Link Parameters	Units	72M0G7W
Uplink frequency	GHz	13.88
Downlink frequency	GHz	11.07
User data rate	kbit/s	100983
Modulation		QPSK
Total coding rate		0.841
Carrier bandwidth	kHz	72000
Uplink:		
Nominal E/S e.i.r.p. per carrier	dBW	81.9
Earth station diameter	m	4.5
Earth station gain	dBi	54.5
Uplink input power per carrier	dBW	27.4
Uplink input power density	dBW/Hz	-51.1
Atmospheric loss	dB	0.2
Free space path loss	dB	207.0
G/T satellite (-3dB contour)	dB/K	3.9
C/N thermal uplink	dB	28.6
C/I XPOL, ACI, IM, ASI	dB	25.8
C/(N+I) uplink	dB	24.0
Downlink:		
Satellite e.i.r.p. per carrier (-3dB contour)	dBW	51.8
Atmospheric loss	dB	0.1
Free space path loss	dB	205.0
Earth station diameter	m	1.5
Earth station gain	dBi	43.0
Noise temperature	K	105.0
Earth station G/T	dB/K	22.8
C/N thermal downlink	dB	19.4
C/I XPOL, ACI, IM, ASI	dB	17.5
C/(N+I) downlink	dB	13.3
Overall:		
C/(N+I) overall	dB	12.9
C/(N+I) required	dB	6.5
Margin	dB	6.4