

General:	Units	Clear Sky	Faded
Emission Designator		1M22G7W	1M22G7W
Data Rate	Mbit/s	1.95	1.95
Modulation		8-PSK	8-PSK
Coding Rate		0.6642	0.6642
Carrier Bandwidth	MHz	1.2	1.2
Uplink Frequency	GHz	49.7625	49.7625
Downlink Frequency	GHz	39.5625	39.5625
Uplink:			
Tx E/S Antenna Diameter	m	0.74	0.74
Tx E/S Power to Antenna	W	4.0	4.0
Tx E/S Antenna Gain	dBi	49.8	49.8
Tx E/S EIRP per Carrier	dBW	55.9	55.9
Tx E/S Antenna Pointing Loss	dB	0.5	0.5
Atmospheric and Rain Losses	dB	2.4	9.5
Free Space Loss	dB	218.2	218.2
G/T toward Tx E/S (-3 dB)	dB/K	19	19
C/I - Intra-system	dB	20.9	20.9
Downlink:			
EIRP per Carrier towards Rx E/S (-2 dB)	dBW	38.9	31.8
Atmospheric and Rain Losses	dB	0.5	8.7
Free Space Loss	dB	216.2	216.2
Rx E/S Antenna Pointing Loss	dB	1	1
Rx E/S Antenna Diameter	m	3.5	3.5
Rx E/S Antenna Gain	dBi	61.4	61.4
Rx E/S G/T	dB/K	37.4	34.5
System Noise Temp (LNA+Sky)	K	250	485
C/I - Intra-system	dB	19.5	19.5
End-to-End:			
C/N - Thermal Uplink	dB	22.3	15.2
C/I Up - ASI	dB	25.9	18.8
C/N - Thermal Downlink	dB	27.1	9.0
C/I Down - ASI	dB	31.5	24.4
C/(N+I) - Total Actual	dB	15.1	7.1
C/N - Required	dB	7.1	7.1
Excess Margin	dB	8.0	0.0