

General:	Units	Clear Sky	Faded
Emission Designator		125MG7W	125MG7W
Data Rate	Mbit/s	225	225
Modulation		8-PSK	8-PSK
Coding Rate		0.7470	0.7470
Carrier Bandwidth	MHz	125	125
Uplink Frequency	GHz	49.7625	49.7625
Downlink Frequency	GHz	39.5625	39.5625
Uplink:			
Tx E/S Antenna Diameter	m	3.5	3.5
Tx E/S Power to Antenna	W	10.0	100.0
Tx E/S Antenna Gain	dBi	63.3	63.3
Tx E/S EIRP per Carrier	dBW	73.3	83.3
Tx E/S Antenna Pointing Loss	dB	1	1
Atmospheric and Rain Losses	dB	2.4	12.4
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	25.0	25.0
Downlink:			
EIRP per Carrier towards Rx E/S (-2 dB)	dBW	62.0	62.0
Atmospheric and Rain Losses	dB	0.5	18.2
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	34.2
System Noise Temp (LNA+Sky)	K	250	523
C/I - Intra-system	dB	20.1	20.1
End-to-End:			
C/N - Thermal Uplink	dB	19.2	19.2
C/I Up - ASI	dB	22.8	22.8
C/N - Thermal Downlink	dB	30.1	9.2
C/I Down - ASI	dB	34.5	34.5
C/(N+I) - Total Actual	dB	15.0	8.2
C/N - Required	dB	8.2	8.2
Excess Margin	dB	6.8	0.0