



LigoWave Link Analysis Report

Date Generated: 8/26/2010 5:46 PM EST

SITE INFORMATION

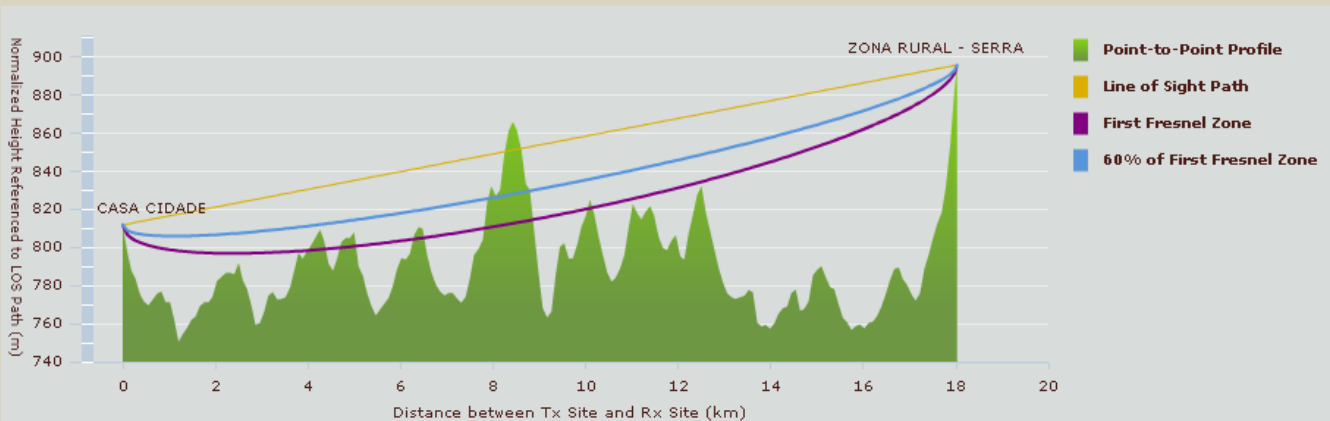
Tx Site Name	: CASA CIDADE	Rx Site Name	: ZONA RURAL - SERRA
Radio Type	: LigoPTP 900-N	Radio Type	: LigoPTP 900-N
Latitude	: 25° 13' 7.7063" S (25.218807)	Latitude	: 25° 22' 49.9663" S (25.380546)
Longitude	: 50° 59' 4.2162" W (50.984505)	Longitude	: 50° 59' 48.2762" W (50.996743)
Tx Power	: 28 dBm	Rx Threshold	: -92 dBm
Ant. Gain	: 15 dBi	Ant. Gain	: 15 dBi
Ant. Height	: 6 meters	Ant. Height	: 3 meters

PARAMETERS

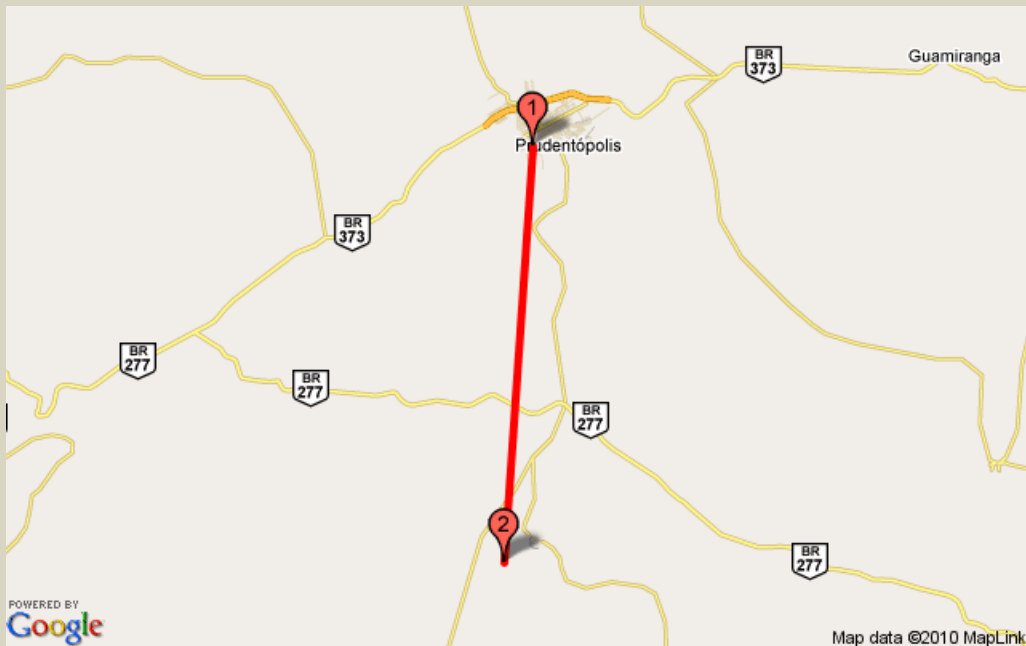
Frequency	: 907 MHz	Climate	: Continental Subtropical
Ant. Polarization	: Horizontal	Measurement System	: Metric System
Misc. Loss	: 0 dBm	Rain Rate	: 0 mm/hr

RESULTS

Total Path Loss	: 139.11 dBm	Thermal Fade Margin	: 10.89 dBm
Rx Signal Level	: -81.11 dBm	Distance between sites	: 18.03 km
EIRP	: 43 dBm	Link availability due to rain	: N/A%



MAP



Path Loss:139.11 dBm

5MHz CHANNEL				
MODULATION	RX LEVEL	FADE MARGIN	AVAILABILITY	MAX THROUGHPUT
BPSK 1/2	-81.11 dBm	10.89 dBm	N/A%	1.25 Mbps
BPSK 3/4	-81.11 dBm	9.89 dBm	N/A%	2 Mbps
QPSK 1/2	-81.11 dBm	9.89 dBm	N/A%	2.5 Mbps
QPSK 3/4	-81.11 dBm	6.89 dBm	N/A%	3.75 Mbps
16-QAM 1/2	-81.11 dBm	2.89 dBm	N/A%	4.5 Mbps
16-QAM 3/4	-83.11 dBm	-2.11 dBm	0%	6.75 Mbps
64-QAM 2/3	-84.11 dBm	-9.11 dBm	0%	9 Mbps
64-QAM 3/4	-85.11 dBm	-13.11 dBm	0%	10 Mbps

10MHz CHANNEL				
MODULATION	RX LEVEL	FADE MARGIN	AVAILABILITY	MAX THROUGHPUT
BPSK 1/2	-81.11 dBm	10.89 dBm	N/A%	2.5 Mbps
BPSK 3/4	-81.11 dBm	9.89 dBm	N/A%	4 Mbps
QPSK 1/2	-81.11 dBm	9.89 dBm	N/A%	5 Mbps
QPSK 3/4	-81.11 dBm	6.89 dBm	N/A%	7.5 Mbps
16-QAM 1/2	-81.11 dBm	2.89 dBm	N/A%	9 Mbps
16-QAM 3/4	-83.11 dBm	-2.11 dBm	0%	13.5 Mbps
64-QAM 2/3	-84.11 dBm	-9.11 dBm	0%	18 Mbps
64-QAM 3/4	-85.11 dBm	-13.11 dBm	0%	20 Mbps

20MHz CHANNEL				
MODULATION	RX LEVEL	FADE MARGIN	AVAILABILITY	MAX THROUGHPUT
BPSK 1/2	-81.11 dBm	10.89 dBm	N/A%	5 Mbps
BPSK 3/4	-81.11 dBm	9.89 dBm	N/A%	8 Mbps
QPSK 1/2	-81.11 dBm	9.89 dBm	N/A%	10 Mbps
QPSK 3/4	-81.11 dBm	6.89 dBm	N/A%	15 Mbps
16-QAM 1/2	-81.11 dBm	2.89 dBm	N/A%	18 Mbps
16-QAM 3/4	-83.11 dBm	-2.11 dBm	0%	27 Mbps
64-QAM 2/3	-84.11 dBm	-9.11 dBm	0%	36 Mbps
64-QAM 3/4	-85.11 dBm	-13.11 dBm	0%	40 Mbps