

## FCC ID: MZR-YMC624

According to KDB 447498 D04 Interim General RF Exposure Guidance v01

### 1. SAR-based Exemption

A more comprehensive exemption, considering a variable power threshold that depends on both the separation distance and power, is provided in § 1.1307(b)(3)(i)(B). This exemption is applicable to the frequency range between 300 MHz and 6 GHz, with test separation distances between 0.5 cm and 40 cm, and for all RF sources in fixed, mobile, and portable device exposure conditions.

Accordingly, a RF source is considered an RF exempt device if its available maximum time-averaged (matched conducted) power or its effective radiated power (ERP), whichever is greater, are below a specified threshold. This exemption threshold was derived based on general population 1-g SAR requirements and is detailed in Appendix C.

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

Where

$$x = -\log_{10} \left( \frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right) \text{ and } f \text{ is in GHz;}$$

and

$$ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

### 2. RF Exposure Test Exemptions for Single Source

| Mode                 | Frequency Range (MHz) | Minimum Separation Distance (cm) | Maximum Average Target Power (dBm) | Maximum Tune up (dB) | Maximum Average Output Power |       | Ant. Gain (dBi) | ERP   |      | Limits $P_{th}$ (mW) | Ratio <sup>1)</sup> | Result |
|----------------------|-----------------------|----------------------------------|------------------------------------|----------------------|------------------------------|-------|-----------------|-------|------|----------------------|---------------------|--------|
|                      |                       |                                  |                                    |                      | (dBm)                        | (mW)  |                 | (dBm) | (mW) |                      |                     |        |
| Bluetooth Low Energy | 2 402 ~ 2 480         | 20                               | 0                                  | 1.5                  | 1.5                          | 1.413 | 3.19            | 2.54  | 1.79 | 3060                 | 0.001               | Pass   |

Note ;

- ERP (dBm) = Maximum average power (dBm) + Antenna gain (dBi) -2.15
- Maximum average target power is the manufacturer's declared rated power.
- Maximum average output power = Maximum average target power (dBm) + Maximum tune up (dB).

1) A greater value between the ERP(dBm) and the Maximum average output power(dBm) is applied.

### 3. Conclusion: No SAR is required.