From: Robert Clydesdale

To: Jose Trevino
Date: March 17, 2010

Subject: FCC file number 0095-EX-PL-2010

Message:

Prior response could not read the calculations in the figures provided. Below are the data points and calclations in text form.

6. The maximum equivalent isotropically radiated power (EIRP) must be such that the calculated emissions are no greater than -140 dBm/24 MHz as received by an isotropic antenna at a distance of 100 feet (30 meters) from the building where the test is being conducted. The calculations showing compliance with this requirement must be provided with the application for frequency assignment and should be based on free space propagation with no allowance for additional attenuation (e.g., building attenuation.)

The calculations showing compliance with this requirement are provided below:

Product RG-58. Frequency is 1575. Attenuation (db/100 feet) is 19.605. Attenuation (db/100 mtrs) is 64.324. Average Power (kW) 0.07. Run Length 50 feet of cable. Total run attenuation is 9.8 dB. Efficiency is 10.5%.

Receive antenna gain is 35. Ant cable insertion loss is -9.8. Repeater Amp Gain is 30. Repeater Amp Gain is 3 best case. Range in feet 175. Repeated signal power @Range in dBm is -142.75. Total signal power @range in Watts is 5.3e-18.

GPS Carrier Frequency MHz is 1575. Free space loss with isotropic antennas is 70.95. Total system gain is 55.2. Range in Miles 0.03. Effective Radiated Power is -73.95 dBm. Effective Radiated Power is -103.95 dBW. Avg receive power North America -130 dBm. Reference Dipole Gain 2.15. Transmitted Power 2.0e-11 W. Range 0.05 KM. Effective Isotropic radiated power -71.80 dBm. Effective Isotropic radiated power -101.80 dBW. Typical value @L1: 130.0 dBm. @L2 -127.5 dBm. Range 53.3400 meters. Effective radiated power is 4.0e-11.