

RF Exposure Evaluation Report

1 RF EXPOSURE

Product Name: Microphone
 Model No.: K66DG, k66dg-us, k66dg-ca, k66dg-jp, k66dg-eu
 FCC ID: 2BMI6-K66DG

2. RF Exposure Evaluation

FCC KDB447498 D01 General RF Exposure Guidance v06: Mobile and Portable Device, RF Exposure, Equipment Authorization Procedures.

FCC CFR 47 part1 1.1310: Radiofrequency radiation exposure limits.

FCC CFR 47 part2 2.1093 Radiofrequency radiation exposure evaluation: portable devices.

2.1 LIMITS

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances \leq 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}$

- $f(\text{GHz})$ 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

The test exclusions are applicable only when the minimum test separation distance is \leq 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is $<$ 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

2.2 EUT RF EXPOSURE EVALUATION

Worst Mode: GFSK

Channel (MHz)	Conducted Power (dBm)	Tune up Tolerance (dBm)	Maximum tune-up Power		Calculated value	Limit
			(dBm)	(mW)		
3-DH5-2402MHz	1.31	2 \pm 1	3.0	1.995	0.618	3.0
BLE-2480MHz	5.41	5 \pm 1	6.0	3.981	1.254	3.0
2.4G-2402MHz	-3.55	-3 \pm 1	-2.0	0.631	0.196	3.0

dbm=dbuv/m-95.2, so the 2.4G-2402MHz power is 91.65-95.2= -3.55dBm

Max Calculated value 1.254 < 3.0, So there is no require SAR test.