

FCC RF Exposure

EUT Description: Wireless Controller

Model No.: SW038

FCC ID: **2A29X-SW038**

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

Where:

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

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

	Output power (dBm)	Tune Up Power (dBm)	Max Tune Up power dBm/mW	Min test separation distance mm	Result	Limit	SAR Test Exclusion
BT	1.716	1±1	2/1.58	5	0.49127	3.0	Pass

Note:
PK Output power= conducted power.
Conducted power see the test report **HK2109233623-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 RF Exposure test exclusion. The test exclusion threshold is 0.49127 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(GHz) is the RF channel transmit frequency in GHz

Distance=5mm