$P_{Tmax} = P_R + 20 \log_{10} f + 20 \log_{10} (30+d)-27.55$

where:

	L1	L2	L5	
P_R is the power received at 30 meters from the building (i.e. -140 dBm/24 MHz)	-140	-140	-140	dBm/24 MHz
f is frequency in MHz (i.e. 1575.42 for L1, 1227.60 for L2, 1176.45 for L5)	1575.42	1227.6	1176.45	MHz
Distance between the radiator and the closest exterior wall of the building in feet	13.5	13.5	13.5	feet
d is the distance between the radiator and the closest exterior wall of the building in meters.	**4.11**	**4.11**	**4.11**	meters
P_{Tmax} is the maximum permissible EIRP in dBm	**-72.94**	**-75.11**	**-75.48**	dBm
P_{Tmax} can then be converted to picowatts by using the formula $P_{Tmax(pW)} = 10^{(PTmax/10 + 9)}$	**50.78**	**30.83**	**28.32**	pW

Distance to Range, m	**34.11**	**34.11**	
GLI Metro Configuration Set to - ERP dBm	**-73.00**	**-78.00**	dBm
GLI Metro Configuration Set to - ERP pW	**50**	**16**	pW
GLI Metro Configuration Set to - EIRP (ERP+2.15)	**-70.85**	**-75.85**	dBm
Free Space Path Loss (m and MHz) with Isotropic Antennas	**67.06**	**64.89**	dB
ERP at Range (dBm)	**-142.21**	**-145.04**	dBm
EIRP at Range (dBm)	**-140.06**	**-142.89**	dBm
ERP at Range (dBW)	**-172.21**	**-175.04**	dBW
EIRP at Range (dBW)	**-170.06**	**-172.89**	dBW