

General:	Units	Clear Sky	Faded
Emission Designator		612KG7W	612KG7W
Data Rate	Mbit/s	0.24	0.24
Modulation		BPSK	BPSK
Coding Rate		0.5000	0.5000
Carrier Bandwidth	MHz	0.6	0.6
Uplink Frequency	GHz	49.7625	49.7625
Downlink Frequency	GHz	39.5625	39.5625
Uplink:			
Tx E/S Antenna Diameter	m	0.74	0.74
Tx E/S Power to Antenna	W	4.0	4.0
Tx E/S Antenna Gain	dBi	49.8	49.8
Tx E/S EIRP per Carrier	dBW	55.9	55.9
Tx E/S Antenna Pointing Loss	dB	0.5	0.5
Atmospheric and Rain Losses	dB	2.4	14
Free Space Loss	dB	218.2	218.2
G/T toward Tx E/S (-3 dB)	dB/K	19	19
C/I - Intra-system	dB	15.7	15.7
Downlink:			
EIRP per Carrier towards Rx E/S (-2 dB)	dBW	35.9	24.3
Atmospheric and Rain Losses	dB	0.5	13.8
Free Space Loss	dB	216.2	216.2
Rx E/S Antenna Pointing Loss	dB	1	1
Rx E/S Antenna Diameter	m	3.5	3.5
Rx E/S Antenna Gain	dBi	61.4	61.4
Rx E/S G/T	dB/K	37.4	34.2
System Noise Temp (LNA+Sky)	K	250	515
C/I - Intra-system	dB	16.4	16.4
End-to-End:			
C/N - Thermal Uplink	dB	25.3	13.7
C/I Up - ASI	dB	28.9	17.3
C/N - Thermal Downlink	dB	27.1	-0.9
C/I Down - ASI	dB	31.5	19.9
C/(N+I) - Total Actual	dB	12.5	-1.3
C/N - Required	dB	-1.3	-1.3
Excess Margin	dB	13.8	0.0