

RF EXPOSURE EVALUATION

EUT Specification

EUT	Smart lock
Model Name	G6, G8
Frequency band (Operating)	☐ WLAN: 2.412GHz ~ 2.462GHz ☐ WLAN: 5.18GHz ~ 5.32GHz / 5.50GHz ~ 5.70GHz ☐ WLAN: 5.745GHz ~ 5825GHz ☒ Others(13.56MHz)
Device category	☒ Portable (<20cm separation) ☐ Mobile (>20cm separation) ☐ Others ____
Antenna diversity	☒ Single antenna ☐ Multiple antennas ☐ Tx diversity ☐ Rx diversity ☐ Tx/Rx diversity
Max. output power	47.53 dBuV/m (-47.728dBm)(0.0000169mW)
Evaluation applied	☐ MPE Evaluation ☒ SAR Evaluation

Standard Requirement

Portable Device

According to §15.247(i) and §1.1307b(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines. See KDB 447498 D01 General RF Exposure Guidance V6, section 4.3.1.

For frequencies below 100 MHz, the following may be considered for SAR test exclusion (also illustrated in Appendix C):

- 1) For *test separation distances* > 50 mm and < 200 mm, the power threshold at the corresponding test separation distance at 100 MHz in step b) is multiplied by $[1 + \log(100/f_{\text{(MHz)}})]$
- 2) For *test separation distances* ≤ 50 mm, the power threshold determined by the equation in c) 1) for 50 mm and 100 MHz is multiplied by ½
- 3) SAR measurement procedures are not established below 100 MHz.

When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any SAR test results below 100 MHz to be acceptable.

Measurement Result

Channel Frequency (GHz)	Max Output power (dBm)	Max tune-up tolerance Output power (dBm)	Max Output power (dBm)	Max Output power (mW)	Threshold Value(mW)
0.01356	-47.728	-47.728 ± 1	-46.728	0.000021	442

power=Transmitter Spurious-95.2= 47.53 -95.2= -47.728dBm

According to KDB447498 D01 V6, threshold at which no 1-g SAR, separation distance is 5mm, and no simultaneous SAR measurement is required.

The SAR measurement is not necessary.