

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 ≤ 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f(\text{GHz})}] \leq 3.0$ 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

The test exclusions are applicable only when the minimum test separation distance is ≤ 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 ± 1	3.0	1.995	0.618	3.0
BLE-2480MHz	5.41	5 ± 1	6.0	3.981	1.254	3.0
2.4G-2402MHz	-3.55	-3 ± 1	-2.0	0.631	0.196	3.0

dbm=dbuv/m-95.2, so the 2.4G-2402MHz power is $91.65-95.2 = -3.55\text{dBm}$

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