# **RF EXPOSURE EVALUATION**

## MAXIMUM PERMISSIBLE EXPOSURE (MPE)

### **Applicable Standard**

According to subpart 15.247 (i) and subpart 2.1091 systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

According to KDB 447498 D04 Interim General RF Exposure Guidance

#### MPE-Based Exemption:

General frequency and separation-distance dependent MPE-based effective radiated power(ERP) thresholds are in Table B.1 [Table 1 of § 1.1307(b)(3)(i)(C)] to support an exemption from further evaluation from 300 kHz through 100 GHz.

Table 1 to § 1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation						
RF Source frequency (MHz)	Threshold ERP (watts)					
0.3-1.34	1,920 R <sup>2</sup> .					
1.34-30	3,450 R <sup>2</sup> /f <sup>2</sup> .					
30-300	3.83 R <sup>2</sup> .					
300-1,500	0.0128 R <sup>2</sup> f.					
1,500-100,000	19.2R <sup>2</sup> .					

R is the minimum separation distance in meters f = frequency in MHz

Result
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Mode	Frequency (MHz)	Tune up conducted	Antenna Gain#		ERP		Evaluation Distance	ERP Limit
	(1/112)	power <sup>#</sup> (dBm)	(dBi)	(dBd)	(dBm)	(W)	(m)	(W)
BT	2402-2480	7.0	4.6	2.45	9.45	0.009	0.2	0.768

Note: 1. The tune up conducted power and antenna gain was declared by the applicant. 2. The BT and 2.4G Wi-Fi cannot transmit at same time.

3. 0dBd=2.15dBi

To maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 20cm from nearby persons.

### **Result: Compliant**