Exhibit: RF Exposure – FCC

(WR9EBSMSW1V001)

Report File #: 7169001943-000

RF Exposure – FCC

The device is intended for use for mobile application and the minimum separation distance from the radiating structure to any part of the body or extremity of a user is greater than 20 cm as stated by the manufacturer during normal operation.

The EUT contains a 902 – 928 MHz FHSS transmitter and a 2400 – 2483.5 MHz DTS transmitter. The Firmware guarantees simultaneous will not occur. Antenna co-location testing is therefore not applicable.

Radiofrequency Radiation Exposure Evaluation: Mobile Devices

Portable 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.

The limits, as defined FCC 1.1310 Table 1 (B) limits for general public exposure was applied. The limits for the frequency ranges 300 MHz to 1.5 GHz and 1.5 GHz to 100 GHz was applied. The limits are f/1500 mW/cm^2 and 1.0 mW/cm^2 respectively

The power density formula is given by:
$P_d = PG / (4\pi R^2)$

Where,
P = Peak Antenna Conducted Power in mW
G = Numeric Antenna Gain
R = Separation distance in cm

MPE Calculations: 2412 – 2462 MHz DTS transmitter

The DTS transmitter have a 2 dBi antenna and the maximum peak power is 84.33 mW.

$P_d = (84.33\ mW * 1.6) / (4 * \pi * (20cm)^2)$
$P_d = 0.026\ mW/cm^2$

The device passes the requirement. The calculated power density is 0.026 mW/cm^2 and this is below the 1.0 mW/cm^2 limit.

MPE Calculations: 902.8 – 927.7 MHz FHSS transmitter

The FHSS transmitter have a 1.5 dBi antenna and the maximum peak power is 101.16 mW.

$P_d = (101.16 \text{ mW} * 1.4) / (4 * \pi * (20\text{cm})^2)$
$P_d = 0.028 \text{ mW/ cm}^2$

The device passes the requirement. The calculated power density is 0.028 mW/cm^2 and this is below the (902.8/1500) = 0.6 mW/cm^2 limit.