

Request for Routine Processing of Non-Compliant Antenna

The antenna at issue is a C-band Prodelin 1251(2.4m) (“Antenna”). This Antenna does not strictly comply with Section 25.209 of the Regulations. However, according to Section 25.218 of the Regulations, an applicant may request routine processing of an application if it meets the applicable off-axis EIRP envelopes.

Furthermore, an application pursuant to Section 25.218 must file the corresponding tables outlined in Section 25.115(h) of the Regulations. Applicant presents below the tables outlined in Section 25.115(h) and therefore requests routine processing of this application.

EIRP DENSITY TABLE, AZIMUTH - §25.218 (h) (1)				
Antenna Manufacturer	Prodelin		Antenna Diameter	2.4 m
Antenna Model	1351		Antenna Gain	42.5 dBi
Transmit Frequency	6.245	GHz	Max EIRP Density	-25.2 dBW/4KHz

Off-Axis degrees	§25.218 SD (dBW/4KHz)	Actual SD (dBW/4KHz)	Margin (dB)
1.5	21.9	-7.7	-29.6
1.6	21.2	-28.7	-49.9
1.7	20.5	-18.7	-39.2
1.8	19.9	-11.7	-31.6
1.9	19.3	-7.7	-27.0
2.0	18.8	-6.7	-25.4
2.1	18.2	-5.7	-23.9
2.2	17.7	-6.2	-23.9
2.3	17.3	-7.2	-24.4
2.4	16.8	-8.7	-25.4
2.5	16.4	-7.7	-24.0
2.6	15.9	-11.2	-27.1
2.7	15.5	-12.7	-28.2
2.8	15.1	-13.7	-28.8
2.9	14.7	-15.2	-29.9
3.0	14.4	-16.5	-30.8
3.1	14.0	-16.7	-30.7
3.2	13.7	-16.5	-30.1
3.3	13.3	-15.7	-29.0
3.4	13.0	-14.7	-27.7
3.5	12.7	-13.7	-26.4
3.6	12.4	-13.7	-26.0
3.7	12.1	-12.9	-24.9
3.8	11.8	-12.7	-24.5
3.9	11.5	-12.7	-24.2
4.0	11.2	-12.7	-23.9
4.1	11.0	-12.7	-23.6
4.2	10.7	-13.2	-23.9
4.3	10.5	-14.5	-24.9
4.4	10.2	-15.2	-25.4
4.5	10.0	-17.7	-27.6
4.6	9.7	-19.2	-28.9
4.7	9.5	-22.7	-32.2

Off-Axis degrees	§25.218 SD (dBW/4KHz)	Actual SD (dBW/4KHz)	Margin (dB)
7.5	5.3	-30.2	-35.5
7.6	5.3	-30.7	-36.0
7.7	5.3	-30.7	-36.0
7.8	5.3	-30.7	-36.0
7.9	5.3	-29.7	-35.0
8.0	5.3	-28.7	-34.0
8.1	5.3	-26.7	-32.0
8.2	5.3	-26.2	-31.5
8.3	5.3	-25.2	-30.5
8.4	5.3	-24.7	-30.0
8.5	5.3	-24.7	-30.0
8.6	5.3	-24.7	-30.0
8.7	5.3	-25.7	-31.0
8.8	5.3	-26.7	-32.0
8.9	5.3	-27.7	-33.0
9.0	5.3	-29.2	-34.5
9.1	5.3	-31.7	-37.0
9.2	5.3	-32.7	-38.0
9.3	5.1	-33.7	-38.7
9.4	5.0	-34.7	-39.6
9.5	4.9	-34.7	-39.5
9.6	4.7	-35.7	-40.4
9.7	4.6	-36.7	-41.3
9.8	4.5	-37.7	-42.2
9.9	4.4	-38.7	-43.1
10.0	4.3	-40.7	-45.0
15.0	-0.1	-34.7	-34.6
20.0	-3.2	-42.7	-39.4
25.0	-5.6	-38.7	-33.0
30.0	-7.6	-35.7	-28.0
35.0	-9.3	-44.7	-35.4
40.0	-10.8	-48.7	-37.9
45.0	-12.0	-52.7	-40.6

4.8	9.3	-26.7	-35.9
4.9	9.0	-34.7	-43.7
5.0	8.8	-38.7	-47.5
5.1	8.6	-38.7	-47.3
5.2	8.4	-32.7	-41.1
5.3	8.2	-31.7	-39.8
5.4	8.0	-32.7	-40.6
5.5	7.8	-36.7	-44.4
5.6	7.6	-40.7	-48.2
5.7	7.4	-44.7	-52.1
5.8	7.2	-36.7	-43.9
5.9	7.0	-31.7	-38.7
6.0	6.8	-27.7	-34.5
6.1	6.7	-26.4	-33.0
6.2	6.5	-26.4	-32.8
6.3	6.3	-25.7	-32.0
6.4	6.1	-26.4	-32.5
6.5	6.0	-26.7	-32.6
6.6	5.8	-27.7	-33.5
6.7	5.6	-29.7	-35.3
6.8	5.5	-32.7	-38.1
6.9	5.3	-38.7	-44.0
7.0	5.2	-37.7	-42.8
7.1	5.3	-34.7	-40.0
7.2	5.3	-32.2	-37.5
7.3	5.3	-30.9	-36.2
7.4	5.3	-30.5	-35.8

50.0	-12.7	-48.7	-36.0
55.0	-12.7	-46.7	-34.0
60.0	-12.7	-46.7	-34.0
65.0	-12.7	-47.7	-35.0
70.0	-12.7	-49.7	-37.0
75.0	-12.7	-52.7	-40.0
80.0	-12.7	-53.7	-41.0
85.0	-12.7	-54.7	-42.0
90.0	-12.7	-59.7	-47.0
95.0	-12.7	-52.7	-40.0
100.0	-12.7	-39.7	-27.0
105.0	-12.7	-49.7	-37.0
110.0	-12.7	-47.7	-35.0
115.0	-12.7	-53.7	-41.0
120.0	-12.7	-56.7	-44.0
125.0	-12.7	-41.7	-29.0
130.0	-12.7	-42.7	-30.0
135.0	-12.7	-39.7	-27.0
140.0	-12.7	-42.7	-30.0
145.0	-12.7	-32.7	-20.0
150.0	-12.7	-32.7	-20.0
155.0	-12.7	-36.7	-24.0
160.0	-12.7	-40.7	-28.0
165.0	-12.7	-34.7	-22.0
170.0	-12.7	-31.7	-19.0
175.0	-12.7	-38.7	-26.0
180.0	-12.7	-23.7	-11.0

EIRP DENSITY TABLE, ELEVATION - §25.218 (h) (2)				
Antenna Manufacturer	Prodelin		Antenna Diameter	2.4 m
Antenna Model	1351		Antenna Gain	42.5 dBi
Transmit Frequency	6.245	GHz	Max EIRP Density	-25.2 dBW/4KHz

Off-Axis degrees	§25.218 SD (dBW/4KHz)	Actual SD (dBW/4KHz)	Margin (dB)
1.5	24.9	-0.7	-25.6
1.6	24.2	-2.7	-26.9
1.7	23.5	-5.7	-29.2
1.8	22.9	-6.7	-29.6
1.9	22.3	-7.7	-30.0
2.0	21.8	-7.7	-29.4
2.1	21.2	-8.2	-29.4
2.2	20.7	-8.7	-29.4
2.3	20.3	-10.2	-30.4
2.4	19.8	-11.7	-31.4
2.5	19.4	-13.7	-33.0
2.6	18.9	-15.7	-34.6
2.7	18.5	-15.7	-34.2
2.8	18.1	-14.7	-32.8
2.9	17.7	-13.7	-31.4
3.0	17.4	-13.2	-30.5
3.1	17.0	-12.7	-29.7
3.2	16.7	-13.2	-29.8
3.3	16.3	-13.7	-30.0
3.4	16.0	-15.2	-31.2
3.5	15.7	-17.7	-33.4
3.6	15.4	-20.7	-36.0
3.7	15.1	-23.2	-38.2
3.8	14.8	-23.7	-38.5
3.9	14.5	-21.7	-36.2
4.0	14.2	-18.7	-32.9
4.1	14.0	-27.7	-41.6
4.2	13.7	-26.7	-40.4
4.3	13.5	-26.2	-39.6
4.4	13.2	-26.7	-39.9
4.5	13.0	-27.7	-40.6
4.6	12.7	-29.2	-41.9
4.7	12.5	-31.7	-44.2
4.8	12.3	-25.7	-37.9

Off-Axis degrees	§25.218 SD (dBW/4KHz)	Actual SD (dBW/4KHz)	Margin (dB)
6.1	9.7	-34.7	-44.3
6.2	9.5	-28.7	-38.1
6.3	9.3	-25.7	-35.0
6.4	9.1	-23.7	-32.8
6.5	9.0	-22.2	-31.1
6.6	8.8	-21.7	-30.5
6.7	8.6	-21.7	-30.3
6.8	8.5	-22.2	-30.6
6.9	8.3	-22.7	-31.0
7.0	8.2	-23.2	-31.3
7.1	8.0	-23.7	-31.7
7.2	7.9	-24.2	-32.0
7.3	7.7	-24.2	-31.9
7.4	7.6	-24.7	-32.2
7.5	7.4	-24.7	-32.1
7.6	7.3	-24.7	-31.9
7.7	7.1	-25.2	-32.3
7.8	7.0	-25.7	-32.7
7.9	6.9	-26.2	-33.0
8.0	6.7	-26.7	-33.4
8.1	6.6	-27.2	-33.7
8.2	6.5	-26.7	-33.1
8.3	6.3	-25.7	-32.0
8.4	6.2	-24.7	-30.8
8.5	6.1	-23.7	-29.7
8.6	5.9	-22.7	-28.6
8.7	5.8	-22.2	-28.0
8.8	5.7	-22.2	-27.8
8.9	5.6	-22.7	-28.2
9.0	5.4	-22.7	-28.1
9.1	5.3	-24.7	-30.0
9.2	5.2	-25.7	-30.9
9.3	5.1	-30.2	-35.2
9.4	5.0	-27.7	-32.6

4.9	12.0	-29.7	-41.7
5.0	11.8	-32.2	-44.0
5.1	11.6	-27.7	-39.3
5.2	11.4	-24.7	-36.1
5.3	11.2	-23.2	-34.3
5.4	11.0	-22.2	-33.1
5.5	10.8	-21.7	-32.4
5.6	10.6	-22.7	-33.2
5.7	10.4	-23.7	-34.1
5.8	10.2	-26.7	-36.9
5.9	10.0	-30.7	-40.7
6.0	9.8	-35.7	-45.5

9.5	4.9	-28.8	-33.6
9.6	4.7	-30.3	-35.0
9.7	4.6	-30.3	-34.9
9.8	4.5	-32.7	-37.2
9.9	4.4	-33.2	-37.6
10.0	4.3	-33.8	-38.1
15.0	-0.1	-35.2	-35.1
20.0	-3.2	-44.7	-41.4
25.0	-5.6	-38.7	-33.0
30.0	-7.6	-42.7	-35.0
35.0	-9.3	-47.7	-38.4
40.0	-10.8	-41.7	-30.9
45.0	-12.0	-42.7	-30.6

EIRP DENSITY TABLE, HORIZON - §25.218 (h) (3)				
Antenna Manufacturer	Prodelin	Antenna Diameter	2.4	M
Antenna Model	1351	Antenna Gain	42.5	dBi
Transmit Frequency	6.245 GHz	Max EIRP Density	-25.2	dBW/4KHz

A horizon gain table was generated for this particular location and satellite arc, as part of the frequency coordination report included with the underlying application.