FCC RF Exposure

EUT Description:Smart Knob Lock
Test type.:K11B
Series model:K11,K11A,K11C,K11D,K11E,K11 mini,K11A mini,
K11B mini,K11C mini,K11D mini,K11E mini,K11 PRO,K11A PRO,K11B PRO,K11C PRO,
K11D PRO,K11E PRO,K11 PLUS,K11A PLUS,K11B PLUS,K11C PLUS,K11D PLUS,
K11E PLUS,K11 WF,K11A WF,K11B WF,K11C WF,K11D WF,
K11 MT,K11A MT,K11B MT,K11C MT,K11D MT,K11E MT,
FCC ID: 2A97U-K11
Equipment type: Portable Device

1. Test Procedure
   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:

   [(max. power of channel, including tune-up tolerance, mW)/
   (min. test separation distance, mm)] · [√f(GHz)] ⩽ 3.0 for 1-g SAR and ⩽ 7.5 for 10-g extremity SAR,

   where
   f(GHz) is the RF channel transmit frequency in GHz
   Power and distance are rounded to the nearest mW and mm before calculation The result is rounded to one decimal place for comparison

   The test exclusions are applicable only when the minimum test separation distance is ⩽ 50 mm and for transmission frequencies between 100 MHz and 6GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

2. Test Result of RF Exposure Evaluation

BT

Mode	Channel Freq. (MHz)	Maximum Conducted Output Power(PK) (dBm)	Antenna Gain (dBi)	Antenna gain numeric	Max power (W)
GFSK	2402	1.41	3.5	2.24	0.00138356
	2440	1.59	3.5	2.24	0.00144211
	2480	1.79	3.5	2.24	0.00151008

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance,mm)] · [√f(GHz)]=1.51008/5*√2.480=0.475615≤3.0 Threshold at which no SAR required is and ≤ 3.0 for 1-g SAR, Separation distance is 5mm.

Conclusion：No SAR required