

MSAT DATA2 Carrier EOC Link Budget			
		FORWARD	RETURN
PARAMETER	UNITS	(Hub to User)	(User to Hub)
Noise Bandwidth	kHz	42	42
Boltzmann's constant	dBW/Hz·K	-228.6	-228.6
UPLINK		Clear	Clear
Frequency	GHz	13	1.64
Earth Station EIRP	dBW	53.4	6.5
Body Shielding Loss	dB	x	0
Polarization Loss	dB	x	-0.5
Free Space Loss	dB	-206.7	-188.8
Uplink Fade	dB	0	0
Satellite Antenna Gain, EOC	dBi	29	29
Received Carrier Power	dBW	-124.3	-153.78
Satellite G/T	dB/K	-1	5
Intersystem Interference Allowance	dB	0.5	1
C/No	dB·Hz	73.8	49.82
C/Imo	dB·Hz	68.2	70.2
Satellite C/(No+Io)	dB·Hz	67.2	49.8
DOWNLINK			
Frequency	GHz	1.55	11
Satellite Active Gain	dB	123.3	122
Satellite Antenna Gain, EOC	dBi	29	29
Satellite EOC EIRP	dBW	28	-2.78
Free Space Loss	dB	-188.5	-205.2
Downlink Fade	dB	x	0
Earth Station G/T	dB/K	-25.3	36.5
Interference Allowance	dB	1	0.5
C/No	dB·Hz	41.8	56.62
LINK			
Link C/(No+Io)	dB·Hz	41.8	49.0
Required C/No	dB·Hz	41.2	41.2
Margin	dB	0.6	7.8