

FCC ID: S7A-SP159

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:

Antenna Type: Chip antenna

Antenna Gain: 0.47dBi;

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	1g SAR Exclusion threshold	SAR test exclusion
GFSK	2.402	1.69	1.476	2±1	3	1.995	<5	0.61847	3.00	YES
	2.441	1.55	1.429	2±1	3	1.995	<5	0.62347	3.00	YES
	2.480	1.21	1.321	2±1	3	1.995	<5	0.62843	3.00	YES
$\pi/4$ -DQPSK	2.402	1.69	1.476	2±1	3	1.995	<5	0.61847	3.00	YES
	2.441	1.52	1.419	2±1	3	1.995	<5	0.62347	3.00	YES
	2.480	1.20	1.318	2±1	3	1.995	<5	0.62843	3.00	YES
8-DPSK	2.402	1.76	1.500	2±1	3	1.995	<5	0.61847	3.00	YES
	2.441	1.59	1.442	2±1	3	1.995	<5	0.62347	3.00	YES
	2.480	1.31	1.352	2±1	3	1.995	<5	0.62843	3.00	YES

BLE:

Antenna Type: Chip antenna

Antenna Gain: 0.47dBi;

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	1g SAR Exclusion threshold	SAR test exclusion
BLE(1M)	2.402	1.27	1.340	1±1	2	1.585	<5	0.49127	3.00	YES
	2.440	1.10	1.288	1±1	2	1.585	<5	0.49514	3.00	YES
	2.480	0.67	1.167	1±1	2	1.585	<5	0.49918	3.00	YES
BLE(2M)	2.402	1.26	1.337	1±1	2	1.585	<5	0.49127	3.00	YES
	2.440	1.08	1.282	1±1	2	1.585	<5	0.49514	3.00	YES
	2.480	0.72	1.180	1±1	2	1.585	<5	0.49918	3.00	YES

SRD2.4G:

Antenna Type 1: Chip antenna, Antenna gain 1:0.47dBi;

Antenna Type 2: PCB antenna, Antenna gain 2:0.58 dBi;

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	1g SAR Exclusion threshold	SAR test exclusion
OQPSK (Ant1)	2.405	8.91	7.780	8±1	9	7.943	<5	2.46370	3.00	YES
	2.440	7.86	6.109	8±1	9	7.943	<5	2.48156	3.00	YES
	2.480	7.06	5.082	8±1	9	7.943	<5	2.50182	3.00	YES
OQPSK (Ant2)	2.405	9.07	8.072	8.5±1	9.5	8.913	<5	2.76432	3.00	YES
	2.440	9.29	8.492	8.5±1	9.5	8.913	<5	2.78436	3.00	YES
	2.480	7.56	5.702	8.5±1	9.5	8.913	<5	2.80709	3.00	YES

Note: BT and SRD2.4G cannot be transmitted simultaneously.

Conclusion:

For the max result : 2.80709≤ 3.0 for 1-g SAR, No SAR is required.

Signature: 

Date: 2025-06-16

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

COMPANY (Please print or type): Shenzhen NTEK Testing Technology Co., Ltd./ No. 24 Xinfu East Road, Xiangshan Community, Xinqiao Street, Baoan District, Shenzhen, Guangdong, People's Republic of China.