

**Exhibit A – Radiation Hazard Analysis**

Cobham SATCOM  
Marine Systems  
4030 Nelson Ave., Concord  
California, 94520, USA

T: +1 925 798 7979  
F: +1 925 798-7986

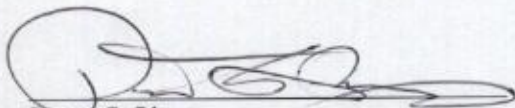
Sept 30, 2009

To Whom It May Concern:

The industry accepted average safe power level for continuous RF exposure has been determined to be  $10 \text{ mW/cm}^2$  (10 milli-Watts per square centimeter). Assuming an equal distribution of power across the 1-Meter aperture of a 4006 antenna system, the peak RF density using a 4 Watt BUC (Block Up Converter) is  $0.5 \text{ mW/cm}^2$  ( $4\text{W} \times 1000 \text{ mW/W} / 7854 \text{ cm}^2$ ). Using an 8 Watt BUC, the peak RF density is  $1.0 \text{ mW/cm}^2$ . These peak levels are between 10 and 20 times below the recommended safe exposure level to start with however, the peak levels are even further reduced by a 1 to 10 percent duty cycle modulation of the transmitted data. This yields average RF power levels between 0.004 and 0.09  $\text{mW/cm}^2$  or somewhere between 100 to 2000 times lower than the accepted safe RF exposure level.

Sea Tel is confident that a person standing anywhere outside the radome limits is safe from RF exposure. This condition is NOT true inside the radome. Between the feed and the dish there are hazardous RF levels and hence the need for the warning labels on the front of the Antenna Control Unit.

Respectfully,



9/30/09

Peter G. Blaney  
Chief Engineer  
Sea Tel Products  
Marine Systems  
Cobham SATCOM.

## Maximum Safe RF Exposure Power Levels

Antenna Diameter Meters	Antenna Area cm <sup>2</sup>		Typical BUC Power Watts	Peak Power Density mW/cm <sup>2</sup>		Max Safe BUC Power Watts	Peak Power Density mW/cm <sup>2</sup>
0.6	2,827		8	2.8		25	8.8
1	7,854		8	1.0		75	9.5
1.2	11,310		25	2.2		100	8.8
1.5	17,671		25	1.4		150	8.5
1.8	25,447		25	1.0		250	9.8
2	31,416		100	3.2		300	9.5
2.4	45,239		200	4.4		450	9.9
3.6	101,788		200	2.0		1000	9.8
8797 (2.0)	30,500		100	3.3		300	9.8
9797 (2.4)	42,450		200	4.7		400	9.4

**Notes:**

The Peak Power Density shown above, assumes a 100 percent duty cycle modulation of the BUC or RF power amplifier, at maximum capacity. The nominal power level setting for operating within a network is always limited to a value between 50 and 75 percent of the maximum capacity of the amplifier to prevent spurious transmissions. Additionally, typical network system transmissions are duty cycle modulated between 1 and 10 percent to accommodate multiple users. These two factors reduce the average power level of the RF transmissions by a factor of 13 to 200 times lower than the already safe levels tabulated above.

Any system equipped with a BUC or RF power amplifier equal to or less than the 'Max Safe BUC Power' stated above, is gaurenteed to be safe outside the confines of the radome walls.

**Exhibit B – Declaration of Peter Blaney, Chief Engineer of Cobham SATCOM, Sea Tel, Inc.**



**Cobham SATCOM**  
Marine Systems  
Sea Tel Products  
4030 Nelson Ave., Concord  
California, 94520, USA  
T: +1 (925) 798-7979  
F: +1 (925) 798-7986

Declaration of Cobham SATCOM, Sea Tel, Inc.

1. Cobham SATCOM - Marine Systems, Sea Tel Products designs, develops, manufactures and services marine stabilized antenna systems for satellite communication at sea. These products are in turn used by our customers as part of their Ku-band Earth Station on Vessels (ESV) networks.
2. FCC regulation 47 C.F.R. § 25.222 defines the provisions for blanket licensing of ESV antennas operating in the Ku Band. This declaration covers the requirements for meeting § 25.222 (a)(1) by the demonstrations outlined in paragraphs (b)(1)(i) and (b)(1)(iii). The requirements for meeting § 25.222 (a)(3)-(a)(7) are left to the applicant. The paragraph numbers in this declaration refer to the 2009 version of FCC 47 C.F.R. § 25.222.
3. Sea Tel hereby declares that the antennas listed below will meet the off-axis EIRP spectral density requirements of § 25.222 (a)(1)(i) with an N value of 1, when the following Input Power spectral density limitations are met:

0.6 Meter Ku Band, Models 2406 and USAT-24 are limited to	-21.6 dBW/4kHz
0.75 Meter Ku Band, Model USAT-30 is limited to	-21.6 dBW/4kHz
1.0 Meter Ku Band, Models 4003/4006/4009/4010 are limited to	-16.3 dBW/4kHz
1.2 Meter Ku Band, Models 4996/5009/5010 are limited to	-14.0 dBW/4kHz
1.5 Meter Ku Band, Models 6006/6009 are limited to	-14.0 dBW/4kHz
2.4 Meter Ku Band, Model 9797 is limited to	-14.0 dBW/4kHz
4. Sea Tel hereby declares that the antennas referenced in paragraph 3 above, will maintain a stabilization pointing accuracy of better than 0.2 degrees under specified ship motion conditions, thus meeting the requirements of § 25.222 (a)(1)(ii).
5. Sea Tel hereby declares that the antennas referenced in paragraph 3 above, will automatically cease transmission within 100 milliseconds if the pointing error should exceed 0.5 degrees and will not resume transmission until the error drops below 0.2 degrees, thus meeting the requirements of § 25.222 (a)(1)(iii).
6. Sea Tel maintains all relevant test data, which is available upon request, to verify these declarations.

Executed on: 7/28/10

By:   
Peter G. Blaney  
Chief Engineer, Sea Tel Products  
Cobham SATCOM, Marine Systems

**Exhibit C – EIRP Density Tables**

# Cobham SATCOM, Sea Tel Products

1.0m EIRPsd Data Table

Co Pol Azimuth, -10 to +10 Degrees @ 0.1 deg (A)

14.25 GHz @ -16.3 dBW / 4 kHz

14.25 GHz @ -16.3 dBW / 4 kHz

Angle Degrees	EIRPsd dBW/4kHz	Mask dBW/4kHz
-10.0	-20.2	-7.0
-9.9	-18.8	-6.9
-9.8	-17.5	-6.8
-9.7	-16.8	-6.7
-9.6	-16.2	-6.6
-9.5	-16.0	-6.4
-9.4	-16.1	-6.3
-9.3	-16.2	-6.2
-9.2	-16.3	-6.1
-9.1	-16.4	-6.0
-9.0	-16.7	-6.0
-8.9	-17.0	-6.0
-8.8	-17.9	-6.0
-8.7	-18.7	-6.0
-8.6	-19.4	-6.0
-8.5	-19.8	-6.0
-8.4	-19.9	-6.0
-8.3	-19.9	-6.0
-8.2	-19.9	-6.0
-8.1	-19.6	-6.0
-8.0	-18.6	-6.0
-7.9	-17.6	-6.0
-7.8	-16.9	-6.0
-7.7	-16.3	-6.0
-7.6	-15.9	-6.0
-7.5	-14.8	-6.0
-7.4	-13.4	-6.0
-7.3	-12.2	-6.0
-7.2	-11.2	-6.0
-7.1	-10.5	-6.0
-7.0	-10.1	-6.0
-6.9	-9.9	-6.0
-6.8	-10.1	-5.8
-6.7	-10.6	-5.7
-6.6	-11.4	-5.5
-6.5	-13.0	-5.3
-6.4	-15.7	-5.2
-6.3	-18.6	-5.0
-6.2	-22.1	-4.8
-6.1	-22.6	-4.6
-6.0	-21.4	-4.5
-5.9	-20.4	-4.3
-5.8	-19.9	-4.1
-5.7	-19.3	-3.9
-5.6	-17.6	-3.7
-5.5	-15.3	-3.5
-5.4	-12.8	-3.3
-5.3	-10.7	-3.1
-5.2	-8.9	-2.9
-5.1	-7.3	-2.7
-5.0	-6.3	-2.5
-4.9	-5.6	-2.3
-4.8	-5.1	-2.0
-4.7	-4.9	-1.8
-4.6	-4.8	-1.6
-4.5	-4.7	-1.3
-4.4	-4.9	-1.1
-4.3	-5.2	-0.8

Angle Degrees	EIRPsd dBW/4kHz	Mask dBW/4kHz
0.0	24.4	
0.1	24.3	
0.2	24.1	
0.3	23.8	
0.4	23.4	
0.5	22.9	
0.6	22.3	
0.7	21.3	
0.8	20.5	
0.9	19.4	
1.0	18.0	
1.1	16.8	
1.2	14.8	
1.3	12.7	
1.4	10.4	
1.5	7.0	10.6
1.6	3.2	9.9
1.7	-2.9	9.2
1.8	-18.1	8.6
1.9	-7.7	8.0
2.0	-1.3	7.5
2.1	1.1	6.9
2.2	2.5	6.4
2.3	3.4	6.0
2.4	3.6	5.5
2.5	3.3	5.1
2.6	2.6	4.6
2.7	1.9	4.2
2.8	0.8	3.8
2.9	-0.2	3.4
3.0	-1.2	3.1
3.1	-2.4	2.7
3.2	-3.4	2.4
3.3	-4.5	2.0
3.4	-5.6	1.7
3.5	-6.6	1.4
3.6	-7.2	1.1
3.7	-7.5	0.8
3.8	-7.3	0.5
3.9	-6.6	0.2
4.0	-5.9	-0.1
4.1	-5.0	-0.3
4.2	-4.3	-0.6
4.3	-4.0	-0.8
4.4	-4.0	-1.1
4.5	-4.2	-1.3
4.6	-4.5	-1.6
4.7	-4.8	-1.8
4.8	-5.2	-2.0
4.9	-5.8	-2.3
5.0	-6.7	-2.5
5.1	-7.7	-2.7
5.2	-9.2	-2.9
5.3	-10.5	-3.1
5.4	-11.9	-3.3
5.5	-13.7	-3.5
5.6	-15.2	-3.7
5.7	-17.6	-3.9

# Cobham SATCOM, Sea Tel Products

1.0m EIRPsd Data Table

Co Pol Azimuth, -10 to +10 Degrees @ 0.1 deg (A)

-4.2	-5.7	-0.6
-4.1	-6.6	-0.3
-4.0	-7.6	-0.1
-3.9	-8.6	0.2
-3.8	-9.7	0.5
-3.7	-10.4	0.8
-3.6	-10.7	1.1
-3.5	-10.3	1.4
-3.4	-9.6	1.7
-3.3	-7.9	2.0
-3.2	-6.0	2.4
-3.1	-4.3	2.7
-3.0	-2.3	3.1
-2.9	-0.8	3.4
-2.8	0.7	3.8
-2.7	1.9	4.2
-2.6	2.6	4.6
-2.5	3.2	5.1
-2.4	3.2	5.5
-2.3	2.9	6.0
-2.2	1.7	6.4
-2.1	0.2	6.9
-2.0	-3.5	7.5
-1.9	-11.3	8.0
-1.8	-6.5	8.6
-1.7	1.8	9.2
-1.6	6.2	9.9
-1.5	9.3	10.6
-1.4	12.3	
-1.3	14.2	
-1.2	16.1	
-1.1	17.6	
-1.0	18.8	
-0.9	20.1	
-0.8	21.0	
-0.7	21.9	
-0.6	22.6	
-0.5	23.1	
-0.4	23.6	
-0.3	24.0	
-0.2	24.2	
-0.1	24.4	
0.0	24.4	

5.8	-21.5	-4.1
5.9	-26.3	-4.3
6.0	-27.0	-4.5
6.1	-21.2	-4.6
6.2	-17.7	-4.8
6.3	-15.5	-5.0
6.4	-14.4	-5.2
6.5	-13.7	-5.3
6.6	-13.3	-5.5
6.7	-12.8	-5.7
6.8	-12.0	-5.8
6.9	-11.4	-6.0
7.0	-11.1	-6.1
7.1	-11.2	-6.0
7.2	-11.4	-6.0
7.3	-11.9	-6.0
7.4	-12.4	-6.0
7.5	-12.9	-6.0
7.6	-14.3	-6.0
7.7	-16.2	-6.0
7.8	-19.3	-6.0
7.9	-23.8	-6.0
8.0	-27.6	-6.0
8.1	-26.7	-6.0
8.2	-23.6	-6.0
8.3	-21.9	-6.0
8.4	-20.6	-6.0
8.5	-20.1	-6.0
8.6	-19.7	-6.0
8.7	-19.6	-6.0
8.8	-19.8	-6.0
8.9	-20.0	-6.0
9.0	-20.0	-6.0
9.1	-19.4	-6.0
9.2	-18.6	-6.0
9.3	-17.5	-6.2
9.4	-16.7	-6.3
9.5	-16.3	-6.4
9.6	-16.3	-6.6
9.7	-17.0	-6.7
9.8	-18.3	-6.8
9.9	-20.0	-6.9
10.0	-22.8	-7.0



# Cobham SATCOM, Sea Tel Products

1.0m EIRPsd Data Table

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

14.25 GHz @ -16.3 dBW / 4 kHz

Angle Degrees	EIRPsd dBW/4kHz	Mask dBW/4kHz
-180.0	-41.9	-24.0
-179.0	-45.1	-24.0
-178.0	-44.0	-24.0
-177.0	-51.5	-24.0
-176.0	-44.9	-24.0
-175.0	-49.7	-24.0
-174.0	-41.5	-24.0
-173.0	-45.4	-24.0
-172.0	-49.6	-24.0
-171.0	-49.0	-24.0
-170.0	-44.6	-24.0
-169.0	-47.3	-24.0
-168.0	-44.9	-24.0
-167.0	-44.3	-24.0
-166.0	-50.7	-24.0
-165.0	-46.9	-24.0
-164.0	-43.6	-24.0
-163.0	-50.0	-24.0
-162.0	-44.9	-24.0
-161.0	-46.7	-24.0
-160.0	-42.9	-24.0
-159.0	-44.5	-24.0
-158.0	-44.0	-24.0
-157.0	-45.6	-24.0
-156.0	-43.4	-24.0
-155.0	-44.9	-24.0
-154.0	-42.5	-24.0
-153.0	-43.7	-24.0
-152.0	-44.2	-24.0
-151.0	-44.5	-24.0
-150.0	-43.3	-24.0
-149.0	-45.8	-24.0
-148.0	-42.9	-24.0
-147.0	-43.5	-24.0
-146.0	-44.3	-24.0
-145.0	-43.7	-24.0
-144.0	-42.7	-24.0
-143.0	-46.0	-24.0
-142.0	-42.9	-24.0
-141.0	-42.4	-24.0
-140.0	-43.5	-24.0
-139.0	-44.8	-24.0
-138.0	-42.5	-24.0
-137.0	-46.2	-24.0
-136.0	-43.7	-24.0
-135.0	-44.3	-24.0
-134.0	-47.1	-24.0
-133.0	-41.9	-24.0
-132.0	-44.0	-24.0
-131.0	-45.3	-24.0
-130.0	-42.9	-24.0
-129.0	-44.7	-24.0
-128.0	-46.2	-24.0
-127.0	-42.7	-24.0
-126.0	-42.6	-24.0
-125.0	-48.0	-24.0
-124.0	-41.3	-24.0
-123.0	-44.0	-24.0
-122.0	-45.6	-24.0

14.25 GHz @ -16.3 dBW / 4 kHz

Angle Degrees	EIRPsd dBW/4kHz	Mask dBW/4kHz
0.0	24.4	
1.0	20.0	
2.0	2.9	7.5
3.0	0.3	3.1
4.0	-4.2	-0.1
5.0	-5.5	-2.5
6.0	-16.6	-4.5
7.0	-11.1	-6.1
8.0	-21.5	-6.0
9.0	-18.0	-6.0
10.0	-19.2	-7.0
11.0	-30.5	-8.0
12.0	-17.4	-9.0
13.0	-21.4	-9.8
14.0	-19.8	-10.7
15.0	-22.0	-11.4
16.0	-35.1	-12.1
17.0	-26.3	-12.8
18.0	-28.2	-13.4
19.0	-30.4	-14.0
20.0	-40.4	-14.5
21.0	-32.2	-15.1
22.0	-27.0	-15.6
23.0	-35.3	-16.0
24.0	-31.5	-16.5
25.0	-21.8	-16.9
26.0	-19.4	-17.4
27.0	-21.8	-17.8
28.0	-26.2	-18.2
29.0	-26.6	-18.6
30.0	-26.3	-18.9
31.0	-28.6	-19.3
32.0	-23.2	-19.6
33.0	-22.2	-20.0
34.0	-28.4	-20.3
35.0	-30.3	-20.6
36.0	-25.7	-20.9
37.0	-24.4	-21.2
38.0	-24.6	-21.5
39.0	-24.2	-21.8
40.0	-25.6	-22.1
41.0	-23.9	-22.3
42.0	-23.4	-22.6
43.0	-24.0	-22.8
44.0	-29.9	-23.1
45.0	-32.5	-23.3
46.0	-28.4	-23.6
47.0	-28.9	-23.8
48.0	-32.1	-24.0
49.0	-43.9	-24.0
50.0	-37.0	-24.0
51.0	-34.3	-24.0
52.0	-37.0	-24.0
53.0	-36.2	-24.0
54.0	-32.4	-24.0
55.0	-28.5	-24.0
56.0	-27.9	-24.0
57.0	-28.5	-24.0
58.0	-29.4	-24.0

# Cobham SATCOM, Sea Tel Products

1.0m EIRPsd Data Table

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

-121.0	-43.2	-24.0	59.0	-31.0	-24.0
-120.0	-45.1	-24.0	60.0	-32.2	-24.0
-119.0	-51.5	-24.0	61.0	-31.6	-24.0
-118.0	-43.7	-24.0	62.0	-32.3	-24.0
-117.0	-41.7	-24.0	63.0	-32.7	-24.0
-116.0	-47.7	-24.0	64.0	-33.7	-24.0
-115.0	-41.8	-24.0	65.0	-39.3	-24.0
-114.0	-43.5	-24.0	66.0	-41.7	-24.0
-113.0	-47.4	-24.0	67.0	-42.1	-24.0
-112.0	-43.2	-24.0	68.0	-48.3	-24.0
-111.0	-42.5	-24.0	69.0	-42.7	-24.0
-110.0	-51.6	-24.0	70.0	-34.7	-24.0
-109.0	-41.1	-24.0	71.0	-32.3	-24.0
-108.0	-41.2	-24.0	72.0	-33.3	-24.0
-107.0	-51.7	-24.0	73.0	-36.4	-24.0
-106.0	-39.7	-24.0	74.0	-40.8	-24.0
-105.0	-39.2	-24.0	75.0	-33.9	-24.0
-104.0	-44.2	-24.0	76.0	-31.4	-24.0
-103.0	-40.8	-24.0	77.0	-31.7	-24.0
-102.0	-38.1	-24.0	78.0	-35.6	-24.0
-101.0	-40.3	-24.0	79.0	-47.1	-24.0
-100.0	-50.8	-24.0	80.0	-35.9	-24.0
-99.0	-40.0	-24.0	81.0	-32.7	-24.0
-98.0	-38.1	-24.0	82.0	-32.9	-24.0
-97.0	-40.4	-24.0	83.0	-35.7	-24.0
-96.0	-45.1	-24.0	84.0	-46.6	-24.0
-95.0	-36.8	-24.0	85.0	-35.9	-24.0
-94.0	-35.9	-24.0	86.0	-34.1	-24.0
-93.0	-40.7	-24.0	87.0	-35.3	-24.0
-92.0	-40.5	-24.0	88.0	-41.6	-24.0
-91.0	-34.6	-24.0	89.0	-39.9	-24.0
-90.0	-34.3	-24.0	90.0	-35.6	-24.0
-89.0	-38.4	-24.0	91.0	-35.3	-24.0
-88.0	-39.6	-24.0	92.0	-42.0	-24.0
-87.0	-33.2	-24.0	93.0	-41.5	-24.0
-86.0	-32.4	-24.0	94.0	-37.7	-24.0
-85.0	-35.1	-24.0	95.0	-39.0	-24.0
-84.0	-40.8	-24.0	96.0	-47.9	-24.0
-83.0	-35.0	-24.0	97.0	-41.6	-24.0
-82.0	-31.2	-24.0	98.0	-39.8	-24.0
-81.0	-31.2	-24.0	99.0	-42.0	-24.0
-80.0	-34.5	-24.0	100.0	-53.4	-24.0
-79.0	-42.6	-24.0	101.0	-41.4	-24.0
-78.0	-34.4	-24.0	102.0	-39.9	-24.0
-77.0	-30.9	-24.0	103.0	-45.5	-24.0
-76.0	-30.1	-24.0	104.0	-45.8	-24.0
-75.0	-32.0	-24.0	105.0	-42.1	-24.0
-74.0	-39.3	-24.0	106.0	-42.8	-24.0
-73.0	-38.3	-24.0	107.0	-55.2	-24.0
-72.0	-33.0	-24.0	108.0	-44.4	-24.0
-71.0	-32.6	-24.0	109.0	-43.7	-24.0
-70.0	-34.1	-24.0	110.0	-51.9	-24.0
-69.0	-44.2	-24.0	111.0	-44.9	-24.0
-68.0	-45.0	-24.0	112.0	-42.2	-24.0
-67.0	-42.5	-24.0	113.0	-53.5	-24.0
-66.0	-41.3	-24.0	114.0	-42.4	-24.0
-65.0	-43.1	-24.0	115.0	-43.2	-24.0
-64.0	-36.3	-24.0	116.0	-48.0	-24.0
-63.0	-34.9	-24.0	117.0	-42.7	-24.0
-62.0	-34.9	-24.0	118.0	-45.1	-24.0
-61.0	-34.4	-24.0	119.0	-48.0	-24.0
-60.0	-34.4	-24.0	120.0	-46.1	-24.0

# Cobham SATCOM, Sea Tel Products

1.0m EIRPsd Data Table

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

-59.0	-32.1	-24.0	121.0	-46.1	-24.0
-58.0	-29.6	-24.0	122.0	-47.3	-24.0
-57.0	-28.8	-24.0	123.0	-44.8	-24.0
-56.0	-27.6	-24.0	124.0	-42.8	-24.0
-55.0	-28.6	-24.0	125.0	-51.9	-24.0
-54.0	-31.6	-24.0	126.0	-43.9	-24.0
-53.0	-36.4	-24.0	127.0	-43.9	-24.0
-52.0	-37.3	-24.0	128.0	-49.0	-24.0
-51.0	-33.4	-24.0	129.0	-45.0	-24.0
-50.0	-34.5	-24.0	130.0	-47.5	-24.0
-49.0	-38.6	-24.0	131.0	-44.4	-24.0
-48.0	-32.7	-24.0	132.0	-46.1	-24.0
-47.0	-29.4	-23.8	133.0	-43.9	-24.0
-46.0	-28.9	-23.6	134.0	-52.2	-24.0
-45.0	-32.8	-23.3	135.0	-43.0	-24.0
-44.0	-30.7	-23.1	136.0	-44.4	-24.0
-43.0	-24.4	-22.8	137.0	-47.5	-24.0
-42.0	-24.2	-22.6	138.0	-44.9	-24.0
-41.0	-25.2	-22.3	139.0	-47.8	-24.0
-40.0	-26.2	-22.1	140.0	-44.7	-24.0
-39.0	-24.5	-21.8	141.0	-46.6	-24.0
-38.0	-24.1	-21.5	142.0	-45.0	-24.0
-37.0	-24.4	-21.2	143.0	-47.7	-24.0
-36.0	-26.0	-20.9	144.0	-43.5	-24.0
-35.0	-30.6	-20.6	145.0	-43.4	-24.0
-34.0	-27.7	-20.3	146.0	-46.0	-24.0
-33.0	-22.9	-20.0	147.0	-42.7	-24.0
-32.0	-24.5	-19.6	148.0	-46.0	-24.0
-31.0	-31.5	-19.3	149.0	-44.2	-24.0
-30.0	-26.7	-18.9	150.0	-46.0	-24.0
-29.0	-27.2	-18.6	151.0	-46.9	-24.0
-28.0	-25.4	-18.2	152.0	-43.9	-24.0
-27.0	-21.4	-17.8	153.0	-45.5	-24.0
-26.0	-19.7	-17.4	154.0	-45.4	-24.0
-25.0	-23.0	-16.9	155.0	-44.6	-24.0
-24.0	-30.2	-16.5	156.0	-44.8	-24.0
-23.0	-34.3	-16.0	157.0	-44.5	-24.0
-22.0	-30.9	-15.6	158.0	-43.7	-24.0
-21.0	-33.4	-15.1	159.0	-44.4	-24.0
-20.0	-35.6	-14.5	160.0	-43.0	-24.0
-19.0	-29.6	-14.0	161.0	-43.1	-24.0
-18.0	-27.1	-13.4	162.0	-46.4	-24.0
-17.0	-26.1	-12.8	163.0	-47.2	-24.0
-16.0	-33.5	-12.1	164.0	-45.8	-24.0
-15.0	-22.0	-11.4	165.0	-45.5	-24.0
-14.0	-20.1	-10.7	166.0	-49.8	-24.0
-13.0	-20.2	-9.8	167.0	-43.4	-24.0
-12.0	-17.5	-9.0	168.0	-46.5	-24.0
-11.0	-30.4	-8.0	169.0	-49.5	-24.0
-10.0	-17.2	-7.0	170.0	-42.5	-24.0
-9.0	-16.3	-6.0	171.0	-45.9	-24.0
-8.0	-16.6	-6.0	172.0	-47.7	-24.0
-7.0	-10.0	-6.0	173.0	-43.9	-24.0
-6.0	-19.6	-4.5	174.0	-46.9	-24.0
-5.0	-5.0	-2.5	175.0	-44.0	-24.0
-4.0	-6.2	-0.1	176.0	-48.0	-24.0
-3.0	1.3	3.1	177.0	-48.2	-24.0
-2.0	1.0	7.5	178.0	-49.3	-24.0
-1.0	21.5		179.0	-46.2	-24.0
0.0	24.4		180.0	-48.2	-24.0

# Cobham SATCOM, Sea Tel Products

1.0m EIRPsd Data Table

Co Pol Elevation, 0 to +30 Degrees @ 0.1 / 0.5 deg (B)

14.25 GHz @ -16.3 dBW / 4 kHz

Angle Degrees	EIRPsd dBW/4kHz	Mask dBW/4kHz
0.0	24.5	
0.1	24.5	
0.2	24.4	
0.3	24.2	
0.4	23.9	
0.5	23.5	
0.6	23.1	
0.7	22.5	
0.8	21.8	
0.9	21.1	
1.0	20.2	
1.1	19.0	
1.2	18.0	
1.3	16.5	
1.4	15.1	
1.5	13.4	
1.6	11.5	
1.7	9.3	
1.8	6.1	
1.9	2.8	
2.0	-2.1	
2.1	-12.7	
2.2	-11.9	
2.3	-5.1	
2.4	-1.9	
2.5	-0.6	
2.6	0.1	
2.7	0.3	
2.8	0.1	
2.9	-0.2	
3.0	-0.5	6.1
3.1	-0.9	5.7
3.2	-1.3	5.4
3.3	-1.8	5.0
3.4	-2.5	4.7
3.5	-3.2	4.4
3.6	-4.1	4.1
3.7	-5.1	3.8
3.8	-5.9	3.5
3.9	-6.7	3.2
4.0	-7.4	2.9
4.1	-7.8	2.7
4.2	-8.3	2.4
4.3	-8.6	2.2
4.4	-8.7	1.9
4.5	-8.6	1.7
4.6	-8.3	1.4
4.7	-7.7	1.2
4.8	-7.3	1.0
4.9	-6.9	0.7
5.0	-6.9	0.5
5.1	-7.3	0.3
5.2	-8.1	0.1
5.3	-9.8	-0.1
5.4	-11.8	-0.3
5.5	-14.3	-0.5
5.6	-16.6	-0.7

14.25 GHz @ -16.3 dBW / 4 kHz

Angle Degrees	EIRPsd dBW/4kHz	Mask dBW/4kHz
10.0	-15.7	-7.0
10.5	-17.5	-7.5
11.0	-20.7	-8.0
11.5	-21.9	-8.5
12.0	-22.8	-9.0
12.5	-25.6	-9.4
13.0	-29.1	-9.8
13.5	-28.0	-10.3
14.0	-23.5	-10.7
14.5	-20.3	-11.0
15.0	-19.6	-11.4
15.5	-20.7	-11.8
16.0	-22.7	-12.1
16.5	-27.2	-12.4
17.0	-38.8	-12.8
17.5	-40.0	-13.1
18.0	-33.0	-13.4
18.5	-31.3	-13.7
19.0	-30.5	-14.0
19.5	-31.3	-14.3
20.0	-33.8	-14.5
20.5	-38.0	-14.8
21.0	-35.8	-15.1
21.5	-32.9	-15.3
22.0	-32.0	-15.6
22.5	-33.6	-15.8
23.0	-40.1	-16.0
23.5	-43.0	-16.3
24.0	-34.0	-16.5
24.5	-29.7	-16.7
25.0	-30.3	-16.9
25.5	-34.5	-17.2
26.0	-43.0	-17.4
26.5	-39.4	-17.6
27.0	-34.6	-17.8
27.5	-32.2	-18.0
28.0	-30.9	-18.2
28.5	-32.2	-18.4
29.0	-31.0	-18.6
29.5	-28.6	-18.7
30.0	-27.2	-18.9

# Cobham SATCOM, Sea Tel Products

1.0m EIRPsd Data Table

Co Pol Elevation, 0 to +30 Degrees @ 0.1 / 0.5 deg (B)

5.7	-17.6	-0.9
5.8	-18.2	-1.1
5.9	-17.7	-1.3
6.0	-16.5	-1.5
6.1	-15.0	-1.6
6.2	-14.1	-1.8
6.3	-13.9	-2.0
6.4	-14.3	-2.2
6.5	-15.0	-2.3
6.6	-15.7	-2.5
6.7	-16.3	-2.7
6.8	-16.8	-2.8
6.9	-17.2	-3.0
7.0	-18.4	-3.1
7.1	-20.2	-3.3
7.2	-22.2	-3.4
7.3	-23.4	-3.6
7.4	-23.8	-3.7
7.5	-23.9	-3.9
7.6	-25.0	-4.0
7.7	-26.0	-4.2
7.8	-25.7	-4.3
7.9	-23.3	-4.4
8.0	-21.3	-4.6
8.1	-20.4	-4.7
8.2	-19.9	-4.8
8.3	-19.6	-5.0
8.4	-19.3	-5.1
8.5	-19.3	-5.2
8.6	-19.2	-5.4
8.7	-19.0	-5.5
8.8	-19.0	-5.6
8.9	-18.8	-5.7
9.0	-18.5	-5.9
9.1	-18.1	-6.0
9.2	-17.8	-6.1
9.3	-17.3	-6.2
9.4	-16.9	-6.3
9.5	-16.5	-6.4
9.6	-16.2	-6.6
9.7	-15.7	-6.7
9.8	-15.4	-6.8
9.9	-15.4	-6.9
10.0	-15.7	-7.0


# Cobham SATCOM, Sea Tel Products

1.0m EIRPsd Data Table

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

14.25 GHz @ -16.3 dBW / 4 kHz

Angle Degrees	EIRPsd dBW/4kHz	Mask dBW/4kHz
-10.0	-36.3	-16.0
-9.9	-33.3	-16.0
-9.8	-32.9	-16.0
-9.7	-33.8	-16.0
-9.6	-34.3	-16.0
-9.5	-36.5	-16.0
-9.4	-35.4	-16.0
-9.3	-33.9	-16.0
-9.2	-35.8	-16.0
-9.1	-33.5	-16.0
-9.0	-30.8	-16.0
-8.9	-33.3	-16.0
-8.8	-37.2	-16.0
-8.7	-28.1	-16.0
-8.6	-30.6	-16.0
-8.5	-36.5	-16.0
-8.4	-35.8	-16.0
-8.3	-36.1	-16.0
-8.2	-31.4	-16.0
-8.1	-31.8	-16.0
-8.0	-31.8	-16.0
-7.9	-33.5	-16.0
-7.8	-30.1	-16.0
-7.7	-29.4	-16.0
-7.6	-31.7	-16.0
-7.5	-30.6	-16.0
-7.4	-34.7	-16.0
-7.3	-30.5	-16.0
-7.2	-33.1	-16.0
-7.1	-34.8	-16.0
-7.0	-36.4	-16.0
-6.9	-30.2	-16.0
-6.8	-33.3	-15.8
-6.7	-30.1	-15.7
-6.6	-31.0	-15.5
-6.5	-29.1	-15.3
-6.4	-31.4	-15.2
-6.3	-31.0	-15.0
-6.2	-29.4	-14.8
-6.1	-29.6	-14.6
-6.0	-31.7	-14.5
-5.9	-37.4	-14.3
-5.8	-32.4	-14.1
-5.7	-37.7	-13.9
-5.6	-32.3	-13.7
-5.5	-36.5	-13.5
-5.4	-33.0	-13.3
-5.3	-29.7	-13.1
-5.2	-33.1	-12.9
-5.1	-35.0	-12.7
-5.0	-33.6	-12.5
-4.9	-35.1	-12.3
-4.8	-35.1	-12.0
-4.7	-47.7	-11.8
-4.6	-39.6	-11.6
-4.5	-49.3	-11.3
-4.4	-34.4	-11.1
-4.3	-55.7	-10.8

14.25 GHz @ -16.3 dBW / 4 kHz

Angle Degrees	EIRPsd dBW/4kHz	Mask dBW/4kHz
0.0	-30.8	
0.1	-28.8	
0.2	-21.9	
0.3	-20.0	
0.4	-19.4	
0.5	-18.8	
0.6	-18.4	
0.7	-17.4	
0.8	-18.4	
0.9	-18.4	
1.0	-19.1	
1.1	-19.4	
1.2	-20.1	
1.3	-20.8	
1.4	-22.0	
1.5	-21.1	
1.6	-21.4	
1.7	-21.7	
1.8	-21.2	-1.4
1.9	-21.2	-2.0
2.0	-19.5	-2.5
2.1	-20.6	-3.1
2.2	-20.0	-3.6
2.3	-18.4	-4.0
2.4	-19.5	-4.5
2.5	-18.9	-4.9
2.6	-20.4	-5.4
2.7	-20.3	-5.8
2.8	-20.8	-6.2
2.9	-21.2	-6.6
3.0	-22.1	-6.9
3.1	-23.6	-7.3
3.2	-25.4	-7.6
3.3	-27.2	-8.0
3.4	-28.2	-8.3
3.5	-31.1	-8.6
3.6	-34.1	-8.9
3.7	-34.7	-9.2
3.8	-37.3	-9.5
3.9	-40.5	-9.8
4.0	-49.4	-10.1
4.1	-37.0	-10.3
4.2	-39.9	-10.6
4.3	-37.8	-10.8
4.4	-37.4	-11.1
4.5	-42.5	-11.3
4.6	-49.7	-11.6
4.7	-50.3	-11.8
4.8	-43.5	-12.0
4.9	-44.1	-12.3
5.0	-46.3	-12.5
5.1	-35.5	-12.7
5.2	-37.3	-12.9
5.3	-41.1	-13.1
5.4	-40.9	-13.3
5.5	-40.3	-13.5
5.6	-40.1	-13.7
5.7	-40.3	-13.9

# Cobham SATCOM, Sea Tel Products

1.0m EIRPsd Data Table

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

-4.2	-38.6	-10.6	5.8	-42.2	-14.1
-4.1	-43.4	-10.3	5.9	-39.2	-14.3
-4.0	-41.3	-10.1	6.0	-34.5	-14.5
-3.9	-48.3	-9.8	6.1	-35.6	-14.6
-3.8	-45.8	-9.5	6.2	-34.0	-14.8
-3.7	-43.4	-9.2	6.3	-39.5	-15.0
-3.6	-33.4	-8.9	6.4	-35.4	-15.2
-3.5	-35.6	-8.6	6.5	-36.7	-15.3
-3.4	-29.9	-8.3	6.6	-35.7	-15.5
-3.3	-29.6	-8.0	6.7	-32.1	-15.7
-3.2	-26.9	-7.6	6.8	-35.9	-15.8
-3.1	-23.6	-7.3	6.9	-34.8	-16.0
-3.0	-24.0	-6.9	7.0	-49.2	-16.0
-2.9	-21.1	-6.6	7.1	-42.8	-16.0
-2.8	-21.2	-6.2	7.2	-40.1	-16.0
-2.7	-18.9	-5.8	7.3	-34.4	-16.0
-2.6	-19.4	-5.4	7.4	-43.2	-16.0
-2.5	-19.2	-4.9	7.5	-40.2	-16.0
-2.4	-19.0	-4.5	7.6	-42.7	-16.0
-2.3	-20.0	-4.0	7.7	-40.7	-16.0
-2.2	-19.7	-3.6	7.8	-43.5	-16.0
-2.1	-20.8	-3.1	7.9	-39.9	-16.0
-2.0	-22.7	-2.5	8.0	-35.5	-16.0
-1.9	-24.0	-2.0	8.1	-37.4	-16.0
-1.8	-22.0	-1.4	8.2	-44.9	-16.0
-1.7	-21.5		8.3	-35.3	-16.0
-1.6	-18.2		8.4	-39.6	-16.0
-1.5	-17.2		8.5	-36.4	-16.0
-1.4	-15.2		8.6	-36.4	-16.0
-1.3	-14.3		8.7	-46.3	-16.0
-1.2	-13.2		8.8	-37.2	-16.0
-1.1	-13.1		8.9	-36.0	-16.0
-1.0	-13.4		9.0	-36.7	-16.0
-0.9	-13.2		9.1	-33.2	-16.0
-0.8	-13.0		9.2	-36.0	-16.0
-0.7	-14.1		9.3	-37.4	-16.0
-0.6	-14.7		9.4	-31.9	-16.0
-0.5	-15.9		9.5	-36.0	-16.0
-0.4	-17.7		9.6	-35.6	-16.0
-0.3	-21.1		9.7	-36.5	-16.0
-0.2	-25.9		9.8	-47.3	-16.0
-0.1	-32.9		9.9	-40.2	-16.0
0.0	-30.8		10.0	-35.7	-16.0

# Cobham SATCOM, Sea Tel Products

1.2M EIRPsd Data Table - Co Pol Azimuth, -10 to +10 Degrees @ 0.1 (A)

14.25 GHz @ -14 dBW / 4 kHz

Angle Degrees	EIRPsd dBW/4kHz	Mask dBW/4kHz
-10.0	-22.6	-7.1
-9.9	-21.7	-6.9
-9.8	-20.6	-6.8
-9.7	-20.4	-6.7
-9.6	-20.6	-6.6
-9.5	-22.0	-6.5
-9.4	-23.8	-6.4
-9.3	-27.3	-6.3
-9.2	-35.3	-6.2
-9.1	-34.5	-6.0
-9.0	-28.1	-6.0
-8.9	-23.5	-6.0
-8.8	-22.2	-6.0
-8.7	-21.0	-6.0
-8.6	-20.7	-6.0
-8.5	-21.0	-6.0
-8.4	-22.7	-6.0
-8.3	-24.1	-6.0
-8.2	-26.2	-6.0
-8.1	-26.0	-6.0
-8.0	-24.4	-6.0
-7.9	-22.0	-6.0
-7.8	-20.2	-6.0
-7.7	-19.2	-6.0
-7.6	-18.8	-6.0
-7.5	-18.9	-6.0
-7.4	-19.1	-6.0
-7.3	-19.0	-6.0
-7.2	-18.4	-6.0
-7.1	-16.8	-6.0
-7.0	-14.7	-6.0
-6.9	-13.9	-6.0
-6.8	-12.5	-5.9
-6.7	-11.7	-5.7
-6.6	-11.5	-5.6
-6.5	-11.0	-5.4
-6.4	-10.9	-5.2
-6.3	-10.7	-5.1
-6.2	-10.3	-4.9
-6.1	-9.7	-4.7
-6.0	-9.1	-4.5
-5.9	-8.4	-4.4
-5.8	-7.8	-4.2
-5.7	-7.3	-4.0
-5.6	-7.1	-3.8
-5.5	-7.1	-3.6
-5.4	-7.4	-3.4
-5.3	-7.8	-3.2
-5.2	-8.3	-3.0
-5.1	-9.3	-2.8
-5.0	-10.1	-2.6
-4.9	-10.9	-2.4
-4.8	-11.5	-2.1
-4.7	-11.6	-1.9
-4.6	-11.3	-1.7
-4.5	-10.6	-1.5
-4.4	-10.0	-1.2

14.25 GHz @ -14 dBW / 4 kHz

Angle Degrees	EIRPsd dBW/4kHz	Mask dBW/4kHz
0.0	28.9	
0.1	28.8	
0.2	28.8	
0.3	28.3	
0.4	27.9	
0.5	27.3	
0.6	26.2	
0.7	25.7	
0.8	24.4	
0.9	22.4	
1.0	21.2	
1.1	19.1	
1.2	16.2	
1.3	12.9	
1.4	8.8	
1.5	2.6	10.2
1.6	-7.0	9.6
1.7	0.0	8.9
1.8	3.9	8.3
1.9	5.3	7.7
2.0	5.7	7.2
2.1	5.2	6.7
2.2	4.2	6.2
2.3	3.2	5.7
2.4	1.2	5.3
2.5	-1.1	4.8
2.6	-3.0	4.4
2.7	-4.2	4.0
2.8	-4.6	3.6
2.9	-4.7	3.3
3.0	-5.3	2.9
3.1	-6.2	2.5
3.2	-7.7	2.2
3.3	-10.5	1.9
3.4	-12.1	1.6
3.5	-12.0	1.2
3.6	-9.9	0.9
3.7	-8.2	0.6
3.8	-7.1	0.4
3.9	-6.6	0.1
4.0	-6.4	-0.2
4.1	-6.8	-0.5
4.2	-7.4	-0.7
4.3	-8.2	-1.0
4.4	-10.0	-1.2
4.5	-11.1	-1.5
4.6	-12.0	-1.7
4.7	-13.2	-1.9
4.8	-13.3	-2.1
4.9	-12.9	-2.4
5.0	-11.6	-2.6
5.1	-10.6	-2.8
5.2	-9.4	-3.0
5.3	-7.9	-3.2
5.4	-7.2	-3.4
5.5	-6.5	-3.6
5.6	-5.9	-3.8



## Cobham SATCOM, Sea Tel Products

1.2M EIRPsd Data Table - Co Pol Azimuth, -10 to +10 Degrees @ 0.1 (A)

-4.3	-8.8	-1.0
-4.2	-7.9	-0.7
-4.1	-7.2	-0.5
-4.0	-6.6	-0.2
-3.9	-6.4	0.1
-3.8	-6.6	0.4
-3.7	-7.3	0.6
-3.6	-8.2	0.9
-3.5	-9.7	1.2
-3.4	-10.6	1.6
-3.3	-10.6	1.9
-3.2	-9.1	2.2
-3.1	-7.7	2.5
-3.0	-6.6	2.9
-2.9	-5.4	3.3
-2.8	-4.9	3.6
-2.7	-4.0	4.0
-2.6	-2.6	4.4
-2.5	-1.3	4.8
-2.4	1.0	5.3
-2.3	2.9	5.7
-2.2	4.4	6.2
-2.1	5.8	6.7
-2.0	6.5	7.2
-1.9	6.7	7.7
-1.8	6.3	8.3
-1.7	4.8	8.9
-1.6	1.3	9.6
-1.5	-4.5	10.2
-1.4	-3.3	
-1.3	6.5	
-1.2	11.1	
-1.1	15.5	
-1.0	17.9	
-0.9	19.8	
-0.8	22.4	
-0.7	23.7	
-0.6	25.0	
-0.5	26.2	
-0.4	27.0	
-0.3	27.8	
-0.2	28.3	
-0.1	28.6	
0.0	28.9	

5.7	-5.7	-4.0
5.8	-5.6	-4.2
5.9	-5.7	-4.4
6.0	-6.1	-4.5
6.1	-6.6	-4.7
6.2	-7.2	-4.9
6.3	-7.8	-5.1
6.4	-8.4	-5.2
6.5	-8.9	-5.4
6.6	-9.3	-5.6
6.7	-9.7	-5.7
6.8	-10.1	-5.9
6.9	-10.6	-6.0
7.0	-11.4	-6.0
7.1	-12.3	-6.0
7.2	-13.3	-6.0
7.3	-14.7	-6.0
7.4	-15.8	-6.0
7.5	-17.1	-6.0
7.6	-17.9	-6.0
7.7	-18.4	-6.0
7.8	-19.2	-6.0
7.9	-20.5	-6.0
8.0	-21.6	-6.0
8.1	-24.0	-6.0
8.2	-27.0	-6.0
8.3	-28.1	-6.0
8.4	-26.1	-6.0
8.5	-23.4	-6.0
8.6	-22.3	-6.0
8.7	-21.1	-6.0
8.8	-20.8	-6.0
8.9	-21.1	-6.0
9.0	-22.5	-6.0
9.1	-24.3	-6.0
9.2	-26.3	-6.2
9.3	-28.9	-6.3
9.4	-28.1	-6.4
9.5	-26.0	-6.5
9.6	-23.8	-6.6
9.7	-23.0	-6.7
9.8	-22.4	-6.8
9.9	-22.5	-6.9
10.0	-22.8	-7.1

# Cobham SATCOM, Sea Tel Products

1.2M EIRPsd Data Table - Co Pol Azimuth, -180 to +180 Degrees @ 0.5 (A)

14.25 GHz @ -14 dBW / 4 kHz

Angle Degrees	EIRPsd dBW/4kHz	Mask dBW/4kHz
-179.5	-39.6	-24.0
-179.0	-43.0	-24.0
-178.5	-43.2	-24.0
-178.0	-41.3	-24.0
-177.5	-38.5	-24.0
-177.0	-37.9	-24.0
-176.5	-40.0	-24.0
-176.0	-41.1	-24.0
-175.5	-37.7	-24.0
-175.0	-42.2	-24.0
-174.5	-39.1	-24.0
-174.0	-42.3	-24.0
-173.5	-35.3	-24.0
-173.0	-35.3	-24.0
-172.5	-50.7	-24.0
-172.0	-43.7	-24.0
-171.5	-41.8	-24.0
-171.0	-42.0	-24.0
-170.5	-39.5	-24.0
-170.0	-40.8	-24.0
-169.5	-42.4	-24.0
-169.0	-41.8	-24.0
-168.5	-38.6	-24.0
-168.0	-44.0	-24.0
-167.5	-37.3	-24.0
-167.0	-38.1	-24.0
-166.5	-46.5	-24.0
-166.0	-39.5	-24.0
-165.5	-40.0	-24.0
-165.0	-41.5	-24.0
-164.5	-41.8	-24.0
-164.0	-44.5	-24.0
-163.5	-37.0	-24.0
-163.0	-41.3	-24.0
-162.5	-42.9	-24.0
-162.0	-37.2	-24.0
-161.5	-35.9	-24.0
-161.0	-40.7	-24.0
-160.5	-37.6	-24.0
-160.0	-38.7	-24.0
-159.5	-46.0	-24.0
-159.0	-40.9	-24.0
-158.5	-44.3	-24.0
-158.0	-37.0	-24.0
-157.5	-40.4	-24.0
-157.0	-41.5	-24.0
-156.5	-46.1	-24.0
-156.0	-40.4	-24.0
-155.5	-40.5	-24.0
-155.0	-38.9	-24.0
-154.5	-37.7	-24.0
-154.0	-46.4	-24.0
-153.5	-41.1	-24.0
-153.0	-45.2	-24.0
-152.5	-37.7	-24.0
-152.0	-41.3	-24.0
-151.5	-39.6	-24.0

14.25 GHz @ -14 dBW / 4 kHz

Angle Degrees	EIRPsd dBW/4kHz	Mask dBW/4kHz
0.0	28.9	
0.5	27.5	
1.0	21.5	
1.5	4.4	10.6
2.0	5.6	7.5
2.5	-0.5	5.1
3.0	-5.1	3.1
3.5	-8.6	1.4
4.0	-6.4	-0.1
4.5	-10.9	-1.3
5.0	-9.7	-2.5
5.5	-5.7	-3.5
6.0	-6.0	-4.5
6.5	-8.8	-5.3
7.0	-11.1	-6.0
7.5	-16.8	-6.0
8.0	-21.2	-6.0
8.5	-21.3	-6.0
9.0	-22.0	-6.0
9.5	-23.2	-6.4
10.0	-22.7	-7.0
10.5	-32.0	-7.5
11.0	-25.5	-8.0
11.5	-21.6	-8.5
12.0	-26.1	-9.0
12.5	-25.4	-9.4
13.0	-27.4	-9.8
13.5	-20.3	-10.3
14.0	-20.4	-10.7
14.5	-27.0	-11.0
15.0	-31.3	-11.4
15.5	-24.1	-11.8
16.0	-23.1	-12.1
16.5	-26.2	-12.4
17.0	-25.1	-12.8
17.5	-21.9	-13.1
18.0	-22.2	-13.4
18.5	-27.1	-13.7
19.0	-29.8	-14.0
19.5	-25.6	-14.3
20.0	-25.7	-14.5
20.5	-26.6	-14.8
21.0	-25.7	-15.1
21.5	-29.0	-15.3
22.0	-36.1	-15.6
22.5	-28.0	-15.8
23.0	-25.8	-16.0
23.5	-27.3	-16.3
24.0	-29.8	-16.5
24.5	-29.8	-16.7
25.0	-29.4	-16.9
25.5	-28.8	-17.2
26.0	-26.6	-17.4
26.5	-27.4	-17.6
27.0	-28.7	-17.8
27.5	-27.6	-18.0
28.0	-27.6	-18.2

## Cobham SATCOM, Sea Tel Products

1.2M EIRPsd Data Table - Co Pol Azimuth, -180 to +180 Degrees @ 0.5 (A)

-151.0	-43.4	-24.0
-150.5	-49.7	-24.0
-150.0	-38.9	-24.0
-149.5	-39.0	-24.0
-149.0	-44.3	-24.0
-148.5	-48.3	-24.0
-148.0	-41.2	-24.0
-147.5	-44.0	-24.0
-147.0	-37.9	-24.0
-146.5	-46.3	-24.0
-146.0	-44.5	-24.0
-145.5	-39.7	-24.0
-145.0	-40.2	-24.0
-144.5	-40.1	-24.0
-144.0	-40.4	-24.0
-143.5	-37.1	-24.0
-143.0	-37.3	-24.0
-142.5	-43.4	-24.0
-142.0	-38.9	-24.0
-141.5	-37.5	-24.0
-141.0	-38.7	-24.0
-140.5	-34.4	-24.0
-140.0	-40.2	-24.0
-139.5	-38.9	-24.0
-139.0	-37.4	-24.0
-138.5	-41.2	-24.0
-138.0	-36.3	-24.0
-137.5	-38.2	-24.0
-137.0	-41.1	-24.0
-136.5	-38.3	-24.0
-136.0	-41.6	-24.0
-135.5	-38.6	-24.0
-135.0	-36.7	-24.0
-134.5	-36.0	-24.0
-134.0	-43.0	-24.0
-133.5	-36.7	-24.0
-133.0	-38.6	-24.0
-132.5	-44.2	-24.0
-132.0	-40.1	-24.0
-131.5	-41.9	-24.0
-131.0	-40.9	-24.0
-130.5	-38.0	-24.0
-130.0	-39.6	-24.0
-129.5	-38.1	-24.0
-129.0	-41.3	-24.0
-128.5	-40.3	-24.0
-128.0	-42.8	-24.0
-127.5	-35.8	-24.0
-127.0	-40.3	-24.0
-126.5	-40.5	-24.0
-126.0	-37.9	-24.0
-125.5	-39.6	-24.0
-125.0	-42.5	-24.0
-124.5	-40.0	-24.0
-124.0	-40.4	-24.0
-123.5	-41.5	-24.0
-123.0	-40.7	-24.0
-122.5	-37.4	-24.0
-122.0	-34.7	-24.0
-121.5	-45.5	-24.0
-121.0	-41.4	-24.0

28.5	-24.7	-18.4
29.0	-22.5	-18.6
29.5	-21.7	-18.7
30.0	-22.6	-18.9
30.5	-25.5	-19.1
31.0	-27.7	-19.3
31.5	-25.2	-19.5
32.0	-23.7	-19.6
32.5	-23.9	-19.8
33.0	-23.8	-20.0
33.5	-25.7	-20.1
34.0	-31.7	-20.3
34.5	-32.9	-20.4
35.0	-36.9	-20.6
35.5	-29.9	-20.8
36.0	-26.4	-20.9
36.5	-24.3	-21.1
37.0	-23.6	-21.2
37.5	-24.5	-21.4
38.0	-25.4	-21.5
38.5	-28.1	-21.6
39.0	-35.9	-21.8
39.5	-33.7	-21.9
40.0	-30.9	-22.1
40.5	-27.7	-22.2
41.0	-28.0	-22.3
41.5	-29.7	-22.5
42.0	-29.4	-22.6
42.5	-32.0	-22.7
43.0	-34.0	-22.8
43.5	-33.4	-23.0
44.0	-34.2	-23.1
44.5	-41.2	-23.2
45.0	-43.0	-23.3
45.5	-34.7	-23.5
46.0	-31.1	-23.6
46.5	-31.8	-23.7
47.0	-32.4	-23.8
47.5	-34.2	-23.9
48.0	-38.0	-24.0
48.5	-39.9	-24.0
49.0	-34.5	-24.0
49.5	-32.8	-24.0
50.0	-33.4	-24.0
50.5	-33.0	-24.0
51.0	-31.7	-24.0
51.5	-33.4	-24.0
52.0	-35.2	-24.0
52.5	-34.0	-24.0
53.0	-35.5	-24.0
53.5	-34.0	-24.0
54.0	-33.5	-24.0
54.5	-32.1	-24.0
55.0	-33.3	-24.0
55.5	-35.2	-24.0
56.0	-35.1	-24.0
56.5	-34.0	-24.0
57.0	-35.5	-24.0
57.5	-38.3	-24.0
58.0	-34.6	-24.0
58.5	-36.2	-24.0

## Cobham SATCOM, Sea Tel Products

1.2M EIRPsd Data Table - Co Pol Azimuth, -180 to +180 Degrees @ 0.5 (A)

-120.5	-38.0	-24.0
-120.0	-39.9	-24.0
-119.5	-36.9	-24.0
-119.0	-43.0	-24.0
-118.5	-38.8	-24.0
-118.0	-35.4	-24.0
-117.5	-39.1	-24.0
-117.0	-42.6	-24.0
-116.5	-44.8	-24.0
-116.0	-38.9	-24.0
-115.5	-36.5	-24.0
-115.0	-40.0	-24.0
-114.5	-37.0	-24.0
-114.0	-40.4	-24.0
-113.5	-38.3	-24.0
-113.0	-38.3	-24.0
-112.5	-36.8	-24.0
-112.0	-42.1	-24.0
-111.5	-38.7	-24.0
-111.0	-39.4	-24.0
-110.5	-37.4	-24.0
-110.0	-45.0	-24.0
-109.5	-40.1	-24.0
-109.0	-41.2	-24.0
-108.5	-35.5	-24.0
-108.0	-37.4	-24.0
-107.5	-38.2	-24.0
-107.0	-35.5	-24.0
-106.5	-37.1	-24.0
-106.0	-39.6	-24.0
-105.5	-38.2	-24.0
-105.0	-33.7	-24.0
-104.5	-35.0	-24.0
-104.0	-43.3	-24.0
-103.5	-40.8	-24.0
-103.0	-36.9	-24.0
-102.5	-34.7	-24.0
-102.0	-35.5	-24.0
-101.5	-35.9	-24.0
-101.0	-36.9	-24.0
-100.5	-40.3	-24.0
-100.0	-40.5	-24.0
-99.5	-35.3	-24.0
-99.0	-36.7	-24.0
-98.5	-37.8	-24.0
-98.0	-35.6	-24.0
-97.5	-35.8	-24.0
-97.0	-34.2	-24.0
-96.5	-34.9	-24.0
-96.0	-34.0	-24.0
-95.5	-30.9	-24.0
-95.0	-32.7	-24.0
-94.5	-32.3	-24.0
-94.0	-33.1	-24.0
-93.5	-32.8	-24.0
-93.0	-35.9	-24.0
-92.5	-34.7	-24.0
-92.0	-35.2	-24.0
-91.5	-31.8	-24.0
-91.0	-30.2	-24.0
-90.5	-29.1	-24.0

59.0	-37.9	-24.0
59.5	-27.8	-24.0
60.0	-29.5	-24.0
60.5	-28.3	-24.0
61.0	-35.6	-24.0
61.5	-37.8	-24.0
62.0	-38.9	-24.0
62.5	-39.2	-24.0
63.0	-44.0	-24.0
63.5	-54.0	-24.0
64.0	-45.8	-24.0
64.5	-40.9	-24.0
65.0	-34.2	-24.0
65.5	-38.0	-24.0
66.0	-39.0	-24.0
66.5	-41.1	-24.0
67.0	-42.4	-24.0
67.5	-55.2	-24.0
68.0	-40.4	-24.0
68.5	-37.6	-24.0
69.0	-34.8	-24.0
69.5	-33.9	-24.0
70.0	-34.5	-24.0
70.5	-33.4	-24.0
71.0	-34.1	-24.0
71.5	-35.1	-24.0
72.0	-33.2	-24.0
72.5	-33.3	-24.0
73.0	-33.8	-24.0
73.5	-34.0	-24.0
74.0	-32.9	-24.0
74.5	-31.4	-24.0
75.0	-30.4	-24.0
75.5	-29.5	-24.0
76.0	-27.5	-24.0
76.5	-26.8	-24.0
77.0	-26.4	-24.0
77.5	-26.8	-24.0
78.0	-26.2	-24.0
78.5	-25.2	-24.0
79.0	-24.9	-24.0
79.5	-24.1	-24.0
80.0	-23.9	-24.0
80.5	-23.5	-24.0
81.0	-24.5	-24.0
81.5	-24.9	-24.0
82.0	-26.0	-24.0
82.5	-25.9	-24.0
83.0	-25.6	-24.0
83.5	-25.3	-24.0
84.0	-25.6	-24.0
84.5	-25.7	-24.0
85.0	-25.4	-24.0
85.5	-26.4	-24.0
86.0	-26.2	-24.0
86.5	-28.3	-24.0
87.0	-29.0	-24.0
87.5	-27.4	-24.0
88.0	-27.7	-24.0
88.5	-27.6	-24.0
89.0	-28.6	-24.0

## Cobham SATCOM, Sea Tel Products

1.2M EIRPs Data Table - Co Pol Azimuth, -180 to +180 Degrees @ 0.5 (A)

-90.0	-30.8	-24.0
-89.5	-28.3	-24.0
-89.0	-29.3	-24.0
-88.5	-29.7	-24.0
-88.0	-28.6	-24.0
-87.5	-29.1	-24.0
-87.0	-29.9	-24.0
-86.5	-29.4	-24.0
-86.0	-27.8	-24.0
-85.5	-27.9	-24.0
-85.0	-26.4	-24.0
-84.5	-25.3	-24.0
-84.0	-25.4	-24.0
-83.5	-25.2	-24.0
-83.0	-25.8	-24.0
-82.5	-26.4	-24.0
-82.0	-26.4	-24.0
-81.5	-25.0	-24.0
-81.0	-25.1	-24.0
-80.5	-26.3	-24.0
-80.0	-25.9	-24.0
-79.5	-26.2	-24.0
-79.0	-25.9	-24.0
-78.5	-26.0	-24.0
-78.0	-25.8	-24.0
-77.5	-25.1	-24.0
-77.0	-26.6	-24.0
-76.5	-28.7	-24.0
-76.0	-28.9	-24.0
-75.5	-29.9	-24.0
-75.0	-31.9	-24.0
-74.5	-32.9	-24.0
-74.0	-34.5	-24.0
-73.5	-35.5	-24.0
-73.0	-38.4	-24.0
-72.5	-37.4	-24.0
-72.0	-39.2	-24.0
-71.5	-37.0	-24.0
-71.0	-33.5	-24.0
-70.5	-34.0	-24.0
-70.0	-37.8	-24.0
-69.5	-34.5	-24.0
-69.0	-35.1	-24.0
-68.5	-39.2	-24.0
-68.0	-36.9	-24.0
-67.5	-41.2	-24.0
-67.0	-41.4	-24.0
-66.5	-40.5	-24.0
-66.0	-45.0	-24.0
-65.5	-52.9	-24.0
-65.0	-46.3	-24.0
-64.5	-43.7	-24.0
-64.0	-42.1	-24.0
-63.5	-41.4	-24.0
-63.0	-47.2	-24.0
-62.5	-43.1	-24.0
-62.0	-43.9	-24.0
-61.5	-37.8	-24.0
-61.0	-37.2	-24.0
-60.5	-40.6	-24.0
-60.0	-44.1	-24.0

89.5	-29.3	-24.0
90.0	-29.1	-24.0
90.5	-29.5	-24.0
91.0	-29.7	-24.0
91.5	-32.7	-24.0
92.0	-33.0	-24.0
92.5	-32.7	-24.0
93.0	-30.0	-24.0
93.5	-29.9	-24.0
94.0	-30.7	-24.0
94.5	-35.3	-24.0
95.0	-32.9	-24.0
95.5	-32.0	-24.0
96.0	-32.8	-24.0
96.5	-35.1	-24.0
97.0	-33.9	-24.0
97.5	-39.2	-24.0
98.0	-35.5	-24.0
98.5	-32.6	-24.0
99.0	-30.5	-24.0
99.5	-34.4	-24.0
100.0	-33.6	-24.0
100.5	-35.1	-24.0
101.0	-40.2	-24.0
101.5	-36.1	-24.0
102.0	-35.4	-24.0
102.5	-35.0	-24.0
103.0	-34.9	-24.0
103.5	-35.1	-24.0
104.0	-36.4	-24.0
104.5	-41.2	-24.0
105.0	-35.0	-24.0
105.5	-36.2	-24.0
106.0	-32.8	-24.0
106.5	-33.4	-24.0
107.0	-36.5	-24.0
107.5	-40.3	-24.0
108.0	-39.2	-24.0
108.5	-35.7	-24.0
109.0	-42.6	-24.0
109.5	-35.7	-24.0
110.0	-37.1	-24.0
110.5	-39.7	-24.0
111.0	-37.9	-24.0
111.5	-37.2	-24.0
112.0	-35.7	-24.0
112.5	-38.2	-24.0
113.0	-37.2	-24.0
113.5	-38.8	-24.0
114.0	-41.0	-24.0
114.5	-38.4	-24.0
115.0	-41.8	-24.0
115.5	-36.7	-24.0
116.0	-39.2	-24.0
116.5	-37.9	-24.0
117.0	-34.2	-24.0
117.5	-40.8	-24.0
118.0	-41.2	-24.0
118.5	-37.3	-24.0
119.0	-37.0	-24.0
119.5	-38.6	-24.0

## Cobham SATCOM, Sea Tel Products

1.2M EIRPs Data Table - Co Pol Azimuth, -180 to +180 Degrees @ 0.5 (A)

-59.5	-40.3	-24.0
-59.0	-43.3	-24.0
-58.5	-45.5	-24.0
-58.0	-36.7	-24.0
-57.5	-32.4	-24.0
-57.0	-32.3	-24.0
-56.5	-34.2	-24.0
-56.0	-34.1	-24.0
-55.5	-32.8	-24.0
-55.0	-33.6	-24.0
-54.5	-34.9	-24.0
-54.0	-30.5	-24.0
-53.5	-28.1	-24.0
-53.0	-27.8	-24.0
-52.5	-29.2	-24.0
-52.0	-28.7	-24.0
-51.5	-30.9	-24.0
-51.0	-33.2	-24.0
-50.5	-35.7	-24.0
-50.0	-39.5	-24.0
-49.5	-35.8	-24.0
-49.0	-40.2	-24.0
-48.5	-39.5	-24.0
-48.0	-40.5	-24.0
-47.5	-32.7	-23.9
-47.0	-30.6	-23.8
-46.5	-26.7	-23.7
-46.0	-25.6	-23.6
-45.5	-27.2	-23.5
-45.0	-25.9	-23.3
-44.5	-26.9	-23.2
-44.0	-30.3	-23.1
-43.5	-33.1	-23.0
-43.0	-31.5	-22.8
-42.5	-33.2	-22.7
-42.0	-37.5	-22.6
-41.5	-35.8	-22.5
-41.0	-31.1	-22.3
-40.5	-28.7	-22.2
-40.0	-26.4	-22.1
-39.5	-25.0	-21.9
-39.0	-24.6	-21.8
-38.5	-24.5	-21.6
-38.0	-27.8	-21.5
-37.5	-30.9	-21.4
-37.0	-32.4	-21.2
-36.5	-29.9	-21.1
-36.0	-28.7	-20.9
-35.5	-27.5	-20.8
-35.0	-27.9	-20.6
-34.5	-30.1	-20.4
-34.0	-27.3	-20.3
-33.5	-27.0	-20.1
-33.0	-29.5	-20.0
-32.5	-29.1	-19.8
-32.0	-25.3	-19.6
-31.5	-24.2	-19.5
-31.0	-23.4	-19.3
-30.5	-23.4	-19.1
-30.0	-24.3	-18.9
-29.5	-26.7	-18.7

120.0	-38.1	-24.0
120.5	-45.4	-24.0
121.0	-36.7	-24.0
121.5	-39.9	-24.0
122.0	-37.3	-24.0
122.5	-36.9	-24.0
123.0	-38.1	-24.0
123.5	-38.5	-24.0
124.0	-39.6	-24.0
124.5	-38.4	-24.0
125.0	-38.1	-24.0
125.5	-38.3	-24.0
126.0	-35.9	-24.0
126.5	-39.9	-24.0
127.0	-38.1	-24.0
127.5	-37.0	-24.0
128.0	-40.8	-24.0
128.5	-38.0	-24.0
129.0	-40.6	-24.0
129.5	-40.3	-24.0
130.0	-35.5	-24.0
130.5	-39.0	-24.0
131.0	-43.3	-24.0
131.5	-36.8	-24.0
132.0	-39.2	-24.0
132.5	-39.2	-24.0
133.0	-35.5	-24.0
133.5	-36.0	-24.0
134.0	-39.5	-24.0
134.5	-38.1	-24.0
135.0	-37.6	-24.0
135.5	-38.5	-24.0
136.0	-36.0	-24.0
136.5	-37.5	-24.0
137.0	-38.8	-24.0
137.5	-33.7	-24.0
138.0	-40.7	-24.0
138.5	-39.7	-24.0
139.0	-37.1	-24.0
139.5	-35.3	-24.0
140.0	-33.0	-24.0
140.5	-31.4	-24.0
141.0	-34.7	-24.0
141.5	-40.2	-24.0
142.0	-39.1	-24.0
142.5	-34.7	-24.0
143.0	-39.5	-24.0
143.5	-34.7	-24.0
144.0	-38.6	-24.0
144.5	-37.3	-24.0
145.0	-39.8	-24.0
145.5	-37.1	-24.0
146.0	-34.9	-24.0
146.5	-48.8	-24.0
147.0	-40.4	-24.0
147.5	-43.6	-24.0
148.0	-35.7	-24.0
148.5	-37.7	-24.0
149.0	-38.7	-24.0
149.5	-35.2	-24.0
150.0	-42.2	-24.0

## Cobham SATCOM, Sea Tel Products

1.2M EIRPsd Data Table - Co Pol Azimuth, -180 to +180 Degrees @ 0.5 (A)

-29.0	-28.2	-18.6
-28.5	-28.2	-18.4
-28.0	-27.5	-18.2
-27.5	-27.7	-18.0
-27.0	-27.1	-17.8
-26.5	-26.2	-17.6
-26.0	-27.9	-17.4
-25.5	-30.1	-17.2
-25.0	-29.3	-16.9
-24.5	-29.9	-16.7
-24.0	-28.2	-16.5
-23.5	-24.3	-16.3
-23.0	-23.9	-16.0
-22.5	-28.2	-15.8
-22.0	-31.3	-15.6
-21.5	-25.7	-15.3
-21.0	-23.6	-15.1
-20.5	-24.5	-14.8
-20.0	-22.9	-14.5
-19.5	-24.1	-14.3
-19.0	-28.3	-14.0
-18.5	-23.8	-13.7
-18.0	-20.3	-13.4
-17.5	-21.1	-13.1
-17.0	-25.9	-12.8
-16.5	-25.2	-12.4
-16.0	-21.7	-12.1
-15.5	-23.6	-11.8
-15.0	-39.6	-11.4
-14.5	-27.2	-11.0
-14.0	-20.0	-10.7
-13.5	-20.1	-10.3
-13.0	-28.2	-9.8
-12.5	-25.9	-9.4
-12.0	-23.1	-9.0
-11.5	-19.3	-8.5
-11.0	-21.6	-8.0
-10.5	-27.3	-7.5
-10.0	-20.9	-7.0
-9.5	-21.6	-6.4
-9.0	-22.5	-6.0
-8.5	-20.9	-6.0
-8.0	-20.6	-6.0
-7.5	-18.9	-6.0
-7.0	-12.9	-6.1
-6.5	-10.8	-5.3
-6.0	-8.0	-4.5
-5.5	-7.1	-3.5
-5.0	-9.9	-2.5
-4.5	-9.1	-1.3
-4.0	-6.4	-0.1
-3.5	-9.3	1.4
-3.0	-5.0	3.1
-2.5	2.5	5.1
-2.0	6.7	7.5
-1.5	4.7	10.6
-1.0	21.8	
-0.5	27.6	
0.00	28.9	

150.5	-37.6	-24.0
151.0	-43.4	-24.0
151.5	-38.9	-24.0
152.0	-37.9	-24.0
152.5	-39.3	-24.0
153.0	-48.8	-24.0
153.5	-35.3	-24.0
154.0	-35.5	-24.0
154.5	-46.1	-24.0
155.0	-44.8	-24.0
155.5	-37.4	-24.0
156.0	-36.1	-24.0
156.5	-39.3	-24.0
157.0	-45.4	-24.0
157.5	-38.3	-24.0
158.0	-42.5	-24.0
158.5	-43.3	-24.0
159.0	-42.1	-24.0
159.5	-41.2	-24.0
160.0	-43.8	-24.0
160.5	-43.4	-24.0
161.0	-36.0	-24.0
161.5	-39.8	-24.0
162.0	-37.9	-24.0
162.5	-45.4	-24.0
163.0	-40.3	-24.0
163.5	-43.3	-24.0
164.0	-39.6	-24.0
164.5	-43.3	-24.0
165.0	-42.7	-24.0
165.5	-41.2	-24.0
166.0	-43.8	-24.0
166.5	-41.3	-24.0
167.0	-39.9	-24.0
167.5	-37.7	-24.0
168.0	-39.0	-24.0
168.5	-39.1	-24.0
169.0	-41.7	-24.0
169.5	-38.6	-24.0
170.0	-44.5	-24.0
170.5	-35.8	-24.0
171.0	-36.7	-24.0
171.5	-38.4	-24.0
172.0	-33.6	-24.0
172.5	-35.4	-24.0
173.0	-44.8	-24.0
173.5	-46.9	-24.0
174.0	-44.3	-24.0
174.5	-50.1	-24.0
175.0	-37.8	-24.0
175.5	-37.8	-24.0
176.0	-47.0	-24.0
176.5	-44.0	-24.0
177.0	-40.9	-24.0
177.5	-38.9	-24.0
178.0	-37.8	-24.0
178.5	-39.1	-24.0
179.0	-38.5	-24.0
179.50	-37.91	-24.00

# Cobham SATCOM, Sea Tel Products

1.2M EIRPsd Data Table - Co Pol Elevation, 0 to +30 Degrees @ 0.1 / 0.5 deg (B)

14.25 GHz @ -14 dBW / 4 kHz

Angle Degrees	EIRPsd dBW/4kHz	Mask dBW/4kHz
0.0	28.9	
0.1	28.8	
0.2	28.5	
0.3	28.2	
0.4	27.7	
0.5	26.9	
0.6	26.0	
0.7	24.9	
0.8	23.8	
0.9	22.2	
1.0	20.2	
1.1	18.5	
1.2	14.4	
1.3	11.9	
1.4	9.5	
1.5	3.5	
1.6	-4.8	
1.7	-8.6	
1.8	-0.4	
1.9	2.2	
2.0	3.0	
2.1	3.6	
2.2	3.5	
2.3	3.5	
2.4	2.8	
2.5	1.5	
2.6	0.7	
2.7	-0.5	
2.8	-1.0	
2.9	-2.4	
3.0	-3.4	5.9
3.1	-4.8	5.5
3.2	-5.2	5.2
3.3	-5.2	4.9
3.4	-5.3	4.6
3.5	-4.8	4.2
3.6	-5.1	3.9
3.7	-4.6	3.6
3.8	-4.3	3.4
3.9	-4.9	3.1
4.0	-5.9	2.8
4.1	-7.3	2.5
4.2	-7.4	2.3
4.3	-8.5	2.0
4.4	-8.6	1.8
4.5	-9.3	1.5
4.6	-8.9	1.3
4.7	-8.7	1.1
4.8	-9.3	0.9
4.9	-8.9	0.6
5.0	-8.5	0.4
5.1	-8.6	0.2
5.2	-8.4	0.0
5.3	-8.4	-0.2
5.4	-8.1	-0.4
5.5	-8.4	-0.6
5.6	-7.7	-0.8
5.7	-8.8	-1.0

14.25 GHz @ -14 dBW / 4 kHz

Angle Degrees	EIRPsd dBW/4kHz	Mask dBW/4kHz
10.0	-20.6	-7.1
10.5	-28.7	-7.6
11.0	-24.1	-8.1
11.5	-25.0	-8.6
12.0	-31.8	-9.0
12.5	-22.1	-9.5
13.0	-32.5	-9.9
13.5	-23.1	-10.3
14.0	-25.8	-10.7
14.5	-25.3	-11.1
15.0	-31.8	-11.4
15.5	-25.9	-11.8
16.0	-32.0	-12.1
16.5	-28.8	-12.5
17.0	-26.7	-12.8
17.5	-22.4	-13.1
18.0	-25.0	-13.4
18.5	-27.9	-13.7
19.0	-32.5	-14.0
19.5	-24.5	-14.3
20.0	-24.8	-14.6
20.5	-26.6	-14.8
21.0	-28.8	-15.1
21.5	-45.0	-15.3
22.0	-30.4	-15.6
22.5	-27.3	-15.8
23.0	-22.6	-16.1
23.5	-27.7	-16.3
24.0	-31.7	-16.5
24.5	-28.3	-16.8
25.0	-25.6	-17.0
25.5	-28.0	-17.2
26.0	-44.0	-17.4
26.5	-31.5	-17.6
27.0	-27.7	-17.8
27.5	-39.3	-18.0
28.0	-44.6	-18.2
28.5	-27.8	-18.4
29.0	-30.6	-18.6
29.5	-28.7	-18.8
30.0	-30.7	-18.3





# Cobham SATCOM, Sea Tel Products

1.2M EIRPsd Data Table - Cross Pol Azimuth, -10 to +10 Degrees @ 0.1 (C)

14.25 GHz @ -14 dBW / 4 kHz

Angle Degrees	EIRPsd dBW/4kHz	Mask dBW/4kHz
-10.0	-36.3	-16.0
-9.9	-33.3	-16.0
-9.8	-32.9	-16.0
-9.7	-33.8	-16.0
-9.6	-34.3	-16.0
-9.5	-36.5	-16.0
-9.4	-35.4	-16.0
-9.3	-33.9	-16.0
-9.2	-35.8	-16.0
-9.1	-33.5	-16.0
-9.0	-30.8	-16.0
-8.9	-33.3	-16.0
-8.8	-37.2	-16.0
-8.7	-28.1	-16.0
-8.6	-30.6	-16.0
-8.5	-36.5	-16.0
-8.4	-35.8	-16.0
-8.3	-36.1	-16.0
-8.2	-31.4	-16.0
-8.1	-31.8	-16.0
-8.0	-31.8	-16.0
-7.9	-33.5	-16.0
-7.8	-30.1	-16.0
-7.7	-29.4	-16.0
-7.6	-31.7	-16.0
-7.5	-30.6	-16.0
-7.4	-34.7	-16.0
-7.3	-30.5	-16.0
-7.2	-33.1	-16.0
-7.1	-34.8	-16.0
-7.0	-36.4	-16.0
-6.9	-30.2	-16.0
-6.8	-33.3	-15.8
-6.7	-30.1	-15.7
-6.6	-31.0	-15.5
-6.5	-29.1	-15.3
-6.4	-31.4	-15.2
-6.3	-31.0	-15.0
-6.2	-29.4	-14.8
-6.1	-29.6	-14.6
-6.0	-31.7	-14.5
-5.9	-37.4	-14.3
-5.8	-32.4	-14.1
-5.7	-37.7	-13.9
-5.6	-32.3	-13.7
-5.5	-36.5	-13.5
-5.4	-33.0	-13.3
-5.3	-29.7	-13.1
-5.2	-33.1	-12.9
-5.1	-35.0	-12.7
-5.0	-33.6	-12.5
-4.9	-35.1	-12.3
-4.8	-35.1	-12.0
-4.7	-47.7	-11.8
-4.6	-39.6	-11.6
-4.5	-49.3	-11.3
-4.4	-34.4	-11.1
-4.3	-55.7	-10.8

14.25 GHz @ -14 dBW / 4 kHz

Angle Degrees	EIRPsd dBW/4kHz	Mask dBW/4kHz
0.0	-30.8	
0.1	-28.8	
0.2	-21.9	
0.3	-20.0	
0.4	-19.4	
0.5	-18.8	
0.6	-18.4	
0.7	-17.4	
0.8	-18.4	
0.9	-18.4	
1.0	-19.1	
1.1	-19.4	
1.2	-20.1	
1.3	-20.8	
1.4	-22.0	
1.5	-21.1	
1.6	-21.4	
1.7	-21.7	
1.8	-21.2	-1.4
1.9	-21.2	-2.0
2.0	-19.5	-2.5
2.1	-20.6	-3.1
2.2	-20.0	-3.6
2.3	-18.4	-4.0
2.4	-19.5	-4.5
2.5	-18.9	-4.9
2.6	-20.4	-5.4
2.7	-20.3	-5.8
2.8	-20.8	-6.2
2.9	-21.2	-6.6
3.0	-22.1	-6.9
3.1	-23.6	-7.3
3.2	-25.4	-7.6
3.3	-27.2	-8.0
3.4	-28.2	-8.3
3.5	-31.1	-8.6
3.6	-34.1	-8.9
3.7	-34.7	-9.2
3.8	-37.3	-9.5
3.9	-40.5	-9.8
4.0	-49.4	-10.1
4.1	-37.0	-10.3
4.2	-39.9	-10.6
4.3	-37.8	-10.8
4.4	-37.4	-11.1
4.5	-42.5	-11.3
4.6	-49.7	-11.6
4.7	-50.3	-11.8
4.8	-43.5	-12.0
4.9	-44.1	-12.3
5.0	-46.3	-12.5
5.1	-35.5	-12.7
5.2	-37.3	-12.9
5.3	-41.1	-13.1
5.4	-40.9	-13.3
5.5	-40.3	-13.5
5.6	-40.1	-13.7
5.7	-40.3	-13.9

## Cobham SATCOM, Sea Tel Products

1.2M EIRPsd Data Table - Cross Pol Azimuth, -10 to +10 Degrees @ 0.1 (C)

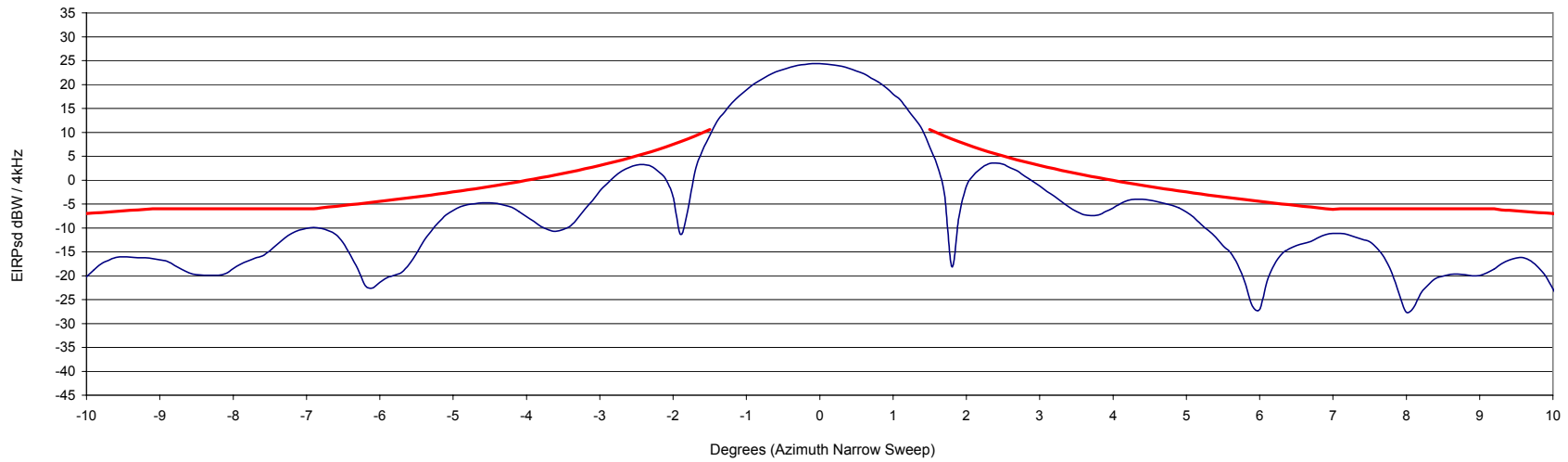
-4.2	-38.6	-10.6
-4.1	-43.4	-10.3
-4.0	-41.3	-10.1
-3.9	-48.3	-9.8
-3.8	-45.8	-9.5
-3.7	-43.4	-9.2
-3.6	-33.4	-8.9
-3.5	-35.6	-8.6
-3.4	-29.9	-8.3
-3.3	-29.6	-8.0
-3.2	-26.9	-7.6
-3.1	-23.6	-7.3
-3.0	-24.0	-6.9
-2.9	-21.1	-6.6
-2.8	-21.2	-6.2
-2.7	-18.9	-5.8
-2.6	-19.4	-5.4
-2.5	-19.2	-4.9
-2.4	-19.0	-4.5
-2.3	-20.0	-4.0
-2.2	-19.7	-3.6
-2.1	-20.8	-3.1
-2.0	-22.7	-2.5
-1.9	-24.0	-2.0
-1.8	-22.0	-1.4
-1.7	-21.5	
-1.6	-18.2	
-1.5	-17.2	
-1.4	-15.2	
-1.3	-14.3	
-1.2	-13.2	
-1.1	-13.1	
-1.0	-13.4	
-0.9	-13.2	
-0.8	-13.0	
-0.7	-14.1	
-0.6	-14.7	
-0.5	-15.9	
-0.4	-17.7	
-0.3	-21.1	
-0.2	-25.9	
-0.1	-32.9	
0.0	-30.8	

5.8	-42.2	-14.1
5.9	-39.2	-14.3
6.0	-34.5	-14.5
6.1	-35.6	-14.6
6.2	-34.0	-14.8
6.3	-39.5	-15.0
6.4	-35.4	-15.2
6.5	-36.7	-15.3
6.6	-35.7	-15.5
6.7	-32.1	-15.7
6.8	-35.9	-15.8
6.9	-34.8	-16.0
7.0	-49.2	-16.0
7.1	-42.8	-16.0
7.2	-40.1	-16.0
7.3	-34.4	-16.0
7.4	-43.2	-16.0
7.5	-40.2	-16.0
7.6	-42.7	-16.0
7.7	-40.7	-16.0
7.8	-43.5	-16.0
7.9	-39.9	-16.0
8.0	-35.5	-16.0
8.1	-37.4	-16.0
8.2	-44.9	-16.0
8.3	-35.3	-16.0
8.4	-39.6	-16.0
8.5	-36.4	-16.0
8.6	-36.4	-16.0
8.7	-46.3	-16.0
8.8	-37.2	-16.0
8.9	-36.0	-16.0
9.0	-36.7	-16.0
9.1	-33.2	-16.0
9.2	-36.0	-16.0
9.3	-37.4	-16.0
9.4	-31.9	-16.0
9.5	-36.0	-16.0
9.6	-35.6	-16.0
9.7	-36.5	-16.0
9.8	-47.3	-16.0
9.9	-40.2	-16.0
10.0	-35.7	-16.0

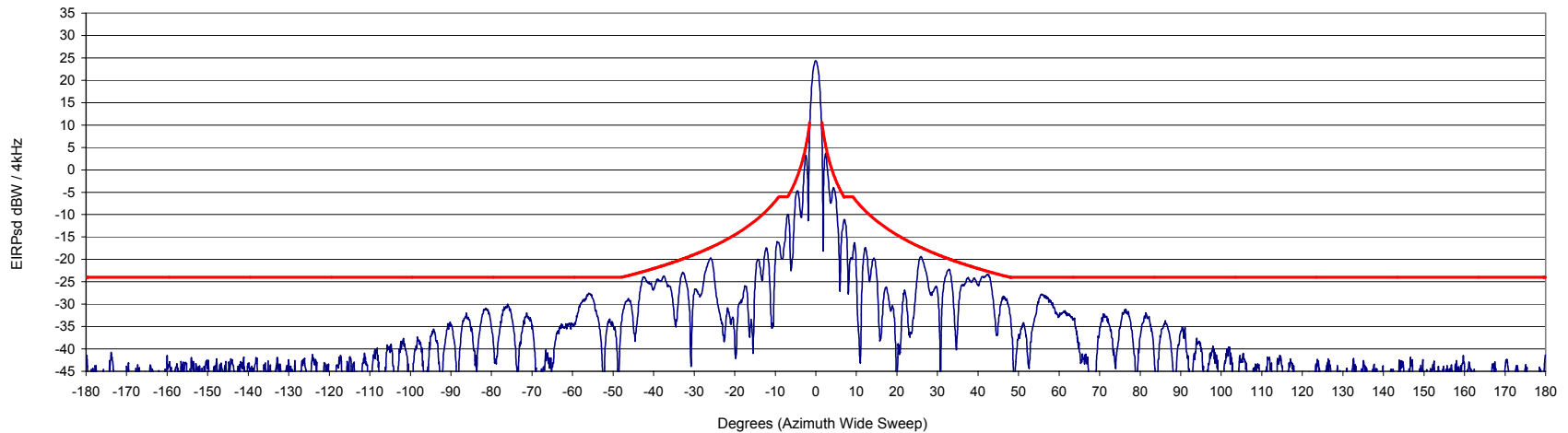
## **Exhibit D – Antenna Patterns**

**Cobham SATCOM, Sea Tel Products**  
**1.0 m EIRPsd, HH Co-Pol, Azimuth, E-Plane (A)**

14.25 GHz @ -16.3 dBW / 4 kHz, 0.2 dB Radome Loss



14.25 GHz @ -16.3 dBW / 4 kHz, 0.2 dB Radome Loss

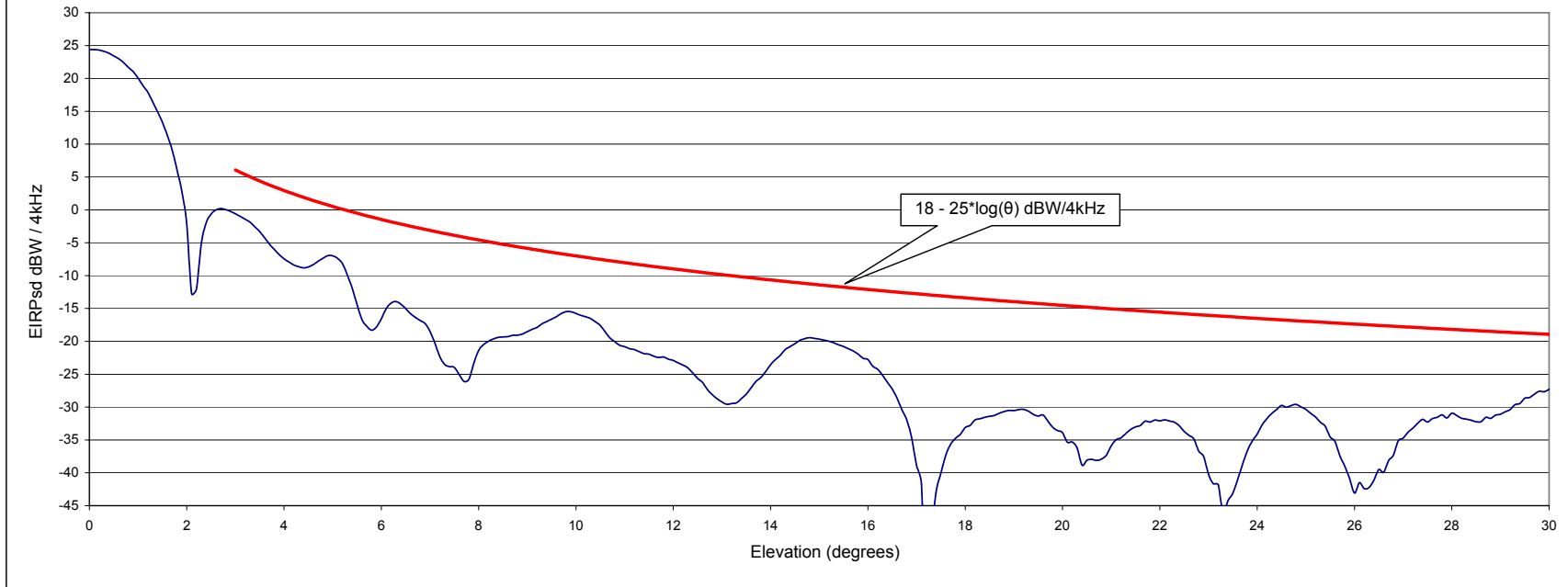


**File**  
D:\SEATEL\ACQUIREDATA\AZ1425\_40\_H.MDB

Plot Parameters			Peak Excursions dB		% Over
Input sd	Gain	Cal Factor	1.5° to 7°	7° to 180°	
-16.3	40.88	55.82	-1.2	-0.7	0%

**Cobham SATCOM, Sea Tel Products**  
**1.0 meter EIRPsd, HH Co-Pol, Elevation, H-Plane (B)**

14.25 GHz @ -16.3 dBW / 4 kHz, 0.2 dB Radome Loss



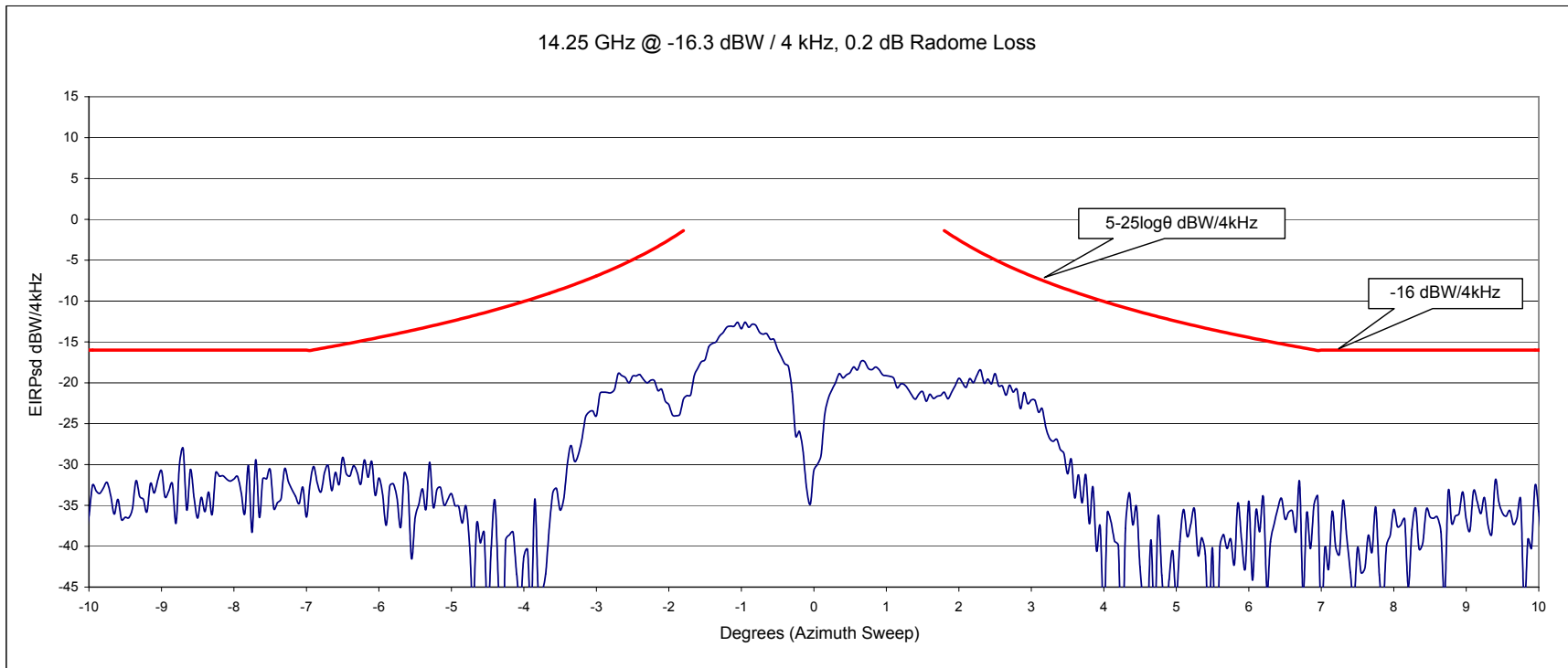
**File**  
D:\SEATELVACQUIREDDATA\AZ1425\_40\_E\_V.MDB

Plot Parameters		
Input sd	Gain	Cal Factor
-16.3	40.88	56.36

Peak Excursions dB	
	3° to 30°
-	-6.59

**% Over**  
0%

**Cobnam SATCOM, Sea Tel Products  
1.0 meter EIRPsd, VH X-Pol, Azimuth, E-Plane (C)**



**File:**  
E:\LOOPCANYON\ACQUIREDATA\1425XAZ\_HH\_ND\_2.MDB

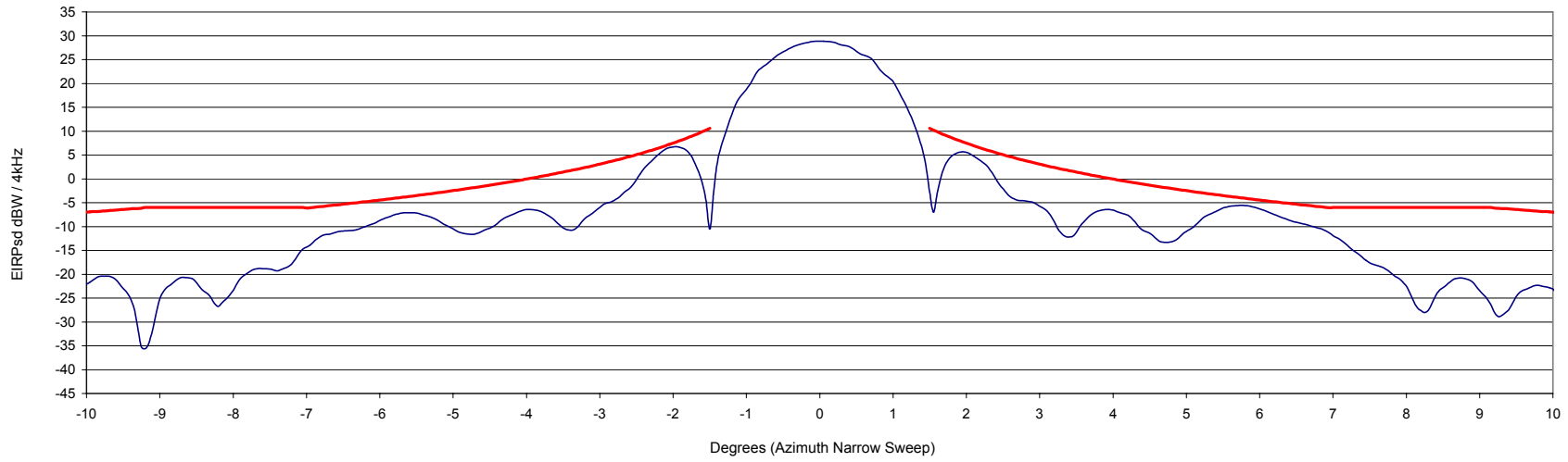
Plot Parameters		
Pin sd	Gain	Cal Factor
-16.3	43.05	42.12

Peak Excursions dB	
1.8° to 7°	7° to 180°
-13.09	-13.31

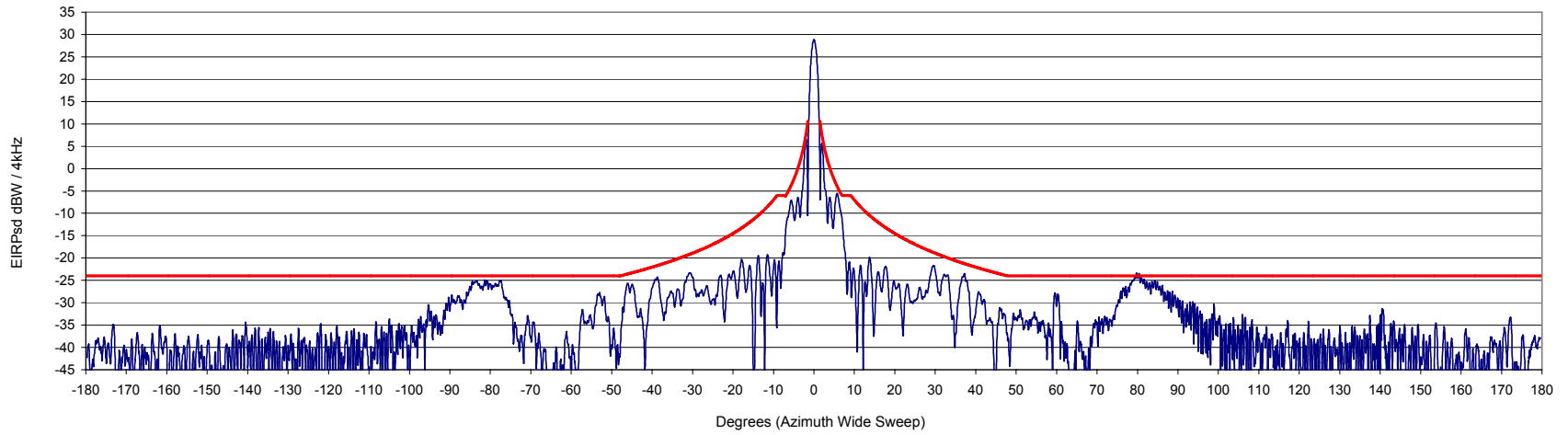
**% Over**  
0.00

**Cobham SATCOM, Sea Tel Products**  
**1.2 meter EIRPsd, HH Co-Pol, Azimuth, E-Plane (A)**

14.25 GHz @ -14 dBW / 4 kHz, 0.2 dB Radome Loss



14.25 GHz @ -14 dBW / 4 kHz, 0.2 dB Radome Loss



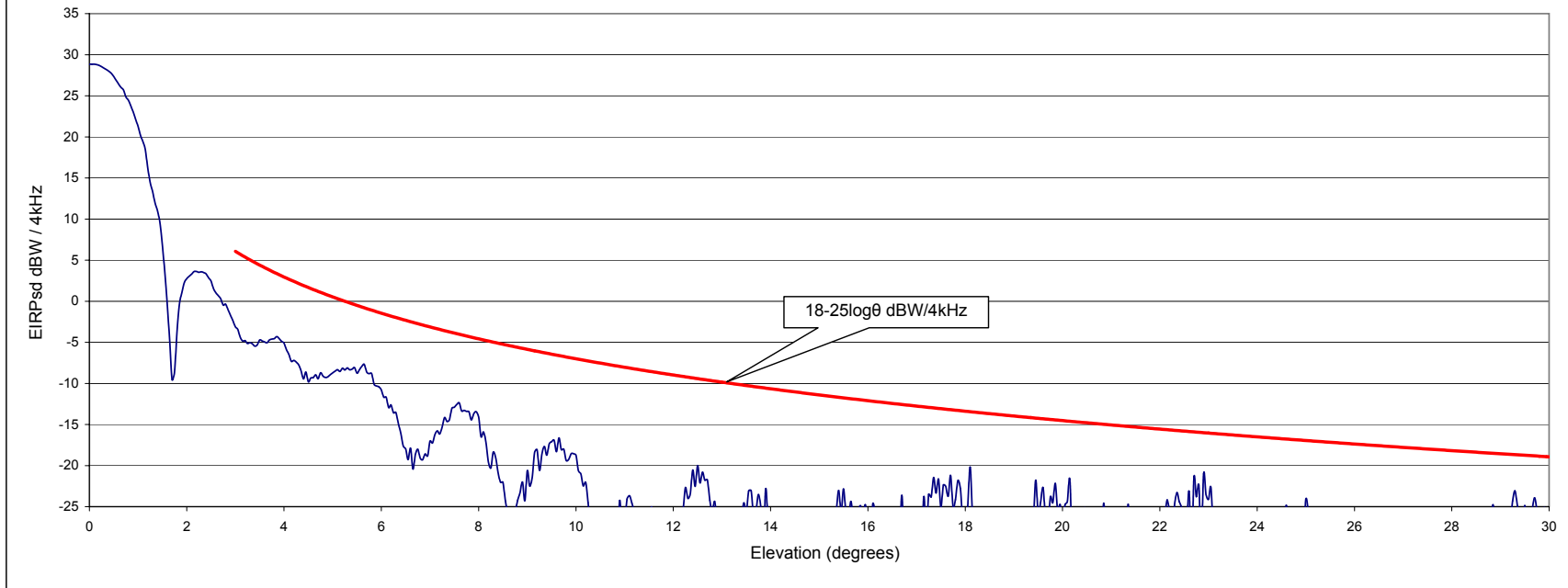
**File**  
 E:\LOOPCANYON\ACQUIREDATA\1425\_AZ\_HH.MDB

Plot Parameters			Peak Excursions dB		% Over
Input sd	Gain	Cal Factor	1.5° to 7°	7° to 180°	
-14.0	43.05	42.22	-0.7	0.5	0%



**Cobham SATCOM, Sea Tel Products**  
**1.2 meter EIRPsd, HH Co-Pol, Elevation, H-Plane (B)**

14.25 GHz @ -14 dBW / 4 kHz, 0.2 dB Radome Loss



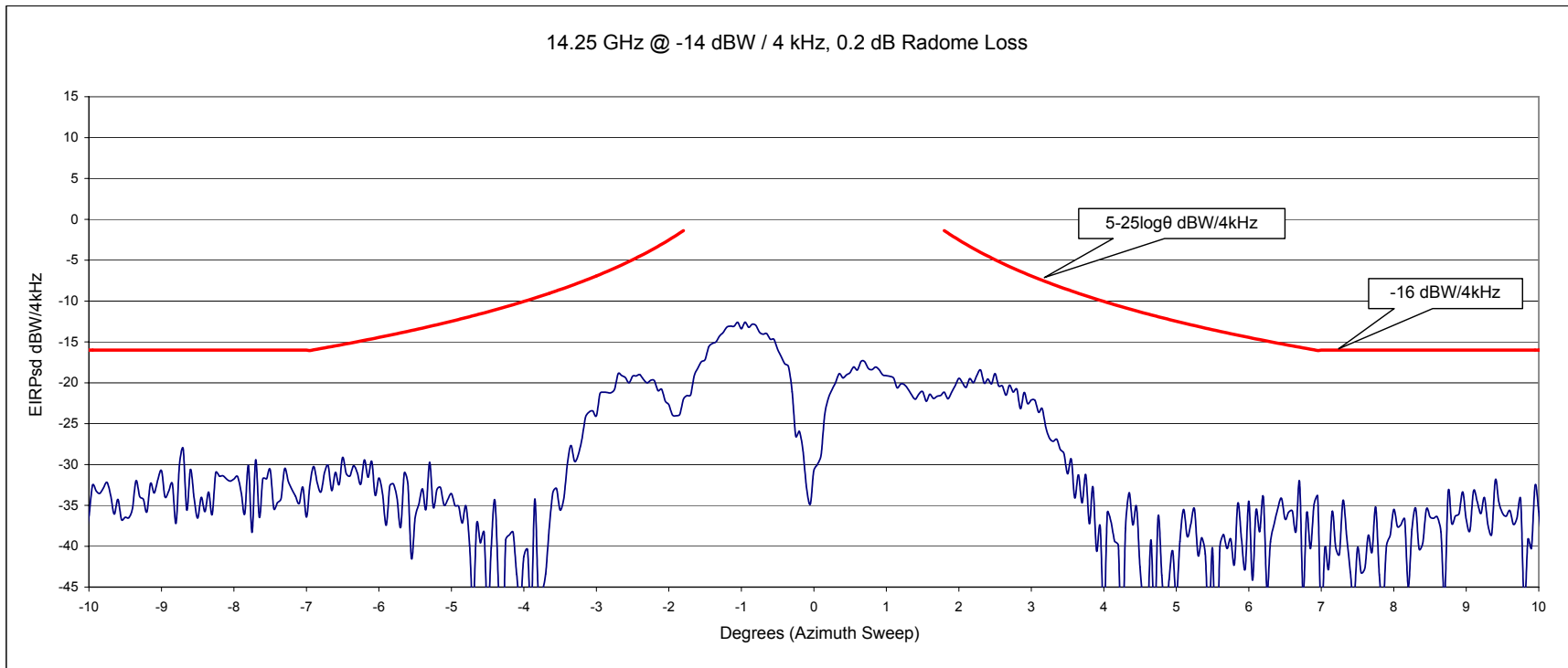
**File**  
 E:\LOOPCANYONACQUIREDATA\1425EL\_HH\_ND\_11.MDB

Plot Parameters		
Input sd	Gain	Cal Factor
-14.0	43.05	46.92

Peak Excursions dB	
	3° to 30°
-	-3.12

**% Over**  
 0%

**Cobnam SATCOM, Sea Tel Products  
1.2 meter EIRPsd, VH XP, Azimuth, E-Plane (C)**



**File**  
E:\LOOPCANYONACQUIREDATA\1425XAZ\_HH\_ND\_2.MDB

Plot Parameters		
Pin sd	Gain	Cal Factor
-14	43.05	42.12

Peak Excursions dB	
1.8° to 7°	7° to 180°
-13.09	-13.31

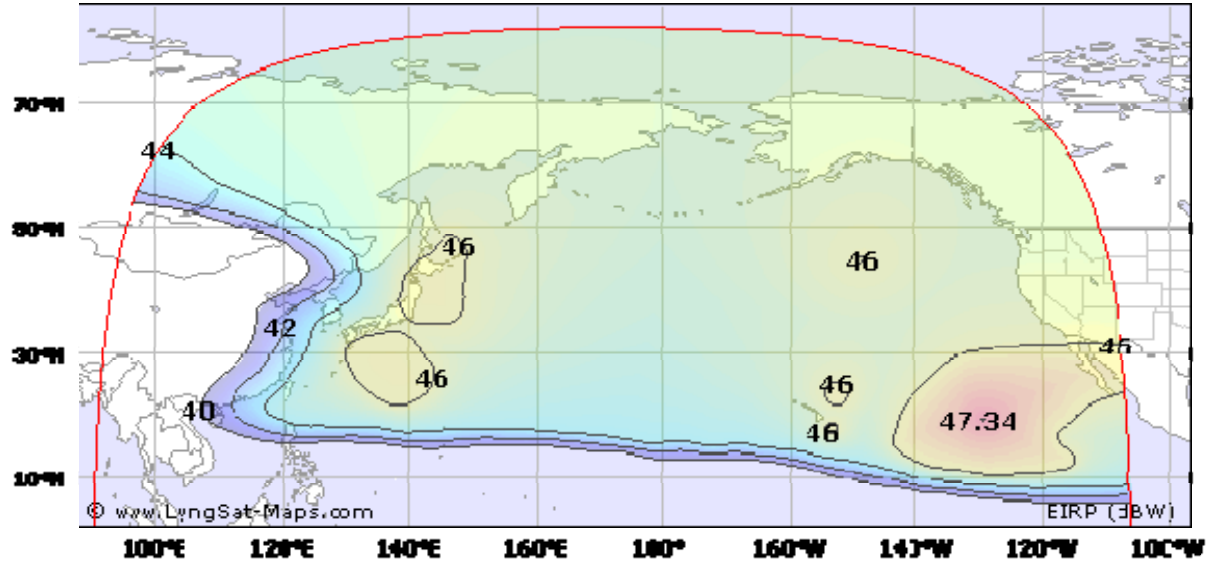
**% Over**  
0.00

**Exhibit E – ESV Operating Regions**

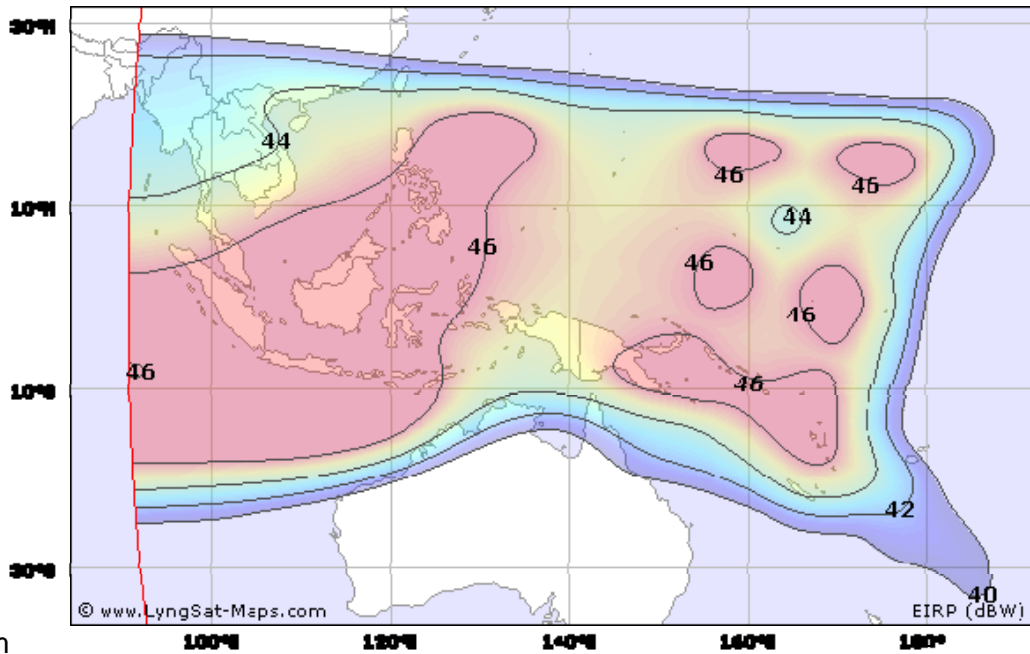
# Blue Marble ESV License Application ESV Operating Regions

## Coverage area maps

GE-23 North Pacific Beam

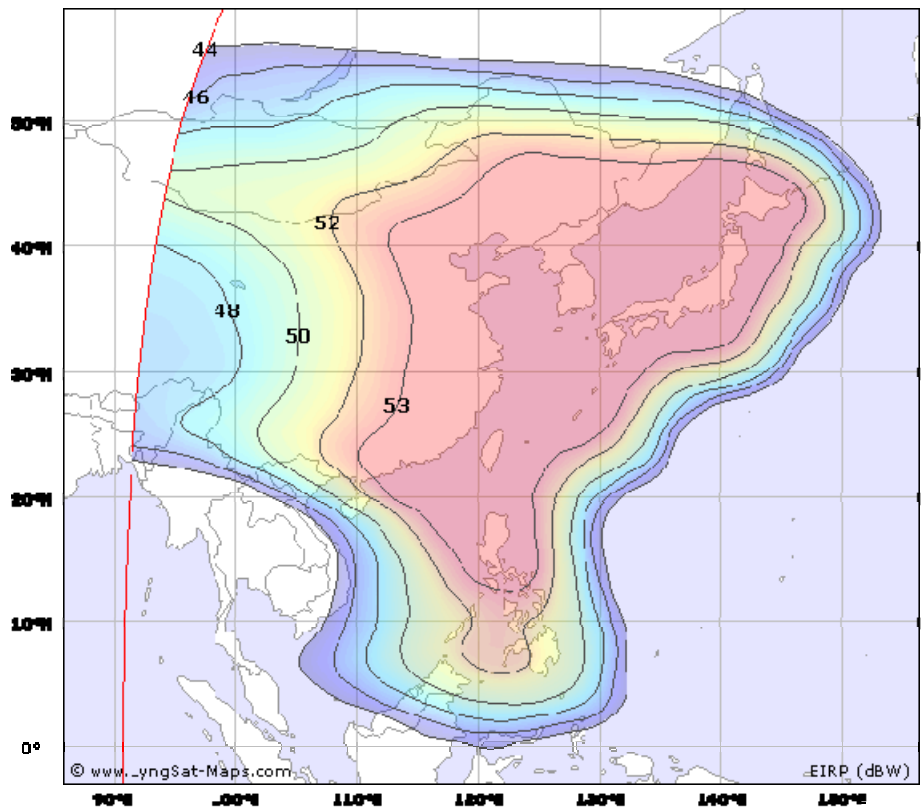


GE-23 South Pacific



Beam

GE-23 Northeast Asia Beam



## **Exhibit F – Operating Frequencies**

Blue Marble intends to use the frequencies of both the extended Ku-Band (10950-11700 MHz and 12200-12750 MHz - receive) and the standard Ku-band (1700-12200 MHz and 14000-14500 MHz – receive and transmit). Blue Marble will not claim protection from interference from any authorized terrestrial station to which the extended Ku-band frequencies are currently assigned or may be assigned in the future. Blue Marble recognizes that the Commission has limited ALSAT authority to use of the regular Ku-band frequencies. To the extent Blue Marble seeks to use the extended Ku-band frequencies with any satellite other than GE-23, it will seek the appropriate changes to its authorization at that time.