



**CENTRE OF TESTING SERVICE  
INTERNATIONAL**

**OPERATE ACCORDING TO ISO/IEC 17025**

# **FCC ID TEST REPORT**

**TEST REPORT NUMBER : CGZ3170105-00010-EF**



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

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



TEST REPORT For FCC ID

Report Reference No. .... CGZ3170105-00010-EF

Date of issue..... 20 February 2017

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 E-care Electronics Co.,Ltd.

Address..... 5/F, B Building, Fuali Industrial Zone, District 28, Baoan, Shenzhen
Guangdong, China. P.C: 518101

Test specification .....

Standard ..... 47 CFR PART 15 OCT, 2016 , ANSI C63.10-2013

Test Report Form No. .... CTSEMC-1.0

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

Master TRF..... Dated 2009-01

CENTRE OF TESTING SERVICE CO., LTD. All rights reserved.

This publication may be reproduced in whole or in part for non-commercial purposes as long as the
CENTRE OF TESTING SERVICE CO., LTD is acknowledged as copyright owner and source of the
material. CENTRE OF TESTING SERVICE CO., LTD takes no responsibility for and will not assume liability
for damages resulting from the reader's interpretation of the reproduced material due to its placement and
context.

Test item description ..... : Digital Multifunction Oven Thermometer

Trade Mark ..... /

Manufacturer..... Shen Zhen E-care Electronics Co.,Ltd.

Model/Type reference..... TP-07S

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

Operating Frequency..... 433.99MHz

Result ..... PASSED

Compiled by:

Kate zhang / Fileadministrators

Supervised by:

Duke yang / Technique principal

Approved by:

Vincent yao / Manager

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CENTRE OF TESTING SERVICE CO., LTD.

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

Tel: +86-20-85543113 (32 lines)

Fax: +86-20-38780406

Complaint line: +86-20-85533471

E-mail: cts@cts-lab.com.cn

See Reverse For Terms And Conditions of Service



**FCC ID -- TEST REPORT**

<b>Test Report No. :</b> CGZ3170105-00010-EF	<u>20 February 2017</u> Date of issue
--	--

Type / Model.....	TP-07S
EUT.....	Digital Multifunction Oven Thermometer
<b>Applicant.....</b>	Shen Zhen E-care Electronics Co.,Ltd.
Address.....	5/F, B Building, Fuali Industrial Zone, District 28, Baoan, Shenzhen Guangdong, China. P.C: 518101
Telephone.....	+86-0755-33931980
Fax.....	+86-0755-33931982
Contact.....	/
<b>Manufacturer.....</b>	Shen Zhen E-care Electronics Co.,Ltd.
Address.....	5/F, B Building, Fuali Industrial Zone, District 28, Baoan, Shenzhen Guangdong, China. P.C: 518101
Telephone.....	+86-0755-33931980
Fax.....	+86-0755-33931982
Contact.....	/
<b>Factory .....</b>	Shen Zhen E-care Electronics Co.,Ltd.
Address.....	5/F, B Building, Fuali Industrial Zone, District 28, Baoan, Shenzhen Guangdong, China. P.C: 518101
Telephone.....	+86-0755-33931980
Fax.....	+86-0755-33931982
Contact.....	/

<b>Test Result</b> according to the standards on page 3: <b>PASSED</b>
--

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.

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.



TABLE OF CONTENTS

Description Page
1. TEST STANDARDS 5
2. SUMMARY 5
2.1 GENERAL REMARKS 5
2.2 FINAL ASSESSMENT 5
3. EQUIPMENT UNDER TEST 6
3.1 POWER SUPPLY SYSTEM UTILISED 6
3.2 SHORT DESCRIPTION OF THE EQUIPMENT UNDER TEST (EUT) 6
3.3 EUT OPERATION MODE 6
3.4 EUT CONFIGURATION 7
4. TEST ENVIRONMENT 8
4.1 ADDRESS OF THE TEST LABORATORY 8
4.2 TEST FACILITY 8
4.3 ENVIRONMENTAL CONDITIONS 8
4.4 DEFINITIONS OF SYMBOLS USED IN THIS TEST REPORT 8
4.5 STATEMENT OF THE MEASUREMENT UNCERTAINTY 8
4.6 MEASUREMENT UNCERTAINTY 9
5. Summary of standards and results 9
5.1.DESCRPTION OF STANDARDS AND RESULTS 9
6. Power Line Conducted Emission Test 10
6.1.1 DESCRIPTION OF THE TEST LOCATION 10
6.1.2TEST EQUIPMENT 10
6.2.1 BLOCK DIAGRAM OF TEST SETUP 10
6.2.2 DESCRIPTION OF THE TEST SET-UP 10
6.2.3 LIMITS OF DISTURBANCE (CLASS B) 11
6.2.4 POWER LINE CONDUCTED EMISSION TEST RESULTS 11
7. Radiated disturbance (electric field) 12
7.1.TEST EQUIPMENT 12
7.2.BLOCK DIAGRAM OF TEST SETUP 12
7.3.RADIATED EMISSION LIMIT STANDARD: FCC 15.231,209 13
7.4.TEST PROCEDURE 13
7.5.RADIATED EMISSION TEST RESULTS 14
8. 20 dB Bandwidth test 22
8.1. TEST EQUIPMENT 22
8.2. TEST INFORMATION 22

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CENTRE OF TESTING SERVICE CO., LTD.

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

Tel: +86-20-85543113 (32 lines)

Fax: +86-20-38780406

Complaint line: +86-20-85533471

E-mail: cts@cts-lab.com.cn

See Reverse For Terms And Conditions of Service



9. Stop Transmitting Time Test .....24

    9.1. TEST EQUIPMENT .....24

    9.2. TEST INFORMATION .....24

    9.3. TEST RESULTS .....24

10. Pulse Desensitization Correction Factor .....26

    10.1. TEST EQUIPMENT .....26

    10.2. TEST INFORMATION .....26

    10.3. TEST RESULTS .....26

11. Antenna Requirements .....29

    11.1 STANDARD APPLICABLE .....29

    11.2 ANTENNA CONSTRUCTION AND DIRECTIONAL GAIN .....29

12. Manufacturer/ Approval holder Declaration .....29

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

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

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

Tel: +86-20-85543113 (32 lines)

Fax: +86-20-38780406

Complaint line: +86-20-85533471

E-mail: cts@cts-lab.com.cn

See Reverse For Terms And Conditions of Service



## 1. TEST STANDARDS

The tests were performed according to following standards:

- 47 CFR PART 15 OCT, 2016
- ANSI C63.10-2013

## 2. SUMMARY

### 2.1 GENERAL REMARKS

Date of receipt of test sample	05 January 2017
Testing commenced on	05 January~20 February 2017
Testing concluded on	20 February 2017

### 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.



### 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.

### 3.4 EUT configuration

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

Description	:	Digital Multifunction Oven Thermometer
Model Number	:	TP-07S
Operation frequency	:	433.99MHz
Radio Technology	:	FSK
Modulation Technology	:	FSK modulation
Antenna	:	Internal Antenna

#### 3.4.2. Tested Supporting System Details

N/A

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

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

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

Tel: +86-20-85543113 (32 lines)

Fax: +86-20-38780406

Complaint line: +86-20-85533471

E-mail: cts@cts-lab.com.cn

See Reverse For Terms And Conditions of Service





## 4. TEST ENVIRONMENT

### 4.1 Address of the test laboratory

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

Tel: +86-20-85543113 (32 lines)

Fax: +86-20-38780406

### 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 22 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.791995, June 15, 2018.

### 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.

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

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

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

Tel: +86-20-85543113 (32 lines)

Fax: +86-20-38780406

Complaint line: +86-20-85533471

E-mail: cts@cts-lab.com.cn

See Reverse For Terms And Conditions of Service



**4.6 Measurement Uncertainty**

Test Item	Frequency Range	Uncertainty	Note
Conduction disturbance	150kHz~30MHz	±1.22dB	(1)
Power disturbance	30MHz~300MHz	±1.38dB	(1)
Radiation emission (3m)	30MHz~300MHz	±3.14dB	(1)
	300MHz~1000MHz	±3.18dB	(1)
	1GHz~18GHz	±3.54dB	(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	ANSI C63.10-2013 FCC Part 15 C: 15.207	N/A
Radiated Emission Test	ANSI C63.10-2013 FCC Part 15 C: 15.209 FCC Part 15 C: 15.231(e)	PASSED
20 dB Bandwidth Test	ANSI C63.10-2013 FCC Part 15 C: 15.231(e)	PASSED
Stop Transmitting Time Test	ANSI C63.10-2013 FCC Part 15 C: 15.231(e)	PASSED
N/A is an abbreviation for Not Applicable.		

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

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

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

Tel: +86-20-85543113 (32 lines)

Fax: +86-20-38780406

Complaint line: +86-20-85533471

E-mail: cts@cts-lab.com.cn

See Reverse For Terms And Conditions of Service

## 6. Power Line Conducted Emission Test

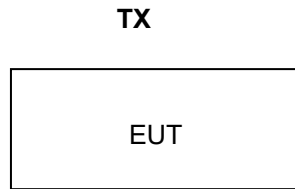
### 6.1.1 Description of the test location

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	ESHS10	842884/012	2016/10/24
2	Artificial Mains	ROHDE & SCHWARZ	ESH3-Z5	832479/025	2016/10/24
3	Artificial Mains	ROHDE & SCHWARZ	ESH3-Z5	832479/026	2016/10/24
4	Pulse Limiter	ROHDE & SCHWARZ	ESHSZ2	100301	2016/10/24
5	EMI Test Software	ROHDE & SCHWARZ	ESK1	N/A	2016/10/24

### 6.2.1 Block Diagram of Test Setup



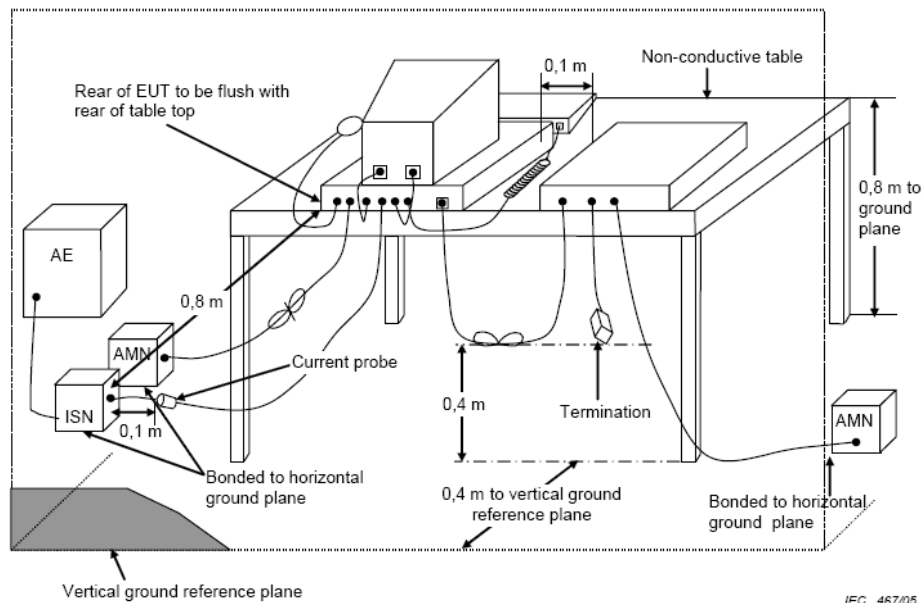
(EUT: Digital Multifunction Oven Thermometer)

### 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



Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

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

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

Tel: +86-20-85543113 (32 lines)

Fax: +86-20-38780406

Complaint line: +86-20-85533471

E-mail: cts@cts-lab.com.cn

See Reverse For Terms And Conditions of Service



### 6.2.3 Limits of disturbance (Class B)

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB( $\mu$ V)	Average Level 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.**

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

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

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

Tel: +86-20-85543113 (32 lines)

Fax: +86-20-38780406

Complaint line: +86-20-85533471

E-mail: cts@cts-lab.com.cn

See Reverse For Terms And Conditions of Service

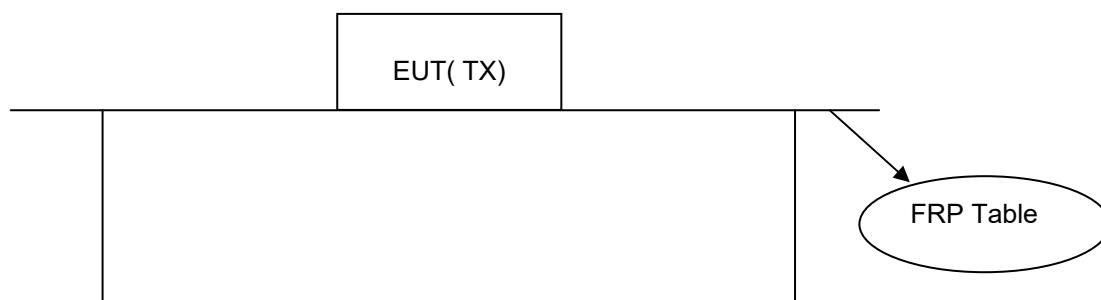
## 7. Radiated disturbance (electric field)

### 7.1. Test Equipment

Radiated disturbance (electric field)					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	EMI Test Receiver	ROHDE & SCHWARZ	ESCI	100868	2016/10/24
2	Biconical Antenna	ROHDE & SCHWARZ	HK116	100221	2016/03/26
3	Log per Antenna	ROHDE & SCHWARZ	HL223	100226	2016/03/26
4	Log per Antenna	ROHDE & SCHWARZ	HL050	100186	2016/03/26
5	Signal analyzer	ROHDE & SCHWARZ	FSIQ26	100311	2016/03/24
6	Loop Antenna	A.R.A	PLA-1030/B	1030	2016/10/24

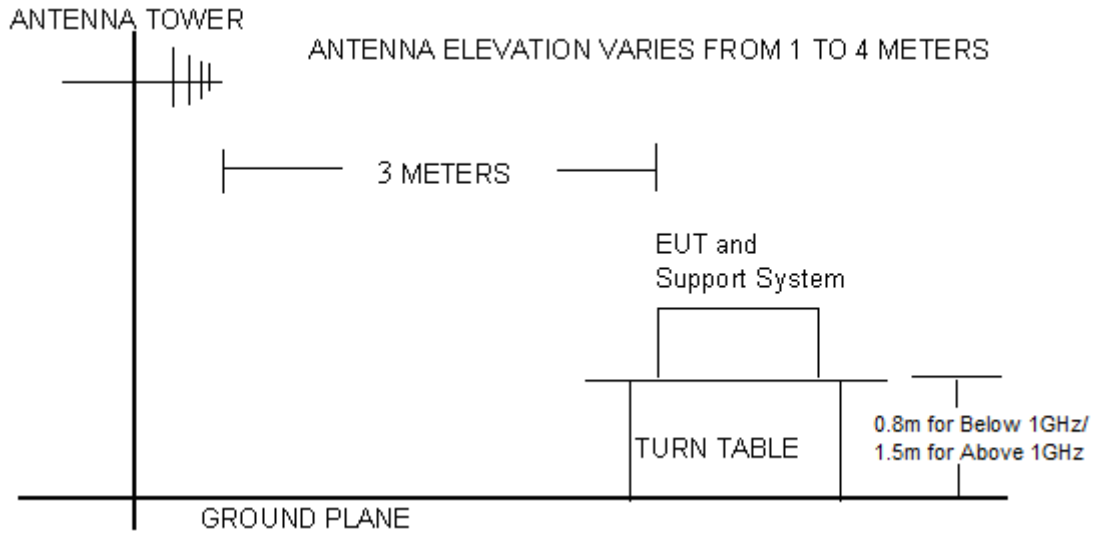
### 7.2. Block Diagram of Test Setup

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



(EUT: Digital Multifunction Oven Thermometer)

**7.2.2 Anechoic Chamber Setup Diagram**



**7.3. Radiated Emission Limit Standard: FCC 15.231,209**

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		$\mu\text{V}/\text{m}$	$\text{dB}(\mu\text{V})/\text{m}$
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 dB( $\mu\text{V}$ )/m (Peak) 54.0 dB( $\mu\text{V}$ )/m (Average)	

- Remark:
- (1) Emission level  $\text{dB}\mu\text{V} = 20 \log$  Emission level  $\mu\text{V}/\text{m}$
  - (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 (1.5m for above 1GHz) 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 a 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 C63.10-2013on 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,

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

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

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

Tel: +86-20-85543113 (32 lines)

Fax: +86-20-38780406

Complaint line: +86-20-85533471

E-mail: cts@cts-lab.com.cn

See Reverse For Terms And Conditions of Service

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.

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

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

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

Tel: +86-20-85543113 (32 lines)

Fax: +86-20-38780406

Complaint line: +86-20-85533471

E-mail: cts@cts-lab.com.cn

See Reverse For Terms And Conditions of Service



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

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBµV/m)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.
Remark:Other frequency no specific emission form the EUT (Margin > 20dB form the applicable Limit)							

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

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

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

Tel: +86-20-85543113 (32 lines)

Fax: +86-20-38780406

Complaint line: +86-20-85533471

E-mail: cts@cts-lab.com.cn

See Reverse For Terms And Conditions of Service





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

EUT	Digital Multifunction Oven Thermometer
Operating Condition	Battery 1.5V*2
Test Condition	Ambient Temperature: 25°C Humidity: 56%
Test Date:	05~09 January 2017
Operator	<b>Duke</b>
MODEL NO	TP-07S

Fundamental and Harmonics Average Result							
Frequency (MHz)	Factor (dB/m)	Reading (dBµV)	Duty Cycle Correction Factor(dB)	Level (dBµV/m)	Limit (15.231e) (dBµV/m)	Margin (dB)	Det.
433.99	-9.15	79.04	----	69.89	-----	-----	Peak
433.99	-9.15	79.04	-10.11	59.78	72.87	-13.09	AVG

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

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

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

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

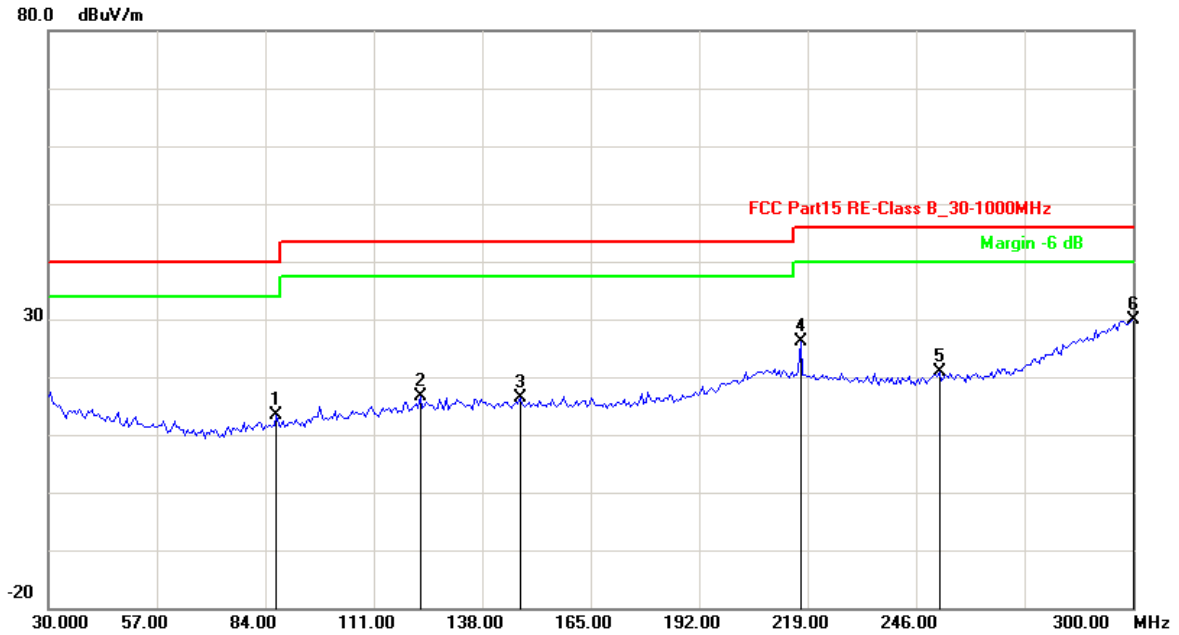
Tel: +86-20-85543113 (32 lines)

Fax: +86-20-38780406

Complaint line: +86-20-85533471

E-mail: cts@cts-lab.com.cn

See Reverse For Terms And Conditions of Service



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	86.8136	-19.40	32.79	13.39	40.00	-26.61	QP
2	122.5250	-16.57	33.15	16.58	43.50	-26.92	QP
3	147.4148	-15.98	32.39	16.41	43.50	-27.09	QP
4	217.2144	-10.72	36.89	26.17	46.00	-19.83	QP
5	251.8437	-11.35	32.26	20.91	46.00	-25.09	QP
6	300.0000	-1.42	31.33	29.91	46.00	-16.09	QP

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

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

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

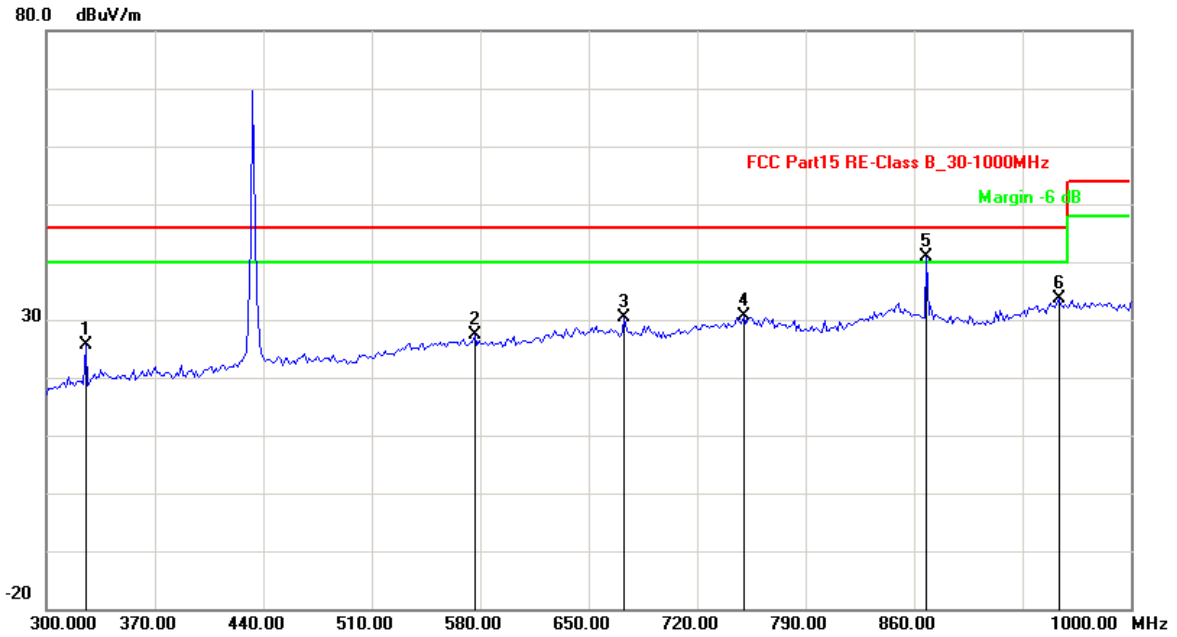
Tel: +86-20-85543113 (32 lines)

Fax: +86-20-38780406

Complaint line: +86-20-85533471

E-mail: cts@cts-lab.com.cn

See Reverse For Terms And Conditions of Service



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBµV/m)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.
1	325.2505	-12.47	38.16	25.69	46.00	-20.31	QP
2	576.3527	-5.61	32.92	27.31	46.00	-18.69	QP
3	673.1462	-3.45	33.74	30.29	46.00	-15.71	QP
4	750.3006	-1.61	32.29	30.68	46.00	-15.32	QP
5	868.1362	-10.94	41.61	30.67	52.87	-22.20	AVG
6	953.7074	0.38	33.32	33.70	46.00	-12.30	QP

Above 1GHz

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBµV/m)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.
1	1771.543	3.39	39.57	42.96	74.00	-31.04	peak
2	1771.543	3.39	26.39	29.78	54.00	-24.22	AVG
3	4725.451	5.01	37.56	42.57	74.00	-31.43	peak
4	4725.451	5.01	24.84	29.85	54.00	-24.15	AVG

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

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

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

Tel: +86-20-85543113 (32 lines)

Fax: +86-20-38780406

Complaint line: +86-20-85533471

E-mail: cts@cts-lab.com.cn

See Reverse For Terms And Conditions of Service



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

EUT	Digital Multifunction Oven Thermometer
Operating Condition	Battery 1.5V*2
Test Condition	Ambient Temperature: 25°C Humidity: 56%
Test Date:	05 ~ 09 January 2017
Operator	<b>Duke</b>
MODEL NO	TP-07S

Fundamental and Harmonics Average Result							
Frequency (MHz)	Factor (dB/m)	Reading (dBµV)	Duty Cycle Correction Factor(dB)	Level (dBµV/m)	Limit (15.231e) (dBµV/m)	Margin (dB)	Det.
433.99	-9.15	74.10	----	64.95	-----	-----	Peak
433.99	-9.15	74.10	-10.11	54.84	72.87	-18.03	AVG

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

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

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

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

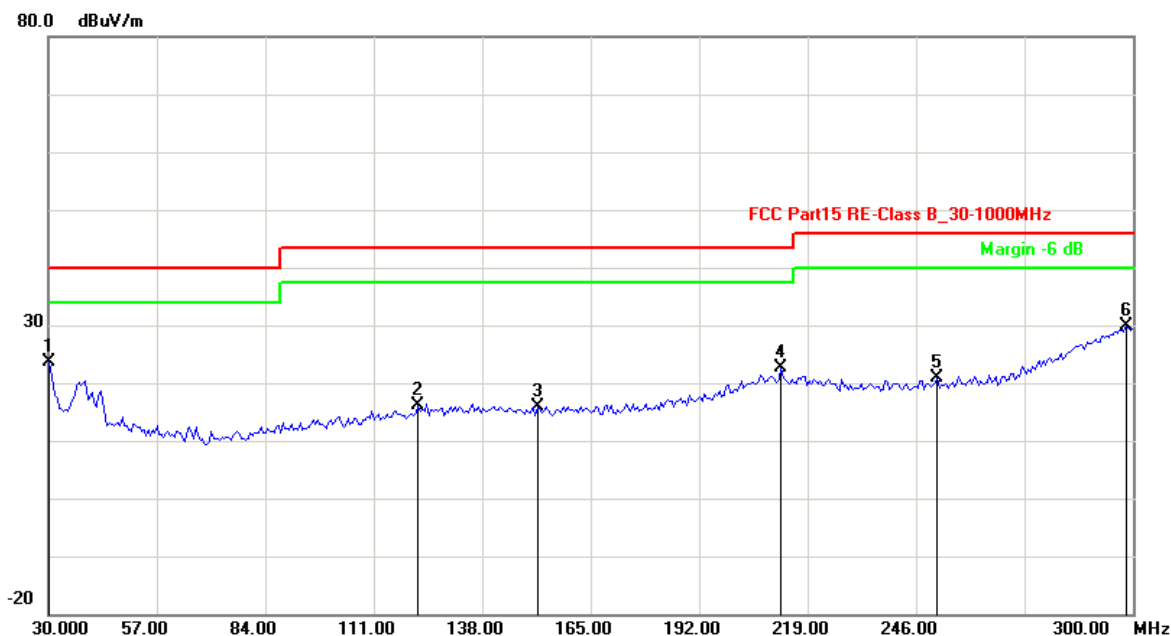
Tel: +86-20-85543113 (32 lines)

Fax: +86-20-38780406

Complaint line: +86-20-85533471

E-mail: cts@cts-lab.com.cn

See Reverse For Terms And Conditions of Service



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBµV/m)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.
1	30.0000	-16.04	39.68	23.64	40.00	-16.36	QP
2	121.9839	-16.60	32.73	16.13	43.50	-27.37	QP
3	151.7434	-15.96	31.95	15.99	43.50	-27.51	QP
4	212.3446	-10.36	32.98	22.62	43.50	-20.88	QP
5	251.3026	-11.38	32.37	20.99	46.00	-25.01	QP
6	298.3767	-1.85	31.65	29.80	46.00	-16.20	QP

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

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

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

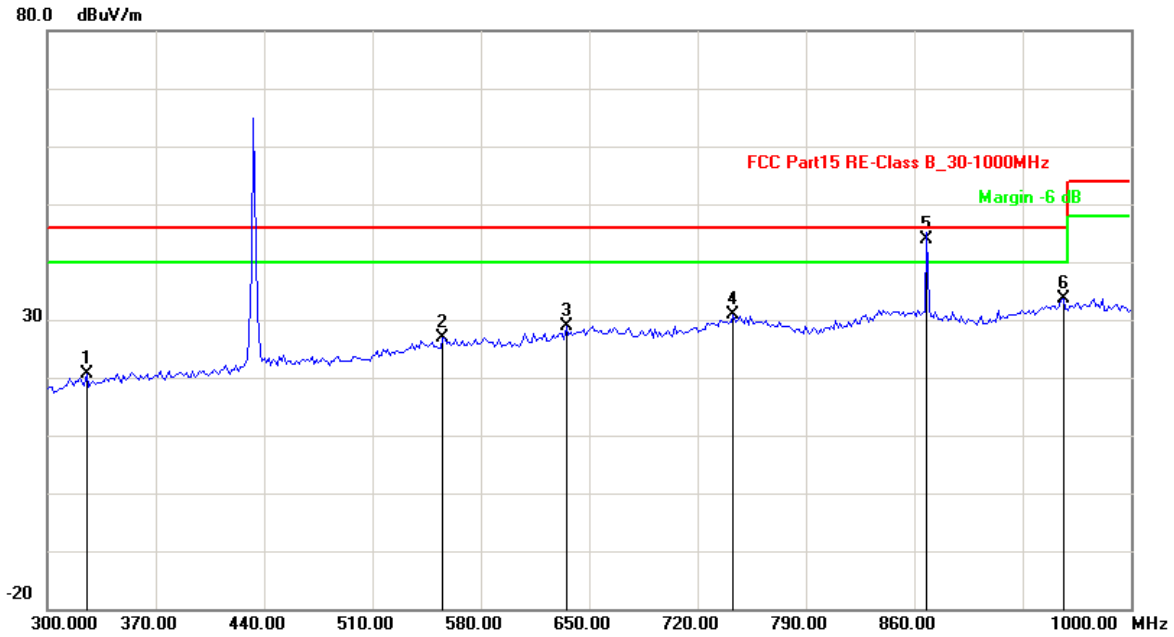
Tel: +86-20-85543113 (32 lines)

Fax: +86-20-38780406

Complaint line: +86-20-85533471

E-mail: cts@cts-lab.com.cn

See Reverse For Terms And Conditions of Service



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBµV/m)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.
1	325.2505	-12.47	33.02	20.55	46.00	-25.45	QP
2	555.3106	-5.67	32.49	26.82	46.00	-19.18	QP
3	635.2705	-3.91	32.89	28.98	46.00	-17.02	QP
4	743.2866	-1.88	32.67	30.79	46.00	-15.21	QP
5	868.1363	-10.94	44.68	33.74	52.87	-19.13	AVG
6	956.5130	0.36	33.25	33.61	46.00	-12.39	QP

Above 1GHz

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBµV/m)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.
1	1462.926	1.48	39.12	40.60	74.00	-33.40	peak
2	1462.926	1.48	26.37	27.85	54.00	-26.15	AVG
3	3557.114	3.47	36.33	39.80	74.00	-34.20	peak
4	3557.114	3.47	23.00	26.47	54.00	-27.53	AVG

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

Remark: Others frequency Radiated Emission level margin all >20dB of Limit.

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

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

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

Tel: +86-20-85543113 (32 lines)

Fax: +86-20-38780406

Complaint line: +86-20-85533471

E-mail: cts@cts-lab.com.cn

See Reverse For Terms And Conditions of Service



## 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	2016/10/24
2	Log per Antenna	ROHDE & SCHWARZ	HL223	100226	2016/03/26
3	Signal analyzer	ROHDE & SCHWARZ	FSIQ26	100311	2016/03/26

### 8.2. Test Information

EUT:	Digital Multifunction Oven Thermometer
M/N:	TP-07S
Power supply:	Battery 1.5V*2
Test Condition:	Ambient Temperature: 25°C Humidity: 56%
Test standard:	FCC PART 15C: 15.231a
Test mode:	Transmitting
Test Frequency:	433.99 MHz
Test Date:	05~09 January 2017
Test By:	<b>Duke</b>

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

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

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

Tel: +86-20-85543113 (32 lines)

Fax: +86-20-38780406

Complaint line: +86-20-85533471

E-mail: cts@cts-lab.com.cn

See Reverse For Terms And Conditions of Service

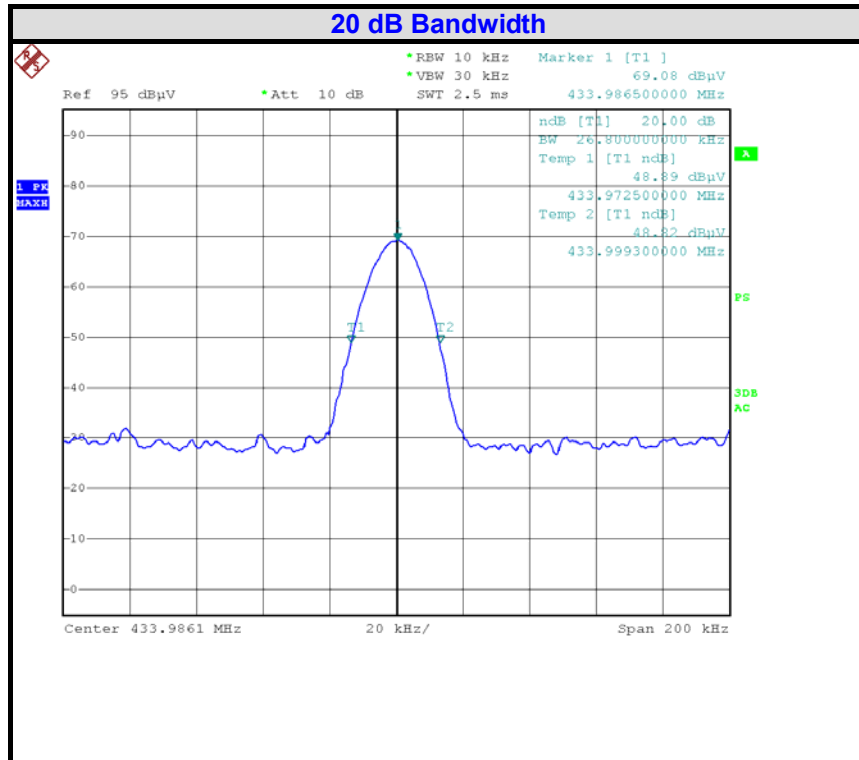


8.3. Test Results

PASSED.

The testing data was attached in the next pages.

Frequency (MHz)	20 dB Bandwidth (KHz)	Limit(MHz): No wider than 0.25% of the center frequency	Conclusion
433.99	26.8KHz	433.99*0.25%=1.083MHz	PASSED



Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

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

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

Tel: +86-20-85543113 (32 lines)

Fax: +86-20-38780406

Complaint line: +86-20-85533471

E-mail: cts@cts-lab.com.cn

See Reverse For Terms And Conditions of Service





## 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	2016/10/24
2	Log per Antenna	ROHDE & SCHWARZ	HL223	100226	2016/03/26
3	Signal analyzer	ROHDE & SCHWARZ	FSIQ26	100311	2016/03/24

### 9.2. Test Information

EUT:	Digital Multifunction Oven Thermometer
M/N:	TP-07S
Power supply:	Battery 1.5V*2
Test Condition:	Ambient Temperature: 25°C Humidity: 56%
Test standard:	FCC PART 15C: 15.231(e)
Test mode:	Transmitting
Test Frequency:	433.99 MHz
Test Date:	20 February 2017
Test By:	<b>Duke</b>

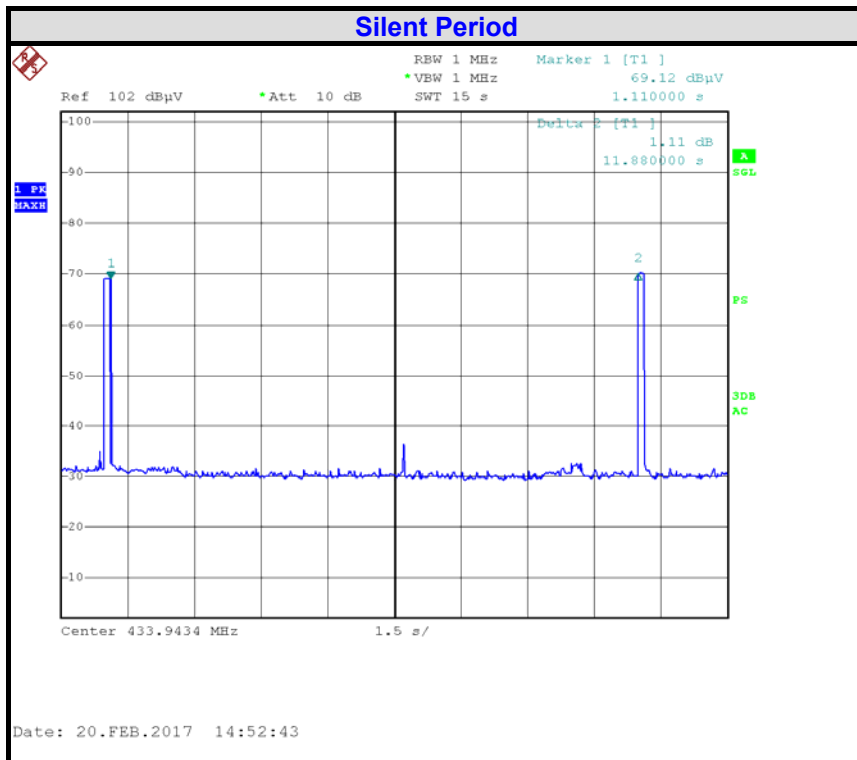
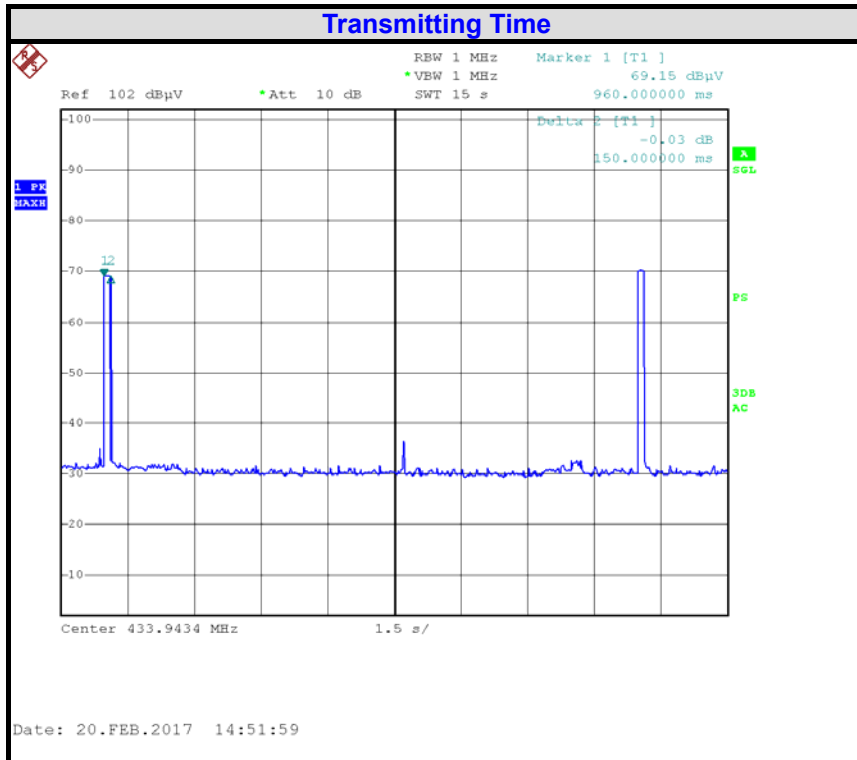
### 9.3. Test Results

#### 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	150.00ms	11.88s	>10s and 30 times of transmissions	PASSED



Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

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

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

Tel: +86-20-85543113 (32 lines)

Fax: +86-20-38780406

Complaint line: +86-20-85533471

E-mail: cts@cts-lab.com.cn

See Reverse For Terms And Conditions of Service

## 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	2016/10/24
2	Log per Antenna	ROHDE & SCHWARZ	HL223	100226	2016/03/24
3	Signal analyzer	ROHDE & SCHWARZ	FSIQ26	100311	2016/03/24

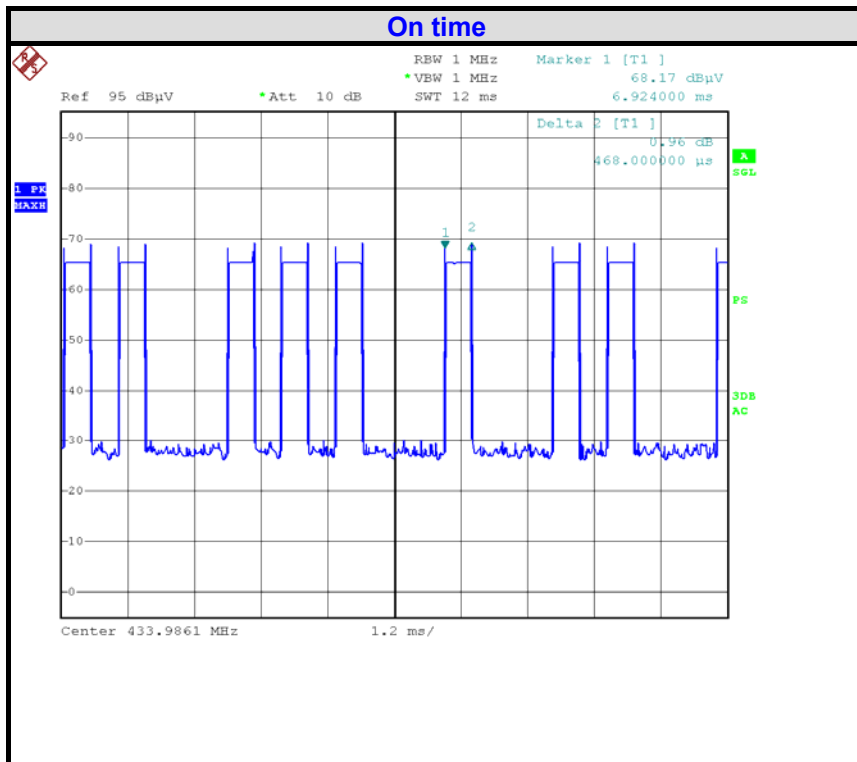
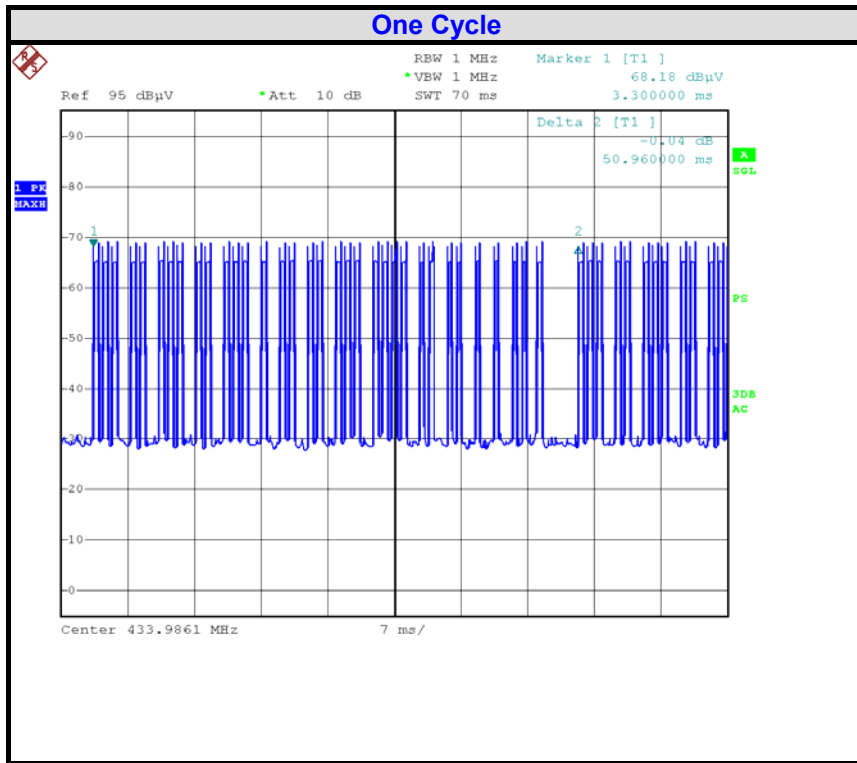
### 10.2. Test Information

EUT:	Digital Multifunction Oven Thermometer
M/N:	TP-07S
Power supply:	Battery 1.5V*2
Test Condition:	Ambient Temperature: 25°C Humidity: 56%
Test standard:	FCC PART 15C: 15.231e
Test mode:	Transmitting
Test Frequency:	433.99 MHz
Test Date:	05~09 January 2017
Test By:	<b>Duke</b>

### 10.3. Test Results

**PASSED.**

The testing data was attached in the next pages.



Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

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

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

Tel: +86-20-85543113 (32 lines)

Fax: +86-20-38780406

Complaint line: +86-20-85533471

E-mail: cts@cts-lab.com.cn

See Reverse For Terms And Conditions of Service

**Test Data**

**Ton+off**=50.96ms(which exceeds 0.1 seconds,and use the formula Ton/100ms to calculate the duty-cycle correction factor)

**Ton**=0.468 ms \*34=15.91ms

**Duty cycle Correction Factor**= $20 \cdot \log(\text{Ton}/\text{Ton}+\text{off}) = 20 \log 15.91\text{ms}/50.96\text{ms} = -10.11\text{dB}$ .

Pulse Desensitization Correction Factor (**PDCF**):

( $\text{RBW} > 2/\text{PW} = 2/0.000468\text{s} = 4.3\text{KHz}$ )

**PW**=0.468 ms

**T**=50.96ms (which exceeds 0.1 seconds,and use the formula Ton/100ms to calculate the duty-cycle correction factor)

**PDCF**dB= $20 \log \text{PW}/\text{T} = 20 \log 0.468\text{ms}/50.96\text{ms} = -40.74\text{dB}$ .

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

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

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

Tel: +86-20-85543113 (32 lines)

Fax: +86-20-38780406

Complaint line: +86-20-85533471

E-mail: cts@cts-lab.com.cn

See Reverse For Terms And Conditions of Service



## 11. Antenna Requirements

### 11.1 Standard Applicable

The EUT is Internal antenna with 0dBi, according to FCC 47 CFR Section 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.

### 11.2 Antenna Construction and Directional Gain

Antenna type: Internal antenna  
Antenna Gain: 0dBi

## 12. Manufacturer/ Approval holder Declaration

The following identical model(s):

N/A

Belong to the tested device:

Product description: **Digital Multifunction Oven Thermometer**  
Model name: **TP-07S**