

RF Exposure Report

FCC ID: 2AF7A-A30

SAR Test Exclusion Calculations

1. FCC: According to KDB 447498 D01 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies v06.
 - (1) Clause 4.3: General SAR test reduction and exclusion guidance
 - Sub clause 4.31: Standalone SAR test exclusion considerations
 - 1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6GHz at test separation distance ≤ 5 mm are determined by:

$$\frac{[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation, mm})]^*[\sqrt{f_{(\text{GHz})}}]}{\leq 3.0 \text{ for 1-g SAR}}$$

$$\frac{[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation, mm})]^*[\sqrt{f_{(\text{GHz})}}]}{\leq 7.5.0 \text{ for 10-g SAR}}$$

Bluetooth V4.2: 2402~2480 MHz

(BLE)GFSK, Pi/4-QDPSK, 8-DPSK

Test separation: 5mm					
Protocol	Channel Frequency (MHz)	Output Power Conducted Power (dBm)	Output Power Conducted Power (mW)	Calculation Value (mW/mm ²)	Limit (mW/mm ²)
GFSK	2402	4.13	2.59	0.802	3.0
Pi/4-QDPSK	2402	5.35	3.43	1.062	3.0
8-DPSK	2402	5.63	3.66	1.133	3.0
BLE	2402	0.89	1.23	0.380	3.0

Then SAR evaluation is not required

***** END OF REPORT *****