

Link Parameters		Clear Sky High Downlink EIRP High Rain Rate Zone	Clear Sky Low Downlink EIRP Low Rain Rate Zone
Carrier			
Data Rate	(Mbps)	3.110	3.110
Modulation		QPSK	QPSK
FEC		0.691	0.691
Bandwidth	(dB-Hz)	64.3	64.3
Uplink			
Uplink Frequency	(MHz)	29,872	29,872
Tx E/S Antenna Diameter	(m)	0.65	0.65
Tx E/S Power to Antenna	(dBW)	4.0	4.0
Input Power Density	(dBW/Hz)	-60.3	-60.3
Tx E/S Antenna Gain	(dB)	43.2	43.2
Tx E/S EIRP per Carrier	(dBW)	47.2	47.2
Mispointing Error	(dB)	0.3	0.3
Atmospheric Losses	(dB)	0.5	0.5
Free Space Loss	(dB)	213.7	213.7
Satellite Antenna Gain (- 3dB)	(dBi)	52.2	52.2
Satellite Antenna G/T (-3 dB)	(dB/K)	23.5	23.5
(C/I) Up - Intra-system	(dB)	23.0	23.0
Downlink			
Downlink Frequency	(MHz)	18,522	18,522
Downlink EIRP (-3 dB)	(dBW)	35.8	29.8
Beam Peak EIRP Density	(dBW/Hz)	-25.5	-31.5
Atmospheric Losses	(dB)	0.3	0.3
Free Space Loss	(dB)	209.5	209.5
Rx E/S Antenna Diameter	(m)	8.10	8.10
Antenna Mispointing Error	(dB)	0.50	0.50
Rx E/S Antenna Gain	(dB)	61.4	61.4
Rx E/S G/T	(dB/K)	37.7	37.7
System Noise Temp.	(K)	232	232
(C/I) Dn - Intra-system	(dB)	20.0	20.0
End-to-End			
(C/N) - Thermal Uplink	(dB)	20.5	20.5
(C/N) - Thermal Downlink	(dB)	27.5	21.5
(C/I) Up - ASI	(dB)	16.2	16.2
(C/I) Dn - ASI	(dB)	31.6	25.6
(C/N+I) - Total Actual	(dB)	13.0	12.4
(C/N+I) - Total Required	(dB)	5.1	5.1
System Margin	(dB)	7.9	7.3