

FCC TEST REPORT

Product : HUB Mirage
Trade mark : USECORE
Model/Type reference : EHM10
Serial Number : N/A
Report Number : EED32I001113
FCC ID : 2AIU2-EHM10
Date of Issue : Jun. 22, 2016
Test Standards : 47 CFR Part 15 Subpart C (2015)
Test result : PASS

Prepared for:

Shenzhen Ecore Global Technology Co., Ltd.
3F, Da Xin Industrial co., Building, No.223 TaoYuan Road Nanshan
District, Shenzhen, 518052, P.R.C

Prepared by:

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Date:

Jun. 22, 2016

Report Seal

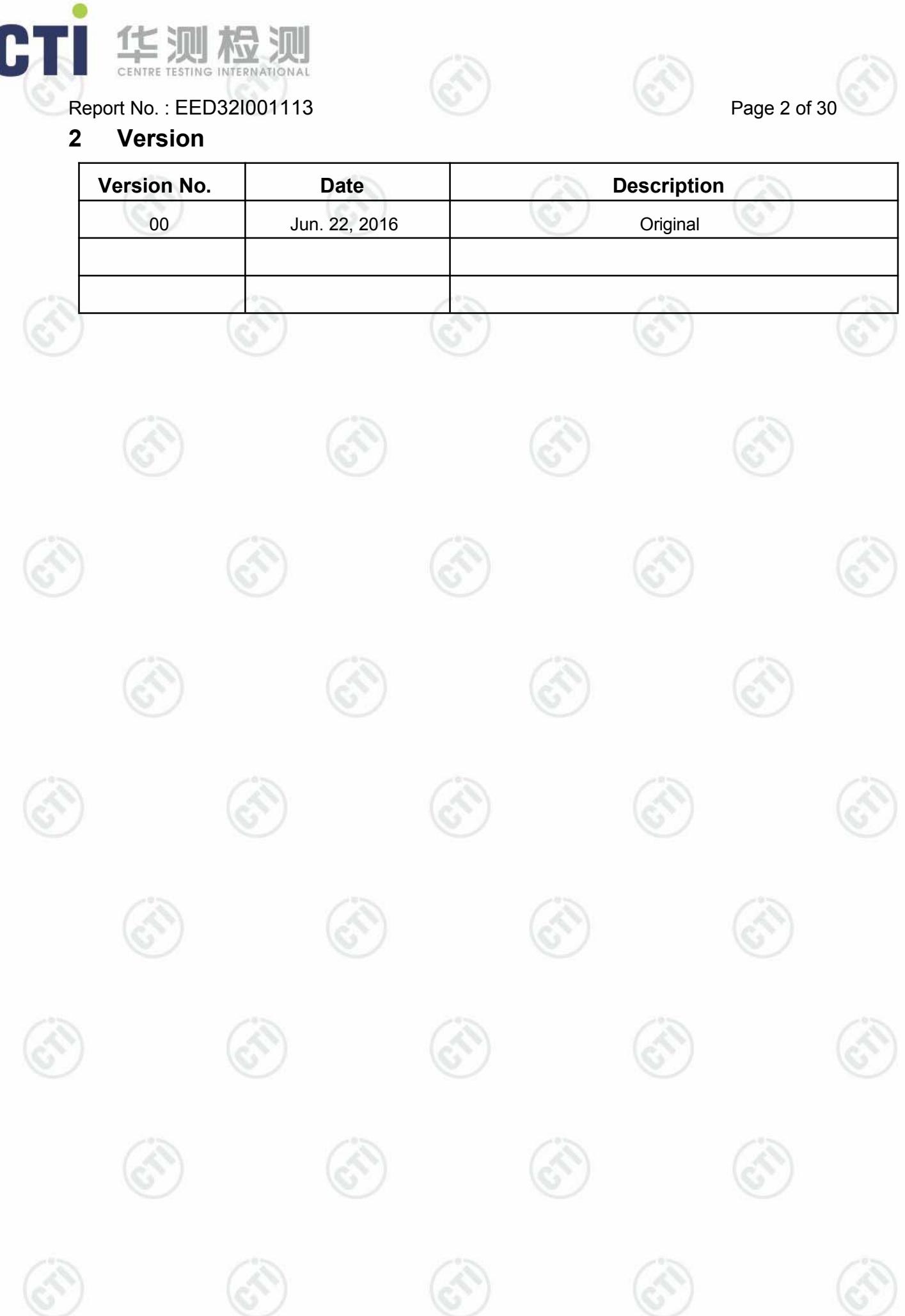
Sheek Luo

Lab supervisor

Check No.: 2384303852

2 Version

Version No.	Date	Description
00	Jun. 22, 2016	Original



3 Test Summary

Test Item	Test Requirement	Test method	Result
Antenna Requirement	47 CFR Part 15 Subpart C Section 15.203	ANSI C63.10-2013	PASS
AC Power Line Conducted Emission	47 CFR Part 15 Subpart C Section 15.207	ANSI C63.10-2013	NA
Field Strength of the Fundamental Signal	47 CFR Part 15 Subpart C Section 15.249 (a)	ANSI C63.10-2013	PASS
Spurious Emissions	47 CFR Part 15 Subpart C Section 15.249 (a)/15.209	ANSI C63.10-2013	PASS
Restricted bands around fundamental frequency (Radiated Emission)	47 CFR Part 15 Subpart C Section 15.249(a)/15.205	ANSI C63.10-2013	PASS
20dB Occupied Bandwidth	47 CFR Part 15 Subpart C Section 15.215 (c)	ANSI C63.10-2013	PASS

Remark:

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

Test according to ANSI C63.4-2014 & ANSI C63.10-2013.

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5 General Information

5.1 Client Information

Applicant:	Shenzhen Ecore Global Technology Co., Ltd.
Address of Applicant:	3F, Da Xin Industrial co., Building, No.223 TaoYuan Road Nanshan District, Shenzhen, 518052, P.R.C
Manufacturer:	Shenzhen Ecore Global Technology Co., Ltd.
Address of Manufacturer:	3F, Da Xin Industrial co., Building, No.223 TaoYuan Road Nanshan District, Shenzhen, 518052, P.R.C
Factory:	Shenzhen Ecore Global Technology Co., Ltd.
Address of Factory:	3F, Da Xin Industrial co., Building, No.223 TaoYuan Road Nanshan District, Shenzhen, 518052, P.R.C

5.2 General Description of EUT

Product Name:	HUB Mirage
Mode No.(EUT):	EHM10
Trade Mark:	USECORE
EUT Supports Radios application:	2416MHz; 2468MHz
Power Supply:	1xAAA alkaline battery=1.5V

5.3 Product Specification subjective to this standard

Frequency Range:	2416MHz; 2468MHz
Modulation Type:	FSK
Sample Type:	Portable production
Hardware Version:	V1.2 (manufacturer declare)
Software Version:	V2.3(manufacturer declare)
Antenna Type:	PIFA
Antenna Gain:	0dBi
Test voltage:	1xAAA alkaline battery=1.5V
Sample Received Date:	Jun. 07, 2016
Sample tested Date:	Jun. 07, 2016 to Jun. 22, 2016

5.4 Test Environment and Mode

Operating Environment:	
Temperature:	24°C
Humidity:	54% RH
Atmospheric Pressure:	1010mbar
Test mode:	
Transmitting mode:	Keep the EUT transmitted the continuous modulation test signal at the specific channel(s)

5.5 Description of Support Units

The EUT has been tested independently.

5.6 Test Location

All tests were performed at:

Centre Testing International (Shenzhen) Corporation

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

Telephone: +86 (0) 755 33683668 Fax:+86 (0) 755 33683385

No tests were sub-contracted.

5.7 Test Facility

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

FCC-Registration No.: 886427

Centre Testing International (Shenzhen) Corporation. 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 (Shenzhen) Corporation. 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 (Shenzhen) Corporation., 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	7.9×10^{-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	TTE20130797	06-02-2013	06-01-2016
3M Chamber & Accessory Equipment	TDK	SAC-3	TTE20130797	06-01-2016	05-31-2019
TRILOG Broadband Antenna	SCHWARZBEC K	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	00057410	06-30-2015	06-28-2018
Horn Antenna	A.H.SYSTEMS	SAS-574	374	06-30-2015	06-29-2016
Loop Antenna	ETS	6502	00071730	07-30-2015	07-28-2017
Spectrum Analyzer	R&S	FSP40	100416	06-30-2015	06-28-2016
Receiver	R&S	ESCI	100435	06-30-2015	06-28-2016
LISN	schwarzbeck	NNBM8125	81251547	06-30-2015	06-28-2016
LISN	schwarzbeck	NNBM8125	81251548	06-30-2015	06-28-2016
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	07-08-2015	07-06-2016
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(3-18GHz)	Sinoscite	FL3CX03WG18 NM12-0398-002	TTF20120439	01-12-2016	01-11-2017
High-pass filter(6-18GHz)	MICRO-TRONICS	SPA-F-63029-4	003	01-12-2016	01-11-2017
band rejection filter	Sinoscite	FL5CX01CA09 CL12-0395-001	TTF20120434	01-12-2016	01-11-2017
band rejection filter	Sinoscite	FL5CX01CA08 CL12-0393-001	TTF20120435	01-12-2016	01-11-2017
band rejection filter	Sinoscite	FL5CX02CA04 CL12-0396-002	TTF20120436	01-12-2016	01-11-2017
band rejection filter	Sinoscite	FL5CX02CA03 CL12-0394-001	TTF20120437	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	06-30-2015	06-28-2016
Receiver	R&S	ESCI	100435	06-30-2015	06-28-2016
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 (3-18GHz)	Sinoscite	FL3CX03WG18 NM12-0398-002	TTF20120439	01-12-2016	01-11-2017
High-pass filter (6-18GHz)	MICRO-TRONICS	SPA-F-63029-4	003	01-12-2016	01-11-2017
band rejection filter	Sinoscite	FL5CX01CA09C L12-0395-001	TTF20120434	01-12-2016	01-11-2017
band rejection filter	Sinoscite	FL5CX01CA08C L12-0393-001	TTF20120435	01-12-2016	01-11-2017
band rejection filter	Sinoscite	FL5CX02CA04C L12-0396-002	TTF20120436	01-12-2016	01-11-2017

7 Test results and Measurement Data

7.1 Antenna Requirement

Standard requirement:	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>EUT Antenna:</p> <p>The antenna is PIFA on the main PCB and no consideration of replacement. The best case gain of the antenna is 0dBi.</p> 	

7.2 Radiated Spurious Emission

Test Requirement: 47 CFR Part 15C Section 15.249 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:

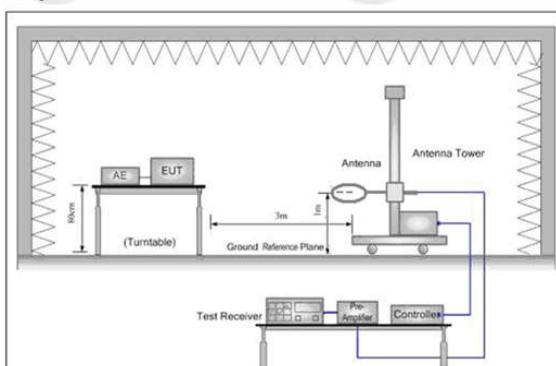


Figure 1. Below 30MHz

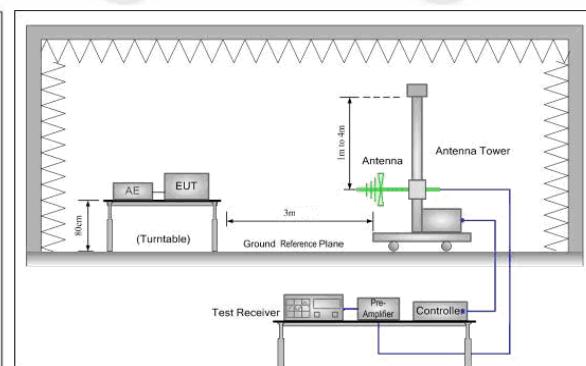


Figure 2. 30MHz to 1GHz

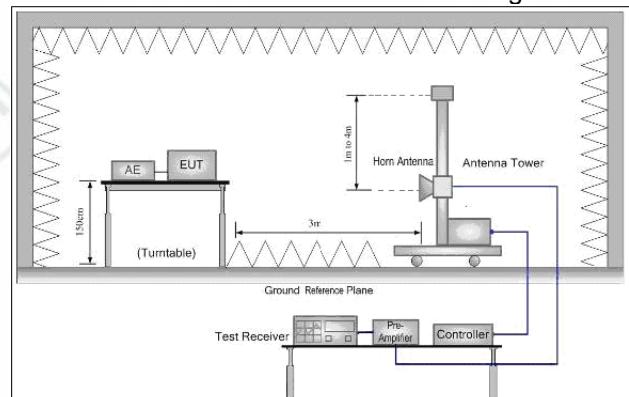


Figure 3. Above 1GHz

Below 1GHz test procedure as below:

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.

The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

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.

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 rota table table was turned from 0 degrees to 360 degrees to find the maximum reading.

The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

If the emission level of the EUT in peak mode was 10dB lower than the limit specified,

Test Procedure:

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:

Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 meter to 1.5 meter(Above 18GHz the distance is 1 meter and table is 1.5 meter).

Test the EUT in the lowest channel , the Highest channel

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.

Repeat above procedures until all frequencies measured was complete.

Limit:
 (Spurious
 Emissions)

Frequency	Field strength (microvolt/meter)	Limit (dB μ V/m)	Remark	Measurement distance (m)
0.009MHz-0.490MHz	2400/F(kHz)	-	-	300
0.490MHz-1.705MHz	24000/F(kHz)	-	-	30
1.705MHz-30MHz	30	-	-	30
30MHz-88MHz	100	40.0	Quasi-peak	3
88MHz-216MHz	150	43.5	Quasi-peak	3
216MHz-960MHz	200	46.0	Quasi-peak	3
960MHz-1GHz	500	54.0	Quasi-peak	3
Above 1GHz	500	54.0	Average	3

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:
 (Field strength of
 the fundamental
 signal)

Frequency	Limit (dB μ V/m @3m)	Remark
2400MHz-2483.5MHz	94.0	Average Value
	114.0	Peak Value

Test Mode:

Transmitting mode

Instruments Used: Refer to section 6 for details

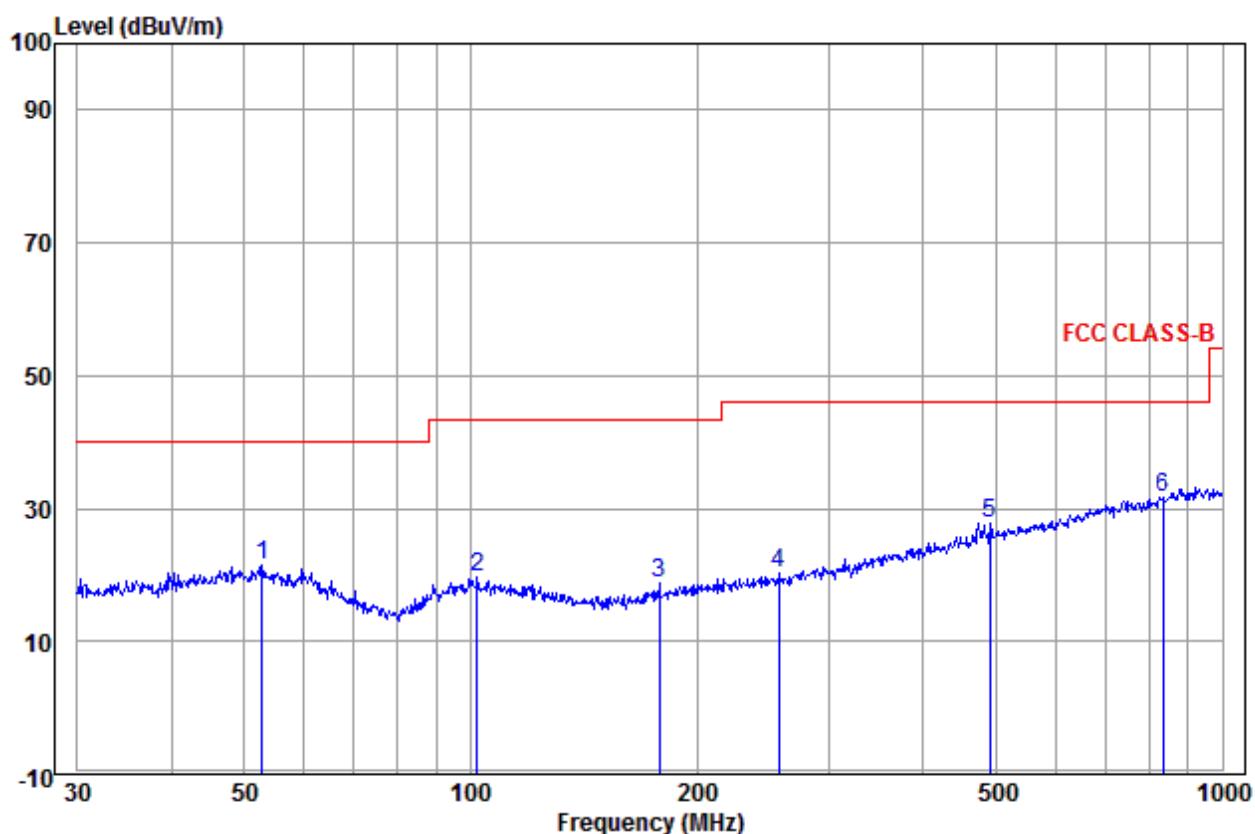
Test Results: Pass

Measurement Data**Field Strength Of The Fundamental Signal****Peak value:**

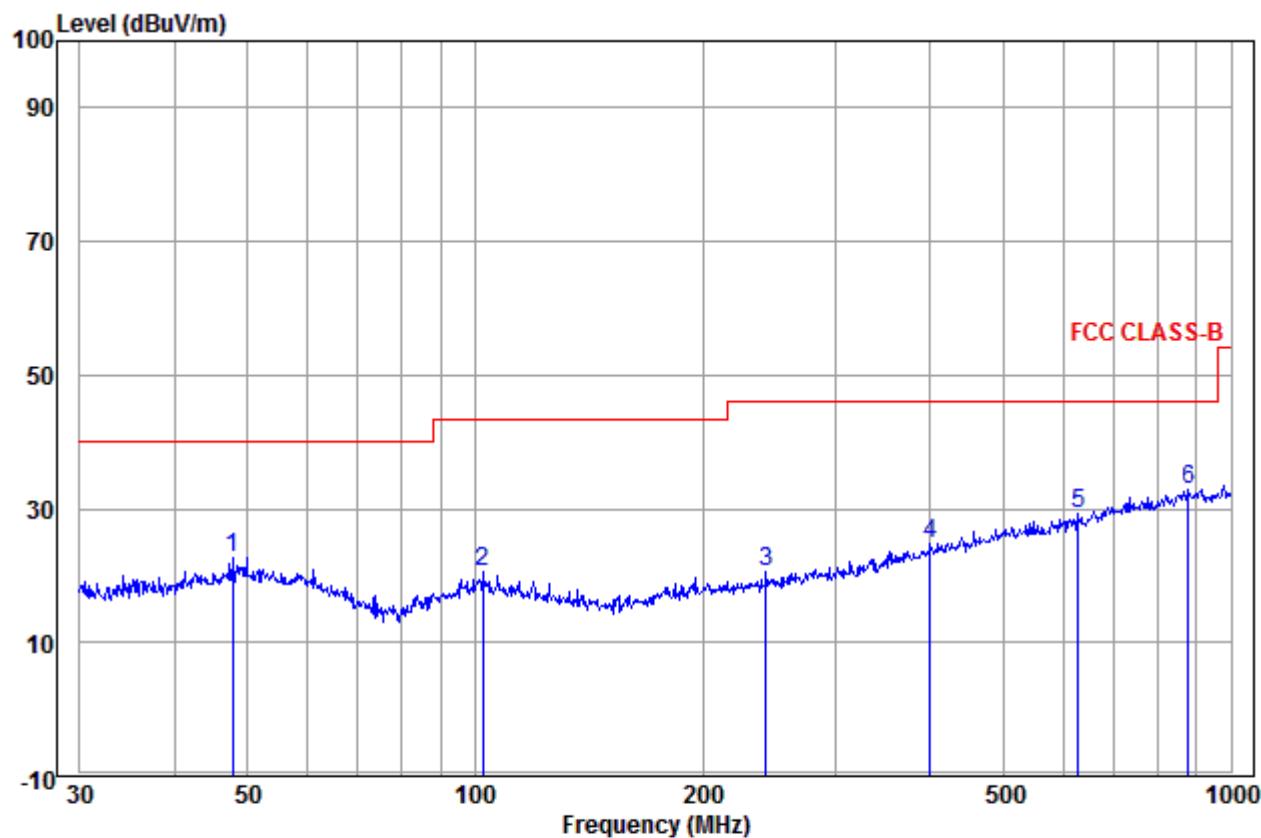
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dB μ V)	Level (dB μ V/m)	Limit (dB μ V/m)	Over Limit (dB)	Result	Antenna Polaxis
2416	32.59	4.34	34.39	85.32	87.86	94	-6.14	Pass	H
2416	32.59	4.34	34.39	73.73	76.27	94	-17.73	Pass	V
2468	32.69	4.47	34.40	86.39	89.15	94	-4.85	Pass	H
2468	32.69	4.47	34.40	73.22	75.98	94	-18.02	Pass	V

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 measurements were shown in the report.

30MHz~1GHz



	Ant	Cable	Read	Limit		Over	Remark
	Freq	Factor	Loss	Level	Level	Line	
	MHz	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	52.760	14.72	1.41	5.33	21.46	40.00	-18.54 Horizontal
2	102.001	13.03	1.57	5.06	19.66	43.50	-23.84 Horizontal
3	178.133	10.84	1.96	5.97	18.77	43.50	-24.73 Horizontal
4	257.422	12.58	2.35	5.38	20.31	46.00	-25.69 Horizontal
5	490.745	18.17	3.11	6.38	27.66	46.00	-18.34 Horizontal
6 pp	833.317	21.80	4.07	5.92	31.79	46.00	-14.21 Horizontal



	Ant Freq	Cable Factor	Read Loss	Read Level	Limit Level	Limit Line	Over Limit	Over Pol/Phase	Remark
	MHz	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
1	47.826	14.92	1.23	6.46	22.61	40.00	-17.39		Vertical
2	102.360	13.00	1.57	6.12	20.69	43.50	-22.81		Vertical
3	242.525	12.29	2.33	5.90	20.52	46.00	-25.48		Vertical
4	400.432	16.31	2.80	5.61	24.72	46.00	-21.28		Vertical
5	627.274	19.24	3.54	6.41	29.19	46.00	-16.81		Vertical
6 pp	878.322	22.19	4.27	6.30	32.76	46.00	-13.24		Vertical

Above 1GHz									
Test mode:		Transmitting		Test channel:		Lowest			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dB μ V)	Level (dB μ V/m)	Limit (dB μ V/m)	Over Limit (dB)	Result	Antenna Polaxis
1185.958	30.19	2.50	34.98	47.11	44.82	74	-29.18	Pass	H
1668.044	31.18	2.98	34.54	47.91	47.53	74	-26.47	Pass	H
2390.000	32.53	4.28	34.39	44.26	46.68	74	-27.32	Pass	H
4832.000	34.75	5.10	34.35	45.97	51.47	74	-22.53	Pass	H
4832.000	34.75	5.10	34.35	42.10	47.60	54	-6.40	Pass	H-AV
7248.000	36.43	6.70	34.90	39.96	48.19	74	-25.81	Pass	H
9664.000	37.94	7.68	35.06	38.20	48.76	74	-25.24	Pass	H
12272.340	39.52	8.49	34.20	36.42	50.23	74	-23.77	Pass	H
1118.517	30.02	2.42	35.05	48.04	45.43	74	-28.57	Pass	V
1668.044	31.18	2.98	34.54	48.39	48.01	74	-25.99	Pass	V
2390.000	32.53	4.28	34.39	44.87	47.29	74	-26.71	Pass	V
4310.849	33.57	5.31	34.50	44.61	48.99	74	-25.01	Pass	V
4832.000	34.75	5.10	34.35	44.70	50.20	74	-23.80	Pass	V
7248.000	36.43	6.70	34.90	42.33	50.56	74	-23.44	Pass	V
9664.000	37.94	7.68	35.06	39.91	50.47	74	-23.53	Pass	V
Test mode:		Transmitting		Test channel:		Highest			
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dB μ V)	Level (dB μ V/m)	Limit (dB μ V/m)	Over Limit (dB)	Result	Antenna Polaxis
1132.844	30.06	2.43	35.04	48.45	45.90	74	-28.10	Pass	H
1668.044	31.18	2.98	34.54	49.21	48.83	74	-25.17	Pass	H
2483.500	32.71	4.51	34.41	45.22	48.03	74	-25.97	Pass	H
3844.279	32.91	5.46	34.59	43.20	46.98	74	-27.02	Pass	H
4936.000	34.97	5.06	34.32	41.47	47.18	74	-26.82	Pass	H
7404.000	36.44	6.84	34.90	42.23	50.61	74	-23.39	Pass	H
9872.000	38.17	7.51	35.02	37.02	47.68	74	-26.32	Pass	H
1132.844	30.06	2.43	35.04	48.18	45.63	74	-28.37	Pass	V
1668.044	31.18	2.98	34.54	47.87	47.49	74	-26.51	Pass	V
2483.500	32.71	4.51	34.41	43.44	46.25	74	-27.75	Pass	V
4936.000	34.97	5.06	34.32	46.00	51.71	74	-22.29	Pass	V
4936.000	34.97	5.06	34.32	43.10	48.81	54	-5.19	Pass	V-AV
7404.000	36.44	6.84	34.90	42.25	50.63	74	-23.37	Pass	V
9874.000	38.17	7.51	35.02	38.71	49.37	74	-24.63	Pass	V
11341.140	39.41	7.87	34.21	37.37	50.44	74	-23.56	Pass	V

Remark:

- 1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

$$\text{Final Test Level} = \text{Receiver Reading} - \text{Correct Factor}$$

$$\text{Correct Factor} = \text{Preamplifier Factor} - \text{Antenna Factor} - \text{Cable Factor}$$

Scan from the test data, The average value is lower than limit, and The below the limit need not be reported, so only the peak value had been displayed.

7.3 Emissions Out of Band-edge

Test Requirement: 47 CFR Part 15C Section 15.209 and 15.205

Test Method: ANSI C63.10

Test Site:

Limit(Band Edge):

Measurement Distance: 3m (Semi-Anechoic Chamber)

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 Section 15.209, whichever is the lesser attenuation.

Frequency	Limit (dB μ V/m @3m)	Remark
30MHz-88MHz	40.0	Quasi-peak Value
88MHz-216MHz	43.5	Quasi-peak Value
216MHz-960MHz	46.0	Quasi-peak Value
960MHz-1GHz	54.0	Quasi-peak Value
Above 1GHz	54.0	Average Value
	74.0	Peak Value

Test Setup:

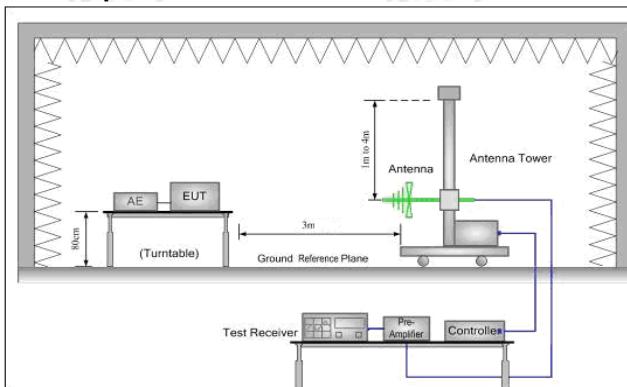


Figure 1. 30MHz to 1GHz

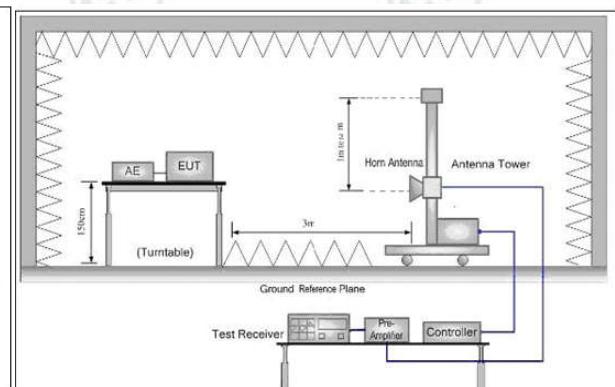


Figure 2. Above 1 GHz

Below 1GHz test procedure as below:

Test Procedure:

- 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.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- 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.
- 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.
- The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- 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:

- 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).
- Test the EUT in the lowest channel , the Highest channel
- 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.
- Repeat above procedures until all frequencies measured was complete.

Instruments Used:

Refer to section 6 for details

Test Mode:

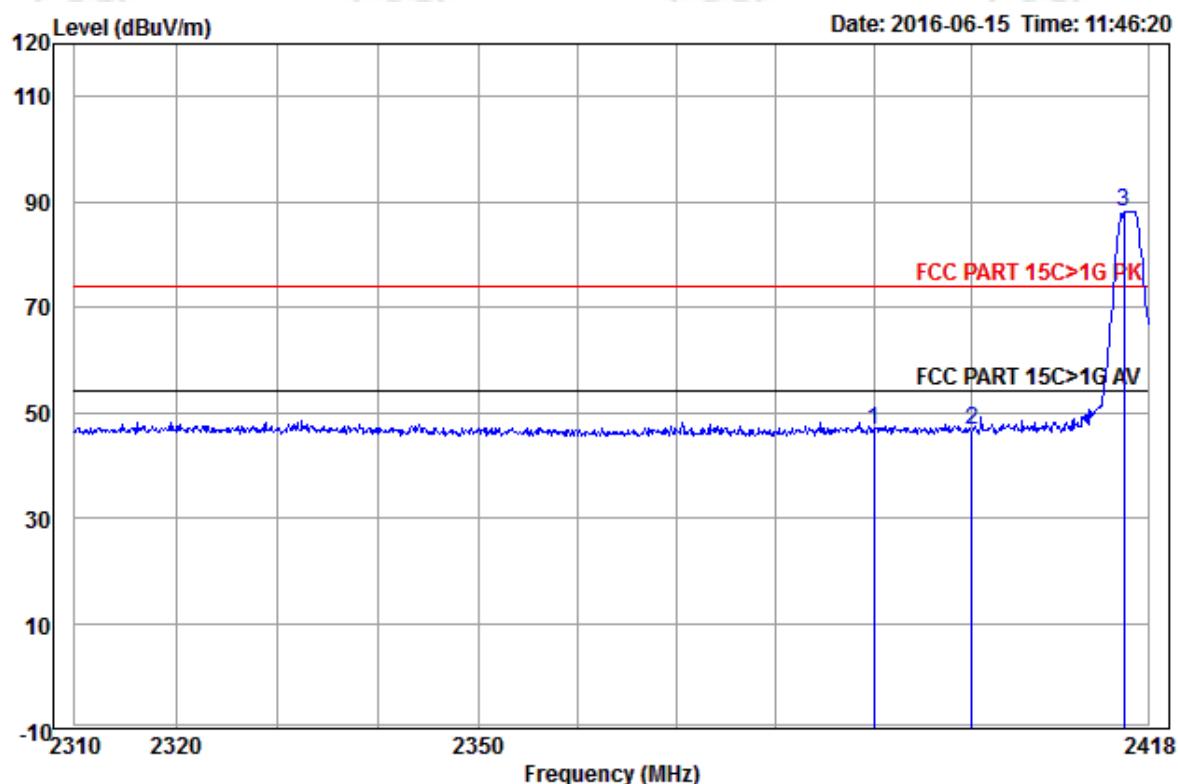
Transmitting mode

Test Results:

Pass

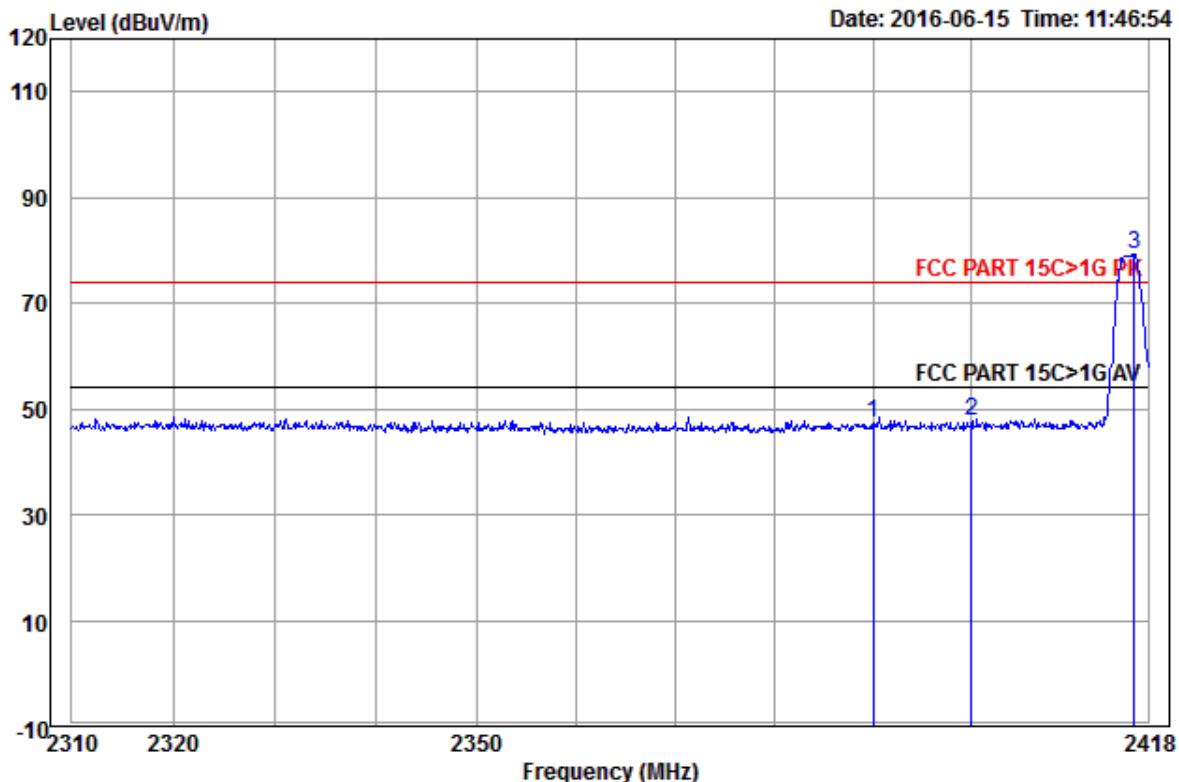
Test plot as follows:

Frequency: 2390.0MHz	Polarization: Horizontal	Remark: PK
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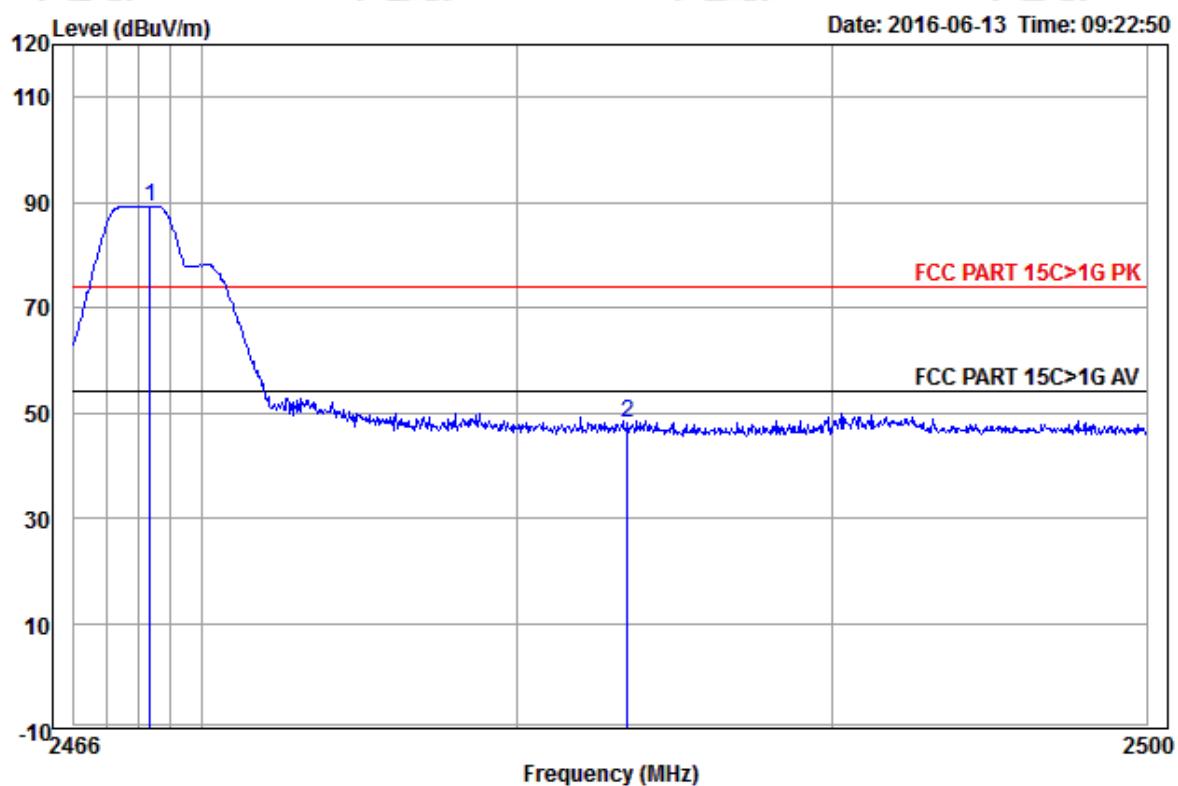
Freq	Ant Factor	Cable Loss	Preamp Factor	Read Level		Limit Line	Over Limit	Pol/Phase	Remark
				Level	Level				
	MHz	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
1	2390.000	32.53	4.28	34.39	44.26	46.68	74.00	-27.32	Horizontal
2	2400.000	32.55	4.30	34.39	44.20	46.66	74.00	-27.34	Horizontal
3 pp	2415.571	32.58	4.34	34.39	85.69	88.22	74.00	14.22	Horizontal

Frequency: 2390.0MHz	Polarization: Vertical	Remark: PK
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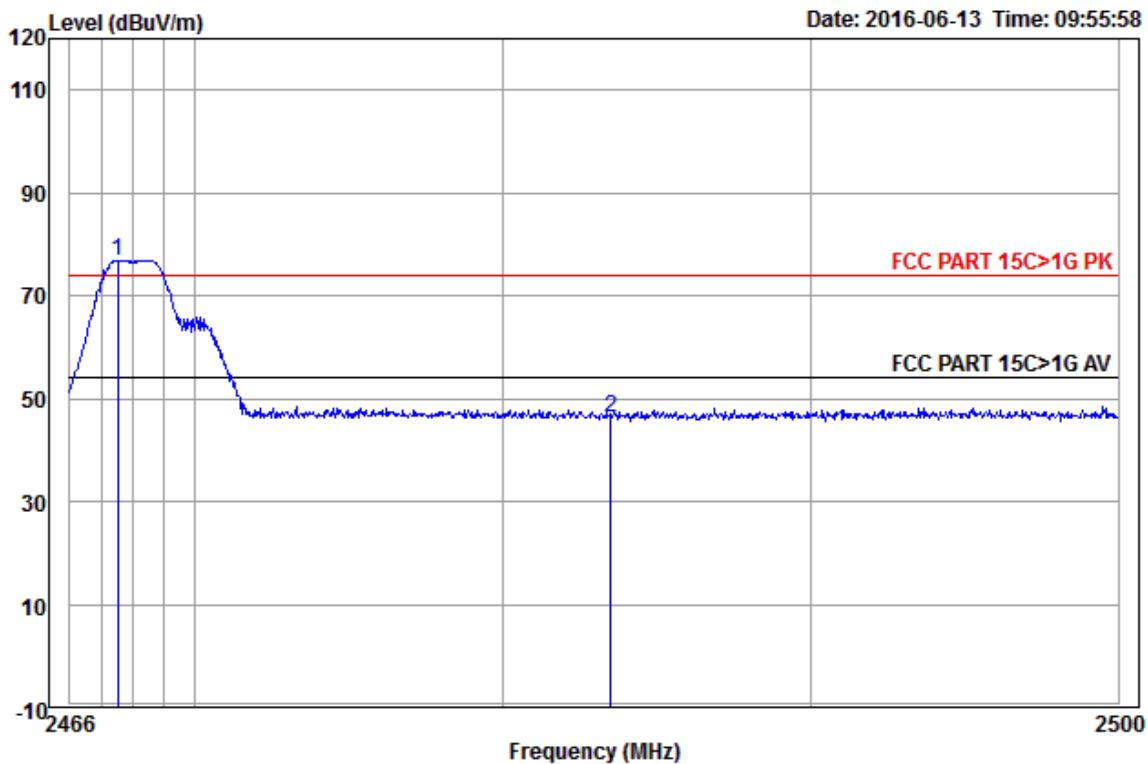
	Ant Freq	Cable Factor	Preamp Loss	Read Factor	Level dBuV	Line dBuV/m	Limit dBuV/m	Over Line dB	Over Pol/Phase	Remark
	MHz	dB/m	dB	dB	dBuV	dBuV/m	dBuV/m	dB		
1	2390.000	32.53	4.28	34.39	44.87	47.29	74.00	-26.71	Vertical	
2	2400.000	32.55	4.30	34.39	45.11	47.57	74.00	-26.43	Vertical	
3 pp	2416.564	32.59	4.35	34.39	76.63	79.18	74.00	5.18	Vertical	

Frequency: 2483.5MHz	Polarization: Horizontal	Remark: PK
----------------------	--------------------------	------------



	Ant Freq	Cable Factor	Preamp Loss	Read Factor	Level Level	Limit Line	Over Limit	Over Pol/Phase	Remark
	MHz	dB/m	dB	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	2468.399	32.69	4.47	34.40	86.55	89.31	74.00	15.31	Horizontal
2	2483.500	32.71	4.51	34.41	45.22	48.03	74.00	-25.97	Horizontal

Frequency: 2483.5MHz	Polarization: Vertical	Remark: PK
----------------------	------------------------	------------



Freq	Ant	Cable	Preamp	Read	Limit	Over	Remark		
	Freq	Factor	Loss	Factor	Level	Level			
	MHz	dB/m	dB	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	2467.554	32.68	4.47	34.40	74.16	76.91	74.00	2.91	Vertical
2	2483.500	32.71	4.51	34.41	43.44	46.25	74.00	-27.75	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

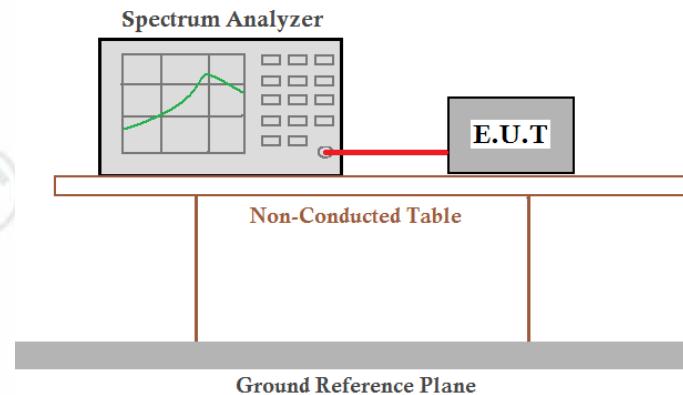
Scan from the test data, The average value is lower than limit, and The below the limit need not be reported, so only the peak value had been displayed.

7.4 20dB Bandwidth

Test Requirement: 47 CFR Part 15C Section 15.215

Test Method: ANSI C63.10

Test Setup:



Test Mode: Transmitter mode

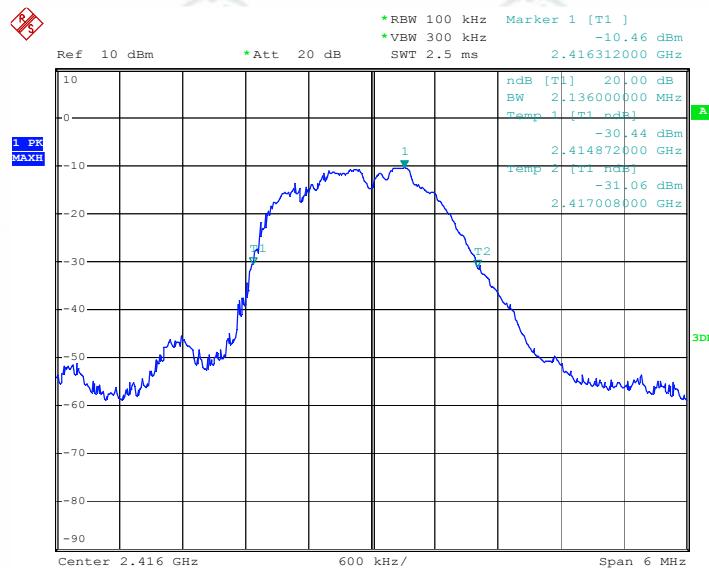
Limit: N/A

Instruments Used: Refer to section 6 for details

Test Channel/Frequency	20dB bandwidth (MHz)
1Ch/2416MHz	2.136
2Ch/2468MHz	2.544

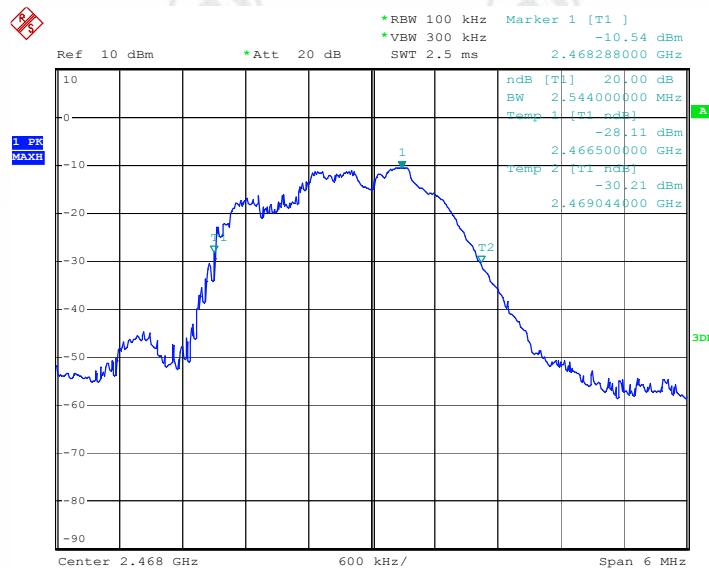
Test plot as follows:

2416MHz



Date: 13.JUN.2016 23:24:00

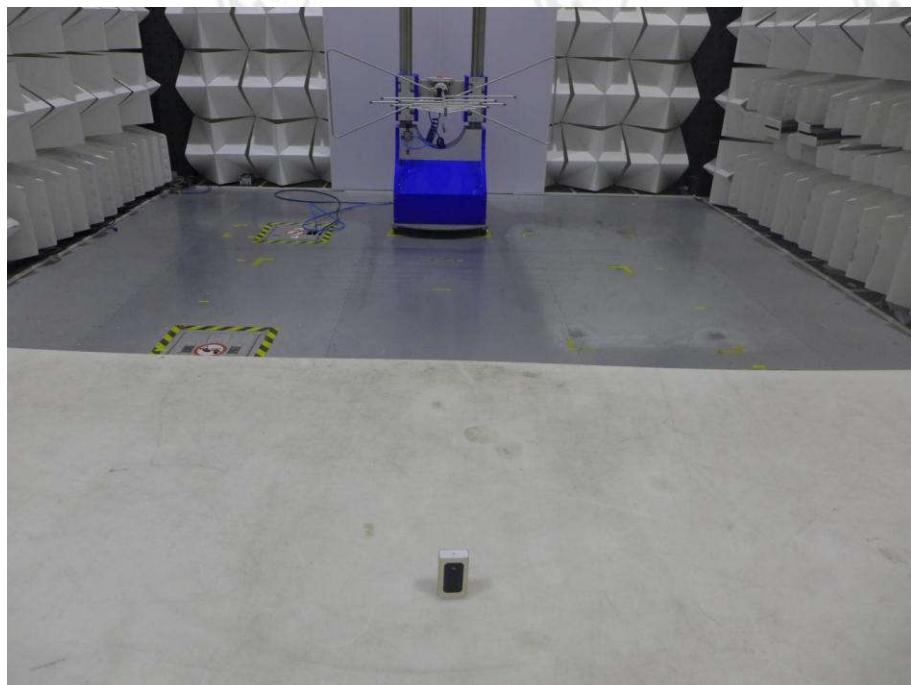
2468MHz



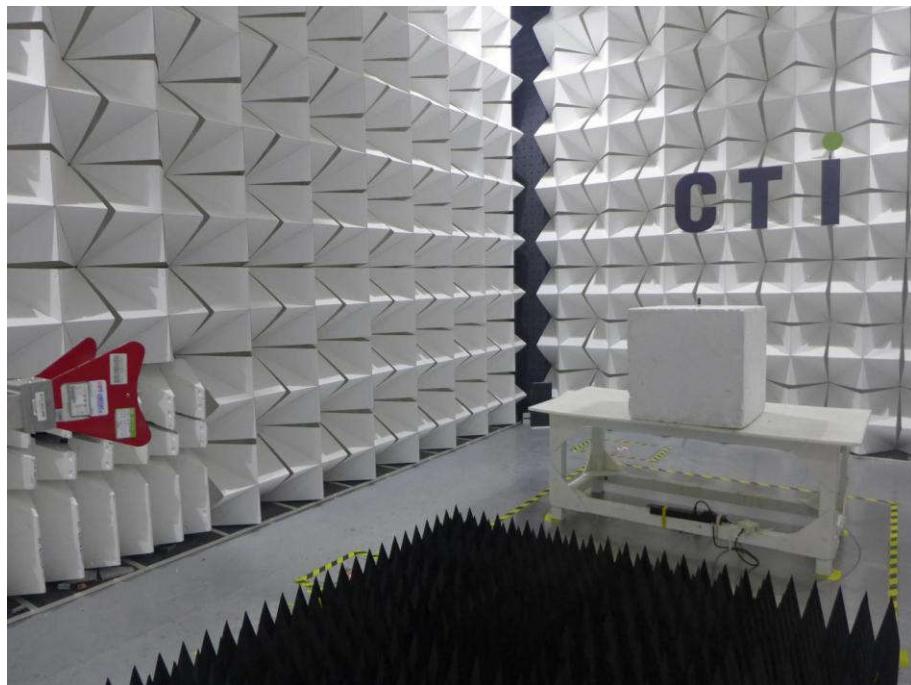
Date: 13.JUN.2016 23:26:21

APPENDIX 1 PHOTOGRAPHS OF TEST SETUP

Test Model No.: EHM10



Radiated emission Test Setup-1(Below 1GHz)



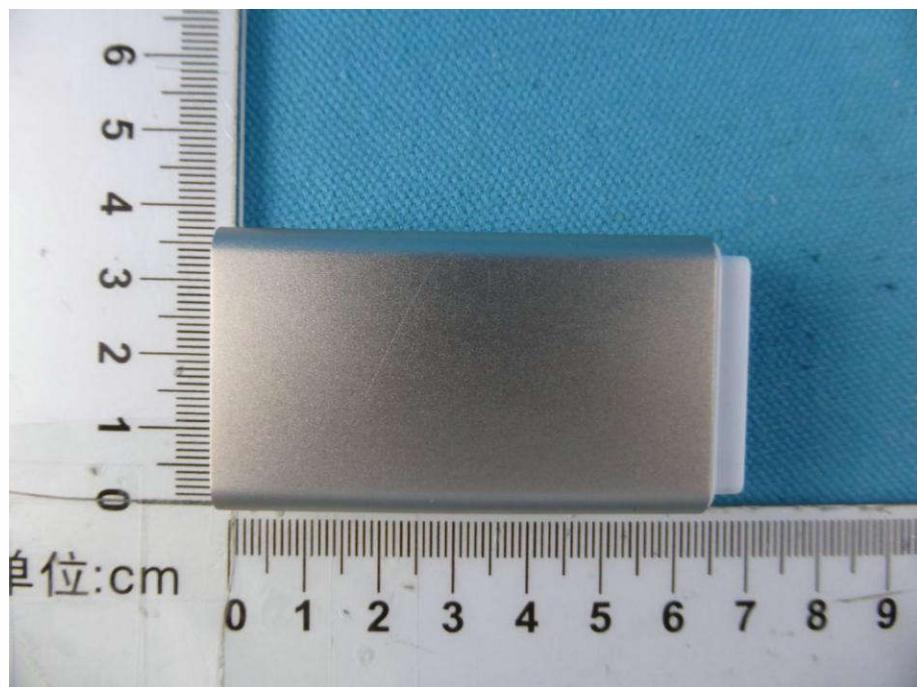
Radiated spurious emission Test Setup-2(Above 1GHz)

APPENDIX 2 PHOTOGRAPHS OF EUT

Test mode No.: EHM10



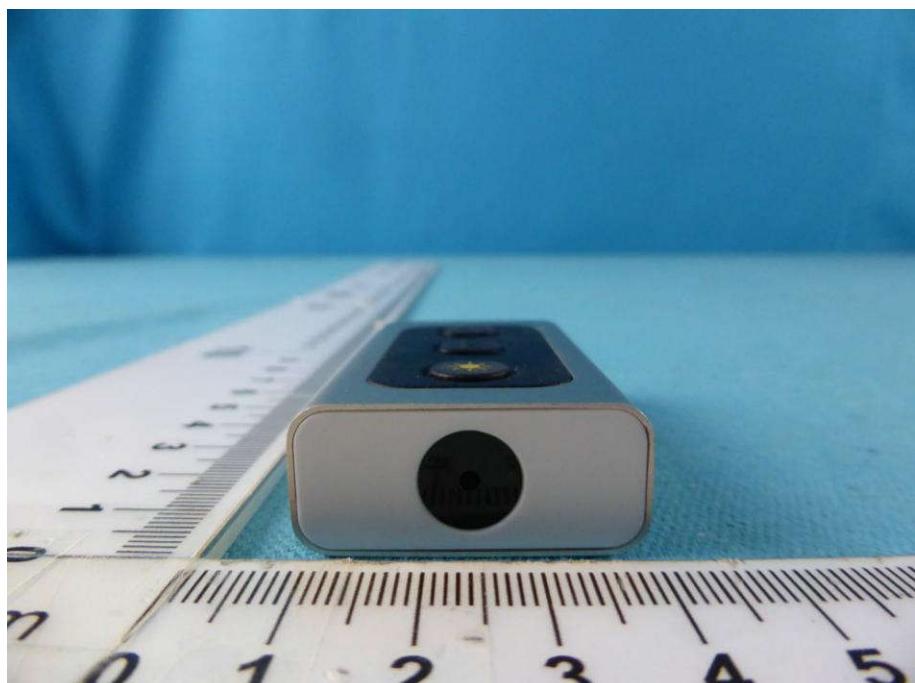
View of Product-1



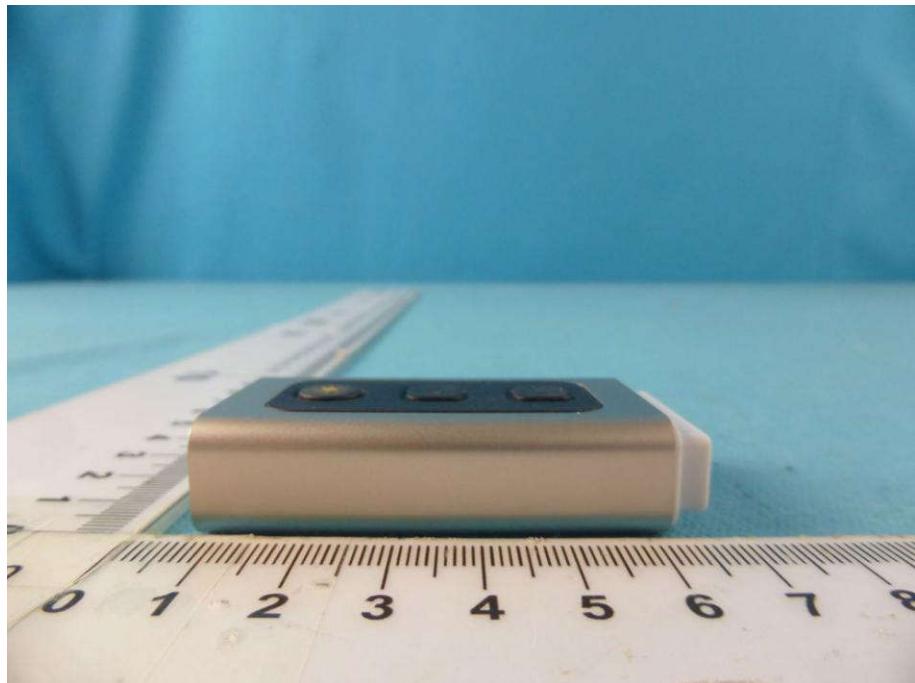
View of Product-2



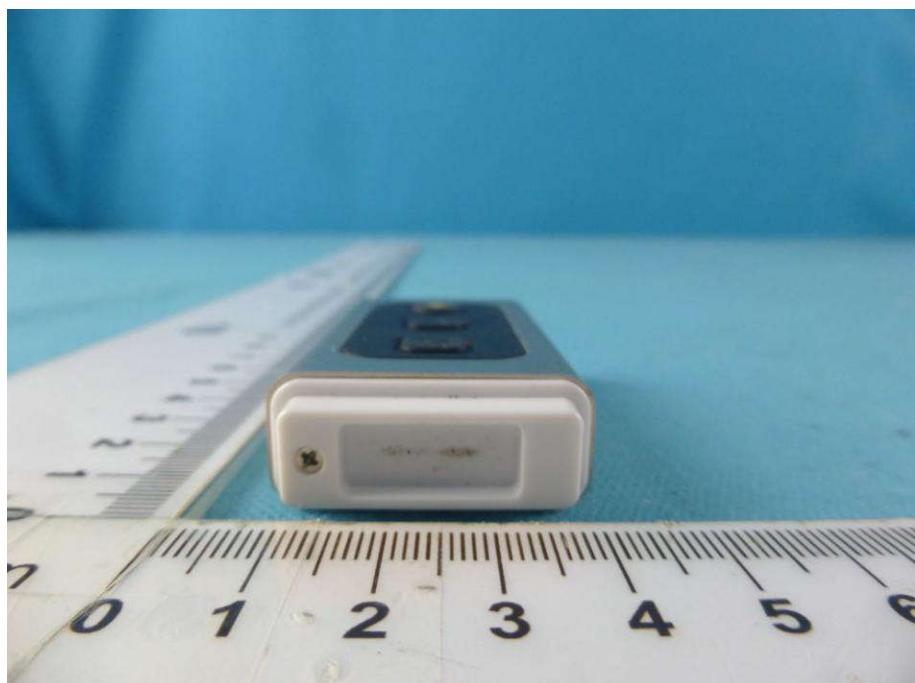
View of Product-3



View of Product-4



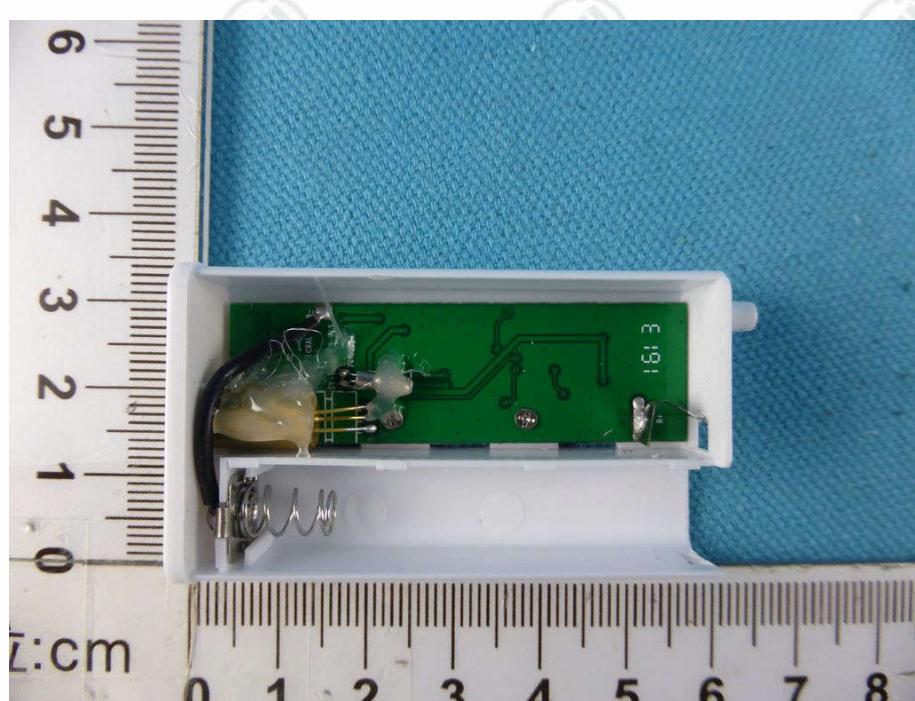
View of Product-5



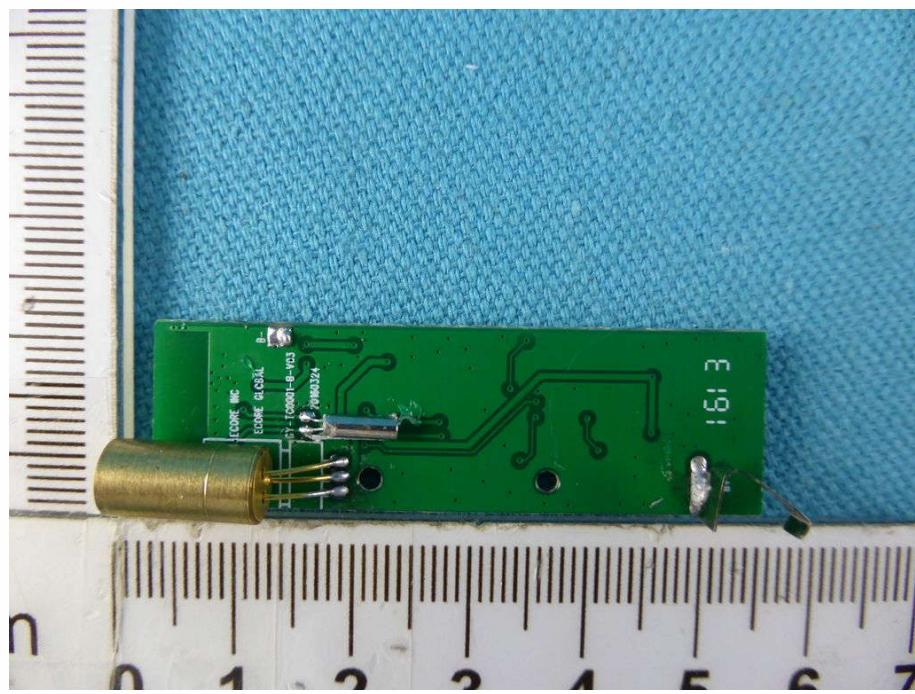
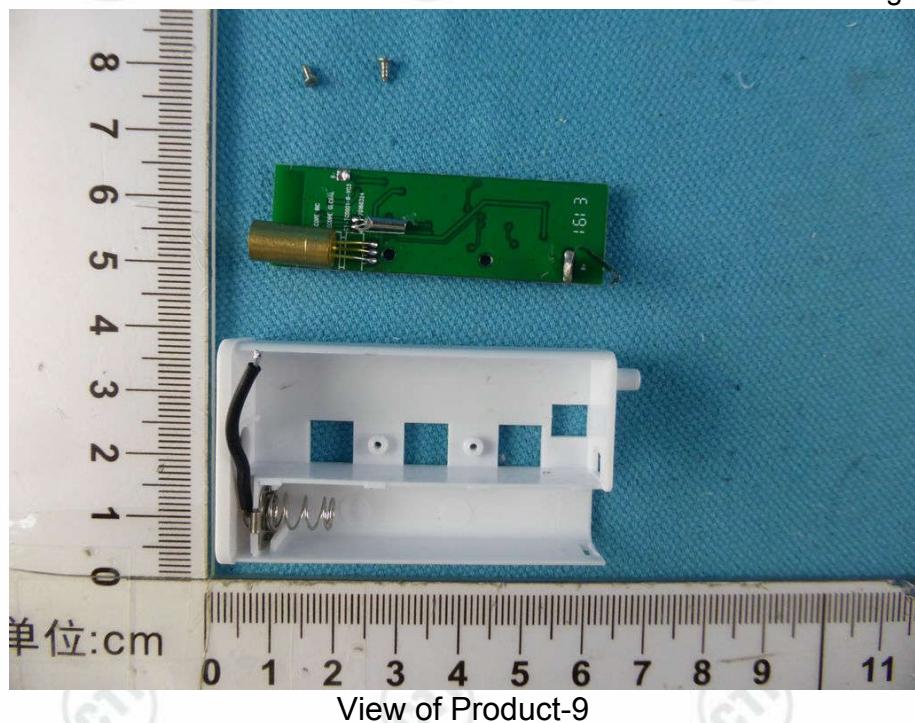
View of Product-6

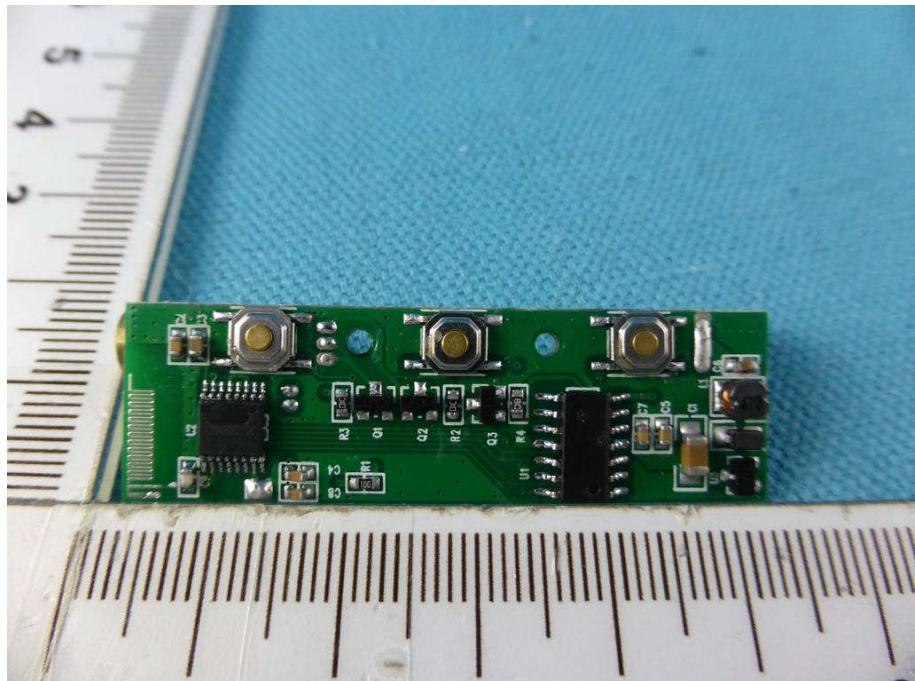


View of Product-7



View of Product-8





View of Product-11

*** End of Report ***

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