

<b>Link Parameters</b>	<b>Units</b>	<b>32M4G7W</b>
Uplink frequency	GHz	13.90
Downlink frequency	GHz	11.10
User data rate	kbit/s	5120
Modulation		QPSK
Total coding rate		0.325
Carrier bandwidth	kHz	32400
<b>Uplink:</b>		
Nominal E/S e.i.r.p. per carrier	dBW	74.1
Earth station diameter	m	6.1
Earth station gain	dBi	57.1
Uplink input power per carrier	dBW	17.0
Uplink input power density	dBW/Hz	-58.1
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	22.8
C/I XPOL, ACI, ASI	dB	19.5
C/(N+I) uplink	dB	17.8
<b>Downlink:</b>		
Satellite e.i.r.p. per carrier (-3 dB contour)	dBW	42.7
Atmospheric loss	dB	0.1
Free space path loss	dB	205.1
Earth station diameter	m	0.6
Earth station gain	dBi	35.0
Noise temperature	K	100.0
Earth station G/T	dB/K	15.0
C/N thermal downlink	dB	6.0
C/I XPOL, ACI, IM, ASI	dB	1.0
C/(N+I) downlink	dB	-0.2
<b>Overall:</b>		
C/(N+I) overall	dB	-0.3
C/(N+I) required	dB	-4.7
Margin	dB	4.4