

General:	Units	Clear Sky	Faded
Emission Designator		1M38G7D	1M38G7D
Data Rate	kbit/s	952.5	952.5
Modulation		QPSK	QPSK
Coding Rate		0.4970	0.4970
Carrier Bandwidth	kHz	1380	1380
Uplink Frequency	GHz	28.4	28.4
Downlink Frequency	GHz	18.6	18.6
Uplink Elevation Angle	degrees	35	35
Downlink Elevation Angle	degrees	35	35
Uplink:			
Tx E/S Antenna Diameter	m	0.67	0.67
Tx E/S Power to Antenna	W	2.5	2.5
Tx E/S Antenna Gain	dBi	44.1	44.1
Tx E/S EIRP per Carrier	dBW	48.1	48.1
Tx E/S Antenna Pointing Loss	dB	0.5	0.5
Atmospheric and Rain Losses	dB	0.5	4
Free Space Loss	dB	213.2	213.2
G/T toward Tx E/S (-3 dB)	dB/K	3.5	3.5
C/I - Intra-system	dB	30.0	30.0
Downlink:			
EIRP per Carrier towards Rx E/S (-3 dB)	dBW	34.8	31.3
Atmospheric and Rain Losses	dB	0.3	8
Free Space Loss	dB	209.5	209.5
Rx E/S Antenna Pointing Loss	dB	0.8	0.8
Rx E/S Antenna Diameter	m	7.3	7.3
Rx E/S Antenna Gain	dBi	61.2	61.2
Rx E/S G/T	dB/K	38.0	34.7
System Noise Temp (LNA+Sky)	K	210	442
C/I - Intra-system	dB	16.0	16.0
End-to-End:			
C/N - Thermal Uplink	dB	5.4	1.9
C/I Up - ASI	dB	19.5	16.0
C/N - Thermal Downlink	dB	30.1	15.7
C/I Down - ASI	dB	26.8	26.8
C/(N+I) - Total Actual	dB	4.8	1.4
C/N - Required	dB	1.4	1.4
Excess Margin	dB	3.4	0.0