FCC ID:2AK6D-VTK5000

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:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]·[√f(GHZ)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where:

- f(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:

1M

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	SAR Exclusion threshold	SAR test exclusion
GFSK	2.402	-1.488	0.71	-1±1	0.00	1.00	<5	0.30997	3.00	YES
	2.44	-1.319	0.74	-1±1	0.00	1.00	<5	0.31241	3.00	YES
	2.480	-1.91	0.64	-1±1	0.00	1.00	<5	0.31496	3.00	YES

2M

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	SAR Exclusion threshold	SAR test exclusion
GFSK	2.402	-2.069	0.62	-2±1	-1.00	0.79	<5	0.24622	3.00	YES
	2.44	-3.066	0.49	-3±1	-2.00	0.63	<5	0.19712	3.00	YES
	2.480	-3.911	0.41	-3±1	-2.00	0.63	<5	0.19873	3.00	YES

2.4GHz:

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	SAR Exclusion threshold	SAR test exclusion
GFSK	2.402	1.502	1.41	1±1	2.00	1.58	<5	0.49127	3.00	YES

Note:dbm=dbuv/m-95.2=97.04-95.2=1.84dBm(EIRP), so the conduct peak power=1.84-0.338=1.502dBm

Conclusion:

For the max result : 0.49127≤ FCC Limit 3.0 for 1g SAR.