

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
Uplink Frequency (MHz)	28,175	28,175
Link Geometry:		
Elevation Angle (degrees)	30.0	30.0
Tx E/S Range to Satellite (km)	38,612	38,612
Uplink:		
Tx E/S Antenna Diameter (m)	7.30	7.30
Tx E/S Power to Antenna (W)	0.5	50.0
Tx E/S Antenna Gain (dB)	64.4	64.4
Tx E/S EIRP per Carrier (dBW)	61.4	81.4
Atmospheric and Rain Losses (dB)	0.4	20.4
Free Space Loss (dB)	213.2	213.2
G/T towards Tx E/S (dB/K)	15.8	15.8
(Eb/No) - Thermal Uplink (dB)	10.7	10.7
(Eb/lo) - (ASI) (dB)	11.8	11.8
(Eb/No+lo) - Total Actual (dB)	8.2	8.2
(Eb/No+lo) - Total Required (dB)	5.5	5.5
Excess Margin (dB)	2.7	2.7
Availability (%)	N/A	99.96