

Downlink :			LA	CONUS	99.9%	
Satellite Location: 118.8 WL						
Uplink			Downlink		Clear	Rain
UL Freq	GHz	25.0	DL Freq	GHz	17.5	17.5
ES Ant Dia	m	13.0	ES Ant Dia	inches	18.0	18.0
ES Ant Gain	dBW	67.6	Satellite EIRP	dBW	54.9	54.9
ES Tx Power	dBW	12.0	ES ptg loss	dB	-0.1	-0.1
ES OBO	dBW	-3.0	Free space loss	dB	-208.7	-208.7
ES Output Losses	dBW	-1.5	Atmos loss	dB	-0.5	-0.5
ES ptg loss	dB	-0.5	Rain & Other loss	dB	0.0	-2.9
ES EIRP (Clear)	dBW	74.6	Wetting loss	dB	0.0	-0.5
Free space loss	dB	-212.0	Total loss	dB	-209.3	-212.8
Sat G/T	dB/K	17.5	ES G/T	dB/K	16.4	13.9
C/N (thermal)	dB	34.6	Bandwidth	dB-Hz	74.1	74.1
Uplink Power Control	dB	7.9	C/N (thermal)	dB	16.5	10.5
UL Spot Beam Interf	dB	35.0	DL Spot Beam Interf	dB	50.0	50.0
Adj Carr Interf	dB	30.0	Adj Carr Interf	dB	30.0	30.0
Adj Sat Interf	dB	50.0	Adj Sat Interf	dB	20.1	20.1
Cross Pol	dB	30.0	Cross Pol	dB	25.0	25.0
Total UL C/I	dB	26.3	Total DL C/I	dB	18.5	18.5

SUMMARY

Clear			Rain		
UL C/N (thermal)	dB	34.6	UL C/N (thermal)	dB	34.6
DL C/N (thermal)	dB	16.5	DL C/N (thermal)	dB	10.5
Total UL C/I	dB	26.3	Total UL C/I	dB	26.3
Total DL C/I	dB	18.5	Total DL C/I	dB	18.5
Total C/(N+I)	dB	14.1	Total C/(N+I)	dB	9.8
Req'd C/(N+I)	dB	6.6	Req'd C/(N+I)	dB	6.6

Table B-1

Downlink :	NEW YORK	CONUS	99.9%
Satellite Location: 118.8 WL			
Uplink		Downlink	
		Clear	Rain
UL Freq	GHz 25.0	DL Freq	GHz 17.5 17.5
ES Ant Dia	m 13.0	ES Ant Dia	inches 26.0 26.0
ES Ant Gain	dBW 67.6	Satellite EIRP	dBW 56.8 56.8
ES Tx Power	dBW 12.0	ES ptg loss	dB -0.2 -0.2
ES OBO	dBW -3.0	Free space loss	dB -209.2 -209.2
ES Output Losses	dBW -1.5	Atmos loss	dB 0.0 0.0
ES ptg loss	dB -0.5	Rain & Other loss	dB 0.0 -9.3
ES EIRP (Clear)	dBW 74.6	Wetting loss	dB 0.0 -0.5
Free space loss	dB -212.0	Total loss	dB -209.4 -219.2
Sat G/T	dB/K 17.5	ES G/T	dB/K 18.9 15.8
C/N (thermal)	dB 34.6	Bandwidth	dB-Hz 74.1 74.1
Uplink Power Control	dB 7.9	C/N (thermal)	dB 19.8 6.9
UL Spot Beam Interf	dB 35.0	DL Spot Beam Interf	dB 50.0 50.0
Adj Carr Interf	dB 30.0	Adj Carr Interf	dB 30.0 30.0
Adj Sat Interf	dB 50.0	Adj Sat Interf	dB 22.6 22.6
Cross Pol	dB 30.0	Cross Pol	dB 25.0 25.0
Total UL C/I	dB 26.3	Total DL C/I	dB 20.2 20.2

SUMMARY

Clear		Rain	
UL C/N (thermal)	dB 34.6	UL C/N (thermal)	dB 34.6
DL C/N (thermal)	dB 19.8	DL C/N (thermal)	dB 6.9
Total UL C/I	dB 26.3	Total UL C/I	dB 26.3
Total DL C/I	dB 20.2	Total DL C/I	dB 20.2
Total C/(N+I)	dB 16.4	Total C/(N+I)	dB 6.7
Req'd C/(N+I)	dB 6.6	Req'd C/(N+I)	dB 6.6

Table B-2

Downlink :			MIAMI	CONUS	99.8%	
Satellite Location: 118.8 WL						
Uplink				Downlink	Clear	Rain
UL Freq	GHz	25.0	DL Freq	GHz	17.5	17.5
ES Ant Dia	m	13.0	ES Ant Dia	inches	26.0	26.0
ES Ant Gain	dBW	67.6	Satellite EIRP	dBW	61.0	61.0
ES Tx Power	dBW	12.0	ES ptg loss	dB	-0.2	-0.2
ES OBO	dBW	-3.0	Free space loss	dB	-208.9	-208.9
ES Output Losses	dBW	-1.5	Atmos loss	dB	-0.7	-0.7
ES ptg loss	dB	-0.5	Rain & Other loss	dB	0.0	-11.9
ES EIRP (Clear)	dBW	74.6	Wetting loss	dB	0.0	-0.5
Free space loss	dB	-212.0	Total loss	dB	-209.8	-222.2
Sat G/T	dB/K	17.5	ES G/T	dB/K	19.4	15.7
C/N (thermal)	dB	34.6	Bandwidth	dB-Hz	74.1	74.1
Uplink Power Control	dB	7.9	C/N (thermal)	dB	25.1	8.9
UL Spot Beam Interf	dB	35.0	DL Spot Beam Interf	dB	50.0	50.0
Adj Carr Interf	dB	30.0	Adj Carr Interf	dB	30.0	30.0
Adj Sat Interf	dB	50.0	Adj Sat Interf	dB	22.3	22.3
Cross Pol	dB	30.0	Cross Pol	dB	25.0	25.0
Total UL C/I	dB	26.3	Total DL C/I	dB	20.3	20.3

SUMMARY

Clear			Rain		
UL C/N (thermal)	dB	34.6	UL C/N (thermal)	dB	34.6
DL C/N (thermal)	dB	25.1	DL C/N (thermal)	dB	8.9
Total UL C/I	dB	26.3	Total UL C/I	dB	26.3
Total DL C/I	dB	20.3	Total DL C/I	dB	20.3
Total C/(N+I)	dB	17.8	Total C/(N+I)	dB	8.5
Req'd C/(N+I)	dB	6.6	Req'd C/(N+I)	dB	6.6

Table B-3

Downlink :			HONOLULU CONUS		99.5%	
Satellite Location: 118.8 WL						
Uplink			Downlink		Clear Rain	
UL Freq	GHz	25.0	DL Freq	GHz	17.5	17.5
ES Ant Dia	m	13.0	ES Ant Dia	inches	48.0	48.0
ES Ant Gain	dBW	67.6	Satellite EIRP	dBW	48.6	48.6
ES Tx Power	dBW	12.0	ES ptg loss	dB	-0.8	-0.8
ES OBO	dBW	-3.0	Free space loss	dB	-208.8	-208.8
ES Output Losses	dBW	-1.5	Atmos loss	dB	-0.6	-0.6
ES ptg loss	dB	-0.5	Rain & Other loss	dB	0.0	-5.2
ES EIRP (Clear)	dBW	74.6	Wetting loss	dB	0.0	-0.5
Free space loss	dB	-212.0	Total loss	dB	-210.2	-215.9
Sat G/T	dB/K	17.5	ES G/T	dB/K	24.8	21.7
C/N (thermal)	dB	34.6	Bandwidth	dB-Hz	74.1	74.1
Uplink Power Control	dB	7.9	C/N (thermal)	dB	17.6	8.8
UL Spot Beam Interf	dB	35.0	DL Spot Beam Interf	dB	50.0	50.0
Adj Carr Interf	dB	30.0	Adj Carr Interf	dB	30.0	30.0
Adj Sat Interf	dB	50.0	Adj Sat Interf	dB	28.3	28.3
Cross Pol	dB	30.0	Cross Pol	dB	25.0	25.0
Total UL C/I	dB	26.3	Total DL C/I	dB	22.5	22.5

SUMMARY

Clear			Rain		
UL C/N (thermal)	dB	34.6	UL C/N (thermal)	dB	34.6
DL C/N (thermal)	dB	17.6	DL C/N (thermal)	dB	8.8
Total UL C/I	dB	26.3	Total UL C/I	dB	26.3
Total DL C/I	dB	22.5	Total DL C/I	dB	22.5
Total C/(N+I)	dB	15.7	Total C/(N+I)	dB	8.5
Req'd C/(N+I)	dB	6.6	Req'd C/(N+I)	dB	6.6

Table B-4