



RF Exposure Evaluation

FCC ID: 2BCKX-WATCH5MAX

1. Client Information

Applicant	:	Shenzhen Daiku Technology Co., Ltd
Address	:	605-606, Building E, Longjing Science Park, No.339 Bulong Road, Longgang District, Shenzhen, China
Manufacturer	:	Shenzhen Daiku Technology Co., Ltd
Address	:	605-606, Building E, Longjing Science Park, No.339 Bulong Road, Longgang District, Shenzhen, China

2. General Description of EUT

EUT Name	:	smart watch	
Model(s) No.	:	watch5max	
Model Difference	:	----	
Product Description	:	Operation Frequency:	Bluetooth V5.3: 2402MHz~2480MHz
	:	Antenna Gain:	0dBi Wire Antenna
Power Supply	:	Input: DC 5V/0.2A DC 3.7V 300mAh 1.11Wh Rechargeable Li-ion battery	
Software Version	:	V0.01	
Hardware Version	:	3.0	
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:

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

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



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	0.859	0±1	1	1.259	0.390	3.0
2.441	1.382	1±1	2	1.585	0.495	3.0
2.480	1.484	1±1	2	1.585	0.499	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	1.701	1±1	2	1.585	0.491	3.0
2.441	2.258	2±1	3	1.995	0.623	3.0
2.480	2.315	2±1	3	1.995	0.628	3.0
Bluetooth Mode (8-DPSK)						
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	2.352	2±1	3	1.995	0.618	3.0
2.441	2.885	2±1	3	1.995	0.623	3.0
2.480	2.958	2±1	3	1.995	0.628	3.0

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	0.811	0±1	1	1.259	0.390	3.0
2.440	1.302	1±1	2	1.585	0.495	3.0
2.480	1.33	1±1	2	1.585	0.499	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	0.946	0±1	1	1.259	0.390	3.0
2.440	1.495	1±1	2	1.585	0.495	3.0
2.480	1.522	1±1	2	1.585	0.499	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-----

