Attachment 1:   **RF EXPOSURE INFORMATION**

RADIO FREQUENCY EXPOSURE (HAZARD) INFORMATION

Testing was performed in accordance with the requirements of FCC Part 15.247(b)(5)

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).

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

Transmitter # 2: The Bluetooth is a portable device. The antenna is located on the right hinge of LCD screen projected distance of greater than 2.5cm from the bottom of the laptop.

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

MPE calculation for Bluetooth is not applicable and SAR is not required as the power for BT is below the low threshold.

The MPE calculation shown below is for the WLAN mobile device for a separation distance of greater than 20cm.

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 $1 mW/cm^2$.

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 5.0 of EMC Technologies Report No: M050532_Cert_WLL4070_11abg_DTS_BT (WLAN Module):
Prediction frequency = 2412 MHz
Maximum peak output power = 20.6 dBm = 114.8 mW
Antenna (Inverted F) gain (typical) = 0.73 dBi = 1.18 numeric
Prediction distance = 20 cm
MPE limit for uncontrolled exposure at prediction frequency = $1 mW/cm^2$
The power density calculated = $0.03 mW/cm^2$

Prediction frequency = 5745 MHz
Maximum peak output power = 17.9 dBm = 61.7 mW
Antenna (Inverted F) gain (typical) = 3.08 dBi = 2.03 numeric
Prediction distance = 20 cm
MPE limit for uncontrolled exposure at prediction frequency = $1 mW/cm^2$
The power density calculated = $0.025 mW/cm^2$

Results: Complies