

* 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 (GHz) | Conducted output power (dBm) | Conducted output power (mW) | Min. test separation distance (mm) | SAR test exclusion thresholds ≤ 3.0 for 1-g SAR |
|-------------------------|------------------------------------|-----------------------------------|--|---|
| 2.480 | 7.5 | 5.62 | 5 | 1.77 |

1. SAR test exclusion thresholds

$$= [(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \\ = [(5.62)/(5)] \cdot [\sqrt{2.480}] = 1.77$$

| Mode | Target power (dBm) | Allowed tolerant (dB) | Max tune up power (dBm) | Measured Average power (dBm) |
|-------|-----------------------|--------------------------|----------------------------|------------------------------------|
| GFSK | 6 | ±1.5 | 7.5 | 6.985 |
| 8DPSK | 3 | ±1.5 | 4.5 | 4.221 |

1.2 RF Exposure Compliance Issue

Therefore, EUT is not required the SAR Evaluation.