

# RF MEASUREMENT REPORT

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**FCC ID:** 2AQ8LPPA1  
**Applicant:** Parsyl  
**Product:** Parsyl Passport  
**Model No.:** PPA1  
**Brand Name:** Parsyl  
**FCC Classification:** Digital Transmission System (DTS)  
**FCC Rule Part(s):** Part 15 Subpart C (Section 15.247)  
**Result:** Complies  
**Test Date:** 2022-06-10 ~ 2022-06-15

**Reviewed By:**

\_\_\_\_\_  
Sunny Sun

**Approved By:**

\_\_\_\_\_  
Robin Wu



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.10-2013. Test results reported herein relate only to the item(s) tested.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

**Revision History**

Report No.	Version	Description	Issue Date	Note
2203RSU047-U2	Rev. 01	Initial Report	2022-07-31	Valid

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**1. General Information**

**1.1. Applicant**

Parsyl  
2825 Larimer Street, Denver CO 80205 USA


**1.2. Manufacturer**

Parsyl  
2825 Larimer Street, Denver CO 80205 USA

**1.3. Testing Facility**

<input checked="checked" type="checkbox"/>	<p><b>Test Site – MRT Suzhou Laboratory</b></p> <hr/> <p><b>Laboratory Location (Suzhou - Wuzhong)</b> D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China</p> <p><b>Laboratory Location (Suzhou - SIP)</b> 4b Building, Liando U Valley, No.200 Xingpu Rd., Shengpu Town, Suzhou Industrial Park, China</p> <hr/> <p><b>Laboratory Accreditations</b></p> <p>A2LA: 3628.01 <span style="float: right;">CNAS: L10551</span></p> <p>FCC: CN1166 <span style="float: right;">ISED: CN0001</span></p> <p>VCCI: <input type="checkbox"/>R-20025 <input type="checkbox"/>G-20034 <input type="checkbox"/>C-20020 <input type="checkbox"/>T-20020  <input type="checkbox"/>R-20141 <input type="checkbox"/>G-20134 <input type="checkbox"/>C-20103 <input type="checkbox"/>T-20104</p>
<input type="checkbox"/>	<p><b>Test Site – MRT Shenzhen Laboratory</b></p> <hr/> <p><b>Laboratory Location (Shenzhen)</b> 1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, China</p> <hr/> <p><b>Laboratory Accreditations</b></p> <p>A2LA: 3628.02 <span style="float: right;">CNAS: L10551</span></p> <p>FCC: CN1284 <span style="float: right;">ISED: CN0105</span></p>
<input type="checkbox"/>	<p><b>Test Site – MRT Taiwan Laboratory</b></p> <hr/> <p><b>Laboratory Location (Taiwan)</b> No. 38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)</p> <hr/> <p><b>Laboratory Accreditations</b></p> <p>TAF: L3261-190725</p> <p>FCC: 291082, TW3261 <span style="float: right;">ISED: TW3261</span></p>

#### 1.4. Product Information

Product Name	Parsyl Passport
Model No.	PPA1
IMEI	864200052679751; 864200052648236
GSM Specification	GSM850, PCS1900
Cat M Specification	Band 2, 4, 5, 12, 13, 25, 26, 66
NB-IoT Specification	Band 2, 4, 5, 12, 13, 25, 66, 71
Wi-Fi Specification	802.11b/g/n
Bluetooth Specification	v5.0 single mode for BLE only
Antenna Information	Refer to section 1.6
Operating Temperature	-30°C ~ +55°C
Accessories	
AC/DC Adapter	Model: MKE-1202000DEXD Input: 100-240V ~ 50/60Hz, 0.8A Output: 12.0V  2A, 24W
Integrated License Modular Information	
Manufacturer	Quectel Wireless Solutions Co., Ltd
FCC ID	XMR201910BG95M3
Model No.	BG95-M3
Integrated Wi-Fi Modular Information	
Manufacturer	ESPRESSIF SYSTEMS (SHANGHAI) PTE LTD
FCC ID	2AC7Z-ESPWROOM32
Model No.	ESP-WROOM-32
Remark:	
1. The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer.	

#### 1.5. Radio Specification under Test

Bluetooth Frequency	2402 ~ 2480MHz
Channel Number	40
Type of modulation	GFSK
Data Rate	1Mbps, 2Mbps

### 1.6. Antennas Details

Radio Spec.	Antenna Type	Frequency Band (MHz)	Antenna Gain (dBi)
2.4G Wi-Fi	PCB Antenna	2400 ~ 2483.5	2
Bluetooth	Dipole Antenna	2400 ~ 2483.5	2.5
CAT M / NB-IoT Band 2/25	Dipole Antenna	1850 ~ 1915	2.8
CAT M / NB-IoT Band 4/66	Dipole Antenna	1710 ~ 1780	0.4
CAT M / NB-IoT / GSM Band 5	Dipole Antenna	824 ~ 849	-0.2
CAT M Band 26	Dipole Antenna	814 ~ 849	-0.2
CAT M / NB-IoT Band 12	Dipole Antenna	699 ~ 716	-4.5
CAT M / NB-IoT Band 13	Dipole Antenna	746 ~ 756	-4.5
NB-IoT Band 71	Dipole Antenna	617 ~ 652	-4.5

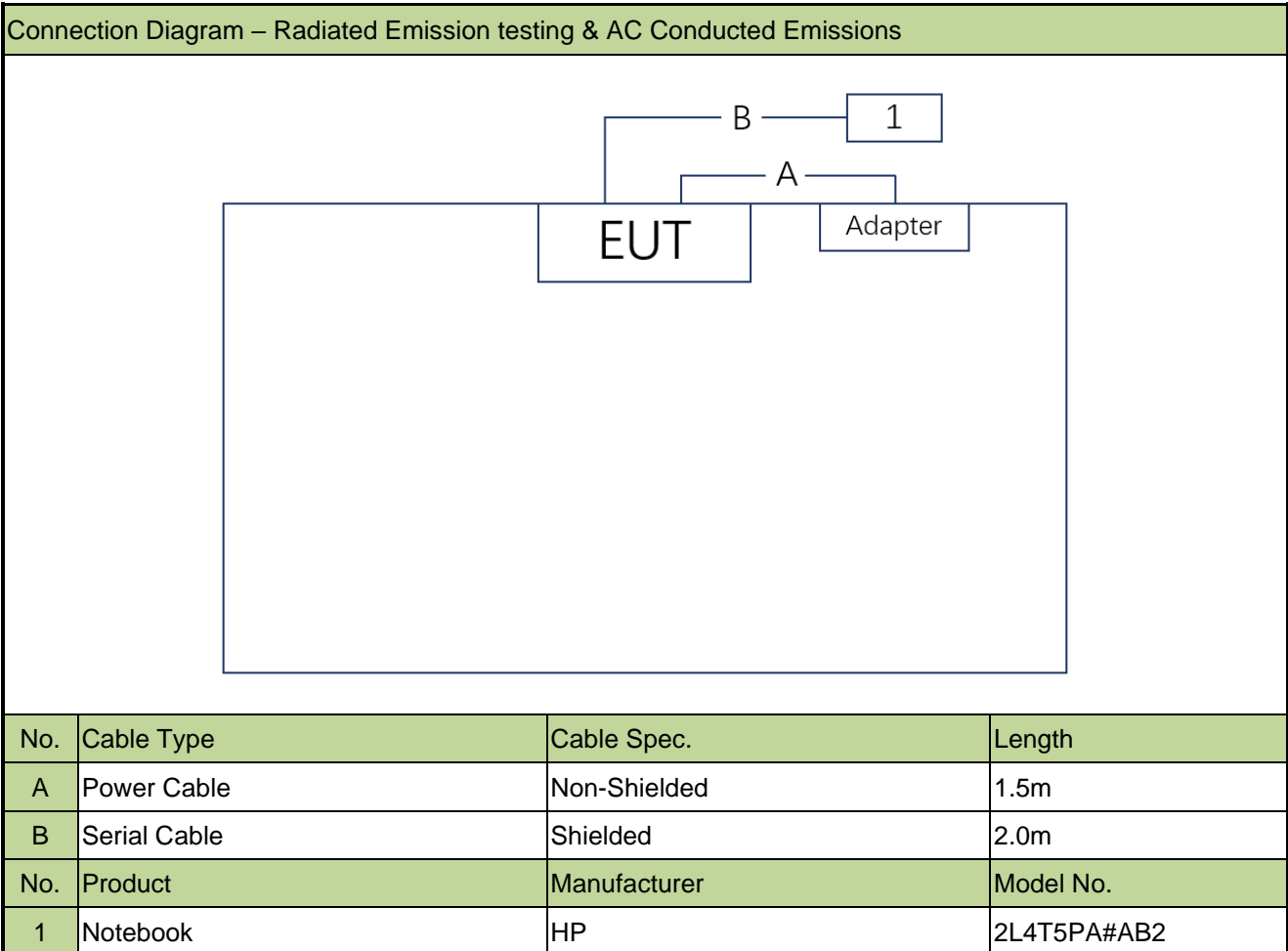
### 1.7. Working Frequencies

Channel	Frequency	Channel	Frequency	Channel	Frequency
00	2402 MHz	01	2404 MHz	02	2406 MHz
03	2408 MHz	04	2410 MHz	05	2412 MHz
06	2414 MHz	07	2416 MHz	08	2418 MHz
09	2420 MHz	10	2422 MHz	11	2424 MHz
12	2426 MHz	13	2428 MHz	14	2430 MHz
15	2432 MHz	16	2434 MHz	17	2436 MHz
18	2438 MHz	19	2440 MHz	20	2442 MHz
21	2444 MHz	22	2446 MHz	23	2448 MHz
24	2450 MHz	25	2452 MHz	26	2454 MHz
27	2456 MHz	28	2458 MHz	29	2460 MHz
30	2462 MHz	31	2464 MHz	32	2466 MHz
33	2468 MHz	34	2470 MHz	35	2472 MHz
36	2474 MHz	37	2476 MHz	38	2478 MHz
39	2480 MHz	--	--	--	--

## 2. Test Configuration

### 2.1. Test System Connection Diagram

The device was tested per the guidance ANSI C63.10-2013 was used to reference the appropriate EUT setup for radiated emissions testing and AC line conducted testing.



### 2.2. Test Software

The test utility software used during testing was “nRF Connect for Desktop”, and the version was v3.9.0.

### 2.3. Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15.247
- KDB 558074 D01v05r02
- ANSI C63.10-2013



**2.4. Test Environment Condition**

Ambient Temperature	15 ~ 35°C
Relative Humidity	20 ~75%RH

### 3. Antenna Requirements

**Excerpt from §15.203 of the FCC Rules/Regulations:**

“An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can 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 shall be considered sufficient to comply with the provisions of this section.”

**Conclusion:**

The unit complies with the requirement of §15.203.

#### 4. Measuring Instrument

Instrument	Manufacturer	Model No.	Asset No.	Cali. Interval	Cali. Due Date	Test Site
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2022-10-28	WZ-AC2
Horn Antenna	Schwarzbeck	BBHA 9170	MRTSUE06597	1 year	2022-12-01	WZ-AC2
TRILOG Antenna	Schwarzbeck	VULB 9162	MRTSUE06022	1 year	2023-05-20	WZ-AC2
EMI Test Receiver	Agilent	N9038A	MRTSUE06125	1 year	2023-06-04	WZ-AC2
Thermohygrometer	Mingle	ETH529	MRTSUE06170	1 year	2022-12-01	WZ-AC2
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06171	1 year	2022-10-21	WZ-AC2
Preamplifier	Schwarzbeck	BBV 9718	MRTSUE06176	1 year	2022-11-12	WZ-AC2
Anechoic Chamber	RIKEN	WZ-AC2	MRTSUE06213	1 year	2023-04-21	WZ-AC2
Thermohygrometer	testo	Testo 608-H1	MRTSUE11038	1 year	2022-11-11	WZ-AC2
Two-Line V-Network	R&S	ENV216	MRTSUE06002	1 year	2023-06-04	WZ-SR2
Shielding Room	MIX-BEP	WZ-SR2	MRTSUE06215	5 years	2026-12-20	WZ-SR2
Thermohygrometer	testo	608-H1	MRTSUE06404	1 year	2023-06-06	WZ-SR2
EMI Test Receiver	R&S	ESR3	MRTSUE06909	1 year	2022-11-01	WZ-SR2
USB Power Sensor	Keysight	U2021XA	MRTSUE06582	1 year	2022-08-08	WZ-SR5
Signal Analyzer	Agilent	N9020A	MRTSUE06106	1 year	2023-04-06	WZ-SR5
Thermohygrometer	testo	608-H1	MRTSUE06402	1 year	2023-06-06	WZ-SR5
Shielding Room	HUAMING	WZ-SR5	MRTSUE06442	N/A	N/A	WZ-SR5
Attenuator	MVE	MVE2213	MRTSUE11071	1 year	2023-06-09	WZ

Software	Version	Function
EMI V3	V 3.0.0	EMI Test Software
Controller_MF 7802	1.02	RE Antenna & turntable

## 5. Decision Rules and Measurement Uncertainty

### 5.1. Decision Rules

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4: 2012 Clause 8.2. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

### 5.2. Measurement Uncertainty

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k = 2$ .

<b>AC Conducted Emission Measurement</b>
Measurement Uncertainty for a Level of Confidence of 95% ( $U=2Uc(y)$ ): 9kHz~150kHz: 3.74dB 150kHz~30MHz: 3.44dB
<b>Radiated Disturbance</b>
Measurement Uncertainty for a Level of Confidence of 95% ( $U=2Uc(y)$ ): Horizontal: 30MHz~300MHz: 5.04dB 300MHz~1GHz: 4.95dB 1GHz~40GHz: 6.40dB Vertical: 30MHz~300MHz: 5.24dB 300MHz~1GHz: 6.03dB 1GHz~40GHz: 6.40dB
<b>Spurious Emissions, Conducted</b>
Measuring Uncertainty for a Level of Confidence of 95% ( $U=2Uc(y)$ ): 0.78dB
<b>Output Power</b>
Measuring Uncertainty for a Level of Confidence of 95% ( $U=2Uc(y)$ ): 1.13dB
<b>Power Spectrum Density</b>
Measuring Uncertainty for a Level of Confidence of 95% ( $U=2Uc(y)$ ): 1.15dB
<b>Occupied Bandwidth</b>
Measuring Uncertainty for a Level of Confidence of 95% ( $U=2Uc(y)$ ): 0.28%

## 6. Test Result

### 6.1. Summary

FCC Section(s)	Test Description	Test Condition	Verdict
15.247(a)(2)	6dB Bandwidth	Conducted	Pass
15.247(b)(3)	Output Power		Pass
15.247(e)	Power Spectral Density		Pass
15.247(d)	Band Edge / Out-of-Band Emissions		Pass
15.205 15.209	General Field Strength (Restricted Bands and Radiated Emission)	Radiated	Pass
15.207	AC Conducted Emissions 150kHz - 30MHz	Line Conducted	Pass

**Remark:**

1. The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
2. All modes of operation and data rates were investigated. For radiated emission tests, every axis (X, Y, Z) was also verified. The test results shown in the following sections represent the worst-case emissions.

## 6.2. 6dB Bandwidth Measurement

### 6.2.1. Test Limit

The minimum 6dB bandwidth shall be at least 500 kHz.

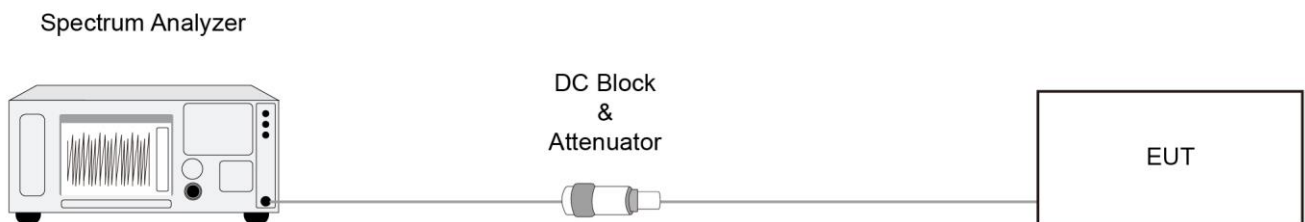
### 6.2.2. Test Procedure

ANSI C63.10-2013 - Section 11.8

### 6.2.3. Test Setting

1. The Spectrum's automatic bandwidth measurement capability was used to perform the 6dB bandwidth measurement. The "X" dB bandwidth parameter was set to  $X = 6$ . The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. Set RBW = 100 kHz
3. VBW  $\geq 3 \times$  RBW
4. Detector = Peak
5. Trace mode = Max hold
6. Sweep = Auto couple
7. Allow the trace to stabilize

### 6.2.4. Test Setup



### 6.2.5. Test Result

Refer to Appendix A.2.

### **6.3. Output Power Measurement**

#### **6.3.1. Test Limit**

The maximum output power shall be less 1 Watt (30dBm).

The conducted output power limit specified in paragraph FCC Part 15.247(b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. 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 FCC Part 15.247(b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### **6.3.2. Test Procedure**

ANSI C63.10-2013 - Section 11.9.1.3

ANSI C63.10-2013 - Section 11.9.2.3.2

#### **6.3.3. Test Setting**

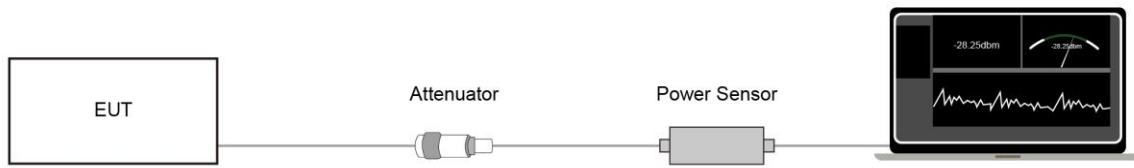
##### **Method PKPM1 (Peak Power Measurement of Signals with DTS BW $\leq$ 50MHz)**

Peak power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The pulse sensor employs a VBW = 50MHz so this method was only used for signals whose DTS bandwidth was less than or equal to 50MHz.

##### **Average Power Measurement**

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter.

### 6.3.4. Test Setup



### 6.3.5. Test Result

Refer to Appendix A.3.



## 6.4. Power Spectral Density Measurement

### 6.4.1. Test Limit

The maximum permissible power spectral density is 8dBm in any 3 kHz band.

The same method of determining the conducted output power shall be used to determine the power spectral density.

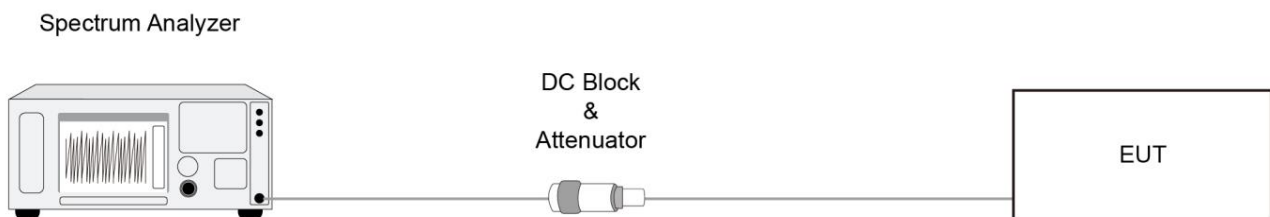
### 6.4.2. Test Procedure

ANSI C63.10-2013 Section 11.10.2

### 6.4.3. Test Setting

1. Analyzer was set to the center frequency of the DTS channel under investigation
2. Span = 1.5 times the DTS channel bandwidth
3. RBW = 3kHz
4. VBW = 10kHz
5. Detector = peak
6. Sweep time = auto couple
7. Trace mode = max hold
8. Trace was allowed to stabilize

### 6.4.4. Test Setup



### 6.4.5. Test Result

Refer to Appendix A.4.

## **6.5. Conducted Band Edge and Out-of-Band Emissions Measurement**

### **6.5.1. Test Limit**

The limit for out-of-band spurious emissions at the band edge is 20dB below the fundamental emission level, as determined from the in-band power measurement of the DTS channel performed in a 100 kHz bandwidth per the PSD procedure.

### **6.5.2. Test Procedure**

ANSI C63.10-2013 - Section 11.11

### **6.5.3. Test Setting**

#### **Reference level measurement**

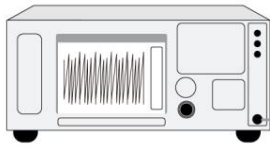
1. Set instrument center frequency to DTS channel center frequency
2. Set the span to  $\geq 1.5$  times the DTS bandwidth
3. Set the RBW = 100 kHz
4. Set the VBW  $\geq 3 \times$  RBW
5. Detector = Peak
6. Sweep time = auto couple
7. Trace mode = max hold
8. Allow trace to fully stabilize

#### **Emission level measurement**

1. Set the center frequency and span to encompass frequency range to be measured
2. RBW = 100kHz
3. VBW = 300kHz
4. Detector = Peak
5. Trace mode = max hold
6. Sweep time = auto couple
7. The trace was allowed to stabilize

#### 6.5.4. Test Setup

Spectrum Analyzer



DC Block  
&  
Attenuator



#### 6.5.5. Test Result

Refer to Appendix A.5.

## 6.6. Radiated Spurious Emission Measurement

### 6.6.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

### 6.6.2. Test Procedure

ANSI C63.10-2013 - Section 11.11 & 11.12

ANSI C63.10-2013 - Section 6.3 (General Requirements)

ANSI C63.10-2013 - Section 6.4 (Standard test method below 30MHz)

ANSI C63.10-2013 - Section 6.5 (Standard test method above 30MHz to 1GHz)

ANSI C63.10-2013 - Section 6.6 (Standard test method above 1GHz)

### 6.6.3. Test Setting

**Table 1 - RBW as a function of frequency**

Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000MHz	1MHz

**Quasi-Peak Measurements below 1GHz**

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = as specified in Table 1
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

**Peak Measurements above 1GHz**

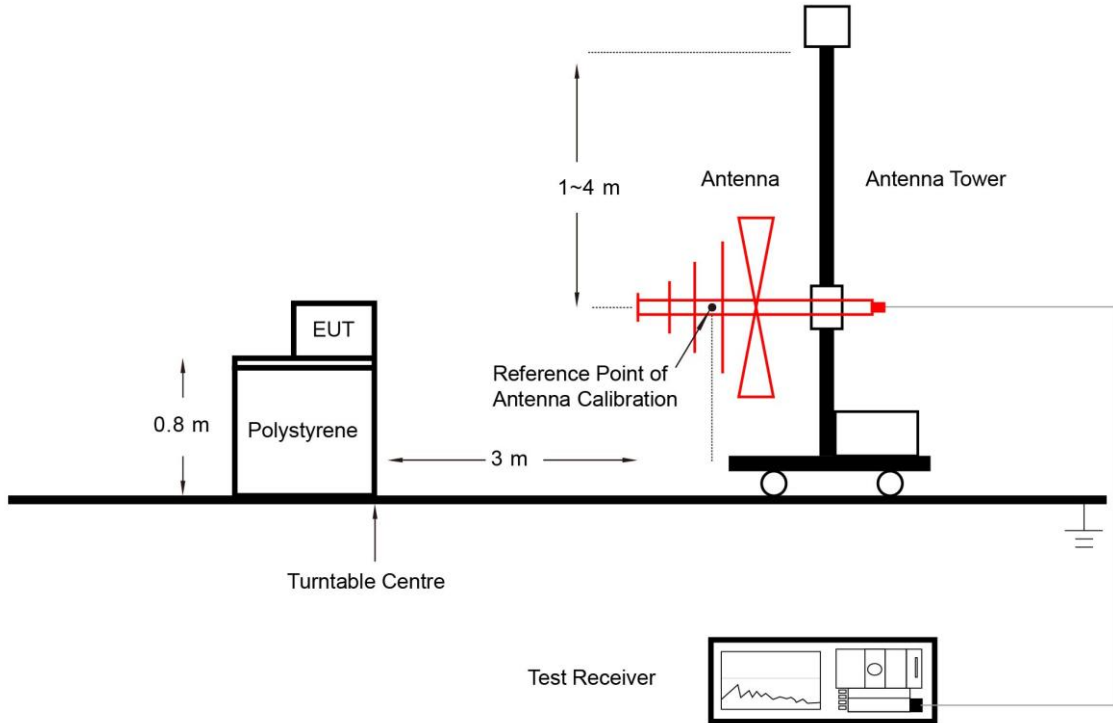
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

**Average Measurements above 1GHz (Method VB)**

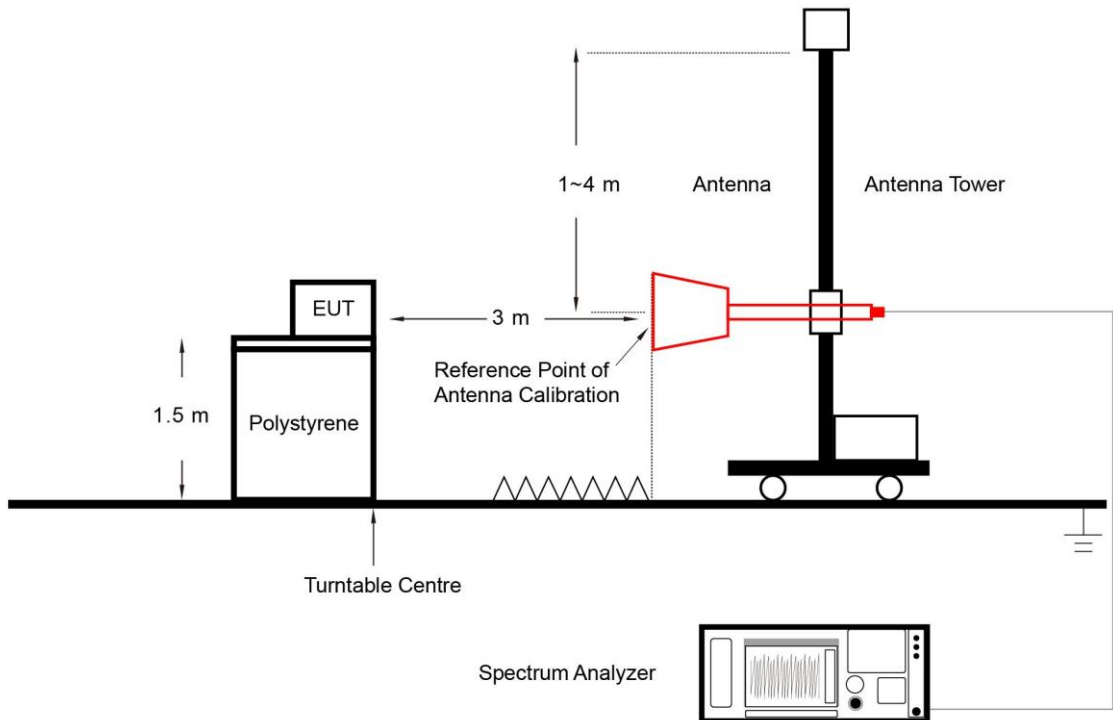
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle  $\geq 98\%$ , set VBW = 10 Hz.  
If the EUT duty cycle is  $< 98\%$ , set VBW  $\geq 1/T$ . T is the minimum transmission duration.
4. Detector = Peak
5. Sweep time = auto
6. Trace mode = max hold
7. Trace was allowed to stabilize

### 6.6.4. Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



### **6.6.5. Test Result**

Refer to Appendix A.6.

## 6.7. Radiated Restricted Band Edge Measurement

### 6.7.1. Test Limit

#### For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
<sup>1</sup> 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	( <sup>2</sup> )
13.36 - 13.41	--	--	--



All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

### 6.7.2. Test Procedure

ANSI C63.10-2013 Section 6.3, 6.6, 11.13

### 6.7.3. Test Setting

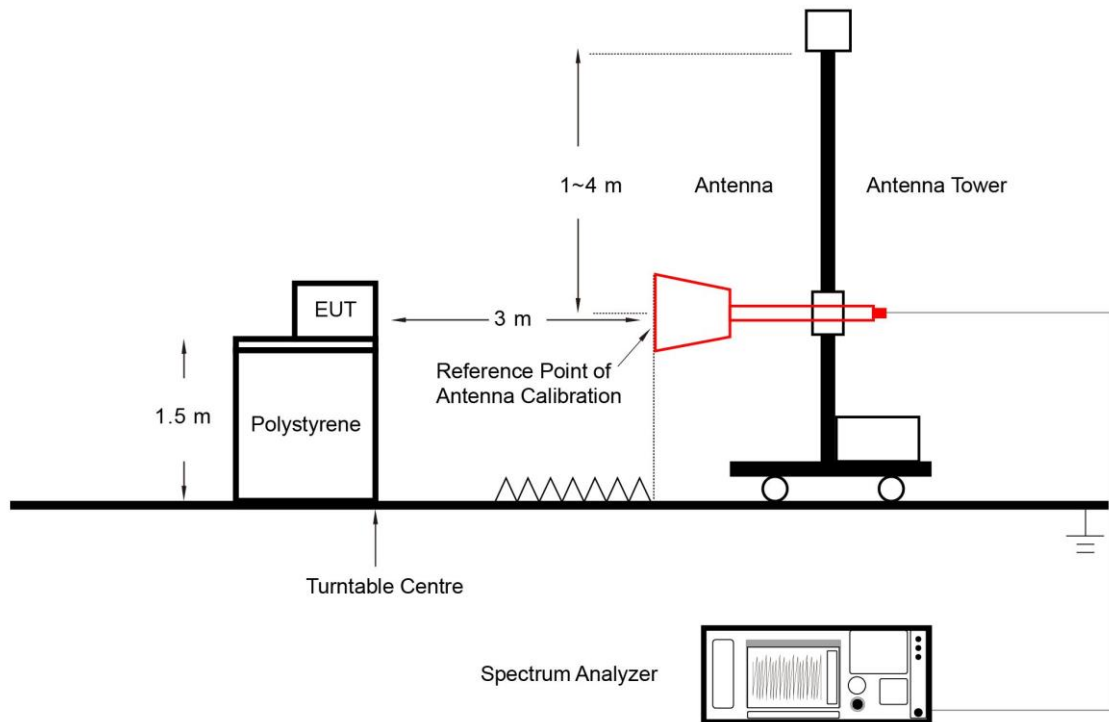
#### **Peak Field Strength Measurements**

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

#### **Average Field Strength Measurements**

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW  $\geq 1/T$
4. As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to "Voltage" regardless of the display mode
5. Detector = Peak
6. Sweep time = auto
7. Trace mode = max hold
8. Allow max hold to run for at least 50 times (1/duty cycle) traces

### 6.7.4. Test Setup



### 6.7.5. Test Result

Refer to Appendix A.7.

## 6.8. AC Conducted Emissions Measurement

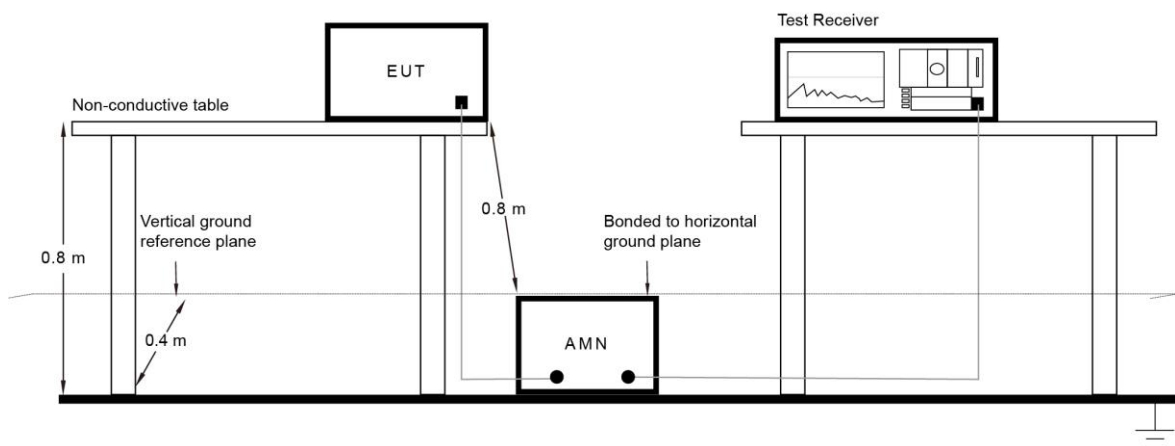
### 6.8.1. Test Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

### 6.8.2. Test Setup



### 6.8.3. Test Result

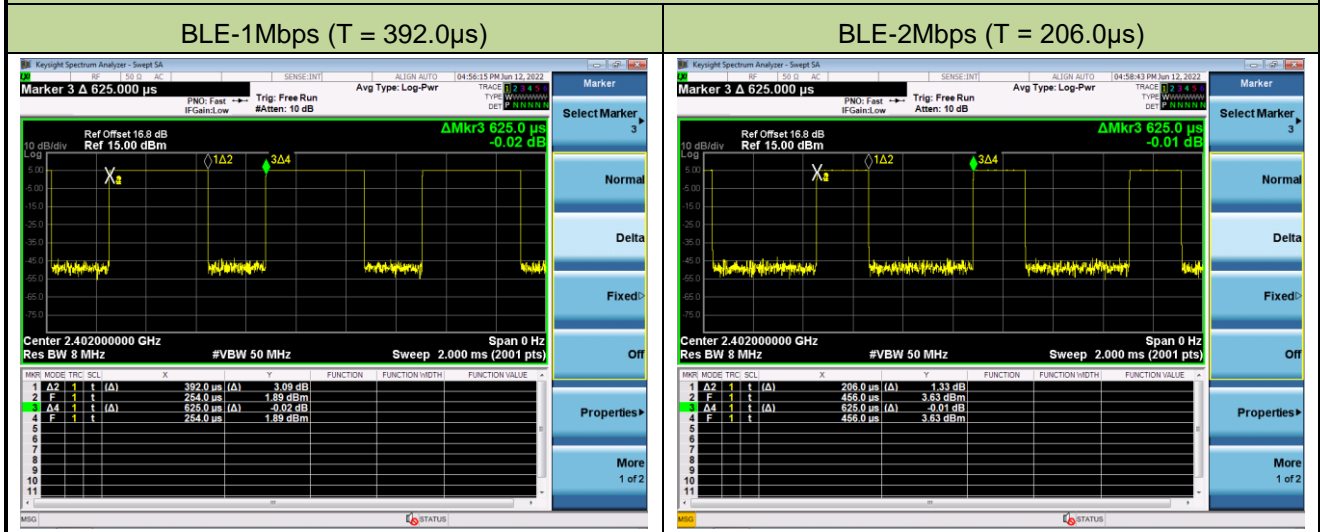
Refer to Appendix A.8.

## Appendix A - Test Result

### A.1 Duty Cycle Test Result

Test Site	WZ-SR5	Test Engineer	Bruce Wang
Test Date	2022-06-12		

Test Mode	Duty Cycle
BLE-1Mbps	62.72%
BLE-2Mbps	32.96%
Duty Cycle (T = Transmission Duration)	



**A.2 6dB Bandwidth Test Result**

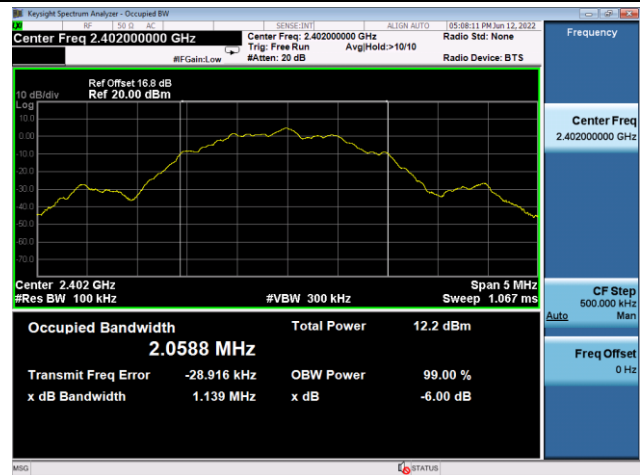
Test Site	WZ-SR5	Test Engineer	Bruce Wang
Test Date	2022-06-12		

Test Mode	Data Rate	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
BLE	1Mbps	00	2402	0.7127	≥ 0.5
BLE	1Mbps	19	2440	0.7173	≥ 0.5
BLE	1Mbps	39	2480	0.7272	≥ 0.5
BLE	2Mbps	00	2402	1.139	≥ 0.5
BLE	2Mbps	19	2440	1.137	≥ 0.5
BLE	2Mbps	39	2480	1.137	≥ 0.5



BLE-2Mbps 6dB Bandwidth

Channel 00 (2402MHz)



Channel 19 (2440MHz)



Channel 39 (2480MHz)



**A.3 Output Power Test Result**

Test Site	WZ-SR5	Test Engineer	Bruce Wang
Test Date	2022-06-12		

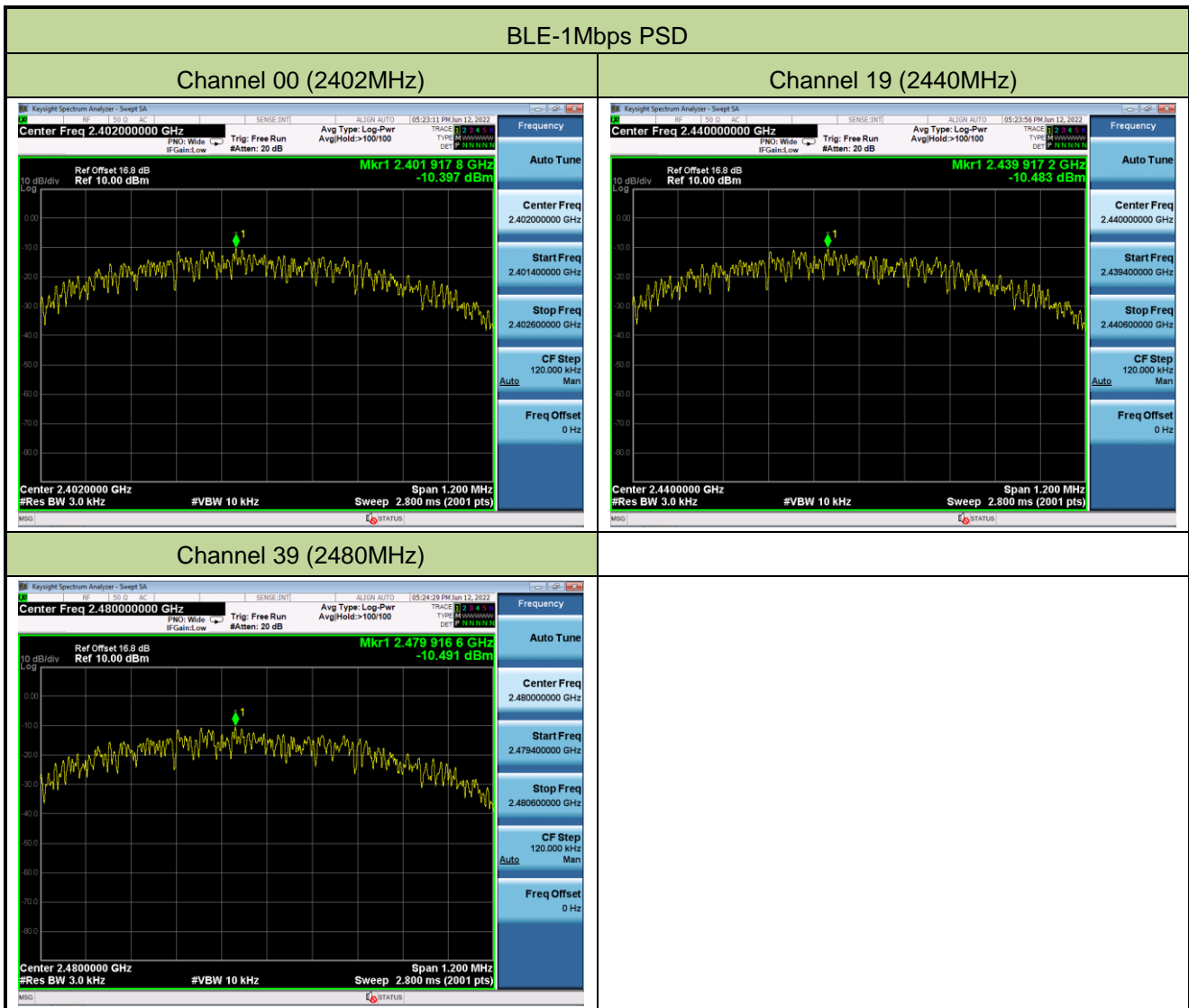
Test Mode	Data Rate	Channel No.	Frequency (MHz)	Peak Power (dBm)	Limit (dBm)	Result
<b>Peak Output Power</b>						
BLE	1Mbps	00	2402	4.88	≤ 30.00	Pass
BLE	1Mbps	19	2440	4.82	≤ 30.00	Pass
BLE	1Mbps	39	2480	4.88	≤ 30.00	Pass
BLE	2Mbps	00	2402	4.92	≤ 30.00	Pass
BLE	2Mbps	19	2440	4.85	≤ 30.00	Pass
BLE	2Mbps	39	2480	4.90	≤ 30.00	Pass
<b>Average Output Power (Reporting Only)</b>						
BLE	1Mbps	00	2402	4.80	≤ 30.00	Pass
BLE	1Mbps	19	2440	4.75	≤ 30.00	Pass
BLE	1Mbps	39	2480	4.80	≤ 30.00	Pass
BLE	2Mbps	00	2402	4.85	≤ 30.00	Pass
BLE	2Mbps	19	2440	4.78	≤ 30.00	Pass
BLE	2Mbps	39	2480	4.82	≤ 30.00	Pass

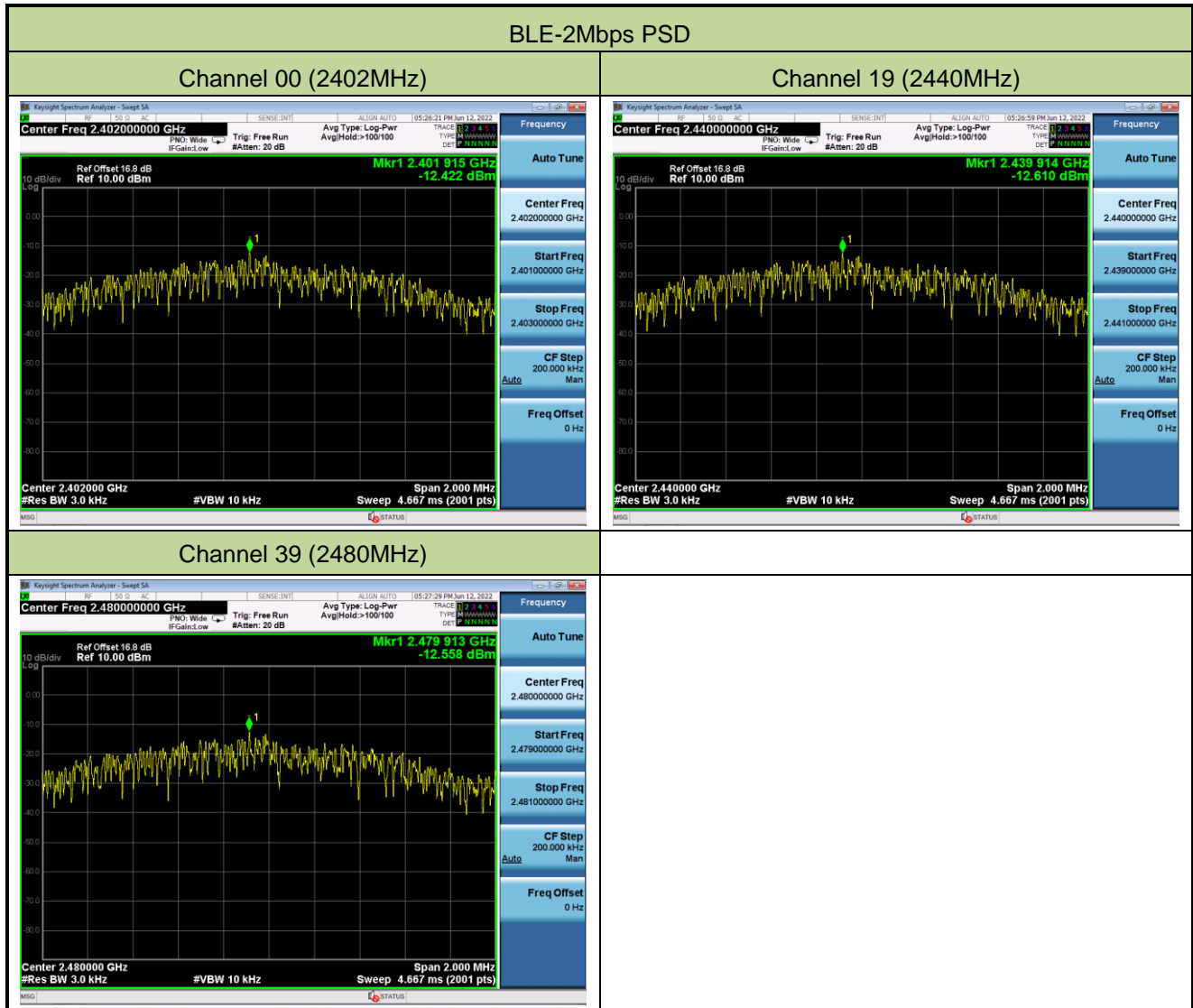


**A.4 Power Spectral Density Test Result**

Test Site	WZ-SR5	Test Engineer	Bruce Wang
Test Date	2022-06-12		

Test Mode	Data Rate	Channel No.	Frequency (MHz)	PSD Result (dBm / 3kHz)	Limit (dBm / 3kHz)	Result
BLE	1Mbps	00	2402	-10.397	≤ 8.00	Pass
BLE	1Mbps	19	2440	-10.483	≤ 8.00	Pass
BLE	1Mbps	39	2480	-10.491	≤ 8.00	Pass
BLE	2Mbps	00	2402	-12.422	≤ 8.00	Pass
BLE	2Mbps	19	2440	-12.610	≤ 8.00	Pass
BLE	2Mbps	39	2480	-12.558	≤ 8.00	Pass

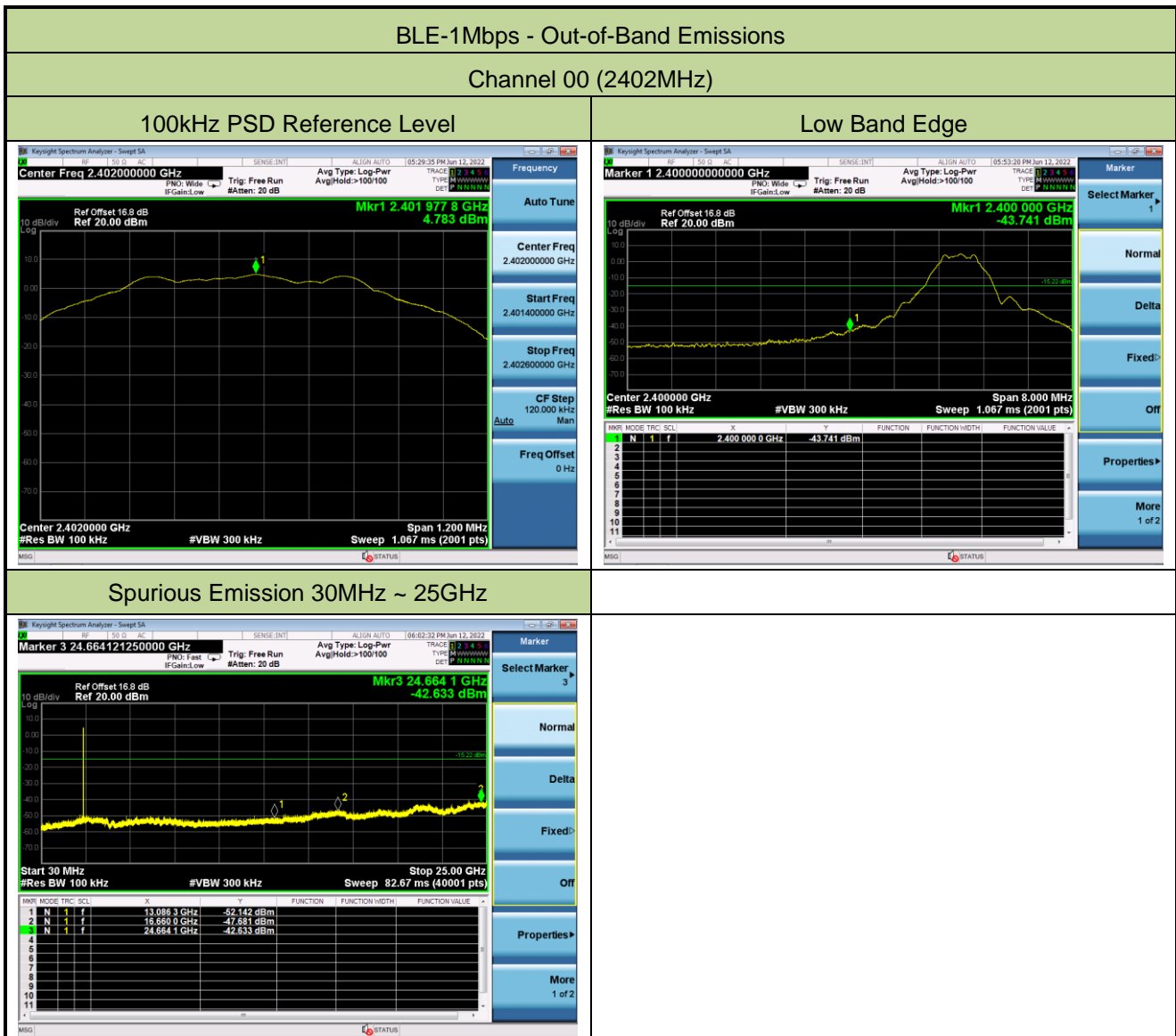




### A.5 Conducted Band Edge and Out-of-Band Emissions Test Result

Test Site	WZ-SR5	Test Engineer	Bruce Wang
Test Date	2022-06-12		

Test Mode	Data Rate / Mbps	Channel No.	Frequency (MHz)	Limit (dBc)	Result
BLE	1	00	2402	20	Pass
BLE	1	19	2440	20	Pass
BLE	1	39	2480	20	Pass
BLE	2	00	2402	20	Pass
BLE	2	19	2440	20	Pass
BLE	2	39	2480	20	Pass



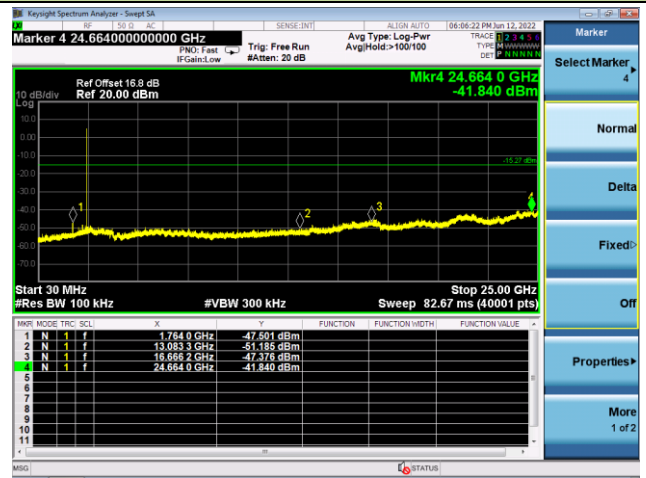
## BLE-1Mbps - Out-of-Band Emissions

## Channel 19 (2440MHz)

## 100kHz PSD Reference Level



## Spurious Emission 30MHz ~ 25GHz

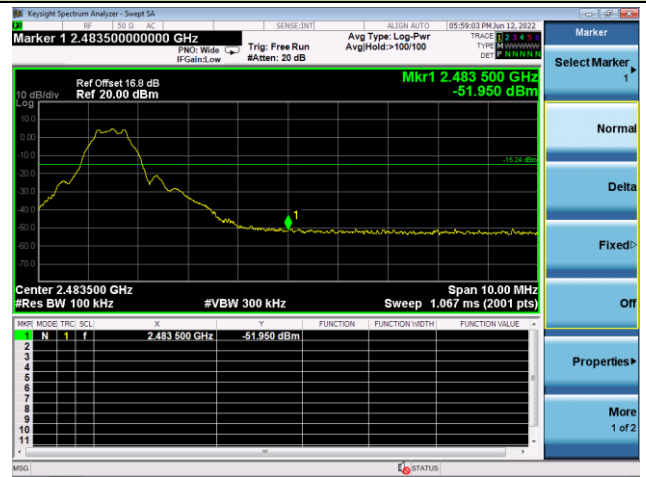


## Channel 39 (2480MHz)

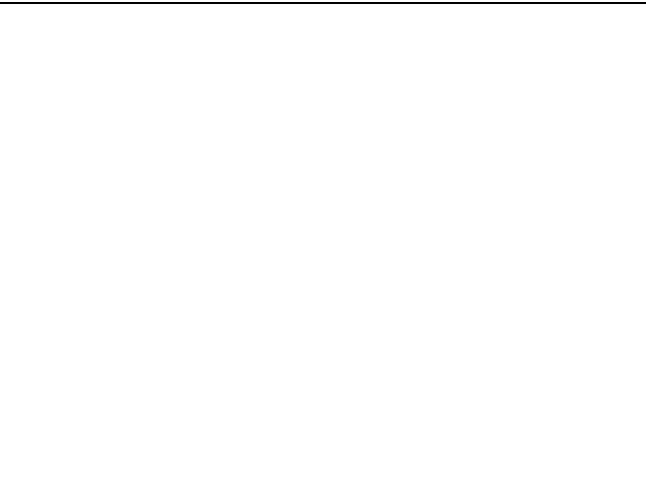
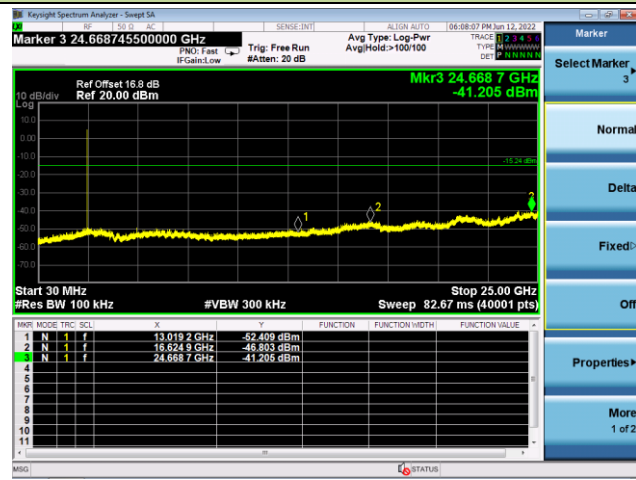
## 100kHz PSD Run Reference Level



## High Band Edge



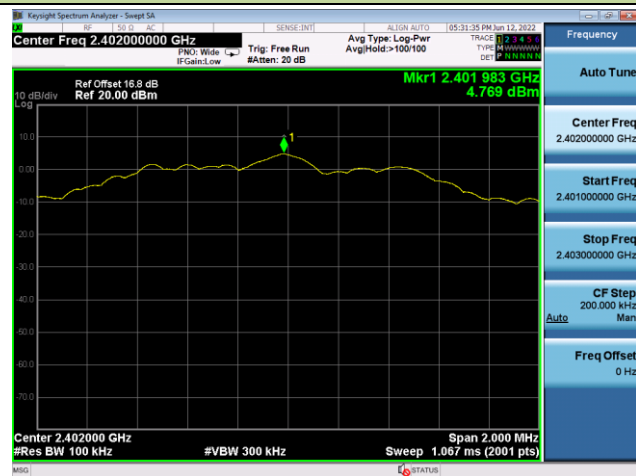
## Spurious Emission 30MHz ~ 25GHz



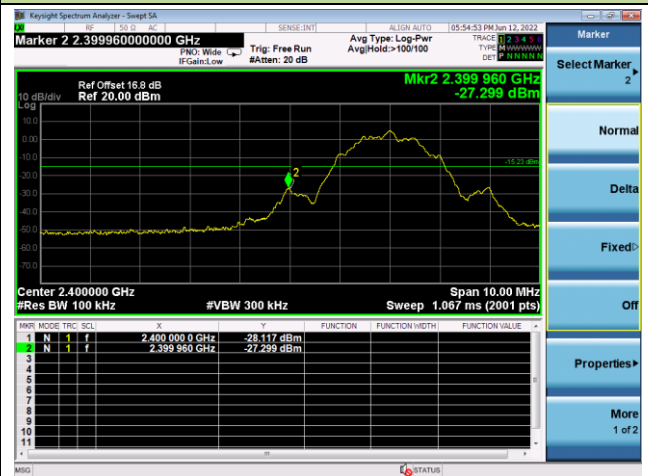
BLE-2Mbps - Out-of-Band Emissions

Channel 00 (2402MHz)

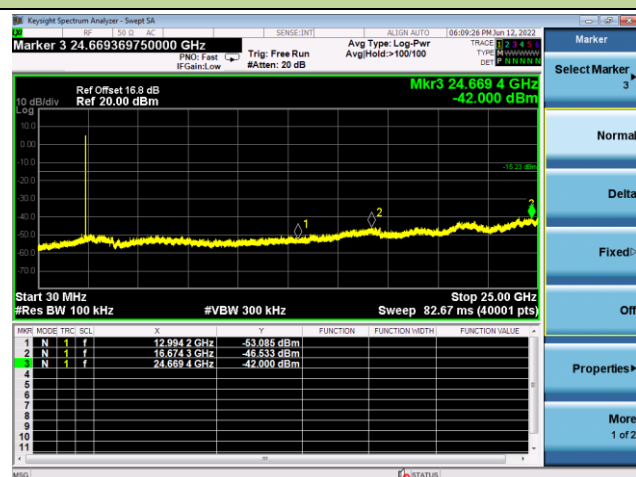
100kHz PSD Reference Level



Low Band Edge

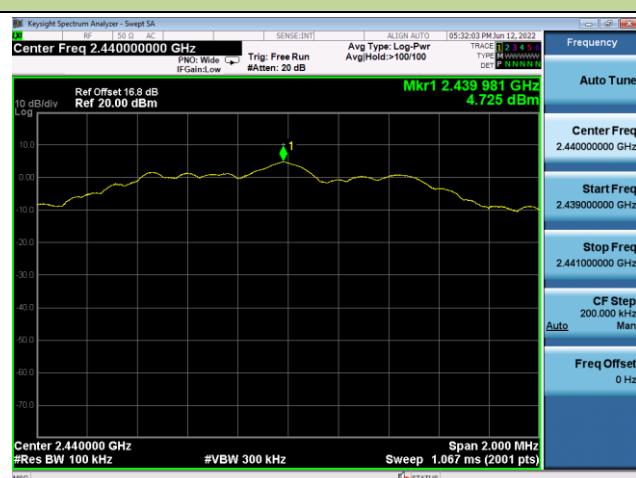


Spurious Emission 30MHz ~ 25GHz

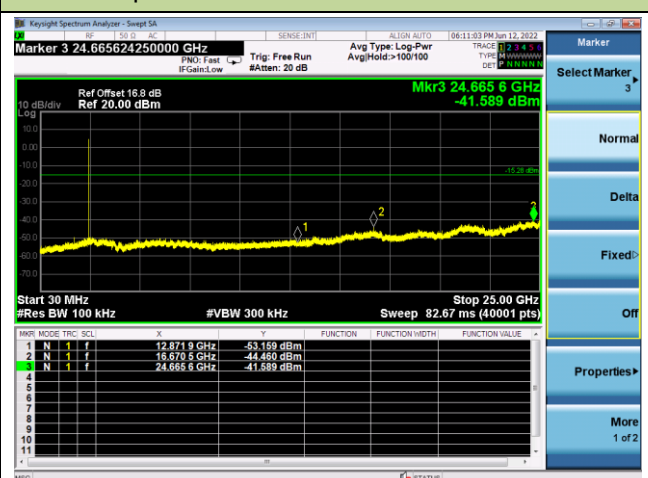


Channel 19 (2440MHz)

100kHz PSD Reference Level



Spurious Emission 30MHz ~ 25GHz



**BLE-2Mbps - Out-of-Band Emissions**  
**Channel 39 (2480MHz)**



**Spurious Emission 30MHz ~ 25GHz**



**A.6 Radiated Spurious Emission Test Result**

Test Site	WZ-AC2	Test Engineer	Lucas Wang
Test Date	2022-06-10	Test Mode:	BLE-1Mbps
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Test Channel	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
00	4808.0	45.3	4.3	49.6	74.0	-24.4	Peak	Horizontal
	8429.0	33.7	11.4	45.1	74.0	-28.9	Peak	Horizontal
	12007.5	33.5	17.0	50.5	74.0	-23.5	Peak	Horizontal
	4799.5	40.1	4.4	44.5	74.0	-29.5	Peak	Vertical
	8454.5	32.9	11.7	44.6	74.0	-29.4	Peak	Vertical
	11038.5	33.7	16.4	50.1	74.0	-23.9	Peak	Vertical
19	4876.0	44.0	3.7	47.7	74.0	-26.3	Peak	Horizontal
	7324.0	39.0	11.1	50.1	74.0	-23.9	Peak	Horizontal
	12194.5	32.8	17.8	50.6	74.0	-23.4	Peak	Horizontal
	4884.5	37.4	3.7	41.1	74.0	-32.9	Peak	Vertical
	7315.5	36.8	11.1	47.9	74.0	-26.1	Peak	Vertical
	11659.0	31.2	17.9	49.1	74.0	-24.9	Peak	Vertical
39	4961.0	43.4	3.6	47.0	74.0	-27.0	Peak	Horizontal
	7443.0	36.5	11.5	48.0	74.0	-26.0	Peak	Horizontal
	12398.5	35.2	17.1	52.3	74.0	-21.7	Peak	Horizontal
	12398.6	30.1	17.1	47.2	54.0	-6.8	Average	Horizontal
	4961.0	38.1	3.6	41.7	74.0	-32.3	Peak	Vertical
	7443.0	37.7	11.5	49.2	74.0	-24.8	Peak	Vertical
	11038.5	33.5	16.4	49.9	74.0	-24.1	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Test Site	WZ-AC2	Test Engineer	Lucas Wang
Test Date	2022-06-10	Test Mode:	BLE-2Mbps
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Test Channel	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
00	4808.0	44.7	4.3	49.0	74.0	-25.0	Peak	Horizontal
	7434.5	32.5	11.6	44.1	74.0	-29.9	Peak	Horizontal
	11259.5	32.1	16.8	48.9	74.0	-25.1	Peak	Horizontal
	4808.0	39.1	4.3	43.4	74.0	-30.6	Peak	Vertical
	7647.0	34.1	11.3	45.4	74.0	-28.6	Peak	Vertical
	11650.5	31.8	17.8	49.6	74.0	-24.4	Peak	Vertical
19	4884.5	43.2	3.7	46.9	74.0	-27.1	Peak	Horizontal
	7315.5	37.5	11.1	48.6	74.0	-25.4	Peak	Horizontal
	11497.5	32.5	17.4	49.9	74.0	-24.1	Peak	Horizontal
	4876.0	37.2	3.7	40.9	74.0	-33.1	Peak	Vertical
	7315.5	37.2	11.1	48.3	74.0	-25.7	Peak	Vertical
	11599.5	32.0	17.5	49.5	74.0	-24.5	Peak	Vertical
39	4961.0	43.7	3.6	47.3	74.0	-26.7	Peak	Horizontal
	7443.0	36.3	11.5	47.8	74.0	-26.2	Peak	Horizontal
	12398.5	33.8	17.1	50.9	74.0	-23.1	Peak	Horizontal
	4961.0	36.1	3.6	39.7	74.0	-34.3	Peak	Vertical
	7434.5	36.3	11.6	47.9	74.0	-26.1	Peak	Vertical
	11319.0	32.8	17.2	50.0	74.0	-24.0	Peak	Vertical

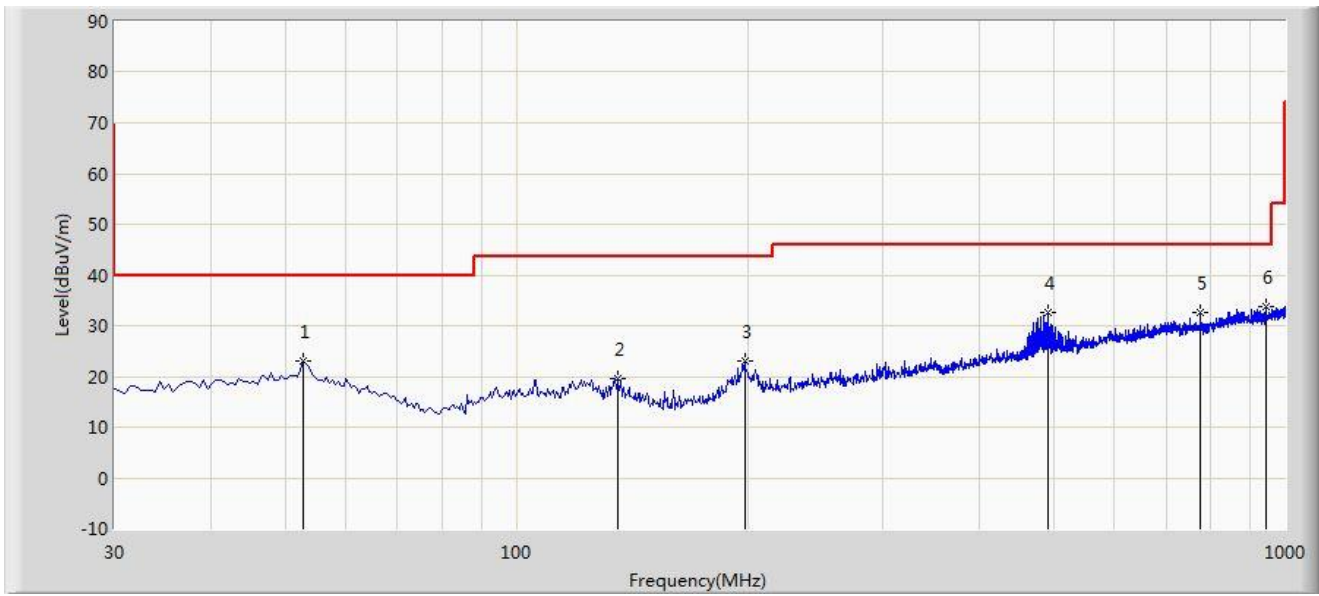
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)



**The Worst Case Result of Radiated Emission below 1GHz:**

Site: WZ-AC2	Test Date: 2022-06-10
Limit: FCC_Part15.209_RSE(3m)	Engineer: Lucas Wang
Probe: VULB9162_30-7000MHz	Polarity: Horizontal
EUT: Parsyl Passport	Power: AC 120V/60Hz
<b>Test Mode:</b> Transmit by BLE-2Mbps at Channel 2402MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1			52.795	23.036	2.462	-16.964	40.000	20.574	PK
2			135.245	19.604	4.176	-23.896	43.500	15.427	PK
3			198.295	22.986	3.905	-20.514	43.500	19.081	PK
4			491.720	32.526	7.222	-13.474	46.000	25.304	PK
5			775.445	32.473	3.135	-13.527	46.000	29.338	PK
6		*	943.255	33.862	2.688	-12.138	46.000	31.174	PK

Note 1: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

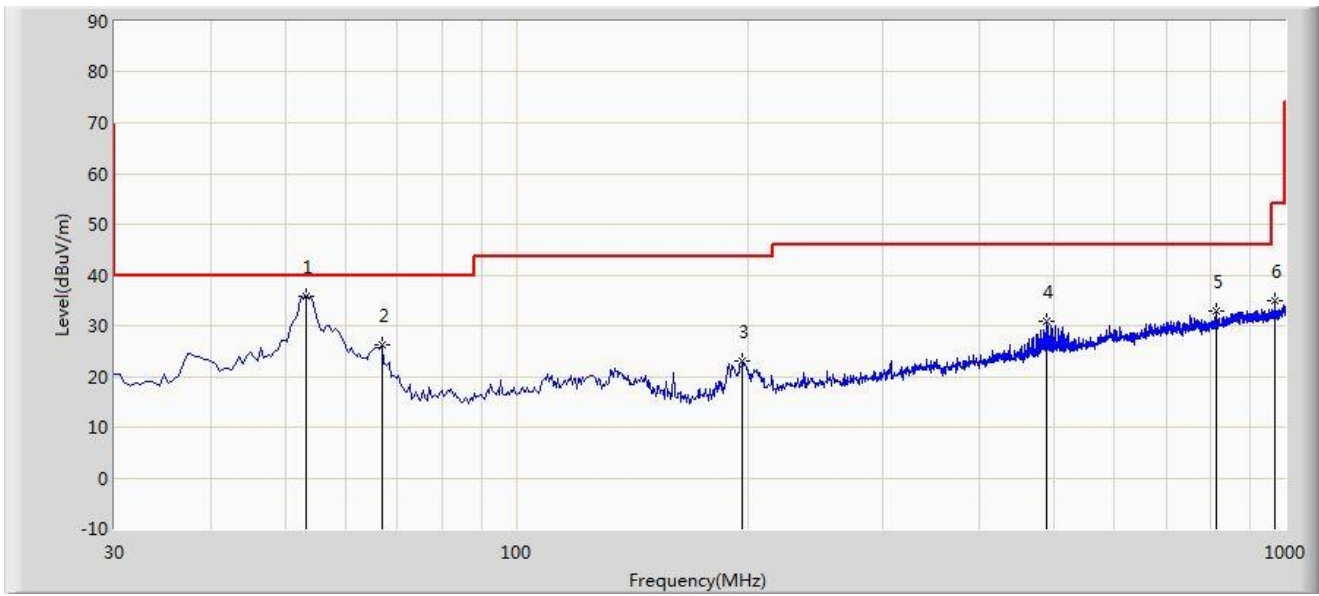
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: QP measurement was not performed when peak measure level was lower than the QP limit.

Note 3: The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 25GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value.

Therefore, the data is not presented in the report.

Site: WZ-AC2	Test Date: 2022-06-10
Limit: FCC_Part15.209_RSE(3m)	Engineer: Lucas Wang
Probe: VULB9162_30-7000MHz	Polarity: Vertical
EUT: Parsyl Passport	Power: AC 120V/60Hz
<b>Test Mode:</b> Transmit by BLE-2Mbps at Channel 2402MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1		*	53.280	35.935	15.420	-4.065	40.000	20.515	PK
2			66.860	26.191	8.592	-13.809	40.000	17.599	PK
3			196.840	22.964	3.858	-20.536	43.500	19.106	PK
4			490.265	30.843	5.548	-15.157	46.000	25.295	PK
5			814.245	32.788	2.813	-13.212	46.000	29.975	PK
6			971.385	35.013	3.456	-18.987	54.000	31.557	PK

Note 1: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

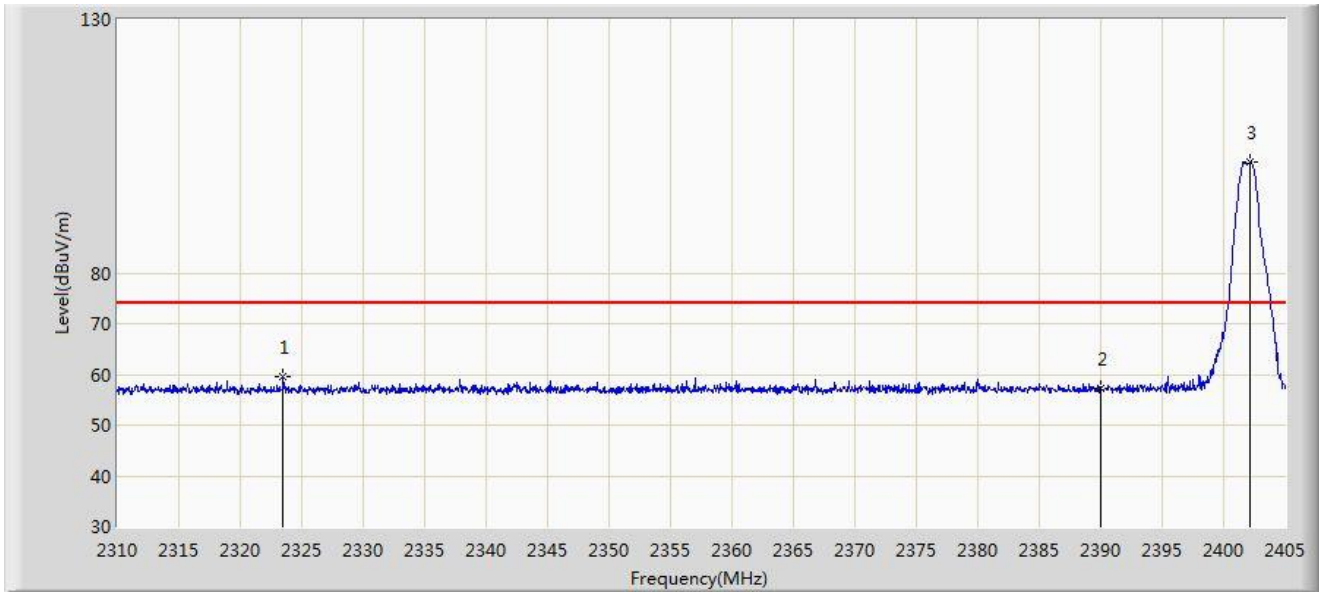
Note 2: QP measurement was not performed when peak measure level was lower than the QP limit.

Note 3: The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 25GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value.

Therefore, the data is not presented in the report.

**A.7 Radiated Restricted Band Edge Test Result**

Site: WZ-AC2	Time: 2022/06/10 - 19:20
Limit: FCC_2.4G_RE(3m)	Engineer: Lucas Wang
Probe: BBHA9120D_1457_1-18GHz	Polarity: Horizontal
EUT: Parsyl Passport	Power: AC 120V/60Hz
Test Mode: Transmit by BLE-1Mbps at 2402MHz	



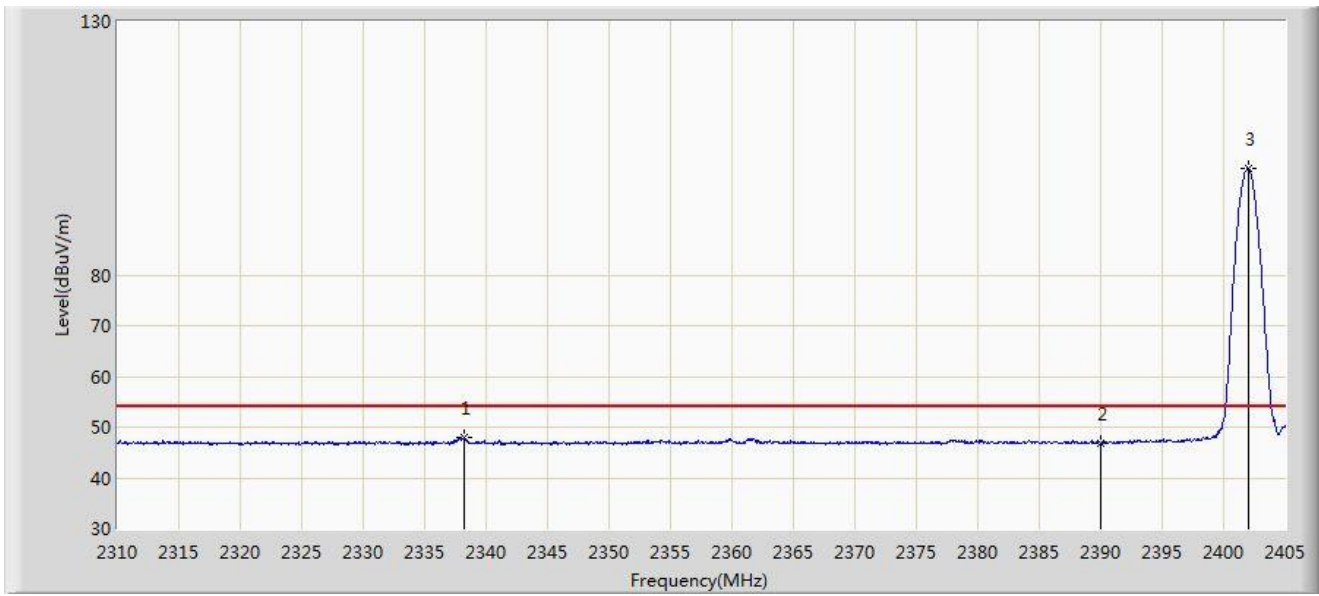
No	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1	*	2323.490	59.464	27.859	-14.536	74.000	31.606	PK
2		2390.000	57.268	25.835	-16.732	74.000	31.433	PK
3		2402.198	101.756	70.373	N/A	N/A	31.383	PK

Note 1: " \* ", means this data is the worst emission level.

Note 2: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: WZ-AC2	Time: 2022/06/10 - 19:27
Limit: FCC_2.4G_RE(3m)	Engineer: Lucas Wang
Probe: BBHA9120D_1457_1-18GHz	Polarity: Horizontal
EUT: Parsyl Passport	Power: AC 120V/60Hz
Test Mode: Transmit by BLE-1Mbps at 2402MHz	



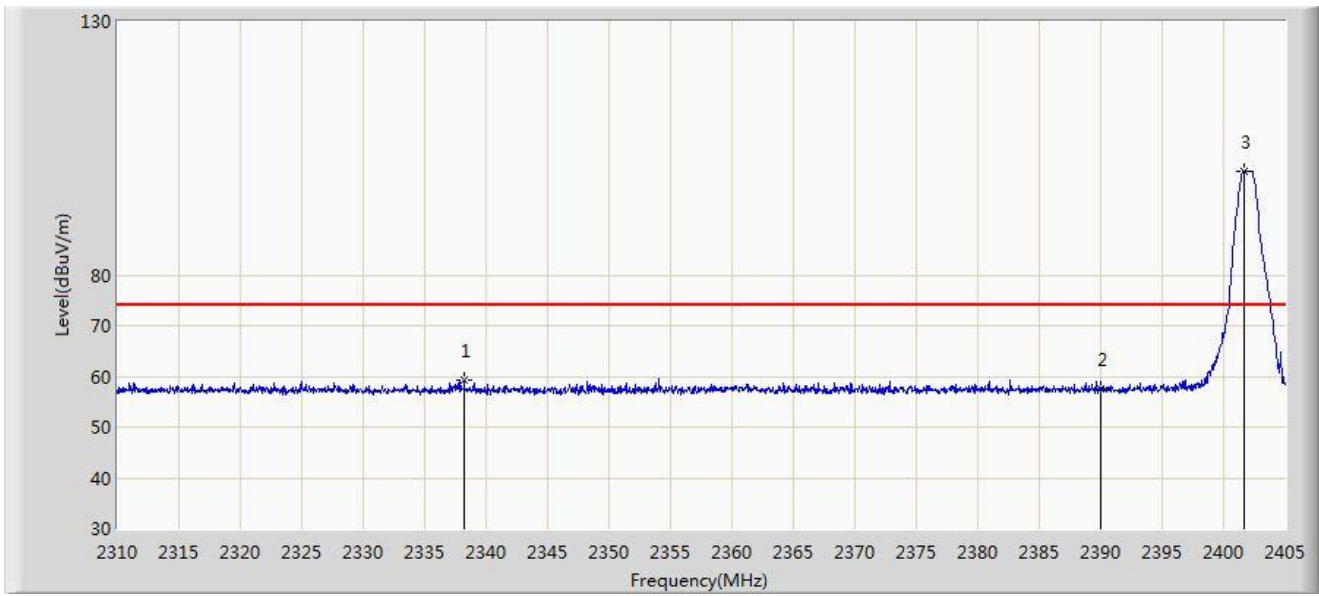
No	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1	*	2338.167	47.961	16.410	-6.039	54.000	31.551	AV
2		2390.000	46.920	15.487	-7.080	54.000	31.433	AV
3		2402.008	100.946	69.562	N/A	N/A	31.384	AV

Note 1: " \* ", means this data is the worst emission level.

Note 2: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: WZ-AC2	Time: 2022/06/10 - 19:35
Limit: FCC_2.4G_RE(3m)	Engineer: Lucas Wang
Probe: BBHA9120D_1457_1-18GHz	Polarity: Vertical
EUT: Parsyl Passport	Power: AC 120V/60Hz
Test Mode: Transmit by BLE-1Mbps at 2402MHz	



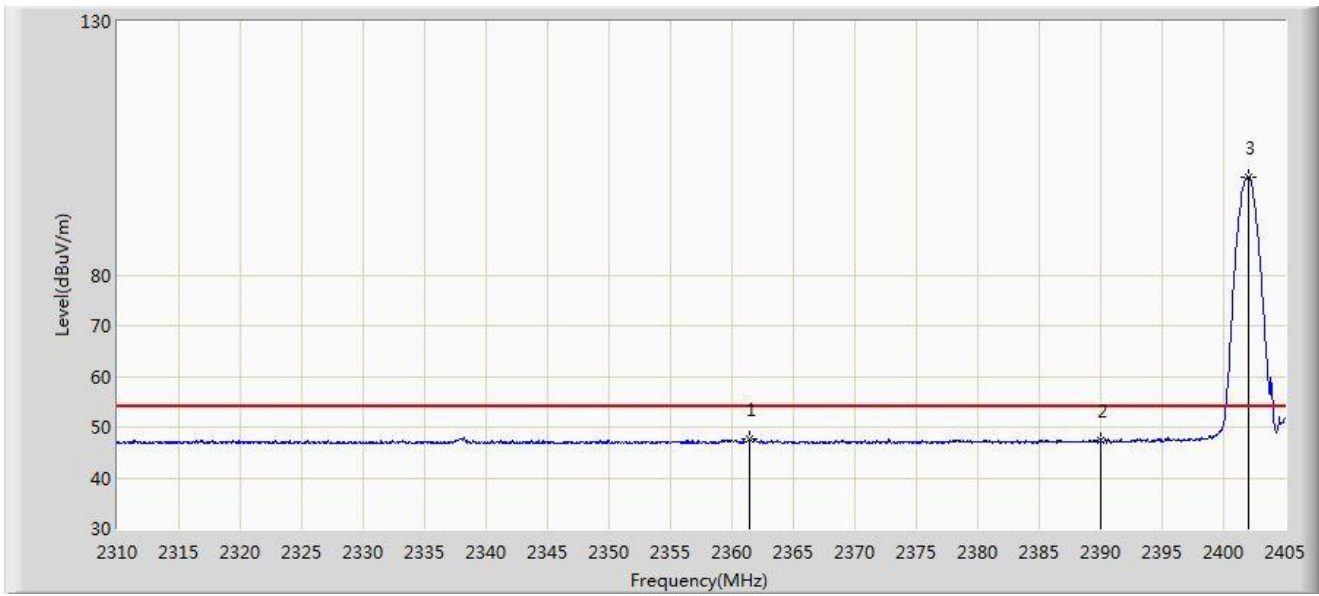
No	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1	*	2338.215	59.152	27.601	-14.848	74.000	31.551	PK
2		2390.000	57.674	26.241	-16.326	74.000	31.433	PK
3		2401.627	100.474	69.089	N/A	N/A	31.385	PK

Note 1: " \* ", means this data is the worst emission level.

Note 2: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: WZ-AC2	Time: 2022/06/10 - 19:29
Limit: FCC_2.4G_RE(3m)	Engineer: Lucas Wang
Probe: BBHA9120D_1457_1-18GHz	Polarity: Vertical
EUT: Parsyl Passport	Power: AC 120V/60Hz
Test Mode: Transmit by BLE-1Mbps at 2402MHz	



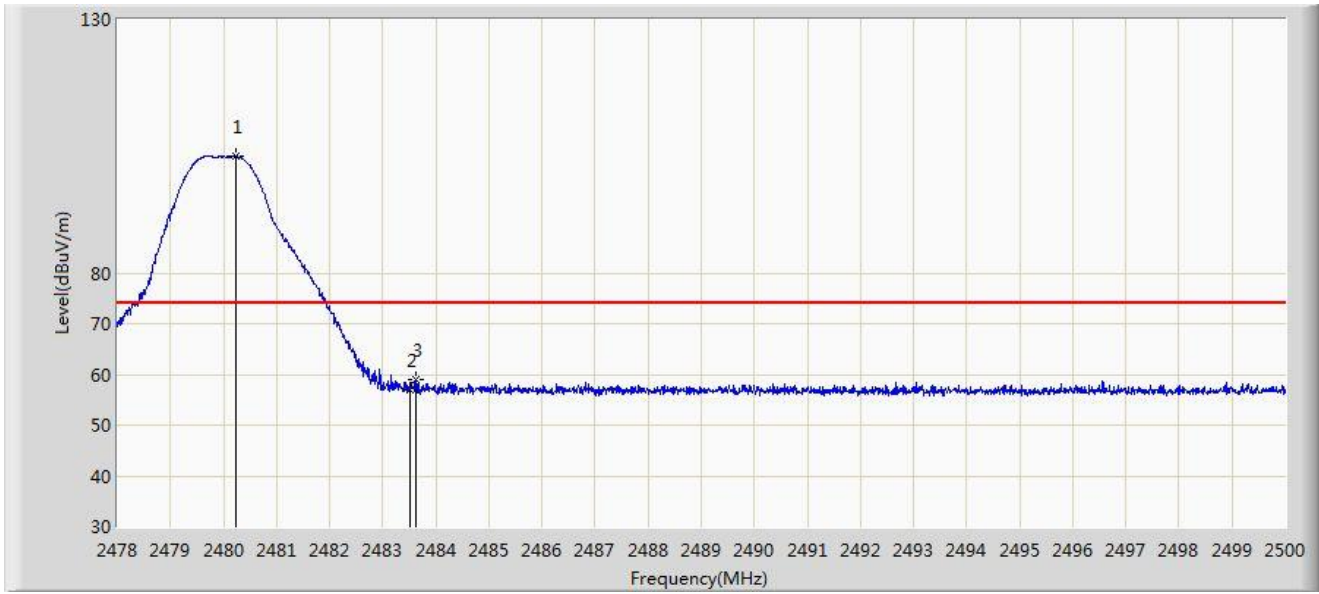
No	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1	*	2361.442	47.550	16.038	-6.450	54.000	31.512	AV
2		2390.000	47.435	16.002	-6.565	54.000	31.433	AV
3		2402.055	99.401	68.018	N/A	N/A	31.384	AV

Note 1: " \* ", means this data is the worst emission level.

Note 2: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: WZ-AC2	Time: 2022/06/10 - 19:43
Limit: FCC_2.4G_RE(3m)	Engineer: Lucas Wang
Probe: BBHA9120D_1457_1-18GHz	Polarity: Horizontal
EUT: Parsyl Passport	Power: AC 120V/60Hz
Test Mode: Transmit by BLE-1Mbps at 2480MHz	



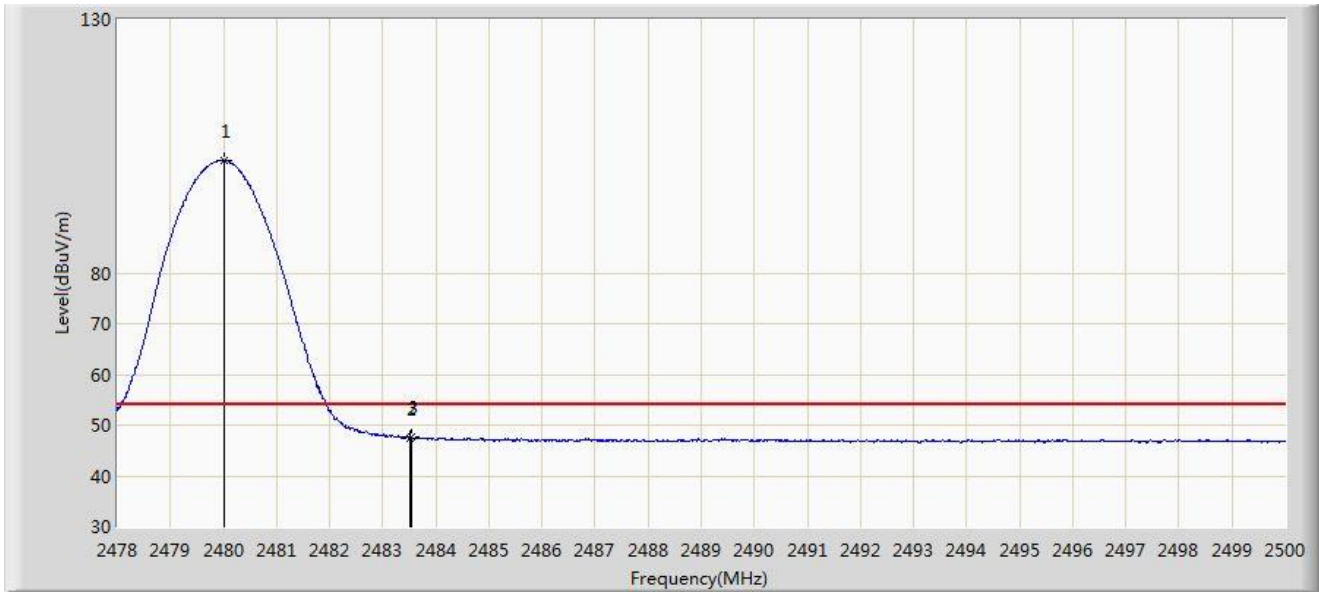
No	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1		2480.233	102.945	71.636	N/A	N/A	31.309	PK
2		2483.500	57.090	25.775	-16.910	74.000	31.315	PK
3	*	2483.621	58.967	27.652	-15.033	74.000	31.315	PK

Note 1: " \* ", means this data is the worst emission level.

Note 2: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: WZ-AC2	Time: 2022/06/10 - 19:47
Limit: FCC_2.4G_RE(3m)	Engineer: Lucas Wang
Probe: BBHA9120D_1457_1-18GHz	Polarity: Horizontal
EUT: Parsyl Passport	Power: AC 120V/60Hz
Test Mode: Transmit by BLE-1Mbps at 2480MHz	



No	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1		2480.002	102.251	70.943	N/A	N/A	31.308	AV
2		2483.500	47.493	16.178	-6.507	54.000	31.315	AV
3	*	2483.544	47.751	16.436	-6.249	54.000	31.315	AV

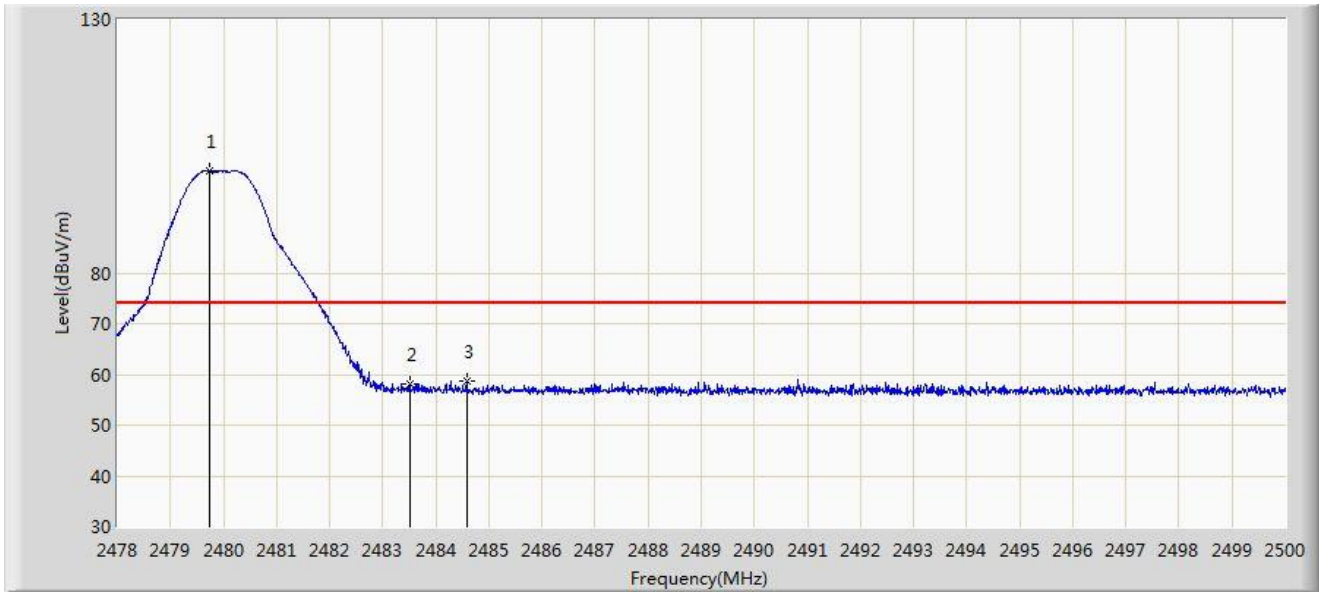
Note 1: " \* ", means this data is the worst emission level.

Note 2: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).



Site: WZ-AC2	Time: 2022/06/10 - 19:50
Limit: FCC_2.4G_RE(3m)	Engineer: Lucas Wang
Probe: BBHA9120D_1457_1-18GHz	Polarity: Vertical
EUT: Parsyl Passport	Power: AC 120V/60Hz
Test Mode: Transmit by BLE-1Mbps at 2480MHz	



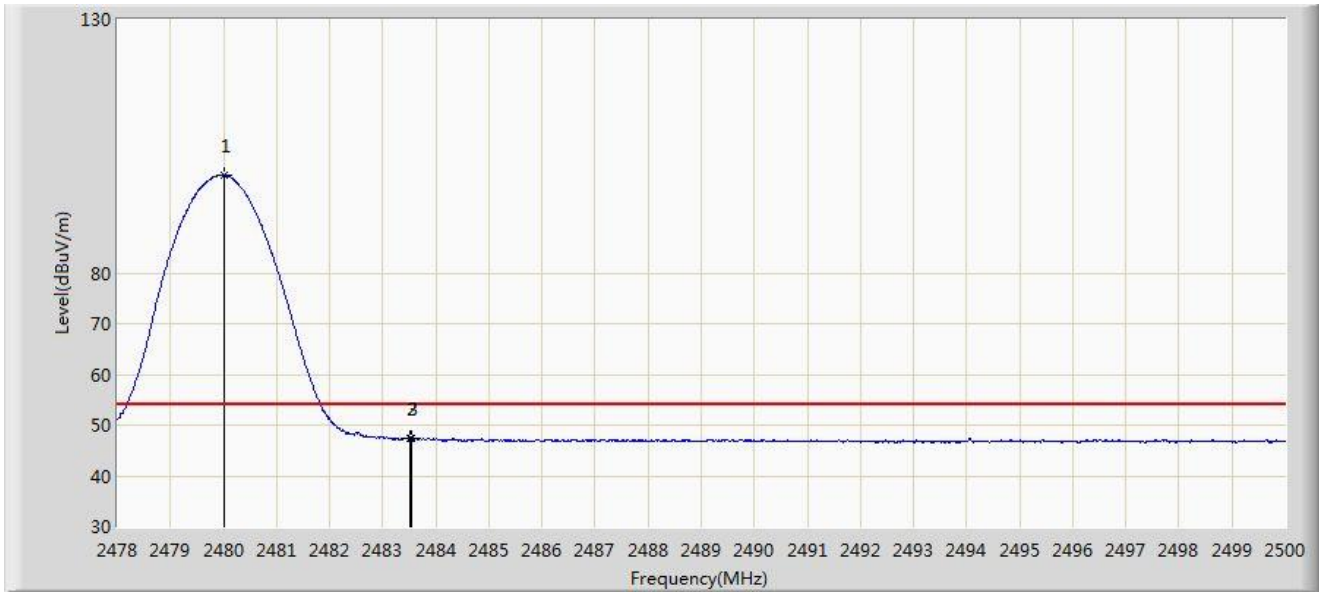
No	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1		2479.727	100.129	68.821	N/A	N/A	31.308	PK
2		2483.500	58.042	26.727	-15.958	74.000	31.315	PK
3	*	2484.589	58.609	27.292	-15.391	74.000	31.317	PK

Note 1: " \* ", means this data is the worst emission level.

Note 2: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: WZ-AC2	Time: 2022/06/10 - 19:50
Limit: FCC_2.4G_RE(3m)	Engineer: Lucas Wang
Probe: BBHA9120D_1457_1-18GHz	Polarity: Vertical
EUT: Parsyl Passport	Power: AC 120V/60Hz
Test Mode: Transmit by BLE-1Mbps at 2480MHz	



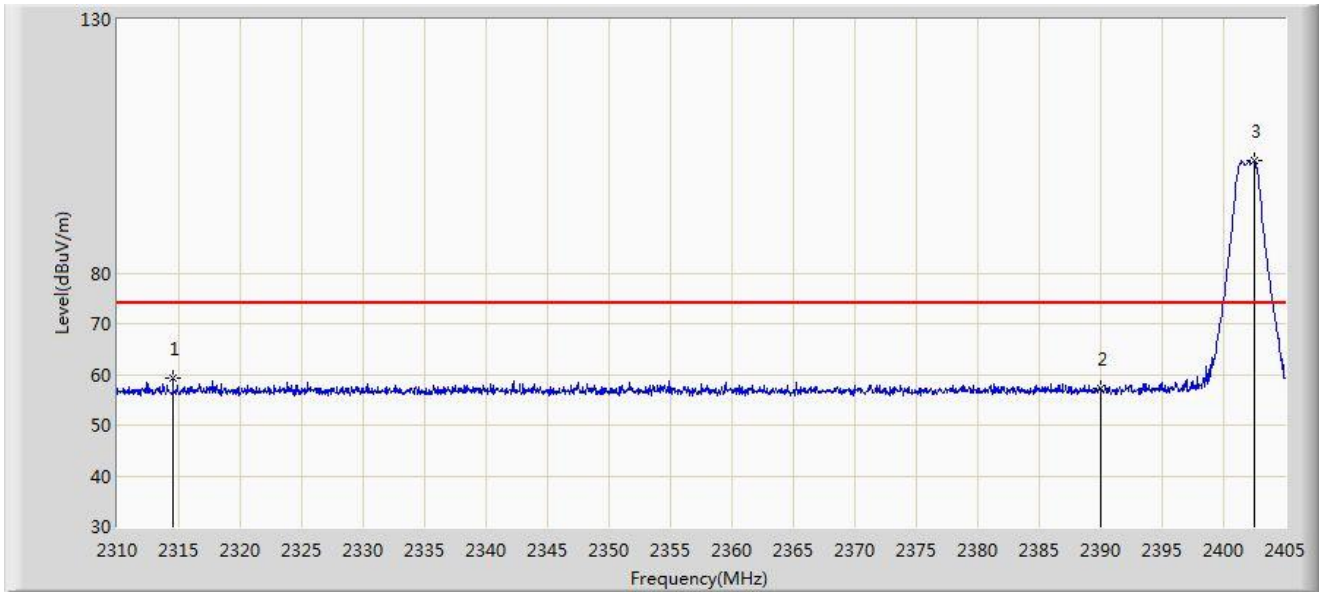
No	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1		2480.024	99.294	67.986	N/A	N/A	31.308	AV
2		2483.500	47.257	15.942	-6.743	54.000	31.315	AV
3	*	2483.555	47.481	16.166	-6.519	54.000	31.315	AV

Note 1: " \* ", means this data is the worst emission level.

Note 2: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: WZ-AC2	Time: 2022/06/10 - 20:06
Limit: FCC_2.4G_RE(3m)	Engineer: Lucas Wang
Probe: BBHA9120D_1457_1-18GHz	Polarity: Horizontal
EUT: Parsyl Passport	Power: AC 120V/60Hz
Test Mode: Transmit by BLE-2Mbps at 2402MHz	



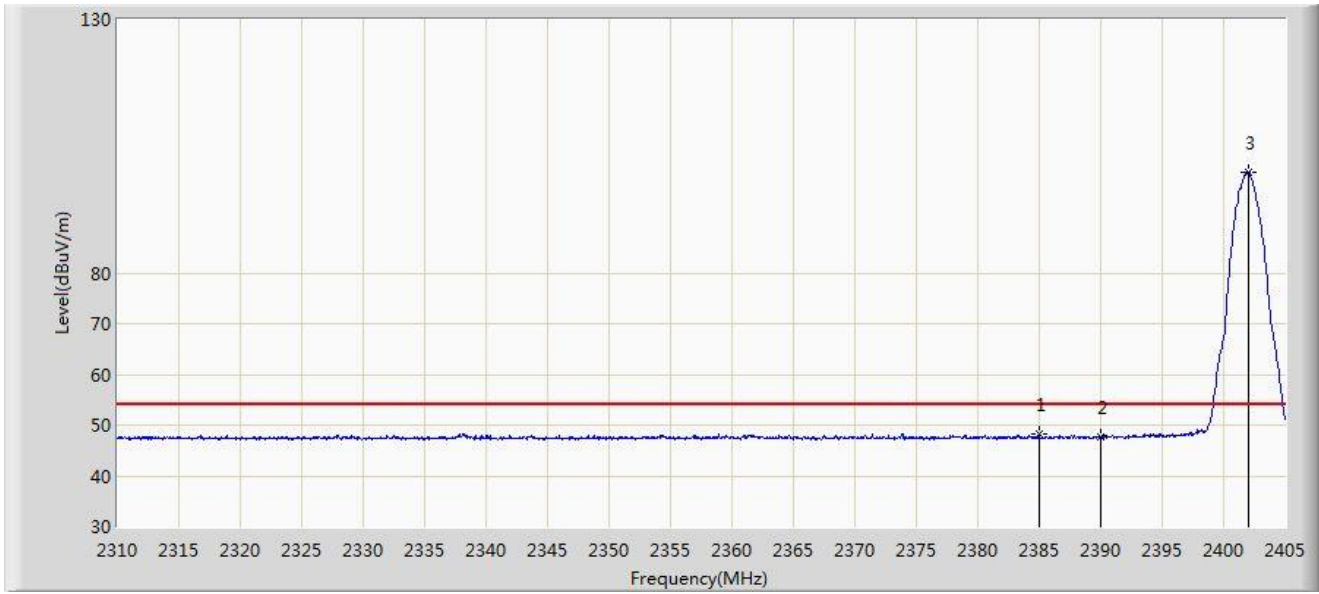
No	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1	*	2314.512	59.358	27.729	-14.642	74.000	31.629	PK
2		2390.000	57.178	25.745	-16.822	74.000	31.433	PK
3		2402.482	102.076	70.694	N/A	N/A	31.383	PK

Note 1: " \* ", means this data is the worst emission level.

Note 2: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: WZ-AC2	Time: 2022/06/10 - 20:09
Limit: FCC_2.4G_RE(3m)	Engineer: Lucas Wang
Probe: BBHA9120D_1457_1-18GHz	Polarity: Horizontal
EUT: Parsyl Passport	Power: AC 120V/60Hz
Test Mode: Transmit by BLE-2Mbps at 2402MHz	



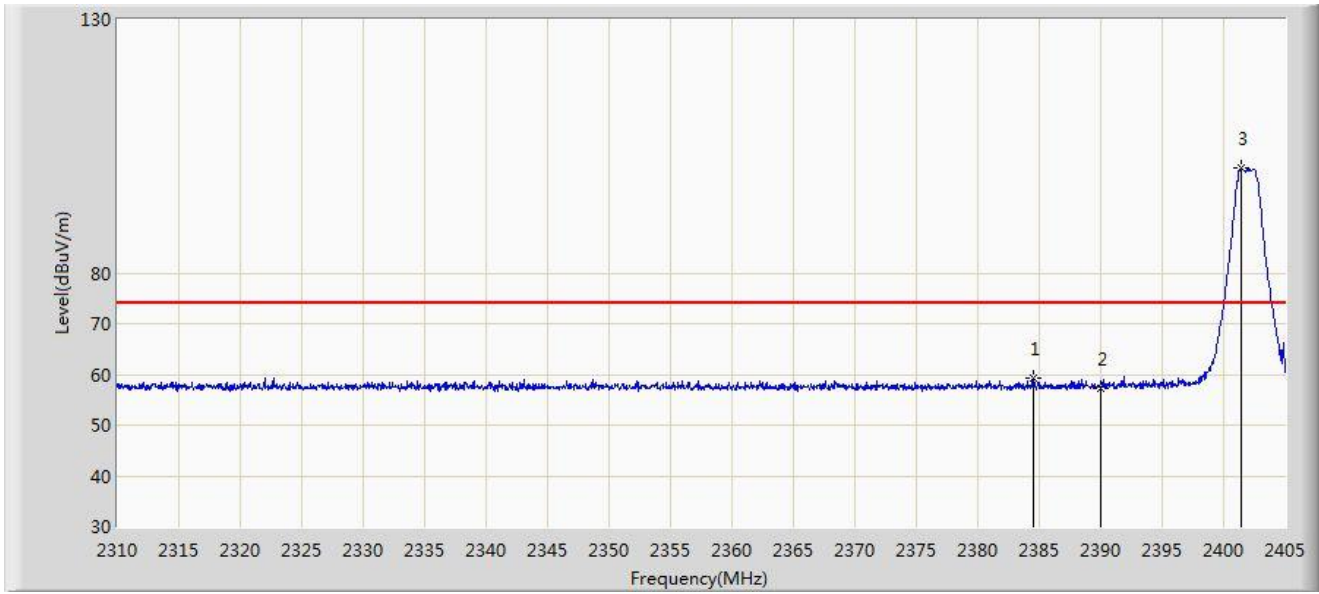
No	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1	*	2384.955	48.269	16.811	-5.731	54.000	31.458	AV
2		2390.000	47.690	16.257	-6.310	54.000	31.433	AV
3		2402.055	99.899	68.516	N/A	N/A	31.384	AV

Note 1: " \* ", means this data is the worst emission level.

Note 2: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: WZ-AC2	Time: 2022/06/10 - 20:12
Limit: FCC_2.4G_RE(3m)	Engineer: Lucas Wang
Probe: BBHA9120D_1457_1-18GHz	Polarity: Vertical
EUT: Parsyl Passport	Power: AC 120V/60Hz
Test Mode: Transmit by BLE-2Mbps at 2402MHz	



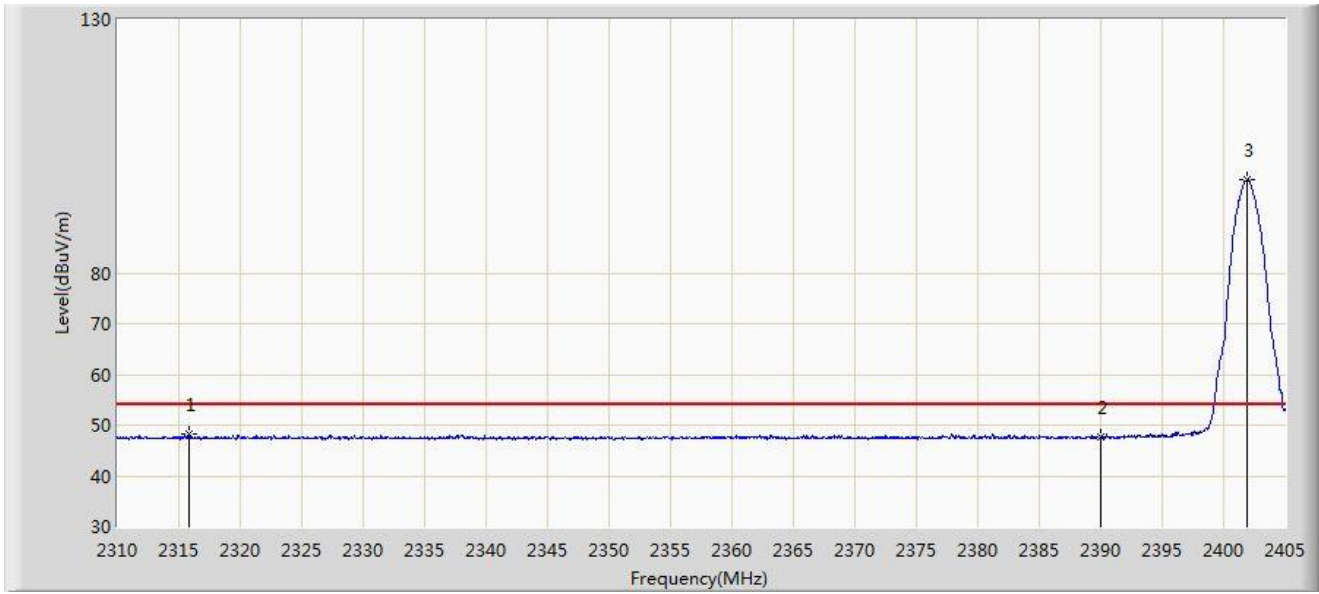
No	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1	*	2384.575	59.162	27.702	-14.838	74.000	31.460	PK
2		2390.000	57.318	25.885	-16.682	74.000	31.433	PK
3		2401.437	100.622	69.236	N/A	N/A	31.385	PK

Note 1: " \* ", means this data is the worst emission level.

Note 2: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: WZ-AC2	Time: 2022/06/10 - 20:10
Limit: FCC_2.4G_RE(3m)	Engineer: Lucas Wang
Probe: BBHA9120D_1457_1-18GHz	Polarity: Vertical
EUT: Parsyl Passport	Power: AC 120V/60Hz
Test Mode: Transmit by BLE-2Mbps at 2402MHz	



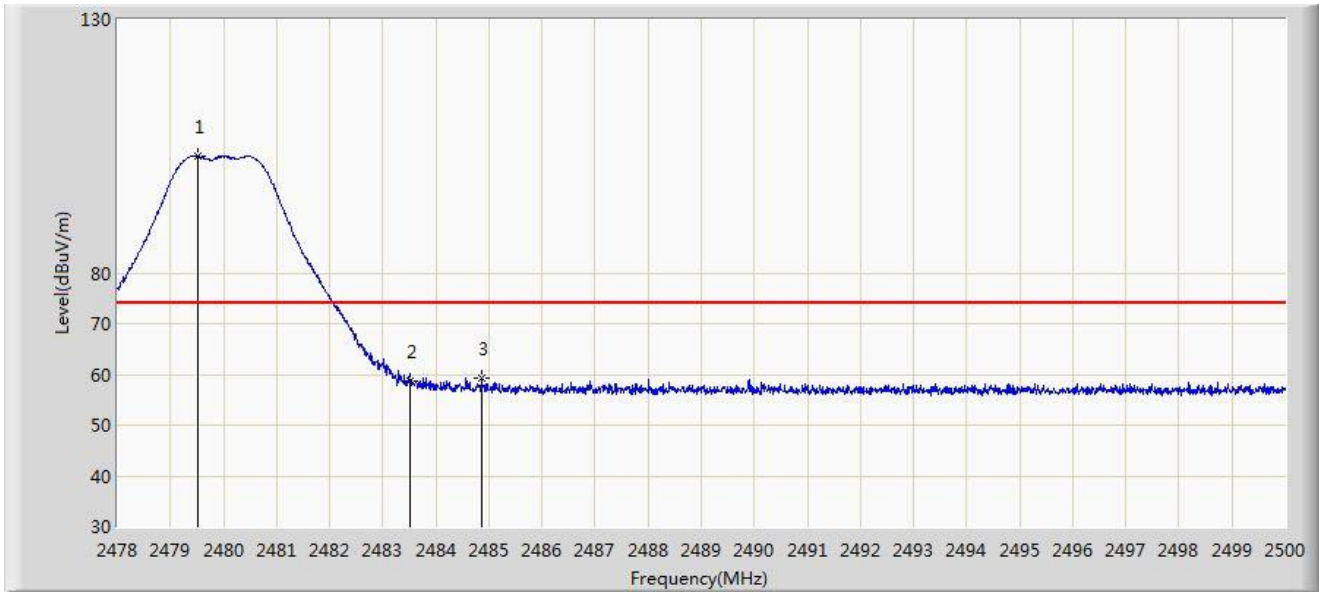
No	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1	*	2315.795	48.322	16.696	-5.678	54.000	31.626	AV
2		2390.000	47.685	16.252	-6.315	54.000	31.433	AV
3		2401.960	98.401	67.017	N/A	N/A	31.384	AV

Note 1: " \* ", means this data is the worst emission level.

Note 2: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: WZ-AC2	Time: 2022/06/10 - 19:55
Limit: FCC_2.4G_RE(3m)	Engineer: Lucas Wang
Probe: BBHA9120D_1457_1-18GHz	Polarity: Horizontal
EUT: Parsyl Passport	Power: AC 120V/60Hz
Test Mode: Transmit by BLE-2Mbps at 2480MHz	



No	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1		2479.507	103.012	71.705	N/A	N/A	31.307	PK
2		2483.500	58.764	27.449	-15.236	74.000	31.315	PK
3	*	2484.864	59.321	28.004	-14.679	74.000	31.317	PK

Note 1: " \* ", means this data is the worst emission level.

Note 2: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: WZ-AC2	Time: 2022/06/10 - 19:59
Limit: FCC_2.4G_RE(3m)	Engineer: Lucas Wang
Probe: BBHA9120D_1457_1-18GHz	Polarity: Horizontal
EUT: Parsyl Passport	Power: AC 120V/60Hz
Test Mode: Transmit by BLE-2Mbps at 2480MHz	



No	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1		2479.969	100.875	69.567	N/A	N/A	31.308	AV
2		2483.500	49.452	18.137	-4.548	54.000	31.315	AV
3	*	2483.522	49.809	18.494	-4.191	54.000	31.315	AV

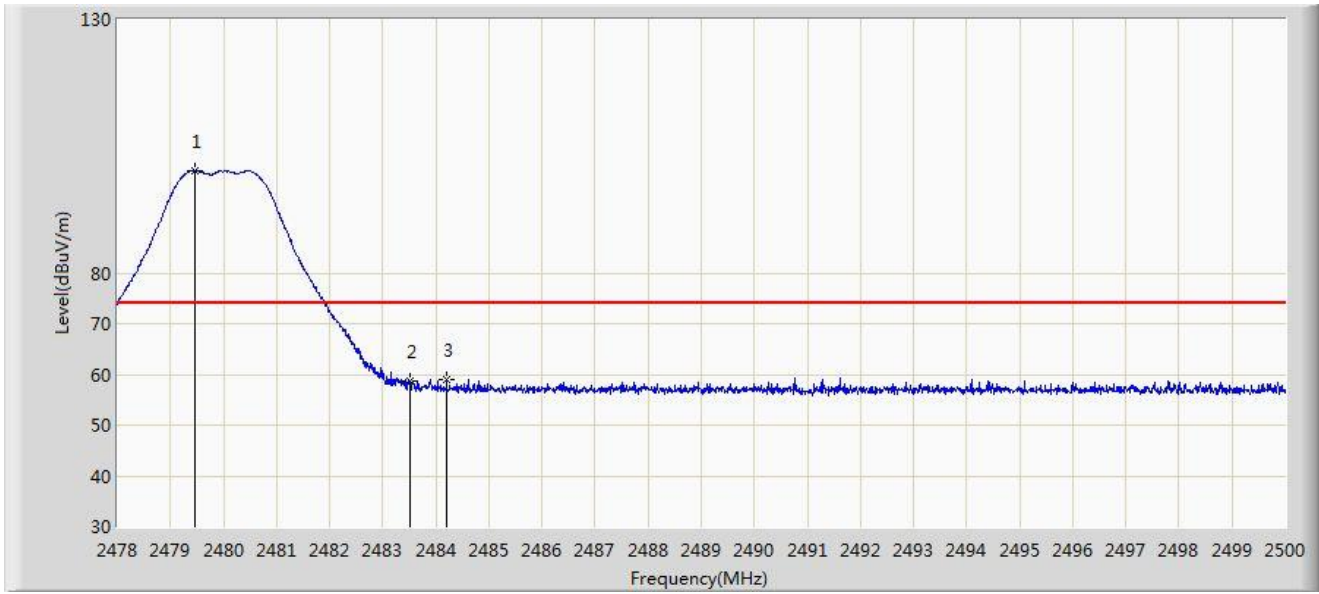
Note 1: " \* ", means this data is the worst emission level.

Note 2: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).



Site: WZ-AC2	Time: 2022/06/10 - 20:03
Limit: FCC_2.4G_RE(3m)	Engineer: Lucas Wang
Probe: BBHA9120D_1457_1-18GHz	Polarity: Vertical
EUT: Parsyl Passport	Power: AC 120V/60Hz
Test Mode: Transmit by BLE-2Mbps at 2480MHz	



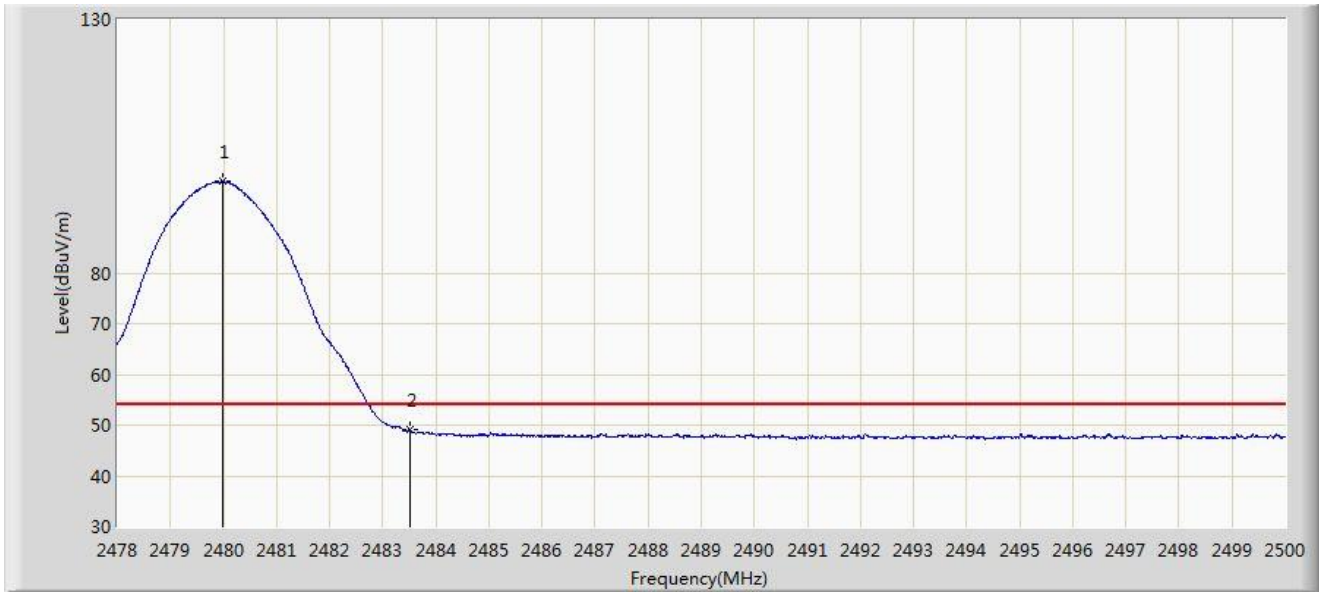
No	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1		2479.452	100.203	68.896	N/A	N/A	31.307	PK
2		2483.500	58.791	27.476	-15.209	74.000	31.315	PK
3	*	2484.204	59.027	27.711	-14.973	74.000	31.316	PK

Note 1: " \* ", means this data is the worst emission level.

Note 2: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: WZ-AC2	Time: 2022/06/10 - 20:02
Limit: FCC_2.4G_RE(3m)	Engineer: Lucas Wang
Probe: BBHA9120D_1457_1-18GHz	Polarity: Vertical
EUT: Parsyl Passport	Power: AC 120V/60Hz
Test Mode: Transmit by BLE-2Mbps at 2480MHz	



No	Mark	Frequency (MHz)	Measure Level (dB $\mu$ V/m)	Reading Level (dB $\mu$ V)	Margin (dB)	Limit (dB $\mu$ V/m)	Factor (dB/m)	Type
1		2479.991	98.021	66.713	N/A	N/A	31.308	AV
2	*	2483.500	49.075	17.760	-4.925	54.000	31.315	AV

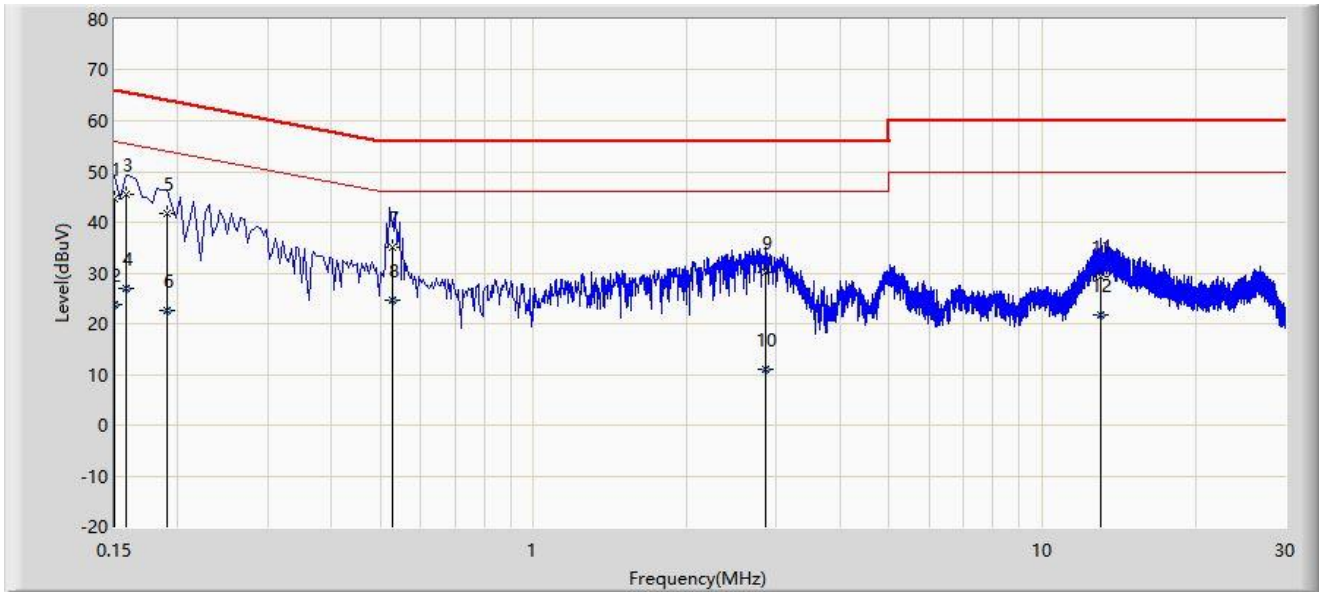
Note 1: " \* ", means this data is the worst emission level.

Note 2: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

### A.8 AC Conducted Emissions Test Result

Site: WZ-SR2	Time: 2022/06/15 - 10:05
Limit: FCC_Part15.207_CE_AC Power	Engineer: Alin Zhou
Probe: ENV216_101683_Filter Off_E	Polarity: Line
EUT: Parsyl Passport	Power: AC 120V/60Hz
<b>Test Mode:</b> Transmit by BLE-2Mbps at Channel 2402MHz	



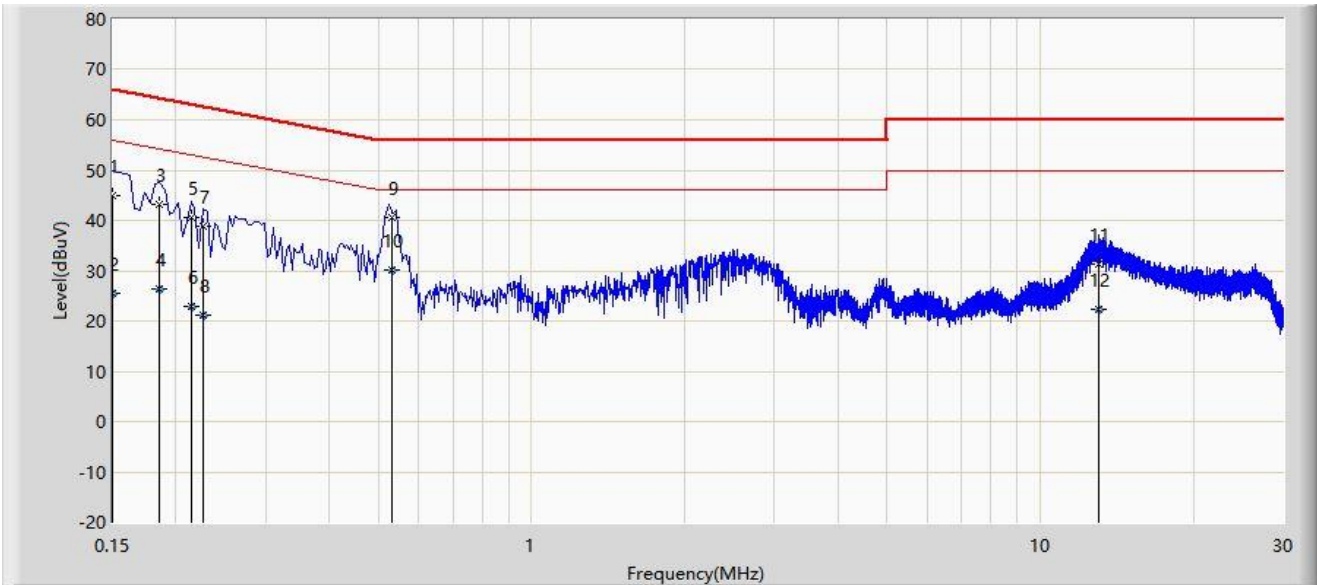
No	Mark	Frequency (MHz)	Measure Level (dBμV)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV)	Factor (dB)	Type
1		0.150	44.771	34.870	-21.229	66.000	9.901	QP
2		0.150	23.778	13.876	-32.222	56.000	9.901	AV
3	*	0.158	45.378	35.478	-20.190	65.568	9.900	QP
4		0.158	26.864	16.964	-28.704	55.568	9.900	AV
5		0.190	41.745	31.845	-22.291	64.037	9.900	QP
6		0.190	22.497	12.597	-31.540	54.037	9.900	AV
7		0.527	35.093	25.172	-20.907	56.000	9.921	QP
8		0.527	24.541	14.619	-21.459	46.000	9.921	AV
9		2.850	30.082	19.956	-25.918	56.000	10.127	QP
10		2.850	10.923	0.797	-35.077	46.000	10.127	AV
11		13.058	29.263	18.325	-30.737	60.000	10.938	QP
12		13.058	21.706	10.768	-28.294	50.000	10.938	AV

Note 1: " \* ", means this data is the worst emission level.

Note 2: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB).

Note 3: Factor (dB) = Cable Loss (dB) + LISN Factor (dB).

Site: WZ-SR2	Time: 2022/06/15 - 10:12
Limit: FCC_Part15.207_CE_AC Power	Engineer: Alin Zhou
Probe: ENV216_101683_Filter Off_E	Polarity: Neutral
EUT: Parsyl Passport	Power: AC 120V/60Hz
<b>Test Mode:</b> Transmit by BLE-2Mbps at Channel 2402MHz	



No	Mark	Frequency (MHz)	Measure Level (dBμV)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV)	Factor (dB)	Type
1		0.150	44.841	34.922	-21.159	66.000	9.920	QP
2		0.150	25.426	15.507	-30.574	56.000	9.920	AV
3		0.186	43.178	33.266	-21.035	64.213	9.913	QP
4		0.186	26.413	16.500	-27.801	54.213	9.913	AV
5		0.214	40.506	30.595	-22.543	63.049	9.911	QP
6		0.214	22.940	13.029	-30.109	53.049	9.911	AV
7		0.226	38.962	29.051	-23.633	62.595	9.911	QP
8		0.226	21.138	11.227	-31.457	52.595	9.911	AV
9	*	0.531	40.521	30.588	-15.479	56.000	9.932	QP
10		0.531	30.193	20.261	-15.807	46.000	9.932	AV
11		13.022	31.251	20.305	-28.749	60.000	10.946	QP
12		13.022	22.307	11.361	-27.693	50.000	10.946	AV

Note 1: " \* ", means this data is the worst emission level.

Note 2: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB).

Note 3: Factor (dB) = Cable Loss (dB) + LISN Factor (dB).

## **Appendix B - Test Setup Photograph**

Refer to "2203RSU047-UT" file.

## Appendix C - EUT Photograph

Refer to "2203RSU047-UE" file.

\_\_\_\_\_ The End \_\_\_\_\_