

General:	Units	Clear Sky	Faded
Emission Designator		2M75G7D	2M75G7D
Data Rate	kbit/s	2853.0	2853.0
Modulation		QPSK	QPSK
Coding Rate		0.7470	0.7470
Carrier Bandwidth	kHz	2750	2750
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	0.95	0.95
Tx E/S Power to Antenna	W	5.0	5.0
Tx E/S Antenna Gain	dBi	47.1	47.1
Tx E/S EIRP per Carrier	dBW	54.1	54.1
Tx E/S Antenna Pointing Loss	dB	0.5	0.5
Atmospheric and Rain Losses	dB	0.5	3.7
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	37.9	34.7
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	8.4	5.2
C/I Up - ASI	dB	22.5	19.3
C/N - Thermal Downlink	dB	30.2	16.1
C/I Down - ASI	dB	30.8	30.8
C/(N+I) - Total Actual	dB	7.5	4.4
C/N - Required	dB	4.4	4.4
Excess Margin	dB	3.1	0.0