

# RF Exposure Evaluation

## FCC ID: 2ATK6-W1S

### 1. Client Information

<b>Applicant</b>	:	SHENZHEN LOOKCARE INDUSTRY CO., LTD
<b>Address</b>	:	5F, Bldg H, No.8 East Area, Shangxue Science and Technology Industry, Bantian St, Longgang Dist, Shenzhen, China
<b>Manufacturer</b>	:	SHENZHEN LOOKCARE INDUSTRY CO., LTD
<b>Address</b>	:	5F, Bldg H, No.8 East Area, Shangxue Science and Technology Industry, Bantian St, Longgang Dist, Shenzhen, China

### 2. General Description of EUT

<b>EUT Name</b>	:	TWS
<b>Models No.</b>	:	W1S, W1, W2, W2S, W3, W3S, W5, W5S, W6, W6S, W7, W7S, W8, W8S, W9, W9S, W1 Pro
<b>Model Difference</b>	:	The same product motherboard, different knowledge appearance and model.
<b>Product Description</b>	:	Operation Frequency: Bluetooth 5.1(BT): 2402~2480 MHz
	:	Max. Power: Bluetooth: -0.164 dBm(Max)
	:	Antenna Gain: -0.58dBi Ceramic Antenna
	:	Modulation Type: GFSK
<b>Power Supply (Earphone)</b>	:	USB Input: 5V DC 3.7V by 30mAh Li-ion battery
<b>Power Supply (Charger Box)</b>	:	USB Input: 5V DC 3.7V by 300mAh Li-ion battery
<b>Software Version</b>	:	N/A
<b>Hardware Version</b>	:	W1-6973D-V13
<b>Connecting I/O Port(S)</b>	:	Please refer to the User's Manual
<b>Remark</b>	:	The antenna gain provided by the applicant, the verified for the RF conduction test 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:

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

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

**2. Calculation:**

Test separation: 5mm						
Bluetooth Mode (GFSK)						
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	-0.860	0±1	1	1.259	0.390	3.0
2.441	-0.164	0±1	1	1.259	0.393	3.0
2.480	-0.234	0±1	1	1.259	0.397	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 REPORT-----