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	Ant Cable Insertion Loss	Repeater Amp Gain	Repeater Ant Gain Best Case	Range in Feet	Repeated Signal Power @ Range In dBm
38	-10	22	3	100	-143.09

GPS Carrier Frequency MHz
1575

Avg Receive Power L1 dBm North America
-130

Free Space loss with Isotropic Antennas
-66.09

Total System Gain
53

Range in Miles
0.02

Range in Meters
31.17

Range in Kilometers
0.03

Total Signal Power @ Range in Watts
4.9E-18

Radiated Power dBm
-77

Transmitted Power (W)
10.0E-12

Effective Radiated Power (W)
20.0E-12

Effective Radiated Power (dBW)
-107


GPS Networking
Global Positioning Solutions