



Standalone SAR test exclusion considerations: Bluetooth

RF feature	Mode	Transmitting Frequency(MHz)	Test separation distance (mm) ^{Note1}	ANT Gain (dBi)	Max. power with tune-up tolerance (dBm) ^{Note2}	Max. power with tune-up tolerance (mW)	Power thresholds	SAR test exclusion thresholds
BT	1Mbps	2480.00	5.0	-0.10	3.50	2.2387	0.71	3.00
BT	2Mbps	2480.00	5.0	-0.10	1.50	1.4125	0.44	3.00
BT	3Mbps	2480.00	5.0	-0.10	1.50	1.4125	0.44	3.00

Note1. The minimum separation distance between antenna and user is 5mm. But we applied a closer distance to calculate the worst results.

Exact antenna dimensions and separation distances are shown in the "Attestation letter" in the FCC filing.

Note2. Please refer to the operation description for Max.tune-up power.

KDB 447498 D01 clause 4.3.1 Step 1) SAR test exclusion thresholds for 100MHz to 6GHz at test separation distances ≤ 50 mm

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

Sample Calculation

$$= [(2.2387\text{mW} / 5\text{mm})] \times [\sqrt{2.48\text{GHz}}] = 0.71$$

Note. The calculation result was rounded to two decimal places for comparison.

Conclusion : SAR evaluation for general population exposure conditions by measurement or numerical simulation is not required