

**GPS BOOSTER STATION (RE-RADIATION SYSTEM) LINK**

Frequency = 1575.4 MHz

Wavelength = 0.190428 m

Range, re-radiator to wall = 15.2 m 50 ft

Roof Antenna Gain 5.4 dBi

Roof Antenna LNA Gain = 33.0 dB

Roof Antenna LNA to Re-radiator Antenna Cable Insertion Loss = -5.0 dB

Re-radiator LNA Gain = 15.0 dB

Re-radiator Antenna Gain = 5.0 dBi

Booster Station Gain = 53.4 dB

Free Space Propagation Loss (Range + 30m) = -69.5 dB

Specified GPS Signal Strength = -130.0 dBm/24 MHz

Booster GPS Signal Strength = -146.1 dBm/24 MHz

Specified Maximum Signal Strength = -140.0 dBm/24 MHz

Margin = 6.1 dB