



RF Exposure Evaluation

FCC ID: 2BDA2-AK81

1. Client Information

Applicant	:	Shenzhen Wo Ko Xun Electronic Technology Co., Ltd.
Address	:	6F.Hua-yu Technology Building.Niu lan qian xin Vallage Industrial area, Minzhi, LonghuaDistrict, shenzhen City518131, CHINA
Manufacturer	:	Shenzhen Wo Ko Xun Electronic Technology Co., Ltd.
Address	:	6F.Hua-yu Technology Building.Niu lan qian xin Vallage Industrial area, Minzhi, LonghuaDistrict, shenzhen City518131, CHINA

2. General Description of EUT

EUT Name	:	Smart Watch
Model(s) No.	:	AK81, AK80, AK83, AK85, AK86, AK88, AK89, AK90, AK91, AK92, AK93, AK95, AK96, AK97, AK98, AK99, AK77, AK61
Model Difference	:	All these models are identical in the same PCB, layout and electrical circuit, The only difference is appearance.
Product Description	:	Operation Frequency: Bluetooth 5.3(BLE): 2402MHz~2480MHz
	:	Antenna Gain: 0.17dBi FPC Antenna
Power Rating	:	Input: DC 5V, 200mA
Li-ion Polymer Battery	:	3.7V by 400mAh Rechargeable Li-ion battery
Software Version	:	freertos
Hardware Version	:	MOY.M81309.01
Remark: The antenna gain provided by the applicant, the adapter and verified for the RF conduction test and adapter provided by TOBY test lab.		

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 v06.

- (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:

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

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



2. Calculation:

Test separation: 5mm						
Bluetooth LE 1M						
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (dBm)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	4.487	4±1	5	3.162	0.980	3.0
2.440	3.586	4±1	5	3.162	0.988	3.0
2.480	2.444	2±1	3	1.995	0.628	3.0

Test separation: 5mm						
Bluetooth LE 2M						
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (dBm)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	4.643	5±1	6	3.981	1.234	3.0
2.440	3.896	4±1	5	3.162	0.988	3.0
2.480	2.666	3±1	4	2.512	0.791	3.0

The measurement results comply with the FCC Limit per 47 CFR 2.1093 for the uncontrolled RF Exposure and SAR Exclusion Threshold per KDB 447498 v06.

-----END OF THE REPORT-----

