

Final

EIRP Spectral Density

Model Name: Intellian v150NX

Test Date: June 25, 2019

Prepared by

RF Engineering Department
Intellian Technologies, Inc.

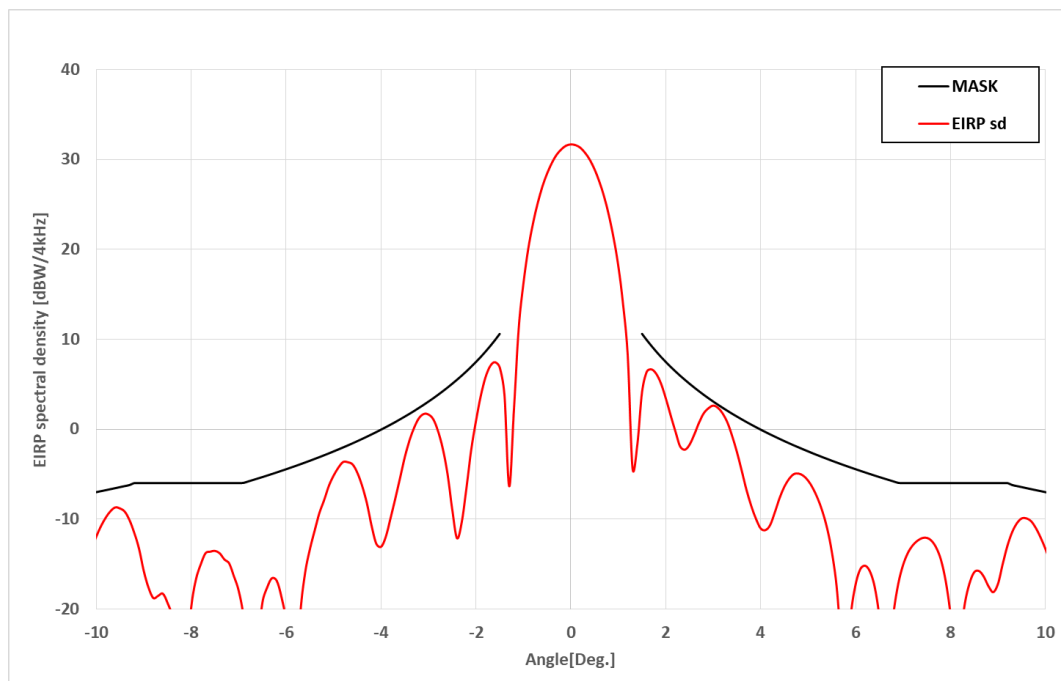
Confidential and Intellian proprietary

Contents

1. EIRP Spectral Density of V150NX	3
1.1. Azimuth Pattern for Co-pol, Narrow Angle (-10°~10°)	3
1.2. Azimuth Pattern for Co-pol, Wide Angle (-180°~180°)	4
1.3. Azimuth Pattern for Cross-pol, Narrow angle (-10°~10°)	5
1.4. Elevation Pattern for Co-pol, Narrow Angle (-25°~25°)	6
2. EIRP Spectral Density Data	7
2.1. Azimuth Pattern for Co-pol (-10°~10°)	7
2.2. Azimuth Pattern for Co-pol (-180°~180°)	9
2.3. Azimuth Pattern for Cross-pol (-10°~10°)	13
2.4. Elevation Pattern for Co-pol (-25°~25°)	15

1. EIRP Spectral Density of v150NX

1.1. Azimuth Pattern for Co-pol, Narrow Angle (-10° ~ 10°)



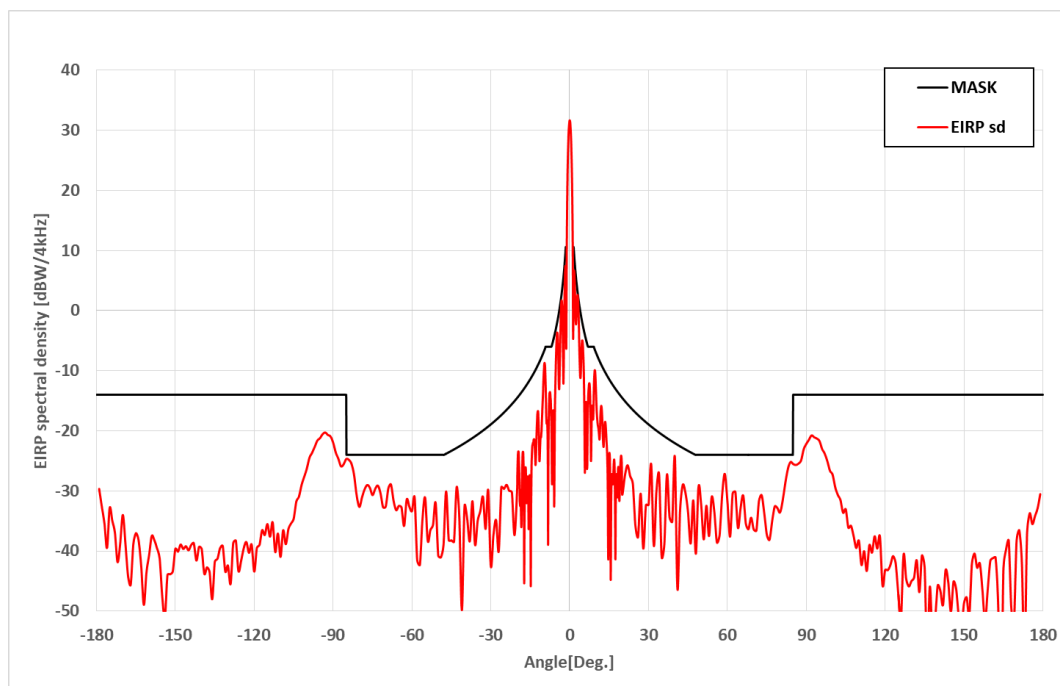
-14.00dBW/4kHz Input power spectral density @ f=14.25GHz

▪ FCC EIRP spectral density regulation

15-25log(θ)	dBW/4kHz	for	$1.5^\circ \leq \theta \leq 7.0^\circ$
-6	dBW/4kHz	for	$7.0^\circ < \theta \leq 9.2^\circ$
18-25log(θ)	dBW/4kHz	for	$9.2^\circ < \theta \leq 48^\circ$
-24	dBW/4kHz	for	$48^\circ < \theta \leq 85^\circ$
-14	dBW/4kHz	for	$85^\circ < \theta \leq 180^\circ$

The v150NX's Radiation pattern meets the FCC EIRP spectral density mask when the input powers spectral density is @ -14.00 dBW/ 4kHz

1.2. Azimuth Pattern for Co-pol, Wide Angle (-180°~180°)



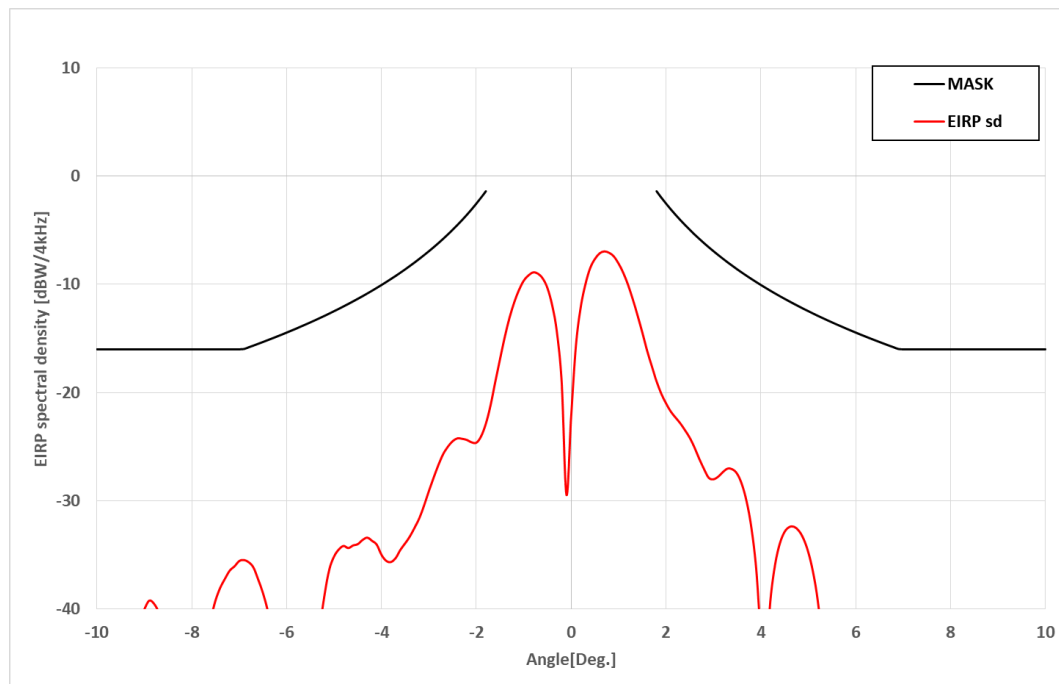
-14.00dBW/4kHz Input power spectral density @ f=14.25GHz

▪ FCC EIRP spectral density regulation

15-25log(θ)	dBW/4kHz	for	$1.5^\circ \leq \theta \leq 7.0^\circ$
-6	dBW/4kHz	for	$7.0^\circ < \theta \leq 9.2^\circ$
18-25log(θ)	dBW/4kHz	for	$9.2^\circ < \theta \leq 48^\circ$
-24	dBW/4kHz	for	$48^\circ < \theta \leq 85^\circ$
-14	dBW/4kHz	for	$85^\circ < \theta \leq 180^\circ$

The v150NX's Radiation pattern meets the FCC EIRP spectral density mask when the input powers spectral density is @ -14.00 dBW/ 4kHz

1.3. Azimuth Pattern for Cross-pol, Narrow angle (-10°~10°)



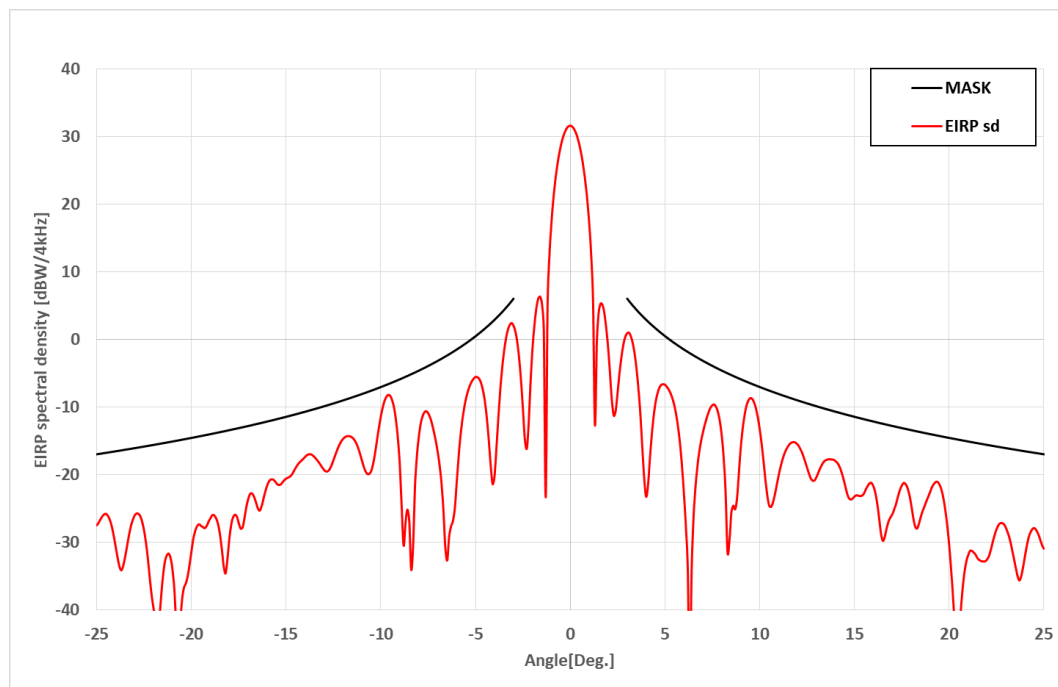
-14.00dBW/4kHz Input power spectral density @ f=14.25GHz

▪ FCC EIRP spectral density regulation

$5-25\log(\theta)$	dBW/4kHz	for	$1.8^\circ \leq \theta \leq 7.0^\circ$
-16	dBW/4kHz	for	$7.0^\circ < \theta \leq 9.2^\circ$

The v150NX's Radiation pattern meets the FCC EIRP spectral density mask when the input powers spectral density is @ -14.00 dBW/ 4kHz

1.4. Elevation Pattern for Co-pol, Narrow Angle (-25°~25°)



-14.00dBW/4kHz Input power spectral density @ f=14.25GHz

▪ FCC EIRP spectral density regulation

18-25log(θ)	dBW/4kHz	for	$3.0^\circ \leq \theta \leq 48^\circ$
-24	dBW/4kHz	for	$48^\circ < \theta \leq 85^\circ$
-14	dBW/4kHz	for	$85^\circ < \theta \leq 180^\circ$

The v150NX's Radiation pattern meets the FCC EIRP spectral density mask when the input powers spectral density is @ -14.00 dBW/ 4kHz

2. EIRP Spectral Density Data

2.1. Azimuth Pattern for Co-pol (-10°~10°)

F=14.25GHz, -14.00dBW/4KHz EIRP sd					
-10	-11.926	-7.000	-5.2	-7.881	-2.900
-9.9	-10.753	-6.891	-5.1	-6.304	-2.689
-9.8	-9.818	-6.781	-5	-5.159	-2.474
-9.7	-9.103	-6.669	-4.9	-4.277	-2.255
-9.6	-8.700	-6.557	-4.8	-3.649	-2.031
-9.5	-8.820	-6.443	-4.7	-3.676	-1.802
-9.4	-9.182	-6.328	-4.6	-3.925	-1.569
-9.3	-10.129	-6.212	-4.5	-4.849	-1.330
-9.2	-11.548	-6.000	-4.4	-6.304	-1.086
-9.1	-13.302	-6.000	-4.3	-8.209	-0.837
-9	-15.795	-6.000	-4.2	-10.738	-0.581
-8.9	-17.631	-6.000	-4.1	-12.754	-0.320
-8.8	-18.778	-6.000	-4	-13.083	-0.051
-8.7	-18.546	-6.000	-3.9	-11.958	0.223
-8.6	-18.294	-6.000	-3.8	-9.895	0.505
-8.5	-19.320	-6.000	-3.7	-7.710	0.795
-8.4	-20.994	-6.000	-3.6	-5.438	1.092
-8.3	-26.534	-6.000	-3.5	-3.100	1.398
-8.2	-38.971	-6.000	-3.4	-1.235	1.713
-8.1	-25.830	-6.000	-3.3	0.210	2.037
-8	-19.771	-6.000	-3.2	1.234	2.371
-7.9	-16.688	-6.000	-3.1	1.691	2.716
-7.8	-15.046	-6.000	-3	1.626	3.072
-7.7	-13.800	-6.000	-2.9	1.099	3.440
-7.6	-13.624	-6.000	-2.8	-0.213	3.821
-7.5	-13.539	-6.000	-2.7	-2.172	4.216
-7.4	-13.805	-6.000	-2.6	-4.971	4.626
-7.3	-14.499	-6.000	-2.5	-8.921	5.051
-7.2	-14.934	-6.000	-2.4	-12.129	5.495
-7.1	-16.381	-6.000	-2.3	-10.349	5.957
-7	-17.975	-6.000	-2.2	-6.502	6.439
-6.9	-20.820	-5.971	-2.1	-2.290	6.945
-6.8	-26.116	-5.813	-2	0.921	7.474
-6.7	-28.853	-5.652	-1.9	3.669	8.031
-6.6	-23.848	-5.489	-1.8	5.760	8.618
-6.5	-19.261	-5.323	-1.7	7.016	9.239
-6.4	-17.597	-5.154	-1.6	7.450	9.897
-6.3	-16.570	-4.984	-1.5	6.870	10.598
-6.2	-16.843	-4.810	-1.4	3.793	
-6.1	-18.661	-4.633	-1.3	-6.349	
-6	-21.654	-4.454	-1.2	2.203	
-5.9	-32.369	-4.271	-1.1	11.192	
-5.8	-28.731	-4.086	-1	16.226	
-5.7	-20.399	-3.897	-0.9	20.012	
-5.6	-15.955	-3.705	-0.8	22.848	
-5.5	-13.362	-3.509	-0.7	25.129	
-5.4	-11.279	-3.310	-0.6	26.983	
-5.3	-9.331	-3.107	-0.5	28.451	
			-0.4	29.615	
			-0.3	30.527	

-0.2	31.123	
-0.1	31.529	
0	31.668	
0.1	31.584	
0.2	31.293	
0.3	30.719	
0.4	29.946	
0.5	28.872	
0.6	27.517	
0.7	25.858	
0.8	23.789	
0.9	21.241	
1	18.112	
1.1	13.872	
1.2	7.984	
1.3	-4.366	
1.4	-1.722	
1.5	4.148	10.598
1.6	6.402	9.897
1.7	6.647	9.239
1.8	6.144	8.618
1.9	5.058	8.031
2	3.420	7.474
2.1	1.581	6.945
2.2	-0.207	6.439
2.3	-1.898	5.957
2.4	-2.282	5.495
2.5	-1.738	5.051
2.6	-0.592	4.626
2.7	0.720	4.216
2.8	1.765	3.821
2.9	2.332	3.440
3	2.618	3.072
3.1	2.367	2.716
3.2	1.729	2.371
3.3	0.720	2.037
3.4	-0.783	1.713
3.5	-2.567	1.398
3.6	-4.621	1.092
3.7	-6.757	0.795
3.8	-8.527	0.505
3.9	-9.978	0.223
4	-11.040	-0.051
4.1	-11.219	-0.320
4.2	-10.651	-0.581
4.3	-9.203	-0.837
4.4	-7.632	-1.086
4.5	-6.371	-1.330
4.6	-5.510	-1.569
4.7	-4.997	-1.802
4.8	-4.939	-2.031
4.9	-5.186	-2.255

5	-5.732	-2.474
5.1	-6.572	-2.689
5.2	-7.699	-2.900
5.3	-9.141	-3.107
5.4	-11.044	-3.310
5.5	-13.679	-3.509
5.6	-17.523	-3.705
5.7	-23.861	-3.897
5.8	-26.907	-4.086
5.9	-20.596	-4.271
6	-17.250	-4.454
6.1	-15.556	-4.633
6.2	-15.183	-4.810
6.3	-15.802	-4.984
6.4	-17.518	-5.154
6.5	-20.851	-5.323
6.6	-26.294	-5.489
6.7	-25.791	-5.652
6.8	-20.463	-5.813
6.9	-17.158	-5.971
7	-15.114	-6.000
7.1	-13.775	-6.000
7.2	-12.937	-6.000
7.3	-12.418	-6.000
7.4	-12.115	-6.000
7.5	-12.086	-6.000
7.6	-12.417	-6.000
7.7	-13.202	-6.000
7.8	-14.564	-6.000
7.9	-16.959	-6.000
8	-20.550	-6.000
8.1	-24.950	-6.000
8.2	-23.413	-6.000
8.3	-19.451	-6.000
8.4	-17.146	-6.000
8.5	-15.902	-6.000
8.6	-15.775	-6.000
8.7	-16.393	-6.000
8.8	-17.469	-6.000
8.9	-18.125	-6.000
9	-17.203	-6.000
9.1	-14.990	-6.000
9.2	-12.949	-6.000
9.3	-11.440	-6.212
9.4	-10.441	-6.328
9.5	-9.924	-6.443
9.6	-9.923	-6.557
9.7	-10.249	-6.669
9.8	-11.015	-6.781
9.9	-12.071	-6.891
10	-13.311	-7.000

2.2. Azimuth Pattern for Co-pol (-180°~180°)

F=14.25GHz, -14.00dBW/4KHz EIRP sd		
-179	-29.654	-14.000
-178	-32.538	-14.000
-177	-35.371	-14.000
-176	-39.467	-14.000
-175	-32.841	-14.000
-174	-34.941	-14.000
-173	-36.967	-14.000
-172	-41.830	-14.000
-171	-38.801	-14.000
-170	-34.001	-14.000
-169	-38.771	-14.000
-168	-44.178	-14.000
-167	-45.595	-14.000
-166	-38.857	-14.000
-165	-37.026	-14.000
-164	-38.182	-14.000
-163	-42.588	-14.000
-162	-48.954	-14.000
-161	-43.607	-14.000
-160	-40.677	-14.000
-159	-37.498	-14.000
-158	-38.196	-14.000
-157	-39.510	-14.000
-156	-41.198	-14.000
-155	-47.524	-14.000
-154	-51.024	-14.000
-153	-43.942	-14.000
-152	-43.867	-14.000
-151	-43.421	-14.000
-150	-39.642	-14.000
-149	-40.093	-14.000
-148	-38.909	-14.000
-147	-39.649	-14.000
-146	-39.201	-14.000
-145	-39.875	-14.000
-144	-39.010	-14.000
-143	-38.698	-14.000
-142	-41.577	-14.000
-141	-39.303	-14.000
-140	-39.638	-14.000
-139	-43.772	-14.000
-138	-42.712	-14.000
-137	-43.458	-14.000
-136	-48.019	-14.000
-135	-41.779	-14.000
-134	-41.311	-14.000
-133	-39.526	-14.000
-132	-39.150	-14.000
-131	-43.412	-14.000

-130	-42.427	-14.000
-129	-45.467	-14.000
-128	-38.683	-14.000
-127	-38.265	-14.000
-126	-43.319	-14.000
-125	-41.640	-14.000
-124	-39.538	-14.000
-123	-38.499	-14.000
-122	-40.297	-14.000
-121	-38.929	-14.000
-120	-43.410	-14.000
-119	-39.493	-14.000
-118	-38.990	-14.000
-117	-36.524	-14.000
-116	-37.338	-14.000
-115	-35.521	-14.000
-114	-37.608	-14.000
-113	-35.215	-14.000
-112	-40.172	-14.000
-111	-37.092	-14.000
-110	-40.978	-14.000
-109	-36.554	-14.000
-108	-38.848	-14.000
-107	-36.341	-14.000
-106	-35.410	-14.000
-105	-34.627	-14.000
-104	-31.766	-14.000
-103	-30.960	-14.000
-102	-29.033	-14.000
-101	-27.650	-14.000
-100	-26.281	-14.000
-99	-24.492	-14.000
-98	-23.651	-14.000
-97	-22.669	-14.000
-96	-21.623	-14.000
-95	-21.221	-14.000
-94	-20.551	-14.000
-93	-20.273	-14.000
-92	-20.678	-14.000
-91	-20.935	-14.000
-90	-21.940	-14.000
-89	-23.587	-14.000
-88	-24.653	-14.000
-87	-25.904	-14.000
-86	-25.566	-14.000
-85	-24.691	-24.000
-84	-24.828	-24.000
-83	-25.488	-24.000
-82	-27.410	-24.000
-81	-30.871	-24.000
-80	-32.649	-24.000

-79	-31.064	-24.000
-78	-29.720	-24.000
-77	-29.006	-24.000
-76	-29.503	-24.000
-75	-30.694	-24.000
-74	-29.669	-24.000
-73	-29.113	-24.000
-72	-30.316	-24.000
-71	-32.693	-24.000
-70	-32.622	-24.000
-69	-29.609	-24.000
-68	-28.922	-24.000
-67	-31.644	-24.000
-66	-33.191	-24.000
-65	-32.495	-24.000
-64	-32.721	-24.000
-63	-35.815	-24.000
-62	-31.428	-24.000
-61	-32.602	-24.000
-60	-33.365	-24.000
-59	-31.104	-24.000
-58	-41.539	-24.000
-57	-42.312	-24.000
-56	-34.683	-24.000
-55	-31.119	-24.000
-54	-38.285	-24.000
-53	-36.488	-24.000
-52	-35.658	-24.000
-51	-31.977	-24.000
-50	-40.789	-24.000
-49	-41.057	-24.000
-48	-39.024	-24.000
-47	-30.085	-23.802
-46	-38.211	-23.569
-45	-38.211	-23.330
-44	-38.451	-23.086
-43	-29.350	-22.837
-42	-34.264	-22.581
-41	-49.822	-22.320
-40	-32.526	-22.051
-39	-34.664	-21.777
-38	-38.364	-21.495
-37	-31.703	-21.205
-36	-38.990	-20.908
-35	-34.963	-20.602
-34	-33.352	-20.287
-33	-30.969	-19.963
-32	-36.322	-19.629
-31	-29.872	-19.284
-30	-42.519	-18.928
-29	-37.299	-18.560
-28	-34.872	-18.179
-27	-40.063	-17.784
-26	-29.366	-17.374

-25	-29.653	-16.949
-24	-28.984	-16.505
-23	-29.982	-16.043
-22	-30.214	-15.561
-21	-37.346	-15.055
-20	-29.900	-14.526
-19	-31.731	-13.969
-18	-25.055	-13.382
-17	-27.583	-12.761
-16	-27.569	-12.103
-15	-30.852	-11.402
-14	-21.987	-10.653
-13	-25.692	-9.849
-12	-16.830	-8.980
-11	-21.106	-8.035
-10	-11.926	-7.000
-9	-15.795	-6.000
-8	-19.771	-6.000
-7	-17.975	-6.124
-6	-21.654	-4.454
-5	-5.159	-2.474
-4	-13.083	-0.051
-3	1.626	3.072
-2	0.921	7.474
-1	16.226	
0	31.668	
1	18.112	
2	3.420	7.474
3	2.618	3.072
4	-11.040	-0.051
5	-5.732	-2.474
6	-17.250	-4.454
7	-15.114	-6.124
8	-20.550	-6.000
9	-17.203	-6.000
10	-13.311	-7.000
11	-19.890	-8.035
12	-15.836	-8.980
13	-22.001	-9.849
14	-21.533	-10.653
15	-24.593	-11.402
16	-27.343	-12.103
17	-25.148	-12.761
18	-30.260	-13.382
19	-30.390	-13.969
20	-30.641	-14.526
21	-27.489	-15.055
22	-25.721	-15.561
23	-27.548	-16.043
24	-28.742	-16.505
25	-35.787	-16.949
26	-37.643	-17.374
27	-30.453	-17.784
28	-39.609	-18.179

29	-32.354	-18.560
30	-32.296	-18.928
31	-25.577	-19.284
32	-39.131	-19.629
33	-30.013	-19.963
34	-27.228	-20.287
35	-40.970	-20.602
36	-38.883	-20.908
37	-27.275	-21.205
38	-34.405	-21.495
39	-35.087	-21.777
40	-24.365	-22.051
41	-46.332	-22.320
42	-33.192	-22.581
43	-28.978	-22.837
44	-30.248	-23.086
45	-33.469	-23.330
46	-38.739	-23.569
47	-31.574	-23.802
48	-40.444	-24.000
49	-29.377	-24.000
50	-32.276	-24.000
51	-38.072	-24.000
52	-32.458	-24.000
53	-37.506	-24.000
54	-31.031	-24.000
55	-33.373	-24.000
56	-38.566	-24.000
57	-37.440	-24.000
58	-30.673	-24.000
59	-27.167	-24.000
60	-31.820	-24.000
61	-37.594	-24.000
62	-30.389	-24.000
63	-30.156	-24.000
64	-36.149	-24.000
65	-32.869	-24.000
66	-30.773	-24.000
67	-35.447	-24.000
68	-36.373	-24.000
69	-34.445	-24.000
70	-36.415	-24.000
71	-36.597	-24.000
72	-31.666	-24.000
73	-30.684	-24.000
74	-33.693	-24.000
75	-37.297	-24.000
76	-38.130	-24.000
77	-35.061	-24.000
78	-32.578	-24.000
79	-32.839	-24.000
80	-33.581	-24.000
81	-31.626	-24.000
82	-28.732	-24.000
83	-26.344	-24.000

84	-25.189	-24.000
85	-25.520	-24.000
86	-25.685	-14.000
87	-25.462	-14.000
88	-24.939	-14.000
89	-23.094	-14.000
90	-22.175	-14.000
91	-21.485	-14.000
92	-20.756	-14.000
93	-21.064	-14.000
94	-21.284	-14.000
95	-21.679	-14.000
96	-22.998	-14.000
97	-23.781	-14.000
98	-25.040	-14.000
99	-26.644	-14.000
100	-27.267	-14.000
101	-29.389	-14.000
102	-30.674	-14.000
103	-31.517	-14.000
104	-33.638	-14.000
105	-33.051	-14.000
106	-36.113	-14.000
107	-35.787	-14.000
108	-37.529	-14.000
109	-39.492	-14.000
110	-38.282	-14.000
111	-42.331	-14.000
112	-40.030	-14.000
113	-43.316	-14.000
114	-39.028	-14.000
115	-40.252	-14.000
116	-37.548	-14.000
117	-39.575	-14.000
118	-37.572	-14.000
119	-45.739	-14.000
120	-43.143	-14.000
121	-43.201	-14.000
122	-42.300	-14.000
123	-40.844	-14.000
124	-42.007	-14.000
125	-47.219	-14.000
126	-51.342	-14.000
127	-40.605	-14.000
128	-44.633	-14.000
129	-45.887	-14.000
130	-44.998	-14.000
131	-44.428	-14.000
132	-41.538	-14.000
133	-46.834	-14.000
134	-40.726	-14.000
135	-42.670	-14.000
136	-57.854	-14.000
137	-45.936	-14.000
138	-54.429	-14.000

139	-51.327	-14.000
140	-45.748	-14.000
141	-46.606	-14.000
142	-48.979	-14.000
143	-43.161	-14.000
144	-45.146	-14.000
145	-50.090	-14.000
146	-45.120	-14.000
147	-46.312	-14.000
148	-50.831	-14.000
149	-52.711	-14.000
150	-48.659	-14.000
151	-47.709	-14.000
152	-50.739	-14.000
153	-42.100	-14.000
154	-40.406	-14.000
155	-42.788	-14.000
156	-42.037	-14.000
157	-46.484	-14.000
158	-51.748	-14.000
159	-46.454	-14.000
160	-41.624	-14.000
161	-41.185	-14.000
162	-41.070	-14.000
163	-49.125	-14.000
164	-70.456	-14.000
165	-42.941	-14.000
166	-39.711	-14.000
167	-38.310	-14.000
168	-49.540	-14.000
169	-51.894	-14.000
170	-38.225	-14.000
171	-36.529	-14.000
172	-41.832	-14.000
173	-58.339	-14.000
174	-36.897	-14.000
175	-33.711	-14.000
176	-35.510	-14.000
177	-34.184	-14.000
178	-32.857	-14.000
179	-30.531	-14.000

2.3. Azimuth Pattern for Cross-pol (-10°~10°)

F=14.25GHz, -14.00dBW/4KHz EIRP sd		
-10	-42.132	-16.000
-9.9	-42.355	-16.000
-9.8	-43.799	-16.000
-9.7	-47.268	-16.000
-9.6	-54.171	-16.000
-9.5	-57.732	-16.000
-9.4	-48.967	-16.000
-9.3	-45.218	-16.000
-9.2	-42.769	-16.000
-9.1	-41.075	-16.000
-9	-40.028	-16.000
-8.9	-39.244	-16.000
-8.8	-39.513	-16.000
-8.7	-40.300	-16.000
-8.6	-41.539	-16.000
-8.5	-43.266	-16.000
-8.4	-44.657	-16.000
-8.3	-45.819	-16.000
-8.2	-47.046	-16.000
-8.1	-47.574	-16.000
-8	-47.299	-16.000
-7.9	-46.366	-16.000
-7.8	-44.531	-16.000
-7.7	-42.715	-16.000
-7.6	-40.902	-16.000
-7.5	-39.200	-16.000
-7.4	-38.038	-16.000
-7.3	-37.201	-16.000
-7.2	-36.456	-16.000
-7.1	-36.067	-16.000
-7	-35.578	-16.000
-6.9	-35.485	-15.971
-6.8	-35.693	-15.813
-6.7	-36.186	-15.652
-6.6	-37.307	-15.489
-6.5	-38.550	-15.323
-6.4	-40.159	-15.154
-6.3	-42.251	-14.984
-6.2	-44.603	-14.810
-6.1	-46.730	-14.633
-6	-47.145	-14.454
-5.9	-45.635	-14.271
-5.8	-44.769	-14.086
-5.7	-46.144	-13.897
-5.6	-49.716	-13.705
-5.5	-55.764	-13.509
-5.4	-47.718	-13.310
-5.3	-41.968	-13.107

-5.2	-38.651	-12.900
-5.1	-36.344	-12.689
-5	-35.154	-12.474
-4.9	-34.503	-12.255
-4.8	-34.184	-12.031
-4.7	-34.380	-11.802
-4.6	-34.139	-11.569
-4.5	-34.015	-11.330
-4.4	-33.629	-11.086
-4.3	-33.415	-10.837
-4.2	-33.711	-10.581
-4.1	-34.070	-10.320
-4	-35.015	-10.051
-3.9	-35.566	-9.777
-3.8	-35.667	-9.495
-3.7	-35.294	-9.205
-3.6	-34.526	-8.908
-3.5	-33.929	-8.602
-3.4	-33.286	-8.287
-3.3	-32.470	-7.963
-3.2	-31.585	-7.629
-3.1	-30.414	-7.284
-3	-29.085	-6.928
-2.9	-27.857	-6.560
-2.8	-26.684	-6.179
-2.7	-25.691	-5.784
-2.6	-25.003	-5.374
-2.5	-24.493	-4.949
-2.4	-24.234	-4.505
-2.3	-24.274	-4.043
-2.2	-24.380	-3.561
-2.1	-24.604	-3.055
-2	-24.637	-2.526
-1.9	-24.048	-1.969
-1.8	-22.880	-1.382
-1.7	-21.171	
-1.6	-18.974	
-1.5	-16.882	
-1.4	-14.834	
-1.3	-13.065	
-1.2	-11.640	
-1.1	-10.498	
-1	-9.651	
-0.9	-9.161	
-0.8	-8.887	
-0.7	-9.011	
-0.6	-9.456	
-0.5	-10.351	
-0.4	-11.968	
-0.3	-14.468	

-0.2	-19.132	
-0.1	-29.457	
0	-22.174	
0.1	-15.628	
0.2	-12.137	
0.3	-9.974	
0.4	-8.492	
0.5	-7.643	
0.6	-7.122	
0.7	-6.946	
0.8	-7.078	
0.9	-7.418	
1	-8.085	
1.1	-8.952	
1.2	-10.061	
1.3	-11.400	
1.4	-12.876	
1.5	-14.456	
1.6	-16.111	
1.7	-17.567	
1.8	-18.968	-1.382
1.9	-20.107	-1.969
2	-21.002	-2.526
2.1	-21.756	-3.055
2.2	-22.314	-3.561
2.3	-22.843	-4.043
2.4	-23.484	-4.505
2.5	-24.180	-4.949
2.6	-25.077	-5.374
2.7	-26.129	-5.784
2.8	-27.065	-6.179
2.9	-27.880	-6.560
3	-28.017	-6.928
3.1	-27.774	-7.284
3.2	-27.348	-7.629
3.3	-27.028	-7.963
3.4	-27.101	-8.287
3.5	-27.517	-8.602
3.6	-28.499	-8.908
3.7	-30.094	-9.205
3.8	-32.503	-9.495
3.9	-36.246	-9.777
4	-42.309	-10.051
4.1	-44.970	-10.320
4.2	-39.251	-10.581
4.3	-35.886	-10.837
4.4	-33.950	-11.086
4.5	-32.886	-11.330
4.6	-32.434	-11.569
4.7	-32.409	-11.802
4.8	-32.777	-12.031
4.9	-33.531	-12.255

5	-34.775	-12.474
5.1	-36.607	-12.689
5.2	-39.260	-12.900
5.3	-43.306	-13.107
5.4	-49.724	-13.310
5.5	-54.135	-13.509
5.6	-48.825	-13.705
5.7	-46.142	-13.897
5.8	-45.388	-14.086
5.9	-45.682	-14.271
6	-47.035	-14.454
6.1	-49.426	-14.633
6.2	-52.972	-14.810
6.3	-59.165	-14.984
6.4	-67.348	-15.154
6.5	-58.064	-15.323
6.6	-52.902	-15.489
6.7	-49.091	-15.652
6.8	-46.430	-15.813
6.9	-44.619	-15.971
7	-43.464	-16.000
7.1	-42.921	-16.000
7.2	-43.088	-16.000
7.3	-43.635	-16.000
7.4	-44.429	-16.000
7.5	-45.201	-16.000
7.6	-45.497	-16.000
7.7	-45.150	-16.000
7.8	-44.580	-16.000
7.9	-44.067	-16.000
8	-43.930	-16.000
8.1	-44.500	-16.000
8.2	-45.904	-16.000
8.3	-48.260	-16.000
8.4	-50.689	-16.000
8.5	-49.266	-16.000
8.6	-46.160	-16.000
8.7	-43.687	-16.000
8.8	-42.237	-16.000
8.9	-41.615	-16.000
9	-41.474	-16.000
9.1	-41.980	-16.000
9.2	-42.911	-16.000
9.3	-44.197	-16.000
9.4	-45.675	-16.000
9.5	-46.842	-16.000
9.6	-47.018	-16.000
9.7	-46.695	-16.000
9.8	-46.542	-16.000
9.9	-46.688	-16.000
10	-47.081	-16.000

2.4. Elevation Pattern for Co-pol (-25°~25°)

F=14.25GHz, -14.00dBW/4KHz EIRP sd					
-25	-27.464	-16.949	-20.1	-33.269	-14.580
-24.9	-27.059	-16.905	-20	-31.245	-14.526
-24.8	-26.549	-16.861	-19.9	-29.390	-14.471
-24.7	-26.104	-16.817	-19.8	-28.266	-14.417
-24.6	-25.816	-16.773	-19.7	-27.546	-14.362
-24.5	-25.758	-16.729	-19.6	-27.301	-14.306
-24.4	-26.115	-16.685	-19.5	-27.541	-14.251
-24.3	-26.739	-16.640	-19.4	-27.717	-14.195
-24.2	-27.714	-16.595	-19.3	-27.884	-14.139
-24.1	-29.079	-16.550	-19.2	-27.577	-14.083
-24	-30.682	-16.505	-19.1	-26.923	-14.026
-23.9	-32.258	-16.460	-19	-26.413	-13.969
-23.8	-33.579	-16.414	-18.9	-25.957	-13.912
-23.7	-34.107	-16.369	-18.8	-25.990	-13.854
-23.6	-33.381	-16.323	-18.7	-26.425	-13.796
-23.5	-32.094	-16.277	-18.6	-27.252	-13.738
-23.4	-30.487	-16.230	-18.5	-28.758	-13.679
-23.3	-28.911	-16.184	-18.4	-30.931	-13.620
-23.2	-27.596	-16.137	-18.3	-33.496	-13.561
-23.1	-26.667	-16.090	-18.2	-34.577	-13.502
-23	-26.001	-16.043	-18.1	-32.378	-13.442
-22.9	-25.702	-15.996	-18	-29.404	-13.382
-22.8	-25.768	-15.948	-17.9	-27.313	-13.321
-22.7	-26.129	-15.901	-17.8	-26.239	-13.261
-22.6	-26.985	-15.853	-17.7	-25.882	-13.199
-22.5	-28.289	-15.805	-17.6	-26.191	-13.138
-22.4	-30.093	-15.756	-17.5	-27.200	-13.076
-22.3	-32.475	-15.708	-17.4	-27.956	-13.014
-22.2	-35.339	-15.659	-17.3	-27.773	-12.951
-22.1	-37.880	-15.610	-17.2	-26.343	-12.888
-22	-39.791	-15.561	-17.1	-24.668	-12.825
-21.9	-41.487	-15.511	-17	-23.508	-12.761
-21.8	-42.852	-15.461	-16.9	-22.799	-12.697
-21.7	-41.293	-15.411	-16.8	-22.756	-12.633
-21.6	-37.865	-15.361	-16.7	-23.225	-12.568
-21.5	-34.844	-15.311	-16.6	-24.041	-12.503
-21.4	-32.805	-15.260	-16.5	-24.917	-12.437
-21.3	-31.894	-15.209	-16.4	-25.289	-12.371
-21.2	-31.648	-15.158	-16.3	-24.647	-12.305
-21.1	-32.336	-15.107	-16.2	-23.530	-12.238
-21	-34.124	-15.055	-16.1	-22.423	-12.171
-20.9	-37.187	-15.004	-16	-21.521	-12.103
-20.8	-43.358	-14.952	-15.9	-20.904	-12.035
-20.7	-51.794	-14.899	-15.8	-20.677	-11.966
-20.6	-42.594	-14.847	-15.7	-20.678	-11.897
-20.5	-38.572	-14.794	-15.6	-20.911	-11.828
-20.4	-36.714	-14.741	-15.5	-21.306	-11.758
-20.3	-36.069	-14.687	-15.4	-21.487	-11.688
-20.2	-34.966	-14.634	-15.3	-21.424	-11.617
			-15.2	-21.123	-11.546
			-15.1	-20.772	-11.474

-15	-20.536	-11.402
-14.9	-20.396	-11.330
-14.8	-20.251	-11.257
-14.7	-19.937	-11.183
-14.6	-19.460	-11.109
-14.5	-18.945	-11.034
-14.4	-18.504	-10.959
-14.3	-18.165	-10.883
-14.2	-17.893	-10.807
-14.1	-17.629	-10.730
-14	-17.330	-10.653
-13.9	-17.056	-10.575
-13.8	-16.962	-10.497
-13.7	-16.945	-10.418
-13.6	-17.115	-10.338
-13.5	-17.391	-10.258
-13.4	-17.704	-10.178
-13.3	-18.068	-10.096
-13.2	-18.471	-10.014
-13.1	-18.889	-9.932
-13	-19.274	-9.849
-12.9	-19.498	-9.765
-12.8	-19.449	-9.680
-12.7	-19.137	-9.595
-12.6	-18.522	-9.509
-12.5	-17.784	-9.423
-12.4	-17.003	-9.336
-12.3	-16.247	-9.248
-12.2	-15.578	-9.159
-12.1	-15.067	-9.070
-12	-14.673	-8.980
-11.9	-14.414	-8.889
-11.8	-14.278	-8.797
-11.7	-14.247	-8.705
-11.6	-14.312	-8.611
-11.5	-14.499	-8.517
-11.4	-14.839	-8.423
-11.3	-15.338	-8.327
-11.2	-16.031	-8.230
-11.1	-16.925	-8.133
-11	-17.897	-8.035
-10.9	-18.839	-7.936
-10.8	-19.546	-7.836
-10.7	-19.881	-7.735
-10.6	-19.823	-7.633
-10.5	-19.324	-7.530
-10.4	-18.217	-7.426
-10.3	-16.627	-7.321
-10.2	-14.733	-7.215
-10.1	-12.890	-7.108
-10	-11.281	-7.000
-9.9	-9.959	-6.891
-9.8	-8.980	-6.781

-9.7	-8.390	-6.669
-9.6	-8.155	-6.557
-9.5	-8.350	-6.443
-9.4	-9.022	-6.328
-9.3	-10.171	-6.212
-9.2	-12.053	-6.095
-9.1	-14.762	-5.976
-9	-18.736	-5.856
-8.9	-24.921	-5.735
-8.8	-30.478	-5.612
-8.7	-27.032	-5.488
-8.6	-25.126	-5.362
-8.5	-26.928	-5.235
-8.4	-34.019	-5.107
-8.3	-30.453	-4.977
-8.2	-21.760	-4.845
-8.1	-17.192	-4.712
-8	-14.354	-4.577
-7.9	-12.444	-4.441
-7.8	-11.311	-4.302
-7.7	-10.721	-4.162
-7.6	-10.576	-4.020
-7.5	-10.911	-3.877
-7.4	-11.531	-3.731
-7.3	-12.490	-3.583
-7.2	-13.673	-3.433
-7.1	-15.028	-3.281
-7	-16.653	-3.127
-6.9	-18.645	-2.971
-6.8	-21.309	-2.813
-6.7	-25.256	-2.652
-6.6	-30.760	-2.489
-6.5	-32.661	-2.323
-6.4	-29.159	-2.154
-6.3	-27.644	-1.984
-6.2	-26.819	-1.810
-6.1	-24.951	-1.633
-6	-21.176	-1.454
-5.9	-17.358	-1.271
-5.8	-14.231	-1.086
-5.7	-11.860	-0.897
-5.6	-10.010	-0.705
-5.5	-8.595	-0.509
-5.4	-7.552	-0.310
-5.3	-6.745	-0.107
-5.2	-6.150	0.100
-5.1	-5.755	0.311
-5	-5.506	0.526
-4.9	-5.549	0.745
-4.8	-5.835	0.969
-4.7	-6.515	1.198
-4.6	-7.679	1.431
-4.5	-9.362	1.670

-4.4	-11.838	1.914
-4.3	-15.094	2.163
-4.2	-18.762	2.419
-4.1	-21.391	2.680
-4	-20.086	2.949
-3.9	-15.902	3.223
-3.8	-11.540	3.505
-3.7	-7.414	3.795
-3.6	-4.229	4.092
-3.5	-1.731	4.398
-3.4	0.153	4.713
-3.3	1.449	5.037
-3.2	2.190	5.371
-3.1	2.459	5.716
-3	2.088	6.072
-2.9	1.182	
-2.8	-0.415	
-2.7	-2.861	
-2.6	-6.191	
-2.5	-10.438	
-2.4	-14.771	
-2.3	-16.142	
-2.2	-12.315	
-2.1	-6.321	
-2	-1.368	
-1.9	2.037	
-1.8	4.564	
-1.7	6.015	
-1.6	6.383	
-1.5	5.340	
-1.4	1.391	
-1.3	-23.313	
-1.2	5.282	
-1.1	12.651	
-1	17.274	
-0.9	20.712	
-0.8	23.418	
-0.7	25.578	
-0.6	27.333	
-0.5	28.738	
-0.4	29.835	
-0.3	30.663	
-0.2	31.236	
-0.1	31.563	
0	31.668	
0.1	31.522	
0.2	31.156	
0.3	30.544	
0.4	29.679	
0.5	28.548	
0.6	27.113	
0.7	25.332	
0.8	23.160	

0.9	20.457	
1	17.055	
1.1	12.549	
1.2	5.605	
1.3	-12.644	
1.4	-0.351	
1.5	4.138	
1.6	5.364	
1.7	5.122	
1.8	3.826	
1.9	1.541	
2	-1.393	
2.1	-5.325	
2.2	-9.258	
2.3	-11.268	
2.4	-10.382	
2.5	-7.621	
2.6	-4.809	
2.7	-2.487	
2.8	-0.706	
2.9	0.424	
3	0.964	6.072
3.1	1.022	5.716
3.2	0.460	5.371
3.3	-0.585	5.037
3.4	-2.208	4.713
3.5	-4.480	4.398
3.6	-7.451	4.092
3.7	-11.195	3.795
3.8	-16.039	3.505
3.9	-20.528	3.223
4	-23.245	2.949
4.1	-21.537	2.680
4.2	-17.573	2.419
4.3	-14.030	2.163
4.4	-11.275	1.914
4.5	-9.247	1.670
4.6	-7.950	1.431
4.7	-7.103	1.198
4.8	-6.678	0.969
4.9	-6.586	0.745
5	-6.675	0.526
5.1	-6.995	0.311
5.2	-7.412	0.100
5.3	-8.000	-0.107
5.4	-8.796	-0.310
5.5	-9.847	-0.509
5.6	-11.301	-0.705
5.7	-13.230	-0.897
5.8	-15.694	-1.086
5.9	-18.949	-1.271
6	-22.966	-1.454
6.1	-27.742	-1.633

6.2	-33.859	-1.810
6.3	-51.841	-1.984
6.4	-34.654	-2.154
6.5	-26.580	-2.323
6.6	-22.010	-2.489
6.7	-18.946	-2.652
6.8	-16.687	-2.813
6.9	-14.999	-2.971
7	-13.686	-3.127
7.1	-12.537	-3.281
7.2	-11.563	-3.433
7.3	-10.712	-3.583
7.4	-10.041	-3.731
7.5	-9.681	-3.877
7.6	-9.591	-4.020
7.7	-9.973	-4.162
7.8	-10.806	-4.302
7.9	-12.214	-4.441
8	-14.437	-4.577
8.1	-17.729	-4.712
8.2	-22.858	-4.845
8.3	-31.547	-4.977
8.4	-29.676	-5.107
8.5	-25.575	-5.235
8.6	-24.553	-5.362
8.7	-25.091	-5.488
8.8	-23.473	-5.612
8.9	-19.555	-5.735
9	-15.848	-5.856
9.1	-13.092	-5.976
9.2	-11.122	-6.095
9.3	-9.744	-6.212
9.4	-8.986	-6.328
9.5	-8.642	-6.443
9.6	-8.752	-6.557
9.7	-9.282	-6.669
9.8	-10.194	-6.781
9.9	-11.541	-6.891
10	-13.316	-7.000
10.1	-15.473	-7.108
10.2	-18.035	-7.215
10.3	-20.777	-7.321
10.4	-23.111	-7.426
10.5	-24.573	-7.530
10.6	-24.723	-7.633
10.7	-24.029	-7.735
10.8	-22.850	-7.836
10.9	-21.434	-7.936
11	-20.009	-8.035
11.1	-18.778	-8.133
11.2	-17.721	-8.230
11.3	-16.877	-8.327
11.4	-16.221	-8.423

11.5	-15.725	-8.517
11.6	-15.380	-8.611
11.7	-15.182	-8.705
11.8	-15.139	-8.797
11.9	-15.242	-8.889
12	-15.509	-8.980
12.1	-15.939	-9.070
12.2	-16.502	-9.159
12.3	-17.234	-9.248
12.4	-18.067	-9.336
12.5	-18.961	-9.423
12.6	-19.844	-9.509
12.7	-20.561	-9.595
12.8	-20.869	-9.680
12.9	-20.785	-9.765
13	-20.275	-9.849
13.1	-19.593	-9.932
13.2	-18.941	-10.014
13.3	-18.398	-10.096
13.4	-17.995	-10.178
13.5	-17.803	-10.258
13.6	-17.695	-10.338
13.7	-17.677	-10.418
13.8	-17.726	-10.497
13.9	-17.765	-10.575
14	-17.966	-10.653
14.1	-18.251	-10.730
14.2	-18.728	-10.807
14.3	-19.462	-10.883
14.4	-20.408	-10.959
14.5	-21.513	-11.034
14.6	-22.659	-11.109
14.7	-23.422	-11.183
14.8	-23.646	-11.257
14.9	-23.499	-11.330
15	-23.200	-11.402
15.1	-23.012	-11.474
15.2	-23.068	-11.546
15.3	-23.138	-11.617
15.4	-23.060	-11.688
15.5	-22.751	-11.758
15.6	-22.123	-11.828
15.7	-21.601	-11.897
15.8	-21.231	-11.966
15.9	-21.202	-12.035
16	-21.706	-12.103
16.1	-22.651	-12.171
16.2	-24.240	-12.238
16.3	-26.420	-12.305
16.4	-28.708	-12.371
16.5	-29.759	-12.437
16.6	-29.135	-12.503
16.7	-27.855	-12.568

16.8	-26.859	-12.633
16.9	-26.286	-12.697
17	-25.807	-12.761
17.1	-25.067	-12.825
17.2	-24.230	-12.888
17.3	-23.148	-12.951
17.4	-22.212	-13.014
17.5	-21.564	-13.076
17.6	-21.188	-13.138
17.7	-21.372	-13.199
17.8	-21.939	-13.261
17.9	-22.980	-13.321
18	-24.516	-13.382
18.1	-26.319	-13.442
18.2	-27.609	-13.502
18.3	-27.946	-13.561
18.4	-27.241	-13.620
18.5	-26.205	-13.679
18.6	-25.319	-13.738
18.7	-24.609	-13.796
18.8	-23.861	-13.854
18.9	-23.176	-13.912
19	-22.472	-13.969
19.1	-21.745	-14.026
19.2	-21.319	-14.083
19.3	-21.027	-14.139
19.4	-21.071	-14.195
19.5	-21.514	-14.251
19.6	-22.265	-14.306
19.7	-23.574	-14.362
19.8	-25.341	-14.417
19.9	-27.588	-14.471
20	-30.460	-14.526
20.1	-34.023	-14.580
20.2	-37.976	-14.634
20.3	-43.128	-14.687
20.4	-48.528	-14.741
20.5	-45.560	-14.794
20.6	-40.564	-14.847
20.7	-37.085	-14.899
20.8	-34.518	-14.952
20.9	-32.847	-15.004

21	-31.879	-15.055
21.1	-31.246	-15.107
21.2	-31.251	-15.158
21.3	-31.496	-15.209
21.4	-31.843	-15.260
21.5	-32.353	-15.311
21.6	-32.626	-15.361
21.7	-32.754	-15.411
21.8	-32.824	-15.461
21.9	-32.782	-15.511
22	-32.507	-15.561
22.1	-31.995	-15.610
22.2	-31.051	-15.659
22.3	-29.914	-15.708
22.4	-28.876	-15.756
22.5	-28.026	-15.805
22.6	-27.420	-15.853
22.7	-27.142	-15.901
22.8	-27.145	-15.948
22.9	-27.328	-15.996
23	-27.883	-16.043
23.1	-28.613	-16.090
23.2	-29.540	-16.137
23.3	-30.787	-16.184
23.4	-32.162	-16.230
23.5	-33.548	-16.277
23.6	-34.859	-16.323
23.7	-35.617	-16.369
23.8	-34.995	-16.414
23.9	-33.653	-16.460
24	-31.998	-16.505
24.1	-30.438	-16.550
24.2	-29.190	-16.595
24.3	-28.440	-16.640
24.4	-27.979	-16.685
24.5	-27.883	-16.729
24.6	-28.193	-16.773
24.7	-28.749	-16.817
24.8	-29.546	-16.861
24.9	-30.387	-16.905
25	-30.918	-16.949