

LinkBudget:

CONUS Beam: 8PSK rate 2/3

DATA RATE	38333.96 kbps	sat	BSS129	UPLINK SITE	
NUMBER OF PHASES	8	xpdr	CONUS	UPLINK SFD	-99.00 dBW/m2
LDPC	2/3	loc	-129.0	ATTENUATOR	10.0 dB
SPECTRAL EFFICIENCY	1.916698			UPLINK G/T	5.00 dB/K
REQUIRED Eb/No	4.40 dB			UPLINK FREQ	17300.00 MHz
IF BANDWIDTH	20000.0 kHz			DOWNLINK FREQ	12200.00 MHz
C/N REQUIRED	7.20 dB			UPLINK EIRP	73.5 dBW
Faded System Margin	0.3 dB			Uncompensated U/L Fade	0.0 dB
Antenna Efficiency	63.00%			UPLINK C/N+I	24.0 dB
Spacing Factor	1.2			Adjacent satellite C/I	20 99.0
Required Bandwidth	24.000 MHz			Transponder Bandwidth	24.0 MHz
Allocated Bandwidth	24.000 MHz			Required Bandwidth	100.00 %
Transponder SCPC IBO	0.0 dB			Allocated Bandwidth	100.00 %
Transponder SCPC OBO	0.0 dB			Carrier Allocated Power	100.00 %
Carrier IBO	0.00 dB				
Carrier OBO	0.00 dB				

RECEIVE SITE	ANT	ES	ANT	Assumed	MINIMUM	XPDR		CLEAR-SKY	MARGIN
	DIA	Tsys	G/T	C/I	C/N	SAT	CXR	DOWNLINK	TO
	(m)	(K)	(dB/K)	(dB)	DOWN	EIRP	EIRP	C/N	MIN C/Ndn
					(dB)	(dBW)	(dBW)	(dB)	(dB)
ATLANTA GA	0.50	105.0	13.6	20.0	7.9	55.80	55.80	19.0	11.2
PHOENIX AZ	0.50	105.0	13.6	20.0	7.9	51.50	51.50	15.1	7.2
LOS ANGELES CA	0.50	105.0	13.6	20.0	7.9	51.10	51.10	14.7	6.8
SAN FRANCISCO CA	0.50	105.0	13.6	20.0	7.9	52.80	52.80	16.3	8.5
DENVER CO	0.50	105.0	13.6	20.0	7.9	51.40	51.40	14.8	7.0
CHICAGO IL	0.50	105.0	13.6	20.0	7.9	53.70	53.70	16.9	9.0
SEATTLE WA	0.50	105.0	13.6	20.0	7.9	52.70	52.70	16.1	8.2
MIAMI	0.50	105.0	13.6	20.0	7.9	57.90	57.90	21.2	13.0