

<b>General:</b>	<b>Units</b>	<b>Clear Sky</b>	<b>Faded</b>
Emission Designator		250MG7W	250MG7W
Data Rate	Mbit/s	450	450
Modulation		8-PSK	8-PSK
Coding Rate		0.7470	0.7470
Carrier Bandwidth	MHz	250	250
Uplink Frequency	GHz	48.075	48.075
Downlink Frequency	GHz	40.875	40.875
<b>Uplink:</b>			
Tx E/S Antenna Diameter	m	3.5	3.5
Tx E/S Power to Antenna	W	20.0	200.0
Tx E/S Antenna Gain	dBi	63.0	63.0
Tx E/S EIRP per Carrier	dBW	76.1	86.1
Tx E/S Antenna Pointing Loss	dB	1	1
Atmospheric and Rain Losses	dB	1.6	11.6
Free Space Loss	dB	217.9	217.9
G/T (-2dB contour)	dB/K	20	20
C/I - Intra-system	dB	25.0	25.0
<b>Downlink:</b>			
EIRP per Carrier towards Rx E/S (-3dB)	dBW	67	67
Atmospheric and Rain Losses	dB	0.6	7.9
Free Space Loss	dB	216.4	216.4
Rx E/S Antenna Pointing Loss	dB	0.5	0.5
Rx E/S Antenna Diameter	m	0.74	0.74
Rx E/S Antenna Gain	dBi	48.1	48.1
Rx E/S G/T	dB/K	24.6	21.6
System Noise Temp (LNA+Sky)	K	225	451
C/I - Intra-system	dB	20.1	20.1
<b>End-to-End:</b>			
C/N - Thermal Uplink	dB	21.0	21.0
C/I Up - ASI	dB	22.8	22.8
C/N - Thermal Downlink	dB	19.5	9.2
C/I Down - ASI	dB	23.6	23.6
C/(N+I) - Total Actual	dB	13.8	8.2
C/N - Required	dB	8.2	8.2
Excess Margin	dB	5.6	0.0