Exhibit 3- Maximum Equivalent Isotropically Radiated Power.

Calculation of the maximum equivalent isotropically radiated power per NTIA 8.3.28 #7.

Location: **1680 University Avenue Rochester, NY 14610**

GPS Re-radiator ERP	Equivalent dBm
70 pico-watts	-72 dBm

Calculation of loss for free space propagation using ITU model:

Using the simplified equation for path loss in free space:

L (dB) = 20log(f) + N log (d) - 27.54

Where:

N is the distance power loss coefficient = 20
d (Distance in meters from the source to 30 meters away from the building) = 38
f = 1575.24 MHz
L=Free space path loss in dB

L(dB) = 20log(1575.24) + 20log(38) - 27.54
= 63.95 + 31.6 - 27.54
= 68.01 dB

The re-radiated GPS signal at 100 feet (30 meters) from the building will be:

S (dBm) = GPS Re-radiator Power (ERP) dBm - Free space path loss (dB)
= -72 dBm – 68.01 dB
= - 140.01 dBm (-140 dBm maximum permitted)

Exhibit 3- Maximum Equivalent Isotropically Radiated Power.

Calculation of the maximum equivalent isotropically radiated power per NTIA 8.3.28 #7.

Location: **570 Culver Road Rochester, NY 14609**

GPS Re-radiator ERP	Equivalent dBm
70 pico-watts	-72 dBm

Calculation of loss for free space propagation using ITU model:

Using the simplified equation for path loss in free space:

L (dB) = 20log(f) + N log (d) – 27.54

Where:

N is the distance power loss coefficient = 20
d (Distance in meters from the source to 30 meters away from the building) = 60
f = 1575.24 MHz
L=Free space path loss in dB

L(dB) = 20log(1575.24) + 20log(60) - 27.54
= 63.95 + 35.56 - 27.54
= 71.97 dB

The re-radiated GPS signal at 100 feet (30 meters) from the building will be:

S (dBm) = GPS Re-radiator Power (ERP) dBm - Free space path loss (dB)
= -72 dBm – 71.97 dB
= -143.97 dBm (-140 dBm maximum permitted)

Exhibit 3- Maximum Equivalent Isotropically Radiated Power.

Calculation of the maximum equivalent isotropically radiated power per NTIA 8.3.28 #7.

Location: 97 Humboldt St Rochester, NY 14609

GPS Re-radiator ERP	Equivalent dBm
70 pico-watts	-72 dBm

Calculation of loss for free space propagation using ITU model:

Using the simplified equation for path loss in free space:

L (dB) = 20log(f) + N log (d) – 27.54

Where:

N is the distance power loss coefficient = 20
d (Distance in meters from the source to 30 meters away from the building) = 60
f = 1575.24 MHz
L=Free space path loss in dB

L(dB) = 20log(1575.24) + 20log(60) - 27.54
= 63.95 + 35.56 - 27.54
= 71.97 dB

The re-radiated GPS signal at 100 feet (30 meters) from the building will be:

S (dBm) = GPS Re-radiator Power (ERP) dBm - Free space path loss (dB)
= -72 dBm – 71.97 dB
= -143.97 dBm (-140 dBm maximum permitted)