

FCC RF Exposure

EUT Description: RF 2.4G Remote Control

Model No.: ZX001-24Key-2.4G

FCC ID: 2BRB7-ZX001-24KEY

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 \leq 50 mm are determined by:

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

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

$$\text{EIRP(dBm)} = 95.48(\text{dBuV/m}) - 95.2 = 0.28(\text{dBm})$$

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
2402	0.28	0.1±1(1.1)	1.288	5	0.399	3.0	Pass

Note:
PK Output power= conducted power.
Conducted power see the test report HK2507254105-E, antenna gain=0dBi

Per KDB 447498 D01, when the minimum test separation distance is $<$ 5 mm, a distance of 5 mm is applied to determine SAR test exclusion. The test exclusion threshold is 0.399 which is \leq 3, 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