

FCC RF Exposure

EUT Description: 2.4GHz wireless microphone system

Model No.: B-3RC

FCC ID: 2BCVT-B-3RC

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:

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

Where:

Result = $P/D \cdot \sqrt{F}$

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

2440MHz:

EIRP(dBm) = 99.75 (dBuV/m) - 95.2 = 4.55 (dBm)

Frequency (MHz)	Output power (dBm)	Tune Up Power (dBm)	Max Tune Up power dBm/mW	Min test separation distance mm	Result	Limit (mW/cm ²)	SAR Test Exclusion
2440	4.55	4 ± 1	5/3.16	5	0.988	3.0	Pass
Note: PK Output power = conducted power. Conducted power see the test report DL-240606007ER , antenna gain = 5.09dBi							

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 0.988 which is ≤ 3 , RF Exposure testing is not required.

Note: Exclusion Thresholds Results = $\left[\frac{\text{max. power of channel, including tune-up tolerance, mW}}{(\text{min. test separation distance, mm})} \right] \cdot \sqrt{f(\text{GHz})}$

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

Distance = 5mm