Link Parameters	Units	48K6G7W
Uplink frequency	GHz	14.18
Downlink frequency	GHz	11.88
User data rate	kbit/s	56
Modulation		QPSK
Total coding rate		0.691
Number of carriers		617
Carrier bandwidth	kHz	48.6
Uplink:		
Nominal E/S e.i.r.p. per carrier	dBW	39.3
Earth station diameter	m	1.2
Earth station gain	dBi	43.2
Uplink input power per carrier	dBW	-3.9
Uplink input power density	dBW/Hz	-50.7
Atmospheric loss	dB	0.1
Free space path loss	dB	207.2
G/T satellite (-3 dB contour)	dB/K	-0.4
C/N thermal uplink	dB	13.3
Downlink:		
Satellite e.i.r.p. per carrier (-3dB contour)	dBW	15.3
Atmospheric loss	dB	0.1
Free space path loss	dB	205.7
Earth station diameter	m	2.4
Earth station gain	dBi	47.7
Noise temperature	K	120.0
Earth station G/T	dB/K	26.9
C/N thermal downlink	dB	18.1
Adjacent Satellite 1:		
Orbital separation	degrees	1.85
Uplink input power density	dBW/Hz	-45.0
Downlink e.i.r.p. density	dBW/Hz	-23.0
Adjacent Satellite 2:		
Orbital separation	degrees	2.05
Uplink input power density	dBW/Hz	-45.0
Downlink e.i.r.p. density	dBW/Hz	-23.0
Link Degradations:		
C/I IM, XPOL, ACI	dB	14.7
C/I uplink ASI	dB	13.7
C/I downlink ASI	dB	15.3
Overall:		
C/(N+I) overall	dB	7.7
C/(N+I) required	dB	5.7
Margin	dB	2.0