# **RF** exposure evaluation

## FCC ID: 2AXDO-XAW-01L

### § 2.1093 Radiofrequency radiation exposure evaluation: Portable Devices.

According to § 15.247(i) and § 1.1307b(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the commission's guidance.

The 1-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq$  50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance,

mm)]  $\cdot [\sqrt{f(GHz)}] \le 3.0$  for 1-g SAR, where

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- When the minimum test separation distance is < 5 mm, a distance of 5 mm according is applied to determine SAR test exclusion.
- The result is rounded to one decimal place for comparison

#### • For BT:

| Channel | Frequency<br>(GHz) | Max.<br>Power<br>(dBm) | Tune<br>up<br>Power<br>(dBm) | Max.<br>Tune<br>up<br>Power<br>(dBm) | Max.<br>Tune<br>up<br>Power<br>(mW) | Test<br>distance<br>(mm) | Result | exclusion<br>thresholds<br>for 1-g<br>SAR |
|---------|--------------------|------------------------|------------------------------|--------------------------------------|-------------------------------------|--------------------------|--------|---|
| CH 78   | 2.480              | -2.92                  | -2.0±1                       | -1.0                                 | 0.79                                | 5                        | 0.25   | 3.0                                       |

For BLE:

| Channel | Frequency<br>(GHz) | Max.<br>Power<br>(dBm) | Tune<br>up<br>Power<br>(dBm) | Max.<br>Tune<br>up<br>Power<br>(dBm) | Max.<br>Tune<br>up<br>Power<br>(mW) | Test<br>distance<br>(mm) | Result | exclusion<br>thresholds<br>for 1-g<br>SAR |
|---------|--------------------|------------------------|------------------------------|--------------------------------------|-------------------------------------|--------------------------|--------|---|
| CH 00   | 2.402              | -5.38                  | -5.0±1                       | -4.0                                 | 0.40                                | 5                        | 0.12   | 3.0                                       |

#### **Result:**

Base on the calculation value, No SAR measurement is required.