# Attachment 1

# RF EXPOSURE INFORMATION

## RADIO FREQUENCY EXPOSURE (HAZARD) INFORMATION

Testing was performed in accordance with the requirements of FCC Part 15.407(f)

Spread spectrum transmitters operating in the 2400 - 2483.5 MHz and 5.150 – 5.350 GHz 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).

Transmitter # 1: The WLAN antennas are located on the top edge of LCD screen (2 antennas left and right) and projected distance of greater than 20cm from user.

Transmitter # 2: The Bluetooth antenna is located under the keyboard and projected distance of less than 20cm from user.

SAR is not required as the WLAN transmitter is mobile device and the power for the Bluetooth transmitter is below the low threshold.

The separation distance between the WLAN and BT antennas is greater than 20cm. Therefore, they are not co-located transmitters.

The MPE calculation shown below is for the WLAN power density.

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)

**The result was extracted from section 4.0 of EMC report:**
**M060108_Cert_WM3945ABG_NII_Class_2**
Prediction frequency = **5320 MHz**
Maximum peak output power = 17.8 dBm = 60.3 mW
Antenna (Monopole) gain (max) = 3.23 dBi = 2.104 numeric
The power density calculated = 0.026 mW/cm$^2$

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

**Results:** Calculations show that the Radio devices with described antennas complied with Maximum Permissible Exposure (MPE) limit for the General Population/Uncontrolled Exposure