RF Exposure Evaluation

FCC ID: 2BDQE-LW8

1. Client Information

Applicant	:	Shenzhen langwei Technology Co., Ltd.
Address	:	505, B12, Yintian Industrial Park, Xixiang, Bao'an, Shenzhen, China
Manufacturer	:	Shenzhen langwei Technology Co., Ltd.
Address	:	505, B12, Yintian Industrial Park, Xixiang, Bao'an, Shenzhen, China

2. General Description of EUT

EUT Name	:	Smart Watch	
Model(s) No.	:	LW8, LW5, LW6, LW7, LW9, LW10, LW11, LW12, LW13, LW14, LW15, LW80, LW81, LW82, LW83, LW84, LW85, LW86, LW87, LW88, LW89, LW90	
Model Difference	:	All these models are identical in the same PCB, layout and electrical circuit, the only difference is appearance.	
Sample ID	:	HC-C-202311-0205-01-01-1#& HC-C-202311-0205-01-01-2#	
Product Description	:	Operation Frequency:	Bluetooth V5.3: 2402MHz~2480MHz
		Number of Channel:	BT: 79 channels BLE: 40 channels
		Antenna Gain:	2.0dBi Internal Antenna
Power Rating	:	USB Input: DC 5V, 150mA DC 3.7V 260mAh 0.96Wh Rechargeable Li-ion battery	
Software Version	:	00.82.00.06-9837	
Hardware Version	:	K07C	
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.

1 A/F., Building.6, Rundongsheng Industrial Zone, Longzhu, Xixiang, Bao'an, Shenzhen, Guangdong, China
Tel: +86 75526509301 Fax: +86 75526509195

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:
   [(max. power of channel, including tune-up tolerance, mW)/(min. test separation, mm)]*[$\sqrt{f_{(GHz)}}$] ≤3.0 for 1-g SAR
   [(max. power of channel, including tune-up tolerance, mW)/(min. test separation, mm)]*[$\sqrt{f_{(GHz)}}$] ≤7.5.0 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	2.761	2±1	3	1.995	0.618	**3.0**
2.441	2.596	2±1	3	1.995	0.623	**3.0**
2.480	2.857	2±1	3	1.995	0.628	**3.0**
Bluetooth Mode (Pi/4-DQPSK)						
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	3.522	3±1	4	2.512	0.779	**3.0**
2.441	3.600	3±1	4	2.512	0.785	**3.0**
2.480	3.705	3±1	4	2.512	0.791	**3.0**
Bluetooth LE Mode(1Mbps)						
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	7.643	7±1	8	6.31	1.956	**3.0**
2.440	7.460	7±1	8	6.31	1.971	**3.0**
2.480	7.428	7±1	8	6.31	1.987	**3.0**
Bluetooth LE Mode(2Mbps)						
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	7.660	7±1	8	6.31	1.956	**3.0**
2.440	7.606	7±1	8	6.31	1.971	**3.0**
2.480	7.558	7±1	8	6.31	1.987	**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-----