

## **EXHIBITS 2 THROUGH 10**

**25.222(b)(1)(i) Tables for Antennas**

## **EXHIBIT 2**

**25.222(b)(1)(i)(A) Tables for the Sea Tel Model 9797 2.4 Meter  
Ku-band Antennas**

# Exhibit 2 Cobham SATCOM, Sea Tel Products

2.4m Ku EIRPsd Data Table  
Co Pol Azimuth, -10 to +10 Degrees @ 0.1deg (A)

14.25 GHz @ -14 dBW / 4 kHz

Angle Degrees	EIRPsd dBW/4kHz	Mask dBW/4kHz
-10.0	-24.4	-7.1
-9.9	-20.2	-6.9
-9.8	-19.5	-6.8
-9.7	-17.7	-6.7
-9.6	-18.0	-6.6
-9.5	-15.5	-6.5
-9.4	-15.9	-6.4
-9.3	-15.8	-6.3
-9.2	-15.1	-6.2
-9.1	-15.1	-6.0
-9.0	-15.8	-6.0
-8.9	-17.9	-6.0
-8.8	-17.2	-6.0
-8.7	-15.1	-6.0
-8.6	-15.6	-6.0
-8.5	-15.5	-6.0
-8.4	-17.9	-6.0
-8.3	-22.4	-6.0
-8.2	-22.0	-6.0
-8.1	-17.2	-6.0
-8.0	-14.5	-6.0
-7.9	-12.7	-6.0
-7.8	-11.7	-6.0
-7.7	-12.8	-6.0
-7.6	-15.6	-6.0
-7.5	-18.1	-6.0
-7.4	-13.8	-6.0
-7.3	-10.5	-6.0
-7.2	-8.6	-6.0
-7.1	-8.2	-6.0
-7.0	-9.4	-6.0
-6.9	-10.6	-6.0
-6.8	-13.6	-5.9
-6.7	-18.2	-5.7
-6.6	-28.5	-5.6
-6.5	-17.9	-5.4
-6.4	-12.6	-5.2
-6.3	-10.7	-5.1
-6.2	-10.6	-4.9
-6.1	-12.2	-4.7
-6.0	-13.7	-4.5
-5.9	-12.7	-4.4
-5.8	-10.3	-4.2
-5.7	-8.8	-4.0
-5.6	-7.1	-3.8
-5.5	-6.0	-3.6
-5.4	-5.6	-3.4
-5.3	-7.5	-3.2
-5.2	-10.5	-3.0
-5.1	-15.3	-2.8
-5.0	-29.6	-2.6
-4.9	-22.3	-2.4
-4.8	-22.2	-2.1
-4.7	-14.9	-1.9
-4.6	-10.2	-1.7
-4.5	-7.4	-1.5
-4.4	-6.4	-1.2

14.25 GHz @ -14 dBW / 4 kHz

Angle Degrees	EIRPsd dBW/4kHz	Mask dBW/4kHz
0.0	33.3	
0.1	33.7	
0.2	33.5	
0.3	32.8	
0.4	31.5	
0.5	30.0	
0.6	28.3	
0.7	26.3	
0.8	24.1	
0.9	21.7	
1.0	18.2	
1.1	15.1	
1.2	10.0	
1.3	6.6	
1.4	2.2	
1.5	-15.5	10.7
1.6	-0.1	10.2
1.7	3.0	9.6
1.8	2.7	8.3
1.9	0.6	7.7
2.0	-1.3	7.2
2.1	-1.2	6.7
2.2	-2.3	6.2
2.3	-6.1	5.7
2.4	-18.5	5.3
2.5	-10.7	4.8
2.6	-7.5	4.4
2.7	-8.8	4.0
2.8	-11.8	3.6
2.9	-11.9	3.3
3.0	-10.4	2.9
3.1	-10.3	2.5
3.2	-9.5	2.2
3.3	-8.5	1.9
3.4	-7.0	1.6
3.5	-5.8	1.2
3.6	-6.7	0.9
3.7	-7.1	0.6
3.8	-8.9	0.4
3.9	-10.1	0.1
4.0	-10.7	-0.2
4.1	-9.6	-0.5
4.2	-8.9	-0.7
4.3	-10.3	-1.0
4.4	-15.0	-1.2
4.5	-26.1	-1.5
4.6	-17.4	-1.7
4.7	-15.6	-1.9
4.8	-15.3	-2.1
4.9	-18.8	-2.4
5.0	-24.4	-2.6
5.1	-21.0	-2.8
5.2	-25.4	-3.0
5.3	-19.1	-3.2
5.4	-15.5	-3.4
5.5	-14.0	-3.6
5.6	-14.1	-3.8

Exhibit 2

**Cobham SATCOM, Sea Tel Products**

2.4m Ku EIRPsd Data Table  
Co Pol Azimuth, -10 to +10 Degrees @ 0.1deg (A)

-4.3	-6.6	-1.0
-4.2	-7.8	-0.7
-4.1	-8.9	-0.5
-4.0	-9.1	-0.2
-3.9	-7.8	0.1
-3.8	-6.0	0.4
-3.7	-3.8	0.6
-3.6	-2.4	0.9
-3.5	-2.4	1.2
-3.4	-2.9	1.6
-3.3	-4.1	1.9
-3.2	-4.6	2.2
-3.1	-4.5	2.5
-3.0	-3.1	2.9
-2.9	-1.1	3.3
-2.8	0.2	3.6
-2.7	0.6	4.0
-2.6	-0.3	4.4
-2.5	-1.4	4.8
-2.4	-2.3	5.3
-2.3	-3.5	5.7
-2.2	-5.0	6.2
-2.1	-2.5	6.7
-2.0	1.0	7.2
-1.9	1.9	7.7
-1.8	2.2	8.3
-1.7	2.1	8.9
-1.6	2.6	9.6
-1.5	2.8	10.2
-1.4	0.4	
-1.3	-7.3	
-1.2	-1.1	
-1.1	9.4	
-1.0	11.7	
-0.9	13.4	
-0.8	17.7	
-0.7	21.9	
-0.6	24.3	
-0.5	26.5	
-0.4	28.2	
-0.3	29.5	
-0.2	31.1	
-0.1	32.3	
0.0	33.3	

5.7	-15.6	-4.0
5.8	-16.8	-4.2
5.9	-16.6	-4.4
6.0	-17.4	-4.5
6.1	-20.4	-4.7
6.2	-25.9	-4.9
6.3	-35.2	-5.1
6.4	-44.9	-5.2
6.5	-28.6	-5.4
6.6	-23.7	-5.6
6.7	-20.5	-5.7
6.8	-15.8	-5.9
6.9	-11.9	-6.0
7.0	-9.6	-6.0
7.1	-9.2	-6.0
7.2	-9.8	-6.0
7.3	-13.3	-6.0
7.4	-20.8	-6.0
7.5	-20.7	-6.0
7.6	-16.1	-6.0
7.7	-13.9	-6.0
7.8	-13.6	-6.0
7.9	-14.1	-6.0
8.0	-15.7	-6.0
8.1	-18.2	-6.0
8.2	-20.1	-6.0
8.3	-17.3	-6.0
8.4	-13.9	-6.0
8.5	-13.9	-6.0
8.6	-14.9	-6.0
8.7	-18.7	-6.0
8.8	-21.6	-6.0
8.9	-19.8	-6.0
9.0	-15.2	-6.0
9.1	-13.0	-6.0
9.2	-11.8	-6.2
9.3	-11.4	-6.3
9.4	-12.0	-6.4
9.5	-12.6	-6.5
9.6	-13.4	-6.6
9.7	-13.1	-6.7
9.8	-13.8	-6.8
9.9	-14.4	-6.9
10.0	-15.0	-7.1

Exhibit 2

**Cobham SATCOM, Sea Tel Products**

2.4m Ku EIRPsd Data Table

Co Pol Azimuth, -180 to +180 Degrees @ 1.0 deg (A)

14.25 GHz @ -14 dBW / 4 kHz

Angle Degrees	EIRPsd dBW/4kHz	Mask dBW/4kHz
-179.0	-32.3	-14.0
-178.0	-34.3	-14.0
-177.0	-31.7	-14.0
-176.0	-29.1	-14.0
-175.0	-30.2	-14.0
-174.0	-37.0	-14.0
-173.0	-31.1	-14.0
-172.0	-32.9	-14.0
-171.0	-29.5	-14.0
-170.0	-31.8	-14.0
-169.0	-36.2	-14.0
-168.0	-32.7	-14.0
-167.0	-32.1	-14.0
-166.0	-30.7	-14.0
-165.0	-33.9	-14.0
-164.0	-39.2	-14.0
-163.0	-42.2	-14.0
-162.0	-30.7	-14.0
-161.0	-30.2	-14.0
-160.0	-31.2	-14.0
-159.0	-35.9	-14.0
-158.0	-27.1	-14.0
-157.0	-31.4	-14.0
-156.0	-36.2	-14.0
-155.0	-38.3	-14.0
-154.0	-27.9	-14.0
-153.0	-48.5	-14.0
-152.0	-30.5	-14.0
-151.0	-34.0	-14.0
-150.0	-34.1	-14.0
-149.0	-30.5	-14.0
-148.0	-32.5	-14.0
-147.0	-42.2	-14.0
-146.0	-31.9	-14.0
-145.0	-29.8	-14.0
-144.0	-42.7	-14.0
-143.0	-30.1	-14.0
-142.0	-36.4	-14.0
-141.0	-38.1	-14.0
-140.0	-27.8	-14.0
-139.0	-31.8	-14.0
-138.0	-32.3	-14.0
-137.0	-31.0	-14.0
-136.0	-33.1	-14.0
-135.0	-31.4	-14.0
-134.0	-28.2	-14.0
-133.0	-34.5	-14.0
-132.0	-32.3	-14.0
-131.0	-31.5	-14.0
-130.0	-32.1	-14.0
-129.0	-27.3	-14.0
-128.0	-28.8	-14.0
-127.0	-32.1	-14.0
-126.0	-30.9	-14.0
-125.0	-30.9	-14.0
-124.0	-33.8	-14.0
-123.0	-33.5	-14.0
-122.0	-33.3	-14.0

14.25 GHz @ -14 dBW / 4 kHz

Angle Degrees	EIRPsd dBW/4kHz	Mask dBW/4kHz
0.0	33.6	
1.0	15.9	
2.0	-1.3	7.5
3.0	-10.0	3.1
4.0	-9.7	-0.1
5.0	-21.9	-2.5
6.0	-19.6	-4.5
7.0	-9.1	-6.0
8.0	-17.1	-6.0
9.0	-13.5	-6.0
10.0	-15.0	-7.0
11.0	-17.3	-8.0
12.0	-19.4	-9.0
13.0	-20.2	-9.8
14.0	-32.9	-10.7
15.0	-20.1	-11.4
16.0	-23.4	-12.1
17.0	-28.0	-12.8
18.0	-21.3	-13.4
19.0	-25.7	-14.0
20.0	-22.0	-14.5
21.0	-40.2	-15.1
22.0	-24.2	-15.6
23.0	-20.9	-16.0
24.0	-20.7	-16.5
25.0	-28.6	-16.9
26.0	-20.8	-17.4
27.0	-39.8	-17.8
28.0	-23.0	-18.2
29.0	-20.6	-18.6
30.0	-35.2	-18.9
31.0	-30.9	-19.3
32.0	-25.2	-19.6
33.0	-21.2	-20.0
34.0	-30.8	-20.3
35.0	-28.3	-20.6
36.0	-19.5	-20.9
37.0	-23.5	-21.2
38.0	-31.9	-21.5
39.0	-24.7	-21.8
40.0	-39.5	-22.1
41.0	-24.3	-22.3
42.0	-32.2	-22.6
43.0	-29.1	-22.8
44.0	-23.7	-23.1
45.0	-30.4	-23.3
46.0	-31.2	-23.6
47.0	-27.3	-23.8
48.0	-35.3	-24.0
49.0	-28.8	-24.0
50.0	-25.3	-24.0
51.0	-31.0	-24.0
52.0	-27.1	-24.0
53.0	-33.8	-24.0
54.0	-32.9	-24.0
55.0	-36.6	-24.0
56.0	-32.2	-24.0
57.0	-27.6	-24.0

Exhibit 2

**Cobham SATCOM, Sea Tel Products**

2.4m Ku EIRPsd Data Table

Co Pol Azimuth, -180 to +180 Degrees @ 1.0 deg (A)

-121.0	-29.5	-14.0
-120.0	-33.4	-14.0
-119.0	-28.1	-14.0
-118.0	-25.9	-14.0
-117.0	-28.1	-14.0
-116.0	-36.7	-14.0
-115.0	-32.7	-14.0
-114.0	-26.6	-14.0
-113.0	-29.8	-14.0
-112.0	-30.8	-14.0
-111.0	-25.1	-14.0
-110.0	-27.2	-14.0
-109.0	-25.8	-14.0
-108.0	-33.1	-14.0
-107.0	-26.3	-14.0
-106.0	-23.1	-14.0
-105.0	-28.2	-14.0
-104.0	-19.3	-14.0
-103.0	-22.1	-14.0
-102.0	-19.6	-14.0
-101.0	-16.5	-14.0
-100.0	-19.9	-14.0
-99.0	-20.0	-14.0
-98.0	-21.0	-14.0
-97.0	-38.6	-14.0
-96.0	-23.6	-14.0
-95.0	-23.5	-14.0
-94.0	-28.6	-14.0
-93.0	-26.2	-14.0
-92.0	-26.4	-14.0
-91.0	-33.7	-14.0
-90.0	-29.7	-14.0
-89.0	-29.0	-14.0
-88.0	-34.1	-14.0
-87.0	-29.9	-14.0
-86.0	-28.0	-14.0
-85.0	-30.3	-24.0
-84.0	-26.8	-24.0
-83.0	-30.9	-24.0
-82.0	-29.7	-24.0
-81.0	-24.3	-24.0
-80.0	-29.9	-24.0
-79.0	-25.7	-24.0
-78.0	-25.8	-24.0
-77.0	-35.8	-24.0
-76.0	-29.7	-24.0
-75.0	-26.7	-24.0
-74.0	-42.9	-24.0
-73.0	-26.0	-24.0
-72.0	-30.7	-24.0
-71.0	-26.6	-24.0
-70.0	-29.4	-24.0
-69.0	-34.4	-24.0
-68.0	-31.4	-24.0
-67.0	-36.6	-24.0
-66.0	-29.9	-24.0
-65.0	-26.1	-24.0
-64.0	-31.1	-24.0
-63.0	-30.1	-24.0
-62.0	-44.3	-24.0
-61.0	-31.2	-24.0

58.0	-25.1	-24.0
59.0	-27.1	-24.0
60.0	-29.9	-24.0
61.0	-26.4	-24.0
62.0	-49.8	-24.0
63.0	-34.9	-24.0
64.0	-30.1	-24.0
65.0	-31.3	-24.0
66.0	-30.7	-24.0
67.0	-32.6	-24.0
68.0	-38.3	-24.0
69.0	-31.3	-24.0
70.0	-31.4	-24.0
71.0	-33.3	-24.0
72.0	-27.0	-24.0
73.0	-31.0	-24.0
74.0	-34.0	-24.0
75.0	-33.4	-24.0
76.0	-34.5	-24.0
77.0	-26.4	-24.0
78.0	-26.8	-24.0
79.0	-38.8	-24.0
80.0	-27.0	-24.0
81.0	-39.7	-24.0
82.0	-28.8	-24.0
83.0	-33.1	-24.0
84.0	-33.0	-24.0
85.0	-28.5	-14.0
86.0	-28.3	-14.0
87.0	-28.5	-14.0
88.0	-24.7	-14.0
89.0	-29.8	-14.0
90.0	-27.7	-14.0
91.0	-27.6	-14.0
92.0	-26.8	-14.0
93.0	-23.5	-14.0
94.0	-21.5	-14.0
95.0	-26.0	-14.0
96.0	-23.0	-14.0
97.0	-20.3	-14.0
98.0	-21.7	-14.0
99.0	-24.2	-14.0
100.0	-20.7	-14.0
101.0	-23.2	-14.0
102.0	-19.8	-14.0
103.0	-21.0	-14.0
104.0	-21.1	-14.0
105.0	-19.4	-14.0
106.0	-24.0	-14.0
107.0	-23.7	-14.0
108.0	-22.4	-14.0
109.0	-29.1	-14.0
110.0	-29.4	-14.0
111.0	-25.0	-14.0
112.0	-36.4	-14.0
113.0	-30.2	-14.0
114.0	-31.5	-14.0
115.0	-30.8	-14.0
116.0	-39.0	-14.0
117.0	-38.1	-14.0
118.0	-28.3	-14.0

Exhibit 2

**Cobham SATCOM, Sea Tel Products**

2.4m Ku EIRPsd Data Table

Co Pol Azimuth, -180 to +180 Degrees @ 1.0 deg (A)

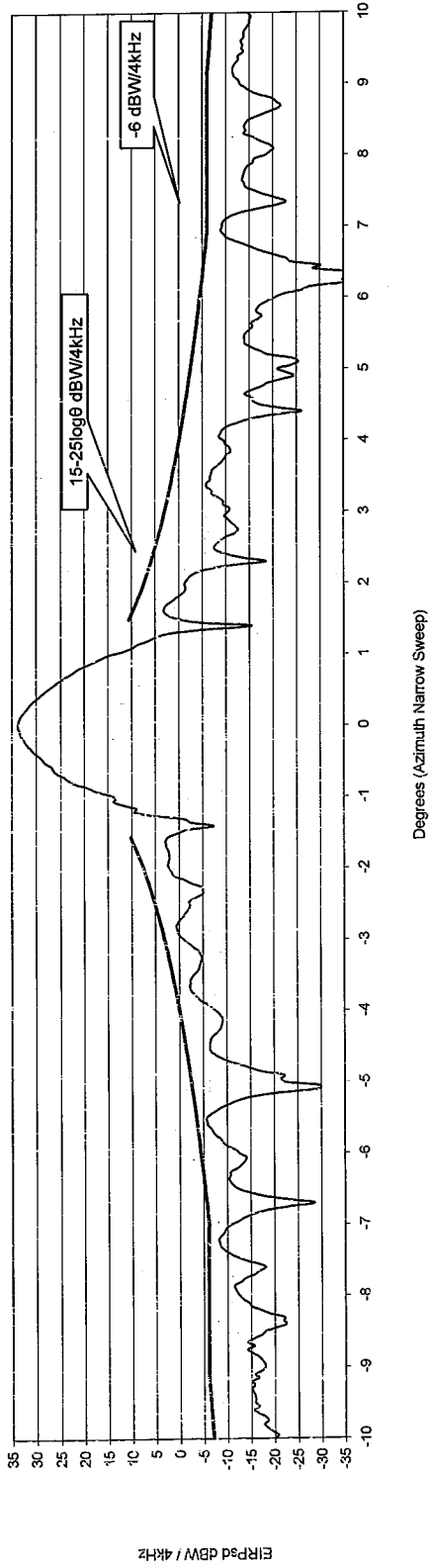
-60.0	-29.0	-24.0
-59.0	-53.1	-24.0
-58.0	-28.7	-24.0
-57.0	-40.8	-24.0
-56.0	-32.3	-24.0
-55.0	-36.3	-24.0
-54.0	-30.9	-24.0
-53.0	-28.3	-24.0
-52.0	-29.7	-24.0
-51.0	-41.9	-24.0
-50.0	-35.7	-24.0
-49.0	-29.4	-24.0
-48.0	-30.9	-24.0
-47.0	-26.0	-23.8
-46.0	-27.1	-23.6
-45.0	-26.0	-23.3
-44.0	-30.1	-23.1
-43.0	-42.3	-22.8
-42.0	-29.7	-22.6
-41.0	-26.3	-22.3
-40.0	-25.9	-22.1
-39.0	-28.9	-21.8
-38.0	-29.7	-21.5
-37.0	-24.3	-21.2
-36.0	-30.5	-20.9
-35.0	-22.5	-20.6
-34.0	-23.2	-20.3
-33.0	-23.7	-20.0
-32.0	-26.1	-19.6
-31.0	-25.6	-19.3
-30.0	-25.1	-18.9
-29.0	-39.2	-18.6
-28.0	-24.0	-18.2
-27.0	-25.8	-17.8
-26.0	-32.2	-17.4
-25.0	-25.9	-16.9
-24.0	-28.5	-16.5
-23.0	-24.4	-16.0
-22.0	-29.1	-15.6
-21.0	-21.8	-15.1
-20.0	-27.1	-14.5
-19.0	-27.4	-14.0
-18.0	-25.7	-13.4
-17.0	-22.7	-12.8
-16.0	-32.4	-12.1
-15.0	-27.8	-11.4
-14.0	-23.1	-10.7
-13.0	-22.2	-9.8
-12.0	-16.0	-9.0
-11.0	-19.1	-8.0
-10.0	-21.4	-7.0
-9.0	-17.6	-6.0
-8.0	-13.0	-6.0
-7.0	-10.2	-6.1
-6.0	-13.4	-4.5
-5.0	-26.0	-2.5
-4.0	-8.2	-0.1
-3.0	-1.7	3.1
-2.0	1.7	7.5
-1.0	13.6	
0.0	33.6	

119.0	-28.9	-14.0
120.0	-39.9	-14.0
121.0	-38.3	-14.0
122.0	-33.0	-14.0
123.0	-33.1	-14.0
124.0	-28.6	-14.0
125.0	-31.4	-14.0
126.0	-34.7	-14.0
127.0	-30.5	-14.0
128.0	-29.7	-14.0
129.0	-33.7	-14.0
130.0	-34.9	-14.0
131.0	-34.1	-14.0
132.0	-29.9	-14.0
133.0	-36.1	-14.0
134.0	-44.4	-14.0
135.0	-32.4	-14.0
136.0	-36.2	-14.0
137.0	-37.3	-14.0
138.0	-40.6	-14.0
139.0	-28.3	-14.0
140.0	-32.4	-14.0
141.0	-33.3	-14.0
142.0	-31.5	-14.0
143.0	-33.1	-14.0
144.0	-44.0	-14.0
145.0	-32.5	-14.0
146.0	-28.6	-14.0
147.0	-32.9	-14.0
148.0	-40.0	-14.0
149.0	-35.6	-14.0
150.0	-35.8	-14.0
151.0	-35.1	-14.0
152.0	-33.2	-14.0
153.0	-29.8	-14.0
154.0	-41.6	-14.0
155.0	-42.1	-14.0
156.0	-44.8	-14.0
157.0	-30.6	-14.0
158.0	-36.8	-14.0
159.0	-27.8	-14.0
160.0	-28.3	-14.0
161.0	-34.5	-14.0
162.0	-29.0	-14.0
163.0	-29.3	-14.0
164.0	-29.7	-14.0
165.0	-30.7	-14.0
166.0	-40.6	-14.0
167.0	-34.1	-14.0
168.0	-38.5	-14.0
169.0	-33.8	-14.0
170.0	-38.7	-14.0
171.0	-46.6	-14.0
172.0	-34.1	-14.0
173.0	-36.0	-14.0
174.0	-34.6	-14.0
175.0	-27.3	-14.0
176.0	-32.6	-14.0
177.0	-36.7	0.0
178.0	-34.2	0.0
179.0	-31.3	0.0

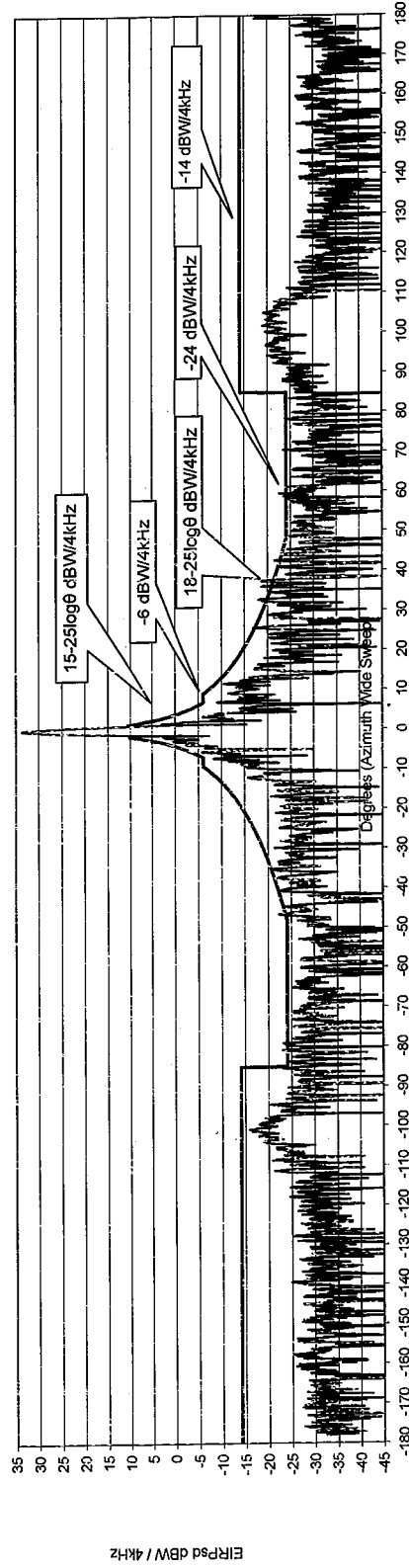
# Exhibit 2

## Cobham SATCOM, Sea Tel Products 2.4m Ku EIRPsd, Co-Pol, Azimuth, E-Plane (A)

14.25 GHz @ -14 dBW / 4 kHz, 0.7 dB Radome Loss



14.25 GHz @ -14 dBW / 4 kHz, 0.7 dB Radome Loss



Plot Parameters		Peak Excursions dB	
Input sd	Gain	1.5° to 7°	7° to 180°
-14.0	48.48	-2.21	2.2
		% Over	
		1%	
		Cal Factor	
		67.8	

File  
E:\Loop Canyon\AcquiredData\AZI\_1425\_HOR.mdb



## **EXHIBIT 3**

**25.222(b)(1)(i)(B) Tables for the Sea Tel Model 9797 2.4 Meter  
Ku-band Antennas**

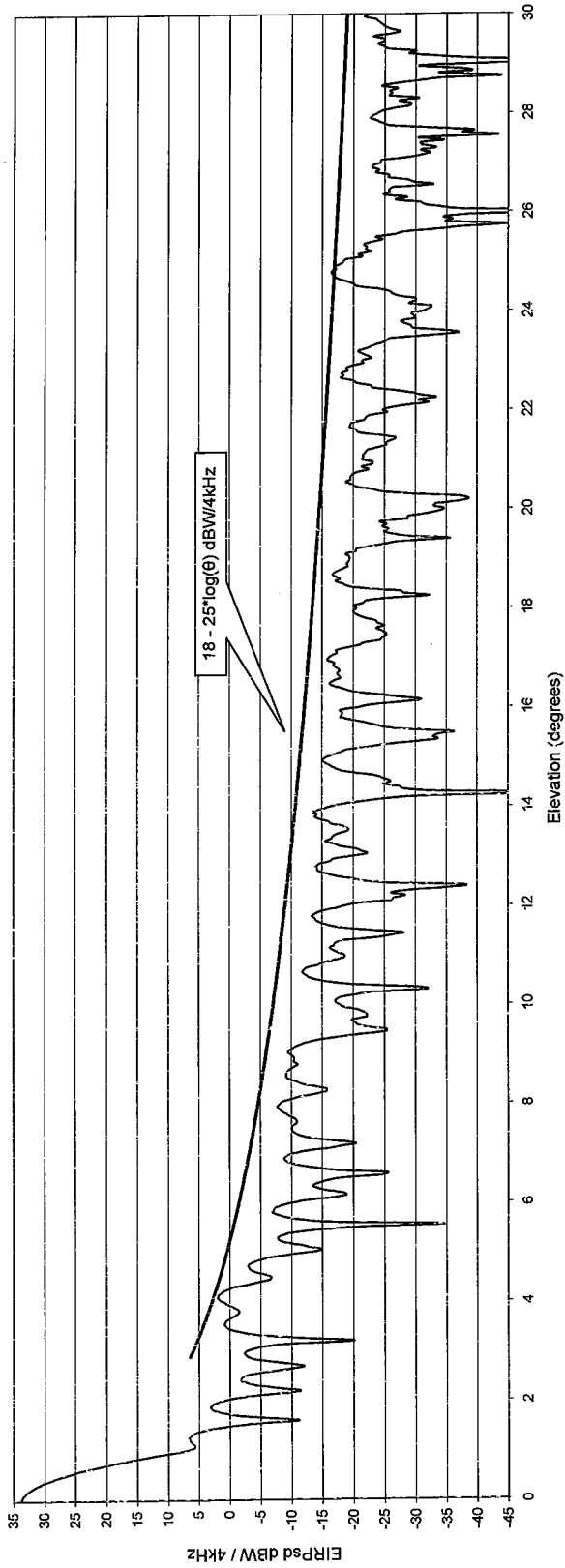




# Exhibit 3

Cobham SATCOM, Sea Tel Products  
 2.4m Ku EIRPsd, Co-Pol, Elevation, H-Plane (B)

14.25 GHz @ -14 dBW / 4 kHz, 0.7 dB Radome Loss



Plot Parameters  
 Input sd -14.0  
 Gain 48.48  
 Cal Factor 68.2

Peak Excursions dB  
 3° to 30°  
 - 0.41  
 % Over 0%

File  
 E:\Loop Canyon\AcquiredData\ELE\_1425\_HOR.mdb

## **EXHIBIT 4**

**25.222(b)(1)(i)(C) Tables for the Sea Tel Model 9797 2.4 Meter  
Ku-band Antennas**

# Exhibit 4

## Cobham SATCOM, Sea Tel Products

2.4m Ku EIRPsd Data Table  
 Cross Pol Azimuth, -10 to +10 Degrees @ 0.1 deg (C)

14.25 GHz @ -14 dBW / 4 kHz

Angle Degrees	EIRPsd dBW/4kHz	Mask dBW/4kHz
-10.0	-26.4	-16.0
-9.9	-24.5	-16.0
-9.8	-26.1	-16.0
-9.7	-25.8	-16.0
-9.6	-25.2	-16.0
-9.5	-24.9	-16.0
-9.4	-25.1	-16.0
-9.3	-25.0	-16.0
-9.2	-26.3	-16.0
-9.1	-25.9	-16.0
-9.0	-27.2	-16.0
-8.9	-24.8	-16.0
-8.8	-24.1	-16.0
-8.7	-25.0	-16.0
-8.6	-23.0	-16.0
-8.5	-24.5	-16.0
-8.4	-25.3	-16.0
-8.3	-25.7	-16.0
-8.2	-24.9	-16.0
-8.1	-23.9	-16.0
-8.0	-23.1	-16.0
-7.9	-24.1	-16.0
-7.8	-24.6	-16.0
-7.7	-24.6	-16.0
-7.6	-31.1	-16.0
-7.5	-28.9	-16.0
-7.4	-27.1	-16.0
-7.3	-23.5	-16.0
-7.2	-20.9	-16.0
-7.1	-20.7	-16.0
-7.0	-23.5	-16.0
-6.9	-25.4	-16.0
-6.8	-25.7	-15.8
-6.7	-25.7	-15.7
-6.6	-29.3	-15.5
-6.5	-30.9	-15.3
-6.4	-26.7	-15.2
-6.3	-25.3	-15.0
-6.2	-27.3	-14.8
-6.1	-35.2	-14.6
-6.0	-31.6	-14.5
-5.9	-32.0	-14.3
-5.8	-27.9	-14.1
-5.7	-22.9	-13.9
-5.6	-20.5	-13.7
-5.5	-18.3	-13.5
-5.4	-18.0	-13.3
-5.3	-19.3	-13.1
-5.2	-18.8	-12.9
-5.1	-18.0	-12.7
-5.0	-17.7	-12.5
-4.9	-17.9	-12.3
-4.8	-18.0	-12.0
-4.7	-16.6	-11.8
-4.6	-17.5	-11.6
-4.5	-19.8	-11.3
-4.4	-24.5	-11.1
-4.3	-26.8	-10.8

14.25 GHz @ -14 dBW / 4 kHz

Angle Degrees	EIRPsd dBW/4kHz	Mask dBW/4kHz
0.0	9.4	
0.1	11.6	
0.2	12.2	
0.3	11.7	
0.4	10.7	
0.5	10.0	
0.6	9.2	
0.7	8.1	
0.8	5.7	
0.9	2.1	
1.0	-1.0	
1.1	-1.8	
1.2	-3.5	
1.3	-6.6	
1.4	-9.7	
1.5	-7.4	
1.6	-6.7	
1.7	-8.6	
1.8	-12.1	-1.4
1.9	-9.6	-2.0
2.0	-7.4	-2.5
2.1	-7.7	-3.1
2.2	-10.5	-3.6
2.3	-16.0	-4.0
2.4	-19.5	-4.5
2.5	-15.4	-4.9
2.6	-13.7	-5.4
2.7	-12.7	-5.8
2.8	-12.3	-6.2
2.9	-12.5	-6.6
3.0	-14.9	-6.9
3.1	-18.0	-7.3
3.2	-24.8	-7.6
3.3	-26.9	-8.0
3.4	-26.3	-8.3
3.5	-25.4	-8.6
3.6	-22.1	-8.9
3.7	-21.4	-9.2
3.8	-23.0	-9.5
3.9	-32.3	-9.8
4.0	-21.4	-10.1
4.1	-16.8	-10.3
4.2	-16.4	-10.6
4.3	-18.1	-10.8
4.4	-25.0	-11.1
4.5	-35.7	-11.3
4.6	-40.8	-11.6
4.7	-28.8	-11.8
4.8	-22.8	-12.0
4.9	-19.6	-12.3
5.0	-19.0	-12.5
5.1	-21.1	-12.7
5.2	-28.5	-12.9
5.3	-24.6	-13.1
5.4	-20.8	-13.3
5.5	-19.7	-13.5
5.6	-20.7	-13.7
5.7	-21.1	-13.9

Exhibit 4

**Cobham SATCOM, Sea Tel Products**

2.4m Ku EIRPsd Data Table

Cross Pol Azimuth, -10 to +10 Degrees @ 0.1 deg (C)

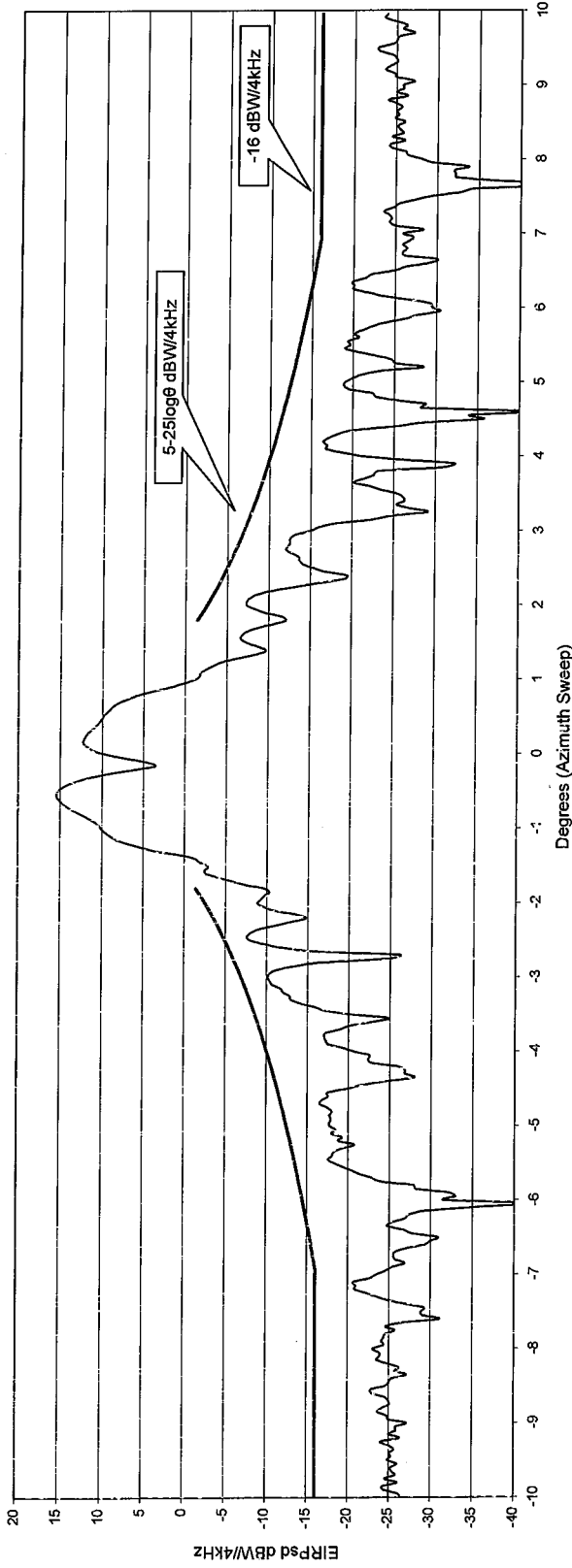
-4.2	-26.0	-10.6
-4.1	-22.4	-10.3
-4.0	-20.7	-10.1
-3.9	-17.5	-9.8
-3.8	-17.1	-9.5
-3.7	-18.9	-9.2
-3.6	-23.0	-8.9
-3.5	-20.6	-8.6
-3.4	-15.9	-8.3
-3.3	-13.0	-8.0
-3.2	-12.0	-7.6
-3.1	-10.8	-7.3
-3.0	-10.2	-6.9
-2.9	-11.1	-6.6
-2.8	-16.5	-6.2
-2.7	-26.1	-5.8
-2.6	-12.0	-5.4
-2.5	-8.0	-4.9
-2.4	-8.0	-4.5
-2.3	-11.0	-4.0
-2.2	-14.8	-3.6
-2.1	-10.9	-3.1
-2.0	-8.8	-2.5
-1.9	-9.6	-2.0
-1.8	-9.6	-1.4
-1.7	-5.6	
-1.6	-2.6	
-1.5	-2.8	
-1.4	-1.3	
-1.3	3.3	
-1.2	6.7	
-1.1	8.8	
-1.0	10.0	
-0.9	10.9	
-0.8	12.4	
-0.7	14.1	
-0.6	15.1	
-0.5	15.4	
-0.4	14.2	
-0.3	11.3	
-0.2	6.2	
-0.1	4.7	
0.0	9.4	

5.8	-23.9	-14.1
5.9	-27.8	-14.3
6.0	-29.4	-14.5
6.1	-27.1	-14.6
6.2	-21.9	-14.8
6.3	-20.1	-15.0
6.4	-21.4	-15.2
6.5	-24.9	-15.3
6.6	-29.1	-15.5
6.7	-26.0	-15.7
6.8	-26.4	-15.8
6.9	-26.7	-16.0
7.0	-25.9	-16.0
7.1	-25.0	-16.0
7.2	-24.5	-16.0
7.3	-23.6	-16.0
7.4	-25.4	-16.0
7.5	-29.3	-16.0
7.6	-34.6	-16.0
7.7	-38.2	-16.0
7.8	-32.2	-16.0
7.9	-33.7	-16.0
8.0	-28.1	-16.0
8.1	-26.1	-16.0
8.2	-24.3	-16.0
8.3	-24.5	-16.0
8.4	-25.4	-16.0
8.5	-26.0	-16.0
8.6	-25.3	-16.0
8.7	-25.7	-16.0
8.8	-24.1	-16.0
8.9	-25.0	-16.0
9.0	-25.8	-16.0
9.1	-25.0	-16.0
9.2	-23.7	-16.0
9.3	-25.0	-16.0
9.4	-24.5	-16.0
9.5	-22.8	-16.0
9.6	-25.0	-16.0
9.7	-27.1	-16.0
9.8	-26.2	-16.0
9.9	-23.6	-16.0
0.0	0.0	0.0

# Exhibit 4

Cobnam SATCOM, Sea Tel Products  
 2.4m Ku EIRPsd, X-Pol, Azimuth, H-Plane (C)

14.25 GHz @ -14 dBW / 4 kHz, 0.7 dB Radome Loss



Peak Excursions dB  
 1.8° to 7° 7° to 180°  
 -2.85 -4.67

Plot Parameters  
 Pin sd -14.0 Gain 48.48 Cal Factor 68.0

File: E:\Loop Canyon\AcquiredData\14125\_CP.mdb

% Over  
 0.00



## **EXHIBIT 5**

**25.222(b)(1)(i)(A) Tables for the Intellian Model v60G**

**0.60 Meter Ku-band Antennas**

Exhibit 5



## 2. EIRP Spectral Density Data

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

Angle	EIRP SD (dBW/4kHz)	Mask (dBW/4kHz)
-10.0	-21.30	-7.00
-9.9	-20.74	-6.89
-9.8	-20.62	-6.78
-9.7	-20.49	-6.67
-9.6	-20.22	-6.56
-9.5	-19.95	-6.44
-9.4	-19.68	-6.33
-9.3	-19.41	-6.21
-9.2	-18.98	-6.09
-9.1	-18.57	-6.00
-9.0	-18.10	-6.00
-8.9	-17.65	-6.00
-8.8	-17.18	-6.00
-8.7	-16.73	-6.00
-8.6	-16.29	-6.00
-8.5	-15.86	-6.00
-8.4	-15.48	-6.00
-8.3	-15.11	-6.00
-8.2	-14.80	-6.00
-8.1	-14.50	-6.00
-8.0	-14.32	-6.00
-7.9	-14.13	-6.00
-7.8	-14.03	-6.00
-7.7	-13.92	-6.00
-7.6	-13.94	-6.00
-7.5	-13.95	-6.00
-7.4	-14.07	-6.00
-7.3	-14.19	-6.00
-7.2	-14.40	-6.00
-7.1	-14.61	-6.00
-7.0	-14.82	-6.00
-6.9	-15.04	-5.97
-6.8	-15.25	-5.81
-6.7	-15.47	-5.65
-6.6	-15.60	-5.49
-6.5	-15.74	-5.32
-6.4	-15.74	-5.15
-6.3	-15.74	-4.98
-6.2	-15.60	-4.81
-6.1	-15.47	-4.63
-6.0	-15.16	-4.45
-5.9	-14.86	-4.27
-5.8	-14.33	-4.09
-5.7	-13.83	-3.90
-5.6	-13.06	-3.70
-5.5	-12.35	-3.51
-5.4	-11.39	-3.31
-5.3	-10.53	-3.11
-5.2	-9.51	-2.90
-5.1	-8.60	-2.69

Angle	EIRP SD (dBW/4kHz)	Mask (dBW/4kHz)
-5.0	-7.67	-2.47
-4.9	-6.82	-2.25
-4.8	-5.97	-2.03
-4.7	-5.20	-1.80
-4.6	-4.46	-1.57
-4.5	-3.77	-1.33
-4.4	-3.16	-1.09
-4.3	-2.59	-0.84
-4.2	-2.12	-0.58
-4.1	-1.67	-0.32
-4.0	-1.32	-0.05
-3.9	-0.97	0.22
-3.8	-0.75	0.51
-3.7	-0.54	0.79
-3.6	-0.43	1.09
-3.5	-0.32	1.40
-3.4	-0.26	1.71
-3.3	-0.20	2.04
-3.2	-0.12	2.37
-3.1	-0.03	2.72
-3.0	0.23	3.07
-2.9	0.47	3.44
-2.8	1.00	3.82
-2.7	1.53	4.22
-2.6	2.06	4.63
-2.5	2.58	5.05
-2.4	3.30	5.40
-2.3	4.03	5.96
-2.2	5.03	6.44
-2.1	5.94	6.94
-2.0	6.86	7.47
-1.9	7.70	8.03
-1.8	8.50	8.62
-1.7	9.24	9.24
-1.6	9.81	9.90
-1.5	10.60	10.60
-1.4	11.32	
-1.3	11.94	
-1.2	12.47	
-1.1	12.98	
-1.0	13.43	
-0.9	13.87	
-0.8	14.26	
-0.7	14.64	
-0.6	14.92	
-0.5	15.20	
-0.4	15.41	
-0.3	15.61	
-0.2	15.75	
-0.1	15.79	

Exhibit 5

**Intellian**<sup>®</sup>

Test Report

Angle	EIRP SD (dBW/4kHz)	Mask (dBW/4kHz)
0.0	15.82	
0.1	15.81	
0.2	15.74	
0.3	15.65	
0.4	15.50	
0.5	15.28	
0.6	15.00	
0.7	14.71	
0.8	14.34	
0.9	13.95	
1.0	13.50	
1.1	13.03	
1.2	12.50	
1.3	11.94	
1.4	11.32	
1.5	10.66	10.60
1.6	9.95	9.90
1.7	9.19	9.24
1.8	8.40	8.62
1.9	7.54	8.03
2.0	6.61	7.47
2.1	5.59	6.94
2.2	4.60	6.44
2.3	3.50	5.96
2.4	2.37	5.49
2.5	1.45	5.05
2.6	0.54	4.63
2.7	-0.38	4.22
2.8	-1.30	3.82
2.9	-2.21	3.44
3.0	-2.75	3.07
3.1	-3.31	2.72
3.2	-3.42	2.37
3.3	-3.54	2.04
3.4	-3.48	1.71
3.5	-3.43	1.40
3.6	-3.40	1.09
3.7	-3.38	0.79
3.8	-3.49	0.51
3.9	-3.60	0.22
4.0	-3.86	-0.05
4.1	-4.14	-0.32
4.2	-4.53	-0.58
4.3	-4.04	-0.84
4.4	-5.45	-1.09
4.5	-5.99	-1.33
4.6	-6.63	-1.57
4.7	-7.31	-1.80
4.8	-8.07	-2.03
4.9	-8.91	-2.25

Angle	EIRP SD (dBW/4kHz)	Mask (dBW/4kHz)
5.0	-9.74	-2.47
5.1	-10.67	-2.69
5.2	-11.57	-2.90
5.3	-12.59	-3.11
5.4	-13.51	-3.31
5.5	-14.55	-3.51
5.6	-15.35	-3.70
5.7	-16.24	-3.90
5.8	-17.01	-4.09
5.9	-17.86	-4.27
6.0	-18.54	-4.45
6.1	-19.27	-4.63
6.2	-19.74	-4.81
6.3	-20.24	-4.98
6.4	-20.47	-5.15
6.5	-20.71	-5.32
6.6	-20.81	-5.49
6.7	-20.91	-5.65
6.8	-20.98	-5.81
6.9	-21.06	-5.97
7.0	-21.24	-6.00
7.1	-21.41	-6.00
7.2	-21.74	-6.00
7.3	-22.08	-6.00
7.4	-22.62	-6.00
7.5	-23.21	-6.00
7.6	-24.11	-6.00
7.7	-25.11	-6.00
7.8	-26.24	-6.00
7.9	-27.53	-6.00
8.0	-28.18	-6.00
8.1	-28.87	-6.00
8.2	-28.17	-6.00
8.3	-27.53	-6.00
8.4	-26.26	-6.00
8.5	-25.16	-6.00
8.6	-24.12	-6.00
8.7	-23.19	-6.00
8.8	-22.52	-6.00
8.9	-21.89	-6.00
9.0	-21.57	-6.00
9.1	-21.25	-6.00
9.2	-21.31	-6.09
9.3	-21.36	-6.21
9.4	-21.68	-6.33
9.5	-22.01	-6.44
9.6	-22.78	-6.56
9.7	-23.61	-6.67
9.8	-24.82	-6.78
9.9	-26.22	-6.89
10.0	-28.30	-7.00

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

Angle	EIRP sd (dBW/4kHz)	Mask (dBW/4kHz)
-180	-27.92	-14.00
-179	-28.52	-14.00
-178	-30.60	-14.00
-177	-26.56	-14.00
-176	-25.86	-14.00
-175	-25.34	-14.00
-174	-26.04	-14.00
-173	-26.04	-14.00
-172	-25.65	-14.00
-171	-25.93	-14.00
-170	-27.52	-14.00
-169	-32.17	-14.00
-168	-36.86	-14.00
-167	-32.87	-14.00
-166	-34.69	-14.00
-165	-39.11	-14.00
-164	-37.05	-14.00
-163	-42.92	-14.00
-162	-44.57	-14.00
-161	-49.77	-14.00
-160	-41.87	-14.00
-159	-44.28	-14.00
-158	-52.87	-14.00
-157	-38.98	-14.00
-156	-41.96	-14.00
-155	-53.07	-14.00
-154	-44.47	-14.00
-153	-39.91	-14.00
-152	-46.38	-14.00
-151	-50.26	-14.00
-150	-52.43	-14.00
-149	-51.16	-14.00
-148	-46.66	-14.00
-147	-45.30	-14.00
-146	-46.12	-14.00
-145	-44.30	-14.00
-144	-46.31	-14.00
-143	-46.50	-14.00
-142	-47.21	-14.00
-141	-50.84	-14.00
-140	-50.23	-14.00
-139	-54.86	-14.00
-138	-55.15	-14.00
-137	-51.84	-14.00
-136	-49.84	-14.00

Angle	EIRP sd (dBW/4kHz)	Mask (dBW/4kHz)
-135	-47.28	-14.00
-134	-47.59	-14.00
-133	-56.99	-14.00
-132	-55.18	-14.00
-131	-65.30	-14.00
-130	-51.96	-14.00
-129	-47.20	-14.00
-128	-47.83	-14.00
-127	-49.50	-14.00
-126	-52.76	-14.00
-125	-50.75	-14.00
-124	-57.05	-14.00
-123	-47.56	-14.00
-122	-46.20	-14.00
-121	-46.82	-14.00
-120	-49.49	-14.00
-119	-58.92	-14.00
-118	-53.56	-14.00
-117	-44.19	-14.00
-116	-49.58	-14.00
-115	-55.30	-14.00
-114	-64.37	-14.00
-113	-46.09	-14.00
-112	-44.97	-14.00
-111	-42.24	-14.00
-110	-46.39	-14.00
-109	-55.80	-14.00
-108	-44.21	-14.00
-107	-43.56	-14.00
-106	-45.02	-14.00
-105	-42.56	-14.00
-104	-44.40	-14.00
-103	-45.30	-14.00
-102	-51.10	-14.00
-101	-45.55	-14.00
-100	-47.96	-14.00
-99	-48.79	-14.00
-98	-46.59	-14.00
-97	-45.39	-14.00
-96	-44.55	-14.00
-95	-45.04	-14.00
-94	-44.91	-14.00
-93	-46.43	-14.00
-92	-43.26	-14.00
-91	-40.48	-14.00

Angle	EIRP sd (dBW/4kHz)	Mask (dBW/4kHz)
-90	-39.66	-14.00
-89	-37.66	-14.00
-88	-36.48	-14.00
-87	-34.84	-14.00
-86	-34.51	-14.00
-85	-32.40	-14.00
-84	-30.72	-24.00
-83	-30.71	-24.00
-82	-31.08	-24.00
-81	-32.65	-24.00
-80	-35.88	-24.00
-79	-37.05	-24.00
-78	-32.87	-24.00
-77	-31.39	-24.00
-76	-32.56	-24.00
-75	-32.71	-24.00
-74	-34.59	-24.00
-73	-41.42	-24.00
-72	-46.14	-24.00
-71	-42.24	-24.00
-70	-42.06	-24.00
-69	-42.98	-24.00
-68	-40.38	-24.00
-67	-46.56	-24.00
-66	-32.75	-24.00
-65	-31.39	-24.00
-64	-29.47	-24.00
-63	-29.65	-24.00
-62	-32.19	-24.00
-61	-32.76	-24.00
-60	-41.90	-24.00
-59	-47.40	-24.00
-58	-37.21	-24.00
-57	-37.37	-24.00
-56	-44.10	-24.00
-55	-50.38	-24.00
-54	-44.19	-24.00
-53	-44.87	-24.00
-52	-59.98	-24.00
-51	-41.37	-24.00
-50	-36.55	-24.00
-49	-37.01	-24.00
-48	-37.00	-24.00
-47	-36.05	-23.80
-46	-36.57	-23.57

Angle	EIRP sd (dBW/4kHz)	Mask (dBW/4kHz)
-45	-36.39	-23.33
-44	-33.68	-23.09
-43	-30.75	-22.84
-42	-32.42	-22.58
-41	-38.43	-22.32
-40	-43.57	-22.05
-39	-39.24	-21.78
-38	-37.27	-21.49
-37	-35.70	-21.21
-36	-35.50	-20.91
-35	-32.99	-20.60
-34	-30.66	-20.29
-33	-29.14	-19.96
-32	-28.97	-19.63
-31	-32.39	-19.28
-30	-40.41	-18.93
-29	-36.36	-18.56
-28	-40.75	-18.18
-27	-33.01	-17.78
-26	-35.70	-17.37
-25	-34.54	-16.95
-24	-29.26	-16.51
-23	-34.57	-16.04
-22	-33.93	-15.56
-21	-38.58	-15.06
-20	-37.18	-14.53
-19	-32.22	-13.97
-18	-23.76	-13.38
-17	-24.94	-12.76
-16	-34.93	-12.10
-15	-27.95	-11.40
-14	-28.66	-10.65
-13	-26.24	-9.85
-12	-21.78	-8.98
-11	-20.57	-8.03
-10	-21.30	-7.00
-9	-18.10	-6.00
-8	-14.32	-6.00
-7	-14.82	-6.13
-6	-15.16	-4.45
-5	-7.67	-2.47
-4	-1.32	-0.05
-3	0.23	3.07
-2	6.86	7.47
-1	13.43	

Exhibit 5



Angle	EIRP sd (dBW/4kHz)	Mask (dBW/4kHz)
0	15.82	
1	13.50	
2	6.61	7.47
3	-2.75	3.07
4	-3.86	-0.05
5	-9.74	-2.47
6	-18.54	-4.45
7	-21.24	-6.13
8	-28.18	-6.00
9	-21.57	-6.00
10	-28.30	-7.00
11	-22.85	-8.03
12	-22.62	-8.98
13	-25.60	-9.85
14	-21.62	-10.65
15	-21.67	-11.40
16	-24.69	-12.10
17	-27.70	-12.76
18	-23.09	-13.38
19	-28.26	-13.97
20	-32.75	-14.53
21	-35.11	-15.06
22	-32.11	-15.56
23	-36.13	-16.04
24	-36.61	-16.51
25	-33.73	-16.95
26	-27.29	-17.37
27	-25.23	-17.78
28	-28.14	-18.18
29	-32.72	-18.56
30	-36.99	-18.93
31	-29.02	-19.28
32	-27.05	-19.63
33	-30.82	-19.96
34	-42.16	-20.29
35	-42.00	-20.60
36	-41.48	-20.91
37	-44.83	-21.21
38	-39.93	-21.49
39	-35.75	-21.78
40	-34.82	-22.05
41	-39.51	-22.32
42	-39.02	-22.58
43	-32.38	-22.84
44	-31.75	-23.09

Angle	EIRP sd (dBW/4kHz)	Mask (dBW/4kHz)
45	-35.32	-23.33
46	-34.52	-23.57
47	-31.76	-23.80
48	-32.49	-24.00
49	-41.91	-24.00
50	-39.32	-24.00
51	-35.20	-24.00
52	-39.92	-24.00
53	-48.00	-24.00
54	-37.42	-24.00
55	-37.66	-24.00
56	-41.56	-24.00
57	-39.02	-24.00
58	-41.92	-24.00
59	-56.54	-24.00
60	-40.78	-24.00
61	-35.88	-24.00
62	-34.87	-24.00
63	-37.76	-24.00
64	-39.95	-24.00
65	-41.95	-24.00
66	-45.81	-24.00
67	-46.14	-24.00
68	-43.13	-24.00
69	-42.05	-24.00
70	-40.67	-24.00
71	-37.22	-24.00
72	-35.46	-24.00
73	-33.88	-24.00
74	-32.62	-24.00
75	-31.91	-24.00
76	-31.41	-24.00
77	-30.93	-24.00
78	-30.63	-24.00
79	-29.56	-24.00
80	-28.42	-24.00
81	-28.13	-24.00
82	-28.50	-24.00
83	-30.93	-24.00
84	-33.36	-24.00
85	-35.19	-14.00
86	-35.94	-14.00
87	-36.00	-14.00
88	-35.14	-14.00
89	-33.50	-14.00

Exhibit 5

**Intellian®**

Intellian v-Series  
Maritime Ku-band VSAT Antenna System

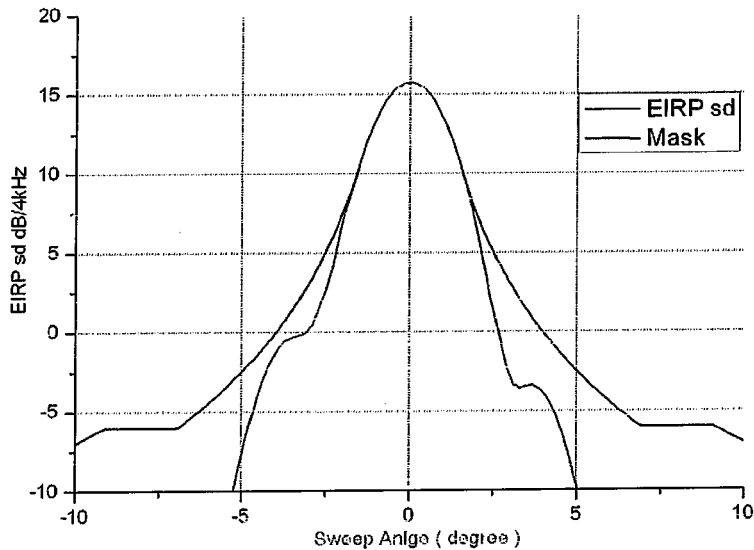
**Test Report**

Angle	EIRP sd (dBW/4kHz)	Mask (dBW/4kHz)
90	-33.31	-14.00
91	-34.63	-14.00
92	-34.63	-14.00
93	-35.51	-14.00
94	-37.40	-14.00
95	-38.52	-14.00
96	-37.99	-14.00
97	-36.99	-14.00
98	-37.67	-14.00
99	-40.39	-14.00
100	-41.18	-14.00
101	-39.14	-14.00
102	-40.78	-14.00
103	-42.64	-14.00
104	-44.01	-14.00
105	-44.74	-14.00
106	-42.61	-14.00
107	-43.82	-14.00
108	-42.67	-14.00
109	-43.88	-14.00
110	-45.18	-14.00
111	-45.71	-14.00
112	-44.55	-14.00
113	-42.05	-14.00
114	-44.15	-14.00
115	-46.22	-14.00
116	-40.78	-14.00
117	-40.14	-14.00
118	-42.30	-14.00
119	-53.73	-14.00
120	-50.16	-14.00
121	-44.93	-14.00
122	-53.55	-14.00
123	-49.90	-14.00
124	-51.44	-14.00
125	-55.44	-14.00
126	-51.58	-14.00
127	-52.59	-14.00
128	-56.87	-14.00
129	-53.54	-14.00
130	-72.38	-14.00
131	-54.61	-14.00
132	-49.00	-14.00
133	-47.44	-14.00
134	-46.11	-14.00

Angle	EIRP sd (dBW/4kHz)	Mask (dBW/4kHz)
135	-50.86	-14.00
136	-51.03	-14.00
137	-46.20	-14.00
138	-48.93	-14.00
139	-56.72	-14.00
140	-57.69	-14.00
141	-58.44	-14.00
142	-52.85	-14.00
143	-49.27	-14.00
144	-42.99	-14.00
145	-41.17	-14.00
146	-44.94	-14.00
147	-46.54	-14.00
148	-49.73	-14.00
149	-46.22	-14.00
150	-44.67	-14.00
151	-44.32	-14.00
152	-43.44	-14.00
153	-43.70	-14.00
154	-44.85	-14.00
155	-46.77	-14.00
156	-58.66	-14.00
157	-62.16	-14.00
158	-42.34	-14.00
159	-38.76	-14.00
160	-41.53	-14.00
161	-49.26	-14.00
162	-61.93	-14.00
163	-50.53	-14.00
164	-49.61	-14.00
165	-47.72	-14.00
166	-43.41	-14.00
167	-45.51	-14.00
168	-41.88	-14.00
169	-34.33	-14.00
170	-32.81	-14.00
171	-34.18	-14.00
172	-36.68	-14.00
173	-37.28	-14.00
174	-40.52	-14.00
175	-42.91	-14.00
176	-33.80	-14.00
177	-29.84	-14.00
178	-27.06	-14.00
179	-25.06	-14.00
180	-25.35	-14.00

## 1. EIRP Spectral Density of V60G

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



14.25GHz EIRP spectral density @ -22.3 dBW/4kHz Input power spectral density

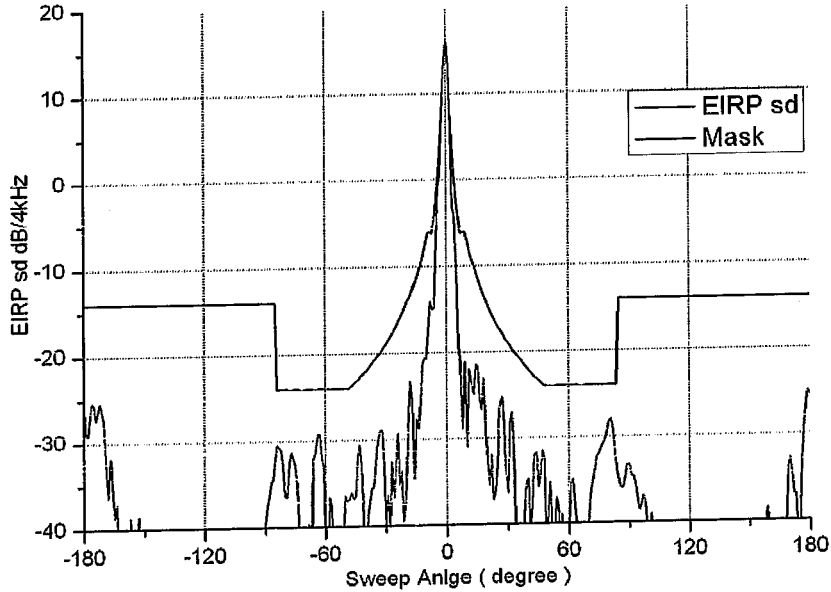
#### ▪ FCC EIRP spectral density regulation

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

The v60G's Radiation pattern meets the FCC EIRP spectral density mask when the input powers spectral density is @ -22.3 dBW/ 4kHz



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



14.25GHz EIRP spectral density @ -22.3dBW/4kHz Input power spectral density

▪ **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	$9.2^\circ < \theta \leq 48^\circ$
-24	dBW/4kHz	for	$48^\circ < \theta \leq 85^\circ$
-14	dBW/4kHz	for	$85^\circ < \theta \leq 180^\circ$

*The v60G's Radiation pattern meets the FCC EIRP spectral density mask when the input power spectral density is @ -22.3 dBW/ 4kHz*

# **EXHIBIT 6**

**25.222(b)(1)(i)(B) Tables for the Intellian Model v60G**

**0.60 Meter Ku-band Antennas**

**2.4. Elevation Pattern for Co-pol (-30°~30°)**

Angle	EIRP sd (dBW/4kHz)	Mask (dBW/4kHz)
-30.00	-32.34	-18.93
-29.80	-33.69	-18.86
-29.60	-34.44	-18.78
-29.40	-34.20	-18.71
-29.20	-33.12	-18.63
-29.00	-31.84	-18.56
-28.80	-30.79	-18.48
-28.60	-29.95	-18.41
-28.40	-29.32	-18.33
-28.20	-28.75	-18.26
-28.00	-28.15	-18.18
-27.80	-27.65	-18.10
-27.60	-27.09	-18.02
-27.40	-26.61	-17.94
-27.20	-26.23	-17.86
-27.00	-25.94	-17.78
-26.80	-25.90	-17.70
-26.60	-26.03	-17.62
-26.40	-26.24	-17.54
-26.20	-26.63	-17.46
-26.00	-27.13	-17.37
-25.80	-27.67	-17.29
-25.60	-28.14	-17.21
-25.40	-28.47	-17.12
-25.20	-28.50	-17.04
-25.00	-28.04	-16.95
-24.80	-27.35	-16.86
-24.60	-26.50	-16.77
-24.40	-25.76	-16.68
-24.20	-25.28	-16.60
-24.00	-25.09	-16.51
-23.80	-25.19	-16.41
-23.60	-25.73	-16.32
-23.40	-26.57	-16.23
-23.20	-27.85	-16.14
-23.00	-29.77	-16.04
-22.80	-32.29	-15.95
-22.60	-34.62	-15.85
-22.40	-34.76	-15.76
-22.20	-33.19	-15.66
-22.00	-31.18	-15.56
-21.80	-29.92	-15.46
-21.60	-28.98	-15.36
-21.40	-28.49	-15.26
-21.20	-28.42	-15.16
-21.00	-28.81	-15.06
-20.80	-29.42	-14.95
-20.60	-29.90	-14.85
-20.40	-30.36	-14.74
-20.20	-30.52	-14.63

Angle	EIRP sd (dBW/4kHz)	Mask (dBW/4kHz)
-20	-30.73	-14.53
-19.8	-31.49	-14.42
-19.6	-32.60	-14.31
-19.4	-34.71	-14.20
-19.2	-38.39	-14.08
-19	-45.35	-13.97
-18.8	-40.54	-13.85
-18.6	-35.01	-13.74
-18.4	-32.07	-13.62
-18.2	-29.99	-13.50
-18	-28.92	-13.38
-17.8	-28.71	-13.26
-17.6	-29.16	-13.14
-17.4	-30.46	-13.01
-17.2	-32.84	-12.89
-17	-35.78	-12.76
-16.8	-35.41	-12.63
-16.6	-31.76	-12.50
-16.4	-28.88	-12.37
-16.2	-26.66	-12.24
-16	-25.46	-12.10
-15.8	-24.84	-11.97
-15.6	-25.03	-11.83
-15.4	-25.97	-11.69
-15.2	-28.11	-11.55
-15	-31.70	-11.40
-14.8	-39.04	-11.26
-14.6	-36.19	-11.11
-14.4	-29.47	-10.96
-14.2	-25.66	-10.81
-14	-23.37	-10.65
-13.8	-21.98	-10.50
-13.6	-21.10	-10.34
-13.4	-21.03	-10.18
-13.2	-21.72	-10.01
-13	-23.18	-9.85
-12.8	-26.09	-9.68
-12.6	-30.74	-9.51
-12.4	-34.63	-9.34
-12.2	-28.40	-9.16
-12	-23.71	-8.98
-11.8	-20.70	-8.80
-11.6	-18.77	-8.61
-11.4	-17.54	-8.42
-11.2	-16.83	-8.23
-11	-16.66	-8.03
-10.8	-16.82	-7.84
-10.6	-17.23	-7.63
-10.4	-17.91	-7.43
-10.2	-18.82	-7.22

Exhibit 6

**Intellian**<sup>®</sup>

**Test Report**

Angle	EIRP sd (dBW/4kHz)	Mask (dBW/4kHz)
-10	-19.72	-7.00
-9.8	-20.28	-6.78
-9.6	-20.50	-6.56
-9.4	-19.83	-6.33
-9.2	-18.93	-6.09
-9	-17.64	-5.86
-8.8	-16.11	-5.61
-8.6	-14.48	-5.36
-8.4	-13.22	-5.11
-8.2	-12.11	-4.85
-8	-11.26	-4.58
-7.8	-10.73	-4.30
-7.6	-10.61	-4.02
-7.4	-10.82	-3.73
-7.2	-11.59	-3.43
-7	-12.86	-3.13
-6.8	-14.87	-2.81
-6.6	-18.08	-2.49
-6.4	-23.99	-2.15
-6.2	-38.06	-1.81
-6	-24.14	-1.45
-5.8	-19.65	-1.09
-5.6	-17.68	-0.70
-5.4	-16.98	-0.31
-5.2	-17.02	0.10
-5	-16.43	0.53
-4.8	-14.02	0.97
-4.6	-10.57	1.43
-4.4	-7.50	1.91
-4.2	-5.06	2.42
-4	-3.18	2.95
-3.8	-1.80	3.51
-3.6	-0.88	4.09
-3.4	-0.45	4.71
-3.2	-0.58	5.37
-3	-1.39	6.07
-2.8	-3.17	
-2.6	-6.39	
-2.4	-10.17	
-2.2	-5.34	
-2	0.09	
-1.8	4.03	
-1.6	6.96	
-1.4	9.19	
-1.2	11.03	
-1	12.47	
-0.8	13.62	
-0.6	14.50	
-0.4	15.15	
-0.2	15.53	

Angle	EIRP sd (dBW/4kHz)	Mask (dBW/4kHz)
0	15.82	
0.2	15.80	
0.4	15.71	
0.6	15.37	
0.8	14.80	
1	14.03	
1.2	13.02	
1.4	11.66	
1.6	10.00	
1.8	8.01	
2	5.56	
2.2	2.22	
2.4	-2.15	
2.6	-6.45	
2.8	-5.72	
3	-2.87	6.07
3.2	-0.91	5.37
3.4	0.21	4.71
3.6	0.59	4.09
3.8	0.43	3.51
4	-0.24	2.95
4.2	-1.35	2.42
4.4	-2.85	1.91
4.6	-4.78	1.43
4.8	-7.07	0.97
5	-9.78	0.53
5.2	-12.77	0.10
5.4	-15.36	-0.31
5.6	-17.27	-0.70
5.8	-19.01	-1.09
6	-21.76	-1.45
6.2	-26.57	-1.81
6.4	-26.51	-2.15
6.6	-19.71	-2.49
6.8	-15.38	-2.81
7	-12.55	-3.13
7.2	-10.59	-3.43
7.4	-9.36	-3.73
7.6	-8.69	-4.02
7.8	-8.43	-4.30
8	-8.54	-4.58
8.2	-8.97	-4.85
8.4	-9.76	-5.11
8.6	-10.81	-5.36
8.8	-12.25	-5.61
9	-13.94	-5.86
9.2	-16.08	-6.09
9.4	-18.56	-6.33
9.6	-20.92	-6.56
9.8	-22.85	-6.78

Exhibit 6

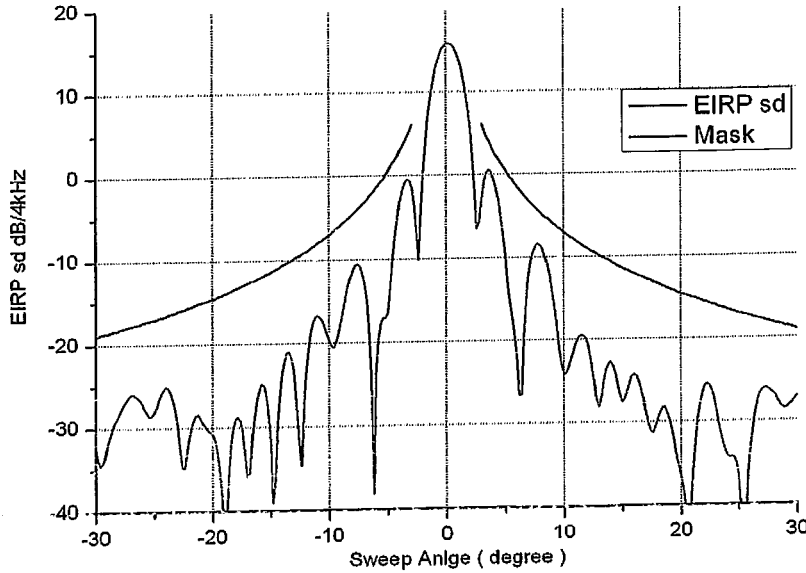
**Intellian**<sup>®</sup>

Test Report

Angle	EIRP sd (dBW/4kHz)	Mask (dBW/4kHz)
10.00	-23.96	-7.00
10.20	-24.05	-7.22
10.40	-23.43	-7.43
10.60	-22.45	-7.63
10.80	-21.50	-7.84
11.00	-20.57	-8.03
11.20	-19.97	-8.23
11.40	-19.54	-8.42
11.60	-19.45	-8.61
11.80	-19.65	-8.80
12.00	-20.26	-8.98
12.20	-21.30	-9.16
12.40	-22.98	-9.34
12.60	-25.12	-9.51
12.80	-27.24	-9.68
13.00	-28.04	-9.85
13.20	-26.82	-10.01
13.40	-25.01	-10.18
13.60	-23.64	-10.34
13.80	-22.94	-10.50
14.00	-22.74	-10.65
14.20	-23.14	-10.81
14.40	-24.07	-10.96
14.60	-25.30	-11.11
14.80	-26.66	-11.26
15.00	-27.53	-11.40
15.20	-27.30	-11.55
15.40	-26.35	-11.69
15.60	-25.32	-11.83
15.80	-24.57	-11.97
16.00	-24.21	-12.10
16.20	-24.40	-12.24
16.40	-24.94	-12.37
16.60	-25.92	-12.50
16.80	-27.22	-12.63
17.00	-28.81	-12.76
17.20	-30.16	-12.89
17.40	-30.99	-13.01
17.60	-31.21	-13.14
17.80	-30.58	-13.26
18.00	-29.59	-13.38
18.20	-28.67	-13.50
18.40	-28.24	-13.62
18.60	-28.21	-13.74
18.80	-28.73	-13.85
19.00	-29.62	-13.97
19.20	-30.75	-14.08
19.40	-32.40	-14.20
19.60	-33.95	-14.31
19.80	-35.25	-14.42

Angle	EIRP sd (dBW/4kHz)	Mask (dBW/4kHz)
20.00	-36.65	-14.53
20.20	-38.04	-14.63
20.40	-40.23	-14.74
20.60	-43.34	-14.85
20.80	-41.98	-14.95
21.00	-36.28	-15.06
21.20	-32.43	-15.16
21.40	-29.72	-15.26
21.60	-27.79	-15.36
21.80	-26.48	-15.46
22.00	-25.68	-15.56
22.20	-25.44	-15.66
22.40	-25.62	-15.76
22.60	-26.27	-15.85
22.80	-27.20	-15.95
23.00	-28.55	-16.04
23.20	-29.87	-16.14
23.40	-31.34	-16.23
23.60	-32.69	-16.32
23.80	-33.63	-16.41
24.00	-34.10	-16.51
24.20	-34.26	-16.60
24.40	-34.26	-16.68
24.60	-34.30	-16.77
24.80	-34.97	-16.86
25.00	-36.62	-16.95
25.20	-40.09	-17.04
25.40	-45.46	-17.12
25.60	-41.66	-17.21
25.80	-36.32	-17.29
26.00	-32.96	-17.37
26.20	-30.59	-17.46
26.40	-28.85	-17.54
26.60	-27.52	-17.62
26.80	-26.68	-17.70
27.00	-26.21	-17.78
27.20	-26.03	-17.86
27.40	-25.97	-17.94
27.60	-26.09	-18.02
27.80	-26.34	-18.10
28.00	-26.65	-18.18
28.20	-27.05	-18.26
28.40	-27.53	-18.33
28.60	-28.01	-18.41
28.80	-28.33	-18.48
29.00	-28.41	-18.56
29.20	-28.34	-18.63
29.40	-28.08	-18.71
29.60	-27.77	-18.78
29.80	-27.36	-18.86
30.00	-27.12	-18.93

**1.4. Elevation Pattern for Co-pol, Narrow Angle (-30°~30°)**



14.25GHz EIRP spectral density @ -22.3dBW/4kHz Input power spectral density

▪ **FCC EIRP spectral density regulation**

<b>18-25log(θ)</b>	<b>dBW/4kHz</b>	<b>for</b>	<b>3.0° ≤ θ ≤ 48°</b>
<b>-24</b>	<b>dBW/4kHz</b>	<b>for</b>	<b>48° &lt; θ ≤ 85°</b>
<b>-14</b>	<b>dBW/4kHz</b>	<b>for</b>	<b>85° &lt; θ ≤ 180°</b>

*The v60G's Radiation pattern meets the FCC EIRP spectral density mask when the input power spectral density is @ -22.3 dBW/ 4kHz*

## **EXHIBIT 7**

**25.222(b)(1)(i)(C) Tables for the Intellian Model v60G**

**0.60 Meter Ku-band Antennas**

Exhibit 7

**Intellian®**

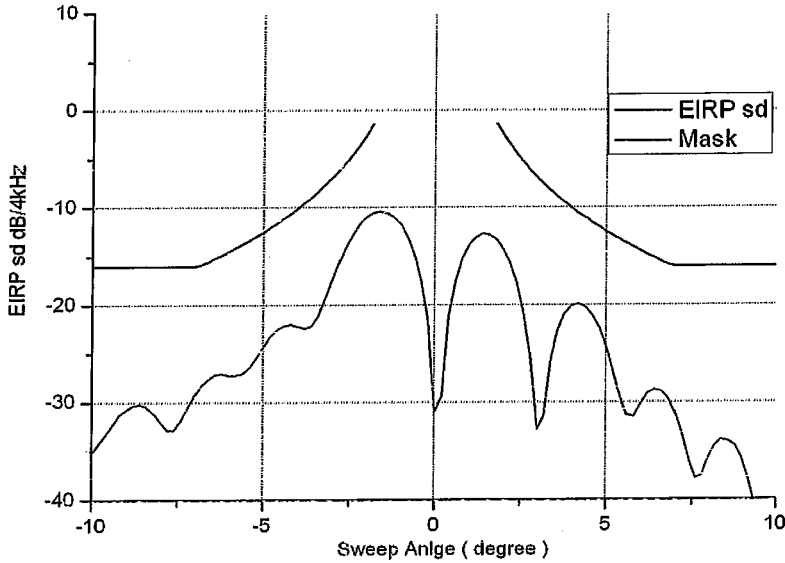
**2.3. Azimuth Pattern for Cross-pol (-10°~10°)**

Angle	EIRP sd (dBW/4kHz)	Mask (dBW/4kHz)
-10.0	-35.16	-16.00
-9.8	-34.21	-16.00
-9.6	-33.22	-16.00
-9.4	-32.29	-16.00
-9.2	-31.30	-16.00
-9.0	-30.76	-16.00
-8.8	-30.32	-16.00
-8.6	-30.15	-16.00
-8.4	-30.45	-16.00
-8.2	-31.08	-16.00
-8.0	-31.99	-16.00
-7.8	-32.75	-16.00
-7.6	-32.75	-16.00
-7.4	-31.90	-16.00
-7.2	-30.60	-16.00
-7.0	-29.32	-16.00
-6.8	-28.29	-15.81
-6.6	-27.64	-15.49
-6.4	-27.14	-15.15
-6.2	-27.05	-14.81
-6.0	-27.23	-14.45
-5.8	-27.22	-14.09
-5.6	-27.05	-13.70
-5.4	-26.37	-13.31
-5.2	-25.39	-12.90
-5.0	-24.28	-12.47
-4.8	-23.22	-12.03
-4.6	-22.55	-11.57
-4.4	-22.10	-11.09
-4.2	-22.00	-10.58
-4.0	-22.16	-10.05
-3.8	-22.33	-9.49
-3.6	-22.20	-8.91
-3.4	-21.15	-8.29
-3.2	-19.36	-7.63
-3.0	-17.46	-6.93
-2.8	-15.71	-6.18
-2.6	-14.12	-5.37
-2.4	-12.77	-4.51
-2.2	-11.70	-3.56
-2.0	-10.98	-2.53
-1.8	-10.53	-1.38
-1.6	-10.39	
-1.4	-10.52	
-1.2	-10.95	
-1.0	-11.72	
-0.8	-12.98	
-0.6	-14.88	
-0.4	-17.60	
-0.2	-21.60	

Angle	EIRP sd (dBW/4kHz)	Mask (dBW/4kHz)
0.0	-30.924	
0.2	-29.38	
0.4	-21.152	
0.6	-17.534	
0.8	-15.228	
1.0	-13.838	
1.2	-13.038	
1.4	-12.702	
1.6	-12.802	
1.8	-13.318	-1.38
2.0	-14.279	-2.53
2.2	-15.717	-3.56
2.4	-17.804	-4.51
2.6	-20.736	-5.37
2.8	-25.124	-6.18
3.0	-32.764	-6.93
3.2	-31.432	-7.63
3.4	-25.541	-8.29
3.6	-22.553	-8.91
3.8	-20.884	-9.49
4.0	-20.08	-10.05
4.2	-19.868	-10.58
4.4	-20.231	-11.09
4.6	-21.062	-11.57
4.8	-22.363	-12.03
5.0	-24.27	-12.47
5.2	-26.756	-12.90
5.4	-29.403	-13.31
5.6	-31.361	-13.70
5.8	-31.444	-14.09
6.0	-30.169	-14.45
6.2	-29.114	-14.81
6.4	-28.691	-15.15
6.6	-28.81	-15.49
6.8	-29.58	-15.81
7.0	-30.955	-16.00
7.2	-33.077	-16.00
7.4	-35.694	-16.00
7.6	-37.765	-16.00
7.8	-37.55	-16.00
8.0	-35.846	-16.00
8.2	-34.569	-16.00
8.4	-33.894	-16.00
8.6	-33.968	-16.00
8.8	-34.462	-16.00
9.0	-35.722	-16.00
9.2	-37.772	-16.00
9.4	-40.709	-16.00
9.6	-45.245	-16.00
9.8	-49.549	-16.00
10.0	-48.563	-16.00



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



14.25GHz EIRP spectral density @ -22.3dBW/4kHz Input power spectral density

▪ **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 v60G's Radiation pattern meets the FCC EIRP spectral density mask when the Input powers spectral density is @ -22.3 dBW/ 4kHz*

## **EXHIBIT 8**

**25.222(b)(1)(i)(A) Tables for the Intellian Model v80G**

**0.80 Meter Ku-band Antennas**

Exhibit 8

## 2. EIRP Spectral Density Data

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

14.25GHz @ -20.13 dBW/4kHz			14.25GHz @ -20.13 dBW/4kHz		
Angle (Degree)	EIRP SD (dBW/4kHz)	Mask (dBW/4kHz)	Angle (Degree)	EIRP SD (dBW/4kHz)	Mask (dBW/4kHz)
-10.0	-19.81	-7.00	-5.0	-12.46	-2.47
-9.9	-19.72	-6.89	-4.9	-11.71	-2.25
-9.8	-19.56	-6.78	-4.8	-10.81	-2.03
-9.7	-19.44	-6.67	-4.7	-9.89	-1.80
-9.6	-19.39	-6.56	-4.6	-8.94	-1.57
-9.5	-19.40	-6.44	-4.5	-8.07	-1.33
-9.4	-19.48	-6.33	-4.4	-7.33	-1.09
-9.3	-19.65	-6.21	-4.3	-6.70	-0.84
-9.2	-19.69	-6.00	-4.2	-6.20	-0.58
-9.1	-19.53	-6.00	-4.1	-5.86	-0.32
-9.0	-19.21	-6.00	-4.0	-5.64	-0.05
-8.9	-18.68	-6.00	-3.9	-5.54	0.22
-8.8	-17.92	-6.00	-3.8	-5.56	0.51
-8.7	-17.14	-6.00	-3.7	-5.67	0.79
-8.6	-16.45	-6.00	-3.6	-5.86	1.09
-8.5	-15.79	-6.00	-3.5	-6.13	1.40
-8.4	-15.30	-6.00	-3.4	-6.46	1.71
-8.3	-14.98	-6.00	-3.3	-6.86	2.04
-8.2	-14.77	-6.00	-3.2	-7.34	2.37
-8.1	-14.61	-6.00	-3.1	-8.00	2.72
-8.0	-14.49	-6.00	-3.0	-8.90	3.07
-7.9	-14.31	-6.00	-2.9	-10.12	3.44
-7.8	-14.02	-6.00	-2.8	-11.70	3.82
-7.7	-13.63	-6.00	-2.7	-13.27	4.22
-7.6	-13.21	-6.00	-2.6	-13.09	4.63
-7.5	-12.79	-6.00	-2.5	-10.49	5.05
-7.4	-12.39	-6.00	-2.4	-7.17	5.49
-7.3	-12.07	-6.00	-2.3	-4.05	5.96
-7.2	-11.81	-6.00	-2.2	-1.36	6.44
-7.1	-11.60	-6.00	-2.1	1.03	6.94
-7.0	-11.41	-6.00	-2.0	3.19	7.47
-6.9	-11.26	-5.97	-1.9	4.87	8.03
-6.8	-11.14	-5.81	-1.8	6.13	8.62
-6.7	-11.07	-5.65	-1.7	7.87	9.24
-6.6	-11.06	-5.49	-1.6	9.45	9.90
-6.5	-11.15	-5.32	-1.5	10.59	10.60
-6.4	-11.35	-5.15	-1.4	11.98	
-6.3	-11.63	-4.98	-1.3	13.23	
-6.2	-12.02	-4.81	-1.2	14.35	
-6.1	-12.49	-4.63	-1.1	15.18	
-6.0	-12.93	-4.45	-1.0	15.92	
-5.9	-13.37	-4.27	-0.9	16.59	
-5.8	-13.75	-4.09	-0.8	17.18	
-5.7	-13.98	-3.90	-0.7	17.71	
-5.6	-14.08	-3.70	-0.6	18.18	
-5.5	-14.09	-3.51	-0.5	18.57	
-5.4	-13.98	-3.31	-0.4	18.90	
-5.3	-13.76	-3.11	-0.3	19.16	
-5.2	-13.47	-2.90	-0.2	19.34	
-5.1	-13.05	-2.69	-0.1	19.44	

Exhibit 8

**Intellian**<sup>®</sup>

**Test Report**

14.25GHz @ -20.13 dBW/4kHz			14.25GHz @ -20.13 dBW/4kHz		
Angle (Degree)	EIRP SD (dBW/4kHz)	Mask (dBW/4kHz)	Angle (Degree)	EIRP SD (dBW/4kHz)	Mask (dBW/4kHz)
0.0	19.47		5.0	-11.28	-2.47
0.1	19.41		5.1	-11.56	-2.69
0.2	19.27		5.2	-11.66	-2.90
0.3	19.07		5.3	-11.65	-3.11
0.4	18.79		5.4	-11.62	-3.31
0.5	18.44		5.5	-11.54	-3.51
0.6	18.04		5.6	-11.40	-3.70
0.7	17.58		5.7	-11.25	-3.90
0.8	17.05		5.8	-11.03	-4.09
0.9	16.46		5.9	-10.75	-4.27
1.0	15.79		6.0	-10.44	-4.45
1.1	15.05		6.1	-10.15	-4.63
1.2	13.92		6.2	-9.85	-4.81
1.3	12.94		6.3	-9.62	-4.98
1.4	11.89		6.4	-9.45	-5.15
1.5	10.43	10.60	6.5	-9.35	-5.32
1.6	9.05	9.90	6.6	-9.31	-5.49
1.7	7.65	9.24	6.7	-9.32	-5.65
1.8	6.14	8.62	6.8	-9.39	-5.81
1.9	4.12	8.03	6.9	-9.49	-5.97
2.0	3.06	7.47	7.0	-9.64	-6.00
2.1	0.93	6.94	7.1	-9.87	-6.00
2.2	-1.46	6.44	7.2	-10.17	-6.00
2.3	-4.18	5.96	7.3	-10.56	-6.00
2.4	-7.38	5.49	7.4	-11.06	-6.00
2.5	-10.91	5.05	7.5	-11.68	-6.00
2.6	-13.56	4.63	7.6	-12.36	-6.00
2.7	-13.20	4.22	7.7	-13.07	-6.00
2.8	-11.21	3.82	7.8	-13.80	-6.00
2.9	-9.46	3.44	7.9	-14.44	-6.00
3.0	-8.16	3.07	8.0	-14.96	-6.00
3.1	-7.20	2.72	8.1	-15.40	-6.00
3.2	-6.47	2.37	8.2	-15.77	-6.00
3.3	-5.92	2.04	8.3	-16.13	-6.00
3.4	-5.49	1.71	8.4	-16.51	-6.00
3.5	-5.14	1.40	8.5	-16.95	-6.00
3.6	-4.90	1.09	8.6	-17.47	-6.00
3.7	-4.75	0.79	8.7	-17.98	-6.00
3.8	-4.70	0.51	8.8	-18.53	-6.00
3.9	-4.75	0.22	8.9	-19.05	-6.00
4.0	-4.92	-0.05	9.0	-19.44	-6.00
4.1	-5.22	-0.32	9.1	-19.69	-6.00
4.2	-5.63	-0.58	9.2	-19.81	-6.00
4.3	-6.17	-0.84	9.3	-19.75	-6.21
4.4	-6.84	-1.09	9.4	-19.57	-6.33
4.5	-7.59	-1.33	9.5	-19.42	-6.44
4.6	-8.44	-1.57	9.6	-19.29	-6.56
4.7	-9.32	-1.80	9.7	-19.21	-6.67
4.8	-10.13	-2.03	9.8	-19.22	-6.78
4.9	-10.80	-2.25	9.9	-19.29	-6.89
			10.0	-19.37	-7.00

Exhibit 8

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

14.25GHz @ -20.13 dBW/4kHz			14.25GHz @ -20.13 dBW/4kHz		
Angle (Degree)	EIRP SD (dBW/4kHz)	Mask (dBW/4kHz)	Angle (Degree)	EIRP SD (dBW/4kHz)	Mask (dBW/4kHz)
-180.0	-53.44	-14.00	-135.0	-54.29	-14.00
-179.0	-50.55	-14.00	-134.0	-52.77	-14.00
-178.0	-48.34	-14.00	-133.0	-50.87	-14.00
-177.0	-46.55	-14.00	-132.0	-52.70	-14.00
-176.0	-44.63	-14.00	-131.0	-49.45	-14.00
-175.0	-42.52	-14.00	-130.0	-44.76	-14.00
-174.0	-42.62	-14.00	-129.0	-51.22	-14.00
-173.0	-42.73	-14.00	-128.0	-51.37	-14.00
-172.0	-48.94	-14.00	-127.0	-50.44	-14.00
-171.0	-48.00	-14.00	-126.0	-53.73	-14.00
-170.0	-48.78	-14.00	-125.0	-58.80	-14.00
-169.0	-49.93	-14.00	-124.0	-55.06	-14.00
-168.0	-51.44	-14.00	-123.0	-52.74	-14.00
-167.0	-46.88	-14.00	-122.0	-60.30	-14.00
-166.0	-68.21	-14.00	-121.0	-50.44	-14.00
-165.0	-48.49	-14.00	-120.0	-57.30	-14.00
-164.0	-72.77	-14.00	-119.0	-57.53	-14.00
-163.0	-65.48	-14.00	-118.0	-51.97	-14.00
-162.0	-53.83	-14.00	-117.0	-52.31	-14.00
-161.0	-54.40	-14.00	-116.0	-47.34	-14.00
-160.0	-49.91	-14.00	-115.0	-52.70	-14.00
-159.0	-49.82	-14.00	-114.0	-50.21	-14.00
-158.0	-56.07	-14.00	-113.0	-50.99	-14.00
-157.0	-48.74	-14.00	-112.0	-48.16	-14.00
-156.0	-58.47	-14.00	-111.0	-48.41	-14.00
-155.0	-53.88	-14.00	-110.0	-49.23	-14.00
-154.0	-46.49	-14.00	-109.0	-53.50	-14.00
-153.0	-43.61	-14.00	-108.0	-49.71	-14.00
-152.0	-55.30	-14.00	-107.0	-48.53	-14.00
-151.0	-64.42	-14.00	-106.0	-61.78	-14.00
-150.0	-47.96	-14.00	-105.0	-43.94	-14.00
-149.0	-53.68	-14.00	-104.0	-47.30	-14.00
-148.0	-47.85	-14.00	-103.0	-44.83	-14.00
-147.0	-50.28	-14.00	-102.0	-40.69	-14.00
-146.0	-44.58	-14.00	-101.0	-39.78	-14.00
-145.0	-51.21	-14.00	-100.0	-36.66	-14.00
-144.0	-50.48	-14.00	-99.0	-36.41	-14.00
-143.0	-61.52	-14.00	-98.0	-35.37	-14.00
-142.0	-47.29	-14.00	-97.0	-35.75	-14.00
-141.0	-50.19	-14.00	-96.0	-38.63	-14.00
-140.0	-57.40	-14.00	-95.0	-42.68	-14.00
-139.0	-60.32	-14.00	-94.0	-48.11	-14.00
-138.0	-59.52	-14.00	-93.0	-48.56	-14.00
-137.0	-49.87	-14.00	-92.0	-40.06	-14.00
-136.0	-71.58	-14.00	-91.0	-35.41	-14.00

Exhibit 8

**Intellian**<sup>®</sup>

**Test Report**

14.25GHz @ -20.13 dBW/4kHz			14.25GHz @ -20.13 dBW/4kHz		
Angle (Degree)	EIRP SD (dBW/4kHz)	Mask (dBW/4kHz)	Angle (Degree)	EIRP SD (dBW/4kHz)	Mask (dBW/4kHz)
-90.0	-33.12	-14.00	-45.0	-52.23	-23.33
-89.0	-35.12	-14.00	-44.0	-31.85	-23.09
-88.0	-37.51	-14.00	-43.0	-31.37	-22.84
-87.0	-31.69	-14.00	-42.0	-31.88	-22.58
-86.0	-33.03	-14.00	-41.0	-38.37	-22.32
-85.0	-30.37	-24.00	-40.0	-34.68	-22.05
-84.0	-30.30	-24.00	-39.0	-36.69	-21.78
-83.0	-34.04	-24.00	-38.0	-38.93	-21.49
-82.0	-35.57	-24.00	-37.0	-35.29	-21.21
-81.0	-38.06	-24.00	-36.0	-43.90	-20.91
-80.0	-35.76	-24.00	-35.0	-34.06	-20.60
-79.0	-34.22	-24.00	-34.0	-31.27	-20.29
-78.0	-39.20	-24.00	-33.0	-41.02	-19.96
-77.0	-40.09	-24.00	-32.0	-35.91	-19.63
-76.0	-36.04	-24.00	-31.0	-42.49	-19.28
-75.0	-40.49	-24.00	-30.0	-37.57	-18.93
-74.0	-38.79	-24.00	-29.0	-41.40	-18.56
-73.0	-38.72	-24.00	-28.0	-42.25	-18.18
-72.0	-39.92	-24.00	-27.0	-41.98	-17.78
-71.0	-41.06	-24.00	-26.0	-41.58	-17.37
-70.0	-40.09	-24.00	-25.0	-37.93	-16.95
-69.0	-31.45	-24.00	-24.0	-41.38	-16.51
-68.0	-36.25	-24.00	-23.0	-30.00	-16.04
-67.0	-35.03	-24.00	-22.0	-39.70	-15.56
-66.0	-32.09	-24.00	-21.0	-32.06	-15.06
-65.0	-28.73	-24.00	-20.0	-32.11	-14.53
-64.0	-31.37	-24.00	-19.0	-27.39	-13.97
-63.0	-43.80	-24.00	-18.0	-29.78	-13.38
-62.0	-32.66	-24.00	-17.0	-43.68	-12.76
-61.0	-34.19	-24.00	-16.0	-26.46	-12.10
-60.0	-35.66	-24.00	-15.0	-30.42	-11.40
-59.0	-37.56	-24.00	-14.0	-36.83	-10.65
-58.0	-31.07	-24.00	-13.0	-29.67	-9.85
-57.0	-41.55	-24.00	-12.0	-26.59	-8.98
-56.0	-31.74	-24.00	-11.0	-18.14	-8.03
-55.0	-38.70	-24.00	-10.0	-19.81	-7.00
-54.0	-36.66	-24.00	-9.0	-19.21	-6.00
-53.0	-29.68	-24.00	-8.0	-14.49	-6.00
-52.0	-37.44	-24.00	-7.0	-11.41	-6.13
-51.0	-37.18	-24.00	-6.0	-12.93	-4.45
-50.0	-33.12	-24.00	-5.0	-12.46	-2.47
-49.0	-34.62	-24.00	-4.0	-5.64	-0.05
-48.0	-30.69	-24.03	-3.0	-8.90	3.07
-47.0	-44.07	-23.80	-2.0	3.19	7.47
-46.0	-34.48	-23.57	-1.0	15.92	

Exhibit 2

**Intellian**<sup>®</sup>

**Test Report**

14.25GHz @ -20.13 dBW/4kHz			14.25GHz @ -20.13 dBW/4kHz		
Angle (Degree)	EIRP SD (dBW/4kHz)	Mask (dBW/4kHz)	Angle (Degree)	EIRP SD (dBW/4kHz)	Mask (dBW/4kHz)
0.0	19.47		45.0	-43.09	-23.33
1.0	15.79		46.0	-33.56	-23.57
2.0	3.06	7.47	47.0	-47.13	-23.80
3.0	-8.16	3.07	48.0	-29.77	-24.03
4.0	-4.92	-0.05	49.0	-33.59	-24.00
5.0	-11.28	-2.47	50.0	-33.58	-24.00
6.0	-10.44	-4.45	51.0	-30.53	-24.00
7.0	-9.64	-6.13	52.0	-45.97	-24.00
8.0	-14.96	-6.00	53.0	-39.93	-24.00
9.0	-19.44	-6.00	54.0	-37.40	-24.00
10.0	-19.37	-7.00	55.0	-37.58	-24.00
11.0	-20.82	-8.03	56.0	-34.72	-24.00
12.0	-36.31	-8.98	57.0	-35.06	-24.00
13.0	-30.24	-9.85	58.0	-48.14	-24.00
14.0	-39.55	-10.65	59.0	-35.51	-24.00
15.0	-30.17	-11.40	60.0	-42.33	-24.00
16.0	-26.04	-12.10	61.0	-34.56	-24.00
17.0	-32.02	-12.76	62.0	-37.78	-24.00
18.0	-26.29	-13.38	63.0	-48.65	-24.00
19.0	-30.39	-13.97	64.0	-35.39	-24.00
20.0	-33.86	-14.53	65.0	-31.91	-24.00
21.0	-36.89	-15.06	66.0	-36.38	-24.00
22.0	-36.22	-15.56	67.0	-33.85	-24.00
23.0	-32.82	-16.04	68.0	-34.59	-24.00
24.0	-29.80	-16.51	69.0	-41.23	-24.00
25.0	-33.16	-16.95	70.0	-34.10	-24.00
26.0	-28.49	-17.37	71.0	-34.73	-24.00
27.0	-31.85	-17.78	72.0	-36.56	-24.00
28.0	-38.74	-18.18	73.0	-33.01	-24.00
29.0	-30.83	-18.56	74.0	-29.32	-24.00
30.0	-37.67	-18.93	75.0	-28.71	-24.00
31.0	-35.05	-19.28	76.0	-28.69	-24.00
32.0	-32.20	-19.63	77.0	-30.40	-24.00
33.0	-42.19	-19.96	78.0	-33.53	-24.00
34.0	-31.92	-20.29	79.0	-37.35	-24.00
35.0	-31.97	-20.60	80.0	-44.30	-24.00
36.0	-40.80	-20.91	81.0	-37.49	-24.00
37.0	-36.81	-21.21	82.0	-32.90	-24.00
38.0	-38.02	-21.49	83.0	-32.01	-24.00
39.0	-30.56	-21.78	84.0	-32.91	-24.00
40.0	-46.87	-22.05	85.0	-34.60	-24.00
41.0	-40.48	-22.32	86.0	-37.81	-14.00
42.0	-34.10	-22.58	87.0	-42.55	-14.00
43.0	-35.22	-22.84	88.0	-48.27	-14.00
44.0	-34.30	-23.09	89.0	-53.83	-14.00

Exhibit 8

**Intellian**<sup>®</sup>

**Test Report**

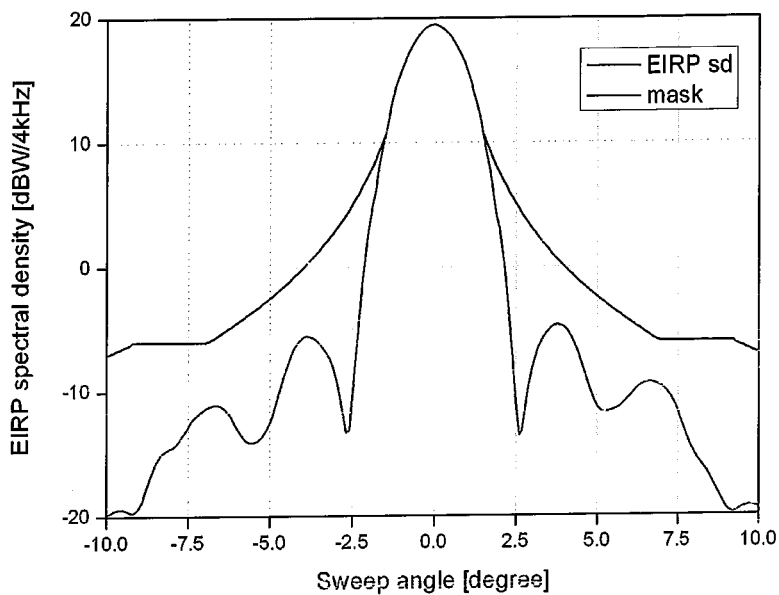
14.25GHz @ -20.13 dBW/4kHz			14.25GHz @ -20.13 dBW/4kHz		
Angle (Degree)	EIRP SD (dBW/4kHz)	Mask (dBW/4kHz)	Angle (Degree)	EIRP SD (dBW/4kHz)	Mask (dBW/4kHz)
90.0	-56.45	-14.00	135.0	-47.46	-14.00
91.0	-44.27	-14.00	136.0	-63.66	-14.00
92.0	-34.60	-14.00	137.0	-50.13	-14.00
93.0	-31.96	-14.00	138.0	-49.62	-14.00
94.0	-30.44	-14.00	139.0	-51.22	-14.00
95.0	-31.09	-14.00	140.0	-56.59	-14.00
96.0	-33.39	-14.00	141.0	-44.36	-14.00
97.0	-36.01	-14.00	142.0	-49.86	-14.00
98.0	-37.96	-14.00	143.0	-51.21	-14.00
99.0	-36.26	-14.00	144.0	-38.93	-14.00
100.0	-41.98	-14.00	145.0	-51.32	-14.00
101.0	-40.83	-14.00	146.0	-51.67	-14.00
102.0	-40.07	-14.00	147.0	-45.21	-14.00
103.0	-37.20	-14.00	148.0	-47.47	-14.00
104.0	-39.80	-14.00	149.0	-42.53	-14.00
105.0	-37.94	-14.00	150.0	-51.73	-14.00
106.0	-35.20	-14.00	151.0	-38.84	-14.00
107.0	-37.42	-14.00	152.0	-43.98	-14.00
108.0	-36.79	-14.00	153.0	-47.54	-14.00
109.0	-37.39	-14.00	154.0	-52.36	-14.00
110.0	-42.29	-14.00	155.0	-41.24	-14.00
111.0	-38.96	-14.00	156.0	-40.59	-14.00
112.0	-49.98	-14.00	157.0	-45.00	-14.00
113.0	-54.43	-14.00	158.0	-43.21	-14.00
114.0	-41.81	-14.00	159.0	-45.45	-14.00
115.0	-42.68	-14.00	160.0	-46.87	-14.00
116.0	-55.22	-14.00	161.0	-46.16	-14.00
117.0	-45.78	-14.00	162.0	-49.06	-14.00
118.0	-43.26	-14.00	163.0	-46.36	-14.00
119.0	-41.13	-14.00	164.0	-44.20	-14.00
120.0	-50.87	-14.00	165.0	-51.18	-14.00
121.0	-50.16	-14.00	166.0	-44.61	-14.00
122.0	-46.89	-14.00	167.0	-43.59	-14.00
123.0	-48.04	-14.00	168.0	-44.03	-14.00
124.0	-49.70	-14.00	169.0	-46.29	-14.00
125.0	-52.32	-14.00	170.0	-39.02	-14.00
126.0	-55.46	-14.00	171.0	-35.96	-14.00
127.0	-48.56	-14.00	172.0	-49.97	-14.00
128.0	-54.46	-14.00	173.0	-40.43	-14.00
129.0	-43.75	-14.00	174.0	-35.47	-14.00
130.0	-45.68	-14.00	175.0	-43.52	-14.00
131.0	-42.08	-14.00	176.0	-41.42	-14.00
132.0	-44.57	-14.00	177.0	-43.03	-14.00
133.0	-54.39	-14.00	178.0	-44.63	-14.00
134.0	-52.55	-14.00	179.0	-46.85	-14.00
			180.0	-49.52	-14.00



Exhibit 8

# 1. EIRP Spectral Density of V80G

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



14.25GHz EIRP spectral density @ -20.13dBW/4kHz Input power spectral density

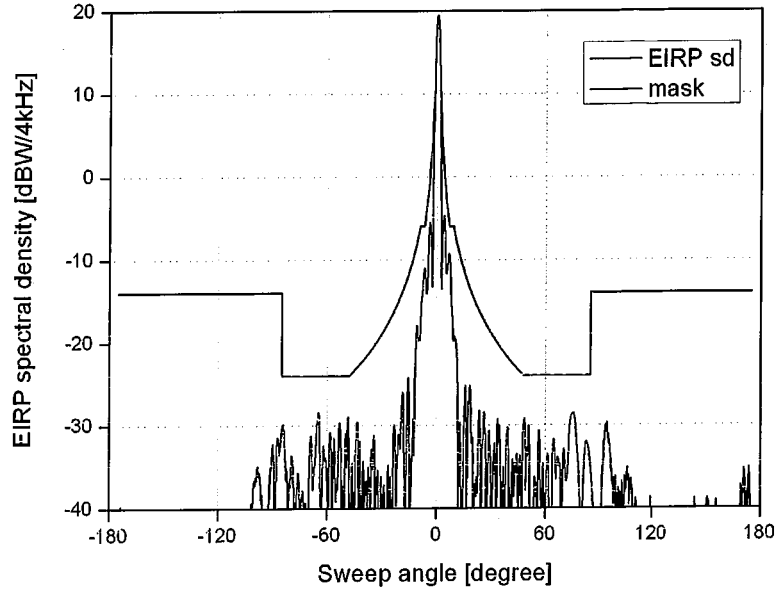
### ▪ FCC EIRP spectral density regulation

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

The v80G's Radiation pattern meets the FCC EIRP spectral density mask when the input powers spectral density is @ -20.13 dBW/ 4kHz

Exhibit 8

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



14.25GHz EIRP spectral density @ -20.13dBW/4kHz Input power spectral density

#### 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	$9.2^\circ < \theta \leq 48^\circ$
-24	dBW/4kHz	for	$48^\circ < \theta \leq 85^\circ$
-14	dBW/4kHz	for	$85^\circ < \theta \leq 180^\circ$

The v80G's Radiation pattern meets the FCC EIRP spectral density mask when the Input powers spectral density is @ -20.13 dBW/ 4kHz

## **EXHIBIT 9**

**25.222(b)(1)(i)(B) Tables for the Intellian Model v80G**

**0.80 Meter Ku-band Antennas**

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

14.25GHz @ -20.13 dBW/4kHz			14.25GHz @ -20.13 dBW/4kHz		
Angle (Degree)	EIRP SD (dBW/4kHz)	Mask (dBW/4kHz)	Angle (Degree)	EIRP SD (dBW/4kHz)	Mask (dBW/4kHz)
0.0	19.47		5.0	-12.62	0.53
0.1	19.44		5.1	-11.94	0.31
0.2	19.31		5.2	-11.33	0.10
0.3	19.07		5.3	-10.96	-0.11
0.4	18.69		5.4	-10.75	-0.31
0.5	18.22		5.5	-10.81	-0.51
0.6	17.68		5.6	-11.29	-0.70
0.7	17.03		5.7	-12.12	-0.90
0.8	16.34		5.8	-13.28	-1.09
0.9	15.59		5.9	-15.10	-1.27
1.0	14.78		6.0	-17.55	-1.45
1.1	13.90		6.1	-20.42	-1.63
1.2	12.92		6.2	-23.41	-1.81
1.3	11.83		6.3	-24.22	-1.98
1.4	10.55		6.4	-22.77	-2.15
1.5	9.05		6.5	-21.06	-2.32
1.6	7.33		6.6	-19.95	-2.49
1.7	5.23		6.7	-19.42	-2.65
1.8	2.74		6.8	-19.11	-2.81
1.9	-0.15		6.9	-18.82	-2.97
2.0	-3.65		7.0	-18.59	-3.13
2.1	-7.41		7.1	-18.31	-3.28
2.2	-9.66		7.2	-17.79	-3.43
2.3	-9.31		7.3	-17.17	-3.58
2.4	-7.70		7.4	-16.60	-3.73
2.5	-6.40		7.5	-15.93	-3.88
2.6	-5.54		7.6	-15.29	-4.02
2.7	-4.92		7.7	-14.79	-4.16
2.8	-4.58		7.8	-14.33	-4.30
2.9	-4.56		7.9	-13.95	-4.44
3.0	-4.89	6.07	8.0	-13.70	-4.58
3.1	-5.52	5.72	8.1	-13.56	-4.71
3.2	-6.50	5.37	8.2	-13.50	-4.85
3.3	-8.04	5.04	8.3	-13.58	-4.98
3.4	-9.95	4.71	8.4	-13.76	-5.11
3.5	-12.27	4.40	8.5	-14.05	-5.24
3.6	-15.31	4.09	8.6	-14.47	-5.36
3.7	-18.62	3.79	8.7	-15.04	-5.49
3.8	-21.72	3.51	8.8	-15.81	-5.61
3.9	-24.52	3.22	8.9	-16.77	-5.73
4.0	-26.58	2.95	9.0	-17.95	-5.86
4.1	-25.67	2.68	9.1	-19.53	-5.98
4.2	-23.33	2.42	9.2	-21.36	-6.09
4.3	-20.57	2.16	9.3	-23.43	-6.21
4.4	-18.06	1.91	9.4	-25.60	-6.33
4.5	-16.38	1.67	9.5	-26.94	-6.44
4.6	-15.23	1.43	9.6	-26.77	-6.56
4.7	-14.36	1.20	9.7	-25.88	-6.67
4.8	-13.71	0.97	9.8	-25.14	-6.78
4.9	-13.19	0.75	9.9	-24.44	-6.89

Exhibit 9

**Intellian**<sup>®</sup>

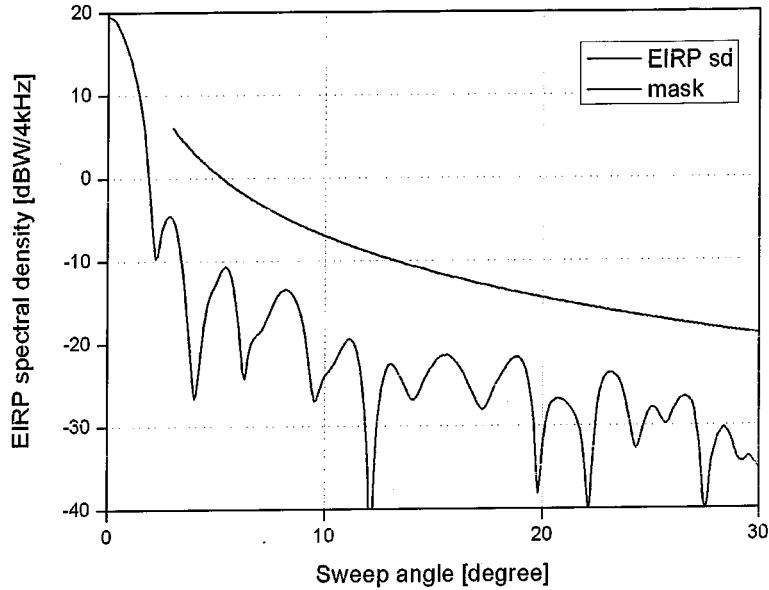
Intellian v-Series  
Maritime Ku-band VSAT Antenna System

Test Report

14.25GHz @ -20.13 dBW/4kHz			14.25GHz @ -20.13 dBW/4kHz		
Angle (Degree)	EIRP SD (dBW/4kHz)	Mask (dBW/4kHz)	Angle (Degree)	EIRP SD (dBW/4kHz)	Mask (dBW/4kHz)
10.0	-23.91	-7.00	15.0	-22.43	-11.40
10.1	-23.58	-7.11	15.1	-22.11	-11.47
10.2	-23.25	-7.22	15.2	-21.84	-11.55
10.3	-22.85	-7.32	15.3	-21.62	-11.62
10.4	-22.46	-7.43	15.4	-21.50	-11.69
10.5	-22.02	-7.53	15.5	-21.44	-11.76
10.6	-21.49	-7.63	15.6	-21.44	-11.83
10.7	-20.92	-7.73	15.7	-21.51	-11.90
10.8	-20.43	-7.84	15.8	-21.67	-11.97
10.9	-19.96	-7.94	15.9	-21.90	-12.03
11.0	-19.56	-8.03	16.0	-22.19	-12.10
11.1	-19.42	-8.13	16.1	-22.57	-12.17
11.2	-19.49	-8.23	16.2	-22.98	-12.24
11.3	-19.78	-8.33	16.3	-23.42	-12.30
11.4	-20.42	-8.42	16.4	-23.90	-12.37
11.5	-21.49	-8.52	16.5	-24.43	-12.44
11.6	-22.88	-8.61	16.6	-25.00	-12.50
11.7	-24.80	-8.70	16.7	-25.57	-12.57
11.8	-27.51	-8.80	16.8	-26.16	-12.63
11.9	-31.13	-8.89	16.9	-26.75	-12.70
12.0	-37.02	-8.98	17.0	-27.26	-12.76
12.1	-58.99	-9.07	17.1	-27.68	-12.82
12.2	-39.18	-9.16	17.2	-27.97	-12.89
12.3	-32.97	-9.25	17.3	-27.96	-12.95
12.4	-29.58	-9.34	17.4	-27.60	-13.01
12.5	-27.14	-9.42	17.5	-27.04	-13.08
12.6	-25.32	-9.51	17.6	-26.48	-13.14
12.7	-24.11	-9.60	17.7	-25.86	-13.20
12.8	-23.20	-9.68	17.8	-25.28	-13.26
12.9	-22.61	-9.76	17.9	-24.78	-13.32
13.0	-22.46	-9.85	18.0	-24.31	-13.38
13.1	-22.58	-9.93	18.1	-23.83	-13.44
13.2	-22.83	-10.01	18.2	-23.40	-13.50
13.3	-23.31	-10.10	18.3	-23.01	-13.56
13.4	-23.89	-10.18	18.4	-22.65	-13.62
13.5	-24.35	-10.26	18.5	-22.27	-13.68
13.6	-24.94	-10.34	18.6	-21.97	-13.74
13.7	-25.56	-10.42	18.7	-21.79	-13.80
13.8	-26.02	-10.50	18.8	-21.67	-13.85
13.9	-26.52	-10.58	18.9	-21.69	-13.91
14.0	-26.83	-10.65	19.0	-21.94	-13.97
14.1	-26.77	-10.73	19.1	-22.36	-14.03
14.2	-26.42	-10.81	19.2	-22.96	-14.08
14.3	-25.94	-10.88	19.3	-23.97	-14.14
14.4	-25.35	-10.96	19.4	-25.42	-14.20
14.5	-24.73	-11.03	19.5	-27.23	-14.25
14.6	-24.18	-11.11	19.6	-30.05	-14.31
14.7	-23.68	-11.18	19.7	-34.29	-14.36
14.8	-23.22	-11.26	19.8	-38.09	-14.42
14.9	-22.81	-11.33	19.9	-35.88	-14.47

14.25GHz @ -20.13 dBW/4kHz			14.25GHz @ -20.13 dBW/4kHz		
Angle (Degree)	EIRP SD (dBW/4kHz)	Mask (dBW/4kHz)	Angle (Degree)	EIRP SD (dBW/4kHz)	Mask (dBW/4kHz)
20.0	-32.21	-14.53	25.0	-27.88	-16.95
20.1	-30.10	-14.58	25.1	-27.84	-16.99
20.2	-28.63	-14.63	25.2	-28.01	-17.04
20.3	-27.67	-14.69	25.3	-28.46	-17.08
20.4	-27.23	-14.74	25.4	-28.97	-17.12
20.5	-26.99	-14.79	25.5	-29.42	-17.16
20.6	-26.80	-14.85	25.6	-29.73	-17.21
20.7	-26.75	-14.90	25.7	-29.73	-17.25
20.8	-26.78	-14.95	25.8	-29.39	-17.29
20.9	-26.85	-15.00	25.9	-28.74	-17.33
21.0	-27.00	-15.06	26.0	-28.11	-17.37
21.1	-27.24	-15.11	26.1	-27.61	-17.42
21.2	-27.55	-15.16	26.2	-27.13	-17.46
21.3	-27.93	-15.21	26.3	-26.80	-17.50
21.4	-28.35	-15.26	26.4	-26.69	-17.54
21.5	-28.90	-15.31	26.5	-26.56	-17.58
21.6	-29.60	-15.36	26.6	-26.48	-17.62
21.7	-30.44	-15.41	26.7	-26.64	-17.66
21.8	-31.81	-15.46	26.8	-26.86	-17.70
21.9	-34.12	-15.51	26.9	-27.25	-17.74
22.0	-37.29	-15.56	27.0	-28.24	-17.78
22.1	-40.53	-15.61	27.1	-29.75	-17.82
22.2	-37.49	-15.66	27.2	-31.57	-17.86
22.3	-33.26	-15.71	27.3	-34.64	-17.90
22.4	-29.96	-15.76	27.4	-38.82	-17.94
22.5	-27.55	-15.80	27.5	-40.30	-17.98
22.6	-26.10	-15.85	27.6	-38.70	-18.02
22.7	-25.05	-15.90	27.7	-35.86	-18.06
22.8	-24.28	-15.95	27.8	-34.00	-18.10
22.9	-23.88	-16.00	27.9	-33.03	-18.14
23.0	-23.70	-16.04	28.0	-32.08	-18.18
23.1	-23.59	-16.09	28.1	-31.28	-18.22
23.2	-23.63	-16.14	28.2	-30.81	-18.26
23.3	-23.82	-16.18	28.3	-30.45	-18.29
23.4	-24.06	-16.23	28.4	-30.25	-18.33
23.5	-24.47	-16.28	28.5	-30.45	-18.37
23.6	-25.09	-16.32	28.6	-30.92	-18.41
23.7	-25.86	-16.37	28.7	-31.46	-18.45
23.8	-26.89	-16.41	28.8	-32.20	-18.48
23.9	-28.22	-16.46	28.9	-33.08	-18.52
24.0	-29.65	-16.51	29.0	-33.82	-18.56
24.1	-31.19	-16.55	29.1	-34.19	-18.60
24.2	-32.38	-16.60	29.2	-34.28	-18.63
24.3	-32.67	-16.64	29.3	-34.27	-18.67
24.4	-32.24	-16.68	29.4	-34.01	-18.71
24.5	-31.19	-16.73	29.5	-33.70	-18.75
24.6	-30.15	-16.77	29.6	-33.73	-18.78
24.7	-29.31	-16.82	29.7	-34.08	-18.82
24.8	-28.56	-16.86	29.8	-34.46	-18.86
24.9	-28.08	-16.90	29.9	-34.80	-18.89
			30.0	-35.21	-18.93

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



14.25GHz EIRP spectral density @ -20.13dBW/4kHz Input power spectral density

▪ **FCC EIRP spectral density regulation**

18-25log( $\theta$ )	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 v80G's Radiation pattern meets the FCC EIRP spectral density mask when the Input powers spectral density is @ -20.13 dBW/ 4kHz*

## **EXHIBIT 10**

**25.222(b)(1)(i)(C) Tables for the Intellian Model v80G**

**0.80 Meter Ku-band Antennas**



Exhibit 10

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

14.25GHz @ -20.13 dBW/4kHz			14.25GHz @ -20.13 dBW/4kHz		
Angle (Degree)	EIRP SD (dBW/4kHz)	Mask (dBW/4kHz)	Angle (Degree)	EIRP SD (dBW/4kHz)	Mask (dBW/4kHz)
-10.0	-30.25	-16.00	-5.0	-33.69	-12.47
-9.9	-29.95	-16.00	-4.9	-33.73	-12.25
-9.8	-29.80	-16.00	-4.8	-34.13	-12.03
-9.7	-29.94	-16.00	-4.7	-34.23	-11.80
-9.6	-30.45	-16.00	-4.6	-33.97	-11.57
-9.5	-31.24	-16.00	-4.5	-33.73	-11.33
-9.4	-32.26	-16.00	-4.4	-33.39	-11.09
-9.3	-33.50	-16.00	-4.3	-33.31	-10.84
-9.2	-29.67	-16.00	-4.2	-33.58	-10.58
-9.1	-30.03	-16.00	-4.1	-33.62	-10.32
-9.0	-30.82	-16.00	-4.0	-33.55	-10.05
-8.9	-31.94	-16.00	-3.9	-33.43	-9.78
-8.8	-32.64	-16.00	-3.8	-33.08	-9.49
-8.7	-32.65	-16.00	-3.7	-32.59	-9.21
-8.6	-31.98	-16.00	-3.6	-32.47	-8.91
-8.5	-31.49	-16.00	-3.5	-32.74	-8.60
-8.4	-31.78	-16.00	-3.4	-33.33	-8.29
-8.3	-32.84	-16.00	-3.3	-34.38	-7.96
-8.2	-35.02	-16.00	-3.2	-35.24	-7.63
-8.1	-39.57	-16.00	-3.1	-34.87	-7.28
-8.0	-43.01	-16.00	-3.0	-33.81	-6.93
-7.9	-33.51	-16.00	-2.9	-32.46	-6.56
-7.8	-34.46	-16.00	-2.8	-31.67	-6.18
-7.7	-32.13	-16.00	-2.7	-31.64	-5.78
-7.6	-30.73	-16.00	-2.6	-31.84	-5.37
-7.5	-29.94	-16.00	-2.5	-32.12	-4.95
-7.4	-29.67	-16.00	-2.4	-32.59	-4.51
-7.3	-29.74	-16.00	-2.3	-32.96	-4.04
-7.2	-29.85	-16.00	-2.2	-33.16	-3.56
-7.1	-29.65	-16.00	-2.1	-33.77	-3.06
-7.0	-29.09	-16.00	-2.0	-35.17	-2.53
-6.9	-28.56	-15.97	-1.9	-35.99	-1.97
-6.8	-28.08	-15.81	-1.8	-34.30	-1.38
-6.7	-28.06	-15.65	-1.7	-29.69	
-6.6	-28.87	-15.49	-1.6	-25.22	
-6.5	-30.43	-15.32	-1.5	-21.47	
-6.4	-32.59	-15.15	-1.4	-18.28	
-6.3	-36.05	-14.98	-1.3	-15.80	
-6.2	-39.19	-14.81	-1.2	-13.79	
-6.1	-38.66	-14.63	-1.1	-12.12	
-6.0	-36.68	-14.45	-1.0	-10.98	
-5.9	-35.17	-14.27	-0.9	-10.16	
-5.8	-34.34	-14.09	-0.8	-9.67	
-5.7	-34.00	-13.90	-0.7	-9.59	
-5.6	-33.94	-13.70	-0.6	-9.82	
-5.5	-34.06	-13.51	-0.5	-10.24	
-5.4	-34.29	-13.31	-0.4	-10.89	
-5.3	-34.25	-13.11	-0.3	-11.57	
-5.2	-33.84	-12.90	-0.2	-12.19	
-5.1	-33.72	-12.69	-0.1	-12.85	

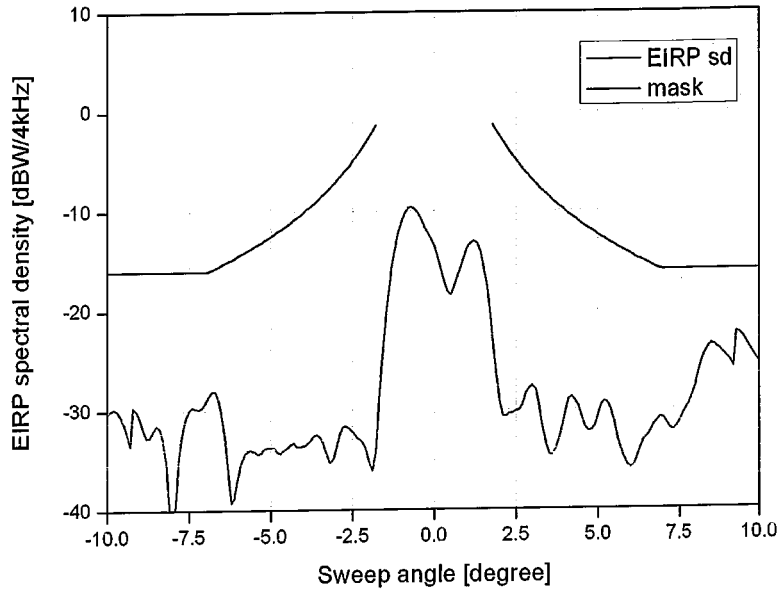
Exhibit 10



Test Report

14.25GHz @ -20.13 dBW/4kHz			14.25GHz @ -20.13 dBW/4kHz		
Angle (Degree)	EIRP SD (dBW/4kHz)	Mask (dBW/4kHz)	Angle (Degree)	EIRP SD (dBW/4kHz)	Mask (dBW/4kHz)
0.0	-13.51		5.0	-30.63	-12.47
0.1	-14.48		5.1	-29.56	-12.69
0.2	-15.79		5.2	-29.22	-12.90
0.3	-17.01		5.3	-29.45	-13.11
0.4	-18.09		5.4	-30.10	-13.31
0.5	-18.43		5.5	-31.38	-13.51
0.6	-17.81		5.6	-32.99	-13.70
0.7	-16.71		5.7	-34.05	-13.90
0.8	-15.76		5.8	-34.92	-14.09
0.9	-14.70		5.9	-35.58	-14.27
1.0	-13.76		6.0	-35.82	-14.45
1.1	-13.29		6.1	-35.53	-14.63
1.2	-13.07		6.2	-34.84	-14.81
1.3	-13.24		6.3	-33.88	-14.98
1.4	-14.10		6.4	-33.09	-15.15
1.5	-15.49		6.5	-32.78	-15.32
1.6	-17.26		6.6	-32.24	-15.49
1.7	-19.97		6.7	-31.63	-15.65
1.8	-23.20	-1.38	6.8	-31.27	-15.81
1.9	-26.24	-1.97	6.9	-30.89	-15.97
2.0	-29.09	-2.53	7.0	-30.94	-16.00
2.1	-30.64	-3.06	7.1	-31.50	-16.00
2.2	-30.63	-3.56	7.2	-31.97	-16.00
2.3	-30.42	-4.04	7.3	-32.13	-16.00
2.4	-30.34	-4.51	7.4	-31.84	-16.00
2.5	-30.12	-4.95	7.5	-31.25	-16.00
2.6	-30.07	-5.37	7.6	-30.63	-16.00
2.7	-29.52	-5.78	7.7	-30.07	-16.00
2.8	-28.42	-6.18	7.8	-29.52	-16.00
2.9	-27.86	-6.56	7.9	-28.73	-16.00
3.0	-27.66	-6.93	8.0	-27.76	-16.00
3.1	-27.99	-7.28	8.1	-26.55	-16.00
3.2	-29.54	-7.63	8.2	-25.28	-16.00
3.3	-31.79	-7.96	8.3	-24.44	-16.00
3.4	-33.35	-8.29	8.4	-23.85	-16.00
3.5	-34.49	-8.60	8.5	-23.52	-16.00
3.6	-34.55	-8.91	8.6	-23.62	-16.00
3.7	-34.01	-9.21	8.7	-23.91	-16.00
3.8	-33.02	-9.49	8.8	-24.16	-16.00
3.9	-31.72	-9.78	8.9	-24.50	-16.00
4.0	-30.13	-10.05	9.0	-24.79	-16.00
4.1	-28.99	-10.32	9.1	-25.14	-16.00
4.2	-28.79	-10.58	9.2	-25.85	-16.00
4.3	-29.16	-10.84	9.3	-22.33	-16.00
4.4	-29.74	-11.09	9.4	-22.46	-16.00
4.5	-30.75	-11.33	9.5	-22.79	-16.00
4.6	-31.75	-11.57	9.6	-23.41	-16.00
4.7	-32.16	-11.80	9.7	-23.99	-16.00
4.8	-32.10	-12.03	9.8	-24.45	-16.00
4.9	-31.65	-12.25	9.9	-24.95	-16.00
			10.0	-25.49	-16.00

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



14.25GHz EIRP spectral density @ -20.13dBW/4kHz Input power spectral density

▪ **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 v80G's Radiation pattern meets the FCC EIRP spectral density mask when the Input powers spectral density is @ -20.13 dBW/ 4kHz*