

Table D-2 GMSA Forward Link Budget – PC Card

CDMA Carrier – Terminal G/T=-26 dB/K

Parameter	Units	
Allocated Satellite EIRP	dBW	78.1
Number of satellites		2
Number of beams- Primary Coverage Area		170
Carrier BW	MHz	1.25
Downlink L-band C/N		
EIRP per carrier	dBW	58.8
Beam roll off at EoC	dB	1.14
EIRP per carrier at EoC	dBW	57.7
Free space propagation loss	dB	-187.7
Average blockage margin	dB	-5.0
MT G/T	dB/K	-26.0
Boltzmann's constant	dBW/Hz.K	-228.6
Equivalent Noise Bandwidth	dBHz	60.9
C/N	dB	6.67
Downlink L-band Inter-beam Interference		
C/I	dB	1.04
Up-link Ku-band C/N (Thermal)		
Earth station EIRP / 1.25MHz carrier	dBW	62.0
Free space propagation	dB	-206.9
Atmospheric loss 99.5% Availability	dB	-8.7
Satellite Ku band G/T	dB/K	11.5
(C/N) up link /1.25MHz carrier	dB Hz	25.6
Up-link Ku-band C/I (Interference)		
C/I (Adjacent Channel)	dB	27.0
C/I (Co-channel Interference)	dB	19.0
C/I (Crosspolarization)	dB	23.0
C/I (NPR Interference)	dB	20.0
C/I (rain Depolarization)	dB	17.5
Interference from calibration signal	dB	21.0
C/I (NPR Interference)	dB	15.0
C/I _{Up} / 1.25MHz Carrier	dB	10.6
Effective C/(I+N)	dB	-0.4
Aggregate Data Rate per Carrier	kbps	614.4