

Request for Routine Processing of Non-Compliant Antenna

The antenna at issue is a C-band Seatel 9797 (“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 - §25.115 (h) (1)				
Antenna Manufacturer	Seatel	Antenna Diameter	2.4	m
Antenna Model	9797	Antenna Gain	41.4	dBi
Transmit Frequency	6.175 GHz	Max EIRP Density	18.3	dBW/4KHz

Off-Axis degrees	§25.218 SD (dBW/4KHz)	Actual SD (dBW/4KHz)	Margin (dB)
1.5	21.9	1.9	-20.0
1.6	21.2	-0.6	-21.8
1.7	20.5	-3.1	-23.6
1.8	19.9	-6.1	-26.0
1.9	19.3	-9.1	-28.4
2.0	18.8	-11.6	-30.4
2.1	18.2	-14.6	-32.8
2.2	17.7	-18.1	-35.8
2.3	17.3	-19.1	-36.4
2.4	16.8	-18.1	-34.9
2.5	16.4	-17.0	-33.4
2.6	15.9	-15.7	-31.6
2.7	15.5	-15.6	-31.1
2.8	15.1	-15.7	-30.8
2.9	14.7	-17.0	-31.7
3.0	14.4	-19.1	-33.5
3.1	14.0	-22.0	-36.0
3.2	13.7	-25.6	-39.3
3.3	13.3	-27.1	-40.4
3.4	13.0	-23.1	-36.1
3.5	12.7	-19.1	-31.8
3.6	12.4	-18.1	-30.5
3.7	12.1	-17.3	-29.4
3.8	11.8	-17.1	-28.9
3.9	11.5	-18.1	-29.6
4.0	11.2	-19.1	-30.3
4.1	11.0	-20.6	-31.6
4.2	10.7	-22.0	-32.7
4.3	10.5	-24.2	-34.7
4.4	10.2	-28.1	-38.3
4.5	10.0	-34.2	-44.2
4.6	9.7	-40.1	-49.8

Off-Axis degrees	§25.218 SD (dBW/4KHz)	Actual SD (dBW/4KHz)	Margin (dB)
7.5	5.3	-29.2	-34.5
7.6	5.3	-28.1	-33.4
7.7	5.3	-24.2	-29.5
7.8	5.3	-25.6	-30.9
7.9	5.3	-25.1	-30.4
8.0	5.3	-25.1	-30.4
8.1	5.3	-24.1	-29.4
8.2	5.3	-24.1	-29.4
8.3	5.3	-24.1	-29.4
8.4	5.3	-25.6	-30.9
8.5	5.3	-26.1	-31.4
8.6	5.3	-26.6	-31.9
8.7	5.3	-28.1	-33.4
8.8	5.3	-29.2	-34.5
8.9	5.3	-30.1	-35.4
9.0	5.3	-30.6	-35.9
9.1	5.3	-31.1	-36.4
9.2	5.3	-32.1	-37.4
9.3	5.1	-33.1	-38.2
9.4	5.0	-33.6	-38.6
9.5	4.9	-34.6	-39.5
9.6	4.7	-35.1	-39.8
9.7	4.6	-35.6	-40.2
9.8	4.5	-35.6	-40.1
9.9	4.4	-35.1	-39.5
10.0	4.3	-34.1	-38.4
15.0	-0.1	-35.1	-35.0
20.0	-3.2	-39.1	-35.9
25.0	-5.6	-41.1	-35.5
30.0	-7.6	-38.1	-30.5
35.0	-9.3	-40.6	-31.3
40.0	-10.8	-38.1	-27.3

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4.7	9.5	-40.1	-49.6
4.8	9.3	-34.2	-43.5
4.9	9.0	-29.2	-38.2
5.0	8.8	-28.1	-36.9
5.1	8.6	-25.6	-34.2
5.2	8.4	-24.1	-32.5
5.3	8.2	-23.1	-31.3
5.4	8.0	-22.0	-30.0
5.5	7.8	-21.1	-28.9
5.6	7.6	-20.6	-28.2
5.7	7.4	-21.1	-28.5
5.8	7.2	-20.6	-27.8
5.9	7.0	-22.0	-29.0
6.0	6.8	-23.1	-29.9
6.1	6.7	-25.1	-31.8
6.2	6.5	-26.1	-32.6
6.3	6.3	-28.1	-34.4
6.4	6.1	-29.1	-35.2
6.5	6.0	-29.1	-35.1
6.6	5.8	-29.1	-34.9
6.7	5.6	-29.1	-34.7
6.8	5.5	-29.1	-34.6
6.9	5.3	-30.1	-35.4
7.0	5.2	-30.6	-35.8
7.1	5.3	-31.6	-36.9
7.2	5.3	-32.1	-37.4
7.3	5.3	-30.4	-35.7
7.4	5.3	-30.6	-35.9

45.0	-12.0	-40.6	-28.6
50.0	-12.7	-41.1	-28.4
55.0	-12.7	-38.1	-25.4
60.0	-12.7	-44.1	-31.4
65.0	-12.7	-46.1	-33.4
70.0	-12.7	-45.6	-32.9
75.0	-12.7	-46.1	-33.4
80.0	-12.7	-45.6	-32.9
85.0	-12.7	-45.1	-32.4
90.0	-12.7	-43.1	-30.4
95.0	-12.7	-44.1	-31.4
100.0	-12.7	-43.1	-30.4
105.0	-12.7	-33.1	-20.4
110.0	-12.7	-35.6	-22.9
115.0	-12.7	-33.1	-20.4
120.0	-12.7	-33.1	-20.4
125.0	-12.7	-33.1	-20.4
130.0	-12.7	-33.1	-20.4
135.0	-12.7	-33.1	-20.4
140.0	-12.7	-34.1	-21.4
145.0	-12.7	-34.1	-21.4
150.0	-12.7	-33.1	-20.4
155.0	-12.7	-35.6	-22.9
160.0	-12.7	-37.1	-24.4
165.0	-12.7	-32.6	-19.9
170.0	-12.7	-35.6	-22.9
175.0	-12.7	-40.6	-27.9
180.0	-12.7	-43.1	-30.4

EIRP DENSITY TABLE, ELEVATION - §25.115 (h) (2)				
Antenna Manufacturer	Seatel	Antenna Diameter	2.4	m
Antenna Model	9797	Antenna Gain	41.4	dBi
Transmit Frequency	6.175 GHz	Max EIRP Density	18.3	dBW/4KHz

Off-Axis degrees	§25.218 SD (dBW/4KHz)	Actual SD (dBW/4KHz)	Margin (dB)
1.5	24.9	7.0	-17.9
1.6	24.2	5.1	-19.1
1.7	23.5	3.1	-20.4
1.8	22.9	0.9	-22.0
1.9	22.3	-1.9	-24.2
2.0	21.8	-4.7	-26.5
2.1	21.2	-8.2	-29.5
2.2	20.7	-11.8	-32.5
2.3	20.3	-14.2	-34.4
2.4	19.8	-14.8	-34.6
2.5	19.4	-14.6	-33.9
2.6	18.9	-14.5	-33.4
2.7	18.5	-15.0	-33.5
2.8	18.1	-16.3	-34.4
2.9	17.7	-18.4	-36.1
3.0	17.4	-21.9	-39.3
3.1	17.0	-28.8	-45.8
3.2	16.7	-36.9	-53.6
3.3	16.3	-26.4	-42.7
3.4	16.0	-21.9	-37.9
3.5	15.7	-19.9	-35.6
3.6	15.4	-18.7	-34.1
3.7	15.1	-18.4	-33.5
3.8	14.8	-18.8	-33.6
3.9	14.5	-19.8	-34.4
4.0	14.2	-21.8	-36.1
4.1	14.0	-25.4	-39.4
4.2	13.7	-31.5	-45.2
4.3	13.5	-40.7	-54.2
4.4	13.2	-28.0	-41.2
4.5	13.0	-23.5	-36.4
4.6	12.7	-20.6	-33.4

Off-Axis degrees	§25.218 SD (dBW/4KHz)	Actual SD (dBW/4KHz)	Margin (dB)
6.1	9.7	-22.3	-31.9
6.2	9.5	-21.4	-30.9
6.3	9.3	-21.2	-30.5
6.4	9.1	-21.6	-30.7
6.5	9.0	-22.5	-31.5
6.6	8.8	-24.3	-33.1
6.7	8.6	-26.6	-35.3
6.8	8.5	-30.3	-38.8
6.9	8.3	-33.6	-41.9
7.0	8.2	-31.0	-39.1
7.1	8.0	-27.3	-35.3
7.2	7.9	-24.7	-32.5
7.3	7.7	-22.9	-30.6
7.4	7.6	-21.9	-29.4
7.5	7.4	-21.4	-28.8
7.6	7.3	-21.3	-28.6
7.7	7.1	-21.7	-28.9
7.8	7.0	-22.6	-29.6
7.9	6.9	-24.0	-30.9
8.0	6.7	-26.1	-32.8
8.1	6.6	-28.9	-35.5
8.2	6.5	-31.3	-37.8
8.3	6.3	-31.4	-37.7
8.4	6.2	-28.9	-35.1
8.5	6.1	-26.6	-32.6
8.6	5.9	-24.9	-30.8
8.7	5.8	-23.7	-29.5
8.8	5.7	-22.9	-28.6
8.9	5.6	-22.7	-28.2
9.0	5.4	-22.8	-28.3
9.1	5.3	-23.2	-28.5
9.2	5.2	-24.0	-29.2

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4.7	12.5	-18.9	-31.4
4.8	12.3	-17.9	-30.1
4.9	12.0	-17.4	-29.4
5.0	11.8	-17.3	-29.2
5.1	11.6	-17.7	-29.4
5.2	11.4	-18.6	-30.0
5.3	11.2	-19.9	-31.1
5.4	11.0	-22.1	-33.1
5.5	10.8	-25.5	-36.3
5.6	10.6	-31.4	-42.0
5.7	10.4	-48.5	-58.9
5.8	10.2	-32.1	-42.4
5.9	10.0	-26.6	-36.6
6.0	9.8	-23.8	-33.6

9.3	5.1	-24.8	-29.9
9.4	5.0	-25.3	-30.3
9.5	4.9	-25.4	-30.2
9.6	4.7	-24.7	-29.4
9.7	4.6	-23.5	-28.1
9.8	4.5	-22.3	-26.8
9.9	4.4	-21.3	-25.8
10.0	4.3	-20.6	-24.9
15.0	-0.1	-31.3	-31.2
20.0	-3.2	-40.0	-36.8
25.0	-5.6	-40.6	-35.0
30.0	-7.6	-45.0	-37.4
35.0	-9.3	-37.7	-28.4
40.0	-10.8	-39.1	-28.4
45.0	-12.0	-42.6	-30.6

EIRP DENSITY TABLE, HORIZON - §25.115 (h) (3) Antenna				
Manufacturer	Seatel		Antenna Diameter	2.4 m
Antenna Model	9797		Antenna Gain	41.4 dBi
Transmit Frequency	6.175	GHz	Max EIRP Density	18.3 dBW/4KHz

Off-Axis degrees	§25.218 SD (dBW/4KHz)	Actual SD (dBW/4KHz)	Margin (dB)
1.5	21.9	-3.9	-25.8
1.6	21.2	-6.4	-27.6
1.7	20.5	-8.9	-29.4
1.8	19.9	-11.9	-31.8
1.9	19.3	-14.9	-34.2
2.0	18.8	-17.4	-36.1
2.1	18.2	-20.4	-38.6
2.2	17.7	-23.9	-41.6
2.3	17.3	-24.9	-42.1
2.4	16.8	-23.9	-40.7
2.5	16.4	-22.8	-39.1
2.6	15.9	-21.5	-37.4
2.7	15.5	-21.4	-36.9
2.8	15.1	-21.5	-36.6
2.9	14.7	-22.8	-37.5
3.0	14.4	-24.9	-39.2
3.1	14.0	-27.8	-41.8
3.2	13.7	-31.4	-45.0
3.3	13.3	-32.9	-46.2
3.4	13.0	-28.9	-41.9
3.5	12.7	-24.9	-37.6
3.6	12.4	-23.9	-36.3
3.7	12.1	-23.1	-35.2
3.8	11.8	-22.9	-34.7
3.9	11.5	-23.9	-35.4
4.0	11.2	-24.9	-36.1
4.1	11.0	-26.4	-37.4
4.2	10.7	-27.8	-38.5
4.3	10.5	-30.0	-40.4
4.4	10.2	-33.9	-44.1
4.5	10.0	-40.0	-49.9
4.6	9.7	-45.9	-55.6

Off-Axis degrees	§25.218 SD (dBW/4KHz)	Actual SD (dBW/4KHz)	Margin (dB)
7.5	5.3	-35.0	-40.3
7.6	5.3	-33.9	-39.2
7.7	5.3	-30.0	-35.3
7.8	5.3	-31.4	-36.7
7.9	5.3	-30.9	-36.2
8.0	5.3	-30.9	-36.2
8.1	5.3	-29.9	-35.2
8.2	5.3	-29.9	-35.2
8.3	5.3	-29.9	-35.2
8.4	5.3	-31.4	-36.7
8.5	5.3	-31.9	-37.2
8.6	5.3	-32.4	-37.7
8.7	5.3	-33.9	-39.2
8.8	5.3	-35.0	-40.3
8.9	5.3	-35.9	-41.2
9.0	5.3	-36.4	-41.7
9.1	5.3	-36.9	-42.2
9.2	5.3	-37.9	-43.2
9.3	5.1	-38.9	-44.0
9.4	5.0	-39.4	-44.3
9.5	4.9	-40.4	-45.2
9.6	4.7	-40.9	-45.6
9.7	4.6	-41.4	-46.0
9.8	4.5	-41.4	-45.9
9.9	4.4	-40.9	-45.3
10.0	4.3	-39.9	-44.2
15.0	-0.1	-40.9	-40.8
20.0	-3.2	-44.9	-41.6
25.0	-5.6	-46.9	-41.2
30.0	-7.6	-43.9	-36.2
35.0	-9.3	-46.4	-37.1
40.0	-10.8	-43.9	-33.1

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4.7	9.5	-45.9	-55.4
4.8	9.3	-40.0	-49.2
4.9	9.0	-35.0	-44.0
5.0	8.8	-33.9	-42.7
5.1	8.6	-31.4	-40.0
5.2	8.4	-29.9	-38.3
5.3	8.2	-28.9	-37.1
5.4	8.0	-27.8	-35.8
5.5	7.8	-26.9	-34.7
5.6	7.6	-26.4	-34.0
5.7	7.4	-26.9	-34.3
5.8	7.2	-26.4	-33.6
5.9	7.0	-27.8	-34.8
6.0	6.8	-28.9	-35.7
6.1	6.7	-30.9	-37.5
6.2	6.5	-31.9	-38.4
6.3	6.3	-33.9	-40.2
6.4	6.1	-34.9	-41.0
6.5	6.0	-34.9	-40.8
6.6	5.8	-34.9	-40.7
6.7	5.6	-34.9	-40.5
6.8	5.5	-34.9	-40.4
6.9	5.3	-35.9	-41.2
7.0	5.2	-36.4	-41.5
7.1	5.3	-37.4	-42.7
7.2	5.3	-37.9	-43.2
7.3	5.3	-36.2	-41.5
7.4	5.3	-36.4	-41.7

45.0	-12.0	-46.4	-34.3
50.0	-12.7	-46.9	-34.2
55.0	-12.7	-43.9	-31.2
60.0	-12.7	-49.9	-37.2
65.0	-12.7	-51.9	-39.2
70.0	-12.7	-51.4	-38.7
75.0	-12.7	-51.9	-39.2
80.0	-12.7	-51.4	-38.7
85.0	-12.7	-50.9	-38.2
90.0	-12.7	-48.9	-36.2
95.0	-12.7	-49.9	-37.2
100.0	-12.7	-48.9	-36.2
105.0	-12.7	-38.9	-26.2
110.0	-12.7	-41.4	-28.7
115.0	-12.7	-38.9	-26.2
120.0	-12.7	-38.9	-26.2
125.0	-12.7	-38.9	-26.2
130.0	-12.7	-38.9	-26.2
135.0	-12.7	-38.9	-26.2
140.0	-12.7	-39.9	-27.2
145.0	-12.7	-39.9	-27.2
150.0	-12.7	-38.9	-26.2
155.0	-12.7	-41.4	-28.7
160.0	-12.7	-42.9	-30.2
165.0	-12.7	-38.4	-25.7
170.0	-12.7	-41.4	-28.7
175.0	-12.7	-46.4	-33.7
180.0	-12.7	-48.9	-36.2