



SAR exemption evaluation

Applicant Bosch Sensortec GmbH
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Product IoT Hub
Model IoT Hub
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Conducted Power

Network Standards	Carrier frequency (MHz)	Conducted Output Power (dBm)	Conclusion
Bluetooth (Low Energy)	2402	-0.66	PASS
	2440	-0.54	PASS
	2480	-1.01	PASS

Per KDB 447498 D01, the 1-g 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

- $f(\text{GHz})$ 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

Per KDB 447498 D01, when the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

Bluetooth	Distance (mm)	MAX Power (dBm)	Frequency (MHz)	Ratio	Evaluation
Head	5	-0.54	2480	0.28	No
Body-worn	10	-0.54	2480	0.09	No