

Supplemental Material

The ScN Bandgap

Ruopeng Deng,¹ B.D. Ozsdolay,¹ P.Y. Zheng,¹ S.V. Khare² and D. Gall¹

¹*Department of Materials Science and Engineering, Rensselaer Polytechnic Institute, Troy,
New York 12180, USA*

²*Department of Physics and Astronomy, University of Toledo, 2801 West Bancroft Street,
Toledo, OH 43606*

These supplemental material contains:

- (1) Typical x-ray diffraction data.**
- (2) Optical properties of ScN for photon energies from 0-10 eV.**

(1) Typical x-ray diffraction data.

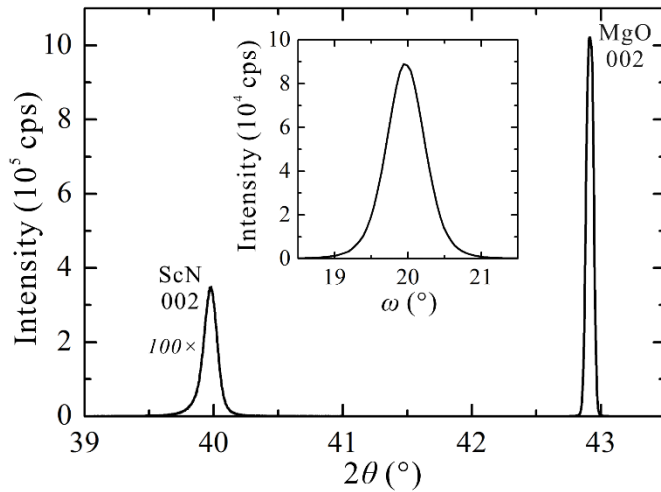


Figure: X-ray diffraction ω - 2θ spectrum and ScN 002 ω -rocking-curve, from an epitaxial 262-nm-thick ScN(001)/MgO(001) layer deposited at $T_s = 950^\circ\text{C}$ in a 20 mTorr N_2/Ar gas mixture ($\text{N}_2:\text{Ar} = 4:1$).

The figure shows a portion of a typical XRD ω - 2θ spectrum. It is from a 262-nm-thick ScN(001) layer with a relatively small carrier concentration of $N = 1.12 \times 10^{20} \text{ cm}^{-3}$, deposited at $T_s = 950^\circ\text{C}$ in a 20 mTorr N_2/Ar mixture gas ($\text{N}_2:\text{Ar} = 4:1$), using a magnetron power $p_{\text{Sc}} = 180 \text{ W}$ and the substrate a floating potential. The only two peaks within the measured 2θ range from 33 - 75° are due to the MgO 002 substrate and ScN 002 reflections, indicating the absence of misoriented grains. The measured MgO 002 substrate peak at $42.916 \pm 0.003^\circ$ corresponds to a lattice constant of $4.2114 \pm 0.0003 \text{ \AA}$, in good agreement with the literature value of 4.2117 \AA .¹ The ScN 002 peak at $39.976 \pm 0.003^\circ$ corresponds to an out-of-plane lattice constant of $4.5070 \pm 0.0003 \text{ \AA}$, which is 0.13% larger than the reported relaxed lattice constant of 4.501 \AA ,² indicating a small in-plane compressive strain of 0.26%, determined using a Poisson's ratio of 0.2.² The inset in Fig. 1 shows the ω -rocking-curve from the ScN 002 reflection of the same sample. The measured full-width-at-half-maximum (FWHM) of 0.61° suggests a small degree of mosaicity and a relatively good crystal quality. X-ray \square -scans (not shown) at a tilt angle of 54.7° exhibit four symmetric peaks for both 2θ values corresponding to the MgO 222 and ScN 222 reflections, confirming a cube-on-cube epitaxial relationship between the MgO substrate and the ScN layer.

References

- ¹ B. J. Skinner, *American Mineralogist* **42**, 39 (1957).
- ² D. Gall, I. Petrov, P. Desjardins, and J. E. Greene, *Journal of Applied Physics* **86** (1999).

(2) Optical properties of ScN for photon energies from 0-10 eV.

The following table contains the dielectric function $\varepsilon = \varepsilon_1 + i \varepsilon_2$ and the refractive index n and extinction coefficient k of ScN as a function photon energy $h\nu = 0-10$ eV, as determined using density functional calculations with the HSE06 hybrid exchange correlation functional. The table includes also the refractive index determined from fitting of optical transmission and reflection measurements in the transparent photon energy range $h\nu = 1-2$ eV.

$h\nu$ (eV)	ε_1	ε_2	n	k	n
					<i>(experimental)</i> <i>Only for 1-2 eV</i>
0	7.644	0.000	2.765	0.000	
0.0054	7.644	0.000	2.765	0.000	
0.0108	7.644	0.000	2.765	0.000	
0.0161	7.644	0.000	2.765	0.000	
0.0215	7.644	0.000	2.765	0.000	
0.0269	7.644	0.000	2.765	0.000	
0.0323	7.644	0.000	2.765	0.000	
0.0377	7.644	0.000	2.765	0.000	
0.0431	7.644	0.000	2.765	0.000	
0.0484	7.644	0.000	2.765	0.000	
0.0538	7.644	0.000	2.765	0.000	
0.0592	7.645	0.000	2.765	0.000	
0.0646	7.645	0.000	2.765	0.000	
0.07	7.645	0.000	2.765	0.000	
0.0753	7.645	0.001	2.765	0.000	
0.0807	7.646	0.001	2.765	0.000	
0.0861	7.646	0.001	2.765	0.000	
0.0915	7.646	0.001	2.765	0.000	
0.0969	7.646	0.001	2.765	0.000	
0.1023	7.647	0.001	2.765	0.000	
0.1076	7.647	0.001	2.765	0.000	
0.113	7.648	0.001	2.765	0.000	
0.1184	7.648	0.001	2.765	0.000	
0.1238	7.648	0.001	2.766	0.000	
0.1292	7.649	0.001	2.766	0.000	
0.1345	7.649	0.001	2.766	0.000	

0.1399	7.650	0.001	2.766	0.000	
0.1453	7.650	0.001	2.766	0.000	
0.1507	7.651	0.001	2.766	0.000	
0.1561	7.651	0.001	2.766	0.000	
0.1614	7.652	0.001	2.766	0.000	
0.1668	7.652	0.001	2.766	0.000	
0.1722	7.653	0.001	2.766	0.000	
0.1776	7.653	0.001	2.766	0.000	
0.183	7.654	0.001	2.767	0.000	
0.1884	7.655	0.001	2.767	0.000	
0.1937	7.655	0.001	2.767	0.000	
0.1991	7.656	0.001	2.767	0.000	
0.2045	7.657	0.001	2.767	0.000	
0.2099	7.657	0.001	2.767	0.000	
0.2153	7.658	0.001	2.767	0.000	
0.2206	7.659	0.001	2.767	0.000	
0.226	7.660	0.001	2.768	0.000	
0.2314	7.660	0.002	2.768	0.000	
0.2368	7.661	0.002	2.768	0.000	
0.2422	7.662	0.002	2.768	0.000	
0.2476	7.663	0.002	2.768	0.000	
0.2529	7.664	0.002	2.768	0.000	
0.2583	7.664	0.002	2.768	0.000	
0.2637	7.665	0.002	2.769	0.000	
0.2691	7.666	0.002	2.769	0.000	
0.2745	7.667	0.002	2.769	0.000	
0.2798	7.668	0.002	2.769	0.000	
0.2852	7.669	0.002	2.769	0.000	
0.2906	7.670	0.002	2.769	0.000	
0.296	7.671	0.002	2.770	0.000	
0.3014	7.672	0.002	2.770	0.000	
0.3068	7.673	0.002	2.770	0.000	
0.3121	7.674	0.002	2.770	0.000	
0.3175	7.675	0.002	2.770	0.000	
0.3229	7.676	0.002	2.771	0.000	
0.3283	7.677	0.002	2.771	0.000	
0.3337	7.679	0.002	2.771	0.000	
0.339	7.680	0.002	2.771	0.000	
0.3444	7.681	0.002	2.771	0.000	
0.3498	7.682	0.002	2.772	0.000	
0.3552	7.683	0.002	2.772	0.000	
0.3606	7.684	0.002	2.772	0.000	
0.366	7.686	0.002	2.772	0.000	
0.3713	7.687	0.002	2.773	0.000	

0.3767	7.688	0.002	2.773	0.000	
0.3821	7.690	0.002	2.773	0.000	
0.3875	7.691	0.003	2.773	0.000	
0.3929	7.692	0.003	2.773	0.000	
0.3982	7.694	0.003	2.774	0.000	
0.4036	7.695	0.003	2.774	0.000	
0.409	7.696	0.003	2.774	0.000	
0.4144	7.698	0.003	2.774	0.000	
0.4198	7.699	0.003	2.775	0.000	
0.4251	7.701	0.003	2.775	0.000	
0.4305	7.702	0.003	2.775	0.001	
0.4359	7.704	0.003	2.776	0.001	
0.4413	7.705	0.003	2.776	0.001	
0.4467	7.707	0.003	2.776	0.001	
0.4521	7.708	0.003	2.776	0.001	
0.4574	7.710	0.003	2.777	0.001	
0.4628	7.712	0.003	2.777	0.001	
0.4682	7.713	0.003	2.777	0.001	
0.4736	7.715	0.003	2.778	0.001	
0.479	7.717	0.003	2.778	0.001	
0.4843	7.718	0.003	2.778	0.001	
0.4897	7.720	0.003	2.778	0.001	
0.4951	7.722	0.003	2.779	0.001	
0.5005	7.723	0.003	2.779	0.001	
0.5059	7.725	0.003	2.779	0.001	
0.5113	7.727	0.003	2.780	0.001	
0.5166	7.729	0.003	2.780	0.001	
0.522	7.731	0.003	2.780	0.001	
0.5274	7.733	0.004	2.781	0.001	
0.5328	7.734	0.004	2.781	0.001	
0.5382	7.736	0.004	2.781	0.001	
0.5435	7.738	0.004	2.782	0.001	
0.5489	7.740	0.004	2.782	0.001	
0.5543	7.742	0.004	2.782	0.001	
0.5597	7.744	0.004	2.783	0.001	
0.5651	7.746	0.004	2.783	0.001	
0.5705	7.748	0.004	2.784	0.001	
0.5758	7.750	0.004	2.784	0.001	
0.5812	7.752	0.004	2.784	0.001	
0.5866	7.754	0.004	2.785	0.001	
0.592	7.757	0.004	2.785	0.001	
0.5974	7.759	0.004	2.785	0.001	
0.6027	7.761	0.004	2.786	0.001	
0.6081	7.763	0.004	2.786	0.001	

0.6135	7.765	0.004	2.787	0.001	
0.6189	7.767	0.004	2.787	0.001	
0.6243	7.770	0.004	2.787	0.001	
0.6297	7.772	0.004	2.788	0.001	
0.635	7.774	0.004	2.788	0.001	
0.6404	7.777	0.004	2.789	0.001	
0.6458	7.779	0.004	2.789	0.001	
0.6512	7.781	0.004	2.790	0.001	
0.6566	7.784	0.005	2.790	0.001	
0.6619	7.786	0.005	2.790	0.001	
0.6673	7.789	0.005	2.791	0.001	
0.6727	7.791	0.005	2.791	0.001	
0.6781	7.794	0.005	2.792	0.001	
0.6835	7.796	0.005	2.792	0.001	
0.6888	7.799	0.005	2.793	0.001	
0.6942	7.801	0.005	2.793	0.001	
0.6996	7.804	0.005	2.794	0.001	
0.705	7.806	0.005	2.794	0.001	
0.7104	7.809	0.005	2.794	0.001	
0.7158	7.812	0.005	2.795	0.001	
0.7211	7.814	0.005	2.795	0.001	
0.7265	7.817	0.005	2.796	0.001	
0.7319	7.820	0.005	2.796	0.001	
0.7373	7.823	0.005	2.797	0.001	
0.7427	7.825	0.005	2.797	0.001	
0.748	7.828	0.005	2.798	0.001	
0.7534	7.831	0.005	2.798	0.001	
0.7588	7.834	0.005	2.799	0.001	
0.7642	7.837	0.005	2.799	0.001	
0.7696	7.840	0.005	2.800	0.001	
0.775	7.843	0.006	2.800	0.001	
0.7803	7.846	0.006	2.801	0.001	
0.7857	7.849	0.006	2.802	0.001	
0.7911	7.852	0.006	2.802	0.001	
0.7965	7.855	0.006	2.803	0.001	
0.8019	7.858	0.006	2.803	0.001	
0.8072	7.861	0.006	2.804	0.001	
0.8126	7.864	0.006	2.804	0.001	
0.818	7.867	0.006	2.805	0.001	
0.8234	7.870	0.006	2.805	0.001	
0.8288	7.874	0.006	2.806	0.001	
0.8342	7.877	0.006	2.807	0.001	
0.8395	7.880	0.006	2.807	0.001	
0.8449	7.883	0.006	2.808	0.001	

0.8503	7.887	0.006	2.808	0.001	
0.8557	7.890	0.006	2.809	0.001	
0.8611	7.893	0.006	2.810	0.001	
0.8664	7.897	0.006	2.810	0.001	
0.8718	7.900	0.006	2.811	0.001	
0.8772	7.904	0.007	2.811	0.001	
0.8826	7.907	0.007	2.812	0.001	
0.888	7.911	0.007	2.813	0.001	
0.8934	7.914	0.007	2.813	0.001	
0.8987	7.918	0.007	2.814	0.001	
0.9041	7.921	0.007	2.815	0.001	
0.9095	7.925	0.007	2.815	0.001	
0.9149	7.929	0.007	2.816	0.001	
0.9203	7.933	0.007	2.816	0.001	
0.9256	7.936	0.007	2.817	0.001	
0.931	7.940	0.007	2.818	0.001	
0.9364	7.944	0.007	2.818	0.001	
0.9418	7.948	0.007	2.819	0.001	
0.9472	7.952	0.007	2.820	0.001	
0.9525	7.955	0.007	2.821	0.001	
0.9579	7.959	0.007	2.821	0.001	
0.9633	7.963	0.007	2.822	0.001	
0.9687	7.967	0.008	2.823	0.001	
0.9741	7.971	0.008	2.823	0.001	
0.9795	7.975	0.008	2.824	0.001	
0.9848	7.980	0.008	2.825	0.001	
0.9902	7.984	0.008	2.826	0.001	
0.9956	7.988	0.008	2.826	0.001	
1.001	7.992	0.008	2.827	0.001	2.606
1.0064	7.996	0.008	2.828	0.001	2.608
1.0117	8.001	0.008	2.829	0.001	2.610
1.0171	8.005	0.008	2.829	0.001	2.611
1.0225	8.009	0.008	2.830	0.001	2.613
1.0279	8.014	0.008	2.831	0.001	2.614
1.0333	8.018	0.008	2.832	0.001	2.616
1.0387	8.022	0.008	2.832	0.001	2.618
1.044	8.027	0.008	2.833	0.001	2.619
1.0494	8.031	0.008	2.834	0.001	2.621
1.0548	8.036	0.009	2.835	0.002	2.622
1.0602	8.040	0.009	2.836	0.002	2.624
1.0656	8.045	0.009	2.836	0.002	2.626
1.0709	8.050	0.009	2.837	0.002	2.627
1.0763	8.054	0.009	2.838	0.002	2.629
1.0817	8.059	0.009	2.839	0.002	2.630

1.0871	8.064	0.009	2.840	0.002	2.632
1.0925	8.069	0.009	2.841	0.002	2.633
1.0979	8.073	0.009	2.841	0.002	2.635
1.1032	8.078	0.009	2.842	0.002	2.636
1.1086	8.083	0.009	2.843	0.002	2.638
1.114	8.088	0.009	2.844	0.002	2.639
1.1194	8.093	0.009	2.845	0.002	2.641
1.1248	8.098	0.009	2.846	0.002	2.643
1.1301	8.103	0.010	2.847	0.002	2.644
1.1355	8.109	0.010	2.848	0.002	2.646
1.1409	8.114	0.010	2.848	0.002	2.647
1.1463	8.119	0.010	2.849	0.002	2.649
1.1517	8.124	0.010	2.850	0.002	2.650
1.1571	8.130	0.010	2.851	0.002	2.652
1.1624	8.135	0.010	2.852	0.002	2.653
1.1678	8.140	0.010	2.853	0.002	2.655
1.1732	8.146	0.010	2.854	0.002	2.656
1.1786	8.151	0.010	2.855	0.002	2.658
1.184	8.157	0.010	2.856	0.002	2.659
1.1893	8.163	0.010	2.857	0.002	2.661
1.1947	8.168	0.011	2.858	0.002	2.662
1.2001	8.174	0.011	2.859	0.002	2.664
1.2055	8.180	0.011	2.860	0.002	2.665
1.2109	8.185	0.011	2.861	0.002	2.667
1.2162	8.191	0.011	2.862	0.002	2.668
1.2216	8.197	0.011	2.863	0.002	2.670
1.227	8.203	0.011	2.864	0.002	2.671
1.2324	8.209	0.011	2.865	0.002	2.673
1.2378	8.215	0.011	2.866	0.002	2.674
1.2432	8.221	0.011	2.867	0.002	2.676
1.2485	8.227	0.011	2.868	0.002	2.677
1.2539	8.233	0.012	2.869	0.002	2.679
1.2593	8.240	0.012	2.870	0.002	2.680
1.2647	8.246	0.012	2.872	0.002	2.682
1.2701	8.252	0.012	2.873	0.002	2.683
1.2754	8.259	0.012	2.874	0.002	2.685
1.2808	8.265	0.012	2.875	0.002	2.686
1.2862	8.272	0.012	2.876	0.002	2.688
1.2916	8.278	0.012	2.877	0.002	2.690
1.297	8.285	0.012	2.878	0.002	2.691
1.3024	8.291	0.013	2.879	0.002	2.693
1.3077	8.298	0.013	2.881	0.002	2.694
1.3131	8.305	0.013	2.882	0.002	2.696
1.3185	8.312	0.013	2.883	0.002	2.697

1.3239	8.319	0.013	2.884	0.002	2.699
1.3293	8.326	0.013	2.885	0.002	2.701
1.3346	8.333	0.013	2.887	0.002	2.702
1.34	8.340	0.013	2.888	0.002	2.704
1.3454	8.347	0.013	2.889	0.002	2.705
1.3508	8.354	0.014	2.890	0.002	2.707
1.3562	8.362	0.014	2.892	0.002	2.709
1.3616	8.369	0.014	2.893	0.002	2.710
1.3669	8.376	0.014	2.894	0.002	2.712
1.3723	8.384	0.014	2.895	0.002	2.714
1.3777	8.391	0.014	2.897	0.002	2.715
1.3831	8.399	0.014	2.898	0.002	2.717
1.3885	8.407	0.014	2.899	0.002	2.719
1.3938	8.414	0.015	2.901	0.003	2.720
1.3992	8.422	0.015	2.902	0.003	2.722
1.4046	8.430	0.015	2.903	0.003	2.724
1.41	8.438	0.015	2.905	0.003	2.725
1.4154	8.446	0.015	2.906	0.003	2.727
1.4208	8.454	0.015	2.908	0.003	2.729
1.4261	8.463	0.015	2.909	0.003	2.731
1.4315	8.471	0.016	2.910	0.003	2.732
1.4369	8.479	0.016	2.912	0.003	2.734
1.4423	8.488	0.016	2.913	0.003	2.736
1.4477	8.496	0.016	2.915	0.003	2.738
1.453	8.505	0.016	2.916	0.003	2.740
1.4584	8.514	0.016	2.918	0.003	2.741
1.4638	8.522	0.016	2.919	0.003	2.743
1.4692	8.531	0.017	2.921	0.003	2.745
1.4746	8.540	0.017	2.922	0.003	2.747
1.4799	8.549	0.017	2.924	0.003	2.749
1.4853	8.558	0.017	2.925	0.003	2.751
1.4907	8.568	0.017	2.927	0.003	2.753
1.4961	8.577	0.017	2.929	0.003	2.755
1.5015	8.586	0.018	2.930	0.003	2.757
1.5069	8.596	0.018	2.932	0.003	2.759
1.5122	8.605	0.018	2.934	0.003	2.761
1.5176	8.615	0.018	2.935	0.003	2.763
1.523	8.625	0.018	2.937	0.003	2.765
1.5284	8.635	0.019	2.939	0.003	2.767
1.5338	8.645	0.019	2.940	0.003	2.769
1.5391	8.655	0.019	2.942	0.003	2.771
1.5445	8.665	0.019	2.944	0.003	2.773
1.5499	8.676	0.019	2.945	0.003	2.775
1.5553	8.686	0.020	2.947	0.003	2.777

1.5607	8.697	0.020	2.949	0.003	2.779
1.5661	8.707	0.020	2.951	0.003	2.781
1.5714	8.718	0.020	2.953	0.003	2.783
1.5768	8.729	0.020	2.954	0.003	2.786
1.5822	8.740	0.021	2.956	0.003	2.788
1.5876	8.751	0.021	2.958	0.004	2.790
1.593	8.763	0.021	2.960	0.004	2.792
1.5983	8.774	0.021	2.962	0.004	2.795
1.6037	8.786	0.022	2.964	0.004	2.797
1.6091	8.797	0.022	2.966	0.004	2.799
1.6145	8.809	0.022	2.968	0.004	2.802
1.6199	8.821	0.022	2.970	0.004	2.804
1.6253	8.833	0.023	2.972	0.004	2.807
1.6306	8.845	0.023	2.974	0.004	2.809
1.636	8.858	0.023	2.976	0.004	2.811
1.6414	8.870	0.024	2.978	0.004	2.814
1.6468	8.883	0.024	2.980	0.004	2.816
1.6522	8.896	0.024	2.983	0.004	2.819
1.6575	8.909	0.024	2.985	0.004	2.822
1.6629	8.922	0.025	2.987	0.004	2.824
1.6683	8.936	0.025	2.989	0.004	2.827
1.6737	8.949	0.025	2.992	0.004	2.830
1.6791	8.963	0.026	2.994	0.004	2.832
1.6845	8.977	0.026	2.996	0.004	2.835
1.6898	8.991	0.026	2.998	0.004	2.838
1.6952	9.005	0.027	3.001	0.004	2.841
1.7006	9.020	0.027	3.003	0.005	2.843
1.706	9.034	0.028	3.006	0.005	2.846
1.7114	9.049	0.028	3.008	0.005	2.849
1.7167	9.064	0.028	3.011	0.005	2.852
1.7221	9.080	0.029	3.013	0.005	2.855
1.7275	9.095	0.029	3.016	0.005	2.858
1.7329	9.111	0.030	3.018	0.005	2.861
1.7383	9.127	0.030	3.021	0.005	2.864
1.7436	9.143	0.030	3.024	0.005	2.867
1.749	9.160	0.031	3.027	0.005	2.870
1.7544	9.177	0.031	3.029	0.005	2.874
1.7598	9.194	0.032	3.032	0.005	2.877
1.7652	9.211	0.032	3.035	0.005	2.880
1.7706	9.228	0.033	3.038	0.005	2.884
1.7759	9.246	0.034	3.041	0.006	2.887
1.7813	9.264	0.034	3.044	0.006	2.891
1.7867	9.283	0.035	3.047	0.006	2.894
1.7921	9.302	0.035	3.050	0.006	2.898

1.7975	9.321	0.036	3.053	0.006	2.901
1.8028	9.340	0.037	3.056	0.006	2.905
1.8082	9.360	0.037	3.059	0.006	2.909
1.8136	9.380	0.038	3.063	0.006	2.912
1.819	9.401	0.039	3.066	0.006	2.916
1.8244	9.422	0.039	3.069	0.006	2.920
1.8298	9.443	0.040	3.073	0.007	2.924
1.8351	9.465	0.041	3.076	0.007	2.928
1.8405	9.487	0.042	3.080	0.007	2.932
1.8459	9.510	0.043	3.084	0.007	2.936
1.8513	9.533	0.044	3.088	0.007	2.940
1.8567	9.556	0.044	3.091	0.007	2.945
1.862	9.581	0.045	3.095	0.007	2.949
1.8674	9.605	0.047	3.099	0.008	2.953
1.8728	9.630	0.048	3.103	0.008	2.958
1.8782	9.656	0.049	3.107	0.008	2.962
1.8836	9.683	0.050	3.112	0.008	2.967
1.889	9.710	0.051	3.116	0.008	2.972
1.8943	9.738	0.053	3.121	0.008	2.976
1.8997	9.766	0.054	3.125	0.009	2.981
1.9051	9.796	0.055	3.130	0.009	2.986
1.9105	9.826	0.057	3.135	0.009	2.991
1.9159	9.857	0.059	3.140	0.009	2.996
1.9212	9.889	0.060	3.145	0.010	3.001
1.9266	9.922	0.062	3.150	0.010	3.007
1.932	9.956	0.064	3.155	0.010	3.012
1.9374	9.991	0.066	3.161	0.011	3.018
1.9428	10.027	0.069	3.167	0.011	3.023
1.9482	10.065	0.071	3.173	0.011	3.029
1.9535	10.104	0.074	3.179	0.012	3.035
1.9589	10.144	0.077	3.185	0.012	3.041
1.9643	10.186	0.080	3.192	0.013	3.047
1.9697	10.230	0.084	3.198	0.013	3.053
1.9751	10.276	0.088	3.206	0.014	3.059
1.9804	10.324	0.092	3.213	0.014	3.066
1.9858	10.375	0.097	3.221	0.015	3.072
1.9912	10.428	0.103	3.229	0.016	3.079
1.9966	10.485	0.109	3.238	0.017	3.086
2.002	10.545	0.117	3.247	0.018	3.093
2.0073	10.609	0.126	3.257	0.019	
2.0127	10.678	0.136	3.268	0.021	
2.0181	10.752	0.150	3.279	0.023	
2.0235	10.834	0.167	3.292	0.025	
2.0289	10.924	0.191	3.305	0.029	

2.0343	11.021	0.224	3.320	0.034	
2.0396	11.125	0.272	3.336	0.041	
2.045	11.229	0.337	3.351	0.050	
2.0504	11.329	0.419	3.366	0.062	
2.0558	11.421	0.515	3.380	0.076	
2.0612	11.503	0.625	3.393	0.092	
2.0665	11.572	0.745	3.404	0.109	
2.0719	11.627	0.873	3.412	0.128	
2.0773	11.665	1.007	3.419	0.147	
2.0827	11.685	1.141	3.422	0.167	
2.0881	11.690	1.271	3.424	0.186	
2.0935	11.681	1.395	3.424	0.204	
2.0988	11.663	1.511	3.422	0.221	
2.1042	11.638	1.620	3.420	0.237	
2.1096	11.604	1.722	3.416	0.252	
2.115	11.563	1.816	3.411	0.266	
2.1204	11.517	1.899	3.405	0.279	
2.1257	11.467	1.972	3.399	0.290	
2.1311	11.418	2.034	3.392	0.300	
2.1365	11.371	2.085	3.386	0.308	
2.1419	11.330	2.128	3.381	0.315	
2.1473	11.296	2.166	3.376	0.321	
2.1527	11.268	2.203	3.373	0.327	
2.158	11.246	2.239	3.370	0.332	
2.1634	11.228	2.277	3.368	0.338	
2.1688	11.212	2.318	3.366	0.344	
2.1742	11.196	2.362	3.364	0.351	
2.1796	11.180	2.408	3.363	0.358	
2.1849	11.161	2.455	3.361	0.365	
2.1903	11.139	2.502	3.358	0.372	
2.1957	11.115	2.546	3.355	0.379	
2.2011	11.092	2.588	3.353	0.386	
2.2065	11.069	2.630	3.350	0.392	
2.2119	11.046	2.671	3.347	0.399	
2.2172	11.023	2.712	3.345	0.405	
2.2226	10.998	2.753	3.342	0.412	
2.228	10.973	2.792	3.339	0.418	
2.2334	10.946	2.831	3.336	0.424	
2.2388	10.919	2.869	3.332	0.430	
2.2441	10.891	2.905	3.329	0.436	
2.2495	10.862	2.940	3.325	0.442	
2.2549	10.833	2.973	3.322	0.448	
2.2603	10.804	3.005	3.318	0.453	
2.2657	10.774	3.034	3.314	0.458	

2.271	10.744	3.061	3.310	0.462	
2.2764	10.716	3.084	3.307	0.466	
2.2818	10.693	3.107	3.304	0.470	
2.2872	10.672	3.131	3.301	0.474	
2.2926	10.651	3.158	3.298	0.479	
2.298	10.629	3.186	3.296	0.483	
2.3033	10.605	3.215	3.293	0.488	
2.3087	10.580	3.243	3.290	0.493	
2.3141	10.552	3.270	3.286	0.498	
2.3195	10.525	3.295	3.283	0.502	
2.3249	10.497	3.318	3.279	0.506	
2.3302	10.470	3.340	3.276	0.510	
2.3356	10.443	3.360	3.272	0.513	
2.341	10.417	3.379	3.269	0.517	
2.3464	10.391	3.397	3.265	0.520	
2.3518	10.367	3.414	3.262	0.523	
2.3572	10.343	3.431	3.259	0.526	
2.3625	10.319	3.447	3.256	0.529	
2.3679	10.296	3.461	3.253	0.532	
2.3733	10.276	3.474	3.250	0.535	
2.3787	10.259	3.489	3.248	0.537	
2.3841	10.242	3.507	3.246	0.540	
2.3894	10.225	3.526	3.243	0.543	
2.3948	10.206	3.545	3.241	0.547	
2.4002	10.186	3.564	3.239	0.550	
2.4056	10.166	3.584	3.236	0.554	
2.411	10.144	3.602	3.233	0.557	
2.4164	10.122	3.620	3.231	0.560	
2.4217	10.100	3.638	3.228	0.564	
2.4271	10.077	3.654	3.225	0.567	
2.4325	10.055	3.669	3.222	0.569	
2.4379	10.033	3.683	3.219	0.572	
2.4433	10.011	3.697	3.216	0.575	
2.4486	9.989	3.710	3.213	0.577	
2.454	9.968	3.723	3.210	0.580	
2.4594	9.947	3.735	3.207	0.582	
2.4648	9.926	3.746	3.204	0.585	
2.4702	9.905	3.755	3.201	0.586	
2.4756	9.887	3.763	3.199	0.588	
2.4809	9.871	3.771	3.197	0.590	
2.4863	9.856	3.782	3.195	0.592	
2.4917	9.842	3.793	3.193	0.594	
2.4971	9.827	3.805	3.191	0.596	
2.5025	9.811	3.817	3.189	0.598	

2.5078	9.796	3.829	3.187	0.601	
2.5132	9.781	3.842	3.185	0.603	
2.5186	9.766	3.854	3.183	0.605	
2.524	9.752	3.867	3.181	0.608	
2.5294	9.737	3.880	3.179	0.610	
2.5347	9.722	3.893	3.178	0.613	
2.5401	9.707	3.907	3.176	0.615	
2.5455	9.692	3.920	3.174	0.618	
2.5509	9.677	3.935	3.172	0.620	
2.5563	9.661	3.949	3.170	0.623	
2.5617	9.645	3.964	3.168	0.626	
2.567	9.628	3.978	3.166	0.628	
2.5724	9.610	3.993	3.164	0.631	
2.5778	9.591	4.006	3.161	0.634	
2.5832	9.572	4.018	3.159	0.636	
2.5886	9.554	4.029	3.156	0.638	
2.5939	9.537	4.040	3.154	0.641	
2.5993	9.520	4.052	3.152	0.643	
2.6047	9.503	4.065	3.149	0.645	
2.6101	9.484	4.077	3.147	0.648	
2.6155	9.465	4.089	3.144	0.650	
2.6209	9.445	4.099	3.142	0.652	
2.6262	9.426	4.109	3.139	0.654	
2.6316	9.407	4.118	3.136	0.656	
2.637	9.388	4.126	3.134	0.658	
2.6424	9.370	4.134	3.131	0.660	
2.6478	9.353	4.142	3.129	0.662	
2.6531	9.336	4.150	3.127	0.664	
2.6585	9.319	4.158	3.124	0.665	
2.6639	9.302	4.166	3.122	0.667	
2.6693	9.285	4.174	3.120	0.669	
2.6747	9.267	4.182	3.117	0.671	
2.6801	9.249	4.190	3.115	0.673	
2.6854	9.231	4.197	3.112	0.674	
2.6908	9.213	4.203	3.110	0.676	
2.6962	9.195	4.208	3.107	0.677	
2.7016	9.177	4.212	3.104	0.678	
2.707	9.161	4.215	3.102	0.679	
2.7123	9.146	4.217	3.100	0.680	
2.7177	9.132	4.221	3.098	0.681	
2.7231	9.119	4.225	3.096	0.682	
2.7285	9.106	4.229	3.094	0.683	
2.7339	9.092	4.234	3.092	0.685	
2.7393	9.079	4.238	3.090	0.686	

2.7446	9.067	4.242	3.088	0.687	
2.75	9.055	4.246	3.087	0.688	
2.7554	9.043	4.251	3.085	0.689	
2.7608	9.032	4.255	3.084	0.690	
2.7662	9.021	4.260	3.082	0.691	
2.7715	9.010	4.266	3.081	0.692	
2.7769	8.999	4.272	3.079	0.694	
2.7823	8.988	4.278	3.078	0.695	
2.7877	8.977	4.285	3.076	0.696	
2.7931	8.966	4.291	3.075	0.698	
2.7984	8.955	4.298	3.073	0.699	
2.8038	8.943	4.305	3.072	0.701	
2.8092	8.931	4.312	3.070	0.702	
2.8146	8.919	4.318	3.068	0.704	
2.82	8.907	4.325	3.067	0.705	
2.8254	8.894	4.330	3.065	0.706	
2.8307	8.883	4.335	3.063	0.708	
2.8361	8.872	4.340	3.062	0.709	
2.8415	8.862	4.346	3.060	0.710	
2.8469	8.851	4.352	3.059	0.711	
2.8523	8.840	4.358	3.057	0.713	
2.8576	8.829	4.365	3.056	0.714	
2.863	8.818	4.371	3.054	0.715	
2.8684	8.807	4.377	3.053	0.717	
2.8738	8.797	4.383	3.052	0.718	
2.8792	8.786	4.389	3.050	0.719	
2.8846	8.776	4.395	3.049	0.721	
2.8899	8.766	4.402	3.048	0.722	
2.8953	8.756	4.409	3.046	0.724	
2.9007	8.746	4.417	3.045	0.725	
2.9061	8.735	4.424	3.044	0.727	
2.9115	8.724	4.432	3.042	0.728	
2.9168	8.713	4.440	3.041	0.730	
2.9222	8.701	4.448	3.039	0.732	
2.9276	8.689	4.456	3.038	0.733	
2.933	8.677	4.463	3.036	0.735	
2.9384	8.664	4.471	3.034	0.737	
2.9438	8.650	4.478	3.032	0.738	
2.9491	8.636	4.485	3.030	0.740	
2.9545	8.622	4.491	3.029	0.741	
2.9599	8.609	4.496	3.027	0.743	
2.9653	8.595	4.501	3.025	0.744	
2.9707	8.582	4.505	3.023	0.745	
2.976	8.569	4.510	3.021	0.746	

2.9814	8.555	4.514	3.019	0.748	
2.9868	8.542	4.518	3.017	0.749	
2.9922	8.529	4.521	3.015	0.750	
2.9976	8.517	4.523	3.013	0.751	
3.003	8.505	4.525	3.011	0.751	
3.0083	8.493	4.527	3.010	0.752	
3.0137	8.482	4.530	3.008	0.753	
3.0191	8.472	4.532	3.007	0.754	
3.0245	8.462	4.534	3.005	0.754	
3.0299	8.452	4.537	3.004	0.755	
3.0352	8.442	4.540	3.002	0.756	
3.0406	8.433	4.543	3.001	0.757	
3.046	8.423	4.547	3.000	0.758	
3.0514	8.413	4.550	2.998	0.759	
3.0568	8.403	4.553	2.997	0.760	
3.0621	8.394	4.556	2.995	0.761	
3.0675	8.384	4.559	2.994	0.761	
3.0729	8.374	4.562	2.992	0.762	
3.0783	8.364	4.564	2.991	0.763	
3.0837	8.355	4.566	2.990	0.764	
3.0891	8.347	4.568	2.988	0.764	
3.0944	8.338	4.570	2.987	0.765	
3.0998	8.330	4.573	2.986	0.766	
3.1052	8.322	4.576	2.985	0.767	
3.1106	8.315	4.579	2.984	0.767	
3.116	8.307	4.582	2.983	0.768	
3.1213	8.300	4.584	2.982	0.769	
3.1267	8.292	4.588	2.981	0.770	
3.1321	8.285	4.591	2.980	0.770	
3.1375	8.278	4.595	2.979	0.771	
3.1429	8.271	4.598	2.978	0.772	
3.1483	8.264	4.602	2.977	0.773	
3.1536	8.257	4.606	2.976	0.774	
3.159	8.250	4.610	2.975	0.775	
3.1644	8.243	4.615	2.974	0.776	
3.1698	8.236	4.619	2.973	0.777	
3.1752	8.229	4.624	2.972	0.778	
3.1805	8.221	4.628	2.971	0.779	
3.1859	8.213	4.633	2.970	0.780	
3.1913	8.206	4.637	2.969	0.781	
3.1967	8.198	4.641	2.968	0.782	
3.2021	8.190	4.645	2.967	0.783	
3.2075	8.183	4.649	2.966	0.784	
3.2128	8.176	4.652	2.965	0.785	

3.2182	8.169	4.656	2.964	0.785	
3.2236	8.162	4.660	2.963	0.786	
3.229	8.156	4.664	2.962	0.787	
3.2344	8.149	4.669	2.962	0.788	
3.2397	8.143	4.673	2.961	0.789	
3.2451	8.137	4.678	2.960	0.790	
3.2505	8.130	4.682	2.959	0.791	
3.2559	8.123	4.687	2.958	0.792	
3.2613	8.117	4.692	2.957	0.793	
3.2667	8.110	4.697	2.957	0.794	
3.272	8.103	4.702	2.956	0.795	
3.2774	8.096	4.707	2.955	0.797	
3.2828	8.088	4.712	2.954	0.798	
3.2882	8.081	4.717	2.953	0.799	
3.2936	8.074	4.721	2.952	0.800	
3.2989	8.067	4.725	2.951	0.801	
3.3043	8.059	4.729	2.950	0.802	
3.3097	8.052	4.733	2.949	0.803	
3.3151	8.045	4.737	2.948	0.803	
3.3205	8.038	4.741	2.947	0.804	
3.3259	8.032	4.744	2.946	0.805	
3.3312	8.026	4.747	2.945	0.806	
3.3366	8.020	4.751	2.945	0.807	
3.342	8.015	4.755	2.944	0.808	
3.3474	8.009	4.758	2.943	0.808	
3.3528	8.004	4.762	2.943	0.809	
3.3581	7.999	4.766	2.942	0.810	
3.3635	7.994	4.771	2.941	0.811	
3.3689	7.989	4.775	2.941	0.812	
3.3743	7.984	4.780	2.940	0.813	
3.3797	7.979	4.785	2.940	0.814	
3.385	7.974	4.790	2.939	0.815	
3.3904	7.969	4.795	2.939	0.816	
3.3958	7.964	4.800	2.938	0.817	
3.4012	7.959	4.805	2.937	0.818	
3.4066	7.954	4.809	2.937	0.819	
3.412	7.949	4.814	2.936	0.820	
3.4173	7.944	4.819	2.936	0.821	
3.4227	7.939	4.824	2.935	0.822	
3.4281	7.935	4.828	2.934	0.823	
3.4335	7.930	4.833	2.934	0.824	
3.4389	7.926	4.837	2.934	0.824	
3.4442	7.922	4.842	2.933	0.825	
3.4496	7.918	4.847	2.933	0.826	

3.455	7.915	4.852	2.932	0.827	
3.4604	7.912	4.857	2.932	0.828	
3.4658	7.908	4.862	2.932	0.829	
3.4712	7.905	4.867	2.932	0.830	
3.4765	7.903	4.873	2.931	0.831	
3.4819	7.900	4.879	2.931	0.832	
3.4873	7.898	4.885	2.931	0.833	
3.4927	7.895	4.891	2.931	0.834	
3.4981	7.893	4.897	2.931	0.835	
3.5034	7.891	4.903	2.931	0.836	
3.5088	7.889	4.910	2.931	0.838	
3.5142	7.887	4.917	2.931	0.839	
3.5196	7.886	4.924	2.931	0.840	
3.525	7.884	4.932	2.931	0.841	
3.5304	7.883	4.940	2.931	0.843	
3.5357	7.881	4.948	2.931	0.844	
3.5411	7.880	4.956	2.932	0.845	
3.5465	7.878	4.965	2.932	0.847	
3.5519	7.876	4.974	2.932	0.848	
3.5573	7.875	4.983	2.932	0.850	
3.5626	7.874	4.992	2.932	0.851	
3.568	7.872	5.001	2.932	0.853	
3.5734	7.871	5.010	2.933	0.854	
3.5788	7.870	5.020	2.933	0.856	
3.5842	7.869	5.030	2.933	0.857	
3.5896	7.869	5.040	2.934	0.859	
3.5949	7.868	5.050	2.934	0.861	
3.6003	7.868	5.061	2.935	0.862	
3.6057	7.869	5.073	2.935	0.864	
3.6111	7.868	5.086	2.936	0.866	
3.6165	7.867	5.099	2.936	0.868	
3.6218	7.866	5.111	2.937	0.870	
3.6272	7.865	5.123	2.937	0.872	
3.6326	7.865	5.135	2.937	0.874	
3.638	7.865	5.148	2.938	0.876	
3.6434	7.865	5.160	2.939	0.878	
3.6487	7.866	5.174	2.940	0.880	
3.6541	7.868	5.187	2.940	0.882	
3.6595	7.870	5.202	2.941	0.884	
3.6649	7.873	5.217	2.943	0.886	
3.6703	7.876	5.233	2.944	0.889	
3.6757	7.880	5.251	2.945	0.891	
3.681	7.882	5.270	2.947	0.894	
3.6864	7.884	5.289	2.948	0.897	

3.6918	7.888	5.307	2.949	0.900	
3.6972	7.892	5.326	2.951	0.903	
3.7026	7.899	5.346	2.953	0.905	
3.7079	7.907	5.368	2.955	0.908	
3.7133	7.917	5.393	2.958	0.912	
3.7187	7.929	5.422	2.961	0.916	
3.7241	7.940	5.455	2.964	0.920	
3.7295	7.950	5.493	2.968	0.925	
3.7349	7.960	5.532	2.971	0.931	
3.7402	7.970	5.575	2.975	0.937	
3.7456	7.983	5.624	2.979	0.944	
3.751	7.996	5.683	2.984	0.952	
3.7564	8.006	5.754	2.989	0.963	
3.7618	8.008	5.840	2.993	0.976	
3.7671	7.991	5.939	2.996	0.991	
3.7725	7.951	6.042	2.995	1.009	
3.7779	7.888	6.141	2.990	1.027	
3.7833	7.802	6.231	2.982	1.045	
3.7887	7.693	6.302	2.970	1.061	
3.7941	7.570	6.343	2.954	1.074	
3.7994	7.448	6.348	2.936	1.081	
3.8048	7.348	6.322	2.919	1.083	
3.8102	7.278	6.287	2.907	1.082	
3.8156	7.230	6.261	2.898	1.080	
3.821	7.189	6.246	2.891	1.080	
3.8263	7.150	6.237	2.884	1.081	
3.8317	7.111	6.232	2.878	1.083	
3.8371	7.072	6.229	2.872	1.084	
3.8425	7.031	6.227	2.866	1.087	
3.8479	6.991	6.226	2.859	1.089	
3.8533	6.949	6.224	2.853	1.091	
3.8586	6.906	6.221	2.846	1.093	
3.864	6.861	6.218	2.839	1.095	
3.8694	6.815	6.212	2.832	1.097	
3.8748	6.768	6.202	2.824	1.098	
3.8802	6.721	6.187	2.816	1.099	
3.8855	6.676	6.168	2.808	1.098	
3.8909	6.635	6.141	2.800	1.097	
3.8963	6.605	6.112	2.793	1.094	
3.9017	6.582	6.088	2.788	1.092	
3.9071	6.561	6.069	2.784	1.090	
3.9124	6.540	6.053	2.779	1.089	
3.9178	6.518	6.038	2.775	1.088	
3.9232	6.497	6.024	2.771	1.087	

3.9286	6.476	6.010	2.767	1.086	
3.934	6.456	5.997	2.763	1.085	
3.9394	6.436	5.984	2.759	1.085	
3.9447	6.417	5.972	2.755	1.084	
3.9501	6.398	5.961	2.752	1.083	
3.9555	6.380	5.951	2.748	1.083	
3.9609	6.362	5.941	2.745	1.082	
3.9663	6.343	5.933	2.741	1.082	
3.9716	6.324	5.925	2.738	1.082	
3.977	6.304	5.917	2.734	1.082	
3.9824	6.283	5.909	2.730	1.082	
3.9878	6.261	5.901	2.726	1.082	
3.9932	6.239	5.892	2.722	1.082	
3.9986	6.217	5.882	2.718	1.082	
4.0039	6.194	5.872	2.714	1.082	
4.0093	6.172	5.860	2.709	1.081	
4.0147	6.149	5.848	2.705	1.081	
4.0201	6.127	5.835	2.701	1.080	
4.0255	6.105	5.820	2.696	1.079	
4.0308	6.083	5.804	2.692	1.078	
4.0362	6.063	5.786	2.687	1.077	
4.0416	6.044	5.766	2.683	1.075	
4.047	6.029	5.746	2.679	1.072	
4.0524	6.016	5.726	2.676	1.070	
4.0578	6.006	5.708	2.673	1.068	
4.0631	5.997	5.692	2.671	1.066	
4.0685	5.988	5.678	2.668	1.064	
4.0739	5.979	5.664	2.666	1.062	
4.0793	5.970	5.652	2.664	1.061	
4.0847	5.962	5.640	2.662	1.060	
4.09	5.953	5.630	2.659	1.058	
4.0954	5.943	5.620	2.657	1.057	
4.1008	5.933	5.610	2.655	1.056	
4.1062	5.923	5.600	2.653	1.055	
4.1116	5.913	5.590	2.650	1.055	
4.117	5.903	5.580	2.648	1.054	
4.1223	5.892	5.571	2.646	1.053	
4.1277	5.882	5.561	2.644	1.052	
4.1331	5.872	5.552	2.641	1.051	
4.1385	5.861	5.543	2.639	1.050	
4.1439	5.851	5.534	2.637	1.049	
4.1492	5.840	5.524	2.634	1.049	
4.1546	5.829	5.515	2.632	1.048	
4.16	5.818	5.506	2.630	1.047	

4.1654	5.807	5.496	2.627	1.046	
4.1708	5.797	5.487	2.625	1.045	
4.1761	5.786	5.477	2.622	1.044	
4.1815	5.775	5.467	2.620	1.043	
4.1869	5.764	5.456	2.617	1.042	
4.1923	5.754	5.446	2.615	1.041	
4.1977	5.743	5.436	2.613	1.040	
4.2031	5.733	5.425	2.610	1.039	
4.2084	5.722	5.414	2.608	1.038	
4.2138	5.711	5.403	2.605	1.037	
4.2192	5.701	5.391	2.603	1.036	
4.2246	5.691	5.379	2.600	1.034	
4.23	5.680	5.366	2.598	1.033	
4.2353	5.671	5.352	2.595	1.031	
4.2407	5.663	5.337	2.593	1.029	
4.2461	5.656	5.322	2.591	1.027	
4.2515	5.651	5.307	2.589	1.025	
4.2569	5.648	5.293	2.587	1.023	
4.2623	5.645	5.281	2.586	1.021	
4.2676	5.643	5.270	2.585	1.019	
4.273	5.641	5.261	2.584	1.018	
4.2784	5.638	5.252	2.583	1.017	
4.2838	5.634	5.244	2.582	1.016	
4.2892	5.631	5.236	2.581	1.014	
4.2945	5.626	5.228	2.579	1.013	
4.2999	5.622	5.220	2.578	1.012	
4.3053	5.617	5.213	2.577	1.011	
4.3107	5.612	5.205	2.575	1.011	
4.3161	5.607	5.197	2.574	1.010	
4.3215	5.601	5.190	2.573	1.009	
4.3268	5.596	5.182	2.571	1.008	
4.3322	5.591	5.174	2.570	1.007	
4.3376	5.585	5.166	2.568	1.006	
4.343	5.580	5.158	2.567	1.005	
4.3484	5.575	5.150	2.566	1.004	
4.3537	5.570	5.142	2.564	1.003	
4.3591	5.565	5.134	2.563	1.002	
4.3645	5.559	5.126	2.561	1.001	
4.3699	5.554	5.118	2.560	1.000	
4.3753	5.549	5.110	2.559	0.999	
4.3807	5.543	5.102	2.557	0.998	
4.386	5.538	5.094	2.556	0.997	
4.3914	5.532	5.086	2.554	0.996	
4.3968	5.527	5.077	2.553	0.994	

4.4022	5.522	5.068	2.551	0.993	
4.4076	5.517	5.060	2.550	0.992	
4.4129	5.512	5.051	2.548	0.991	
4.4183	5.507	5.042	2.547	0.990	
4.4237	5.502	5.033	2.545	0.989	
4.4291	5.497	5.023	2.544	0.987	
4.4345	5.493	5.014	2.543	0.986	
4.4398	5.488	5.005	2.541	0.985	
4.4452	5.484	4.995	2.540	0.983	
4.4506	5.480	4.985	2.538	0.982	
4.456	5.475	4.975	2.537	0.980	
4.4614	5.472	4.965	2.536	0.979	
4.4668	5.468	4.954	2.534	0.977	
4.4721	5.465	4.943	2.533	0.976	
4.4775	5.463	4.932	2.532	0.974	
4.4829	5.461	4.920	2.531	0.972	
4.4883	5.460	4.909	2.530	0.970	
4.4937	5.460	4.898	2.529	0.968	
4.499	5.461	4.888	2.529	0.966	
4.5044	5.462	4.878	2.528	0.965	
4.5098	5.464	4.869	2.528	0.963	
4.5152	5.465	4.861	2.528	0.962	
4.5206	5.466	4.853	2.527	0.960	
4.526	5.468	4.846	2.527	0.959	
4.5313	5.468	4.839	2.527	0.958	
4.5367	5.469	4.833	2.527	0.956	
4.5421	5.470	4.826	2.526	0.955	
4.5475	5.470	4.820	2.526	0.954	
4.5529	5.470	4.814	2.526	0.953	
4.5582	5.470	4.807	2.525	0.952	
4.5636	5.470	4.801	2.525	0.951	
4.569	5.470	4.795	2.524	0.950	
4.5744	5.470	4.789	2.524	0.949	
4.5798	5.470	4.783	2.523	0.948	
4.5852	5.470	4.777	2.523	0.947	
4.5905	5.469	4.771	2.523	0.946	
4.5959	5.469	4.764	2.522	0.944	
4.6013	5.469	4.758	2.522	0.943	
4.6067	5.469	4.752	2.521	0.942	
4.6121	5.469	4.746	2.521	0.941	
4.6174	5.469	4.739	2.520	0.940	
4.6228	5.469	4.733	2.520	0.939	
4.6282	5.469	4.727	2.520	0.938	
4.6336	5.469	4.721	2.519	0.937	

4.639	5.469	4.714	2.519	0.936	
4.6444	5.470	4.708	2.519	0.935	
4.6497	5.470	4.702	2.518	0.934	
4.6551	5.470	4.695	2.518	0.932	
4.6605	5.471	4.689	2.518	0.931	
4.6659	5.471	4.683	2.517	0.930	
4.6713	5.472	4.676	2.517	0.929	
4.6766	5.472	4.670	2.517	0.928	
4.682	5.473	4.663	2.516	0.927	
4.6874	5.474	4.657	2.516	0.925	
4.6928	5.475	4.650	2.516	0.924	
4.6982	5.476	4.643	2.515	0.923	
4.7035	5.477	4.637	2.515	0.922	
4.7089	5.478	4.630	2.515	0.920	
4.7143	5.480	4.623	2.515	0.919	
4.7197	5.481	4.616	2.515	0.918	
4.7251	5.482	4.609	2.514	0.917	
4.7305	5.484	4.602	2.514	0.915	
4.7358	5.487	4.594	2.514	0.914	
4.7412	5.489	4.587	2.514	0.912	
4.7466	5.492	4.579	2.514	0.911	
4.752	5.496	4.572	2.514	0.909	
4.7574	5.500	4.565	2.515	0.908	
4.7627	5.504	4.557	2.515	0.906	
4.7681	5.508	4.550	2.515	0.905	
4.7735	5.513	4.544	2.516	0.903	
4.7789	5.518	4.537	2.516	0.902	
4.7843	5.523	4.530	2.517	0.900	
4.7897	5.529	4.524	2.517	0.899	
4.795	5.535	4.518	2.518	0.897	
4.8004	5.541	4.513	2.519	0.896	
4.8058	5.547	4.508	2.519	0.895	
4.8112	5.553	4.503	2.520	0.893	
4.8166	5.559	4.498	2.521	0.892	
4.8219	5.565	4.494	2.522	0.891	
4.8273	5.570	4.489	2.522	0.890	
4.8327	5.577	4.484	2.523	0.889	
4.8381	5.583	4.479	2.524	0.887	
4.8435	5.589	4.475	2.525	0.886	
4.8489	5.596	4.470	2.526	0.885	
4.8542	5.603	4.465	2.527	0.884	
4.8596	5.610	4.460	2.528	0.882	
4.865	5.617	4.456	2.529	0.881	
4.8704	5.625	4.451	2.530	0.880	

4.8758	5.633	4.446	2.531	0.878	
4.8811	5.642	4.441	2.532	0.877	
4.8865	5.651	4.437	2.533	0.876	
4.8919	5.660	4.432	2.535	0.874	
4.8973	5.670	4.428	2.536	0.873	
4.9027	5.681	4.424	2.538	0.872	
4.9081	5.692	4.419	2.540	0.870	
4.9134	5.704	4.415	2.541	0.869	
4.9188	5.717	4.411	2.543	0.867	
4.9242	5.730	4.408	2.546	0.866	
4.9296	5.745	4.404	2.548	0.864	
4.935	5.761	4.401	2.551	0.863	
4.9403	5.778	4.399	2.553	0.861	
4.9457	5.797	4.398	2.557	0.860	
4.9511	5.819	4.397	2.560	0.859	
4.9565	5.842	4.400	2.565	0.858	
4.9619	5.868	4.405	2.570	0.857	
4.9672	5.894	4.416	2.575	0.857	
4.9726	5.920	4.431	2.580	0.859	
4.978	5.944	4.452	2.586	0.861	
4.9834	5.965	4.477	2.591	0.864	
4.9888	5.980	4.506	2.595	0.868	
4.9942	5.989	4.536	2.598	0.873	
4.9995	5.992	4.567	2.601	0.878	
5.0049	5.988	4.595	2.602	0.883	
5.0103	5.979	4.617	2.601	0.887	
5.0157	5.970	4.633	2.601	0.891	
5.0211	5.963	4.645	2.600	0.893	
5.0264	5.958	4.655	2.600	0.895	
5.0318	5.956	4.664	2.600	0.897	
5.0372	5.955	4.675	2.601	0.899	
5.0426	5.954	4.687	2.601	0.901	
5.048	5.950	4.700	2.601	0.903	
5.0534	5.945	4.711	2.601	0.906	
5.0587	5.940	4.719	2.601	0.907	
5.0641	5.936	4.727	2.600	0.909	
5.0695	5.934	4.734	2.600	0.910	
5.0749	5.933	4.742	2.601	0.912	
5.0803	5.931	4.750	2.601	0.913	
5.0856	5.930	4.758	2.601	0.915	
5.091	5.929	4.767	2.602	0.916	
5.0964	5.928	4.776	2.602	0.918	
5.1018	5.927	4.785	2.602	0.919	
5.1072	5.926	4.796	2.603	0.921	

5.1126	5.924	4.807	2.603	0.923	
5.1179	5.922	4.819	2.603	0.925	
5.1233	5.918	4.831	2.604	0.928	
5.1287	5.911	4.843	2.603	0.930	
5.1341	5.903	4.854	2.603	0.933	
5.1395	5.895	4.863	2.602	0.935	
5.1448	5.886	4.870	2.601	0.936	
5.1502	5.878	4.876	2.600	0.938	
5.1556	5.870	4.881	2.599	0.939	
5.161	5.864	4.885	2.598	0.940	
5.1664	5.857	4.889	2.597	0.941	
5.1718	5.852	4.893	2.596	0.942	
5.1771	5.847	4.897	2.595	0.943	
5.1825	5.842	4.901	2.595	0.944	
5.1879	5.837	4.905	2.594	0.945	
5.1933	5.833	4.908	2.594	0.946	
5.1987	5.828	4.912	2.593	0.947	
5.204	5.824	4.915	2.593	0.948	
5.2094	5.821	4.919	2.592	0.949	
5.2148	5.818	4.922	2.592	0.949	
5.2202	5.815	4.926	2.592	0.950	
5.2256	5.813	4.930	2.592	0.951	
5.2309	5.811	4.935	2.592	0.952	
5.2363	5.808	4.941	2.592	0.953	
5.2417	5.805	4.948	2.592	0.955	
5.2471	5.802	4.955	2.591	0.956	
5.2525	5.797	4.961	2.591	0.957	
5.2579	5.791	4.967	2.590	0.959	
5.2632	5.785	4.972	2.590	0.960	
5.2686	5.778	4.977	2.589	0.961	
5.274	5.772	4.981	2.588	0.962	
5.2794	5.766	4.985	2.587	0.963	
5.2848	5.760	4.988	2.586	0.964	
5.2901	5.754	4.991	2.586	0.965	
5.2955	5.748	4.994	2.585	0.966	
5.3009	5.743	4.996	2.584	0.967	
5.3063	5.738	4.998	2.583	0.967	
5.3117	5.733	4.999	2.583	0.968	
5.3171	5.728	5.001	2.582	0.968	
5.3224	5.724	5.002	2.581	0.969	
5.3278	5.720	5.003	2.581	0.969	
5.3332	5.717	5.004	2.580	0.970	
5.3386	5.714	5.006	2.580	0.970	
5.344	5.711	5.007	2.579	0.971	

5.3493	5.709	5.009	2.579	0.971	
5.3547	5.707	5.011	2.579	0.972	
5.3601	5.705	5.013	2.579	0.972	
5.3655	5.704	5.015	2.579	0.972	
5.3709	5.703	5.019	2.579	0.973	
5.3763	5.701	5.023	2.579	0.974	
5.3816	5.698	5.027	2.578	0.975	
5.387	5.695	5.031	2.578	0.976	
5.3924	5.692	5.035	2.578	0.977	
5.3978	5.689	5.039	2.578	0.977	
5.4032	5.686	5.042	2.577	0.978	
5.4085	5.683	5.046	2.577	0.979	
5.4139	5.680	5.050	2.577	0.980	
5.4193	5.677	5.054	2.577	0.981	
5.4247	5.673	5.058	2.576	0.982	
5.4301	5.669	5.062	2.576	0.983	
5.4355	5.665	5.065	2.575	0.983	
5.4408	5.661	5.069	2.575	0.984	
5.4462	5.657	5.072	2.574	0.985	
5.4516	5.653	5.075	2.574	0.986	
5.457	5.649	5.078	2.573	0.987	
5.4624	5.645	5.081	2.573	0.987	
5.4677	5.641	5.083	2.572	0.988	
5.4731	5.638	5.086	2.572	0.989	
5.4785	5.634	5.088	2.572	0.989	
5.4839	5.631	5.090	2.571	0.990	
5.4893	5.628	5.093	2.571	0.991	
5.4946	5.625	5.095	2.570	0.991	
5.5	5.622	5.098	2.570	0.992	
5.5054	5.620	5.101	2.570	0.992	
5.5108	5.617	5.104	2.570	0.993	
5.5162	5.614	5.107	2.569	0.994	
5.5216	5.612	5.111	2.569	0.995	
5.5269	5.608	5.115	2.569	0.996	
5.5323	5.604	5.119	2.568	0.997	
5.5377	5.600	5.123	2.568	0.997	
5.5431	5.596	5.126	2.568	0.998	
5.5485	5.592	5.128	2.567	0.999	
5.5538	5.588	5.131	2.567	1.000	
5.5592	5.585	5.134	2.566	1.000	
5.5646	5.581	5.138	2.566	1.001	
5.57	5.577	5.142	2.565	1.002	
5.5754	5.572	5.145	2.565	1.003	
5.5808	5.567	5.148	2.564	1.004	

5.5861	5.561	5.150	2.563	1.005	
5.5915	5.557	5.152	2.563	1.005	
5.5969	5.552	5.153	2.562	1.006	
5.6023	5.547	5.154	2.561	1.006	
5.6077	5.543	5.156	2.561	1.007	
5.613	5.539	5.157	2.560	1.007	
5.6184	5.535	5.157	2.559	1.008	
5.6238	5.532	5.158	2.559	1.008	
5.6292	5.528	5.159	2.558	1.008	
5.6346	5.525	5.160	2.558	1.009	
5.64	5.522	5.160	2.557	1.009	
5.6453	5.520	5.161	2.557	1.009	
5.6507	5.518	5.161	2.557	1.009	
5.6561	5.516	5.162	2.556	1.010	
5.6615	5.514	5.163	2.556	1.010	
5.6669	5.512	5.165	2.556	1.010	
5.6722	5.511	5.166	2.556	1.011	
5.6776	5.510	5.168	2.556	1.011	
5.683	5.509	5.170	2.556	1.011	
5.6884	5.507	5.173	2.556	1.012	
5.6938	5.506	5.176	2.556	1.013	
5.6992	5.504	5.179	2.556	1.013	
5.7045	5.502	5.182	2.555	1.014	
5.7099	5.500	5.184	2.555	1.014	
5.7153	5.498	5.187	2.555	1.015	
5.7207	5.496	5.189	2.555	1.016	
5.7261	5.494	5.192	2.555	1.016	
5.7314	5.493	5.195	2.555	1.017	
5.7368	5.491	5.198	2.555	1.017	
5.7422	5.490	5.202	2.555	1.018	
5.7476	5.488	5.205	2.555	1.019	
5.753	5.486	5.209	2.554	1.020	
5.7583	5.483	5.213	2.554	1.020	
5.7637	5.481	5.217	2.554	1.021	
5.7691	5.478	5.222	2.554	1.022	
5.7745	5.474	5.225	2.554	1.023	
5.7799	5.471	5.229	2.553	1.024	
5.7853	5.467	5.233	2.553	1.025	
5.7906	5.464	5.236	2.553	1.026	
5.796	5.460	5.239	2.552	1.026	
5.8014	5.456	5.242	2.552	1.027	
5.8068	5.453	5.245	2.551	1.028	
5.8122	5.449	5.248	2.551	1.029	
5.8175	5.445	5.250	2.550	1.029	

5.8229	5.442	5.253	2.550	1.030	
5.8283	5.438	5.255	2.550	1.031	
5.8337	5.435	5.257	2.549	1.031	
5.8391	5.431	5.259	2.549	1.032	
5.8445	5.428	5.261	2.548	1.032	
5.8498	5.425	5.263	2.548	1.033	
5.8552	5.422	5.265	2.547	1.033	
5.8606	5.419	5.268	2.547	1.034	
5.866	5.416	5.270	2.547	1.035	
5.8714	5.413	5.272	2.546	1.035	
5.8767	5.410	5.274	2.546	1.036	
5.8821	5.407	5.276	2.546	1.036	
5.8875	5.404	5.277	2.545	1.037	
5.8929	5.401	5.279	2.545	1.037	
5.8983	5.398	5.281	2.545	1.038	
5.9037	5.396	5.282	2.544	1.038	
5.909	5.394	5.284	2.544	1.038	
5.9144	5.392	5.286	2.544	1.039	
5.9198	5.391	5.288	2.544	1.039	
5.9252	5.389	5.290	2.544	1.040	
5.9306	5.387	5.293	2.543	1.040	
5.9359	5.385	5.295	2.543	1.041	
5.9413	5.383	5.298	2.543	1.042	
5.9467	5.381	5.301	2.543	1.042	
5.9521	5.379	5.305	2.543	1.043	
5.9575	5.376	5.308	2.543	1.044	
5.9629	5.373	5.311	2.542	1.045	
5.9682	5.369	5.314	2.542	1.045	
5.9736	5.366	5.316	2.542	1.046	
5.979	5.363	5.318	2.541	1.046	
5.9844	5.360	5.320	2.541	1.047	
5.9898	5.357	5.321	2.540	1.047	
5.9951	5.354	5.323	2.540	1.048	
6.0005	5.352	5.325	2.540	1.048	
6.0059	5.350	5.326	2.540	1.049	
6.0113	5.347	5.328	2.539	1.049	
6.0167	5.346	5.329	2.539	1.049	
6.022	5.344	5.331	2.539	1.050	
6.0274	5.342	5.332	2.539	1.050	
6.0328	5.340	5.334	2.539	1.051	
6.0382	5.339	5.336	2.538	1.051	
6.0436	5.337	5.337	2.538	1.051	
6.049	5.336	5.339	2.538	1.052	
6.0543	5.335	5.341	2.538	1.052	

6.0597	5.334	5.343	2.538	1.052	
6.0651	5.333	5.345	2.538	1.053	
6.0705	5.333	5.347	2.538	1.053	
6.0759	5.332	5.349	2.538	1.054	
6.0812	5.332	5.351	2.538	1.054	
6.0866	5.332	5.354	2.539	1.055	
6.092	5.332	5.357	2.539	1.055	
6.0974	5.332	5.361	2.539	1.056	
6.1028	5.332	5.364	2.539	1.056	
6.1082	5.331	5.368	2.539	1.057	
6.1135	5.331	5.372	2.540	1.058	
6.1189	5.330	5.377	2.540	1.059	
6.1243	5.329	5.381	2.540	1.059	
6.1297	5.328	5.385	2.540	1.060	
6.1351	5.327	5.389	2.540	1.061	
6.1404	5.326	5.394	2.540	1.062	
6.1458	5.325	5.398	2.540	1.062	
6.1512	5.324	5.403	2.541	1.063	
6.1566	5.322	5.409	2.541	1.064	
6.162	5.320	5.414	2.541	1.065	
6.1674	5.318	5.419	2.541	1.066	
6.1727	5.315	5.424	2.541	1.067	
6.1781	5.312	5.429	2.540	1.069	
6.1835	5.309	5.433	2.540	1.069	
6.1889	5.306	5.438	2.540	1.070	
6.1943	5.303	5.442	2.540	1.071	
6.1996	5.300	5.446	2.540	1.072	
6.205	5.297	5.450	2.539	1.073	
6.2104	5.294	5.454	2.539	1.074	
6.2158	5.290	5.457	2.539	1.075	
6.2212	5.287	5.461	2.539	1.076	
6.2266	5.284	5.464	2.538	1.076	
6.2319	5.281	5.468	2.538	1.077	
6.2373	5.278	5.471	2.538	1.078	
6.2427	5.275	5.475	2.537	1.079	
6.2481	5.272	5.478	2.537	1.080	
6.2535	5.268	5.481	2.537	1.080	
6.2588	5.265	5.483	2.536	1.081	
6.2642	5.262	5.486	2.536	1.082	
6.2696	5.259	5.489	2.536	1.082	
6.275	5.257	5.491	2.536	1.083	
6.2804	5.254	5.493	2.535	1.083	
6.2857	5.251	5.495	2.535	1.084	
6.2911	5.249	5.497	2.535	1.084	

6.2965	5.247	5.499	2.535	1.085	
6.3019	5.246	5.501	2.534	1.085	
6.3073	5.244	5.503	2.534	1.086	
6.3127	5.243	5.506	2.534	1.086	
6.318	5.242	5.508	2.534	1.087	
6.3234	5.241	5.511	2.534	1.087	
6.3288	5.240	5.514	2.534	1.088	
6.3342	5.239	5.517	2.535	1.088	
6.3396	5.239	5.520	2.535	1.089	
6.3449	5.238	5.523	2.535	1.089	
6.3503	5.238	5.526	2.535	1.090	
6.3557	5.237	5.530	2.535	1.091	
6.3611	5.237	5.534	2.535	1.091	
6.3665	5.236	5.539	2.536	1.092	
6.3719	5.236	5.544	2.536	1.093	
6.3772	5.234	5.549	2.536	1.094	
6.3826	5.233	5.554	2.536	1.095	
6.388	5.231	5.559	2.536	1.096	
6.3934	5.229	5.564	2.536	1.097	
6.3988	5.227	5.568	2.536	1.098	
6.4041	5.224	5.573	2.536	1.099	
6.4095	5.221	5.577	2.536	1.100	
6.4149	5.219	5.580	2.536	1.100	
6.4203	5.216	5.584	2.536	1.101	
6.4257	5.214	5.587	2.535	1.102	
6.4311	5.213	5.591	2.535	1.103	
6.4364	5.211	5.595	2.535	1.103	
6.4418	5.209	5.599	2.535	1.104	
6.4472	5.207	5.603	2.535	1.105	
6.4526	5.205	5.607	2.535	1.106	
6.458	5.203	5.610	2.535	1.106	
6.4633	5.201	5.614	2.535	1.107	
6.4687	5.199	5.617	2.535	1.108	
6.4741	5.197	5.621	2.535	1.109	
6.4795	5.196	5.624	2.535	1.109	
6.4849	5.194	5.628	2.535	1.110	
6.4903	5.193	5.631	2.535	1.111	
6.4956	5.191	5.634	2.535	1.111	
6.501	5.190	5.638	2.535	1.112	
6.5064	5.189	5.641	2.535	1.113	
6.5118	5.188	5.645	2.535	1.113	
6.5172	5.187	5.648	2.535	1.114	
6.5225	5.186	5.652	2.535	1.115	
6.5279	5.186	5.655	2.536	1.115	

6.5333	5.185	5.659	2.536	1.116	
6.5387	5.185	5.663	2.536	1.117	
6.5441	5.185	5.668	2.536	1.117	
6.5494	5.185	5.672	2.537	1.118	
6.5548	5.185	5.677	2.537	1.119	
6.5602	5.184	5.682	2.537	1.120	
6.5656	5.184	5.687	2.538	1.121	
6.571	5.183	5.692	2.538	1.121	
6.5764	5.183	5.697	2.538	1.122	
6.5817	5.182	5.702	2.538	1.123	
6.5871	5.182	5.708	2.539	1.124	
6.5925	5.181	5.713	2.539	1.125	
6.5979	5.181	5.719	2.539	1.126	
6.6033	5.181	5.725	2.540	1.127	
6.6086	5.180	5.732	2.540	1.128	
6.614	5.179	5.739	2.541	1.129	
6.6194	5.178	5.746	2.541	1.131	
6.6248	5.176	5.753	2.541	1.132	
6.6302	5.174	5.760	2.541	1.133	
6.6356	5.171	5.766	2.541	1.135	
6.6409	5.168	5.773	2.541	1.136	
6.6463	5.165	5.778	2.541	1.137	
6.6517	5.162	5.784	2.541	1.138	
6.6571	5.159	5.789	2.541	1.139	
6.6625	5.155	5.795	2.541	1.140	
6.6678	5.152	5.800	2.541	1.141	
6.6732	5.149	5.805	2.541	1.142	
6.6786	5.147	5.809	2.540	1.143	
6.684	5.144	5.814	2.540	1.144	
6.6894	5.141	5.818	2.540	1.145	
6.6948	5.138	5.822	2.540	1.146	
6.7001	5.136	5.827	2.540	1.147	
6.7055	5.133	5.831	2.540	1.148	
6.7109	5.131	5.834	2.540	1.149	
6.7163	5.129	5.838	2.540	1.149	
6.7217	5.127	5.841	2.540	1.150	
6.727	5.126	5.845	2.540	1.151	
6.7324	5.125	5.848	2.540	1.151	
6.7378	5.124	5.852	2.540	1.152	
6.7432	5.123	5.856	2.540	1.153	
6.7486	5.122	5.860	2.540	1.153	
6.754	5.122	5.864	2.540	1.154	
6.7593	5.121	5.868	2.541	1.155	
6.7647	5.121	5.872	2.541	1.156	

6.7701	5.121	5.876	2.541	1.156	
6.7755	5.121	5.880	2.542	1.157	
6.7809	5.122	5.885	2.542	1.158	
6.7862	5.122	5.889	2.542	1.158	
6.7916	5.123	5.894	2.543	1.159	
6.797	5.124	5.899	2.543	1.160	
6.8024	5.125	5.904	2.544	1.160	
6.8078	5.127	5.909	2.545	1.161	
6.8131	5.128	5.915	2.545	1.162	
6.8185	5.130	5.921	2.546	1.163	
6.8239	5.132	5.928	2.547	1.164	
6.8293	5.134	5.935	2.548	1.165	
6.8347	5.135	5.942	2.548	1.166	
6.8401	5.136	5.950	2.549	1.167	
6.8454	5.138	5.958	2.550	1.168	
6.8508	5.139	5.966	2.551	1.169	
6.8562	5.140	5.975	2.552	1.171	
6.8616	5.140	5.984	2.552	1.172	
6.867	5.139	5.993	2.553	1.174	
6.8723	5.138	6.002	2.553	1.175	
6.8777	5.137	6.011	2.554	1.177	
6.8831	5.136	6.019	2.554	1.178	
6.8885	5.135	6.027	2.555	1.180	
6.8939	5.134	6.035	2.555	1.181	
6.8993	5.133	6.044	2.556	1.182	
6.9046	5.131	6.051	2.556	1.184	
6.91	5.130	6.059	2.556	1.185	
6.9154	5.129	6.067	2.557	1.186	
6.9208	5.128	6.074	2.557	1.188	
6.9262	5.126	6.082	2.557	1.189	
6.9315	5.125	6.089	2.558	1.190	
6.9369	5.125	6.096	2.558	1.191	
6.9423	5.124	6.103	2.559	1.193	
6.9477	5.124	6.110	2.559	1.194	
6.9531	5.125	6.117	2.560	1.195	
6.9585	5.125	6.125	2.561	1.196	
6.9638	5.126	6.134	2.561	1.197	
6.9692	5.125	6.142	2.562	1.199	
6.9746	5.125	6.150	2.562	1.200	
6.98	5.125	6.158	2.563	1.201	
6.9854	5.126	6.166	2.564	1.203	
6.9907	5.126	6.174	2.564	1.204	
6.9961	5.127	6.183	2.565	1.205	
7.0015	5.128	6.191	2.566	1.206	

7.0069	5.129	6.200	2.567	1.208	
7.0123	5.131	6.209	2.568	1.209	
7.0177	5.132	6.217	2.568	1.210	
7.023	5.133	6.226	2.569	1.212	
7.0284	5.135	6.235	2.570	1.213	
7.0338	5.138	6.243	2.571	1.214	
7.0392	5.142	6.252	2.573	1.215	
7.0446	5.146	6.262	2.574	1.216	
7.0499	5.151	6.273	2.576	1.218	
7.0553	5.155	6.285	2.577	1.219	
7.0607	5.161	6.298	2.579	1.221	
7.0661	5.166	6.311	2.581	1.223	
7.0715	5.172	6.327	2.583	1.225	
7.0768	5.177	6.344	2.585	1.227	
7.0822	5.180	6.363	2.587	1.230	
7.0876	5.182	6.383	2.589	1.233	
7.093	5.182	6.403	2.590	1.236	
7.0984	5.180	6.422	2.591	1.239	
7.1038	5.178	6.439	2.592	1.242	
7.1091	5.177	6.455	2.593	1.245	
7.1145	5.177	6.474	2.595	1.247	
7.1199	5.176	6.493	2.596	1.251	
7.1253	5.173	6.513	2.597	1.254	
7.1307	5.169	6.532	2.598	1.257	
7.136	5.164	6.550	2.599	1.260	
7.1414	5.160	6.568	2.599	1.263	
7.1468	5.156	6.585	2.600	1.266	
7.1522	5.151	6.603	2.601	1.269	
7.1576	5.147	6.620	2.601	1.272	
7.163	5.143	6.637	2.602	1.275	
7.1683	5.140	6.654	2.603	1.278	
7.1737	5.137	6.673	2.604	1.281	
7.1791	5.134	6.693	2.605	1.285	
7.1845	5.129	6.713	2.606	1.288	
7.1899	5.124	6.733	2.606	1.292	
7.1952	5.118	6.753	2.607	1.295	
7.2006	5.111	6.773	2.607	1.299	
7.206	5.105	6.792	2.608	1.302	
7.2114	5.099	6.811	2.608	1.306	
7.2168	5.094	6.830	2.609	1.309	
7.2222	5.090	6.850	2.610	1.312	
7.2275	5.086	6.871	2.611	1.316	
7.2329	5.081	6.895	2.612	1.320	
7.2383	5.076	6.919	2.613	1.324	

7.2437	5.069	6.944	2.614	1.328	
7.2491	5.062	6.969	2.615	1.333	
7.2544	5.055	6.995	2.616	1.337	
7.2598	5.048	7.022	2.617	1.342	
7.2652	5.041	7.051	2.618	1.347	
7.2706	5.032	7.083	2.619	1.352	
7.276	5.022	7.118	2.620	1.358	
7.2814	5.009	7.156	2.621	1.365	
7.2867	4.991	7.196	2.622	1.372	
7.2921	4.967	7.239	2.622	1.381	
7.2975	4.934	7.279	2.620	1.389	
7.3029	4.895	7.316	2.617	1.398	
7.3083	4.852	7.346	2.613	1.406	
7.3136	4.806	7.369	2.608	1.413	
7.319	4.760	7.386	2.603	1.419	
7.3244	4.716	7.397	2.597	1.424	
7.3298	4.674	7.404	2.591	1.429	
7.3352	4.634	7.409	2.586	1.433	
7.3405	4.596	7.410	2.580	1.436	
7.3459	4.561	7.409	2.575	1.439	
7.3513	4.529	7.407	2.570	1.441	
7.3567	4.500	7.403	2.566	1.443	
7.3621	4.474	7.400	2.561	1.445	
7.3675	4.450	7.397	2.558	1.446	
7.3728	4.427	7.396	2.554	1.448	
7.3782	4.405	7.396	2.551	1.450	
7.3836	4.383	7.396	2.548	1.452	
7.389	4.361	7.397	2.544	1.454	
7.3944	4.338	7.396	2.541	1.455	
7.3997	4.316	7.395	2.538	1.457	
7.4051	4.295	7.394	2.534	1.459	
7.4105	4.274	7.392	2.531	1.460	
7.4159	4.254	7.390	2.528	1.462	
7.4213	4.235	7.388	2.525	1.463	
7.4267	4.217	7.387	2.522	1.464	
7.432	4.200	7.385	2.519	1.466	
7.4374	4.183	7.384	2.517	1.467	
7.4428	4.166	7.383	2.514	1.468	
7.4482	4.149	7.383	2.512	1.470	
7.4536	4.133	7.383	2.509	1.471	
7.4589	4.115	7.384	2.507	1.473	
7.4643	4.098	7.384	2.504	1.474	
7.4697	4.080	7.383	2.502	1.476	
7.4751	4.063	7.383	2.499	1.477	

7.4805	4.045	7.381	2.496	1.478	
7.4859	4.028	7.379	2.494	1.480	
7.4912	4.011	7.377	2.491	1.481	
7.4966	3.995	7.374	2.488	1.482	
7.502	3.980	7.371	2.486	1.483	
7.5074	3.966	7.367	2.483	1.483	
7.5128	3.952	7.365	2.481	1.484	
7.5181	3.939	7.362	2.479	1.485	
7.5235	3.927	7.360	2.477	1.486	
7.5289	3.915	7.358	2.475	1.487	
7.5343	3.903	7.355	2.473	1.487	
7.5397	3.893	7.354	2.471	1.488	
7.5451	3.883	7.353	2.470	1.489	
7.5504	3.873	7.353	2.468	1.489	
7.5558	3.864	7.354	2.467	1.490	
7.5612	3.856	7.356	2.466	1.492	
7.5666	3.847	7.359	2.465	1.493	
7.572	3.837	7.364	2.464	1.494	
7.5773	3.827	7.370	2.463	1.496	
7.5827	3.816	7.377	2.462	1.498	
7.5881	3.803	7.385	2.461	1.501	
7.5935	3.789	7.393	2.459	1.503	
7.5989	3.773	7.400	2.458	1.506	
7.6042	3.757	7.408	2.456	1.508	
7.6096	3.739	7.416	2.454	1.511	
7.615	3.720	7.423	2.452	1.514	
7.6204	3.699	7.430	2.449	1.517	
7.6258	3.678	7.437	2.447	1.520	
7.6312	3.655	7.442	2.444	1.523	
7.6365	3.630	7.447	2.441	1.525	
7.6419	3.605	7.450	2.437	1.528	
7.6473	3.578	7.453	2.434	1.531	
7.6527	3.549	7.453	2.429	1.534	
7.6581	3.519	7.451	2.425	1.536	
7.6634	3.489	7.446	2.420	1.538	
7.6688	3.459	7.438	2.415	1.540	
7.6742	3.429	7.427	2.409	1.541	
7.6796	3.399	7.412	2.404	1.542	
7.685	3.372	7.394	2.398	1.542	
7.6904	3.347	7.374	2.392	1.541	
7.6957	3.326	7.351	2.387	1.540	
7.7011	3.309	7.327	2.382	1.538	
7.7065	3.296	7.303	2.378	1.536	
7.7119	3.287	7.280	2.374	1.533	

7.7173	3.279	7.258	2.371	1.531	
7.7226	3.274	7.239	2.368	1.528	
7.728	3.270	7.221	2.366	1.526	
7.7334	3.267	7.204	2.364	1.524	
7.7388	3.264	7.189	2.362	1.522	
7.7442	3.262	7.176	2.360	1.520	
7.7496	3.258	7.163	2.359	1.518	
7.7549	3.254	7.149	2.357	1.517	
7.7603	3.250	7.134	2.355	1.515	
7.7657	3.247	7.117	2.353	1.513	
7.7711	3.246	7.099	2.351	1.510	
7.7765	3.249	7.079	2.349	1.507	
7.7818	3.257	7.060	2.349	1.503	
7.7872	3.270	7.044	2.349	1.499	
7.7926	3.285	7.032	2.350	1.496	
7.798	3.302	7.024	2.352	1.493	
7.8034	3.319	7.021	2.354	1.491	
7.8088	3.336	7.021	2.357	1.490	
7.8141	3.352	7.026	2.360	1.489	
7.8195	3.366	7.034	2.363	1.489	
7.8249	3.378	7.045	2.365	1.489	
7.8303	3.386	7.057	2.368	1.490	
7.8357	3.393	7.071	2.370	1.492	
7.841	3.397	7.085	2.372	1.493	
7.8464	3.401	7.100	2.374	1.495	
7.8518	3.402	7.117	2.376	1.498	
7.8572	3.402	7.136	2.378	1.501	
7.8626	3.397	7.157	2.379	1.504	
7.8679	3.387	7.179	2.380	1.508	
7.8733	3.370	7.198	2.379	1.513	
7.8787	3.350	7.210	2.377	1.517	
7.8841	3.330	7.217	2.375	1.520	
7.8895	3.314	7.222	2.373	1.522	
7.8949	3.298	7.226	2.371	1.524	
7.9002	3.282	7.229	2.369	1.526	
7.9056	3.266	7.231	2.366	1.528	
7.911	3.250	7.230	2.364	1.529	
7.9164	3.236	7.229	2.362	1.530	
7.9218	3.223	7.226	2.360	1.531	
7.9271	3.211	7.224	2.358	1.532	
7.9325	3.200	7.220	2.356	1.533	
7.9379	3.190	7.216	2.354	1.533	
7.9433	3.181	7.212	2.352	1.533	
7.9487	3.173	7.209	2.350	1.533	

7.9541	3.165	7.205	2.349	1.534	
7.9594	3.158	7.202	2.347	1.534	
7.9648	3.152	7.197	2.346	1.534	
7.9702	3.147	7.193	2.345	1.534	
7.9756	3.144	7.189	2.344	1.533	
7.981	3.142	7.186	2.344	1.533	
7.9863	3.141	7.186	2.343	1.533	
7.9917	3.140	7.187	2.343	1.533	
7.9971	3.138	7.189	2.343	1.534	
8.0025	3.135	7.193	2.343	1.535	
8.0079	3.131	7.197	2.343	1.536	
8.0133	3.126	7.202	2.343	1.537	
8.0186	3.118	7.207	2.342	1.539	
8.024	3.110	7.210	2.341	1.540	
8.0294	3.101	7.212	2.340	1.541	
8.0348	3.091	7.213	2.339	1.542	
8.0402	3.083	7.212	2.337	1.543	
8.0455	3.075	7.209	2.336	1.543	
8.0509	3.070	7.207	2.335	1.543	
8.0563	3.067	7.204	2.334	1.543	
8.0617	3.065	7.204	2.334	1.543	
8.0671	3.063	7.206	2.334	1.544	
8.0725	3.059	7.209	2.333	1.545	
8.0778	3.054	7.212	2.333	1.546	
8.0832	3.047	7.215	2.332	1.547	
8.0886	3.041	7.216	2.331	1.548	
8.094	3.034	7.217	2.330	1.548	
8.0994	3.027	7.216	2.329	1.549	
8.1047	3.021	7.214	2.328	1.549	
8.1101	3.017	7.210	2.327	1.549	
8.1155	3.016	7.208	2.327	1.549	
8.1209	3.016	7.206	2.327	1.549	
8.1263	3.017	7.207	2.327	1.549	
8.1316	3.018	7.209	2.327	1.549	
8.137	3.019	7.212	2.328	1.549	
8.1424	3.019	7.217	2.328	1.550	
8.1478	3.018	7.223	2.329	1.551	
8.1532	3.016	7.230	2.329	1.552	
8.1586	3.013	7.237	2.329	1.553	
8.1639	3.007	7.242	2.329	1.555	
8.1693	3.001	7.247	2.329	1.556	
8.1747	2.995	7.249	2.328	1.557	
8.1801	2.989	7.250	2.327	1.558	
8.1855	2.985	7.250	2.326	1.558	

8.1908	2.983	7.248	2.326	1.558	
8.1962	2.984	7.248	2.326	1.558	
8.2016	2.987	7.249	2.327	1.558	
8.207	2.990	7.253	2.327	1.558	
8.2124	2.992	7.259	2.328	1.559	
8.2178	2.993	7.265	2.329	1.559	
8.2231	2.994	7.271	2.330	1.560	
8.2285	2.995	7.277	2.331	1.561	
8.2339	2.996	7.284	2.332	1.562	
8.2393	2.999	7.291	2.333	1.563	
8.2447	3.001	7.299	2.334	1.564	
8.25	3.003	7.310	2.335	1.565	
8.2554	3.003	7.321	2.336	1.567	
8.2608	3.000	7.332	2.337	1.569	
8.2662	2.997	7.341	2.337	1.570	
8.2716	2.995	7.348	2.338	1.572	
8.277	2.995	7.355	2.338	1.573	
8.2823	2.996	7.363	2.339	1.574	
8.2877	2.998	7.370	2.340	1.575	
8.2931	3.001	7.378	2.342	1.575	
8.2985	3.006	7.387	2.343	1.576	
8.3039	3.012	7.398	2.345	1.577	
8.3092	3.019	7.410	2.347	1.578	
8.3146	3.028	7.424	2.350	1.579	
8.32	3.039	7.440	2.353	1.581	
8.3254	3.051	7.461	2.357	1.583	
8.3308	3.063	7.488	2.361	1.585	
8.3362	3.073	7.520	2.366	1.589	
8.3415	3.080	7.559	2.371	1.594	
8.3469	3.079	7.605	2.375	1.601	
8.3523	3.067	7.653	2.378	1.609	
8.3577	3.044	7.696	2.379	1.617	
8.3631	3.016	7.731	2.378	1.625	
8.3684	2.985	7.762	2.377	1.633	
8.3738	2.953	7.786	2.375	1.639	
8.3792	2.920	7.805	2.372	1.645	
8.3846	2.889	7.818	2.369	1.650	
8.39	2.861	7.828	2.366	1.654	
8.3953	2.837	7.836	2.363	1.658	
8.4007	2.815	7.844	2.361	1.661	
8.4061	2.794	7.851	2.359	1.664	
8.4115	2.776	7.858	2.357	1.667	
8.4169	2.760	7.866	2.355	1.670	
8.4223	2.745	7.875	2.354	1.673	

8.4276	2.729	7.887	2.353	1.676	
8.433	2.712	7.899	2.352	1.679	
8.4384	2.693	7.910	2.350	1.683	
8.4438	2.673	7.920	2.349	1.686	
8.4492	2.654	7.926	2.347	1.689	
8.4545	2.637	7.931	2.345	1.691	
8.4599	2.624	7.936	2.343	1.693	
8.4653	2.612	7.941	2.342	1.695	
8.4707	2.602	7.948	2.342	1.697	
8.4761	2.593	7.957	2.341	1.699	
8.4815	2.585	7.967	2.341	1.702	
8.4868	2.577	7.979	2.341	1.704	
8.4922	2.568	7.992	2.341	1.707	
8.4976	2.560	8.006	2.342	1.709	
8.503	2.553	8.021	2.342	1.712	
8.5084	2.547	8.038	2.343	1.715	
8.5137	2.540	8.059	2.344	1.719	
8.5191	2.532	8.082	2.345	1.723	
8.5245	2.520	8.108	2.346	1.728	
8.5299	2.505	8.134	2.347	1.733	
8.5353	2.489	8.159	2.347	1.738	
8.5407	2.471	8.185	2.347	1.743	
8.546	2.452	8.210	2.347	1.749	
8.5514	2.430	8.235	2.347	1.754	
8.5568	2.407	8.259	2.346	1.760	
8.5622	2.384	8.281	2.345	1.765	
8.5676	2.363	8.302	2.345	1.770	
8.5729	2.343	8.323	2.344	1.775	
8.5783	2.322	8.347	2.344	1.781	
8.5837	2.301	8.370	2.343	1.786	
8.5891	2.281	8.395	2.343	1.791	
8.5945	2.263	8.420	2.343	1.797	
8.5999	2.246	8.449	2.344	1.802	
8.6052	2.231	8.483	2.345	1.808	
8.6106	2.215	8.524	2.348	1.815	
8.616	2.197	8.573	2.350	1.824	
8.6214	2.172	8.634	2.353	1.834	
8.6268	2.136	8.704	2.356	1.848	
8.6321	2.080	8.784	2.357	1.864	
8.6375	1.994	8.865	2.354	1.883	
8.6429	1.874	8.924	2.345	1.903	
8.6483	1.743	8.940	2.329	1.919	
8.6537	1.630	8.923	2.313	1.929	
8.659	1.541	8.895	2.299	1.935	

8.6644	1.466	8.868	2.286	1.939	
8.6698	1.399	8.844	2.275	1.944	
8.6752	1.337	8.820	2.265	1.947	
8.6806	1.278	8.796	2.255	1.951	
8.686	1.222	8.772	2.245	1.954	
8.6913	1.170	8.748	2.236	1.957	
8.6967	1.120	8.725	2.227	1.959	
8.7021	1.071	8.705	2.218	1.962	
8.7075	1.021	8.683	2.209	1.965	
8.7129	0.971	8.658	2.200	1.967	
8.7182	0.924	8.631	2.191	1.969	
8.7236	0.880	8.602	2.183	1.971	
8.729	0.841	8.573	2.174	1.971	
8.7344	0.805	8.545	2.167	1.972	
8.7398	0.772	8.521	2.160	1.973	
8.7452	0.741	8.498	2.153	1.974	
8.7505	0.710	8.480	2.147	1.975	
8.7559	0.679	8.466	2.141	1.977	
8.7613	0.642	8.456	2.136	1.980	
8.7667	0.602	8.446	2.129	1.983	
8.7721	0.557	8.436	2.123	1.987	
8.7774	0.507	8.426	2.115	1.992	
8.7828	0.448	8.413	2.106	1.997	
8.7882	0.380	8.393	2.095	2.003	
8.7936	0.307	8.356	2.082	2.007	
8.799	0.238	8.302	2.067	2.008	
8.8044	0.181	8.235	2.052	2.007	
8.8097	0.139	8.163	2.037	2.003	
8.8151	0.109	8.089	2.025	1.998	
8.8205	0.091	8.016	2.013	1.991	
8.8259	0.086	7.944	2.004	1.982	
8.8313	0.098	7.879	1.997	1.973	
8.8366	0.121	7.832	1.994	1.964	
8.842	0.139	7.808	1.994	1.958	
8.8474	0.145	7.791	1.992	1.956	
8.8528	0.144	7.773	1.990	1.953	
8.8582	0.141	7.758	1.987	1.952	
8.8636	0.135	7.746	1.985	1.951	
8.8689	0.122	7.737	1.982	1.951	
8.8743	0.101	7.726	1.978	1.953	
8.8797	0.076	7.710	1.973	1.954	
8.8851	0.048	7.689	1.967	1.955	
8.8905	0.021	7.663	1.960	1.955	
8.8958	-0.005	7.633	1.953	1.954	

8.9012	-0.029	7.600	1.946	1.953	
8.9066	-0.051	7.566	1.938	1.952	
8.912	-0.072	7.528	1.931	1.949	
8.9174	-0.090	7.488	1.923	1.947	
8.9227	-0.104	7.445	1.916	1.943	
8.9281	-0.113	7.403	1.909	1.939	
8.9335	-0.118	7.362	1.903	1.934	
8.9389	-0.120	7.322	1.898	1.929	
8.9443	-0.119	7.284	1.893	1.924	
8.9497	-0.116	7.249	1.889	1.919	
8.955	-0.111	7.217	1.885	1.914	
8.9604	-0.106	7.188	1.882	1.910	
8.9658	-0.101	7.161	1.879	1.906	
8.9712	-0.097	7.137	1.876	1.902	
8.9766	-0.095	7.113	1.873	1.898	
8.9819	-0.093	7.090	1.871	1.895	
8.9873	-0.091	7.066	1.868	1.892	
8.9927	-0.088	7.043	1.865	1.888	
8.9981	-0.086	7.021	1.862	1.885	
9.0035	-0.083	6.999	1.860	1.882	
9.0089	-0.081	6.977	1.857	1.879	
9.0142	-0.077	6.955	1.854	1.875	
9.0196	-0.073	6.934	1.852	1.872	
9.025	-0.068	6.914	1.850	1.868	
9.0304	-0.063	6.895	1.848	1.865	
9.0358	-0.059	6.877	1.846	1.862	
9.0411	-0.054	6.860	1.845	1.859	
9.0465	-0.050	6.844	1.843	1.857	
9.0519	-0.046	6.827	1.841	1.854	
9.0573	-0.042	6.811	1.840	1.851	
9.0627	-0.037	6.795	1.838	1.848	
9.0681	-0.032	6.779	1.837	1.845	
9.0734	-0.026	6.765	1.836	1.843	
9.0788	-0.021	6.753	1.835	1.840	
9.0842	-0.016	6.741	1.834	1.838	
9.0896	-0.012	6.731	1.833	1.836	
9.095	-0.008	6.721	1.832	1.834	
9.1003	-0.006	6.711	1.831	1.833	
9.1057	-0.005	6.701	1.830	1.831	
9.1111	-0.005	6.690	1.828	1.830	
9.1165	-0.004	6.679	1.827	1.828	
9.1219	-0.003	6.667	1.825	1.826	
9.1273	-0.002	6.655	1.824	1.824	
9.1326	0.000	6.643	1.823	1.823	

9.138	0.003	6.632	1.821	1.821	
9.1434	0.006	6.622	1.820	1.819	
9.1488	0.009	6.612	1.820	1.817	
9.1542	0.012	6.604	1.819	1.815	
9.1595	0.014	6.596	1.818	1.814	
9.1649	0.016	6.588	1.817	1.813	
9.1703	0.016	6.580	1.816	1.812	
9.1757	0.017	6.573	1.815	1.811	
9.1811	0.017	6.565	1.814	1.809	
9.1864	0.017	6.557	1.813	1.808	
9.1918	0.017	6.549	1.812	1.807	
9.1972	0.017	6.542	1.811	1.806	
9.2026	0.016	6.534	1.810	1.805	
9.208	0.015	6.526	1.809	1.804	
9.2134	0.014	6.518	1.807	1.803	
9.2187	0.012	6.509	1.806	1.802	
9.2241	0.012	6.500	1.804	1.801	
9.2295	0.012	6.491	1.803	1.800	
9.2349	0.012	6.482	1.802	1.799	
9.2403	0.013	6.473	1.801	1.797	
9.2456	0.014	6.465	1.800	1.796	
9.251	0.015	6.457	1.799	1.795	
9.2564	0.016	6.450	1.798	1.793	
9.2618	0.017	6.443	1.797	1.792	
9.2672	0.019	6.436	1.796	1.791	
9.2726	0.019	6.430	1.796	1.790	
9.2779	0.020	6.424	1.795	1.789	
9.2833	0.021	6.418	1.794	1.788	
9.2887	0.021	6.412	1.793	1.788	
9.2941	0.022	6.407	1.793	1.787	
9.2995	0.022	6.402	1.792	1.786	
9.3048	0.022	6.397	1.791	1.785	
9.3102	0.022	6.392	1.791	1.785	
9.3156	0.022	6.387	1.790	1.784	
9.321	0.022	6.383	1.789	1.783	
9.3264	0.021	6.378	1.789	1.783	
9.3318	0.020	6.374	1.788	1.782	
9.3371	0.019	6.370	1.787	1.782	
9.3425	0.018	6.367	1.787	1.782	
9.3479	0.017	6.363	1.786	1.781	
9.3533	0.015	6.360	1.785	1.781	
9.3587	0.013	6.356	1.784	1.781	
9.364	0.011	6.352	1.784	1.781	
9.3694	0.009	6.348	1.783	1.780	

9.3748	0.006	6.344	1.782	1.780	
9.3802	0.004	6.340	1.781	1.780	
9.3856	0.001	6.336	1.780	1.780	
9.391	-0.002	6.332	1.779	1.779	
9.3963	-0.004	6.328	1.778	1.779	
9.4017	-0.007	6.323	1.777	1.779	
9.4071	-0.010	6.319	1.776	1.779	
9.4125	-0.012	6.314	1.775	1.779	
9.4179	-0.015	6.310	1.774	1.778	
9.4232	-0.018	6.306	1.773	1.778	
9.4286	-0.020	6.301	1.772	1.778	
9.434	-0.023	6.296	1.771	1.778	
9.4394	-0.025	6.291	1.770	1.777	
9.4448	-0.027	6.286	1.769	1.777	
9.4501	-0.028	6.282	1.768	1.776	
9.4555	-0.029	6.277	1.767	1.776	
9.4609	-0.030	6.273	1.767	1.775	
9.4663	-0.030	6.269	1.766	1.775	
9.4717	-0.031	6.266	1.766	1.774	
9.4771	-0.031	6.264	1.765	1.774	
9.4824	-0.031	6.263	1.765	1.774	
9.4878	-0.033	6.261	1.765	1.774	
9.4932	-0.034	6.260	1.764	1.774	
9.4986	-0.035	6.259	1.764	1.774	
9.504	-0.036	6.259	1.764	1.774	
9.5093	-0.037	6.259	1.764	1.774	
9.5147	-0.038	6.260	1.764	1.775	
9.5201	-0.039	6.262	1.764	1.775	
9.5255	-0.041	6.265	1.764	1.776	
9.5309	-0.044	6.269	1.764	1.777	
9.5363	-0.048	6.274	1.764	1.778	
9.5416	-0.053	6.280	1.764	1.779	
9.547	-0.061	6.286	1.764	1.782	
9.5524	-0.072	6.292	1.764	1.784	
9.5578	-0.085	6.297	1.762	1.786	
9.5632	-0.100	6.299	1.761	1.789	
9.5685	-0.115	6.298	1.758	1.791	
9.5739	-0.130	6.295	1.756	1.793	
9.5793	-0.143	6.290	1.753	1.794	
9.5847	-0.156	6.284	1.751	1.795	
9.5901	-0.167	6.278	1.748	1.795	
9.5955	-0.178	6.272	1.746	1.796	
9.6008	-0.188	6.264	1.743	1.797	
9.6062	-0.197	6.256	1.741	1.797	

9.6116	-0.204	6.248	1.739	1.797	
9.617	-0.210	6.241	1.737	1.796	
9.6224	-0.215	6.235	1.736	1.796	
9.6277	-0.220	6.230	1.734	1.796	
9.6331	-0.225	6.226	1.733	1.797	
9.6385	-0.230	6.222	1.731	1.797	
9.6439	-0.236	6.220	1.730	1.797	
9.6493	-0.242	6.217	1.729	1.798	
9.6547	-0.249	6.215	1.728	1.798	
9.66	-0.256	6.213	1.727	1.799	
9.6654	-0.263	6.211	1.725	1.800	
9.6708	-0.271	6.209	1.724	1.801	
9.6762	-0.279	6.207	1.723	1.802	
9.6816	-0.286	6.206	1.721	1.803	
9.6869	-0.295	6.206	1.720	1.804	
9.6923	-0.304	6.206	1.719	1.805	
9.6977	-0.315	6.207	1.718	1.807	
9.7031	-0.327	6.208	1.716	1.809	
9.7085	-0.341	6.208	1.714	1.811	
9.7138	-0.356	6.206	1.712	1.813	
9.7192	-0.372	6.204	1.709	1.815	
9.7246	-0.389	6.201	1.706	1.817	
9.73	-0.407	6.196	1.703	1.819	
9.7354	-0.425	6.190	1.700	1.821	
9.7408	-0.443	6.182	1.696	1.822	
9.7461	-0.462	6.172	1.692	1.824	
9.7515	-0.480	6.160	1.688	1.825	
9.7569	-0.497	6.147	1.684	1.825	
9.7623	-0.512	6.132	1.679	1.826	
9.7677	-0.526	6.116	1.675	1.825	
9.773	-0.538	6.100	1.671	1.825	
9.7784	-0.549	6.084	1.667	1.824	
9.7838	-0.558	6.068	1.664	1.824	
9.7892	-0.567	6.052	1.660	1.823	
9.7946	-0.575	6.036	1.657	1.822	
9.8	-0.583	6.021	1.653	1.821	
9.8053	-0.589	6.005	1.650	1.820	
9.8107	-0.594	5.990	1.647	1.818	
9.8161	-0.599	5.974	1.644	1.817	
9.8215	-0.603	5.960	1.641	1.816	
9.8269	-0.606	5.946	1.639	1.814	
9.8322	-0.608	5.934	1.637	1.813	
9.8376	-0.611	5.922	1.634	1.812	
9.843	-0.614	5.911	1.632	1.811	

9.8484	-0.617	5.900	1.630	1.810	
9.8538	-0.620	5.890	1.628	1.809	
9.8592	-0.624	5.880	1.626	1.808	
9.8645	-0.629	5.869	1.624	1.807	
9.8699	-0.633	5.858	1.622	1.806	
9.8753	-0.637	5.847	1.619	1.805	
9.8807	-0.639	5.836	1.617	1.804	
9.8861	-0.642	5.826	1.615	1.803	
9.8914	-0.644	5.816	1.614	1.802	
9.8968	-0.646	5.808	1.612	1.801	
9.9022	-0.649	5.800	1.610	1.801	
9.9076	-0.654	5.792	1.609	1.800	
9.913	-0.659	5.784	1.607	1.800	
9.9184	-0.664	5.775	1.605	1.800	
9.9237	-0.669	5.766	1.603	1.799	
9.9291	-0.674	5.757	1.600	1.799	
9.9345	-0.679	5.747	1.598	1.798	
9.9399	-0.685	5.737	1.596	1.798	
9.9453	-0.690	5.727	1.594	1.797	
9.9506	-0.696	5.717	1.591	1.796	
9.956	-0.702	5.705	1.588	1.796	
9.9614	-0.707	5.692	1.586	1.795	
9.9668	-0.711	5.679	1.583	1.794	
9.9722	-0.714	5.665	1.581	1.792	
9.9776	-0.716	5.652	1.578	1.791	
9.9829	-0.716	5.640	1.576	1.789	
9.9883	-0.717	5.628	1.574	1.788	
9.9937	-0.717	5.617	1.573	1.786	
9.9991	-0.716	5.607	1.571	1.784	
10.0045	-0.716	5.597	1.570	1.783	
10.0098	-0.715	5.588	1.568	1.782	