

7. RF Exposure Requirements

7.1 Test Equipment

Please refer to Section 10 this report.

7.2 Limit

According to FCC 15.247(e)(i) and FCC 1.1307(b)(1), Systems operating under 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 Commissions guidelines.

According to KDB 447498 section 4.3.1, the 1-g SAR test exclusion thresholds at test separation Distances \leq 50 mm are determined by:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$$

Frequency Range		Maximum measured transmitter power frequency(MHz)	SAR Limitation (mW)
Low Frequency(MHz)	High Frequency(MHz)		
2402	2480	2480	3.0

7.3 Test Result

Product	: BLUETOOTH SPEAKER	Test Mode	: Bluetooth 4.1 LE
Test Item	: RF Exposure	Temperature	: 25 °C
Test Voltage	: DC 3.7V	Humidity	: 56%RH
Test Result	: PASS		

RF Exposure Requirements	Compliance with FCC Rules
<p>EIRP=PxG</p> <p>Where:</p> <p>P=Power input to antenna</p> <p>G=Power gain of the antenna relative to an isotropic radiator</p>	<p>The maximum tune-up limit power is 0.98mW@ 2.480GHz</p> <p>Prediction distance: 5mm</p> <p>$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] = 0.31 \leq 3.0$</p> <p>Conclusion: No SAR is required.</p>