

Table 11-2: Command and Ranging Link Budget

ECHOSTAR-5 Command Link Budget (On Station)			
Link Parameters		High U/L	Low U/L
Frequency	(MHz)	17,301	17,301
Incident Flux Density	(dBW/m ²)	-88.0	-108.0
Aperture Factor	(dB-m ²)	-46.2	-46.2
Incident Isotropic Power	(dBW)	-134.2	-154.2
Antenna Gain (EOC)	(dBi)	29.8	29.8
Noise Temperature	(dB-K)	27.7	27.7
Total Receive Losses	(dB)	8.0	8.0
Satellite G/T	(dB/K)	2.1	2.1
Receiver Input Power	(dBm)	-82.4	-102.4
Receiver Threshold	(dBm)	-110.0	-110.0
Spacecraft Margin	(dB)	27.6	7.6