



LigoWave Link Analysis Report

Date Generated: 4/30/2012 3:30 PM EST

SITE INFORMATION

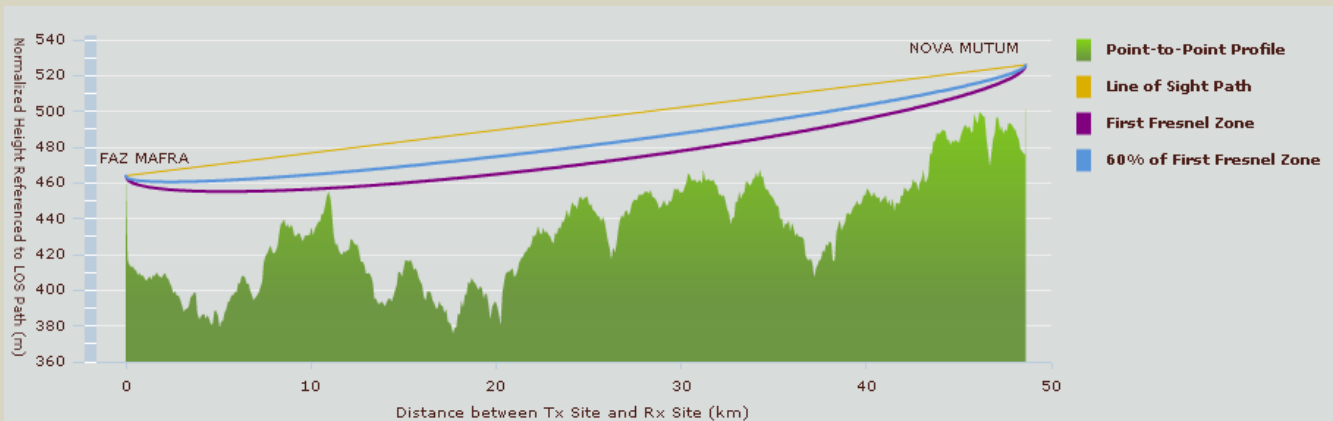
Tx Site Name	: FAZ MAFRA	Rx Site Name	: NOVA MUTUM
Radio Type	: LigoPTP 5 Mimo	Radio Type	: LigoPTP 5 Mimo
Latitude	: 13° 25' 57.9" S (13.43275)	Latitude	: 13° 48' 58.42" S (13.816228)
Longitude	: 56° 18' 35.43" W (56.309842)	Longitude	: 56° 5' 38.18" W (56.093939)
Tx Power	: 25 dBm	Rx Threshold	: -94 dBm
Ant. Gain	: 30 dBi	Ant. Gain	: 30 dBi
Ant. Height	: 45 meters	Ant. Height	: 50 meters

PARAMETERS

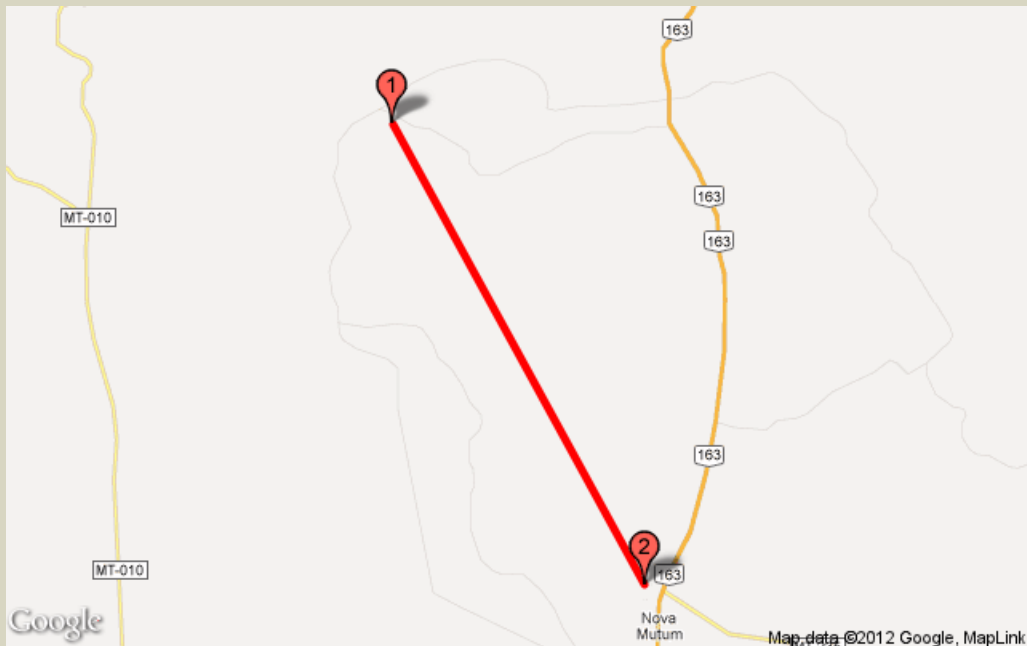
Frequency	: 5800 MHz	Climate	: Continental Temperate
Ant. Polarization	: Vertical	Measurement System	: Metric System
Misc. Loss	: 0 dBm	Rain Rate	: 0 mm/hr

RESULTS

Total Path Loss	: 146.4 dBm	Thermal Fade Margin	: 32.6 dBm
Rx Signal Level	: -61.4 dBm	Distance between sites	: 48.61 km
EIRP	: 55 dBm	Link availability due to rain	: N/A%



MAP



Path Loss:146.4 dBm

20MHz CHANNEL					
MODULATION	RX LEVEL	FADE MARGIN	AVAILABILITY	TX/RX	MAX THROUGHPUT
BPSK 1/2	-61.4 dBm	32.6 dBm	N/A%	1X1	6 Mbps
QPSK 1/2	-61.4 dBm	29.6 dBm	N/A%	1X1	12 Mbps
QPSK 3/4	-61.4 dBm	27.6 dBm	N/A%	1X1	18 Mbps
16-QAM 1/2	-62.4 dBm	23.6 dBm	N/A%	1X1	22 Mbps
16-QAM 3/4	-64.4 dBm	17.6 dBm	N/A%	1X1	38 Mbps
64-QAM 2/3	-65.4 dBm	11.6 dBm	N/A%	1X1	44 Mbps
64-QAM 3/4	-66.4 dBm	8.6 dBm	N/A%	1X1	50 Mbps
64-QAM 5/6	-67.4 dBm	5.6 dBm	N/A%	1X1	55 Mbps
BPSK 1/2	-61.4 dBm	32.6 dBm	N/A%	2X2	12 Mbps
QPSK 1/2	-61.4 dBm	29.6 dBm	N/A%	2X2	24 Mbps
QPSK 3/4	-61.4 dBm	27.6 dBm	N/A%	2X2	36 Mbps
16-QAM 1/2	-62.4 dBm	23.6 dBm	N/A%	2X2	44 Mbps
16-QAM 3/4	-64.4 dBm	17.6 dBm	N/A%	2X2	76 Mbps
64-QAM 2/3	-65.4 dBm	11.6 dBm	N/A%	2X2	88 Mbps
64-QAM 3/4	-66.4 dBm	8.6 dBm	N/A%	2X2	100 Mbps
64-QAM 5/6	-67.4 dBm	5.6 dBm	N/A%	2X2	110 Mbps

40MHz CHANNEL					
MODULATION	RX LEVEL	FADE MARGIN	AVAILABILITY	TX/RX	MAX THROUGHPUT
BPSK 1/2	-61.4 dBm	32.6 dBm	N/A%	1X1	12 Mbps
QPSK 1/2	-61.4 dBm	29.6 dBm	N/A%	1X1	24 Mbps
QPSK 3/4	-61.4 dBm	27.6 dBm	N/A%	1X1	36 Mbps
16-QAM 1/2	-62.4 dBm	23.6 dBm	N/A%	1X1	44 Mbps
16-QAM 3/4	-64.4 dBm	17.6 dBm	N/A%	1X1	76 Mbps
64-QAM 2/3	-65.4 dBm	11.6 dBm	N/A%	1X1	88 Mbps
64-QAM 3/4	-66.4 dBm	8.6 dBm	N/A%	1X1	100 Mbps
64-QAM 5/6	-67.4 dBm	5.6 dBm	N/A%	1X1	110 Mbps
BPSK 1/2	-61.4 dBm	32.6 dBm	N/A%	2X2	24 Mbps
QPSK 1/2	-61.4 dBm	29.6 dBm	N/A%	2X2	48 Mbps
QPSK 3/4	-61.4 dBm	27.6 dBm	N/A%	2X2	72 Mbps
16-QAM 1/2	-62.4 dBm	23.6 dBm	N/A%	2X2	88 Mbps
16-QAM 3/4	-64.4 dBm	17.6 dBm	N/A%	2X2	115 Mbps
64-QAM 2/3	-65.4 dBm	11.6 dBm	N/A%	2X2	135 Mbps
64-QAM 3/4	-66.4 dBm	8.6 dBm	N/A%	2X2	160 Mbps
64-QAM 5/6	-67.4 dBm	5.6 dBm	N/A%	2X2	180 Mbps