

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.

BT:

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	5.50	3.55	6±1	7	5.01	<5	1.55352	3.00	YES
	2.441	6.26	4.23	6±1	7	5.01	<5	1.56608	3.00	YES
	2.480	4.96	3.13	5±1	6	3.98	<5	1.25388	3.00	YES
$\pi/4$ -DQPSK	2.402	5.43	3.49	6±1	7	5.01	<5	1.55352	3.00	YES
	2.441	6.21	4.18	6±1	7	5.01	<5	1.56608	3.00	YES
	2.480	4.92	3.10	5±1	6	3.98	<5	1.25388	3.00	YES
8-DPSK	2.402	5.49	3.54	6±1	7	5.01	<5	1.55352	3.00	YES
	2.441	6.24	4.21	6±1	7	5.01	<5	1.56608	3.00	YES
	2.480	4.91	3.10	5±1	6	3.98	<5	1.25388	3.00	YES

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
GFSK (1M)	2.402	5.51	3.56	5±1	6	3.98	<5	1.23400	3.00	YES
	2.440	5.51	3.56	5±1	6	3.98	<5	1.24373	3.00	YES
	2.480	4.97	3.14	5±1	6	3.98	<5	1.25388	3.00	YES

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 (2M)	2.402	5.44	3.50	5±1	6	3.98	<5	1.23400	3.00	YES
	2.440	5.43	3.49	5±1	6	3.98	<5	1.24373	3.00	YES
	2.480	4.90	3.09	5±1	6	3.98	<5	1.25388	3.00	YES

Conclusion:

For the max result : $1.56608 \leq 3.0$ for 1g SAR, No SAR is required.

Alex

Signature:

Date: 2021-05-31

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.