

City	Old EIRPs	Old EIRPs + 2.7	4/20 Turbo 8PSK 2/3 EIRPs	Delta (4/21 EIRPs - 4/20 EIRPs)	4/21 Turbo 8PSK 2/3 EIRPs	Delta (8PSK 2/3 - Old EIRPs)	Turbo 8PSK 3/4 EIRPs	Delta (8PSK 3/4 - Old EIRPs)
HONOLULU HI	50.00	52.70	50.00	#REF!	#REF!	#REF!	#REF!	#REF!
TAMPA FL	54.00	56.70	58.00	#REF!	#REF!	#REF!	#REF!	#REF!
ST PETERSBUR	54.00	56.70	58.00	#REF!	#REF!	#REF!	#REF!	#REF!
SARASOTA FL	54.00	56.70	58.00	#REF!	#REF!	#REF!	#REF!	#REF!
CHARLESTON S	54.00	56.70	58.00	#REF!	#REF!	#REF!	#REF!	#REF!
NEW ORLEANS	54.00	56.70	57.50	#REF!	#REF!	#REF!	#REF!	#REF!
HOUSTON TX	53.00	55.70	56.70	#REF!	#REF!	#REF!	#REF!	#REF!
SAN ANTONIO T	50.00	52.70	51.60	#REF!	#REF!	#REF!	#REF!	#REF!
ATLANTA GA	54.00	56.70	55.50	#REF!	#REF!	#REF!	#REF!	#REF!
NASHVILLE TN	54.00	56.70	55.70	#REF!	#REF!	#REF!	#REF!	#REF!
EL PASO TX	48.00	50.70	50.00	#REF!	#REF!	#REF!	#REF!	#REF!
LAS CRUCES N	48.00	50.70	50.00	#REF!	#REF!	#REF!	#REF!	#REF!
SHREVEPORT L	52.00	54.70	54.40	#REF!	#REF!	#REF!	#REF!	#REF!
PHOENIX AZ	48.00	50.70	50.00	#REF!	#REF!	#REF!	#REF!	#REF!
PRESCOTT AZ	48.00	50.70	50.00	#REF!	#REF!	#REF!	#REF!	#REF!
OKLAHOMA CIT	49.50	52.20	52.20	#REF!	#REF!	#REF!	#REF!	#REF!
LOS ANGELES C	48.00	50.70	50.00	#REF!	#REF!	#REF!	#REF!	#REF!
WASHINGTON D	54.00	56.70	55.30	#REF!	#REF!	#REF!	#REF!	#REF!
HAGERSTOWN	54.00	56.70	55.30	#REF!	#REF!	#REF!	#REF!	#REF!
ST LOUIS MO	50.50	53.20	53.20	#REF!	#REF!	#REF!	#REF!	#REF!
SAN FRANCISCO	48.00	50.70	50.00	#REF!	#REF!	#REF!	#REF!	#REF!
OAKLAND CA	48.00	50.70	50.00	#REF!	#REF!	#REF!	#REF!	#REF!
SAN JOSE CA	48.00	50.70	50.00	#REF!	#REF!	#REF!	#REF!	#REF!
DENVER CO	48.00	50.70	50.00	#REF!	#REF!	#REF!	#REF!	#REF!
SALT LAKE CITY	48.00	50.70	50.00	#REF!	#REF!	#REF!	#REF!	#REF!
CLEVELAND OH	51.10	53.80	54.50	#REF!	#REF!	#REF!	#REF!	#REF!
AKRON OH	51.10	53.80	54.50	#REF!	#REF!	#REF!	#REF!	#REF!
CANTON OH	51.10	53.80	54.50	#REF!	#REF!	#REF!	#REF!	#REF!
CHICAGO IL	51.50	54.20	53.90	#REF!	#REF!	#REF!	#REF!	#REF!
BOISE ID	48.00	50.70	50.00	#REF!	#REF!	#REF!	#REF!	#REF!
MARQUETTE IA	50.80	53.50	53.50	#REF!	#REF!	#REF!	#REF!	#REF!
MARQUETTE IL	51.50	54.20	53.60	#REF!	#REF!	#REF!	#REF!	#REF!
MARQUETTE KS	49.00	51.70	51.10	#REF!	#REF!	#REF!	#REF!	#REF!
MARQUETTE MI	50.50	53.20	53.00	#REF!	#REF!	#REF!	#REF!	#REF!
MARQUETTE NE	49.00	51.70	51.30	#REF!	#REF!	#REF!	#REF!	#REF!
MARQUETTE W	50.50	53.20	52.40	#REF!	#REF!	#REF!	#REF!	#REF!
MINNEAPOLIS M	50.00	52.70	52.10	#REF!	#REF!	#REF!	#REF!	#REF!
ST PAUL MN	50.00	52.70	52.10	#REF!	#REF!	#REF!	#REF!	#REF!
SEATTLE WA	49.00	51.70	50.50	#REF!	#REF!	#REF!	#REF!	#REF!
TACOMA WA	49.00	51.70	50.50	#REF!	#REF!	#REF!	#REF!	#REF!
PORTLAND OR	49.00	51.70	50.50	#REF!	#REF!	#REF!	#REF!	#REF!
GREAT FALLS M	54.00	56.70	55.30	#REF!	#REF!	#REF!	#REF!	#REF!
GREAT FALLS N	48.00	50.70	50.00	#REF!	#REF!	#REF!	#REF!	#REF!
GREAT FALLS S	54.00	56.70	56.70	#REF!	#REF!	#REF!	#REF!	#REF!
GREAT FALLS V	54.00	56.70	55.30	#REF!	#REF!	#REF!	#REF!	#REF!
MINOT ND	49.40	52.10	51.90	#REF!	#REF!	#REF!	#REF!	#REF!
BISMARCK ND	49.40	52.10	51.80	#REF!	#REF!	#REF!	#REF!	#REF!
DICKINSON ND	49.40	52.10	50.00	#REF!	#REF!	#REF!	#REF!	#REF!
MIAMI FL	54.00	56.70	58.00	#REF!	#REF!	#REF!	#REF!	#REF!
ANCHORAGE A	49.00	51.70	51.70	#REF!	#REF!	#REF!	#REF!	#REF!
CORPUS CHRIS	51.00	53.70	51.60	#REF!	#REF!	#REF!	#REF!	#REF!
LUBBOCK TX	49.00	51.70	50.40	#REF!	#REF!	#REF!	#REF!	#REF!
BAKERSFIELD C	48.00	50.70	50.00	#REF!	#REF!	#REF!	#REF!	#REF!
INDIANAPOLIS I	53.00	55.70	55.30	#REF!	#REF!	#REF!	#REF!	#REF!
TOPEKA KS	49.00	51.70	52.50	#REF!	#REF!	#REF!	#REF!	#REF!
SIOUX FALLS S	49.00	51.70	51.60	#REF!	#REF!	#REF!	#REF!	#REF!
EUGENE OR	48.00	50.70	50.00	#REF!	#REF!	#REF!	#REF!	#REF!
IDAHO FALLS ID	48.00	50.70	50.00	#REF!	#REF!	#REF!	#REF!	#REF!
FARGO ND	49.00	51.70	52.00	#REF!	#REF!	#REF!	#REF!	#REF!
SPOKANE WA	48.00	50.70	50.00	#REF!	#REF!	#REF!	#REF!	#REF!
			# decreased:	0.00	Average:	#REF!	Average:	#REF!

Green: lower than old EIRPs + 2.7 dB
Red: higher

BSS @129W

	Eb/No	datarate			EIRP values?
DVB S2 QPSK 1/4	0.75	9804.86	#DIV/0!		n/a
DVB S2 QPSK 1/3	0.59	13128.96	#DIV/0!		n/a
DVB S2 QPSK 2/5	0.73	15788.24	#DIV/0!		n/a
Turbo QPSK 1/2	1.7	18974.44	#DIV/0!	updated 3/23	Old EIRPs
DVB S2 QPSK 3/5	1.48	23766.08	#DIV/0!		n/a
Turbo QPSK 2/3	2.7	#REF!	#REF!	updated 3/23	Old EIRPs
Turbo QPSK 3/4	3.1	#REF!	#REF!	updated 3/23	Old EIRPs
DVB S2 QPSK 4/5	2.67	#REF!	#REF!		n/a
Turbo QPSK 5/6	3.7	#REF!	#REF!	updated 4/18 u:	4/19 EIRPs
Turbo QPSK 7/8	4.2	#REF!	#REF!	updated 4/19 u:	4/19 EIRPs
DVB S2 QPSK 9/10	3.89	#REF!	#REF!		n/a
Turbo 8PSK 2/3	4.4	#REF!	#REF!	updated 4/18 u:	4/19 EIRPs
Turbo 8PSK 3/4	4.9	#REF!	#REF!	updated 4/18 u:	4/19 EIRPs
Turbo 8PSK 5/6	6.4	#REF!	#REF!	updated 4/18 u:	4/19 EIRPs
Turbo 8PSK 8/9	6.7	#REF!	#REF!	updated 4/18 u:	n/a

Earth Station G/T degrade by:	0.5	dB
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DATA RATE	18974.44	kbps
NUMBER OF PHASES	4	
LDPC	1 / 2	
SPECTRAL EFFICIENCY	0.948722	
REQUIRED Eb/No	1.70	dB
IF BANDWIDTH	20000.0	kHz
C/N REQUIRED	1.47	dB
Faded System Margin	0.3	dB
Antenna Efficiency	63.00%	
Spacing Factor	1.2	
Required Bandwidth	24.000	MHz
Allocated Bandwidth	24.000	MHz
Transponder SCPC IBO	0.0	dB
Transponder SCPC OBO	0.0	dB
Carrier IBO	0.00	dB
Carrier OBO	0.00	dB

sat #REF!
xpdr #REF!
loc #REF!

UPLINK SITE	#NAME?	#NAME?
UPLINK SFD		#NAME? dBW/m2
ATTENUATOR		10.0 dB
UPLINK G/T		#NAME? dB/K
UPLINK FREQ		#REF! MHz
DOWNLINK FREQ		#REF! MHz
UPLINK EIRP		#NAME? dBW
Uncompensated U/L Fade		0.0 dB
UPLINK C/N		#NAME? dB
Adjacent satellite C/I		15
Spot beam C/I		15.0
Transponder Bandwidth		24.0 MHz
Required Bandwidth		100.00 %
Allocated Bandwidth		100.00 %
Carrier Allocated Power		100.00 %

RECEIVE SITE	0.45	ANT DIA (m)	ES Tsys (K)	ANT G/T (dB/K)	Assumed C/I (dB)	MINIMUM C/N DOWN (dB)	XPDR SAT EIRP (dBW)	CXR EIRP (dBW)	CLEAR-SKY DOWNLINK C/N (dB)	MARGIN TO MIN C/Ndn (dB)
#NAME?	0.45	110.0	13.6	12.0	#NAME?	50.00	50.00	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	52.60	52.60	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	52.60	52.60	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	52.60	52.60	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	53.80	53.80	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	51.50	51.50	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	51.00	51.00	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	50.00	50.00	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	52.60	52.60	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	52.50	52.50	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	48.00	48.00	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	48.00	48.00	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	52.00	52.00	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	48.00	48.00	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	48.00	48.00	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	49.50	49.50	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	48.00	48.00	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	52.50	52.50	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	52.50	52.50	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	50.00	50.00	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	48.00	48.00	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	48.00	48.00	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	48.00	48.00	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	48.00	48.00	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	48.00	48.00	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	48.00	48.00	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	48.00	48.00	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	51.50	51.50	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	51.50	51.50	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	51.50	51.50	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	51.00	51.00	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	48.00	48.00	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	50.50	50.50	#NAME?	#NAME?	#

#NAME?	0.45	110.0	13.6	12.0	#NAME?	50.50	50.50	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	48.50	48.50	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	50.00	50.00	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	48.50	48.50	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	50.00	50.00	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	49.10	49.10	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	49.10	49.10	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	48.00	48.00	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	48.00	48.00	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	48.00	48.00	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	48.00	48.00	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	48.30	48.30	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	48.30	48.30	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	48.90	48.90	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	48.90	48.90	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	48.90	48.90	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	53.00	53.00	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	49.00	49.00	#NAME?	#NAME?	#

DATA RATE	23766.08	kbps
NUMBER OF PHASES	4	
LDPC	3 / 5	
SPECTRAL EFFICIENCY	1.188304	
REQUIRED Eb/No	1.48	dB
IF BANDWIDTH	20000.0	kHz
C/N REQUIRED	2.23	dB
Faded System Margin	0.3	dB
Antenna Efficiency	63.00%	

Spacing Factor	1.2	
Required Bandwidth	24.000	MHz
Allocated Bandwidth	24.000	MHz
Transponder SCPC IBO	0.0	dB
Transponder SCPC OBO	0.0	dB
Carrier IBO	0.00	dB
Carrier OBO	0.00	dB

sat #REF!
xpdr #REF!
loc #REF!

UPLINK SITE	#NAME?	#NAME?
UPLINK SFD		#NAME? dBW/m2
ATTENUATOR		10.0 dB
UPLINK G/T		#NAME? dB/K
UPLINK FREQ		#REF! MHz
DOWNLINK FREQ		#REF! MHz
UPLINK EIRP	#NAME?	dBW
Uncompensated U/L Fade		0.0 dB
UPLINK C/N	#NAME?	dB

Adjacent satellite C/I	15
Spot beam C/I	15.0
Transponder Bandwidth	24.0 MHz
Required Bandwidth	100.00 %
Allocated Bandwidth	100.00 %
Carrier Allocated Power	100.00 %

RECEIVE SITE	0.45				MINIMUM	XPDR	CXR	CLEAR-SKY	MARGIN	
	ANT DIA (m)	ES Tsys (K)	ANT G/T (dB/K)	Assumed C/I (dB)	C/N DOWN (dB)	SAT EIRP (dBW)		DOWNLINK C/N (dB)	TO MIN C/Ndn (dB)	
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#

#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#
#NAME?	0.45	110.0	13.6	12.0	#NAME?	#NAME?	#NAME?	#NAME?	#NAME?	#

