

**FCC RF EXPOSURE REPORT**

<b>EUT</b>	Wireless Transmitter
<b>Frequency band (Operating)</b>	<input type="checkbox"/> WLAN: 2.412GHz ~ 2.462GHz <input checked="" type="checkbox"/> WLAN: 5.180GHz ~ 5.240GHz <input type="checkbox"/> Bluetooth: 2.402GHz ~ 2.480 GHz
<b>Device category</b>	<input type="checkbox"/> Portable (<20cm separation) <input checked="" type="checkbox"/> Mobile (>20cm separation)
<b>Exposure classification</b>	<input type="checkbox"/> Occupational/Controlled exposure (S = 5mW/cm <sup>2</sup> ) <input checked="" type="checkbox"/> General Population/Uncontrolled exposure (S=1mW/cm <sup>2</sup> )
<b>Antenna diversity</b>	<input type="checkbox"/> Single antenna <input checked="" type="checkbox"/> Multiple antennas <input type="checkbox"/> Tx diversity <input type="checkbox"/> Rx diversity <input checked="" type="checkbox"/> Tx/Rx diversity
<b>Max. output power</b>	Chain 0: 9.82dBm (9.59 mW) Chain 1: 9.54dBm (8.99 mW)
<b>Antenna gain (Max)</b>	Chain0:2.0 dBi Chain1:2.0 dBi
<b>Evaluation applied</b>	<input checked="" type="checkbox"/> MPE Evaluation* <input type="checkbox"/> SAR Evaluation <input type="checkbox"/> N/A



## TEST RESULTS

No non-compliance noted.

### Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi r^2} = \frac{EIRP}{4\pi r^2}$$

Where S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

EIRP = Effective Isotropically Radiated Power

Values S = 1.0 mW/cm<sup>2</sup> for General population uncontrolled exposure (FCC Part 1.1310 Radiofrequency radiation exposure limits)

$$S = 1.0 \text{ mW/cm}^2$$

$$P = 9.82\text{dBm} (9.594 \text{ mW})$$

$$G = \text{Antenna gain (total array gain)} = 2.0 \text{ dBi}$$

$$EIRP = P_T \times G$$

$$R = 20 \text{ cm}$$

### **Calculation:**

$$EIRP = 9.594 \times 2.0 = 19.188\text{mW}$$

$$S = 19.188 / 12.56 \times (20)^2$$

$$S = 19.188 / 5026$$

$$S = 0.0038 \text{ mW/cm}^2$$