

RF Test Report

For

Beijing Inhand Networks Technology Co., Ltd.

Test Standards:	<u>FCC Part 15 Subpart E §15. 407</u> <u>IC RSS-247 Issue 2</u>
Product Name:	<u>Edge computing gateway</u>
Tested Model:	<u>IG974</u>
Additional Model No.:	<u>FCC:IG904,IG914,IG924,IG934,</u> <u>IG944,IG954,IG964,IG984,IG994</u> <u>IC: IG944,IG954,IG984</u>
Brand Name:	
FCC ID:	<u>2AANY-IG974</u>
IC:	<u>11594A-IG974</u>
Classification	<u>(NII)Unlicensed National Information Infrastructure</u>
Report No.:	<u>EC2301026RF02</u>
Tested Date:	<u>2023-01-09 to 2023-02-14</u>
Issued Date:	<u>2023-02-16</u>

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Note: The test results in this report apply exclusively to the tested model / sample. Without written approval of Hunan Ecloud Testing Technology Co., Ltd., the test report shall not be reproduced except in full.

Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	2023.02.16	Valid	Original Report

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Summary of Test Result

FCC Rule	IC Rule	Description	Limit	Result	Remark
2.1049 15.403(i)	RSS-247 Section 6	6dB & 99% Bandwidth	- >500kHz	Pass Pass	U-NII-1 U-NII-3
15.407(a)	RSS-247 Section 6	Maximum Conducted Output Power	≤30dBm For AP ≤23.98dBm For Client	Pass	U-NII-1
			≤30dBm	Pass	U-NII-3
		Maximum e.i.r.p.	200 mW or 10 + 10 log10B	Pass	U-NII-1
15.407(a)	RSS-247 Section 6	E.I.R.P. Power Spectral Density	≤10dBm/MHz	Pass	U-NII-1
		Power Spectral Density	≤17dBm/MHz For AP ≤11dBm/MHz For Client	Pass	U-NII-1
			≤30dBm/500kHz	Pass	U-NII-3
15.407(b)	RSS-247 Section 6	Unwanted Emissions	15.407(b) 15.209(a)	Pass	Under limit 4.50 dB at 17235 MHz
15.207	RSS-Gen 8.8	AC Conducted Emission	15.207(a)	Pass	Under limit 7.16 dB at 2.993 MH
15.407(g)	RSS-Gen 6.11	Frequency Stability	Within Operation Band	Not Required	-
15.407(c)	RSS-247 6.4(a)	Automatically Discontinue Transmission	Discontinue Transmission	Pass	-
15.203 & 15.407(a)	RSS-Gen 6.8	Antenna Requirement	15.203 & 15.407(a) RSS-GEN 6.8	Pass	-

1 .Test Laboratory

1.1 Test facility

CNAS (accreditation number: L11138)

Hunan Ecloud Testing Technology Co., Ltd. has obtained the accreditation of China National Accreditation Service for Conformity Assessment (CNAS).

FCC (Designation number: CN1244 , Test Firm Registration Number: 793308)

Hunan Ecloud Testing Technology Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

ISED(CAB identifier: CN0012, ISED# :24347)

Hunan Ecloud Testing Technology Co., Ltd. has been listed on the Wireless Device Testing Laboratories list of innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements.

A2LA (Certificate Code: 4895.01)

Hunan Ecloud Testing Technology Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

2 General Description

2.1 Applicant

Beijing Inhand Networks Technology Co., Ltd.

Room 501, floor 5, building 3, yard 18, ziyue road, chaoyang district, Beijing

2.2 Manufacturer

Beijing Inhand Networks Technology Co., Ltd.

Room 501, floor 5, building 3, yard 18, ziyue road, chaoyang district, Beijing

2.3 General Description Of EUT

Product	Edge computing gateway
Model No.	IG974
FCC ID:	2AANY-IG974
IC:	11594A-IG974
Additional No.	FCC:IG904,IG914,IG924,IG934,IG944,IG954,IG964,IG984,IG994 IC: IG944,IG954,IG984
Difference Description	These models are the same in these:appearance,PCB layout and basic software function;The only difference is that the products are used in different markets.
HW Version	V1.3
SW Version	V2.0
Power Supply	12-48Vdc
Extreme temperature	-20°C ~70°C
Modulation Technology	256QAM,64QAM, 16QAM, QPSK, BPSK for OFDM
Modulation Type	802.11a/n/ac : OFDM
Operating Frequency	U-NII-1:5150~5250MHz U-NII-3:5725~5850MHz
Max. Output Power	U-NII-1: 802.11a : 17.47 dBm (0.0558 W) 802.11n HT20 MIMO: 19.08 dBm (0.0809 W) 802.11n HT40 MIMO : 19.10 dBm (0.0813 W) 802.11ac VHT20 MIMO: 19.15 dBm (0.0822 W) 802.11ac VHT40 MIMO: 19.12 dBm (0.0817 W) 802.11ac VHT80 MIMO: 19.01 dBm (0.0796 W) U-NII-3: 802.11a : 17.70 dBm (0.0589 W) 802.11n HT20 MIMO: 19.07 dBm (0.0807 W) 802.11n HT40 MIMO: 19.12 dBm (0.0817 W) 802.11ac VHT20 MIMO : 19.01 dBm (0.0796 W)

	802.11ac VHT40 MIMO: 19.01 dBm (0.0796 W) 802.11ac VHT80 MIMO: 19.19 dBm (0.0830 W)
Max. E.I.R.P.	19.4 dBm (0.0871 W)
Antenna Type	Sucker antenna
Antenna Gain (dBi)	Ant 1 : 0.21dBi Gain at U-NII-1 0.21dBi Gain at U-NII-3 Ant 2 : 0.21dBi Gain at U-NII-1 0.21dBi Gain at U-NII-3
Sample No.	2301026R-1/1
Sample Received Date	2023-01-09
I/O Ports	Refer to user's manual
Cable Supplied	Refer to user's manual

NOTE:

1. The above EUT information is declared by manufacturer. Our laboratory is not responsible for the information provided by the manufacturer.
2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
3. Pre-scan all voltages, the report only lists the worst voltage DC12V test results.

2.4 Modification of EUT

No modifications are made to the EUT during all test items.

2.5 Applicable Standards

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

- ♦ FCC Part 15 Subpart E §15.407
- ♦ ANSI C63.10-2013
- ♦ FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ♦ IC RSS-247 Issue 2
- ♦ IC RSS-Gen Issue 5

Remark:

1. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, ICES-003 recorded in a separate test report.

3 Test Configuration of Equipment Under Test

3.1 Carrier Frequency and Channel

U-NII-1

Channel	Frequency	Channel	Frequency
36	5180 MHz	44	5220 MHz
38	5190 MHz	46	5230 MHz
40	5200 MHz	48	5240 MHz
42	5210 MHz		

U-NII-3

Channel	Frequency	Channel	Frequency
149	5745 MHz	157	5785 MHz
151	5755 MHz	159	5795 MHz
153	5765 MHz	161	5805 MHz
155	5775 MHz	165	5825 MHz

3.2 Test Mode

Based on the baseline scan, the worst - case data rates were:

802.11a mode: 6 Mbps

802.11n HT20 mode: MCS0

802.11n HT40 mode: MCS0

802.11n VHT20 mode: Nssi MCS0

802.11n VHT40 mode: Nssi MCS0

802.11n VHT80 mode: Nssi MCS0

Note: The product can be used as both an Access point and a Client device. Only the worst Client device test results are listed in the report.

3.2.1 Antenna Port Conducted Measurement

Summary table of Test Cases				
Test Item	Modulation			
	802.11 a	802.11n HT20/ 802.11ac VHT20	802.11n HT40/ 802.11ac VHT40	802.11ac VHT80
U-NII-1	Mode 1: CH36 Mode 2: CH44 Mode 3: CH48	Mode 1: CH36 Mode 2: CH44 Mode 3: CH48	Mode 1: CH38 Mode 2: CH46 Mode 3: -	Mode 1: CH42 Mode 2: - Mode 3: -

Summary table of Test Cases				
Test Item	Modulation			
	802.11 a	802.11n HT20/ 802.11ac VHT20	802.11n HT40/ 802.11ac VHT40	802.11ac VHT80
U-NII-3	Mode 1: CH149 Mode 2: CH157 Mode 3: CH165	Mode 1: CH149 Mode 2: CH157 Mode 3: CH165	Mode 1: CH151 Mode 2: CH159	Mode 1: CH155 Mode 2: - Mode 3: -

3.2.2 Radiated Emission Test (Below 1GHz)

Radiated Test Cases	Modulation
	802.11a CH149

Note : 1. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, XYZ axis, antenna ports (if EUT with antenna diversity architecture) and packet type. It was determined that X orientation was worst-case orientation; therefore, all final radiated testing was performed with the EUT in X orientation.

2. Following channel(s) was (were) selected for the final test as listed above.

3. All the below test modes were conducted, only reported the worst case mode 802.11n HT20 CH157.

3.2.3 Radiated Bandedge and Radiated Emission Test (Above 1GHz)

Summary table of Test Cases				
Test Item	Modulation			
	802.11 a	802.11n HT20/ 802.11ac VHT20	802.11n HT40/ 802.11ac VHT40	802.11ac VHT80
U-NII-1	Mode 1: CH36 Mode 2: CH44 Mode 3: CH48	Mode 1: CH36 Mode 2: CH44 Mode 3: CH48	Mode 1: CH38 Mode 2: CH46 Mode 3: -	Mode 1: CH42 Mode 2: - Mode 3: -

Summary table of Test Cases				
Test Item	Modulation			
	802.11 a	802.11n HT20/ 802.11ac VHT20	802.11n HT40/ 802.11ac VHT40	802.11ac VHT80
U-NII-3	Mode 1: CH149 Mode 2: CH157 Mode 3: CH165	Mode 1: CH149 Mode 2: CH157 Mode 3: CH165	Mode 1: CH151 Mode 2: CH159	Mode 1: CH155 Mode 2: - Mode 3: -

- Note : 1. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, XYZ axis, antenna ports (if EUT with antenna diversity architecture) and packet type. It was determined that X orientation was worst-case orientation; therefore, all final radiated testing was performed with the EUT in X orientation.
2. Following channel(s) was (were) selected for the final test as listed above
3. For frequency above 18GHz, the measured value is much lower than the limit, therefore, it is not reflected in the report.
4. Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

3.2.4 Power Line Conducted Emission Test:

AC Conducted Emission	Mode 1 : RLAN Linking + RJ45 ping + Adapter
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3.3 Support Equipment

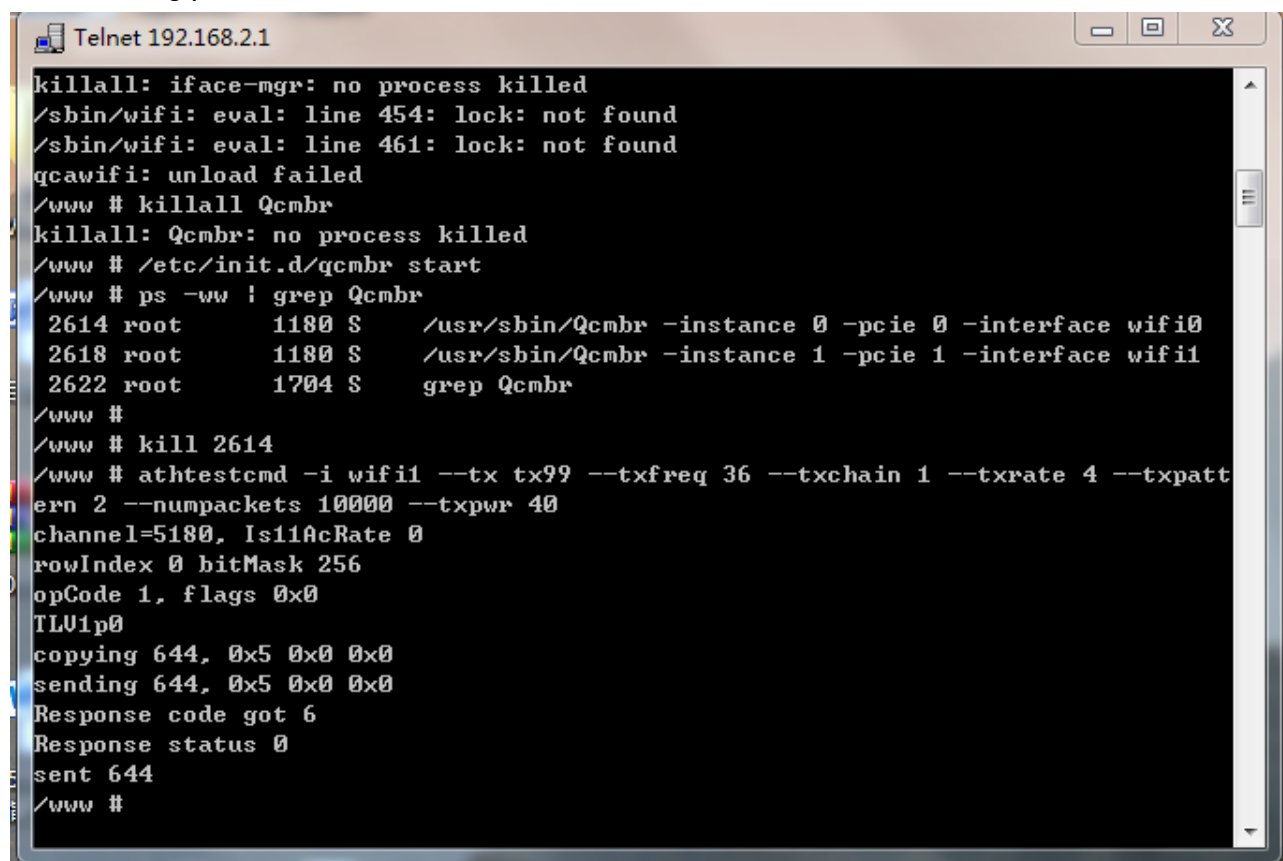
Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	WLAN AP	NETGEAR	R7800	PY315100319	N/A	shielded, 1.8 m
2.	Notebook	Lenovo	E470C	FCC SDoC	N/A	shielded cable DC O/P 1.8 m unshielded AC I/P cable 1.2 m
3.	Adapter	KUANEN	KT12W120100EU	FCC SDoC	N/A	N/A

3.4 Test Setup

The EUT is continuously communicating to the WIFI tester during the tests.

EUT was set in the Hidden menu mode to enable WIFI communications.

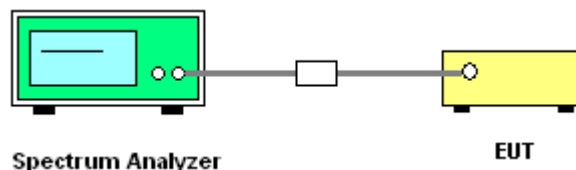
The following picture is a screenshot of the test software



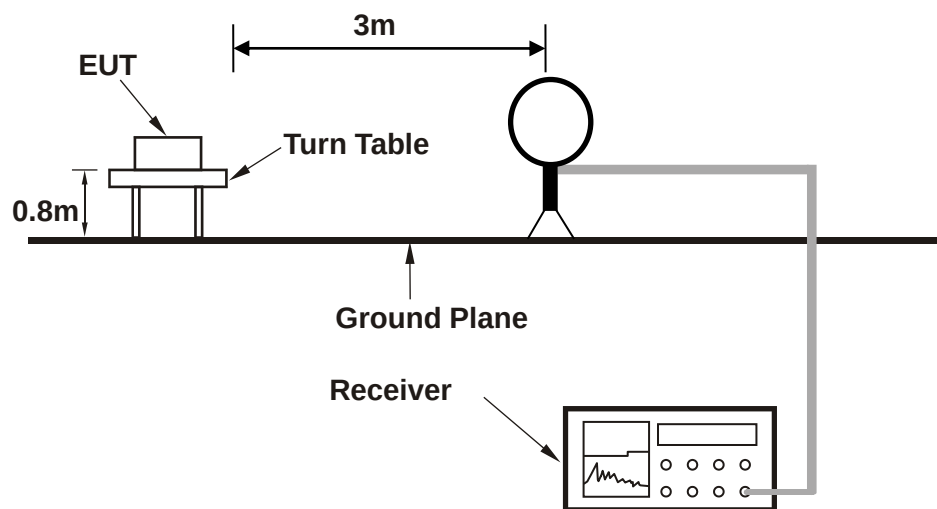
```

Telnet 192.168.2.1
killall: iface-mgr: no process killed
/sbin/wifi: eval: line 454: lock: not found
/sbin/wifi: eval: line 461: lock: not found
qcawifi: unload failed
/www # killall Qcmbr
killall: Qcmbr: no process killed
/www # /etc/init.d/qcmbr start
/www # ps -ww | grep Qcmbr
 2614 root      1180 S      /usr/sbin/Qcmbr -instance 0 -pcie 0 -interface wifi0
 2618 root      1180 S      /usr/sbin/Qcmbr -instance 1 -pcie 1 -interface wifi1
 2622 root      1704 S      grep Qcmbr
/www #
/www # kill 2614
/www # athtestcmd -i wifi1 --tx tx99 --txfreq 36 --txchain 1 --txrate 4 --txpatt
ern 2 --numpackets 10000 --txpwr 40
channel=5180, Is11AcRate 0
rowIndex 0 bitMask 256
opCode 1, flags 0x0
TLU1p0
copying 644, 0x5 0x0 0x0
sending 644, 0x5 0x0 0x0
Response code got 6
Response status 0
sent 644
/www #
  
```

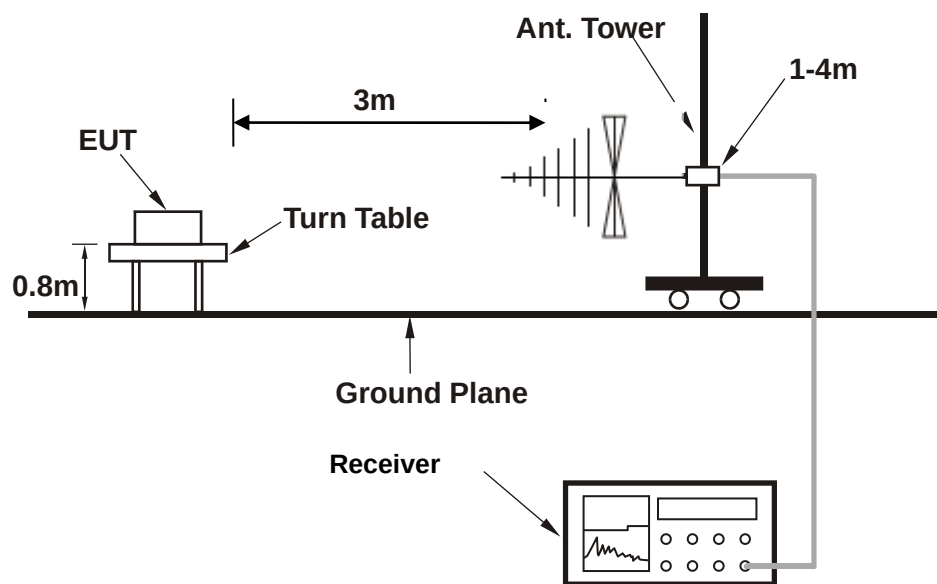
Setup diagram for Conducted Test



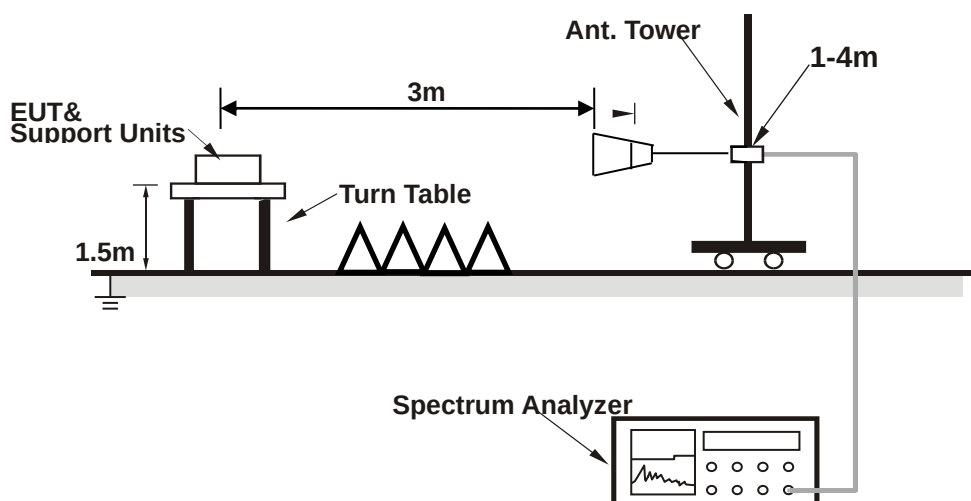
Setup diagram for Radiation(9KHz~30MHz) Test



Setup diagram for Radiation(Below 1G) Test



Setup diagram for Radiation(Above1G) Test



3.5 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example:

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 5 dB and 10dB attenuator.

$$\begin{aligned} \text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)}. \\ &= 5 + 10 = 15 \text{ (dB)} \end{aligned}$$

For all radiated test items:

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

Over Limit (dB μ V/m) = Level(dB μ V/m) - Limit Level (dB μ V/m)

4 Test Result

4.1 6dB 26dB and 99% Occupied Bandwidth Measurement

4.1.1 Limit of 6dB 26dB and 99% Bandwidth

There is no limit bandwidth for U-NII-1, U-NII-2-A and U-NII-2-C.

The minimum 6 dB bandwidth shall be at least 500 kHz for U-NII-3.

4.1.2 Test Procedures

1. Place the EUT on the table and set it in transmitting mode.
2. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules .
3. Remove the antenna from the EUT and then connect a low loss RF cable from the Antenna port to the spectrum analyzer.
4. 26dB Band width Measurement: Set the spectrum analyzer as 1% of emission BW Sweep=auto, Detector = Peak, Trace Mode = Max Hold, Manually readjust RBW until the RBW/EBW ratio is approximately 1% based on EBW as observed on the result of pre-sequence measurement.
5. 99% Band width Measurement: Set the spectrum analyzer as 1%~5% of emission BW Sweep=auto, Detector = Peak, Trace Mode = Max Hold, $VBW \geq 3 * RBW$, span=1.5 times to 5.0 times the OBW, Manually readjust RBW until the RBW/EBW ratio is approximately 1% based on EBW as observed on the result of pre-sequence measurement.
6. Minimum Emission Bandwidth Measurement: Set the spectrum analyzer RBW=100KHz, $VBW \geq 3 * RBW$, Sweep=auto, Detector = Peak, Trace Mode = Max Hold, Mark the peak frequency and -6dB (upper and lower) frequency.
7. According to RSS-GEN section 6.7, for IC 6 dB bandwidth measurement, the spectrum analyzer's resolution bandwidth (RBW) setting should be 1%-5% of OBW, and set the Video bandwidth (VBW) $\geq 3 * RBW$.
8. Repeat the procedures as list above until all test default channels (low, middle, and high) are completed.
9. Measure and record the results in the test report.

4.1.3 Test Result of 6dB Bandwidth, 26dB and 99% Bandwidth

26dB Bandwidth: Refer to Appendix A1

99% Bandwidth: Refer to Appendix A2

6dB Bandwidth: Refer to Appendix A3

4.2 Maximum Conducted Output Power Measurement

4.2.1 Limit of Output Power

FCC

Operation Band	EUT Category		Limit
U-NII-1		Access Point(Mater Device)	1 Watt(30dBm)
		Fixed point-to-point Acss Ponit	1 Watt(30dBm)
	√	Mobile and portable client device	250mW(23.98dBm)
U-NII-2A			250mW(23.98dBm) or 11dBm+10 log B
U-NII-2C			250mW(23.98dBm) or 11dBm+10 log B
U-NII-3	√		1 W(30dBm)

IC

Operation Frequency Band	Limit
5150~5250 MHz	EIRP shall not exceed 200 mW or 10 + 10 logB, dBm
5250~5350 MHz	Conducted output power shall not exceed 250 mW or 11 +10 logB EIRP shall not exceed 1.0 W or 17 + 10 logB, dBm
5470~5600 MHz and 5650~5725 MHz	Conducted output power shall not exceed 250 mW or 11 +10 logB EIRP shall not exceed 1.0 W or 17 + 10 logB, dBm
5725~5850 MHz	The maximum conducted output power over the frequency band of operation shall not exceed 1 W.

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

B is the 99% emission bandwidth in megahertz.

4.2.2 Test Procedures

1. Place the EUT on the table and set it in transmitting mode.
2. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules .
3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the Spectrum Analyzer.
4. Spectrum Analyzer is used as the auxiliary test equipment to conduct the output power measurement.
5. Set span to encompass the entire emission bandwidth (EBW) of the signal. Set sweep trigger to "free run.", RBW = 1 MHz, Set VBW $\geq$ 3MHz, Number of points in sweep $\geq 2 \times$ span / RBW, Sweep time = auto, Detector = power averaging (rms).
6. Video filtering shall be applied to power signal (rms), it shall be set to operate on a linear voltage signal.
7. Trace average at least 100 traces in power averaging (rms) mode.
8. Repeat above procedures until all frequency (low, middle, and high channel) measured were complete.

4.2.3 Test Result of Output Power

Refer to Appendix B

4.3 Power Spectral Density Measurement

4.3.1 Limits of Power Spectral Density

FCC

Operztion Band	EUT Category		Limit
U-NII-1		Access Point(Mater Device)	17dBm/MHz
		Fixed point-to-point Access Ponit	
	√	Mobile and portable client device	11dBm/ MHz
U-NII-2A			11dBm/ MHz
U-NII-2C			11dBm/ MHz
U-NII-3	√		30 dBm/500kHz

IC

Operztion Frequency Band	Limit
5150~5250 MHz	EIRP spectral density 10 dBm / MHz
5250~5350 MHz	11dBm / MHz
5470~5600 MHz and 5650~5725 MHz	11dBm / MHz
5725~5850 MHz	30 dBm/500kHz

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

4.3.2 Test Procedure

1. Place the EUT on the table and set it in transmitting mode.
2. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules .
3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to Spectrum.
4. For UNII-1: Set RBW=1MHz, VBW=3MHz, where span is enough to capture the entire bandwidth, Sweep time = Auto (601 pts), detector = RMS, traces 100 sweeps of video averaging(SA-2 with the omission of procedure x, the integration with 26dB EBW bandwidth)
5. For UNII-3: Set RBW=470KHz, VBW=1.5MHz, where span is enough to capture the entire bandwidth, Sweep time = Auto (601 pts), detector = RMS, traces 100 sweeps of video averaging(SA-2 with the omission of procedure x, the integration with 26dB EBW bandwidth)
6. Use the cursor on spectrum to peak search the highest level of trace.
7. Record the max. reading and add 10 log(1/duty cycle).
8. Repeat above procedures until all default test channel (low, middle, and high) was complete.

4.3.3 Test Result of Power Spectral Density

Refer to Appendix C

4.4 Unwanted Emissions Measurement

This section as specified in FCC Part 15.407(b) is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement. The unwanted emissions shall comply with 15.407(b)(1) to (6), and restricted bands per FCC Part 15.205.

4.4.1 Limit of Unwanted Emissions

(1) For transmitters operating in the 5150-5250 MHz band: all emissions outside of the 5150-5350MHz band shall not exceed an EIRP of -27dBm/MHz.

For transmitters operating in the 5250-5350 MHz band: all emissions outside of the 5150-5350MHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5250-5350 MHz band that generate emissions in the 5150-5250 MHz band must meet all applicable technical requirements for operation in the 5150-5250 MHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5150-5250 MHz band.

For transmitters operating in the 5470-5600 MHz and 5650-5725MHz band: all emissions outside of the 5470-5600 MHz and 5650-5725MHz band shall not exceed an EIRP of -27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band:

15.407(b)(4)(i) 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.

(2) Unwanted spurious emissions fallen in restricted bands shall comply with the general field strength limits as below table

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

Note: The following formula is used to convert the EIRP to field strength.

$$E = \frac{1000000 \sqrt{30P}}{3} \mu\text{V/m, where P is the eirp (Watts)}$$

EIRP (dBm)	Field Strength at 3m (dBμV/m)
-17	78.3
-27	68.3

(3) KDB789033 D02 v02r01 G2)c) As specified in 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a peak 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 average and peak limits of 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz peak emission limit.

4.4.2 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section G) Unwanted emissions measurement.

(1) Procedure for Unwanted Emissions Measurements Below 1000MHz

- RBW = 120 kHz
- VBW = 300 kHz
- Detector = Peak
- Trace mode = max hold

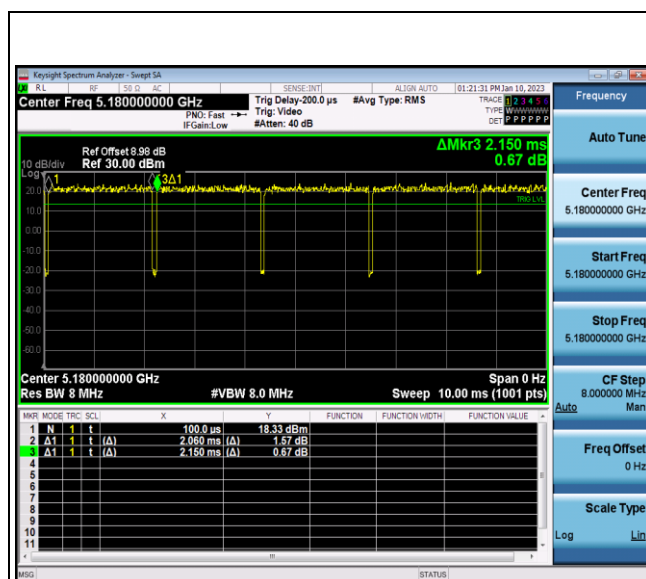
(2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz

- RBW = 1 MHz
- VBW ≥ 3 MHz
- Detector = Peak
- Sweep time = auto
- Trace mode = max hold

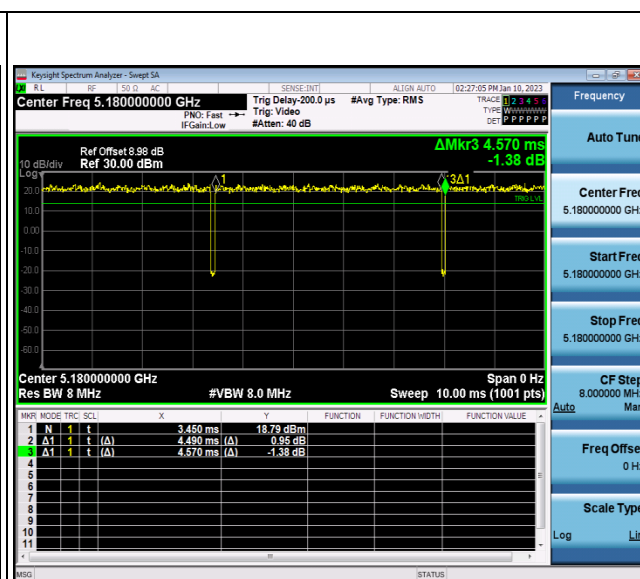
(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

- RBW = 1 MHz
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - $VBW \geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground..
 3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
 4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
 5. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
 6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
 7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
 8. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

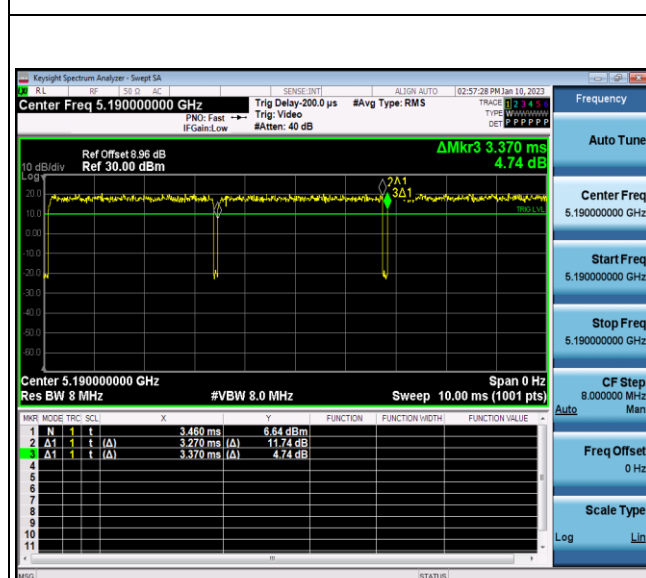
Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
802.11a	95.81	2.06	0.49	1KHz
802.11n HT20	98.25	-	-	10Hz
802.11n HT40	97.03	3.27	0.31	1KHz
802.11ac HT20	77.82	2.28	0.44	1KHz
802.11ac HT40	83.67	3.28	0.30	1KHz
802.11ac HT80	84.41	3.52	0.28	300Hz



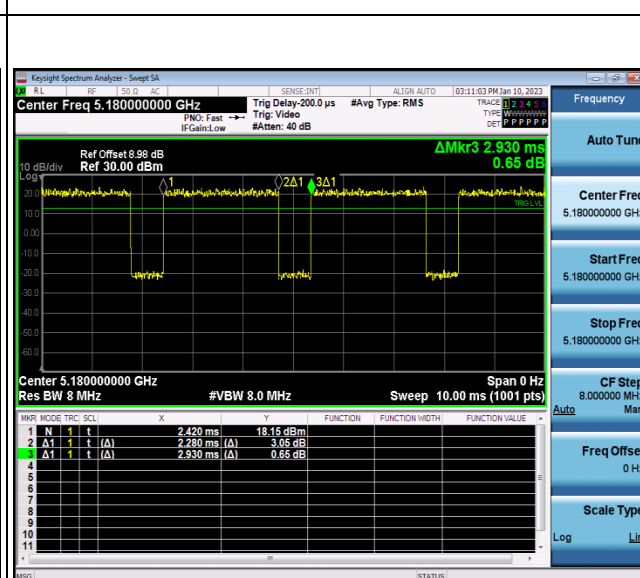
802.11a



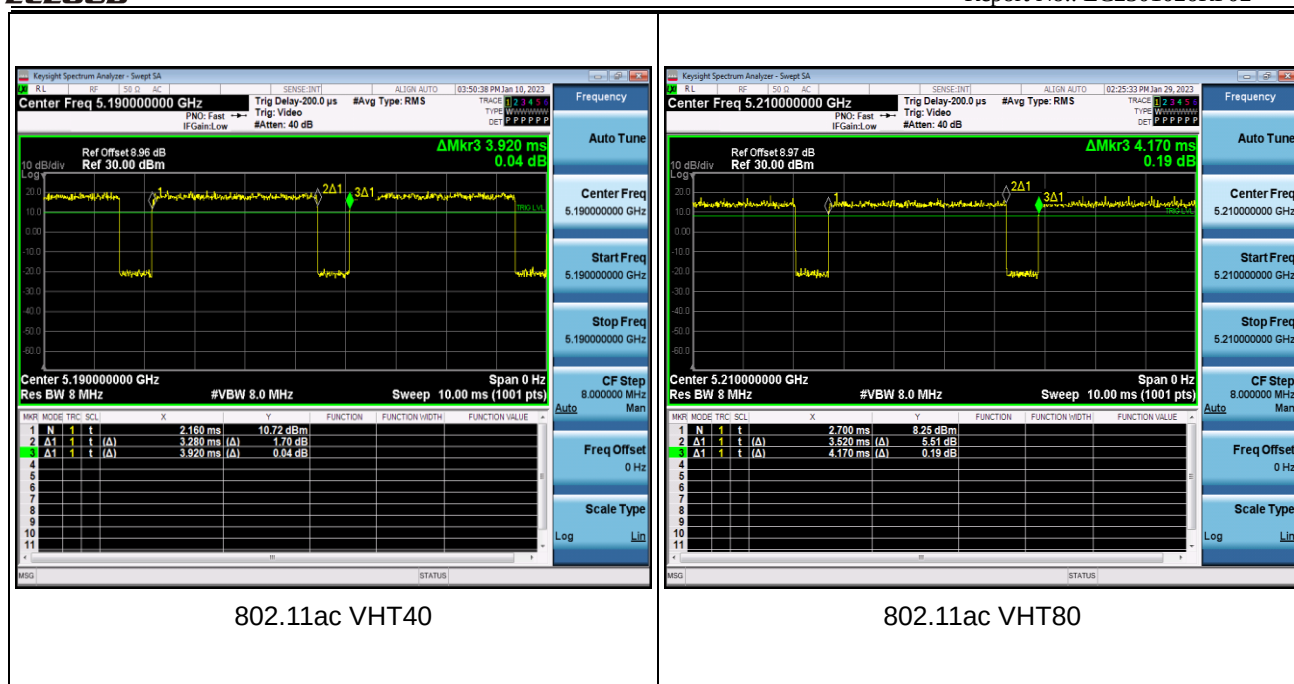
802.11n HT20



802.11n HT40



802.11ac VHT20



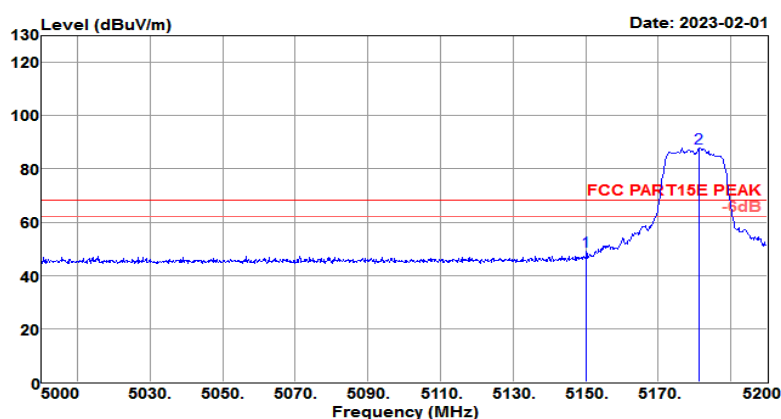
4.4.3 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

4.4.4 Test Result of Radiated Spurious at Band Edges

Test Mode :	802.11a CH36 5180MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.00GHz~5.200GHz	Polarization :	Horizontal

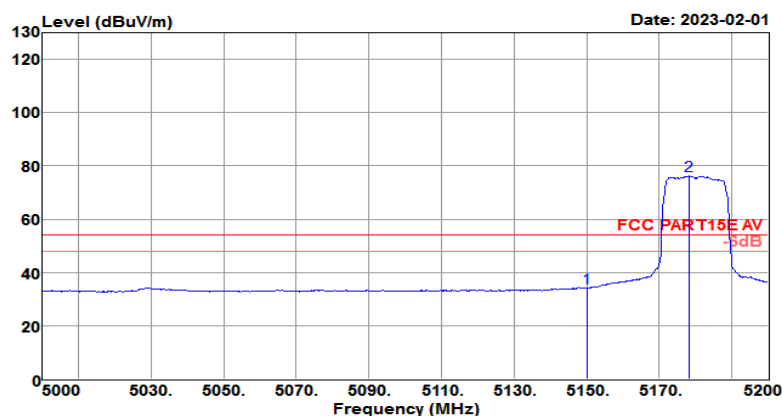
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11a CH36 (5180MHz)	Power rating	: DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5150.000	46.02	31.32	7.59	35.75	49.18	68.20	-19.02	Peak
5181.400	84.74	31.35	7.53	35.72	87.90	68.20	19.70	Peak

Test Mode :	802.11a CH36 5180MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.00GHz~5.200GHz	Polarization :	Horizontal

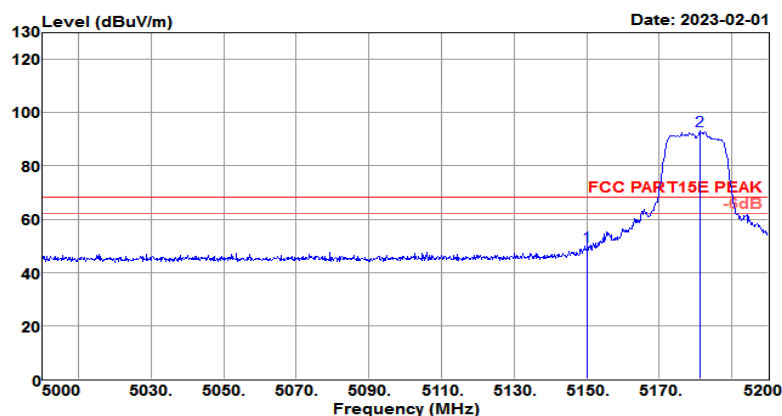
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11a CH36 (5180MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5150.000	31.05	31.32	7.59	35.75	34.21	54.00	-19.79	Average
5178.400	73.02	31.34	7.53	35.72	76.17	54.00	22.17	Average

Test Mode :	802.11a CH36 5180MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.00GHz~5.200GHz	Polarization :	Vertical

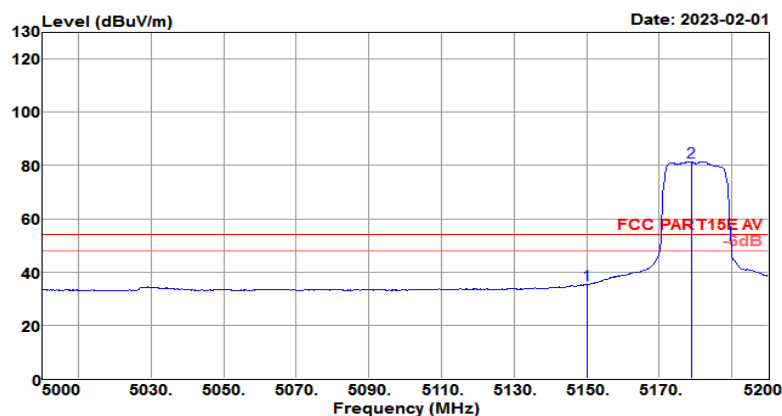
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11a CH36 (5180MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5150.000	46.54	31.32	7.59	35.75	49.70	68.20	-18.50	Peak
5181.400	89.94	31.35	7.53	35.72	93.10	68.20	24.90	Peak

Test Mode :	802.11a CH36 5180MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.00GHz~5.200GHz	Polarization :	Vertical

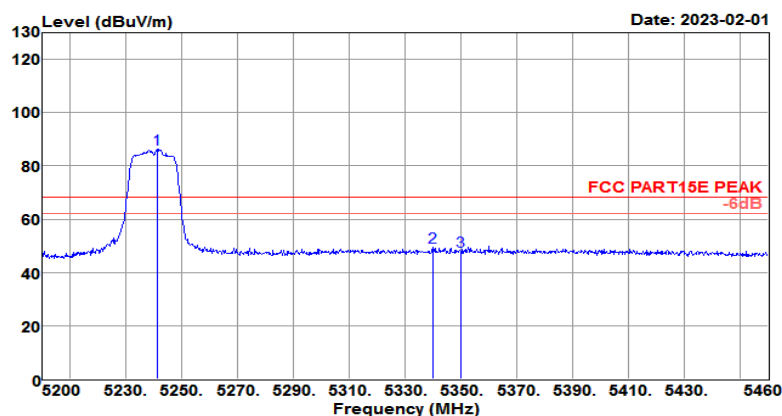
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11a CH36 (5180MHz)	Power rating	: DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5150.000	31.99	31.32	7.59	35.75	35.15	54.00	-18.85	Average
5179.000	78.20	31.34	7.53	35.72	81.35	54.00	27.35	Average

Test Mode :	802.11a CH48 5240MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.20GHz~5.46GHz	Polarization :	Horizontal

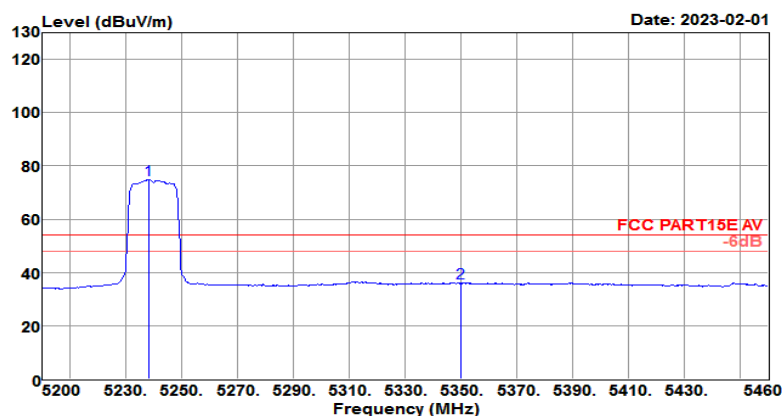
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11a CH48 (5240MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5241.340	82.89	31.39	7.78	35.66	86.40	68.20	18.20	Peak
5340.140	45.29	31.47	8.46	35.56	49.66	68.20	-18.54	Peak
5350.000	43.34	31.48	8.53	35.55	47.80	68.20	-20.40	Peak

Test Mode :	802.11a CH48 5240MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.20GHz~5.46GHz	Polarization :	Horizontal

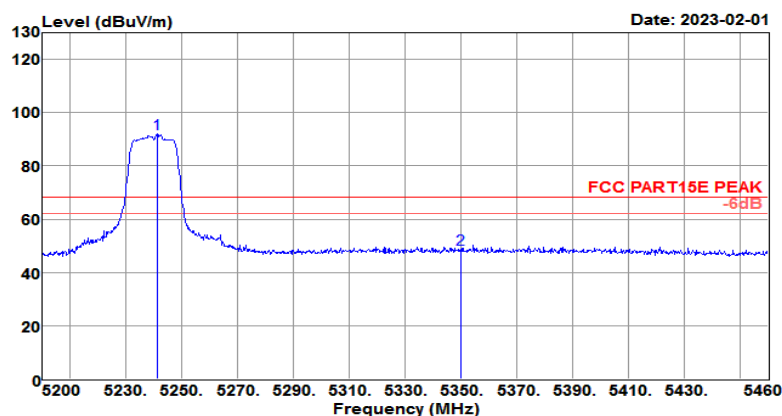
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11a CH48 (5240MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5238.220	71.42	31.39	7.76	35.66	74.91	54.00	20.91	Average
5350.000	31.46	31.48	8.53	35.55	35.92	54.00	-18.08	Average

Test Mode :	802.11a CH48 5240MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.20GHz~5.46GHz	Polarization :	Vertical

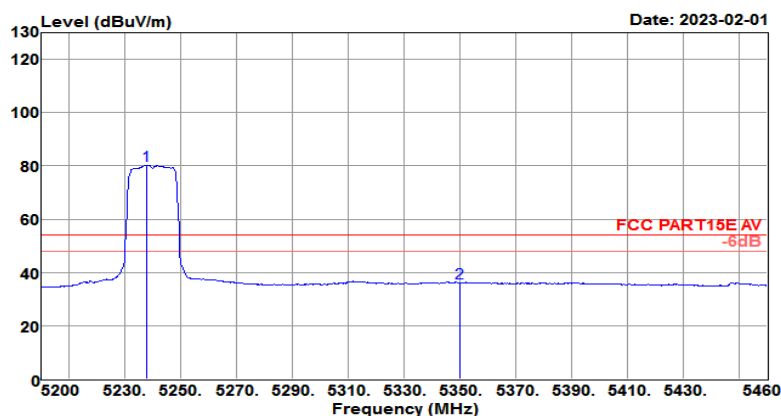
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11a CH48 (5240MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5241.340	88.61	31.39	7.78	35.66	92.12	68.20	23.92	Peak
5350.000	44.12	31.48	8.53	35.55	48.58	68.20	-19.62	Peak

Test Mode :	802.11a CH48 5240MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.20GHz~5.46GHz	Polarization :	Vertical

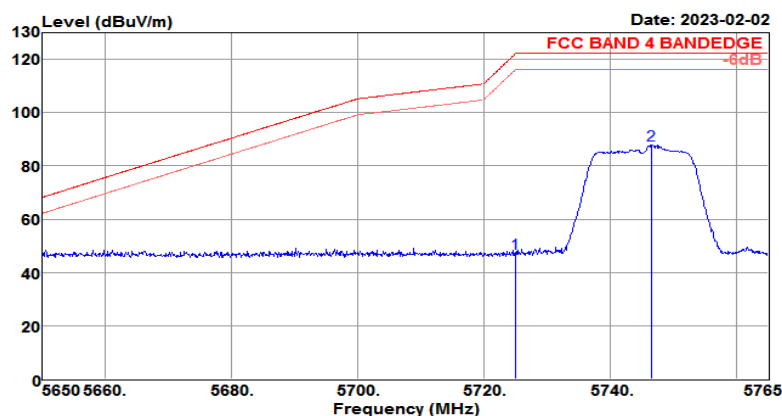
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11a CH48 (5240MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5237.700	76.84	31.39	7.75	35.66	80.32	54.00	26.32	Average
5350.000	31.63	31.48	8.53	35.55	36.09	54.00	-17.91	Average

Test Mode :	802.11a CH149 5745MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.650GHz~5.765GHz	Polarization :	Horizontal

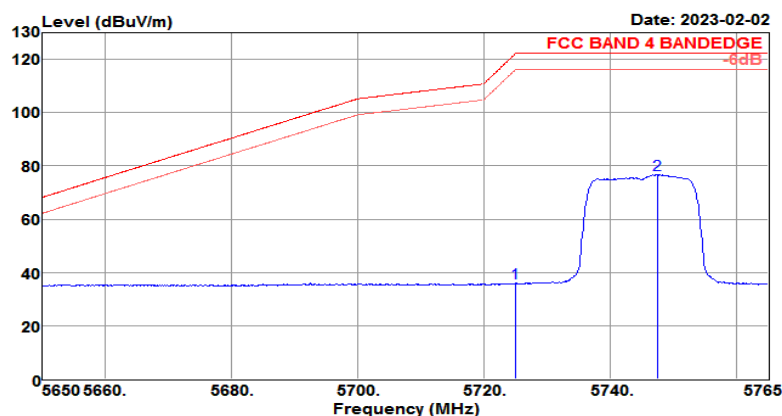
Test Site	: 3m Chamber	Temp/Humi	: 23℃/61%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11a CH149 (5745MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5725.000	43.21	31.96	7.29	35.18	47.28	122.20	-74.92	Peak
5746.485	83.91	31.99	7.12	35.15	87.87	122.20	-34.33	Peak

Test Mode :	802.11a CH149 5745MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.650GHz~5.765GHz	Polarization :	Horizontal

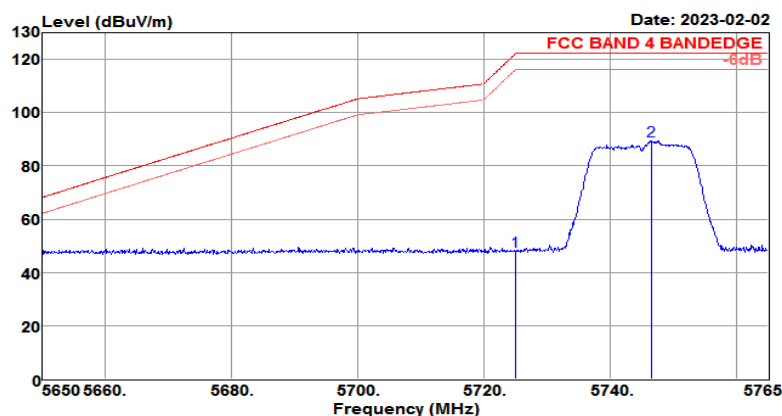
Test Site	: 3m Chamber	Temp/Humi	: 23℃/61%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11a CH149 (5745MHz)	Power rating	: DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5725.000	31.89	31.96	7.29	35.18	35.96	122.20	-86.24	Average
5747.405	72.79	32.00	7.12	35.15	76.76	122.20	-45.44	Average

Test Mode :	802.11a CH149 5745MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.650GHz~5.765GHz	Polarization :	Vertical

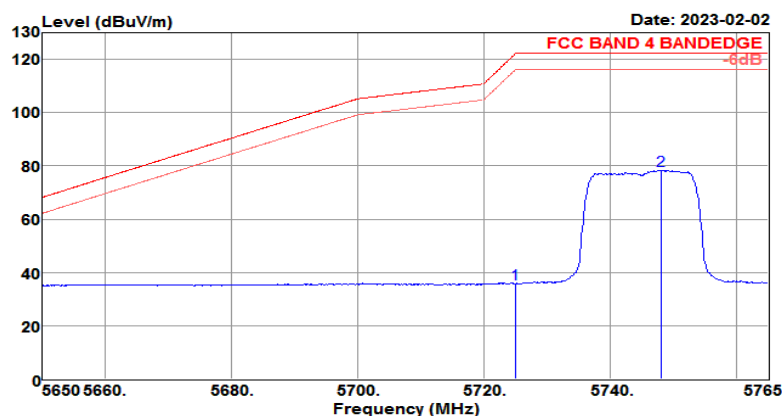
Test Site	: 3m Chamber	Temp/Humi	: 23℃/61%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11a CH149 (5745MHz)	Power rating	: DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5725.000	43.81	31.96	7.29	35.18	47.88	122.20	-74.32	Peak
5746.485	85.59	31.99	7.12	35.15	89.55	122.20	-32.65	Peak

Test Mode :	802.11a CH149 5745MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.650GHz~5.765GHz	Polarization :	Vertical

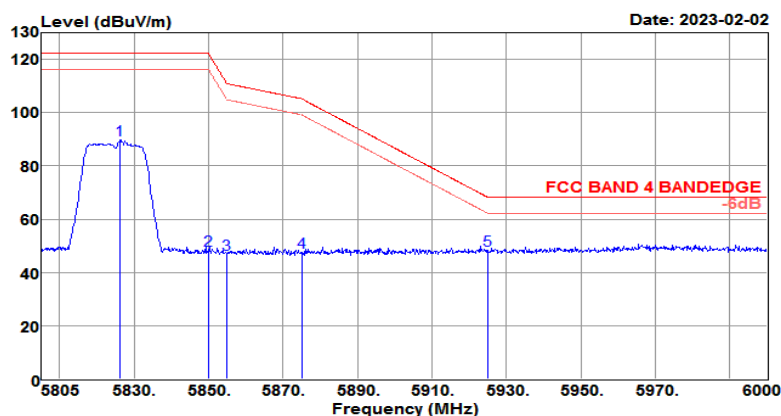
Test Site	: 3m Chamber	Temp/Humi	: 23℃/61%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11a CH149 (5745MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5725.000	31.73	31.96	7.29	35.18	35.80	122.20	-86.40	Average
5748.095	74.44	32.00	7.11	35.15	78.40	122.20	-43.80	Average

Test Mode :	802.11a CH165 5825MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.805GHz~6.00GHz	Polarization :	Horizontal

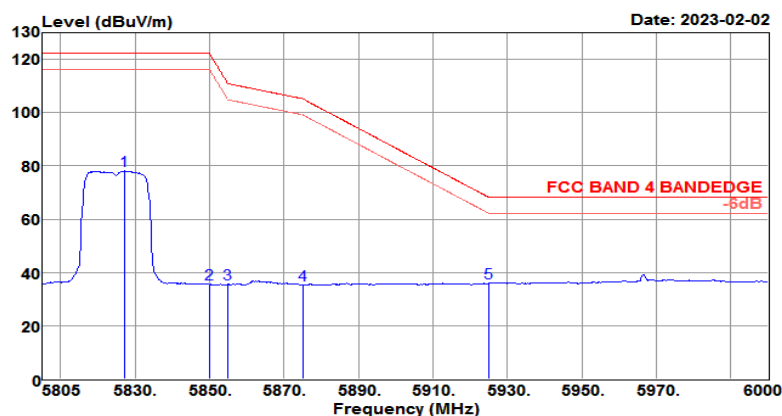
Test Site	: 3m Chamber	Temp/Humi	: 23℃/61%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11a CH165 (5825MHz)	Power rating	: DC 12W
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5826.255	85.67	32.12	6.91	35.07	89.63	122.20	-32.57	Peak
5850.000	44.10	32.16	7.10	35.05	48.31	122.20	-73.89	Peak
5855.000	42.67	32.17	7.14	35.05	46.93	110.80	-63.87	Peak
5875.000	43.27	32.20	7.30	35.03	47.74	105.20	-57.46	Peak
5925.000	43.47	32.28	7.70	34.98	48.47	68.20	-19.73	Peak

Test Mode :	802.11a CH165 5825MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.805GHz~6.00GHz	Polarization :	Horizontal

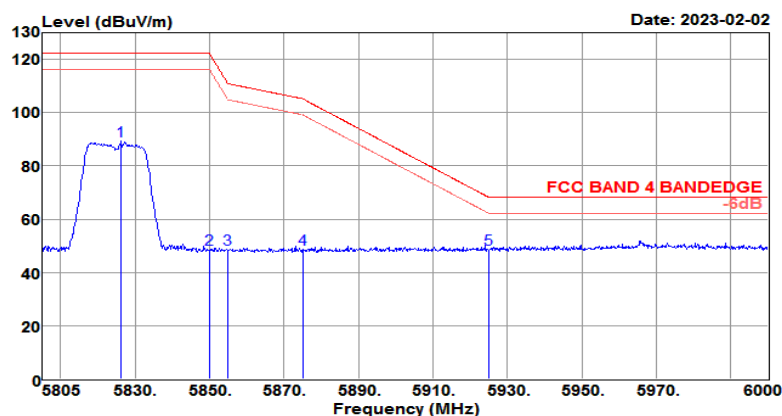
Test Site	: 3m Chamber	Temp/Humi	: 23℃/61%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11a CH165 (5825MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5827.035	74.15	32.12	6.92	35.07	78.12	122.20	-44.08	Average
5850.000	31.37	32.16	7.10	35.05	35.58	122.20	-86.62	Average
5855.000	31.25	32.17	7.14	35.05	35.51	110.80	-75.29	Average
5875.000	30.97	32.20	7.30	35.03	35.44	105.20	-69.76	Average
5925.000	30.94	32.28	7.70	34.98	35.94	68.20	-32.26	Average

Test Mode :	802.11a CH165 5825MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.805GHz~6.00GHz	Polarization :	Vertical

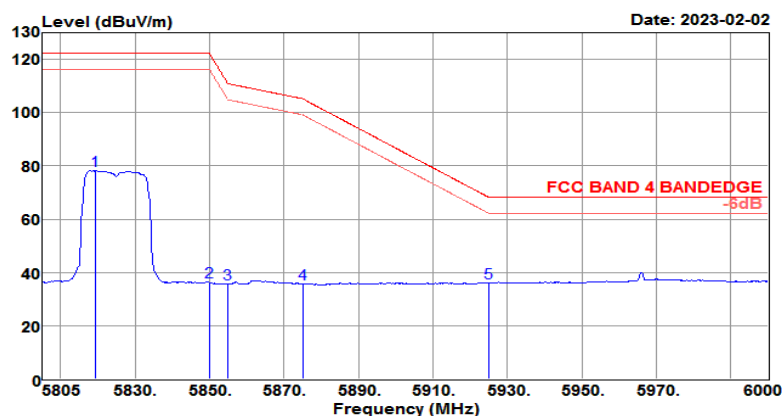
Test Site	: 3m Chamber	Temp/Humi	: 23℃/61%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11a CH165 (5825MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5826.255	85.29	32.12	6.91	35.07	89.25	122.20	-32.95	Peak
5850.000	44.64	32.16	7.10	35.05	48.85	122.20	-73.35	Peak
5855.000	44.58	32.17	7.14	35.05	48.84	110.80	-61.96	Peak
5875.000	44.16	32.20	7.30	35.03	48.63	105.20	-56.57	Peak
5925.000	43.90	32.28	7.70	34.98	48.90	68.20	-19.30	Peak

Test Mode :	802.11a CH165 5825MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.805GHz~6.00GHz	Polarization :	Vertical

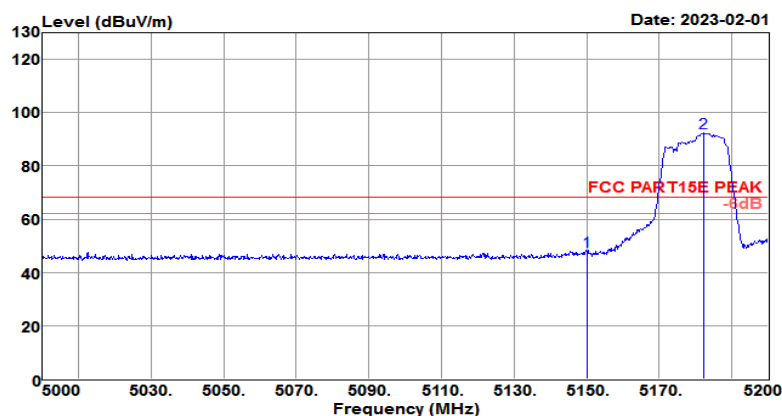
Test Site	: 3m Chamber	Temp/Humi	: 23℃/61%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11a CH165 (5825MHz)	Power rating	: DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5819.430	74.31	32.11	6.86	35.08	78.20	122.20	-44.00	Average
5850.000	32.28	32.16	7.10	35.05	36.49	122.20	-85.71	Average
5855.000	31.59	32.17	7.14	35.05	35.85	110.80	-74.95	Average
5875.000	31.14	32.20	7.30	35.03	35.61	105.20	-69.59	Average
5925.000	31.08	32.28	7.70	34.98	36.08	68.20	-32.12	Average

Test Mode :	802.11n HT20 CH36 5180MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.0GHz~5.20GHz	Polarization :	Horizontal

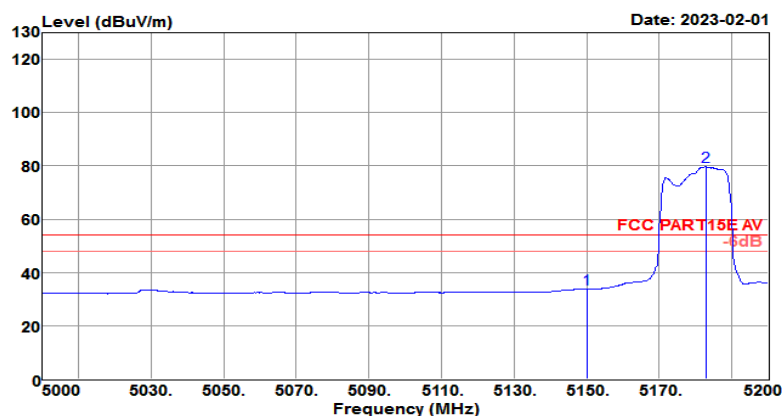
Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11n HT20 CH36 (5180MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5150.000	44.94	31.32	7.59	35.75	48.10	68.20	-20.10	Peak
5182.200	89.30	31.35	7.53	35.72	92.46	68.20	24.26	Peak

Test Mode :	802.11n HT20 CH36 5180MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.0GHz~5.20GHz	Polarization :	Horizontal

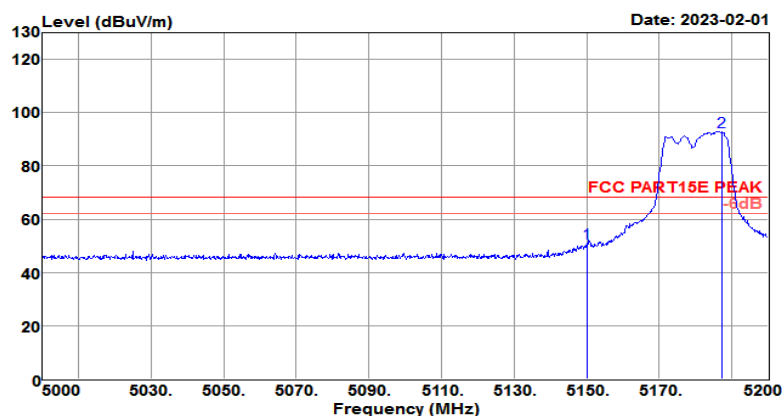
Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11n HT20 CH36 (5180MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5150.000	30.50	31.32	7.59	35.75	33.66	54.00	-20.34	Average
5182.800	76.46	31.35	7.52	35.72	79.61	54.00	25.61	Average

Test Mode :	802.11n HT20 CH36 5180MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.0GHz~5.20GHz	Polarization :	Vertical

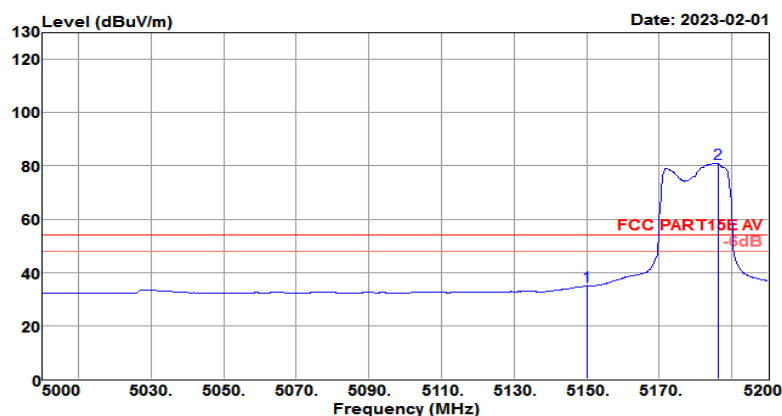
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11n HT20 CH36 (5180MHz)	Power rating	: DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5150.000	47.88	31.32	7.59	35.75	51.04	68.20	-17.16	Peak
5187.200	89.82	31.35	7.52	35.71	92.98	68.20	24.78	Peak

Test Mode :	802.11n HT20 CH36 5180MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.0GHz~5.20GHz	Polarization :	Vertical

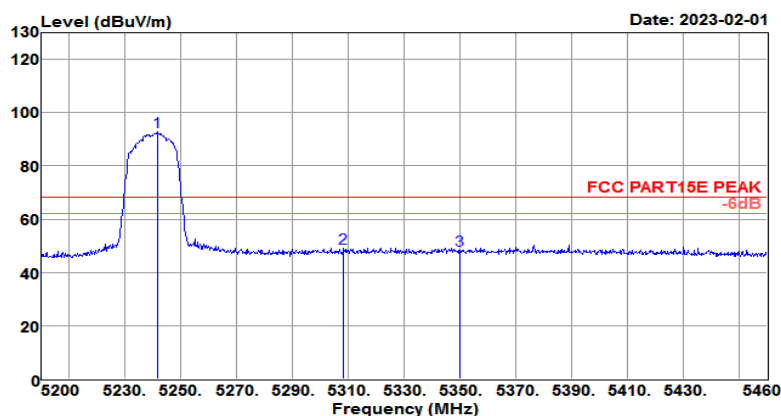
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11n HT20 CH36 (5180MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5150.000	31.65	31.32	7.59	35.75	34.81	54.00	-19.19	Average
5186.200	77.82	31.35	7.52	35.71	80.98	54.00	26.98	Average

Test Mode :	802.11n HT 20 CH48 5240MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.20GHz~5.46GHz	Polarization :	Horizontal

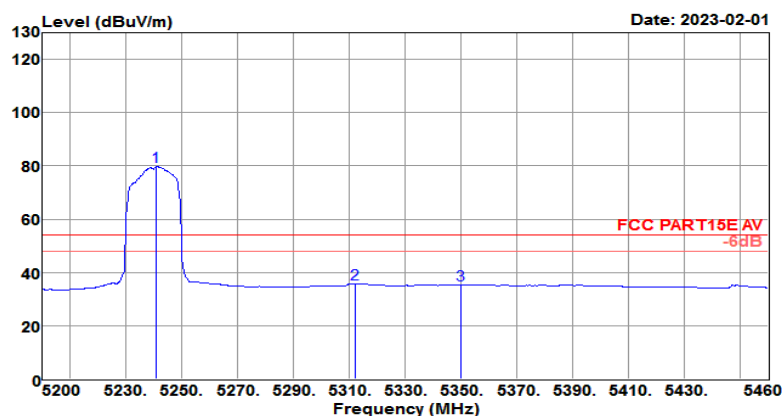
Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11n HT20 CH48 (5240MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5241.600	89.16	31.39	7.78	35.66	92.67	68.20	24.47	Peak
5308.420	45.11	31.45	8.24	35.59	49.21	68.20	-18.99	Peak
5350.000	43.77	31.48	8.53	35.55	48.23	68.20	-19.97	Peak

Test Mode :	802.11 n HT 20 CH48 5240MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.20GHz~5.46GHz	Polarization :	Horizontal

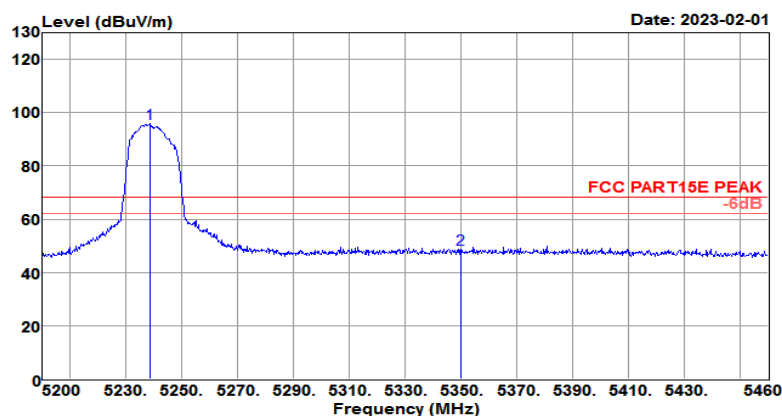
Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11n HT20 CH48 (5240MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5240.820	76.15	31.39	7.77	35.66	79.65	54.00	25.65	Average
5312.060	31.67	31.45	8.27	35.59	35.80	54.00	-18.20	Average
5350.000	30.79	31.48	8.53	35.55	35.25	54.00	-18.75	Average

Test Mode :	802.11 n HT 20 CH48 5240MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.20GHz~5.46GHz	Polarization :	Vertical

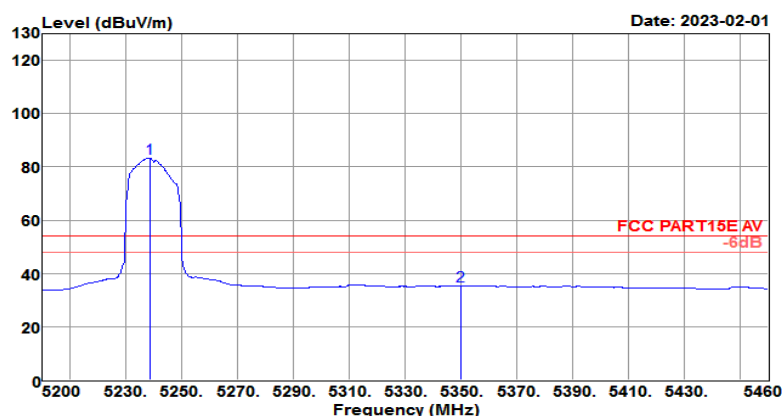
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11n HT20 CH48 (5240MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5238.480	92.32	31.39	7.76	35.66	95.81	68.20	27.61	Peak
5350.000	44.16	31.48	8.53	35.55	48.62	68.20	-19.58	Peak

Test Mode :	802.11 n HT 20 CH48 5240MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.20GHz~5.46GHz	Polarization :	Vertical

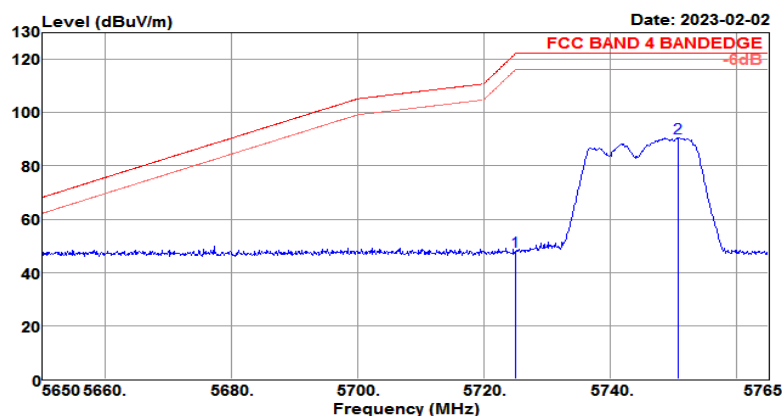
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11n HT20 CH48 (5240MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5238.480	79.90	31.39	7.76	35.66	83.39	54.00	29.39	Average
5350.000	30.80	31.48	8.53	35.55	35.26	54.00	-18.74	Average

Test Mode :	802.11 n HT 20 CH149 5745MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.65GHz~5.765GHz	Polarization :	Horizontal

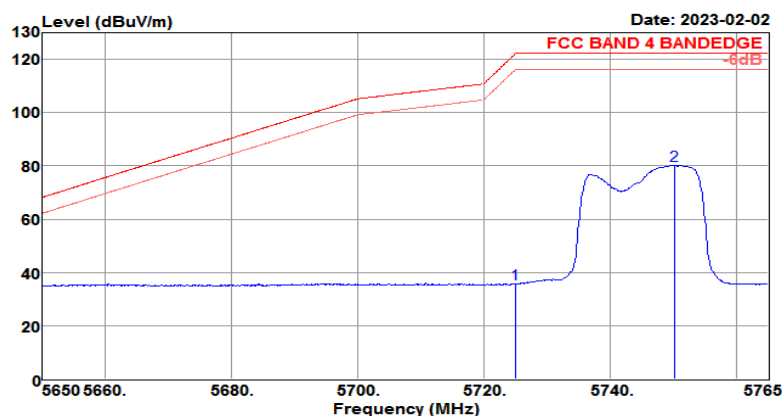
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11n HT20 CH149 (5745MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5725.000	43.70	31.96	7.29	35.18	47.77	122.20	-74.43	Peak
5750.740	86.62	32.00	7.09	35.15	90.56	122.20	-31.64	Peak

Test Mode :	802.11 n HT 20 CH149 5745MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.65GHz~5.765GHz	Polarization :	Horizontal

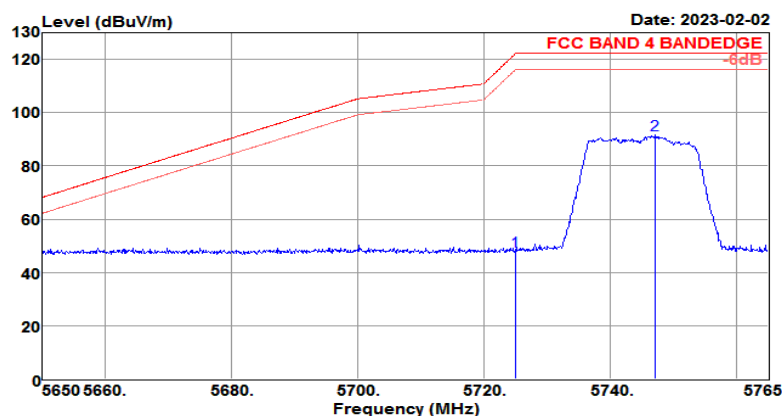
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11n HT20 CH149 (5745MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5725.000	31.56	31.96	7.29	35.18	35.63	122.20	-86.57	Average
5750.280	76.12	32.00	7.09	35.15	80.06	122.20	-42.14	Average

Test Mode :	802.11 n HT 20 CH149 5745MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.65GHz~5.765GHz	Polarization :	Vertical

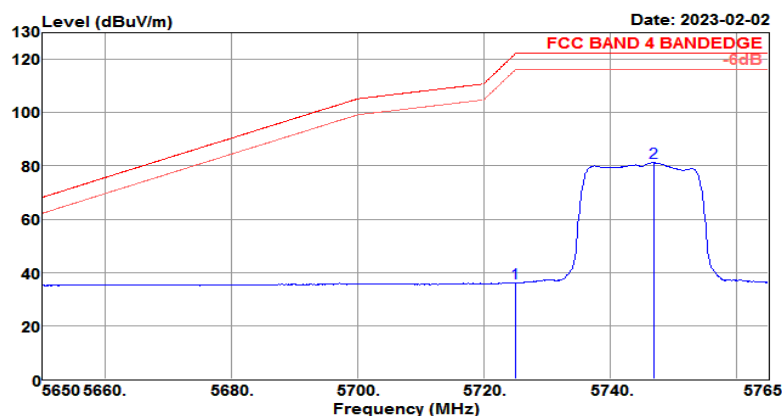
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11n HT20 CH149 (5745MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5725.000	43.97	31.96	7.29	35.18	48.04	122.20	-74.16	Peak
5747.175	87.74	32.00	7.12	35.15	91.71	122.20	-30.49	Peak

Test Mode :	802.11 n HT 20 CH149 5745MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.65GHz~5.765GHz	Polarization :	Vertical

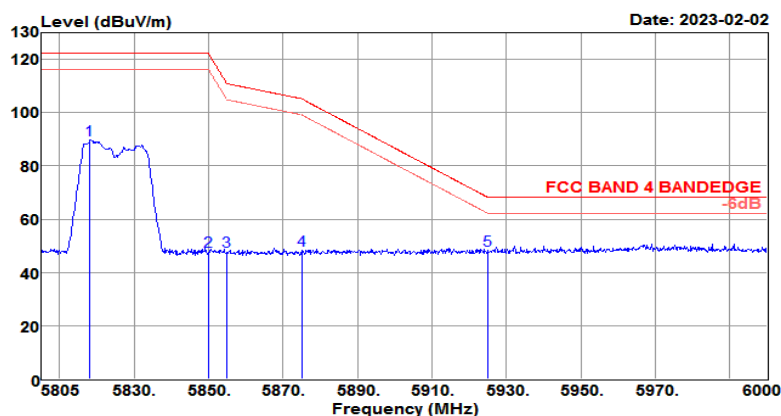
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11n HT20 CH149 (5745MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5725.000	32.10	31.96	7.29	35.18	36.17	122.20	-86.03	Average
5746.945	77.25	32.00	7.12	35.15	81.22	122.20	-40.98	Average

Test Mode :	802.11 n HT 20 CH165 5825MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.805GHz~6.000GHz	Polarization :	Horizontal

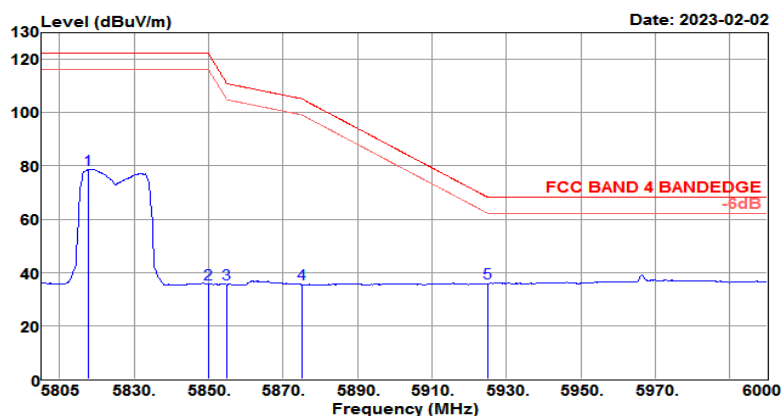
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11n HT20 CH165 (5825MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5818.065	85.84	32.11	6.84	35.08	89.71	122.20	-32.49	Peak
5850.000	43.64	32.16	7.10	35.05	47.85	122.20	-74.35	Peak
5855.000	43.56	32.17	7.14	35.05	47.82	110.80	-62.98	Peak
5875.000	43.73	32.20	7.30	35.03	48.20	105.20	-57.00	Peak
5925.000	43.39	32.28	7.70	34.98	48.39	68.20	-19.81	Peak

Test Mode :	802.11 n HT 20 CH165 5825MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.805GHz~6.000GHz	Polarization :	Horizontal

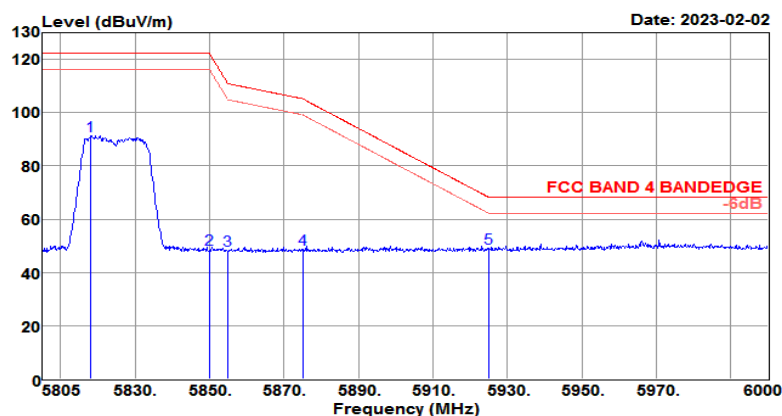
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11n HT20 CH165 (5825MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5817.675	74.82	32.11	6.84	35.08	78.69	122.20	-43.51	Average
5850.000	31.56	32.16	7.10	35.05	35.77	122.20	-86.43	Average
5855.000	31.35	32.17	7.14	35.05	35.61	110.80	-75.19	Average
5875.000	31.15	32.20	7.30	35.03	35.62	105.20	-69.58	Average
5925.000	31.03	32.28	7.70	34.98	36.03	68.20	-32.17	Average

Test Mode :	802.11 n HT 20 CH165 5825MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.805GHz~6.000GHz	Polarization :	Vertical

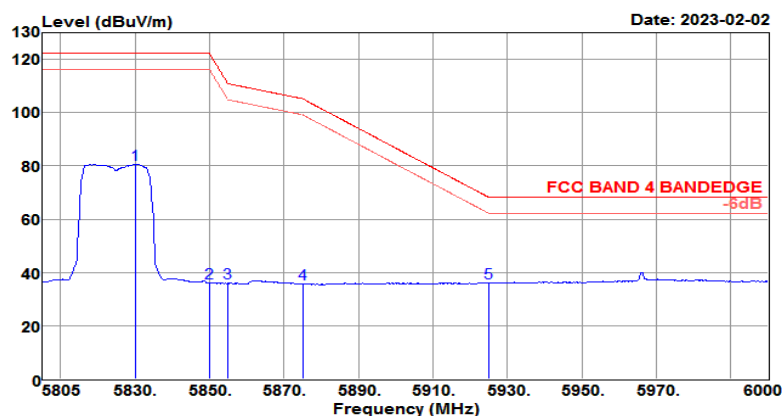
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11n HT20 CH165 (5825MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5818.065	87.31	32.11	6.84	35.08	91.18	122.20	-31.02	Peak
5850.000	44.34	32.16	7.10	35.05	48.55	122.20	-73.65	Peak
5855.000	44.10	32.17	7.14	35.05	48.36	110.80	-62.44	Peak
5875.000	44.41	32.20	7.30	35.03	48.88	105.20	-56.32	Peak
5925.000	44.11	32.28	7.70	34.98	49.11	68.20	-19.09	Peak

Test Mode :	802.11 n HT 20 CH165 5825MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.805GHz~6.000GHz	Polarization :	Vertical

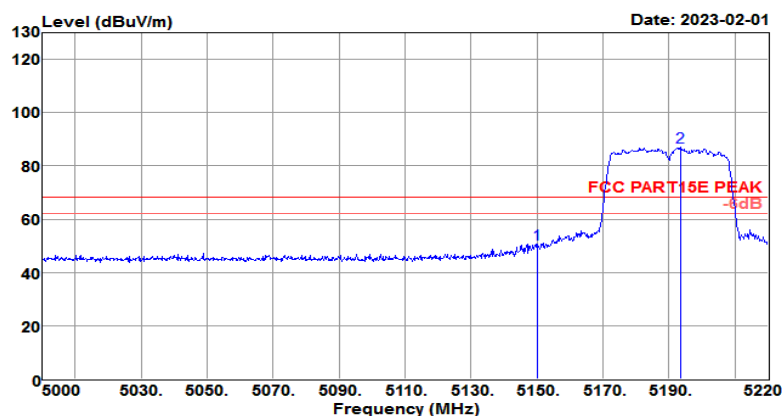
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11n HT20 CH165 (5825MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5830.155	76.56	32.13	6.94	35.07	80.56	122.20	-41.64	Average
5850.000	31.96	32.16	7.10	35.05	36.17	122.20	-86.03	Average
5855.000	31.69	32.17	7.14	35.05	35.95	110.80	-74.85	Average
5875.000	31.18	32.20	7.30	35.03	35.65	105.20	-69.55	Average
5925.000	31.06	32.28	7.70	34.98	36.06	68.20	-32.14	Average

Test Mode :	802.11n HT40 CH38 5190MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.00GHz~5.220GHz	Polarization :	Horizontal

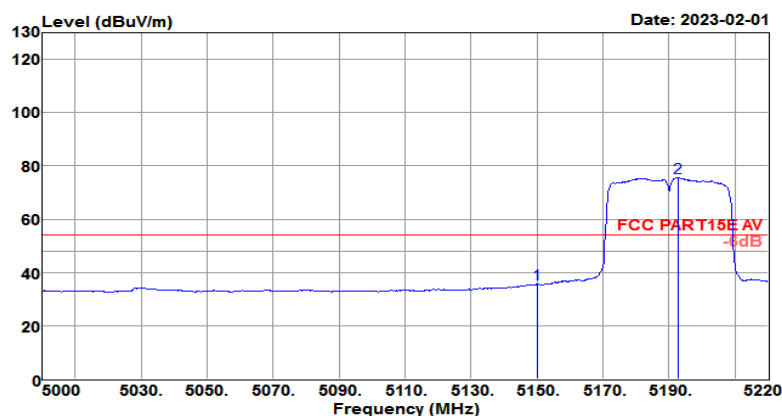
Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11n HT40 CH38 (5190MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5150.000	47.51	31.32	7.59	35.75	50.67	68.20	-17.53	Peak
5193.380	83.90	31.35	7.50	35.71	87.04	68.20	18.84	Peak

Test Mode :	802.11n HT40 CH38 5190MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.00GHz~5.220GHz	Polarization :	Horizontal

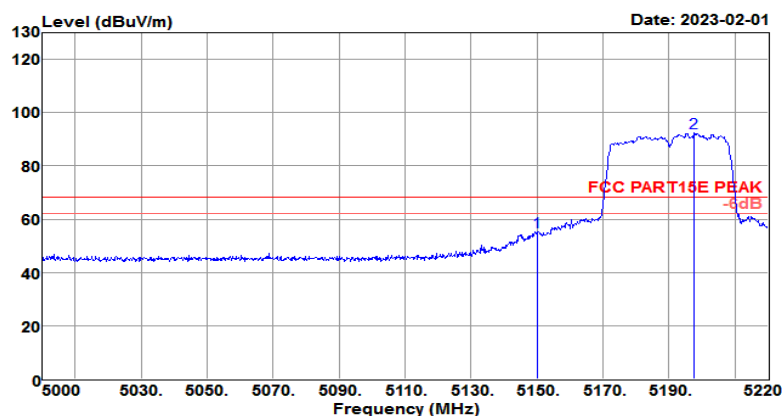
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11n HT40 CH38 (5190MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5150.000	32.37	31.32	7.59	35.75	35.53	54.00	-18.47	Average
5192.940	72.37	31.35	7.50	35.71	75.51	54.00	21.51	Average

Test Mode :	802.11n HT40 CH38 5190MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.00GHz~5.220GHz	Polarization :	Vertical

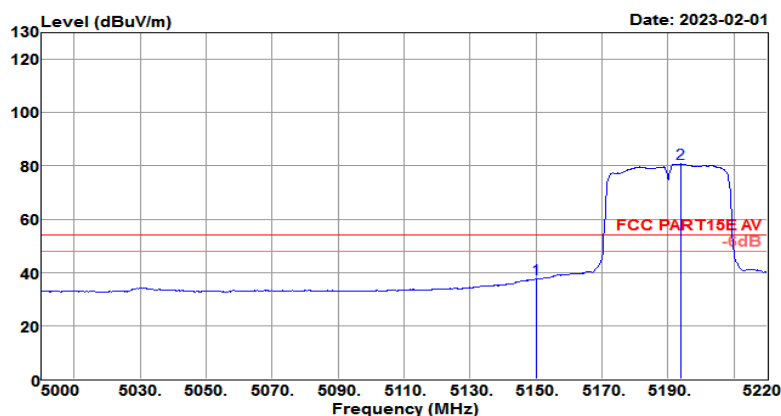
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11n HT40 CH38 (5190MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5150.000	51.98	31.32	7.59	35.75	55.14	68.20	-13.06	Peak
5197.560	89.17	31.36	7.49	35.70	92.32	68.20	24.12	Peak

Test Mode :	802.11n HT40 CH38 5190MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.00GHz~5.220GHz	Polarization :	Vertical

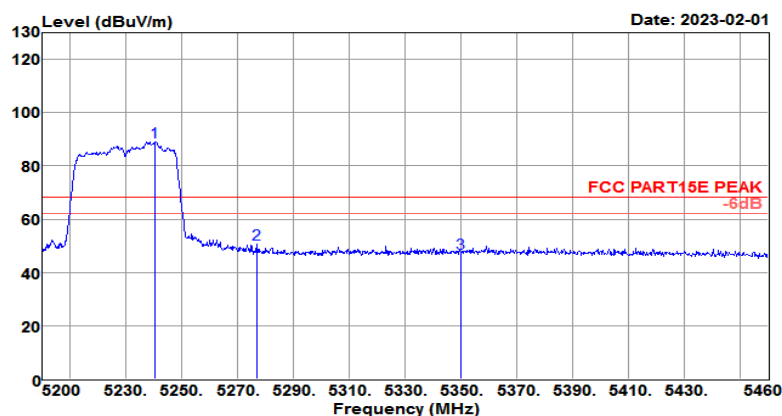
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11n HT40 CH38 (5190MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5150.000	34.36	31.32	7.59	35.75	37.52	54.00	-16.48	Average
5193.820	77.59	31.36	7.50	35.71	80.74	54.00	26.74	Average

Test Mode :	802.11n HT40 CH46 5230MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.20GHz~5.46GHz	Polarization :	Horizontal

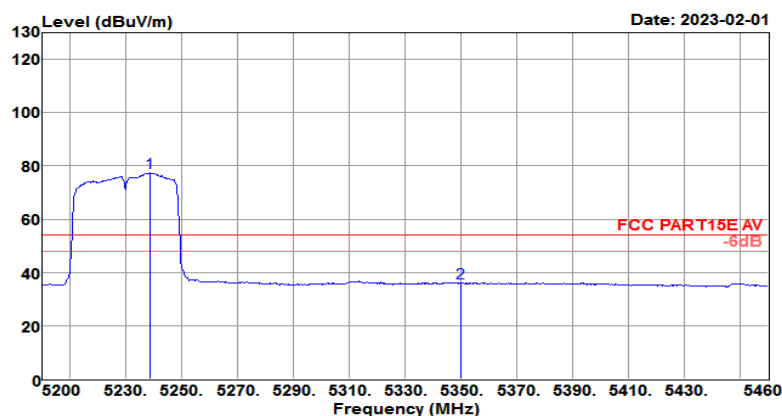
Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11n HT40 CH46 (5230MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5240.560	85.64	31.39	7.77	35.66	89.14	68.20	20.94	Peak
5276.960	46.68	31.42	8.02	35.62	50.50	68.20	-17.70	Peak
5350.000	42.84	31.48	8.53	35.55	47.30	68.20	-20.90	Peak

Test Mode :	802.11n HT40 CH46 5230MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.20GHz~5.46GHz	Polarization :	Horizontal

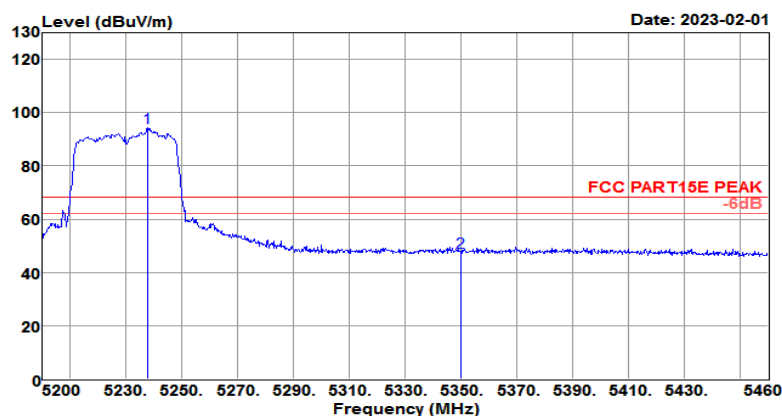
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11n HT40 CH46 (5230MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5238.480	73.83	31.39	7.76	35.66	77.32	54.00	23.32	Average
5350.000	31.58	31.48	8.53	35.55	36.04	54.00	-17.96	Average

Test Mode :	802.11n HT40 CH46 5230MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.20GHz~5.46GHz	Polarization :	Vertical

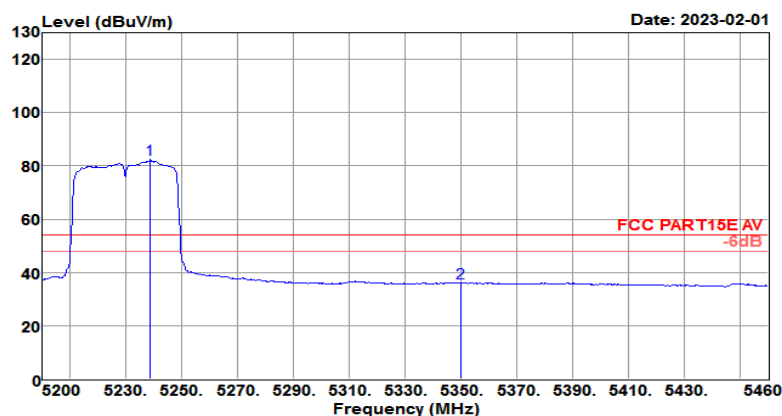
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11n HT40 CH46 (5230MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5237.700	90.74	31.39	7.75	35.66	94.22	68.20	26.02	Peak
5350.000	43.03	31.48	8.53	35.55	47.49	68.20	-20.71	Peak

Test Mode :	802.11n HT40 CH46 5230MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.20GHz~5.46GHz	Polarization :	Vertical

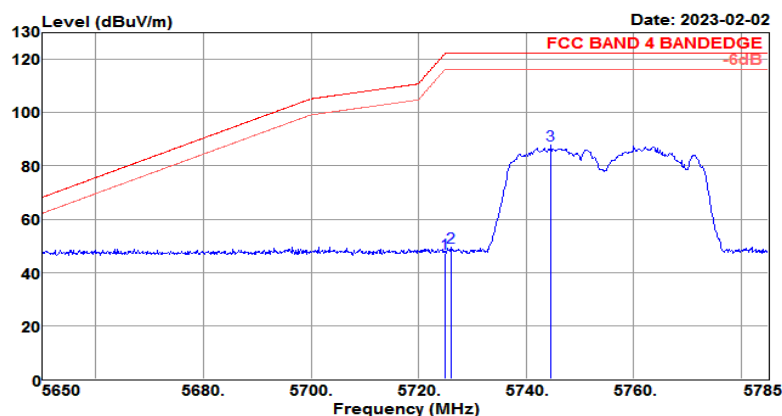
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11n HT40 CH46 (5230MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5238.740	78.79	31.39	7.76	35.66	82.28	54.00	28.28	Average
5350.000	31.43	31.48	8.53	35.55	35.89	54.00	-18.11	Average

Test Mode :	802.11n HT40 CH151 5755MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.650GHz~5.785GHz	Polarization :	Horizontal

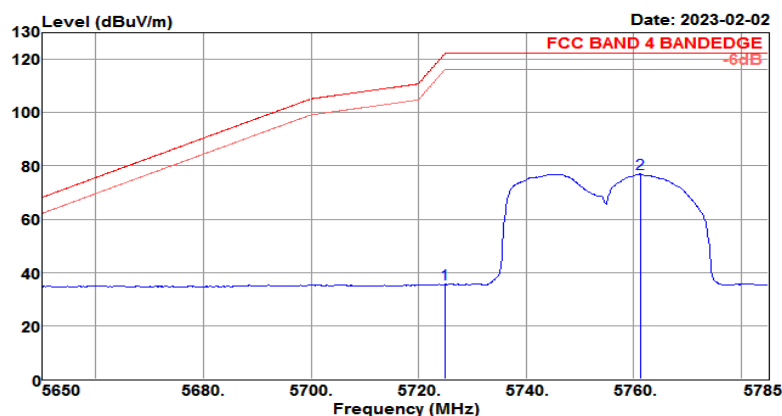
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11n HT40 CH151 (5755MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5725.000	43.12	31.96	7.29	35.18	47.19	122.20	-75.01	Peak
5726.140	45.28	31.96	7.28	35.17	49.35	122.20	-72.85	Peak
5744.635	83.70	31.99	7.14	35.16	87.67	122.20	-34.53	Peak

Test Mode :	802.11n HT40 CH151 5755MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.650GHz~5.785GHz	Polarization :	Horizontal

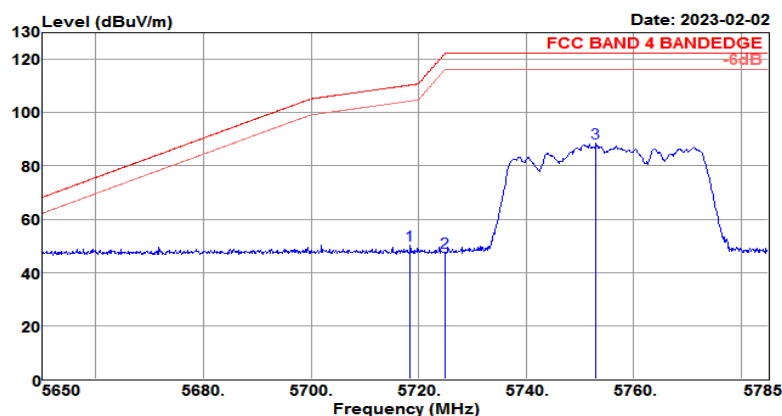
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11n HT40 CH151 (5755MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5725.000	31.47	31.96	7.29	35.18	35.54	122.20	-86.66	Average
5761.240	73.04	32.02	7.01	35.14	76.93	122.20	-45.27	Average

Test Mode :	802.11n HT40 CH151 5755MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.650GHz~5.785GHz	Polarization :	Vertical

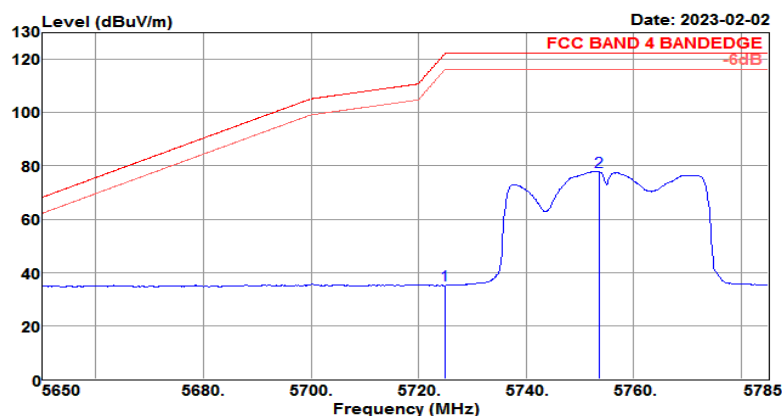
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11n HT40 CH151 (5755MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5718.445	46.13	31.95	7.34	35.18	50.24	110.37	-60.13	Peak
5725.000	43.59	31.96	7.29	35.18	47.66	122.20	-74.54	Peak
5753.005	84.63	32.00	7.07	35.15	88.55	122.20	-33.65	Peak

Test Mode :	802.11n HT40 CH151 5755MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.650GHz~5.785GHz	Polarization :	Vertical

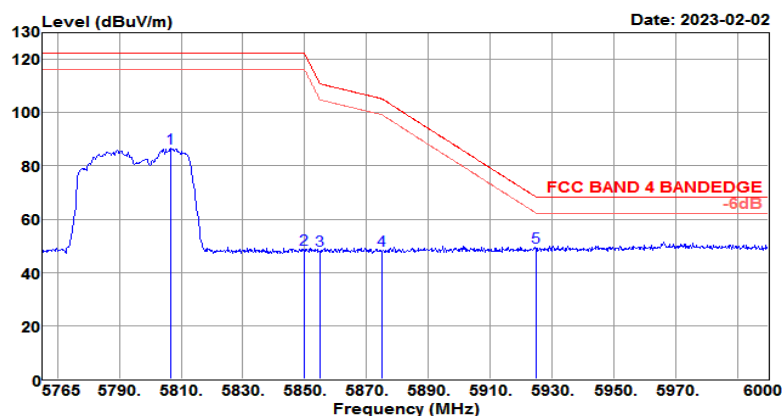
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11n HT40 CH151 (5755MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5725.000	31.10	31.96	7.29	35.18	35.17	122.20	-87.03	Average
5753.545	73.91	32.01	7.07	35.15	77.84	122.20	-44.36	Average

Test Mode :	802.11n HT40 CH159 5795MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.765GHz~6.000GHz	Polarization :	Horizontal

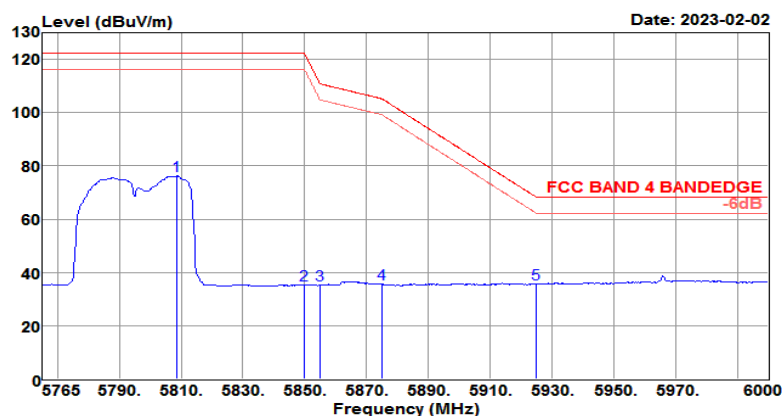
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11n HT40 CH159 (5795MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5806.830	82.87	32.09	6.75	35.09	86.62	122.20	-35.58	Peak
5850.000	44.67	32.16	7.10	35.05	48.88	122.20	-73.32	Peak
5855.000	44.11	32.17	7.14	35.05	48.37	110.80	-62.43	Peak
5875.000	43.96	32.20	7.30	35.03	48.43	105.20	-56.77	Peak
5925.000	44.31	32.28	7.70	34.98	49.31	68.20	-18.89	Peak

Test Mode :	802.11n HT40 CH159 5795MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.765GHz~6.000GHz	Polarization :	Horizontal

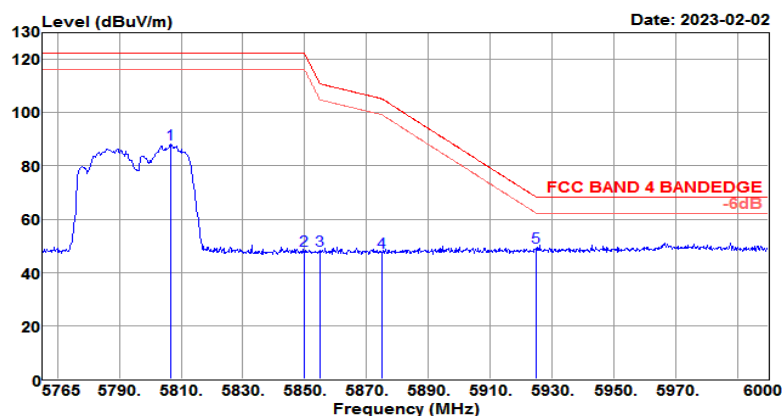
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11n HT40 CH159 (5795MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5808.475	72.47	32.09	6.77	35.09	76.24	122.20	-45.96	Average
5850.000	31.21	32.16	7.10	35.05	35.42	122.20	-86.78	Average
5855.000	31.07	32.17	7.14	35.05	35.33	110.80	-75.47	Average
5875.000	31.30	32.20	7.30	35.03	35.77	105.20	-69.43	Average
5925.000	30.73	32.28	7.70	34.98	35.73	68.20	-32.47	Average

Test Mode :	802.11n HT40 CH159 5795MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.765GHz~6.000GHz	Polarization :	Vertical

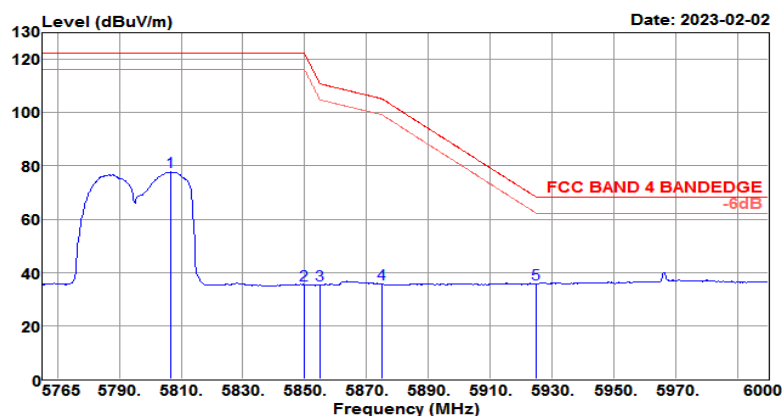
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11n HT40 CH159 (5795MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5806.595	84.44	32.09	6.75	35.09	88.19	122.20	-34.01	Peak
5850.000	44.30	32.16	7.10	35.05	48.51	122.20	-73.69	Peak
5855.000	43.97	32.17	7.14	35.05	48.23	110.80	-62.57	Peak
5875.000	43.12	32.20	7.30	35.03	47.59	105.20	-57.61	Peak
5925.000	44.31	32.28	7.70	34.98	49.31	68.20	-18.89	Peak

Test Mode :	802.11n HT40 CH159 5795MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.765GHz~6.000GHz	Polarization :	Vertical

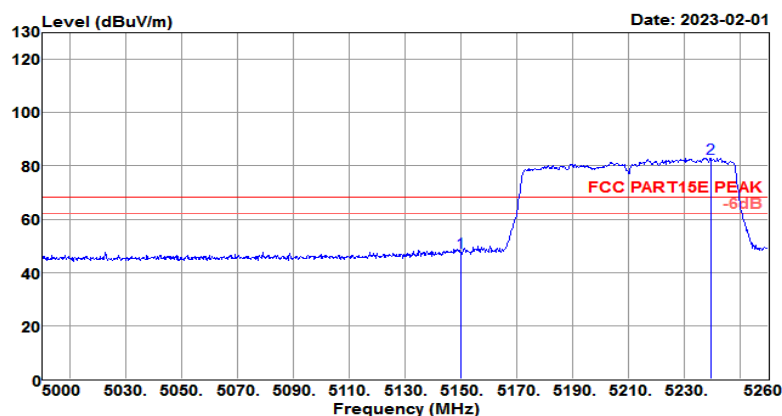
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11n HT40 CH159 (5795MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5806.595	73.96	32.09	6.75	35.09	77.71	122.20	-44.49	Average
5850.000	31.23	32.16	7.10	35.05	35.44	122.20	-86.76	Average
5855.000	31.05	32.17	7.14	35.05	35.31	110.80	-75.49	Average
5875.000	31.25	32.20	7.30	35.03	35.72	105.20	-69.48	Average
5925.000	30.83	32.28	7.70	34.98	35.83	68.20	-32.37	Average

Test Mode :	802.11ac VHT80 CH42 5210MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5GHz~5.26GHz	Polarization :	Horizontal

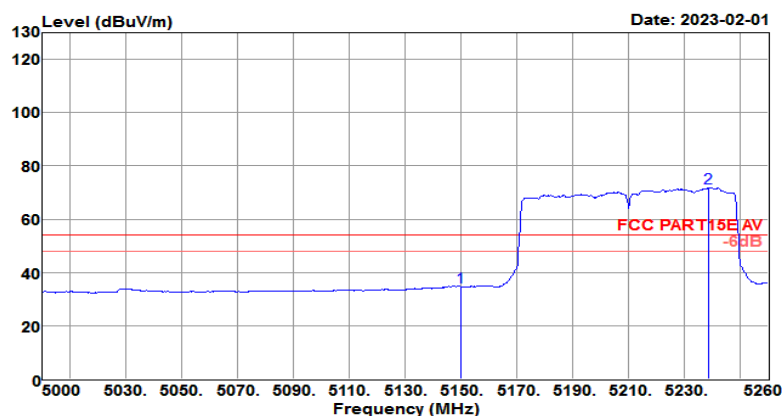
Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11ac VHT80 CH42(5210MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5150.000	44.59	31.32	7.59	35.75	47.75	68.20	-20.45	Peak
5239.460	79.48	31.39	7.76	35.66	82.97	68.20	14.77	Peak

Test Mode :	802.11ac VHT80 CH42 5210MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5GHz~5.26GHz	Polarization :	Horizontal

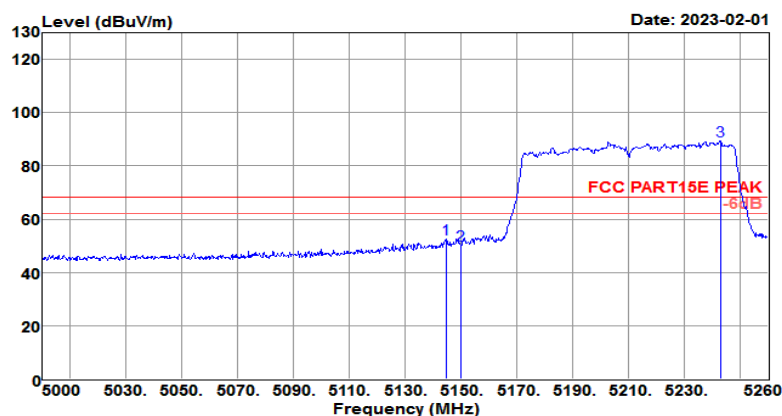
Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11ac VHT80 CH42(5210MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5150.000	31.50	31.32	7.59	35.75	34.66	54.00	-19.34	Average
5238.680	68.17	31.39	7.76	35.66	71.66	54.00	17.66	Average

Test Mode :	802.11ac VHT80 CH42 5210MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5GHz~5.26GHz	Polarization :	Vertical

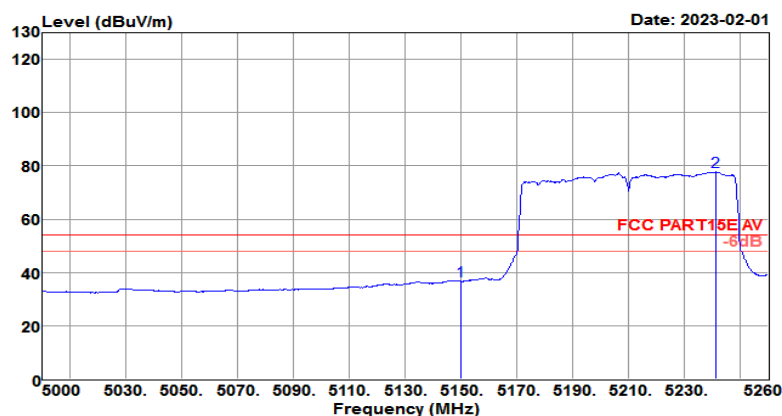
Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11ac VHT80 CH42(5210MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5144.820	49.45	31.32	7.60	35.76	52.61	68.20	-15.59	Peak
5150.000	47.25	31.32	7.59	35.75	50.41	68.20	-17.79	Peak
5242.840	86.00	31.39	7.79	35.66	89.52	68.20	21.32	Peak

Test Mode :	802.11ac VHT80 CH42 5210MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.00GHz~5.260GHz	Polarization :	Vertical

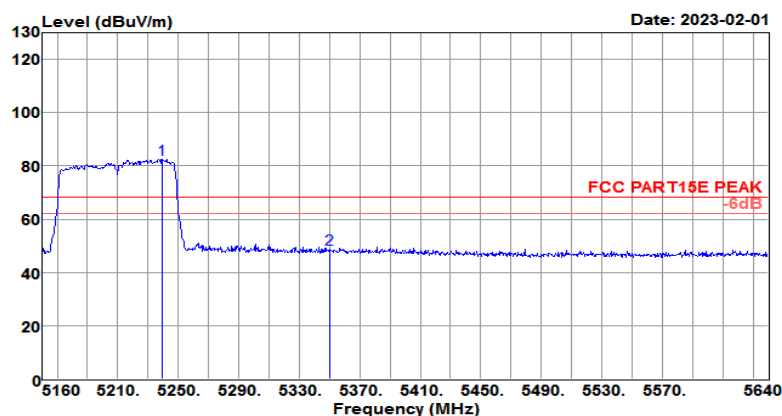
Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11ac VHT80 CH42(5210MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5150.000	33.53	31.32	7.59	35.75	36.69	54.00	-17.31	Average
5241.280	74.17	31.39	7.78	35.66	77.68	54.00	23.68	Average

Test Mode :	802.11ac VHT80 CH42 5210MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.160GHz~5.64GHz	Polarization :	Horizontal

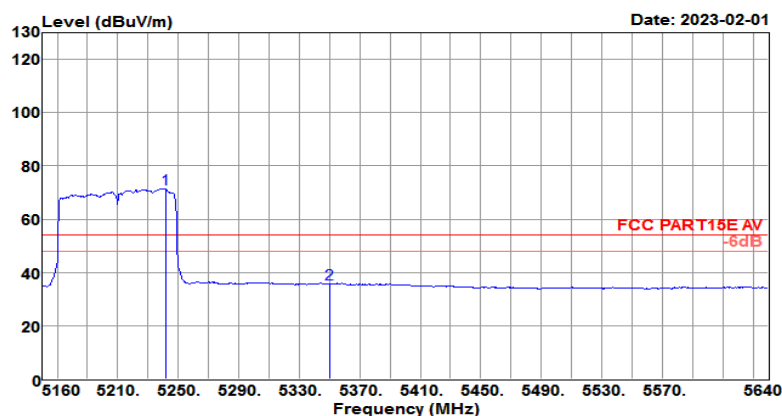
Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11ac VHT80 CH42(5210MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5239.200	79.17	31.39	7.76	35.66	82.66	68.20	14.46	Peak
5350.000	44.31	31.48	8.53	35.55	48.77	68.20	-19.43	Peak

Test Mode :	802.11ac VHT80 CH42 5210MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.160GHz~5.64GHz	Polarization :	Horizontal

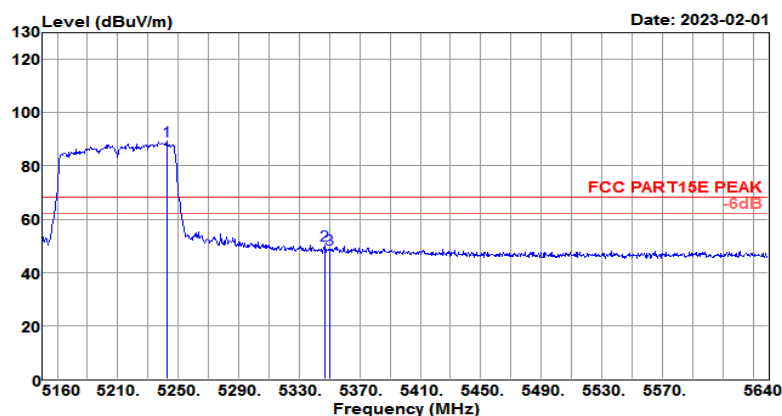
Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11ac VHT80 CH42(5210MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5242.080	67.97	31.39	7.78	35.66	71.48	54.00	17.48	Average
5350.000	31.19	31.48	8.53	35.55	35.65	54.00	-18.35	Average

Test Mode :	802.11ac VHT80 CH42 5210MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.160GHz~5.64GHz	Polarization :	Vertical

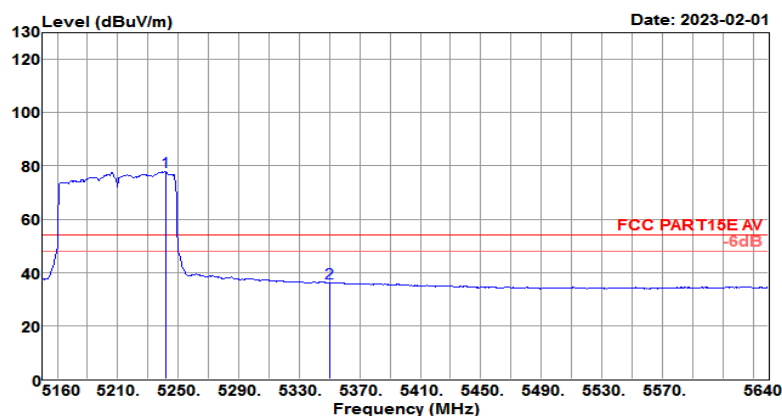
Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11ac VHT80 CH42(5210MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5242.560	85.95	31.39	7.79	35.66	89.47	68.20	21.27	Peak
5346.720	45.75	31.48	8.51	35.55	50.19	68.20	-18.01	Peak
5350.000	44.33	31.48	8.53	35.55	48.79	68.20	-19.41	Peak

Test Mode :	802.11ac VHT80 CH42 5210MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.160GHz~5.64GHz	Polarization :	Vertical

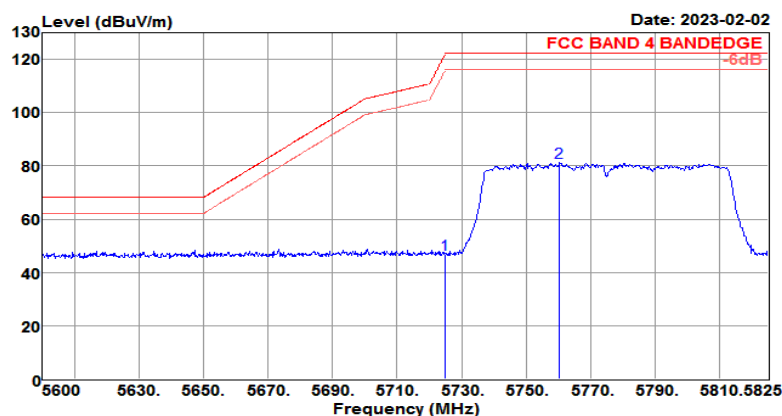
Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11ac VHT80 CH42(5210MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5241.600	74.24	31.39	7.78	35.66	77.75	54.00	23.75	Average
5350.000	31.60	31.48	8.53	35.55	36.06	54.00	-17.94	Average

Test Mode :	802.11ac VHT80 CH155 5775MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.6GHz~5.825GHz	Polarization :	Horizontal

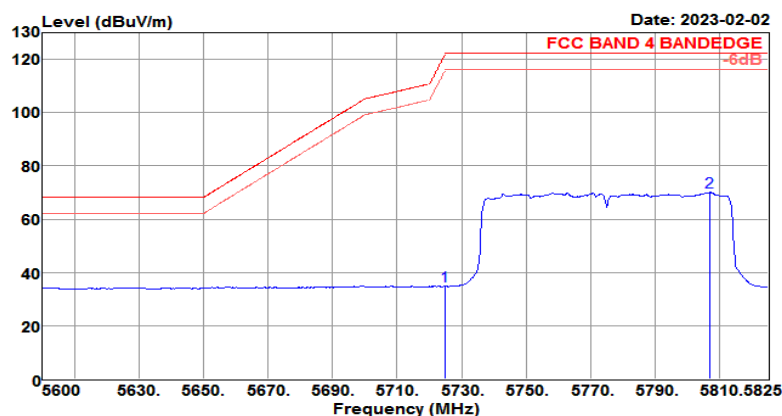
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11ac VHT80 CH155 (5775MHz)Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5725.000	42.77	31.96	7.29	35.18	46.84	122.20	-75.36	Peak
5760.425	77.48	32.02	7.01	35.14	81.37	122.20	-40.83	Peak

Test Mode :	802.11ac VHT80 CH155 5775MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.6GHz~5.825GHz	Polarization :	Horizontal

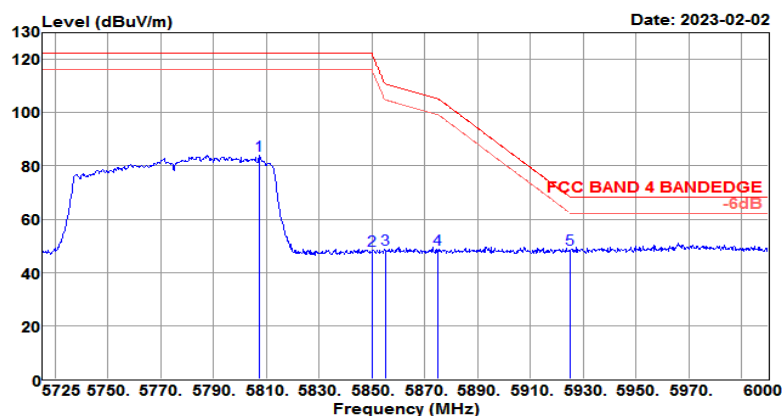
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11ac VHT80 CH155 (5775MHz)Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5725.000	30.71	31.96	7.29	35.18	34.78	122.20	-87.42	Average
5807.000	66.40	32.09	6.76	35.09	70.16	122.20	-52.04	Average

Test Mode :	802.11ac VHT80 CH155 5775MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.725GHz~6.000GHz	Polarization :	Vertical

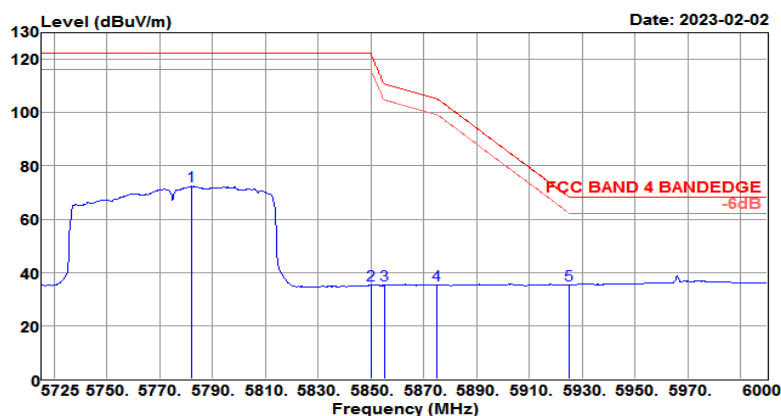
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11ac VHT80 CH155 (5775MHz) Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5807.500	80.31	32.09	6.76	35.09	84.07	122.20	-38.13	Peak
5850.000	44.29	32.16	7.10	35.05	48.50	122.20	-73.70	Peak
5855.000	44.52	32.17	7.14	35.05	48.78	110.80	-62.02	Peak
5875.000	44.37	32.20	7.30	35.03	48.84	105.20	-56.36	Peak
5925.000	43.65	32.28	7.70	34.98	48.65	68.20	-19.55	Peak

Test Mode :	802.11ac VHT80 CH155 5775MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.725GHz~6.000GHz	Polarization :	Vertical

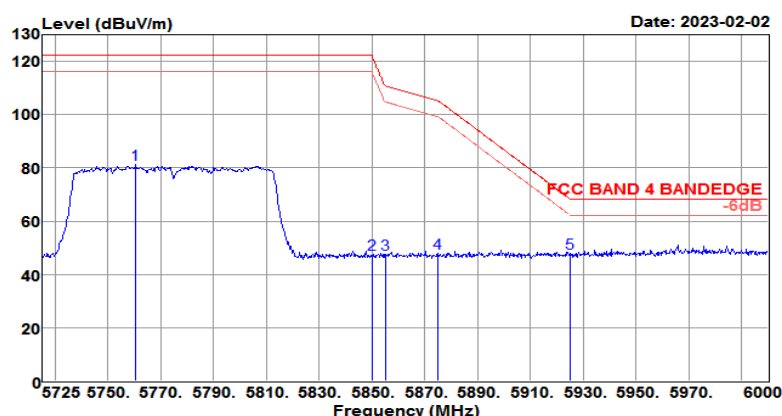
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11ac VHT80 CH155 (5775MHz) Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5782.200	68.56	32.05	6.84	35.12	72.33	122.20	-49.87	Average
5850.000	30.97	32.16	7.10	35.05	35.18	122.20	-87.02	Average
5855.000	30.91	32.17	7.14	35.05	35.17	110.80	-75.63	Average
5875.000	30.98	32.20	7.30	35.03	35.45	105.20	-69.75	Average
5925.000	30.42	32.28	7.70	34.98	35.42	68.20	-32.78	Average

Test Mode :	802.11ac VHT80 CH155 5775MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.725GHz~6.000GHz	Polarization :	Horizontal

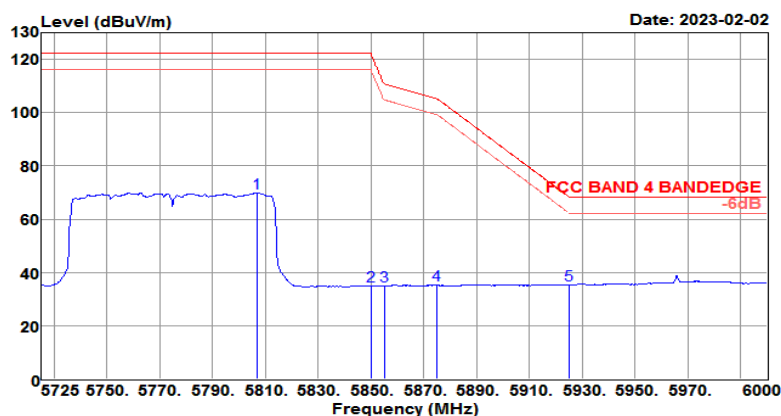
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11ac VHT80 CH155 (5775MHz)Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5760.475	77.25	32.02	7.01	35.14	81.14	122.20	-41.06	Peak
5850.000	43.27	32.16	7.10	35.05	47.48	122.20	-74.72	Peak
5855.000	43.26	32.17	7.14	35.05	47.52	110.80	-63.28	Peak
5875.000	43.33	32.20	7.30	35.03	47.80	105.20	-57.40	Peak
5925.000	43.07	32.28	7.70	34.98	48.07	68.20	-20.13	Peak

Test Mode :	802.11ac VHT80 CH155 5775MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.725GHz~6.000GHz	Polarization :	Horizontal

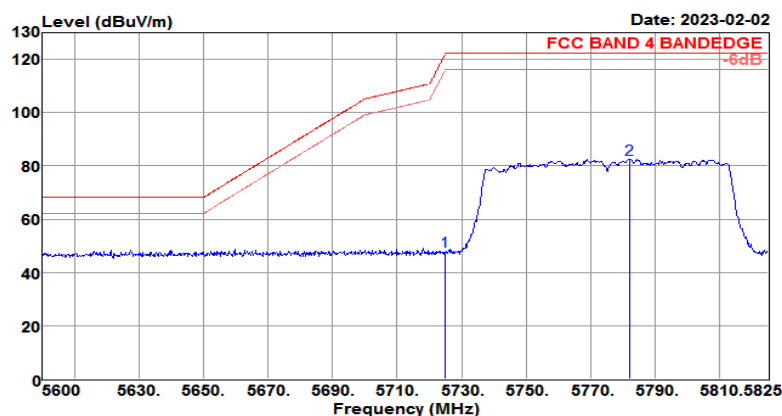
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11ac VHT80 CH155 (5775MHz)Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5806.950	66.19	32.09	6.76	35.09	69.95	122.20	-52.25	Average
5850.000	30.77	32.16	7.10	35.05	34.98	122.20	-87.22	Average
5855.000	30.68	32.17	7.14	35.05	34.94	110.80	-75.86	Average
5875.000	30.85	32.20	7.30	35.03	35.32	105.20	-69.88	Average
5925.000	30.27	32.28	7.70	34.98	35.27	68.20	-32.93	Average

Test Mode :	802.11ac VHT80 CH155 5775MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.600GHz~5.825GHz	Polarization :	Vertical

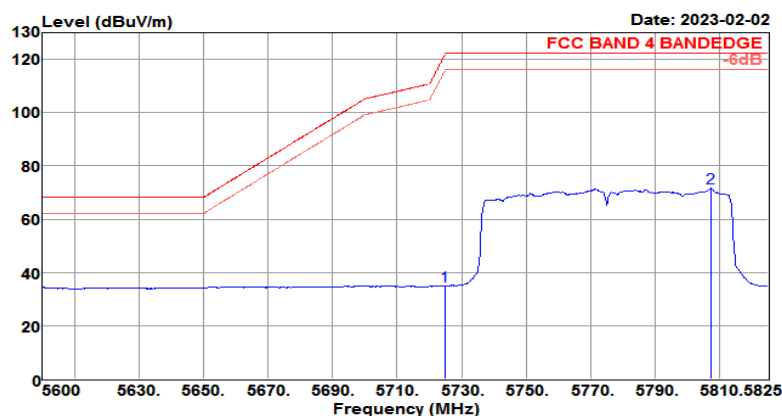
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11ac VHT80 CH155 (5775MHz)Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5725.000	43.87	31.96	7.29	35.18	47.94	122.20	-74.26	Peak
5782.025	78.74	32.05	6.84	35.12	82.51	122.20	-39.69	Peak

Test Mode :	802.11ac VHT80 CH155 5775MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	5.600GHz~5.825GHz	Polarization :	Vertical

Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11ac VHT80 CH155 (5775MHz)Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974

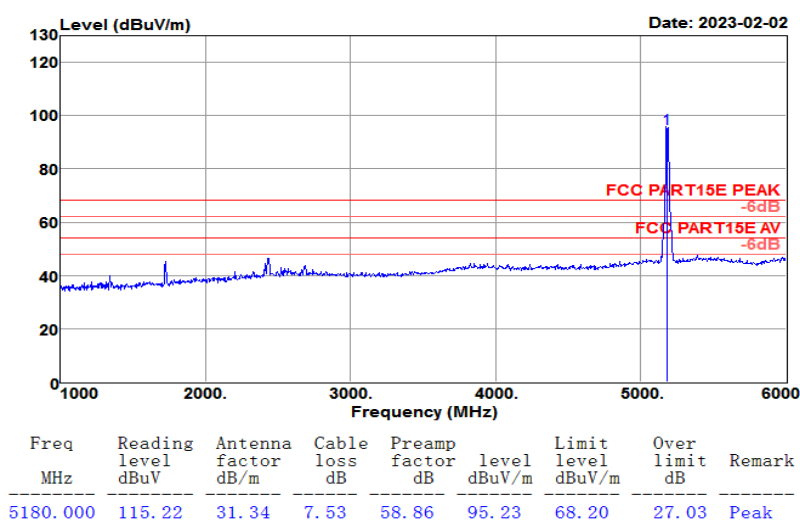


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5725.000	30.77	31.96	7.29	35.18	34.84	122.20	-87.36	Average
5807.225	67.88	32.09	6.76	35.09	71.64	122.20	-50.56	Average

4.4.5 Test Result of Radiated Spurious Emission (1GHz ~ 10th Harmonic)

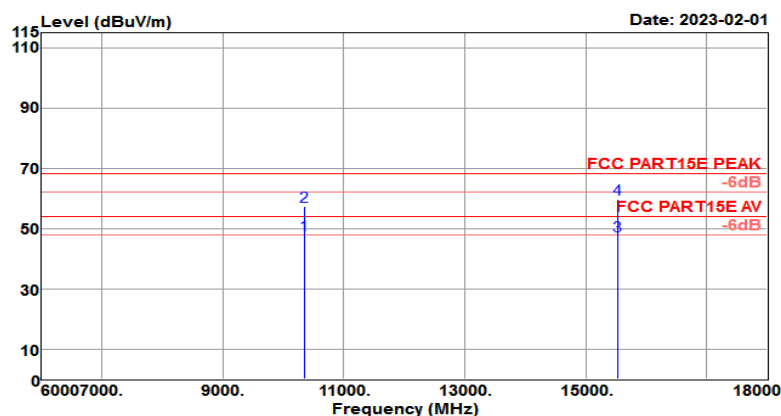
Test Mode :	802.11a CH36 5180MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11a CH36 (5180MHz)	Power rating	: DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Test Mode :	802.11a CH36 5180MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11a CH36 (5180MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		

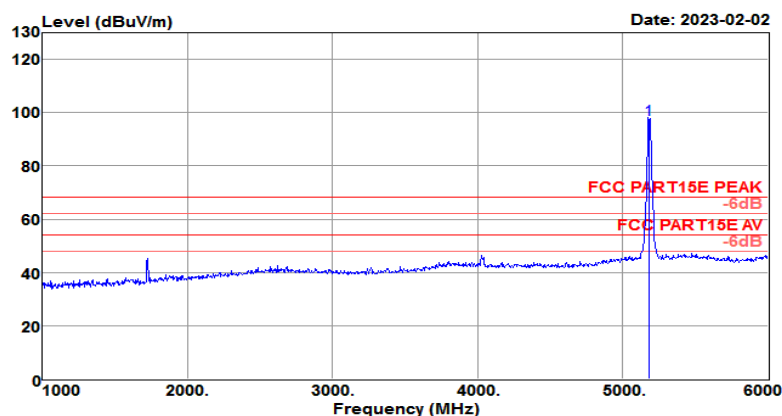


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
10360.000	29.11	39.20	13.23	33.83	47.71	54.00	-6.29	Average
10360.000	38.71	39.20	13.23	33.83	57.31	68.20	-10.89	Peak
15540.000	19.82	38.43	20.83	31.52	47.56	54.00	-6.44	Average
15540.000	32.13	38.43	20.83	31.52	59.87	68.20	-8.33	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11a CH36 5180MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Vertical

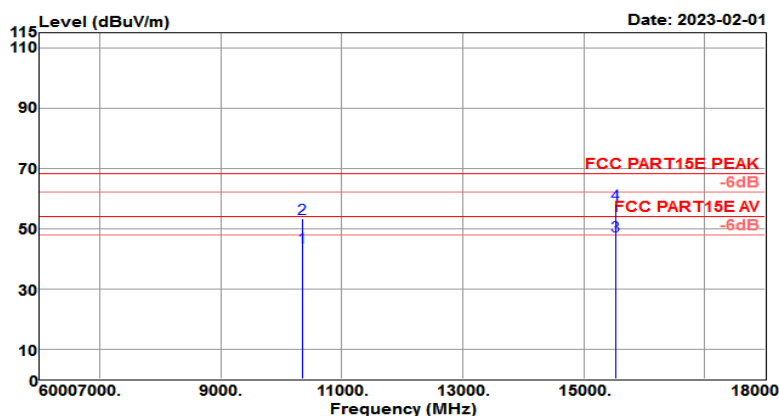
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11a CH36 (5180MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5180.000	117.55	31.34	7.53	58.86	97.56	68.20	29.36	Peak

Test Mode :	802.11a CH36 5180MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11a CH36 (5180MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		

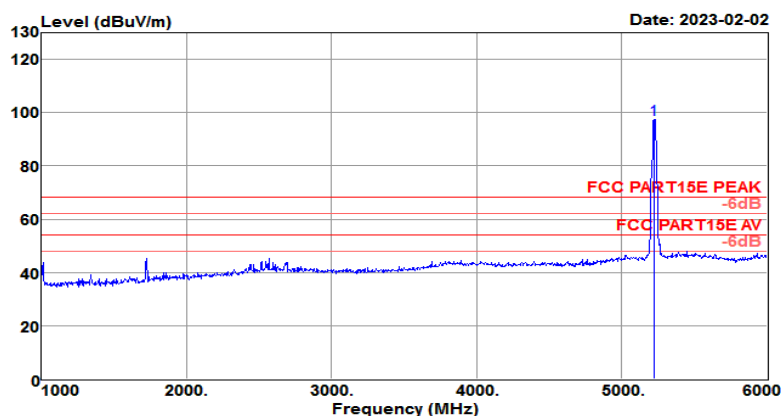


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
10360.000	25.03	39.20	13.23	33.83	43.63	54.00	-10.37	Average
10360.000	34.76	39.20	13.23	33.83	53.36	68.20	-14.84	Peak
15540.000	19.85	38.43	20.83	31.52	47.59	54.00	-6.41	Average
15540.000	30.31	38.43	20.83	31.52	58.05	68.20	-10.15	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11a CH44 5220MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Horizontal

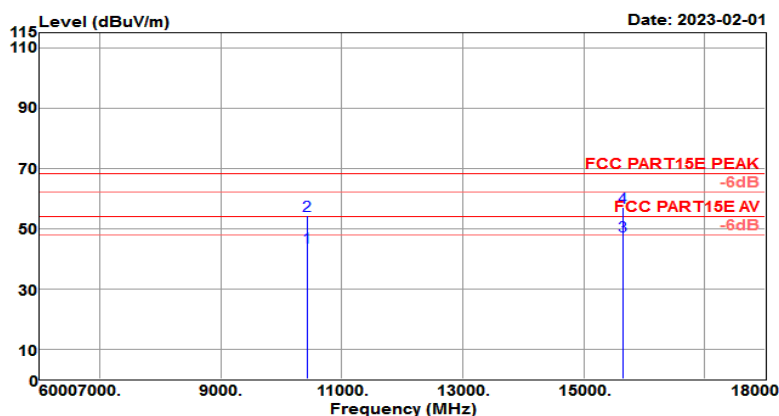
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11a CH44 (5220MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5220.000	117.13	31.38	7.63	58.86	97.28	68.20	29.08	Peak

Test Mode :	802.11a CH44 5220MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11a CH44 (5220MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		

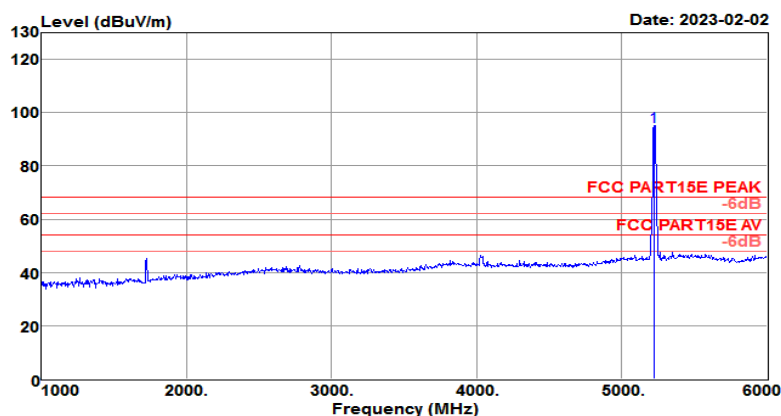


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
10440.000	24.81	39.32	13.29	33.73	43.69	54.00	-10.31	Average
10440.000	35.53	39.32	13.29	33.73	54.41	68.20	-13.79	Peak
15660.000	20.15	38.21	20.44	31.44	47.36	54.00	-6.64	Average
15660.000	29.83	38.21	20.44	31.44	57.04	68.20	-11.16	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11a CH44 5220MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Vertical

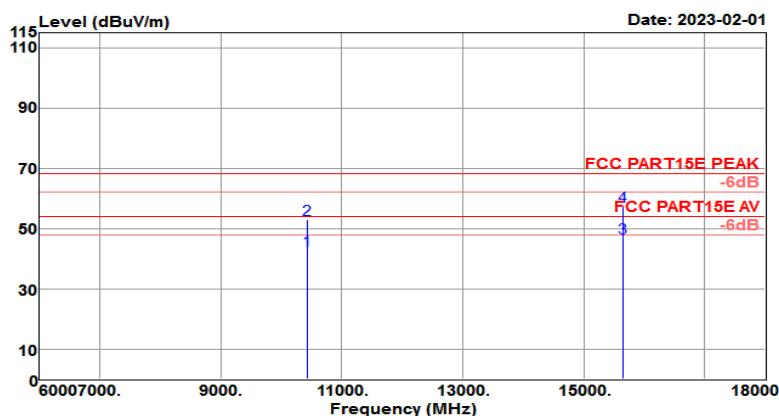
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11a CH44 (5220MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5220.000	114.47	31.38	7.63	58.86	94.62	68.20	26.42	Peak

Test Mode :	802.11a CH44 5220MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11a CH44 (5220MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		

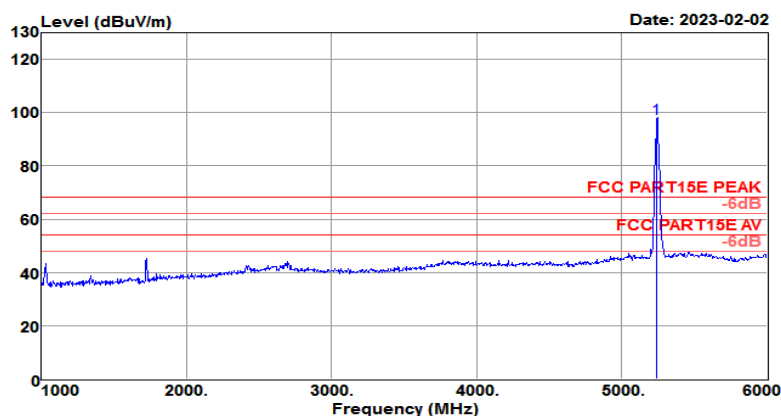


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
10440.000	23.75	39.32	13.29	33.73	42.63	54.00	-11.37	Average
10440.000	34.12	39.32	13.29	33.73	53.00	68.20	-15.20	Peak
15660.000	19.53	38.21	20.44	31.44	46.74	54.00	-7.26	Average
15660.000	30.15	38.21	20.44	31.44	57.36	68.20	-10.84	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11a CH48 5240MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Horizontal

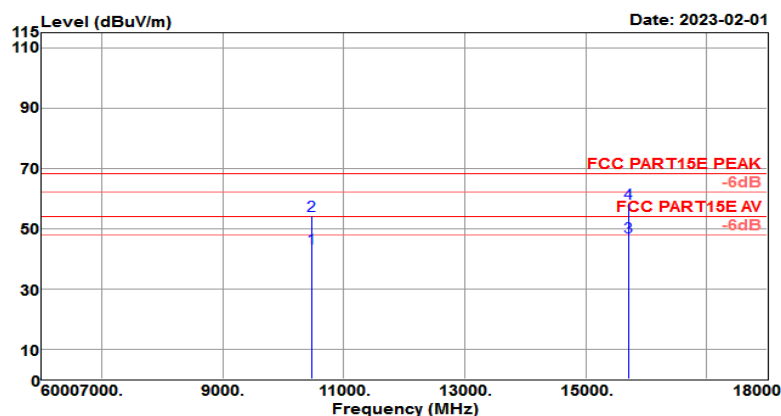
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11a CH48 (5240MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5240.000	117.41	31.39	7.77	58.85	97.72	68.20	29.52	Peak

Test Mode :	802.11a CH48 5240MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11a CH48 (5240MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		

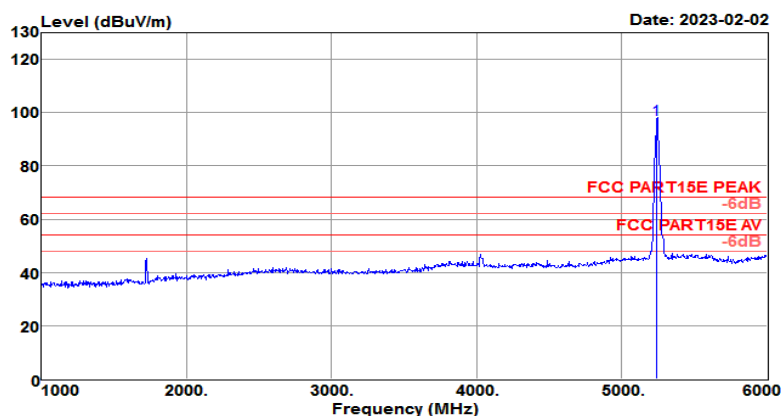


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
10480.000	24.58	39.37	13.32	33.68	43.59	54.00	-10.41	Average
10480.000	35.36	39.37	13.32	33.68	54.37	68.20	-13.83	Peak
15720.000	20.18	38.10	20.24	31.40	47.12	54.00	-6.88	Average
15720.000	31.36	38.10	20.24	31.40	58.30	68.20	-9.90	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11a CH48 5240MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Vertical

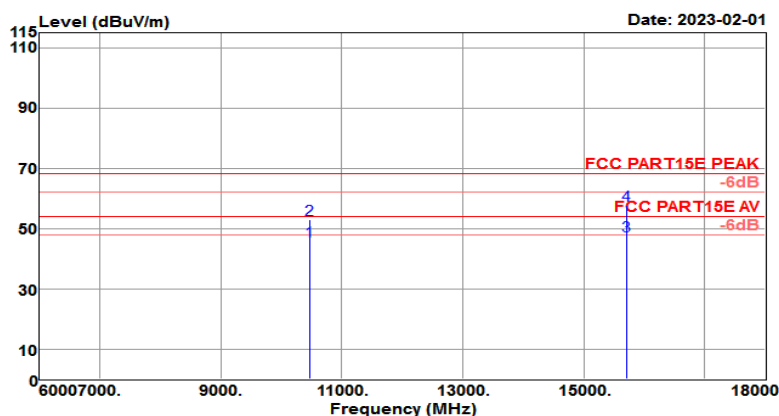
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11a CH48 (5240MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5240.000	117.08	31.39	7.77	58.85	97.39	68.20	29.19	Peak

Test Mode :	802.11a CH48 5240MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11a CH48 (5240MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		

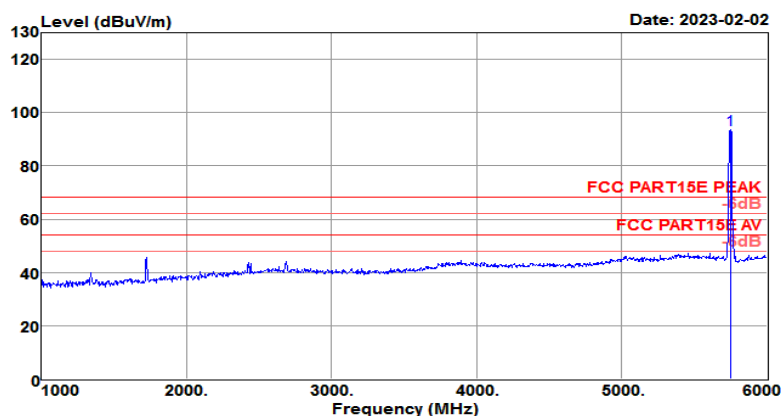


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
10480.000	26.72	39.37	13.32	33.68	45.73	54.00	-8.27	Average
10480.000	33.86	39.37	13.32	33.68	52.87	68.20	-15.33	Peak
15720.000	20.58	38.10	20.24	31.40	47.52	54.00	-6.48	Average
15720.000	30.82	38.10	20.24	31.40	57.76	68.20	-10.44	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11a CH149 5745MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Horizontal

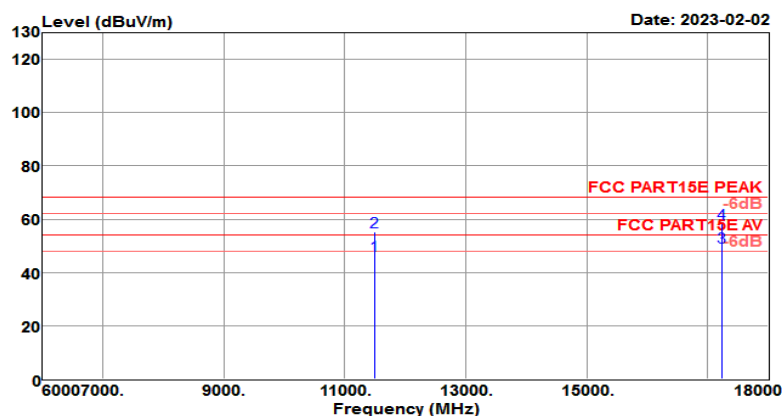
Test Site	: 3m Chamber	Temp/Humi	: 23℃/61%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11a CH149 (5745MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5745.000	113.13	31.99	7.13	58.75	93.50	68.20	25.30	Peak

Test Mode :	802.11a CH149 5745MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 23℃/61%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11a CH149 (5745MHz)	Power rating	: DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		

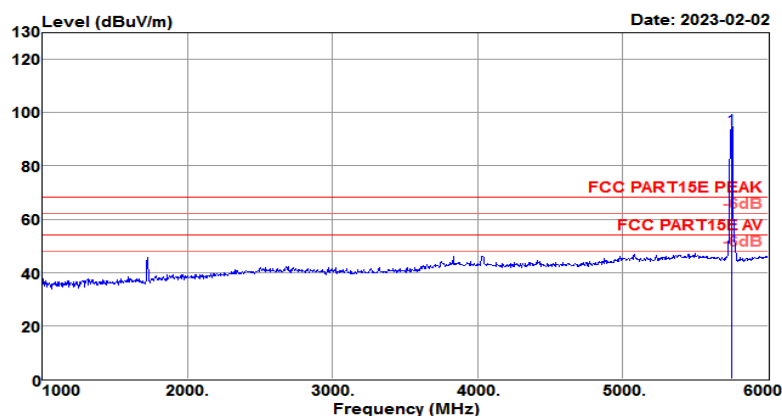


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
11490.000	25.04	39.70	14.52	32.90	46.36	54.00	-7.64	Average
11490.000	33.73	39.70	14.52	32.90	55.05	68.20	-13.15	Peak
17235.000	21.45	40.90	17.34	30.19	49.50	54.00	-4.50	Average
17235.000	30.29	40.90	17.34	30.19	58.34	68.20	-9.86	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11a CH149 5745MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Vertical

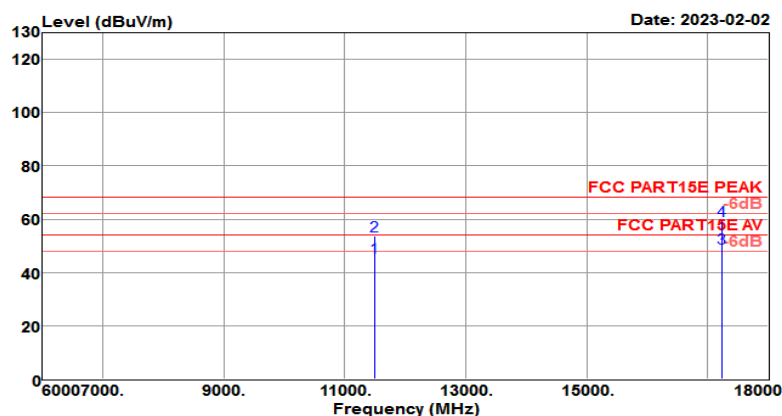
Test Site	: 3m Chamber	Temp/Humi	: 23℃/61%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11a CH149 (5745MHz)	Power rating	: DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5745.000	113.44	31.99	7.13	58.75	93.81	68.20	25.61	Peak

Test Mode :	802.11a CH149 5745MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 23℃/61%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11a CH149 (5745MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		

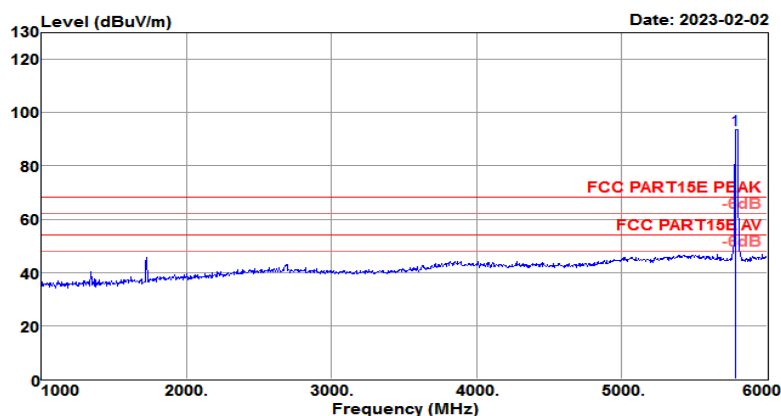


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
11490.000	24.33	39.70	14.52	32.90	45.65	54.00	-8.35	Average
11490.000	32.39	39.70	14.52	32.90	53.71	68.20	-14.49	Peak
17235.000	21.21	40.90	17.34	30.19	49.26	54.00	-4.74	Average
17235.000	31.49	40.90	17.34	30.19	59.54	68.20	-8.66	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11a CH157 5785MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Horizontal

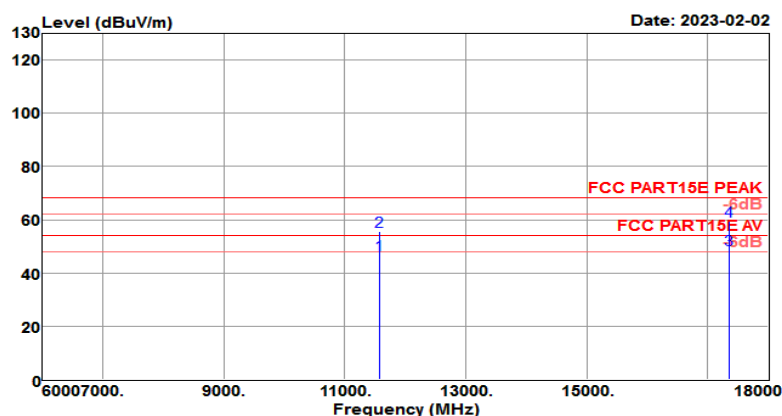
Test Site	: 3m Chamber	Temp/Humi	: 23℃/61%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11a CH157 (5785MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5785.000	113.48	32.06	6.82	58.74	93.62	68.20	25.42	Peak

Test Mode :	802.11a CH157 5785MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 23℃/61%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11a CH157 (5785MHz)	Power rating	: DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		

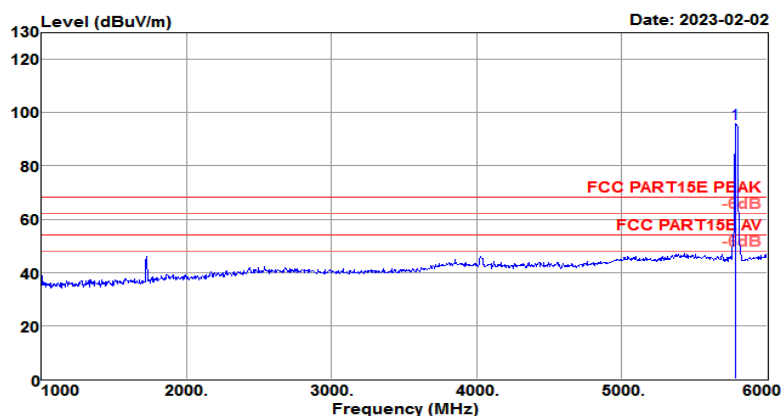


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
11570.000	25.38	39.56	14.68	32.89	46.73	54.00	-7.27	Average
11570.000	34.23	39.56	14.68	32.89	55.58	68.20	-12.62	Peak
17355.000	20.57	41.31	16.94	30.28	48.54	54.00	-5.46	Average
17355.000	31.37	41.31	16.94	30.28	59.34	68.20	-8.86	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11a CH157 5785MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Vertical

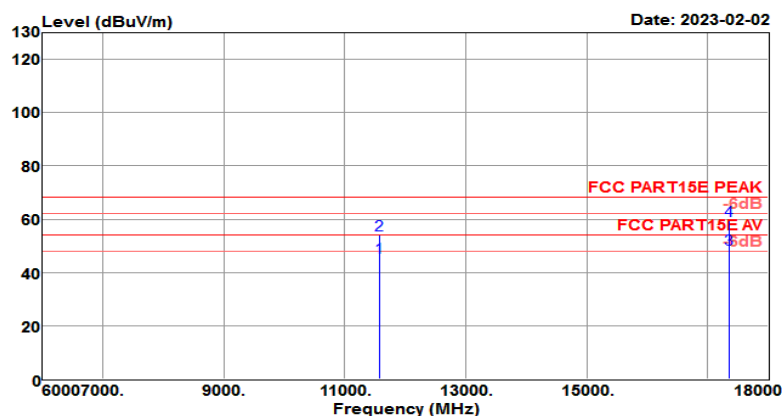
Test Site	: 3m Chamber	Temp/Humi	: 23℃/61%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11a CH157 (5785MHz)	Power rating	: DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5785.000	115.85	32.06	6.82	58.74	95.99	68.20	27.79	Peak

Test Mode :	802.11a CH157 5785MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 23℃/61%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11a CH157 (5785MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		

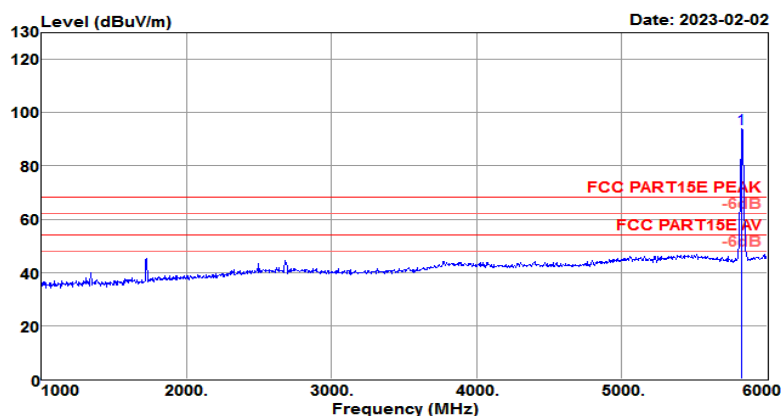


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
11570.000	24.36	39.56	14.68	32.89	45.71	54.00	-8.29	Average
11570.000	32.84	39.56	14.68	32.89	54.19	68.20	-14.01	Peak
17355.000	20.92	41.31	16.94	30.28	48.89	54.00	-5.11	Average
17355.000	31.33	41.31	16.94	30.28	59.30	68.20	-8.90	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11a CH165 5825MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Horizontal

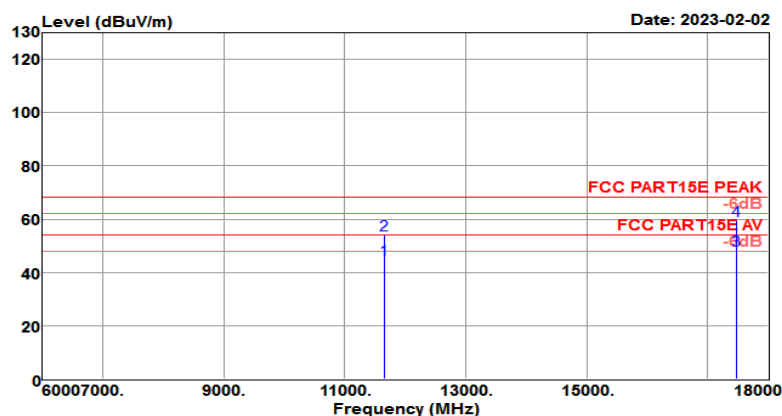
Test Site	: 3m Chamber	Temp/Humi	: 23℃/61%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11a CH165 (5825MHz)	Power rating	: DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5825.000	113.54	32.12	6.90	58.74	93.82	68.20	25.62	Peak

Test Mode :	802.11a CH165 5825MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 23℃/61%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11a CH165 (5825MHz)	Power rating	: DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		

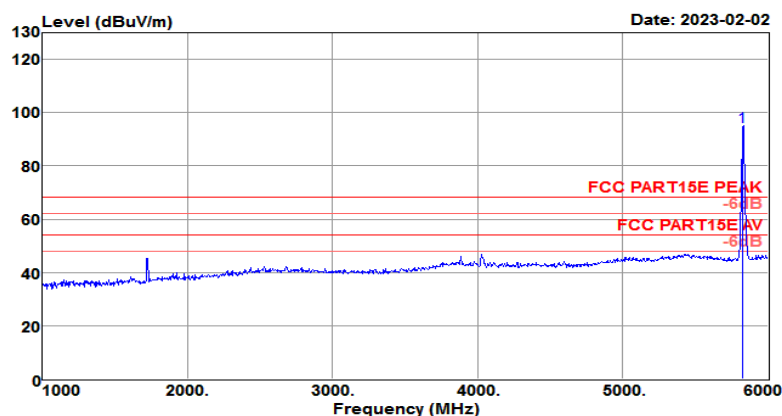


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
11650.000	23.67	39.40	14.87	32.87	45.07	54.00	-8.93	Average
11650.000	32.58	39.40	14.87	32.87	53.98	68.20	-14.22	Peak
17475.000	20.32	41.72	16.53	30.38	48.19	54.00	-5.81	Average
17475.000	31.43	41.72	16.53	30.38	59.30	68.20	-8.90	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11a CH165 5825MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Vertical

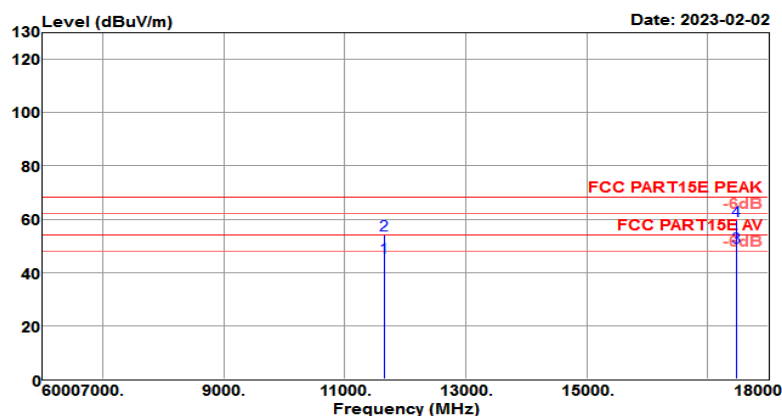
Test Site	: 3m Chamber	Temp/Humi	: 23℃/61%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11a CH165 (5825MHz)	Power rating	: DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5825.000	114.30	32.12	6.90	58.74	94.58	68.20	26.38	Peak

Test Mode :	802.11a CH165 5825MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 23℃/61%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11a CH165 (5825MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		

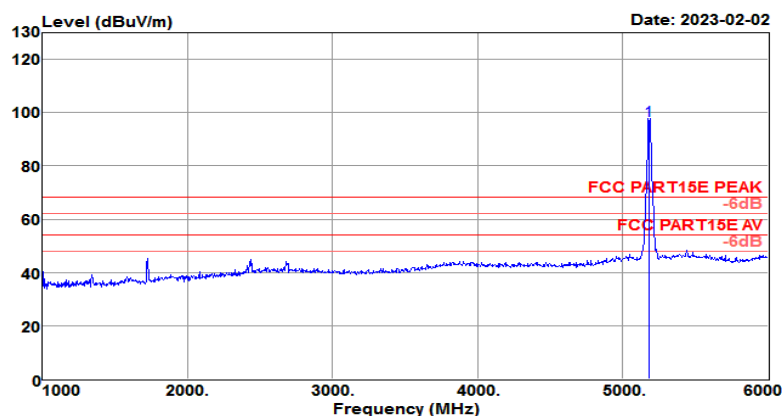


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
11650.000	24.32	39.40	14.87	32.87	45.72	54.00	-8.28	Average
11650.000	32.67	39.40	14.87	32.87	54.07	68.20	-14.13	Peak
17475.000	21.61	41.72	16.53	30.38	49.48	54.00	-4.52	Average
17475.000	31.62	41.72	16.53	30.38	59.49	68.20	-8.71	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11n HT20 CH36 5180MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Horizontal

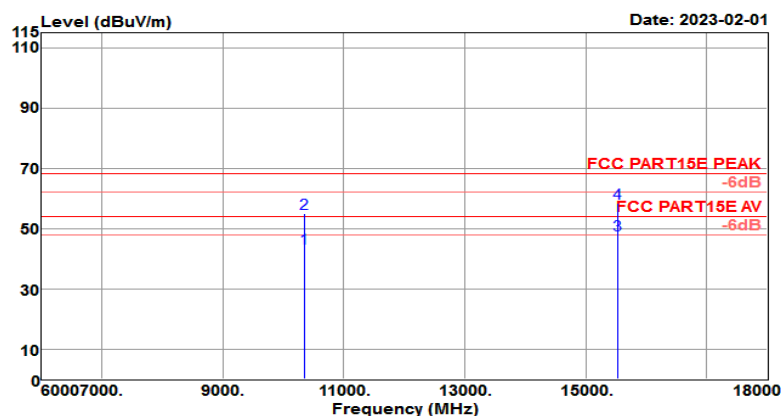
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11n HT20 CH36 (5180MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5180.000	117.04	31.34	7.53	58.86	97.05	68.20	28.85	Peak

Test Mode :	802.11 n HT20 CH36 5180MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Horizontal

Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11n HT20 CH36 (5180MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974

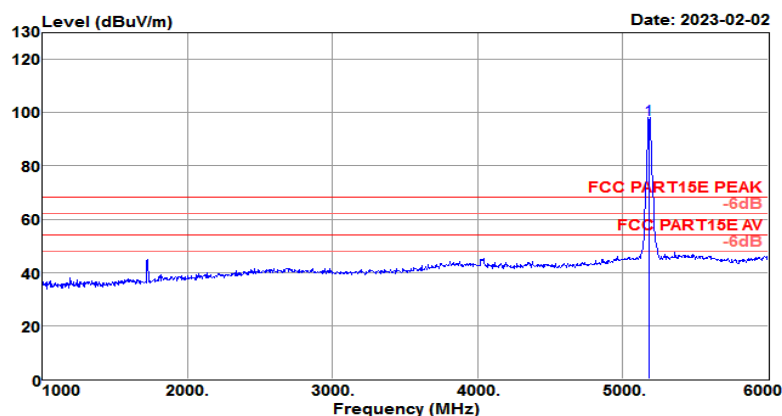


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
10360.000	24.86	39.20	13.23	33.83	43.46	54.00	-10.54	Average
10360.000	36.28	39.20	13.23	33.83	54.88	68.20	-13.32	Peak
15540.000	20.18	38.43	20.83	31.52	47.92	54.00	-6.08	Average
15540.000	30.62	38.43	20.83	31.52	58.36	68.20	-9.84	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11 n HT20 CH36 5180MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Vertical

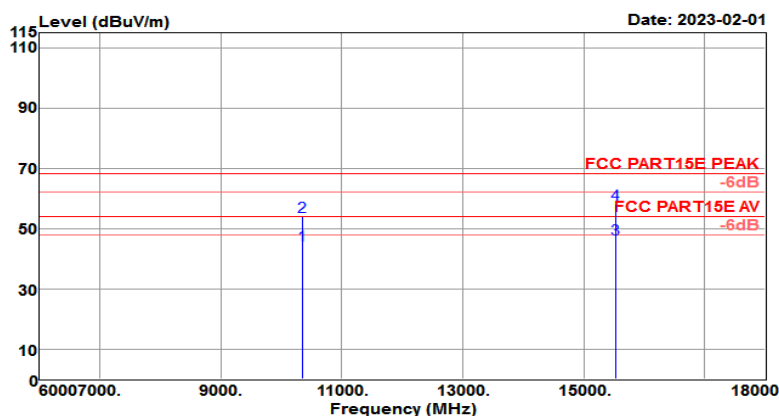
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11n HT20 CH36 (5180MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5180.000	117.37	31.34	7.53	58.86	97.38	68.20	29.18	Peak

Test Mode :	802.11 n HT20 CH36 5180MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Vertical

Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11n HT20 CH36 (5180MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974

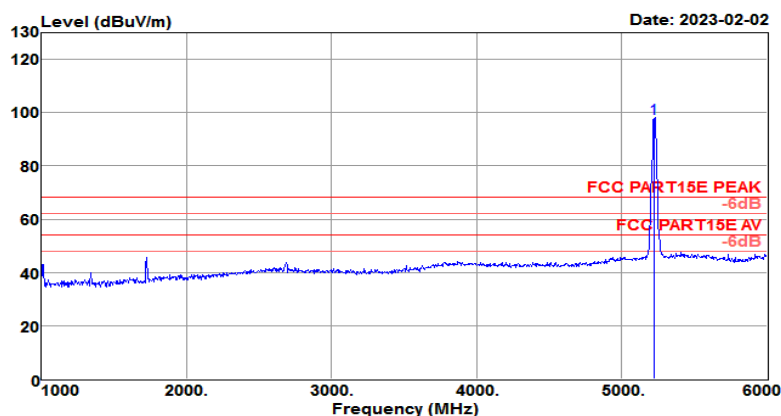


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
10360.000	25.86	39.20	13.23	33.83	44.46	54.00	-9.54	Average
10360.000	35.43	39.20	13.23	33.83	54.03	68.20	-14.17	Peak
15540.000	18.75	38.43	20.83	31.52	46.49	54.00	-7.51	Average
15540.000	30.36	38.43	20.83	31.52	58.10	68.20	-10.10	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11 n HT20 CH40 5200MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Horizontal

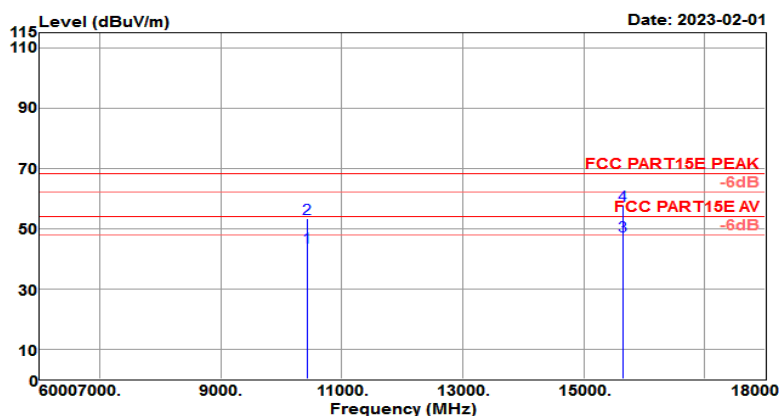
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11n HT20 CH44 (5220MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5220.000	117.48	31.38	7.63	58.86	97.63	68.20	29.43	Peak

Test Mode :	802.11 n HT20 CH40 5200MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Horizontal

Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11n HT20 CH44 (5220MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974

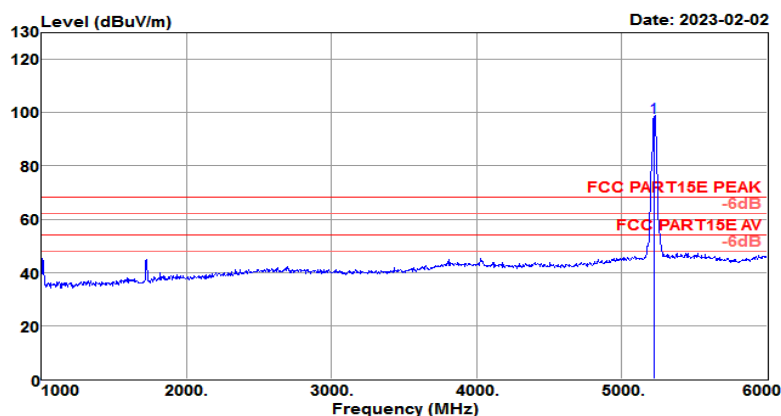


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
10440.000	24.85	39.32	13.29	33.73	43.73	54.00	-10.27	Average
10440.000	34.48	39.32	13.29	33.73	53.36	68.20	-14.84	Peak
15660.000	20.35	38.21	20.44	31.44	47.56	54.00	-6.44	Average
15660.000	30.59	38.21	20.44	31.44	57.80	68.20	-10.40	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11 n HT20 CH40 5200MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Vertical

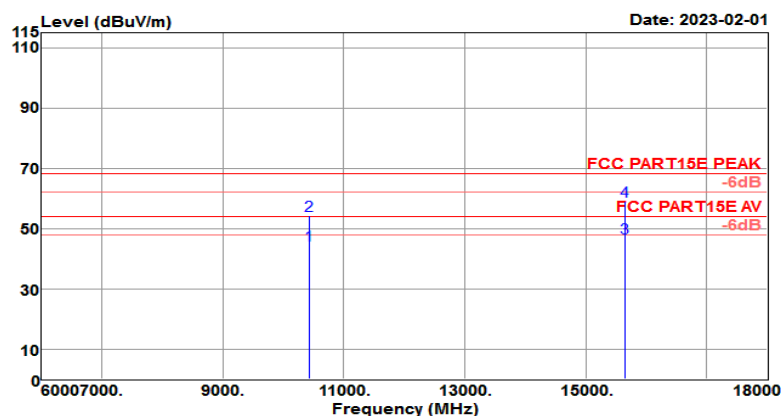
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11n HT20 CH44 (5220MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5220.000	117.99	31.38	7.63	58.86	98.14	68.20	29.94	Peak

Test Mode :	802.11 n HT20 CH40 5200MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Vertical

Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11n HT20 CH44 (5220MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974

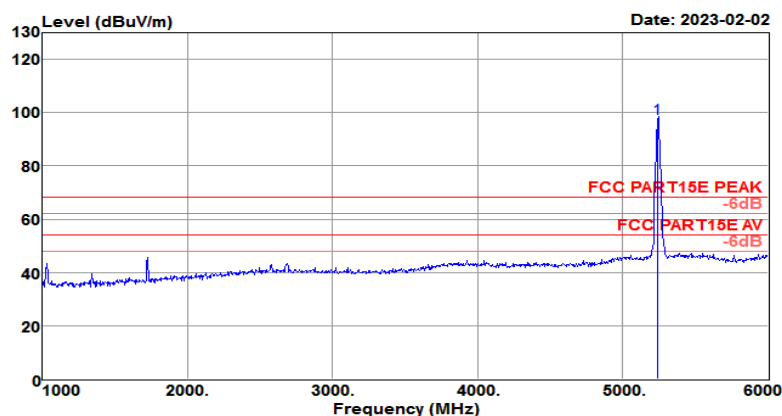


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
10440.000	25.62	39.32	13.29	33.73	44.50	54.00	-9.50	Average
10440.000	35.31	39.32	13.29	33.73	54.19	68.20	-14.01	Peak
15660.000	19.73	38.21	20.44	31.44	46.94	54.00	-7.06	Average
15660.000	31.87	38.21	20.44	31.44	59.08	68.20	-9.12	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11 n HT20 CH48 5240MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Horizontal

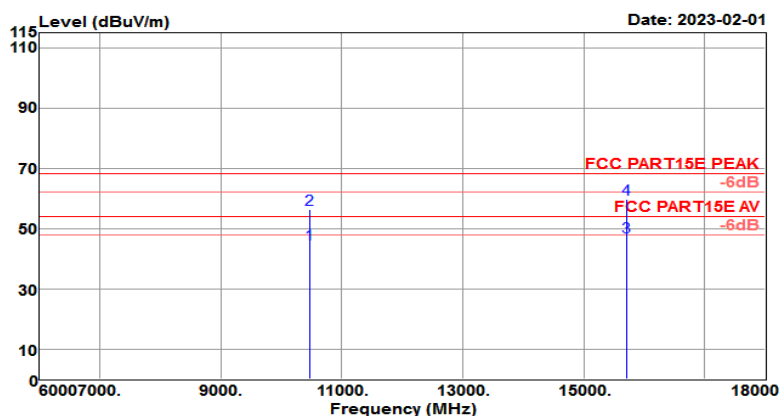
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11n HT20 CH48 (5240MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5240.000	117.45	31.39	7.77	58.85	97.76	68.20	29.56	Peak

Test Mode :	802.11 n HT20 CH48 5240MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11n HT20 CH48 (5240MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		

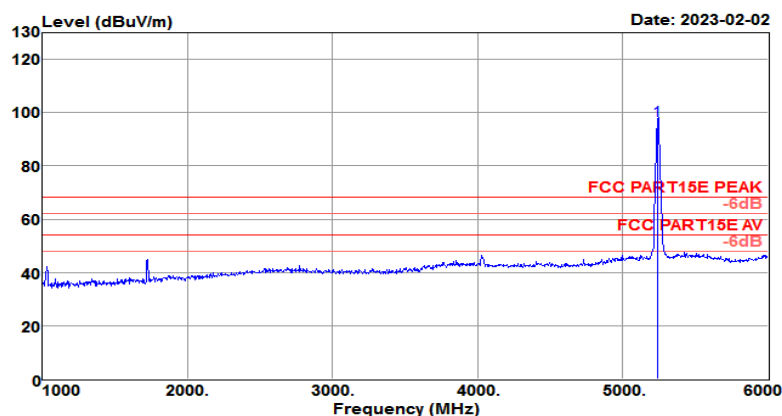


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
10480.000	25.73	39.37	13.32	33.68	44.74	54.00	-9.26	Average
10480.000	37.33	39.37	13.32	33.68	56.34	68.20	-11.86	Peak
15720.000	20.29	38.10	20.24	31.40	47.23	54.00	-6.77	Average
15720.000	32.76	38.10	20.24	31.40	59.70	68.20	-8.50	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11 n HT20 CH48 5240MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Vertical

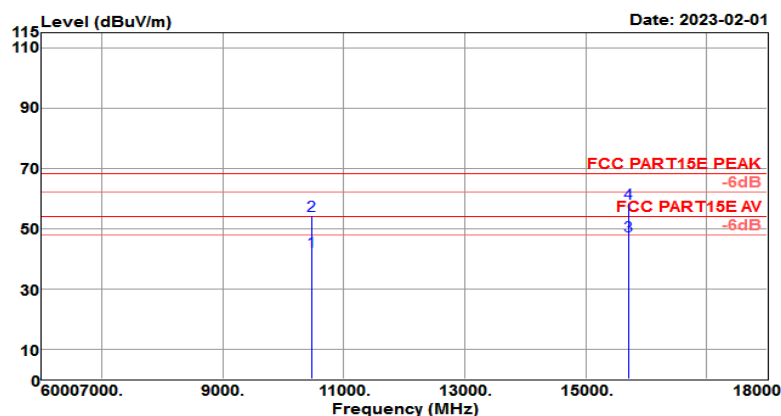
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11n HT20 CH48 (5240MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5240.000	116.59	31.39	7.77	58.85	96.90	68.20	28.70	Peak

Test Mode :	802.11 n HT20 CH48 5240MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Vertical

Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11n HT20 CH48 (5240MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974

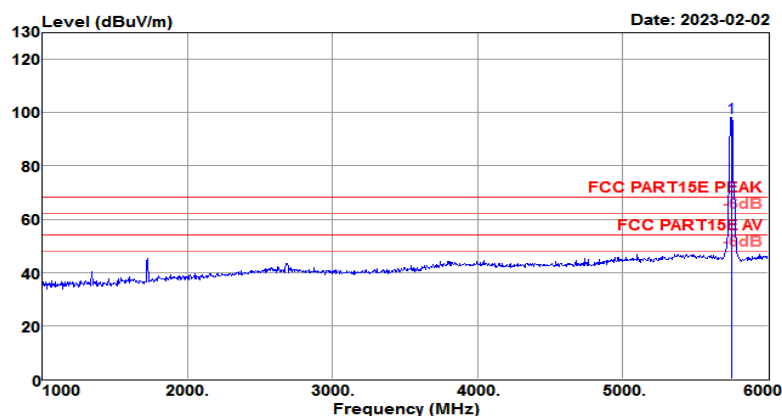


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
10480.000	23.26	39.37	13.32	33.68	42.27	54.00	-11.73	Average
10480.000	35.14	39.37	13.32	33.68	54.15	54.00	-14.05	Peak
15720.000	20.72	38.10	20.24	31.40	47.66	54.00	-6.34	Average
15720.000	31.36	38.10	20.24	31.40	58.30	54.00	-9.90	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11 n HT20 CH149 5745MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Horizontal

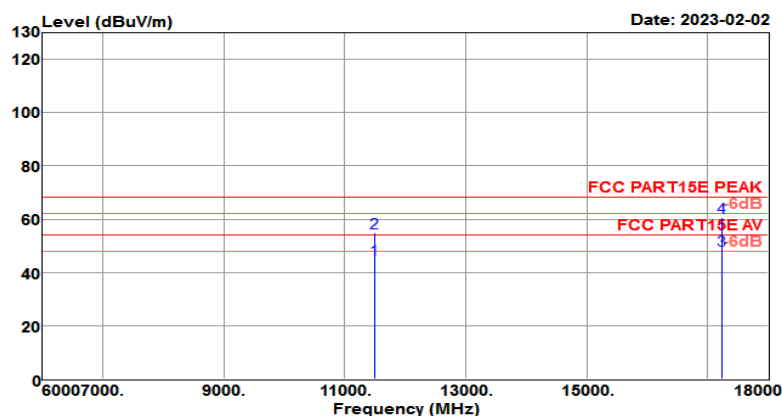
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11n HT20 CH149 (5745MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5745.000	117.98	31.99	7.13	58.75	98.35	68.20	30.15	Peak

Test Mode :	802.11 n HT20 CH149 5745MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Horizontal

Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11n HT20 CH149 (5745MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974

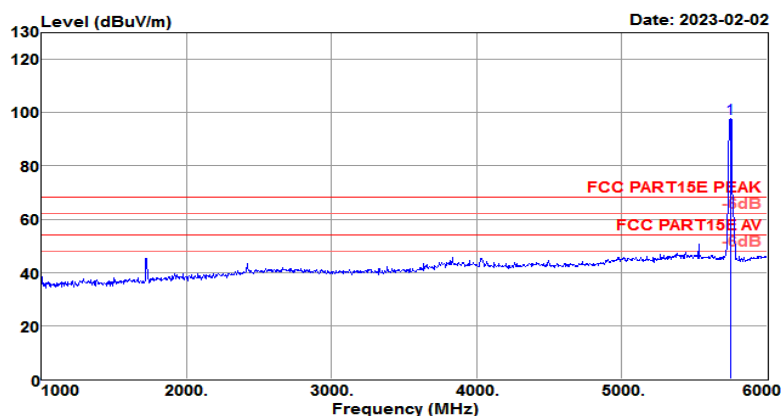


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
11490.000	23.74	39.70	14.52	32.90	45.06	54.00	-8.94	Average
11490.000	33.43	39.70	14.52	32.90	54.75	68.20	-13.45	Peak
17235.000	20.37	40.90	17.34	30.19	48.42	54.00	-5.58	Average
17235.000	32.74	40.90	17.34	30.19	60.79	68.20	-7.41	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11 n HT20 CH149 5745MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Vertical

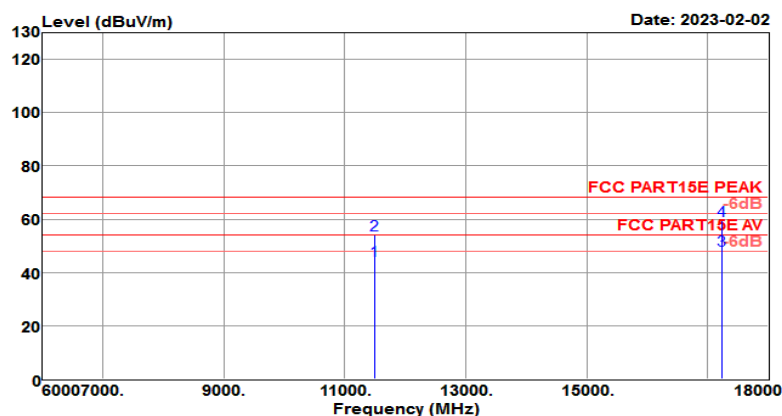
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11n HT20 CH149 (5745MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5745.000	117.30	31.99	7.13	58.75	97.67	68.20	29.47	Peak

Test Mode :	802.11 n HT20 CH149 5745MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Vertical

Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11n HT20 CH149 (5745MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974

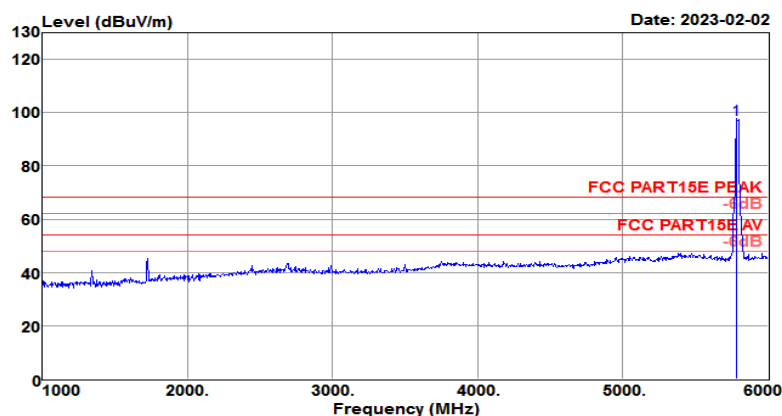


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
11490.000	23.13	39.70	14.52	32.90	44.45	54.00	-9.55	Average
11490.000	32.64	39.70	14.52	32.90	53.96	68.20	-14.24	Peak
17235.000	20.17	40.90	17.34	30.19	48.22	54.00	-5.78	Average
17235.000	31.27	40.90	17.34	30.19	59.32	68.20	-8.88	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11 n HT20 CH157 5785MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Horizontal

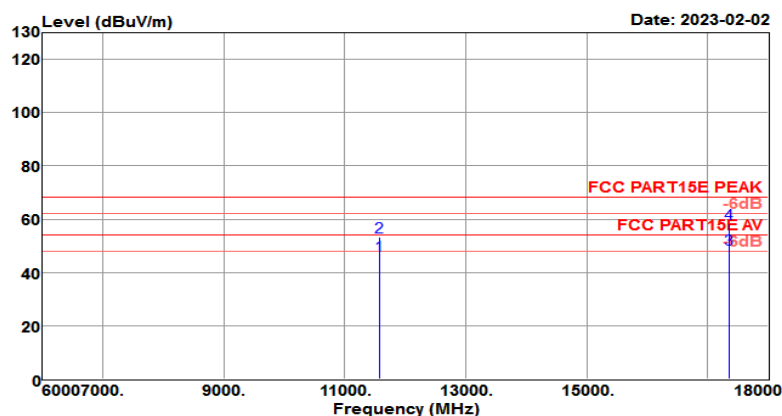
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11n HT20 CH157 (5785MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5785.000	117.29	32.06	6.82	58.74	97.43	68.20	29.23	Peak

Test Mode :	802.11 n HT20 CH157 5785MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Horizontal

Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11n HT20 CH157 (5785MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974

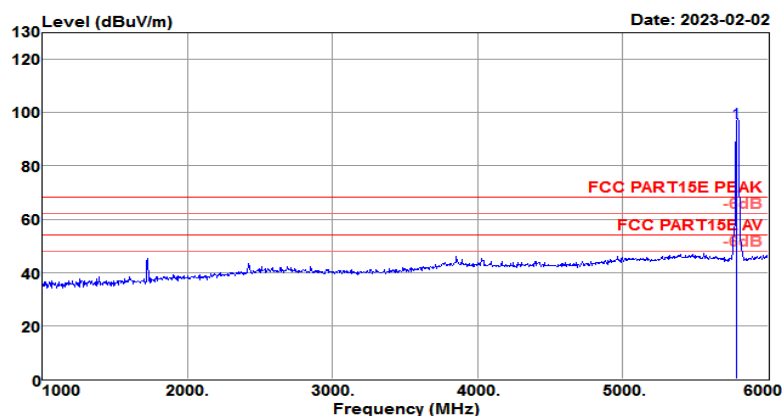


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
11570.000	25.13	39.56	14.68	32.89	46.48	54.00	-7.52	Average
11570.000	32.12	39.56	14.68	32.89	53.47	68.20	-14.73	Peak
17355.000	20.77	41.31	16.94	30.28	48.74	54.00	-5.26	Average
17355.000	30.22	41.31	16.94	30.28	58.19	68.20	-10.01	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11 n HT20 CH157 5785MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Vertical

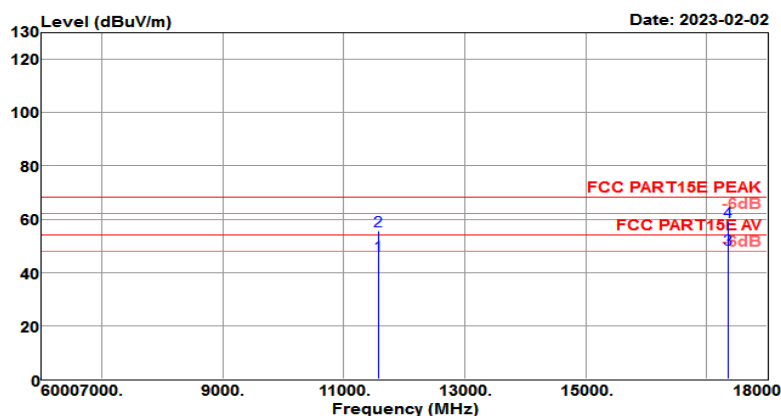
Test Site	: 3m Chamber	Temp/Humi	: 23℃/61%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11n HT20 CH157 (5785MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5785.000	116.19	32.06	6.82	58.74	96.33	68.20	28.13	Peak

Test Mode :	802.11 n HT20 CH157 5785MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Vertical

Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11n HT20 CH157 (5785MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974

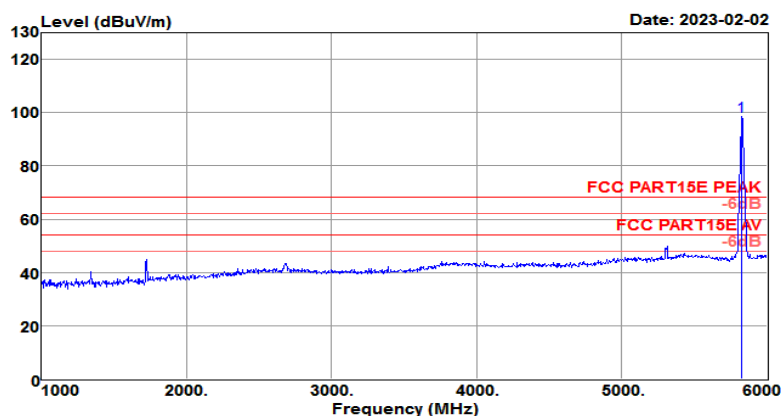


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
11570.000	25.05	39.56	14.68	32.89	46.40	54.00	-7.60	Average
11570.000	34.42	39.56	14.68	32.89	55.77	68.20	-12.43	Peak
17355.000	20.56	41.31	16.94	30.28	48.53	54.00	-5.47	Average
17355.000	31.03	41.31	16.94	30.28	59.00	68.20	-9.20	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11 n HT20 CH165 5825MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Horizontal

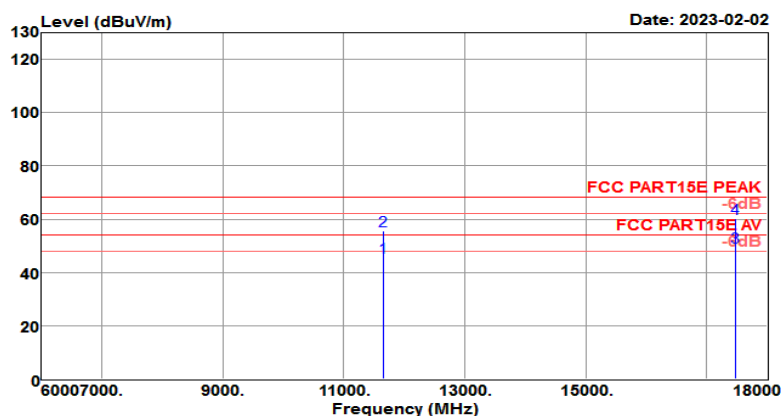
Test Site	: 3m Chamber	Temp/Humi	: 23℃/61%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11n HT20 CH165 (5825MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5825.000	118.26	32.12	6.90	58.74	98.54	68.20	30.34	Peak

Test Mode :	802.11 n HT20 CH165 5825MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Horizontal

Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11n HT20 CH165 (5825MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974

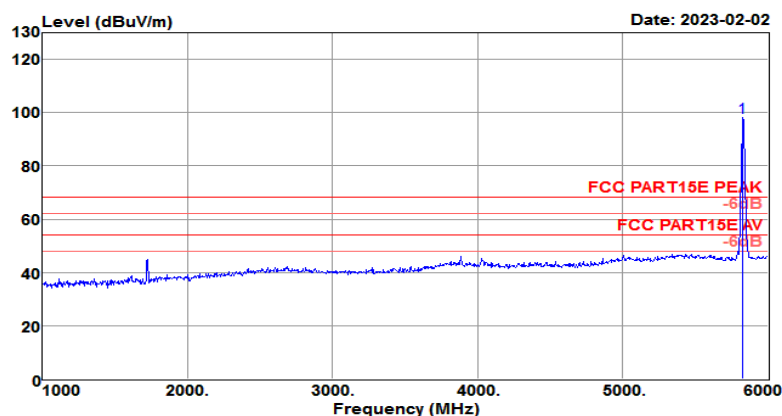


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
11650.000	24.35	39.40	14.87	32.87	45.75	54.00	-8.25	Average
11650.000	34.15	39.40	14.87	32.87	55.55	68.20	-12.65	Peak
17475.000	21.49	41.72	16.53	30.38	49.36	54.00	-4.64	Average
17475.000	32.38	41.72	16.53	30.38	60.25	68.20	-7.95	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11 n HT20 CH165 5825MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Vertical

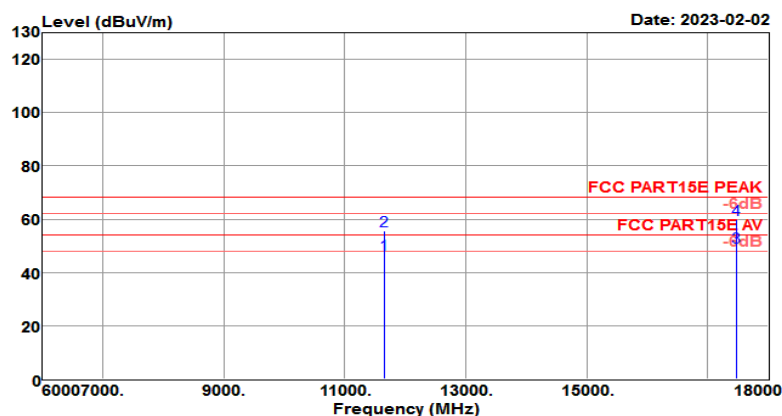
Test Site	: 3m Chamber	Temp/Humi	: 23℃/61%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11n HT20 CH165 (5825MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5825.000	117.88	32.12	6.90	58.74	98.16	68.20	29.96	Peak

Test Mode :	802.11 n HT20 CH165 5825MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Vertical

Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11n HT20 CH165 (5825MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974

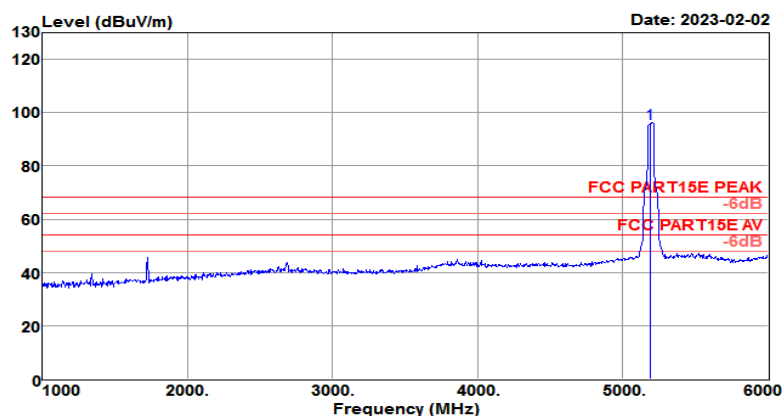


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
11650.000	25.24	39.40	14.87	32.87	46.64	54.00	-7.36	Average
11650.000	34.37	39.40	14.87	32.87	55.77	68.20	-12.43	Peak
17475.000	21.57	41.72	16.53	30.38	49.44	54.00	-4.56	Average
17475.000	32.03	41.72	16.53	30.38	59.90	68.20	-8.30	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11n HT40 CH38 5190MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Horizontal

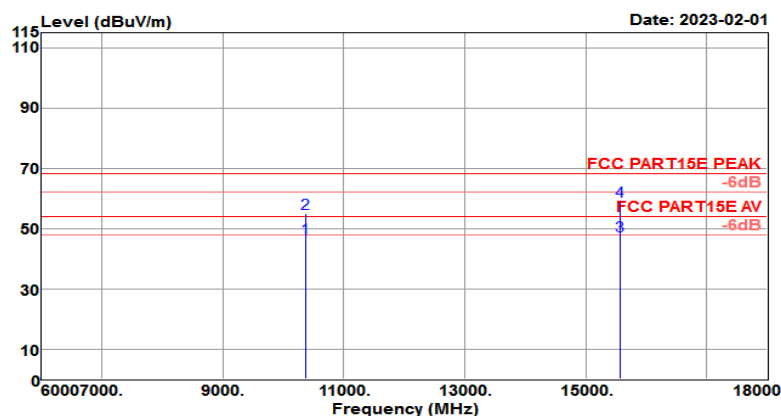
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11n HT40 CH38 (5190MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5190.000	116.03	31.35	7.51	58.86	96.03	68.20	27.83	Peak

Test Mode :	802.11n HT40 CH38 5190MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Horizontal

Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11n HT40 CH38 (5190MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974

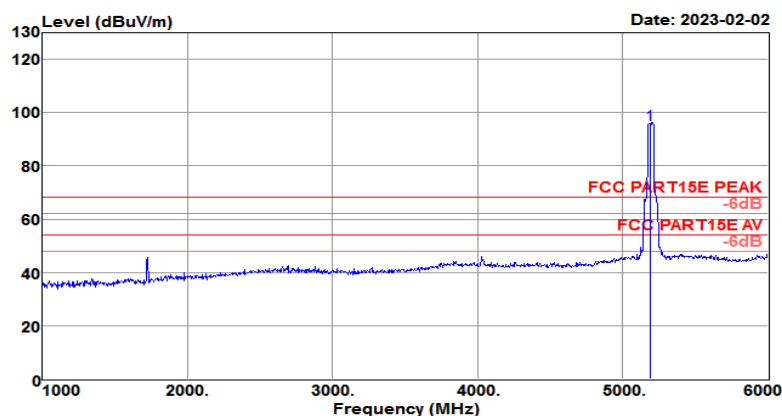


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
10380.000	28.12	39.23	13.25	33.81	46.79	54.00	-7.21	Average
10380.000	36.35	39.23	13.25	33.81	55.02	68.20	-13.18	Peak
15570.000	19.84	38.37	20.73	31.50	47.44	54.00	-6.56	Average
15570.000	31.32	38.37	20.73	31.50	58.92	68.20	-9.28	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11n HT40 CH38 5190MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Vertical

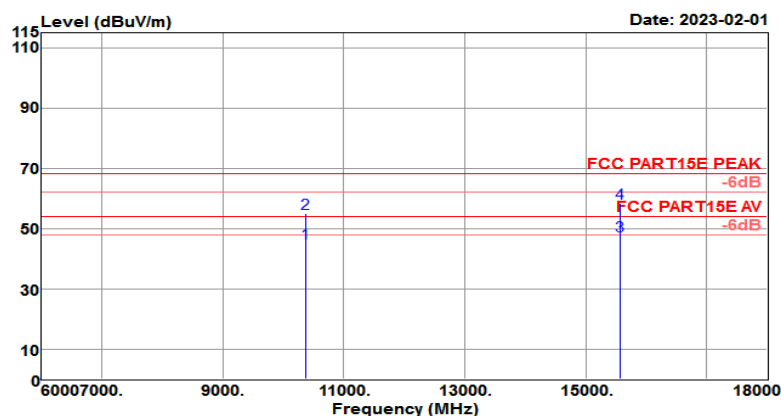
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11n HT40 CH38 (5190MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5190.000	115.43	31.35	7.51	58.86	95.43	68.20	27.23	Peak

Test Mode :	802.11n HT40 CH38 5190MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Vertical

Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11n HT40 CH38 (5190MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974

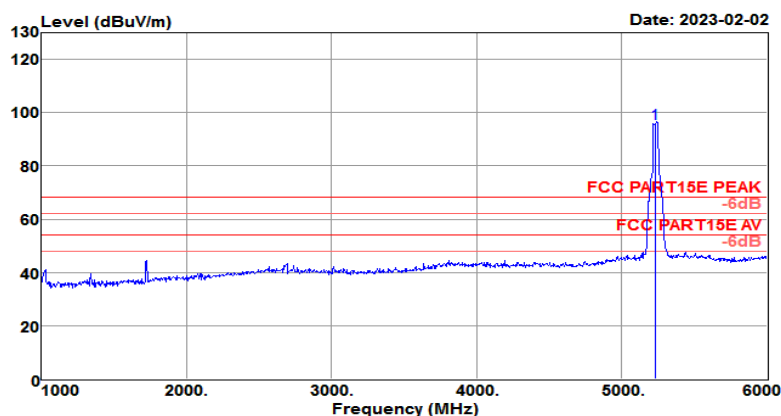


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
10380.000	26.32	39.23	13.25	33.81	44.99	54.00	-9.01	Average
10380.000	36.18	39.23	13.25	33.81	54.85	68.20	-13.35	Peak
15570.000	19.85	38.37	20.73	31.50	47.45	54.00	-6.55	Average
15570.000	30.72	38.37	20.73	31.50	58.32	68.20	-9.88	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11 n HT40 CH46 5230MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Horizontal

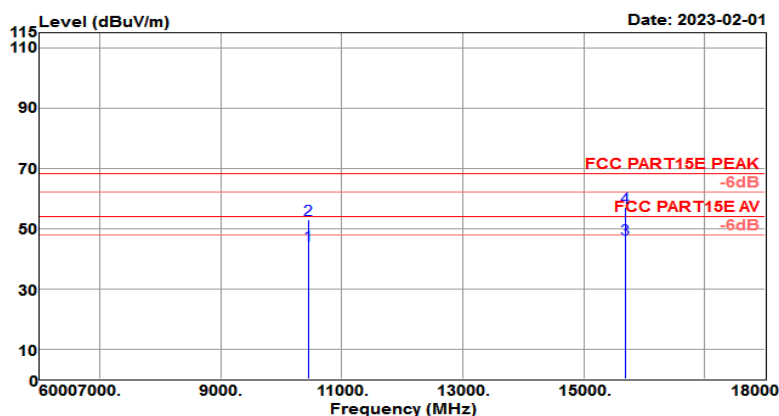
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11n HT40 CH46 (5230MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5230.000	115.82	31.38	7.70	58.85	96.05	68.20	27.85	Peak

Test Mode :	802.11 n HT40 CH46 5230MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Horizontal

Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11n HT40 CH46 (5230MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974

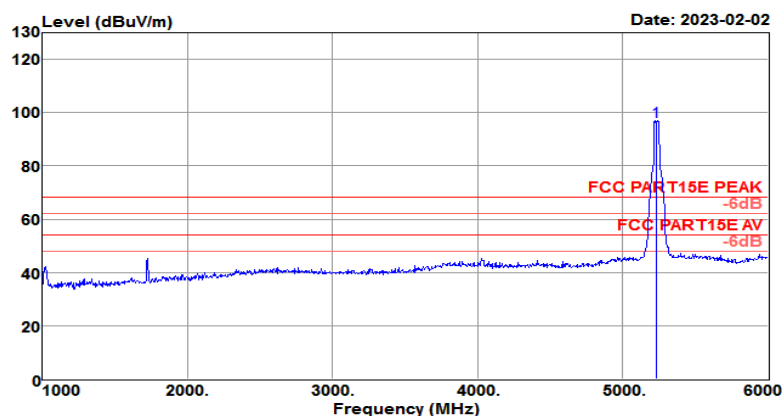


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
10460.000	25.62	39.34	13.31	33.70	44.57	54.00	-9.43	Average
10460.000	34.12	39.34	13.31	33.70	53.07	68.20	-15.13	Peak
15690.000	19.32	38.16	20.34	31.42	46.40	54.00	-7.60	Average
15690.000	29.87	38.16	20.34	31.42	56.95	68.20	-11.25	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11 n HT40 CH46 5230MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Vertical

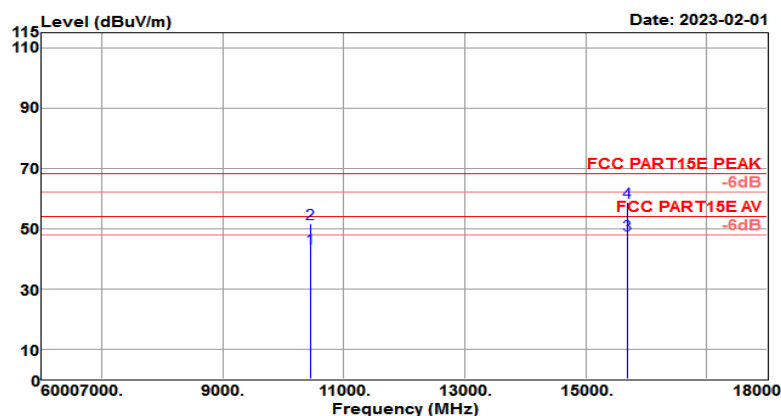
Test Site	: 3m Chamber	Temp/Humi	: 24℃/62%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11n HT40 CH46 (5230MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5230.000	116.30	31.38	7.70	58.85	96.53	68.20	28.33	Peak

Test Mode :	802.11 n HT40 CH46 5230MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Vertical

Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11n HT40 CH46 (5230MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974

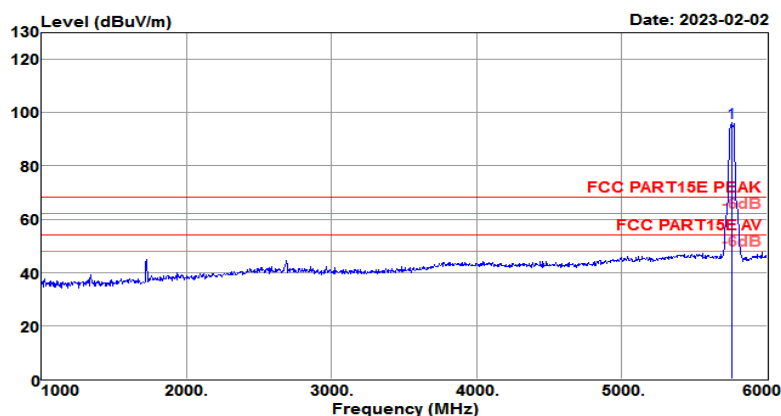


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
10460.000	24.52	39.34	13.31	33.70	43.47	54.00	-10.53	Average
10460.000	32.75	39.34	13.31	33.70	51.70	68.20	-16.50	Peak
15690.000	20.91	38.16	20.34	31.42	47.99	54.00	-6.01	Average
15690.000	31.54	38.16	20.34	31.42	58.62	68.20	-9.58	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11 n HT40 CH151 5755MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Horizontal

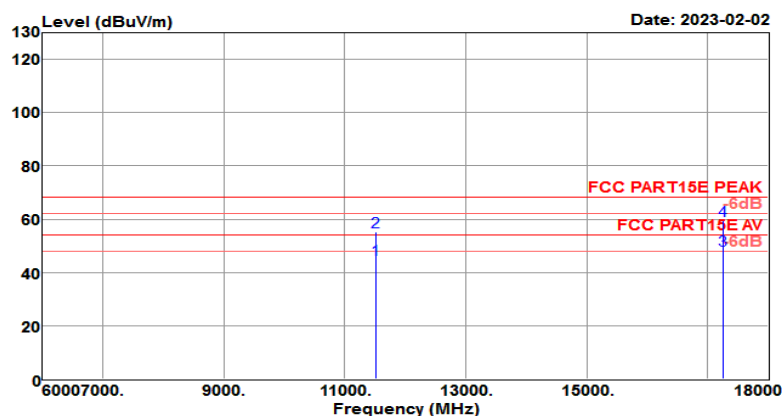
Test Site	: 3m Chamber	Temp/Humi	: 23℃/61%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11n HT40 CH151 (5755MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5755.000	115.85	32.01	7.06	58.75	96.17	68.20	27.97	Peak

Test Mode :	802.11 n HT40 CH151 5755MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Horizontal

Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11n HT40 CH151 (5755MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974

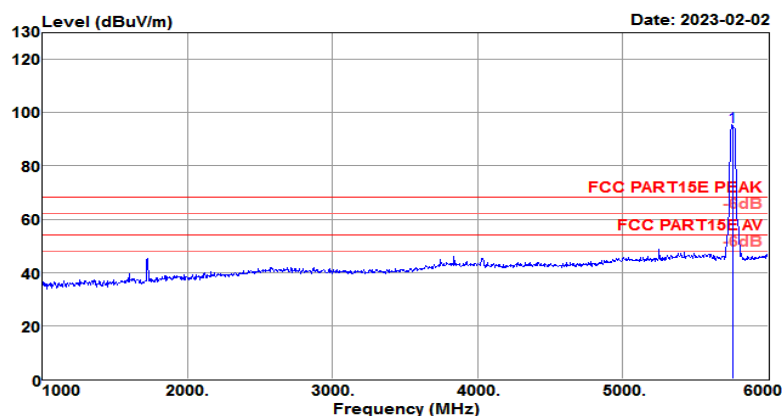


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
11510.000	23.76	39.68	14.53	32.90	45.07	54.00	-8.93	Average
11510.000	33.92	39.68	14.53	32.90	55.23	68.20	-12.97	Peak
17265.000	20.45	41.00	17.24	30.21	48.48	54.00	-5.52	Average
17265.000	31.28	41.00	17.24	30.21	59.31	68.20	-8.89	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11 n HT40 CH151 5755MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Vertical

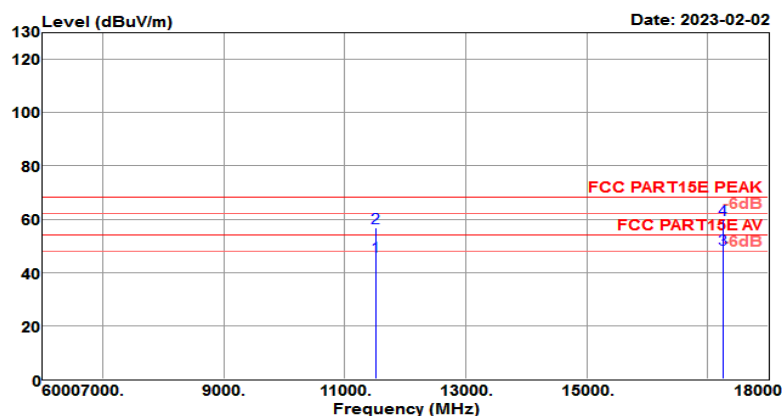
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11n HT40 CH151 (5755MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5755.000	114.23	32.01	7.06	58.75	94.55	68.20	26.35	Peak

Test Mode :	802.11 n HT40 CH151 5755MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Vertical

Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11n HT40 CH151 (5755MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974

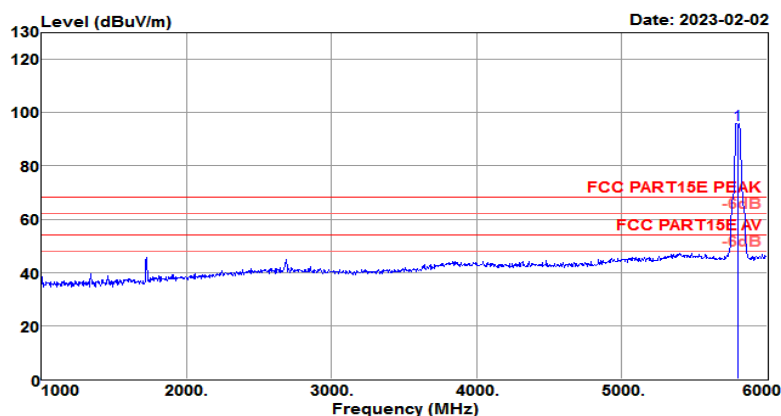


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
11510.000	24.73	39.68	14.53	32.90	46.04	54.00	-7.96	Average
11510.000	35.38	39.68	14.53	32.90	56.69	68.20	-11.51	Peak
17265.000	20.52	41.00	17.24	30.21	48.55	54.00	-5.45	Average
17265.000	31.73	41.00	17.24	30.21	59.76	68.20	-8.44	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11 n HT40 CH159 5795MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Horizontal

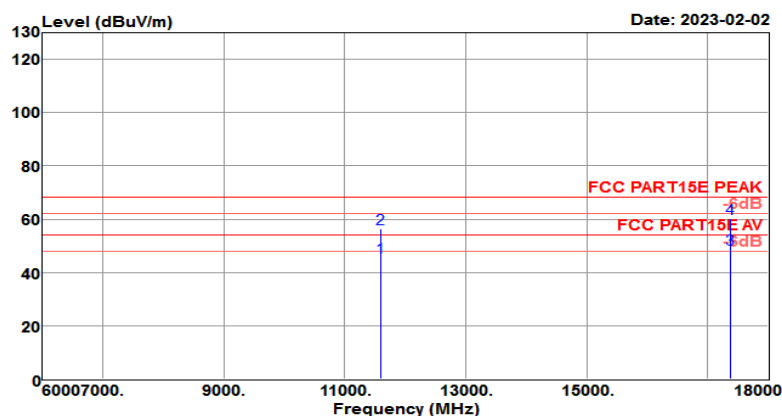
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11n HT40 CH159 (5795MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5795.000	115.29	32.07	6.74	58.74	95.36	68.20	27.16	Peak

Test Mode :	802.11 n HT40 CH159 5795MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Horizontal

Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11n HT40 CH159 (5795MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974

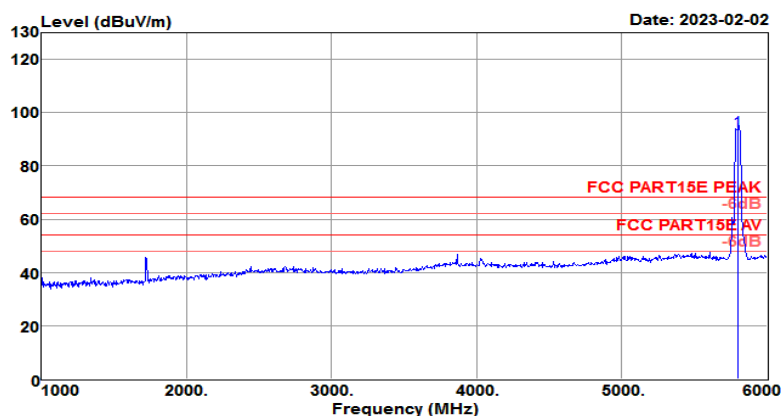


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
11590.000	24.25	39.52	14.73	32.88	45.62	54.00	-8.38	Average
11590.000	35.20	39.52	14.73	32.88	56.57	68.20	-11.63	Peak
17385.000	20.74	41.41	16.84	30.31	48.68	54.00	-5.32	Average
17385.000	32.13	41.41	16.84	30.31	60.07	68.20	-8.13	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11 n HT40 CH159 5795MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Vertical

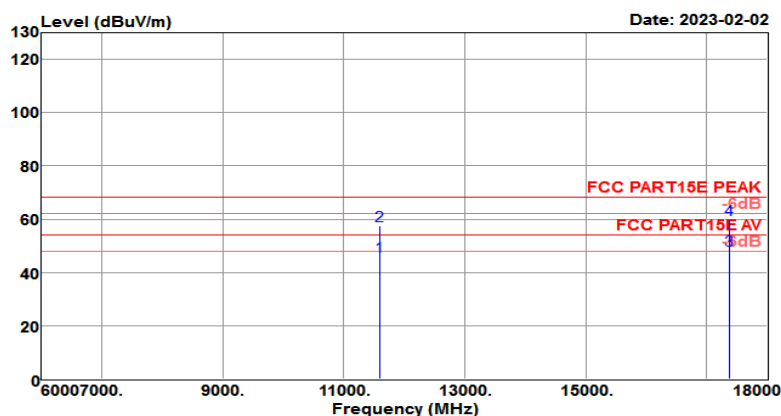
Test Site	: 3m Chamber	Temp/Humi	: 23℃/61%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11n HT40 CH159 (5795MHz)	Power rating:	DC 12V
EUT	: Edge computing gateway		
Model No.	: IG974		



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5795.000	113.23	32.07	6.74	58.74	93.30	68.20	25.10	Peak

Test Mode :	802.11 n HT40 CH159 5795MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Vertical

Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11n HT40 CH159 (5795MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974

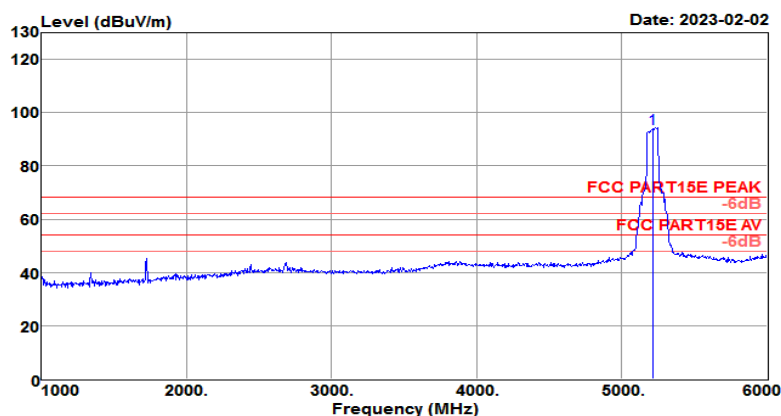


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
11590.000	24.81	39.52	14.73	32.88	46.18	54.00	-7.82	Average
11590.000	36.12	39.52	14.73	32.88	57.49	68.20	-10.71	Peak
17385.000	20.47	41.41	16.84	30.31	48.41	54.00	-5.59	Average
17385.000	31.81	41.41	16.84	30.31	59.75	68.20	-8.45	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11 ac VHT80 CH42 5210MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Horizontal

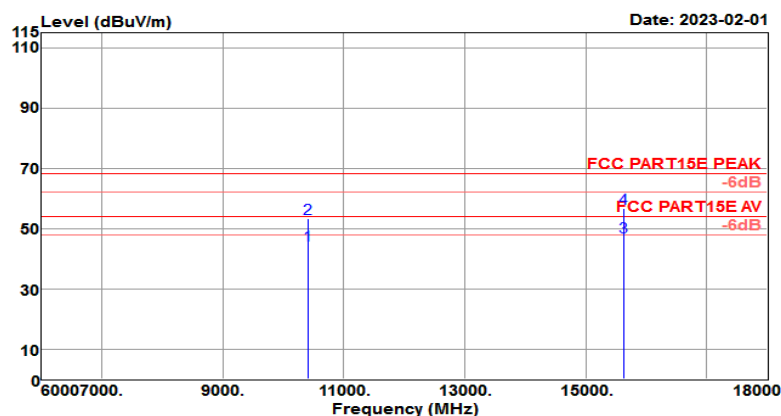
Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11ac VHT80 CH42(5210MHz) Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5210.000	114.00	31.37	7.56	58.86	94.07	68.20	25.87	Peak

Test Mode :	802.11 ac VHT80 CH42 5210MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Horizontal

Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11ac VHT80 CH42(5210MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974

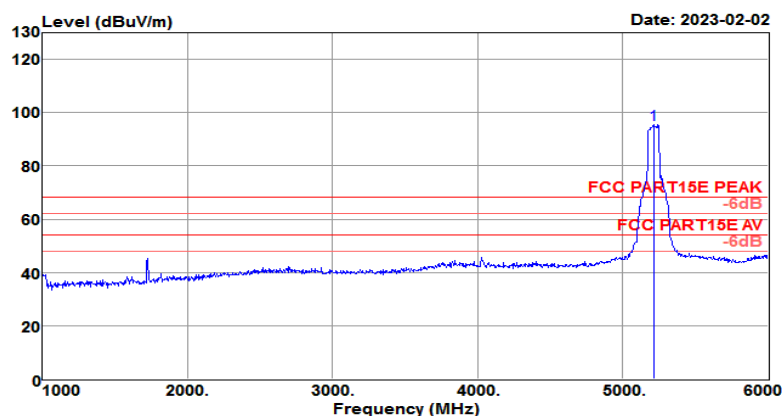


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
10420.000	25.74	39.29	13.28	33.75	44.56	54.00	-9.44	Average
10420.000	34.40	39.29	13.28	33.75	53.22	68.20	-14.98	Peak
15630.000	19.84	38.27	20.54	31.46	47.19	54.00	-6.81	Average
15630.000	29.36	38.27	20.54	31.46	56.71	68.20	-11.49	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11 ac VHT80 CH42 5210MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Vertical

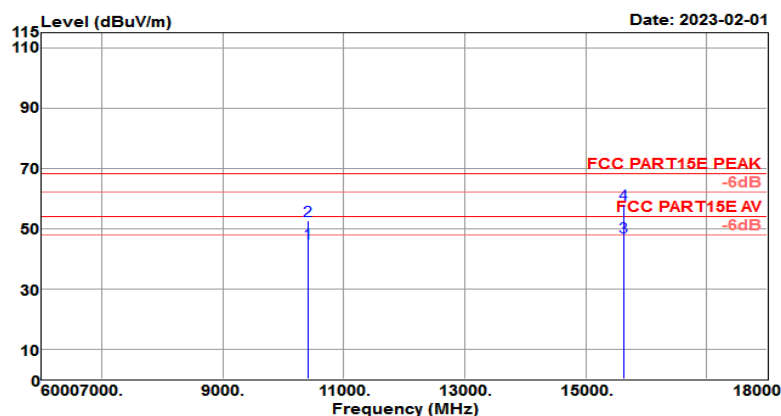
Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11ac VHT80 CH42(5210MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5210.000	115.25	31.37	7.56	58.86	95.32	68.20	27.12	Peak

Test Mode :	802.11 ac VHT80 CH42 5210MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Vertical

Test Site : 3m Chamber
 Temp/Humi : 24℃/62%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11ac VHT80 CH42(5210MHz)
 Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974

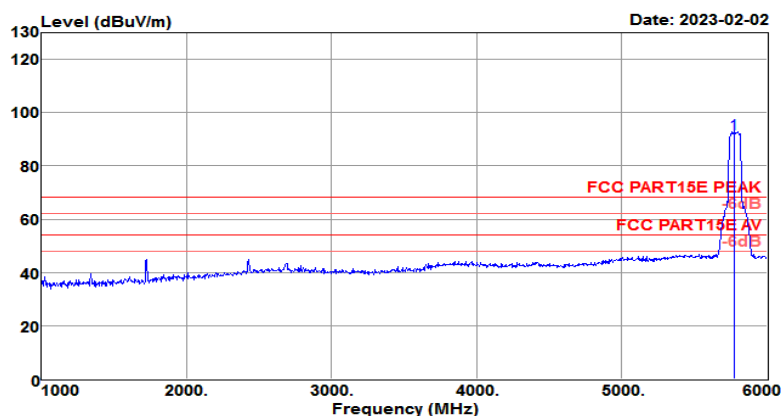


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
10420.000	26.42	39.29	13.28	33.75	45.24	54.00	-8.76	Average
10420.000	33.84	39.29	13.28	33.75	52.66	68.20	-15.54	Peak
15630.000	19.66	38.27	20.54	31.46	47.01	54.00	-6.99	Average
15630.000	30.81	38.27	20.54	31.46	58.16	68.20	-10.04	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11 ac VHT80 CH155 5775MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Horizontal

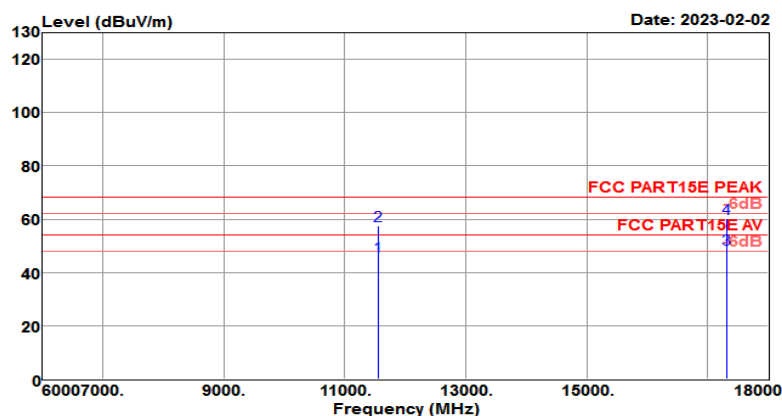
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11ac VHT80 CH155(5775MHz) Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5775.000	111.77	32.04	6.90	58.75	91.96	68.20	23.76	Peak

Test Mode :	802.11 ac VHT80 CH155 5775MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Horizontal

Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11ac VHT80 CH155(5775MHz) Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974

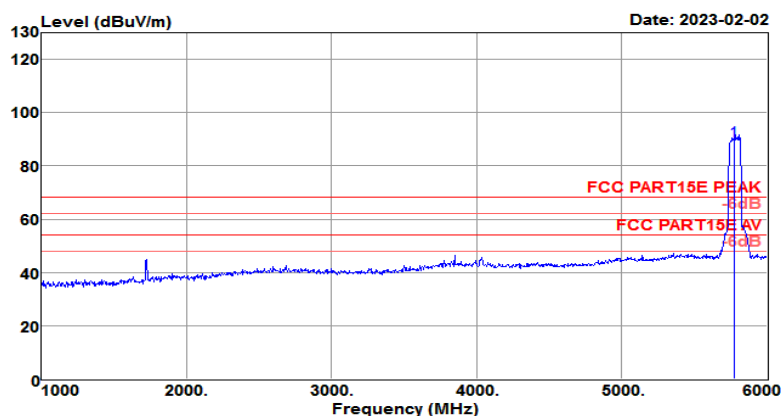


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamplifier factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
11550.000	24.74	39.60	14.63	32.89	46.08	54.00	-7.92	Average
11550.000	36.35	39.60	14.63	32.89	57.69	68.20	-10.51	Peak
17325.000	20.75	41.20	17.04	30.26	48.73	54.00	-5.27	Average
17325.000	32.14	41.20	17.04	30.26	60.12	68.20	-8.08	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

Test Mode :	802.11 ac VHT80 CH155 5775MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	1GHz~6GHz	Polarization :	Vertical

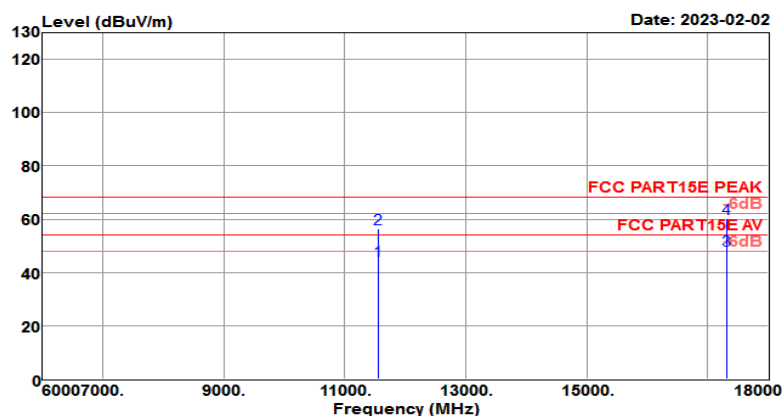
Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11ac VHT80 CH155(5775MHz) Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
5775.000	109.27	32.04	6.90	58.75	89.46	68.20	21.26	Peak

Test Mode :	802.11 ac VHT80 CH155 5775MHz	Temperature :	21~24℃
Test Engineer :	Jack Liu	Relative Humidity :	61~65%
Frequency Range	6GHz~18GHz	Polarization :	Vertical

Test Site : 3m Chamber
 Temp/Humi : 23℃/61%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11ac VHT80 CH155(5775MHz) Power rating: DC 12V
 EUT : Edge computing gateway
 Model No. : IG974

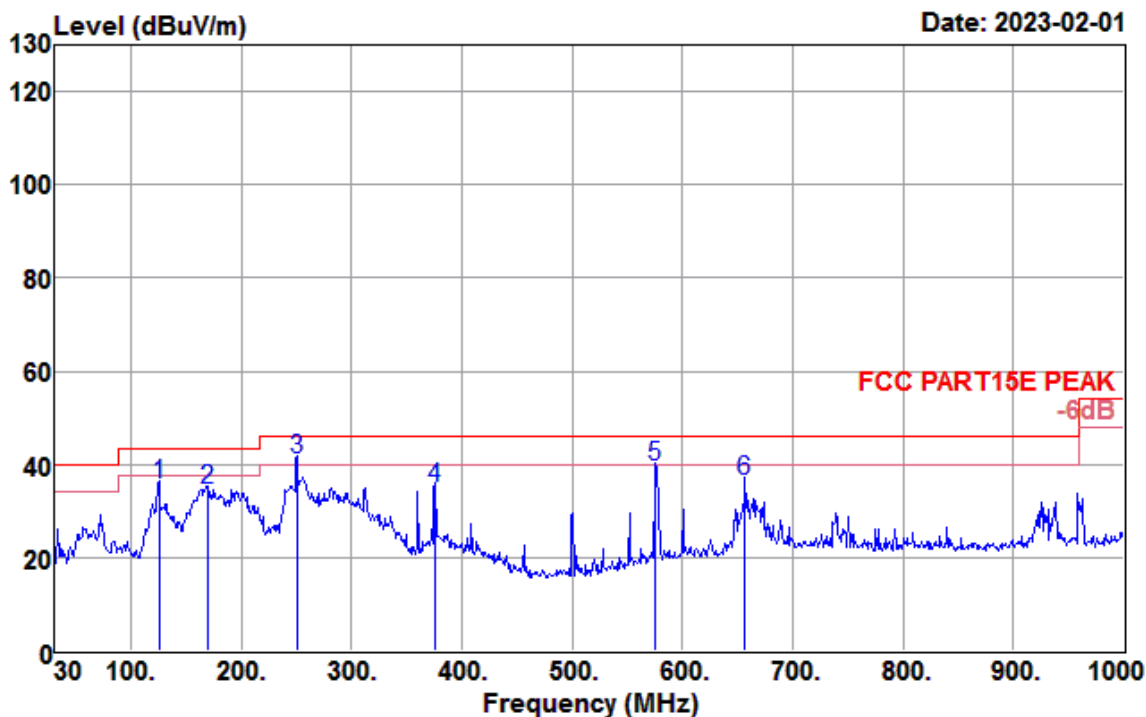


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
11550.000	23.15	39.60	14.63	32.89	44.49	54.00	-9.51	Average
11550.000	34.87	39.60	14.63	32.89	56.21	68.20	-11.99	Peak
17325.000	20.21	41.20	17.04	30.26	48.19	54.00	-5.81	Average
17325.000	32.28	41.20	17.04	30.26	60.26	68.20	-7.94	Peak

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 0dB below the specification limit, so it was not reported above 18GHz.

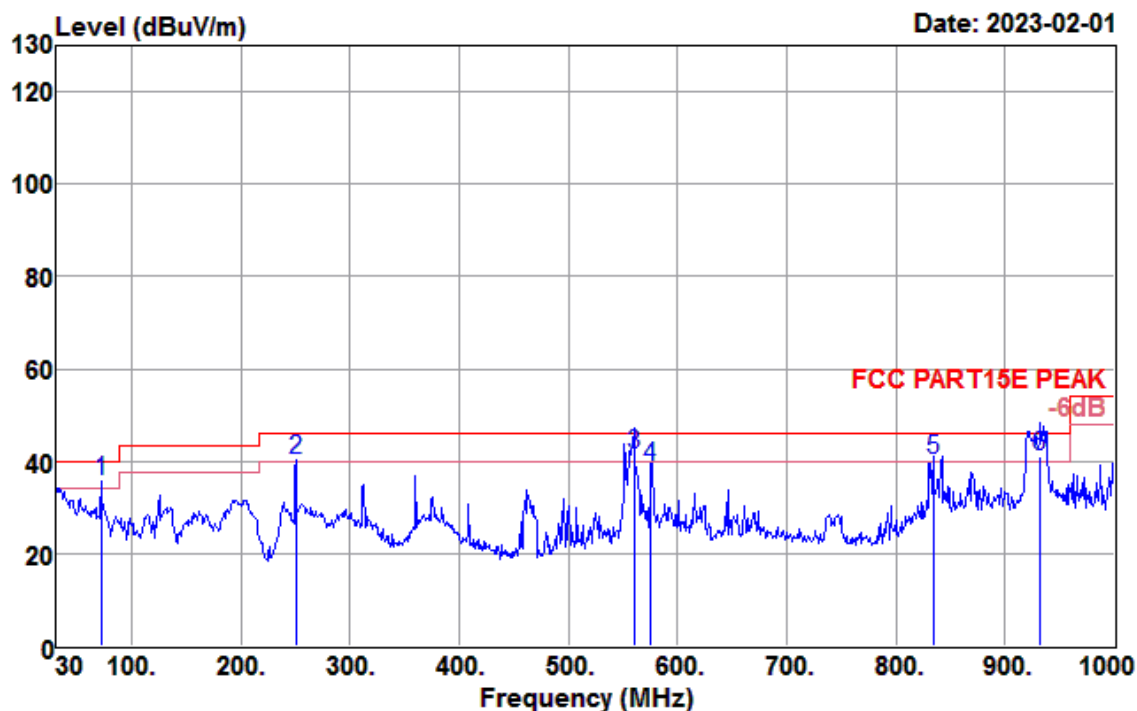
4.4.6 Test Result of Radiated Spurious Emission (30MHz ~ 1GHz)

Test Mode :	802.11a CH149 5745MHz	Temperature :	21~25℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequency Range	30MHz~1GHz	Polarization :	Horizontal



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
125.060	53.99	12.10	2.11	32.66	35.54	43.50	-7.96	QP
169.680	51.15	13.47	2.52	32.67	34.47	43.50	-9.03	QP
250.190	58.79	11.69	3.06	32.65	40.89	46.00	-5.11	QP
375.320	49.31	14.70	3.76	32.72	35.05	46.00	-10.95	QP
575.140	49.01	18.23	4.96	32.78	39.42	46.00	-6.58	QP
656.620	44.28	19.40	5.16	32.55	36.29	46.00	-9.71	QP

Test Mode :	802.11a CH149 5745MHz	Temperature :	21~25℃
Test Engineer :	Jack Liu	Relative Humidity :	62~65%
Frequency Range	30MHz~1GHz	Polarization :	Vertical



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
71.710	54.55	12.06	1.59	32.65	35.55	40.00	-4.45	QP
250.190	57.99	11.69	3.06	32.65	40.09	46.00	-5.91	QP
559.620	51.60	17.87	4.79	32.79	41.47	46.00	-4.53	QP
575.140	48.21	18.23	4.96	32.78	38.62	46.00	-7.38	QP
834.130	45.17	21.18	6.00	32.20	40.15	46.00	-5.85	QP
932.100	44.54	22.42	6.31	32.06	41.21	46.00	-4.79	QP

4.5 AC Conducted Emission Measurement

4.5.1 Limit of AC Conducted Emission

FCC §15.207

IC RSS-GEN 8.8

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency Range	Quasi Peak(dB μ V)	Average(dB μ V)
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50

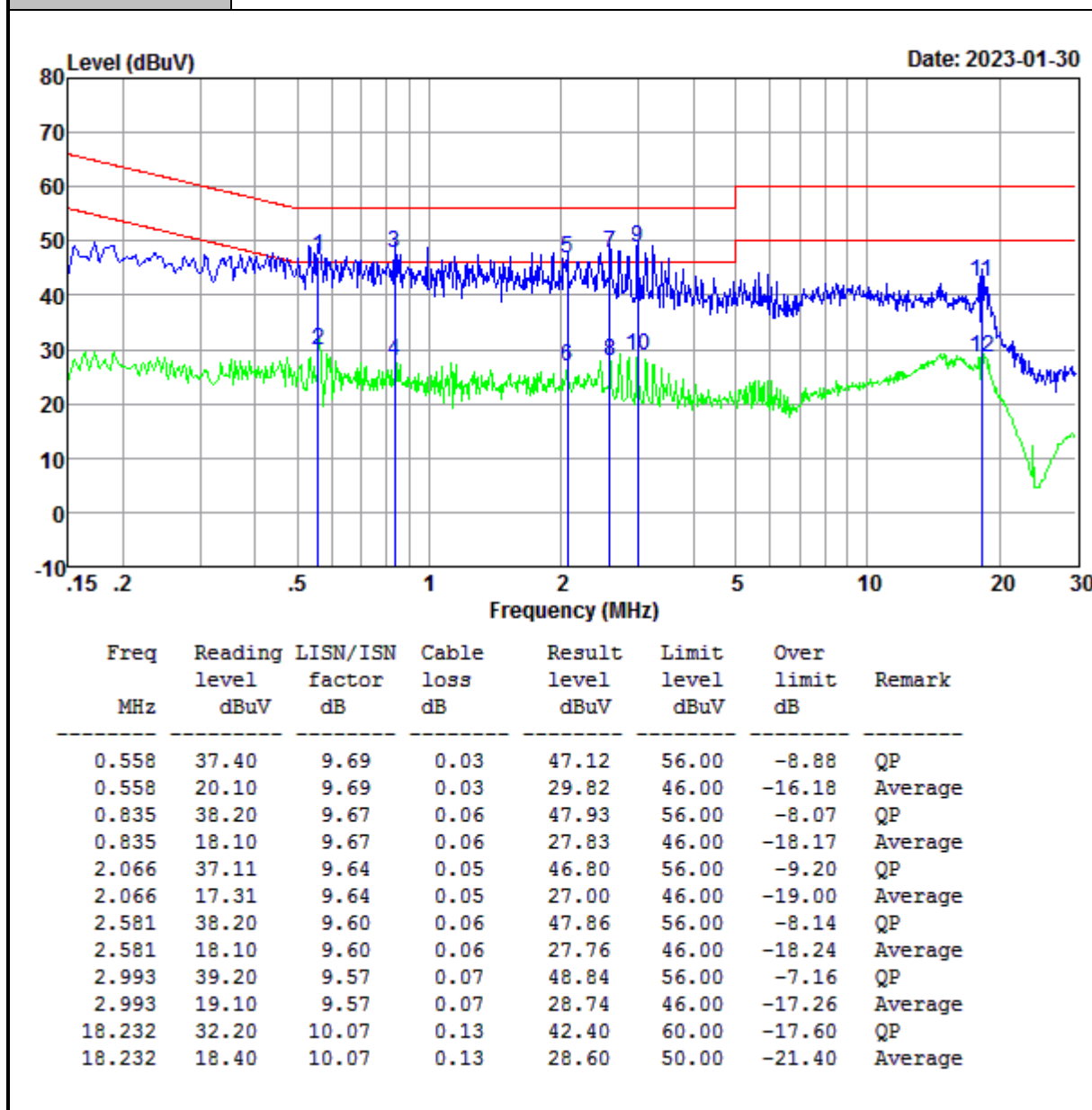
*Decreases with the logarithm of the frequency.

4.5.2 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

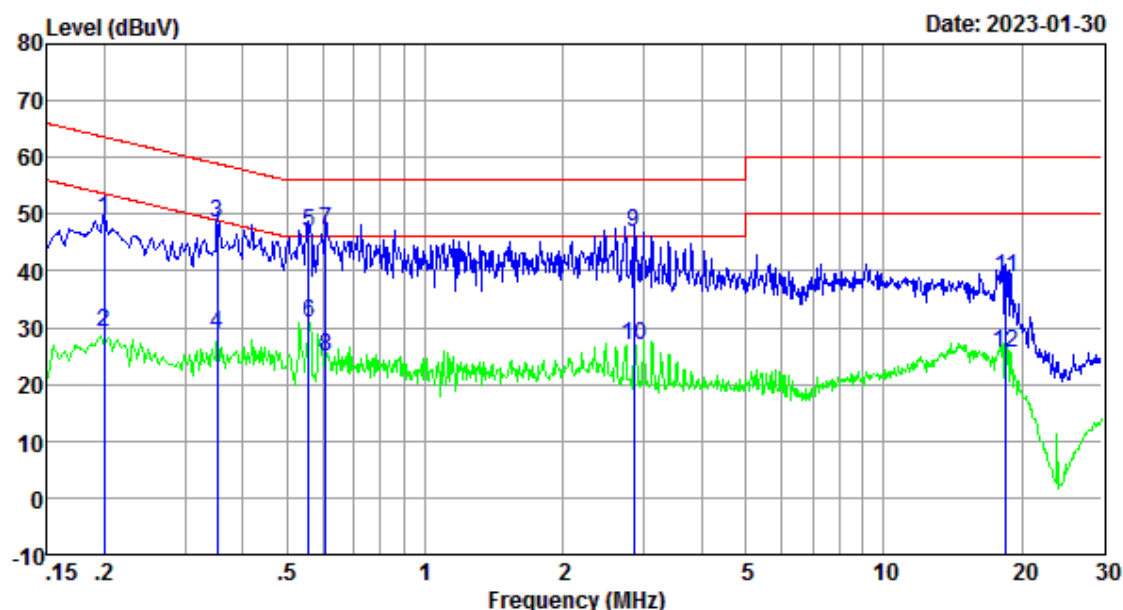
4.5.3 Test Result of AC Conducted Emission

Test Mode :	Mode 1	Temperature :	20°C
Test Engineer :	Jack Liu	Relative Humidity :	64%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	RLAN Linking + RJ45 ping + Adapter		



Result Level= Reading Level + LISN Factor + Cable Loss

Test Mode :	Mode 1	Temperature :	20°C
Test Engineer :	Jack Liu	Relative Humidity :	64%
Test Voltage :	120Vac / 60Hz	Phase :	NEUTRAL
Function Type :	RLAN Linking + RJ45 ping + Adapter		



Freq MHz	Reading level dBuV	LISN/ISN factor dB	Cable loss dB	Result level dBuV	Limit level dBuV	Over limit dB	Remark
0.200	39.20	9.79	0.03	49.02	63.62	-14.60	QP
0.200	19.30	9.79	0.03	29.12	53.62	-24.50	Average
0.352	38.70	9.66	0.03	48.39	58.91	-10.52	QP
0.352	19.10	9.66	0.03	28.79	48.91	-20.12	Average
0.558	37.20	9.66	0.03	46.89	56.00	-9.11	QP
0.558	21.10	9.66	0.03	30.79	46.00	-15.21	Average
0.608	37.40	9.66	0.03	47.09	56.00	-8.91	QP
0.608	15.10	9.66	0.03	24.79	46.00	-21.21	Average
2.854	37.10	9.66	0.06	46.82	56.00	-9.18	QP
2.854	17.20	9.66	0.06	26.92	46.00	-19.08	Average
18.524	28.40	10.28	0.13	38.81	60.00	-21.19	QP
18.524	15.10	10.28	0.13	25.51	50.00	-24.49	Average

Result Level= Reading Level + LISN Factor + Cable Loss

4.6 Frequency Stability Measurement

4.6.1 Limit of Frequency Stability

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

4.6.2 Test Procedures

1. To ensure emission at the band edge is maintained within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.
2. The EUT was operated at the maximum output power, and connected to the spectrum analyzer, which is set to maximum hold function and peak detector. The peak value of the power envelope was measured and noted. The upper and lower frequency points were respectively measured relatively 10dB lower than the measured peak value.
3. The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

NT: 25°C LT: -20°C HT: 70°C

NV: 12Vdc LV: 12Vdc HV: 48Vdc

4.6.3 Test Result of Frequency Stability

N/A

4.7 Automatically Discontinue Transmission

4.7.1 Limit of Automatically Discontinue Transmission

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

4.7.2 Test Result of Automatically Discontinue Transmission

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

4.8 Antenna Requirements

4.8.1 Standard Applicable

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

4.8.2 Antenna Connected Construction

An sucker antenna design is used.

4.8.3 Antenna Gain

The antenna peak gain of EUT is 0.21dBi for each antenna less than 6 dBi. For MIMO transmitting mode , the total peak gain is 3.22dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

No antenna other than that furnished by the responsible party shall be used with the device. This device use a permanently attached antennas. The use of a standard antenna jack or electrical connector is prohibited. This device is compliant with FCC Part 15.203.

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Due Date	Remark
Spectrum Analyzer	Keysight	N9010A	MY56070788	2022-12-26	2023-12-25	Conducted
Power Sensor	Keysight	U2021XA	MY56510025	2022-12-27	2022-12-26	Conducted
Power Sensor	Keysight	U2021XA	MY57030005	2022-12-27	2022-12-26	Conducted
Power Sensor	Keysight	U2021XA	MY56510018	2022-12-27	2022-12-26	Conducted
Power Sensor	Keysight	U2021XA	MY56480002	2022-12-27	2022-12-26	Conducted
Thermal Chamber	Howkin	UHL-34	19111801	2022-12-23	2023-12-22	Conducted
Base Station	R&S	CMW 270	101231	2022-12-26	2023-12-25	Conducted
Signal Generator (Interferer)	Keysight	N5182B	MY56200384	2022-12-26	2023-12-25	Conducted
Signal Generator (Blocker)	Keysight	N5171B	MY56200661	2022-12-26	2023-12-25	Conducted

Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV 30	101433	2022-12-26	2023-12-25	Radiation
Amplifier	Sonoma	310	363917	2022-12-26	2023-12-25	Radiation
Amplifier	Schwarzbeck	BBV 9718	327	2022-12-27	2023-12-26	Radiation
Amplifier	Narda	TTA1840-35-HG	2034380	2023-01-06	2023-01-05	Radiation
Amplifier	Narda	TTA1840-35-HG	2034380	2023-01-04	2024-01-03	Radiation
Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-051	2020-02-14	2023-02-13	Radiation
Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-051	2023-02-12	2026-02-11	Radiation
Broadband Antenna	Schwarzbeck	VULB 9168	9168-757	2020-09-27	2023-09-26	Radiation
Horn Antenna	Schwarzbeck	BBHA 9120 D	1677	2020-02-14	2023-02-13	Radiation
Horn Antenna	Schwarzbeck	BBHA 9120 D	1677	2023-02-12	2026-02-11	Radiation
Horn Antenna	COM-POWER	AH-1840	101117	2021-06-05	2024-06-04	Radiation
Test Software	Auidx	E3	6.111221a	N/A	N/A	Radiation
Filter	Micro-Tronics	BRM 50702	G266	N/A	N/A	Radiation

Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Due Date	Remark
LISN	R&S	ENV216	102125	2021-12-29	2022-12-28	Conducted
LISN	R&S	ENV432	101327	2021-12-29	2022-12-28	Conducted
EMI Test Receiver	R&S	ESR3	102143	2021-12-30	2022-12-29	Conducted
EMI Test Software	Audix	E3	N/A	N/A	N/A	Conducted

N/A: No Calibration Required

6 Uncertainty of Evaluation

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	9kHz~30MHz	3.29dB
Radiated emission	30MHz ~ 1GHz	5.40dB
	1GHz ~ 18GHz	5.03dB
	18GHz ~ 40GHz	5.21dB

MEASUREMENT	UNCERTAINTY
Occupied Channel Bandwidth	±57.212Hz
RF output power, conducted	±1.04dB
Power density, conducted	±2.31dB
Emissions, conducted	±2.18dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Appendix A1: Emission Bandwidth

Test Result

TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	19.200	5170.400	5189.600	---	---
	Ant2	5180	19.000	5170.480	5189.480	---	---
	Ant1	5220	19.080	5210.440	5229.520	---	---
	Ant2	5220	19.160	5210.440	5229.600	---	---
	Ant1	5240	19.160	5230.360	5249.520	---	---
	Ant2	5240	19.160	5230.480	5249.640	---	---
	Ant1	5745	19.320	5735.400	5754.720	---	---
	Ant2	5745	19.160	5735.440	5754.600	---	---
	Ant1	5785	18.800	5775.680	5794.480	---	---
	Ant2	5785	19.200	5775.400	5794.600	---	---
	Ant1	5825	19.160	5815.440	5834.600	---	---
	Ant2	5825	19.120	5815.440	5834.560	---	---
11N20MIMO	Ant1	5180	20.040	5169.960	5190.000	---	---
	Ant2	5180	19.760	5170.040	5189.800	---	---
	Ant1	5220	20.080	5209.880	5229.960	---	---
	Ant2	5220	19.920	5210.040	5229.960	---	---
	Ant1	5240	20.000	5229.960	5249.960	---	---
	Ant2	5240	19.800	5230.080	5249.880	---	---
	Ant1	5745	20.160	5734.920	5755.080	---	---
	Ant2	5745	20.160	5734.840	5755.000	---	---
	Ant1	5785	20.080	5774.880	5794.960	---	---
	Ant2	5785	20.080	5774.880	5794.960	---	---
	Ant1	5825	20.040	5814.880	5834.920	---	---
	Ant2	5825	19.920	5814.960	5834.880	---	---
11N40MIMO	Ant1	5190	39.120	5170.560	5209.680	---	---
	Ant2	5190	39.200	5170.320	5209.520	---	---
	Ant1	5230	39.040	5210.560	5249.600	---	---
	Ant2	5230	39.200	5210.400	5249.600	---	---
	Ant1	5755	39.280	5735.480	5774.760	---	---
	Ant2	5755	38.880	5735.560	5774.440	---	---
	Ant1	5795	39.120	5775.640	5814.760	---	---

	Ant2	5795	39.120	5775.400	5814.520	---	---
11AC20MIMO	Ant1	5180	20.240	5169.880	5190.120	---	---
	Ant2	5180	20.200	5169.800	5190.000	---	---
	Ant1	5220	20.240	5209.840	5230.080	---	---
	Ant2	5220	20.080	5209.920	5230.000	---	---
	Ant1	5240	20.200	5229.840	5250.040	---	---
	Ant2	5240	20.040	5229.920	5249.960	---	---
	Ant1	5745	20.240	5734.880	5755.120	---	---
	Ant2	5745	20.160	5734.840	5755.000	---	---
	Ant1	5785	20.240	5774.880	5795.120	---	---
	Ant2	5785	20.120	5774.840	5794.960	---	---
	Ant1	5825	20.200	5814.880	5835.080	---	---
	Ant2	5825	20.040	5814.880	5834.920	---	---
11AC40MIMO	Ant1	5190	39.120	5170.480	5209.600	---	---
	Ant2	5190	39.120	5170.320	5209.440	---	---
	Ant1	5230	39.040	5210.480	5249.520	---	---
	Ant2	5230	38.880	5210.480	5249.360	---	---
	Ant1	5755	39.040	5735.640	5774.680	---	---
	Ant2	5755	38.960	5735.480	5774.440	---	---
	Ant1	5795	39.040	5775.640	5814.680	---	---
	Ant2	5795	39.040	5775.400	5814.440	---	---
11AC80MIMO	Ant1	5210	82.720	5168.560	5251.280	---	---
	Ant2	5210	83.360	5168.080	5251.440	---	---
	Ant1	5775	82.880	5733.560	5816.440	---	---
	Ant2	5775	82.080	5734.040	5816.120	---	---