

FCC RF Exposure

EUT Description: Speaker
 Model No.: IQ-1510WK
 FCC ID: 2AC5R-IQ1510WK

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:

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

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

	Frequenc y (MHz)	Output power (dBm)	Tune Up Power (dBm)	Max Tune Up power (dBm/mW)	Min test separation distance (mm)	Result	Limit	SAR Test Exclusion
EDR	2402	-0.52	-1 ± 1	0/1.000	5	0.310	3.0	Pass
2.4GWIFI	2437	4.75	4 ± 1	5/3.162	5	0.987	3.0	Pass

Note:

PK Output power= conducted power.

Conducted power see the test report **HK2508214731-1E/2E**, BT antenna gain= 3.64dBi, WIFI antenna gain= 2.66dBi.

BT and 2.4GWiFi Simultaneous evaluation:

$0.310 / 3 + 0.987 / 3 = 0.432 < 1$, SAR testing is not required

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 meets the requirements, SAR 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