

<b>Link Parameters</b>	<b>Units</b>	<b>445KG7W</b>
Uplink frequency	GHz	6.20
Downlink frequency	GHz	4.00
User data rate	kbit/s	512.0
Modulation		QPSK
Total coding rate		0.691
Carrier bandwidth	kHz	445.0
<b>Uplink:</b>		
Nominal E/S e.i.r.p. per carrier	dBW	49.9
Earth station diameter	m	4.5
Earth station gain	dBi	47.5
Uplink input power per carrier	dBW	2.4
Uplink input power density	dBW/Hz	-54.0
Atmospheric loss	dB	0.1
Free space path loss	dB	200.0
G/T satellite (-3dB contour)	dB/K	1.2
C/N thermal uplink	dB	23.2
C/I XPOL, ACI, IM, ASI	dB	15.2
C/(N+I) uplink	dB	14.5
<b>Downlink:</b>		
Satellite e.i.r.p. per carrier (-3dB contour)	dBW	17.5
Atmospheric loss	dB	0.1
Free space path loss	dB	196.2
Earth station diameter	m	3.7
Earth station gain	dBi	42.0
Noise temperature	K	90.0
Earth station G/T	dB/K	22.4
C/N thermal downlink	dB	15.8
C/I XPOL, ACI, IM, ASI	dB	11.0
C/(N+I) downlink	dB	7.5
<b>Overall:</b>		
C/(N+I) overall	dB	6.7
C/(N+I) required	dB	5.7
System Margin	dB	1.0