

<b>General:</b>	<b>Units</b>	<b>Clear Sky</b>
Emission Designator		500MG7D
Carrier Bandwidth	MHz	500
Uplink Frequency	GHz	28.85
Downlink Frequency	GHz	19.05
<b>Uplink:</b>		
Tx E/S Antenna Diameter	m	7.3
Tx E/S Power to Antenna	W	10.0
Tx E/S Antenna Gain	dBi	65.0
Tx E/S EIRP per Carrier	dBW	75.0
Tx E/S Antenna Pointing Loss	dB	1.2
Atmospheric and Rain Losses	dB	0.5
Free Space Loss	dB	213.6
G/T (peak)	dB/K	16.1
C/I - Intra-system	dB	25.5
<b>Downlink:</b>		
EIRP per Carrier towards Rx E/S	dBW	67.9
Atmospheric and Rain Losses	dB	0.4
Free Space Loss	dB	210.1
Rx E/S Antenna Pointing Loss	dB	0.5
Rx E/S Antenna Diameter	m	0.67
Rx E/S Antenna Gain	dBi	40.7
Rx E/S G/T	dB/K	17.2
System Noise Temp (LNA+Sky)	K	224
C/I - Intra-system	dB	18.7
<b>End-to-End:</b>		
C/N - Thermal Uplink	dB	18.2
C/I Up - ASI	dB	18.9
C/N - Thermal Downlink	dB	16.5
C/I Down - ASI	dB	16.7
C/(N+I) - Total Actual	dB	10.6
C/N - Required	dB	-2.8
Excess Margin	dB	13.3