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# RF Exposure Evaluation Report

**Report No.:** CQASZ20220100041E-02  
**Applicant:** Shenzhen IWOWN Technology Co., Ltd.  
**Address of Applicant:** 10A, Block C, Tongfang Information Harbor, No.11 Langshan Road, Nanshan District, Shenzhen China  
**Equipment Under Test (EUT):**  
**EUT Name:** Smart Watch  
**Model No.:** VG3, CS169H, CS220C, CR132, CR133, K3.P3.P3pro, CS177, CS178, CS201CH, H1C, BP100, CS169G, P2CG, CK100  
**Test Model No.:** VG3  
**Brand Name:** N/A  
**FCC ID:** 2AKPH-CS196H  
**Standards:** 47 CFR Part 1.1307  
47 CFR Part 2.1093  
KDB447498D01 General RF Exposure Guidance v06  
**Date of Receipt:** 2020-11-03  
**Date of Test:** 2020-11-03 to 2020-11-13  
**Date of Issue:** 2022-1-21  
**Test Result:** **PASS\***

\*In the configuration tested, the EUT complied with the standards specified above

**Tested By:**

*Timo Lei*

( Timo Lei )

**Reviewed By:**

*Rock Huang*

( Rock Huang )

**Approved By:**

*Jack Ai*

( Jack Ai )



The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CQA, this report can't be reproduced except in full.

## 1 Version

### Revision History Of Report

| Report No.           | Version | Description    | Issue Date |
|----------------------|---------|----------------|------------|
| CQASZ20220100041E-02 | Rev.01  | Initial report | 2022-1-21  |

Note:

This test report (Ref. No.: CQASZ20220100041E-02)

All test data comes from source test reports (Ref. No.: CQASZ20201101312E-02).

Only on the basis of the original report Change Model No., Brand Name, Applicant, Address of Applicant, Manufacturer, Address of Manufacturer, Factory, Address of Factory. The tested samples have not been changed.

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### 3 General Information

#### 3.1 Client Information

|                          |                                                                                                                                                             |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Applicant:               | Shenzhen IWOWN Technology Co., Ltd.                                                                                                                         |
| Address of Applicant:    | 10A, Block C, Tongfang Information Harbor, No.11 Langshan Road, Nanshan District, Shenzhen China                                                            |
| Manufacturer:            | Shenzhen IWOWN Technology Co., Ltd.                                                                                                                         |
| Address of Manufacturer: | 10A, Block C, Tongfang Information Harbor, No.11 Langshan Road, Nanshan District, Shenzhen China                                                            |
| Factory:                 | Shenzhen IWOWN Technology Co., Ltd.                                                                                                                         |
| Address of Factory:      | 06A, BULIDING H, INNOVATION YUNGU PLANT, NO.48, PAOTAI ROAD LI SONGLANG COMMUNITY FIRST INDUSTRIAL ZONE, GONGMING STREET, GUANGMING DISTRICT, SHENZHEN CITY |

#### 3.2 General Description of EUT

|                       |                                                                                                                    |
|-----------------------|--------------------------------------------------------------------------------------------------------------------|
| Product Name:         | Smart Watch                                                                                                        |
| Model No.:            | VG3, CS169H, CS220C, CR132, CR133, K3.P3.P3pro, CS177, CS178, CS201CH, H1C, BP100, CS169G, P2CG, CK100             |
| Test Model No.:       | VG3                                                                                                                |
| Trade Mark:           | N/A                                                                                                                |
| Hardware Version:     | V1.1                                                                                                               |
| Software Version:     | 17.0.12.12                                                                                                         |
| Operation Frequency:  | 2402MHz~2480MHz                                                                                                    |
| Bluetooth Version:    | V5.0                                                                                                               |
| Modulation Type:      | GFSK                                                                                                               |
| Transfer Rate:        | 1Mbps                                                                                                              |
| Number of Channel:    | 40                                                                                                                 |
| Product Type:         | <input type="checkbox"/> Mobile <input checked="" type="checkbox"/> Portable <input type="checkbox"/> Fix Location |
| Test Software of EUT: | WCN Combo Tool #1 (manufacturer declare)                                                                           |
| Antenna Type:         | Ceramic antenna                                                                                                    |
| Antenna Gain:         | 2.0dBi                                                                                                             |
| EUT Power Supply:     | lithium battery: DC 3.8V, 250mAh, Charge by DC 5V                                                                  |

Note:

Model No.: VG3, CS169H, CS220C, CR132, CR133, K3.P3.P3pro, CS177, CS178, CS201CH, H1C, BP100, CS169G, P2CG, CK100.

Only the model VG3 was tested, since the circuit design, layout, components used and internal wiring are all the same, except for the color difference.

## 4 SAR Evaluation

### 4.1 RF Exposure Compliance Requirement

#### 4.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

##### 4.3.1. Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

#### 4.1.2 Limits

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$$\frac{[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}]}{\leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}}$$

$f(\text{GHz})$  is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation<sup>17</sup>

The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm is applied to determine SAR test exclusion

#### 4.1.3 EUT RF Exposure

##### 1) For BLE

##### Measurement Data

| GFSK mode        |                            |                            |                       |       |
|------------------|----------------------------|----------------------------|-----------------------|-------|
| Test channel     | Peak Output Power<br>(dBm) | Tune up tolerance<br>(dBm) | Maximum tune-up Power |       |
|                  |                            |                            | (dBm)                 | (mW)  |
| Lowest(2402MHz)  | -0.68                      | -1.5±1                     | -0.5                  | 0.891 |
| Middle(2440MHz)  | -0.47                      | -1.0±1                     | 0                     | 1.000 |
| Highest(2480MHz) | -0.48                      | -1.0±1                     | 0                     | 1.000 |

| Worst case: GFSK                                        |                                                    |                               |                           |       |                     |                        |
|---------------------------------------------------------|----------------------------------------------------|-------------------------------|---------------------------|-------|---------------------|------------------------|
| Channel                                                 | Maximum Peak<br>Conducted<br>Output Power<br>(dBm) | Tune up<br>tolerance<br>(dBm) | Maximum tune-<br>up Power |       | Calculated<br>value | Exclusion<br>threshold |
|                                                         |                                                    |                               | (dBm)                     | (mW)  |                     |                        |
| Lowest<br>(2402MHz)                                     | -0.68                                              | -1.5±1                        | -0.5                      | 0.891 | 0.276               | 3.0                    |
| Middle<br>(2440MHz)                                     | -0.47                                              | -1.0±1                        | 0                         | 1.000 | 0.312               |                        |
| Highest<br>(2480MHz)                                    | -0.48                                              | -1.0±1                        | 0                         | 1.000 | 0.315               |                        |
| Conclusion: the calculated value ≤3.0, SAR is exempted. |                                                    |                               |                           |       |                     |                        |

Remark: The Max Conducted Peak Output Power data refer to report Report No.: CQASZ20220100041E-01