

<b>Link Parameters</b>	<b>Units</b>	<b>72M0G7W</b>
Uplink frequency	GHz	13.90
Downlink frequency	GHz	11.10
User data rate	kbit/s	153005
Modulation		8PSK
Total coding rate		0.841
Carrier bandwidth	kHz	72000
<b>Uplink:</b>		
Nominal E/S e.i.r.p. per carrier	dBW	78.8
Earth station diameter	m	4.5
Earth station gain	dBi	54.5
Uplink input power per carrier	dBW	24.3
Uplink input power density	dBW/Hz	-54.3
Atmospheric loss	dB	0.2
Free space path loss	dB	207.0
G/T satellite (-3 dB contour)	dB/K	2.4
C/N thermal uplink	dB	24.0
C/I XPOL, ACI, ASI	dB	20.3
C/(N+I) uplink	dB	18.8
<b>Downlink:</b>		
Satellite e.i.r.p. per carrier (-3 dB contour)	dBW	47.5
Atmospheric loss	dB	0.1
Free space path loss	dB	205.1
Earth station diameter	m	3.0
Earth station gain	dBi	49.0
Noise temperature	K	120.0
Earth station G/T	dB/K	28.2
C/N thermal downlink	dB	20.6
C/I XPOL, ACI, IM, ASI	dB	15.5
C/(N+I) downlink	dB	11.8
<b>Overall:</b>		
C/(N+I) overall	dB	11.0
C/(N+I) required	dB	6.5
Margin	dB	4.5