

Link Parameters	Units	48K6G7W
Uplink frequency	GHz	14.40
Downlink frequency	GHz	12.10
User data rate	kbit/s	56
Modulation		QPSK
Total coding rate		0.691
Carrier bandwidth	kHz	48.6
Uplink:		
Nominal E/S e.i.r.p. per carrier	dBW	39.2
Earth station diameter	m	2.4
Earth station gain	dBi	49.3
Uplink input power per carrier	dBW	-10.1
Uplink input power density	dBW/Hz	-57.0
Atmospheric loss	dB	0.2
Free space path loss	dB	207.3
G/T satellite (-3 dB contour)	dB/K	1.6
C/N thermal uplink	dB	15.0
C/I XPOL, ACI, ASI	dB	21.8
C/(N+I) uplink	dB	14.2
Downlink:		
Satellite e.i.r.p. per carrier (-3dB contour)	dBW	16.3
Atmospheric loss	dB	0.1
Free space path loss	dB	205.8
Earth station diameter	m	2.4
Earth station gain	dBi	47.8
Noise temperature	K	120.0
Earth station G/T	dB/K	27.0
C/N thermal downlink	dB	19.1
C/I XPOL, ACI, IM, ASI	dB	12.3
C/(N+I) downlink	dB	11.5
Overall:		
C/(N+I) overall	dB	9.6
C/(N+I) required	dB	5.7
Margin	dB	3.9