

TEST REPORT

Report No.: BCTC2408476113E

Applicant: SHENZHEN ECARE ELECTRONICS CO., LTD

Product Name: Digital Pool Thermometer Floating

Test Model: TP211B

Tested Date: 2024-08-19 to 2024-08-23

Issued Date: 2024-08-27

Shenzhen BCTC Testing Co., Ltd.



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FCC ID: 2AATP-TP211B

Product Name: Digital Pool Thermometer Floating

Trademark: N/A

Model/Type Ref.: TP211B, TP211BW

Prepared For: SHENZHEN ECARE ELECTRONICS CO., LTD

Address: B201/B401/B501/B601, Hua Li Industrial Building, 404 Yu An Road, Bao An,

Shenzhen, Guang Dong, China 518133

Manufacturer: SHENZHEN ECARE ELECTRONICS CO., LTD

Address: B201/B401/B501/B601, Hua Li Industrial Building, 404 Yu An Road, Bao An,

Shenzhen, Guang Dong, China 518133

Prepared By: Shenzhen BCTC Testing Co., Ltd.

Address: 1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road,

Tangwei, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China

Sample Received Date: 2024-08-19

Sample tested Date: 2024-08-19 to 2024-08-23

Report No.: BCTC2408476113E

Test Standards: FCC Part15.249

ANSI C63.10-2013

Test Results: PASS

Tested by:

Brave 2emg

Brave Zeng/ Project Handler

Approved by:

Zero Zhou/Reviewer

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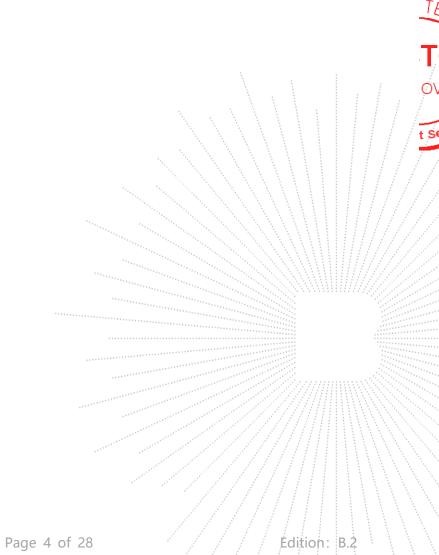
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1. Version

| Report No. | Issue Date | Description | Approved |
|-----------------|------------|-------------|----------|
| BCTC2408476113E | 2024-08-27 | Original | Valid |



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2. Test Summary

The Product has been tested according to the following specifications:

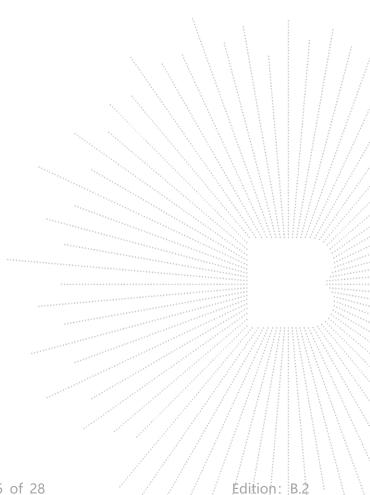
| No. | Test Parameter | Clause No | Results |
|-----|---|--------------|------------------|
| 1 | Conducted Emission | 15.207 | N/A ¹ |
| 2 | 20dB Bandwidth | 15.215 | PASS |
| 3 | Fundamental &Radiated Spurious Emission Measurement | 15.249 | PASS |
| 4 | Band Edge Emission | 15.205 | PASS |
| 5 | Antenna Requirement | 15.203 | PASS |

Remark:

N/A is an abbreviation for not applicable.

NOTE1: The EUT is powered by the DC only, the test item is not applicable

NOTE2: The report use radiated measurements in the restricted frequency bands. In addition, the radiated test is also performed to ensure the emissions emanating from the device cabinet also comply with the applicable limits.



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3. Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the Product as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

| No. | Item | Uncertainty |
|-----|--|-------------|
| 1 | 3m chamber Radiated spurious emission(9kHz-30MHz) | U=3.7dB |
| 2 | 3m chamber Radiated spurious emission(30MHz-1GHz) | U=4.3dB |
| 3 | 3m chamber Radiated spurious emission(1GHz-18GHz) | U=4.5dB |
| 4 | 3m chamber Radiated spurious emission(18GHz-40GHz) | U=3.34dB |
| 5 | Conducted Emission(150kHz-30MHz) | U=3.20dB |
| 6 | Conducted Adjacent channel power | U=1.38dB |
| 7 | Conducted output power uncertainty Above 1G | U=1.576dB |
| 8 | Conducted output power uncertainty below 1G | U=1.28dB |
| 9 | humidity uncertainty | U=5.3% |
| 10 | Temperature uncertainty | U=0.59°C |

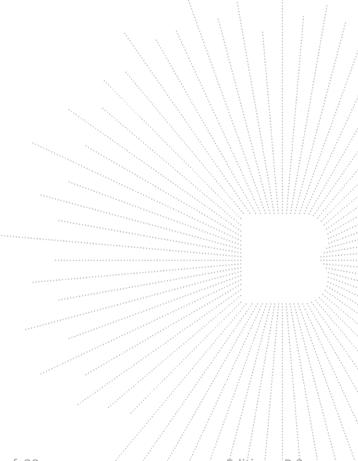
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4. Product Information and Test Setup

4.1 Product Information

| Model/Type Ref.: | TP211B, TP211BW |
|-----------------------|--|
| Model differences: | The following models of units we produce are identical in electrical, mechanical and physical structure; The difference is only in the model name, we finally have TP211B as test model. |
| Hardware Version: | N/A |
| Software Version: | N/A |
| Operation Frequency: | 915 MHz |
| Type of Modulation: | FSK |
| Number Of Channel | 1 Channel |
| Antenna installation: | Internal antenna |
| Antenna Gain: | -5.55dBi |
| Remark: | The antenna gain of the product comes from the antenna report provided by the customer, and the test data is affected by the customer information. |
| Ratings: | Input: DC 3V From battery |



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4.2 Test Setup Configuration

See test photographs attached in *EUT TEST SETUP PHOTOGRAPHS* for the actual connections between Product and support equipment.

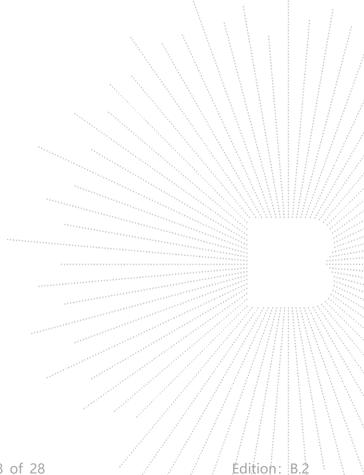
4.3 Support Equipment

| No. | Device Type | Brand | Model | Series No. | Note |
|-----|-------------|-------|-------|------------|------|
| E-1 | N/A | N/A | N/A | N/A | N/A |
| E-2 | N/A | N/A | N/A | N/A | N/A |

| Item | Shielded Type | Ferrite Core | Length | Note |
|------|---------------|--------------|--------|------|
| N/A | N/A | N/A | N/A | |

Notes:

- 1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
- 2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.



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4.4 Channel List

| СН | Frequency (MHz) |
|----|--------------------|
| 1 | 915 |

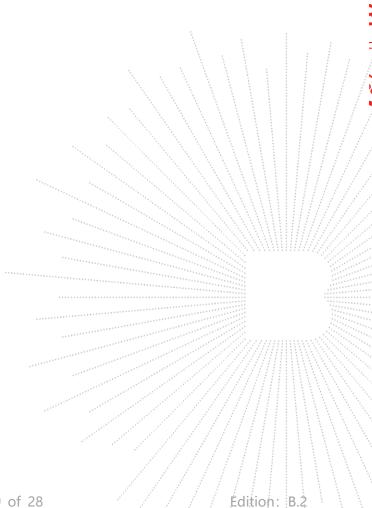
4.5 Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

| Test Mode | Test mode | |
|-----------|-----------|--|
| Mode 1 | TX | |

Note:

(1) The measurements are performed at the available channels.



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5. Test Facility and Test Instrument Used

5.1 Test Facility

All measurement facilities used to collect the measurement data are located at Shenzhen BCTC Testing C o., Ltd. Address:1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuha i Subdistrict, Bao'an District, Shenzhen, Guangdong, China. The site and apparatus are constructed in con formance with the requirements of ANSI C63.4 and CISPR 16-1-1 other equivalent standards.

FCC Test Firm Registration Number: 712850 A2LA certificate registration number is: CN1212

ISED Registered No.: 23583 ISED CAB identifier: CN0017

5.2 Test Instrument Used

| RF Conducted Test | | | | | | |
|-------------------------------------|--------------|--------|------------|--------------|--------------|--|
| Equipment | Manufacturer | Model# | Serial# | Last Cal. | Next Cal. | |
| Power meter | Keysight | E4419 | \ | May 16, 2024 | May 15, 2025 | |
| Power Sensor (AV) | Keysight | E9300A | \ | May 16, 2024 | May 15, 2025 | |
| Signal Analyzer20kH z-26.5GHz | Keysight | N9020A | MY49100060 | May 16, 2024 | May 15, 2025 | |
| Spectrum Analyzer9kHz- 40GHz | R&S | FSP40 | 100363 | May 16, 2024 | May 15, 2025 | |

| | Radiated Emissions Test (966 Chamber) | | | | | | |
|---------------------------------|---------------------------------------|----------------------|------------------|--------------|--------------|--|--|
| Equipment | Manufacturer | Model# | Serial# | Last Cal. | Next Cal. | | |
| 966 chamber | ChengYu | 966 Room | 966 | May 16, 2024 | May 15, 2025 | | |
| Receiver | R&S | ESR3 | 102075 | May 16, 2024 | May 15, 2025 | | |
| Receiver | R&S | ESRP | 101154 | May 16, 2024 | May 15, 2025 | | |
| Amplifier | Schwarzbeck | BBV9744 | 9744-0037 | May 16, 2024 | May 15, 2025 | | |
| TRILOG Broadband Antenna | Schwarzbeck | VULB9163 | 942 | May 21, 2024 | May 20, 2025 | | |
| Loop Antenna(9KHz -30MHz) | Schwarzbeck | FMZB1519B | 00014 | May 21, 2024 | May 20, 2025 | | |
| Amplifier | SKET | LAPA_01G1 8G-45dB | SK202104090 1 | May 16, 2024 | May 15, 2025 | | |
| Horn Antenna | Schwarzbeck | BBHA9120D | 1541 | May 30, 2024 | May 29, 2025 | | |
| Amplifier(18G Hz-40GHz) | MITEQ | TTA1840-35- HG | 2034381 | May 16, 2024 | May 15, 2025 | | |
| Horn Antenn(18GH z-40GHz) | Schwarzbeck | BBHA9170 | 00822 | May 21, 2024 | May 20, 2025 | | |

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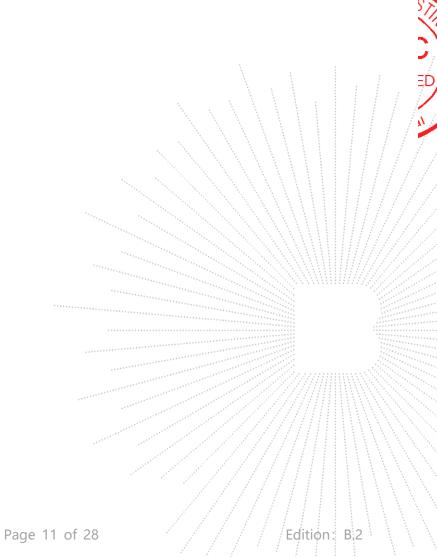
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| Spectrum Analyzer9kHz- 40GHz | R&S | FSP40 | 100363 | May 16, 2024 | May 15, 2025 |
|------------------------------------|------|--------|------------|--------------|--------------|
| Software | Frad | EZ-EMC | FA-03A2 RE | \ | \ |



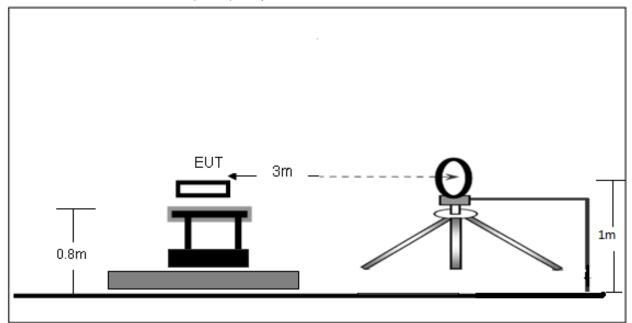
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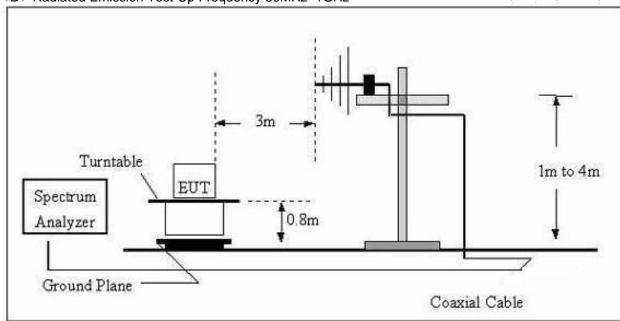
6. Radiated Emissions

6.1 Block Diagram Of Test Setup

(A) Radiated Emission Test-Up Frequency Below 30MHz



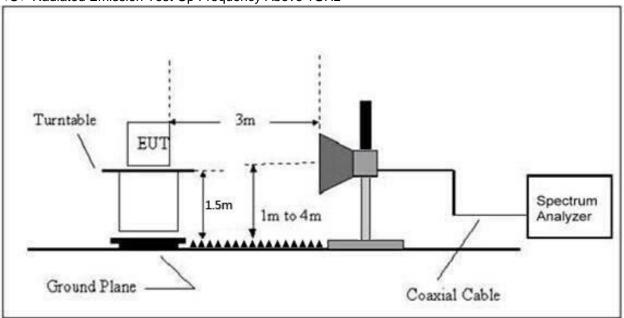
(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



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(C) Radiated Emission Test-Up Frequency Above 1GHz



6.2 Limit

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

| Frequency | Field Strength | Distance | Field Strength Limit at 3m Distance | | | |
|---------------|----------------|----------|-------------------------------------|--------------------------------------|--|--|
| (MHz) | uV/m | (m) | uV/m dBuV/m | | | |
| 0.009 ~ 0.490 | 2400/F(kHz) | 300 | 10000 * 2400/F(kHz) | 20log ^{(2400/F(kHz))} + 80 | | |
| 0.490 ~ 1.705 | 24000/F(kHz) | 30 | 100 * 24000/F(kHz) | 20log ^{(24000/F(kHz))} + 40 | | |
| 1.705 ~ 30 | 30 | 30 | 100 * 30 | 20log ⁽³⁰⁾ + 40 | | |
| 30 ~ 88 | 100 | 3 | 100 | 20log ⁽¹⁰⁰⁾ | | |
| 88 ~ 216 | 150 | 3 | 150 | 20log ⁽¹⁵⁰⁾ | | |
| 216 ~ 960 | 200 | 3 | 200 | 20log ⁽²⁰⁰⁾ | | |
| Above 960 | 500 | 3 | 500 | 20log ⁽⁵⁰⁰⁾ | | |

The field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

| Fundamental frequency | Field strength of fundamental (millivolts/meter) | Field strength of harmonics (microvolts/meter) |
|-----------------------|--|--|
| 902-928 MHz | 50(94 dBV/m) | 500(54 dBV/m) |
| 2400-2483.5 MHz | 50(94 dBV/m) | 500(54 dBV/m) |
| 5725-5875 MHz | 50(94 dBV/m) | 500(54 dBV/m) |
| 24.0-24.25 GHz | 250(108 dBV/m) | 2500(68 dBV/m) |

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LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

| FREQUENCY (MHz) | Limit (dBuV/m) (at 3M) | | |
|--------------------|------------------------|---------|--|
| | PEAK | AVERAGE | |
| Above 1000 | 74 | 54 | |

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

FREQUENCY RANGE OF RADIATED MEASUREMENT (For unintentional radiators)

| Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz) | Range (MHz) | |
|---|---|--|
| Below 1.705 | 30 | |
| 1.705 – 108 | 1000 | |
| 108 – 500 | 2000 | |
| 500 – 1000 | 5000 | |
| Above 1000 | 5 th harmonic of the highest frequency or 40 GHz, whichever is lower | |

6.3 Test Procedure

| Spectrum Parameter | Setting |
|---------------------------------------|--|
| Attenuation | Aùto \\\\\\\ |
| Start Frequency | 1000 MHz \ \ \ \ \ \ |
| Stop Frequency | 10th carrier harmonic |
| RB / VB (emission in restricted band) | 1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average |

| Receiver Parameter | Setting |
|------------------------|----------------------------------|
| Attenuation | Auto |
| Start ~ Stop Frequency | 9kHz~150kHz / RB 200Hz for QP |
| Start ~ Stop Frequency | 150kHz~30MHz / RB 9kHz for QP |
| Start ~ Stop Frequency | 30MHz~1000MHz / RB 120kHz for QP |

Below 1GHz test procedure as below:

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

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- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Above 1GHz test procedure as below:

- g. Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 metre to 1.5 metre(Above 18GHz the distance is 1 meter and table is 1.5 metre).
- h. Test the EUT in the lowest channel ,the middle channel ,the Highest channel.

Note:

Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

Above 1GHz test procedure as below:

- a. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b.The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d.For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e.The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- g.Test the EUT in the lowest channel, the Highest channel.

Note

Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

6.4 EUT Operating Conditions

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

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6.5 Test Result

Below 30MHz

| Temperature: | 26℃ | Relative Humidtity: | 24% | |
|--------------|---------|---------------------|--------------------|--|
| Pressure: | 101 kPa | Test Voltage : | DC 3V From battery | |
| Test Mode : | Mode 1 | Polarization : | | |

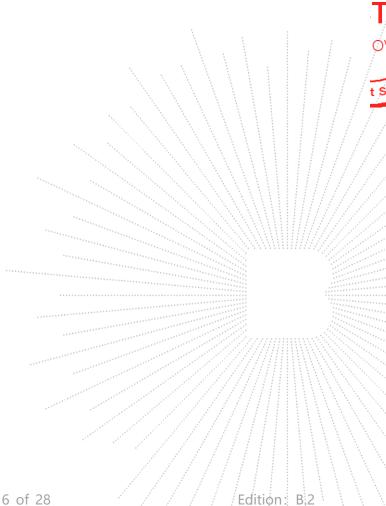
| Freq. | Reading | Limit | Margin | State |
|-------|----------|----------|--------|-------|
| (MHz) | (dBuV/m) | (dBuV/m) | (dB) | P/F |
| | | | | PASS |
| | | | | PASS |

Note:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor =40 log (specific distance/test distance)(dB);

Limit line = specific limits(dBuv) + distance extrapolation factor.

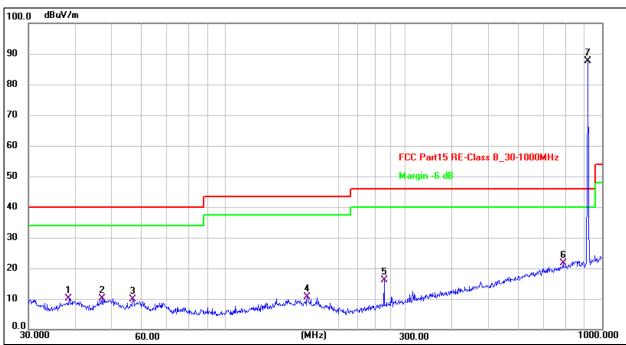


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Between 30MHz - 1GHz

| Temperature: | 26 ℃ | Relative Humidity: | 54% |
|--------------|--------|--------------------|--------------------|
| Pressure: | 101KPa | Phase : | Horizontal |
| Test Mode: | Mode 1 | Test Voltage : | DC 3V From battery |



Remark:

- 1.Factor = Antenna Factor + Cable Loss Pre-amplifier
- 2. Measurement=Reading Level+ Correct Factor
- 3. Over=Measurement-Limit

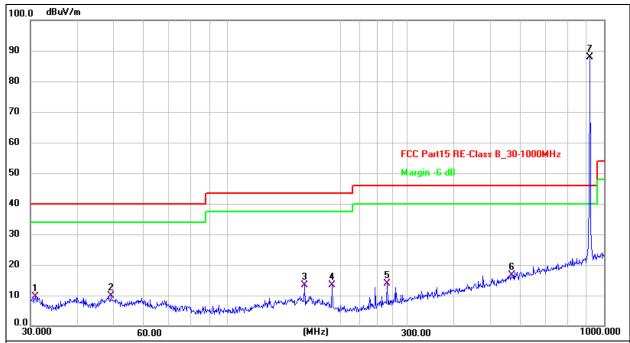
| | | | | | | | 1 1 1 1 |
|-----|--------------------|-------------------|------------------|-------------------|-------------------|----------------|----------|
| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
| 1 | 38.4809 | 27.47 | -17.40 | 10.07 | 40.00 | -29.93 | QP |
| 2 | 46.9948 | 27.23 | -17.15 | 10.08 | 40.00 | -29.92 | QP |
| 3 | 56.7917 | 27.54 | -17.60 | 9.94 | 40.00 | -30.06 | QP |
| 4 | 164.9075 | 27.82 | -17.25 | 10.57 | 43.50 | -32.93 | QP |
| 5 | 263.8190 | 34.42 | -18.19 | 16.23 | 46.00 | -29.77 | QP |
| 6 | 787.8511 | 26.62 | -5.05 | 21.57 | 46.00 | -24.43 | QP |
| 7 * | 916.0684 | 90.66 | -3.15 | 87.51 | 94.00 | 6.49 | QP |
| | | | | | | | |

Note: MARK 7 is Field Strength of Fundamental;





| Temperature: | 26 ℃ | Relative Humidity: | 54% | |
|--------------|--------|--------------------|--------------------|--|
| Pressure: | 101KPa | Phase : | Vertical | |
| Test Mode: | Mode 1 | Test Voltage : | DC 3V From battery | |



Remark:

- 1.Factor = Antenna Factor + Cable Loss Pre-amplifier.
- 2. Measurement=Reading Level+ Correct Factor
- 3. Over=Measurement-Limit

| | | | | | | 3 3 5 | 1 1 1 1 |
|-----|--------------------|----------------|------------------|-------------------|-------------------|----------------|----------|
| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
| 1 | 30.9618 | 27.05 | -17.48 | 9.57 | 40.00 | -30.43 | QP |
| 2 | 49.0144 | 26.92 | -17.06 | 9.86 | 40.00 | -30.14 | QP |
| 3 | 160.3456 | 30.41 | -17.08 | 13.33 | 43.50 | -30.17 | QP |
| 4 | 189.7385 | 32.73 | -19.44 | 13.29 | 43.50 | -30.21 | QP |
| 5 | 265.6757 | 32.11 | -18.12 | 13.99 | 46.00 | -32.01 | QP |
| 6 | 568.6126 | 26.34 | -9.66 | 16.68 | 46.00 | -29.32 | QP |
| 7 * | 916.0686 | 91.14 | -3.15 | 87.99 | 94.00 | -6.01 | QP |
| | | | | | | | |

Note: MARK 7 is Field Strength of Fundamental;



(Above 1000 MHz) Normal Voltage 915MHz

| Polar (H/V) | Frequency | Meter Reading | Factor | Emission Level | Limits | Margin | Detector Type |
|----------------|-----------|------------------|--------|-------------------|----------|--------|------------------|
| (1 " *) | (MHz) | (dBuV) | (dB) | (dBuV/m) | (dBuV/m) | (dB) | 1,700 |
| | | | | | | | |
| V | 1956.24 | 73.44 | -26.55 | 46.89 | 74 | -27.11 | PK |
| V | 1956.24 | 64.58 | -24.52 | 40.06 | 54 | -13.94 | AV |
| V | 2659.51 | 62.95 | -20.59 | 42.36 | 74 | -31.64 | PK |
| V | 2659.51 | 53.67 | -23.62 | 30.05 | 54 | -23.95 | AV |
| V | 3547.42 | 68.52 | -20.47 | 48.05 | 74 | -25.95 | PK |
| V | 3547.42 | 59.54 | -19.69 | 39.85 | 54 | -14.15 | AV |
| Н | 1749.46 | 69.58 | -24.62 | 44.96 | 74 | -29.04 | PK |
| Н | 1749.46 | 64.72 | -29.56 | 35.16 | 54 | -18.84 | AV |
| Н | 2544.47 | 58.44 | -23.49 | 34.95 | 74 | -39.05 | PK |
| Н | 2544.47 | 60.63 | -21.56 | 39.07 | 54 | -14.93 | AV _E |
| Н | 3492.14 | 68.27 | -20.19 | 48.08 | 74 | -25.92 | PK |
| Н | 3492.14 | 58.4 | -24.62 | 33.78 | 54 | -20.22 | AV |

Remark:

Absolute Level= ReadingLevel+ Factor, Margin= Limit- Absolute Level
Other harmonics emissions are lower than 20dB below the allowable limit.

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■ Field Strength of the fundamental signal

| Temperature: | 26°C | Relative Humidity: | 54% | |
|----------------|--------------------|--------------------|------------|--|
| Pressure: | 101kPa | Polarization : | Horizontal | |
| Test Voltage : | DC 3V From battery | | | |
| Test Mode : | Mode 1 | | | |

| Frequency | Meter Reading | Factor | Emission Level | Limits | Margin | Detector Type |
|-----------|------------------|--------|-------------------|----------|--------|----------------|
| (MHz) | (dBµV) | (dB) | (dBµV/m) | (dBµV/m) | (dB) | 20.00.0. 1,700 |
| 915.00 | 96.54 | -3.07 | 93.47 | 114 | -20.53 | Peak |
| 915.00 | 92.17 | -3.07 | 89.10 | 94 | -4.90 | Average |

Remark:

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

All interfaces was connected, and TX mode

| Temperature: | 26°C | Relative Humidity: | 54% | |
|----------------|--------------------|--------------------|----------|--|
| Pressure: | 101kPa | Polarization : | Vertical | |
| Test Voltage : | DC 3V From battery | | | |
| Test Mode : | Mode 1 | | | |

| Frequency | Meter Reading | Factor | Emission Level | Limits | Margin | Detector Type |
|-----------|------------------|--------|-------------------|----------|--------|---------------|
| (MHz) | (dBµV) | (dB) | (dBµV/m) | (dBµV/m) | (dB) | Botootor Typo |
| 915.00 | 86.54 | -3.07 | 83.47 | 114 | -30.53 | Peak |
| 915.00 | 85.49 | -3.07 | 82.42 | 94 | -11.58 | Average |

Remark:

Factor = Antenna Factor + Cable Loss – Pre-amplifier.

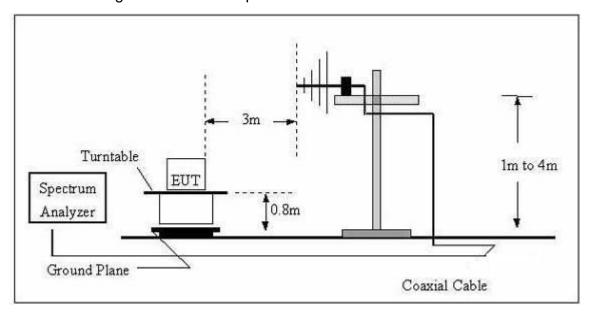
All interfaces was connected, and TX mode

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7. 100 KHz Bandwidth Of Frequency Band Edge

7.1 Block Diagram Of Test Setup



7.2 Applicable Standard

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in § 15.209, whichever is the lesser attenuation

7.3 Test Procedure

a.Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.

b.Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.

c.VBW for Peak, Quasi-peak, or Average Detector Function: 3 x RBW

d.Repeat above procedures until all measured frequencies were complete.

Note

Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

7.4 EUT Operating Conditions

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

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TC

3C

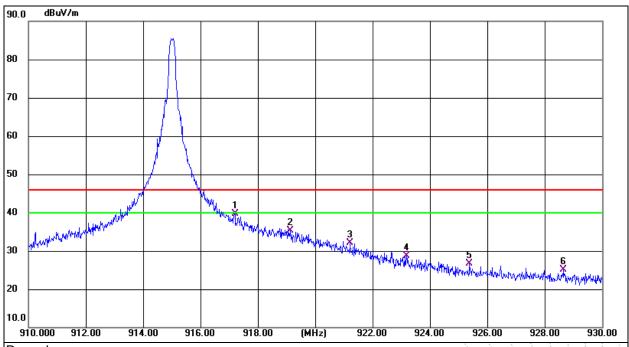
еро



7.5 Test Result

| Temperature: | 26 °C | Relative Humidity: | 54% |
|--------------|---------|--------------------|--------------------|
| Pressure: | 101 kPa | Test Voltage : | DC 3V From battery |
| Test Mode : | TX | | |

915 MHz Horizontal



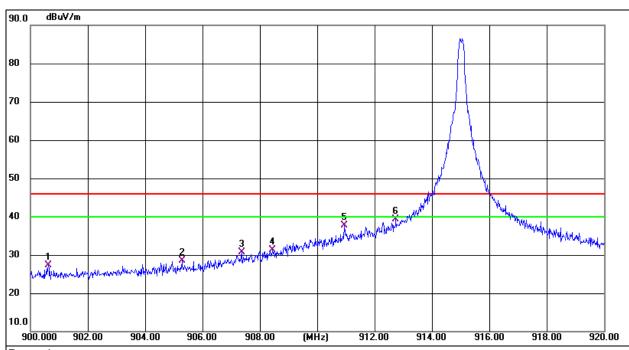
Remark:

- 1.Factor = Antenna Factor + Cable Loss Pre-amplifier.
- 2. Measurement=Reading Level+ Correct Factor
- 3. Over=Measurement-Limit

| 1 | | | | | | 4 4 4 4 | |
|-----|--------------------|-------------------|------------------|-------------------|-------------------|----------------|----------|
| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
| 1 * | 917.2000 | 38.57 | 1.19 | 39.76 | 46.00 | -6.24 | QP |
| 2 | 919.1200 | 34.00 | 1.23 | 35.23 | 46.00 | -10.77 | QP |
| 3 | 921.2200 | 30.80 | 1.26 | 32.06 | 46.00 | -13.94 | QP |
| 4 | 923.1800 | 27.48 | 1.31 | 28.79 | 46.00 | -17.21 | QP |
| 5 | 925.3800 | 25.37 | 1.34 | 26.71 | 46.00 | -19.29 | QP |
| 6 | 928.6600 | 23.70 | 1.40 | 25.10 | 46.00 | -20.90 | QP |
| | | | | | | | |



915 MHz Vertical



Remark:

- 1.Factor = Antenna Factor + Cable Loss Pre-amplifier.
- 2. Measurement=Reading Level+ Correct Factor
- 3. Over=Measurement-Limit

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|--------------------|----------------|------------------|-------------------|-------------------|----------------|----------|
| 1 | 900.6200 | 26.50 | 0.88 | 27.38 | 46.00 | -18.62 | QP |
| 2 | 905.2800 | 27.45 | 0.96 | 28.41 | 46.00 | -17.59 | QP |
| 3 | 907.3600 | 29.80 | 1.00 | 30.80 | 46.00 | -15.20 | QP |
| 4 | 908.4400 | 30.35 | 1.03 | 31.38 | 46.00 | -14.62 | QP |
| 5 | 910.9400 | 36.64 | 1.07 | 37.71 | 46.00 | -8.29 | QP |
| 6 * | 912.7400 | 38.26 | 1.11 | 39.37 | 46.00 | -6.63 | QP |
| | | | | | | | |



8. 20 DB Bandwidth

8.1 Block Diagram Of Test Setup



8.2 Limit

| FCC Part15 (15.249) , Subpart C | | | | | |
|---------------------------------|-----------|--------------------------|--------|--|--|
| Section | Test Item | Frequency Range (MHz) | Result | | |
| 15.249 | Bandwidth | 902~928 | PASS | | |

8.3 Test Procedure

- 1. Set resolution bandwidth (RBW) = 1-5%
- 2. Set the video bandwidth (VBW) \geq 3 x RBW.
- 3. Detector = Peak.
- 4. Trace mode = max hold.
- 5. Sweep = auto couple.
- 6. Allow the trace to stabilize.
- 7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 20 dB relative to the maximum level measured in the fundamental emission.

8.4 EUT Operation Conditions

The EUT tested system was configured as the statements of 2.4 unless otherwise a special operating condition is specified in the follows during the testing.

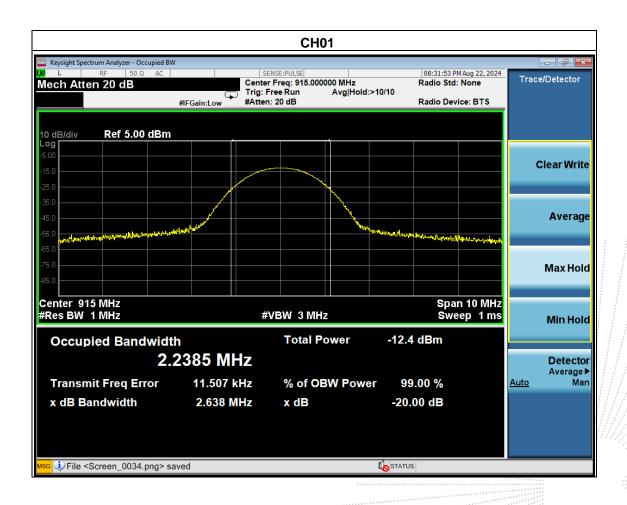
00:,LTn



8.5 Test Result

| Temperature: | 26℃ | Relative Humidity: | 54% |
|----------------|--------------------|--------------------|-----|
| Test Voltage : | DC 3V From battery | Remark | N/A |

| Channel | Frequency (MHz) | 20dB bandwidth (KHz) |
|---------|--------------------|-------------------------|
| 01 | 915.00 | 2638 |



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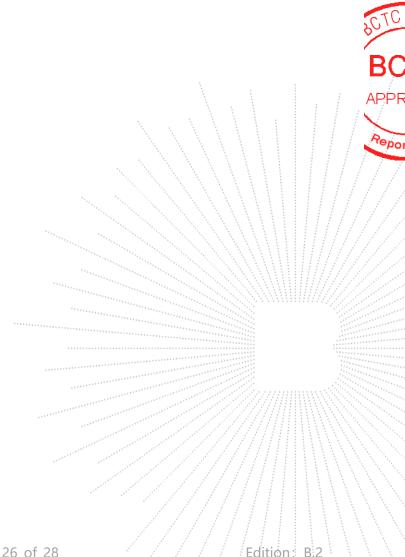
9. Antenna Requirement

9.1 Limit

15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

9.2 Test Result

The EUT antenna is a non-removable internal antenna and meets the requirements in this section.

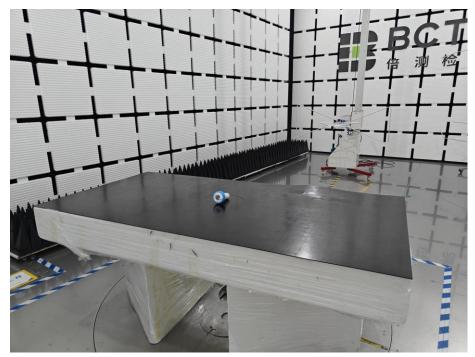


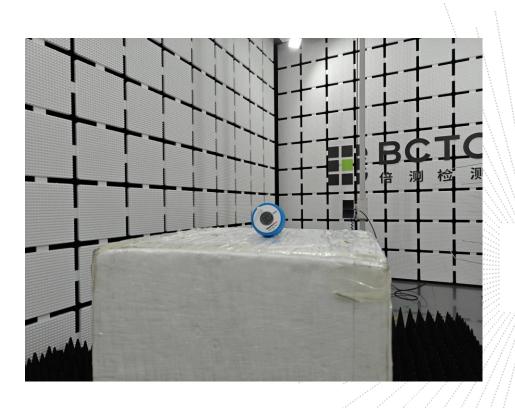
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10. EUT Test Setup Photographs

Radiated Measurement Photos





TC OVEL



STATEMENT

- 1. The equipment lists are traceable to the national reference standards.
- 2. The test report can not be partially copied unless prior written approval is issued from our lab.
- 3. The test report is invalid without the "special seal for inspection and testing".
- 4. The test report is invalid without the signature of the approver.
- 5. The test process and test result is only related to the Unit Under Test.
- 6. Sample information is provided by the client and the laboratory is not responsible for its authenticity.
- 7. The quality system of our laboratory is in accordance with ISO/IEC17025.
- 8. If there is any objection to this test report, the client should inform issuing laboratory within 15 days from the date of receiving test report.

Address:

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Complaint/Advice E-mail: advice@bctc-lab.com.cn

**** END ****

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