

FCC ID: 2BCH7-SHIELD-LD

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.

BLE

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
BLE-1M	2.402	0.76	1.19	0±1	1	1.26	<5	0.39023	3.00	YES
	2.440	0.93	1.24	0±1	1	1.26	<5	0.39330	3.00	YES
	2.480	0.42	1.10	0±1	1	1.26	<5	0.39651	3.00	YES
BLE-2M	2.402	0.78	1.20	0±1	1	1.26	<5	0.39023	3.00	YES
	2.440	0.92	1.24	0±1	1	1.26	<5	0.39330	3.00	YES
	2.480	0.4	1.10	0±1	1	1.26	<5	0.39651	3.00	YES

BR+EDR:

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
GFSK	2.402	0.59	1.15	0±1	1	1.26	<5	0.39023	3.00	YES
	2.441	0.75	1.19	0±1	1	1.26	<5	0.39338	3.00	YES
	2.480	0.27	1.06	0±1	1	1.26	<5	0.39651	3.00	YES
$\pi/4$ -DQPSK	2.402	1.35	1.36	1±1	2	1.58	<5	0.49127	3.00	YES
	2.441	1.54	1.43	1±1	2	1.58	<5	0.49524	3.00	YES
	2.480	1.04	1.27	1±1	2	1.58	<5	0.49918	3.00	YES
8-DPSK	2.402	1.62	1.45	1±1	2	1.58	<5	0.49127	3.00	YES
	2.441	1.8	1.51	1±1	2	1.58	<5	0.49524	3.00	YES
	2.480	1.33	1.36	1±1	2	1.58	<5	0.49918	3.00	YES

Conclusion:

For the max result : $0.49918 \leq 3.0$ for 1g SAR, SAR is not required.



Signature:

Date: 8/30/2023

NAME AND TITLE (Please print or type): Alex li /Manager

COMPANY (Please print or type): Shenzhen NTEK Testing Technology Co., Ltd./ 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street Bao'an District, Shenzhen P.R. China.