

FCC RF Exposure

EUT Description: Barcode Scanner

Model No.: BR312

FCC ID: **2AH6G-BR212BR312**

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

EIRP(dBm) = 99.54(dBuV/m) - 95.2 = 4.34(dBm)

Frequency (MHz)	Output power (dBm)	Tune Up Power (dBm)	Max Tune Up power (dBm/mW)	Min test separation distance mm	Result	Limit	SAR Test Exclusion
2470	4.34	4 ± 1	5/3.162	5	0.994	3.0	Pass
Note: PK Output power = conducted power. Conducted power see the test report HK2412238014-E , antenna gain = 0.56dBi							

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 0.994 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