

Link Parameters	Units	346KG7W	1M84G7W	8M25G7W	36M0G7W
Uplink Frequency	GHz	6.280	6.280	6.280	6.280
Downlink Frequency	GHz	4.055	4.055	4.055	4.055
Carrier Allocated Bandwidth	kHz	346.0	1840.0	8250.0	36000.0
<b>Uplink:</b>					
Noise BW (or energy dispersal for TV/FM)	kHz	256	1365.3	6111.3	30000
Nominal E/S e.i.r.p. per carrier	dBW	49.7	58.7	64.4	77.0
Earth Station Diameter	m	4.5	11.0	4.5	13.0
Earth Station Gain	dBi	47.5	55.3	47.5	56.8
Uplink Input Power per Carrier	dBW	2.2	3.4	16.9	20.2
Free Space Loss	dB	200.6	200.6	200.6	200.6
G/T Satellite	dB/K	-11.5	-11.5	-11.5	-11.5
C/N Thermal Uplink	dB	12.1	13.8	13.0	18.7
C/I XPOL, ACI, IM, ASI	dB	15.7	17.4	16.6	22.3
C/(N+I) uplink	dB	10.5	12.3	11.5	17.1
<b>Downlink:</b>					
Satellite e.i.r.p. per carrier (-3dB contour)	dBW	12.2	21.3	27.0	34.6
Max e.i.r.p. Density	dBW/4KHz	-2.9	-1.1	-1.9	-1.2
Max PFD	dBW/m2/4	-165.0	-163.2	-164.0	-163.3
Free Space Loss	dB	196.0	196.0	196.0	196.0
Earth Station Diameter	m	3.8	4.5	3.8	3.8
Earth Station Gain	dBi	42.3	43.8	42.3	42.3
Noise Temperature	kHz	95.0	95.0	95.0	95.0
Earth Station G/T	dB/K	22.5	24.0	22.5	22.5
C/N Thermal Downlink	dB	13.2	16.6	14.3	15.0
C/I XPOL, ACI, IM, ASI	dB	16.5	19.8	17.5	18.2
C/(N+I) downlink	dB	11.6	14.9	12.6	13.3
<b>Adjacent satellite interference:</b>					
uplink input power dens @ 2 deg	dBW/Hz	-44	-44	-44	-44
downlink eirp dens @ 2 deg	dBW/Hz	-37	-37	-37	-37
C/I up	dB	18.67	20.40	19.59	25.28
C/I dn	dB	19.47	22.80	20.49	21.18
Aggregate C/I up	dB	15.67	17.40	16.59	22.28
Aggregate C/I dn	dB	16.47	19.80	17.49	18.18
<b>Overall:</b>					
C/(N+I) overall	dB	8.0	10.4	9.0	11.8
C/(N+I) required	dB	6.0	9.3	6.9	6.9
System Margin	dB	2.0	1.1	2.1	4.9

<b>36M0F3F</b>
5.97
3.75
36000.0
2000.0
78.6
13.0
56.8
21.8
200.6
-9.5
21.5
23.1
19.2
34.2
10.2
-151.9
195.5
4.5
43.8
95.0
24.0
15.8
18.5
13.9
-44
-37
26.09
21.49
23.09
18.49
12.8
10.0
2.8