

Manufacturer	Model Number	No. of Units	Experimental (Y/N)	Width of Beam at 1/	
				C-Band @ 6 GHz	X-Band @ 8 GHz
L-3 Communications, NSN	3.9M OE-593\F	1	Yes	0.90	0.67
L-3 Communications, NSN	2.4 M AN/USC-60A	1	Yes	1.46	1.09
L-3 Communications, GCS	1.2 M GCS-1512eK-040	1	Yes	2.92	2.19
L-3 Communications, GCS	1.6 M GCS-1516eK-040	1	Yes	2.19	1.64
L-3 Communications, GCS	2.0 M GCS-1520eK-040	1	Yes	1.75	1.31
L-3 Communications, GCS	2.4 M GCS-1524eK-040	1	Yes	1.46	1.09
Vertex	Vertex 2.4M Flyaway ANTSC-179	1	Yes	1.46	1.09

Entered Values from Data Sheet

Enter EIRP (dBW)	= ERP (MW)
67.5	5.62

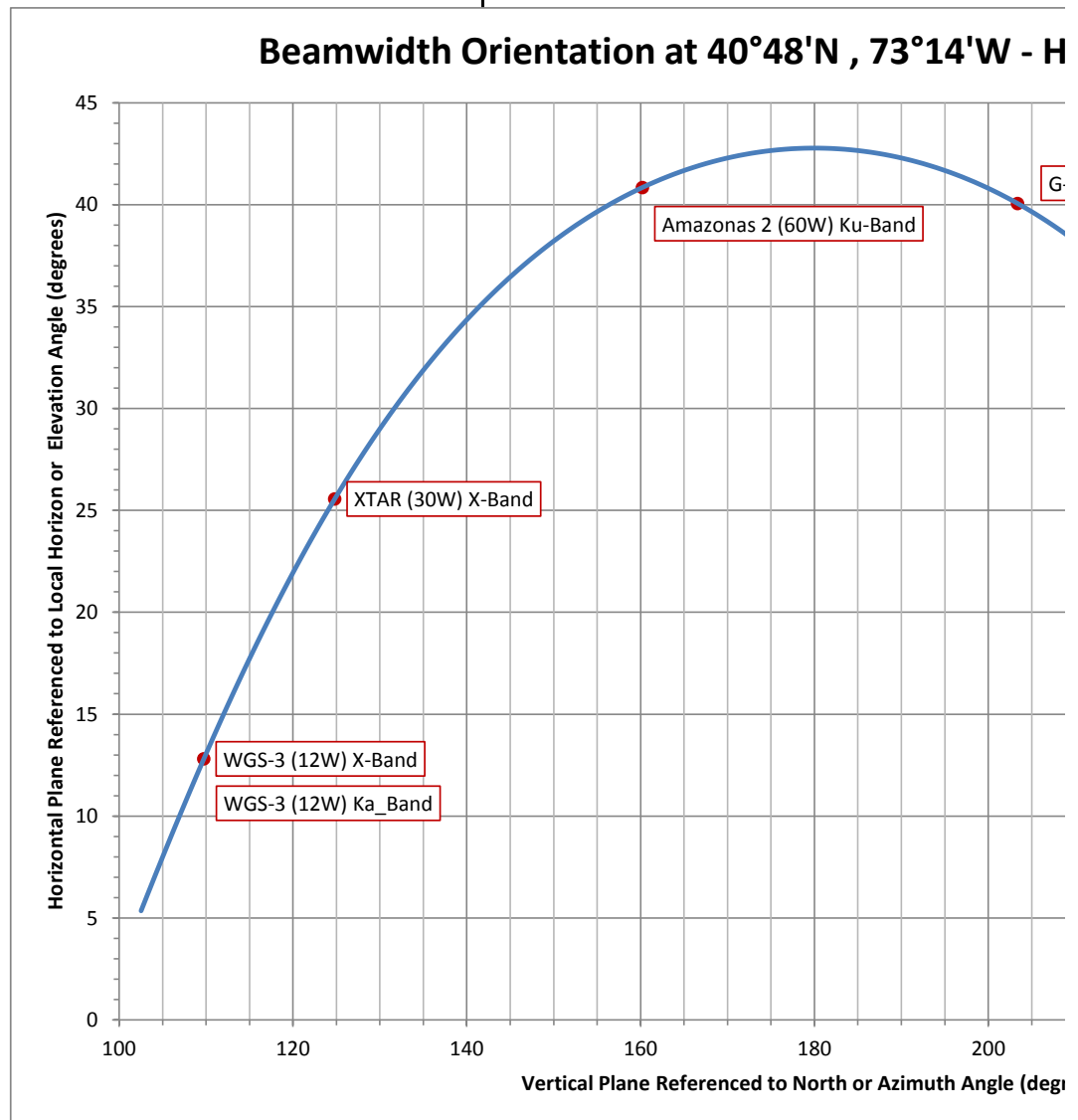
Model Number	Antenna Size (m)	Enter Frequency (GHz)	Enter EIRP (dBW)
3.9M OE-593\F	3.9	6	67.5
2.4 M AN/USC-60A	2.4		61.5
1.2 M GCS-1512eK-040	1.2		
1.6 M GCS-1516eK-040	1.6		
2.0 M GCS-1520eK-040	2.0		55.7
2.4 M GCS-1524eK-040	2.4		57.2
Vertex 2.4M Flyaway ANTSC-179	2.4		63.0

6, 8, 14, or 30.5

'2 Power point (degs)		C-Band		X-Band				Ku-Band		Ka-Band	
		G-28 (89W)		WGS-3 (12W)		XTAR (30W)		Amazonas 2 (61 W)		WGS-3 (12W)	
Ku-Band @ 14 GHz	Ka-Band @ 30.5 GHz	Orientation		Orientation		Orientation		Orientation		Orientation	
		Horiz. plane (deg)	Vert. plane (deg)	Horiz. plane (deg)	Vert. plane (deg)	Horiz. plane (deg)	Vert. plane (deg)	Horiz. plane (deg)	Vert. plane (deg)	Horiz. plane (deg)	Vert. plane (deg)
0.38	0.18	40.1	203.4	12.8	109.7	124.8	25.6	41.1	161.6	12.8	109.7
0.63	0.29										
1.25	0.57										
0.94	0.43										
0.75	0.34										
0.63	0.29										
0.63	0.29										

= Power @
Transmitter
(W)

163
107
0
0
41
40
151



All Bands			
Geosynchronous Satellite Arc (Satellite Longitude Range from 2° West to 145° West)			
Orientation			
Horiz. plane (deg)		Vert. plane (deg)	
$EL = \arctan \left[\frac{\cos(40.8) \cdot \cos(-73.233 + Satlong) - 0.1526}{\sqrt{1 - \cos(40.8) \cdot \cos(-73.233 + SatLong)^2}} \right]$		$AZ = \arccos \left[-\tan \arcsin(\cos(40.8) \cdot \cos(-73.233 + SatLong)) \cdot \tan(40.8) \right]$	
As defined by equation		As defined by equation.	

