

GPS Networking HNRRKIT Reradiating Kit Emissions Calculations

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	25	3	100	-140.09
GPS Carrier Frequency MHz				Total System Gain	Total Signal Power @ Range in Watts
1575				56	9.8E-18
Avg Receive Power L1 dBm North America				Range in Meters	Radiated Power dBm
-130				31.17	-74
Free Space loss with Isotropic Antennas				Range in Kilometers	Transmitted Power (W)
-66.09				0.03	20.0E-12
					Effective Radiated Power (W)
					39.8E-12
					Effective Radiated Power (dBW)
					-104

This kit will be used as experimental RNSS test equipment for the purpose of testing GPS receivers.
The GPS signal will be reradiated within GIC's warehouse to allow for testing of GPS receivers manufactured by GEOTAB Inc.
Calculations provided by GPS Networking