



**CENTRE OF TESTING SERVICE  
INTERNATIONAL**

**OPERATE ACCORDING TO ISO/IEC 17025**

# **FCC ID TEST REPORT**

**TEST REPORT NUMBER : CGZ3160908-01674-EF**



**CENTRE OF TESTING SERVICE CO., LTD.**

A101, No.65, Zhuji Highway, Tianhe District, Guangzhou, China



## TEST REPORT For FCC ID

**Report Reference No. .... CGZ3160908-01674-EF**

Date of issue..... 12 September 2016

**Testing Laboratory Name ..... CENTRE OF TESTING SERVICE CO., LTD.**

Address..... A101, No.65, Zhuji Highway, Tianhe District, Guangzhou, China

 Testing location/ procedure ..... Full application of Harmonised standards ☒

 Partial application of Harmonised standards ☐

 Other standard testing method ☐
**Applicant's name..... SHEN ZHEN BUYBEST GROUP COMPANY LIMITED**

Address..... Unit 1505, Shang Hang Building, Block 301 Shang Bu Industrial Zone, Road Hong Li, Fu Tian, Shenzhen, China

**Test specification .....**

 Standard ..... **47 CFR PART 15 OCT, 2015; ANSI C63.10:2013**
**Test Report Form No. .... CTSEMC-1.0**

TRF Originator ..... CENTRE OF TESTING SERVICE CO., LTD.

Master TRF ..... Dated 2009-01

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**Test item description ..... : Remote Food Thermometer with Dual Probe**

Trade Mark ..... /

Manufacturer..... SHEN ZHEN BUYBEST GROUP COMPANY LIMITED

Model/Type reference..... TP-22

Ratings..... Battery 1.5V\*2

Operating Frequency..... 433.99 MHz

 Result ..... **PASSED**
**Compiled by:**

Kate zhang / Fileadministrators

**Supervised by:**

Duke yang / Technique principal

**Approved by:**

Vincent yao / Manager

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## FCC ID -- T E S T R E P O R T

|                          |                            |   |
|--------------------------|----------------------------|---|
| <b>Test Report No. :</b> | <b>CGZ3160908-01674-EF</b> | <u>12 September 2016</u><br>Date of issue |
|--------------------------|----------------------------|---|

|                          |  |
|--------------------------|--|
| Type / Model.....        | TP-22  |
| EUT.....                 | Remote Food Thermometer with Dual Probe  |
| <b>Applicant.....</b>    | SHEN ZHEN BUYBEST GROUP COMPANY LIMITED  |
| Address.....             | Unit 1505,Shang Hang Building,Block 301 Shang Bu Industrial Zone,Road Hong Li,Fu Tian, Shenzhen, China |
| Telephone.....           | +86-755-27758173   |
| Fax.....                 | +86-755-27755173   |
| Contact.....             | Susan Liu  |
| <b>Manufacturer.....</b> | SHEN ZHEN BUYBEST GROUP COMPANY LIMITED  |
| Address.....             | Unit 1505,Shang Hang Building,Block 301 Shang Bu Industrial Zone,Road Hong Li,Fu Tian, Shenzhen, China |
| Telephone.....           | +86-755-27758173   |
| Fax.....                 | +86-755-27755173   |
| Contact.....             | Susan Liu  |
| <b>Factory .....</b>     | /  |
| Address.....             | /  |
| Telephone.....           | /  |
| Fax.....                 | /  |
| Contact.....             | /  |

**Test Result** according to the standards on page 3: **PASSED**

The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

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## 1. TEST STANDARDS

The tests were performed according to following standards:

- 47 CFR PART 15 OCT, 2015
- ANSI C63.10:2013

## 2. SUMMARY

### 2.1 GENERAL REMARKS

|                                |                      |
|--------------------------------|----------------------|
| Date of receipt of test sample | 08 September 2016    |
|                                |                      |
| Testing commenced on           | 08~12 September 2016 |
|                                |                      |
| Testing concluded on           | 12 September 2016    |

### 2.2 FINAL ASSESSMENT

The FCC requirements pertaining to the technical standards and tested operation modes are

- - fulfilled.
- ☐ - **not** fulfilled.

The equipment under test

- - fulfils the FCC requirements cited on page 1.
- ☐ - **does not** fulfil the FCC requirements cited on page 1.

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### 3. EQUIPMENT UNDER TEST

#### 3.1 Power supply system utilised

Power supply voltage : ☒ Battery 1.5V\*2  
☐ Other

#### 3.2 Short description of the Equipment under Test (EUT)

Number of tested samples: 1  
Serial number: Prototype

#### 3.3 EUT operation mode

The equipment under test was operated during the measurement under the following conditions:  
For Radiation emission:

- ☒ -TX +X position
- ☐ -TX +Y position
- ☐ -TX +Z position

Operation mode 1: TX +X position

Note: X position of EUT is the worst case, so only these test results be recorded in the test report.

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### 3.4 EUT configuration

#### 3.4.1. Description of configuration (EUT)

|                       |   |   |
|-----------------------|---|---|
| Description           | : | Remote Food Thermometer with Dual Probe |
| Model Number          | : | TP-22                                   |
| Operation frequency   | : | 433.99 MHz                              |
| Radio Technology      | : | ASK                                     |
| Modulation Technology | : | ASK modulation                          |
| Antenna               | : | Internal Antenna                        |

#### 3.4.2. Tested Supporting System Details

N/A

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## 4. TEST ENVIRONMENT

### 4.1 Address of the test laboratory

A101, No.65, Zhuji Highway, Tianhe District, Guangzhou, China

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### 4.2 Test facility

The test facility is recognized, certified, or accredited by the following organizations:

#### **CNAS-Lab Code: L3394**

CENTRE OF TESTING SERVICE CO., LTD has been assessed and proved to be in compliance with CNAS-CL01: 2006 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC 17025: 2005 General Requirements) for the Competence of Testing and Calibration Laboratories.

#### **IC-Registration No.: 8374A**

The 3m Alternate Test Site of CENTRE OF TESTING SERVICE CO., LTD has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 8374A on May, 2014 .

#### **FCC-Registration No.: 971995**

CENTRE OF TESTING SERVICE CO., LTD, EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Registration No. 971995, July, 2015.

### 4.3 Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

|                       |            |
|-----------------------|------------|
| Temperature:          | 15~35 ° C  |
| Humidity:             | 25~75 %    |
| Atmospheric pressure: | 86~106 kPa |

### 4.4 Definitions of symbols used in this test report

- - The black square indicates that the listed condition, standard or equipment is applicable for this report.
- - The empty square indicates that the listed condition, standard or equipment is **not** applicable for this report.

### 4.5 Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to CISPR 16 - 4 "Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements" and is documented in the CTS quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

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#### 4.6 Measurement Uncertainty

| Test Item               | Frequency Range | Uncertainty         | Note |
|-------------------------|-----------------|---------------------|------|
| Conduction disturbance  | 150kHz~30MHz    | $\pm 1.22\text{dB}$ | (1)  |
| Power disturbance       | 30MHz~300MHz    | $\pm 1.38\text{dB}$ | (1)  |
| Radiation emission (3m) | 30MHz~300MHz    | $\pm 3.14\text{dB}$ | (1)  |
|                         | 300MHz~1000MHz  | $\pm 3.18\text{dB}$ | (1)  |
|                         | 1GHz~18GHz      | $\pm 3.54\text{dB}$ | (1)  |

(1). This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k=2$ .

### 5. Summary of standards and results

#### 5.1. Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

| EMISSION                                   |  |         |
|--|--|---------|
| Description of Test Item                   | Standard                                     | Results |
| Conducted Emission Test                    | FCC Part 15 § 15.207<br>ANSI C63.10:2013     | N/A     |
| Radiated Emission Test                     | ANSI C63.10:2013<br>FCC Part 15 C: 15.231(e) | PASSED  |
| 20 dB Bandwidth Test                       | ANSI C63.10:2013<br>FCC Part 15 C: 15.231    | PASSED  |
| Stop Transmitting Time Test                | ANSI C63.10:2013<br>FCC Part 15 C: 15.231(e) | PASSED  |
| N/A is an abbreviation for Not Applicable. |  |         |

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## 6. Power Line Conducted Emission Test

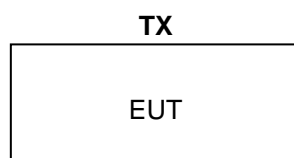
### 6.1.1 Description of the test location

Test location : Shielding Room

### 6.1.2 Test Equipment

| Conducted Disturbance |                   |                 |           |            |            |
|-----------------------|-------------------|-----------------|-----------|------------|------------|
| Item                  | Test Equipment    | Manufacturer    | Model No. | Serial No. | Last Cal.  |
| 1                     | EMI Test Receiver | ROHDE & SCHWARZ | ESCI      | 100868     | 2015/10/30 |
| 2                     | Artificial Mains  | ROHDE & SCHWARZ | ESH3-Z5   | 832479/025 | 2015/10/30 |
| 3                     | Artificial Mains  | ROHDE & SCHWARZ | ESH3-Z5   | 100140     | 2015/10/30 |
| 4                     | Pulse Limiter     | ROHDE & SCHWARZ | ESHS-Z2   | 100301     | 2015/10/30 |
| 5                     | EMI Test Software | Farad           | EZ-EMC    | N/A        | N/A        |

### 6.2.1 Block Diagram of Test Setup



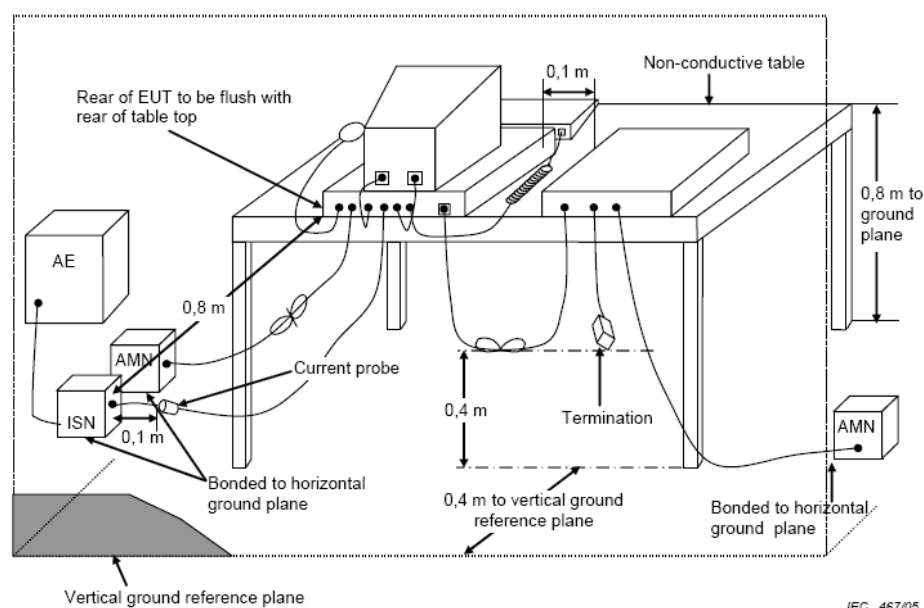
**(EUT: Remote Food Thermometer with Dual Probe)**

### 6.2.2 Description of the test set-up

#### 6.1.2.1 Operating Condition

The EUT is engraving during the test, and the results of the maximum emanation are recorded

#### 6.1.2.2 Block Diagram of Test Setup



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**6.2.3 Limits of disturbance (Class B)**

| Frequency       | Maximum RF Line Voltage          |                               |
|-----------------|----------------------------------|-------------------------------|
|                 | Quasi-Peak Level<br>dB( $\mu$ V) | Average Level<br>dB( $\mu$ V) |
| 150kHz ~ 500kHz | 66 ~ 56*                         | 56 ~ 46*                      |
| 500kHz ~ 5MHz   | 56                               | 46                            |
| 5MHz ~ 30MHz    | 60                               | 50                            |

Note: (1) The tighter limit shall apply at the edge between two frequency bands.

**6.2.4 Power Line Conducted Emission Test Results**

**Power supply by battery , Not applicable.**

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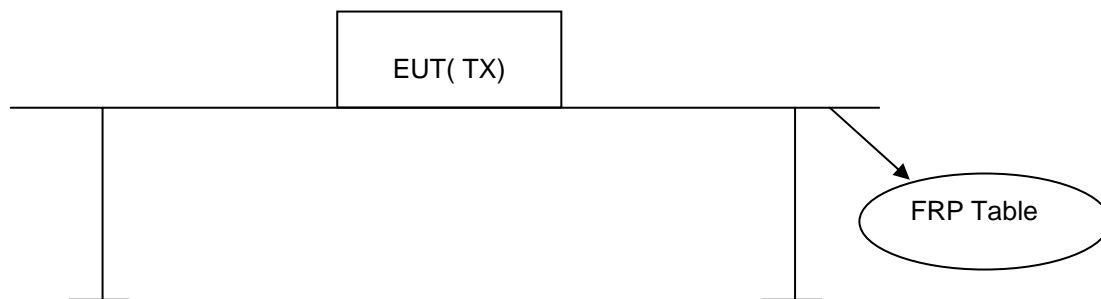
## 7. Radiated disturbance (electric field)

### 7.1. Test Equipment

| Radiated disturbance (electric field) |                   |                 |           |            |            |
|---------------------------------------|-------------------|-----------------|-----------|------------|------------|
| Item                                  | Test Equipment    | Manufacturer    | Model No. | Serial No. | Last Cal.  |
| 1                                     | Signal analyzer   | ROHDE & SCHWARZ | FSIQ26    | 100311     | 2016/03/24 |
| 2                                     | EMI Test Receiver | ROHDE & SCHWARZ | ESVS 10   | 842885/001 | 2016/03/24 |
| 3                                     | Biconical Antenna | ROHDE & SCHWARZ | HK116     | 100221     | 2016/03/24 |
| 4                                     | Log per Antenna   | ROHDE & SCHWARZ | HL223     | 100226     | 2016/03/24 |
| 5                                     | Log per Antenna   | ROHDE & SCHWARZ | HL050     | 100186     | 2016/03/24 |
| 6                                     | Pre-Amplifier     | EMC             | EMC330    | 980113     | 2016/03/24 |
| 7                                     | Pre-Amplifier     | EMC             | EMC012645 | 980114     | 2016/03/24 |

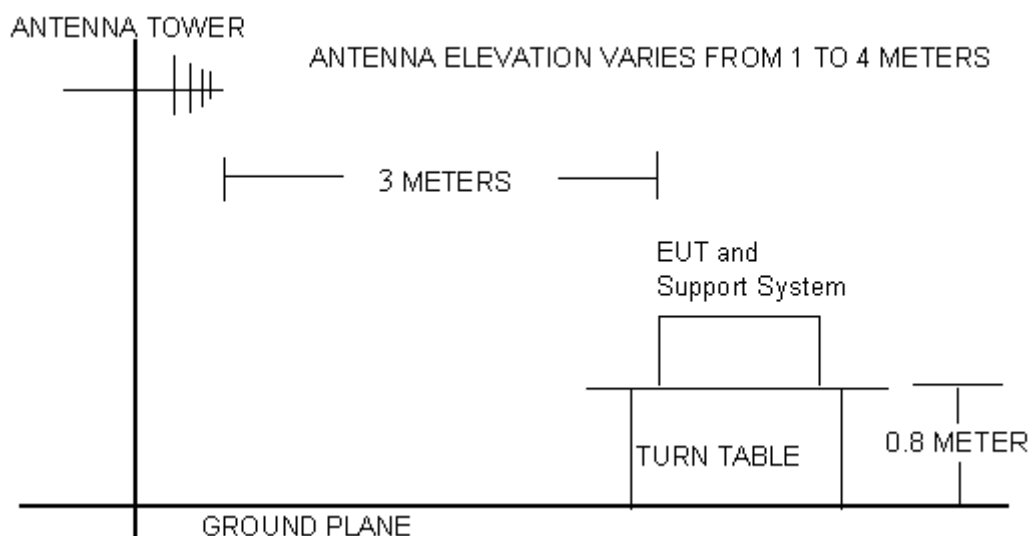
### 7.2. Block Diagram of Test Setup

#### 7.2.1 Block Diagram of connection between EUT and simulators



(EUT: Remote Food Thermometer with Dual Probe)

### 7.2.2 Anechoic Chamber Setup Diagram



### 7.3. Radiated Emission Limit Standard: FCC 15.231(e), 209;

| FREQUENCY<br>MHz | DISTANCE<br>Meters | FIELD STRENGTHS LIMIT  |                                   |
|------------------|--------------------|--|-----------------------------------|
|                  |                    | $\mu\text{V/m}$  | $\text{dB}(\mu\text{V})/\text{m}$ |
| 0.009 ~ 0.490    | 300                | 2400/F(KHz)  | ----                              |
| 0.490 ~ 1.705    | 30                 | 24000/F(KHz)   | ----                              |
| 1.705 ~ 30       | 3                  | 30   | ----                              |
| 30 ~ 88          | 3                  | 100  | 40.0                              |
| 88 ~ 216         | 3                  | 150  | 43.5                              |
| 216 ~ 960        | 3                  | 200  | 46.0                              |
| 960 ~ 1000       | 3                  | 500  | 54.0                              |
| Above 1000       | 3                  | Other: 74.0 $\text{dB}(\mu\text{V})/\text{m}$ (Peak)<br>54.0 $\text{dB}(\mu\text{V})/\text{m}$ (Average) |                                   |

- Remark:
- (1) Emission level  $\text{dB}\mu\text{V} = 20 \log$  Emission level  $\mu\text{V/m}$
  - (2) The smaller limit shall apply at the cross point between two frequency bands.
  - (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

### 7.4. Test Procedure

The EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna is set on Test. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4-2009 on radiated emission Test.

The frequency range from 30MHz to 1000MHz and above 1GHz. is investigated. Please see the following pages.

All measurements for radiated emissions within the restricted bands were performed using a Quasi-Peak detector with 120kHz RBW below 1GHz and a Peak and Average detector with 1MHz RBW above 1GHz,

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All measurements for radiated emissions within the restricted bands were performed using a Quasi-Peak detector with 300kHz VBW below 1GHz and a Peak detector with 1MHz VBW above 1GHz, A average detector be caluclated from peak value using duty cycle factor Both 30MHz to 1000MHz and above 1GHz

Pretest x, y, z position of EUT, final, select the worst case x position test and record the test results in the report.

The test modes (TX and RX Mode) is tested in Anechoic Chamber and all the scanning waveforms are reported on section 7.5

## **7.5.Radiated Emission Test Results**

**PASSED.**

The frequency range from 9KHz to 30MHz,30MHz to 230MHz, 230MHz to 1000MHz and above 1GHz. is investigated. Please see the following pages.

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|                  |                     |         |  |
|------------------|---------------------|---------|--|
| Test Mode:       | TX -X Position Mode | Result: | <input checked="" type="checkbox"/> - passed |
| Frequency range: | 9KHz~30MHz          |         | <input type="checkbox"/> - not passed        |

| No.  | Frequency<br>(MHz) | Factor<br>(dB/m) | Reading<br>(dBμV/m) | Level<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) | Det. |
|--|--------------------|------------------|---------------------|-------------------|-------------------|----------------|------|
| Remark:Other frequency no specific emission form the EUT (Margin > 10dB form the applicable Limit) |                    |                  |                     |                   |                   |                |      |

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|                  |                 |         |  |
|------------------|-----------------|---------|--|
| Channel:         | 433.99 MHz (TX) | Result: | <input checked="" type="checkbox"/> - passed |
| Test point:      | Horizontal      |         | <input type="checkbox"/> - not passed        |
| Frequency range: | 30MHz ~18GHz    |         |  |

|                     |   |
|---------------------|---|
| EUT                 | Remote Food Thermometer with Dual Probe |
| Operating Condition | Battery 1.5V*2                          |
| Test Condition      | Ambient Temperature: 25°C Humidity: 56% |
| Test Date:          | 08~12 September 2016                    |
| Operator            | <b>Duke</b>                             |
| MODEL NO            | TP-22                                   |

| Fundamental and Harmonics Average Result |               |                      |                                  |                      |                      |             |      |
|--|---------------|----------------------|----------------------------------|----------------------|----------------------|-------------|------|
| Frequency (MHz)                          | Factor (dB/m) | Reading (dB $\mu$ V) | Duty Cycle Correction Factor(dB) | Level (dB $\mu$ V/m) | Limit (dB $\mu$ V/m) | Margin (dB) | Det. |
| 433.99                                   | -9.15         | 73.94                | -----                            | 64.79                | -----                | -----       | Peak |
| 433.99                                   | -9.15         | 73.94                | -13.91                           | 50.88                | 72.87                | -21.99      | AVG  |

Note:Level=Reading+Factor. Margin= Level - Limit.  
Average Level=Peak level + Duty Factor

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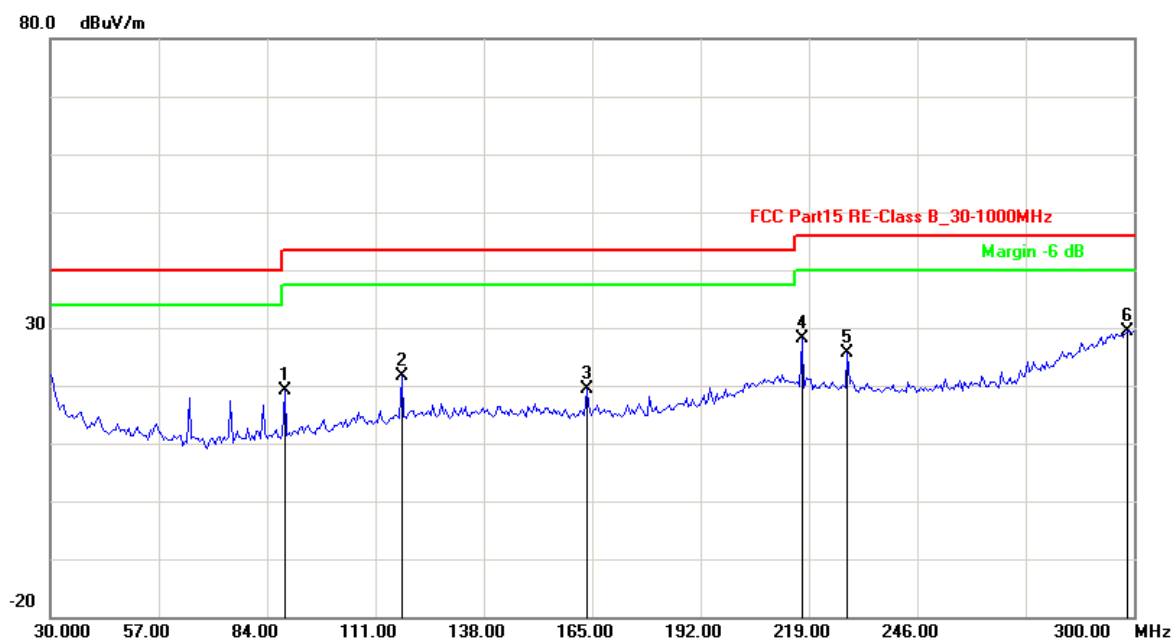
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| No. | Frequency (MHz) | Factor (dB/m) | Reading (dB $\mu$ V/m) | Level (dB $\mu$ V/m) | Limit (dB $\mu$ V/m) | Margin (dB) | Det. |
|-----|-----------------|---------------|------------------------|----------------------|----------------------|-------------|------|
| 1   | 88.4368         | -19.27        | 38.43                  | 19.16                | 43.50                | -24.34      | QP   |
| 2   | 117.6553        | -16.86        | 38.44                  | 21.58                | 43.50                | -21.92      | QP   |
| 3   | 163.6472        | -15.97        | 35.29                  | 19.32                | 43.50                | -24.18      | QP   |
| 4   | 217.2144        | -10.72        | 38.87                  | 28.15                | 46.00                | -17.85      | QP   |
| 5   | 228.5771        | -11.55        | 37.28                  | 25.73                | 46.00                | -20.27      | QP   |
| 6   | 298.3767        | -1.85         | 31.16                  | 29.31                | 46.00                | -16.69      | QP   |

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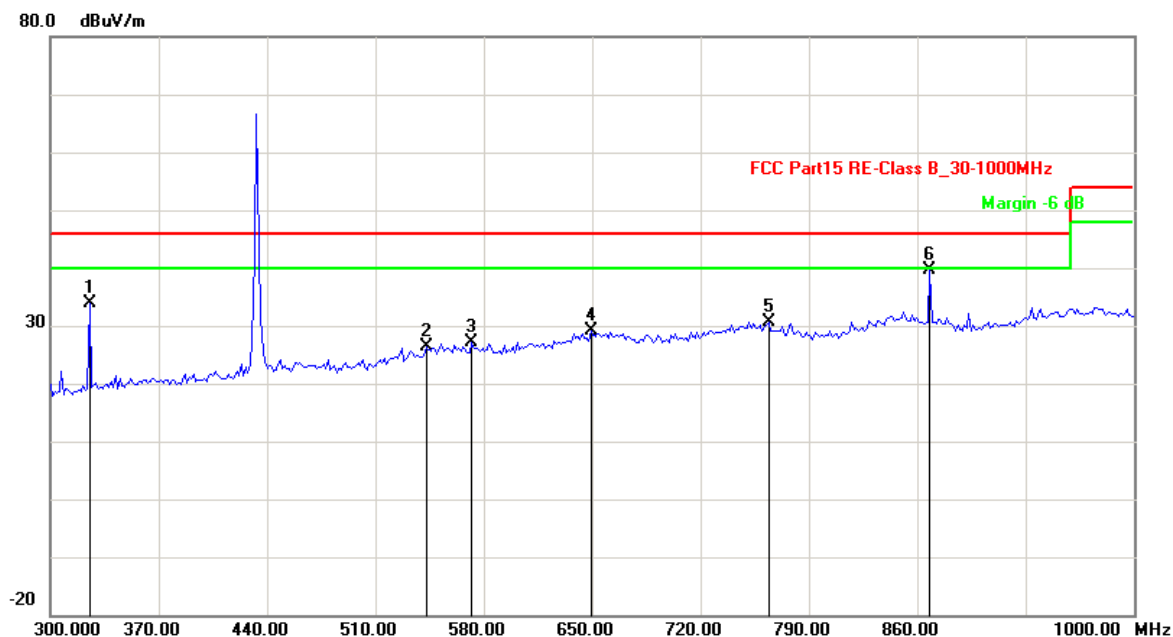
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| No. | Frequency (MHz) | Factor (dB/m) | Reading (dBμV/m) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Det. |
|-----|-----------------|---------------|------------------|----------------|----------------|-------------|------|
| 1   | 325.2505        | -12.47        | 46.38            | 33.91          | 46.00          | -12.09      | QP   |
| 2   | 542.6854        | -6.04         | 32.53            | 26.49          | 46.00          | -19.51      | QP   |
| 3   | 572.1443        | -5.62         | 32.80            | 27.18          | 46.00          | -18.82      | QP   |
| 4   | 649.2986        | -3.26         | 32.30            | 29.04          | 46.00          | -16.96      | QP   |
| 5   | 764.3287        | -2.08         | 32.73            | 30.65          | 46.00          | -15.35      | QP   |
| 6   | 868.1363        | -14.74        | 40.36            | 25.62          | 52.87          | -27.25      | AVG  |

Above 1GHz

| No. | Frequency (MHz) | Factor (dB/m) | Reading (dBμV/m) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Det. |
|-----|-----------------|---------------|------------------|----------------|----------------|-------------|------|
| 1   | 2014.028        | 4.80          | 44.37            | 49.17          | 74.00          | -24.83      | peak |
| 2   | 2014.028        | 4.80          | 31.65            | 36.45          | 54.00          | -17.55      | AVG  |
| 3   | 7150.301        | 11.78         | 36.58            | 48.36          | 74.00          | -25.64      | peak |
| 4   | 7150.301        | 11.78         | 23.50            | 35.28          | 54.00          | -18.72      | AVG  |

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|                  |                 |         |  |
|------------------|-----------------|---------|--|
| Channel:         | 433.99 MHz (TX) | Result: | <input checked="" type="checkbox"/> - passed |
| Test point:      | Vertical        |         | <input type="checkbox"/> - not passed        |
| Frequency range: | 30MHz ~18GHz    |         |  |

|                     |   |
|---------------------|---|
| EUT                 | Remote Food Thermometer with Dual Probe |
| Operating Condition | Battery 1.5V*2                          |
| Test Condition      | Ambient Temperature: 25°C Humidity: 56% |
| Test Date:          | 08~12 September 2016                    |
| Operator            | <b>Duke</b>                             |
| MODEL NO            | TP-22                                   |

| Fundamental and Harmonics Average Result |               |                |                                  |                |                |             |      |
|--|---------------|----------------|----------------------------------|----------------|----------------|-------------|------|
| Frequency (MHz)                          | Factor (dB/m) | Reading (dBμV) | Duty Cycle Correction Factor(dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Det. |
| 433.99                                   | -9.15         | 65.87          | ----                             | 56.72          | -----          | -----       | Peak |
| 433.99                                   | -9.15         | 65.87          | -13.91                           | 42.81          | 72.87          | -30.06      | AVG  |

Note: Level=Reading+Factor. Margin= Level - Limit.  
Average Level=Peak level + Duty Factor

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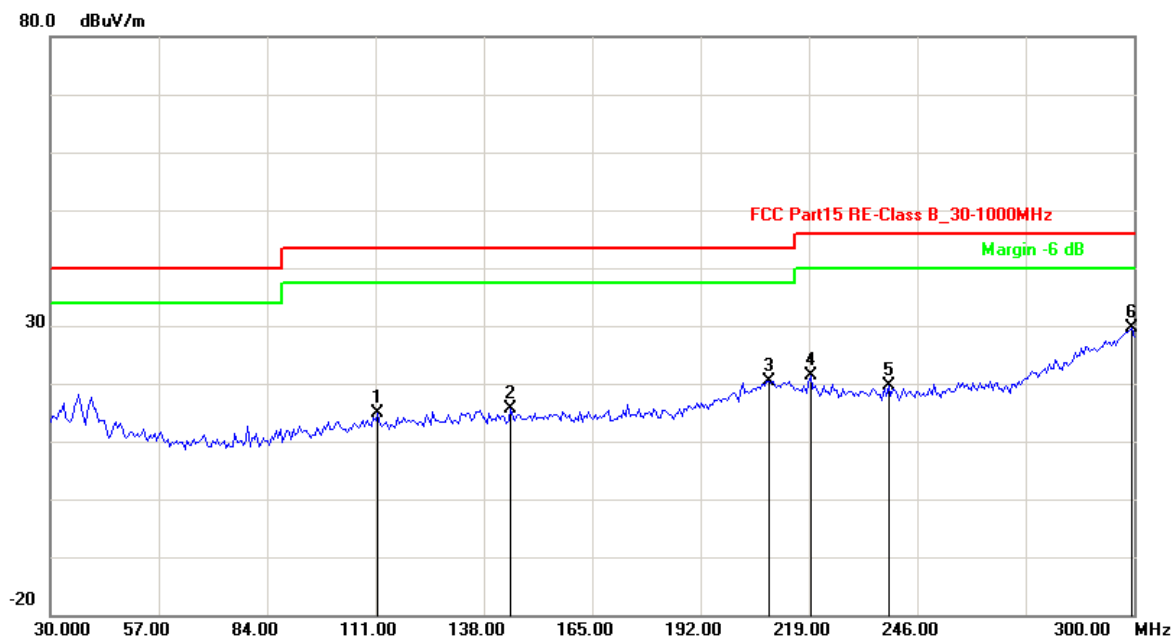
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| No. | Frequency (MHz) | Factor (dB/m) | Reading (dBμV/m) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Det. |
|-----|-----------------|---------------|------------------|----------------|----------------|-------------|------|
| 1   | 111.7034        | -17.20        | 32.14            | 14.94          | 43.50          | -28.56      | QP   |
| 2   | 144.7094        | -16.01        | 31.60            | 15.59          | 43.50          | -27.91      | QP   |
| 3   | 209.0982        | -10.38        | 30.78            | 20.40          | 43.50          | -23.10      | QP   |
| 4   | 219.3788        | -10.87        | 32.22            | 21.35          | 46.00          | -24.65      | QP   |
| 5   | 238.8577        | -11.57        | 31.24            | 19.67          | 46.00          | -26.33      | QP   |
| 6   | 299.4589        | -1.56         | 31.07            | 29.51          | 46.00          | -16.49      | QP   |

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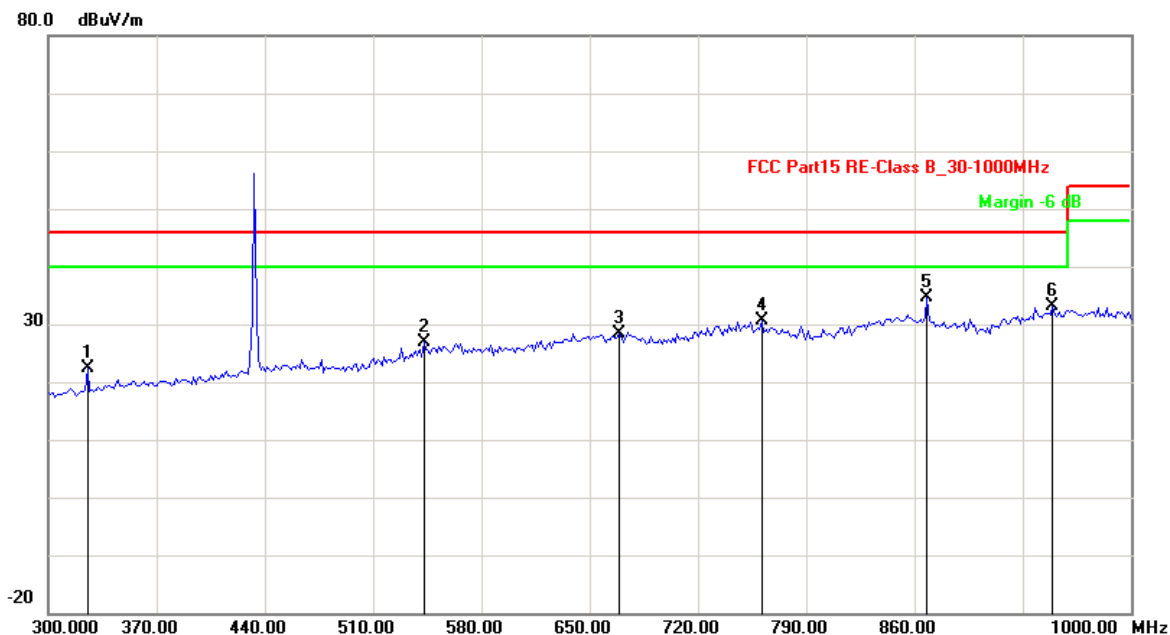
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| No. | Frequency (MHz) | Factor (dB/m) | Reading (dBμV/m) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Det. |
|-----|-----------------|---------------|------------------|----------------|----------------|-------------|------|
| 1   | 325.2505        | -12.47        | 34.79            | 22.32          | 46.00          | -23.68      | QP   |
| 2   | 542.6854        | -6.04         | 32.91            | 26.87          | 46.00          | -19.13      | QP   |
| 3   | 668.9379        | -3.41         | 31.73            | 28.32          | 46.00          | -17.68      | QP   |
| 4   | 761.5230        | -1.98         | 32.69            | 30.71          | 46.00          | -15.29      | QP   |
| 5   | 868.1363        | -14.74        | 35.56            | 19.99          | 52.87          | -32.88      | AVG  |
| 6   | 949.4990        | 0.40          | 32.73            | 33.13          | 46.00          | -12.87      | QP   |

Above 1GHz

| No. | Frequency (MHz) | Factor (dB/m) | Reading (dBμV/m) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Det. |
|-----|-----------------|---------------|------------------|----------------|----------------|-------------|------|
| 1   | 1749.499        | 3.27          | 40.70            | 43.97          | 74.00          | -30.03      | peak |
| 2   | 1749.499        | 3.27          | 27.14            | 30.41          | 54.00          | -23.59      | AVG  |
| 3   | 4989.980        | 5.90          | 38.54            | 44.44          | 74.00          | -29.56      | peak |
| 4   | 4989.980        | 5.90          | 25.38            | 31.28          | 54.00          | -22.72      | AVG  |

Note:Level=Reading+Factor. Margin= Level- Limit

Remark: Others frequency Radiated Emission level margin all >10dB of Limit.

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## 8.20 dB Bandwidth test

### 8.1. Test Equipment

| 20 dB Bandwidth test |                   |                 |           |            |            |
|----------------------|-------------------|-----------------|-----------|------------|------------|
| Item                 | Test Equipment    | Manufacturer    | Model No. | Serial No. | Last Cal.  |
| 1                    | EMI Test Receiver | ROHDE & SCHWARZ | ESCI      | 10868      | 2015/10/30 |
| 2                    | Log per Antenna   | ROHDE & SCHWARZ | HL223     | 100226     | 2016/03/24 |
| 3                    | Signal analyzer   | ROHDE & SCHWARZ | FSIQ26    | 100311     | 2016/03/24 |

### 8.2. Test Information

|                 |   |
|-----------------|---|
| EUT:            | Remote Food Thermometer with Dual Probe |
| M/N:            | TP-22                                   |
| Power supply:   | Battery 1.5V*2                          |
| Test Condition: | Ambient Temperature: 25°C Humidity: 56% |
| Test standard:  | FCC PART 15C: 15.231                    |
| Test mode:      | Transmitting                            |
| Test Frequency: | 433.99 MHz                              |
| Test Date:      | 08~12 September 2016                    |
| Test By:        | Duke                                    |

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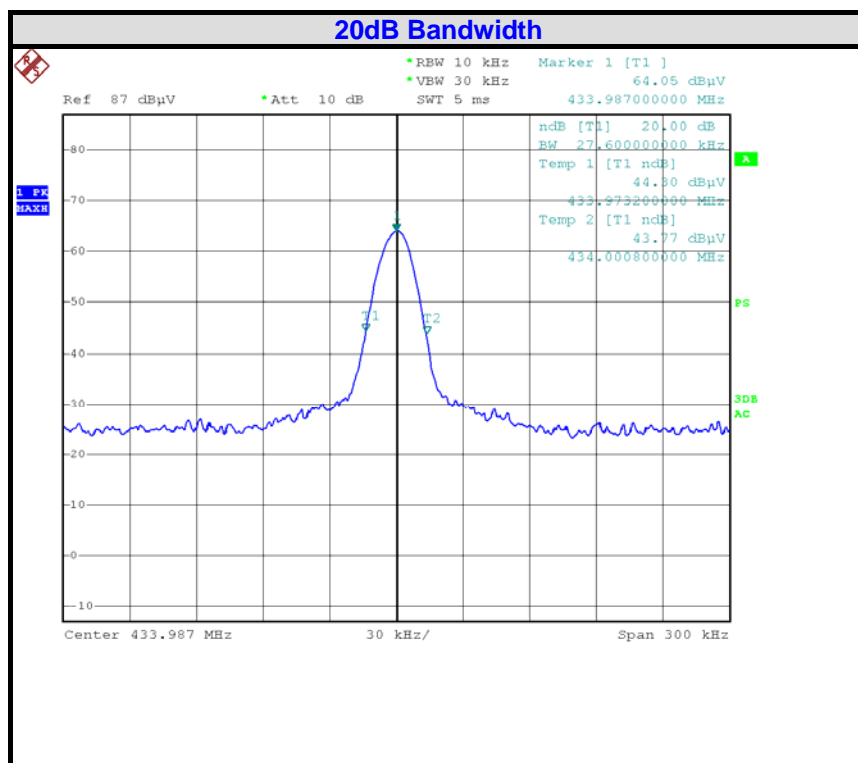
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### 8.3. Test Results

**PASSED.**

The testing data was attached in the next pages.

| Frequency (MHz) | 20 dB Bandwidth (kHz) | Limit(kHz): No wider than 0.25% of the center frequency | Conclusion |
|-----------------|-----------------------|---|------------|
| 433.99          | 27.60                 | $433.99 \times 0.25\% = 1.085\text{MHz}$                | PASSED     |



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## 9. Stop Transmitting Time Test

### 9.1. Test Equipment

| Band Edge Compliance test |                   |                 |           |            |            |
|---------------------------|-------------------|-----------------|-----------|------------|------------|
| Item                      | Test Equipment    | Manufacturer    | Model No. | Serial No. | Last Cal.  |
| 1                         | EMI Test Receiver | ROHDE & SCHWARZ | ESCI      | 10868      | 2015/10/30 |
| 2                         | Log per Antenna   | ROHDE & SCHWARZ | HL223     | 100226     | 2016/03/24 |
| 3                         | Signal analyzer   | ROHDE & SCHWARZ | FSIQ26    | 100311     | 2016/03/24 |

### 9.2. Test Information

|                 |   |
|-----------------|---|
| EUT:            | Remote Food Thermometer with Dual Probe |
| M/N:            | TP-22                                   |
| Power supply:   | Battery 1.5V*2                          |
| Test Condition: | Ambient Temperature: 25°C Humidity: 56% |
| Test standard:  | FCC PART 15C: 15.231                    |
| Test mode:      | Transmitting                            |
| Test Frequency: | 433.99 MHz                              |
| Test Date:      | 08~12 September 2016                    |
| Test By:        | Duke                                    |

### 9.3. Test Results

#### PASSED.

The testing data was attached in the next pages.

Set the spectrum to zero span, activated the EUT automatically, And then, we could see the transmitting wave in the spectrum, when the time marker went to "1R", released the EUT, we could see the EUT stop transmitting.

| Frequency (MHz) | Transmitting Time | Silent Period  | Limit: the silent period between transmissions shall be at least 30 times the duration of the transmission but in no case less than 10seconds | Conclusion |
|-----------------|-------------------|----------------|---|------------|
| 433.99          | 200.00ms          | 12.04s>30*0.2s | >10s and 30 times of transmissions  | PASSED     |

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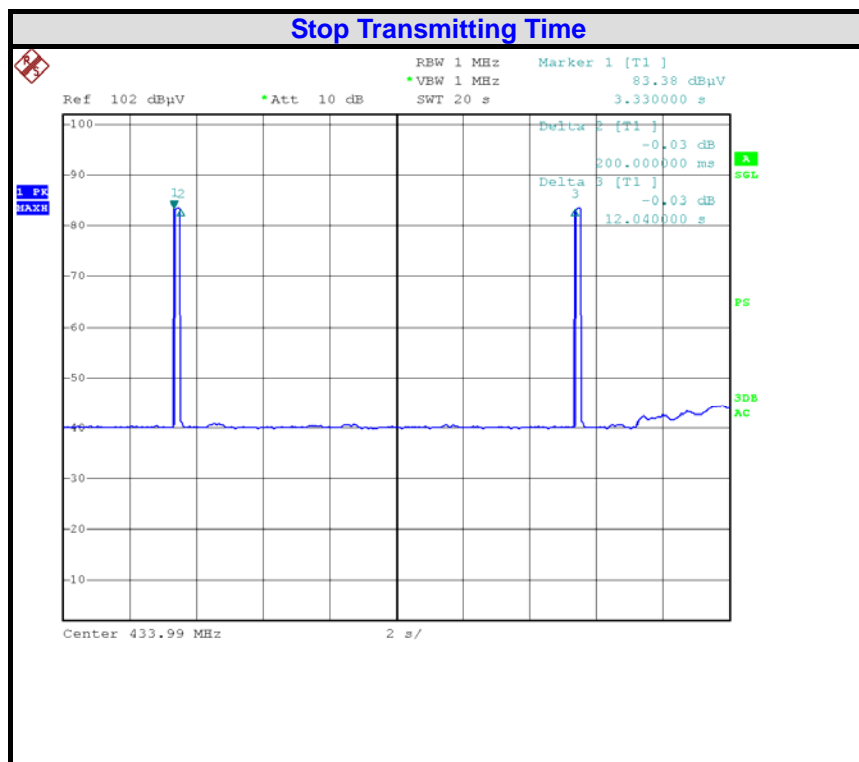
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## 10. Pulse Desensitization Correction Factor

### 10.1. Test Equipment

| Band Edge Compliance test |                   |                 |           |            |            |
|---------------------------|-------------------|-----------------|-----------|------------|------------|
| Item                      | Test Equipment    | Manufacturer    | Model No. | Serial No. | Last Cal.  |
| 1                         | EMI Test Receiver | ROHDE & SCHWARZ | ESCI      | 10868      | 2015/10/30 |
| 2                         | Log per Antenna   | ROHDE & SCHWARZ | HL223     | 100226     | 2016/03/24 |
| 3                         | Signal analyzer   | ROHDE & SCHWARZ | FSIQ26    | 100311     | 2016/03/24 |

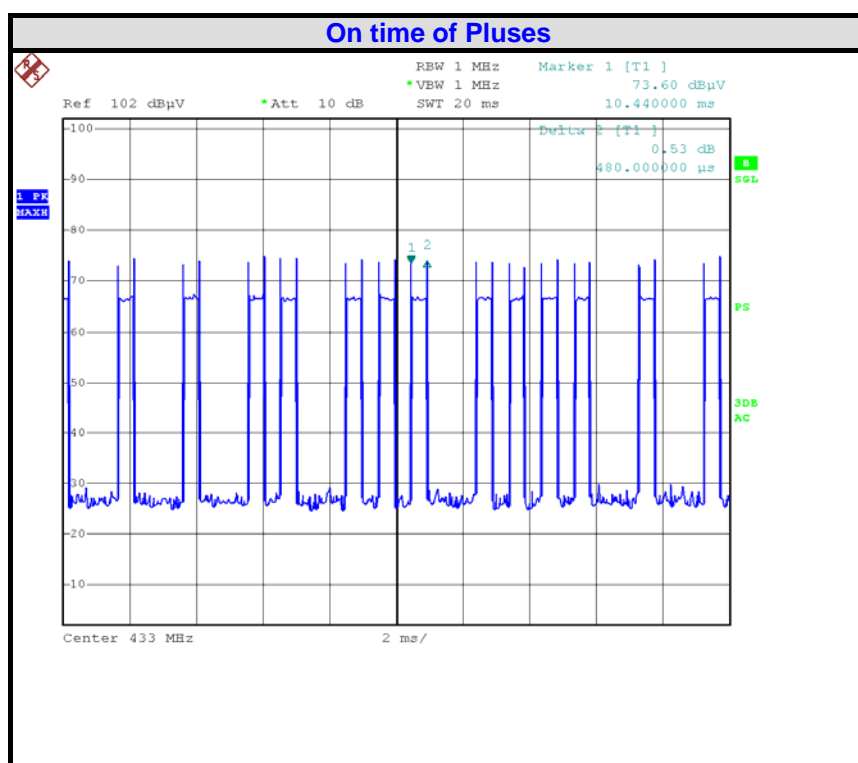
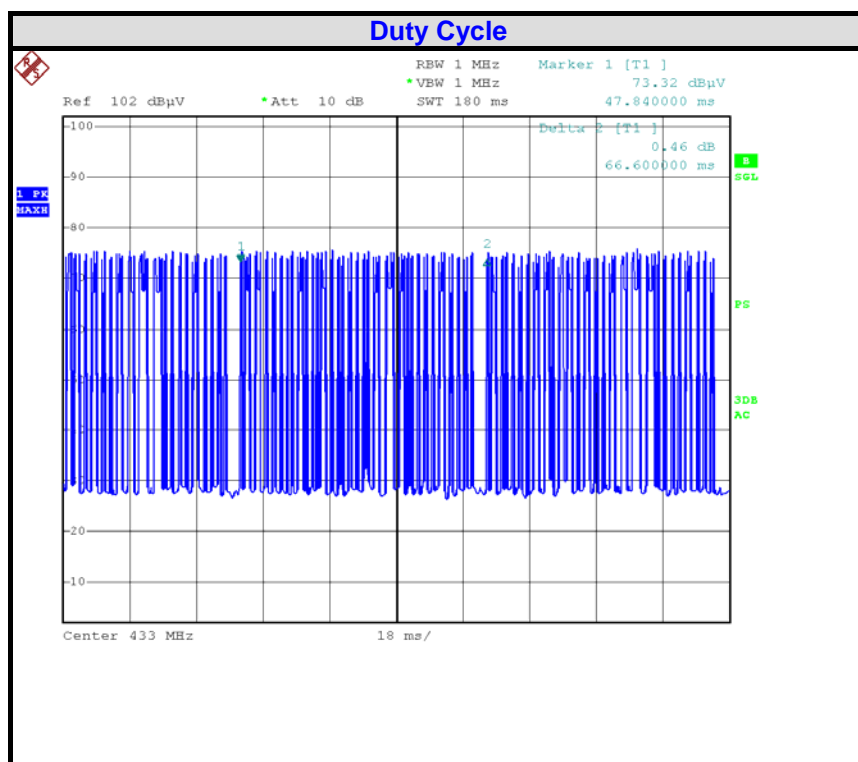
### 10.2. Test Information

|                 |   |
|-----------------|---|
| EUT:            | Remote Food Thermometer with Dual Probe |
| M/N:            | TP-22                                   |
| Power supply:   | Battery 1.5V*2                          |
| Test Condition: | Ambient Temperature: 25°C Humidity: 56% |
| Test standard:  | FCC PART 15C: 15.231                    |
| Test mode:      | Transmitting                            |
| Test Frequency: | 433.99 MHz                              |
| Test Date:      | 08~12 September 2016                    |
| Test By:        | Duke                                    |

### 10.3. Test Results

**PASSED.**

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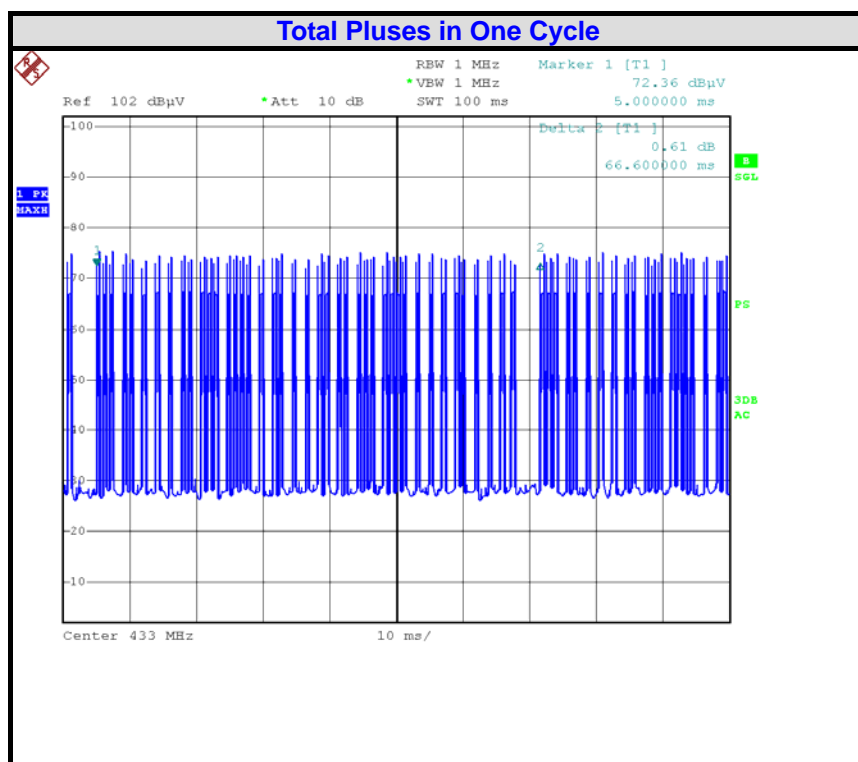
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### Test Data

Ton+off=200ms(which exceeds 0.1 seconds,and use the formula Ton/100ms to calculate the duty-cycle correction factor)

Ton=0.48\*42=20.16ms

Duty cycle Correction Factor=20\*log(Ton/Ton+off)= 20\*log 20.16ms /100ms= -13.91dB

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## 11. Manufacturer/ Approval holder Declaration

The following identical model(s):

N/A

Belong to the tested device:

Product description: **Remote Food Thermometer with Dual Probe**  
Model name: **TP-22**

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