



## 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: 9.88dBm (9.73 mW) Chain 1: 9.66dBm (9.25 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 mW/cm<sup>2</sup>**

P = 9.88dBm (9.7274 mW)

G = Antenna gain (total array gain) = 2.0 dBi

EIRP = P<sub>T</sub> x G

R = 20 cm

### **Calculation:**

$$\text{EIRP} = 9.7274 \times 2.0 = 19.4548 \text{mW}$$

$$S = 19.4548 / 12.56 \times (20)^2$$

$$S = 19.465 / 5026$$

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