

## \* 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

Mode	Test frequency (GHz)	Conducted output power (dBm)	Conducted output power (mW)	Min. test separation distance (mm)	SAR test exclusion thresholds ≤ 3.0 for 10-g SAR
Bluetooth	2.480	7.00	5.01	5.00	1.58

#### 1. SAR test exclusion thresholds

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

$$Bluetooth = [(5.01)/(5)] \cdot [\sqrt{2.480}] = 1.58$$

Mode	Target power [dBm]	Tolerance [dB]	Max tuneup power [dBm]	Average Power [dBm]
GFSK-Lowest	6.00	1.00	7.00	5.53
GFSK-Middle	6.00	1.00	7.00	6.11
GFSK-Highest	6.00	1.00	7.00	6.49
π/4DQPSK-Lowest	3.00	1.00	4.00	2.79
π/4DQPSK-Middle	3.00	1.00	4.00	3.33
π/4DQPSK-Highest	3.00	1.00	4.00	3.78
8DPSK-Lowest	3.00	1.00	4.00	2.67
8DPSK-Middle	3.00	1.00	4.00	3.37
8DPSK-Highest	3.00	1.00	4.00	3.73

### 1.2 RF Exposure Compliance Issue

Therefore, EUT is not required the SAR Evaluation.