

| Receive Ant Gain                        | Ant Cable Insertion Loss | Repeater Amp Gain | Repeater Ant Gain Best Case | Range in Feet       | Repeated Signal Power @ Range In dBm    |
|-----------------------------------------|--------------------------|-------------------|-----------------------------|---------------------|-----------------------------------------|
| 33                                      | -12                      | 29                | 3                           | 100                 | -143.09                                 |
| GPS Carrier Frequency MHz               |                          |                   | Total System Gain           | Range in Miles      | Total Signal Power @ Range in Watts     |
| 1575                                    |                          |                   | 53                          | 0.02                | 4.9E-18                                 |
| Avg Receive Power L1 dBm North America  |                          |                   |                             | Range in Meters     | Radiated Power dBm                      |
| -130                                    |                          |                   |                             | 31.17               | -77                                     |
| Free Space loss with Isotropic Antennas |                          |                   |                             | Range in Kilometers | Transmitted Power (pW)                  |
| -66.09                                  |                          |                   |                             | 0.03                | 9.6                                     |
|                                         |                          |                   |                             |                     | Effective Radiated Power (pW)           |
|                                         |                          |                   |                             |                     | 19.2                                    |
|                                         |                          |                   |                             |                     | Effective Isotropic Radiated Power (pW) |
|                                         |                          |                   |                             |                     | 31.5                                    |
|                                         |                          |                   |                             |                     | Effective Radiated Power (dBW)          |
|                                         |                          |                   |                             |                     | -107                                    |

