

RF Exposure

FCC ID : 2AD2W-RODSMPCAM

IC ID : 25971-RODSMPCAM

Portable device

According to §15.247(e)(i) and §1.1307(b)(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 guidelines.

According to KDB447498 D01 General RF Exposure Guidance V06

The 1-g SAR and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where:

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

Band of Operation		Conducted Power w/tolerance dBm	Conducted Power w/tolerance mW	Distance (R) mm	Result calculation	SAR Exclusion threshold	Result
Type	MHz						
Bluetooth	2402 - 2480 (2441)	3.24	2.11 mW	<5	0.65889	3.00	Pass
LE	2402 - 2480 (2440)	2.61	1.82 mW	<5	0.57445	3.00	Pass

According to RSS-102 issue 5, section 2.5.1 table1 SAR evaluation–Exemption limits.

Band of Operation		Conducted Power w/tolerance dBm	Antenna Gain dBi	E.i.r.p w/tolerance dBm	E.i.r.p w/tolerance mW	Distance (R) mm	Limit mW	Result
Type	MHz							
Bluetooth	2402 - 2480 (2441)	2.24	0.5	2.74	1.88 mW	<5	4.04909	Pass
LE	2402 - 2480 (2440)	2.61	0.5	3.11	2.05 mW	<5	3.94286	Pass

Note: ϕ is Frequency of max power.

Conclusion:

SAR is not required.