



TEST REPORT

FCC PART 15.247

Report Reference No.: **CTL1708103031-WF**

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Ivan Xie

Product Name.....: Smart Light Bulb

Model/Type reference: SLB01

Trade Mark.....: N/A

FCC ID.....: **2ACE5-SLB01**

Applicant's name: **TELEPHONE EST (HK) CO., LTD**

Address of applicant: Room709, 7F, FuLi tianhe commercial building, Linhe East Road and tianhe district, Guangzhou, 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 15.247:** Operation within the bands 902-928 MHz, 2400-2483.5 MHz and 5725-5850 MHz.

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

Master TRF.....: Dated 2011-01

Date of Receipt.....: Aug. 11, 2017

Date of Test Date.....: Aug. 11, 2017–Aug. 18, 2017

Data of Issue.....: Aug. 18, 2017

Result.....: Pass

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TEST REPORT

Test Report No. :	CTL1708103031-WF	Aug. 18, 2017 ----- Date of issue
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Equipment under Test : Smart Light Bulb

Model /Type : SLB01

Applicant : **TELEPHONE EST (HK) CO., LTD**

Address : Room709, 7F, FuLi tianhe commercial building, Linhe East Road and tianhe district, Guangzhou, China

Manufacturer : **TELEPHONE EST (HK) CO., LTD**

Address : Room709, 7F, FuLi tianhe commercial building, Linhe East Road and tianhe district, Guangzhou, China

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

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.

**** Modified History ****

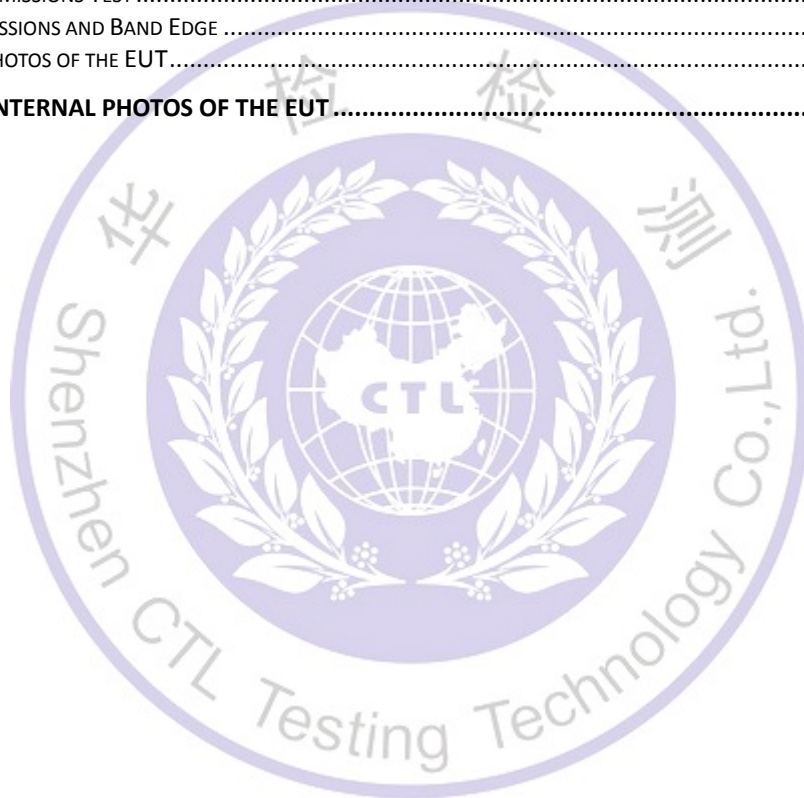
Revisions	Description	Issued Data	Report No.	Remark
Version 1.0	Initial Test Report Release	2017-08-18	CTL1708103031-WF	Tracy Qi



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1. SUMMARY

1.1. TEST STANDARDS

The tests were performed according to following standards:

[FCC Rules Part 15.247](#): Frequency Hopping, Direct Spread Spectrum and Hybrid Systems that are in operation within the bands of 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz

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

[KDB558074 D01 V03r05](#): Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247

1.2. Test Description

FCC PART 15.247		
FCC Part 15.207	AC Power Conducted Emission	PASS
FCC Part 15.247(a)(2)	6dB Bandwidth	PASS
FCC Part 15.247(d)	Spurious RF Conducted Emission	PASS
FCC Part 15.247(b)	Maximum Conducted Output Power	PASS
FCC Part 15.247(e)	Power Spectral Density	PASS
FCC Part 15.109/ 15.205/ 15.209	Radiated Emissions	PASS
FCC Part 15.247(d)	Band Edge	PASS
FCC Part 15.203/15.247 (b)	Antenna Requirement	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 22/EN 55022 requirements.

1.3.2 Laboratory accreditation

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

IC Registration No.: 9618B

The 3m alternate test site of Shenzhen CTL Testing Technology Co., Ltd. EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration No.: 9618B on November 13, 2013.

FCC-Registration No.: 970318

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 970318, December 19, 2013.

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	Measurement Uncertainty	Notes
Transmitter power conducted	±0.57 dB	(1)
Transmitter power Radiated	±2.20 dB	(1)
Conducted spurious emission 9KHz-40 GHz	±2.20 dB	(1)
Occupied Bandwidth	±0.01ppm	(1)
Radiated Emission 30~1000MHz	±4.10dB	(1)
Radiated Emission Above 1GHz	±4.32dB	(1)
Conducted Disturbance0.15~30MHz	±3.20dB	(1)

- (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:	Smart Light Bulb
Model/Type reference:	SLB01
Power supply:	AC 230V/50Hz
Bluetooth BLE	
Supported type:	Version 4.0 for low Energy
Modulation:	GFSK
Operation frequency:	2402MHz to 2480MHz
Channel number:	40
Channel separation:	2 MHz
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 (Duty Cycle more than 98%) and receiving mode for testing.

There are 39 channels provided to the EUT and Channel 00/19/39 were selected for BT4.0 test.

Operation Frequency List BT4.0 :

Channel	Frequency (MHz)
00	2402
02	2404
03	2406
⋮	⋮
19	2440
⋮	⋮
37	2476
38	2478
39	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	2017/05/20	2018/05/19
LISN	R&S	ESH2-Z5	860014/010	2017/05/20	2018/05/19
Bilog Antenna	Sunol Sciences Corp.	JB1	A061713	2017/05/20	2018/05/19
EMI Test Receiver	R&S	ESCI	103710	2017/05/20	2018/05/19
Spectrum Analyzer	Agilent	E4407B	MY41440676	2017/05/20	2018/05/19
Spectrum Analyzer	Agilent	N9020	US46220290	2017/05/20	2018/05/19
Power Meter	Anritsu	ML2487B	110553	2017/05/20	2018/05/19
Power Sensor	Anritsu	MA2411B	100345	2017/05/20	2018/05/19
Controller	EM Electronics	Controller EM 1000	N/A	2017/05/20	2018/05/19
Horn Antenna	Sunol Sciences Corp.	DRH-118	A062013	2017/05/20	2018/05/19
Active Loop Antenna	SCHWARZBECK	FMZB1519	1519-037	2017/05/20	2018/05/19
Amplifier	Agilent	8349B	3008A02306	2017/05/20	2018/05/19
Amplifier	Agilent	8447D	2944A10176	2017/05/20	2018/05/19
Temperature/Humidity Meter	Gangxing	CTH-608	02	2017/05/20	2018/05/19
High-Pass Filter	K&L	9SH10-2700/X1 2750-O/O	N/A	2017/05/20	2018/05/19
High-Pass Filter	K&L	41H10-1375/U1 2750-O/O	N/A	2017/05/20	2018/05/19
Coaxial Cables	HUBER+SUHNER	SUCOFLEX 104PEA-10M	10m	2017/05/20	2018/05/19
Coaxial Cables	HUBER+SUHNER	SUCOFLEX 104PEA-3M	3m	2017/05/20	2018/05/19
Coaxial Cables	HUBER+SUHNER	SUCOFLEX 104PEA-3M	3m	2017/05/20	2018/05/19
RF Cable	Megalon	RF-A303	N/A	2017/05/20	2018/05/19

The calibration interval was one year

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

This submittal(s) (test report) is intended to comply with Section 15.247 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

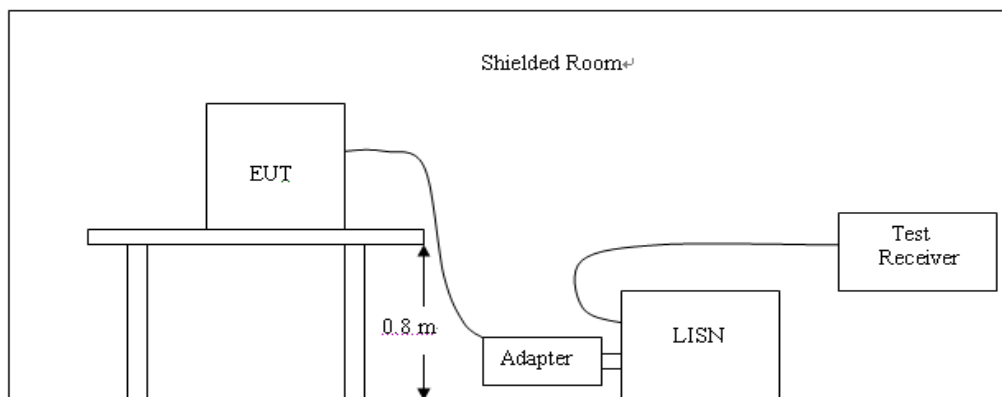
LIMIT

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



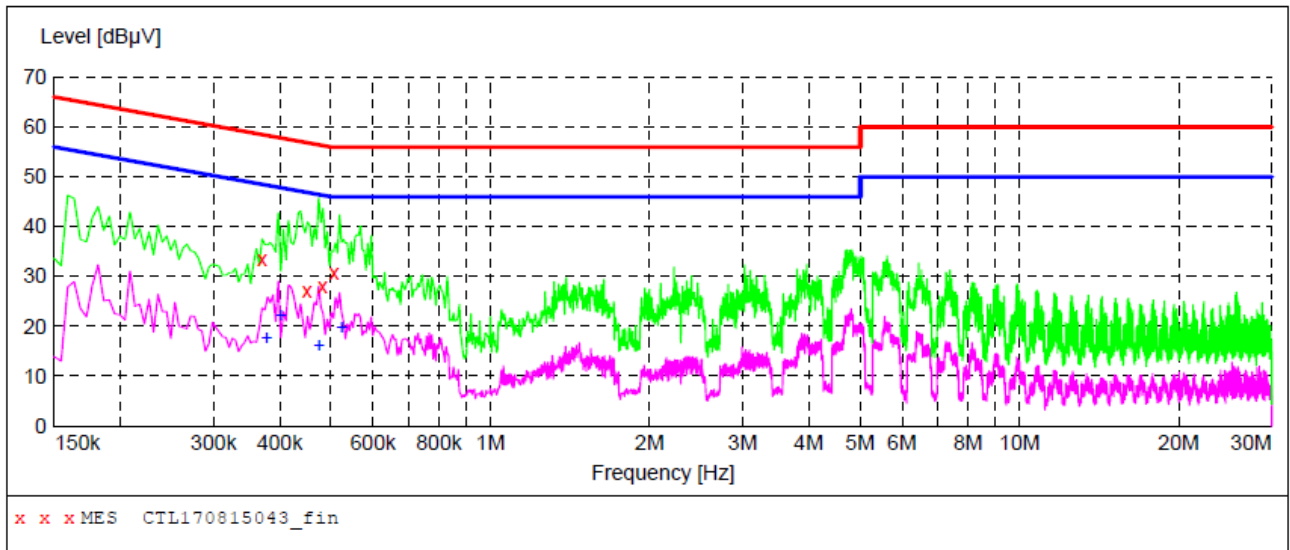
TEST PROCEDURE

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. The 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

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "CTL170815043_fin"

15/08/2017 14:21

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.370000	33.40	10.2	59	25.1	QP	L1	GND
0.450000	27.10	10.2	57	29.8	QP	L1	GND
0.482000	27.90	10.2	56	28.4	QP	L1	GND
0.506000	30.70	10.2	56	25.3	QP	L1	GND

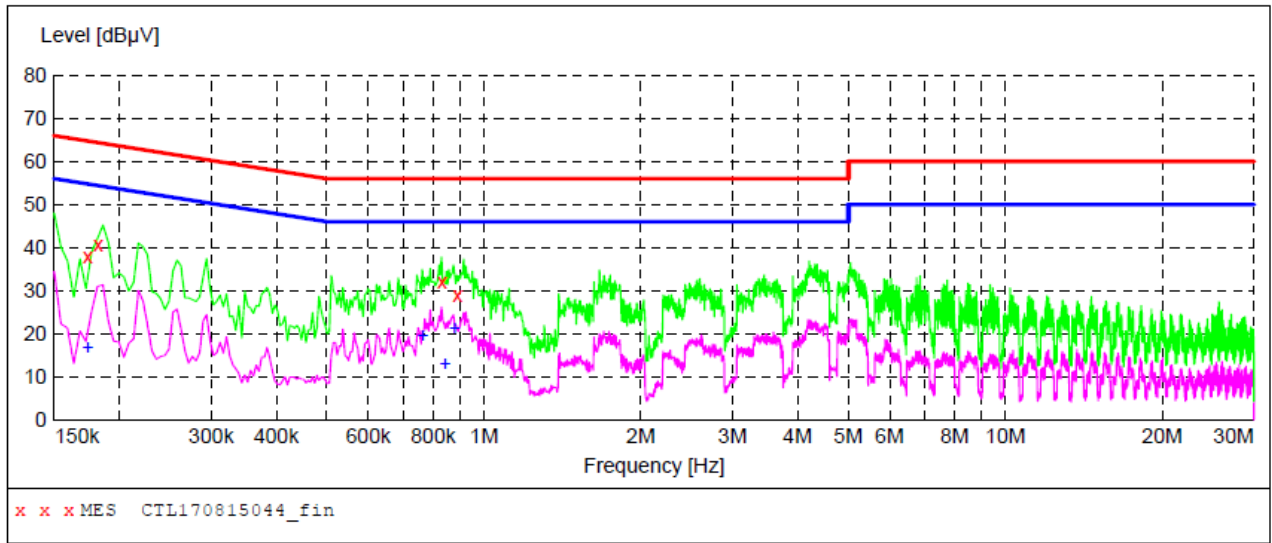
MEASUREMENT RESULT: "CTL170815043_fin2"

15/08/2017 14:21

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.378000	17.70	10.2	48	30.6	AV	L1	GND
0.402000	22.20	10.2	48	25.6	AV	L1	GND
0.474000	16.20	10.2	46	30.2	AV	L1	GND
0.524000	19.80	10.2	46	26.2	AV	L1	GND

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

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "CTL170815044_fin"

15/08/2017 14:25

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.174000	37.80	10.2	65	27.0	QP	N	GND
0.182000	40.60	10.2	64	23.8	QP	N	GND
0.830000	32.00	10.2	56	24.0	QP	N	GND
0.890000	28.90	10.2	56	27.1	QP	N	GND

MEASUREMENT RESULT: "CTL170815044_fin2"

15/08/2017 14:25

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.174000	16.80	10.2	55	38.0	AV	N	GND
0.764000	19.70	10.2	46	26.3	AV	N	GND
0.842000	13.10	10.2	46	32.9	AV	N	GND
0.878000	21.20	10.2	46	24.8	AV	N	GND

3.2. Radiated Emissions and Band Edge

Limit

For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emission out of authorized band shall not exceed the following table at a 3 meters measurement distance.

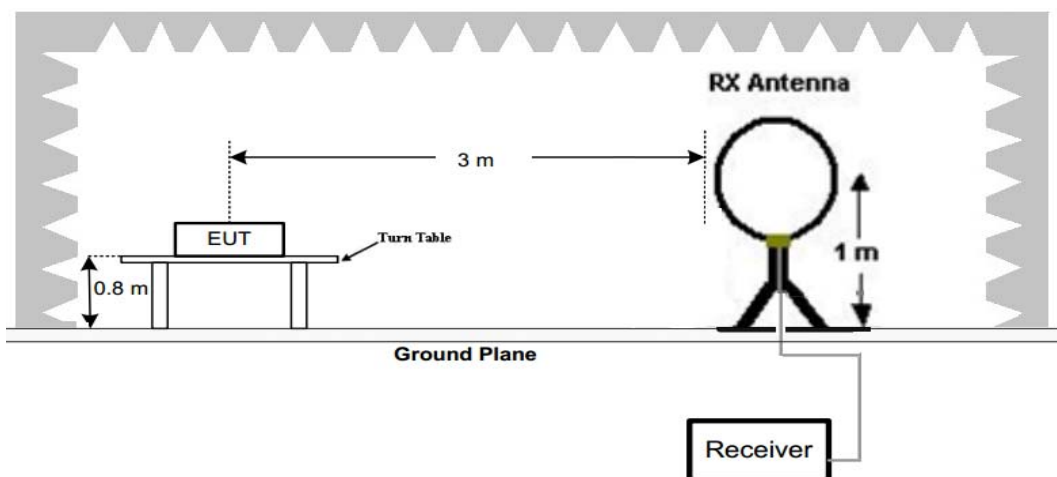
In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a)

Radiated emission limits

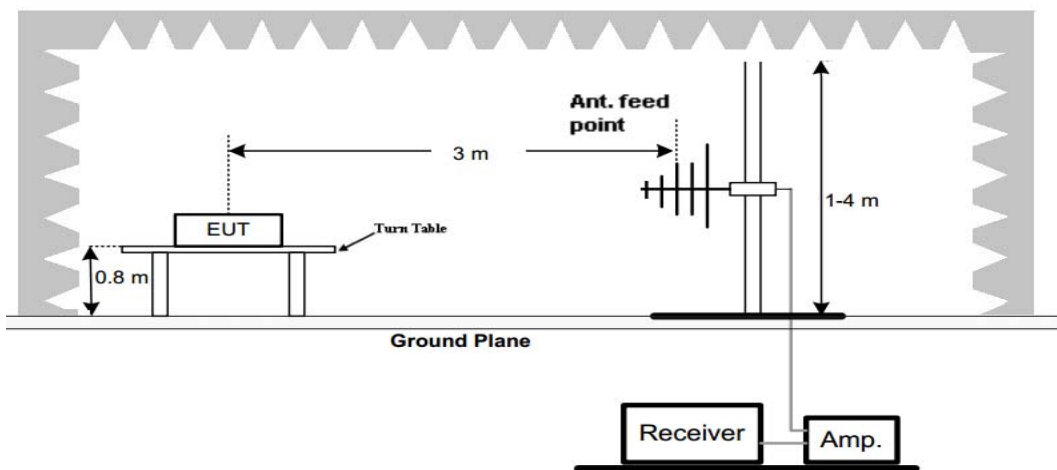
Frequency (MHz)	Distance (Meters)	Radiated (dB μ V/m)	Radiated (μ V/m)
0.009-0.49	3	$20\log(2400/F(\text{KHz}))+40\log(300/3)$	$2400/F(\text{KHz})$
0.49-1.705	3	$20\log(24000/F(\text{KHz}))+40\log(30/3)$	$24000/F(\text{KHz})$
1.705-30	3	$20\log(30)+40\log(30/3)$	30
30-88	3	40.0	100
88-216	3	43.5	150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

TEST CONFIGURATION

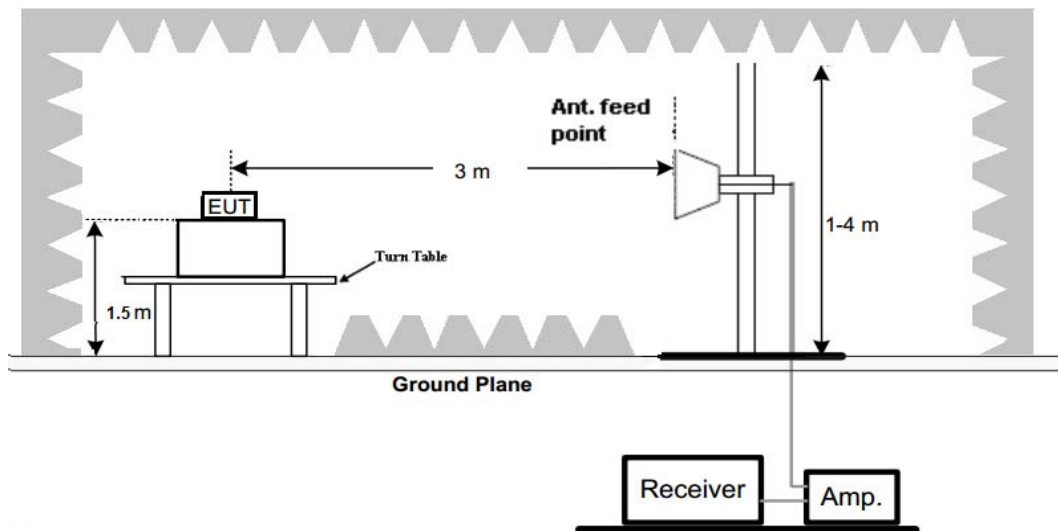
(A) Radiated Emission Test Set-Up, Frequency Below 30MHz



(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:

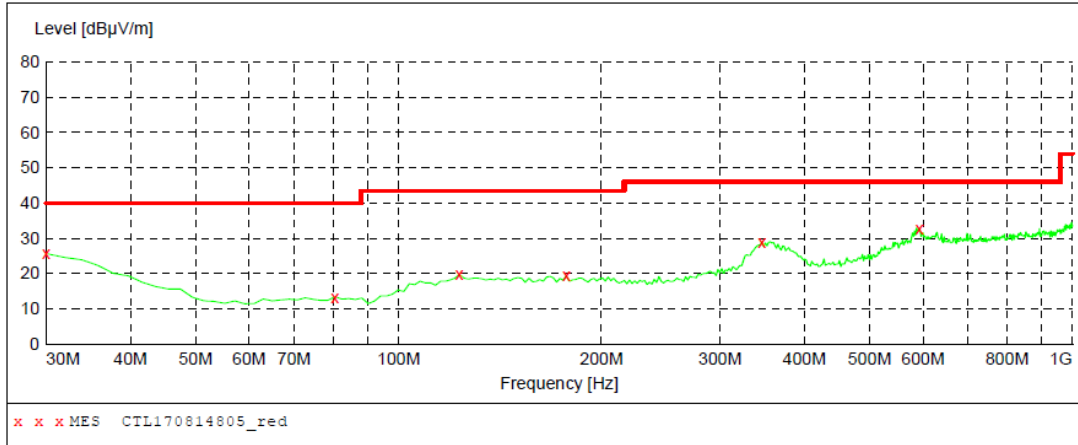
1. For below 1GHz testing recorded worst at BLE low channel.
2. Radiated emission test from 9 KHz to 10th harmonic of fundamental was verified, and no emission found except system noise floor in 9 KHz to 30MHz and not recorded in this report.

For 30MHz-1GHz

Horizontal

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

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



MEASUREMENT RESULT: "CTL170814805_red"

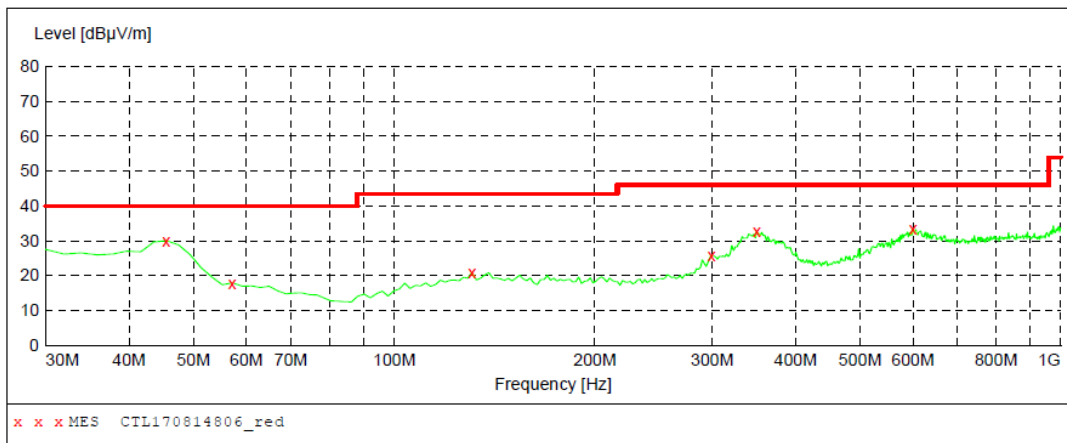
8/14/2017 9:49AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
30.000000	25.60	22.1	40.0	14.4	---	0.0	0.00	HORIZONTAL
80.440000	13.40	9.0	40.0	26.6	---	0.0	0.00	HORIZONTAL
123.120000	19.70	15.2	43.5	23.8	---	0.0	0.00	HORIZONTAL
177.440000	19.30	14.6	43.5	24.2	---	0.0	0.00	HORIZONTAL
346.220000	29.00	17.2	46.0	17.0	---	0.0	0.00	HORIZONTAL
592.600000	32.90	22.9	46.0	13.1	---	0.0	0.00	HORIZONTAL

Vertical

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

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



MEASUREMENT RESULT: "CTL170814806_red"

8/14/2017 9:50AM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
45.520000	30.00	11.2	40.0	10.0	---	0.0	0.00	VERTICAL
57.160000	17.90	7.9	40.0	22.1	---	0.0	0.00	VERTICAL
130.880000	20.80	15.3	43.5	22.7	---	0.0	0.00	VERTICAL
299.660000	25.80	16.1	46.0	20.2	---	0.0	0.00	VERTICAL
350.100000	32.60	17.3	46.0	13.4	---	0.0	0.00	VERTICAL
600.360000	33.50	23.0	46.0	12.5	---	0.0	0.00	VERTICAL

For 1GHz to 25GHz

BT4.0 Mode (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	50.82	PK	74.00	23.18	46.31	33.49	6.91	35.89	4.51
4804.00	--	AV	54.00	--	--	--	--	--	--
5286.50	43.17	PK	74.00	30.83	35.96	34.38	7.10	34.27	7.21
5286.50	--	AV	54.00	--	--	--	--	--	--
7206.00	48.86	PK	74.00	25.14	37.76	36.95	9.18	35.03	11.10
7206.00	--	AV	54.00	--	--	--	--	--	--

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	50.13	PK	74.00	23.87	45.62	33.49	6.91	35.89	4.51
4804.00	--	AV	54.00	--	--	--	--	--	--
5286.50	42.77	PK	74.00	31.23	35.21	34.69	7.23	34.36	7.56
5286.50	--	AV	54.00	--	--	--	--	--	--
7206.00	48.42	PK	74.00	25.58	37.32	36.95	9.18	35.03	11.10
7206.00	--	AV	54.00	--	--	--	--	--	--

Frequency(MHz):			2440		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)
4880.00	50.14	PK	74.00	23.86	43.89	33.60	6.95	34.30	6.25
4880.00	--	AV	54.00	--	--	--	--	--	--
5310.75	43.29	PK	74.00	30.71	35.66	34.57	7.16	34.10	7.63
5310.75	--	AV	54.00	--	--	--	--	--	--
7320.00	48.55	PK	74.00	25.45	36.86	37.46	9.23	35.00	11.69
7320.00	--	AV	54.00	--	--	--	--	--	--

Frequency(MHz):			2440		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)
4880.00	50.83	PK	74.00	23.17	44.58	33.60	6.95	34.30	6.25
4880.00	--	AV	54.00	--	--	--	--	--	--
5310.75	42.46	PK	74.00	31.54	34.82	34.58	7.16	34.10	7.64
5310.75	--	AV	54.00	--	--	--	--	--	--
7320.00	48.04	PK	74.00	25.96	36.35	37.46	9.23	35.00	11.69
7320.00	--	AV	54.00	--	--	--	--	--	--

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	50.26	PK	74.00	23.74	45.34	33.84	7.00	35.92	4.92
4960.00	--	AV	54.00	--	--	--	--	--	--
5325.50	42.11	PK	74.00	31.89	34.57	34.67	7.22	34.35	7.54
5325.50	--	AV	54.00	--	--	--	--	--	--
7440.00	48.63	PK	74.00	25.37	36.68	37.64	9.28	34.97	11.95
7440.00	--	AV	54.00	--	--	--	--	--	--

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	49.98	PK	74.00	24.02	45.06	33.84	7.00	35.92	4.92
4960.00	--	AV	54.00	--	--	--	--	--	--
5115.25	43.01	PK	74.00	30.99	35.82	34.36	7.10	34.27	7.19
5115.25	--	AV	54.00	--	--	--	--	--	--
7440.00	47.67	PK	74.00	26.33	35.72	37.64	9.28	34.97	11.95
7440.00	--	AV	54.00	--	--	--	--	--	--

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

Results of Band Edges Test (Radiated)

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	95.84	PK	--	--	62.45	28.78	4.61	0.00	33.39
2402.00	88.02	AV	--	--	54.63	28.78	4.61	0.00	33.39
2348.75	42.79	PK	74.00	31.21	9.71	28.52	4.56	0.00	33.08
2348.75	--	AV	54.00	--	--	--	--	--	--
2390.00	44.72	PK	74.00	29.28	11.40	28.72	4.60	0.00	33.32
2390.00	--	AV	54.00	--	--	--	--	--	--
2400.00	45.65	PK	74.00	28.35	12.26	28.78	4.61	0.00	33.39
2400.00	--	AV	54.00	--	--	--	--	--	--

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	96.27	PK	--	--	62.88	28.78	4.61	0	33.39
2402.00	88.15	AV	--	--	54.76	28.78	4.61	0	33.39
2348.75	42.63	PK	74	31.37	9.55	28.52	4.56	0	33.08
2348.75	--	AV	54	--	--	--	--	--	--
2390.00	45.71	PK	74	28.29	12.39	28.72	4.60	0	33.32
2390.00	--	AV	54	--	--	--	--	--	--
2400.00	46.08	PK	74	27.92	12.69	28.78	4.61	0	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	96.17	PK	--	--	62.55	28.92	4.70	0.00	33.62
2480.00	90.02	AV	--	--	56.4	28.92	4.70	0.00	33.62
2483.50	43.44	PK	74	30.56	9.81	28.93	4.70	0.00	33.63
2483.50	--	AV	54	--	--	--	--	--	--
2489.15	42.06	PK	74	31.94	8.4	28.95	4.71	0.00	33.66
2489.15	--	AV	54	--	--	--	--	--	--
2500.00	46.21	PK	74	27.79	12.53	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	95.08	PK	--	--	61.46	28.92	4.70	0.00	33.62
2480.00	89.13	AV	--	--	55.51	28.92	4.70	0.00	33.62
2483.50	42.40	PK	74	31.60	8.77	28.93	4.70	0.00	33.63
2483.50	--	AV	54	--	--	--	--	--	--
2489.15	42.09	PK	74	31.91	8.43	28.95	4.71	0.00	33.66
2489.15	--	AV	54	--	--	--	--	--	--
2500.00	46.04	PK	74	27.96	12.36	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.
6. RBW1MHz VBW3MHz Peak detector is for PK value; RBW 1MHz VBW10Hz Peak detector is for AV value.
7. For fundamental frequency, RBW 3MHz VBW 3MHz Peak detector is for PK Value; RMS detector is for AV value.



3.3. Test Setup Photos of the EUT

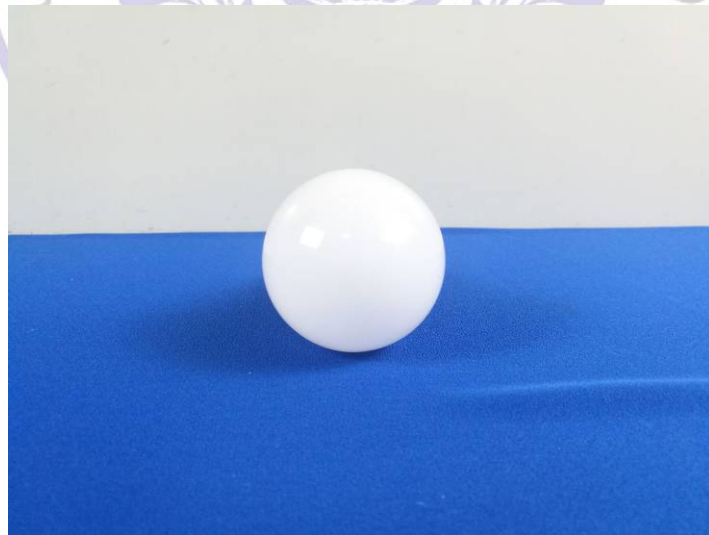




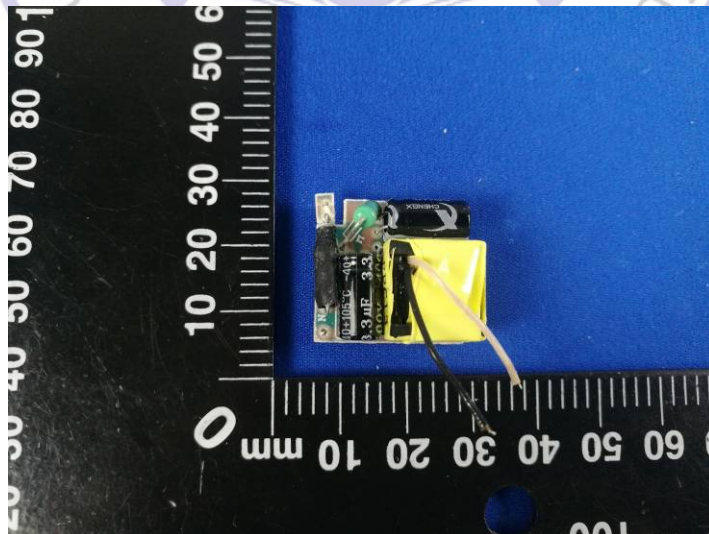
4. External and Internal Photos of the EUT

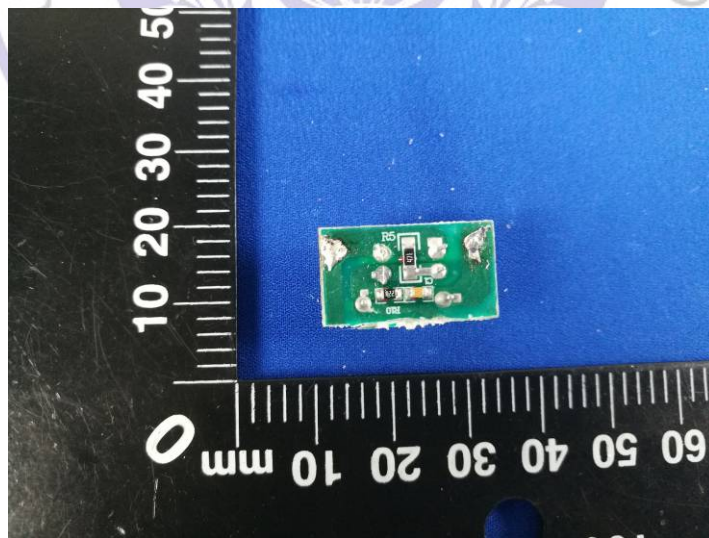
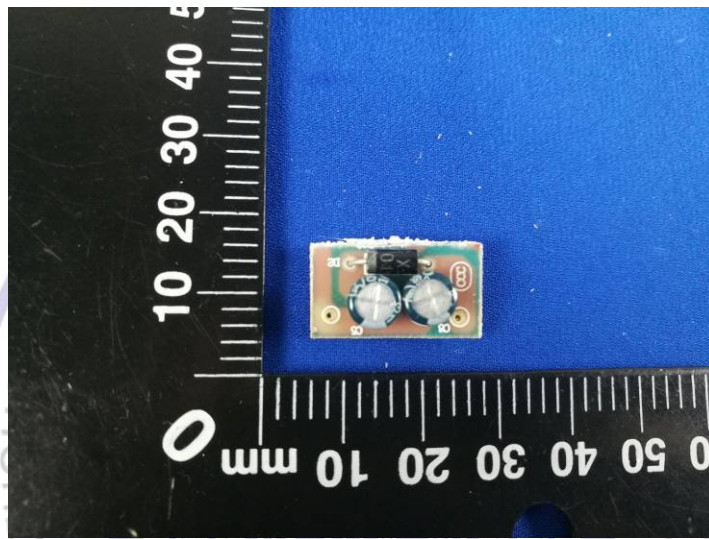
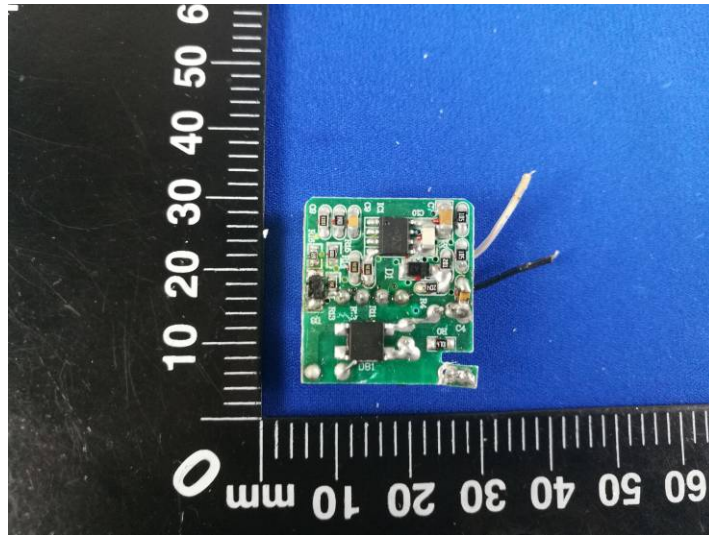
External photos

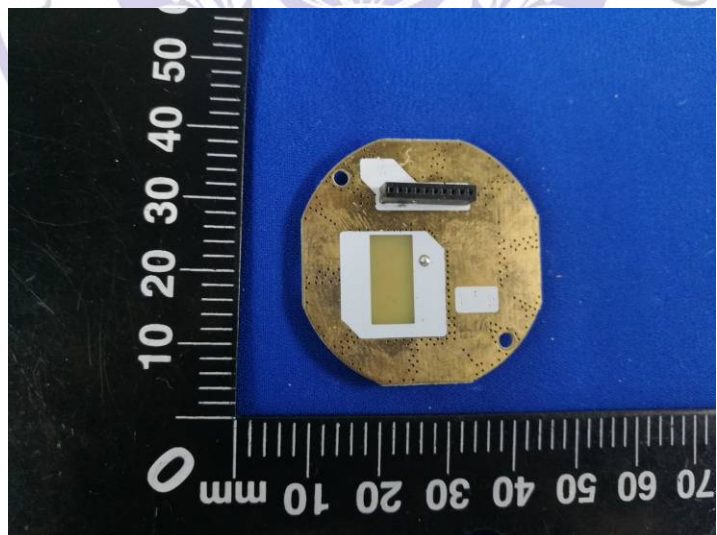
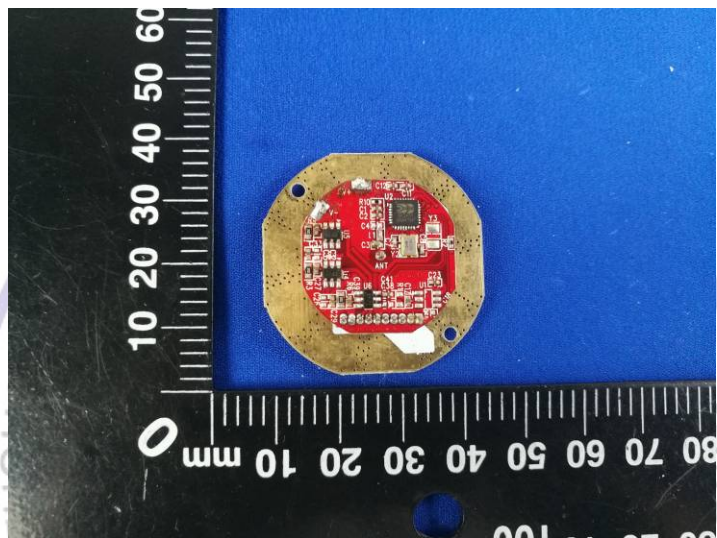
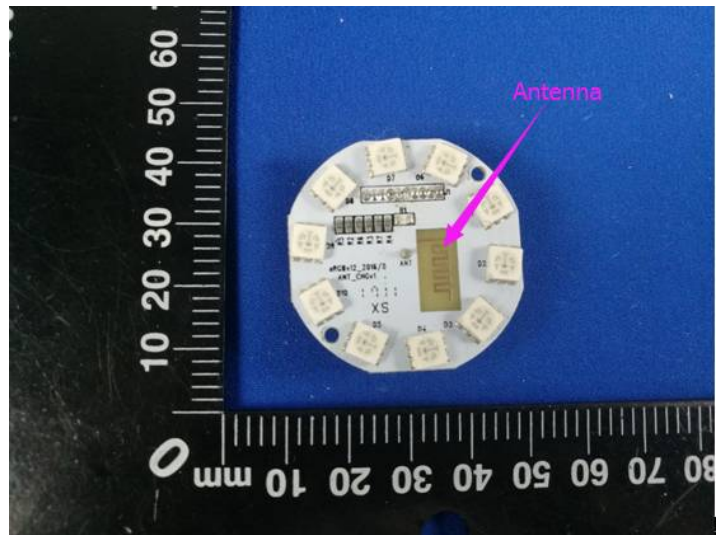


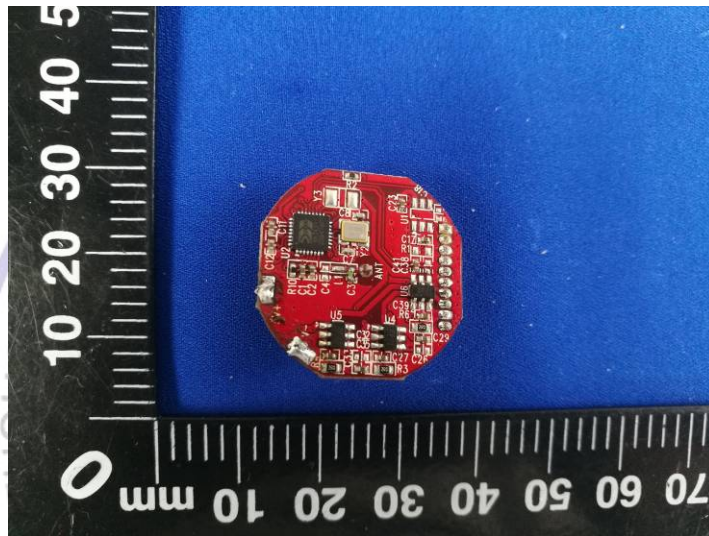
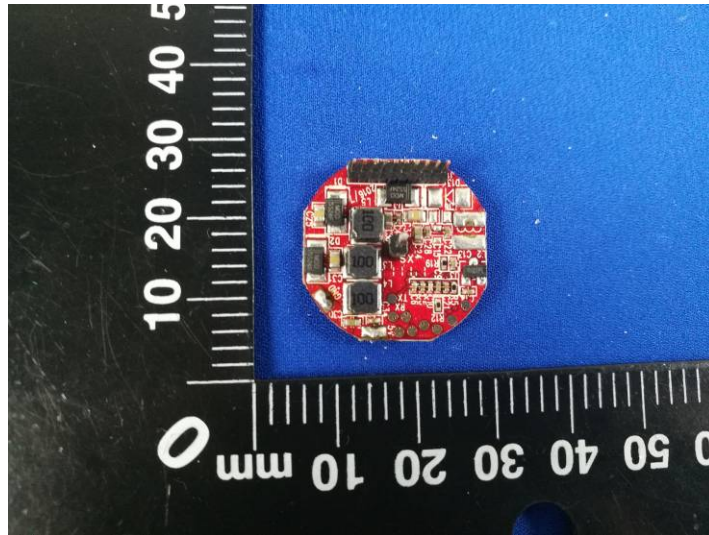


Internal photos









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

