

## RF EXPOSURE EVALUATION

### MPE-Based Exemption

#### 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 v01 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                  | $1,920 R^2$ .         |
| 1.34-30                   | $3,450 R^2/f^2$ .     |
| 30-300                    | $3.83 R^2$ .          |
| 300-1,500                 | $0.0128 R^2 f$ .      |
| 1,500-100,000             | $19.2 R^2$ .          |

R is the minimum separation distance in meters

f = frequency in MHz

### Result

| Mode       | Frequency (MHz) | Tune up conducted power <sup>#</sup> (dBm) | Antenna Gain <sup>#</sup> |       | ERP   |       | Evaluation Distance (m) | ERP Limit (W) |
|------------|-----------------|--------------------------------------------|---------------------------|-------|-------|-------|-------------------------|---------------|
|            |                 |                                            | (dBi)                     | (dBd) | (dBm) | (W)   |                         |               |
| 2.4G Wi-Fi | 2412-2462       | 23.00                                      | 2.97                      | 0.82  | 23.82 | 0.241 | 0.2                     | 0.768         |

Note: 1. The tune up conducted power<sup>#</sup> and antenna gain<sup>#</sup> were declared by the applicant.

2. The 2.4G and 5G Wi-Fi cannot transmit at same time.

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

**Result: Compliant**