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Change the values in the yellow boxes to calculate required readings

Receive Ant Gain	Ant Cable Insertion Loss	Repeater Amp Gain	Splitter Loss/Gain	Repeater Ant Gain	Range in Feet	EIRP @ Range In dBm	ERP
40	-27.97	30	11	3	100	-140.29	-142.44

Total Signal Power @ Range in Watts
9.4E-18

GPS Carrier Frequency MHz : 1575 MHz

Range in Meters
31.17
Radiated Power dBm
-73.97

Avg Receive Power L1 dBm N. America : -130 dBm

Transmitted Power (W)
20.1E-12

Free Space loss with Isotropic Antennas : -66.32 dB

TX Pwr (dBm) to antenna = -130 dBm + 57.03 - 3 dB (Repeater Ant Gain) = -76.97

Effective Isotropic Radiated Power (W)
40.1E-12 24.44 pW ERP

Effective Radiated Power (dBW)
-103.97

	EiRP	ERP	
TX Pwr (dBm) to antenna	-76.97	-76.97	dBm
Repeater Ant Gain	3	0.85	dBi/dBd
Total Power radiated	-73.97	-76.12	dBm
FSPL (100 ft)	-66.32	-66.32	dB
EiRP/ERP @ 100 ft	-140.29	-142.44	dBm

Effective Radiated Power -103.97 -106.12 dBW

Effective Radiated Power 40.1 24.4 pW

EiRP

ERP