Link Parameters	Units	36M0G7W
Uplink frequency	GHz	13.88
Downlink frequency	GHz	11.07
User data rate	kbit/s	50492
Modulation		QPSK
Total coding rate		0.841
Carrier bandwidth	kHz	36000
Uplink:		
Nominal E/S e.i.r.p. per carrier	dBW	68.8
Earth station diameter	m	4.5
Earth station gain	dBi	54.5
Uplink input power per carrier	dBW	14.3
Uplink input power density	dBW/Hz	-61.2
Atmospheric loss	dB	0.2
Free space path loss	dB	207.0
G/T satellite (-3dB contour)	dB/K	4.7
C/N thermal uplink	dB	19.3
C/I XPOL, ACI, IM, ASI	dB	20.4
C/(N+I) uplink	dB	16.8
Downlink:		
Satellite e.i.r.p. per carrier (-3dB contour)	dBW	43.7
Atmospheric loss	dB	0.1
Free space path loss	dB	205.0
Earth station diameter	m	2.4
Earth station gain	dBi	47.0
Noise temperature	K	110.0
Earth station G/T	dB/K	26.6
C/N thermal downlink	dB	18.2
C/I XPOL, ACI, IM, ASI	dB	16.3
C/(N+I) downlink	dB	12.2
Overall:		
C/(N+I) overall	dB	10.9
C/(N+I) required	dB	6.5
Margin	dB	4.4