RF EXPOSURE INFORMATION

RADIO FREQUENCY EXPOSURE (HAZARD) INFORMATION
Testing was performed in accordance with the requirements of FCC Part 15.247(i)

Spread spectrum transmitters operating in the 2400 - 2483.5 MHz and 5725 – 5850 MHz bands are required to be operated in a manner that ensures that the public is not exposed to RF energy levels in accordance with CFR 47, Section 1.1307(b)(1).

The MPE calculation shown below is for the Wireless Radio device with a separation distance of greater than 105cm.

In accordance with Section 1.1310, the Maximum Permissible Exposure (MPE) limit for the General Population/Uncontrolled Exposure of 1.0 has been applied, i.e 1mW/cm^2.

Friis transmission formula: $Pd = (P*G) / (4*\pi*r^2)$

where: Pd = power density (mW/cm^2)
P = power input to the antenna (mW)
G = antenna gain (numeric)
r = distance to the center of radiation of the antenna (cm)

Prediction frequency = 5785 MHz
Maximum peak output power = 29.35 dBm = 860.994 mW
Antenna gain (typical) = 22 dBi = 158.5 numeric
Prediction distance = 105 cm
The power density calculated = 0.985 mW/cm^2

MPE limit for uncontrolled exposure at prediction frequency = 1 mW/cm^2

Results: Calculations show that the Wireless Radio device with described antennas complied with Maximum Permissible Exposure (MPE) limit for the General Population/Uncontrolled Exposure with a separation distance of greater than 105cm.