

## \* RF Exposure

### 1. Regulation

According to §15.247(i), 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 levels in excess of the Commission's guidelines. See § 1.1307(b)(1) of this Chapter.

#### **KDB447498 was used as the guidance.**

According to §1.1310 and §2.1093 RF exposure is calculated.

### 1.1 Result

| Test frequency<br>(GHz) | Conducted Output<br>Power<br>(dBm) | Conducted Output<br>Power<br>(mW) | Min. Test Separation<br>Distance<br>(mm) | SAR Test Exclusion<br>Thresholds<br>≤ 3.0 for 1-g SAR |
|-------------------------|------------------------------------|-----------------------------------|------------------------------------------|-------------------------------------------------------|
| 2.427                   | 0.0                                | 1.00                              | 5.0                                      | 0.31                                                  |

#### 1. SAR test exclusion thresholds

$$= [(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}]$$
$$= [(1.00)/(5)] \cdot [\sqrt{2.427}] = 0.31$$

| Test frequency<br>(GHz) | Target power<br>(dBm) | Allowed tolerant<br>(dB) | Max tune up power<br>(dBm) | Measured<br>Average power<br>(dBm) |
|-------------------------|-----------------------|--------------------------|----------------------------|------------------------------------|
| 2.427                   | -2.0                  | ±2                       | 0.0                        | -0.91                              |
| 2.441                   | -2.0                  | ±2                       | 0.0                        | -1.18                              |
| 2.457                   | -2.0                  | ±2                       | 0.0                        | -1.30                              |

### 1.2 RF Exposure Compliance Issue

Therefore, EUT is not required the SAR Evaluation.