

# FCC TEST REPORT

**Product** : Remote Transmitter  
**Trade mark** : Skylink  
**Model/Type reference** : GS-MT2, WD-MT2  
**Serial Number** : N/A  
**Report Number** : EED32I002260  
**FCC ID** : KUTWDGSMT2  
**Date of Issue** : Aug. 27, 2016  
**Test Standards** : 47 CFR Part 15 Subpart C (2015)  
**Test result** : PASS

Prepared for:

**Capital Prospect Ltd**

**Rm 03, 13/F, Block B, Veristrong Ind. Bdg 34-36, Au Pui Wan Street,  
Fo Tan, N.T. Hong Kong**

Prepared by:

**Centre Testing International Group Co., Ltd.  
Hongwei Industrial Zone, Bao'an 70 District,  
Shenzhen, Guangdong, China**

**TEL: +86-755-3368 3668**

**FAX: +86-755-3368 3385**

Tested By:

*Tom chen*

Tom chen (Test Project)

Compiled by:

*Kevin lan*

Kevin lan(Project Engineer)

Reviewed by:

*Kevin yang*

Kevin yang (Reviewer)

Approved by:

*Sheek Luo*

Sheek Luo (Lab supervisor)



Aug. 27, 2016

Check No.: 2325254888

## 2 Version

Version No.	Date	Description
00	Aug. 27, 2016	Original

### 3 Test Summary

Test Item	Test Requirement	Test method	Result
<b>Antenna Requirement</b>	47 CFR Part 15 Subpart C Section 15.203	ANSI C63.10-2013	PASS
<b>AC Power Line Conducted Emission</b>	47 CFR Part 15 Subpart C Section 15.207	ANSI C63.10-2013	N/A
<b>Field Strength of the Fundamental Signal</b>	47 CFR Part 15 Subpart C Section 15.231 (b)	ANSI C63.10-2013	PASS
<b>Spurious Emissions</b>	47 CFR Part 15 Subpart C Section 15.231 (b)/15.209	ANSI C63.10-2013	PASS
<b>20dB Bandwidth</b>	47 CFR Part 15 Subpart C Section 15.231 (c)	ANSI C63.10-2013	PASS
<b>Deactivated Time</b>	47 CFR Part 15 Subpart C Section 15.231 (a)	ANSI C63.10-2013	PASS

Remark:

The tested sample and the sample information are provided by the client.

N/A: Not applicable for test device.

Model No.: GS-MT2, WD-MT2

These models are similar identical on the circuit design, layout and transmission portion. The only difference in between the models is the sensor detection portion.

According to the declaration from the applicant, the models GS-MT2 and models WD-MT2 were identical, The only difference in between the models is the sensor detection portion. Therefore in this report the Model No. GS-MT2 were fully tested, and the Model No.WD-MT2 were retested for Fundamental Emission and Spurious Emissions.

## 4 Contents

<b>1 COVER PAGE</b> .....	<b>1</b>
<b>2 VERSION</b> .....	<b>2</b>
<b>3 TEST SUMMARY</b> .....	<b>3</b>
<b>4 CONTENTS</b> .....	<b>4</b>
<b>5 GENERAL INFORMATION</b> .....	<b>5</b>
5.1 CLIENT INFORMATION.....	5
5.2 GENERAL DESCRIPTION OF EUT.....	5
5.3 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD.....	5
5.4 TEST ENVIRONMENT AND MODE.....	5
5.5 DESCRIPTION OF SUPPORT UNITS.....	5
5.6 TEST LOCATION.....	6
5.7 TEST FACILITY.....	6
5.8 DEVIATION FROM STANDARDS.....	7
5.9 ABNORMALITIES FROM STANDARD CONDITIONS.....	7
5.10 OTHER INFORMATION REQUESTED BY THE CUSTOMER.....	7
5.11 MEASUREMENT UNCERTAINTY (95% CONFIDENCE LEVELS, K=2).....	7
<b>6 EQUIPMENT LIST</b> .....	<b>8</b>
<b>7 TEST RESULTS AND MEASUREMENT DATA</b> .....	<b>10</b>
7.1 ANTENNA REQUIREMENT.....	10
7.2 RADIATED TRANSMITTER EMISSIONS.....	11
7.2.1 Radiated Emissions.....	11
7.3 20dB BANDWIDTH.....	19
7.4 DEACTIVATED TIME.....	20
<b>APPENDIX 1 PHOTOGRAPHS OF TEST SETUP</b> .....	<b>21</b>
<b>APPENDIX 2 PHOTOGRAPHS OF EUT</b> .....	<b>23</b>

## 5 General Information

### 5.1 Client Information

Applicant:	Capital Prospect Ltd
Address of Applicant:	Rm 03, 13/F, Block B, Veristrong Ind. Bdg 34-36, Au Pui Wan Street, Fo Tan, N.T. Hong Kong
Manufacturer:	Capital Prospect Ltd
Address of Manufacturer:	Rm 03, 13/F, Block B, Veristrong Ind. Bdg 34-36, Au Pui Wan Street, Fo Tan, N.T. Hong Kong
Factory:	Dongguan Skylink Electronics Co., Ltd.
Address of Factory:	82 DALING RD GAO YING VILLAGE DALANG TOWN DONGGUAN GUANGDONG

### 5.2 General Description of EUT

Product Name:	Remote Transmitter
Model No.:	GS-MT2, WD-MT2
Trade Mark:	Skylink
EUT Primary Function:	The remote transmitter transmit a 433.92MHz PCM modulated signal to control the corresponding receiver
Power Supply:	1*1.5(AA)=1.5V

### 5.3 Product Specification subjective to this standard

Frequency Range:	433.92MHz
Sample Type:	Portable production
Antenna Type:	Integral
Antenna gain:	0dBi
Test voltage:	1*1.5(AA)=1.5V
Sample Received Date:	Aug. 12, 2016
Sample tested Date:	Aug. 12, 2016 to Aug. 27, 2016

### 5.4 Test Environment and Mode

<b>Operating Environment:</b>	
Temperature:	22°C
Humidity:	54% RH
Atmospheric Pressure:	1010mbar
<b>Test mode:</b>	
Continuous Transmitting mode:	Continuous transmit 433.92MHz signal with the continuous transmission samples.
Normal transmission mode:	Transmission by the normal sample

### 5.5 Description of Support Units

The EUT has been tested independently.



## 5.6 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd.

Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China 518101

Telephone: +86 (0) 755 3368 3668 Fax: +86 (0) 755 3368 3385

No tests were sub-contracted.

## 5.7 Test Facility

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

### **CNAS-Lab Code: L1910**

Centre Testing International Group Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC 17025: 2005 General Requirements) for the Competence of Testing and Calibration Laboratories..

### **A2LA-Lab Cert. No. 3061.01**

Centre Testing International Group Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

### **FCC-Registration No.: 886427**

Centre Testing International Group 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 886427.

### **IC-Registration No.: 7408A-2**

The 3m Alternate Test Site of Centre Testing International Group Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 7408A-2 .

### **IC-Registration No.: 7408B-1**

The 10m Alternate Test Site of Centre Testing International Group Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 7408B-1.

### **NEMKO-Aut. No.: ELA503**

Centre Testing International Group Co., Ltd. has been assessed the quality assurance system, the testing facilities, qualifications and testing practices of the relevant parts of the organization. The quality assurance system of the Laboratory has been validated against ISO/IEC 17025 or equivalent. The laboratory also fulfils the conditions described in Nemko Document NLA-10.

### **VCCI**

The Radiation 3 & 10 meters site of Centre Testing International Group Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-4096.

Main Ports Conducted Interference Measurement of Centre Testing International Group Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: C-4563.

Telecommunication Ports Conducted Disturbance Measurement of Centre Testing International Group Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: T-2146.

The Radiation 3 meters site of Centre Testing International Group Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-758

## 5.8 Deviation from Standards

None.

## 5.9 Abnormalities from Standard Conditions

None.

## 5.10 Other Information Requested by the Customer

None.

## 5.11 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty
1	Radio Frequency	$7.9 \times 10^{-8}$
2	RF power, conducted	0.31dB (30MHz-1GHz)
		0.57dB (1GHz-18GHz)
3	Radiated Spurious emission test	4.5dB (30MHz-1GHz)
		4.8dB (1GHz-12.75GHz)
4	Conduction emission	3.6dB (9kHz to 150kHz)
		3.2dB (150kHz to 30MHz)
5	Temperature test	0.64°C
6	Humidity test	2.8%
7	DC power voltages	0.025%

## 6 Equipment List

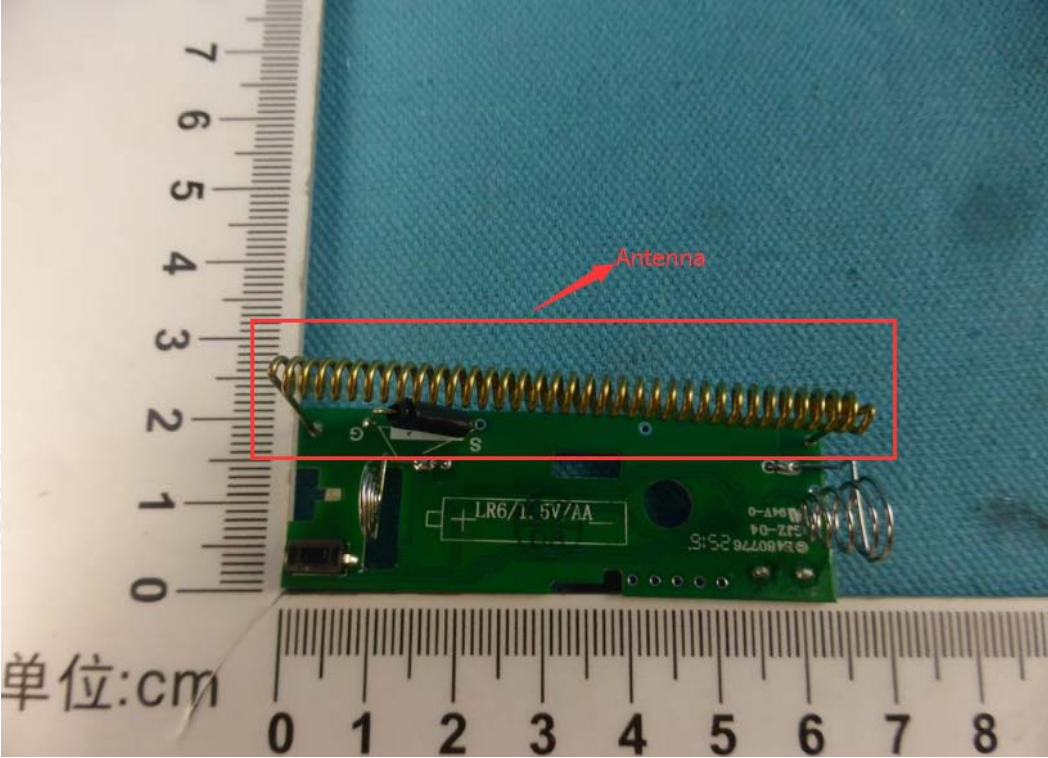
3M Semi/full-anechoic Chamber					
Equipment	Manufacturer	Mode No.	Serial Number	Cal. date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
3M Chamber & Accessory Equipment	TDK	SAC-3	---	06-05-2016	06-05-2019
TRILOG Broadband Antenna	SCHWARZBECK	VULB9163	9163-484	05-23-2016	05-22-2017
Microwave Preamplifier	Agilent	8449B	3008A02425	02-04-2016	02-03-2017
Horn Antenna	ETS-LINDGREN	3117	00057407	07-20-2015	07-18-2018
Loop Antenna	ETS	6502	00071730	07-30-2015	07-28-2017
Spectrum Analyzer	R&S	FSP40	100416	06-16-2016	06-15-2017
Receiver	R&S	ESCI	100435	06-16-2016	06-15-2017
Multi device Controller	matur	NCD/070/10711 112	---	01-12-2016	01-11-2017
LISN	schwarzbeck	NNBM8125	81251547	06-16-2016	06-15-2017
LISN	schwarzbeck	NNBM8125	81251548	06-16-2016	06-15-2017
Signal Generator	Agilent	E4438C	MY45095744	04-01-2016	03-31-2017
Signal Generator	Keysight	E8257D	MY53401106	04-01-2016	03-31-2017
Temperature/ Humidity Indicator	TAYLOR	1451	1905	04-27-2016	04-26-2017
Communication test set	Agilent	E5515C	GB47050534	04-01-2016	03-31-2017
Cable line	Fulai(7M)	SF106	5219/6A	01-12-2016	01-11-2017
Cable line	Fulai(6M)	SF106	5220/6A	01-12-2016	01-11-2017
Cable line	Fulai(3M)	SF106	5216/6A	01-12-2016	01-11-2017
Cable line	Fulai(3M)	SF106	5217/6A	01-12-2016	01-11-2017
Communication test set	R&S	CMW500	152394	04-01-2016	03-31-2017
High-pass filter	Sinoscite	FL3CX03WG18 NM12-0398-002	---	01-12-2016	01-11-2017
High-pass filter	MICRO-TRONICS	SPA-F-63029-4	---	01-12-2016	01-11-2017
band rejection filter	Sinoscite	FL5CX01CA09C L12-0395-001	---	01-12-2016	01-11-2017
band rejection filter	Sinoscite	FL5CX01CA08C L12-0393-001	---	01-12-2016	01-11-2017
band rejection filter	Sinoscite	FL5CX02CA04C L12-0396-002	---	01-12-2016	01-11-2017
band rejection filter	Sinoscite	FL5CX02CA03C L12-0394-001	---	01-12-2016	01-11-2017



RF Conducted test					
Equipment	Manufacturer	Mode No.	Serial Number	Cal. date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
Spectrum Analyzer	R&S	FSP40	100416	06-16-2016	06-15-2017
Receiver	R&S	ESCI	100435	06-16-2016	06-15-2017
Signal Generator	Agilent	E4438C	MY45095744	04-01-2016	03-31-2017
Signal Generator	Keysight	E8257D	MY53401106	04-01-2016	03-31-2017
High-pass filter	Sinoscite	FL3CX03WG18 NM12-0398-002	---	01-12-2016	01-11-2017
High-pass filter	MICRO-TRONICS	SPA-F-63029-4	---	01-12-2016	01-11-2017
band rejection filter	Sinoscite	FL5CX01CA09C L12-0395-001	---	01-12-2016	01-11-2017
band rejection filter	Sinoscite	FL5CX01CA08C L12-0393-001	---	01-12-2016	01-11-2017
band rejection filter	Sinoscite	FL5CX02CA04C L12-0396-002	---	01-12-2016	01-11-2017

## 7 Test results and Measurement Data

### 7.1 Antenna Requirement

<b>Standard requirement:</b>	47 CFR Part 15C Section 15.203
<p>15.203 requirement: 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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.</p> 	
<p>Result: Integral antenna is used. It is permanently attached antenna and not be replaced by user.</p>	

## 7.2 Radiated Transmitter Emissions

### 7.2.1 Radiated Emissions

**Test Requirement:** 47 CFR Part 15C Section 15.231(b) and 15.209

**Test Method:** ANSI C63.10

**Test Site:** Measurement Distance: 3m (Semi-Anechoic Chamber)

**Receiver Setup:**

Frequency	Detector	RBW	VBW	Remark
0.009MHz-0.090MHz	Peak	10kHz	30kHz	Peak
0.009MHz-0.090MHz	Average	10kHz	30kHz	Average
0.090MHz-0.110MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
0.110MHz-0.490MHz	Peak	10kHz	30kHz	Peak
0.110MHz-0.490MHz	Average	10kHz	30kHz	Average
0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak
Above 1GHz	Peak	1MHz	3MHz	Peak
	Peak	1MHz	10Hz	Average

**Test Setup:**

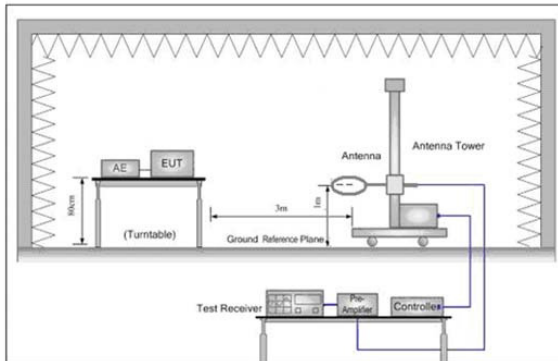


Figure 1. Below 30MHz

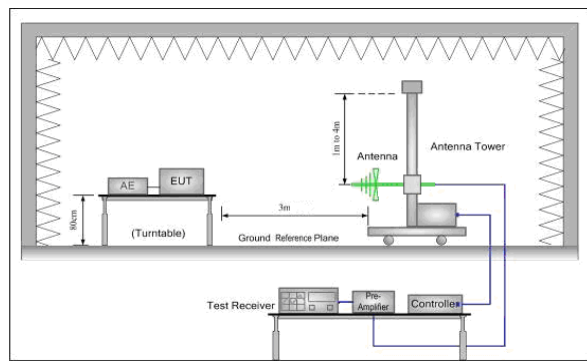


Figure 2. 30MHz to 1GHz

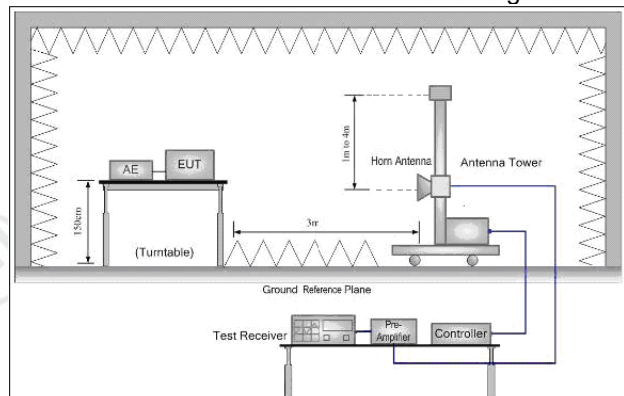


Figure 3. Above 1GHz

**Test Procedure: 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 chamber. 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 (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 ,middle channel, the Highest channel
- i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case.
- j. Repeat above procedures until all frequencies measured was complete.

**Limit:  
(Spurious)**

Frequency	Limit (dB $\mu$ V/m @3m)	Detector
30MHz - 10 <sup>th</sup> harmonics	60.8	Average
	80.8	Peak

**Note:** 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.

**Limit:  
(Fundamental)**

Frequency	Limit (dB $\mu$ V/m @3m)	Remark
433.92MHz	80.8	Average Value
	100.8	Peak Value

**Test Mode:** transmitting mode

**Instruments Used:** Refer to section 6 for details

**Test Results:** **PASS**



**Test data**

**Fundamental Emission**

**GS-MT2**

Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Read Level (dB $\mu$ V)	Peak Level (dB $\mu$ V/m)	Average Limit (dB $\mu$ V/m)	Over Limit (dB)	Polarization
433.92	17.07	2.93	29.47	49.47	80.8	-31.33	Horizontal
433.92	17.07	2.93	28.28	48.28	80.8	-32.52	Vertical

**WD-MT2**

Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Read Level (dB $\mu$ V)	Peak Level (dB $\mu$ V/m)	Average Limit (dB $\mu$ V/m)	Over Limit (dB)	Polarization
433.92	16.86	2.93	37.59	57.38	80.8	-23.42	Horizontal
433.92	16.86	2.93	26.83	46.62	80.8	-34.18	Vertical

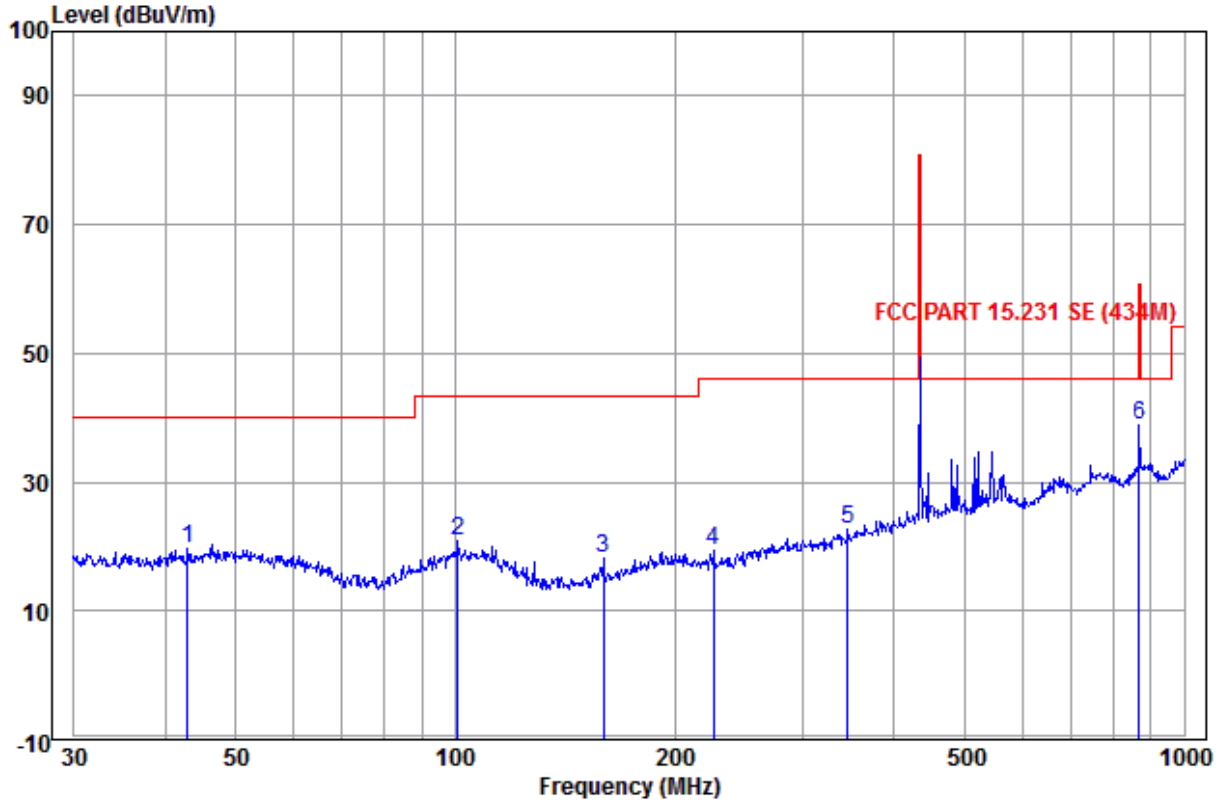
**Remark:** As shown in this section, for field strength of the fundamental signal measurements, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above. So, only the peak value is measured.



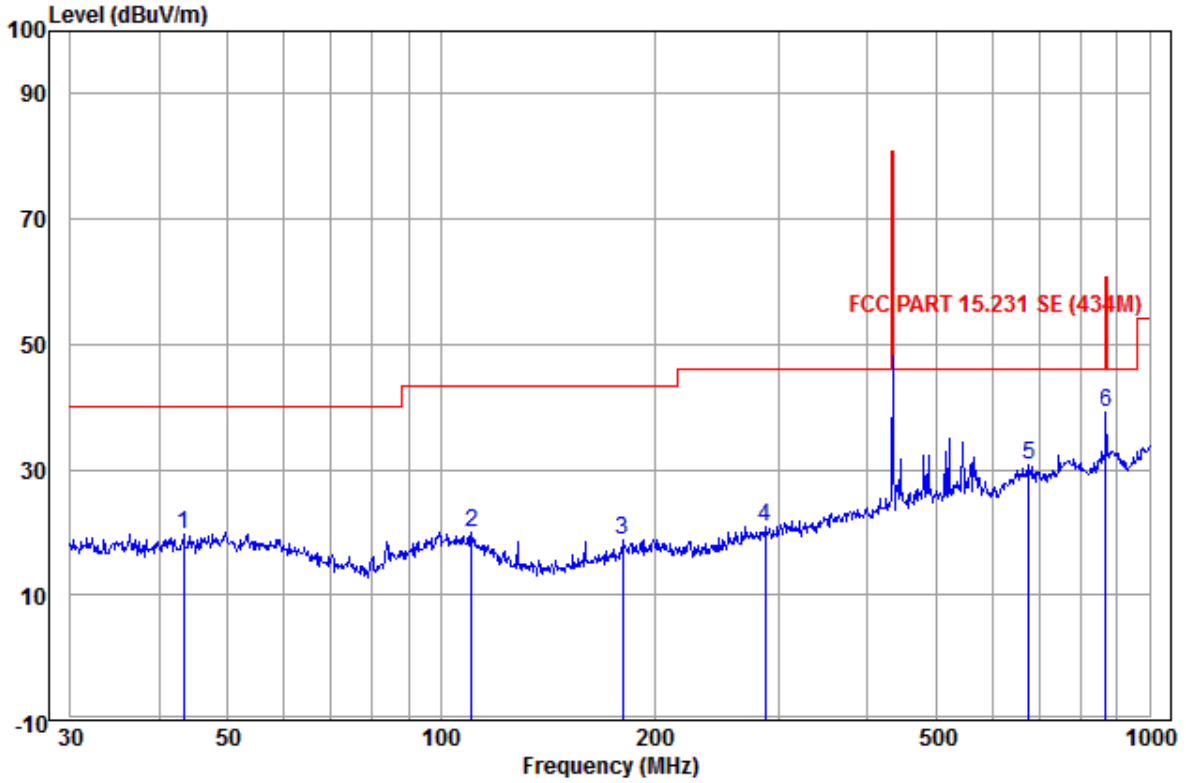
**Spurious Emissions**

30MHz-1GHz

GS-MT2



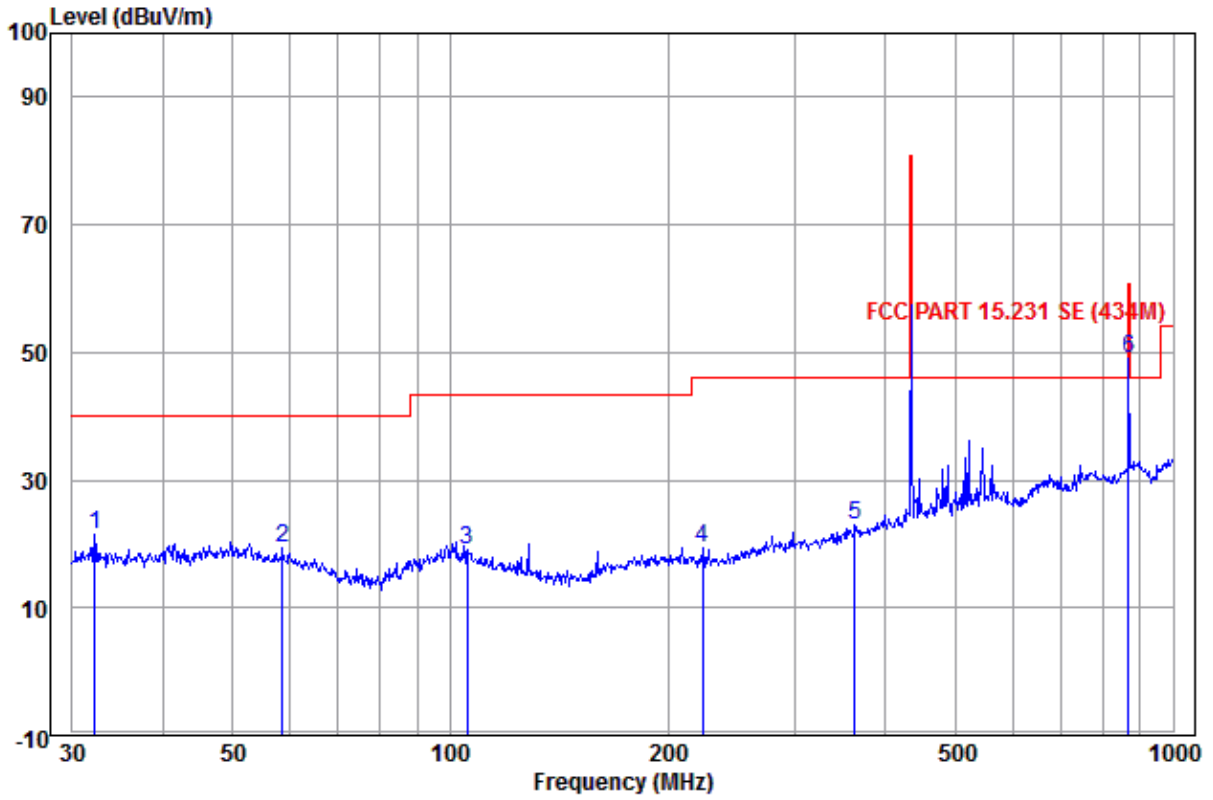
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Read Level (dBuV)	Peak Level (dBuV/m)	Average Limit (dBuV/m)	Over Limit (dB)	polarization
42.900	14.48	0.80	4.25	19.53	60.80	-41.27	Horizontal
100.934	13.22	1.57	5.97	20.76	60.80	-40.04	Horizontal
159.784	9.80	1.72	6.51	18.03	60.80	-42.77	Horizontal
226.099	12.04	2.29	5.00	19.33	60.80	-41.47	Horizontal
345.595	14.88	2.68	4.98	22.54	60.80	-38.26	Horizontal
869.130	22.16	4.24	12.35	38.75	60.80	-22.05	Horizontal



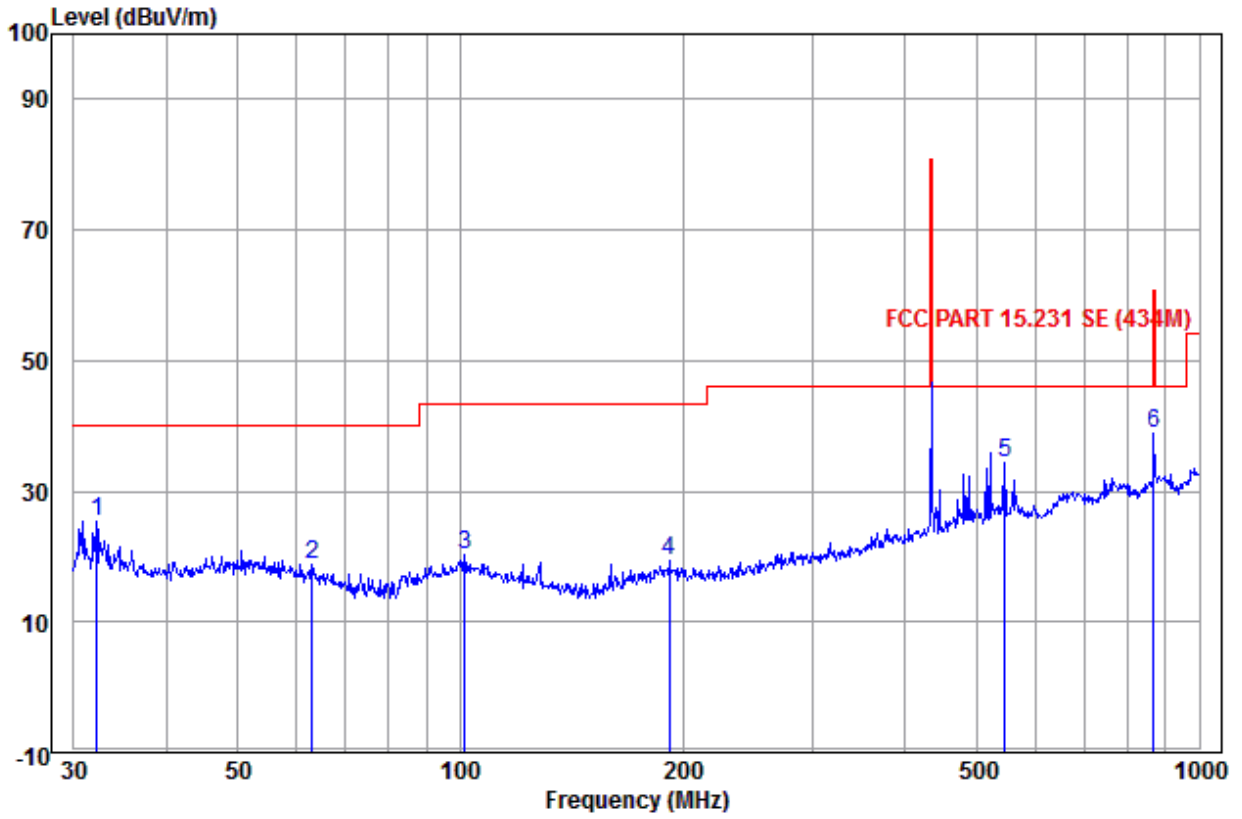
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Read Level (dBuV)	Peak Level (dBuV/m)	Average Limit (dBuV/m)	Over Limit (dB)	polarization
43.353	14.52	0.84	4.39	19.75	60.80	-41.05	Vertical
110.569*	13.29	1.57	5.22	20.08	43.50	-23.42	Vertical
180.649	10.75	1.99	6.16	18.90	60.80	-41.90	Vertical
286.982	13.23	2.37	5.42	21.02	60.80	-39.78	Vertical
675.208	20.26	3.73	6.84	30.83	60.80	-29.97	Vertical
869.130	22.16	4.24	12.72	39.12	60.80	-21.68	Vertical

**Remark:** "\*" The emission is falling in FCC restricted band of section 15.205, the general limit of 15.209 shall be used instead of the limit of spurious emission under 15.231(b)

**WD-MT2**



Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Read Level (dBUV)	Peak Level (dBUV/m)	Average Limit (dBUV/m)	Over Limit (dB)	polarization
32.179	12.91	1.03	7.43	21.37	60.80	-39.43	Horizontal
58.613	13.97	1.43	4.08	19.48	60.80	-41.32	Horizontal
105.642	12.73	1.57	4.70	19.00	60.80	-41.80	Horizontal
223.733	12.00	2.28	5.05	19.33	60.80	-41.47	Horizontal
362.985	15.21	2.73	5.07	23.01	60.80	-37.79	Horizontal
869.130	22.09	4.24	22.61	48.94	60.80	-11.86	Horizontal



Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Read Level (dBuV)	Peak Level (dBuV/m)	Average Limit (dBuV/m)	Over Limit (dB)	polarization
32.179	12.91	1.03	11.52	25.46	60.80	-35.34	Vertical
63.092	12.69	1.44	4.70	18.83	60.80	-41.97	Vertical
101.289	13.09	1.57	5.63	20.29	60.80	-40.51	Vertical
191.745	11.32	2.12	5.84	19.28	60.80	-41.52	Vertical
545.183	18.58	3.20	12.60	34.38	60.80	-26.42	Vertical
869.130	22.09	4.24	12.62	38.95	60.80	-21.85	Vertical

**Above 1GHz**

Peak value:

GS-MT2

Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Level (dBμV/m)	Average Limit (dBμV/m)	Over Limit (dB)	Polarization
1119.499*	30.03	2.42	35.05	48.18	45.58	54.00	-8.42	Horizontal
1669.365*	31.18	2.98	34.53	47.29	46.92	54.00	-7.08	Horizontal
2312.996*	32.38	4.09	34.37	45.62	47.72	54.00	-6.28	Horizontal
3251.049	33.38	5.57	34.53	46.32	50.74	60.80	-10.06	Horizontal
3772.333*	32.96	5.48	34.58	44.69	48.55	54.00	-5.45	Horizontal
5340.371	35.39	5.90	34.30	43.35	50.34	60.80	-10.46	Horizontal
1119.499*	30.03	2.42	35.05	48.44	45.84	54.00	-8.16	Vertical
1483.178*	30.84	2.81	34.69	46.34	45.30	54.00	-8.70	Vertical
2092.177	31.91	3.50	34.32	45.97	47.06	60.80	-13.74	Vertical
2878.122*	33.41	5.38	34.48	45.26	49.57	54.00	-4.43	Vertical
4096.425*	33.05	5.40	34.57	44.28	48.16	54.00	-5.84	Vertical
5685.998	35.66	6.73	34.30	43.53	51.62	60.80	-9.18	Vertical

## WD-MT2

Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Level (dBμV/m)	Average Limit (dBμV/m)	Over Limit (dB)	Polarization
1294.356	30.44	2.62	34.86	46.42	44.62	60.80	-16.18	Horizontal
1666.376*	31.17	2.97	34.54	47.78	47.38	54.00	-6.62	Horizontal
2263.794*	32.28	3.96	34.36	44.53	46.41	54.00	-7.59	Horizontal
2742.200*	33.18	5.09	34.46	44.57	48.38	54.00	-5.62	Horizontal
3861.233*	32.90	5.46	34.59	44.44	48.21	54.00	-5.79	Horizontal
4744.751*	34.56	5.13	34.37	43.85	49.17	54.00	-4.83	Horizontal
1166.597*	30.14	2.48	35.00	46.49	44.11	54.00	-9.89	Vertical
1666.376*	31.17	2.97	34.54	46.86	46.46	54.00	-7.54	Vertical
2247.628*	32.25	3.92	34.36	44.97	46.78	54.00	-7.22	Vertical
3015.374	33.59	5.62	34.50	45.94	50.65	60.80	-10.15	Vertical
3931.041*	32.85	5.45	34.59	44.67	48.38	54.00	-5.62	Vertical
5245.537	35.31	5.67	34.30	43.17	49.85	60.80	-10.95	Vertical

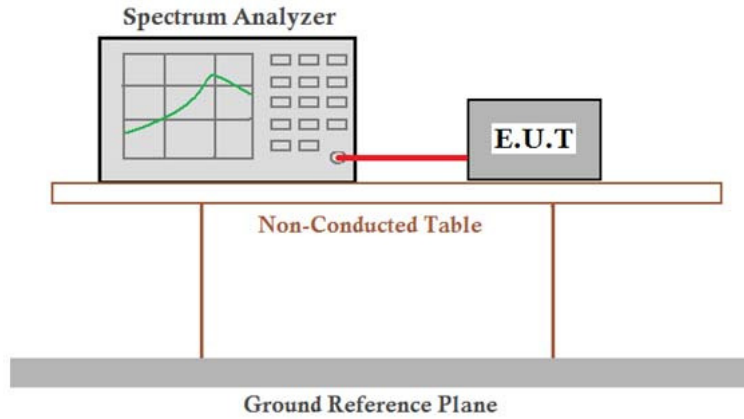
## Remark:

- The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:  
 Final Test Level = Receiver Reading - Correct Factor  
 Correct Factor = Preamplifier Factor - Antenna Factor - Cable Factor
- As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. So, only the peak values are measured.
- \*\*\* The emission is falling in FCC restricted band of section 15.205, the general limit of 15.209 shall be used instead of the limit of spurious emission under 15.231(b)
- Scan from 9kHz to 6GHz, the disturbance below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.



### 7.3 20dB Bandwidth

**Test Requirement:** 47 CFR Part 15C Section 15.231 (c)  
**Test Method:** ANSI C63.10  
**Test Setup:**



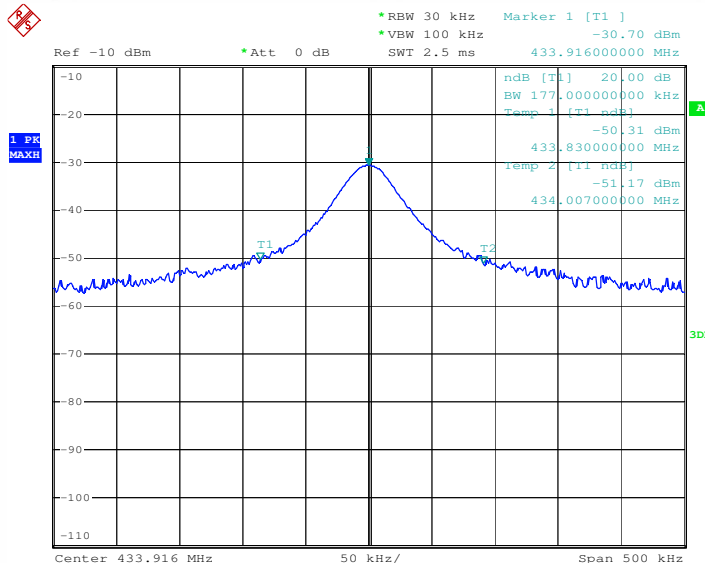
**Limit:** The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70 MHz and below 900 MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the center frequency. Bandwidth is determined at the points 20 dB down from the modulated carrier.

**Test Mode:** Transmitting mode  
**Instruments Used:** Refer to section 6 for details  
**Test Results:** Pass

**Test data**

20dB bandwidth (kHz)	Limit (kHz)	Results
177	787.5	Pass

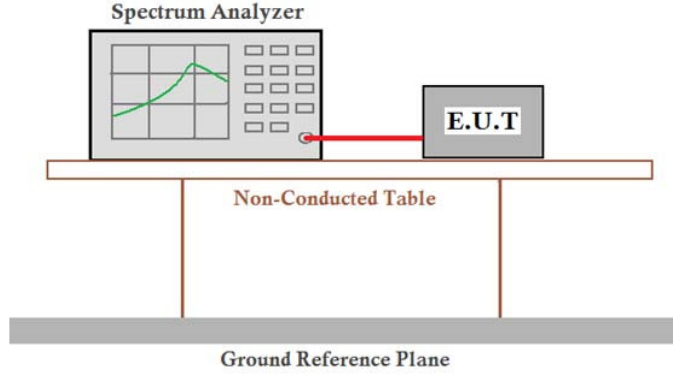
Test plot as follows:



Date: 24.AUG.2016 09:30:06

### 7.4 Deactivated Time

**Test Requirement:** 47 CFR Part 15C Section 15.231 (a)  
**Test Method:** ANSI C63.10  
**Test Setup:**



**Limit:** Automatically deactivate the transmitter within 5 seconds of being released

**Test Mode:** Press and release the button immediately with the normal sample

**Instruments Used:** Refer to section 6 for details

**Test Results:** **PASS**

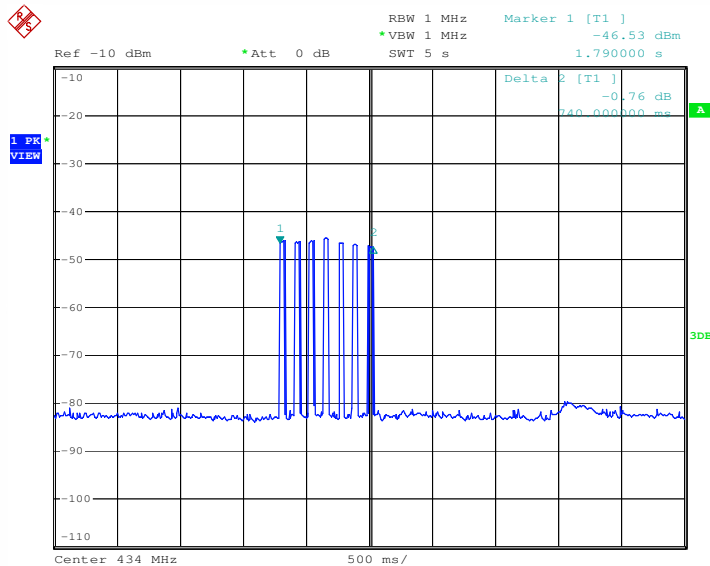
**Remark:**

- 1) Only manually switching and no automatic activation.
- 2) No Periodic transmission
- 3) No emergencies function.
- 4) No transmission of setup-information for security system exceed transmission during limit in (a)(1) and (a)(2).

**Test data:**

Test item	Test value	Limit (s)	Results
Manually press button	0.74s	≤5s	Pass

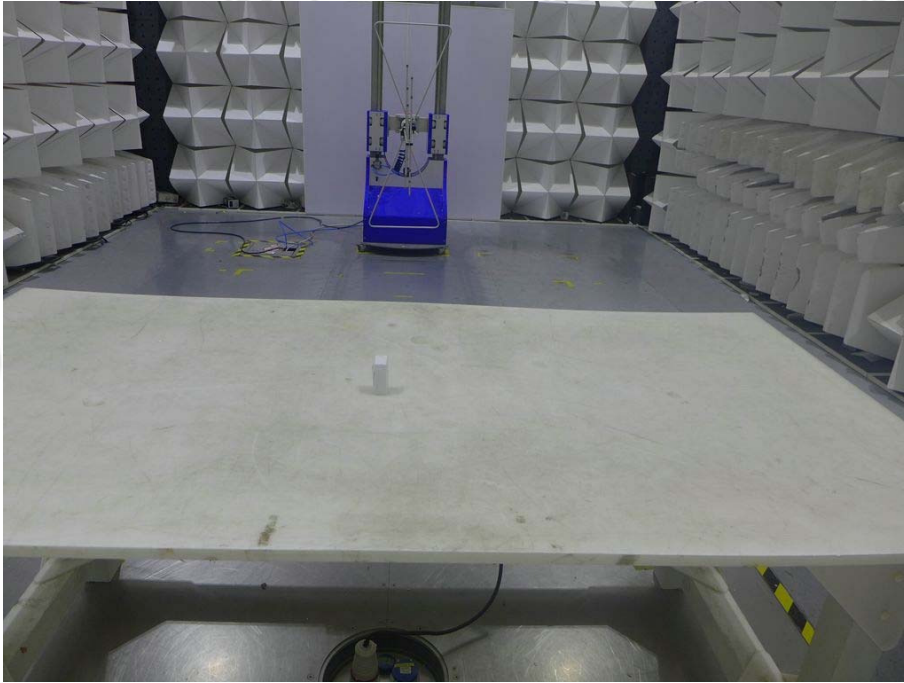
**Test plot as follows:**



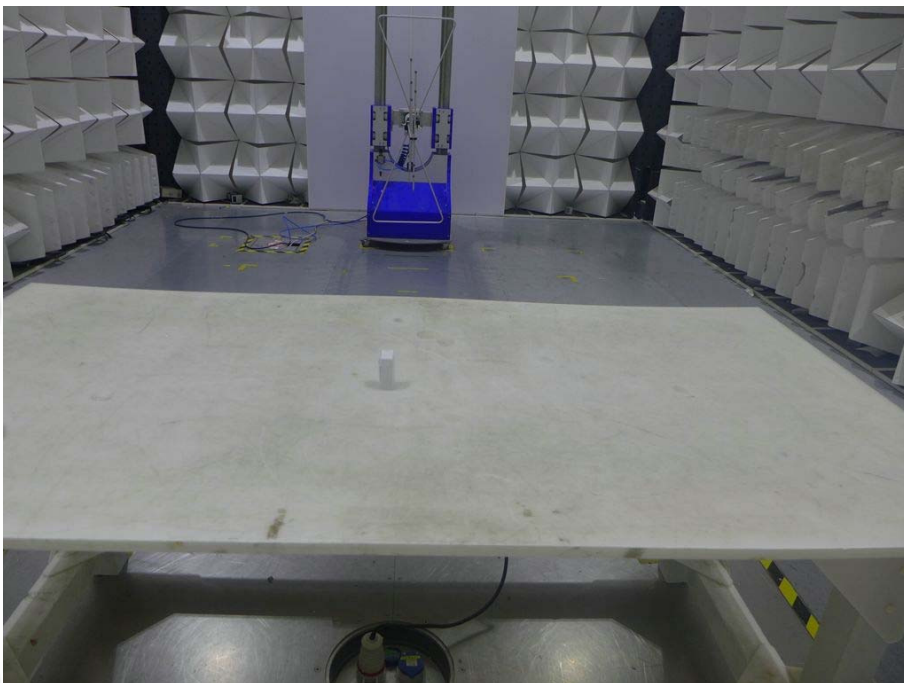
Date: 26.AUG.2016 19:27:30

## APPENDIX 1 PHOTOGRAPHS OF TEST SETUP

Test Model No.: GS-MT2, WD-MT2



**Radiated emission Test Setup-1 for GS-MT2(30MHz~1GHz)**

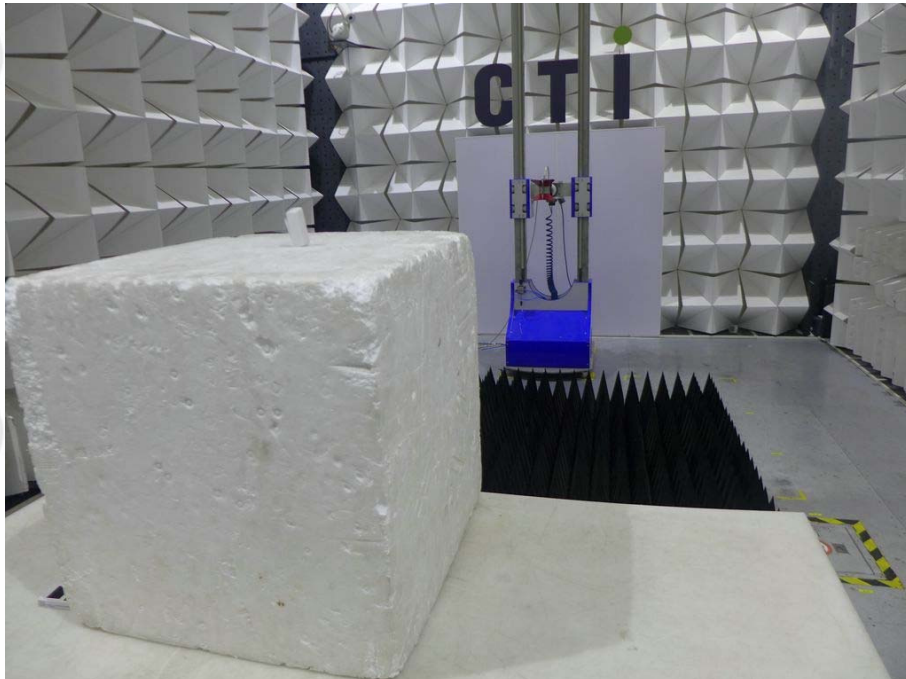


**Radiated emission Test Setup-2 for WD-MT2(30MHz~1GHz)**





**Radiated spurious emission Test Setup-3 for GS-MT2(Above 1GHz)**



**Radiated spurious emission Test Setup-4 for WD-MT2(Above 1GHz)**

## APPENDIX 2 PHOTOGRAPHS OF EUT

Test model No.: GS-MT2

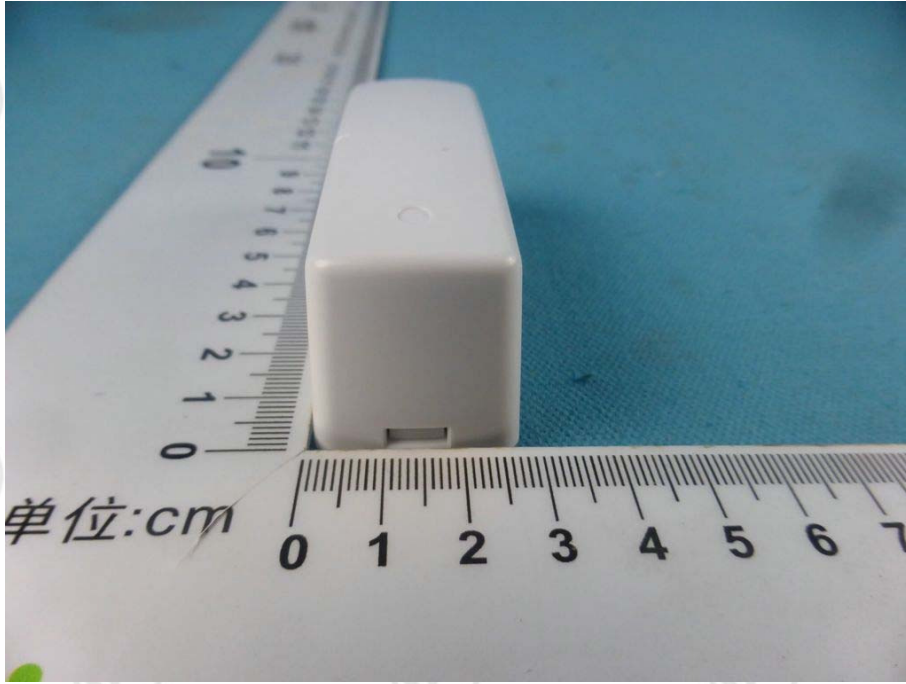


View of Product-1

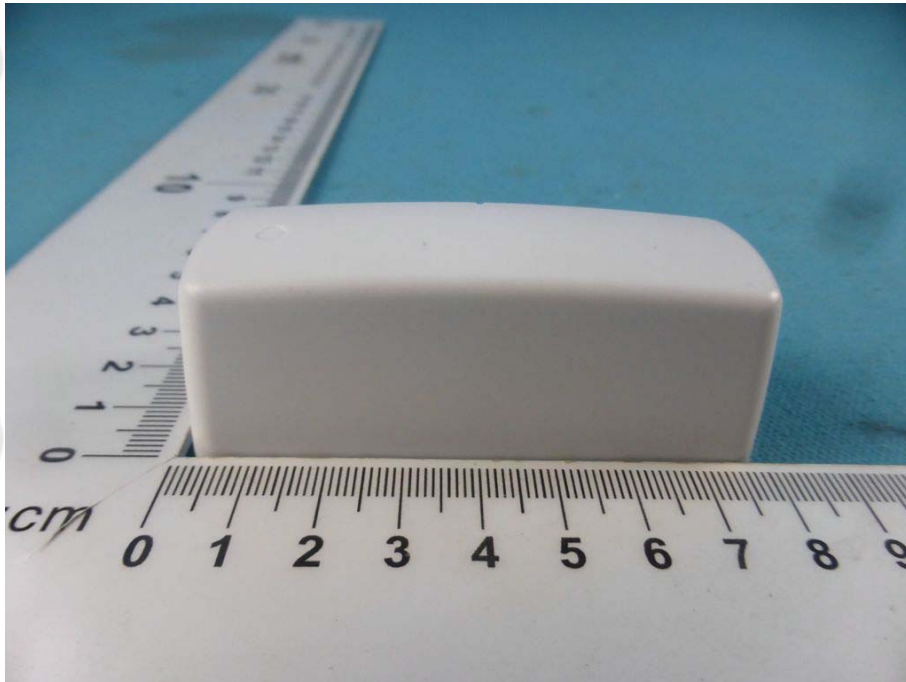


View of Product-2

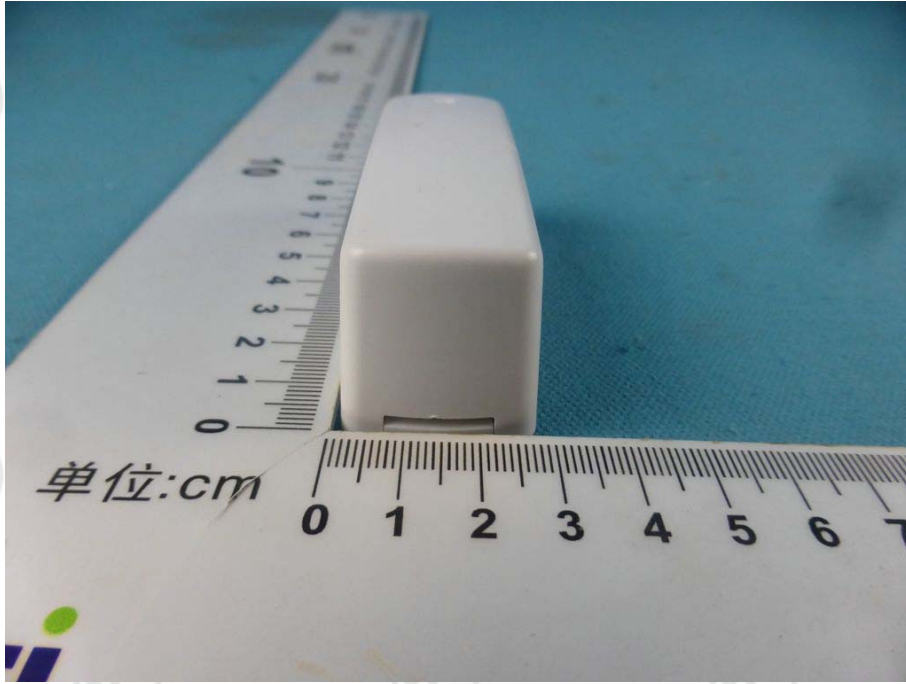




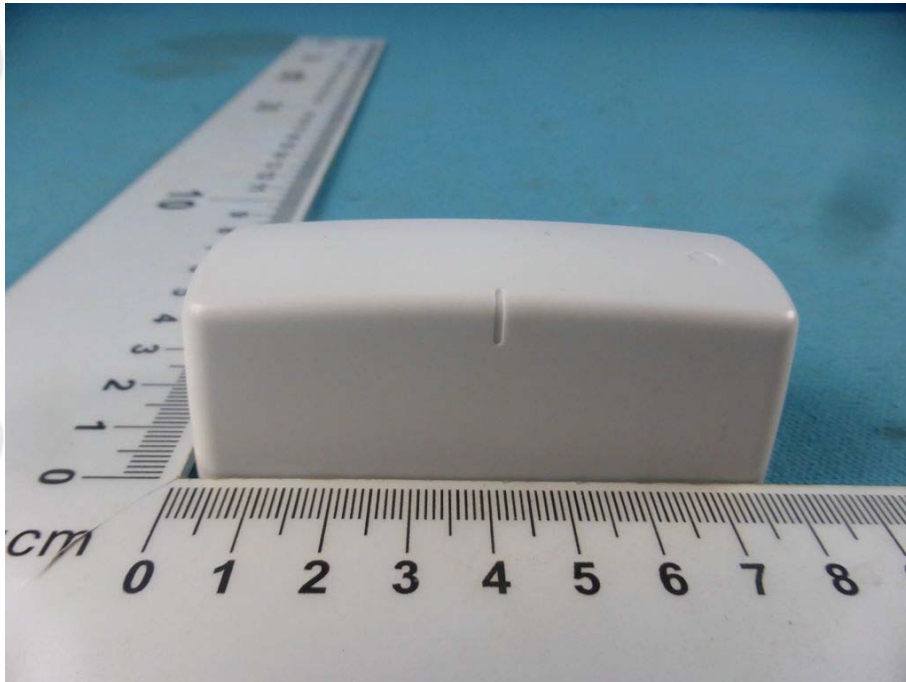
View of Product-3



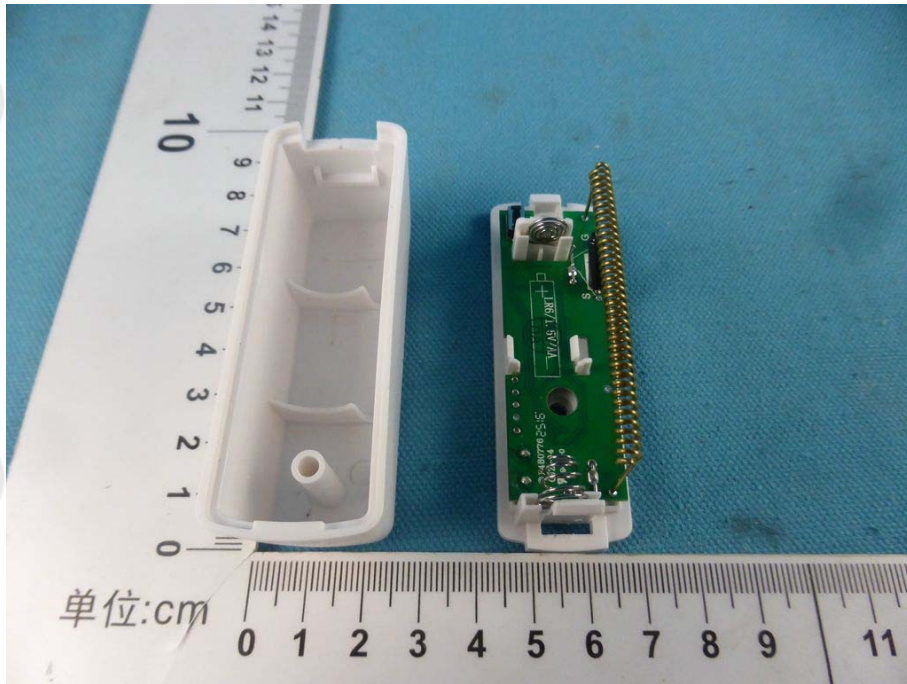
View of Product-4



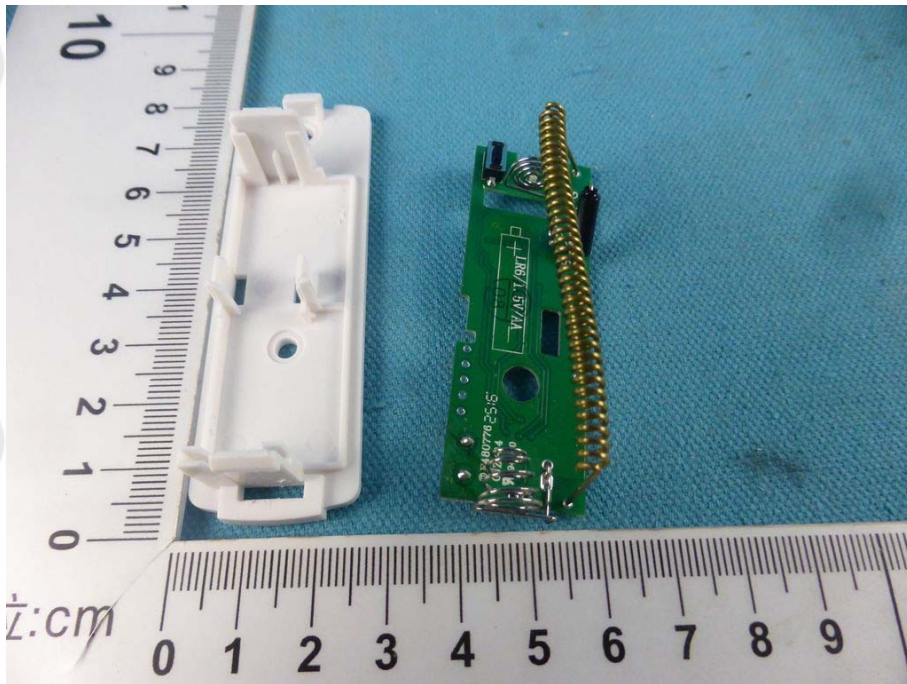
View of Product-5



View of Product-6

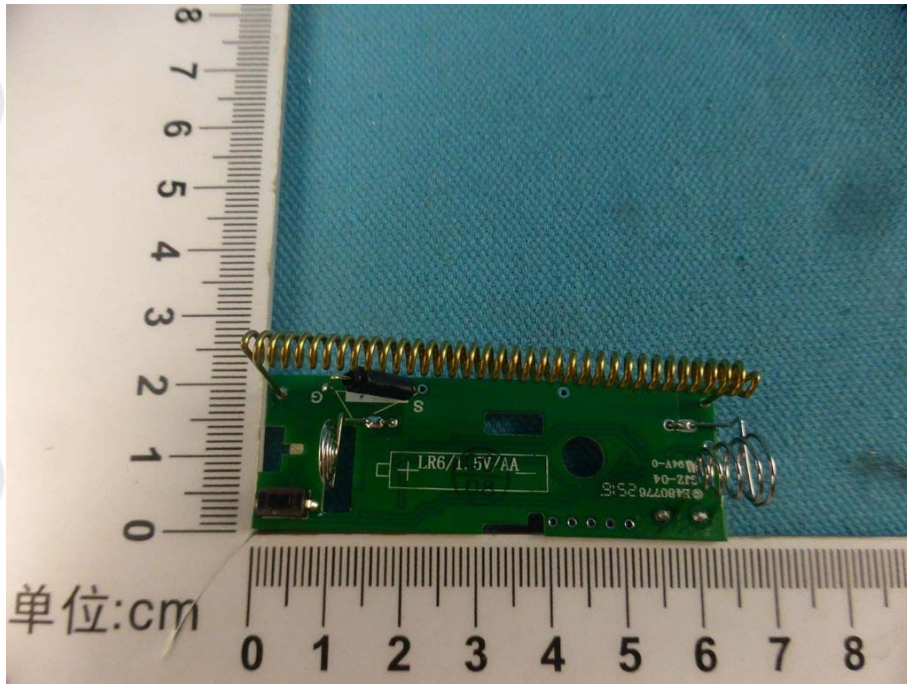


View of Product-7

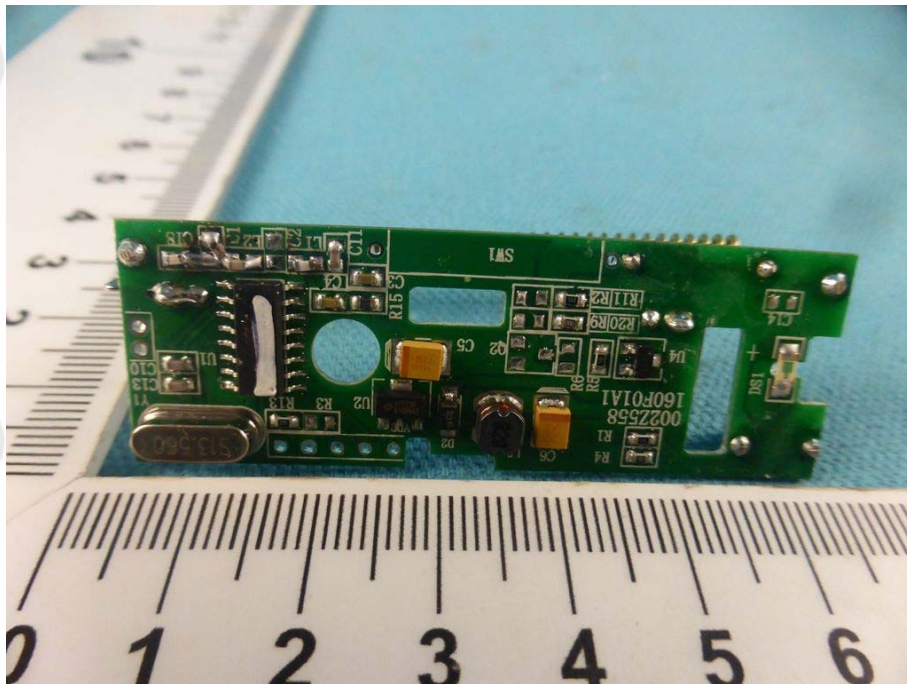


View of Product-8



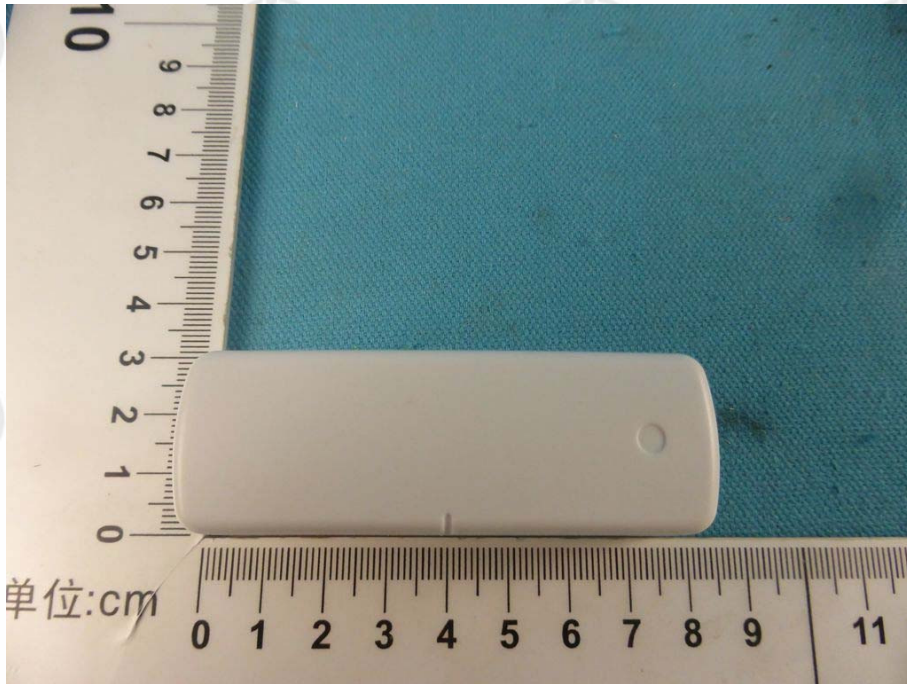


View of Product-9



View of Product-10

Test model No.: WD-MT2

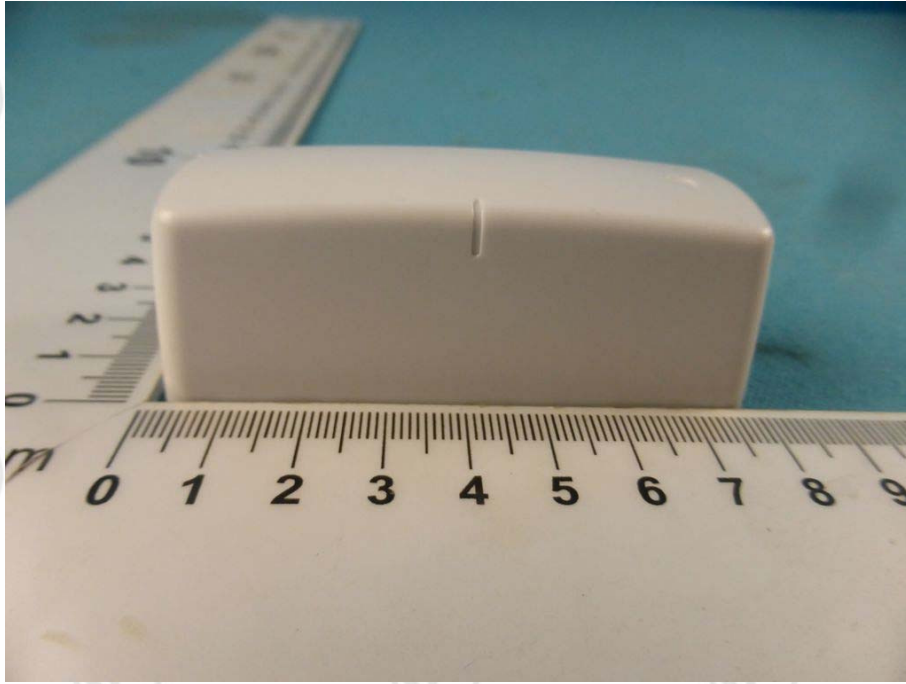


View of Product-1

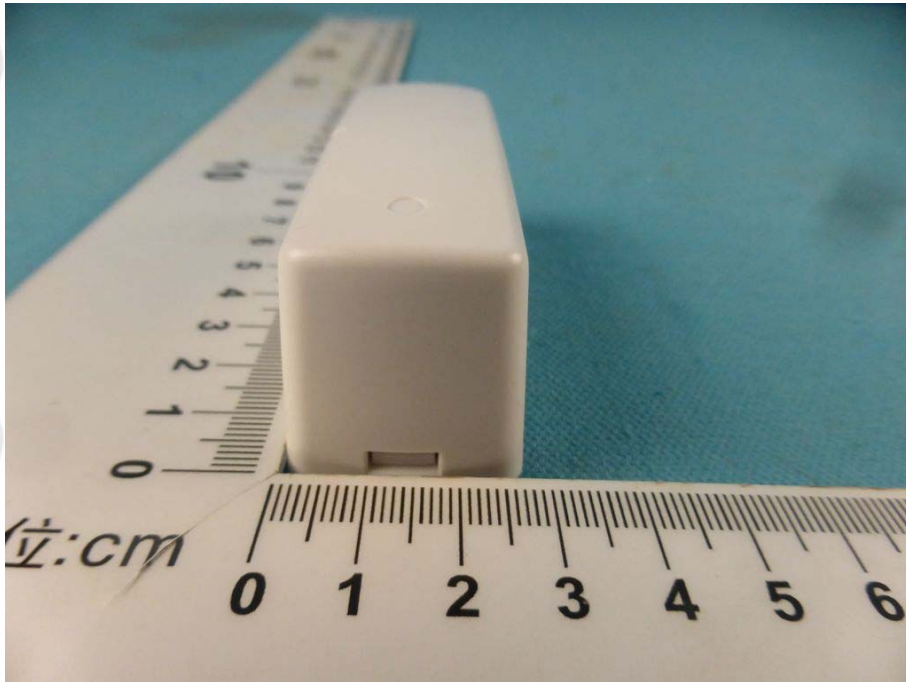


View of Product-2





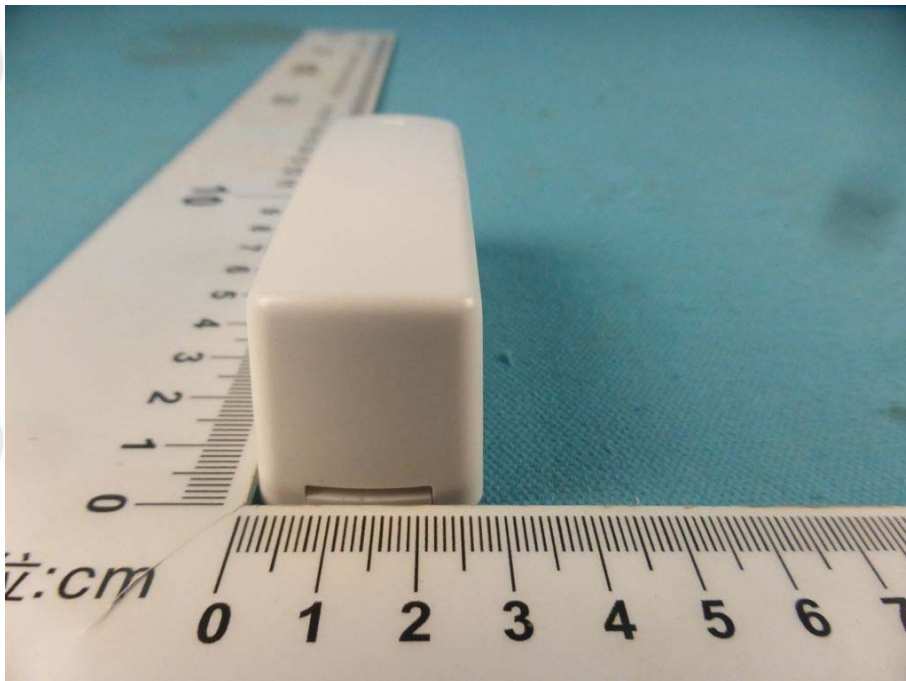
View of Product-3



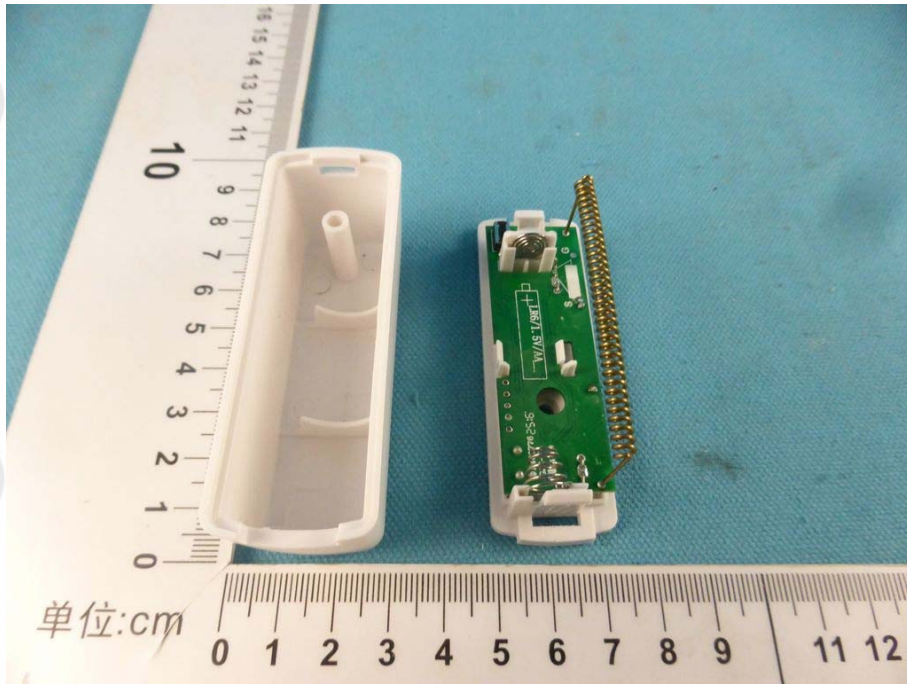
View of Product-4



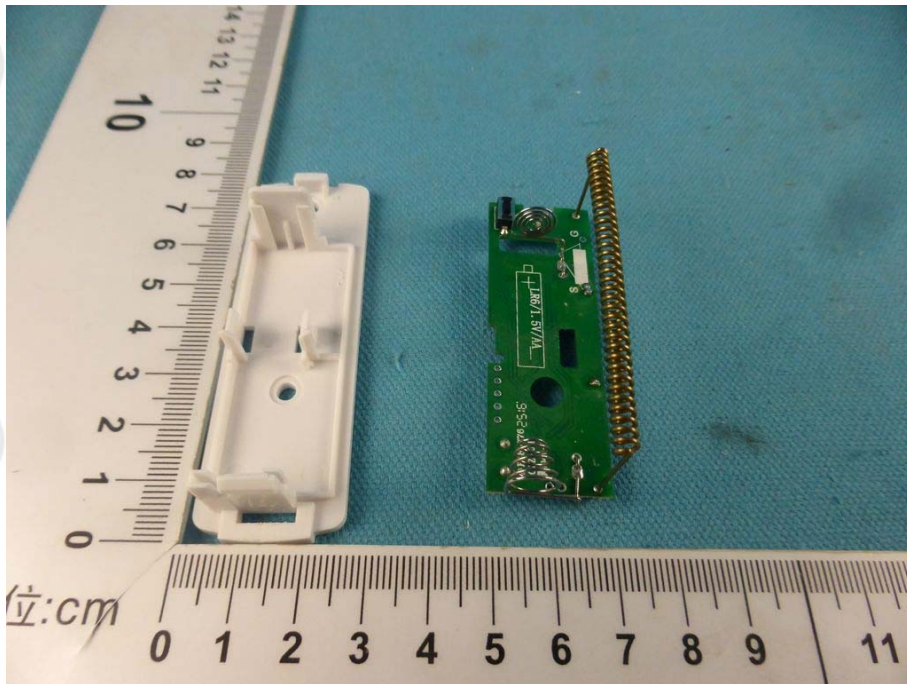
View of Product-5



View of Product-6

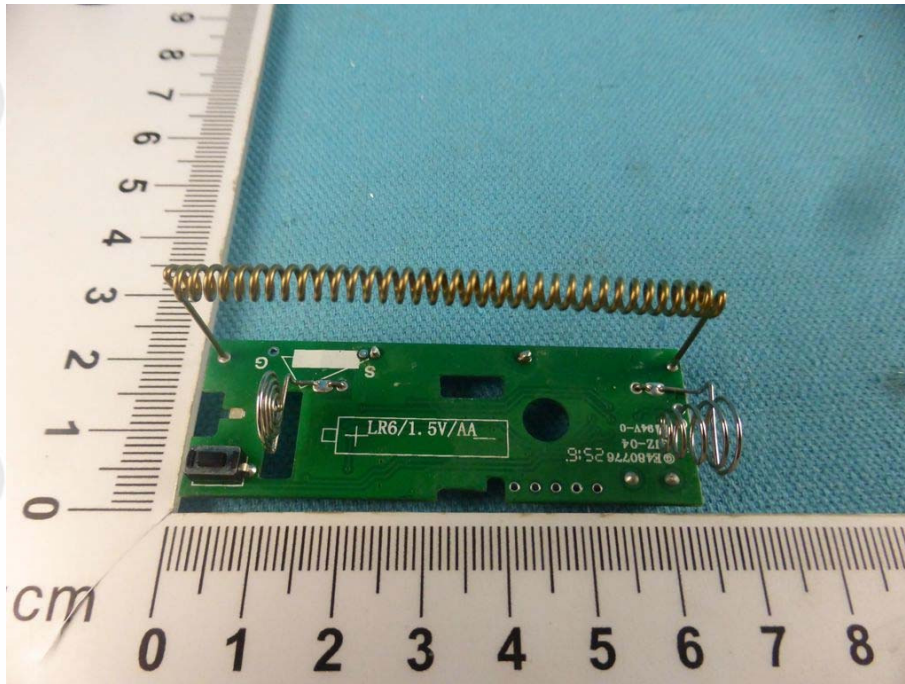


View of Product-7

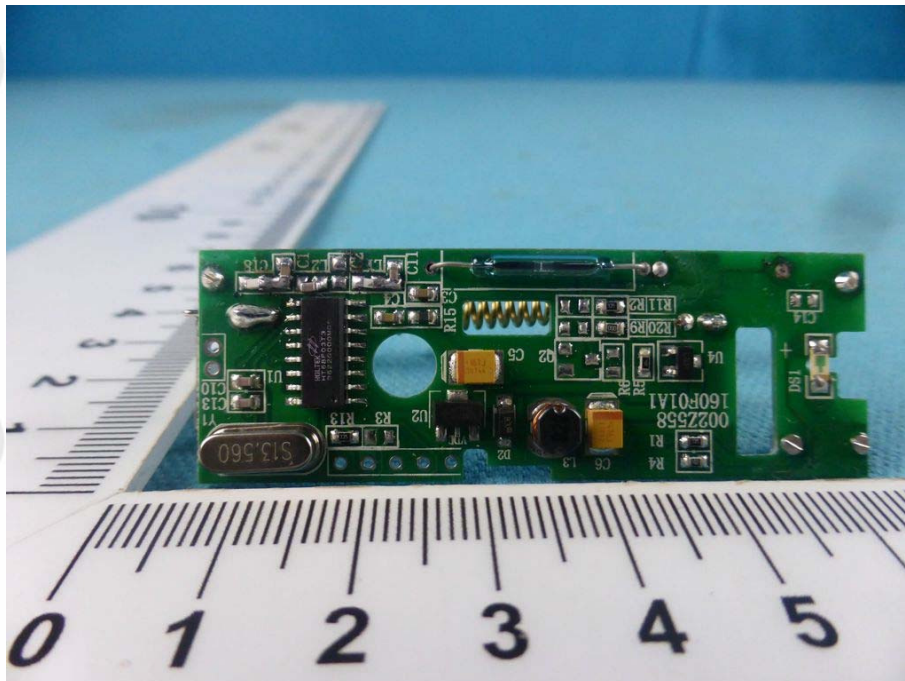


View of Product-8





View of Product-9



View of Product-10

\*\*\* End of Report \*\*\*

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