

Link Parameters	Clear Sky (- 3dB Contour)	Faded (-3 dB Contour)
General:		
Emission Designator	125MG7W	125MG7W
Data Rate (Mbps)	144	144
Modulation	QPSK	QPSK
Coding Rate	0.691	0.691
Carrier Bandwidth (MHz)	125	125
Downlink Frequency (MHz)	20,000	20,000
Link Geometry:		
Elevation Angle (degrees)	30.0	30.0
Rx E/S Range to Satellite (km)	38,612	38,612
Downlink:		
EIRP per Carrier towards Rx E/S (dBW)	62.0	62.0
Atmospheric and Rain Losses (dB)	0.4	24.9
Free Space Loss (dB)	210.2	210.2
Rx E/S Antenna Diameter (m)	7.30	7.30
Antenna Mis-pointing Error (dB)	0.50	0.50
Rx E/S Antenna Gain (dB)	61.5	61.5
Rx E/S G/T (dB/K)	37.1	34.0
System (LNA+Sky) Noise Temp. (K)	275	554
(Eb/No) - Thermal Downlink (dB)	35.0	7.5
(Eb/lo) - (ASI) (dB)	34.6	34.6
(Eb/No+lo) - Total Actual (dB)	31.8	7.4
(Eb/No+lo) - Total Required (dB)	5.5	5.5
Excess Margin (dB)	26.3	1.9
Availability (%)	N/A	99.99