

# RF Exposure Evaluation

## FCC ID:2BDA2-AK75

### 1. Client Information

Applicant	:	Shenzhen Wo Kosun 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 Kosun 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.	:	AK75, AK77, AK80, AK81, AK82, AK83, AK85, AK86, AK88, AK89, AK90, AK91, AK92, AK93, AK95, AK96, AK97, AK98, AK99
Model Difference	:	All these models are identical in the same PCB layout and electrical circuit, the only difference is that appearance.
Product Description	Operation Frequency:	Bluetooth V5.4: 2402MHz~2480MHz
	Antenna Gain:	-7.13dBi Wire Antenna
Power Rating	:	Input: DC 5V
Li-ion Polymer Battery	:	DC 3.8V 800mAh Rechargeable Li-ion battery
Software Version	:	V1.09 9830
Hardware Version	:	T5170

**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  $\leq 5$  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	4.192	4±1	5	3.162	0.980	3.0
2.440	3.545	4±1	5	3.162	0.988	3.0
2.480	2.491	3±1	4	2.512	0.791	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	4.056	4±1	5	3.162	0.980	3.0
2.440	3.408	3±1	4	2.512	0.785	3.0
2.480	2.728	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-----