

**Exhibit 5A.1 – Plots and Tables with §25.115(g)(1) Information for
Ku-band Antennas**

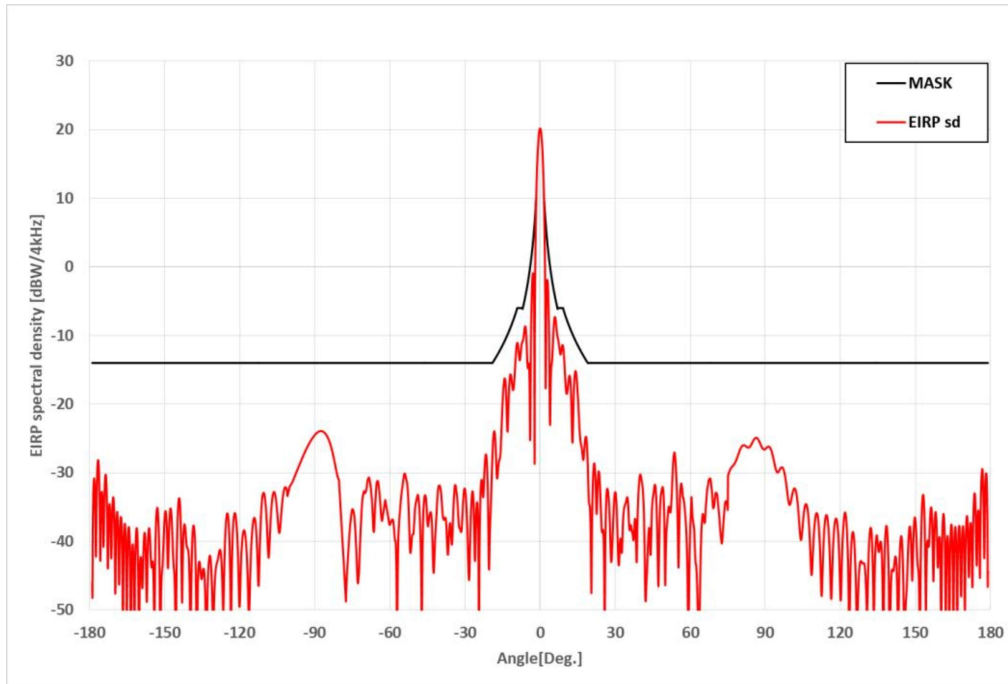
Exhibit Contains:

Plots and Tables for Intellian V80e antenna.

1. EIRP Spectral Density of v80E

1.1. Frequency 13.75GHz EIRP Spectral Density

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



-18.80dBW/4kHz Input power spectral density @ f=13.75GHz

- **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	$9.2^\circ < \theta \leq 19.1^\circ$
-14	dBW/4kHz	for	$19.1^\circ < \theta \leq 180^\circ$

The v80E's Radiation pattern meets the FCC EIRP spectral density mask when the input powers spectral density is @ -18.80 dBW/ 4kHz

2. EIRP Spectral Density Data

2.1. Frequency 13.75GHz Data

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

F=13.75GHz, -18.80dBW/4KHz EIRP sd		
-179	-46.017	-14.000
-178	-31.905	-14.000
-177	-29.909	-14.000
-176	-35.800	-14.000
-175	-33.176	-14.000
-174	-32.051	-14.000
-173	-37.598	-14.000
-172	-34.702	-14.000
-171	-36.124	-14.000
-170	-40.546	-14.000
-169	-35.693	-14.000
-168	-40.981	-14.000
-167	-42.029	-14.000
-166	-37.437	-14.000
-165	-46.675	-14.000
-164	-40.495	-14.000
-163	-40.974	-14.000
-162	-50.173	-14.000
-161	-38.822	-14.000
-160	-45.915	-14.000
-159	-46.834	-14.000
-158	-38.757	-14.000
-157	-45.454	-14.000
-156	-38.827	-14.000
-155	-43.042	-14.000
-154	-47.750	-14.000
-153	-35.099	-14.000
-152	-48.379	-14.000
-151	-43.919	-14.000
-150	-36.192	-14.000
-149	-40.888	-14.000
-148	-35.982	-14.000
-147	-38.812	-14.000
-146	-46.402	-14.000
-145	-38.367	-14.000
-144	-34.263	-14.000
-143	-47.449	-14.000
-142	-37.621	-14.000
-141	-40.988	-14.000
-140	-48.234	-14.000
-139	-39.720	-14.000
-138	-39.582	-14.000
-137	-51.963	-14.000
-136	-43.203	-14.000
-135	-44.964	-14.000
-134	-46.069	-14.000
-133	-48.831	-14.000
-132	-42.076	-14.000
-131	-48.690	-14.000

-130	-45.864	-14.000
-129	-42.933	-14.000
-128	-41.234	-14.000
-127	-46.219	-14.000
-126	-40.885	-14.000
-125	-35.906	-14.000
-124	-42.134	-14.000
-123	-40.702	-14.000
-122	-35.872	-14.000
-121	-39.666	-14.000
-120	-48.804	-14.000
-119	-39.648	-14.000
-118	-38.691	-14.000
-117	-44.005	-14.000
-116	-47.045	-14.000
-115	-38.194	-14.000
-114	-36.723	-14.000
-113	-42.067	-14.000
-112	-40.582	-14.000
-111	-33.489	-14.000
-110	-33.595	-14.000
-109	-39.212	-14.000
-108	-39.183	-14.000
-107	-33.644	-14.000
-106	-33.026	-14.000
-105	-36.139	-14.000
-104	-38.412	-14.000
-103	-34.115	-14.000
-102	-32.157	-14.000
-101	-33.381	-14.000
-100	-31.972	-14.000
-99	-31.351	-14.000
-98	-30.458	-14.000
-97	-29.566	-14.000
-96	-28.682	-14.000
-95	-27.807	-14.000
-94	-26.976	-14.000
-93	-26.218	-14.000
-92	-25.546	-14.000
-91	-24.961	-14.000
-90	-24.478	-14.000
-89	-24.126	-14.000
-88	-23.942	-14.000
-87	-23.962	-14.000
-86	-24.223	-14.000
-85	-24.772	-14.000
-84	-25.670	-14.000
-83	-26.983	-14.000
-82	-28.706	-14.000
-81	-30.458	-14.000
-80	-33.567	-14.000

-79	-39.894	-14.000
-78	-46.221	-14.000
-77	-43.576	-14.000
-76	-37.981	-14.000
-75	-35.312	-14.000
-74	-37.534	-14.000
-73	-45.508	-14.000
-72	-40.819	-14.000
-71	-33.828	-14.000
-70	-32.961	-14.000
-69	-31.164	-14.000
-68	-31.398	-14.000
-67	-35.307	-14.000
-66	-35.425	-14.000
-65	-31.187	-14.000
-64	-33.855	-14.000
-63	-36.704	-14.000
-62	-34.216	-14.000
-61	-35.875	-14.000
-60	-37.552	-14.000
-59	-36.815	-14.000
-58	-39.858	-14.000
-57	-48.199	-14.000
-56	-35.572	-14.000
-55	-31.997	-14.000
-54	-30.132	-14.000
-53	-32.102	-14.000
-52	-41.037	-14.000
-51	-39.018	-14.000
-50	-35.266	-14.000
-49	-33.314	-14.000
-48	-37.274	-14.000
-47	-41.411	-14.000
-46	-33.273	-14.000
-45	-37.506	-14.000
-44	-35.968	-14.000
-43	-40.126	-14.000
-42	-40.051	-14.000
-41	-33.337	-14.000
-40	-32.008	-14.000
-39	-35.897	-14.000
-38	-36.545	-14.000
-37	-41.597	-14.000
-36	-37.327	-14.000
-35	-38.803	-14.000
-34	-31.796	-14.000
-33	-34.469	-14.000
-32	-38.181	-14.000
-31	-35.934	-14.000
-30	-32.435	-14.000
-29	-39.484	-14.000
-28	-40.581	-14.000
-27	-32.704	-14.000
-26	-42.846	-14.000

-25	-35.022	-14.000
-24	-35.622	-14.000
-23	-32.536	-14.000
-22	-28.201	-14.000
-21	-31.367	-14.000
-20	-37.627	-14.000
-19	-26.998	-13.969
-18	-24.710	-13.382
-17	-30.410	-12.761
-16	-27.728	-12.103
-15	-19.840	-11.402
-14	-16.352	-10.653
-13	-24.020	-9.849
-12	-15.823	-8.980
-11	-17.685	-8.035
-10	-14.652	-7.000
-9	-11.089	-6.000
-8	-13.430	-6.000
-7	-10.854	-6.127
-6	-8.661	-4.454
-5	-14.546	-2.474
-4	-25.205	-0.051
-3	-1.191	3.072
-2	-2.391	7.474
-1	16.365	
0	20.181	
1	16.342	
2	-1.605	7.474
3	-2.166	3.072
4	-23.013	-0.051
5	-12.201	-2.474
6	-7.341	-4.454
7	-10.276	-6.127
8	-12.621	-6.000
9	-11.380	-6.000
10	-16.051	-7.000
11	-17.851	-8.035
12	-16.184	-8.980
13	-25.190	-9.849
14	-15.299	-10.653
15	-18.359	-11.402
16	-24.977	-12.103
17	-27.614	-12.761
18	-25.193	-13.382
19	-28.282	-13.969
20	-35.635	-14.000
21	-32.744	-14.000
22	-29.862	-14.000
23	-32.009	-14.000
24	-32.559	-14.000
25	-38.407	-14.000
26	-42.989	-14.000
27	-32.434	-14.000
28	-38.857	-14.000

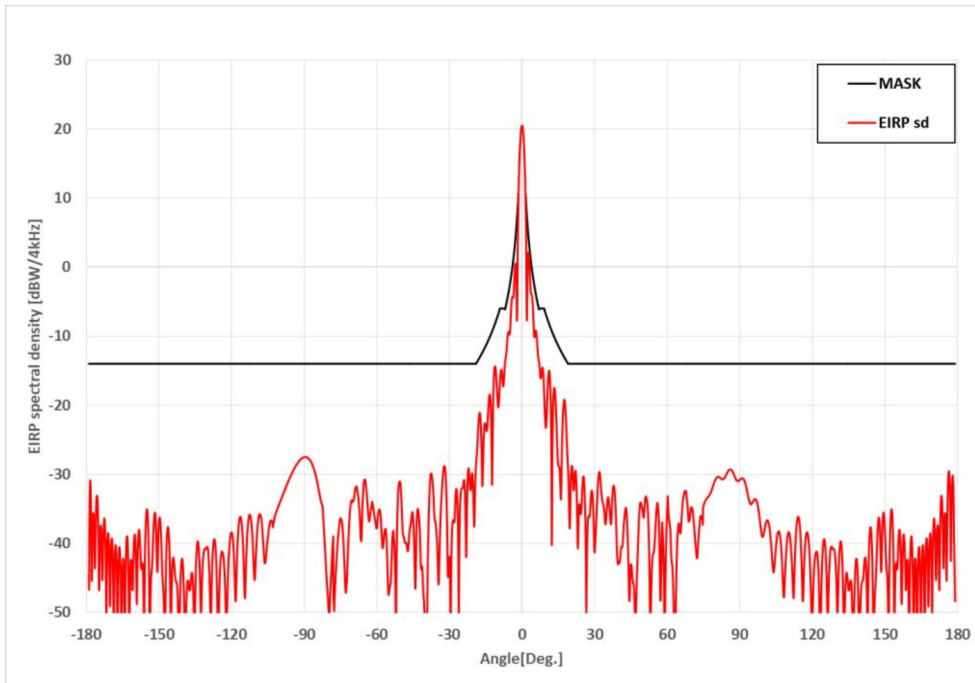
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30	-32.817	-14.000
31	-39.758	-14.000
32	-39.880	-14.000
33	-38.586	-14.000
34	-34.611	-14.000
35	-33.785	-14.000
36	-37.872	-14.000
37	-38.988	-14.000
38	-36.728	-14.000
39	-36.030	-14.000
40	-30.261	-14.000
41	-32.265	-14.000
42	-47.093	-14.000
43	-41.845	-14.000
44	-40.780	-14.000
45	-33.825	-14.000
46	-31.806	-14.000
47	-42.039	-14.000
48	-34.749	-14.000
49	-32.072	-14.000
50	-46.400	-14.000
51	-36.370	-14.000
52	-35.750	-14.000
53	-29.891	-14.000
54	-27.833	-14.000
55	-37.501	-14.000
56	-32.978	-14.000
57	-33.520	-14.000
58	-36.108	-14.000
59	-47.704	-14.000
60	-38.260	-14.000
61	-36.692	-14.000
62	-42.269	-14.000
63	-50.022	-14.000
64	-45.206	-14.000
65	-36.001	-14.000
66	-36.547	-14.000
67	-31.944	-14.000
68	-30.833	-14.000
69	-34.571	-14.000
70	-33.238	-14.000
71	-34.044	-14.000
72	-38.468	-14.000
73	-38.789	-14.000
74	-34.296	-14.000
75	-35.392	-14.000
76	-29.508	-14.000
77	-28.996	-14.000
78	-28.478	-14.000
79	-27.547	-14.000
80	-26.556	-14.000
81	-26.024	-14.000
82	-26.071	-14.000
83	-26.322	-14.000

84	-26.135	-14.000
85	-25.464	-14.000
86	-24.952	-14.000
87	-25.064	-14.000
88	-25.773	-14.000
89	-26.495	-14.000
90	-26.533	-14.000
91	-26.212	-14.000
92	-26.405	-14.000
93	-27.529	-14.000
94	-29.210	-14.000
95	-29.951	-14.000
96	-29.395	-14.000
97	-29.303	-14.000
98	-30.711	-14.000
99	-33.502	-14.000
100	-34.525	-14.000
101	-32.791	-14.000
102	-32.416	-14.000
103	-34.724	-14.000
104	-39.370	-14.000
105	-37.447	-14.000
106	-34.684	-14.000
107	-35.651	-14.000
108	-41.539	-14.000
109	-41.918	-14.000
110	-36.545	-14.000
111	-36.439	-14.000
112	-42.600	-14.000
113	-43.049	-14.000
114	-36.668	-14.000
115	-37.104	-14.000
116	-44.918	-14.000
117	-41.726	-14.000
118	-36.850	-14.000
119	-38.245	-14.000
120	-47.839	-14.000
121	-39.139	-14.000
122	-35.886	-14.000
123	-42.190	-14.000
124	-44.811	-14.000
125	-38.634	-14.000
126	-43.662	-14.000
127	-49.046	-14.000
128	-42.932	-14.000
129	-43.207	-14.000
130	-44.714	-14.000
131	-46.116	-14.000
132	-38.078	-14.000
133	-44.177	-14.000
134	-41.271	-14.000
135	-40.592	-14.000
136	-40.110	-14.000
137	-50.150	-14.000
138	-39.049	-14.000

139	-40.468	-14.000
140	-50.261	-14.000
141	-44.296	-14.000
142	-42.209	-14.000
143	-53.316	-14.000
144	-40.048	-14.000
145	-43.305	-14.000
146	-50.492	-14.000
147	-42.056	-14.000
148	-38.379	-14.000
149	-42.438	-14.000
150	-36.895	-14.000
151	-43.775	-14.000
152	-47.388	-14.000
153	-33.260	-14.000
154	-45.065	-14.000
155	-40.018	-14.000
156	-35.803	-14.000
157	-42.430	-14.000
158	-35.733	-14.000
159	-43.810	-14.000
160	-43.211	-14.000
161	-36.650	-14.000
162	-48.535	-14.000
163	-39.869	-14.000
164	-39.923	-14.000
165	-46.636	-14.000
166	-37.931	-14.000
167	-43.055	-14.000
168	-42.541	-14.000
169	-37.785	-14.000
170	-43.172	-14.000
171	-38.857	-14.000
172	-37.434	-14.000
173	-40.331	-14.000
174	-34.784	-14.000
175	-35.909	-14.000
176	-38.007	-14.000
177	-30.804	-14.000
178	-31.487	-14.000
179	-44.391	-14.000

1.3. Frequency 14.50GHz EIRP Spectral Density

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



-18.80dBW/4kHz Input power spectral density @ f=14.50GHz

- **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	$9.2^\circ < \theta \leq 19.1^\circ$
-14	dBW/4kHz	for	$19.1^\circ < \theta \leq 180^\circ$

The v80E's Radiation pattern meets the FCC EIRP spectral density mask when the input powers spectral density is @ -18.80 dBW/ 4kHz

2.3. Frequency 14.50GHz Data

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

F=14.50GHz, -18.80dBW/4KHz EIRP sd		
-179	-44.505	-14.000
-178	-38.121	-14.000
-177	-36.022	-14.000
-176	-34.898	-14.000
-175	-40.445	-14.000
-174	-37.548	-14.000
-173	-38.970	-14.000
-172	-43.392	-14.000
-171	-38.539	-14.000
-170	-43.827	-14.000
-169	-44.875	-14.000
-168	-40.283	-14.000
-167	-49.522	-14.000
-166	-42.915	-14.000
-165	-42.861	-14.000
-164	-51.527	-14.000
-163	-39.642	-14.000
-162	-46.203	-14.000
-161	-46.802	-14.000
-160	-38.725	-14.000
-159	-45.422	-14.000
-158	-38.795	-14.000
-157	-43.010	-14.000
-156	-47.718	-14.000
-155	-35.067	-14.000
-154	-48.347	-14.000
-153	-43.887	-14.000
-152	-36.160	-14.000
-151	-40.856	-14.000
-150	-36.797	-14.000
-149	-40.474	-14.000
-148	-48.911	-14.000
-147	-41.723	-14.000
-146	-38.466	-14.000
-145	-51.991	-14.000
-144	-42.163	-14.000
-143	-45.530	-14.000
-142	-52.776	-14.000
-141	-44.262	-14.000
-140	-44.123	-14.000
-139	-55.480	-14.000
-138	-45.441	-14.000
-137	-45.922	-14.000
-136	-45.747	-14.000
-135	-47.229	-14.000
-134	-39.706	-14.000
-133	-46.319	-14.000
-132	-43.494	-14.000
-131	-40.848	-14.000

-130	-40.572	-14.000
-129	-46.981	-14.000
-128	-43.072	-14.000
-127	-39.517	-14.000
-126	-47.168	-14.000
-125	-46.021	-14.000
-124	-41.191	-14.000
-123	-43.806	-14.000
-122	-51.470	-14.000
-121	-40.840	-14.000
-120	-38.409	-14.000
-119	-42.249	-14.000
-118	-44.923	-14.000
-117	-37.109	-14.000
-116	-36.673	-14.000
-115	-43.054	-14.000
-114	-42.605	-14.000
-113	-36.444	-14.000
-112	-36.550	-14.000
-111	-42.167	-14.000
-110	-42.138	-14.000
-109	-36.599	-14.000
-108	-35.981	-14.000
-107	-39.694	-14.000
-106	-42.662	-14.000
-105	-39.016	-14.000
-104	-36.808	-14.000
-103	-37.683	-14.000
-102	-35.924	-14.000
-101	-34.954	-14.000
-100	-34.026	-14.000
-99	-33.134	-14.000
-98	-32.250	-14.000
-97	-31.376	-14.000
-96	-30.544	-14.000
-95	-29.787	-14.000
-94	-29.114	-14.000
-93	-28.530	-14.000
-92	-28.046	-14.000
-91	-27.694	-14.000
-90	-27.510	-14.000
-89	-27.530	-14.000
-88	-27.791	-14.000
-87	-28.340	-14.000
-86	-29.238	-14.000
-85	-30.551	-14.000
-84	-32.274	-14.000
-83	-34.027	-14.000
-82	-37.135	-14.000
-81	-43.462	-14.000
-80	-49.189	-14.000

-79	-45.544	-14.000
-78	-39.049	-14.000
-77	-44.644	-14.000
-76	-39.049	-14.000
-75	-36.380	-14.000
-74	-38.603	-14.000
-73	-46.576	-14.000
-72	-41.887	-14.000
-71	-34.896	-14.000
-70	-34.030	-14.000
-69	-32.233	-14.000
-68	-32.466	-14.000
-67	-36.375	-14.000
-66	-35.593	-14.000
-65	-30.756	-14.000
-64	-33.563	-14.000
-63	-36.552	-14.000
-62	-34.204	-14.000
-61	-36.004	-14.000
-60	-37.821	-14.000
-59	-35.094	-14.000
-58	-38.741	-14.000
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-56	-39.425	-14.000
-55	-47.259	-14.000
-54	-43.687	-14.000
-53	-38.731	-14.000
-52	-49.768	-14.000
-51	-31.800	-14.000
-50	-32.485	-14.000
-49	-38.920	-14.000
-48	-39.911	-14.000
-47	-40.764	-14.000
-46	-37.238	-14.000
-45	-36.278	-14.000
-44	-45.761	-14.000
-43	-35.025	-14.000
-42	-40.900	-14.000
-41	-45.319	-14.000
-40	-56.413	-14.000
-39	-44.538	-14.000
-38	-31.008	-14.000
-37	-30.935	-14.000
-36	-36.631	-14.000
-35	-40.666	-14.000
-34	-40.381	-14.000
-33	-31.782	-14.000
-32	-28.876	-14.000
-31	-36.943	-14.000
-30	-42.092	-14.000
-29	-39.107	-14.000
-28	-36.968	-14.000
-27	-32.259	-14.000
-26	-45.324	-14.000

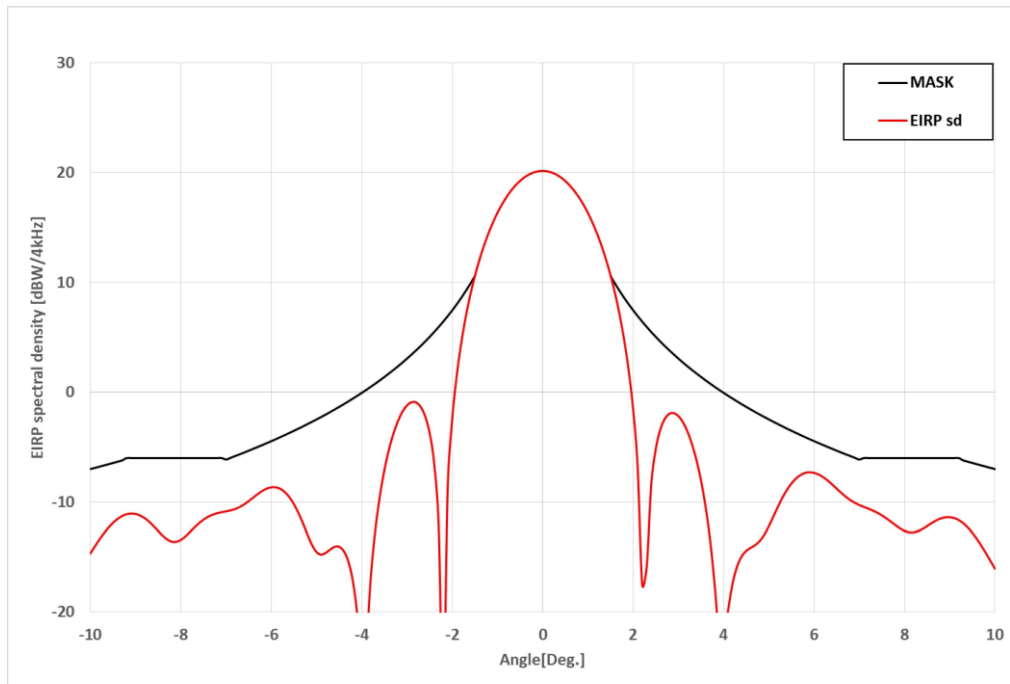
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-24	-30.860	-14.000
-23	-41.842	-14.000
-22	-29.223	-14.000
-21	-31.338	-14.000
-20	-34.837	-14.000
-19	-28.618	-13.969
-18	-22.731	-13.382
-17	-23.028	-12.761
-16	-26.743	-12.103
-15	-23.057	-11.402
-14	-21.010	-10.653
-13	-19.581	-9.849
-12	-21.014	-8.980
-11	-14.507	-8.035
-10	-19.932	-7.000
-9	-16.079	-6.000
-8	-16.621	-6.000
-7	-13.803	-6.127
-6	-10.255	-4.454
-5	-9.534	-2.474
-4	-4.308	-0.051
-3	-0.580	3.072
-2	-6.881	7.474
-1	16.087	
0	20.527	
1	16.056	
2	-7.692	7.474
3	1.027	3.072
4	-4.014	-0.051
5	-9.842	-2.474
6	-9.828	-4.454
7	-13.696	-6.127
8	-15.656	-6.000
9	-16.672	-6.000
10	-22.829	-7.000
11	-15.357	-8.035
12	-21.974	-8.980
13	-18.600	-9.849
14	-20.328	-10.653
15	-28.731	-11.402
16	-33.344	-12.103
17	-20.790	-12.761
18	-20.928	-13.382
19	-29.042	-13.969
20	-33.721	-14.000
21	-30.204	-14.000
22	-29.542	-14.000
23	-40.022	-14.000
24	-35.077	-14.000
25	-31.567	-14.000
26	-33.899	-14.000
27	-38.720	-14.000
28	-35.969	-14.000

29	-32.590	-14.000
30	-41.306	-14.000
31	-34.231	-14.000
32	-29.648	-14.000
33	-33.332	-14.000
34	-35.427	-14.000
35	-35.143	-14.000
36	-34.321	-14.000
37	-36.162	-14.000
38	-31.757	-14.000
39	-38.354	-14.000
40	-42.909	-14.000
41	-40.625	-14.000
42	-37.678	-14.000
43	-34.866	-14.000
44	-43.277	-14.000
45	-43.048	-14.000
46	-45.834	-14.000
47	-52.432	-14.000
48	-39.704	-14.000
49	-34.085	-14.000
50	-35.854	-14.000
51	-33.335	-14.000
52	-35.208	-14.000
53	-52.222	-14.000
54	-41.752	-14.000
55	-38.750	-14.000
56	-34.137	-14.000
57	-44.262	-14.000
58	-37.445	-14.000
59	-59.556	-14.000
60	-35.065	-14.000
61	-37.181	-14.000
62	-43.051	-14.000
63	-59.400	-14.000
64	-41.482	-14.000
65	-37.716	-14.000
66	-36.002	-14.000
67	-32.772	-14.000
68	-33.068	-14.000
69	-36.884	-14.000
70	-34.776	-14.000
71	-37.127	-14.000
72	-41.273	-14.000
73	-39.025	-14.000
74	-36.034	-14.000
75	-34.593	-14.000
76	-33.706	-14.000
77	-33.264	-14.000
78	-32.631	-14.000
79	-31.619	-14.000
80	-30.725	-14.000
81	-30.377	-14.000
82	-30.546	-14.000
83	-30.725	-14.000

84	-30.352	-14.000
85	-29.655	-14.000
86	-29.303	-14.000
87	-29.621	-14.000
88	-30.419	-14.000
89	-30.980	-14.000
90	-30.823	-14.000
91	-30.577	-14.000
92	-31.034	-14.000
93	-32.414	-14.000
94	-34.001	-14.000
95	-34.239	-14.000
96	-33.640	-14.000
97	-33.940	-14.000
98	-35.849	-14.000
99	-38.629	-14.000
100	-38.455	-14.000
101	-36.832	-14.000
102	-37.188	-14.000
103	-40.413	-14.000
104	-44.209	-14.000
105	-40.305	-14.000
106	-38.255	-14.000
107	-40.137	-14.000
108	-47.095	-14.000
109	-42.302	-14.000
110	-38.498	-14.000
111	-39.948	-14.000
112	-46.544	-14.000
113	-40.127	-14.000
114	-36.210	-14.000
115	-38.438	-14.000
116	-48.344	-14.000
117	-40.224	-14.000
118	-38.544	-14.000
119	-42.885	-14.000
120	-51.422	-14.000
121	-42.269	-14.000
122	-41.517	-14.000
123	-51.547	-14.000
124	-43.140	-14.000
125	-39.493	-14.000
126	-46.910	-14.000
127	-43.520	-14.000
128	-40.526	-14.000
129	-40.929	-14.000
130	-46.467	-14.000
131	-42.711	-14.000
132	-40.281	-14.000
133	-54.164	-14.000
134	-44.381	-14.000
135	-46.849	-14.000
136	-45.663	-14.000
137	-59.578	-14.000
138	-42.515	-14.000

139	-48.227	-14.000
140	-47.699	-14.000
141	-45.006	-14.000
142	-42.311	-14.000
143	-48.668	-14.000
144	-37.652	-14.000
145	-47.767	-14.000
146	-46.453	-14.000
147	-37.825	-14.000
148	-39.128	-14.000
149	-37.245	-14.000
150	-38.167	-14.000
151	-45.250	-14.000
152	-40.295	-14.000
153	-35.832	-14.000
154	-50.563	-14.000
155	-43.778	-14.000
156	-38.035	-14.000
157	-47.489	-14.000
158	-39.459	-14.000
159	-43.684	-14.000
160	-62.520	-14.000
161	-39.073	-14.000
162	-49.038	-14.000
163	-47.896	-14.000
164	-40.593	-14.000
165	-50.636	-14.000
166	-42.595	-14.000
167	-40.111	-14.000
168	-49.122	-14.000
169	-39.852	-14.000
170	-37.904	-14.000
171	-44.542	-14.000
172	-38.335	-14.000
173	-34.945	-14.000
174	-40.210	-14.000
175	-36.133	-14.000
176	-31.953	-14.000
177	-36.169	-14.000
178	-30.193	-14.000
179	-48.413	-14.000

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



-18.80dBW/4kHz Input power spectral density @ f=13.75GHz

- **FCC EIRP spectral density regulation**

$15-25\log(\theta)$	dBW/4kHz	for	$1.5^\circ \leq \theta \leq 7.0^\circ$
-6	dBW/4kHz	for	$7.0^\circ < \theta \leq 9.2^\circ$
$18-25\log(\theta)$	dBW/4kHz	for	$9.2^\circ < \theta \leq 19.1^\circ$
-14	dBW/4kHz	for	$19.1^\circ < \theta \leq 180^\circ$

The v80E's Radiation pattern meets the FCC EIRP spectral density mask when the input powers spectral density is @ -18.80 dBW/ 4kHz

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

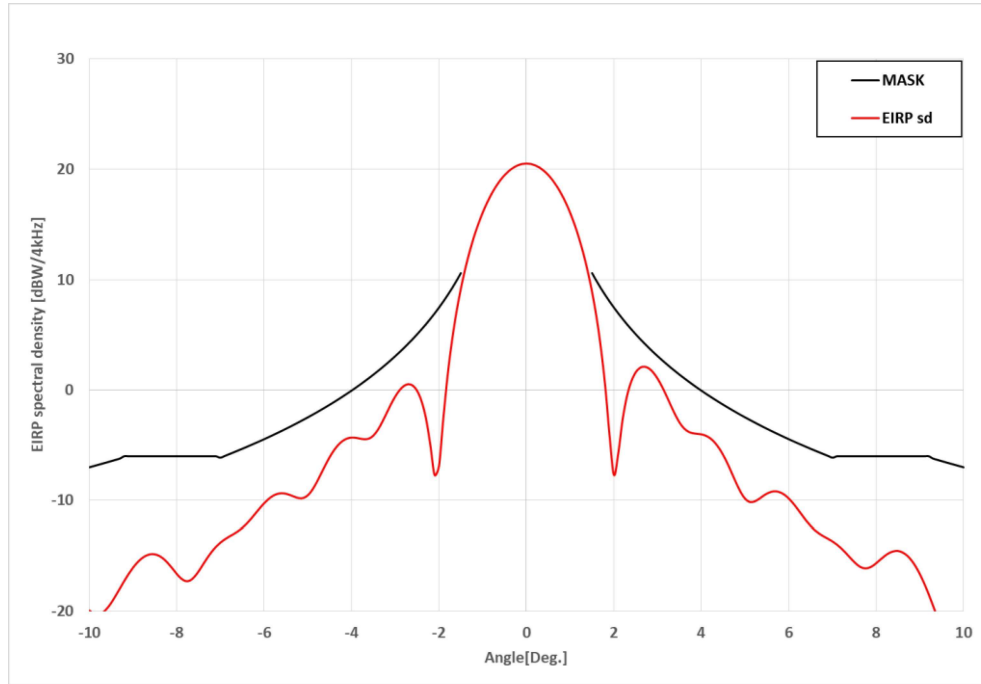
F=13.75GHz, -18.80dBW/4KHz EIRP sd		
-10	-14.652	-7.000
-9.9	-14.002	-6.891
-9.8	-13.386	-6.781
-9.7	-12.818	-6.669
-9.6	-12.312	-6.557
-9.5	-11.881	-6.443
-9.4	-11.533	-6.328
-9.3	-11.273	-6.212
-9.2	-11.112	-6.000
-9.1	-11.050	-6.000
-9	-11.089	-6.000
-8.9	-11.236	-6.000
-8.8	-11.476	-6.000
-8.7	-11.810	-6.000
-8.6	-12.211	-6.000
-8.5	-12.642	-6.000
-8.4	-13.067	-6.000
-8.3	-13.404	-6.000
-8.2	-13.599	-6.000
-8.1	-13.609	-6.000
-8	-13.430	-6.000
-7.9	-13.114	-6.000
-7.8	-12.720	-6.000
-7.7	-12.309	-6.000
-7.6	-11.929	-6.000
-7.5	-11.603	-6.000
-7.4	-11.346	-6.000
-7.3	-11.156	-6.000
-7.2	-11.023	-6.000
-7.1	-10.931	-6.000
-7	-10.854	-6.127
-6.9	-10.765	-5.971
-6.8	-10.640	-5.813
-6.7	-10.457	-5.652
-6.6	-10.213	-5.489
-6.5	-9.918	-5.323
-6.4	-9.593	-5.154
-6.3	-9.272	-4.984
-6.2	-8.991	-4.810
-6.1	-8.777	-4.633
-6	-8.661	-4.454
-5.9	-8.668	-4.271
-5.8	-8.806	-4.086
-5.7	-9.110	-3.897
-5.6	-9.575	-3.705
-5.5	-10.212	-3.509
-5.4	-11.023	-3.310
-5.3	-11.963	-3.107

-5.2	-12.974	-2.900
-5.1	-13.900	-2.689
-5	-14.546	-2.474
-4.9	-14.769	-2.255
-4.8	-14.621	-2.031
-4.7	-14.311	-1.802
-4.6	-14.063	-1.569
-4.5	-14.063	-1.330
-4.4	-14.452	-1.086
-4.3	-15.377	-0.837
-4.2	-17.157	-0.581
-4.1	-20.278	-0.320
-4	-25.205	-0.051
-3.9	-22.890	0.223
-3.8	-16.769	0.505
-3.7	-12.497	0.795
-3.6	-9.428	1.092
-3.5	-7.069	1.398
-3.4	-5.214	1.713
-3.3	-3.752	2.037
-3.2	-2.609	2.371
-3.1	-1.760	2.716
-3	-1.191	3.072
-2.9	-0.906	3.440
-2.8	-0.931	3.821
-2.7	-1.327	4.216
-2.6	-2.187	4.626
-2.5	-3.746	5.051
-2.4	-6.497	5.495
-2.3	-12.198	5.957
-2.2	-28.695	6.439
-2.1	-8.620	6.945
-2	-2.391	7.474
-1.9	1.572	8.031
-1.8	4.533	8.618
-1.7	6.915	9.239
-1.6	8.898	9.897
-1.5	10.597	10.598
-1.4	12.069	
-1.3	13.357	
-1.2	14.490	
-1.1	15.487	
-1	16.365	
-0.9	17.134	
-0.8	17.804	
-0.7	18.382	
-0.6	18.874	
-0.5	19.281	
-0.4	19.611	
-0.3	19.863	

-0.2	20.042	
-0.1	20.148	
0	20.181	
0.1	20.144	
0.2	20.034	
0.3	19.851	
0.4	19.594	
0.5	19.261	
0.6	18.850	
0.7	18.357	
0.8	17.778	
0.9	17.109	
1	16.342	
1.1	15.470	
1.2	14.481	
1.3	13.362	
1.4	12.094	
1.5	10.651	10.598
1.6	8.995	9.897
1.7	7.075	9.239
1.8	4.797	8.618
1.9	2.008	8.031
2	-1.605	7.474
2.1	-6.890	6.945
2.2	-17.489	6.439
2.3	-15.854	5.957
2.4	-8.425	5.495
2.5	-5.185	5.051
2.6	-3.404	4.626
2.7	-2.427	4.216
2.8	-1.966	3.821
2.9	-1.901	3.440
3	-2.166	3.072
3.1	-2.726	2.716
3.2	-3.572	2.371
3.3	-4.719	2.037
3.4	-6.189	1.713
3.5	-8.048	1.398
3.6	-10.406	1.092
3.7	-13.416	0.795
3.8	-17.408	0.505
3.9	-22.106	0.223
4	-23.013	-0.051
4.1	-19.851	-0.320
4.2	-17.381	-0.581
4.3	-15.834	-0.837
4.4	-14.938	-1.086
4.5	-14.439	-1.330
4.6	-14.150	-1.569
4.7	-13.902	-1.802
4.8	-13.536	-2.031
4.9	-12.965	-2.255

5	-12.201	-2.474
5.1	-11.328	-2.689
5.2	-10.444	-2.900
5.3	-9.617	-3.107
5.4	-8.905	-3.310
5.5	-8.315	-3.509
5.6	-7.862	-3.705
5.7	-7.547	-3.897
5.8	-7.354	-4.086
5.9	-7.294	-4.271
6	-7.341	-4.454
6.1	-7.492	-4.633
6.2	-7.732	-4.810
6.3	-8.040	-4.984
6.4	-8.401	-5.154
6.5	-8.784	-5.323
6.6	-9.164	-5.489
6.7	-9.516	-5.652
6.8	-9.823	-5.813
6.9	-10.072	-5.971
7	-10.276	-6.127
7.1	-10.447	-6.000
7.2	-10.607	-6.000
7.3	-10.779	-6.000
7.4	-10.978	-6.000
7.5	-11.216	-6.000
7.6	-11.493	-6.000
7.7	-11.797	-6.000
7.8	-12.108	-6.000
7.9	-12.397	-6.000
8	-12.621	-6.000
8.1	-12.750	-6.000
8.2	-12.758	-6.000
8.3	-12.648	-6.000
8.4	-12.448	-6.000
8.5	-12.190	-6.000
8.6	-11.925	-6.000
8.7	-11.686	-6.000
8.8	-11.501	-6.000
8.9	-11.399	-6.000
9	-11.380	-6.000
9.1	-11.464	-6.000
9.2	-11.648	-6.000
9.3	-11.930	-6.212
9.4	-12.314	-6.328
9.5	-12.787	-6.443
9.6	-13.342	-6.557
9.7	-13.968	-6.669
9.8	-14.645	-6.781
9.9	-15.346	-6.891
10	-16.051	-7.000

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



-18.80dBW/4kHz Input power spectral density @ f=14.50GHz

- **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	$9.2^\circ < \theta \leq 19.1^\circ$
-14	dBW/4kHz	for	$19.1^\circ < \theta \leq 180^\circ$

The v80E's Radiation pattern meets the FCC EIRP spectral density mask when the input powers spectral density is @ -18.80 dBW/ 4kHz

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

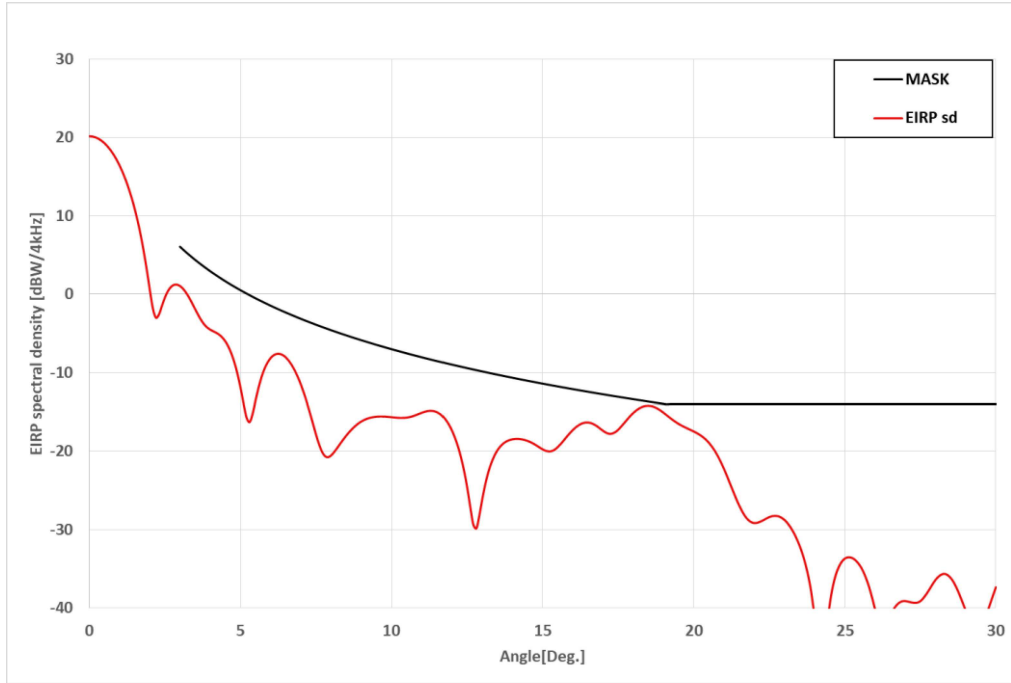
F= 14.50GHz, -18.80dBW/4KHz EIRP sd		
-10	-19.932	-7.000
-9.9	-20.224	-6.891
-9.8	-20.310	-6.781
-9.7	-20.156	-6.669
-9.6	-19.795	-6.557
-9.5	-19.273	-6.443
-9.4	-18.638	-6.328
-9.3	-17.962	-6.212
-9.2	-17.282	-6.000
-9.1	-16.645	-6.000
-9	-16.079	-6.000
-8.9	-15.602	-6.000
-8.8	-15.231	-6.000
-8.7	-14.980	-6.000
-8.6	-14.849	-6.000
-8.5	-14.859	-6.000
-8.4	-14.997	-6.000
-8.3	-15.269	-6.000
-8.2	-15.658	-6.000
-8.1	-16.123	-6.000
-8	-16.621	-6.000
-7.9	-17.037	-6.000
-7.8	-17.275	-6.000
-7.7	-17.239	-6.000
-7.6	-16.924	-6.000
-7.5	-16.410	-6.000
-7.4	-15.800	-6.000
-7.3	-15.193	-6.000
-7.2	-14.642	-6.000
-7.1	-14.177	-6.000
-7	-13.803	-6.127
-6.9	-13.505	-5.971
-6.8	-13.259	-5.813
-6.7	-13.032	-5.652
-6.6	-12.781	-5.489
-6.5	-12.481	-5.323
-6.4	-12.107	-5.154
-6.3	-11.669	-4.984
-6.2	-11.191	-4.810
-6.1	-10.706	-4.633
-6	-10.255	-4.454
-5.9	-9.877	-4.271
-5.8	-9.587	-4.086
-5.7	-9.413	-3.897
-5.6	-9.351	-3.705
-5.5	-9.393	-3.509
-5.4	-9.522	-3.310
-5.3	-9.675	-3.107

-5.2	-9.795	-2.900
-5.1	-9.773	-2.689
-5	-9.534	-2.474
-4.9	-9.054	-2.255
-4.8	-8.379	-2.031
-4.7	-7.597	-1.802
-4.6	-6.807	-1.569
-4.5	-6.073	-1.330
-4.4	-5.447	-1.086
-4.3	-4.952	-0.837
-4.2	-4.599	-0.581
-4.1	-4.388	-0.320
-4	-4.308	-0.051
-3.9	-4.328	0.223
-3.8	-4.405	0.505
-3.7	-4.457	0.795
-3.6	-4.392	1.092
-3.5	-4.121	1.398
-3.4	-3.613	1.713
-3.3	-2.908	2.037
-3.2	-2.105	2.371
-3.1	-1.300	2.716
-3	-0.580	3.072
-2.9	-0.006	3.440
-2.8	0.379	3.821
-2.7	0.531	4.216
-2.6	0.400	4.626
-2.5	-0.072	5.051
-2.4	-1.005	5.495
-2.3	-2.543	5.957
-2.2	-4.921	6.439
-2.1	-7.714	6.945
-2	-6.881	7.474
-1.9	-2.504	8.031
-1.8	1.426	8.618
-1.7	4.552	9.239
-1.6	7.082	9.897
-1.5	9.193	10.598
-1.4	10.989	
-1.3	12.536	
-1.2	13.883	
-1.1	15.059	
-1	16.087	
-0.9	16.984	
-0.8	17.763	
-0.7	18.433	
-0.6	19.002	
-0.5	19.474	
-0.4	19.857	
-0.3	20.150	

-0.2	20.359	
-0.1	20.484	
0	20.527	
0.1	20.488	
0.2	20.364	
0.3	20.158	
0.4	19.865	
0.5	19.483	
0.6	19.008	
0.7	18.435	
0.8	17.759	
0.9	16.969	
1	16.056	
1.1	15.006	
1.2	13.797	
1.3	12.405	
1.4	10.791	
1.5	8.899	10.598
1.6	6.645	9.897
1.7	3.880	9.239
1.8	0.387	8.618
1.9	-4.072	8.031
2	-7.692	7.474
2.1	-5.727	6.945
2.2	-2.643	6.439
2.3	-0.539	5.957
2.4	0.809	5.495
2.5	1.611	5.051
2.6	2.022	4.626
2.7	2.121	4.216
2.8	1.963	3.821
2.9	1.588	3.440
3	1.027	3.072
3.1	0.313	2.716
3.2	-0.507	2.371
3.3	-1.379	2.037
3.4	-2.219	1.713
3.5	-2.936	1.398
3.6	-3.460	1.092
3.7	-3.768	0.795
3.8	-3.907	0.505
3.9	-3.961	0.223
4	-4.014	-0.051
4.1	-4.132	-0.320
4.2	-4.362	-0.581
4.3	-4.725	-0.837
4.4	-5.237	-1.086
4.5	-5.893	-1.330
4.6	-6.677	-1.569
4.7	-7.552	-1.802
4.8	-8.447	-2.031
4.9	-9.252	-2.255

5	-9.842	-2.474
5.1	-10.129	-2.689
5.2	-10.116	-2.900
5.3	-9.912	-3.107
5.4	-9.632	-3.310
5.5	-9.379	-3.509
5.6	-9.220	-3.705
5.7	-9.173	-3.897
5.8	-9.268	-4.086
5.9	-9.487	-4.271
6	-9.828	-4.454
6.1	-10.267	-4.633
6.2	-10.775	-4.810
6.3	-11.314	-4.984
6.4	-11.841	-5.154
6.5	-12.307	-5.323
6.6	-12.697	-5.489
6.7	-13.000	-5.652
6.8	-13.242	-5.813
6.9	-13.462	-5.971
7	-13.696	-6.127
7.1	-13.977	-6.000
7.2	-14.319	-6.000
7.3	-14.718	-6.000
7.4	-15.151	-6.000
7.5	-15.569	-6.000
7.6	-15.908	-6.000
7.7	-16.104	-6.000
7.8	-16.113	-6.000
7.9	-15.949	-6.000
8	-15.656	-6.000
8.1	-15.313	-6.000
8.2	-14.988	-6.000
8.3	-14.728	-6.000
8.4	-14.583	-6.000
8.5	-14.557	-6.000
8.6	-14.684	-6.000
8.7	-14.954	-6.000
8.8	-15.377	-6.000
8.9	-15.954	-6.000
9	-16.672	-6.000
9.1	-17.525	-6.000
9.2	-18.492	-6.000
9.3	-19.528	-6.212
9.4	-20.589	-6.328
9.5	-21.590	-6.443
9.6	-22.426	-6.557
9.7	-23.023	-6.669
9.8	-23.274	-6.781
9.9	-23.207	-6.891
10	-22.829	-7.000

1.1.4. Elevation Pattern for Co-pol, Narrow Angle (0°~30°)



-18.80dBW/4kHz Input power spectral density @ f=13.75GHz

▪ **FCC EIRP spectral density regulation**

$18-25\log(\theta)$	dBW/4kHz	for	$3.0^\circ \leq \theta \leq 19.1^\circ$
-14	dBW/4kHz	for	$19.1^\circ < \theta \leq 180^\circ$

The v80E's Radiation pattern meets the FCC EIRP spectral density mask when the input powers spectral density is @ -18.80 dBW/ 4kHz

2.1.4. Elevation Pattern for Co-pol (0°~30°)

F=13.75GHz, -18.80dBW/4KHz EIRP sd		
0	20.181	
0.1	20.144	
0.2	20.036	
0.3	19.858	
0.4	19.607	
0.5	19.282	
0.6	18.881	
0.7	18.400	
0.8	17.835	
0.9	17.181	
1	16.431	
1.1	15.578	
1.2	14.612	
1.3	13.519	
1.4	12.285	
1.5	10.888	
1.6	9.303	
1.7	7.496	
1.8	5.430	
1.9	3.092	
2	0.549	
2.1	-1.786	
2.2	-2.981	
2.3	-2.592	
2.4	-1.486	
2.5	-0.398	
2.6	0.418	
2.7	0.942	
2.8	1.205	
2.9	1.232	
3	1.058	6.072
3.1	0.708	5.716
3.2	0.205	5.371
3.3	-0.421	5.037
3.4	-1.133	4.713
3.5	-1.890	4.398
3.6	-2.630	4.092
3.7	-3.297	3.795
3.8	-3.838	3.505
3.9	-4.237	3.223
4	-4.512	2.949
4.1	-4.718	2.680
4.2	-4.914	2.419
4.3	-5.162	2.163
4.4	-5.514	1.914
4.5	-6.006	1.670
4.6	-6.679	1.431
4.7	-7.565	1.198
4.8	-8.703	0.969

4.9	-10.132	0.745
5	-11.878	0.526
5.1	-13.862	0.311
5.2	-15.667	0.100
5.3	-16.284	-0.107
5.4	-15.267	-0.310
5.5	-13.539	-0.509
5.6	-11.893	-0.705
5.7	-10.528	-0.897
5.8	-9.472	-1.086
5.9	-8.685	-1.271
6	-8.126	-1.454
6.1	-7.780	-1.633
6.2	-7.609	-1.810
6.3	-7.605	-1.984
6.4	-7.753	-2.154
6.5	-8.043	-2.323
6.6	-8.474	-2.489
6.7	-9.037	-2.652
6.8	-9.731	-2.813
6.9	-10.558	-2.971
7	-11.513	-3.127
7.1	-12.592	-3.281
7.2	-13.796	-3.433
7.3	-15.096	-3.583
7.4	-16.465	-3.731
7.5	-17.835	-3.877
7.6	-19.077	-4.020
7.7	-20.054	-4.162
7.8	-20.617	-4.302
7.9	-20.746	-4.441
8	-20.531	-4.577
8.1	-20.106	-4.712
8.2	-19.590	-4.845
8.3	-19.045	-4.977
8.4	-18.514	-5.107
8.5	-18.013	-5.235
8.6	-17.551	-5.362
8.7	-17.133	-5.488
8.8	-16.770	-5.612
8.9	-16.457	-5.735
9	-16.195	-5.856
9.1	-15.990	-5.976
9.2	-15.828	-6.095
9.3	-15.711	-6.212
9.4	-15.632	-6.328
9.5	-15.583	-6.443
9.6	-15.561	-6.557
9.7	-15.562	-6.669
9.8	-15.578	-6.781
9.9	-15.607	-6.891

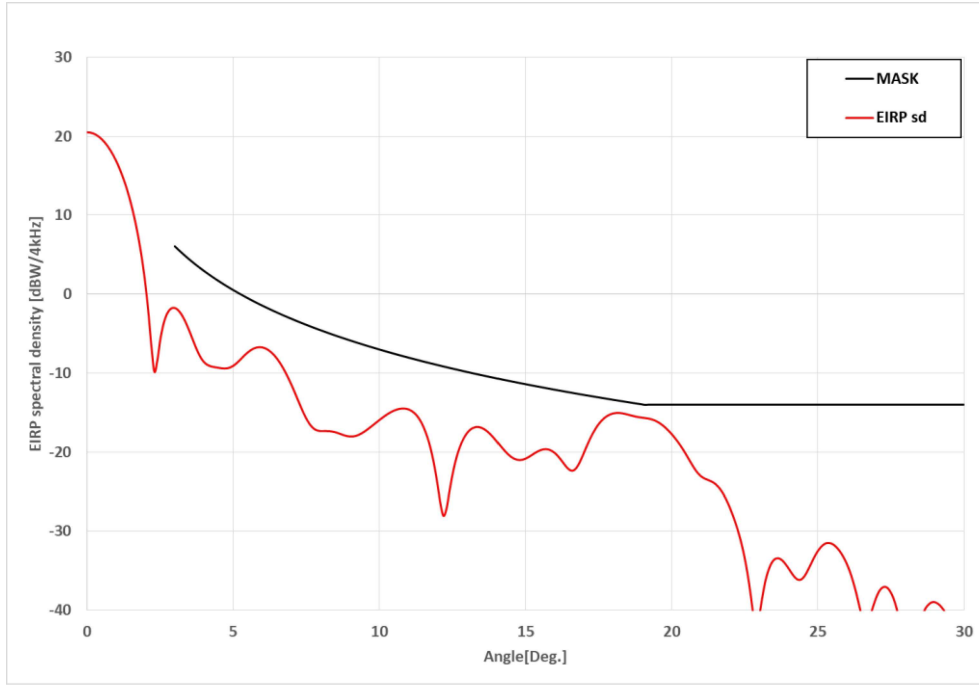
10	-15.645	-7.000
10.1	-15.684	-7.108
10.2	-15.717	-7.215
10.3	-15.737	-7.321
10.4	-15.734	-7.426
10.5	-15.700	-7.530
10.6	-15.630	-7.633
10.7	-15.525	-7.735
10.8	-15.389	-7.836
10.9	-15.237	-7.936
11	-15.085	-8.035
11.1	-14.952	-8.133
11.2	-14.857	-8.230
11.3	-14.824	-8.327
11.4	-14.864	-8.423
11.5	-14.992	-8.517
11.6	-15.227	-8.611
11.7	-15.569	-8.705
11.8	-16.042	-8.797
11.9	-16.652	-8.889
12	-17.416	-8.980
12.1	-18.360	-9.070
12.2	-19.511	-9.159
12.3	-20.916	-9.248
12.4	-22.632	-9.336
12.5	-24.717	-9.423
12.6	-27.144	-9.509
12.7	-29.374	-9.595
12.8	-29.832	-9.680
12.9	-28.167	-9.765
13	-25.990	-9.849
13.1	-24.104	-9.932
13.2	-22.598	-10.014
13.3	-21.433	-10.096
13.4	-20.535	-10.178
13.5	-19.849	-10.258
13.6	-19.345	-10.338
13.7	-18.977	-10.418
13.8	-18.721	-10.497
13.9	-18.555	-10.575
14	-18.461	-10.653
14.1	-18.416	-10.730
14.2	-18.423	-10.807
14.3	-18.468	-10.883
14.4	-18.550	-10.959
14.5	-18.676	-11.034
14.6	-18.840	-11.109
14.7	-19.044	-11.183
14.8	-19.280	-11.257
14.9	-19.528	-11.330
15	-19.761	-11.402
15.1	-19.936	-11.474

15.2	-20.011	-11.546
15.3	-19.956	-11.617
15.4	-19.759	-11.688
15.5	-19.435	-11.758
15.6	-19.027	-11.828
15.7	-18.569	-11.897
15.8	-18.101	-11.966
15.9	-17.656	-12.035
16	-17.250	-12.103
16.1	-16.905	-12.171
16.2	-16.630	-12.238
16.3	-16.433	-12.305
16.4	-16.332	-12.371
16.5	-16.317	-12.437
16.6	-16.401	-12.503
16.7	-16.576	-12.568
16.8	-16.812	-12.633
16.9	-17.109	-12.697
17	-17.397	-12.761
17.1	-17.631	-12.825
17.2	-17.763	-12.888
17.3	-17.731	-12.951
17.4	-17.551	-13.014
17.5	-17.229	-13.076
17.6	-16.811	-13.138
17.7	-16.363	-13.199
17.8	-15.902	-13.261
17.9	-15.473	-13.321
18	-15.090	-13.382
18.1	-14.758	-13.442
18.2	-14.507	-13.502
18.3	-14.321	-13.561
18.4	-14.215	-13.620
18.5	-14.193	-13.679
18.6	-14.239	-13.738
18.7	-14.371	-13.796
18.8	-14.563	-13.854
18.9	-14.804	-13.912
19	-15.092	-13.969
19.1	-15.392	-14.026
19.2	-15.698	-14.000
19.3	-15.993	-14.000
19.4	-16.257	-14.000
19.5	-16.508	-14.000
19.6	-16.727	-14.000
19.7	-16.922	-14.000
19.8	-17.111	-14.000
19.9	-17.288	-14.000
20	-17.473	-14.000
20.1	-17.675	-14.000
20.2	-17.902	-14.000
20.3	-18.179	-14.000

20.4	-18.510	-14.000
20.5	-18.914	-14.000
20.6	-19.404	-14.000
20.7	-19.980	-14.000
20.8	-20.655	-14.000
20.9	-21.423	-14.000
21	-22.270	-14.000
21.1	-23.184	-14.000
21.2	-24.143	-14.000
21.3	-25.105	-14.000
21.4	-26.041	-14.000
21.5	-26.914	-14.000
21.6	-27.673	-14.000
21.7	-28.300	-14.000
21.8	-28.759	-14.000
21.9	-29.037	-14.000
22	-29.158	-14.000
22.1	-29.118	-14.000
22.2	-28.975	-14.000
22.3	-28.789	-14.000
22.4	-28.571	-14.000
22.5	-28.386	-14.000
22.6	-28.266	-14.000
22.7	-28.228	-14.000
22.8	-28.285	-14.000
22.9	-28.461	-14.000
23	-28.754	-14.000
23.1	-29.162	-14.000
23.2	-29.695	-14.000
23.3	-30.350	-14.000
23.4	-31.131	-14.000
23.5	-32.051	-14.000
23.6	-33.150	-14.000
23.7	-34.486	-14.000
23.8	-36.161	-14.000
23.9	-38.360	-14.000
24	-41.556	-14.000
24.1	-46.898	-14.000
24.2	-64.152	-14.000
24.3	-49.561	-14.000
24.4	-42.968	-14.000
24.5	-39.497	-14.000
24.6	-37.268	-14.000
24.7	-35.741	-14.000
24.8	-34.735	-14.000
24.9	-34.074	-14.000
25	-33.677	-14.000
25.1	-33.534	-14.000
25.2	-33.558	-14.000

25.3	-33.743	-14.000
25.4	-34.097	-14.000
25.5	-34.596	-14.000
25.6	-35.289	-14.000
25.7	-36.197	-14.000
25.8	-37.308	-14.000
25.9	-38.670	-14.000
26	-40.186	-14.000
26.1	-41.607	-14.000
26.2	-42.486	-14.000
26.3	-42.527	-14.000
26.4	-41.883	-14.000
26.5	-41.023	-14.000
26.6	-40.244	-14.000
26.7	-39.676	-14.000
26.8	-39.319	-14.000
26.9	-39.132	-14.000
27	-39.113	-14.000
27.1	-39.185	-14.000
27.2	-39.285	-14.000
27.3	-39.339	-14.000
27.4	-39.308	-14.000
27.5	-39.116	-14.000
27.6	-38.722	-14.000
27.7	-38.213	-14.000
27.8	-37.602	-14.000
27.9	-36.969	-14.000
28	-36.410	-14.000
28.1	-35.986	-14.000
28.2	-35.719	-14.000
28.3	-35.628	-14.000
28.4	-35.795	-14.000
28.5	-36.150	-14.000
28.6	-36.698	-14.000
28.7	-37.462	-14.000
28.8	-38.356	-14.000
28.9	-39.334	-14.000
29	-40.347	-14.000
29.1	-41.265	-14.000
29.2	-42.014	-14.000
29.3	-42.511	-14.000
29.4	-42.595	-14.000
29.5	-42.268	-14.000
29.6	-41.592	-14.000
29.7	-40.666	-14.000
29.8	-39.559	-14.000
29.9	-38.433	-14.000
30	-37.336	-14.000

1.3.4. Elevation Pattern for Co-pol, Narrow Angle (0°~30°)



-18.80dBW/4kHz Input power spectral density @ f=14.50GHz

▪ **FCC EIRP spectral density regulation**

18-25log(θ)	dBW/4kHz	for	$3.0^\circ \leq \theta \leq 19.1^\circ$
-14	dBW/4kHz	for	$19.1^\circ < \theta \leq 180^\circ$

The v80E's Radiation pattern meets the FCC EIRP spectral density mask when the input powers spectral density is @ -18.80 dBW/ 4kHz

2.3.4. Elevation Pattern for Co-pol (0°~30°)

F= 14.50GHz, -18.80dBW/4KHz EIRP sd		
0	20.527	
0.1	20.491	
0.2	20.385	
0.3	20.207	
0.4	19.959	
0.5	19.636	
0.6	19.238	
0.7	18.762	
0.8	18.205	
0.9	17.561	
1	16.826	
1.1	15.992	
1.2	15.052	
1.3	13.992	
1.4	12.800	
1.5	11.454	
1.6	9.931	
1.7	8.194	
1.8	6.185	
1.9	3.833	
2	0.998	
2.1	-2.488	
2.2	-6.700	
2.3	-9.832	
2.4	-8.417	
2.5	-5.818	
2.6	-3.956	
2.7	-2.764	
2.8	-2.075	
2.9	-1.761	
3	-1.744	6.072
3.1	-1.976	5.716
3.2	-2.417	5.371
3.3	-3.035	5.037
3.4	-3.806	4.713
3.5	-4.683	4.398
3.6	-5.624	4.092
3.7	-6.560	3.795
3.8	-7.408	3.505
3.9	-8.108	3.223
4	-8.603	2.949
4.1	-8.919	2.680
4.2	-9.095	2.419
4.3	-9.195	2.163
4.4	-9.265	1.914
4.5	-9.327	1.670
4.6	-9.383	1.431
4.7	-9.411	1.198
4.8	-9.385	0.969

4.9	-9.279	0.745
5	-9.079	0.526
5.1	-8.794	0.311
5.2	-8.447	0.100
5.3	-8.071	-0.107
5.4	-7.705	-0.310
5.5	-7.370	-0.509
5.6	-7.094	-0.705
5.7	-6.886	-0.897
5.8	-6.755	-1.086
5.9	-6.708	-1.271
6	-6.742	-1.454
6.1	-6.864	-1.633
6.2	-7.067	-1.810
6.3	-7.353	-1.984
6.4	-7.721	-2.154
6.5	-8.169	-2.323
6.6	-8.697	-2.489
6.7	-9.303	-2.652
6.8	-9.982	-2.813
6.9	-10.732	-2.971
7	-11.539	-3.127
7.1	-12.394	-3.281
7.2	-13.276	-3.433
7.3	-14.152	-3.583
7.4	-14.992	-3.731
7.5	-15.743	-3.877
7.6	-16.368	-4.020
7.7	-16.835	-4.162
7.8	-17.135	-4.302
7.9	-17.293	-4.441
8	-17.352	-4.577
8.1	-17.354	-4.712
8.2	-17.350	-4.845
8.3	-17.362	-4.977
8.4	-17.409	-5.107
8.5	-17.497	-5.235
8.6	-17.614	-5.362
8.7	-17.751	-5.488
8.8	-17.881	-5.612
8.9	-17.984	-5.735
9	-18.039	-5.856
9.1	-18.032	-5.976
9.2	-17.957	-6.095
9.3	-17.820	-6.212
9.4	-17.627	-6.328
9.5	-17.394	-6.443
9.6	-17.129	-6.557
9.7	-16.845	-6.669
9.8	-16.553	-6.781
9.9	-16.253	-6.891

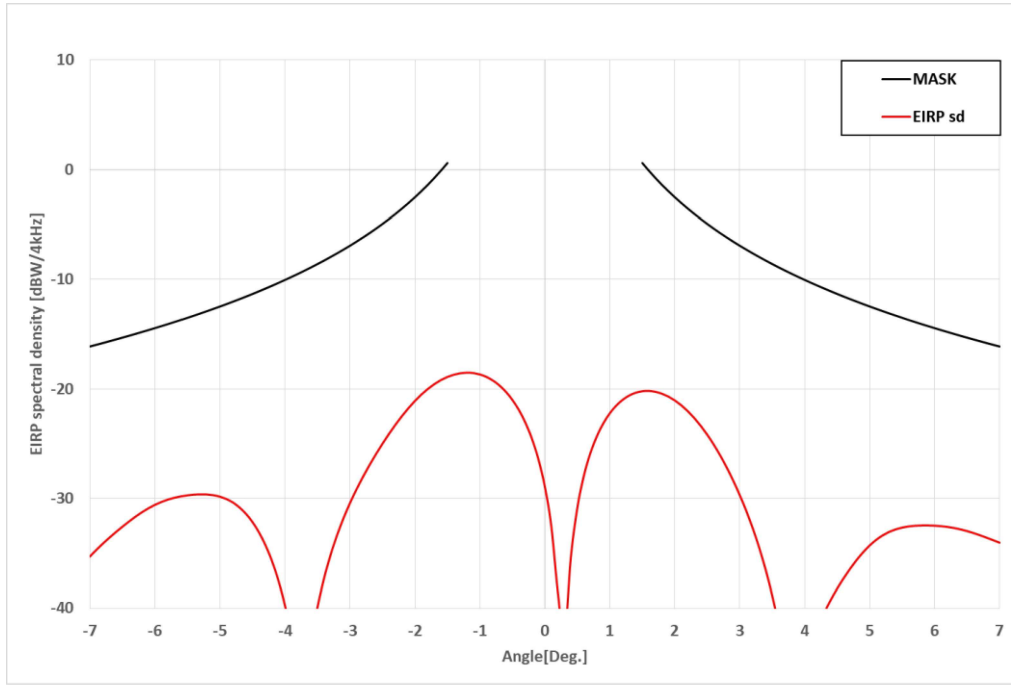
10	-15.959	-7.000
10.1	-15.675	-7.108
10.2	-15.406	-7.215
10.3	-15.161	-7.321
10.4	-14.945	-7.426
10.5	-14.761	-7.530
10.6	-14.622	-7.633
10.7	-14.524	-7.735
10.8	-14.483	-7.836
10.9	-14.502	-7.936
11	-14.593	-8.035
11.1	-14.772	-8.133
11.2	-15.047	-8.230
11.3	-15.448	-8.327
11.4	-15.984	-8.423
11.5	-16.692	-8.517
11.6	-17.601	-8.611
11.7	-18.748	-8.705
11.8	-20.203	-8.797
11.9	-22.011	-8.889
12	-24.222	-8.980
12.1	-26.607	-9.070
12.2	-28.058	-9.159
12.3	-27.217	-9.248
12.4	-25.085	-9.336
12.5	-23.032	-9.423
12.6	-21.339	-9.509
12.7	-20.015	-9.595
12.8	-18.990	-9.680
12.9	-18.206	-9.765
13	-17.630	-9.849
13.1	-17.221	-9.932
13.2	-16.965	-10.014
13.3	-16.838	-10.096
13.4	-16.829	-10.178
13.5	-16.926	-10.258
13.6	-17.116	-10.338
13.7	-17.390	-10.418
13.8	-17.733	-10.497
13.9	-18.130	-10.575
14	-18.566	-10.653
14.1	-19.022	-10.730
14.2	-19.471	-10.807
14.3	-19.903	-10.883
14.4	-20.280	-10.959
14.5	-20.597	-11.034
14.6	-20.833	-11.109
14.7	-20.972	-11.183
14.8	-21.021	-11.257
14.9	-20.970	-11.330
15	-20.838	-11.402
15.1	-20.646	-11.474

15.2	-20.415	-11.546
15.3	-20.174	-11.617
15.4	-19.956	-11.688
15.5	-19.775	-11.758
15.6	-19.665	-11.828
15.7	-19.633	-11.897
15.8	-19.693	-11.966
15.9	-19.857	-12.035
16	-20.118	-12.103
16.1	-20.485	-12.171
16.2	-20.927	-12.238
16.3	-21.418	-12.305
16.4	-21.892	-12.371
16.5	-22.240	-12.437
16.6	-22.374	-12.503
16.7	-22.177	-12.568
16.8	-21.672	-12.633
16.9	-20.935	-12.697
17	-20.076	-12.761
17.1	-19.216	-12.825
17.2	-18.390	-12.888
17.3	-17.657	-12.951
17.4	-17.017	-13.014
17.5	-16.473	-13.076
17.6	-16.036	-13.138
17.7	-15.681	-13.199
17.8	-15.418	-13.261
17.9	-15.229	-13.321
18	-15.107	-13.382
18.1	-15.053	-13.442
18.2	-15.044	-13.502
18.3	-15.088	-13.561
18.4	-15.161	-13.620
18.5	-15.253	-13.679
18.6	-15.357	-13.738
18.7	-15.447	-13.796
18.8	-15.534	-13.854
18.9	-15.596	-13.912
19	-15.647	-13.969
19.1	-15.699	-14.026
19.2	-15.751	-14.000
19.3	-15.844	-14.000
19.4	-15.966	-14.000
19.5	-16.136	-14.000
19.6	-16.360	-14.000
19.7	-16.627	-14.000
19.8	-16.950	-14.000
19.9	-17.312	-14.000
20	-17.713	-14.000
20.1	-18.154	-14.000
20.2	-18.631	-14.000
20.3	-19.159	-14.000

20.4	-19.726	-14.000
20.5	-20.335	-14.000
20.6	-20.972	-14.000
20.7	-21.595	-14.000
20.8	-22.184	-14.000
20.9	-22.676	-14.000
21	-23.047	-14.000
21.1	-23.303	-14.000
21.2	-23.468	-14.000
21.3	-23.620	-14.000
21.4	-23.795	-14.000
21.5	-24.047	-14.000
21.6	-24.411	-14.000
21.7	-24.889	-14.000
21.8	-25.494	-14.000
21.9	-26.222	-14.000
22	-27.061	-14.000
22.1	-28.011	-14.000
22.2	-29.085	-14.000
22.3	-30.291	-14.000
22.4	-31.683	-14.000
22.5	-33.340	-14.000
22.6	-35.367	-14.000
22.7	-37.821	-14.000
22.8	-40.573	-14.000
22.9	-42.094	-14.000
23	-40.804	-14.000
23.1	-38.502	-14.000
23.2	-36.515	-14.000
23.3	-35.129	-14.000
23.4	-34.193	-14.000
23.5	-33.637	-14.000
23.6	-33.434	-14.000
23.7	-33.472	-14.000
23.8	-33.732	-14.000
23.9	-34.158	-14.000
24	-34.683	-14.000
24.1	-35.244	-14.000
24.2	-35.751	-14.000
24.3	-36.092	-14.000
24.4	-36.167	-14.000
24.5	-35.928	-14.000
24.6	-35.407	-14.000
24.7	-34.702	-14.000
24.8	-33.939	-14.000
24.9	-33.202	-14.000
25	-32.553	-14.000
25.1	-32.062	-14.000
25.2	-31.709	-14.000

25.3	-31.514	-14.000
25.4	-31.497	-14.000
25.5	-31.605	-14.000
25.6	-31.866	-14.000
25.7	-32.253	-14.000
25.8	-32.745	-14.000
25.9	-33.380	-14.000
26	-34.143	-14.000
26.1	-35.066	-14.000
26.2	-36.192	-14.000
26.3	-37.513	-14.000
26.4	-39.032	-14.000
26.5	-40.548	-14.000
26.6	-41.588	-14.000
26.7	-41.622	-14.000
26.8	-40.740	-14.000
26.9	-39.552	-14.000
27	-38.469	-14.000
27.1	-37.650	-14.000
27.2	-37.197	-14.000
27.3	-37.036	-14.000
27.4	-37.204	-14.000
27.5	-37.717	-14.000
27.6	-38.518	-14.000
27.7	-39.702	-14.000
27.8	-41.227	-14.000
27.9	-43.016	-14.000
28	-45.011	-14.000
28.1	-46.300	-14.000
28.2	-46.092	-14.000
28.3	-44.745	-14.000
28.4	-43.046	-14.000
28.5	-41.667	-14.000
28.6	-40.571	-14.000
28.7	-39.754	-14.000
28.8	-39.286	-14.000
28.9	-39.023	-14.000
29	-38.977	-14.000
29.1	-39.137	-14.000
29.2	-39.439	-14.000
29.3	-39.889	-14.000
29.4	-40.478	-14.000
29.5	-41.211	-14.000
29.6	-42.132	-14.000
29.7	-43.269	-14.000
29.8	-44.687	-14.000
29.9	-46.355	-14.000
30	-47.765	-14.000

1.1.3. Azimuth Pattern for Cross-pol, Narrow angle (-7°~7°)



-18.80dBW/4kHz Input power spectral density @ f=13.75GHz

▪ **FCC EIRP spectral density regulation**

$5-25\log(\theta) \quad \text{dBW/4kHz} \quad \text{for} \quad 1.5^\circ \leq \theta \leq 7.0^\circ$
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The v80E's Radiation pattern meets the FCC EIRP spectral density mask when the input powers spectral density is @ -18.80 dBW/ 4kHz

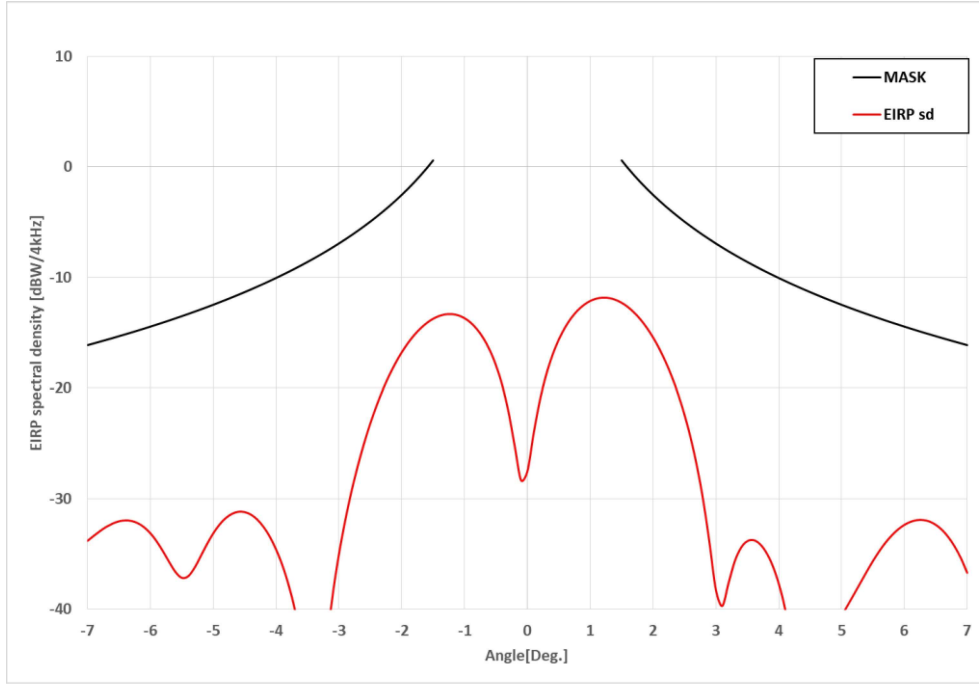
2.1.3. Azimuth Pattern for Cross-pol (-7°~7°)

F=13.75GHz, -18.80dBW/4KHz EIRP sd		
-7	-35.313	-16.127
-6.9	-34.697	-15.971
-6.8	-34.127	-15.813
-6.7	-33.590	-15.652
-6.6	-33.080	-15.489
-6.5	-32.591	-15.323
-6.4	-32.121	-15.154
-6.3	-31.678	-14.984
-6.2	-31.273	-14.810
-6.1	-30.908	-14.633
-6	-30.591	-14.454
-5.9	-30.328	-14.271
-5.8	-30.110	-14.086
-5.7	-29.941	-13.897
-5.6	-29.812	-13.705
-5.5	-29.717	-13.509
-5.4	-29.654	-13.310
-5.3	-29.630	-13.107
-5.2	-29.643	-12.900
-5.1	-29.709	-12.689
-5	-29.844	-12.474
-4.9	-30.063	-12.255
-4.8	-30.381	-12.031
-4.7	-30.830	-11.802
-4.6	-31.416	-11.569
-4.5	-32.168	-11.330
-4.4	-33.115	-11.086
-4.3	-34.285	-10.837
-4.2	-35.730	-10.581
-4.1	-37.528	-10.320
-4	-39.780	-10.051
-3.9	-42.581	-9.777
-3.8	-45.485	-9.495
-3.7	-45.844	-9.205
-3.6	-43.015	-8.908
-3.5	-39.899	-8.602
-3.4	-37.306	-8.287
-3.3	-35.176	-7.963
-3.2	-33.369	-7.629
-3.1	-31.808	-7.284
-3	-30.425	-6.928
-2.9	-29.175	-6.560
-2.8	-28.028	-6.179
-2.7	-26.959	-5.784
-2.6	-25.954	-5.374
-2.5	-25.003	-4.949
-2.4	-24.106	-4.505
-2.3	-23.264	-4.043
-2.2	-22.478	-3.561

-2.1	-21.755	-3.055
-2	-21.099	-2.526
-1.9	-20.512	-1.969
-1.8	-19.998	-1.382
-1.7	-19.559	-0.761
-1.6	-19.194	-0.103
-1.5	-18.908	0.598
-1.4	-18.698	
-1.3	-18.567	
-1.2	-18.518	
-1.1	-18.553	
-1	-18.681	
-0.9	-18.904	
-0.8	-19.234	
-0.7	-19.683	
-0.6	-20.264	
-0.5	-21.005	
-0.4	-21.929	
-0.3	-23.086	
-0.2	-24.545	
-0.1	-26.422	
0	-28.946	
0.1	-32.589	
0.2	-38.565	
0.3	-42.691	
0.4	-35.382	
0.5	-30.858	
0.6	-27.945	
0.7	-25.879	
0.8	-24.330	
0.9	-23.141	
1	-22.222	
1.1	-21.513	
1.2	-20.982	
1.3	-20.598	
1.4	-20.346	
1.5	-20.213	0.598
1.6	-20.186	-0.103
1.7	-20.262	-0.761
1.8	-20.434	-1.382
1.9	-20.698	-1.969
2	-21.054	-2.526
2.1	-21.499	-3.055
2.2	-22.035	-3.561
2.3	-22.662	-4.043
2.4	-23.379	-4.505
2.5	-24.188	-4.949
2.6	-25.093	-5.374
2.7	-26.089	-5.784
2.8	-27.186	-6.179
2.9	-28.385	-6.560

3	-29.697	-6.928
3.1	-31.138	-7.284
3.2	-32.730	-7.629
3.3	-34.512	-7.963
3.4	-36.534	-8.287
3.5	-38.866	-8.602
3.6	-41.558	-8.908
3.7	-44.492	-9.205
3.8	-46.847	-9.495
3.9	-46.934	-9.777
4	-45.267	-10.051
4.1	-43.383	-10.320
4.2	-41.769	-10.581
4.3	-40.421	-10.837
4.4	-39.256	-11.086
4.5	-38.221	-11.330
4.6	-37.278	-11.569
4.7	-36.404	-11.802
4.8	-35.614	-12.031
4.9	-34.909	-12.255
5	-34.296	-12.474
5.1	-33.784	-12.689
5.2	-33.375	-12.900
5.3	-33.054	-13.107
5.4	-32.823	-13.310
5.5	-32.661	-13.509
5.6	-32.556	-13.705
5.7	-32.495	-13.897
5.8	-32.470	-14.086
5.9	-32.467	-14.271
6	-32.490	-14.454
6.1	-32.535	-14.633
6.2	-32.604	-14.810
6.3	-32.701	-14.984
6.4	-32.829	-15.154
6.5	-32.984	-15.323
6.6	-33.165	-15.489
6.7	-33.369	-15.652
6.8	-33.586	-15.813
6.9	-33.812	-15.971
7	-34.042	-16.127

1.3.3. Azimuth Pattern for Cross-pol, Narrow angle (-7°~7°)



-18.80dBW/4kHz Input power spectral density @ f=14.50GHz

▪ **FCC EIRP spectral density regulation**

$5-25\log(\theta) \quad \text{dBW/4kHz} \quad \text{for} \quad 1.5^\circ \leq \theta \leq 7.0^\circ$
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The v80E's Radiation pattern meets the FCC EIRP spectral density mask when the input powers spectral density is @ -18.80 dBW/ 4kHz

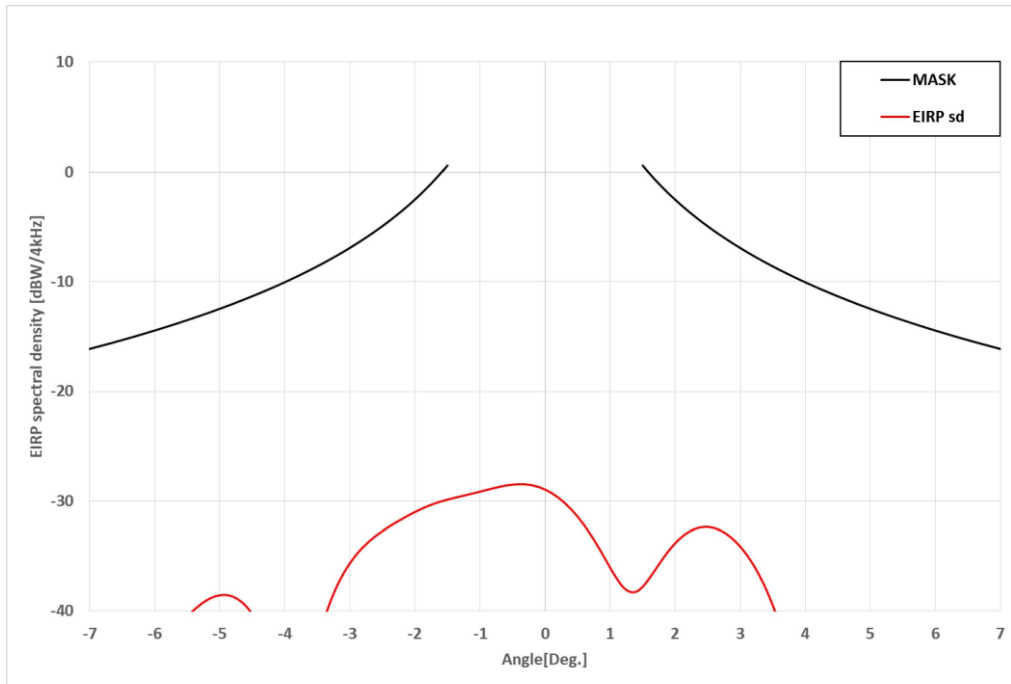
2.3.3. Azimuth Pattern for Cross-pol (-7°~7°)

F=14.50GHz, -18.80dBW/4KHz EIRP sd		
-7	-33.818	-16.127
-6.9	-33.359	-15.971
-6.8	-32.930	-15.813
-6.7	-32.549	-15.652
-6.6	-32.254	-15.489
-6.5	-32.052	-15.323
-6.4	-31.971	-15.154
-6.3	-32.022	-14.984
-6.2	-32.222	-14.810
-6.1	-32.592	-14.633
-6	-33.134	-14.454
-5.9	-33.868	-14.271
-5.8	-34.760	-14.086
-5.7	-35.745	-13.897
-5.6	-36.647	-13.705
-5.5	-37.167	-13.509
-5.4	-37.032	-13.310
-5.3	-36.291	-13.107
-5.2	-35.224	-12.900
-5.1	-34.125	-12.689
-5	-33.147	-12.474
-4.9	-32.350	-12.255
-4.8	-31.756	-12.031
-4.7	-31.372	-11.802
-4.6	-31.186	-11.569
-4.5	-31.216	-11.330
-4.4	-31.444	-11.086
-4.3	-31.887	-10.837
-4.2	-32.551	-10.581
-4.1	-33.442	-10.320
-4	-34.596	-10.051
-3.9	-36.026	-9.777
-3.8	-37.818	-9.495
-3.7	-40.067	-9.205
-3.6	-43.079	-8.908
-3.5	-47.754	-8.602
-3.4	-59.358	-8.287
-3.3	-52.207	-7.963
-3.2	-43.742	-7.629
-3.1	-38.788	-7.284
-3	-35.075	-6.928
-2.9	-32.003	-6.560
-2.8	-29.364	-6.179
-2.7	-27.057	-5.784
-2.6	-25.009	-5.374
-2.5	-23.197	-4.949
-2.4	-21.581	-4.505
-2.3	-20.149	-4.043
-2.2	-18.880	-3.561

-2.1	-17.761	-3.055
-2	-16.782	-2.526
-1.9	-15.934	-1.969
-1.8	-15.210	-1.382
-1.7	-14.605	-0.761
-1.6	-14.115	-0.103
-1.5	-13.740	0.598
-1.4	-13.480	
-1.3	-13.338	
-1.2	-13.322	
-1.1	-13.433	
-1	-13.692	
-0.9	-14.106	
-0.8	-14.702	
-0.7	-15.509	
-0.6	-16.569	
-0.5	-17.955	
-0.4	-19.764	
-0.3	-22.163	
-0.2	-25.296	
-0.1	-28.352	
0	-27.538	
0.1	-24.090	
0.2	-21.089	
0.3	-18.789	
0.4	-17.016	
0.5	-15.624	
0.6	-14.524	
0.7	-13.658	
0.8	-12.985	
0.9	-12.483	
1	-12.129	
1.1	-11.916	
1.2	-11.830	
1.3	-11.867	
1.4	-12.024	
1.5	-12.295	0.598
1.6	-12.683	-0.103
1.7	-13.186	-0.761
1.8	-13.808	-1.382
1.9	-14.555	-1.969
2	-15.433	-2.526
2.1	-16.456	-3.055
2.2	-17.638	-3.561
2.3	-19.000	-4.043
2.4	-20.576	-4.505
2.5	-22.403	-4.949
2.6	-24.552	-5.374
2.7	-27.113	-5.784
2.8	-30.229	-6.179
2.9	-34.080	-6.560

3	-38.267	-6.928
3.1	-39.724	-7.284
3.2	-37.683	-7.629
3.3	-35.678	-7.963
3.4	-34.441	-8.287
3.5	-33.848	-8.602
3.6	-33.757	-8.908
3.7	-34.106	-9.205
3.8	-34.859	-9.495
3.9	-36.031	-9.777
4	-37.687	-10.051
4.1	-39.962	-10.320
4.2	-43.173	-10.581
4.3	-48.199	-10.837
4.4	-59.286	-11.086
4.5	-56.188	-11.330
4.6	-48.614	-11.569
4.7	-45.168	-11.802
4.8	-43.119	-12.031
4.9	-41.724	-12.255
5	-40.625	-12.474
5.1	-39.631	-12.689
5.2	-38.635	-12.900
5.3	-37.620	-13.107
5.4	-36.607	-13.310
5.5	-35.641	-13.509
5.6	-34.759	-13.705
5.7	-33.978	-13.897
5.8	-33.320	-14.086
5.9	-32.783	-14.271
6	-32.373	-14.454
6.1	-32.092	-14.633
6.2	-31.944	-14.810
6.3	-31.937	-14.984
6.4	-32.072	-15.154
6.5	-32.373	-15.323
6.6	-32.837	-15.489
6.7	-33.488	-15.652
6.8	-34.338	-15.813
6.9	-35.403	-15.971
7	-36.715	-16.127

1.1.5. Elevation Pattern for Cross-pol, Narrow angle (-7°~7°)



-18.80dBW/4kHz Input power spectral density @ f=13.75GHz

▪ **FCC EIRP spectral density regulation**

$$5-25\log(\theta) \quad \text{dBW/4kHz} \quad \text{for} \quad 1.5^\circ \leq \theta \leq 7.0^\circ$$

The v80E's Radiation pattern meets the FCC EIRP spectral density mask when the input powers spectral density is @ -18.80 dBW/ 4kHz

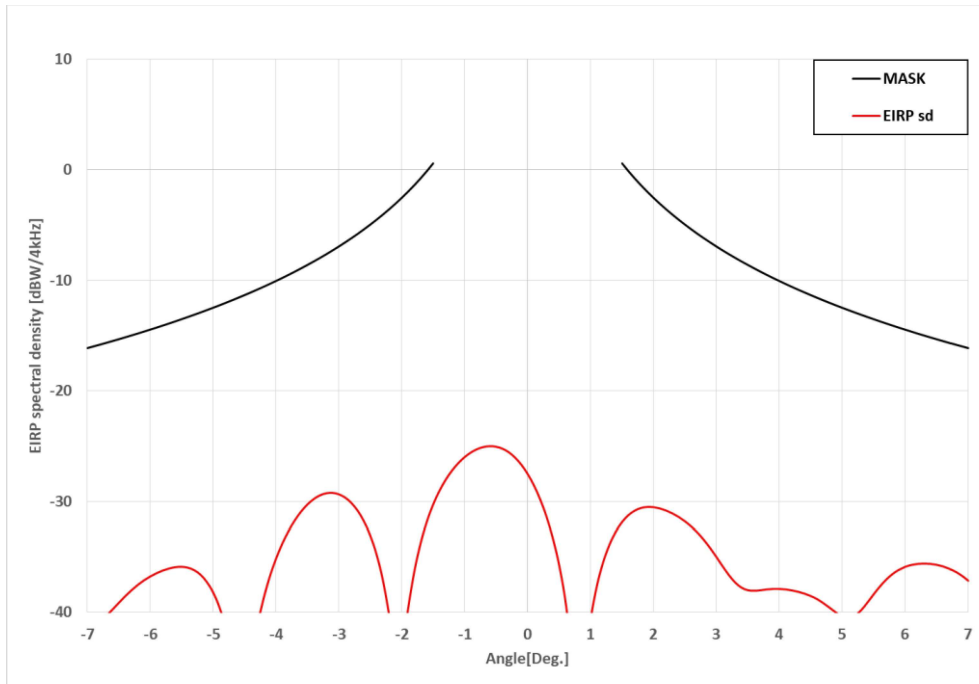
2.1.5. Elevation Pattern for Cross-pol (-7°~7°)

F=13.75GHz, -18.80dBW/4KHz EIRP sd		
-7	-55.495	-16.127
-6.9	-55.562	-15.971
-6.8	-54.706	-15.813
-6.7	-53.354	-15.652
-6.6	-51.899	-15.489
-6.5	-50.462	-15.323
-6.4	-49.116	-15.154
-6.3	-47.857	-14.984
-6.2	-46.678	-14.810
-6.1	-45.579	-14.633
-6	-44.559	-14.454
-5.9	-43.613	-14.271
-5.8	-42.737	-14.086
-5.7	-41.931	-13.897
-5.6	-41.197	-13.705
-5.5	-40.523	-13.509
-5.4	-39.933	-13.310
-5.3	-39.427	-13.107
-5.2	-39.018	-12.900
-5.1	-38.722	-12.689
-5	-38.558	-12.474
-4.9	-38.532	-12.255
-4.8	-38.672	-12.031
-4.7	-38.992	-11.802
-4.6	-39.505	-11.569
-4.5	-40.259	-11.330
-4.4	-41.282	-11.086
-4.3	-42.653	-10.837
-4.2	-44.508	-10.581
-4.1	-47.123	-10.320
-4	-51.157	-10.051
-3.9	-58.699	-9.777
-3.8	-58.132	-9.495
-3.7	-50.409	-9.205
-3.6	-46.078	-8.908
-3.5	-43.131	-8.602
-3.4	-40.927	-8.287
-3.3	-39.190	-7.963
-3.2	-37.782	-7.629
-3.1	-36.626	-7.284
-3	-35.672	-6.928
-2.9	-34.873	-6.560
-2.8	-34.210	-6.179
-2.7	-33.646	-5.784
-2.6	-33.159	-5.374
-2.5	-32.731	-4.949
-2.4	-32.345	-4.505
-2.3	-31.980	-4.043
-2.2	-31.639	-3.561

-2.1	-31.313	-3.055
-2	-31.003	-2.526
-1.9	-30.717	-1.969
-1.8	-30.460	-1.382
-1.7	-30.231	-0.761
-1.6	-30.034	-0.103
-1.5	-29.864	0.598
-1.4	-29.710	
-1.3	-29.569	
-1.2	-29.430	
-1.1	-29.285	
-1	-29.135	
-0.9	-28.985	
-0.8	-28.833	
-0.7	-28.697	
-0.6	-28.581	
-0.5	-28.496	
-0.4	-28.456	
-0.3	-28.474	
-0.2	-28.553	
-0.1	-28.710	
0	-28.946	
0.1	-29.264	
0.2	-29.670	
0.3	-30.162	
0.4	-30.740	
0.5	-31.412	
0.6	-32.178	
0.7	-33.035	
0.8	-33.985	
0.9	-35.002	
1	-36.039	
1.1	-37.021	
1.2	-37.812	
1.3	-38.231	
1.4	-38.230	
1.5	-37.779	0.598
1.6	-37.039	-0.103
1.7	-36.177	-0.761
1.8	-35.309	-1.382
1.9	-34.509	-1.969
2	-33.820	-2.526
2.1	-33.258	-3.055
2.2	-32.829	-3.561
2.3	-32.534	-4.043
2.4	-32.376	-4.505
2.5	-32.345	-4.949
2.6	-32.447	-5.374
2.7	-32.676	-5.784
2.8	-33.030	-6.179
2.9	-33.515	-6.560

3	-34.127	-6.928
3.1	-34.875	-7.284
3.2	-35.767	-7.629
3.3	-36.816	-7.963
3.4	-38.042	-8.287
3.5	-39.472	-8.602
3.6	-41.132	-8.908
3.7	-43.073	-9.205
3.8	-45.348	-9.495
3.9	-48.015	-9.777
4	-51.134	-10.051
4.1	-54.487	-10.320
4.2	-57.113	-10.581
4.3	-57.485	-10.837
4.4	-56.425	-11.086
4.5	-55.291	-11.330
4.6	-54.219	-11.569
4.7	-53.188	-11.802
4.8	-52.067	-12.031
4.9	-50.821	-12.255
5	-49.529	-12.474
5.1	-48.307	-12.689
5.2	-47.140	-12.900
5.3	-46.088	-13.107
5.4	-45.153	-13.310
5.5	-44.334	-13.509
5.6	-43.663	-13.705
5.7	-43.125	-13.897
5.8	-42.739	-14.086
5.9	-42.502	-14.271
6	-42.398	-14.454
6.1	-42.433	-14.633
6.2	-42.569	-14.810
6.3	-42.779	-14.984
6.4	-43.027	-15.154
6.5	-43.273	-15.323
6.6	-43.474	-15.489
6.7	-43.621	-15.652
6.8	-43.722	-15.813
6.9	-43.791	-15.971
7	-43.857	-16.127

1.3.5. Elevation Pattern for Cross-pol, Narrow angle (-7°~7°)



-18.80dBW/4kHz Input power spectral density @ f=14.50GHz

▪ **FCC EIRP spectral density regulation**

$5-25\log(\theta) \quad \text{dBW/4kHz} \quad \text{for} \quad 1.5^\circ \leq \theta \leq 7.0^\circ$
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The v80E's Radiation pattern meets the FCC EIRP spectral density mask when the input powers spectral density is @ -18.80 dBW/ 4kHz

2.3.5. Elevation Pattern for Cross-pol (-7°~7°)

F=14.50GHz, -18.80dBW/4KHz EIRP sd		
-7	-41.626	-16.127
-6.9	-41.303	-15.971
-6.8	-40.873	-15.813
-6.7	-40.350	-15.652
-6.6	-39.770	-15.489
-6.5	-39.166	-15.323
-6.4	-38.574	-15.154
-6.3	-38.034	-14.984
-6.2	-37.548	-14.810
-6.1	-37.129	-14.633
-6	-36.775	-14.454
-5.9	-36.477	-14.271
-5.8	-36.232	-14.086
-5.7	-36.051	-13.897
-5.6	-35.929	-13.705
-5.5	-35.896	-13.509
-5.4	-35.976	-13.310
-5.3	-36.200	-13.107
-5.2	-36.608	-12.900
-5.1	-37.262	-12.689
-5	-38.201	-12.474
-4.9	-39.536	-12.255
-4.8	-41.351	-12.031
-4.7	-43.728	-11.802
-4.6	-46.277	-11.569
-4.5	-46.793	-11.330
-4.4	-44.310	-11.086
-4.3	-41.332	-10.837
-4.2	-38.845	-10.581
-4.1	-36.833	-10.320
-4	-35.185	-10.051
-3.9	-33.818	-9.777
-3.8	-32.674	-9.495
-3.7	-31.713	-9.205
-3.6	-30.921	-8.908
-3.5	-30.283	-8.602
-3.4	-29.794	-8.287
-3.3	-29.455	-7.963
-3.2	-29.266	-7.629
-3.1	-29.229	-7.284
-3	-29.358	-6.928
-2.9	-29.655	-6.560
-2.8	-30.143	-6.179
-2.7	-30.844	-5.784
-2.6	-31.800	-5.374
-2.5	-33.077	-4.949
-2.4	-34.776	-4.505
-2.3	-37.091	-4.043
-2.2	-40.270	-3.561

-2.1	-44.010	-3.055
-2	-43.784	-2.526
-1.9	-39.760	-1.969
-1.8	-36.340	-1.382
-1.7	-33.785	-0.761
-1.6	-31.830	-0.103
-1.5	-30.285	0.598
-1.4	-29.045	
-1.3	-28.036	
-1.2	-27.210	
-1.1	-26.538	
-1	-25.998	
-0.9	-25.577	
-0.8	-25.270	
-0.7	-25.079	
-0.6	-25.003	
-0.5	-25.054	
-0.4	-25.239	
-0.3	-25.563	
-0.2	-26.051	
-0.1	-26.701	
0	-27.539	
0.1	-28.583	
0.2	-29.860	
0.3	-31.422	
0.4	-33.355	
0.5	-35.789	
0.6	-39.038	
0.7	-43.651	
0.8	-48.677	
0.9	-45.237	
1	-40.670	
1.1	-37.611	
1.2	-35.462	
1.3	-33.887	
1.4	-32.722	
1.5	-31.859	0.598
1.6	-31.246	-0.103
1.7	-30.840	-0.761
1.8	-30.598	-1.382
1.9	-30.503	-1.969
2	-30.524	-2.526
2.1	-30.636	-3.055
2.2	-30.829	-3.561
2.3	-31.089	-4.043
2.4	-31.411	-4.505
2.5	-31.803	-4.949
2.6	-32.269	-5.374
2.7	-32.818	-5.784
2.8	-33.466	-6.179
2.9	-34.203	-6.560

3	-35.014	-6.928
3.1	-35.859	-7.284
3.2	-36.662	-7.629
3.3	-37.326	-7.963
3.4	-37.787	-8.287
3.5	-38.016	-8.602
3.6	-38.065	-8.908
3.7	-38.017	-9.205
3.8	-37.946	-9.495
3.9	-37.896	-9.777
4	-37.895	-10.051
4.1	-37.942	-10.320
4.2	-38.030	-10.581
4.3	-38.156	-10.837
4.4	-38.325	-11.086
4.5	-38.542	-11.330
4.6	-38.818	-11.569
4.7	-39.185	-11.802
4.8	-39.597	-12.031
4.9	-40.032	-12.255
5	-40.381	-12.474
5.1	-40.506	-12.689
5.2	-40.320	-12.900
5.3	-39.834	-13.107
5.4	-39.140	-13.310
5.5	-38.386	-13.509
5.6	-37.674	-13.705
5.7	-37.054	-13.897
5.8	-36.552	-14.086
5.9	-36.175	-14.271
6	-35.901	-14.454
6.1	-35.728	-14.633
6.2	-35.631	-14.810
6.3	-35.600	-14.984
6.4	-35.627	-15.154
6.5	-35.712	-15.323
6.6	-35.855	-15.489
6.7	-36.065	-15.652
6.8	-36.347	-15.813
6.9	-36.709	-15.971
7	-37.158	-16.127