**FCC ID: 2AZKWREBE-TZ15L** **ATTACHMENT**

# RF EXPOSURE EVULATION

## 1.1 Limit

According to §1.1310 and §2.1091 RF exposure is calculated.

(B) Limits for General Population/Uncontrolled Exposures

| Frequency range (MHz) | Electric field Strength | Magnetic field Strength | Power density | Averaging time |
|---|---|---|---|---|
| 1.34 - 30..... | 824/f | 2.19/f | *(180/ f²) | 30 |
| 30 - 300..... | 27.5 | 0.073 | 0.2 | 30 |
| 300 - 1500..... | ..... | ..... | f/1500 | 30 |
| 1500 - 100.000..... | ..... | ..... | **1.0** | 30 |

F = frequency in MHz

* = Plane-wave equivalent power density

## 1.2 MAXIMUM PERMISSIBLE EXPOSURE Prediction

Prediction of MPE limit at a given distance

**Power density at the specific separation:**

| | |
|---|---|
| $S = PG/(4R^2\pi)$<br><br>$S = (1.98 * 0.28) / (4 * 20^2 * \pi)$<br><br>$S = 0.0001$ mW/cm$^2$ | Where,<br>S = Maximum power density (mW/cm$^2$)<br>P = Power input to the antenna (mW)<br>G = Numeric power gain of the antenna<br>R = Distance to the center of the radiation of the antenna (20 cm = limit for MPE) |

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**1.3 MAXIMUM PERMISSIBLE EXPOSURE Prediction**

**- Calculated under the worst-case conditions of each mode.**

**(Measured power 3.0 dBm ± 0.5dB)**

## 3-1. 2.4 GHz Mode

| | | |
|---|---|---|
| Max Peak output Power at antenna input terminal | 2.96 | dBm |
| Max Peak output Power at antenna input terminal | 1.98 | mW |
| Prediction distance | 5 | mm |
| Prediction frequency | 2,480 | MHz |
| Antenna Gain(typical) | -5.73 | dBi |
| Antenna Gain(numeric) | 0.28 | - |

For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] ·[√f(GHz)] ≤ 3.0 for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR

[(1.98)/(5)] ·[√2.480] = 0.672 ≤ 3.0

**Thus, SAR for this device is not required.**