

Enhancing Energy Transfer through Visible Light-Driven Polymerization in Metal-Organic Framework

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Content

Experimental Section	1
N ₂ Sorption Measurement.	3
Electrochemical measurements.	3
X-Ray Structural Determination.	4
Theoretical calculation	4
Figure S1. (a)-(c) The partial view of porous structure of Zr-MOF from three directions; (d) pore diagram of Zr-MOF.	6
Table S1. The dynamic structural transformation of crystal parameters along with the increasing light time and crystal data and structure refinement for Zr-MOF (HUST-28)	7
Table S2. Bond Lengths for Zr-MOF	9
Figure S2. XRD patterns of Zr-MOF after immersing in aqueous solution with different pH	10
Figure S3. N ₂ adsorption/desorption curves at 77K for Zr-MOF	10
Figure S4. TGA curve of as-synthesized Zr-MOF.	11
Figure S5. Color change of Zr-MOF in DCM before and after illumination (above); color change of Zr-MOF in DCM solution of TEMPO before and after illumination (below).	11
Figure S6. High-resolution XPS spectra of Zr-MOF before and after irradiation.	12
Table S3. Crystal data and structure refinement for Zr-MOF-hv 5min.	12
Table S4. Bond Lengths for Zr-MOF-hv 5min.	14
Figure S7. (a)-(c) The partial view of Zr-MOF-hv 10min porous structure from three directions; (d) Zr-MOF-hv 10 min pore diagram.	15
Table S5. Crystal data and structure refinement for Zr-MOF-hv 10min.	15
Table S6. Bond Lengths for Zr-MOF-hv 10min.	17
Figure S8. (a)-(c) The partial view of Zr-MOF-hv 20min porous structure from three directions; (d) Zr-MOF-hv 20 min pore diagram.	18
Table S7. Crystal data and structure refinement for Zr-MOF-hv 20min.	18
Table S8. Bond Lengths for Zr-MOF-hv 20min.	20
Figure S9. (a)-(c) The partial view of Zr-MOF-hv 30min porous structure from three directions; (d) Zr-MOF-hv 30 min pore diagram.	21
Table S9. Crystal data and structure refinement for Zr-MOF-hv 30min.	21
Table S10. Bond Lengths for Zr-MOF-hv 30min.	23
Table S11. Crystal data and structure refinement for Zr-MOF-hv 40min.	24

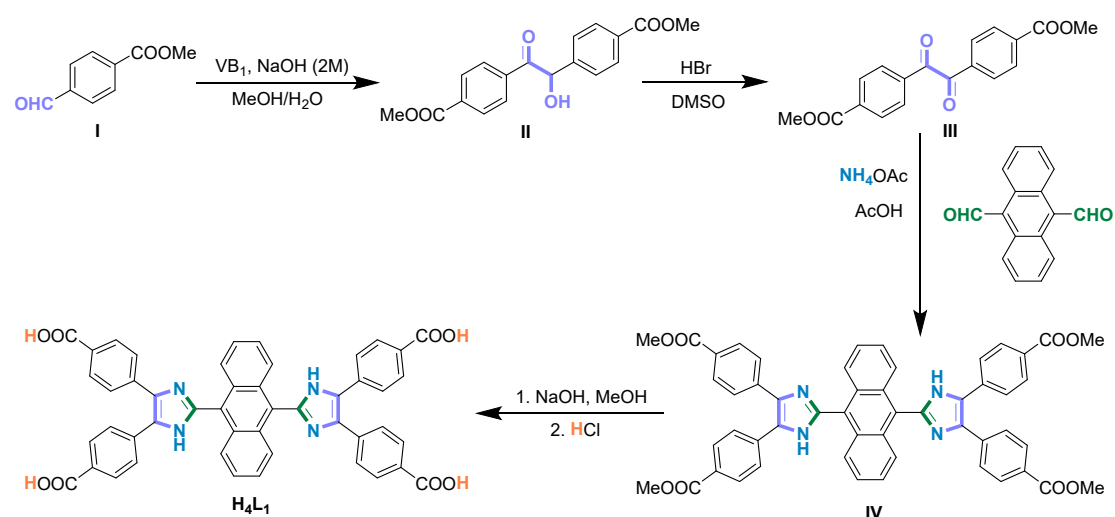
Table S12. Bond Lengths for Zr-MOF-hv40min.	25
Table S13. Crystal data and structure refinement for Zr-MOF-hv 50min.....	26
Table S14. Bond Lengths for Zr-MOF-hv 50min.	27
Figure S10. (a)-(c) The partial view of Zr-MOF-hv 120min porous structure from three directions; (d) Zr-MOF-hv 120 min pore diagram.....	28
Table S15. Crystal data and structure refinement for Zr-MOF-hv120min.....	28
Table S16. Bond Lengths for Zr-MOF-hv120min.	30
Figure S11. Solid ¹³ C NMR spectra along with increasing light time	31
Figure S12. N ₂ adsorption/desorption curves at 77K for Zr-MOF-hv	32
Figure S13. The distribution of HOMO orbital (a) and LUMO orbital (b) in Zr ₆ -L.....	32
Figure S14. The distribution of HOMO orbital (a) and LUMO orbital (b) in Zr ₆ -L-radical	32
Figure S15. The distribution of HOMO orbital (a) and LUMO orbital (b) in Zr ₆ -L-O ₂ 33	
Figure S16. The distribution of HOMO orbital (a) and LUMO orbital (b) in Zr ₆ -L-O ₂ -radical	33
Figure S17. The distribution of HOMO orbital (a) and LUMO orbital (b) in Zr ₆ -L-hv33	
Figure S18. (a) the view of bond order for Zr ₆ -L-hv unit;(b) the enlarged view of bond order for the central part of Zr ₆ -L-hv unit.	34
Figure S19. The distribution of HOMO orbital (a) and LUMO orbital (b) in Zr ₆ -L-hv-biradical	35
Table S17. The optimized Coordinates (Angstroms) for final two original units	35
Table S18. The optimized Coordinates (Angstroms) for final TS1.....	38
Table S19. The optimized Coordinates (Angstroms) for final TS2.....	41
Table S20. The optimized Coordinates (Angstroms) for final TS3.....	45
Table S21. The optimized Coordinates (Angstroms) for final state.....	49
Figure S20. Schematic diagram of the free energy change in each step of the selected bimolecular unit polymerization process	52
Figure S21. Fluorescence quenching of Zr-MOF-hv with increasing the concentration of THF (a) and 1a (b)	53
Figure S22. High-resolution mass spectrometry (HRMS) data for free radical trapping experiments	53
Characterization Data of the Products.....	53

Experimental Section

Materials and Methods

All reagents and solvents used in the experimental procedure were purchased commercially and used without further purification. FTIR spectra ($4000\text{--}400\text{ cm}^{-1}$) were obtained by using an INVENIO-R Fourier transform mid-IR spectrometer (KBr pressed slices). ^1H Nuclear magnetic resonance (NMR) data were measured on a Bruker AV-400. Thermogravimetric analysis (TGA) was performed on a Perkin-Elmer TGA4000 analyzer from room temperature to 800°C at a rate of $10^\circ\text{C}/\text{min}$ under N_2 atmosphere. X-ray powder diffraction (XRD) was obtained using a SmartLab-SE type X-ray diffractometer with a Cu-K_α target in the range of $5\text{--}50^\circ$ and a scan rate of $10^\circ/\text{min}$. All fluorescence spectra were measured with an RF-5301PC fluorescence spectrophotometer. The ultraviolet-visible (UV-vis) absorption spectra were measured at room temperature using a UV-3600 UV, visible, and near-infrared spectrophotometer. Gas adsorption experiments were performed using a Micromeritics ASAP 2460 instrument for gas adsorption testing.

Syntheses of H_4L



Synthesis of **II**

Vitamin B_1 (1.1 g, 0.81 mmol), MeOH (18 mL) and H_2O (6 mL) was added to a 150 mL round-bottomed flask, and the mixture was cooled down in ice water. Subsequently, 2 M NaOH solution was introduced to adjust the pH to 9 over a period of time followed

by **I** (9.0 g, 54.87 mmol). Then, the contents were gradually heated to 85 °C and kept for 4 h. After cooling down to room temperature, the resultant precipitate was filtered, washed with cold MeOH and water, and dried at an 80 °C oven to obtain **II** as an off-white solid in 85 % yield.

*Synthesis of **III***

A mixture of **II** (7.4 g, 18.24 mmol), DMSO (50 mL) and 48% aqueous HBr (10.5 mL) was placed in a 150 mL round-bottomed flask. And the mixture was stirred at 60 °C for 24 h. After completion of the reaction, the mixture was poured into ice-cold water. The yellow precipitate was collected by filtration, washed with water and dried. The crude product was recrystallized from MeOH to afford **III** as a yellow solid in 90% yield.

*Synthesis of **IV***

The obtained product **III** (3.3 g, 10.05 mmol), anthracene-9,10-dicarbaldehyde (0.79 g, 3.36 mmol), ammonium acetate (5.19 g, 67.2 mmol) was dissolved in acetic acid (45 mL). The solution was heated and refluxed for 24 h. After completion of the reaction, the mixture was poured into ice-cold water. The precipitate was collected by filtration and washed with water. The crude product was washed with CHCl₃/MeOH (50:50) mixture to afford **IV** as a yellow solid in 75% yield.

*Synthesis of **H₄L***

The obtained tetraester **IV** (2.00 g, 2.68 mmol) and NaOH (3.20 g, 79.60 mmol) was placed in the mixture of MeOH (50 mL) and H₂O (20 mL). The mixture was heated and refluxed for 24 h. After cooling to room temperature, MeOH was removed in vacuum. The remaining aqueous solution was acidized with 2 M HCl to give yellow precipitate. The precipitate was filtered, washed with water and dried to obtain product H₄L₁ as a yellow solid in 96% yield.

Synthesis of Zr-MOF

A 5 mL glass vial was added with H₄L₁ (10 mg), ZrCl₄ (17 mg), DMF (2 mL) and glacial acetic acid (1.4 mL) with sonication to mix well. Then, the solution was heated at 120 °C for 3 days. Yellow spindle-shaped crystals were obtained, filtered and then washed thoroughly with DMF, finally activated with MeOH. (yield: 60% based on

H₄L₁).

Synthesis of Zr-BBI.

A 10 mL glass vial was added with H₄L₂ (24 mg), ZrCl₄ (14 mg), DMF (5 mL) and HCOOH (2.8 mL) with sonication to mix well. Then, the solution was heated at 120 °C for 3 days. Yellow rectangular flaky crystals were obtained, filtered and then washed thoroughly with DMF, finally activated with MeOH.

Synthesis of Zr-DPA.

A 5 mL glass vial was added with H₄L₃ (4 mg), ZrCl₄ (7 mg), DMF (1 mL) and glacial acetic acid (0.25 mL) with sonication to mix well. Then, the solution was heated at 120 °C for 3 days. Yellow rectangular flaky crystals were obtained, filtered and then washed thoroughly with DMF, finally activated with MeOH.

N₂ Sorption Measurement.

Before gas sorption experiments, the as-synthesized sample of Zr-MOF and Zr-MOF-hv was washed with DMF and immersed in MeOH for 3 days, during which the solvent was decanted and freshly replenished three times. The solvent was removed under vacuum at 60 °C, yielding porous material. The N₂ sorption measurement was then conducted using a Micromeritics ASAP 2020 system.

Electrochemical measurements.

Electrochemical measurements were performed on a CHI 660C electrochemical workstation (Shanghai, China) with a standard three-electrode system. To prepare the catalyst-modified electrodes, the photocatalyst (10 mg) was sonicated and dispersed in a mixed solution of methanol (1.5 mL) and nafion (10 μL) to form a slurry, which was then spread on ITO glass with an exposed area of 0.36 cm² and then heated at 60 °C for 6 h. The working electrode was irradiated under a 10 W white LED lamp using 0.5 M Na₂SO₄ aqueous solution as the electrolyte. Measurement of transient photocurrent response of samples at 0.2 V operating voltage and EIS Nyquist at 1.5 V operating voltage. Pt wire and Ag/AgCl electrodes with saturated KCl solution were used as the counter and reference electrodes respectively.

X-Ray Structural Determination.

Diffraction data for Zr-MOF, Zr-MOF-hv-5 min, Zr-MOF-hv-10 min, Zr-MOF-hv-20 min, Zr-MOF-hv-30 min, Zr-MOF-hv-40 min, Zr-MOF-hv-50 min, Zr-MOF-hv-120 min ($0.1 \times 0.05 \times 0.05$ mm) was collected via Bruker Venture using Cu- K_{α} ($\lambda = 1.54178$ Å) radiation at 100 K in Shanghai Synchrotron Radiation Facility. The structures of complexes were solved by direct methods, and the non-hydrogen atoms were located from the trial structure and then refined anisotropically with SHELXTL using a full-matrix leastsquares procedure based on F^2 values. The hydrogen atom positions were fixed geometrically at calculated distances and allowed to ride on the parent atoms. Attempts to define the highly disordered solvent molecules were unsuccessful, so the structure was refined with the PLATON “SQUEEZE” procedure. The diffraction intensity of crystal sample was very weak due to the very small size and low density, which must be responsible for the corresponding alert A. CCDC-2235394-2235400 for Zr-MOF, Zr-MOF-hv 5min, Zr-MOF-hv 10min, Zr-MOF-hv 20min, Zr-MOF-hv 30min, Zr-MOF-hv 40min, Zr-MOF-hv 50min, and Zr-MOF-hv 120min contain the supplementary crystallographic data for this paper. These data can be obtained free of charge from The Cambridge Crystallographic Data Centre via <http://www.ccdc.cam.ac.uk/datarequest/cif>.

Theoretical calculation

The structures of intermediates were optimized by Dmol³ module, following by the frequency calculation to obtain zero point vibration energy and Gibbs free energy. The generalized gradient approximation (GGA) with the Perdew-Burke-Ernzerhof (PBE) function and TS for DFT-D correction were employed. The convergence tolerance of energy, force and displacement convergence were set as 1×10^{-5} Ha, 2×10^{-3} Ha, and 5×10^{-3} Å, respectively. The core treatment was chosen as the effective core potential (ECP), and the electron treatment was performed by double numerical plus d-functions (DNP) basis set. For Figure 7 and 9, the model had been selected as four Zr₆O₈ clusters linked with one ligand. The peripheral of Zr₆ cluster was modified by formic acid. For Figure 8, the model had been selected as two units containing only one anthracene ring and two imidazole rings. In order to simulate the spatial confinement effect of Zr-MOF,

the distance between the carbon atoms in the center of the anthracene rings and the imidazole rings were restricted according to the single-crystal X-ray results. For Figure 11, the change of free energies for every step were calculated by the following reaction equation: $\Delta G = \Delta E + \Delta G(298.15 \text{ K})$, in which $\Delta G(298.15 \text{ K})$ contains the change of the zero point vibration energy. Additionally, TD-DFT calculations had been carried out with ALDA model and the same parameters, excepted for DNP of 4.4.

Photoactivity experiments

The photoactivity experiments of Zr-MOF was tested with an 32 W compact fluorescent lamp (380-800 nm) as the visible light source for photochromic behavior, and with 10 W 365 nm LED for 12h at room temperature for photocatalysis. To evaluate the stability and reusability of the photocatalysts, experiments were performed in five consecutive cycles using the recovered catalysts. After each reaction, the solid photocatalyst was collected by centrifugation and washed thoroughly with ultrapure water and ethanol for the next test.

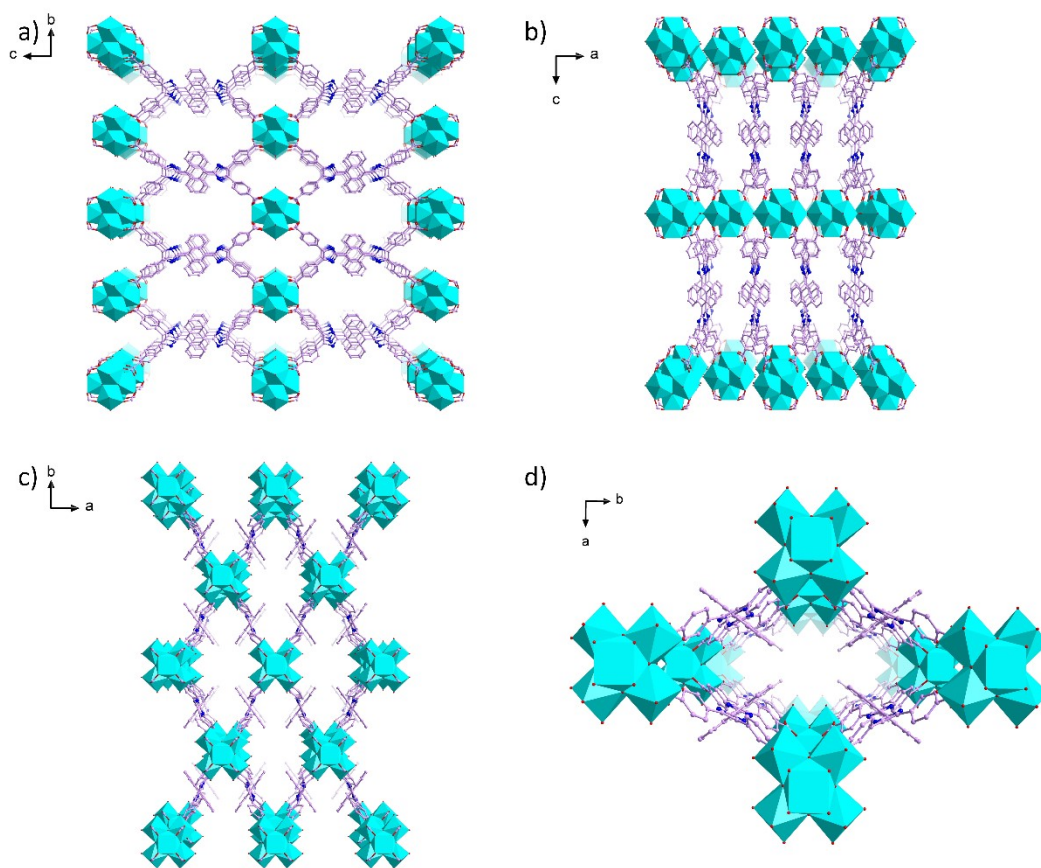
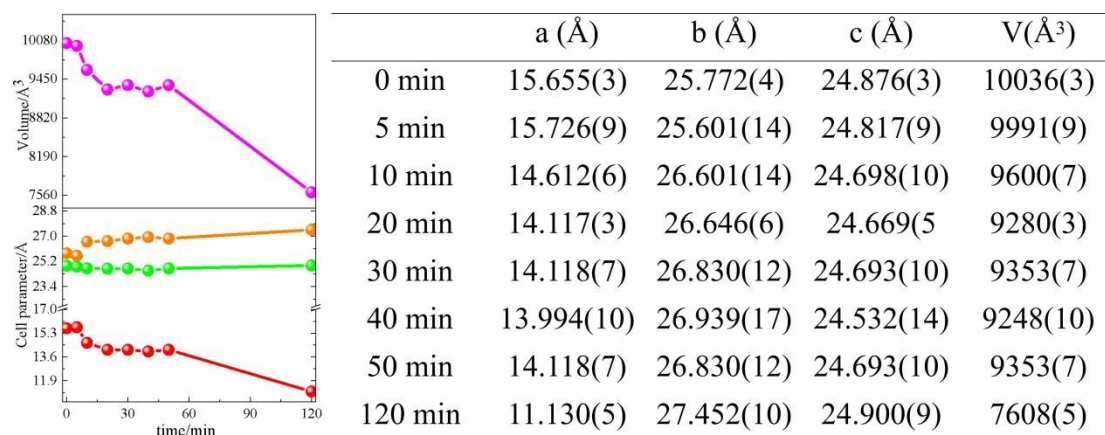


Figure S1. (a)-(c) The partial view of porous structure of Zr-MOF from three directions; (d) pore diagram of Zr-MOF.

Table S1. The dynamic structural transformation of crystal parameters along with the increasing light time and crystal data and structure refinement for Zr-MOF (HUST-28)



Zr-MOF-0min	
Empirical formula	C ₄₈ H ₂₄ N ₄ O ₁₆ Zr ₃
Formula weight	1186.37
Temperature/K	100
Crystal system	orthorhombic
Space group	Cmmm
a/Å	15.655(3)
b/Å	25.772(4)
c/Å	24.876(3)
α/°	90
β/°	90
γ/°	90
Volume/Å ³	10037(2)
Z	4
ρ _{calc} /g/cm ³	0.785
μ/mm ⁻¹	0.342
F(000)	2352.0
Radiation	CuK _α (λ = 1.54178)

2 Θ range for data collection/ $^{\circ}$	3.044 to 49.416
Index ranges	$-18 \leq h \leq 18, -30 \leq k \leq 30, -28 \leq l \leq 28$
Reflections collected	27787
Independent reflections	4606 [$R_{\text{int}} = 0.1496, R_{\text{sigma}} = 0.0960$]
Data/restraints/parameters	4606/42/171
Goodness-of-fit on F^2	1.059
Final R indexes [$I \geq 2\sigma(I)$]	$R_1 = 0.0879, wR_2 = 0.2368$
Final R indexes [all data]	$R_1 = 0.1143, wR_2 = 0.2608$
Largest diff. peak/hole / $e \text{ \AA}^{-3}$	2.63/-1.84

Table S2. Bond Lengths for Zr-MOF

Atom Atom Length/Å			Atom Atom Length/Å		
Zr1	Zr2	3.5010(10)	Zr2	O4 ⁷	2.138(6)
Zr1	Zr2 ¹	3.5010(10)	O1	C1	1.271(8)
Zr1	Zr2 ²	3.5010(10)	O2	C1	1.254(8)
Zr1	Zr2 ³	3.5010(10)	N1	C8	1.418(9)
Zr1	O1	2.172(5)	N1	C9	1.341(8)
Zr1	O1 ⁴	2.172(5)	C2	C1	1.500(9)
Zr1	O1 ⁵	2.172(5)	C2	C7	1.399(11)
Zr1	O1 ³	2.172(5)	C2	C3	1.351(11)
Zr1	O3	2.211(9)	C6	C7	1.392(10)
Zr1	O3 ⁵	2.211(9)	C6	C5	1.378(11)
Zr1	O4 ⁵	2.173(9)	C10	C9	1.511(14)
Zr1	O4	2.173(9)	C10	C11	1.396(12)
Zr2	Zr2 ²	3.541(2)	C10	C11 ⁸	1.396(12)
Zr2	Zr2 ³	3.5481(18)	C5	C8	1.496(10)
Zr2	O2 ⁶	2.287(5)	C5	C4	1.402(11)
Zr2	O2 ³	2.287(5)	C8	C8 ⁸	1.324(15)
Zr2	O5	2.178(10)	C3	C4	1.378(10)
Zr2	O6	2.160(9)	C11	C11 ⁹	1.392(18)
Zr2	O3 ⁷	2.148(5)	C11	C12	1.432(15)
Zr2	O3	2.148(5)	C12	C13	1.361(17)
Zr2	O4	2.138(6)	C13	C13 ⁹	1.47(3)

Asymmetric code: ¹1-X,1-Y,1-Z; ²1-X,+Y,1-Z; ³+X,1-Y,+Z; ⁴1-X,+Y,+Z; ⁵1-X,1-Y,+Z; ⁶+X,1-Y,1-Z; ⁷+X,+Y,1-Z; ⁸3/2-X,3/2-Y,+Z; ⁹+X,+Y,2-Z

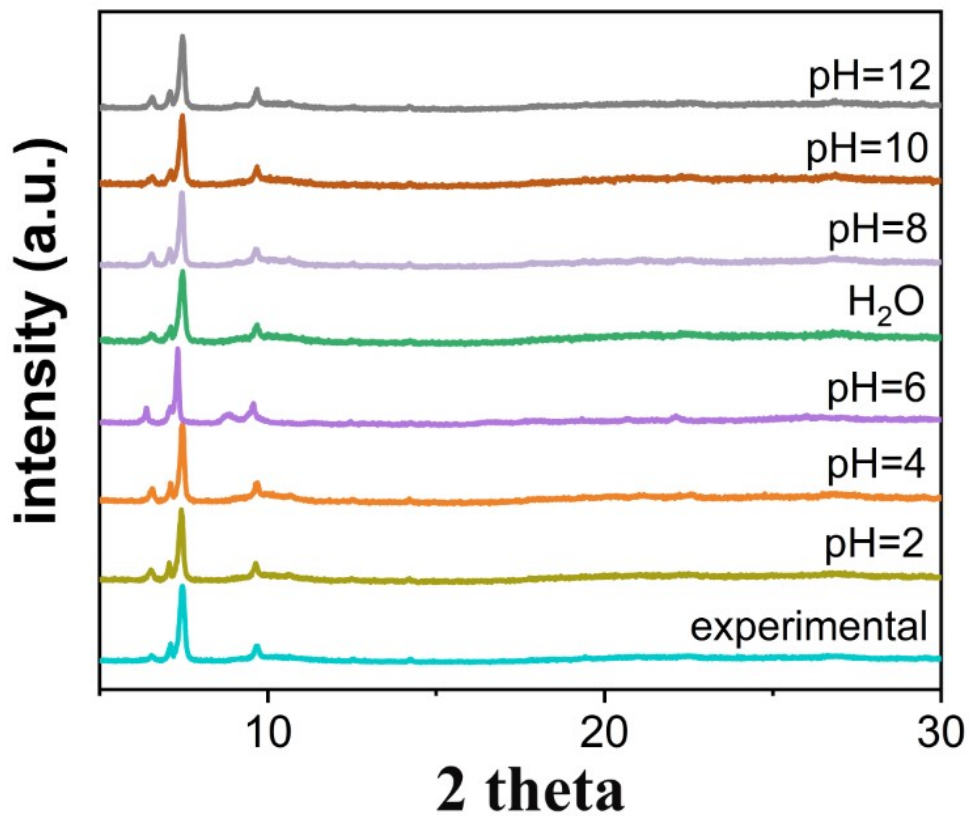


Figure S2. XRD patterns of Zr-MOF after immersing in aqueous solution with different pH

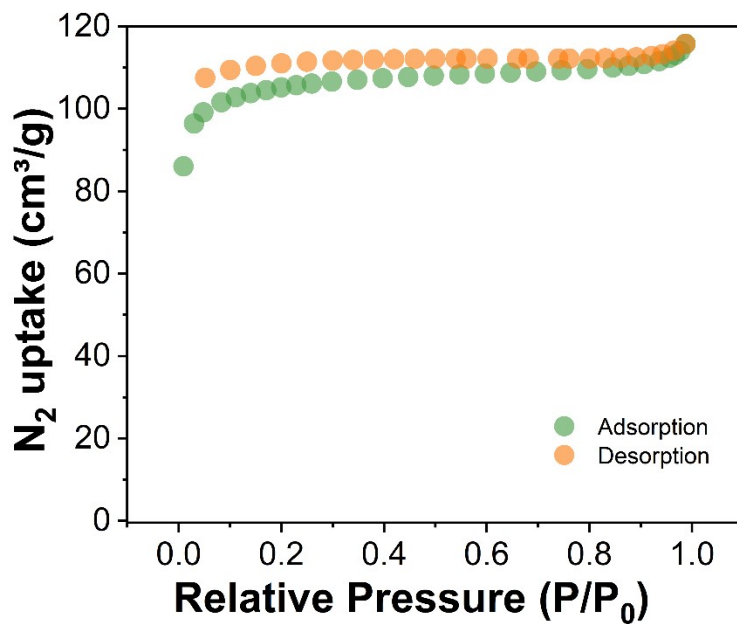


Figure S3. N₂ adsorption/desorption curves at 77K for Zr-MOF

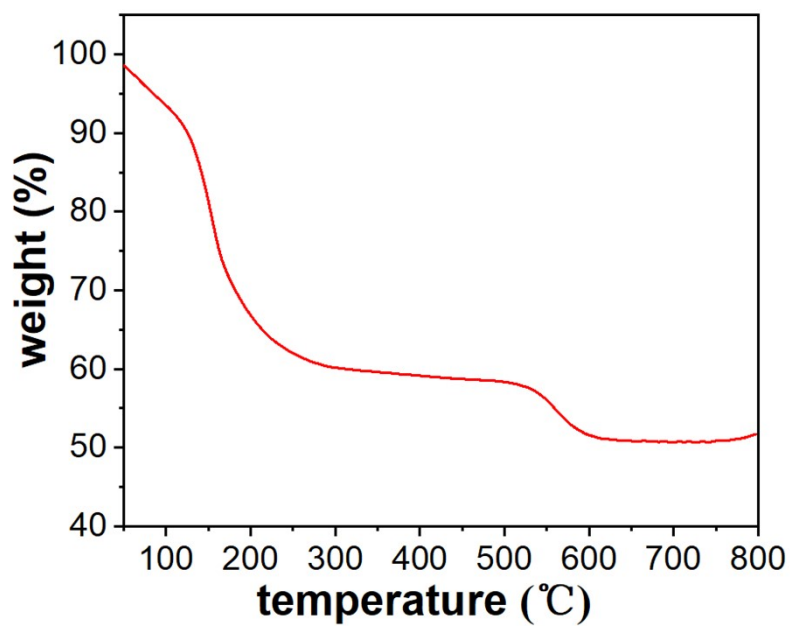


Figure S4. TGA curve of as-synthesized Zr-MOF.

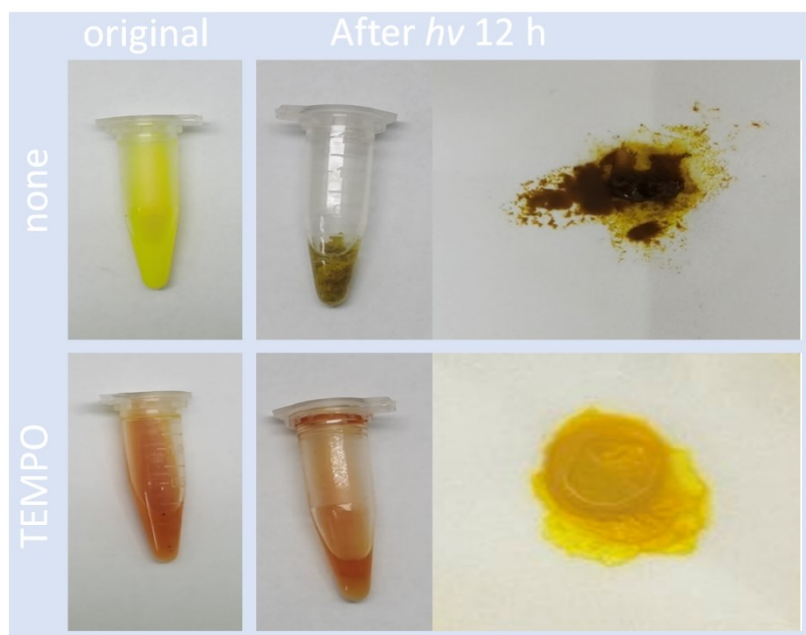


Figure S5. Color change of Zr-MOF in DCM before and after illumination (above); color change of Zr-MOF in DCM solution of TEMPO before and after illumination (below).

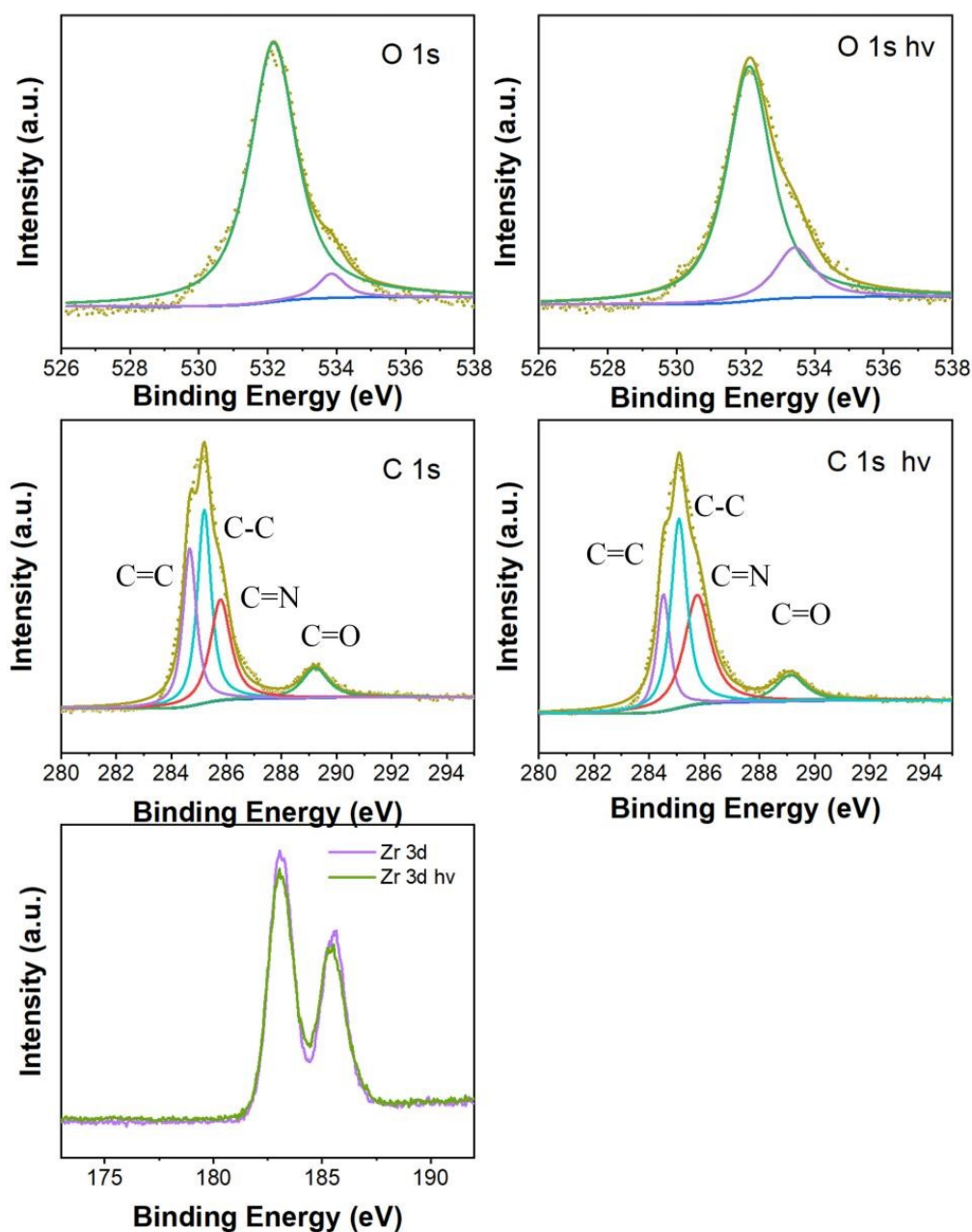


Figure S6. High-resolution XPS spectra of Zr-MOF before and after irradiation.

Table S3. Crystal data and structure refinement for Zr-MOF-hv 5min.

Identification code	Zr-MOF-hv 5min
Empirical formula	$C_{48}H_{24}N_4O_{16}Zr_3$
Formula weight	1186.37
Temperature/K	100
Crystal system	orthorhombic

Space group	Cmmm
a/Å	15.726(9)
b/Å	25.601(14)
c/Å	24.817(9)
α /°	90
β /°	90
γ /°	90
Volume/Å ³	9991(8)
Z	4
ρ_{calc} /cm ³	0.789
μ /mm ⁻¹	0.343
F(000)	2352.0
Radiation	CuK α (λ = 1.54178)
2 Θ range for data collection/°	3.04 to 35.994
Index ranges	-13 \leq h \leq 13, -22 \leq k \leq 22, -21 \leq l \leq 21
Reflections collected	25605
Independent reflections	1905 [R_{int} = 0.1850, R_{sigma} = 0.0843]
Data/restraints/parameters	1905/212/172
Goodness-of-fit on F ²	1.264
Final R indexes [$I \geq 2\sigma(I)$]	R_1 = 0.1143, wR_2 = 0.3148
Final R indexes [all data]	R_1 = 0.1495, wR_2 = 0.3506
Largest diff. peak/hole / e Å ⁻³	0.96/-1.34

Table S4. Bond Lengths for Zr-MOF-hv 5min.

Atom Atom Length/Å			Atom Atom Length/Å		
Zr01	Zr02 ¹	3.489(3)	Zr02	O5	2.28(2)
Zr01	Zr02 ²	3.489(3)	O1	C1	1.212(16)
Zr01	Zr02 ³	3.489(3)	O2	C1	1.278(17)
Zr01	Zr02	3.489(3)	C2	C1	1.42(2)
Zr01	O1 ⁴	2.195(10)	C2	C3	1.353(17)
Zr01	O1 ²	2.195(10)	C2	C7	1.482(14)
Zr01	O1 ⁵	2.195(10)	C6	C5	1.408(19)
Zr01	O1	2.195(10)	C6	C7	1.322(18)
Zr01	O3 ⁴	2.182(12)	C3	C4	1.430(19)
Zr01	O3	2.182(13)	N1	C8	1.360(17)
Zr01	O4	2.147(11)	N1	C9	1.356(16)
Zr01	O4 ⁴	2.147(11)	C5	C4	1.385(19)
Zr02	Zr02 ¹	3.531(7)	C5	C8	1.483(19)
Zr02	Zr02 ²	3.536(5)	C8	C8 ⁷	1.36(3)
Zr02	O2 ³	2.262(10)	C10	C9	1.449(18)
Zr02	O2 ⁴	2.262(10)	C10	C11 ⁷	1.424(15)
Zr02	O3 ⁶	2.125(6)	C10	C11	1.424(15)
Zr02	O3	2.125(6)	C11	C11 ⁸	1.410(18)
Zr02	O4	2.133(8)	C11	C12	1.439(17)
Zr02	O4 ⁶	2.133(8)	C13	C13 ⁸	1.47(2)
Zr02	O6	2.186(13)	C13	C12	1.448(18)

Asymmetric code: ¹1-X,+Y,1-Z; ²+X,1-Y,+Z; ³1-X,1-Y,1-Z; ⁴1-X,1-Y,+Z; ⁵1-X,+Y,+Z; ⁶+X,+Y,1-Z; ⁷1/2-X,1/2-Y,+Z; ⁸+X,+Y,-

Z

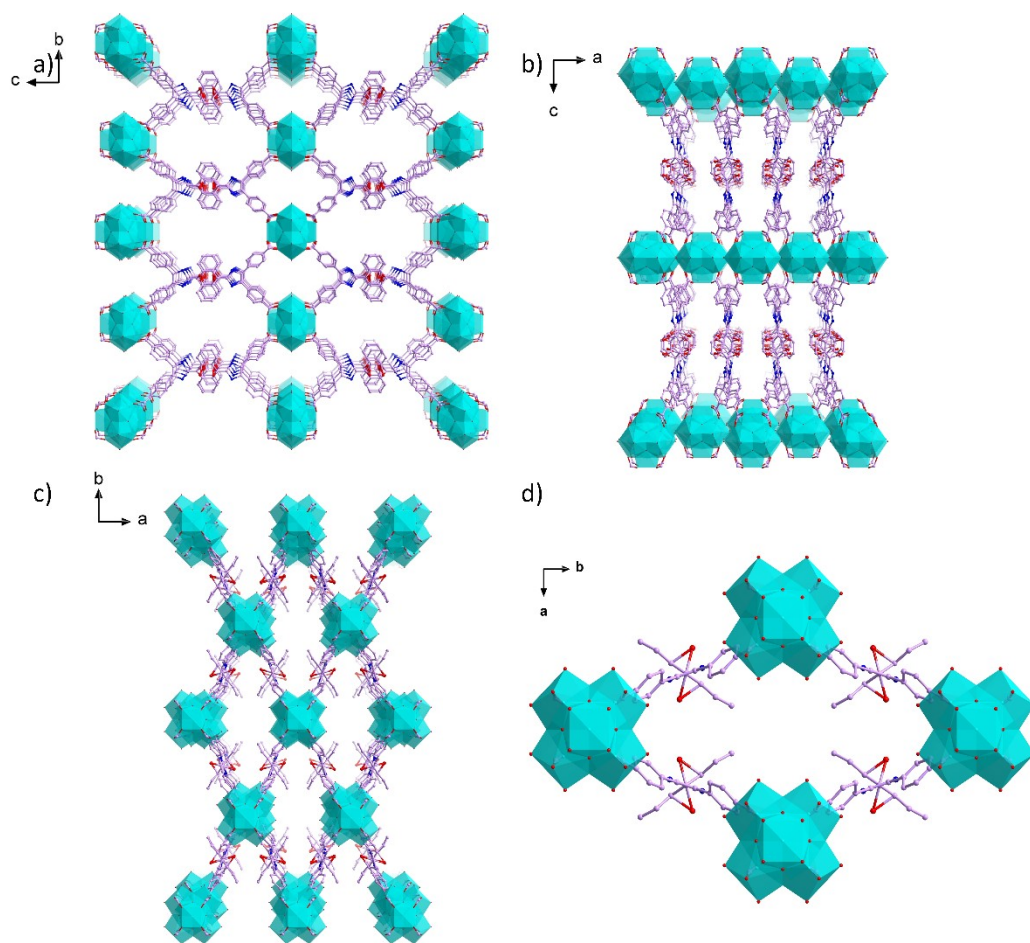


Figure S7. (a)-(c) The partial view of Zr-MOF-hv 10min porous structure from three directions; (d) Zr-MOF-hv 10 min pore diagram.

Table S5. Crystal data and structure refinement for Zr-MOF-hv 10min.

Identification code	Zr-MOF-hv10min
Empirical formula	$C_{48}H_{24}N_4O_{20}Zr_3$
Formula weight	1250.37
Temperature/K	100
Crystal system	orthorhombic
Space group	Cmmm
a/Å	14.612(6)
b/Å	26.601(14)

$c/\text{\AA}$	24.698(10)
$\alpha/^\circ$	90
$\beta/^\circ$	90
$\gamma/^\circ$	90
Volume/ \AA^3	9600(7)
Z	4
$\rho_{\text{calc}}/\text{g/cm}^3$	0.865
μ/mm^{-1}	0.363
F(000)	2480.0
Radiation	CuK $_{\alpha}$ ($\lambda = 1.54178$)
2 Θ range for data collection/ $^\circ$	3.18 to 31.666
Index ranges	$-11 \leq h \leq 11, -20 \leq k \leq 20, -18 \leq l \leq 18$
Reflections collected	16900
Independent reflections	1304 [$R_{\text{int}} = 0.1445, R_{\text{sigma}} = 0.0628$]
Data/restraints/parameters	1304/259/181
Goodness-of-fit on F^2	1.075
Final R indexes [$I \geq 2\sigma(I)$]	$R_1 = 0.0982, wR_2 = 0.2734$
Final R indexes [all data]	$R_1 = 0.1161, wR_2 = 0.2962$
Largest diff. peak/hole / $e \text{\AA}^{-3}$	0.86/-0.74

Table S6. Bond Lengths for Zr-MOF-hv 10min.

Atom Atom Length/Å			Atom Atom Length/Å		
Zr01	Zr02	3.499(3)	O2	C1	1.300(19)
Zr01	Zr02 ¹	3.499(3)	N1	C9	1.394(15)
Zr01	Zr02 ²	3.499(3)	N1	C8	1.486(19)
Zr01	Zr02 ³	3.499(3)	C4	C5	1.31(2)
Zr01	O1	2.203(11)	C4	C3	1.384(19)
Zr01	O1 ³	2.203(11)	C2	C7	1.322(19)
Zr01	O1 ⁴	2.203(11)	C2	C1	1.488(15)
Zr01	O1 ⁵	2.203(11)	C2	C3	1.41(2)
Zr01	O4 ⁵	2.197(17)	C7	C6	1.315(19)
Zr01	O4	2.196(17)	C5	C6	1.46(2)
Zr01	O3 ⁵	2.192(16)	C5	C8	1.49(2)
Zr01	O3	2.192(16)	C10	C9	1.30(3)
Zr02	Zr02 ¹	3.532(7)	C10	O7	1.30(3)
Zr02	Zr02 ³	3.544(6)	C10	O7 ⁷	1.30(3)
Zr02	O5	2.235(17)	C10	C11 ⁷	1.480(17)
Zr02	O6	2.223(18)	C10	C11	1.480(17)
Zr02	O2 ⁵	2.304(12)	O7	C11 ⁷	1.87(4)
Zr02	O2 ²	2.304(12)	O7	C11	1.47(3)
Zr02	O4 ⁶	2.141(9)	C12	C13	1.414(19)
Zr02	O4	2.141(9)	C12	C11	1.449(19)
Zr02	O3	2.134(10)	C13	C13 ⁸	1.51(2)
Zr02	O3 ⁶	2.134(10)	C11	C11 ⁸	1.48(2)
O1	C1	1.214(18)	C8	C8 ⁷	1.28(3)

Asymmetric code: ¹1-X,+Y,1-Z; ²1-X,1-Y,1-Z; ³+X,1-Y,+Z; ⁴1-X,+Y,+Z; ⁵1-X,1-Y,+Z; ⁶+X,+Y,1-Z; ⁷3/2-X,3/2-Y,+Z;

⁸+X,+Y,2-Z

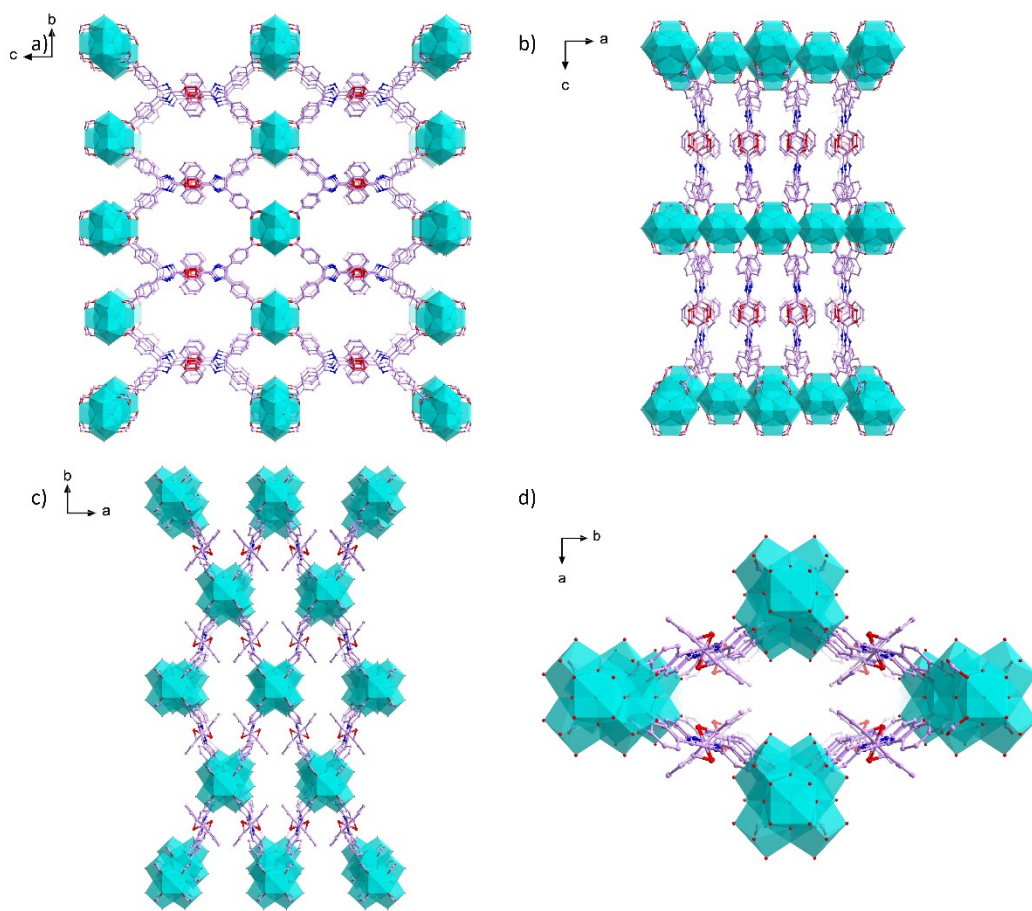


Figure S8. (a)-(c) The partial view of Zr-MOF-hv 20min porous structure from three directions; (d) Zr-MOF-hv 20 min pore diagram.

Table S7. Crystal data and structure refinement for Zr-MOF-hv 20min.

Identification code	Zr-MOF-hv20min
Empirical formula	$C_{48}H_{24}N_4O_{20}Zr_3$
Formula weight	1250.37
Temperature/K	100
Crystal system	orthorhombic
Space group	Cmmm
a/Å	14.117(3)
b/Å	26.646(6)
c/Å	24.669(5)

$\alpha/^\circ$	90
$\beta/^\circ$	90
$\gamma/^\circ$	90
Volume/ \AA^3	9280(4)
Z	4
$\rho_{\text{calc}}/\text{g}/\text{cm}^3$	0.895
μ/mm^{-1}	0.375
F(000)	2480.0
Radiation	CuK $_{\alpha}$ ($\lambda = 1.54178$)
2 Θ range for data collection/ $^\circ$	3.056 to 41.654
Index ranges	$-14 \leq h \leq 14, -26 \leq k \leq 26, -24 \leq l \leq 24$
Reflections collected	35617
Independent reflections	2682 [$R_{\text{int}} = 0.1731, R_{\text{sigma}} = 0.0706$]
Data/restraints/parameters	2682/100/181
Goodness-of-fit on F^2	1.244
Final R indexes [$I \geq 2\sigma(I)$]	$R_1 = 0.1097, wR_2 = 0.3202$
Final R indexes [all data]	$R_1 = 0.1456, wR_2 = 0.3575$
Largest diff. peak/hole / $e \text{\AA}^{-3}$	0.96/-0.83

Table S8. Bond Lengths for Zr-MOF-hv 20min.

Atom Atom Length/Å			Atom Atom Length/Å		
Zr01	Zr02 ¹	3.496(2)	N1	C9	1.342(12)
Zr01	Zr02 ²	3.496(2)	N1	C8	1.463(14)
Zr01	Zr02	3.496(2)	C1	C2	1.470(16)
Zr01	Zr02 ³	3.496(2)	C10	C9	1.35(2)
Zr01	O1 ¹	2.188(8)	C10	C11 ⁷	1.440(12)
Zr01	O1 ⁴	2.188(8)	C10	C11	1.440(12)
Zr01	O1 ⁵	2.188(8)	C10	O7	1.382(16)
Zr01	O1	2.188(8)	C10	O7 ⁷	1.382(16)
Zr01	O3 ⁴	2.182(15)	C5	C4	1.356(16)
Zr01	O3	2.182(15)	C5	C6	1.419(17)
Zr01	O4 ⁴	2.195(11)	C5	C8	1.436(15)
Zr01	O4	2.195(11)	C3	C2	1.350(19)
Zr02	Zr02 ¹	3.535(3)	C3	C4	1.343(16)
Zr02	Zr02 ³	3.526(6)	C2	C7	1.459(18)
Zr02	O6	2.196(10)	C7	C6	1.322(15)
Zr02	O2 ²	2.279(8)	C8	C8 ⁷	1.42(2)
Zr02	O2 ⁴	2.279(8)	C11	C11 ⁸	1.447(18)
Zr02	O5	2.205(16)	C11	C12	1.442(16)
Zr02	O3	2.138(6)	C11	O7	1.52(3)
Zr02	O3 ⁶	2.138(6)	C11	O7 ⁷	1.91(3)
Zr02	O4	2.145(7)	C13	C13 ⁸	1.462(18)
Zr02	O4 ⁶	2.145(7)	C13	C12	1.427(16)
O1	C1	1.256(14)	O7	O7 ⁸	1.67(4)
O2	C1	1.266(13)			

Asymmetric code: ¹+X,1-Y,+Z; ²1-X,1-Y,1-Z; ³1-X,+Y,1-Z; ⁴1-X,1-Y,+Z; ⁵1-X,+Y,+Z; ⁶+X,+Y,1-Z; ⁷1/2-X,1/2-Y,+Z; ⁸+X,+Y,-

Z

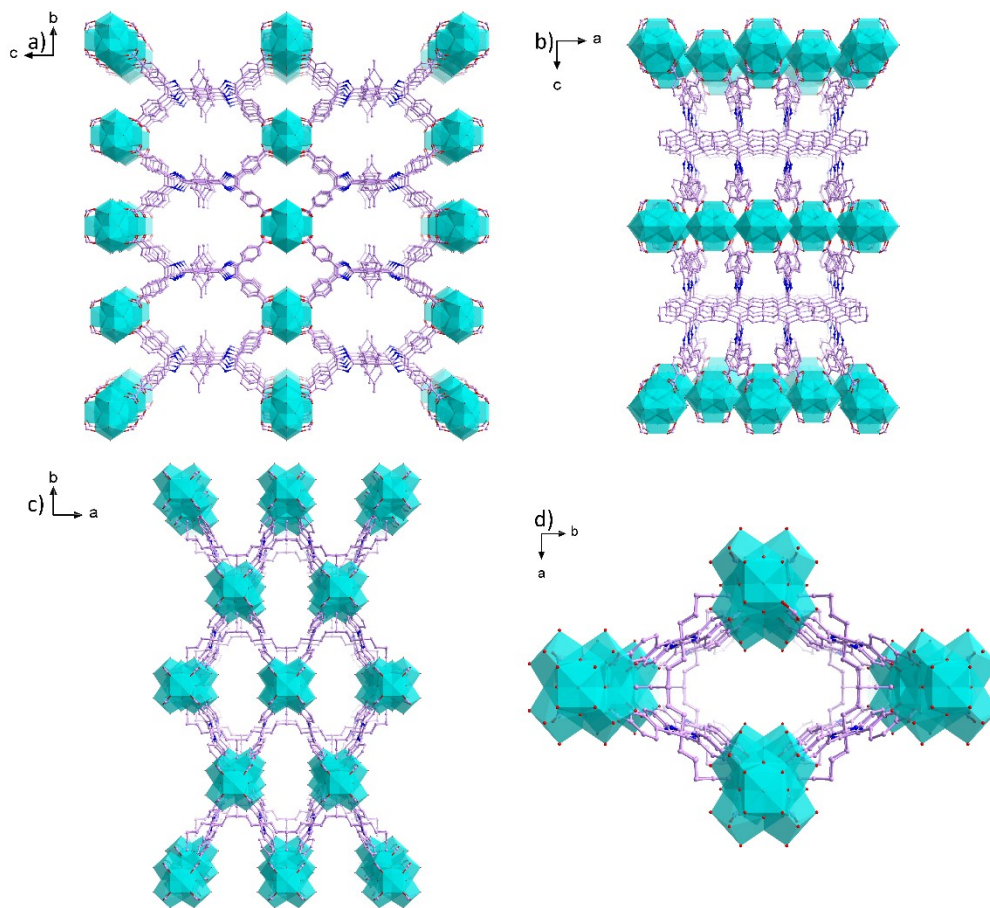


Figure S9. (a)-(c) The partial view of Zr-MOF-hv 30min porous structure from three directions; (d) Zr-MOF-hv 30 min pore diagram.

Table S9. Crystal data and structure refinement for Zr-MOF-hv 30min.

Identification code	Zr-MOF-hv 30min
Empirical formula	$C_{48}H_{24}N_4O_{20}Zr_3$
Formula weight	1250.37
Temperature/K	100
Crystal system	orthorhombic
Space group	Cmmm
$a/\text{\AA}$	14.118(7)
$b/\text{\AA}$	26.830(12)
$c/\text{\AA}$	24.693(10)
$\alpha/^\circ$	90

$\beta/^\circ$	90
$\gamma/^\circ$	90
Volume/ \AA^3	9354(7)
Z	4
$\rho_{\text{calc}}/\text{g/cm}^3$	0.888
μ/mm^{-1}	0.372
F(000)	2480.0
Radiation	CuK $_{\alpha}$ ($\lambda = 1.54178$)
2Θ range for data collection/ $^\circ$	3.26 to 33.036
Index ranges	$-11 \leq h \leq 11, -21 \leq k \leq 21, -19 \leq l \leq 19$
Reflections collected	17822
Independent reflections	1365 [$R_{\text{int}} = 0.1764, R_{\text{sigma}} = 0.0839$]
Data/restraints/parameters	1365/184/184
Goodness-of-fit on F^2	1.372
Final R indexes [$I \geq 2\sigma(I)$]	$R_1 = 0.1348, wR_2 = 0.3249$
Final R indexes [all data]	$R_1 = 0.1571, wR_2 = 0.3450$
Largest diff. peak/hole / $e \text{\AA}^{-3}$	1.40/-1.20

Table S10. Bond Lengths for Zr-MOF-hv 30min.

Atom Atom Length/Å			Atom Atom Length/Å		
Zr01	Zr01 ¹	3.557(6)	C10	O7	1.29(6)
Zr01	Zr01 ²	3.528(8)	C10	O7 ⁷	1.29(6)
Zr01	Zr02	3.498(3)	O2	C1	1.275(15)
Zr01	Zr02 ³	3.499(3)	C8	C8 ⁷	1.439(18)
Zr01	O5	2.10(2)	C8	C5	1.403(14)
Zr01	O6	2.157(18)	C8	N1	1.454(14)
Zr01	O2 ³	2.287(14)	C3	C2	1.34(2)
Zr01	O2 ⁴	2.287(14)	C3	C4	1.37(2)
Zr01	O3	2.139(10)	C2	C1	1.466(18)
Zr01	O3 ⁵	2.139(10)	C2	C7	1.440(17)
Zr01	O4 ⁵	2.116(13)	C9	N1 ⁷	1.447(18)
Zr01	O4	2.116(13)	C9	N1	1.447(18)
Zr02	O1 ⁴	2.231(14)	C7	C6	1.415(19)
Zr02	O1 ¹	2.231(14)	C6	C5	1.429(16)
Zr02	O1 ⁶	2.231(14)	C4	C5	1.41(2)
Zr02	O1	2.231(14)	C11	C11 ⁸	1.49(2)
Zr02	O3 ⁴	2.23(2)	C11	O7 ⁷	1.49(5)
Zr02	O3	2.23(2)	C11	C12	1.40(2)
Zr02	O4	2.172(18)	C13	C13 ⁹	1.484(19)
Zr02	O4 ⁴	2.172(18)	C13	C14	1.503(17)
O1	C1	1.17(2)	C13	C12 ¹⁰	1.445(13)
C10	C9	1.438(19)	C13	C12	1.445(13)
C10	C11 ⁷	1.465(16)	C14	C14 ⁹	1.45(2)
C10	C11	1.465(16)	O7	O7 ⁸	1.64(9)

Asymmetric code: ¹+X,1-Y,+Z; ²1-X,+Y,1-Z; ³1-X,1-Y,1-Z; ⁴1-X,1-Y,+Z; ⁵+X,+Y,1-Z; ⁶1-X,+Y,+Z; ⁷1/2-X,1/2-Y,+Z; ⁸+X,+Y,-

Z; ⁹-X,+Y,-Z; ¹⁰-X,+Y,+Z

Table S11. Crystal data and structure refinement for Zr-MOF-hv40min.

Identification code	Zr-MOF-hv40min
Empirical formula	C ₄₈ H ₂₄ N ₄ O ₂₀ Zr ₃
Formula weight	1250.37
Temperature/K	100
Crystal system	orthorhombic
Space group	Cmmm
a/Å	13.994(10)
b/Å	26.939(17)
c/Å	24.532(14)
α /°	90
β /°	90
γ /°	90
Volume/Å ³	9248(10)
Z	4
$\rho_{\text{calc}}/\text{cm}^3$	0.898
μ/mm^{-1}	0.377
F(000)	2480.0
Radiation	CuK α ($\lambda = 1.54178$)
2 Θ range for data collection/°	3.024 to 35.982
Index ranges	-12 \leq h \leq 12, -23 \leq k \leq 23, -21 \leq l \leq 21
Reflections collected	22018
Independent reflections	1651 [$R_{\text{int}} = 0.2546$, $R_{\text{sigma}} = 0.1799$]
Data/restraints/parameters	1651/303/184
Goodness-of-fit on F ²	1.264
Final R indexes [$I \geq 2\sigma(I)$]	$R_1 = 0.1577$, $wR_2 = 0.3470$
Final R indexes [all data]	$R_1 = 0.2060$, $wR_2 = 0.4023$
Largest diff. peak/hole / e Å ⁻³	1.87/-0.91

Table S12. Bond Lengths for Zr-MOF-hv40min.

Atom Atom Length/Å			Atom Atom Length/Å		
Zr01	Zr02	3.496(4)	C7	C6	1.407(17)
Zr01	Zr02 ¹	3.496(4)	C10	C9	1.283(17)
Zr01	Zr02 ²	3.496(4)	C10	C11	1.581(10)
Zr01	Zr02 ³	3.496(4)	C10	C11 ⁷	1.581(10)
Zr01	O1 ⁴	2.179(12)	C10	O7 ⁷	1.653(11)
Zr01	O1	2.179(12)	C10	O7	1.653(11)
Zr01	O1 ⁵	2.179(12)	N1	C8	1.44(3)
Zr01	O1 ¹	2.179(12)	N1	C9	1.378(19)
Zr01	O3	2.18(2)	C4	C5	1.32(3)
Zr01	O3 ⁵	2.18(2)	C4	C3	1.39(3)
Zr01	O4 ⁵	2.138(18)	C2	C3	1.43(2)
Zr01	O4	2.137(18)	C2	C1	1.53(2)
Zr02	Zr02 ³	3.518(10)	C5	C6	1.47(3)
Zr02	Zr02 ¹	3.540(6)	C5	C8	1.53(3)
Zr02	O5	2.09(3)	C8	C8 ⁷	1.32(4)
Zr02	O6	2.158(15)	C11	C11 ⁸	1.58(2)
Zr02	O2 ²	2.271(14)	C11	O7	1.518(19)
Zr02	O2 ⁵	2.271(14)	C11	C12	1.426(18)
Zr02	O3 ⁶	2.119(7)	O7	O7 ⁸	1.294(19)
Zr02	O3	2.119(7)	C13	C13 ⁹	1.51(2)
Zr02	O4 ⁶	2.171(12)	C13	C12 ⁴	1.462(19)
Zr02	O4	2.171(12)	C13	C12	1.462(19)
O1	C1	1.24(2)	C13	C14	1.57(3)
O2	C1	1.31(3)	C14	C14 ⁹	1.49(2)
C7	C2	1.33(2)			

Asymmetric code: ¹+X,1-Y,+Z; ²1-X,1-Y,-Z; ³1-X,+Y,-Z; ⁴1-X,+Y,+Z; ⁵1-X,1-Y,+Z; ⁶+X,+Y,-Z; ⁷3/2-X,3/2-Y,+Z; ⁸+X,+Y,1-Z;

⁹1-X,+Y,1-Z

Table S13. Crystal data and structure refinement for Zr-MOF-hv 50min.

Identification code	Zr-MOF-hv50min
Empirical formula	C ₄₈ H ₂₄ N ₄ O ₂₀ Zr ₃
Formula weight	1250.37
Temperature/K	100
Crystal system	orthorhombic
Space group	Cmmm
a/Å	14.118(7)
b/Å	26.830(12)
c/Å	24.693(10)
α/°	90
β/°	90
γ/°	90
Volume/Å ³	9354(7)
Z	4
ρ _{calc} /cm ³	0.888
μ/mm ⁻¹	0.372
F(000)	2480.0
Radiation	CuK _α (λ = 1.54178)
2θ range for data collection/°	3.26 to 33.036
Index ranges	-11 ≤ h ≤ 11, -21 ≤ k ≤ 21, -19 ≤ l ≤ 19
Reflections collected	17822
Independent reflections	1365 [R _{int} = 0.1764, R _{sigma} = 0.0839]
Data/restraints/parameters	1365/184/184
Goodness-of-fit on F ²	1.372
Final R indexes [I ≥ 2σ (I)]	R ₁ = 0.1348, wR ₂ = 0.3249
Final R indexes [all data]	R ₁ = 0.1571, wR ₂ = 0.3450
Largest diff. peak/hole / e Å ⁻³	1.40/-1.20

Table S14. Bond Lengths for Zr-MOF-hv 50min.

Atom Atom Length/Å			Atom Atom Length/Å		
Zr01	Zr01 ¹	3.557(6)	C10	O7	1.29(6)
Zr01	Zr01 ²	3.528(8)	C10	O7 ⁷	1.29(6)
Zr01	Zr02	3.498(3)	O2	C1	1.275(15)
Zr01	Zr02 ³	3.499(3)	C8	C8 ⁷	1.439(18)
Zr01	O5	2.10(2)	C8	C5	1.403(14)
Zr01	O6	2.157(18)	C8	N1	1.454(14)
Zr01	O2 ³	2.287(14)	C3	C2	1.34(2)
Zr01	O2 ⁴	2.287(14)	C3	C4	1.37(2)
Zr01	O3	2.139(10)	C2	C1	1.466(18)
Zr01	O3 ⁵	2.139(10)	C2	C7	1.440(17)
Zr01	O4 ⁵	2.116(13)	C9	N1 ⁷	1.447(18)
Zr01	O4	2.116(13)	C9	N1	1.447(18)
Zr02	O1 ⁴	2.231(14)	C7	C6	1.415(19)
Zr02	O1 ¹	2.231(14)	C6	C5	1.429(16)
Zr02	O1 ⁶	2.231(14)	C4	C5	1.41(2)
Zr02	O1	2.231(14)	C11	C11 ⁸	1.49(2)
Zr02	O3 ⁴	2.23(2)	C11	O7 ⁷	1.49(5)
Zr02	O3	2.23(2)	C11	C12	1.40(2)
Zr02	O4	2.172(18)	C13	C13 ⁹	1.484(19)
Zr02	O4 ⁴	2.172(18)	C13	C14	1.503(17)
O1	C1	1.17(2)	C13	C12 ¹⁰	1.445(13)
C10	C9	1.438(19)	C13	C12	1.445(13)
C10	C11 ⁷	1.465(16)	C14	C14 ⁹	1.45(2)
C10	C11	1.465(16)	O7	O7 ⁸	1.64(9)

Asymmetric code: ¹+X,1-Y,+Z; ²1-X,+Y,1-Z; ³1-X,1-Y,1-Z; ⁴1-X,1-Y,+Z; ⁵+X,+Y,1-Z; ⁶1-X,+Y,+Z; ⁷1/2-X,1/2-Y,+Z; ⁸+X,+Y,-

Z; ⁹-X,+Y,-Z; ¹⁰-X,+Y,+Z

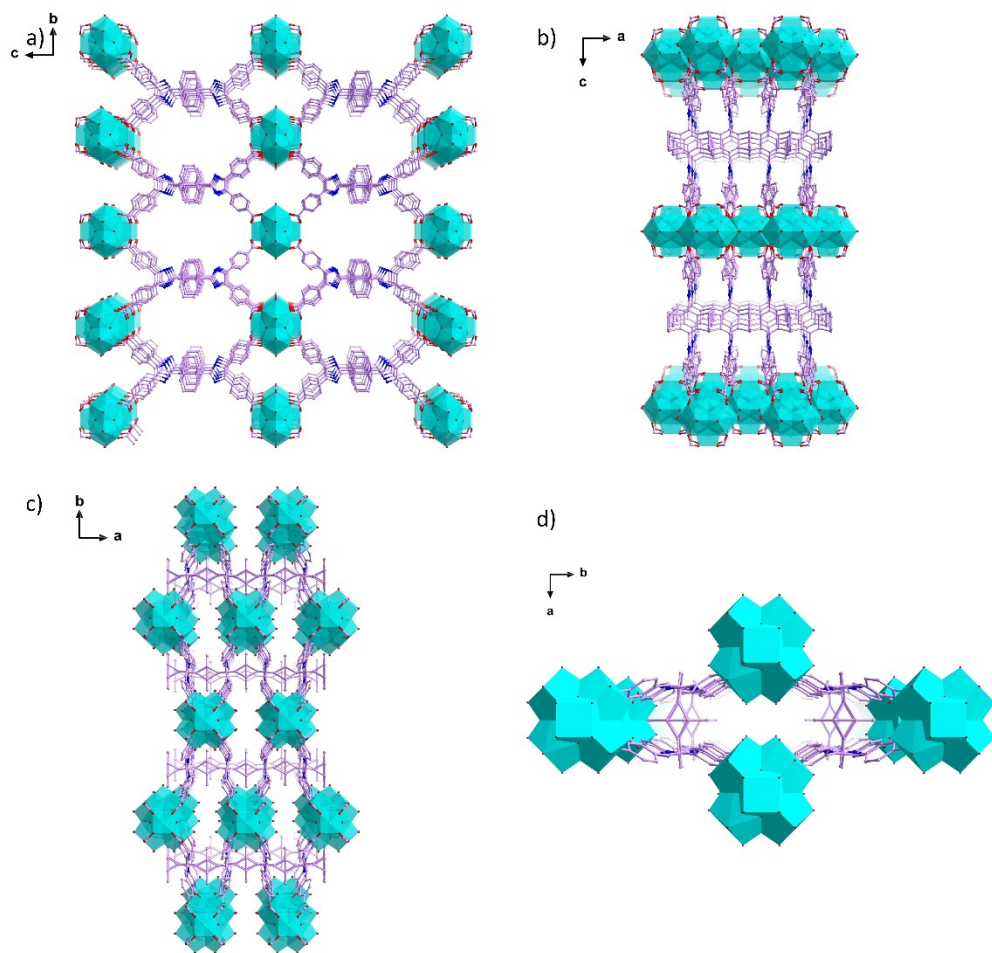


Figure S10. (a)-(c) The partial view of Zr-MOF-hv 120min porous structure from three directions; (d) Zr-MOF-hv 120 min pore diagram.

Table S15. Crystal data and structure refinement for Zr-MOF-hv120min.

Identification code	Zr-MOF-hv120min
Empirical formula	$C_{48}H_{24}N_4O_{16}Zr_3$
Formula weight	1186.37
Temperature/K	100
Crystal system	orthorhombic
Space group	<i>Cmmm</i>
a/Å	11.130(5)
b/Å	27.452(10)
c/Å	24.900(9)

$\alpha/^\circ$	90
$\beta/^\circ$	90
$\gamma/^\circ$	90
Volume/ \AA^3	7608(5)
Z	4
$\rho_{\text{calc}}/\text{g}/\text{cm}^3$	1.029
μ/mm^{-1}	0.451
F(000)	2320.0
Radiation	CuK $_{\alpha}$ ($\lambda = 1.54178$)
2 Θ range for data collection/ $^\circ$	3.272 to 34.602
Index ranges	$-9 \leq h \leq 9, -22 \leq k \leq 22, -20 \leq l \leq 20$
Reflections collected	15165
Independent reflections	1269 [$R_{\text{int}} = 0.1815, R_{\text{sigma}} = 0.0816$]
Data/restraints/parameters	1269/175/166
Goodness-of-fit on F^2	1.771
Final R indexes [$I \geq 2\sigma(I)$]	$R_1 = 0.1797, wR_2 = 0.4565$
Final R indexes [all data]	$R_1 = 0.2266, wR_2 = 0.5038$
Largest diff. peak/hole / $e \text{\AA}^{-3}$	0.94/-0.70

Table S16. Bond Lengths for Zr-MOF-hv120min.

Atom Atom Length/Å			Atom Atom Length/Å		
Zr1	Zr2 ¹	3.600(11)	C10	C9	1.42(2)
Zr1	Zr2	3.600(11)	C10	C11	1.34(5)
Zr1	Zr2 ²	3.600(11)	C10	C11 ⁷	1.34(5)
Zr1	Zr2 ³	3.600(11)	C9	N1 ⁷	1.45(4)
Zr1	O4 ⁴	2.37(5)	C9	N1	1.45(4)
Zr1	O4 ²	2.37(5)	C1	C2	1.40(5)
Zr1	O5 ⁵	2.15(3)	C6	C5	1.3900
Zr1	O5	2.15(3)	C6	C7	1.3900
Zr1	O5 ³	2.15(3)	C5	C4	1.3900
Zr1	O5 ⁶	2.15(3)	C5	C8	1.38(4)
Zr1	O3 ⁵	2.09(9)	C4	C3	1.3900
Zr1	O3	2.09(9)	C3	C2	1.3900
Zr2	Zr2 ¹	3.664(14)	C2	C7	1.3900
Zr2	O4 ⁴	2.00(3)	C8	C8 ⁷	1.51(8)
Zr2	O4	2.00(3)	C8	N1	1.49(4)
Zr2	O1 ⁴	2.28(3)	C11	C11 ⁸	1.87(13)
Zr2	O1	2.28(3)	C11	C13	1.83(2)
Zr2	O3 ⁴	2.27(3)	C11	C14	1.88(2)
Zr2	O3	2.27(3)	C12	C12 ⁸	1.60(2)
Zr2	O6	2.21(2)	C12	C13	1.61(2)
Zr2	O2	2.251(18)	C15	C15 ⁸	1.49(2)
O4	O4 ⁴	1.42(18)	C15	C14	1.58(2)
O5	C1 ¹	1.40(5)	C13	C14	1.80(2)
O1	C1	1.33(4)			

Asymmetric code: ¹+X,1-Y,1-Z; ²-X,1-Y,1-Z; ³-X,+Y,+Z; ⁴+X,+Y,1-Z; ⁵-X,1-Y,+Z; ⁶+X,1-Y,+Z; ⁷1/2-X,3/2-Y,+Z; ⁸+X,+Y,-Z

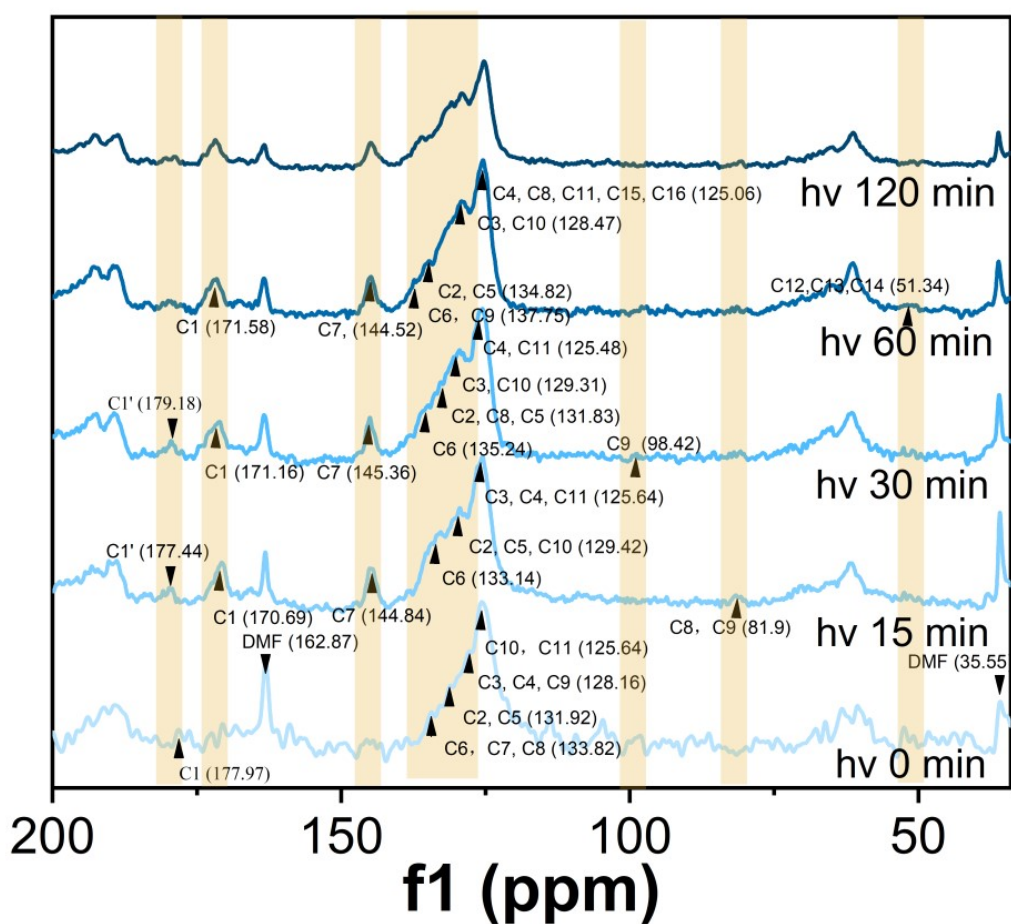
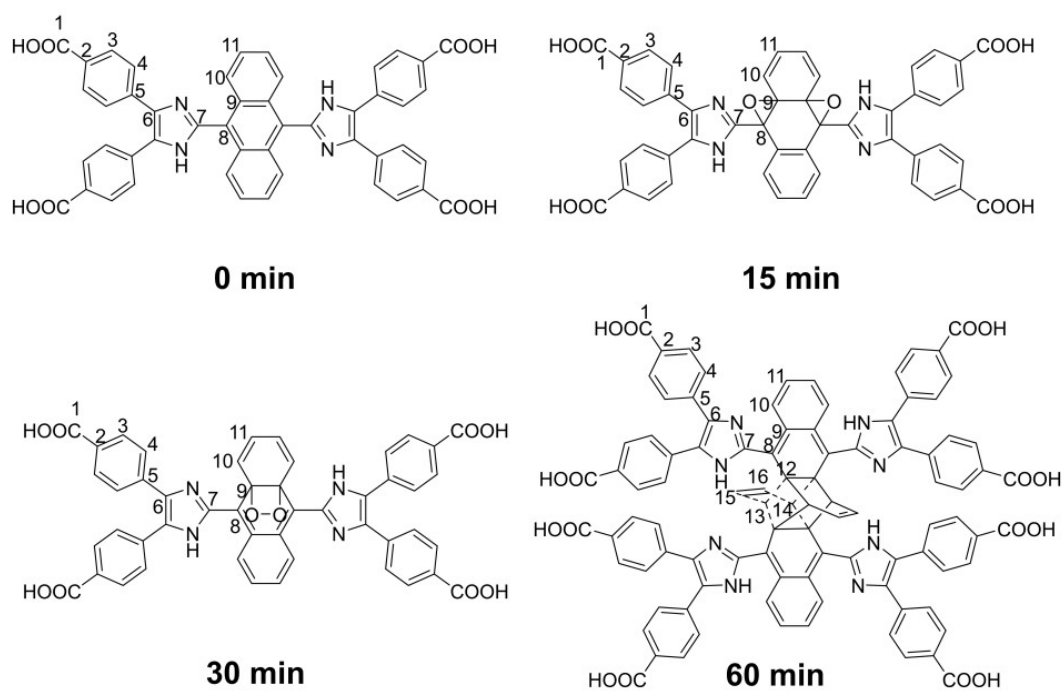


Figure S11. Solid ^{13}C NMR spectra along with increasing light time

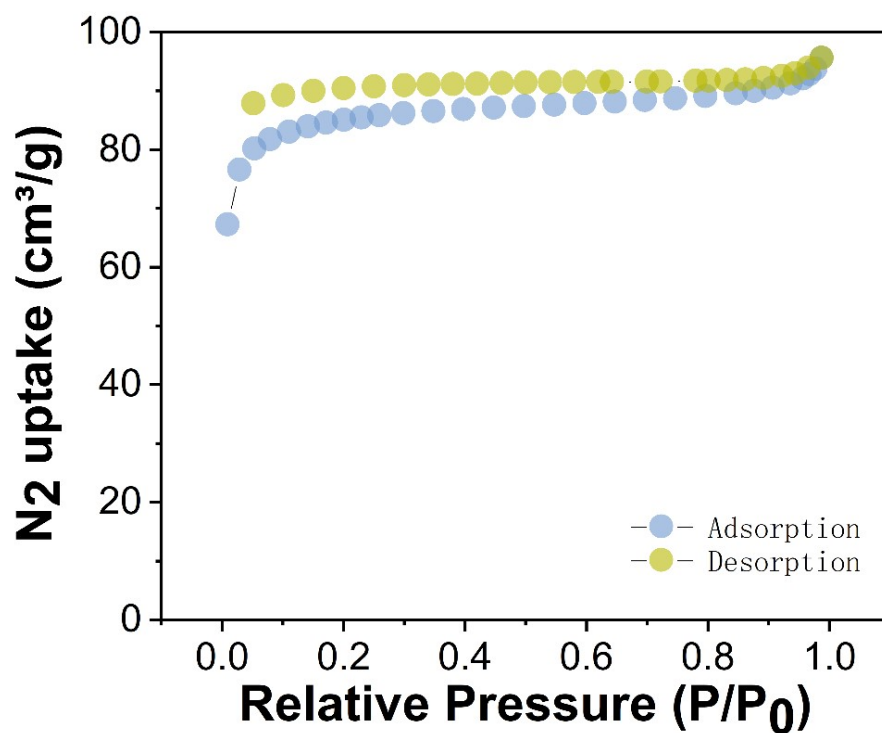


Figure S12. N₂ adsorption/desorption curves at 77K for Zr-MOF-*hν*

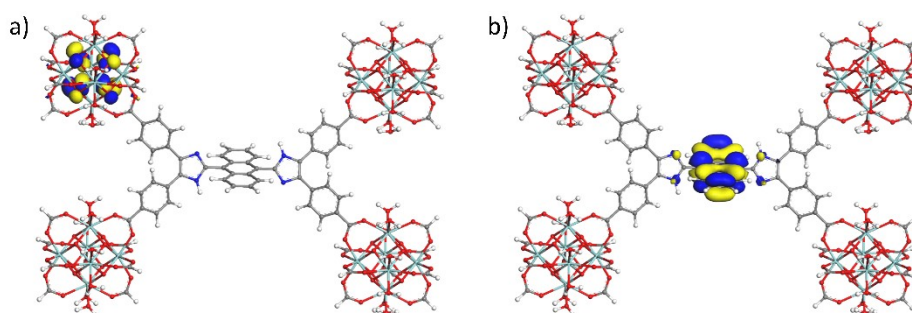


Figure S13. The distribution of HOMO orbital (a) and LUMO orbital (b) in Zr₆-L

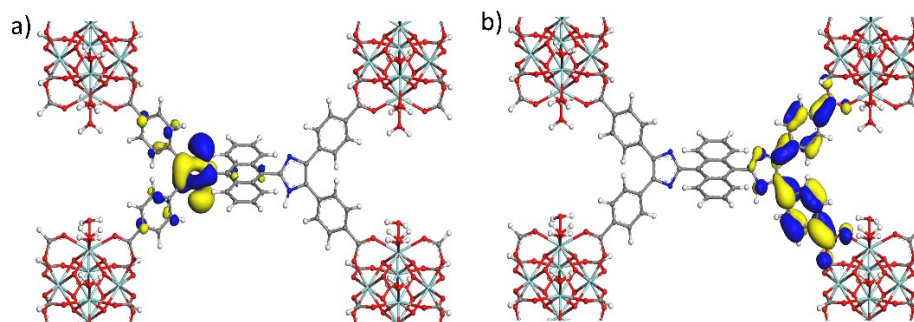


Figure S14. The distribution of HOMO orbital (a) and LUMO orbital (b) in Zr₆-L-radical

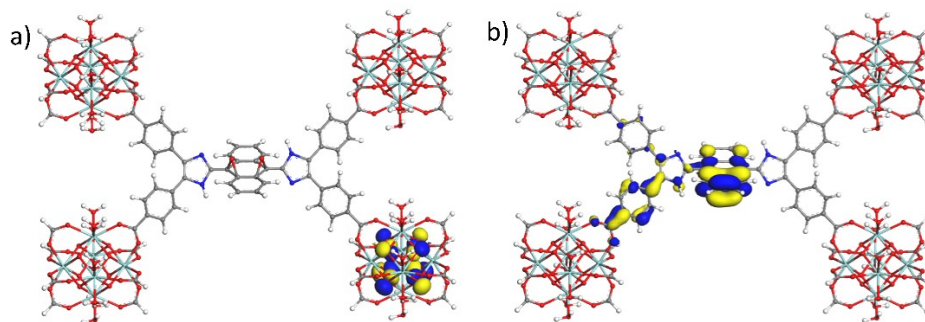


Figure S15. The distribution of HOMO orbital (a) and LUMO orbital (b) in Zr_6-L-O_2

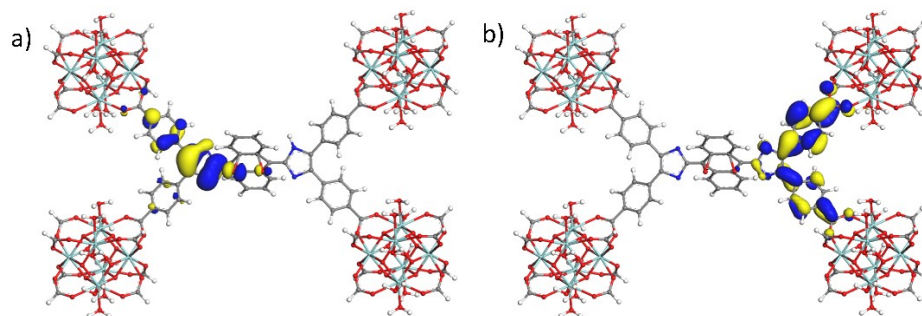


Figure S16. The distribution of HOMO orbital (a) and LUMO orbital (b) in Zr_6-L-O_2 -radical

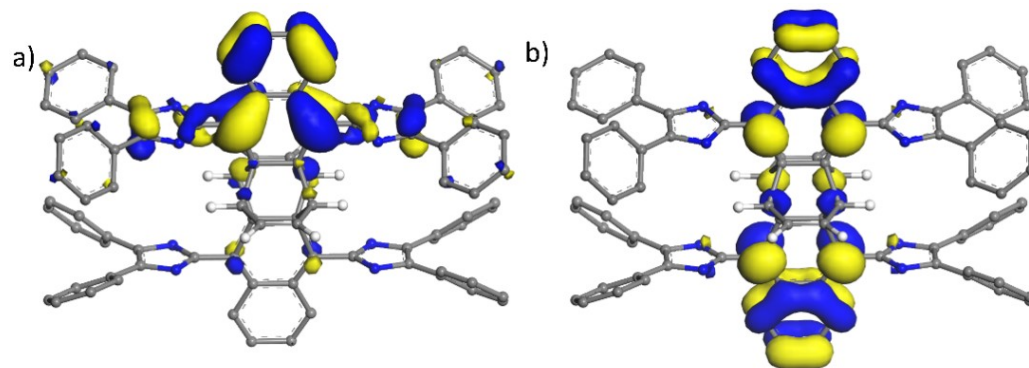


Figure S17. The distribution of HOMO orbital (a) and LUMO orbital (b) in Zr_6-L-hv

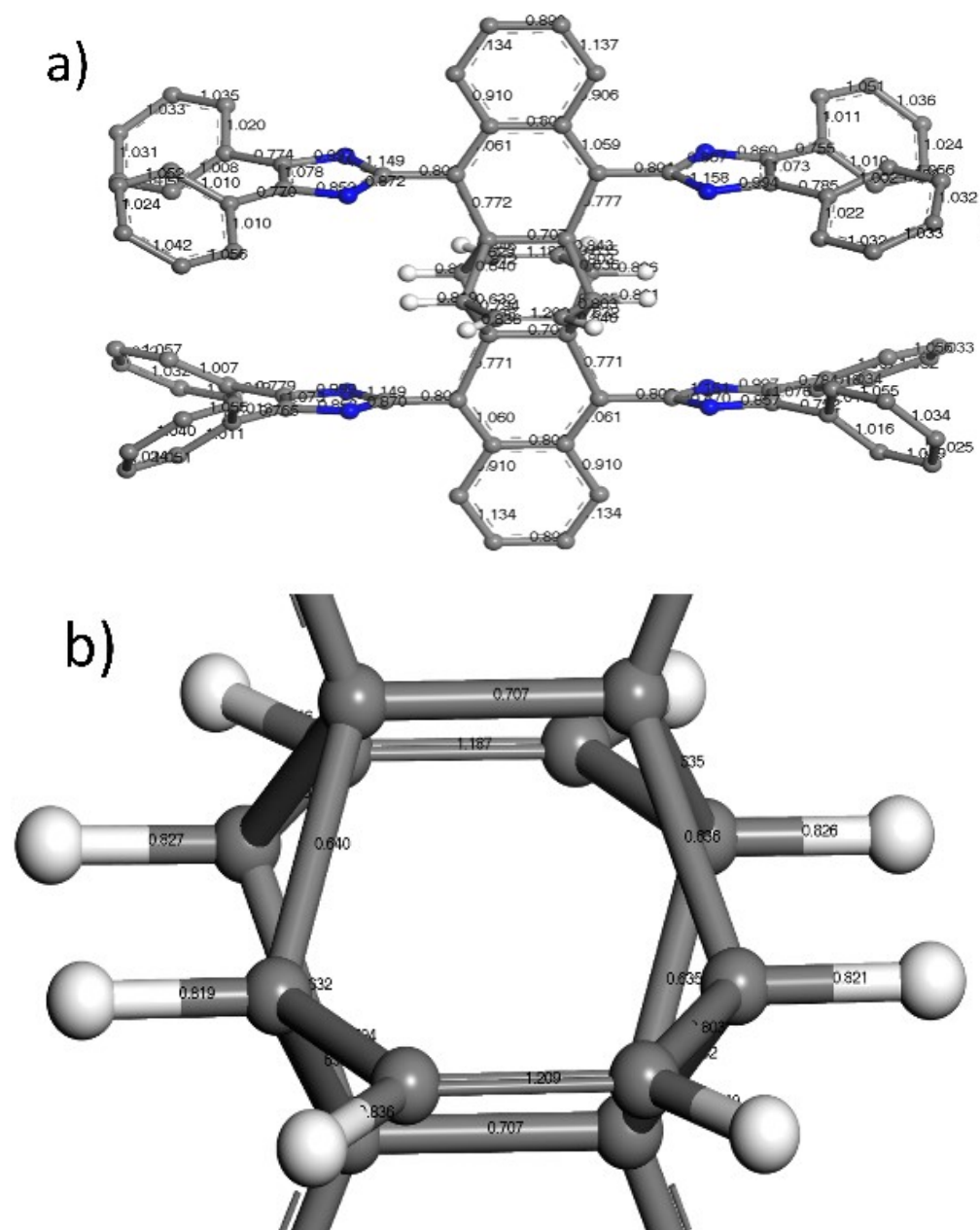


Figure S18. (a) the view of bond order for Zr_6 -L-hv unit; b) the enlarged view of bond order for the central part of Zr_6 -L-hv unit.

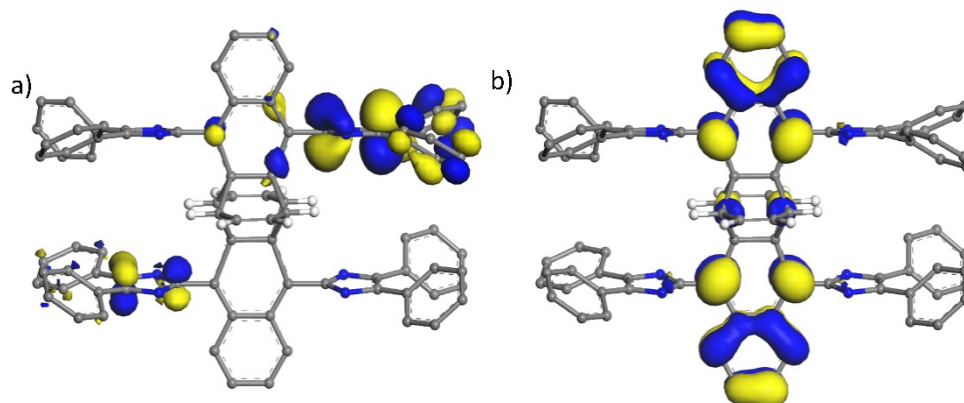


Figure S19. The distribution of HOMO orbital (a) and LUMO orbital (b) in Zr₆-L-hv-biradical

Table S17. The optimized Coordinates (Angstroms) for final two original units

ATOM		X	Y	Z
1	N	3.390478	-1.119777	-3.687068
2	N	-3.420304	-1.136094	3.674585
3	N	3.508908	-0.940592	3.642603
4	N	-3.549913	-0.951334	-3.626792
5	N	4.165668	0.958602	-3.667428
6	N	-4.204267	0.939297	3.680428
7	N	4.278627	1.138985	3.704001
8	N	-4.347795	1.116470	-3.714873
9	C	3.781469	-0.066155	-1.428660
10	C	-3.834831	-0.068925	1.429615
11	C	3.935281	0.110194	1.425715
12	C	-4.012579	0.109394	-1.424053
13	C	3.218599	-1.544071	-6.151992
14	C	3.561236	-0.681376	-4.983802
15	C	-3.237820	-1.601907	6.124749
16	C	-3.587390	-0.712972	4.978252
17	C	3.179336	-1.548004	6.063747
18	C	3.589318	-0.610025	4.981945
19	C	-3.182924	-1.574536	-6.038082
20	C	-3.612891	-0.630914	-4.969195
21	C	4.419713	1.537798	-6.112570
22	C	4.050232	0.614247	-4.999641
23	C	-4.439196	1.498115	6.125805
24	C	-4.081347	0.580740	5.009346
25	C	4.379722	1.553908	6.168644
26	C	4.077318	0.686224	4.992547
27	C	-4.404865	1.517470	-6.182566

28	C	-4.115727	0.659646	-4.996431
29	C	3.755320	-0.110674	-2.899537
30	C	-3.792815	-0.121320	2.899804
31	C	3.934706	0.138655	2.897723
32	C	-4.000711	0.127537	-2.895795
33	C	3.160407	1.014449	-0.747748
34	C	2.375028	1.988865	-1.438516
35	H	2.202381	1.864627	-2.508849
36	C	1.788756	3.042604	-0.780039
37	H	1.174492	3.757958	-1.333928
38	C	-3.248784	1.030044	0.746383
39	C	-2.482604	2.024231	1.431930
40	H	-2.284744	1.894912	2.497395
41	C	-1.953381	3.107870	0.774577
42	H	-1.359835	3.843088	1.324875
43	C	3.262942	1.121970	0.691892
44	C	2.633371	2.228822	1.337956
45	H	2.741844	2.322318	2.418457
46	C	1.939002	3.174702	0.623330
47	H	1.472614	4.015748	1.142278
48	C	-3.369018	1.140949	-0.691828
49	C	-2.794069	2.277192	-1.337832
50	H	-2.918423	2.371578	-2.416472
51	C	-2.134248	3.247672	-0.624024
52	H	-1.715396	4.114591	-1.141742
53	C	4.468457	-1.068132	-0.695934
54	C	5.122301	-2.158554	-1.344949
55	H	5.016942	-2.250554	-2.426007
56	C	5.853404	-3.082775	-0.637931
57	H	6.344610	-3.906164	-1.162261

58	C	-4.507073	-1.083992	0.699941
59	C	-5.136445	-2.188654	1.349876
60	H	-5.030791	-2.277614	2.430942
61	C	-5.841528	-3.132134	0.641934
62	H	-6.314631	-3.965630	1.166951
63	C	4.567088	-0.963695	0.743787
64	C	5.365669	-1.928774	1.432500
65	H	5.518501	-1.814348	2.506957
66	C	5.990535	-2.958473	0.768168
67	H	6.612513	-3.667034	1.322591
68	C	-4.612579	-0.981289	-0.739559
69	C	-5.388358	-1.965719	-1.427537
70	H	-5.549609	-1.851625	-2.500828
71	C	-5.983907	-3.011612	-0.763433
72	H	-6.590702	-3.734403	-1.316229
73	H	3.159388	-1.817544	3.257646
74	H	-3.197093	-1.821861	-3.230248
75	H	4.509259	1.846113	-3.301776
76	H	-4.559764	1.826626	3.325804
77	H	-2.147448	-1.767314	6.182178
78	H	-3.709852	-2.591253	6.004241
79	H	-3.567219	-1.175185	7.085240
80	H	3.667031	-2.533778	5.960191
81	H	2.086432	-1.716540	6.077580
82	H	3.465398	-1.137696	7.043207
83	H	-4.308116	0.982280	7.088136
84	H	-5.489696	1.834692	6.068485
85	H	-3.800788	2.400869	6.144829
86	H	5.435947	1.873248	6.161948
87	H	4.185787	1.032054	7.118175

88	H	3.765405	2.470792	6.149826
89	H	3.709334	-2.528361	-6.070885
90	H	3.534248	-1.077432	-7.099268
91	H	2.130829	-1.727373	-6.207770
92	H	-3.469079	-1.179318	-7.023618
93	H	-3.658318	-2.565438	-5.924982
94	H	-2.088065	-1.729651	-6.045766
95	H	3.579134	1.684916	-6.812206
96	H	5.271566	1.152195	-6.700626
97	H	4.706855	2.529906	-5.730041
98	H	-4.249438	0.970588	-7.124900
99	H	-3.757327	2.411946	-6.194602
100	H	-5.448001	1.873080	-6.158761

Table S18. The optimized Coordinates (Angstroms) for final TS1

ATOM		X	Y	Z
1	N	18.724027	7.621021	21.176096
2	C	19.114969	7.951297	18.711717
3	N	10.392747	7.600793	28.376422
4	C	10.294961	8.089881	30.831505
5	N	18.451950	7.676283	28.293964
6	C	18.666233	8.257924	30.740433
7	N	10.665908	7.727596	21.039629
8	C	10.789507	8.412355	18.617980
9	N	17.668834	5.635274	21.172862
10	C	17.565931	5.024331	18.719047
11	N	11.452307	5.645191	28.366735
12	C	11.974535	5.221847	30.791494
13	N	18.002462	5.515918	28.278780
14	C	17.979219	4.990516	30.730986
15	N	11.120077	5.530601	20.994562

16	C	11.307357	5.134477	18.533892
17	C	18.127921	6.661112	23.286649
18	C	10.861936	6.570834	26.128724
19	C	18.167667	6.623413	26.162803
20	C	10.822538	6.578231	23.240344
21	C	18.145253	6.685399	21.876432
22	C	10.865992	6.631068	27.610234
23	C	18.171701	6.589767	27.559825
24	C	10.854650	6.577718	21.782224
25	O	16.369794	6.337889	23.645650
26	C	16.907592	8.959766	23.307499
27	H	17.109093	9.101239	22.246366
28	C	16.232962	9.893967	24.050236
29	H	15.896284	10.817443	23.570596
30	C	17.409964	7.770870	23.939401
31	C	18.579006	7.162270	19.859089
32	O	12.620405	6.172198	25.858092
33	C	12.208341	8.828294	26.070042
34	H	12.029457	8.982591	27.134614
35	C	12.857880	9.750078	25.310809
36	H	13.208030	10.671908	25.782740
37	C	11.666183	7.636763	25.450428
38	C	10.694152	7.233962	29.677215
39	O	16.558609	6.013250	25.560308
40	C	16.468590	8.595752	26.101233
41	H	16.232023	8.422467	27.151962
42	C	15.981552	9.693296	25.442630
43	H	15.394897	10.428263	25.995913
44	C	17.314444	7.635111	25.419030
45	C	18.429694	7.297362	29.629451

46	O	12.458327	6.136952	23.914013
47	C	12.670758	8.459344	23.247628
48	H	12.952817	8.244418	22.215598
49	C	13.128684	9.548516	23.901742
50	H	13.747414	10.276840	23.376055
51	C	11.873354	7.401819	23.954797
52	C	10.880799	7.403279	19.708763
53	C	19.684314	4.699776	23.239388
54	H	19.684597	4.719985	22.148450
55	C	20.440890	3.745054	23.911158
56	H	21.019728	3.012852	23.342727
57	C	18.935119	5.646284	23.949906
58	C	17.972937	5.919397	19.836629
59	C	9.409427	4.576288	26.091517
60	H	9.425222	4.589906	27.183667
61	C	8.722598	3.564897	25.422100
62	H	8.217171	2.780722	25.991751
63	C	10.070996	5.590914	25.385372
64	C	11.375968	6.028751	29.692555
65	C	19.753881	4.693402	26.030736
66	H	19.771408	4.667044	27.119844
67	C	20.463790	3.737459	25.306734
68	H	21.044856	2.980151	25.840479
69	C	18.996287	5.674469	25.378600
70	C	18.144400	5.937936	29.590220
71	C	9.340274	4.548543	23.295326
72	H	9.346608	4.523138	22.205290
73	C	8.688441	3.556655	24.025540
74	H	8.158762	2.760066	23.496975
75	C	10.047033	5.563136	23.952085

76	C	11.066484	6.028615	19.705910
77	H	18.894904	7.466149	17.748094
78	H	20.208659	8.077131	18.791781
79	H	18.673600	8.962192	18.695261
80	H	10.662126	7.677712	31.784369
81	H	9.197268	8.180229	30.902442
82	H	10.695377	9.111889	30.719134
83	H	18.557473	8.624832	27.933980
84	H	19.644096	8.764757	30.650082
85	H	18.654939	7.728108	31.704825
86	H	17.888238	9.041553	30.784133
87	H	10.596828	8.667565	21.428777
88	H	9.792782	8.887654	18.573934
89	H	10.972330	7.933173	17.644943
90	H	11.537013	9.217719	18.737080
91	H	17.041477	4.927631	21.554664
92	H	18.046601	4.031709	18.789076
93	H	17.859245	5.466969	17.755409
94	H	16.472802	4.863032	18.695543
95	H	12.084985	4.950436	27.966684
96	H	13.069646	5.123560	30.680078
97	H	11.552081	4.202732	30.831739
98	H	11.780461	5.702445	31.761704
99	H	18.615693	4.101098	30.592092
100	H	16.936840	4.635166	30.799405
101	H	18.245298	5.460646	31.690626
102	H	11.387904	5.705258	17.596307
103	H	10.489672	4.401441	18.417440
104	H	12.238687	4.562077	18.674203

Table S19. The optimized Coordinates (Angstroms) for final TS2

ATOM		X	Y	Z
1	N	3.900768	7.987044	28.401856
2	N	10.242850	8.005829	21.081711
3	N	3.811619	8.060767	21.026164
4	N	10.332306	8.009287	28.361078
5	N	3.236654	5.850578	28.524469
6	N	11.049026	5.917523	20.914027
7	N	3.364066	5.864088	20.961848
8	N	10.921940	5.853443	28.535884
9	C	3.567206	6.833849	26.201098
10	C	10.624683	6.768123	23.247698
11	C	3.567065	6.879300	23.257242
12	C	10.625578	6.792790	26.189650
13	C	3.995078	8.717997	30.834754
14	C	10.135647	8.788320	18.664188
15	C	3.922290	8.704836	18.562589
16	C	10.289021	8.810733	30.775001
17	C	3.109010	5.545878	31.034802
18	C	11.311915	5.709153	18.403428
19	C	3.220667	5.500073	18.452232
20	C	11.097156	5.617144	31.047060
21	C	3.564069	6.841918	27.675668
22	C	10.626298	6.854625	21.772601
23	C	3.568051	6.913936	21.779453
24	C	10.622555	6.833795	27.664105
25	C	3.750577	7.706914	29.764688
26	C	4.399992	5.824831	25.453134
27	C	5.915023	3.831695	25.401669
28	H	6.134188	2.903946	25.918679
29	C	5.156785	4.750955	26.104668

30	H	5.016901	4.651397	27.179079
31	O	4.821867	7.226579	25.379755
32	C	10.450685	7.774388	19.716541
33	C	9.769801	5.727617	23.901925
34	C	8.201977	3.831695	23.936331
35	H	7.965123	2.896989	23.439915
36	C	9.078060	4.645270	23.240424
37	H	9.298063	4.481147	22.188682
38	O	9.232624	7.090293	23.848858
39	C	3.720050	7.721949	19.672209
40	C	4.397986	5.782147	23.880007
41	C	5.915023	3.831695	23.936331
42	H	6.148128	2.900465	23.431178
43	C	5.079574	4.680939	23.229745
44	H	4.876914	4.535372	22.172216
45	O	4.972676	7.130339	23.860776
46	C	10.481263	7.760528	29.730529
47	C	9.755963	5.796145	25.464959
48	C	8.201977	3.831695	25.401669
49	H	7.986471	2.901436	25.914513
50	C	8.962024	4.746226	26.113391
51	H	9.094821	4.644044	27.188972
52	O	9.379752	7.209315	25.366583
53	C	3.401664	6.366151	29.820529
54	C	2.594502	7.668527	25.462502
55	C	1.273481	9.720606	25.470664
56	H	0.768825	10.509211	26.028160
57	C	1.950678	8.707804	26.151204
58	H	1.944719	8.697228	27.239817
59	C	10.939234	6.477219	19.631023

60	C	11.604127	7.589227	24.005133
61	C	13.024911	9.568304	24.001796
62	H	13.551741	10.345256	23.451028
63	C	12.306242	8.587571	23.316450
64	H	12.291960	8.594415	22.227605
65	C	3.438932	6.363366	19.653476
66	C	2.617658	7.704336	24.038212
67	C	1.260277	9.732540	24.069585
68	H	0.741788	10.524426	23.530204
69	C	1.945628	8.740869	23.368415
70	H	1.932139	8.750140	22.279663
71	C	10.787550	6.409626	29.819154
72	C	11.629757	7.574748	25.432045
73	C	13.021518	9.576301	25.402591
74	H	13.542003	10.364870	25.944963
75	C	12.311870	8.598864	26.102774
76	H	12.312424	8.611814	27.191326
77	H	9.808038	8.824749	21.496941
78	H	10.027380	8.879829	27.935806
79	H	4.957316	9.241669	30.710370
80	H	4.015770	8.228496	31.816354
81	H	3.204070	9.488104	30.868707
82	H	9.350278	8.440427	17.971889
83	H	11.026364	9.023630	18.059556
84	H	9.785783	9.727927	19.112421
85	H	2.992106	8.868434	17.993464
86	H	4.684771	8.355803	17.847879
87	H	4.252725	9.680901	18.944906
88	H	10.334089	8.350631	31.770843
89	H	9.314812	9.322054	30.689002

90	H	11.077235	9.583204	30.736529
91	H	3.713106	4.626086	31.050799
92	H	2.050145	5.243117	31.054216
93	H	3.321768	6.112685	31.952829
94	H	11.093631	6.287098	17.493300
95	H	10.764387	4.753480	18.342054
96	H	12.386570	5.462972	18.399949
97	H	3.755504	4.544388	18.554638
98	H	3.581591	6.004131	17.545750
99	H	2.153598	5.260645	18.309787
100	H	12.168135	5.353340	31.080543
101	H	10.528826	4.673981	31.067519
102	H	10.857365	6.187310	31.955825
103	H	4.240779	8.854780	27.997868
104	H	4.044743	8.972930	21.406407

Table S20. The optimized Coordinates (Angstroms) for final TS3

ATOM		X	Y	Z
1	C	17.234321	6.480980	26.146473
2	C	10.909662	6.513091	23.226764
3	C	17.203285	6.585578	23.239796
4	C	10.949052	6.688173	26.137093
5	C	17.984332	7.422632	29.532437
6	C	10.194707	7.362444	19.807218
7	C	17.919296	7.555749	19.853329
8	C	10.296680	7.525099	29.580468
9	C	17.560204	6.129923	29.778229
10	C	10.727563	6.109369	19.587079
11	C	17.637578	6.220729	19.632579
12	C	10.623041	6.192755	29.739198
13	C	17.385681	6.642946	27.605475

14	C	10.770669	6.633806	21.765124
15	C	17.323468	6.770917	21.779912
16	C	10.849661	6.831473	27.604208
17	C	18.467274	8.439293	30.513142
18	C	15.891242	6.754951	25.490993
19	N	17.883107	7.722996	28.191974
20	C	9.651222	8.327711	18.806166
21	C	12.261670	6.768990	23.878891
22	N	10.211137	7.668049	21.151147
23	C	18.359907	8.591051	18.870757
24	C	15.861588	6.778949	23.930517
25	N	17.723249	7.880214	21.179476
26	C	9.851260	8.503284	30.615914
27	C	12.292757	6.829225	25.440503
28	N	10.431298	7.903294	28.257542
29	C	17.445887	5.353573	31.039728
30	C	18.361623	6.237645	25.408522
31	N	17.166532	5.648563	28.541062
32	C	10.922820	5.318849	18.343035
33	C	9.767538	6.363963	23.974228
34	N	11.113662	5.662730	20.841101
35	C	17.649889	5.387067	18.403351
36	C	18.346364	6.299428	23.937582
37	N	17.241956	5.736913	20.866316
38	C	10.695632	5.306075	30.929079
39	C	9.787515	6.455536	25.444573
40	N	10.988413	5.766082	28.474540
41	C	14.049494	4.876327	25.462807
42	C	14.065918	4.858779	23.953347
43	C	14.831555	5.927365	26.200973

44	O	15.643740	8.202435	25.490310
45	C	13.308261	5.909337	23.191019
46	O	12.530004	8.211371	23.843219
47	C	14.841930	5.910361	23.212020
48	O	15.517970	8.204083	23.981597
49	C	13.298710	5.962122	26.180701
50	O	12.662195	8.247527	25.351207
51	C	19.616101	5.921952	26.056700
52	C	20.737952	5.662414	25.339912
53	C	20.727459	5.736660	23.902626
54	C	19.590703	6.060441	23.237884
55	C	8.493068	6.102647	23.340733
56	C	7.355966	5.936861	24.063831
57	C	7.373357	6.039668	25.497978
58	C	8.532751	6.304467	26.152036
59	C	14.016996	3.339195	25.512498
60	C	14.056637	3.320468	23.950502
61	H	19.173603	9.117325	30.015573
62	H	18.972797	7.978305	31.377168
63	H	17.637423	9.058461	30.896955
64	H	9.250405	7.813058	17.920313
65	H	10.411680	9.049831	18.460325
66	H	8.840871	8.908639	19.272418
67	H	17.505686	9.146451	18.443077
68	H	18.927779	8.149894	18.034658
69	H	19.004077	9.321365	19.379199
70	H	9.340130	8.007197	31.457908
71	H	9.153653	9.221442	30.161058
72	H	10.695558	9.085216	31.025616
73	H	17.955586	4.376832	30.986797

74	H	16.397306	5.166845	31.324679
75	H	17.912070	5.923609	31.856421
76	H	16.915130	4.683976	28.334847
77	H	10.339483	5.770581	17.528082
78	H	10.592346	4.271712	18.450062
79	H	11.975808	5.301274	18.015985
80	H	11.395379	4.708820	21.058924
81	H	18.200822	4.440173	18.542219
82	H	18.139455	5.940549	17.589745
83	H	16.633510	5.128287	18.062710
84	H	17.087672	4.756433	21.093922
85	H	11.736394	5.060485	31.195000
86	H	10.162001	4.352699	30.771978
87	H	10.240073	5.798976	31.799280
88	H	11.172016	4.802228	28.205861
89	H	15.145047	5.643804	27.208508
90	H	12.999760	5.611045	22.188504
91	H	15.187236	5.607294	22.220533
92	H	12.953680	5.694637	27.180931
93	H	19.630711	5.880177	27.146523
94	H	21.666032	5.403989	25.853462
95	H	21.650745	5.544644	23.350344
96	H	19.584137	6.154716	22.151901
97	H	8.462089	6.038370	22.252657
98	H	6.413122	5.730637	23.552354
99	H	6.439890	5.923675	26.055444
100	H	8.555994	6.418714	27.235093
101	H	14.891198	2.871998	25.990650
102	H	13.100420	2.912097	25.943972
103	H	13.170659	2.865181	23.483213

104 H 14.960202 2.856367 23.529709

Table S21. The optimized Coordinates (Angstroms) for final state

ATOM	X	Y	Z
1 C	13.773193	20.748942	1.347679
2 C	8.391692	20.563152	-1.482060
3 C	13.875065	20.423405	-1.489986
4 C	8.486569	20.286426	1.364907
5 C	14.169737	19.653318	6.207082
6 C	7.284211	19.501496	-6.224388
7 C	12.501036	19.824128	-6.193943
8 C	9.094744	18.724838	6.045796
9 C	13.510632	22.858336	5.845278
10 C	9.426885	22.035907	-6.085440
11 C	15.290052	21.616809	-6.106166
12 C	7.663983	21.711619	6.075645
13 C	13.880348	20.995642	2.804310
14 C	8.352189	20.695509	-2.928897
15 C	13.910189	20.416485	-2.930992
16 C	8.378608	20.159430	2.832899
17 C	14.016534	20.481855	4.978191
18 N	14.120063	19.973462	3.695833
19 C	15.006035	20.677220	0.673256
20 C	7.892465	20.210991	-5.064081
21 N	7.582958	19.901195	-3.754703
22 C	7.138491	20.503992	-0.771598
23 C	13.316143	20.251607	-5.016798
24 N	12.953622	19.939558	-3.739273
25 C	15.133588	20.432037	-0.766272
26 C	8.667170	19.588128	4.902587
27 N	8.873073	19.193214	3.596866

28	C	7.260539	20.295110	0.678128
29	C	13.697449	21.812865	4.798771
30	N	13.608330	22.119548	3.454590
31	C	12.469974	20.617573	0.706597
32	C	8.818565	21.237178	-4.978288
33	N	9.106701	21.513850	-3.666618
34	C	9.919179	20.480479	-0.826303
35	C	14.517436	20.955534	-5.017955
36	N	14.889690	21.021710	-3.691952
37	C	12.343322	20.511893	-0.833601
38	C	8.077262	20.838008	4.944206
39	N	7.895176	21.182882	3.618026
40	C	9.800224	20.395365	0.717966
41	C	11.070523	22.891697	0.643518
42	C	11.184290	18.107275	0.659407
43	C	11.150442	21.580861	1.263088
44	C	11.094859	19.414330	1.275794
45	C	11.084378	22.895571	-0.703013
46	C	11.170288	18.096828	-0.688727
47	C	11.128610	21.574884	-1.325744
48	C	11.130473	19.411352	-1.318704
49	H	14.324557	19.008560	3.443238
50	H	6.945438	19.173931	-3.433894
51	H	15.682492	21.526492	-3.298456
52	C	16.204795	20.893153	1.455878
53	C	17.470430	20.729909	0.984037
54	C	17.688028	20.334319	-0.368756
55	C	16.659683	20.216909	-1.236943
56	C	5.613751	20.665644	-1.265389
57	C	4.584466	20.521871	-0.406734

58	C	4.797674	20.167389	0.960856
59	C	6.059777	20.056176	1.452830
60	H	16.071560	21.200165	2.493356
61	H	18.323093	20.869361	1.648695
62	H	18.700357	20.107473	-0.712099
63	H	16.808253	19.856895	-2.254467
64	H	5.467490	20.954554	-2.305786
65	H	3.568556	20.686344	-0.768602
66	H	3.939566	19.998071	1.611553
67	H	6.188465	19.760418	2.493301
68	H	11.023697	23.795398	1.255869
69	H	11.235555	17.204251	1.272796
70	H	11.137114	21.575288	2.357484
71	H	11.116884	19.433952	2.369176
72	H	11.036226	23.802839	-1.307867
73	H	11.213942	17.183104	-1.285340
74	H	11.066884	21.585615	-2.419238
75	H	11.188710	19.404882	-2.412823
76	H	7.459306	22.029948	3.259267
77	H	7.120498	18.434971	-6.002490
78	H	7.950131	19.556928	-7.095283
79	H	6.310395	19.922478	-6.527421
80	H	12.540979	20.564636	-7.006858
81	H	11.455667	19.684292	-5.887339
82	H	12.853143	18.864221	-6.606320
83	H	9.572213	23.071503	-5.750729
84	H	8.782363	22.048505	-6.973952
85	H	10.414398	21.651458	-6.384583
86	H	15.206200	21.055197	-7.048956
87	H	16.360973	21.691645	-5.854127

88	H	14.929294	22.641994	-6.300286
89	H	14.525693	20.276583	7.040879
90	H	14.898528	18.842550	6.065809
91	H	13.218362	19.190728	6.525535
92	H	8.868078	17.670380	5.827341
93	H	8.577185	19.001093	6.976381
94	H	10.183333	18.796378	6.224173
95	H	13.154850	22.433131	6.794842
96	H	12.777970	23.603776	5.504644
97	H	14.449667	23.401109	6.048691
98	H	7.986260	22.755183	5.927653
99	H	8.125296	21.355844	7.005621
100	H	6.571588	21.720281	6.229671

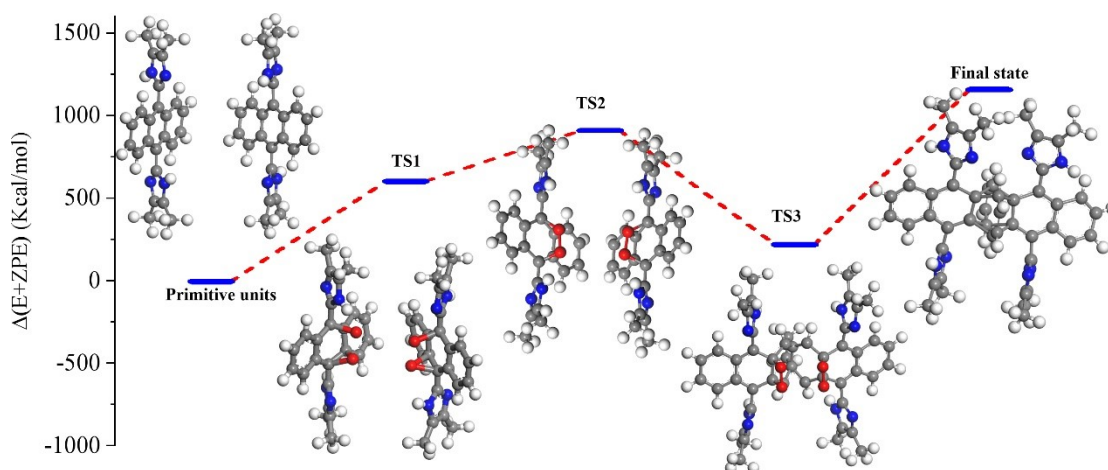


Figure S20. Schematic diagram of the free energy change in each step of the selected bimolecular unit polymerization process

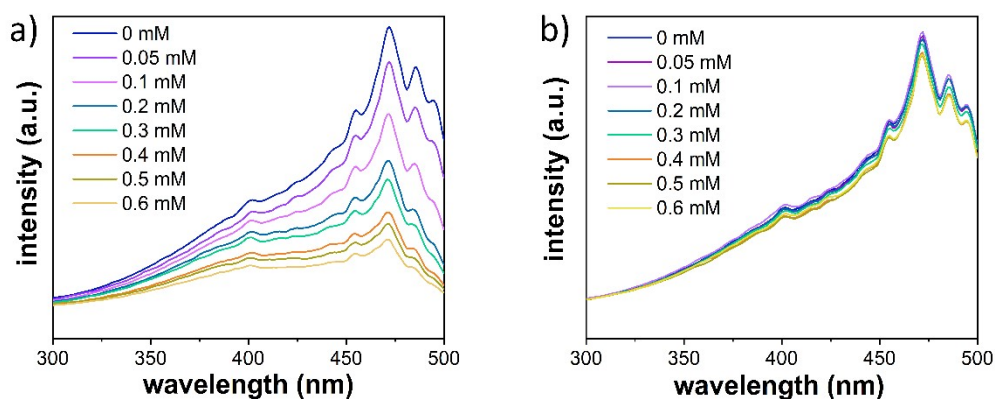


Figure S21. Fluorescence quenching of Zr-MOF-hv with increasing the concentration of THF (a) and **1a** (b)

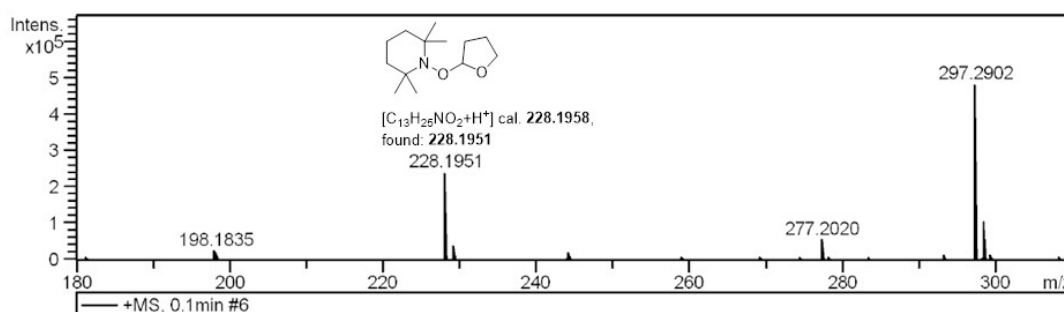
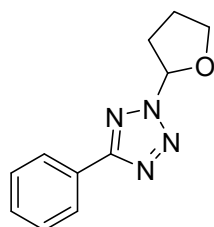


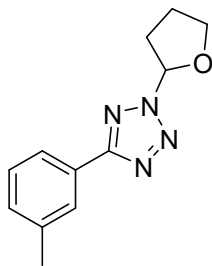
Figure S22. High-resolution mass spectrometry (HRMS) data for free radical trapping experiments

Characterization Data of the Products



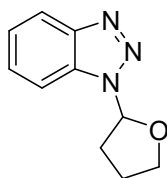
5-phenyl-2-(tetrahydrofuran-2-yl)-2H-tetrazole (**2a**)

¹H NMR (400 MHz, CDCl₃) δ 8.02 (s, 1H), 7.72 (d, *J* = 8.1 Hz, 1H), 7.61 (d, *J* = 8.5 Hz, 1H), 7.42 - 7.38 (m, 1H), 7.17 (t, *J* = 7.5 Hz, 1H), 4.07 - 3.97 (m, 2H), 2.95 - 2.91 (m, 1H), 2.47 - 2.36 (m, 2H), 2.16 - 2.07 (m, 1H); ¹³C NMR (100 MHz, CDCl₃) δ 139.88, 133.94, 126.56, 124.70, 121.14, 121.01, 109.68, 86.89, 68.77, 30.26, 25.08.



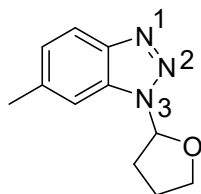
2-(tetrahydrofuran-2-yl)-5-(m-tolyl)-2H-tetrazole (2b)

^1H NMR (400 MHz, CDCl_3) δ 7.99 - 7.95 (m, 2H), 7.37 (t, $J = 7.6$ Hz, 1H), 7.29 (s, 1H), 6.57 (dd, $J = 6.5, 2.1$ Hz, 1H), 4.31 - 4.25 (m, 1H), 4.17 - 4.11 (m, 1H), 2.74 - 2.66 (m, 1H), 2.57 - 2.47 (m, 2H), 2.43 (s, 3H), 2.24 - 2.10 (m, 1H); ^{13}C NMR (100 MHz, CDCl_3) δ 165.30, 138.62, 131.14, 128.78, 127.53, 127.22, 124.08, 91.66, 70.22, 31.85, 24.06, 21.38.



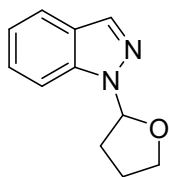
1-(tetrahydrofuran-2-yl)-1H-benzo[d][1,2,3]triazole (2c)

^1H NMR (400 MHz, CDCl_3) δ 8.07 (d, $J = 8.3$ Hz, 1H), 7.72 (d, $J = 8.3$ Hz, 1H), 7.50 (t, $J = 7.6$ Hz, 1H), 7.38 (t, $J = 7.5$ Hz, 1H), 6.52 (dd, $J = 6.7, 2.4$ Hz, 1H), 4.13 - 4.01 (m, 2H), 3.21 - 3.14 (m, 1H), 2.57 - 2.35 (m, 2H), 2.23 - 2.14 (m, 1H); ^{13}C NMR (100 MHz, CDCl_3) δ 132.88, 127.50, 124.13, 119.88, 110.43, 87.92, 69.29, 30.81, 24.39.



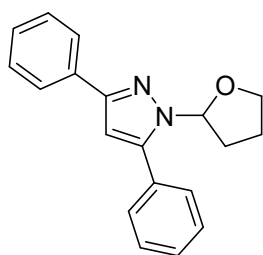
5-methyl-1-(tetrahydrofuran-2-yl)-1H-benzo[d][1,2,3]triazole and 6-methyl-1-(tetrahydrofuran-2-yl)-1H-benzo[d][1,2,3]triazole (2d)

^1H NMR (400 MHz, CDCl_3) δ 7.92 (d, $J = 8.5$ Hz, 1.00H), 7.81 (s, 0.60H), 7.58 (d, $J = 8.5$ Hz, 0.62H), 7.47 (s, 1.00H), 7.32 (d, $J = 7.5$ Hz, 0.62H), 7.20 (d, $J = 8.5$ Hz, 1.00H), 6.47 (t, $J = 7.0$ Hz, 1.67H), 4.14 - 3.93 (m, 4.25H), 3.20 - 3.11 (m, 1.74H), 2.53 (s, 3.24H), 2.51 (s, 2.24H), 2.49 - 2.35 (m, 2.90H), 2.22 - 2.11 (m, 1.84H). ^{13}C NMR (100 MHz, CDCl_3) δ 146.98, 145.04, 138.12, 134.12, 133.30, 131.30, 129.63, 126.38, 119.28, 118.76, 109.90, 109.56, 87.90, 87.64, 69.19, 30.77, 30.61, 24.42, 24.39, 22.00, 21.47.



1-(tetrahydrofuran-2-yl)-1H-indazole (2e)

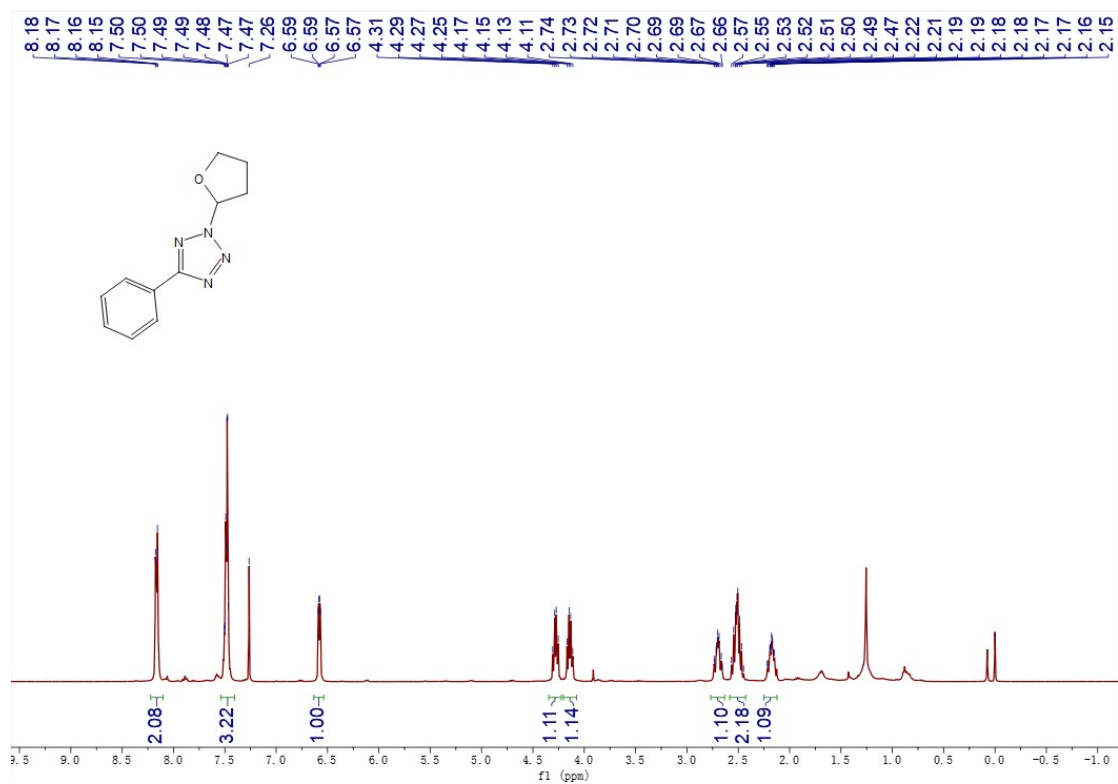
^1H NMR (400 MHz, CDCl_3) δ 8.02 (s, 1H), 7.72 (d, $J = 8.1$ Hz, 1H), 7.61 (d, $J = 8.5$ Hz, 1H), 7.42 - 7.38 (m, 1H), 7.17 (t, $J = 7.5$ Hz, 1H), 6.40 (dd, $J = 6.7, 3.3$ Hz, 1H), 4.07 - 3.97 (m, 2H), 2.98.00 - 2.91 (m, 1H), 2.47 - 2.36 (m, 2H), 2.16 - 2.07 (m, 1H); ^{13}C NMR (100 MHz, CDCl_3) δ 139.88, 133.94, 126.56, 124.70, 121.14, 121.01, 109.68, 86.89, 68.77, 30.26, 25.08.



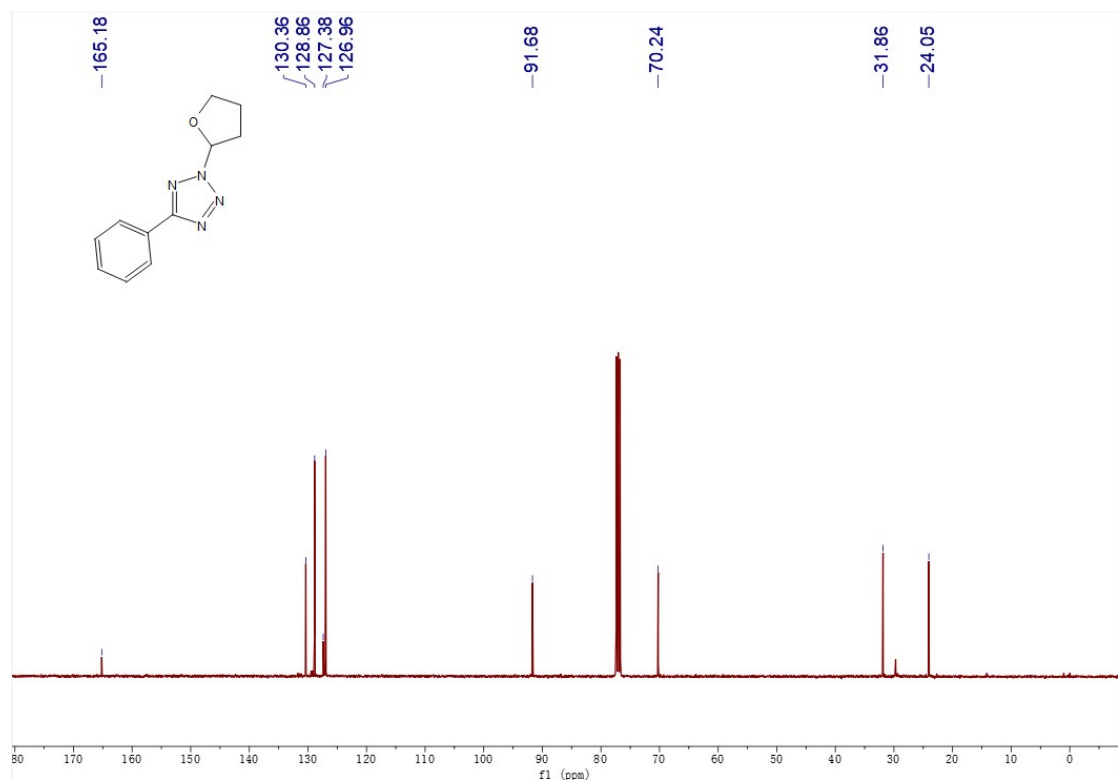
3,5-diphenyl-1-(tetrahydrofuran-2-yl)-1H-pyrazole (2f)

^1H NMR (400 MHz, CDCl_3) δ 7.86 (d, $J = 7.2$ Hz, 2H), 7.60 (d, $J = 7.0$ Hz, 2H), 7.44 (dq, $J = 22.8, 7.3$ Hz, 6H), 7.32 (d, $J = 7.3$ Hz, 1H), 6.62 (s, 1H), 5.99 (dd, $J = 7.2, 3.0$ Hz, 1H), 4.28 (q, $J = 7.4$ Hz, 1H), 4.02 - 3.97 (m, 1H), 2.89 - 2.79 (m, 1H), 2.66 - 2.56 (m, 1H), 2.26 - 2.19 (m, 1H), 2.08 - 2.04 (m, 1H); ^{13}C NMR (101 MHz, CDCl_3) δ 150.82, 145.70, 133.61, 130.50, 129.30, 129.03, 128.68, 128.60, 128.52, 125.76, 103.64, 86.60, 69.15, 31.01, 25.56.

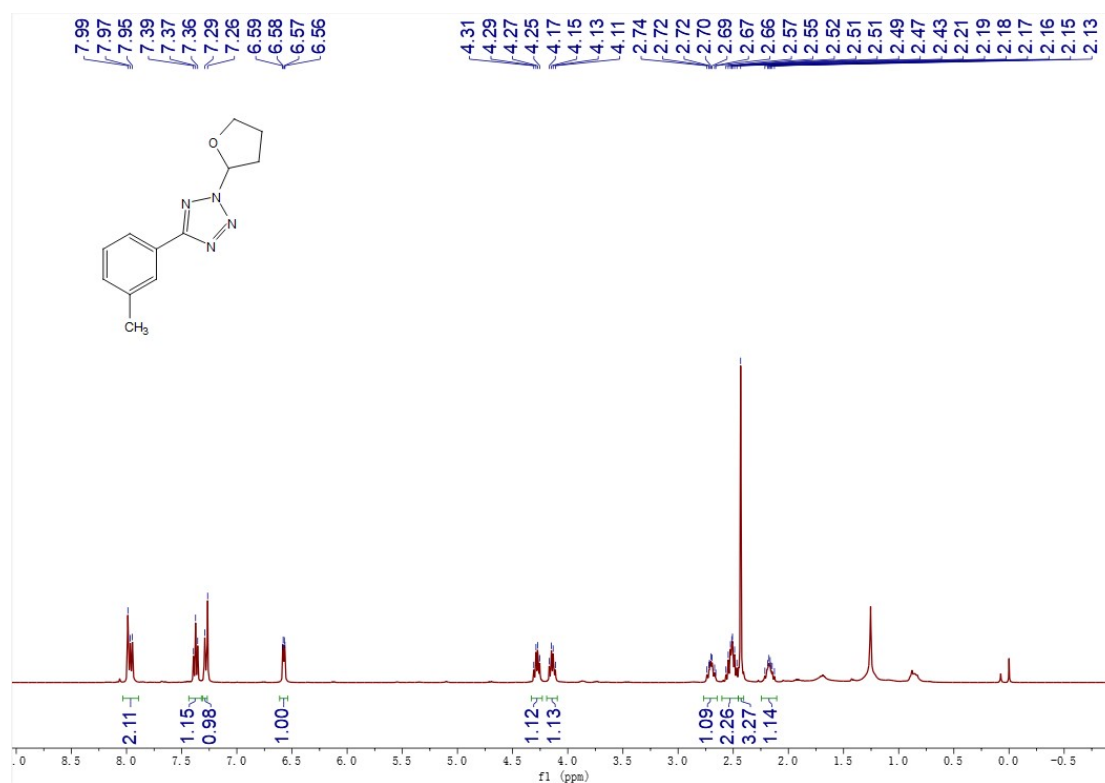
2a-¹H NMR (400 MHz, CDCl₃)



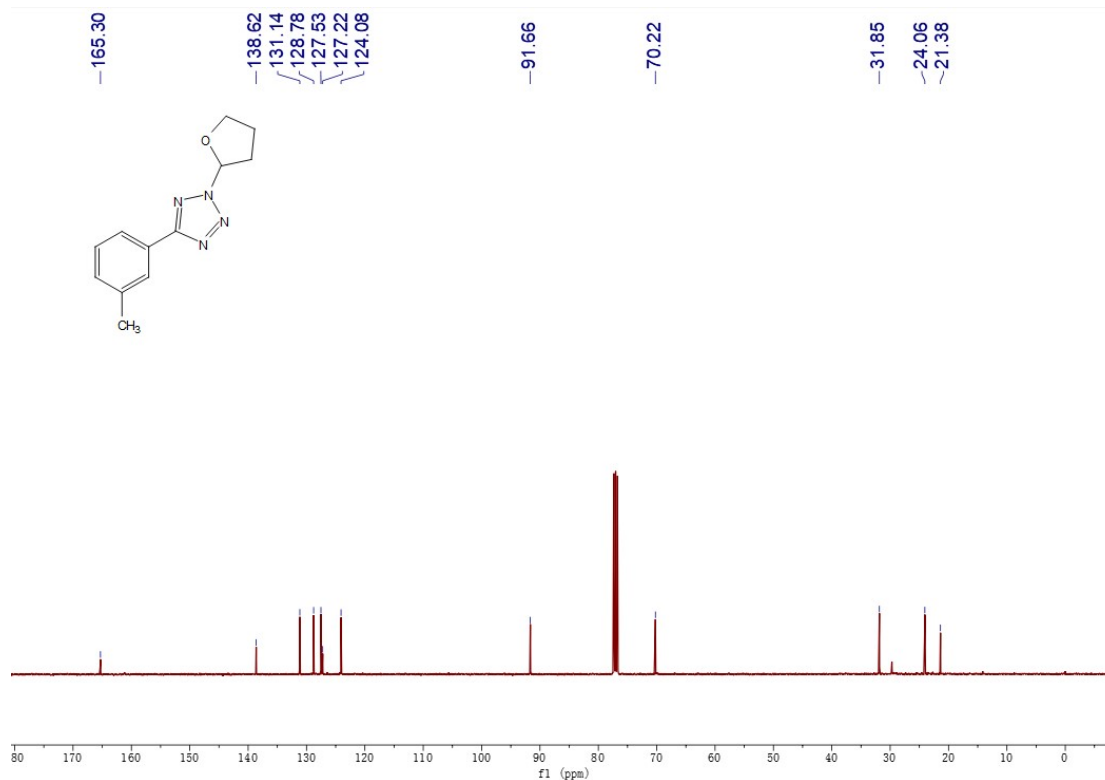
2a-¹³C NMR (100 MHz, CDCl₃)



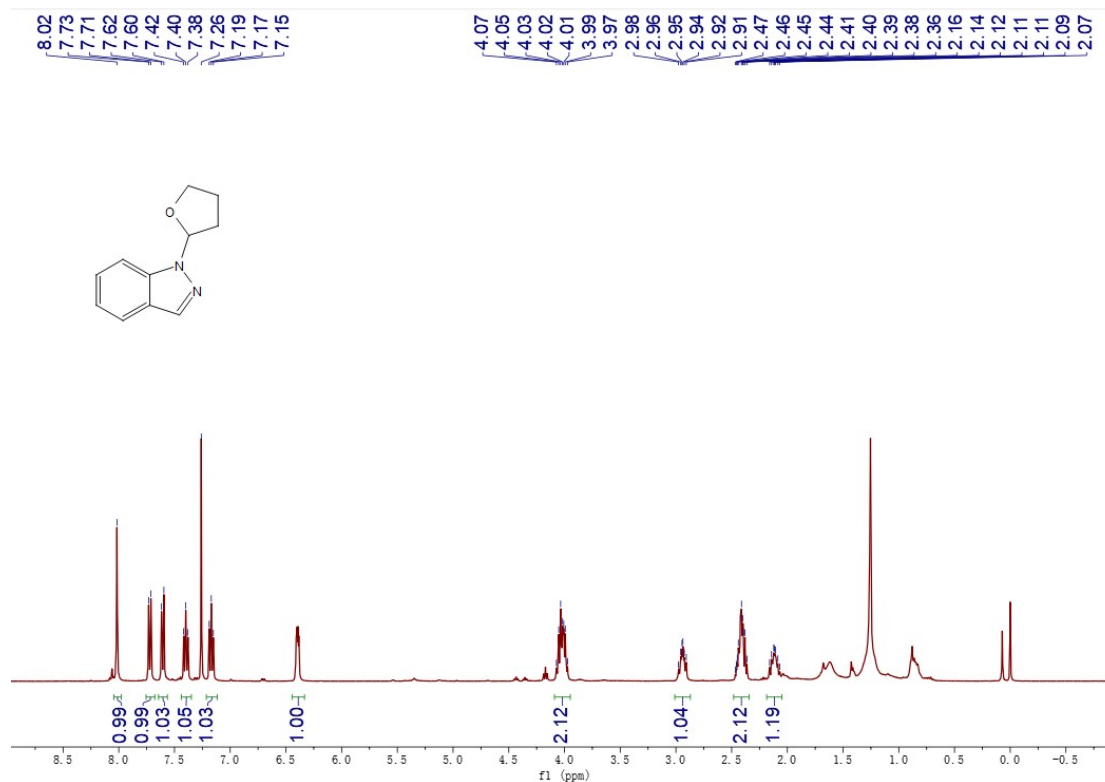
2b-¹H NMR (400 MHz, CDCl₃)



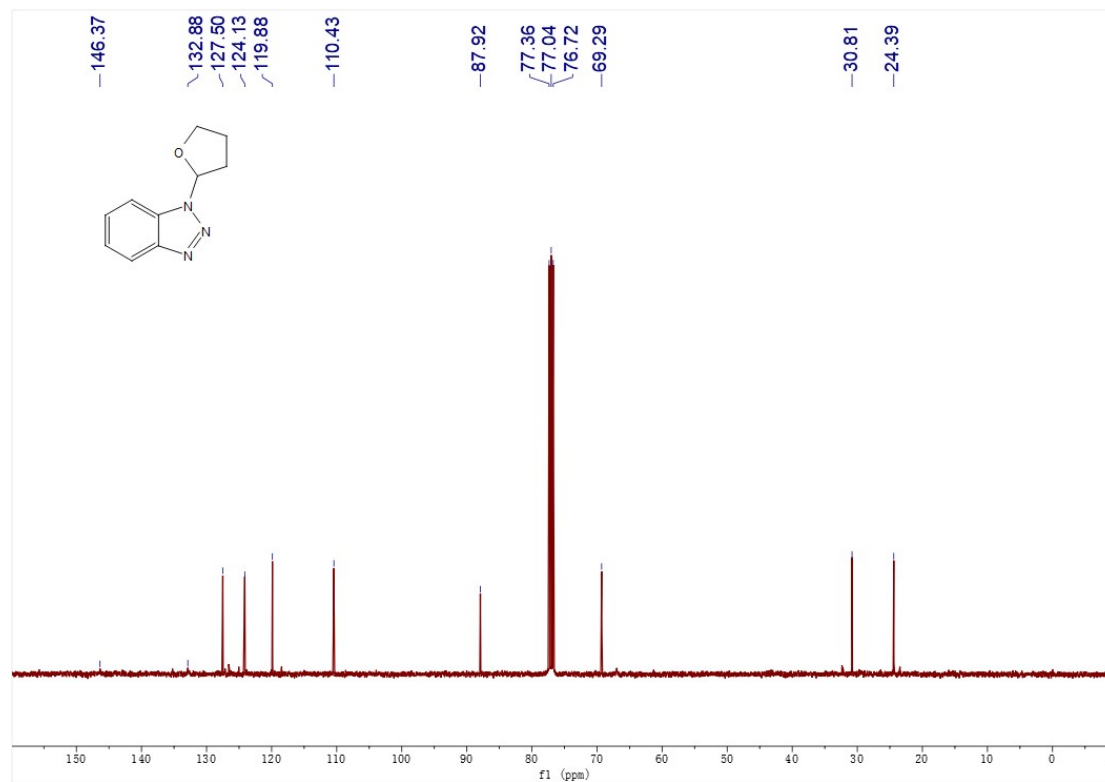
2b-¹³C NMR (100 MHz, CDCl₃)



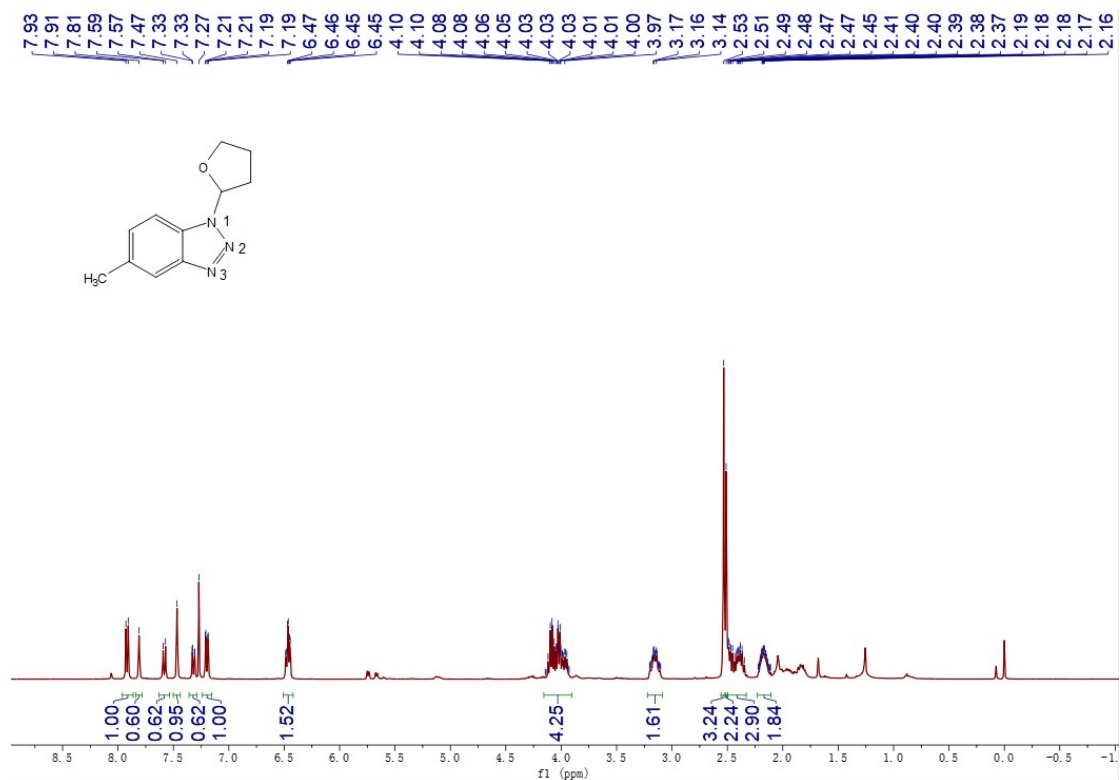
2c-¹H NMR (400 MHz, CDCl₃)



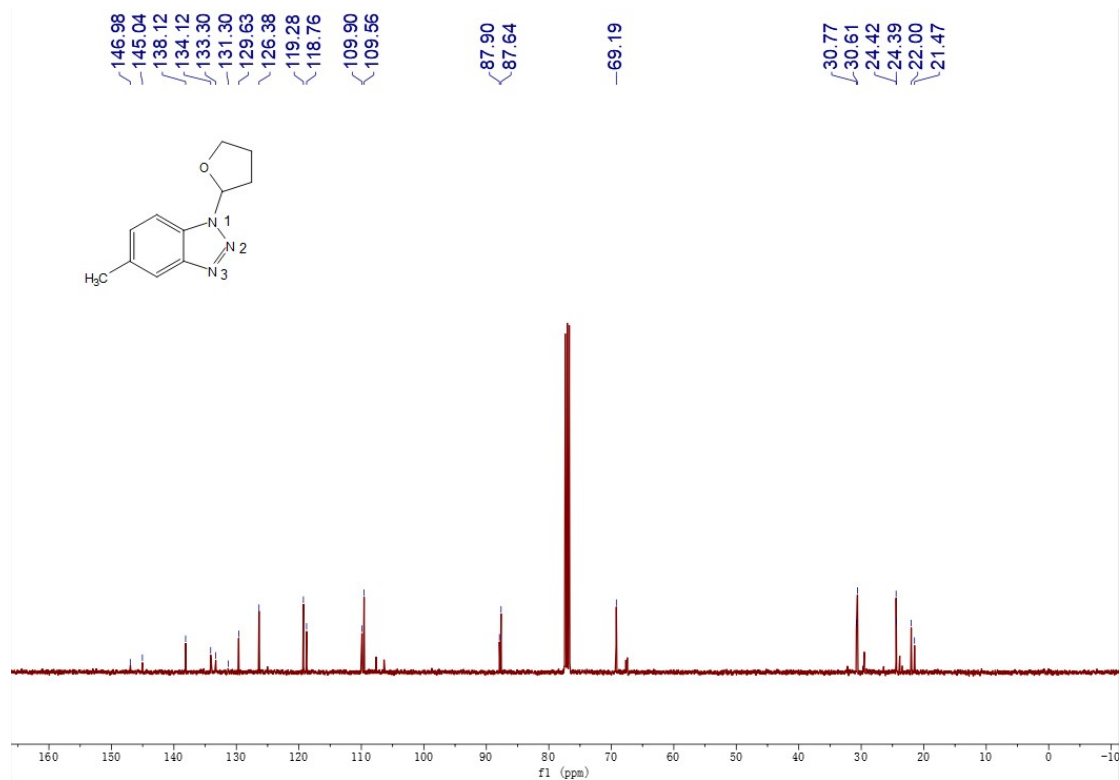
2c-¹³C NMR (100 MHz, CDCl₃)



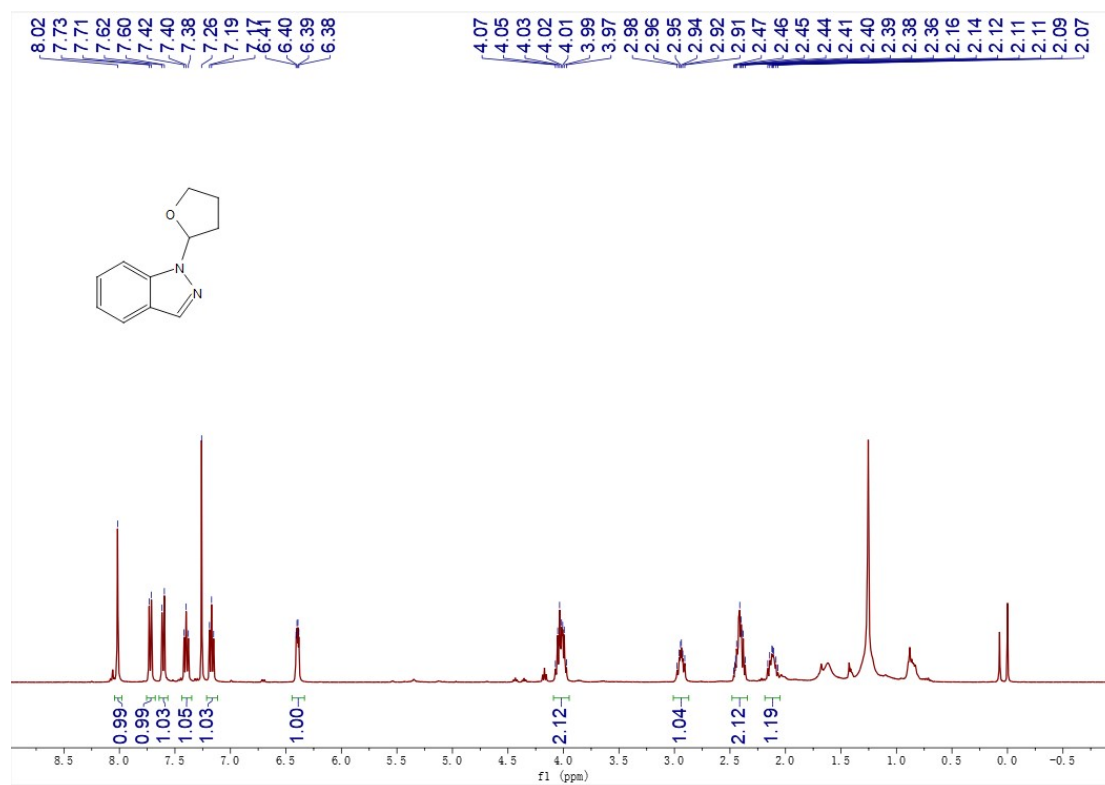
2d-¹H NMR (400 MHz, CDCl₃)



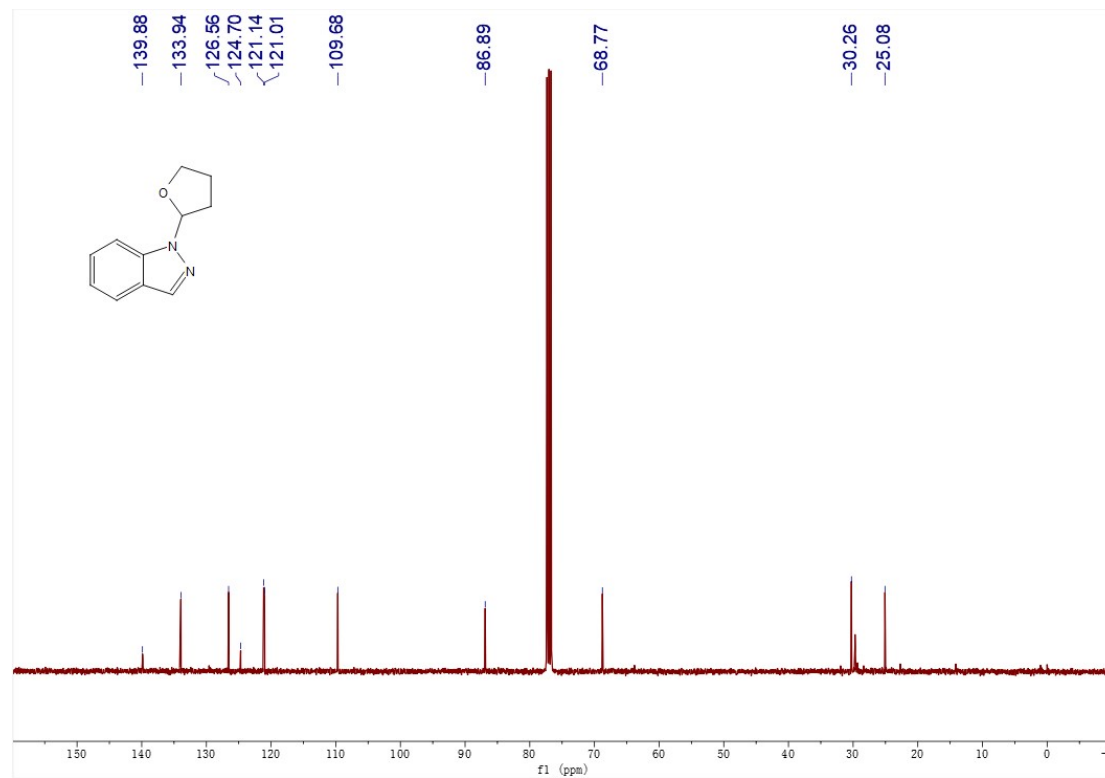
2d-¹³C NMR (100 MHz, CDCl₃)



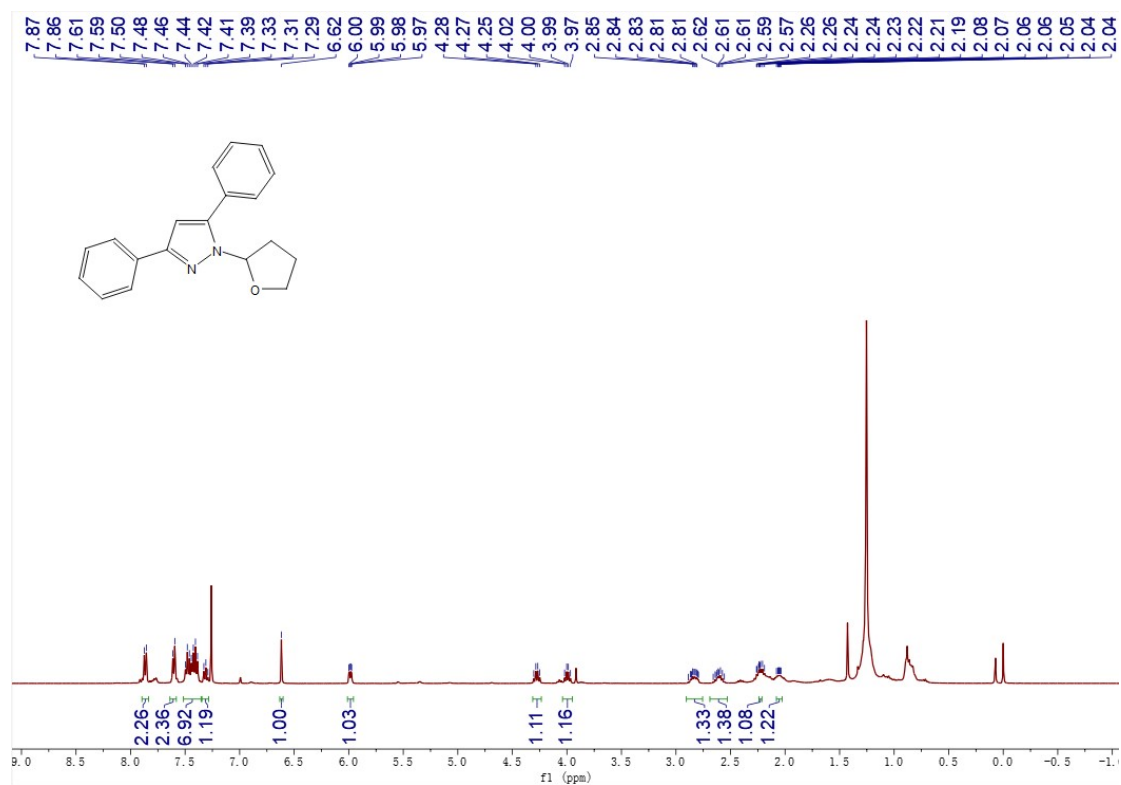
2e-¹H NMR (400 MHz, CDCl₃)



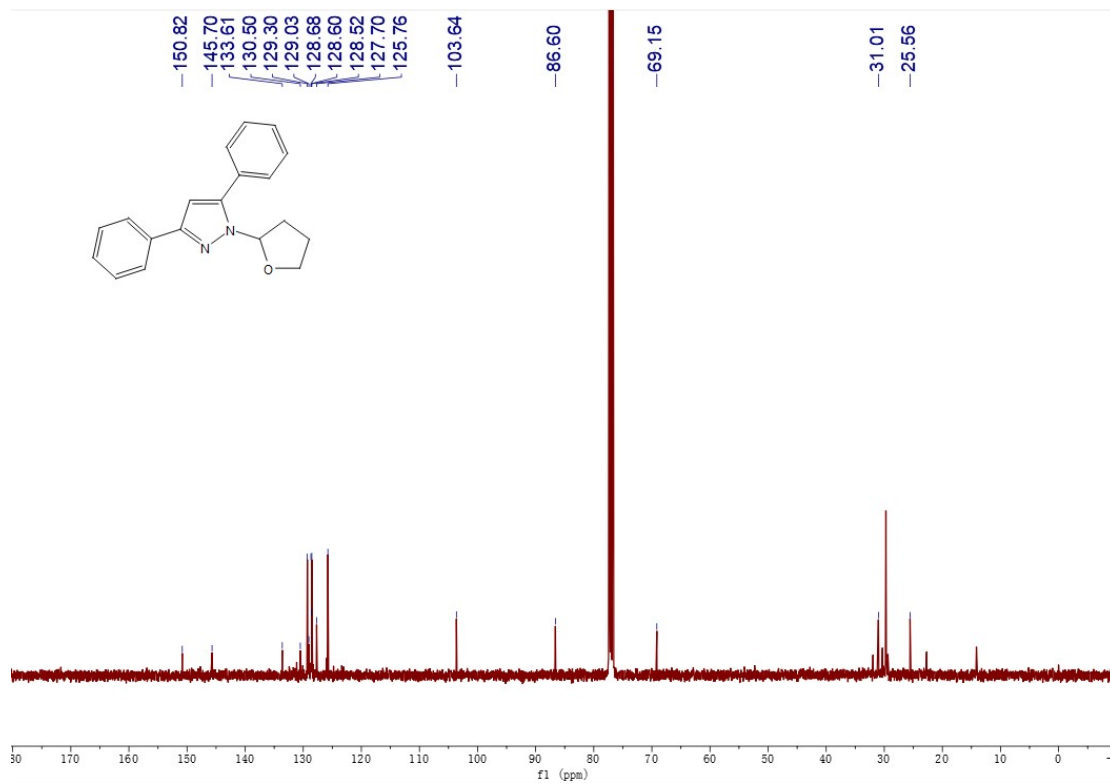
2e-¹³C NMR (100 MHz, CDCl₃)



2f-¹H NMR (400 MHz, CDCl₃)



2f-¹³C NMR (100 MHz, CDCl₃)



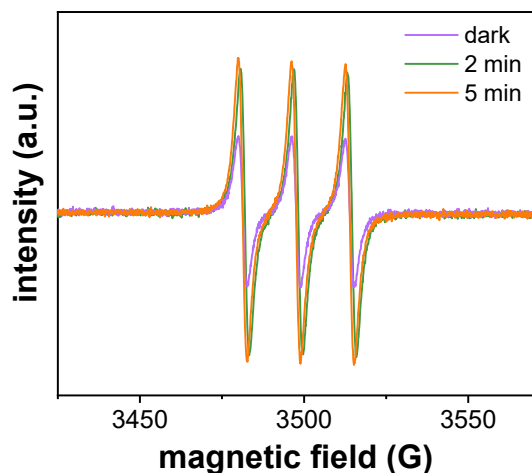


Figure S23. EPR spectra for TEMPO in acetonitrile (3 mL) with Zr-MOF (10 mg) under air atmosphere in the dark or upon white CFL light irradiation for 2 and 5 min. The signals were significantly strengthened after 2 min of light, and still not weakened at 5 min of light, which verified the presence of single-linear oxygen.

Table S22. Simulated UV-vis spectra for different units

Zr ₆ -L		Zr ₆ -L-radical		Zr ₆ -L-O ₂		Zr ₆ -L-O ₂ -radical		Zr ₆ -L-hv		Zr ₆ -L-hv-biradical	
wavelength	intensity	wavelength	intensity	wavelength	intensity	wavelength	intensity	wavelength	intensity	wavelength	intensity
496	3.75E-04	494	0.00434	519	5.00E-04	473	0.00123	383	2.13E-04	479	1.02E-04
496.1275	3.85E-04	494.15	0.0045	519.13	5.14E-04	473.164	0.00127	383.256	2.26E-04	479.3635	1.14E-04
496.255	3.95E-04	494.3	0.00466	519.26	5.27E-04	473.328	0.00131	383.512	2.40E-04	479.727	1.27E-04
496.3825	4.05E-04	494.45	0.00483	519.39	5.41E-04	473.492	0.00136	383.768	2.55E-04	480.0905	1.41E-04
496.51	4.15E-04	494.6	0.005	519.52	5.55E-04	473.656	0.0014	384.024	2.71E-04	480.454	1.57E-04
496.6375	4.26E-04	494.75	0.00518	519.65	5.70E-04	473.82	0.00145	384.28	2.88E-04	480.8175	1.75E-04
496.765	4.36E-04	494.9	0.00536	519.78	5.85E-04	473.984	0.00149	384.536	3.05E-04	481.181	1.95E-04
496.8925	4.47E-04	495.05	0.00555	519.91	6.00E-04	474.148	0.00154	384.792	3.23E-04	481.5445	2.17E-04
497.02	4.58E-04	495.2	0.00574	520.04	6.15E-04	474.312	0.00159	385.048	3.43E-04	481.908	2.41E-04
497.1475	4.70E-04	495.35	0.00594	520.17	6.31E-04	474.476	0.00164	385.304	3.63E-04	482.2715	2.67E-04
497.275	4.81E-04	495.5	0.00615	520.3	6.47E-04	474.64	0.00169	385.56	3.84E-04	482.635	2.97E-04
497.4025	4.93E-04	495.65	0.00636	520.43	6.63E-04	474.804	0.00174	385.816	4.06E-04	482.9985	3.30E-04
497.53	5.05E-04	495.8	0.00657	520.56	6.79E-04	474.968	0.0018	386.072	4.30E-04	483.362	3.66E-04
497.6575	5.17E-04	495.95	0.0068	520.69	6.96E-04	475.132	0.00185	386.328	4.54E-04	483.7255	4.06E-04
497.785	5.29E-04	496.1	0.00702	520.82	7.13E-04	475.296	0.00191	386.584	4.80E-04	484.089	4.50E-04
497.9125	5.42E-04	496.25	0.00726	520.95	7.31E-04	475.46	0.00196	386.84	5.07E-04	484.4525	4.98E-04
498.04	5.55E-04	496.4	0.0075	521.08	7.49E-04	475.624	0.00202	387.096	5.35E-04	484.816	5.52E-04
498.1675	5.68E-04	496.55	0.00775	521.21	7.67E-04	475.788	0.00208	387.352	5.65E-04	485.1795	6.11E-04
498.295	5.81E-04	496.7	0.008	521.34	7.85E-04	475.952	0.00214	387.608	5.95E-04	485.543	6.76E-04
498.4225	5.94E-04	496.85	0.00826	521.47	8.04E-04	476.116	0.0022	387.864	6.28E-04	485.9065	7.47E-04
498.55	6.08E-04	497	0.00852	521.6	8.23E-04	476.28	0.00227	388.12	6.61E-04	486.27	8.26E-04
498.6775	6.22E-04	497.15	0.0088	521.73	8.42E-04	476.444	0.00233	388.376	6.96E-04	486.6335	9.12E-04
498.805	6.36E-04	497.3	0.00907	521.86	8.61E-04	476.608	0.0024	388.632	7.33E-04	486.997	0.00101
498.9325	6.50E-04	497.45	0.00936	521.99	8.81E-04	476.772	0.00246	388.888	7.72E-04	487.3605	0.00111
499.06	6.65E-04	497.6	0.00965	522.12	9.02E-04	476.936	0.00253	389.144	8.11E-04	487.724	0.00122
499.1875	6.79E-04	497.75	0.00995	522.25	9.22E-04	477.1	0.0026	389.4	8.53E-04	488.0875	0.00135
499.315	6.94E-04	497.9	0.01026	522.38	9.43E-04	477.264	0.00267	389.656	8.97E-04	488.451	0.00148

499.4425	7.09E-04	498.05	0.01057	522.51	9.64E-04	477.428	0.00274	389.912	9.42E-04	488.8145	0.00163
499.57	7.25E-04	498.2	0.01089	522.64	9.86E-04	477.592	0.00281	390.168	9.89E-04	489.178	0.00179
499.6975	7.40E-04	498.35	0.01122	522.77	0.00101	477.756	0.00288	390.424	0.00104	489.5415	0.00197
499.825	7.56E-04	498.5	0.01156	522.9	0.00103	477.92	0.00296	390.68	0.00109	489.905	0.00216
499.9525	7.72E-04	498.65	0.0119	523.03	0.00105	478.084	0.00304	390.936	0.00114	490.2685	0.00237
500.08	7.88E-04	498.8	0.01225	523.16	0.00107	478.248	0.00311	391.192	0.0012	490.632	0.0026
500.2075	8.05E-04	498.95	0.01261	523.29	0.0011	478.412	0.00319	391.448	0.00125	490.9955	0.00285
500.335	8.21E-04	499.1	0.01298	523.42	0.00112	478.576	0.00327	391.704	0.00131	491.359	0.00311
500.4625	8.38E-04	499.25	0.01335	523.55	0.00115	478.74	0.00335	391.96	0.00138	491.7225	0.0034
500.59	8.55E-04	499.4	0.01373	523.68	0.00117	478.904	0.00343	392.216	0.00144	492.086	0.00372
500.7175	8.73E-04	499.55	0.01412	523.81	0.00119	479.068	0.00351	392.472	0.00151	492.4495	0.00406
500.845	8.90E-04	499.7	0.01452	523.94	0.00122	479.232	0.0036	392.728	0.00158	492.813	0.00442
500.9725	9.08E-04	499.85	0.01492	524.07	0.00124	479.396	0.00368	392.984	0.00165	493.1765	0.00482
501.1	9.26E-04	500	0.01533	524.2	0.00127	479.56	0.00376	393.24	0.00172	493.54	0.00524
501.2275	9.44E-04	500.15	0.01575	524.33	0.00129	479.724	0.00385	393.496	0.0018	493.9035	0.0057
501.355	9.62E-04	500.3	0.01618	524.46	0.00132	479.888	0.00394	393.752	0.00188	494.267	0.00619
501.4825	9.80E-04	500.45	0.01662	524.59	0.00135	480.052	0.00403	394.008	0.00196	494.6305	0.00671
501.61	9.99E-04	500.6	0.01706	524.72	0.00137	480.216	0.00412	394.264	0.00205	494.994	0.00728
501.7375	0.00102	500.75	0.01752	524.85	0.0014	480.38	0.00421	394.52	0.00213	495.3575	0.00788
501.865	0.00104	500.9	0.01798	524.98	0.00143	480.544	0.0043	394.776	0.00223	495.721	0.00853
501.9925	0.00106	501.05	0.01844	525.11	0.00145	480.708	0.00439	395.032	0.00232	496.0845	0.00922
502.12	0.00108	501.2	0.01892	525.24	0.00148	480.872	0.00448	395.288	0.00242	496.448	0.00995
502.2475	0.0011	501.35	0.01941	525.37	0.00151	481.036	0.00457	395.544	0.00252	496.8115	0.01073
502.375	0.00112	501.5	0.0199	525.5	0.00154	481.2	0.00467	395.8	0.00263	497.175	0.01156
502.5025	0.00114	501.65	0.0204	525.63	0.00157	481.364	0.00476	396.056	0.00273	497.5385	0.01245
502.63	0.00116	501.8	0.02091	525.76	0.0016	481.528	0.00486	396.312	0.00285	497.902	0.01338
502.7575	0.00118	501.95	0.02143	525.89	0.00162	481.692	0.00495	396.568	0.00296	498.2655	0.01438
502.885	0.0012	502.1	0.02195	526.02	0.00165	481.856	0.00505	396.824	0.00308	498.629	0.01543
503.0125	0.00122	502.25	0.02248	526.15	0.00168	482.02	0.00515	397.08	0.0032	498.9925	0.01653
503.14	0.00124	502.4	0.02302	526.28	0.00171	482.184	0.00524	397.336	0.00333	499.356	0.0177
503.2675	0.00126	502.55	0.02357	526.41	0.00174	482.348	0.00534	397.592	0.00346	499.7195	0.01893
503.395	0.00128	502.7	0.02413	526.54	0.00177	482.512	0.00544	397.848	0.0036	500.083	0.02023
503.5225	0.0013	502.85	0.02469	526.67	0.0018	482.676	0.00554	398.104	0.00374	500.4465	0.02159
503.65	0.00132	503	0.02526	526.8	0.00184	482.84	0.00564	398.36	0.00388	500.81	0.02302
503.7775	0.00134	503.15	0.02584	526.93	0.00187	483.004	0.00574	398.616	0.00403	501.1735	0.02451
503.905	0.00137	503.3	0.02643	527.06	0.0019	483.168	0.00584	398.872	0.00418	501.537	0.02607
504.0325	0.00139	503.45	0.02702	527.19	0.00193	483.332	0.00594	399.128	0.00434	501.9005	0.0277
504.16	0.00141	503.6	0.02763	527.32	0.00196	483.496	0.00604	399.384	0.00451	502.264	0.02941
504.2875	0.00143	503.75	0.02823	527.45	0.00199	483.66	0.00614	399.64	0.00468	502.6275	0.03118
504.415	0.00145	503.9	0.02885	527.58	0.00203	483.824	0.00624	399.896	0.00485	502.991	0.03302
504.5425	0.00148	504.05	0.02947	527.71	0.00206	483.988	0.00634	400.152	0.00503	503.3545	0.03493
504.67	0.0015	504.2	0.0301	527.84	0.00209	484.152	0.00644	400.408	0.00521	503.718	0.03691
504.7975	0.00152	504.35	0.03074	527.97	0.00212	484.316	0.00654	400.664	0.0054	504.0815	0.03896
504.925	0.00155	504.5	0.03138	528.1	0.00216	484.48	0.00664	400.92	0.0056	504.445	0.04108
505.0525	0.00157	504.65	0.03203	528.23	0.00219	484.644	0.00674	401.176	0.0058	504.8085	0.04327
505.18	0.00159	504.8	0.03269	528.36	0.00222	484.808	0.00684	401.432	0.00601	505.172	0.04552
505.3075	0.00161	504.95	0.03335	528.49	0.00226	484.972	0.00694	401.688	0.00622	505.5355	0.04784
505.435	0.00164	505.1	0.03402	528.62	0.00229	485.136	0.00704	401.944	0.00644	505.899	0.05022
505.5625	0.00166	505.25	0.0347	528.75	0.00233	485.3	0.00714	402.2	0.00667	506.2625	0.05265
505.69	0.00168	505.4	0.03538	528.88	0.00236	485.464	0.00723	402.456	0.00691	506.626	0.05515
505.8175	0.00171	505.55	0.03606	529.01	0.00239	485.628	0.00733	402.712	0.00715	506.9895	0.0577

505.945	0.00173	505.7	0.03675	529.14	0.00243	485.792	0.00743	402.968	0.0074	507.353	0.0603
506.0725	0.00175	505.85	0.03745	529.27	0.00246	485.956	0.00753	403.224	0.00765	507.7165	0.06295
506.2	0.00178	506	0.03815	529.4	0.0025	486.12	0.00762	403.48	0.00792	508.08	0.06564
506.3275	0.0018	506.15	0.03886	529.53	0.00253	486.284	0.00772	403.736	0.00819	508.4435	0.06837
506.455	0.00182	506.3	0.03957	529.66	0.00257	486.448	0.00781	403.992	0.00847	508.807	0.07114
506.5825	0.00185	506.45	0.04028	529.79	0.0026	486.612	0.00791	404.248	0.00875	509.1705	0.07393
506.71	0.00187	506.6	0.041	529.92	0.00264	486.776	0.008	404.504	0.00905	509.534	0.07676
506.8375	0.00189	506.75	0.04172	530.05	0.00267	486.94	0.00809	404.76	0.00936	509.8975	0.0796
506.965	0.00192	506.9	0.04245	530.18	0.00271	487.104	0.00818	405.016	0.00967	510.261	0.08247
507.0925	0.00194	507.05	0.04318	530.31	0.00274	487.268	0.00827	405.272	0.00999	510.6245	0.08534
507.22	0.00197	507.2	0.04391	530.44	0.00278	487.432	0.00836	405.528	0.01032	510.988	0.08822
507.3475	0.00199	507.35	0.04465	530.57	0.00281	487.596	0.00845	405.784	0.01067	511.3515	0.09109
507.475	0.00201	507.5	0.04538	530.7	0.00285	487.76	0.00854	406.04	0.01102	511.715	0.09396
507.6025	0.00204	507.65	0.04613	530.83	0.00288	487.924	0.00862	406.296	0.01138	512.0785	0.09682
507.73	0.00206	507.8	0.04687	530.96	0.00292	488.088	0.00871	406.552	0.01175	512.442	0.09966
507.8575	0.00208	507.95	0.04761	531.09	0.00295	488.252	0.00879	406.808	0.01213	512.8055	0.10248
507.985	0.00211	508.1	0.04836	531.22	0.00299	488.416	0.00887	407.064	0.01253	513.169	0.10527
508.1125	0.00213	508.25	0.04911	531.35	0.00302	488.58	0.00895	407.32	0.01293	513.5325	0.10802
508.24	0.00215	508.4	0.04985	531.48	0.00306	488.744	0.00903	407.576	0.01335	513.896	0.11073
508.3675	0.00218	508.55	0.0506	531.61	0.00309	488.908	0.00911	407.832	0.01378	514.2595	0.11339
508.495	0.0022	508.7	0.05135	531.74	0.00313	489.072	0.00918	408.088	0.01421	514.623	0.11601
508.6225	0.00222	508.85	0.0521	531.87	0.00316	489.236	0.00925	408.344	0.01467	514.9865	0.11856
508.75	0.00225	509	0.05285	532	0.0032	489.4	0.00933	408.6	0.01513	515.35	0.12105
508.8775	0.00227	509.15	0.0536	532.13	0.00323	489.564	0.0094	408.856	0.0156	515.7135	0.12347
509.005	0.00229	509.3	0.05434	532.26	0.00327	489.728	0.00947	409.112	0.01609	516.077	0.12582
509.1325	0.00231	509.45	0.05509	532.39	0.0033	489.892	0.00953	409.368	0.01659	516.4405	0.1281
509.26	0.00234	509.6	0.05584	532.52	0.00334	490.056	0.0096	409.624	0.01711	516.804	0.13029
509.3875	0.00236	509.75	0.05658	532.65	0.00337	490.22	0.00966	409.88	0.01764	517.1675	0.1324
509.515	0.00238	509.9	0.05732	532.78	0.0034	490.384	0.00972	410.136	0.01818	517.531	0.13442
509.6425	0.0024	510.05	0.05806	532.91	0.00344	490.548	0.00978	410.392	0.01873	517.8945	0.13635
509.77	0.00242	510.2	0.05879	533.04	0.00347	490.712	0.00984	410.648	0.0193	518.258	0.13819
509.8975	0.00245	510.35	0.05952	533.17	0.00351	490.876	0.0099	410.904	0.01988	518.6215	0.13993
510.025	0.00247	510.5	0.06025	533.3	0.00354	491.04	0.00995	411.16	0.02048	518.985	0.14158
510.1525	0.00249	510.65	0.06097	533.43	0.00357	491.204	0.01	411.416	0.02109	519.3485	0.14313
510.28	0.00251	510.8	0.06169	533.56	0.00361	491.368	0.01005	411.672	0.02171	519.712	0.14458
510.4075	0.00253	510.95	0.06241	533.69	0.00364	491.532	0.0101	411.928	0.02235	520.0755	0.14593
510.535	0.00255	511.1	0.06312	533.82	0.00367	491.696	0.01014	412.184	0.023	520.439	0.14718
510.6625	0.00257	511.25	0.06383	533.95	0.0037	491.86	0.01018	412.44	0.02367	520.8025	0.14833
510.79	0.00259	511.4	0.06453	534.08	0.00374	492.024	0.01023	412.696	0.02435	521.166	0.14939
510.9175	0.00261	511.55	0.06522	534.21	0.00377	492.188	0.01026	412.952	0.02504	521.5295	0.15035
511.045	0.00263	511.7	0.06591	534.34	0.0038	492.352	0.0103	413.208	0.02575	521.893	0.15122
511.1725	0.00265	511.85	0.06659	534.47	0.00383	492.516	0.01033	413.464	0.02648	522.2565	0.15199
511.3	0.00267	512	0.06726	534.6	0.00386	492.68	0.01037	413.72	0.02722	522.62	0.15268
511.4275	0.00269	512.15	0.06793	534.73	0.00389	492.844	0.0104	413.976	0.02797	522.9835	0.15328
511.555	0.00271	512.3	0.06859	534.86	0.00392	493.008	0.01042	414.232	0.02873	523.347	0.1538
511.6825	0.00273	512.45	0.06924	534.99	0.00396	493.172	0.01045	414.488	0.02951	523.7105	0.15424
511.81	0.00275	512.6	0.06988	535.12	0.00399	493.336	0.01047	414.744	0.03031	524.074	0.15461
511.9375	0.00277	512.75	0.07052	535.25	0.00402	493.5	0.01049	415	0.03111	524.4375	0.15491
512.065	0.00279	512.9	0.07114	535.38	0.00404	493.664	0.01051	415.256	0.03193	524.801	0.15514
512.1925	0.0028	513.05	0.07176	535.51	0.00407	493.828	0.01052	415.512	0.03276	525.1645	0.15532
512.32	0.00282	513.2	0.07236	535.64	0.0041	493.992	0.01054	415.768	0.03361	525.528	0.15543

512.4475	0.00284	513.35	0.07296	535.77	0.00413	494.156	0.01055	416.024	0.03446	525.8915	0.1555
512.575	0.00286	513.5	0.07355	535.9	0.00416	494.32	0.01056	416.28	0.03533	526.255	0.15553
512.7025	0.00287	513.65	0.07413	536.03	0.00419	494.484	0.01056	416.536	0.03621	526.6185	0.15552
512.83	0.00289	513.8	0.07469	536.16	0.00421	494.648	0.01057	416.792	0.03709	526.982	0.15547
512.9575	0.0029	513.95	0.07525	536.29	0.00424	494.812	0.01057	417.048	0.03799	527.3455	0.15539
513.085	0.00292	514.1	0.07579	536.42	0.00427	494.976	0.01057	417.304	0.0389	527.709	0.1553
513.2125	0.00293	514.25	0.07632	536.55	0.0043	495.14	0.01057	417.56	0.03982	528.0725	0.15518
513.34	0.00295	514.4	0.07684	536.68	0.00432	495.304	0.01056	417.816	0.04074	528.436	0.15506
513.4675	0.00296	514.55	0.07735	536.81	0.00435	495.468	0.01056	418.072	0.04167	528.7995	0.15492
513.595	0.00298	514.7	0.07784	536.94	0.00437	495.632	0.01055	418.328	0.04261	529.163	0.15478
513.7225	0.00299	514.85	0.07833	537.07	0.0044	495.796	0.01054	418.584	0.04355	529.5265	0.15465
513.85	0.00301	515	0.0788	537.2	0.00442	495.96	0.01052	418.84	0.0445	529.89	0.15452
513.9775	0.00302	515.15	0.07925	537.33	0.00444	496.124	0.01051	419.096	0.04546	530.2535	0.1544
514.105	0.00303	515.3	0.0797	537.46	0.00447	496.288	0.01049	419.352	0.04641	530.617	0.1543
514.2325	0.00305	515.45	0.08013	537.59	0.00449	496.452	0.01047	419.608	0.04737	530.9805	0.15421
514.36	0.00306	515.6	0.08054	537.72	0.00451	496.616	0.01045	419.864	0.04833	531.344	0.15414
514.4875	0.00307	515.75	0.08095	537.85	0.00454	496.78	0.01043	420.12	0.04929	531.7075	0.1541
514.615	0.00308	515.9	0.08134	537.98	0.00456	496.944	0.0104	420.376	0.05025	532.071	0.15408
514.7425	0.00309	516.05	0.08171	538.11	0.00458	497.108	0.01037	420.632	0.05121	532.4345	0.15409
514.87	0.0031	516.2	0.08207	538.24	0.0046	497.272	0.01034	420.888	0.05217	532.798	0.15412
514.9975	0.00311	516.35	0.08241	538.37	0.00462	497.436	0.01031	421.144	0.05312	533.1615	0.15419
515.125	0.00312	516.5	0.08274	538.5	0.00464	497.6	0.01028	421.4	0.05407	533.525	0.15429
515.2525	0.00313	516.65	0.08306	538.63	0.00466	497.764	0.01024	421.656	0.05501	533.8885	0.15441
515.38	0.00314	516.8	0.08336	538.76	0.00468	497.928	0.01021	421.912	0.05595	534.252	0.15457
515.5075	0.00315	516.95	0.08364	538.89	0.0047	498.092	0.01017	422.168	0.05688	534.6155	0.15475
515.635	0.00316	517.1	0.08391	539.02	0.00472	498.256	0.01013	422.424	0.0578	534.979	0.15496
515.7625	0.00317	517.25	0.08416	539.15	0.00473	498.42	0.01009	422.68	0.05871	535.3425	0.1552
515.89	0.00318	517.4	0.0844	539.28	0.00475	498.584	0.01004	422.936	0.0596	535.706	0.15546
516.0175	0.00318	517.55	0.08462	539.41	0.00477	498.748	0.01	423.192	0.06049	536.0695	0.15575
516.145	0.00319	517.7	0.08483	539.54	0.00478	498.912	0.00995	423.448	0.06136	536.433	0.15605
516.2725	0.0032	517.85	0.08502	539.67	0.0048	499.076	0.0099	423.704	0.06221	536.7965	0.15636
516.4	0.0032	518	0.08519	539.8	0.00481	499.24	0.00985	423.96	0.06305	537.16	0.15669
516.5275	0.00321	518.15	0.08535	539.93	0.00483	499.404	0.0098	424.216	0.06387	537.5235	0.15703
516.655	0.00321	518.3	0.08549	540.06	0.00484	499.568	0.00975	424.472	0.06467	537.887	0.15736
516.7825	0.00322	518.45	0.08562	540.19	0.00486	499.732	0.0097	424.728	0.06546	538.2505	0.1577
516.91	0.00322	518.6	0.08573	540.32	0.00487	499.896	0.00964	424.984	0.06622	538.614	0.15803
517.0375	0.00323	518.75	0.08582	540.45	0.00488	500.06	0.00959	425.24	0.06696	538.9775	0.15835
517.165	0.00323	518.9	0.0859	540.58	0.0049	500.224	0.00953	425.496	0.06767	539.341	0.15866
517.2925	0.00324	519.05	0.08596	540.71	0.00491	500.388	0.00947	425.752	0.06837	539.7045	0.15894
517.42	0.00324	519.2	0.086	540.84	0.00492	500.552	0.00942	426.008	0.06903	540.068	0.1592
517.5475	0.00324	519.35	0.08603	540.97	0.00493	500.716	0.00936	426.264	0.06968	540.4315	0.15943
517.675	0.00324	519.5	0.08604	541.1	0.00494	500.88	0.0093	426.52	0.07029	540.795	0.15962
517.8025	0.00325	519.65	0.08604	541.23	0.00495	501.044	0.00923	426.776	0.07087	541.1585	0.15977
517.93	0.00325	519.8	0.08602	541.36	0.00496	501.208	0.00917	427.032	0.07143	541.522	0.15986
518.0575	0.00325	519.95	0.08598	541.49	0.00497	501.372	0.00911	427.288	0.07196	541.8855	0.15991
518.185	0.00325	520.1	0.08593	541.62	0.00498	501.536	0.00905	427.544	0.07245	542.249	0.1599
518.3125	0.00325	520.25	0.08586	541.75	0.00499	501.7	0.00898	427.8	0.07292	542.6125	0.15982
518.44	0.00325	520.4	0.08578	541.88	0.005	501.864	0.00892	428.056	0.07335	542.976	0.15968
518.5675	0.00325	520.55	0.08568	542.01	0.005	502.028	0.00885	428.312	0.07375	543.3395	0.15947
518.695	0.00325	520.7	0.08556	542.14	0.00501	502.192	0.00879	428.568	0.07411	543.703	0.15917
518.8225	0.00325	520.85	0.08543	542.27	0.00502	502.356	0.00872	428.824	0.07445	544.0665	0.1588

518.95	0.00325	521	0.08528	542.4	0.00503	502.52	0.00865	429.08	0.07474	544.43	0.15834
519.0775	0.00325	521.15	0.08512	542.53	0.00503	502.684	0.00859	429.336	0.075	544.7935	0.1578
519.205	0.00325	521.3	0.08495	542.66	0.00504	502.848	0.00852	429.592	0.07523	545.157	0.15716
519.3325	0.00324	521.45	0.08476	542.79	0.00504	503.012	0.00845	429.848	0.07542	545.5205	0.15643
519.46	0.00324	521.6	0.08455	542.92	0.00505	503.176	0.00839	430.104	0.07557	545.884	0.1556
519.5875	0.00324	521.75	0.08433	543.05	0.00505	503.34	0.00832	430.36	0.07569	546.2475	0.15467
519.715	0.00323	521.9	0.08409	543.18	0.00505	503.504	0.00825	430.616	0.07577	546.611	0.15365
519.8425	0.00323	522.05	0.08384	543.31	0.00506	503.668	0.00819	430.872	0.07582	546.9745	0.15252
519.97	0.00323	522.2	0.08358	543.44	0.00506	503.832	0.00812	431.128	0.07582	547.338	0.15129
520.0975	0.00322	522.35	0.0833	543.57	0.00506	503.996	0.00805	431.384	0.07579	547.7015	0.14996
520.225	0.00322	522.5	0.08301	543.7	0.00507	504.16	0.00799	431.64	0.07573	548.065	0.14853
520.3525	0.00321	522.65	0.0827	543.83	0.00507	504.324	0.00792	431.896	0.07562	548.4285	0.147
520.48	0.00321	522.8	0.08238	543.96	0.00507	504.488	0.00785	432.152	0.07549	548.792	0.14537
520.6075	0.0032	522.95	0.08205	544.09	0.00507	504.652	0.00779	432.408	0.07531	549.1555	0.14364
520.735	0.0032	523.1	0.08171	544.22	0.00507	504.816	0.00772	432.664	0.0751	549.519	0.14181
520.8625	0.00319	523.25	0.08135	544.35	0.00508	504.98	0.00766	432.92	0.07485	549.8825	0.13989
520.99	0.00319	523.4	0.08098	544.48	0.00508	505.144	0.00759	433.176	0.07457	550.246	0.13788
521.1175	0.00318	523.55	0.0806	544.61	0.00508	505.308	0.00753	433.432	0.07426	550.6095	0.13578
521.245	0.00317	523.7	0.0802	544.74	0.00508	505.472	0.00747	433.688	0.07391	550.973	0.13359
521.3725	0.00317	523.85	0.0798	544.87	0.00508	505.636	0.0074	433.944	0.07353	551.3365	0.13133
521.5	0.00316	524	0.07938	545	0.00508	505.8	0.00734	434.2	0.07311	551.7	0.12899
521.6275	0.00315	524.15	0.07895	545.13	0.00507	505.964	0.00728	434.456	0.07267	552.0635	0.12657
521.755	0.00314	524.3	0.07851	545.26	0.00507	506.128	0.00722	434.712	0.07219	552.427	0.12409
521.8825	0.00314	524.45	0.07806	545.39	0.00507	506.292	0.00716	434.968	0.07168	552.7905	0.12155
522.01	0.00313	524.6	0.0776	545.52	0.00507	506.456	0.0071	435.224	0.07114	553.154	0.11895
522.1375	0.00312	524.75	0.07713	545.65	0.00507	506.62	0.00704	435.48	0.07058	553.5175	0.1163
522.265	0.00311	524.9	0.07665	545.78	0.00507	506.784	0.00699	435.736	0.06998	553.881	0.1136
522.3925	0.0031	525.05	0.07616	545.91	0.00507	506.948	0.00693	435.992	0.06936	554.2445	0.11086
522.52	0.00309	525.2	0.07566	546.04	0.00506	507.112	0.00687	436.248	0.06871	554.608	0.10808
522.6475	0.00308	525.35	0.07515	546.17	0.00506	507.276	0.00682	436.504	0.06804	554.9715	0.10527
522.775	0.00307	525.5	0.07463	546.3	0.00506	507.44	0.00677	436.76	0.06735	555.335	0.10244
522.9025	0.00306	525.65	0.0741	546.43	0.00505	507.604	0.00672	437.016	0.06663	555.6985	0.0996
523.03	0.00305	525.8	0.07357	546.56	0.00505	507.768	0.00667	437.272	0.06589	556.062	0.09674
523.1575	0.00304	525.95	0.07303	546.69	0.00505	507.932	0.00662	437.528	0.06513	556.4255	0.09387
523.285	0.00303	526.1	0.07247	546.82	0.00505	508.096	0.00657	437.784	0.06434	556.789	0.091
523.4125	0.00302	526.25	0.07192	546.95	0.00504	508.26	0.00652	438.04	0.06355	557.1525	0.08814
523.54	0.00301	526.4	0.07135	547.08	0.00504	508.424	0.00648	438.296	0.06273	557.516	0.08528
523.6675	0.003	526.55	0.07078	547.21	0.00503	508.588	0.00643	438.552	0.06189	557.8795	0.08244
523.795	0.00299	526.7	0.0702	547.34	0.00503	508.752	0.00639	438.808	0.06105	558.243	0.07962
523.9225	0.00298	526.85	0.06961	547.47	0.00503	508.916	0.00635	439.064	0.06018	558.6065	0.07682
524.05	0.00297	527	0.06902	547.6	0.00502	509.08	0.00631	439.32	0.05931	558.97	0.07405
524.1775	0.00296	527.15	0.06843	547.73	0.00502	509.244	0.00627	439.576	0.05842	559.3335	0.07132
524.305	0.00295	527.3	0.06782	547.86	0.00501	509.408	0.00623	439.832	0.05752	559.697	0.06862
524.4325	0.00294	527.45	0.06722	547.99	0.00501	509.572	0.0062	440.088	0.05661	560.0605	0.06596
524.56	0.00293	527.6	0.0666	548.12	0.00501	509.736	0.00616	440.344	0.0557	560.424	0.06335
524.6875	0.00292	527.75	0.06599	548.25	0.005	509.9	0.00613	440.6	0.05477	560.7875	0.06078
524.815	0.0029	527.9	0.06536	548.38	0.005	510.064	0.0061	440.856	0.05384	561.151	0.05826
524.9425	0.00289	528.05	0.06474	548.51	0.00499	510.228	0.00607	441.112	0.05291	561.5145	0.0558
525.07	0.00288	528.2	0.06411	548.64	0.00499	510.392	0.00604	441.368	0.05197	561.878	0.05339
525.1975	0.00287	528.35	0.06348	548.77	0.00498	510.556	0.00602	441.624	0.05102	562.2415	0.05104
525.325	0.00286	528.5	0.06284	548.9	0.00498	510.72	0.00599	441.88	0.05008	562.605	0.04875

525.4525	0.00285	528.65	0.0622	549.03	0.00498	510.884	0.00597	442.136	0.04913	562.9685	0.04653
525.58	0.00283	528.8	0.06156	549.16	0.00497	511.048	0.00595	442.392	0.04818	563.332	0.04436
525.7075	0.00282	528.95	0.06091	549.29	0.00497	511.212	0.00593	442.648	0.04723	563.6955	0.04226
525.835	0.00281	529.1	0.06027	549.42	0.00496	511.376	0.00591	442.904	0.04628	564.059	0.04022
525.9625	0.0028	529.25	0.05962	549.55	0.00496	511.54	0.0059	443.16	0.04534	564.4225	0.03825
526.09	0.00279	529.4	0.05897	549.68	0.00495	511.704	0.00588	443.416	0.0444	564.786	0.03635
526.2175	0.00277	529.55	0.05831	549.81	0.00495	511.868	0.00587	443.672	0.04346	565.1495	0.03451
526.345	0.00276	529.7	0.05766	549.94	0.00494	512.032	0.00586	443.928	0.04252	565.513	0.03274
526.4725	0.00275	529.85	0.057	550.07	0.00494	512.196	0.00585	444.184	0.04159	565.8765	0.03103
526.6	0.00274	530	0.05635	550.2	0.00494	512.36	0.00585	444.44	0.04067	566.24	0.02939
526.7275	0.00273	530.15	0.05569	550.33	0.00493	512.524	0.00584	444.696	0.03975	566.6035	0.02781
526.855	0.00272	530.3	0.05504	550.46	0.00493	512.688	0.00584	444.952	0.03884	566.967	0.0263
526.9825	0.0027	530.45	0.05438	550.59	0.00492	512.852	0.00584	445.208	0.03794	567.3305	0.02485
527.11	0.00269	530.6	0.05372	550.72	0.00492	513.016	0.00584	445.464	0.03705	567.694	0.02346
527.2375	0.00268	530.75	0.05307	550.85	0.00492	513.18	0.00585	445.72	0.03616	568.0575	0.02214
527.365	0.00267	530.9	0.05241	550.98	0.00491	513.344	0.00585	445.976	0.03529	568.421	0.02087
527.4925	0.00266	531.05	0.05176	551.11	0.00491	513.508	0.00586	446.232	0.03442	568.7845	0.01966
527.62	0.00265	531.2	0.0511	551.24	0.00491	513.672	0.00587	446.488	0.03357	569.148	0.01851
527.7475	0.00263	531.35	0.05045	551.37	0.0049	513.836	0.00588	446.744	0.03272	569.5115	0.01742
527.875	0.00262	531.5	0.0498	551.5	0.0049	514	0.0059	447	0.03189	569.875	0.01638
528.0025	0.00261	531.65	0.04915	551.63	0.0049	514.164	0.00592	447.256	0.03106	570.2385	0.0154
528.13	0.0026	531.8	0.0485	551.76	0.00489	514.328	0.00593	447.512	0.03025	570.602	0.01446
528.2575	0.00259	531.95	0.04786	551.89	0.00489	514.492	0.00595	447.768	0.02945	570.9655	0.01358
528.385	0.00258	532.1	0.04721	552.02	0.00489	514.656	0.00598	448.024	0.02867	571.329	0.01274
528.5125	0.00257	532.25	0.04657	552.15	0.00489	514.82	0.006	448.28	0.02789	571.6925	0.01195
528.64	0.00256	532.4	0.04593	552.28	0.00488	514.984	0.00603	448.536	0.02713	572.056	0.01121
528.7675	0.00255	532.55	0.0453	552.41	0.00488	515.148	0.00606	448.792	0.02638	572.4195	0.01051
528.895	0.00253	532.7	0.04466	552.54	0.00488	515.312	0.00609	449.048	0.02564	572.783	0.00985
529.0225	0.00252	532.85	0.04403	552.67	0.00488	515.476	0.00613	449.304	0.02492	573.1465	0.00923
529.15	0.00251	533	0.0434	552.8	0.00488	515.64	0.00616	449.56	0.02421	573.51	0.00865
529.2775	0.0025	533.15	0.04278	552.93	0.00487	515.804	0.0062	449.816	0.02351	573.8735	0.0081
529.405	0.00249	533.3	0.04216	553.06	0.00487	515.968	0.00625	450.072	0.02283	574.237	0.0076
529.5325	0.00248	533.45	0.04154	553.19	0.00487	516.132	0.00629	450.328	0.02216	574.6005	0.00712
529.66	0.00247	533.6	0.04093	553.32	0.00487	516.296	0.00634	450.584	0.02151	574.964	0.00668
529.7875	0.00246	533.75	0.04032	553.45	0.00487	516.46	0.00639	450.84	0.02086	575.3275	0.00628
529.915	0.00245	533.9	0.03971	553.58	0.00487	516.624	0.00644	451.096	0.02023	575.691	0.0059
530.0425	0.00244	534.05	0.03911	553.71	0.00487	516.788	0.00649	451.352	0.01962	576.0545	0.00555
530.17	0.00243	534.2	0.03851	553.84	0.00487	516.952	0.00655	451.608	0.01902	576.418	0.00523
530.2975	0.00243	534.35	0.03791	553.97	0.00486	517.116	0.00661	451.864	0.01843	576.7815	0.00493
530.425	0.00242	534.5	0.03733	554.1	0.00486	517.28	0.00667	452.12	0.01785	577.145	0.00466
530.5525	0.00241	534.65	0.03674	554.23	0.00486	517.444	0.00673	452.376	0.01729	577.5085	0.00442
530.68	0.0024	534.8	0.03616	554.36	0.00486	517.608	0.0068	452.632	0.01674	577.872	0.00419
530.8075	0.00239	534.95	0.03558	554.49	0.00486	517.772	0.00687	452.888	0.01621	578.2355	0.00399
530.935	0.00238	535.1	0.03501	554.62	0.00486	517.936	0.00695	453.144	0.01568	578.599	0.00382
531.0625	0.00237	535.25	0.03445	554.75	0.00486	518.1	0.00702	453.4	0.01517	578.9625	0.00366
531.19	0.00237	535.4	0.03389	554.88	0.00486	518.264	0.0071	453.656	0.01468	579.326	0.00352
531.3175	0.00236	535.55	0.03333	555.01	0.00486	518.428	0.00718	453.912	0.01419	579.6895	0.0034
531.445	0.00235	535.7	0.03278	555.14	0.00486	518.592	0.00727	454.168	0.01372	580.053	0.00329
531.5725	0.00234	535.85	0.03224	555.27	0.00486	518.756	0.00735	454.424	0.01326	580.4165	0.00321
531.7	0.00233	536	0.0317	555.4	0.00487	518.92	0.00744	454.68	0.01281	580.78	0.00314
531.8275	0.00233	536.15	0.03116	555.53	0.00487	519.084	0.00754	454.936	0.01238	581.1435	0.00308

531.955	0.00232	536.3	0.03063	555.66	0.00487	519.248	0.00763	455.192	0.01195	581.507	0.00304
532.0825	0.00231	536.45	0.03011	555.79	0.00487	519.412	0.00773	455.448	0.01154	581.8705	0.00302
532.21	0.00231	536.6	0.02959	555.92	0.00487	519.576	0.00784	455.704	0.01114	582.234	0.00301
532.3375	0.0023	536.75	0.02908	556.05	0.00487	519.74	0.00794	455.96	0.01075	582.5975	0.00301
532.465	0.00229	536.9	0.02857	556.18	0.00487	519.904	0.00805	456.216	0.01037	582.961	0.00302
532.5925	0.00229	537.05	0.02807	556.31	0.00487	520.068	0.00816	456.472	0.01	583.3245	0.00304
532.72	0.00228	537.2	0.02758	556.44	0.00487	520.232	0.00828	456.728	0.00965	583.688	0.00308
532.8475	0.00228	537.35	0.02709	556.57	0.00487	520.396	0.0084	456.984	0.0093	584.0515	0.00312
532.975	0.00227	537.5	0.0266	556.7	0.00487	520.56	0.00852	457.24	0.00896	584.415	0.00318
533.1025	0.00227	537.65	0.02613	556.83	0.00488	520.724	0.00865	457.496	0.00864	584.7785	0.00324
533.23	0.00226	537.8	0.02566	556.96	0.00488	520.888	0.00878	457.752	0.00832	585.142	0.00332
533.3575	0.00226	537.95	0.02519	557.09	0.00488	521.052	0.00891	458.008	0.00801	585.5055	0.0034
533.485	0.00225	538.1	0.02473	557.22	0.00488	521.216	0.00905	458.264	0.00772	585.869	0.00349
533.6125	0.00225	538.25	0.02428	557.35	0.00488	521.38	0.00919	458.52	0.00743	586.2325	0.00358
533.74	0.00224	538.4	0.02383	557.48	0.00488	521.544	0.00933	458.776	0.00715	586.596	0.00368
533.8675	0.00224	538.55	0.02339	557.61	0.00488	521.708	0.00948	459.032	0.00688	586.9595	0.00379
533.995	0.00224	538.7	0.02296	557.74	0.00488	521.872	0.00963	459.288	0.00662	587.323	0.0039
534.1225	0.00223	538.85	0.02253	557.87	0.00489	522.036	0.00979	459.544	0.00637	587.6865	0.00402
534.25	0.00223	539	0.02211	558	0.00489	522.2	0.00995	459.8	0.00612	588.05	0.00415
534.3775	0.00223	539.15	0.0217	558.13	0.00489	522.364	0.01011	460.056	0.00588	588.4135	0.00427
534.505	0.00223	539.3	0.02129	558.26	0.00489	522.528	0.01028	460.312	0.00565	588.777	0.0044
534.6325	0.00222	539.45	0.02089	558.39	0.00489	522.692	0.01045	460.568	0.00543	589.1405	0.00453
534.76	0.00222	539.6	0.02049	558.52	0.00489	522.856	0.01062	460.824	0.00522	589.504	0.00467
534.8875	0.00222	539.75	0.0201	558.65	0.00489	523.02	0.0108	461.08	0.00501	589.8675	0.00481
535.015	0.00222	539.9	0.01972	558.78	0.00489	523.184	0.01099	461.336	0.00481	590.231	0.00494
535.1425	0.00222	540.05	0.01934	558.91	0.00489	523.348	0.01117	461.592	0.00462	590.5945	0.00508
535.27	0.00221	540.2	0.01897	559.04	0.00489	523.512	0.01137	461.848	0.00443	590.958	0.00522
535.3975	0.00221	540.35	0.01861	559.17	0.00489	523.676	0.01156	462.104	0.00425	591.3215	0.00536
535.525	0.00221	540.5	0.01825	559.3	0.00489	523.84	0.01176	462.36	0.00408	591.685	0.00549
535.6525	0.00221	540.65	0.0179	559.43	0.00489	524.004	0.01197	462.616	0.00391	592.0485	0.00563
535.78	0.00221	540.8	0.01756	559.56	0.00489	524.168	0.01218	462.872	0.00375	592.412	0.00576
535.9075	0.00221	540.95	0.01722	559.69	0.00489	524.332	0.01239	463.128	0.0036	592.7755	0.00589
536.035	0.00221	541.1	0.01689	559.82	0.00489	524.496	0.01261	463.384	0.00345	593.139	0.00602
536.1625	0.00221	541.25	0.01656	559.95	0.00489	524.66	0.01283	463.64	0.0033	593.5025	0.00614
536.29	0.00221	541.4	0.01625	560.08	0.00489	524.824	0.01306	463.896	0.00317	593.866	0.00626
536.4175	0.00221	541.55	0.01594	560.21	0.00489	524.988	0.01329	464.152	0.00303	594.2295	0.00637
536.545	0.00221	541.7	0.01563	560.34	0.00489	525.152	0.01353	464.408	0.0029	594.593	0.00648
536.6725	0.00221	541.85	0.01533	560.47	0.00489	525.316	0.01377	464.664	0.00278	594.9565	0.00659
536.8	0.00222	542	0.01504	560.6	0.00489	525.48	0.01402	464.92	0.00266	595.32	0.00669
536.9275	0.00222	542.15	0.01476	560.73	0.00489	525.644	0.01427	465.176	0.00255	595.6835	0.00678
537.055	0.00222	542.3	0.01448	560.86	0.00488	525.808	0.01452	465.432	0.00244	596.047	0.00687
537.1825	0.00222	542.45	0.01421	560.99	0.00488	525.972	0.01478	465.688	0.00233	596.4105	0.00695
537.31	0.00222	542.6	0.01394	561.12	0.00488	526.136	0.01505	465.944	0.00223	596.774	0.00702
537.4375	0.00223	542.75	0.01369	561.25	0.00488	526.3	0.01532	466.2	0.00213	597.1375	0.00709
537.565	0.00223	542.9	0.01343	561.38	0.00487	526.464	0.01559	466.456	0.00204	597.501	0.00714
537.6925	0.00223	543.05	0.01319	561.51	0.00487	526.628	0.01587	466.712	0.00195	597.8645	0.00719
537.82	0.00224	543.2	0.01295	561.64	0.00487	526.792	0.01616	466.968	0.00186	598.228	0.00724
537.9475	0.00224	543.35	0.01272	561.77	0.00486	526.956	0.01644	467.224	0.00178	598.5915	0.00727
538.075	0.00224	543.5	0.0125	561.9	0.00486	527.12	0.01674	467.48	0.0017	598.955	0.0073
538.2025	0.00225	543.65	0.01228	562.03	0.00485	527.284	0.01704	467.736	0.00162	599.3185	0.00731
538.33	0.00225	543.8	0.01207	562.16	0.00485	527.448	0.01734	467.992	0.00155	599.682	0.00732

538.4575	0.00225	543.95	0.01186	562.29	0.00485	527.612	0.01765	468.248	0.00148	600.0455	0.00733
538.585	0.00226	544.1	0.01166	562.42	0.00484	527.776	0.01796	468.504	0.00141	600.409	0.00732
538.7125	0.00226	544.25	0.01147	562.55	0.00483	527.94	0.01828	468.76	0.00134	600.7725	0.0073
538.84	0.00227	544.4	0.01129	562.68	0.00483	528.104	0.0186	469.016	0.00128	601.136	0.00728
538.9675	0.00227	544.55	0.01111	562.81	0.00482	528.268	0.01893	469.272	0.00122	601.4995	0.00725
539.095	0.00228	544.7	0.01094	562.94	0.00482	528.432	0.01926	469.528	0.00116	601.863	0.00721
539.2225	0.00229	544.85	0.01078	563.07	0.00481	528.596	0.0196	469.784	0.00111	602.2265	0.00717
539.35	0.00229	545	0.01062	563.2	0.0048	528.76	0.01994	470.04	0.00106	602.59	0.00711
539.4775	0.0023	545.15	0.01047	563.33	0.00479	528.924	0.02028	470.296	0.00101	602.9535	0.00705
539.605	0.0023	545.3	0.01033	563.46	0.00479	529.088	0.02063	470.552	9.61E-04	603.317	0.00698
539.7325	0.00231	545.45	0.01019	563.59	0.00478	529.252	0.02099	470.808	9.15E-04	603.6805	0.00691
539.86	0.00232	545.6	0.01006	563.72	0.00477	529.416	0.02134	471.064	8.71E-04	604.044	0.00683
539.9875	0.00232	545.75	0.00994	563.85	0.00476	529.58	0.02171	471.32	8.29E-04	604.4075	0.00674
540.115	0.00233	545.9	0.00982	563.98	0.00475	529.744	0.02207	471.576	7.89E-04	604.771	0.00665
540.2425	0.00234	546.05	0.00971	564.11	0.00474	529.908	0.02245	471.832	7.51E-04	605.1345	0.00655
540.37	0.00234	546.2	0.00961	564.24	0.00473	530.072	0.02282	472.088	7.15E-04	605.498	0.00644
540.4975	0.00235	546.35	0.00951	564.37	0.00472	530.236	0.0232	472.344	6.80E-04	605.8615	0.00633
540.625	0.00236	546.5	0.00942	564.5	0.00471	530.4	0.02358	472.6	6.47E-04	606.225	0.00622
540.7525	0.00237	546.65	0.00934	564.63	0.0047	530.564	0.02397	472.856	6.15E-04	606.5885	0.0061
540.88	0.00238	546.8	0.00927	564.76	0.00469	530.728	0.02436	473.112	5.85E-04	606.952	0.00598
541.0075	0.00238	546.95	0.0092	564.89	0.00467	530.892	0.02475	473.368	5.56E-04	607.3155	0.00586
541.135	0.00239	547.1	0.00914	565.02	0.00466	531.056	0.02515	473.624	5.28E-04	607.679	0.00573
541.2625	0.0024	547.25	0.00908	565.15	0.00465	531.22	0.02555	473.88	5.02E-04	608.0425	0.0056
541.39	0.00241	547.4	0.00904	565.28	0.00463	531.384	0.02596	474.136	4.77E-04	608.406	0.00547
541.5175	0.00242	547.55	0.009	565.41	0.00462	531.548	0.02636	474.392	4.53E-04	608.7695	0.00533
541.645	0.00243	547.7	0.00896	565.54	0.00461	531.712	0.02677	474.648	4.30E-04	609.133	0.0052
541.7725	0.00244	547.85	0.00894	565.67	0.00459	531.876	0.02719	474.904	4.08E-04	609.4965	0.00506
541.9	0.00245	548	0.00892	565.8	0.00458	532.04	0.0276	475.16	3.87E-04	609.86	0.00492
542.0275	0.00246	548.15	0.00891	565.93	0.00456	532.204	0.02802	475.416	3.68E-04	610.2235	0.00479
542.155	0.00247	548.3	0.0089	566.06	0.00455	532.368	0.02844	475.672	3.49E-04	610.587	0.00465
542.2825	0.00248	548.45	0.00891	566.19	0.00453	532.532	0.02886	475.928	3.31E-04	610.9505	0.00451
542.41	0.00249	548.6	0.00892	566.32	0.00451	532.696	0.02928	476.184	3.14E-04	611.314	0.00437
542.5375	0.0025	548.75	0.00894	566.45	0.0045	532.86	0.02971	476.44	2.98E-04	611.6775	0.00424
542.665	0.00251	548.9	0.00896	566.58	0.00448	533.024	0.03014	476.696	2.83E-04	612.041	0.0041
542.7925	0.00252	549.05	0.00899	566.71	0.00446	533.188	0.03057	476.952	2.68E-04	612.4045	0.00396
542.92	0.00253	549.2	0.00903	566.84	0.00444	533.352	0.031	477.208	2.55E-04	612.768	0.00383
543.0475	0.00254	549.35	0.00908	566.97	0.00443	533.516	0.03143	477.464	2.42E-04	613.1315	0.0037
543.175	0.00255	549.5	0.00914	567.1	0.00441	533.68	0.03186	477.72	2.29E-04	613.495	0.00357
543.3025	0.00256	549.65	0.0092	567.23	0.00439	533.844	0.03229	477.976	2.18E-04	613.8585	0.00344
543.43	0.00257	549.8	0.00927	567.36	0.00437	534.008	0.03273	478.232	2.07E-04	614.222	0.00332
543.5575	0.00258	549.95	0.00935	567.49	0.00435	534.172	0.03316	478.488	1.96E-04	614.5855	0.00319
543.685	0.00259	550.1	0.00943	567.62	0.00433	534.336	0.03359	478.744	1.87E-04	614.949	0.00307
543.8125	0.0026	550.25	0.00952	567.75	0.00431	534.5	0.03402	479	1.77E-04	615.3125	0.00296
543.94	0.00261	550.4	0.00962	567.88	0.00429	534.664	0.03446	479.256	1.69E-04	615.676	0.00284
544.0675	0.00262	550.55	0.00973	568.01	0.00427	534.828	0.03489	479.512	1.61E-04	616.0395	0.00273
544.195	0.00264	550.7	0.00985	568.14	0.00424	534.992	0.03532	479.768	1.53E-04	616.403	0.00262
544.3225	0.00265	550.85	0.00997	568.27	0.00422	535.156	0.03575	480.024	1.46E-04	616.7665	0.00251
544.45	0.00266	551	0.0101	568.4	0.0042	535.32	0.03618	480.28	1.40E-04	617.13	0.00241
544.5775	0.00267	551.15	0.01024	568.53	0.00418	535.484	0.0366	480.536	1.34E-04	617.4935	0.00231
544.705	0.00268	551.3	0.01039	568.66	0.00416	535.648	0.03703	480.792	1.29E-04	617.857	0.00221
544.8325	0.00269	551.45	0.01055	568.79	0.00413	535.812	0.03745	481.048	1.24E-04	618.2205	0.00211

544.96	0.0027	551.6	0.01071	568.92	0.00411	535.976	0.03787	481.304	1.20E-04	618.584	0.00202
545.0875	0.00272	551.75	0.01088	569.05	0.00409	536.14	0.03829	481.56	1.16E-04	618.9475	0.00193
545.215	0.00273	551.9	0.01106	569.18	0.00406	536.304	0.0387	481.816	1.13E-04	619.311	0.00185
545.3425	0.00274	552.05	0.01125	569.31	0.00404	536.468	0.03911	482.072	1.10E-04	619.6745	0.00177
545.47	0.00275	552.2	0.01145	569.44	0.00401	536.632	0.03952	482.328	1.08E-04	620.038	0.00169
545.5975	0.00276	552.35	0.01166	569.57	0.00399	536.796	0.03993	482.584	1.06E-04	620.4015	0.00161
545.725	0.00277	552.5	0.01187	569.7	0.00396	536.96	0.04033	482.84	1.05E-04	620.765	0.00153
545.8525	0.00278	552.65	0.01209	569.83	0.00394	537.124	0.04072	483.096	1.04E-04	621.1285	0.00146
545.98	0.0028	552.8	0.01232	569.96	0.00391	537.288	0.04111	483.352	1.05E-04	621.492	0.00139
546.1075	0.00281	552.95	0.01256	570.09	0.00389	537.452	0.0415	483.608	1.05E-04	621.8555	0.00133
546.235	0.00282	553.1	0.01281	570.22	0.00386	537.616	0.04188	483.864	1.07E-04	622.219	0.00126
546.3625	0.00283	553.25	0.01307	570.35	0.00384	537.78	0.04226	484.12	1.09E-04	622.5825	0.0012
546.49	0.00284	553.4	0.01333	570.48	0.00381	537.944	0.04263	484.376	1.12E-04	622.946	0.00114
546.6175	0.00285	553.55	0.0136	570.61	0.00378	538.108	0.04299	484.632	1.16E-04	623.3095	0.00109
546.745	0.00286	553.7	0.01389	570.74	0.00376	538.272	0.04335	484.888	1.20E-04	623.673	0.00103
546.8725	0.00287	553.85	0.01418	570.87	0.00373	538.436	0.04371	485.144	1.26E-04	624.0365	9.80E-04
547	0.00289	554	0.01448	571	0.0037	538.6	0.04405	485.4	1.32E-04	624.4	9.30E-04
547.1275	0.0029	554.15	0.01479	571.13	0.00368	538.764	0.04439	485.656	1.40E-04	624.7635	8.83E-04
547.255	0.00291	554.3	0.01511	571.26	0.00365	538.928	0.04473	485.912	1.48E-04	625.127	8.37E-04
547.3825	0.00292	554.45	0.01544	571.39	0.00362	539.092	0.04505	486.168	1.58E-04	625.4905	7.94E-04
547.51	0.00293	554.6	0.01577	571.52	0.0036	539.256	0.04537	486.424	1.69E-04	625.854	7.52E-04
547.6375	0.00294	554.75	0.01612	571.65	0.00357	539.42	0.04568	486.68	1.82E-04	626.2175	7.12E-04
547.765	0.00295	554.9	0.01648	571.78	0.00354	539.584	0.04598	486.936	1.96E-04	626.581	6.74E-04
547.8925	0.00296	555.05	0.01684	571.91	0.00351	539.748	0.04628	487.192	2.11E-04	626.9445	6.38E-04
548.02	0.00297	555.2	0.01721	572.04	0.00349	539.912	0.04656	487.448	2.28E-04	627.308	6.03E-04
548.1475	0.00298	555.35	0.0176	572.17	0.00346	540.076	0.04684	487.704	2.47E-04	627.6715	5.70E-04
548.275	0.00299	555.5	0.01799	572.3	0.00343	540.24	0.04711	487.96	2.68E-04	628.035	5.38E-04
548.4025	0.003	555.65	0.01839	572.43	0.0034	540.404	0.04737	488.216	2.91E-04	628.3985	5.08E-04
548.53	0.00301	555.8	0.0188	572.56	0.00338	540.568	0.04761	488.472	3.17E-04	628.762	4.79E-04
548.6575	0.00302	555.95	0.01923	572.69	0.00335	540.732	0.04786	488.728	3.45E-04	629.1255	4.51E-04
548.785	0.00303	556.1	0.01966	572.82	0.00332	540.896	0.04809	488.984	3.75E-04	629.489	4.25E-04
548.9125	0.00304	556.25	0.0201	572.95	0.00329	541.06	0.04831	489.24	4.09E-04	629.8525	4.00E-04
549.04	0.00305	556.4	0.02055	573.08	0.00327	541.224	0.04852	489.496	4.45E-04	630.216	3.77E-04
549.1675	0.00305	556.55	0.02101	573.21	0.00324	541.388	0.04872	489.752	4.85E-04	630.5795	3.54E-04
549.295	0.00306	556.7	0.02148	573.34	0.00321	541.552	0.04891	490.008	5.29E-04	630.943	3.33E-04
549.4225	0.00307	556.85	0.02196	573.47	0.00318	541.716	0.04909	490.264	5.76E-04	631.3065	3.13E-04
549.55	0.00308	557	0.02245	573.6	0.00316	541.88	0.04926	490.52	6.28E-04	631.67	2.93E-04
549.6775	0.00309	557.15	0.02295	573.73	0.00313	542.044	0.04942	490.776	6.83E-04	632.0335	2.75E-04
549.805	0.00309	557.3	0.02346	573.86	0.0031	542.208	0.04956	491.032	7.44E-04	632.397	2.58E-04
549.9325	0.0031	557.45	0.02397	573.99	0.00308	542.372	0.0497	491.288	8.10E-04	632.7605	2.41E-04
550.06	0.00311	557.6	0.0245	574.12	0.00305	542.536	0.04983	491.544	8.81E-04	633.124	2.26E-04
550.1875	0.00312	557.75	0.02504	574.25	0.00302	542.7	0.04994	491.8	9.58E-04	633.4875	2.11E-04
550.315	0.00312	557.9	0.02559	574.38	0.003	542.864	0.05004	492.056	0.00104	633.851	1.97E-04
550.4425	0.00313	558.05	0.02615	574.51	0.00297	543.028	0.05013	492.312	0.00113	634.2145	1.84E-04
550.57	0.00313	558.2	0.02672	574.64	0.00294	543.192	0.05021	492.568	0.00123	634.578	1.71E-04
550.6975	0.00314	558.35	0.0273	574.77	0.00292	543.356	0.05028	492.824	0.00133	634.9415	1.60E-04
550.825	0.00315	558.5	0.02788	574.9	0.00289	543.52	0.05034	493.08	0.00145	635.305	1.49E-04
550.9525	0.00315	558.65	0.02848	575.03	0.00287	543.684	0.05038	493.336	0.00157	635.6685	1.38E-04
551.08	0.00316	558.8	0.02909	575.16	0.00284	543.848	0.05042	493.592	0.0017	636.032	1.28E-04
551.2075	0.00316	558.95	0.02971	575.29	0.00282	544.012	0.05044	493.848	0.00184	636.3955	1.19E-04
551.335	0.00317	559.1	0.03034	575.42	0.00279	544.176	0.05045	494.104	0.00199	636.759	1.10E-04

551.4625	0.00317	559.25	0.03097	575.55	0.00277	544.34	0.05045	494.36	0.00215	637.1225	1.02E-04
551.59	0.00317	559.4	0.03162	575.68	0.00274	544.504	0.05043	494.616	0.00233	637.486	9.47E-05
551.7175	0.00318	559.55	0.03228	575.81	0.00272	544.668	0.05041	494.872	0.00251	637.8495	8.76E-05
551.845	0.00318	559.7	0.03295	575.94	0.00269	544.832	0.05037	495.128	0.00271	638.213	8.09E-05
551.9725	0.00318	559.85	0.03362	576.07	0.00267	544.996	0.05032	495.384	0.00293	638.5765	7.46E-05
552.1	0.00319	560	0.03431	576.2	0.00265	545.16	0.05026	495.64	0.00316	638.94	6.88E-05
552.2275	0.00319	560.15	0.03501	576.33	0.00263	545.324	0.05018	495.896	0.0034	639.3035	6.34E-05
552.355	0.00319	560.3	0.03571	576.46	0.0026	545.488	0.0501	496.152	0.00366	639.667	5.83E-05
552.4825	0.00319	560.45	0.03643	576.59	0.00258	545.652	0.05	496.408	0.00394	640.0305	5.36E-05
552.61	0.00319	560.6	0.03716	576.72	0.00256	545.816	0.0499	496.664	0.00424	640.394	4.92E-05
552.7375	0.00319	560.75	0.03789	576.85	0.00254	545.98	0.04978	496.92	0.00456	640.7575	4.51E-05
552.865	0.00319	560.9	0.03863	576.98	0.00252	546.144	0.04965	497.176	0.00489	641.121	4.13E-05
552.9925	0.00319	561.05	0.03939	577.11	0.0025	546.308	0.0495	497.432	0.00525	641.4845	3.78E-05
553.12	0.00319	561.2	0.04015	577.24	0.00248	546.472	0.04935	497.688	0.00563	641.848	3.46E-05
553.2475	0.00319	561.35	0.04092	577.37	0.00246	546.636	0.04919	497.944	0.00604	642.2115	3.16E-05
553.375	0.00319	561.5	0.0417	577.5	0.00244	546.8	0.04901	498.2	0.00647	642.575	2.88E-05
553.5025	0.00319	561.65	0.04249	577.63	0.00242	546.964	0.04883	498.456	0.00693	642.9385	2.62E-05
553.63	0.00319	561.8	0.04329	577.76	0.0024	547.128	0.04863	498.712	0.00741	643.302	2.39E-05
553.7575	0.00319	561.95	0.0441	577.89	0.00238	547.292	0.04842	498.968	0.00792	643.6655	2.17E-05
553.885	0.00318	562.1	0.04492	578.02	0.00236	547.456	0.04821	499.224	0.00847	644.029	1.97E-05
554.0125	0.00318	562.25	0.04574	578.15	0.00235	547.62	0.04798	499.48	0.00904	644.3925	1.79E-05
554.14	0.00318	562.4	0.04658	578.28	0.00233	547.784	0.04774	499.736	0.00965	644.756	1.62E-05
554.2675	0.00318	562.55	0.04742	578.41	0.00231	547.948	0.04749	499.992	0.01029	645.1195	1.47E-05
554.395	0.00317	562.7	0.04827	578.54	0.0023	548.112	0.04724	500.248	0.01097	645.483	1.32E-05
554.5225	0.00317	562.85	0.04912	578.67	0.00228	548.276	0.04697	500.504	0.01168	645.8465	1.20E-05
554.65	0.00316	563	0.04999	578.8	0.00226	548.44	0.04669	500.76	0.01244	646.21	1.08E-05
554.7775	0.00316	563.15	0.05086	578.93	0.00225	548.604	0.04641	501.016	0.01323	646.5735	9.73E-06
554.905	0.00315	563.3	0.05175	579.06	0.00224	548.768	0.04611	501.272	0.01406	646.937	8.75E-06
555.0325	0.00315	563.45	0.05263	579.19	0.00222	548.932	0.04581	501.528	0.01494	647.3005	7.87E-06
555.16	0.00314	563.6	0.05353	579.32	0.00221	549.096	0.0455	501.784	0.01586	647.664	7.07E-06
555.2875	0.00313	563.75	0.05443	579.45	0.0022	549.26	0.04518	502.04	0.01683	648.0275	6.35E-06
555.415	0.00313	563.9	0.05534	579.58	0.00218	549.424	0.04485	502.296	0.01784	648.391	5.70E-06
555.5425	0.00312	564.05	0.05626	579.71	0.00217	549.588	0.04452	502.552	0.0189	648.7545	5.11E-06
555.67	0.00311	564.2	0.05718	579.84	0.00216	549.752	0.04417	502.808	0.02002	649.118	4.58E-06
555.7975	0.0031	564.35	0.05811	579.97	0.00215	549.916	0.04382	503.064	0.02118	649.4815	4.10E-06
555.925	0.0031	564.5	0.05905	580.1	0.00214	550.08	0.04347	503.32	0.0224	649.845	3.67E-06
556.0525	0.00309	564.65	0.05999	580.23	0.00213	550.244	0.0431	503.576	0.02368	650.2085	3.29E-06
556.18	0.00308	564.8	0.06093	580.36	0.00212	550.408	0.04273	503.832	0.02501	650.572	2.95E-06
556.3075	0.00307	564.95	0.06189	580.49	0.00211	550.572	0.04235	504.088	0.02639	650.9355	2.65E-06
556.435	0.00306	565.1	0.06284	580.62	0.0021	550.736	0.04197	504.344	0.02784	651.299	2.38E-06
556.5625	0.00305	565.25	0.06381	580.75	0.00209	550.9	0.04158	504.6	0.02935	651.6625	2.14E-06
556.69	0.00304	565.4	0.06477	580.88	0.00209	551.064	0.04119	504.856	0.03091	652.026	1.94E-06
556.8175	0.00303	565.55	0.06575	581.01	0.00208	551.228	0.04079	505.112	0.03254	652.3895	1.76E-06
556.945	0.00302	565.7	0.06672	581.14	0.00207	551.392	0.04038	505.368	0.03424	652.753	1.61E-06
557.0725	0.00301	565.85	0.0677	581.27	0.00207	551.556	0.03997	505.624	0.036	653.1165	1.48E-06
557.2	0.00299	566	0.06869	581.4	0.00206	551.72	0.03956	505.88	0.03782	653.48	1.37E-06
557.3275	0.00298	566.15	0.06967	581.53	0.00206	551.884	0.03914	506.136	0.03972	653.8435	1.28E-06
557.455	0.00297	566.3	0.07066	581.66	0.00205	552.048	0.03872	506.392	0.04167	654.207	1.22E-06
557.5825	0.00296	566.45	0.07166	581.79	0.00205	552.212	0.03829	506.648	0.0437	654.5705	1.17E-06
557.71	0.00294	566.6	0.07265	581.92	0.00205	552.376	0.03786	506.904	0.0458	654.934	1.14E-06
557.8375	0.00293	566.75	0.07365	582.05	0.00204	552.54	0.03743	507.16	0.04796	655.2975	1.12E-06

557.965	0.00292	566.9	0.07465	582.18	0.00204	552.704	0.03699	507.416	0.0502	655.661	1.12E-06
558.0925	0.0029	567.05	0.07565	582.31	0.00204	552.868	0.03656	507.672	0.05251	656.0245	1.14E-06
558.22	0.00289	567.2	0.07666	582.44	0.00204	553.032	0.03612	507.928	0.05488	656.388	1.18E-06
558.3475	0.00287	567.35	0.07766	582.57	0.00204	553.196	0.03567	508.184	0.05733	656.7515	1.23E-06
558.475	0.00286	567.5	0.07867	582.7	0.00204	553.36	0.03523	508.44	0.05985	657.115	1.29E-06
558.6025	0.00284	567.65	0.07967	582.83	0.00204	553.524	0.03478	508.696	0.06243	657.4785	1.37E-06
558.73	0.00283	567.8	0.08068	582.96	0.00204	553.688	0.03433	508.952	0.06509	657.842	1.47E-06
558.8575	0.00281	567.95	0.08168	583.09	0.00204	553.852	0.03388	509.208	0.06782	658.2055	1.59E-06
558.985	0.00279	568.1	0.08269	583.22	0.00204	554.016	0.03344	509.464	0.07061	658.569	1.72E-06
559.1125	0.00278	568.25	0.08369	583.35	0.00205	554.18	0.03298	509.72	0.07347	658.9325	1.88E-06
559.24	0.00276	568.4	0.08469	583.48	0.00205	554.344	0.03253	509.976	0.0764	659.296	2.05E-06
559.3675	0.00274	568.55	0.0857	583.61	0.00205	554.508	0.03208	510.232	0.07939	659.6595	2.25E-06
559.495	0.00273	568.7	0.08669	583.74	0.00206	554.672	0.03163	510.488	0.08245	660.023	2.46E-06
559.6225	0.00271	568.85	0.08769	583.87	0.00206	554.836	0.03118	510.744	0.08557	660.3865	2.70E-06
559.75	0.00269	569	0.08869	584	0.00207	555	0.03073	511	0.08875	660.75	2.96E-06
559.8775	0.00267	569.15	0.08968	584.13	0.00207	555.164	0.03028	511.256	0.09198	661.1135	3.25E-06
560.005	0.00265	569.3	0.09066	584.26	0.00208	555.328	0.02983	511.512	0.09528	661.477	3.57E-06
560.1325	0.00264	569.45	0.09165	584.39	0.00208	555.492	0.02939	511.768	0.09862	661.8405	3.92E-06
560.26	0.00262	569.6	0.09263	584.52	0.00209	555.656	0.02894	512.024	0.10202	662.204	4.30E-06
560.3875	0.0026	569.75	0.0936	584.65	0.0021	555.82	0.0285	512.28	0.10547	662.5675	4.71E-06
560.515	0.00258	569.9	0.09458	584.78	0.0021	555.984	0.02805	512.536	0.10897	662.931	5.15E-06
560.6425	0.00256	570.05	0.09554	584.91	0.00211	556.148	0.02761	512.792	0.1125	663.2945	5.64E-06
560.77	0.00254	570.2	0.0965	585.04	0.00212	556.312	0.02718	513.048	0.11608	663.658	6.16E-06
560.8975	0.00252	570.35	0.09746	585.17	0.00213	556.476	0.02674	513.304	0.11969	664.0215	6.73E-06
561.025	0.0025	570.5	0.0984	585.3	0.00214	556.64	0.02631	513.56	0.12333	664.385	7.34E-06
561.1525	0.00248	570.65	0.09935	585.43	0.00215	556.804	0.02588	513.816	0.127	664.7485	7.99E-06
561.28	0.00246	570.8	0.10028	585.56	0.00216	556.968	0.02545	514.072	0.1307	665.112	8.70E-06
561.4075	0.00244	570.95	0.10121	585.69	0.00217	557.132	0.02502	514.328	0.13442	665.4755	9.45E-06
561.535	0.00242	571.1	0.10213	585.82	0.00218	557.296	0.0246	514.584	0.13815	665.839	1.03E-05
561.6625	0.0024	571.25	0.10304	585.95	0.00219	557.46	0.02418	514.84	0.1419	666.2025	1.11E-05
561.79	0.00238	571.4	0.10394	586.08	0.0022	557.624	0.02377	515.096	0.14565	666.566	1.21E-05
561.9175	0.00236	571.55	0.10483	586.21	0.00222	557.788	0.02336	515.352	0.1494	666.9295	1.31E-05
562.045	0.00233	571.7	0.10572	586.34	0.00223	557.952	0.02295	515.608	0.15315	667.293	1.41E-05
562.1725	0.00231	571.85	0.10659	586.47	0.00224	558.116	0.02254	515.864	0.1569	667.6565	1.52E-05
562.3	0.00229	572	0.10746	586.6	0.00225	558.28	0.02214	516.12	0.16063	668.02	1.64E-05
562.4275	0.00227	572.15	0.10831	586.73	0.00227	558.444	0.02175	516.376	0.16434	668.3835	1.77E-05
562.555	0.00225	572.3	0.10916	586.86	0.00228	558.608	0.02136	516.632	0.16803	668.747	1.91E-05
562.6825	0.00223	572.45	0.10999	586.99	0.0023	558.772	0.02097	516.888	0.17169	669.1105	2.05E-05
562.81	0.0022	572.6	0.11081	587.12	0.00231	558.936	0.02059	517.144	0.17532	669.474	2.20E-05
562.9375	0.00218	572.75	0.11162	587.25	0.00233	559.1	0.02021	517.4	0.1789	669.8375	2.36E-05
563.065	0.00216	572.9	0.11242	587.38	0.00234	559.264	0.01983	517.656	0.18245	670.201	2.53E-05
563.1925	0.00214	573.05	0.11321	587.51	0.00236	559.428	0.01947	517.912	0.18594	670.5645	2.71E-05
563.32	0.00212	573.2	0.11398	587.64	0.00237	559.592	0.0191	518.168	0.18937	670.928	2.89E-05
563.4475	0.00209	573.35	0.11474	587.77	0.00239	559.756	0.01874	518.424	0.19275	671.2915	3.09E-05
563.575	0.00207	573.5	0.11549	587.9	0.0024	559.92	0.01839	518.68	0.19605	671.655	3.30E-05
563.7025	0.00205	573.65	0.11622	588.03	0.00242	560.084	0.01804	518.936	0.19929	672.0185	3.51E-05
563.83	0.00203	573.8	0.11694	588.16	0.00244	560.248	0.01769	519.192	0.20244	672.382	3.74E-05
563.9575	0.00201	573.95	0.11764	588.29	0.00245	560.412	0.01735	519.448	0.20552	672.7455	3.98E-05
564.085	0.00198	574.1	0.11833	588.42	0.00247	560.576	0.01702	519.704	0.2085	673.109	4.23E-05
564.2125	0.00196	574.25	0.11901	588.55	0.00249	560.74	0.01669	519.96	0.21139	673.4725	4.48E-05
564.34	0.00194	574.4	0.11967	588.68	0.00251	560.904	0.01636	520.216	0.21418	673.836	4.75E-05

564.4675	0.00192	574.55	0.12032	588.81	0.00252	561.068	0.01605	520.472	0.21687	674.1995	5.03E-05
564.595	0.00189	574.7	0.12095	588.94	0.00254	561.232	0.01573	520.728	0.21944	674.563	5.33E-05
564.7225	0.00187	574.85	0.12156	589.07	0.00256	561.396	0.01542	520.984	0.22191	674.9265	5.63E-05
564.85	0.00185	575	0.12216	589.2	0.00258	561.56	0.01512	521.24	0.22426	675.29	5.94E-05
564.9775	0.00183	575.15	0.12274	589.33	0.0026	561.724	0.01482	521.496	0.22648	675.6535	6.27E-05
565.105	0.00181	575.3	0.1233	589.46	0.00261	561.888	0.01453	521.752	0.22858	676.017	6.60E-05
565.2325	0.00178	575.45	0.12385	589.59	0.00263	562.052	0.01424	522.008	0.23055	676.3805	6.95E-05
565.36	0.00176	575.6	0.12438	589.72	0.00265	562.216	0.01396	522.264	0.23238	676.744	7.31E-05
565.4875	0.00174	575.75	0.1249	589.85	0.00267	562.38	0.01368	522.52	0.23408	677.1075	7.68E-05
565.615	0.00172	575.9	0.12539	589.98	0.00269	562.544	0.01341	522.776	0.23563	677.471	8.06E-05
565.7425	0.0017	576.05	0.12587	590.11	0.00271	562.708	0.01315	523.032	0.23704	677.8345	8.46E-05
565.87	0.00167	576.2	0.12633	590.24	0.00273	562.872	0.01289	523.288	0.23831	678.198	8.86E-05
565.9975	0.00165	576.35	0.12677	590.37	0.00275	563.036	0.01263	523.544	0.23943	678.5615	9.27E-05
566.125	0.00163	576.5	0.1272	590.5	0.00277	563.2	0.01238	523.8	0.24039	678.925	9.70E-05
566.2525	0.00161	576.65	0.12761	590.63	0.00279	563.364	0.01214	524.056	0.24121	679.2885	1.01E-04
566.38	0.00159	576.8	0.12799	590.76	0.0028	563.528	0.0119	524.312	0.24187	679.652	1.06E-04
566.5075	0.00157	576.95	0.12836	590.89	0.00282	563.692	0.01167	524.568	0.24237	680.0155	1.10E-04
566.635	0.00155	577.1	0.12872	591.02	0.00284	563.856	0.01144	524.824	0.24272	680.379	1.15E-04
566.7625	0.00153	577.25	0.12905	591.15	0.00286	564.02	0.01121	525.08	0.24291	680.7425	1.20E-04
566.89	0.0015	577.4	0.12936	591.28	0.00288	564.184	0.01099	525.336	0.24294	681.106	1.24E-04
567.0175	0.00148	577.55	0.12966	591.41	0.0029	564.348	0.01078	525.592	0.24281	681.4695	1.29E-04
567.145	0.00146	577.7	0.12993	591.54	0.00292	564.512	0.01057	525.848	0.24253	681.833	1.34E-04
567.2725	0.00144	577.85	0.13019	591.67	0.00294	564.676	0.01037	526.104	0.24209	682.1965	1.39E-04
567.4	0.00142	578	0.13043	591.8	0.00296	564.84	0.01017	526.36	0.24149	682.56	1.44E-04
567.5275	0.0014	578.15	0.13064	591.93	0.00298	565.004	0.00998	526.616	0.24074	682.9235	1.50E-04
567.655	0.00138	578.3	0.13084	592.06	0.003	565.168	0.00979	526.872	0.23984	683.287	1.55E-04
567.7825	0.00136	578.45	0.13102	592.19	0.00302	565.332	0.00961	527.128	0.23878	683.6505	1.60E-04
567.91	0.00134	578.6	0.13118	592.32	0.00304	565.496	0.00943	527.384	0.23758	684.014	1.65E-04
568.0375	0.00132	578.75	0.13133	592.45	0.00305	565.66	0.00926	527.64	0.23623	684.3775	1.71E-04
568.165	0.0013	578.9	0.13145	592.58	0.00307	565.824	0.00909	527.896	0.23473	684.741	1.76E-04
568.2925	0.00129	579.05	0.13155	592.71	0.00309	565.988	0.00893	528.152	0.23309	685.1045	1.82E-04
568.42	0.00127	579.2	0.13164	592.84	0.00311	566.152	0.00877	528.408	0.23131	685.468	1.87E-04
568.5475	0.00125	579.35	0.1317	592.97	0.00313	566.316	0.00862	528.664	0.2294	685.8315	1.93E-04
568.675	0.00123	579.5	0.13175	593.1	0.00315	566.48	0.00847	528.92	0.22735	686.195	1.98E-04
568.8025	0.00121	579.65	0.13178	593.23	0.00316	566.644	0.00832	529.176	0.22518	686.5585	2.04E-04
568.93	0.00119	579.8	0.13179	593.36	0.00318	566.808	0.00818	529.432	0.22288	686.922	2.10E-04
569.0575	0.00117	579.95	0.13178	593.49	0.0032	566.972	0.00805	529.688	0.22046	687.2855	2.15E-04
569.185	0.00116	580.1	0.13175	593.62	0.00322	567.136	0.00791	529.944	0.21793	687.649	2.21E-04
569.3125	0.00114	580.25	0.1317	593.75	0.00323	567.3	0.00779	530.2	0.21529	688.0125	2.26E-04
569.44	0.00112	580.4	0.13164	593.88	0.00325	567.464	0.00767	530.456	0.21254	688.376	2.32E-04
569.5675	0.0011	580.55	0.13155	594.01	0.00327	567.628	0.00755	530.712	0.20969	688.7395	2.38E-04
569.695	0.00109	580.7	0.13145	594.14	0.00328	567.792	0.00743	530.968	0.20674	689.103	2.43E-04
569.8225	0.00107	580.85	0.13133	594.27	0.0033	567.956	0.00733	531.224	0.2037	689.4665	2.49E-04
569.95	0.00105	581	0.1312	594.4	0.00331	568.12	0.00722	531.48	0.20058	689.83	2.55E-04
570.0775	0.00104	581.15	0.13104	594.53	0.00333	568.284	0.00712	531.736	0.19738	690.1935	2.60E-04
570.205	0.00102	581.3	0.13087	594.66	0.00335	568.448	0.00702	531.992	0.1941	690.557	2.66E-04
570.3325	0.00101	581.45	0.13069	594.79	0.00336	568.612	0.00693	532.248	0.19075	690.9205	2.71E-04
570.46	9.90E-04	581.6	0.13048	594.92	0.00338	568.776	0.00684	532.504	0.18734	691.284	2.77E-04
570.5875	9.74E-04	581.75	0.13026	595.05	0.00339	568.94	0.00676	532.76	0.18387	691.6475	2.82E-04
570.715	9.59E-04	581.9	0.13002	595.18	0.0034	569.104	0.00668	533.016	0.18034	692.011	2.88E-04
570.8425	9.44E-04	582.05	0.12977	595.31	0.00342	569.268	0.0066	533.272	0.17677	692.3745	2.93E-04

570.97	9.29E-04	582.2	0.1295	595.44	0.00343	569.432	0.00653	533.528	0.17316	692.738	2.99E-04
571.0975	9.14E-04	582.35	0.12921	595.57	0.00344	569.596	0.00646	533.784	0.16951	693.1015	3.04E-04
571.225	9.00E-04	582.5	0.12891	595.7	0.00346	569.76	0.0064	534.04	0.16583	693.465	3.10E-04
571.3525	8.86E-04	582.65	0.1286	595.83	0.00347	569.924	0.00633	534.296	0.16213	693.8285	3.15E-04
571.48	8.72E-04	582.8	0.12827	595.96	0.00348	570.088	0.00628	534.552	0.1584	694.192	3.20E-04
571.6075	8.58E-04	582.95	0.12792	596.09	0.00349	570.252	0.00622	534.808	0.15466	694.5555	3.26E-04
571.735	8.45E-04	583.1	0.12756	596.22	0.0035	570.416	0.00617	535.064	0.15091	694.919	3.31E-04
571.8625	8.32E-04	583.25	0.12719	596.35	0.00352	570.58	0.00613	535.32	0.14716	695.2825	3.37E-04
571.99	8.19E-04	583.4	0.12681	596.48	0.00353	570.744	0.00609	535.576	0.14341	695.646	3.42E-04
572.1175	8.06E-04	583.55	0.12641	596.61	0.00354	570.908	0.00605	535.832	0.13966	696.0095	3.47E-04
572.245	7.94E-04	583.7	0.126	596.74	0.00355	571.072	0.00601	536.088	0.13592	696.373	3.53E-04
572.3725	7.81E-04	583.85	0.12557	596.87	0.00356	571.236	0.00598	536.344	0.13219	696.7365	3.58E-04
572.5	7.69E-04	584	0.12513	597	0.00357	571.4	0.00595	536.6	0.12849	697.1	3.63E-04
572.6275	7.57E-04	584.15	0.12469	597.13	0.00357	571.564	0.00593	536.856	0.1248	697.4635	3.69E-04
572.755	7.46E-04	584.3	0.12423	597.26	0.00358	571.728	0.00591	537.112	0.12115	697.827	3.74E-04
572.8825	7.35E-04	584.45	0.12376	597.39	0.00359	571.892	0.00589	537.368	0.11752	698.1905	3.79E-04
573.01	7.23E-04	584.6	0.12327	597.52	0.0036	572.056	0.00588	537.624	0.11393	698.554	3.85E-04
573.1375	7.13E-04	584.75	0.12278	597.65	0.0036	572.22	0.00587	537.88	0.11038	698.9175	3.90E-04
573.265	7.02E-04	584.9	0.12228	597.78	0.00361	572.384	0.00586	538.136	0.10686	699.281	3.95E-04
573.3925	6.91E-04	585.05	0.12177	597.91	0.00362	572.548	0.00586	538.392	0.1034	699.6445	4.01E-04
573.52	6.81E-04	585.2	0.12125	598.04	0.00362	572.712	0.00586	538.648	0.09998	700.008	4.06E-04
573.6475	6.71E-04	585.35	0.12072	598.17	0.00363	572.876	0.00586	538.904	0.09661	700.3715	4.12E-04
573.775	6.62E-04	585.5	0.12018	598.3	0.00363	573.04	0.00587	539.16	0.09329	700.735	4.17E-04
573.9025	6.52E-04	585.65	0.11963	598.43	0.00364	573.204	0.00588	539.416	0.09003	701.0985	4.22E-04
574.03	6.43E-04	585.8	0.11908	598.56	0.00364	573.368	0.0059	539.672	0.08682	701.462	4.28E-04
574.1575	6.34E-04	585.95	0.11852	598.69	0.00365	573.532	0.00591	539.928	0.08368	701.8255	4.33E-04
574.285	6.25E-04	586.1	0.11795	598.82	0.00365	573.696	0.00594	540.184	0.0806	702.189	4.39E-04
574.4125	6.16E-04	586.25	0.11737	598.95	0.00365	573.86	0.00596	540.44	0.07758	702.5525	4.44E-04
574.54	6.08E-04	586.4	0.11679	599.08	0.00365	574.024	0.00599	540.696	0.07462	702.916	4.49E-04
574.6675	6.00E-04	586.55	0.11621	599.21	0.00366	574.188	0.00602	540.952	0.07174	703.2795	4.55E-04
574.795	5.92E-04	586.7	0.11561	599.34	0.00366	574.352	0.00605	541.208	0.06891	703.643	4.60E-04
574.9225	5.84E-04	586.85	0.11502	599.47	0.00366	574.516	0.00609	541.464	0.06616	704.0065	4.66E-04
575.05	5.76E-04	587	0.11441	599.6	0.00366	574.68	0.00613	541.72	0.06347	704.37	4.71E-04
575.1775	5.69E-04	587.15	0.11381	599.73	0.00366	574.844	0.00618	541.976	0.06086	704.7335	4.76E-04
575.305	5.62E-04	587.3	0.1132	599.86	0.00366	575.008	0.00623	542.232	0.05831	705.097	4.82E-04
575.4325	5.55E-04	587.45	0.11258	599.99	0.00366	575.172	0.00628	542.488	0.05584	705.4605	4.87E-04
575.56	5.48E-04	587.6	0.11197	600.12	0.00365	575.336	0.00633	542.744	0.05343	705.824	4.92E-04
575.6875	5.42E-04	587.75	0.11135	600.25	0.00365	575.5	0.00639	543	0.0511	706.1875	4.98E-04
575.815	5.35E-04	587.9	0.11072	600.38	0.00365	575.664	0.00645	543.256	0.04883	706.551	5.03E-04
575.9425	5.29E-04	588.05	0.1101	600.51	0.00365	575.828	0.00652	543.512	0.04664	706.9145	5.08E-04
576.07	5.23E-04	588.2	0.10947	600.64	0.00364	575.992	0.00659	543.768	0.04451	707.278	5.13E-04
576.1975	5.18E-04	588.35	0.10884	600.77	0.00364	576.156	0.00666	544.024	0.04246	707.6415	5.18E-04
576.325	5.12E-04	588.5	0.10822	600.9	0.00364	576.32	0.00674	544.28	0.04047	708.005	5.23E-04
576.4525	5.07E-04	588.65	0.10759	601.03	0.00363	576.484	0.00682	544.536	0.03855	708.3685	5.28E-04
576.58	5.02E-04	588.8	0.10696	601.16	0.00363	576.648	0.0069	544.792	0.0367	708.732	5.33E-04
576.7075	4.97E-04	588.95	0.10633	601.29	0.00362	576.812	0.00699	545.048	0.03492	709.0955	5.38E-04
576.835	4.92E-04	589.1	0.1057	601.42	0.00362	576.976	0.00708	545.304	0.0332	709.459	5.42E-04
576.9625	4.88E-04	589.25	0.10507	601.55	0.00361	577.14	0.00717	545.56	0.03154	709.8225	5.47E-04
577.09	4.83E-04	589.4	0.10444	601.68	0.0036	577.304	0.00727	545.816	0.02995	710.186	5.51E-04
577.2175	4.79E-04	589.55	0.10381	601.81	0.00359	577.468	0.00737	546.072	0.02842	710.5495	5.56E-04
577.345	4.75E-04	589.7	0.10319	601.94	0.00359	577.632	0.00747	546.328	0.02695	710.913	5.60E-04

577.4725	4.71E-04	589.85	0.10256	602.07	0.00358	577.796	0.00758	546.584	0.02554	711.2765	5.64E-04
577.6	4.68E-04	590	0.10194	602.2	0.00357	577.96	0.00769	546.84	0.02418	711.64	5.69E-04
577.7275	4.64E-04	590.15	0.10132	602.33	0.00356	578.124	0.0078	547.096	0.02289	712.0035	5.73E-04
577.855	4.61E-04	590.3	0.10071	602.46	0.00355	578.288	0.00792	547.352	0.02165	712.367	5.77E-04
577.9825	4.58E-04	590.45	0.1001	602.59	0.00354	578.452	0.00804	547.608	0.02046	712.7305	5.81E-04
578.11	4.55E-04	590.6	0.09949	602.72	0.00353	578.616	0.00817	547.864	0.01933	713.094	5.85E-04
578.2375	4.52E-04	590.75	0.09888	602.85	0.00352	578.78	0.0083	548.12	0.01824	713.4575	5.88E-04
578.365	4.50E-04	590.9	0.09828	602.98	0.00351	578.944	0.00843	548.376	0.01721	713.821	5.92E-04
578.4925	4.47E-04	591.05	0.09768	603.11	0.0035	579.108	0.00857	548.632	0.01622	714.1845	5.96E-04
578.62	4.45E-04	591.2	0.09708	603.24	0.00349	579.272	0.00871	548.888	0.01529	714.548	6.00E-04
578.7475	4.43E-04	591.35	0.09649	603.37	0.00348	579.436	0.00885	549.144	0.01439	714.9115	6.04E-04
578.875	4.41E-04	591.5	0.09591	603.5	0.00346	579.6	0.009	549.4	0.01354	715.275	6.08E-04
579.0025	4.39E-04	591.65	0.09532	603.63	0.00345	579.764	0.00915	549.656	0.01273	715.6385	6.12E-04
579.13	4.38E-04	591.8	0.09475	603.76	0.00344	579.928	0.0093	549.912	0.01196	716.002	6.17E-04
579.2575	4.37E-04	591.95	0.09418	603.89	0.00342	580.092	0.00946	550.168	0.01124	716.3655	6.21E-04
579.385	4.35E-04	592.1	0.09361	604.02	0.00341	580.256	0.00962	550.424	0.01054	716.729	6.26E-04
579.5125	4.34E-04	592.25	0.09305	604.15	0.00339	580.42	0.00979	550.68	0.00989	717.0925	6.31E-04
579.64	4.33E-04	592.4	0.0925	604.28	0.00338	580.584	0.00996	550.936	0.00927	717.456	6.36E-04
579.7675	4.33E-04	592.55	0.09195	604.41	0.00337	580.748	0.01013	551.192	0.00868	717.8195	6.42E-04
579.895	4.32E-04	592.7	0.0914	604.54	0.00335	580.912	0.01031	551.448	0.00813	718.183	6.48E-04
580.0225	4.32E-04	592.85	0.09087	604.67	0.00333	581.076	0.01049	551.704	0.0076	718.5465	6.55E-04
580.15	4.31E-04	593	0.09034	604.8	0.00332	581.24	0.01068	551.96	0.00711	718.91	6.63E-04
580.2775	4.31E-04	593.15	0.08981	604.93	0.0033	581.404	0.01086	552.216	0.00664	719.2735	6.71E-04
580.405	4.31E-04	593.3	0.08929	605.06	0.00329	581.568	0.01106	552.472	0.0062	719.637	6.80E-04
580.5325	4.31E-04	593.45	0.08878	605.19	0.00327	581.732	0.01125	552.728	0.00578	720.0005	6.89E-04
580.66	4.32E-04	593.6	0.08828	605.32	0.00325	581.896	0.01145	552.984	0.00539	720.364	7.00E-04
580.7875	4.32E-04	593.75	0.08778	605.45	0.00324	582.06	0.01166	553.24	0.00502	720.7275	7.12E-04
580.915	4.33E-04	593.9	0.08729	605.58	0.00322	582.224	0.01186	553.496	0.00468	721.091	7.25E-04
581.0425	4.34E-04	594.05	0.0868	605.71	0.0032	582.388	0.01207	553.752	0.00435	721.4545	7.39E-04
581.17	4.35E-04	594.2	0.08632	605.84	0.00318	582.552	0.01229	554.008	0.00405	721.818	7.55E-04
581.2975	4.36E-04	594.35	0.08585	605.97	0.00316	582.716	0.01251	554.264	0.00376	722.1815	7.72E-04
581.425	4.37E-04	594.5	0.08538	606.1	0.00315	582.88	0.01273	554.52	0.00349	722.545	7.91E-04
581.5525	4.39E-04	594.65	0.08493	606.23	0.00313	583.044	0.01296	554.776	0.00324	722.9085	8.12E-04
581.68	4.40E-04	594.8	0.08447	606.36	0.00311	583.208	0.01319	555.032	0.00301	723.272	8.34E-04
581.8075	4.42E-04	594.95	0.08403	606.49	0.00309	583.372	0.01342	555.288	0.00279	723.6355	8.59E-04
581.935	4.44E-04	595.1	0.08359	606.62	0.00307	583.536	0.01366	555.544	0.00258	723.999	8.85E-04
582.0625	4.46E-04	595.25	0.08316	606.75	0.00305	583.7	0.0139	555.8	0.00239	724.3625	9.15E-04
582.19	4.48E-04	595.4	0.08273	606.88	0.00303	583.864	0.01414	556.056	0.00221	724.726	9.46E-04
582.3175	4.51E-04	595.55	0.08232	607.01	0.00301	584.028	0.01439	556.312	0.00205	725.0895	9.81E-04
582.445	4.53E-04	595.7	0.08191	607.14	0.00299	584.192	0.01464	556.568	0.00189	725.453	0.00102
582.5725	4.56E-04	595.85	0.0815	607.27	0.00297	584.356	0.0149	556.824	0.00175	725.8165	0.00106
582.7	4.59E-04	596	0.0811	607.4	0.00295	584.52	0.01516	557.08	0.00161	726.18	0.0011
582.8275	4.62E-04	596.15	0.08071	607.53	0.00293	584.684	0.01542	557.336	0.00149	726.5435	0.00115
582.955	4.65E-04	596.3	0.08033	607.66	0.00291	584.848	0.01569	557.592	0.00137	726.907	0.0012
583.0825	4.69E-04	596.45	0.07995	607.79	0.00289	585.012	0.01596	557.848	0.00126	727.2705	0.00125
583.21	4.72E-04	596.6	0.07958	607.92	0.00287	585.176	0.01623	558.104	0.00116	727.634	0.00131
583.3375	4.76E-04	596.75	0.07921	608.05	0.00285	585.34	0.01651	558.36	0.00107	727.9975	0.00137
583.465	4.80E-04	596.9	0.07885	608.18	0.00283	585.504	0.01679	558.616	9.81E-04	728.361	0.00143
583.5925	4.84E-04	597.05	0.0785	608.31	0.0028	585.668	0.01707	558.872	9.01E-04	728.7245	0.0015
583.72	4.88E-04	597.2	0.07815	608.44	0.00278	585.832	0.01736	559.128	8.27E-04	729.088	0.00157
583.8475	4.93E-04	597.35	0.0778	608.57	0.00276	585.996	0.01765	559.384	7.59E-04	729.4515	0.00165

583.975	4.97E-04	597.5	0.07747	608.7	0.00274	586.16	0.01794	559.64	6.96E-04	729.815	0.00173
584.1025	5.02E-04	597.65	0.07714	608.83	0.00272	586.324	0.01824	559.896	6.37E-04	730.1785	0.00182
584.23	5.07E-04	597.8	0.07681	608.96	0.0027	586.488	0.01854	560.152	5.84E-04	730.542	0.00191
584.3575	5.12E-04	597.95	0.07649	609.09	0.00268	586.652	0.01884	560.408	5.34E-04	730.9055	0.002
584.485	5.18E-04	598.1	0.07617	609.22	0.00266	586.816	0.01915	560.664	4.88E-04	731.269	0.0021
584.6125	5.23E-04	598.25	0.07586	609.35	0.00263	586.98	0.01945	560.92	4.46E-04	731.6325	0.0022
584.74	5.29E-04	598.4	0.07556	609.48	0.00261	587.144	0.01977	561.176	4.08E-04	731.996	0.00231
584.8675	5.35E-04	598.55	0.07526	609.61	0.00259	587.308	0.02008	561.432	3.72E-04	732.3595	0.00242
584.995	5.41E-04	598.7	0.07496	609.74	0.00257	587.472	0.0204	561.688	3.39E-04	732.723	0.00254
585.1225	5.48E-04	598.85	0.07467	609.87	0.00255	587.636	0.02072	561.944	3.09E-04	733.0865	0.00266
585.25	5.54E-04	599	0.07438	610	0.00253	587.8	0.02104	562.2	2.82E-04	733.45	0.00278
585.3775	5.61E-04	599.15	0.0741	610.13	0.0025	587.964	0.02136	562.456	2.56E-04	733.8135	0.00291
585.505	5.68E-04	599.3	0.07382	610.26	0.00248	588.128	0.02169	562.712	2.33E-04	734.177	0.00304
585.6325	5.76E-04	599.45	0.07354	610.39	0.00246	588.292	0.02202	562.968	2.12E-04	734.5405	0.00318
585.76	5.83E-04	599.6	0.07327	610.52	0.00244	588.456	0.02235	563.224	1.93E-04	734.904	0.00332
585.8875	5.91E-04	599.75	0.073	610.65	0.00242	588.62	0.02269	563.48	1.75E-04	735.2675	0.00346
586.015	5.99E-04	599.9	0.07273	610.78	0.0024	588.784	0.02302	563.736	1.59E-04	735.631	0.00361
586.1425	6.07E-04	600.05	0.07247	610.91	0.00238	588.948	0.02336	563.992	1.44E-04	735.9945	0.00376
586.27	6.16E-04	600.2	0.07221	611.04	0.00236	589.112	0.0237	564.248	1.30E-04	736.358	0.00391
586.3975	6.24E-04	600.35	0.07195	611.17	0.00234	589.276	0.02404	564.504	1.18E-04	736.7215	0.00406
586.525	6.33E-04	600.5	0.07169	611.3	0.00231	589.44	0.02438	564.76	1.07E-04	737.085	0.00421
586.6525	6.43E-04	600.65	0.07144	611.43	0.00229	589.604	0.02473	565.016	9.67E-05	737.4485	0.00437
586.78	6.52E-04	600.8	0.07119	611.56	0.00227	589.768	0.02507	565.272	8.74E-05	737.812	0.00452
586.9075	6.62E-04	600.95	0.07094	611.69	0.00225	589.932	0.02542	565.528	7.90E-05	738.1755	0.00468
587.035	6.72E-04	601.1	0.07069	611.82	0.00223	590.096	0.02577	565.784	7.13E-05	738.539	0.00484
587.1625	6.83E-04	601.25	0.07044	611.95	0.00221	590.26	0.02612	566.04	6.43E-05	738.9025	0.005
587.29	6.93E-04	601.4	0.0702	612.08	0.00219	590.424	0.02647	566.296	5.80E-05	739.266	0.00515
587.4175	7.04E-04	601.55	0.06995	612.21	0.00217	590.588	0.02682	566.552	5.22E-05	739.6295	0.00531
587.545	7.15E-04	601.7	0.06971	612.34	0.00215	590.752	0.02717	566.808	4.70E-05	739.993	0.00546
587.6725	7.27E-04	601.85	0.06947	612.47	0.00213	590.916	0.02752	567.064	4.23E-05	740.3565	0.00561
587.8	7.39E-04	602	0.06923	612.6	0.00211	591.08	0.02788	567.32	3.81E-05	740.72	0.00576
587.9275	7.51E-04	602.15	0.06899	612.73	0.00209	591.244	0.02823	567.576	3.42E-05	741.0835	0.00591
588.055	7.64E-04	602.3	0.06875	612.86	0.00207	591.408	0.02858	567.832	3.07E-05	741.447	0.00605
588.1825	7.77E-04	602.45	0.06851	612.99	0.00205	591.572	0.02893	568.088	2.76E-05	741.8105	0.00618
588.31	7.90E-04	602.6	0.06827	613.12	0.00204	591.736	0.02929	568.344	2.47E-05	742.174	0.00632
588.4375	8.03E-04	602.75	0.06803	613.25	0.00202	591.9	0.02964	568.6	2.22E-05	742.5375	0.00645
588.565	8.17E-04	602.9	0.06779	613.38	0.002	592.064	0.02999	568.856	1.99E-05	742.901	0.00657
588.6925	8.31E-04	603.05	0.06754	613.51	0.00198	592.228	0.03034	569.112	1.78E-05	743.2645	0.00669
588.82	8.46E-04	603.2	0.0673	613.64	0.00196	592.392	0.03069	569.368	1.59E-05	743.628	0.0068
588.9475	8.61E-04	603.35	0.06706	613.77	0.00194	592.556	0.03104	569.624	1.42E-05	743.9915	0.0069
589.075	8.76E-04	603.5	0.06681	613.9	0.00193	592.72	0.03139	569.88	1.27E-05	744.355	0.007
589.2025	8.92E-04	603.65	0.06657	614.03	0.00191	592.884	0.03173	570.136	1.14E-05	744.7185	0.00709
589.33	9.08E-04	603.8	0.06632	614.16	0.00189	593.048	0.03208	570.392	1.01E-05	745.082	0.00717
589.4575	9.25E-04	603.95	0.06607	614.29	0.00187	593.212	0.03242	570.648	9.04E-06	745.4455	0.00725
589.585	9.42E-04	604.1	0.06582	614.42	0.00186	593.376	0.03276	570.904	8.06E-06	745.809	0.00732
589.7125	9.59E-04	604.25	0.06557	614.55	0.00184	593.54	0.0331	571.16	7.18E-06	746.1725	0.00737
589.84	9.77E-04	604.4	0.06532	614.68	0.00183	593.704	0.03344	571.416	6.39E-06	746.536	0.00743
589.9675	9.95E-04	604.55	0.06506	614.81	0.00181	593.868	0.03377	571.672	5.69E-06	746.8995	0.00747
590.095	0.00101	604.7	0.0648	614.94	0.00179	594.032	0.03411	571.928	5.06E-06	747.263	0.0075
590.2225	0.00103	604.85	0.06454	615.07	0.00178	594.196	0.03444	572.184	4.50E-06	747.6265	0.00753
590.35	0.00105	605	0.06428	615.2	0.00176	594.36	0.03476	572.44	3.99E-06	747.99	0.00754

590.4775	0.00107	605.15	0.06402	615.33	0.00175	594.524	0.03508	572.696	3.55E-06	748.3535	0.00755
590.605	0.00109	605.3	0.06375	615.46	0.00173	594.688	0.0354	572.952	3.15E-06	748.717	0.00755
590.7325	0.00111	605.45	0.06348	615.59	0.00172	594.852	0.03572	573.208	2.80E-06	749.0805	0.00754
590.86	0.00113	605.6	0.06321	615.72	0.0017	595.016	0.03603	573.464	2.48E-06	749.444	0.00753
590.9875	0.00116	605.75	0.06293	615.85	0.00169	595.18	0.03634	573.72	2.20E-06	749.8075	0.00751
591.115	0.00118	605.9	0.06265	615.98	0.00168	595.344	0.03665	573.976	1.95E-06	750.171	0.00747
591.2425	0.0012	606.05	0.06237	616.11	0.00166	595.508	0.03695	574.232	1.73E-06	750.5345	0.00744
591.37	0.00122	606.2	0.06208	616.24	0.00165	595.672	0.03724	574.488	1.54E-06	750.898	0.00739
591.4975	0.00125	606.35	0.0618	616.37	0.00164	595.836	0.03753	574.744	1.37E-06	751.2615	0.00734
591.625	0.00127	606.5	0.0615	616.5	0.00162	596	0.03782	575	1.22E-06	751.625	0.00728
591.7525	0.0013	606.65	0.06121	616.63	0.00161	596.164	0.0381	575.256	1.08E-06	751.9885	0.00722
591.88	0.00132	606.8	0.06091	616.76	0.0016	596.328	0.03838	575.512	9.67E-07	752.352	0.00715
592.0075	0.00135	606.95	0.06061	616.89	0.00159	596.492	0.03865	575.768	8.65E-07	752.7155	0.00708
592.135	0.00137	607.1	0.0603	617.02	0.00157	596.656	0.03892	576.024	7.77E-07	753.079	0.00701
592.2625	0.0014	607.25	0.05999	617.15	0.00156	596.82	0.03918	576.28	7.01E-07	753.4425	0.00693
592.39	0.00143	607.4	0.05968	617.28	0.00155	596.984	0.03943	576.536	6.36E-07	753.806	0.00685
592.5175	0.00146	607.55	0.05936	617.41	0.00154	597.148	0.03968	576.792	5.81E-07	754.1695	0.00677
592.645	0.00148	607.7	0.05904	617.54	0.00153	597.312	0.03992	577.048	5.35E-07	754.533	0.00668
592.7725	0.00151	607.85	0.05872	617.67	0.00152	597.476	0.04016	577.304	4.98E-07	754.8965	0.0066
592.9	0.00154	608	0.05839	617.8	0.00151	597.64	0.04039	577.56	4.68E-07	755.26	0.00651
593.0275	0.00157	608.15	0.05806	617.93	0.0015	597.804	0.04061	577.816	4.45E-07	755.6235	0.00643
593.155	0.0016	608.3	0.05772	618.06	0.00149	597.968	0.04083	578.072	4.29E-07	755.987	0.00634
593.2825	0.00164	608.45	0.05738	618.19	0.00148	598.132	0.04104	578.328	4.19E-07	756.3505	0.00626
593.41	0.00167	608.6	0.05704	618.32	0.00147	598.296	0.04124	578.584	4.16E-07	756.714	0.00618
593.5375	0.0017	608.75	0.05669	618.45	0.00146	598.46	0.04143	578.84	4.19E-07	757.0775	0.00611
593.665	0.00173	608.9	0.05634	618.58	0.00146	598.624	0.04162	579.096	4.27E-07	757.441	0.00603
593.7925	0.00177	609.05	0.05599	618.71	0.00145	598.788	0.0418	579.352	4.41E-07	757.8045	0.00596
593.92	0.0018	609.2	0.05563	618.84	0.00144	598.952	0.04197	579.608	4.61E-07	758.168	0.0059
594.0475	0.00184	609.35	0.05527	618.97	0.00143	599.116	0.04214	579.864	4.87E-07	758.5315	0.00584
594.175	0.00187	609.5	0.0549	619.1	0.00143	599.28	0.0423	580.12	5.19E-07	758.895	0.00579
594.3025	0.00191	609.65	0.05453	619.23	0.00142	599.444	0.04244	580.376	5.58E-07	759.2585	0.00574
594.43	0.00194	609.8	0.05416	619.36	0.00141	599.608	0.04258	580.632	6.03E-07	759.622	0.0057
594.5575	0.00198	609.95	0.05378	619.49	0.00141	599.772	0.04272	580.888	6.54E-07	759.9855	0.00567
594.685	0.00202	610.1	0.0534	619.62	0.0014	599.936	0.04284	581.144	7.14E-07	760.349	0.00564
594.8125	0.00206	610.25	0.05302	619.75	0.00139	600.1	0.04296	581.4	7.81E-07	760.7125	0.00562
594.94	0.0021	610.4	0.05263	619.88	0.00139	600.264	0.04307	581.656	8.56E-07	761.076	0.00561
595.0675	0.00214	610.55	0.05224	620.01	0.00138	600.428	0.04316	581.912	9.40E-07	761.4395	0.00561
595.195	0.00218	610.7	0.05184	620.14	0.00138	600.592	0.04325	582.168	1.03E-06	761.803	0.00561
595.3225	0.00222	610.85	0.05144	620.27	0.00138	600.756	0.04334	582.424	1.14E-06	762.1665	0.00563
595.45	0.00226	611	0.05104	620.4	0.00137	600.92	0.04341	582.68	1.25E-06	762.53	0.00565
595.5775	0.0023	611.15	0.05064	620.53	0.00137	601.084	0.04347	582.936	1.38E-06	762.8935	0.00568
595.705	0.00235	611.3	0.05023	620.66	0.00136	601.248	0.04353	583.192	1.52E-06	763.257	0.00572
595.8325	0.00239	611.45	0.04982	620.79	0.00136	601.412	0.04358	583.448	1.68E-06	763.6205	0.00576
595.96	0.00243	611.6	0.04941	620.92	0.00136	601.576	0.04361	583.704	1.85E-06	763.984	0.00582
596.0875	0.00248	611.75	0.04899	621.05	0.00135	601.74	0.04364	583.96	2.04E-06	764.3475	0.00588
596.215	0.00252	611.9	0.04857	621.18	0.00135	601.904	0.04366	584.216	2.24E-06	764.711	0.00595
596.3425	0.00257	612.05	0.04815	621.31	0.00135	602.068	0.04367	584.472	2.47E-06	765.0745	0.00602
596.47	0.00262	612.2	0.04772	621.44	0.00135	602.232	0.04367	584.728	2.71E-06	765.438	0.00611
596.5975	0.00267	612.35	0.04729	621.57	0.00135	602.396	0.04367	584.984	2.98E-06	765.8015	0.0062
596.725	0.00271	612.5	0.04686	621.7	0.00135	602.56	0.04365	585.24	3.28E-06	766.165	0.00629
596.8525	0.00276	612.65	0.04643	621.83	0.00135	602.724	0.04362	585.496	3.60E-06	766.5285	0.00639

596.98	0.00281	612.8	0.04599	621.96	0.00134	602.888	0.04359	585.752	3.95E-06	766.892	0.0065
597.1075	0.00286	612.95	0.04556	622.09	0.00134	603.052	0.04355	586.008	4.34E-06	767.2555	0.00661
597.235	0.00291	613.1	0.04512	622.22	0.00134	603.216	0.04349	586.264	4.75E-06	767.619	0.00672
597.3625	0.00296	613.25	0.04467	622.35	0.00134	603.38	0.04343	586.52	5.21E-06	767.9825	0.00684
597.49	0.00302	613.4	0.04423	622.48	0.00134	603.544	0.04336	586.776	5.70E-06	768.346	0.00696
597.6175	0.00307	613.55	0.04379	622.61	0.00135	603.708	0.04328	587.032	6.24E-06	768.7095	0.00708
597.745	0.00312	613.7	0.04334	622.74	0.00135	603.872	0.0432	587.288	6.83E-06	769.073	0.0072
597.8725	0.00318	613.85	0.04289	622.87	0.00135	604.036	0.0431	587.544	7.46E-06	769.4365	0.00732
598	0.00323	614	0.04244	623	0.00135	604.2	0.043	587.8	8.15E-06	769.8	0.00745
598.1275	0.00329	614.15	0.04199	623.13	0.00135	604.364	0.04288	588.056	8.90E-06	770.1635	0.00757
598.255	0.00334	614.3	0.04153	623.26	0.00135	604.528	0.04276	588.312	9.71E-06	770.527	0.00769
598.3825	0.0034	614.45	0.04108	623.39	0.00136	604.692	0.04263	588.568	1.06E-05	770.8905	0.00781
598.51	0.00345	614.6	0.04062	623.52	0.00136	604.856	0.04249	588.824	1.15E-05	771.254	0.00792
598.6375	0.00351	614.75	0.04017	623.65	0.00136	605.02	0.04235	589.08	1.26E-05	771.6175	0.00803
598.765	0.00357	614.9	0.03971	623.78	0.00137	605.184	0.04219	589.336	1.37E-05	771.981	0.00814
598.8925	0.00363	615.05	0.03925	623.91	0.00137	605.348	0.04203	589.592	1.49E-05	772.3445	0.00824
599.02	0.00369	615.2	0.03879	624.04	0.00137	605.512	0.04186	589.848	1.61E-05	772.708	0.00834
599.1475	0.00375	615.35	0.03834	624.17	0.00138	605.676	0.04169	590.104	1.75E-05	773.0715	0.00843
599.275	0.00381	615.5	0.03788	624.3	0.00138	605.84	0.0415	590.36	1.90E-05	773.435	0.00851
599.4025	0.00387	615.65	0.03742	624.43	0.00139	606.004	0.04131	590.616	2.06E-05	773.7985	0.00859
599.53	0.00393	615.8	0.03696	624.56	0.00139	606.168	0.04111	590.872	2.24E-05	774.162	0.00866
599.6575	0.00399	615.95	0.0365	624.69	0.0014	606.332	0.04091	591.128	2.42E-05	774.5255	0.00872
599.785	0.00405	616.1	0.03604	624.82	0.0014	606.496	0.04069	591.384	2.62E-05	774.889	0.00877
599.9125	0.00412	616.25	0.03558	624.95	0.00141	606.66	0.04047	591.64	2.84E-05	775.2525	0.00881
600.04	0.00418	616.4	0.03512	625.08	0.00142	606.824	0.04025	591.896	3.07E-05	775.616	0.00884
600.1675	0.00424	616.55	0.03466	625.21	0.00142	606.988	0.04001	592.152	3.32E-05	775.9795	0.00886
600.295	0.00431	616.7	0.03421	625.34	0.00143	607.152	0.03978	592.408	3.58E-05	776.343	0.00887
600.4225	0.00437	616.85	0.03375	625.47	0.00144	607.316	0.03953	592.664	3.87E-05	776.7065	0.00888
600.55	0.00444	617	0.03329	625.6	0.00145	607.48	0.03928	592.92	4.17E-05	777.07	0.00887
600.6775	0.0045	617.15	0.03284	625.73	0.00145	607.644	0.03903	593.176	4.50E-05	777.4335	0.00885
600.805	0.00457	617.3	0.03238	625.86	0.00146	607.808	0.03876	593.432	4.84E-05	777.797	0.00882
600.9325	0.00464	617.45	0.03193	625.99	0.00147	607.972	0.0385	593.688	5.22E-05	778.1605	0.00878
601.06	0.0047	617.6	0.03148	626.12	0.00148	608.136	0.03823	593.944	5.61E-05	778.524	0.00873
601.1875	0.00477	617.75	0.03103	626.25	0.00149	608.3	0.03795	594.2	6.03E-05	778.8875	0.00867
601.315	0.00484	617.9	0.03058	626.38	0.0015	608.464	0.03767	594.456	6.48E-05	779.251	0.0086
601.4425	0.00491	618.05	0.03013	626.51	0.00151	608.628	0.03738	594.712	6.96E-05	779.6145	0.00852
601.57	0.00498	618.2	0.02969	626.64	0.00152	608.792	0.03709	594.968	7.47E-05	779.978	0.00842
601.6975	0.00505	618.35	0.02924	626.77	0.00153	608.956	0.0368	595.224	8.02E-05	780.3415	0.00832
601.825	0.00511	618.5	0.0288	626.9	0.00154	609.12	0.0365	595.48	8.59E-05	780.705	0.00821
601.9525	0.00518	618.65	0.02836	627.03	0.00155	609.284	0.0362	595.736	9.21E-05	781.0685	0.0081
602.08	0.00525	618.8	0.02792	627.16	0.00156	609.448	0.0359	595.992	9.86E-05	781.432	0.00797
602.2075	0.00532	618.95	0.02749	627.29	0.00157	609.612	0.03559	596.248	1.05E-04	781.7955	0.00783
602.335	0.0054	619.1	0.02706	627.42	0.00159	609.776	0.03528	596.504	1.13E-04	782.159	0.00769
602.4625	0.00547	619.25	0.02663	627.55	0.0016	609.94	0.03497	596.76	1.21E-04	782.5225	0.00754
602.59	0.00554	619.4	0.0262	627.68	0.00161	610.104	0.03465	597.016	1.29E-04	782.886	0.00738
602.7175	0.00561	619.55	0.02577	627.81	0.00162	610.268	0.03433	597.272	1.37E-04	783.2495	0.00722
602.845	0.00568	619.7	0.02535	627.94	0.00164	610.432	0.03401	597.528	1.47E-04	783.613	0.00705
602.9725	0.00575	619.85	0.02493	628.07	0.00165	610.596	0.03369	597.784	1.56E-04	783.9765	0.00688
603.1	0.00583	620	0.02451	628.2	0.00166	610.76	0.03336	598.04	1.67E-04	784.34	0.0067
603.2275	0.0059	620.15	0.0241	628.33	0.00168	610.924	0.03304	598.296	1.77E-04	784.7035	0.00652
603.355	0.00597	620.3	0.02369	628.46	0.00169	611.088	0.03271	598.552	1.89E-04	785.067	0.00633

603.4825	0.00604	620.45	0.02328	628.59	0.00171	611.252	0.03238	598.808	2.01E-04	785.4305	0.00615
603.61	0.00612	620.6	0.02287	628.72	0.00172	611.416	0.03206	599.064	2.13E-04	785.794	0.00596
603.7375	0.00619	620.75	0.02247	628.85	0.00174	611.58	0.03173	599.32	2.27E-04	786.1575	0.00576
603.865	0.00626	620.9	0.02207	628.98	0.00176	611.744	0.0314	599.576	2.41E-04	786.521	0.00557
603.9925	0.00634	621.05	0.02168	629.11	0.00177	611.908	0.03107	599.832	2.55E-04	786.8845	0.00538
604.12	0.00641	621.2	0.02129	629.24	0.00179	612.072	0.03074	600.088	2.71E-04	787.248	0.00518
604.2475	0.00648	621.35	0.0209	629.37	0.00181	612.236	0.03041	600.344	2.87E-04	787.6115	0.00499
604.375	0.00656	621.5	0.02051	629.5	0.00182	612.4	0.03008	600.6	3.04E-04	787.975	0.0048
604.5025	0.00663	621.65	0.02013	629.63	0.00184	612.564	0.02975	600.856	3.22E-04	788.3385	0.00461
604.63	0.0067	621.8	0.01976	629.76	0.00186	612.728	0.02942	601.112	3.41E-04	788.702	0.00442
604.7575	0.00678	621.95	0.01938	629.89	0.00188	612.892	0.02909	601.368	3.61E-04	789.0655	0.00423
604.885	0.00685	622.1	0.01901	630.02	0.0019	613.056	0.02877	601.624	3.81E-04	789.429	0.00405
605.0125	0.00692	622.25	0.01865	630.15	0.00192	613.22	0.02844	601.88	4.03E-04	789.7925	0.00387
605.14	0.007	622.4	0.01829	630.28	0.00194	613.384	0.02812	602.136	4.25E-04	790.156	0.00369
605.2675	0.00707	622.55	0.01793	630.41	0.00196	613.548	0.0278	602.392	4.49E-04	790.5195	0.00351
605.395	0.00714	622.7	0.01757	630.54	0.00198	613.712	0.02747	602.648	4.73E-04	790.883	0.00334
605.5225	0.00722	622.85	0.01723	630.67	0.002	613.876	0.02716	602.904	4.99E-04	791.2465	0.00318
605.65	0.00729	623	0.01688	630.8	0.00202	614.04	0.02684	603.16	5.26E-04	791.61	0.00301
605.7775	0.00736	623.15	0.01654	630.93	0.00204	614.204	0.02652	603.416	5.54E-04	791.9735	0.00286
605.905	0.00744	623.3	0.0162	631.06	0.00207	614.368	0.02621	603.672	5.83E-04	792.337	0.0027
606.0325	0.00751	623.45	0.01587	631.19	0.00209	614.532	0.0259	603.928	6.13E-04	792.7005	0.00255
606.16	0.00758	623.6	0.01554	631.32	0.00211	614.696	0.02559	604.184	6.44E-04	793.064	0.00241
606.2875	0.00766	623.75	0.01521	631.45	0.00214	614.86	0.02529	604.44	6.77E-04	793.4275	0.00227
606.415	0.00773	623.9	0.01489	631.58	0.00216	615.024	0.02499	604.696	7.11E-04	793.791	0.00214
606.5425	0.0078	624.05	0.01458	631.71	0.00218	615.188	0.02469	604.952	7.47E-04	794.1545	0.00201
606.67	0.00788	624.2	0.01426	631.84	0.00221	615.352	0.02439	605.208	7.84E-04	794.518	0.00189
606.7975	0.00795	624.35	0.01396	631.97	0.00224	615.516	0.0241	605.464	8.22E-04	794.8815	0.00177
606.925	0.00802	624.5	0.01365	632.1	0.00226	615.68	0.02381	605.72	8.61E-04	795.245	0.00166
607.0525	0.00809	624.65	0.01335	632.23	0.00229	615.844	0.02352	605.976	9.03E-04	795.6085	0.00155
607.18	0.00816	624.8	0.01306	632.36	0.00231	616.008	0.02324	606.232	9.45E-04	795.972	0.00145
607.3075	0.00823	624.95	0.01277	632.49	0.00234	616.172	0.02296	606.488	9.90E-04	796.3355	0.00135
607.435	0.00831	625.1	0.01248	632.62	0.00237	616.336	0.02268	606.744	0.00104	796.699	0.00126
607.5625	0.00838	625.25	0.0122	632.75	0.0024	616.5	0.02241	607	0.00108	797.0625	0.00117
607.69	0.00845	625.4	0.01192	632.88	0.00242	616.664	0.02214	607.256	0.00113	797.426	0.00109
607.8175	0.00852	625.55	0.01165	633.01	0.00245	616.828	0.02188	607.512	0.00118	797.7895	0.00101
607.945	0.00859	625.7	0.01138	633.14	0.00248	616.992	0.02161	607.768	0.00124	798.153	9.35E-04
608.0725	0.00866	625.85	0.01111	633.27	0.00251	617.156	0.02136	608.024	0.00129	798.5165	8.65E-04
608.2	0.00873	626	0.01085	633.4	0.00254	617.32	0.0211	608.28	0.00135	798.88	8.00E-04
608.3275	0.0088	626.15	0.0106	633.53	0.00257	617.484	0.02085	608.536	0.0014	799.2435	7.38E-04
608.455	0.00886	626.3	0.01035	633.66	0.0026	617.648	0.02061	608.792	0.00146	799.607	6.80E-04
608.5825	0.00893	626.45	0.0101	633.79	0.00264	617.812	0.02037	609.048	0.00153	799.9705	6.26E-04
608.71	0.009	626.6	0.00986	633.92	0.00267	617.976	0.02013	609.304	0.00159	800.334	5.76E-04
608.8375	0.00907	626.75	0.00962	634.05	0.0027	618.14	0.0199	609.56	0.00166	800.6975	5.29E-04
608.965	0.00914	626.9	0.00938	634.18	0.00273	618.304	0.01967	609.816	0.00172	801.061	4.85E-04
609.0925	0.0092	627.05	0.00915	634.31	0.00277	618.468	0.01944	610.072	0.00179	801.4245	4.44E-04
609.22	0.00927	627.2	0.00893	634.44	0.0028	618.632	0.01922	610.328	0.00187	801.788	4.06E-04
609.3475	0.00934	627.35	0.00871	634.57	0.00283	618.796	0.019	610.584	0.00194	802.1515	3.71E-04
609.475	0.0094	627.5	0.00849	634.7	0.00287	618.96	0.01879	610.84	0.00202	802.515	3.38E-04
609.6025	0.00947	627.65	0.00827	634.83	0.0029	619.124	0.01858	611.096	0.0021	802.8785	3.08E-04
609.73	0.00953	627.8	0.00806	634.96	0.00294	619.288	0.01837	611.352	0.00218	803.242	2.80E-04
609.8575	0.0096	627.95	0.00786	635.09	0.00298	619.452	0.01817	611.608	0.00226	803.6055	2.54E-04

609.985	0.00966	628.1	0.00766	635.22	0.00301	619.616	0.01798	611.864	0.00235	803.969	2.31E-04
610.1125	0.00973	628.25	0.00746	635.35	0.00305	619.78	0.01778	612.12	0.00244	804.3325	2.09E-04
610.24	0.00979	628.4	0.00727	635.48	0.00309	619.944	0.01759	612.376	0.00253	804.696	1.89E-04
610.3675	0.00985	628.55	0.00708	635.61	0.00312	620.108	0.01741	612.632	0.00262	805.0595	1.71E-04
610.495	0.00992	628.7	0.00689	635.74	0.00316	620.272	0.01723	612.888	0.00272	805.423	1.54E-04
610.6225	0.00998	628.85	0.00671	635.87	0.0032	620.436	0.01705	613.144	0.00282	805.7865	1.39E-04
610.75	0.01004	629	0.00653	636	0.00324	620.6	0.01688	613.4	0.00292	806.15	1.25E-04
610.8775	0.0101	629.15	0.00636	636.13	0.00328	620.764	0.01671	613.656	0.00303	806.5135	1.12E-04
611.005	0.01016	629.3	0.00619	636.26	0.00332	620.928	0.01654	613.912	0.00314	806.877	1.01E-04
611.1325	0.01022	629.45	0.00602	636.39	0.00336	621.092	0.01638	614.168	0.00325	807.2405	9.05E-05
611.26	0.01028	629.6	0.00586	636.52	0.0034	621.256	0.01622	614.424	0.00337	807.604	8.10E-05
611.3875	0.01034	629.75	0.0057	636.65	0.00344	621.42	0.01607	614.68	0.00349	807.9675	7.25E-05
611.515	0.0104	629.9	0.00554	636.78	0.00348	621.584	0.01592	614.936	0.00361	808.331	6.47E-05
611.6425	0.01046	630.05	0.00539	636.91	0.00353	621.748	0.01577	615.192	0.00373	808.6945	5.77E-05
611.77	0.01052	630.2	0.00524	637.04	0.00357	621.912	0.01562	615.448	0.00386	809.058	5.14E-05
611.8975	0.01058	630.35	0.00509	637.17	0.00361	622.076	0.01548	615.704	0.00399	809.4215	4.57E-05
612.025	0.01064	630.5	0.00495	637.3	0.00365	622.24	0.01534	615.96	0.00413	809.785	4.06E-05
612.1525	0.0107	630.65	0.00481	637.43	0.0037	622.404	0.01521	616.216	0.00427	810.1485	3.60E-05
612.28	0.01075	630.8	0.00468	637.56	0.00374	622.568	0.01508	616.472	0.00442	810.512	3.19E-05
612.4075	0.01081	630.95	0.00454	637.69	0.00378	622.732	0.01495	616.728	0.00457	810.8755	2.82E-05
612.535	0.01087	631.1	0.00441	637.82	0.00383	622.896	0.01482	616.984	0.00472	811.239	2.49E-05
612.6625	0.01092	631.25	0.00429	637.95	0.00387	623.06	0.0147	617.24	0.00488	811.6025	2.20E-05
612.79	0.01098	631.4	0.00417	638.08	0.00392	623.224	0.01458	617.496	0.00504	811.966	1.94E-05
612.9175	0.01103	631.55	0.00405	638.21	0.00396	623.388	0.01446	617.752	0.00521	812.3295	1.71E-05
613.045	0.01109	631.7	0.00393	638.34	0.00401	623.552	0.01434	618.008	0.00538	812.693	1.50E-05
613.1725	0.01114	631.85	0.00381	638.47	0.00406	623.716	0.01423	618.264	0.00555	813.0565	1.32E-05
613.3	0.0112	632	0.0037	638.6	0.0041	623.88	0.01412	618.52	0.00574	813.42	1.15E-05
613.4275	0.01125	632.15	0.0036	638.73	0.00415	624.044	0.01401	618.776	0.00592	813.7835	1.01E-05
613.555	0.0113	632.3	0.00349	638.86	0.0042	624.208	0.01391	619.032	0.00612	814.147	8.83E-06
613.6825	0.01136	632.45	0.00339	638.99	0.00424	624.372	0.01381	619.288	0.00632	814.5105	7.71E-06
613.81	0.01141	632.6	0.00329	639.12	0.00429	624.536	0.0137	619.544	0.00652	814.874	6.72E-06
613.9375	0.01146	632.75	0.00319	639.25	0.00434	624.7	0.01361	619.8	0.00673	815.2375	5.86E-06
614.065	0.01151	632.9	0.0031	639.38	0.00439	624.864	0.01351	620.056	0.00695	815.601	5.09E-06
614.1925	0.01156	633.05	0.003	639.51	0.00443	625.028	0.01341	620.312	0.00717	815.9645	4.42E-06
614.32	0.01161	633.2	0.00291	639.64	0.00448	625.192	0.01332	620.568	0.0074	816.328	3.84E-06
614.4475	0.01167	633.35	0.00283	639.77	0.00453	625.356	0.01323	620.824	0.00764	816.6915	3.32E-06
614.575	0.01172	633.5	0.00274	639.9	0.00458	625.52	0.01314	621.08	0.00789	817.055	2.87E-06
614.7025	0.01177	633.65	0.00266	640.03	0.00463	625.684	0.01305	621.336	0.00814	817.4185	2.48E-06
614.83	0.01182	633.8	0.00258	640.16	0.00468	625.848	0.01296	621.592	0.0084	817.782	2.14E-06
614.9575	0.01187	633.95	0.0025	640.29	0.00473	626.012	0.01288	621.848	0.00867	818.1455	1.85E-06
615.085	0.01192	634.1	0.00243	640.42	0.00477	626.176	0.01279	622.104	0.00894	818.509	1.59E-06
615.2125	0.01197	634.25	0.00235	640.55	0.00482	626.34	0.01271	622.36	0.00923	818.8725	1.37E-06
615.34	0.01201	634.4	0.00228	640.68	0.00487	626.504	0.01263	622.616	0.00952	819.236	1.17E-06
615.4675	0.01206	634.55	0.00221	640.81	0.00492	626.668	0.01254	622.872	0.00982	819.5995	1.00E-06
615.595	0.01211	634.7	0.00215	640.94	0.00497	626.832	0.01246	623.128	0.01013	819.963	8.60E-07
615.7225	0.01216	634.85	0.00208	641.07	0.00502	626.996	0.01239	623.384	0.01045	820.3265	7.35E-07
615.85	0.01221	635	0.00202	641.2	0.00507	627.16	0.01231	623.64	0.01078	820.69	6.27E-07
615.9775	0.01225	635.15	0.00196	641.33	0.00512	627.324	0.01223	623.896	0.01113	821.0535	5.35E-07
616.105	0.0123	635.3	0.0019	641.46	0.00517	627.488	0.01215	624.152	0.01148	821.417	4.55E-07
616.2325	0.01235	635.45	0.00184	641.59	0.00522	627.652	0.01208	624.408	0.01184	821.7805	3.87E-07
616.36	0.0124	635.6	0.00178	641.72	0.00527	627.816	0.012	624.664	0.01221	822.144	3.29E-07

616.4875	0.01244	635.75	0.00173	641.85	0.00532	627.98	0.01192	624.92	0.01259	822.5075	2.79E-07
616.615	0.01249	635.9	0.00168	641.98	0.00536	628.144	0.01185	625.176	0.01299	822.871	2.36E-07
616.7425	0.01254	636.05	0.00163	642.11	0.00541	628.308	0.01177	625.432	0.01339	823.2345	2.00E-07
616.87	0.01258	636.2	0.00158	642.24	0.00546	628.472	0.0117	625.688	0.01381	823.598	1.69E-07
616.9975	0.01263	636.35	0.00153	642.37	0.00551	628.636	0.01162	625.944	0.01424	823.9615	1.42E-07
617.125	0.01268	636.5	0.00148	642.5	0.00556	628.8	0.01155	626.2	0.01468	824.325	1.20E-07
617.2525	0.01272	636.65	0.00144	642.63	0.00561	628.964	0.01148	626.456	0.01514	824.6885	1.01E-07
617.38	0.01277	636.8	0.0014	642.76	0.00565	629.128	0.0114	626.712	0.0156	825.052	8.48E-08
617.5075	0.01281	636.95	0.00135	642.89	0.0057	629.292	0.01133	626.968	0.01609	825.4155	7.12E-08
617.635	0.01286	637.1	0.00131	643.02	0.00575	629.456	0.01125	627.224	0.01658	825.779	5.97E-08
617.7625	0.0129	637.25	0.00127	643.15	0.0058	629.62	0.01118	627.48	0.01709	826.1425	4.99E-08
617.89	0.01295	637.4	0.00124	643.28	0.00584	629.784	0.01111	627.736	0.01761	826.506	4.17E-08
618.0175	0.01299	637.55	0.0012	643.41	0.00589	629.948	0.01103	627.992	0.01815	826.8695	3.48E-08
618.145	0.01304	637.7	0.00116	643.54	0.00594	630.112	0.01096	628.248	0.0187	827.233	2.90E-08
618.2725	0.01308	637.85	0.00113	643.67	0.00598	630.276	0.01088	628.504	0.01927	827.5965	2.42E-08
618.4	0.01313	638	0.0011	643.8	0.00603	630.44	0.01081	628.76	0.01985	827.96	2.01E-08
618.5275	0.01317	638.15	0.00106	643.93	0.00607	630.604	0.01073	629.016	0.02044	828.3235	1.67E-08
618.655	0.01322	638.3	0.00103	644.06	0.00612	630.768	0.01066	629.272	0.02105	828.687	1.38E-08
618.7825	0.01326	638.45	0.001	644.19	0.00616	630.932	0.01058	629.528	0.02168	829.0505	1.15E-08
618.91	0.0133	638.6	9.73E-04	644.32	0.0062	631.096	0.0105	629.784	0.02232	829.414	9.48E-09
619.0375	0.01335	638.75	9.45E-04	644.45	0.00625	631.26	0.01043	630.04	0.02298	829.7775	7.83E-09
619.165	0.01339	638.9	9.18E-04	644.58	0.00629	631.424	0.01035	630.296	0.02365	830.141	6.46E-09
619.2925	0.01343	639.05	8.92E-04	644.71	0.00633	631.588	0.01027	630.552	0.02434	830.5045	5.33E-09
619.42	0.01348	639.2	8.66E-04	644.84	0.00637	631.752	0.01019	630.808	0.02505	830.868	4.38E-09
619.5475	0.01352	639.35	8.42E-04	644.97	0.00641	631.916	0.01011	631.064	0.02577	831.2315	3.60E-09
619.675	0.01356	639.5	8.18E-04	645.1	0.00645	632.08	0.01003	631.32	0.0265	831.595	2.96E-09
619.8025	0.01361	639.65	7.95E-04	645.23	0.00649	632.244	0.00995	631.576	0.02726	831.9585	2.43E-09
619.93	0.01365	639.8	7.73E-04	645.36	0.00653	632.408	0.00987	631.832	0.02802	832.322	1.99E-09
620.0575	0.01369	639.95	7.52E-04	645.49	0.00657	632.572	0.00979	632.088	0.02881	832.6855	1.63E-09
620.185	0.01374	640.1	7.31E-04	645.62	0.00661	632.736	0.00971	632.344	0.02961	833.049	1.34E-09
620.3125	0.01378	640.25	7.11E-04	645.75	0.00665	632.9	0.00962	632.6	0.03042	833.4125	1.10E-09
620.44	0.01382	640.4	6.92E-04	645.88	0.00668	633.064	0.00954	632.856	0.03125	833.776	9.01E-10
620.5675	0.01386	640.55	6.74E-04	646.01	0.00672	633.228	0.00946	633.112	0.0321	834.1395	7.43E-10
620.695	0.01391	640.7	6.56E-04	646.14	0.00676	633.392	0.00937	633.368	0.03296	834.503	6.17E-10
620.8225	0.01395	640.85	6.38E-04	646.27	0.00679	633.556	0.00929	633.624	0.03383	834.8665	5.18E-10
620.95	0.01399	641	6.22E-04	646.4	0.00682	633.72	0.0092	633.88	0.03472	835.23	4.42E-10
621.0775	0.01403	641.15	6.05E-04	646.53	0.00686	633.884	0.00912	634.136	0.03562	835.5935	3.85E-10
621.205	0.01407	641.3	5.90E-04	646.66	0.00689	634.048	0.00903	634.392	0.03654	835.957	3.46E-10
621.3325	0.01412	641.45	5.75E-04	646.79	0.00692	634.212	0.00894	634.648	0.03747	836.3205	3.23E-10
621.46	0.01416	641.6	5.60E-04	646.92	0.00695	634.376	0.00885	634.904	0.03841	836.684	3.16E-10
621.5875	0.0142	641.75	5.46E-04	647.05	0.00698	634.54	0.00877	635.16	0.03937	837.0475	3.23E-10
621.715	0.01424	641.9	5.32E-04	647.18	0.00701	634.704	0.00868	635.416	0.04033	837.411	3.46E-10
621.8425	0.01428	642.05	5.19E-04	647.31	0.00703	634.868	0.00859	635.672	0.04131	837.7745	3.86E-10
621.97	0.01432	642.2	5.06E-04	647.44	0.00706	635.032	0.0085	635.928	0.04229	838.138	4.45E-10
622.0975	0.01436	642.35	4.94E-04	647.57	0.00709	635.196	0.00841	636.184	0.04329	838.5015	5.25E-10
622.225	0.0144	642.5	4.82E-04	647.7	0.00711	635.36	0.00832	636.44	0.04429	838.865	6.30E-10
622.3525	0.01444	642.65	4.70E-04	647.83	0.00714	635.524	0.00823	636.696	0.0453	839.2285	7.64E-10
622.48	0.01448	642.8	4.59E-04	647.96	0.00716	635.688	0.00813	636.952	0.04632	839.592	9.33E-10
622.6075	0.01452	642.95	4.48E-04	648.09	0.00718	635.852	0.00804	637.208	0.04735	839.9555	1.15E-09
622.735	0.01456	643.1	4.38E-04	648.22	0.0072	636.016	0.00795	637.464	0.04838	840.319	1.41E-09
622.8625	0.0146	643.25	4.28E-04	648.35	0.00722	636.18	0.00786	637.72	0.04941	840.6825	1.74E-09

622.99	0.01463	643.4	4.18E-04	648.48	0.00724	636.344	0.00776	637.976	0.05045	841.046	2.14E-09
623.1175	0.01467	643.55	4.08E-04	648.61	0.00726	636.508	0.00767	638.232	0.05149	841.4095	2.63E-09
623.245	0.01471	643.7	3.99E-04	648.74	0.00728	636.672	0.00758	638.488	0.05253	841.773	3.24E-09
623.3725	0.01475	643.85	3.90E-04	648.87	0.00729	636.836	0.00748	638.744	0.05357	842.1365	3.98E-09
623.5	0.01478	644	3.82E-04	649	0.00731	637	0.00739	639	0.05461	842.5	4.89E-09
623.6275	0.01482	644.15	3.73E-04	649.13	0.00732	637.164	0.00729	639.256	0.05565	842.8635	6.00E-09
623.755	0.01486	644.3	3.65E-04	649.26	0.00733	637.328	0.0072	639.512	0.05669	843.227	7.35E-09
623.8825	0.01489	644.45	3.57E-04	649.39	0.00735	637.492	0.0071	639.768	0.05772	843.5905	9.00E-09
624.01	0.01493	644.6	3.49E-04	649.52	0.00736	637.656	0.00701	640.024	0.05874	843.954	1.10E-08
624.1375	0.01496	644.75	3.42E-04	649.65	0.00737	637.82	0.00691	640.28	0.05975	844.3175	1.34E-08
624.265	0.015	644.9	3.35E-04	649.78	0.00737	637.984	0.00682	640.536	0.06076	844.681	1.64E-08
624.3925	0.01503	645.05	3.27E-04	649.91	0.00738	638.148	0.00672	640.792	0.06176	845.0445	1.99E-08
624.52	0.01506	645.2	3.21E-04	650.04	0.00739	638.312	0.00663	641.048	0.06274	845.408	2.42E-08
624.6475	0.01509	645.35	3.14E-04	650.17	0.00739	638.476	0.00653	641.304	0.06371	845.7715	2.94E-08
624.775	0.01513	645.5	3.07E-04	650.3	0.0074	638.64	0.00644	641.56	0.06467	846.135	3.57E-08
624.9025	0.01516	645.65	3.01E-04	650.43	0.0074	638.804	0.00635	641.816	0.06561	846.4985	4.32E-08
625.03	0.01519	645.8	2.95E-04	650.56	0.0074	638.968	0.00625	642.072	0.06653	846.862	5.23E-08
625.1575	0.01522	645.95	2.89E-04	650.69	0.0074	639.132	0.00616	642.328	0.06744	847.2255	6.31E-08
625.285	0.01525	646.1	2.83E-04	650.82	0.0074	639.296	0.00606	642.584	0.06832	847.589	7.61E-08
625.4125	0.01528	646.25	2.77E-04	650.95	0.0074	639.46	0.00597	642.84	0.06919	847.9525	9.17E-08
625.54	0.01531	646.4	2.72E-04	651.08	0.0074	639.624	0.00588	643.096	0.07003	848.316	1.10E-07
625.6675	0.01533	646.55	2.66E-04	651.21	0.00739	639.788	0.00578	643.352	0.07084	848.6795	1.33E-07
625.795	0.01536	646.7	2.61E-04	651.34	0.00739	639.952	0.00569	643.608	0.07163	849.043	1.59E-07
625.9225	0.01539	646.85	2.56E-04	651.47	0.00738	640.116	0.0056	643.864	0.07239	849.4065	1.91E-07
626.05	0.01541	647	2.51E-04	651.6	0.00738	640.28	0.00551	644.12	0.07313	849.77	2.28E-07
626.1775	0.01544	647.15	2.46E-04	651.73	0.00737	640.444	0.00541	644.376	0.07383	850.1335	2.73E-07
626.305	0.01546	647.3	2.41E-04	651.86	0.00736	640.608	0.00532	644.632	0.0745	850.497	3.25E-07
626.4325	0.01548	647.45	2.36E-04	651.99	0.00735	640.772	0.00523	644.888	0.07514	850.8605	3.88E-07
626.56	0.0155	647.6	2.31E-04	652.12	0.00734	640.936	0.00514	645.144	0.07575	851.224	4.62E-07
626.6875	0.01552	647.75	2.27E-04	652.25	0.00732	641.1	0.00505	645.4	0.07632	851.5875	5.49E-07
626.815	0.01554	647.9	2.22E-04	652.38	0.00731	641.264	0.00496	645.656	0.07685	851.951	6.52E-07
626.9425	0.01556	648.05	2.18E-04	652.51	0.00729	641.428	0.00488	645.912	0.07735	852.3145	7.73E-07
627.07	0.01558	648.2	2.14E-04	652.64	0.00728	641.592	0.00479	646.168	0.07781	852.678	9.15E-07
627.1975	0.0156	648.35	2.09E-04	652.77	0.00726	641.756	0.0047	646.424	0.07823	853.0415	1.08E-06
627.325	0.01562	648.5	2.05E-04	652.9	0.00724	641.92	0.00461	646.68	0.07861	853.405	1.28E-06
627.4525	0.01563	648.65	2.01E-04	653.03	0.00722	642.084	0.00453	646.936	0.07894	853.7685	1.51E-06
627.58	0.01565	648.8	1.97E-04	653.16	0.0072	642.248	0.00444	647.192	0.07924	854.132	1.78E-06
627.7075	0.01566	648.95	1.93E-04	653.29	0.00718	642.412	0.00436	647.448	0.07949	854.4955	2.09E-06
627.835	0.01567	649.1	1.90E-04	653.42	0.00716	642.576	0.00428	647.704	0.07971	854.859	2.45E-06
627.9625	0.01568	649.25	1.86E-04	653.55	0.00714	642.74	0.00419	647.96	0.07987	855.2225	2.88E-06
628.09	0.01569	649.4	1.82E-04	653.68	0.00711	642.904	0.00411	648.216	0.07999	855.586	3.37E-06
628.2175	0.0157	649.55	1.78E-04	653.81	0.00709	643.068	0.00403	648.472	0.08007	855.9495	3.95E-06
628.345	0.01571	649.7	1.75E-04	653.94	0.00706	643.232	0.00395	648.728	0.0801	856.313	4.61E-06
628.4725	0.01572	649.85	1.71E-04	654.07	0.00704	643.396	0.00387	648.984	0.08009	856.6765	5.39E-06
628.6	0.01572	650	1.68E-04	654.2	0.00701	643.56	0.0038	649.24	0.08003	857.04	6.28E-06
628.7275	0.01573	650.15	1.65E-04	654.33	0.00698	643.724	0.00372	649.496	0.07993	857.4035	7.31E-06
628.855	0.01573	650.3	1.61E-04	654.46	0.00695	643.888	0.00364	649.752	0.07978	857.767	8.49E-06
628.9825	0.01573	650.45	1.58E-04	654.59	0.00692	644.052	0.00357	650.008	0.07958	858.1305	9.86E-06
629.11	0.01573	650.6	1.55E-04	654.72	0.00689	644.216	0.00349	650.264	0.07934	858.494	1.14E-05
629.2375	0.01573	650.75	1.52E-04	654.85	0.00685	644.38	0.00342	650.52	0.07906	858.8575	1.32E-05
629.365	0.01573	650.9	1.48E-04	654.98	0.00682	644.544	0.00335	650.776	0.07873	859.221	1.53E-05

629.4925	0.01572	651.05	1.45E-04	655.11	0.00679	644.708	0.00328	651.032	0.07835	859.5845	1.77E-05
629.62	0.01572	651.2	1.42E-04	655.24	0.00675	644.872	0.00321	651.288	0.07793	859.948	2.04E-05
629.7475	0.01571	651.35	1.39E-04	655.37	0.00672	645.036	0.00314	651.544	0.07747	860.3115	2.35E-05
629.875	0.01571	651.5	1.36E-04	655.5	0.00668	645.2	0.00307	651.8	0.07697	860.675	2.70E-05
630.0025	0.0157	651.65	1.34E-04	655.63	0.00664	645.364	0.003	652.056	0.07642	861.0385	3.10E-05
630.13	0.01569	651.8	1.31E-04	655.76	0.0066	645.528	0.00294	652.312	0.07583	861.402	3.56E-05
630.2575	0.01567	651.95	1.28E-04	655.89	0.00656	645.692	0.00287	652.568	0.0752	861.7655	4.08E-05
630.385	0.01566	652.1	1.25E-04	656.02	0.00652	645.856	0.00281	652.824	0.07453	862.129	4.67E-05
630.5125	0.01565	652.25	1.22E-04	656.15	0.00648	646.02	0.00275	653.08	0.07383	862.4925	5.33E-05
630.64	0.01563	652.4	1.20E-04	656.28	0.00644	646.184	0.00268	653.336	0.07308	862.856	6.08E-05
630.7675	0.01561	652.55	1.17E-04	656.41	0.0064	646.348	0.00262	653.592	0.0723	863.2195	6.93E-05
630.895	0.01559	652.7	1.15E-04	656.54	0.00636	646.512	0.00257	653.848	0.07149	863.583	7.89E-05
631.0225	0.01557	652.85	1.12E-04	656.67	0.00632	646.676	0.00251	654.104	0.07064	863.9465	8.97E-05
631.15	0.01555	653	1.10E-04	656.8	0.00627	646.84	0.00245	654.36	0.06976	864.31	1.02E-04
631.2775	0.01553	653.15	1.07E-04	656.93	0.00623	647.004	0.00239	654.616	0.06885	864.6735	1.15E-04
631.405	0.0155	653.3	1.05E-04	657.06	0.00619	647.168	0.00234	654.872	0.06791	865.037	1.31E-04
631.5325	0.01548	653.45	1.02E-04	657.19	0.00614	647.332	0.00229	655.128	0.06694	865.4005	1.48E-04
631.66	0.01545	653.6	1.00E-04	657.32	0.0061	647.496	0.00223	655.384	0.06594	865.764	1.67E-04
631.7875	0.01542	653.75	9.77E-05	657.45	0.00605	647.66	0.00218	655.64	0.06492	866.1275	1.88E-04
631.915	0.01539	653.9	9.54E-05	657.58	0.00601	647.824	0.00213	655.896	0.06388	866.491	2.12E-04
632.0425	0.01536	654.05	9.32E-05	657.71	0.00596	647.988	0.00208	656.152	0.06281	866.8545	2.38E-04
632.17	0.01532	654.2	9.10E-05	657.84	0.00591	648.152	0.00204	656.408	0.06173	867.218	2.68E-04
632.2975	0.01529	654.35	8.88E-05	657.97	0.00586	648.316	0.00199	656.664	0.06062	867.5815	3.00E-04
632.425	0.01525	654.5	8.67E-05	658.1	0.00582	648.48	0.00194	656.92	0.0595	867.945	3.36E-04
632.5525	0.01521	654.65	8.46E-05	658.23	0.00577	648.644	0.0019	657.176	0.05836	868.3085	3.76E-04
632.68	0.01517	654.8	8.26E-05	658.36	0.00572	648.808	0.00185	657.432	0.05721	868.672	4.20E-04
632.8075	0.01513	654.95	8.06E-05	658.49	0.00567	648.972	0.00181	657.688	0.05605	869.0355	4.69E-04
632.935	0.01509	655.1	7.86E-05	658.62	0.00562	649.136	0.00177	657.944	0.05487	869.399	5.23E-04
633.0625	0.01504	655.25	7.67E-05	658.75	0.00558	649.3	0.00173	658.2	0.05369	869.7625	5.82E-04
633.19	0.015	655.4	7.47E-05	658.88	0.00553	649.464	0.00169	658.456	0.0525	870.126	6.47E-04
633.3175	0.01495	655.55	7.29E-05	659.01	0.00548	649.628	0.00165	658.712	0.0513	870.4895	7.18E-04
633.445	0.0149	655.7	7.10E-05	659.14	0.00543	649.792	0.00162	658.968	0.0501	870.853	7.95E-04
633.5725	0.01485	655.85	6.92E-05	659.27	0.00538	649.956	0.00158	659.224	0.0489	871.2165	8.81E-04
633.7	0.0148	656	6.74E-05	659.4	0.00533	650.12	0.00154	659.48	0.04769	871.58	9.74E-04
633.8275	0.01474	656.15	6.57E-05	659.53	0.00528	650.284	0.00151	659.736	0.04649	871.9435	0.00107
633.955	0.01469	656.3	6.40E-05	659.66	0.00523	650.448	0.00148	659.992	0.04529	872.307	0.00119
634.0825	0.01463	656.45	6.23E-05	659.79	0.00518	650.612	0.00145	660.248	0.04409	872.6705	0.00131
634.21	0.01457	656.6	6.07E-05	659.92	0.00513	650.776	0.00141	660.504	0.0429	873.034	0.00144
634.3375	0.01451	656.75	5.91E-05	660.05	0.00508	650.94	0.00138	660.76	0.04171	873.3975	0.00158
634.465	0.01445	656.9	5.75E-05	660.18	0.00503	651.104	0.00135	661.016	0.04053	873.761	0.00173
634.5925	0.01439	657.05	5.59E-05	660.31	0.00498	651.268	0.00133	661.272	0.03936	874.1245	0.00189
634.72	0.01433	657.2	5.44E-05	660.44	0.00493	651.432	0.0013	661.528	0.03819	874.488	0.00207
634.8475	0.01426	657.35	5.29E-05	660.57	0.00488	651.596	0.00127	661.784	0.03704	874.8515	0.00226
634.975	0.01419	657.5	5.15E-05	660.7	0.00483	651.76	0.00125	662.04	0.0359	875.215	0.00247
635.1025	0.01413	657.65	5.01E-05	660.83	0.00478	651.924	0.00122	662.296	0.03477	875.5785	0.00269
635.23	0.01406	657.8	4.87E-05	660.96	0.00474	652.088	0.0012	662.552	0.03366	875.942	0.00293
635.3575	0.01398	657.95	4.73E-05	661.09	0.00469	652.252	0.00118	662.808	0.03256	876.3055	0.00318
635.485	0.01391	658.1	4.59E-05	661.22	0.00464	652.416	0.00115	663.064	0.03148	876.669	0.00345
635.6125	0.01384	658.25	4.46E-05	661.35	0.00459	652.58	0.00113	663.32	0.03042	877.0325	0.00374
635.74	0.01376	658.4	4.34E-05	661.48	0.00454	652.744	0.00111	663.576	0.02937	877.396	0.00405
635.8675	0.01369	658.55	4.21E-05	661.61	0.00449	652.908	0.00109	663.832	0.02834	877.7595	0.00438

635.995	0.01361	658.7	4.09E-05	661.74	0.00445	653.072	0.00107	664.088	0.02733	878.123	0.00473
636.1225	0.01353	658.85	3.97E-05	661.87	0.0044	653.236	0.00105	664.344	0.02633	878.4865	0.0051
636.25	0.01345	659	3.85E-05	662	0.00435	653.4	0.00104	664.6	0.02536	878.85	0.00549
636.3775	0.01337	659.15	3.74E-05	662.13	0.00431	653.564	0.00102	664.856	0.02441	879.2135	0.0059
636.505	0.01329	659.3	3.63E-05	662.26	0.00426	653.728	0.001	665.112	0.02348	879.577	0.00634
636.6325	0.0132	659.45	3.52E-05	662.39	0.00422	653.892	9.88E-04	665.368	0.02257	879.9405	0.0068
636.76	0.01312	659.6	3.41E-05	662.52	0.00417	654.056	9.74E-04	665.624	0.02168	880.304	0.00728
636.8875	0.01303	659.75	3.31E-05	662.65	0.00413	654.22	9.60E-04	665.88	0.02081	880.6675	0.00779
637.015	0.01294	659.9	3.20E-05	662.78	0.00408	654.384	9.46E-04	666.136	0.01996	881.031	0.00832
637.1425	0.01286	660.05	3.10E-05	662.91	0.00404	654.548	9.34E-04	666.392	0.01914	881.3945	0.00887
637.27	0.01277	660.2	3.01E-05	663.04	0.004	654.712	9.22E-04	666.648	0.01834	881.758	0.00945
637.3975	0.01268	660.35	2.91E-05	663.17	0.00395	654.876	9.10E-04	666.904	0.01756	882.1215	0.01006
637.525	0.01258	660.5	2.82E-05	663.3	0.00391	655.04	8.99E-04	667.16	0.0168	882.485	0.01069
637.6525	0.01249	660.65	2.73E-05	663.43	0.00387	655.204	8.89E-04	667.416	0.01607	882.8485	0.01134
637.78	0.0124	660.8	2.64E-05	663.56	0.00383	655.368	8.79E-04	667.672	0.01536	883.212	0.01202
637.9075	0.0123	660.95	2.56E-05	663.69	0.00379	655.532	8.70E-04	667.928	0.01467	883.5755	0.01272
638.035	0.01221	661.1	2.48E-05	663.82	0.00375	655.696	8.61E-04	668.184	0.014	883.939	0.01345
638.1625	0.01211	661.25	2.40E-05	663.95	0.00371	655.86	8.53E-04	668.44	0.01335	884.3025	0.01419
638.29	0.01202	661.4	2.32E-05	664.08	0.00367	656.024	8.45E-04	668.696	0.01273	884.666	0.01496
638.4175	0.01192	661.55	2.24E-05	664.21	0.00363	656.188	8.38E-04	668.952	0.01212	885.0295	0.01575
638.545	0.01182	661.7	2.17E-05	664.34	0.0036	656.352	8.31E-04	669.208	0.01154	885.393	0.01656
638.6725	0.01172	661.85	2.09E-05	664.47	0.00356	656.516	8.25E-04	669.464	0.01098	885.7565	0.01739
638.8	0.01162	662	2.02E-05	664.6	0.00353	656.68	8.19E-04	669.72	0.01044	886.12	0.01824
638.9275	0.01152	662.15	1.96E-05	664.73	0.00349	656.844	8.13E-04	669.976	0.00992	886.4835	0.0191
639.055	0.01142	662.3	1.89E-05	664.86	0.00346	657.008	8.08E-04	670.232	0.00942	886.847	0.01998
639.1825	0.01132	662.45	1.82E-05	664.99	0.00342	657.172	8.03E-04	670.488	0.00894	887.2105	0.02087
639.31	0.01121	662.6	1.76E-05	665.12	0.00339	657.336	7.99E-04	670.744	0.00847	887.574	0.02177
639.4375	0.01111	662.75	1.70E-05	665.25	0.00336	657.5	7.95E-04	671	0.00803	887.9375	0.02268
639.565	0.01101	662.9	1.64E-05	665.38	0.00333	657.664	7.91E-04	671.256	0.0076	888.301	0.02359
639.6925	0.0109	663.05	1.58E-05	665.51	0.00329	657.828	7.88E-04	671.512	0.0072	888.6645	0.02451
639.82	0.0108	663.2	1.53E-05	665.64	0.00326	657.992	7.85E-04	671.768	0.00681	889.028	0.02544
639.9475	0.01069	663.35	1.47E-05	665.77	0.00324	658.156	7.82E-04	672.024	0.00643	889.3915	0.02636
640.075	0.01059	663.5	1.42E-05	665.9	0.00321	658.32	7.80E-04	672.28	0.00608	889.755	0.02728
640.2025	0.01048	663.65	1.37E-05	666.03	0.00318	658.484	7.78E-04	672.536	0.00574	890.1185	0.0282
640.33	0.01037	663.8	1.32E-05	666.16	0.00315	658.648	7.76E-04	672.792	0.00541	890.482	0.02911
640.4575	0.01027	663.95	1.27E-05	666.29	0.00313	658.812	7.74E-04	673.048	0.0051	890.8455	0.03001
640.585	0.01016	664.1	1.23E-05	666.42	0.0031	658.976	7.73E-04	673.304	0.00481	891.209	0.03089
640.7125	0.01005	664.25	1.18E-05	666.55	0.00308	659.14	7.71E-04	673.56	0.00453	891.5725	0.03176
640.84	0.00994	664.4	1.14E-05	666.68	0.00305	659.304	7.70E-04	673.816	0.00426	891.936	0.03261
640.9675	0.00983	664.55	1.09E-05	666.81	0.00303	659.468	7.70E-04	674.072	0.00401	892.2995	0.03344
641.095	0.00973	664.7	1.05E-05	666.94	0.00301	659.632	7.69E-04	674.328	0.00376	892.663	0.03425
641.2225	0.00962	664.85	1.01E-05	667.07	0.00299	659.796	7.69E-04	674.584	0.00353	893.0265	0.03503
641.35	0.00951	665	9.76E-06	667.2	0.00297	659.96	7.68E-04	674.84	0.00332	893.39	0.03578
641.4775	0.0094	665.15	9.39E-06	667.33	0.00295	660.124	7.68E-04	675.096	0.00311	893.7535	0.0365
641.605	0.00929	665.3	9.03E-06	667.46	0.00293	660.288	7.68E-04	675.352	0.00292	894.117	0.03719
641.7325	0.00918	665.45	8.68E-06	667.59	0.00291	660.452	7.68E-04	675.608	0.00273	894.4805	0.03783
641.86	0.00907	665.6	8.34E-06	667.72	0.0029	660.616	7.68E-04	675.864	0.00256	894.844	0.03844
641.9875	0.00896	665.75	8.02E-06	667.85	0.00288	660.78	7.69E-04	676.12	0.00239	895.2075	0.03901
642.115	0.00886	665.9	7.70E-06	667.98	0.00286	660.944	7.69E-04	676.376	0.00224	895.571	0.03954
642.2425	0.00875	666.05	7.40E-06	668.11	0.00285	661.108	7.69E-04	676.632	0.00209	895.9345	0.04002
642.37	0.00864	666.2	7.11E-06	668.24	0.00284	661.272	7.70E-04	676.888	0.00195	896.298	0.04045

642.4975	0.00853	666.35	6.83E-06	668.37	0.00282	661.436	7.71E-04	677.144	0.00182	896.6615	0.04083
642.625	0.00842	666.5	6.55E-06	668.5	0.00281	661.6	7.71E-04	677.4	0.0017	897.025	0.04117
642.7525	0.00831	666.65	6.29E-06	668.63	0.0028	661.764	7.72E-04	677.656	0.00158	897.3885	0.04145
642.88	0.0082	666.8	6.04E-06	668.76	0.00279	661.928	7.73E-04	677.912	0.00147	897.752	0.04168
643.0075	0.0081	666.95	5.79E-06	668.89	0.00278	662.092	7.73E-04	678.168	0.00137	898.1155	0.04186
643.135	0.00799	667.1	5.56E-06	669.02	0.00278	662.256	7.74E-04	678.424	0.00127	898.479	0.04198
643.2625	0.00788	667.25	5.33E-06	669.15	0.00277	662.42	7.75E-04	678.68	0.00118	898.8425	0.04205
643.39	0.00777	667.4	5.11E-06	669.28	0.00276	662.584	7.76E-04	678.936	0.0011	899.206	0.04207
643.5175	0.00767	667.55	4.90E-06	669.41	0.00276	662.748	7.76E-04	679.192	0.00102	899.5695	0.04203
643.645	0.00756	667.7	4.69E-06	669.54	0.00275	662.912	7.77E-04	679.448	9.48E-04	899.933	0.04194
643.7725	0.00746	667.85	4.50E-06	669.67	0.00275	663.076	7.78E-04	679.704	8.79E-04	900.2965	0.0418
643.9	0.00735	668	4.31E-06	669.8	0.00274	663.24	7.78E-04	679.96	8.14E-04	900.66	0.0416
644.0275	0.00725	668.15	4.12E-06	669.93	0.00274	663.404	7.79E-04	680.216	7.54E-04	901.0235	0.04135
644.155	0.00714	668.3	3.95E-06	670.06	0.00274	663.568	7.79E-04	680.472	6.98E-04	901.387	0.04105
644.2825	0.00704	668.45	3.78E-06	670.19	0.00274	663.732	7.80E-04	680.728	6.45E-04	901.7505	0.0407
644.41	0.00693	668.6	3.62E-06	670.32	0.00274	663.896	7.80E-04	680.984	5.97E-04	902.114	0.0403
644.5375	0.00683	668.75	3.46E-06	670.45	0.00274	664.06	7.81E-04	681.24	5.51E-04	902.4775	0.03985
644.665	0.00673	668.9	3.31E-06	670.58	0.00274	664.224	7.81E-04	681.496	5.09E-04	902.841	0.03937
644.7925	0.00662	669.05	3.17E-06	670.71	0.00275	664.388	7.81E-04	681.752	4.70E-04	903.2045	0.03883
644.92	0.00652	669.2	3.03E-06	670.84	0.00275	664.552	7.82E-04	682.008	4.34E-04	903.568	0.03826
645.0475	0.00642	669.35	2.90E-06	670.97	0.00276	664.716	7.82E-04	682.264	4.00E-04	903.9315	0.03765
645.175	0.00632	669.5	2.77E-06	671.1	0.00276	664.88	7.82E-04	682.52	3.69E-04	904.295	0.037
645.3025	0.00622	669.65	2.64E-06	671.23	0.00277	665.044	7.81E-04	682.776	3.40E-04	904.6585	0.03632
645.43	0.00612	669.8	2.53E-06	671.36	0.00277	665.208	7.81E-04	683.032	3.14E-04	905.022	0.03561
645.5575	0.00603	669.95	2.41E-06	671.49	0.00278	665.372	7.81E-04	683.288	2.89E-04	905.3855	0.03487
645.685	0.00593	670.1	2.30E-06	671.62	0.00279	665.536	7.80E-04	683.544	2.66E-04	905.749	0.0341
645.8125	0.00583	670.25	2.20E-06	671.75	0.0028	665.7	7.80E-04	683.8	2.46E-04	906.1125	0.03331
645.94	0.00573	670.4	2.10E-06	671.88	0.00281	665.864	7.79E-04	684.056	2.27E-04	906.476	0.0325
646.0675	0.00564	670.55	2.00E-06	672.01	0.00282	666.028	7.78E-04	684.312	2.09E-04	906.8395	0.03167
646.195	0.00554	670.7	1.91E-06	672.14	0.00283	666.192	7.78E-04	684.568	1.93E-04	907.203	0.03082
646.3225	0.00545	670.85	1.82E-06	672.27	0.00284	666.356	7.76E-04	684.824	1.78E-04	907.5665	0.02997
646.45	0.00536	671	1.74E-06	672.4	0.00286	666.52	7.75E-04	685.08	1.65E-04	907.93	0.0291
646.5775	0.00527	671.15	1.66E-06	672.53	0.00287	666.684	7.74E-04	685.336	1.53E-04	908.2935	0.02823
646.705	0.00517	671.3	1.58E-06	672.66	0.00289	666.848	7.73E-04	685.592	1.42E-04	908.657	0.02735
646.8325	0.00508	671.45	1.51E-06	672.79	0.0029	667.012	7.71E-04	685.848	1.33E-04	909.0205	0.02646
646.96	0.00499	671.6	1.44E-06	672.92	0.00292	667.176	7.69E-04	686.104	1.24E-04	909.384	0.02558
647.0875	0.0049	671.75	1.37E-06	673.05	0.00293	667.34	7.67E-04	686.36	1.16E-04	909.7475	0.0247
647.215	0.00482	671.9	1.30E-06	673.18	0.00295	667.504	7.65E-04	686.616	1.10E-04	910.111	0.02382
647.3425	0.00473	672.05	1.24E-06	673.31	0.00297	667.668	7.63E-04	686.872	1.04E-04	910.4745	0.02296
647.47	0.00464	672.2	1.18E-06	673.44	0.00299	667.832	7.61E-04	687.128	9.89E-05	910.838	0.02209
647.5975	0.00456	672.35	1.12E-06	673.57	0.00301	667.996	7.59E-04	687.384	9.48E-05	911.2015	0.02124
647.725	0.00447	672.5	1.07E-06	673.7	0.00303	668.16	7.56E-04	687.64	9.14E-05	911.565	0.0204
647.8525	0.00439	672.65	1.02E-06	673.83	0.00305	668.324	7.53E-04	687.896	8.89E-05	911.9285	0.01958
647.98	0.00431	672.8	9.68E-07	673.96	0.00307	668.488	7.51E-04	688.152	8.71E-05	912.292	0.01877
648.1075	0.00422	672.95	9.20E-07	674.09	0.00309	668.652	7.48E-04	688.408	8.60E-05	912.6555	0.01797
648.235	0.00414	673.1	8.75E-07	674.22	0.00311	668.816	7.45E-04	688.664	8.56E-05	913.019	0.01719
648.3625	0.00406	673.25	8.32E-07	674.35	0.00314	668.98	7.41E-04	688.92	8.60E-05	913.3825	0.01643
648.49	0.00398	673.4	7.90E-07	674.48	0.00316	669.144	7.38E-04	689.176	8.71E-05	913.746	0.01569
648.6175	0.00391	673.55	7.51E-07	674.61	0.00319	669.308	7.34E-04	689.432	8.89E-05	914.1095	0.01497
648.745	0.00383	673.7	7.13E-07	674.74	0.00321	669.472	7.31E-04	689.688	9.14E-05	914.473	0.01427
648.8725	0.00375	673.85	6.77E-07	674.87	0.00324	669.636	7.27E-04	689.944	9.46E-05	914.8365	0.0136

649	0.00368	674	6.43E-07	675	0.00326	669.8	7.23E-04	690.2	9.85E-05	915.2	0.01294
649.1275	0.0036	674.15	6.11E-07	675.13	0.00329	669.964	7.19E-04	690.456	1.03E-04	915.5635	0.01231
649.255	0.00353	674.3	5.80E-07	675.26	0.00332	670.128	7.15E-04	690.712	1.09E-04	915.927	0.01169
649.3825	0.00346	674.45	5.50E-07	675.39	0.00335	670.292	7.10E-04	690.968	1.15E-04	916.2905	0.0111
649.51	0.00339	674.6	5.22E-07	675.52	0.00337	670.456	7.06E-04	691.224	1.22E-04	916.654	0.01054
649.6375	0.00332	674.75	4.95E-07	675.65	0.0034	670.62	7.01E-04	691.48	1.30E-04	917.0175	0.00999
649.765	0.00325	674.9	4.69E-07	675.78	0.00343	670.784	6.97E-04	691.736	1.39E-04	917.381	0.00947
649.8925	0.00318	675.05	4.45E-07	675.91	0.00346	670.948	6.92E-04	691.992	1.48E-04	917.7445	0.00897
650.02	0.00311	675.2	4.22E-07	676.04	0.00349	671.112	6.87E-04	692.248	1.59E-04	918.108	0.00849
650.1475	0.00304	675.35	4.00E-07	676.17	0.00353	671.276	6.82E-04	692.504	1.71E-04	918.4715	0.00803
650.275	0.00298	675.5	3.79E-07	676.3	0.00356	671.44	6.77E-04	692.76	1.83E-04	918.835	0.0076
650.4025	0.00291	675.65	3.59E-07	676.43	0.00359	671.604	6.72E-04	693.016	1.97E-04	919.1985	0.00718
650.53	0.00285	675.8	3.40E-07	676.56	0.00362	671.768	6.66E-04	693.272	2.12E-04	919.562	0.00678
650.6575	0.00279	675.95	3.22E-07	676.69	0.00366	671.932	6.61E-04	693.528	2.28E-04	919.9255	0.00641
650.785	0.00272	676.1	3.05E-07	676.82	0.00369	672.096	6.55E-04	693.784	2.46E-04	920.289	0.00605
650.9125	0.00266	676.25	2.89E-07	676.95	0.00372	672.26	6.50E-04	694.04	2.64E-04	920.6525	0.00571
651.04	0.0026	676.4	2.73E-07	677.08	0.00376	672.424	6.44E-04	694.296	2.85E-04	921.016	0.00538
651.1675	0.00255	676.55	2.59E-07	677.21	0.00379	672.588	6.38E-04	694.552	3.06E-04	921.3795	0.00508
651.295	0.00249	676.7	2.45E-07	677.34	0.00383	672.752	6.32E-04	694.808	3.30E-04	921.743	0.00479
651.4225	0.00243	676.85	2.32E-07	677.47	0.00386	672.916	6.26E-04	695.064	3.54E-04	922.1065	0.00451
651.55	0.00237	677	2.19E-07	677.6	0.0039	673.08	6.20E-04	695.32	3.81E-04	922.47	0.00425
651.6775	0.00232	677.15	2.08E-07	677.73	0.00394	673.244	6.14E-04	695.576	4.10E-04	922.8335	0.00401
651.805	0.00227	677.3	1.96E-07	677.86	0.00397	673.408	6.08E-04	695.832	4.40E-04	923.197	0.00377
651.9325	0.00221	677.45	1.86E-07	677.99	0.00401	673.572	6.02E-04	696.088	4.73E-04	923.5605	0.00355
652.06	0.00216	677.6	1.76E-07	678.12	0.00405	673.736	5.95E-04	696.344	5.07E-04	923.924	0.00335
652.1875	0.00211	677.75	1.66E-07	678.25	0.00409	673.9	5.89E-04	696.6	5.44E-04	924.2875	0.00315
652.315	0.00206	677.9	1.57E-07	678.38	0.00413	674.064	5.82E-04	696.856	5.84E-04	924.651	0.00297
652.4425	0.00201	678.05	1.49E-07	678.51	0.00417	674.228	5.76E-04	697.112	6.25E-04	925.0145	0.00279
652.57	0.00196	678.2	1.41E-07	678.64	0.0042	674.392	5.69E-04	697.368	6.70E-04	925.378	0.00263
652.6975	0.00191	678.35	1.34E-07	678.77	0.00424	674.556	5.63E-04	697.624	7.17E-04	925.7415	0.00247
652.825	0.00186	678.5	1.27E-07	678.9	0.00428	674.72	5.56E-04	697.88	7.67E-04	926.105	0.00233
652.9525	0.00182	678.65	1.20E-07	679.03	0.00432	674.884	5.50E-04	698.136	8.20E-04	926.4685	0.00219
653.08	0.00177	678.8	1.14E-07	679.16	0.00437	675.048	5.43E-04	698.392	8.76E-04	926.832	0.00206
653.2075	0.00173	678.95	1.08E-07	679.29	0.00441	675.212	5.36E-04	698.648	9.35E-04	927.1955	0.00194
653.335	0.00169	679.1	1.02E-07	679.42	0.00445	675.376	5.30E-04	698.904	9.98E-04	927.559	0.00182
653.4625	0.00164	679.25	9.72E-08	679.55	0.00449	675.54	5.23E-04	699.16	0.00106	927.9225	0.00171
653.59	0.0016	679.4	9.24E-08	679.68	0.00453	675.704	5.16E-04	699.416	0.00113	928.286	0.00161
653.7175	0.00156	679.55	8.79E-08	679.81	0.00457	675.868	5.10E-04	699.672	0.00121	928.6495	0.00151
653.845	0.00152	679.7	8.38E-08	679.94	0.00462	676.032	5.03E-04	699.928	0.00129	929.013	0.00142
653.9725	0.00148	679.85	7.99E-08	680.07	0.00466	676.196	4.96E-04	700.184	0.00137	929.3765	0.00134
654.1	0.00144	680	7.63E-08	680.2	0.0047	676.36	4.90E-04	700.44	0.00145	929.74	0.00125
654.2275	0.0014	680.15	7.30E-08	680.33	0.00474	676.524	4.83E-04	700.696	0.00154	930.1035	0.00118
654.355	0.00137	680.3	7.00E-08	680.46	0.00479	676.688	4.76E-04	700.952	0.00164	930.467	0.0011
654.4825	0.00133	680.45	6.72E-08	680.59	0.00483	676.852	4.70E-04	701.208	0.00174	930.8305	0.00104
654.61	0.00129	680.6	6.47E-08	680.72	0.00488	677.016	4.63E-04	701.464	0.00184	931.194	9.71E-04
654.7375	0.00126	680.75	6.25E-08	680.85	0.00492	677.18	4.56E-04	701.72	0.00195	931.5575	9.10E-04
654.865	0.00123	680.9	6.04E-08	680.98	0.00496	677.344	4.50E-04	701.976	0.00207	931.921	8.53E-04
654.9925	0.00119	681.05	5.87E-08	681.11	0.00501	677.508	4.43E-04	702.232	0.00219	932.2845	7.98E-04
655.12	0.00116	681.2	5.71E-08	681.24	0.00505	677.672	4.37E-04	702.488	0.00231	932.648	7.47E-04
655.2475	0.00113	681.35	5.58E-08	681.37	0.0051	677.836	4.30E-04	702.744	0.00245	933.0115	6.99E-04
655.375	0.0011	681.5	5.47E-08	681.5	0.00514	678	4.24E-04	703	0.00258	933.375	6.53E-04

655.5025	0.00107	681.65	5.38E-08	681.63	0.00519	678.164	4.17E-04	703.256	0.00273	933.7385	6.10E-04
655.63	0.00104	681.8	5.32E-08	681.76	0.00523	678.328	4.11E-04	703.512	0.00288	934.102	5.69E-04
655.7575	0.00101	681.95	5.27E-08	681.89	0.00528	678.492	4.05E-04	703.768	0.00303	934.4655	5.31E-04
655.885	9.79E-04	682.1	5.25E-08	682.02	0.00532	678.656	3.98E-04	704.024	0.0032	934.829	4.95E-04
656.0125	9.52E-04	682.25	5.25E-08	682.15	0.00537	678.82	3.92E-04	704.28	0.00336	935.1925	4.61E-04
656.14	9.24E-04	682.4	5.27E-08	682.28	0.00542	678.984	3.86E-04	704.536	0.00354	935.556	4.29E-04
656.2675	8.98E-04	682.55	5.32E-08	682.41	0.00546	679.148	3.80E-04	704.792	0.00372	935.9195	3.99E-04
656.395	8.72E-04	682.7	5.38E-08	682.54	0.00551	679.312	3.74E-04	705.048	0.00391	936.283	3.71E-04
656.5225	8.47E-04	682.85	5.47E-08	682.67	0.00555	679.476	3.68E-04	705.304	0.00411	936.6465	3.44E-04
656.65	8.22E-04	683	5.59E-08	682.8	0.0056	679.64	3.62E-04	705.56	0.00431	937.01	3.19E-04
656.7775	7.98E-04	683.15	5.72E-08	682.93	0.00565	679.804	3.56E-04	705.816	0.00452	937.3735	2.96E-04
656.905	7.75E-04	683.3	5.88E-08	683.06	0.00569	679.968	3.51E-04	706.072	0.00474	937.737	2.74E-04
657.0325	7.52E-04	683.45	6.07E-08	683.19	0.00574	680.132	3.45E-04	706.328	0.00497	938.1005	2.53E-04
657.16	7.29E-04	683.6	6.28E-08	683.32	0.00579	680.296	3.39E-04	706.584	0.0052	938.464	2.34E-04
657.2875	7.08E-04	683.75	6.52E-08	683.45	0.00583	680.46	3.34E-04	706.84	0.00544	938.8275	2.16E-04
657.415	6.86E-04	683.9	6.78E-08	683.58	0.00588	680.624	3.29E-04	707.096	0.00569	939.191	1.99E-04
657.5425	6.66E-04	684.05	7.08E-08	683.71	0.00593	680.788	3.23E-04	707.352	0.00595	939.5545	1.84E-04
657.67	6.45E-04	684.2	7.40E-08	683.84	0.00597	680.952	3.18E-04	707.608	0.00621	939.918	1.69E-04
657.7975	6.26E-04	684.35	7.75E-08	683.97	0.00602	681.116	3.13E-04	707.864	0.00648	940.2815	1.55E-04
657.925	6.07E-04	684.5	8.14E-08	684.1	0.00607	681.28	3.08E-04	708.12	0.00676	940.645	1.43E-04
658.0525	5.88E-04	684.65	8.55E-08	684.23	0.00611	681.444	3.03E-04	708.376	0.00705	941.0085	1.31E-04
658.18	5.70E-04	684.8	9.01E-08	684.36	0.00616	681.608	2.98E-04	708.632	0.00734	941.372	1.20E-04
658.3075	5.52E-04	684.95	9.49E-08	684.49	0.00621	681.772	2.93E-04	708.888	0.00764	941.7355	1.10E-04
658.435	5.35E-04	685.1	1.00E-07	684.62	0.00625	681.936	2.89E-04	709.144	0.00795	942.099	1.00E-04
658.5625	5.18E-04	685.25	1.06E-07	684.75	0.0063	682.1	2.84E-04	709.4	0.00827	942.4625	9.16E-05
658.69	5.02E-04	685.4	1.12E-07	684.88	0.00635	682.264	2.79E-04	709.656	0.00859	942.826	8.35E-05
658.8175	4.86E-04	685.55	1.18E-07	685.01	0.00639	682.428	2.75E-04	709.912	0.00892	943.1895	7.61E-05
658.945	4.70E-04	685.7	1.25E-07	685.14	0.00644	682.592	2.71E-04	710.168	0.00926	943.553	6.92E-05
659.0725	4.55E-04	685.85	1.33E-07	685.27	0.00649	682.756	2.66E-04	710.424	0.0096	943.9165	6.29E-05
659.2	4.40E-04	686	1.41E-07	685.4	0.00653	682.92	2.62E-04	710.68	0.00996	944.28	5.71E-05
659.3275	4.26E-04	686.15	1.49E-07	685.53	0.00658	683.084	2.58E-04	710.936	0.01031	944.6435	5.18E-05
659.455	4.12E-04	686.3	1.58E-07	685.66	0.00663	683.248	2.54E-04	711.192	0.01068	945.007	4.69E-05
659.5825	3.99E-04	686.45	1.68E-07	685.79	0.00667	683.412	2.50E-04	711.448	0.01105	945.3705	4.24E-05
659.71	3.86E-04	686.6	1.78E-07	685.92	0.00672	683.576	2.47E-04	711.704	0.01143	945.734	3.83E-05
659.8375	3.73E-04	686.75	1.89E-07	686.05	0.00676	683.74	2.43E-04	711.96	0.01181	946.0975	3.46E-05
659.965	3.61E-04	686.9	2.01E-07	686.18	0.00681	683.904	2.39E-04	712.216	0.0122	946.461	3.12E-05
660.0925	3.49E-04	687.05	2.13E-07	686.31	0.00686	684.068	2.36E-04	712.472	0.01259	946.8245	2.81E-05
660.22	3.37E-04	687.2	2.26E-07	686.44	0.0069	684.232	2.33E-04	712.728	0.01299	947.188	2.52E-05
660.3475	3.26E-04	687.35	2.40E-07	686.57	0.00695	684.396	2.29E-04	712.984	0.01339	947.5515	2.27E-05
660.475	3.15E-04	687.5	2.55E-07	686.7	0.00699	684.56	2.26E-04	713.24	0.0138	947.915	2.03E-05
660.6025	3.04E-04	687.65	2.70E-07	686.83	0.00704	684.724	2.23E-04	713.496	0.01421	948.2785	1.82E-05
660.73	2.94E-04	687.8	2.87E-07	686.96	0.00708	684.888	2.20E-04	713.752	0.01462	948.642	1.63E-05
660.8575	2.84E-04	687.95	3.04E-07	687.09	0.00712	685.052	2.17E-04	714.008	0.01504	949.0055	1.45E-05
660.985	2.74E-04	688.1	3.23E-07	687.22	0.00717	685.216	2.14E-04	714.264	0.01546	949.369	1.30E-05
661.1125	2.65E-04	688.25	3.43E-07	687.35	0.00721	685.38	2.12E-04	714.52	0.01588	949.7325	1.16E-05
661.24	2.56E-04	688.4	3.63E-07	687.48	0.00726	685.544	2.09E-04	714.776	0.0163	950.096	1.03E-05
661.3675	2.47E-04	688.55	3.85E-07	687.61	0.0073	685.708	2.07E-04	715.032	0.01673	950.4595	9.14E-06
661.495	2.38E-04	688.7	4.09E-07	687.74	0.00734	685.872	2.04E-04	715.288	0.01716	950.823	8.11E-06
661.6225	2.30E-04	688.85	4.33E-07	687.87	0.00739	686.036	2.02E-04	715.544	0.01758	951.1865	7.19E-06
661.75	2.22E-04	689	4.59E-07	688	0.00743	686.2	1.99E-04	715.8	0.01801	951.55	6.37E-06
661.8775	2.14E-04	689.15	4.87E-07	688.13	0.00747	686.364	1.97E-04	716.056	0.01844	951.9135	5.63E-06

662.005	2.06E-04	689.3	5.16E-07	688.26	0.00751	686.528	1.95E-04	716.312	0.01887	952.277	4.97E-06
662.1325	1.99E-04	689.45	5.46E-07	688.39	0.00755	686.692	1.93E-04	716.568	0.01929	952.6405	4.38E-06
662.26	1.92E-04	689.6	5.79E-07	688.52	0.00759	686.856	1.91E-04	716.824	0.01972	953.004	3.86E-06
662.3875	1.85E-04	689.75	6.13E-07	688.65	0.00764	687.02	1.89E-04	717.08	0.02014	953.3675	3.40E-06
662.515	1.78E-04	689.9	6.49E-07	688.78	0.00768	687.184	1.87E-04	717.336	0.02056	953.731	2.98E-06
662.6425	1.72E-04	690.05	6.87E-07	688.91	0.00772	687.348	1.86E-04	717.592	0.02097	954.0945	2.62E-06
662.77	1.65E-04	690.2	7.27E-07	689.04	0.00775	687.512	1.84E-04	717.848	0.02139	954.458	2.29E-06
662.8975	1.59E-04	690.35	7.69E-07	689.17	0.00779	687.676	1.83E-04	718.104	0.02179	954.8215	2.01E-06
663.025	1.53E-04	690.5	8.14E-07	689.3	0.00783	687.84	1.81E-04	718.36	0.0222	955.185	1.75E-06
663.1525	1.48E-04	690.65	8.61E-07	689.43	0.00787	688.004	1.80E-04	718.616	0.0226	955.5485	1.53E-06
663.28	1.42E-04	690.8	9.10E-07	689.56	0.00791	688.168	1.78E-04	718.872	0.02299	955.912	1.33E-06
663.4075	1.37E-04	690.95	9.62E-07	689.69	0.00795	688.332	1.77E-04	719.128	0.02338	956.2755	1.16E-06
663.535	1.32E-04	691.1	1.02E-06	689.82	0.00798	688.496	1.76E-04	719.384	0.02376	956.639	1.01E-06
663.6625	1.27E-04	691.25	1.07E-06	689.95	0.00802	688.66	1.75E-04	719.64	0.02413	957.0025	8.77E-07
663.79	1.22E-04	691.4	1.14E-06	690.08	0.00805	688.824	1.73E-04	719.896	0.0245	957.366	7.61E-07
663.9175	1.18E-04	691.55	1.20E-06	690.21	0.00809	688.988	1.72E-04	720.152	0.02485	957.7295	6.59E-07
664.045	1.13E-04	691.7	1.27E-06	690.34	0.00812	689.152	1.72E-04	720.408	0.0252	958.093	5.70E-07
664.1725	1.09E-04	691.85	1.34E-06	690.47	0.00816	689.316	1.71E-04	720.664	0.02554	958.4565	4.92E-07
664.3	1.05E-04	692	1.41E-06	690.6	0.00819	689.48	1.70E-04	720.92	0.02587	958.82	4.24E-07
664.4275	1.01E-04	692.15	1.49E-06	690.73	0.00823	689.644	1.69E-04	721.176	0.0262	959.1835	3.66E-07
664.555	9.67E-05	692.3	1.57E-06	690.86	0.00826	689.808	1.68E-04	721.432	0.02651	959.547	3.14E-07
664.6825	9.30E-05	692.45	1.66E-06	690.99	0.00829	689.972	1.68E-04	721.688	0.02681	959.9105	2.70E-07
664.81	8.94E-05	692.6	1.75E-06	691.12	0.00832	690.136	1.67E-04	721.944	0.0271	960.274	2.32E-07
664.9375	8.59E-05	692.75	1.84E-06	691.25	0.00835	690.3	1.66E-04	722.2	0.02738	960.6375	1.99E-07
665.065	8.25E-05	692.9	1.94E-06	691.38	0.00838	690.464	1.66E-04	722.456	0.02765	961.001	1.70E-07
665.1925	7.93E-05	693.05	2.05E-06	691.51	0.00841	690.628	1.65E-04	722.712	0.0279	961.3645	1.45E-07
665.32	7.62E-05	693.2	2.16E-06	691.64	0.00844	690.792	1.65E-04	722.968	0.02815	961.728	1.24E-07
665.4475	7.31E-05	693.35	2.27E-06	691.77	0.00847	690.956	1.65E-04	723.224	0.02838	962.0915	1.06E-07
665.575	7.02E-05	693.5	2.39E-06	691.9	0.00849	691.12	1.64E-04	723.48	0.0286	962.455	9.00E-08
665.7025	6.74E-05	693.65	2.52E-06	692.03	0.00852	691.284	1.64E-04	723.736	0.02881	962.8185	7.65E-08
665.83	6.47E-05	693.8	2.65E-06	692.16	0.00855	691.448	1.64E-04	723.992	0.029	963.182	6.50E-08
665.9575	6.21E-05	693.95	2.79E-06	692.29	0.00857	691.612	1.64E-04	724.248	0.02918	963.5455	5.51E-08
666.085	5.96E-05	694.1	2.94E-06	692.42	0.0086	691.776	1.64E-04	724.504	0.02935	963.909	4.67E-08
666.2125	5.72E-05	694.25	3.09E-06	692.55	0.00862	691.94	1.63E-04	724.76	0.0295	964.2725	3.95E-08
666.34	5.49E-05	694.4	3.25E-06	692.68	0.00864	692.104	1.63E-04	725.016	0.02964	964.636	3.33E-08
666.4675	5.26E-05	694.55	3.42E-06	692.81	0.00866	692.268	1.63E-04	725.272	0.02976	964.9995	2.81E-08
666.595	5.05E-05	694.7	3.60E-06	692.94	0.00869	692.432	1.63E-04	725.528	0.02988	965.363	2.37E-08
666.7225	4.84E-05	694.85	3.78E-06	693.07	0.00871	692.596	1.63E-04	725.784	0.02997	965.7265	1.99E-08
666.85	4.64E-05	695	3.97E-06	693.2	0.00873	692.76	1.64E-04	726.04	0.03006	966.09	1.67E-08
666.9775	4.45E-05	695.15	4.17E-06	693.33	0.00874	692.924	1.64E-04	726.296	0.03013	966.4535	1.40E-08
667.105	4.26E-05	695.3	4.38E-06	693.46	0.00876	693.088	1.64E-04	726.552	0.03018	966.817	1.18E-08
667.2325	4.09E-05	695.45	4.60E-06	693.59	0.00878	693.252	1.64E-04	726.808	0.03022	967.1805	9.85E-09
667.36	3.91E-05	695.6	4.83E-06	693.72	0.0088	693.416	1.64E-04	727.064	0.03025	967.544	8.23E-09
667.4875	3.75E-05	695.75	5.07E-06	693.85	0.00881	693.58	1.65E-04	727.32	0.03026	967.9075	6.87E-09
667.615	3.59E-05	695.9	5.32E-06	693.98	0.00883	693.744	1.65E-04	727.576	0.03026	968.271	5.72E-09
667.7425	3.44E-05	696.05	5.59E-06	694.11	0.00884	693.908	1.65E-04	727.832	0.03025	968.6345	4.76E-09
667.87	3.29E-05	696.2	5.86E-06	694.24	0.00885	694.072	1.66E-04	728.088	0.03022	968.998	3.96E-09
667.9975	3.15E-05	696.35	6.15E-06	694.37	0.00886	694.236	1.66E-04	728.344	0.03018	969.3615	3.29E-09
668.125	3.02E-05	696.5	6.44E-06	694.5	0.00888	694.4	1.67E-04	728.6	0.03012	969.725	2.73E-09
668.2525	2.89E-05	696.65	6.75E-06	694.63	0.00889	694.564	1.67E-04	728.856	0.03005	970.0885	2.26E-09
668.38	2.77E-05	696.8	7.08E-06	694.76	0.00889	694.728	1.68E-04	729.112	0.02997	970.452	1.87E-09

668.5075	2.65E-05	696.95	7.42E-06	694.89	0.0089	694.892	1.68E-04	729.368	0.02987	970.8155	1.54E-09
668.635	2.53E-05	697.1	7.77E-06	695.02	0.00891	695.056	1.69E-04	729.624	0.02976	971.179	1.27E-09
668.7625	2.42E-05	697.25	8.14E-06	695.15	0.00892	695.22	1.70E-04	729.88	0.02964	971.5425	1.05E-09
668.89	2.32E-05	697.4	8.52E-06	695.28	0.00892	695.384	1.70E-04	730.136	0.02951	971.906	8.62E-10
669.0175	2.21E-05	697.55	8.92E-06	695.41	0.00893	695.548	1.71E-04	730.392	0.02936	972.2695	7.08E-10
669.145	2.12E-05	697.7	9.34E-06	695.54	0.00893	695.712	1.72E-04	730.648	0.0292	972.633	5.81E-10
669.2725	2.02E-05	697.85	9.77E-06	695.67	0.00893	695.876	1.73E-04	730.904	0.02903	972.9965	4.76E-10
669.4	1.94E-05	698	1.02E-05	695.8	0.00893	696.04	1.74E-04	731.16	0.02885	973.36	3.89E-10
669.5275	1.85E-05	698.15	1.07E-05	695.93	0.00893	696.204	1.75E-04	731.416	0.02866	973.7235	3.18E-10
669.655	1.77E-05	698.3	1.12E-05	696.06	0.00893	696.368	1.76E-04	731.672	0.02846	974.087	2.60E-10
669.7825	1.69E-05	698.45	1.17E-05	696.19	0.00893	696.532	1.77E-04	731.928	0.02824	974.4505	2.12E-10
669.91	1.61E-05	698.6	1.22E-05	696.32	0.00893	696.696	1.78E-04	732.184	0.02802	974.814	1.72E-10
670.0375	1.54E-05	698.75	1.28E-05	696.45	0.00893	696.86	1.79E-04	732.44	0.02779	975.1775	1.40E-10
670.165	1.47E-05	698.9	1.33E-05	696.58	0.00892	697.024	1.80E-04	732.696	0.02754	975.541	1.14E-10
670.2925	1.41E-05	699.05	1.39E-05	696.71	0.00892	697.188	1.81E-04	732.952	0.02729	975.9045	9.22E-11
670.42	1.34E-05	699.2	1.45E-05	696.84	0.00891	697.352	1.82E-04	733.208	0.02703	976.268	7.46E-11
670.5475	1.28E-05	699.35	1.52E-05	696.97	0.0089	697.516	1.84E-04	733.464	0.02676	976.6315	6.03E-11
670.675	1.23E-05	699.5	1.58E-05	697.1	0.00889	697.68	1.85E-04	733.72	0.02648	976.995	4.87E-11
670.8025	1.17E-05	699.65	1.65E-05	697.23	0.00888	697.844	1.86E-04	733.976	0.02619	977.3585	3.93E-11
670.93	1.12E-05	699.8	1.73E-05	697.36	0.00887	698.008	1.88E-04	734.232	0.0259	977.722	3.16E-11
671.0575	1.07E-05	699.95	1.80E-05	697.49	0.00886	698.172	1.89E-04	734.488	0.0256	978.0855	2.55E-11
671.185	1.02E-05	700.1	1.88E-05	697.62	0.00885	698.336	1.91E-04	734.744	0.02529	978.449	2.04E-11
671.3125	9.71E-06	700.25	1.96E-05	697.75	0.00884	698.5	1.92E-04	735	0.02497	978.8125	1.64E-11
671.44	9.27E-06	700.4	2.04E-05	697.88	0.00882	698.664	1.94E-04	735.256	0.02465	979.176	1.31E-11
671.5675	8.85E-06	700.55	2.13E-05	698.01	0.00881	698.828	1.96E-04	735.512	0.02432	979.5395	1.05E-11
671.695	8.45E-06	700.7	2.22E-05	698.14	0.00879	698.992	1.98E-04	735.768	0.02399	979.903	8.40E-12
671.8225	8.07E-06	700.85	2.31E-05	698.27	0.00877	699.156	1.99E-04	736.024	0.02365	980.2665	6.70E-12
671.95	7.70E-06	701	2.40E-05	698.4	0.00875	699.32	2.01E-04	736.28	0.02331	980.63	5.34E-12
672.0775	7.35E-06	701.15	2.50E-05	698.53	0.00873	699.484	2.03E-04	736.536	0.02296	980.9935	4.25E-12
672.205	7.02E-06	701.3	2.60E-05	698.66	0.00871	699.648	2.05E-04	736.792	0.02261	981.357	3.38E-12
672.3325	6.70E-06	701.45	2.71E-05	698.79	0.00869	699.812	2.07E-04	737.048	0.02226	981.7205	2.68E-12
672.46	6.40E-06	701.6	2.82E-05	698.92	0.00867	699.976	2.10E-04	737.304	0.0219	982.084	2.13E-12
672.5875	6.11E-06	701.75	2.93E-05	699.05	0.00865	700.14	2.12E-04	737.56	0.02153	982.4475	1.68E-12
672.715	5.84E-06	701.9	3.05E-05	699.18	0.00862	700.304	2.14E-04	737.816	0.02117	982.811	1.33E-12
672.8425	5.58E-06	702.05	3.17E-05	699.31	0.0086	700.468	2.17E-04	738.072	0.0208	983.1745	1.05E-12
672.97	5.33E-06	702.2	3.30E-05	699.44	0.00857	700.632	2.19E-04	738.328	0.02043	983.538	8.29E-13
673.0975	5.09E-06	702.35	3.43E-05	699.57	0.00854	700.796	2.22E-04	738.584	0.02006	983.9015	6.52E-13
673.225	4.87E-06	702.5	3.56E-05	699.7	0.00852	700.96	2.25E-04	738.84	0.01969	984.265	5.13E-13
673.3525	4.66E-06	702.65	3.70E-05	699.83	0.00849	701.124	2.27E-04	739.096	0.01931	984.6285	4.03E-13
673.48	4.46E-06	702.8	3.84E-05	699.96	0.00846	701.288	2.30E-04	739.352	0.01894	984.992	3.16E-13
673.6075	4.27E-06	702.95	3.99E-05	700.09	0.00843	701.452	2.33E-04	739.608	0.01856	985.3555	2.48E-13
673.735	4.09E-06	703.1	4.14E-05	700.22	0.00839	701.616	2.36E-04	739.864	0.01819	985.719	1.94E-13
673.8625	3.92E-06	703.25	4.30E-05	700.35	0.00836	701.78	2.39E-04	740.12	0.01781	986.0825	1.51E-13
673.99	3.76E-06	703.4	4.46E-05	700.48	0.00833	701.944	2.42E-04	740.376	0.01744	986.446	1.18E-13
674.1175	3.61E-06	703.55	4.63E-05	700.61	0.00829	702.108	2.46E-04	740.632	0.01706	986.8095	9.20E-14
674.245	3.47E-06	703.7	4.80E-05	700.74	0.00826	702.272	2.49E-04	740.888	0.01669	987.173	7.16E-14
674.3725	3.34E-06	703.85	4.98E-05	700.87	0.00822	702.436	2.53E-04	741.144	0.01631	987.5365	5.57E-14
674.5	3.21E-06	704	5.16E-05	701	0.00819	702.6	2.56E-04	741.4	0.01594	987.9	4.32E-14
674.6275	3.09E-06	704.15	5.35E-05	701.13	0.00815	702.764	2.60E-04	741.656	0.01557	988.2635	3.35E-14
674.755	2.98E-06	704.3	5.55E-05	701.26	0.00811	702.928	2.64E-04	741.912	0.01521	988.627	2.59E-14
674.8825	2.88E-06	704.45	5.75E-05	701.39	0.00807	703.092	2.68E-04	742.168	0.01484	988.9905	2.00E-14

675.01	2.78E-06	704.6	5.95E-05	701.52	0.00803	703.256	2.72E-04	742.424	0.01448	989.354	1.55E-14
675.1375	2.70E-06	704.75	6.17E-05	701.65	0.00799	703.42	2.76E-04	742.68	0.01412	989.7175	1.19E-14
675.265	2.62E-06	704.9	6.38E-05	701.78	0.00795	703.584	2.80E-04	742.936	0.01376	990.081	9.18E-15
675.3925	2.54E-06	705.05	6.61E-05	701.91	0.00791	703.748	2.85E-04	743.192	0.0134	990.4445	7.06E-15
675.52	2.47E-06	705.2	6.84E-05	702.04	0.00786	703.912	2.89E-04	743.448	0.01305	990.808	5.42E-15
675.6475	2.41E-06	705.35	7.08E-05	702.17	0.00782	704.076	2.94E-04	743.704	0.0127	991.1715	4.16E-15
675.775	2.35E-06	705.5	7.32E-05	702.3	0.00777	704.24	2.99E-04	743.96	0.01236	991.535	3.19E-15
675.9025	2.30E-06	705.65	7.57E-05	702.43	0.00773	704.404	3.04E-04	744.216	0.01202	991.8985	2.44E-15
676.03	2.26E-06	705.8	7.83E-05	702.56	0.00768	704.568	3.09E-04	744.472	0.01168	992.262	1.86E-15
676.1575	2.22E-06	705.95	8.09E-05	702.69	0.00764	704.732	3.14E-04	744.728	0.01135	992.6255	1.42E-15
676.285	2.18E-06	706.1	8.36E-05	702.82	0.00759	704.896	3.19E-04	744.984	0.01102	992.989	1.08E-15
676.4125	2.15E-06	706.25	8.64E-05	702.95	0.00754	705.06	3.25E-04	745.24	0.0107	993.3525	8.23E-16
676.54	2.13E-06	706.4	8.93E-05	703.08	0.00749	705.224	3.30E-04	745.496	0.01038	993.716	6.26E-16
676.6675	2.11E-06	706.55	9.22E-05	703.21	0.00744	705.388	3.36E-04	745.752	0.01007	994.0795	4.75E-16
676.795	2.10E-06	706.7	9.52E-05	703.34	0.0074	705.552	3.42E-04	746.008	0.00976	994.443	3.60E-16
676.9225	2.09E-06	706.85	9.83E-05	703.47	0.00735	705.716	3.48E-04	746.264	0.00945	994.8065	2.72E-16
677.05	2.09E-06	707	1.01E-04	703.6	0.00729	705.88	3.54E-04	746.52	0.00915	995.17	2.06E-16
677.1775	2.09E-06	707.15	1.05E-04	703.73	0.00724	706.044	3.60E-04	746.776	0.00886	995.5335	1.55E-16
677.305	2.09E-06	707.3	1.08E-04	703.86	0.00719	706.208	3.66E-04	747.032	0.00857	995.897	1.17E-16
677.4325	2.10E-06	707.45	1.11E-04	703.99	0.00714	706.372	3.73E-04	747.288	0.00829	996.2605	8.82E-17
677.56	2.12E-06	707.6	1.15E-04	704.12	0.00709	706.536	3.80E-04	747.544	0.00801	996.624	6.63E-17
677.6875	2.14E-06	707.75	1.18E-04	704.25	0.00703	706.7	3.86E-04	747.8	0.00774	996.9875	4.98E-17
677.815	2.16E-06	707.9	1.22E-04	704.38	0.00698	706.864	3.93E-04	748.056	0.00747	997.351	3.74E-17
677.9425	2.19E-06	708.05	1.26E-04	704.51	0.00693	707.028	4.00E-04	748.312	0.00721	997.7145	2.80E-17
678.07	2.22E-06	708.2	1.30E-04	704.64	0.00687	707.192	4.08E-04	748.568	0.00696	998.078	2.09E-17
678.1975	2.26E-06	708.35	1.33E-04	704.77	0.00682	707.356	4.15E-04	748.824	0.00671	998.4415	1.56E-17
678.325	2.31E-06	708.5	1.37E-04	704.9	0.00676	707.52	4.23E-04	749.08	0.00647	998.805	1.17E-17
678.4525	2.35E-06	708.65	1.41E-04	705.03	0.00671	707.684	4.30E-04	749.336	0.00623	999.1685	8.69E-18
678.58	2.41E-06	708.8	1.46E-04	705.16	0.00665	707.848	4.38E-04	749.592	0.006	999.532	6.46E-18
678.7075	2.46E-06	708.95	1.50E-04	705.29	0.0066	708.012	4.46E-04	749.848	0.00577	999.8955	4.80E-18
678.835	2.52E-06	709.1	1.54E-04	705.42	0.00654	708.176	4.54E-04	750.104	0.00555	1000.259	3.56E-18
678.9625	2.59E-06	709.25	1.59E-04	705.55	0.00649	708.34	4.63E-04	750.36	0.00533	1000.6225	2.64E-18
679.09	2.66E-06	709.4	1.63E-04	705.68	0.00643	708.504	4.71E-04	750.616	0.00513	1000.986	1.95E-18
679.2175	2.74E-06	709.55	1.68E-04	705.81	0.00637	708.668	4.80E-04	750.872	0.00492	1001.3495	1.44E-18
679.345	2.82E-06	709.7	1.72E-04	705.94	0.00632	708.832	4.88E-04	751.128	0.00472	1001.713	1.07E-18
679.4725	2.90E-06	709.85	1.77E-04	706.07	0.00626	708.996	4.97E-04	751.384	0.00453	1002.0765	7.86E-19
679.6	3.00E-06	710	1.82E-04	706.2	0.0062	709.16	5.06E-04	751.64	0.00435	1002.44	5.79E-19
679.7275	3.09E-06	710.15	1.87E-04	706.33	0.00614	709.324	5.15E-04	751.896	0.00417	1002.8035	4.25E-19
679.855	3.19E-06	710.3	1.92E-04	706.46	0.00609	709.488	5.25E-04	752.152	0.00399	1003.167	3.12E-19
679.9825	3.30E-06	710.45	1.97E-04	706.59	0.00603	709.652	5.34E-04	752.408	0.00382	1003.5305	2.29E-19
680.11	3.41E-06	710.6	2.02E-04	706.72	0.00597	709.816	5.44E-04	752.664	0.00366	1003.894	1.68E-19
680.2375	3.53E-06	710.75	2.08E-04	706.85	0.00591	709.98	5.54E-04	752.92	0.0035	1004.2575	1.23E-19
680.365	3.65E-06	710.9	2.13E-04	706.98	0.00586	710.144	5.64E-04	753.176	0.00334	1004.621	8.96E-20
680.4925	3.78E-06	711.05	2.19E-04	707.11	0.0058	710.308	5.74E-04	753.432	0.00319	1004.9845	6.54E-20
680.62	3.92E-06	711.2	2.24E-04	707.24	0.00574	710.472	5.84E-04	753.688	0.00305	1005.348	4.76E-20
680.7475	4.06E-06	711.35	2.30E-04	707.37	0.00568	710.636	5.94E-04	753.944	0.00291	1005.7115	3.46E-20
680.875	4.21E-06	711.5	2.36E-04	707.5	0.00563	710.8	6.05E-04	754.2	0.00278	1006.075	2.52E-20
681.0025	4.36E-06	711.65	2.42E-04	707.63	0.00557	710.964	6.15E-04	754.456	0.00265	1006.4385	1.83E-20
681.13	4.52E-06	711.8	2.48E-04	707.76	0.00551	711.128	6.26E-04	754.712	0.00253	1006.802	1.32E-20
681.2575	4.69E-06	711.95	2.54E-04	707.89	0.00545	711.292	6.37E-04	754.968	0.00241	1007.1655	9.57E-21
681.385	4.86E-06	712.1	2.60E-04	708.02	0.0054	711.456	6.48E-04	755.224	0.00229	1007.529	6.92E-21

681.5125	5.04E-06	712.25	2.66E-04	708.15	0.00534	711.62	6.60E-04	755.48	0.00218	1007.8925	4.99E-21
681.64	5.23E-06	712.4	2.72E-04	708.28	0.00528	711.784	6.71E-04	755.736	0.00207	1008.256	3.60E-21
681.7675	5.43E-06	712.55	2.79E-04	708.41	0.00523	711.948	6.82E-04	755.992	0.00197	1008.6195	2.59E-21
681.895	5.63E-06	712.7	2.85E-04	708.54	0.00517	712.112	6.94E-04	756.248	0.00187	1008.983	1.86E-21
682.0225	5.84E-06	712.85	2.92E-04	708.67	0.00511	712.276	7.06E-04	756.504	0.00178	1009.3465	1.34E-21
682.15	6.06E-06	713	2.99E-04	708.8	0.00506	712.44	7.18E-04	756.76	0.00169	1009.71	9.59E-22
682.2775	6.28E-06	713.15	3.05E-04	708.93	0.005	712.604	7.30E-04	757.016	0.0016	1010.0735	6.86E-22
682.405	6.52E-06	713.3	3.12E-04	709.06	0.00495	712.768	7.42E-04	757.272	0.00152	1010.437	4.91E-22
682.5325	6.76E-06	713.45	3.19E-04	709.19	0.00489	712.932	7.54E-04	757.528	0.00144	1010.8005	3.51E-22
682.66	7.01E-06	713.6	3.26E-04	709.32	0.00484	713.096	7.67E-04	757.784	0.00137	1011.164	2.50E-22
682.7875	7.27E-06	713.75	3.33E-04	709.45	0.00478	713.26	7.79E-04	758.04	0.00129	1011.5275	1.78E-22
682.915	7.54E-06	713.9	3.40E-04	709.58	0.00473	713.424	7.92E-04	758.296	0.00123	1011.891	1.27E-22
683.0425	7.82E-06	714.05	3.48E-04	709.71	0.00467	713.588	8.04E-04	758.552	0.00116	1012.2545	9.00E-23
683.17	8.11E-06	714.2	3.55E-04	709.84	0.00462	713.752	8.17E-04	758.808	0.0011	1012.618	6.38E-23
683.2975	8.41E-06	714.35	3.62E-04	709.97	0.00457	713.916	8.30E-04	759.064	0.00104	1012.9815	4.52E-23
683.425	8.72E-06	714.5	3.70E-04	710.1	0.00451	714.08	8.43E-04	759.32	9.81E-04	1013.345	3.20E-23
683.5525	9.04E-06	714.65	3.77E-04	710.23	0.00446	714.244	8.56E-04	759.576	9.27E-04	1013.7085	2.26E-23
683.68	9.37E-06	714.8	3.85E-04	710.36	0.00441	714.408	8.70E-04	759.832	8.76E-04	1014.072	1.60E-23
683.8075	9.71E-06	714.95	3.93E-04	710.49	0.00436	714.572	8.83E-04	760.088	8.27E-04	1014.4355	1.12E-23
683.935	1.01E-05	715.1	4.00E-04	710.62	0.0043	714.736	8.96E-04	760.344	7.80E-04	1014.799	7.92E-24
684.0625	1.04E-05	715.25	4.08E-04	710.75	0.00425	714.9	9.10E-04	760.6	7.37E-04	1015.1625	5.56E-24
684.19	1.08E-05	715.4	4.16E-04	710.88	0.0042	715.064	9.23E-04	760.856	6.95E-04	1015.526	3.91E-24
684.3175	1.12E-05	715.55	4.24E-04	711.01	0.00415	715.228	9.37E-04	761.112	6.56E-04	1015.8895	2.74E-24
684.445	1.16E-05	715.7	4.32E-04	711.14	0.0041	715.392	9.51E-04	761.368	6.18E-04	1016.253	1.92E-24
684.5725	1.20E-05	715.85	4.40E-04	711.27	0.00405	715.556	9.65E-04	761.624	5.83E-04	1016.6165	1.34E-24
684.7	1.24E-05	716	4.48E-04	711.4	0.004	715.72	9.79E-04	761.88	5.50E-04	1016.98	9.36E-25
684.8275	1.29E-05	716.15	4.56E-04	711.53	0.00396	715.884	9.93E-04	762.136	5.18E-04	1017.3435	6.53E-25
684.955	1.33E-05	716.3	4.64E-04	711.66	0.00391	716.048	0.00101	762.392	4.88E-04	1017.707	4.55E-25
685.0825	1.38E-05	716.45	4.72E-04	711.79	0.00386	716.212	0.00102	762.648	4.60E-04	1018.0705	3.16E-25
685.21	1.43E-05	716.6	4.80E-04	711.92	0.00382	716.376	0.00103	762.904	4.34E-04	1018.434	2.20E-25
685.3375	1.48E-05	716.75	4.89E-04	712.05	0.00377	716.54	0.00105	763.16	4.09E-04	1018.7975	1.52E-25
685.465	1.53E-05	716.9	4.97E-04	712.18	0.00372	716.704	0.00106	763.416	3.86E-04	1019.161	1.06E-25
685.5925	1.58E-05	717.05	5.05E-04	712.31	0.00368	716.868	0.00108	763.672	3.64E-04	1019.5245	7.30E-26
685.72	1.64E-05	717.2	5.13E-04	712.44	0.00363	717.032	0.00109	763.928	3.43E-04	1019.888	5.04E-26
685.8475	1.69E-05	717.35	5.22E-04	712.57	0.00359	717.196	0.00111	764.184	3.24E-04	1020.2515	3.48E-26
685.975	1.75E-05	717.5	5.30E-04	712.7	0.00355	717.36	0.00112	764.44	3.05E-04	1020.615	2.40E-26
686.1025	1.81E-05	717.65	5.38E-04	712.83	0.00351	717.524	0.00113	764.696	2.88E-04	1020.9785	1.65E-26
686.23	1.87E-05	717.8	5.47E-04	712.96	0.00346	717.688	0.00115	764.952	2.72E-04	1021.342	1.13E-26
686.3575	1.93E-05	717.95	5.55E-04	713.09	0.00342	717.852	0.00116	765.208	2.58E-04	1021.7055	7.79E-27
686.485	2.00E-05	718.1	5.64E-04	713.22	0.00338	718.016	0.00118	765.464	2.44E-04	1022.069	5.34E-27
686.6125	2.06E-05	718.25	5.72E-04	713.35	0.00334	718.18	0.00119	765.72	2.31E-04	1022.4325	3.65E-27
686.74	2.13E-05	718.4	5.80E-04	713.48	0.0033	718.344	0.00121	765.976	2.19E-04	1022.796	2.50E-27
686.8675	2.20E-05	718.55	5.89E-04	713.61	0.00326	718.508	0.00122	766.232	2.08E-04	1023.1595	1.71E-27
686.995	2.27E-05	718.7	5.97E-04	713.74	0.00322	718.672	0.00123	766.488	1.97E-04	1023.523	1.16E-27
687.1225	2.35E-05	718.85	6.05E-04	713.87	0.00319	718.836	0.00125	766.744	1.87E-04	1023.8865	7.92E-28
687.25	2.42E-05	719	6.14E-04	714	0.00315	719	0.00126	767	1.78E-04	1024.25	5.39E-28
687.3775	2.50E-05	719.15	6.22E-04	714.13	0.00311	719.164	0.00128	767.256	1.70E-04	1024.6135	3.66E-28
687.505	2.58E-05	719.3	6.30E-04	714.26	0.00308	719.328	0.00129	767.512	1.63E-04	1024.977	2.48E-28
687.6325	2.67E-05	719.45	6.38E-04	714.39	0.00304	719.492	0.00131	767.768	1.55E-04	1025.3405	1.68E-28
687.76	2.75E-05	719.6	6.47E-04	714.52	0.00301	719.656	0.00132	768.024	1.49E-04	1025.704	1.14E-28
687.8875	2.84E-05	719.75	6.55E-04	714.65	0.00297	719.82	0.00133	768.28	1.43E-04	1026.0675	7.68E-29

688.015	2.93E-05	719.9	6.63E-04	714.78	0.00294	719.984	0.00135	768.536	1.37E-04	1026.431	5.18E-29
688.1425	3.02E-05	720.05	6.71E-04	714.91	0.00291	720.148	0.00136	768.792	1.32E-04	1026.7945	3.49E-29
688.27	3.11E-05	720.2	6.79E-04	715.04	0.00288	720.312	0.00137	769.048	1.28E-04	1027.158	2.35E-29
688.3975	3.21E-05	720.35	6.87E-04	715.17	0.00284	720.476	0.00139	769.304	1.24E-04	1027.5215	1.58E-29
688.525	3.31E-05	720.5	6.94E-04	715.3	0.00281	720.64	0.0014	769.56	1.20E-04	1027.885	1.06E-29
688.6525	3.41E-05	720.65	7.02E-04	715.43	0.00278	720.804	0.00141	769.816	1.16E-04	1028.2485	7.11E-30
688.78	3.51E-05	720.8	7.10E-04	715.56	0.00275	720.968	0.00143	770.072	1.13E-04	1028.612	4.76E-30
688.9075	3.62E-05	720.95	7.18E-04	715.69	0.00273	721.132	0.00144	770.328	1.10E-04	1028.9755	3.18E-30
689.035	3.73E-05	721.1	7.25E-04	715.82	0.0027	721.296	0.00145	770.584	1.08E-04	1029.339	2.12E-30
689.1625	3.84E-05	721.25	7.33E-04	715.95	0.00267	721.46	0.00147	770.84	1.05E-04	1029.7025	1.42E-30
689.29	3.96E-05	721.4	7.40E-04	716.08	0.00264	721.624	0.00148	771.096	1.03E-04	1030.066	9.43E-31
689.4175	4.07E-05	721.55	7.47E-04	716.21	0.00262	721.788	0.00149	771.352	1.02E-04	1030.4295	6.27E-31
689.545	4.19E-05	721.7	7.54E-04	716.34	0.00259	721.952	0.0015	771.608	9.99E-05	1030.793	4.17E-31
689.6725	4.32E-05	721.85	7.61E-04	716.47	0.00257	722.116	0.00152	771.864	9.85E-05	1031.1565	2.77E-31
689.8	4.44E-05	722	7.68E-04	716.6	0.00254	722.28	0.00153	772.12	9.72E-05	1031.52	1.85E-31
689.9275	4.57E-05	722.15	7.75E-04	716.73	0.00252	722.444	0.00154	772.376	9.61E-05	1031.8835	1.24E-31
690.055	4.70E-05	722.3	7.82E-04	716.86	0.0025	722.608	0.00155	772.632	9.51E-05	1032.247	8.45E-32
690.1825	4.84E-05	722.45	7.89E-04	716.99	0.00248	722.772	0.00156	772.888	9.43E-05	1032.6105	5.98E-32
690.31	4.98E-05	722.6	7.95E-04	717.12	0.00245	722.936	0.00157	773.144	9.35E-05	1032.974	4.56E-32
690.4375	5.12E-05	722.75	8.02E-04	717.25	0.00243	723.1	0.00159	773.4	9.29E-05	1033.3375	3.95E-32
690.565	5.26E-05	722.9	8.08E-04	717.38	0.00241	723.264	0.0016	773.656	9.24E-05	1033.701	4.04E-32
690.6925	5.41E-05	723.05	8.14E-04	717.51	0.00239	723.428	0.00161	773.912	9.20E-05	1034.0645	4.86E-32
690.82	5.56E-05	723.2	8.20E-04	717.64	0.00237	723.592	0.00162	774.168	9.16E-05	1034.428	6.55E-32
690.9475	5.72E-05	723.35	8.26E-04	717.77	0.00236	723.756	0.00163	774.424	9.13E-05	1034.7915	9.40E-32
691.075	5.88E-05	723.5	8.31E-04	717.9	0.00234	723.92	0.00164	774.68	9.11E-05	1035.155	1.39E-31
691.2025	6.04E-05	723.65	8.37E-04	718.03	0.00232	724.084	0.00165	774.936	9.09E-05	1035.5185	2.09E-31
691.33	6.20E-05	723.8	8.42E-04	718.16	0.0023	724.248	0.00166	775.192	9.07E-05	1035.882	3.15E-31
691.4575	6.37E-05	723.95	8.48E-04	718.29	0.00229	724.412	0.00167	775.448	9.06E-05	1036.2455	4.75E-31
691.585	6.54E-05	724.1	8.53E-04	718.42	0.00227	724.576	0.00167	775.704	9.05E-05	1036.609	7.17E-31
691.7125	6.72E-05	724.25	8.58E-04	718.55	0.00226	724.74	0.00168	775.96	9.04E-05	1036.9725	1.08E-30
691.84	6.90E-05	724.4	8.62E-04	718.68	0.00224	724.904	0.00169	776.216	9.03E-05	1037.336	1.63E-30
691.9675	7.08E-05	724.55	8.67E-04	718.81	0.00223	725.068	0.0017	776.472	9.02E-05	1037.6995	2.45E-30
692.095	7.27E-05	724.7	8.71E-04	718.94	0.00222	725.232	0.00171	776.728	9.02E-05	1038.063	3.69E-30
692.2225	7.46E-05	724.85	8.76E-04	719.07	0.0022	725.396	0.00171	776.984	9.01E-05	1038.4265	5.54E-30
692.35	7.65E-05	725	8.80E-04	719.2	0.00219	725.56	0.00172	777.24	9.00E-05	1038.79	8.30E-30
692.4775	7.85E-05	725.15	8.83E-04	719.33	0.00218	725.724	0.00173	777.496	8.99E-05	1039.1535	1.24E-29
692.605	8.05E-05	725.3	8.87E-04	719.46	0.00217	725.888	0.00174	777.752	8.98E-05	1039.517	1.86E-29
692.7325	8.26E-05	725.45	8.91E-04	719.59	0.00216	726.052	0.00174	778.008	8.97E-05	1039.8805	2.77E-29
692.86	8.47E-05	725.6	8.94E-04	719.72	0.00215	726.216	0.00175	778.264	8.95E-05	1040.244	4.14E-29
692.9875	8.69E-05	725.75	8.97E-04	719.85	0.00214	726.38	0.00175	778.52	8.93E-05	1040.6075	6.16E-29
693.115	8.90E-05	725.9	9.00E-04	719.98	0.00213	726.544	0.00176	778.776	8.91E-05	1040.971	9.17E-29
693.2425	9.13E-05	726.05	9.03E-04	720.11	0.00212	726.708	0.00176	779.032	8.89E-05	1041.3345	1.36E-28
693.37	9.35E-05	726.2	9.05E-04	720.24	0.00212	726.872	0.00177	779.288	8.86E-05	1041.698	2.02E-28
693.4975	9.58E-05	726.35	9.08E-04	720.37	0.00211	727.036	0.00177	779.544	8.83E-05	1042.0615	2.99E-28
693.625	9.82E-05	726.5	9.10E-04	720.5	0.0021	727.2	0.00178	779.8	8.79E-05	1042.425	4.43E-28
693.7525	1.01E-04	726.65	9.12E-04	720.63	0.0021	727.364	0.00178	780.056	8.75E-05	1042.7885	6.54E-28
693.88	1.03E-04	726.8	9.14E-04	720.76	0.00209	727.528	0.00178	780.312	8.71E-05	1043.152	9.65E-28
694.0075	1.05E-04	726.95	9.15E-04	720.89	0.00209	727.692	0.00178	780.568	8.67E-05	1043.5155	1.42E-27
694.135	1.08E-04	727.1	9.16E-04	721.02	0.00208	727.856	0.00179	780.824	8.62E-05	1043.879	2.09E-27
694.2625	1.11E-04	727.25	9.18E-04	721.15	0.00208	728.02	0.00179	781.08	8.56E-05	1044.2425	3.08E-27
694.39	1.13E-04	727.4	9.19E-04	721.28	0.00207	728.184	0.00179	781.336	8.50E-05	1044.606	4.52E-27

694.5175	1.16E-04	727.55	9.19E-04	721.41	0.00207	728.348	0.00179	781.592	8.44E-05	1044.9695	6.62E-27
694.645	1.19E-04	727.7	9.20E-04	721.54	0.00207	728.512	0.00179	781.848	8.38E-05	1045.333	9.69E-27
694.7725	1.21E-04	727.85	9.20E-04	721.67	0.00207	728.676	0.00179	782.104	8.31E-05	1045.6965	1.42E-26
694.9	1.24E-04	728	9.20E-04	721.8	0.00206	728.84	0.00179	782.36	8.23E-05	1046.06	2.07E-26
695.0275	1.27E-04	728.15	9.20E-04	721.93	0.00206	729.004	0.00179	782.616	8.16E-05	1046.4235	3.02E-26
695.155	1.30E-04	728.3	9.20E-04	722.06	0.00206	729.168	0.00179	782.872	8.08E-05	1046.787	4.39E-26
695.2825	1.33E-04	728.45	9.19E-04	722.19	0.00206	729.332	0.00179	783.128	7.99E-05	1047.1505	6.39E-26
695.41	1.36E-04	728.6	9.19E-04	722.32	0.00206	729.496	0.00179	783.384	7.91E-05	1047.514	9.28E-26
695.5375	1.39E-04	728.75	9.18E-04	722.45	0.00206	729.66	0.00179	783.64	7.82E-05	1047.8775	1.35E-25
695.665	1.42E-04	728.9	9.17E-04	722.58	0.00206	729.824	0.00179	783.896	7.72E-05	1048.241	1.95E-25
695.7925	1.45E-04	729.05	9.15E-04	722.71	0.00206	729.988	0.00178	784.152	7.63E-05	1048.6045	2.82E-25
695.92	1.48E-04	729.2	9.14E-04	722.84	0.00206	730.152	0.00178	784.408	7.53E-05	1048.968	4.07E-25
696.0475	1.51E-04	729.35	9.12E-04	722.97	0.00207	730.316	0.00178	784.664	7.43E-05	1049.3315	5.88E-25
696.175	1.54E-04	729.5	9.10E-04	723.1	0.00207	730.48	0.00177	784.92	7.33E-05	1049.695	8.47E-25
696.3025	1.58E-04	729.65	9.08E-04	723.23	0.00207	730.644	0.00177	785.176	7.23E-05	1050.0585	1.22E-24
696.43	1.61E-04	729.8	9.06E-04	723.36	0.00207	730.808	0.00177	785.432	7.12E-05	1050.422	1.75E-24
696.5575	1.64E-04	729.95	9.03E-04	723.49	0.00208	730.972	0.00176	785.688	7.01E-05	1050.7855	2.51E-24
696.685	1.68E-04	730.1	9.01E-04	723.62	0.00208	731.136	0.00176	785.944	6.91E-05	1051.149	3.60E-24
696.8125	1.71E-04	730.25	8.98E-04	723.75	0.00208	731.3	0.00175	786.2	6.80E-05	1051.5125	5.16E-24
696.94	1.75E-04	730.4	8.95E-04	723.88	0.00209	731.464	0.00175	786.456	6.69E-05	1051.876	7.37E-24
697.0675	1.78E-04	730.55	8.91E-04	724.01	0.00209	731.628	0.00174	786.712	6.58E-05	1052.2395	1.05E-23
697.195	1.82E-04	730.7	8.88E-04	724.14	0.0021	731.792	0.00173	786.968	6.48E-05	1052.603	1.50E-23
697.3225	1.86E-04	730.85	8.84E-04	724.27	0.0021	731.956	0.00173	787.224	6.37E-05	1052.9665	2.14E-23
697.45	1.89E-04	731	8.81E-04	724.4	0.00211	732.12	0.00172	787.48	6.26E-05	1053.33	3.04E-23
697.5775	1.93E-04	731.15	8.77E-04	724.53	0.00211	732.284	0.00171	787.736	6.16E-05	1053.6935	4.31E-23
697.705	1.97E-04	731.3	8.72E-04	724.66	0.00212	732.448	0.0017	787.992	6.06E-05	1054.057	6.12E-23
697.8325	2.01E-04	731.45	8.68E-04	724.79	0.00213	732.612	0.00169	788.248	5.96E-05	1054.4205	8.67E-23
697.96	2.05E-04	731.6	8.64E-04	724.92	0.00213	732.776	0.00169	788.504	5.87E-05	1054.784	1.23E-22
698.0875	2.09E-04	731.75	8.59E-04	725.05	0.00214	732.94	0.00168	788.76	5.78E-05	1055.1475	1.73E-22
698.215	2.13E-04	731.9	8.54E-04	725.18	0.00215	733.104	0.00167	789.016	5.69E-05	1055.511	2.44E-22
698.3425	2.17E-04	732.05	8.49E-04	725.31	0.00215	733.268	0.00166	789.272	5.61E-05	1055.8745	3.44E-22
698.47	2.21E-04	732.2	8.44E-04	725.44	0.00216	733.432	0.00165	789.528	5.53E-05	1056.238	4.84E-22
698.5975	2.25E-04	732.35	8.39E-04	725.57	0.00217	733.596	0.00164	789.784	5.46E-05	1056.6015	6.80E-22
698.725	2.29E-04	732.5	8.33E-04	725.7	0.00218	733.76	0.00163	790.04	5.40E-05	1056.965	9.55E-22
698.8525	2.33E-04	732.65	8.28E-04	725.83	0.00219	733.924	0.00161	790.296	5.35E-05	1057.3285	1.34E-21
698.98	2.37E-04	732.8	8.22E-04	725.96	0.00219	734.088	0.0016	790.552	5.30E-05	1057.692	1.87E-21
699.1075	2.42E-04	732.95	8.16E-04	726.09	0.0022	734.252	0.00159	790.808	5.26E-05	1058.0555	2.62E-21
699.235	2.46E-04	733.1	8.10E-04	726.22	0.00221	734.416	0.00158	791.064	5.24E-05	1058.419	3.65E-21
699.3625	2.50E-04	733.25	8.04E-04	726.35	0.00222	734.58	0.00157	791.32	5.22E-05	1058.7825	5.10E-21
699.49	2.55E-04	733.4	7.98E-04	726.48	0.00223	734.744	0.00156	791.576	5.22E-05	1059.146	7.09E-21
699.6175	2.59E-04	733.55	7.92E-04	726.61	0.00224	734.908	0.00154	791.832	5.23E-05	1059.5095	9.86E-21
699.745	2.64E-04	733.7	7.85E-04	726.74	0.00225	735.072	0.00153	792.088	5.26E-05	1059.873	1.37E-20
699.8725	2.68E-04	733.85	7.79E-04	726.87	0.00226	735.236	0.00152	792.344	5.30E-05	1060.2365	1.90E-20
700	2.73E-04	734	7.72E-04	727	0.00227	735.4	0.0015	792.6	5.35E-05	1060.6	2.63E-20
700.1275	2.77E-04	734.15	7.65E-04	727.13	0.00228	735.564	0.00149	792.856	5.43E-05	1060.9635	3.64E-20
700.255	2.82E-04	734.3	7.58E-04	727.26	0.00229	735.728	0.00148	793.112	5.53E-05	1061.327	5.02E-20
700.3825	2.87E-04	734.45	7.51E-04	727.39	0.0023	735.892	0.00146	793.368	5.65E-05	1061.6905	6.93E-20
700.51	2.91E-04	734.6	7.44E-04	727.52	0.00231	736.056	0.00145	793.624	5.79E-05	1062.054	9.55E-20
700.6375	2.96E-04	734.75	7.37E-04	727.65	0.00232	736.22	0.00143	793.88	5.95E-05	1062.4175	1.31E-19
700.765	3.01E-04	734.9	7.30E-04	727.78	0.00233	736.384	0.00142	794.136	6.15E-05	1062.781	1.80E-19
700.8925	3.06E-04	735.05	7.23E-04	727.91	0.00234	736.548	0.0014	794.392	6.37E-05	1063.1445	2.48E-19

701.02	3.11E-04	735.2	7.15E-04	728.04	0.00235	736.712	0.00139	794.648	6.62E-05	1063.508	3.39E-19
701.1475	3.16E-04	735.35	7.08E-04	728.17	0.00236	736.876	0.00137	794.904	6.91E-05	1063.8715	4.64E-19
701.275	3.21E-04	735.5	7.01E-04	728.3	0.00237	737.04	0.00136	795.16	7.23E-05	1064.235	6.35E-19
701.4025	3.26E-04	735.65	6.93E-04	728.43	0.00238	737.204	0.00134	795.416	7.59E-05	1064.5985	8.66E-19
701.53	3.31E-04	735.8	6.86E-04	728.56	0.0024	737.368	0.00133	795.672	7.99E-05	1064.962	1.18E-18
701.6575	3.36E-04	735.95	6.78E-04	728.69	0.00241	737.532	0.00131	795.928	8.43E-05	1065.3255	1.61E-18
701.785	3.41E-04	736.1	6.70E-04	728.82	0.00242	737.696	0.0013	796.184	8.93E-05	1065.689	2.19E-18
701.9125	3.46E-04	736.25	6.63E-04	728.95	0.00243	737.86	0.00128	796.44	9.47E-05	1066.0525	2.97E-18
702.04	3.51E-04	736.4	6.55E-04	729.08	0.00244	738.024	0.00126	796.696	1.01E-04	1066.416	4.02E-18
702.1675	3.56E-04	736.55	6.48E-04	729.21	0.00245	738.188	0.00125	796.952	1.07E-04	1066.7795	5.45E-18
702.295	3.61E-04	736.7	6.40E-04	729.34	0.00246	738.352	0.00123	797.208	1.14E-04	1067.143	7.37E-18
702.4225	3.66E-04	736.85	6.32E-04	729.47	0.00248	738.516	0.00121	797.464	1.22E-04	1067.5065	9.95E-18
702.55	3.72E-04	737	6.24E-04	729.6	0.00249	738.68	0.0012	797.72	1.31E-04	1067.87	1.34E-17
702.6775	3.77E-04	737.15	6.17E-04	729.73	0.0025	738.844	0.00118	797.976	1.40E-04	1068.2335	1.81E-17
702.805	3.82E-04	737.3	6.09E-04	729.86	0.00251	739.008	0.00117	798.232	1.50E-04	1068.597	2.43E-17
702.9325	3.87E-04	737.45	6.01E-04	729.99	0.00252	739.172	0.00115	798.488	1.61E-04	1068.9605	3.27E-17
703.06	3.93E-04	737.6	5.94E-04	730.12	0.00253	739.336	0.00113	798.744	1.72E-04	1069.324	4.38E-17
703.1875	3.98E-04	737.75	5.86E-04	730.25	0.00254	739.5	0.00112	799	1.85E-04	1069.6875	5.87E-17
703.315	4.03E-04	737.9	5.79E-04	730.38	0.00256	739.664	0.00111	799.256	1.99E-04	1070.051	7.86E-17
703.4425	4.09E-04	738.05	5.71E-04	730.51	0.00257	739.828	0.00108	799.512	2.13E-04	1070.4145	1.05E-16
703.57	4.14E-04	738.2	5.64E-04	730.64	0.00258	739.992	0.00107	799.768	2.29E-04	1070.778	1.40E-16
703.6975	4.20E-04	738.35	5.56E-04	730.77	0.00259	740.156	0.00105	800.024	2.46E-04	1071.1415	1.87E-16
703.825	4.25E-04	738.5	5.49E-04	730.9	0.0026	740.32	0.00103	800.28	2.65E-04	1071.505	2.49E-16
703.9525	4.31E-04	738.65	5.42E-04	731.03	0.00261	740.484	0.00102	800.536	2.84E-04	1071.8685	3.31E-16
704.08	4.36E-04	738.8	5.34E-04	731.16	0.00262	740.648	9.99E-04	800.792	3.05E-04	1072.232	4.39E-16
704.2075	4.41E-04	738.95	5.27E-04	731.29	0.00264	740.812	9.83E-04	801.048	3.28E-04	1072.5955	5.82E-16
704.335	4.47E-04	739.1	5.20E-04	731.42	0.00265	740.976	9.66E-04	801.304	3.52E-04	1072.959	7.71E-16
704.4625	4.52E-04	739.25	5.13E-04	731.55	0.00266	741.14	9.50E-04	801.56	3.78E-04	1073.3225	1.02E-15
704.59	4.58E-04	739.4	5.06E-04	731.68	0.00267	741.304	9.33E-04	801.816	4.05E-04	1073.686	1.35E-15
704.7175	4.63E-04	739.55	4.99E-04	731.81	0.00268	741.468	9.17E-04	802.072	4.35E-04	1074.0495	1.77E-15
704.845	4.69E-04	739.7	4.92E-04	731.94	0.00269	741.632	9.01E-04	802.328	4.66E-04	1074.413	2.34E-15
704.9725	4.74E-04	739.85	4.86E-04	732.07	0.0027	741.796	8.85E-04	802.584	4.99E-04	1074.7765	3.07E-15
705.1	4.80E-04	740	4.79E-04	732.2	0.00271	741.96	8.69E-04	802.84	5.35E-04	1075.14	4.04E-15
705.2275	4.86E-04	740.15	4.73E-04	732.33	0.00272	742.124	8.53E-04	803.096	5.72E-04	1075.5035	5.30E-15
705.355	4.91E-04	740.3	4.67E-04	732.46	0.00273	742.288	8.37E-04	803.352	6.12E-04	1075.867	6.94E-15
705.4825	4.97E-04	740.45	4.61E-04	732.59	0.00274	742.452	8.22E-04	803.608	6.55E-04	1076.2305	9.08E-15
705.61	5.02E-04	740.6	4.55E-04	732.72	0.00275	742.616	8.06E-04	803.864	7.00E-04	1076.594	1.19E-14
705.7375	5.08E-04	740.75	4.49E-04	732.85	0.00276	742.78	7.91E-04	804.12	7.47E-04	1076.9575	1.55E-14
705.865	5.13E-04	740.9	4.43E-04	732.98	0.00277	742.944	7.76E-04	804.376	7.98E-04	1077.321	2.02E-14
705.9925	5.19E-04	741.05	4.37E-04	733.11	0.00278	743.108	7.61E-04	804.632	8.51E-04	1077.6845	2.63E-14
706.12	5.24E-04	741.2	4.32E-04	733.24	0.00279	743.272	7.46E-04	804.888	9.08E-04	1078.048	3.41E-14
706.2475	5.30E-04	741.35	4.27E-04	733.37	0.0028	743.436	7.31E-04	805.144	9.67E-04	1078.4115	4.43E-14
706.375	5.35E-04	741.5	4.22E-04	733.5	0.00281	743.6	7.17E-04	805.4	0.00103	1078.775	5.75E-14
706.5025	5.41E-04	741.65	4.17E-04	733.63	0.00281	743.764	7.02E-04	805.656	0.0011	1079.1385	7.44E-14
706.63	5.46E-04	741.8	4.12E-04	733.76	0.00282	743.928	6.88E-04	805.912	0.00117	1079.502	9.62E-14
706.7575	5.52E-04	741.95	4.08E-04	733.89	0.00283	744.092	6.74E-04	806.168	0.00124	1079.8655	1.24E-13
706.885	5.57E-04	742.1	4.03E-04	734.02	0.00284	744.256	6.60E-04	806.424	0.00132	1080.229	1.60E-13
707.0125	5.63E-04	742.25	3.99E-04	734.15	0.00285	744.42	6.47E-04	806.68	0.0014	1080.5925	2.06E-13
707.14	5.68E-04	742.4	3.95E-04	734.28	0.00285	744.584	6.33E-04	806.936	0.00148	1080.956	2.65E-13
707.2675	5.74E-04	742.55	3.92E-04	734.41	0.00286	744.748	6.20E-04	807.192	0.00157	1081.3195	3.41E-13
707.395	5.79E-04	742.7	3.88E-04	734.54	0.00287	744.912	6.07E-04	807.448	0.00167	1081.683	4.37E-13

707.5225	5.84E-04	742.85	3.85E-04	734.67	0.00288	745.076	5.94E-04	807.704	0.00176	1082.0465	5.60E-13
707.65	5.90E-04	743	3.82E-04	734.8	0.00288	745.24	5.82E-04	807.96	0.00187	1082.41	7.16E-13
707.7775	5.95E-04	743.15	3.80E-04	734.93	0.00289	745.404	5.70E-04	808.216	0.00198	1082.7735	9.15E-13
707.905	6.01E-04	743.3	3.77E-04	735.06	0.0029	745.568	5.58E-04	808.472	0.00209	1083.137	1.17E-12
708.0325	6.06E-04	743.45	3.75E-04	735.19	0.0029	745.732	5.46E-04	808.728	0.0022	1083.5005	1.49E-12
708.16	6.11E-04	743.6	3.73E-04	735.32	0.00291	745.896	5.34E-04	808.984	0.00233	1083.864	1.89E-12
708.2875	6.16E-04	743.75	3.71E-04	735.45	0.00291	746.06	5.23E-04	809.24	0.00246	1084.2275	2.41E-12
708.415	6.22E-04	743.9	3.70E-04	735.58	0.00292	746.224	5.12E-04	809.496	0.00259	1084.591	3.05E-12
708.5425	6.27E-04	744.05	3.69E-04	735.71	0.00292	746.388	5.02E-04	809.752	0.00273	1084.9545	3.87E-12
708.67	6.32E-04	744.2	3.68E-04	735.84	0.00293	746.552	4.91E-04	810.008	0.00287	1085.318	4.90E-12
708.7975	6.37E-04	744.35	3.68E-04	735.97	0.00293	746.716	4.81E-04	810.264	0.00302	1085.6815	6.20E-12
708.925	6.42E-04	744.5	3.67E-04	736.1	0.00294	746.88	4.71E-04	810.52	0.00318	1086.045	7.82E-12
709.0525	6.47E-04	744.65	3.67E-04	736.23	0.00294	747.044	4.61E-04	810.776	0.00334	1086.4085	9.86E-12
709.18	6.53E-04	744.8	3.68E-04	736.36	0.00294	747.208	4.52E-04	811.032	0.0035	1086.772	1.24E-11
709.3075	6.58E-04	744.95	3.69E-04	736.49	0.00295	747.372	4.43E-04	811.288	0.00368	1087.1355	1.56E-11
709.435	6.63E-04	745.1	3.70E-04	736.62	0.00295	747.536	4.34E-04	811.544	0.00386	1087.499	1.96E-11
709.5625	6.68E-04	745.25	3.71E-04	736.75	0.00295	747.7	4.26E-04	811.8	0.00404	1087.8625	2.46E-11
709.69	6.72E-04	745.4	3.73E-04	736.88	0.00295	747.864	4.18E-04	812.056	0.00423	1088.226	3.08E-11
709.8175	6.77E-04	745.55	3.76E-04	737.01	0.00296	748.028	4.10E-04	812.312	0.00443	1088.5895	3.85E-11
709.945	6.82E-04	745.7	3.78E-04	737.14	0.00296	748.192	4.03E-04	812.568	0.00463	1088.953	4.82E-11
710.0725	6.87E-04	745.85	3.81E-04	737.27	0.00296	748.356	3.96E-04	812.824	0.00484	1089.3165	6.01E-11
710.2	6.92E-04	746	3.84E-04	737.4	0.00296	748.52	3.89E-04	813.08	0.00506	1089.68	7.49E-11
710.3275	6.97E-04	746.15	3.88E-04	737.53	0.00296	748.684	3.83E-04	813.336	0.00528	1090.0435	9.32E-11
710.455	7.01E-04	746.3	3.92E-04	737.66	0.00296	748.848	3.77E-04	813.592	0.00551	1090.407	1.16E-10
710.5825	7.06E-04	746.45	3.97E-04	737.79	0.00296	749.012	3.71E-04	813.848	0.00574	1090.7705	1.44E-10
710.71	7.10E-04	746.6	4.02E-04	737.92	0.00296	749.176	3.66E-04	814.104	0.00599	1091.134	1.78E-10
710.8375	7.15E-04	746.75	4.08E-04	738.05	0.00296	749.34	3.61E-04	814.36	0.00623	1091.4975	2.20E-10
710.965	7.20E-04	746.9	4.14E-04	738.18	0.00296	749.504	3.56E-04	814.616	0.00648	1091.861	2.72E-10
711.0925	7.24E-04	747.05	4.20E-04	738.31	0.00296	749.668	3.52E-04	814.872	0.00674	1092.2245	3.36E-10
711.22	7.28E-04	747.2	4.27E-04	738.44	0.00295	749.832	3.48E-04	815.128	0.00701	1092.588	4.15E-10
711.3475	7.33E-04	747.35	4.34E-04	738.57	0.00295	749.996	3.45E-04	815.384	0.00728	1092.9515	5.11E-10
711.475	7.37E-04	747.5	4.42E-04	738.7	0.00295	750.16	3.42E-04	815.64	0.00755	1093.315	6.28E-10
711.6025	7.41E-04	747.65	4.50E-04	738.83	0.00295	750.324	3.39E-04	815.896	0.00783	1093.6785	7.71E-10
711.73	7.46E-04	747.8	4.59E-04	738.96	0.00294	750.488	3.37E-04	816.152	0.00812	1094.042	9.45E-10
711.8575	7.50E-04	747.95	4.69E-04	739.09	0.00294	750.652	3.35E-04	816.408	0.00841	1094.4055	1.16E-09
711.985	7.54E-04	748.1	4.79E-04	739.22	0.00294	750.816	3.33E-04	816.664	0.0087	1094.769	1.42E-09
712.1125	7.58E-04	748.25	4.89E-04	739.35	0.00293	750.98	3.32E-04	816.92	0.009	1095.1325	1.73E-09
712.24	7.62E-04	748.4	5.00E-04	739.48	0.00293	751.144	3.32E-04	817.176	0.0093	1095.496	2.11E-09
712.3675	7.66E-04	748.55	5.12E-04	739.61	0.00292	751.308	3.32E-04	817.432	0.00961	1095.8595	2.57E-09
712.495	7.70E-04	748.7	5.24E-04	739.74	0.00292	751.472	3.32E-04	817.688	0.00992	1096.223	3.13E-09
712.6225	7.73E-04	748.85	5.36E-04	739.87	0.00291	751.636	3.33E-04	817.944	0.01024	1096.5865	3.80E-09
712.75	7.77E-04	749	5.50E-04	740	0.00291	751.8	3.35E-04	818.2	0.01055	1096.95	4.61E-09
712.8775	7.81E-04	749.15	5.64E-04	740.13	0.0029	751.964	3.36E-04	818.456	0.01087	1097.3135	5.59E-09
713.005	7.85E-04	749.3	5.78E-04	740.26	0.00289	752.128	3.39E-04	818.712	0.0112	1097.677	6.77E-09
713.1325	7.88E-04	749.45	5.93E-04	740.39	0.00289	752.292	3.41E-04	818.968	0.01152	1098.0405	8.18E-09
713.26	7.92E-04	749.6	6.09E-04	740.52	0.00288	752.456	3.45E-04	819.224	0.01185	1098.404	9.87E-09
713.3875	7.95E-04	749.75	6.26E-04	740.65	0.00287	752.62	3.49E-04	819.48	0.01217	1098.7675	1.19E-08
713.515	7.98E-04	749.9	6.43E-04	740.78	0.00286	752.784	3.53E-04	819.736	0.0125	1099.131	1.43E-08
713.6425	8.02E-04	750.05	6.61E-04	740.91	0.00286	752.948	3.58E-04	819.992	0.01283	1099.4945	1.72E-08
713.77	8.05E-04	750.2	6.79E-04	741.04	0.00285	753.112	3.63E-04	820.248	0.01316	1099.858	2.07E-08
713.8975	8.08E-04	750.35	6.98E-04	741.17	0.00284	753.276	3.69E-04	820.504	0.01349	1100.2215	2.48E-08

714.025	8.11E-04	750.5	7.18E-04	741.3	0.00283	753.44	3.76E-04	820.76	0.01382	1100.585	2.97E-08
714.1525	8.14E-04	750.65	7.39E-04	741.43	0.00282	753.604	3.83E-04	821.016	0.01414	1100.9485	3.55E-08
714.28	8.17E-04	750.8	7.60E-04	741.56	0.00281	753.768	3.91E-04	821.272	0.01447	1101.312	4.24E-08
714.4075	8.20E-04	750.95	7.82E-04	741.69	0.0028	753.932	3.99E-04	821.528	0.01479	1101.6755	5.06E-08
714.535	8.23E-04	751.1	8.05E-04	741.82	0.00279	754.096	4.08E-04	821.784	0.01511	1102.039	6.03E-08
714.6625	8.26E-04	751.25	8.29E-04	741.95	0.00278	754.26	4.18E-04	822.04	0.01542	1102.4025	7.17E-08
714.79	8.29E-04	751.4	8.53E-04	742.08	0.00277	754.424	4.28E-04	822.296	0.01574	1102.766	8.52E-08
714.9175	8.31E-04	751.55	8.78E-04	742.21	0.00275	754.588	4.39E-04	822.552	0.01604	1103.1295	1.01E-07
715.045	8.34E-04	751.7	9.04E-04	742.34	0.00274	754.752	4.51E-04	822.808	0.01635	1103.493	1.20E-07
715.1725	8.36E-04	751.85	9.31E-04	742.47	0.00273	754.916	4.63E-04	823.064	0.01665	1103.8565	1.42E-07
715.3	8.39E-04	752	9.59E-04	742.6	0.00272	755.08	4.76E-04	823.32	0.01694	1104.22	1.68E-07
715.4275	8.41E-04	752.15	9.87E-04	742.73	0.0027	755.244	4.90E-04	823.576	0.01723	1104.5835	1.98E-07
715.555	8.43E-04	752.3	0.00102	742.86	0.00269	755.408	5.04E-04	823.832	0.01751	1104.947	2.33E-07
715.6825	8.46E-04	752.45	0.00105	742.99	0.00268	755.572	5.20E-04	824.088	0.01778	1105.3105	2.74E-07
715.81	8.48E-04	752.6	0.00108	743.12	0.00266	755.736	5.36E-04	824.344	0.01804	1105.674	3.23E-07
715.9375	8.50E-04	752.75	0.00111	743.25	0.00265	755.9	5.52E-04	824.6	0.0183	1106.0375	3.79E-07
716.065	8.52E-04	752.9	0.00114	743.38	0.00263	756.064	5.70E-04	824.856	0.01855	1106.401	4.44E-07
716.1925	8.54E-04	753.05	0.00118	743.51	0.00262	756.228	5.88E-04	825.112	0.01879	1106.7645	5.20E-07
716.32	8.56E-04	753.2	0.00121	743.64	0.0026	756.392	6.07E-04	825.368	0.01902	1107.128	6.08E-07
716.4475	8.57E-04	753.35	0.00125	743.77	0.00259	756.556	6.27E-04	825.624	0.01924	1107.4915	7.10E-07
716.575	8.59E-04	753.5	0.00128	743.9	0.00257	756.72	6.48E-04	825.88	0.01945	1107.855	8.28E-07
716.7025	8.61E-04	753.65	0.00132	744.03	0.00256	756.884	6.70E-04	826.136	0.01965	1108.2185	9.65E-07
716.83	8.62E-04	753.8	0.00136	744.16	0.00254	757.048	6.92E-04	826.392	0.01984	1108.582	1.12E-06
716.9575	8.64E-04	753.95	0.0014	744.29	0.00253	757.212	7.16E-04	826.648	0.02002	1108.9455	1.30E-06
717.085	8.65E-04	754.1	0.00144	744.42	0.00251	757.376	7.40E-04	826.904	0.02018	1109.309	1.51E-06
717.2125	8.66E-04	754.25	0.00148	744.55	0.00249	757.54	7.65E-04	827.16	0.02034	1109.6725	1.75E-06
717.34	8.67E-04	754.4	0.00152	744.68	0.00248	757.704	7.92E-04	827.416	0.02048	1110.036	2.03E-06
717.4675	8.69E-04	754.55	0.00157	744.81	0.00246	757.868	8.19E-04	827.672	0.02061	1110.3995	2.34E-06
717.595	8.70E-04	754.7	0.00161	744.94	0.00244	758.032	8.47E-04	827.928	0.02072	1110.763	2.70E-06
717.7225	8.71E-04	754.85	0.00166	745.07	0.00242	758.196	8.76E-04	828.184	0.02083	1111.1265	3.12E-06
717.85	8.71E-04	755	0.0017	745.2	0.00241	758.36	9.06E-04	828.44	0.02092	1111.49	3.59E-06
717.9775	8.72E-04	755.15	0.00175	745.33	0.00239	758.524	9.38E-04	828.696	0.02099	1111.8535	4.12E-06
718.105	8.73E-04	755.3	0.0018	745.46	0.00237	758.688	9.70E-04	828.952	0.02106	1112.217	4.73E-06
718.2325	8.74E-04	755.45	0.00185	745.59	0.00235	758.852	0.001	829.208	0.02111	1112.5805	5.43E-06
718.36	8.74E-04	755.6	0.0019	745.72	0.00233	759.016	0.00104	829.464	0.02114	1112.944	6.21E-06
718.4875	8.75E-04	755.75	0.00195	745.85	0.00231	759.18	0.00107	829.72	0.02116	1113.3075	7.11E-06
718.615	8.75E-04	755.9	0.002	745.98	0.0023	759.344	0.00111	829.976	0.02117	1113.671	8.11E-06
718.7425	8.75E-04	756.05	0.00206	746.11	0.00228	759.508	0.00115	830.232	0.02117	1114.0345	9.25E-06
718.87	8.76E-04	756.2	0.00211	746.24	0.00226	759.672	0.00119	830.488	0.02115	1114.398	1.05E-05
718.9975	8.76E-04	756.35	0.00217	746.37	0.00224	759.836	0.00123	830.744	0.02111	1114.7615	1.20E-05
719.125	8.76E-04	756.5	0.00222	746.5	0.00222	760	0.00127	831	0.02107	1115.125	1.36E-05
719.2525	8.76E-04	756.65	0.00228	746.63	0.0022	760.164	0.00131	831.256	0.02101	1115.4885	1.54E-05
719.38	8.76E-04	756.8	0.00234	746.76	0.00218	760.328	0.00135	831.512	0.02093	1115.852	1.75E-05
719.5075	8.76E-04	756.95	0.0024	746.89	0.00216	760.492	0.0014	831.768	0.02085	1116.2155	1.98E-05
719.635	8.75E-04	757.1	0.00246	747.02	0.00214	760.656	0.00144	832.024	0.02074	1116.579	2.24E-05
719.7625	8.75E-04	757.25	0.00252	747.15	0.00212	760.82	0.00149	832.28	0.02063	1116.9425	2.52E-05
719.89	8.75E-04	757.4	0.00258	747.28	0.0021	760.984	0.00154	832.536	0.0205	1117.306	2.85E-05
720.0175	8.74E-04	757.55	0.00265	747.41	0.00208	761.148	0.00159	832.792	0.02036	1117.6695	3.20E-05
720.145	8.74E-04	757.7	0.00271	747.54	0.00206	761.312	0.00164	833.048	0.02021	1118.033	3.60E-05
720.2725	8.73E-04	757.85	0.00278	747.67	0.00204	761.476	0.00169	833.304	0.02005	1118.3965	4.04E-05
720.4	8.72E-04	758	0.00285	747.8	0.00202	761.64	0.00175	833.56	0.01987	1118.76	4.53E-05

720.5275	8.71E-04	758.15	0.00291	747.93	0.002	761.804	0.0018	833.816	0.01969	1119.1235	5.07E-05
720.655	8.71E-04	758.3	0.00298	748.06	0.00198	761.968	0.00186	834.072	0.01949	1119.487	5.67E-05
720.7825	8.70E-04	758.45	0.00305	748.19	0.00195	762.132	0.00192	834.328	0.01928	1119.8505	6.33E-05
720.91	8.69E-04	758.6	0.00313	748.32	0.00193	762.296	0.00198	834.584	0.01906	1120.214	7.06E-05
721.0375	8.67E-04	758.75	0.0032	748.45	0.00191	762.46	0.00204	834.84	0.01883	1120.5775	7.86E-05
721.165	8.66E-04	758.9	0.00327	748.58	0.00189	762.624	0.0021	835.096	0.0186	1120.941	8.74E-05
721.2925	8.65E-04	759.05	0.00334	748.71	0.00187	762.788	0.00216	835.352	0.01835	1121.3045	9.71E-05
721.42	8.63E-04	759.2	0.00342	748.84	0.00185	762.952	0.00222	835.608	0.01809	1121.668	1.08E-04
721.5475	8.62E-04	759.35	0.0035	748.97	0.00183	763.116	0.00229	835.864	0.01783	1122.0315	1.19E-04
721.675	8.60E-04	759.5	0.00357	749.1	0.00181	763.28	0.00236	836.12	0.01756	1122.395	1.32E-04
721.8025	8.59E-04	759.65	0.00365	749.23	0.00179	763.444	0.00243	836.376	0.01728	1122.7585	1.46E-04
721.93	8.57E-04	759.8	0.00373	749.36	0.00177	763.608	0.0025	836.632	0.017	1123.122	1.61E-04
722.0575	8.55E-04	759.95	0.00381	749.49	0.00174	763.772	0.00257	836.888	0.01671	1123.4855	1.77E-04
722.185	8.53E-04	760.1	0.00389	749.62	0.00172	763.936	0.00264	837.144	0.01641	1123.849	1.95E-04
722.3125	8.51E-04	760.25	0.00397	749.75	0.0017	764.1	0.00271	837.4	0.01611	1124.2125	2.14E-04
722.44	8.49E-04	760.4	0.00405	749.88	0.00168	764.264	0.00279	837.656	0.0158	1124.576	2.35E-04
722.5675	8.47E-04	760.55	0.00413	750.01	0.00166	764.428	0.00287	837.912	0.01549	1124.9395	2.58E-04
722.695	8.45E-04	760.7	0.00422	750.14	0.00164	764.592	0.00294	838.168	0.01517	1125.303	2.82E-04
722.8225	8.43E-04	760.85	0.0043	750.27	0.00162	764.756	0.00302	838.424	0.01486	1125.6665	3.09E-04
722.95	8.41E-04	761	0.00439	750.4	0.0016	764.92	0.0031	838.68	0.01454	1126.03	3.37E-04
723.0775	8.38E-04	761.15	0.00447	750.53	0.00158	765.084	0.00319	838.936	0.01421	1126.3935	3.67E-04
723.205	8.36E-04	761.3	0.00456	750.66	0.00156	765.248	0.00327	839.192	0.01389	1126.757	4.00E-04
723.3325	8.33E-04	761.45	0.00465	750.79	0.00154	765.412	0.00336	839.448	0.01356	1127.1205	4.35E-04
723.46	8.30E-04	761.6	0.00473	750.92	0.00152	765.576	0.00344	839.704	0.01323	1127.484	4.72E-04
723.5875	8.28E-04	761.75	0.00482	751.05	0.0015	765.74	0.00353	839.96	0.01291	1127.8475	5.12E-04
723.715	8.25E-04	761.9	0.00491	751.18	0.00148	765.904	0.00362	840.216	0.01258	1128.211	5.55E-04
723.8425	8.22E-04	762.05	0.005	751.31	0.00146	766.068	0.00371	840.472	0.01225	1128.5745	6.00E-04
723.97	8.19E-04	762.2	0.00509	751.44	0.00143	766.232	0.0038	840.728	0.01193	1128.938	6.48E-04
724.0975	8.16E-04	762.35	0.00518	751.57	0.00141	766.396	0.00389	840.984	0.0116	1129.3015	7.00E-04
724.225	8.13E-04	762.5	0.00527	751.7	0.00139	766.56	0.00398	841.24	0.01128	1129.665	7.54E-04
724.3525	8.10E-04	762.65	0.00536	751.83	0.00138	766.724	0.00408	841.496	0.01096	1130.0285	8.11E-04
724.48	8.07E-04	762.8	0.00545	751.96	0.00136	766.888	0.00417	841.752	0.01064	1130.392	8.72E-04
724.6075	8.03E-04	762.95	0.00554	752.09	0.00134	767.052	0.00427	842.008	0.01032	1130.7555	9.35E-04
724.735	8.00E-04	763.1	0.00563	752.22	0.00132	767.216	0.00437	842.264	0.01001	1131.119	0.001
724.8625	7.97E-04	763.25	0.00573	752.35	0.0013	767.38	0.00447	842.52	0.0097	1131.4825	0.00107
724.99	7.93E-04	763.4	0.00582	752.48	0.00128	767.544	0.00457	842.776	0.0094	1131.846	0.00115
725.1175	7.89E-04	763.55	0.00591	752.61	0.00126	767.708	0.00467	843.032	0.0091	1132.2095	0.00122
725.245	7.86E-04	763.7	0.006	752.74	0.00124	767.872	0.00477	843.288	0.0088	1132.573	0.00131
725.3725	7.82E-04	763.85	0.0061	752.87	0.00122	768.036	0.00488	843.544	0.00851	1132.9365	0.00139
725.5	7.78E-04	764	0.00619	753	0.0012	768.2	0.00498	843.8	0.00822	1133.3	0.00148
725.6275	7.75E-04	764.15	0.00628	753.13	0.00118	768.364	0.00508	844.056	0.00794	1133.6635	0.00157
725.755	7.71E-04	764.3	0.00637	753.26	0.00116	768.528	0.00519	844.312	0.00766	1134.027	0.00166
725.8825	7.67E-04	764.45	0.00647	753.39	0.00115	768.692	0.0053	844.568	0.00739	1134.3905	0.00176
726.01	7.63E-04	764.6	0.00656	753.52	0.00113	768.856	0.0054	844.824	0.00712	1134.754	0.00186
726.1375	7.59E-04	764.75	0.00665	753.65	0.00111	769.02	0.00551	845.08	0.00686	1135.1175	0.00197
726.265	7.54E-04	764.9	0.00674	753.78	0.00109	769.184	0.00562	845.336	0.00661	1135.481	0.00208
726.3925	7.50E-04	765.05	0.00684	753.91	0.00107	769.348	0.00573	845.592	0.00636	1135.8445	0.00219
726.52	7.46E-04	765.2	0.00693	754.04	0.00106	769.512	0.00584	845.848	0.00612	1136.208	0.0023
726.6475	7.42E-04	765.35	0.00702	754.17	0.00104	769.676	0.00595	846.104	0.00589	1136.5715	0.00242
726.775	7.37E-04	765.5	0.00711	754.3	0.00102	769.84	0.00606	846.36	0.00566	1136.935	0.00254
726.9025	7.33E-04	765.65	0.0072	754.43	0.00101	770.004	0.00617	846.616	0.00544	1137.2985	0.00266

727.03	7.28E-04	765.8	0.00729	754.56	9.88E-04	770.168	0.00628	846.872	0.00522	1137.662	0.00278
727.1575	7.24E-04	765.95	0.00738	754.69	9.72E-04	770.332	0.00639	847.128	0.00502	1138.0255	0.00291
727.285	7.19E-04	766.1	0.00747	754.82	9.55E-04	770.496	0.00651	847.384	0.00481	1138.389	0.00304
727.4125	7.15E-04	766.25	0.00756	754.95	9.39E-04	770.66	0.00662	847.64	0.00462	1138.7525	0.00317
727.54	7.10E-04	766.4	0.00764	755.08	9.23E-04	770.824	0.00673	847.896	0.00443	1139.116	0.0033
727.6675	7.05E-04	766.55	0.00773	755.21	9.07E-04	770.988	0.00684	848.152	0.00425	1139.4795	0.00343
727.795	7.00E-04	766.7	0.00782	755.34	8.91E-04	771.152	0.00695	848.408	0.00408	1139.843	0.00356
727.9225	6.95E-04	766.85	0.0079	755.47	8.75E-04	771.316	0.00707	848.664	0.00391	1140.2065	0.00369
728.05	6.91E-04	767	0.00799	755.6	8.60E-04	771.48	0.00718	848.92	0.00375	1140.57	0.00382
728.1775	6.86E-04	767.15	0.00807	755.73	8.44E-04	771.644	0.00729	849.176	0.0036	1140.9335	0.00395
728.305	6.81E-04	767.3	0.00815	755.86	8.29E-04	771.808	0.0074	849.432	0.00345	1141.297	0.00408
728.4325	6.76E-04	767.45	0.00823	755.99	8.14E-04	771.972	0.00751	849.688	0.00331	1141.6605	0.00421
728.56	6.71E-04	767.6	0.00831	756.12	8.00E-04	772.136	0.00763	849.944	0.00318	1142.024	0.00434
728.6875	6.65E-04	767.75	0.00839	756.25	7.85E-04	772.3	0.00774	850.2	0.00305	1142.3875	0.00446
728.815	6.60E-04	767.9	0.00847	756.38	7.71E-04	772.464	0.00785	850.456	0.00293	1142.751	0.00458
728.9425	6.55E-04	768.05	0.00855	756.51	7.57E-04	772.628	0.00796	850.712	0.00282	1143.1145	0.0047
729.07	6.50E-04	768.2	0.00862	756.64	7.43E-04	772.792	0.00806	850.968	0.00271	1143.478	0.00482
729.1975	6.45E-04	768.35	0.0087	756.77	7.29E-04	772.956	0.00817	851.224	0.00261	1143.8415	0.00493
729.325	6.39E-04	768.5	0.00877	756.9	7.15E-04	773.12	0.00828	851.48	0.00251	1144.205	0.00504
729.4525	6.34E-04	768.65	0.00884	757.03	7.02E-04	773.284	0.00839	851.736	0.00242	1144.5685	0.00515
729.58	6.29E-04	768.8	0.00891	757.16	6.89E-04	773.448	0.00849	851.992	0.00234	1144.932	0.00525
729.7075	6.23E-04	768.95	0.00898	757.29	6.76E-04	773.612	0.0086	852.248	0.00227	1145.2955	0.00534
729.835	6.18E-04	769.1	0.00905	757.42	6.63E-04	773.776	0.0087	852.504	0.0022	1145.659	0.00543
729.9625	6.13E-04	769.25	0.00911	757.55	6.50E-04	773.94	0.0088	852.76	0.00213	1146.0225	0.00551
730.09	6.07E-04	769.4	0.00918	757.68	6.38E-04	774.104	0.0089	853.016	0.00207	1146.386	0.00559
730.2175	6.02E-04	769.55	0.00924	757.81	6.25E-04	774.268	0.009	853.272	0.00202	1146.7495	0.00566
730.345	5.96E-04	769.7	0.0093	757.94	6.13E-04	774.432	0.0091	853.528	0.00197	1147.113	0.00573
730.4725	5.91E-04	769.85	0.00936	758.07	6.01E-04	774.596	0.0092	853.784	0.00193	1147.4765	0.00579
730.6	5.85E-04	770	0.00942	758.2	5.90E-04	774.76	0.0093	854.04	0.00189	1147.84	0.00584
730.7275	5.80E-04	770.15	0.00947	758.33	5.78E-04	774.924	0.00939	854.296	0.00186	1148.2035	0.00588
730.855	5.74E-04	770.3	0.00953	758.46	5.67E-04	775.088	0.00948	854.552	0.00183	1148.567	0.00592
730.9825	5.68E-04	770.45	0.00958	758.59	5.56E-04	775.252	0.00957	854.808	0.00181	1148.9305	0.00595
731.11	5.63E-04	770.6	0.00963	758.72	5.45E-04	775.416	0.00966	855.064	0.0018	1149.294	0.00597
731.2375	5.57E-04	770.75	0.00968	758.85	5.34E-04	775.58	0.00975	855.32	0.00179	1149.6575	0.00599
731.365	5.51E-04	770.9	0.00972	758.98	5.23E-04	775.744	0.00984	855.576	0.00178	1150.021	0.006
731.4925	5.46E-04	771.05	0.00977	759.11	5.13E-04	775.908	0.00992	855.832	0.00178	1150.3845	0.006
731.62	5.40E-04	771.2	0.00981	759.24	5.02E-04	776.072	0.01	856.088	0.00178	1150.748	0.00599
731.7475	5.35E-04	771.35	0.00985	759.37	4.92E-04	776.236	0.01008	856.344	0.00179	1151.1115	0.00598
731.875	5.29E-04	771.5	0.00989	759.5	4.82E-04	776.4	0.01016	856.6	0.0018	1151.475	0.00596
732.0025	5.23E-04	771.65	0.00992	759.63	4.72E-04	776.564	0.01024	856.856	0.00182	1151.8385	0.00593
732.13	5.17E-04	771.8	0.00996	759.76	4.63E-04	776.728	0.01031	857.112	0.00184	1152.202	0.0059
732.2575	5.12E-04	771.95	0.00999	759.89	4.53E-04	776.892	0.01038	857.368	0.00186	1152.5655	0.00586
732.385	5.06E-04	772.1	0.01002	760.02	4.44E-04	777.056	0.01045	857.624	0.00189	1152.929	0.00582
732.5125	5.00E-04	772.25	0.01005	760.15	4.35E-04	777.22	0.01052	857.88	0.00192	1153.2925	0.00577
732.64	4.95E-04	772.4	0.01007	760.28	4.26E-04	777.384	0.01058	858.136	0.00196	1153.656	0.00571
732.7675	4.89E-04	772.55	0.0101	760.41	4.17E-04	777.548	0.01064	858.392	0.002	1154.0195	0.00565
732.895	4.83E-04	772.7	0.01012	760.54	4.08E-04	777.712	0.0107	858.648	0.00204	1154.383	0.00559
733.0225	4.78E-04	772.85	0.01013	760.67	4.00E-04	777.876	0.01076	858.904	0.00209	1154.7465	0.00552
733.15	4.72E-04	773	0.01015	760.8	3.92E-04	778.04	0.01081	859.16	0.00214	1155.11	0.00545
733.2775	4.66E-04	773.15	0.01017	760.93	3.83E-04	778.204	0.01086	859.416	0.00219	1155.4735	0.00537
733.405	4.61E-04	773.3	0.01018	761.06	3.75E-04	778.368	0.01091	859.672	0.00225	1155.837	0.0053

733.5325	4.55E-04	773.45	0.01019	761.19	3.68E-04	778.532	0.01096	859.928	0.00231	1156.2005	0.00522
733.66	4.49E-04	773.6	0.01019	761.32	3.60E-04	778.696	0.011	860.184	0.00237	1156.564	0.00514
733.7875	4.44E-04	773.75	0.0102	761.45	3.52E-04	778.86	0.01104	860.44	0.00243	1156.9275	0.00507
733.915	4.38E-04	773.9	0.0102	761.58	3.45E-04	779.024	0.01108	860.696	0.0025	1157.291	0.00499
734.0425	4.32E-04	774.05	0.0102	761.71	3.37E-04	779.188	0.01111	860.952	0.00257	1157.6545	0.00491
734.17	4.27E-04	774.2	0.0102	761.84	3.30E-04	779.352	0.01114	861.208	0.00265	1158.018	0.00484
734.2975	4.21E-04	774.35	0.0102	761.97	3.23E-04	779.516	0.01117	861.464	0.00272	1158.3815	0.00476
734.425	4.16E-04	774.5	0.01019	762.1	3.16E-04	779.68	0.0112	861.72	0.0028	1158.745	0.0047
734.5525	4.10E-04	774.65	0.01018	762.23	3.10E-04	779.844	0.01122	861.976	0.00288	1159.1085	0.00463
734.68	4.05E-04	774.8	0.01017	762.36	3.03E-04	780.008	0.01124	862.232	0.00296	1159.472	0.00457
734.8075	3.99E-04	774.95	0.01016	762.49	2.96E-04	780.172	0.01126	862.488	0.00305	1159.8355	0.00452
734.935	3.94E-04	775.1	0.01014	762.62	2.90E-04	780.336	0.01127	862.744	0.00314	1160.199	0.00447
735.0625	3.88E-04	775.25	0.01012	762.75	2.84E-04	780.5	0.01128	863	0.00322	1160.5625	0.00443
735.19	3.83E-04	775.4	0.0101	762.88	2.78E-04	780.664	0.01129	863.256	0.00331	1160.926	0.0044
735.3175	3.77E-04	775.55	0.01008	763.01	2.72E-04	780.828	0.01129	863.512	0.0034	1161.2895	0.00437
735.445	3.72E-04	775.7	0.01006	763.14	2.66E-04	780.992	0.01129	863.768	0.00349	1161.653	0.00436
735.5725	3.67E-04	775.85	0.01003	763.27	2.60E-04	781.156	0.01129	864.024	0.00359	1162.0165	0.00435
735.7	3.61E-04	776	0.01	763.4	2.54E-04	781.32	0.01129	864.28	0.00368	1162.38	0.00436
735.8275	3.56E-04	776.15	0.00997	763.53	2.49E-04	781.484	0.01128	864.536	0.00378	1162.7435	0.00437
735.955	3.51E-04	776.3	0.00994	763.66	2.44E-04	781.648	0.01127	864.792	0.00387	1163.107	0.0044
736.0825	3.45E-04	776.45	0.0099	763.79	2.38E-04	781.812	0.01126	865.048	0.00397	1163.4705	0.00445
736.21	3.40E-04	776.6	0.00986	763.92	2.33E-04	781.976	0.01124	865.304	0.00406	1163.834	0.0045
736.3375	3.35E-04	776.75	0.00982	764.05	2.28E-04	782.14	0.01122	865.56	0.00416	1164.1975	0.00457
736.465	3.30E-04	776.9	0.00978	764.18	2.23E-04	782.304	0.0112	865.816	0.00425	1164.561	0.00466
736.5925	3.25E-04	777.05	0.00974	764.31	2.18E-04	782.468	0.01117	866.072	0.00435	1164.9245	0.00476
736.72	3.20E-04	777.2	0.00969	764.44	2.13E-04	782.632	0.01114	866.328	0.00445	1165.288	0.00488
736.8475	3.15E-04	777.35	0.00965	764.57	2.09E-04	782.796	0.01111	866.584	0.00454	1165.6515	0.00501
736.975	3.10E-04	777.5	0.0096	764.7	2.04E-04	782.96	0.01108	866.84	0.00464	1166.015	0.00516
737.1025	3.05E-04	777.65	0.00954	764.83	2.00E-04	783.124	0.01104	867.096	0.00473	1166.3785	0.00533
737.23	3.00E-04	777.8	0.00949	764.96	1.95E-04	783.288	0.011	867.352	0.00482	1166.742	0.00551
737.3575	2.95E-04	777.95	0.00944	765.09	1.91E-04	783.452	0.01096	867.608	0.00491	1167.1055	0.00572
737.485	2.90E-04	778.1	0.00938	765.22	1.87E-04	783.616	0.01091	867.864	0.005	1167.469	0.00594
737.6125	2.85E-04	778.25	0.00932	765.35	1.83E-04	783.78	0.01087	868.12	0.00509	1167.8325	0.00618
737.74	2.81E-04	778.4	0.00926	765.48	1.79E-04	783.944	0.01082	868.376	0.00518	1168.196	0.00643
737.8675	2.76E-04	778.55	0.0092	765.61	1.75E-04	784.108	0.01076	868.632	0.00526	1168.5595	0.00671
737.995	2.71E-04	778.7	0.00914	765.74	1.71E-04	784.272	0.01071	868.888	0.00535	1168.923	0.00701
738.1225	2.66E-04	778.85	0.00907	765.87	1.67E-04	784.436	0.01065	869.144	0.00543	1169.2865	0.00732
738.25	2.62E-04	779	0.009	766	1.63E-04	784.6	0.01059	869.4	0.00551	1169.65	0.00765
738.3775	2.57E-04	779.15	0.00893	766.13	1.60E-04	784.764	0.01052	869.656	0.00559	1170.0135	0.008
738.505	2.53E-04	779.3	0.00887	766.26	1.56E-04	784.928	0.01046	869.912	0.00566	1170.377	0.00837
738.6325	2.48E-04	779.45	0.00879	766.39	1.53E-04	785.092	0.01039	870.168	0.00573	1170.7405	0.00876
738.76	2.44E-04	779.6	0.00872	766.52	1.49E-04	785.256	0.01032	870.424	0.0058	1171.104	0.00916
738.8875	2.39E-04	779.75	0.00865	766.65	1.46E-04	785.42	0.01024	870.68	0.00587	1171.4675	0.00958
739.015	2.35E-04	779.9	0.00857	766.78	1.43E-04	785.584	0.01017	870.936	0.00593	1171.831	0.01002
739.1425	2.31E-04	780.05	0.0085	766.91	1.40E-04	785.748	0.01009	871.192	0.00599	1172.1945	0.01047
739.27	2.27E-04	780.2	0.00842	767.04	1.37E-04	785.912	0.01001	871.448	0.00604	1172.558	0.01094
739.3975	2.22E-04	780.35	0.00834	767.17	1.34E-04	786.076	0.00993	871.704	0.0061	1172.9215	0.01142
739.525	2.18E-04	780.5	0.00826	767.3	1.31E-04	786.24	0.00985	871.96	0.00615	1173.285	0.01191
739.6525	2.14E-04	780.65	0.00818	767.43	1.28E-04	786.404	0.00976	872.216	0.00619	1173.6485	0.01241
739.78	2.10E-04	780.8	0.0081	767.56	1.25E-04	786.568	0.00967	872.472	0.00623	1174.012	0.01293
739.9075	2.06E-04	780.95	0.00801	767.69	1.22E-04	786.732	0.00958	872.728	0.00627	1174.3755	0.01345

740.035	2.02E-04	781.1	0.00793	767.82	1.19E-04	786.896	0.00949	872.984	0.00631	1174.739	0.01399
740.1625	1.98E-04	781.25	0.00784	767.95	1.17E-04	787.06	0.0094	873.24	0.00634	1175.1025	0.01452
740.29	1.94E-04	781.4	0.00776	768.08	1.14E-04	787.224	0.00931	873.496	0.00636	1175.466	0.01507
740.4175	1.90E-04	781.55	0.00767	768.21	1.11E-04	787.388	0.00921	873.752	0.00638	1175.8295	0.01562
740.545	1.87E-04	781.7	0.00758	768.34	1.09E-04	787.552	0.00911	874.008	0.0064	1176.193	0.01617
740.6725	1.83E-04	781.85	0.0075	768.47	1.07E-04	787.716	0.00901	874.264	0.00642	1176.5565	0.01672
740.8	1.79E-04	782	0.00741	768.6	1.04E-04	787.88	0.00891	874.52	0.00643	1176.92	0.01727
740.9275	1.76E-04	782.15	0.00732	768.73	1.02E-04	788.044	0.00881	874.776	0.00643	1177.2835	0.01782
741.055	1.72E-04	782.3	0.00723	768.86	9.95E-05	788.208	0.00871	875.032	0.00643	1177.647	0.01836
741.1825	1.69E-04	782.45	0.00714	768.99	9.73E-05	788.372	0.00861	875.288	0.00643	1178.0105	0.0189
741.31	1.65E-04	782.6	0.00705	769.12	9.51E-05	788.536	0.0085	875.544	0.00642	1178.374	0.01943
741.4375	1.62E-04	782.75	0.00696	769.25	9.30E-05	788.7	0.0084	875.8	0.00641	1178.7375	0.01995
741.565	1.58E-04	782.9	0.00687	769.38	9.09E-05	788.864	0.00829	876.056	0.0064	1179.101	0.02045
741.6925	1.55E-04	783.05	0.00677	769.51	8.88E-05	789.028	0.00818	876.312	0.00638	1179.4645	0.02095
741.82	1.52E-04	783.2	0.00668	769.64	8.68E-05	789.192	0.00807	876.568	0.00635	1179.828	0.02143
741.9475	1.48E-04	783.35	0.00659	769.77	8.48E-05	789.356	0.00797	876.824	0.00633	1180.1915	0.02189
742.075	1.45E-04	783.5	0.0065	769.9	8.29E-05	789.52	0.00786	877.08	0.0063	1180.555	0.02233
742.2025	1.42E-04	783.65	0.0064	770.03	8.10E-05	789.684	0.00775	877.336	0.00626	1180.9185	0.02276
742.33	1.39E-04	783.8	0.00631	770.16	7.92E-05	789.848	0.00764	877.592	0.00622	1181.282	0.02316
742.4575	1.36E-04	783.95	0.00622	770.29	7.74E-05	790.012	0.00752	877.848	0.00618	1181.6455	0.02354
742.585	1.33E-04	784.1	0.00613	770.42	7.56E-05	790.176	0.00741	878.104	0.00613	1182.009	0.0239
742.7125	1.30E-04	784.25	0.00603	770.55	7.39E-05	790.34	0.0073	878.36	0.00608	1182.3725	0.02423
742.84	1.27E-04	784.4	0.00594	770.68	7.22E-05	790.504	0.00719	878.616	0.00603	1182.736	0.02453
742.9675	1.24E-04	784.55	0.00585	770.81	7.06E-05	790.668	0.00708	878.872	0.00597	1183.0995	0.0248
743.095	1.21E-04	784.7	0.00576	770.94	6.90E-05	790.832	0.00697	879.128	0.00591	1183.463	0.02504
743.2225	1.19E-04	784.85	0.00566	771.07	6.74E-05	790.996	0.00685	879.384	0.00584	1183.8265	0.02526
743.35	1.16E-04	785	0.00557	771.2	6.58E-05	791.16	0.00674	879.64	0.00578	1184.19	0.02544
743.4775	1.13E-04	785.15	0.00548	771.33	6.43E-05	791.324	0.00663	879.896	0.00571	1184.5535	0.02559
743.605	1.11E-04	785.3	0.00539	771.46	6.28E-05	791.488	0.00652	880.152	0.00563	1184.917	0.0257
743.7325	1.08E-04	785.45	0.0053	771.59	6.14E-05	791.652	0.0064	880.408	0.00556	1185.2805	0.02578
743.86	1.05E-04	785.6	0.00521	771.72	6.00E-05	791.816	0.00629	880.664	0.00548	1185.644	0.02583
743.9875	1.03E-04	785.75	0.00512	771.85	5.86E-05	791.98	0.00618	880.92	0.0054	1186.0075	0.02585
744.115	1.00E-04	785.9	0.00503	771.98	5.72E-05	792.144	0.00607	881.176	0.00532	1186.371	0.02583
744.2425	9.80E-05	786.05	0.00494	772.11	5.59E-05	792.308	0.00596	881.432	0.00523	1186.7345	0.02578
744.37	9.57E-05	786.2	0.00485	772.24	5.46E-05	792.472	0.00585	881.688	0.00514	1187.098	0.02569
744.4975	9.34E-05	786.35	0.00476	772.37	5.33E-05	792.636	0.00574	881.944	0.00505	1187.4615	0.02557
744.625	9.11E-05	786.5	0.00467	772.5	5.20E-05	792.8	0.00563	882.2	0.00496	1187.825	0.02542
744.7525	8.88E-05	786.65	0.00458	772.63	5.08E-05	792.964	0.00552	882.456	0.00487	1188.1885	0.02523
744.88	8.66E-05	786.8	0.0045	772.76	4.96E-05	793.128	0.00541	882.712	0.00478	1188.552	0.02501
745.0075	8.45E-05	786.95	0.00441	772.89	4.84E-05	793.292	0.00531	882.968	0.00468	1188.9155	0.02477
745.135	8.24E-05	787.1	0.00433	773.02	4.73E-05	793.456	0.0052	883.224	0.00459	1189.279	0.02449
745.2625	8.03E-05	787.25	0.00424	773.15	4.62E-05	793.62	0.00509	883.48	0.00449	1189.6425	0.02418
745.39	7.83E-05	787.4	0.00416	773.28	4.51E-05	793.784	0.00499	883.736	0.00439	1190.006	0.02385
745.5175	7.63E-05	787.55	0.00407	773.41	4.40E-05	793.948	0.00488	883.992	0.00429	1190.3695	0.02349
745.645	7.43E-05	787.7	0.00399	773.54	4.30E-05	794.112	0.00478	884.248	0.00419	1190.733	0.0231
745.7725	7.24E-05	787.85	0.00391	773.67	4.19E-05	794.276	0.00468	884.504	0.0041	1191.0965	0.02269
745.9	7.05E-05	788	0.00383	773.8	4.09E-05	794.44	0.00458	884.76	0.004	1191.46	0.02226
746.0275	6.87E-05	788.15	0.00375	773.93	3.99E-05	794.604	0.00448	885.016	0.0039	1191.8235	0.02181
746.155	6.69E-05	788.3	0.00367	774.06	3.90E-05	794.768	0.00438	885.272	0.0038	1192.187	0.02134
746.2825	6.51E-05	788.45	0.00359	774.19	3.80E-05	794.932	0.00428	885.528	0.0037	1192.5505	0.02085
746.41	6.34E-05	788.6	0.00351	774.32	3.71E-05	795.096	0.00418	885.784	0.0036	1192.914	0.02035

746.5375	6.17E-05	788.75	0.00344	774.45	3.62E-05	795.26	0.00409	886.04	0.0035	1193.2775	0.01983
746.665	6.01E-05	788.9	0.00336	774.58	3.53E-05	795.424	0.00399	886.296	0.0034	1193.641	0.0193
746.7925	5.85E-05	789.05	0.00329	774.71	3.44E-05	795.588	0.0039	886.552	0.0033	1194.0045	0.01876
746.92	5.69E-05	789.2	0.00321	774.84	3.36E-05	795.752	0.0038	886.808	0.0032	1194.368	0.01821
747.0475	5.53E-05	789.35	0.00314	774.97	3.28E-05	795.916	0.00371	887.064	0.00311	1194.7315	0.01765
747.175	5.38E-05	789.5	0.00307	775.1	3.20E-05	796.08	0.00362	887.32	0.00301	1195.095	0.01709
747.3025	5.23E-05	789.65	0.003	775.23	3.12E-05	796.244	0.00353	887.576	0.00292	1195.4585	0.01652
747.43	5.09E-05	789.8	0.00293	775.36	3.04E-05	796.408	0.00345	887.832	0.00282	1195.822	0.01595
747.5575	4.95E-05	789.95	0.00286	775.49	2.96E-05	796.572	0.00336	888.088	0.00273	1196.1855	0.01538
747.685	4.81E-05	790.1	0.00279	775.62	2.89E-05	796.736	0.00327	888.344	0.00264	1196.549	0.01481
747.8125	4.67E-05	790.25	0.00272	775.75	2.82E-05	796.9	0.00319	888.6	0.00255	1196.9125	0.01425
747.94	4.54E-05	790.4	0.00266	775.88	2.74E-05	797.064	0.00311	888.856	0.00246	1197.276	0.01368
748.0675	4.41E-05	790.55	0.00259	776.01	2.67E-05	797.228	0.00303	889.112	0.00238	1197.6395	0.01312
748.195	4.29E-05	790.7	0.00253	776.14	2.61E-05	797.392	0.00295	889.368	0.00229	1198.003	0.01257
748.3225	4.16E-05	790.85	0.00247	776.27	2.54E-05	797.556	0.00287	889.624	0.00221	1198.3665	0.01203
748.45	4.04E-05	791	0.00241	776.4	2.47E-05	797.72	0.00279	889.88	0.00213	1198.73	0.01149
748.5775	3.93E-05	791.15	0.00234	776.53	2.41E-05	797.884	0.00272	890.136	0.00205	1199.0935	0.01096
748.705	3.81E-05	791.3	0.00228	776.66	2.35E-05	798.048	0.00264	890.392	0.00197	1199.457	0.01045
748.8325	3.70E-05	791.45	0.00223	776.79	2.29E-05	798.212	0.00257	890.648	0.00189	1199.8205	0.00994
748.96	3.59E-05	791.6	0.00217	776.92	2.23E-05	798.376	0.0025	890.904	0.00182	1200.184	0.00945
749.0875	3.49E-05	791.75	0.00211	777.05	2.17E-05	798.54	0.00243	891.16	0.00174	1200.5475	0.00897
749.215	3.38E-05	791.9	0.00206	777.18	2.11E-05	798.704	0.00236	891.416	0.00167	1200.911	0.0085
749.3425	3.28E-05	792.05	0.002	777.31	2.06E-05	798.868	0.00229	891.672	0.0016	1201.2745	0.00805
749.47	3.18E-05	792.2	0.00195	777.44	2.00E-05	799.032	0.00222	891.928	0.00154	1201.638	0.00761
749.5975	3.09E-05	792.35	0.00189	777.57	1.95E-05	799.196	0.00216	892.184	0.00147	1202.0015	0.00718
749.725	2.99E-05	792.5	0.00184	777.7	1.90E-05	799.36	0.00209	892.44	0.00141	1202.365	0.00677
749.8525	2.90E-05	792.65	0.00179	777.83	1.85E-05	799.524	0.00203	892.696	0.00134	1202.7285	0.00638
749.98	2.81E-05	792.8	0.00174	777.96	1.80E-05	799.688	0.00197	892.952	0.00128	1203.092	0.006
750.1075	2.73E-05	792.95	0.00169	778.09	1.75E-05	799.852	0.00191	893.208	0.00123	1203.4555	0.00563
750.235	2.64E-05	793.1	0.00165	778.22	1.70E-05	800.016	0.00185	893.464	0.00117	1203.819	0.00528
750.3625	2.56E-05	793.25	0.0016	778.35	1.66E-05	800.18	0.00179	893.72	0.00112	1204.1825	0.00495
750.49	2.48E-05	793.4	0.00155	778.48	1.61E-05	800.344	0.00174	893.976	0.00106	1204.546	0.00463
750.6175	2.40E-05	793.55	0.00151	778.61	1.57E-05	800.508	0.00168	894.232	0.00101	1204.9095	0.00432
750.745	2.33E-05	793.7	0.00147	778.74	1.52E-05	800.672	0.00163	894.488	9.63E-04	1205.273	0.00403
750.8725	2.25E-05	793.85	0.00142	778.87	1.48E-05	800.836	0.00158	894.744	9.16E-04	1205.6365	0.00376