

FCC RF Exposure

Product Name: Smart Lock

FCCID: 2A9DX-SMARTLOCK

Model(s): 01.Q02.001.W, 01.Q01.001.B, 01.Q01.002.B, 01.Q01.003.B, 01.Q01.004.B, 01.Q01.005.B, 01.Q01.006.B, 01.Q01.007.B, 01.Q01.008.B, 01.Q01.009.B, 01.Q01.010.B, 01.Q01.011.B, 01.Q01.012.B, 01.Q02.002.W, 01.Q02.003.W, 01.Q02.004.W, 01.Q02.005.W, 01.Q02.006.W, 01.Q02.007.W, 01.Q02.008.W, 01.Q02.009.W, 01.Q02.010.W, 01.Q02.011.W, 01.Q02.012.W
01.QXX.XXX.X(Xstands for 0-9 or A-Z. representing different models via different sales channels)

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:

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	SAR Test Exclusion
2480	4.73	4 ± 1	5/3.16	5	0.995	3.0	Pass
Note: PK Output power= conducted power. Conducted power see the test report HK2307173091-E , antenna gain=2.5dBi							

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 0.995 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