

RF Exposure Evaluation

FCC ID: 2AFRJNFAM1

1. Client Information

Applicant : Noke
Address : 10808 S River Front Pkwy Suite 290 South Jordan, UT 84095USA
Manufacturer : Mapleaf Technology Co., Limited
Address : 5B/1003, Shengtaoshajunyuan Xixiang, Baoan District Shenzhen City, China

2. General Description of EUT

EUT Name	:	Noke Key Fob	
Models No.	:	NFAM1	
Model difference	:	N/A	
Product Description	:	Operation Frequency: 2402~2480 MHz	
		Number of Channel:	Bluetooth 4.0 (BLE): 40 channels
		Max Peak Output Power:	3.605 dBm Conducted Power
		Antenna Gain:	1.80 dBi PCB Antenna
		Modulation Type:	GFSK
Power Supply	:	DC Voltage supplied by cell battery.	
Power Rating	:	DC 3.0V cell battery.	
Connecting I/O Port(S)	:	Please refer to the User's Manual	

Note:

More test information about the EUT please refer the RF Test Report.

SAR Test Exclusion Calculations

1. FCC: According to KDB 447498 D01 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies v05r02.

- (1) Clause 4.3: General SAR test reduction and exclusion guidance

- Sub clause 4.31: Standalone SAR test exclusion considerations

- 1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6GHz at test separation distance ≤ 5 mm are determined by:

- $$\frac{[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation, mm})] * [\sqrt{f_{(\text{GHz})}}]}{\leq 3.0 \text{ for 1-g SAR}}$$

- $$\frac{[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation, mm})] * [\sqrt{f_{(\text{GHz})}}]}{\leq 7.5.0 \text{ for 10-g SAR}}$$

2.

Calculation:

Test separation: 5mm					
BLE Mode					
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	3.605	± 0.5	2.573	0.798	3.0
2.442	2.853	± 0.5	2.164	0.676	3.0
2.480	1.480	± 0.5	1.578	0.497	3.0

So standalone SAR measurements are not required.