

FCC RF Exposure

EUT Description: Wireless Microphone

Model No.: WXM09, WXM09A, WXM09B, WXM09C, WXM09D, WXM09-1, WXM09-2, WXM09-3, WXM09-4

FCC ID: **2A085-WXM09**

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:

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

Where:

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

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

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
587.5	6.31	5.5 ± 1	6.5/4.47	5	0.685	3.0	Pass

Note:

PK Output power= conducted power.

Conducted power see the test report **HK2203020817-E**, antenna gain=1dBi

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 0.685 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