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**RF Exposure Analysis
KAVU-TV Channel 20 Victoria, TX
March 2022**

KAVU-TV is licensed to operate on UHF Channel 20 (506-512 MHz) with an effective radiated power of 1000 kilowatts. Operation is with a horizontally-polarized directional antenna.

Precise calculations are made only with regard to the levels from this proposal. Calculations have been made using station technical data from the FCC's database and/or from the station licensee.

The power density calculations shown below were made using the techniques outlined in OET Bulletin No. 65. "Ground level" calculations in this report have been made at a reference height of 2 meters above ground to provide a worst-case estimate of exposure for persons standing on the ground in the vicinity of the tower. The equation shown below was used to calculate the ground level power density figures from each antenna.

$$S(\mu W / cm^2) = \frac{33.41 \times AdjERP(Watts)}{D^2}$$

Where: *AdjERP(Watts)* is the maximum lobe effective radiated power times the element pattern factor times the array pattern factor.

D is the distance in meters from the center of radiation to the calculation point.

Ground level power densities have been calculated for locations extending from the base of the tower to a distance of 1000 meters. Values past this point are increasingly negligible.

Power density levels produced by the proposed facility were calculated for an elevation of 2 meters above ground using the manufacturer's vertical plane pattern for the horizontally-polarized

Dielectric model TUA-O4SP-14/155H-1-T-R antenna. The highest calculated power density from this station alone occurs at a point 54 meters from the base of the antenna support structure. At this point the power density from this facility is calculated to be $0.58 \mu\text{W}/\text{cm}^2$, which is 0.2% of $337.3 \mu\text{W}/\text{cm}^2$ (the FCC maximum for uncontrolled environments at the Channel 20 frequency).

These calculations show that the maximum calculated power density produced at two meters above ground level by the operation of KAVU-TV alone is less than 5% of the applicable FCC exposure limit at all locations between 1 and 1000 meters from the base of the antenna support structure. Section 1.1307 of the Commission's Rules exempts stations from the requirement of preparing an environmental assessment when the calculated emissions from the applicants proposed facility are predicted to be less than 5% of the applicable FCC exposure limit. Therefore, the studied facility is in compliance with Section 1.1301 *et seq* and no further analysis of RF exposure at this site is required in this application.

A handwritten signature in black ink, appearing to read 'Erik C. Swanson'.

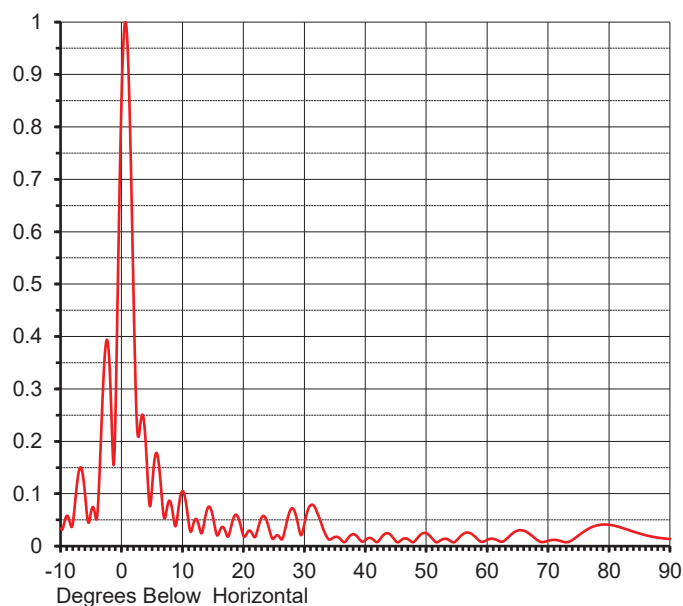
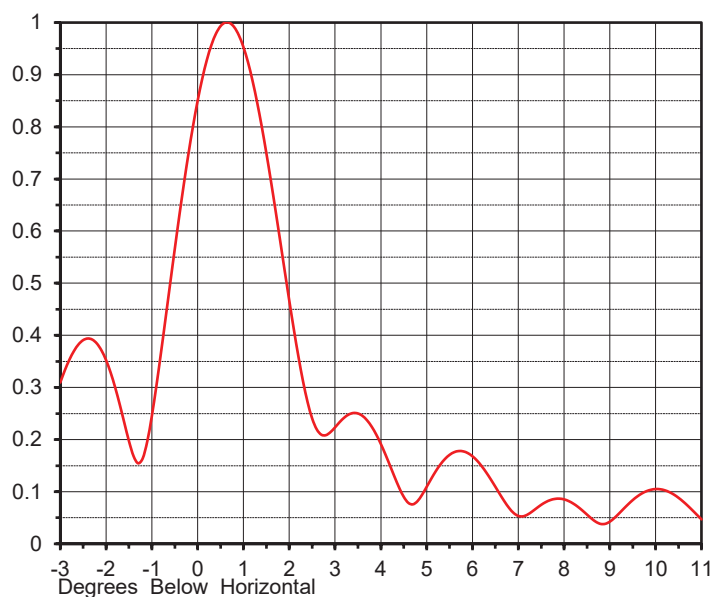
Erik C. Swanson, P.E.

ELEVATION PATTERN

Proposal No. **C-70196**
 Date **20-Jun-17**
 Call Letters **KAVU**
 Channel **20**
 Frequency **509 MHz**
 Antenna Type **TUA-O4SP-14/155H-1-T-R**

RMS Directivity at Main Lobe **26.0 (14.15 dB)**
 RMS Directivity at Horizontal **20.7 (13.16 dB)**
Calculated

Beam Tilt **0.50 deg**
 Pattern Number **14U260050**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.034	10.0	0.105	30.0	0.047	50.0	0.024	70.0	0.010
-9.0	0.058	11.0	0.039	31.0	0.078	51.0	0.013	71.0	0.012
-8.0	0.052	12.0	0.051	32.0	0.064	52.0	0.009	72.0	0.010
-7.0	0.147	13.0	0.024	33.0	0.032	53.0	0.014	73.0	0.007
-6.0	0.088	14.0	0.071	34.0	0.013	54.0	0.009	74.0	0.013
-5.0	0.070	15.0	0.050	35.0	0.018	55.0	0.012	75.0	0.021
-4.0	0.070	16.0	0.029	36.0	0.012	56.0	0.023	76.0	0.029
-3.0	0.333	17.0	0.026	37.0	0.014	57.0	0.025	77.0	0.036
-2.0	0.328	18.0	0.043	38.0	0.023	58.0	0.017	78.0	0.040
-1.0	0.304	19.0	0.056	39.0	0.012	59.0	0.008	79.0	0.041
0.0	0.892	20.0	0.018	40.0	0.012	60.0	0.012	80.0	0.041
1.0	0.924	21.0	0.029	41.0	0.014	61.0	0.014	81.0	0.038
2.0	0.411	22.0	0.022	42.0	0.009	62.0	0.009	82.0	0.035
3.0	0.234	23.0	0.056	43.0	0.022	63.0	0.013	83.0	0.031
4.0	0.171	24.0	0.038	44.0	0.022	64.0	0.023	84.0	0.027
5.0	0.125	25.0	0.016	45.0	0.009	65.0	0.030	85.0	0.024
6.0	0.160	26.0	0.014	46.0	0.013	66.0	0.029	86.0	0.021
7.0	0.053	27.0	0.045	47.0	0.013	67.0	0.022	87.0	0.018
8.0	0.082	28.0	0.072	48.0	0.009	68.0	0.013	88.0	0.016
9.0	0.050	29.0	0.034	49.0	0.022	69.0	0.008	89.0	0.014
								90.0	0.014

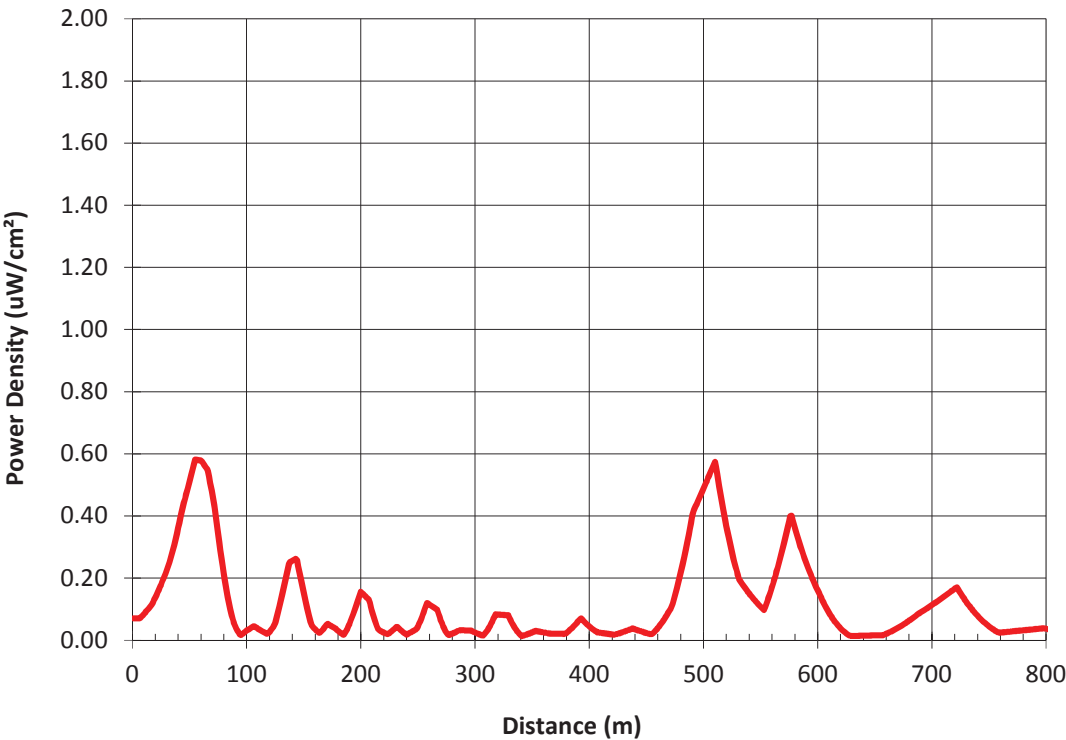
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KAVU-TV Ch20 Victoria
Ground-Level Power Density Calculations
Using Manufacturer's Vertical Plane Pattern

Antenna	TUA-O4SP-14/155H-1-T-R	
ERP	1,000,000 Watts H (avg)	
	- Watts V (avg)	
Antenna AGL	308 meters less 2m is	306 meters above the reference plane
MBT	0 degrees	

Calculated
Maximum is 0.58 uW/cm² at 54 meters from the tower

Power Density vs Distance



KAVU-TV Ch20 Victoria
Ground-Level Power Density Calculations
Using Manufacturer's Vertical Plane Pattern

Distance From Tower (meters)	Hypotenuse (meters)	Depression Angle (with MBT adjust) (degrees)	Interpolated Rel Field	Adjusted ERP (watts)	Power Density uW/cm ²
0	306.00	90.00	0.014	196.0	0.07
1	306.00	89.81	0.014	196.0	0.07
2	306.01	89.63	0.014	196.0	0.07
3	306.01	89.44	0.014	196.0	0.07
4	306.03	89.25	0.014	196.0	0.07
5	306.04	89.06	0.014	196.0	0.07
6	306.06	88.88	0.014	203.0	0.07
7	306.08	88.69	0.015	213.8	0.08
8	306.10	88.50	0.015	224.9	0.08
9	306.13	88.32	0.015	236.2	0.08
10	306.16	88.13	0.016	247.9	0.09
11	306.20	87.94	0.016	259.8	0.09
12	306.24	87.75	0.016	272.0	0.10
13	306.28	87.57	0.017	284.4	0.10
14	306.32	87.38	0.017	297.2	0.11
15	306.37	87.19	0.018	310.2	0.11
16	306.42	87.01	0.018	323.5	0.12
17	306.47	86.82	0.019	343.7	0.12
18	306.53	86.63	0.019	364.8	0.13
19	306.59	86.45	0.020	386.5	0.14
20	306.65	86.26	0.020	408.8	0.15
21	306.72	86.07	0.021	431.7	0.15
22	306.79	85.89	0.021	455.3	0.16
23	306.86	85.70	0.022	479.4	0.17
24	306.94	85.52	0.022	504.2	0.18
25	307.02	85.33	0.023	529.6	0.19
26	307.10	85.14	0.024	555.5	0.20
27	307.19	84.96	0.024	582.1	0.21
28	307.28	84.77	0.025	609.3	0.22
29	307.37	84.59	0.025	637.1	0.23
30	307.47	84.40	0.026	665.5	0.24
31	307.57	84.22	0.026	694.5	0.25
32	307.67	84.03	0.027	724.2	0.26
33	307.77	83.84	0.028	762.9	0.27
34	307.88	83.66	0.028	804.3	0.28
35	308.00	83.47	0.029	846.8	0.30
36	308.11	83.29	0.030	890.4	0.31
37	308.23	83.11	0.031	935.0	0.33
38	308.35	82.92	0.031	980.7	0.34
39	308.48	82.74	0.032	1027.4	0.36
40	308.60	82.55	0.033	1075.2	0.38
41	308.73	82.37	0.034	1124.0	0.39
42	308.87	82.18	0.034	1173.8	0.41
43	309.01	82.00	0.035	1224.7	0.43
44	309.15	81.82	0.036	1263.6	0.44

45	309.29	81.63	0.036	1303.0	0.46
46	309.44	81.45	0.037	1343.0	0.47
47	309.59	81.27	0.037	1383.6	0.48
48	309.74	81.09	0.038	1424.7	0.50
49	309.90	80.90	0.038	1466.3	0.51
50	310.06	80.72	0.039	1508.6	0.52
51	310.22	80.54	0.039	1551.3	0.54
52	310.39	80.36	0.040	1594.7	0.55
53	310.56	80.17	0.040	1638.5	0.57
54	310.73	79.99	0.041	1681.0	0.58
55	310.90	79.81	0.041	1681.0	0.58
56	311.08	79.63	0.041	1681.0	0.58
57	311.26	79.45	0.041	1681.0	0.58
58	311.45	79.27	0.041	1681.0	0.58
59	311.64	79.09	0.041	1681.0	0.58
60	311.83	78.91	0.041	1673.3	0.57
61	312.02	78.73	0.041	1658.6	0.57
62	312.22	78.55	0.041	1644.0	0.56
63	312.42	78.37	0.040	1629.4	0.56
64	312.62	78.19	0.040	1615.0	0.55
65	312.83	78.01	0.040	1600.6	0.55
66	313.04	77.83	0.039	1545.6	0.53
67	313.25	77.65	0.039	1489.9	0.51
68	313.46	77.47	0.038	1435.3	0.49
69	313.68	77.29	0.037	1381.7	0.47
70	313.90	77.11	0.036	1329.3	0.45
71	314.13	76.94	0.036	1264.5	0.43
72	314.36	76.76	0.034	1177.6	0.40
73	314.59	76.58	0.033	1094.0	0.37
74	314.82	76.41	0.032	1013.5	0.34
75	315.06	76.23	0.031	936.3	0.32
76	315.30	76.05	0.029	862.2	0.29
77	315.54	75.88	0.028	784.3	0.26
78	315.78	75.70	0.027	707.4	0.24
79	316.03	75.52	0.025	634.7	0.21
80	316.28	75.35	0.024	565.9	0.19
81	316.54	75.17	0.022	501.2	0.17
82	316.80	75.00	0.021	440.6	0.15
83	317.06	74.82	0.020	383.9	0.13
84	317.32	74.65	0.018	331.2	0.11
85	317.59	74.48	0.017	282.5	0.09
86	317.86	74.30	0.015	237.7	0.08
87	318.13	74.13	0.014	196.9	0.06
88	318.40	73.96	0.013	162.2	0.05
89	318.68	73.78	0.012	136.8	0.05
90	318.96	73.61	0.011	113.7	0.04
91	319.24	73.44	0.010	92.7	0.03
92	319.53	73.27	0.009	73.9	0.02
93	319.82	73.09	0.008	57.3	0.02
94	320.11	72.92	0.007	52.3	0.02
95	320.41	72.75	0.008	59.9	0.02
96	320.71	72.58	0.008	68.1	0.02

97	321.01	72.41	0.009	76.8	0.02
98	321.31	72.24	0.009	86.0	0.03
99	321.62	72.07	0.010	95.7	0.03
100	321.93	71.90	0.010	103.9	0.03
101	322.24	71.73	0.011	110.9	0.04
102	322.55	71.57	0.011	118.2	0.04
103	322.87	71.40	0.011	125.6	0.04
104	323.19	71.23	0.012	133.2	0.04
105	323.51	71.06	0.012	141.1	0.05
106	323.84	70.89	0.012	138.9	0.04
107	324.17	70.73	0.011	131.2	0.04
108	324.50	70.56	0.011	123.7	0.04
109	324.83	70.39	0.011	116.4	0.04
110	325.17	70.23	0.010	109.3	0.03
111	325.51	70.06	0.010	102.5	0.03
112	325.85	69.90	0.010	95.9	0.03
113	326.20	69.73	0.009	89.6	0.03
114	326.55	69.57	0.009	83.4	0.03
115	326.90	69.40	0.009	77.5	0.02
116	327.25	69.24	0.008	71.9	0.02
117	327.60	69.08	0.008	66.4	0.02
118	327.96	68.91	0.008	71.2	0.02
119	328.32	68.75	0.009	85.6	0.03
120	328.69	68.59	0.010	101.3	0.03
121	329.05	68.42	0.011	118.3	0.04
122	329.42	68.26	0.012	136.5	0.04
123	329.80	68.10	0.012	156.0	0.05
124	330.17	67.94	0.014	183.1	0.06
125	330.55	67.78	0.015	224.4	0.07
126	330.93	67.62	0.016	269.7	0.08
127	331.31	67.46	0.018	319.0	0.10
128	331.69	67.30	0.019	372.3	0.11
129	332.08	67.14	0.021	429.7	0.13
130	332.47	66.98	0.022	489.4	0.15
131	332.86	66.82	0.023	539.7	0.16
132	333.26	66.67	0.024	592.4	0.18
133	333.65	66.51	0.025	647.3	0.19
134	334.05	66.35	0.027	704.5	0.21
135	334.46	66.19	0.028	764.1	0.23
136	334.86	66.04	0.029	825.8	0.25
137	335.27	65.88	0.029	847.9	0.25
138	335.68	65.73	0.029	857.0	0.25
139	336.09	65.57	0.029	866.1	0.26
140	336.51	65.42	0.030	875.3	0.26
141	336.92	65.26	0.030	884.4	0.26
142	337.34	65.11	0.030	893.6	0.26
143	337.76	64.95	0.030	880.1	0.26
144	338.19	64.80	0.029	817.5	0.24
145	338.62	64.65	0.028	757.4	0.22
146	339.05	64.49	0.026	699.7	0.20
147	339.48	64.34	0.025	644.4	0.19
148	339.91	64.19	0.024	591.5	0.17

149	340.35	64.04	0.023	541.1	0.16
150	340.79	63.89	0.022	477.9	0.14
151	341.23	63.74	0.020	414.3	0.12
152	341.67	63.58	0.019	355.3	0.10
153	342.12	63.43	0.017	301.0	0.09
154	342.57	63.29	0.016	251.3	0.07
155	343.02	63.14	0.014	206.3	0.06
156	343.47	62.99	0.013	167.7	0.05
157	343.93	62.84	0.012	152.7	0.04
158	344.38	62.69	0.012	138.4	0.04
159	344.84	62.54	0.011	124.8	0.04
160	345.31	62.40	0.011	112.0	0.03
161	345.77	62.25	0.010	99.9	0.03
162	346.24	62.10	0.009	88.6	0.02
163	346.71	61.96	0.009	84.9	0.02
164	347.18	61.81	0.010	98.9	0.03
165	347.65	61.67	0.011	113.9	0.03
166	348.13	61.52	0.011	129.9	0.04
167	348.60	61.38	0.012	146.8	0.04
168	349.08	61.23	0.013	164.8	0.05
169	349.57	61.09	0.014	183.8	0.05
170	350.05	60.95	0.014	193.0	0.05
171	350.54	60.80	0.014	185.1	0.05
172	351.03	60.66	0.013	177.4	0.05
173	351.52	60.52	0.013	169.9	0.05
174	352.01	60.38	0.013	162.6	0.04
175	352.51	60.23	0.012	155.5	0.04
176	353.00	60.09	0.012	148.6	0.04
177	353.50	59.95	0.012	139.6	0.04
178	354.01	59.81	0.011	126.6	0.03
179	354.51	59.67	0.011	114.4	0.03
180	355.02	59.53	0.010	102.8	0.03
181	355.52	59.40	0.010	91.8	0.02
182	356.03	59.26	0.009	81.5	0.02
183	356.55	59.12	0.008	71.8	0.02
184	357.06	58.98	0.008	66.7	0.02
185	357.58	58.84	0.009	88.5	0.02
186	358.09	58.71	0.011	113.2	0.03
187	358.62	58.57	0.012	140.8	0.04
188	359.14	58.43	0.013	171.4	0.04
189	359.66	58.30	0.014	204.9	0.05
190	360.19	58.16	0.016	241.2	0.06
191	360.72	58.03	0.017	280.4	0.07
192	361.25	57.89	0.018	318.6	0.08
193	361.78	57.76	0.019	358.1	0.09
194	362.31	57.63	0.020	399.7	0.10
195	362.85	57.49	0.021	443.5	0.11
196	363.39	57.36	0.022	489.5	0.12
197	363.93	57.23	0.023	537.5	0.14
198	364.47	57.09	0.024	587.7	0.15
199	365.02	56.96	0.025	621.3	0.16
200	365.56	56.83	0.025	608.3	0.15

201	366.11	56.70	0.024	595.4	0.15
202	366.66	56.57	0.024	582.7	0.14
203	367.21	56.44	0.024	570.2	0.14
204	367.77	56.31	0.024	557.9	0.14
205	368.32	56.18	0.023	545.7	0.13
206	368.88	56.05	0.023	533.7	0.13
207	369.44	55.92	0.022	490.7	0.12
208	370.00	55.79	0.021	430.1	0.10
209	370.56	55.67	0.019	373.8	0.09
210	371.13	55.54	0.018	321.5	0.08
211	371.69	55.41	0.017	273.3	0.07
212	372.26	55.29	0.015	229.2	0.06
213	372.83	55.16	0.014	189.1	0.05
214	373.41	55.03	0.012	152.9	0.04
215	373.98	54.91	0.012	137.4	0.03
216	374.56	54.78	0.011	128.8	0.03
217	375.13	54.66	0.011	120.4	0.03
218	375.71	54.53	0.011	112.4	0.03
219	376.29	54.41	0.010	104.6	0.02
220	376.88	54.29	0.010	97.2	0.02
221	377.46	54.16	0.009	90.0	0.02
222	378.05	54.04	0.009	83.1	0.02
223	378.64	53.92	0.009	88.6	0.02
224	379.23	53.79	0.010	100.5	0.02
225	379.82	53.67	0.011	113.1	0.03
226	380.41	53.55	0.011	126.4	0.03
227	381.01	53.43	0.012	140.3	0.03
228	381.60	53.31	0.012	155.0	0.04
229	382.20	53.19	0.013	170.3	0.04
230	382.80	53.07	0.014	186.3	0.04
231	383.40	52.95	0.014	189.2	0.04
232	384.01	52.83	0.013	173.1	0.04
233	384.61	52.71	0.013	157.9	0.04
234	385.22	52.59	0.012	143.4	0.03
235	385.83	52.48	0.011	129.6	0.03
236	386.43	52.36	0.011	116.5	0.03
237	387.05	52.24	0.010	104.2	0.02
238	387.66	52.13	0.010	92.6	0.02
239	388.27	52.01	0.009	81.8	0.02
240	388.89	51.89	0.009	88.9	0.02
241	389.51	51.78	0.010	97.9	0.02
242	390.13	51.66	0.010	107.2	0.02
243	390.75	51.55	0.011	117.0	0.03
244	391.37	51.43	0.011	127.1	0.03
245	392.00	51.32	0.012	137.6	0.03
246	392.62	51.20	0.012	148.5	0.03
247	393.25	51.09	0.013	159.8	0.03
248	393.88	50.98	0.013	175.7	0.04
249	394.51	50.86	0.014	210.2	0.05
250	395.14	50.75	0.016	247.6	0.05
251	395.77	50.64	0.017	287.9	0.06
252	396.41	50.53	0.018	331.1	0.07

253	397.05	50.42	0.019	377.2	0.08
254	397.68	50.31	0.021	426.2	0.09
255	398.32	50.19	0.022	477.9	0.10
256	398.96	50.08	0.023	532.4	0.11
257	399.61	49.97	0.024	573.5	0.12
258	400.25	49.86	0.024	563.1	0.12
259	400.90	49.76	0.024	552.7	0.11
260	401.54	49.65	0.023	542.5	0.11
261	402.19	49.54	0.023	532.5	0.11
262	402.84	49.43	0.023	522.5	0.11
263	403.49	49.32	0.023	512.7	0.11
264	404.14	49.21	0.022	503.0	0.10
265	404.80	49.11	0.022	493.5	0.10
266	405.45	49.00	0.022	484.0	0.10
267	406.11	48.89	0.021	425.1	0.09
268	406.77	48.79	0.019	370.1	0.07
269	407.43	48.68	0.018	319.1	0.06
270	408.09	48.58	0.016	272.0	0.05
271	408.75	48.47	0.015	228.8	0.05
272	409.41	48.37	0.014	189.4	0.04
273	410.08	48.26	0.012	153.9	0.03
274	410.75	48.16	0.011	122.2	0.02
275	411.41	48.05	0.010	94.2	0.02
276	412.08	47.95	0.009	84.6	0.02
277	412.75	47.85	0.010	92.3	0.02
278	413.42	47.74	0.010	100.4	0.02
279	414.10	47.64	0.010	108.8	0.02
280	414.77	47.54	0.011	117.5	0.02
281	415.45	47.44	0.011	126.5	0.02
282	416.12	47.34	0.012	135.7	0.03
283	416.80	47.24	0.012	145.3	0.03
284	417.48	47.14	0.012	155.2	0.03
285	418.16	47.04	0.013	165.4	0.03
286	418.85	46.93	0.013	169.0	0.03
287	419.53	46.84	0.013	169.0	0.03
288	420.21	46.74	0.013	169.0	0.03
289	420.90	46.64	0.013	169.0	0.03
290	421.59	46.54	0.013	169.0	0.03
291	422.28	46.44	0.013	169.0	0.03
292	422.97	46.34	0.013	169.0	0.03
293	423.66	46.24	0.013	169.0	0.03
294	424.35	46.15	0.013	169.0	0.03
295	425.04	46.05	0.013	169.0	0.03
296	425.74	45.95	0.013	164.0	0.03
297	426.43	45.86	0.012	154.3	0.03
298	427.13	45.76	0.012	144.8	0.03
299	427.83	45.66	0.012	135.8	0.02
300	428.53	45.57	0.011	127.0	0.02
301	429.23	45.47	0.011	118.5	0.02
302	429.93	45.38	0.011	110.4	0.02
303	430.63	45.28	0.010	102.6	0.02
304	431.34	45.19	0.010	95.1	0.02

305	432.04	45.09	0.009	87.9	0.02
306	432.75	45.00	0.009	81.0	0.01
307	433.46	44.91	0.010	104.3	0.02
308	434.17	44.81	0.011	130.6	0.02
309	434.88	44.72	0.013	159.6	0.03
310	435.59	44.63	0.014	191.5	0.03
311	436.30	44.54	0.015	226.1	0.04
312	437.01	44.44	0.016	263.5	0.05
313	437.73	44.35	0.017	303.6	0.05
314	438.44	44.26	0.019	346.3	0.06
315	439.16	44.17	0.020	391.8	0.07
316	439.88	44.08	0.021	439.9	0.08
317	440.60	43.99	0.022	484.0	0.08
318	441.32	43.90	0.022	484.0	0.08
319	442.04	43.81	0.022	484.0	0.08
320	442.76	43.72	0.022	484.0	0.08
321	443.48	43.63	0.022	484.0	0.08
322	444.21	43.54	0.022	484.0	0.08
323	444.93	43.45	0.022	484.0	0.08
324	445.66	43.36	0.022	484.0	0.08
325	446.39	43.28	0.022	484.0	0.08
326	447.12	43.19	0.022	484.0	0.08
327	447.84	43.10	0.022	484.0	0.08
328	448.58	43.01	0.022	484.0	0.08
329	449.31	42.93	0.021	442.4	0.07
330	450.04	42.84	0.020	396.2	0.07
331	450.77	42.75	0.019	352.8	0.06
332	451.51	42.67	0.018	312.0	0.05
333	452.24	42.58	0.017	273.8	0.04
334	452.98	42.49	0.015	238.2	0.04
335	453.72	42.41	0.014	205.2	0.03
336	454.46	42.32	0.013	174.8	0.03
337	455.20	42.24	0.012	146.8	0.02
338	455.94	42.16	0.011	121.4	0.02
339	456.68	42.07	0.010	98.5	0.02
340	457.42	41.99	0.009	82.2	0.01
341	458.17	41.90	0.009	89.9	0.01
342	458.91	41.82	0.010	98.0	0.02
343	459.66	41.74	0.010	106.4	0.02
344	460.40	41.65	0.011	115.1	0.02
345	461.15	41.57	0.011	124.1	0.02
346	461.90	41.49	0.012	133.5	0.02
347	462.65	41.41	0.012	143.1	0.02
348	463.40	41.33	0.012	153.1	0.02
349	464.15	41.24	0.013	163.3	0.03
350	464.90	41.16	0.013	173.9	0.03
351	465.66	41.08	0.014	184.7	0.03
352	466.41	41.00	0.014	195.9	0.03
353	467.17	40.92	0.014	191.6	0.03
354	467.92	40.84	0.014	187.2	0.03
355	468.68	40.76	0.014	182.8	0.03
356	469.44	40.68	0.013	178.5	0.03

357	470.20	40.60	0.013	174.3	0.03
358	470.96	40.52	0.013	170.2	0.03
359	471.72	40.44	0.013	166.1	0.02
360	472.48	40.36	0.013	162.0	0.02
361	473.24	40.29	0.013	158.1	0.02
362	474.00	40.21	0.012	154.2	0.02
363	474.77	40.13	0.012	150.3	0.02
364	475.53	40.05	0.012	146.5	0.02
365	476.30	39.97	0.012	144.0	0.02
366	477.07	39.90	0.012	144.0	0.02
367	477.83	39.82	0.012	144.0	0.02
368	478.60	39.74	0.012	144.0	0.02
369	479.37	39.67	0.012	144.0	0.02
370	480.14	39.59	0.012	144.0	0.02
371	480.91	39.52	0.012	144.0	0.02
372	481.68	39.44	0.012	144.0	0.02
373	482.46	39.36	0.012	144.0	0.02
374	483.23	39.29	0.012	144.0	0.02
375	484.01	39.21	0.012	144.0	0.02
376	484.78	39.14	0.012	144.0	0.02
377	485.56	39.07	0.012	144.0	0.02
378	486.33	38.99	0.012	146.4	0.02
379	487.11	38.92	0.013	166.7	0.02
380	487.89	38.84	0.014	188.4	0.03
381	488.67	38.77	0.015	211.2	0.03
382	489.45	38.70	0.015	235.3	0.03
383	490.23	38.62	0.016	260.6	0.04
384	491.01	38.55	0.017	287.1	0.04
385	491.79	38.48	0.018	314.8	0.04
386	492.58	38.41	0.019	343.7	0.05
387	493.36	38.33	0.019	373.8	0.05
388	494.15	38.26	0.020	405.0	0.06
389	494.93	38.19	0.021	437.3	0.06
390	495.72	38.12	0.022	470.8	0.06
391	496.50	38.05	0.022	505.5	0.07
392	497.29	37.98	0.023	519.1	0.07
393	498.08	37.91	0.022	490.5	0.07
394	498.87	37.83	0.022	462.8	0.06
395	499.66	37.76	0.021	435.9	0.06
396	500.45	37.69	0.020	410.0	0.05
397	501.24	37.62	0.020	384.9	0.05
398	502.04	37.55	0.019	360.7	0.05
399	502.83	37.49	0.018	337.3	0.04
400	503.62	37.42	0.018	314.8	0.04
401	504.42	37.35	0.017	293.2	0.04
402	505.21	37.28	0.017	272.4	0.04
403	506.01	37.21	0.016	252.4	0.03
404	506.81	37.14	0.015	233.2	0.03
405	507.60	37.07	0.015	214.8	0.03
406	508.40	37.01	0.014	197.3	0.03
407	509.20	36.94	0.014	192.5	0.02
408	510.00	36.87	0.014	188.8	0.02

409	510.80	36.80	0.014	185.1	0.02
410	511.60	36.74	0.013	181.5	0.02
411	512.40	36.67	0.013	177.9	0.02
412	513.21	36.60	0.013	174.3	0.02
413	514.01	36.54	0.013	170.9	0.02
414	514.81	36.47	0.013	167.4	0.02
415	515.62	36.40	0.013	164.0	0.02
416	516.42	36.34	0.013	160.6	0.02
417	517.23	36.27	0.013	157.3	0.02
418	518.03	36.21	0.012	154.1	0.02
419	518.84	36.14	0.012	150.8	0.02
420	519.65	36.08	0.012	147.7	0.02
421	520.46	36.01	0.012	144.5	0.02
422	521.27	35.95	0.012	151.8	0.02
423	522.08	35.88	0.013	161.5	0.02
424	522.89	35.82	0.013	171.4	0.02
425	523.70	35.75	0.013	181.6	0.02
426	524.51	35.69	0.014	192.1	0.02
427	525.32	35.63	0.014	202.8	0.02
428	526.14	35.56	0.015	213.8	0.03
429	526.95	35.50	0.015	225.0	0.03
430	527.77	35.44	0.015	236.5	0.03
431	528.58	35.37	0.016	248.3	0.03
432	529.40	35.31	0.016	260.3	0.03
433	530.21	35.25	0.017	272.5	0.03
434	531.03	35.19	0.017	285.0	0.03
435	531.85	35.12	0.017	297.7	0.04
436	532.66	35.06	0.018	310.6	0.04
437	533.48	35.00	0.018	323.8	0.04
438	534.30	34.94	0.018	313.2	0.04
439	535.12	34.88	0.017	302.4	0.04
440	535.94	34.82	0.017	291.9	0.03
441	536.77	34.76	0.017	281.6	0.03
442	537.59	34.70	0.016	271.5	0.03
443	538.41	34.63	0.016	261.6	0.03
444	539.23	34.57	0.016	251.9	0.03
445	540.06	34.51	0.016	242.4	0.03
446	540.88	34.45	0.015	233.2	0.03
447	541.71	34.39	0.015	224.1	0.03
448	542.53	34.33	0.015	215.3	0.02
449	543.36	34.27	0.014	206.6	0.02
450	544.18	34.22	0.014	198.2	0.02
451	545.01	34.16	0.014	190.0	0.02
452	545.84	34.10	0.013	181.9	0.02
453	546.67	34.04	0.013	174.1	0.02
454	547.50	33.98	0.013	178.9	0.02
455	548.33	33.92	0.014	209.8	0.02
456	549.16	33.86	0.016	243.0	0.03
457	549.99	33.81	0.017	278.7	0.03
458	550.82	33.75	0.018	316.6	0.03
459	551.65	33.69	0.019	356.8	0.04
460	552.48	33.63	0.020	399.3	0.04

461	553.31	33.58	0.021	444.0	0.05
462	554.15	33.52	0.022	491.0	0.05
463	554.98	33.46	0.023	540.1	0.06
464	555.82	33.40	0.024	591.5	0.06
465	556.65	33.35	0.025	645.0	0.07
466	557.49	33.29	0.026	700.7	0.08
467	558.32	33.23	0.028	758.5	0.08
468	559.16	33.18	0.029	818.4	0.09
469	560.00	33.12	0.030	880.4	0.09
470	560.84	33.07	0.031	944.5	0.10
471	561.67	33.01	0.032	1010.6	0.11
472	562.51	32.96	0.033	1117.1	0.12
473	563.35	32.90	0.035	1238.5	0.13
474	564.19	32.85	0.037	1365.9	0.14
475	565.03	32.79	0.039	1499.1	0.16
476	565.87	32.74	0.040	1638.0	0.17
477	566.71	32.68	0.042	1782.7	0.19
478	567.56	32.63	0.044	1933.1	0.20
479	568.40	32.57	0.046	2089.0	0.22
480	569.24	32.52	0.047	2250.5	0.23
481	570.09	32.46	0.049	2417.5	0.25
482	570.93	32.41	0.051	2590.0	0.27
483	571.77	32.36	0.053	2767.9	0.28
484	572.62	32.30	0.054	2951.1	0.30
485	573.46	32.25	0.056	3139.7	0.32
486	574.31	32.20	0.058	3333.5	0.34
487	575.16	32.14	0.059	3532.5	0.36
488	576.00	32.09	0.061	3736.7	0.38
489	576.85	32.04	0.063	3946.0	0.40
490	577.70	31.98	0.064	4124.1	0.41
491	578.55	31.93	0.065	4218.9	0.42
492	579.40	31.88	0.066	4314.6	0.43
493	580.25	31.83	0.066	4411.1	0.44
494	581.10	31.78	0.067	4508.3	0.45
495	581.95	31.72	0.068	4606.3	0.45
496	582.80	31.67	0.069	4705.0	0.46
497	583.65	31.62	0.069	4804.6	0.47
498	584.50	31.57	0.070	4904.8	0.48
499	585.35	31.52	0.071	5005.8	0.49
500	586.20	31.47	0.071	5107.6	0.50
501	587.06	31.42	0.072	5210.0	0.51
502	587.91	31.36	0.073	5313.2	0.51
503	588.77	31.31	0.074	5417.1	0.52
504	589.62	31.26	0.074	5521.6	0.53
505	590.48	31.21	0.075	5626.9	0.54
506	591.33	31.16	0.076	5732.9	0.55
507	592.19	31.11	0.076	5839.5	0.56
508	593.04	31.06	0.077	5946.8	0.56
509	593.90	31.01	0.078	6054.8	0.57
510	594.76	30.96	0.077	5910.0	0.56
511	595.61	30.91	0.075	5676.4	0.53
512	596.47	30.86	0.074	5448.3	0.51

513	597.33	30.82	0.072	5225.4	0.49
514	598.19	30.77	0.071	5007.8	0.47
515	599.05	30.72	0.069	4795.4	0.45
516	599.91	30.67	0.068	4588.3	0.43
517	600.77	30.62	0.066	4386.2	0.41
518	601.63	30.57	0.065	4189.3	0.39
519	602.49	30.52	0.063	3997.5	0.37
520	603.35	30.48	0.062	3810.6	0.35
521	604.22	30.43	0.060	3628.8	0.33
522	605.08	30.38	0.059	3451.9	0.31
523	605.94	30.33	0.057	3279.9	0.30
524	606.80	30.28	0.056	3112.8	0.28
525	607.67	30.24	0.054	2950.5	0.27
526	608.53	30.19	0.053	2793.0	0.25
527	609.40	30.14	0.051	2640.2	0.24
528	610.26	30.09	0.050	2492.2	0.22
529	611.13	30.05	0.048	2348.8	0.21
530	611.99	30.00	0.047	2210.0	0.20
531	612.86	29.95	0.046	2152.7	0.19
532	613.73	29.91	0.046	2096.8	0.19
533	614.59	29.86	0.045	2041.8	0.18
534	615.46	29.81	0.045	1987.7	0.18
535	616.33	29.77	0.044	1934.5	0.17
536	617.20	29.72	0.043	1882.2	0.17
537	618.07	29.68	0.043	1830.7	0.16
538	618.93	29.63	0.042	1780.1	0.16
539	619.80	29.58	0.042	1730.3	0.15
540	620.67	29.54	0.041	1681.3	0.15
541	621.54	29.49	0.040	1633.2	0.14
542	622.41	29.45	0.040	1586.0	0.14
543	623.29	29.40	0.039	1539.5	0.13
544	624.16	29.36	0.039	1493.9	0.13
545	625.03	29.31	0.038	1449.1	0.12
546	625.90	29.27	0.037	1405.0	0.12
547	626.77	29.22	0.037	1361.8	0.12
548	627.65	29.18	0.036	1319.4	0.11
549	628.52	29.13	0.036	1277.8	0.11
550	629.39	29.09	0.035	1236.9	0.10
551	630.27	29.05	0.035	1196.8	0.10
552	631.14	29.00	0.034	1157.5	0.10
553	632.02	28.96	0.036	1267.8	0.11
554	632.89	28.91	0.037	1389.1	0.12
555	633.77	28.87	0.039	1515.7	0.13
556	634.64	28.83	0.041	1647.4	0.14
557	635.52	28.78	0.042	1784.3	0.15
558	636.40	28.74	0.044	1926.1	0.16
559	637.27	28.70	0.046	2073.0	0.17
560	638.15	28.65	0.047	2224.9	0.18
561	639.03	28.61	0.049	2381.7	0.19
562	639.91	28.57	0.050	2543.4	0.21
563	640.78	28.52	0.052	2709.9	0.22
564	641.66	28.48	0.054	2881.2	0.23

565	642.54	28.44	0.055	3057.3	0.25
566	643.42	28.40	0.057	3238.1	0.26
567	644.30	28.35	0.059	3423.6	0.28
568	645.18	28.31	0.060	3613.7	0.29
569	646.06	28.27	0.062	3808.4	0.30
570	646.94	28.23	0.063	4007.7	0.32
571	647.82	28.19	0.065	4211.5	0.34
572	648.71	28.15	0.066	4419.8	0.35
573	649.59	28.10	0.068	4632.5	0.37
574	650.47	28.06	0.070	4849.6	0.38
575	651.35	28.02	0.071	5071.1	0.40
576	652.24	27.98	0.071	5104.5	0.40
577	653.12	27.94	0.070	4947.0	0.39
578	654.00	27.90	0.069	4792.3	0.37
579	654.89	27.86	0.068	4640.5	0.36
580	655.77	27.82	0.067	4491.5	0.35
581	656.66	27.77	0.066	4345.4	0.34
582	657.54	27.73	0.065	4202.0	0.32
583	658.43	27.69	0.064	4061.5	0.31
584	659.31	27.65	0.063	3923.7	0.30
585	660.20	27.61	0.062	3788.6	0.29
586	661.08	27.57	0.060	3656.3	0.28
587	661.97	27.53	0.059	3526.6	0.27
588	662.86	27.49	0.058	3399.7	0.26
589	663.74	27.45	0.057	3275.3	0.25
590	664.63	27.41	0.056	3153.7	0.24
591	665.52	27.37	0.055	3034.6	0.23
592	666.41	27.33	0.054	2918.2	0.22
593	667.30	27.29	0.053	2804.3	0.21
594	668.19	27.26	0.052	2693.0	0.20
595	669.07	27.22	0.051	2584.2	0.19
596	669.96	27.18	0.050	2477.9	0.18
597	670.85	27.14	0.049	2374.2	0.18
598	671.74	27.10	0.048	2272.9	0.17
599	672.63	27.06	0.047	2174.1	0.16
600	673.53	27.02	0.046	2077.8	0.15
601	674.42	26.98	0.044	1977.8	0.15
602	675.31	26.94	0.043	1873.1	0.14
603	676.20	26.91	0.042	1771.5	0.13
604	677.09	26.87	0.041	1673.0	0.12
605	677.98	26.83	0.040	1577.5	0.11
606	678.88	26.79	0.039	1485.1	0.11
607	679.77	26.75	0.037	1395.7	0.10
608	680.66	26.72	0.036	1309.3	0.09
609	681.55	26.68	0.035	1225.9	0.09
610	682.45	26.64	0.034	1145.4	0.08
611	683.34	26.60	0.033	1067.9	0.08
612	684.24	26.57	0.032	993.3	0.07
613	685.13	26.53	0.030	921.6	0.07
614	686.03	26.49	0.029	852.7	0.06
615	686.92	26.45	0.028	786.7	0.06
616	687.82	26.42	0.027	723.5	0.05

617	688.71	26.38	0.026	663.1	0.05
618	689.61	26.34	0.025	605.4	0.04
619	690.50	26.31	0.023	550.6	0.04
620	691.40	26.27	0.022	498.4	0.03
621	692.30	26.23	0.021	449.0	0.03
622	693.20	26.20	0.020	402.3	0.03
623	694.09	26.16	0.019	358.3	0.02
624	694.99	26.12	0.018	316.9	0.02
625	695.89	26.09	0.017	278.1	0.02
626	696.79	26.05	0.016	242.0	0.02
627	697.69	26.01	0.014	208.5	0.01
628	698.58	25.98	0.014	197.2	0.01
629	699.48	25.94	0.014	199.2	0.01
630	700.38	25.91	0.014	201.3	0.01
631	701.28	25.87	0.014	203.3	0.01
632	702.18	25.84	0.014	205.3	0.01
633	703.08	25.80	0.014	207.4	0.01
634	703.98	25.76	0.014	209.4	0.01
635	704.88	25.73	0.015	211.5	0.01
636	705.78	25.69	0.015	213.5	0.01
637	706.69	25.66	0.015	215.6	0.01
638	707.59	25.62	0.015	217.7	0.01
639	708.49	25.59	0.015	219.7	0.01
640	709.39	25.55	0.015	221.8	0.01
641	710.29	25.52	0.015	223.9	0.01
642	711.20	25.48	0.015	226.0	0.01
643	712.10	25.45	0.015	228.0	0.02
644	713.00	25.41	0.015	230.1	0.02
645	713.91	25.38	0.015	232.2	0.02
646	714.81	25.35	0.015	234.3	0.02
647	715.71	25.31	0.015	236.4	0.02
648	716.62	25.28	0.015	238.5	0.02
649	717.52	25.24	0.016	240.6	0.02
650	718.43	25.21	0.016	242.8	0.02
651	719.33	25.18	0.016	244.9	0.02
652	720.24	25.14	0.016	247.0	0.02
653	721.14	25.11	0.016	249.1	0.02
654	722.05	25.07	0.016	251.3	0.02
655	722.95	25.04	0.016	253.4	0.02
656	723.86	25.01	0.016	255.5	0.02
657	724.77	24.97	0.017	274.7	0.02
658	725.67	24.94	0.017	299.5	0.02
659	726.58	24.91	0.018	325.4	0.02
660	727.49	24.87	0.019	352.3	0.02
661	728.39	24.84	0.019	380.1	0.02
662	729.30	24.81	0.020	409.0	0.03
663	730.21	24.78	0.021	438.8	0.03
664	731.12	24.74	0.022	469.6	0.03
665	732.03	24.71	0.022	501.3	0.03
666	732.93	24.68	0.023	534.0	0.03
667	733.84	24.64	0.024	567.7	0.04
668	734.75	24.61	0.025	602.3	0.04

669	735.66	24.58	0.025	637.8	0.04
670	736.57	24.55	0.026	674.3	0.04
671	737.48	24.51	0.027	711.7	0.04
672	738.39	24.48	0.027	750.0	0.05
673	739.30	24.45	0.028	789.2	0.05
674	740.21	24.42	0.029	829.3	0.05
675	741.12	24.39	0.029	870.2	0.05
676	742.03	24.35	0.030	912.1	0.06
677	742.94	24.32	0.031	954.9	0.06
678	743.85	24.29	0.032	998.5	0.06
679	744.77	24.26	0.032	1043.0	0.06
680	745.68	24.23	0.033	1088.3	0.07
681	746.59	24.20	0.034	1134.5	0.07
682	747.50	24.16	0.034	1181.5	0.07
683	748.41	24.13	0.035	1229.4	0.07
684	749.33	24.10	0.036	1278.1	0.08
685	750.24	24.07	0.036	1327.7	0.08
686	751.15	24.04	0.037	1378.0	0.08
687	752.07	24.01	0.038	1429.2	0.08
688	752.98	23.98	0.038	1474.3	0.09
689	753.89	23.95	0.039	1517.3	0.09
690	754.81	23.92	0.040	1560.8	0.09
691	755.72	23.89	0.040	1604.9	0.09
692	756.64	23.85	0.041	1649.4	0.10
693	757.55	23.82	0.041	1694.4	0.10
694	758.47	23.79	0.042	1739.9	0.10
695	759.38	23.76	0.042	1785.9	0.10
696	760.30	23.73	0.043	1832.4	0.11
697	761.21	23.70	0.043	1879.4	0.11
698	762.13	23.67	0.044	1926.9	0.11
699	763.04	23.64	0.044	1974.8	0.11
700	763.96	23.61	0.045	2023.2	0.12
701	764.88	23.58	0.046	2072.1	0.12
702	765.79	23.55	0.046	2121.5	0.12
703	766.71	23.52	0.047	2171.3	0.12
704	767.63	23.49	0.047	2221.5	0.13
705	768.54	23.46	0.048	2272.2	0.13
706	769.46	23.43	0.048	2323.4	0.13
707	770.38	23.40	0.049	2375.0	0.13
708	771.30	23.37	0.049	2427.0	0.14
709	772.22	23.34	0.050	2479.5	0.14
710	773.13	23.32	0.050	2532.5	0.14
711	774.05	23.29	0.051	2585.8	0.14
712	774.97	23.26	0.051	2639.6	0.15
713	775.89	23.23	0.052	2693.8	0.15
714	776.81	23.20	0.052	2748.4	0.15
715	777.73	23.17	0.053	2803.5	0.15
716	778.65	23.14	0.053	2858.9	0.16
717	779.57	23.11	0.054	2914.8	0.16
718	780.49	23.08	0.055	2971.1	0.16
719	781.41	23.05	0.055	3027.7	0.17
720	782.33	23.03	0.056	3084.8	0.17

721	783.25	23.00	0.056	3124.1	0.17
722	784.17	22.97	0.055	3016.6	0.16
723	785.09	22.94	0.054	2911.2	0.16
724	786.01	22.91	0.053	2807.8	0.15
725	786.93	22.88	0.052	2706.6	0.15
726	787.85	22.85	0.051	2607.5	0.14
727	788.77	22.83	0.050	2510.5	0.13
728	789.70	22.80	0.049	2415.5	0.13
729	790.62	22.77	0.048	2322.6	0.12
730	791.54	22.74	0.047	2231.6	0.12
731	792.46	22.71	0.046	2142.8	0.11
732	793.39	22.69	0.045	2055.9	0.11
733	794.31	22.66	0.044	1971.0	0.10
734	795.23	22.63	0.043	1888.1	0.10
735	796.15	22.60	0.043	1807.2	0.10
736	797.08	22.58	0.042	1728.2	0.09
737	798.00	22.55	0.041	1651.1	0.09
738	798.92	22.52	0.040	1576.0	0.08
739	799.85	22.49	0.039	1502.8	0.08
740	800.77	22.47	0.038	1431.5	0.07
741	801.70	22.44	0.037	1362.1	0.07
742	802.62	22.41	0.036	1294.6	0.07
743	803.55	22.38	0.035	1229.0	0.06
744	804.47	22.36	0.034	1165.2	0.06
745	805.39	22.33	0.033	1103.2	0.06
746	806.32	22.30	0.032	1043.1	0.05
747	807.25	22.28	0.031	984.7	0.05
748	808.17	22.25	0.030	928.2	0.05
749	809.10	22.22	0.030	873.5	0.04
750	810.02	22.20	0.029	820.6	0.04
751	810.95	22.17	0.028	769.4	0.04
752	811.87	22.14	0.027	720.0	0.04
753	812.80	22.12	0.026	672.3	0.03
754	813.73	22.09	0.025	626.4	0.03
755	814.65	22.06	0.024	582.2	0.03
756	815.58	22.04	0.023	539.7	0.03
757	816.51	22.01	0.022	498.9	0.03
758	817.44	21.98	0.022	489.1	0.02
759	818.36	21.96	0.022	497.2	0.02
760	819.29	21.93	0.022	505.4	0.03
761	820.22	21.91	0.023	513.6	0.03
762	821.15	21.88	0.023	521.9	0.03
763	822.07	21.85	0.023	530.3	0.03
764	823.00	21.83	0.023	538.7	0.03
765	823.93	21.80	0.023	547.1	0.03
766	824.86	21.78	0.024	555.6	0.03
767	825.79	21.75	0.024	564.1	0.03
768	826.72	21.72	0.024	572.7	0.03
769	827.65	21.70	0.024	581.3	0.03
770	828.57	21.67	0.024	590.0	0.03
771	829.50	21.65	0.024	598.7	0.03
772	830.43	21.62	0.025	607.4	0.03

773	831.36	21.60	0.025	616.2	0.03
774	832.29	21.57	0.025	625.0	0.03
775	833.22	21.55	0.025	633.9	0.03
776	834.15	21.52	0.025	642.8	0.03
777	835.08	21.50	0.026	651.8	0.03
778	836.01	21.47	0.026	660.8	0.03
779	836.95	21.45	0.026	669.9	0.03
780	837.88	21.42	0.026	679.0	0.03
781	838.81	21.40	0.026	688.1	0.03
782	839.74	21.37	0.026	697.3	0.03
783	840.67	21.35	0.027	706.5	0.03
784	841.60	21.32	0.027	715.7	0.03
785	842.53	21.30	0.027	725.0	0.03
786	843.46	21.27	0.027	734.3	0.03
787	844.40	21.25	0.027	743.7	0.03
788	845.33	21.22	0.027	753.1	0.04
789	846.26	21.20	0.028	762.6	0.04
790	847.19	21.17	0.028	772.0	0.04
791	848.13	21.15	0.028	781.6	0.04
792	849.06	21.12	0.028	791.1	0.04
793	849.99	21.10	0.028	800.7	0.04
794	850.92	21.08	0.028	810.4	0.04
795	851.86	21.05	0.029	820.0	0.04
796	852.79	21.03	0.029	829.7	0.04
797	853.72	21.00	0.029	839.5	0.04
798	854.66	20.98	0.029	828.1	0.04
799	855.59	20.96	0.029	813.0	0.04
800	856.53	20.93	0.028	798.1	0.04
801	857.46	20.91	0.028	783.3	0.04
802	858.39	20.88	0.028	768.7	0.03
803	859.33	20.86	0.027	754.3	0.03
804	860.26	20.84	0.027	740.0	0.03
805	861.20	20.81	0.027	725.9	0.03
806	862.13	20.79	0.027	712.0	0.03
807	863.07	20.77	0.026	698.2	0.03
808	864.00	20.74	0.026	684.6	0.03
809	864.94	20.72	0.026	671.2	0.03
810	865.87	20.70	0.026	657.9	0.03
811	866.81	20.67	0.025	644.8	0.03
812	867.74	20.65	0.025	631.8	0.03
813	868.68	20.63	0.025	619.1	0.03
814	869.62	20.60	0.025	606.4	0.03
815	870.55	20.58	0.024	593.9	0.03
816	871.49	20.56	0.024	581.6	0.03
817	872.42	20.53	0.024	569.4	0.02
818	873.36	20.51	0.024	557.4	0.02
819	874.30	20.49	0.023	545.6	0.02
820	875.23	20.46	0.023	533.8	0.02
821	876.17	20.44	0.023	522.3	0.02
822	877.11	20.42	0.023	510.9	0.02
823	878.05	20.40	0.022	499.6	0.02
824	878.98	20.37	0.022	488.5	0.02

825	879.92	20.35	0.022	477.6	0.02
826	880.86	20.33	0.022	466.7	0.02
827	881.80	20.31	0.021	456.1	0.02
828	882.73	20.28	0.021	445.6	0.02
829	883.67	20.26	0.021	435.2	0.02
830	884.61	20.24	0.021	424.9	0.02
831	885.55	20.22	0.020	414.9	0.02
832	886.49	20.19	0.020	404.9	0.02
833	887.43	20.17	0.020	395.1	0.02
834	888.36	20.15	0.020	385.4	0.02
835	889.30	20.13	0.019	375.9	0.02
836	890.24	20.10	0.019	366.5	0.02
837	891.18	20.08	0.019	357.3	0.02
838	892.12	20.06	0.019	348.2	0.01
839	893.06	20.04	0.018	339.2	0.01
840	894.00	20.02	0.018	330.4	0.01
841	894.94	19.99	0.018	332.2	0.01
842	895.88	19.97	0.019	363.2	0.02
843	896.82	19.95	0.020	395.5	0.02
844	897.76	19.93	0.021	429.1	0.02
845	898.70	19.91	0.022	464.0	0.02
846	899.64	19.89	0.022	500.1	0.02
847	900.58	19.86	0.023	537.6	0.02
848	901.52	19.84	0.024	576.3	0.02
849	902.46	19.82	0.025	616.3	0.03
850	903.40	19.80	0.026	657.5	0.03
851	904.34	19.78	0.026	700.0	0.03
852	905.28	19.76	0.027	743.8	0.03
853	906.23	19.73	0.028	788.7	0.03
854	907.17	19.71	0.029	834.9	0.03
855	908.11	19.69	0.030	882.3	0.04
856	909.05	19.67	0.031	930.9	0.04
857	909.99	19.65	0.031	980.7	0.04
858	910.93	19.63	0.032	1031.7	0.04
859	911.88	19.61	0.033	1083.8	0.04
860	912.82	19.59	0.034	1137.2	0.05
861	913.76	19.57	0.035	1191.7	0.05
862	914.70	19.54	0.035	1247.3	0.05
863	915.64	19.52	0.036	1304.2	0.05
864	916.59	19.50	0.037	1362.1	0.05
865	917.53	19.48	0.038	1421.2	0.06
866	918.47	19.46	0.038	1481.5	0.06
867	919.42	19.44	0.039	1542.8	0.06
868	920.36	19.42	0.040	1605.3	0.06
869	921.30	19.40	0.041	1668.9	0.07
870	922.25	19.38	0.042	1733.5	0.07
871	923.19	19.36	0.042	1799.3	0.07
872	924.13	19.34	0.043	1866.2	0.07
873	925.08	19.32	0.044	1934.1	0.08
874	926.02	19.30	0.045	2003.1	0.08
875	926.96	19.28	0.046	2073.2	0.08
876	927.91	19.26	0.046	2144.3	0.08

877	928.85	19.23	0.047	2216.5	0.09
878	929.80	19.21	0.048	2289.8	0.09
879	930.74	19.19	0.049	2364.0	0.09
880	931.68	19.17	0.049	2439.3	0.09
881	932.63	19.15	0.050	2515.7	0.10
882	933.57	19.13	0.051	2593.0	0.10
883	934.52	19.11	0.052	2671.4	0.10
884	935.46	19.09	0.052	2750.7	0.11
885	936.41	19.07	0.053	2831.1	0.11
886	937.35	19.05	0.054	2912.4	0.11
887	938.30	19.03	0.055	2994.8	0.11
888	939.24	19.01	0.055	3078.1	0.12
889	940.19	18.99	0.056	3127.0	0.12
890	941.14	18.97	0.056	3098.3	0.12
891	942.08	18.95	0.055	3069.7	0.12
892	943.03	18.93	0.055	3041.4	0.11
893	943.97	18.91	0.055	3013.2	0.11
894	944.92	18.90	0.055	2985.2	0.11
895	945.87	18.88	0.054	2957.4	0.11
896	946.81	18.86	0.054	2929.8	0.11
897	947.76	18.84	0.054	2902.3	0.11
898	948.70	18.82	0.054	2875.1	0.11
899	949.65	18.80	0.053	2848.0	0.11
900	950.60	18.78	0.053	2821.1	0.10
901	951.54	18.76	0.053	2794.4	0.10
902	952.49	18.74	0.053	2767.9	0.10
903	953.44	18.72	0.052	2741.6	0.10
904	954.39	18.70	0.052	2715.4	0.10
905	955.33	18.68	0.052	2689.4	0.10
906	956.28	18.66	0.052	2663.6	0.10
907	957.23	18.64	0.051	2638.0	0.10
908	958.18	18.62	0.051	2612.5	0.10
909	959.12	18.60	0.051	2587.2	0.09
910	960.07	18.59	0.051	2562.1	0.09
911	961.02	18.57	0.050	2537.1	0.09
912	961.97	18.55	0.050	2512.4	0.09
913	962.91	18.53	0.050	2487.8	0.09
914	963.86	18.51	0.050	2463.3	0.09
915	964.81	18.49	0.049	2439.0	0.09
916	965.76	18.47	0.049	2414.9	0.09
917	966.71	18.45	0.049	2391.0	0.09
918	967.66	18.43	0.049	2367.2	0.08
919	968.61	18.42	0.048	2343.6	0.08
920	969.55	18.40	0.048	2320.2	0.08
921	970.50	18.38	0.048	2296.9	0.08
922	971.45	18.36	0.048	2273.8	0.08
923	972.40	18.34	0.047	2250.9	0.08
924	973.35	18.32	0.047	2228.1	0.08
925	974.30	18.30	0.047	2205.4	0.08
926	975.25	18.29	0.047	2183.0	0.08
927	976.20	18.27	0.046	2160.6	0.08
928	977.15	18.25	0.046	2138.5	0.07

929	978.10	18.23	0.046	2116.5	0.07
930	979.05	18.21	0.046	2094.7	0.07
931	980.00	18.19	0.046	2073.0	0.07
932	980.95	18.18	0.045	2051.4	0.07
933	981.90	18.16	0.045	2030.1	0.07
934	982.85	18.14	0.045	2008.8	0.07
935	983.80	18.12	0.045	1987.7	0.07
936	984.75	18.10	0.044	1966.8	0.07
937	985.70	18.09	0.044	1946.1	0.07
938	986.65	18.07	0.044	1925.4	0.07
939	987.60	18.05	0.044	1905.0	0.07
940	988.55	18.03	0.043	1884.6	0.06
941	989.50	18.01	0.043	1864.5	0.06
942	990.45	18.00	0.043	1843.0	0.06
943	991.41	17.98	0.043	1817.1	0.06
944	992.36	17.96	0.042	1791.3	0.06
945	993.31	17.94	0.042	1765.8	0.06
946	994.26	17.92	0.042	1740.5	0.06
947	995.21	17.91	0.041	1715.5	0.06
948	996.16	17.89	0.041	1690.7	0.06
949	997.11	17.87	0.041	1666.1	0.06
950	998.07	17.85	0.041	1641.7	0.06
951	999.02	17.84	0.040	1617.6	0.05
952	999.97	17.82	0.040	1593.7	0.05
953	1000.92	17.80	0.040	1570.0	0.05
954	1001.87	17.78	0.039	1546.5	0.05
955	1002.83	17.77	0.039	1523.3	0.05
956	1003.78	17.75	0.039	1500.3	0.05
957	1004.73	17.73	0.038	1477.5	0.05
958	1005.68	17.71	0.038	1454.9	0.05
959	1006.64	17.70	0.038	1432.5	0.05
960	1007.59	17.68	0.038	1410.3	0.05
961	1008.54	17.66	0.037	1388.4	0.05
962	1009.49	17.65	0.037	1366.7	0.04
963	1010.45	17.63	0.037	1345.2	0.04
964	1011.40	17.61	0.036	1323.8	0.04
965	1012.35	17.59	0.036	1302.7	0.04
966	1013.31	17.58	0.036	1281.9	0.04
967	1014.26	17.56	0.036	1261.2	0.04
968	1015.21	17.54	0.035	1240.7	0.04
969	1016.17	17.53	0.035	1220.4	0.04
970	1017.12	17.51	0.035	1200.4	0.04
971	1018.08	17.49	0.034	1180.5	0.04
972	1019.03	17.47	0.034	1160.8	0.04
973	1019.98	17.46	0.034	1141.4	0.04
974	1020.94	17.44	0.033	1122.1	0.04
975	1021.89	17.42	0.033	1103.1	0.04
976	1022.85	17.41	0.033	1084.2	0.03
977	1023.80	17.39	0.033	1065.5	0.03
978	1024.75	17.37	0.032	1047.1	0.03
979	1025.71	17.36	0.032	1028.8	0.03
980	1026.66	17.34	0.032	1010.7	0.03

981	1027.62	17.32	0.032	992.8	0.03
982	1028.57	17.31	0.031	975.2	0.03
983	1029.53	17.29	0.031	957.7	0.03
984	1030.48	17.27	0.031	940.4	0.03
985	1031.44	17.26	0.030	923.2	0.03
986	1032.39	17.24	0.030	906.3	0.03
987	1033.35	17.23	0.030	889.6	0.03
988	1034.30	17.21	0.030	873.0	0.03
989	1035.26	17.19	0.029	856.6	0.03
990	1036.21	17.18	0.029	840.4	0.03
991	1037.17	17.16	0.029	824.4	0.03
992	1038.12	17.14	0.028	808.6	0.03
993	1039.08	17.13	0.028	793.0	0.02
994	1040.03	17.11	0.028	777.5	0.02
995	1040.99	17.09	0.028	762.2	0.02
996	1041.95	17.08	0.027	747.1	0.02
997	1042.90	17.06	0.027	732.2	0.02
998	1043.86	17.05	0.027	717.5	0.02
999	1044.81	17.03	0.027	702.9	0.02
1000	1045.77	17.01	0.026	688.5	0.02