Link Parameters	Units	48K6G7W
Uplink frequency	GHz	12.88
Downlink frequency	GHz	10.83
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	48.6
Earth station diameter	m	2.4
Earth station gain	dBi	48.4
Uplink input power per carrier	dBW	0.2
Uplink input power density	dBW/Hz	-46.6
Atmospheric loss	dB	0.2
Free space path loss	dB	206.4
G/T satellite (-6 dB contour)	dB/K	-1.0
C/N thermal uplink	dB	22.8
C/I XPOL, ACI, ASI	dB	24.8
C/(N+I) uplink	dB	20.7
Downlink:		
Satellite e.i.r.p. per carrier (-4 dB contour)	dBW	22.3
Atmospheric loss	dB	0.1
Free space path loss	dB	204.8
Earth station diameter	m	1.2
Earth station gain	dBi	40.8
Noise temperature	K	120.0
Earth station G/T	dB/K	20.0
C/N thermal downlink	dB	19.2
C/I XPOL, ACI, IM, ASI	dB	12.2
C/(N+I) downlink	dB	11.4
Overall:		
C/(N+I) overall	dB	10.9
C/(N+I) required	dB	5.7
Margin	dB	5.2