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TEST REPORT

FOR FCC PART 15 SUBPART C 15.249

Report Reference No.: **CTL1902259011-WF**

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Product Name.....: Bluetooth clock

Model/Type reference: 7CL

Trade Mark.....: N/A

FCC ID.....: **2ABSC-7CL**

Applicant's name: **Shenzhen Qinchengda Electrics Co.,Ltd**

Address of applicant: 2/F,C1 Bldg, 3rd Section, Fu Qiao Industrial Park, Qiao Tou, Fuyong, Bao'an, Shenzhen, China

Test Firm: **Shenzhen CTL Testing Technology Co., Ltd.**

Address of Test Firm: Floor 1-A, Baisha Technology Park, No.3011, Shahexi Road, Nanshan District, Shenzhen, China 518055

Test specification.....:

Standard.....: **FCC Part 15.249:**Operation within the bands 920-928 MHz, 2400-2483.5 MHz, 5725-5850 MHz and 24.0 - 24.25 GHz.

TRF Originator: Shenzhen CTL Testing Technology Co., Ltd.

Master TRF: Dated 2011-01

Date of receipt of test item.....: Mar. 04, 2019

Date of sampling.....: Mar. 04, 2019

Date of Test Date.....: Mar. 04, 2019–May 16, 2019

Data of Issue.....: May 17, 2019

Result.....: **Pass**

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TEST REPORT

Test Report No. :	CTL1902259011-WF	May 17, 2019
		Date of issue

Equipment under Test : Bluetooth clock

Model /Type : 7CL

Applicant : **Shenzhen Qinchengda Electrics Co.,Ltd**

Address : 2/F,C1 Bldg, 3rd Section, Fu Qiao Industrial Park,
Qiao Tou, Fuyong, Bao'an, Shenzhen, China

Manufacturer : **Shenzhen Qinchengda Electrics Co.,Ltd**

Address : 2/F,C1 Bldg, 3rd Section, Fu Qiao Industrial Park,
Qiao Tou, Fuyong, Bao'an, Shenzhen, China

Test result	Pass *
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* In the configuration tested, the EUT complied with the standards specified page 5.

The test results presented in this report relate only to the object tested.

This report shall not be reproduced, except in full, without the written approval of the issuing testing laboratory.

**** Modified History ****

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1. SUMMARY

1.1. TEST STANDARDS

The tests were performed according to following standards:

[FCC Rules Part 15.249](#): Operation within the bands 902 - 928 MHz, 2400 - 2483.5 MHz, 5725 - 5875 MHz, and 24.0 - 24.25 GHz.

[ANSI C63.10:2013](#) : American National Standard for Testing Unlicensed Wireless Devices

1.2. Test Description

FCC PART 15.249		
FCC Part 15.207	Conducted Emission	PASS
FCC Part 15.249(a)	Field Strength of Fundamental	PASS
FCC Part 15.209	Spurious Emission	PASS
FCC Part 15.209	Band edge	PASS

1.3. Test Facility

1.3.1 Address of the test laboratory

Shenzhen CTL Testing Technology Co., Ltd.

Floor 1-A, Baisha Technology Park, No. 3011, Shahexi Road, Nanshan, Shenzhen 518055 China

There is one 3m semi-anechoic chamber and two line conducted labs for final test. The Test Sites meet the requirements in documents ANSI C63.4 and CISPR 32/EN 55032 requirements.

1.3.2 Laboratory accreditation

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

CNAS-Lab Code: L7497

Shenzhen CTL Testing Technology 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. 4343.01

Shenzhen CTL Testing Technology 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.

IC Registration No.: 9518B

CAB identifier: CN0041

The 3m alternate test site of Shenzhen CTL Testing Technology Co., Ltd. EMC Laboratory has been registered by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements with Registration No.: 9518B on Jan. 22, 2019.

FCC-Registration No.: 399832

Designation No.: CN1216

Shenzhen CTL Testing Technology 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 399832, December 08, 2017.

1.4. 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 Shenzhen CTL Testing Technology Co., Ltd. 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.

Hereafter the best measurement capability for CTL laboratory is reported:

Test	Range	Measurement Uncertainty	Notes
Radiated Emission	30~1000MHz	4.10dB	(1)
Radiated Emission	Above 1GHz	4.32dB	(1)
Conducted	0.15~30MHz	3.20dB	(1)

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

2. GENERAL INFORMATION

2.1. Environmental conditions

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

Normal Temperature:	25°C
Relative Humidity:	55 %
Air Pressure:	101 kPa

2.2. General Description of EUT

Product Name:	Bluetooth clock
Model/Type reference:	7CL
Power supply:	AC 120V/60Hz
Adapter information:	Model: XMX-1505BEPT-060200U Input: 100-240V~, 50/60Hz;0.28A Output: 6V---2000mA
Bluetooth	
Version:	Supported BT3.0
Modulation:	GFSK, $\pi/4$ DQPSK, 8DPSK
Operation frequency:	2402MHz~2480MHz
Channel number:	79
Channel separation:	1MHz
Antenna type:	PCB antenna
Antenna gain:	0dBi

Note: For more details, please refer to the user's manual of the EUT.

2.3. Description of Test Modes and Test Frequency

The Applicant provides communication tools software to control the EUT for staying in continuous transmitting and receiving mode for testing.

There are 79 channels provided to the EUT and Channel 00/39/78 was selected for testing.

Operation Frequency :

Channel	Frequency (MHz)
00	2402
01	2403
:	:
38	2440
39	2441
40	2442
:	:
77	2479
78	2480

Note: The line display in grey were the channel selected for testing.

2.4. Equipments Used during the Test

Test Equipment	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Due Date
LISN	R&S	ENV216	3560.6550.1 2	2018/05/25	2019/05/24
LISN	R&S	ESH2-Z5	860014/010	2018/05/25	2019/05/24
Bilog Antenna	Sunol Sciences Corp.	JB1	A061713	2018/05/25	2019/05/24
EMI Test Receiver	R&S	ESCI	1166.5950.03	2018/05/25	2019/05/24
Spectrum Analyzer	Agilent	E4407B	MY41440676	2019/01/19	2020/01/18
Spectrum Analyzer	Agilent	N9020	US46220290	2019/01/14	2020/01/13
Controller	EM Electronics	EM 1000	060859	2018/05/21	2019/05/20
Horn Antenna	Sunol Sciences Corp.	DRH-118	A062013	2018/05/25	2019/05/24
Active Loop Antenna	Da Ze	ZN30900A	/	2018/05/25	2019/05/24
Amplifier	Agilent	8449B	3008A02306	2018/05/25	2019/05/24
Amplifier	Agilent	8447D	2944A10176	2018/05/25	2019/05/24
Temperature/Humidity Meter	Gangxing	CTH-608	02	2018/05/17	2019/05/16
High-Pass Filter	micro-tranics	HPM50108	G174	2018/05/17	2019/05/16
High-Pass Filter	micro-tranics	HPM50111	G142	2018/05/17	2019/05/16
Coaxial Cables	HUBER+SUHNER	SUCOFLEX 104PEA-10M	10m	2018/05/17	2019/05/16
Coaxial Cables	HUBER+SUHNER	SUCOFLEX 104PEA-3M	3m	2018/05/17	2019/05/16
Coaxial Cables	HUBER+SUHNER	SUCOFLEX 104PEA-3M	3m	2018/05/17	2019/05/16
RF Cable	Megalon	RF-A303	N/A	2018/05/17	2019/05/16

The calibration interval was one year

2.5. Related Submittal(s) / Grant(s)

This submittal(s) (test report) is intended to comply with Section 15.249 of the FCC Part 15, Subpart C Rules.

2.6. Modifications

No modifications were implemented to meet testing criteria.

3. TEST CONDITIONS AND RESULTS

3.1. Conducted Emissions Test

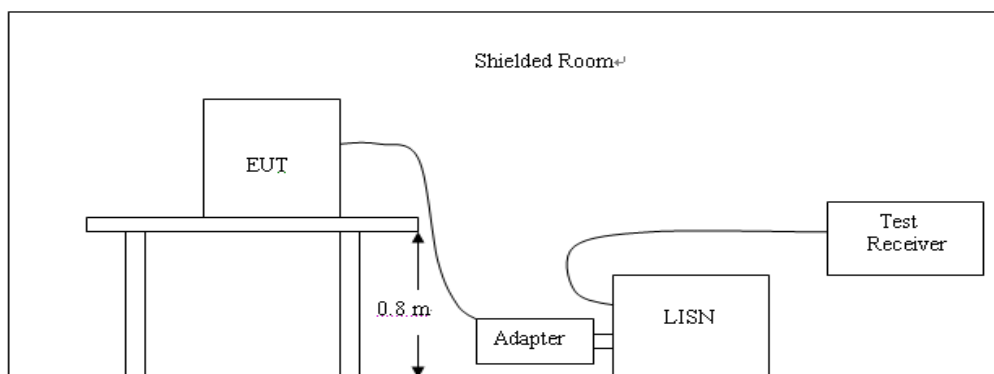
LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.207

Frequency range (MHz)	Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

TEST CONFIGURATION



TEST PROCEDURE

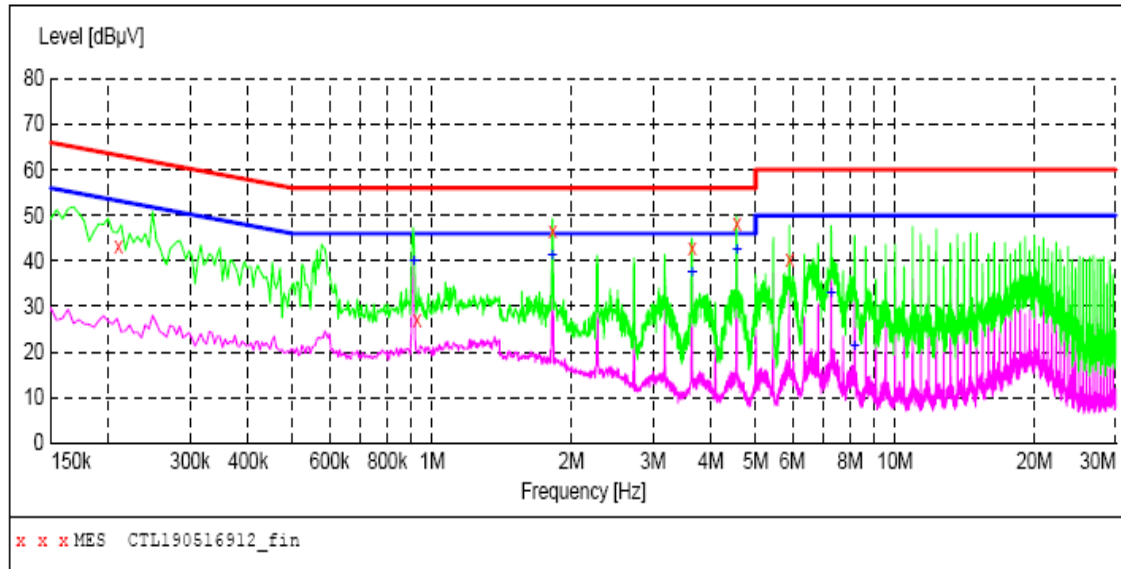
1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. The EUT is a tabletop system; a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10:2013.
2. Support equipment, if needed, was placed as per ANSI C63.10:2013.
3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10:2013.
4. If a EUT received DC power from the USB Port of Notebook PC, the PC's adapter received AC120V/60Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
5. All support equipments received AC power from a second LISN, if any.
6. The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
7. Analyzer / Receiver scanned from 150 KHz to 30MHz for emissions in each of the test modes.
8. During the above scans, the emissions were maximized by cable manipulation.

TEST RESULTS

Remark: All modes of GFSK, Pi/4 DQPSK, and 8DPSK were test at Low, Middle, and High channel; only the worst result of GFSK Low Channel was reported as below:

SCAN TABLE: "Voltage (9K-30M) FIN"

Short Description: 150K-30M Voltage

**MEASUREMENT RESULT: "CTL190516912_fin"**

2019-5-16 10:35??

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.210000	43.40	11.2	63	19.8	QP	L1	GND
0.926000	27.20	11.3	56	28.8	QP	L1	GND
1.820000	46.60	11.3	56	9.4	QP	L1	GND
3.644000	42.60	11.4	56	13.4	QP	L1	GND
4.556000	48.00	11.4	56	8.0	QP	L1	GND
5.924000	40.30	11.1	60	19.7	QP	L1	GND

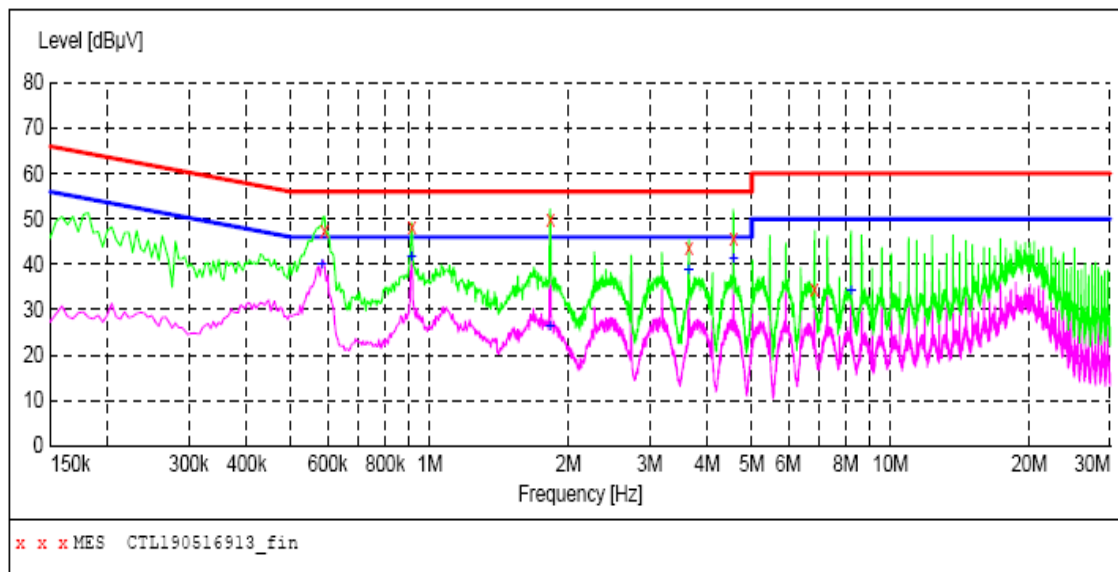
MEASUREMENT RESULT: "CTL190516912_fin2"

2019-5-16 10:35??

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.914000	39.90	11.3	46	6.1	AV	L1	GND
1.820000	41.00	11.3	46	5.0	AV	L1	GND
3.644000	37.30	11.4	46	8.7	AV	L1	GND
4.556000	42.40	11.4	46	3.6	AV	L1	GND
7.286000	33.00	11.0	50	17.0	AV	L1	GND
8.198000	21.40	11.0	50	28.6	AV	L1	GND

SCAN TABLE: "Voltage (9K-30M) FIN"

Short Description: 150K-30M Voltage

**MEASUREMENT RESULT: "CTL190516913_fin"**

2019-5-16 10:38??

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.590000	47.20	11.2	56	8.8	QP	N	GND
0.914000	48.20	11.3	56	7.8	QP	N	GND
1.826000	49.90	11.3	56	6.1	QP	N	GND
3.650000	43.60	11.4	56	12.4	QP	N	GND
4.562000	45.90	11.4	56	10.1	QP	N	GND
6.842000	34.70	10.9	60	25.3	QP	N	GND

MEASUREMENT RESULT: "CTL190516913_fin2"

2019-5-16 10:38??

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.584000	39.80	11.2	46	6.2	AV	N	GND
0.914000	41.70	11.3	46	4.3	AV	N	GND
1.826000	26.10	11.3	46	19.9	AV	N	GND
3.650000	38.60	11.4	46	7.4	AV	N	GND
4.568000	41.10	11.4	46	4.9	AV	N	GND
8.222000	34.20	11.0	50	15.8	AV	N	GND

3.2. Radiated Emissions and Band Edge

Limit

According 15.249, the field strength of emissions from intentional radiators operated within 2400MHz-2483.5 MHz shall not exceed 94dB μ V/m (50mV/m):

FCC PART 15.249(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

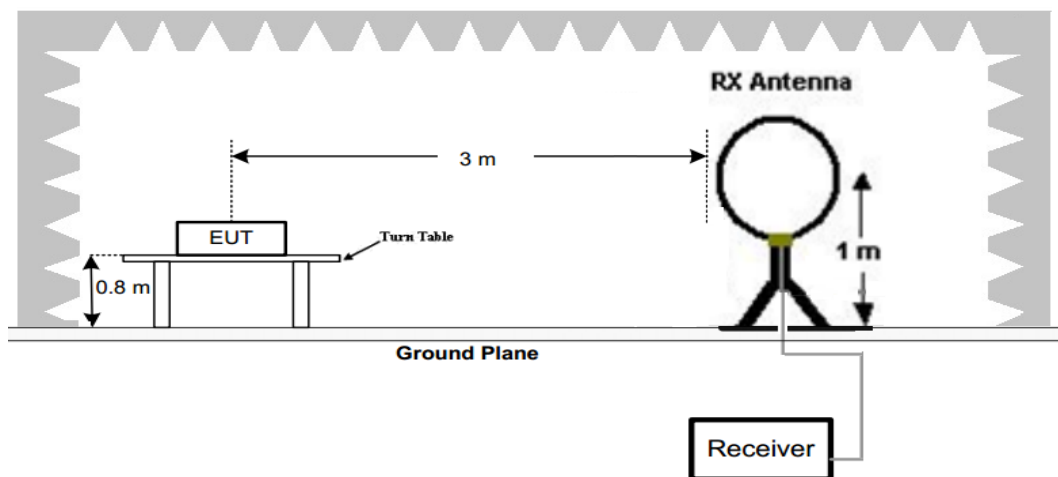
In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a)

Radiated emission limits

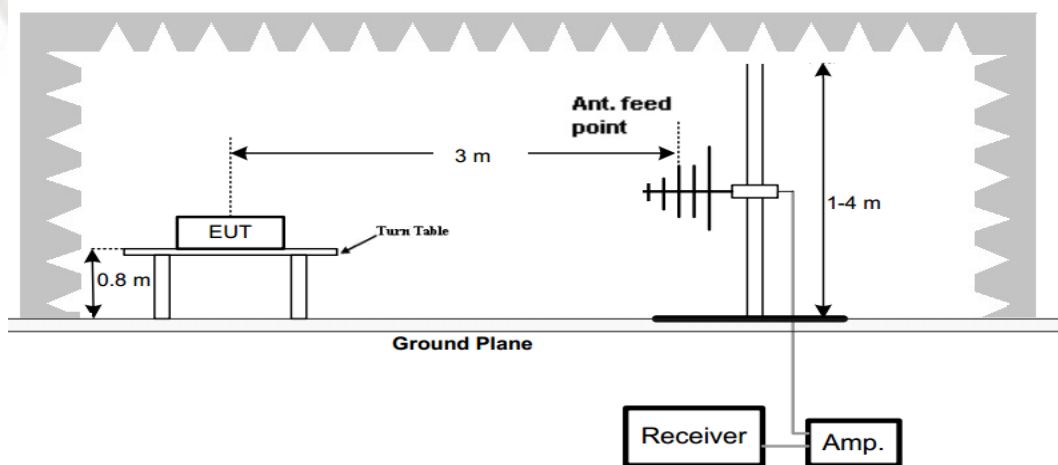
Frequency (MHz)	Distance (Meters)	Radiated (dB μ V/m)	Radiated (μ V/m)
0.009-0.49	3	$20\log(2400/F(\text{KHz}))+40\log(300/3)$	$2400/F(\text{KHz})$
0.49-1.705	3	$20\log(24000/F(\text{KHz}))+40\log(30/3)$	$24000/F(\text{KHz})$
1.705-30	3	$20\log(30)+40\log(30/3)$	30
30-88	3	40.0	100
88-216	3	43.5	150
216-960	3	46.0	200
Above 960	3	54.0	500

TEST CONFIGURATION

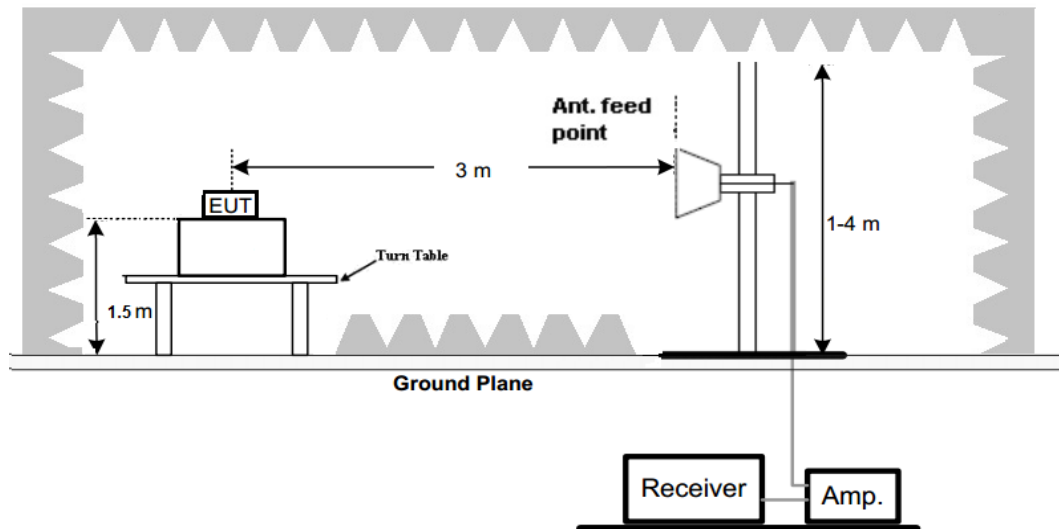
(A) Radiated Emission Test Set-Up, Frequency Below 30MHz



(B) Radiated Emission Test Set-Up, Frequency below 1000MHz



(C) Radiated Emission Test Set-Up, Frequency above 1000MHz

**Test Procedure**

1. Below 1GHz measurement the EUT is placed on a turntable which is 0.8m above ground plane, and above 1GHz measurement EUT was placed on a low permittivity and low loss tangent turn table which is 1.5m above ground plane.
2. Maximum procedure was performed by raising the receiving antenna from 1m to 4m and rotating the turn table from 0° to 360° to acquire the highest emissions from EUT
3. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
4. Repeat above procedures until all frequency measurements have been completed.

TEST RESULTS

Remark:

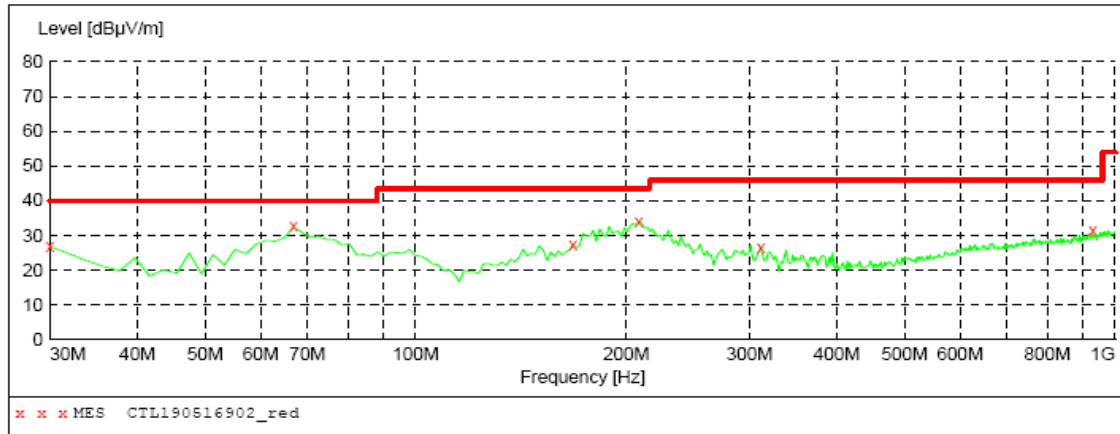
1. We measured Radiated Emission at GFSK mode from 9 KHz to 25GHz and recorded worst case.
2. For below 1GHz testing recorded worst at GFSK low channel.
3. Radiated emission test from 9 KHz to 10th harmonic of fundamental was verified, and no emission found except system noise floor in 9 KHz to 30MHz and not recorded in this report.

For 30MHz-1GHz

Horizontal

SWEEP TABLE: "test (30M-1G)"

Short Description: Field Strength
 Start Stop Detector Meas. IF Transducer
 Frequency Frequency Time Bandw.
 30.0 MHz 1.0 GHz MaxPeak 300.0 ms 120 kHz JB1

**MEASUREMENT RESULT: "CTL190516902_red"**

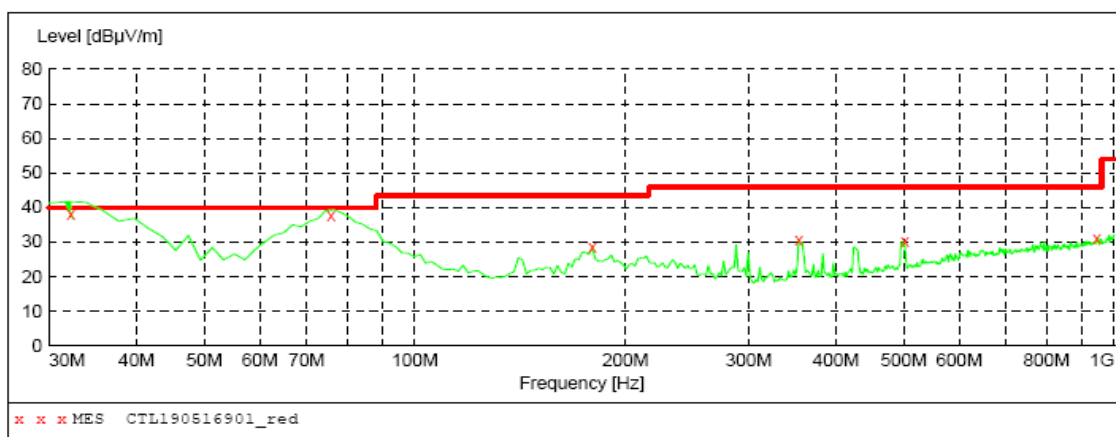
16/05/2019 08:54

Frequency MHz	Level dBuV/m	Transd dB	Limit dBuV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
30.000000	26.90	22.2	40.0	13.1	Peak	0.0	0.00	HORIZONTAL
66.860000	32.50	8.7	40.0	7.5	Peak	0.0	0.00	HORIZONTAL
167.740000	27.40	14.5	43.5	16.1	Peak	0.0	0.00	HORIZONTAL
208.480000	34.00	14.5	43.5	9.5	Peak	0.0	0.00	HORIZONTAL
311.300000	26.60	16.4	46.0	19.4	Peak	0.0	0.00	HORIZONTAL
928.220000	31.30	26.9	46.0	14.7	Peak	0.0	0.00	HORIZONTAL

Vertical

SWEEP TABLE: "test (30M-1G)"

Short Description: Field Strength
 Start Stop Detector Meas. IF Transducer
 Frequency Frequency Time Bandw.
 30.0 MHz 1.0 GHz MaxPeak 300.0 ms 120 kHz JB1

**MEASUREMENT RESULT: "CTL190516901_red"**

16/05/2019 08:46

Frequency MHz	Level dBuV/m	Transd dB	Limit dBuV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
31.940000	38.80	20.9	40.0	1.2	QP	0.0	0.00	VERTICAL
76.560000	38.00	9.1	40.0	2.0	QP	0.0	0.00	VERTICAL
179.380000	28.50	14.6	43.5	15.0	Peak	0.0	0.00	VERTICAL
353.980000	30.70	17.4	46.0	15.3	Peak	0.0	0.00	VERTICAL
501.420000	30.10	20.6	46.0	15.9	Peak	0.0	0.00	VERTICAL
943.740000	31.00	27.2	46.0	15.0	Peak	0.0	0.00	VERTICAL

For 1GHz to 25GHz

Note : GFSK, $\pi/4$ DQPSK and 8DPSK all have been tested, only worse case GFSK is reported.

 $\pi/4$ DQPSK (above 1GHz)

Frequency(MHz):			2402		Polarity:			HORIZONTAL	
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
4804.00	58.26	PK	74	15.74	53.75	33.49	6.91	35.89	4.51
4804.00	50.87	AV	54	3.13	46.36	33.49	6.91	35.89	4.51
5193.00	46.53	PK	74	27.47	39.17	34.53	7.14	34.30	7.36
5193.00	--	AV	54	--	--	--	--	--	--
7206.00	49.89	PK	74	24.11	38.78	36.95	9.18	35.03	11.11
7206.00	--	AV	54	--	--	--	--	--	--

Frequency(MHz):			2402		Polarity:			VERTICAL	
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
4804.00	57.40	PK	74	16.60	52.89	33.49	6.91	35.89	4.51
4804.00	50.48	AV	54	3.52	45.97	33.49	6.91	35.89	4.51
6211.00	47.35	PK	74	26.65	38.94	35.19	7.92	34.69	8.41
6211.00	--	AV	54	--	--	--	--	--	--
7206.00	48.50	PK	74	25.50	37.39	36.95	9.18	35.03	11.11
7206.00	--	AV	54	--	--	--	--	--	--

Frequency(MHz):			2441		Polarity:			HORIZONTAL	
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
4882.00	58.26	PK	74	15.74	53.61	33.60	6.95	35.90	4.65
4882.00	49.78	AV	54	4.22	45.13	33.60	6.95	35.90	4.65
5404.00	46.25	PK	74	27.75	38.62	34.74	7.26	34.38	7.63
5404.00	--	AV	54	--	--	--	--	--	--
7323.00	49.69	PK	74	24.31	37.99	37.46	9.23	35.00	11.70
7323.00	--	AV	54	--	--	--	--	--	--

Frequency(MHz):			2441		Polarity:			VERTICAL	
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
4882.00	56.84	PK	74	17.16	52.19	33.60	6.95	35.90	4.65
4882.00	48.71	AV	54	5.29	44.06	33.60	6.95	35.90	4.65
7052.00	45.60	PK	74	28.40	35.19	36.35	9.12	35.07	10.41
7052.00	--	AV	54	--	--	--	--	--	--
7323.00	48.42	PK	74	25.58	36.72	37.46	9.23	35.00	11.70
7323.00	--	AV	54	--	--	--	--	--	--

Frequency(MHz):			2480		Polarity:			HORIZONTAL	
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
4960.00	59.27	PK	74	14.73	54.35	33.84	7.00	35.92	4.92
4960.00	51.39	AV	54	2.61	46.47	33.84	7.00	35.92	4.92
5608.00	45.33	PK	74	28.67	37.63	34.77	7.37	34.45	7.70
5608.00	--	AV	54	--	--	--	--	--	--
7440.00	52.20	PK	74	21.80	40.25	37.64	9.28	34.97	11.95
7440.00	--	AV	54	--	--	--	--	--	--

Frequency(MHz):			2480		Polarity:			VERTICAL	
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
4960.00	58.87	PK	74	15.13	53.95	33.84	7.00	35.92	4.92
4960.00	50.13	AV	54	3.87	45.21	33.84	7.00	35.92	4.92
6825.00	47.36	PK	74	26.64	37.49	36.03	8.83	34.99	9.87
6825.00	--	AV	54	--	--	--	--	--	--
7440.00	49.12	PK	74	24.88	37.17	37.64	9.28	34.97	11.95
7440.00	--	AV	54	--	--	--	--	--	--

REMARKS:

1. Emission level (dBuV/m) =Raw Value (dBuV)+Correction Factor (dB/m)
2. Correction Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
3. Margin value = Limit value- Emission level.
4. -- Mean the PK detector measured value is below average limit.
5. The other emission levels were very low against the limit.

RBW1MHz VBW3MHz Peak detector is for PK value; RBW 1MHz VBW10Hz Peak detector is for AV value.

Results of Band Edges Test (Radiated)

Note : GFSK, $\pi/4$ DQPSK and 8DPSK all have been tested, only worse case GFSK is reported.

Frequency(MHz):			2402		Polarity:			HORIZONTAL	
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
2402.00	92.30	PK	--	--	58.90	28.78	4.61	0.00	33.40
2402.00	84.05	AV	--	--	50.65	28.78	4.61	0.00	33.40
2360.00	45.83	PK	74	28.17	12.73	28.53	4.57	0.00	33.10
2360.00	--	AV	54	--	--	--	--	--	--
2390.00	45.18	PK	74	28.82	11.86	28.72	4.60	0.00	33.32
2390.00	--	AV	54	--	--	--	--	--	--
2400.00	51.28	PK	74	22.72	17.89	28.78	4.61	0.00	33.39
2400.00	--	AV	54	--	--	--	--	--	--

Frequency(MHz):			2402		Polarity:			VERTICAL	
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
2402.00	91.90	PK	--	--	58.50	28.78	4.61	0.00	33.40
2402.00	82.25	AV	--	--	48.85	28.78	4.61	0.00	33.40
2360.00	45.78	PK	74	28.22	12.68	28.53	4.57	0.00	33.10
2390.00	--	AV	54	--	--	--	--	--	--
2390.00	45.43	PK	74	28.57	12.11	28.72	4.60	0.00	33.32
2390.00	--	AV	54	--	--	--	--	--	--
2400.00	50.63	PK	74	23.37	17.24	28.78	4.61	0.00	33.39
2400.00	--	AV	54	--	--	--	--	--	--

Frequency(MHz):			2480		Polarity:			HORIZONTAL	
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
2480.00	91.34	PK	--	--	57.72	28.92	4.70	0.00	33.62
2480.00	82.84	AV	--	--	49.22	28.92	4.70	0.00	33.62
2483.50	46.16	PK	74	27.84	12.53	28.93	4.70	0.00	33.63
2483.50	--	AV	54	--	--	--	--	--	--
2487.00	45.45	PK	74	28.55	11.81	28.94	4.71	0.00	33.64
2487.00	--	AV	54	--	--	--	--	--	--
2500.00	42.31	PK	74	31.69	8.63	28.96	4.72	0.00	33.68
2500.00	--	AV	54	--	--	--	--	--	--

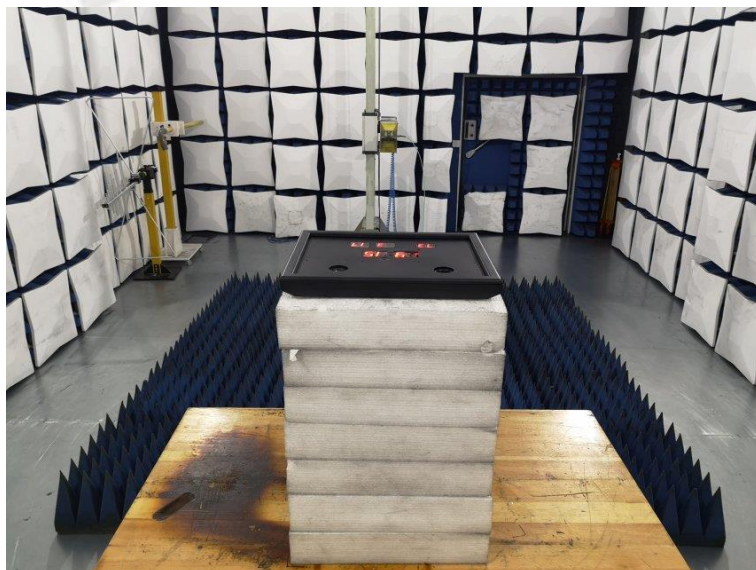
Frequency(MHz):			2480		Polarity:			VERTICAL	
Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)
2480.00	91.36	PK	--	--	57.74	28.92	4.70	0.00	33.62
2480.00	82.20	AV	--	--	48.58	28.92	4.70	0.00	33.62
2483.50	46.70	PK	74	27.30	13.07	28.93	4.70	0.00	33.63
2483.50	--	AV	54	--	--	--	--	--	--
2487.00	44.52	PK	74	29.48	10.88	28.94	4.71	0.00	33.64
2487.00	--	AV	54	--	--	--	--	--	--
2500.00	42.29	PK	74	31.71	8.61	28.96	4.72	0.00	33.68
2500.00	--	AV	54	--	--	--	--	--	--

REMARKS:

1. Emission level (dBuV/m) =Raw Value (dBuV)+Correction Factor (dB/m)
2. Correction Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
3. Margin value = Limit value- Emission level.
4. Mean the PK detector measured value is below average limit.
5. The other emission levels were very low against the limit.

RBW1MHz VBW3MHz Peak detector is for PK value; RBW 1MHz VBW10Hz Peak detector is for AV value.

4. Test Setup Photos of the EUT



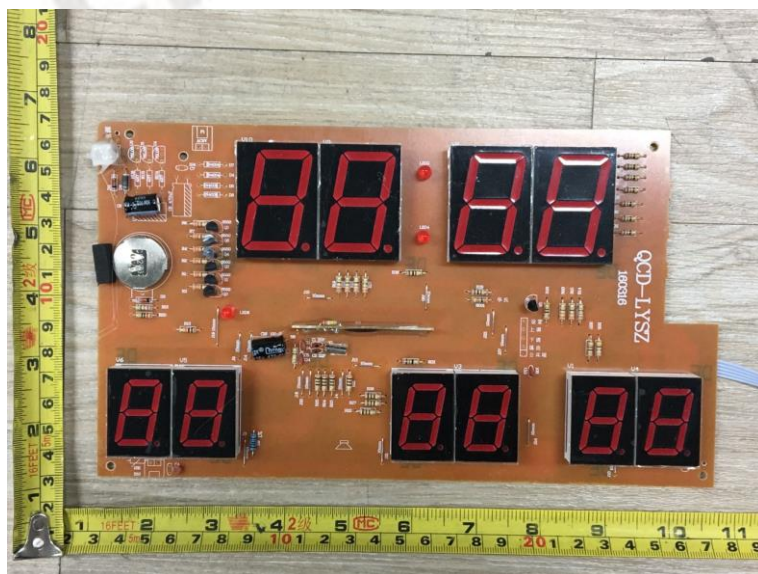
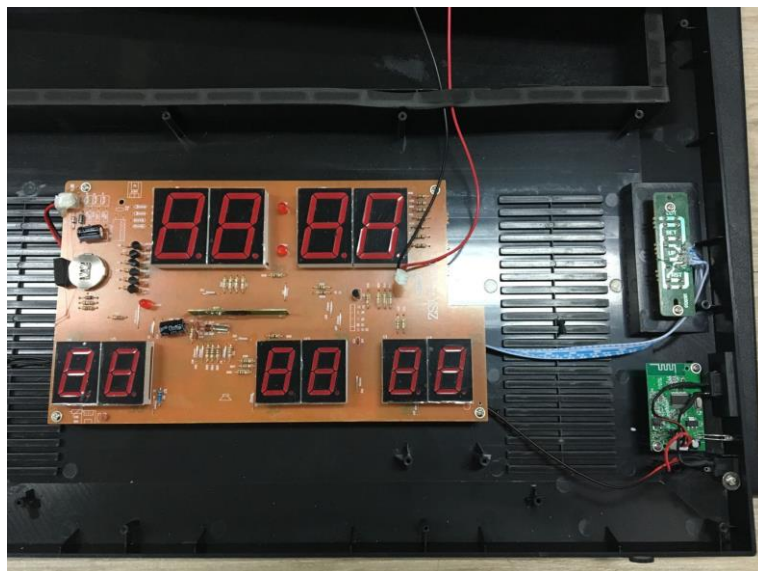
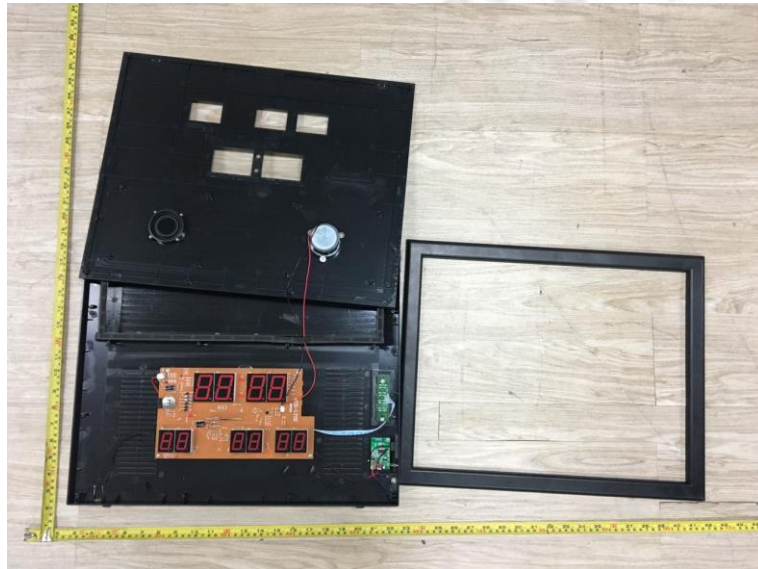
5. External and Internal Photos of the EUT

External Photos



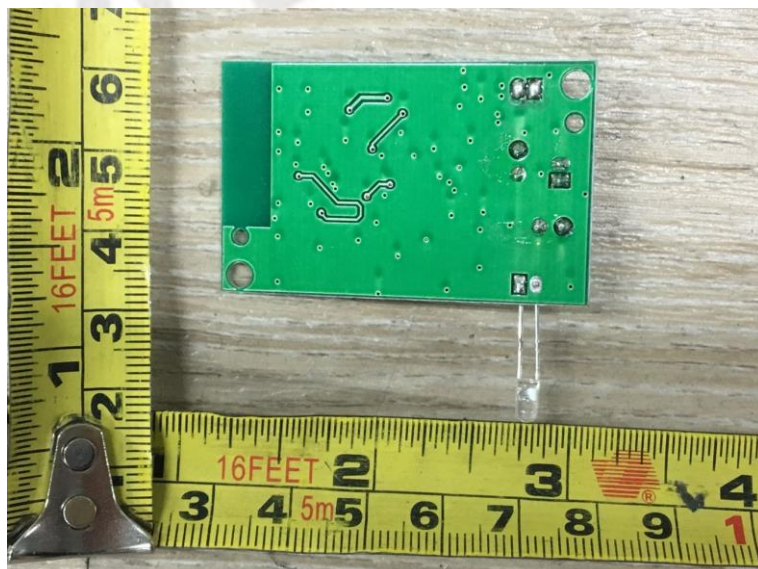
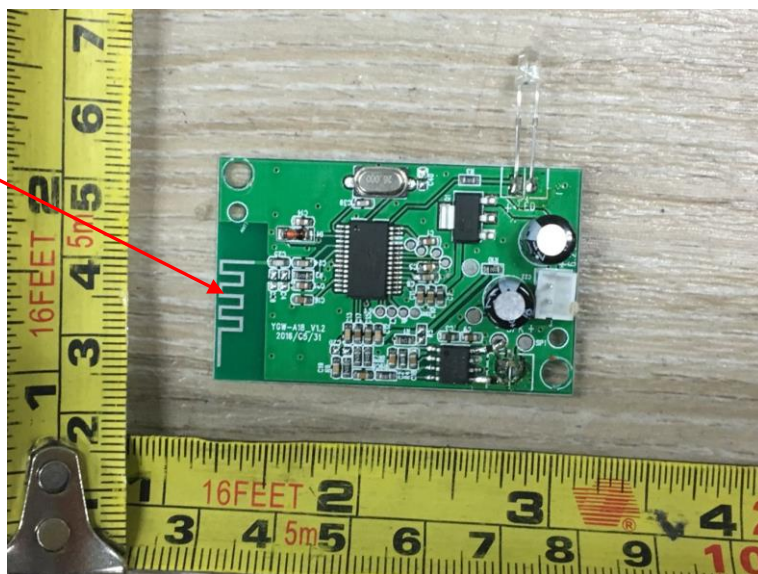


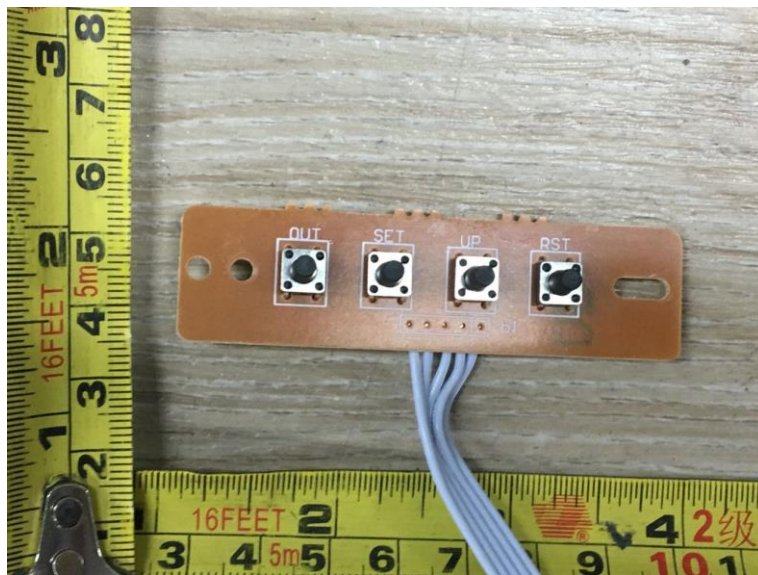
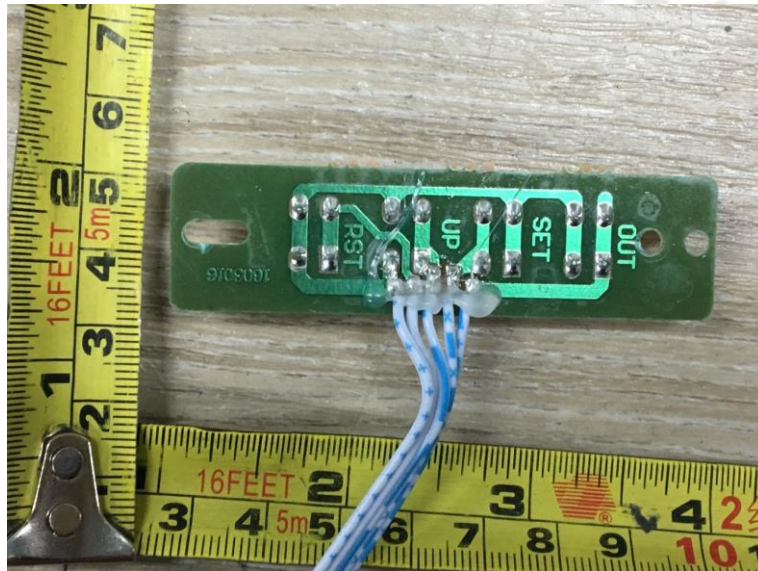


Internal Photos of EUT



BT Antenna





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