Exhibit: RF Exposure – FCC

Report File #:7169007900RB-000

RF Exposure – FCC

The device is a mobile device intended to generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter's radiating structure and the body of the user or nearby persons.

The EUT contains a 6. MHz FHSS transmitter and a 2400 – 2483.5 MHz DTS transmitter.

Radiofrequency Radiation Exposure Evaluation: Mobile Devices

Mobile devices shall be evaluated for RF radiation exposure according to the provisions of FCC §2.1091 and the MPE guidelines identified in FCC §1.1310.

As per FCC §1.1310 Table 1(B), the limit for Maximum Permissible Exposure (MPE) to radiofrequency electromagnetic fields for General Population/Uncontrolled Exposure in the frequency range of 300 MHz to 1.5 GHz is f/1500 mW/cm^2 and in the frequency range of 1.5GHz to 100GHz is 1.0 mW/cm^2. Where f = frequency in MHz.

The power density formula is given by:

$$P_d = (P_{out}*G) / (4*pi*R^2)$$

Where,
P_d = Power density in mW/cm^2
P_{out} = Conducted output power to antenna in mW
G = Numeric Antenna Gain
Pi = 3.1416
R = Separation distance in cm

The term (P_{out}*G) is the E.I.R.P of the transmitter.

MPE Calculation: 6.5 GHz UWB transmitter

The UWB transmitter has an E.I.R.P of -1.9 dBm or 0.65 mW.

For a separations distance of 20 cm, the power density is:

$$P_d = (0.65\ mW) / (4 * 3.1416 * (20cm)^2)$$
$$P_d = 0.00013\ mW/cm^2$$

The device passes the requirement. The calculated power density of 0.00013 mW/cm^2 is below the 1 mW/cm^2 limit.

Simultaneous Transmission

For simultaneous transmission, the Sum of rations of MPEs shall be < 1.

The device integrates a 2.4 GHz DTS modular transmitter with possible simultaneous transmission. The sum of MPE ratios reported is 0.031.

$\sum$ of MPE rations = MPE of UWB + $\sum$ MPE of module
= 0.00013 + 0.031
= 0. 03113 < 1

The device meets simultaneous transmission requirement.