

## TEST REPORT

**Product** : Blood Glucose Meter  
**Trade mark** : N/A  
**Model/Type reference** : G-427B  
**Serial Number** : N/A  
**Report Number** : EED32K00051801  
**FCC ID** : 2AHLE-BGMB002  
**Date of Issue** : Apr. 24, 2018  
**Test Standards** : 47 CFR Part 15Subpart C  
**Test result** : PASS

Prepared for:

**Bioland Technology Ltd.**

**A6b7 (Block G), Shangrong Ind. Zone Baolong 5th Rd, Longgang District,  
Shenzhen, guangdong, China**

Prepared by:

**Centre Testing International Group Co., Ltd.  
Hongwei Industrial Zone, Bao'an 70 District,  
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Date:

Apr. 24, 2018

Check No.:3177478674



## 2 Version

Version No.	Date	Description
00	Apr. 24, 2018	Original

### 3 Test Summary

Test Item	Test Requirement	Test method	Result
<b>Antenna Requirement</b>	47 CFR Part 15Subpart C Section 15.203/15.247 (c)	ANSI C63.10-2013	PASS
<b>AC Power Line Conducted Emission</b>	47 CFR Part 15Subpart C Section 15.207	ANSI C63.10-2013	N/A
<b>Conducted Peak Output Power</b>	47 CFR Part 15Subpart C Section 15.247 (b)(3)	ANSI C63.10-2013/ KDB 558074 D01v04	PASS
<b>6dB Occupied Bandwidth</b>	47 CFR Part 15Subpart C Section 15.247 (a)(2)	ANSI C63.10-2013/ KDB 558074 D01v04	PASS
<b>Power Spectral Density</b>	47 CFR Part 15Subpart C Section 15.247 (e)	ANSI C63.10-2013/ KDB 558074 D01v04	PASS
<b>Band-edge for RF Conducted Emissions</b>	47 CFR Part 15Subpart C Section 15.247(d)	ANSI C63.10-2013/ KDB 558074 D01v04	PASS
<b>RF Conducted Spurious Emissions</b>	47 CFR Part 15Subpart C Section 15.247(d)	ANSI C63.10-2013/ KDB 558074 D01v04	PASS
<b>Radiated Spurious Emissions</b>	47 CFR Part 15Subpart C Section 15.205/15.209	ANSI C63.10-2013	PASS
<b>Restricted bands around fundamental frequency (Radiated Emission)</b>	47 CFR Part 15Subpart C Section 15.205/15.209	ANSI C63.10-2013	PASS

Remark:

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

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

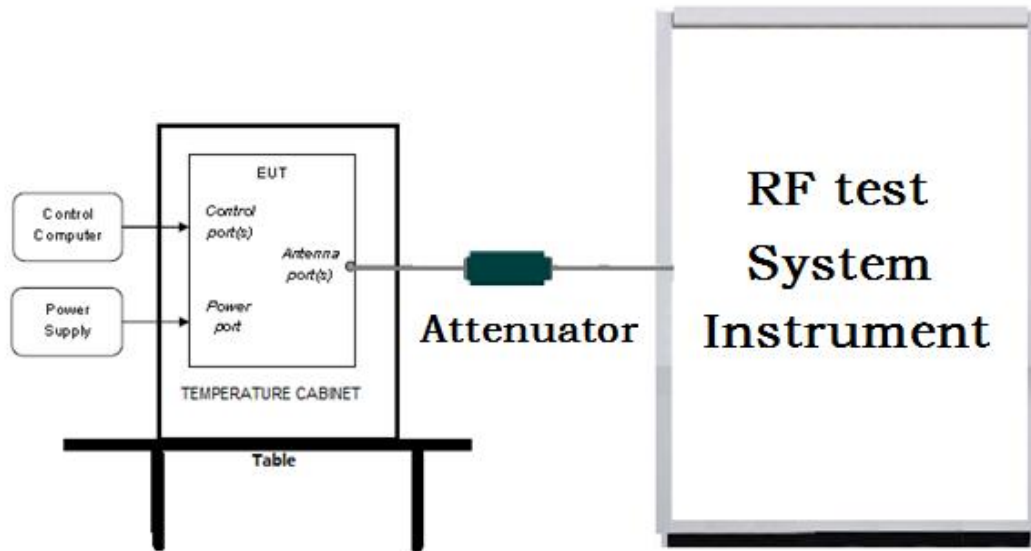
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## 5 Test Requirement

### 5.1 Test setup

#### 5.1.1 For Conducted test setup



#### 5.1.2 For Radiated Emissions test setup

Radiated Emissions setup:

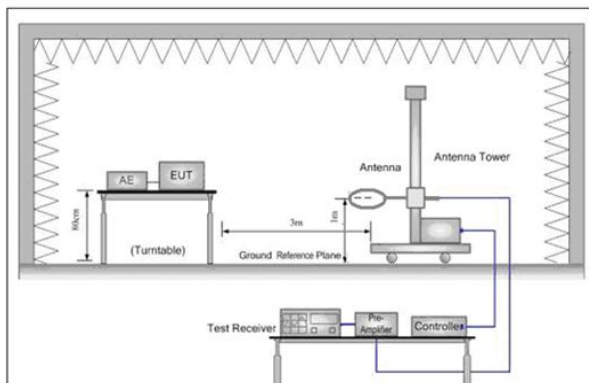


Figure 1. Below 30MHz

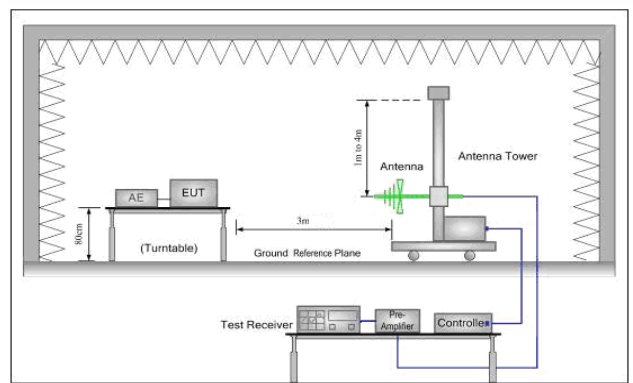


Figure 2. 30MHz to 1GHz

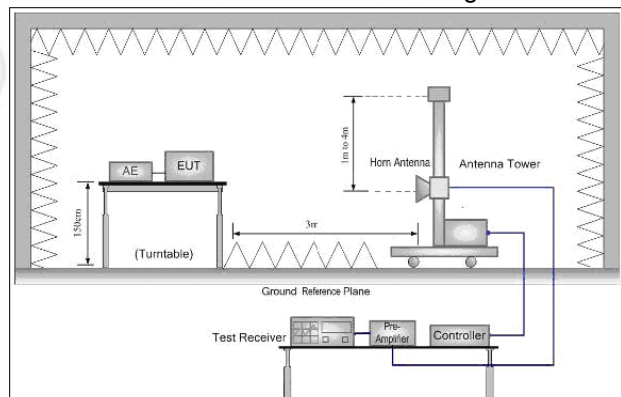
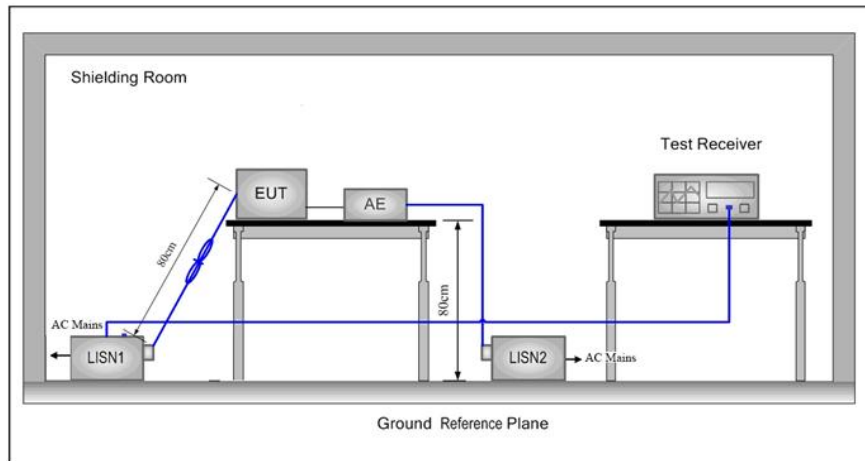


Figure 3. Above 1GHz

### 5.1.3 For Conducted Emissions test setup Conducted Emissions setup



## 5.2 Test Environment

<b>Operating Environment:</b>	
Temperature:	24°C
Humidity:	50 % RH
Atmospheric Pressure:	1010mbar

## 5.3 Test Condition

Test channel:

Test Mode	Tx/Rx	RF Channel		
		Low(L)	Middle(M)	High(H)
GFSK	2402MHz ~2480 MHz	Channel 1	Channel 20	Channel 40
		2402MHz	2440MHz	2480MHz
Transmitting mode:	Keep the EUT in transmitting mode with all kind of modulation and all kind of data rate.			

## 6 General Information

### 6.1 Client Information

Applicant:	Bioland Technology Ltd.
Address of Applicant:	A6b7 (Block G), Shangrong Ind. Zone Baolong 5th Rd, Longgang District, Shenzhen, guangdong, China
Manufacturer:	Bioland Technology Ltd.
Address of Manufacturer:	A6b7 (Block G), Shangrong Ind. Zone Baolong 5th Rd, Longgang District, Shenzhen, guangdong, China
Factory:	Bioland Technology Ltd.
Address of Factory:	A6b7 (Block G), Shangrong Ind. Zone Baolong 5th Rd, Longgang District, Shenzhen, guangdong, China

### 6.2 General Description of EUT

Product Name:	Blood Glucose Meter
Model No.(EUT):	G-427B
Trade mark:	N/A
EUT Supports Radios application:	2402-2480MHz
Power Supply:	DC 3V (Alkaline Battery AAA *2)
Sample Received Date:	Mar. 15, 2018
Sample tested Date:	Mar. 15, 2018 to Apr. 24, 2018

### 6.3 Product Specification subjective to this standard

Operation Frequency:	2402MHz~2480MHz
Bluetooth Version:	4.0
Modulation Technique:	DSSS
Modulation Type:	Bluetooth
Number of Channel:	40
Test Power Grade:	4(manufacturer declare )
Test Software of EUT:	Bluetooth TI Tool (manufacturer declare )
Antenna Type and Gain:	PCB antenna Gain: 2.81dBi
Test Voltage:	DC 3V

## 6.4 Description of Support Units

The EUT has been tested independently.

## 6.5 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd.

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

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

No tests were sub-contracted.

FCC Designation No.: CN1164

## 6.6 Deviation from Standards

None.

## 6.7 Abnormalities from Standard Conditions

None.

## 6.8 Other Information Requested by the Customer

None.

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

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



## 7 Equipment List

RF test system					
Equipment	Manufacturer	Model No.	Serial Number	Cal. Date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
Signal Generator	Keysight	E8257D	MY53401106	03-13-2018	03-12-2019
Spectrum Analyzer	Keysight	N9010A	MY54510339	03-13-2018	03-12-2019
Signal Generator	Keysight	N5182B	MY53051549	03-13-2018	03-12-2019
High-pass filter(3-18GHz)	Sinoscite	FL3CX03WG18 NM12-0398-002	---	01-10-2018	01-09-2019
band rejection filter	Sinoscite	FL5CX01CA09C L12-0395-001	---	01-10-2018	01-09-2019
band rejection filter	Sinoscite	FL5CX01CA08C L12-0393-001	---	01-10-2018	01-09-2019
band rejection filter	Sinoscite	FL5CX02CA04C L12-0396-002	---	01-10-2018	01-09-2019
band rejection filter	Sinoscite	FL5CX02CA03C L12-0394-001	---	01-10-2018	01-09-2019
DC Power	Keysight	E3642A	MY54436035	03-14-2018	03-13-2019
PC-1	Lenovo	R4960d	---		
BT&WI-FI Automatic control	R&S	OSP120	101374	03-13-2018	03-12-2019
RF control unit	JS Tonscend	JS0806-2	158060006	03-14-2018	03-13-2019
BT&WI-FI Automatic test software	JS Tonscend	JS1120-2	---	03-14-2018	03-13-2019

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	9163-484	06-09-2017	06-08-2018
Horn Antenna	ETS-LINDGREN	3117	00057407	07-20-2015	07-18-2018
Loop Antenna	ETS	6502	00071730	06-22-2017	06-21-2019
Spectrum Analyzer	R&S	FSP40	100416	06-13-2017	06-12-2018
Receiver	R&S	ESCI	100435	06-14-2017	06-13-2018
LISN	schwarzbeck	NNBM8125	81251547	06-13-2017	06-12-2018
LISN	schwarzbeck	NNBM8125	81251548	06-13-2017	06-12-2018
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	TAYLOR	1451	1905	05-08-2017	05-07-2018
Communication test set	Agilent	E5515C	GB47050534	03-16-2018	03-15-2019
Cable line	Fulai(7M)	SF106	5219/6A	01-10-2018	01-09-2019
Cable line	Fulai(6M)	SF106	5220/6A	01-10-2018	01-09-2019
Cable line	Fulai(3M)	SF106	5216/6A	01-10-2018	01-09-2019
Cable line	Fulai(3M)	SF106	5217/6A	01-10-2018	01-09-2019
Communication test set	R&S	CMW500	152394	03-16-2018	03-15-2019
High-pass filter	Sinoscite	FL3CX03WG 18NM12- 0398-002	---	01-10-2018	01-09-2019
band rejection filter	Sinoscite	FL5CX01CA 09CL12- 0395-001	---	01-10-2018	01-09-2019
band rejection filter	Sinoscite	FL5CX01CA 08CL12- 0393-001	---	01-10-2018	01-09-2019
band rejection filter	Sinoscite	FL5CX02CA 04CL12- 0396-002	---	01-10-2018	01-09-2019
band rejection filter	Sinoscite	FL5CX02CA 03CL12- 0394-001	---	01-10-2018	01-09-2019

## 8 Radio Technical Requirements Specification

### Reference documents for testing:

No.	Identity	Document Title
1	FCC Part15C	Subpart C-Intentional Radiators
2	ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices

### Test Results List:

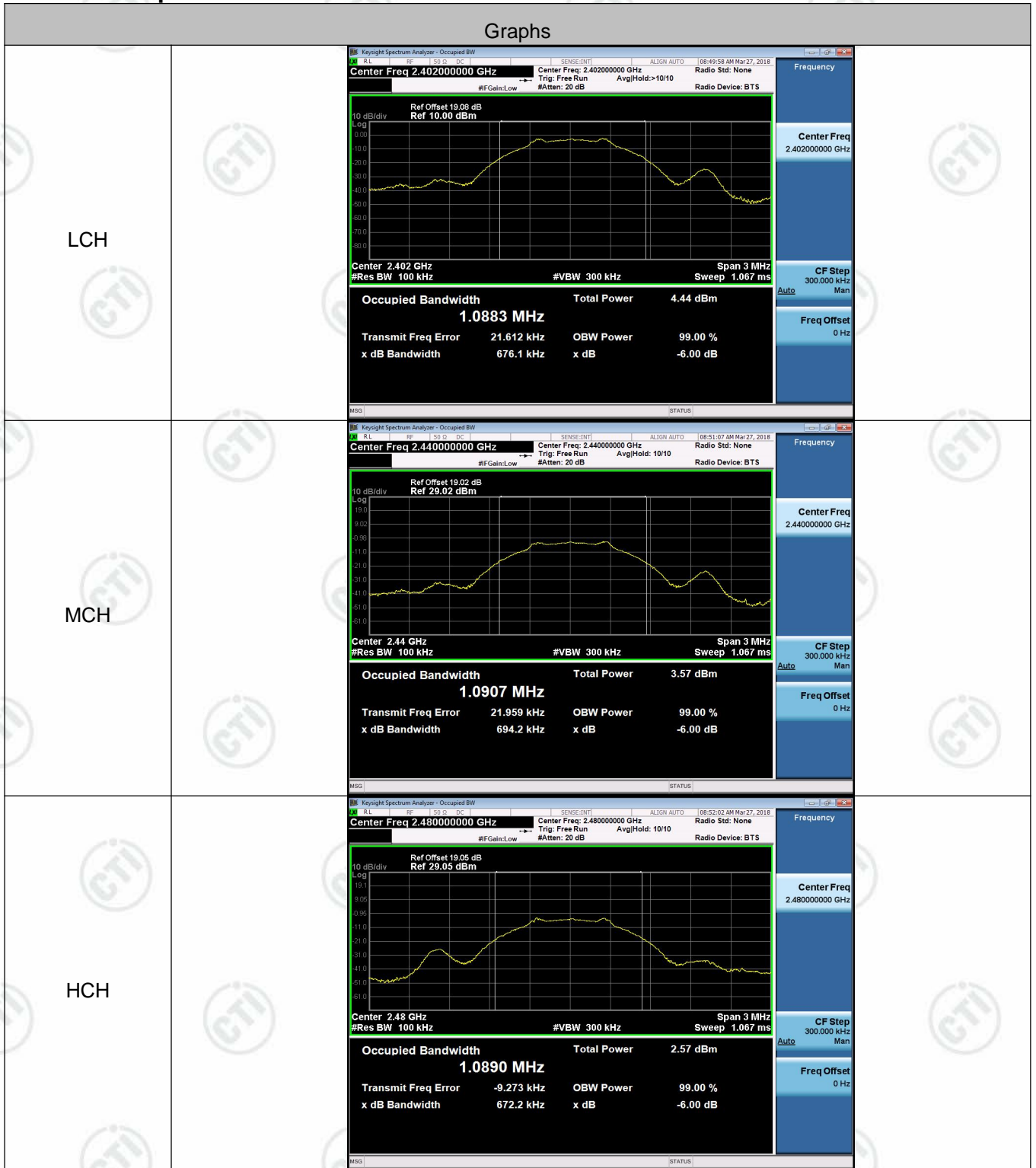
Test Requirement	Test method	Test item	Verdict	Note
Part15C Section 15.247 (a)(2)	ANSI C63.10	6dB Occupied Bandwidth	PASS	Appendix A)
Part15C Section 15.247 (b)(3)	ANSI C63.10	Conducted Peak Output Power	PASS	Appendix B)
Part15C Section 15.247(d)	ANSI C63.10	Band-edge for RF Conducted Emissions	PASS	Appendix C)
Part15C Section 15.247(d)	ANSI C63.10	RF Conducted Spurious Emissions	PASS	Appendix D)
Part15C Section 15.247 (e)	ANSI C63.10	Power Spectral Density	PASS	Appendix E)
Part15C Section 15.203/15.247 (c)	ANSI C63.10	Antenna Requirement	PASS	Appendix F)
Part15C Section 15.207	ANSI C63.10	AC Power Line Conducted Emission	N/A	N/A
Part15C Section 15.205/15.209	ANSI C63.10	Restricted bands around fundamental frequency (Radiated Emission)	PASS	Appendix G)
Part15C Section 15.205/15.209	K ANSI C63.10	Radiated Spurious Emissions	PASS	Appendix H)

**Appendix A): 6dB Occupied Bandwidth**

**Test Result**

Mode	Channel	6dB Bandwidth [MHz]	99% OBW[MHz]	Verdict	Remark
BLE	LCH	0.6761	1.0883	PASS	Peak detector
BLE	MCH	0.6942	1.0907	PASS	
BLE	HCH	0.6722	1.0890	PASS	

**Test Graphs**

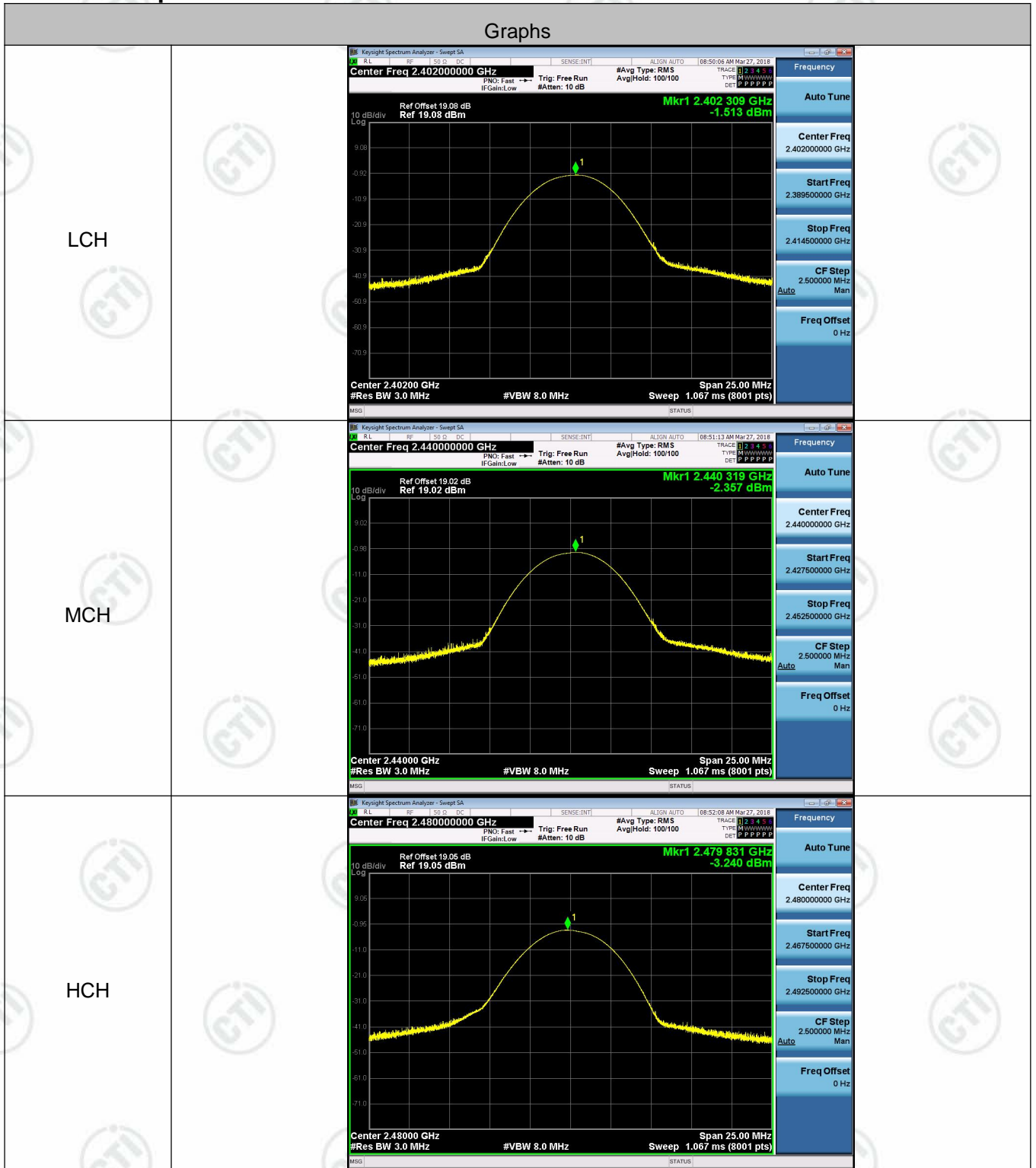


### Appendix B): Conducted Peak Output Power

#### Test Result

Mode	Channel	Conduct Peak Power[dBm]	Verdict
BLE	LCH	-1.513	PASS
BLE	MCH	-2.357	PASS
BLE	HCH	-3.24	PASS

**Test Graphs**



**Appendix C): Band-edge for RF Conducted Emissions**

**Result Table**

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BLE	LCH	-2.095	-57.800	-22.1	PASS
BLE	HCH	-3.861	-51.640	-23.86	PASS



**Test Graphs**

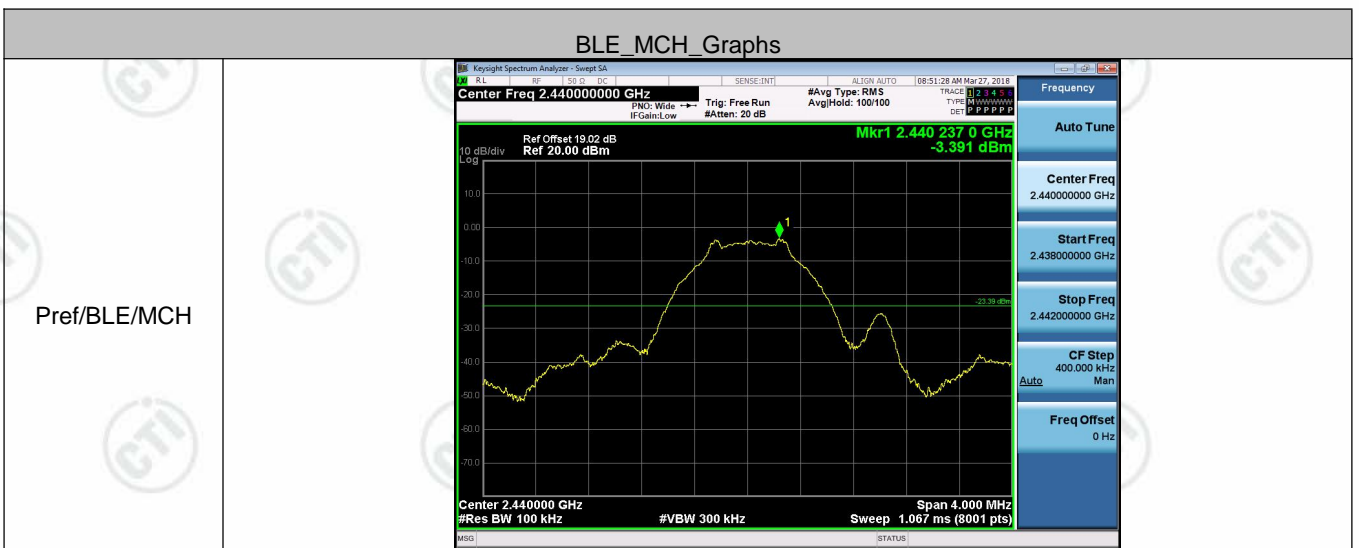
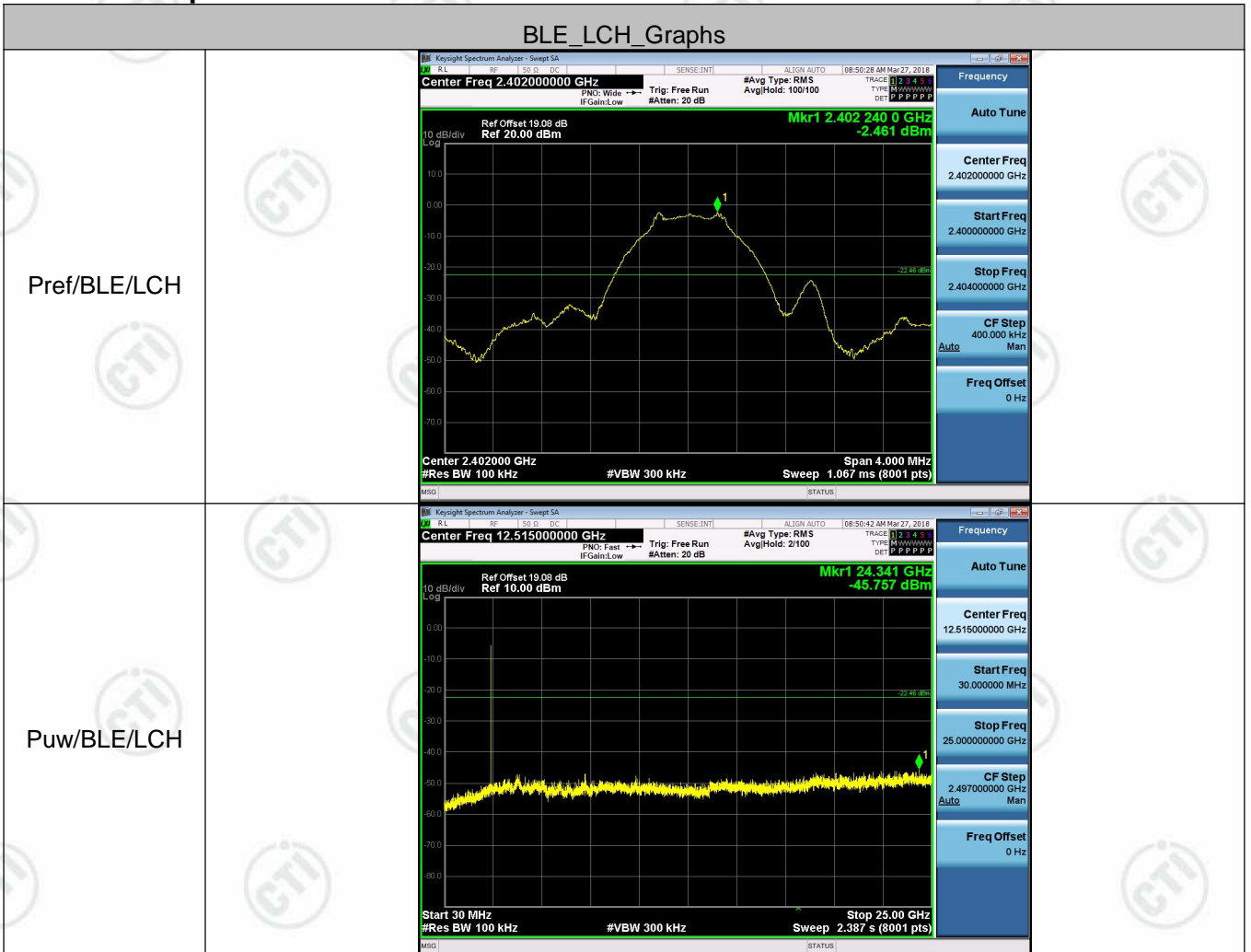


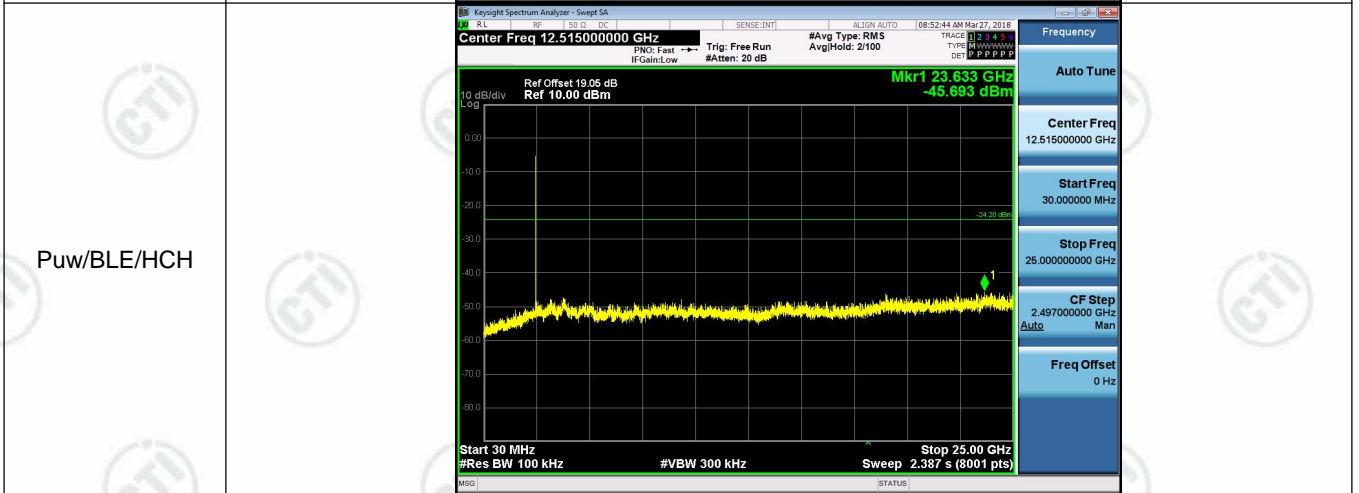
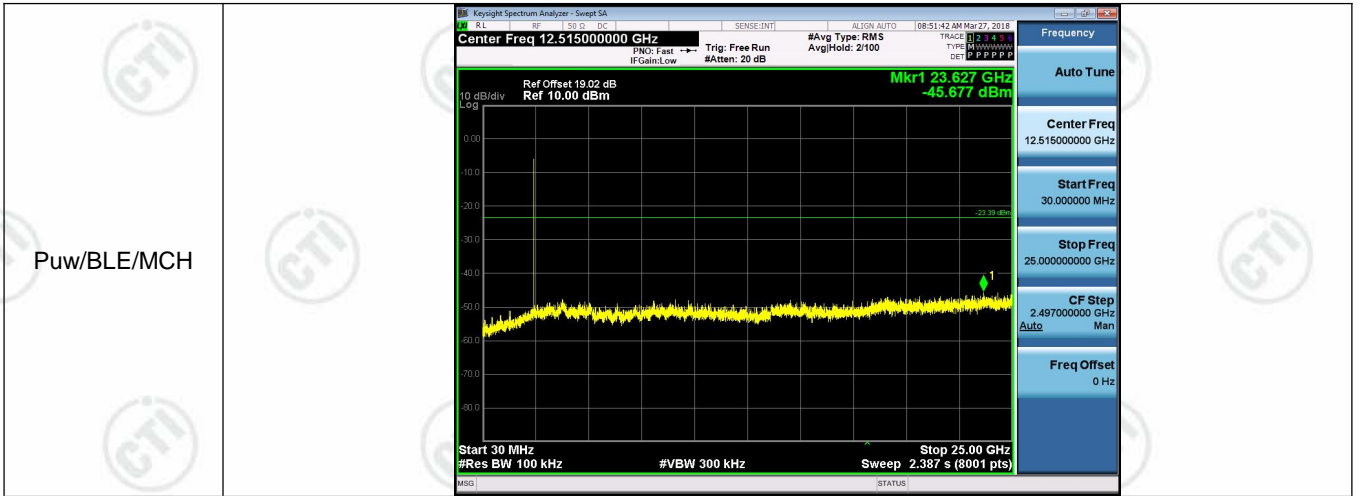
## Appendix D): RF Conducted Spurious Emissions

Result Table

Mode	Channel	Pref [dBm]	Puw[dBm]	Verdict
BLE	LCH	-2.461	<Limit	PASS
BLE	MCH	-3.391	<Limit	PASS
BLE	HCH	-4.199	<Limit	PASS

**Test Graphs**



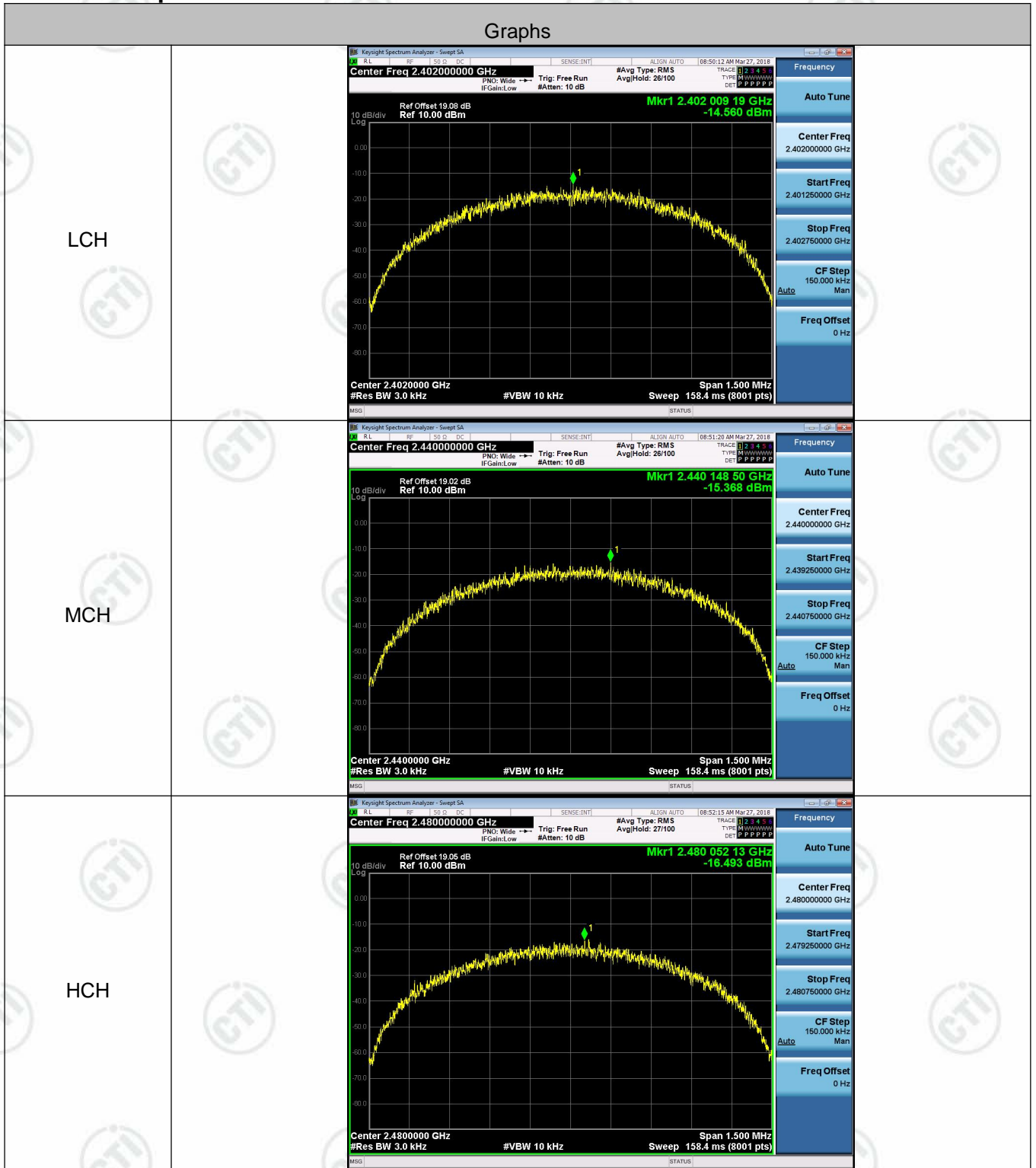


## Appendix E): Power Spectral Density

### Result Table

Mode	Channel	PSD [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
BLE	LCH	-14.560	8	PASS
BLE	MCH	-15.368	8	PASS
BLE	HCH	-16.493	8	PASS

**Test Graphs**



## Appendix F): Antenna Requirement

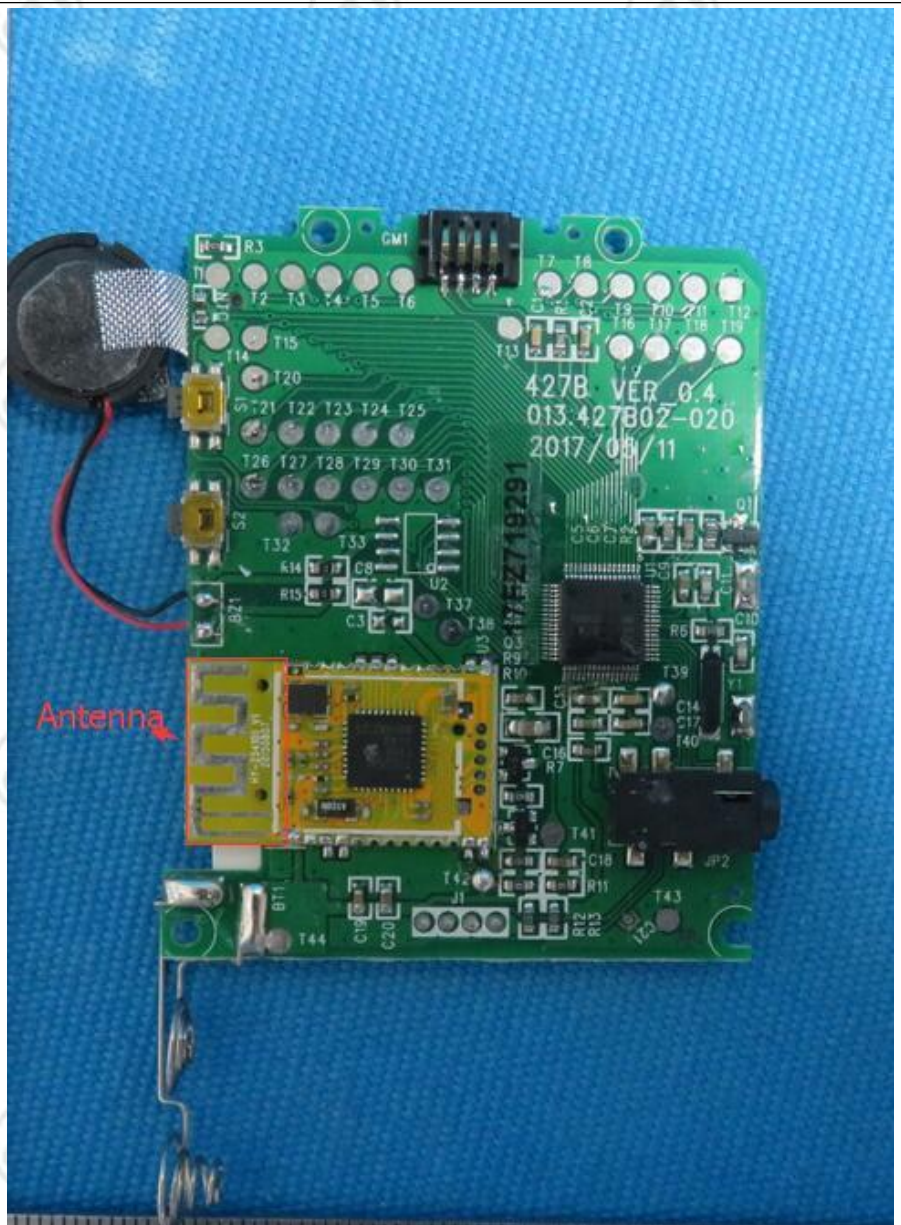
### 15.203 requirement:

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.

### 15.247(b) (4) requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### EUT Antenna:



The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 2.81dBi.

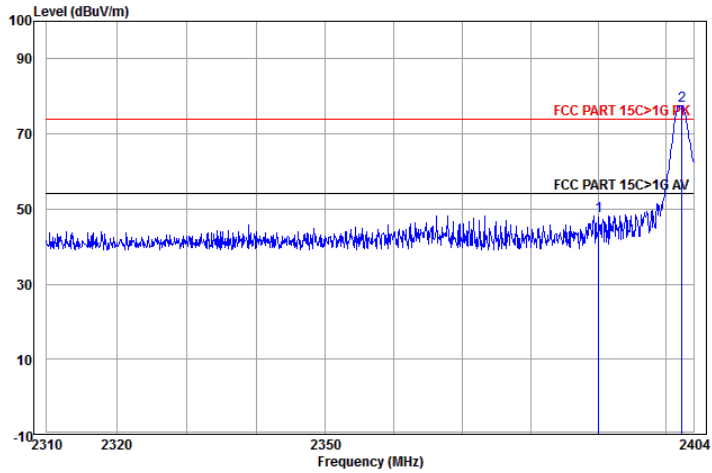
## Appendix G): Restricted bands around fundamental frequency (Radiated)

Receiver Setup:	<table border="1"> <thead> <tr> <th>Frequency</th> <th>Detector</th> <th>RBW</th> <th>VBW</th> <th>Remark</th> </tr> </thead> <tbody> <tr> <td>30MHz-1GHz</td> <td>Quasi-peak</td> <td>120kHz</td> <td>300kHz</td> <td>Quasi-peak</td> </tr> <tr> <td rowspan="2">Above 1GHz</td> <td>Peak</td> <td>1MHz</td> <td>3MHz</td> <td>Peak</td> </tr> <tr> <td>Peak</td> <td>1MHz</td> <td>10Hz</td> <td>Average</td> </tr> </tbody> </table>	Frequency	Detector	RBW	VBW	Remark	30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak	Above 1GHz	Peak	1MHz	3MHz	Peak	Peak	1MHz	10Hz	Average	
Frequency	Detector	RBW	VBW	Remark																	
30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak																	
Above 1GHz	Peak	1MHz	3MHz	Peak																	
	Peak	1MHz	10Hz	Average																	
Test Procedure:	<p><b>Below 1GHz test procedure as below:</b></p> <ol style="list-style-type: none"> <li>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.</li> <li>The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</li> <li>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.</li> <li>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 and the rotatable was turned from 0 degrees to 360 degrees to find the maximum reading.</li> <li>The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li> <li>Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel</li> </ol> <p><b>Above 1GHz test procedure as below:</b></p> <ol style="list-style-type: none"> <li>Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber change form table 0.8 meter to 1.5 meter( Above 18GHz the distance is 1 meter and table is 1.5 meter).</li> <li>. Test the EUT in the lowest channel , the Highest channel</li> <li>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.</li> <li>Repeat above procedures until all frequencies measured was complete.</li> </ol>																				
Limit:	<table border="1"> <thead> <tr> <th>Frequency</th> <th>Limit (dB<math>\mu</math>V/m @3m)</th> <th>Remark</th> </tr> </thead> <tbody> <tr> <td>30MHz-88MHz</td> <td>40.0</td> <td>Quasi-peak Value</td> </tr> <tr> <td>88MHz-216MHz</td> <td>43.5</td> <td>Quasi-peak Value</td> </tr> <tr> <td>216MHz-960MHz</td> <td>46.0</td> <td>Quasi-peak Value</td> </tr> <tr> <td>960MHz-1GHz</td> <td>54.0</td> <td>Quasi-peak Value</td> </tr> <tr> <td rowspan="2">Above 1GHz</td> <td>54.0</td> <td>Average Value</td> </tr> <tr> <td>74.0</td> <td>Peak Value</td> </tr> </tbody> </table>	Frequency	Limit (dB $\mu$ 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
Frequency	Limit (dB $\mu$ 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																			



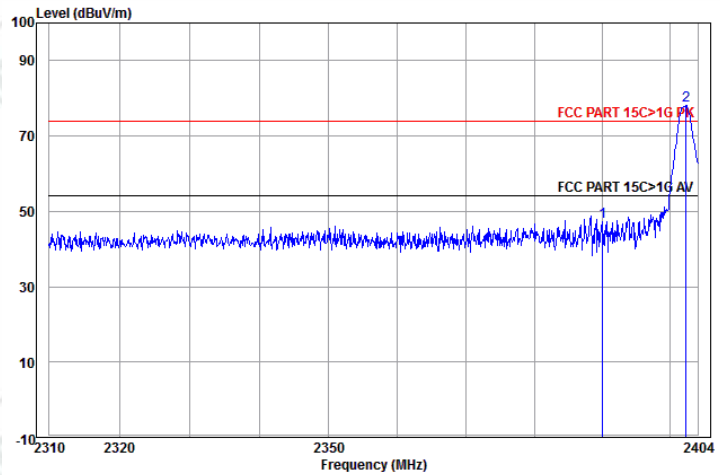
**Test plot as follows:**

Worse case mode:	GFSK		
Frequency: 2402MHz	Test channel: Lowest	Polarization: Horizontal	Remark: Peak



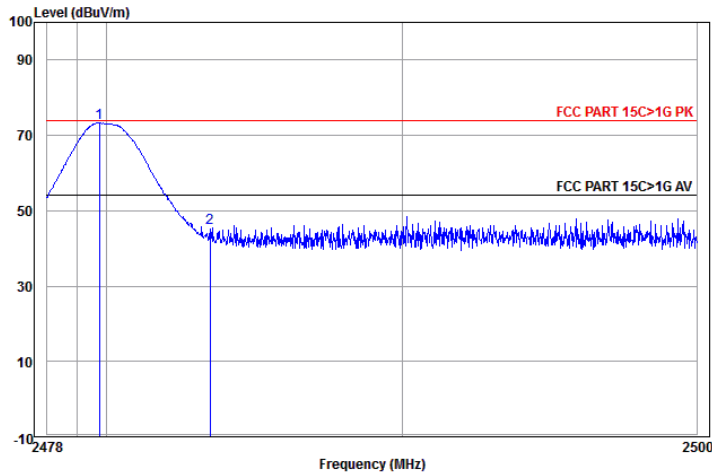
	Ant Freq	Cable Factor	Preamp Loss	Read Level	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dB/m	dB	dB	dBuV	dBuV/m	dBuV/m	dB	
1	2390.000	32.53	3.07	44.03	56.46	48.03	74.00	-25.97	Horizontal Peak
2 pp	2402.275	32.56	3.08	44.04	86.04	77.64	74.00	3.64	Horizontal Peak

Worse case mode:	GFSK		
Frequency: 2402MHz	Test channel: Lowest	Polarization: Vertical	Remark: Peak



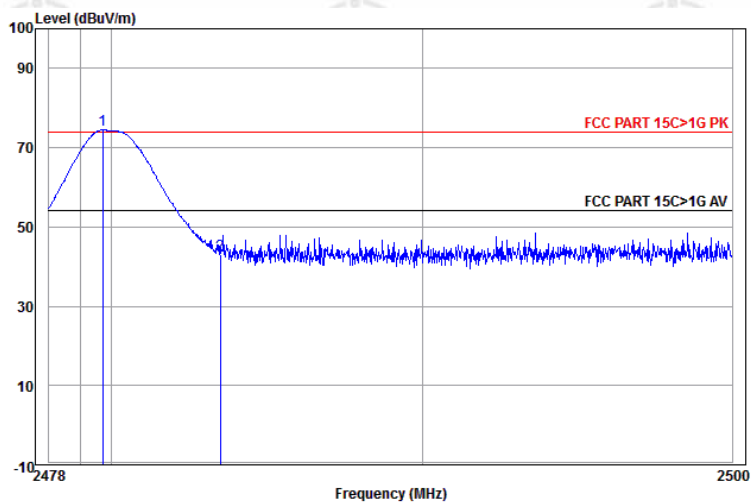
	Ant Freq	Cable Factor	Preamp Loss	Read Level	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dB/m	dB	dB	dBuV	dBuV/m	dBuV/m	dB	
1	2390.000	32.53	3.07	44.03	55.66	47.23	74.00	-26.77	Vertical Peak
2 pp	2402.275	32.56	3.08	44.04	86.46	78.06	74.00	4.06	Vertical Peak

Worse case mode:	GFSK		
Frequency: 2480MHz	Test channel: Highest	Polarization: Horizontal	Remark: Peak



	Ant Freq	Cable Factor	Preamp Loss	Read Level	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dB/m	dB	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	2479.753	32.71	3.12	44.14	81.61	73.30	74.00	-0.70	Horizontal Peak
2	2483.500	32.71	3.12	44.14	53.76	45.45	74.00	-28.55	Horizontal Peak

Worse case mode:	GFSK		
Frequency: 2480MHz	Test channel: Highest	Polarization: Vertical	Remark: Peak



	Ant Freq	Cable Factor	Preamp Loss	Read Level	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dB/m	dB	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	2479.731	32.71	3.12	44.14	82.85	74.54	74.00	0.54	Vertical Peak
2	2483.500	32.71	3.12	44.14	51.44	43.13	74.00	-30.87	Vertical Peak

**Note:**

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

Final Test Level = Receiver Reading - Correct Factor

Correct Factor = Pre-amplifier Factor - Antenna Factor - Cable Factor

## Appendix H): Radiated Spurious Emissions

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 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 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:**

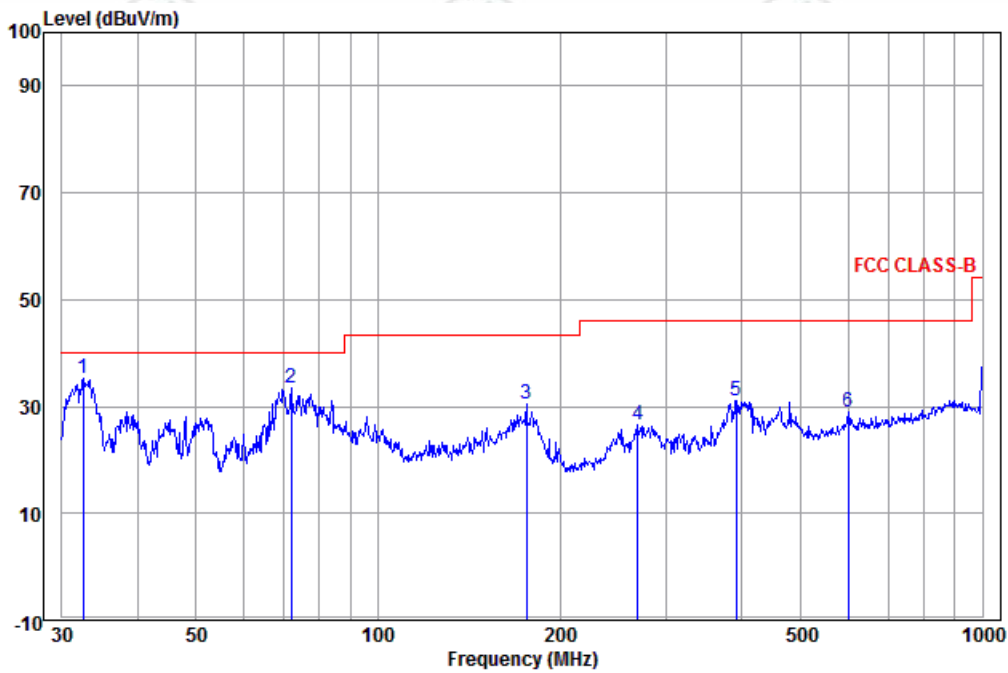
- Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 meter to 1.5 meter( Above 18GHz the distance is 1 meter and table is 1.5 meter).
- Test the EUT in the lowest channel ,the middle channel ,the Highest channel
- The radiation 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:	Frequency	Field strength (microvolt/meter)	Limit (dB $\mu$ 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.

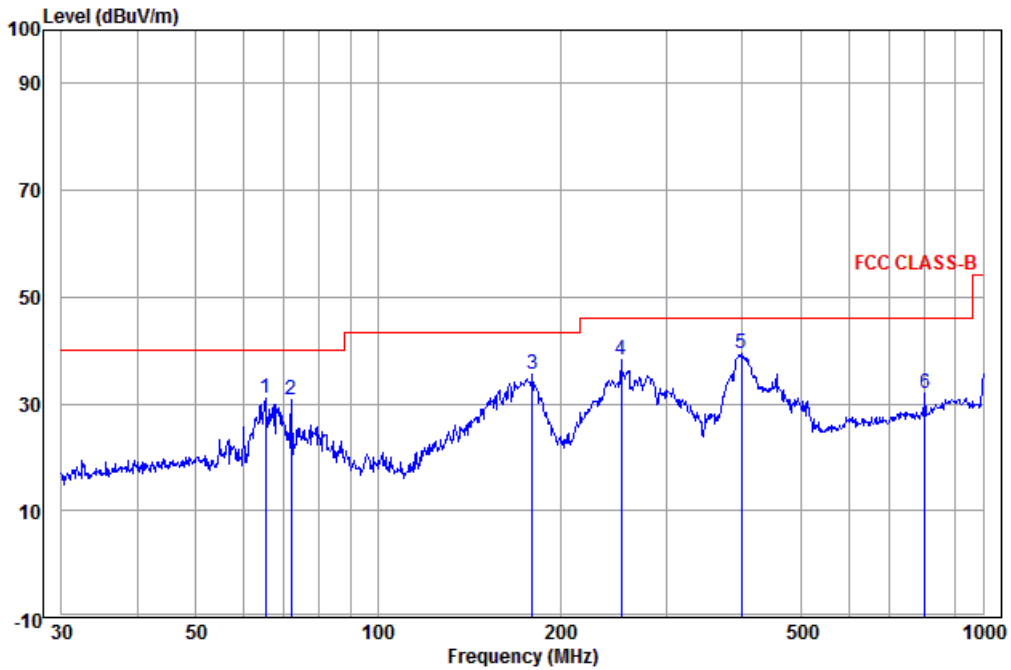
**Radiated Spurious Emissions test Data:  
Radiated Emission below 1GHz**

30MHz~1GHz (QP)		
Test mode:	Transmitting	Vertical



	Ant Freq	Cable Factor	Cable Loss	Read Level	Limit Level	Over Limit	Pol/Phase	Remark
	MHz	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	32.520	12.43	0.08	22.83	35.34	40.00	-4.66	Vertical QP
2	71.832	10.05	0.28	23.05	33.38	40.00	-6.62	Vertical QP
3	176.269	10.31	0.88	19.15	30.34	43.50	-13.16	Vertical QP
4	269.428	12.93	1.23	12.41	26.57	46.00	-19.43	Vertical QP
5	392.095	15.08	1.32	14.70	31.10	46.00	-14.90	Vertical QP
6	599.321	18.69	1.83	8.31	28.83	46.00	-17.17	Vertical QP

Test mode:	Transmitting	Horizontal
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	Ant Freq	Ant Factor	Cable Loss	Read Level	Limit Level	Over Limit	Pol/Phase	Remark
	MHz	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	65.114	11.67	0.23	19.06	30.96	40.00	-9.04	Horizontal QP
2	71.832	10.05	0.28	20.46	30.79	40.00	-9.21	Horizontal QP
3	180.017	10.51	0.92	24.23	35.66	43.50	-7.84	Horizontal QP
4	252.063	12.64	1.33	24.33	38.30	46.00	-7.70	Horizontal QP
5 pp	399.030	15.19	1.32	22.92	39.43	46.00	-6.57	Horizontal QP
6	801.786	19.86	2.46	9.56	31.88	46.00	-14.12	Horizontal QP

**Transmitter Emission above 1GHz**

Worse case mode:		GFSK(DH5)		Test channel:		Lowest	Remark: Peak		
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dB $\mu$ V)	Level (dB $\mu$ V/m)	Limit Line (dB $\mu$ V/m)	Over Limit (dB)	Result	Antenna Polaxis
1263.883	30.38	1.96	44.29	48.72	36.77	74.00	-37.23	Pass	H
1525.860	30.92	2.32	43.97	49.57	38.84	74.00	-35.16	Pass	H
4804.000	34.69	5.98	44.60	54.09	50.16	74.00	-23.84	Pass	H
6063.190	35.93	7.42	44.51	48.69	47.53	74.00	-26.47	Pass	H
7206.000	36.42	6.97	44.77	47.71	46.33	74.00	-27.67	Pass	H
9608.000	37.88	6.98	45.58	45.67	44.95	74.00	-29.05	Pass	H
1260.670	30.37	1.95	44.30	48.99	37.01	74.00	-36.99	Pass	V
1823.477	31.43	2.66	43.66	49.17	39.60	74.00	-34.40	Pass	V
4804.000	34.69	5.98	44.60	50.95	47.02	74.00	-26.98	Pass	V
6078.644	35.94	7.42	44.51	48.86	47.71	74.00	-26.29	Pass	V
7206.000	36.42	6.97	44.77	47.63	46.25	74.00	-27.75	Pass	V
9608.000	37.88	6.98	45.58	46.21	45.49	74.00	-28.51	Pass	V

Worse case mode:		GFSK(DH5)		Test channel:		Middle	Remark: Peak		
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dB $\mu$ V)	Level (dB $\mu$ V/m)	Limit Line (dB $\mu$ V/m)	Over Limit (dB)	Result	Antenna Polaxis
1273.572	30.40	1.97	44.28	48.98	37.07	74.00	-36.93	Pass	H
1773.127	31.35	2.61	43.71	47.73	37.98	74.00	-36.02	Pass	H
4880.000	34.85	6.13	44.60	52.94	49.32	74.00	-24.68	Pass	H
6461.583	36.14	7.32	44.55	49.26	48.17	74.00	-25.83	Pass	H
7320.000	36.43	6.85	44.87	49.30	47.71	74.00	-26.29	Pass	H
9760.000	38.05	7.12	45.55	46.61	46.23	74.00	-27.77	Pass	H
1046.885	29.83	1.60	44.62	48.98	35.79	74.00	-38.21	Pass	V
1529.749	30.93	2.33	43.96	47.95	37.25	74.00	-36.75	Pass	V
4880.000	34.85	6.13	44.60	51.18	47.56	74.00	-26.44	Pass	V
6396.125	36.11	7.34	44.54	49.05	47.96	74.00	-26.04	Pass	V
7320.000	36.43	6.85	44.87	47.70	46.11	74.00	-27.89	Pass	V
9760.000	38.05	7.12	45.55	46.50	46.12	74.00	-27.88	Pass	V

Worse case mode:		GFSK(DH5)		Test channel:		Highest	Remark: Peak		
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Result	Antenna Polaxis
1173.943	30.16	1.82	44.42	48.34	35.90	74.00	-38.10	Pass	H
1521.981	30.91	2.32	43.97	48.13	37.39	74.00	-36.61	Pass	H
4960.000	35.02	6.29	44.60	51.59	48.30	74.00	-25.70	Pass	H
6561.030	36.19	7.30	44.56	48.59	47.52	74.00	-26.48	Pass	H
7440.000	36.45	6.73	44.97	47.67	45.88	74.00	-28.12	Pass	H
9920.000	38.22	7.26	45.52	46.33	46.29	74.00	-27.71	Pass	H
1225.860	30.29	1.90	44.35	48.84	36.68	74.00	-37.32	Pass	V
1755.164	31.32	2.59	43.73	48.82	39.00	74.00	-35.00	Pass	V
4960.000	35.02	6.29	44.60	48.35	45.06	74.00	-28.94	Pass	V
5850.919	35.79	7.29	44.51	49.07	47.64	74.00	-26.36	Pass	V
7440.000	36.45	6.73	44.97	46.93	45.14	74.00	-28.86	Pass	V
9920.000	38.22	7.26	45.52	46.54	46.50	74.00	-27.50	Pass	V

**Note:**

1) 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

2) Scan from 9kHz to 25GHz, the disturbance above 13GHz and 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.

## PHOTOGRAPHS OF TEST SETUP

Test model No.: G-427B



**Radiated spurious emission Test Setup-1(Below 1GHz)**

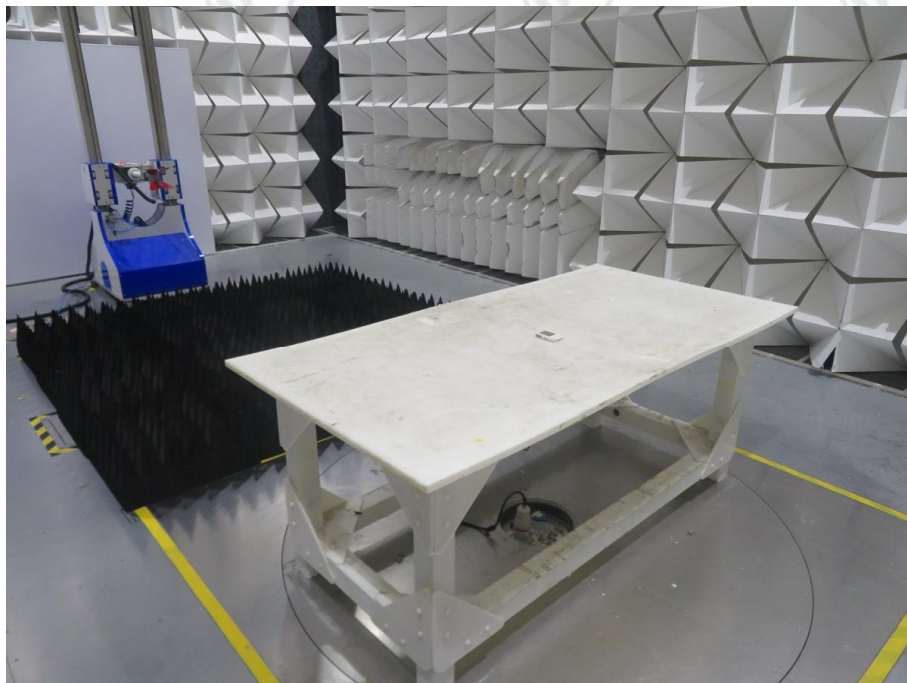


**Radiated spurious emission Test Setup-2(Above 1GHz)**





**Radiated emission Test Setup-3(Below 1GHz)**



**Radiated emission Test Setup-4(Above 1GHz)**



**Radiated emission Test Setup-5(Below 30M)**



**close-up Test Setup**

## PHOTOGRAPHS OF EUT Constructional Details

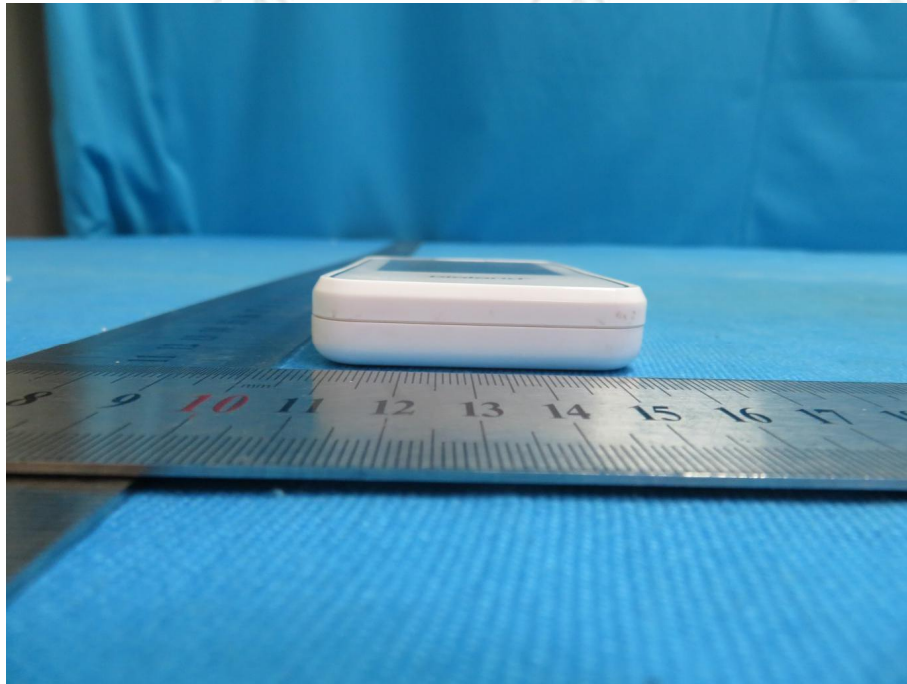
Test model No.: G-427B



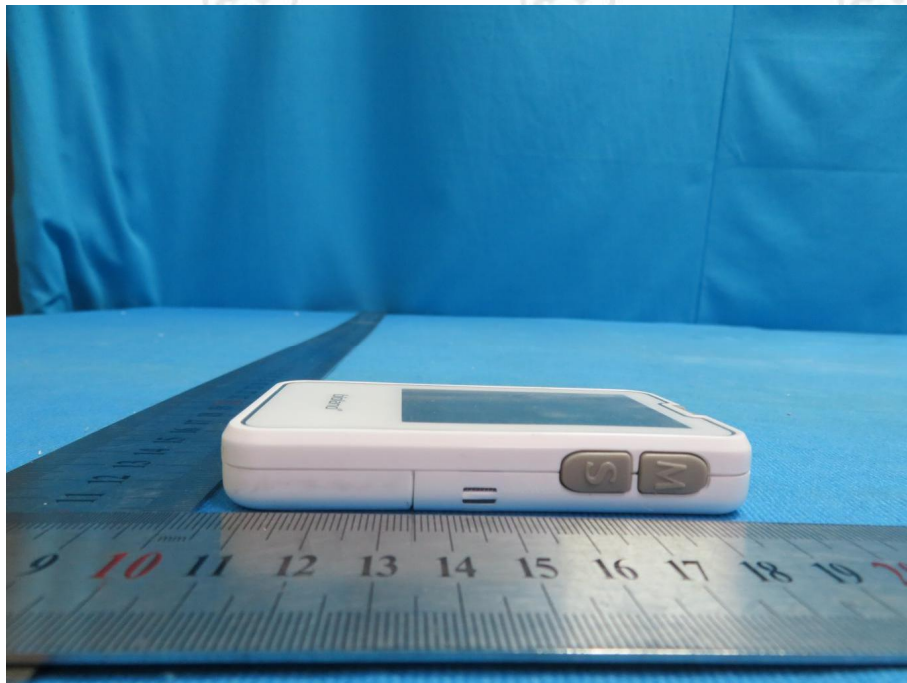
View of Product-1



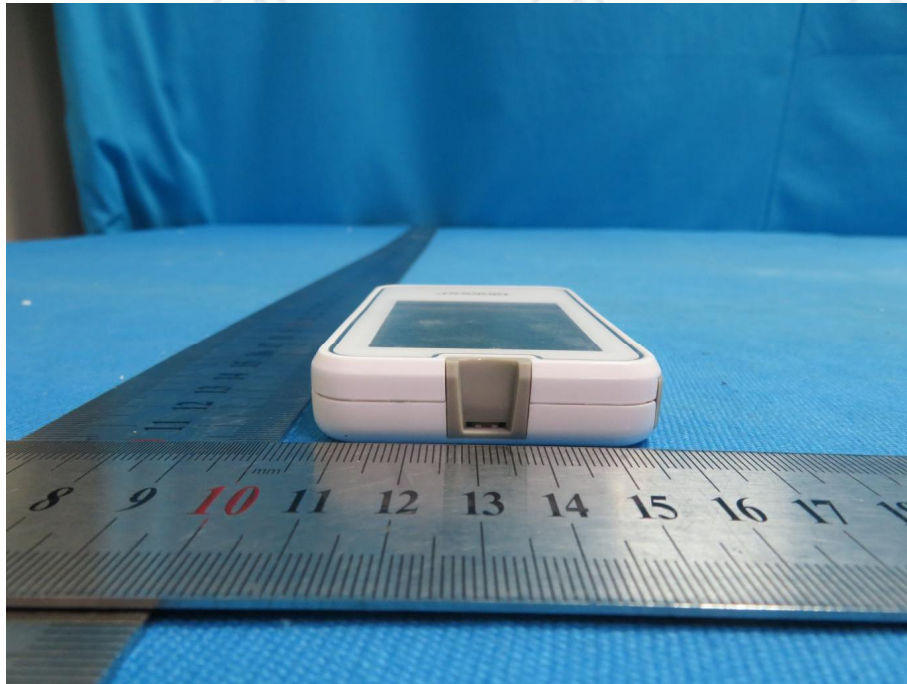
View of Product-2



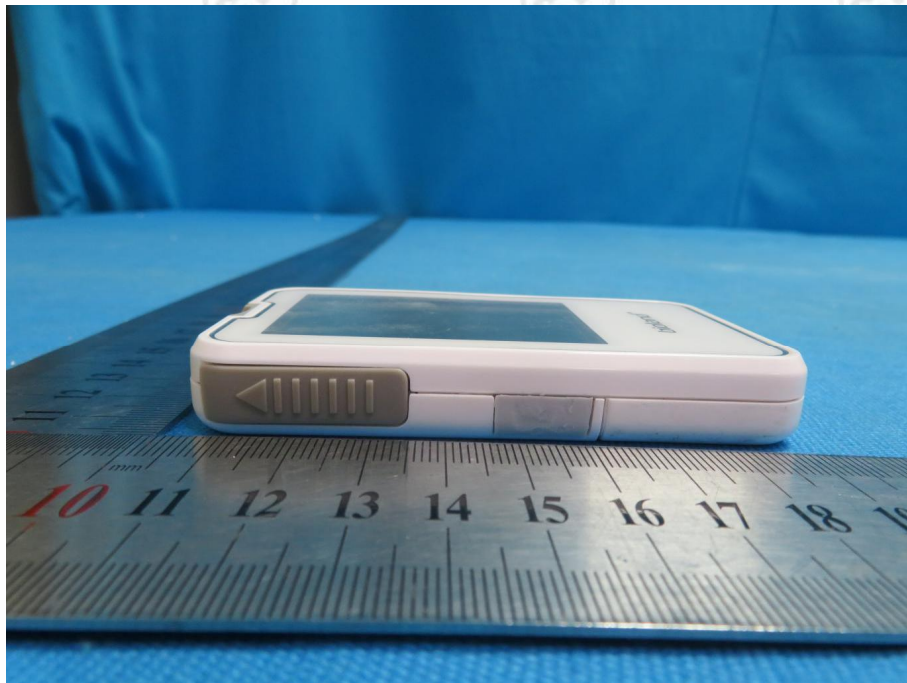
View of Product-3



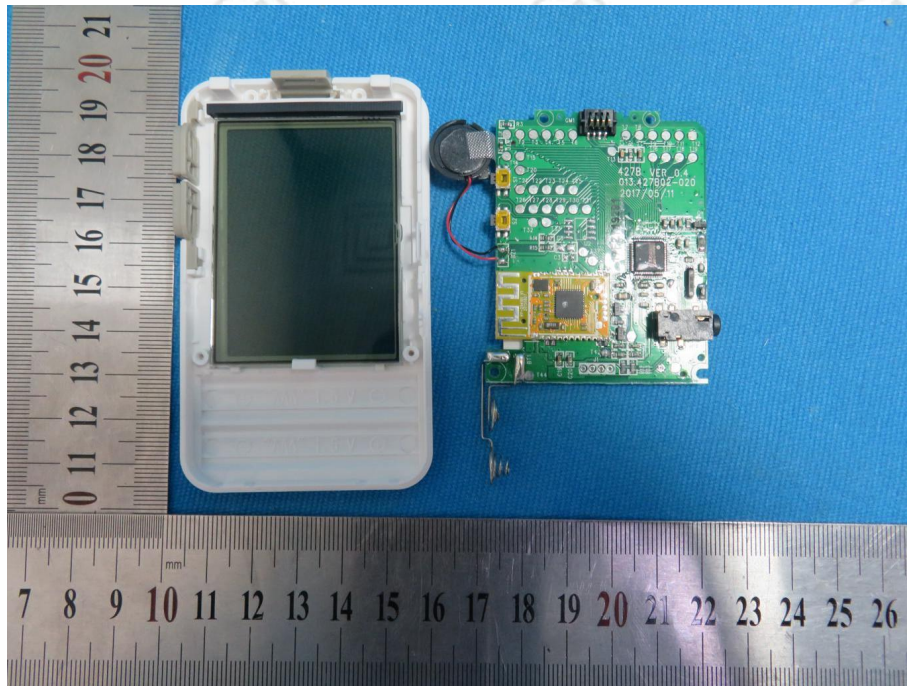
View of Product-4



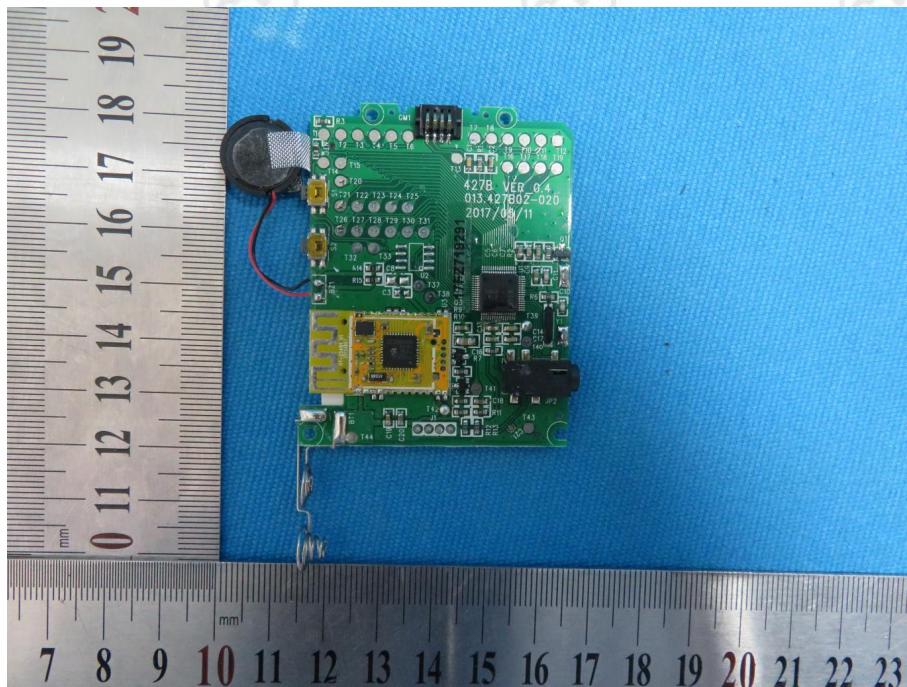
View of Product-5



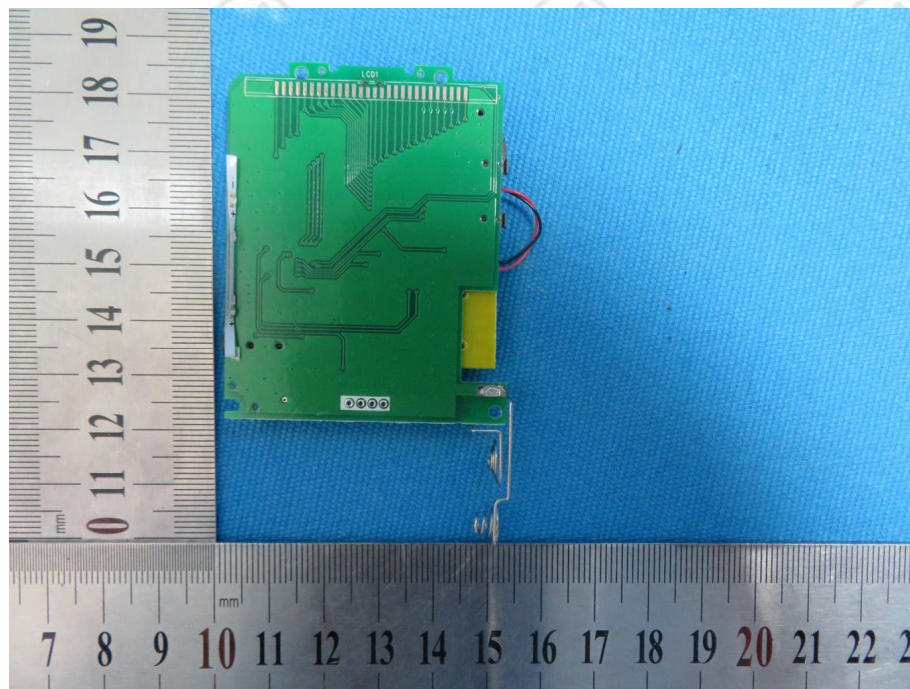
View of Product-6



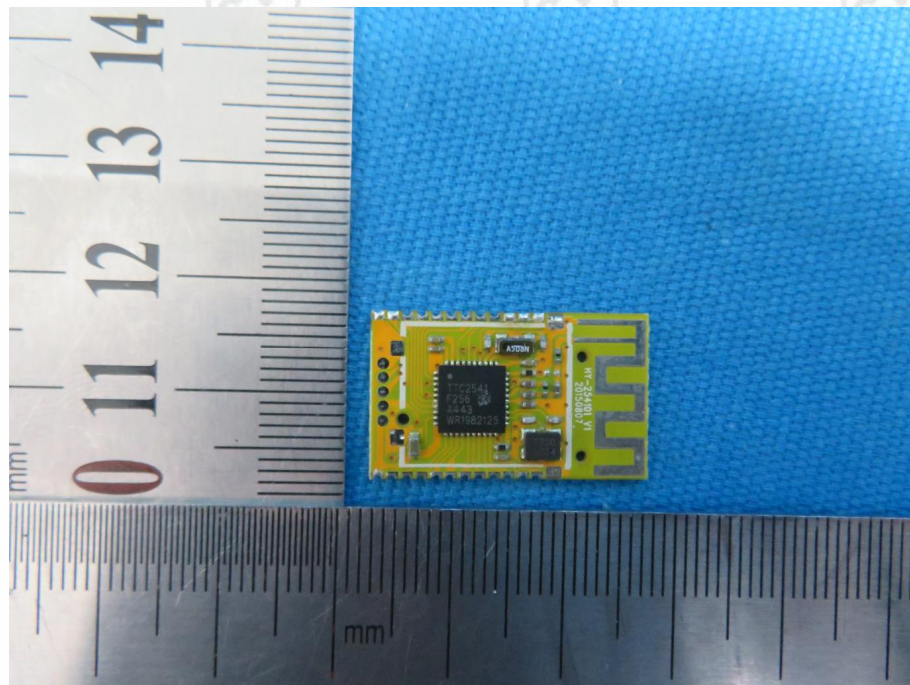
View of Product-7



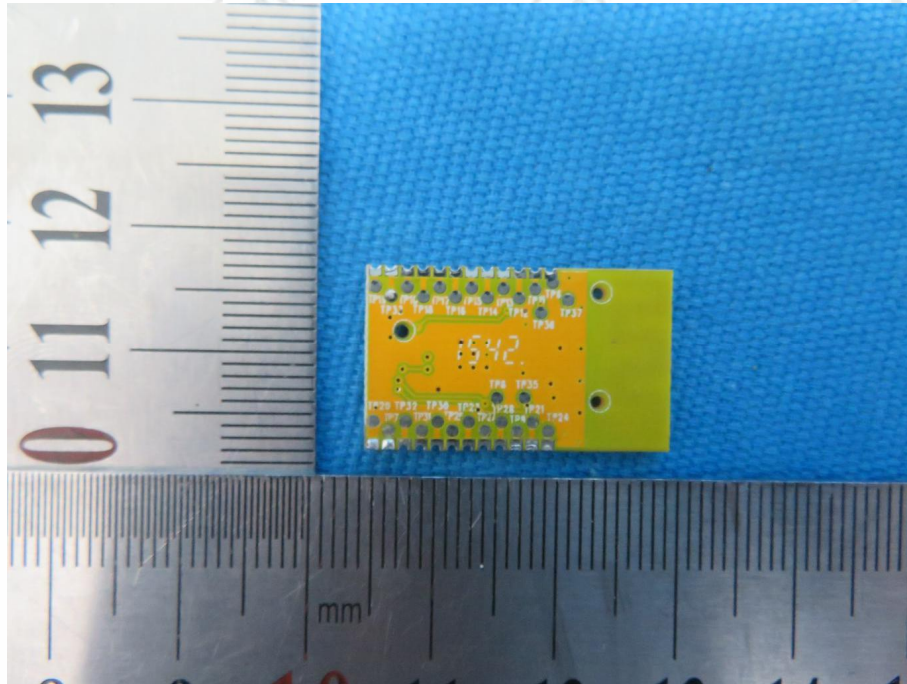
View of Product-8



View of Product-9



View of Product-10



View of Product-11

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

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