

Report No.: 2412TW0114-U2 Report Version: 1.0 Issue Date: 2025-01-06

# MEASUREMENT REPORT

FCC ID : 2A8JK-FIDES-LINK2 APPLICANT : ACSL Ltd. **Application Type** : Certification Product : Fides-Link2 Model No. : AC-FIDES-02-B Serial Model No. : AIR : EO-00005-01 GND: EO-00006-01 **Brand Name** : ACSL FCC Classification : Unlicensed National Information Infrastructure (UNII) FCC Rule Part(s) : Part 15 Subpart E (Section 15.407) Test Procedure(s) : ANSI C63.10-2013 **Received Date** : December 16, 2024 **Test Date** : December 20, 2024 ~ January 2, 2025 : Kaunaz Lee **Tested By** (Kaunaz Lee) Paddy Chen (Paddy Chen) **Reviewed By Testing Laboratory** am per 3261 **Approved By** (Chenz Ker)

The test results only relate to the tested samples.

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 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 (Taiwan) Co., Ltd.



## **Revision History**

Report No.	Version	Description	Issue Date	Note
2412TW0114-U2	1.0	Original Report	2025-01-06	



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#### **General Information**

Applicant	ACSL Ltd.		
Applicant Address	Hulic Kasai Rinkai Building 2F 3-6-4 Rinkaicho, Edogawa-ku Tokyo 134-0086 Japan		
Manufacturer	ACSL Ltd.		
Manufacturer Address	Hulic Kasai Rinkai Building 2F 3-6-4 Rinkaicho, Edogawa-ku Tokyo 134-0086 Japan		
Test Site	MRT Technology (Taiwan) Co., Ltd		
Test Site Address	No. 38, Fuxing Second Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C)		
MRT FCC Registration No.	291082		
Test Device Serial No.	#1-1 Production Pre-Production Engineering		

Test Facility / Accreditations

Measurements were performed at MRT Laboratory located in Fuxing Rd., Taoyuan, Taiwan (R.O.C)

- •MRT facility is a FCC registered (Reg. No. 291082) test facility with the site description report on file and is designated by the FCC as an Accredited Test Firm.
- MRT facility is an IC registered (MRT Reg. No. 21723) test laboratory with the site description on file at Industry Canada.
- MRT Lab is accredited to ISO 17025 by the Taiwan Accreditation Foundation (TAF Cert. No. 3261) in EMC, Telecommunications and Radio testing for FCC (Designation Number: TW3261), Industry Canada, EU and TELEC Rules.



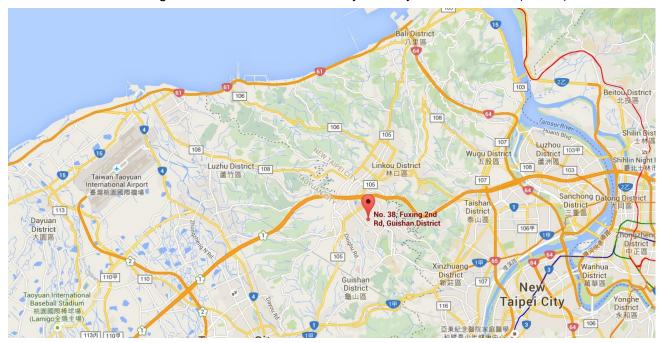
## 1. INTRODUCTION

## 1.1. Scope

Measurement and determination of electromagnetic emissions (EMC) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission and the Industry Canada Certification and Engineering Bureau.

## 1.2. MRT Test Location

The map below shows the location of the MRT LABORATORY, its proximity to the Taoyuan City. These measurement tests were conducted at the MRT Technology (Taiwan) Co., Ltd. Facility located at No.38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 33377, Taiwan (R.O.C).





## 2. PRODUCT INFORMATION

## 2.1. Equipment Description

Product Name	Fides-Link2
Brand Name	ACSL
Model No.	AC-FIDES-02-B
Carico Madal No	AIR : EO-00005-01
Series Model No.	GND : EO-00006-01
SRD 5.8GHz Specification	5.8GHz

Remark:

- The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer.
- The firmware of the two MCU models is different. The AIR model can choose to transmit with either RF1 or RF2, whereas the GND model supports transmission only with RF1.
- 3. The difference between the two models is only MCU firmware and does not affect the RF.
- 4. We use AIR: EO-00005-01 to perform tests.



Operating Frequency	5735~5835MHz
Channel Number	5
Type of modulation	OFDM
Channel Bandwidth	10MHz
Data Rate	2.08Mbps ~ 6.57Mbps
RF Port	2

## 2.2. Product Specification Subjective to this Standard

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



## 2.3. Operation Frequencies and Channel List

Channel	Frequency	Channel	Frequency	Channel	Frequency
01	5735 MHz	02	5760 MHz	03	5785 MHz
04	5810 MHz	05	5835 MHz		



## 2.4. Test Mode

Test Mode	Mode 1: Transmit by 5.8GHz with Ant 1
Test Mode	Mode 2: Transmit by 5.8GHz with Ant 2

Note: Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.

### 2.5. Test Software

The test utility software used during testing was "SSCOM V5.13.1".



### 2.6. Duty Cycles

Test Mode	Duty Cycle	
5.8GHz	100%	

### 2.7. Test Configuration

This device was tested per the guidance of KDB 789033 D02v02r01. ANSI C63.10-2013 was used to reference the appropriate EUT setup for radiated spurious emissions testing and AC line conducted testing.

### 2.8. EMI Suppression Device(s)/Modifications

No EMI suppression device(s) were added and/or no modifications were made during testing.

### 2.9. Labeling Requirements

#### Per 2.1074 & 15.19; Docket 95-19

The label shall be permanently affixed at a conspicuous location on the device; instruction manual or pamphlet supplied to the user and be readily visible to the purchaser at the time of purchase. However, when the device is so small wherein placement of the label with specified statement is not practical, only the FCC ID must be displayed on the device per Section 15.19(a)(5). Please see attachment for FCC ID label and label location.



## 3. DESCRIPTION OF TEST

### **3.1. Evaluation Procedure**

The measurement procedures described in the American National Standard for Testing Unlicensed Wireless Devices (ANSI C63.10-2013), and the guidance provided in KDB 789033 were used in the measurement of the device.

Deviation from measurement procedure.....None

## 3.2. AC Line Conducted Emissions

The line-conducted facility is located inside an 9'x4'x3' shielded enclosure. A 1m x 2m wooden table 80cm high is placed 40cm away from the vertical wall and 80cm away from the sidewall of the shielded room. Two 10kHz-30MHz,  $50\Omega/50$ uH Line-Impedance Stabilization Networks (LISNs) are bonded to the shielded room floor. Power to the LISNs is filtered by external high-current high-insertion loss power line filters. These filters attenuate ambient signal noise from entering the measurement lines. These filters are also bonded to the shielded enclosure.

The EUT is powered from one LISN and the support equipment is powered from the second LISN. All interconnecting cables more than 1 meter were shortened to a 1 meter length by non-inductive bundling (serpentine fashion) and draped over the back edge of the test table. All cables were at least 40cm above the horizontal reference ground-plane. Power cables for support equipment were routed down to the second LISN while ensuring that that cables were not draped over the second LISN.

Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The RF output of the LISN was connected to the receiver and exploratory measurements were made to determine the frequencies producing the maximum emission from the EUT. The receiver was scanned from 150kHz to 30MHz. The detector function was set to peak mode for exploratory measurements while the bandwidth of the analyzer was set to 9kHz. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Each emission was also maximized by varying: power lines, the mode of operation or data exchange speed, or support equipment whichever determined the worst-case emission. Once the worst case emissions have been identified, the one EUT cable configuration/arrangement and mode of operation that produced these emissions are used for final measurements on the same test site. The analyzer is set to CISPR quasi-peak and average detectors with a 9kHz resolution bandwidth for final measurements.

An extension cord was used to connect to a single LISN which powered by EUT. The extension cord was calibrated with LISN, the impedance and insertion loss are compliance with the requirements as stated in ANSI C63.10-2013.

Line conducted emissions test results are shown in Section 7.10.



## 3.3. Radiated Emissions

The radiated test facilities consisted of an indoor 3 meter semi-anechoic chamber used for final measurements and exploratory measurements, when necessary. The measurement area is contained within the semi-anechoic chamber which is shielded from any ambient interference. For measurements above 1GHz absorbers are arranged on the floor between the turn table and the antenna mast in such a way so as to maximize the reduction of reflections. For measurements below 1GHz, the absorbers are removed. A turntable is used for radiated measurement. It is a continuously rotatable, remote controlled, metallic turntable and 2 meters (6.56 ft.) in diameter. The turn table is flush with the raised floor of the chamber in order to maintain its function as a ground plane. An 80cm high PVC support structure is placed on top of the turntable.

For all measurements, the spectrum was scanned through all EUT azimuths and from 1 to 4 meter receive antenna height using a broadband antenna from 30MHz up to the upper frequency shown in 15.33(b)(1) depending on the highest frequency generated or used in the device or on which the device operates or tunes. For frequencies above 1GHz, linearly polarized double ridge horn antennas were used. For frequencies below 30MHz, a calibrated loop antenna was used. When exploratory measurements were necessary, they were performed at 1 meter test distance inside the semi-anechoic chamber using broadband antennas, broadband amplifiers, and spectrum analyzers to determine the frequencies and modes producing the maximum emissions. Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The test set-up for frequencies below 1GHz was placed on top of the 0.8 meter high, 1 x 1.5 meter table; and test set-up for frequencies 1-40GHz was placed on top of the 1.5 meter high, 1 x 1.5 meter table. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Appropriate precaution was taken to ensure that all emissions from the EUT were maximized and investigated. The system configuration, clock speed, mode of operation or video resolution, if applicable, turntable azimuth, and receive antenna height was noted for each frequency found.

Final measurements were made in the semi-anechoic chamber using calibrated, linearly polarized broadband and horn antennas. The test setup was configured to the setup that produced the worst case emissions. The spectrum analyzer was set to investigate all frequencies required for testing to compare the highest radiated disturbances with respect to the specified limits. The turntable containing the EUT was rotated through 360 degrees and the height of the receive antenna was varied 1 to 4 meters and stopped at the azimuth and height producing the maximum emission. Each emission was maximized by changing the orientation of the EUT through three orthogonal planes and changing the polarity of the receive antenna, whichever produced the worst-case emissions. According to 3dB Beam-Width of horn antenna, the horn antenna should be always directed to the EUT when rising height.





## 4. 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 **Fides-Link2**, is permanently attached.
- There are no provisions for connection to an external antenna.

#### Conclusion:

The EUT unit complies with the requirement of §15.203.

#### Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	TLL-SKYLink	Raptor.Drone.ANT1.C113.382B.1	FPCB	2.4G: 2.04dBi 5.8G: 2.08dBi
2	TLL-SKYLink	Raptor.YK.C113.187B.1	FPCB	2.4G: 1.65dBi 5.8G: 2.04dBi

Note: We selected the max peak gain antenna Raptor.Drone.ANT1.C113.382B.1 to perform the test.



## 5. TEST EQUIPMENT CALIBRATION DATE

#### **Radiated Emissions**

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Acitve Loop Antenna	SCHWARZBECK	FMZB 1519B	MRTTWA00002	1 year	2025/5/7
Broadband TRILOG Antenna	SCHWARZBECK	VULB 9162	MRTTWA00001	1 year	2025/11/5
Broadband Hornantenna	SCHWARZBECK	BBHA 9120D	MRTTWA00003	1 year	2025/2/28
Broadband Preamplifier	SCHWARZBECK	BBV 9718	MRTTWA00005	1 year	2025/2/28
Breitband Hornantenna	SCHWARZBECK	BBHA 9170	MRTTWA00004	1 year	2025/3/26
Broadband Amplifier	SCHWARZBECK	BBV 9721	MRTTWA00006	1 year	2025/3/21
EMI Test Receiver	R&S	ESR3	MRTTWA00009	1 year	2025/3/5
Signal Analyzer	R&S	FSV40	MRTTWA00007	1 year	2025/3/14

#### Conducted Test Equipment

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EXA Signal Analyzer	KEYSIGHT	N9010A	MRTTWA00012	1 year	2025/9/24
EXA Signal Analyzer	KEYSIGHT	N9010B	MRTTWA00074	1 year	2025/8/12
USB Wideband Power Sensor	KEYSIGHT	U2021XA	MRTTWA00014	1 year	2025/4/16

Software	Manufacturer	Version No.
e3	Audix	9.160520a



## 6. 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.

Conducted Emission- Power Line
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)):
0.15MHz~30MHz: ± 2.53dB
Conducted Measurement
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): ± 1.3dB
Radiated Spurious Emission
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)):
9kHz~30MHz: ± 3.92dB
30MHz~1GHz: ± 4.25dB
1GHz~18GHz: ± 4.40dB
18GHz~40GHz: ± 4.45dB





## 7. TEST RESULT

## 7.1. Summary

**Product Name:** 

Fides-Link2

FCC Section(s)	Test Description	Test Limit	Test Condition	Test Result	Reference
15.407(a)	26dB Bandwidth	N/A		Pass	Section 7.2
15.407(e)	6dB Bandwidth	≥ 500kHz		Pass	Section 7.3
15.407(a)(1)(i), (2), (3)	Maximum Conducted Output Power	Refer to Section 7.5	Conducted	Pass	Section 7.4
15.407(h)(1)	Transmit Power Control	≤ 24 dBm	-	N/A	Section 7.5
15.407(a)(1)(i), (2), (3), (5)	Power Spectral Density	Refer to Section 7.7		Pass	Section 7.6
15.407(b)(1), (4)	Undesirable Emissions	≤ -27dBm/MHz EIRP ≤ -17dBm/MHz EIRP		Pass	
15.205, 15.209 15.407(b)(8), (9), (10)	General Field Strength Limits (Restricted Bands and Radiated Emission Limits)	Emissions in restricted bands must meet the radiated limits detailed in 15.209	Radiated	Pass	Section 7.7 & 7.8
15.207	AC Conducted Emissions 150kHz - 30MHz	< FCC 15.207 limits	Line Conducted	Pass	Section 7.9

Notes:

1) Determining compliance is based on the test results met the regulation limits or requirements declared by clients, and the test results don't take into account the value of measurement uncertainty.



## 7.2. 26dB Bandwidth Measurement

#### 7.2.1.Test Limit

N/A

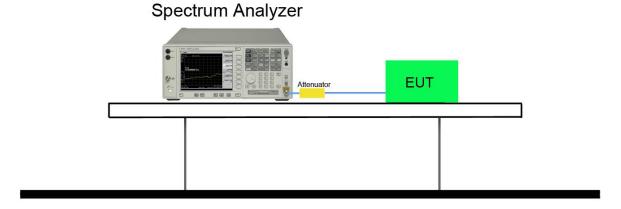
#### 7.2.2.Test Procedure used

KDB 789033 D02v02r01 - Section C.1

#### 7.2.3. Test Setting

- The analyzers' automatic bandwidth measurement capability was used to perform the 26dB bandwidth measurement. The "X" dB bandwidth parameter was set to X = 26. The automatic bandwidth measurement function also has the capability of simultaneously measuring the 99% occupied bandwidth. The bandwidth measurement was not influenced by any intermediated power nulls in the fundamental emission.
- 2. RBW = approximately 1% of the emission bandwidth.
- 3. VBW  $\geq$  3 × RBW.
- 4. Detector = Peak.
- 5. Trace mode = max hold.

#### 7.2.4. Test Setup



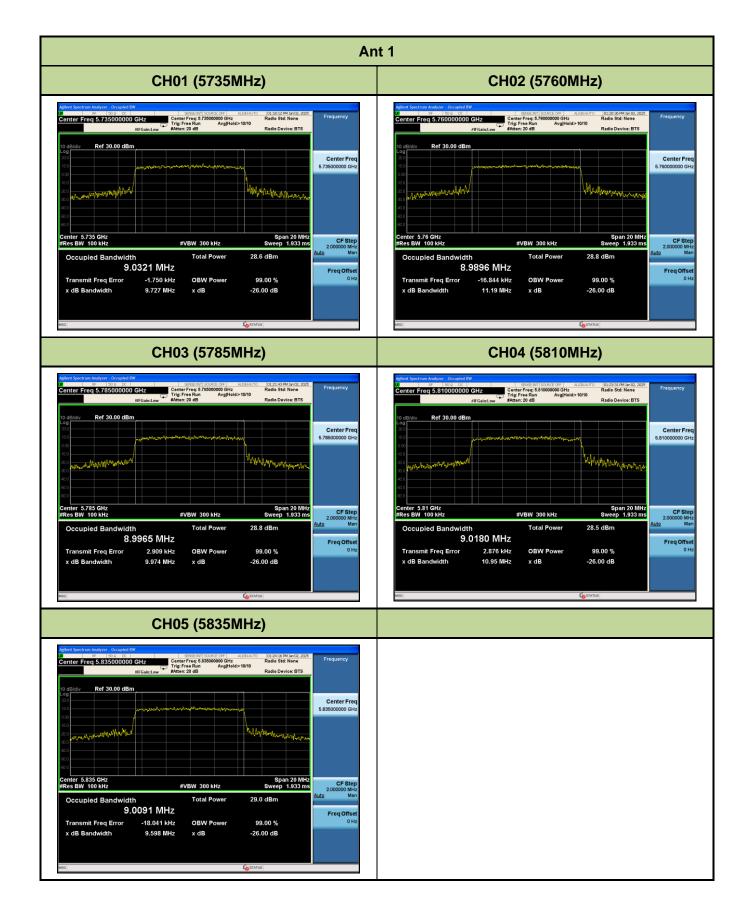


#### 7.2.5. Test Result

Product	Fides-Link2	Temperature	20°C
Test Engineer	Fran	Relative Humidity	56%
Test Site	SR6	Test Date	2025/1/2

Test Mode	Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
	CH01	5735	9.727	9.0321	N/A	Pass
	CH02	5760	11.190	8.9896	N/A	Pass
5.8GHz_Ant 1	CH03	5785	9.974	8.9965	N/A	Pass
	CH04	5810	10.950	9.0180	N/A	Pass
	CH05	5835	9.598	9.0091	N/A	Pass







### 7.3. 6dB Bandwidth Measurement

#### 7.3.1.Test Limit

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

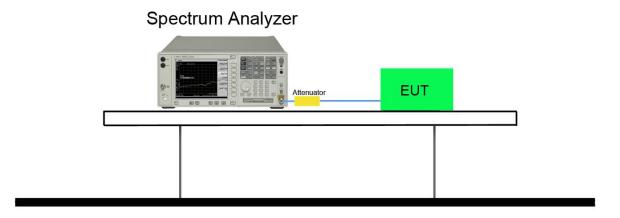
#### 7.3.2. Test Procedure used

KDB 789033 D02v02r01 - Section C.2

#### 7.3.3.Test Setting

- 1. Set center frequency to the nominal EUT channel center frequency.
- 2. RBW = 100 kHz.
- 3. VBW  $\geq$  3 x RBW.
- 4. Detector = Peak.
- 5. Trace mode = max hold.
- 6. Sweep = auto couple.
- 7. Allow the trace to stabilize.
- 8. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

#### 7.3.4. Test Setup



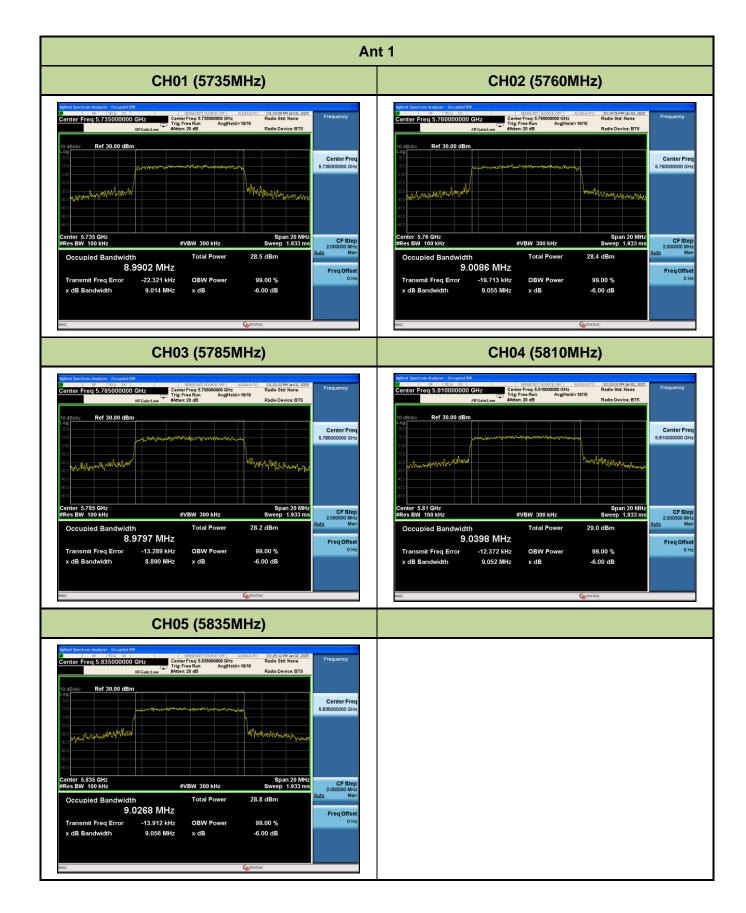


#### 7.3.5.Test Result

Product	Fides-Link2	Temperature	20°C
Test Engineer	Fran	Relative Humidity	56%
Test Site	SR6	Test Date	2025/1/2

Test Mode	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
	CH01	5735	9.014	8.9902	≥ 0.5	Pass
	CH02	5760	9.055	9.0086	≥ 0.5	Pass
5.8GHz_Ant 1	CH03	5785	8.890	8.9797	≥ 0.5	Pass
	CH04	5810	9.052	9.0398	≥ 0.5	Pass
	CH05	5835	9.056	9.0268	≥ 0.5	Pass







### 7.4. Output Power Measurement

#### 7.4.1.Test Limit

#### For FCC Power Measurement Limit

For client operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 250mW.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW (23.98dBm) or 11dBm +10 log (26dB BW).

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm).

If transmitting antennas of directional gain greater than 6dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

#### 7.4.2. Test Procedure Used

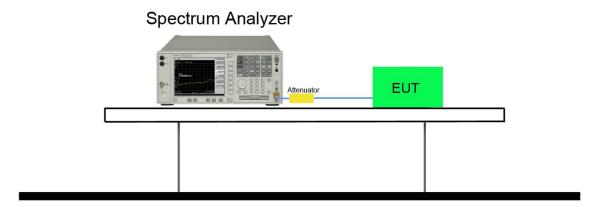
KDB 789033 D02v02r01 - Section E) 3) b) Method PM-G



### 7.4.3. Test Setting

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. The trace was averaged over 100 traces to obtain the final measured average power.

#### 7.4.4.Test Setup





#### 7.4.5.Test Result

Product	Fides-Link2	Temperature	20°C
Test Engineer	Fran	Relative Humidity	56%
Test Site	SR6	Test Date	2025/1/2

AIR:

Test Mode	Channel No.	Frequency (MHz)	Average Power (dBm)	Power Limit (dBm)
	CH01	5735	22.23	< 30
	CH02	5760	23.25	< 30
5.8GHz_Ant 1	CH03	5785	23.63	< 30
	CH04	5810	23.53	< 30
	CH05	5835	23.43	< 30
	CH01	5735	23.02	< 30
	CH02	5760	22.67	< 30
5.8GHz_Ant 2	CH03	5785	23.95	< 30
	CH04	5810	23.94	< 30
	CH05	5835	23.58	< 30

Note1: Average Power =Reading value on power meter + cable loss.



GND:

Test Mode	Channel No.	Frequency (MHz)	Average Power (dBm)	Power Limit (dBm)
	CH01	5735	22.19	< 30
	CH02	5760	23.21	< 30
5.8GHz_Ant 1	CH03	5785	23.31	< 30
	CH04	5810	23.43	< 30
	CH05	5835	23.36	< 30

Note1: Average Power =Reading value on power meter + cable loss.



## 7.5. Transmit Power Control

#### 7.5.1.Test Limit

The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm.

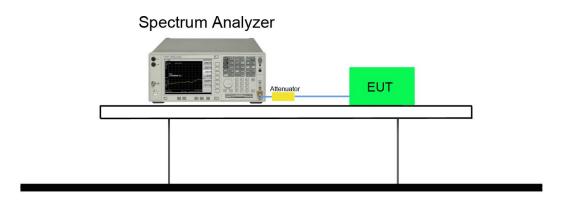
#### 7.5.2. Test Procedure Used

KDB 789033 D02v02r01 - Section E) 3) b) Method PM-G

#### 7.5.3. Test Setting

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. The trace was averaged over 100 traces to obtain the final measured average power.

#### 7.5.4. Test Setup





#### 7.5.5.Test Result

A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.



## 7.6. Power Spectral Density Measurement

#### 7.6.1.Test Limit

#### For FCC Power Spectral Density Limit

For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band.

If transmitting antennas of directional gain greater than 6dBi are used, the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

#### 7.6.2. Test Procedure Used

KDB 789033 D02v02r01 - Section F





### 7.6.3. Test Setting

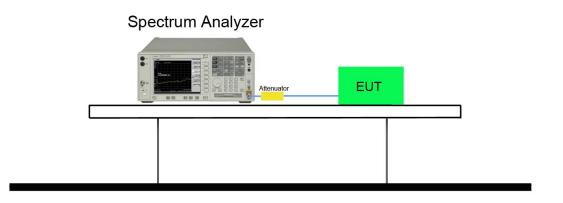
- 1. Analyzer was set to the center frequency of the UNII channel under investigation
- 2. Span was set to encompass the entire 26dB EBW of the signal.
- 3. RBW = 1MHz, if measurement bandwidth of Maximum PSD is specified in 500 kHz,
- 4. RBW = 100 kHz
- 5. VBW = 3MHz
- 6. Number of sweep points  $\geq 2 \times (\text{span} / \text{RBW})$
- 7. Detector = power averaging (Average)
- 8. Sweep time = auto
- 9. Trigger = free run

10. Use the peak search function on the instrument to find the peak of the spectrum and record its value.

11. Add  $10*\log(1/x)$ , where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add  $10*\log(1/0.25) = 6$  dB if the duty cycle is 25 percent.

12. When the measurement bandwidth of Maximum PSD is specified in 500 kHz, add a constant factor  $10^{10}(500 \text{ kHz}/100 \text{ kHz}) = 7 \text{ dB}$  to the measured result

#### 7.6.4. Test Setup





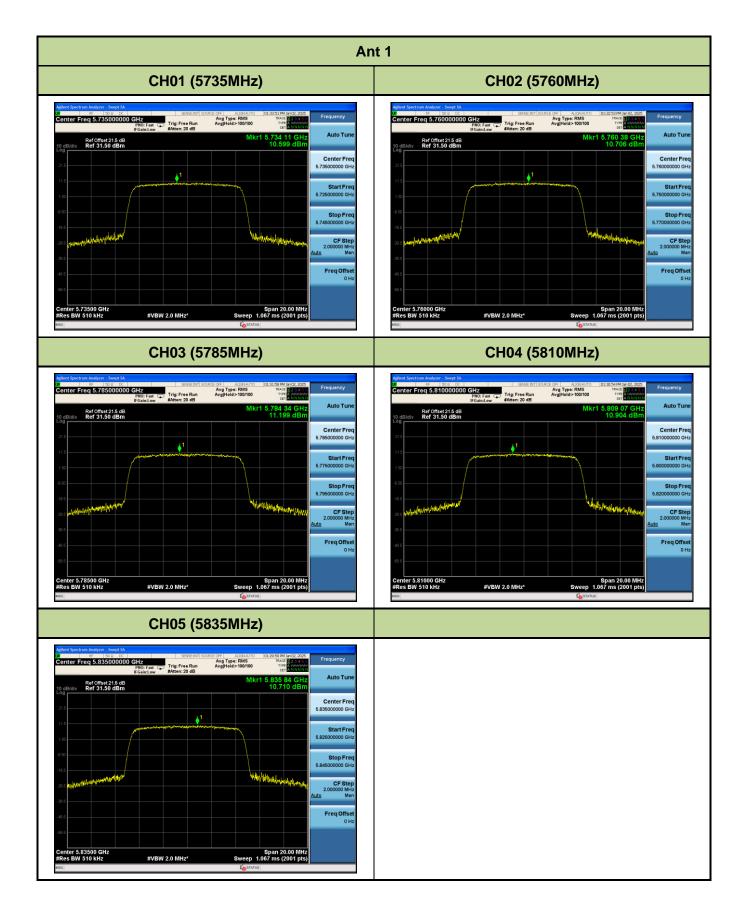
#### 7.6.5. Test Result

Product	Fides-Link2	Temperature	20°C
Test Engineer	Fran	Relative Humidity	56%
Test Site	SR6	Test Date	2025/1/2

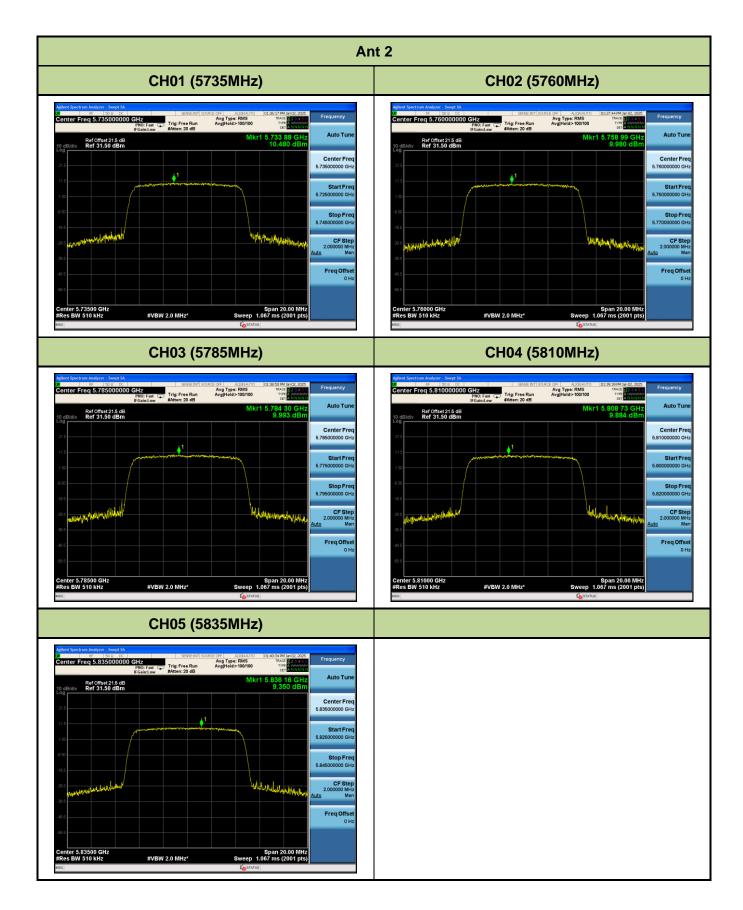
Test Mode	Ch. No.	Freq. (MHz)	Average PSD (dBm/510KHz)	Duty Cycle (%)	Total PSD (dBm/ 510kHz)	Limit (dBm/ 500kHz)	Result
5.8GHz_Ant 1	CH01	5735	10.599	100.00%	10.599	≤ 30	Pass
	CH02	5760	10.706	100.00%	10.706	≤ 30	Pass
	CH03	5785	11.199	100.00%	11.199	≤ 30	Pass
	CH04	5810	10.904	100.00%	10.904	≤ 30	Pass
	CH05	5835	10.710	100.00%	10.710	≤ 30	Pass
5.8GHz_Ant 2	CH01	5735	10.480	100.00%	10.480	≤ 30	Pass
	CH02	5760	9.980	100.00%	9.980	≤ 30	Pass
	CH03	5785	9.993	100.00%	9.993	≤ 30	Pass
	CH04	5810	9.884	100.00%	9.884	≤ 30	Pass
	CH05	5835	9.350	100.00%	9.350	≤ 30	Pass

Note: Total PSD= Average PSD + + 10\*log (1/Duty Cycle).











## 7.7. Radiated Spurious Emission Measurement

#### 7.7.1.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 [V/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				

#### 7.7.2. Test Procedure Used

KDB 789033 D02v02r01 - Section G

#### 7.7.3. Test Setting

#### 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



#### 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 = 120 kHz
- 4. Detector = CISPR quasi-peak
- 5. Sweep time = auto couple
- 6. Trace was allowed to stabilize

#### Average Measurements above 1GHz (Method AD)

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW = 3MHz
- 4. Detector = power average (Average)
- 5. Number of measurement points = 1001 (Number of points must be > 2 x span/RBW)
- 6. Sweep time = auto
- 7. Trace was averaged over at 100 sweeps

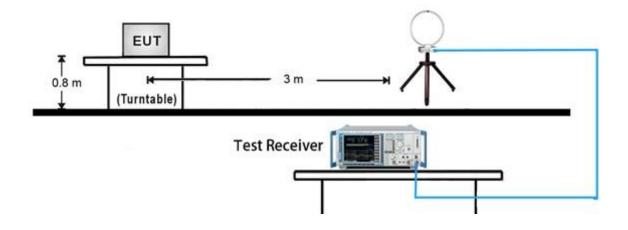
#### Quasi-Peak & Average Measurements below 30MHz

- 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 = 200Hz for 9kHz to 150kHz frequency; RBW = 9kHz for 0.15MHz to 30MHz frequency
- 4. Detector = CISPR quasi-peak or power average (Average)
- 5. Sweep time = auto couple
- 6. Trace was allowed to stabilize

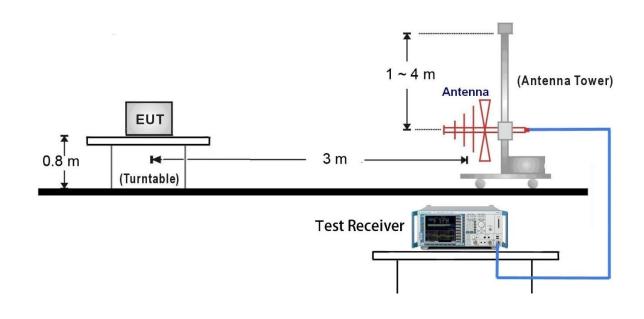


## 7.7.4. Test Setup

#### 9kHz ~ 30MHz Test Setup:

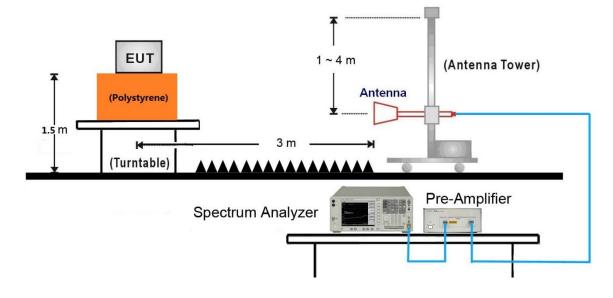


<u>30MHz ~ 1GHz Test Setup:</u>

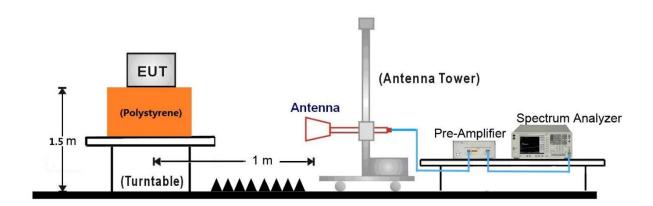




### 1GHz ~18GHz Test Setup:



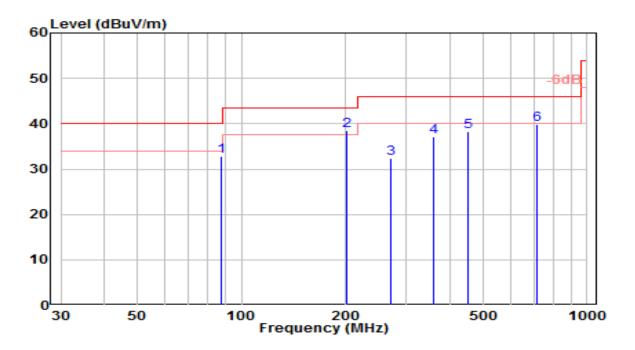
18GHz ~40GHz Test Setup:





### 7.7.5. Test Result

EUT	Fides-Link2	Date of Test	2024-12-20
Factor	VULB 9162	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	SRD 5.8G_TX_Ant 1_5785MHz	Test Voltage	AC 120V/60Hz



No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
NU		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		87.293	16.55	16.32	32.88	-7.12	40.00	150	355	QP
2	*	201.287	19.91	18.53	38.43	-5.07	43.50	150	285	QP
3		271.559	11.78	20.51	32.29	-13.71	46.00	100	215	QP
4		358.662	13.93	23.12	37.06	-8.94	46.00	100	350	QP
5		451.536	13.91	24.34	38.24	-7.76	46.00	100	355	QP
6		718.526	10.91	29.03	39.94	-6.06	46.00	100	215	QP

Note:

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

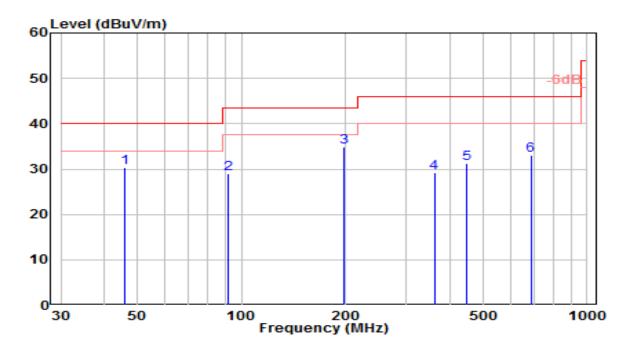
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).

3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-20		
Factor	VULB 9162	Temp. / Humidity	22°C /60%		
Polarity	Vertical	Site / Test Engineer	AC1 / Todd		
Test Mode	SRD 5.8G_TX_Ant 1_5785MHz	Test Voltage	AC 120V/60Hz		

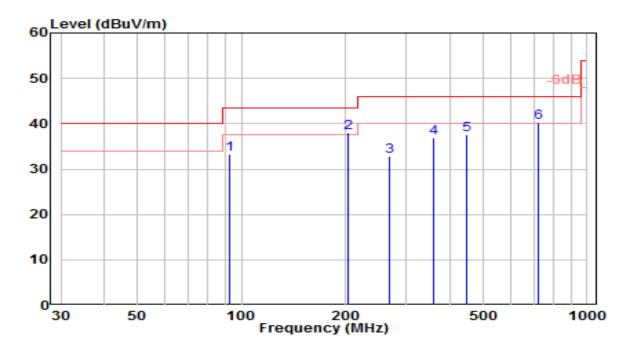


No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
INU		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		45.805	9.23	21.05	30.28	-9.72	40.00	100	145	QP
2		91.301	11.52	17.38	28.90	-14.60	43.50	150	60	QP
3	*	197.296	16.32	18.44	34.77	-8.73	43.50	150	250	QP
4		361.247	6.05	23.17	29.22	-16.78	46.00	150	70	QP
5		447.664	6.86	24.28	31.13	-14.87	46.00	100	235	QP
6		687.204	4.92	28.19	33.11	-12.89	46.00	100	310	QP

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-20		
Factor	VULB 9162	Temp. / Humidity	22°C /60%		
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd		
Test Mode	SRD 5.8G_TX_Ant 2_5785MHz	Test Voltage	AC 120V/60Hz		

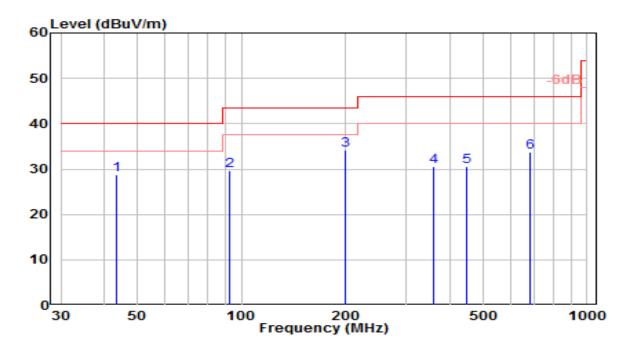


No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
INO		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		92.730	15.75	17.63	33.38	-10.12	43.50	150	355	QP
2	*	203.315	19.55	18.47	38.02	-5.48	43.50	150	285	QP
3		268.804	12.40	20.49	32.89	-13.11	46.00	100	215	QP
4		359.501	13.76	23.14	36.90	-9.10	46.00	100	350	QP
5		449.523	13.30	24.30	37.59	-8.41	46.00	100	355	QP
6		721.420	11.27	29.08	40.35	-5.65	46.00	100	215	QP

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-20		
Factor	VULB 9162	Temp. / Humidity	22°C /60%		
Polarity	Vertical	Site / Test Engineer	AC1 / Todd		
Test Mode	SRD 5.8G_TX_Ant 2_5785MHz	Test Voltage	AC 120V/60Hz		



No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
INU		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		43.468	8.07	20.73	28.80	-11.20	40.00	100	145	QP
2		92.565	12.02	17.60	29.61	-13.89	43.50	150	60	QP
3	*	200.055	15.70	18.56	34.25	-9.25	43.50	150	250	QP
4		360.318	7.40	23.15	30.55	-15.45	46.00	150	70	QP
5		449.853	6.32	24.30	30.62	-15.38	46.00	100	235	QP
6		684.458	5.58	28.08	33.66	-12.34	46.00	100	310	QP

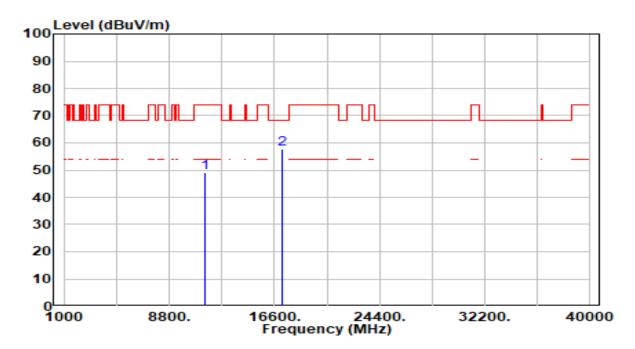
- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).

3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22		
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	22°C /60%		
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd		
Test Mode	SRD 5.8G_TX_Ant 1_5735MHz	Test Voltage	AC 120V/60Hz		

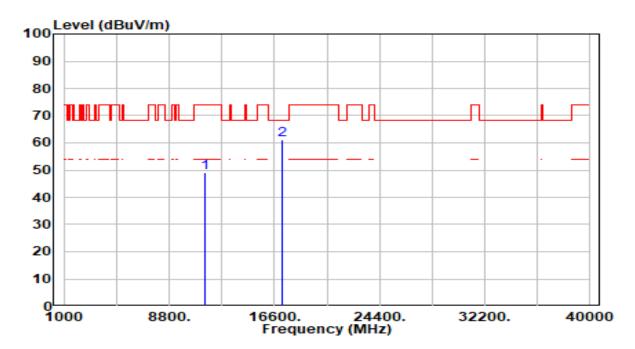


No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
No		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		11470.000	29.28	19.79	49.07	-24.93	74.00	300	237	Peak
2	*	17205.000	32.20	25.54	57.74	-10.46	68.20	300	38	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB).
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22		
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	22°C /60%		
Polarity	Vertical	Site / Test Engineer	AC1 / Todd		
Test Mode	SRD 5.8G_TX_Ant 1_5735MHz	Test Voltage	AC 120V/60Hz		

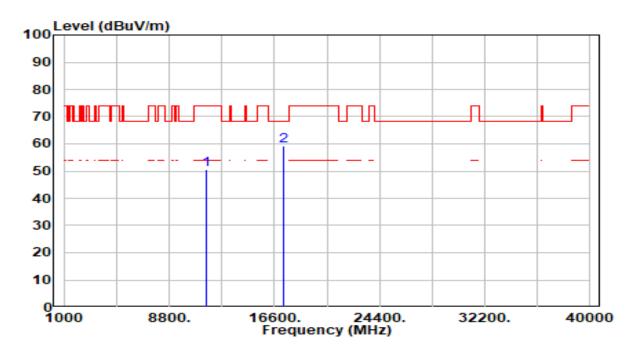


No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
INO		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		11470.000	29.42	19.79	49.21	-24.79	74.00	300	280	Peak
2	*	17205.000	35.50	25.54	61.04	-7.16	68.20	300	337	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB).
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22		
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	22°C /60%		
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd		
Test Mode	SRD 5.8G_TX_Ant 1_5760MHz	Test Voltage	AC 120V/60Hz		

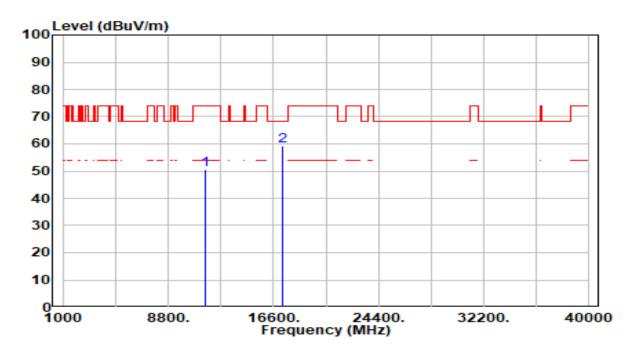


No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		11520.000	30.62	19.81	50.43	-23.57	74.00	300	250	Peak
2	*	17280.000	33.23	26.10	59.33	-8.87	68.20	300	13	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB).
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22		
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	22°C /60%		
Polarity	Vertical	Site / Test Engineer	AC1 / Todd		
Test Mode	SRD 5.8G_TX_Ant 1_5760MHz	Test Voltage	AC 120V/60Hz		

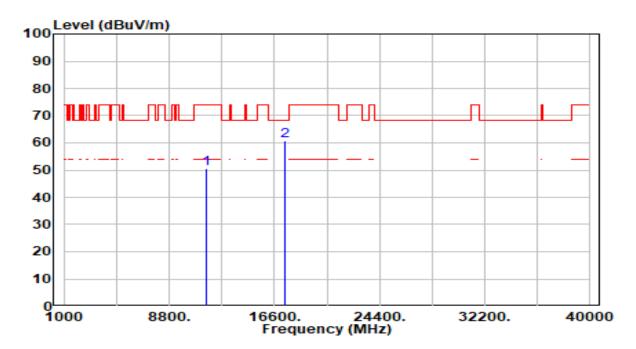


No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
INO		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		11520.000	30.63	19.81	50.44	-23.56	74.00	300	358	Peak
2	*	17280.000	32.96	26.10	59.06	-9.14	68.20	300	14	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB).
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22		
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	22°C /60%		
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd		
Test Mode	SRD 5.8G_TX_Ant 1_5785MHz	Test Voltage	AC 120V/60Hz		

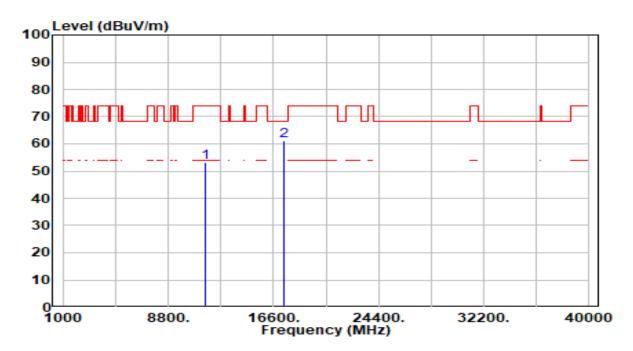


No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
No		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		11570.000	30.71	19.72	50.43	-23.57	74.00	300	115	Peak
2	*	17355.000	34.28	26.65	60.93	-7.27	68.20	300	207	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB).
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22		
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	22°C /60%		
Polarity	Vertical	Site / Test Engineer	AC1 / Todd		
Test Mode	SRD 5.8G_TX_Ant 1_5785MHz	Test Voltage	AC 120V/60Hz		

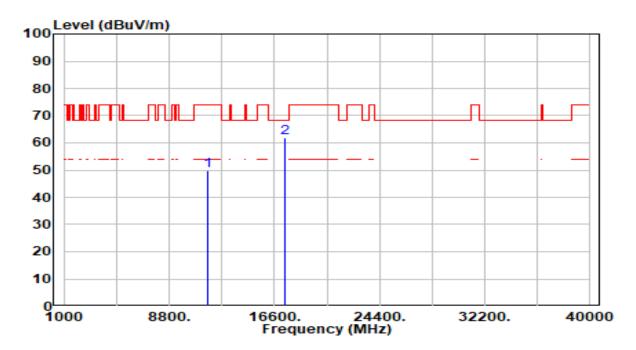


No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
INO		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		11570.000	33.53	19.72	53.25	-20.75	74.00	300	162	Peak
2	*	17355.000	34.42	26.65	61.07	-7.13	68.20	300	106	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB).
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22		
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	22°C /60%		
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd		
Test Mode	SRD 5.8G_TX_Ant 1_5810MHz	Test Voltage	AC 120V/60Hz		

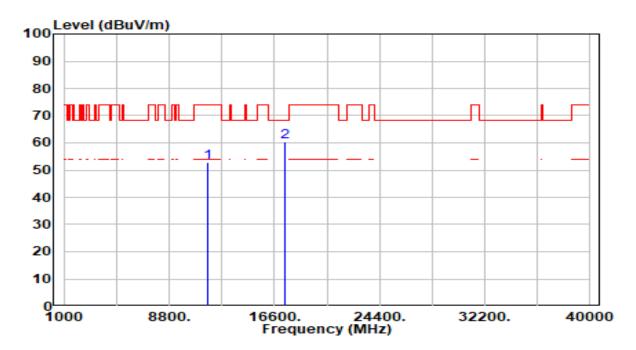


No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
INO		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		11620.000	30.30	19.63	49.92	-24.08	74.00	300	230	Peak
2	*	17430.000	34.72	27.21	61.93	-6.27	68.20	300	152	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB).
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22		
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	22°C /60%		
Polarity	Vertical	Site / Test Engineer	AC1 / Todd		
Test Mode	SRD 5.8G_TX_Ant 1_5810MHz	Test Voltage	AC 120V/60Hz		

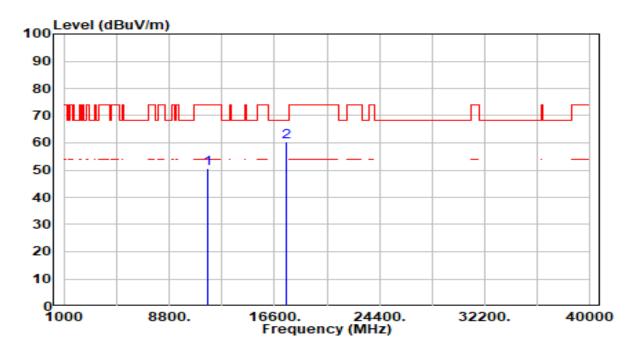


No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
No		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		11620.000	33.10	19.63	52.73	-21.27	74.00	300	163	Peak
2	*	17430.000	33.07	27.21	60.28	-7.92	68.20	300	174	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB).
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	SRD 5.8G_TX_Ant 1_5835MHz	Test Voltage	AC 120V/60Hz

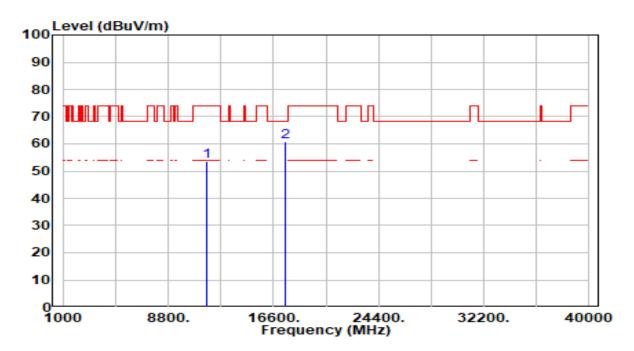


N	0	Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		11670.000	30.93	19.53	50.46	-23.54	74.00	300	158	Peak
2	*	17505.000	32.43	27.77	60.20	-8.00	68.20	300	165	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB).
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	SRD 5.8G_TX_Ant 1_5835MHz	Test Voltage	AC 120V/60Hz

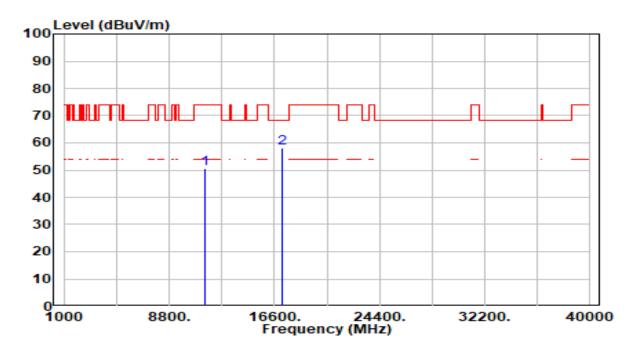


No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
INO		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		11670.000	33.87	19.53	53.40	-20.60	74.00	300	350	Peak
2	*	17505.000	33.17	27.77	60.94	-7.26	68.20	300	180	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB).
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	SRD 5.8G_TX_Ant 2_5735MHz	Test Voltage	AC 120V/60Hz

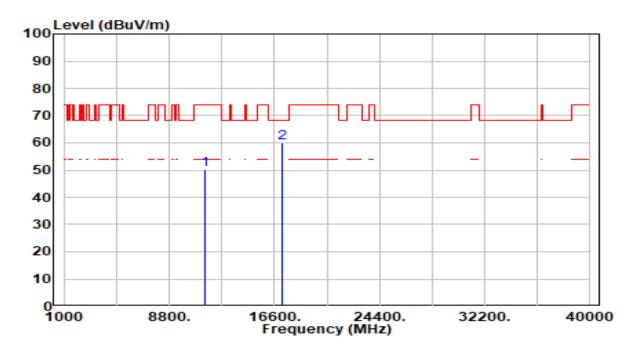


No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
INU		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		11470.000	30.59	19.79	50.38	-23.62	74.00	300	172	Peak
2	*	17205.000	32.50	25.54	58.04	-10.16	68.20	300	326	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB).
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	SRD 5.8G_TX_Ant 2_5735MHz	Test Voltage	AC 120V/60Hz

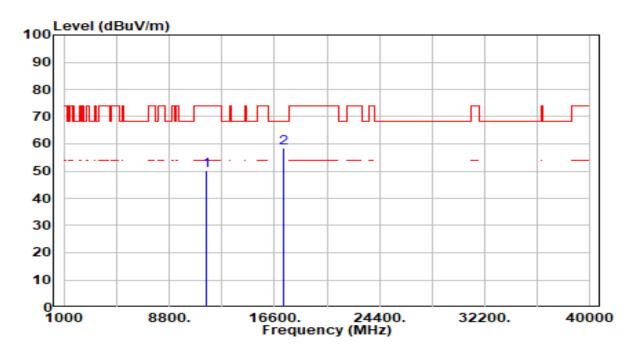


No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
INO		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		11470.000	30.52	19.79	50.32	-23.68	74.00	300	355	Peak
2	*	17205.000	34.29	25.54	59.83	-8.37	68.20	300	323	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB).
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	SRD 5.8G_TX_Ant 2_5760MHz	Test Voltage	AC 120V/60Hz

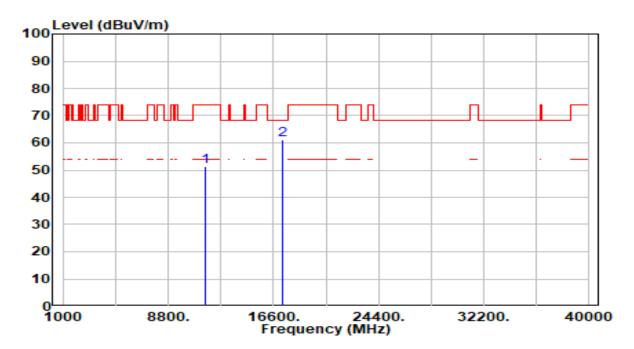


No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		11520.000	30.52	19.81	50.33	-23.67	74.00	300	123	Peak
2	*	17280.000	32.44	26.10	58.53	-9.67	68.20	300	272	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB).
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	SRD 5.8G_TX_Ant 2_5760MHz	Test Voltage	AC 120V/60Hz

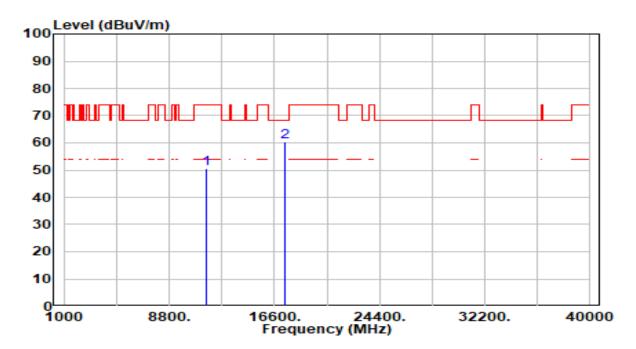


No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
INO		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		11520.000	31.69	19.81	51.50	-22.50	74.00	300	240	Peak
2	*	17280.000	35.14	26.10	61.24	-6.96	68.20	300	215	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB).
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22		
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	22°C /60%		
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd		
Test Mode	SRD 5.8G_TX_Ant 2_5785MHz	Test Voltage	AC 120V/60Hz		

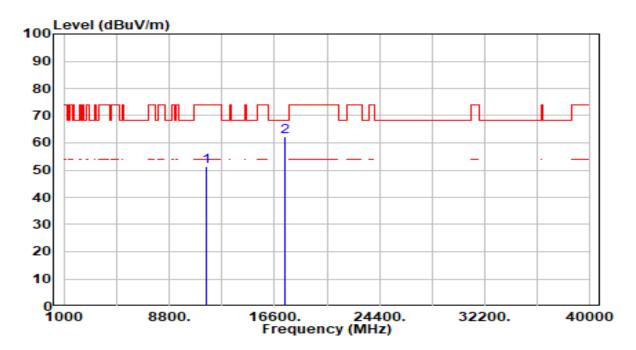


No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
INO		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		11570.000	30.88	19.72	50.60	-23.40	74.00	300	255	Peak
2	*	17355.000	33.89	26.65	60.54	-7.66	68.20	300	319	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB).
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22		
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	22°C /60%		
Polarity	Vertical	Site / Test Engineer	AC1 / Todd		
Test Mode	SRD 5.8G_TX_Ant 2_5785MHz	Test Voltage	AC 120V/60Hz		

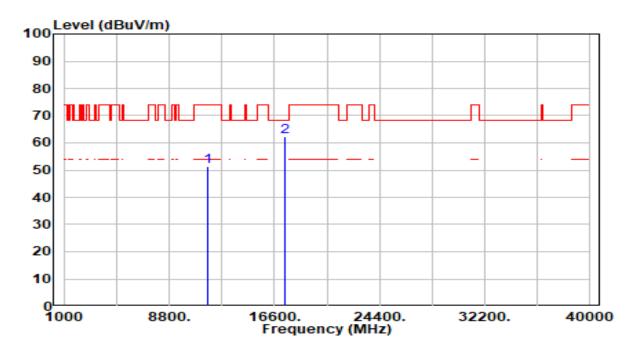


No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
No		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		11570.000	31.62	19.72	51.34	-22.66	74.00	300	7	Peak
2	*	17355.000	35.54	26.65	62.19	-6.01	68.20	300	210	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB).
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22		
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	22°C /60%		
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd		
Test Mode	SRD 5.8G_TX_Ant 2_5810MHz	Test Voltage	AC 120V/60Hz		

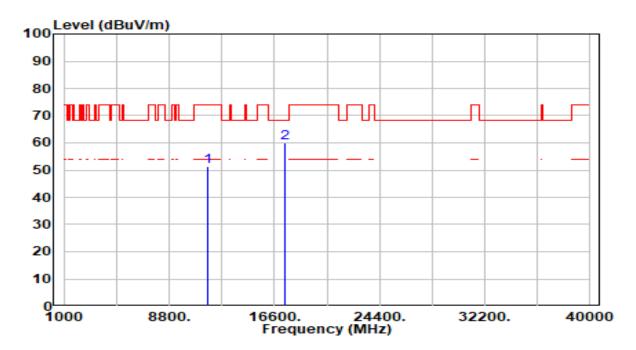


No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
INO		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		11620.000	31.56	19.63	51.19	-22.81	74.00	300	282	Peak
2	*	17430.000	34.91	27.21	62.12	-6.08	68.20	300	297	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB).
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22		
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	22°C /60%		
Polarity	Vertical	Site / Test Engineer	AC1 / Todd		
Test Mode	SRD 5.8G_TX_Ant 2_5810MHz	Test Voltage	AC 120V/60Hz		

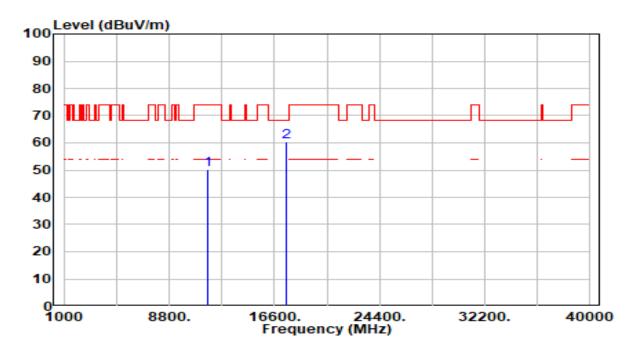


No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
INO		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		11620.000	31.68	19.63	51.31	-22.69	74.00	300	333	Peak
2	*	17430.000	32.95	27.21	60.16	-8.04	68.20	300	360	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB).
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22		
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	22°C /60%		
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd		
Test Mode	SRD 5.8G_TX_Ant 2_5835MHz	Test Voltage	AC 120V/60Hz		

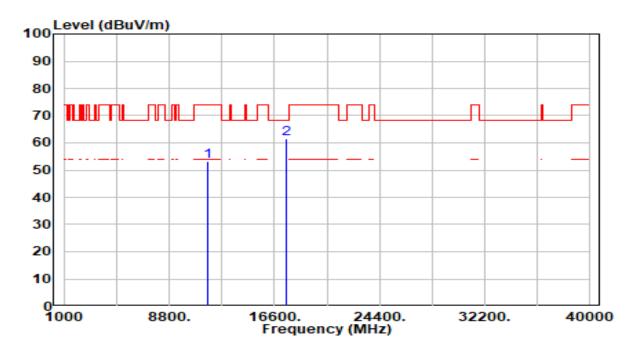


No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		11670.000	30.58	19.53	50.11	-23.89	74.00	300	148	Peak
2	*	17505.000	32.72	27.77	60.49	-7.71	68.20	300	165	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB).
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22		
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	22°C /60%		
Polarity	Vertical	Site / Test Engineer	AC1 / Todd		
Test Mode	SRD 5.8G_TX_Ant 2_5835MHz	Test Voltage	AC 120V/60Hz		



No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
INO		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		11670.000	33.59	19.53	53.12	-20.88	74.00	300	360	Peak
2	*	17505.000	33.58	27.77	61.35	-6.85	68.20	300	237	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB).
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



# 7.8. Radiated Restricted Band Edge Measurement

### 7.8.1. 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,

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	8.25 - 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 - 156.525	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				

must also comply with the radiated emission limits specified in Section 15.209(a).



#### For 15.407(b) requirement:

For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For FCC transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

**For IC transmitters operating in the 5.725-5.85 GHz band:** All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz.

Refer to KDB 789033 D02v02r01 G)2)c), as specified in § 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a maximum emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in § 15.407(b)(4)). However, an out-of-band emission that complies with both the peak and average limits of § 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz maximum emission 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.



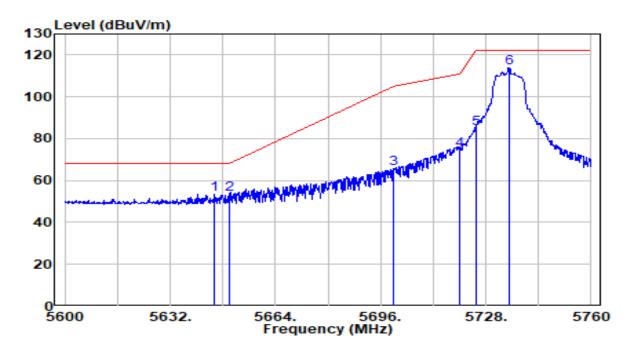
# FCC-Radiated emission limits; general requirements

FC	FCC Part 15 Subpart C Paragraph 15.209								
Frequency [MHz]	Field Strength [V/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							



### 7.8.2. Test Result

EUT	Fides-Link2	Date of Test	2024-12-22
Factor	BBHA 9120D	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	SRD 5.8G_TX_Ant 1_5735MHz	Test Voltage	AC 120V/60Hz



No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
INO		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1	*	5645.600	48.36	5.26	53.62	-14.58	68.20	145	230	Peak
2		5650.000	48.02	5.27	53.30	-14.90	68.20	145	230	Peak
3		5700.000	60.12	5.44	65.56	-39.64	105.20	145	230	Peak
4		5720.000	68.89	5.51	74.40	-36.40	110.80	145	230	Peak
5		5725.000	79.17	5.53	84.70	-37.50	122.20	145	230	Peak
6		5735.040	108.36	5.56	113.92	N/A	N/A	145	230	Peak

Note:

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

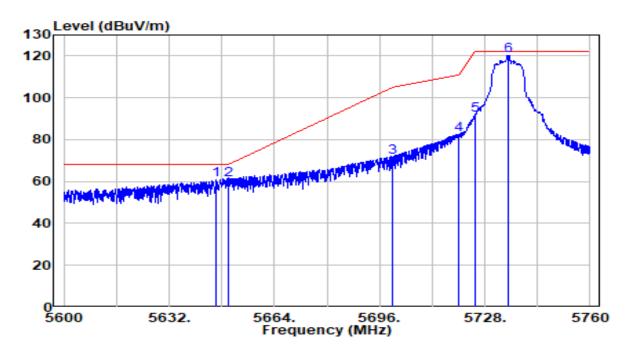
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 20dB Attenuation.

3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22		
Factor	BBHA 9120D	Temp. / Humidity	22°C /60%		
Polarity	Vertical	Site / Test Engineer	AC1 / Todd		
Test Mode	SRD 5.8G_TX_Ant 1_5735MHz	Test Voltage	AC 120V/60Hz		

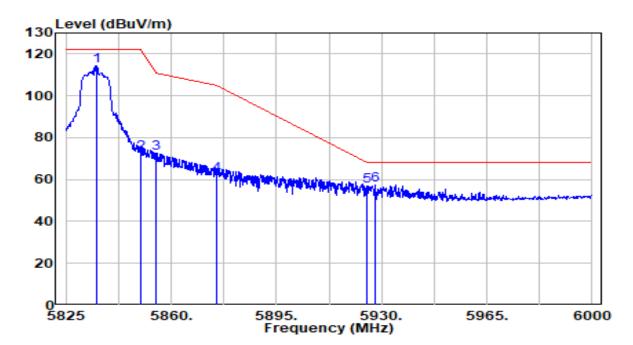


No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
INU		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		5646.400	55.62	5.26	60.88	-7.32	68.20	185	200	Peak
2	*	5650.000	55.69	5.27	60.97	-7.23	68.20	185	200	Peak
3		5700.000	66.37	5.44	71.81	-33.39	105.20	185	200	Peak
4		5720.000	77.03	5.51	82.53	-28.27	110.80	185	200	Peak
5		5725.000	86.24	5.53	91.76	-30.44	122.20	185	200	Peak
6		5735.040	114.65	5.56	120.21	N/A	N/A	185	200	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB) + 20dB Attenuation.
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22		
Factor	BBHA 9120D	Temp. / Humidity	22°C /60%		
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd		
Test Mode	SRD 5.8G_TX_Ant 1_5835MHz	Test Voltage	AC 120V/60Hz		

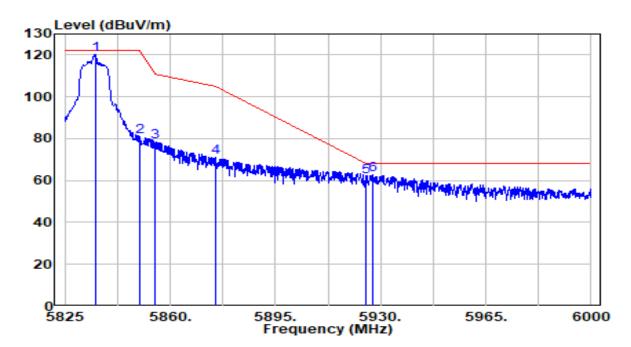


No	Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
INU	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1	5835.325	108.35	5.90	114.25	N/A	N/A	150	220	Peak
2	5850.000	66.45	5.95	72.39	-49.81	122.20	150	220	Peak
3	5855.000	66.71	5.96	72.67	-38.13	110.80	150	220	Peak
4	5875.000	56.50	6.03	62.53	-42.67	105.20	150	220	Peak
5	5925.000	50.67	6.20	56.87	-11.33	68.20	150	220	Peak
6	* 5927.900	51.27	6.21	57.48	-10.72	68.20	150	220	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB) + 20dB Attenuation.
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22
Factor	BBHA 9120D	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	SRD 5.8G_TX_Ant 1_5835MHz	Test Voltage	AC 120V/60Hz

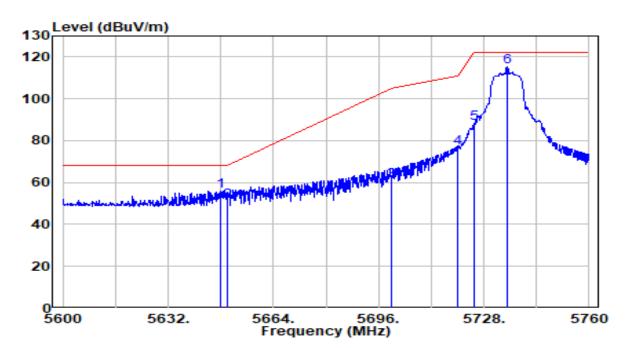


No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
INU		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		5835.150	114.17	5.90	120.06	N/A	N/A	290	205	Peak
2		5850.000	75.11	5.95	81.06	-41.14	122.20	290	205	Peak
3		5855.000	72.36	5.96	78.32	-32.48	110.80	290	205	Peak
4		5875.000	65.06	6.03	71.09	-34.11	105.20	290	205	Peak
5		5925.000	55.54	6.20	61.74	-6.46	68.20	290	205	Peak
6	*	5927.200	56.38	6.21	62.59	-5.61	68.20	290	205	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB) + 20dB Attenuation.
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22		
Factor	BBHA 9120D	Temp. / Humidity	22°C /60%		
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd		
Test Mode	SRD 5.8G_TX_Ant 2_5735MHz	Test Voltage	AC 120V/60Hz		

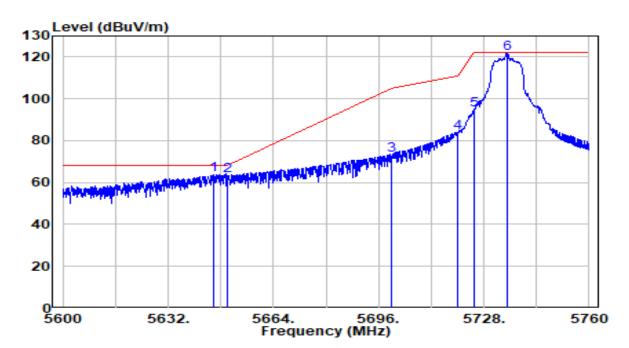


No		Frequency	Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
INU		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1	*	5647.840	50.83	5.27	56.09	-12.11	68.20	220	245	Peak
2		5650.000	45.84	5.27	51.11	-17.09	68.20	220	245	Peak
3		5700.000	55.19	5.44	60.63	-44.57	105.20	220	245	Peak
4		5720.000	71.06	5.51	76.57	-34.23	110.80	220	245	Peak
5		5725.000	82.67	5.53	88.19	-34.01	122.20	220	245	Peak
6		5735.040	109.48	5.56	115.04	N/A	N/A	220	245	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB) + 20dB Attenuation.
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22
Factor	BBHA 9120D	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	SRD 5.8G_TX_Ant 2_5735MHz	Test Voltage	AC 120V/60Hz

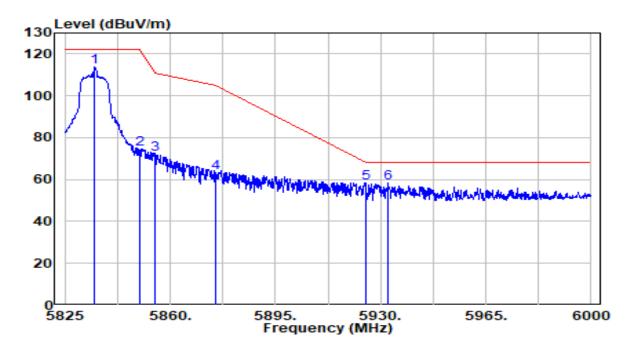


No		Frequency	quency Reading C.F Measure		Measurement	Margin	Limit	Height	Angle	Remark
INU		(MHz) (dBuV)		(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1	*	5645.760	58.51	5.26	63.77	-4.43	68.20	210	165	Peak
2		5650.000	58.25	5.27	63.53	-4.67	68.20	210	165	Peak
3		5700.000	67.79	5.44	73.24	-31.96	105.20	210	165	Peak
4		5720.000	78.37	5.51	83.88	-26.92	110.80	210	165	Peak
5		5725.000	89.09	5.53	94.62	-27.58	122.20	210	165	Peak
6		5735.200	116.14	5.56	121.70	N/A	N/A	210	165	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB) + 20dB Attenuation.
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22		
Factor	BBHA 9120D	Temp. / Humidity 22°C /60%			
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd		
Test Mode	SRD 5.8G_TX_Ant 2_5735MHz	Test Voltage	AC 120V/60Hz		

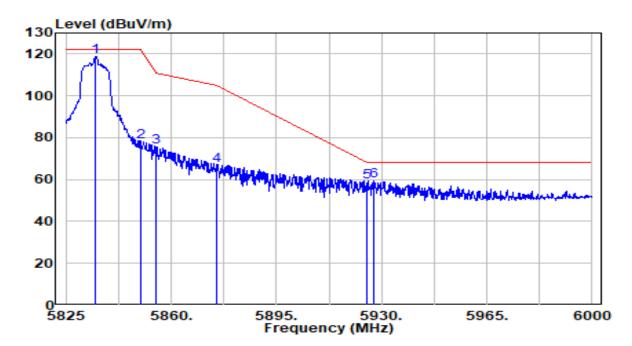


No			Measurement	Margin	Limit	Height	Angle	Remark		
INO			(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1	*	5834.975	107.71	5.90	113.61	N/A	N/A	185	240	Peak
2		5850.000	68.38	5.95	74.33	-47.87	122.20	185	240	Peak
3		5855.000	66.01	5.96	71.97	-38.83	110.80	185	240	Peak
4		5875.000	57.45	6.03	63.48	-41.72	105.20	185	240	Peak
5	*	5925.000	52.33	6.20	58.53	-9.67	68.20	185	240	Peak
6		5932.450	52.05	6.22	58.27	-9.93	68.20	185	240	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB) + 20dB Attenuation.
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



EUT	Fides-Link2	Date of Test	2024-12-22
Factor	BBHA 9120D	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	SRD 5.8G_TX_Ant 2_5735MHz	Test Voltage	AC 120V/60Hz



No	Frequency		Reading	C.F	Measurement	Margin	Limit	Height	Angle	Remark
INU		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dB)	(dBuV/m)	(cm)	(deg)	(QP/PK/AV)
1		5834.800	112.94	5.89	118.83	N/A	N/A	235	220	Peak
2		5850.000	72.18	5.95	78.12	-44.08	122.20	235	220	Peak
3		5855.000	69.36	5.96	75.33	-35.47	110.80	235	220	Peak
4		5875.000	60.83	6.03	66.86	-38.34	105.20	235	220	Peak
5		5925.000	52.68	6.20	58.88	-9.32	68.20	235	220	Peak
6	*	5927.375	53.10	6.21	59.31	-8.89	68.20	235	220	Peak

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) Preamplifier(dB) + 20dB Attenuation.
- 3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



# 7.9. AC Conducted Emissions Measurement

### 7.9.1. Test Limit

FCC Part 15.207 Limits									
Frequency	QP	AV							
(MHz)	(dBµV)	(dBµV)							
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.

### 7.9.2. Test Procedure

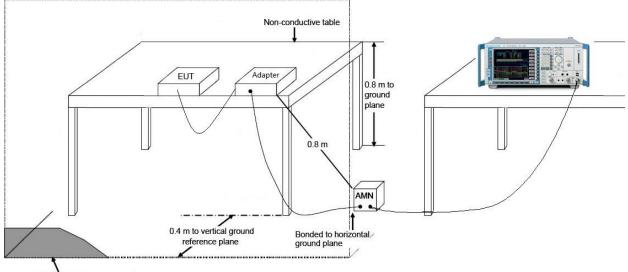
The EUT was setup according to ANSI C63.4, 2009 and tested according to KDB 789033 for compliance to FCC 47CFR 15.247 requirements. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs) Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.



## 7.9.3. Test Setup

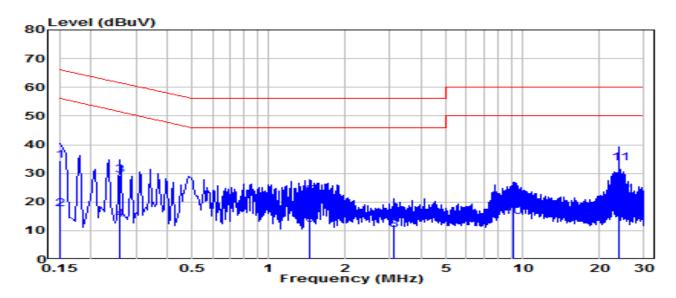


Vertical ground reference plane



## 7.9.4. Test Result

EUT	Fides-Link2	Date of Test	2024-12-25
Factor	CE_ENV216-L1 (Filter ON)	Temp. / Humidity	24.3°C /65%
Polarity	Line1	Site / Test Engineer	SR2 / Ryan
Test Mode	SRD 5.8G_TX_Ant 1_5785MHz	Test Voltage	AC 120V/60Hz



Na		Frequency	Reading	C.F	Measurement	Margin	Limit	Remark
No		(MHz)	(dBuV)	(dB)	(dBuV)	(dB)	(dBuV)	(QP/PK/AV)
1		0.150	24.66	9.63	34.29	-31.71	66.00	QP
2		0.150	7.76	9.63	17.39	-38.61	56.00	Average
3		0.258	19.64	9.64	29.27	-32.22	61.50	QP
4		0.258	4.19	9.64	13.82	-37.67	51.50	Average
5		1.441	12.34	9.69	22.03	-33.97	56.00	QP
6		1.441	2.40	9.69	12.09	-33.91	46.00	Average
7		3.124	2.31	9.72	12.02	-43.98	56.00	QP
8		3.124	0.45	9.72	10.17	-35.83	46.00	Average
9		9.118	10.98	9.85	20.83	-39.17	60.00	QP
10		9.118	5.06	9.85	14.91	-35.09	50.00	Average
11	*	23.993	23.61	9.92	33.53	-26.47	60.00	QP
12	*	23.993	12.68	9.92	22.60	-27.40	50.00	Average

#### Note:

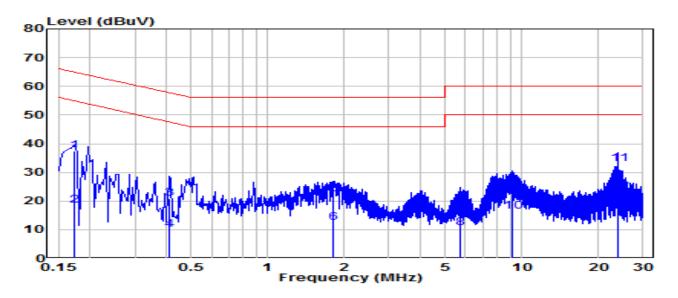
1. " \*", means this data is the worst emission level.

2. C.F (Correction Factor) = LISN Factor (dB)+ Cable Loss (dB).

3. Measurement (dBuV) = Reading(dBuV) + C.F (Correction Factor).



EUT	Fides-Link2	Date of Test	2024-12-25
Factor	CE_ENV216-N (Filter ON)	Temp. / Humidity	24.3°C /65%
Polarity	Neutral	Site / Test Engineer	SR2 / Ryan
Test Mode	SRD 5.8G_TX_Ant 1_5785MHz	Test Voltage	AC 120V/60Hz



Na	F	requency	Reading	C.F	Measurement	Margin	Limit	Remark
No		(MHz)	(dBuV)	(dB)	(dBuV)	(dB)	(dBuV)	(QP/PK/AV)
1		0.172	27.66	9.63	37.29	-27.55	64.84	QP
2		0.172	8.69	9.63	18.32	-36.52	54.84	Average
3		0.411	11.24	9.65	20.89	-36.74	57.63	QP
4		0.411	0.22	9.65	9.87	-37.76	47.63	Average
5		1.806	12.58	9.70	22.29	-33.71	56.00	QP
6		1.806	2.71	9.70	12.41	-33.59	46.00	Average
7		5.729	7.40	9.78	17.17	-42.83	60.00	QP
8		5.729	0.84	9.78	10.62	-39.38	50.00	Average
9		9.154	13.76	9.87	23.63	-36.37	60.00	QP
10		9.154	6.43	9.87	16.30	-33.70	50.00	Average
11	*	23.989	23.01	10.01	33.03	-26.97	60.00	QP
12	*	23.989	13.22	10.01	23.24	-26.76	50.00	Average

- 1. " \*", means this data is the worst emission level.
- 2. C.F (Correction Factor) = LISN Factor (dB)+ Cable Loss (dB).
- 3. Measurement (dBuV) = Reading(dBuV) + C.F (Correction Factor).



# 8. CONCLUSION

The data collected relate only the item(s) tested and show that the Fides-Link2, is in compliance

with Part 15E of the FCC Rules.



# Appendix A : Test Photograph

Refer to "2412TW0114-UTfile.

# Appendix B : External Photograph

Refer to "2412TW0114-UE file.

# Appendix C : Internal Photograph

Refer to "2412TW0114-UI file.

The End