

Change the values in the yellow boxes to calculate required readings
-140 or less at a range of 100 feet to meet NTIA regulations

Receive Ant Gain (dBm)	Cable Insertion Loss (dBm)	Repeater Amp Gain (dBm)	Repeater Ant Gain Best Case (dBi)	Range in Feet	Effective Isotropic Radiated Power @ Range In dBm
35	-5.1	22	3	100	-141.19
GPS Carrier Frequency MHz 1575			Total System Gain 54.9	Range in Miles 0.02	Total Signal Power @ Range in Watts 7.6E-18
Avg Receive Power L1 dBm North America -130				Range in Meters 31.17	Radiated Power dBm -75.1
Free Space loss with Isotropic Antennas -66.09				Range in Kilometers 0.03	Transmitted Power (W) 15.5E-12
					Effective Radiated Power (W) 30.9E-12
					Effective Radiated Power (dBW) -105.1