

<b>General:</b>	<b>Units</b>	<b>Clear Sky</b>	<b>Faded</b>
Emission Designator		25M0G7D	25M0G7D
Data Rate	kbit/s	50000.0	50000.0
Modulation		8-PSK	8-PSK
Coding Rate		0.8333	0.8333
Carrier Bandwidth	kHz	25000	25000
Uplink Frequency	GHz	28.85	28.85
Downlink Frequency	GHz	19.05	19.05
Uplink Elevation Angle	degrees	35	35
Downlink Elevation Angle	degrees	35	35
<b>Uplink:</b>			
Tx E/S Antenna Diameter	m	7.3	7.3
Tx E/S Power to Antenna	W	1.9	33.0
Tx E/S Antenna Gain	dBi	64.6	64.6
Tx E/S EIRP per Carrier	dBW	67.3	79.8
Tx E/S Antenna Pointing Loss	dB	1.2	1.2
Atmospheric and Rain Losses	dB	0.5	13
Free Space Loss	dB	213.3	213.3
G/T toward Tx E/S	dB/K	13.2	13.2
C/I - Intra-system	dB	16.3	16.3
<b>Downlink:</b>			
EIRP per Carrier towards Rx E/S	dBW	45.2	45.2
Atmospheric and Rain Losses	dB	0.4	7.6
Free Space Loss	dB	209.7	209.7
Rx E/S Antenna Pointing Loss	dB	0.55	0.55
Rx E/S Antenna Diameter	m	7.3	7.3
Rx E/S Antenna Gain	dBi	61.1	61.1
Rx E/S G/T	dB/K	37.6	34.5
System Noise Temp (LNA+Sky)	K	225	457
C/I - Intra-system	dB	15.3	15.3
<b>End-to-End:</b>			
C/N - Thermal Uplink	dB	21.1	21.1
C/I Up - ASI	dB	24.5	24.5
C/N - Thermal Downlink	dB	27.7	17.5
C/I Down - ASI	dB	27.8	27.8
C/(N+I) - Total Actual	dB	11.7	10.8
C/N - Required	dB	10.8	10.8
Excess Margin	dB	1.0	0.0