

Component	Signal Level		Manufacturer	Part Number	Notes
			GPS Received Signal		-110 to -149 dBm (-130dBm typ)
Repeater Regulated Output	-75	dBm	GLI-METRO		
Cable Loss	-5	dB	Line Loss from Repeater to Tx Antenna		
GPS Transmit Power	-80	dBm	L1-Band XMT Antenna RF Input Power		
Repeater Antenna Gain	3	dB	Antcom		
Ptmax	-77	dBm			
Path Loss @ 40m	-68.4	dB	Path Loss = 20 Log F (MHz) + 20 Log d (m) - 27.55		
EIRP @ 40m from Bldg	-145.4 dBm/24 MHz		1575.42	MHz	Frequency L1
			30	m	Outside Bldg
			10	m	Antenna to Bldg Walls
			40	m	Total Distance
$P_R (EIRP) = P_{t_{max}} - 20\log f - 20\log (30 + d) + 27.55 = -77 - 63.9 - 32.04 + 27.55 = \mathbf{-145.4 \text{ dBm/24 MHz}}$					