



RF MEASUREMENT REPORT

FCC ID: 2A8JK-FIDES-LINK

Applicant: ACSL Ltd.

Product: Fides-Link

Model No.: Falcon 3.0 AIR: E-000109-02
Falcon 3.0 GND: E-000110-02

Brand Name: ACSL

FCC Classification: Digital Transmission System (DTS)

FCC Rule Part(s): Part 15 Subpart C (Section 15.247)

Result: Complies

Test Date: 2022-08-25 ~ 2022-09-01

Reviewed By:

Jame Yuan

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
2207RSU061-U1	Rev. 01	Initial Report	2022-09-05	Valid

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1. General Information

1.1. Applicant

ACSL Ltd.

Hulic Kasai Rinkai Building 1F 3-6-4 Rinkaicho, Edogawa-ku Tokyo 134-0086 Japan

1.2. Manufacturer

ACSL Ltd.

Hulic Kasai Rinkai Building 1F 3-6-4 Rinkaicho, Edogawa-ku Tokyo 134-0086 Japan

1.3. Testing Facility

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

1.4. Product Information

Product Name	Fides-Link
Model No.	Falcon 3.0 AIR: E-000109-02 Falcon 3.0 GND: E-000110-02
Serial No.	20220727Sample#04
RF Specification	2.4GHz
Antenna Information	Refer to section 1.6
Working Voltage	DC 12V
Remark: 1. The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer. 2. The difference between the two models is only MCU firmware and does not affect the RF. 3. We use Falcon 3.0 AIR: E-000109-02 to perform tests.	

1.5. Radio Specification under Test

Frequency Range	2412 ~ 2467MHz
Channel Number	12
Type of Modulation	OFDM
Channel Bandwidth	10MHz
Data Rate	2.3 Mbps ~ 12 Mbps
RF Port	2

Note: The product works with only one port at a time.

1.6. Antenna Details

Antenna Type	Part Number	Frequency Band (MHz)	Antenna Gain (dBi)
Omni Antenna	YMC.Controller.ANT1.V2.C113.187B.1	2400~2500	2.6
Omni Antenna	YMC.Drone.ANT1.C113.382B.1	2400~2480	3.0

Note: We selected the max peak gain antenna YMC.Drone to perform the test.

1.7. Working Frequencies

Channel	Frequency	Channel	Frequency	Channel	Frequency
01	2412 MHz	02	2417 MHz	03	2422 MHz
04	2427 MHz	05	2432 MHz	06	2437 MHz
07	2442 MHz	08	2447 MHz	09	2452 MHz
10	2457 MHz	11	2462 MHz	12	2467 MHz

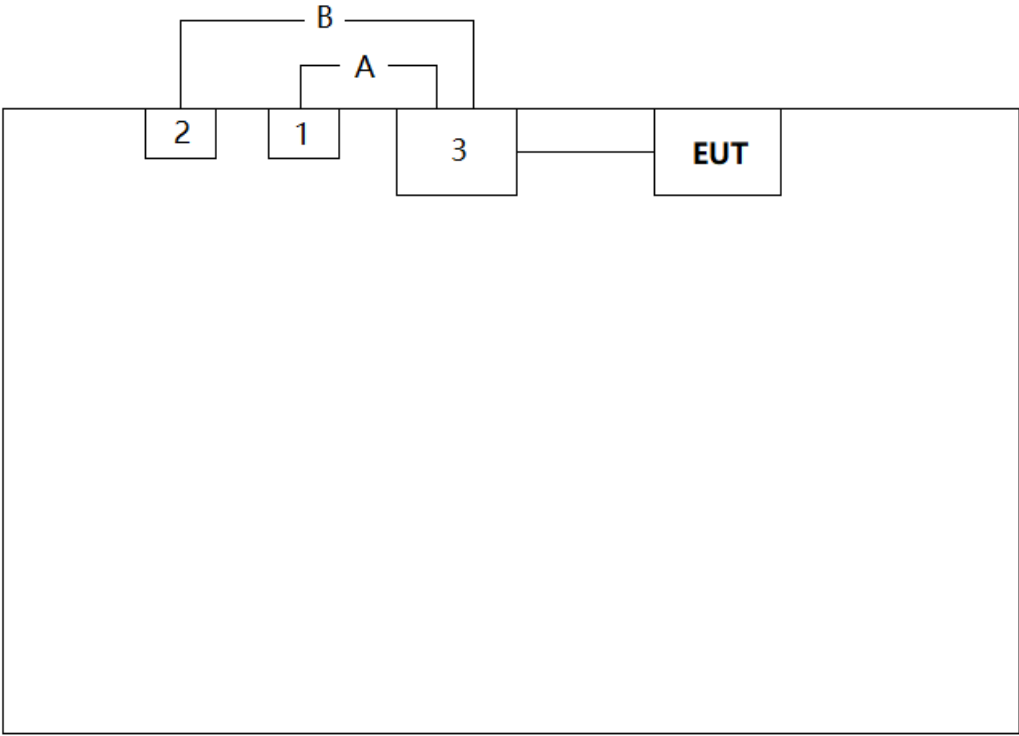
2. Test Configuration

2.1. Test Mode

Mode 1: Transmit by Ant 1
Mode 2: Transmit by Ant 2

2.2. 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.

Connection Diagram			
			
Cable Type		Cable Description	
A	Power Cable	Non shielded, 1.5m	
B	USB Cable	Non shielded, 1m	
Product		Manufacturer	Model No.
1	Adapter	Shenzhen AQUILSTAR Technology Co., Ltd	ASSA13A-120150
2	Notebook	Dell	DELL Inspiron 5359
3	Auxiliary equipment	N/A	N/A

Note: This adapter is provided by the laboratory for testing only, not by the applicant.

2.3. Test Software

The test utility software used during testing was “IPOP”, and the version was V4.1.

Note: Final power setting please refer to operational description.

2.4. 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

2.5. 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.”

- The antenna of the device uses the special IPEX connector.

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
Thermohygrometer	testo	608-H1	MRTSUE06402	1 year	2023-06-06	WZ-SR5
Shielding Room	HUAMING	WZ-SR5	MRTSUE06442	N/A	N/A	WZ-SR5
Signal Analyzer	Keysight	N9010B	MRTSUE06457	1 year	2023-06-04	WZ-SR5
USB Power Sensor	Keysight	U2021XA	MRTSUE06447	1 year	2023-06-04	WZ-SR5
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2022-12-29	WZ-AC1
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06023	1 year	2022-09-16	WZ-AC1
Preamplifier	Agilent	83017A	MRTSUE06076	1 year	2022-11-12	WZ-AC1
TRILOG Antenna	Schwarzbeck	VULB 9168	MRTSUE06172	1 year	2023-06-21	WZ-AC1
Anechoic Chamber	TDK	WZ-AC1	MRTSUE06212	1 year	2023-04-21	WZ-AC1
Thermohygrometer	testo	608-H1	MRTSUE06403	1 year	2023-06-06	WZ-AC1
Signal Analyzer	Keysight	N9010B	MRTSUE06607	1 year	2022-12-29	WZ-AC1
Thermohygrometer	testo	Testo 608-H1	MRTSUE11039	1 year	2022-11-11	WZ-AC1
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

Software	Version	Function
EMI Software	V3.0.0	EMI Test Software
Controller_MF 7802	2.03C	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 $k = 2$.

AC Conducted Emission Measurement
Measurement Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 9kHz~150kHz: 3.74dB 150kHz~30MHz: 3.44dB
Radiated Disturbance
Measurement Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 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
Spurious Emissions, Conducted
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 0.78dB
Output Power
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 1.13dB
Power Spectrum Density
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 1.15dB
Occupied Bandwidth
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 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. 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.

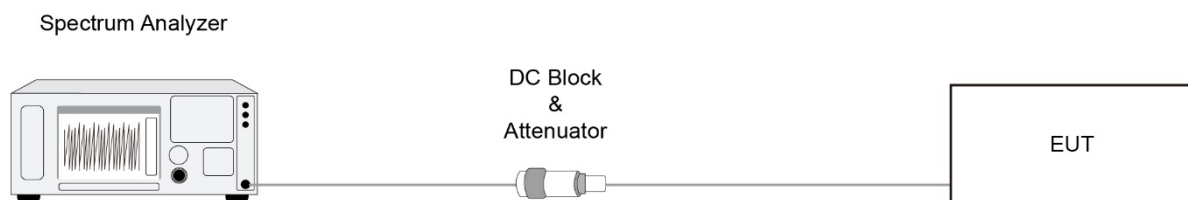
6.2.2. Test Procedure

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 11.9.2.3.2

6.3.3. Test Setting

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.

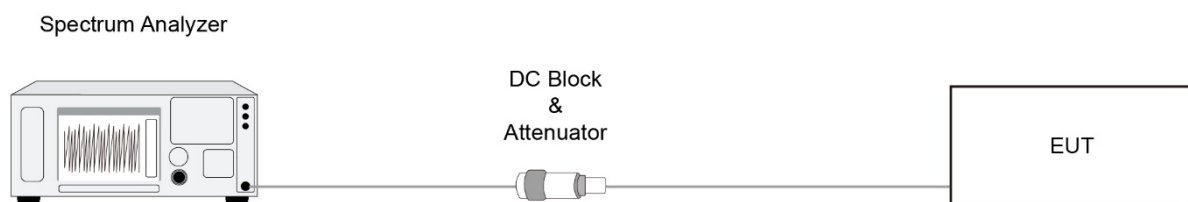
6.4.2. Test Procedure

ANSI C63.10 - 2013 - Section 11.10.5

6.4.3. Test Setting

1. Measure the duty cycle (x) of the transmitter output signal.
2. Set instrument center frequency to DTS channel center frequency.
3. Set span to at least 1.5 times the OBW.
4. RBW = 10 kHz.
5. VBW = 30 kHz.
6. Detector = RMS.
7. Ensure that the number of measurement points in the sweep $\geq 2 \times \text{span/RBW}$.
8. Sweep time = auto couple.
9. Don't use sweep triggering. Allow sweep to "free run".
10. Employ trace averaging (RMS) mode over a minimum of 100 traces.
11. Use the peak marker function to determine the maximum amplitude level.
12. Add $10 \log (1/x)$, where x is the duty cycle measured in step (a, to the measured PSD to compute the average PSD during the actual transmission time. If measured value exceeds requirement specified by regulatory agency, then reduce RBW (but no less than 3 kHz) and repeat (note that this may require zooming in on the emission of interest and reducing the span to meet the minimum measurement point requirement as the RBW is reduced).

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 30dB 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

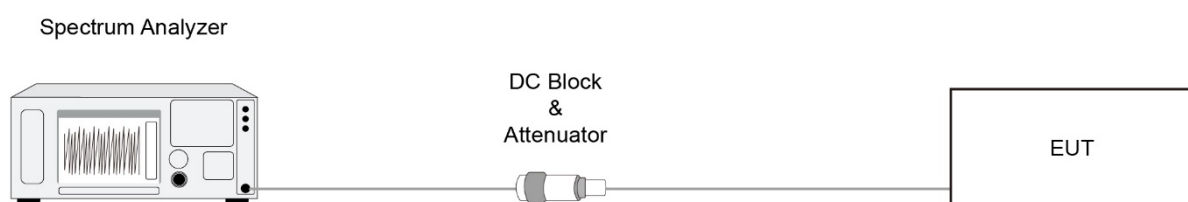
Reference level measurement

1. Set instrument center frequency to DTS channel center frequency
2. Set the span to ≥ 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



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

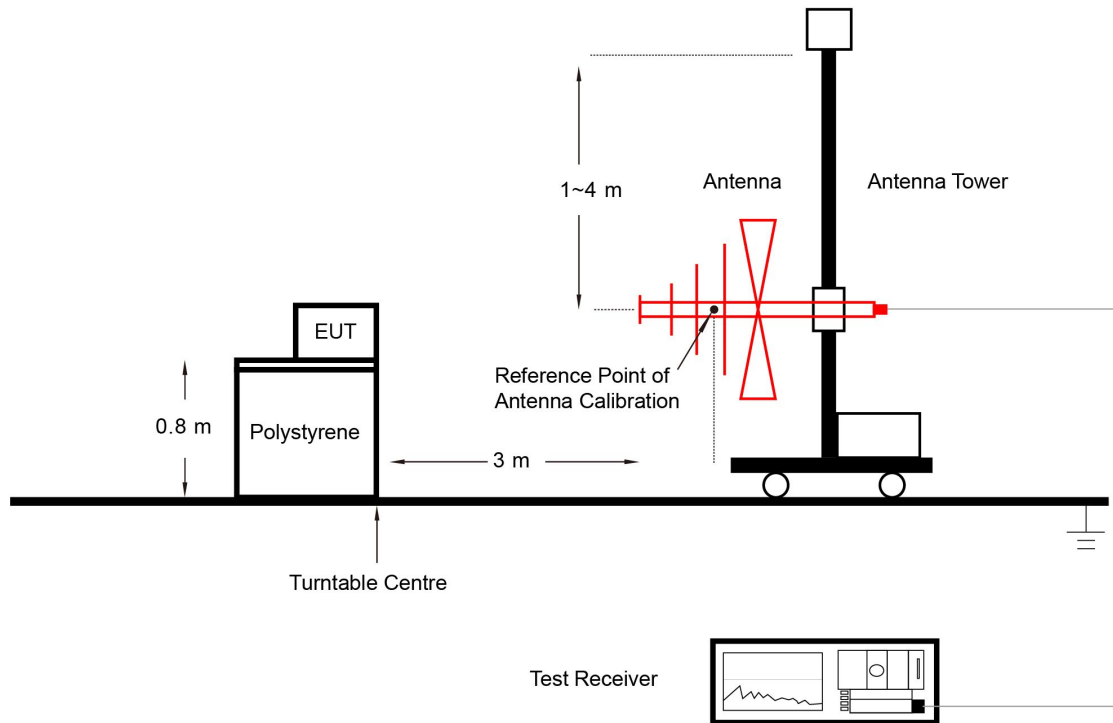
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

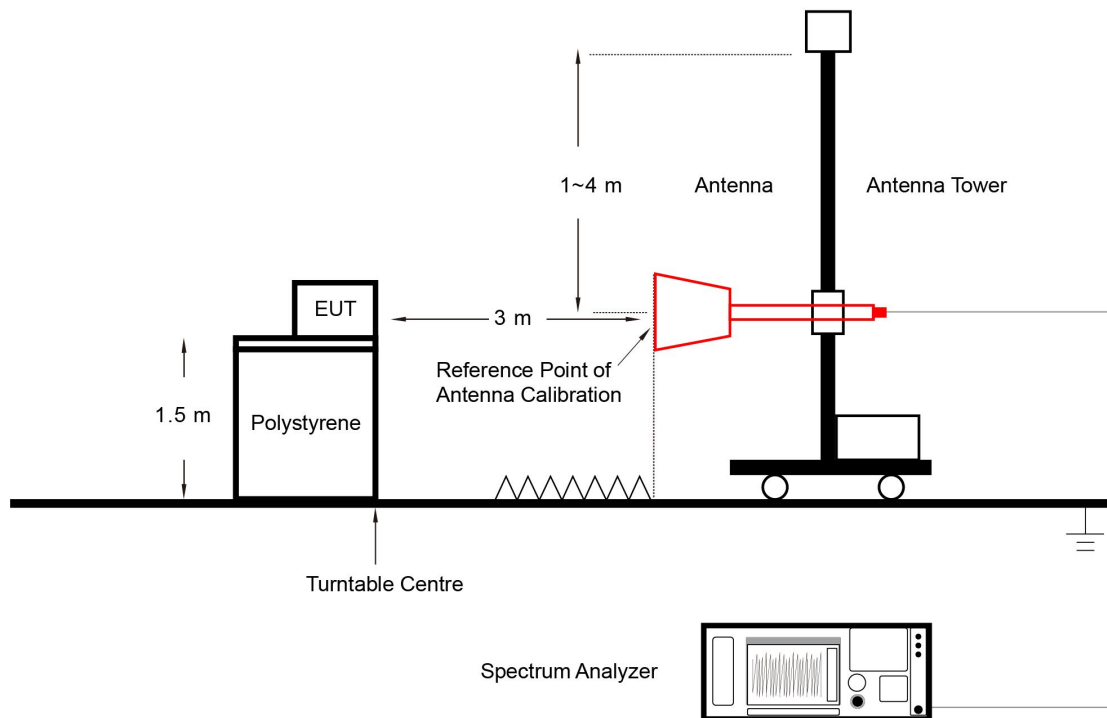
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10 Hz.
If the EUT duty cycle is $< 98\%$, set $\text{VBW} \geq 1/T$. T is the minimum transmission duration.
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
¹ 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	(²)
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

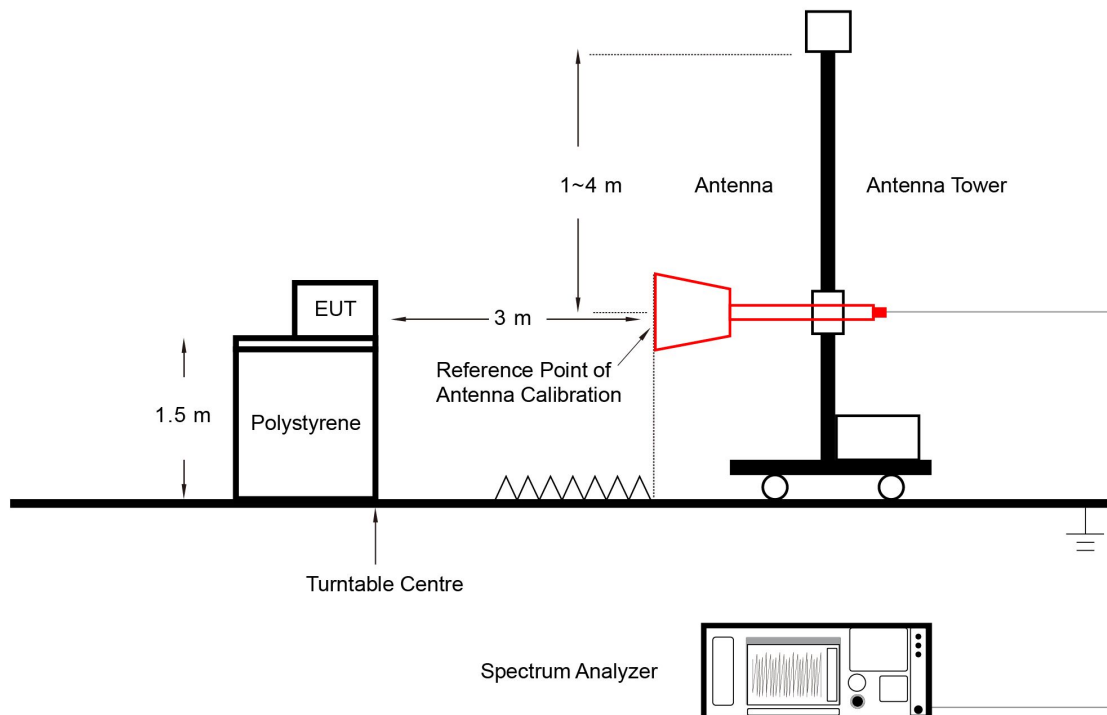
Peak Field Strength Measurements

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

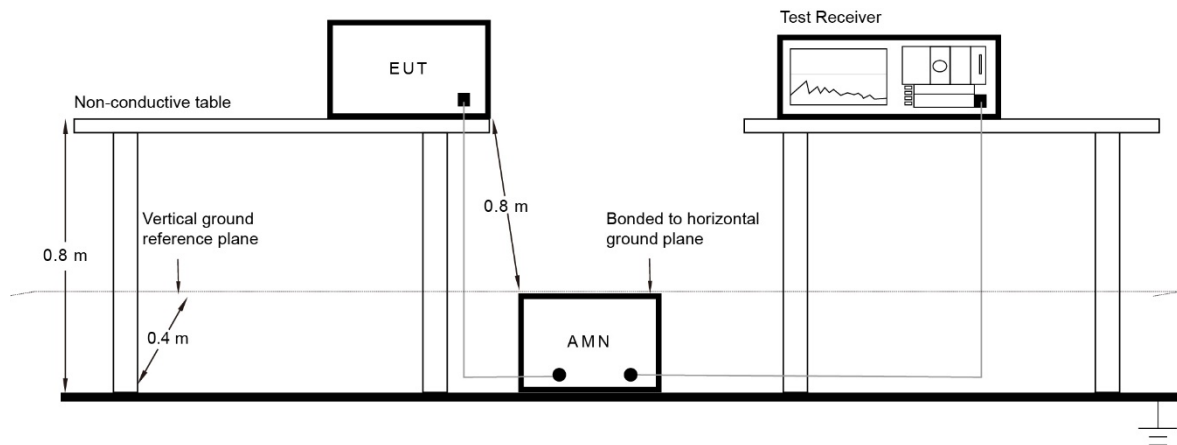
6.8.1. Test Limit

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

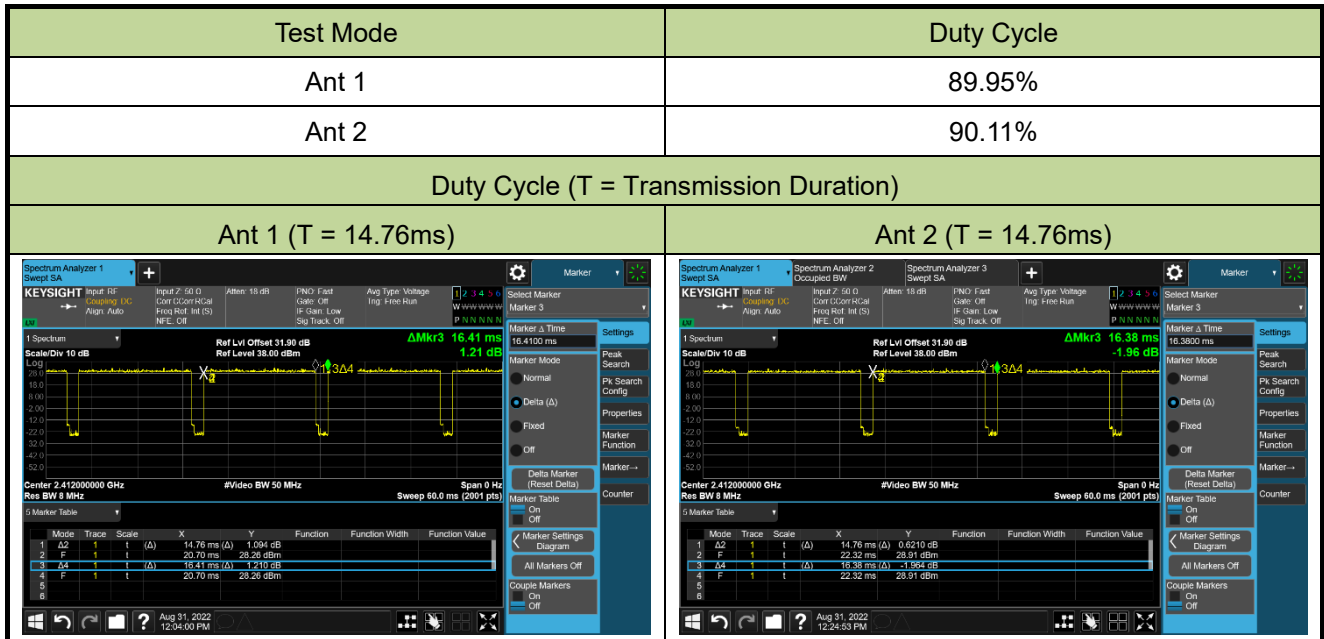


6.8.3. Test Result

Refer to Appendix A.8.

Appendix A – Test Result

A.1 Duty Cycle Test Result



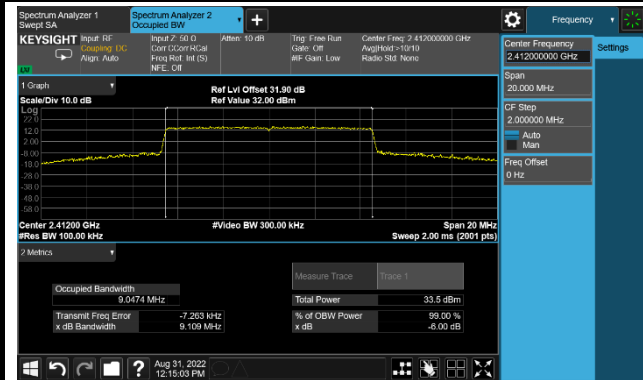
A.2 6dB Bandwidth Test Result

Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2022-08-31		

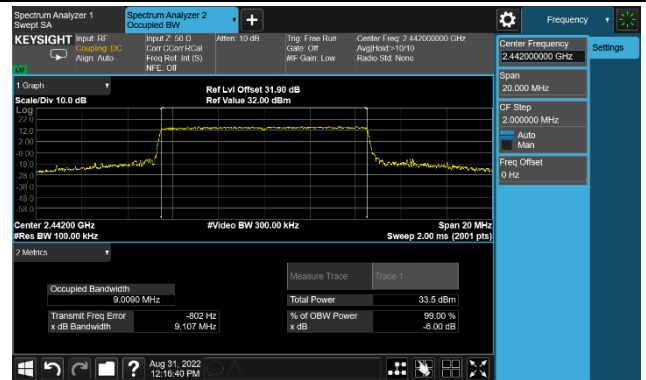
Test Mode	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
Ant 1	01	2412	9.109	≥ 0.5
	07	2442	9.107	≥ 0.5
	12	2467	9.109	≥ 0.5
Ant 2	01	2412	9.105	≥ 0.5
	07	2442	9.106	≥ 0.5
	12	2467	9.118	≥ 0.5

Antenna 1 - 6dB Bandwidth

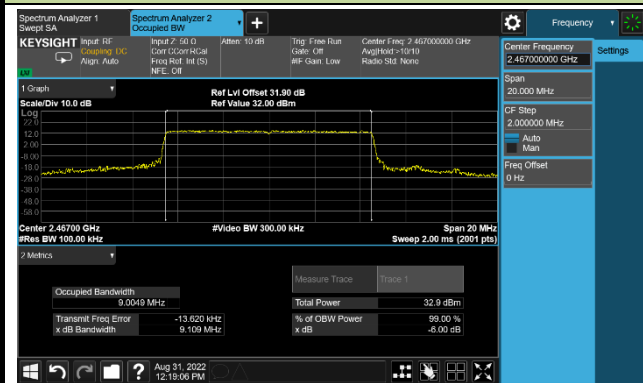
Channel 01 (2412MHz)



Channel 07 (2442MHz)

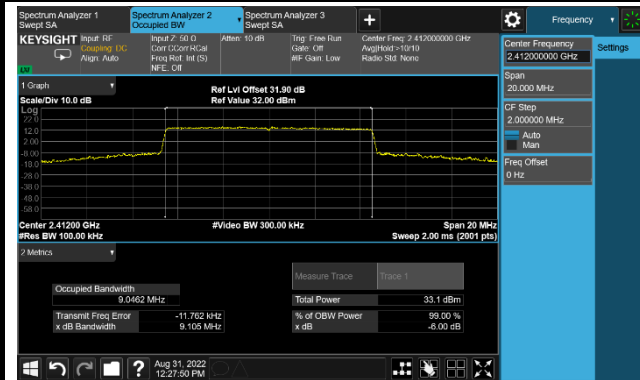


Channel 12 (2467MHz)

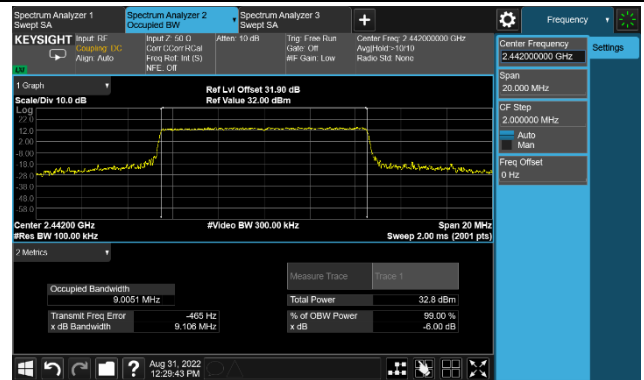


Antenna 2 - 6dB Bandwidth

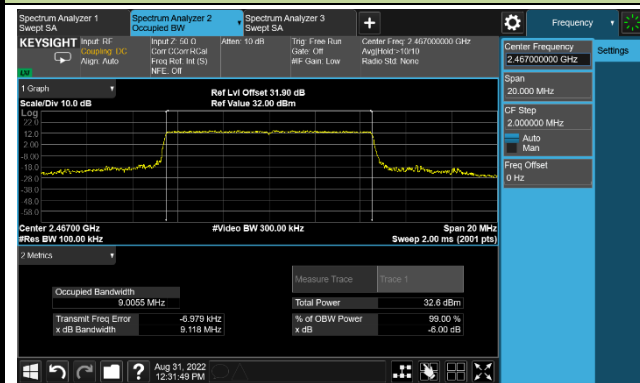
Channel 01 (2412MHz)



Channel 07 (2442MHz)



Channel 12 (2467MHz)



A.3 Output Power Test Result

Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2022-08-31		

Test Mode	Channel No.	Freq. (MHz)	Average Power (dBm)	Limit (dBm)
Ant 1	01	2412	23.99	≤ 30.00
	07	2442	24.09	≤ 30.00
	12	2467	23.24	≤ 30.00
Ant 2	01	2412	23.50	≤ 30.00
	07	2442	23.16	≤ 30.00
	12	2467	22.94	≤ 30.00

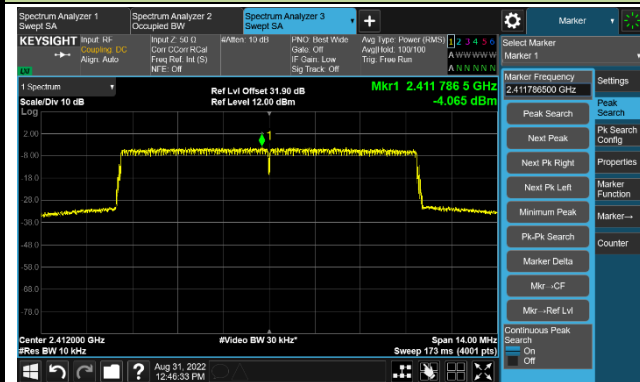
A.4 Power Spectral Density Test Result

Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2022-08-31		

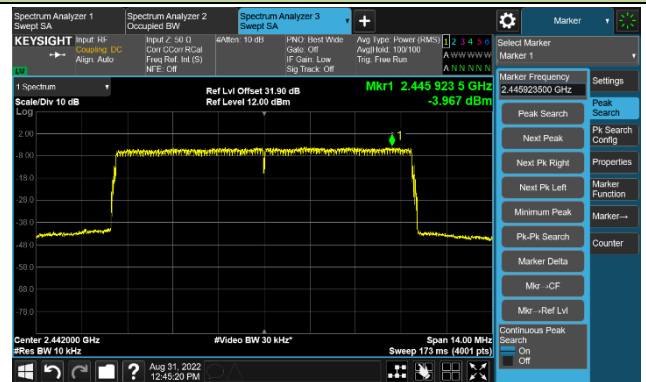
Test Mode	Channel No.	Freq. (MHz)	AVPSD (dBm / 10kHz)	Limit (dBm / 3kHz)	Result
Ant 1	01	2412	-4.065	≤ 8.00	Pass
	07	2442	-3.967	≤ 8.00	Pass
	12	2467	-4.969	≤ 8.00	Pass
Ant 2	01	2412	-4.564	≤ 8.00	Pass
	07	2442	-4.994	≤ 8.00	Pass
	12	2467	-5.303	≤ 8.00	Pass

Ant 1 AVPSD

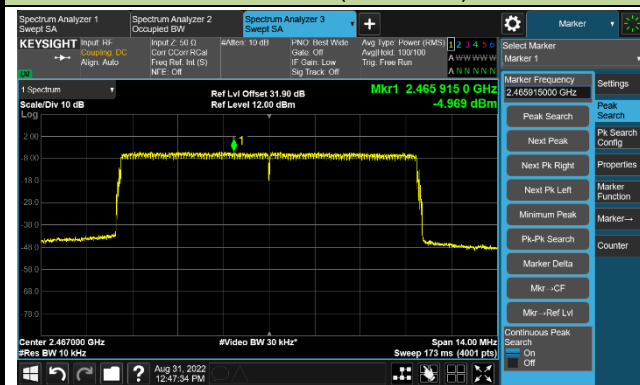
Channel 01 (2412MHz)



Channel 07 (2442MHz)

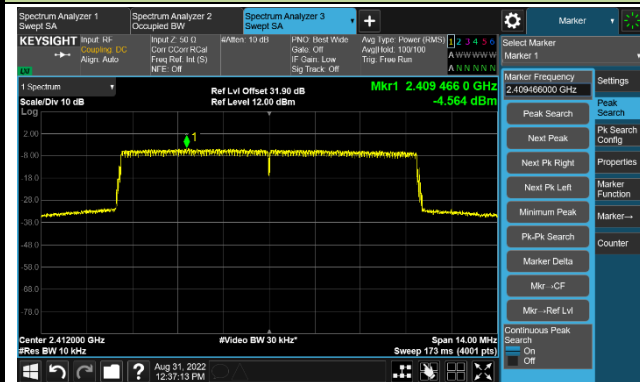


Channel 12 (2467MHz)

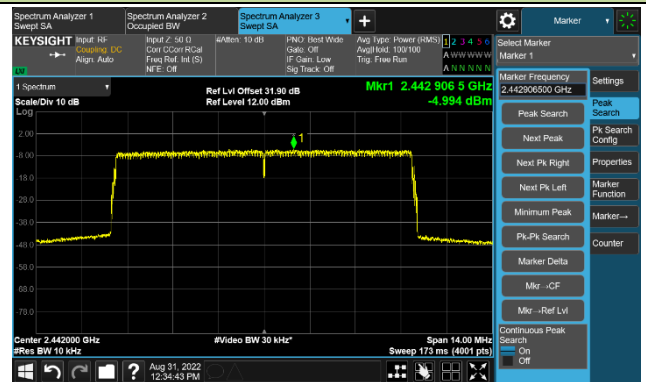


Ant 2 AVPSD

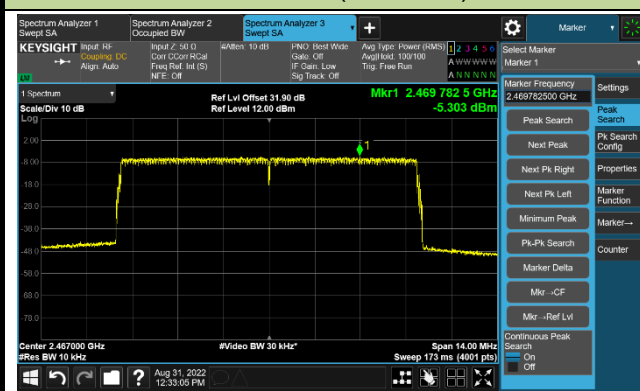
Channel 01 (2412MHz)



Channel 07 (2442MHz)



Channel 12 (2467MHz)



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

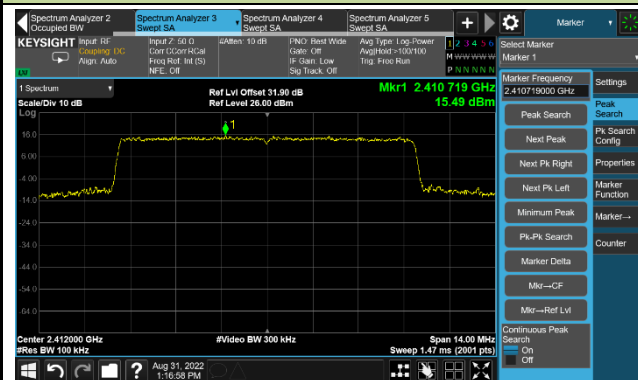
Test Site	WZ-SR5	Test Engineer	Lynn Yang
Test Date	2022-08-31		

Test Mode	Channel No.	Frequency (MHz)	Limit
Ant 1	01	2412	30dBc
	07	2442	30dBc
	12	2467	30dBc
Ant 2	01	2412	30dBc
	07	2442	30dBc
	12	2467	30dBc

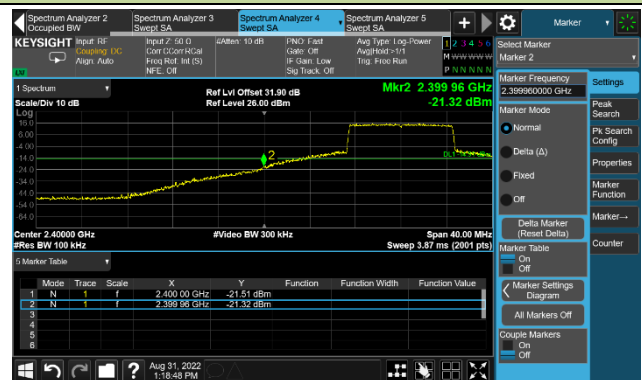
Antenna 1 Out-of-Band Emissions

Channel 01 (2412MHz)

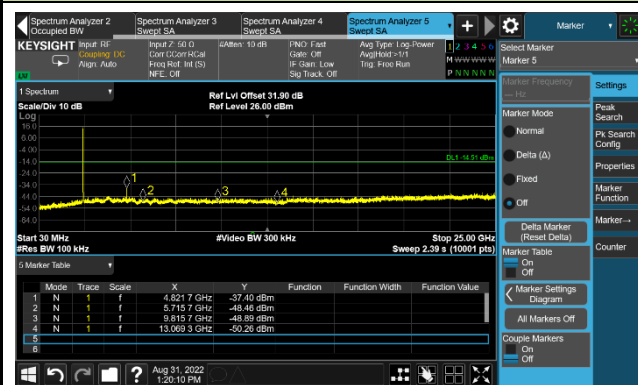
Reference Level



Low Band Edge

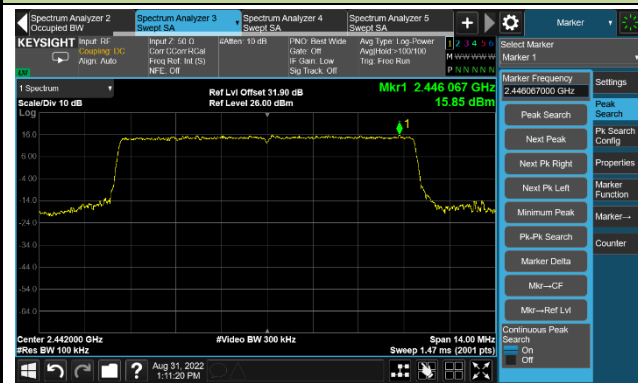


Spurious Emission

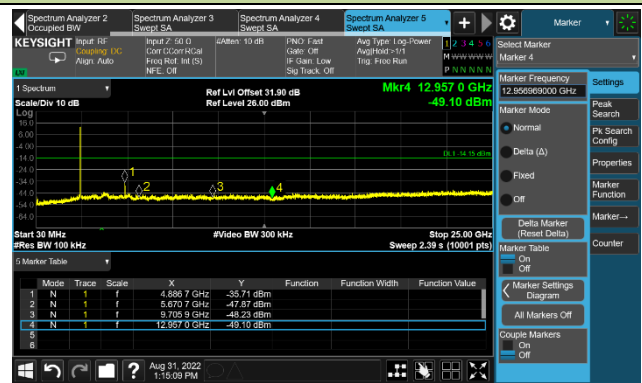


Channel 07 (2442MHz)

Reference Level

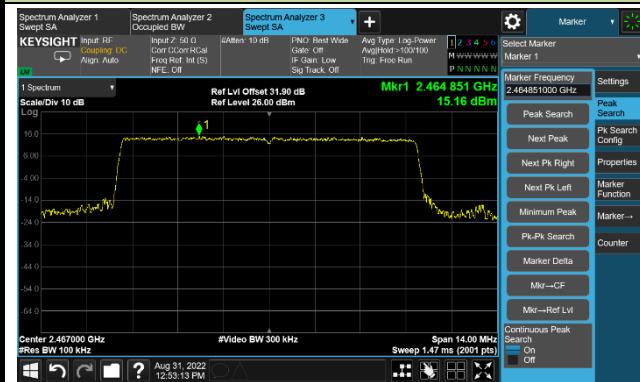


Spurious Emission

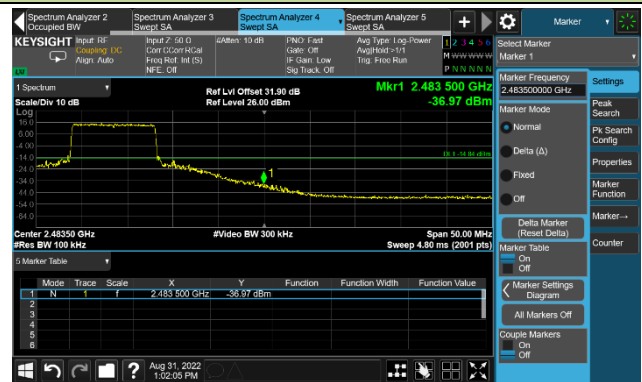


Channel 12 (2467MHz)

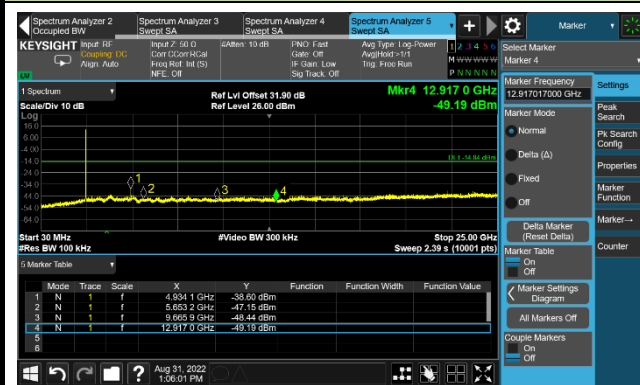
Reference Level



High Band Edge



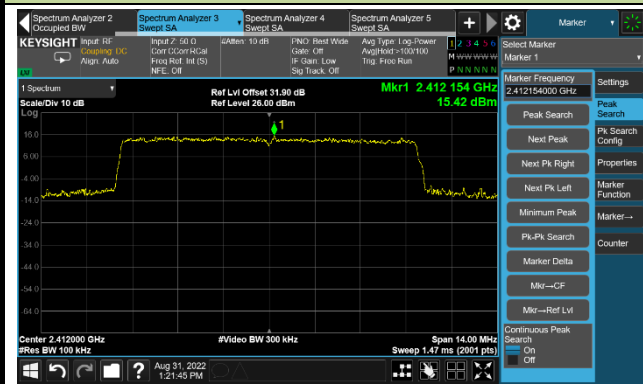
Spurious Emission



Antenna 2 Out-of-Band Emissions

Channel 01 (2412MHz)

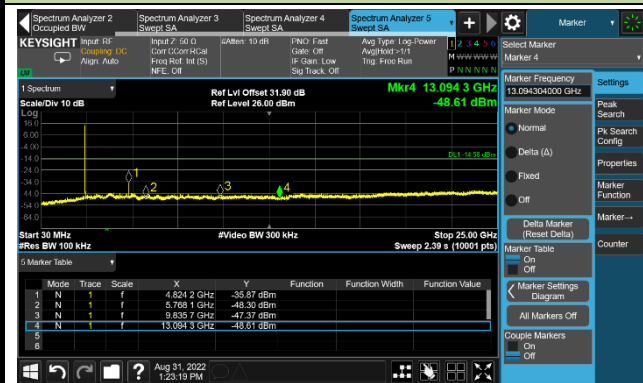
Reference Level



Low Band Edge

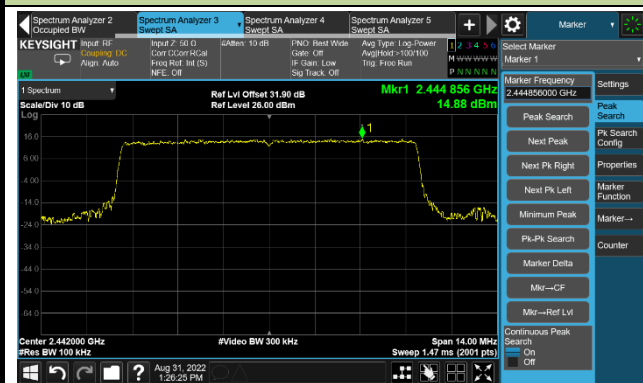


Spurious Emission



Channel 07 (2442MHz)

Reference Level

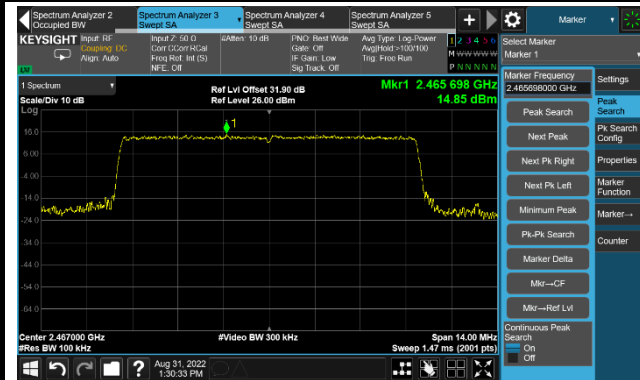


Spurious Emission

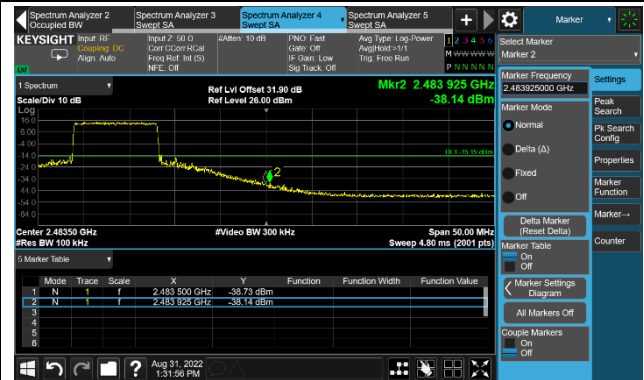


Channel 12 (2467MHz)

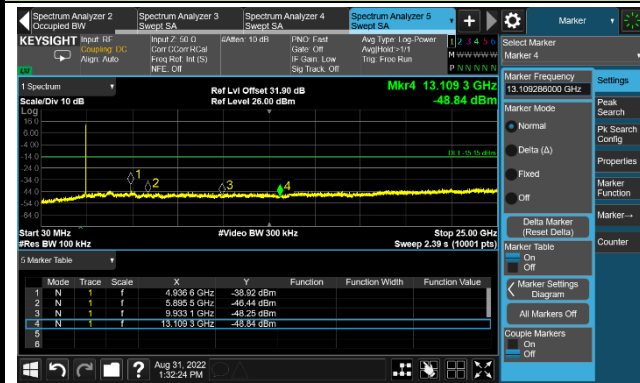
Reference Level



High Band Edge



Spurious Emission



A.6 Radiated Spurious Emission Test Result

Test Site	WZ-AC1	Test Engineer	Charles Zhang
Test Date	2022-08-30	Test Mode:	Antenna 1
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
01	4816.5	60.6	3.1	63.7	74.0	-10.3	Peak	Horizontal
	4816.5	49.5	3.1	52.6	54.0	-1.4	Average	Horizontal
	8403.5	34.1	8.9	43.0	74.0	-31.0	Peak	Horizontal
	12058.5	40.0	12.3	52.3	74.0	-21.7	Peak	Horizontal
	12058.5	28.2	12.3	40.5	54.0	-13.5	Average	Horizontal
	4816.5	52.1	3.1	55.2	74.0	-18.8	Peak	Vertical
	4816.5	42.5	3.1	45.6	54.0	-8.4	Average	Vertical
	8497.0	35.8	9.1	44.9	74.0	-29.1	Peak	Vertical
	12058.5	41.0	12.3	53.3	74.0	-20.7	Peak	Vertical
	12058.5	28.3	12.3	40.6	54.0	-13.4	Average	Vertical
07	4884.5	62.5	3.3	65.8	74.0	-8.2	Peak	Horizontal
	4884.5	49.7	3.3	53.0	54.0	-1.0	Average	Horizontal
	7332.5	43.4	8.0	51.4	74.0	-22.6	Peak	Horizontal
	7332.5	32.9	8.0	40.9	54.0	-13.1	Average	Horizontal
	11540.0	35.8	12.5	48.3	74.0	-25.7	Peak	Horizontal
	4884.5	53.7	3.3	57.0	74.0	-17.0	Peak	Vertical
	4884.5	41.7	3.3	45.0	54.0	-9.0	Average	Vertical
	7324.0	48.0	8.0	56.0	74.0	-18.0	Peak	Vertical
	7324.0	36.7	8.0	44.7	54.0	-9.3	Average	Vertical
	12101.0	37.5	12.0	49.5	74.0	-24.5	Peak	Vertical
12	4935.5	61.4	3.4	64.8	74.0	-9.2	Peak	Horizontal
	4935.5	49.3	3.4	52.7	54.0	-1.3	Average	Horizontal
	7400.5	37.8	8.1	45.9	74.0	-28.1	Peak	Horizontal
	11472.0	36.1	12.5	48.6	74.0	-25.4	Peak	Horizontal
	4935.5	55.1	3.4	58.5	74.0	-15.5	Peak	Vertical
	4935.5	42.9	3.4	46.3	54.0	-7.7	Average	Vertical
	7400.5	44.3	8.1	52.4	74.0	-21.6	Peak	Vertical
	7400.5	32.1	8.1	40.2	54.0	-13.8	Average	Vertical

	11616.5	36.3	12.2	48.5	74.0	-25.5	Peak	Vertical
Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB/m)								
Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)								

Test Site	WZ-AC1	Test Engineer	Charles Zhang
Test Date	2022-08-30	Test Mode:	Antenna 2
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.		

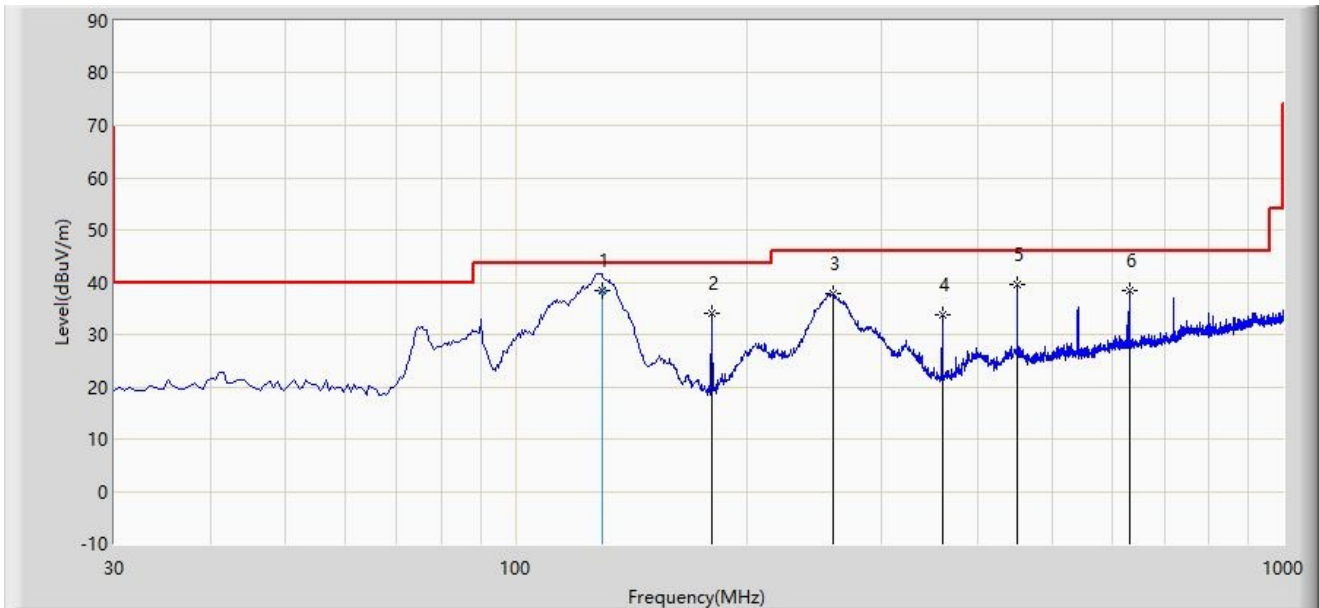
Test Channel	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
01	4816.5	53.5	3.1	56.6	74.0	-17.4	Peak	Horizontal
	4816.5	43.5	3.1	46.6	54.0	-7.4	Average	Horizontal
	8386.5	34.1	8.9	43.0	74.0	-31.0	Peak	Horizontal
	12067.0	38.6	12.2	50.8	74.0	-23.2	Peak	Horizontal
	12067.0	25.6	12.2	37.8	54.0	-16.2	Average	Horizontal
	4816.5	61.1	3.1	64.2	74.0	-9.8	Peak	Vertical
	4816.5	50.3	3.1	53.4	54.0	-0.6	Average	Vertical
	7417.5	36.7	8.0	44.7	74.0	-29.3	Peak	Vertical
	12058.5	42.4	12.3	54.7	74.0	-19.3	Peak	Vertical
	12058.5	27.2	12.3	39.5	54.0	-14.5	Average	Vertical
07	4884.5	52.3	3.3	55.6	74.0	-18.4	Peak	Horizontal
	4884.5	42.0	3.3	45.3	54.0	-8.7	Average	Horizontal
	8131.5	34.4	8.7	43.1	74.0	-30.9	Peak	Horizontal
	12135.0	36.3	12.2	48.5	74.0	-25.5	Peak	Horizontal
	4884.5	62.6	3.3	65.9	74.0	-8.1	Peak	Vertical
	4884.5	50.2	3.3	53.5	54.0	-0.5	Average	Vertical
	7545.0	37.0	8.1	45.1	74.0	-28.9	Peak	Vertical
	11310.5	36.6	12.5	49.1	74.0	-24.9	Peak	Vertical
12	4935.5	54.5	3.4	57.9	74.0	-16.1	Peak	Horizontal
	4935.5	42.3	3.4	45.7	54.0	-8.3	Average	Horizontal
	7630.0	36.5	8.0	44.5	74.0	-29.5	Peak	Horizontal
	11489.0	36.1	12.7	48.8	74.0	-25.2	Peak	Horizontal
	4935.5	62.4	3.4	65.8	74.0	-8.2	Peak	Vertical
	4935.5	50.0	3.4	53.4	54.0	-0.6	Average	Vertical
	8386.5	35.7	8.9	44.6	74.0	-29.4	Peak	Vertical
	11336.0	36.5	12.5	49.0	74.0	-25.0	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 of Radiated Spurious Emission for below 1GHz

Site: WZ-AC1	Time: 2022/08/31 - 15:58
Limit: FCC_Part15.209_RSE(3m)	Engineer: Charles Zhang
Probe: VULB 9168_25-2000MHz	Polarity: Horizontal
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 1 at 2412MHz	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB/m)	Type
1	*	129.430	38.297	21.640	-5.203	43.500	16.658	QP
2		179.865	33.950	17.282	-9.550	43.500	16.668	PK
3		258.920	37.782	20.925	-8.218	46.000	16.857	PK
4		360.285	33.781	14.058	-12.219	46.000	19.723	PK
5		450.010	39.479	17.212	-6.521	46.000	22.267	PK
6		629.945	38.340	12.299	-7.660	46.000	26.040	PK

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

Note 2: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB/m).

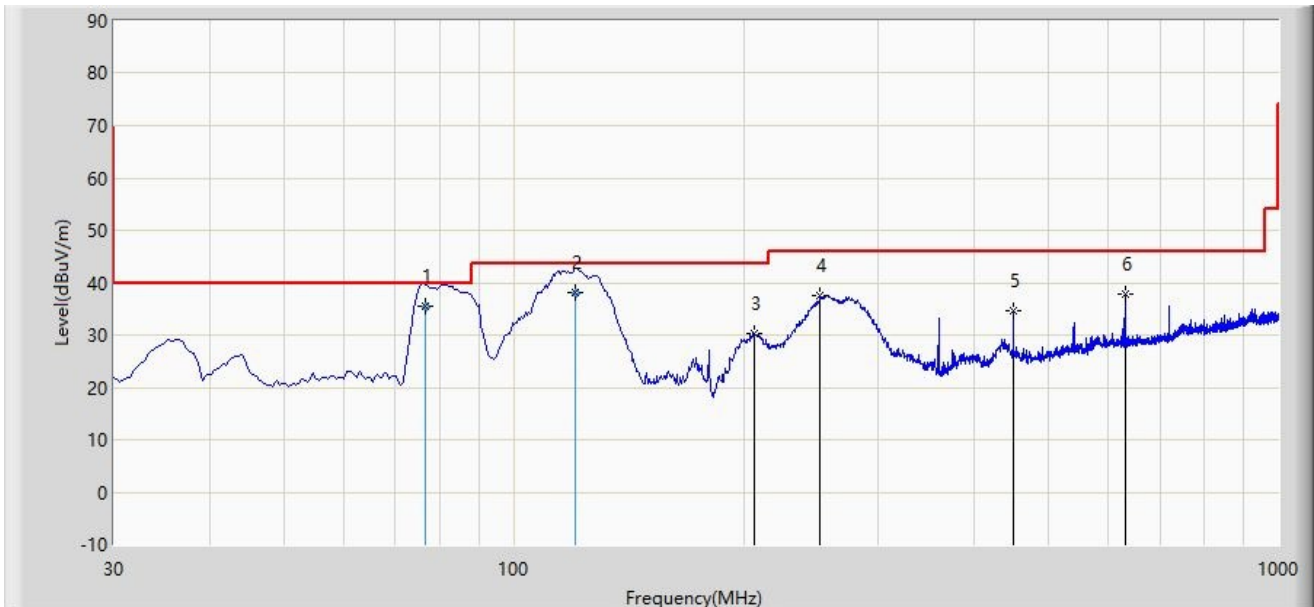
Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 4: Quasi-Peak measurement was not performed when peak measure level was lower than the quasi-peak limit.

Note 5: 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-AC1	Time: 2022/08/31 - 16:02
Limit: FCC_Part15.209_RSE(3m)	Engineer: Charles Zhang
Probe: VULB 9168_25-2000MHz	Polarity: Vertical
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 1 at 2412MHz	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB/m)	Type
1	*	76.690	35.464	20.570	-4.536	40.000	14.893	QP
2		120.200	38.080	22.280	-5.420	43.500	15.800	QP
3		206.055	30.225	15.602	-13.275	43.500	14.623	PK
4		251.645	37.418	20.692	-8.582	46.000	16.726	PK
5		450.010	34.509	12.242	-11.491	46.000	22.267	PK
6		629.945	37.902	11.861	-8.098	46.000	26.040	PK

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

Note 2: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB/m).

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

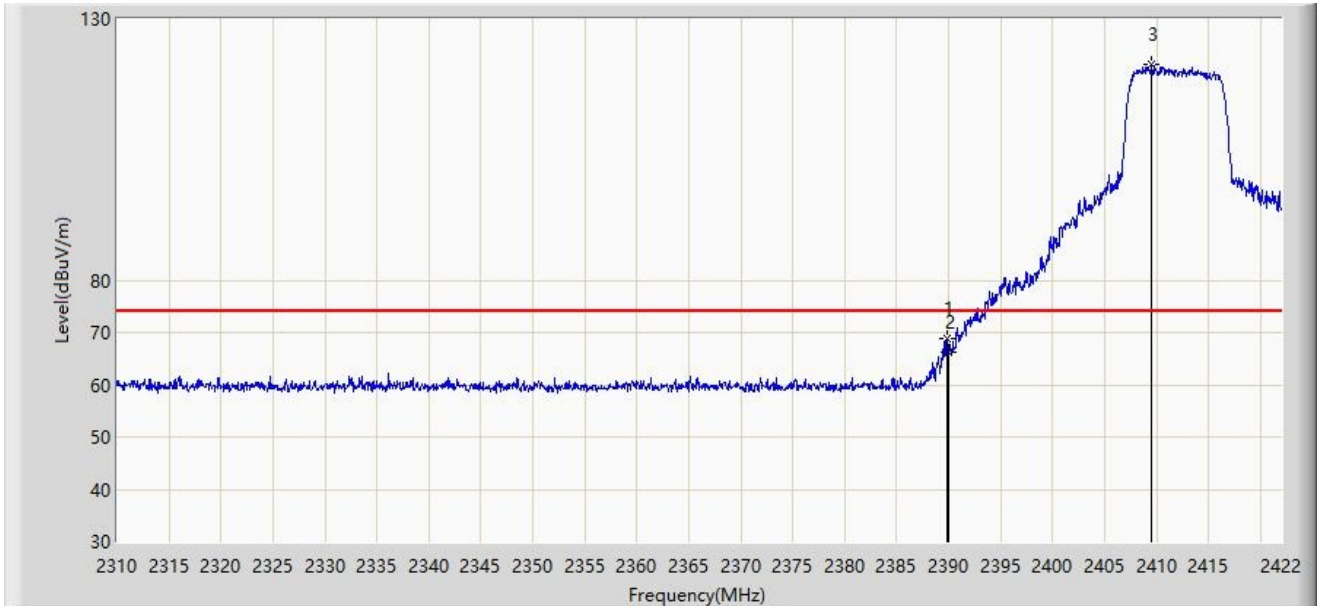
Note 4: Quasi-Peak measurement was not performed when peak measure level was lower than the quasi-peak limit.

Note 5: 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-AC1	Time: 2022/08/30 - 10:00
Limit: FCC_2.4G_RE(3m)	Engineer: Charles Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 1 at 2412MHz	



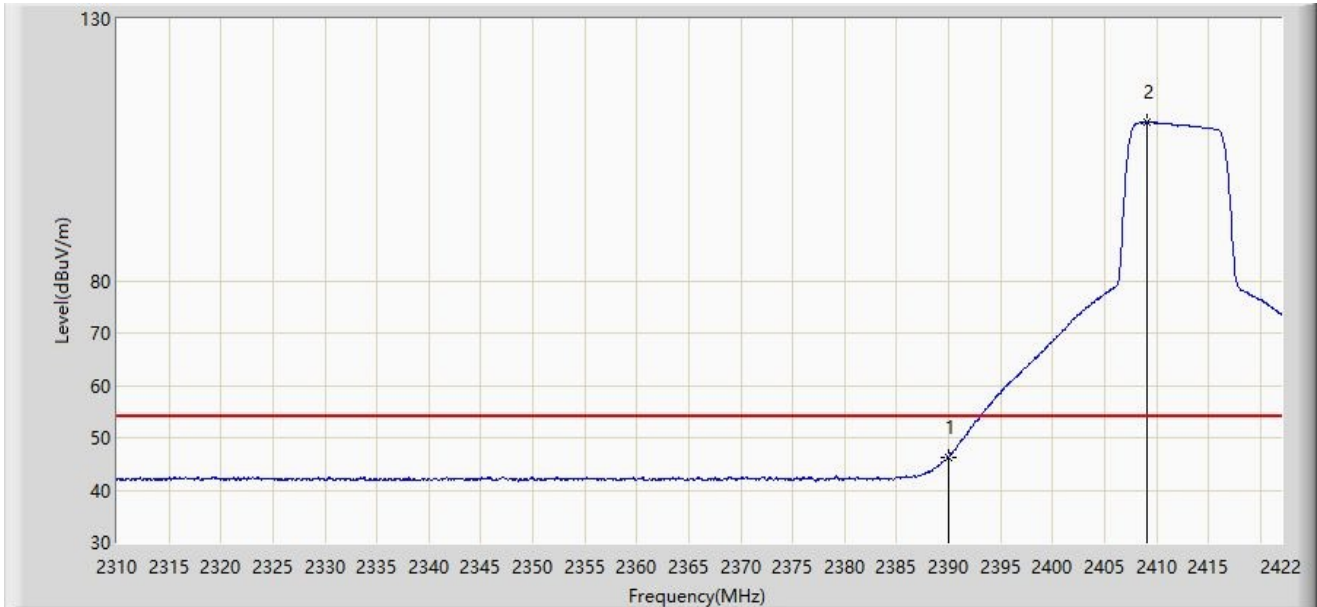
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2389.800	68.796	38.270	-5.204	74.000	30.526	PK
2		2390.000	66.269	35.743	-7.731	74.000	30.526	PK
3		2409.512	121.303	90.745	N/A	N/A	30.558	PK

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

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

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

Site: WZ-AC1	Time: 2022/08/30 - 10:02
Limit: FCC_2.4G_RE(3m)	Engineer: Charles Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 1 at 2412MHz	



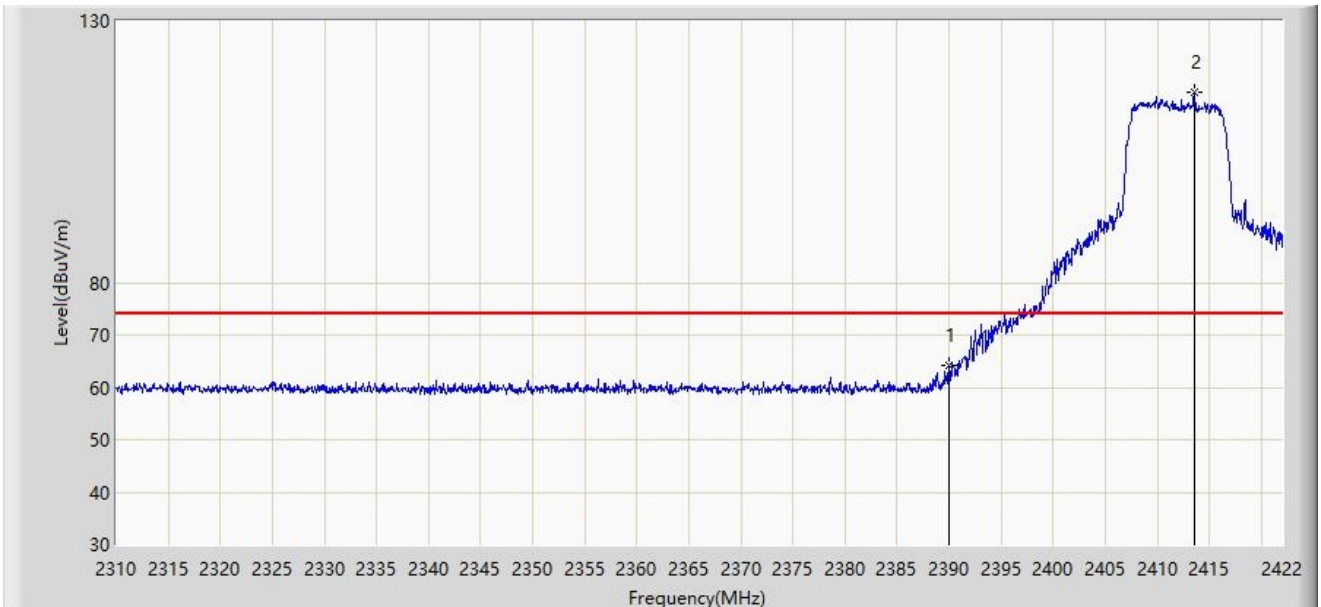
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2390.000	46.160	15.634	-7.840	54.000	30.526	AV
2		2409.064	110.171	79.613	N/A	N/A	30.558	AV

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

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

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

Site: WZ-AC1	Time: 2022/08/30 - 10:08
Limit: FCC_2.4G_RE(3m)	Engineer: Charles Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 1 at 2412MHz	



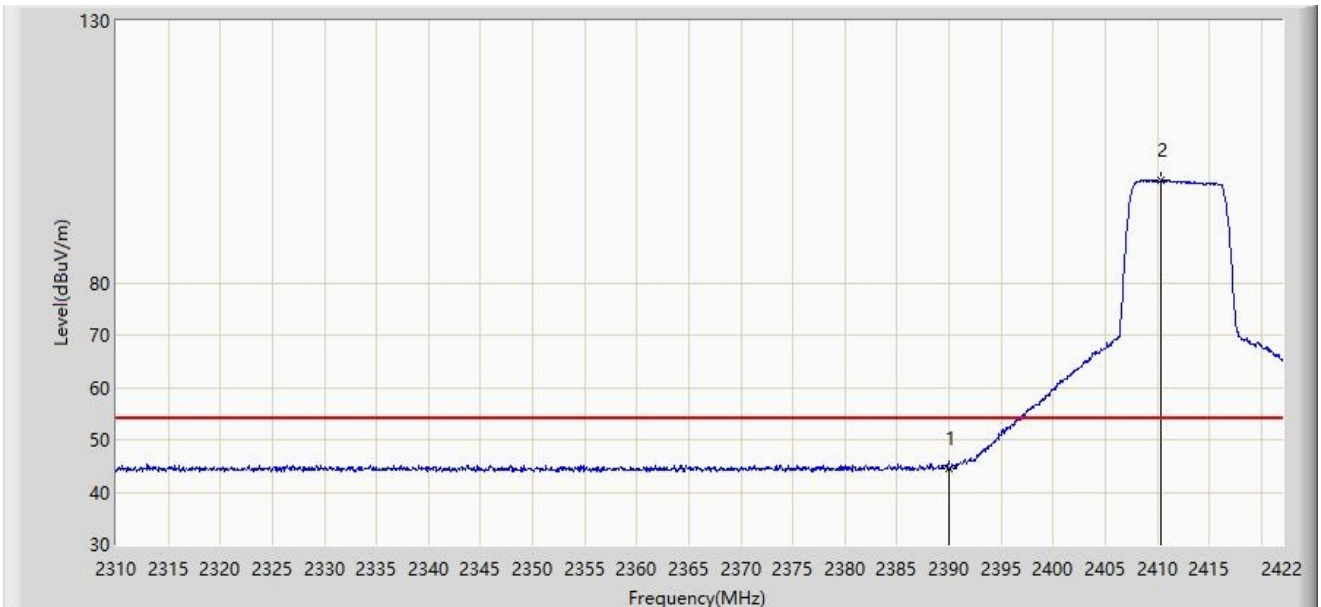
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2390.000	64.149	33.623	-9.851	74.000	30.526	PK
2		2413.544	116.247	85.689	N/A	N/A	30.559	PK

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

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

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

Site: WZ-AC1	Time: 2022/08/30 - 10:11
Limit: FCC_2.4G_RE(3m)	Engineer: Charles Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 1 at 2412MHz	



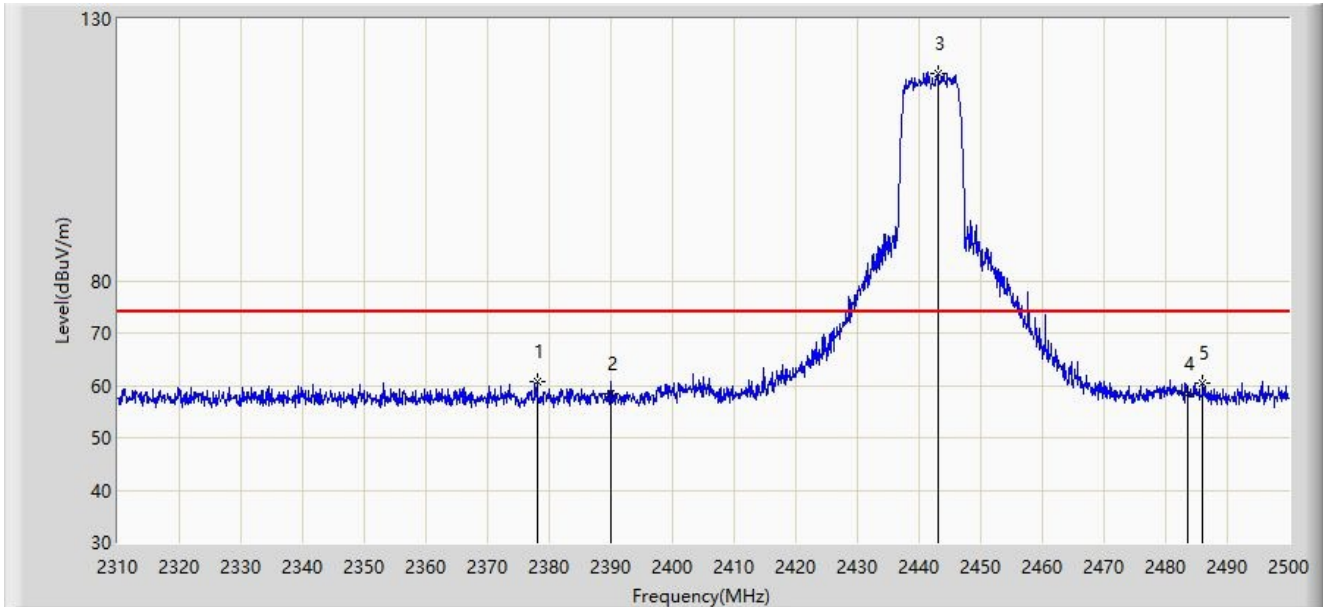
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2390.000	44.464	13.938	-9.536	54.000	30.526	AV
2		2410.296	99.485	68.927	N/A	N/A	30.559	AV

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

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

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

Site: WZ-AC1	Time: 2022/08/30 - 10:47
Limit: FCC_2.4G_RE(3m)	Engineer: Charles Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 1 at 2442MHz	



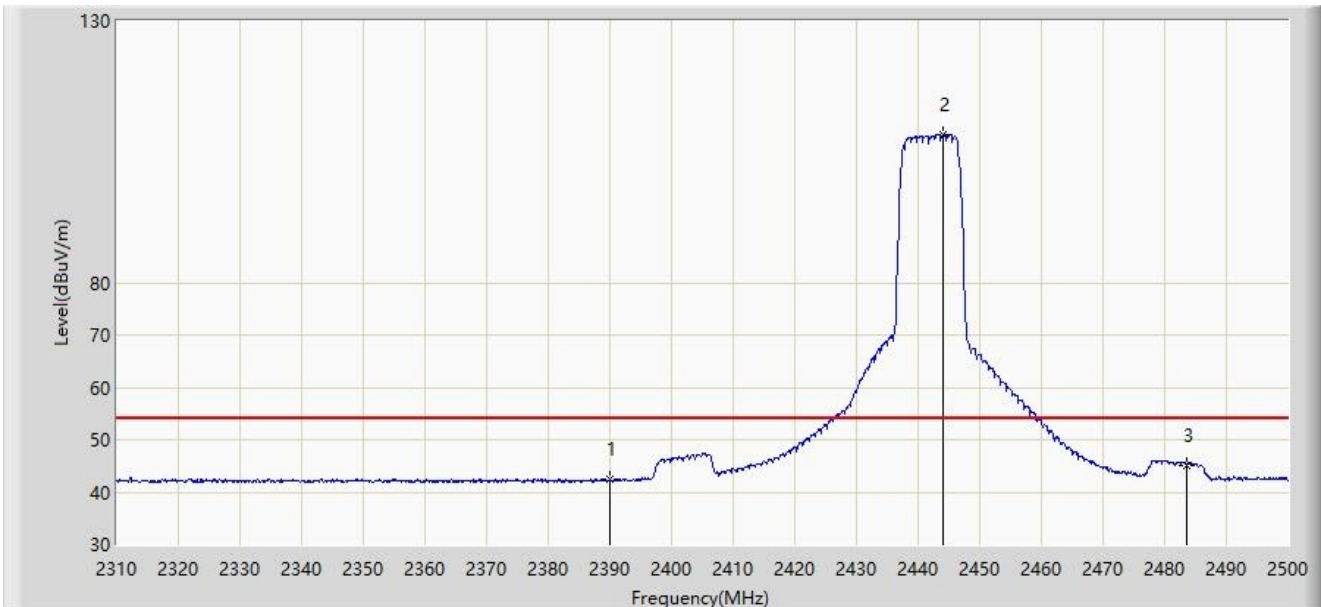
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2378.020	60.798	30.270	-13.202	74.000	30.528	PK
2		2390.000	58.364	27.838	-15.636	74.000	30.526	PK
3		2443.000	119.700	89.139	N/A	N/A	30.561	PK
4		2483.500	58.326	27.623	-15.674	74.000	30.704	PK
5		2485.940	60.414	29.709	-13.586	74.000	30.705	PK

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

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

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

Site: WZ-AC1	Time: 2022/08/30 - 10:49
Limit: FCC_2.4G_RE(3m)	Engineer: Charles Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 1 at 2442MHz	



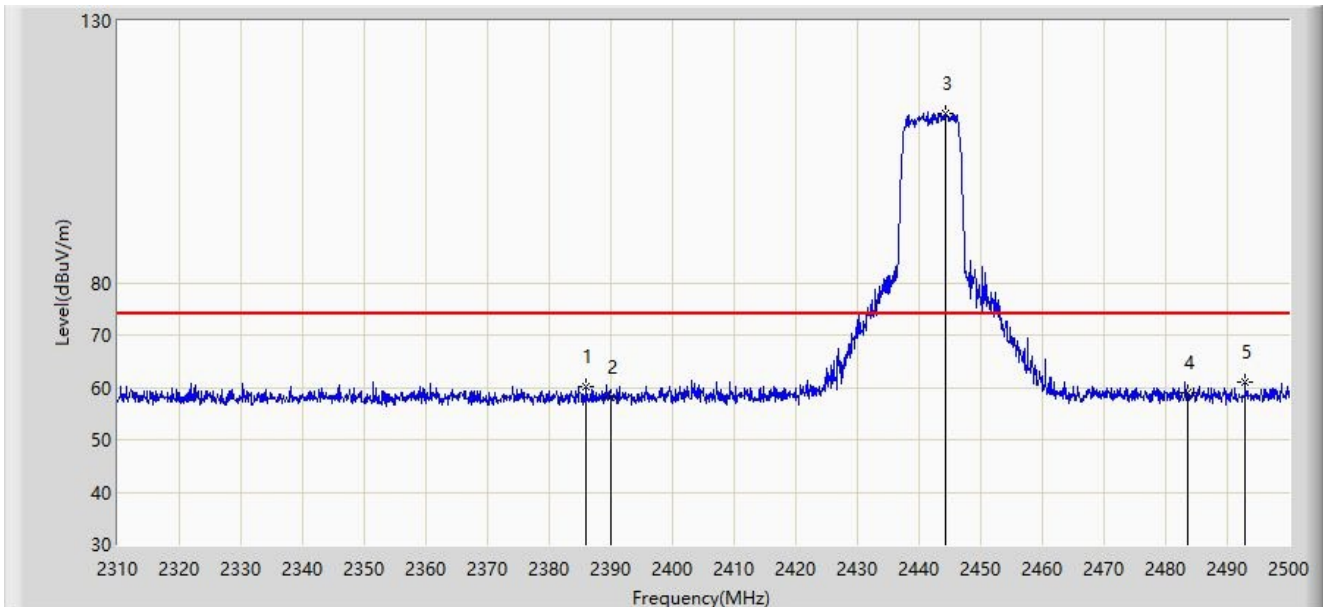
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2390.000	42.323	11.797	-11.677	54.000	30.526	AV
2		2443.950	108.116	77.552	N/A	N/A	30.564	AV
3	*	2483.500	45.140	14.437	-8.860	54.000	30.704	AV

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

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

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

Site: WZ-AC1	Time: 2022/08/30 - 10:50
Limit: FCC_2.4G_RE(3m)	Engineer: Charles Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 1 at 2442MHz	



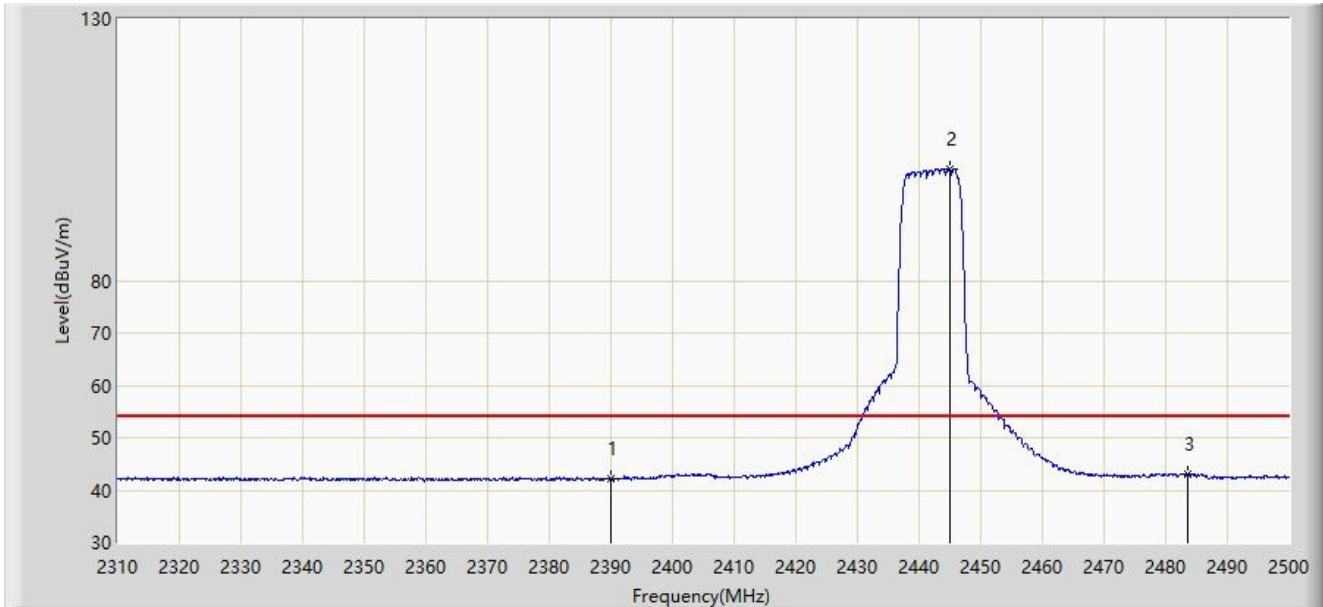
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2386.000	60.082	29.563	-13.918	74.000	30.519	PK
2		2390.000	57.997	27.471	-16.003	74.000	30.526	PK
3		2444.235	112.455	81.890	N/A	N/A	30.566	PK
4		2483.500	58.898	28.195	-15.102	74.000	30.704	PK
5	*	2492.875	61.119	30.406	-12.881	74.000	30.714	PK

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

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

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

Site: WZ-AC1	Time: 2022/08/30 - 10:52
Limit: FCC_2.4G_RE(3m)	Engineer: Charles Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 1 at 2442MHz	



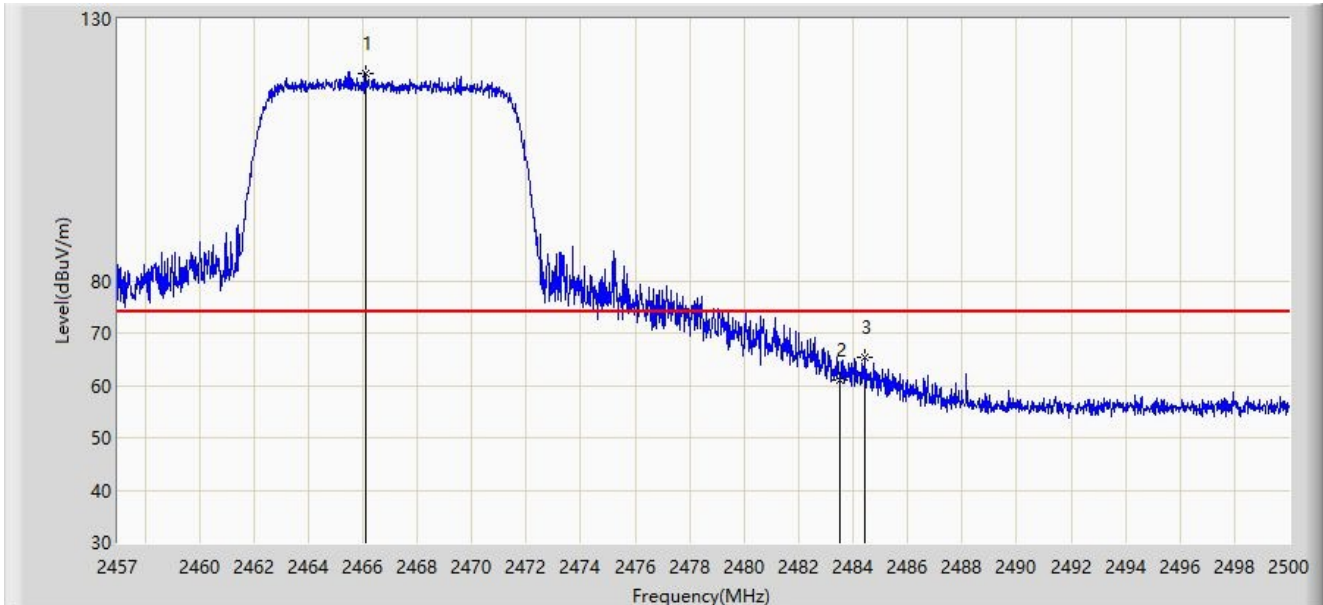
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2390.000	42.152	11.626	-11.848	54.000	30.526	AV
2		2444.900	101.340	70.772	N/A	N/A	30.568	AV
3	*	2483.500	42.899	12.196	-11.101	54.000	30.704	AV

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

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

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

Site: WZ-AC1	Time: 2022/08/30 - 16:09
Limit: FCC_2.4G_RE(3m)	Engineer: Charles Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 1 at 2467MHz	



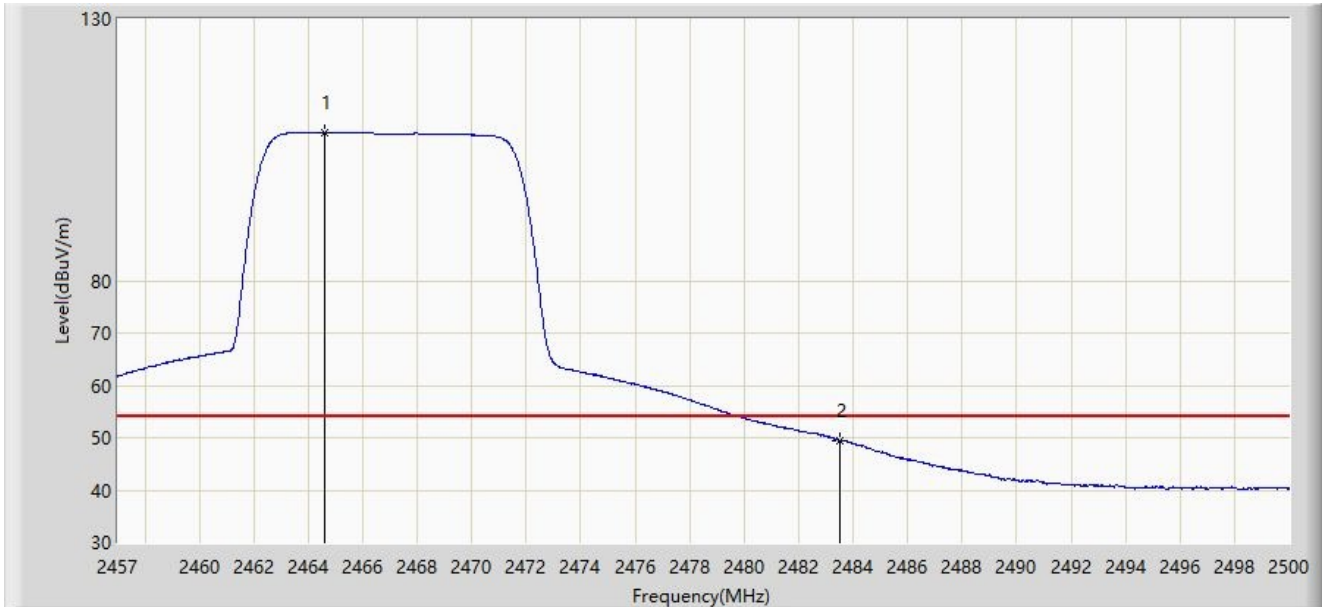
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2466.094	119.627	88.970	N/A	N/A	30.657	PK
2		2483.500	61.088	30.385	-12.912	74.000	30.704	PK
3	*	2484.413	65.349	34.645	-8.651	74.000	30.704	PK

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

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

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

Site: WZ-AC1	Time: 2022/08/30 - 16:12
Limit: FCC_2.4G_RE(3m)	Engineer: Charles Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 1 at 2467MHz	



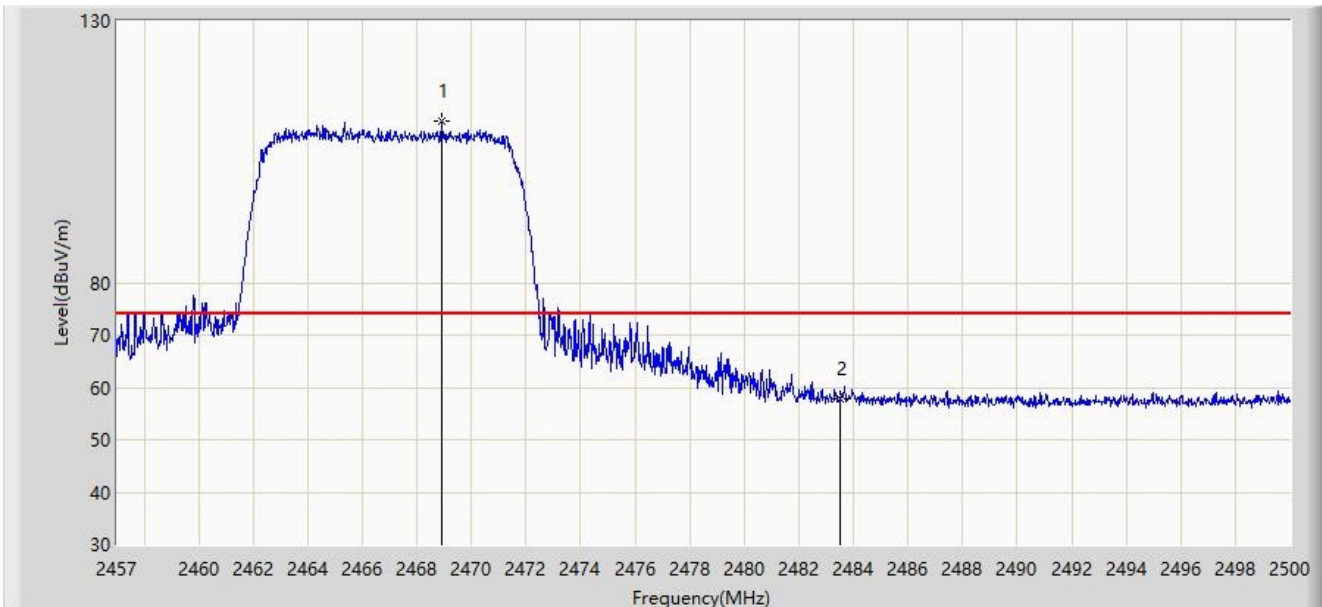
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2464.611	108.246	77.597	N/A	N/A	30.649	AV
2	*	2483.500	49.533	18.830	-4.467	54.000	30.704	AV

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

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

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

Site: WZ-AC1	Time: 2022/08/30 - 16:15
Limit: FCC_2.4G_RE(3m)	Engineer: Charles Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 1 at 2467MHz	



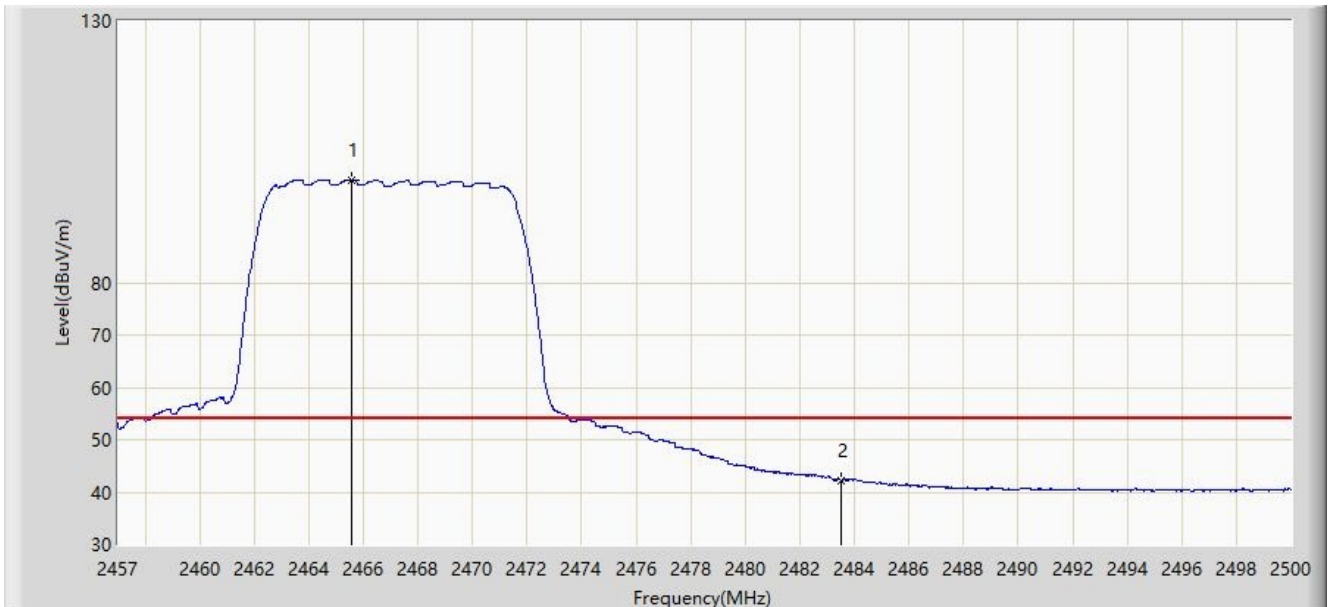
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2468.911	110.884	80.213	N/A	N/A	30.671	PK
2	*	2483.500	57.704	27.001	-16.296	74.000	30.704	PK

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

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

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

Site: WZ-AC1	Time: 2022/08/30 - 16:16
Limit: FCC_2.4G_RE(3m)	Engineer: Charles Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 1 at 2467MHz	



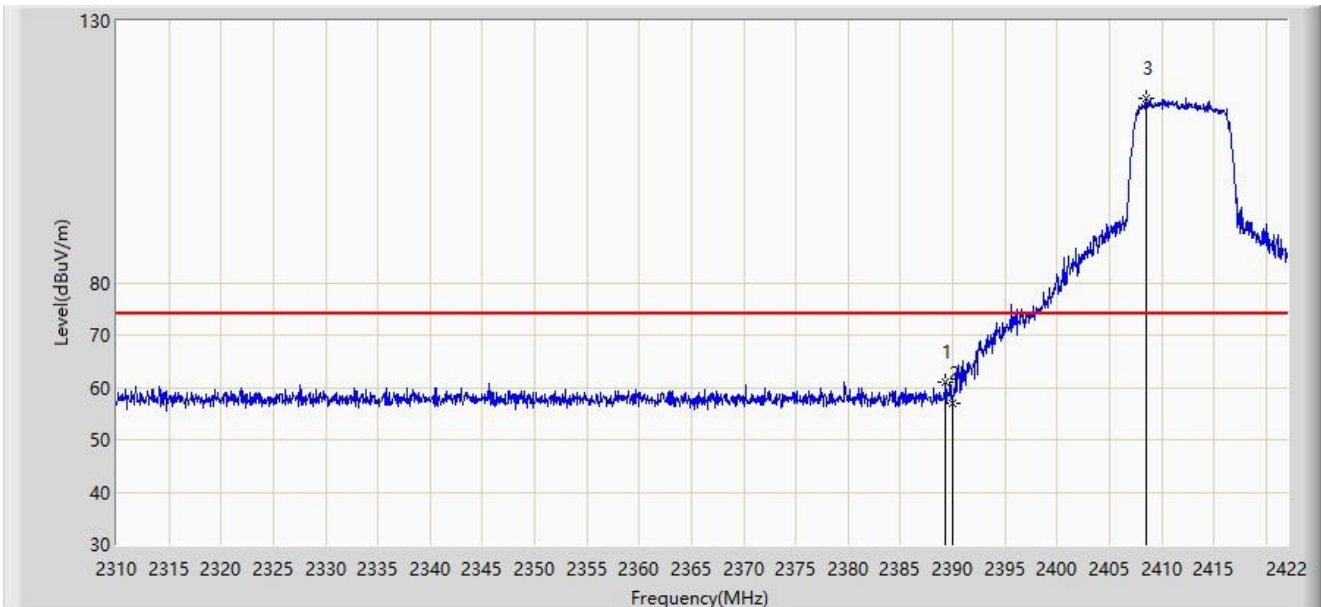
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2465.557	99.560	68.906	N/A	N/A	30.654	AV
2	*	2483.500	42.248	11.545	-11.752	54.000	30.704	AV

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

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

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

Site: WZ-AC1	Time: 2022/08/30 - 16:21
Limit: FCC_2.4G_RE(3m)	Engineer: Charles Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 2 at 2412MHz	



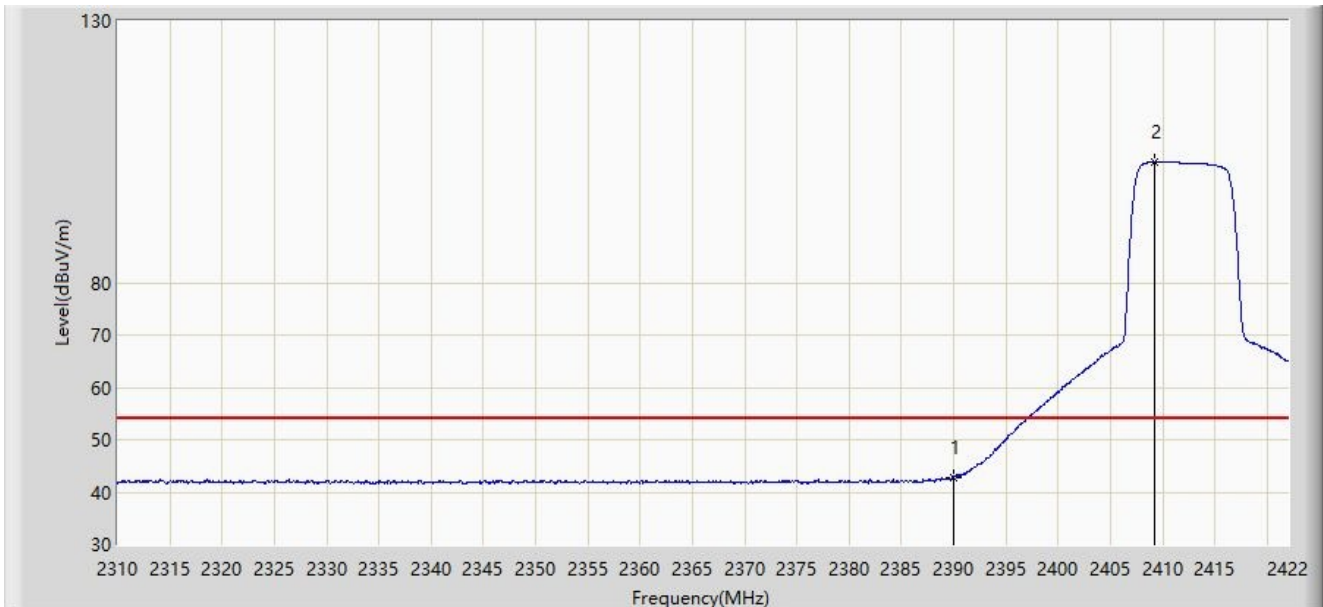
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2389.352	60.907	30.382	-13.093	74.000	30.526	PK
2		2390.000	56.863	26.337	-17.137	74.000	30.526	PK
3		2408.504	115.084	84.526	N/A	N/A	30.558	PK

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

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

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

Site: WZ-AC1	Time: 2022/08/30 - 16:24
Limit: FCC_2.4G_RE(3m)	Engineer: Charles Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 2 at 2412MHz	



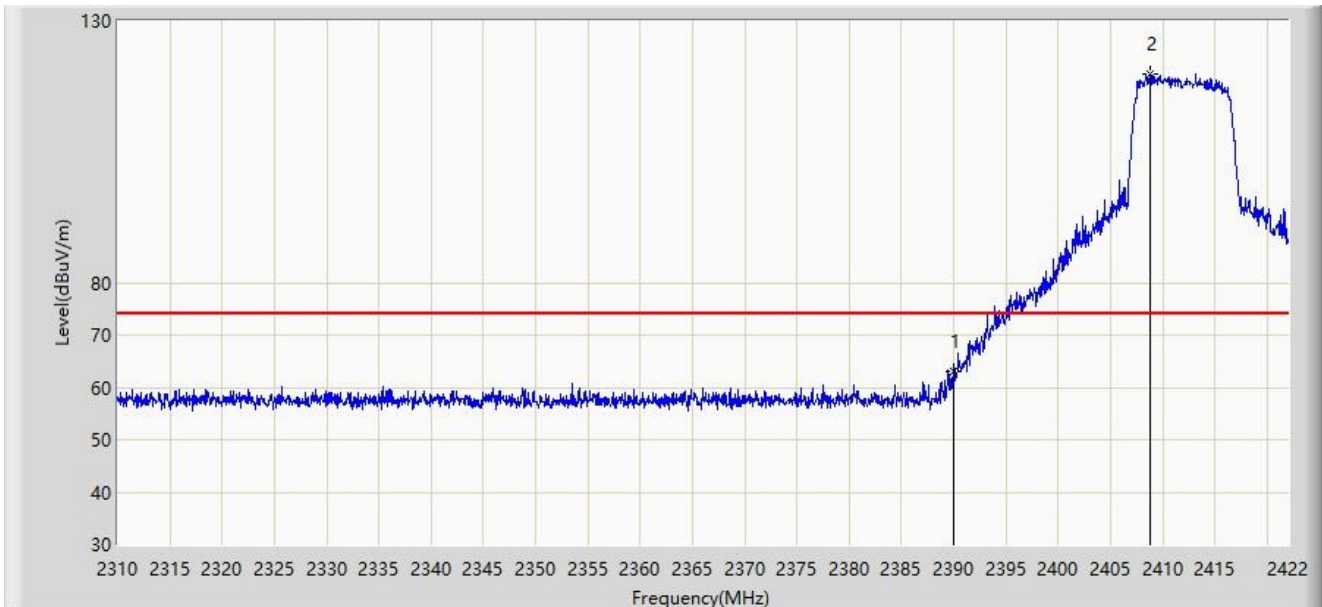
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2390.000	42.878	12.352	-11.122	54.000	30.526	AV
2		2409.232	103.026	72.468	N/A	N/A	30.558	AV

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

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

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

Site: WZ-AC1	Time: 2022/08/30 - 16:26
Limit: FCC_2.4G_RE(3m)	Engineer: Charles Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 2 at 2412MHz	



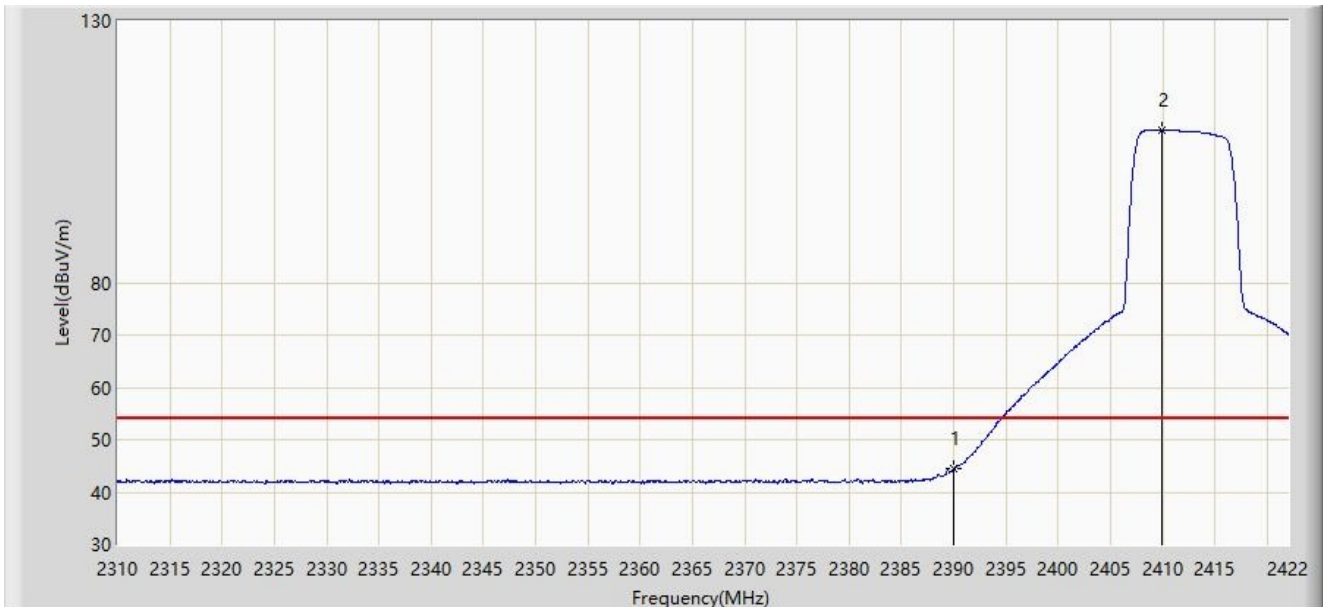
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2390.000	63.113	32.587	-10.887	74.000	30.526	PK
2		2408.840	119.807	89.249	N/A	N/A	30.559	PK

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

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

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

Site: WZ-AC1	Time: 2022/08/30 - 16:27
Limit: FCC_2.4G_RE(3m)	Engineer: Charles Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 2 at 2412MHz	



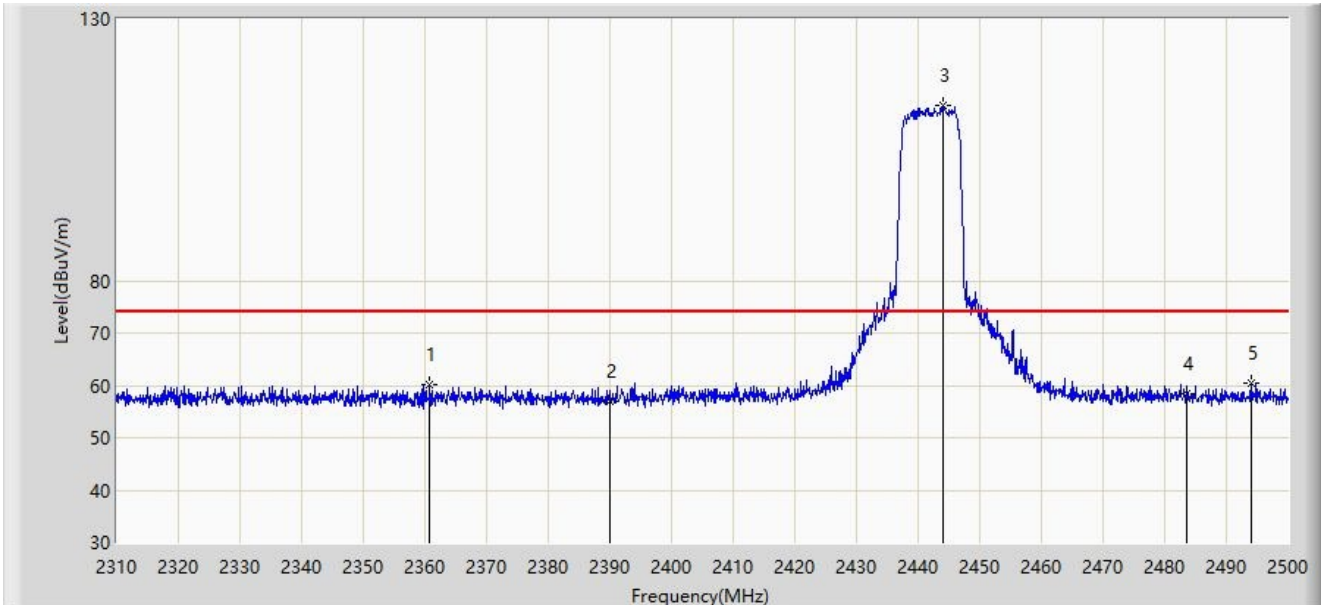
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2390.000	44.439	13.913	-9.561	54.000	30.526	AV
2		2409.904	109.249	78.691	N/A	N/A	30.558	AV

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

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

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

Site: WZ-AC1	Time: 2022/08/30 - 16:30
Limit: FCC_2.4G_RE(3m)	Engineer: Charles Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 2 at 2442MHz	



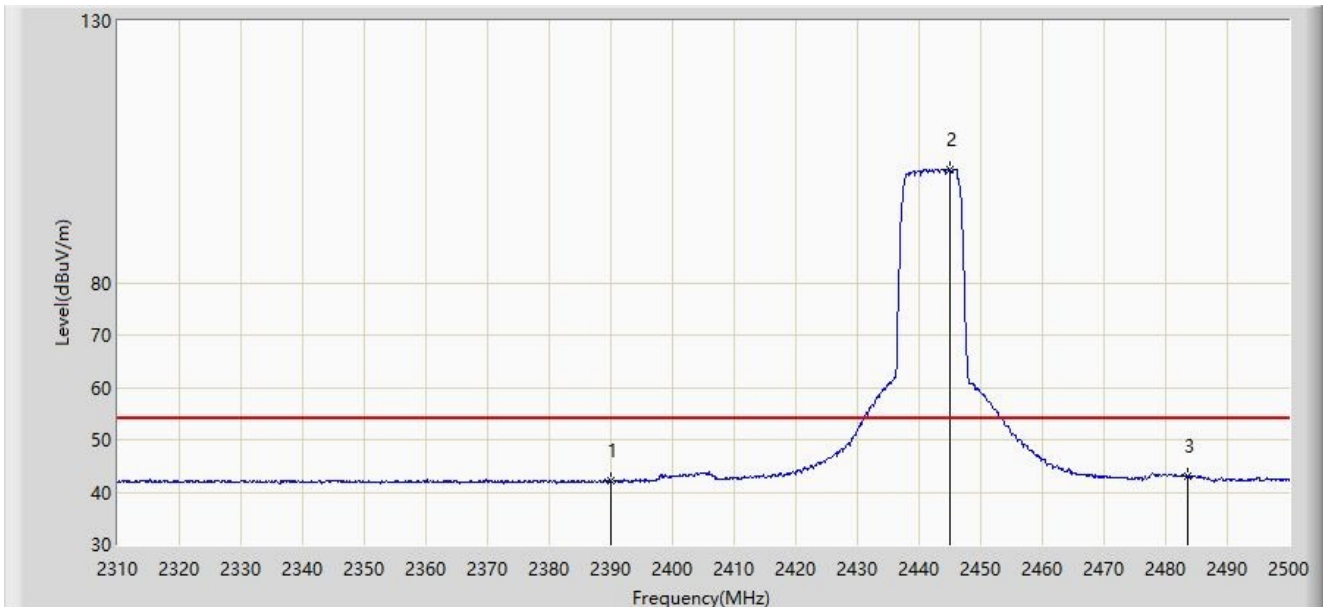
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2360.825	60.079	29.530	-13.921	74.000	30.550	PK
2		2390.000	57.083	26.557	-16.917	74.000	30.526	PK
3		2444.045	113.599	83.034	N/A	N/A	30.565	PK
4		2483.500	58.418	27.715	-15.582	74.000	30.704	PK
5	*	2494.015	60.420	29.701	-13.580	74.000	30.718	PK

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

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

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

Site: WZ-AC1	Time: 2022/08/30 - 16:34
Limit: FCC_2.4G_RE(3m)	Engineer: Charles Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 2 at 2442MHz	



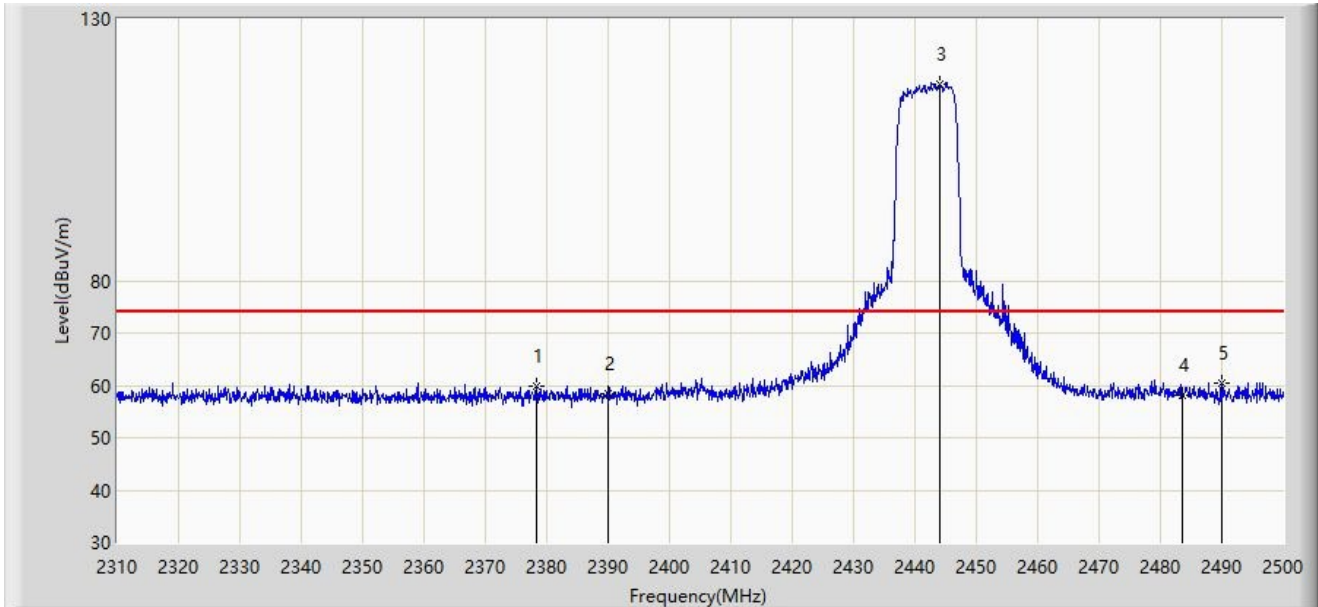
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2390.000	42.048	11.522	-11.952	54.000	30.526	AV
2		2444.900	101.713	71.145	N/A	N/A	30.568	AV
3	*	2483.500	42.932	12.229	-11.068	54.000	30.704	AV

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

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

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

Site: WZ-AC1	Time: 2022/08/30 - 16:34
Limit: FCC_2.4G_RE(3m)	Engineer: Charles Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 2 at 2442MHz	



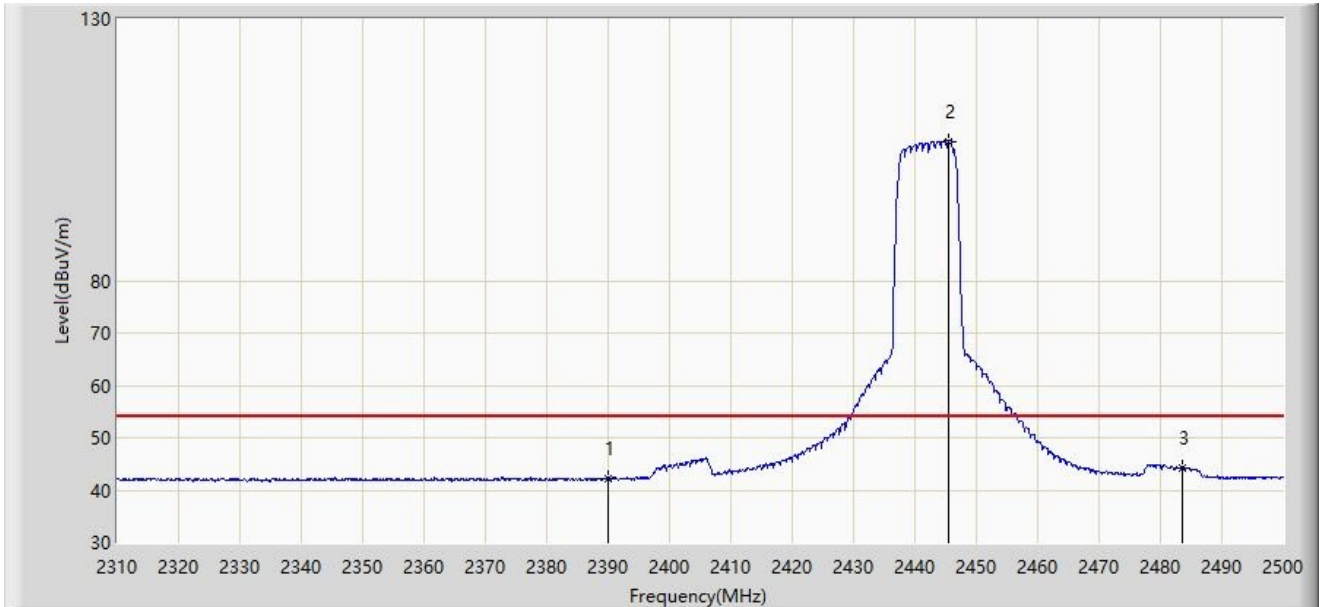
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2378.305	59.989	29.461	-14.011	74.000	30.528	PK
2		2390.000	58.393	27.867	-15.607	74.000	30.526	PK
3		2444.140	117.465	86.900	N/A	N/A	30.565	PK
4		2483.500	58.242	27.539	-15.758	74.000	30.704	PK
5	*	2489.930	60.347	29.640	-13.653	74.000	30.708	PK

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

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

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

Site: WZ-AC1	Time: 2022/08/30 - 16:36
Limit: FCC_2.4G_RE(3m)	Engineer: Charles Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 2 at 2442MHz	



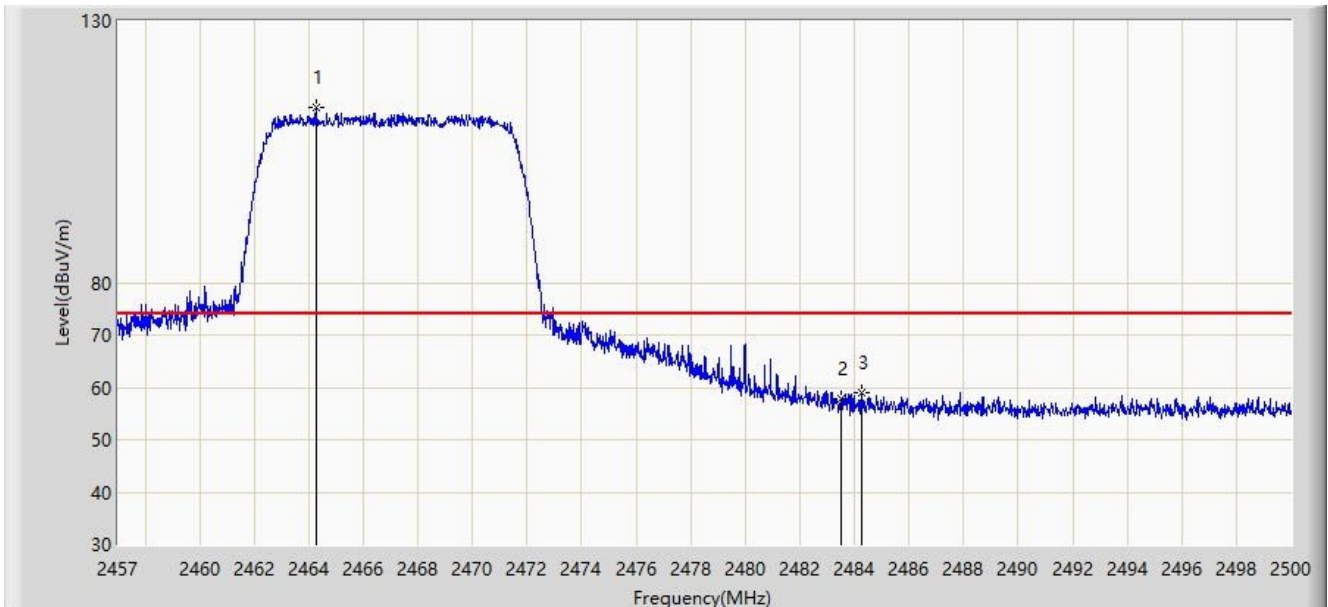
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2390.000	42.152	11.626	-11.848	54.000	30.526	AV
2		2445.470	106.603	76.033	N/A	N/A	30.570	AV
3	*	2483.500	44.204	13.501	-9.796	54.000	30.704	AV

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

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

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

Site: WZ-AC1	Time: 2022/08/30 - 16:38
Limit: FCC_2.4G_RE(3m)	Engineer: Charles Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 2 at 2467MHz	



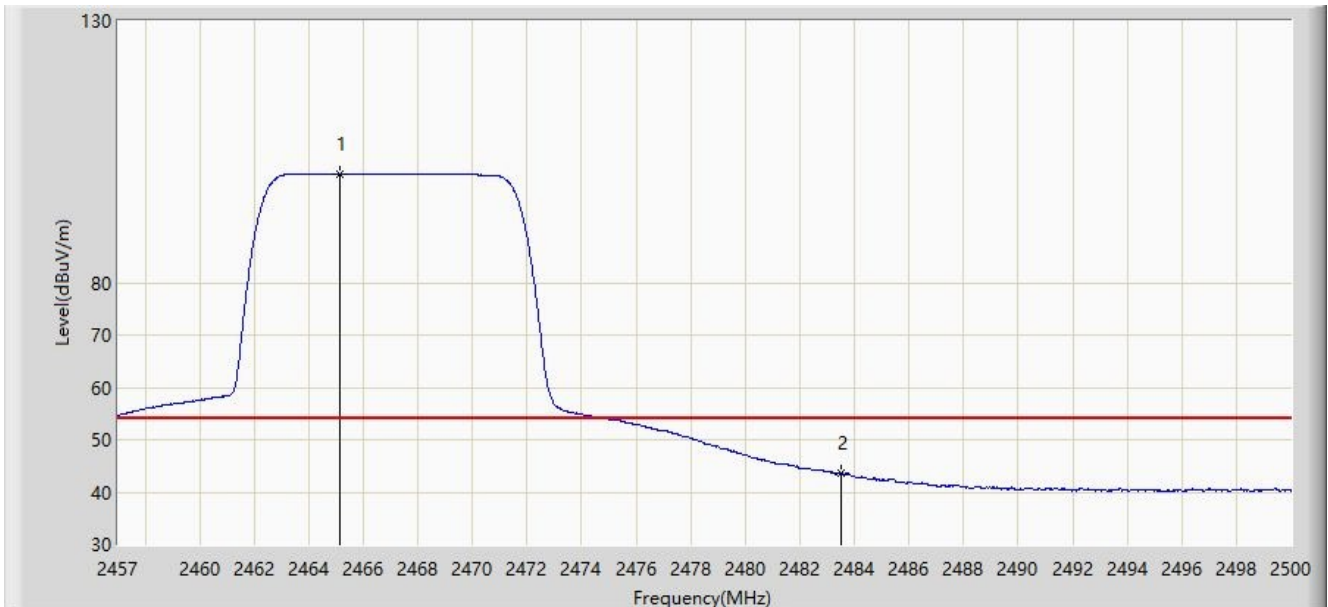
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2464.267	113.342	82.695	N/A	N/A	30.648	PK
2		2483.500	57.682	26.979	-16.318	74.000	30.704	PK
3	*	2484.283	59.031	28.327	-14.969	74.000	30.704	PK

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

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

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

Site: WZ-AC1	Time: 2022/08/30 - 16:40
Limit: FCC_2.4G_RE(3m)	Engineer: Charles Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 2 at 2467MHz	



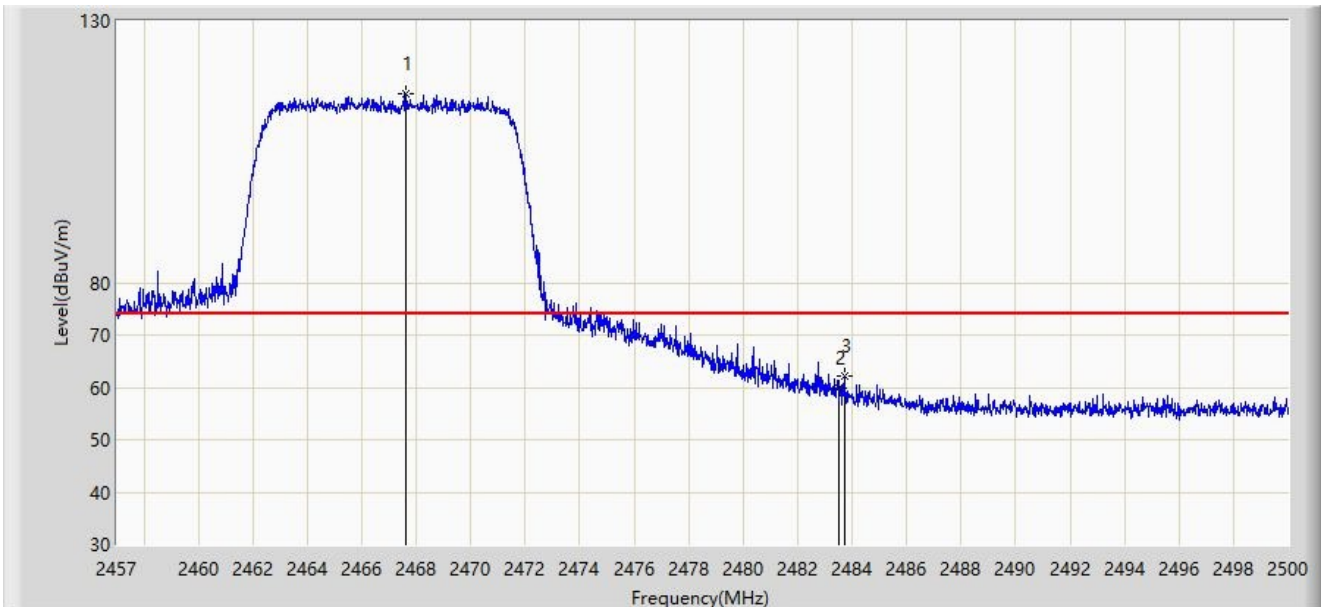
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2465.127	100.764	70.112	N/A	N/A	30.652	AV
2	*	2483.500	43.533	12.830	-10.467	54.000	30.704	AV

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

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

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

Site: WZ-AC1	Time: 2022/08/30 - 16:41
Limit: FCC_2.4G_RE(3m)	Engineer: Charles Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 2 at 2467MHz	



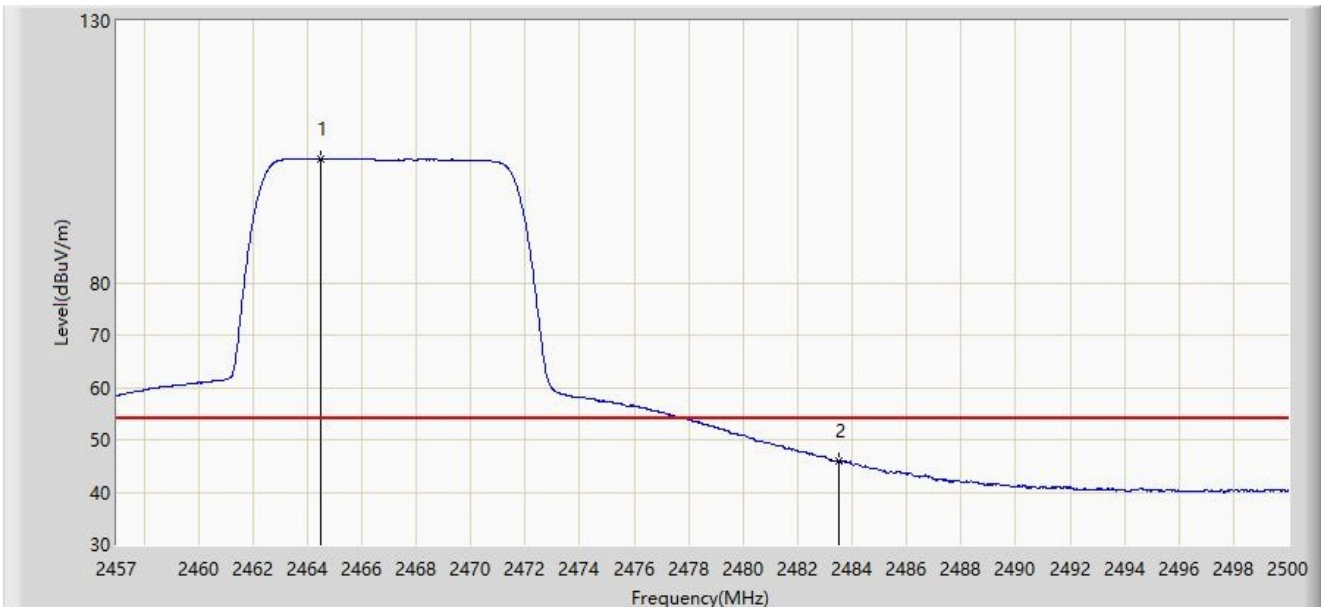
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2467.621	116.199	85.534	N/A	N/A	30.665	PK
2		2483.500	59.724	29.021	-14.276	74.000	30.704	PK
3	*	2483.703	62.181	31.477	-11.819	74.000	30.704	PK

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

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

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

Site: WZ-AC1	Time: 2022/08/30 - 16:42
Limit: FCC_2.4G_RE(3m)	Engineer: Charles Zhang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 2 at 2467MHz	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2464.482	103.760	73.111	N/A	N/A	30.648	AV
2	*	2483.500	45.938	15.235	-8.062	54.000	30.704	AV

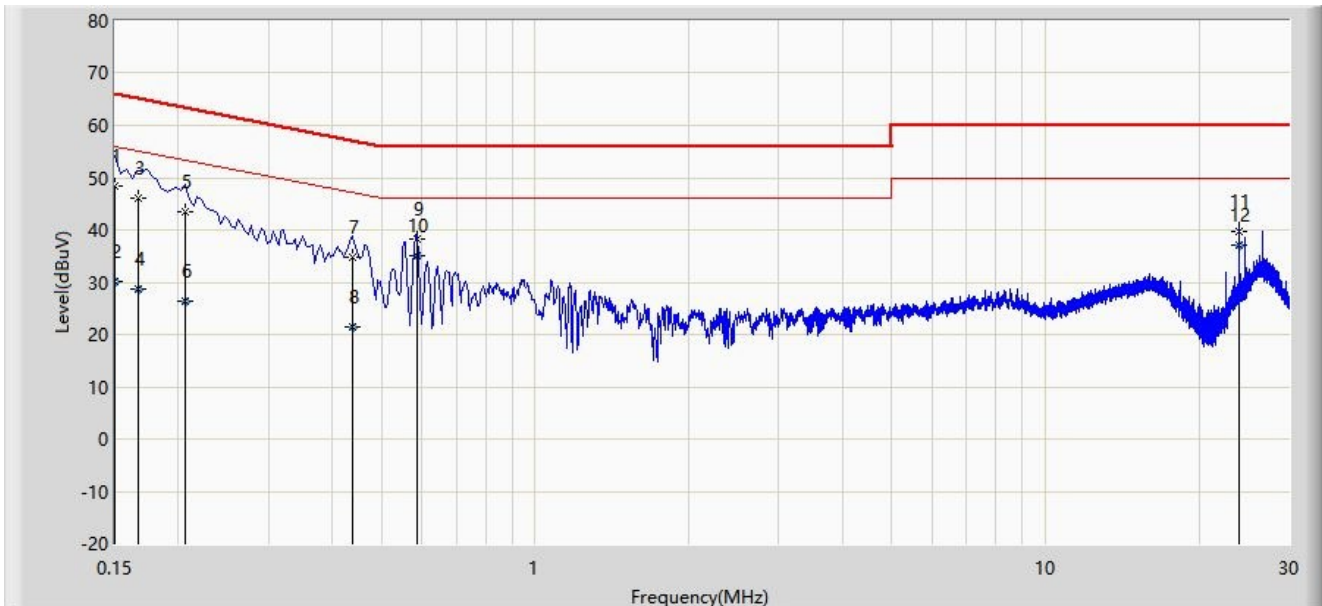
Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + 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: 2022/08/31 - 16:07
Temperature: 23.6°C	Humidity: 56.2%
Limit: FCC_Part15.207_CE_AC Power	Engineer: Bob Zhang
Probe: ENV216_101683_Filter Off_E	Polarity: Line
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 1 at 2412MHz	



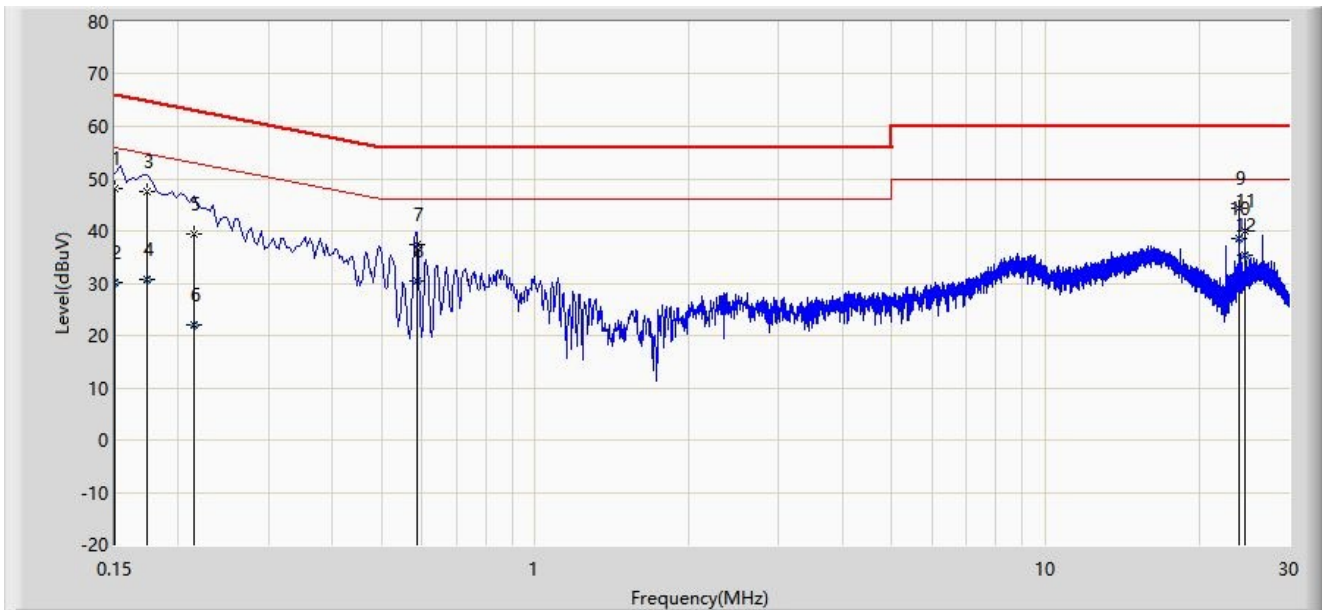
No	Mark	Frequency (MHz)	Measure Level (dBμV)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV)	Factor (dB)	Type
1		0.150	48.397	38.520	-17.603	66.000	9.878	QP
2		0.150	30.269	20.391	-25.731	56.000	9.878	AV
3		0.167	46.201	36.321	-18.912	65.113	9.880	QP
4		0.167	28.586	18.706	-26.527	55.113	9.880	AV
5		0.206	43.462	33.579	-19.904	63.365	9.883	QP
6		0.206	26.269	16.387	-27.096	53.365	9.883	AV
7		0.438	34.662	24.727	-22.437	57.100	9.936	QP
8		0.438	21.497	11.562	-25.602	47.100	9.936	AV
9		0.586	38.184	28.235	-17.816	56.000	9.949	QP
10	*	0.586	35.179	25.230	-10.821	46.000	9.949	AV
11		23.998	39.712	27.929	-20.288	60.000	11.784	QP
12		23.998	37.082	25.298	-12.918	50.000	11.784	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: 2022/08/31 - 16:14
Temperature: 23.6°C	Humidity: 56.2%
Limit: FCC_Part15.207_CE_AC Power	Engineer: Bob Zhang
Probe: ENV216_101683_Filter Off_E	Polarity: Neutral
EUT: Fides-Link	Power: By test Jig
Test Mode: Transmit by Ant 1 at 2412MHz	



No	Mark	Frequency (MHz)	Measure Level (dBμV)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV)	Factor (dB)	Type
1		0.150	48.128	38.228	-17.872	66.000	9.900	QP
2		0.150	30.045	20.145	-25.955	56.000	9.900	AV
3		0.174	47.496	37.591	-17.271	64.767	9.905	QP
4		0.174	30.799	20.894	-23.968	54.767	9.905	AV
5		0.214	39.480	29.568	-23.569	63.049	9.912	QP
6		0.214	22.027	12.115	-31.021	53.049	9.912	AV
7		0.586	37.478	27.511	-18.522	56.000	9.967	QP
8		0.586	30.430	20.463	-15.570	46.000	9.967	AV
9		23.998	44.375	32.609	-15.625	60.000	11.766	QP
10	*	23.998	38.684	26.918	-11.316	50.000	11.766	AV
11		24.574	40.047	28.256	-19.953	60.000	11.791	QP
12		24.574	35.439	23.648	-14.561	50.000	11.791	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 “2207RSU061-UT” file.

Appendix C – EUT Photograph

Refer to “2207RSU061-UE” file.

_____ The End _____