

Portable device

According to §15.249 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.

Antenna Type: PCB Antenna

Antenna Gain: 0 dBi

Transmit power:

Frequency (MHz)	EIRP power (dBuV/m)	EIRP power (dBm)	EIRP power (mW)
2407	86.39	-8.87	0.13
2448	84.63	-10.63	0.09
2459	85.87	-9.39	0.12

$\text{EIRP} = \text{E} - 104.8 + 20\log(D)$

Maximum Permissible Exposure:

Modulation	Channel Freq. (GHz)	Conducted power (dBm)	Conducted 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
FSK	2.407	-8.87	0.130	-8 \pm 1	-7.0	0.200	<5	0.062	3.00	YES
	2.448	-10.63	0.086	-10 \pm 1	-9.0	0.126	<5	0.039	3.00	YES
	2.459	-9.39	0.115	-9 \pm 1	-8.0	0.158	<5	0.050	3.00	YES

Conclusion:

For the max result : $0.062 \leq 3.0$ for 1-g SAR, No SAR is required.



Signature:

Date: 2024-07-12

NAME AND TITLE (Please print or type): Alex /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 518126 P.R. China