FCC RF Exposure

EUT Description: K12 WIRELESS KARAOKE SPAKER

Model No.: K12 FCC ID: 2BMM8-K12

1. Limits

According to KDB 447498 D01 General RF Exposure Guidance v06 The 1-g 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)]·[$\sqrt{f(GHz)}$]≤3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR

Where:

Result=P/D*√F

F= the RF channel transmit frequency in GHz

P= Maximum turn-up power in mw

D= Min. test separation distance in mm

2. Test Result of RF Exposure Evaluation

	Frequency	Output	Tune	Max Tune	Min test	Result	Limit	SAR Test
	(MHz)	power	Up	Up power	separation		(mW/cm ²)	Exclusion
		(dBm)	Power	(dBm/mW)	distance			
			(dBm)		(mm)			
D. E	0.400	4.40	4 : 4 (0)	4.505	_	0.400	0.0	
BLE	2480	1.43	1±1(2)	1.585	5	0.499	3.0	Pass
EDR	2480	1.61	1±1(2)	1.585	5	0.499	3.0	Pass

Note:

PK Output power= conducted power.

Conducted power see the test report HK2411297298-1E/2E, antenna gain=-0.58dBi

Synchronous launch evaluation: BLE+EDR=0.499+0.499=0.998mW/cm²

Per KDB 447498 D01, when the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine RF Exposure test exclusion. The test exclusion threshold is 0.998 which is≤ 3, RF Exposure testing is not required.

Note: Exclusion Thresholds Results= $[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] <math>\cdot [\sqrt{f_{(GHz)}}]$

 $f_{(\text{GHz})}\,\text{is}$ the RF channel transmit frequency in GHz

Distance=5mm