

FCC RF Exposure

EUT Description: wireless microphone

Model No.: BX9-S, BO4-M, BX9, BX8, BX7, BX6, BX5, BX4, BX3, BX2, BX1, FBX-4, FBX-4M, FBX5, FBX6, FBX7, FBX8, FBX9, BM1, BM2, BM3, BM4, BM5, BM6, BM7, BM8, BM9, BM10, YC1, YC2, YC3, YC4, YC5, YC6, YC7, YC8, YC9, YC10, LK1, LK2, LK3, LK4, LK5, LK6, LK7, LK8, LK9, LK10, LM1, LM2, LM3, LM4, LM5, LM6, LM7, LM8, LM9, LM10, KM1, KM2, KM3, KM4, KM5, KM6, KM7, KM8, KM9, KM10, UM1, UM2, UM3, UM4, UM5, UM6, UM7, UM8, UM9, UM10, H1, H2, H3, H4, H5, H6, H7, H8, H9, B118, B218, B318, B518, B618, AM01, AM02, AM03, AM04, AM05, AM06, AM07, AM08, AM09, DR01, DR02, DR03, DR04, DR05, DR06, DR07, DR08, DR09, T8, Q6, Q7, W1, W2

FCC ID: **2A9QH-BX9-S**

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:

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

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
553.8	3.40	3 ± 1	4/2.512	5	0.374	3.0	Pass
Note: PK Output power = conducted power. Conducted power see the test report HK2211094977-E , antenna gain = 2dBi							

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

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

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

Distance = 5mm