

Link Parameters	Units	346KG7W	461KG7W	1M84G7W	8M25G7W
Uplink Frequency	GHz	14.205	14.205	14.205	14.205
Downlink Frequency	GHz	3.905	3.905	3.905	3.905
Carrier Allocated Bandwidth	kHz	346.0	461.0	1840.0	8250.0
Uplink:					
Noise BW (or energy dispersal for TV/FM)	kHz	256	341.3	1365.3	6111.3
Nominal E/S e.i.r.p. per carrier	dBW	49.6	51.1	57.7	63.4
Earth Station Diameter	m	1.8	2.4	3.7	2.4
Earth Station Gain	dBi	49.6	49.1	52.9	49.1
Uplink Input Power per Carrier	dBW	0.0	2.0	4.8	14.3
Free Space Loss	dB	207.7	207.7	207.7	207.7
G/T Satellite	dB/K	5.0	5.0	5.0	5.0
C/N Thermal Uplink	dB	21.4	21.7	22.2	21.4
C/I XPOL, ACI, IM, ASI	dB	21.6	21.8	22.4	21.6
C/(N+I) uplink	dB	18.5	18.7	19.3	18.5
Downlink:					
Satellite e.i.r.p. per carrier (-5dB contour)	dBW	10.6	12.2	18.7	24.4
Max e.i.r.p. Density	dBW/4KHz	-2.5	-2.1	-1.7	-2.5
Max PFD	dBW/m2/4kHz	-164.6	-164.2	-163.8	-164.6
Free Space Loss	dB	196.1	196.1	196.1	196.1
Earth Station Diameter	m	3.8	5.6	5.6	4.5
Earth Station Gain	dBi	42.4	45.9	45.9	43.8
Noise Temperature	kHz	95.0	95.0	95.0	95.0
Earth Station G/T	dB/K	22.6	26.1	26.1	24.0
C/N Thermal Downlink	dB	11.6	15.5	16.0	13.1
C/I XPOL, ACI, IM, ASI	dB	15.0	18.8	19.3	16.4
C/(N+I) downlink	dB	10.0	13.8	14.3	11.4
Adjacent satellite interference:					
uplink input power dens @ 2 deg	dBW/Hz	-50	-50	-50	-50
downlink eirp dens @ 2 deg	dBW/Hz	-37	-37	-37	-37
C/I up	dB	24.57	24.82	25.40	24.59
C/I dn	dB	17.97	21.82	22.30	19.39
Aggregate C/I up	dB	21.57	21.82	22.40	21.59
Aggregate C/I dn	dB	14.97	18.82	19.30	16.39
Overall:					
C/(N+I) overall	dB	9.4	12.6	13.1	10.6
C/(N+I) required	dB	6.0	9.3	9.3	6.9
System Margin	dB	3.4	3.3	3.8	3.7

72M0G7W	36M0F3F
14.205	14.205
3.905	3.905
72000.0	36000.0
63330	2000.0
80.6	72.4
5.6	5.6
56.5	56.5
24.1	15.9
207.7	207.7
5.0	5.0
28.5	22.7
28.6	22.9
25.6	19.8
32.0	28.4
-5.0	6.4
-167.1	-155.7
196.1	196.1
9.0	9.0
50.0	50.0
95.0	95.0
30.2	30.2
16.7	15.6
20.0	18.9
15.1	13.9

-50	-50
-37	-37
31.64	25.89
23.04	21.89
28.64	22.89
20.04	18.89
14.7	12.9
12.7	10.0
2.0	2.9