

FCC RF Exposure

EUT Description: Wireless Microphone

Model No.: VC545,A-K68,A-K78,A-K88,A-K98,A-K58,A-K209,A-K208,A-KX4,EKV006

FCC ID: 2A6SX-VC545

Equipment type: Portable Device

1. Test Procedure

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:

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

where

f(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 6GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

2. Test Result of RF Exposure Evaluation

CH/Frequency	Output power (dBm/ mW)
Channel 49 554.85MHz	5.59/3.622
Channel 50 555.10MHz	5.44/3.500

[554.85MHz, 5.59dBm/3.622mW) output power]

$(3.622\text{mW} / 5\text{mm}) \cdot [\sqrt{0.55485(\text{GHz})}] = 0.54 < 3.0$ for 1-g SAR

Conclusion: No SAR is required

[555.10MHz, 5.44dBm/3.500mW) output power]

$(3.500\text{mW} / 5\text{mm}) \cdot [\sqrt{0.5551(\text{GHz})}] = 0.52 < 3.0$ for 1-g SAR

Conclusion: No SAR is required