

<b>Link Parameters</b>	<b>Units</b>	<b>346KG7W</b>	<b>461KG7W</b>	<b>1M84G7W</b>	<b>8M25G7W</b>
Uplink Frequency	GHz	14.125	14.125	14.125	14.125
Downlink Frequency	GHz	11.830	11.830	11.830	11.830
Carrier Allocated Bandwidth	kHz	346.0	461.0	1840.0	8250.0
<b>Uplink:</b>					
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	55.5	58.0	64.1	68.2
Earth Station Diameter	m	4.5	3.7	11.0	4.5
Earth Station Gain	dBi	54.5	52.8	62.4	54.5
Uplink Input Power per Carrier	dBW	1.0	5.2	1.7	13.7
Free Space Loss	dB	207.5	207.5	207.5	207.5
G/T Satellite	dB/K	4.0	4.0	4.0	4.0
C/N Thermal Uplink	dB	26.5	27.8	27.8	25.4
C/I XPOL, ACI, IM, ASI	dB	27.5	28.7	28.8	26.4
C/(N+I) uplink	dB	24.0	25.2	25.3	22.9
<b>Downlink:</b>					
Satellite e.i.r.p. per carrier (-4dB contour)	dBW	22.5	25.0	31.1	35.2
Max e.i.r.p. Density	dBW/4KHz	8.4	9.7	9.7	7.3
Max PFD	dBW/m2/4kHz	-153.7	-152.4	-152.4	-154.8
Free Space Loss	dB	206.1	206.1	206.1	206.1
Earth Station Diameter	m	1.8	2.4	2.4	2.4
Earth Station Gain	dBi	45.3	47.8	47.8	47.8
Noise Temperature	kHz	160.0	160.0	160.0	160.0
Earth Station G/T	dB/K	23.3	25.8	25.8	25.8
C/N Thermal Downlink	dB	14.2	17.9	18.0	15.6
C/I XPOL, ACI, IM, ASI	dB	18.8	22.5	22.6	20.2
C/(N+I) downlink	dB	12.9	16.6	16.7	14.3
<b>Adjacent satellite interference:</b>					
uplink input power dens @ 2 deg	dBW/Hz	-50	-50	-50	-50
downlink eirp dens @ 2 deg	dBW/Hz	-26	-26	-26	-26
C/I up	dB	30.47	31.72	31.80	29.39
C/I dn	dB	21.77	25.52	25.60	23.19
Aggregate C/I up	dB	27.47	28.72	28.80	26.39
Aggregate C/I dn	dB	18.77	22.52	22.60	20.19
<b>Overall:</b>					
C/(N+I) overall	dB	12.6	16.1	16.1	13.7
C/(N+I) required	dB	6.0	9.3	9.3	6.9
System Margin	dB	6.6	6.8	6.8	6.8

<b>72M0G7W</b>	<b>36M0F3F</b>
14.125	14.125
11.830	11.830
72000.0	36000.0
63330	2000.0
82.9	78.4
13.0	13.0
62.4	63.9
20.5	14.5
207.5	207.5
4.0	4.0
30.0	27.9
30.9	28.9
27.4	25.4
47.9	37.1
9.9	14.1
-152.2	-148.0
206.1	205.6
3.7	4.5
51.6	52.5
160.0	160.0
29.6	30.5
21.9	15.0
26.5	19.1
20.6	13.6
-50	-50
-26	-26
33.94	31.89
29.54	22.09
30.94	28.89
26.54	19.09
19.8	13.3
12.7	10.0
7.1	3.3