

Link Parameters	Units	54M0G7W
Uplink frequency	GHz	6.88
Downlink frequency	GHz	4.65
User data rate	kbit/s	114754
Modulation		8PSK
Total coding rate		0.841
Carrier bandwidth	kHz	54000
Uplink:		
Nominal E/S e.i.r.p. per carrier	dBW	85.0
Earth station diameter	m	6.1
Earth station gain	dBi	51.0
Uplink input power per carrier	dBW	34.0
Uplink input power density	dBW/Hz	-43.3
Atmospheric loss	dB	0.1
Free space path loss	dB	200.9
G/T satellite (-3 dB contour)	dB/K	-5.0
C/N thermal uplink	dB	30.3
C/I XPOL, ACI, ASI	dB	20.8
C/(N+I) uplink	dB	20.3
Downlink:		
Satellite e.i.r.p. per carrier (-3dB contour)	dBW	40.4
Atmospheric loss	dB	0.1
Free space path loss	dB	197.5
Earth station diameter	m	4.5
Earth station gain	dBi	45.0
Noise temperature	K	100.0
Earth station G/T	dB/K	25.0
C/N thermal downlink	dB	19.0
C/I XPOL, ACI, IM, ASI	dB	14.2
C/(N+I) downlink	dB	10.5
Overall:		
C/(N+I) overall	dB	10.1
C/(N+I) required	dB	6.5
Margin	dB	3.6