

FCC ID: 2AHXJ-M2018

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: ANT1:

1M

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	-0.14	0.97	0±1	1.00	1.26	<5	0.39023	3.00	YES
	2.44	0.057	1.01	0±1	1.00	1.26	<5	0.39330	3.00	YES
	2.480	-0.428	0.91	0±1	1.00	1.26	<5	0.39651	3.00	YES

2M

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	-0.031	0.99	0±1	1.00	1.26	<5	0.39023	3.00	YES
	2.44	0.198	1.05	0±1	1.00	1.26	<5	0.39330	3.00	YES
	2.480	-0.295	0.93	0±1	1.00	1.26	<5	0.39651	3.00	YES

BLE: ANT2:

1M

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	-0.18	0.96	0±1	1.00	1.26	<5	0.39023	3.00	YES
	2.44	-0.026	0.99	0±1	1.00	1.26	<5	0.39330	3.00	YES
	2.480	-0.75	0.84	0±1	1.00	1.26	<5	0.39651	3.00	YES

2M

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	-0.108	0.98	0±1	1.00	1.26	<5	0.39023	3.00	YES
	2.44	0.135	1.03	0±1	1.00	1.26	<5	0.39330	3.00	YES
	2.480	-0.467	0.90	0±1	1.00	1.26	<5	0.39651	3.00	YES

BLE: ANT3:

1M

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	-0.075	0.98	0±1	1.00	1.26	<5	0.39023	3.00	YES
	2.44	0.079	1.02	0±1	1.00	1.26	<5	0.39330	3.00	YES
	2.480	-0.471	0.90	0±1	1.00	1.26	<5	0.39651	3.00	YES

2M

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	0.019	1.00	0±1	1.00	1.26	<5	0.39023	3.00	YES
	2.44	0.229	1.05	0±1	1.00	1.26	<5	0.39330	3.00	YES
	2.480	-0.303	0.93	0±1	1.00	1.26	<5	0.39651	3.00	YES

2.4GHz: ANT1:

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	-0.109	0.98	0±1	1.00	1.26	<5	0.39023	3.00	YES
	2.44	0.04	1.01	0±1	1.00	1.26	<5	0.39330	3.00	YES
	2.480	-0.401	0.91	0±1	1.00	1.26	<5	0.39651	3.00	YES

2.4GHz: ANT2:

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	-0.057	0.99	0±1	1.00	1.26	<5	0.39023	3.00	YES
	2.44	0.064	1.01	0±1	1.00	1.26	<5	0.39330	3.00	YES
	2.480	-0.488	0.89	0±1	1.00	1.26	<5	0.39651	3.00	YES

2.4GHz: ANT3:

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	-0.091	0.98	0±1	1.00	1.26	<5	0.39023	3.00	YES
	2.44	0.102	1.02	0±1	1.00	1.26	<5	0.39330	3.00	YES
	2.480	-0.451	0.90	0±1	1.00	1.26	<5	0.39651	3.00	YES

Conclusion:For the max result : $0.39651 \leq$ FCC Limit 3.0 for 1g SAR.