

(Excerpted from p. 15 of the Technical Appendix)

**Table 9. Command, Telemetry and Beacon Link Parameters  
For GEO and Transfer Orbit**

	Command		Telemetry		Beacon
	Xfer	GEO	Xfer	GEO	GEO
Polarization	LHCP	LHCP	LHCP	LHCP	LHCP
Power into Antenna, dBW	27	27	14	0	-20.4
Power Density, dBW/m <sup>2</sup>	-33	-33	-34.6	-51.6	n/a
Tx Antenna Gain (7 m), Dbw	60.2	60.2	-3	16 (horn)	45.4
E.i.r.p, dBW	87.1	87.1	11	16	25.0
E.i.r.p Density, dBW/Hz	27.1	27.1	-37.6	-35.6	n/a
PFD, dBW/m <sup>2</sup>	-75.3	-75.3	-140	-146.3	n/a
Required PFD, dBW/m <sup>2</sup>	-105	-105	n/a	n/a	n/a
Space Loss, dB	-209.1	-209.1	-206.1	-206.1	-206.1
Rx Antenna Gain, dBi	-3	19 (horn)	57.2	57.2	33.5
Bandwidth, dB	60	60	48.6	51.6	40
CNR, dB	15.0	37.9 (1)	21.3	23.3	18.5
Data Rate, bps	250	250	2,400	4,800	n/a

(1) Power can be reduced during normal operations.