

FCC ID: 2BSFY-DIFFUSER

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.

2.4GWIFI:

Modulation	Channel Freq. (GHz)	Conduct ed power (dBm)	Conducte d power (mW)	Tune-up power (dBm)	Max tune-up power (dBm)	Max tune-up power (mW)	Distance (mm)	Result calculation	SAR Exclusion threshold	SAR test exclusion
802.11b	2.412	8.358	6.85	8±1	9.00	7.94	<5	2.46728	3.00	YES
	2.437	8.763	7.52	8±1	9.00	7.94	<5	2.48003	3.00	YES
	2.462	8.331	6.81	8±1	9.00	7.94	<5	2.49272	3.00	YES
802.11g	2.412	8.395	6.91	8±1	9.00	7.94	<5	2.46728	3.00	YES
	2.437	8.842	7.66	8±1	9.00	7.94	<5	2.48003	3.00	YES
	2.462	8.427	6.96	8±1	9.00	7.94	<5	2.49272	3.00	YES
802.11n(HT20)	2.412	7.955	6.24	7±1	8.00	6.31	<5	1.95983	3.00	YES
	2.437	8.394	6.91	8±1	9.00	7.94	<5	2.48003	3.00	YES
	2.462	8.003	6.31	8±1	9.00	7.94	<5	2.49272	3.00	YES
802.11n(HT40)	2.422	8.324	6.80	8±1	9.00	7.94	<5	2.47239	3.00	YES
	2.437	8.555	7.17	8±1	9.00	7.94	<5	2.48003	3.00	YES
	2.452	8.544	7.15	8±1	9.00	7.94	<5	2.48766	3.00	YES

Conclusion:

For the max result : $2.49272 \leq \text{FCC Limit } 3.0$ for 1g SAR.