Establishing flammability ranges of building insulation materials

Graduation study

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BRANDWEER

TU/e Technische Universiteit Eindhoven University of Technology

COLOPHON

Establishing flammability ranges of building insulation materials

A graduation study into the flammability ranges of the fire effluents resulting from the pyrolysis of building insulation materials.

For the graduation of the Master Track Building technology, of the Master Architecture, Building and Planning at the Eindhoven University of Technology.

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BRANDWEER Nederland

Preface

During this project my knowledge about fire safety engineering increased from practically zero to an extensive knowledge about the fire safety of buildings and building insulation materials. Extensive knowledge was gained during an earlier performed literature study and during the course fire safety engineering by Ir. R.A.P. van Herpen. Also visits to some congresses and manufacturers was of great importance in gaining relevant knowledge. This knowledge was translated in what I believe a very practical test setup which can be useful for other studies and the testing of other materials.

This study has been done under the supervision of Prof. Dr. Ir. Brouwers which I would like thank for his time, knowledge and vision during the project. Furthermore I would like thank Ir. R.A.P. van Herpen and Ir. de Korte for their practical knowledge and input. From the scientific board of Brandweer Nederland I would like to thank Dr. Ir. R. Weewer and Ir. M. Heijman for their inspiring enthusiasm and input. Finally I would like to thank my college A.W. Giunta d'Albani for the cooperation during the project and the built of the test setup.

Besides the support of the supervisors during the course of the project some input was given by several experts in the field of fire safety engineering including R. Weghorst, B. van Roosmalen, P. van de Leur and J. Mertens. I would like to thank them for their critical view on the subject, their aid with designing the test setup and their refreshing opinions.

Summary

The Dutch Firefighting brigade, Brandweer Nederland, instigated in cooperation with the Eindhoven University of technology research in the area of fire safety engineering. One of the results from this cooperation was a literature study was performed into the fire behaviour of sandwich panels with a combustible core. From this study it became clear that more research is needed into the possibility of a smoke gas explosion resulting from the pyrolysis of building insulation materials.

This study is focused on insulation materials used as a core for sandwich panels as well as insulation materials used for roofs with a steel deck construction principle. The goal of the study is to experimentally establish flammability limits of the fire effluents resulting from the pyrolysis of insulation materials in order to gain insight in the possibility of a smoke gas explosion during a building fire. For this study 5 different insulation materials were chosen:

- Polyurethane (PUR)
- Polyisocyanurate (PIR)
- Stone wool
- Expanded Polystyrene (EPS)
- Extruded Polystyrene (XPS)

To establish the required flammability limits an experimental setup was made which is able to measure mass loss in real time. The oven is also able to heat up samples up to 400 °C and measure the temperature in real time. These measurements enabled the calculations of ratios of gas mixtures leaving the oven through an exhaust. The temperature of 400 °C is the limit for testing the materials, because when a compartment on fire reaches 400 °C it is considered as a flashover fire. At this point no firefighters are actively intervening inside the building and a possible smoke gas explosion does not pose a threat anymore.

During the experiments conducted in this study, the flammability limits of PIR and Stone wool could not be found. The results also showed that the mass loss of these products during exposure of temperatures below the 400 °C is low compared to PUR, EPS and XPS.

For the material PUR a lower flammability limit as well as an upper flammability limit could be established. The mass loss was high and a broad range of ratios could be detected. The Polystyrene based materials, EPS and XPS, are like PUR and PIR synthetic insulation materials. Unlike PUR and PIR these materials are thermoplastics. This causes the materials to melt before starting pyrolysis. This property resulted in the start of pyrolysis at higher temperatures than the other materials. Once pyrolysis starts, the mass loss rate is high. The highest loss of mass is detected with the materials EPX and XPS. For the Polystyrene based materials a lower flammability limit could be detected. An upper flammability could not be detected. For the materials Stone wool and PIR flammability limits could not be detected.

As a final part of this study some modelling was done for typical buildings with a steel deck roof structure, from this modelling was derived that in none of the cases a smoke gas explosion could occur resulting from the pyrolysis of building insulation materials alone. However the mass of the pyrolysis gas from the insulation materials are of such a level available in the smoke layer that the chance of a smoke gas explosion increases.

Samenvatting

De Nederlandse brandweer, Brandweer Nederland, is in samenwerking met de Technische Universiteit Eindhoven onderzoek gaan verrichten op het gebied van brandveiligheid. Een van de resultaten van deze samenwerking was een literatuuronderzoek op het gebied van brandveiligheid van sandwichpanelen met een kunststof kern. Uit dit onderzoek bleek dat meer onderzoek nodig is over de mogelijkheid tot een rook gas explosie als resultaat van de pyrolyse van isolatie materialen.

Dit onderzoek is gericht op isolatie materialen zoals gebruikt in de kernen van sandwichpanelen en isolatie materialen gebruikt op steel deck dakconstructies. Het doel van de studie is om experimenteel de vlambaarheidsgrenzen van gassen die ontstaan door pyrolyse van isolatie materialen vast te stellen. Dit om inzicht te krijgen in de mogelijkheden tot een rook gas explosie tijdens een gebouwbrand. Voor deze studie zijn 5 materialen gekozen om te onderzoeken:

- Polyurethaan (PUR)
- Polyisocyanuraat (PIR)
- Steenwol
- Geëxpandeerd Polystyreen (EPS)
- Geëxtrudeerd Polystyreen (XPS)

Om de vlambaarheidsgrenzen vast te stellen is er een experimentele testopstelling ontworpen welke het massa van verlies van de materialen continu tijdens het experiment kan meten. De oven is in staat om de materialen te verhitten tot een temperatuur tot 400 °C en de temperatuur gedurende het experiment te meten. Deze metingen maken het mogelijk om de verhouding van het gas mengsel welke de oven verlaat via een uitlaat te bepalen. De maximale temperatuur waarop getest wordt is 400 °C, omdat wanneer een compartiment welke in brand staat een temperatuur bereikt van 400 °C, de brand gezien wordt als een flashover. Op dit moment is er geen brandweer meer in het compartiment en vormt een mogelijke rook gas explosie geen gevaar meer.

Uit het experiment bleek dat van de materialen PIR en Steenwol geen vlambaarheidsgrenzen konden worden gevonden. De resultaten lieten ook zien dat het totale massa verlies bij een blootstelling aan 400 °C laag is in vergelijking tot de andere materialen.

Voor het materiaal PUR kon zowel een onderste vlambaarheidsgrens worden bepaald als een bovenste vlambaarheidsgrens. Tijdens het experiment was het massa verlies hoog en een groot bereik aan verhoudingen was gedetecteerd. De op Polystyreen gebaseerde materialen, EPS en XPS, zijn net als PUR en PIR synthetische isolatie materialen. In tegenstelling tot PUR en PIR zijn deze materialen thermoplasten. Deze eigenschap zorgt ervoor dat het materiaal eerst smelt en daarna start het pyrolyse proces. Deze eigenschap resulteerde in het feit dat pyrolyse start op een hogere temperatuur in vergelijking met de andere materialen. Echter wanneer deze temperatuur bereikt wordt, is het massa verlies hoog. Gedurende deze experimenten is het hoogste massa verlies gedetecteerd. Voor de op Polystyreen gebaseerde materialen is een onderste vlambaarheidsgrens gedetecteerd. Er is geen bovenste vlambaarheidsgrens gedetecteerd. Voor de materialen PIR en steenwol zijn geen vlambaarheidsgrenzen gedetecteerd.

Ter afsluiting van dit onderzoek zijn er brandscenario's gemodelleerd in een aantal typische gebouwen met een steel deck dakconstructie. Uit deze modellen bleek dat in geen van de gevallen een rook gas explosie kan ontstaan ten gevolge van de pyrolyse van isolatie materialen. Echter is de massa van het pyrolyse gas van isolatie materialen van een dusdanige hoogte aanwezig in de rooklaag dat een het risico op een rookgas explosie significant toeneemt.

Table of contents

1 Introduction

The report which lies before you is a study into the flammability ranges of gas mixtures resulting from the pyrolysis of building insulation materials. The study is a follow-up on the earlier performed literature study regarding the fire safety of sandwich panels with a combustible core (de Kluiver and Giunta d'Albani, 2014). Results from this study showed that sandwich panel cores may lead to a higher fire risk and a higher risk for firefighters when entering a building during a fire. The study concluded that more information is needed regarding the possibility of smoke gas explosions when gas mixtures resulting from the pyrolysis of building insulation materials are exposed to fire. The study could not prove that gas mixtures from pyrolysis gas results in the possibility of a smoke gas explosion, nor could it prove that smoke gas explosions from the gas mixtures are not possible.

Smoke gas explosions however are a hot topic in the fire safety and fire fighting industry. The previous study done showed that the occurrence of a smoke gas explosion can be established. The cause of this smoke gas explosion is the ignition of the pyrolysis gas mixture from the different materials on fire. The Dutch fire fighting brigade has high suspicions that combustible building insulation materials, like Polystyrene and Polyurethane, when pyrolysed can lead to smoke gas explosions. The nature of a fire is that multiple products are on fire which results in a various mix of gasses in the smoke layer, therefore researchers could not definitively identify building insulation materials as the main cause of smoke gas explosions. This was established in multiple studies done into the fire at "De Punt" (van Herpen, 2009). This study aims to fill up the gap in the literature by experimentally achieve the flammability ranges of a gas mixture consisting only out of air and the gasses from the pyrolysis of building insulation materials.

To achieve this knowledge an experimental setup is built. This setup enables the measurement of mass flows continuously during the experiment and it is able to ignite gas mixtures to check the mixture on potential flammability. The results from the experiments lead to knowledge into the flammability of gas mixtures resulting from the pyrolysis of building insulation materials. Furthermore it tries to establish the ranges of flammability of the gas mixtures. The result from the experiment only proves the possibility of a smoke gas explosion, this does not prove that a smoke gas explosion will occur in a building. In order to prove this additional information is needed. Especially the mass loss of a construction. This mass loss is needed to compare the total amount of mass loss in a building during a fire with the loss of mass in the experiment. This comparison enables to translate the results from the experiment into a realistic building on fire. The information required will be provided from another study (Giunta d'Albani, 2014). This study establishes experimentally the loss of mass of a sandwich panel construction when exposed to a hot smoke layer. The combined results of the two studies enable to prove the fact if building insulation materials can be responsible for smoke gas explosions. This ultimately answers the suspicions of the Dutch fire fighting brigade.

1.1 Problem definition

That smoke gas explosions can occur is clear and established (Bengtsson, 2001). The literature study showed that more research is needed to conclude about smoke gas explosions with a relationship to combustible insulation materials. However, the cause

of these explosions is mostly unknown. In this study the suspicion of Brandweer Nederland which states that combustible insulation materials are causing smoke gas explosions is tested. The literature study resulted in the proposal of two experiments. The combined results from the experiments will prove or disprove the possibility of a smoke gas explosion resulting from the pyrolysis gasses released by the cores of sandwich panels in buildings. The first experiment focusses on the cores of the sandwich panels and tries to establish if a smoke gas explosion is able to occur when the core materials are exposed to a hot temperature. The exact nature of the experiment will be explained shortly hereafter. The result of the first experiment will be knowledge about the existence of certain flammability ranges. The second experiment focusses on the mass loss of sandwich panels when exposed to a hot smoke layer. From this mass loss, the mass of released gas can be derived. The mass of the released gas needs to be established in order to compare the results from the first experiments to a realistic scenario. This comparison is possible for multiple types of buildings. As a second part of this study the results of the two experiments will be combined and for multiple types of buildings fire scenarios will be modelled according to the natural fire curve. The results from this model will be used together with the results from the experiments, this enables to define the risk for some types of buildings.

In order to answer the problem for each experiment a central research question is formulated. For the first experiment, which tries to establish the flammability ranges of a gas mixture resulting from the pyrolysis of combustible building materials the research question is defined as follows:

What is the flammability range of different insulating core materials of sandwich panels, when subjected to a fire in a pre-flashover phase?

For the second experiment which tries to establish the loss of mass of a construction when exposed to a hot smoke layer is defined as follows:

Produces the mass loss by degradation / pyrolysis of a steel sandwich construction alone enough flammable gases to create an explosive mixture in the hot gas layer while exposed to temperatures in the range of 150-350 °C?

The combined results of the studies create the possibility to calculate events where smoke gas explosions can occur, together with some modelling of specific types of buildings the combined results can predict if certain types of building pose a risk for firefighters when intervening during a fire situation. This answers the problem and provides Brandweer Nederland the required information. It also fills the gap in the literature about flammability ranges of pyrolysis gas from combustible insulation materials. This study focusses on the first experiment. A model has been made in order to provide an overview of this study, the model is presented in Figure 1. Concerning the modelling, the study by Giunta d'Albani (2014) will focus on buildings with a sandwich panel construction. The current study focusses on buildings with a steel deck roof construction.

1.2 Theoretical background

The experiment that will be conducted in this study is designed after a literature study done in a previous phase regarding the fire safety of sandwich panels with a combustible core. From the study follows that more information is needed to gain a better insight in the fire safety of the combustible cored sandwich panels (de Kluiver and Giunta d'Albani, 2014). Especially the possibility of a smoke gas explosion resulting from sudden ignition of the smoke layer containing gasses from the pyrolysis of the combustible insulation materials which are used as a core for a sandwich panel. The study showed that in some cases a smoke gas explosion occurred during

a fire situation which resulted in a flashover fire and in some occasion's injuries or death by firefighters. As a result from these cases where firefighters got injured or died during intervention, the Dutch fire fighting brigade, Brandweer Nederland, asked the Eindhoven University of Technology to perform research about the fire safety of sandwich panels. This research initially formed a literature study which showed the need for more experimental research into the fire safety of sandwich panels altogether. The study showed that there is a possibility that sandwich panels with a combustible core are as fire safe as sandwich panels with an incombustible core. This means that for experimental research the sandwich panels with an incombustible core and a combustible core are to be tested. This also relieves the study from the possibility of being biased.

For further explanation of the following experiment more information about the phenomena smoke gas explosion is needed. The book "enclosure fires" by Bengtsson (2001) describes a smoke gas explosion as follows:

"When smoke gases leak into an area adjacent to the fire room, they may mix very well with air. This mixture can expand into the whole or parts of the volume and fall within the flammability range. If the mixture ignites the pressure may increase significantly. This is known as a smoke gas explosion."

For the occurrence of a smoke gas explosion some conditions are required. First there must be a mixture of smoke and air. This mixture needs to be within the flammability limits. Where the lower flammability limit (LFL) is the lowest concentration of smoke in air capable of producing a flash of fire in presence of an ignition source, the upper flammability limit (UFL) is the highest concentration of smoke in air capable of producing flash of fire in presence of an ignition source. This introduces also the second requirement, the presence of an ignition source. This combination can lead to a potential deathly situation when for example an adjacent room to the fire room fills with smoke and falls within the flammability range, when the mixture is ignited the complete mixture can explode setting the entire room ablaze in seconds. In some occasions Brandweer Nederland experienced situations where possibly a smoke gas explosion occurred. These occurrences of smoke gas explosion are recorded in some studies done commissioned by Brandweer Nederland (Custers and Smeets, 2005). Engineering consultancies also acknowledge that during a fire situation in some cases a smoke gas explosions might occur (van Herpen, 2009). As a result from these studies Brandweer Nederland want to determine the cause of these smoke gas explosions. The idea that possibly combustible insulation materials, as for example used in sandwich panels, are responsible for a smoke gas explosions is pitched by Brandweer Nederland. This study aims to answer the question if sandwich panels exposed to a hot smoke layer can result in the aforementioned smoke gas explosion. Therefore, the flammability limits of a gas mixture resulting from the pyrolysis of sandwich panel core materials need to be found. Secondly, the amount of released gas in a fire situation by the sandwich panels needs to be found. Combining the results provides enough resources to calculate if there is a possibility of a smoke gas explosion in any type of building where the tested materials are applied.

In order to achieve the required flammability ranges the experiment must provide the required data. To define the flammability ranges of the gas mixture the ratio between pyrolysis gas and air needs to be known. When this mixture with the known ratio is flammable the result is that the gas mixture falls within the flammability limits, changing the ratio and checking the different mixtures on flammability results in a spectrum of different mixtures checked on flammability. This provides a range of ratios of gas mixtures which are flammable or not flammable and thus provides the required flammability ranges.

1.3 Reading guide

The report first discusses more elaborately the goal of the experiment in the second chapter. The specifications of test setup will also be explained in Chapter 2. Building the test set-up and the validation of the test setup is also part of the chapter. In Chapter 3 the experiment is conducted. The results from the experiment are also found in Chapter 3. The modelling part of the study will be discussed in Chapter 4. The report will conclude with a short summary of the conclusions and the discussion of the study in Chapter 5. The recommendations for further research in the subject are the final piece of this report.

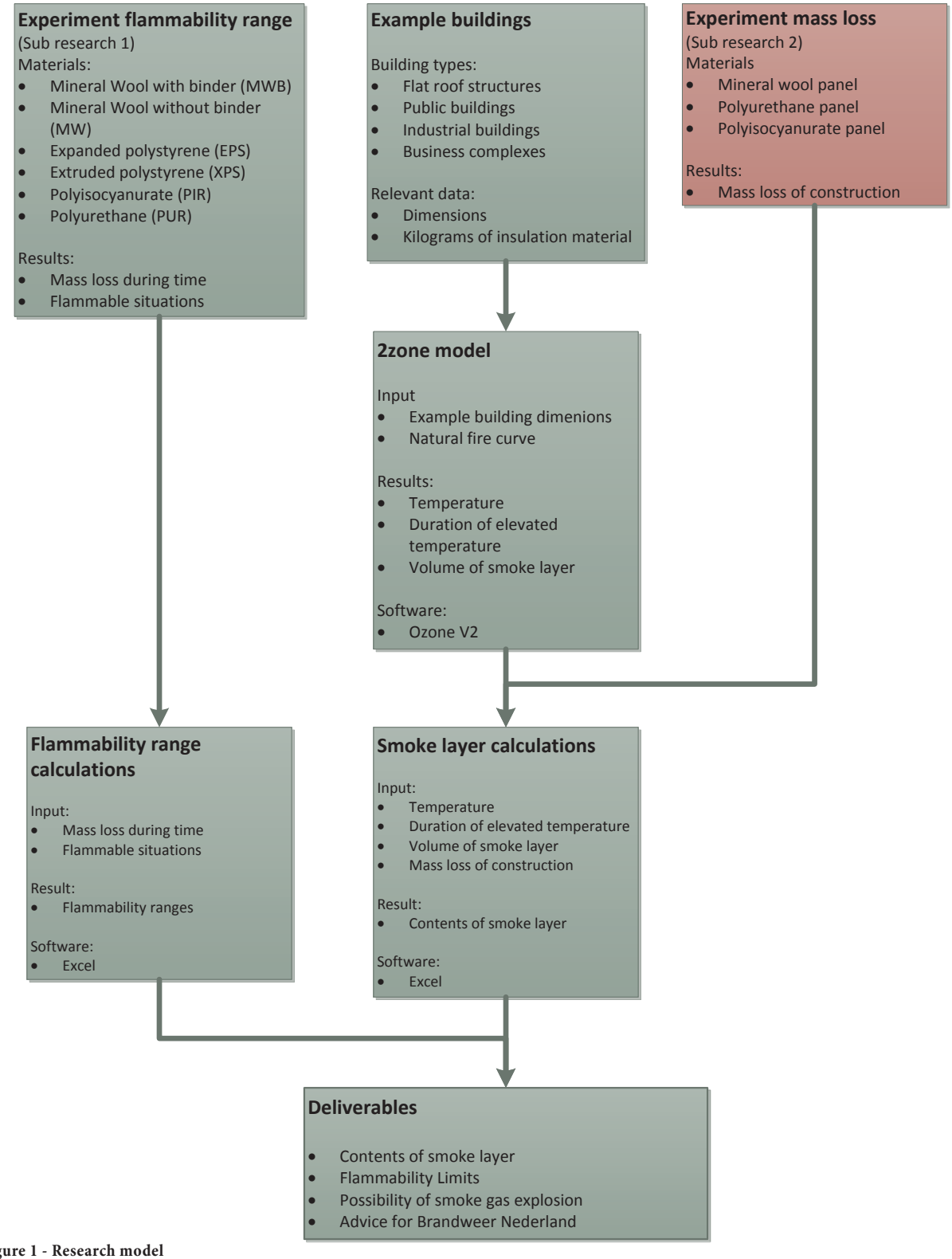

Figure 1 - Research model

2 Research design and experimental setup

The following chapter will further describe the design of the research and elaborate the experimental setup which has been designed specifically for this study. First, the scope of the study will be determined and afterwards an explanation about the setup with specifications. At the end of this chapter the method of data analysis will be discussed as well as some predictions for the coming experiments.

2.1 Experimental scope

The ensure the study remains focused on the question from Brandweer Nederland an experimental scope has been chosen. The scope is partly defined by Brandweer Nederland itself, by requesting knowledge about the fire behaviour of synthetic building insulation products during fires when fire fighters are able to intervene. Therefore the testing temperatures are limited to 400 °C which is the boundary where a flashover fire starts (Bengtsonn, 2001). Below this temperature it is still possible that firefighters are intervening inside the building or compartment.

Furthermore, the study is defined by the number of materials. The chosen materials are the most broadly used insulation materials in the construction industry today and will be described in 2.1.2.

2.1.1 Testing temperatures

Realistically, fire fighters will not actively intervene in a room where temperatures are higher than 250 °C, however testing the materials at 400 °C is still highly relevant due to stratification of the smoke layer. The accumulating smoke can be of a higher temperature than the area which firefighters work, this effect applies especially for higher compartments like atria or industrial halls. Another reason for testing at 400 °C is that smoke can flow through cavities in other compartments. These compartments can be much cooler and still contain people exiting the building or fire fighters intervening. Testing temperatures higher than 400 °C are not relevant, because a fire with temperatures higher than 400 °C is considered to be in a flashover state. This means that the compartment is considered to be fully on fire and lost. During a flashover fire the fire fighters do not intervene, therefore is testing at 400 °C and higher not of interest for this study (Bengtsonn, 2001).

From the literature study followed that some pyrolysis processes start at 150 °C (de Kluiver and Giunta d'Albani, 2014), this temperature will be the starting point of the experiments. The materials are then gradually exposed to a temperature of maximum 400 °C. This process takes up to one and a half hour. The temperature curve can be found in Figure 2.

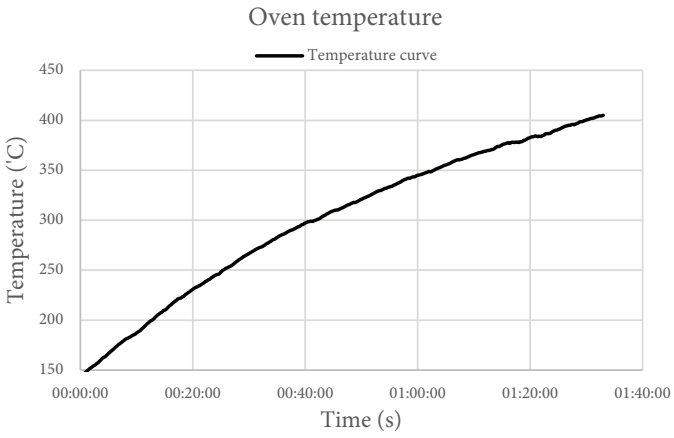

Figure 2 - Temperature curve of the oven during a test

2.1.2 Materials

The experiment focusses on building insulation materials used as a core for sandwich panel constructions and steel deck constructions. These are divided into two forms.

The first is the incombustible type. These sandwich panels have a core existing out of mineral wool. These are mainly used because of their high fire resistance and high acoustic qualities. Because of the fact that mineral wool itself is incombustible, the sandwich panels with this core are considered as incombustible. However some remarks need to be placed with that viewpoint, since mineral wool in pure form has no structural strength. To fabricate panels with some structural strength for spanning over a roof structure and bearing snow loads etc. the mineral wool core is compressed using an adhesive. Also, the steel facings are bonded together using and adhesive. This compression and the natural specifications of the product result in a more heavy panel compared to a panel with a combustible core. This extra weight results in a more compressed panel and the usage of more adhesives. The addition of adhesives could potentially make the product combustible, or less fire safe. Therefore, the products with a considered incombustible core are also being tested. For this test, two different samples will be tested, first a roof panel with a stone wool core. Second, a test will be done only exposing the core, without the steel facings. This gains insight in the effects of the adhesives to the fire properties.

For the combustible types multiple materials are used as the core for sandwich panel, mainly the cores exist out of polyurethane (PUR), and polyisocyanurate (PIR). PIR is considered a more fire safe product than PUR, since PUR disintegrates when exposed to temperatures between 250 °C and 450 °C. The material PIR evolves on the surface into a char layer when it is exposed to flame contact or elevated temperatures, around 350 °C and higher (Harwood and Hume, 1997). The production of the char layer does not stop smoke production, therefore the material PIR is still applicable for the experiment. The material PUR smokes heavily when exposed to temperatures above 250 °C and is therefore very applicable for the test. The tested samples are from products which are used in the common market.

PIR and PUR sandwich panels mainly dominate the market for combustible cored sandwich panels, however there are some other types on the market. The two other materials are used for sandwich panels with a combustible core are EPS, expanded polystyrene, and XPS, extruded polystyrene. These materials are also extensively used for a steel deck roof construction. This type of construction offers a fast and cheap way of constructing insulating roofs for industrial halls and buildings. The main differences of EPS and XPS with PUR and PIR is the fact that EPS and XPS are thermoplastics and PUR and PIR are thermosets. This means that during a fire situation the products EPS and XPS melt. Melting temperatures of EPS are reported to be within the range of 160-200 degrees Celsius, pyrolysis starts at 180 degrees Celsius (Harwood and Hume 1997). Because of the fact that these insulation materials are also applied in these types of construction, testing the thermoplastic insulation materials increases the value of the study. The EPS and XPS insulation materials are of a type which can be bought in a hardware store or which are used for building construction.

Concluding the following materials will be tested:

- Stone wool, wall panel
- Stone wool, roof panel
- Polyisocyanurate(PIR), roof panel
- Polyurethane(PUR), roof panel
- Expanded polystyrene(EPS), board
- Extruded polystyrene(XPS), board

The materials will be tested in sizes of 10x10 cm blocks of material, the height of the samples are determined by the supplied panels or boards. For PIR this is a height of 10 cm. The stone wool core sample has as well a height of 10 cm. The PUR sample height is 10 cm at the lower side and 13.5 cm at the higher

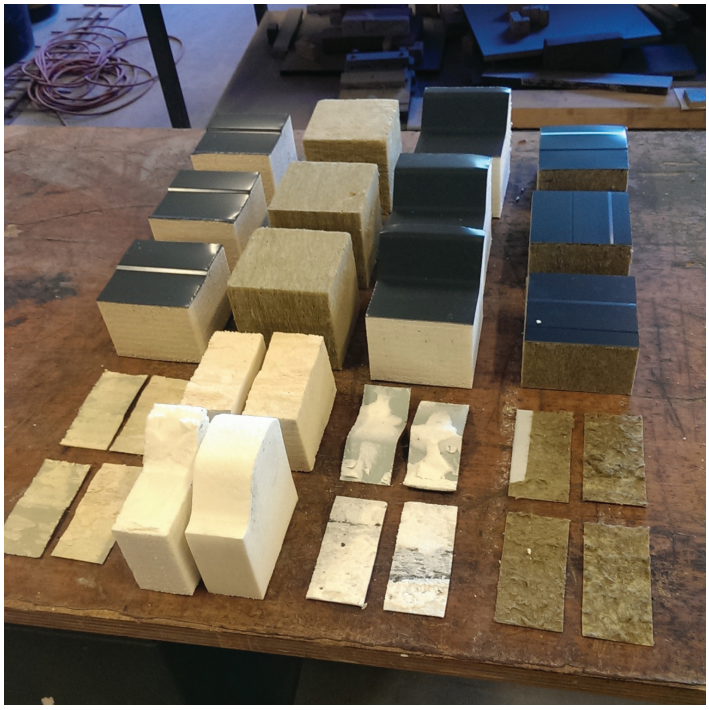

Figure 3 - Test samples left to right: PIR, Stone wool core, PUR, Stone wool panel

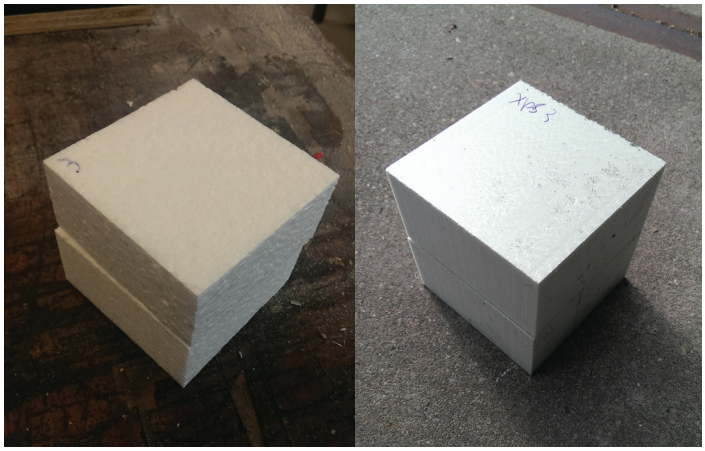

Figure 4 - Test samples left: XPS, right: EPS

side. The Stone wool panel product has a height of 6 cm. The products XPS and EPS have a height of 10 cm. The pictures show the products that will be tested. In Figure 3 and Figure 4 one can find the tested products.

2.2 Specifications of the test setup

To acquire the desired data an experimental setup is specifically designed for this study. The materials are subjected to temperatures to maximum 400 °C. Also, the mass flows of air and pyrolysis gas need to be measured and be able to be calculated. This provides some conditions and specifications for the experimental setup. To achieve the 400 °C the setup will be a specifically designed oven for the purpose of this experiment. The gas mixture in the oven will be subjected to a flammability test, therefore de mechanism for heating the oven cannot add any gasses to the mixture. This condition resulted that the oven is heated with an electrical element. The element is a solid block of brass metal to distribute the heat of three electrical spirals with a power of 1750 Watt. To ensure that the element provides enough heat, the oven is built using cellular concrete. This material provides strength as well as some insulating value, it is also easy to work with. A provision is made for a scale to measure the mass of the sample during the heating process. The gas mixture inside the oven needs to be mixed homogenously to calculate the correct air to pyrolysis gas ratio. To ensure the mixture is homogeneously mixed a fan is mounted inside the oven. The flammability test takes place outside the oven, using an exhaust pipe the mixture is led out of the oven, at the end of the exhaust pipe an ignition element is mounted. This ignition element is a piezoelectric element. The element creates a spark inside the exhaust, possibly igniting the passing gas mixture. This occurrence can be seen visually. As a secondary ignition possibility a regular lighter will be used to try to ignite the mixture. As a final possibility when the previous attempts fail, a glass bottle can be used to capture the gas mixture from the exhaust. This enables a more accurate observation. The observations will be logged with the time at that moment, this enables to find the conditions of the gas mixture later on.

Overall the oven is 50 x 50 x 75 cm, the dimensions on the inside are 30 x 30 x 60 cm. Furthermore it is of importance that the oven is built with an acceptable air tightness, when this is not the case air can penetrate through cavities which makes it more difficult to calculate the correct gas mixture ratios. Specific dimensions and drawings can be seen in Figure 5 and Figure 6. Drawings to scale and photo material can be found in the appendix of this report.

2.2.1 Temperature

The temperature in the oven should be monitored continuously to ensure the validity of the experiment. This is taken care of by the application of five thermocouples. Four of the thermocouples are monitored using a data logger, a fifth is used for controlling the thermostat which is coupled to the electric element. One of the thermocouples monitored on the data logger and the thermocouple controlling the thermostat are disk thermocouples, these are thermocouples welded to a small steel plate. These are used in order to know the temperature of a surface, instead of the temperature of the gas mixture in the oven. Another advantage of these thermocouples is that they are not as vulnerable to turbulence as the thermocouples which measure the air temperature. This results in more accurate calculations. The disk thermocouples were made by hard soldering the tip of the thermocouple to a stainless steel plate, see Figure 7. Two out of the three other thermocouples which are monitored by the data logger measure the temperature on the bottom side of the oven and the top side of the oven. The fourth monitored thermocouple measure the temperature of the exhaust gasses.

The used thermocouples are of a type K, it is a widely used thermocouple with a sensitivity of approximately 41 µV/°C. The range of the thermocouple is -270 °C to

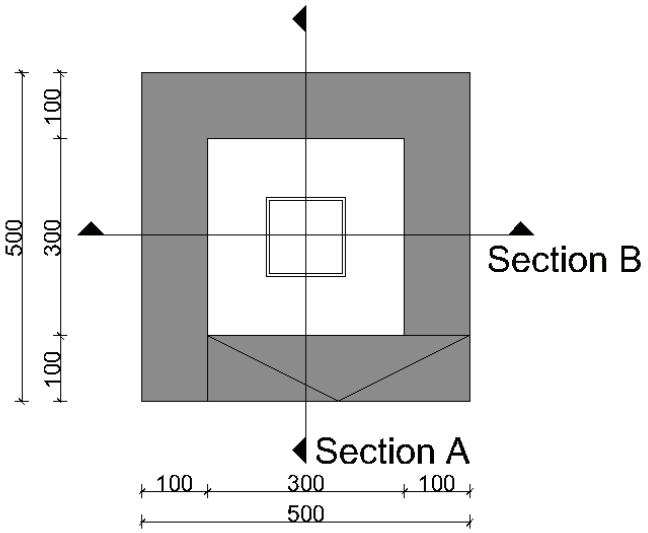

Figure 6 - top side view of the oven

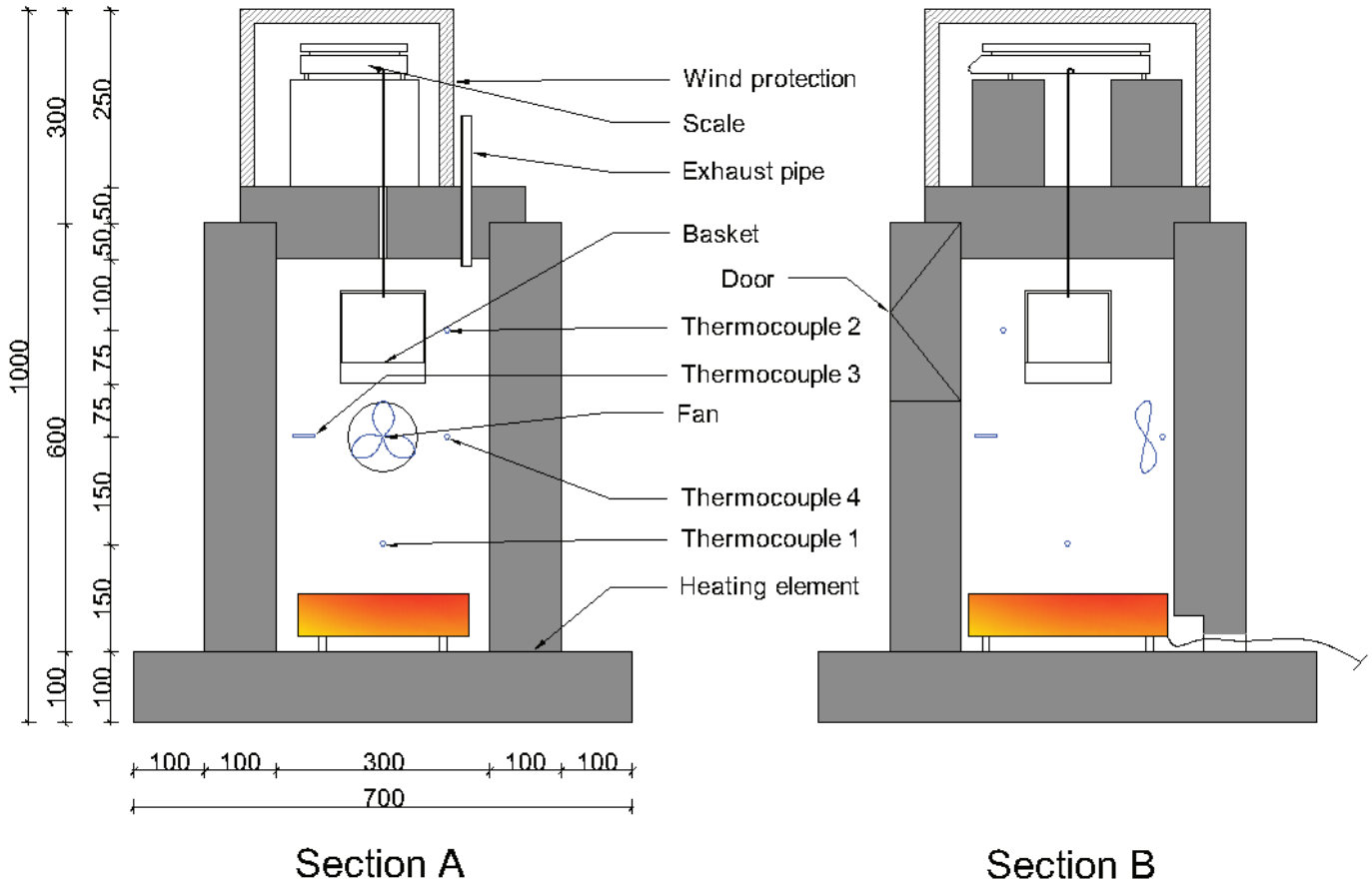

Figure 5 -Section of the oven

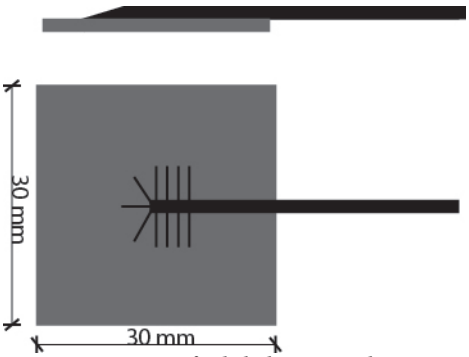

Figure 7 - Drawing of a disk thermocouple

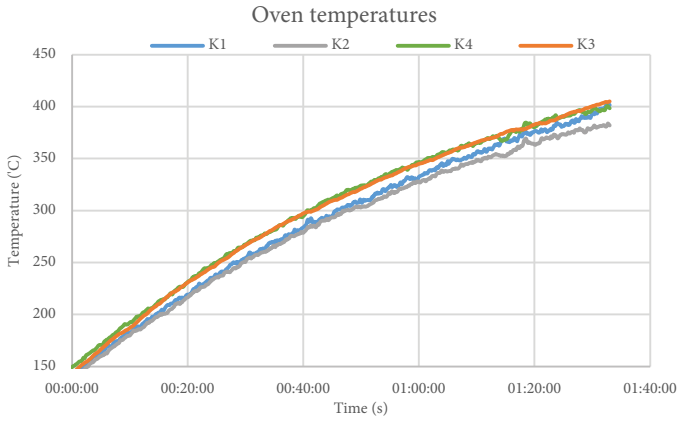

Figure 8 - Oven temperature readings

1372 °C and has a maximum permitted error of 1.5 °C (Park and Carroll, 1993). In Figure 8 the temperature curves of the logged thermocouples during a test are shown, there can clearly be seen that thermocouple K3 has a more stable course. Furthermore, the temperature difference because of the height of the oven can be seen.

2.2.2 Mass and air flow

The second part of the measurement involves knowing the exact mass flows through the oven. To gain precise insight in these mass flows there will a combination of calculations and measurements.

2.2.2.1 Sample mass

First, the mass of the sample will be measured continuously throughout the experiment. This gives insight in the loss of mass during a certain period of the experiment, which provides data about the flow of pyrolysis gas. The used scale is a Metttler Toledo PB3001, it has a precision of 0.1 grams and a repeatability of 0.05 grams.

In order to verify if the mass measurements are correct it is needed to check if the results from the measurements correspond to results found in literature. For the materials PUR and PIR Thermogravimetric analysis (TGA) is done. A TGA gradually exposes a very small sample, up to a few milligrams of product, to a high temperature and measures the mass of the product. This process is analogue to the current experiment, however the current experiment uses samples up to a thousand times larger. Because these samples are insulation materials, some delay in the loss of mass is expected when the results of the current experiment are compared to TGA in the literature.

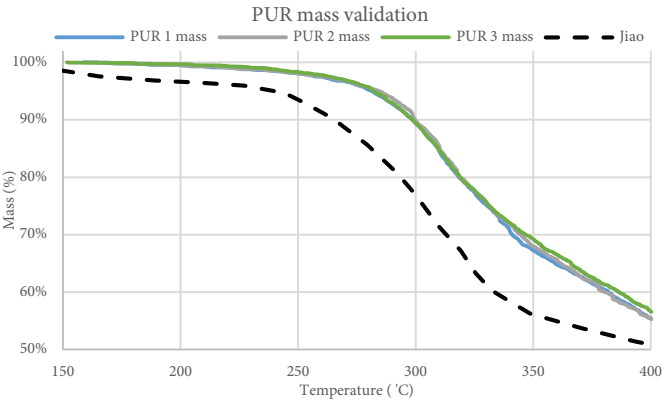

Figure 9 - Mass validation with the material PUR (Jiao et al., 2013)

Figure 9 shows the TGA from a polyurethane foam in air (Jiao, et al. 2013). The figure shows that at a temperature of 400 °C the remaining mass of the sample is 52%.

The result from the study by Jiao et al. (2013) can be compared to the results from the experiment, these results are plotted in the same figure. The figure shows that the mass of the samples after being gradually exposed to 400 °C is 55%. Distinctive is also the speed at which the sample degrades. The study shows a slower rate of degradation at 340 °C. The results from the experiment also show this slower rate of degradation. Considering the fact that results correspond well, one can conclude that the mass measurements are correct. To make this statement stronger the results from the experiments of the material Polyisocyanurate (PIR) can be used.

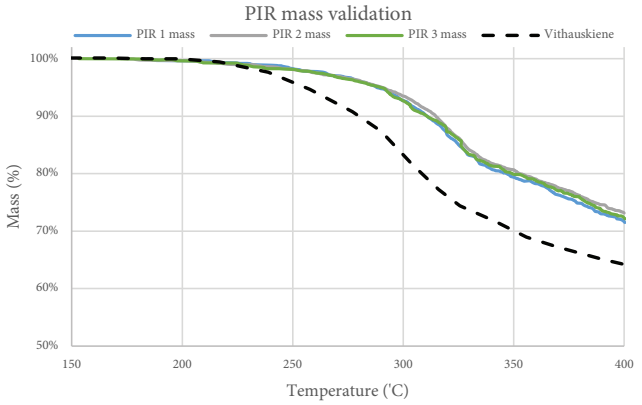

Figure 10 - Mass validation with the material PIR (Vithauskiene et al., 2011)

For the material PIR there are also some TGA test results available. Figure 10 shows the thermal analysis from a polyisocyanurate foam based on Poly(ethylene terephthalate) waste (Vithauskiene, et al. 2011). This product, PET, is commonly used for creating plastic bottles. It is also a raw material for creating PIR foams for sandwich panels. The figure shows that at a temperature of 400 °C the remaining mass is 65%.

The results from the experiment are also shown in Figure 10. The results show a remaining mass of 72 %. This is a slight difference from the results from the study by Vitkauskiene et al. (2011). The difference however, can be explained because of the formation of a char layer. This char layer prevents the heat from reaching the core of the sample. Therefore, the core of the sample will have a lower temperature then the ambient temperature the sample is exposed to. More information about the char layer will be provided in Chapter 3. In a TGA test the sample size is a few milligrams, the sample size in this experiment is around 30 grams. This difference causes that during a TGA test the formation of a char layer does not influence the results. The difference in sample size explains the delay in mass loss and is in this experiment around 7% at 400 °C.

Due to the outcome of the mass loss experiments and their correspondence to studies found in literature, one can conclude that the mass measurements in these experiments are valid.

2.2.2.2 Air flow

The mass flow of air will not be measured, this will be calculated using the ideal gas law. The assumption is that the pressure in the oven stays equal to the outside pressure due to the exhaust. This, however, is only true if the capacity of the exhaust is high enough to cope with the mass flows. Calculations have been done to secure that the capacity of the exhaust is high enough. With the change of temperature, we can calculate the change of volume due to the temperature increase. Using the ideal gas law with an isobaric process the formula needed to find the change in volume is as follows:

$$\Delta V=(V_1 \times (T_2/T_1)) - V_1 \quad (1)$$

With:

ΔV	Change in volume (m^3)
V_1	Volume of the oven (m^3)
T_1	Temperature time step 1 (K)
T_2	Temperature time step 2 (K)

The first part of the formula calculates the size of the volume as a result of the temperature increase. By subtracting the size of the initial volume, the change of volume is known.

Secondly, the air volume needs to be converted to air mass to enable the comparison with loss of mass from the sample. This is performed by multiplying it with the air density. The air density can be calculated using the ideal gas law with the current temperature and atmospheric pressure. The used constant in the formula 3.46×10^{-3} is the molar mass divided by the universal gas constant. The temperature follows from the measurements from thermocouple 3. The atmospheric pressure is taken from data of the Dutch meteorological institute KNMI (2014).

The density of air can then be calculated as follows:

$$\rho_{air} = 3.46 \times 10^{-3} \times (p/T) \quad (2)$$

With:

ρ_{air}	Air density (Kg/m^3)
p	Atmospheric pressure (Pa)
T	Temperature (K)

The curve of the air density during the experiments can be found in Figure 11. The mass flow of the air is then calculated by multiplying the results from equation (1) and (2):

$$m_{air} = \rho_{air} \times \Delta V \quad (3)$$

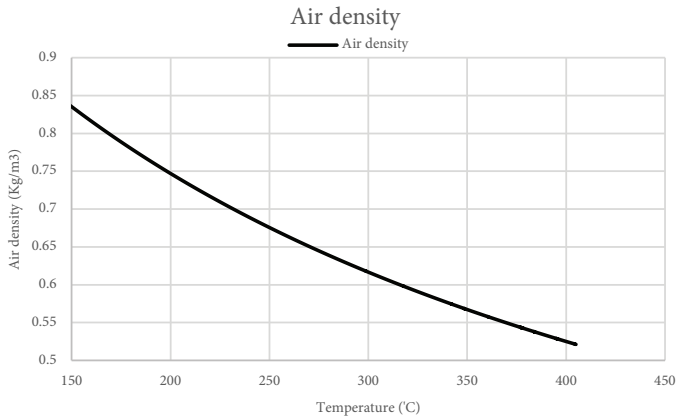

Figure 11 - Air pressure for p =101300 Pa = 1 atm

2.5 Method of data analysis

The conducted experiment provides data about mass loss during the experiment and data about the temperature in the oven. As discussed in paragraph 2.4.2 the experiment is also designed in a way that the flow of air can be calculated. This is essential for the experiment, the purpose of the experiment is in fact calculating the ratio between the flow of air and the flow of pyrolysis gas. The flow of pyrolysis gas is the release of gasses from the sample. In short, the loss of mass of the sample is the exact flow of pyrolysis gas. These calculations result in the ratio between the mass of gas and the mass of air, a mass ratio. The ratios which represents upper and lower flammability limits in literature almost always represent limits in volumes. This method of presenting the results is not possible in this study due to the fact that the molar mass of pyrolysis products is unknown. Therefore, will the calculated ratios be presented as mass ratios.

The temperature and weight are measured in time steps of 10 seconds. This results in a calculation of the ratio at that moment every 10 seconds. However, not all of these calculations are valid. This due to the fact that as well as readings from the scale and/or readings from the thermocouples result in invalid values. The invalid readings caused by the scale are because the precision of the scale is limited to 0.1 grams. This can give a result that during the experiment the scale measures a mass increase. A mass increase results in a negative ratio between air and pyrolysis gas. A negative ratio is physically impossible and therefore invalid. The invalid readings caused by the thermocouples are caused by either limited precision or turbulence in the oven. The result from this limited precision or turbulence is a decrease in temperature. A decrease in temperature results in a ratio higher than 100% between air and pyrolysis gas. This is also physically impossible.

The invalid values are filtered from the actual results during the data analysis. How this is performed can be seen in Figure 12.

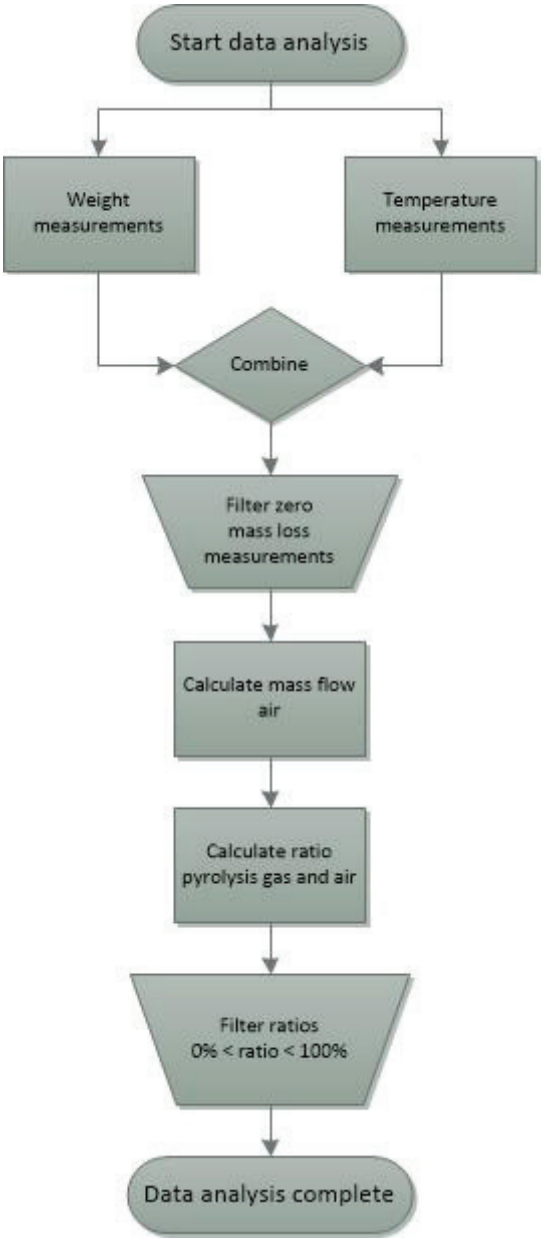

Figure 12 - method of data analysis

2.6 Hypotheses

The hypotheses of this experiment can be divided in four parts, this because the expected significant different outcomes of the different materials. For the material PUR more accurate knowledge of the fire effluents is available, therefore a more accurate hypotheses can be presented. The fire effluents of the materials PIR should be about the same as for the material PUR, this however is unsure and the amount of effluents released should be of a lower level. The effluents resulting from the pyrolysis of a Stone wool product should be the gasification of the binder materials in the product, the expected concentrations however are low. The behaviour of EPS and XPS will be significantly different because of their thermoplastic properties, this might influence the release of pyrolysis gas.

2.6.1 PUR material

From the literature study done in the previous phase of the research the possible fire effluents when the material PUR is pyrolysed. Specifically: carbon dioxide, carbon monoxide, nitrogen oxides, ammonia, benzene, toluene, acetaldehyde, alkanes and trace hydrogen cyanide, halide compounds like hydrogen fluoride, hydrogen chloride, hydrogen bromide and phosgene (Vithauskiene, et al. 2011). The Matheson Gas Data Book provides the UEL and LEL of some gasses (Jaws and Braker, 2001). The following gasses and their UFL and LFL which occur during the pyrolysis of PUR are presented in Figure 13 and Table 1.

Using this information the expectation is that the pyrolysis of PUR can lead to a flammable gas mixture, because of the fact that the concentrations of the type of gasses in unknown a precise prediction cannot be made. Since that the concentrations are unknown the location of the flammability range is hard to predict. The flammability ranges of the gases individually is known, how they react together however is unknown. PUR has compared to the other materials a higher rate of pyrolysis, expected is that a flammability range will be found at a relatively low ratio.

Gas	LFL v/v	UFL v/v
Carbon monoxide	12.0 %	74.0 %
Ammonia	15.0 %	28.0 %
Benzene	1.3 %	7.9 %
Toluene	1.2 %	7.1 %
Acetaldehyde	4.0 %	60.0 %
Hydrogen cyanide	5.6 %	44.0 %

Table 1 - Table of the flammability ranges of PUR effluents

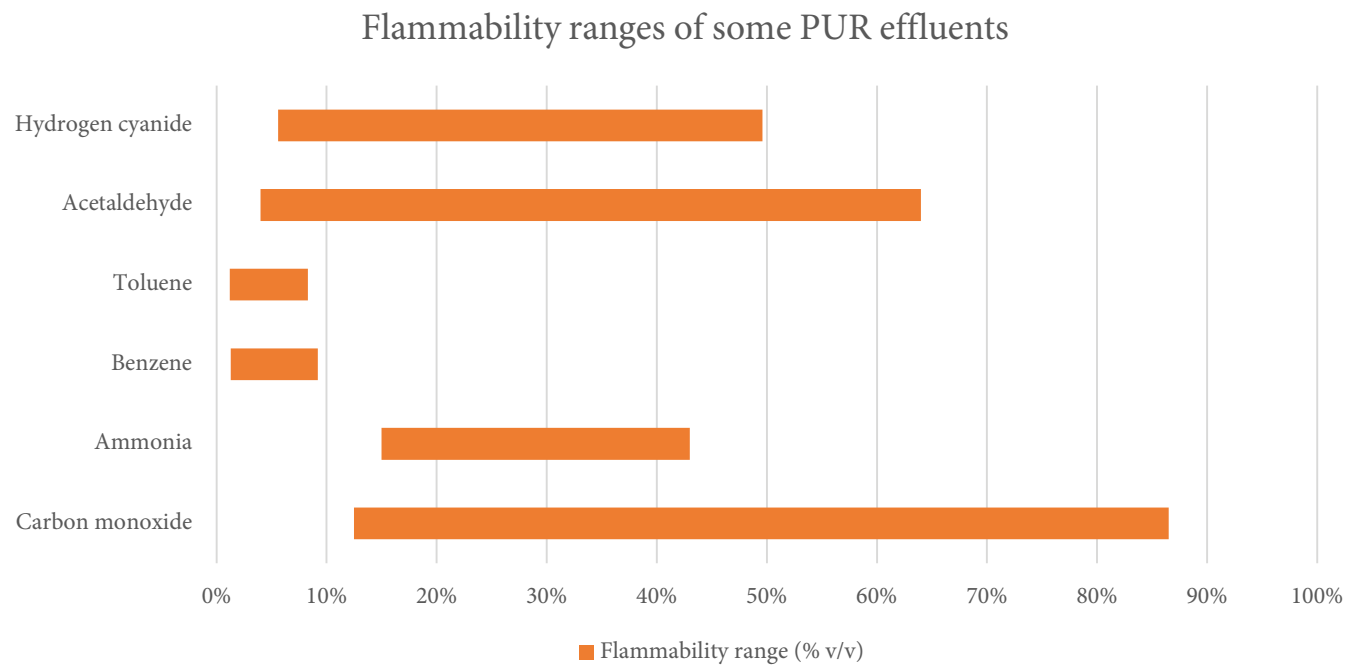

Figure 13 - Flammability ranges of PUR effluents (Vithauskiene, et al. 2011)

2.6.2 PIR material

It is expected that to some the fire effluents of PIR will have some resemblamces with the fire effluents of PUR. To what extend this is the case is not known. Expected is that some of the named fire effluents of PUR will also be present during the pyrolysis of PIR, however the concentration and or composition will be different due to the different reaction to heat. Expected is that a flammability range will be found, although the rate of mass loss is much lower making it difficult to establish.

2.6.3 Stone wool

Considering the fact that the only fire effluents produced are from the binders, only a low concentration of effluents is expected. This is further reduced in time because of the fact that is takes time for the heat to reach the core of the product. The effluents are unknown which makes it also unknown if these gases have a flammability range.

2.6.4 EPS/XPS materials

The hypotheses from the polystyrene products follows from a study done by Joshua, et al. (1987). The study synthesizes multiple studies and created a table of gasses which are found during the thermal decomposition of the material. For this hypothesis, the gasses found in three or more studies are the ones presented below in Figure 14 and Table 2. Again, with these gases found the lower and upper flammability ranges could be found (Jaws and Braker, 2001).

The main ingredient for the creation of the expanded or extruded polystyrene foams is Styrene. The boiling point of Styrene is around 150 °C. From the literature study performed earlier, it is known that EPS and XPS start pyrolysis at this temperature (Harwood and Hume, 1997). Therefore, one can conclude that the probability that pyrolysis gas from EPS or XPS can contain a high concentration of Styrene gas. The expectation is that for XPS and EPS a flammability range can be found in low concentrations of pyrolysis gas.

Gas	LFL v/v	UFL v/v
Acetylene	2.6%	13.0%
Benzene	1.3%	7.9%
Carbon monoxide	12.5%	74.0%
Ethane	3.0%	12.4%
Ethyl benzene	1.0%	6.7%
Ethylene	2.7%	36.0%
Methane	5.0%	15.0%
Styrene	1.1%	100.0%
Toluene	1.2%	7.1%

Table 2 - Table of the flammability ranges of some PS effluents

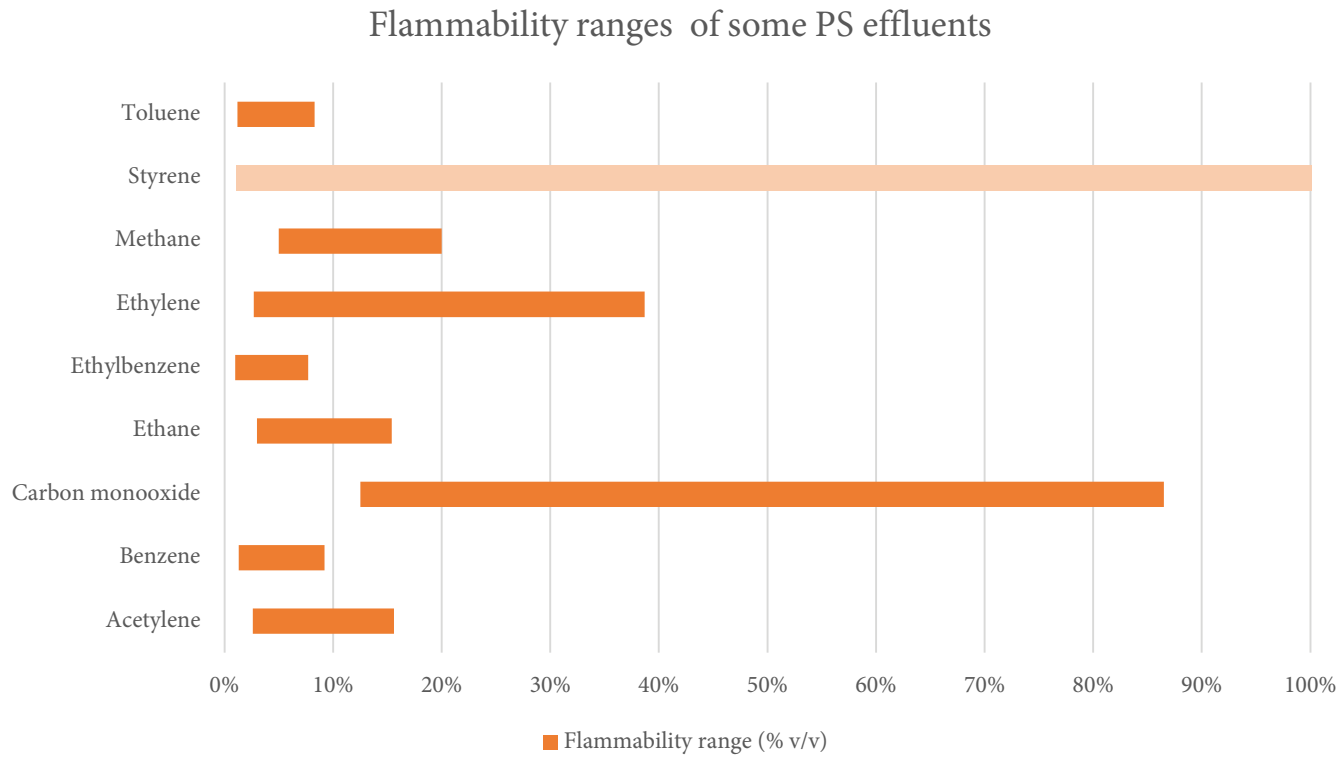

Figure 14 - Flammability ranges of PS effluents (Joshua, et al. 1987)

3 Results

The following chapter will elaborate the results from the experiment. The results of the individual experiments are built up out of three parts. First the results from the measurements, second the observations done during the experiment and third the results from the calculations using the measurements. The observations are categorized into three events. First, the event where smoke is detected. Second, the event that smoke is flammable. Third, the event that the smoke is burnt instantly. When smoke is detected and the results show that the smoke is not flammable, the ratio at that time of testing does not fall within the flammability limits. When smoke is flammable, the ratio does fall within the flammability limits. When the smoke is flammable and burnt instantly the ratio is close to a stoichiometric ratio, which means the burning of the gas happens almost ideally. For the individual experiments time is used as parameter to view the progress. This enables to compare the observations during the experiment with the current measurements and calculations at that time.

As a second part of presenting the results, the individual experiments will be combined. The results from the same material will be combined in order to check for inaccuracies and validity.

The third part of this chapter will discuss the results from the experiment and translate them into real world scenarios using the modelling tool Ozone v2. This tool is able to calculate smoke layer temperatures and the volume of the smoke layer. The results from the experiment performed by Giunta d'Albani (2014), discussed in Chapter 2.1, will be used to calculate the contents of the smoke layer. The results from this experiment then enables to predict the flammability of the smoke layer.

Below the individual results are presented along with figures about the loss of mass of the sample and the calculated ratio's. These calculated ratios are mass ratios of material to air in % m/m. The results of these ratio calculations are volatile, this is due to the limited precision of the scale. This will be explained more elaborately in Paragraph 3.5.2. These figures are accompanied by a table with the observations. The figures and tables display the calculations and observations during time which enables to compare different events with specific ratios of pyrolysis gas and air. The gas mixture was initially attempted to be ignited using the piezoelectric element. This method did not result in observations of ignition. The second attempt to ignite the mixture using a regular lighter resulted in the observation that the smoke could be flammable however this could not be recorded using a photo camera. Finally, the smoke was captured using a glass bottle. Inside this bottle the smoke could be seen clearly and also the flammability of the smoke could be recorded. This testing of smoke mixtures with the bottle is done continuously throughout the experiments, the tables show the moment at which an observation changed. For example with PUR test 1 at 25 minutes into the test, the first smoke was observed and this smoke was also flammable. The given ratio at that time is the average ratio during that minute. This process is analogue for all the other tests.

3.1 Polyurethane

The material Polyurethane (PUR) has been tested four times. All of the tests showed specific similarities which can be seen from the figures and tables.

3.1.1 PUR test 1

Figure 15 shows the ratio and the loss of mass of the first test with the PUR sample. There can clearly be seen that there is a distinct relationship between the

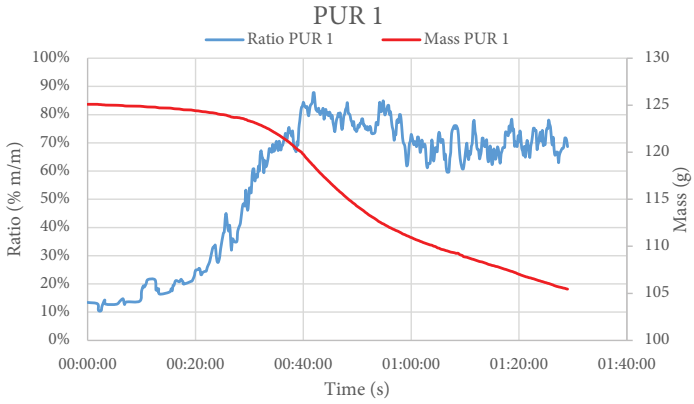

Figure 15 PUR test 1 mass loss and ratio

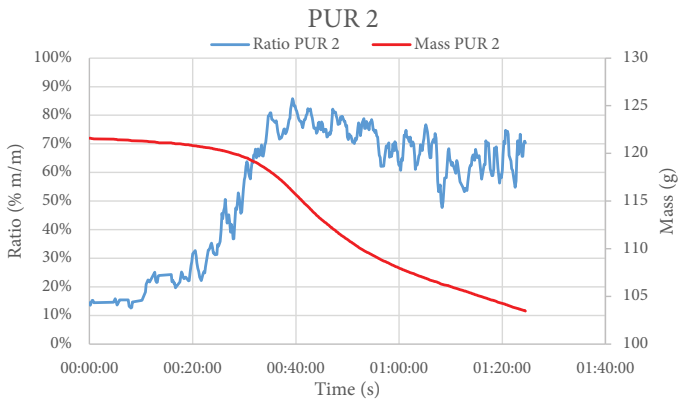

Figure 16 - PUR test 2 mass loss and ratio

rate of mass loss and the ratio. A higher rate of mass loss leads to higher ratios, this is a logical event due to the fact that a higher loss of the sample directly leads to more pyrolysis gas.

Table 3 shows the observations during the experiment. The table shows that until 25 minutes into the test, no smoke is detected and no flammability could be observed. The first smoke is detected at 25 minutes into the test. At that time the ratio between pyrolysis gas and air is at 36%, the smoke is at that ratio flammable. From this test the lower flammability limit was detected at a ratio of 36%. Further into the test smoke intensified at 37 minutes, this event corresponds to the loss of mass which at that time also increases. At 40 minutes into the test the ratio is at such a level that flammability no longer is detected. This event remains until flammability is again observed one hour into the test. The average ratio during that time is 78%. In this test the lower flammability limit is found 36% and the upper flammability limit is detected at 78%.

3.1.2 PUR test 2

The results from the second test can be found in Figure 16 and Table 4. The Figure shows again that there is a clear relationship between de ratio and rate of mass loss. Also, the results are similar to the first test.

The Table presents the observations done during the experiment. The first observations of a flammable mixture are found at a time of 26 minutes into the test. At that time the ratio is 40 %. From this test the lower flammability limit is detected at a ratio of 40%. Furthermore is observed that after detection of a flammable mixture the smoke intensifies, this corresponds to the increasing rate of mass loss. At 39 minutes into the test the ratio is at such a high level that the smoke is no longer flammable, this observation continuous until 47 minutes into the test. During that time the average ratio is 78%. This test showed a lower flammability limit of 40% and an upper flammability limit of 78%.

Time	Smoke	Flammable	Stoichiometric	Temperature (°C)	Ratio (% m/m)
00:00:00	No	No	No	155	12
00:25:00	Observed	Yes	Yes	260	36
00:37:00	Intensifies	Yes	Yes	270	55
00:40:00	Intensifies	No	No	305	78
00:49:00	Stabilises	No	No	320	80
01:00:00	Reduction	Yes	Yes	345	62
01:06:00	Stabilises	Yes	No	355	68
01:28:00	Reduction	Yes	Yes	395	65
01:30:00	Stabilises	Yes	Yes	400	70

Table 3 - Observations during PUR test 1

Time	Smoke	Flammable	Stoichiometric	Temperature (°C)	Ratio (% m/m)
00:00:00	Not	No	No	160	12
00:26:00	Observed	Yes	Yes	260	40
00:29:00	Intensifies	Yes	Yes	275	45
00:38:00	Stabilises	Yes	Yes	300	48
00:39:00	Stabilises	No	No	310	78
00:47:00	Reduction	Yes	No	325	73
00:50:00	Stabilises	Yes	No	330	70
00:59:00	Reduction	Yes	Yes	355	65
01:05:00	Stabilises	Yes	Yes	360	70
01:25:00	Stabilises	Yes	Yes	400	681

Table 4 - Observations during PUR test 2

3.1.3 PUR test 3

The third test also shows similar results to the first two tests. In Figure 18 and Table 5 the results are shown from the loss of mass and the calculated ratios. Again the correspondence between the rate of mass loss and the height of the ratio is visible.

In Table 5 the observations during the experiment are shown. The first observation which showed flammability is found at 25 minutes. From Figure 17 can be found that the ratio at that time was 39%. The lower flammability range in this test is found at 39%.

This test also showed that an upper flammability limit can be established. This observed from 38 minutes until 48 minutes. The ratio at 38 minutes into the test was 78%. The third test showed a lower flammability limit of 39% and an upper flammability limit of 78%.

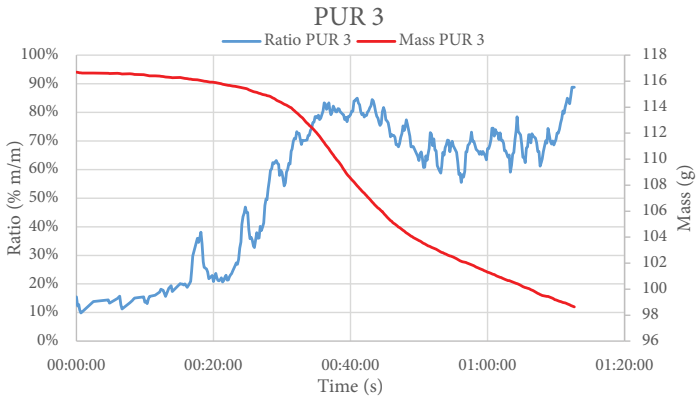

Figure 17 -PUR test 3 mass loss and ratio

3.1.4 PUR test 4

The fourth test is the final test with the PUR material. Figure 18 and Table 6 show the progress of the mass of the sample and the ratio of pyrolysis gas with air. In this test the relationship between the loss of mass and the ratio is clearly visible.

Table 6 shows the observations done during the tests, the first detection of a flammable mixture is done at 31 minutes. From Figure 18 the ratio is found, this ratio is at that moment 40%. During this test the lower flammability limit is found at 40%.

Time	Smoke	Flammable	Stoichiometric	Temperature (°C)	Ratio (% m/m)
00:00:00	No	No	No	150	11
00:25:00	Observed	Yes	Yes	260	39
00:29:00	Intensifies	Yes	Yes	275	50
00:38:00	Intensifies	No	No	320	78
00:40:00	Stabilises	No	No	325	80
00:48:00	Reduction	Yes	No	340	68
00:53:00	Reduction	Yes	No	355	65
00:56:00	Stabilises	Yes	No	365	71
01:15:00	Stabilises	Yes	No	400	76

Table 5 - Observations during PUR test 3

Time	Smoke	Flammable	Stoichiometric	Temperature (°C)	Ratio (% m/m)
00:00:00	No	No	No	150	15
00:31:00	Observed	Yes	Yes	265	40
00:37:00	Intensifies	Yes	Yes	280	44
00:42:00	Stabilises	No	No	295	77
01:02:00	Reduction	Yes	Yes	340	73
01:06:00	Stabilises	Yes	No	345	72
01:28:00	Reduction	Yes	Yes	375	65
01:31:00	Stabilises	Yes	Yes	400	45

Table 6 - Observations during PUR test 4

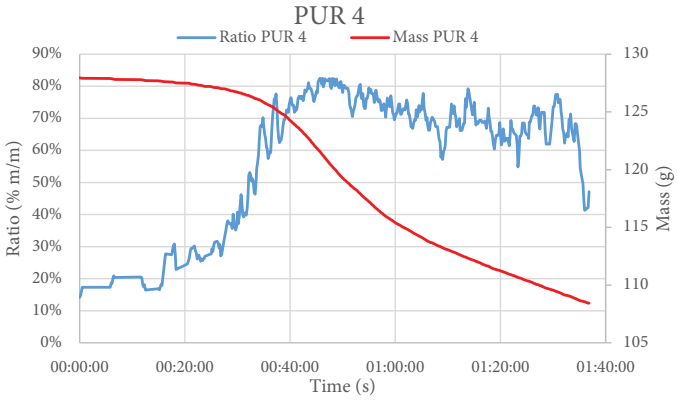

Figure 18 - PUR test 4 mass loss and ratio

At 42 minutes into the test the gas mixture is no longer flammable. This inability to ignite the gas mixture ends at 1 hour into the test, the ratio at 42 minutes into the test is 77%. The third test showed a lower flammability limit of 40% and an upper flammability limit of 77%.

3.1.5 Concluding PUR

In this part of the chapter the results from the different tests will be combined. This enables to compare the different results. The results will be compared using temperatures and the mass of the samples is shown relatively to the initial mass.

Table 7 averages the found mass losses of the different experiments of the samples. From the relative mass losses one can conclude that the results from the four tests correspond to each other. This result can further be seen in Figure 19. This figure shows the relative mass losses along with the ratios. The ratios in this figure have been averaged to reduce noise due to the volatile results from the ratio calculations.

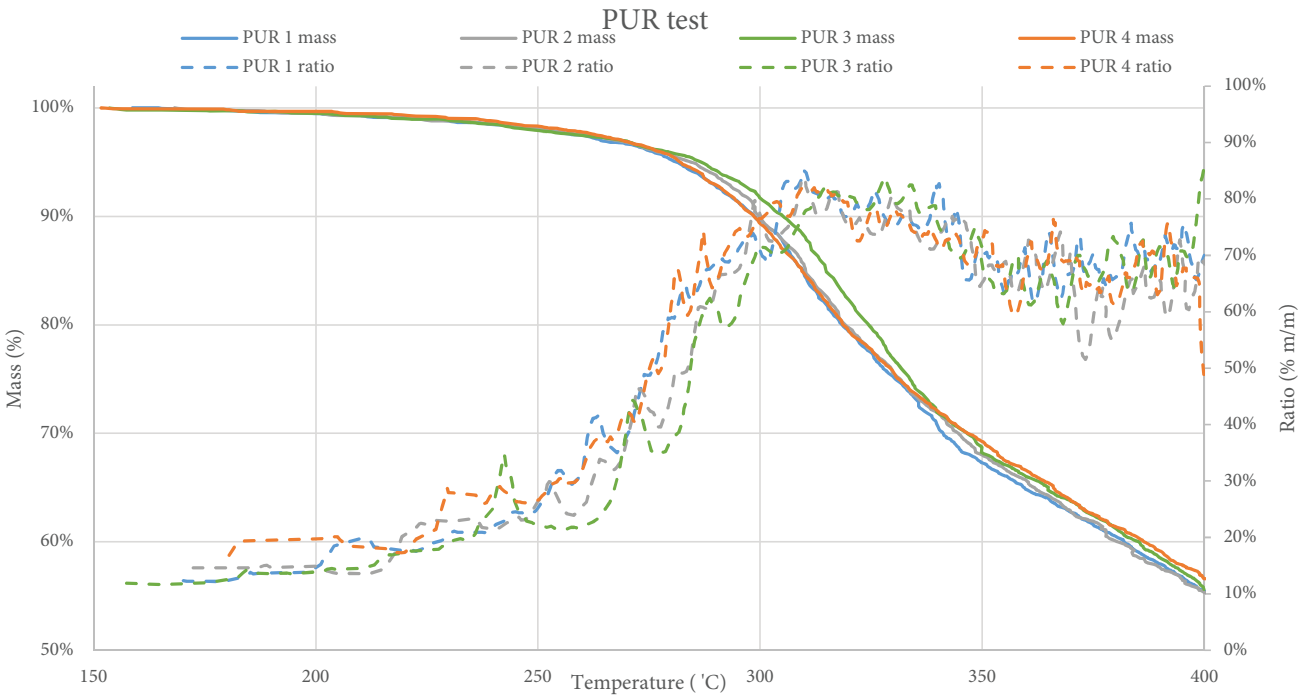

Figure 19 - Mass losses and ratios of PUR tests combined

Table of mass losses

At 400 °C	PUR 1	PUR 2	PUR 3	PUR 4	Average
Sample mass	125.1	121.6	116.7	128.0	122.9
Core mass	44.1	40.6	40.7	45.0	42.6
Mass loss	20	18.2	18.1	20	19.1
% of sample	16%	15%	16%	16%	16%
% of core	45%	45%	44%	44%	45%

Table 7 - Table of mass losses of the material PUR

The figure shows that all the tests had a similar course, the loss of mass follows an almost identical path as what could be expected. Also the calculated ratios show similar results, although due to the volatility of the calculations they do not follow the exact path. However there can clearly be seen that the overall form is corresponding.

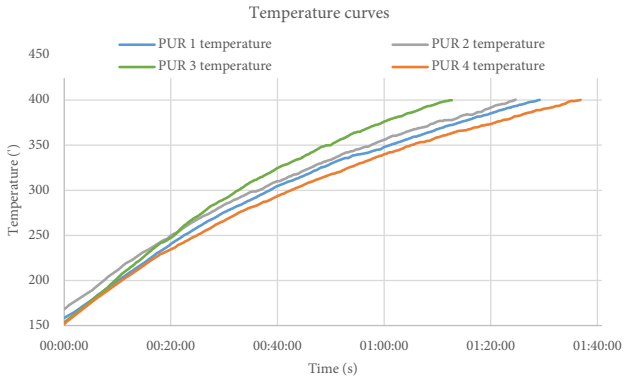

Figure 20 -Temperature curves of the PUR tests

The difference in the ratios after 340 °C where the rate of mass loss reduces appears to be too low. Lower ratios are to be expected, however the rate at which the temperature rises in the oven is of importance. Figure 20 shows the temperature curves of the different tests. From the curves there can be seen that the rate at which the temperature increases significantly slows down after reaching a temperature of 300 °C. A slower increase of temperature results in a lower change of the air volume during the same period. Resulting in a lower flow of air. The rate at which pyrolysis gas is formed does not change. This implies that the ratio of pyrolysis gas in air increases, due to a decreased flow of air.

The sample deteriorates in a characteristic way, in

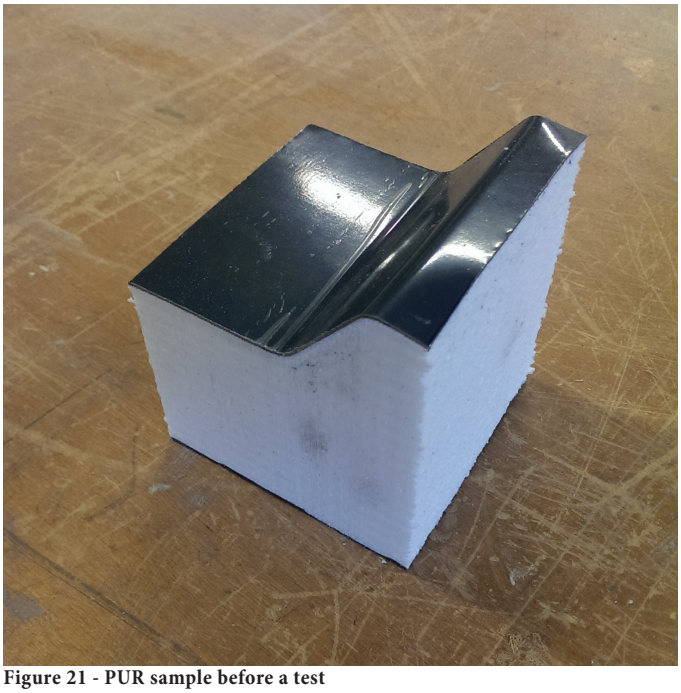

Figure 21 - PUR sample before a test

Figure 21 and Figure 22 the samples before and after the test can be seen. During the heating process the outer edges of the material deteriorate differently than the material in the core of the sample.

As can be seen from the photos the core of the sample is completely lost. This is especially visible in the section of the sample. The edges of the foam deteriorate but do not gasify. What also can be seen is that at the places where the facings are the PUR foam is completely lost. The material appears to be reacting more heavily to heat transferred by conduction then

Figure 22 PUR sample after a test

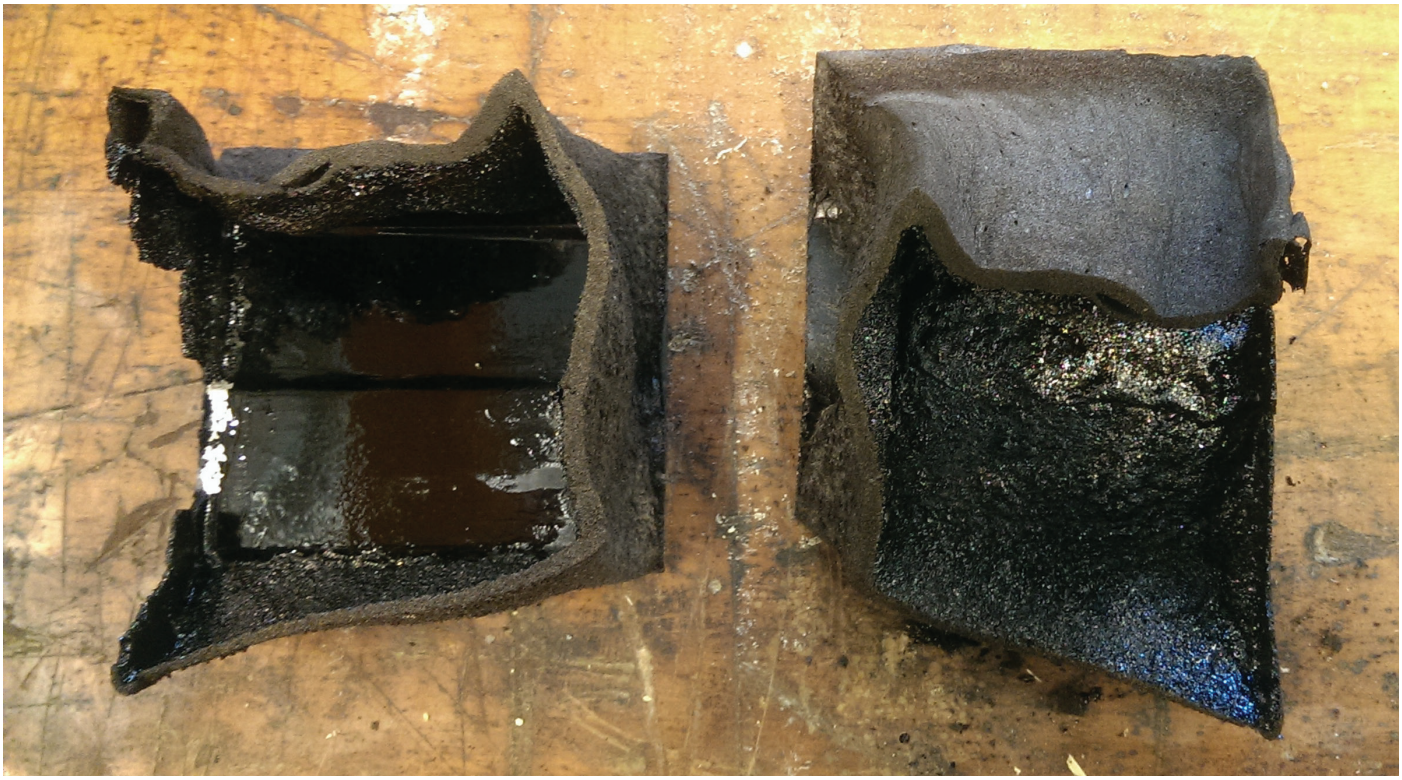

Figure 23 - Section of a PUR sample after a test

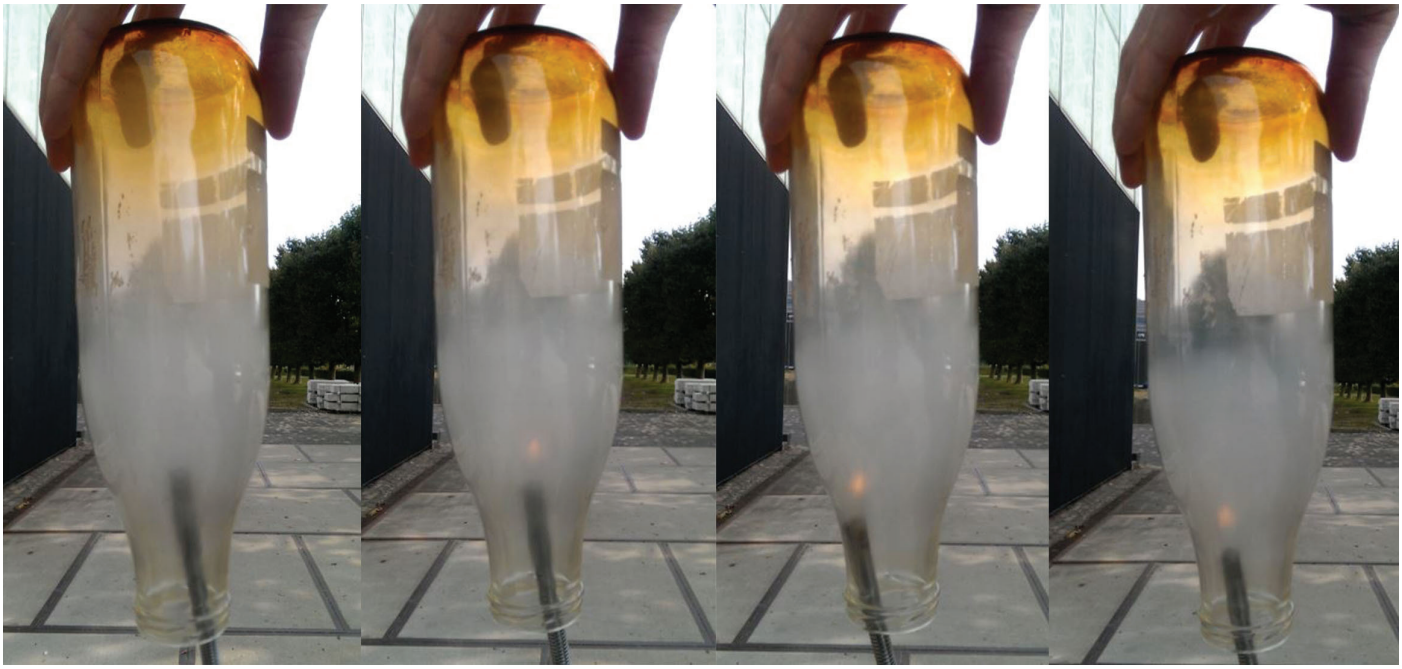

Figure 24 - Stills of a film where smoke is burnt inside the bottle

by convection. The areas where the sample is exposed to the hot air, the material still exists. The sample is not subjected to radiation. The state of the sample also proves the high loss of mass as measured during the experiments. A section of the PUR sample after the test can be seen in Figure 23.

The flammability of the smoke is filmed using a camera, stills from filming can be found in Figure 24 these stills show clearly that the smoke is burnt. In the event of figure 24 the smoke in the bottle is burned clear in two seconds. From the stills in Figure 25 an ignition close to the stoichiometric ratio can be seen. From the start of the lighter the smoke is burnt fast, within one second.

To conclude the material Polyurethane, the flammability ranges need to be established, this is performed by averaging the found limits in the four

Figure 25 - Stills of a film where smoke is burnt close to a stoichiometric ratio

tests.

Table of flammability limits

	LFL (% m/m)	UFL (% m/m)
PUR 1	36 %	78 %
PUR 2	40 %	78 %
PUR 3	39 %	78 %
PUR 4	40 %	77 %
Average	39%	78%

Table 8 - Table of flammability limits of the material PUR

Table 8 presents the found flammability limits of the tests on the PUR sandwich panel samples. From this experiment the flammability limits are determined as follows:

The lower flammability limit of gas effluents resulting from the pyrolysis of Polyurethane is 39% m/m. The upper flammability limit of gas effluents resulting from the pyrolysis of Polyurethane is 78% m/m.

3.2 Polyisocyanurate

This part of the chapter will discuss the results of the tests done on Polyisocyanurate (PIR). PIR is a similar material like PUR, however it has some extra features which make it more fire safe then PUR. First, it has the ability to form a char layer when exposed to a hot temperature. Like a char layer formed on wood, it protects the material from heat reaching the core of the sample and it prevents oxygen to react with the material. This results in a higher resistance to heat and fire. What impact this effect has on the tests will be elaborated further on.

3.2.1 PIR test 1

The materials PIR and PUR have a similar background, this is visible from the test. The rate at which mass is lost shows similarities as well as the temperatures where mass loss starts. In Figure 26 the mass loss and the calculated ratios are presented.

The rate of mass loss shows a distinct similarity to the rate of mass loss with PUR materials, however the total loss of mass is 50% lower than the mass loss of PUR.

This lower rate of mass loss also results in lower ratios. The maximum ratio found in this test can be found in Figure 26 and lies between the 60% and 70%. From

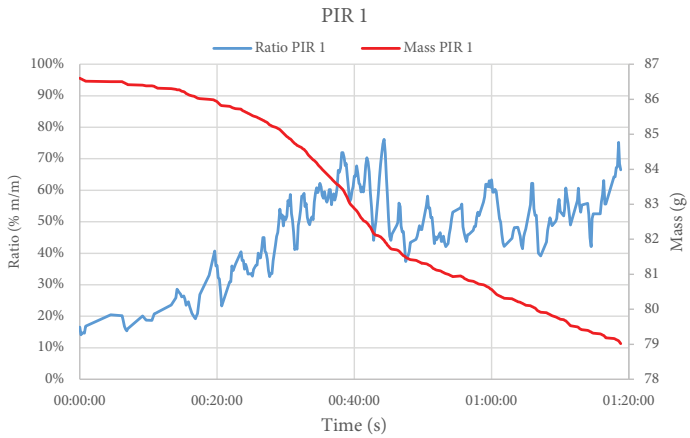

Figure 26 - PIR test 1 mass loss and ratio

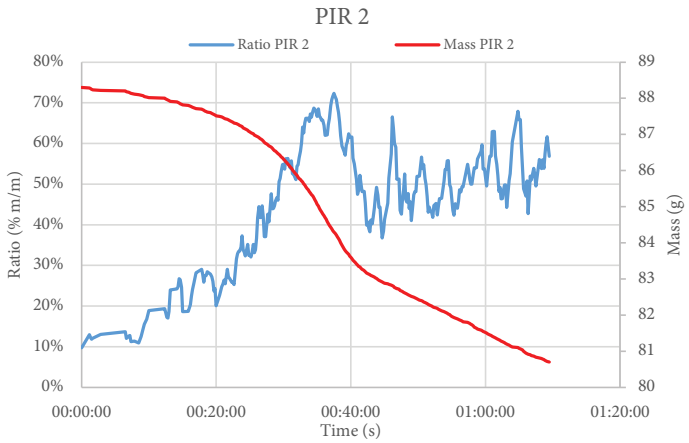

Figure 27 - PIR test 2 mass loss and ratio

Table 9 can be derived that at 39 minutes into the test, the first smoke is observed. The ratio is at that time 55%, the smoke tested at time was not flammable. In the following minutes the smoke intensifies as the rate of mass loss increases, however even gas mixtures with a ratio of 70% are not flammable. From this test no flammability limits could be established.

Time	Smoke	Flammable	Stoichiometric	Temperature (°C)	Ratio (% m/m)
00:00:00	No	No	No	180	14
00:39:00	Observed	No	No	320	60
00:44:00	Intensifies	No	No	330	65
00:49:00	Stabilises	No	No	340	52
00:59:00	Reduction	No	No	365	55
01:18:00	No	No	No	400	68

Table 9 - Observations during PIR test 1

3.2.2 PIR test 2

The second test shows the same results, the relationship between the rate of mass loss and the ratio is clearly visible. This is shown in Figure 27.

During the test smoke was observed starting from 29 minutes into the test as can be found in Table 10. The ratio at that time is 45%. Smoke leaving the oven further intensifies, until ratios are reached from 60% to 70%, with a peak at 74%. Testing the smoke did not result in the observation of a flammable mixture. Nearing the end of the test no smoke was observed anymore. Concluding this test, no flammability limits could be found.

3.2.3 PIR test 3

The third test is the final test regarding PIR performed as is described in Chapter 2. The results are shown in Figure 28 and Table 11. The relationship between the rate of the mass loss and the ratio is again visible.

During the test smoke was observed starting from 35 minutes into the test. The ratio at that time is 43%.

Time	Smoke	Flammable	Stoichiometric	Temperature (°C)	Ratio (% m/m)
00:00:00	No	No	No	175	10
00:29:00	Observed	No	No	305	40
00:34:00	Intensifies	No	No	310	45
00:39:00	Stabilises	No	No	340	58
00:44:00	Reduction	No	No	345	42
01:09:00	No	No	No	400	56

Table 10 - Observations during PIR test 2

Time	Smoke	Flammable	Stoichiometric	Temperature (°C)	Ratio (% m/m)
00:00:00	No	No	No	150	10
00:35:00	Observed	No	No	260	43
00:46:00	Intensifies	No	No	320	65
00:51:00	Stabilises	No	No	325	42
00:56:00	Reduction	No	No	340	46
01:18:00	No	No	No	400	68

Table 11 - Observations during PIR test 3

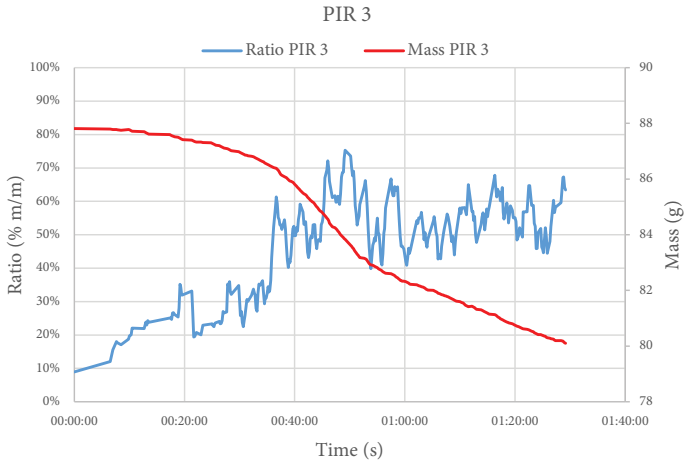

Figure 28 - PIR test 3 mass loss and ratios

The volume of smoke further intensifies until ratios are reached from 60% to 70%. Testing the smoke did not result in the observation of a flammable mixture. Nearing the end of the test no smoke was observed anymore.

3.2.4 PIR test 4

The fourth test is carried out differently. The previous experiments showed that due to the low mass losses, ratios do not reach levels higher than 60% to 70%. 74% is the absolute maximum ratio found in the experiments, however it is unlikely that these ratios could be encountered during a real life fire scenario, it is still of value to try to elevate the ratios and check for flammability of the gas mixture.

In order to obtain the higher ratios a higher yield of pyrolysis gas is needed. To create a higher yield of pyrolysis gas the sample is exposed instantly to a high temperature. This temperature shock results in an instantaneous loss of mass, resulting in a higher ratio.

Figure 29 shows the result from exposing the core material to a high temperature instantly. The ratios

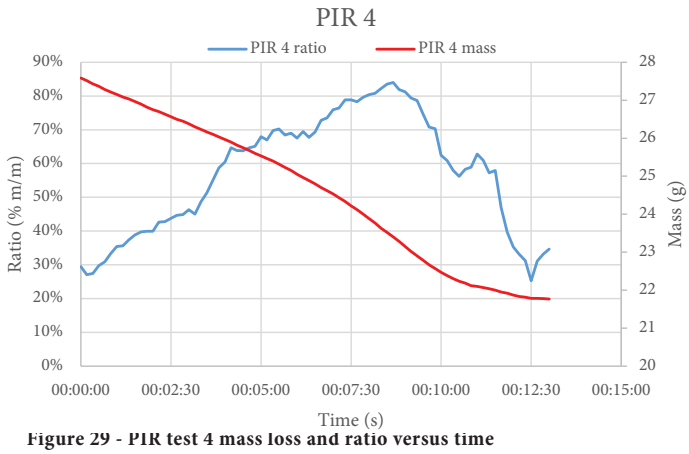

Figure 29 - PIR test 4 mass loss and ratio versus time

start at 30% and within 5 minutes reach the maximum ratio found in the previous experiments. In this experiment however the ratio reaches higher levels. The highest ratio found in this experiment is 84%, this ratio is reached at 8 minutes and 30 seconds in the experiment. After this short peak the ratio quickly drops to the levels found in the earlier experiments.

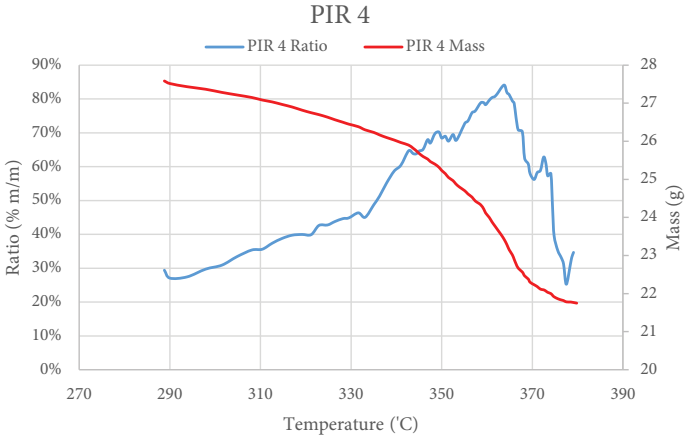

Figure 30 - PIR test 4 mass loss and ratio versus temperature

Figure 30 shows the same results, however temperature is used as parameter to plot the progress of mass loss and ratios. It is clear that within 8 minutes the temperature rises from 290 °C to 365 °C. Due to this fast temperature increase, almost 10 °C per minute, the high ratio is found.

The goal of this experiment was obtaining a higher ratio in order to check if a flammable mixture can be found. Obtaining a higher ratio in this experiment did not result in a flammable mixture. Therefore, can be concluded that in these experiments the lower flammability limit lies above the 84% or the fire effluents from the pyrolysis of PIR are not flammable in the temperature range of this experiment.

3.2.5 Concluding PIR

To conclude the material Polyisocyanurate, the results from the different experiments are combined. The mass losses will be shown relatively to the initial mass and temperature will be used to plot the progress of the mass loss and the ratios.

From Table 12 it is clear that the results from the mass losses are stable throughout the three experiments. It is also clear that the loss of mass is much lower than the losses of mass found with the material PUR. The effect of the built up of char appears to be visible in the loss of mass.

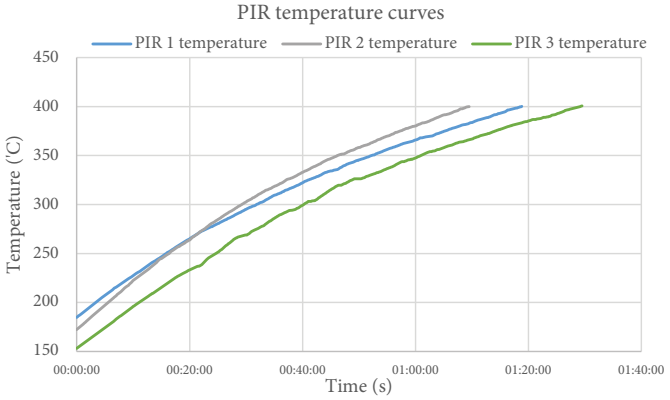

Figure 32 - Temperature curves of the PIR tests

Table of mass losses

At 400 °C.	PIR 1	PIR 2	PIR 3	Average
Sample mass	86.6	88.3	87.8	87.6
Core mass	26.6	28.3	27.8	27.6
Mass loss	7.6	7.6	7.7	7.6
% of sample	9%	9%	9%	9%
% of core	29%	27%	28%	28%

Table 12 - Table of mass losses of the material PIR

Figure 31 further shows the resemblance of the experiments with each other. The mass loss corresponds well, as well as the ratios. In these experiments the ratio showed a high volatility, therefore they are averaged.

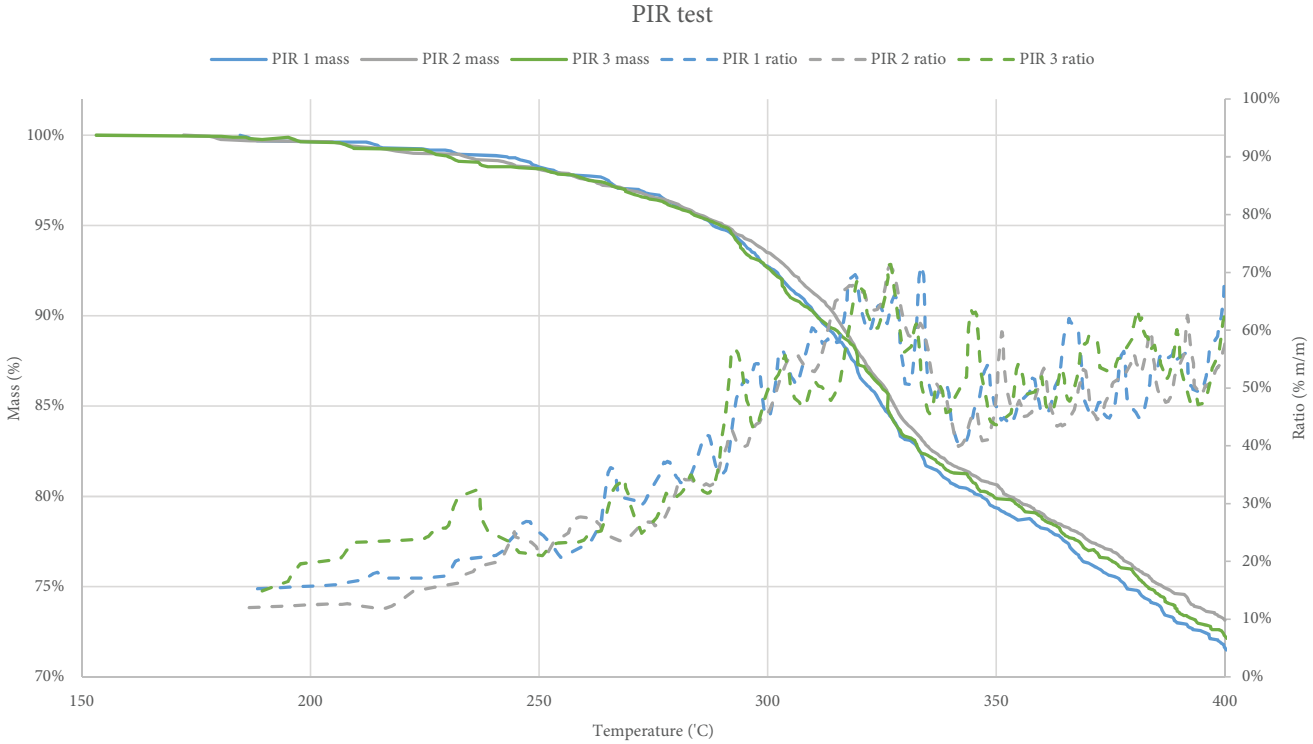

Figure 31 - Mass loss and ratios of the PIR tests combined

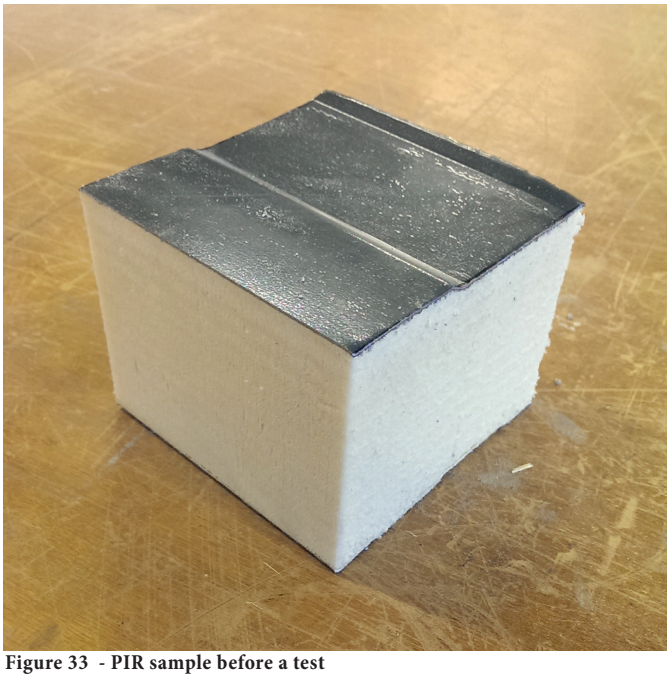

Figure 33 - PIR sample before a test

From the temperature curves in Figure 32 there can be seen that the experiments were performed under the same conditions. The curve from the third experiment appears to be deviating, this is due to the fact that the first mass loss was detected at 150 °C. This means that the test started at 150 °C, in the other test mass loss was detected from 180 °C. Resulting in a higher start of the temperature curve. The path of the third curve does show the same progress.

Figure 35 - PIR sample after a test

As mentioned before, the material PIR builds a char layer when exposed to a high temperature. The effects of the char layer are best observed in photos, these can be seen in Figure 34 and Figure 35. Especially the photo of a section of the material shows a significant different result. Where the material PUR was completely lost, the PIR material is deteriorated but did not gasify. Figure 33 shows the sample before the test.

Figure 34 - Section of a PIR sample after a test

During the test the foam expands and a char layer is formed and has a depth of around 1 cm. The char layer appears to be protecting the core of the sample. The core is deteriorated as can be seen in the Figure 34 but the material still exists. Another characteristic finding is the shining property of the char layer, this might indicate that during the pyrolysis process a metal compound is exposed or part of the char layer. Another property of PIR is that the pyrolysis temperature of PIR lies somewhat higher compared to PUR (Harwood and Hume, 1997). This is noticeable during the attempts of igniting the gas mixture. During ignition it is visible that the pyrolysis gas condenses against the glass of the bottle, this can be seen in Figure 36. The colour of the condensed gas is brown like the colour of the char layer and can be seen in Figure 37.

During the experiments no flammable smoke was detected, also were the mass losses low. Therefore, no flammable limits of the fire effluents from the pyrolysis of Polyisocyanurate were found. The char layer appears to be protecting the core which reduces mass loss. This reduction of mass loss resulted in lower ratios of pyrolysis gas in air, however during an extra experiment where higher ratios were reached no flammable gas mixture was detected. The highest ratio found was 84%, this can be found in Figure 29 and 30. This ratio is very unlikely to occur during a real life fire situation.

The lower flammability limit of gas effluents resulting from the pyrolysis of Polyisocyanurate could not be detected. The limit either does not exist or is higher than 84% m/m. An upper flammability limit was therefore, not detected either.

Figure 36 - PIR effluents condensate

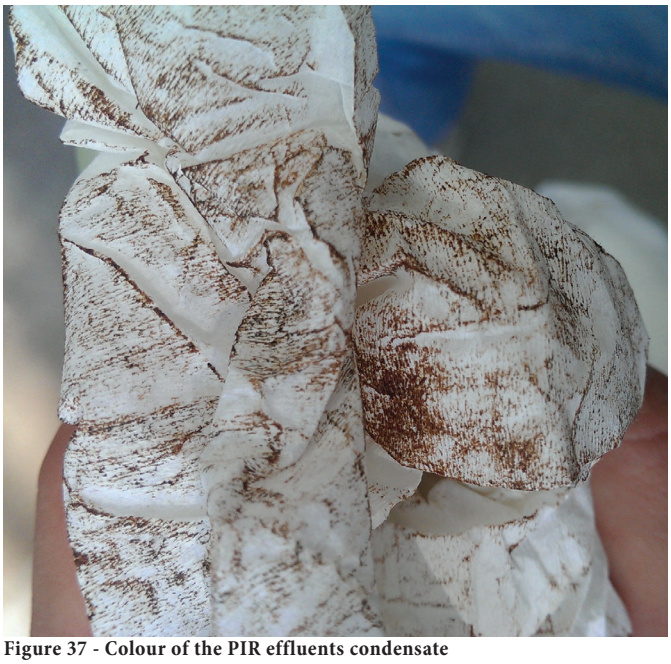

Figure 37 - Colour of the PIR effluents condensate

3.3 Stone wool

The next results are from the core material stone wool, this material is considered to be incombustible and the expectation is that no flammability limits will be found. The material however is still interesting to study because of the adhesives used in the material. These adhesive will be released during the experiment and might burn. The results are split into two parts, first the test on the core material. Second, the test on the panel.

3.3.1 Stone wool core

The first test regarding Stone wool is the test on just the core material. The stone wool core (SWC) is subjected to the same experiment as the previous materials.

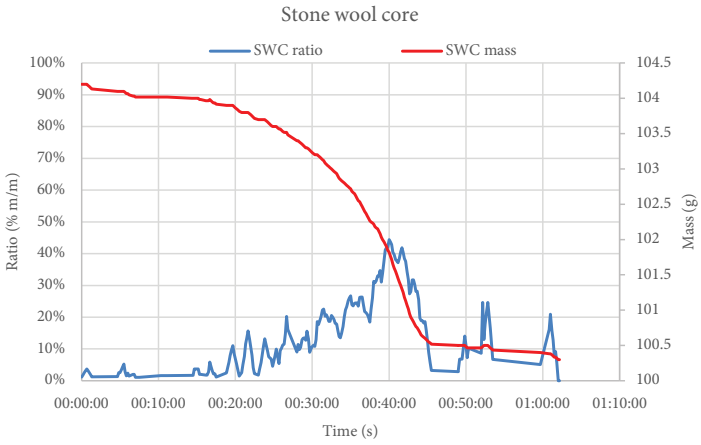

Figure 38 - SWC test 1 mass loss and ratio, Time

The figure above shows the results from the experiment. There appears to be a dramatic drop of mass starting from 20 minutes in the test, however the mass loss is only 4 grams. This is minor mass loss compared to the previous two materials PUR and PIR. Another distinct event occurs at 45 minutes into the test. At that time the mass loss almost stops entirely, this is due to the fact that the adhesive is than completely vaporised. From the previous performed literature study it is known that adhesives start losing their adhesive capabilities around 150 °C, it can be expected that higher temperatures results in the glue vaporising (Harwood and Hume 1997). In Figure 40 the results are shown using temperature as parameter to plot the progress of the experiment.

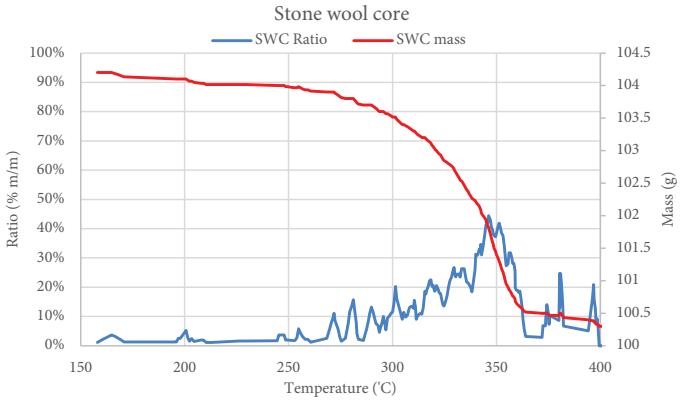

Figure 39 - SWC test mass loss and ratio versus temperature

The figure can be split in four phases, the first phase starts at 150 °C and ends at 210 °C. This is the first detected mass loss but does not continue. This due to the fact that moisture in the inorganic material vaporises first, when exposed to an initial temperature of 150 °C. The second phase then starts and ends at 250 °C. No mass loss is detected due to the fact that the moisture has vaporised and the adhesive layer is still in the sample and does not vaporise. The adhesive starts vaporising at 250 °C and is completely vaporised at 360 °C. This is the third phase of the experiment. The fourth and final phase ends at 400 °C and shows little mass loss, this is probably due to the fact that all of the adhesive has vaporised.

The ratios during this experiment remain low, with a peak of 40% at 350 °C and at 40 minutes into the test. At 30 minutes into the test the first smoke in a very light concentration was observed, this smoke was not flammable. 15 minutes later at 45 minutes into the test no smoke was observed anymore. During this period of 15 minutes no flammability of smoke was detected. No flammability limits of the material were detected.

3.3.2 Stone wool panel

The second test regarding stone wool is the test with the material as a core for the sandwich panel (SWP). The main difference with this test is that the steel facings are still attached to the core material, this

has the effect that there are more adhesives used and there is less room for the adhesives to be released from the sample.

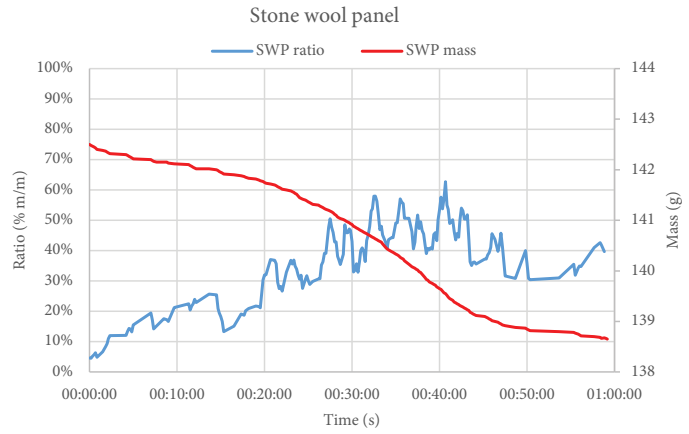

Figure 40 - SWP test mass loss and ratio versus time

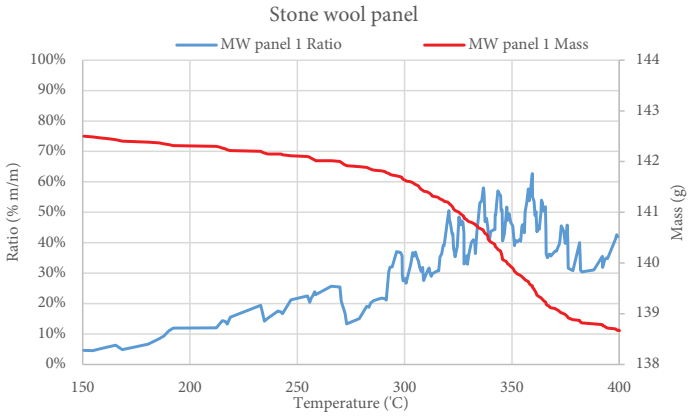

Figure 41 - SWP test mass loss and ratio versus temperature

From the figure above can be seen that mass loss starts instantly from 150 °C. This rate at which mass is lost increases at 20 minutes into the test. From Figure 41 it is clear that the temperature at that time is 300 °C. The rate of the loss of mass shows some resemblance with the experiment with the core material. At 300 °C the rate at which mass is lost increases heavily.

The ratios during this experiment remain low, however slightly higher than the first experiment with stone wool due to a higher loss of mass. Apart from a small peak around the 60%, the average maximum concentration found is around the 50%. These ratios of the gas mixtures as well as the lower ratios were tested on flammability. During this test no flammable mixtures were detected.

3.3.3 Concluding stone wool

The main difference between the test on just the core material and the test on the panel, is that mass loss of the panel is continuous towards the end of the test. Where the core material showed distinct phases, the test with the panel does not.

Also remarkable is that the mass lost by the panel is 5 grams and the mass lost by the core sample is 4 grams. However the core material of the panel sample is only half of the tested core sample from the first stone wool experiment as can be seen in Table 13.

Table of mass losses

At 400 °C	SWP	SWC
Sample mass	142.5	104.2
Core mass	56.5	104.2
Mass loss	5.0	4.0
% of core	9%	4%

Table 13 - Table of mass losses of the material Stone wool

These differences can be explained due to the different amounts of adhesives used. The core sample has no facings attached and is pure core material. The sandwich panel sample has a similar core, the difference is that the facings are attached. These facings are attached using an adhesive, this results in a higher amount of adhesive in the sandwich panel

Figure 42 - SWC test sample before a test

Figure 43- SWC sample after a test

test sample. From the experiments it is known that the adhesives cause the loss of mass, therefore is there a relationship between the loss of mass and the concentration of adhesives in the test sample. More adhesives lead to more mass loss. Assuming that the core of the Stone wool sandwich panel has the same concentration of adhesive as the tested core sample. 60% of the total mass loss is due to the adhesives used for the facings and 40% due to the adhesives for the core.

Figure 45 - loose fibres of the SWC after a test

The results of the vaporised adhesives can clearly be seen on the photos presented in Figure 43 and Figure 45. After the test the colour of the sample completely disappeared, a photo before a test can be seen in Figure 42. Also, the strength of the sample is reduced. Before

Figure 44 - loss of structural strength, load : 5KG

testing the sample has some mechanical properties due to the adhesive, with the adhesive gone the block has now no mechanical strength. This can be seen in Figure 44. The mass on the block is 5 kg. The photos show that the inorganic fibres are loose and no longer form a single block.

The sample of the sandwich panel has similar results, the same discolouration can be seen in Figure 46. The adhesive layer which attaches the facings to the core, still has enough strength not to loosen from the core. Due to the fact that the fibres are bonded perpendicular to the facings the sample still has some structural strength and the sample does not fall apart.

In Figure 47 below, the results from the two experiments are combined. From the figure can clearly be seen that the panel loses more mass then the core sample. The course of the mass loss however shows resemblance to each other. The course of the ratio also show some correspondence, it is clear that the core sample with a lower rate of mass loss also has lower ratio of pyrolysis gas in air. From both experiments it is clear that the ratio of fire effluents from the pyrolysis of stone wool does not reach high levels, unlike the ratios with PUR and PIR. Also were there no flammable mixtures detected. From these experiments no flammability limits could be established.

Figure 46 - Discolouration of a SWP sample after a test

The lower flammability limit of gas effluents resulting from the pyrolysis of stone wool could not be detected. The limit either does not exist or is higher than 60% m/m. An upper flammability limit was not detected either.

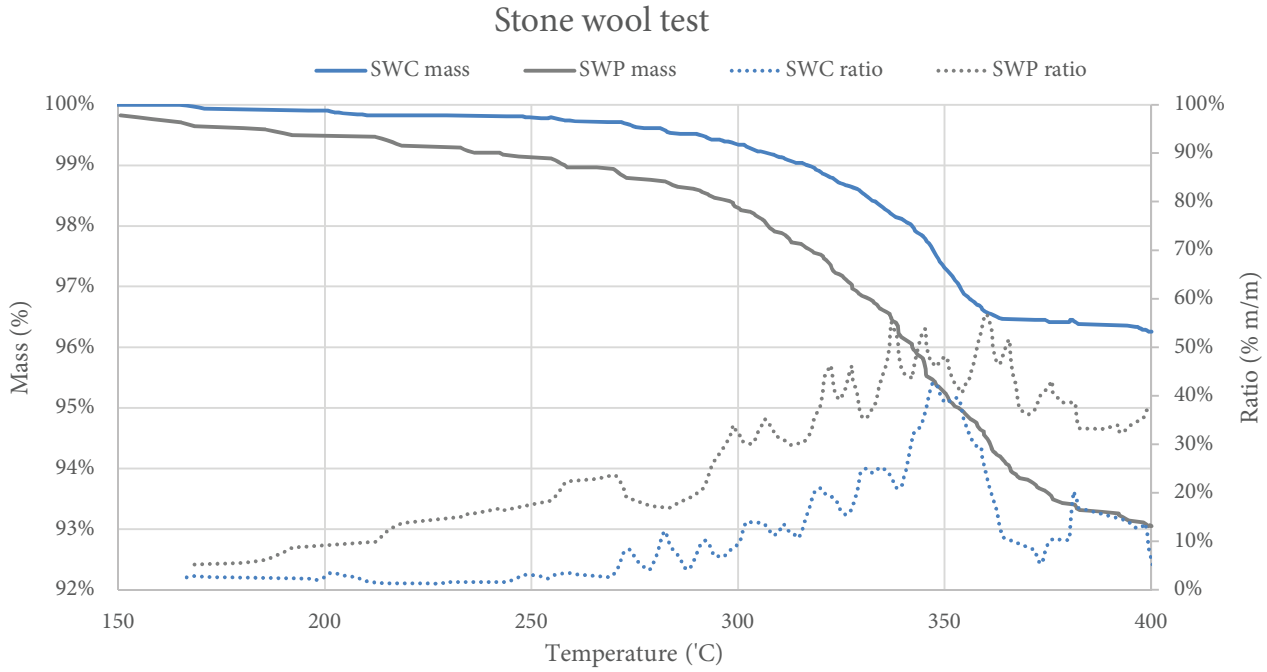

Figure 47 - Mass losses and ratios Stone wool combined

3.4 Polystyrene

The final tests are done on a combination of materials with a polystyrene basis. The two products chosen for these experiments are expanded polystyrene (EPS) and extruded polystyrene (XPS). From the earlier performed literature study it is known that these products first melt and then start pyrolysis (Zorgman, 1980). This might show very different results as seen before. From the earlier performed literature study was found that sandwich panels with a polystyrene core are not widely used (de Kluiver and Giunta d'Albani, 2014). The products however are used on a broad scale on steel deck roof constructions as discussed in Paragraph 2.3.2. Therefore, the products are only tested as a core material without facings.

3.4.1 EPS test 1

The results from the first tests are shown in Figure 48. It is clear that the pyrolysis process starts at 30 minutes into the test at a temperature of 270 °C , since from that moment on mass loss starts. From that point on the rate of mass loss increases exponentially and the ratio rises as well. During this test flammable mixtures were detected, in Table 14 the observations are presented. During the observations the first smoke was detected at 30 minutes.

The ratio found at 30 minutes into the test is 34%. This test established at lower flammability limit at 34%. From the observations can further be derived that smoke output further intensifies during the experiment, this corresponds with the findings from Figure 48. The highest ratio found during the test lies at 90%, however no moments of an inflammable mixture were found. During this test no upper flammability limit could be detected. The rate at which the smoke is burnt changes, until 1 hour and 6 minutes into the test the smoke burns fast. During this phase the ratio is close to a stoichiometric ratio. The average ratio at that point is 70%. Below the 70% and above the 34% the mixture is highly flammable, above the 70% the mixture is still flammable all be it less intense.

3.4.2 EPS test 2

The results from the second test are presented in Figure 49. This test shows start of the pyrolysis process around 20 minutes into the test. In analogy with the first test, from that moment on the rate at which mass is lost increases exponentially. The ratio rises accordingly.

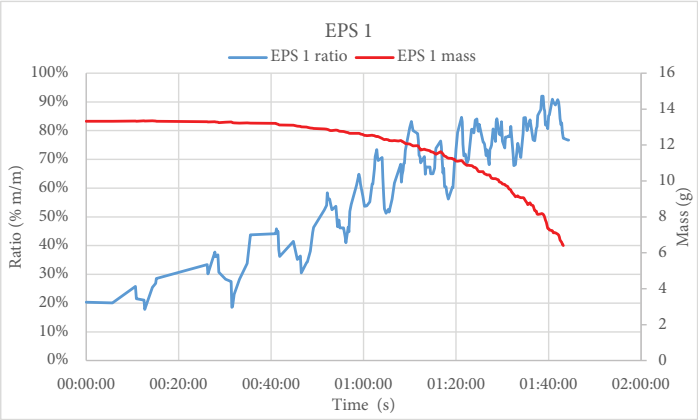

Figure 48 - EPS test 1 mass loss and ratio

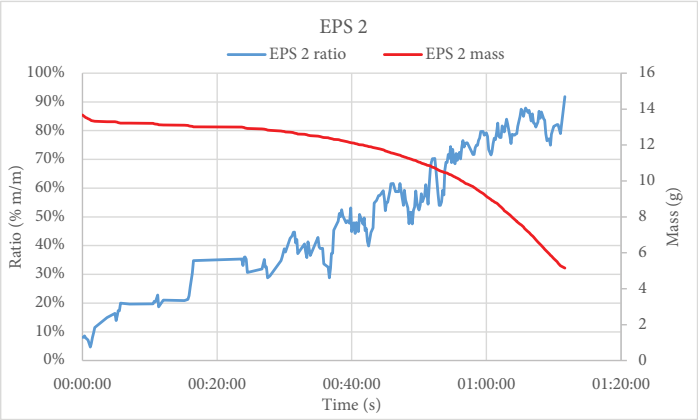

Figure 49 - EPS test 2 mass loss and ratio

Time	Smoke	Flammable	Stoichiometric	Temperature (°C)	Ratio (% m/m)
00:00:00	No	No	No	190	20
00:30:00	Observed	Yes	Yes	275	28
00:58:00	Intensifies	Yes	Yes	325	56
01:06:00	Intensifies	Yes	No	330	70
01:37:00	Intensifies	Yes	No	370	90

Table 14 - Observations during EPS test 1

Time	Smoke	Flammable	Stoichiometric	Temperature (°C)	Ratio (% m/m)
00:00:00	No	No	No	150	8
00:20:00	Observed	Yes	Yes	275	37
00:50:00	Intensifies	Yes	Yes	345	55
01:00:00	Intensifies	Yes	No	365	75
01:10:00	Intensifies	Yes	No	375	90

Table 15 - Observations during EPS test 2

The smoke observed was detected as flammable. In Table 15 the observations made are presented. 20 minutes into the test the first flammable smoke is observed.

The ratio found at 20 minutes into the test is 37%. From this experiment a lower flammability limit could be detected at 37%. An upper flammability was again not found during the test. The highest ratio observed was 90%. The tested gas mixture at this ratio was still able to burn, which means that the mixture is still within the flammability ranges. This experiment could not establish an upper flammability limit. However the rate at which the smoke is burnt changes, until 1 hour into the test the smoke burns fast. During this phase the ratio is close to a stoichiometric ratio. The average ratio at that point is 75%. Below the 75% and above the 37% the mixture is highly flammable, above the 75% the mixture is still flammable all be it less intense.

3.4.3 XPS test 1

The third test with the polystyrene products is the first test with XPS as material. The primary difference between EPS and XPS is the production method. This difference is causing that XPS has a higher density, however from the earlier performed literature study

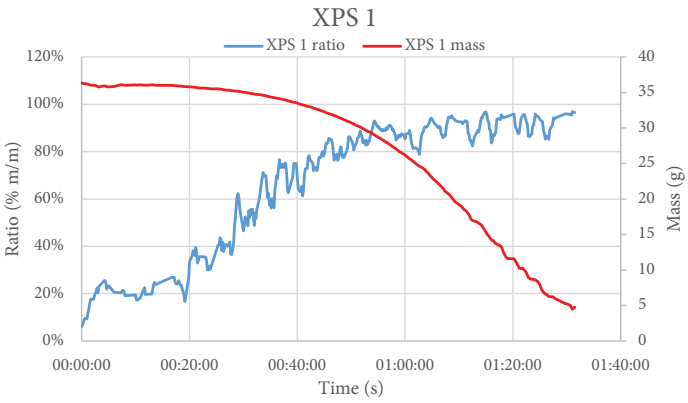

Figure 50 - XPS test 1 mass loss and ratio

it is known that the properties regarding fire safety have resemblance. The results from the experiment with the first XPS sample can be found in Figure 50.

From the figure can be seen that the materials EPS and XPS indeed have corresponding fire properties, this is visible from the rate at which mass is lost. During this test the gas mixture was also detected as flammable. In Table 16 the observations are presented.

During the test the first flammable smoke was detected 29 minutes into the test. From Figure 51 can be read that the ratio at that time was 38%. From this experiment the lower flammability limit is established at 38%. Up to the end of the test the mixture remains flammable, which indicates that no upper flammability limit could be found. The highest calculated ratio is 95%, this means that there is no upper flammability limit or the upper flammability limit lies higher than 95%. Another observation is the

Time	Smoke	Flammable	Stoichiometric	Temperature (°C)	Ratio (% m/m)
00:00:00	No	No	No	150	20
00:29:00	Observed	Yes	Yes	315	38
00:33:00	Intensifies	Yes	Yes	325	55
00:45:00	Intensifies	Yes	No	375	72
01:31:00	Intensifies	Yes	No	400	95

Table 16 - Observations during XPS test 1

rate at which the smoke is burnt, until 45 minutes into the test the smoke burns fast. During this phase the ratio is close to a stoichiometric ratio. The average ratio at that point is 72%. Below the 72% and above the 38% the mixture is highly flammable, above the 75% the mixture is still flammable all be it less intense.

3.4.4 XPS test 2

The fourth test regarding the Polystyrene material is the last experiment of this study. The results from his experiment are presented in Figure 51. This experiment is corresponding to the other experiments, the course of the mass of the sample is the same and the ratio also follows the same course. The observations are presented in Table 17.

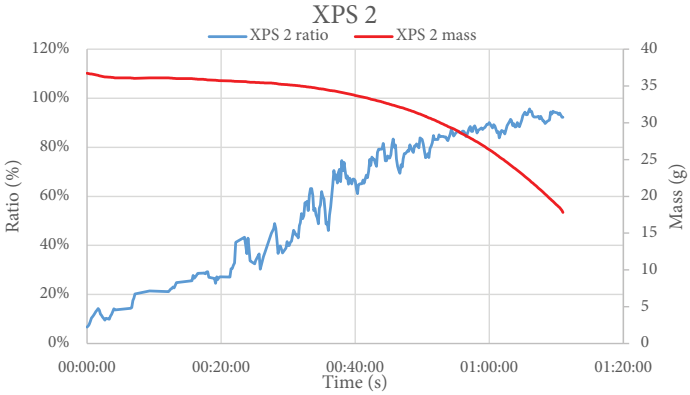

Figure 51 - XPS test 2 mass loss and ratio

At 25 minutes into the test the first flammable mixture was detected. Figure 51 shows that the ratio at that time was 35%. This experiment established a lower flammability limit at 35%. Up to the end of the test the mixture remains flammable, however the intensity at which the smoke is burnt lowers. The highest ratio detected during the test is 94%, this indicates that either there is no upper flammability limit or the flammability limit lies higher than 94%. As said, the intensity at which the smoke burns lowers, this is detected at 44 minutes into the test. The ratio is at that moment 73%. During this phase the gas mixture is close to a stoichiometric ratio. Below the 73% and above the 35% the mixture is highly flammable, above the 75% the mixture is still flammable all be it less intense.

3.4.5 Concluding polystyrene

The products EPS and XPS indeed have similar fire resistance properties when exposed to a hot layer. Both the materials melt instantly at 150 °C. However a high loss of mass is not detected until further into the test, during this phase the material is molten. The molten residue has some resemblance with crude oil, this is not surprising due to the fact it was made from crude oil.

The mass losses of the materials seen absolute have a significant difference, this is due to the fact that the XPS is three times more dense then EPS. From Table 18 can be seen that the mass losses are relatively the same.

Table of mass losses

At 380 °C	EPS 1	EPS 2	XPS 1	XPS 2
Mass sample	13.6	13.6	36.7	36.3
Mass loss	7.5	7.6	19.5	19.2
% of core	55%	56%	53%	53%

Table 18 - Table of mass losses of the material PS

Some of the experiments took longer than others, this was due to fact that the weather conditions changed

Time	Smoke	Flammable	Stoichiometric	Temperature (°C)	Ratio (% m/m)
00:00:00	No	No	No	150	8
00:25:00	Observed	Yes	Yes	310	35
00:33:00	Intensifies	Yes	Yes	325	40
00:44:00	Intensifies	Yes	No	350	75
01:11:00	Intensifies	Yes	No	375	94

Table 17 - Observations during XPS test 2

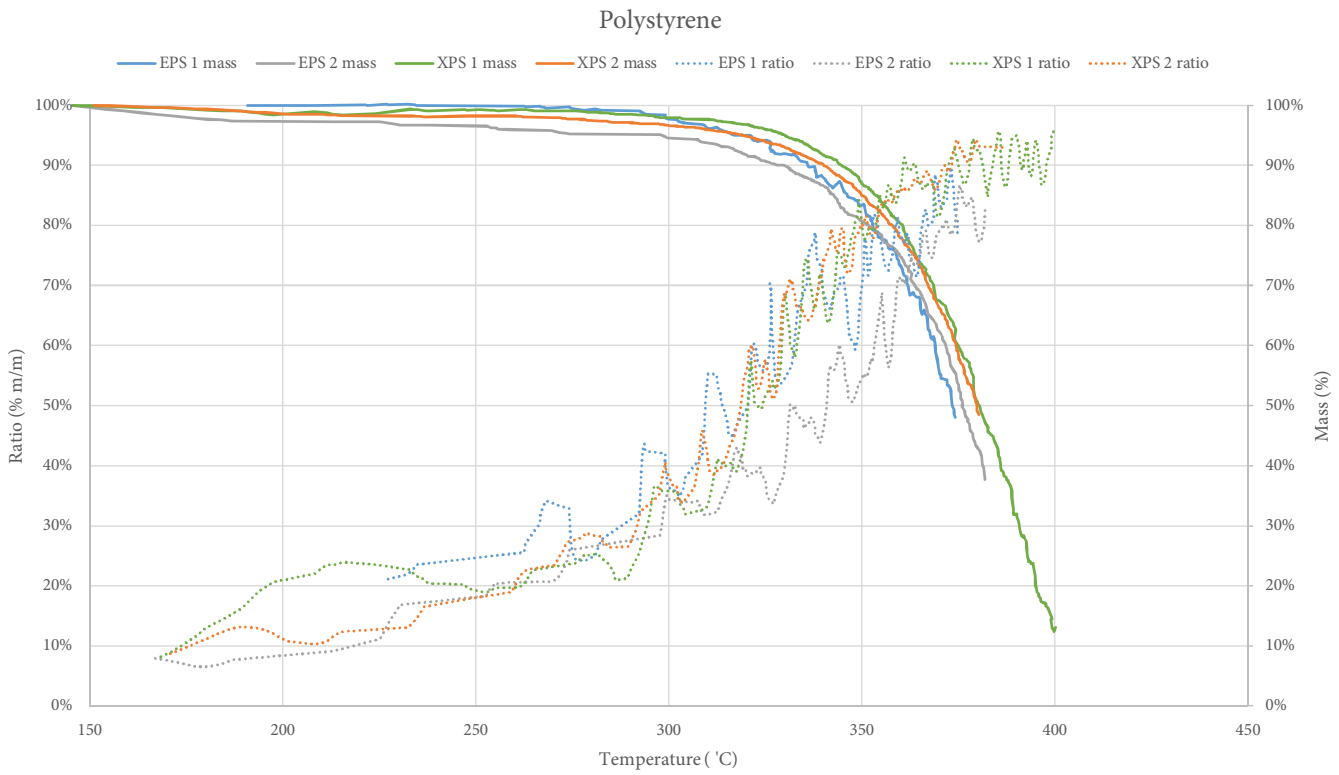

Figure 52 - Mass losses and ratios of PS combined

significantly. From Figure 53 the temperature curves from the experiments can be seen. Especially the temperature curve from the first EPS test is deviating, the results from the test however are still considered as valid because the results correspond with other three experiments. The results still correspond which can be seen in Figure 52. The rate at which the mass is lost corresponds, as well as the ratio. The ratios from XPS have a higher peak, this corresponds with the absolute mass loss. This absolute mass loss of XPS is higher due to the higher mass of the samples.

In all of the experiments a lower flammability limit could be detected. In the table below, Table 19, the lower flammability limits are presented. Also the ratios where the flammability of the mixture was reduced are presented in this figure.

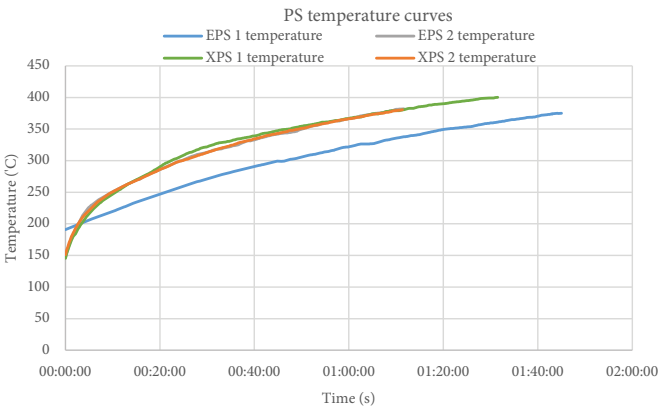

Figure 53 - Temperature curves of the PS tests

Table of flammability limits

	LFL m/m	Stoichiometric limit	UFL m/m
eps 1	34 %	70 %	-
eps 2	37 %	75 %	-
xps 1	38 %	72 %	-
xps 2	35 %	75 %	-
Average	36 %	73 %	-

Table 19 - Table of flammability limits of the material PS

The lower flammability limit of gas effluents resulting from the pyrolysis of Polystyrene is 36%. The upper flammability limit of gas effluents resulting from the pyrolysis of Polystyrene could not be found, it therefore does not exist or is higher than 95%.

3.5 Conclusions on material level

From the different experiments it is clear that the different materials have different responses to a hot temperature. These different reactions have distinct consequences for the results regarding mass loss and the results of the ratios.

3.5.1 Conclusions regarding mass loss

The mass losses of representative experiments for each material are plotted in Figure 54. The common background of the PIR and PUR materials is clear because both have a characteristic progress of mass loss. This progress shows an initial high rate of mass loss starting from 275 °C. However, despite an increase of temperature, the rate at which mass is lost reduces from a temperature of 340 °C. The protective char layer PIR builds up is likely the cause of the much lower loss of mass compared to PUR. Although both materials react at the same temperatures, the mass lost by PUR was 33% higher in these experiments. Concluding, both of the materials show the exact same mass loss until 275 °C. After this temperature PUR starts losing mass at a higher rate than PIR, resulting in a higher mass loss. This is also in analogy with mass loss tests in other studies (Jiao et al., 2013; Vithauskiene et al., 2011).

The stone wool material reacted much different to heat as did the thermoset materials PUR and PIR. The inorganic fibres in the material stone wool do not melt or gasify at temperatures used in these experiments. This explains the minor mass loss measured with the samples. The adhesive used for giving the material some structural strength appears to be the cause for the minor mass loss detected. This expectation is further enhanced by the fact that the test on the stone wool panel sample showed a higher mass loss although the stone wool core material was less. The higher loss of mass can then be attributed to the higher concentration of adhesives to bond the facings with the stone wool core. From Figure 54 it appears that the mass loss of Stone wool is very minor compared to the other materials, some remarks need to be placed with this statement. Due to the high mass of Stone wool, it shows relatively a small mass loss, although absolute the loss of mass is still small. The absolute difference with the other materials is significantly lower when mass loss is compared absolute.

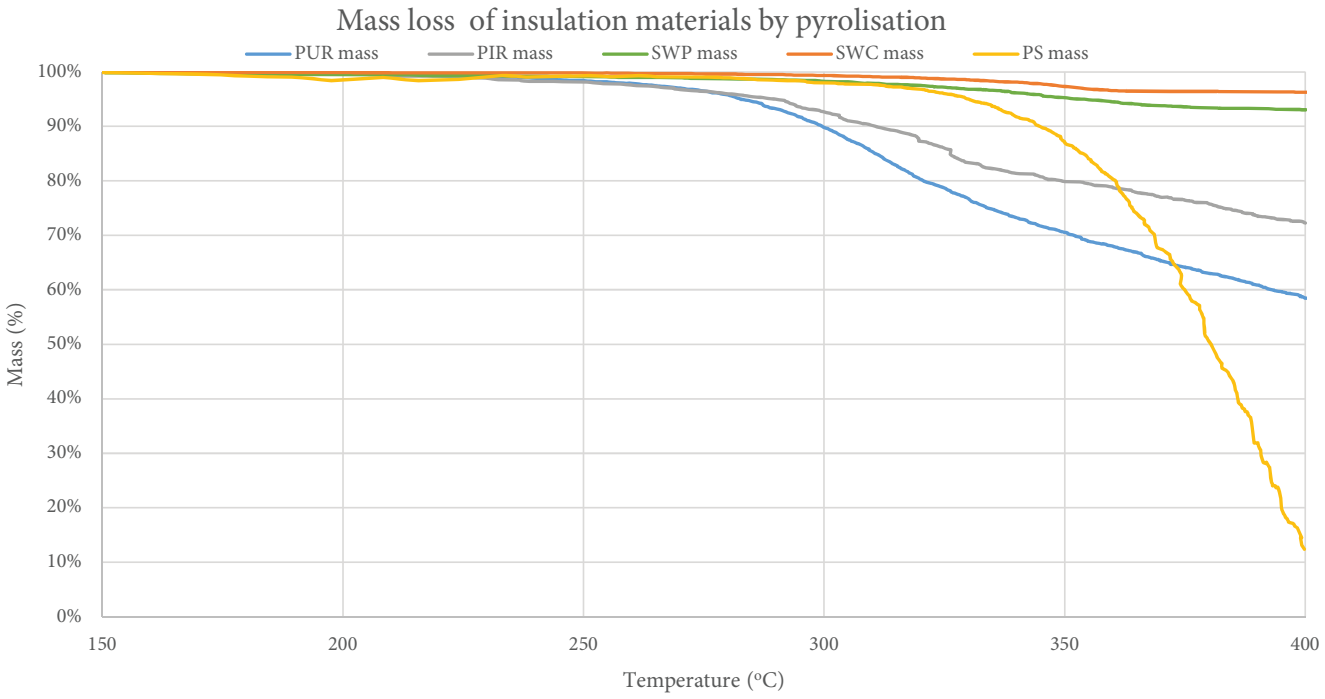

Figure 54 - Mass losses of the different materials

The materials with a Polystyrene basis reacted as expected very differently from the PUR/PIR materials. Although they all are synthetic insulation materials, the difference between a thermoset insulation material and a thermoplastic insulation material is clear. From the mass loss figures it appears that the PS materials have a better resistance to heat due to the fact that mass loss only starts at roughly 300 °C. However the material is already completely lost at 150 °C. This is not detected because the PS materials first melts and then starts pyrolysis. During the increase of temperature in the oven the rate at which mass is lost increases at such a rate that the material is completely lost within several minutes. From the experiments it is clear that when the polystyrene products are exposed to a temperature of 300 °C pyrolysis starts. It appears to be that temperature does not have to rise to keep the pyrolysis process going. When the temperature is kept at 350 °C the material would eventually be completely lost. A higher temperature only speeds up the process at which mass is lost. Table 20 shows the mass losses in absolute and relative numbers.

Table of mass losses of the tested materials

At 400 °C	PUR	PIR	SWC	SWP	PS
Sample mass	128.0	87.8	104.2	142.5	36.7
Core mass	45.0	27.8	104.2	56.5	36.7
Mass lost	20.0	7.7	4.0	5.0	31.9
% sample	16 %	9%	4%	4%	87%
% core	44%	28%	4%	9%	87%

Table 20 - Table of mass losses of the tested materials at 400 °C.

From the table it is clear that the Stone wool material has the lowest loss of mass when exposed to a temperature of 400 °C. The second lowest mass loss is from the material PIR. Although sharing a common basis with PUR the increased fire resistance properties, including the built up of char, help reduce mass loss significantly. PUR which does not possess these fire resistance properties shows a much higher mass loss when exposed to 400 °C. The PS material show the highest mass loss with 87% at 400 °C. From the rate at which mass is lost, which can be seen in Figure 54, it is clear that the material would be completely lost if the temperature would rise a bit further.

Another interesting fact is looking at the mass losses at a temperature of 250 °C. The temperature at which firefighters stop intervening in a compartment on fire.

Table of mass losses from tested insulations materials

At 250 °C	PUR	PIR	SWC	SWP	PS
Sample mass	128.0	87.8	104.2	142.5	36.7
Core mass	45.0	27.8	104.2	56.5	36.7
Mass lost	0.8	0.5	0.2	0.4	0.7
% sample	0.6%	0.6%	0.2%	0.3%	1.9%
% core	1.8%	1.8%	0.2%	0.7%	1.9%

Table 21 - Table of mass losses of the tested materials at 250 °C.

From the table above and the figure on the previous page it is clear that in this temperature zone the materials do not start pyrolysis. The PS materials will be molten at that time and provided that the building is detailed well, firefighters do not encounter these molten products. If the building is not detailed well and the molten materials can leak through roof systems or walls, it is possible that firefighters encounter the hot molten substance. It is also possible that this molten substance of 250 °C starts a fire elsewhere in the building.

The other materials show very little mass loss at a temperature of 250 °C. This is in correspondence with the study done by Giunta d'Albani (2014). His study into the mass loss of sandwich panel constructions showed that the differences of mass loss from the different materials at a temperature of 250 °C is very small. The absolute mass loss is also very small.

3.5.2 Conclusions regarding flammability limits

The mass losses in this study were used to calculate the ratio between air and pyrolysis gas in order to gain insight in the possibility if fire effluents, resulting from the pyrolysis of insulation materials, are able to exist in such high concentrations during a building

fire that a smoke gas explosion can occur. With this insight in the mass losses during a period in which the temperature rises from 150 °C to 400 °C a broad spectrum of ratios between pyrolysis gas and air was found. The found ratios started from 8% until in some cases 95%. The ratios during the experiment for each of the materials are shown in Figure 55. The ratios have a have a relationship with the mass loss, which are shown Figure 54. The higher the rate of mass loss the higher the ratio at that time in the experiment. Although that the mass loss graphs appear to be very stable, the ratio graphs are very volatile. This volatility is due to the fact that the scale has a limited precision of 0.1 gram. Due to continuously averaging the absolute mass loss was lowered to steps of 0.016 grams. However due to this limit the result remain volatile. The resulting gas mixtures with the calculated ratios were tested on flammability. Some of the materials emitted flammable gasses, other materials did not. From some of the materials a lower flammability limit (LFL) as well as an upper flammability limit (UFL) could be established. With some materials an upper flammability limit could not be found. In Table 22 the flammability limits of the materials are presented.

Table of flammability limits

	PUR	PIR	SW	PS
LFL m/m	39%	-	-	36%
UFL m/m	78%	-	-	-

Table 22 - Table of flammability limits of the materials

The table above shows that from the material PUR and PS a lower flammability limit was found. From the PIR products and the stone wool products a lower flammability limit could not be detected. The highest ratio during a PIR test was found during a test where the product was instantly exposed to a hot temperature. This temperature was 350 °C. The highest ratio found during that test was 84%, even at that ratio of unburnt pyrolysis gas, the gas mixture would not burn. Resulting in the conclusion that from these experiments it was found that PIR effluents either have a lower flammability limit above the 84% or are not flammable at all.

Regarding the stone wool products, the expectancy was that no flammability limits would be found due to the low loss of mass. The fibres from which the stone wool is made do not burn or gasify at this temperature range. The adhesives used to give the product the structural strength are responsible for

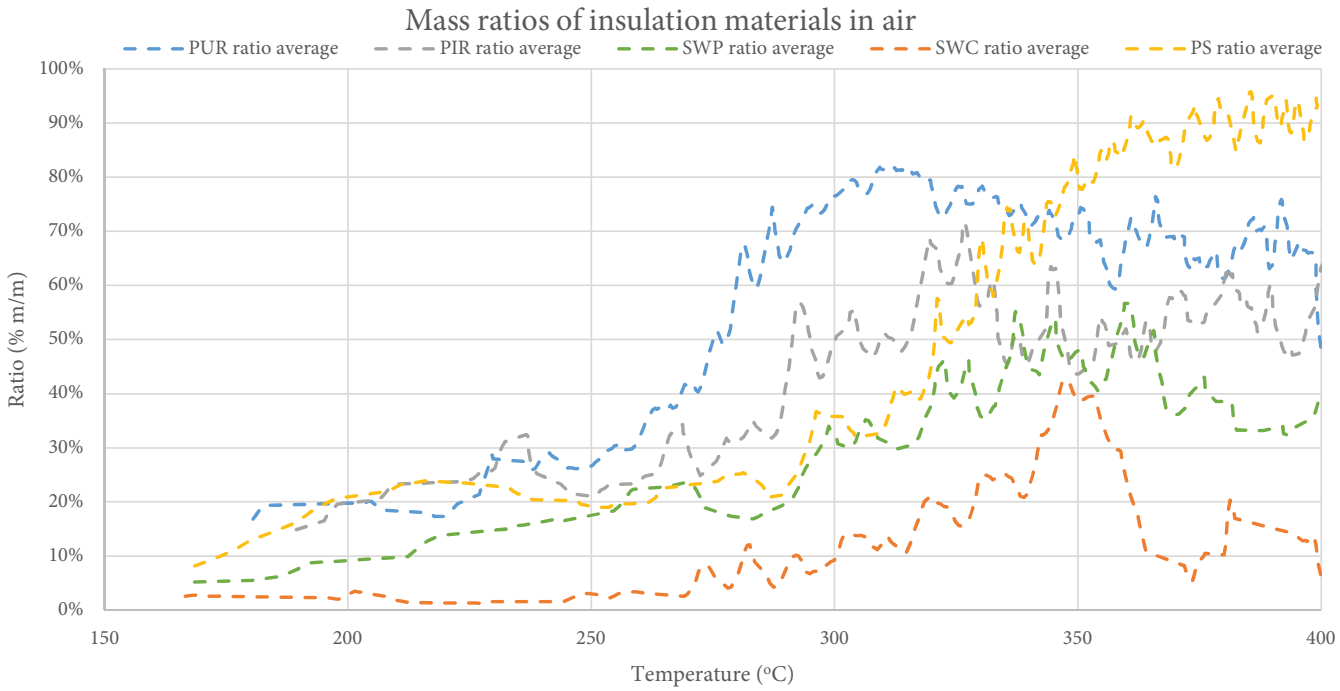

Figure 55 - ratios of the different materials.

the loss of mass. This experiment resulted that the concentration of adhesives in the products is not high enough to create a ratio between pyrolysis gas and air which is flammable. The highest ratio found during the experiments with stone wool is 50%. Resulting in the conclusion that from these experiments no lower flammability limit resulting from the pyrolysis of stone wool could be established. The ratio is either higher than 50% or does not exist.

Regarding the material PUR, flammability limits could be established. In the experiments with polyurethane a broad spectrum of ratios were detected. Starting from 15% up to 80%. During the testing of the flammability of these gas mixtures a lower flammability limit was found at 39%. Further in the test was an upper flammability limit detected at a ratio of 78%. The finding of these flammability limits and as well as the high mass loss further showed that the difference between PIR and PUR is significant. Due to the lack of fire safety measures PUR does not only releases more pyrolysis gas, but also a flammable gas, which could potentially lead to a more hazardous situation during a building fire.

The polystyrene materials are like PUR and PIR a synthetic insulation material, with the difference that PS is a thermoplastic material and PUR and PIR a thermoset. This results in the fact that the material is molten at a very early stage in the test. The products start melting from the beginning of the test at a temperature of 150 °C. The mass loss results do not show the process of melting, the ratios therefor also remain low until pyrolysis starts. Until this moment ratios follow the level of the stone wool samples, only when the temperature reaches 275 °C pyrolysis starts and ratios reach higher levels. From that moment on the ratio reaches high levels at a fast pace. These high levels however did not result in an observations of an upper flammability limit. A lower flammability limit however could be established at 36%.

3.5.3 Volume based ratios

All the mentioned flammability limits are derived from ratios between masses. Flammability limits presented in the literature from individual gasses however are presented in ratios of volume. In this study is not possible to present the ratios in volumes due to the fact that molar masses of the pyrolysis gas in unknown. However, in the case of the polystyrene products an assumption can be made that 100% of the pyrolysis gas is styrene gas.

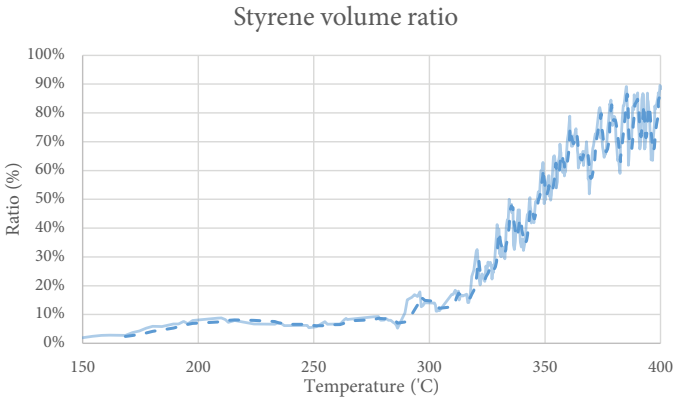

Figure 56 - Styrene volume ratio versus temperature

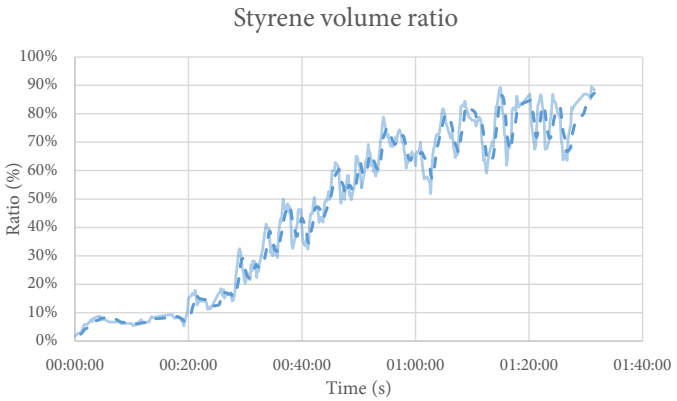

Figure 57 - Styrene volume ratio versus time

Considering this, volume ratios can be calculated using the ideal gas law and the molar mass of styrene. The differences in the ratio are especially visible in the lower regions. The volume ratios are presented in the Figure 56 and Figure 57.

The calculated volume ratios are from first experiment with XPS. Looking back at the observations made during that experiment, the first observation of a flammable mixture was at 29 minutes into the test.

The average volume ratio at that time is 16% v/v. This is significantly lower than the mass ratio of 36% m/m. The lower flammability volume ratio however is higher than the lower flammability ratio found from Styrene in the literature, which is 1.1% v/v (Jaws and Braker, 2001). This value is valid for a pure styrene gas with the chemical formula $C_6H_5CH=CH_2$. However, the styrene in the insulation materials is polymerized. This means that especially at low temperatures the pyrolysis gas consists out of chains of styrene molecules which are possibly harder to ignite then a single molecule of styrene. Also there are some other explanations for this higher observation of a flammable ratio, these are discussed in Chapter 5. These uncertainties make the volume ratio not applicable for conclusions, however the example calculation helps understanding the difference between a volume ratio found in literature and a mass ratio.

The gas mixtures were tested on flammability in a bottle, the observations of a flammable gas mixture was made when smoke clearly burnt inside the bottle. This is noticeable because the bottle becomes clear after the smoke is burnt. This might seem as an abstract comparison of a smoke gas explosion. This is the result of igniting the gas mixture in a small volume and because of the fact that the temperature of the smoke inside the bottle has already cooled down. This change in temperature makes a difference due to the fact that the higher the temperature of a smoke layer is, the more easily it is ignited. To create a less abstract observation of a flammable gas mixture, it was tried to ignite the gas mixture inside the oven. This results in a more realistic event of what could potentially happen in a fire situation. For every tested material it is tried to ignite the gas mixture inside the oven. Ignition of the gas mixture was possible with the following materials:

- Polyurethane (PUR)
- Expanded Polystyrene (EPS)
- Extruded Polystyrene (XPS)

Figure 58 - Stills from a video capturing a smoke gas explosion

The best visible effect was found during the ignition of the gas mixture resulting from the pyrolysis of XPS. This does not necessarily mean that XPS provides for the most intense effect, during these experiments no ratios can be calculated due to fact that the flow of air becomes unknown. This flow air becomes unknown because by igniting the gas mixture inside the oven. This is due to the fact that for igniting the mixture in the oven an opening is created for the lighter. Through this opening air can flow inside the oven allowing a chimney effect through the exhaust. This is clearly visible because the flame of the lighter is blown inwards. This chimney effect makes the absolute flow of air unknown during the period the gas mixture is ignited. The stills from Figure 58 show the results from igniting the mixture inside the oven. The stills are taken within a time frame of 1 second.

With the knowledge about the flammability limits modelling can be done, in the next part of this chapter some typical buildings will be modelled. Together with the understanding of the flammability limits an insight will be given in the risk of a smoke gas explosion during a fire situation.

4 Modelling

The following part of this chapter consists out of some basic fire scenario modelling of typical buildings in which the discussed materials are used. In this study only structures with a steel deck roof will be modelled. The buildings chosen provide a broad range of typical buildings where these steel deck structures are used. The dimensions are generically chosen. For the fire modelling the tool Ozone v2 is used, this software is written by the University of Liege in cooperation with Arcelor Steel. The tool is designed to calculate fire loads on structural elements, however it can also be used to predict fire conditions in a compartment. It calculates a one zone model (full compartment fire, post-flashover), as well as a two zone model. The two zone model calculates the temperature of the smoke layer as well as the height of the smoke layer. For this study the assumption is that the smoke layer is mixed homogeneously, therefore no complex CFD modelling is necessary. The advantage for using this tool is the simplicity and validity. The validity of this tool was also discussed in the previous performed literature study (de Kluiver and Giunta d'Albani, 2014) and was also established in a paper by Cadorin (2002). The simulation software used is Ozone V2.2,

4.1 Building types and materials

The buildings for this modelling part of the study were chosen in order to achieve a broad range of buildings. The buildings were also chosen on the fact if they are built using the steel deck roof principle. The following building types are chosen:

- Business complex
- Hardware store
- Industrial hall
- Shopping mall

These buildings represent a large number of buildings built in the contemporary society. They are also

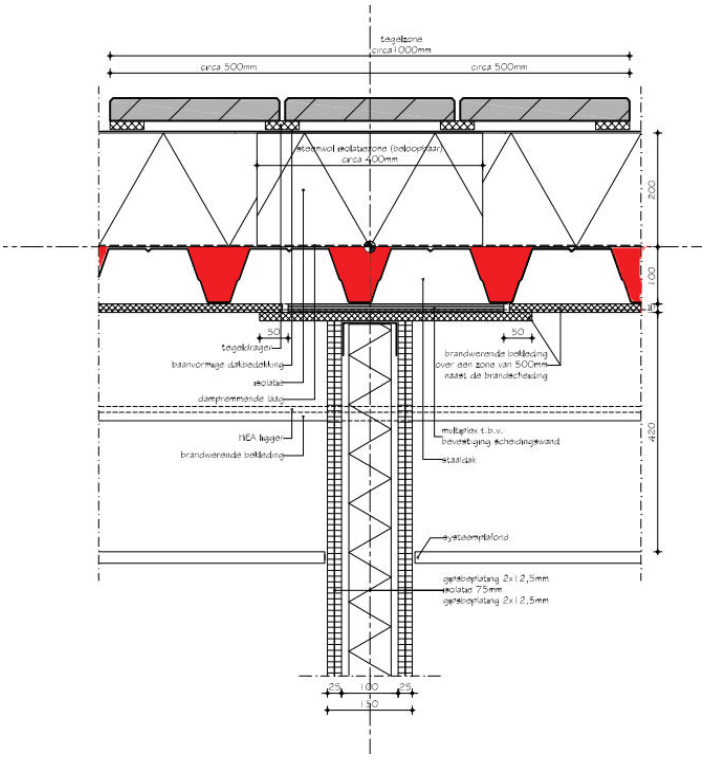

Figure 59 - Reference detail of a steel deck roof structure

commonly built using a steel deck roof principle. The dimensions in which they exist are diverse, but for this modelling part of the study the dimensions are chosen to create a generic spectrum of buildings and fire compartments. The dimensions of the compartments of the buildings are presented in Table 23.

Building type	Height	Width	Depth
Business complex	8m	50m	20m
Hardware store	8m	50m	50m
Industrial hall	8m	100m	50m
Shopping mall	6m	100m	100m

Table 23 - Table of the chosen building types and dimensions

The modelling is done for fire compartments with a logical fire scenario, the building types in which there is naturally only one fire compartments the complete building will be modelled. This is the case for a fire in a hardware store and industrial hall. A fire in a

compartment will be modelled for the building types business complex and shopping mall. In case of a steel deck roof system it is especially interesting to calculate with compartments due to the fact that through the canals in the roof which naturally exist due to the form of the steel structure, as can be seen in Figure 59. This figure shows a typical detail of a steel deck structure, indicated in red are the canals in which pyrolysis gas can flow free across the entire roof.

From the earlier results in this study it is clear that only the insulation materials PUR, EPS and XPS have flammability limits. Only these materials are of interest to model with.

4.2 Mass loss data

For the material PUR, data is needed from the study done by Giunta d'Albani (2014). This data provides insight in the loss of mass of a sandwich panel during a fire situation. Data for the material PUR from the current study is not realistic due to the fact that the sample is being exposed to elevated temperatures from all sides. The experiment by Giunta d'Albani exposed the sample from one side, simulating a realistic fire scenario. The test exposes a sandwich panel sample to a hot layer for 10 minutes and measures the loss of mass afterwards. The experiments were done on three different temperatures:

- 150 °C
- 250 °C
- 350 °C

In the current study none of the materials showed mass loss at 150 °C and therefore no modelling will be done for this temperature. At 250 °C PUR showed minor loss but EPS and XPS showed no loss, therefore only for the material PUR modelling will be done at a temperature of 250 °C. All of the materials showed mass loss at 350 °C, so for all of the materials modelling will be done at 350 °C. The results regarding the PUR sandwich panel were that on average at a temperature 250 °C the mass loss is 45 grams per square meter. For a temperature of 350 °C the loss is on average 355 grams per square meter (Giunta d'Albani, 2014).

The study by Giunta d'Albani did no research on PS materials, therefore data is used from the current experiment. Due to the fact that PS is molten and no longer behaves as an insulation material at a temperature of 350 °C the results from this study are usable. For the EPS materials 18% of the mass is lost at 350 °C and for XPS 14% is lost at this temperature, this can be seen in Figure 53. For the model the assumption is that when the roof is exposed to 350 °C the total loss of mass is 18% of the entire mass of EPS and 14% of the entire mass of XPS.

4.3 Modelling fire scenarios

In total 12 different scenarios will be modelled, each of the types of buildings with three different materials. Al of the different scenarios will be modelled using the standard fire curve. The fire properties are provided by the NEN norm, NEN-EN 1991-1-2/NB. The fire is defined by three properties:

- Time constant
- Rate of heat release
- 80%-fractiles

The properties of the fire for each of the buildings are presented in Table 24. With this information the model calculates the height of the hot smoke layer and the temperature of this layer.

Building type	Time constant	RHR (KW/m²)	80%-fractiles (MJ/m²)
Business complex	300	250	511
Hardware store	150	250	730
Industrial hall	150	6000	1800
Shopping mall	150	250	730

Table 24 - Fire properties of the building types

4.4 Model results

In this paragraph the mass loss data described in Section 4.2 and the simulation results from Ozone for 12 different scenarios (Section 4.3) will be applied to calculation of the mass-based pyrolysis/smoke layer ratio for 4 buildings with 3 different materials. The data from Ozone v2 consists of the temperature of the smoke layer and the height of the smoke layer. The smoke layer is defined by Ozone (Cadorin, 2002) as the layer of hot air resulting from the fire in the compartment. The temperature of the smoke layer provided by Ozone, determines the air density (Eq. (2)). This is calculated analogue as described in Paragraph 2.2.2.2. Together with the dimensions of the compartment, the height of the smoke layer and the air density, the mass of the smoke is calculated. The next step is calculating the mass of the pyrolysis gas. This is done by using the mass loss data from the study by Giunta d'Albani for the material PUR and the current study for PS (Section 4.2). Based on the mass of the pyrolysis and the total mass of the smoke layer, which is the mass of the hot air plus the mass of the pyrolysis gas, the ratio % m/m of pyrolysis gas in the smoke layer is calculated. This calculation provides insight in the possibility of a smoke gas explosion in a building compartment. The flowchart in Figure 60 provides an overview of the calculations.

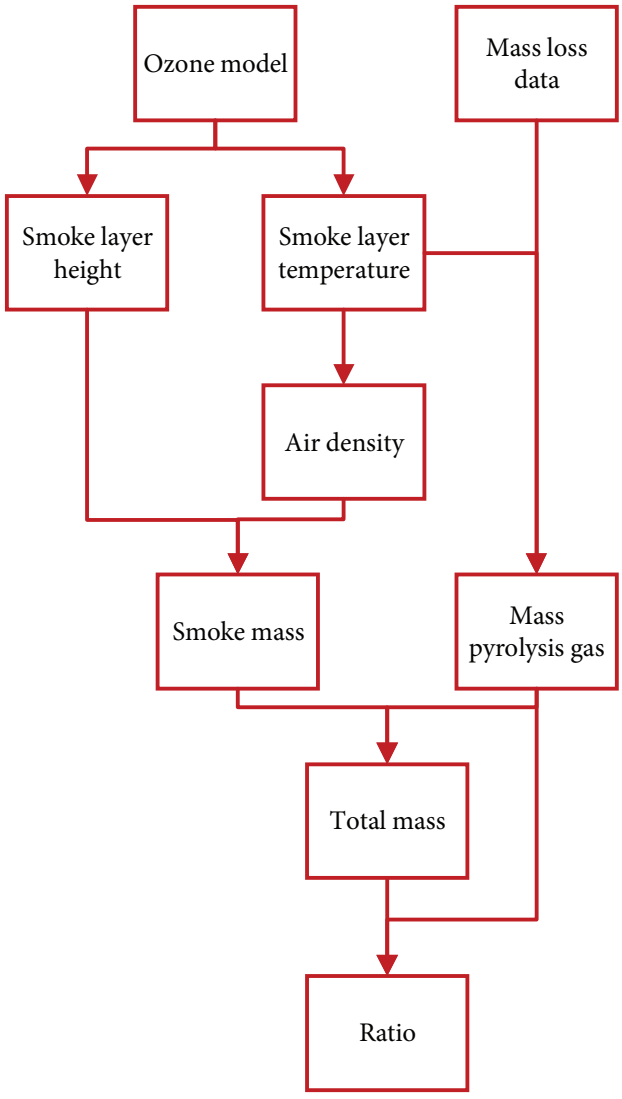

Figure 60 - Flowchart of the steps for calculating the ratio

4.4.1 Polyurethane

The results for PUR are presented with a graph which shows the temperature in the compartment and mass of the hot smoke layer. The assumption is that all of the pyrolysis gas from the insulation materials enter the smoke layer. From the graph the moment can be spotted where the temperature on average was either 250 °C or 350 °C. The mass of the smoke layer at that time will be used to calculate the ratio between pyrolysis gas and air.

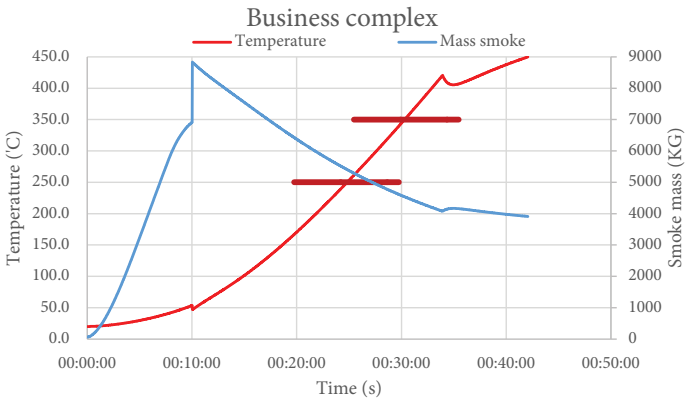

Figure 61 - Temperature and smoke mass of the business complex

Figure 61 shows the course of the temperature and the mass of the smoke layer for the business complex, the two horizontal lines indicate the zone at which the temperature is on average either 250 °C or 350 °C. At the end of the these zones the mass of the smoke layer is used to calculate the ratio using the data provided by the study of Giunta d'Albani.

The total surface area of the roof for the business complex is 1000 m². For PUR this means that at a temperature of 250 °C the loss of mass will be 45 KG and at 350 °C 355 KG. From the model the smoke mass can be derived. At the end of the zone at which the temperature was on average 250 °C the smoke mass without pyrolysis gas is 4615 KG. This results in a ratio of 1%. At the end of the zone at which the temperature was on average 350 °C the smoke mass without pyrolysis gas is 4158 KG. This results in a ratio of 8%.

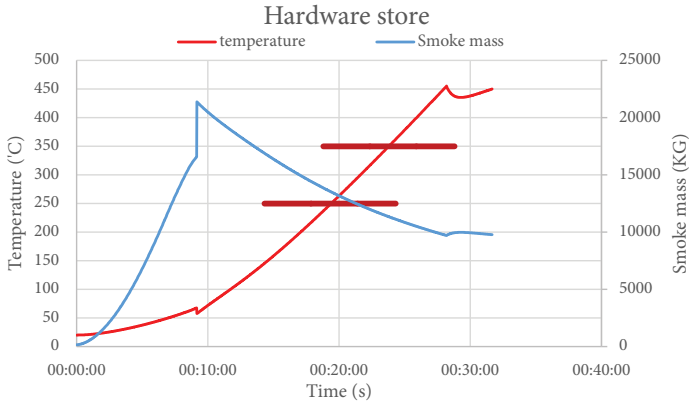

Figure 62 - Temperature and smoke mass of the hardware store

Figure 62 shows the results from the hardware store. The total surface area of the roof for the business complex is 2500 m². For PUR this means that at a temperature of 250 °C the loss of mass will be 113 KG and at 350 °C 888 KG. From the model the smoke mass can be derived. At the end of the zone at which the temperature was on average 250 °C the smoke mass without pyrolysis gas is 11123 KG. This results in a ratio of 1%. At the end of the zone at which the temperature was on average 350 °C the smoke mass without pyrolysis gas is 9943 KG. This results in a ratio of 8%.

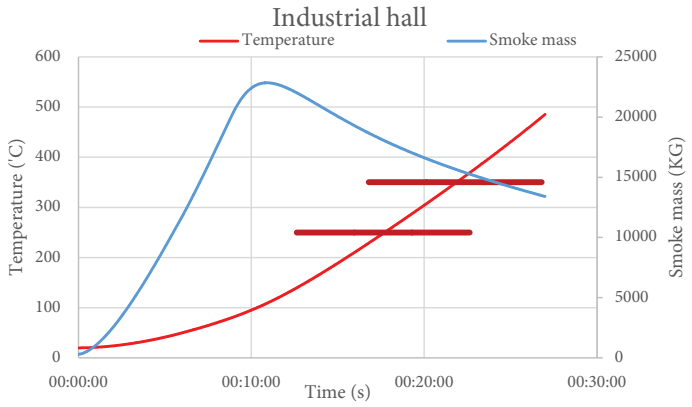

Figure 63 - Temperature and smoke mass of the industrial hall

Figure 63 shows the results from the industrial hall. The total surface area of the roof for the business complex is 5000 m². For PUR this means that at a temperature of 250 °C the loss of mass will be 226 KG and at 350 °C 1776 KG. From the model the smoke mass can be derived. At the end of the zone at which the temperature was on average 250 °C the smoke mass without pyrolysis gas is 15265 KG. This results in a ratio of 1%. At the end of the zone at which the temperature was on average 350 °C the smoke mass without pyrolysis gas is 13484 KG. This results in a ratio of 12%.

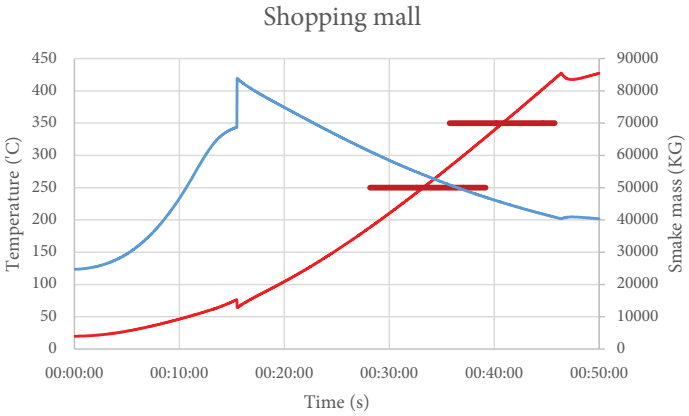

Figure 64 - Temperature and smoke mass of the shopping mall

Figure 64 shows the results from the shopping mall. The total surface area of the roof for the shopping mall is 10000 m². For PUR this means that at a temperature of 250 °C the loss of mass will be 452 KG and at 350 °C 3552 KG. From the model the smoke mass can be derived. At the end of the zone at which the temperature was on average 250 °C the smoke mass without pyrolysis gas is 61237 KG. This results in a ratio of 1%. At the end of the zone at which the temperature was on average 350 °C the smoke mass without pyrolysis gas is 40867 KG. This results in a ratio of 8%.

Concluding the results from the model with the PUR materials, the highest ratio found was 12%. The lowest ratio found was 1%. This is corresponding with the results that at 250 °C the loss of mass of PUR is low, a low loss of mass directly means a low ratio of pyrolysis gas and air. The ratios found at a temperature of 350 °C are significantly higher, this corresponds with the higher loss of mass at this temperature. Table 25

presents the ratios found.

Table of calculated ratios in compartment

Building type	Ratio at 250 °C (% m/m)	Ratio at 350 °C (% m/m)
Business complex	1%	7%
Hardware store	1%	8%
Industrial hall	1%	12%
Shopping mall	1%	8%

Table 25 - Table of calculated ratios of PUR effluents in the compartments

From the table, one can conclude that the ratios calculated are not as high as the flammability limits found during the experiments. This means that for these specific cases there is no risk of a smoke gas explosion resulting from the pyrolysis of PUR insulation used in the roof. They however do account for a large proportion of pyrolysis gas in the smoke layer. Assuming that a flammable mixture is reached at a ratio 39%. The mass of pyrolysis gas available in the smoke layer lies between the 20% and 25% when a flammable ratio is reached at 39%, thus increasing the chance that a smoke gas explosion can occur when other flammable gasses, for example pyrolysis gas from the interior, are mixed with the smoke layer.

4.4.2 Polystyrene

For the polystyrene materials data is known what the expected loss of mass is at a specific temperature. At 350 °C this is for EPS 18% and for XPS 14%. The assumption is that the thickness of the insulation layer is 10 cm. From manufacturers data follows that the density of EPS is 15 kg/m^3 and XPS is 28 kg/m^3 (EUMEPS, 2011; BASF, 2005). As a result from this the weight of a square meter of applied EPS or XPS is 1.5 KG and 2.8 KG. Considering that of EPS 18% of the mass is lost at 350 °C at that time 0.210 KG/m^2 of pyrolysis gas from EPS is available in the smoke layer. For XPS there is 0.392 KG/m^2 available in the smoke layer. From the models used in the previous paragraph, the mass of the smoke is known at 350 °C. These are different from the smoke mass with PUR. The smoke mass in the tables below are from the exact moment the temperature is 350 and 275 °C.

Building type (350 °C)	Roof area (m^2)	Mass of pyrolysis gas (KG)	Smoke mass (KG)	Ratio (% m/m)
Business complex (EPS)	1000	210	4538	4.4%
Hardware store (EPS)	2500	525	11339	4.4%
Industrial hall (EPS)	5000	1050	15628	6.3%
Shopping mall (EPS)	10000	2100	45373	4.4%
Business complex (XPS)	1000	392	4538	8.0%
Hardware store (XPS)	2500	980	11339	8.0%
Industrial hall (XPS)	5000	1960	15628	11.1%
Shopping mall (XPS)	10000	3920	45373	8.0%

Table 26 - Table of calculated ratios for the modelled building types and the materials XPS and EPS at 350 °C

Building type (375 °C)	Roof area (m^2)	Mass of pyrolysis gas (KG)	Smoke mass (KG)	Ratio (% m/m)
Business complex (EPS)	1000	600	4361	12.1%
Hardware store (EPS)	2500	1500	10901	12.1%
Industrial hall (EPS)	5000	3000	15149	16.5%
Shopping mall (EPS)	10000	6000	43612	12.1%
Business complex (XPS)	1000	1120	4361	20.4%
Hardware store (XPS)	2500	2800	10901	20.4%
Industrial hall (XPS)	5000	5600	15149	27.0%
Shopping mall (XPS)	10000	11200	43612	20.4%

Table 27 - Table of calculated ratios for the modelled building types and the materials XPS and EPS at 375 °C

The results are presented in Table 26.

The results from table show that the ratio between pyrolysis gas and air does not achieve limits above the lower flammability limit. With 6.3% as the highest ratio with EPS and 11.1% with XPS at a temperature of 350 °C the smoke layer has not enough pyrolysis gas to be flammable according to the results of this study.

The temperature of 350 °C for a polystyrene product is a turning point regarding the rate at which mass is lost. Where at 350 °C the mass loss for EPS and XPS is 14% and 18%, the mass loss at 375 °C is 40% and 50%. It is therefore also of interest to calculate the ratios at that temperature. Also, because the time difference in a temperature of 350 °C and 375 °C for example the industrial hall is only one minute.
At 375 °C the mass losses for EPS and XPS are:

- 0.600 KG/m^2 of EPS
- 1.12 KG/m^2 of XPS

The results from the second calculations at a temperature of 375 °C show a significant increase in the ratio, as shown in Table 27. The ratios for EPS tripled and the ratios for XPS are 2,5 times higher. However the established lower flammability limit of 36% is not reached. The explanation for this observation is that the volume of the smoke layer is of such a great size that the applied insulation materials do not have a mass high enough to create a flammable mixture.

The found ratios at 375 °C of 27% do however come close to the found flammability range 36%. Assuming that a flammable mixture can be formed at a ratio of 36%. From these models it appears to be possible that 68% of the mass needed to provide a flammable mixture at a ratio 36% is provided by the pyrolysis of XPS. Therefore, increasing the risk of a smoke gas explosion significantly if more flammable gasses from other sources are mixed with the smoke layer.

5 Conclusion and discussion

To conclude the study the results and findings are summarized. First the results of the mass losses and the ratios found will be discussed. Second the results from modelling of some typical buildings with a steel deck roof structure and the calculated ratios will be discussed. Thereafter some proposals for further research. Finally the conclusions of the research

5.1 Conclusions

From this experiment one can conclude that regarding mass loss at a temperature of 400 °C the insulation material stone wool has the lowest loss of mass with a mass loss of 4% for the core material and 8% loss for the sandwich panel sample. The second lowest material and therefore second best performing insulation material is Polyisocyanurate (PIR) with a loss of 28% for the core and 9% loss for the sandwich panel sample. The next material shares the same basis with PIR but without some fire resistance enhancing properties is Polyurethane (PUR). The PUR mass loss results are 45% for the core and 16% for the sandwich panel sample. Polystyrene materials are tested up to 380 °C and only as a core product and not as sandwich panel. The mass loss for expanded Polystyrene (EPS) was 56% and for extruded Polystyrene (XPS) 53%.

Regarding the flammability of gas mixtures resulting from pyrolysis of the insulation materials a broad spectrum of ratios were analysed on flammability. For the stone wool products the analysed ratio are between the 2% and 55%. During the analysis, no flammable mixtures were detected. The testing of PIR resulted in ratios between 14% and 84%. During the analysis, no flammable mixtures were detected. The experiments with PUR delivered ratios between 12% and 89%. During the analysis a lower flammability limit as well as an upper flammability limit could be detected.

For Polyurethane the lower flammability was detected at 39% m/m and the upper flammability limit at 78% m/m.

During the experiments with the polystyrene products, a range of ratios between 8% and 95% were analysed. During the analysis a lower flammability limit could be established, but no upper flammability limit could be established.

For Polystyrene the lower flammability limit was found at a ratio of 36% m/m.

From the results from these experiments one can conclude that pyrolysis of stone wool or PIR do not result in extra hazards during a fire situation regarding the possibility of a smoke gas explosion. From these experiments can also be concluded that the pyrolysis of the materials PUR and PS possibly increase hazards during a fire situation due to the fact that fire effluents are flammable. Therefore, increasing the possibility of a smoke gas explosion. These conclusions are valid for temperatures up to 400 °C.

As a secondary part of this study modelling was done on typical buildings were the studied materials are used. The materials where a flammable mixture was detected were used for this model. The model provides insight in the possibility if insulation materials could generate enough pyrolysis gas in a compartment to create a flammable mixture. From the results of the model there can be concluded that insulation materials

alone do not generate enough pyrolysis gas to create a flammable mixture in a compartment during the pre-flashover phase of a building fire. However from the modelling it appeared that the majority of the pyrolysis gas needed for a smoke gas explosion are for the account of the insulation materials. Which means that the flammable pyrolysis gas from insulation materials still possibly increase the risk of a smoke gas explosion. Also, the calculation is based on a homogeneous mix of pyrolysis gas and air. This is optimistic because it is possible that the pyrolysis gas remains in the top layer of the smoke, meaning that the chance of a smoke gas explosion might be higher.

For the materials where a lower flammability limit is established it is clear that the found lower flammability limits are higher then lower flammability limits found in literature. This is due to the fact that pyrolysis gas at low temperatures contains larger chains of molecules which are harder to ignite. From the modelling it appeared that the found flammability limits are not reached. However, from the results from this study there must be concluded that the materials where a lower flammability limit was found the risk of a smoke gas explosion increases. This is due to two reasons.

1. The found ratios are calculated as if the smoke layer is mixed homogeneously, it is more likely that pyrolysis gas accumulates at that top of the smoke layer resulting in locally higher concentrations, possible exceeding the lower flammability limit.

2. If assuming that the smoke layer is indeed homogeneously mixed a large proportion of pyrolysis gas needed for a smoke gas explosion is provided by only insulation materials. In some cases up to 68%. Therefore, greatly increasing the risk of a smoke gas explosion if other products are subject to pyrolysis as well.

With these results of this study in mind one can conclude that the materials Polyurethane, Expanded Polystyrene and Extruded Polystyrene used as insulation materials in steel deck roof construction potentially increase the risk of a smoke gas explosion.

This risk however during the period where a building is evacuated and during the repression phase is small. During this period up to 250 °C, pyrolisation of insulation materials occurs at very low rate. Resulting in very low concentrations of pyrolysis gas in air. Therefore making the risk of a smoke gas explosions due to insulation materials highly unlikely during that period. The risk is greatly increased when temperatures reach higher levels and/or fire effluents are able to flow into compartments where temperatures are lower. Potentially surprising fire fighters.

5.2 Discussion

The results from this experiment concluded that during the pre-flashover phase of a building fire a smoke gas explosion cannot occur from the pyrolysis of building insulation materials alone. This however was only calculated for specific types of buildings, the result can be different for any other type of building with other dimensions. Also, the thickness of the insulation material is of importance. Especially for the PS materials which melt in an early stage of a building fire is this of importance. It is clear from these experiments that PUR and PS can potentially create a hazardous situation and more research is needed to what extend these extra hazards can occur. It is also possible that fire effluents flow from the compartment on fire to adjacent compartments building up a potentially high ratio between pyrolysis gas and air. More research is needed to what extend this is possible and which effect a cold temperature has on the pyrolysis gas is also not clear.

The results showed that there is major difference between lower flammability limits found in the literature and the found lower flammability limits.

Especially for Polystyrene this comparison can be made, since for that material an assumption could be made that 100% of the pyrolysis gas is Styrene. The lower flammability limit of styrene found in literature is 1.1% and the found flammability limit is 16%. As described the assumption that the pyrolysis gas is 100% styrene is incorrect. Especially for lower temperatures the pyrolysis products of Polystyrene are not pure Styrene. Due to the low temperature, pyrolysis products will be chains of Styrene molecules, in essence, the pyrolysis products are small chains of polystyrene. These chains are harder to ignite, thus resulting in a higher lower explosive limit. This effect explains to a large extend the difference between the value found in the literature and the value found in this experiment. The values found in this experiment are for a real life fire scenario more realistic then the values found in literature. This is due to the fact that the values found in this experiment are valid for temperatures equivalent to real life fire scenarios.

The experimental setup was specifically designed to measure the mass loss of a sample and be able to calculate the ratios between pyrolysis gas and air. Therefore it is of importance that the oven as air tight as possible. Great care was taken to ensure the oven was airtight, but a 100% airtightness cannot be guaranteed. It is therefore possible that air leaked into the oven, this would result in the fact that the calculated ratios are higher than they were in real. Therefore, it is possible that the provided ratios are, resulting from air leakage into the oven, all be it to a very small extend, too high.

The ratios found of pyrolysis gas in a smoke layer as modelled in Chapter 4 are at such a level that they do not exceed the lower flammability limits. However in these calculations the assumption is that the smoke layer is fully homogenous. This is a optimistic assumption. More likely is the fact that the top layer contains a higher concentration of pyrolysis gas. Resulting in the fact that concentrations exceeding the lower flammability limit are reached earlier then calculated in this study. This results in a higher risk of a smoke gas explosion.

5.3 Recommendations for further research

A logical next step for this subject would be research about the pyrolysis gas using gas chromatography. When the compounds of the pyrolysis gas are known volume ratios can be found and only then can the flammability limits easily be compared with limits of individual gasses in the literature. The effects of small and large chains of polymers in the pyrolysis gas can then also be found.

This study is limited to the testing of insulation materials. The same test is highly usable for the testing of other materials. For example materials used for the interior of buildings like carpets or foams used in furniture, this could lead to insights into the risks of a smoke gas explosions resulting from the pyrolysis of products used in the interior of buildings.

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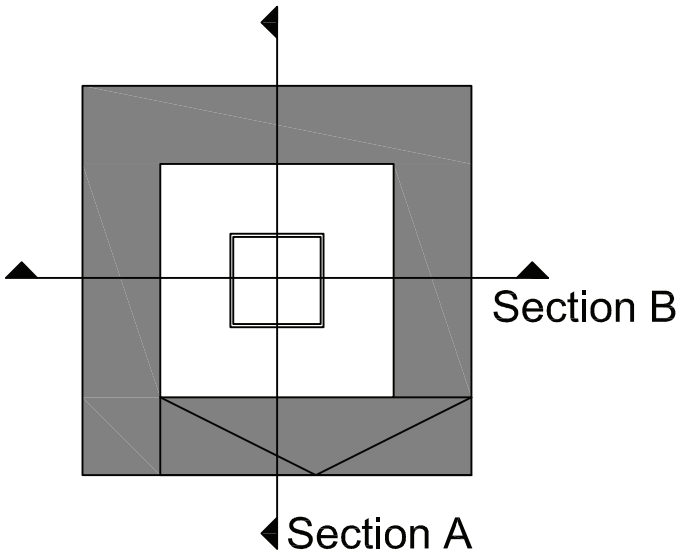
Appendix

Contents of Appendix:

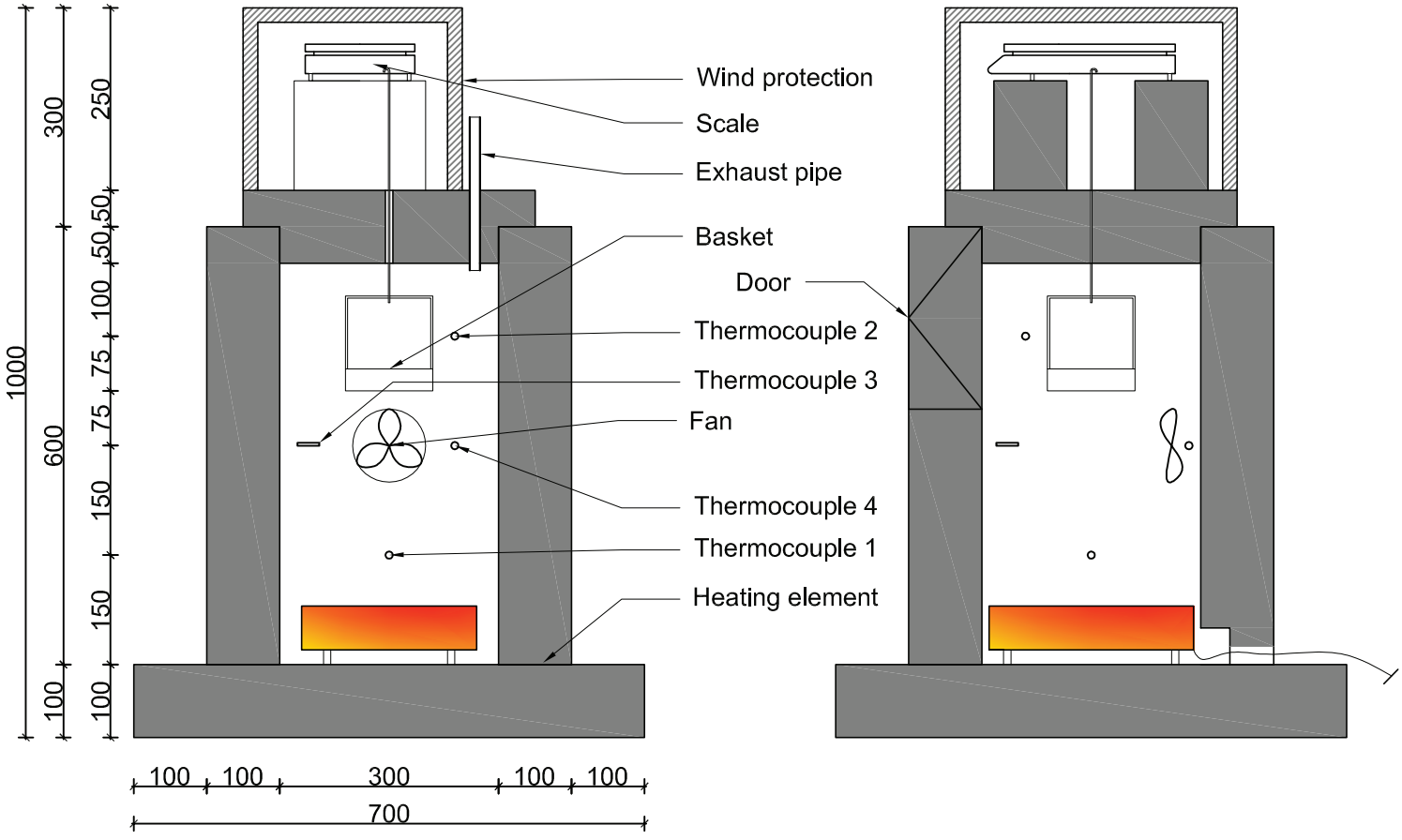
- List of figures and tables
- Drawings of experimental setup to scale
- Photos of experimental setup
- Example calculation ratio
- Example calculation fire model

List of figures and tables

Drawings test setup to scale, scale 1:10



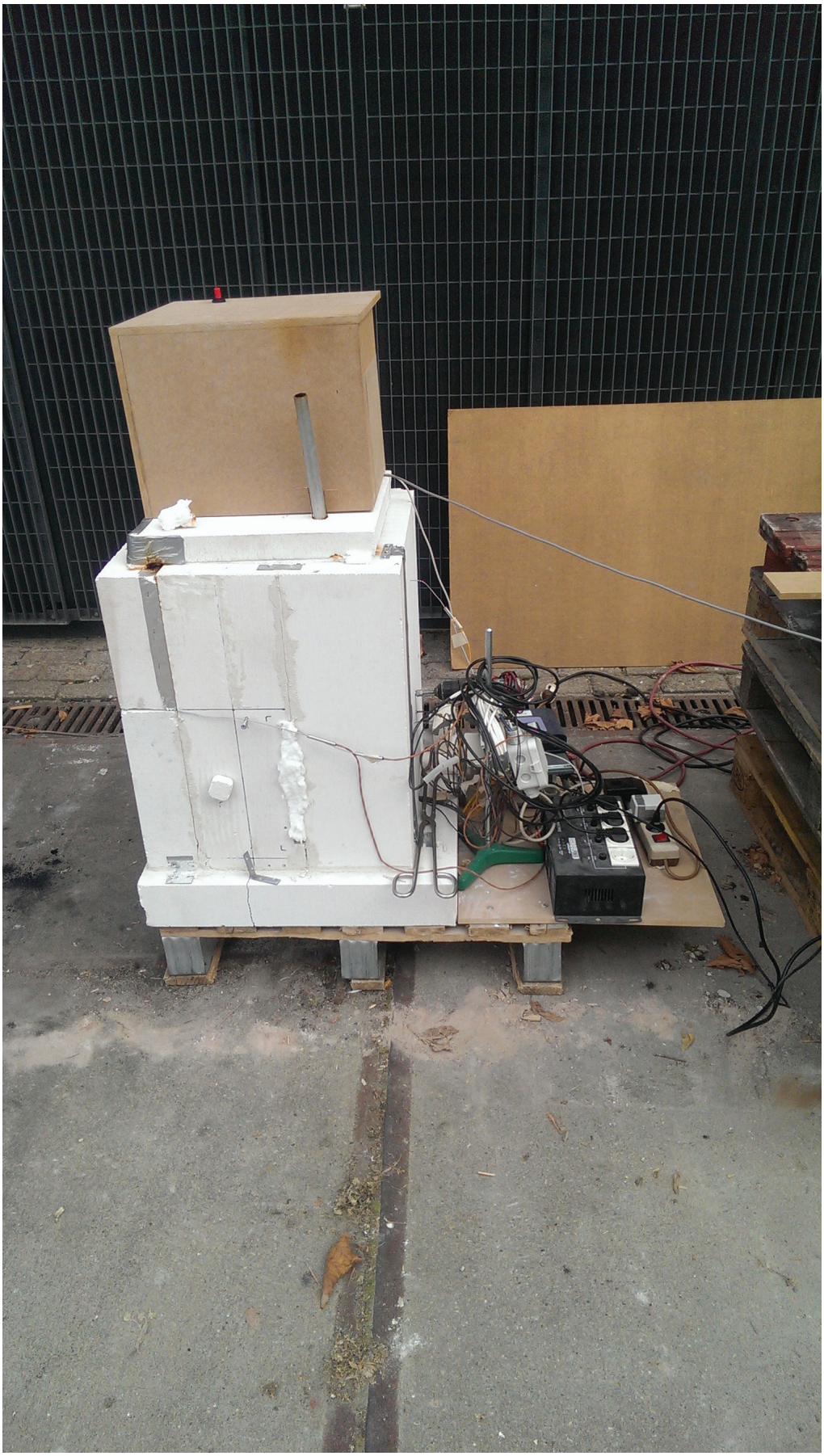
Plan



Section A

Section B

Photos experimental test setup

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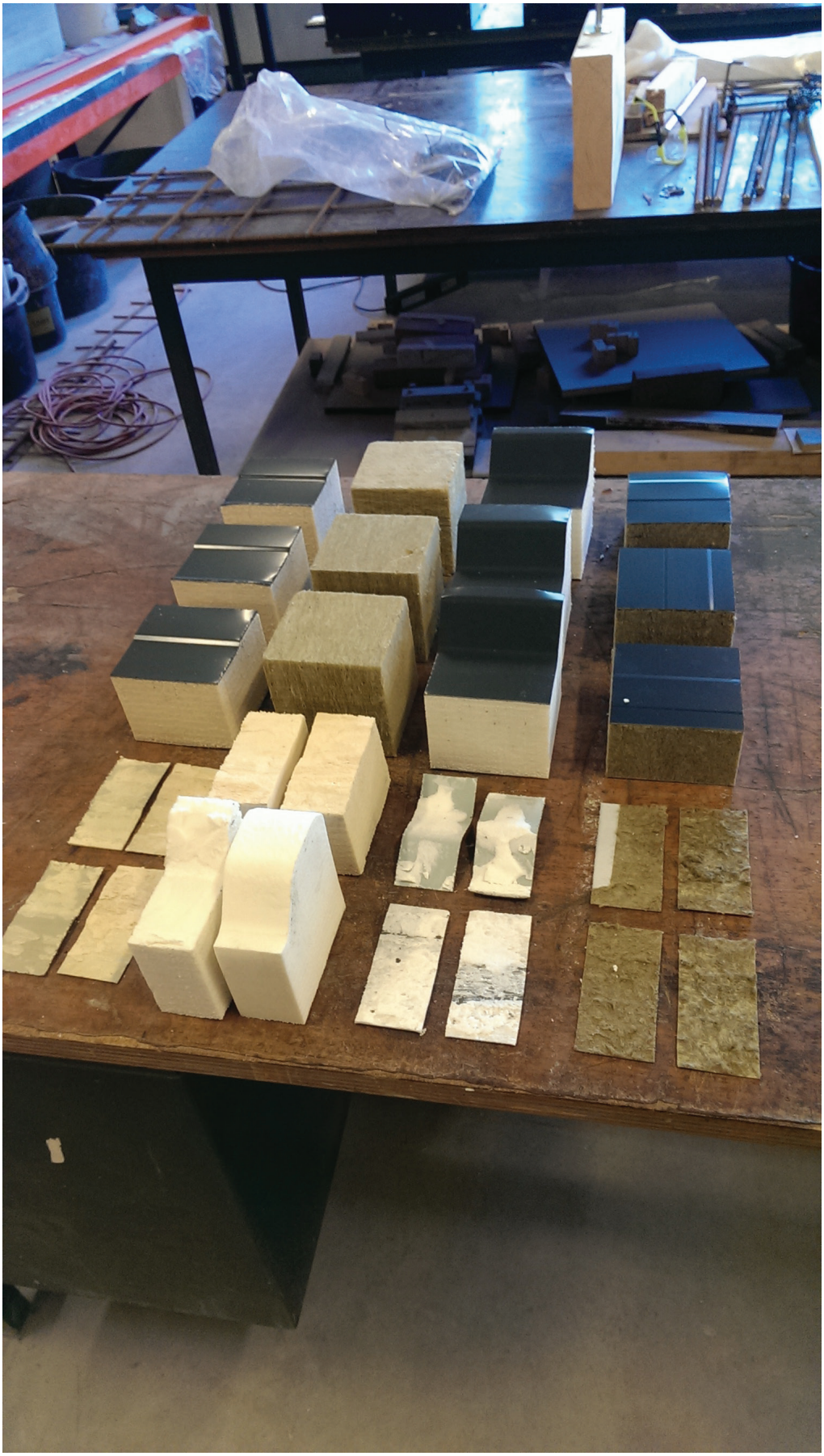

Example calculation of the ratios

Date/Time	Time start	3 ('C)	3 (K)	Air density	VG mass (g)	Abs loss	Air flow	Air mass	Ratio	Ratio VG	Core mass	Relative mass
10:34:03	00:00:00	151.7	424.85	0.83	127.95	0.0167	1.14E-04	9.52E-02	15%	14%	46.95	100%
10:34:13	00:00:10	152.6	425.75	0.83	127.93	0.0167	2.28E-04	1.90E-01	8%	15%	46.93	100%
10:34:33	00:00:30	154.4	427.55	0.83	127.92	0.0167	3.13E-03	2.59E+00	1%	17%	46.92	100%
10:39:53	00:05:50	179.2	452.35	0.78	127.90	0.0167	8.36E-05	6.53E-02	20%	17%	46.90	100%
10:40:03	00:06:00	179.9	453.05	0.78	127.88	0.0167	7.15E-05	5.58E-02	23%	19%	46.88	100%
10:40:13	00:06:10	180.5	453.65	0.78	127.87	0.0167	9.52E-05	7.42E-02	18%	19%	46.87	100%
10:40:23	00:06:20	181.3	454.45	0.78	127.85	0.0167	9.51E-05	7.39E-02	18%	20%	46.85	100%
10:40:33	00:06:30	182.1	455.25	0.78	127.83	0.0167	7.12E-05	5.53E-02	23%	21%	46.83	100%
10:40:43	00:06:40	182.7	455.85	0.78	127.82	0.0167	2.49E-03	1.93E+00	1%	20%	46.82	100%
10:45:43	00:11:40	203.7	476.85	0.74	127.80	0.0167	5.66E-05	4.20E-02	28%	21%	46.80	100%
10:45:53	00:11:50	204.2	477.35	0.74	127.78	0.0167	7.92E-05	5.86E-02	22%	20%	46.78	100%
10:46:03	00:12:00	204.9	478.05	0.74	127.77	0.0167	5.65E-05	4.18E-02	29%	18%	46.77	100%
10:46:13	00:12:10	205.4	478.55	0.74	127.75	0.0167	7.90E-05	5.83E-02	22%	17%	46.75	100%
10:46:23	00:12:20	206.1	479.25	0.74	127.73	0.0167	9.01E-05	6.65E-02	20%	18%	46.73	100%
10:46:33	00:12:30	206.9	480.05	0.74	127.72	0.0167	1.15E-03	8.45E-01	2%	16%	46.72	100%
10:49:03	00:15:00	217.1	490.25	0.72	127.70	0.0167	6.61E-05	4.76E-02	26%	17%	46.70	99%
10:49:13	00:15:10	217.7	490.85	0.72	127.68	0.0167	1.76E-04	1.27E-01	12%	17%	46.68	99%
10:49:33	00:15:30	219.3	492.45	0.72	127.67	0.0167	7.68E-05	5.51E-02	23%	18%	46.67	99%
10:49:43	00:15:40	220	493.15	0.72	127.65	0.0167	6.57E-05	4.71E-02	26%	18%	46.65	99%
10:49:53	00:15:50	220.6	493.75	0.72	127.63	0.0167	2.08E-04	1.49E-01	10%	21%	46.63	99%
10:50:23	00:16:20	222.5	495.65	0.71	127.62	0.0167	4.90E-04	3.50E-01	5%	28%	46.62	99%
10:51:33	00:17:30	227	500.15	0.71	127.60	0.0167	7.56E-05	5.34E-02	24%	28%	46.60	99%
10:51:43	00:17:40	227.7	500.85	0.71	127.58	0.0167	8.63E-05	6.09E-02	21%	29%	46.58	99%
10:51:53	00:17:50	228.5	501.65	0.70	127.57	0.0167	8.61E-05	6.07E-02	22%	30%	46.57	99%
10:52:03	00:18:00	229.3	502.45	0.70	127.55	0.0167	3.22E-05	2.27E-02	42%	31%	46.55	99%
10:52:13	00:18:10	229.6	502.75	0.70	127.53	0.0167	2.15E-05	1.51E-02	52%	27%	46.53	99%
10:52:23	00:18:20	229.8	502.95	0.70	127.52	0.0167	6.66E-04	4.68E-01	3%	23%	46.52	99%
10:54:33	00:20:30	236	509.15	0.69	127.50	0.0167	5.30E-05	3.68E-02	31%	25%	46.50	99%
10:54:43	00:20:40	236.5	509.65	0.69	127.48	0.0167	5.30E-05	3.67E-02	31%	26%	46.48	99%
10:54:53	00:20:50	237	510.15	0.69	127.47	0.0167	7.41E-05	5.13E-02	25%	26%	46.47	99%
10:55:03	00:21:00	237.7	510.85	0.69	127.45	0.0167	8.46E-05	5.85E-02	22%	28%	46.45	99%
10:55:13	00:21:10	238.5	511.65	0.69	127.43	0.0167	7.39E-05	5.10E-02	25%	29%	46.43	99%

10:55:23	00:21:20	239.2	512.35	0.69	127.42	0.0167	1.48E-04	1.02E-01	14%	29%	46.42	99%
10:55:53	00:21:50	240.6	513.75	0.69	127.40	0.0167	4.20E-05	2.89E-02	37%	30%	46.40	99%
10:56:03	00:22:00	241	514.15	0.69	127.38	0.0167	4.20E-05	2.89E-02	37%	29%	46.38	99%
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10:56:33	00:22:30	242.4	515.55	0.69	127.33	0.0167	7.33E-05	5.03E-02	25%	27%	46.33	99%
10:56:43	00:22:40	243.1	516.25	0.68	127.32	0.0167	1.05E-04	7.16E-02	19%	27%	46.32	99%
10:57:03	00:23:00	244.1	517.25	0.68	127.30	0.0167	6.26E-05	4.28E-02	28%	26%	46.30	99%
10:57:13	00:23:10	244.7	517.85	0.68	127.28	0.0167	5.21E-05	3.56E-02	32%	26%	46.28	99%
10:57:23	00:23:20	245.2	518.35	0.68	127.27	0.0167	7.29E-05	4.97E-02	25%	26%	46.27	99%
10:57:33	00:23:30	245.9	519.05	0.68	127.25	0.0167	5.20E-05	3.54E-02	32%	26%	46.25	99%
10:57:43	00:23:40	246.4	519.55	0.68	127.23	0.0167	6.24E-05	4.24E-02	28%	26%	46.23	98%
10:57:53	00:23:50	247	520.15	0.68	127.22	0.0167	2.91E-04	1.98E-01	8%	27%	46.22	98%
10:58:53	00:24:50	249.8	522.95	0.68	127.20	0.0167	5.16E-05	3.49E-02	32%	28%	46.20	98%
10:59:03	00:25:00	250.3	523.45	0.68	127.18	0.0167	6.19E-05	4.18E-02	29%	28%	46.18	98%
10:59:13	00:25:10	250.9	524.05	0.67	127.17	0.0167	6.18E-05	4.17E-02	29%	29%	46.17	98%
10:59:23	00:25:20	251.5	524.65	0.67	127.15	0.0167	5.15E-05	3.47E-02	32%	28%	46.15	98%
10:59:33	00:25:30	252	525.15	0.67	127.13	0.0167	5.14E-05	3.46E-02	33%	31%	46.13	98%
10:59:43	00:25:40	252.5	525.65	0.67	127.12	0.0167	1.85E-04	1.24E-01	12%	31%	46.12	98%
11:00:13	00:26:10	254.3	527.45	0.67	127.10	0.0167	5.12E-05	3.43E-02	33%	32%	46.10	98%
11:00:23	00:26:20	254.8	527.95	0.67	127.08	0.0167	4.09E-05	2.74E-02	38%	31%	46.08	98%
11:00:33	00:26:30	255.2	528.35	0.67	127.07	0.0167	8.18E-05	5.47E-02	23%	30%	46.07	98%
11:00:43	00:26:40	256	529.15	0.67	127.05	0.0167	3.06E-05	2.04E-02	45%	31%	46.05	98%
11:00:53	00:26:50	256.3	529.45	0.67	127.03	0.0167	4.08E-05	2.72E-02	38%	27%	46.03	98%
11:01:03	00:27:00	256.7	529.85	0.67	127.02	0.0167	1.63E-04	1.09E-01	13%	28%	46.02	98%
11:01:33	00:27:30	258.3	531.45	0.67	127.00	0.0167	6.10E-05	4.05E-02	29%	32%	46.00	98%
11:01:43	00:27:40	258.9	532.05	0.66	126.98	0.0167	6.09E-05	4.05E-02	29%	34%	45.98	98%
11:01:53	00:27:50	259.5	532.65	0.66	126.97	0.0167	6.08E-05	4.04E-02	29%	36%	45.97	98%
11:02:03	00:28:00	260.1	533.25	0.66	126.95	0.0167	8.10E-05	5.37E-02	24%	37%	45.95	98%
11:02:13	00:28:10	260.9	534.05	0.66	126.93	0.0333	7.08E-05	4.68E-02	42%	38%	45.93	98%
11:02:23	00:28:20	261.6	534.75	0.66	126.90	0.0333	7.07E-05	4.67E-02	42%	38%	45.90	98%
11:02:33	00:28:30	262.3	535.45	0.66	126.87	0.0167	4.03E-05	2.66E-02	38%	37%	45.87	98%
11:02:43	00:28:40	262.7	535.85	0.66	126.85	0.0167	4.03E-05	2.66E-02	39%	37%	45.85	98%

11:02:53	00:28:50	263.1	536.25	0.66	126.83	0.0167	4.03E-05	2.65E-02	39%	37%	45.83	98%
11:03:03	00:29:00	263.5	536.65	0.66	126.82	0.0167	6.04E-05	3.98E-02	30%	36%	45.82	98%
11:03:13	00:29:10	264.1	537.25	0.66	126.80	0.0167	4.02E-05	2.64E-02	39%	40%	45.80	98%
11:03:23	00:29:20	264.5	537.65	0.66	126.78	0.0167	4.02E-05	2.64E-02	39%	38%	45.78	98%
11:03:33	00:29:30	264.9	538.05	0.66	126.77	0.0167	4.01E-05	2.64E-02	39%	37%	45.77	97%
11:03:43	00:29:40	265.3	538.45	0.66	126.75	0.0167	4.01E-05	2.63E-02	39%	35%	45.75	97%
11:03:53	00:29:50	265.7	538.85	0.66	126.73	0.0167	6.01E-05	3.94E-02	30%	36%	45.73	97%
11:04:03	00:30:00	266.3	539.45	0.66	126.72	0.0333	4.00E-05	2.62E-02	56%	41%	45.72	97%
11:04:13	00:30:10	266.7	539.85	0.65	126.68	0.0167	7.00E-05	4.58E-02	27%	37%	45.68	97%
11:04:23	00:30:20	267.4	540.55	0.65	126.67	0.0167	5.99E-05	3.92E-02	30%	39%	45.67	97%
11:04:33	00:30:30	268	541.15	0.65	126.65	0.0167	5.99E-05	3.91E-02	30%	43%	45.65	97%
11:04:43	00:30:40	268.6	541.75	0.65	126.63	0.0333	5.98E-05	3.90E-02	46%	46%	45.63	97%
11:04:53	00:30:50	269.2	542.35	0.65	126.60	0.0333	3.98E-05	2.60E-02	56%	44%	45.60	97%
11:05:03	00:31:00	269.6	542.75	0.65	126.57	0.0167	4.97E-05	3.24E-02	34%	40%	45.57	97%
11:05:13	00:31:10	270.1	543.25	0.65	126.55	0.0167	3.98E-05	2.59E-02	39%	39%	45.55	97%
11:05:23	00:31:20	270.5	543.65	0.65	126.53	0.0333	4.97E-05	3.23E-02	51%	40%	45.53	97%
11:05:33	00:31:30	271	544.15	0.65	126.50	0.0333	4.96E-05	3.22E-02	51%	40%	45.50	97%
11:05:43	00:31:40	271.5	544.65	0.65	126.47	0.0167	4.96E-05	3.22E-02	34%	40%	45.47	97%
11:05:53	00:31:50	272	545.15	0.65	126.45	0.0167	5.94E-05	3.85E-02	30%	42%	45.45	97%
11:06:03	00:32:00	272.6	545.75	0.65	126.43	0.0167	5.94E-05	3.84E-02	30%	46%	45.43	97%
11:06:13	00:32:10	273.2	546.35	0.65	126.42	0.0333	5.93E-05	3.84E-02	46%	52%	45.42	97%
11:06:23	00:32:20	273.8	546.95	0.65	126.38	0.0333	4.94E-05	3.19E-02	51%	53%	45.38	97%
11:06:33	00:32:30	274.3	547.45	0.65	126.35	0.0333	5.92E-05	3.82E-02	47%	52%	45.35	97%
11:06:43	00:32:40	274.9	548.05	0.64	126.32	0.0333	5.91E-05	3.81E-02	47%	50%	45.32	97%
11:06:53	00:32:50	275.5	548.65	0.64	126.28	0.0333	3.94E-05	2.54E-02	57%	51%	45.28	96%
11:07:03	00:33:00	275.9	549.05	0.64	126.25	0.0500	3.93E-05	2.53E-02	66%	50%	45.25	96%
11:07:13	00:33:10	276.3	549.45	0.64	126.20	0.0333	4.91E-05	3.16E-02	51%	47%	45.20	96%
11:07:23	00:33:20	276.8	549.95	0.64	126.17	0.0167	2.95E-05	1.89E-02	47%	46%	45.17	96%
11:07:33	00:33:30	277.1	550.25	0.64	126.15	0.0167	4.91E-05	3.15E-02	35%	49%	45.15	96%
11:07:43	00:33:40	277.6	550.75	0.64	126.13	0.0333	4.90E-05	3.15E-02	51%	54%	45.13	96%
11:07:53	00:33:50	278.1	551.25	0.64	126.10	0.0333	4.90E-05	3.14E-02	51%	56%	45.10	96%
11:08:03	00:34:00	278.6	551.75	0.64	126.07	0.0167	2.94E-05	1.88E-02	47%	59%	45.07	96%
11:08:13	00:34:10	278.9	552.05	0.64	126.05	0.0333	5.87E-05	3.76E-02	47%	63%	45.05	96%

11:08:23	00:34:20	279.5	552.65	0.64	126.02	0.0500	4.89E-05	3.12E-02	62%	67%	45.02	96%
11:08:33	00:34:30	280	553.15	0.64	125.97	0.0500	3.90E-05	2.50E-02	67%	68%	44.97	96%
11:08:43	00:34:40	280.4	553.55	0.64	125.92	0.0333	2.93E-05	1.87E-02	64%	67%	44.92	96%
11:08:53	00:34:50	280.7	553.85	0.64	125.88	0.0500	3.90E-05	2.49E-02	67%	70%	44.88	96%
11:09:03	00:35:00	281.1	554.25	0.64	125.83	0.0500	2.92E-05	1.86E-02	73%	68%	44.83	95%
11:09:13	00:35:10	281.4	554.55	0.64	125.78	0.0500	2.92E-05	1.86E-02	73%	65%	44.78	95%
11:09:23	00:35:20	281.7	554.85	0.64	125.73	0.0333	2.92E-05	1.86E-02	64%	64%	44.73	95%
11:09:33	00:35:30	282	555.15	0.64	125.70	0.0333	2.92E-05	1.86E-02	64%	61%	44.70	95%
11:09:43	00:35:40	282.3	555.45	0.64	125.67	0.0500	1.94E-05	1.24E-02	80%	61%	44.67	95%
11:09:53	00:35:50	282.5	555.65	0.64	125.62	0.0333	4.86E-05	3.09E-02	52%	58%	44.62	95%
11:10:03	00:36:00	283	556.15	0.64	125.58	0.0333	3.88E-05	2.47E-02	57%	58%	44.58	95%
11:10:13	00:36:10	283.4	556.55	0.64	125.55	0.0333	2.91E-05	1.85E-02	64%	60%	44.55	95%
11:10:23	00:36:20	283.7	556.85	0.63	125.52	0.0333	5.82E-05	3.69E-02	47%	59%	44.52	95%
11:10:33	00:36:30	284.3	557.45	0.63	125.48	0.0500	4.84E-05	3.07E-02	62%	65%	44.48	95%
11:10:43	00:36:40	284.8	557.95	0.63	125.43	0.0500	4.84E-05	3.07E-02	62%	70%	44.43	95%
11:10:53	00:36:50	285.3	558.45	0.63	125.38	0.0500	5.80E-05	3.67E-02	58%	73%	44.38	95%
11:11:03	00:37:00	285.9	559.05	0.63	125.33	0.0667	5.80E-05	3.66E-02	65%	76%	44.33	94%
11:11:13	00:37:10	286.5	559.65	0.63	125.27	0.0500	4.82E-05	3.05E-02	62%	76%	44.27	94%
11:11:23	00:37:20	287	560.15	0.63	125.22	0.0667	1.93E-05	1.22E-02	85%	78%	44.22	94%
11:11:33	00:37:30	287.2	560.35	0.63	125.15	0.0667	9.64E-06	6.08E-03	92%	73%	44.15	94%
11:11:43	00:37:40	287.3	560.45	0.63	125.08	0.0500	1.93E-05	1.22E-02	80%	68%	44.08	94%
11:11:53	00:37:50	287.5	560.65	0.63	125.03	0.0500	2.89E-05	1.82E-02	73%	64%	44.03	94%
11:12:03	00:38:00	287.8	560.95	0.63	124.98	0.0500	4.81E-05	3.03E-02	62%	62%	43.98	94%
11:12:13	00:38:10	288.3	561.45	0.63	124.93	0.0500	2.89E-05	1.82E-02	73%	63%	43.93	94%
11:12:23	00:38:20	288.6	561.75	0.63	124.88	0.0500	5.77E-05	3.63E-02	58%	63%	43.88	93%
11:12:33	00:38:30	289.2	562.35	0.63	124.83	0.0333	3.84E-05	2.41E-02	58%	65%	43.83	93%
11:12:43	00:38:40	289.6	562.75	0.63	124.80	0.0500	5.76E-05	3.62E-02	58%	68%	43.80	93%
11:12:53	00:38:50	290.2	563.35	0.63	124.75	0.0667	5.75E-05	3.61E-02	65%	70%	43.75	93%
11:13:03	00:39:00	290.8	563.95	0.63	124.68	0.0500	3.83E-05	2.40E-02	68%	70%	43.68	93%
11:13:13	00:39:10	291.2	564.35	0.63	124.63	0.0667	3.83E-05	2.40E-02	74%	71%	43.63	93%
11:13:23	00:39:20	291.6	564.75	0.63	124.57	0.0667	4.78E-05	2.99E-02	69%	73%	43.57	93%
11:13:33	00:39:30	292.1	565.25	0.63	124.50	0.0833	4.78E-05	2.99E-02	74%	73%	43.50	93%
11:13:43	00:39:40	292.6	565.75	0.62	124.42	0.0667	4.77E-05	2.98E-02	69%	72%	43.42	92%

11:13:53	00:39:50	293.1	566.25	0.62	124.35	0.0667	5.72E-05	3.57E-02	65%	74%	43.35	92%
11:14:03	00:40:00	293.7	566.85	0.62	124.28	0.0833	4.76E-05	2.97E-02	74%	76%	43.28	92%
11:14:13	00:40:10	294.2	567.35	0.62	124.20	0.0667	1.90E-05	1.19E-02	85%	76%	43.20	92%
11:14:23	00:40:20	294.4	567.55	0.62	124.13	0.0667	4.76E-05	2.96E-02	69%	75%	43.13	92%
11:14:33	00:40:30	294.9	568.05	0.62	124.07	0.0667	4.75E-05	2.96E-02	69%	74%	43.07	92%
11:14:43	00:40:40	295.4	568.55	0.62	124.00	0.0833	2.85E-05	1.77E-02	82%	74%	43.00	92%
11:14:53	00:40:50	295.7	568.85	0.62	123.92	0.0667	3.80E-05	2.36E-02	74%	72%	42.92	91%
11:15:03	00:41:00	296.1	569.25	0.62	123.85	0.0667	2.85E-05	1.77E-02	79%	73%	42.85	91%
11:15:13	00:41:10	296.4	569.55	0.62	123.78	0.0667	3.79E-05	2.35E-02	74%	72%	42.78	91%
11:15:23	00:41:20	296.8	569.95	0.62	123.72	0.0667	5.68E-05	3.53E-02	65%	73%	42.72	91%
11:15:33	00:41:30	297.4	570.55	0.62	123.65	0.0667	4.73E-05	2.93E-02	69%	76%	42.65	91%
11:15:43	00:41:40	297.9	571.05	0.62	123.58	0.0667	4.73E-05	2.93E-02	69%	77%	42.58	91%
11:15:53	00:41:50	298.4	571.55	0.62	123.52	0.0833	2.83E-05	1.75E-02	83%	77%	42.52	91%
11:16:03	00:42:00	298.7	571.85	0.62	123.43	0.0667	3.78E-05	2.33E-02	74%	76%	42.43	90%
11:16:13	00:42:10	299.1	572.25	0.62	123.37	0.0833	3.77E-05	2.33E-02	78%	77%	42.37	90%
11:16:23	00:42:20	299.5	572.65	0.62	123.28	0.0833	2.83E-05	1.75E-02	83%	77%	42.28	90%
11:16:33	00:42:30	299.8	572.95	0.62	123.20	0.0833	4.71E-05	2.91E-02	74%	75%	42.20	90%
11:16:43	00:42:40	300.3	573.45	0.62	123.12	0.0667	4.71E-05	2.90E-02	70%	77%	42.12	90%
11:16:53	00:42:50	300.8	573.95	0.62	123.05	0.0833	3.76E-05	2.32E-02	78%	79%	42.05	90%
11:17:03	00:43:00	301.2	574.35	0.62	122.97	0.0833	3.76E-05	2.31E-02	78%	78%	41.97	89%
11:17:13	00:43:10	301.6	574.75	0.61	122.88	0.0833	3.76E-05	2.31E-02	78%	79%	41.88	89%
11:17:23	00:43:20	302	575.15	0.61	122.80	0.0833	4.69E-05	2.88E-02	74%	79%	41.80	89%
11:17:33	00:43:30	302.5	575.65	0.61	122.72	0.0833	2.81E-05	1.73E-02	83%	81%	41.72	89%
11:17:43	00:43:40	302.8	575.95	0.61	122.63	0.1000	3.75E-05	2.30E-02	81%	80%	41.63	89%
11:17:53	00:43:50	303.2	576.35	0.61	122.53	0.0833	4.68E-05	2.87E-02	74%	79%	41.53	88%
11:18:03	00:44:00	303.7	576.85	0.61	122.45	0.1000	3.74E-05	2.29E-02	81%	79%	41.45	88%
11:18:13	00:44:10	304.1	577.25	0.61	122.35	0.1000	3.74E-05	2.29E-02	81%	78%	41.35	88%
11:18:23	00:44:20	304.5	577.65	0.61	122.25	0.1000	2.80E-05	1.72E-02	85%	77%	41.25	88%
11:18:33	00:44:30	304.8	577.95	0.61	122.15	0.0833	4.67E-05	2.86E-02	74%	75%	41.15	88%
11:18:43	00:44:40	305.3	578.45	0.61	122.07	0.0833	3.73E-05	2.28E-02	79%	76%	41.07	87%
11:18:53	00:44:50	305.7	578.85	0.61	121.98	0.0833	4.66E-05	2.85E-02	75%	77%	40.98	87%
11:19:03	00:45:00	306.2	579.35	0.61	121.90	0.0833	4.66E-05	2.84E-02	75%	79%	40.90	87%
11:19:13	00:45:10	306.7	579.85	0.61	121.82	0.0833	4.66E-05	2.84E-02	75%	78%	40.82	87%

11:19:23	00:45:20	307.2	580.35	0.61	121.73	0.0833	4.65E-05	2.83E-02	75%	81%	40.73	87%
11:19:33	00:45:30	307.7	580.85	0.61	121.65	0.0833	3.72E-05	2.26E-02	79%	82%	40.65	87%
11:19:43	00:45:40	308.1	581.25	0.61	121.57	0.1000	2.79E-05	1.69E-02	86%	82%	40.57	86%
11:19:53	00:45:50	308.4	581.55	0.61	121.47	0.0833	2.79E-05	1.69E-02	83%	82%	40.47	86%
11:20:03	00:46:00	308.7	581.85	0.61	121.38	0.0833	5.57E-05	3.38E-02	71%	81%	40.38	86%
11:20:13	00:46:10	309.3	582.45	0.61	121.30	0.1000	9.27E-06	5.63E-03	95%	82%	40.30	86%
11:20:23	00:46:20	309.4	582.55	0.61	121.20	0.0833	3.71E-05	2.25E-02	79%	80%	40.20	86%
11:20:33	00:46:30	309.8	582.95	0.61	121.12	0.1000	3.71E-05	2.25E-02	82%	81%	40.12	85%
11:20:43	00:46:40	310.2	583.35	0.61	121.02	0.0833	2.78E-05	1.68E-02	83%	82%	40.02	85%
11:20:53	00:46:50	310.5	583.65	0.61	120.93	0.1000	5.55E-05	3.36E-02	75%	82%	39.93	85%
11:21:03	00:47:00	311.1	584.25	0.60	120.83	0.1000	3.70E-05	2.24E-02	82%	82%	39.83	85%
11:21:13	00:47:10	311.5	584.65	0.60	120.73	0.0833	3.69E-05	2.23E-02	79%	82%	39.73	85%
11:21:23	00:47:20	311.9	585.05	0.60	120.65	0.1000	2.77E-05	1.67E-02	86%	82%	39.65	84%
11:21:33	00:47:30	312.2	585.35	0.60	120.55	0.1000	1.85E-05	1.11E-02	90%	82%	39.55	84%
11:21:43	00:47:40	312.4	585.55	0.60	120.45	0.0833	3.69E-05	2.23E-02	79%	80%	39.45	84%
11:21:53	00:47:50	312.8	585.95	0.60	120.37	0.0833	4.61E-05	2.78E-02	75%	79%	39.37	84%
11:22:03	00:48:00	313.3	586.45	0.60	120.28	0.0833	2.76E-05	1.66E-02	83%	82%	39.28	84%
11:22:13	00:48:10	313.6	586.75	0.60	120.20	0.0833	3.68E-05	2.22E-02	79%	82%	39.20	83%
11:22:23	00:48:20	314	587.15	0.60	120.12	0.0833	1.84E-05	1.11E-02	88%	82%	39.12	83%
11:22:33	00:48:30	314.2	587.35	0.60	120.03	0.0833	4.60E-05	2.77E-02	75%	80%	39.03	83%
11:22:43	00:48:40	314.7	587.85	0.60	119.95	0.0833	4.59E-05	2.76E-02	75%	81%	38.95	83%
11:22:53	00:48:50	315.2	588.35	0.60	119.87	0.0833	9.18E-06	5.51E-03	94%	82%	38.87	83%
11:23:03	00:49:00	315.3	588.45	0.60	119.78	0.1000	4.59E-05	2.76E-02	78%	81%	38.78	83%
11:23:13	00:49:10	315.8	588.95	0.60	119.68	0.0833	2.75E-05	1.65E-02	83%	80%	38.68	82%
11:23:23	00:49:20	316.1	589.25	0.60	119.60	0.0833	4.58E-05	2.75E-02	75%	79%	38.60	82%
11:23:33	00:49:30	316.6	589.75	0.60	119.52	0.0833	3.66E-05	2.19E-02	79%	81%	38.52	82%
11:23:43	00:49:40	317	590.15	0.60	119.43	0.0833	2.75E-05	1.64E-02	84%	81%	38.43	82%
11:23:53	00:49:50	317.3	590.45	0.60	119.35	0.0833	2.74E-05	1.64E-02	84%	79%	38.35	82%
11:24:03	00:50:00	317.6	590.75	0.60	119.27	0.0667	3.66E-05	2.19E-02	75%	78%	38.27	82%
11:24:13	00:50:10	318	591.15	0.60	119.20	0.0667	2.74E-05	1.64E-02	80%	80%	38.20	81%
11:24:23	00:50:20	318.3	591.45	0.60	119.13	0.0667	1.83E-05	1.09E-02	86%	80%	38.13	81%
11:24:43	00:50:40	318.5	591.65	0.60	119.00	0.0667	2.74E-05	1.64E-02	80%	79%	38.00	81%
11:24:53	00:50:50	318.8	591.95	0.60	118.93	0.0667	4.56E-05	2.72E-02	71%	79%	37.93	81%

11:25:03	00:51:00	319.3	592.45	0.60	118.87	0.0667	3.65E-05	2.18E-02	75%	79%	37.87	81%
11:25:13	00:51:10	319.7	592.85	0.60	118.80	0.0833	1.82E-05	1.09E-02	88%	78%	37.80	81%
11:25:23	00:51:20	319.9	593.05	0.60	118.72	0.0667	2.73E-05	1.63E-02	80%	74%	37.72	80%
11:25:33	00:51:30	320.2	593.35	0.60	118.65	0.0667	2.73E-05	1.63E-02	80%	73%	37.65	80%
11:25:43	00:51:40	320.5	593.65	0.60	118.58	0.0667	2.73E-05	1.62E-02	80%	73%	37.58	80%
11:25:53	00:51:50	320.8	593.95	0.60	118.52	0.0667	4.55E-05	2.71E-02	71%	71%	37.52	80%
11:26:03	00:52:00	321.3	594.45	0.59	118.45	0.0667	5.45E-05	3.24E-02	67%	72%	37.45	80%
11:26:13	00:52:10	321.9	595.05	0.59	118.38	0.0500	4.54E-05	2.70E-02	65%	73%	37.38	80%
11:26:23	00:52:20	322.4	595.55	0.59	118.33	0.0667	3.63E-05	2.15E-02	76%	74%	37.33	80%
11:26:33	00:52:30	322.8	595.95	0.59	118.27	0.0500	2.72E-05	1.61E-02	76%	76%	37.27	79%
11:26:43	00:52:40	323.1	596.25	0.59	118.22	0.0833	6.34E-05	3.76E-02	69%	77%	37.22	79%
11:26:53	00:52:50	323.8	596.95	0.59	118.13	0.0667	2.71E-05	1.61E-02	81%	77%	37.13	79%
11:27:03	00:53:00	324.1	597.25	0.59	118.07	0.0667	4.52E-05	2.68E-02	71%	78%	37.07	79%
11:27:13	00:53:10	324.6	597.75	0.59	118.00	0.0833	5.42E-05	3.20E-02	72%	80%	37.00	79%
11:27:23	00:53:20	325.2	598.35	0.59	117.92	0.0833	1.80E-05	1.07E-02	89%	81%	36.92	79%
11:27:33	00:53:30	325.4	598.55	0.59	117.83	0.0833	3.61E-05	2.13E-02	80%	77%	36.83	78%
11:27:43	00:53:40	325.8	598.95	0.59	117.75	0.0500	3.61E-05	2.13E-02	70%	76%	36.75	78%
11:27:53	00:53:50	326.2	599.35	0.59	117.70	0.0833	1.80E-05	1.06E-02	89%	78%	36.70	78%
11:28:03	00:54:00	326.4	599.55	0.59	117.62	0.0667	2.70E-05	1.59E-02	81%	74%	36.62	78%
11:28:13	00:54:10	326.7	599.85	0.59	117.55	0.0667	3.60E-05	2.12E-02	76%	73%	36.55	78%
11:28:23	00:54:20	327.1	600.25	0.59	117.48	0.0500	4.50E-05	2.65E-02	65%	73%	36.48	78%
11:28:33	00:54:30	327.6	600.75	0.59	117.43	0.0667	3.60E-05	2.12E-02	76%	76%	36.43	78%
11:28:43	00:54:40	328	601.15	0.59	117.37	0.0833	3.59E-05	2.11E-02	80%	76%	36.37	77%
11:28:53	00:54:50	328.4	601.55	0.59	117.28	0.0500	4.49E-05	2.64E-02	65%	78%	36.28	77%
11:29:03	00:55:00	328.9	602.05	0.59	117.23	0.0667	3.59E-05	2.11E-02	76%	80%	36.23	77%
11:29:13	00:55:10	329.3	602.45	0.59	117.17	0.0667	3.59E-05	2.10E-02	76%	78%	36.17	77%
11:29:23	00:55:20	329.7	602.85	0.59	117.10	0.0833	2.69E-05	1.58E-02	84%	79%	36.10	77%
11:29:33	00:55:30	330	603.15	0.59	117.02	0.0667	3.58E-05	2.10E-02	76%	78%	36.02	77%
11:29:53	00:55:50	330.4	603.55	0.59	116.88	0.0833	1.79E-05	1.05E-02	89%	78%	35.88	76%
11:30:03	00:56:00	330.6	603.75	0.59	116.80	0.0667	3.58E-05	2.09E-02	76%	75%	35.80	76%
11:30:13	00:56:10	331	604.15	0.59	116.73	0.0667	5.36E-05	3.14E-02	68%	76%	35.73	76%
11:30:23	00:56:20	331.6	604.75	0.58	116.67	0.0667	2.68E-05	1.57E-02	81%	79%	35.67	76%
11:30:33	00:56:30	331.9	605.05	0.58	116.60	0.0667	3.57E-05	2.09E-02	76%	77%	35.60	76%

11:30:43	00:56:40	332.3	605.45	0.58	116.53	0.0667	3.57E-05	2.08E-02	76%	76%	35.53	76%
11:30:53	00:56:50	332.7	605.85	0.58	116.47	0.0667	4.46E-05	2.60E-02	72%	75%	35.47	76%
11:31:03	00:57:00	333.2	606.35	0.58	116.40	0.0667	2.67E-05	1.56E-02	81%	76%	35.40	75%
11:31:13	00:57:10	333.5	606.65	0.58	116.33	0.0667	1.78E-05	1.04E-02	87%	75%	35.33	75%
11:31:23	00:57:20	333.7	606.85	0.58	116.27	0.0500	3.56E-05	2.07E-02	71%	72%	35.27	75%
11:31:33	00:57:30	334.1	607.25	0.58	116.22	0.0667	5.34E-05	3.11E-02	68%	72%	35.22	75%
11:31:43	00:57:40	334.7	607.85	0.58	116.15	0.0667	4.44E-05	2.58E-02	72%	74%	35.15	75%
11:31:53	00:57:50	335.2	608.35	0.58	116.08	0.0500	2.66E-05	1.55E-02	76%	75%	35.08	75%
11:32:03	00:58:00	335.5	608.65	0.58	116.03	0.0667	3.55E-05	2.06E-02	76%	74%	35.03	75%
11:32:13	00:58:10	335.9	609.05	0.58	115.97	0.0500	3.55E-05	2.06E-02	71%	70%	34.97	74%
11:32:23	00:58:20	336.3	609.45	0.58	115.92	0.0500	3.54E-05	2.06E-02	71%	74%	34.92	74%
11:32:33	00:58:30	336.7	609.85	0.58	115.87	0.0500	2.66E-05	1.54E-02	76%	76%	34.87	74%
11:32:43	00:58:40	337	610.15	0.58	115.82	0.0500	2.66E-05	1.54E-02	76%	75%	34.82	74%
11:32:53	00:58:50	337.3	610.45	0.58	115.77	0.0500	3.54E-05	2.05E-02	71%	74%	34.77	74%
11:33:03	00:59:00	337.7	610.85	0.58	115.72	0.0333	4.42E-05	2.56E-02	57%	74%	34.72	74%
11:33:13	00:59:10	338.2	611.35	0.58	115.68	0.0500	8.83E-06	5.11E-03	91%	77%	34.68	74%
11:33:23	00:59:20	338.3	611.45	0.58	115.63	0.0667	1.77E-05	1.02E-02	87%	75%	34.63	74%
11:33:33	00:59:30	338.5	611.65	0.58	115.57	0.0500	4.41E-05	2.55E-02	66%	72%	34.57	74%
11:33:43	00:59:40	339	612.15	0.58	115.52	0.0500	3.53E-05	2.04E-02	71%	71%	34.52	74%
11:33:53	00:59:50	339.4	612.55	0.58	115.47	0.0500	3.53E-05	2.03E-02	71%	70%	34.47	73%
11:34:03	01:00:00	339.8	612.95	0.58	115.42	0.0500	2.64E-05	1.52E-02	77%	71%	34.42	73%
11:34:13	01:00:10	340.1	613.25	0.58	115.37	0.0500	2.64E-05	1.52E-02	77%	72%	34.37	73%
11:34:23	01:00:20	340.4	613.55	0.58	115.32	0.0333	2.64E-05	1.52E-02	69%	72%	34.32	73%
11:34:33	01:00:30	340.7	613.85	0.58	115.28	0.0500	5.28E-05	3.04E-02	62%	73%	34.28	73%
11:34:43	01:00:40	341.3	614.45	0.58	115.23	0.0333	3.52E-05	2.02E-02	62%	75%	34.23	73%
11:34:53	01:00:50	341.7	614.85	0.57	115.20	0.0500	2.63E-05	1.51E-02	77%	75%	34.20	73%
11:35:03	01:01:00	342	615.15	0.57	115.15	0.0500	1.76E-05	1.01E-02	83%	71%	34.15	73%
11:35:13	01:01:10	342.2	615.35	0.57	115.10	0.0333	1.76E-05	1.01E-02	77%	71%	34.10	73%
11:35:33	01:01:30	342.4	615.55	0.57	115.02	0.0333	1.75E-05	1.01E-02	77%	73%	34.02	72%
11:35:43	01:01:40	342.6	615.75	0.57	114.98	0.0500	3.51E-05	2.01E-02	71%	73%	33.98	72%
11:35:53	01:01:50	343	616.15	0.57	114.93	0.0333	3.51E-05	2.01E-02	62%	73%	33.93	72%
11:36:03	01:02:00	343.4	616.55	0.57	114.90	0.0333	4.38E-05	2.51E-02	57%	74%	33.90	72%
11:36:13	01:02:10	343.9	617.05	0.57	114.87	0.0500	1.75E-05	1.00E-02	83%	76%	33.87	72%

11:36:23	01:02:20	344.1	617.25	0.57	114.82	0.0333	8.75E-06	5.01E-03	87%	75%	33.82	72%
11:36:33	01:02:30	344.2	617.35	0.57	114.78	0.0500	2.62E-05	1.50E-02	77%	71%	33.78	72%
11:36:43	01:02:40	344.5	617.65	0.57	114.73	0.0333	2.62E-05	1.50E-02	69%	71%	33.73	72%
11:36:53	01:02:50	344.8	617.95	0.57	114.70	0.0500	3.50E-05	2.00E-02	71%	70%	33.70	72%
11:37:03	01:03:00	345.2	618.35	0.57	114.65	0.0500	4.37E-05	2.50E-02	67%	67%	33.65	72%
11:37:13	01:03:10	345.7	618.85	0.57	114.60	0.0500	2.62E-05	1.50E-02	77%	68%	33.60	72%
11:37:23	01:03:20	346	619.15	0.57	114.55	0.0500	4.36E-05	2.49E-02	67%	67%	33.55	71%
11:37:33	01:03:30	346.5	619.65	0.57	114.50	0.0333	1.74E-05	9.94E-03	77%	69%	33.50	71%
11:37:43	01:03:40	346.7	619.85	0.57	114.47	0.0500	6.10E-05	3.48E-02	59%	70%	33.47	71%
11:37:53	01:03:50	347.4	620.55	0.57	114.42	0.0333	4.35E-05	2.48E-02	57%	69%	33.42	71%
11:38:03	01:04:00	347.9	621.05	0.57	114.38	0.0500	3.48E-05	1.98E-02	72%	73%	33.38	71%
11:38:13	01:04:10	348.3	621.45	0.57	114.33	0.0333	2.61E-05	1.48E-02	69%	70%	33.33	71%
11:38:23	01:04:20	348.6	621.75	0.57	114.30	0.0333	1.74E-05	9.87E-03	77%	72%	33.30	71%
11:38:33	01:04:30	348.8	621.95	0.57	114.27	0.0500	1.74E-05	9.87E-03	84%	74%	33.27	71%
11:38:43	01:04:40	349	622.15	0.57	114.22	0.0333	4.34E-05	2.47E-02	57%	72%	33.22	71%
11:38:53	01:04:50	349.5	622.65	0.57	114.18	0.0500	2.60E-05	1.48E-02	77%	74%	33.18	71%
11:39:03	01:05:00	349.8	622.95	0.57	114.13	0.0333	4.33E-05	2.46E-02	58%	73%	33.13	71%
11:39:13	01:05:10	350.3	623.45	0.57	114.10	0.0500	2.60E-05	1.47E-02	77%	76%	33.10	71%
11:39:23	01:05:20	350.6	623.75	0.57	114.05	0.0500	8.66E-06	4.91E-03	91%	78%	33.05	70%
11:39:33	01:05:30	350.7	623.85	0.57	114.00	0.0500	3.46E-05	1.96E-02	72%	73%	33.00	70%
11:39:43	01:05:40	351.1	624.25	0.57	113.95	0.0500	4.33E-05	2.45E-02	67%	72%	32.95	70%
11:39:53	01:05:50	351.6	624.75	0.57	113.90	0.0500	3.46E-05	1.96E-02	72%	69%	32.90	70%
11:40:03	01:06:00	352	625.15	0.57	113.85	0.0500	2.59E-05	1.47E-02	77%	70%	32.85	70%
11:40:13	01:06:10	352.3	625.45	0.57	113.80	0.0333	8.63E-06	4.88E-03	87%	68%	32.80	70%
11:40:23	01:06:20	352.4	625.55	0.57	113.77	0.0333	3.45E-05	1.95E-02	63%	66%	32.77	70%
11:40:33	01:06:30	352.8	625.95	0.56	113.73	0.0333	3.45E-05	1.95E-02	63%	66%	32.73	70%
11:40:43	01:06:40	353.2	626.35	0.56	113.70	0.0167	2.59E-05	1.46E-02	53%	69%	32.70	70%
11:41:03	01:07:00	353.4	626.55	0.56	113.67	0.0333	1.72E-05	9.72E-03	77%	70%	32.67	70%
11:41:33	01:07:30	353.5	626.65	0.56	113.55	0.0333	3.45E-05	1.94E-02	63%	69%	32.55	69%
11:41:43	01:07:40	353.9	627.05	0.56	113.52	0.0500	2.58E-05	1.46E-02	77%	67%	32.52	69%
11:41:53	01:07:50	354.2	627.35	0.56	113.47	0.0333	3.44E-05	1.94E-02	63%	67%	32.47	69%
11:42:03	01:08:00	354.6	627.75	0.56	113.43	0.0333	1.72E-05	9.69E-03	77%	67%	32.43	69%
11:42:23	01:08:20	354.8	627.95	0.56	113.37	0.0167	1.72E-05	9.68E-03	63%	63%	32.37	69%

11:42:33	01:08:30	355	628.15	0.56	113.35	0.0333	2.58E-05	1.45E-02	70%	63%	32.35	69%
11:42:43	01:08:40	355.3	628.45	0.56	113.32	0.0333	5.16E-05	2.90E-02	53%	58%	32.32	69%
11:42:53	01:08:50	355.9	629.05	0.56	113.28	0.0500	2.58E-05	1.45E-02	78%	60%	32.28	69%
11:43:03	01:09:00	356.2	629.35	0.56	113.23	0.0333	3.43E-05	1.93E-02	63%	57%	32.23	69%
11:43:13	01:09:10	356.6	629.75	0.56	113.20	0.0333	5.14E-05	2.89E-02	54%	60%	32.20	69%
11:43:23	01:09:20	357.2	630.35	0.56	113.17	0.0333	4.28E-05	2.40E-02	58%	60%	32.17	69%
11:43:33	01:09:30	357.7	630.85	0.56	113.13	0.0167	4.28E-05	2.40E-02	41%	61%	32.13	68%
11:43:43	01:09:40	358.2	631.35	0.56	113.12	0.0333	3.42E-05	1.92E-02	64%	66%	32.12	68%
11:43:53	01:09:50	358.6	631.75	0.56	113.08	0.0167	1.71E-05	9.56E-03	64%	67%	32.08	68%
11:44:13	01:10:10	358.8	631.95	0.56	113.03	0.0333	1.71E-05	9.56E-03	78%	67%	32.03	68%
11:44:23	01:10:20	359	632.15	0.56	113.00	0.0333	4.27E-05	2.39E-02	58%	67%	32.00	68%
11:44:33	01:10:30	359.5	632.65	0.56	112.97	0.0333	3.41E-05	1.91E-02	64%	70%	31.97	68%
11:44:43	01:10:40	359.9	633.05	0.56	112.93	0.0333	2.56E-05	1.43E-02	70%	74%	31.93	68%
11:44:53	01:10:50	360.2	633.35	0.56	112.90	0.0333	2.56E-05	1.43E-02	70%	73%	31.90	68%
11:45:03	01:11:00	360.5	633.65	0.56	112.87	0.0167	1.70E-05	9.51E-03	64%	72%	31.87	68%
11:45:13	01:11:10	360.7	633.85	0.56	112.85	0.0333	1.70E-05	9.50E-03	78%	74%	31.85	68%
11:45:23	01:11:20	360.9	634.05	0.56	112.82	0.0333	1.70E-05	9.49E-03	78%	72%	31.82	68%
11:45:33	01:11:30	361.1	634.25	0.56	112.78	0.0333	8.51E-06	4.74E-03	88%	70%	31.78	68%
11:45:43	01:11:40	361.2	634.35	0.56	112.75	0.0333	4.26E-05	2.37E-02	58%	67%	31.75	68%
11:45:53	01:11:50	361.7	634.85	0.56	112.72	0.0333	3.40E-05	1.89E-02	64%	68%	31.72	68%
11:46:03	01:12:00	362.1	635.25	0.56	112.68	0.0333	1.70E-05	9.46E-03	78%	68%	31.68	67%
11:46:13	01:12:10	362.3	635.45	0.56	112.65	0.0333	3.40E-05	1.89E-02	64%	70%	31.65	67%
11:46:23	01:12:20	362.7	635.85	0.56	112.62	0.0333	2.55E-05	1.42E-02	70%	66%	31.62	67%
11:46:33	01:12:30	363	636.15	0.56	112.58	0.0333	2.55E-05	1.41E-02	70%	66%	31.58	67%
11:46:43	01:12:40	363.3	636.45	0.56	112.55	0.0333	3.39E-05	1.88E-02	64%	66%	31.55	67%
11:46:53	01:12:50	363.7	636.85	0.55	112.52	0.0333	3.39E-05	1.88E-02	64%	67%	31.52	67%
11:47:03	01:13:00	364.1	637.25	0.55	112.48	0.0333	8.47E-06	4.70E-03	88%	68%	31.48	67%
11:47:13	01:13:10	364.2	637.35	0.55	112.45	0.0167	4.24E-05	2.35E-02	42%	68%	31.45	67%
11:47:23	01:13:20	364.7	637.85	0.55	112.43	0.0333	2.54E-05	1.41E-02	70%	76%	31.43	67%
11:47:33	01:13:30	365	638.15	0.55	112.40	0.0333	2.54E-05	1.41E-02	70%	73%	31.40	67%
11:47:43	01:13:40	365.3	638.45	0.55	112.37	0.0333	2.54E-05	1.40E-02	70%	76%	31.37	67%
11:47:53	01:13:50	365.6	638.75	0.55	112.33	0.0333	2.54E-05	1.40E-02	70%	79%	31.33	67%
11:48:03	01:14:00	365.9	639.05	0.55	112.30	0.0333	8.45E-06	4.67E-03	88%	78%	31.30	67%

11:48:23	01:14:20	366	639.15	0.55	112.23	0.0333	8.45E-06	4.67E-03	88%	75%	31.23	67%
11:48:43	01:14:40	366.1	639.25	0.55	112.18	0.0167	2.53E-05	1.40E-02	54%	71%	31.18	66%
11:49:03	01:15:00	366.4	639.55	0.55	112.13	0.0333	8.44E-06	4.67E-03	88%	75%	31.13	66%
11:49:13	01:15:10	366.5	639.65	0.55	112.10	0.0333	8.44E-06	4.66E-03	88%	71%	31.10	66%
11:49:23	01:15:20	366.6	639.75	0.55	112.07	0.0167	1.69E-05	9.33E-03	64%	68%	31.07	66%
11:49:33	01:15:30	366.8	639.95	0.55	112.05	0.0500	4.22E-05	2.33E-02	68%	69%	31.05	66%
11:49:43	01:15:40	367.3	640.45	0.55	112.00	0.0333	3.37E-05	1.86E-02	64%	68%	31.00	66%
11:50:03	01:16:00	367.7	640.85	0.55	111.95	0.0333	1.69E-05	9.29E-03	78%	69%	30.95	66%
11:50:13	01:16:10	367.9	641.05	0.55	111.92	0.0333	3.37E-05	1.86E-02	64%	69%	30.92	66%
11:50:23	01:16:20	368.3	641.45	0.55	111.88	0.0500	4.21E-05	2.32E-02	68%	69%	30.88	66%
11:50:33	01:16:30	368.8	641.95	0.55	111.83	0.0333	2.52E-05	1.39E-02	71%	69%	30.83	66%
11:50:43	01:16:40	369.1	642.25	0.55	111.80	0.0333	3.36E-05	1.85E-02	64%	69%	30.80	66%
11:50:53	01:16:50	369.5	642.65	0.55	111.77	0.0333	2.52E-05	1.39E-02	71%	69%	30.77	66%
11:51:03	01:17:00	369.8	642.95	0.55	111.73	0.0167	8.40E-06	4.62E-03	78%	69%	30.73	65%
11:51:23	01:17:20	369.8	642.95	0.55	111.68	0.0167	1.68E-05	9.23E-03	64%	67%	30.68	65%
11:51:33	01:17:30	370	643.15	0.55	111.67	0.0167	1.68E-05	9.23E-03	64%	69%	30.67	65%
11:51:43	01:17:40	370.2	643.35	0.55	111.65	0.0333	2.52E-05	1.38E-02	71%	73%	30.65	65%
11:51:53	01:17:50	370.5	643.65	0.55	111.62	0.0500	5.03E-05	2.76E-02	64%	71%	30.62	65%
11:52:03	01:18:00	371.1	644.25	0.55	111.57	0.0500	3.35E-05	1.84E-02	73%	69%	30.57	65%
11:52:13	01:18:10	371.5	644.65	0.55	111.52	0.0333	3.35E-05	1.84E-02	64%	66%	30.52	65%
11:52:23	01:18:20	371.9	645.05	0.55	111.48	0.0333	1.67E-05	9.17E-03	78%	66%	30.48	65%
11:52:43	01:18:40	371.9	645.05	0.55	111.42	0.0333	8.37E-06	4.59E-03	88%	62%	30.42	65%
11:52:53	01:18:50	372	645.15	0.55	111.38	0.0167	2.51E-05	1.38E-02	55%	60%	30.38	65%
11:53:03	01:19:00	372.3	645.45	0.55	111.37	0.0167	2.51E-05	1.37E-02	55%	63%	30.37	65%
11:53:13	01:19:10	372.6	645.75	0.55	111.35	0.0167	2.51E-05	1.37E-02	55%	65%	30.35	65%
11:53:23	01:19:20	372.9	646.05	0.55	111.33	0.0167	1.67E-05	9.15E-03	65%	65%	30.33	65%
11:53:43	01:19:40	373	646.15	0.55	111.28	0.0167	2.51E-05	1.37E-02	55%	65%	30.28	65%
11:53:53	01:19:50	373.3	646.45	0.55	111.27	0.0167	8.35E-06	4.57E-03	78%	69%	30.27	64%
11:54:03	01:20:00	373.4	646.55	0.55	111.25	0.0333	2.51E-05	1.37E-02	71%	66%	30.25	64%
11:54:13	01:20:10	373.7	646.85	0.55	111.22	0.0333	3.34E-05	1.82E-02	65%	62%	30.22	64%
11:54:23	01:20:20	374.1	647.25	0.55	111.18	0.0333	5.01E-05	2.73E-02	55%	63%	30.18	64%
11:54:33	01:20:30	374.7	647.85	0.55	111.15	0.0167	1.67E-05	9.09E-03	65%	67%	30.15	64%
11:54:43	01:20:40	374.9	648.05	0.55	111.13	0.0333	1.67E-05	9.09E-03	79%	65%	30.13	64%

11:54:53	01:20:50	375.1	648.25	0.55	111.10	0.0333	4.17E-05	2.27E-02	59%	63%	30.10	64%
11:55:03	01:21:00	375.6	648.75	0.54	111.07	0.0167	3.33E-05	1.81E-02	48%	64%	30.07	64%
11:55:13	01:21:10	376	649.15	0.54	111.05	0.0333	2.50E-05	1.36E-02	71%	64%	30.05	64%
11:55:23	01:21:20	376.3	649.45	0.54	111.02	0.0333	1.66E-05	9.05E-03	79%	64%	30.02	64%
11:55:43	01:21:40	376.4	649.55	0.54	110.95	0.0167	2.49E-05	1.36E-02	55%	61%	29.95	64%
11:55:53	01:21:50	376.7	649.85	0.54	110.93	0.0333	3.32E-05	1.81E-02	65%	65%	29.93	64%
11:56:03	01:22:00	377.1	650.25	0.54	110.90	0.0333	3.32E-05	1.81E-02	65%	69%	29.90	64%
11:56:13	01:22:10	377.5	650.65	0.54	110.87	0.0167	3.32E-05	1.80E-02	48%	67%	29.87	64%
11:56:23	01:22:20	377.9	651.05	0.54	110.85	0.0333	2.49E-05	1.35E-02	71%	67%	29.85	64%
11:56:33	01:22:30	378.2	651.35	0.54	110.82	0.0333	3.32E-05	1.80E-02	65%	66%	29.82	64%
11:57:03	01:23:00	378.4	651.55	0.54	110.73	0.0333	1.66E-05	8.99E-03	79%	65%	29.73	63%
11:57:13	01:23:10	378.6	651.75	0.54	110.70	0.0333	8.29E-06	4.49E-03	88%	62%	29.70	63%
11:57:23	01:23:20	378.7	651.85	0.54	110.67	0.0167	3.31E-05	1.80E-02	48%	55%	29.67	63%
11:57:33	01:23:30	379.1	652.25	0.54	110.65	0.0167	3.31E-05	1.79E-02	48%	58%	29.65	63%
11:57:43	01:23:40	379.5	652.65	0.54	110.63	0.0333	3.31E-05	1.79E-02	65%	64%	29.63	63%
11:57:53	01:23:50	379.9	653.05	0.54	110.60	0.0333	4.13E-05	2.24E-02	60%	64%	29.60	63%
11:58:03	01:24:00	380.4	653.55	0.54	110.57	0.0333	4.13E-05	2.23E-02	60%	65%	29.57	63%
11:58:13	01:24:10	380.9	654.05	0.54	110.53	0.0333	6.60E-05	3.57E-02	48%	69%	29.53	63%
11:58:23	01:24:20	381.7	654.85	0.54	110.50	0.0333	3.30E-05	1.78E-02	65%	69%	29.50	63%
11:58:33	01:24:30	382.1	655.25	0.54	110.47	0.0333	8.24E-06	4.45E-03	88%	69%	29.47	63%
11:58:43	01:24:40	382.2	655.35	0.54	110.43	0.0167	1.65E-05	8.89E-03	65%	66%	29.43	63%
11:59:03	01:25:00	382.3	655.45	0.54	110.38	0.0167	1.65E-05	8.89E-03	65%	65%	29.38	63%
11:59:13	01:25:10	382.5	655.65	0.54	110.37	0.0167	8.24E-06	4.44E-03	79%	65%	29.37	63%
11:59:23	01:25:20	382.6	655.75	0.54	110.35	0.0167	3.29E-05	1.78E-02	48%	64%	29.35	63%
11:59:33	01:25:30	383	656.15	0.54	110.33	0.0333	3.29E-05	1.77E-02	65%	69%	29.33	62%
11:59:43	01:25:40	383.4	656.55	0.54	110.30	0.0333	2.47E-05	1.33E-02	72%	69%	29.30	62%
11:59:53	01:25:50	383.7	656.85	0.54	110.27	0.0333	4.11E-05	2.21E-02	60%	70%	29.27	62%
12:00:03	01:26:00	384.2	657.35	0.54	110.23	0.0333	3.29E-05	1.77E-02	65%	71%	29.23	62%
12:00:13	01:26:10	384.6	657.75	0.54	110.20	0.0333	2.46E-05	1.32E-02	72%	71%	29.20	62%
12:00:23	01:26:20	384.9	658.05	0.54	110.17	0.0333	1.64E-05	8.81E-03	79%	74%	29.17	62%
12:00:33	01:26:30	385.1	658.25	0.54	110.13	0.0333	3.28E-05	1.76E-02	65%	74%	29.13	62%
12:00:43	01:26:40	385.5	658.65	0.54	110.10	0.0333	1.64E-05	8.80E-03	79%	72%	29.10	62%
12:00:53	01:26:50	385.7	658.85	0.54	110.07	0.0167	1.64E-05	8.79E-03	65%	71%	29.07	62%

12:01:03	01:27:00	385.9	659.05	0.54	110.05	0.0167	1.64E-05	8.79E-03	65%	71%	29.05	62%
12:01:13	01:27:10	386.1	659.25	0.54	110.03	0.0333	8.19E-06	4.39E-03	88%	73%	29.03	62%
12:01:23	01:27:20	386.2	659.35	0.54	110.00	0.0333	1.64E-05	8.78E-03	79%	68%	29.00	62%
12:01:33	01:27:30	386.4	659.55	0.54	109.97	0.0167	2.46E-05	1.32E-02	56%	67%	28.97	62%
12:01:43	01:27:40	386.7	659.85	0.54	109.95	0.0333	2.46E-05	1.32E-02	72%	71%	28.95	62%
12:01:53	01:27:50	387	660.15	0.54	109.92	0.0333	3.27E-05	1.75E-02	66%	72%	28.92	62%
12:02:03	01:28:00	387.4	660.55	0.54	109.88	0.0500	2.45E-05	1.31E-02	79%	72%	28.88	62%
12:02:13	01:28:10	387.7	660.85	0.53	109.83	0.0333	4.90E-05	2.62E-02	56%	72%	28.83	61%
12:02:23	01:28:20	388.3	661.45	0.53	109.80	0.0333	2.45E-05	1.31E-02	72%	72%	28.80	61%
12:02:33	01:28:30	388.6	661.75	0.53	109.77	0.0333	1.63E-05	8.72E-03	79%	66%	28.77	61%
12:02:43	01:28:40	388.8	661.95	0.53	109.73	0.0167	8.16E-06	4.36E-03	79%	62%	28.73	61%
12:02:53	01:28:50	388.9	662.05	0.53	109.72	0.0333	3.26E-05	1.74E-02	66%	62%	28.72	61%
12:03:13	01:29:10	389	662.15	0.53	109.67	0.0167	8.16E-06	4.35E-03	79%	62%	28.67	61%
12:03:23	01:29:20	389.1	662.25	0.53	109.65	0.0167	2.45E-05	1.31E-02	56%	62%	28.65	61%
12:03:33	01:29:30	389.4	662.55	0.53	109.63	0.0167	5.71E-05	3.04E-02	35%	65%	28.63	61%
12:03:53	01:29:50	390	663.15	0.53	109.58	0.0167	2.44E-05	1.30E-02	56%	70%	28.58	61%
12:04:03	01:30:00	390.3	663.45	0.53	109.57	0.0333	1.63E-05	8.67E-03	79%	74%	28.57	61%
12:04:13	01:30:10	390.5	663.65	0.53	109.53	0.0333	3.25E-05	1.73E-02	66%	74%	28.53	61%
12:04:33	01:30:30	390.9	664.05	0.53	109.47	0.0333	1.63E-05	8.66E-03	79%	77%	28.47	61%
12:04:53	01:30:50	391.1	664.25	0.53	109.42	0.0333	2.44E-05	1.30E-02	72%	77%	28.42	61%
12:05:03	01:31:00	391.4	664.55	0.53	109.38	0.0167	1.63E-05	8.64E-03	66%	75%	28.38	60%
12:05:13	01:31:10	391.6	664.75	0.53	109.37	0.0333	1.62E-05	8.64E-03	79%	76%	28.37	60%
12:05:23	01:31:20	391.8	664.95	0.53	109.33	0.0333	1.62E-05	8.63E-03	79%	76%	28.33	60%
12:05:33	01:31:30	392	665.15	0.53	109.30	0.0333	8.12E-06	4.31E-03	89%	72%	28.30	60%
12:05:43	01:31:40	392.1	665.25	0.53	109.27	0.0500	2.44E-05	1.29E-02	79%	71%	28.27	60%
12:05:53	01:31:50	392.4	665.55	0.53	109.22	0.0333	4.87E-05	2.59E-02	56%	67%	28.22	60%
12:06:03	01:32:00	393	666.15	0.53	109.18	0.0333	2.43E-05	1.29E-02	72%	66%	28.18	60%
12:06:13	01:32:10	393.3	666.45	0.53	109.15	0.0167	8.10E-06	4.30E-03	80%	62%	28.15	60%
12:06:23	01:32:20	393.4	666.55	0.53	109.13	0.0167	2.43E-05	1.29E-02	56%	64%	28.13	60%
12:06:43	01:32:40	393.6	666.75	0.53	109.10	0.0167	8.10E-06	4.29E-03	80%	65%	28.10	60%
12:06:53	01:32:50	393.7	666.85	0.53	109.08	0.0167	2.43E-05	1.29E-02	56%	64%	28.08	60%
12:07:03	01:33:00	394	667.15	0.53	109.07	0.0167	3.24E-05	1.72E-02	49%	70%	28.07	60%
12:07:13	01:33:10	394.4	667.55	0.53	109.05	0.0333	5.66E-05	3.00E-02	53%	69%	28.05	60%

12:07:23	01:33:20	395.1	668.25	0.53	109.02	0.0333	8.08E-06	4.27E-03	89%	71%	28.02	60%
12:07:33	01:33:30	395.2	668.35	0.53	108.98	0.0333	3.23E-05	1.71E-02	66%	67%	27.98	60%
12:07:43	01:33:40	395.6	668.75	0.53	108.95	0.0333	2.42E-05	1.28E-02	72%	65%	27.95	60%
12:07:53	01:33:50	395.9	669.05	0.53	108.92	0.0333	8.07E-06	4.26E-03	89%	64%	27.92	59%
12:08:03	01:34:00	396	669.15	0.53	108.88	0.0333	7.26E-05	3.84E-02	46%	63%	27.88	59%
12:08:13	01:34:10	396.9	670.05	0.53	108.85	0.0333	3.22E-05	1.70E-02	66%	68%	27.85	59%
12:08:23	01:34:20	397.3	670.45	0.53	108.82	0.0333	4.03E-05	2.12E-02	61%	68%	27.82	59%
12:08:33	01:34:30	397.8	670.95	0.53	108.78	0.0333	4.83E-05	2.54E-02	57%	68%	27.78	59%
12:08:43	01:34:40	398.4	671.55	0.53	108.75	0.0333	3.22E-05	1.69E-02	66%	65%	27.75	59%
12:09:03	01:35:00	398.8	671.95	0.53	108.68	0.0333	1.61E-05	8.45E-03	80%	60%	27.68	59%
12:09:13	01:35:10	399	672.15	0.53	108.65	0.0167	8.03E-06	4.22E-03	80%	55%	27.65	59%
12:09:43	01:35:40	398.9	672.05	0.53	108.60	0.0167	1.61E-05	8.45E-03	66%	49%	27.60	59%
12:09:53	01:35:50	399.1	672.25	0.53	108.58	0.0167	2.41E-05	1.27E-02	57%	45%	27.58	59%
12:10:03	01:36:00	399.4	672.55	0.53	108.57	0.0167	4.82E-05	2.53E-02	40%	41%	27.57	59%
12:10:43	01:36:40	399.9	673.05	0.53	108.45	0.0100	3.21E-05	1.69E-02	37%	42%	27.45	58%
12:10:53	01:36:50	400.3	673.45	0.52	108.44	0.0150	3.21E-05	1.68E-02	47%	47%	27.44	58%

Example calculation of a fire model

time [s]		p_floor [Pa]	TU [	TL [−C]	Zs [m]	H smoke [m]	Area smoke [m2]	Vsmoke [m3]	Density smoke [kg/m3]	Msmoke [KG]	AV temp 10 min
0	00:00:00	0	20	20	7.95	0.05	5000	250	1.206	301.415	46.65
1	00:00:01	-0.08	20	20	7.95	0.05	5000	250	1.206	301.415	46.78
2	00:00:02	-0.08	20.001	20	7.95	0.05	5000	250	1.206	301.414	46.90
3	00:00:03	-0.08	20.001	19.999	7.949	0.051	5000	255	1.206	307.442	47.03
4	00:00:04	-0.08	20.003	19.999	7.949	0.051	5000	255	1.206	307.440	47.15
5	00:00:05	-0.08	20.005	19.998	7.948	0.052	5000	260	1.206	313.466	47.28
6	00:00:06	-0.08	20.007	19.998	7.947	0.053	5000	265	1.206	319.492	47.41
7	00:00:07	-0.08	20.011	19.997	7.946	0.054	5000	270	1.206	325.516	47.54
8	00:00:08	-0.08	20.015	19.997	7.945	0.055	5000	275	1.206	331.539	47.66
9	00:00:09	-0.08	20.019	19.996	7.945	0.055	5000	275	1.206	331.535	47.79
10	00:00:10	-0.08	20.025	19.996	7.943	0.057	5000	285	1.206	343.584	47.92
11	00:00:11	-0.08	20.031	19.996	7.942	0.058	5000	290	1.206	349.604	48.05
12	00:00:12	-0.08	20.038	19.995	7.941	0.059	5000	295	1.206	355.623	48.18
13	00:00:13	-0.08	20.045	19.995	7.94	0.06	5000	300	1.205	361.642	48.31
14	00:00:14	-0.079	20.053	19.994	7.939	0.061	5000	305	1.205	367.660	48.44
15	00:00:15	-0.079	20.062	19.994	7.937	0.063	5000	315	1.205	379.702	48.57
16	00:00:16	-0.079	20.071	19.994	7.936	0.064	5000	320	1.205	385.718	48.70
17	00:00:17	-0.079	20.081	19.993	7.934	0.066	5000	330	1.205	397.758	48.84
18	00:00:18	-0.079	20.091	19.993	7.933	0.067	5000	335	1.205	403.770	48.97
19	00:00:19	-0.079	20.102	19.992	7.931	0.069	5000	345	1.205	415.808	49.10
20	00:00:20	-0.079	20.114	19.992	7.93	0.07	5000	350	1.205	421.817	49.23
21	00:00:21	-0.079	20.127	19.992	7.928	0.072	5000	360	1.205	433.849	49.37
22	00:00:22	-0.079	20.14	19.991	7.926	0.074	5000	370	1.205	445.881	49.50
23	00:00:23	-0.079	20.153	19.991	7.924	0.076	5000	380	1.205	457.912	49.63
24	00:00:24	-0.079	20.167	19.99	7.922	0.078	5000	390	1.205	469.939	49.77
25	00:00:25	-0.079	20.182	19.99	7.92	0.08	5000	400	1.205	481.964	49.90
26	00:00:26	-0.079	20.197	19.99	7.918	0.082	5000	410	1.205	493.988	50.04
27	00:00:27	-0.079	20.213	19.989	7.916	0.084	5000	420	1.205	506.009	50.18
28	00:00:28	-0.079	20.23	19.989	7.914	0.086	5000	430	1.205	518.027	50.31
29	00:00:29	-0.079	20.247	19.989	7.912	0.088	5000	440	1.205	530.043	50.45
30	00:00:30	-0.079	20.264	19.988	7.91	0.09	5000	450	1.205	542.058	50.58

31	00:00:31	-0.079	20.283	19.988	7.908	0.092	5000	460	1.204	554.068	50.72
32	00:00:32	-0.079	20.301	19.988	7.906	0.094	5000	470	1.204	566.079	50.86
33	00:00:33	-0.079	20.321	19.987	7.903	0.097	5000	485	1.204	584.105	51.00
34	00:00:34	-0.079	20.34	19.987	7.901	0.099	5000	495	1.204	596.110	51.14
35	00:00:35	-0.079	20.361	19.987	7.899	0.101	5000	505	1.204	608.109	51.28
36	00:00:36	-0.079	20.382	19.986	7.896	0.104	5000	520	1.204	626.127	51.41
37	00:00:37	-0.079	20.403	19.986	7.894	0.106	5000	530	1.204	638.122	51.55
38	00:00:38	-0.079	20.425	19.986	7.891	0.109	5000	545	1.204	656.133	51.69
39	00:00:39	-0.079	20.448	19.985	7.889	0.111	5000	555	1.204	668.120	51.83
40	00:00:40	-0.079	20.471	19.985	7.886	0.114	5000	570	1.204	686.123	51.98
41	00:00:41	-0.079	20.495	19.985	7.884	0.116	5000	580	1.204	698.104	52.12
42	00:00:42	-0.079	20.519	19.984	7.881	0.119	5000	595	1.204	716.099	52.26
43	00:00:43	-0.079	20.544	19.984	7.878	0.122	5000	610	1.203	734.090	52.40
44	00:00:44	-0.078	20.569	19.984	7.875	0.125	5000	625	1.203	752.077	52.54
45	00:00:45	-0.078	20.595	19.984	7.873	0.127	5000	635	1.203	764.043	52.69
46	00:00:46	-0.078	20.621	19.983	7.87	0.13	5000	650	1.203	782.022	52.83
47	00:00:47	-0.078	20.648	19.983	7.867	0.133	5000	665	1.203	799.995	52.97
48	00:00:48	-0.078	20.675	19.983	7.864	0.136	5000	680	1.203	817.965	53.12
49	00:00:49	-0.078	20.703	19.983	7.861	0.139	5000	695	1.203	835.929	53.26
50	00:00:50	-0.078	20.732	19.982	7.858	0.142	5000	710	1.203	853.886	53.41
51	00:00:51	-0.078	20.76	19.982	7.855	0.145	5000	725	1.203	871.843	53.55
52	00:00:52	-0.078	20.79	19.982	7.852	0.148	5000	740	1.202	889.790	53.70
53	00:00:53	-0.078	20.82	19.982	7.849	0.151	5000	755	1.202	907.734	53.84
54	00:00:54	-0.078	20.85	19.981	7.846	0.154	5000	770	1.202	925.674	53.99
55	00:00:55	-0.078	20.881	19.981	7.843	0.157	5000	785	1.202	943.607	54.14
56	00:00:56	-0.078	20.913	19.981	7.84	0.16	5000	800	1.202	961.533	54.28
57	00:00:57	-0.078	20.944	19.981	7.836	0.164	5000	820	1.202	985.467	54.43
58	00:00:58	-0.078	20.977	19.981	7.833	0.167	5000	835	1.202	1003.381	54.58
59	00:00:59	-0.078	21.01	19.981	7.83	0.17	5000	850	1.202	1021.292	54.73
60	00:01:00	-0.078	21.043	19.98	7.827	0.173	5000	865	1.201	1039.198	54.88
61	00:01:01	-0.078	21.077	19.98	7.823	0.177	5000	885	1.201	1063.103	55.03
62	00:01:02	-0.078	21.112	19.98	7.82	0.18	5000	900	1.201	1080.993	55.18
63	00:01:03	-0.078	21.146	19.98	7.816	0.184	5000	920	1.201	1104.887	55.33

64	00:01:04	-0.078	21.182	19.98	7.813	0.187	5000	935	1.201	1122.764	55.48
65	00:01:05	-0.078	21.218	19.98	7.809	0.191	5000	955	1.201	1146.640	55.63
66	00:01:06	-0.078	21.254	19.979	7.806	0.194	5000	970	1.201	1164.508	55.78
67	00:01:07	-0.078	21.291	19.979	7.802	0.198	5000	990	1.200	1188.369	55.93
68	00:01:08	-0.078	21.328	19.979	7.799	0.201	5000	1005	1.200	1206.223	56.08
69	00:01:09	-0.078	21.366	19.979	7.795	0.205	5000	1025	1.200	1230.069	56.23
70	00:01:10	-0.078	21.404	19.979	7.792	0.208	5000	1040	1.200	1247.909	56.39
71	00:01:11	-0.078	21.443	19.979	7.788	0.212	5000	1060	1.200	1271.739	56.54
72	00:01:12	-0.078	21.482	19.979	7.784	0.216	5000	1080	1.200	1295.562	56.69
73	00:01:13	-0.078	21.522	19.979	7.78	0.22	5000	1100	1.199	1319.375	56.85
74	00:01:14	-0.078	21.562	19.979	7.777	0.223	5000	1115	1.199	1337.185	57.00
75	00:01:15	-0.078	21.603	19.979	7.773	0.227	5000	1135	1.199	1360.981	57.16
76	00:01:16	-0.078	21.644	19.979	7.769	0.231	5000	1155	1.199	1384.771	57.31
77	00:01:17	-0.078	21.685	19.979	7.765	0.235	5000	1175	1.199	1408.553	57.47
78	00:01:18	-0.078	21.727	19.979	7.761	0.239	5000	1195	1.199	1432.325	57.62
79	00:01:19	-0.078	21.77	19.979	7.757	0.243	5000	1215	1.198	1456.084	57.78
80	00:01:20	-0.078	21.813	19.979	7.753	0.247	5000	1235	1.198	1479.837	57.94
81	00:01:21	-0.078	21.856	19.979	7.749	0.251	5000	1255	1.198	1503.583	58.09
82	00:01:22	-0.078	21.9	19.979	7.745	0.255	5000	1275	1.198	1527.316	58.25
83	00:01:23	-0.078	21.945	19.979	7.741	0.259	5000	1295	1.198	1551.038	58.41
84	00:01:24	-0.078	21.99	19.979	7.737	0.263	5000	1315	1.198	1574.752	58.57
85	00:01:25	-0.078	22.035	19.979	7.733	0.267	5000	1335	1.197	1598.459	58.73
86	00:01:26	-0.077	22.081	19.979	7.729	0.271	5000	1355	1.197	1622.153	58.89
87	00:01:27	-0.077	22.127	19.979	7.725	0.275	5000	1375	1.197	1645.840	59.05
88	00:01:28	-0.077	22.173	19.979	7.721	0.279	5000	1395	1.197	1669.519	59.21
89	00:01:29	-0.077	22.221	19.979	7.717	0.283	5000	1415	1.197	1693.180	59.37
90	00:01:30	-0.077	22.268	19.979	7.712	0.288	5000	1440	1.196	1722.820	59.53
91	00:01:31	-0.077	22.316	19.979	7.708	0.292	5000	1460	1.196	1746.465	59.69
92	00:01:32	-0.077	22.365	19.979	7.704	0.296	5000	1480	1.196	1770.095	59.85
93	00:01:33	-0.077	22.414	19.979	7.7	0.3	5000	1500	1.196	1793.718	60.01
94	00:01:34	-0.077	22.463	19.979	7.695	0.305	5000	1525	1.196	1823.311	60.18
95	00:01:35	-0.077	22.513	19.98	7.691	0.309	5000	1545	1.195	1846.911	60.34
96	00:01:36	-0.077	22.563	19.98	7.687	0.313	5000	1565	1.195	1870.503	60.50

97	00:01:37	-0.077	22.614	19.98	7.682	0.318	5000	1590	1.195	1900.055	60.67
98	00:01:38	-0.077	22.665	19.98	7.678	0.322	5000	1610	1.195	1923.624	60.83
99	00:01:39	-0.077	22.717	19.98	7.673	0.327	5000	1635	1.195	1953.150	60.99
100	00:01:40	-0.077	22.769	19.98	7.669	0.331	5000	1655	1.194	1976.695	61.16
101	00:01:41	-0.077	22.821	19.981	7.664	0.336	5000	1680	1.194	2006.202	61.32
102	00:01:42	-0.077	22.874	19.981	7.66	0.34	5000	1700	1.194	2029.722	61.49
103	00:01:43	-0.077	22.927	19.981	7.655	0.345	5000	1725	1.194	2059.202	61.66
104	00:01:44	-0.077	22.981	19.981	7.651	0.349	5000	1745	1.194	2082.697	61.82
105	00:01:45	-0.077	23.035	19.982	7.646	0.354	5000	1770	1.193	2112.150	61.99
106	00:01:46	-0.077	23.09	19.982	7.641	0.359	5000	1795	1.193	2141.585	62.16
107	00:01:47	-0.077	23.145	19.982	7.637	0.363	5000	1815	1.193	2165.044	62.33
108	00:01:48	-0.077	23.201	19.982	7.632	0.368	5000	1840	1.193	2194.451	62.49
109	00:01:49	-0.077	23.257	19.983	7.627	0.373	5000	1865	1.192	2223.847	62.66
110	00:01:50	-0.077	23.313	19.983	7.622	0.378	5000	1890	1.192	2253.231	62.83
111	00:01:51	-0.077	23.37	19.983	7.618	0.382	5000	1910	1.192	2276.637	63.00
112	00:01:52	-0.077	23.427	19.984	7.613	0.387	5000	1935	1.192	2305.993	63.17
113	00:01:53	-0.077	23.485	19.984	7.608	0.392	5000	1960	1.191	2335.329	63.34
114	00:01:54	-0.077	23.543	19.984	7.603	0.397	5000	1985	1.191	2364.654	63.51
115	00:01:55	-0.077	23.602	19.985	7.598	0.402	5000	2010	1.191	2393.960	63.68
116	00:01:56	-0.077	23.661	19.985	7.593	0.407	5000	2035	1.191	2423.254	63.85
117	00:01:57	-0.077	23.721	19.985	7.589	0.411	5000	2055	1.191	2446.575	64.03
118	00:01:58	-0.077	23.78	19.986	7.584	0.416	5000	2080	1.190	2475.847	64.20
119	00:01:59	-0.077	23.841	19.986	7.579	0.421	5000	2105	1.190	2505.090	64.37
120	00:02:00	-0.077	23.901	19.987	7.574	0.426	5000	2130	1.190	2534.329	64.54
121	00:02:01	-0.077	23.963	19.987	7.569	0.431	5000	2155	1.190	2563.540	64.72
122	00:02:02	-0.077	24.024	19.988	7.564	0.436	5000	2180	1.189	2592.747	64.89
123	00:02:03	-0.077	24.086	19.988	7.559	0.441	5000	2205	1.189	2621.933	65.06
124	00:02:04	-0.077	24.149	19.989	7.554	0.446	5000	2230	1.189	2651.099	65.24
125	00:02:05	-0.077	24.212	19.989	7.548	0.452	5000	2260	1.189	2686.194	65.41
126	00:02:06	-0.077	24.275	19.99	7.543	0.457	5000	2285	1.188	2715.334	65.59
127	00:02:07	-0.077	24.339	19.99	7.538	0.462	5000	2310	1.188	2744.451	65.77
128	00:02:08	-0.077	24.403	19.991	7.533	0.467	5000	2335	1.188	2773.557	65.94
129	00:02:09	-0.077	24.467	19.991	7.528	0.472	5000	2360	1.188	2802.649	66.12

130	00:02:10	-0.077	24.532	19.992	7.523	0.477	5000	2385	1.187	2831.720	66.30
131	00:02:11	-0.077	24.598	19.992	7.517	0.483	5000	2415	1.187	2866.703	66.47
132	00:02:12	-0.077	24.664	19.993	7.512	0.488	5000	2440	1.187	2895.737	66.65
133	00:02:13	-0.077	24.73	19.993	7.507	0.493	5000	2465	1.187	2924.759	66.83
134	00:02:14	-0.077	24.797	19.994	7.502	0.498	5000	2490	1.186	2953.757	67.01
135	00:02:15	-0.077	24.864	19.995	7.496	0.504	5000	2520	1.186	2988.673	67.19
136	00:02:16	-0.078	24.931	19.995	7.491	0.509	5000	2545	1.186	3017.644	67.37
137	00:02:17	-0.078	24.999	19.996	7.486	0.514	5000	2570	1.185	3046.592	67.55
138	00:02:18	-0.078	25.067	19.997	7.48	0.52	5000	2600	1.185	3081.452	67.73
139	00:02:19	-0.078	25.136	19.997	7.475	0.525	5000	2625	1.185	3110.362	67.91
140	00:02:20	-0.078	25.205	19.998	7.469	0.531	5000	2655	1.185	3145.181	68.09
141	00:02:21	-0.078	25.275	19.999	7.464	0.536	5000	2680	1.184	3174.052	68.27
142	00:02:22	-0.078	25.345	20	7.458	0.542	5000	2710	1.184	3208.830	68.45
143	00:02:23	-0.078	25.415	20	7.453	0.547	5000	2735	1.184	3237.672	68.63
144	00:02:24	-0.078	25.486	20.001	7.447	0.553	5000	2765	1.184	3272.408	68.82
145	00:02:25	-0.078	25.557	20.002	7.442	0.558	5000	2790	1.183	3301.211	69.00
146	00:02:26	-0.078	25.629	20.003	7.436	0.564	5000	2820	1.183	3335.904	69.18
147	00:02:27	-0.078	25.701	20.003	7.431	0.569	5000	2845	1.183	3364.667	69.37
148	00:02:28	-0.078	25.773	20.004	7.425	0.575	5000	2875	1.182	3399.327	69.55
149	00:02:29	-0.078	25.846	20.005	7.419	0.581	5000	2905	1.182	3433.960	69.74
150	00:02:30	-0.078	25.92	20.006	7.414	0.586	5000	2930	1.182	3462.655	69.92
151	00:02:31	-0.078	25.993	20.007	7.408	0.592	5000	2960	1.182	3497.255	70.11
152	00:02:32	-0.078	26.067	20.008	7.403	0.597	5000	2985	1.181	3525.921	70.29
153	00:02:33	-0.078	26.142	20.009	7.397	0.603	5000	3015	1.181	3560.465	70.48
154	00:02:34	-0.078	26.217	20.01	7.391	0.609	5000	3045	1.181	3594.991	70.67
155	00:02:35	-0.078	26.292	20.01	7.385	0.615	5000	3075	1.180	3629.501	70.86
156	00:02:36	-0.078	26.368	20.011	7.38	0.62	5000	3100	1.180	3658.080	71.04
157	00:02:37	-0.078	26.444	20.012	7.374	0.626	5000	3130	1.180	3692.544	71.23
158	00:02:38	-0.078	26.521	20.013	7.368	0.632	5000	3160	1.179	3726.978	71.42
159	00:02:39	-0.078	26.598	20.014	7.362	0.638	5000	3190	1.179	3761.394	71.61
160	00:02:40	-0.078	26.675	20.015	7.356	0.644	5000	3220	1.179	3795.793	71.80
161	00:02:41	-0.078	26.753	20.016	7.35	0.65	5000	3250	1.179	3830.161	71.99
162	00:02:42	-0.078	26.831	20.017	7.345	0.655	5000	3275	1.178	3858.620	72.18

163	00:02:43	-0.078	26.909	20.019	7.339	0.661	5000	3305	1.178	3892.954	72.37
164	00:02:44	-0.078	26.988	20.02	7.333	0.667	5000	3335	1.178	3927.257	72.56
165	00:02:45	-0.078	27.068	20.021	7.327	0.673	5000	3365	1.177	3961.529	72.75
166	00:02:46	-0.078	27.148	20.022	7.321	0.679	5000	3395	1.177	3995.782	72.94
167	00:02:47	-0.078	27.228	20.023	7.315	0.685	5000	3425	1.177	4030.017	73.13
168	00:02:48	-0.079	27.308	20.024	7.309	0.691	5000	3455	1.176	4064.234	73.33
169	00:02:49	-0.079	27.389	20.025	7.303	0.697	5000	3485	1.176	4098.420	73.52
170	00:02:50	-0.079	27.471	20.026	7.297	0.703	5000	3515	1.176	4132.573	73.71
171	00:02:51	-0.079	27.553	20.028	7.291	0.709	5000	3545	1.175	4166.707	73.91
172	00:02:52	-0.079	27.635	20.029	7.285	0.715	5000	3575	1.175	4200.823	74.10
173	00:02:53	-0.079	27.717	20.03	7.279	0.721	5000	3605	1.175	4234.920	74.30
174	00:02:54	-0.079	27.8	20.031	7.273	0.727	5000	3635	1.174	4268.984	74.49
175	00:02:55	-0.079	27.884	20.033	7.266	0.734	5000	3670	1.174	4308.886	74.69
176	00:02:56	-0.079	27.968	20.034	7.26	0.74	5000	3700	1.174	4342.896	74.88
177	00:02:57	-0.079	28.052	20.035	7.254	0.746	5000	3730	1.173	4376.888	75.08
178	00:02:58	-0.079	28.136	20.037	7.248	0.752	5000	3760	1.173	4410.861	75.28
179	00:02:59	-0.079	28.221	20.038	7.242	0.758	5000	3790	1.173	4444.800	75.47
180	00:03:00	-0.079	28.307	20.039	7.235	0.765	5000	3825	1.172	4484.567	75.67
181	00:03:01	-0.079	28.393	20.041	7.229	0.771	5000	3855	1.172	4518.451	75.87
182	00:03:02	-0.079	28.479	20.042	7.223	0.777	5000	3885	1.172	4552.316	76.07
183	00:03:03	-0.079	28.565	20.044	7.217	0.783	5000	3915	1.171	4586.161	76.27
184	00:03:04	-0.079	28.652	20.045	7.21	0.79	5000	3950	1.171	4625.828	76.46
185	00:03:05	-0.079	28.74	20.046	7.204	0.796	5000	3980	1.171	4659.602	76.66
186	00:03:06	-0.08	28.827	20.048	7.198	0.802	5000	4010	1.170	4693.372	76.86
187	00:03:07	-0.08	28.916	20.049	7.191	0.809	5000	4045	1.170	4732.942	77.06
188	00:03:08	-0.08	29.004	20.051	7.185	0.815	5000	4075	1.170	4766.655	77.26
189	00:03:09	-0.08	29.093	20.052	7.179	0.821	5000	4105	1.169	4800.333	77.47
190	00:03:10	-0.08	29.182	20.054	7.172	0.828	5000	4140	1.169	4839.837	77.67
191	00:03:11	-0.08	29.272	20.056	7.166	0.834	5000	4170	1.169	4873.457	77.87
192	00:03:12	-0.08	29.362	20.057	7.159	0.841	5000	4205	1.168	4912.899	78.07
193	00:03:13	-0.08	29.453	20.059	7.153	0.847	5000	4235	1.168	4946.462	78.27
194	00:03:14	-0.08	29.544	20.06	7.146	0.854	5000	4270	1.168	4985.842	78.48
195	00:03:15	-0.08	29.635	20.062	7.14	0.86	5000	4300	1.167	5019.363	78.68

196	00:03:16	-0.08	29.727	20.064	7.133	0.867	5000	4335	1.167	5058.681	78.89
197	00:03:17	-0.08	29.819	20.065	7.127	0.873	5000	4365	1.167	5092.142	79.09
198	00:03:18	-0.08	29.911	20.067	7.12	0.88	5000	4400	1.166	5131.414	79.29
199	00:03:19	-0.081	30.004	20.069	7.114	0.886	5000	4430	1.166	5164.816	79.50
200	00:03:20	-0.081	30.097	20.071	7.107	0.893	5000	4465	1.166	5204.026	79.71
201	00:03:21	-0.081	30.191	20.072	7.101	0.899	5000	4495	1.165	5237.368	79.91
202	00:03:22	-0.081	30.285	20.074	7.094	0.906	5000	4530	1.165	5276.513	80.12
203	00:03:23	-0.081	30.38	20.076	7.087	0.913	5000	4565	1.164	5315.616	80.32
204	00:03:24	-0.081	30.474	20.078	7.081	0.919	5000	4595	1.164	5348.893	80.53
205	00:03:25	-0.081	30.57	20.08	7.074	0.926	5000	4630	1.164	5387.932	80.74
206	00:03:26	-0.081	30.665	20.082	7.067	0.933	5000	4665	1.163	5426.964	80.95
207	00:03:27	-0.081	30.761	20.083	7.061	0.939	5000	4695	1.163	5460.138	81.16
208	00:03:28	-0.081	30.858	20.085	7.054	0.946	5000	4730	1.163	5499.087	81.37
209	00:03:29	-0.081	30.954	20.087	7.047	0.953	5000	4765	1.162	5538.029	81.57
210	00:03:30	-0.081	31.052	20.089	7.04	0.96	5000	4800	1.162	5576.910	81.78
211	00:03:31	-0.082	31.149	20.091	7.034	0.966	5000	4830	1.161	5609.977	81.99
212	00:03:32	-0.082	31.247	20.093	7.027	0.973	5000	4865	1.161	5648.810	82.20
213	00:03:33	-0.082	31.345	20.095	7.02	0.98	5000	4900	1.161	5687.618	82.42
214	00:03:34	-0.082	31.444	20.097	7.013	0.987	5000	4935	1.160	5726.382	82.63
215	00:03:35	-0.082	31.543	20.099	7.006	0.994	5000	4970	1.160	5765.120	82.84
216	00:03:36	-0.082	31.643	20.101	6.999	1.001	5000	5005	1.160	5803.815	83.05
217	00:03:37	-0.082	31.743	20.104	6.993	1.007	5000	5035	1.159	5836.688	83.26
218	00:03:38	-0.082	31.843	20.106	6.986	1.014	5000	5070	1.159	5875.334	83.48
219	00:03:39	-0.082	31.943	20.108	6.979	1.021	5000	5105	1.158	5913.954	83.69
220	00:03:40	-0.082	32.045	20.11	6.972	1.028	5000	5140	1.158	5952.511	83.90
221	00:03:41	-0.083	32.146	20.112	6.965	1.035	5000	5175	1.158	5991.061	84.12
222	00:03:42	-0.083	32.248	20.114	6.958	1.042	5000	5210	1.157	6029.565	84.33
223	00:03:43	-0.083	32.35	20.117	6.951	1.049	5000	5245	1.157	6068.044	84.55
224	00:03:44	-0.083	32.452	20.119	6.944	1.056	5000	5280	1.157	6106.498	84.76
225	00:03:45	-0.083	32.555	20.121	6.937	1.063	5000	5315	1.156	6144.905	84.98
226	00:03:46	-0.083	32.659	20.124	6.93	1.07	5000	5350	1.156	6183.267	85.19
227	00:03:47	-0.083	32.763	20.126	6.923	1.077	5000	5385	1.155	6221.602	85.41
228	00:03:48	-0.083	32.867	20.128	6.916	1.084	5000	5420	1.155	6259.912	85.63

229	00:03:49	-0.083	32.971	20.131	6.909	1.091	5000	5455	1.155	6298.195	85.85
230	00:03:50	-0.084	33.076	20.133	6.902	1.098	5000	5490	1.154	6336.432	86.06
231	00:03:51	-0.084	33.181	20.135	6.895	1.105	5000	5525	1.154	6374.642	86.28
232	00:03:52	-0.084	33.287	20.138	6.887	1.113	5000	5565	1.153	6418.572	86.50
233	00:03:53	-0.084	33.393	20.14	6.88	1.12	5000	5600	1.153	6456.707	86.72
234	00:03:54	-0.084	33.499	20.143	6.873	1.127	5000	5635	1.153	6494.816	86.94
235	00:03:55	-0.084	33.606	20.145	6.866	1.134	5000	5670	1.152	6532.877	87.16
236	00:03:56	-0.084	33.713	20.148	6.859	1.141	5000	5705	1.152	6570.911	87.38
237	00:03:57	-0.084	33.821	20.15	6.852	1.148	5000	5740	1.151	6608.897	87.60
238	00:03:58	-0.085	33.929	20.153	6.844	1.156	5000	5780	1.151	6652.612	87.82
239	00:03:59	-0.085	34.037	20.156	6.837	1.163	5000	5815	1.151	6690.543	88.04
240	00:04:00	-0.085	34.146	20.158	6.83	1.17	5000	5850	1.150	6728.425	88.26
241	00:04:01	-0.085	34.255	20.161	6.823	1.177	5000	5885	1.150	6766.281	88.48
242	00:04:02	-0.085	34.364	20.164	6.815	1.185	5000	5925	1.149	6809.856	88.71
243	00:04:03	-0.085	34.474	20.166	6.808	1.192	5000	5960	1.149	6847.634	88.93
244	00:04:04	-0.085	34.584	20.169	6.801	1.199	5000	5995	1.149	6885.384	89.15
245	00:04:05	-0.086	34.695	20.172	6.793	1.207	5000	6035	1.148	6928.826	89.38
246	00:04:06	-0.086	34.806	20.174	6.786	1.214	5000	6070	1.148	6966.498	89.60
247	00:04:07	-0.086	34.917	20.177	6.779	1.221	5000	6105	1.147	7004.142	89.83
248	00:04:08	-0.086	35.029	20.18	6.771	1.229	5000	6145	1.147	7047.471	90.05
249	00:04:09	-0.086	35.141	20.183	6.764	1.236	5000	6180	1.146	7085.037	90.28
250	00:04:10	-0.086	35.254	20.186	6.757	1.243	5000	6215	1.146	7122.552	90.50
251	00:04:11	-0.086	35.367	20.189	6.749	1.251	5000	6255	1.146	7165.767	90.73
252	00:04:12	-0.087	35.48	20.192	6.742	1.258	5000	6290	1.145	7203.225	90.96
253	00:04:13	-0.087	35.593	20.195	6.734	1.266	5000	6330	1.145	7246.379	91.18
254	00:04:14	-0.087	35.707	20.198	6.727	1.273	5000	6365	1.144	7283.757	91.41
255	00:04:15	-0.087	35.822	20.201	6.719	1.281	5000	6405	1.144	7326.802	91.64
256	00:04:16	-0.087	35.937	20.204	6.712	1.288	5000	6440	1.143	7364.099	91.87
257	00:04:17	-0.087	36.052	20.207	6.704	1.296	5000	6480	1.143	7407.082	92.09
258	00:04:18	-0.087	36.167	20.21	6.697	1.303	5000	6515	1.143	7444.321	92.32
259	00:04:19	-0.088	36.283	20.213	6.689	1.311	5000	6555	1.142	7487.219	92.55
260	00:04:20	-0.088	36.399	20.216	6.682	1.318	5000	6590	1.142	7524.376	92.78
261	00:04:21	-0.088	36.516	20.219	6.674	1.326	5000	6630	1.141	7567.187	93.01

262	00:04:22	-0.088	36.633	20.222	6.666	1.334	5000	6670	1.141	7609.966	93.24
263	00:04:23	-0.088	36.751	20.225	6.659	1.341	5000	6705	1.140	7646.986	93.47
264	00:04:24	-0.088	36.868	20.229	6.651	1.349	5000	6745	1.140	7689.702	93.71
265	00:04:25	-0.089	36.986	20.232	6.644	1.356	5000	6780	1.140	7726.663	93.94
266	00:04:26	-0.089	37.105	20.235	6.636	1.364	5000	6820	1.139	7769.267	94.17
267	00:04:27	-0.089	37.224	20.238	6.628	1.372	5000	6860	1.139	7811.838	94.40
268	00:04:28	-0.089	37.343	20.242	6.621	1.379	5000	6895	1.138	7848.685	94.63
269	00:04:29	-0.089	37.463	20.245	6.613	1.387	5000	6935	1.138	7891.168	94.87
270	00:04:30	-0.089	37.583	20.248	6.605	1.395	5000	6975	1.137	7933.618	95.10
271	00:04:31	-0.09	37.703	20.252	6.597	1.403	5000	7015	1.137	7976.036	95.34
272	00:04:32	-0.09	37.824	20.255	6.59	1.41	5000	7050	1.137	8012.712	95.57
273	00:04:33	-0.09	37.945	20.259	6.582	1.418	5000	7090	1.136	8055.039	95.81
274	00:04:34	-0.09	38.067	20.262	6.574	1.426	5000	7130	1.136	8097.309	96.04
275	00:04:35	-0.09	38.189	20.266	6.566	1.434	5000	7170	1.135	8139.544	96.28
276	00:04:36	-0.091	38.311	20.269	6.559	1.441	5000	7205	1.135	8176.073	96.51
277	00:04:37	-0.091	38.433	20.273	6.551	1.449	5000	7245	1.134	8218.245	96.75
278	00:04:38	-0.091	38.557	20.276	6.543	1.457	5000	7285	1.134	8260.331	96.99
279	00:04:39	-0.091	38.68	20.28	6.535	1.465	5000	7325	1.133	8302.411	97.22
280	00:04:40	-0.091	38.804	20.284	6.527	1.473	5000	7365	1.133	8344.430	97.46
281	00:04:41	-0.091	38.928	20.287	6.519	1.481	5000	7405	1.133	8386.416	97.70
282	00:04:42	-0.092	39.052	20.291	6.511	1.489	5000	7445	1.132	8428.368	97.94
283	00:04:43	-0.092	39.177	20.295	6.503	1.497	5000	7485	1.132	8470.260	98.18
284	00:04:44	-0.092	39.302	20.298	6.496	1.504	5000	7520	1.131	8506.463	98.42
285	00:04:45	-0.092	39.428	20.302	6.488	1.512	5000	7560	1.131	8548.263	98.65
286	00:04:46	-0.092	39.554	20.306	6.48	1.52	5000	7600	1.130	8590.029	98.89
287	00:04:47	-0.093	39.68	20.31	6.472	1.528	5000	7640	1.130	8631.762	99.14
288	00:04:48	-0.093	39.807	20.314	6.464	1.536	5000	7680	1.129	8673.433	99.38
289	00:04:49	-0.093	39.934	20.318	6.456	1.544	5000	7720	1.129	8715.070	99.62
290	00:04:50	-0.093	40.062	20.321	6.448	1.552	5000	7760	1.128	8756.646	99.86
291	00:04:51	-0.093	40.19	20.325	6.44	1.56	5000	7800	1.128	8798.188	100.10
292	00:04:52	-0.094	40.318	20.329	6.432	1.568	5000	7840	1.128	8839.696	100.34
293	00:04:53	-0.094	40.446	20.333	6.424	1.576	5000	7880	1.127	8881.170	100.59
294	00:04:54	-0.094	40.575	20.337	6.415	1.585	5000	7925	1.127	8928.214	100.83

295	00:04:55	-0.094	40.705	20.341	6.407	1.593	5000	7965	1.126	8969.561	101.07
296	00:04:56	-0.095	40.834	20.345	6.399	1.601	5000	8005	1.126	9010.902	101.32
297	00:04:57	-0.095	40.964	20.35	6.391	1.609	5000	8045	1.125	9052.181	101.56
298	00:04:58	-0.095	41.095	20.354	6.383	1.617	5000	8085	1.125	9093.396	101.81
299	00:04:59	-0.095	41.226	20.358	6.375	1.625	5000	8125	1.124	9134.577	102.05
300	00:05:00	-0.095	41.357	20.362	6.367	1.633	5000	8165	1.124	9175.724	102.30
301	00:05:01	-0.096	41.488	20.366	6.358	1.642	5000	8210	1.123	9222.453	102.54
302	00:05:02	-0.096	41.62	20.371	6.35	1.65	5000	8250	1.123	9263.500	102.79
303	00:05:03	-0.096	41.752	20.375	6.342	1.658	5000	8290	1.122	9304.512	103.03
304	00:05:04	-0.096	41.885	20.379	6.334	1.666	5000	8330	1.122	9345.460	103.28
305	00:05:05	-0.096	42.018	20.383	6.326	1.674	5000	8370	1.121	9386.373	103.53
306	00:05:06	-0.097	42.151	20.388	6.317	1.683	5000	8415	1.121	9432.857	103.78
307	00:05:07	-0.097	42.285	20.392	6.309	1.691	5000	8455	1.120	9473.669	104.03
308	00:05:08	-0.097	42.419	20.397	6.301	1.699	5000	8495	1.120	9514.446	104.27
309	00:05:09	-0.097	42.554	20.401	6.293	1.707	5000	8535	1.120	9555.159	104.52
310	00:05:10	-0.098	42.688	20.405	6.284	1.716	5000	8580	1.119	9601.462	104.77
311	00:05:11	-0.098	42.824	20.41	6.276	1.724	5000	8620	1.119	9642.072	105.02
312	00:05:12	-0.098	42.959	20.415	6.268	1.732	5000	8660	1.118	9682.678	105.27
313	00:05:13	-0.098	43.095	20.419	6.259	1.741	5000	8705	1.118	9728.807	105.52
314	00:05:14	-0.099	43.231	20.424	6.251	1.749	5000	8745	1.117	9769.310	105.77
315	00:05:15	-0.099	43.368	20.428	6.242	1.758	5000	8790	1.117	9815.331	106.02
316	00:05:16	-0.099	43.505	20.433	6.234	1.766	5000	8830	1.116	9855.731	106.28
317	00:05:17	-0.099	43.642	20.438	6.226	1.774	5000	8870	1.116	9896.096	106.53
318	00:05:18	-0.1	43.78	20.442	6.217	1.783	5000	8915	1.115	9941.970	106.78
319	00:05:19	-0.1	43.918	20.447	6.209	1.791	5000	8955	1.115	9982.232	107.03
320	00:05:20	-0.1	44.057	20.452	6.2	1.8	5000	9000	1.114	10027.997	107.29
321	00:05:21	-0.1	44.196	20.457	6.192	1.808	5000	9040	1.114	10068.155	107.54
322	00:05:22	-0.101	44.335	20.461	6.183	1.817	5000	9085	1.113	10113.843	107.79
323	00:05:23	-0.101	44.474	20.466	6.175	1.825	5000	9125	1.113	10153.927	108.05
324	00:05:24	-0.101	44.614	20.471	6.166	1.834	5000	9170	1.112	10199.505	108.30
325	00:05:25	-0.101	44.754	20.476	6.158	1.842	5000	9210	1.112	10239.485	108.56
326	00:05:26	-0.102	44.895	20.481	6.149	1.851	5000	9255	1.111	10284.953	108.81
327	00:05:27	-0.102	45.036	20.486	6.141	1.859	5000	9295	1.111	10324.827	109.07

328	00:05:28	-0.102	45.177	20.491	6.132	1.868	5000	9340	1.110	10370.218	109.33
329	00:05:29	-0.102	45.319	20.496	6.124	1.876	5000	9380	1.110	10409.986	109.58
330	00:05:30	-0.103	45.461	20.501	6.115	1.885	5000	9425	1.109	10455.265	109.84
331	00:05:31	-0.103	45.604	20.506	6.106	1.894	5000	9470	1.109	10500.472	110.10
332	00:05:32	-0.103	45.747	20.511	6.098	1.902	5000	9510	1.108	10540.096	110.35
333	00:05:33	-0.103	45.89	20.516	6.089	1.911	5000	9555	1.108	10585.223	110.61
334	00:05:34	-0.104	46.033	20.522	6.08	1.92	5000	9600	1.107	10630.311	110.87
335	00:05:35	-0.104	46.177	20.527	6.072	1.928	5000	9640	1.107	10669.790	111.13
336	00:05:36	-0.104	46.321	20.532	6.063	1.937	5000	9685	1.106	10714.765	111.39
337	00:05:37	-0.105	46.468	20.537	6.054	1.946	5000	9730	1.106	10759.599	111.65
338	00:05:38	-0.105	46.616	20.543	6.046	1.954	5000	9770	1.105	10798.831	111.91
339	00:05:39	-0.105	46.765	20.548	6.037	1.963	5000	9815	1.105	10843.517	112.17
340	00:05:40	-0.105	46.914	20.553	6.029	1.971	5000	9855	1.104	10882.640	112.43
341	00:05:41	-0.106	47.064	20.559	6.02	1.98	5000	9900	1.104	10927.211	112.69
342	00:05:42	-0.106	47.213	20.564	6.012	1.988	5000	9940	1.103	10966.259	112.95
343	00:05:43	-0.106	47.362	20.57	6.003	1.997	5000	9985	1.103	11010.784	113.21
344	00:05:44	-0.107	47.512	20.575	5.995	2.005	5000	10025	1.102	11049.722	113.48
345	00:05:45	-0.107	47.662	20.581	5.986	2.014	5000	10070	1.102	11094.132	113.74
346	00:05:46	-0.107	47.811	20.586	5.977	2.023	5000	10115	1.101	11138.535	114.00
347	00:05:47	-0.107	47.962	20.592	5.969	2.031	5000	10155	1.101	11177.325	114.26
348	00:05:48	-0.108	48.112	20.597	5.96	2.04	5000	10200	1.100	11221.613	114.53
349	00:05:49	-0.108	48.262	20.603	5.951	2.049	5000	10245	1.100	11265.860	114.79
350	00:05:50	-0.108	48.413	20.609	5.942	2.058	5000	10290	1.099	11310.030	115.06
351	00:05:51	-0.109	48.563	20.614	5.933	2.067	5000	10335	1.099	11354.195	115.32
352	00:05:52	-0.109	48.714	20.62	5.925	2.075	5000	10375	1.098	11392.792	115.59
353	00:05:53	-0.109	48.865	20.626	5.916	2.084	5000	10420	1.098	11436.841	115.85
354	00:05:54	-0.11	49.017	20.632	5.907	2.093	5000	10465	1.097	11480.813	116.12
355	00:05:55	-0.11	49.168	20.637	5.898	2.102	5000	10510	1.097	11524.780	116.38
356	00:05:56	-0.11	49.32	20.643	5.889	2.111	5000	10555	1.096	11568.669	116.65
357	00:05:57	-0.11	49.472	20.649	5.88	2.12	5000	10600	1.096	11612.517	116.92
358	00:05:58	-0.111	49.624	20.655	5.871	2.129	5000	10645	1.095	11656.323	117.18
359	00:05:59	-0.111	49.776	20.661	5.862	2.138	5000	10690	1.094	11700.089	117.45
360	00:06:00	-0.111	49.928	20.667	5.853	2.147	5000	10735	1.094	11743.813	117.72

361	00:06:01	-0.112	50.081	20.673	5.844	2.156	5000	10780	1.093	11787.460	117.99
362	00:06:02	-0.112	50.234	20.679	5.835	2.165	5000	10825	1.093	11831.065	118.26
363	00:06:03	-0.112	50.387	20.685	5.826	2.174	5000	10870	1.092	11874.629	118.53
364	00:06:04	-0.113	50.54	20.691	5.817	2.183	5000	10915	1.092	11918.152	118.80
365	00:06:05	-0.113	50.693	20.697	5.808	2.192	5000	10960	1.091	11961.634	119.07
366	00:06:06	-0.113	50.847	20.703	5.798	2.202	5000	11010	1.091	12010.492	119.34
367	00:06:07	-0.114	51.001	20.71	5.789	2.211	5000	11055	1.090	12053.852	119.61
368	00:06:08	-0.114	51.155	20.716	5.78	2.22	5000	11100	1.090	12097.171	119.88
369	00:06:09	-0.114	51.309	20.722	5.771	2.229	5000	11145	1.089	12140.448	120.15
370	00:06:10	-0.115	51.463	20.728	5.761	2.239	5000	11195	1.089	12189.129	120.42
371	00:06:11	-0.115	51.618	20.735	5.752	2.248	5000	11240	1.088	12232.284	120.69
372	00:06:12	-0.115	51.773	20.741	5.743	2.257	5000	11285	1.088	12275.398	120.97
373	00:06:13	-0.116	51.928	20.748	5.733	2.267	5000	11335	1.087	12323.907	121.24
374	00:06:14	-0.116	52.083	20.754	5.724	2.276	5000	11380	1.087	12366.936	121.51
375	00:06:15	-0.116	52.239	20.76	5.715	2.285	5000	11425	1.086	12409.887	121.79
376	00:06:16	-0.117	52.395	20.767	5.705	2.295	5000	11475	1.086	12458.224	122.06
377	00:06:17	-0.117	52.551	20.773	5.696	2.304	5000	11520	1.085	12501.089	122.33
378	00:06:18	-0.117	52.707	20.78	5.686	2.314	5000	11570	1.085	12549.337	122.61
379	00:06:19	-0.118	52.863	20.787	5.677	2.323	5000	11615	1.084	12592.117	122.88
380	00:06:20	-0.118	53.02	20.793	5.667	2.333	5000	11665	1.084	12640.236	123.16
381	00:06:21	-0.118	53.177	20.8	5.658	2.342	5000	11710	1.083	12682.894	123.44
382	00:06:22	-0.119	53.334	20.806	5.648	2.352	5000	11760	1.083	12730.923	123.71
383	00:06:23	-0.119	53.492	20.813	5.638	2.362	5000	11810	1.082	12778.867	123.99
384	00:06:24	-0.119	53.649	20.82	5.629	2.371	5000	11855	1.082	12821.396	124.27
385	00:06:25	-0.12	53.807	20.827	5.619	2.381	5000	11905	1.081	12869.250	124.54
386	00:06:26	-0.12	53.965	20.833	5.609	2.391	5000	11955	1.080	12917.057	124.82
387	00:06:27	-0.12	54.123	20.84	5.6	2.4	5000	12000	1.080	12959.419	125.10
388	00:06:28	-0.121	54.282	20.847	5.59	2.41	5000	12050	1.079	13007.098	125.38
389	00:06:29	-0.121	54.441	20.854	5.58	2.42	5000	12100	1.079	13054.730	125.66
390	00:06:30	-0.121	54.6	20.861	5.571	2.429	5000	12145	1.078	13096.923	125.93
391	00:06:31	-0.122	54.759	20.868	5.561	2.439	5000	12195	1.078	13144.466	126.21
392	00:06:32	-0.122	54.919	20.875	5.551	2.449	5000	12245	1.077	13191.922	126.49
393	00:06:33	-0.123	55.079	20.882	5.541	2.459	5000	12295	1.077	13239.331	126.77

394	00:06:34	-0.123	55.239	20.889	5.531	2.469	5000	12345	1.076	13286.695	127.05
395	00:06:35	-0.123	55.399	20.896	5.521	2.479	5000	12395	1.076	13334.012	127.34
396	00:06:36	-0.124	55.559	20.903	5.511	2.489	5000	12445	1.075	13381.284	127.62
397	00:06:37	-0.124	55.72	20.91	5.501	2.499	5000	12495	1.075	13428.468	127.90
398	00:06:38	-0.124	55.881	20.918	5.492	2.508	5000	12540	1.074	13470.236	128.18
399	00:06:39	-0.125	56.042	20.925	5.482	2.518	5000	12590	1.074	13517.330	128.46
400	00:06:40	-0.125	56.204	20.932	5.472	2.528	5000	12640	1.073	13564.338	128.75
401	00:06:41	-0.125	56.366	20.939	5.462	2.538	5000	12690	1.073	13611.299	129.03
402	00:06:42	-0.126	56.528	20.947	5.451	2.549	5000	12745	1.072	13663.575	129.31
403	00:06:43	-0.126	56.69	20.954	5.441	2.559	5000	12795	1.072	13710.441	129.60
404	00:06:44	-0.127	56.853	20.961	5.431	2.569	5000	12845	1.071	13757.220	129.88
405	00:06:45	-0.127	57.016	20.969	5.421	2.579	5000	12895	1.070	13803.953	130.17
406	00:06:46	-0.127	57.179	20.976	5.411	2.589	5000	12945	1.070	13850.639	130.45
407	00:06:47	-0.128	57.342	20.984	5.401	2.599	5000	12995	1.069	13897.280	130.74
408	00:06:48	-0.128	57.506	20.991	5.391	2.609	5000	13045	1.069	13943.832	131.02
409	00:06:49	-0.128	57.67	20.999	5.38	2.62	5000	13100	1.068	13995.680	131.31
410	00:06:50	-0.129	57.834	21.006	5.37	2.63	5000	13150	1.068	14042.138	131.59
411	00:06:51	-0.129	57.998	21.014	5.36	2.64	5000	13200	1.067	14088.549	131.88
412	00:06:52	-0.13	58.163	21.021	5.35	2.65	5000	13250	1.067	14134.872	132.17
413	00:06:53	-0.13	58.328	21.029	5.339	2.661	5000	13305	1.066	14186.480	132.45
414	00:06:54	-0.13	58.493	21.037	5.329	2.671	5000	13355	1.066	14232.708	132.74
415	00:06:55	-0.131	58.659	21.045	5.319	2.681	5000	13405	1.065	14278.847	133.03
416	00:06:56	-0.131	58.824	21.052	5.308	2.692	5000	13460	1.065	14330.306	133.32
417	00:06:57	-0.132	58.99	21.06	5.298	2.702	5000	13510	1.064	14376.350	133.61
418	00:06:58	-0.132	59.157	21.068	5.288	2.712	5000	13560	1.064	14422.305	133.90
419	00:06:59	-0.132	59.323	21.076	5.277	2.723	5000	13615	1.063	14473.572	134.19
420	00:07:00	-0.133	59.49	21.084	5.267	2.733	5000	13665	1.063	14519.432	134.48
421	00:07:01	-0.133	59.657	21.092	5.256	2.744	5000	13720	1.062	14570.556	134.77
422	00:07:02	-0.134	59.825	21.099	5.246	2.754	5000	13770	1.061	14616.278	135.06
423	00:07:03	-0.134	59.992	21.107	5.235	2.765	5000	13825	1.061	14667.302	135.35
424	00:07:04	-0.134	60.16	21.115	5.225	2.775	5000	13875	1.060	14712.928	135.64
425	00:07:05	-0.135	60.328	21.124	5.214	2.786	5000	13930	1.060	14763.808	135.93
426	00:07:06	-0.135	60.497	21.132	5.204	2.796	5000	13980	1.059	14809.296	136.22

427	00:07:07	-0.136	60.666	21.14	5.193	2.807	5000	14035	1.059	14860.032	136.52
428	00:07:08	-0.136	60.835	21.148	5.182	2.818	5000	14090	1.058	14910.716	136.81
429	00:07:09	-0.136	61.004	21.156	5.172	2.828	5000	14140	1.058	14956.061	137.10
430	00:07:10	-0.137	61.174	21.164	5.161	2.839	5000	14195	1.057	15006.600	137.40
431	00:07:11	-0.137	61.344	21.172	5.15	2.85	5000	14250	1.057	15057.088	137.69
432	00:07:12	-0.138	61.514	21.181	5.14	2.86	5000	14300	1.056	15102.245	137.99
433	00:07:13	-0.138	61.684	21.189	5.129	2.871	5000	14355	1.056	15152.633	138.28
434	00:07:14	-0.139	61.855	21.197	5.118	2.882	5000	14410	1.055	15202.925	138.57
435	00:07:15	-0.139	62.026	21.206	5.107	2.893	5000	14465	1.054	15253.166	138.87
436	00:07:16	-0.139	62.198	21.214	5.097	2.903	5000	14515	1.054	15298.040	139.17
437	00:07:17	-0.14	62.369	21.222	5.086	2.914	5000	14570	1.053	15348.181	139.46
438	00:07:18	-0.14	62.541	21.231	5.075	2.925	5000	14625	1.053	15398.224	139.76
439	00:07:19	-0.141	62.713	21.239	5.064	2.936	5000	14680	1.052	15448.217	140.05
440	00:07:20	-0.141	62.886	21.248	5.053	2.947	5000	14735	1.052	15498.112	140.35
441	00:07:21	-0.141	63.059	21.256	5.042	2.958	5000	14790	1.051	15547.956	140.65
442	00:07:22	-0.142	63.232	21.265	5.031	2.969	5000	14845	1.051	15597.749	140.95
443	00:07:23	-0.142	63.405	21.273	5.021	2.979	5000	14895	1.050	15642.239	141.25
444	00:07:24	-0.143	63.579	21.282	5.01	2.99	5000	14950	1.050	15691.886	141.54
445	00:07:25	-0.143	63.753	21.291	4.999	3.001	5000	15005	1.049	15741.481	141.84
446	00:07:26	-0.144	63.927	21.299	4.988	3.012	5000	15060	1.049	15791.025	142.14
447	00:07:27	-0.144	64.102	21.308	4.977	3.023	5000	15115	1.048	15840.471	142.44
448	00:07:28	-0.144	64.277	21.317	4.966	3.034	5000	15170	1.047	15889.865	142.74
449	00:07:29	-0.145	64.452	21.326	4.955	3.045	5000	15225	1.047	15939.209	143.04
450	00:07:30	-0.145	64.627	21.334	4.943	3.057	5000	15285	1.046	15993.733	143.34
451	00:07:31	-0.146	64.803	21.343	4.932	3.068	5000	15340	1.046	16042.924	143.64
452	00:07:32	-0.146	64.979	21.352	4.921	3.079	5000	15395	1.045	16092.064	143.94
453	00:07:33	-0.147	65.155	21.361	4.91	3.09	5000	15450	1.045	16141.152	144.25
454	00:07:34	-0.147	65.332	21.37	4.899	3.101	5000	15505	1.044	16190.142	144.55
455	00:07:35	-0.148	65.509	21.379	4.888	3.112	5000	15560	1.044	16239.081	144.85
456	00:07:36	-0.148	65.686	21.388	4.877	3.123	5000	15615	1.043	16287.968	145.15
457	00:07:37	-0.148	65.864	21.397	4.865	3.135	5000	15675	1.043	16341.969	145.46
458	00:07:38	-0.149	66.042	21.406	4.854	3.146	5000	15730	1.042	16390.703	145.76
459	00:07:39	-0.149	66.22	21.415	4.843	3.157	5000	15785	1.041	16439.387	146.06

460	00:07:40	-0.15	66.399	21.424	4.832	3.168	5000	15840	1.041	16487.970	146.37
461	00:07:41	-0.15	66.578	21.433	4.82	3.18	5000	15900	1.040	16541.704	146.67
462	00:07:42	-0.151	66.757	21.442	4.809	3.191	5000	15955	1.040	16590.183	146.98
463	00:07:43	-0.151	66.936	21.452	4.798	3.202	5000	16010	1.039	16638.610	147.28
464	00:07:44	-0.152	67.116	21.461	4.787	3.213	5000	16065	1.039	16686.938	147.59
465	00:07:45	-0.152	67.296	21.47	4.775	3.225	5000	16125	1.038	16740.405	147.89
466	00:07:46	-0.153	67.476	21.479	4.764	3.236	5000	16180	1.038	16788.627	148.20
467	00:07:47	-0.153	67.657	21.489	4.752	3.248	5000	16240	1.037	16841.935	148.51
468	00:07:48	-0.153	67.838	21.498	4.741	3.259	5000	16295	1.037	16890.003	148.81
469	00:07:49	-0.154	68.02	21.507	4.73	3.27	5000	16350	1.036	16937.971	149.12
470	00:07:50	-0.154	68.201	21.517	4.718	3.282	5000	16410	1.035	16991.115	149.43
471	00:07:51	-0.155	68.383	21.526	4.707	3.293	5000	16465	1.035	17038.978	149.74
472	00:07:52	-0.155	68.565	21.535	4.695	3.305	5000	16525	1.034	17091.961	150.04
473	00:07:53	-0.156	68.748	21.545	4.684	3.316	5000	16580	1.034	17139.669	150.35
474	00:07:54	-0.156	68.931	21.554	4.672	3.328	5000	16640	1.033	17192.492	150.66
475	00:07:55	-0.157	69.114	21.564	4.661	3.339	5000	16695	1.033	17240.096	150.97
476	00:07:56	-0.157	69.298	21.573	4.649	3.351	5000	16755	1.032	17292.758	151.28
477	00:07:57	-0.158	69.482	21.583	4.638	3.362	5000	16810	1.032	17340.206	151.59
478	00:07:58	-0.158	69.666	21.593	4.626	3.374	5000	16870	1.031	17392.759	151.90
479	00:07:59	-0.159	69.851	21.602	4.615	3.385	5000	16925	1.030	17440.051	152.21
480	00:08:00	-0.159	70.036	21.612	4.603	3.397	5000	16985	1.030	17492.443	152.52
481	00:08:01	-0.159	70.221	21.622	4.591	3.409	5000	17045	1.029	17544.777	152.83
482	00:08:02	-0.16	70.406	21.631	4.58	3.42	5000	17100	1.029	17591.912	153.15
483	00:08:03	-0.16	70.592	21.641	4.568	3.432	5000	17160	1.028	17644.086	153.46
484	00:08:04	-0.161	70.778	21.651	4.556	3.444	5000	17220	1.028	17696.203	153.77
485	00:08:05	-0.161	70.965	21.66	4.545	3.455	5000	17275	1.027	17743.076	154.08
486	00:08:06	-0.162	71.152	21.67	4.533	3.467	5000	17335	1.027	17795.032	154.40
487	00:08:07	-0.162	71.339	21.68	4.521	3.479	5000	17395	1.026	17846.931	154.71
488	00:08:08	-0.163	71.527	21.69	4.51	3.49	5000	17450	1.025	17893.595	155.02
489	00:08:09	-0.163	71.715	21.7	4.498	3.502	5000	17510	1.025	17945.332	155.34
490	00:08:10	-0.164	71.903	21.71	4.486	3.514	5000	17570	1.024	17997.013	155.65
491	00:08:11	-0.164	72.091	21.72	4.474	3.526	5000	17630	1.024	18048.637	155.97
492	00:08:12	-0.165	72.28	21.73	4.462	3.538	5000	17690	1.023	18100.153	156.28

493	00:08:13	-0.165	72.469	21.74	4.451	3.549	5000	17745	1.023	18146.500	156.60
494	00:08:14	-0.166	72.659	21.75	4.439	3.561	5000	17805	1.022	18197.853	156.91
495	00:08:15	-0.166	72.849	21.76	4.427	3.573	5000	17865	1.022	18249.150	157.23
496	00:08:16	-0.167	73.039	21.77	4.415	3.585	5000	17925	1.021	18300.391	157.54
497	00:08:17	-0.167	73.23	21.78	4.403	3.597	5000	17985	1.020	18351.523	157.86
498	00:08:18	-0.168	73.421	21.79	4.391	3.609	5000	18045	1.020	18402.598	158.18
499	00:08:19	-0.168	73.612	21.8	4.379	3.621	5000	18105	1.019	18453.617	158.50
500	00:08:20	-0.169	73.804	21.81	4.368	3.632	5000	18160	1.019	18499.433	158.81
501	00:08:21	-0.169	73.996	21.82	4.356	3.644	5000	18220	1.018	18550.289	159.13
502	00:08:22	-0.17	74.188	21.83	4.344	3.656	5000	18280	1.018	18601.089	159.45
503	00:08:23	-0.17	74.381	21.841	4.332	3.668	5000	18340	1.017	18651.779	159.77
504	00:08:24	-0.171	74.574	21.851	4.32	3.68	5000	18400	1.016	18702.412	160.09
505	00:08:25	-0.171	74.767	21.861	4.308	3.692	5000	18460	1.016	18752.990	160.41
506	00:08:26	-0.172	74.961	21.871	4.296	3.704	5000	18520	1.015	18803.457	160.73
507	00:08:27	-0.172	75.155	21.882	4.284	3.716	5000	18580	1.015	18853.868	161.05
508	00:08:28	-0.173	75.349	21.892	4.272	3.728	5000	18640	1.014	18904.223	161.37
509	00:08:29	-0.173	75.544	21.902	4.26	3.74	5000	18700	1.014	18954.468	161.69
510	00:08:30	-0.173	75.739	21.913	4.248	3.752	5000	18760	1.013	19004.657	162.01
511	00:08:31	-0.174	75.935	21.923	4.236	3.764	5000	18820	1.012	19054.734	162.33
512	00:08:32	-0.174	76.131	21.933	4.223	3.777	5000	18885	1.012	19109.816	162.65
513	00:08:33	-0.175	76.327	21.944	4.211	3.789	5000	18945	1.011	19159.778	162.97
514	00:08:34	-0.175	76.524	21.954	4.199	3.801	5000	19005	1.011	19209.630	163.30
515	00:08:35	-0.176	76.721	21.965	4.187	3.813	5000	19065	1.010	19259.426	163.62
516	00:08:36	-0.176	76.918	21.975	4.175	3.825	5000	19125	1.010	19309.165	163.94
517	00:08:37	-0.177	77.116	21.986	4.163	3.837	5000	19185	1.009	19358.794	164.26
518	00:08:38	-0.177	77.314	21.996	4.151	3.849	5000	19245	1.008	19408.366	164.59
519	00:08:39	-0.178	77.512	22.007	4.139	3.861	5000	19305	1.008	19457.882	164.91
520	00:08:40	-0.178	77.711	22.017	4.126	3.874	5000	19370	1.007	19512.324	165.24
521	00:08:41	-0.179	77.91	22.028	4.114	3.886	5000	19430	1.007	19561.670	165.56
522	00:08:42	-0.179	78.11	22.038	4.102	3.898	5000	19490	1.006	19610.904	165.89
523	00:08:43	-0.18	78.309	22.049	4.09	3.91	5000	19550	1.006	19660.138	166.21
524	00:08:44	-0.18	78.51	22.059	4.078	3.922	5000	19610	1.005	19709.204	166.54
525	00:08:45	-0.181	78.71	22.07	4.065	3.935	5000	19675	1.004	19763.293	166.86

526	00:08:46	-0.181	78.911	22.081	4.053	3.947	5000	19735	1.004	19812.245	167.19
527	00:08:47	-0.182	79.113	22.091	4.041	3.959	5000	19795	1.003	19861.084	167.52
528	00:08:48	-0.182	79.315	22.102	4.029	3.971	5000	19855	1.003	19909.867	167.84
529	00:08:49	-0.183	79.517	22.113	4.016	3.984	5000	19920	1.002	19963.606	168.17
530	00:08:50	-0.183	79.719	22.123	4.004	3.996	5000	19980	1.002	20012.274	168.50
531	00:08:51	-0.184	79.922	22.135	3.992	4.008	5000	20040	1.001	20060.831	168.82
532	00:08:52	-0.185	80.125	22.146	3.979	4.021	5000	20105	1.000	20114.333	169.15
533	00:08:53	-0.185	80.329	22.158	3.967	4.033	5000	20165	1.000	20162.718	169.48
534	00:08:54	-0.186	80.534	22.17	3.955	4.045	5000	20225	0.999	20210.990	169.81
535	00:08:55	-0.187	80.738	22.181	3.943	4.057	5000	20285	0.999	20259.263	170.14
536	00:08:56	-0.188	80.944	22.193	3.931	4.069	5000	20345	0.998	20307.366	170.47
537	00:08:57	-0.188	81.149	22.205	3.919	4.081	5000	20405	0.998	20355.470	170.80
538	00:08:58	-0.189	81.356	22.216	3.907	4.093	5000	20465	0.997	20403.404	171.13
539	00:08:59	-0.19	81.562	22.228	3.896	4.104	5000	20520	0.996	20446.357	171.46
540	00:09:00	-0.191	81.769	22.24	3.884	4.116	5000	20580	0.996	20494.182	171.79
541	00:09:01	-0.192	81.977	22.251	3.872	4.128	5000	20640	0.995	20541.893	172.12
542	00:09:02	-0.193	82.185	22.263	3.861	4.139	5000	20695	0.995	20584.575	172.45
543	00:09:03	-0.194	82.393	22.275	3.849	4.151	5000	20755	0.994	20632.178	172.78
544	00:09:04	-0.195	82.602	22.287	3.838	4.162	5000	20810	0.993	20674.699	173.12
545	00:09:05	-0.196	82.812	22.298	3.827	4.173	5000	20865	0.993	20717.112	173.45
546	00:09:06	-0.197	83.021	22.31	3.815	4.185	5000	20925	0.992	20764.495	173.78
547	00:09:07	-0.198	83.232	22.322	3.804	4.196	5000	20980	0.992	20806.747	174.11
548	00:09:08	-0.199	83.442	22.333	3.793	4.207	5000	21035	0.991	20849.008	174.45
549	00:09:09	-0.201	83.653	22.345	3.782	4.218	5000	21090	0.991	20891.160	174.78
550	00:09:10	-0.202	83.865	22.357	3.771	4.229	5000	21145	0.990	20933.204	175.11
551	00:09:11	-0.203	84.077	22.369	3.76	4.24	5000	21200	0.989	20975.197	175.45
552	00:09:12	-0.204	84.29	22.38	3.749	4.251	5000	21255	0.989	21017.082	175.78
553	00:09:13	-0.205	84.503	22.392	3.739	4.261	5000	21305	0.988	21053.977	176.12
554	00:09:14	-0.207	84.717	22.404	3.728	4.272	5000	21360	0.988	21095.706	176.45
555	00:09:15	-0.208	84.931	22.416	3.718	4.282	5000	21410	0.987	21132.450	176.79
556	00:09:16	-0.209	85.145	22.427	3.707	4.293	5000	21465	0.986	21174.083	177.12
557	00:09:17	-0.21	85.36	22.439	3.697	4.303	5000	21515	0.986	21210.678	177.46
558	00:09:18	-0.212	85.575	22.451	3.687	4.313	5000	21565	0.985	21247.228	177.79

559	00:09:19	-0.213	85.791	22.462	3.676	4.324	5000	21620	0.985	21288.599	178.13
560	00:09:20	-0.214	86.008	22.474	3.666	4.334	5000	21670	0.984	21324.941	178.47
561	00:09:21	-0.216	86.225	22.486	3.656	4.344	5000	21720	0.983	21361.238	178.80
562	00:09:22	-0.217	86.442	22.497	3.646	4.354	5000	21770	0.983	21397.492	179.14
563	00:09:23	-0.218	86.66	22.509	3.636	4.364	5000	21820	0.982	21433.643	179.48
564	00:09:24	-0.22	86.879	22.521	3.627	4.373	5000	21865	0.982	21464.781	179.82
565	00:09:25	-0.221	87.098	22.532	3.617	4.383	5000	21915	0.981	21500.787	180.16
566	00:09:26	-0.222	87.317	22.544	3.607	4.393	5000	21965	0.981	21536.750	180.49
567	00:09:27	-0.224	87.537	22.556	3.598	4.402	5000	22010	0.980	21567.709	180.83
568	00:09:28	-0.225	87.758	22.567	3.588	4.412	5000	22060	0.979	21603.468	181.17
569	00:09:29	-0.227	87.979	22.579	3.579	4.421	5000	22105	0.979	21634.289	181.51
570	00:09:30	-0.228	88.201	22.591	3.57	4.43	5000	22150	0.978	21665.012	181.85
571	00:09:31	-0.23	88.423	22.602	3.56	4.44	5000	22200	0.978	21700.585	182.19
572	00:09:32	-0.231	88.646	22.614	3.551	4.449	5000	22245	0.977	21731.170	182.53
573	00:09:33	-0.232	88.869	22.625	3.542	4.458	5000	22290	0.976	21761.718	182.87
574	00:09:34	-0.234	89.093	22.637	3.533	4.467	5000	22335	0.976	21792.167	183.21
575	00:09:35	-0.235	89.317	22.648	3.525	4.475	5000	22375	0.975	21817.704	183.56
576	00:09:36	-0.237	89.542	22.66	3.516	4.484	5000	22420	0.974	21848.021	183.90
577	00:09:37	-0.238	89.767	22.672	3.507	4.493	5000	22465	0.974	21878.300	184.24
578	00:09:38	-0.24	89.993	22.683	3.499	4.501	5000	22505	0.973	21903.616	184.58
579	00:09:39	-0.241	90.22	22.695	3.49	4.51	5000	22550	0.973	21933.702	184.92
580	00:09:40	-0.243	90.447	22.706	3.482	4.518	5000	22590	0.972	21958.891	185.27
581	00:09:41	-0.244	90.674	22.718	3.473	4.527	5000	22635	0.971	21988.906	185.61
582	00:09:42	-0.246	90.903	22.729	3.465	4.535	5000	22675	0.971	22013.908	185.95
583	00:09:43	-0.247	91.131	22.741	3.457	4.543	5000	22715	0.970	22038.939	186.30
584	00:09:44	-0.249	91.361	22.752	3.449	4.551	5000	22755	0.970	22063.818	186.64
585	00:09:45	-0.251	91.59	22.763	3.441	4.559	5000	22795	0.969	22088.726	186.98
586	00:09:46	-0.252	91.821	22.775	3.433	4.567	5000	22835	0.968	22113.482	187.33
587	00:09:47	-0.254	92.052	22.786	3.425	4.575	5000	22875	0.968	22138.206	187.67
588	00:09:48	-0.255	92.283	22.798	3.418	4.582	5000	22910	0.967	22158.063	188.02
589	00:09:49	-0.257	92.515	22.809	3.41	4.59	5000	22950	0.967	22182.667	188.36
590	00:09:50	-0.258	92.748	22.82	3.402	4.598	5000	22990	0.966	22207.180	188.71
591	00:09:51	-0.26	92.981	22.832	3.395	4.605	5000	23025	0.965	22226.834	189.05

592	00:09:52	-0.261	93.215	22.843	3.387	4.613	5000	23065	0.965	22251.226	189.40
593	00:09:53	-0.263	93.449	22.854	3.38	4.62	5000	23100	0.964	22270.767	189.75
594	00:09:54	-0.265	93.684	22.866	3.373	4.627	5000	23135	0.963	22290.222	190.09
595	00:09:55	-0.266	93.919	22.877	3.366	4.634	5000	23170	0.963	22309.652	190.44
596	00:09:56	-0.268	94.155	22.888	3.359	4.641	5000	23205	0.962	22328.996	190.79
597	00:09:57	-0.269	94.392	22.9	3.352	4.648	5000	23240	0.962	22348.255	191.13
598	00:09:58	-0.271	94.629	22.911	3.345	4.655	5000	23275	0.961	22367.489	191.48
599	00:09:59	-0.273	94.867	22.922	3.338	4.662	5000	23310	0.960	22386.637	191.83
600	00:10:00	-0.274	95.105	22.934	3.331	4.669	5000	23345	0.960	22405.761	192.18
601	00:10:01	-0.276	95.344	22.945	3.324	4.676	5000	23380	0.959	22424.799	192.53
602	00:10:02	-0.277	95.584	22.956	3.318	4.682	5000	23410	0.959	22438.959	192.88
603	00:10:03	-0.279	95.824	22.967	3.311	4.689	5000	23445	0.958	22457.890	193.22
604	00:10:04	-0.28	96.064	22.979	3.305	4.695	5000	23475	0.957	22472.010	193.57
605	00:10:05	-0.282	96.305	22.99	3.298	4.702	5000	23510	0.957	22490.833	193.92
606	00:10:06	-0.284	96.547	23.001	3.292	4.708	5000	23540	0.956	22504.792	194.27
607	00:10:07	-0.285	96.79	23.012	3.285	4.715	5000	23575	0.955	22523.448	194.62
608	00:10:08	-0.287	97.032	23.023	3.279	4.721	5000	23605	0.955	22537.367	194.97
609	00:10:09	-0.288	97.276	23.034	3.273	4.727	5000	23635	0.954	22551.146	195.32
610	00:10:10	-0.29	97.52	23.046	3.267	4.733	5000	23665	0.954	22564.907	195.68
611	00:10:11	-0.292	97.765	23.057	3.261	4.739	5000	23695	0.953	22578.588	196.03
612	00:10:12	-0.293	98.01	23.068	3.255	4.745	5000	23725	0.952	22592.252	196.38
613	00:10:13	-0.295	98.256	23.079	3.249	4.751	5000	23755	0.952	22605.837	196.73
614	00:10:14	-0.296	98.502	23.09	3.244	4.756	5000	23780	0.951	22614.649	197.08
615	00:10:15	-0.298	98.749	23.101	3.238	4.762	5000	23810	0.950	22628.140	197.43
616	00:10:16	-0.3	98.997	23.113	3.232	4.768	5000	23840	0.950	22641.552	197.79
617	00:10:17	-0.301	99.245	23.124	3.227	4.773	5000	23865	0.949	22650.201	198.14
618	00:10:18	-0.303	99.494	23.135	3.221	4.779	5000	23895	0.948	22663.520	198.49
619	00:10:19	-0.304	99.743	23.146	3.216	4.784	5000	23920	0.948	22672.083	198.85
620	00:10:20	-0.306	99.993	23.157	3.21	4.79	5000	23950	0.947	22685.308	199.20
621	00:10:21	-0.307	100.243	23.168	3.205	4.795	5000	23975	0.947	22693.784	199.55
622	00:10:22	-0.309	100.495	23.179	3.2	4.8	5000	24000	0.946	22702.126	199.91
623	00:10:23	-0.311	100.746	23.19	3.195	4.805	5000	24025	0.945	22710.518	200.26
624	00:10:24	-0.312	100.998	23.201	3.189	4.811	5000	24055	0.945	22723.562	200.62

625	00:10:25	-0.314	101.251	23.213	3.184	4.816	5000	24080	0.944	22731.807	200.97
626	00:10:26	-0.315	101.505	23.224	3.179	4.821	5000	24105	0.943	22739.980	201.33
627	00:10:27	-0.317	101.759	23.235	3.174	4.826	5000	24130	0.943	22748.142	201.68
628	00:10:28	-0.318	102.013	23.246	3.17	4.83	5000	24150	0.942	22751.582	202.04
629	00:10:29	-0.32	102.268	23.257	3.165	4.835	5000	24175	0.941	22759.665	202.39
630	00:10:30	-0.322	102.524	23.268	3.16	4.84	5000	24200	0.941	22767.676	202.75
631	00:10:31	-0.323	102.78	23.279	3.155	4.845	5000	24225	0.940	22775.676	203.11
632	00:10:32	-0.325	103.037	23.29	3.151	4.849	5000	24245	0.940	22778.907	203.46
633	00:10:33	-0.326	103.295	23.301	3.146	4.854	5000	24270	0.939	22786.767	203.82
634	00:10:34	-0.328	103.553	23.312	3.141	4.859	5000	24295	0.938	22794.617	204.18
635	00:10:35	-0.329	103.812	23.324	3.137	4.863	5000	24315	0.938	22797.707	204.53
636	00:10:36	-0.331	104.071	23.335	3.133	4.867	5000	24335	0.937	22800.793	204.89
637	00:10:37	-0.332	104.331	23.346	3.128	4.872	5000	24360	0.936	22808.496	205.25
638	00:10:38	-0.334	104.591	23.357	3.124	4.876	5000	24380	0.936	22811.511	205.61
639	00:10:39	-0.336	104.852	23.368	3.12	4.88	5000	24400	0.935	22814.460	205.96
640	00:10:40	-0.337	105.114	23.379	3.115	4.885	5000	24425	0.934	22822.017	206.32
641	00:10:41	-0.339	105.376	23.39	3.111	4.889	5000	24445	0.934	22824.895	206.68
642	00:10:42	-0.34	105.638	23.401	3.107	4.893	5000	24465	0.933	22827.769	207.04
643	00:10:43	-0.342	105.902	23.413	3.103	4.897	5000	24485	0.932	22830.519	207.40
644	00:10:44	-0.343	106.166	23.424	3.099	4.901	5000	24505	0.932	22833.265	207.76
645	00:10:45	-0.345	106.43	23.435	3.095	4.905	5000	24525	0.931	22836.007	208.12
646	00:10:46	-0.346	106.695	23.446	3.091	4.909	5000	24545	0.930	22838.685	208.48
647	00:10:47	-0.348	106.961	23.457	3.087	4.913	5000	24565	0.930	22841.299	208.84
648	00:10:48	-0.349	107.227	23.468	3.084	4.916	5000	24580	0.929	22839.264	209.20
649	00:10:49	-0.351	107.493	23.48	3.08	4.92	5000	24600	0.929	22841.874	209.56
650	00:10:50	-0.352	107.761	23.491	3.076	4.924	5000	24620	0.928	22844.360	209.92
651	00:10:51	-0.354	108.029	23.502	3.072	4.928	5000	24640	0.927	22846.844	210.28
652	00:10:52	-0.355	108.297	23.513	3.069	4.931	5000	24655	0.927	22844.690	210.64
653	00:10:53	-0.357	108.566	23.524	3.065	4.935	5000	24675	0.926	22847.110	211.00
654	00:10:54	-0.358	108.836	23.536	3.062	4.938	5000	24690	0.925	22844.840	211.37
655	00:10:55	-0.36	109.106	23.547	3.058	4.942	5000	24710	0.925	22847.196	211.73
656	00:10:56	-0.361	109.377	23.558	3.055	4.945	5000	24725	0.924	22844.869	212.09
657	00:10:57	-0.363	109.648	23.569	3.051	4.949	5000	24745	0.923	22847.162	212.45

658	00:10:58	-0.364	109.92	23.581	3.048	4.952	5000	24760	0.923	22844.779	212.82
659	00:10:59	-0.366	110.192	23.592	3.045	4.955	5000	24775	0.922	22842.400	213.18
660	00:11:00	-0.367	110.465	23.603	3.041	4.959	5000	24795	0.921	22844.571	213.54
661	00:11:01	-0.369	110.739	23.615	3.038	4.962	5000	24810	0.921	22842.076	213.91
662	00:11:02	-0.37	111.013	23.626	3.035	4.965	5000	24825	0.920	22839.584	214.27
663	00:11:03	-0.372	111.288	23.638	3.032	4.968	5000	24840	0.919	22837.037	214.63
664	00:11:04	-0.373	111.563	23.649	3.029	4.971	5000	24855	0.919	22834.493	215.00
665	00:11:05	-0.375	111.839	23.66	3.026	4.974	5000	24870	0.918	22831.894	215.36
666	00:11:06	-0.376	112.115	23.672	3.023	4.977	5000	24885	0.917	22829.298	215.73
667	00:11:07	-0.378	112.392	23.683	3.02	4.98	5000	24900	0.917	22826.647	216.09
668	00:11:08	-0.379	112.669	23.695	3.017	4.983	5000	24915	0.916	22824.000	216.46
669	00:11:09	-0.381	112.947	23.706	3.014	4.986	5000	24930	0.915	22821.297	216.82
670	00:11:10	-0.382	113.226	23.718	3.011	4.989	5000	24945	0.915	22818.539	217.19
671	00:11:11	-0.384	113.505	23.729	3.008	4.992	5000	24960	0.914	22815.785	217.55
672	00:11:12	-0.385	113.785	23.741	3.005	4.995	5000	24975	0.913	22812.976	217.92
673	00:11:13	-0.387	114.065	23.752	3.003	4.997	5000	24985	0.913	22805.608	218.28
674	00:11:14	-0.388	114.346	23.764	3	5	5000	25000	0.912	22802.752	218.65
675	00:11:15	-0.39	114.627	23.775	2.997	5.003	5000	25015	0.911	22799.899	219.02
676	00:11:16	-0.391	114.909	23.787	2.994	5.006	5000	25030	0.911	22796.993	219.38
677	00:11:17	-0.393	115.192	23.799	2.992	5.008	5000	25040	0.910	22789.481	219.75
678	00:11:18	-0.394	115.474	23.81	2.989	5.011	5000	25055	0.909	22786.586	220.12
679	00:11:19	-0.395	115.758	23.822	2.987	5.013	5000	25065	0.909	22779.034	220.48
680	00:11:20	-0.397	116.042	23.834	2.984	5.016	5000	25080	0.908	22776.034	220.85
681	00:11:21	-0.398	116.327	23.846	2.982	5.018	5000	25090	0.907	22768.442	221.22
682	00:11:22	-0.4	116.612	23.857	2.979	5.021	5000	25105	0.907	22765.396	221.59
683	00:11:23	-0.401	116.897	23.869	2.977	5.023	5000	25115	0.906	22757.823	221.96
684	00:11:24	-0.403	117.184	23.881	2.974	5.026	5000	25130	0.905	22754.672	222.32
685	00:11:25	-0.404	117.47	23.893	2.972	5.028	5000	25140	0.905	22747.060	222.69
686	00:11:26	-0.406	117.758	23.905	2.969	5.031	5000	25155	0.904	22743.863	223.06
687	00:11:27	-0.407	118.045	23.917	2.967	5.033	5000	25165	0.903	22736.212	223.43
688	00:11:28	-0.408	118.334	23.929	2.965	5.035	5000	25175	0.903	22728.456	223.80
689	00:11:29	-0.41	118.623	23.941	2.963	5.037	5000	25185	0.902	22720.711	224.17
690	00:11:30	-0.411	118.912	23.953	2.96	5.04	5000	25200	0.901	22717.485	224.54

691	00:11:31	-0.413	119.202	23.965	2.958	5.042	5000	25210	0.901	22709.702	224.91
692	00:11:32	-0.414	119.492	23.977	2.956	5.044	5000	25220	0.900	22701.931	225.28
693	00:11:33	-0.416	119.783	23.989	2.954	5.046	5000	25230	0.899	22694.113	225.65
694	00:11:34	-0.417	120.075	24.001	2.952	5.048	5000	25240	0.899	22686.249	226.02
695	00:11:35	-0.419	120.367	24.013	2.95	5.05	5000	25250	0.898	22678.397	226.39
696	00:11:36	-0.42	120.659	24.025	2.947	5.053	5000	25265	0.897	22675.044	226.76
697	00:11:37	-0.421	120.952	24.037	2.945	5.055	5000	25275	0.897	22667.154	227.13
698	00:11:38	-0.423	121.246	24.05	2.943	5.057	5000	25285	0.896	22659.218	227.50
699	00:11:39	-0.424	121.54	24.062	2.941	5.059	5000	25295	0.895	22651.295	227.87
700	00:11:40	-0.426	121.835	24.074	2.939	5.061	5000	25305	0.895	22643.325	228.24
701	00:11:41	-0.427	122.13	24.087	2.937	5.063	5000	25315	0.894	22635.368	228.62
702	00:11:42	-0.429	122.425	24.099	2.936	5.064	5000	25320	0.893	22622.955	228.99
703	00:11:43	-0.43	122.722	24.111	2.934	5.066	5000	25330	0.893	22614.911	229.36
704	00:11:44	-0.431	123.018	24.124	2.932	5.068	5000	25340	0.892	22606.935	229.73
705	00:11:45	-0.433	123.315	24.136	2.93	5.07	5000	25350	0.891	22598.915	230.11
706	00:11:46	-0.434	123.613	24.149	2.928	5.072	5000	25360	0.891	22590.849	230.48
707	00:11:47	-0.436	123.911	24.161	2.926	5.074	5000	25370	0.890	22582.796	230.85
708	00:11:48	-0.437	124.21	24.174	2.924	5.076	5000	25380	0.889	22574.698	231.22
709	00:11:49	-0.438	124.509	24.186	2.923	5.077	5000	25385	0.889	22562.168	231.60
710	00:11:50	-0.44	124.808	24.199	2.921	5.079	5000	25395	0.888	22554.097	231.97
711	00:11:51	-0.441	125.108	24.212	2.919	5.081	5000	25405	0.887	22545.982	232.34
712	00:11:52	-0.443	125.409	24.224	2.917	5.083	5000	25415	0.887	22537.823	232.72
713	00:11:53	-0.444	125.71	24.237	2.916	5.084	5000	25420	0.886	22525.245	233.09
714	00:11:54	-0.446	126.012	24.25	2.914	5.086	5000	25430	0.885	22517.058	233.47
715	00:11:55	-0.447	126.314	24.263	2.912	5.088	5000	25440	0.885	22508.882	233.84
716	00:11:56	-0.448	126.616	24.276	2.911	5.089	5000	25445	0.884	22496.299	234.22
717	00:11:57	-0.45	126.919	24.289	2.909	5.091	5000	25455	0.883	22488.095	234.59
718	00:11:58	-0.451	127.223	24.301	2.908	5.092	5000	25460	0.883	22475.434	234.97
719	00:11:59	-0.453	127.527	24.314	2.906	5.094	5000	25470	0.882	22467.203	235.34
720	00:12:00	-0.454	127.831	24.327	2.904	5.096	5000	25480	0.881	22458.984	235.72
721	00:12:01	-0.455	128.136	24.34	2.903	5.097	5000	25485	0.881	22446.317	236.09
722	00:12:02	-0.457	128.442	24.354	2.901	5.099	5000	25495	0.880	22438.015	236.47
723	00:12:03	-0.458	128.748	24.367	2.9	5.1	5000	25500	0.879	22425.328	236.84

724	00:12:04	-0.46	129.054	24.38	2.898	5.102	5000	25510	0.879	22417.054	237.22
725	00:12:05	-0.461	129.361	24.393	2.897	5.103	5000	25515	0.878	22404.347	237.60
726	00:12:06	-0.463	129.668	24.406	2.895	5.105	5000	25525	0.877	22396.046	237.97
727	00:12:07	-0.464	129.976	24.42	2.894	5.106	5000	25530	0.877	22383.319	238.35
728	00:12:08	-0.465	130.284	24.433	2.893	5.107	5000	25535	0.876	22370.610	238.73
729	00:12:09	-0.467	130.593	24.446	2.891	5.109	5000	25545	0.875	22362.243	239.10
730	00:12:10	-0.468	130.902	24.46	2.89	5.11	5000	25550	0.875	22349.516	239.48
731	00:12:11	-0.47	131.212	24.473	2.888	5.112	5000	25560	0.874	22341.122	239.86
732	00:12:12	-0.471	131.522	24.486	2.887	5.113	5000	25565	0.873	22328.375	240.24
733	00:12:13	-0.472	131.833	24.5	2.886	5.114	5000	25570	0.873	22315.592	240.61
734	00:12:14	-0.474	132.144	24.514	2.884	5.116	5000	25580	0.872	22307.188	240.99
735	00:12:15	-0.475	132.455	24.527	2.883	5.117	5000	25585	0.871	22294.441	241.37
736	00:12:16	-0.477	132.767	24.541	2.882	5.118	5000	25590	0.871	22281.659	241.75
737	00:12:17	-0.478	133.079	24.554	2.88	5.12	5000	25600	0.870	22273.246	242.13
738	00:12:18	-0.48	133.392	24.568	2.879	5.121	5000	25605	0.869	22260.444	242.50
739	00:12:19	-0.481	133.705	24.582	2.878	5.122	5000	25610	0.869	22247.663	242.88
740	00:12:20	-0.482	134.019	24.596	2.877	5.123	5000	25615	0.868	22234.846	243.26
741	00:12:21	-0.484	134.333	24.61	2.875	5.125	5000	25625	0.867	22226.386	243.64
742	00:12:22	-0.485	134.648	24.623	2.874	5.126	5000	25630	0.867	22213.551	244.02
743	00:12:23	-0.487	134.963	24.637	2.873	5.127	5000	25635	0.866	22200.735	244.40
744	00:12:24	-0.488	135.278	24.651	2.872	5.128	5000	25640	0.865	22187.940	244.78
745	00:12:25	-0.49	135.594	24.665	2.871	5.129	5000	25645	0.865	22175.110	245.16
746	00:12:26	-0.491	135.911	24.679	2.869	5.131	5000	25655	0.864	22166.566	245.54
747	00:12:27	-0.492	136.227	24.694	2.868	5.132	5000	25660	0.863	22153.772	245.92
748	00:12:28	-0.494	136.545	24.708	2.867	5.133	5000	25665	0.863	22140.890	246.30
749	00:12:29	-0.495	136.862	24.722	2.866	5.134	5000	25670	0.862	22128.082	246.68
750	00:12:30	-0.497	137.18	24.736	2.865	5.135	5000	25675	0.861	22115.240	247.06
751	00:12:31	-0.498	137.499	24.75	2.864	5.136	5000	25680	0.861	22102.364	247.44
752	00:12:32	-0.5	137.818	24.765	2.863	5.137	5000	25685	0.860	22089.507	247.82
753	00:12:33	-0.501	138.137	24.779	2.862	5.138	5000	25690	0.859	22076.671	248.20
754	00:12:34	-0.502	138.457	24.793	2.86	5.14	5000	25700	0.859	22068.095	248.59
755	00:12:35	-0.504	138.777	24.808	2.859	5.141	5000	25705	0.858	22055.242	248.97
756	00:12:36	-0.505	139.097	24.822	2.858	5.142	5000	25710	0.857	22042.408	249.35

757	00:12:37	-0.507	139.418	24.837	2.857	5.143	5000	25715	0.857	22029.542	249.73		
758	00:12:38	-0.508	139.74	24.851	2.856	5.144	5000	25720	0.856	22016.641	250.11	250	
759	00:12:39	-0.51	140.062	24.866	2.855	5.145	5000	25725	0.855	22003.761	250.49	250	
760	00:12:40	-0.511	140.384	24.881	2.854	5.146	5000	25730	0.855	21990.902	250.88	250	
761	00:12:41	-0.512	140.706	24.895	2.853	5.147	5000	25735	0.854	21978.062	251.26	250	
762	00:12:42	-0.514	141.029	24.91	2.852	5.148	5000	25740	0.853	21965.189	251.64	250	
763	00:12:43	-0.515	141.353	24.925	2.851	5.149	5000	25745	0.853	21952.283	252.03	250	
764	00:12:44	-0.517	141.677	24.94	2.85	5.15	5000	25750	0.852	21939.397	252.41	250	
765	00:12:45	-0.518	142.001	24.955	2.849	5.151	5000	25755	0.851	21926.531	252.79	250	
766	00:12:46	-0.52	142.326	24.97	2.848	5.152	5000	25760	0.851	21913.633	253.17	250	
767	00:12:47	-0.521	142.651	24.984	2.847	5.153	5000	25765	0.850	21900.755	253.56	250	
768	00:12:48	-0.523	142.976	24.999	2.846	5.154	5000	25770	0.849	21887.897	253.94	250	
769	00:12:49	-0.524	143.302	25.015	2.845	5.155	5000	25775	0.849	21875.007	254.33	250	
770	00:12:50	-0.525	143.628	25.03	2.844	5.156	5000	25780	0.848	21862.136	254.71	250	
771	00:12:51	-0.527	143.955	25.045	2.843	5.157	5000	25785	0.847	21849.234	255.09	250	
772	00:12:52	-0.528	144.282	25.06	2.843	5.157	5000	25785	0.847	21832.118	255.48	250	
773	00:12:53	-0.53	144.609	25.075	2.842	5.158	5000	25790	0.846	21819.259	255.86	250	
774	00:12:54	-0.531	144.937	25.09	2.841	5.159	5000	25795	0.845	21806.368	256.25	250	
775	00:12:55	-0.533	145.265	25.106	2.84	5.16	5000	25800	0.845	21793.497	256.63	250	
776	00:12:56	-0.534	145.593	25.121	2.839	5.161	5000	25805	0.844	21780.647	257.02	250	
777	00:12:57	-0.536	145.922	25.137	2.838	5.162	5000	25810	0.843	21767.764	257.40	250	
778	00:12:58	-0.537	146.251	25.152	2.837	5.163	5000	25815	0.843	21754.902	257.79	250	
779	00:12:59	-0.539	146.581	25.167	2.836	5.164	5000	25820	0.842	21742.009	258.17	250	
780	00:13:00	-0.54	146.911	25.183	2.835	5.165	5000	25825	0.841	21729.135	258.56	250	
781	00:13:01	-0.542	147.241	25.199	2.835	5.165	5000	25825	0.841	21712.078	258.94	250	
782	00:13:02	-0.543	147.572	25.214	2.834	5.166	5000	25830	0.840	21699.197	259.33	250	
783	00:13:03	-0.545	147.903	25.23	2.833	5.167	5000	25835	0.839	21686.335	259.72	250	
784	00:13:04	-0.546	148.235	25.246	2.832	5.168	5000	25840	0.839	21673.443	260.10	250	
785	00:13:05	-0.547	148.567	25.261	2.831	5.169	5000	25845	0.838	21660.571	260.49	250	
786	00:13:06	-0.549	148.899	25.277	2.83	5.17	5000	25850	0.837	21647.719	260.87	250	
787	00:13:07	-0.55	149.231	25.293	2.83	5.17	5000	25850	0.837	21630.703	261.26	250	
788	00:13:08	-0.552	149.564	25.309	2.829	5.171	5000	25855	0.836	21617.844	261.65	250	
789	00:13:09	-0.553	149.898	25.325	2.828	5.172	5000	25860	0.835	21604.954	262.04	250	

790	00:13:10	-0.555	150.231	25.341	2.827	5.173	5000	25865	0.835	21592.135	262.42	250
791	00:13:11	-0.556	150.565	25.357	2.826	5.174	5000	25870	0.834	21579.285	262.81	250
792	00:13:12	-0.558	150.9	25.373	2.826	5.174	5000	25870	0.833	21562.238	263.20	250
793	00:13:13	-0.559	151.234	25.389	2.825	5.175	5000	25875	0.833	21549.432	263.58	250
794	00:13:14	-0.561	151.569	25.405	2.824	5.176	5000	25880	0.832	21536.596	263.97	250
795	00:13:15	-0.562	151.905	25.421	2.823	5.177	5000	25885	0.832	21523.729	264.36	250
796	00:13:16	-0.564	152.24	25.438	2.822	5.178	5000	25890	0.831	21510.933	264.75	250
797	00:13:17	-0.565	152.577	25.454	2.822	5.178	5000	25890	0.830	21493.905	265.14	250
798	00:13:18	-0.567	152.913	25.47	2.821	5.179	5000	25895	0.830	21481.102	265.52	250
799	00:13:19	-0.568	153.25	25.487	2.82	5.18	5000	25900	0.829	21468.269	265.91	250
800	00:13:20	-0.57	153.587	25.503	2.819	5.181	5000	25905	0.828	21455.457	266.30	250
801	00:13:21	-0.571	153.924	25.52	2.819	5.181	5000	25905	0.828	21438.527	266.69	250
802	00:13:22	-0.573	154.262	25.536	2.818	5.182	5000	25910	0.827	21425.707	267.08	250
803	00:13:23	-0.574	154.6	25.553	2.817	5.183	5000	25915	0.826	21412.909	267.47	250
804	00:13:24	-0.576	154.939	25.569	2.816	5.184	5000	25920	0.826	21400.080	267.86	250
805	00:13:25	-0.577	155.277	25.586	2.816	5.184	5000	25920	0.825	21383.197	268.25	250
806	00:13:26	-0.579	155.616	25.603	2.815	5.185	5000	25925	0.824	21370.412	268.64	250
807	00:13:27	-0.58	155.956	25.619	2.814	5.186	5000	25930	0.824	21357.598	269.03	250
808	00:13:28	-0.582	156.296	25.636	2.814	5.186	5000	25930	0.823	21340.688	269.42	250
809	00:13:29	-0.584	156.636	25.653	2.813	5.187	5000	25935	0.822	21327.918	269.81	250
810	00:13:30	-0.585	156.976	25.67	2.812	5.188	5000	25940	0.822	21315.167	270.20	250
811	00:13:31	-0.587	157.317	25.687	2.811	5.189	5000	25945	0.821	21302.388	270.59	250
812	00:13:32	-0.588	157.658	25.704	2.811	5.189	5000	25945	0.820	21285.526	270.98	250
813	00:13:33	-0.59	157.999	25.721	2.81	5.19	5000	25950	0.820	21272.790	271.37	250
814	00:13:34	-0.591	158.341	25.738	2.809	5.191	5000	25955	0.819	21260.025	271.76	250
815	00:13:35	-0.593	158.683	25.755	2.809	5.191	5000	25955	0.818	21243.187	272.15	250
816	00:13:36	-0.594	159.025	25.772	2.808	5.192	5000	25960	0.818	21230.466	272.54	250
817	00:13:37	-0.596	159.368	25.789	2.807	5.193	5000	25965	0.817	21217.715	272.93	250
818	00:13:38	-0.597	159.711	25.806	2.807	5.193	5000	25965	0.817	21200.902	273.32	250
819	00:13:39	-0.599	160.054	25.823	2.806	5.194	5000	25970	0.816	21188.195	273.71	250
820	00:13:40	-0.6	160.397	25.841	2.805	5.195	5000	25975	0.815	21175.508	274.11	250
821	00:13:41	-0.602	160.741	25.858	2.805	5.195	5000	25975	0.815	21158.720	274.50	250
822	00:13:42	-0.604	161.085	25.875	2.804	5.196	5000	25980	0.814	21146.027	274.89	250

823	00:13:43	-0.605	161.43	25.893	2.803	5.197	5000	25985	0.813	21133.307	275.28	250
824	00:13:44	-0.607	161.775	25.91	2.803	5.197	5000	25985	0.813	21116.543	275.67	250
825	00:13:45	-0.608	162.12	25.928	2.802	5.198	5000	25990	0.812	21103.866	276.07	250
826	00:13:46	-0.61	162.465	25.945	2.801	5.199	5000	25995	0.811	21091.209	276.46	250
827	00:13:47	-0.611	162.811	25.963	2.801	5.199	5000	25995	0.811	21074.470	276.85	250
828	00:13:48	-0.613	163.157	25.981	2.8	5.2	5000	26000	0.810	21061.807	277.24	250
829	00:13:49	-0.614	163.503	25.998	2.799	5.201	5000	26005	0.809	21049.165	277.64	250
830	00:13:50	-0.616	163.849	26.016	2.799	5.201	5000	26005	0.809	21032.499	278.03	250
831	00:13:51	-0.618	164.196	26.034	2.798	5.202	5000	26010	0.808	21019.852	278.42	250
832	00:13:52	-0.619	164.543	26.052	2.797	5.203	5000	26015	0.808	21007.226	278.82	250
833	00:13:53	-0.621	164.891	26.069	2.797	5.203	5000	26015	0.807	20990.536	279.21	250
834	00:13:54	-0.622	165.238	26.087	2.796	5.204	5000	26020	0.806	20977.953	279.60	250
835	00:13:55	-0.624	165.586	26.105	2.795	5.205	5000	26025	0.806	20965.341	280.00	250
836	00:13:56	-0.625	165.935	26.123	2.795	5.205	5000	26025	0.805	20948.677	280.39	250
837	00:13:57	-0.627	166.283	26.141	2.794	5.206	5000	26030	0.804	20936.109	280.78	250
838	00:13:58	-0.629	166.632	26.159	2.793	5.207	5000	26035	0.804	20923.513	281.18	250
839	00:13:59	-0.63	166.981	26.177	2.793	5.207	5000	26035	0.803	20906.922	281.57	250
840	00:14:00	-0.632	167.33	26.196	2.792	5.208	5000	26040	0.802	20894.369	281.97	250
841	00:14:01	-0.633	167.68	26.214	2.792	5.208	5000	26040	0.802	20877.780	282.36	250
842	00:14:02	-0.635	168.03	26.232	2.791	5.209	5000	26045	0.801	20865.222	282.76	250
843	00:14:03	-0.637	168.38	26.25	2.79	5.21	5000	26050	0.800	20852.685	283.15	250
844	00:14:04	-0.638	168.73	26.269	2.79	5.21	5000	26050	0.800	20836.168	283.55	250
845	00:14:05	-0.64	169.081	26.287	2.789	5.211	5000	26055	0.799	20823.626	283.94	250
846	00:14:06	-0.641	169.432	26.305	2.789	5.211	5000	26055	0.799	20807.112	284.34	250
847	00:14:07	-0.643	169.783	26.324	2.788	5.212	5000	26060	0.798	20794.613	284.73	250
848	00:14:08	-0.645	170.135	26.342	2.787	5.213	5000	26065	0.797	20782.087	285.13	250
849	00:14:09	-0.646	170.487	26.361	2.787	5.213	5000	26065	0.797	20765.598	285.52	250
850	00:14:10	-0.648	170.839	26.379	2.786	5.214	5000	26070	0.796	20753.115	285.92	250
851	00:14:11	-0.649	171.191	26.398	2.785	5.215	5000	26075	0.795	20740.652	286.32	250
852	00:14:12	-0.651	171.544	26.417	2.785	5.215	5000	26075	0.795	20724.188	286.71	250
853	00:14:13	-0.653	171.896	26.435	2.784	5.216	5000	26080	0.794	20711.767	287.11	250
854	00:14:14	-0.654	172.25	26.454	2.784	5.216	5000	26080	0.794	20695.306	287.50	250
855	00:14:15	-0.656	172.603	26.473	2.783	5.217	5000	26085	0.793	20682.881	287.90	250

856	00:14:16	-0.658	172.956	26.492	2.782	5.218	5000	26090	0.792	20670.476	288.30	250
857	00:14:17	-0.659	173.31	26.51	2.782	5.218	5000	26090	0.792	20654.087	288.69	250
858	00:14:18	-0.661	173.664	26.529	2.781	5.219	5000	26095	0.791	20641.678	289.09	250
859	00:14:19	-0.662	174.019	26.548	2.781	5.219	5000	26095	0.790	20625.291	289.49	250
860	00:14:20	-0.664	174.373	26.567	2.78	5.22	5000	26100	0.790	20612.925	289.89	250
861	00:14:21	-0.666	174.728	26.586	2.78	5.22	5000	26100	0.789	20596.586	290.28	250
862	00:14:22	-0.667	175.083	26.605	2.779	5.221	5000	26105	0.789	20584.216	290.68	250
863	00:14:23	-0.669	175.439	26.624	2.778	5.222	5000	26110	0.788	20571.820	291.08	250
864	00:14:24	-0.671	175.794	26.643	2.778	5.222	5000	26110	0.787	20555.553	291.48	250
865	00:14:25	-0.672	176.15	26.663	2.777	5.223	5000	26115	0.787	20543.199	291.87	250
866	00:14:26	-0.674	176.506	26.682	2.777	5.223	5000	26115	0.786	20526.935	292.27	250
867	00:14:27	-0.676	176.863	26.701	2.776	5.224	5000	26120	0.785	20514.578	292.67	250
868	00:14:28	-0.677	177.219	26.72	2.775	5.225	5000	26125	0.785	20502.286	293.07	250
869	00:14:29	-0.679	177.576	26.74	2.775	5.225	5000	26125	0.784	20486.047	293.47	250
870	00:14:30	-0.681	177.933	26.759	2.774	5.226	5000	26130	0.784	20473.751	293.87	250
871	00:14:31	-0.682	178.29	26.778	2.774	5.226	5000	26130	0.783	20457.560	294.26	250
872	00:14:32	-0.684	178.648	26.798	2.773	5.227	5000	26135	0.782	20445.262	294.66	250
873	00:14:33	-0.686	179.005	26.817	2.772	5.228	5000	26140	0.782	20433.027	295.06	250
874	00:14:34	-0.687	179.363	26.837	2.772	5.228	5000	26140	0.781	20416.862	295.46	250
875	00:14:35	-0.689	179.722	26.856	2.771	5.229	5000	26145	0.780	20404.579	295.86	250
876	00:14:36	-0.691	180.08	26.876	2.771	5.229	5000	26145	0.780	20388.462	296.26	250
877	00:14:37	-0.692	180.439	26.896	2.77	5.23	5000	26150	0.779	20376.221	296.66	250
878	00:14:38	-0.694	180.798	26.915	2.77	5.23	5000	26150	0.779	20360.107	297.06	250
879	00:14:39	-0.696	181.157	26.935	2.769	5.231	5000	26155	0.778	20347.908	297.46	250
880	00:14:40	-0.697	181.516	26.955	2.768	5.232	5000	26160	0.777	20335.728	297.86	250
881	00:14:41	-0.699	181.876	26.974	2.768	5.232	5000	26160	0.777	20319.639	298.26	250
882	00:14:42	-0.701	182.235	26.994	2.767	5.233	5000	26165	0.776	20307.501	298.66	250
883	00:14:43	-0.702	182.595	27.014	2.767	5.233	5000	26165	0.776	20291.460	299.06	250
884	00:14:44	-0.704	182.956	27.034	2.766	5.234	5000	26170	0.775	20279.274	299.46	250
885	00:14:45	-0.706	183.316	27.054	2.766	5.234	5000	26170	0.774	20263.281	299.86	250
886	00:14:46	-0.707	183.677	27.074	2.765	5.235	5000	26175	0.774	20251.136	300.26	250
887	00:14:47	-0.709	184.038	27.094	2.764	5.236	5000	26180	0.773	20239.011	300.66	250
888	00:14:48	-0.711	184.399	27.114	2.764	5.236	5000	26180	0.772	20223.043	301.07	250

889	00:14:49	-0.712	184.76	27.134	2.763	5.237	5000	26185	0.772	20210.959	301.47	250
890	00:14:50	-0.714	185.121	27.154	2.763	5.237	5000	26185	0.771	20195.038	301.87	250
891	00:14:51	-0.716	185.483	27.174	2.762	5.238	5000	26190	0.771	20182.951	302.27	250
892	00:14:52	-0.718	185.845	27.195	2.762	5.238	5000	26190	0.770	20167.033	302.67	250
893	00:14:53	-0.719	186.207	27.215	2.761	5.239	5000	26195	0.769	20154.988	303.07	250
894	00:14:54	-0.721	186.57	27.235	2.76	5.24	5000	26200	0.769	20142.917	303.47	250
895	00:14:55	-0.723	186.932	27.255	2.76	5.24	5000	26200	0.768	20127.068	303.88	250
896	00:14:56	-0.724	187.295	27.276	2.759	5.241	5000	26205	0.768	20115.039	304.28	250
897	00:14:57	-0.726	187.658	27.296	2.759	5.241	5000	26205	0.767	20099.193	304.68	250
898	00:14:58	-0.728	188.021	27.317	2.758	5.242	5000	26210	0.766	20087.205	305.08	250
899	00:14:59	-0.73	188.385	27.337	2.758	5.242	5000	26210	0.766	20071.362	305.49	250
900	00:15:00	-0.731	188.748	27.358	2.757	5.243	5000	26215	0.765	20059.414	305.89	250
901	00:15:01	-0.733	189.112	27.378	2.756	5.244	5000	26220	0.765	20047.442	306.29	250
902	00:15:02	-0.735	189.476	27.399	2.756	5.244	5000	26220	0.764	20031.668	306.70	250
903	00:15:03	-0.736	189.84	27.419	2.755	5.245	5000	26225	0.763	20019.736	307.10	250
904	00:15:04	-0.738	190.205	27.44	2.755	5.245	5000	26225	0.763	20003.966	307.50	250
905	00:15:05	-0.74	190.569	27.461	2.754	5.246	5000	26230	0.762	19992.075	307.91	250
906	00:15:06	-0.742	190.934	27.481	2.754	5.246	5000	26230	0.762	19976.351	308.31	250
907	00:15:07	-0.743	191.299	27.502	2.753	5.247	5000	26235	0.761	19964.457	308.71	250
908	00:15:08	-0.745	191.664	27.523	2.753	5.247	5000	26235	0.760	19948.780	309.12	250
909	00:15:09	-0.747	192.03	27.544	2.752	5.248	5000	26240	0.760	19936.883	309.52	250
910	00:15:10	-0.749	192.395	27.564	2.751	5.249	5000	26245	0.759	19925.048	309.92	250
911	00:15:11	-0.75	192.761	27.585	2.751	5.249	5000	26245	0.759	19909.396	310.33	250
912	00:15:12	-0.752	193.127	27.606	2.75	5.25	5000	26250	0.758	19897.558	310.73	250
913	00:15:13	-0.754	193.493	27.627	2.75	5.25	5000	26250	0.757	19881.952	311.14	250
914	00:15:14	-0.756	193.86	27.648	2.749	5.251	5000	26255	0.757	19870.112	311.54	250
915	00:15:15	-0.757	194.226	27.669	2.749	5.251	5000	26255	0.756	19854.552	311.95	250
916	00:15:16	-0.759	194.593	27.69	2.748	5.252	5000	26260	0.756	19842.752	312.35	250
917	00:15:17	-0.761	194.96	27.711	2.747	5.253	5000	26265	0.755	19830.970	312.76	250
918	00:15:18	-0.763	195.327	27.733	2.747	5.253	5000	26265	0.754	19815.435	313.16	250
919	00:15:19	-0.764	195.694	27.754	2.746	5.254	5000	26270	0.754	19803.693	313.57	250
920	00:15:20	-0.766	196.062	27.775	2.746	5.254	5000	26270	0.753	19788.161	313.97	250
921	00:15:21	-0.768	196.429	27.796	2.745	5.255	5000	26275	0.753	19776.459	314.38	250

922	00:15:22	-0.77	196.797	27.818	2.745	5.255	5000	26275	0.752	19760.972	314.79	250
923	00:15:23	-0.771	197.165	27.839	2.744	5.256	5000	26280	0.751	19749.268	315.19	250
924	00:15:24	-0.773	197.533	27.86	2.743	5.257	5000	26285	0.751	19737.582	315.60	250
925	00:15:25	-0.775	197.902	27.882	2.743	5.257	5000	26285	0.750	19722.120	316.00	250
926	00:15:26	-0.777	198.27	27.903	2.742	5.258	5000	26290	0.750	19710.473	316.41	250
927	00:15:27	-0.779	198.639	27.924	2.742	5.258	5000	26290	0.749	19695.057	316.82	250
928	00:15:28	-0.78	199.008	27.946	2.741	5.259	5000	26295	0.749	19683.408	317.22	250
929	00:15:29	-0.782	199.377	27.967	2.741	5.259	5000	26295	0.748	19668.037	317.63	250
930	00:15:30	-0.784	199.746	27.989	2.74	5.26	5000	26300	0.747	19656.427	318.04	250
931	00:15:31	-0.786	200.116	28.011	2.74	5.26	5000	26300	0.747	19641.060	318.44	250
932	00:15:32	-0.787	200.485	28.032	2.739	5.261	5000	26305	0.746	19629.489	318.85	250
933	00:15:33	-0.789	200.855	28.054	2.738	5.262	5000	26310	0.746	19617.895	319.26	250
934	00:15:34	-0.791	201.225	28.076	2.738	5.262	5000	26310	0.745	19602.593	319.67	250
935	00:15:35	-0.793	201.595	28.097	2.737	5.263	5000	26315	0.744	19591.038	320.07	250
936	00:15:36	-0.795	201.965	28.119	2.737	5.263	5000	26315	0.744	19575.781	320.48	250
937	00:15:37	-0.796	202.336	28.141	2.736	5.264	5000	26320	0.743	19564.224	320.89	250
938	00:15:38	-0.798	202.706	28.163	2.736	5.264	5000	26320	0.743	19549.012	321.30	250
939	00:15:39	-0.8	203.077	28.185	2.735	5.265	5000	26325	0.742	19537.493	321.71	250
940	00:15:40	-0.802	203.448	28.206	2.734	5.266	5000	26330	0.742	19525.992	322.11	250
941	00:15:41	-0.804	203.819	28.228	2.734	5.266	5000	26330	0.741	19510.804	322.52	250
942	00:15:42	-0.805	204.191	28.25	2.733	5.267	5000	26335	0.740	19499.301	322.93	250
943	00:15:43	-0.807	204.562	28.272	2.733	5.267	5000	26335	0.740	19484.158	323.34	250
944	00:15:44	-0.809	204.934	28.294	2.732	5.268	5000	26340	0.739	19472.694	323.75	250
945	00:15:45	-0.811	205.305	28.316	2.732	5.268	5000	26340	0.739	19457.594	324.16	250
946	00:15:46	-0.813	205.677	28.338	2.731	5.269	5000	26345	0.738	19446.168	324.57	250
947	00:15:47	-0.815	206.049	28.361	2.73	5.27	5000	26350	0.738	19434.760	324.98	250
948	00:15:48	-0.816	206.422	28.383	2.73	5.27	5000	26350	0.737	19419.644	325.39	250
949	00:15:49	-0.818	206.794	28.405	2.729	5.271	5000	26355	0.736	19408.274	325.80	250
950	00:15:50	-0.82	207.167	28.427	2.729	5.271	5000	26355	0.736	19393.202	326.20	250
951	00:15:51	-0.822	207.54	28.449	2.728	5.272	5000	26360	0.735	19381.830	326.61	250
952	00:15:52	-0.824	207.912	28.472	2.728	5.272	5000	26360	0.735	19366.843	327.02	250
953	00:15:53	-0.825	208.286	28.494	2.727	5.273	5000	26365	0.734	19355.468	327.44	250
954	00:15:54	-0.827	208.659	28.516	2.726	5.274	5000	26370	0.734	19344.152	327.85	250

955	00:15:55	-0.829	209.032	28.539	2.726	5.274	5000	26370	0.733	19329.188	328.26	250
956	00:15:56	-0.831	209.406	28.561	2.725	5.275	5000	26375	0.732	19317.869	328.67	250
957	00:15:57	-0.833	209.779	28.584	2.725	5.275	5000	26375	0.732	19302.949	329.08	250
958	00:15:58	-0.835	210.153	28.606	2.724	5.276	5000	26380	0.731	19291.668	329.49	250
959	00:15:59	-0.836	210.527	28.629	2.724	5.276	5000	26380	0.731	19276.750	329.90	250
960	00:16:00	-0.838	210.901	28.651	2.723	5.277	5000	26385	0.730	19265.507	330.31	250
961	00:16:01	-0.84	211.276	28.674	2.722	5.278	5000	26390	0.730	19254.242	330.72	250
962	00:16:02	-0.842	211.65	28.696	2.722	5.278	5000	26390	0.729	19239.388	331.13	250
963	00:16:03	-0.844	212.025	28.719	2.721	5.279	5000	26395	0.728	19228.160	331.54	250
964	00:16:04	-0.846	212.399	28.742	2.721	5.279	5000	26395	0.728	19213.349	331.96	250
965	00:16:05	-0.848	212.774	28.764	2.72	5.28	5000	26400	0.727	19202.158	332.37	250
966	00:16:06	-0.849	213.149	28.787	2.719	5.281	5000	26405	0.727	19190.985	332.78	250
967	00:16:07	-0.851	213.525	28.81	2.719	5.281	5000	26405	0.726	19176.158	333.19	250
968	00:16:08	-0.853	213.9	28.833	2.718	5.282	5000	26410	0.726	19165.022	333.60	250
969	00:16:09	-0.855	214.276	28.856	2.718	5.282	5000	26410	0.725	19150.238	334.02	250
970	00:16:10	-0.857	214.651	28.878	2.717	5.283	5000	26415	0.725	19139.139	334.43	250
971	00:16:11	-0.859	215.027	28.901	2.717	5.283	5000	26415	0.724	19124.398	334.84	250
972	00:16:12	-0.861	215.403	28.924	2.716	5.284	5000	26420	0.723	19113.297	335.26	250
973	00:16:13	-0.862	215.779	28.947	2.715	5.285	5000	26425	0.723	19102.212	335.67	250
974	00:16:14	-0.864	216.155	28.97	2.715	5.285	5000	26425	0.722	19087.533	336.08	250
975	00:16:15	-0.866	216.532	28.993	2.714	5.286	5000	26430	0.722	19076.447	336.50	250
976	00:16:16	-0.868	216.908	29.016	2.714	5.286	5000	26430	0.721	19061.811	336.91	250
977	00:16:17	-0.87	217.285	29.039	2.713	5.287	5000	26435	0.721	19050.761	337.32	250
978	00:16:18	-0.872	217.662	29.062	2.713	5.287	5000	26435	0.720	19036.128	337.74	250
979	00:16:19	-0.874	218.038	29.086	2.712	5.288	5000	26440	0.720	19025.154	338.15	250
980	00:16:20	-0.876	218.416	29.109	2.711	5.289	5000	26445	0.719	19014.119	338.56	250
981	00:16:21	-0.877	218.793	29.132	2.711	5.289	5000	26445	0.718	18999.547	338.98	250
982	00:16:22	-0.879	219.17	29.155	2.71	5.29	5000	26450	0.718	18988.588	339.39	250
983	00:16:23	-0.881	219.548	29.178	2.71	5.29	5000	26450	0.717	18974.020	339.81	250
984	00:16:24	-0.883	219.925	29.202	2.709	5.291	5000	26455	0.717	18963.096	340.22	250
985	00:16:25	-0.885	220.303	29.225	2.708	5.292	5000	26460	0.716	18952.151	340.64	250
986	00:16:26	-0.887	220.681	29.248	2.708	5.292	5000	26460	0.716	18937.645	341.05	250
987	00:16:27	-0.889	221.059	29.272	2.707	5.293	5000	26465	0.715	18926.736	341.47	250

988	00:16:28	-0.891	221.437	29.295	2.707	5.293	5000	26465	0.715	18912.271	341.88	250	
989	00:16:29	-0.892	221.815	29.319	2.706	5.294	5000	26470	0.714	18901.398	342.30	250	
990	00:16:30	-0.894	222.194	29.342	2.705	5.295	5000	26475	0.714	18890.503	342.71	250	
991	00:16:31	-0.896	222.572	29.366	2.705	5.295	5000	26475	0.713	18876.099	343.13	250	
992	00:16:32	-0.898	222.951	29.389	2.704	5.296	5000	26480	0.712	18865.241	343.54	250	
993	00:16:33	-0.9	223.33	29.413	2.704	5.296	5000	26480	0.712	18850.839	343.96	250	
994	00:16:34	-0.902	223.709	29.436	2.703	5.297	5000	26485	0.711	18840.017	344.38	250	
995	00:16:35	-0.904	224.088	29.46	2.703	5.297	5000	26485	0.711	18825.657	344.79	250	
996	00:16:36	-0.906	224.467	29.484	2.702	5.298	5000	26490	0.710	18814.870	345.21	250	
997	00:16:37	-0.908	224.847	29.507	2.701	5.299	5000	26495	0.710	18804.062	345.63	250	
998	00:16:38	-0.91	225.226	29.531	2.701	5.299	5000	26495	0.709	18789.762	346.04	250	
999	00:16:39	-0.911	225.606	29.555	2.7	5.3	5000	26500	0.709	18778.989	346.46	250	
1000	00:16:40	-0.913	225.986	29.578	2.7	5.3	5000	26500	0.708	18764.692	346.88	250	
1001	00:16:41	-0.915	226.366	29.602	2.699	5.301	5000	26505	0.708	18753.955	347.29	250	
1002	00:16:42	-0.917	226.746	29.626	2.698	5.302	5000	26510	0.707	18743.234	347.71	250	
1003	00:16:43	-0.919	227.126	29.65	2.698	5.302	5000	26510	0.706	18728.997	348.13	250	
1004	00:16:44	-0.921	227.506	29.674	2.697	5.303	5000	26515	0.706	18718.312	348.55	250	
1005	00:16:45	-0.923	227.886	29.698	2.697	5.303	5000	26515	0.705	18704.115	348.96	250	
1006	00:16:46	-0.925	228.267	29.722	2.696	5.304	5000	26520	0.705	18693.427	349.38	250	
1007	00:16:47	-0.927	228.648	29.746	2.695	5.305	5000	26525	0.704	18682.756	349.80	250	
1008	00:16:48	-0.929	229.028	29.77	2.695	5.305	5000	26525	0.704	18668.618	350.22	250	350
1009	00:16:49	-0.931	229.409	29.794	2.694	5.306	5000	26530	0.703	18657.982	350.64	250	350
1010	00:16:50	-0.933	229.79	29.818	2.694	5.306	5000	26530	0.703	18643.848	351.06	250	350
1011	00:16:51	-0.935	230.172	29.842	2.693	5.307	5000	26535	0.702	18633.209	351.47	250	350
1012	00:16:52	-0.936	230.553	29.866	2.692	5.308	5000	26540	0.702	18622.623	351.89	250	350
1013	00:16:53	-0.938	230.934	29.89	2.692	5.308	5000	26540	0.701	18608.548	352.31	250	350
1014	00:16:54	-0.94	231.316	29.914	2.691	5.309	5000	26545	0.701	18597.960	352.73	250	350
1015	00:16:55	-0.942	231.698	29.938	2.691	5.309	5000	26545	0.700	18583.887	353.15	250	350
1016	00:16:56	-0.944	232.079	29.963	2.69	5.31	5000	26550	0.700	18573.371	353.57	250	350
1017	00:16:57	-0.946	232.461	29.987	2.689	5.311	5000	26555	0.699	18562.833	353.99	250	350
1018	00:16:58	-0.948	232.843	30.011	2.689	5.311	5000	26555	0.699	18548.819	354.41	250	350
1019	00:16:59	-0.95	233.225	30.036	2.688	5.312	5000	26560	0.698	18538.316	354.83	250	350
1020	00:17:00	-0.952	233.608	30.06	2.687	5.313	5000	26565	0.697	18527.792	355.25	250	350

1021	00:17:01	-0.954	233.99	30.084	2.687	5.313	5000	26565	0.697	18513.836	355.67	250	350
1022	00:17:02	-0.956	234.373	30.109	2.686	5.314	5000	26570	0.696	18503.347	356.09	250	350
1023	00:17:03	-0.958	234.755	30.133	2.686	5.314	5000	26570	0.696	18489.431	356.51	250	350
1024	00:17:04	-0.96	235.138	30.158	2.685	5.315	5000	26575	0.695	18478.975	356.93	250	350
1025	00:17:05	-0.962	235.521	30.182	2.684	5.316	5000	26580	0.695	18468.536	357.35	250	350
1026	00:17:06	-0.964	235.904	30.207	2.684	5.316	5000	26580	0.694	18454.641	357.77	250	350
1027	00:17:07	-0.966	236.287	30.231	2.683	5.317	5000	26585	0.694	18444.235	358.20	250	350
1028	00:17:08	-0.968	236.67	30.256	2.683	5.317	5000	26585	0.693	18430.379	358.62	250	350
1029	00:17:09	-0.969	237.054	30.28	2.682	5.318	5000	26590	0.693	18419.971	359.04	250	350
1030	00:17:10	-0.971	237.437	30.305	2.681	5.319	5000	26595	0.692	18409.615	359.46	250	350
1031	00:17:11	-0.973	237.821	30.329	2.681	5.319	5000	26595	0.692	18395.780	359.88	250	350
1032	00:17:12	-0.975	238.204	30.354	2.68	5.32	5000	26600	0.691	18385.458	360.30	250	350
1033	00:17:13	-0.977	238.588	30.379	2.68	5.32	5000	26600	0.691	18371.662	360.73	250	350
1034	00:17:14	-0.979	238.972	30.404	2.679	5.321	5000	26605	0.690	18361.337	361.15	250	350
1035	00:17:15	-0.981	239.356	30.428	2.678	5.322	5000	26610	0.690	18351.028	361.57	250	350
1036	00:17:16	-0.983	239.74	30.453	2.678	5.322	5000	26610	0.689	18337.288	361.99	250	350
1037	00:17:17	-0.985	240.125	30.478	2.677	5.323	5000	26615	0.689	18326.977	362.42	250	350
1038	00:17:18	-0.987	240.509	30.503	2.676	5.324	5000	26620	0.688	18316.716	362.84	250	350
1039	00:17:19	-0.989	240.894	30.528	2.676	5.324	5000	26620	0.688	18302.998	363.26	250	350
1040	00:17:20	-0.991	241.278	30.553	2.675	5.325	5000	26625	0.687	18292.771	363.69	250	350
1041	00:17:21	-0.993	241.663	30.578	2.675	5.325	5000	26625	0.687	18279.090	364.11	250	350
1042	00:17:22	-0.995	242.048	30.602	2.674	5.326	5000	26630	0.686	18268.861	364.53	250	350
1043	00:17:23	-0.997	242.433	30.627	2.673	5.327	5000	26635	0.686	18258.647	364.96	250	350
1044	00:17:24	-0.999	242.818	30.652	2.673	5.327	5000	26635	0.685	18245.022	365.38	250	350
1045	00:17:25	-1.001	243.203	30.677	2.672	5.328	5000	26640	0.684	18234.841	365.81	250	350
1046	00:17:26	-1.003	243.588	30.703	2.672	5.328	5000	26640	0.684	18221.255	366.23	250	350
1047	00:17:27	-1.005	243.974	30.728	2.671	5.329	5000	26645	0.683	18211.072	366.65	250	350
1048	00:17:28	-1.007	244.359	30.753	2.67	5.33	5000	26650	0.683	18200.938	367.08	250	350
1049	00:17:29	-1.009	244.745	30.778	2.67	5.33	5000	26650	0.682	18187.373	367.50	250	350
1050	00:17:30	-1.011	245.131	30.803	2.669	5.331	5000	26655	0.682	18177.237	367.57	250	350
1051	00:17:31	-1.013	245.517	30.828	2.668	5.332	5000	26660	0.681	18167.116	367.64	250	350
1052	00:17:32	-1.015	245.903	30.853	2.668	5.332	5000	26660	0.681	18153.606	367.73	250	350
1053	00:17:33	-1.017	246.289	30.879	2.667	5.333	5000	26665	0.680	18143.518	367.82	250	350

1054	00:17:34	-1.019	246.675	30.904	2.667	5.333	5000	26665	0.680	18130.046	367.92	250	350
1055	00:17:35	-1.021	247.061	30.929	2.666	5.334	5000	26670	0.679	18119.990	368.03	250	350
1056	00:17:36	-1.023	247.448	30.955	2.665	5.335	5000	26675	0.679	18109.915	368.15	250	350
1057	00:17:37	-1.025	247.834	30.98	2.665	5.335	5000	26675	0.678	18096.497	368.27	250	350
1058	00:17:38	-1.027	248.221	31.005	2.664	5.336	5000	26680	0.678	18086.454	368.41	250	350
1059	00:17:39	-1.029	248.608	31.031	2.663	5.337	5000	26685	0.677	18076.426	368.55	250	350
1060	00:17:40	-1.031	248.995	31.056	2.663	5.337	5000	26685	0.677	18063.028	368.71	250	350
1061	00:17:41	-1.033	249.381	31.082	2.662	5.338	5000	26690	0.676	18053.067	368.87	250	350
1062	00:17:42	-1.035	249.769	31.107	2.661	5.339	5000	26695	0.676	18043.051	369.04	250	350
1063	00:17:43	-1.037	250.156	31.133	2.661	5.339	5000	26695	0.675	18029.707	369.22	250	350
1064	00:17:44	-1.039	250.543	31.158	2.66	5.34	5000	26700	0.675	18019.758	369.41	250	350
1065	00:17:45	-1.041	250.93	31.184	2.66	5.34	5000	26700	0.674	18006.452	369.60	250	350
1066	00:17:46	-1.043	251.318	31.209	2.659	5.341	5000	26705	0.674	17996.500	369.81	250	350
1067	00:17:47	-1.045	251.706	31.235	2.658	5.342	5000	26710	0.673	17986.563	370.02	250	350
1068	00:17:48	-1.047	252.093	31.261	2.658	5.342	5000	26710	0.673	17973.311	370.24	250	350
1069	00:17:49	-1.049	252.481	31.286	2.657	5.343	5000	26715	0.672	17963.406	370.47	250	350
1070	00:17:50	-1.051	252.869	31.312	2.656	5.344	5000	26720	0.672	17953.515	370.71	250	350
1071	00:17:51	-1.053	253.257	31.338	2.656	5.344	5000	26720	0.671	17940.282	370.95	250	350
1072	00:17:52	-1.055	253.645	31.363	2.655	5.345	5000	26725	0.671	17930.423	371.20	250	350
1073	00:17:53	-1.057	254.034	31.389	2.654	5.346	5000	26730	0.670	17920.545	371.46	250	350
1074	00:17:54	-1.059	254.422	31.415	2.654	5.346	5000	26730	0.670	17907.365	371.73	250	350
1075	00:17:55	-1.061	254.81	31.441	2.653	5.347	5000	26735	0.669	17897.552	372.01	250	350
1076	00:17:56	-1.063	255.199	31.467	2.653	5.347	5000	26735	0.669	17884.375	372.29	250	350
1077	00:17:57	-1.065	255.588	31.493	2.652	5.348	5000	26740	0.668	17874.560	372.58	250	350
1078	00:17:58	-1.067	255.977	31.519	2.651	5.349	5000	26745	0.668	17864.758	372.88	250	350
1079	00:17:59	-1.069	256.365	31.544	2.651	5.349	5000	26745	0.667	17851.668	373.18	250	350
1080	00:18:00	-1.071	256.754	31.57	2.65	5.35	5000	26750	0.667	17841.898	373.49	250	350
1081	00:18:01	-1.073	257.144	31.596	2.649	5.351	5000	26755	0.666	17832.109	373.81	250	350
1082	00:18:02	-1.075	257.533	31.622	2.649	5.351	5000	26755	0.666	17819.038	374.13	250	350
1083	00:18:03	-1.077	257.922	31.648	2.648	5.352	5000	26760	0.666	17809.313	374.46	250	350
1084	00:18:04	-1.079	258.311	31.674	2.647	5.353	5000	26765	0.665	17799.603	374.80	250	350
1085	00:18:05	-1.081	258.701	31.701	2.647	5.353	5000	26765	0.665	17786.551	375.14	250	350
1086	00:18:06	-1.083	259.091	31.727	2.646	5.354	5000	26770	0.664	17776.838	375.48	250	350

1087	00:18:07	-1.085	259.48	31.753	2.645	5.355	5000	26775	0.664	17767.173	375.84	250	350
1088	00:18:08	-1.087	259.87	31.779	2.645	5.355	5000	26775	0.663	17754.173	376.19	250	350
1089	00:18:09	-1.089	260.26	31.805	2.644	5.356	5000	26780	0.663	17744.505	376.56	250	350
1090	00:18:10	-1.091	260.65	31.831	2.644	5.356	5000	26780	0.662	17731.541	376.93	250	350
1091	00:18:11	-1.093	261.04	31.858	2.643	5.357	5000	26785	0.662	17721.903	377.30	250	350
1092	00:18:12	-1.095	261.431	31.884	2.642	5.358	5000	26790	0.661	17712.247	377.68	250	350
1093	00:18:13	-1.097	261.821	31.91	2.642	5.358	5000	26790	0.661	17699.335	378.06	250	350
1094	00:18:14	-1.099	262.211	31.936	2.641	5.359	5000	26795	0.660	17689.742	378.44	250	350
1095	00:18:15	-1.101	262.602	31.963	2.64	5.36	5000	26800	0.660	17680.130	378.84	250	350
1096	00:18:16	-1.104	262.993	31.989	2.64	5.36	5000	26800	0.659	17667.237	379.23	250	350
1097	00:18:17	-1.106	263.383	32.015	2.639	5.361	5000	26805	0.659	17657.688	379.63	250	350
1098	00:18:18	-1.108	263.774	32.042	2.638	5.362	5000	26810	0.658	17648.121	380.03	250	350
1099	00:18:19	-1.11	264.165	32.068	2.638	5.362	5000	26810	0.658	17635.278	380.44	250	350
1100	00:18:20	-1.112	264.556	32.095	2.637	5.363	5000	26815	0.657	17625.741	380.84	250	350
1101	00:18:21	-1.114	264.948	32.121	2.636	5.364	5000	26820	0.657	17616.185	381.26	250	350
1102	00:18:22	-1.116	265.339	32.148	2.636	5.364	5000	26820	0.656	17603.394	381.67	250	350
1103	00:18:23	-1.118	265.73	32.174	2.635	5.365	5000	26825	0.656	17593.901	382.09	250	350
1104	00:18:24	-1.12	266.122	32.201	2.634	5.366	5000	26830	0.655	17584.389	382.51	250	350
1105	00:18:25	-1.122	266.513	32.227	2.634	5.366	5000	26830	0.655	17571.648	382.93	250	350
1106	00:18:26	-1.124	266.905	32.254	2.633	5.367	5000	26835	0.654	17562.166	383.36	250	350
1107	00:18:27	-1.126	267.297	32.281	2.632	5.368	5000	26840	0.654	17552.698	383.79	250	350
1108	00:18:28	-1.128	267.689	32.307	2.632	5.368	5000	26840	0.654	17539.975	384.22	250	350
1109	00:18:29	-1.13	268.081	32.334	2.631	5.369	5000	26845	0.653	17530.537	384.65	250	350
1110	00:18:30	-1.132	268.473	32.361	2.63	5.37	5000	26850	0.653	17521.112	385.09	250	350
1111	00:18:31	-1.134	268.865	32.387	2.63	5.37	5000	26850	0.652	17508.440	385.53	250	350
1112	00:18:32	-1.136	269.257	32.414	2.629	5.371	5000	26855	0.652	17499.045	385.97	250	350
1113	00:18:33	-1.138	269.65	32.441	2.628	5.372	5000	26860	0.651	17489.631	386.41	250	350
1114	00:18:34	-1.141	270.042	32.468	2.628	5.372	5000	26860	0.651	17477.009	386.85	250	350
1115	00:18:35	-1.143	270.435	32.495	2.627	5.373	5000	26865	0.650	17467.625	387.29	250	350
1116	00:18:36	-1.145	270.827	32.521	2.627	5.373	5000	26865	0.650	17455.037	387.74	250	350
1117	00:18:37	-1.147	271.22	32.548	2.626	5.374	5000	26870	0.649	17445.682	388.19	250	350
1118	00:18:38	-1.149	271.613	32.575	2.625	5.375	5000	26875	0.649	17436.340	388.64	250	350
1119	00:18:39	-1.151	272.006	32.602	2.625	5.375	5000	26875	0.648	17423.771	389.09	250	350

1120	00:18:40	-1.153	272.399	32.629	2.624	5.376	5000	26880	0.648	17414.458	389.54	250	350
1121	00:18:41	-1.155	272.792	32.656	2.623	5.377	5000	26885	0.647	17405.159	389.99	250	350
1122	00:18:42	-1.157	273.186	32.683	2.623	5.377	5000	26885	0.647	17392.607	390.44	250	350
1123	00:18:43	-1.159	273.579	32.71	2.622	5.378	5000	26890	0.646	17383.337	390.90	250	350
1124	00:18:44	-1.161	273.973	32.737	2.621	5.379	5000	26895	0.646	17374.049	391.35	250	350
1125	00:18:45	-1.163	274.366	32.764	2.621	5.379	5000	26895	0.646	17361.578	391.81	250	350
1126	00:18:46	-1.165	274.76	32.791	2.62	5.38	5000	26900	0.645	17352.319	392.26	250	350
1127	00:18:47	-1.167	275.154	32.818	2.619	5.381	5000	26905	0.645	17343.073	392.72	250	350
1128	00:18:48	-1.17	275.548	32.845	2.619	5.381	5000	26905	0.644	17330.620	393.18	250	350
1129	00:18:49	-1.172	275.942	32.873	2.618	5.382	5000	26910	0.644	17321.402	393.64	250	350
1130	00:18:50	-1.174	276.336	32.9	2.617	5.383	5000	26915	0.643	17312.198	394.10	250	350
1131	00:18:51	-1.176	276.73	32.927	2.617	5.383	5000	26915	0.643	17299.794	394.56	250	350
1132	00:18:52	-1.178	277.124	32.954	2.616	5.384	5000	26920	0.642	17290.619	395.02	250	350
1133	00:18:53	-1.18	277.519	32.981	2.615	5.385	5000	26925	0.642	17281.425	395.48	250	350
1134	00:18:54	-1.182	277.913	33.009	2.614	5.386	5000	26930	0.641	17272.276	395.94	250	350
1135	00:18:55	-1.184	278.308	33.036	2.614	5.386	5000	26930	0.641	17259.904	396.40	250	350
1136	00:18:56	-1.186	278.703	33.063	2.613	5.387	5000	26935	0.640	17250.752	396.87	250	350
1137	00:18:57	-1.188	279.097	33.091	2.612	5.388	5000	26940	0.640	17241.645	397.33	250	350
1138	00:18:58	-1.19	279.492	33.118	2.612	5.388	5000	26940	0.640	17229.321	397.79	250	350
1139	00:18:59	-1.192	279.887	33.145	2.611	5.389	5000	26945	0.639	17220.211	398.26	250	350
1140	00:19:00	-1.195	280.283	33.173	2.61	5.39	5000	26950	0.639	17211.083	398.72	250	350
1141	00:19:01	-1.197	280.678	33.2	2.61	5.39	5000	26950	0.638	17198.807	399.18	250	350
1142	00:19:02	-1.199	281.073	33.228	2.609	5.391	5000	26955	0.638	17189.738	399.65	250	350
1143	00:19:03	-1.201	281.468	33.255	2.608	5.392	5000	26960	0.637	17180.682	400.11	250	350
1144	00:19:04	-1.203	281.864	33.283	2.608	5.392	5000	26960	0.637	17168.424	400.58	250	350
1145	00:19:05	-1.205	282.26	33.31	2.607	5.393	5000	26965	0.636	17159.364	401.04	250	350
1146	00:19:06	-1.207	282.655	33.338	2.606	5.394	5000	26970	0.636	17150.349	401.50	250	350
1147	00:19:07	-1.209	283.051	33.365	2.606	5.394	5000	26970	0.635	17138.139	401.97	250	350
1148	00:19:08	-1.211	283.447	33.393	2.605	5.395	5000	26975	0.635	17129.120	402.43	250	350
1149	00:19:09	-1.213	283.843	33.421	2.604	5.396	5000	26980	0.635	17120.115	402.90	250	350
1150	00:19:10	-1.215	284.239	33.448	2.604	5.396	5000	26980	0.634	17107.952	403.36	250	350
1151	00:19:11	-1.218	284.635	33.476	2.603	5.397	5000	26985	0.634	17098.974	403.83	250	350
1152	00:19:12	-1.22	285.032	33.504	2.602	5.398	5000	26990	0.633	17089.979	404.29	250	350

1153	00:19:13	-1.222	285.428	33.531	2.602	5.398	5000	26990	0.633	17077.863	404.76	250	350
1154	00:19:14	-1.224	285.825	33.559	2.601	5.399	5000	26995	0.632	17068.895	405.22	250	350
1155	00:19:15	-1.226	286.221	33.587	2.6	5.4	5000	27000	0.632	17059.971	405.69	250	350
1156	00:19:16	-1.228	286.618	33.615	2.6	5.4	5000	27000	0.631	17047.872	406.16	250	350
1157	00:19:17	-1.23	287.015	33.642	2.599	5.401	5000	27005	0.631	17038.944	406.62	250	350
1158	00:19:18	-1.232	287.412	33.67	2.598	5.402	5000	27010	0.631	17030.029	407.09	250	350
1159	00:19:19	-1.234	287.809	33.698	2.598	5.402	5000	27010	0.630	17017.977	407.55	250	350
1160	00:19:20	-1.237	288.206	33.726	2.597	5.403	5000	27015	0.630	17009.090	408.02	250	350
1161	00:19:21	-1.239	288.603	33.754	2.596	5.404	5000	27020	0.629	17000.215	408.48	250	350
1162	00:19:22	-1.241	289	33.782	2.595	5.405	5000	27025	0.629	16991.353	408.95	250	350
1163	00:19:23	-1.243	289.398	33.81	2.595	5.405	5000	27025	0.628	16979.331	409.41	250	350
1164	00:19:24	-1.245	289.795	33.838	2.594	5.406	5000	27030	0.628	16970.497	409.87	250	350
1165	00:19:25	-1.247	290.193	33.866	2.593	5.407	5000	27035	0.627	16961.644	410.34	250	350
1166	00:19:26	-1.249	290.591	33.894	2.593	5.407	5000	27035	0.627	16949.669	410.80	250	350
1167	00:19:27	-1.251	290.989	33.922	2.592	5.408	5000	27040	0.627	16940.844	411.27	250	350
1168	00:19:28	-1.253	291.386	33.95	2.591	5.409	5000	27045	0.626	16932.061	411.73	250	350
1169	00:19:29	-1.256	291.784	33.978	2.591	5.409	5000	27045	0.626	16920.132	412.20	250	350
1170	00:19:30	-1.258	292.183	34.006	2.59	5.41	5000	27050	0.625	16911.316	412.66	250	350
1171	00:19:31	-1.26	292.581	34.034	2.589	5.411	5000	27055	0.625	16902.542	413.12	250	350
1172	00:19:32	-1.262	292.979	34.062	2.589	5.411	5000	27055	0.624	16890.659	413.59	250	350
1173	00:19:33	-1.264	293.378	34.09	2.588	5.412	5000	27060	0.624	16881.883	414.05	250	350
1174	00:19:34	-1.266	293.776	34.119	2.587	5.413	5000	27065	0.623	16873.148	414.51	250	350
1175	00:19:35	-1.268	294.175	34.147	2.586	5.414	5000	27070	0.623	16864.396	414.98	250	350
1176	00:19:36	-1.27	294.574	34.175	2.586	5.414	5000	27070	0.623	16852.544	415.44	250	350
1177	00:19:37	-1.273	294.972	34.203	2.585	5.415	5000	27075	0.622	16843.849	415.90	250	350
1178	00:19:38	-1.275	295.371	34.232	2.584	5.416	5000	27080	0.622	16835.136	416.37	250	350
1179	00:19:39	-1.277	295.77	34.26	2.584	5.416	5000	27080	0.621	16823.329	416.83	250	350
1180	00:19:40	-1.279	296.17	34.288	2.583	5.417	5000	27085	0.621	16814.613	417.29	250	350
1181	00:19:41	-1.281	296.569	34.317	2.582	5.418	5000	27090	0.620	16805.939	417.75	250	350
1182	00:19:42	-1.283	296.968	34.345	2.582	5.418	5000	27090	0.620	16794.177	418.22	250	350
1183	00:19:43	-1.285	297.368	34.373	2.581	5.419	5000	27095	0.620	16785.500	418.68	250	350
1184	00:19:44	-1.287	297.767	34.402	2.58	5.42	5000	27100	0.619	16776.864	419.14	250	350
1185	00:19:45	-1.29	298.167	34.43	2.58	5.42	5000	27100	0.619	16765.118	419.60	250	350

1186	00:19:46	-1.292	298.567	34.459	2.579	5.421	5000	27105	0.618	16756.479	420.06	250	350
1187	00:19:47	-1.294	298.966	34.487	2.578	5.422	5000	27110	0.618	16747.882	420.52	250	350
1188	00:19:48	-1.296	299.366	34.516	2.577	5.423	5000	27115	0.617	16739.268	420.99	250	350
1189	00:19:49	-1.298	299.766	34.544	2.577	5.423	5000	27115	0.617	16727.580	421.45	250	350
1190	00:19:50	-1.3	300.167	34.573	2.576	5.424	5000	27120	0.616	16718.963	421.91	250	350
1191	00:19:51	-1.302	300.567	34.601	2.575	5.425	5000	27125	0.616	16710.387	422.37	250	350
1192	00:19:52	-1.305	300.967	34.63	2.575	5.425	5000	27125	0.616	16698.744	422.83	250	350
1193	00:19:53	-1.307	301.368	34.658	2.574	5.426	5000	27130	0.615	16690.165	423.29	250	350
1194	00:19:54	-1.309	301.768	34.687	2.573	5.427	5000	27135	0.615	16681.626	423.75	250	350
1195	00:19:55	-1.311	302.169	34.716	2.573	5.427	5000	27135	0.614	16669.999	424.21	250	350
1196	00:19:56	-1.313	302.57	34.744	2.572	5.428	5000	27140	0.614	16661.458	424.67	250	350
1197	00:19:57	-1.315	302.971	34.773	2.571	5.429	5000	27145	0.613	16652.928	425.13	250	350
1198	00:19:58	-1.317	303.372	34.802	2.57	5.43	5000	27150	0.613	16644.411	425.59	250	350
1199	00:19:59	-1.32	303.773	34.83	2.57	5.43	5000	27150	0.613	16632.842	426.04	250	350
1200	00:20:00	-1.322	304.174	34.859	2.569	5.431	5000	27155	0.612	16624.350	426.50	250	350
1201	00:20:01	-1.324	304.575	34.888	2.568	5.432	5000	27160	0.612	16615.870	426.96	250	350
1202	00:20:02	-1.326	304.977	34.917	2.568	5.432	5000	27160	0.611	16604.316	427.42	250	350
1203	00:20:03	-1.328	305.378	34.946	2.567	5.433	5000	27165	0.611	16595.861	427.88	250	350
1204	00:20:04	-1.33	305.78	34.974	2.566	5.434	5000	27170	0.611	16587.390	428.34	250	350
1205	00:20:05	-1.332	306.182	35.003	2.565	5.435	5000	27175	0.610	16578.930	428.79	250	350
1206	00:20:06	-1.335	306.584	35.032	2.565	5.435	5000	27175	0.610	16567.434	429.25	250	350
1207	00:20:07	-1.337	306.985	35.061	2.564	5.436	5000	27180	0.609	16559.029	429.71	250	350
1208	00:20:08	-1.339	307.388	35.09	2.563	5.437	5000	27185	0.609	16550.578	430.17	250	350
1209	00:20:09	-1.341	307.79	35.119	2.563	5.437	5000	27185	0.608	16539.125	430.62	250	350
1210	00:20:10	-1.343	308.192	35.148	2.562	5.438	5000	27190	0.608	16530.728	431.08	250	350
1211	00:20:11	-1.345	308.594	35.177	2.561	5.439	5000	27195	0.608	16522.342	431.54	250	350
1212	00:20:12	-1.347	308.997	35.206	2.56	5.44	5000	27200	0.607	16513.940	431.99	250	350
1213	00:20:13	-1.35	309.399	35.235	2.56	5.44	5000	27200	0.607	16502.545	432.45	250	350
1214	00:20:14	-1.352	309.802	35.264	2.559	5.441	5000	27205	0.606	16494.168	432.90	250	350
1215	00:20:15	-1.354	310.205	35.293	2.558	5.442	5000	27210	0.606	16485.802	433.36	250	350
1216	00:20:16	-1.356	310.608	35.322	2.558	5.442	5000	27210	0.605	16474.421	433.82	250	350
1217	00:20:17	-1.358	311.011	35.351	2.557	5.443	5000	27215	0.605	16466.081	434.27	250	350
1218	00:20:18	-1.36	311.414	35.38	2.556	5.444	5000	27220	0.605	16457.752	434.73	250	350

1219	00:20:19	-1.363	311.817	35.41	2.556	5.444	5000	27220	0.604	16446.414	435.18	250	350
1220	00:20:20	-1.365	312.22	35.439	2.555	5.445	5000	27225	0.604	16438.111	435.64	250	350
1221	00:20:21	-1.367	312.624	35.468	2.554	5.446	5000	27230	0.603	16429.790	436.09	250	350
1222	00:20:22	-1.369	313.027	35.497	2.553	5.447	5000	27235	0.603	16421.509	436.54	250	350
1223	00:20:23	-1.371	313.431	35.526	2.553	5.447	5000	27235	0.603	16410.199	437.00	250	350
1224	00:20:24	-1.373	313.835	35.556	2.552	5.448	5000	27240	0.602	16401.915	437.45	250	350
1225	00:20:25	-1.375	314.239	35.585	2.551	5.449	5000	27245	0.602	16393.643	437.90	250	350
1226	00:20:26	-1.378	314.643	35.614	2.551	5.449	5000	27245	0.601	16382.375	438.36	250	350
1227	00:20:27	-1.38	315.047	35.644	2.55	5.45	5000	27250	0.601	16374.128	438.81	250	350
1228	00:20:28	-1.382	315.451	35.673	2.549	5.451	5000	27255	0.600	16365.891	439.26	250	350
1229	00:20:29	-1.384	315.855	35.702	2.548	5.452	5000	27260	0.600	16357.666	439.72	250	350
1230	00:20:30	-1.386	316.26	35.732	2.548	5.452	5000	27260	0.600	16346.426	440.17	250	350
1231	00:20:31	-1.388	316.664	35.761	2.547	5.453	5000	27265	0.599	16338.226	440.62	250	350
1232	00:20:32	-1.391	317.069	35.79	2.546	5.454	5000	27270	0.599	16330.009	441.07	250	350
1233	00:20:33	-1.393	317.473	35.82	2.545	5.455	5000	27275	0.598	16321.831	441.52	250	350
1234	00:20:34	-1.395	317.878	35.849	2.545	5.455	5000	27275	0.598	16310.646	441.98	250	350
1235	00:20:35	-1.397	318.283	35.879	2.544	5.456	5000	27280	0.598	16302.465	442.43	250	350
1236	00:20:36	-1.399	318.688	35.908	2.543	5.457	5000	27285	0.597	16294.295	442.88	250	350
1237	00:20:37	-1.401	319.093	35.938	2.543	5.457	5000	27285	0.597	16283.153	443.33	250	350
1238	00:20:38	-1.404	319.499	35.967	2.542	5.458	5000	27290	0.596	16274.979	443.78	250	350
1239	00:20:39	-1.406	319.904	35.997	2.541	5.459	5000	27295	0.596	16266.845	444.23	250	350
1240	00:20:40	-1.408	320.31	36.026	2.54	5.46	5000	27300	0.596	16258.694	444.68	250	350
1241	00:20:41	-1.41	320.715	36.056	2.54	5.46	5000	27300	0.595	16247.606	445.13	250	350
1242	00:20:42	-1.412	321.121	36.086	2.539	5.461	5000	27305	0.595	16239.480	445.58	250	350
1243	00:20:43	-1.415	321.527	36.115	2.538	5.462	5000	27310	0.594	16231.364	446.03	250	350
1244	00:20:44	-1.417	321.933	36.145	2.538	5.462	5000	27310	0.594	16220.290	446.48	250	350
1245	00:20:45	-1.419	322.339	36.175	2.537	5.463	5000	27315	0.594	16212.199	446.93	250	350
1246	00:20:46	-1.421	322.745	36.204	2.536	5.464	5000	27320	0.593	16204.119	447.38	250	350
1247	00:20:47	-1.423	323.151	36.234	2.535	5.465	5000	27325	0.593	16196.050	447.83	250	350
1248	00:20:48	-1.425	323.558	36.264	2.535	5.465	5000	27325	0.592	16185.003	448.27	250	350
1249	00:20:49	-1.428	323.964	36.294	2.534	5.466	5000	27330	0.592	16176.958	448.72	250	350
1250	00:20:50	-1.43	324.371	36.323	2.533	5.467	5000	27335	0.592	16168.896	449.17	250	350
1251	00:20:51	-1.432	324.778	36.353	2.532	5.468	5000	27340	0.591	16160.846	449.62	250	350

1252	00:20:52	-1.434	325.185	36.383	2.532	5.468	5000	27340	0.591	16149.853	450.06	250	350
1253	00:20:53	-1.436	325.592	36.413	2.531	5.469	5000	27345	0.590	16141.826	450.51	250	350
1254	00:20:54	-1.438	325.999	36.443	2.53	5.47	5000	27350	0.590	16133.811	450.96	250	350
1255	00:20:55	-1.441	326.406	36.473	2.53	5.47	5000	27350	0.590	16122.859	451.40	250	350
1256	00:20:56	-1.443	326.813	36.502	2.529	5.471	5000	27355	0.589	16114.867	451.85	250	350
1257	00:20:57	-1.445	327.221	36.532	2.528	5.472	5000	27360	0.589	16106.859	452.30	250	350
1258	00:20:58	-1.447	327.628	36.562	2.527	5.473	5000	27365	0.588	16098.889	452.74	250	350
1259	00:20:59	-1.449	328.036	36.592	2.527	5.473	5000	27365	0.588	16087.963	453.19	250	350
1260	00:21:00	-1.452	328.444	36.622	2.526	5.474	5000	27370	0.588	16079.990	453.63	250	350
1261	00:21:01	-1.454	328.851	36.652	2.525	5.475	5000	27375	0.587	16072.054	454.08	250	350
1262	00:21:02	-1.456	329.259	36.682	2.524	5.476	5000	27380	0.587	16064.102	454.52	250	350
1263	00:21:03	-1.458	329.668	36.712	2.524	5.476	5000	27380	0.586	16053.203	454.97	250	350
1264	00:21:04	-1.46	330.076	36.742	2.523	5.477	5000	27385	0.586	16045.275	455.41	250	350
1265	00:21:05	-1.462	330.484	36.772	2.522	5.478	5000	27390	0.586	16037.357	455.86	250	350
1266	00:21:06	-1.465	330.893	36.803	2.522	5.478	5000	27390	0.585	16026.498	456.30	250	350
1267	00:21:07	-1.467	331.301	36.833	2.521	5.479	5000	27395	0.585	16018.604	456.75	250	350
1268	00:21:08	-1.469	331.71	36.863	2.52	5.48	5000	27400	0.584	16010.694	457.19	250	350
1269	00:21:09	-1.471	332.119	36.893	2.519	5.481	5000	27405	0.584	16002.795	457.63	250	350
1270	00:21:10	-1.473	332.528	36.923	2.519	5.481	5000	27405	0.584	15991.989	458.08	250	350
1271	00:21:11	-1.476	332.937	36.953	2.518	5.482	5000	27410	0.583	15984.113	458.52	250	350
1272	00:21:12	-1.478	333.346	36.983	2.517	5.483	5000	27415	0.583	15976.247	458.96	250	350
1273	00:21:13	-1.48	333.755	37.014	2.516	5.484	5000	27420	0.582	15968.393	459.40	250	350
1274	00:21:14	-1.482	334.165	37.044	2.516	5.484	5000	27420	0.582	15957.612	459.85	250	350
1275	00:21:15	-1.484	334.574	37.074	2.515	5.485	5000	27425	0.582	15949.781	460.29	250	350
1276	00:21:16	-1.487	334.984	37.104	2.514	5.486	5000	27430	0.581	15941.933	460.73	250	350
1277	00:21:17	-1.489	335.394	37.135	2.513	5.487	5000	27435	0.581	15934.097	461.17	250	350
1278	00:21:18	-1.491	335.804	37.165	2.513	5.487	5000	27435	0.580	15923.369	461.61	250	350
1279	00:21:19	-1.493	336.214	37.195	2.512	5.488	5000	27440	0.580	15915.555	462.05	250	350
1280	00:21:20	-1.495	336.624	37.226	2.511	5.489	5000	27445	0.580	15907.752	462.49	250	350
1281	00:21:21	-1.498	337.034	37.256	2.51	5.49	5000	27450	0.579	15899.959	462.93	250	350
1282	00:21:22	-1.5	337.445	37.287	2.51	5.49	5000	27450	0.579	15889.256	463.37	250	350
1283	00:21:23	-1.502	337.855	37.317	2.509	5.491	5000	27455	0.578	15881.487	463.81	250	350
1284	00:21:24	-1.504	338.266	37.347	2.508	5.492	5000	27460	0.578	15873.701	464.25	250	350

1285	00:21:25	-1.506	338.676	37.378	2.508	5.492	5000	27460	0.578	15863.064	464.69	250	350
1286	00:21:26	-1.509	339.087	37.408	2.507	5.493	5000	27465	0.577	15855.301	465.13	250	350
1287	00:21:27	-1.511	339.498	37.439	2.506	5.494	5000	27470	0.577	15847.549	465.57	250	350
1288	00:21:28	-1.513	339.909	37.469	2.505	5.495	5000	27475	0.577	15839.807	466.01	250	350
1289	00:21:29	-1.515	340.321	37.5	2.505	5.495	5000	27475	0.576	15829.170	466.45	250	350
1290	00:21:30	-1.517	340.732	37.53	2.504	5.496	5000	27480	0.576	15821.451	466.88	250	350
1291	00:21:31	-1.52	341.144	37.561	2.503	5.497	5000	27485	0.575	15813.716	467.32	250	350
1292	00:21:32	-1.522	341.555	37.592	2.502	5.498	5000	27490	0.575	15806.018	467.76	250	350
1293	00:21:33	-1.524	341.967	37.622	2.502	5.498	5000	27490	0.575	15795.431	468.20	250	350
1294	00:21:34	-1.526	342.379	37.653	2.501	5.499	5000	27495	0.574	15787.729	468.63	250	350
1295	00:21:35	-1.528	342.791	37.683	2.5	5.5	5000	27500	0.574	15780.038	469.07	250	350
1296	00:21:36	-1.531	343.203	37.714	2.499	5.501	5000	27505	0.573	15772.357	469.51	250	350
1297	00:21:37	-1.533	343.615	37.745	2.499	5.501	5000	27505	0.573	15761.821	469.94	250	350
1298	00:21:38	-1.535	344.028	37.775	2.498	5.502	5000	27510	0.573	15754.137	470.38	250	350
1299	00:21:39	-1.537	344.44	37.806	2.497	5.503	5000	27515	0.572	15746.489	470.81	250	350
1300	00:21:40	-1.539	344.853	37.837	2.496	5.504	5000	27520	0.572	15738.825	471.25	250	350
1301	00:21:41	-1.542	345.265	37.868	2.496	5.504	5000	27520	0.572	15728.340	471.69	250	350
1302	00:21:42	-1.544	345.678	37.898	2.495	5.505	5000	27525	0.571	15720.699	472.12	250	350
1303	00:21:43	-1.546	346.091	37.929	2.494	5.506	5000	27530	0.571	15713.068	472.55	250	350
1304	00:21:44	-1.548	346.504	37.96	2.493	5.507	5000	27535	0.570	15705.447	472.99	250	350
1305	00:21:45	-1.55	346.918	37.991	2.493	5.507	5000	27535	0.570	15694.961	473.42	250	350
1306	00:21:46	-1.553	347.331	38.021	2.492	5.508	5000	27540	0.570	15687.362	473.86	250	350
1307	00:21:47	-1.555	347.745	38.052	2.491	5.509	5000	27545	0.569	15679.748	474.29	250	350
1308	00:21:48	-1.557	348.158	38.083	2.49	5.51	5000	27550	0.569	15672.170	474.72	250	350
1309	00:21:49	-1.559	348.572	38.114	2.49	5.51	5000	27550	0.568	15661.734	475.16	250	350
1310	00:21:50	-1.561	348.986	38.145	2.489	5.511	5000	27555	0.568	15654.152	475.59	250	350
1311	00:21:51	-1.564	349.4	38.176	2.488	5.512	5000	27560	0.568	15646.581	476.02	250	350
1312	00:21:52	-1.566	349.814	38.207	2.487	5.513	5000	27565	0.567	15639.019	476.45	250	350
1313	00:21:53	-1.568	350.229	38.238	2.487	5.513	5000	27565	0.567	15628.608	476.89	250	350
1314	00:21:54	-1.57	350.643	38.269	2.486	5.514	5000	27570	0.567	15621.069	477.32	250	350
1315	00:21:55	-1.572	351.058	38.3	2.485	5.515	5000	27575	0.566	15613.514	477.75	250	350
1316	00:21:56	-1.575	351.472	38.331	2.484	5.516	5000	27580	0.566	15605.995	478.18	250	350
1317	00:21:57	-1.577	351.887	38.362	2.484	5.516	5000	27580	0.565	15595.633	478.61	250	350

1318	00:21:58	-1.579	352.302	38.393	2.483	5.517	5000	27585	0.565	15588.110	479.04	250	350
1319	00:21:59	-1.581	352.717	38.424	2.482	5.518	5000	27590	0.565	15580.598	479.47	250	350
1320	00:22:00	-1.583	353.132	38.455	2.481	5.519	5000	27595	0.564	15573.095	479.90	250	350
1321	00:22:01	-1.586	353.548	38.486	2.481	5.519	5000	27595	0.564	15562.758	480.33	250	350
1322	00:22:02	-1.588	353.963	38.517	2.48	5.52	5000	27600	0.564	15555.277	480.76	250	350
1323	00:22:03	-1.59	354.379	38.548	2.479	5.521	5000	27605	0.563	15547.781	481.19	250	350
1324	00:22:04	-1.592	354.795	38.579	2.478	5.522	5000	27610	0.563	15540.295	481.62	250	350
1325	00:22:05	-1.595	355.211	38.611	2.478	5.522	5000	27610	0.562	15530.007	482.05	250	350
1326	00:22:06	-1.597	355.627	38.642	2.477	5.523	5000	27615	0.562	15522.543	482.48	250	350
1327	00:22:07	-1.599	356.043	38.673	2.476	5.524	5000	27620	0.562	15515.089	482.90	250	350
1328	00:22:08	-1.601	356.459	38.704	2.475	5.525	5000	27625	0.561	15507.644	483.33	250	350
1329	00:22:09	-1.603	356.876	38.735	2.475	5.525	5000	27625	0.561	15497.380	483.76	250	350
1330	00:22:10	-1.606	357.292	38.767	2.474	5.526	5000	27630	0.561	15489.957	484.19	250	350
1331	00:22:11	-1.608	357.709	38.798	2.473	5.527	5000	27635	0.560	15482.519	484.61	250	350
1332	00:22:12	-1.61	358.126	38.829	2.472	5.528	5000	27640	0.560	15475.092	485.04	250	350
1333	00:22:13	-1.612	358.543	38.86	2.472	5.528	5000	27640	0.560	15464.876	485.46	250	350
1334	00:22:14	-1.614	358.96	38.892	2.471	5.529	5000	27645	0.559	15457.470	485.89	250	350
1335	00:22:15	-1.617	359.377	38.923	2.47	5.53	5000	27650	0.559	15450.073	486.32	250	350
1336	00:22:16	-1.619	359.795	38.954	2.469	5.531	5000	27655	0.558	15442.662	486.74	250	350
1337	00:22:17	-1.621	360.212	38.986	2.469	5.531	5000	27655	0.558	15432.494	487.17	250	350
1338	00:22:18	-1.623	360.63	39.017	2.468	5.532	5000	27660	0.558	15425.105	487.59	250	350
1339	00:22:19	-1.626	361.048	39.049	2.467	5.533	5000	27665	0.557	15417.724	488.02	250	350
1340	00:22:20	-1.628	361.466	39.08	2.466	5.534	5000	27670	0.557	15410.354	488.44	250	350
1341	00:22:21	-1.63	361.884	39.111	2.466	5.534	5000	27670	0.557	15400.210	488.86	250	350
1342	00:22:22	-1.632	362.302	39.143	2.465	5.535	5000	27675	0.556	15392.861	489.29	250	350
1343	00:22:23	-1.634	362.72	39.174	2.464	5.536	5000	27680	0.556	15385.521	489.71	250	350
1344	00:22:24	-1.637	363.139	39.206	2.463	5.537	5000	27685	0.555	15378.167	490.13	250	350
1345	00:22:25	-1.639	363.558	39.237	2.462	5.538	5000	27690	0.555	15370.823	490.56	250	350
1346	00:22:26	-1.641	363.976	39.269	2.462	5.538	5000	27690	0.555	15360.739	490.98	250	350
1347	00:22:27	-1.643	364.395	39.3	2.461	5.539	5000	27695	0.554	15353.415	491.40	250	350
1348	00:22:28	-1.646	364.815	39.332	2.46	5.54	5000	27700	0.554	15346.077	491.82	250	350
1349	00:22:29	-1.648	365.234	39.363	2.459	5.541	5000	27705	0.554	15338.773	492.24	250	350
1350	00:22:30	-1.65	365.653	39.395	2.459	5.541	5000	27705	0.553	15328.712	492.67	250	350

1351	00:22:31	-1.652	366.073	39.427	2.458	5.542	5000	27710	0.553	15321.405	493.09	250	350
1352	00:22:32	-1.654	366.493	39.458	2.457	5.543	5000	27715	0.553	15314.108	493.51	250	350
1353	00:22:33	-1.657	366.912	39.49	2.456	5.544	5000	27720	0.552	15306.844	493.93	250	350
1354	00:22:34	-1.659	367.332	39.521	2.456	5.544	5000	27720	0.552	15296.806	494.35	250	350
1355	00:22:35	-1.661	367.752	39.553	2.455	5.545	5000	27725	0.551	15289.539	494.77	250	350
1356	00:22:36	-1.663	368.173	39.585	2.454	5.546	5000	27730	0.551	15282.258	495.19	250	350
1357	00:22:37	-1.666	368.593	39.616	2.453	5.547	5000	27735	0.551	15275.010	495.61	250	350
1358	00:22:38	-1.668	369.014	39.648	2.453	5.547	5000	27735	0.550	15264.996	496.02	250	350
1359	00:22:39	-1.67	369.434	39.68	2.452	5.548	5000	27740	0.550	15257.768	496.44		350
1360	00:22:40	-1.672	369.855	39.712	2.451	5.549	5000	27745	0.550	15250.527	496.86		350
1361	00:22:41	-1.674	370.276	39.743	2.45	5.55	5000	27750	0.549	15243.295	497.28		350
1362	00:22:42	-1.677	370.698	39.775	2.45	5.55	5000	27750	0.549	15233.304	497.70		350
1363	00:22:43	-1.679	371.119	39.807	2.449	5.551	5000	27755	0.549	15226.093	498.11		350
1364	00:22:44	-1.681	371.54	39.839	2.448	5.552	5000	27760	0.548	15218.891	498.53		350
1365	00:22:45	-1.683	371.962	39.87	2.447	5.553	5000	27765	0.548	15211.675	498.95		350
1366	00:22:46	-1.686	372.384	39.902	2.446	5.554	5000	27770	0.548	15204.468	499.36		350
1367	00:22:47	-1.688	372.806	39.934	2.446	5.554	5000	27770	0.547	15194.535	499.78		350
1368	00:22:48	-1.69	373.228	39.966	2.445	5.555	5000	27775	0.547	15187.349	500.19		350
1369	00:22:49	-1.692	373.65	39.998	2.444	5.556	5000	27780	0.546	15180.172	500.61		350
1370	00:22:50	-1.694	374.072	40.03	2.443	5.557	5000	27785	0.546	15173.005	501.02		350
1371	00:22:51	-1.697	374.495	40.062	2.443	5.557	5000	27785	0.546	15163.095	501.44		350
1372	00:22:52	-1.699	374.918	40.094	2.442	5.558	5000	27790	0.545	15155.925	501.85		350
1373	00:22:53	-1.701	375.34	40.126	2.441	5.559	5000	27795	0.545	15148.787	502.27		350
1374	00:22:54	-1.703	375.763	40.157	2.44	5.56	5000	27800	0.545	15141.636	502.68		350
1375	00:22:55	-1.706	376.187	40.189	2.44	5.56	5000	27800	0.544	15131.749	503.09		350
1376	00:22:56	-1.708	376.61	40.221	2.439	5.561	5000	27805	0.544	15124.617	503.51		350
1377	00:22:57	-1.71	377.033	40.253	2.438	5.562	5000	27810	0.544	15117.496	503.92		350
1378	00:22:58	-1.712	377.457	40.285	2.437	5.563	5000	27815	0.543	15110.360	504.33		350
1379	00:22:59	-1.714	377.881	40.317	2.436	5.564	5000	27820	0.543	15103.233	504.74		350
1380	00:23:00	-1.717	378.305	40.349	2.436	5.564	5000	27820	0.543	15093.403	505.16		350
1381	00:23:01	-1.719	378.729	40.381	2.435	5.565	5000	27825	0.542	15086.297	505.57		350
1382	00:23:02	-1.721	379.153	40.414	2.434	5.566	5000	27830	0.542	15079.200	505.98		350
1383	00:23:03	-1.723	379.577	40.446	2.433	5.567	5000	27835	0.541	15072.112	506.39		350

1384	00:23:04	-1.726	380.002	40.478	2.433	5.567	5000	27835	0.541	15062.305	506.80	350
1385	00:23:05	-1.728	380.427	40.51	2.432	5.568	5000	27840	0.541	15055.214	507.21	350
1386	00:23:06	-1.73	380.851	40.542	2.431	5.569	5000	27845	0.540	15048.156	507.62	350
1387	00:23:07	-1.732	381.277	40.574	2.43	5.57	5000	27850	0.540	15041.061	508.03	350
1388	00:23:08	-1.735	381.702	40.606	2.429	5.571	5000	27855	0.540	15033.998	508.44	350
1389	00:23:09	-1.737	382.127	40.638	2.429	5.571	5000	27855	0.539	15024.247	508.85	350
1390	00:23:10	-1.739	382.553	40.671	2.428	5.572	5000	27860	0.539	15017.181	509.25	350
1391	00:23:11	-1.741	382.978	40.703	2.427	5.573	5000	27865	0.539	15010.147	509.66	350
1392	00:23:12	-1.743	383.404	40.735	2.426	5.574	5000	27870	0.538	15003.099	510.07	350
1393	00:23:13	-1.746	383.83	40.767	2.426	5.574	5000	27870	0.538	14993.371	510.48	350
1394	00:23:14	-1.748	384.256	40.799	2.425	5.575	5000	27875	0.538	14986.343	510.88	350
1395	00:23:15	-1.75	384.683	40.832	2.424	5.576	5000	27880	0.537	14979.302	511.29	350
1396	00:23:16	-1.752	385.109	40.864	2.423	5.577	5000	27885	0.537	14972.293	511.70	350
1397	00:23:17	-1.755	385.536	40.896	2.423	5.577	5000	27885	0.537	14962.587	512.10	350
1398	00:23:18	-1.757	385.963	40.929	2.422	5.578	5000	27890	0.536	14955.575	512.51	350
1399	00:23:19	-1.759	386.39	40.961	2.421	5.579	5000	27895	0.536	14948.572	512.91	350
1400	00:23:20	-1.761	386.817	40.993	2.42	5.58	5000	27900	0.536	14941.578	513.32	350
1401	00:23:21	-1.764	387.244	41.026	2.419	5.581	5000	27905	0.535	14934.593	513.72	350
1402	00:23:22	-1.766	387.672	41.058	2.419	5.581	5000	27905	0.535	14924.920	514.13	350
1403	00:23:23	-1.768	388.099	41.09	2.418	5.582	5000	27910	0.535	14917.954	514.53	350
1404	00:23:24	-1.77	388.527	41.123	2.417	5.583	5000	27915	0.534	14910.976	514.93	350
1405	00:23:25	-1.772	388.955	41.155	2.416	5.584	5000	27920	0.534	14904.006	515.34	350
1406	00:23:26	-1.775	389.383	41.187	2.416	5.584	5000	27920	0.533	14894.378	515.74	350
1407	00:23:27	-1.777	389.812	41.22	2.415	5.585	5000	27925	0.533	14887.405	516.14	350
1408	00:23:28	-1.779	390.24	41.252	2.414	5.586	5000	27930	0.533	14880.464	516.54	350
1409	00:23:29	-1.781	390.669	41.285	2.413	5.587	5000	27935	0.532	14873.510	516.94	350
1410	00:23:30	-1.784	391.098	41.317	2.412	5.588	5000	27940	0.532	14866.564	517.35	350
1411	00:23:31	-1.786	391.527	41.35	2.412	5.588	5000	27940	0.532	14856.969	517.75	350
1412	00:23:32	-1.788	391.956	41.382	2.411	5.589	5000	27945	0.531	14850.043	518.15	350
1413	00:23:33	-1.79	392.385	41.415	2.41	5.59	5000	27950	0.531	14843.126	518.55	350
1414	00:23:34	-1.792	392.815	41.447	2.409	5.591	5000	27955	0.531	14836.196	518.95	350
1415	00:23:35	-1.795	393.244	41.48	2.409	5.591	5000	27955	0.530	14826.645	519.35	350
1416	00:23:36	-1.797	393.674	41.512	2.408	5.592	5000	27960	0.530	14819.734	519.75	350

1417	00:23:37	-1.799	394.104	41.545	2.407	5.593	5000	27965	0.530	14812.832	520.15	350
1418	00:23:38	-1.801	394.534	41.577	2.406	5.594	5000	27970	0.529	14805.939	520.54	350
1419	00:23:39	-1.804	394.965	41.61	2.405	5.595	5000	27975	0.529	14799.033	520.94	350
1420	00:23:40	-1.806	395.395	41.642	2.405	5.595	5000	27975	0.529	14789.515	521.34	350
1421	00:23:41	-1.808	395.826	41.675	2.404	5.596	5000	27980	0.528	14782.628	521.74	350
1422	00:23:42	-1.81	396.257	41.708	2.403	5.597	5000	27985	0.528	14775.750	522.13	350
1423	00:23:43	-1.813	396.688	41.74	2.402	5.598	5000	27990	0.528	14768.881	522.53	350
1424	00:23:44	-1.815	397.119	41.773	2.401	5.599	5000	27995	0.527	14762.021	522.93	350
1425	00:23:45	-1.817	397.551	41.806	2.401	5.599	5000	27995	0.527	14752.512	523.32	350
1426	00:23:46	-1.819	397.982	41.838	2.4	5.6	5000	28000	0.527	14745.671	523.72	350
1427	00:23:47	-1.821	398.414	41.871	2.399	5.601	5000	28005	0.526	14738.817	524.11	350
1428	00:23:48	-1.824	398.846	41.904	2.398	5.602	5000	28010	0.526	14731.972	524.51	350
1429	00:23:49	-1.826	399.278	41.936	2.398	5.602	5000	28010	0.526	14722.508	524.90	350
1430	00:23:50	-1.828	399.711	41.969	2.397	5.603	5000	28015	0.525	14715.660	525.29	350
1431	00:23:51	-1.83	400.143	42.002	2.396	5.604	5000	28020	0.525	14708.843	525.69	350
1432	00:23:52	-1.833	400.576	42.034	2.395	5.605	5000	28025	0.525	14702.012	526.08	350
1433	00:23:53	-1.835	401.009	42.067	2.394	5.606	5000	28030	0.524	14695.191	526.47	350
1434	00:23:54	-1.837	401.442	42.1	2.394	5.606	5000	28030	0.524	14685.758	526.87	350
1435	00:23:55	-1.839	401.875	42.133	2.393	5.607	5000	28035	0.524	14678.956	527.26	350
1436	00:23:56	-1.842	402.309	42.165	2.392	5.608	5000	28040	0.523	14672.141	527.65	350
1437	00:23:57	-1.844	402.742	42.198	2.391	5.609	5000	28045	0.523	14665.356	528.04	350
1438	00:23:58	-1.846	403.176	42.231	2.39	5.61	5000	28050	0.523	14658.558	528.43	350
1439	00:23:59	-1.848	403.61	42.264	2.39	5.61	5000	28050	0.522	14649.158	528.82	350
1440	00:24:00	-1.85	404.044	42.297	2.389	5.611	5000	28055	0.522	14642.379	529.21	350
1441	00:24:01	-1.853	404.479	42.33	2.388	5.612	5000	28060	0.522	14635.587	529.60	350
1442	00:24:02	-1.855	404.913	42.362	2.387	5.613	5000	28065	0.521	14628.826	529.99	350
1443	00:24:03	-1.857	405.348	42.395	2.387	5.613	5000	28065	0.521	14619.447	530.38	350
1444	00:24:04	-1.859	405.783	42.428	2.386	5.614	5000	28070	0.521	14612.683	530.77	350
1445	00:24:05	-1.862	406.218	42.461	2.385	5.615	5000	28075	0.520	14605.928	531.16	350
1446	00:24:06	-1.864	406.653	42.494	2.384	5.616	5000	28080	0.520	14599.181	531.54	350
1447	00:24:07	-1.866	407.089	42.527	2.383	5.617	5000	28085	0.520	14592.422	531.93	350
1448	00:24:08	-1.868	407.524	42.56	2.383	5.617	5000	28085	0.519	14583.096	532.32	350
1449	00:24:09	-1.871	407.96	42.593	2.382	5.618	5000	28090	0.519	14576.356	532.71	350

1450	00:24:10	-1.873	408.396	42.626	2.381	5.619	5000	28095	0.519	14569.624	533.09	350
1451	00:24:11	-1.875	408.832	42.659	2.38	5.62	5000	28100	0.518	14562.900	533.48	350
1452	00:24:12	-1.877	409.269	42.692	2.379	5.621	5000	28105	0.518	14556.164	533.86	350
1453	00:24:13	-1.879	409.705	42.725	2.379	5.621	5000	28105	0.518	14546.870	534.25	350
1454	00:24:14	-1.882	410.142	42.758	2.378	5.622	5000	28110	0.517	14540.153	534.63	350
1455	00:24:15	-1.884	410.579	42.791	2.377	5.623	5000	28115	0.517	14533.445	535.02	350
1456	00:24:16	-1.886	411.016	42.824	2.376	5.624	5000	28120	0.517	14526.745	535.40	350
1457	00:24:17	-1.888	411.454	42.857	2.375	5.625	5000	28125	0.516	14520.032	535.78	350
1458	00:24:18	-1.891	411.891	42.89	2.375	5.625	5000	28125	0.516	14510.769	536.17	350
1459	00:24:19	-1.893	412.329	42.923	2.374	5.626	5000	28130	0.516	14504.075	536.55	350
1460	00:24:20	-1.895	412.767	42.956	2.373	5.627	5000	28135	0.515	14497.390	536.93	350
1461	00:24:21	-1.897	413.205	42.989	2.372	5.628	5000	28140	0.515	14490.713	537.31	350
1462	00:24:22	-1.899	413.644	43.022	2.371	5.629	5000	28145	0.515	14484.024	537.69	350
1463	00:24:23	-1.902	414.082	43.055	2.371	5.629	5000	28145	0.514	14474.793	538.07	350
1464	00:24:24	-1.904	414.521	43.088	2.37	5.63	5000	28150	0.514	14468.122	538.45	350
1465	00:24:25	-1.906	414.96	43.121	2.369	5.631	5000	28155	0.514	14461.460	538.83	350
1466	00:24:26	-1.908	415.399	43.154	2.368	5.632	5000	28160	0.513	14454.806	539.21	350
1467	00:24:27	-1.911	415.838	43.187	2.368	5.632	5000	28160	0.513	14445.596	539.59	350
1468	00:24:28	-1.913	416.278	43.221	2.367	5.633	5000	28165	0.513	14438.940	539.97	350
1469	00:24:29	-1.915	416.718	43.254	2.366	5.634	5000	28170	0.512	14432.292	540.35	350
1470	00:24:30	-1.917	417.158	43.287	2.365	5.635	5000	28175	0.512	14425.653	540.73	350
1471	00:24:31	-1.92	417.598	43.32	2.364	5.636	5000	28180	0.512	14419.023	541.11	350
1472	00:24:32	-1.922	418.038	43.353	2.364	5.636	5000	28180	0.511	14409.844	541.48	350
1473	00:24:33	-1.924	418.479	43.386	2.363	5.637	5000	28185	0.511	14403.211	541.86	350
1474	00:24:34	-1.926	418.919	43.42	2.362	5.638	5000	28190	0.511	14396.607	542.24	350
1475	00:24:35	-1.928	419.36	43.453	2.361	5.639	5000	28195	0.510	14389.991	542.61	350
1476	00:24:36	-1.931	419.802	43.486	2.36	5.64	5000	28200	0.510	14383.362	542.99	350
1477	00:24:37	-1.933	420.243	43.519	2.36	5.64	5000	28200	0.510	14374.215	543.36	350
1478	00:24:38	-1.935	420.684	43.552	2.359	5.641	5000	28205	0.509	14367.625	543.74	350
1479	00:24:39	-1.937	421.126	43.586	2.358	5.642	5000	28210	0.509	14361.024	544.11	350
1480	00:24:40	-1.94	421.568	43.619	2.357	5.643	5000	28215	0.509	14354.431	544.48	350
1481	00:24:41	-1.942	422.01	43.652	2.356	5.644	5000	28220	0.508	14347.846	544.86	350
1482	00:24:42	-1.944	422.453	43.685	2.356	5.644	5000	28220	0.508	14338.708	545.23	350

1483	00:24:43	-1.946	422.895	43.719	2.355	5.645	5000	28225	0.508	14332.142	545.60	350
1484	00:24:44	-1.948	423.338	43.752	2.354	5.646	5000	28230	0.507	14325.563	545.97	350
1485	00:24:45	-1.951	423.781	43.785	2.353	5.647	5000	28235	0.507	14318.993	546.35	350
1486	00:24:46	-1.953	424.224	43.819	2.352	5.648	5000	28240	0.507	14312.431	546.72	350
1487	00:24:47	-1.955	424.668	43.852	2.352	5.648	5000	28240	0.506	14303.325	547.09	350
1488	00:24:48	-1.957	425.111	43.885	2.351	5.649	5000	28245	0.506	14296.781	547.46	350
1489	00:24:49	-1.96	425.555	43.919	2.35	5.65	5000	28250	0.506	14290.225	547.83	350
1490	00:24:50	-1.962	425.999	43.952	2.349	5.651	5000	28255	0.506	14283.678	548.20	350
1491	00:24:51	-1.964	426.444	43.985	2.348	5.652	5000	28260	0.505	14277.118	548.57	350
1492	00:24:52	-1.966	426.888	44.019	2.348	5.652	5000	28260	0.505	14268.063	548.93	350
1493	00:24:53	-1.968	427.333	44.052	2.347	5.653	5000	28265	0.505	14261.521	549.30	350
1494	00:24:54	-1.971	427.778	44.085	2.346	5.654	5000	28270	0.504	14254.988	549.67	350
1495	00:24:55	-1.973	428.223	44.119	2.345	5.655	5000	28275	0.504	14248.464	550.04	350
1496	00:24:56	-1.975	428.668	44.152	2.344	5.656	5000	28280	0.504	14241.947	550.40	350
1497	00:24:57	-1.977	429.114	44.186	2.344	5.656	5000	28280	0.503	14232.902	550.77	350
1498	00:24:58	-1.98	429.56	44.219	2.343	5.657	5000	28285	0.503	14226.384	551.14	350
1499	00:24:59	-1.982	430.006	44.252	2.342	5.658	5000	28290	0.503	14219.873	551.50	350
1500	00:25:00	-1.984	430.452	44.286	2.341	5.659	5000	28295	0.502	14213.371	551.87	350
1501	00:25:01	-1.986	430.898	44.319	2.34	5.66	5000	28300	0.502	14206.878	552.23	350
1502	00:25:02	-1.988	431.345	44.353	2.34	5.66	5000	28300	0.502	14197.863	552.59	350
1503	00:25:03	-1.991	431.792	44.386	2.339	5.661	5000	28305	0.501	14191.367	552.96	350
1504	00:25:04	-1.993	432.239	44.42	2.338	5.662	5000	28310	0.501	14184.880	553.32	350
1505	00:25:05	-1.995	432.686	44.453	2.337	5.663	5000	28315	0.501	14178.400	553.68	350
1506	00:25:06	-1.997	433.134	44.487	2.336	5.664	5000	28320	0.500	14171.909	554.05	350
1507	00:25:07	-2	433.581	44.52	2.336	5.664	5000	28320	0.500	14162.945	554.41	350
1508	00:25:08	-2.002	434.029	44.553	2.335	5.665	5000	28325	0.500	14156.472	554.77	350
1509	00:25:09	-2.004	434.477	44.587	2.334	5.666	5000	28330	0.499	14150.007	555.13	350
1510	00:25:10	-2.006	434.926	44.62	2.333	5.667	5000	28335	0.499	14143.530	555.49	350
1511	00:25:11	-2.008	435.374	44.654	2.332	5.668	5000	28340	0.499	14137.081	555.85	350
1512	00:25:12	-2.011	435.823	44.687	2.332	5.668	5000	28340	0.499	14128.128	556.21	350
1513	00:25:13	-2.013	436.272	44.721	2.331	5.669	5000	28345	0.498	14121.677	556.57	350
1514	00:25:14	-2.015	436.722	44.755	2.33	5.67	5000	28350	0.498	14115.215	556.93	350
1515	00:25:15	-2.017	437.171	44.788	2.329	5.671	5000	28355	0.498	14108.780	557.28	350

1516	00:25:16	-2.019	437.621	44.822	2.328	5.672	5000	28360	0.497	14102.334	557.64	350
1517	00:25:17	-2.022	438.071	44.855	2.327	5.673	5000	28365	0.497	14095.896	558.00	350
1518	00:25:18	-2.024	438.521	44.889	2.327	5.673	5000	28365	0.497	14086.983	558.35	350
1519	00:25:19	-2.026	438.971	44.922	2.326	5.674	5000	28370	0.496	14080.563	558.71	350
1520	00:25:20	-2.028	439.422	44.956	2.325	5.675	5000	28375	0.496	14074.131	559.07	350
1521	00:25:21	-2.031	439.873	44.989	2.324	5.676	5000	28380	0.496	14067.707	559.42	350
1522	00:25:22	-2.033	440.324	45.023	2.323	5.677	5000	28385	0.495	14061.292	559.78	350
1523	00:25:23	-2.035	440.775	45.057	2.323	5.677	5000	28385	0.495	14052.409	560.13	350
1524	00:25:24	-2.037	441.227	45.09	2.322	5.678	5000	28390	0.495	14045.991	560.48	350
1525	00:25:25	-2.039	441.679	45.124	2.321	5.679	5000	28395	0.494	14039.582	560.84	350
1526	00:25:26	-2.042	442.131	45.157	2.32	5.68	5000	28400	0.494	14033.181	561.19	350
1527	00:25:27	-2.044	442.583	45.191	2.319	5.681	5000	28405	0.494	14026.788	561.54	350
1528	00:25:28	-2.046	443.036	45.225	2.319	5.681	5000	28405	0.494	14017.915	561.89	350
1529	00:25:29	-2.048	443.488	45.258	2.318	5.682	5000	28410	0.493	14011.540	562.25	350
1530	00:25:30	-2.05	443.941	45.292	2.317	5.683	5000	28415	0.493	14005.153	562.60	350
1531	00:25:31	-2.053	444.394	45.326	2.316	5.684	5000	28420	0.493	13998.774	562.95	350
1532	00:25:32	-2.055	444.848	45.359	2.315	5.685	5000	28425	0.492	13992.384	563.30	350
1533	00:25:33	-2.057	445.302	45.393	2.315	5.685	5000	28425	0.492	13983.542	563.65	350
1534	00:25:34	-2.059	445.755	45.426	2.314	5.686	5000	28430	0.492	13977.189	563.99	350
1535	00:25:35	-2.061	446.21	45.46	2.313	5.687	5000	28435	0.491	13970.805	564.34	350
1536	00:25:36	-2.064	446.664	45.494	2.312	5.688	5000	28440	0.491	13964.448	564.69	350
1537	00:25:37	-2.066	447.119	45.527	2.311	5.689	5000	28445	0.491	13958.080	565.04	350
1538	00:25:38	-2.068	447.573	45.561	2.31	5.69	5000	28450	0.490	13951.740	565.38	350
1539	00:25:39	-2.07	448.029	45.595	2.31	5.69	5000	28450	0.490	13942.918	565.73	350
1540	00:25:40	-2.072	448.484	45.628	2.309	5.691	5000	28455	0.490	13936.576	566.08	350
1541	00:25:41	-2.075	448.939	45.662	2.308	5.692	5000	28460	0.489	13930.241	566.42	350
1542	00:25:42	-2.077	449.395	45.696	2.307	5.693	5000	28465	0.489	13923.896	566.77	350
1543	00:25:43	-2.079	449.851	45.73	2.306	5.694	5000	28470	0.489	13917.558	567.11	350
1544	00:25:44	-2.081	450.308	45.763	2.306	5.694	5000	28470	0.489	13908.766	567.46	350
1545	00:25:45	-2.083	450.764	45.797	2.305	5.695	5000	28475	0.488	13902.446	567.80	350
1546	00:25:46	-2.086	451.221	45.831	2.304	5.696	5000	28480	0.488	13896.115	568.14	350
1547	00:25:47	-2.088	451.678	45.864	2.303	5.697	5000	28485	0.488	13889.792	568.48	350
1548	00:25:48	-2.09	452.135	45.898	2.302	5.698	5000	28490	0.487	13883.476	568.83	350

1549	00:25:49	-2.092	452.593	45.932	2.302	5.698	5000	28490	0.487	13874.715	569.17	350
1550	00:25:50	-2.094	453.05	45.966	2.301	5.699	5000	28495	0.487	13868.417	569.51	350
1551	00:25:51	-2.097	453.508	45.999	2.3	5.7	5000	28500	0.486	13862.108	569.85	350
1552	00:25:52	-2.099	453.967	46.033	2.299	5.701	5000	28505	0.486	13855.788	570.19	350
1553	00:25:53	-2.101	454.425	46.067	2.298	5.702	5000	28510	0.486	13849.494	570.53	350
1554	00:25:54	-2.103	454.884	46.101	2.297	5.703	5000	28515	0.485	13843.190	570.87	350
1555	00:25:55	-2.105	455.343	46.134	2.297	5.703	5000	28515	0.485	13834.468	571.21	350
1556	00:25:56	-2.108	455.802	46.168	2.296	5.704	5000	28520	0.485	13828.181	571.54	350
1557	00:25:57	-2.11	456.261	46.202	2.295	5.705	5000	28525	0.485	13821.902	571.88	350
1558	00:25:58	-2.112	456.721	46.236	2.294	5.706	5000	28530	0.484	13815.612	572.22	350
1559	00:25:59	-2.114	457.181	46.269	2.293	5.707	5000	28535	0.484	13809.330	572.55	350
1560	00:26:00	-2.116	457.641	46.303	2.293	5.707	5000	28535	0.484	13800.638	572.89	350
1561	00:26:01	-2.119	458.102	46.337	2.292	5.708	5000	28540	0.483	13794.354	573.23	350
1562	00:26:02	-2.121	458.563	46.371	2.291	5.709	5000	28545	0.483	13788.078	573.56	350
1563	00:26:03	-2.123	459.024	46.404	2.29	5.71	5000	28550	0.483	13781.811	573.90	350
1564	00:26:04	-2.125	459.485	46.438	2.289	5.711	5000	28555	0.482	13775.551	574.23	350
1565	00:26:05	-2.127	459.946	46.472	2.289	5.711	5000	28555	0.482	13766.888	574.56	350
1566	00:26:06	-2.13	460.408	46.506	2.288	5.712	5000	28560	0.482	13760.627	574.89	350
1567	00:26:07	-2.132	460.87	46.54	2.287	5.713	5000	28565	0.482	13754.373	575.23	350
1568	00:26:08	-2.134	461.332	46.573	2.286	5.714	5000	28570	0.481	13748.128	575.56	350
1569	00:26:09	-2.136	461.795	46.607	2.285	5.715	5000	28575	0.481	13741.871	575.89	350
1570	00:26:10	-2.138	462.258	46.641	2.284	5.716	5000	28580	0.481	13735.622	576.22	350
1571	00:26:11	-2.141	462.721	46.675	2.284	5.716	5000	28580	0.480	13726.980	576.55	350
1572	00:26:12	-2.143	463.184	46.708	2.283	5.717	5000	28585	0.480	13720.749	576.88	350
1573	00:26:13	-2.145	463.648	46.742	2.282	5.718	5000	28590	0.480	13714.507	577.21	350
1574	00:26:14	-2.147	464.111	46.776	2.281	5.719	5000	28595	0.479	13708.291	577.54	350
1575	00:26:15	-2.149	464.575	46.81	2.28	5.72	5000	28600	0.479	13702.064	577.87	350
1576	00:26:16	-2.151	465.04	46.844	2.279	5.721	5000	28605	0.479	13695.827	578.19	350
1577	00:26:17	-2.154	465.504	46.877	2.279	5.721	5000	28605	0.478	13687.224	578.52	350
1578	00:26:18	-2.156	465.969	46.911	2.278	5.722	5000	28610	0.478	13681.004	578.85	350
1579	00:26:19	-2.158	466.434	46.945	2.277	5.723	5000	28615	0.478	13674.791	579.17	350
1580	00:26:20	-2.16	466.9	46.979	2.276	5.724	5000	28620	0.478	13668.569	579.50	350
1581	00:26:21	-2.162	467.365	47.013	2.275	5.725	5000	28625	0.477	13662.372	579.82	350

1582	00:26:22	-2.165	467.831	47.047	2.275	5.725	5000	28625	0.477	13653.780	580.15	350
1583	00:26:23	-2.167	468.297	47.08	2.274	5.726	5000	28630	0.477	13647.582	580.47	350
1584	00:26:24	-2.169	468.764	47.114	2.273	5.727	5000	28635	0.476	13641.373	580.79	350
1585	00:26:25	-2.171	469.23	47.148	2.272	5.728	5000	28640	0.476	13635.191	581.12	350
1586	00:26:26	-2.173	469.697	47.182	2.271	5.729	5000	28645	0.476	13628.998	581.44	350
1587	00:26:27	-2.175	470.165	47.216	2.27	5.73	5000	28650	0.475	13622.794	581.76	350
1588	00:26:28	-2.178	470.632	47.249	2.27	5.73	5000	28650	0.475	13614.241	582.08	350
1589	00:26:29	-2.18	471.1	47.283	2.269	5.731	5000	28655	0.475	13608.054	582.40	350
1590	00:26:30	-2.182	471.568	47.317	2.268	5.732	5000	28660	0.475	13601.876	582.72	350
1591	00:26:31	-2.184	472.036	47.351	2.267	5.733	5000	28665	0.474	13595.705	583.04	350
1592	00:26:32	-2.186	472.505	47.385	2.266	5.734	5000	28670	0.474	13589.523	583.36	350
1593	00:26:33	-2.189	472.974	47.419	2.266	5.734	5000	28670	0.474	13580.981	583.68	350
1594	00:26:34	-2.191	473.443	47.452	2.265	5.735	5000	28675	0.473	13574.817	584.00	350
1595	00:26:35	-2.193	473.912	47.486	2.264	5.736	5000	28680	0.473	13568.660	584.31	350
1596	00:26:36	-2.195	474.382	47.52	2.263	5.737	5000	28685	0.473	13562.493	584.63	350
1597	00:26:37	-2.197	474.852	47.554	2.262	5.738	5000	28690	0.473	13556.334	584.95	350
1598	00:26:38	-2.199	475.322	47.588	2.261	5.739	5000	28695	0.472	13550.182	585.26	350
1599	00:26:39	-2.202	475.792	47.621	2.261	5.739	5000	28695	0.472	13541.679	585.58	350
1600	00:26:40	-2.204	476.263	47.655	2.26	5.74	5000	28700	0.472	13535.526	585.89	350
1601	00:26:41	-2.206	476.734	47.689	2.259	5.741	5000	28705	0.471	13529.381	586.20	350
1602	00:26:42	-2.208	477.205	47.723	2.258	5.742	5000	28710	0.471	13523.244	586.52	350
1603	00:26:43	-2.21	477.677	47.757	2.257	5.743	5000	28715	0.471	13517.096	586.83	350
1604	00:26:44	-2.212	478.149	47.791	2.256	5.744	5000	28720	0.470	13510.956	587.14	350
1605	00:26:45	-2.215	478.621	47.824	2.256	5.744	5000	28720	0.470	13502.474	587.45	350
1606	00:26:46	-2.217	479.093	47.858	2.255	5.745	5000	28725	0.470	13496.351	587.76	350
1607	00:26:47	-2.219	479.566	47.892	2.254	5.746	5000	28730	0.470	13490.217	588.08	350
1608	00:26:48	-2.221	480.039	47.926	2.253	5.747	5000	28735	0.469	13484.092	588.39	350
1609	00:26:49	-2.223	480.512	47.96	2.252	5.748	5000	28740	0.469	13477.974	588.69	
1610	00:26:50	-2.225	480.986	47.993	2.251	5.749	5000	28745	0.469	13471.846	589.00	
1611	00:26:51	-2.228	481.46	48.027	2.251	5.749	5000	28745	0.468	13463.384	589.31	
1612	00:26:52	-2.23	481.934	48.061	2.25	5.75	5000	28750	0.468	13457.273	589.62	
1613	00:26:53	-2.232	482.408	48.095	2.249	5.751	5000	28755	0.468	13451.169	589.93	
1614	00:26:54	-2.234	482.883	48.129	2.248	5.752	5000	28760	0.467	13445.055	590.23	

1615	00:26:55	-2.236	483.358	48.162	2.247	5.753	5000	28765	0.467	13438.950	590.54
1616	00:26:56	-2.238	483.833	48.196	2.247	5.753	5000	28765	0.467	13430.517	590.84
1617	00:26:57	-2.24	484.308	48.23	2.246	5.754	5000	28770	0.467	13424.428	591.15
1618	00:26:58	-2.243	484.784	48.264	2.245	5.755	5000	28775	0.466	13418.328	591.45
1619	00:26:59	-2.245	485.26	48.298	2.244	5.756	5000	28780	0.466	13412.237	591.76
1620	00:27:00	-2.247	485.737	48.331	2.243	5.757	5000	28785	0.466	13406.135	592.06
1621	00:27:01	-2.249	486.213	48.365	2.242	5.758	5000	28790	0.465	13400.059	592.36
1622	00:27:02	-2.251	486.69	48.399	2.242	5.758	5000	28790	0.465	13391.647	592.66
1623	00:27:03	-2.253	487.168	48.433	2.241	5.759	5000	28795	0.465	13385.552	592.97
1624	00:27:04	-2.256	487.645	48.466	2.24	5.76	5000	28800	0.465	13379.482	593.27
1625	00:27:05	-2.258	488.123	48.5	2.239	5.761	5000	28805	0.464	13373.403	593.57
1626	00:27:06	-2.26	488.601	48.534	2.238	5.762	5000	28810	0.464	13367.331	593.87
1627	00:27:07	-2.262	489.079	48.568	2.237	5.763	5000	28815	0.464	13361.266	594.16
1628	00:27:08	-2.264	489.558	48.601	2.237	5.763	5000	28815	0.463	13352.875	594.46
1629	00:27:09	-2.266	490.037	48.635	2.236	5.764	5000	28820	0.463	13346.810	594.76
1630	00:27:10	-2.268	490.516	48.669	2.235	5.765	5000	28825	0.463	13340.753	595.06
1631	00:27:11	-2.271	490.996	48.703	2.234	5.766	5000	28830	0.463	13334.685	595.35
1632	00:27:12	-2.273	491.476	48.736	2.233	5.767	5000	28835	0.462	13328.625	595.65
1633	00:27:13	-2.275	491.956	48.77	2.232	5.768	5000	28840	0.462	13322.573	595.95
1634	00:27:14	-2.277	492.436	48.804	2.232	5.768	5000	28840	0.462	13314.220	596.24
1635	00:27:15	-2.279	492.917	48.838	2.231	5.769	5000	28845	0.461	13308.168	596.53
1636	00:27:16	-2.281	493.398	48.871	2.23	5.77	5000	28850	0.461	13302.122	596.83
1637	00:27:17	-2.283	493.879	48.905	2.229	5.771	5000	28855	0.461	13296.084	597.12
1638	00:27:18	-2.286	494.361	48.939	2.228	5.772	5000	28860	0.461	13290.037	597.41
1639	00:27:19	-2.288	494.843	48.973	2.227	5.773	5000	28865	0.460	13283.997	597.71
1640	00:27:20	-2.29	495.325	49.006	2.227	5.773	5000	28865	0.460	13275.665	598.00
1641	00:27:21	-2.292	495.808	49.04	2.226	5.774	5000	28870	0.460	13269.625	598.29
1642	00:27:22	-2.294	496.291	49.074	2.225	5.775	5000	28875	0.459	13263.592	598.58
1643	00:27:23	-2.296	496.774	49.107	2.224	5.776	5000	28880	0.459	13257.566	598.87
1644	00:27:24	-2.298	497.257	49.141	2.223	5.777	5000	28885	0.459	13251.548	599.16
1645	00:27:25	-2.301	497.741	49.175	2.222	5.778	5000	28890	0.458	13245.521	599.44
1646	00:27:26	-2.303	498.225	49.208	2.222	5.778	5000	28890	0.458	13237.210	599.73
1647	00:27:27	-2.305	498.709	49.242	2.221	5.779	5000	28895	0.458	13231.199	600.02

1648	00:27:28	-2.307	499.194	49.276	2.22	5.78	5000	28900	0.458	13225.178	600.31
1649	00:27:29	-2.309	499.679	49.309	2.219	5.781	5000	28905	0.457	13219.165	600.59
1650	00:27:30	-2.311	284.116			8	5000	40000	0.634	25369.500	600.88
1651	00:27:31	-5.447	289.732			8	5000	40000	0.628	25116.383	601.52
1652	00:27:32	-5.575	295.378			8	5000	40000	0.622	24866.955	602.16
1653	00:27:33	-5.704	301.033			8	5000	40000	0.616	24622.046	602.78
1654	00:27:34	-5.832	306.695			8	5000	40000	0.610	24381.619	603.40
1655	00:27:35	-5.96	312.363			8	5000	40000	0.604	24145.595	604.00
1656	00:27:36	-6.089	318.031			8	5000	40000	0.598	23914.097	604.60
1657	00:27:37	-6.217	323.695			8	5000	40000	0.592	23687.155	605.19
1658	00:27:38	-6.346	329.352			8	5000	40000	0.587	23464.752	605.77
1659	00:27:39	-6.474	334.997			8	5000	40000	0.581	23246.945	606.34
1660	00:27:40	-6.602	340.625			8	5000	40000	0.576	23033.783	606.90
1661	00:27:41	-6.73	346.226			8	5000	40000	0.571	22825.489	607.45
1662	00:27:42	-6.857	351.798			8	5000	40000	0.566	22621.978	608.00
1663	00:27:43	-6.983	357.339			8	5000	40000	0.561	22423.167	608.53
1664	00:27:44	-7.109	362.856			8	5000	40000	0.556	22228.658	609.06
1665	00:27:45	-7.235	368.334			8	5000	40000	0.551	22038.835	609.57
1666	00:27:46	-7.359	373.767			8	5000	40000	0.546	21853.746	610.08
1667	00:27:47	-7.483	379.153			8	5000	40000	0.542	21673.302	610.58
1668	00:27:48	-7.606	384.485			8	5000	40000	0.537	21497.578	611.07
1669	00:27:49	-7.728	389.761			8	5000	40000	0.533	21326.483	611.55
1670	00:27:50	-7.848	394.975			8	5000	40000	0.529	21160.052	612.02
1671	00:27:51	-7.967	400.123			8	5000	40000	0.525	20998.258	612.48
1672	00:27:52	-8.085	405.203			8	5000	40000	0.521	20841.008	612.94
1673	00:27:53	-8.202	410.208			8	5000	40000	0.517	20688.365	613.38
1674	00:27:54	-8.317	415.138			8	5000	40000	0.514	20540.181	613.82
1675	00:27:55	-8.43	419.986			8	5000	40000	0.510	20396.517	614.25
1676	00:27:56	-8.542	424.752			8	5000	40000	0.506	20257.228	614.68
1677	00:27:57	-8.652	429.43			8	5000	40000	0.503	20122.349	615.09
1678	00:27:58	-8.76	434.02			8	5000	40000	0.500	19991.742	615.50
1679	00:27:59	-8.866	438.513			8	5000	40000	0.497	19865.526	615.90
1680	00:28:00	-8.97	442.916			8	5000	40000	0.494	19743.376	616.29

1681	00:28:01	-9.072	447.223	8	5000	40000	0.491	19625.333	616.68
1682	00:28:02	-9.172	451.432	8	5000	40000	0.488	19511.332	617.05
1683	00:28:03	-9.27	455.541	8	5000	40000	0.485	19401.310	617.43
1684	00:28:04	-9.365	459.55	8	5000	40000	0.482	19295.155	617.79
1685	00:28:05	-9.459	463.457	8	5000	40000	0.480	19192.812	618.15
1686	00:28:06	-9.549	467.261	8	5000	40000	0.477	19094.206	618.50
1687	00:28:07	-9.638	470.962	8	5000	40000	0.475	18999.237	618.85
1688	00:28:08	-9.724	474.56	8	5000	40000	0.473	18907.812	619.19
1689	00:28:09	-9.808	478.055	8	5000	40000	0.470	18819.843	619.52
1690	00:28:10	-9.89	481.447	8	5000	40000	0.468	18735.245	619.85
1691	00:28:11	-9.969	484.736	8	5000	40000	0.466	18653.940	620.17
1692	00:28:12	-10.045	487.924	8	5000	40000	0.464	18575.802	620.49
1693	00:28:13	-10.12	491.012	8	5000	40000	0.463	18500.737	620.80
1694	00:28:14	-10.192	493.999	8	5000	40000	0.461	18428.702	621.11
1695	00:28:15	-10.261	496.889	8	5000	40000	0.459	18359.538	621.42
1696	00:28:16	-10.329	499.682	8	5000	40000	0.457	18293.187	621.71
1697	00:28:17	-10.393	502.379	8	5000	40000	0.456	18229.570	622.01
1698	00:28:18	-10.456	504.983	8	5000	40000	0.454	18168.565	622.30
1699	00:28:19	-10.516	507.496	8	5000	40000	0.453	18110.078	622.58
1700	00:28:20	-10.575	509.919	8	5000	40000	0.451	18054.041	622.86
1701	00:28:21	-10.631	512.255	8	5000	40000	0.450	18000.344	623.14
1702	00:28:22	-10.684	514.506	8	5000	40000	0.449	17948.902	623.41
1703	00:28:23	-10.736	516.673	8	5000	40000	0.447	17899.656	623.69
1704	00:28:24	-10.786	518.759	8	5000	40000	0.446	17852.506	623.95
1705	00:28:25	-10.834	520.766	8	5000	40000	0.445	17807.375	624.22
1706	00:28:26	-10.879	522.697	8	5000	40000	0.444	17764.168	624.48
1707	00:28:27	-10.923	524.555	8	5000	40000	0.443	17722.792	624.73
1708	00:28:28	-10.965	526.341	8	5000	40000	0.442	17683.201	624.99
1709	00:28:29	-11.005	528.059	8	5000	40000	0.441	17645.284	625.24
1710	00:28:30	-11.044	529.711	8	5000	40000	0.440	17608.976	625.49
1711	00:28:31	-11.081	531.298	8	5000	40000	0.439	17574.237	625.73
1712	00:28:32	-11.116	532.823	8	5000	40000	0.439	17540.985	625.98
1713	00:28:33	-11.15	534.289	8	5000	40000	0.438	17509.137	626.22

1714	00:28:34	-11.182	535.697	8	5000	40000	0.437	17478.658	626.46
1715	00:28:35	-11.213	537.05	8	5000	40000	0.436	17449.469	626.70
1716	00:28:36	-11.242	538.35	8	5000	40000	0.436	17421.516	626.93
1717	00:28:37	-11.27	539.599	8	5000	40000	0.435	17394.743	627.16
1718	00:28:38	-11.297	540.801	8	5000	40000	0.434	17369.055	627.39
1719	00:28:39	-11.322	541.956	8	5000	40000	0.434	17344.444	627.62
1720	00:28:40	-11.346	543.067	8	5000	40000	0.433	17320.835	627.85
1721	00:28:41	-11.37	544.135	8	5000	40000	0.432	17298.201	628.08
1722	00:28:42	-11.392	545.163	8	5000	40000	0.432	17276.470	628.30
1723	00:28:43	-11.413	546.153	8	5000	40000	0.431	17255.594	628.52
1724	00:28:44	-11.433	547.105	8	5000	40000	0.431	17235.567	628.74
1725	00:28:45	-11.452	548.022	8	5000	40000	0.430	17216.320	628.96
1726	00:28:46	-11.47	548.905	8	5000	40000	0.430	17197.827	629.18
1727	00:28:47	-11.487	549.757	8	5000	40000	0.430	17180.022	629.40
1728	00:28:48	-11.504	550.578	8	5000	40000	0.429	17162.898	629.61
1729	00:28:49	-11.519	551.369	8	5000	40000	0.429	17146.433	629.83
1730	00:28:50	-11.534	552.134	8	5000	40000	0.428	17130.539	630.04
1731	00:28:51	-11.548	552.872	8	5000	40000	0.428	17115.234	630.25
1732	00:28:52	-11.562	553.585	8	5000	40000	0.428	17100.474	630.47
1733	00:28:53	-11.575	554.274	8	5000	40000	0.427	17086.234	630.68
1734	00:28:54	-11.587	554.941	8	5000	40000	0.427	17072.472	630.88
1735	00:28:55	-11.599	555.587	8	5000	40000	0.426	17059.164	631.09
1736	00:28:56	-11.61	556.212	8	5000	40000	0.426	17046.308	631.30
1737	00:28:57	-11.62	556.818	8	5000	40000	0.426	17033.862	631.51
1738	00:28:58	-11.63	557.406	8	5000	40000	0.426	17021.802	631.71
1739	00:28:59	-11.64	557.977	8	5000	40000	0.425	17010.108	631.92
1740	00:29:00	-11.649	558.531	8	5000	40000	0.425	16998.777	632.12
1741	00:29:01	-11.658	559.07	8	5000	40000	0.425	16987.768	632.32
1742	00:29:02	-11.666	559.594	8	5000	40000	0.424	16977.078	632.53
1743	00:29:03	-11.674	560.104	8	5000	40000	0.424	16966.687	632.73
1744	00:29:04	-11.681	560.601	8	5000	40000	0.424	16956.573	632.93
1745	00:29:05	-11.689	561.085	8	5000	40000	0.424	16946.736	633.13
1746	00:29:06	-11.695	561.558	8	5000	40000	0.423	16937.133	633.33

1747	00:29:07	-11.702	562.02	8	5000	40000	0.423	16927.763	633.53
1748	00:29:08	-11.708	562.471	8	5000	40000	0.423	16918.627	633.73
1749	00:29:09	-11.714	562.912	8	5000	40000	0.423	16909.703	633.92
1750	00:29:10	-11.72	563.343	8	5000	40000	0.423	16900.990	634.12
1751	00:29:11	-11.725	563.766	8	5000	40000	0.422	16892.448	634.32
1752	00:29:12	-11.731	564.18	8	5000	40000	0.422	16884.096	634.51
1753	00:29:13	-11.736	564.587	8	5000	40000	0.422	16875.893	634.71
1754	00:29:14	-11.74	564.985	8	5000	40000	0.422	16867.879	634.90
1755	00:29:15	-11.745	565.377	8	5000	40000	0.421	16859.994	635.10
1756	00:29:16	-11.749	565.762	8	5000	40000	0.421	16852.256	635.29
1757	00:29:17	-11.754	566.141	8	5000	40000	0.421	16844.646	635.49
1758	00:29:18	-11.758	566.514	8	5000	40000	0.421	16837.163	635.68
1759	00:29:19	-11.762	566.881	8	5000	40000	0.421	16829.807	635.87
1760	00:29:20	-11.765	567.242	8	5000	40000	0.421	16822.578	636.06
1761	00:29:21	-11.769	567.599	8	5000	40000	0.420	16815.435	636.25
1762	00:29:22	-11.772	567.951	8	5000	40000	0.420	16808.398	636.45
1763	00:29:23	-11.776	568.298	8	5000	40000	0.420	16801.466	636.64
1764	00:29:24	-11.779	568.642	8	5000	40000	0.420	16794.600	636.83
1765	00:29:25	-11.782	568.981	8	5000	40000	0.420	16787.839	637.02
1766	00:29:26	-11.785	569.316	8	5000	40000	0.420	16781.164	637.21
1767	00:29:27	-11.788	569.648	8	5000	40000	0.419	16774.553	637.39
1768	00:29:28	-11.791	569.977	8	5000	40000	0.419	16768.008	637.58
1769	00:29:29	-11.794	570.302	8	5000	40000	0.419	16761.547	637.77
1770	00:29:30	-11.796	570.625	8	5000	40000	0.419	16755.130	637.96
1771	00:29:31	-11.799	570.945	8	5000	40000	0.419	16748.778	638.15
1772	00:29:32	-11.801	571.262	8	5000	40000	0.419	16742.491	638.33
1773	00:29:33	-11.804	571.576	8	5000	40000	0.418	16736.267	638.52
1774	00:29:34	-11.806	571.888	8	5000	40000	0.418	16730.088	638.71
1775	00:29:35	-11.808	572.198	8	5000	40000	0.418	16723.953	638.89
1776	00:29:36	-11.811	572.506	8	5000	40000	0.418	16717.862	639.08
1777	00:29:37	-11.813	572.812	8	5000	40000	0.418	16711.814	639.26
1778	00:29:38	-11.815	573.116	8	5000	40000	0.418	16705.811	639.45
1779	00:29:39	-11.817	573.418	8	5000	40000	0.417	16699.852	639.63

1780	00:29:40	-11.819	573.718	8	5000	40000	0.417	16693.936	639.82
1781	00:29:41	-11.821	574.017	8	5000	40000	0.417	16688.044	640.00
1782	00:29:42	-11.823	574.315	8	5000	40000	0.417	16682.176	640.18
1783	00:29:43	-11.825	574.611	8	5000	40000	0.417	16676.351	640.37
1784	00:29:44	-11.827	574.906	8	5000	40000	0.417	16670.550	640.55
1785	00:29:45	-11.828	575.199	8	5000	40000	0.417	16664.792	640.73
1786	00:29:46	-11.83	575.491	8	5000	40000	0.416	16659.058	640.91
1787	00:29:47	-11.832	575.783	8	5000	40000	0.416	16653.328	641.09
1788	00:29:48	-11.834	576.073	8	5000	40000	0.416	16647.641	641.27
1789	00:29:49	-11.835	576.362	8	5000	40000	0.416	16641.978	641.46
1790	00:29:50	-11.837	576.65	8	5000	40000	0.416	16636.338	641.64
1791	00:29:51	-11.839	576.937	8	5000	40000	0.416	16630.721	641.82
1792	00:29:52	-11.84	577.223	8	5000	40000	0.416	16625.128	642.00
1793	00:29:53	-11.842	577.509	8	5000	40000	0.415	16619.538	642.17
1794	00:29:54	-11.844	577.794	8	5000	40000	0.415	16613.972	642.35
1795	00:29:55	-11.845	578.078	8	5000	40000	0.415	16608.429	642.53
1796	00:29:56	-11.847	578.361	8	5000	40000	0.415	16602.909	642.71
1797	00:29:57	-11.848	578.644	8	5000	40000	0.415	16597.393	642.89
1798	00:29:58	-11.85	578.926	8	5000	40000	0.415	16591.900	643.07
1799	00:29:59	-11.851	579.208	8	5000	40000	0.415	16586.411	643.24
1800	00:30:00	-11.853	579.489	8	5000	40000	0.415	16580.945	643.42
1801	00:30:01	-11.854	579.769	8	5000	40000	0.414	16575.501	643.60
1802	00:30:02	-11.856	580.049	8	5000	40000	0.414	16570.062	643.77
1803	00:30:03	-11.857	580.328	8	5000	40000	0.414	16564.645	643.95
1804	00:30:04	-11.859	580.607	8	5000	40000	0.414	16559.232	644.13
1805	00:30:05	-11.86	580.886	8	5000	40000	0.414	16553.822	644.30
1806	00:30:06	-11.861	581.164	8	5000	40000	0.414	16548.435	644.48
1807	00:30:07	-11.863	581.441	8	5000	40000	0.414	16543.071	644.65
1808	00:30:08	-11.864	581.719	8	5000	40000	0.413	16537.692	644.83
1809	00:30:09	-11.866	581.996	8	5000	40000	0.413	16532.335	645.00
1810	00:30:10	-11.867	582.272	8	5000	40000	0.413	16527.001	645.17
1811	00:30:11	-11.868	582.548	8	5000	40000	0.413	16521.670	645.35
1812	00:30:12	-11.87	582.824	8	5000	40000	0.413	16516.343	645.52

1813	00:30:13	-11.871	583.099	8	5000	40000	0.413	16511.038	645.69
1814	00:30:14	-11.872	583.374	8	5000	40000	0.413	16505.737	645.86
1815	00:30:15	-11.874	583.649	8	5000	40000	0.413	16500.439	646.04
1816	00:30:16	-11.875	583.924	8	5000	40000	0.412	16495.145	646.21
1817	00:30:17	-11.877	584.198	8	5000	40000	0.412	16489.873	646.38
1818	00:30:18	-11.878	584.472	8	5000	40000	0.412	16484.605	646.55
1819	00:30:19	-11.879	584.746	8	5000	40000	0.412	16479.340	646.72
1820	00:30:20	-11.88	585.019	8	5000	40000	0.412	16474.098	646.89
1821	00:30:21	-11.882	585.292	8	5000	40000	0.412	16468.859	647.06
1822	00:30:22	-11.883	585.565	8	5000	40000	0.412	16463.623	647.23
1823	00:30:23	-11.884	585.838	8	5000	40000	0.411	16458.391	647.40
1824	00:30:24	-11.886	586.11	8	5000	40000	0.411	16453.181	647.57
1825	00:30:25	-11.887	586.382	8	5000	40000	0.411	16447.974	647.74
1826	00:30:26	-11.888	586.654	8	5000	40000	0.411	16442.771	647.91
1827	00:30:27	-11.89	586.925	8	5000	40000	0.411	16437.590	648.07
1828	00:30:28	-11.891	587.197	8	5000	40000	0.411	16432.393	648.24
1829	00:30:29	-11.892	587.468	8	5000	40000	0.411	16427.219	648.41
1830	00:30:30	-11.893	587.739	8	5000	40000	0.411	16422.047	648.58
1831	00:30:31	-11.895	588.009	8	5000	40000	0.410	16416.899	648.74
1832	00:30:32	-11.896	588.28	8	5000	40000	0.410	16411.734	648.91
1833	00:30:33	-11.897	588.55	8	5000	40000	0.410	16406.592	649.08
1834	00:30:34	-11.899	588.82	8	5000	40000	0.410	16401.452	649.24
1835	00:30:35	-11.9	589.09	8	5000	40000	0.410	16396.317	649.41
1836	00:30:36	-11.901	589.359	8	5000	40000	0.410	16391.203	649.57
1837	00:30:37	-11.902	589.629	8	5000	40000	0.410	16386.073	649.74
1838	00:30:38	-11.904	589.898	8	5000	40000	0.410	16380.966	649.90
1839	00:30:39	-11.905	590.167	8	5000	40000	0.409	16375.862	650.06
1840	00:30:40	-11.906	590.435	8	5000	40000	0.409	16370.780	650.23
1841	00:30:41	-11.907	590.704	8	5000	40000	0.409	16365.682	650.39
1842	00:30:42	-11.909	590.972	8	5000	40000	0.409	16360.606	650.55
1843	00:30:43	-11.91	591.24	8	5000	40000	0.409	16355.534	650.72
1844	00:30:44	-11.911	591.508	8	5000	40000	0.409	16350.465	650.88
1845	00:30:45	-11.912	591.775	8	5000	40000	0.409	16345.417	651.04

1846	00:30:46	-11.914	592.042	8	5000	40000	0.409	16340.373	651.20
1847	00:30:47	-11.915	592.31	8	5000	40000	0.408	16335.313	651.36
1848	00:30:48	-11.916	592.576	8	5000	40000	0.408	16330.294	651.53
1849	00:30:49	-11.917	592.843	8	5000	40000	0.408	16325.259	651.69
1850	00:30:50	-11.919	593.109	8	5000	40000	0.408	16320.246	651.85
1851	00:30:51	-11.92	593.376	8	5000	40000	0.408	16315.217	652.01
1852	00:30:52	-11.921	593.642	8	5000	40000	0.408	16310.211	652.17
1853	00:30:53	-11.922	593.907	8	5000	40000	0.408	16305.226	652.33
1854	00:30:54	-11.923	594.173	8	5000	40000	0.408	16300.225	652.49
1855	00:30:55	-11.925	594.438	8	5000	40000	0.407	16295.246	652.64
1856	00:30:56	-11.926	594.703	8	5000	40000	0.407	16290.270	652.80
1857	00:30:57	-11.927	594.968	8	5000	40000	0.407	16285.298	652.96
1858	00:30:58	-11.928	595.233	8	5000	40000	0.407	16280.328	653.12
1859	00:30:59	-11.93	595.497	8	5000	40000	0.407	16275.380	653.28
1860	00:31:00	-11.931	595.761	8	5000	40000	0.407	16270.435	653.43
1861	00:31:01	-11.932	596.025	8	5000	40000	0.407	16265.493	653.59
1862	00:31:02	-11.933	596.288	8	5000	40000	0.407	16260.573	653.75
1863	00:31:03	-11.934	596.552	8	5000	40000	0.406	16255.637	653.90
1864	00:31:04	-11.936	596.815	8	5000	40000	0.406	16250.723	654.06
1865	00:31:05	-11.937	597.078	8	5000	40000	0.406	16245.811	654.21
1866	00:31:06	-11.938	597.341	8	5000	40000	0.406	16240.903	654.37
1867	00:31:07	-11.939	597.603	8	5000	40000	0.406	16236.016	654.52
1868	00:31:08	-11.94	597.865	8	5000	40000	0.406	16231.133	654.68
1869	00:31:09	-11.942	598.127	8	5000	40000	0.406	16226.252	654.83
1870	00:31:10	-11.943	598.389	8	5000	40000	0.406	16221.374	654.99
1871	00:31:11	-11.944	598.65	8	5000	40000	0.405	16216.518	655.14
1872	00:31:12	-11.945	598.911	8	5000	40000	0.405	16211.664	655.29
1873	00:31:13	-11.946	599.172	8	5000	40000	0.405	16206.814	655.45
1874	00:31:14	-11.948	599.433	8	5000	40000	0.405	16201.966	655.60
1875	00:31:15	-11.949	599.693	8	5000	40000	0.405	16197.140	655.75
1876	00:31:16	-11.95	599.953	8	5000	40000	0.405	16192.316	655.90
1877	00:31:17	-11.951	600.213	8	5000	40000	0.405	16187.496	656.05
1878	00:31:18	-11.952	600.473	8	5000	40000	0.405	16182.678	656.20

1879	00:31:19	-11.954	600.732	8	5000	40000	0.404	16177.882	656.36
1880	00:31:20	-11.955	600.991	8	5000	40000	0.404	16173.089	656.51
1881	00:31:21	-11.956	601.25	8	5000	40000	0.404	16168.298	656.66
1882	00:31:22	-11.957	601.508	8	5000	40000	0.404	16163.529	656.81
1883	00:31:23	-11.958	601.766	8	5000	40000	0.404	16158.763	656.96
1884	00:31:24	-11.959	602.024	8	5000	40000	0.404	16153.999	657.10
1885	00:31:25	-11.961	602.282	8	5000	40000	0.404	16149.238	657.25
1886	00:31:26	-11.962	602.539	8	5000	40000	0.404	16144.499	657.40
1887	00:31:27	-11.963	602.797	8	5000	40000	0.403	16139.744	657.55
1888	00:31:28	-11.964	603.053	8	5000	40000	0.403	16135.028	657.70
1889	00:31:29	-11.965	603.31	8	5000	40000	0.403	16130.297	657.85
1890	00:31:30	-11.966	603.566	8	5000	40000	0.403	16125.587	657.99
1891	00:31:31	-11.968	603.822	8	5000	40000	0.403	16120.880	658.14
1892	00:31:32	-11.969	604.078	8	5000	40000	0.403	16116.175	658.29
1893	00:31:33	-11.97	604.333	8	5000	40000	0.403	16111.492	658.43
1894	00:31:34	-11.971	604.588	8	5000	40000	0.403	16106.811	658.58
1895	00:31:35	-11.972	604.843	8	5000	40000	0.403	16102.133	658.73
1896	00:31:36	-11.973	605.098	8	5000	40000	0.402	16097.458	658.87
1897	00:31:37	-11.975	605.352	8	5000	40000	0.402	16092.803	659.02
1898	00:31:38	-11.976	605.606	8	5000	40000	0.402	16088.152	659.16
1899	00:31:39	-11.977	605.859	8	5000	40000	0.402	16083.521	659.30
1900	00:31:40	-11.978	606.113	8	5000	40000	0.402	16078.875	659.45
1901	00:31:41	-11.979	606.366	8	5000	40000	0.402	16074.250	659.59
1902	00:31:42	-11.98	606.618	8	5000	40000	0.402	16069.646	659.74
1903	00:31:43	-11.981	606.871	8	5000	40000	0.402	16065.026	659.88
1904	00:31:44	-11.983	607.123	8	5000	40000	0.402	16060.427	660.02
1905	00:31:45	-11.984	607.375	8	5000	40000	0.401	16055.830	660.16
1906	00:31:46	-11.985	607.626	8	5000	40000	0.401	16051.255	660.31
1907	00:31:47	-11.986	607.877	8	5000	40000	0.401	16046.682	660.45
1908	00:31:48	-11.987	608.128	8	5000	40000	0.401	16042.112	660.59
1909	00:31:49	-11.988	608.379	8	5000	40000	0.401	16037.544	660.73
1910	00:31:50	-11.989	608.629	8	5000	40000	0.401	16032.997	660.87
1911	00:31:51	-11.99	608.879	8	5000	40000	0.401	16028.453	661.01

1912	00:31:52	-11.992	609.129	8	5000	40000	0.401	16023.911	661.15
1913	00:31:53	-11.993	609.378	8	5000	40000	0.400	16019.390	661.29
1914	00:31:54	-11.994	609.627	8	5000	40000	0.400	16014.871	661.43
1915	00:31:55	-11.995	609.875	8	5000	40000	0.400	16010.373	661.57
1916	00:31:56	-11.996	610.124	8	5000	40000	0.400	16005.860	661.71
1917	00:31:57	-11.997	610.372	8	5000	40000	0.400	16001.367	661.85
1918	00:31:58	-11.998	610.619	8	5000	40000	0.400	15996.895	661.99
1919	00:31:59	-11.999	610.867	8	5000	40000	0.400	15992.407	662.13
1920	00:32:00	-12.001	611.114	8	5000	40000	0.400	15987.940	662.26
1921	00:32:01	-12.002	611.36	8	5000	40000	0.400	15983.494	662.40
1922	00:32:02	-12.003	611.607	8	5000	40000	0.399	15979.032	662.54
1923	00:32:03	-12.004	611.853	8	5000	40000	0.399	15974.590	662.67
1924	00:32:04	-12.005	612.098	8	5000	40000	0.399	15970.169	662.81
1925	00:32:05	-12.006	612.343	8	5000	40000	0.399	15965.750	662.95
1926	00:32:06	-12.007	612.588	8	5000	40000	0.399	15961.334	663.08
1927	00:32:07	-12.008	612.833	8	5000	40000	0.399	15956.920	663.22
1928	00:32:08	-12.009	613.077	8	5000	40000	0.399	15952.527	663.35
1929	00:32:09	-12.01	613.321	8	5000	40000	0.399	15948.136	663.49
1930	00:32:10	-12.012	613.565	8	5000	40000	0.399	15943.747	663.62
1931	00:32:11	-12.013	613.808	8	5000	40000	0.398	15939.379	663.76
1932	00:32:12	-12.014	614.051	8	5000	40000	0.398	15935.014	663.89
1933	00:32:13	-12.015	614.294	8	5000	40000	0.398	15930.650	664.02
1934	00:32:14	-12.016	614.536	8	5000	40000	0.398	15926.307	664.16
1935	00:32:15	-12.017	614.778	8	5000	40000	0.398	15921.967	664.29
1936	00:32:16	-12.018	615.019	8	5000	40000	0.398	15917.646	664.42
1937	00:32:17	-12.019	615.26	8	5000	40000	0.398	15913.328	664.56
1938	00:32:18	-12.02	615.501	8	5000	40000	0.398	15909.013	664.69
1939	00:32:19	-12.021	615.742	8	5000	40000	0.398	15904.699	664.82
1940	00:32:20	-12.022	615.982	8	5000	40000	0.398	15900.406	664.95
1941	00:32:21	-12.023	616.221	8	5000	40000	0.397	15896.133	665.08
1942	00:32:22	-12.025	616.461	8	5000	40000	0.397	15891.845	665.21
1943	00:32:23	-12.026	616.7	8	5000	40000	0.397	15887.577	665.34
1944	00:32:24	-12.027	616.938	8	5000	40000	0.397	15883.328	665.47

1945	00:32:25	-12.028	617.177	8	5000	40000	0.397	15879.065	665.60
1946	00:32:26	-12.029	617.415	8	5000	40000	0.397	15874.821	665.73
1947	00:32:27	-12.03	617.652	8	5000	40000	0.397	15870.598	665.86
1948	00:32:28	-12.031	617.889	8	5000	40000	0.397	15866.376	665.99
1949	00:32:29	-12.032	618.126	8	5000	40000	0.397	15862.157	666.12
1950	00:32:30	-12.033	618.363	8	5000	40000	0.396	15857.940	666.25
1951	00:32:31	-12.034	618.599	8	5000	40000	0.396	15853.744	666.38
1952	00:32:32	-12.035	618.834	8	5000	40000	0.396	15849.567	666.50
1953	00:32:33	-12.036	619.07	8	5000	40000	0.396	15845.374	666.63
1954	00:32:34	-12.037	619.305	8	5000	40000	0.396	15841.202	666.76
1955	00:32:35	-12.038	619.539	8	5000	40000	0.396	15837.050	666.88
1956	00:32:36	-12.039	619.773	8	5000	40000	0.396	15832.899	667.01
1957	00:32:37	-12.04	620.007	8	5000	40000	0.396	15828.751	667.14
1958	00:32:38	-12.041	620.241	8	5000	40000	0.396	15824.605	667.26
1959	00:32:39	-12.042	620.474	8	5000	40000	0.396	15820.479	667.39
1960	00:32:40	-12.043	620.707	8	5000	40000	0.395	15816.355	667.51
1961	00:32:41	-12.044	620.939	8	5000	40000	0.395	15812.251	667.64
1962	00:32:42	-12.045	621.171	8	5000	40000	0.395	15808.149	667.76
1963	00:32:43	-12.046	621.402	8	5000	40000	0.395	15804.067	667.89
1964	00:32:44	-12.048	621.634	8	5000	40000	0.395	15799.970	668.01
1965	00:32:45	-12.049	621.864	8	5000	40000	0.395	15795.909	668.14
1966	00:32:46	-12.05	622.095	8	5000	40000	0.395	15791.834	668.26
1967	00:32:47	-12.051	622.325	8	5000	40000	0.395	15787.777	668.38
1968	00:32:48	-12.052	622.554	8	5000	40000	0.395	15783.741	668.51
1969	00:32:49	-12.053	622.784	8	5000	40000	0.394	15779.689	668.63
1970	00:32:50	-12.054	623.013	8	5000	40000	0.394	15775.657	668.75
1971	00:32:51	-12.055	623.241	8	5000	40000	0.394	15771.644	668.87
1972	00:32:52	-12.056	623.469	8	5000	40000	0.394	15767.634	669.00
1973	00:32:53	-12.057	623.697	8	5000	40000	0.394	15763.625	669.12
1974	00:32:54	-12.058	623.924	8	5000	40000	0.394	15759.636	669.24
1975	00:32:55	-12.059	624.151	8	5000	40000	0.394	15755.649	669.36
1976	00:32:56	-12.06	624.378	8	5000	40000	0.394	15751.665	669.48
1977	00:32:57	-12.061	624.604	8	5000	40000	0.394	15747.699	669.60

1978	00:32:58	-12.062	624.83	8	5000	40000	0.394	15743.736	669.72
1979	00:32:59	-12.063	625.055	8	5000	40000	0.393	15739.792	669.84
1980	00:33:00	-12.064	625.28	8	5000	40000	0.393	15735.850	669.96
1981	00:33:01	-12.065	625.504	8	5000	40000	0.393	15731.928	670.08
1982	00:33:02	-12.066	625.729	8	5000	40000	0.393	15727.990	670.20
1983	00:33:03	-12.067	625.952	8	5000	40000	0.393	15724.089	670.31
1984	00:33:04	-12.068	626.176	8	5000	40000	0.393	15720.173	670.43
1985	00:33:05	-12.069	626.399	8	5000	40000	0.393	15716.276	670.55
1986	00:33:06	-12.07	626.621	8	5000	40000	0.393	15712.398	670.67
1987	00:33:07	-12.071	626.843	8	5000	40000	0.393	15708.522	670.79
1988	00:33:08	-12.071	627.065	8	5000	40000	0.393	15704.648	670.90
1989	00:33:09	-12.072	627.286	8	5000	40000	0.393	15700.794	671.02
1990	00:33:10	-12.073	627.507	8	5000	40000	0.392	15696.941	671.14
1991	00:33:11	-12.074	627.728	8	5000	40000	0.392	15693.091	671.25
1992	00:33:12	-12.075	627.948	8	5000	40000	0.392	15689.259	671.37
1993	00:33:13	-12.076	628.168	8	5000	40000	0.392	15685.430	671.48
1994	00:33:14	-12.077	628.387	8	5000	40000	0.392	15681.619	671.60
1995	00:33:15	-12.078	628.606	8	5000	40000	0.392	15677.811	671.71
1996	00:33:16	-12.079	628.825	8	5000	40000	0.392	15674.004	671.83
1997	00:33:17	-12.08	629.043	8	5000	40000	0.392	15670.217	671.94
1998	00:33:18	-12.081	629.261	8	5000	40000	0.392	15666.431	672.06
1999	00:33:19	-12.082	629.478	8	5000	40000	0.392	15662.665	672.17
2000	00:33:20	-12.083	629.695	8	5000	40000	0.391	15658.900	672.29
2001	00:33:21	-12.084	629.911	8	5000	40000	0.391	15655.155	672.40
2002	00:33:22	-12.085	630.127	8	5000	40000	0.391	15651.411	672.51
2003	00:33:23	-12.086	630.343	8	5000	40000	0.391	15647.670	672.62
2004	00:33:24	-12.087	630.558	8	5000	40000	0.391	15643.947	672.74
2005	00:33:25	-12.088	630.773	8	5000	40000	0.391	15640.226	672.85
2006	00:33:26	-12.089	630.988	8	5000	40000	0.391	15636.507	672.96
2007	00:33:27	-12.09	631.202	8	5000	40000	0.391	15632.807	673.07
2008	00:33:28	-12.091	631.415	8	5000	40000	0.391	15629.126	673.18
2009	00:33:29	-12.091	631.628	8	5000	40000	0.391	15625.446	673.30
2010	00:33:30	-12.092	631.841	8	5000	40000	0.391	15621.769	673.41

2011	00:33:31	-12.093	632.054	8	5000	40000	0.390	15618.093	673.52
2012	00:33:32	-12.094	632.266	8	5000	40000	0.390	15614.436	673.63
2013	00:33:33	-12.095	632.477	8	5000	40000	0.390	15610.798	673.74
2014	00:33:34	-12.096	632.688	8	5000	40000	0.390	15607.162	673.85
2015	00:33:35	-12.097	632.899	8	5000	40000	0.390	15603.527	673.96
2016	00:33:36	-12.098	633.109	8	5000	40000	0.390	15599.911	674.07
2017	00:33:37	-12.099	633.319	8	5000	40000	0.390	15596.297	674.17
2018	00:33:38	-12.1	633.529	8	5000	40000	0.390	15592.685	674.28
2019	00:33:39	-12.101	633.738	8	5000	40000	0.390	15589.091	674.39
2020	00:33:40	-12.102	633.946	8	5000	40000	0.390	15585.517	674.50
2021	00:33:41	-12.102	634.155	8	5000	40000	0.390	15581.927	674.61
2022	00:33:42	-12.103	634.362	8	5000	40000	0.389	15578.373	674.71
2023	00:33:43	-12.104	634.57	8	5000	40000	0.389	15574.803	674.82
2024	00:33:44	-12.105	634.777	8	5000	40000	0.389	15571.252	674.93
2025	00:33:45	-12.106	634.983	8	5000	40000	0.389	15567.720	675.04
2026	00:33:46	-12.107	635.189	8	5000	40000	0.389	15564.189	675.14
2027	00:33:47	-12.108	635.395	8	5000	40000	0.389	15560.660	675.25
2028	00:33:48	-12.109	635.6	8	5000	40000	0.389	15557.150	675.35
2029	00:33:49	-12.11	635.805	8	5000	40000	0.389	15553.641	675.46
2030	00:33:50	-12.111	636.01	8	5000	40000	0.389	15550.134	675.57
2031	00:33:51	-12.111	636.214	8	5000	40000	0.389	15546.646	675.67
2032	00:33:52	-12.112	636.417	8	5000	40000	0.389	15543.176	675.78
2033	00:33:53	-12.113	636.621	8	5000	40000	0.388	15539.691	675.88
2034	00:33:54	-12.114	636.823	8	5000	40000	0.388	15536.241	675.98
2035	00:33:55	-12.115	637.026	8	5000	40000	0.388	15532.776	676.09
2036	00:33:56	-12.116	637.228	8	5000	40000	0.388	15529.330	676.19
2037	00:33:57	-12.117	637.429	8	5000	40000	0.388	15525.902	676.30
2038	00:33:58	-12.118	637.63	8	5000	40000	0.388	15522.475	676.40
2039	00:33:59	-12.118	637.831	8	5000	40000	0.388	15519.050	676.50
2040	00:34:00	-12.119	638.031	8	5000	40000	0.388	15515.644	676.60
2041	00:34:01	-12.12	638.231	8	5000	40000	0.388	15512.239	676.71
2042	00:34:02	-12.121	638.43	8	5000	40000	0.388	15508.853	676.81
2043	00:34:03	-12.122	638.629	8	5000	40000	0.388	15505.468	676.91

2044	00:34:04	-12.123	638.828	8	5000	40000	0.388	15502.084	677.01
2045	00:34:05	-12.124	639.026	8	5000	40000	0.387	15498.720	677.11
2046	00:34:06	-12.124	639.224	8	5000	40000	0.387	15495.356	677.22
2047	00:34:07	-12.125	639.421	8	5000	40000	0.387	15492.011	677.32
2048	00:34:08	-12.126	639.618	8	5000	40000	0.387	15488.667	677.42
2049	00:34:09	-12.127	639.814	8	5000	40000	0.387	15485.342	677.52
2050	00:34:10	-12.128	640.01	8	5000	40000	0.387	15482.018	677.62
2051	00:34:11	-12.129	640.206	8	5000	40000	0.387	15478.696	677.72
2052	00:34:12	-12.129	640.401	8	5000	40000	0.387	15475.392	677.82
2053	00:34:13	-12.13	640.596	8	5000	40000	0.387	15472.090	677.92
2054	00:34:14	-12.131	640.79	8	5000	40000	0.387	15468.805	678.02
2055	00:34:15	-12.132	640.984	8	5000	40000	0.387	15465.523	678.12
2056	00:34:16	-12.133	641.178	8	5000	40000	0.387	15462.241	678.21
2057	00:34:17	-12.134	641.371	8	5000	40000	0.386	15458.978	678.31
2058	00:34:18	-12.134	641.563	8	5000	40000	0.386	15455.733	678.41
2059	00:34:19	-12.135	641.756	8	5000	40000	0.386	15452.473	678.51
2060	00:34:20	-12.136	641.947	8	5000	40000	0.386	15449.247	678.61
2061	00:34:21	-12.137	642.139	8	5000	40000	0.386	15446.007	678.70
2062	00:34:22	-12.138	642.33	8	5000	40000	0.386	15442.784	678.80
2063	00:34:23	-12.139	642.52	8	5000	40000	0.386	15439.580	678.90
2064	00:34:24	-12.139	642.71	8	5000	40000	0.386	15436.377	678.99
2065	00:34:25	-12.14	642.9	8	5000	40000	0.386	15433.175	679.09
2066	00:34:26	-12.141	643.089	8	5000	40000	0.386	15429.992	679.19
2067	00:34:27	-12.142	643.278	8	5000	40000	0.386	15426.809	679.28
2068	00:34:28	-12.143	643.467	8	5000	40000	0.386	15423.628	679.38
2069	00:34:29	-12.143	643.655	8	5000	40000	0.386	15420.466	679.47
2070	00:34:30	-12.144	643.842	8	5000	40000	0.385	15417.321	679.57
2071	00:34:31	-12.145	644.029	8	5000	40000	0.385	15414.178	679.66
2072	00:34:32	-12.146	644.216	8	5000	40000	0.385	15411.036	679.76
2073	00:34:33	-12.147	644.402	8	5000	40000	0.385	15407.911	679.85
2074	00:34:34	-12.147	644.588	8	5000	40000	0.385	15404.789	679.95
2075	00:34:35	-12.148	644.774	8	5000	40000	0.385	15401.667	680.04
2076	00:34:36	-12.149	644.959	8	5000	40000	0.385	15398.564	680.13

2077	00:34:37	-12.15	645.143	8	5000	40000	0.385	15395.478	680.23
2078	00:34:38	-12.151	645.327	8	5000	40000	0.385	15392.394	680.32
2079	00:34:39	-12.151	645.511	8	5000	40000	0.385	15389.311	680.41
2080	00:34:40	-12.152	645.695	8	5000	40000	0.385	15386.229	680.51
2081	00:34:41	-12.153	645.878	8	5000	40000	0.385	15383.166	680.60
2082	00:34:42	-12.154	646.06	8	5000	40000	0.385	15380.120	680.69
2083	00:34:43	-12.154	646.242	8	5000	40000	0.384	15377.075	680.78
2084	00:34:44	-12.155	646.424	8	5000	40000	0.384	15374.032	680.88
2085	00:34:45	-12.156	646.605	8	5000	40000	0.384	15371.006	680.97
2086	00:34:46	-12.157	646.786	8	5000	40000	0.384	15367.982	681.06
2087	00:34:47	-12.157	646.966	8	5000	40000	0.384	15364.976	681.15
2088	00:34:48	-12.158	647.146	8	5000	40000	0.384	15361.970	681.24
2089	00:34:49	-12.159	647.326	8	5000	40000	0.384	15358.966	681.33
2090	00:34:50	-12.16	647.505	8	5000	40000	0.384	15355.980	681.42
2091	00:34:51	-12.161	647.684	8	5000	40000	0.384	15352.995	681.51
2092	00:34:52	-12.161	647.862	8	5000	40000	0.384	15350.028	681.60
2093	00:34:53	-12.162	648.04	8	5000	40000	0.384	15347.062	681.69
2094	00:34:54	-12.163	648.217	8	5000	40000	0.384	15344.114	681.78
2095	00:34:55	-12.164	648.394	8	5000	40000	0.384	15341.167	681.87
2096	00:34:56	-12.164	648.571	8	5000	40000	0.383	15338.221	681.96
2097	00:34:57	-12.165	648.747	8	5000	40000	0.383	15335.292	682.05
2098	00:34:58	-12.166	648.923	8	5000	40000	0.383	15332.365	682.14
2099	00:34:59	-12.167	649.098	8	5000	40000	0.383	15329.456	682.23
2100	00:35:00	-12.167	649.273	8	5000	40000	0.383	15326.548	682.31
2101	00:35:01	-12.168	649.448	8	5000	40000	0.383	15323.640	682.40
2102	00:35:02	-12.169	649.622	8	5000	40000	0.383	15320.751	682.49
2103	00:35:03	-12.169	649.796	8	5000	40000	0.383	15317.863	682.58
2104	00:35:04	-12.17	649.969	8	5000	40000	0.383	15314.992	682.66
2105	00:35:05	-12.171	650.142	8	5000	40000	0.383	15312.122	682.75
2106	00:35:06	-12.172	650.315	8	5000	40000	0.383	15309.254	682.84
2107	00:35:07	-12.172	650.487	8	5000	40000	0.383	15306.403	682.92
2108	00:35:08	-12.173	650.658	8	5000	40000	0.383	15303.570	683.01
2109	00:35:09	-12.174	650.829	8	5000	40000	0.383	15300.737	683.10

2110	00:35:10	-12.175	651	8	5000	40000	0.382	15297.906	683.18
2111	00:35:11	-12.175	651.171	8	5000	40000	0.382	15295.076	683.27
2112	00:35:12	-12.176	651.341	8	5000	40000	0.382	15292.264	683.35
2113	00:35:13	-12.177	651.51	8	5000	40000	0.382	15289.469	683.44
2114	00:35:14	-12.177	651.679	8	5000	40000	0.382	15286.675	683.52
2115	00:35:15	-12.178	651.848	8	5000	40000	0.382	15283.882	683.61
2116	00:35:16	-12.179	652.017	8	5000	40000	0.382	15281.090	683.69
2117	00:35:17	-12.18	652.185	8	5000	40000	0.382	15278.315	683.78
2118	00:35:18	-12.18	652.352	8	5000	40000	0.382	15275.559	683.86
2119	00:35:19	-12.181	652.519	8	5000	40000	0.382	15272.803	683.95
2120	00:35:20	-12.182	652.686	8	5000	40000	0.382	15270.048	684.03
2121	00:35:21	-12.182	652.852	8	5000	40000	0.382	15267.310	684.11
2122	00:35:22	-12.183	653.018	8	5000	40000	0.382	15264.574	684.20
2123	00:35:23	-12.184	653.184	8	5000	40000	0.382	15261.839	684.28
2124	00:35:24	-12.184	653.349	8	5000	40000	0.381	15259.121	684.36
2125	00:35:25	-12.185	653.513	8	5000	40000	0.381	15256.420	684.44
2126	00:35:26	-12.186	653.678	8	5000	40000	0.381	15253.704	684.53
2127	00:35:27	-12.186	653.841	8	5000	40000	0.381	15251.022	684.61
2128	00:35:28	-12.187	654.005	8	5000	40000	0.381	15248.324	684.69
2129	00:35:29	-12.188	654.168	8	5000	40000	0.381	15245.644	684.77
2130	00:35:30	-12.189	654.331	8	5000	40000	0.381	15242.965	684.85
2131	00:35:31	-12.189	654.493	8	5000	40000	0.381	15240.303	684.94
2132	00:35:32	-12.19	654.655	8	5000	40000	0.381	15237.642	685.02
2133	00:35:33	-12.191	654.816	8	5000	40000	0.381	15234.998	685.10
2134	00:35:34	-12.191	654.977	8	5000	40000	0.381	15232.355	685.18
2135	00:35:35	-12.192	655.138	8	5000	40000	0.381	15229.713	685.26
2136	00:35:36	-12.193	655.298	8	5000	40000	0.381	15227.089	685.34
2137	00:35:37	-12.193	655.458	8	5000	40000	0.381	15224.465	685.42
2138	00:35:38	-12.194	655.617	8	5000	40000	0.381	15221.859	685.50
2139	00:35:39	-12.195	655.776	8	5000	40000	0.380	15219.253	685.58
2140	00:35:40	-12.195	655.935	8	5000	40000	0.380	15216.649	685.66
2141	00:35:41	-12.196	656.093	8	5000	40000	0.380	15214.061	685.74
2142	00:35:42	-12.197	656.251	8	5000	40000	0.380	15211.475	685.82

2143	00:35:43	-12.197	656.408	8	5000	40000	0.380	15208.906	685.90
2144	00:35:44	-12.198	656.565	8	5000	40000	0.380	15206.337	685.97
2145	00:35:45	-12.199	656.722	8	5000	40000	0.380	15203.770	686.05
2146	00:35:46	-12.199	656.878	8	5000	40000	0.380	15201.220	686.13
2147	00:35:47	-12.2	657.034	8	5000	40000	0.380	15198.670	686.21
2148	00:35:48	-12.2	657.189	8	5000	40000	0.380	15196.138	686.29
2149	00:35:49	-12.201	657.345	8	5000	40000	0.380	15193.591	686.36
2150	00:35:50	-12.202	657.499	8	5000	40000	0.380	15191.076	686.44
2151	00:35:51	-12.202	657.653	8	5000	40000	0.380	15188.563	686.52
2152	00:35:52	-12.203	657.807	8	5000	40000	0.380	15186.050	686.60
2153	00:35:53	-12.204	657.961	8	5000	40000	0.380	15183.539	686.67
2154	00:35:54	-12.204	658.114	8	5000	40000	0.380	15181.044	686.75
2155	00:35:55	-12.205	658.266	8	5000	40000	0.379	15178.567	686.83
2156	00:35:56	-12.206	658.419	8	5000	40000	0.379	15176.074	686.90
2157	00:35:57	-12.206	658.571	8	5000	40000	0.379	15173.598	686.98
2158	00:35:58	-12.207	658.722	8	5000	40000	0.379	15171.139	687.05
2159	00:35:59	-12.207	658.873	8	5000	40000	0.379	15168.681	687.13
2160	00:36:00	-12.208	659.024	8	5000	40000	0.379	15166.224	687.21
2161	00:36:01	-12.209	659.174	8	5000	40000	0.379	15163.784	687.28
2162	00:36:02	-12.209	659.324	8	5000	40000	0.379	15161.345	687.36
2163	00:36:03	-12.21	659.474	8	5000	40000	0.379	15158.906	687.43
2164	00:36:04	-12.211	659.623	8	5000	40000	0.379	15156.485	687.51
2165	00:36:05	-12.211	659.772	8	5000	40000	0.379	15154.064	687.58
2166	00:36:06	-12.212	659.92	8	5000	40000	0.379	15151.661	687.66
2167	00:36:07	-12.212	660.068	8	5000	40000	0.379	15149.258	687.73
2168	00:36:08	-12.213	660.216	8	5000	40000	0.379	15146.856	687.80
2169	00:36:09	-12.214	660.363	8	5000	40000	0.379	15144.470	687.88
2170	00:36:10	-12.214	660.51	8	5000	40000	0.379	15142.086	687.95
2171	00:36:11	-12.215	660.657	8	5000	40000	0.378	15139.702	688.02
2172	00:36:12	-12.215	660.803	8	5000	40000	0.378	15137.336	688.10
2173	00:36:13	-12.216	660.948	8	5000	40000	0.378	15134.986	688.17
2174	00:36:14	-12.217	661.094	8	5000	40000	0.378	15132.621	688.24
2175	00:36:15	-12.217	661.239	8	5000	40000	0.378	15130.272	688.32

2176	00:36:16	-12.218	661.383	8	5000	40000	0.378	15127.941	688.39
2177	00:36:17	-12.218	661.527	8	5000	40000	0.378	15125.610	688.46
2178	00:36:18	-12.219	661.671	8	5000	40000	0.378	15123.280	688.53
2179	00:36:19	-12.22	661.815	8	5000	40000	0.378	15120.951	688.61
2180	00:36:20	-12.22	661.958	8	5000	40000	0.378	15118.639	688.68
2181	00:36:21	-12.221	662.101	8	5000	40000	0.378	15116.327	688.75
2182	00:36:22	-12.221	662.243	8	5000	40000	0.378	15114.032	688.82
2183	00:36:23	-12.222	662.385	8	5000	40000	0.378	15111.738	688.89
2184	00:36:24	-12.223	662.526	8	5000	40000	0.378	15109.461	688.96
2185	00:36:25	-12.223	662.668	8	5000	40000	0.378	15107.168	689.03
2186	00:36:26	-12.224	662.808	8	5000	40000	0.378	15104.909	689.10
2187	00:36:27	-12.224	662.949	8	5000	40000	0.378	15102.633	689.17
2188	00:36:28	-12.225	663.089	8	5000	40000	0.378	15100.375	689.25
2189	00:36:29	-12.225	663.229	8	5000	40000	0.377	15098.117	689.32
2190	00:36:30	-12.226	663.368	8	5000	40000	0.377	15095.876	689.39
2191	00:36:31	-12.227	663.507	8	5000	40000	0.377	15093.636	689.46
2192	00:36:32	-12.227	663.646	8	5000	40000	0.377	15091.397	689.52
2193	00:36:33	-12.228	663.784	8	5000	40000	0.377	15089.174	689.59
2194	00:36:34	-12.228	663.922	8	5000	40000	0.377	15086.952	689.66
2195	00:36:35	-12.229	664.059	8	5000	40000	0.377	15084.746	689.73
2196	00:36:36	-12.229	664.196	8	5000	40000	0.377	15082.542	689.80
2197	00:36:37	-12.23	664.333	8	5000	40000	0.377	15080.337	689.87
2198	00:36:38	-12.23	664.47	8	5000	40000	0.377	15078.134	689.94
2199	00:36:39	-12.231	664.606	8	5000	40000	0.377	15075.947	690.01
2200	00:36:40	-12.232	664.741	8	5000	40000	0.377	15073.777	690.08
2201	00:36:41	-12.232	664.877	8	5000	40000	0.377	15071.592	690.14
2202	00:36:42	-12.233	665.012	8	5000	40000	0.377	15069.423	690.21
2203	00:36:43	-12.233	665.146	8	5000	40000	0.377	15067.271	690.28
2204	00:36:44	-12.234	665.28	8	5000	40000	0.377	15065.119	690.35
2205	00:36:45	-12.234	665.414	8	5000	40000	0.377	15062.969	690.41
2206	00:36:46	-12.235	665.548	8	5000	40000	0.377	15060.818	690.48
2207	00:36:47	-12.235	665.681	8	5000	40000	0.376	15058.685	690.55
2208	00:36:48	-12.236	665.814	8	5000	40000	0.376	15056.552	690.62

2209	00:36:49	-12.236	665.946	8	5000	40000	0.376	15054.435	690.68
2210	00:36:50	-12.237	666.078	8	5000	40000	0.376	15052.320	690.75
2211	00:36:51	-12.238	666.21	8	5000	40000	0.376	15050.204	690.82
2212	00:36:52	-12.238	666.341	8	5000	40000	0.376	15048.106	690.88
2213	00:36:53	-12.239	666.472	8	5000	40000	0.376	15046.008	690.95
2214	00:36:54	-12.239	666.603	8	5000	40000	0.376	15043.910	691.01
2215	00:36:55	-12.24	666.733	8	5000	40000	0.376	15041.830	691.08
2216	00:36:56	-12.24	666.863	8	5000	40000	0.376	15039.749	691.15
2217	00:36:57	-12.241	666.993	8	5000	40000	0.376	15037.670	691.21
2218	00:36:58	-12.241	667.122	8	5000	40000	0.376	15035.607	691.28
2219	00:36:59	-12.242	667.251	8	5000	40000	0.376	15033.544	691.34
2220	00:37:00	-12.242	667.38	8	5000	40000	0.376	15031.482	691.41
2221	00:37:01	-12.243	667.508	8	5000	40000	0.376	15029.437	691.47
2222	00:37:02	-12.243	667.636	8	5000	40000	0.376	15027.392	691.54
2223	00:37:03	-12.244	667.763	8	5000	40000	0.376	15025.364	691.60
2224	00:37:04	-12.244	667.89	8	5000	40000	0.376	15023.336	691.66
2225	00:37:05	-12.245	668.017	8	5000	40000	0.376	15021.309	691.73
2226	00:37:06	-12.245	668.144	8	5000	40000	0.375	15019.282	691.79
2227	00:37:07	-12.246	668.27	8	5000	40000	0.375	15017.272	691.86
2228	00:37:08	-12.246	668.396	8	5000	40000	0.375	15015.262	691.92
2229	00:37:09	-12.247	668.521	8	5000	40000	0.375	15013.269	691.98
2230	00:37:10	-12.247	668.646	8	5000	40000	0.375	15011.276	692.05
2231	00:37:11	-12.248	668.771	8	5000	40000	0.375	15009.284	692.11
2232	00:37:12	-12.248	668.895	8	5000	40000	0.375	15007.309	692.17
2233	00:37:13	-12.249	669.02	8	5000	40000	0.375	15005.318	692.24
2234	00:37:14	-12.249	669.143	8	5000	40000	0.375	15003.359	692.30
2235	00:37:15	-12.25	669.267	8	5000	40000	0.375	15001.385	692.36
2236	00:37:16	-12.25	669.39	8	5000	40000	0.375	14999.427	692.42
2237	00:37:17	-12.251	669.513	8	5000	40000	0.375	14997.470	692.49
2238	00:37:18	-12.251	669.635	8	5000	40000	0.375	14995.529	692.55
2239	00:37:19	-12.252	669.757	8	5000	40000	0.375	14993.589	692.61
2240	00:37:20	-12.252	669.879	8	5000	40000	0.375	14991.649	692.67
2241	00:37:21	-12.253	670	8	5000	40000	0.375	14989.726	692.73

2242	00:37:22	-12.253	670.121	8	5000	40000	0.375	14987.803	692.80
2243	00:37:23	-12.254	670.242	8	5000	40000	0.375	14985.881	692.86
2244	00:37:24	-12.254	670.362	8	5000	40000	0.375	14983.975	692.92
2245	00:37:25	-12.255	670.483	8	5000	40000	0.375	14982.053	692.98
2246	00:37:26	-12.255	670.602	8	5000	40000	0.375	14980.164	693.04
2247	00:37:27	-12.256	670.722	8	5000	40000	0.374	14978.260	693.10
2248	00:37:28	-12.256	670.841	8	5000	40000	0.374	14976.372	693.16
2249	00:37:29	-12.257	670.96	8	5000	40000	0.374	14974.484	693.22
2250	00:37:30	-12.257	671.078	8	5000	40000	0.374	14972.613	693.28
2251	00:37:31	-12.258	671.196	8	5000	40000	0.374	14970.742	693.34
2252	00:37:32	-12.258	671.314	8	5000	40000	0.374	14968.871	693.40
2253	00:37:33	-12.259	671.431	8	5000	40000	0.374	14967.017	693.46
2254	00:37:34	-12.259	671.549	8	5000	40000	0.374	14965.148	693.52
2255	00:37:35	-12.26	671.665	8	5000	40000	0.374	14963.310	693.58
2256	00:37:36	-12.26	671.782	8	5000	40000	0.374	14961.458	693.64
2257	00:37:37	-12.261	671.898	8	5000	40000	0.374	14959.621	693.70
2258	00:37:38	-12.261	672.014	8	5000	40000	0.374	14957.785	693.76
2259	00:37:39	-12.261	672.129	8	5000	40000	0.374	14955.965	693.82
2260	00:37:40	-12.262	672.245	8	5000	40000	0.374	14954.130	693.88
2261	00:37:41	-12.262	672.36	8	5000	40000	0.374	14952.311	693.94
2262	00:37:42	-12.263	672.474	8	5000	40000	0.374	14950.509	694.00
2263	00:37:43	-12.263	672.588	8	5000	40000	0.374	14948.707	694.05
2264	00:37:44	-12.264	672.702	8	5000	40000	0.374	14946.905	694.11
2265	00:37:45	-12.264	672.816	8	5000	40000	0.374	14945.104	694.17
2266	00:37:46	-12.265	672.929	8	5000	40000	0.374	14943.319	694.23
2267	00:37:47	-12.265	673.042	8	5000	40000	0.374	14941.534	694.29
2268	00:37:48	-12.266	673.155	8	5000	40000	0.373	14939.750	694.34
2269	00:37:49	-12.266	673.268	8	5000	40000	0.373	14937.966	694.40
2270	00:37:50	-12.266	673.38	8	5000	40000	0.373	14936.199	694.46
2271	00:37:51	-12.267	673.491	8	5000	40000	0.373	14934.447	694.52
2272	00:37:52	-12.267	673.603	8	5000	40000	0.373	14932.680	694.57
2273	00:37:53	-12.268	673.714	8	5000	40000	0.373	14930.930	694.63
2274	00:37:54	-12.268	673.825	8	5000	40000	0.373	14929.180	694.69

2275	00:37:55	-12.269	673.935	8	5000	40000	0.373	14927.446	694.75
2276	00:37:56	-12.269	674.046	8	5000	40000	0.373	14925.696	694.80
2277	00:37:57	-12.27	674.156	8	5000	40000	0.373	14923.963	694.86
2278	00:37:58	-12.27	674.265	8	5000	40000	0.373	14922.246	694.92
2279	00:37:59	-12.27	674.374	8	5000	40000	0.373	14920.530	694.97
2280	00:38:00	-12.271	674.483	8	5000	40000	0.373	14918.814	695.03
2281	00:38:01	-12.271	674.592	8	5000	40000	0.373	14917.098	695.08
2282	00:38:02	-12.272	674.701	8	5000	40000	0.373	14915.382	695.14
2283	00:38:03	-12.272	674.809	8	5000	40000	0.373	14913.683	695.20
2284	00:38:04	-12.273	674.917	8	5000	40000	0.373	14911.984	695.25
2285	00:38:05	-12.273	675.024	8	5000	40000	0.373	14910.301	695.31
2286	00:38:06	-12.273	675.131	8	5000	40000	0.373	14908.619	695.36
2287	00:38:07	-12.274	675.238	8	5000	40000	0.373	14906.937	695.42
2288	00:38:08	-12.274	675.345	8	5000	40000	0.373	14905.255	695.47
2289	00:38:09	-12.275	675.451	8	5000	40000	0.373	14903.590	695.53
2290	00:38:10	-12.275	675.557	8	5000	40000	0.373	14901.924	695.58
2291	00:38:11	-12.275	675.663	8	5000	40000	0.373	14900.260	695.64
2292	00:38:12	-12.276	675.768	8	5000	40000	0.372	14898.611	695.69
2293	00:38:13	-12.276	675.873	8	5000	40000	0.372	14896.962	695.75
2294	00:38:14	-12.277	675.978	8	5000	40000	0.372	14895.314	695.80
2295	00:38:15	-12.277	676.083	8	5000	40000	0.372	14893.667	695.86
2296	00:38:16	-12.278	676.187	8	5000	40000	0.372	14892.035	695.91
2297	00:38:17	-12.278	676.291	8	5000	40000	0.372	14890.404	695.96
2298	00:38:18	-12.278	676.395	8	5000	40000	0.372	14888.773	696.02
2299	00:38:19	-12.279	676.498	8	5000	40000	0.372	14887.158	696.07
2300	00:38:20	-12.279	676.601	8	5000	40000	0.372	14885.544	696.13
2301	00:38:21	-12.28	676.704	8	5000	40000	0.372	14883.930	696.18
2302	00:38:22	-12.28	676.807	8	5000	40000	0.372	14882.316	696.23
2303	00:38:23	-12.28	676.909	8	5000	40000	0.372	14880.718	696.29
2304	00:38:24	-12.281	677.011	8	5000	40000	0.372	14879.120	696.34
2305	00:38:25	-12.281	677.113	8	5000	40000	0.372	14877.523	696.39
2306	00:38:26	-12.282	677.214	8	5000	40000	0.372	14875.942	696.45
2307	00:38:27	-12.282	677.315	8	5000	40000	0.372	14874.361	696.50

2308	00:38:28	-12.282	677.416	8	5000	40000	0.372	14872.781	696.55
2309	00:38:29	-12.283	677.517	8	5000	40000	0.372	14871.201	696.60
2310	00:38:30	-12.283	677.617	8	5000	40000	0.372	14869.637	696.66
2311	00:38:31	-12.284	677.717	8	5000	40000	0.372	14868.073	696.71
2312	00:38:32	-12.284	677.817	8	5000	40000	0.372	14866.510	696.76
2313	00:38:33	-12.284	677.916	8	5000	40000	0.372	14864.962	696.81
2314	00:38:34	-12.285	678.015	8	5000	40000	0.372	14863.415	696.86
2315	00:38:35	-12.285	678.114	8	5000	40000	0.372	14861.868	696.92
2316	00:38:36	-12.286	678.213	8	5000	40000	0.372	14860.321	696.97
2317	00:38:37	-12.286	678.311	8	5000	40000	0.371	14858.791	697.02
2318	00:38:38	-12.286	678.409	8	5000	40000	0.371	14857.261	697.07
2319	00:38:39	-12.287	678.507	8	5000	40000	0.371	14855.731	697.12
2320	00:38:40	-12.287	678.604	8	5000	40000	0.371	14854.217	697.17
2321	00:38:41	-12.287	678.702	8	5000	40000	0.371	14852.687	697.23
2322	00:38:42	-12.288	678.799	8	5000	40000	0.371	14851.174	697.28
2323	00:38:43	-12.288	678.895	8	5000	40000	0.371	14849.676	697.33
2324	00:38:44	-12.289	678.992	8	5000	40000	0.371	14848.163	697.38
2325	00:38:45	-12.289	679.088	8	5000	40000	0.371	14846.666	697.43
2326	00:38:46	-12.289	679.184	8	5000	40000	0.371	14845.170	697.48
2327	00:38:47	-12.29	679.28	8	5000	40000	0.371	14843.674	697.53
2328	00:38:48	-12.29	679.375	8	5000	40000	0.371	14842.193	697.58
2329	00:38:49	-12.29	679.47	8	5000	40000	0.371	14840.713	697.63
2330	00:38:50	-12.291	679.565	8	5000	40000	0.371	14839.233	697.68
2331	00:38:51	-12.291	679.66	8	5000	40000	0.371	14837.754	697.73
2332	00:38:52	-12.292	679.754	8	5000	40000	0.371	14836.290	697.78
2333	00:38:53	-12.292	679.848	8	5000	40000	0.371	14834.827	697.83
2334	00:38:54	-12.292	679.942	8	5000	40000	0.371	14833.363	697.88
2335	00:38:55	-12.293	680.035	8	5000	40000	0.371	14831.916	697.93
2336	00:38:56	-12.293	680.129	8	5000	40000	0.371	14830.454	697.98
2337	00:38:57	-12.293	680.222	8	5000	40000	0.371	14829.007	698.03
2338	00:38:58	-12.294	680.314	8	5000	40000	0.371	14827.576	698.08
2339	00:38:59	-12.294	680.407	8	5000	40000	0.371	14826.130	698.13
2340	00:39:00	-12.294	680.499	8	5000	40000	0.371	14824.700	698.18

2341	00:39:01	-12.295	680.591	8	5000	40000	0.371	14823.270	698.23
2342	00:39:02	-12.295	680.683	8	5000	40000	0.371	14821.840	698.28
2343	00:39:03	-12.296	680.774	8	5000	40000	0.371	14820.426	698.32
2344	00:39:04	-12.296	680.866	8	5000	40000	0.370	14818.997	698.37
2345	00:39:05	-12.296	680.957	8	5000	40000	0.370	14817.583	698.42
2346	00:39:06	-12.297	681.047	8	5000	40000	0.370	14816.186	698.47
2347	00:39:07	-12.297	681.138	8	5000	40000	0.370	14814.773	698.52
2348	00:39:08	-12.297	681.228	8	5000	40000	0.370	14813.376	698.57
2349	00:39:09	-12.298	681.318	8	5000	40000	0.370	14811.979	698.61
2350	00:39:10	-12.298	681.408	8	5000	40000	0.370	14810.582	698.66
2351	00:39:11	-12.298	681.497	8	5000	40000	0.370	14809.202	698.71
2352	00:39:12	-12.299	681.586	8	5000	40000	0.370	14807.821	698.76
2353	00:39:13	-12.299	681.675	8	5000	40000	0.370	14806.441	698.81
2354	00:39:14	-12.299	681.764	8	5000	40000	0.370	14805.061	698.85
2355	00:39:15	-12.3	681.853	8	5000	40000	0.370	14803.681	698.90
2356	00:39:16	-12.3	681.941	8	5000	40000	0.370	14802.317	698.95
2357	00:39:17	-12.3	682.029	8	5000	40000	0.370	14800.954	699.00
2358	00:39:18	-12.301	682.117	8	5000	40000	0.370	14799.590	699.04
2359	00:39:19	-12.301	682.204	8	5000	40000	0.370	14798.242	699.09
2360	00:39:20	-12.301	682.291	8	5000	40000	0.370	14796.895	699.14
2361	00:39:21	-12.302	682.378	8	5000	40000	0.370	14795.548	699.19
2362	00:39:22	-12.302	682.465	8	5000	40000	0.370	14794.201	699.23
2363	00:39:23	-12.302	682.552	8	5000	40000	0.370	14792.854	699.28
2364	00:39:24	-12.303	682.638	8	5000	40000	0.370	14791.523	699.33
2365	00:39:25	-12.303	682.724	8	5000	40000	0.370	14790.192	699.37
2366	00:39:26	-12.303	682.81	8	5000	40000	0.370	14788.861	699.42
2367	00:39:27	-12.304	682.895	8	5000	40000	0.370	14787.547	699.46
2368	00:39:28	-12.304	682.981	8	5000	40000	0.370	14786.217	699.51
2369	00:39:29	-12.304	683.066	8	5000	40000	0.370	14784.902	699.56
2370	00:39:30	-12.305	683.151	8	5000	40000	0.370	14783.588	699.60
2371	00:39:31	-12.305	683.235	8	5000	40000	0.370	14782.290	699.65
2372	00:39:32	-12.305	683.32	8	5000	40000	0.370	14780.976	699.70
2373	00:39:33	-12.306	683.404	8	5000	40000	0.369	14779.678	699.74

2374	00:39:34	-12.306	683.488	8	5000	40000	0.369	14778.380	699.79
2375	00:39:35	-12.306	683.572	8	5000	40000	0.369	14777.083	699.83
2376	00:39:36	-12.307	683.655	8	5000	40000	0.369	14775.801	699.88
2377	00:39:37	-12.307	683.739	8	5000	40000	0.369	14774.504	699.92
2378	00:39:38	-12.307	683.822	8	5000	40000	0.369	14773.222	699.97
2379	00:39:39	-12.308	683.904	8	5000	40000	0.369	14771.956	700.01
2380	00:39:40	-12.308	683.987	8	5000	40000	0.369	14770.675	700.06
2381	00:39:41	-12.308	684.069	8	5000	40000	0.369	14769.410	700.10
2382	00:39:42	-12.309	684.151	8	5000	40000	0.369	14768.145	700.15
2383	00:39:43	-12.309	684.233	8	5000	40000	0.369	14766.880	700.19
2384	00:39:44	-12.309	684.315	8	5000	40000	0.369	14765.615	700.24
2385	00:39:45	-12.309	684.396	8	5000	40000	0.369	14764.366	700.28
2386	00:39:46	-12.31	684.478	8	5000	40000	0.369	14763.102	700.33
2387	00:39:47	-12.31	684.559	8	5000	40000	0.369	14761.854	700.37
2388	00:39:48	-12.31	684.639	8	5000	40000	0.369	14760.621	700.42
2389	00:39:49	-12.311	684.72	8	5000	40000	0.369	14759.372	700.46
2390	00:39:50	-12.311	684.8	8	5000	40000	0.369	14758.140	700.51
2391	00:39:51	-12.311	684.88	8	5000	40000	0.369	14756.907	700.55
2392	00:39:52	-12.312	684.96	8	5000	40000	0.369	14755.675	700.59
2393	00:39:53	-12.312	685.04	8	5000	40000	0.369	14754.443	700.64
2394	00:39:54	-12.312	685.12	8	5000	40000	0.369	14753.212	700.68
2395	00:39:55	-12.312	685.199	8	5000	40000	0.369	14751.995	700.73
2396	00:39:56	-12.313	685.278	8	5000	40000	0.369	14750.779	700.77
2397	00:39:57	-12.313	685.357	8	5000	40000	0.369	14749.564	700.81
2398	00:39:58	-12.313	685.435	8	5000	40000	0.369	14748.363	700.86
2399	00:39:59	-12.314	685.514	8	5000	40000	0.369	14747.148	700.90
2400	00:40:00	-12.314	685.592	8	5000	40000	0.369	14745.948	700.94
2401	00:40:01	-12.314	685.67	8	5000	40000	0.369	14744.749	700.99
2402	00:40:02	-12.315	685.748	8	5000	40000	0.369	14743.549	701.03
2403	00:40:03	-12.315	685.825	8	5000	40000	0.369	14742.366	701.07
2404	00:40:04	-12.315	685.902	8	5000	40000	0.369	14741.182	701.12
2405	00:40:05	-12.315	685.98	8	5000	40000	0.368	14739.983	701.16
2406	00:40:06	-12.316	686.056	8	5000	40000	0.368	14738.815	701.20

2407	00:40:07	-12.316	686.133	8	5000	40000	0.368	14737.632	701.25
2408	00:40:08	-12.316	686.21	8	5000	40000	0.368	14736.449	701.29
2409	00:40:09	-12.317	686.286	8	5000	40000	0.368	14735.282	701.33
2410	00:40:10	-12.317	686.362	8	5000	40000	0.368	14734.115	701.37
2411	00:40:11	-12.317	686.438	8	5000	40000	0.368	14732.948	701.42
2412	00:40:12	-12.317	686.514	8	5000	40000	0.368	14731.781	701.46
2413	00:40:13	-12.318	686.589	8	5000	40000	0.368	14730.630	701.50
2414	00:40:14	-12.318	686.664	8	5000	40000	0.368	14729.479	701.54
2415	00:40:15	-12.318	686.739	8	5000	40000	0.368	14728.328	701.59
2416	00:40:16	-12.319	686.814	8	5000	40000	0.368	14727.177	701.63
2417	00:40:17	-12.319	686.889	8	5000	40000	0.368	14726.027	701.67
2418	00:40:18	-12.319	686.963	8	5000	40000	0.368	14724.892	701.71
2419	00:40:19	-12.319	687.038	8	5000	40000	0.368	14723.742	701.75
2420	00:40:20	-12.32	687.112	8	5000	40000	0.368	14722.607	701.80
2421	00:40:21	-12.32	687.185	8	5000	40000	0.368	14721.488	701.84
2422	00:40:22	-12.32	687.259	8	5000	40000	0.368	14720.354	701.88
2423	00:40:23	-12.321	687.333	8	5000	40000	0.368	14719.219	701.92
2424	00:40:24	-12.321	687.406	8	5000	40000	0.368	14718.101	701.96
2425	00:40:25	-12.321	687.479	8	5000	40000	0.368	14716.982	702.00
2426	00:40:26	-12.321	687.552	8	5000	40000	0.368	14715.864	702.04
2427	00:40:27	-12.322	687.624	8	5000	40000	0.368	14714.761	702.09
2428	00:40:28	-12.322	687.697	8	5000	40000	0.368	14713.643	702.13
2429	00:40:29	-12.322	687.769	8	5000	40000	0.368	14712.541	702.17
2430	00:40:30	-12.322	687.841	8	5000	40000	0.368	14711.439	702.21
2431	00:40:31	-12.323	687.913	8	5000	40000	0.368	14710.336	702.25
2432	00:40:32	-12.323	687.985	8	5000	40000	0.368	14709.234	702.29
2433	00:40:33	-12.323	688.056	8	5000	40000	0.368	14708.148	702.33
2434	00:40:34	-12.324	688.128	8	5000	40000	0.368	14707.046	702.37
2435	00:40:35	-12.324	688.199	8	5000	40000	0.368	14705.960	702.41
2436	00:40:36	-12.324	688.27	8	5000	40000	0.368	14704.874	702.45
2437	00:40:37	-12.324	688.341	8	5000	40000	0.368	14703.788	702.49
2438	00:40:38	-12.325	688.411	8	5000	40000	0.368	14702.718	702.53
2439	00:40:39	-12.325	688.481	8	5000	40000	0.368	14701.648	702.57

2440	00:40:40	-12.325	688.552	8	5000	40000	0.368	14700.562	702.62
2441	00:40:41	-12.325	688.622	8	5000	40000	0.367	14699.492	702.66
2442	00:40:42	-12.326	688.691	8	5000	40000	0.367	14698.438	702.70
2443	00:40:43	-12.326	688.761	8	5000	40000	0.367	14697.368	702.74
2444	00:40:44	-12.326	688.831	8	5000	40000	0.367	14696.299	702.78
2445	00:40:45	-12.326	688.9	8	5000	40000	0.367	14695.245	702.82
2446	00:40:46	-12.327	688.969	8	5000	40000	0.367	14694.191	702.86
2447	00:40:47	-12.327	689.038	8	5000	40000	0.367	14693.137	702.90
2448	00:40:48	-12.327	689.106	8	5000	40000	0.367	14692.099	702.93
2449	00:40:49	-12.327	689.175	8	5000	40000	0.367	14691.045	702.97
2450	00:40:50	-12.328	689.243	8	5000	40000	0.367	14690.007	703.01
2451	00:40:51	-12.328	689.312	8	5000	40000	0.367	14688.954	703.05
2452	00:40:52	-12.328	689.38	8	5000	40000	0.367	14687.916	703.09
2453	00:40:53	-12.328	689.447	8	5000	40000	0.367	14686.894	703.13
2454	00:40:54	-12.329	689.515	8	5000	40000	0.367	14685.856	703.17
2455	00:40:55	-12.329	689.582	8	5000	40000	0.367	14684.834	703.21
2456	00:40:56	-12.329	689.65	8	5000	40000	0.367	14683.797	703.25
2457	00:40:57	-12.329	689.717	8	5000	40000	0.367	14682.776	703.29
2458	00:40:58	-12.33	689.784	8	5000	40000	0.367	14681.754	703.33
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2460	00:41:00	-12.33	689.917	8	5000	40000	0.367	14679.726	703.41
2461	00:41:01	-12.33	689.983	8	5000	40000	0.367	14678.720	703.45
2462	00:41:02	-12.331	690.05	8	5000	40000	0.367	14677.699	703.48
2463	00:41:03	-12.331	690.116	8	5000	40000	0.367	14676.694	703.52
2464	00:41:04	-12.331	690.182	8	5000	40000	0.367	14675.688	703.56
2465	00:41:05	-12.331	690.247	8	5000	40000	0.367	14674.698	703.60
2466	00:41:06	-12.332	690.313	8	5000	40000	0.367	14673.693	703.64
2467	00:41:07	-12.332	690.378	8	5000	40000	0.367	14672.703	703.68
2468	00:41:08	-12.332	690.443	8	5000	40000	0.367	14671.713	703.72
2469	00:41:09	-12.332	690.509	8	5000	40000	0.367	14670.708	703.75
2470	00:41:10	-12.333	690.573	8	5000	40000	0.367	14669.734	703.79
2471	00:41:11	-12.333	690.638	8	5000	40000	0.367	14668.745	703.83
2472	00:41:12	-12.333	690.703	8	5000	40000	0.367	14667.755	703.87

2473	00:41:13	-12.333	690.767	8	5000	40000	0.367	14666.781	703.91
2474	00:41:14	-12.334	690.831	8	5000	40000	0.367	14665.808	703.94
2475	00:41:15	-12.334	690.895	8	5000	40000	0.367	14664.834	703.98
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2478	00:41:18	-12.335	691.086	8	5000	40000	0.367	14661.929	704.10
2479	00:41:19	-12.335	691.15	8	5000	40000	0.367	14660.956	704.13
2480	00:41:20	-12.335	691.213	8	5000	40000	0.366	14659.998	704.17
2481	00:41:21	-12.335	691.276	8	5000	40000	0.366	14659.041	704.21
2482	00:41:22	-12.335	691.339	8	5000	40000	0.366	14658.083	704.25
2483	00:41:23	-12.336	691.402	8	5000	40000	0.366	14657.126	704.28
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2485	00:41:25	-12.336	691.527	8	5000	40000	0.366	14655.227	704.36
2486	00:41:26	-12.336	691.589	8	5000	40000	0.366	14654.285	704.40
2487	00:41:27	-12.337	691.651	8	5000	40000	0.366	14653.343	704.43
2488	00:41:28	-12.337	691.713	8	5000	40000	0.366	14652.401	704.47
2489	00:41:29	-12.337	691.775	8	5000	40000	0.366	14651.460	704.51
2490	00:41:30	-12.337	691.836	8	5000	40000	0.366	14650.534	704.54
2491	00:41:31	-12.337	691.898	8	5000	40000	0.366	14649.593	704.58
2492	00:41:32	-12.338	691.959	8	5000	40000	0.366	14648.667	704.62
2493	00:41:33	-12.338	692.02	8	5000	40000	0.366	14647.741	704.65
2494	00:41:34	-12.338	692.081	8	5000	40000	0.366	14646.815	704.69
2495	00:41:35	-12.338	692.142	8	5000	40000	0.366	14645.890	704.73
2496	00:41:36	-12.339	692.203	8	5000	40000	0.366	14644.964	704.76
2497	00:41:37	-12.339	692.263	8	5000	40000	0.366	14644.054	704.80
2498	00:41:38	-12.339	692.323	8	5000	40000	0.366	14643.144	704.84
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2502	00:41:42	-12.34	692.563	8	5000	40000	0.366	14639.505	704.98
2503	00:41:43	-12.34	692.623	8	5000	40000	0.366	14638.595	705.02
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2505	00:41:45	-12.341	692.742	8	5000	40000	0.366	14636.792	705.09

2506	00:41:46	-12.341	692.801	8	5000	40000	0.366	14635.898	705.13
2507	00:41:47	-12.341	692.86	8	5000	40000	0.366	14635.004	705.16
2508	00:41:48	-12.341	692.919	8	5000	40000	0.366	14634.110	705.20
2509	00:41:49	-12.341	692.978	8	5000	40000	0.366	14633.216	705.24
2510	00:41:50	-12.342	693.036	8	5000	40000	0.366	14632.338	705.27
2511	00:41:51	-12.342	693.095	8	5000	40000	0.366	14631.444	705.31
2512	00:41:52	-12.342	693.153	8	5000	40000	0.366	14630.566	705.34
2513	00:41:53	-12.342	693.211	8	5000	40000	0.366	14629.688	705.38
2514	00:41:54	-12.342	693.269	8	5000	40000	0.366	14628.810	705.42
2515	00:41:55	-12.343	693.327	8	5000	40000	0.366	14627.932	705.45
2516	00:41:56	-12.343	693.385	8	5000	40000	0.366	14627.054	705.49
2517	00:41:57	-12.343	693.442	8	5000	40000	0.366	14626.192	705.52
2518	00:41:58	-12.343	693.5	8	5000	40000	0.366	14625.314	705.56
2519	00:41:59	-12.343	693.557	8	5000	40000	0.366	14624.452	705.59
2520	00:42:00	-12.344	693.614	8	5000	40000	0.366	14623.590	705.63
2521	00:42:01	-12.344	693.671	8	5000	40000	0.366	14622.727	705.66
2522	00:42:02	-12.344	693.728	8	5000	40000	0.366	14621.865	705.70
2523	00:42:03	-12.344	693.785	8	5000	40000	0.366	14621.003	705.73
2524	00:42:04	-12.345	693.841	8	5000	40000	0.366	14620.157	705.77
2525	00:42:05	-12.345	693.898	8	5000	40000	0.365	14619.295	705.80
2526	00:42:06	-12.345	693.954	8	5000	40000	0.365	14618.448	705.84
2527	00:42:07	-12.345	694.01	8	5000	40000	0.365	14617.602	705.87
2528	00:42:08	-12.345	694.066	8	5000	40000	0.365	14616.756	705.91
2529	00:42:09	-12.346	694.122	8	5000	40000	0.365	14615.909	705.94
2530	00:42:10	-12.346	694.178	8	5000	40000	0.365	14615.063	705.98
2531	00:42:11	-12.346	694.234	8	5000	40000	0.365	14614.217	706.01
2532	00:42:12	-12.346	694.289	8	5000	40000	0.365	14613.386	706.05
2533	00:42:13	-12.346	694.345	8	5000	40000	0.365	14612.541	706.08
2534	00:42:14	-12.347	694.4	8	5000	40000	0.365	14611.710	706.12
2535	00:42:15	-12.347	694.455	8	5000	40000	0.365	14610.879	706.15
2536	00:42:16	-12.347	694.51	8	5000	40000	0.365	14610.049	706.19
2537	00:42:17	-12.347	694.565	8	5000	40000	0.365	14609.219	706.22
2538	00:42:18	-12.347	694.619	8	5000	40000	0.365	14608.403	706.26

2539	00:42:19	-12.347	694.674	8	5000	40000	0.365	14607.573	706.29
2540	00:42:20	-12.348	694.728	8	5000	40000	0.365	14606.758	706.32
2541	00:42:21	-12.348	694.783	8	5000	40000	0.365	14605.928	706.36
2542	00:42:22	-12.348	694.837	8	5000	40000	0.365	14605.113	706.39
2543	00:42:23	-12.348	694.891	8	5000	40000	0.365	14604.299	706.43
2544	00:42:24	-12.348	694.945	8	5000	40000	0.365	14603.484	706.46
2545	00:42:25	-12.349	694.999	8	5000	40000	0.365	14602.670	706.50
2546	00:42:26	-12.349	695.052	8	5000	40000	0.365	14601.870	706.53
2547	00:42:27	-12.349	695.106	8	5000	40000	0.365	14601.056	706.56
2548	00:42:28	-12.349	695.159	8	5000	40000	0.365	14600.257	706.60
2549	00:42:29	-12.349	695.212	8	5000	40000	0.365	14599.458	706.63
2550	00:42:30	-12.35	695.266	8	5000	40000	0.365	14598.644	706.67
2551	00:42:31	-12.35	695.319	8	5000	40000	0.365	14597.845	706.70
2552	00:42:32	-12.35	695.372	8	5000	40000	0.365	14597.046	706.73
2553	00:42:33	-12.35	695.424	8	5000	40000	0.365	14596.262	706.77
2554	00:42:34	-12.35	695.477	8	5000	40000	0.365	14595.463	706.80
2555	00:42:35	-12.351	695.53	8	5000	40000	0.365	14594.665	706.84
2556	00:42:36	-12.351	695.582	8	5000	40000	0.365	14593.881	706.87
2557	00:42:37	-12.351	695.634	8	5000	40000	0.365	14593.098	706.90
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2559	00:42:39	-12.351	695.738	8	5000	40000	0.365	14591.532	706.97
2560	00:42:40	-12.351	695.79	8	5000	40000	0.365	14590.749	707.00
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2562	00:42:42	-12.352	695.894	8	5000	40000	0.365	14589.183	707.07
2563	00:42:43	-12.352	695.945	8	5000	40000	0.365	14588.415	707.10
2564	00:42:44	-12.352	695.997	8	5000	40000	0.365	14587.632	707.14
2565	00:42:45	-12.352	696.048	8	5000	40000	0.365	14586.865	707.17
2566	00:42:46	-12.353	696.099	8	5000	40000	0.365	14586.097	707.20
2567	00:42:47	-12.353	696.15	8	5000	40000	0.365	14585.330	707.24
2568	00:42:48	-12.353	696.201	8	5000	40000	0.365	14584.562	707.27
2569	00:42:49	-12.353	696.252	8	5000	40000	0.365	14583.795	707.30
2570	00:42:50	-12.353	696.303	8	5000	40000	0.365	14583.028	707.34
2571	00:42:51	-12.353	696.354	8	5000	40000	0.365	14582.261	707.37

2572	00:42:52	-12.354	696.404	8	5000	40000	0.365	14581.509	707.40
2573	00:42:53	-12.354	696.454	8	5000	40000	0.365	14580.757	707.43
2574	00:42:54	-12.354	696.505	8	5000	40000	0.364	14579.990	707.47
2575	00:42:55	-12.354	696.555	8	5000	40000	0.364	14579.238	707.50
2576	00:42:56	-12.354	696.605	8	5000	40000	0.364	14578.486	707.53
2577	00:42:57	-12.354	696.655	8	5000	40000	0.364	14577.735	707.57
2578	00:42:58	-12.355	696.705	8	5000	40000	0.364	14576.983	707.60
2579	00:42:59	-12.355	696.754	8	5000	40000	0.364	14576.247	707.63
2580	00:43:00	-12.355	696.804	8	5000	40000	0.364	14575.495	707.66
2581	00:43:01	-12.355	696.853	8	5000	40000	0.364	14574.759	707.70
2582	00:43:02	-12.355	696.903	8	5000	40000	0.364	14574.008	707.73
2583	00:43:03	-12.356	696.952	8	5000	40000	0.364	14573.272	707.76
2584	00:43:04	-12.356	697.001	8	5000	40000	0.364	14572.536	707.79
2585	00:43:05	-12.356	697.05	8	5000	40000	0.364	14571.800	707.83
2586	00:43:06	-12.356	697.099	8	5000	40000	0.364	14571.064	707.86
2587	00:43:07	-12.356	697.148	8	5000	40000	0.364	14570.328	707.89
2588	00:43:08	-12.356	697.197	8	5000	40000	0.364	14569.592	707.92
2589	00:43:09	-12.357	697.245	8	5000	40000	0.364	14568.871	707.96
2590	00:43:10	-12.357	697.294	8	5000	40000	0.364	14568.136	707.99
2591	00:43:11	-12.357	697.342	8	5000	40000	0.364	14567.415	708.02
2592	00:43:12	-12.357	697.39	8	5000	40000	0.364	14566.695	708.05
2593	00:43:13	-12.357	697.439	8	5000	40000	0.364	14565.959	708.08
2594	00:43:14	-12.357	697.487	8	5000	40000	0.364	14565.239	708.12
2595	00:43:15	-12.358	697.535	8	5000	40000	0.364	14564.519	708.15
2596	00:43:16	-12.358	697.582	8	5000	40000	0.364	14563.814	708.18
2597	00:43:17	-12.358	697.63	8	5000	40000	0.364	14563.094	708.21
2598	00:43:18	-12.358	697.678	8	5000	40000	0.364	14562.374	708.24
2599	00:43:19	-12.358	697.725	8	5000	40000	0.364	14561.669	708.28
2600	00:43:20	-12.358	697.773	8	5000	40000	0.364	14560.949	708.31
2601	00:43:21	-12.359	697.82	8	5000	40000	0.364	14560.244	708.34
2602	00:43:22	-12.359	697.867	8	5000	40000	0.364	14559.539	708.37
2603	00:43:23	-12.359	697.914	8	5000	40000	0.364	14558.834	708.40
2604	00:43:24	-12.359	697.961	8	5000	40000	0.364	14558.130	708.44

2605	00:43:25	-12.359	698.008	8	5000	40000	0.364	14557.425	708.47
2606	00:43:26	-12.359	698.055	8	5000	40000	0.364	14556.721	708.50
2607	00:43:27	-12.36	698.102	8	5000	40000	0.364	14556.016	708.53
2608	00:43:28	-12.36	698.148	8	5000	40000	0.364	14555.327	708.56
2609	00:43:29	-12.36	698.195	8	5000	40000	0.364	14554.623	708.59
2610	00:43:30	-12.36	698.241	8	5000	40000	0.364	14553.933	708.62
2611	00:43:31	-12.36	698.288	8	5000	40000	0.364	14553.229	708.66
2612	00:43:32	-12.36	698.334	8	5000	40000	0.364	14552.540	708.69
2613	00:43:33	-12.36	698.38	8	5000	40000	0.364	14551.851	708.72
2614	00:43:34	-12.361	698.426	8	5000	40000	0.364	14551.162	708.75
2615	00:43:35	-12.361	698.472	8	5000	40000	0.364	14550.473	708.78
2616	00:43:36	-12.361	698.518	8	5000	40000	0.364	14549.784	708.81
2617	00:43:37	-12.361	698.563	8	5000	40000	0.364	14549.111	708.84
2618	00:43:38	-12.361	698.609	8	5000	40000	0.364	14548.422	708.88
2619	00:43:39	-12.361	698.654	8	5000	40000	0.364	14547.748	708.91
2620	00:43:40	-12.362	698.7	8	5000	40000	0.364	14547.060	708.94
2621	00:43:41	-12.362	698.745	8	5000	40000	0.364	14546.386	708.97
2622	00:43:42	-12.362	698.79	8	5000	40000	0.364	14545.713	709.00
2623	00:43:43	-12.362	698.836	8	5000	40000	0.364	14545.024	709.03
2624	00:43:44	-12.362	698.881	8	5000	40000	0.364	14544.351	709.06
2625	00:43:45	-12.362	698.926	8	5000	40000	0.364	14543.678	709.09
2626	00:43:46	-12.363	698.97	8	5000	40000	0.364	14543.019	709.12
2627	00:43:47	-12.363	699.015	8	5000	40000	0.364	14542.346	709.16
2628	00:43:48	-12.363	699.06	8	5000	40000	0.364	14541.673	709.19
2629	00:43:49	-12.363	699.104	8	5000	40000	0.364	14541.015	709.22
2630	00:43:50	-12.363	699.149	8	5000	40000	0.364	14540.342	709.25
2631	00:43:51	-12.363	699.193	8	5000	40000	0.363	14539.684	709.28
2632	00:43:52	-12.363	699.238	8	5000	40000	0.363	14539.011	709.31
2633	00:43:53	-12.364	699.282	8	5000	40000	0.363	14538.353	709.34
2634	00:43:54	-12.364	699.326	8	5000	40000	0.363	14537.696	709.37
2635	00:43:55	-12.364	699.37	8	5000	40000	0.363	14537.038	709.40
2636	00:43:56	-12.364	699.414	8	5000	40000	0.363	14536.380	709.43
2637	00:43:57	-12.364	699.458	8	5000	40000	0.363	14535.723	709.46

2638	00:43:58	-12.364	699.502	8	5000	40000	0.363	14535.065	709.49
2639	00:43:59	-12.364	699.545	8	5000	40000	0.363	14534.422	709.52
2640	00:44:00	-12.365	699.589	8	5000	40000	0.363	14533.765	709.56
2641	00:44:01	-12.365	699.632	8	5000	40000	0.363	14533.123	709.59
2642	00:44:02	-12.365	699.676	8	5000	40000	0.363	14532.465	709.62
2643	00:44:03	-12.365	699.719	8	5000	40000	0.363	14531.823	709.65
2644	00:44:04	-12.365	699.762	8	5000	40000	0.363	14531.181	709.68
2645	00:44:05	-12.365	699.805	8	5000	40000	0.363	14530.538	709.71
2646	00:44:06	-12.365	699.848	8	5000	40000	0.363	14529.896	709.74
2647	00:44:07	-12.366	699.891	8	5000	40000	0.363	14529.254	709.77
2648	00:44:08	-12.366	699.934	8	5000	40000	0.363	14528.612	709.80
2649	00:44:09	-12.366	699.977	8	5000	40000	0.363	14527.970	709.83
2650	00:44:10	-12.366	700.02	8	5000	40000	0.363	14527.328	709.86
2651	00:44:11	-12.366	700.062	8	5000	40000	0.363	14526.701	709.89
2652	00:44:12	-12.366	700.105	8	5000	40000	0.363	14526.059	709.92
2653	00:44:13	-12.367	700.147	8	5000	40000	0.363	14525.433	709.95
2654	00:44:14	-12.367	700.19	8	5000	40000	0.363	14524.791	709.98
2655	00:44:15	-12.367	700.232	8	5000	40000	0.363	14524.164	710.01
2656	00:44:16	-12.367	700.274	8	5000	40000	0.363	14523.538	710.04
2657	00:44:17	-12.367	700.316	8	5000	40000	0.363	14522.911	710.07
2658	00:44:18	-12.367	700.358	8	5000	40000	0.363	14522.284	710.10
2659	00:44:19	-12.367	700.4	8	5000	40000	0.363	14521.658	710.13
2660	00:44:20	-12.367	700.442	8	5000	40000	0.363	14521.031	710.16
2661	00:44:21	-12.368	700.484	8	5000	40000	0.363	14520.405	710.19
2662	00:44:22	-12.368	700.526	8	5000	40000	0.363	14519.779	710.22
2663	00:44:23	-12.368	700.567	8	5000	40000	0.363	14519.167	710.25
2664	00:44:24	-12.368	700.609	8	5000	40000	0.363	14518.541	710.28
2665	00:44:25	-12.368	700.65	8	5000	40000	0.363	14517.930	710.31
2666	00:44:26	-12.368	700.692	8	5000	40000	0.363	14517.304	710.34
2667	00:44:27	-12.368	700.733	8	5000	40000	0.363	14516.692	710.37
2668	00:44:28	-12.369	700.774	8	5000	40000	0.363	14516.081	710.40
2669	00:44:29	-12.369	700.815	8	5000	40000	0.363	14515.470	710.43
2670	00:44:30	-12.369	700.857	8	5000	40000	0.363	14514.844	710.46

2671	00:44:31	-12.369	700.898	8	5000	40000	0.363	14514.233	710.49
2672	00:44:32	-12.369	700.938	8	5000	40000	0.363	14513.637	710.52
2673	00:44:33	-12.369	700.979	8	5000	40000	0.363	14513.027	710.55
2674	00:44:34	-12.369	701.02	8	5000	40000	0.363	14512.416	710.58
2675	00:44:35	-12.37	701.061	8	5000	40000	0.363	14511.805	710.61
2676	00:44:36	-12.37	701.101	8	5000	40000	0.363	14511.209	710.64
2677	00:44:37	-12.37	701.142	8	5000	40000	0.363	14510.598	710.67
2678	00:44:38	-12.37	701.182	8	5000	40000	0.363	14510.003	710.70
2679	00:44:39	-12.37	701.223	8	5000	40000	0.363	14509.392	710.73
2680	00:44:40	-12.37	701.263	8	5000	40000	0.363	14508.797	710.76
2681	00:44:41	-12.37	701.303	8	5000	40000	0.363	14508.201	710.78
2682	00:44:42	-12.371	701.343	8	5000	40000	0.363	14507.605	710.81
2683	00:44:43	-12.371	701.383	8	5000	40000	0.363	14507.010	710.84
2684	00:44:44	-12.371	701.423	8	5000	40000	0.363	14506.415	710.87
2685	00:44:45	-12.371	701.463	8	5000	40000	0.363	14505.819	710.90
2686	00:44:46	-12.371	701.503	8	5000	40000	0.363	14505.224	710.93
2687	00:44:47	-12.371	701.543	8	5000	40000	0.363	14504.629	710.96
2688	00:44:48	-12.371	701.583	8	5000	40000	0.363	14504.033	710.99
2689	00:44:49	-12.371	701.622	8	5000	40000	0.363	14503.453	711.02
2690	00:44:50	-12.372	701.662	8	5000	40000	0.363	14502.858	711.05
2691	00:44:51	-12.372	701.701	8	5000	40000	0.363	14502.278	711.08
2692	00:44:52	-12.372	701.741	8	5000	40000	0.363	14501.683	711.11
2693	00:44:53	-12.372	701.78	8	5000	40000	0.363	14501.103	711.14
2694	00:44:54	-12.372	701.82	8	5000	40000	0.363	14500.508	711.17
2695	00:44:55	-12.372	701.859	8	5000	40000	0.362	14499.928	711.19
2696	00:44:56	-12.372	701.898	8	5000	40000	0.362	14499.348	711.22
2697	00:44:57	-12.372	701.937	8	5000	40000	0.362	14498.768	711.25
2698	00:44:58	-12.373	701.976	8	5000	40000	0.362	14498.188	711.28
2699	00:44:59	-12.373	702.015	8	5000	40000	0.362	14497.608	711.31
2700	00:45:00	-12.373	702.054	8	5000	40000	0.362	14497.028	711.34
2701	00:45:01	-12.373	702.093	8	5000	40000	0.362	14496.449	711.37
2702	00:45:02	-12.373	702.131	8	5000	40000	0.362	14495.884	711.40
2703	00:45:03	-12.373	702.17	8	5000	40000	0.362	14495.304	711.43

2704	00:45:04	-12.373	702.208	8	5000	40000	0.362	14494.739	711.46
2705	00:45:05	-12.373	702.247	8	5000	40000	0.362	14494.160	711.48
2706	00:45:06	-12.374	702.285	8	5000	40000	0.362	14493.595	711.51
2707	00:45:07	-12.374	702.324	8	5000	40000	0.362	14493.016	711.54
2708	00:45:08	-12.374	702.362	8	5000	40000	0.362	14492.451	711.57
2709	00:45:09	-12.374	702.4	8	5000	40000	0.362	14491.887	711.60
2710	00:45:10	-12.374	702.439	8	5000	40000	0.362	14491.307	711.63
2711	00:45:11	-12.374	702.477	8	5000	40000	0.362	14490.743	711.66
2712	00:45:12	-12.374	702.515	8	5000	40000	0.362	14490.178	711.69
2713	00:45:13	-12.374	702.553	8	5000	40000	0.362	14489.614	711.71
2714	00:45:14	-12.375	702.591	8	5000	40000	0.362	14489.050	711.74
2715	00:45:15	-12.375	702.628	8	5000	40000	0.362	14488.500	711.77
2716	00:45:16	-12.375	702.666	8	5000	40000	0.362	14487.936	711.80
2717	00:45:17	-12.375	702.704	8	5000	40000	0.362	14487.372	711.83
2718	00:45:18	-12.375	702.742	8	5000	40000	0.362	14486.808	711.86
2719	00:45:19	-12.375	702.779	8	5000	40000	0.362	14486.259	711.89
2720	00:45:20	-12.375	702.817	8	5000	40000	0.362	14485.695	711.92
2721	00:45:21	-12.375	702.854	8	5000	40000	0.362	14485.146	711.94
2722	00:45:22	-12.376	702.892	8	5000	40000	0.362	14484.582	711.97
2723	00:45:23	-12.376	702.929	8	5000	40000	0.362	14484.033	712.00
2724	00:45:24	-12.376	702.966	8	5000	40000	0.362	14483.484	712.03
2725	00:45:25	-12.376	703.003	8	5000	40000	0.362	14482.935	712.06
2726	00:45:26	-12.376	703.041	8	5000	40000	0.362	14482.371	712.09
2727	00:45:27	-12.376	703.078	8	5000	40000	0.362	14481.822	712.12
2728	00:45:28	-12.376	703.115	8	5000	40000	0.362	14481.273	712.14
2729	00:45:29	-12.376	703.152	8	5000	40000	0.362	14480.724	712.17
2730	00:45:30	-12.377	703.189	8	5000	40000	0.362	14480.175	712.20
2731	00:45:31	-12.377	703.225	8	5000	40000	0.362	14479.642	712.23
2732	00:45:32	-12.377	703.262	8	5000	40000	0.362	14479.093	712.26
2733	00:45:33	-12.377	703.299	8	5000	40000	0.362	14478.544	712.29
2734	00:45:34	-12.377	703.336	8	5000	40000	0.362	14477.996	712.31
2735	00:45:35	-12.377	703.372	8	5000	40000	0.362	14477.462	712.34
2736	00:45:36	-12.377	703.409	8	5000	40000	0.362	14476.913	712.37

2737	00:45:37	-12.377	703.445	8	5000	40000	0.362	14476.380	712.40
2738	00:45:38	-12.377	703.482	8	5000	40000	0.362	14475.831	712.43
2739	00:45:39	-12.378	703.518	8	5000	40000	0.362	14475.298	712.46
2740	00:45:40	-12.378	703.554	8	5000	40000	0.362	14474.764	712.48
2741	00:45:41	-12.378	703.591	8	5000	40000	0.362	14474.216	712.51
2742	00:45:42	-12.378	703.627	8	5000	40000	0.362	14473.682	712.54
2743	00:45:43	-12.378	703.663	8	5000	40000	0.362	14473.149	712.57
2744	00:45:44	-12.378	703.699	8	5000	40000	0.362	14472.616	712.60
2745	00:45:45	-12.378	703.735	8	5000	40000	0.362	14472.082	712.62
2746	00:45:46	-12.378	703.771	8	5000	40000	0.362	14471.549	712.65
2747	00:45:47	-12.379	703.807	8	5000	40000	0.362	14471.016	712.68
2748	00:45:48	-12.379	703.843	8	5000	40000	0.362	14470.482	712.71
2749	00:45:49	-12.379	703.879	8	5000	40000	0.362	14469.949	712.74
2750	00:45:50	-12.379	703.914	8	5000	40000	0.362	14469.431	712.76
2751	00:45:51	-12.379	703.95	8	5000	40000	0.362	14468.898	712.79
2752	00:45:52	-12.379	703.986	8	5000	40000	0.362	14468.365	712.82
2753	00:45:53	-12.379	704.021	8	5000	40000	0.362	14467.846	712.85
2754	00:45:54	-12.379	704.057	8	5000	40000	0.362	14467.313	712.88
2755	00:45:55	-12.379	704.092	8	5000	40000	0.362	14466.795	712.90
2756	00:45:56	-12.38	704.128	8	5000	40000	0.362	14466.262	712.93
2757	00:45:57	-12.38	704.163	8	5000	40000	0.362	14465.744	712.96
2758	00:45:58	-12.38	704.198	8	5000	40000	0.362	14465.226	712.99
2759	00:45:59	-12.38	704.233	8	5000	40000	0.362	14464.708	713.02
2760	00:46:00	-12.38	704.269	8	5000	40000	0.362	14464.176	713.04
2761	00:46:01	-12.38	704.304	8	5000	40000	0.362	14463.658	713.07
2762	00:46:02	-12.38	704.339	8	5000	40000	0.362	14463.140	713.10
2763	00:46:03	-12.38	704.374	8	5000	40000	0.362	14462.622	713.13
2764	00:46:04	-12.38	704.409	8	5000	40000	0.362	14462.104	713.16
2765	00:46:05	-12.381	704.444	8	5000	40000	0.362	14461.586	713.18
2766	00:46:06	-12.381	704.479	8	5000	40000	0.362	14461.069	713.21
2767	00:46:07	-12.381	704.514	8	5000	40000	0.362	14460.551	713.24
2768	00:46:08	-12.381	704.548	8	5000	40000	0.362	14460.048	713.27
2769	00:46:09	-12.381	704.583	8	5000	40000	0.361	14459.530	713.29

2770	00:46:10	-12.381	704.618	8	5000	40000	0.361	14459.013	713.32
2771	00:46:11	-12.381	704.652	8	5000	40000	0.361	14458.510	713.35
2772	00:46:12	-12.381	704.687	8	5000	40000	0.361	14457.992	713.38
2773	00:46:13	-12.381	704.721	8	5000	40000	0.361	14457.490	713.41
2774	00:46:14	-12.382	704.756	8	5000	40000	0.361	14456.972	713.43
2775	00:46:15	-12.382	704.79	8	5000	40000	0.361	14456.470	713.46
2776	00:46:16	-12.382	704.825	8	5000	40000	0.361	14455.952	713.49
2777	00:46:17	-12.382	704.859	8	5000	40000	0.361	14455.450	713.52
2778	00:46:18	-12.382	704.893	8	5000	40000	0.361	14454.947	713.54
2779	00:46:19	-12.382	704.927	8	5000	40000	0.361	14454.445	713.57
2780	00:46:20	-12.382	704.962	8	5000	40000	0.361	14453.928	713.60
2781	00:46:21	-12.382	704.996	8	5000	40000	0.361	14453.425	713.63
2782	00:46:22	-12.382	705.03	8	5000	40000	0.361	14452.923	713.65
2783	00:46:23	-12.383	705.064	8	5000	40000	0.361	14452.420	713.68
2784	00:46:24	-12.383	705.098	8	5000	40000	0.361	14451.918	713.71
2785	00:46:25	-12.383	705.132	8	5000	40000	0.361	14451.416	713.74
2786	00:46:26	-12.383	705.166	8	5000	40000	0.361	14450.914	713.76
2787	00:46:27	-12.383	705.199	8	5000	40000	0.361	14450.426	713.79
2788	00:46:28	-12.383	705.233	8	5000	40000	0.361	14449.924	713.82
2789	00:46:29	-12.383	705.267	8	5000	40000	0.361	14449.422	713.85
2790	00:46:30	-12.383	705.301	8	5000	40000	0.361	14448.920	713.87
2791	00:46:31	-12.383	705.334	8	5000	40000	0.361	14448.432	713.90
2792	00:46:32	-12.383	705.368	8	5000	40000	0.361	14447.930	713.93
2793	00:46:33	-12.384	705.401	8	5000	40000	0.361	14447.443	713.96
2794	00:46:34	-12.384	705.435	8	5000	40000	0.361	14446.941	713.98
2795	00:46:35	-12.384	705.468	8	5000	40000	0.361	14446.454	714.01
2796	00:46:36	-12.384	705.502	8	5000	40000	0.361	14445.952	714.04
2797	00:46:37	-12.384	705.535	8	5000	40000	0.361	14445.465	714.07
2798	00:46:38	-12.384	705.568	8	5000	40000	0.361	14444.978	714.09
2799	00:46:39	-12.384	705.602	8	5000	40000	0.361	14444.476	714.12
2800	00:46:40	-12.384	705.635	8	5000	40000	0.361	14443.989	714.15
2801	00:46:41	-12.384	705.668	8	5000	40000	0.361	14443.502	714.18
2802	00:46:42	-12.385	705.701	8	5000	40000	0.361	14443.015	714.20

2803	00:46:43	-12.385	705.734	8	5000	40000	0.361	14442.528	714.23
2804	00:46:44	-12.385	705.767	8	5000	40000	0.361	14442.042	714.26
2805	00:46:45	-12.385	705.8	8	5000	40000	0.361	14441.555	714.28
2806	00:46:46	-12.385	705.833	8	5000	40000	0.361	14441.068	714.31
2807	00:46:47	-12.385	705.866	8	5000	40000	0.361	14440.581	714.34
2808	00:46:48	-12.385	705.899	8	5000	40000	0.361	14440.094	714.37
2809	00:46:49	-12.385	705.932	8	5000	40000	0.361	14439.608	714.39
2810	00:46:50	-12.385	705.965	8	5000	40000	0.361	14439.121	714.42
2811	00:46:51	-12.385	705.997	8	5000	40000	0.361	14438.649	714.45
2812	00:46:52	-12.386	706.03	8	5000	40000	0.361	14438.163	714.47
2813	00:46:53	-12.386	706.063	8	5000	40000	0.361	14437.676	714.50
2814	00:46:54	-12.386	706.095	8	5000	40000	0.361	14437.204	714.53
2815	00:46:55	-12.386	706.128	8	5000	40000	0.361	14436.718	714.56
2816	00:46:56	-12.386	706.161	8	5000	40000	0.361	14436.231	714.58
2817	00:46:57	-12.386	706.193	8	5000	40000	0.361	14435.759	714.61
2818	00:46:58	-12.386	706.225	8	5000	40000	0.361	14435.288	714.64
2819	00:46:59	-12.386	706.258	8	5000	40000	0.361	14434.801	714.66
2820	00:47:00	-12.386	706.29	8	5000	40000	0.361	14434.330	714.69
2821	00:47:01	-12.386	706.323	8	5000	40000	0.361	14433.844	714.72
2822	00:47:02	-12.387	706.355	8	5000	40000	0.361	14433.372	714.75
2823	00:47:03	-12.387	706.387	8	5000	40000	0.361	14432.900	714.77
2824	00:47:04	-12.387	706.419	8	5000	40000	0.361	14432.429	714.80
2825	00:47:05	-12.387	706.452	8	5000	40000	0.361	14431.943	714.83
2826	00:47:06	-12.387	706.484	8	5000	40000	0.361	14431.471	714.85
2827	00:47:07	-12.387	706.516	8	5000	40000	0.361	14431.000	714.88
2828	00:47:08	-12.387	706.548	8	5000	40000	0.361	14430.529	714.91
2829	00:47:09	-12.387	706.58	8	5000	40000	0.361	14430.057	714.94
2830	00:47:10	-12.387	706.612	8	5000	40000	0.361	14429.586	714.96
2831	00:47:11	-12.387	706.644	8	5000	40000	0.361	14429.115	714.99
2832	00:47:12	-12.388	706.676	8	5000	40000	0.361	14428.643	715.02
2833	00:47:13	-12.388	706.707	8	5000	40000	0.361	14428.187	715.04
2834	00:47:14	-12.388	706.739	8	5000	40000	0.361	14427.716	715.07
2835	00:47:15	-12.388	706.771	8	5000	40000	0.361	14427.245	715.10

2836	00:47:16	-12.388	706.803	8	5000	40000	0.361	14426.774	715.12
2837	00:47:17	-12.388	706.834	8	5000	40000	0.361	14426.317	715.15
2838	00:47:18	-12.388	706.866	8	5000	40000	0.361	14425.846	715.18
2839	00:47:19	-12.388	706.898	8	5000	40000	0.361	14425.375	715.20
2840	00:47:20	-12.388	706.929	8	5000	40000	0.361	14424.919	715.23
2841	00:47:21	-12.388	706.961	8	5000	40000	0.361	14424.448	715.26
2842	00:47:22	-12.388	706.992	8	5000	40000	0.361	14423.992	715.29
2843	00:47:23	-12.389	707.024	8	5000	40000	0.361	14423.521	715.31
2844	00:47:24	-12.389	707.055	8	5000	40000	0.361	14423.065	715.34
2845	00:47:25	-12.389	707.087	8	5000	40000	0.361	14422.594	715.37
2846	00:47:26	-12.389	707.118	8	5000	40000	0.361	14422.138	715.39
2847	00:47:27	-12.389	707.149	8	5000	40000	0.361	14421.682	715.42
2848	00:47:28	-12.389	707.181	8	5000	40000	0.361	14421.211	715.45
2849	00:47:29	-12.389	707.212	8	5000	40000	0.361	14420.755	715.47
2850	00:47:30	-12.389	707.243	8	5000	40000	0.361	14420.299	715.50
2851	00:47:31	-12.389	707.274	8	5000	40000	0.360	14419.843	715.53
2852	00:47:32	-12.389	707.306	8	5000	40000	0.360	14419.372	715.55
2853	00:47:33	-12.39	707.337	8	5000	40000	0.360	14418.916	715.58
2854	00:47:34	-12.39	707.368	8	5000	40000	0.360	14418.460	715.61
2855	00:47:35	-12.39	707.399	8	5000	40000	0.360	14418.005	715.63
2856	00:47:36	-12.39	707.43	8	5000	40000	0.360	14417.549	715.66
2857	00:47:37	-12.39	707.461	8	5000	40000	0.360	14417.093	715.69
2858	00:47:38	-12.39	707.492	8	5000	40000	0.360	14416.637	715.71
2859	00:47:39	-12.39	707.523	8	5000	40000	0.360	14416.182	715.74
2860	00:47:40	-12.39	707.554	8	5000	40000	0.360	14415.726	715.77
2861	00:47:41	-12.39	707.584	8	5000	40000	0.360	14415.285	715.79
2862	00:47:42	-12.39	707.615	8	5000	40000	0.360	14414.829	715.82
2863	00:47:43	-12.39	707.646	8	5000	40000	0.360	14414.374	715.85
2864	00:47:44	-12.391	707.677	8	5000	40000	0.360	14413.918	715.87
2865	00:47:45	-12.391	707.707	8	5000	40000	0.360	14413.477	715.90
2866	00:47:46	-12.391	707.738	8	5000	40000	0.360	14413.022	715.93
2867	00:47:47	-12.391	707.769	8	5000	40000	0.360	14412.566	715.95
2868	00:47:48	-12.391	707.799	8	5000	40000	0.360	14412.125	715.98

2869	00:47:49	-12.391	707.83	8	5000	40000	0.360	14411.670	716.01
2870	00:47:50	-12.391	707.861	8	5000	40000	0.360	14411.215	716.03
2871	00:47:51	-12.391	707.891	8	5000	40000	0.360	14410.774	716.06
2872	00:47:52	-12.391	707.922	8	5000	40000	0.360	14410.319	716.09
2873	00:47:53	-12.391	707.952	8	5000	40000	0.360	14409.878	716.11
2874	00:47:54	-12.391	707.982	8	5000	40000	0.360	14409.437	716.14
2875	00:47:55	-12.392	708.013	8	5000	40000	0.360	14408.982	716.17
2876	00:47:56	-12.392	708.043	8	5000	40000	0.360	14408.541	716.19
2877	00:47:57	-12.392	708.073	8	5000	40000	0.360	14408.101	716.22
2878	00:47:58	-12.392	708.104	8	5000	40000	0.360	14407.646	716.25
2879	00:47:59	-12.392	708.134	8	5000	40000	0.360	14407.205	716.27
2880	00:48:00	-12.392	708.164	8	5000	40000	0.360	14406.765	716.30
2881	00:48:01	-12.392	708.194	8	5000	40000	0.360	14406.324	716.33
2882	00:48:02	-12.392	708.225	8	5000	40000	0.360	14405.869	716.35
2883	00:48:03	-12.392	708.255	8	5000	40000	0.360	14405.429	716.38
2884	00:48:04	-12.392	708.285	8	5000	40000	0.360	14404.989	716.41
2885	00:48:05	-12.392	708.315	8	5000	40000	0.360	14404.548	716.43
2886	00:48:06	-12.393	708.345	8	5000	40000	0.360	14404.108	716.46
2887	00:48:07	-12.393	708.375	8	5000	40000	0.360	14403.668	716.49
2888	00:48:08	-12.393	708.405	8	5000	40000	0.360	14403.228	716.51
2889	00:48:09	-12.393	708.435	8	5000	40000	0.360	14402.787	716.54
2890	00:48:10	-12.393	708.465	8	5000	40000	0.360	14402.347	716.57
2891	00:48:11	-12.393	708.495	8	5000	40000	0.360	14401.907	716.59
2892	00:48:12	-12.393	708.525	8	5000	40000	0.360	14401.467	716.62
2893	00:48:13	-12.393	708.555	8	5000	40000	0.360	14401.027	716.65
2894	00:48:14	-12.393	708.584	8	5000	40000	0.360	14400.601	716.67
2895	00:48:15	-12.393	708.614	8	5000	40000	0.360	14400.161	716.70
2896	00:48:16	-12.393	708.644	8	5000	40000	0.360	14399.721	716.72
2897	00:48:17	-12.394	708.674	8	5000	40000	0.360	14399.281	716.75
2898	00:48:18	-12.394	708.703	8	5000	40000	0.360	14398.856	716.78
2899	00:48:19	-12.394	708.733	8	5000	40000	0.360	14398.416	716.80
2900	00:48:20	-12.394	708.763	8	5000	40000	0.360	14397.976	716.83
2901	00:48:21	-12.394	708.792	8	5000	40000	0.360	14397.551	716.86

2902	00:48:22	-12.394	708.822	8	5000	40000	0.360	14397.111	716.88
2903	00:48:23	-12.394	708.851	8	5000	40000	0.360	14396.686	716.91
2904	00:48:24	-12.394	708.881	8	5000	40000	0.360	14396.246	716.94
2905	00:48:25	-12.394	708.911	8	5000	40000	0.360	14395.806	716.96
2906	00:48:26	-12.394	708.94	8	5000	40000	0.360	14395.381	716.99
2907	00:48:27	-12.394	708.969	8	5000	40000	0.360	14394.956	717.02
2908	00:48:28	-12.394	708.999	8	5000	40000	0.360	14394.517	717.04
2909	00:48:29	-12.395	709.028	8	5000	40000	0.360	14394.091	717.07
2910	00:48:30	-12.395	709.058	8	5000	40000	0.360	14393.652	717.09
2911	00:48:31	-12.395	709.087	8	5000	40000	0.360	14393.227	717.12
2912	00:48:32	-12.395	709.116	8	5000	40000	0.360	14392.802	717.15
2913	00:48:33	-12.395	709.146	8	5000	40000	0.360	14392.362	717.17
2914	00:48:34	-12.395	709.175	8	5000	40000	0.360	14391.937	717.20
2915	00:48:35	-12.395	709.204	8	5000	40000	0.360	14391.513	717.23
2916	00:48:36	-12.395	709.233	8	5000	40000	0.360	14391.088	717.25
2917	00:48:37	-12.395	709.263	8	5000	40000	0.360	14390.648	717.28
2918	00:48:38	-12.395	709.292	8	5000	40000	0.360	14390.224	717.31
2919	00:48:39	-12.395	709.321	8	5000	40000	0.360	14389.799	717.33
2920	00:48:40	-12.396	709.35	8	5000	40000	0.360	14389.374	717.36
2921	00:48:41	-12.396	709.379	8	5000	40000	0.360	14388.949	717.38
2922	00:48:42	-12.396	709.408	8	5000	40000	0.360	14388.525	717.41
2923	00:48:43	-12.396	709.437	8	5000	40000	0.360	14388.100	717.44
2924	00:48:44	-12.396	709.466	8	5000	40000	0.360	14387.675	717.46
2925	00:48:45	-12.396	709.495	8	5000	40000	0.360	14387.251	717.49
2926	00:48:46	-12.396	709.524	8	5000	40000	0.360	14386.826	717.52
2927	00:48:47	-12.396	709.553	8	5000	40000	0.360	14386.402	717.54
2928	00:48:48	-12.396	709.582	8	5000	40000	0.360	14385.977	717.57
2929	00:48:49	-12.396	709.611	8	5000	40000	0.360	14385.553	717.60
2930	00:48:50	-12.396	709.64	8	5000	40000	0.360	14385.128	717.62
2931	00:48:51	-12.396	709.669	8	5000	40000	0.360	14384.704	717.65
2932	00:48:52	-12.397	709.698	8	5000	40000	0.360	14384.279	717.67
2933	00:48:53	-12.397	709.726	8	5000	40000	0.360	14383.869	717.70
2934	00:48:54	-12.397	709.755	8	5000	40000	0.360	14383.445	717.73

2935	00:48:55	-12.397	709.784	8	5000	40000	0.360	14383.021	717.75
2936	00:48:56	-12.397	709.813	8	5000	40000	0.360	14382.596	717.78
2937	00:48:57	-12.397	709.841	8	5000	40000	0.360	14382.187	717.81
2938	00:48:58	-12.397	709.87	8	5000	40000	0.360	14381.762	717.83
2939	00:48:59	-12.397	709.899	8	5000	40000	0.360	14381.338	717.86
2940	00:49:00	-12.397	709.927	8	5000	40000	0.360	14380.928	717.88
2941	00:49:01	-12.397	709.956	8	5000	40000	0.360	14380.504	717.91
2942	00:49:02	-12.397	709.985	8	5000	40000	0.360	14380.080	717.94
2943	00:49:03	-12.397	710.013	8	5000	40000	0.359	14379.671	717.96
2944	00:49:04	-12.398	710.042	8	5000	40000	0.359	14379.246	717.99
2945	00:49:05	-12.398	710.07	8	5000	40000	0.359	14378.837	718.02
2946	00:49:06	-12.398	710.099	8	5000	40000	0.359	14378.413	718.04
2947	00:49:07	-12.398	710.127	8	5000	40000	0.359	14378.003	718.07
2948	00:49:08	-12.398	710.156	8	5000	40000	0.359	14377.579	718.09
2949	00:49:09	-12.398	710.184	8	5000	40000	0.359	14377.170	718.12
2950	00:49:10	-12.398	710.212	8	5000	40000	0.359	14376.761	718.15
2951	00:49:11	-12.398	710.241	8	5000	40000	0.359	14376.337	718.17
2952	00:49:12	-12.398	710.269	8	5000	40000	0.359	14375.927	718.20
2953	00:49:13	-12.398	710.298	8	5000	40000	0.359	14375.503	718.23
2954	00:49:14	-12.398	710.326	8	5000	40000	0.359	14375.094	718.25
2955	00:49:15	-12.398	710.354	8	5000	40000	0.359	14374.685	718.28
2956	00:49:16	-12.399	710.383	8	5000	40000	0.359	14374.261	718.30
2957	00:49:17	-12.399	710.411	8	5000	40000	0.359	14373.852	718.33
2958	00:49:18	-12.399	710.439	8	5000	40000	0.359	14373.443	718.36
2959	00:49:19	-12.399	710.467	8	5000	40000	0.359	14373.033	718.38
2960	00:49:20	-12.399	710.496	8	5000	40000	0.359	14372.610	718.41
2961	00:49:21	-12.399	710.524	8	5000	40000	0.359	14372.201	718.44
2962	00:49:22	-12.399	710.552	8	5000	40000	0.359	14371.791	718.46
2963	00:49:23	-12.399	710.58	8	5000	40000	0.359	14371.382	718.49
2964	00:49:24	-12.399	710.608	8	5000	40000	0.359	14370.973	718.51
2965	00:49:25	-12.399	710.636	8	5000	40000	0.359	14370.564	718.54
2966	00:49:26	-12.399	710.664	8	5000	40000	0.359	14370.155	718.57
2967	00:49:27	-12.399	710.692	8	5000	40000	0.359	14369.746	718.59

2968	00:49:28	-12.399	710.721	8	5000	40000	0.359	14369.323	718.62
2969	00:49:29	-12.4	710.749	8	5000	40000	0.359	14368.914	718.64
2970	00:49:30	-12.4	710.777	8	5000	40000	0.359	14368.505	718.67
2971	00:49:31	-12.4	710.805	8	5000	40000	0.359	14368.096	718.70
2972	00:49:32	-12.4	710.833	8	5000	40000	0.359	14367.687	718.72
2973	00:49:33	-12.4	710.86	8	5000	40000	0.359	14367.293	718.75
2974	00:49:34	-12.4	710.888	8	5000	40000	0.359	14366.884	718.78
2975	00:49:35	-12.4	710.916	8	5000	40000	0.359	14366.475	718.80
2976	00:49:36	-12.4	710.944	8	5000	40000	0.359	14366.067	718.83
2977	00:49:37	-12.4	710.972	8	5000	40000	0.359	14365.658	718.85
2978	00:49:38	-12.4	711	8	5000	40000	0.359	14365.249	718.88
2979	00:49:39	-12.4	711.028	8	5000	40000	0.359	14364.841	718.91
2980	00:49:40	-12.4	711.056	8	5000	40000	0.359	14364.432	718.93
2981	00:49:41	-12.401	711.083	8	5000	40000	0.359	14364.038	718.96
2982	00:49:42	-12.401	711.111	8	5000	40000	0.359	14363.629	718.99
2983	00:49:43	-12.401	711.139	8	5000	40000	0.359	14363.221	719.01
2984	00:49:44	-12.401	711.167	8	5000	40000	0.359	14362.812	719.04
2985	00:49:45	-12.401	711.195	8	5000	40000	0.359	14362.403	719.06
2986	00:49:46	-12.401	711.222	8	5000	40000	0.359	14362.009	719.09
2987	00:49:47	-12.401	711.25	8	5000	40000	0.359	14361.601	719.12
2988	00:49:48	-12.401	711.278	8	5000	40000	0.359	14361.192	719.14
2989	00:49:49	-12.401	711.305	8	5000	40000	0.359	14360.799	719.17
2990	00:49:50	-12.401	711.333	8	5000	40000	0.359	14360.390	719.19
2991	00:49:51	-12.401	711.361	8	5000	40000	0.359	14359.982	719.22
2992	00:49:52	-12.401	711.388	8	5000	40000	0.359	14359.588	719.25
2993	00:49:53	-12.401	711.416	8	5000	40000	0.359	14359.180	719.27
2994	00:49:54	-12.402	711.443	8	5000	40000	0.359	14358.786	719.30
2995	00:49:55	-12.402	711.471	8	5000	40000	0.359	14358.377	719.32
2996	00:49:56	-12.402	711.499	8	5000	40000	0.359	14357.969	719.35
2997	00:49:57	-12.402	711.526	8	5000	40000	0.359	14357.575	719.38
2998	00:49:58	-12.402	711.554	8	5000	40000	0.359	14357.167	719.40
2999	00:49:59	-12.402	711.581	8	5000	40000	0.359	14356.774	719.43
3000	00:50:00	-12.402	711.609	8	5000	40000	0.359	14356.365	719.46

3001	00:50:01	-12.402	711.636	8	5000	40000	0.359	14355.972	719.47
3002	00:50:02	-12.402	711.663	8	5000	40000	0.359	14355.578	719.48
3003	00:50:03	-12.402	711.691	8	5000	40000	0.359	14355.170	719.49
3004	00:50:04	-12.402	711.718	8	5000	40000	0.359	14354.776	719.51
3005	00:50:05	-12.402	711.746	8	5000	40000	0.359	14354.368	719.52
3006	00:50:06	-12.402	711.773	8	5000	40000	0.359	14353.975	719.53
3007	00:50:07	-12.403	711.8	8	5000	40000	0.359	14353.581	719.55
3008	00:50:08	-12.403	711.828	8	5000	40000	0.359	14353.173	719.56
3009	00:50:09	-12.403	711.855	8	5000	40000	0.359	14352.780	719.57
3010	00:50:10	-12.403	711.883	8	5000	40000	0.359	14352.372	719.59
3011	00:50:11	-12.403	711.91	8	5000	40000	0.359	14351.979	719.60
3012	00:50:12	-12.403	711.937	8	5000	40000	0.359	14351.585	719.61
3013	00:50:13	-12.403	711.964	8	5000	40000	0.359	14351.192	719.63
3014	00:50:14	-12.403	711.992	8	5000	40000	0.359	14350.784	719.64
3015	00:50:15	-12.403	712.019	8	5000	40000	0.359	14350.391	719.65
3016	00:50:16	-12.403	712.046	8	5000	40000	0.359	14349.997	719.66
3017	00:50:17	-12.403	712.073	8	5000	40000	0.359	14349.604	719.68
3018	00:50:18	-12.403	712.101	8	5000	40000	0.359	14349.196	719.69
3019	00:50:19	-12.403	712.128	8	5000	40000	0.359	14348.803	719.70
3020	00:50:20	-12.404	712.155	8	5000	40000	0.359	14348.410	719.72
3021	00:50:21	-12.404	712.182	8	5000	40000	0.359	14348.017	719.73
3022	00:50:22	-12.404	712.209	8	5000	40000	0.359	14347.624	719.74
3023	00:50:23	-12.404	712.236	8	5000	40000	0.359	14347.230	719.76
3024	00:50:24	-12.404	712.264	8	5000	40000	0.359	14346.823	719.77
3025	00:50:25	-12.404	712.291	8	5000	40000	0.359	14346.430	719.78
3026	00:50:26	-12.404	712.318	8	5000	40000	0.359	14346.037	719.79
3027	00:50:27	-12.404	712.345	8	5000	40000	0.359	14345.644	719.81
3028	00:50:28	-12.404	712.372	8	5000	40000	0.359	14345.251	719.82
3029	00:50:29	-12.404	712.399	8	5000	40000	0.359	14344.858	719.83
3030	00:50:30	-12.404	712.426	8	5000	40000	0.359	14344.465	719.85
3031	00:50:31	-12.404	712.453	8	5000	40000	0.359	14344.072	719.86
3032	00:50:32	-12.404	712.48	8	5000	40000	0.359	14343.679	719.87
3033	00:50:33	-12.405	712.507	8	5000	40000	0.359	14343.286	719.89

3034	00:50:34	-12.405	712.534	8	5000	40000	0.359	14342.893	719.90
3035	00:50:35	-12.405	712.561	8	5000	40000	0.359	14342.500	719.91
3036	00:50:36	-12.405	712.588	8	5000	40000	0.359	14342.107	719.93
3037	00:50:37	-12.405	712.615	8	5000	40000	0.359	14341.714	719.94
3038	00:50:38	-12.405	712.642	8	5000	40000	0.359	14341.321	719.95
3039	00:50:39	-12.405	712.669	8	5000	40000	0.359	14340.929	719.96
3040	00:50:40	-12.405	712.696	8	5000	40000	0.359	14340.536	719.98
3041	00:50:41	-12.405	712.723	8	5000	40000	0.359	14340.143	719.99
3042	00:50:42	-12.405	712.749	8	5000	40000	0.358	14339.765	720.00
3043	00:50:43	-12.405	712.776	8	5000	40000	0.358	14339.372	720.02
3044	00:50:44	-12.405	712.803	8	5000	40000	0.358	14338.980	720.03
3045	00:50:45	-12.405	712.83	8	5000	40000	0.358	14338.587	720.04
3046	00:50:46	-12.405	712.857	8	5000	40000	0.358	14338.194	720.06
3047	00:50:47	-12.406	712.884	8	5000	40000	0.358	14337.802	720.07
3048	00:50:48	-12.406	712.91	8	5000	40000	0.358	14337.424	720.08
3049	00:50:49	-12.406	712.937	8	5000	40000	0.358	14337.031	720.09
3050	00:50:50	-12.406	712.964	8	5000	40000	0.358	14336.639	720.11
3051	00:50:51	-12.406	712.991	8	5000	40000	0.358	14336.246	720.12
3052	00:50:52	-12.406	713.018	8	5000	40000	0.358	14335.854	720.13
3053	00:50:53	-12.406	713.044	8	5000	40000	0.358	14335.476	720.15
3054	00:50:54	-12.406	713.071	8	5000	40000	0.358	14335.083	720.16
3055	00:50:55	-12.406	713.098	8	5000	40000	0.358	14334.691	720.17
3056	00:50:56	-12.406	713.124	8	5000	40000	0.358	14334.313	720.18
3057	00:50:57	-12.406	713.151	8	5000	40000	0.358	14333.920	720.20
3058	00:50:58	-12.406	713.178	8	5000	40000	0.358	14333.528	720.21
3059	00:50:59	-12.406	713.205	8	5000	40000	0.358	14333.136	720.22
3060	00:51:00	-12.407	713.231	8	5000	40000	0.358	14332.758	720.24
3061	00:51:01	-12.407	713.258	8	5000	40000	0.358	14332.366	720.25
3062	00:51:02	-12.407	713.284	8	5000	40000	0.358	14331.988	720.26
3063	00:51:03	-12.407	713.311	8	5000	40000	0.358	14331.595	720.28
3064	00:51:04	-12.407	713.338	8	5000	40000	0.358	14331.203	720.29
3065	00:51:05	-12.407	713.364	8	5000	40000	0.358	14330.826	720.30
3066	00:51:06	-12.407	713.391	8	5000	40000	0.358	14330.433	720.31

3067	00:51:07	-12.407	713.418	8	5000	40000	0.358	14330.041	720.33
3068	00:51:08	-12.407	713.444	8	5000	40000	0.358	14329.663	720.34
3069	00:51:09	-12.407	713.471	8	5000	40000	0.358	14329.271	720.35
3070	00:51:10	-12.407	713.497	8	5000	40000	0.358	14328.894	720.37
3071	00:51:11	-12.407	713.524	8	5000	40000	0.358	14328.502	720.38
3072	00:51:12	-12.407	713.55	8	5000	40000	0.358	14328.124	720.39
3073	00:51:13	-12.407	713.577	8	5000	40000	0.358	14327.732	720.41
3074	00:51:14	-12.408	713.603	8	5000	40000	0.358	14327.354	720.42
3075	00:51:15	-12.408	713.63	8	5000	40000	0.358	14326.962	720.43
3076	00:51:16	-12.408	713.656	8	5000	40000	0.358	14326.585	720.44
3077	00:51:17	-12.408	713.683	8	5000	40000	0.358	14326.193	720.46
3078	00:51:18	-12.408	713.709	8	5000	40000	0.358	14325.816	720.47
3079	00:51:19	-12.408	713.736	8	5000	40000	0.358	14325.424	720.48
3080	00:51:20	-12.408	713.762	8	5000	40000	0.358	14325.046	720.50
3081	00:51:21	-12.408	713.789	8	5000	40000	0.358	14324.654	720.51
3082	00:51:22	-12.408	713.815	8	5000	40000	0.358	14324.277	720.52
3083	00:51:23	-12.408	713.842	8	5000	40000	0.358	14323.885	720.53
3084	00:51:24	-12.408	713.868	8	5000	40000	0.358	14323.508	720.55
3085	00:51:25	-12.408	713.894	8	5000	40000	0.358	14323.130	720.56
3086	00:51:26	-12.408	713.921	8	5000	40000	0.358	14322.739	720.57
3087	00:51:27	-12.408	713.947	8	5000	40000	0.358	14322.361	720.59
3088	00:51:28	-12.409	713.974	8	5000	40000	0.358	14321.970	720.60
3089	00:51:29	-12.409	714	8	5000	40000	0.358	14321.592	720.61
3090	00:51:30	-12.409	714.026	8	5000	40000	0.358	14321.215	720.63
3091	00:51:31	-12.409	714.053	8	5000	40000	0.358	14320.824	720.64
3092	00:51:32	-12.409	714.079	8	5000	40000	0.358	14320.446	720.65
3093	00:51:33	-12.409	714.105	8	5000	40000	0.358	14320.069	720.66
3094	00:51:34	-12.409	714.132	8	5000	40000	0.358	14319.678	720.68
3095	00:51:35	-12.409	714.158	8	5000	40000	0.358	14319.301	720.69
3096	00:51:36	-12.409	714.184	8	5000	40000	0.358	14318.923	720.70
3097	00:51:37	-12.409	714.211	8	5000	40000	0.358	14318.532	720.72
3098	00:51:38	-12.409	714.237	8	5000	40000	0.358	14318.155	720.73
3099	00:51:39	-12.409	714.263	8	5000	40000	0.358	14317.778	720.74

3100	00:51:40	-12.409	714.289	8	5000	40000	0.358	14317.401	720.75
3101	00:51:41	-12.409	714.316	8	5000	40000	0.358	14317.009	720.77
3102	00:51:42	-12.41	714.342	8	5000	40000	0.358	14316.632	720.78
3103	00:51:43	-12.41	714.368	8	5000	40000	0.358	14316.256	720.79
3104	00:51:44	-12.41	714.395	8	5000	40000	0.358	14315.864	720.81
3105	00:51:45	-12.41	714.421	8	5000	40000	0.358	14315.487	720.82
3106	00:51:46	-12.41	714.447	8	5000	40000	0.358	14315.110	720.83
3107	00:51:47	-12.41	714.473	8	5000	40000	0.358	14314.733	720.85
3108	00:51:48	-12.41	714.499	8	5000	40000	0.358	14314.357	720.86
3109	00:51:49	-12.41	714.526	8	5000	40000	0.358	14313.965	720.87
3110	00:51:50	-12.41	714.552	8	5000	40000	0.358	14313.589	720.88
3111	00:51:51	-12.41	714.578	8	5000	40000	0.358	14313.212	720.90
3112	00:51:52	-12.41	714.604	8	5000	40000	0.358	14312.835	720.91
3113	00:51:53	-12.41	714.63	8	5000	40000	0.358	14312.458	720.92
3114	00:51:54	-12.41	714.657	8	5000	40000	0.358	14312.067	720.94
3115	00:51:55	-12.41	714.683	8	5000	40000	0.358	14311.690	720.95
3116	00:51:56	-12.411	714.709	8	5000	40000	0.358	14311.314	720.96
3117	00:51:57	-12.411	714.735	8	5000	40000	0.358	14310.937	720.97
3118	00:51:58	-12.411	714.761	8	5000	40000	0.358	14310.560	720.99
3119	00:51:59	-12.411	714.787	8	5000	40000	0.358	14310.184	721.00
3120	00:52:00	-12.411	714.813	8	5000	40000	0.358	14309.807	721.01
3121	00:52:01	-12.411	714.84	8	5000	40000	0.358	14309.416	721.03
3122	00:52:02	-12.411	714.866	8	5000	40000	0.358	14309.040	721.04
3123	00:52:03	-12.411	714.892	8	5000	40000	0.358	14308.663	721.05
3124	00:52:04	-12.411	714.918	8	5000	40000	0.358	14308.286	721.07
3125	00:52:05	-12.411	714.944	8	5000	40000	0.358	14307.910	721.08
3126	00:52:06	-12.411	714.97	8	5000	40000	0.358	14307.533	721.09
3127	00:52:07	-12.411	714.996	8	5000	40000	0.358	14307.157	721.10
3128	00:52:08	-12.411	715.022	8	5000	40000	0.358	14306.781	721.12
3129	00:52:09	-12.411	715.048	8	5000	40000	0.358	14306.404	721.13
3130	00:52:10	-12.412	715.074	8	5000	40000	0.358	14306.028	721.14
3131	00:52:11	-12.412	715.1	8	5000	40000	0.358	14305.651	721.16
3132	00:52:12	-12.412	715.126	8	5000	40000	0.358	14305.275	721.17

3133	00:52:13	-12.412	715.153	8	5000	40000	0.358	14304.884	721.18
3134	00:52:14	-12.412	715.179	8	5000	40000	0.358	14304.508	721.19
3135	00:52:15	-12.412	715.205	8	5000	40000	0.358	14304.132	721.21
3136	00:52:16	-12.412	715.231	8	5000	40000	0.358	14303.755	721.22
3137	00:52:17	-12.412	715.257	8	5000	40000	0.358	14303.379	721.23
3138	00:52:18	-12.412	715.283	8	5000	40000	0.358	14303.003	721.25
3139	00:52:19	-12.412	715.309	8	5000	40000	0.358	14302.627	721.26
3140	00:52:20	-12.412	715.335	8	5000	40000	0.358	14302.250	721.27
3141	00:52:21	-12.412	715.361	8	5000	40000	0.358	14301.874	721.28
3142	00:52:22	-12.412	715.387	8	5000	40000	0.358	14301.498	721.30
3143	00:52:23	-12.412	715.413	8	5000	40000	0.358	14301.122	721.31
3144	00:52:24	-12.412	715.439	8	5000	40000	0.358	14300.746	721.32
3145	00:52:25	-12.413	715.465	8	5000	40000	0.358	14300.370	721.34
3146	00:52:26	-12.413	715.491	8	5000	40000	0.357	14299.994	721.35
3147	00:52:27	-12.413	715.516	8	5000	40000	0.357	14299.632	721.36
3148	00:52:28	-12.413	715.542	8	5000	40000	0.357	14299.256	721.37
3149	00:52:29	-12.413	715.568	8	5000	40000	0.357	14298.880	721.39
3150	00:52:30	-12.413	715.594	8	5000	40000	0.357	14298.504	721.40
3151	00:52:31	-12.413	715.62	8	5000	40000	0.357	14298.128	721.41
3152	00:52:32	-12.413	715.646	8	5000	40000	0.357	14297.752	721.43
3153	00:52:33	-12.413	715.672	8	5000	40000	0.357	14297.376	721.44
3154	00:52:34	-12.413	715.698	8	5000	40000	0.357	14297.000	721.45
3155	00:52:35	-12.413	715.724	8	5000	40000	0.357	14296.624	721.47
3156	00:52:36	-12.413	715.75	8	5000	40000	0.357	14296.248	721.48
3157	00:52:37	-12.413	715.776	8	5000	40000	0.357	14295.872	721.49
3158	00:52:38	-12.413	715.802	8	5000	40000	0.357	14295.497	721.50
3159	00:52:39	-12.414	715.828	8	5000	40000	0.357	14295.121	721.52
3160	00:52:40	-12.414	715.853	8	5000	40000	0.357	14294.759	721.53
3161	00:52:41	-12.414	715.879	8	5000	40000	0.357	14294.384	721.54
3162	00:52:42	-12.414	715.905	8	5000	40000	0.357	14294.008	721.56
3163	00:52:43	-12.414	715.931	8	5000	40000	0.357	14293.632	721.57
3164	00:52:44	-12.414	715.957	8	5000	40000	0.357	14293.256	721.58
3165	00:52:45	-12.414	715.983	8	5000	40000	0.357	14292.881	721.59

3166	00:52:46	-12.414	716.009	8	5000	40000	0.357	14292.505	721.61
3167	00:52:47	-12.414	716.035	8	5000	40000	0.357	14292.129	721.62
3168	00:52:48	-12.414	716.06	8	5000	40000	0.357	14291.768	721.63
3169	00:52:49	-12.414	716.086	8	5000	40000	0.357	14291.393	721.65
3170	00:52:50	-12.414	716.112	8	5000	40000	0.357	14291.017	721.66
3171	00:52:51	-12.414	716.138	8	5000	40000	0.357	14290.641	721.67
3172	00:52:52	-12.414	716.164	8	5000	40000	0.357	14290.266	721.68
3173	00:52:53	-12.414	716.19	8	5000	40000	0.357	14289.890	721.70
3174	00:52:54	-12.415	716.216	8	5000	40000	0.357	14289.515	721.71
3175	00:52:55	-12.415	716.241	8	5000	40000	0.357	14289.154	721.72
3176	00:52:56	-12.415	716.267	8	5000	40000	0.357	14288.778	721.74
3177	00:52:57	-12.415	716.293	8	5000	40000	0.357	14288.403	721.75
3178	00:52:58	-12.415	716.319	8	5000	40000	0.357	14288.027	721.76
3179	00:52:59	-12.415	716.345	8	5000	40000	0.357	14287.652	721.77
3180	00:53:00	-12.415	716.37	8	5000	40000	0.357	14287.291	721.79
3181	00:53:01	-12.415	716.396	8	5000	40000	0.357	14286.915	721.80
3182	00:53:02	-12.415	716.422	8	5000	40000	0.357	14286.540	721.81
3183	00:53:03	-12.415	716.448	8	5000	40000	0.357	14286.165	721.83
3184	00:53:04	-12.415	716.474	8	5000	40000	0.357	14285.789	721.84
3185	00:53:05	-12.415	716.499	8	5000	40000	0.357	14285.428	721.85
3186	00:53:06	-12.415	716.525	8	5000	40000	0.357	14285.053	721.87
3187	00:53:07	-12.415	716.551	8	5000	40000	0.357	14284.678	721.88
3188	00:53:08	-12.415	716.577	8	5000	40000	0.357	14284.303	721.89
3189	00:53:09	-12.416	716.603	8	5000	40000	0.357	14283.927	721.90
3190	00:53:10	-12.416	716.628	8	5000	40000	0.357	14283.567	721.92
3191	00:53:11	-12.416	716.654	8	5000	40000	0.357	14283.191	721.93
3192	00:53:12	-12.416	716.68	8	5000	40000	0.357	14282.816	721.94
3193	00:53:13	-12.416	716.706	8	5000	40000	0.357	14282.441	721.96
3194	00:53:14	-12.416	716.731	8	5000	40000	0.357	14282.080	721.97
3195	00:53:15	-12.416	716.757	8	5000	40000	0.357	14281.705	721.98
3196	00:53:16	-12.416	716.783	8	5000	40000	0.357	14281.330	721.99
3197	00:53:17	-12.416	716.809	8	5000	40000	0.357	14280.955	722.01
3198	00:53:18	-12.416	716.834	8	5000	40000	0.357	14280.594	722.02

3199	00:53:19	-12.416	716.86	8	5000	40000	0.357	14280.219	722.03
3200	00:53:20	-12.416	716.886	8	5000	40000	0.357	14279.844	722.05
3201	00:53:21	-12.416	716.912	8	5000	40000	0.357	14279.469	722.06
3202	00:53:22	-12.416	716.937	8	5000	40000	0.357	14279.109	722.07
3203	00:53:23	-12.417	716.963	8	5000	40000	0.357	14278.734	722.08
3204	00:53:24	-12.417	716.989	8	5000	40000	0.357	14278.359	722.10
3205	00:53:25	-12.417	717.015	8	5000	40000	0.357	14277.984	722.11
3206	00:53:26	-12.417	717.04	8	5000	40000	0.357	14277.623	722.12
3207	00:53:27	-12.417	717.066	8	5000	40000	0.357	14277.249	722.14
3208	00:53:28	-12.417	717.092	8	5000	40000	0.357	14276.874	722.15
3209	00:53:29	-12.417	717.117	8	5000	40000	0.357	14276.513	722.16
3210	00:53:30	-12.417	717.143	8	5000	40000	0.357	14276.138	722.17
3211	00:53:31	-12.417	717.169	8	5000	40000	0.357	14275.764	722.19
3212	00:53:32	-12.417	717.195	8	5000	40000	0.357	14275.389	722.20
3213	00:53:33	-12.417	717.22	8	5000	40000	0.357	14275.029	722.21
3214	00:53:34	-12.417	717.246	8	5000	40000	0.357	14274.654	722.23
3215	00:53:35	-12.417	717.272	8	5000	40000	0.357	14274.279	722.24
3216	00:53:36	-12.417	717.297	8	5000	40000	0.357	14273.919	722.25
3217	00:53:37	-12.417	717.323	8	5000	40000	0.357	14273.544	722.26
3218	00:53:38	-12.418	717.349	8	5000	40000	0.357	14273.169	722.28
3219	00:53:39	-12.418	717.374	8	5000	40000	0.357	14272.809	722.29
3220	00:53:40	-12.418	717.4	8	5000	40000	0.357	14272.435	722.30
3221	00:53:41	-12.418	717.426	8	5000	40000	0.357	14272.060	722.32
3222	00:53:42	-12.418	717.451	8	5000	40000	0.357	14271.700	722.33
3223	00:53:43	-12.418	717.477	8	5000	40000	0.357	14271.325	722.34
3224	00:53:44	-12.418	717.503	8	5000	40000	0.357	14270.951	722.36
3225	00:53:45	-12.418	717.529	8	5000	40000	0.357	14270.576	722.37
3226	00:53:46	-12.418	717.554	8	5000	40000	0.357	14270.216	722.38
3227	00:53:47	-12.418	717.58	8	5000	40000	0.357	14269.841	722.39
3228	00:53:48	-12.418	717.606	8	5000	40000	0.357	14269.467	722.41
3229	00:53:49	-12.418	717.631	8	5000	40000	0.357	14269.107	722.42
3230	00:53:50	-12.418	717.657	8	5000	40000	0.357	14268.732	722.43
3231	00:53:51	-12.418	717.683	8	5000	40000	0.357	14268.358	722.45

3232	00:53:52	-12.418	717.708	8	5000	40000	0.357	14267.998	722.46
3233	00:53:53	-12.419	717.734	8	5000	40000	0.357	14267.624	722.47
3234	00:53:54	-12.419	717.76	8	5000	40000	0.357	14267.249	722.48
3235	00:53:55	-12.419	717.785	8	5000	40000	0.357	14266.889	722.50
3236	00:53:56	-12.419	717.811	8	5000	40000	0.357	14266.515	722.51
3237	00:53:57	-12.419	717.837	8	5000	40000	0.357	14266.141	722.52
3238	00:53:58	-12.419	717.862	8	5000	40000	0.357	14265.781	722.54
3239	00:53:59	-12.419	717.888	8	5000	40000	0.357	14265.407	722.55
3240	00:54:00	-12.419	717.914	8	5000	40000	0.357	14265.032	722.56
3241	00:54:01	-12.419	717.939	8	5000	40000	0.357	14264.672	722.57
3242	00:54:02	-12.419	717.965	8	5000	40000	0.357	14264.298	722.59
3243	00:54:03	-12.419	717.991	8	5000	40000	0.357	14263.924	722.60
3244	00:54:04	-12.419	718.016	8	5000	40000	0.357	14263.564	722.61
3245	00:54:05	-12.419	718.042	8	5000	40000	0.357	14263.190	722.63
3246	00:54:06	-12.419	718.067	8	5000	40000	0.357	14262.830	722.64
3247	00:54:07	-12.419	718.093	8	5000	40000	0.357	14262.456	722.65
3248	00:54:08	-12.42	718.119	8	5000	40000	0.357	14262.082	722.67
3249	00:54:09	-12.42	718.144	8	5000	40000	0.357	14261.723	722.68
3250	00:54:10	-12.42	718.17	8	5000	40000	0.357	14261.349	722.69
3251	00:54:11	-12.42	718.196	8	5000	40000	0.357	14260.974	722.70
3252	00:54:12	-12.42	718.221	8	5000	40000	0.357	14260.615	722.72
3253	00:54:13	-12.42	718.247	8	5000	40000	0.357	14260.241	722.73
3254	00:54:14	-12.42	718.273	8	5000	40000	0.356	14259.867	722.74
3255	00:54:15	-12.42	718.298	8	5000	40000	0.356	14259.507	722.76
3256	00:54:16	-12.42	718.324	8	5000	40000	0.356	14259.133	722.77
3257	00:54:17	-12.42	718.35	8	5000	40000	0.356	14258.759	722.78
3258	00:54:18	-12.42	718.375	8	5000	40000	0.356	14258.400	722.79
3259	00:54:19	-12.42	718.401	8	5000	40000	0.356	14258.026	722.81
3260	00:54:20	-12.42	718.427	8	5000	40000	0.356	14257.652	722.82
3261	00:54:21	-12.42	718.452	8	5000	40000	0.356	14257.293	722.83
3262	00:54:22	-12.42	718.478	8	5000	40000	0.356	14256.919	722.85
3263	00:54:23	-12.421	718.503	8	5000	40000	0.356	14256.560	722.86
3264	00:54:24	-12.421	718.529	8	5000	40000	0.356	14256.186	722.87

3265	00:54:25	-12.421	718.555	8	5000	40000	0.356	14255.812	722.88
3266	00:54:26	-12.421	718.58	8	5000	40000	0.356	14255.453	722.90
3267	00:54:27	-12.421	718.606	8	5000	40000	0.356	14255.079	722.91
3268	00:54:28	-12.421	718.632	8	5000	40000	0.356	14254.705	722.92
3269	00:54:29	-12.421	718.657	8	5000	40000	0.356	14254.346	722.94
3270	00:54:30	-12.421	718.683	8	5000	40000	0.356	14253.972	722.95
3271	00:54:31	-12.421	718.709	8	5000	40000	0.356	14253.599	722.96
3272	00:54:32	-12.421	718.734	8	5000	40000	0.356	14253.239	722.98
3273	00:54:33	-12.421	718.76	8	5000	40000	0.356	14252.866	722.99
3274	00:54:34	-12.421	718.785	8	5000	40000	0.356	14252.506	723.00
3275	00:54:35	-12.421	718.811	8	5000	40000	0.356	14252.133	723.01
3276	00:54:36	-12.421	718.837	8	5000	40000	0.356	14251.759	723.03
3277	00:54:37	-12.421	718.862	8	5000	40000	0.356	14251.400	723.04
3278	00:54:38	-12.422	718.888	8	5000	40000	0.356	14251.027	723.05
3279	00:54:39	-12.422	718.914	8	5000	40000	0.356	14250.653	723.07
3280	00:54:40	-12.422	718.939	8	5000	40000	0.356	14250.294	723.08
3281	00:54:41	-12.422	718.965	8	5000	40000	0.356	14249.921	723.09
3282	00:54:42	-12.422	718.991	8	5000	40000	0.356	14249.547	723.10
3283	00:54:43	-12.422	719.016	8	5000	40000	0.356	14249.188	723.12
3284	00:54:44	-12.422	719.042	8	5000	40000	0.356	14248.815	723.13
3285	00:54:45	-12.422	719.067	8	5000	40000	0.356	14248.456	723.14
3286	00:54:46	-12.422	719.093	8	5000	40000	0.356	14248.082	723.16
3287	00:54:47	-12.422	719.119	8	5000	40000	0.356	14247.709	723.17
3288	00:54:48	-12.422	719.144	8	5000	40000	0.356	14247.350	723.18
3289	00:54:49	-12.422	719.17	8	5000	40000	0.356	14246.977	723.20
3290	00:54:50	-12.422	719.196	8	5000	40000	0.356	14246.604	723.21
3291	00:54:51	-12.422	719.221	8	5000	40000	0.356	14246.245	723.22
3292	00:54:52	-12.422	719.247	8	5000	40000	0.356	14245.871	723.23
3293	00:54:53	-12.422	719.273	8	5000	40000	0.356	14245.498	723.25
3294	00:54:54	-12.423	719.298	8	5000	40000	0.356	14245.139	723.26
3295	00:54:55	-12.423	719.324	8	5000	40000	0.356	14244.766	723.27
3296	00:54:56	-12.423	719.349	8	5000	40000	0.356	14244.407	723.29
3297	00:54:57	-12.423	719.375	8	5000	40000	0.356	14244.034	723.30

3298	00:54:58	-12.423	719.401	8	5000	40000	0.356	14243.661	723.31
3299	00:54:59	-12.423	719.426	8	5000	40000	0.356	14243.302	723.32
3300	00:55:00	-12.423	719.452	8	5000	40000	0.356	14242.929	723.34
3301	00:55:01	-12.423	719.478	8	5000	40000	0.356	14242.556	723.35
3302	00:55:02	-12.423	719.503	8	5000	40000	0.356	14242.197	723.36
3303	00:55:03	-12.423	719.529	8	5000	40000	0.356	14241.824	723.38
3304	00:55:04	-12.423	719.555	8	5000	40000	0.356	14241.451	723.39
3305	00:55:05	-12.423	719.58	8	5000	40000	0.356	14241.093	723.40
3306	00:55:06	-12.423	719.606	8	5000	40000	0.356	14240.720	723.42
3307	00:55:07	-12.423	719.632	8	5000	40000	0.356	14240.347	723.43
3308	00:55:08	-12.423	719.657	8	5000	40000	0.356	14239.988	723.44
3309	00:55:09	-12.424	719.683	8	5000	40000	0.356	14239.615	723.45
3310	00:55:10	-12.424	719.709	8	5000	40000	0.356	14239.242	723.47
3311	00:55:11	-12.424	719.734	8	5000	40000	0.356	14238.884	723.48
3312	00:55:12	-12.424	719.76	8	5000	40000	0.356	14238.511	723.49
3313	00:55:13	-12.424	719.786	8	5000	40000	0.356	14238.138	723.51
3314	00:55:14	-12.424	719.811	8	5000	40000	0.356	14237.780	723.52
3315	00:55:15	-12.424	719.837	8	5000	40000	0.356	14237.407	723.53
3316	00:55:16	-12.424	719.863	8	5000	40000	0.356	14237.034	723.54
3317	00:55:17	-12.424	719.888	8	5000	40000	0.356	14236.676	723.56
3318	00:55:18	-12.424	719.914	8	5000	40000	0.356	14236.303	723.57
3319	00:55:19	-12.424	719.939	8	5000	40000	0.356	14235.945	723.58
3320	00:55:20	-12.424	719.965	8	5000	40000	0.356	14235.572	723.60
3321	00:55:21	-12.424	719.991	8	5000	40000	0.356	14235.199	723.61
3322	00:55:22	-12.424	720.016	8	5000	40000	0.356	14234.841	723.62
3323	00:55:23	-12.424	720.042	8	5000	40000	0.356	14234.468	723.64
3324	00:55:24	-12.425	720.068	8	5000	40000	0.356	14234.096	723.65
3325	00:55:25	-12.425	720.094	8	5000	40000	0.356	14233.723	723.66
3326	00:55:26	-12.425	720.119	8	5000	40000	0.356	14233.365	723.67
3327	00:55:27	-12.425	720.145	8	5000	40000	0.356	14232.992	723.69
3328	00:55:28	-12.425	720.171	8	5000	40000	0.356	14232.620	723.70
3329	00:55:29	-12.425	720.196	8	5000	40000	0.356	14232.261	723.71
3330	00:55:30	-12.425	720.222	8	5000	40000	0.356	14231.889	723.73

3331	00:55:31	-12.425	720.248	8	5000	40000	0.356	14231.516	723.74
3332	00:55:32	-12.425	720.273	8	5000	40000	0.356	14231.158	723.75
3333	00:55:33	-12.425	720.299	8	5000	40000	0.356	14230.786	723.77
3334	00:55:34	-12.425	720.325	8	5000	40000	0.356	14230.413	723.78
3335	00:55:35	-12.425	720.35	8	5000	40000	0.356	14230.055	723.79
3336	00:55:36	-12.425	720.376	8	5000	40000	0.356	14229.683	723.80
3337	00:55:37	-12.425	720.402	8	5000	40000	0.356	14229.311	723.82
3338	00:55:38	-12.425	720.427	8	5000	40000	0.356	14228.953	723.83
3339	00:55:39	-12.425	720.453	8	5000	40000	0.356	14228.580	723.84
3340	00:55:40	-12.426	720.479	8	5000	40000	0.356	14228.208	723.86
3341	00:55:41	-12.426	720.504	8	5000	40000	0.356	14227.850	723.87
3342	00:55:42	-12.426	720.53	8	5000	40000	0.356	14227.478	723.88
3343	00:55:43	-12.426	720.556	8	5000	40000	0.356	14227.105	723.90
3344	00:55:44	-12.426	720.582	8	5000	40000	0.356	14226.733	723.91
3345	00:55:45	-12.426	720.607	8	5000	40000	0.356	14226.375	723.92
3346	00:55:46	-12.426	720.633	8	5000	40000	0.356	14226.003	723.93
3347	00:55:47	-12.426	720.659	8	5000	40000	0.356	14225.631	723.95
3348	00:55:48	-12.426	720.684	8	5000	40000	0.356	14225.273	723.96
3349	00:55:49	-12.426	720.71	8	5000	40000	0.356	14224.901	723.97
3350	00:55:50	-12.426	720.736	8	5000	40000	0.356	14224.529	723.99
3351	00:55:51	-12.426	720.762	8	5000	40000	0.356	14224.157	724.00
3352	00:55:52	-12.426	720.787	8	5000	40000	0.356	14223.799	724.01
3353	00:55:53	-12.426	720.813	8	5000	40000	0.356	14223.427	724.03
3354	00:55:54	-12.426	720.839	8	5000	40000	0.356	14223.055	724.04
3355	00:55:55	-12.427	720.864	8	5000	40000	0.356	14222.697	724.05
3356	00:55:56	-12.427	720.89	8	5000	40000	0.356	14222.325	724.06
3357	00:55:57	-12.427	720.916	8	5000	40000	0.356	14221.953	724.08
3358	00:55:58	-12.427	720.942	8	5000	40000	0.356	14221.581	724.09
3359	00:55:59	-12.427	720.967	8	5000	40000	0.356	14221.223	724.10
3360	00:56:00	-12.427	720.993	8	5000	40000	0.356	14220.852	724.12
3361	00:56:01	-12.427	721.019	8	5000	40000	0.356	14220.480	724.13
3362	00:56:02	-12.427	721.045	8	5000	40000	0.356	14220.108	724.14
3363	00:56:03	-12.427	721.07	8	5000	40000	0.355	14219.750	724.16

3364	00:56:04	-12.427	721.096	8	5000	40000	0.355	14219.378	724.17
3365	00:56:05	-12.427	721.122	8	5000	40000	0.355	14219.006	724.18
3366	00:56:06	-12.427	721.148	8	5000	40000	0.355	14218.635	724.19
3367	00:56:07	-12.427	721.173	8	5000	40000	0.355	14218.277	724.21
3368	00:56:08	-12.427	721.199	8	5000	40000	0.355	14217.905	724.22
3369	00:56:09	-12.427	721.225	8	5000	40000	0.355	14217.534	724.23
3370	00:56:10	-12.428	721.251	8	5000	40000	0.355	14217.162	724.25
3371	00:56:11	-12.428	721.276	8	5000	40000	0.355	14216.804	724.26
3372	00:56:12	-12.428	721.302	8	5000	40000	0.355	14216.433	724.27
3373	00:56:13	-12.428	721.328	8	5000	40000	0.355	14216.061	724.29
3374	00:56:14	-12.428	721.354	8	5000	40000	0.355	14215.689	724.30
3375	00:56:15	-12.428	721.38	8	5000	40000	0.355	14215.318	724.31
3376	00:56:16	-12.428	721.405	8	5000	40000	0.355	14214.960	724.32
3377	00:56:17	-12.428	721.431	8	5000	40000	0.355	14214.589	724.34
3378	00:56:18	-12.428	721.457	8	5000	40000	0.355	14214.217	724.35
3379	00:56:19	-12.428	721.483	8	5000	40000	0.355	14213.846	724.36
3380	00:56:20	-12.428	721.508	8	5000	40000	0.355	14213.488	724.38
3381	00:56:21	-12.428	721.534	8	5000	40000	0.355	14213.117	724.39
3382	00:56:22	-12.428	721.56	8	5000	40000	0.355	14212.745	724.40
3383	00:56:23	-12.428	721.586	8	5000	40000	0.355	14212.374	724.42
3384	00:56:24	-12.428	721.612	8	5000	40000	0.355	14212.002	724.43
3385	00:56:25	-12.428	721.637	8	5000	40000	0.355	14211.645	724.44
3386	00:56:26	-12.429	721.663	8	5000	40000	0.355	14211.274	724.46
3387	00:56:27	-12.429	721.689	8	5000	40000	0.355	14210.902	724.47
3388	00:56:28	-12.429	721.715	8	5000	40000	0.355	14210.531	724.48
3389	00:56:29	-12.429	721.741	8	5000	40000	0.355	14210.160	724.49
3390	00:56:30	-12.429	721.767	8	5000	40000	0.355	14209.788	724.51
3391	00:56:31	-12.429	721.792	8	5000	40000	0.355	14209.431	724.52
3392	00:56:32	-12.429	721.818	8	5000	40000	0.355	14209.060	724.53
3393	00:56:33	-12.429	721.844	8	5000	40000	0.355	14208.689	724.55
3394	00:56:34	-12.429	721.87	8	5000	40000	0.355	14208.317	724.56
3395	00:56:35	-12.429	721.896	8	5000	40000	0.355	14207.946	724.57
3396	00:56:36	-12.429	721.922	8	5000	40000	0.355	14207.575	724.59

3397	00:56:37	-12.429	721.947	8	5000	40000	0.355	14207.218	724.60
3398	00:56:38	-12.429	721.973	8	5000	40000	0.355	14206.847	724.61
3399	00:56:39	-12.429	721.999	8	5000	40000	0.355	14206.476	724.62
3400	00:56:40	-12.429	722.025	8	5000	40000	0.355	14206.104	724.64
3401	00:56:41	-12.43	722.051	8	5000	40000	0.355	14205.733	724.65
3402	00:56:42	-12.43	722.077	8	5000	40000	0.355	14205.362	724.66
3403	00:56:43	-12.43	722.102	8	5000	40000	0.355	14205.005	724.68
3404	00:56:44	-12.43	722.128	8	5000	40000	0.355	14204.634	724.69
3405	00:56:45	-12.43	722.154	8	5000	40000	0.355	14204.263	724.70
3406	00:56:46	-12.43	722.18	8	5000	40000	0.355	14203.892	724.72
3407	00:56:47	-12.43	722.206	8	5000	40000	0.355	14203.521	724.73
3408	00:56:48	-12.43	722.232	8	5000	40000	0.355	14203.150	724.74
3409	00:56:49	-12.43	722.258	8	5000	40000	0.355	14202.779	724.76
3410	00:56:50	-12.43	722.284	8	5000	40000	0.355	14202.408	724.77
3411	00:56:51	-12.43	722.309	8	5000	40000	0.355	14202.052	724.78
3412	00:56:52	-12.43	722.335	8	5000	40000	0.355	14201.681	724.79
3413	00:56:53	-12.43	722.361	8	5000	40000	0.355	14201.310	724.81
3414	00:56:54	-12.43	722.387	8	5000	40000	0.355	14200.939	724.82
3415	00:56:55	-12.43	722.413	8	5000	40000	0.355	14200.568	724.83
3416	00:56:56	-12.43	722.439	8	5000	40000	0.355	14200.197	724.85
3417	00:56:57	-12.431	722.465	8	5000	40000	0.355	14199.826	724.86
3418	00:56:58	-12.431	722.491	8	5000	40000	0.355	14199.455	724.87
3419	00:56:59	-12.431	722.517	8	5000	40000	0.355	14199.085	724.89
3420	00:57:00	-12.431	722.543	8	5000	40000	0.355	14198.714	724.90
3421	00:57:01	-12.431	722.569	8	5000	40000	0.355	14198.343	724.91
3422	00:57:02	-12.431	722.595	8	5000	40000	0.355	14197.972	724.93
3423	00:57:03	-12.431	722.62	8	5000	40000	0.355	14197.616	724.94
3424	00:57:04	-12.431	722.646	8	5000	40000	0.355	14197.245	724.95
3425	00:57:05	-12.431	722.672	8	5000	40000	0.355	14196.875	724.96
3426	00:57:06	-12.431	722.698	8	5000	40000	0.355	14196.504	724.98
3427	00:57:07	-12.431	722.724	8	5000	40000	0.355	14196.133	724.99
3428	00:57:08	-12.431	722.75	8	5000	40000	0.355	14195.763	725.00
3429	00:57:09	-12.431	722.776	8	5000	40000	0.355	14195.392	725.02

3430	00:57:10	-12.431	722.802	8	5000	40000	0.355	14195.021	725.03
3431	00:57:11	-12.431	722.828	8	5000	40000	0.355	14194.651	725.04
3432	00:57:12	-12.432	722.854	8	5000	40000	0.355	14194.280	725.06
3433	00:57:13	-12.432	722.88	8	5000	40000	0.355	14193.910	725.07
3434	00:57:14	-12.432	722.906	8	5000	40000	0.355	14193.539	725.08
3435	00:57:15	-12.432	722.932	8	5000	40000	0.355	14193.169	725.10
3436	00:57:16	-12.432	722.958	8	5000	40000	0.355	14192.798	725.11
3437	00:57:17	-12.432	722.984	8	5000	40000	0.355	14192.428	725.12
3438	00:57:18	-12.432	723.01	8	5000	40000	0.355	14192.058	725.14
3439	00:57:19	-12.432	723.036	8	5000	40000	0.355	14191.687	725.15
3440	00:57:20	-12.432	723.062	8	5000	40000	0.355	14191.317	725.16
3441	00:57:21	-12.432	723.088	8	5000	40000	0.355	14190.946	725.17
3442	00:57:22	-12.432	723.114	8	5000	40000	0.355	14190.576	725.19
3443	00:57:23	-12.432	723.14	8	5000	40000	0.355	14190.206	725.20
3444	00:57:24	-12.432	723.166	8	5000	40000	0.355	14189.835	725.21
3445	00:57:25	-12.432	723.192	8	5000	40000	0.355	14189.465	725.23
3446	00:57:26	-12.432	723.218	8	5000	40000	0.355	14189.095	725.24
3447	00:57:27	-12.432	723.244	8	5000	40000	0.355	14188.725	725.25
3448	00:57:28	-12.433	723.27	8	5000	40000	0.355	14188.354	725.27
3449	00:57:29	-12.433	723.296	8	5000	40000	0.355	14187.984	725.28
3450	00:57:30	-12.433	723.322	8	5000	40000	0.355	14187.614	725.29
3451	00:57:31	-12.433	723.348	8	5000	40000	0.355	14187.244	725.31
3452	00:57:32	-12.433	723.374	8	5000	40000	0.355	14186.874	725.32
3453	00:57:33	-12.433	723.4	8	5000	40000	0.355	14186.503	725.33
3454	00:57:34	-12.433	723.426	8	5000	40000	0.355	14186.133	725.35
3455	00:57:35	-12.433	723.452	8	5000	40000	0.355	14185.763	725.36
3456	00:57:36	-12.433	723.478	8	5000	40000	0.355	14185.393	725.37
3457	00:57:37	-12.433	723.504	8	5000	40000	0.355	14185.023	725.38
3458	00:57:38	-12.433	723.53	8	5000	40000	0.355	14184.653	725.40
3459	00:57:39	-12.433	723.557	8	5000	40000	0.355	14184.269	725.41
3460	00:57:40	-12.433	723.583	8	5000	40000	0.355	14183.899	725.42
3461	00:57:41	-12.433	723.609	8	5000	40000	0.355	14183.529	725.44
3462	00:57:42	-12.433	723.635	8	5000	40000	0.355	14183.159	725.45

3463	00:57:43	-12.434	723.661	8	5000	40000	0.355	14182.789	725.46
3464	00:57:44	-12.434	723.687	8	5000	40000	0.355	14182.419	725.48
3465	00:57:45	-12.434	723.713	8	5000	40000	0.355	14182.049	725.49
3466	00:57:46	-12.434	723.739	8	5000	40000	0.355	14181.679	725.50
3467	00:57:47	-12.434	723.765	8	5000	40000	0.355	14181.309	725.52
3468	00:57:48	-12.434	723.791	8	5000	40000	0.355	14180.939	725.53
3469	00:57:49	-12.434	723.818	8	5000	40000	0.355	14180.555	725.54
3470	00:57:50	-12.434	723.844	8	5000	40000	0.355	14180.186	725.56
3471	00:57:51	-12.434	723.87	8	5000	40000	0.354	14179.816	725.57
3472	00:57:52	-12.434	723.896	8	5000	40000	0.354	14179.446	725.58
3473	00:57:53	-12.434	723.922	8	5000	40000	0.354	14179.076	725.60
3474	00:57:54	-12.434	723.948	8	5000	40000	0.354	14178.707	725.61
3475	00:57:55	-12.434	723.974	8	5000	40000	0.354	14178.337	725.62
3476	00:57:56	-12.434	724.001	8	5000	40000	0.354	14177.953	725.63
3477	00:57:57	-12.434	724.027	8	5000	40000	0.354	14177.583	725.65
3478	00:57:58	-12.434	724.053	8	5000	40000	0.354	14177.214	725.66
3479	00:57:59	-12.435	724.079	8	5000	40000	0.354	14176.844	725.67
3480	00:58:00	-12.435	724.105	8	5000	40000	0.354	14176.474	725.69
3481	00:58:01	-12.435	724.131	8	5000	40000	0.354	14176.105	725.70
3482	00:58:02	-12.435	724.158	8	5000	40000	0.354	14175.721	725.71
3483	00:58:03	-12.435	724.184	8	5000	40000	0.354	14175.351	725.73
3484	00:58:04	-12.435	724.21	8	5000	40000	0.354	14174.982	725.74
3485	00:58:05	-12.435	724.236	8	5000	40000	0.354	14174.612	725.75
3486	00:58:06	-12.435	724.262	8	5000	40000	0.354	14174.243	725.77
3487	00:58:07	-12.435	724.288	8	5000	40000	0.354	14173.873	725.78
3488	00:58:08	-12.435	724.315	8	5000	40000	0.354	14173.490	725.79
3489	00:58:09	-12.435	724.341	8	5000	40000	0.354	14173.120	725.81
3490	00:58:10	-12.435	724.367	8	5000	40000	0.354	14172.751	725.82
3491	00:58:11	-12.435	724.393	8	5000	40000	0.354	14172.382	725.83
3492	00:58:12	-12.435	724.42	8	5000	40000	0.354	14171.998	725.85
3493	00:58:13	-12.435	724.446	8	5000	40000	0.354	14171.629	725.86
3494	00:58:14	-12.436	724.472	8	5000	40000	0.354	14171.259	725.87
3495	00:58:15	-12.436	724.498	8	5000	40000	0.354	14170.890	725.89

3496	00:58:16	-12.436	724.525	8	5000	40000	0.354	14170.506	725.90
3497	00:58:17	-12.436	724.551	8	5000	40000	0.354	14170.137	725.91
3498	00:58:18	-12.436	724.577	8	5000	40000	0.354	14169.768	725.93
3499	00:58:19	-12.436	724.603	8	5000	40000	0.354	14169.399	725.94
3500	00:58:20	-12.436	724.63	8	5000	40000	0.354	14169.015	725.95
3501	00:58:21	-12.436	724.656	8	5000	40000	0.354	14168.646	725.96
3502	00:58:22	-12.436	724.682	8	5000	40000	0.354	14168.277	725.98
3503	00:58:23	-12.436	724.708	8	5000	40000	0.354	14167.908	725.99
3504	00:58:24	-12.436	724.735	8	5000	40000	0.354	14167.524	726.00
3505	00:58:25	-12.436	724.761	8	5000	40000	0.354	14167.155	726.02
3506	00:58:26	-12.436	724.787	8	5000	40000	0.354	14166.786	726.03
3507	00:58:27	-12.436	724.814	8	5000	40000	0.354	14166.403	726.04
3508	00:58:28	-12.436	724.84	8	5000	40000	0.354	14166.034	726.06
3509	00:58:29	-12.436	724.866	8	5000	40000	0.354	14165.665	726.07
3510	00:58:30	-12.437	724.892	8	5000	40000	0.354	14165.296	726.08
3511	00:58:31	-12.437	724.919	8	5000	40000	0.354	14164.912	726.10
3512	00:58:32	-12.437	724.945	8	5000	40000	0.354	14164.543	726.11
3513	00:58:33	-12.437	724.971	8	5000	40000	0.354	14164.174	726.12
3514	00:58:34	-12.437	724.998	8	5000	40000	0.354	14163.791	726.14
3515	00:58:35	-12.437	725.024	8	5000	40000	0.354	14163.422	726.15
3516	00:58:36	-12.437	725.05	8	5000	40000	0.354	14163.053	726.16
3517	00:58:37	-12.437	725.077	8	5000	40000	0.354	14162.670	726.18
3518	00:58:38	-12.437	725.103	8	5000	40000	0.354	14162.302	726.19
3519	00:58:39	-12.437	725.13	8	5000	40000	0.354	14161.918	726.20
3520	00:58:40	-12.437	725.156	8	5000	40000	0.354	14161.550	726.22
3521	00:58:41	-12.437	725.182	8	5000	40000	0.354	14161.181	726.23
3522	00:58:42	-12.437	725.209	8	5000	40000	0.354	14160.798	726.24
3523	00:58:43	-12.437	725.235	8	5000	40000	0.354	14160.429	726.26
3524	00:58:44	-12.437	725.261	8	5000	40000	0.354	14160.060	726.27
3525	00:58:45	-12.438	725.288	8	5000	40000	0.354	14159.677	726.28
3526	00:58:46	-12.438	725.314	8	5000	40000	0.354	14159.309	726.30
3527	00:58:47	-12.438	725.341	8	5000	40000	0.354	14158.926	726.31
3528	00:58:48	-12.438	725.367	8	5000	40000	0.354	14158.557	726.32

3529	00:58:49	-12.438	725.393	8	5000	40000	0.354	14158.188	726.34
3530	00:58:50	-12.438	725.42	8	5000	40000	0.354	14157.806	726.35
3531	00:58:51	-12.438	725.446	8	5000	40000	0.354	14157.437	726.36
3532	00:58:52	-12.438	725.473	8	5000	40000	0.354	14157.054	726.38
3533	00:58:53	-12.438	725.499	8	5000	40000	0.354	14156.686	726.39
3534	00:58:54	-12.438	725.526	8	5000	40000	0.354	14156.303	726.40
3535	00:58:55	-12.438	725.552	8	5000	40000	0.354	14155.934	726.42
3536	00:58:56	-12.438	725.578	8	5000	40000	0.354	14155.566	726.43
3537	00:58:57	-12.438	725.605	8	5000	40000	0.354	14155.183	726.44
3538	00:58:58	-12.438	725.631	8	5000	40000	0.354	14154.815	726.46
3539	00:58:59	-12.438	725.658	8	5000	40000	0.354	14154.432	726.47
3540	00:59:00	-12.438	725.684	8	5000	40000	0.354	14154.064	726.48
3541	00:59:01	-12.439	725.711	8	5000	40000	0.354	14153.681	726.50
3542	00:59:02	-12.439	725.737	8	5000	40000	0.354	14153.313	726.51
3543	00:59:03	-12.439	725.764	8	5000	40000	0.354	14152.930	726.52
3544	00:59:04	-12.439	725.79	8	5000	40000	0.354	14152.562	726.54
3545	00:59:05	-12.439	725.817	8	5000	40000	0.354	14152.179	726.55
3546	00:59:06	-12.439	725.843	8	5000	40000	0.354	14151.811	726.56
3547	00:59:07	-12.439	725.87	8	5000	40000	0.354	14151.428	726.58
3548	00:59:08	-12.439	725.896	8	5000	40000	0.354	14151.060	726.59
3549	00:59:09	-12.439	725.923	8	5000	40000	0.354	14150.678	726.60
3550	00:59:10	-12.439	725.949	8	5000	40000	0.354	14150.309	726.62
3551	00:59:11	-12.439	725.976	8	5000	40000	0.354	14149.927	726.63
3552	00:59:12	-12.439	726.002	8	5000	40000	0.354	14149.559	726.64
3553	00:59:13	-12.439	726.029	8	5000	40000	0.354	14149.176	726.66
3554	00:59:14	-12.439	726.056	8	5000	40000	0.354	14148.794	726.67
3555	00:59:15	-12.439	726.082	8	5000	40000	0.354	14148.426	726.68
3556	00:59:16	-12.44	726.109	8	5000	40000	0.354	14148.044	726.70
3557	00:59:17	-12.44	726.135	8	5000	40000	0.354	14147.676	726.71
3558	00:59:18	-12.44	726.162	8	5000	40000	0.354	14147.293	726.72
3559	00:59:19	-12.44	726.188	8	5000	40000	0.354	14146.925	726.74
3560	00:59:20	-12.44	726.215	8	5000	40000	0.354	14146.543	726.75
3561	00:59:21	-12.44	726.242	8	5000	40000	0.354	14146.161	726.76

3562	00:59:22	-12.44	726.268	8	5000	40000	0.354	14145.793	726.78
3563	00:59:23	-12.44	726.295	8	5000	40000	0.354	14145.411	726.79
3564	00:59:24	-12.44	726.321	8	5000	40000	0.354	14145.043	726.80
3565	00:59:25	-12.44	726.348	8	5000	40000	0.354	14144.661	726.82
3566	00:59:26	-12.44	726.375	8	5000	40000	0.354	14144.279	726.83
3567	00:59:27	-12.44	726.401	8	5000	40000	0.354	14143.911	726.84
3568	00:59:28	-12.44	726.428	8	5000	40000	0.354	14143.529	726.86
3569	00:59:29	-12.44	726.455	8	5000	40000	0.354	14143.147	726.87
3570	00:59:30	-12.44	726.481	8	5000	40000	0.354	14142.779	726.88
3571	00:59:31	-12.441	726.508	8	5000	40000	0.354	14142.397	726.90
3572	00:59:32	-12.441	726.534	8	5000	40000	0.354	14142.029	726.91
3573	00:59:33	-12.441	726.561	8	5000	40000	0.354	14141.647	726.92
3574	00:59:34	-12.441	726.588	8	5000	40000	0.354	14141.265	726.94
3575	00:59:35	-12.441	726.614	8	5000	40000	0.354	14140.897	726.95
3576	00:59:36	-12.441	726.641	8	5000	40000	0.354	14140.515	726.96
3577	00:59:37	-12.441	726.668	8	5000	40000	0.354	14140.134	726.98
3578	00:59:38	-12.441	726.695	8	5000	40000	0.353	14139.752	726.99
3579	00:59:39	-12.441	726.721	8	5000	40000	0.353	14139.384	727.00
3580	00:59:40	-12.441	726.748	8	5000	40000	0.353	14139.002	727.02
3581	00:59:41	-12.441	726.775	8	5000	40000	0.353	14138.620	727.03
3582	00:59:42	-12.441	726.801	8	5000	40000	0.353	14138.253	727.04
3583	00:59:43	-12.441	726.828	8	5000	40000	0.353	14137.871	727.06
3584	00:59:44	-12.441	726.855	8	5000	40000	0.353	14137.489	727.07
3585	00:59:45	-12.441	726.882	8	5000	40000	0.353	14137.108	727.08
3586	00:59:46	-12.441	726.908	8	5000	40000	0.353	14136.740	727.10
3587	00:59:47	-12.442	726.935	8	5000	40000	0.353	14136.358	727.11
3588	00:59:48	-12.442	726.962	8	5000	40000	0.353	14135.977	727.12
3589	00:59:49	-12.442	726.989	8	5000	40000	0.353	14135.595	727.14
3590	00:59:50	-12.442	727.015	8	5000	40000	0.353	14135.228	727.15
3591	00:59:51	-12.442	727.042	8	5000	40000	0.353	14134.846	727.16
3592	00:59:52	-12.442	727.069	8	5000	40000	0.353	14134.465	727.18
3593	00:59:53	-12.442	727.096	8	5000	40000	0.353	14134.083	727.19
3594	00:59:54	-12.442	727.122	8	5000	40000	0.353	14133.716	727.20

3595	00:59:55	-12.442	727.149		8	5000	40000	0.353	14133.334	727.22
3596	00:59:56	-12.442	727.176		8	5000	40000	0.353	14132.953	727.23
3597	00:59:57	-12.442	727.203		8	5000	40000	0.353	14132.571	727.24
3598	00:59:58	-12.442	727.23		8	5000	40000	0.353	14132.190	727.26
3599	00:59:59	-12.442	727.256		8	5000	40000	0.353	14131.822	727.27
3600	01:00:00	-12.442	727.283		8	5000	40000	0.353	14131.441	727.28