

# FCC TEST REPORT

**Product** : pegasus wireless camera  
**Trade mark** : Pegasus  
**Model/Type reference** : 1000  
**Serial Number** : N/A  
**Report Number** : EED32L00028001  
**FCC ID** : 2ASDDPEGASUS1000T  
**Date of Issue** : Mar. 21, 2019  
**Test Standards** : 47 CFR Part 15 Subpart C  
**Test result** : PASS

Prepared for:

**A.M. Surgical Inc.**

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Prepared by:

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Date:

Mar. 21, 2019



Check No.:3336836061

## 2 Version

Version No.	Date	Description
00	Mar. 21, 2019	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 15.249 (a)	ANSI C63.10-2013	PASS
<b>Spurious Emissions</b>	47 CFR Part 15 Subpart C Section 15.249 (a)/15.209	ANSI C63.10-2013	PASS
<b>Restricted bands around fundamental frequency (Radiated Emission)</b>	47 CFR Part 15 Subpart C Section 15.249(a)/15.205	ANSI C63.10-2013	PASS
<b>20dB Occupied Bandwidth</b>	47 CFR Part 15 Subpart C Section 15.215 (c)	ANSI C63.10-2013	PASS

Remark:

The tested sample(s) and the sample information are provided by the client.

N/A:The device is only battery operated, the AC Power Line Conducted Emission is not applicable.

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## 5 General Information

### 5.1 Client Information

Applicant:	A.M. Surgical Inc.
Address of Applicant:	222 Middle Country Road, Suite 202, Smithtown, NY 11787 USA
Manufacturer:	A.M. Surgical Inc.
Address of Manufacturer:	222 Middle Country Road, Suite 202, Smithtown, NY 11787 USA
Factory:	Medigus Ltd
Address of Factory:	Omer Industrial Park, Suite 7A, PO Box 3030 Israel 8496500

### 5.2 General Description of EUT

Product Name:	pegasus wireless camera
Model No.(EUT):	1000
Trade Mark:	Pegasus
EUT Supports Radios application:	5800MHz
Power Supply:	Lithium battery:2x3.0V(CR123A)=6.0V

### 5.3 Product Specification subjective to this standard

Frequency Range:	5800MHz
Modulation Type:	Analog RF
Number of Channels:	1(declared by the client)
Sample Type:	Portable production
Test Power Grade:	N/A
Test Software of EUT:	N/A
Antenna Type:	Whip antenna
Test voltage:	Lithium battery:2x3.0V(CR123A)=6.0V
Sample Received Date:	Feb. 20, 2019
Sample tested Date:	Feb. 20, 2019 to Feb. 26, 2019



## 5.4 Test Environment and Mode

<b>Operating Environment:</b>	
Temperature:	20 °C
Humidity:	59 % RH
Atmospheric Pressure:	1010 mbar
<b>Test mode:</b>	
Transmitting mode:	The EUT transmitted the continuous modulation test signal at the specific channel

## 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

Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China

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

No tests were sub-contracted.

FCC Designation No.: CN1164

## 5.7 Deviation from Standards

None.

## 5.8 Abnormalities from Standard Conditions

None.

## 5.9 Other Information Requested by the Customer

None.

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

No.	Item	Measurement Uncertainty
1	Radio Frequency	$7.9 \times 10^{-8}$
2	RF power, conducted	0.46dB (30MHz-1GHz)
		0.55dB (1GHz-18GHz)
3	Radiated Spurious emission test	4.3dB (30MHz-1GHz)
		4.5dB (1GHz-12.75GHz)
4	Conduction emission	3.5dB (9kHz to 150kHz)
		3.1dB (150kHz to 30MHz)
5	Temperature test	0.64°C
6	Humidity test	3.8%
7	DC power voltages	0.026%

## 6 Equipment List

3M Semi/full-anechoic Chamber					
Equipment	Manufacturer	Model No.	Serial Number	Cal. date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
3M Chamber & Accessory Equipment	TDK	SAC-3	---	06-04-2016	06-03-2019
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	9163-401	10-28-2018	10-27-2019
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	9163-618	07-30-2018	07-29-2019
Microwave Preamplifier	Agilent	8449B	3008A02425	08-21-2018	08-20-2019
Microwave Preamplifier	Tonscend	EMC051845 SE	980380	01-17-2017 01-16-2018	01-16-2018 01-15-2019
Horn Antenna	Schwarzbeck	BBHA 9120D	9120D-1869	04-25-2018	04-23-2021
Horn Antenna	ETS-LINDGREN	3117	00057410	06-05-2018	06-03-2021
Double ridge horn antenna	A.H.SYSTEMS	SAS-574	6042	06-05-2018	06-04-2021
Pre-amplifier	A.H.SYSTEMS	PAP-1840-60	6041	06-05-2018	06-04-2021
Loop Antenna	ETS	6502	00071730	06-22-2017	06-21-2019
Spectrum Analyzer	R&S	FSP40	100416	05-11-2018	05-10-2019
Receiver	R&S	ESCI	100435	05-25-2018	05-24-2019
Receiver	R&S	ESCI7	100938-003	11-23-2018	11-22-2019
Multi device Controller	maturo	NCD/070/1071112	---	01-09-2019	01-08-2020
LISN	schwarzbeck	NNBM8125	81251547	05-11-2018	05-10-2019
LISN	schwarzbeck	NNBM8125	81251548	05-11-2018	05-10-2019
Signal Generator	Agilent	E4438C	MY45095744	03-13-2018	03-12-2019
Signal Generator	Keysight	E8257D	MY53401106	03-13-2018	03-12-2019
Temperature/ Humidity Indicator	Shanghai qixiang	HM10	1804298	10-12-2018	10-11-2019
Communication test set	Agilent	E5515C	GB47050534	03-16-2018	03-15-2019
Cable line	Fulai(7M)	SF106	5219/6A	01-09-2019	01-08-2020
Cable line	Fulai(6M)	SF106	5220/6A	01-09-2019	01-08-2020
Cable line	Fulai(3M)	SF106	5216/6A	01-09-2019	01-08-2020
Cable line	Fulai(3M)	SF106	5217/6A	01-09-2019	01-08-2020
Communication test set	R&S	CMW500	104466	02-05-2018	02-04-2019
High-pass filter	Sinoscite	FL3CX03WG18NM12-0398-002	---	01-09-2019	01-08-2020
High-pass filter	MICRO-TRONICS	SPA-F-63029-4	---	01-09-2019	01-08-2020
band rejection filter	Sinoscite	FL5CX01CA09CL12-0395-001	---	01-09-2019	01-08-2020
band rejection filter	Sinoscite	FL5CX01CA08CL12-0393-001	---	01-09-2019	01-08-2020
band rejection filter	Sinoscite	FL5CX02CA04CL12-0396-002	---	01-09-2019	01-08-2020
band rejection filter	Sinoscite	FL5CX02CA03CL12-0394-001	---	01-09-2019	01-08-2020

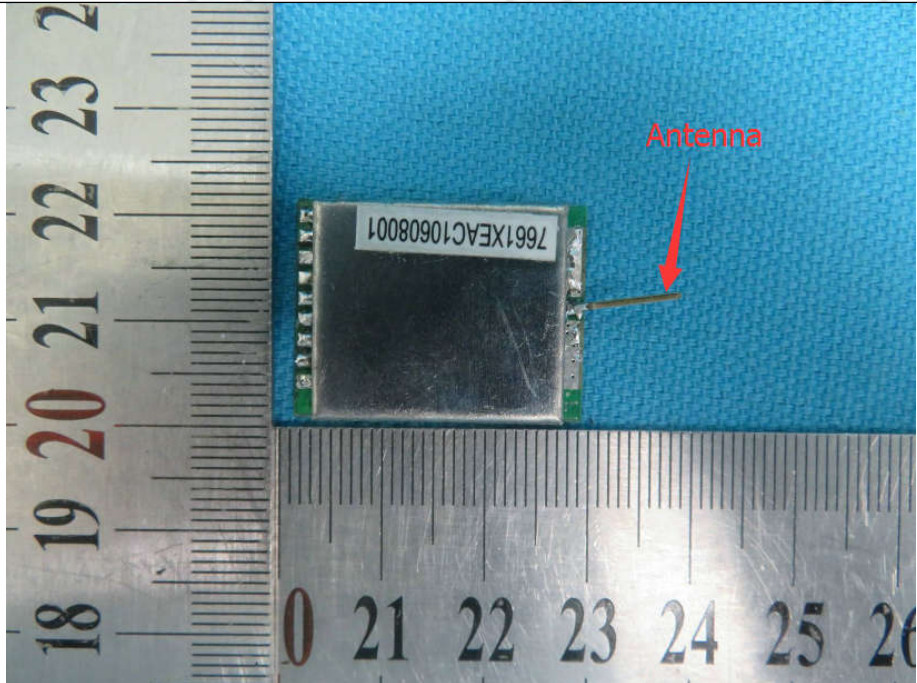
3M full-anechoic Chamber					
Equipment	Manufacturer	Model No.	Serial Number	Cal. date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
Fully Anechoic Chamber	TDK	FAC-3	---	01-17-2018	01-15-2021
Receiver	Keysight	N9038A	MY57290136	03-28-2018	03-27-2019
Spectrum Analyzer	Keysight	N9020B	MY57111112	03-28-2018	03-27-2019
Spectrum Analyzer	Keysight	N9030B	MY57140871	03-28-2018	03-27-2019
Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-075	04-25-2018	04-23-2021
Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-076	04-25-2018	04-23-2021
TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	9163-1148	04-25-2018	04-23-2021
Horn Antenna	Schwarzbeck	BBHA 9170	9170-832	04-25-2018	04-23-2021
Horn Antenna	Schwarzbeck	BBHA 9170	9170-829	04-25-2018	04-23-2021
Communication Antenna	Schwarzbeck	CLSA 0110L	1014	02-15-2018	02-14-2019
Biconical antenna	Schwarzbeck	VUBA 9117	9117-381	04-25-2018	04-23-2021
Horn Antenna	ETS-LINDGR EN	3117	00057407	07-10-2018	07-08-2021
Preamplifier	EMCI	EMC184055SE	980596	06-20-2018	06-19-2019
Communication test set	R&S	CMW500	102898	01-19-2018 01-18-2019	01-18-2019 01-17-2020
Preamplifier	EMCI	EMC001330	980563	06-20-2018	06-19-2019
Preamplifier	Agilent	8449B	3008A02425	08-21-2018	08-20-2019
Temperature/Humidity Indicator	biaozhi	GM1360	EE1186631	05-02-2018	05-01-2019
Signal Generator	KEYSIGHT	E8257D	MY53401106	03-13-2018	03-12-2019
Filter bank	JS Tonscend	JS0806-F	188060094	04-10-2018	04-08-2021
Cable line	Times	SFT205-NMSM-2.50M	394812-0001	01-09-2019	01-08-2020
Cable line	Times	SFT205-NMSM-2.50M	394812-0002	01-09-2019	01-08-2020
Cable line	Times	SFT205-NMSM-2.50M	394812-0003	01-09-2019	01-08-2020
Cable line	Times	SFT205-NMSM-2.50M	393495-0001	01-09-2019	01-08-2020
Cable line	Times	EMC104-NMNM-1000	SN160710	01-09-2019	01-08-2020
Cable line	Times	SFT205-NMSM-3.00M	394813-0001	01-09-2019	01-08-2020
Cable line	Times	SFT205-NMNM-1.50M	381964-0001	01-09-2019	01-08-2020
Cable line	Times	SFT205-NMSM-7.00M	394815-0001	01-09-2019	01-08-2020
Cable line	Times	HF160-KMKM-3.00M	393493-0001	01-09-2019	01-08-2020

RF Conducted test					
Equipment	Manufacturer	Model No.	Serial Number	Cal. date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
Spectrum Analyzer	R&S	FSP40	100416	05-11-2018	05-10-2019
Temperature/Humidity Indicator	biaozhi	GM1360	EE1186643	21-12-2018	20-12-2019



## 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>	
<b>EUT Antenna:</b>	
The antenna is integrated on the main PCB and no consideration of replacement.	

## 7.2 Radiated Spurious Emissions

**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:**

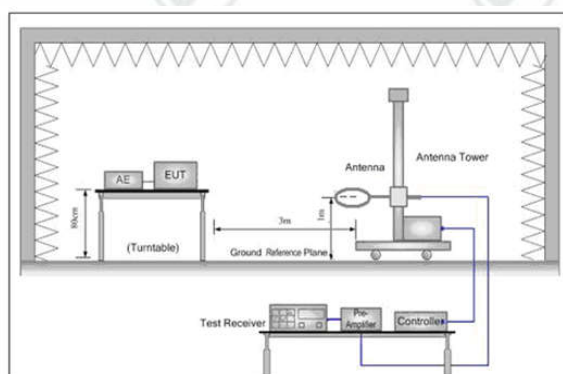


Figure 1. Below 30MHz

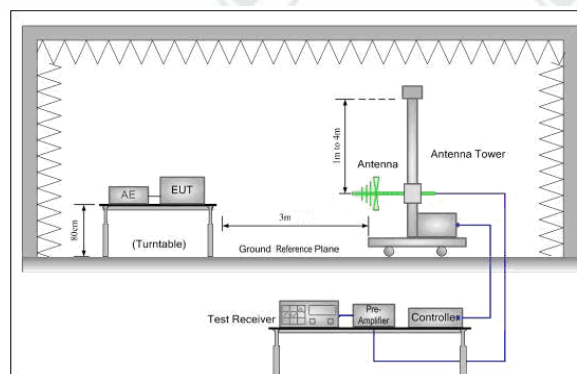


Figure 2. 30MHz to 1GHz

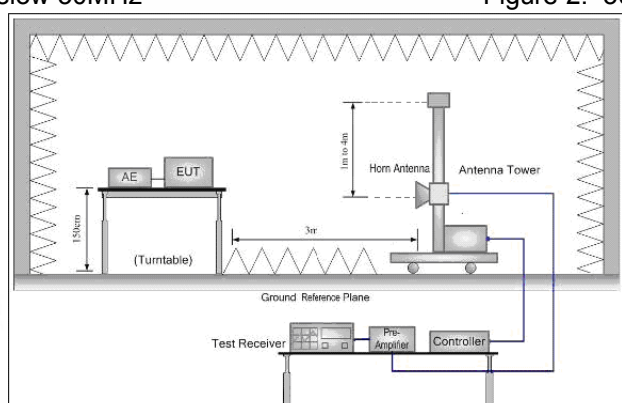


Figure 3. Above 1GHz

**Test Procedure:**

**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, 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 transmit 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 (dBμV/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 (dBμV/m @3m)	Remark
5800MHz	94.0	Average Value
	114.0	Peak Value

**Test Setup:**

**Exploratory Test** Transmitting mode

**Mode:**

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

**Test Results:** Pass

## Measurement Data

### Field Strength Of The Fundamental Signal

Peak value:

Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity
5800	35.48	15.37	-40.91	74.05	83.99	114.00	30.01	Pass	Horizontal
5800	35.48	15.41	-40.91	82.81	92.79	114.00	21.21	Pass	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 measurements were shown in the report.



# **Spurious Emissions**

## **Below 1GHz**

Mode:			Transmitting				Channel:		5800	
NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity
1	55.4165	12.33	0.84	-32.07	33.08	14.18	40.00	25.82	Pass	Horizontal
2	192.0062	10.14	1.62	-31.96	41.44	21.24	43.50	22.26	Pass	Horizontal
3	335.9686	13.99	2.18	-31.80	37.30	21.67	46.00	24.33	Pass	Horizontal
4	440.0600	16.04	2.48	-31.88	39.19	25.83	46.00	20.17	Pass	Horizontal
5	456.0666	16.30	2.54	-31.86	39.25	26.23	46.00	19.77	Pass	Horizontal
6	687.5318	19.70	3.14	-32.06	35.36	26.14	46.00	19.86	Pass	Horizontal

Mode:			Transmitting				Channel:		5800	
NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity
1	360.0270	14.52	2.27	-31.84	47.53	32.48	46.00	13.52	Pass	Vertical
2	440.0600	16.04	2.48	-31.88	50.76	37.40	46.00	8.60	Pass	Vertical
3	456.0666	16.30	2.54	-31.86	50.40	37.38	46.00	8.62	Pass	Vertical
4	648.0488	19.38	3.09	-32.07	43.89	34.29	46.00	11.71	Pass	Vertical
5	864.0894	21.67	3.53	-31.75	40.29	33.74	46.00	12.26	Pass	Vertical
6	960.0320	22.46	3.71	-31.09	38.29	33.37	54.00	20.63	Pass	Vertical



**1GHz-18GHz**

Mode:			Transmitting				Channel:		5800	
NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity
1	1666.1166	29.50	3.33	-42.74	49.47	39.56	74.00	34.44	Pass	Horizontal
2	2900.0000	33.04	4.47	-42.17	50.95	46.29	74.00	27.71	Pass	Horizontal
3	4473.5974	34.46	5.78	-40.90	46.68	46.02	74.00	27.98	Pass	Horizontal
4	7370.2247	36.47	6.42	-40.88	45.92	47.93	74.00	26.07	Pass	Horizontal
5	11600.0000	38.98	7.74	-41.35	44.17	49.54	74.00	24.46	Pass	Horizontal
6	17400.0000	42.60	10.93	-43.63	41.01	50.91	74.00	23.09	Pass	Horizontal

Mode:			Transmitting				Channel:		5800	
NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity
1	1103.9604	28.00	2.60	-42.73	51.48	39.35	74.00	34.65	Pass	Vertical
2	2900.0000	33.04	4.47	-42.17	54.74	50.08	74.00	23.92	Pass	Vertical
3	4886.1386	34.50	6.05	-40.60	48.41	48.36	74.00	25.64	Pass	Vertical
4	8051.8368	36.42	6.57	-40.95	46.84	48.88	74.00	25.12	Pass	Vertical
5	11600.0000	38.98	7.74	-41.35	43.63	49.00	74.00	25.00	Pass	Vertical
6	17400.0000	42.60	10.93	-43.63	40.89	50.79	74.00	23.21	Pass	Vertical

Mode:			Transmitting				Channel:		5800	
NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity
1	19432.2716	38.96	0.00	-62.90	71.50	47.56	74.00	26.44	Pass	Horizontal
2	23200.0000	39.11	0.00	-62.55	67.94	44.50	74.00	29.50	Pass	Horizontal
3	26572.7286	40.39	0.00	-59.81	68.93	49.51	74.00	24.49	Pass	Horizontal
4	29000.0000	40.30	0.00	-60.45	66.19	46.04	74.00	27.96	Pass	Horizontal
5	32757.2379	42.07	0.00	-58.46	66.74	50.35	74.00	23.65	Pass	Horizontal
6	34800.0000	42.88	0.00	-58.42	64.04	48.50	74.00	25.50	Pass	Horizontal

Mode:			Transmitting				Channel:		5800	
NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity
1	19056.0528	38.96	0.00	-63.41	71.90	47.45	74.00	26.55	Pass	Vertical
2	23200.0000	39.11	0.00	-62.55	68.64	45.20	74.00	28.80	Pass	Vertical
3	25548.5774	40.54	0.00	-59.41	68.55	49.68	74.00	24.32	Pass	Vertical
4	29000.0000	40.30	0.00	-60.45	65.59	45.44	74.00	28.56	Pass	Vertical
5	31702.2851	41.80	0.00	-59.00	67.48	50.28	74.00	23.72	Pass	Vertical
6	34800.0000	42.88	0.00	-58.42	64.23	48.69	74.00	25.31	Pass	Vertical

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:  

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

$$\text{Correct Factor} = \text{Preamplifier Factor} - \text{Antenna Factor} - \text{Cable Factor}$$
- 2) Scan from 9kHz to 40GHz, 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 Restricted bands around fundamental frequency

<b>Test Requirement:</b>	47 CFR Part 15C Section 15.209 and 15.205
<b>Test Method:</b>	ANSI C63.10
<b>Test Site:</b>	Measurement Distance: 3m (Semi-Anechoic Chamber)
<b>Limit(band edge):</b>	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 (dBμV/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:

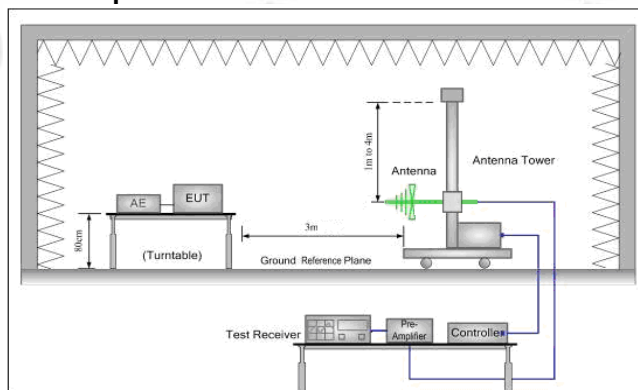


Figure 1. 30MHz to 1GHz

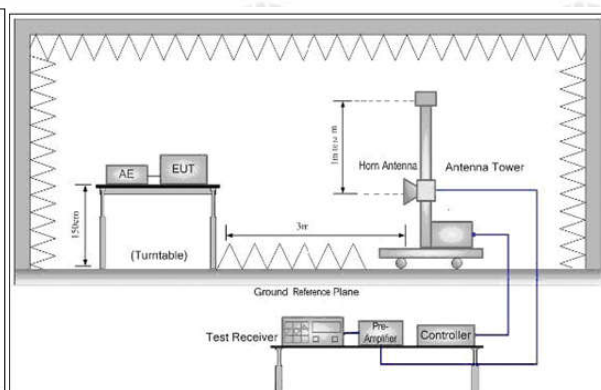


Figure 2. Above 1 GHz

#### Test Procedure:

##### 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 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 meter to 1.5 meter( Above 18GHz the distance is 1 meter and table is 1.5 meter).
- Test the EUT in the transmit 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.

j. Repeat above procedures until all frequencies measured was complete.

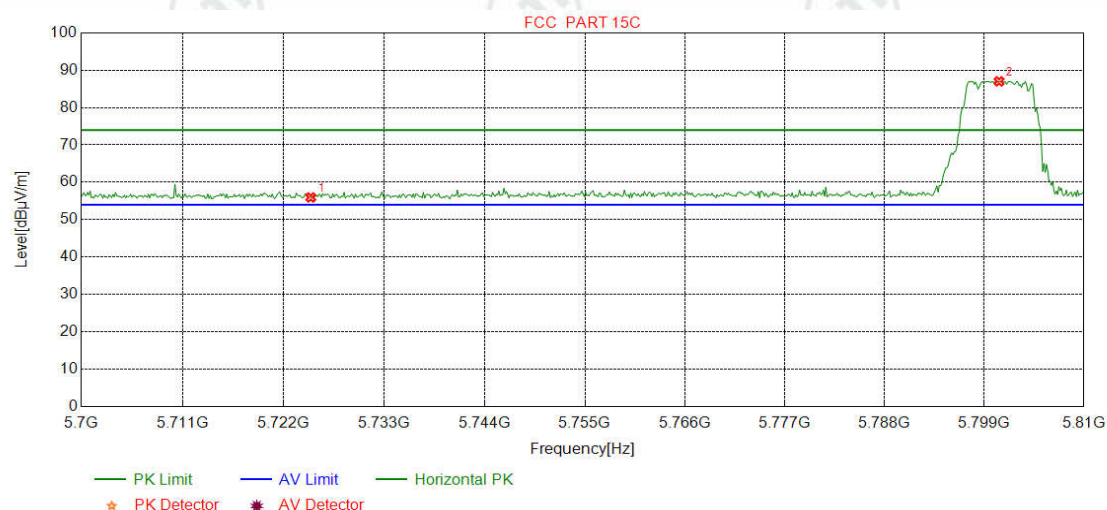
**Exploratory Test Mode:** Transmitting mode

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

**Test Results:** Pass

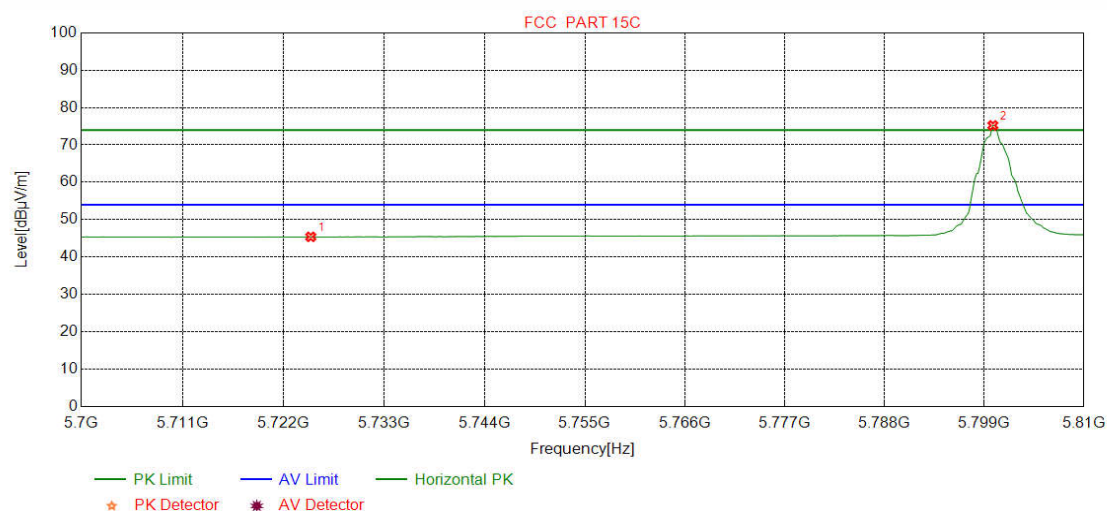
**Test plot as follows:**

Mode:	Transmitting	Channel:	5800
Remark:	Peak		



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity
1	5725.0000	35.36	15.40	-40.85	46.02	55.93	74.00	18.07	Pass	Horizontal
2	5800.6383	35.48	15.38	-40.91	77.07	87.02	74.00	-13.02	Pass	Horizontal

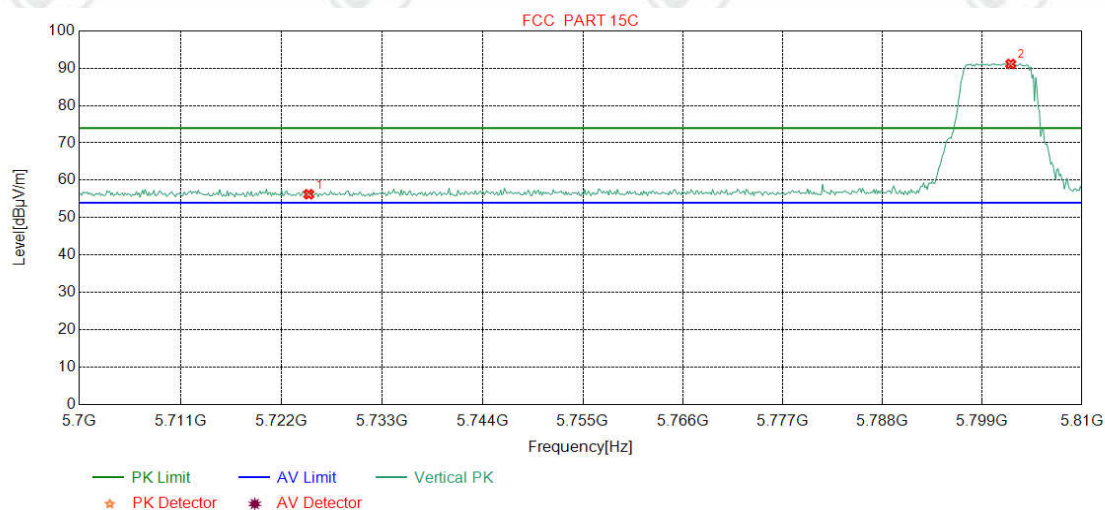
Mode:	Transmitting	Channel:	5800
Remark:	Average		



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity
1	5725.0000	35.36	15.40	-40.85	35.47	45.38	54.00	8.62	Pass	Horizontal
2	5799.9499	35.48	15.37	-40.91	65.29	75.23	54.00	-21.23	Pass	Horizontal

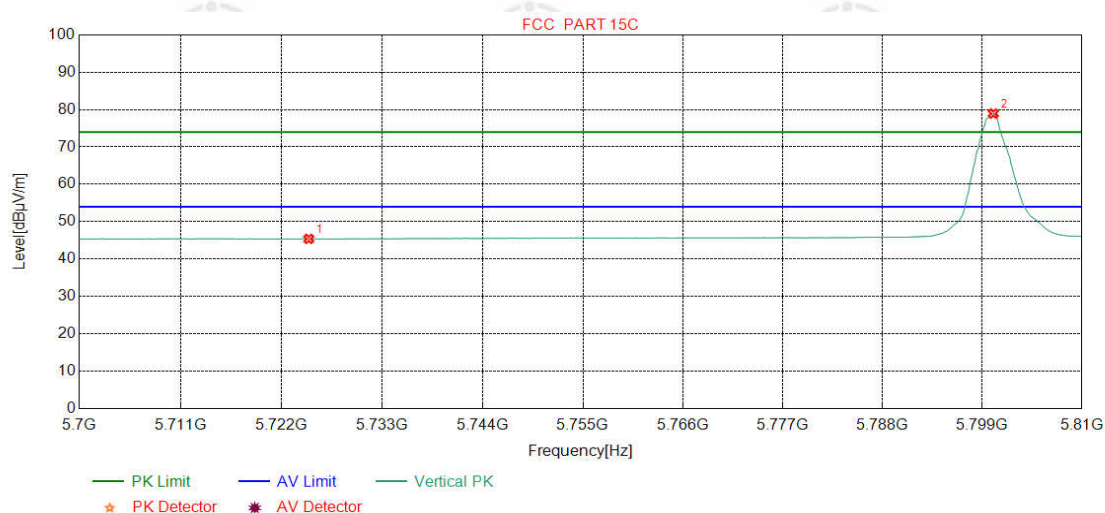


Mode:	Transmitting	Channel:	5800
Remark:	Peak		



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity
1	5725.0000	35.36	15.40	-40.85	46.34	56.25	74.00	17.75	Pass	Vertical
2	5802.1527	35.48	15.40	-40.91	81.19	91.16	74.00	-17.16	Pass	Vertical

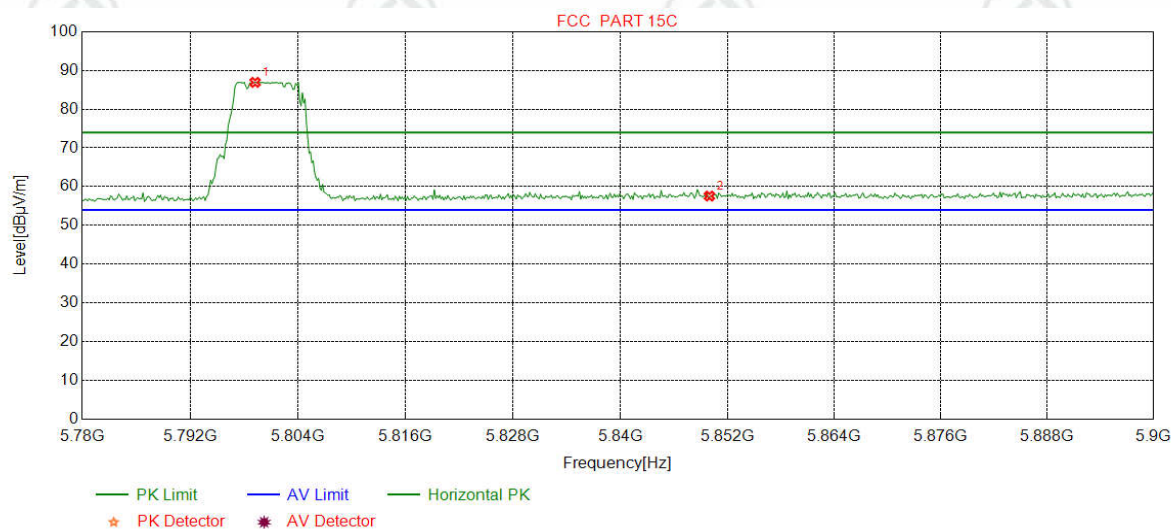
Mode:	Transmitting	Channel:	5800
Remark:	Average		



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity
1	5725.0000	35.36	15.40	-40.85	35.46	45.37	54.00	8.63	Pass	Vertical
2	5800.2253	35.48	15.37	-40.91	69.00	78.94	54.00	-24.94	Pass	Vertical

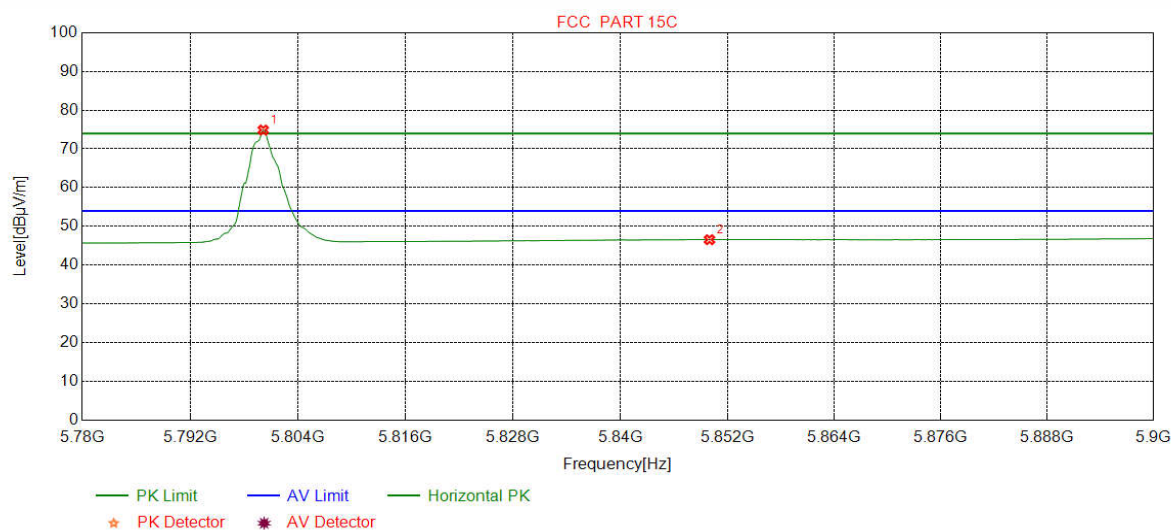


Mode:	Transmitting	Channel:	5800
Remark:	Peak		



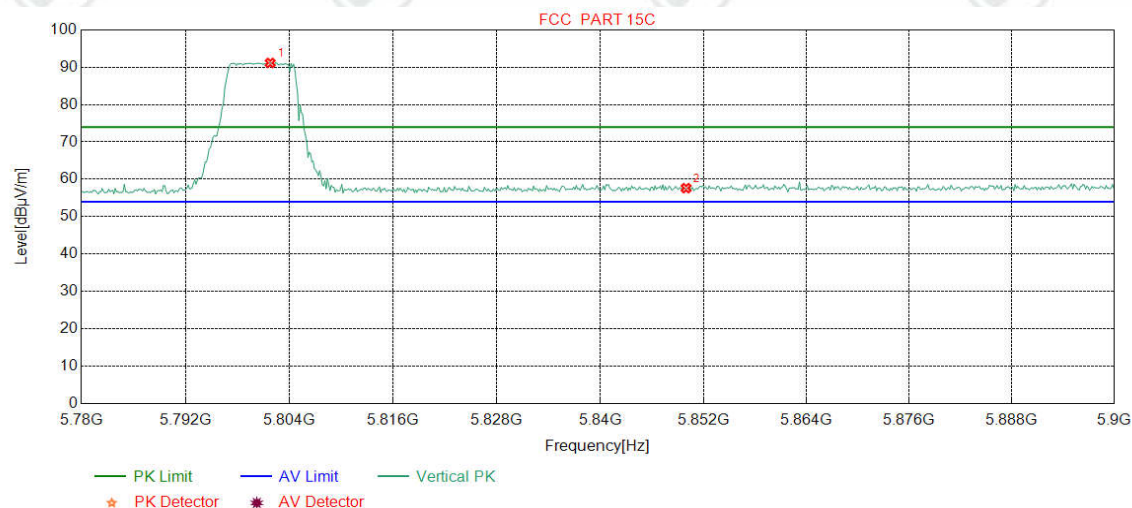
NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity
1	5799.2240	35.48	15.37	-40.91	76.99	86.93	74.00	-12.93	Pass	Horizontal
2	5850.0000	35.56	16.10	-40.95	46.85	57.56	74.00	16.44	Pass	Horizontal

Mode:	Transmitting	Channel:	5800
Remark:	Average		



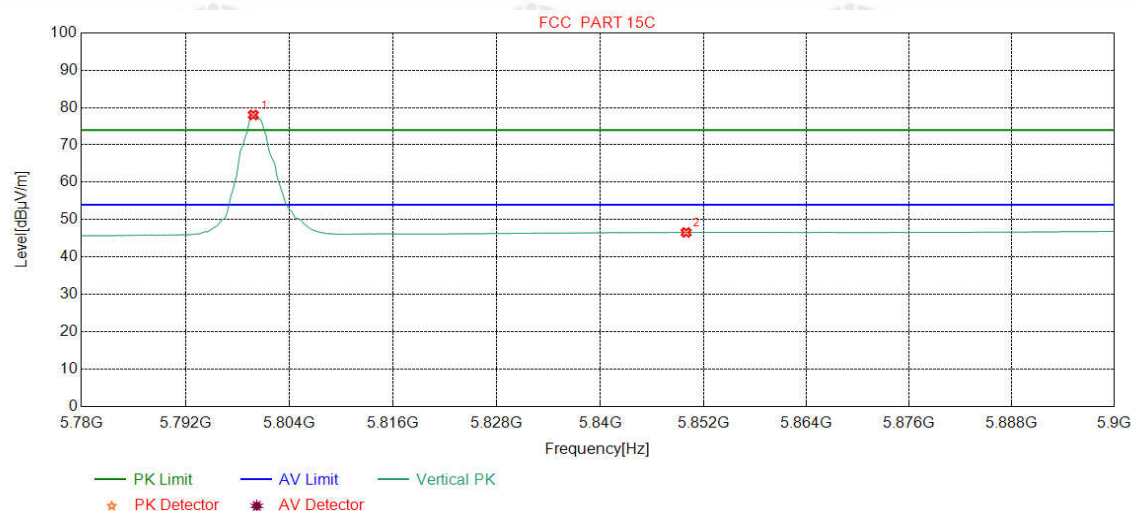
NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity
1	5800.1252	35.48	15.37	-40.91	64.94	74.88	54.00	-20.88	Pass	Horizontal
2	5850.0000	35.56	16.10	-40.95	35.84	46.55	54.00	7.45	Pass	Horizontal

Mode:	Transmitting	Channel:	5800
Remark:	Peak		



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity
1	5801.7772	35.48	15.40	-40.91	81.19	91.16	74.00	-17.16	Pass	Vertical
2	5850.0000	35.56	16.10	-40.95	46.91	57.62	74.00	16.38	Pass	Vertical

Mode:	Transmitting	Channel:	5800
Remark:	Average		



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity
1	5799.8248	35.48	15.37	-40.91	68.10	78.04	54.00	-24.04	Pass	Vertical
2	5850.0000	35.56	16.10	-40.95	35.85	46.56	54.00	7.44	Pass	Vertical

Note:

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

## 7.4 20dB Bandwidth

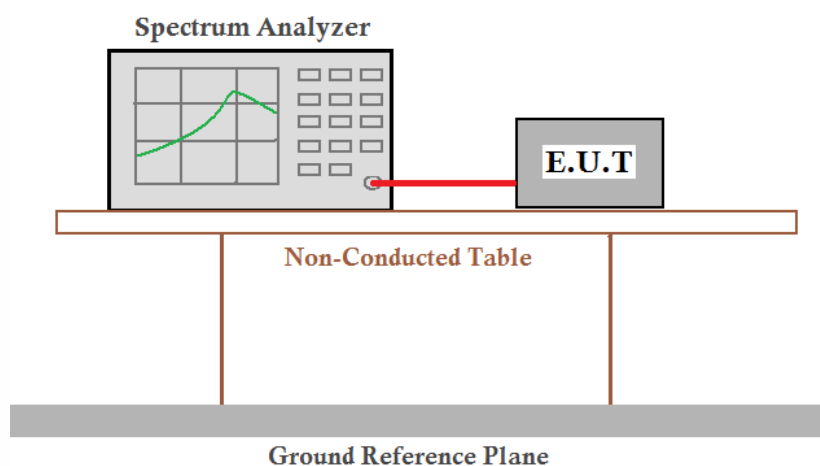
**Test Requirement:**

47 CFR Part 15C Section 15.215

**Test Method:**

ANSI C63.10

**Test Setup:**



**Limit:**

N/A

**Exploratory Test Mode:**

Transmitter mode

**Instruments Used:**

Refer to section 6 for details

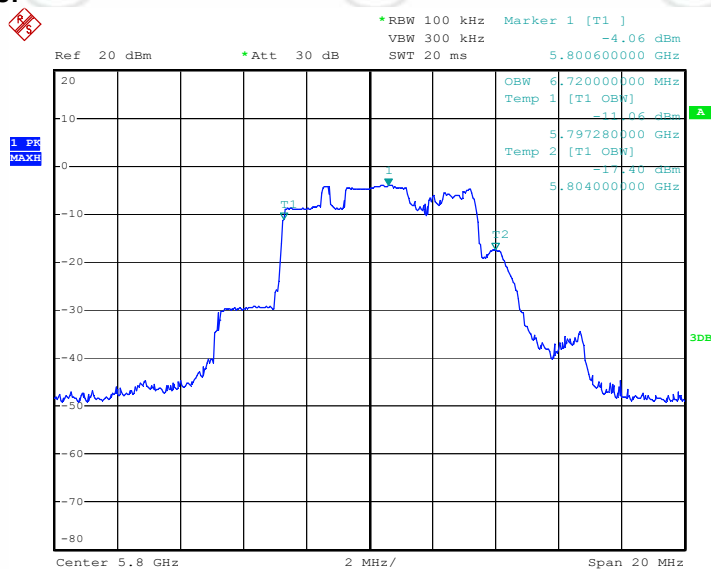
**Test Results:**

Pass

### Measurement Data

Test Channel	20dB bandwidth (MHz)	Results
5800MHz	6.72	Pass

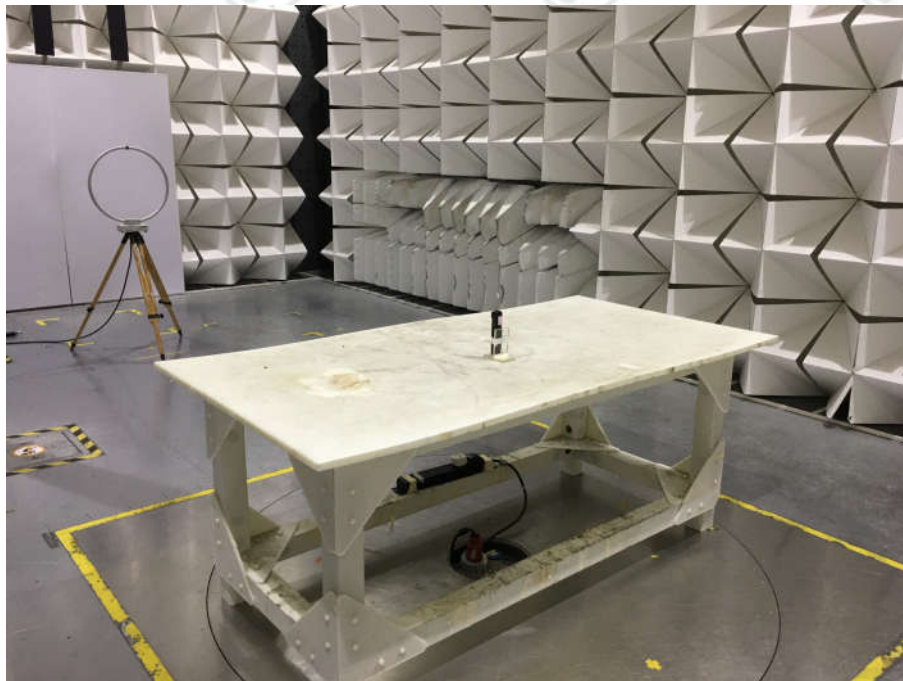
**Test plot as follows:**



Date: 26.FEB.2019 11:24:27

## APPENDIX 1 PHOTOGRAPHS OF TEST SETUP

Test Model No.:1000

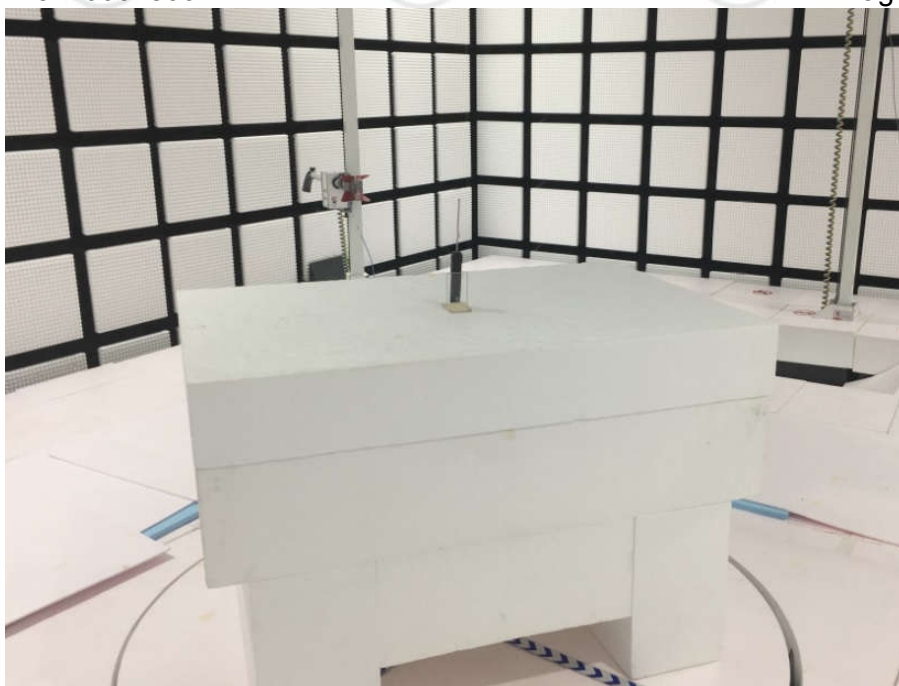


**Radiated emission Test Setup-1(9kHz~30MHz)**

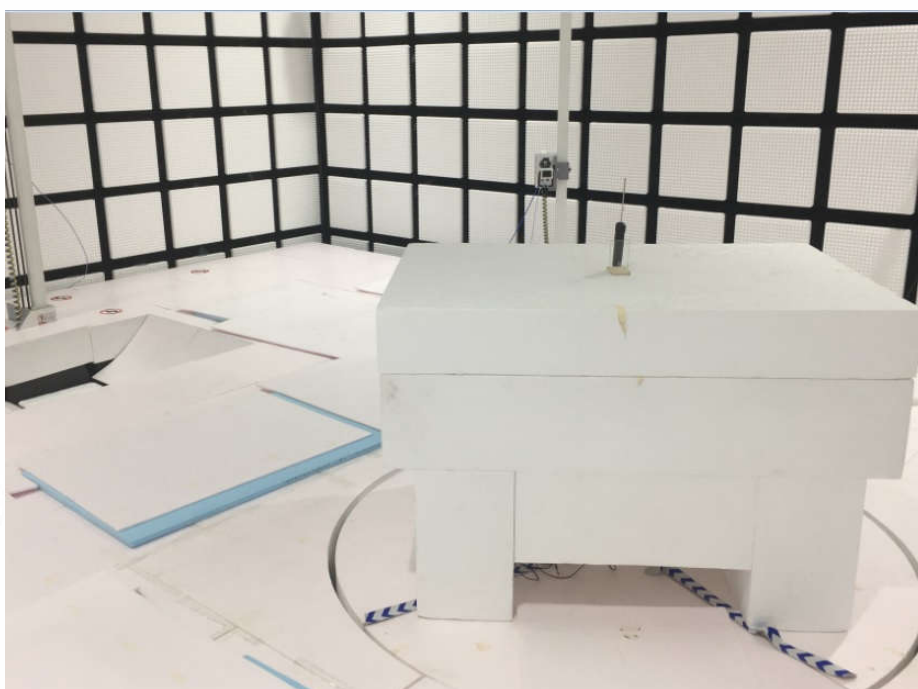


**Radiated emission Test Setup-2 (30MHz~1GHz)**





**Radiated spurious emission Test Setup-3(1-18GHz)**

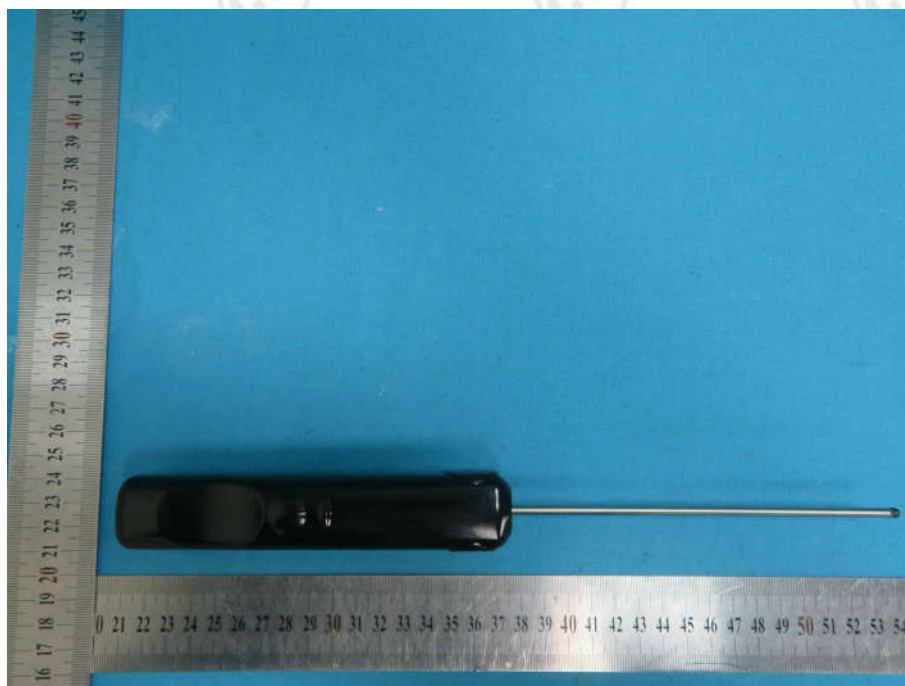


**Radiated spurious emission Test Setup-3(Above 18GHz)**

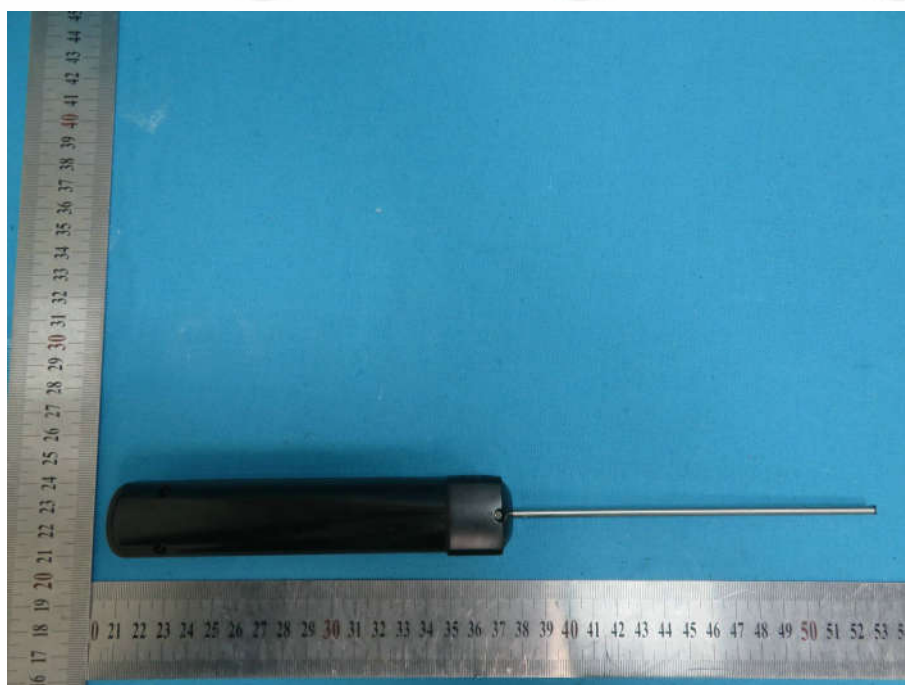


## APPENDIX 2 PHOTOGRAPHS OF EUT

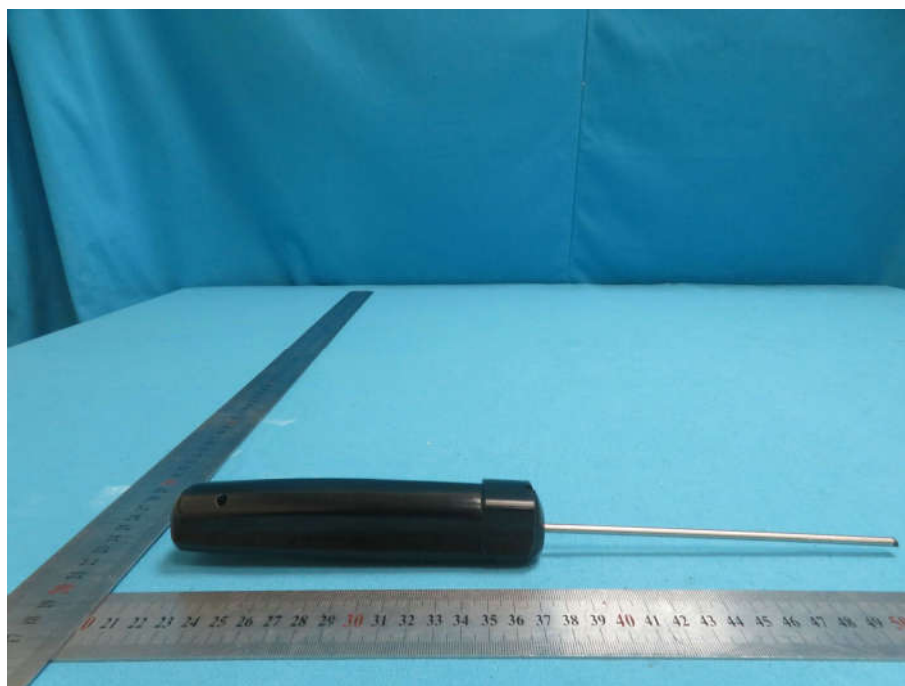
Test model No.:1000



View of Product-1



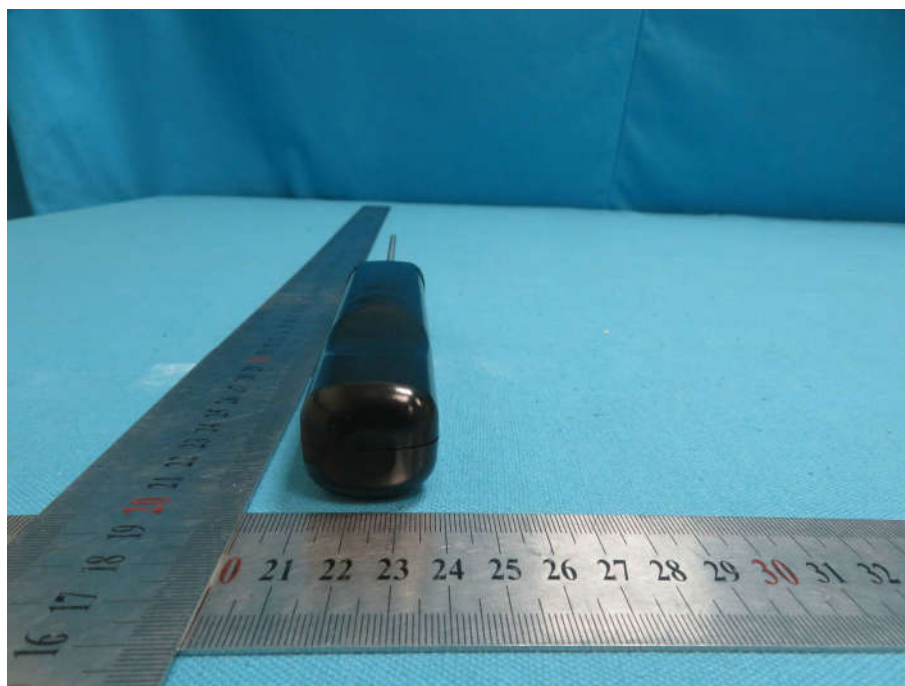
View of Product-2



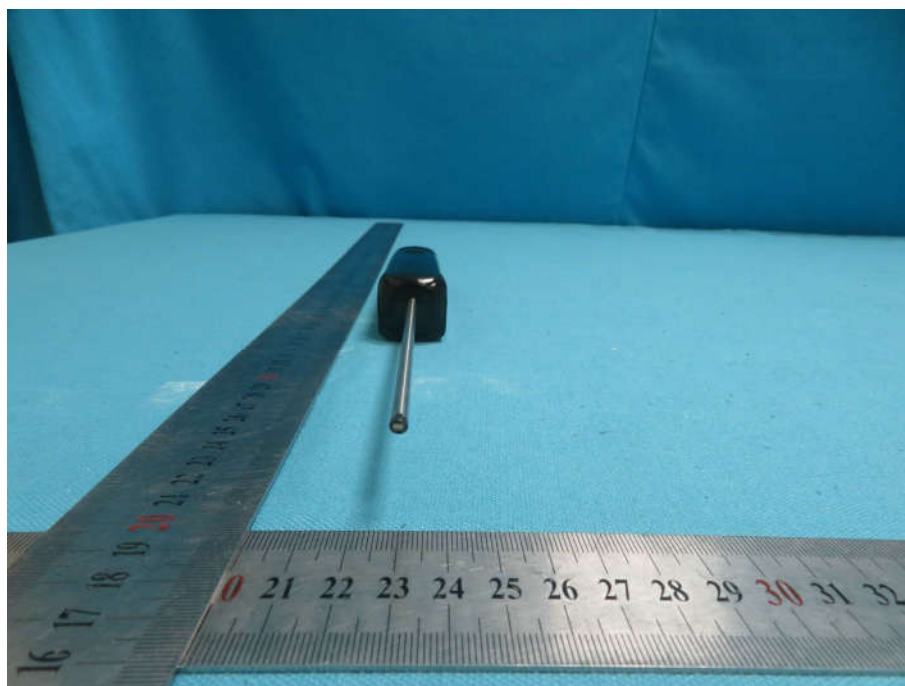
View of Product-3



View of Product-4



View of Product-5



View of Product-6

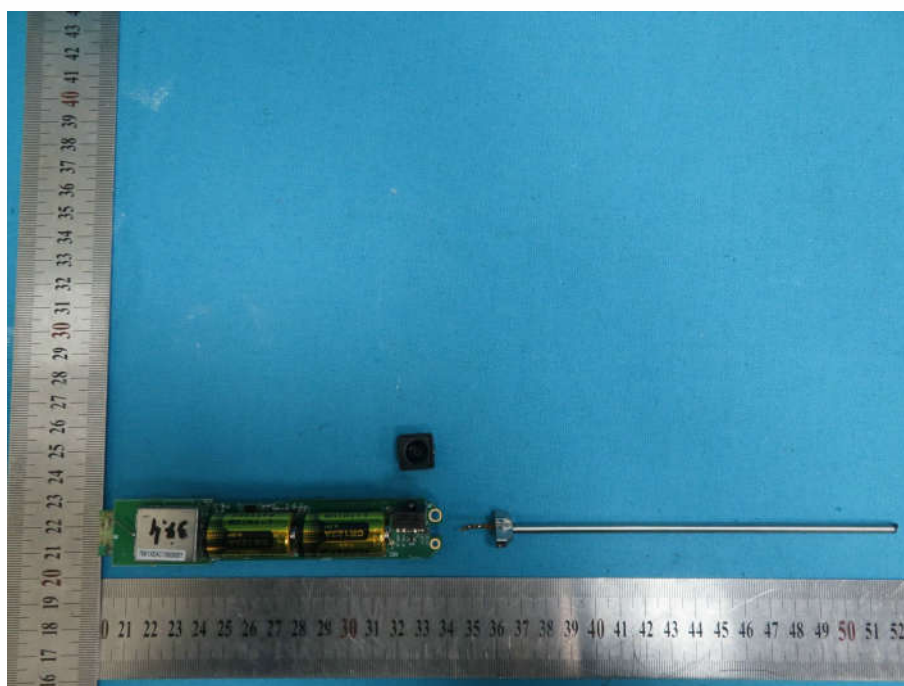




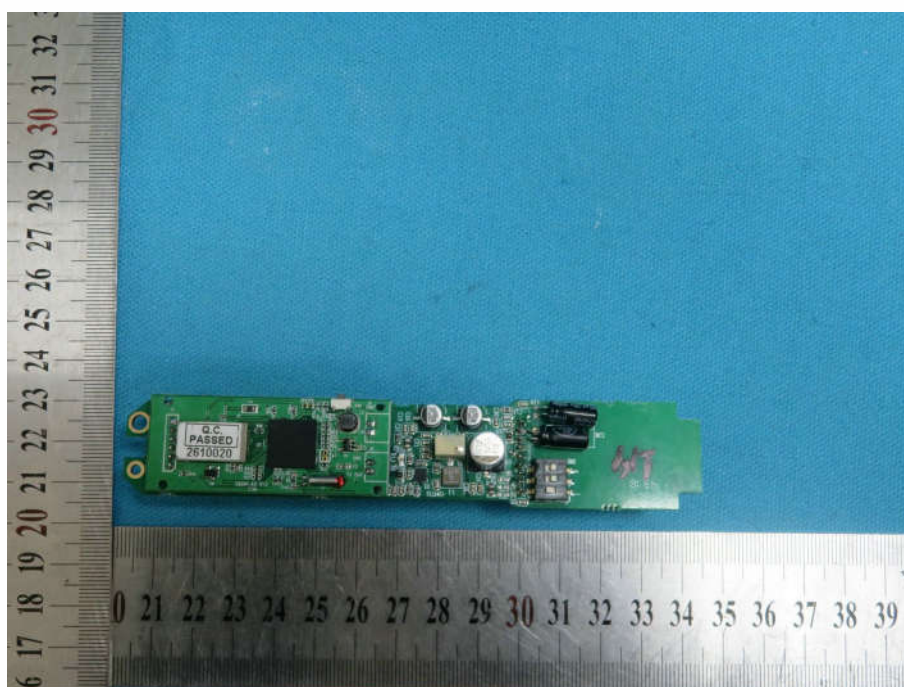
View of Product-7



View of Product-8

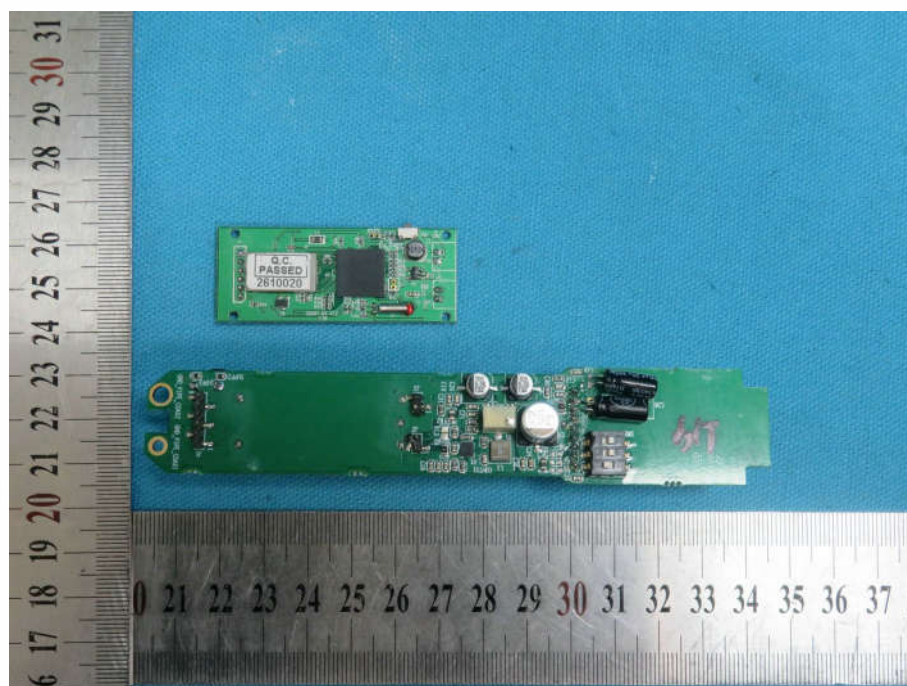


View of Product-9

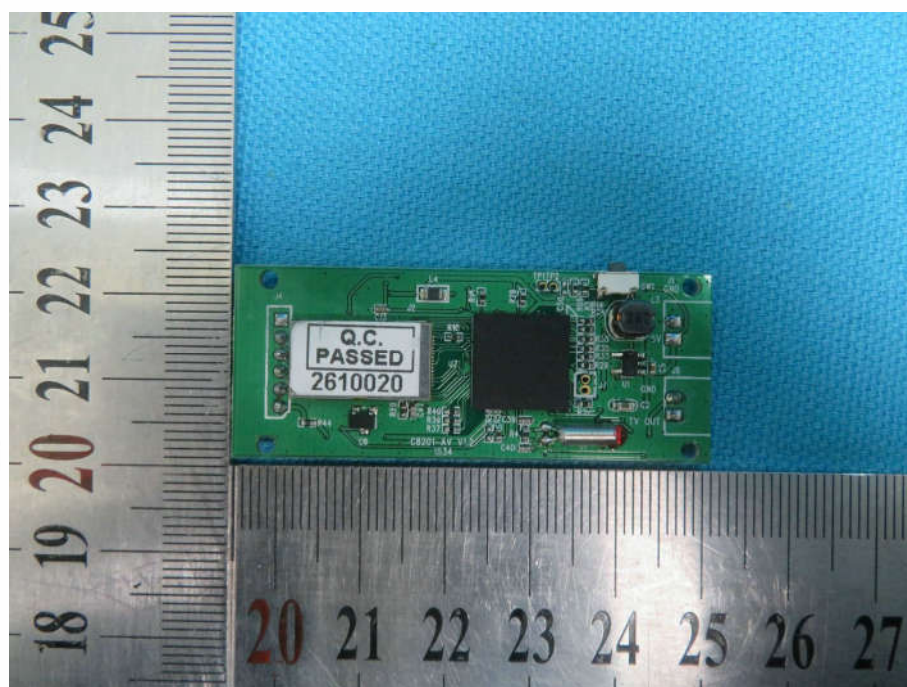


View of Product-10

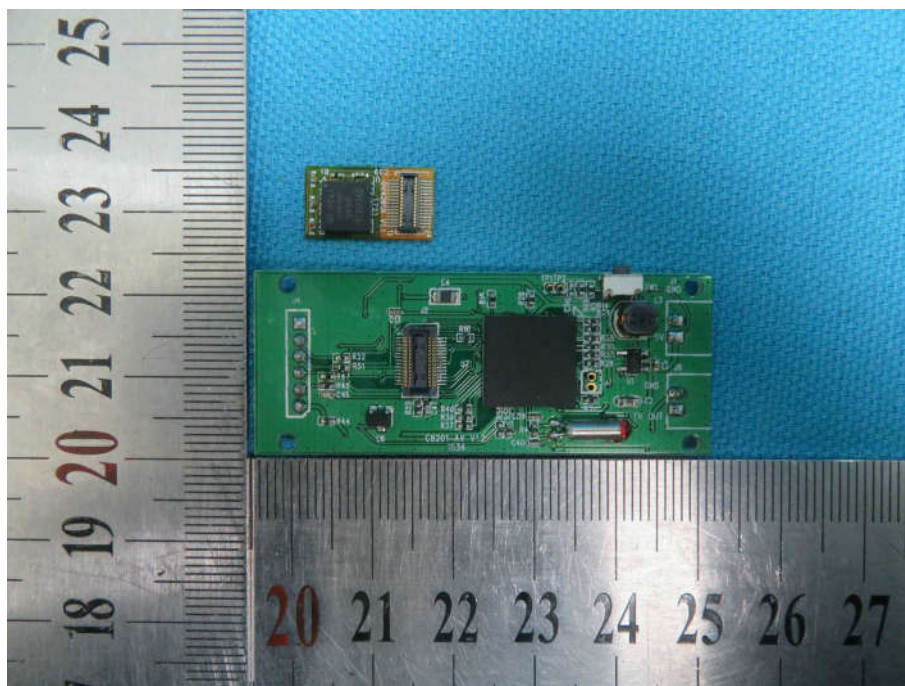




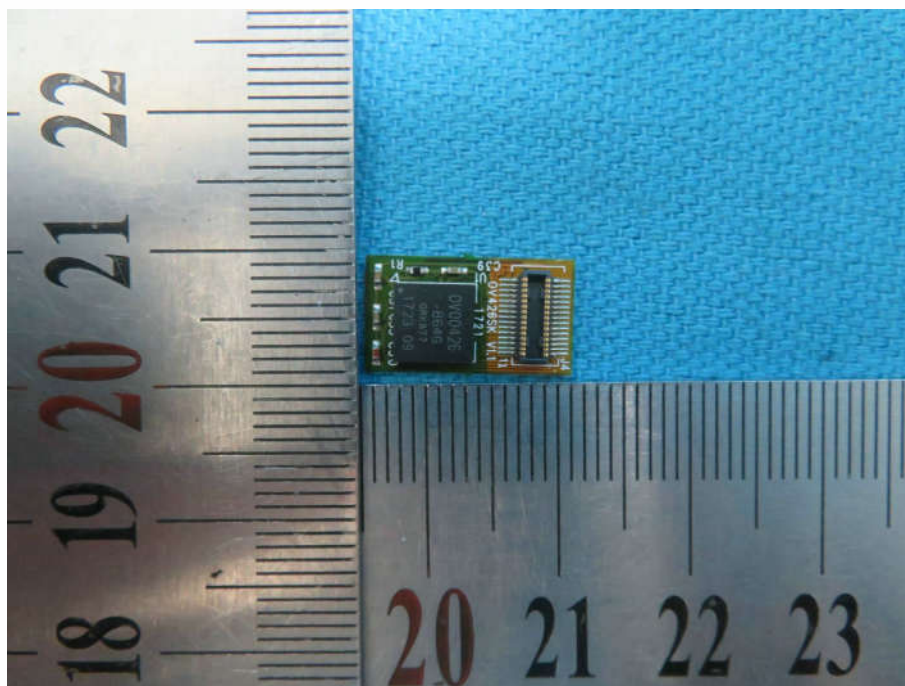
View of Product-11



View of Product-12

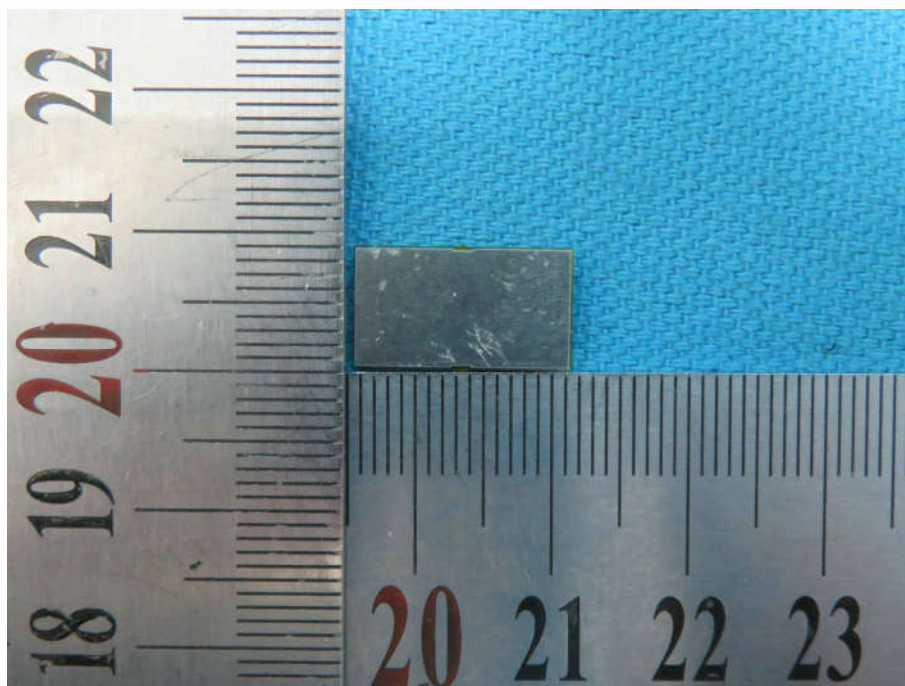


View of Product-13

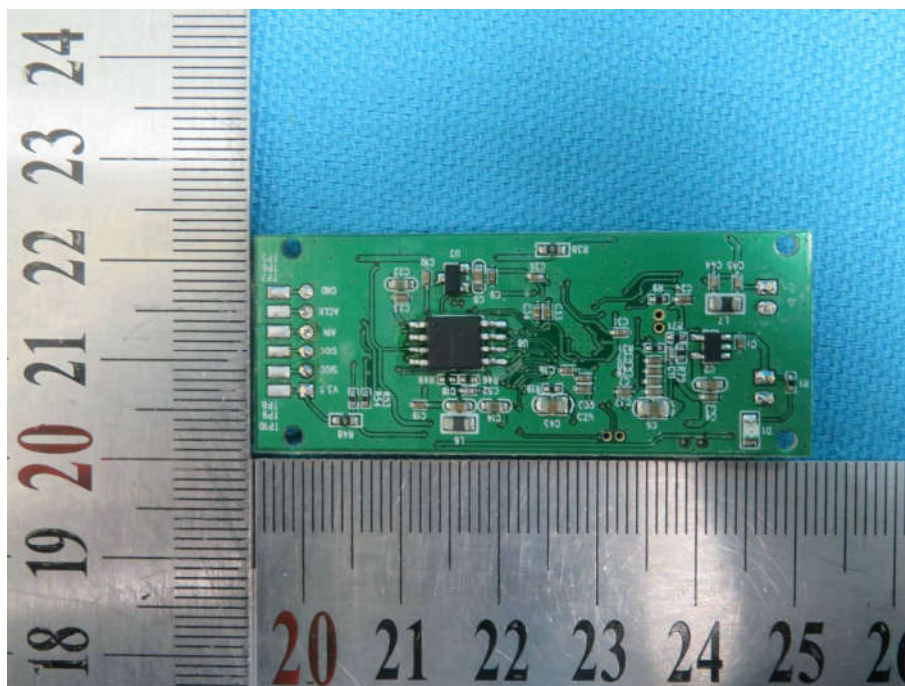


View of Product-14

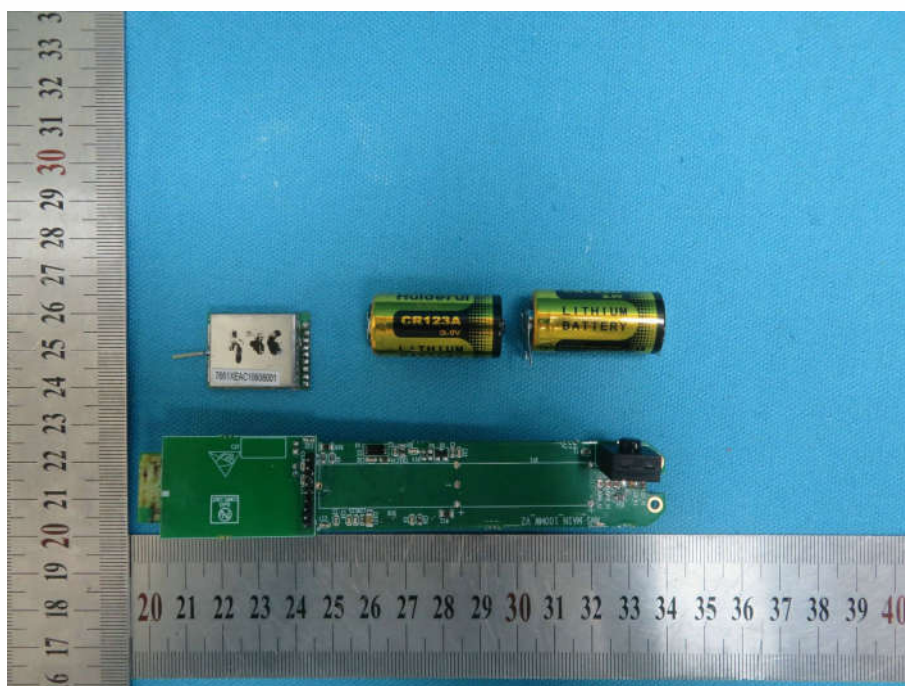




View of Product-15



View of Product-16

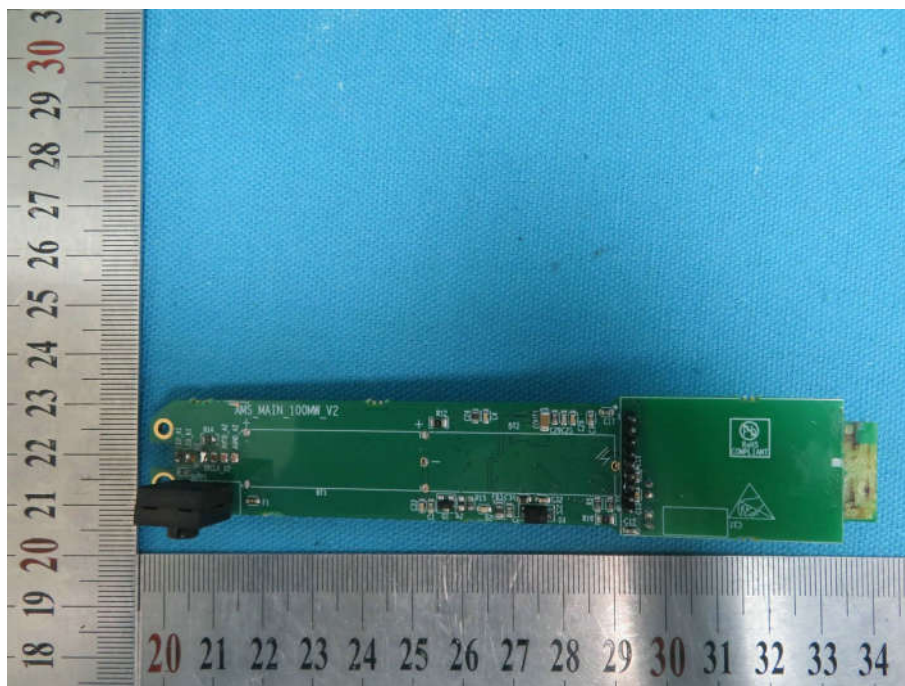


View of Product-17

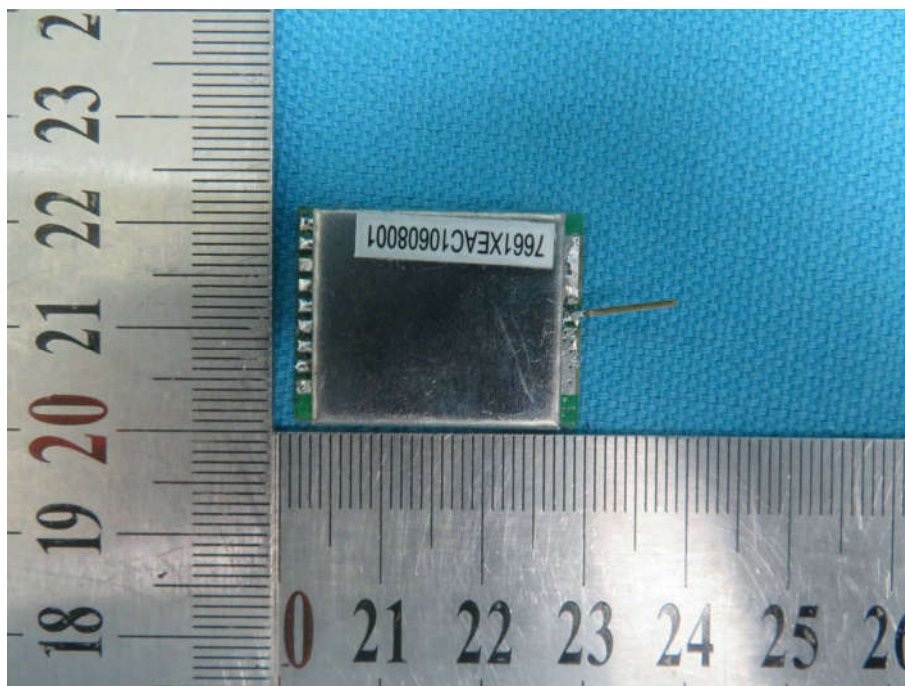


View of Product-18

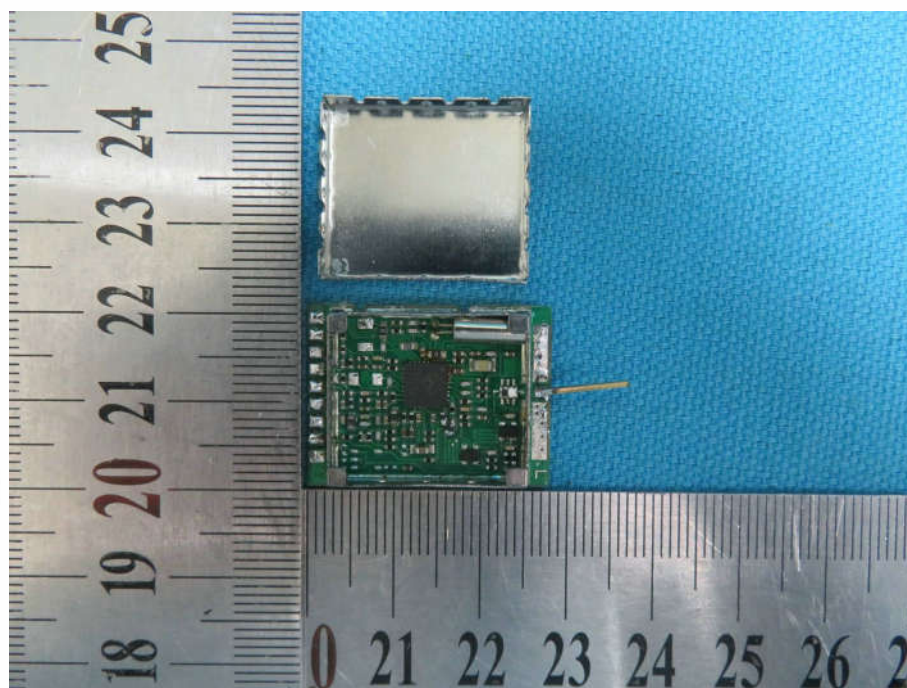




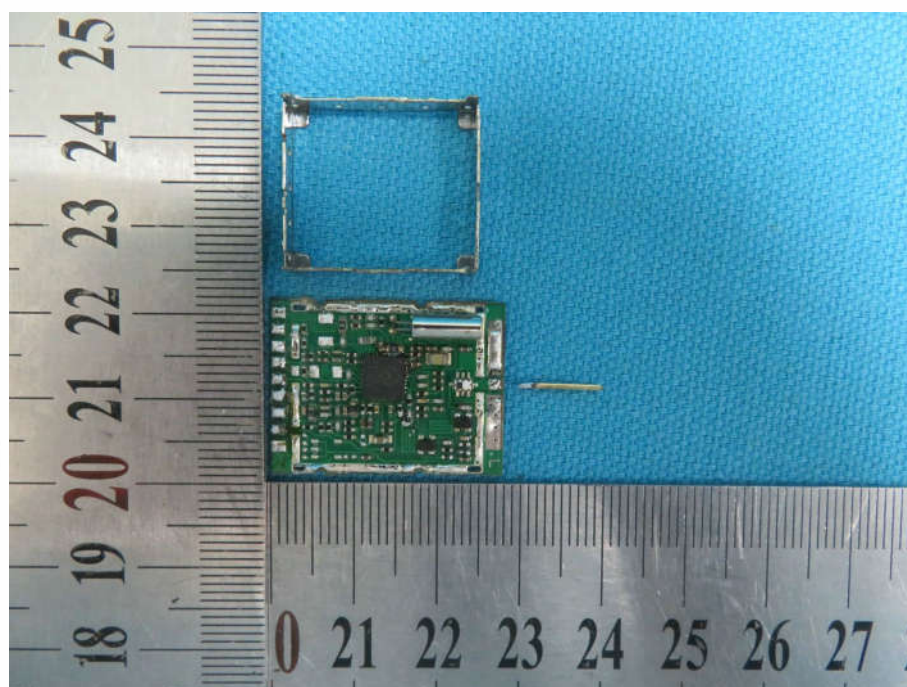
View of Product-19



View of Product-20

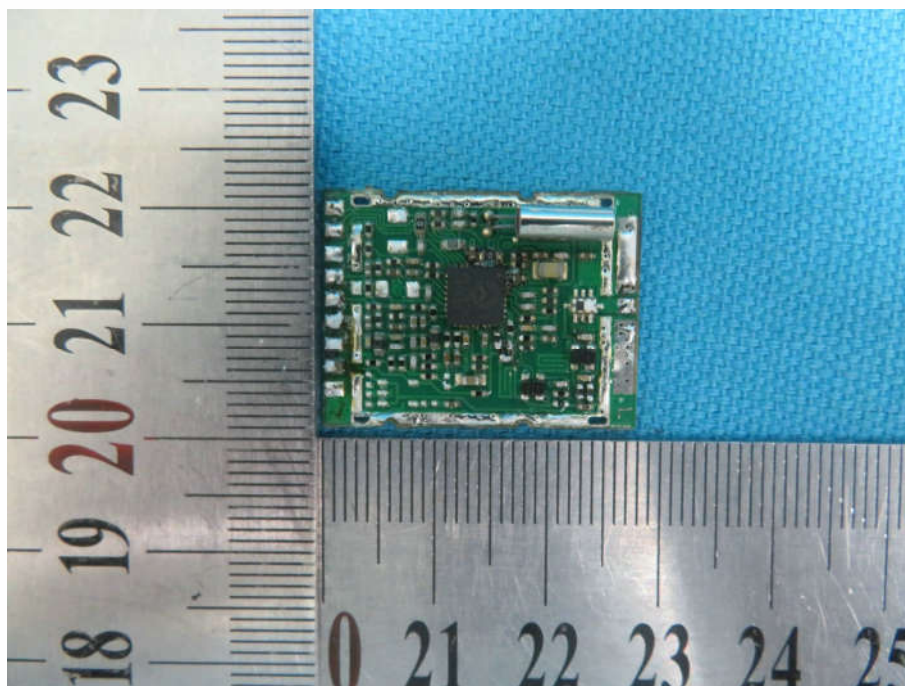


View of Product-21

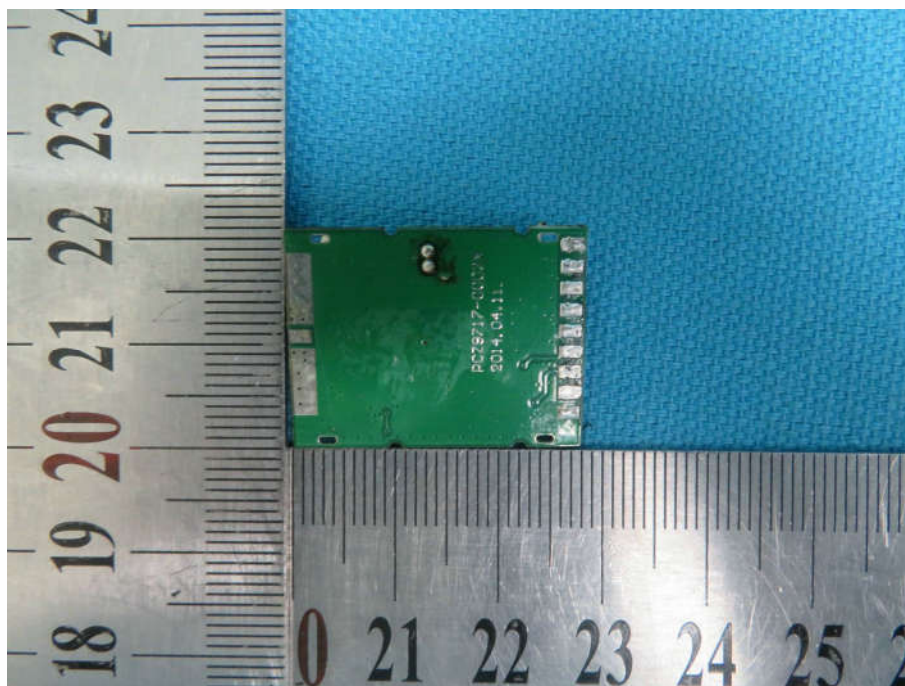


View of Product-22

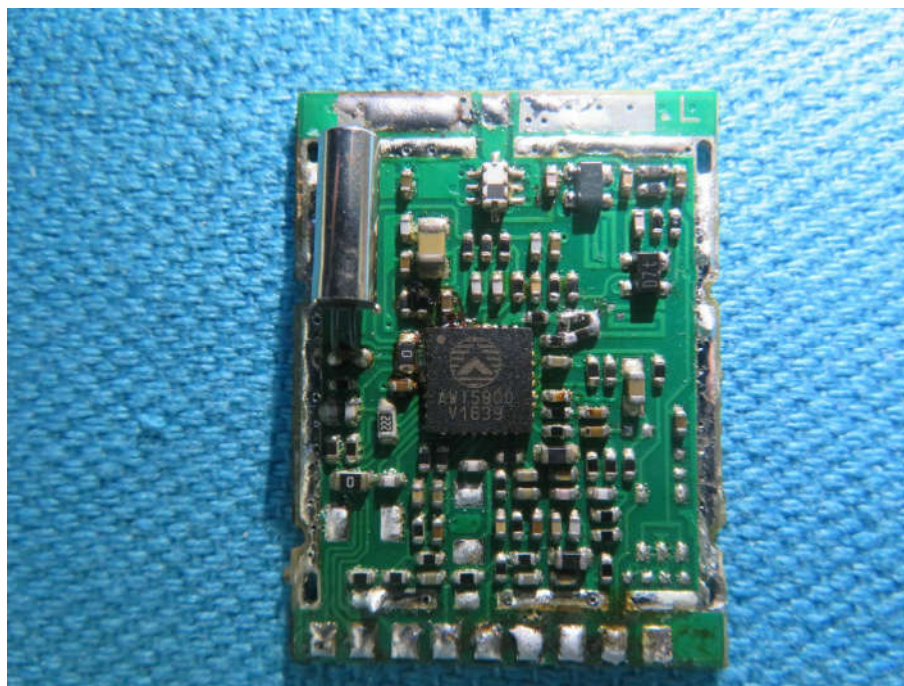




View of Product-23



View of Product-24



View of Product-25

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

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