

FCC ID:2AIOIIR517

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

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

$f(\text{GHz})$ 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;

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz.

We used a distance 5mm to calculated

Maximum measured transmitter power:

WIFI :

802.11b/g/n HT20/n HT40:

Transmit Frequency (GHz)	Mode	Max Conducted Power (dBm)	tune-up power (dBm)	Max tune-up power (dBm)	Result calculation	1-g SAR
2.412	11b	8.72	8.0±1	9.0	2.4673	3.0
2.437	11b	8.67	8.0±1	9.0	2.4800	3.0
2.462	11b	8.58	8.0±1	9.0	2.4927	3.0
2.412	11g	8.47	8.0±1	9.0	2.4673	3.0
2.437	11g	8.49	8.0±1	9.0	2.4800	3.0
2.462	11g	8.51	8.0±1	9.0	2.4927	3.0
2.412	11n HT20	8.37	8.0±1	9.0	2.4673	3.0
2.437	11n HT20	8.35	8.0±1	9.0	2.4800	3.0
2.462	11n HT20	8.39	8.0±1	9.0	2.4927	3.0
2.422	11n HT40	8.10	8.0±1	9.0	2.4724	3.0
2.437	11n HT40	8.09	8.0±1	9.0	2.4800	3.0
2.452	11n HT40	8.11	8.0±1	9.0	2.4877	3.0

Conclusion:

For the max result : $2.4927 \leq 3.0$ for 1-g SAR extremity SAR, No SAR is required.

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