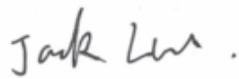
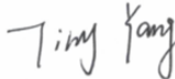


RF Test Report

For

Beijing Inhand Networks Technology Co., Ltd.

Test Standards:	Part 15C Subpart C §15.247 <u>RSS 247 Issue 2</u>
Product Name:	<u>Edge Computer</u>
Tested Model:	<u>EC900</u>
Additional Model No.:	<u>FCC:EC9x2, EC9x4, The letter 'x' stands for the numbers 0-9</u> <u>IC:EC902,EC904,EC922,EC924,EC952,EC954</u>
Brand Name:	
FCC ID:	<u>2AANYEC900</u>
IC:	<u>11594A-EC900</u>
Classification	<u>(DTS) Digital Transmission System</u>
Report No.:	<u>EC2206011RF01</u>
Tested Date:	<u>2022-06-05 to 2022-08-15</u>
Issued Date:	<u>2022-08-15</u>
Prepared By:	 _____ Jack Liu / Engineer
Approved By:	 _____ Tiny Yang / RF Manager

Hunan Ecloud Testing Technology Co., Ltd.
Building A1, Changsha E Center, No. 18 Xiangtai Avenue, Liuyang Economic and
Technological Development Zone, Hunan, P.R.C
Tel.: +86-731-89634887 Fax.: +86-731-89634887
www.hn-ecloud.com

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	/	2022-08-15	Valid	Original Report

TABLE OF CONTENTS

1	TEST LABORATORY	5
1.1	Test facility	5
2	GENERAL DESCRIPTION.....	6
2.1	Applicant	6
2.2	Manufacturer	6
2.3	General Description Of EUT	6
2.4	Modification of EUT	7
2.5	Applicable Standards	7
3	TEST CONFIGURATION OF EQUIPMENT UNDER TEST.....	8
3.1	Descriptions of Test Mode	8
3.2	Test Mode	9
3.3	Support Equipment	10
3.4	Test Setup	10
3.5	Measurement Results Explanation Example	13
4	TEST RESULT	14
4.1	DTS and Occupied Channel Bandwidth Measurement	14
4.2	Maximum Conducted Output Power Measurement	15
4.3	Maximum Power Spectral Density Measurement	16
4.4	Band Edges and Spurious Emission Measurement	17
4.5	Radiated Band Edges and Spurious Emission Measurement	18
4.6	AC Conducted Emission Measurement	102
4.7	Antenna Requirements	105
5	LIST OF MEASURING EQUIPMENT	106
6	UNCERTAINTY OF EVALUATION.....	108
	Appendix A: DTS Bandwidth.....	109
	Appendix B: Occupied Channel Bandwidth	122
	Appendix C: Maximum conducted output power	135
	Appendix D: Duty Cycle.....	149
	Appendix E: Maximum power spectral density.....	152
	Appendix F: Band edge measurements	166
	Appendix G: Conducted Spurious Emission	175
	Appendix H: Setup Photographs	214

Summary Of Test Result

FCC Rule	IC Rule	Description	Limit	Result	Remark
15.247(a)(2)	RSS-247 5.2(a)	6dB Bandwidth	$\geq 0.5\text{MHz}$	Pass	-
-	RSS-Gen 6.7	99% Bandwidth	-	Pass	-
15.247(b)(3)	RSS-247 A5.4(d)	Peak Output Power	$\leq 30\text{dBm}$	Pass	-
15.247(e)	RSS-247 5.2(b)	Power Spectral Density	$\leq 8\text{dBm}/3\text{kHz}$	Pass	-
15.247(d)	RSS-247 5.5	Conducted Band Edges and Spurious Emission	$\leq 30\text{dBc}$	Pass	-
15.247(d)	RSS-247 5.5	Radiated Band Edges and Spurious Emission	15.209(a) & 15.247(d)	Pass	Under limit 2.75 dB at 2483.5 MHz
15.207	RSS-GEN 8.8	AC Conducted Emission	15.207(a)	Pass	Under limit 10.75 dB at 1.117 MHz
15.203 & 15.247(b)	RSS-GEN 6.8	Antenna Requirement	15.203 & 15.247(b) 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 Computer
Model No.	EC900
Brand Name	inhand
Additional No.	FCC:EC9x2, EC9x4, The letter 'x' stands for the numbers 0-9 IC: EC902,EC904,EC922,EC924,EC952,EC954
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.
FCC ID	2AANYEC900
IC	11594A-EC900
Power Supply	12-48Vdc
Modulation Technology	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
Modulation Type	802.11b : DSSS 802.11g/n : OFDM
Operating Frequency	2412-2462MHz
Number Of Channel	11
Max. Output Power	802.11b : 16.97 dBm (0.0498 W) 802.11g : 19.10 dBm (0.0813 W) 802.11n HT20 : 18.97 dBm (0.0789 W) 802.11n HT40 : 19.35 dBm (0.0861 W)
Max. E.I.R.P.	22.35 dBm (0.1718 W)
Antenna Type	Suction cup Antenna with 3dBi gain
HW Version	V1.0
SW Version	V1.0
Sample no.	2206011R-1/1, 2206011R-B-1/1
Sample Received Date	2022-6-05

I/O Ports	Refer to user's manual
-----------	------------------------

NOTE:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
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.
4. Antenna listed as below

Cable No.	Description	Connector	Length	Supplied by
1	WIFI Antenna	RP-SMA-J	20cm	Applicant
2	WIFI Antenna	RP-SMA-J	20cm	Applicant
3	GPS Antenna	SMA-J	2.0m	Applicant
4	3&4G Antenna	SMA-J	2.0m	Applicant
5	3&4G Antenna	SMA-J	2.0m	Applicant

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 C §15.247
- ANSI C63.10-2013
- KDB 558074 D01 15.247 Meas Guidance v05r02
- 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 Descriptions of Test Mode

11 channels are provided for 802.11b, 802.11g and 802.11n(HT20):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
1	2412 MHz	7	2442 MHz
2	2417 MHz	8	2447 MHz
3	2422 MHz	9	2452 MHz
4	2427 MHz	10	2457 MHz
5	2432 MHz	11	2462 MHz
6	2437 MHz		

7 channels are provided for 802.11n(HT40):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
		7	2442 MHz
		8	2447 MHz
3	2422 MHz	9	2452 MHz
4	2427 MHz		
5	2432 MHz		
6	2437 MHz		

The transmitter has a maximum peak conducted output power as follows:

Frequency Range(MHz)	Mode	Rate	Output Power(dBm)
2412~2462	802.11b	1Mbps	16.97
2412~2462	802.11g	6Mbps	19.10
2412~2462	802.11n HT20	MCS0	18.97
2422~2452	802.11n HT40	MCS0	19.35

- a. Radiated emission and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

3.2 Test Mode

3.2.1 Antenna Port Conducted Measurement

Summary table of Test Cases				
Test Item	Modulation			
	802.11 b	802.11 g	802.11n HT20	802.11n HT40
Conducted Test Cases	Mode 1: CH01	Mode 1: CH01	Mode 1: CH01	Mode 1: CH03
	Mode 2: CH06	Mode 2: CH06	Mode 2: CH06	Mode 2: CH06
	Mode 3: CH011	Mode 3: CH011	Mode 3: CH011	Mode 3: CH09

3.2.2 Radiated Emission Test (Below 1GHz)

Radiated Test Cases	802.11 g
	Mode 3: CH011

- 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. 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

3.2.3 Radiated Emission Test (Above 1GHz)

Test Item	Modulation			
	802.11 b	802.11 g	802.11n HT20	802.11n HT40
Radiated Test Cases	Mode 1: CH01	Mode 1: CH01	Mode 1: CH01	Mode 1: CH03
	Mode 2: CH06	Mode 2: CH06	Mode 2: CH06	Mode 2: CH06
	Mode 3: CH11	Mode 3: CH11	Mode 3: CH11	Mode 3: CH09

- Note : 1. The fundamental of the EUT was investigated in three orthogonal orientations X, Y and Z 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.

3.2.4 Power Line Conducted Emission Test:

AC Conducted Emission	Mode 1 : WLAN Linking + RJ45 ping + display + keyboard+ mouse + GPS + Adapter
-----------------------------	---

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 cable1.2 m
3.	Adapter	KUANEN	KT10W120100EUD	FCC SDoC	N/A	N/A
4.	Logitech	Wired Mouse	M-U0026	FCC SDoC	N/A	N/A
5.	SHIPADOO	Wired Keyboard	S-1087	FCC SDoC	N/A	N/A
6.	DELL	Monitor	60NVNB2	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

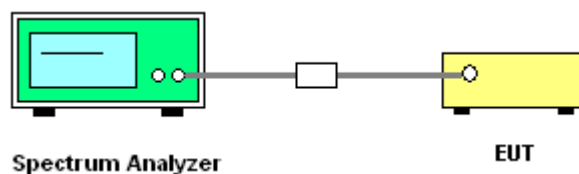
```
C:\Windows\system32\cmd.exe - ssh edge@192.168.3.100
HIMCS11 HIMCS12 HIMCS13 HIMCS14 HIMCS15 HIMCS16 HIMCS17 HIMCS18 HIMCS19 HIMCS20 HIMCS21
HIMCS22 HIMCS23 HIMCS24 HIMCS25 HIMCS26 HIMCS27 HIMCS28 HIMCS29 HIMCS30 HIMCS31 HIMCS32
UHT1MCS1 UHT1MCS2 UHT1MCS3 UHT1MCS4 UHT1MCS5 UHT1MCS6 UHT1MCS7 UHT1MCS8 UHT1MCS9 UHT1MCS10
UHT1MCS11 UHT1MCS12 UHT1MCS13 UHT1MCS14 UHT1MCS15 UHT1MCS16 UHT1MCS17 UHT1MCS18 UHT1MCS19
UHT1MCS20 UHT1MCS21 UHT1MCS22 UHT1MCS23 UHT1MCS24 UHT1MCS25 UHT1MCS26 UHT1MCS27 UHT1MCS28
UHT1MCS29 UHT1MCS30 UHT1MCS31 UHT1MCS32
[TxMode: 1: 1: PACKET Tx 2:CONTINUOUS Tx 3:OFDM Single Tone Tx
[PacketLength] <Option>: count of packet data length, default 1500
[Packet Count] <Option>: count the number of packet to tx , set 0 for CONTINUOUS Packet TX ,default 0
[Packet Interval] <Option>: 1~5535 us,default 100
[Packet Pattern] <Option>: 00~ff(hex) ,default random hex

##### RX mode I #####
1. mp_start
2. mp_bandwidth 40M=[Num]
3. mp_channel [Num]
5. mp_ant_rx [Path]
6. mp_ant_tx [Path]
7. mp_antenna [PAID]
8. mp_query
9. mp_reset_state

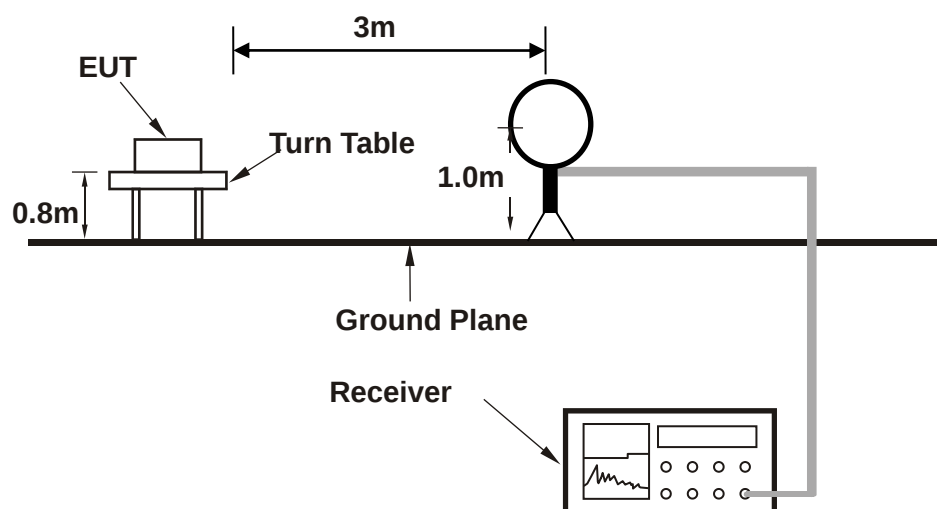
##### Read/Write RF reg I #####
1. rfr [RF Path] [Reg_Addr] return hex value, # RF Path= 0/1/2/3 , Reg Addr hex = 0xXX.
2. rfw [RF Path] [Reg_Addr] [value] # RF Path= 0/1/2/3 , Reg Addr hex = 0xXX , Value Hex = 0x000000 .
3. readrf [RF Path] [Reg_Addr] return decimal value, # RF Path= 0/1/2/3 , Reg Addr hex = 0xXX .
4. writelf [RF Path] [Reg_Addr] [Value] , # RF Path= 0/1/2/3 , Reg Addr hex = 0xXX , Value Hex = 0x000000 .

##### Read/Write mac/bb reg I #####
1. read [data width] [Reg_Addr] return hex value, # Data Width= 1/2/4 , Reg Addr hex = 0xXX .
2. write [data width] [Reg_Addr] [value] # Data Width= 1/2/4 , Reg Addr hex = 0xXX , Value Hex = 0x000000 .
Interface does't accept private ioctl...parameter Error
root@edge-computer:/home/edge# rtwpriv wlan0 mp_channel 9
root@edge-computer:/home/edge# rtwpriv wlan0 mp_channel 9
root@edge-computer:/home/edge# rtwpriv wlan0 mp_bandwidth 40M=1,shortGI=0
wlan0 mp_bandwidth:Change BW 1 to BW 1
root@edge-computer:/home/edge# rtwpriv wlan0 mp_ant_tx ab
wlan0 mp_ant:switch Tx antenna to ab
root@edge-computer:/home/edge# rtwpriv wlan0 mp_txpower patha=75,pathb=85
wlan0 mp_txpower:Set power level path_A=75 path_B=85 path_C=0 path_D=0
root@edge-computer:/home/edge# rtwpriv wlan0 mp_rate 128
wlan0 mp_rate:Set data rate to 128 index 12
root@edge-computer:/home/edge# rtwpriv wlan0 mp_ctx count=x100,pkt
wlan0 mp_ctx:
Start continuous DA=ffffffffffff len=1500 count=0
root@edge-computer:/home/edge#
```

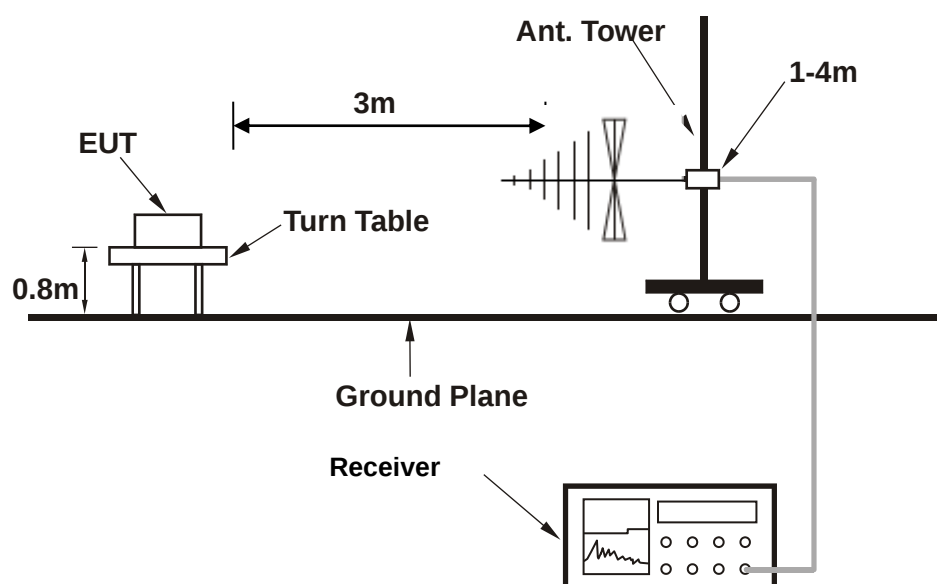
Setup diagram for Conducted Test



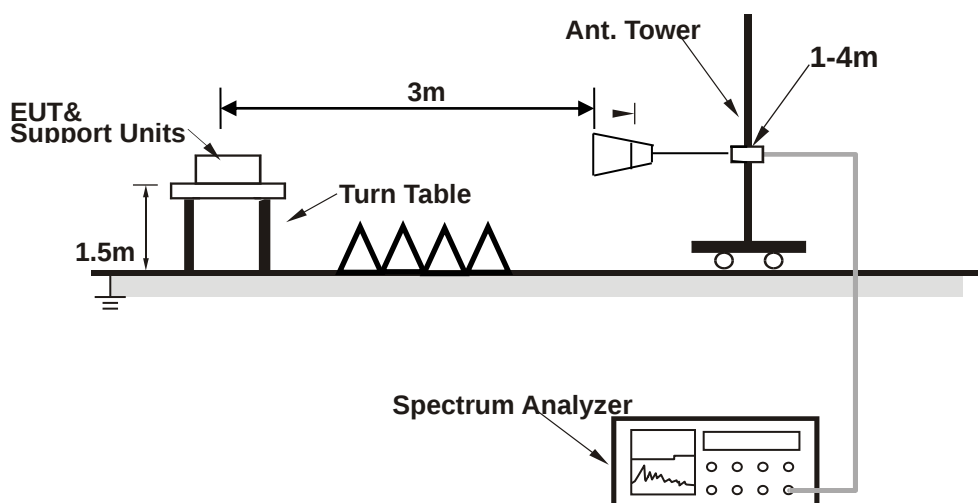
Setup diagram for Radiation(9KHz~30MHz) Test



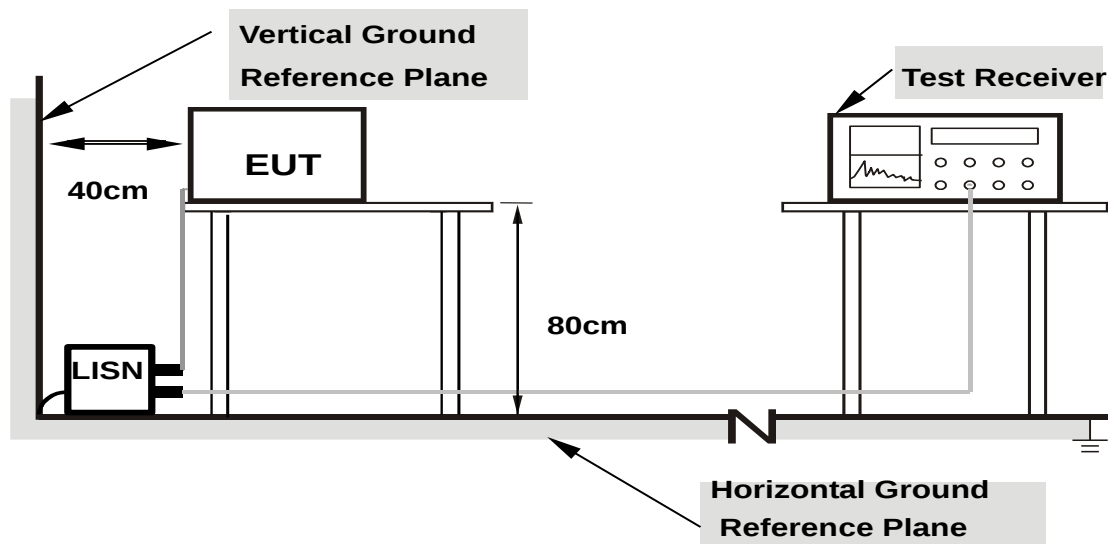
Setup diagram for Radiation(Below 1G) Test



Setup diagram for Radiation(Above1G) Test



Setup diagram for AC Conducted Emission Test



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

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 DTS and Occupied Channel Bandwidth Measurement

4.1.1 Limit of 6dB Bandwidth

FCC §15.247 (a) (2)

IC RSS-247 5.2(a)

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

4.1.2 Test Procedures

1. The testing follows FCC KDB Publication No. 558074 DTS D01 Meas. Guidance v05r02.
2. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
3. Turn on the EUT and connect it to measurement instrument.
4. Set to the maximum power setting and enable Transmitting the EUT transmit continuously
5. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement. The 6 dB bandwidth must be greater than 500 kHz.
6. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 510kHz and set the Video bandwidth (VBW) = 2000kHz.

4.1.3 Test Result of 6dB Bandwidth

Refer to Appendix A of this test report.

4.1.4 Test Result of 99% Bandwidth

Refer to Appendix B of this test report.

4.2 Maximum Conducted Output Power Measurement

4.2.1 Limit of Output Power

FCC §15.247 (b)(3)

For systems using digital modulation in the 2400-2483.5 MHz bands: 30dBm.

IC RSS-247 A5.4(d)

For DTSs employing digital modulation techniques operating in the bands 902-928MHz and 2400-2483.5MHz, the maximum peak conducted output power shall not exceed 1 W.

The e.i.r.p. shall not exceed 4 W, except as provided in section 5.4(e)

4.2.2 Test Procedures

1. The testing follows the Measurement Procedure of ANSI C63.10-2013 section 11.9.2.2.4 Measurement using a spectrum analyzer.
2. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
3. Turn on the EUT and connect it to spectrum analyzer.
4. Set to the maximum power setting and enable Transmitting the EUT transmit continuously
5. Measure the duty cycle, x , of the transmitter output signal as described in below:
 - a. Set the center frequency of the instrument to the center frequency of the transmission.
 - b. Set RBW to the largest available Transmitting value.
 - c. Set detector = peak
6. Set span to at least $1.5 \times \text{OBW}$. Set RBW=510KHz, VBW=2MHz, Number of points in sweep $\geq 2/3 \times$ span, Sweep time = auto. Detector = RMS
7. Allow the sweep to "free run". Trace average 100 traces in RMS mode
8. Compute power by integrating the spectrum across the OBW of the signal using the instrument's Channel power measurement function with band limits set equal to the OBW band edges.
9. Add $10 \log (1/x)$, where x is the duty cycle. The duty cycle factor has been compensated to the "offset" of the spectrum analyser.

4.2.3 Test Result of Peak Output Power

Refer to Appendix C of this test report.

4.2.4 Test Result of Duty Cycle

Refer to Appendix D of this test report.

4.3 Maximum Power Spectral Density Measurement

4.3.1 Limits of Power Spectral Density

FCC§15.247(e)

IC RSS-247 5.2(b)

The peak power spectral density shall not be greater than 8dBm in any 3kHz band at any time interval of continuous transmission.

4.3.2 Test Procedure

1. The testing follows Measurement Procedure 8.4 DTS maximum power spectral density level in the fundamental emission of ANSI C63.10-2013 section 11.10.5
2. Turn on the EUT and connect it to measurement instrument.
3. Measure the duty cycle, x , of the transmitter output signal as described in below:
 - a. Set the center frequency of the instrument to the center frequency of the transmission.
 - b. Set RBW to the largest available Transmitting value.
 - c. Set detector = peak
4. Set span to at least $1.5 \times \text{OBW}$. Set RBW= 30 KHz, VBW=100 KHz, Number of points in sweep $\geq 2/3 \times \text{span}$, Sweep time = auto.
5. Detector = power averaging (rms), Sweep time = auto couple, Trace mode = averaging (rms) mode over a minimum of 100 traces. Use the peak marker function to determine the maximum power level.
6. Add $10 \log(1/x)$, where x is the duty cycle.
7. Measure and record the results in the test report.
8. The Measured power density (dBm)/ 100kHz is a reference level and used as 30dBc down limit line for Conducted Band Edges and Conducted Spurious Emission.
9. Add $10 \log(1/x)$, where x is the duty cycle. The duty cycle factor has been compensated to the 'offset' of the spectrum analyser.

4.3.3 Test Result of Power Spectral Density

Refer to Appendix E of this test report.

4.4 Band Edges and Spurious Emission Measurement

4.4.1 Limit of Conducted Band Edges and Spurious Emission

FCC §15.247 (d)

IC RSS-247 5.5

Maximum conducted (average) output power was used to determine compliance, then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 30 dBc).

4.4.2 Test Procedures

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Turn on the EUT and connect it to measurement instrument.
3. Set RBW = 100 kHz, VBW=300 kHz, Peak Detector. Unwanted Emissions measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz when maximum peak conducted output power procedure is used. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB per 15.247(d).
4. Measure and record the results in the test report.
5. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

4.4.3 Test Result of Conducted Band Edges

Refer to Appendix F of this test report.

4.4.4 Test Result of Conducted Spurious Emission

Refer to Appendix G of this test report.

4.5 Radiated Band Edges and Spurious Emission Measurement

4.5.1 Limit of Radiated Band Edges and Spurious Emission

FCC §15.247 (d)

IC RSS-247 5.5

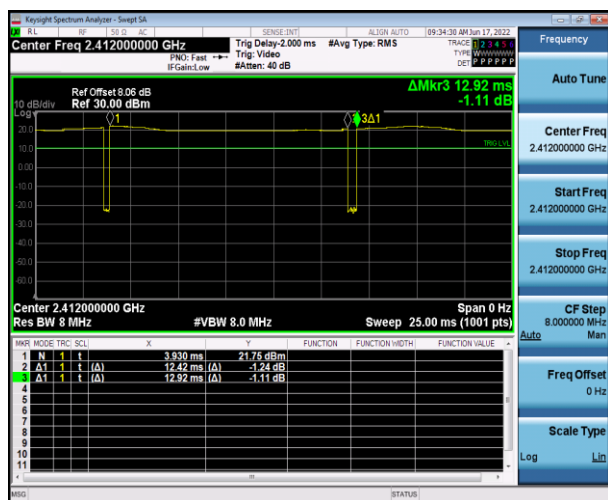
In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 30 dB below the highest emission level within the authorized band. In addition, radiated emissions which fall in the restricted bands must also comply with the FCC section 15.209 limits as below.

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

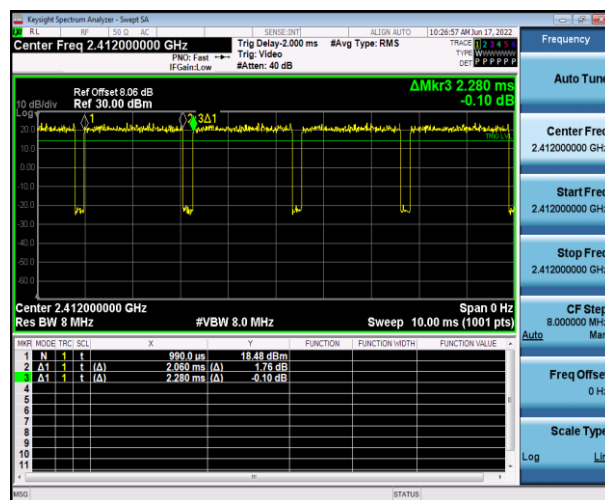
4.5.2 Test Procedures

- 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.
- The measurement distance is 3 meter.
- For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
- Set to the maximum power setting and enable the EUT transmit continuously.
- Use the following spectrum analyzer settings:
 - Span shall wide enough to fully capture the emission being measured;
 - Set RBW=100 kHz for $f < 1$ GHz, RBW=1MHz for $f > 1$ GHz ; VBW $\geq 3 \times$ RBW; Sweep = auto; Detector function = peak; Trace = max hold for peak
 - For average measurement:
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.

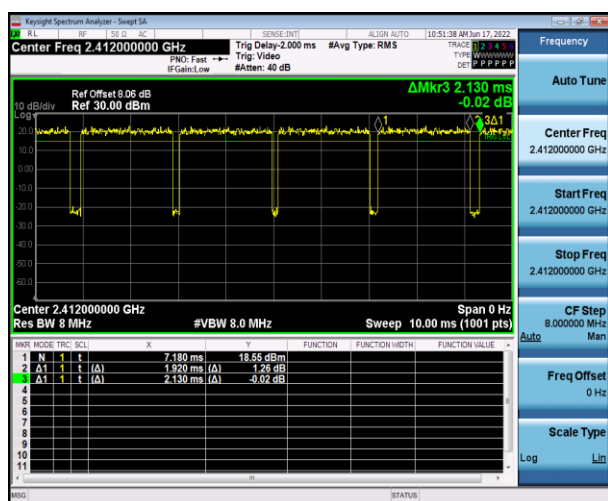
Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
802.11b	96.13	12.42	0.08	100Hz
802.11g	90.35	2.06	0.49	1KHz
802.11n HT20	90.14	1.92	0.52	1KHz
802.11n HT40	83.93	0.94	1.06	3KHz



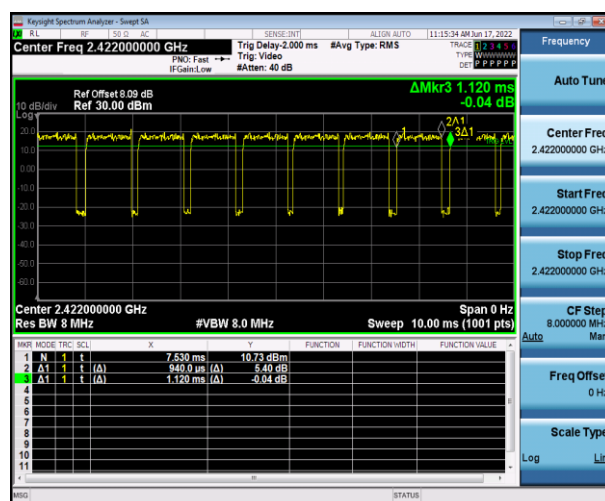
802.11b



802.11g



802.11n HT20



802.11n HT40

- Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
- Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

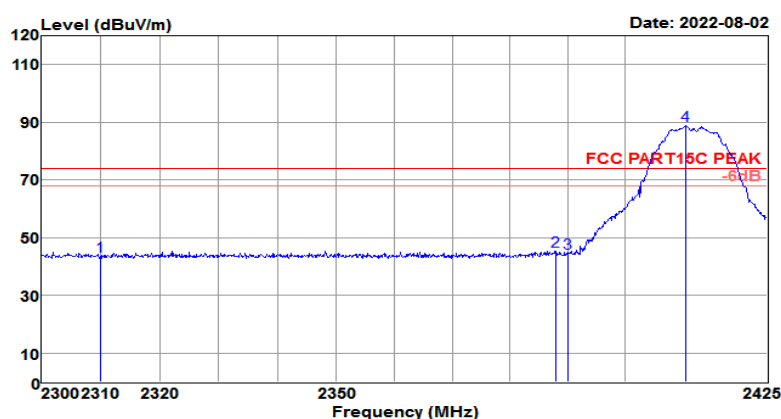
4.5.3 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)

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.

4.5.4 Test Result of Radiated Spurious at Band Edges

Test Mode :	802.11b CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.3GHz~2.425GHz	Polarization :	Horizontal

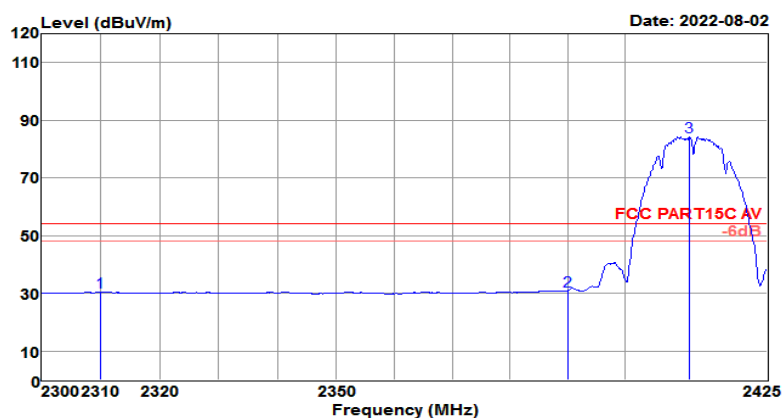
Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11b CH01(2412MHz)	Power rating	: DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



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
2310.000	47.85	27.38	4.08	35.71	43.60	74.00	-30.40	Peak
2388.000	49.53	27.55	4.16	35.89	45.35	74.00	-28.65	Peak
2390.000	48.67	27.56	4.16	35.90	44.49	74.00	-29.51	Peak
2410.750	92.90	27.60	4.17	35.94	88.73	74.00	14.73	Peak

Test Mode :	802.11b CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.3GHz~2.425GHz	Polarization :	Horizontal

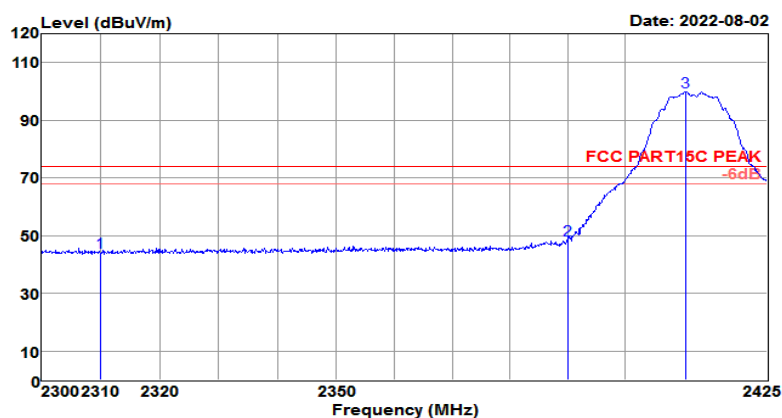
Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11b CH01(2412MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



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
2310.000	34.60	27.38	4.08	35.71	30.35	54.00	-23.65	Average
2390.000	35.14	27.56	4.16	35.90	30.96	54.00	-23.04	Average
2411.250	88.46	27.60	4.17	35.95	84.28	54.00	30.28	Average

Test Mode :	802.11b CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.3GHz~2.425GHz	Polarization :	Vertical

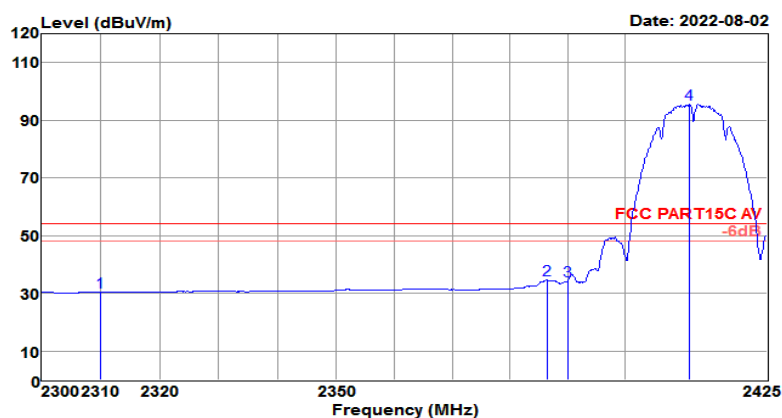
Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11b CH01(2412MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



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
2310.000	48.53	27.38	4.08	35.71	44.28	74.00	-29.72	Peak
2390.000	52.77	27.56	4.16	35.90	48.59	74.00	-25.41	Peak
2410.625	104.12	27.60	4.17	35.94	99.95	74.00	25.95	Peak

Test Mode :	802.11b CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.3GHz~2.425GHz	Polarization :	Vertical

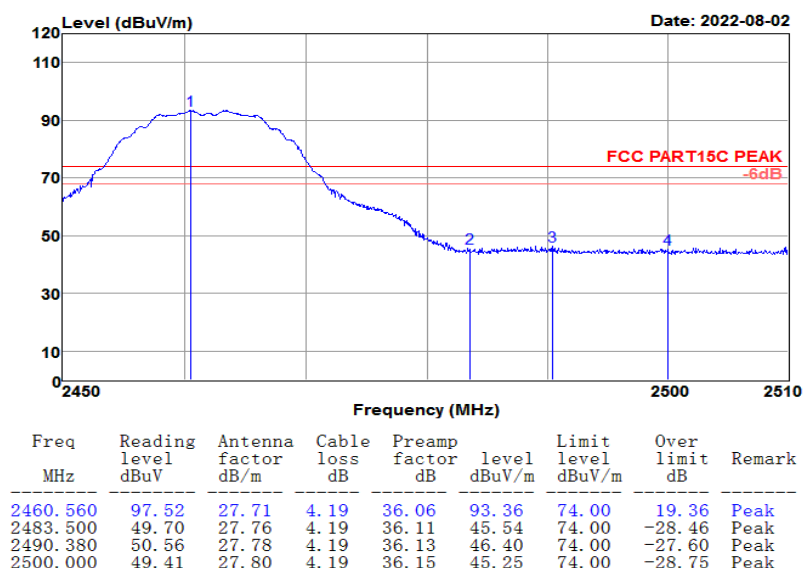
Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11b CH01(2412MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



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
2310.000	34.79	27.38	4.08	35.71	30.54	54.00	-23.46	Average
2386.375	38.73	27.55	4.16	35.89	34.55	54.00	-19.45	Average
2390.000	38.43	27.56	4.16	35.90	34.25	54.00	-19.75	Average
2411.250	99.75	27.60	4.17	35.95	95.57	54.00	41.57	Average

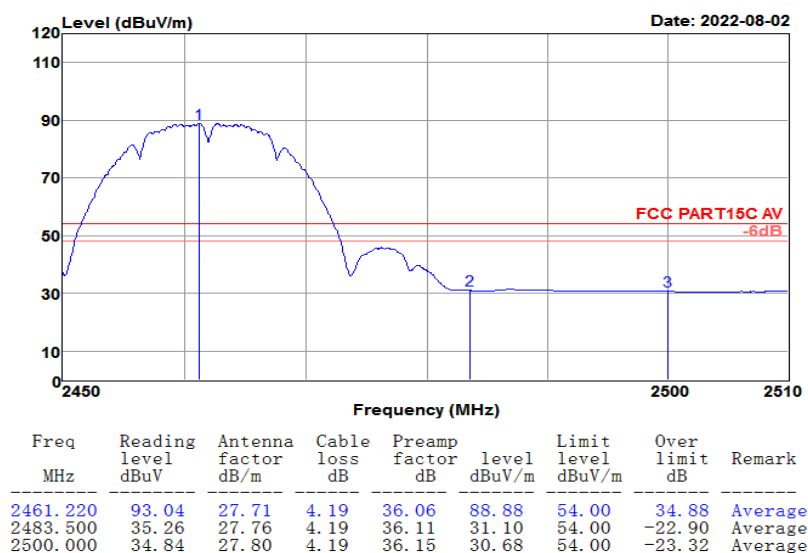
Test Mode :	802.11b CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.45GHz~2.51GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11b CH11(2462MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



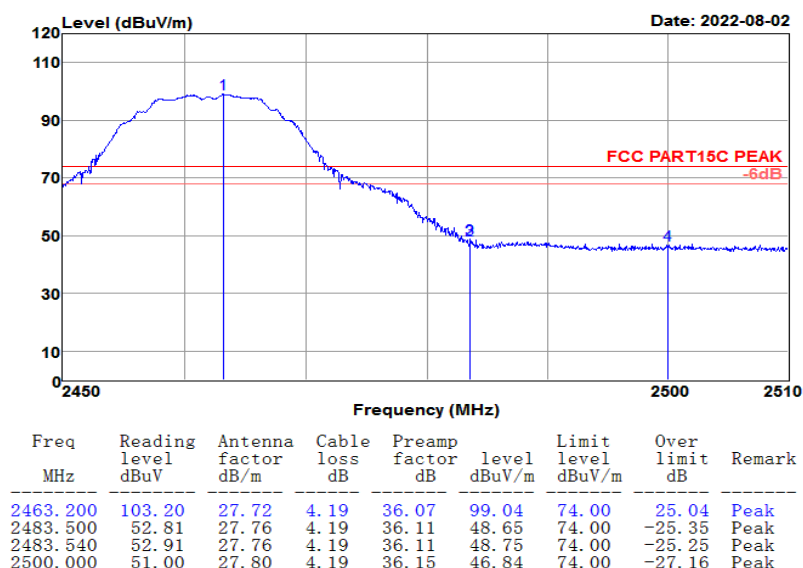
Test Mode :	802.11b CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.45GHz~2.51GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11b CH11(2462MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



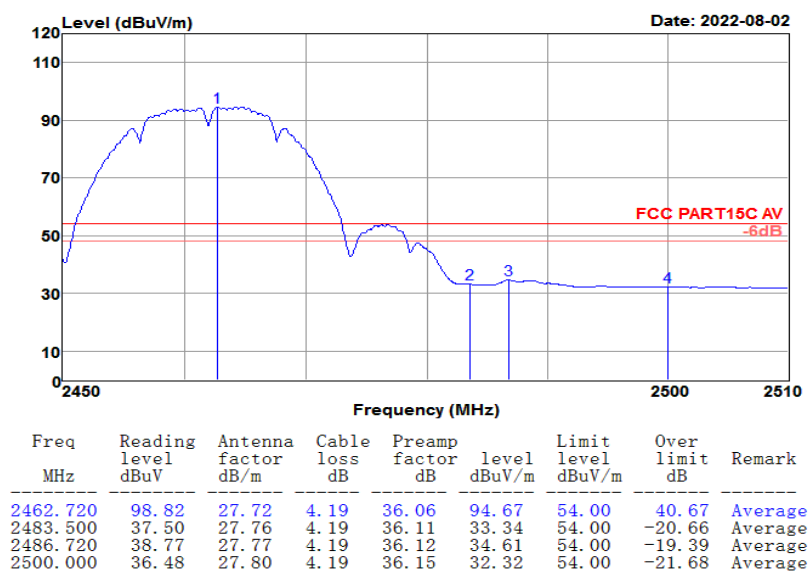
Test Mode :	802.11b CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.45GHz~2.51GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11b CH11(2462MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



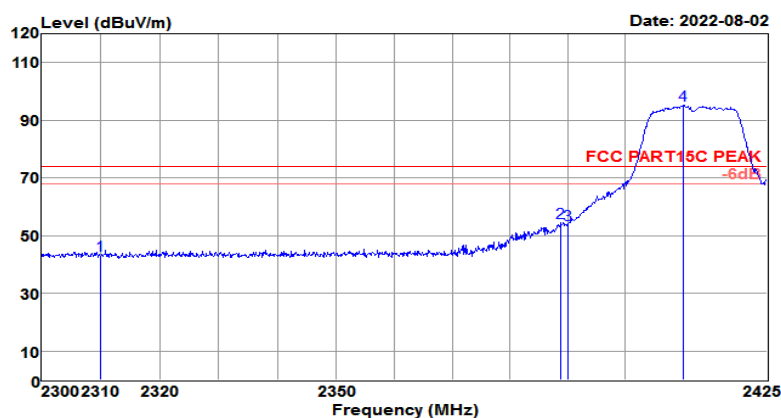
Test Mode :	802.11b CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.45GHz~2.51GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11b CH11(2462MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



Test Mode :	802.11g CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.3GHz~2.425GHz	Polarization :	Horizontal

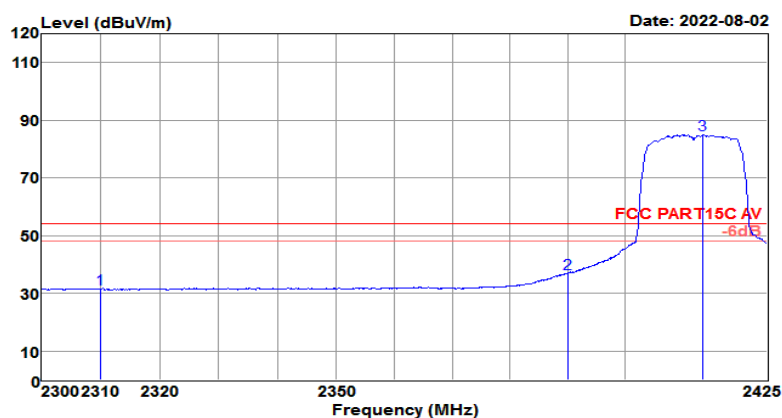
Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11g CH01(2412MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



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
2310.000	47.61	27.38	4.08	35.71	43.36	74.00	-30.64	Peak
2388.875	58.85	27.56	4.16	35.89	54.68	74.00	-19.32	Peak
2390.000	57.87	27.56	4.16	35.90	53.69	74.00	-20.31	Peak
2410.125	99.43	27.60	4.17	35.94	95.26	74.00	21.26	Peak

Test Mode :	802.11g CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.3GHz~2.425GHz	Polarization :	Horizontal

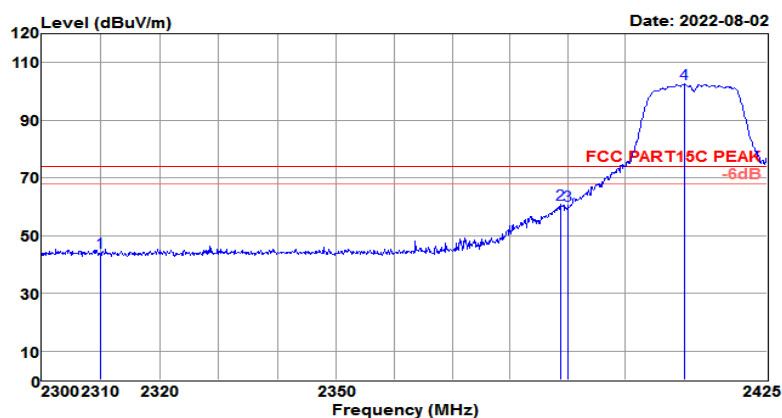
Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11g CH01(2412MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



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
2310.000	35.83	27.38	4.08	35.71	31.58	54.00	-22.42	Average
2390.000	41.14	27.56	4.16	35.90	36.96	54.00	-17.04	Average
2412.750	89.16	27.61	4.17	35.95	84.99	54.00	30.99	Average

Test Mode :	802.11g CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.3GHz~2.425GHz	Polarization :	Vertical

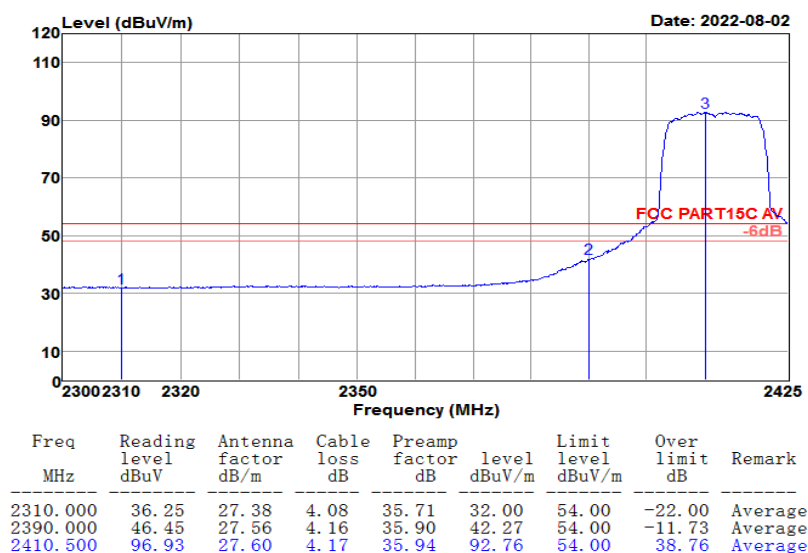
Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11g CH01(2412MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



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
2310.000	48.58	27.38	4.08	35.71	44.33	74.00	-29.67	Peak
2388.750	65.15	27.56	4.16	35.89	60.98	74.00	-13.02	Peak
2390.000	64.88	27.56	4.16	35.90	60.70	74.00	-13.30	Peak
2410.375	106.67	27.60	4.17	35.94	102.50	74.00	28.50	Peak

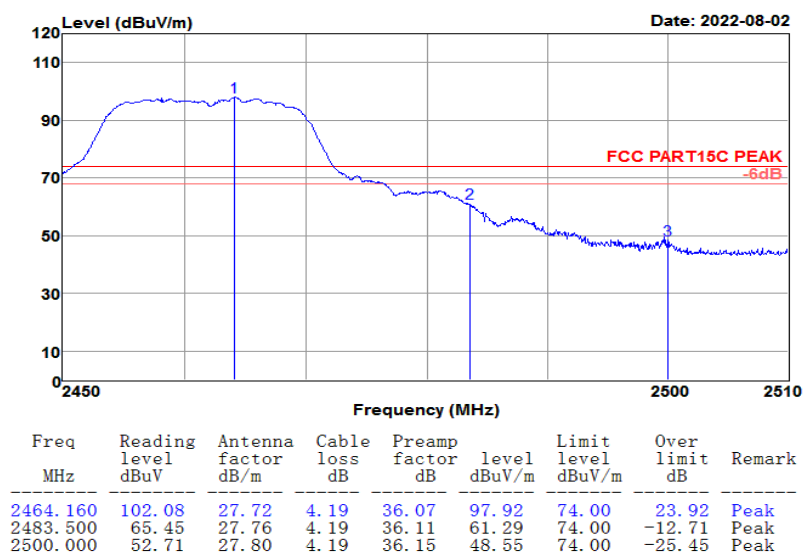
Test Mode :	802.11g CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.3GHz~2.425GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11g CH01(2412MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



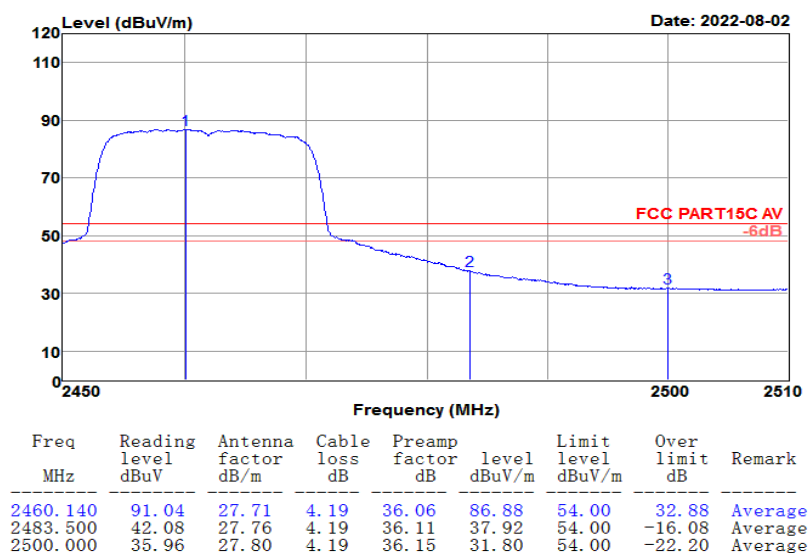
Test Mode :	802.11g CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.45GHz~2.51GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11g CH11(2462MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



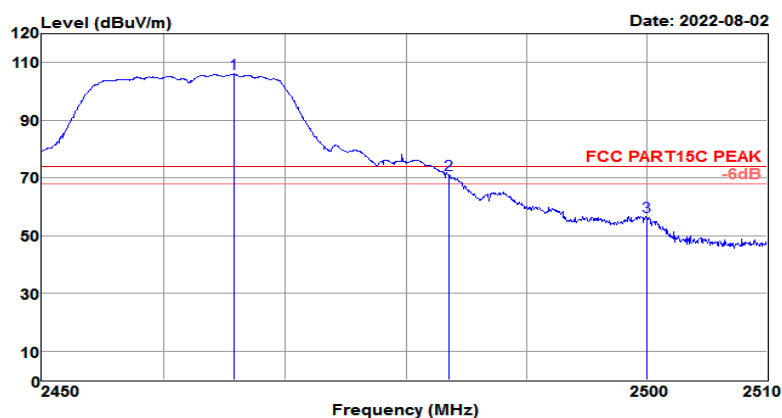
Test Mode :	802.11g CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.45GHz~2.51GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11g CH11(2462MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



Test Mode :	802.11g CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.45GHz~2.51GHz	Polarization :	Vertical

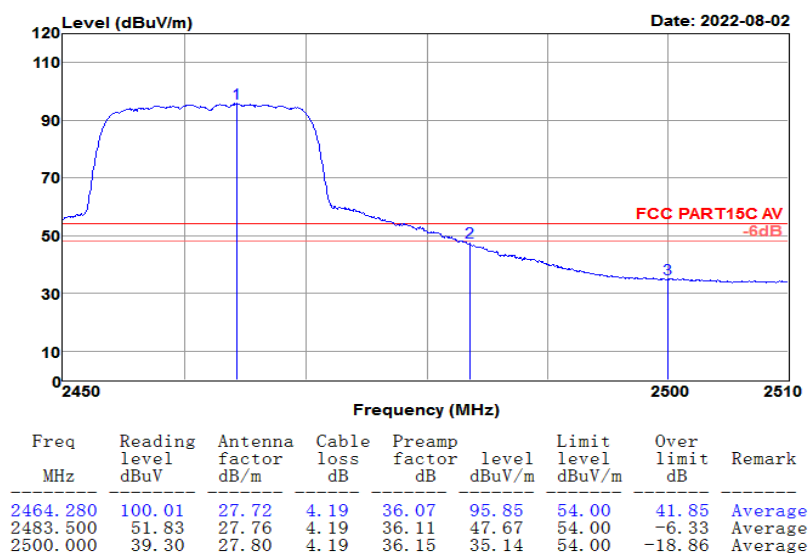
Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11g CH11(2462MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



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
2465.780	110.20	27.72	4.19	36.07	106.04	74.00	32.04	Peak
2483.500	75.41	27.76	4.19	36.11	71.25	74.00	-2.75	Peak
2500.000	60.74	27.80	4.19	36.15	56.58	74.00	-17.42	Peak

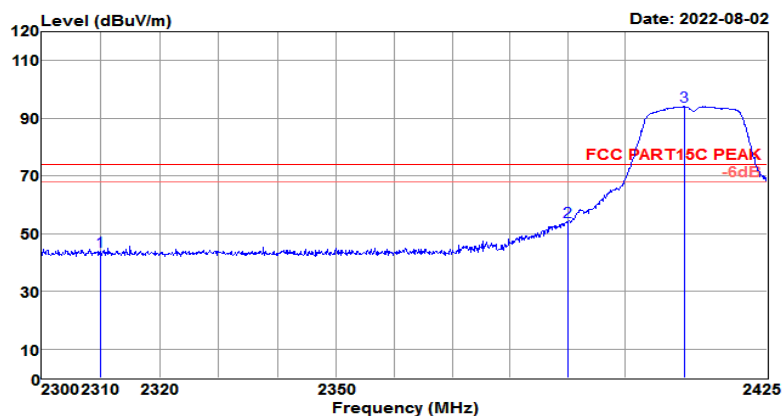
Test Mode :	802.11g CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.45GHz~2.51GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11g CH11(2462MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.3GHz~2.425GHz	Polarization :	Horizontal

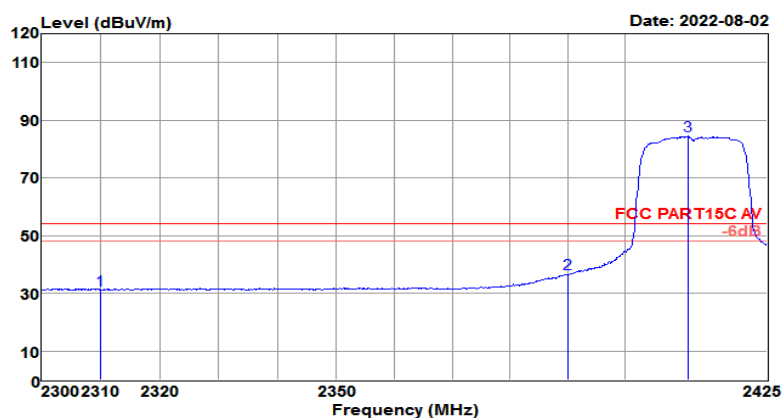
Test Site : 3m Chamber
 Temp/Humi : 22℃/60%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11N HT20 CH01(2412MHz)
 Power rating: DC 12V
 EUT : Edge Computer
 Model No. : EC900



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
2310.000	48.10	27.38	4.08	35.71	43.85	74.00	-30.15	Peak
2390.000	58.42	27.56	4.16	35.90	54.24	74.00	-19.76	Peak
2410.375	98.21	27.60	4.17	35.94	94.04	74.00	20.04	Peak

Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.3GHz~2.425GHz	Polarization :	Horizontal

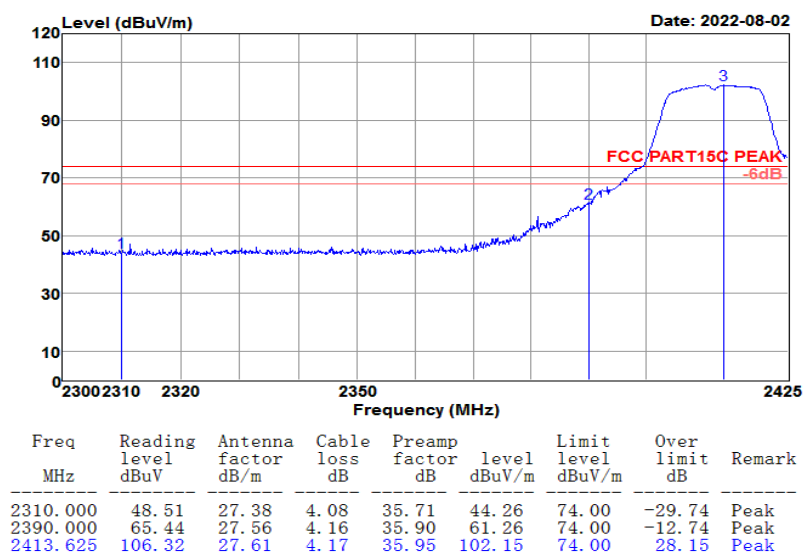
Test Site : 3m Chamber
 Temp/Humi : 22℃/60%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11N HT20 CH01(2412MHz)
 Power rating: DC 12V
 EUT : Edge Computer
 Model No. : EC900



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
2310.000	35.55	27.38	4.08	35.71	31.30	54.00	-22.70	Average
2390.000	41.13	27.56	4.16	35.90	36.95	54.00	-17.05	Average
2411.000	88.63	27.60	4.17	35.95	84.45	54.00	30.45	Average

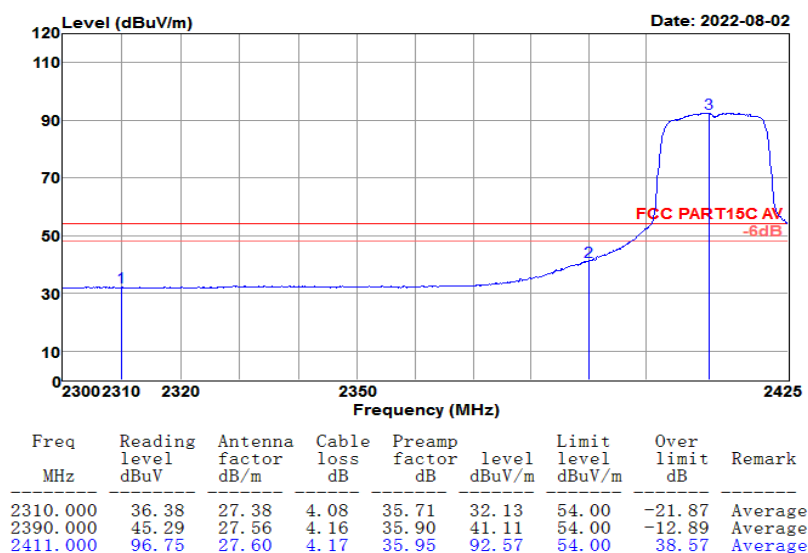
Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.3GHz~2.425GHz	Polarization :	Vertical

Test Site : 3m Chamber
 Temp/Humi : 22℃/60%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11N HT20 CH01(2412MHz)
 Power rating: DC 12V
 EUT : Edge Computer
 Model No. : EC900



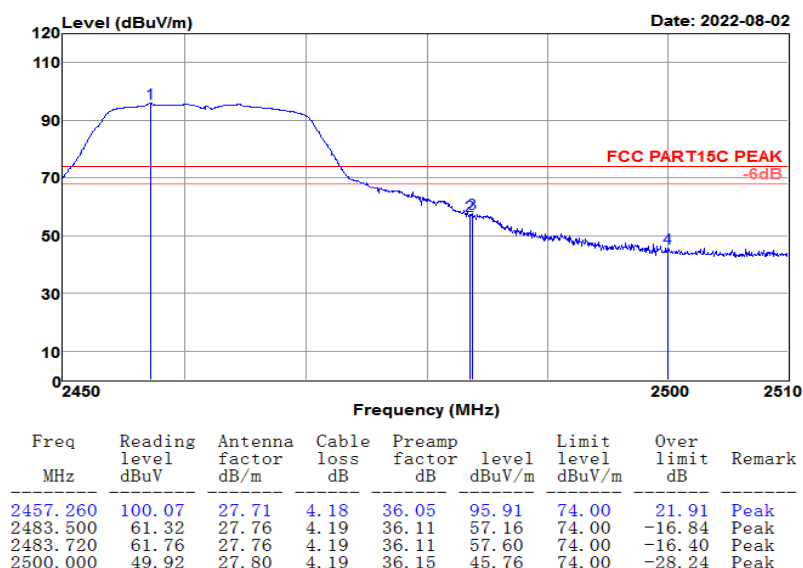
Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.3GHz~2.425GHz	Polarization :	Vertical

Test Site : 3m Chamber
 Temp/Humi : 22℃/60%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11N HT20 CH01(2412MHz)
 Power rating: DC 12V
 EUT : Edge Computer
 Model No. : EC900



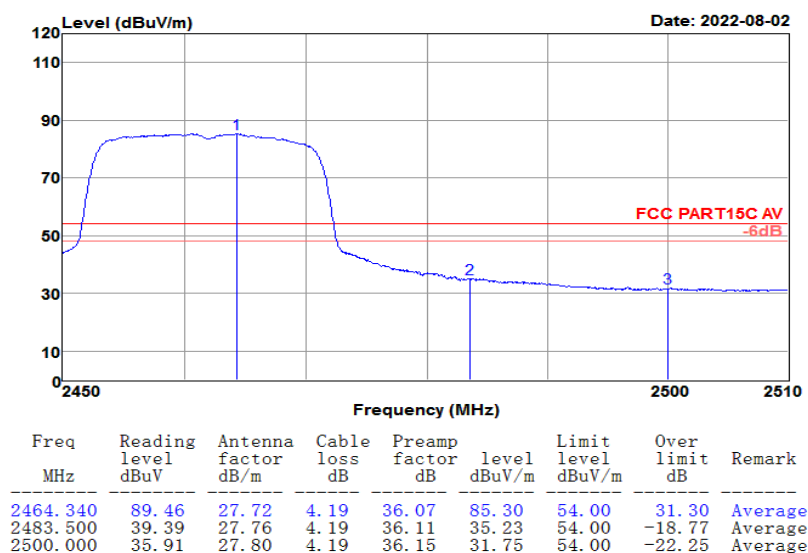
Test Mode :	802.11n HT20 CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.45GHz~2.51GHz	Polarization :	Horizontal

Test Site : 3m Chamber
 Temp/Humi : 22℃/60%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11N HT20 CH11(2462MHz)
 Power rating: DC 12V
 EUT : Edge Computer
 Model No. : EC900



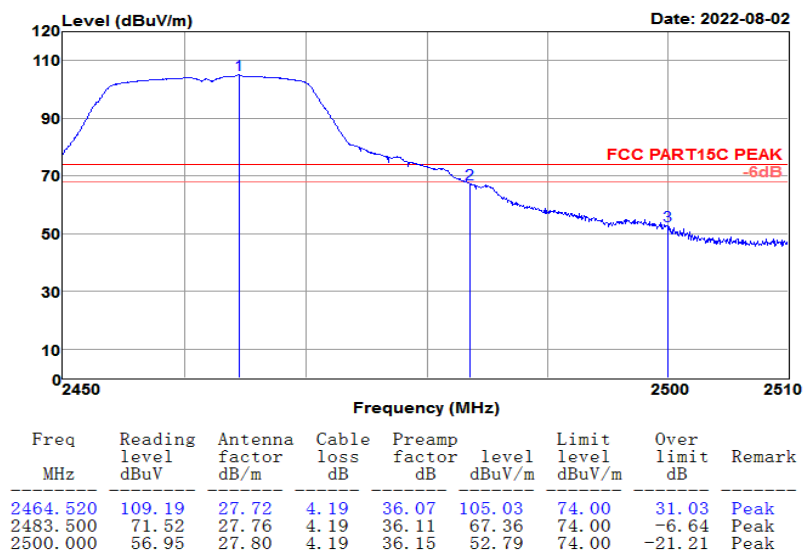
Test Mode :	802.11n HT20 CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.45GHz~2.51GHz	Polarization :	Horizontal

Test Site : 3m Chamber
 Temp/Humi : 22℃/60%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11N HT20 CH11(2462MHz)
 Power rating: DC 12V
 EUT : Edge Computer
 Model No. : EC900



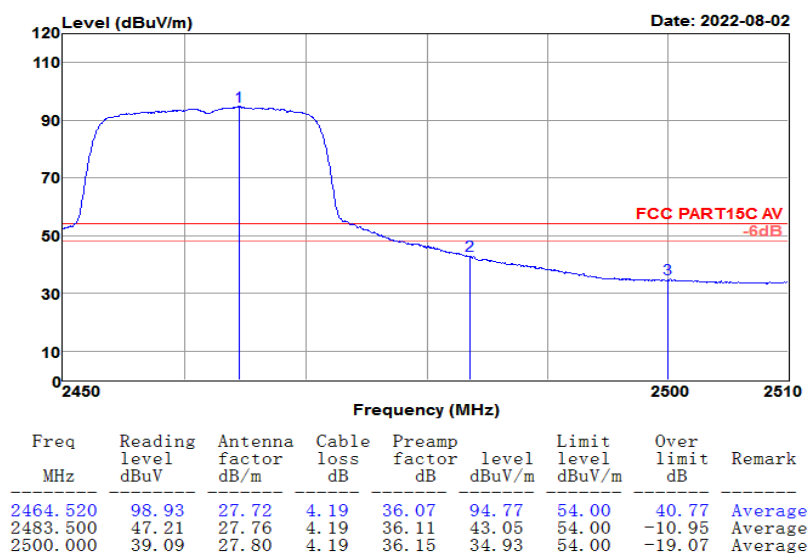
Test Mode :	802.11n HT20 CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.45GHz~2.51GHz	Polarization :	Vertical

Test Site : 3m Chamber
 Temp/Humi : 22℃/60%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11N HT20 CH11(2462MHz)
 Power rating: DC 12V
 EUT : Edge Computer
 Model No. : EC900



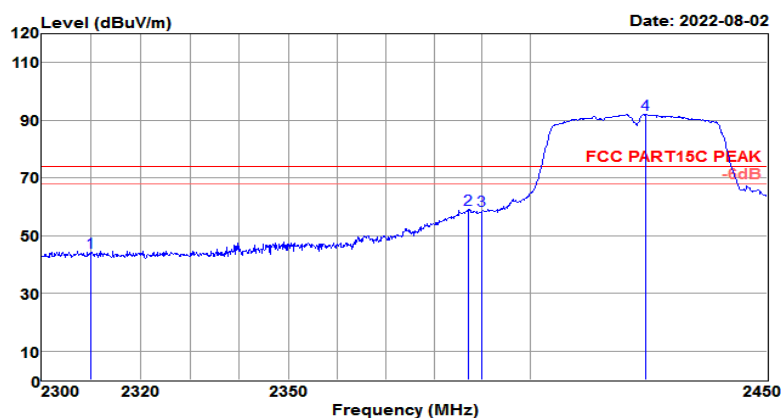
Test Mode :	802.11n HT20 CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.45GHz~2.51GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11N HT20 CH11(2462MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



Test Mode :	802.11n HT40 CH03 (2422 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.3GHz~2.45GHz	Polarization :	Horizontal

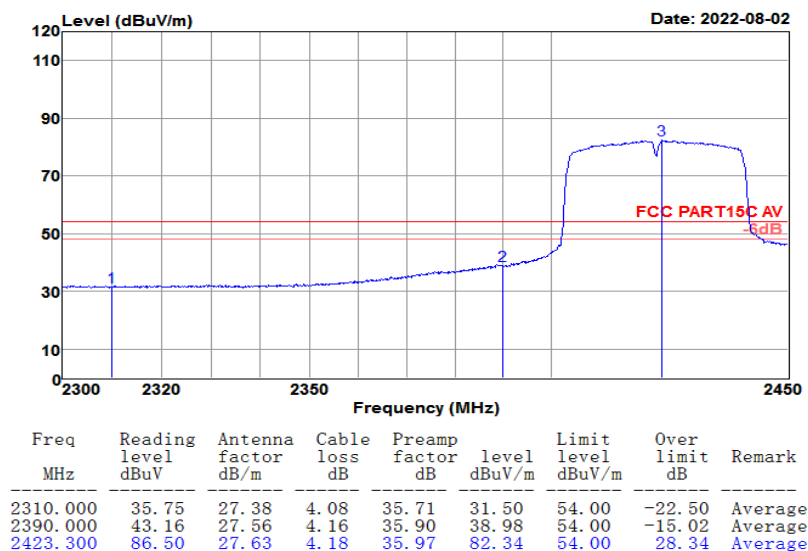
Test Site : 3m Chamber
 Temp/Humi : 22℃/60%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11N HT40 CH03(2422MHz)
 Power rating: DC 12V
 EUT : Edge Computer
 Model No. : EC900



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
2310.000	48.50	27.38	4.08	35.71	44.25	74.00	-29.75	Peak
2387.150	63.28	27.55	4.16	35.89	59.10	74.00	-14.90	Peak
2390.000	62.82	27.56	4.16	35.90	58.64	74.00	-15.36	Peak
2424.200	96.13	27.63	4.18	35.98	91.96	74.00	17.96	Peak

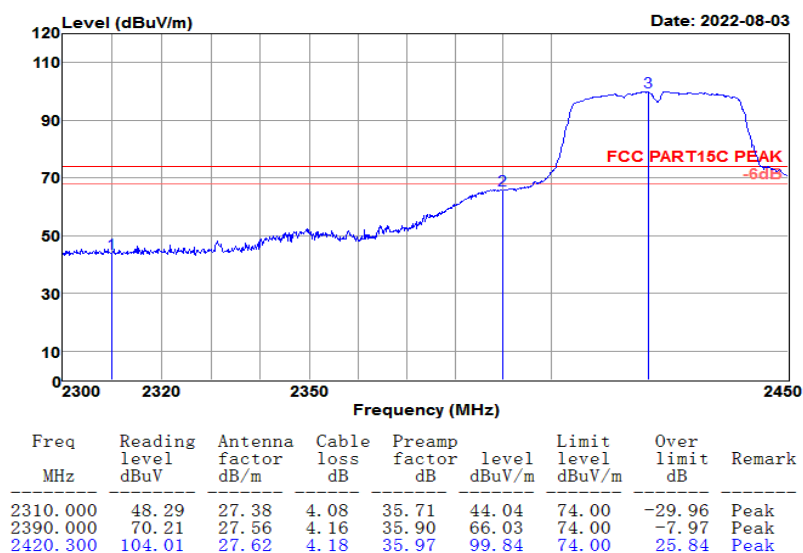
Test Mode :	802.11n HT40 CH03 (2422 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.3GHz~2.45GHz	Polarization :	Horizontal

Test Site : 3m Chamber
 Temp/Humi : 22℃/60%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11N HT40 CH03(2422MHz)
 Power rating: DC 12V
 EUT : Edge Computer
 Model No. : EC900



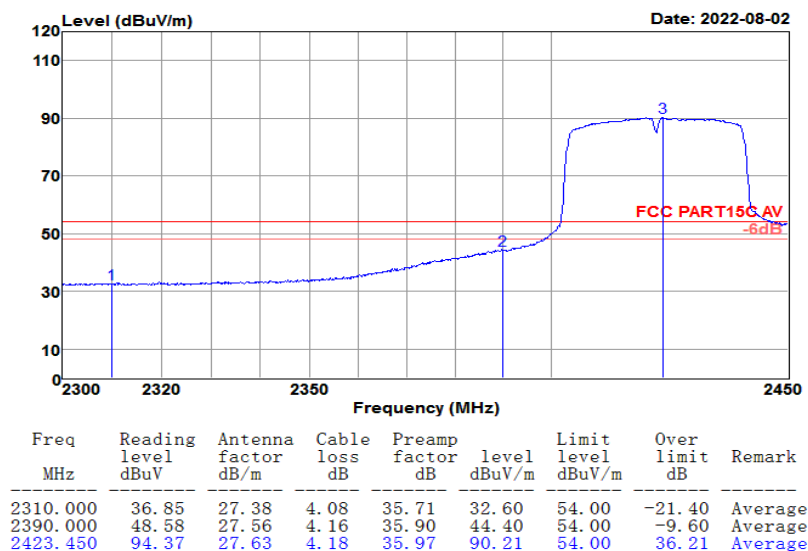
Test Mode :	802.11n HT40 CH03 (2422 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.3GHz~2.45GHz	Polarization :	Vertical

Test Site : 3m Chamber
 Temp/Humi : 22℃/60%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11N HT40 CH03(2422MHz)
 Power rating: DC 12V
 EUT : Edge Computer
 Model No. : EC900



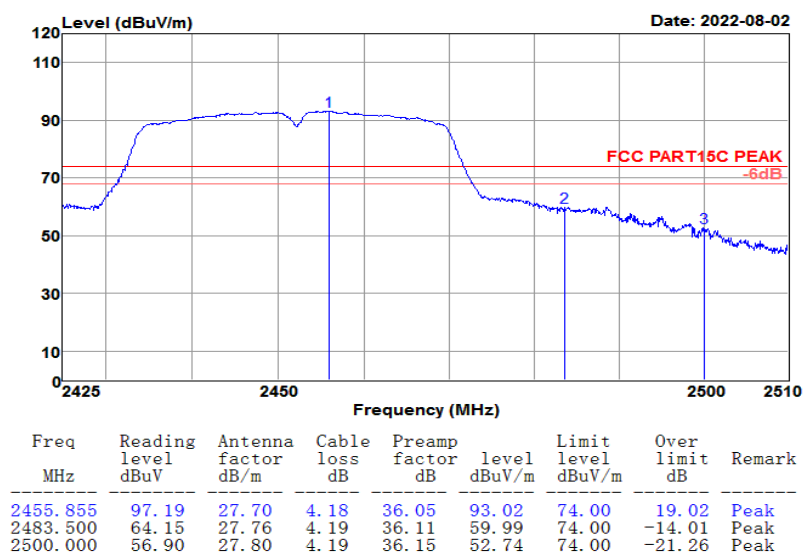
Test Mode :	802.11n HT40 CH03 (2422 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.3GHz~2.45GHz	Polarization :	Vertical

Test Site : 3m Chamber
 Temp/Humi : 22℃/60%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11N HT40 CH03(2422MHz)
 Power rating: DC 12V
 EUT : Edge Computer
 Model No. : EC900



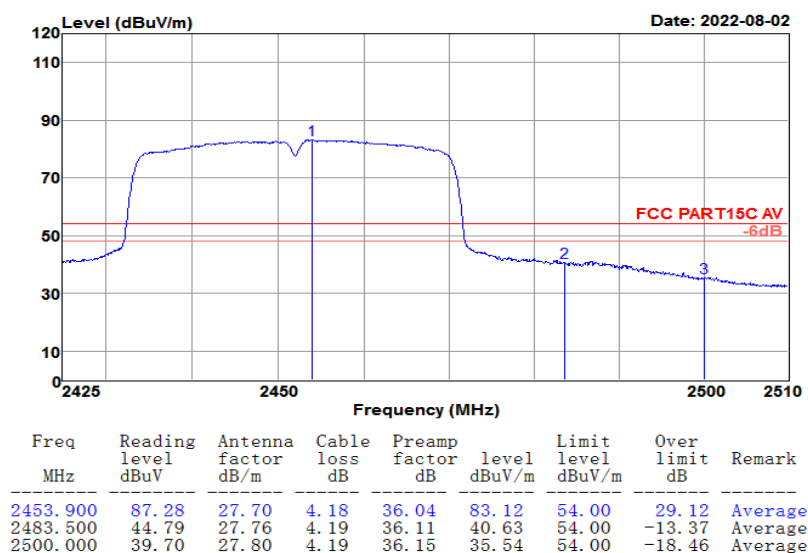
Test Mode :	802.11n HT40 CH09 (2452 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.425GHz~2.51GHz	Polarization :	Horizontal

Test Site : 3m Chamber
 Temp/Humi : 22℃/60%
 Tested by : Jack
 Pol/Phase : HORIZONTAL
 Test Mode : 802.11N HT40 CH09(2452MHz)
 Power rating: DC 12V
 EUT : Edge Computer
 Model No. : EC900



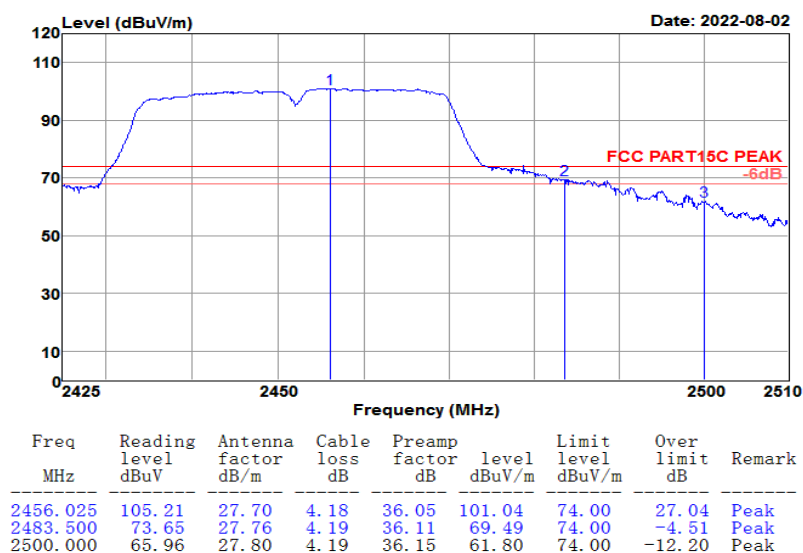
Test Mode :	802.11n HT40 CH09 (2452 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.425GHz~2.51GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11N HT40 CH09(2452MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



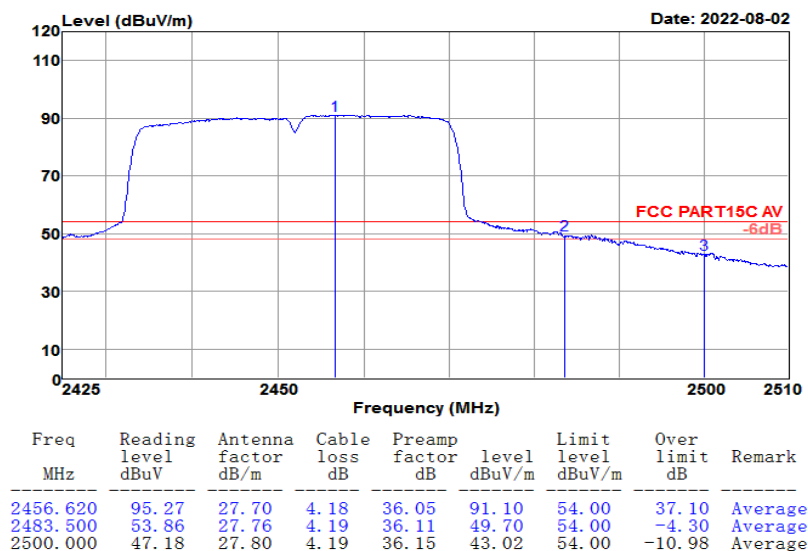
Test Mode :	802.11n HT40 CH09 (2452 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.425GHz~2.51GHz	Polarization :	Vertical

Test Site : 3m Chamber
 Temp/Humi : 22℃/60%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11N HT40 CH09(2452MHz)
 Power rating: DC 12V
 EUT : Edge Computer
 Model No. : EC900



Test Mode :	802.11n HT40 CH09 (2452 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	2.425GHz~2.51GHz	Polarization :	Vertical

Test Site : 3m Chamber
 Temp/Humi : 22℃/60%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11N HT40 CH09(2452MHz)
 Power rating: DC 12V
 EUT : Edge Computer
 Model No. : EC900

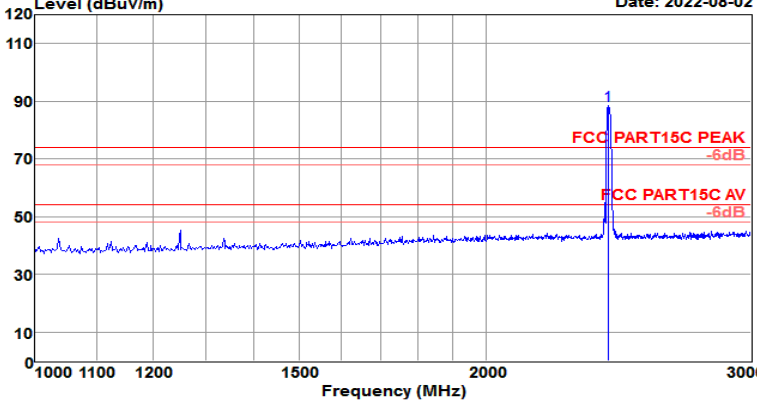


4.5.1 Test Result of Radiated Spurious Emission (1GHz ~ 10th Harmonic)

Test Mode :	802.11b CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	1GHz~3GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11b CH01(2412MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		

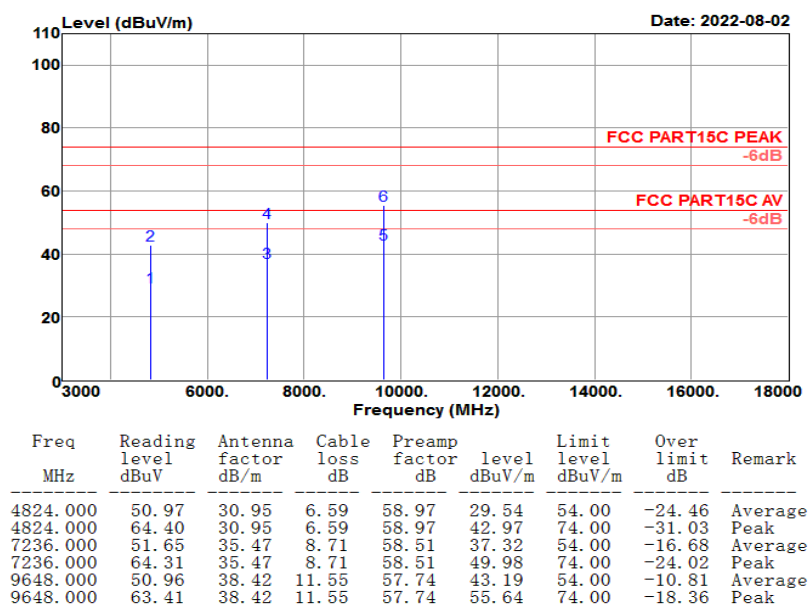
Level (dBuV/m)
Date: 2022-08-02



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
2412.000	92.52	27.61	4.17	35.95	88.35	74.00	14.35	Peak

Test Mode :	802.11b CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	3GHz~18GHz	Polarization :	Horizontal

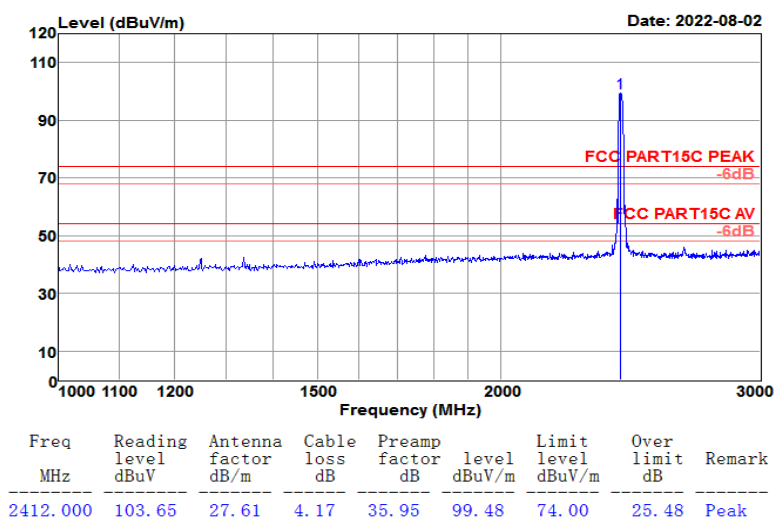
Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11b CH01(2412MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

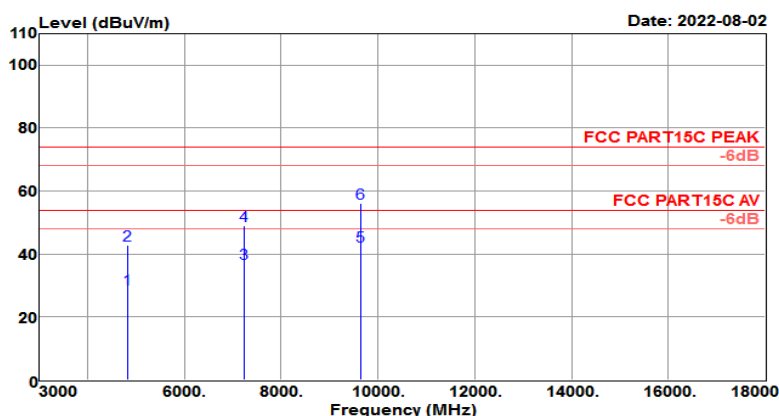
Test Mode :	802.11b CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	1GHz~3GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11b CH01(2412MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



Test Mode :	802.11b CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	3GHz~18GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11b CH01(2412MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		

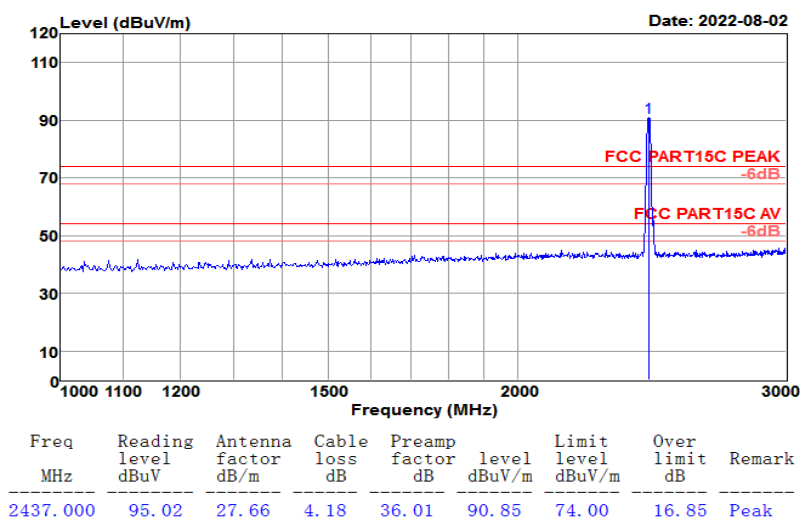


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4824.000	50.32	30.95	6.59	58.97	28.89	54.00	-25.11	Average
4824.000	64.21	30.95	6.59	58.97	42.78	74.00	-31.22	Peak
7236.000	51.38	35.47	8.71	58.51	37.05	54.00	-16.95	Average
7236.000	63.34	35.47	8.71	58.51	49.01	74.00	-24.99	Peak
9648.000	50.39	38.42	11.55	57.74	42.62	54.00	-11.38	Average
9648.000	64.05	38.42	11.55	57.74	56.28	74.00	-17.72	Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

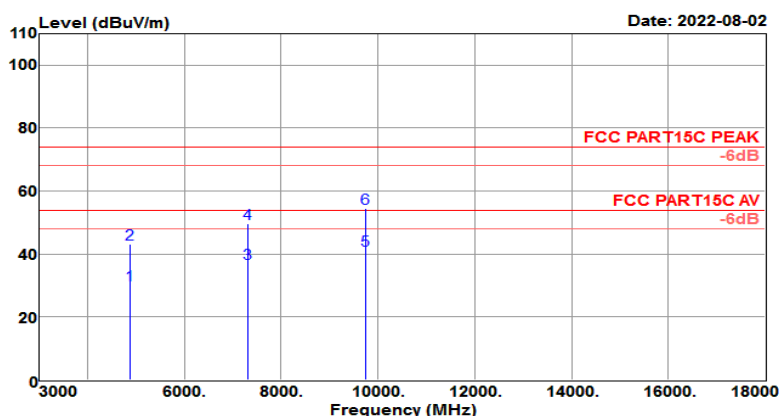
Test Mode :	802.11b CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	1GHz~3GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11b CH06(2437MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



Test Mode :	802.11b CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	3GHz~18GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11b CH06(2437MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		

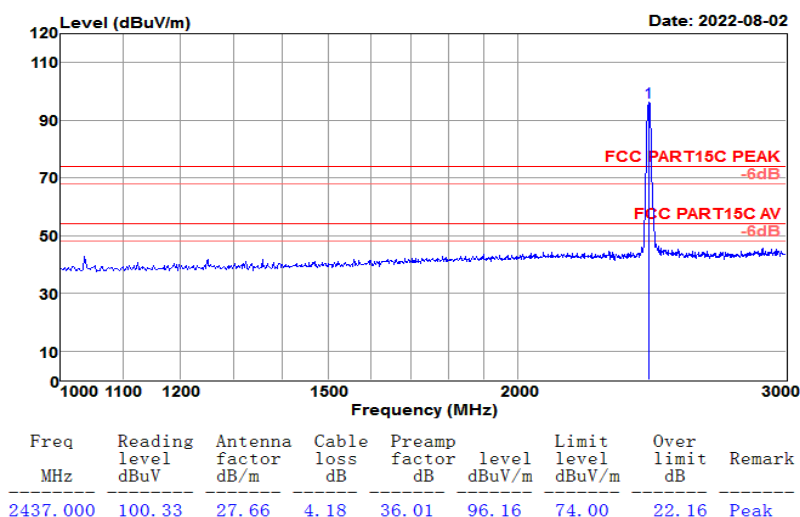


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4874.000	51.24	31.02	6.97	58.95	30.28	54.00	-23.72	Average
4874.000	64.25	31.02	6.97	58.95	43.29	74.00	-30.71	Peak
7311.000	50.97	35.65	8.95	58.48	37.09	54.00	-16.91	Average
7311.000	63.66	35.65	8.95	58.48	49.78	74.00	-24.22	Peak
9748.000	49.32	38.50	11.20	57.70	41.32	54.00	-12.68	Average
9748.000	62.64	38.50	11.20	57.70	54.64	74.00	-19.36	Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

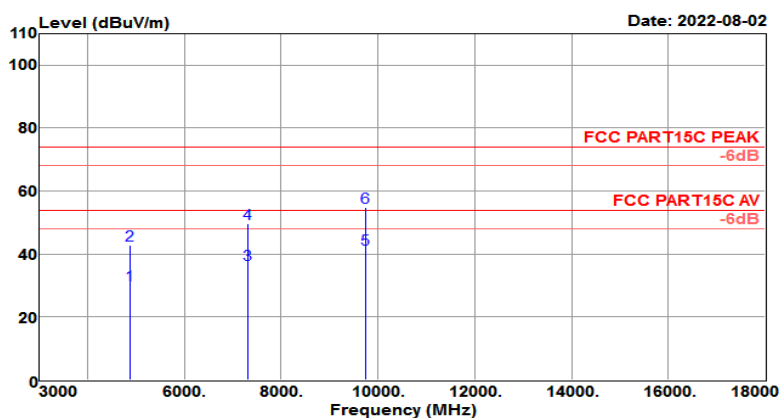
Test Mode :	802.11b CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	1GHz~3GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11b CH06(2437MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



Test Mode :	802.11b CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	3GHz~18GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11b CH06(2437MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		

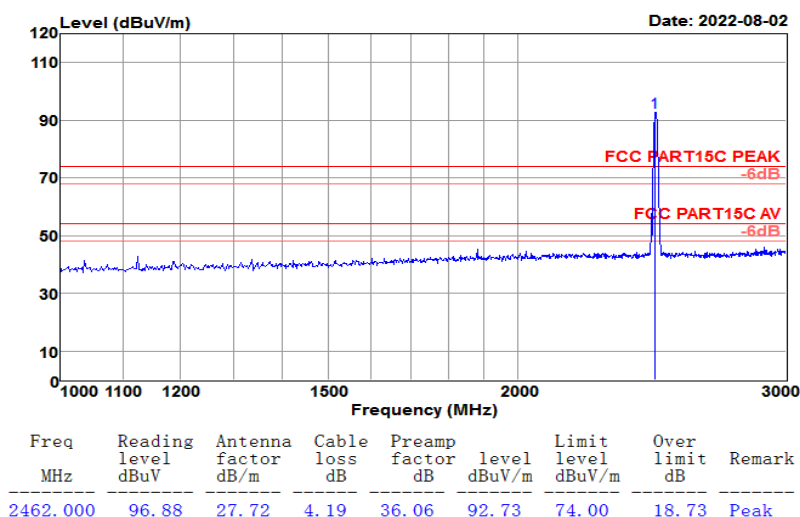


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4874.000	51.05	31.02	6.97	58.95	30.09	54.00	-23.91	Average
4874.000	63.75	31.02	6.97	58.95	42.79	74.00	-31.21	Peak
7311.000	50.51	35.65	8.95	58.48	36.63	54.00	-17.37	Average
7311.000	63.54	35.65	8.95	58.48	49.66	74.00	-24.34	Peak
9748.000	49.44	38.50	11.20	57.70	41.44	54.00	-12.56	Average
9748.000	62.87	38.50	11.20	57.70	54.87	74.00	-19.13	Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

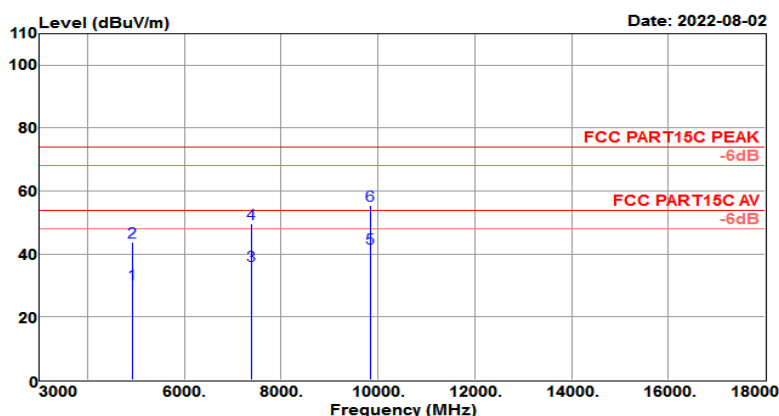
Test Mode :	802.11b CH11 (2462MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	1GHz~3GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11b CH11(2462MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



Test Mode :	802.11b CH11 (2462MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	3GHz~18GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11b CH11(2462MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		

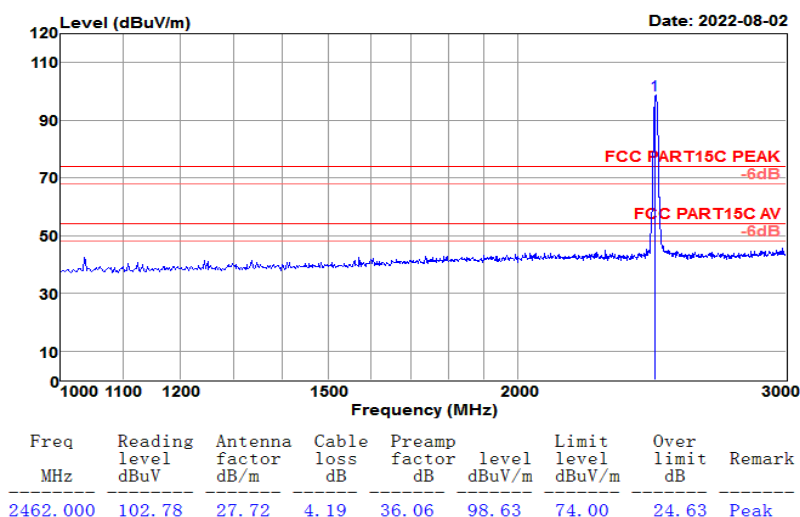


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4924.000	50.89	31.09	7.35	58.93	30.40	54.00	-23.60	Average
4924.000	64.40	31.09	7.35	58.93	43.91	74.00	-30.09	Peak
7386.000	49.93	35.83	9.19	58.45	36.50	54.00	-17.50	Average
7386.000	63.18	35.83	9.19	58.45	49.75	74.00	-24.25	Peak
9848.000	49.32	38.58	11.49	57.66	41.73	54.00	-12.27	Average
9848.000	63.01	38.58	11.49	57.66	55.42	74.00	-18.58	Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

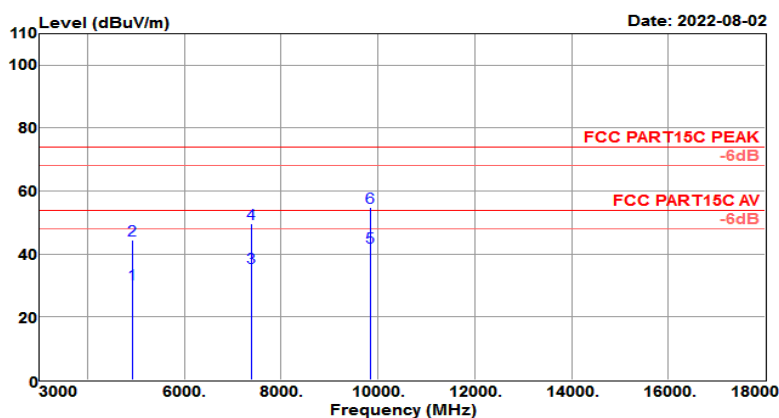
Test Mode :	802.11b CH11 (2462MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	1GHz~3GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11b CH11(2462MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



Test Mode :	802.11b CH11 (2462MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	3GHz~18GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11b CH11(2462MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		

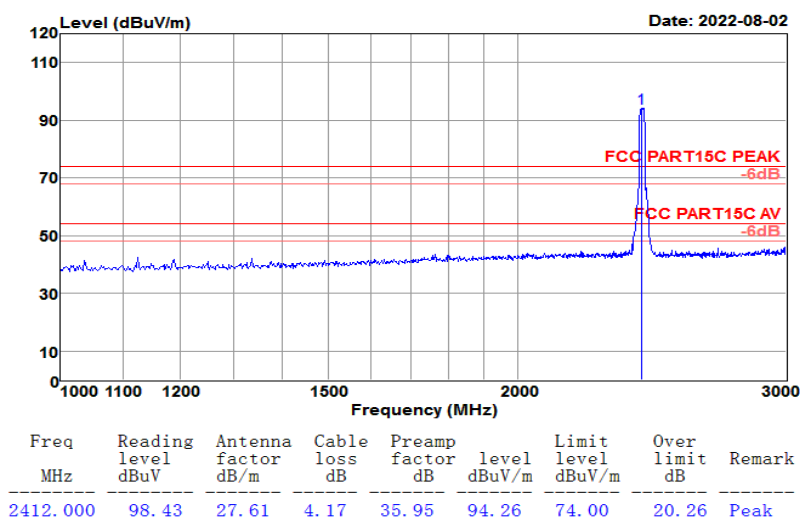


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4924.000	50.97	31.09	7.35	58.93	30.48	54.00	-23.52	Average
4924.000	64.84	31.09	7.35	58.93	44.35	74.00	-29.65	Peak
7386.000	49.18	35.83	9.19	58.45	35.75	54.00	-18.25	Average
7386.000	63.23	35.83	9.19	58.45	49.80	74.00	-24.20	Peak
9848.000	49.86	38.58	11.49	57.66	42.27	54.00	-11.73	Average
9848.000	62.48	38.58	11.49	57.66	54.89	74.00	-19.11	Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

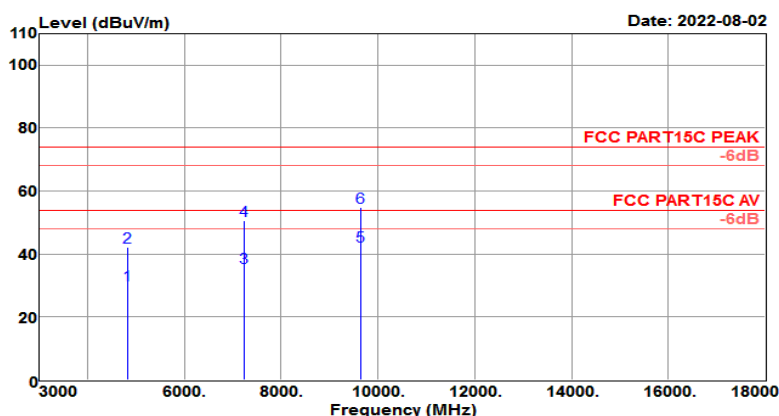
Test Mode :	802.11g CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	1GHz~3GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11g CH01(2412MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



Test Mode :	802.11g CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	3GHz~18GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11g CH01(2412MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		

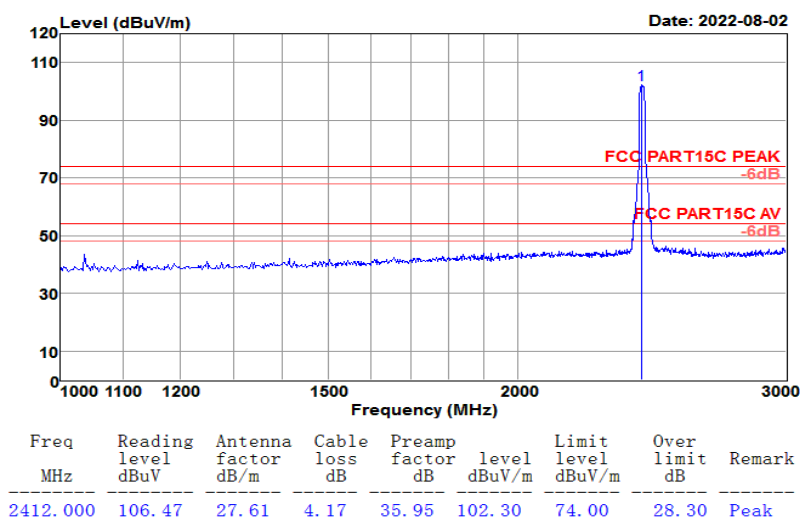


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4824.000	51.75	30.95	6.59	58.97	30.32	54.00	-23.68	Average
4824.000	63.70	30.95	6.59	58.97	42.27	74.00	-31.73	Peak
7236.000	50.13	35.47	8.71	58.51	35.80	54.00	-18.20	Average
7236.000	64.84	35.47	8.71	58.51	50.51	74.00	-23.49	Peak
9648.000	50.27	38.42	11.55	57.74	42.50	54.00	-11.50	Average
9648.000	62.71	38.42	11.55	57.74	54.94	74.00	-19.06	Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

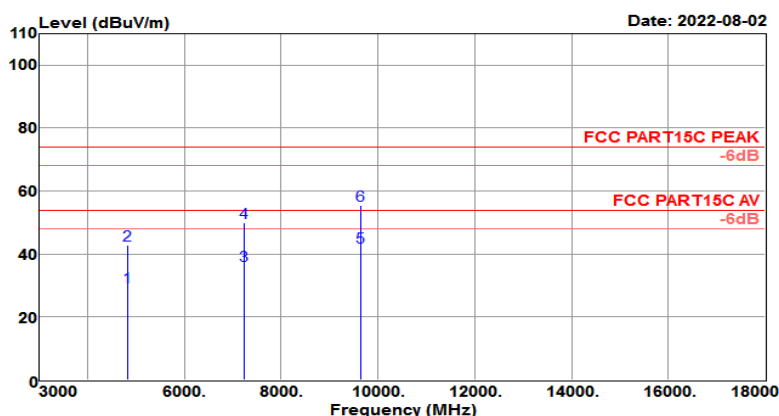
Test Mode :	802.11g CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	1GHz~3GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11g CH01(2412MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



Test Mode :	802.11g CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	3GHz~18GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11g CH01(2412MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		

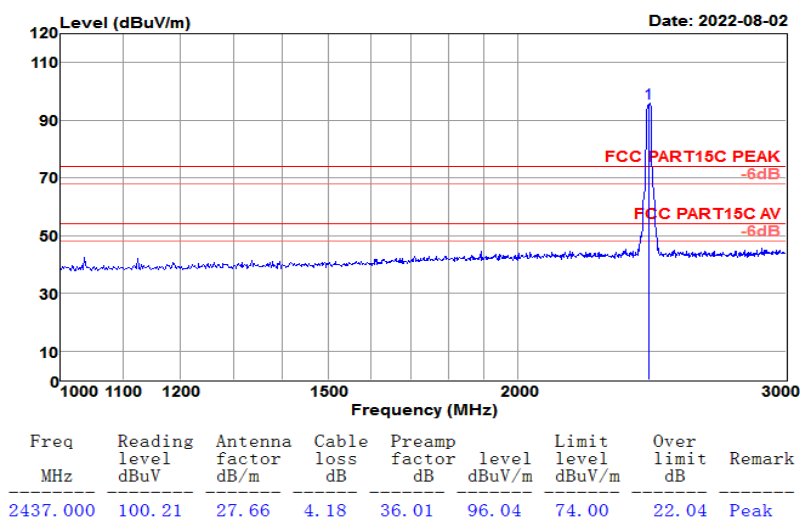


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4824.000	51.02	30.95	6.59	58.97	29.59	54.00	-24.41	Average
4824.000	64.30	30.95	6.59	58.97	42.87	74.00	-31.13	Peak
7236.000	50.53	35.47	8.71	58.51	36.20	54.00	-17.80	Average
7236.000	64.34	35.47	8.71	58.51	50.01	74.00	-23.99	Peak
9648.000	50.01	38.42	11.55	57.74	42.24	54.00	-11.76	Average
9648.000	63.24	38.42	11.55	57.74	55.47	74.00	-18.53	Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

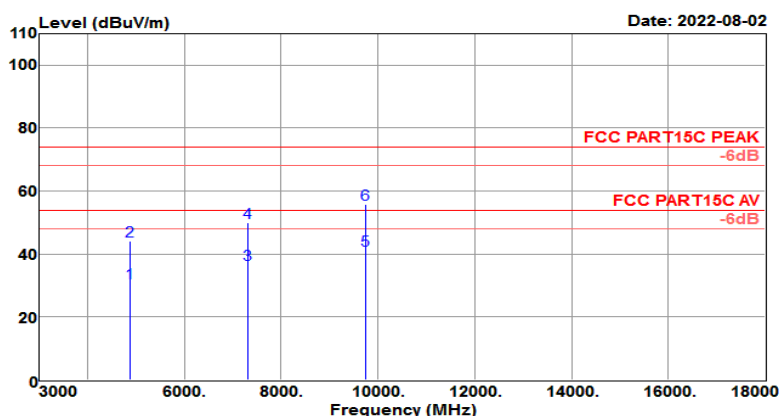
Test Mode :	802.11g CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	1GHz~3GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11g CH06(2437MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



Test Mode :	802.11g CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	3GHz~18GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11g CH06(2437MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		

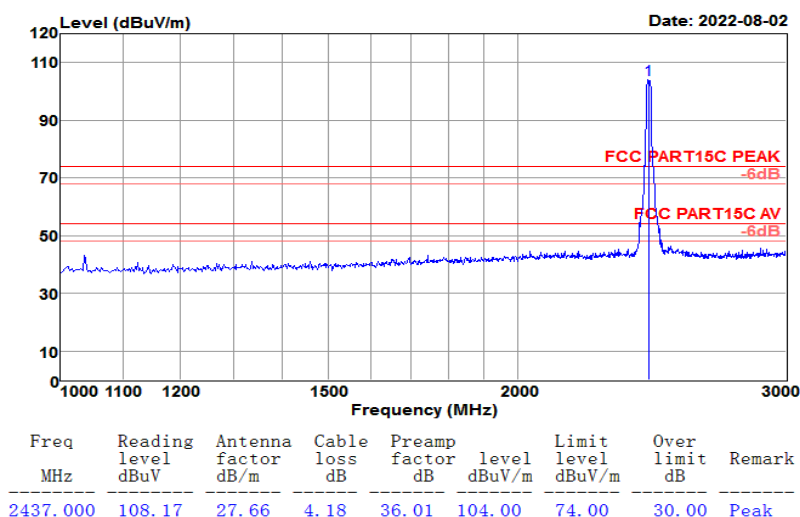


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4874.000	51.74	31.02	6.97	58.95	30.78	54.00	-23.22	Average
4874.000	65.15	31.02	6.97	58.95	44.19	74.00	-29.81	Peak
7311.000	50.72	35.65	8.95	58.48	36.84	54.00	-17.16	Average
7311.000	64.02	35.65	8.95	58.48	50.14	74.00	-23.86	Peak
9748.000	49.37	38.50	11.20	57.70	41.37	54.00	-12.63	Average
9748.000	63.68	38.50	11.20	57.70	55.68	74.00	-18.32	Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

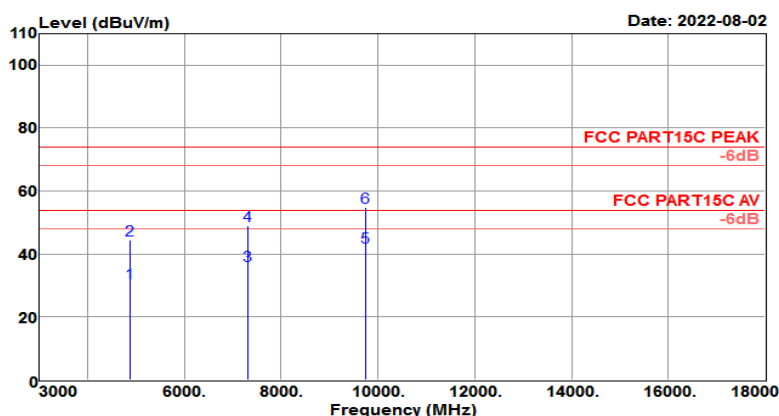
Test Mode :	802.11g CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	1GHz~3GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11g CH06(2437MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



Test Mode :	802.11g CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	3GHz~18GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11g CH06(2437MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		

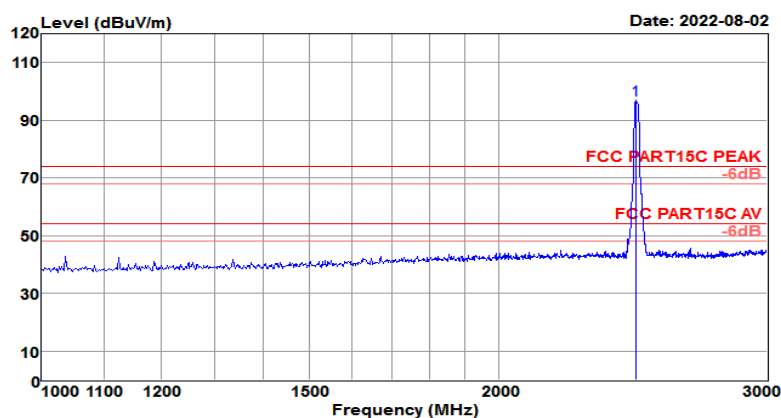


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4874.000	51.73	31.02	6.97	58.95	30.77	54.00	-23.23	Average
4874.000	65.53	31.02	6.97	58.95	44.57	74.00	-29.43	Peak
7311.000	50.37	35.65	8.95	58.48	36.49	54.00	-17.51	Average
7311.000	62.86	35.65	8.95	58.48	48.98	74.00	-25.02	Peak
9748.000	50.28	38.50	11.20	57.70	42.28	54.00	-11.72	Average
9748.000	62.92	38.50	11.20	57.70	54.92	74.00	-19.08	Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

Test Mode :	802.11g CH11 (2462MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	1GHz~3GHz	Polarization :	Horizontal

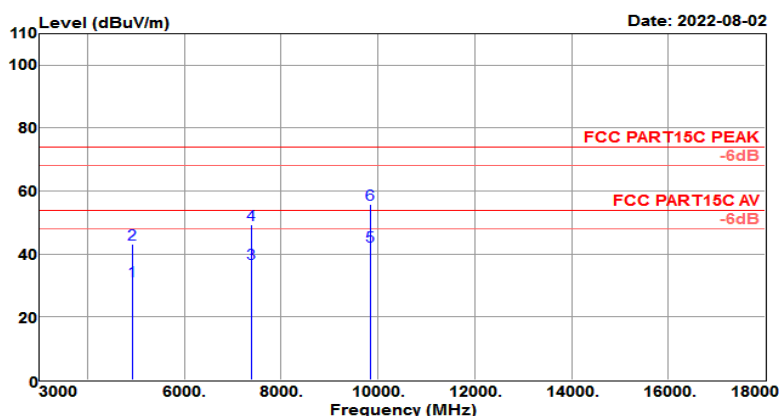
Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11g CH11(2462MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



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
2462.000	101.13	27.72	4.19	36.06	96.98	74.00	22.98	Peak

Test Mode :	802.11g CH11 (2462MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	3GHz~18GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11g CH11(2462MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		

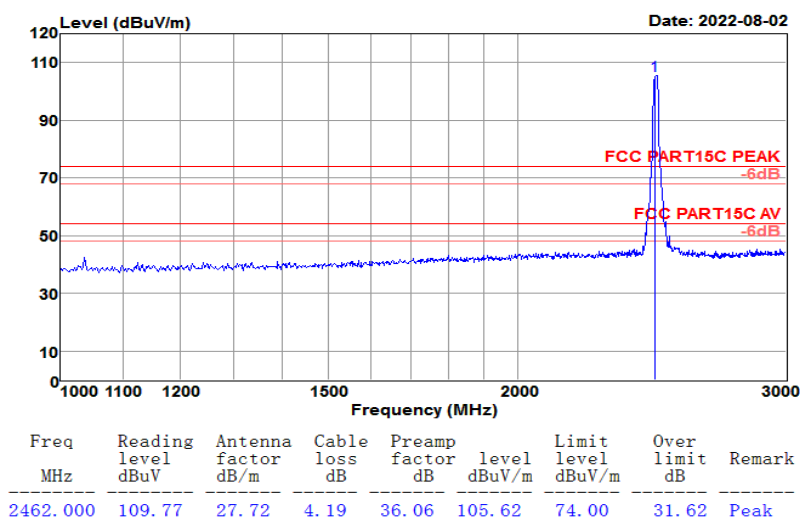


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4924.000	51.83	31.09	7.35	58.93	31.34	54.00	-22.66	Average
4924.000	63.68	31.09	7.35	58.93	43.19	74.00	-30.81	Peak
7386.000	50.37	35.83	9.19	58.45	36.94	54.00	-17.06	Average
7386.000	62.75	35.83	9.19	58.45	49.32	74.00	-24.68	Peak
9848.000	50.17	38.58	11.49	57.66	42.58	54.00	-11.42	Average
9848.000	63.28	38.58	11.49	57.66	55.69	74.00	-18.31	Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

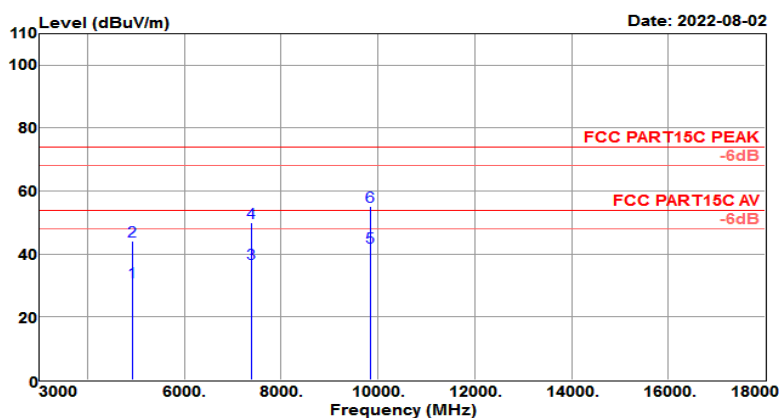
Test Mode :	802.11g CH11 (2462MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	1GHz~3GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11g CH11(2462MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



Test Mode :	802.11g CH11 (2462MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	3GHz~18GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11g CH11(2462MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		

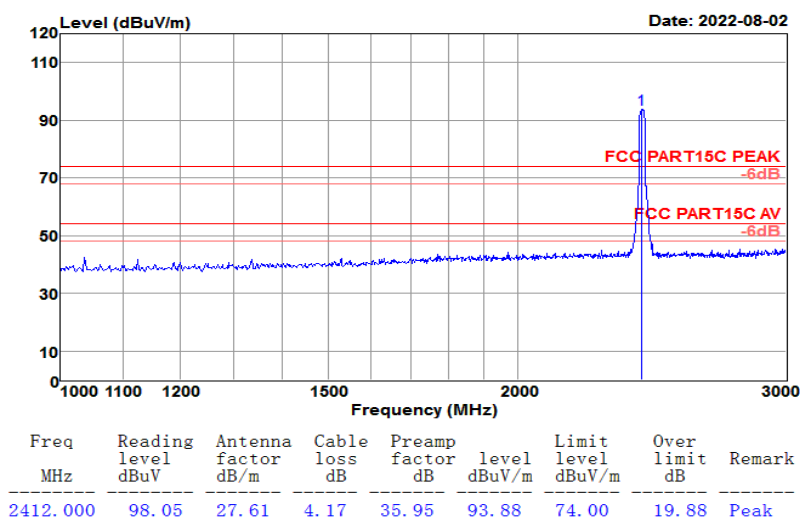


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4924.000	51.60	31.09	7.35	58.93	31.11	54.00	-22.89	Average
4924.000	64.74	31.09	7.35	58.93	44.25	74.00	-29.75	Peak
7386.000	50.52	35.83	9.19	58.45	37.09	54.00	-16.91	Average
7386.000	63.38	35.83	9.19	58.45	49.95	74.00	-24.05	Peak
9848.000	49.76	38.58	11.49	57.66	42.17	54.00	-11.83	Average
9848.000	62.91	38.58	11.49	57.66	55.32	74.00	-18.68	Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

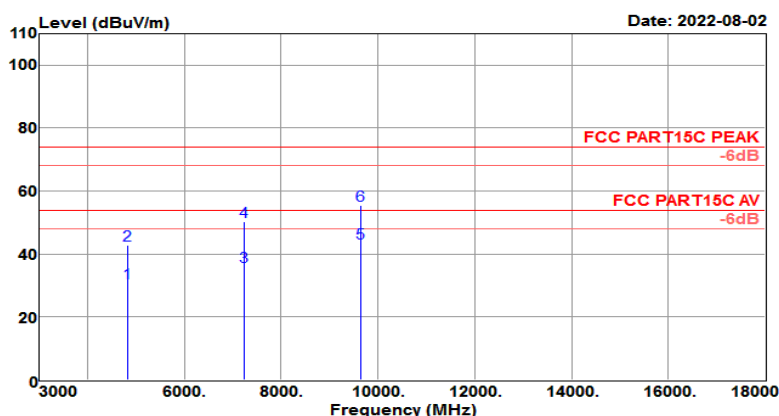
Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	1GHz~3GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11N HT20 CH01(2412MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	3GHz~18GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11N HT20 CH01(2412MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		

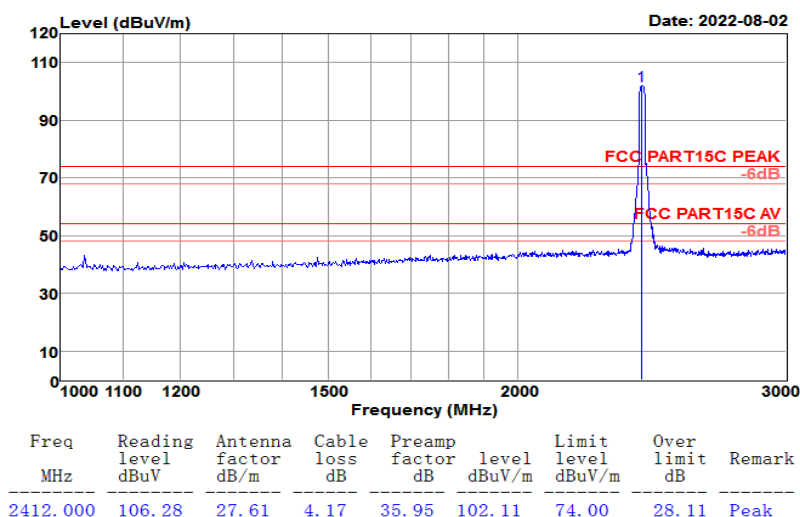


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4824.000	52.37	30.95	6.59	58.97	30.94	54.00	-23.06	Average
4824.000	64.14	30.95	6.59	58.97	42.71	74.00	-31.29	Peak
7236.000	50.39	35.47	8.71	58.51	36.06	54.00	-17.94	Average
7236.000	64.56	35.47	8.71	58.51	50.23	74.00	-23.77	Peak
9648.000	51.25	38.42	11.55	57.74	43.48	54.00	-10.52	Average
9648.000	63.38	38.42	11.55	57.74	55.61	74.00	-18.39	Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

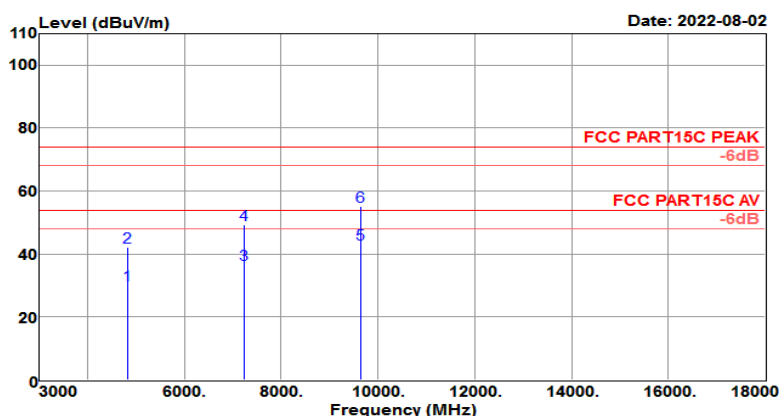
Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	1GHz~3GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11N HT20 CH01(2412MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	3GHz~18GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11N HT20 CH01(2412MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		

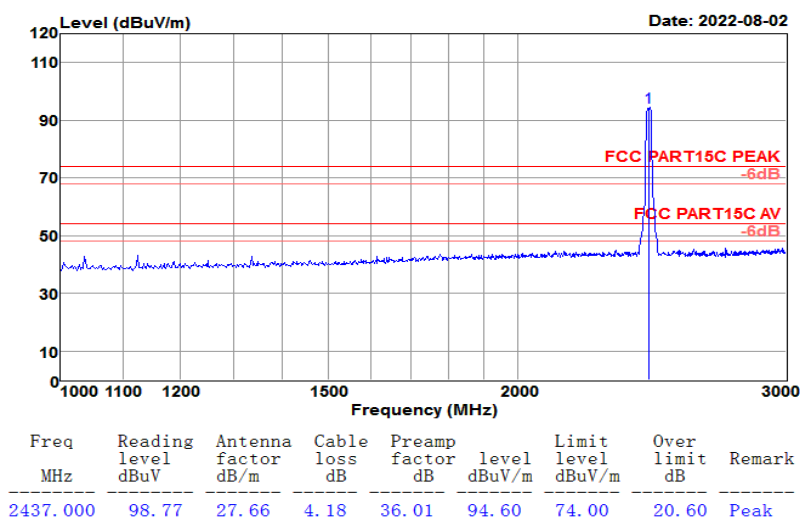


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4824.000	51.74	30.95	6.59	58.97	30.31	54.00	-23.69	Average
4824.000	63.68	30.95	6.59	58.97	42.25	74.00	-31.75	Peak
7236.000	50.95	35.47	8.71	58.51	36.62	54.00	-17.38	Average
7236.000	63.80	35.47	8.71	58.51	49.47	74.00	-24.53	Peak
9648.000	50.87	38.42	11.55	57.74	43.10	54.00	-10.90	Average
9648.000	63.04	38.42	11.55	57.74	55.27	74.00	-18.73	Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

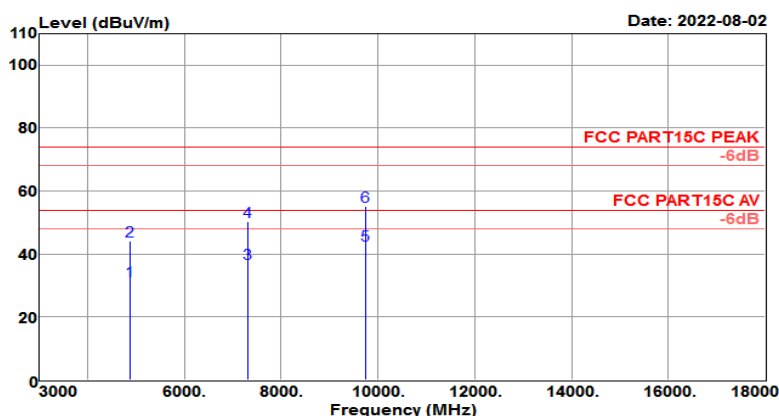
Test Mode :	802.11n HT20 CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	1GHz~3GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11N HT20 CH06(2437MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



Test Mode :	802.11n HT20 CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	3GHz~18GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11N HT20 CH06(2437MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		

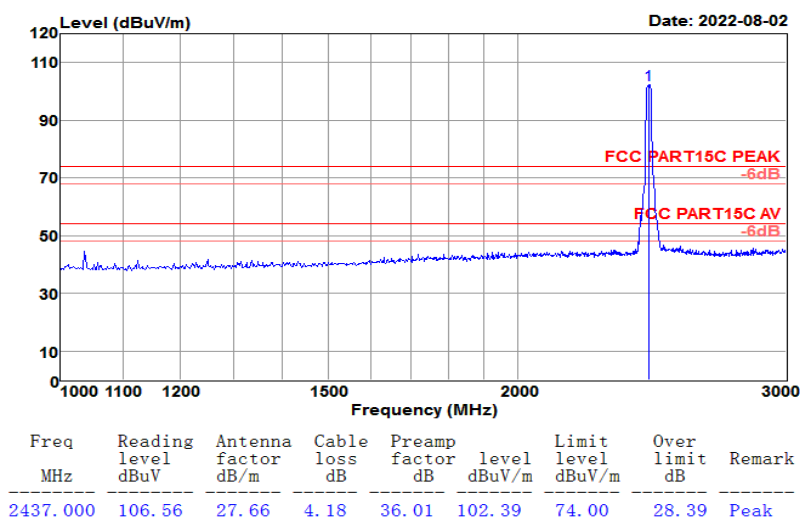


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4874.000	52.38	31.02	6.97	58.95	31.42	54.00	-22.58	Average
4874.000	65.15	31.02	6.97	58.95	44.19	74.00	-29.81	Peak
7311.000	50.97	35.65	8.95	58.48	37.09	54.00	-16.91	Average
7311.000	64.05	35.65	8.95	58.48	50.17	74.00	-23.83	Peak
9748.000	50.84	38.50	11.20	57.70	42.84	54.00	-11.16	Average
9748.000	63.10	38.50	11.20	57.70	55.10	74.00	-18.90	Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

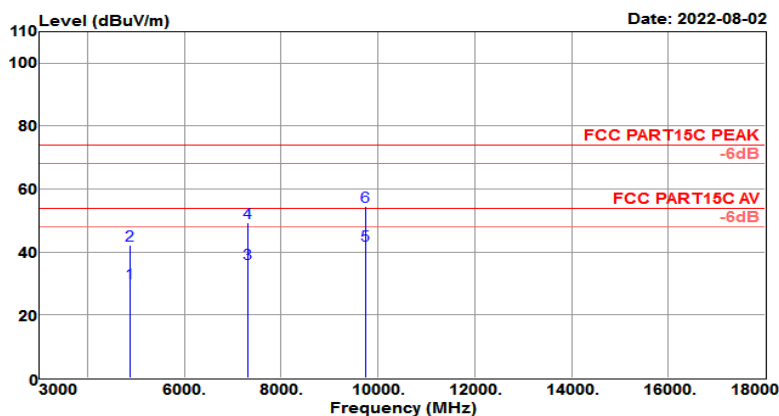
Test Mode :	802.11n HT20 CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	1GHz~3GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11N HT20 CH06(2437MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



Test Mode :	802.11n HT20 CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	3GHz~18GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11N HT20 CH06(2437MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		

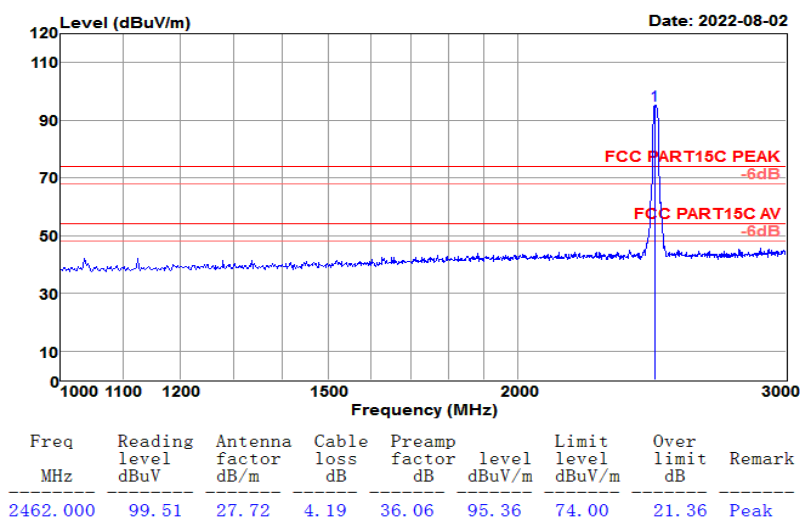


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4874.000	51.28	31.02	6.97	58.95	30.32	54.00	-23.68	Average
4874.000	63.14	31.02	6.97	58.95	42.18	74.00	-31.82	Peak
7311.000	50.36	35.65	8.95	58.48	36.48	54.00	-17.52	Average
7311.000	63.30	35.65	8.95	58.48	49.42	74.00	-24.58	Peak
9748.000	50.29	38.50	11.20	57.70	42.29	54.00	-11.71	Average
9748.000	62.55	38.50	11.20	57.70	54.55	74.00	-19.45	Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

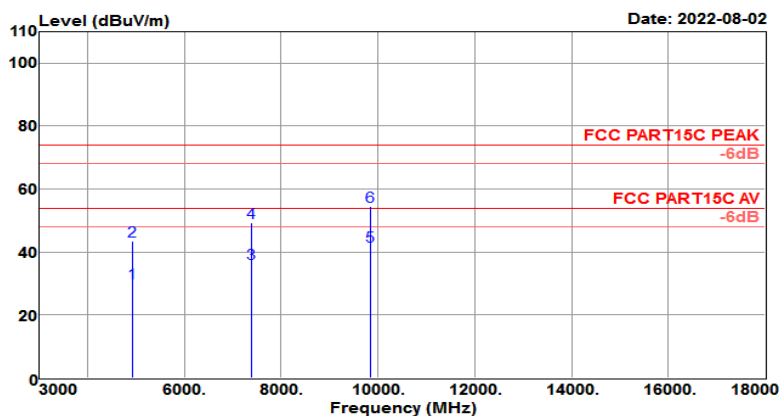
Test Mode :	802.11n HT20 CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	1GHz~3GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11N HT20 CH11(2462MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



Test Mode :	802.11n HT20 CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	3GHz~18GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11N HT20 CH11(2462MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		

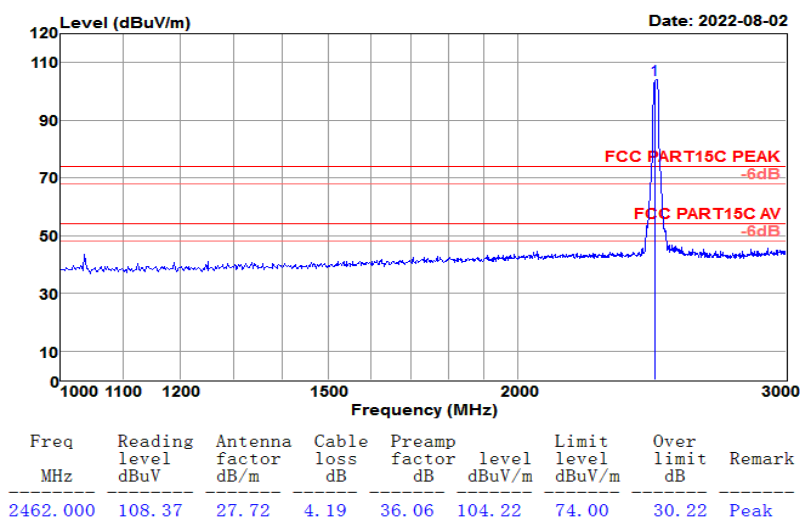


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4924.000	50.82	31.09	7.35	58.93	30.33	54.00	-23.67	Average
4924.000	63.95	31.09	7.35	58.93	43.46	74.00	-30.54	Peak
7386.000	49.74	35.83	9.19	58.45	36.31	54.00	-17.69	Average
7386.000	62.79	35.83	9.19	58.45	49.36	74.00	-24.64	Peak
9848.000	49.37	38.58	11.49	57.66	41.78	54.00	-12.22	Average
9848.000	62.03	38.58	11.49	57.66	54.44	74.00	-19.56	Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

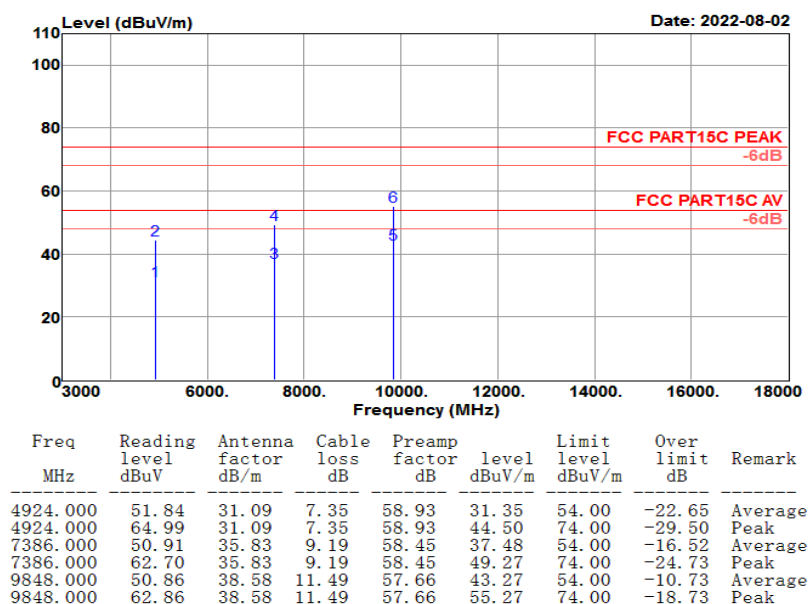
Test Mode :	802.11n HT20 CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	1GHz~3GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11N HT20 CH11(2462MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



Test Mode :	802.11n HT20 CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	3GHz~18GHz	Polarization :	Vertical

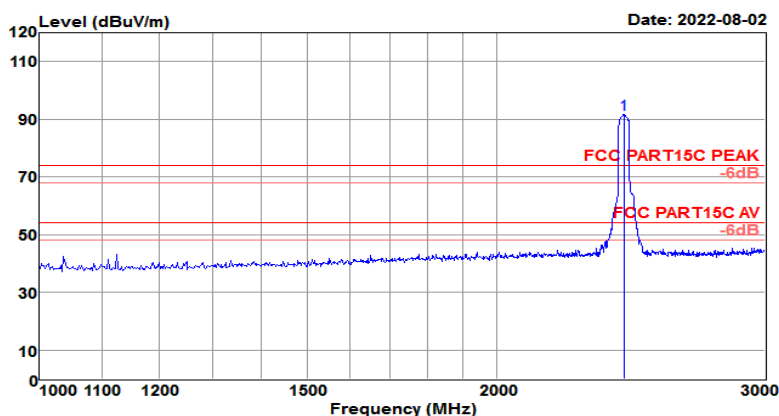
Test Site : 3m Chamber
 Temp/Humi : 22℃/60%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11N HT20 CH11(2462MHz)
 Power rating: DC 12V
 EUT : Edge Computer
 Model No. : EC900



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

Test Mode :	802.11n HT40 CH03 (2422 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	1GHz~3GHz	Polarization :	Horizontal

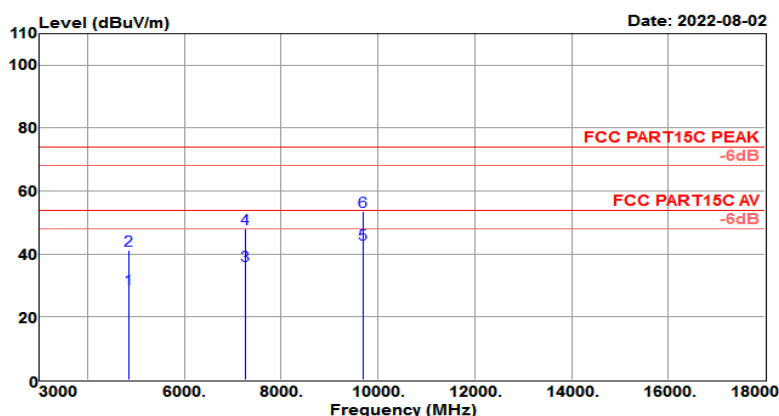
Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11N HT40 CH03(2422MHz)	Power rating	: DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



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
2422.000	95.97	27.63	4.18	35.97	91.81	74.00	17.81	Peak

Test Mode :	802.11n HT40 CH03 (2422 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	3GHz~18GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11N HT40 CH03(2422MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		

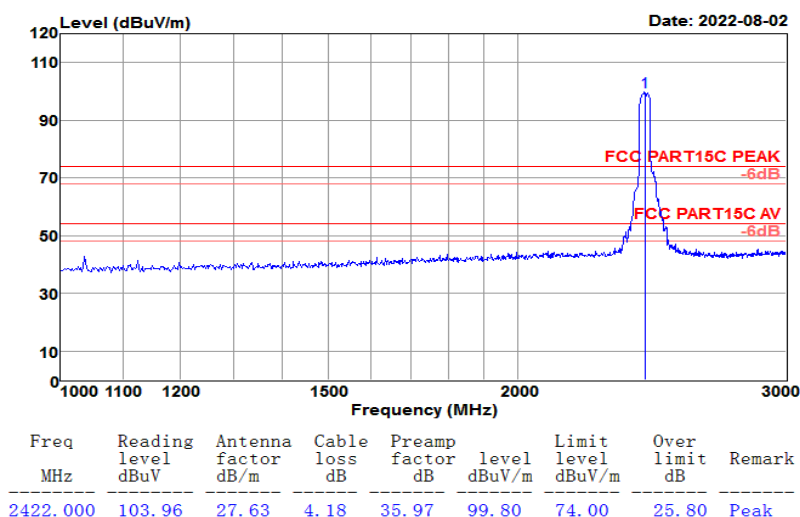


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4844.000	50.26	30.98	6.74	58.96	29.02	54.00	-24.98	Average
4844.000	62.39	30.98	6.74	58.96	41.15	74.00	-32.85	Peak
7266.000	50.61	35.54	8.80	58.49	36.46	54.00	-17.54	Average
7266.000	62.29	35.54	8.80	58.49	48.14	74.00	-25.86	Peak
9688.000	50.94	38.45	11.41	57.72	43.08	54.00	-10.92	Average
9688.000	61.50	38.45	11.41	57.72	53.64	74.00	-20.36	Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

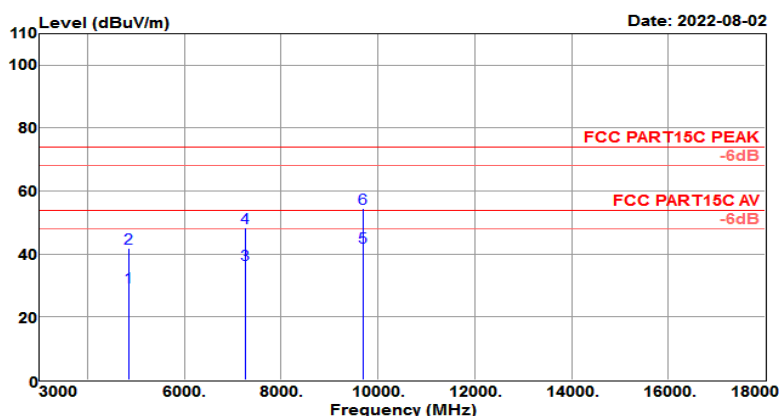
Test Mode :	802.11n HT40 CH03 (2422 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	1GHz~3GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11N HT40 CH03(2422MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



Test Mode :	802.11n HT40 CH03 (2422 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	3GHz~18GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11N HT40 CH03(2422MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		

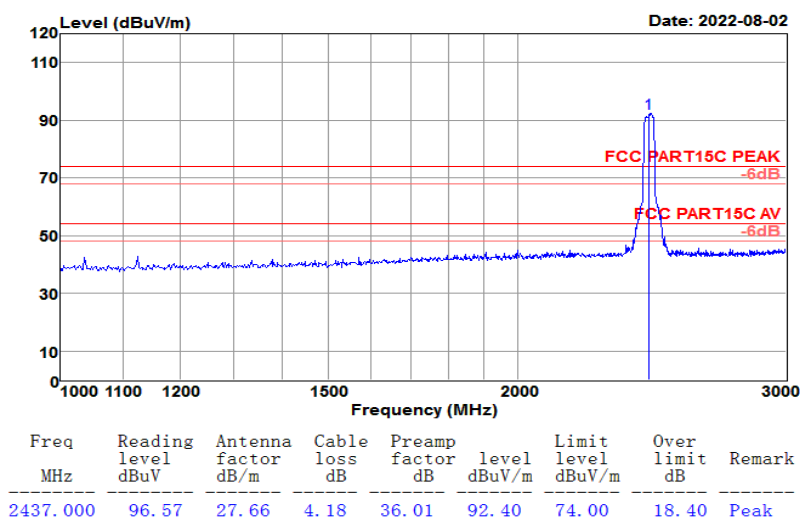


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4844.000	50.65	30.98	6.74	58.96	29.41	54.00	-24.59	Average
4844.000	62.96	30.98	6.74	58.96	41.72	74.00	-32.28	Peak
7266.000	50.86	35.54	8.80	58.49	36.71	54.00	-17.29	Average
7266.000	62.49	35.54	8.80	58.49	48.34	74.00	-25.66	Peak
9688.000	50.17	38.45	11.41	57.72	42.31	54.00	-11.69	Average
9688.000	62.43	38.45	11.41	57.72	54.57	74.00	-19.43	Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

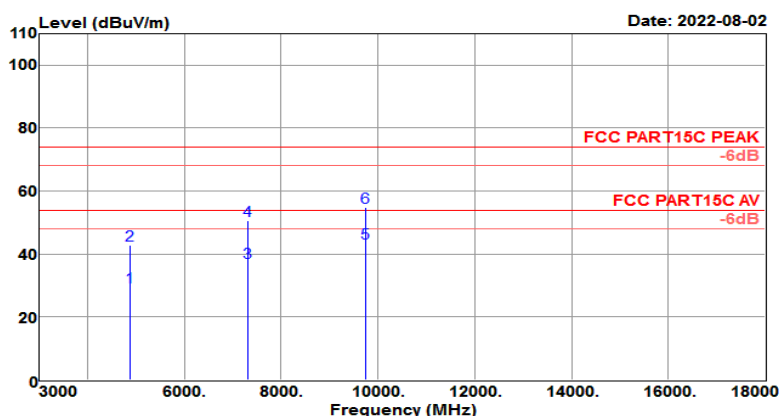
Test Mode :	802.11n HT40 CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	1GHz~3GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11N HT40 CH06(2437MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



Test Mode :	802.11n HT40 CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	3GHz~18GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11N HT40 CH06(2437MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		

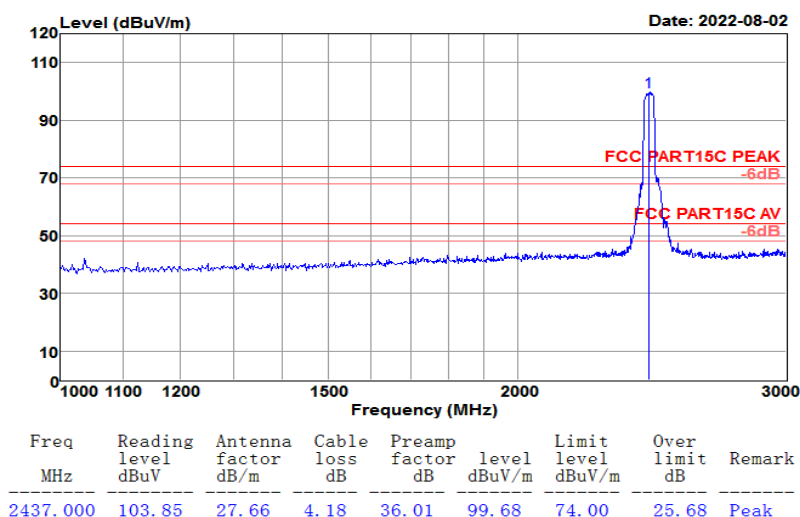


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4874.000	50.46	31.02	6.97	58.95	29.50	54.00	-24.50	Average
4874.000	63.84	31.02	6.97	58.95	42.88	74.00	-31.12	Peak
7311.000	51.14	35.65	8.95	58.48	37.26	54.00	-16.74	Average
7311.000	64.35	35.65	8.95	58.48	50.47	74.00	-23.53	Peak
9748.000	51.35	38.50	11.20	57.70	43.35	54.00	-10.65	Average
9748.000	62.79	38.50	11.20	57.70	54.79	74.00	-19.21	Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

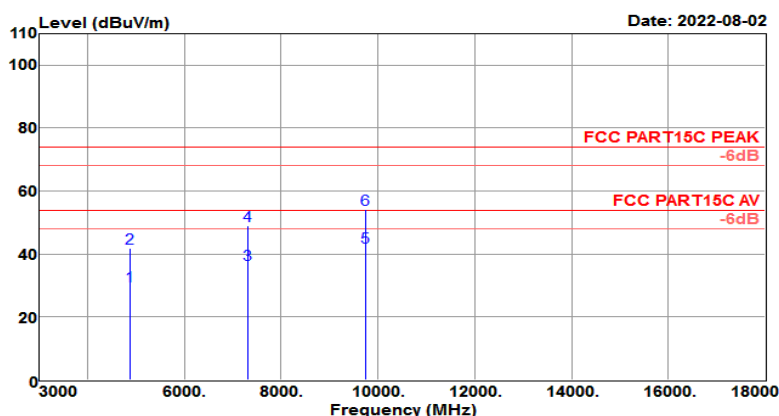
Test Mode :	802.11n HT40 CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	1GHz~3GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11N HT40 CH06(2437MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



Test Mode :	802.11n HT40 CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	3GHz~18GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11N HT40 CH06(2437MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		

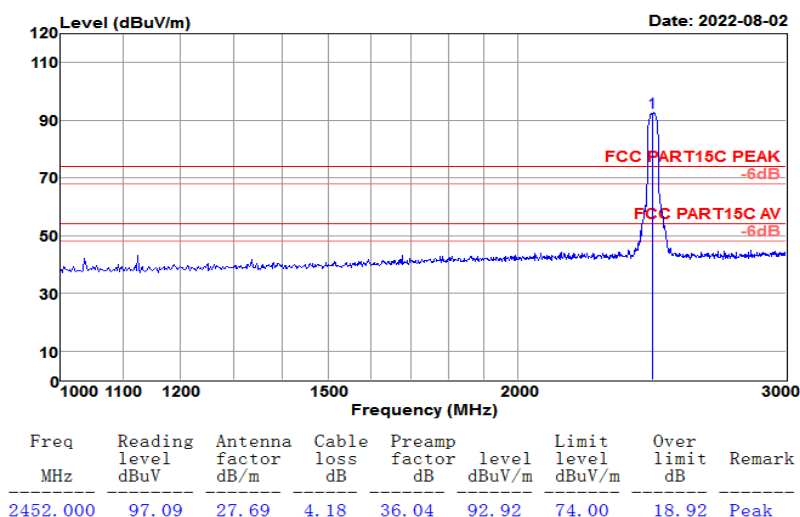


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4874.000	50.67	31.02	6.97	58.95	29.71	54.00	-24.29	Average
4874.000	62.97	31.02	6.97	58.95	42.01	74.00	-31.99	Peak
7311.000	50.43	35.65	8.95	58.48	36.55	54.00	-17.45	Average
7311.000	63.03	35.65	8.95	58.48	49.15	74.00	-24.85	Peak
9748.000	50.29	38.50	11.20	57.70	42.29	54.00	-11.71	Average
9748.000	62.17	38.50	11.20	57.70	54.17	74.00	-19.83	Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

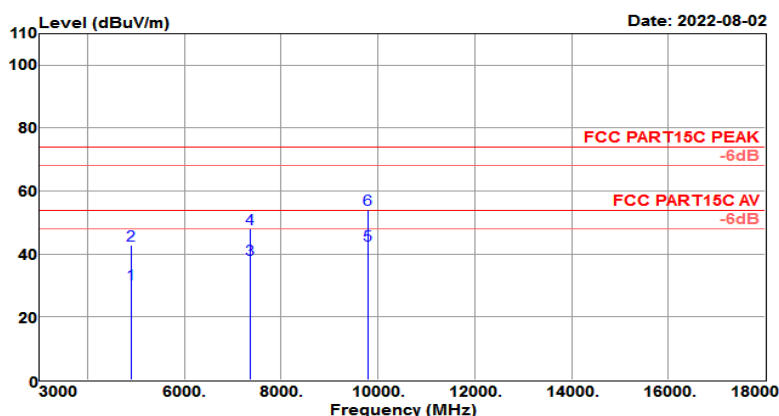
Test Mode :	802.11n HT40 CH09(2452 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	1GHz~3GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11N HT40 CH09(2452MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



Test Mode :	802.11n HT40 CH09(2452 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	3GHz~18GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11N HT40 CH09(2452MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		

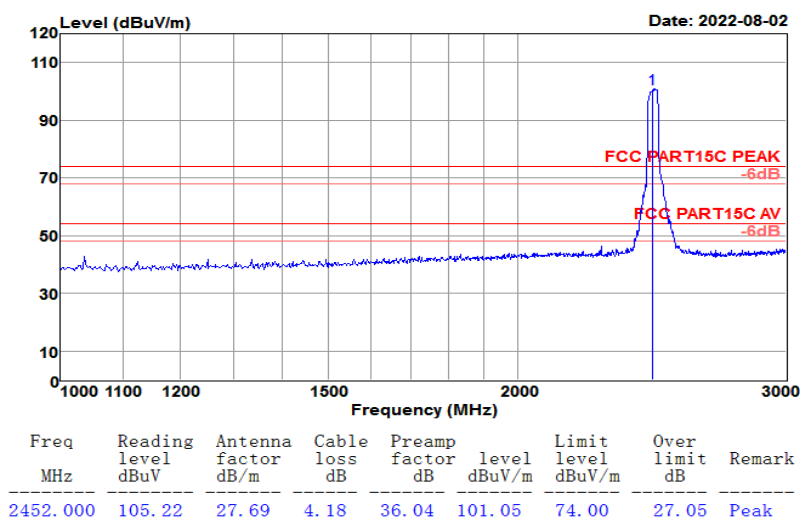


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4904.000	51.25	31.07	7.20	58.94	30.58	54.00	-23.42	Average
4904.000	63.37	31.07	7.20	58.94	42.70	74.00	-31.30	Peak
7356.000	51.97	35.75	9.09	58.46	38.35	54.00	-15.65	Average
7356.000	61.67	35.75	9.09	58.46	48.05	74.00	-25.95	Peak
9808.000	50.96	38.55	11.10	57.68	42.93	54.00	-11.07	Average
9808.000	62.08	38.55	11.10	57.68	54.05	74.00	-19.95	Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

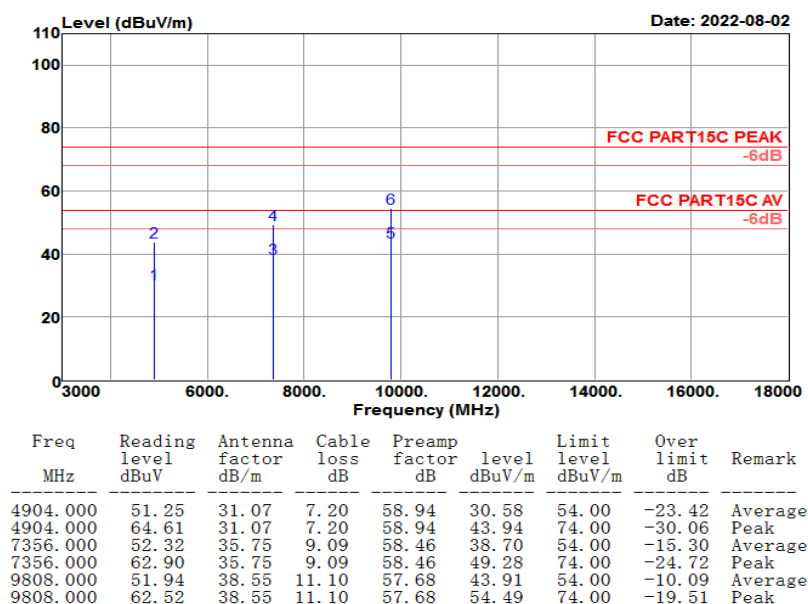
Test Mode :	802.11n HT40 CH09(2452 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	1GHz~3GHz	Polarization :	Vertical

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: VERTICAL
Test Mode	: 802.11N HT40 CH09(2452MHz)	Power rating:	DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



Test Mode :	802.11n HT40 CH09(2452 MHz)	Temperature :	21~23℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	3GHz~18GHz	Polarization :	Vertical

Test Site : 3m Chamber
 Temp/Humi : 22℃/60%
 Tested by : Jack
 Pol/Phase : VERTICAL
 Test Mode : 802.11N HT40 CH09(2452MHz)
 Power rating: DC 12V
 EUT : Edge Computer
 Model No. : EC900

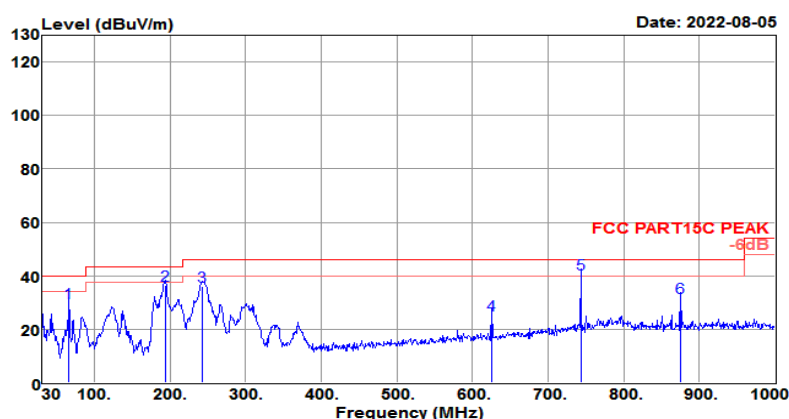


Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

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

Test Mode :	802.11g CH11 (2462 MHz)	Temperature :	21~25℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	30MHz~1GHz	Polarization :	Horizontal

Test Site	: 3m Chamber	Temp/Humi	: 22℃/60%
Tested by	: Jack	Pol/Phase	: HORIZONTAL
Test Mode	: 802.11g CH11(2462MHz)	Power rating	: DC 12V
EUT	: Edge Computer		
Model No.	: EC900		



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
65.890	47.67	13.40	1.50	32.65	29.92	40.00	-10.08	QP
192.960	55.40	10.87	2.68	32.67	36.28	43.50	-7.22	QP
242.430	53.93	11.87	3.01	32.66	36.15	46.00	-9.85	QP
624.610	34.07	19.00	5.06	32.67	25.46	46.00	-20.54	QP
742.950	46.60	20.76	5.49	32.33	40.52	46.00	-5.48	QP
874.870	36.23	21.48	6.15	32.12	31.74	46.00	-14.26	QP

Test Mode :	802.11g CH11 (2462 MHz)	Temperature :	21~25℃
Test Engineer :	Jack Liu	Relative Humidity :	60~63%
Frequency Range	30MHz~1GHz	Polarization :	Vertical

Test Site : 3m Chamber

Temp/Humi : 22℃/60%

Tested by : Jack

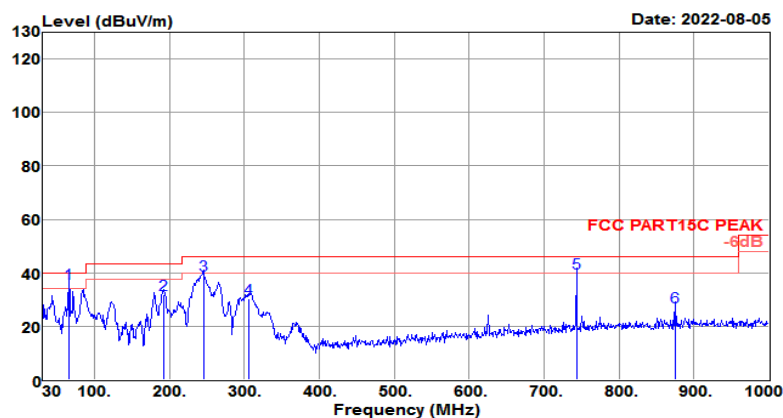
Pol/Phase : VERTICAL

Test Mode : 802.11g CH11(2462MHz)

Power rating: DC 12V

EUT : Edge Computer

Model No. : EC900



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
65.890	53.79	13.40	1.50	32.65	36.04	40.00	-3.96	QP
191.990	50.92	10.96	2.68	32.67	31.89	43.50	-11.61	QP
245.340	56.88	11.80	3.03	32.66	39.05	46.00	-6.95	QP
305.480	46.28	13.32	3.40	32.65	30.35	46.00	-15.65	QP
742.950	45.85	20.76	5.49	32.33	39.77	46.00	-6.23	QP
874.870	31.64	21.48	6.15	32.12	27.15	46.00	-18.85	QP

4.6 AC Conducted Emission Measurement

4.6.1 Limit of AC Conducted Emission

FCC §15.207

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	79	66
0.5-30	73	60

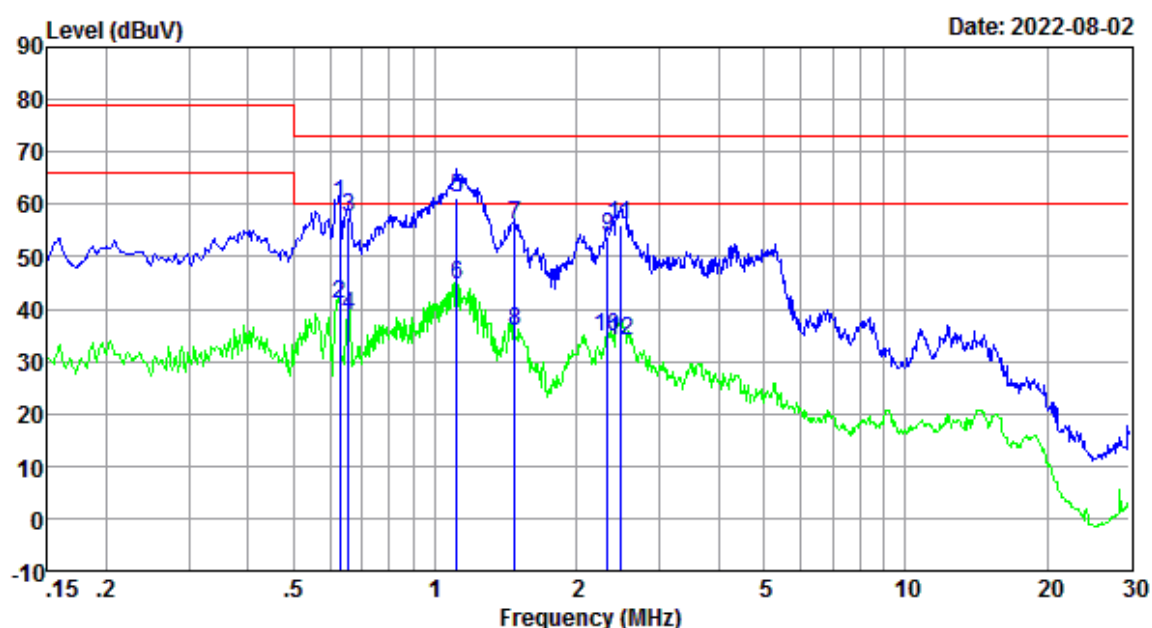
*Decreases with the logarithm of the frequency.

4.6.2 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.

4.6.3 Test Result of AC Conducted Emission

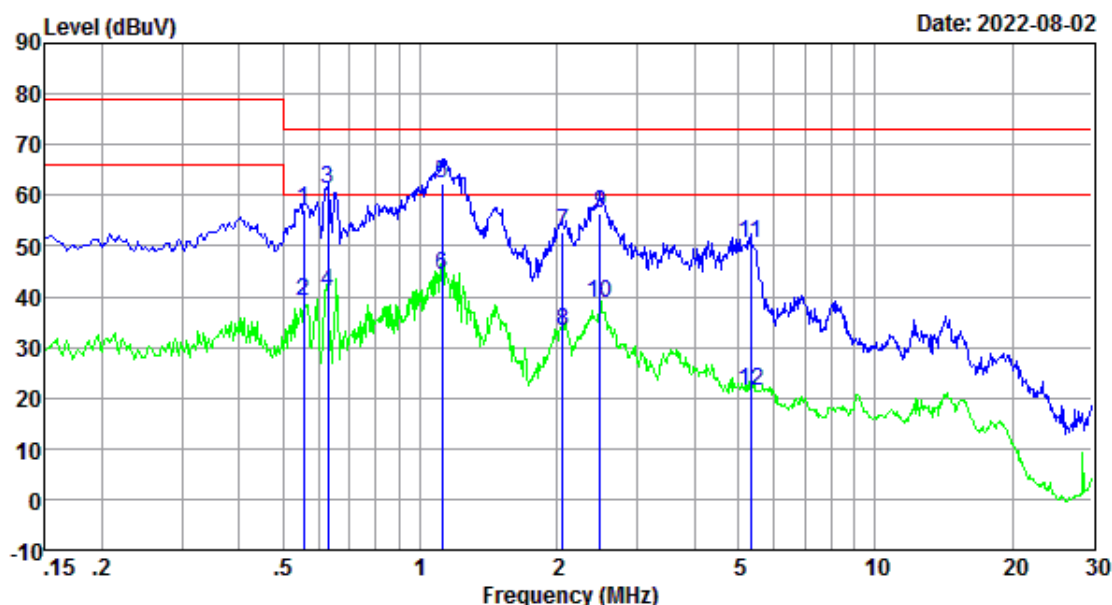
Test Mode :	Mode 1	Temperature :	20℃
Test Engineer :	Jack Liu	Relative Humidity :	64%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	WLAN Linking + RJ45 ping + display + keyboard+ mouse + GPS + Adapter		



Freq MHz	Reading level dBuV	LISN/ISN factor dB	Cable loss dB	Result level dBuV	Limit level dBuV	Over limit dB	Remark
0.627	50.27	9.72	0.03	60.02	73.00	-12.98	QP
0.627	31.35	9.72	0.03	41.10	60.00	-18.90	Average
0.654	47.84	9.74	0.03	57.61	73.00	-15.39	QP
0.654	28.92	9.74	0.03	38.69	60.00	-21.31	Average
1.111	51.70	9.57	0.09	61.36	73.00	-11.64	QP
1.111	34.80	9.57	0.09	44.46	60.00	-15.54	Average
1.480	46.25	9.60	0.07	55.92	73.00	-17.08	QP
1.480	26.16	9.60	0.07	35.83	60.00	-24.17	Average
2.321	44.26	9.62	0.06	53.94	73.00	-19.06	QP
2.321	24.87	9.62	0.06	34.55	60.00	-25.45	Average
2.474	46.37	9.61	0.06	56.04	73.00	-16.96	QP
2.474	24.12	9.61	0.06	33.79	60.00	-26.21	Average

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 :	WLAN Linking + RJ45 ping + display + keyboard+ mouse + GPS + Adapter		



Freq MHz	Reading level dBuV	LISN/ISN factor dB	Cable loss dB	Result level dBuV	Limit level dBuV	Over limit dB	Remark
0.555	47.58	9.66	0.03	57.27	73.00	-15.73	QP
0.555	29.47	9.66	0.03	39.16	60.00	-20.84	Average
0.627	51.46	9.66	0.03	61.15	73.00	-11.85	QP
0.627	31.38	9.66	0.03	41.07	60.00	-18.93	Average
1.117	52.50	9.66	0.09	62.25	73.00	-10.75	QP
1.117	34.38	9.66	0.09	44.13	60.00	-15.87	Average
2.055	43.13	9.66	0.05	52.84	73.00	-20.16	QP
2.055	23.28	9.66	0.05	32.99	60.00	-27.01	Average
2.487	46.87	9.66	0.06	56.59	73.00	-16.41	QP
2.487	28.92	9.66	0.06	38.64	60.00	-21.36	Average
5.333	40.57	9.68	0.10	50.35	73.00	-22.65	QP
5.333	11.68	9.68	0.10	21.46	60.00	-38.54	Average

Result Level= Reading Level + LISN Factor + Cable Loss

4.7 Antenna Requirements

4.7.1 Standard Applicable

According to antenna requirement of §15.203.

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be re-placed by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of Sections 15.211, 15.213, 15.217, 15.219, or 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with Section 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this Part are not exceeded..

And according to §15.247(4)(1), system operating in the 2400-2483.5MHz bands that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum peak output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

4.7.2 Antenna Connected Construction

An Suction cup Antenna design is used.

4.7.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Due Date	Remark
Spectrum Analyzer	Keysight	N9010A	MY56070788	2021-12-28	2022-12-27	Conducted
Power Sensor	Keysight	U2021XA	MY56510025	2021-12-30	2022-12-29	Conducted
Power Sensor	Keysight	U2021XA	MY57030005	2021-12-30	2022-12-29	Conducted
Power Sensor	Keysight	U2021XA	MY56510018	2021-12-30	2022-12-29	Conducted
Power Sensor	Keysight	U2021XA	MY56480002	2021-12-30	2022-12-29	Conducted
Thermal Chamber	Howkin	UHL-34	19111801	2022-04-18	2023-04-17	Conducted
Base Station	R&S	CMW 270	101231	2021-12-28	2022-12-27	Conducted
Signal Generator (Interferer)	Keysight	N5182B	MY56200384	2021-12-28	2022-12-27	Conducted
Signal Generator (Blocker)	Keysight	N5171B	MY56200661	2021-12-28	2022-12-27	Conducted

Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV 40	101433	2021-12-29	2022-12-28	Radiation
Amplifier	Sonoma	310	363917	2021-12-29	2022-12-28	Radiation
Amplifier	Schwarzbeck	BBV 9718	327	2021-12-30	2022-12-29	Radiation
Amplifier	Narda	TTA1840-35-HG	2034380	2021-11-17	2022-11-16	Radiation
Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-051	2020-02-14	2023-02-13	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	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
Communication Tester	R&S	CMW270	101231	2021/12/28	2022/12/27	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
Communication Tester	R&S	CMW270	101231	2021/12/28	2022/12/27	Radiation

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	$\pm 57.212\text{Hz}$
RF output power, conducted	$\pm 1.04\text{dB}$
Power density, conducted	$\pm 2.31\text{dB}$
Emissions, conducted	$\pm 2.18\text{dB}$

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

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.120	2406.920	2417.040	0.5	PASS
	Ant2	2412	10.080	2406.960	2417.040	0.5	PASS
	Ant1	2437	10.080	2431.960	2442.040	0.5	PASS
	Ant2	2437	10.120	2431.920	2442.040	0.5	PASS
	Ant1	2462	10.040	2456.960	2467.000	0.5	PASS
	Ant2	2462	10.080	2456.960	2467.040	0.5	PASS
11G-CDD	Ant1	2412	15.880	2403.880	2419.760	0.5	PASS
	Ant2	2412	16.320	2403.840	2420.160	0.5	PASS
	Ant1	2437	16.320	2428.840	2445.160	0.5	PASS
	Ant2	2437	16.280	2428.840	2445.120	0.5	PASS
	Ant1	2462	16.320	2453.840	2470.160	0.5	PASS
	Ant2	2462	16.280	2453.880	2470.160	0.5	PASS
11N20MIMO	Ant1	2412	17.280	2403.240	2420.520	0.5	PASS
	Ant2	2412	16.000	2404.160	2420.160	0.5	PASS
	Ant1	2437	16.480	2428.640	2445.120	0.5	PASS
	Ant2	2437	16.160	2429.000	2445.160	0.5	PASS
	Ant1	2462	15.440	2454.240	2469.680	0.5	PASS
	Ant2	2462	16.920	2453.600	2470.520	0.5	PASS
11N40MIMO	Ant1	2422	34.960	2404.560	2439.520	0.5	PASS
	Ant2	2422	35.040	2404.480	2439.520	0.5	PASS
	Ant1	2437	35.040	2419.480	2454.520	0.5	PASS
	Ant2	2437	33.920	2419.560	2453.480	0.5	PASS
	Ant1	2452	33.920	2435.680	2469.600	0.5	PASS
	Ant2	2452	34.960	2434.560	2469.520	0.5	PASS

Test Graphs

11B_Ant1_2412



11B_Ant2_2412



11B_Ant1_2437



11B_Ant2_2437



11B_Ant1_2462



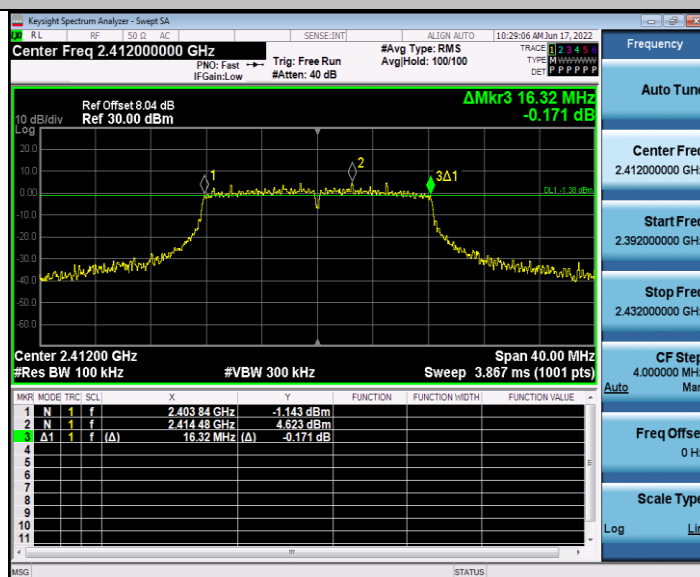
11B_Ant2_2462



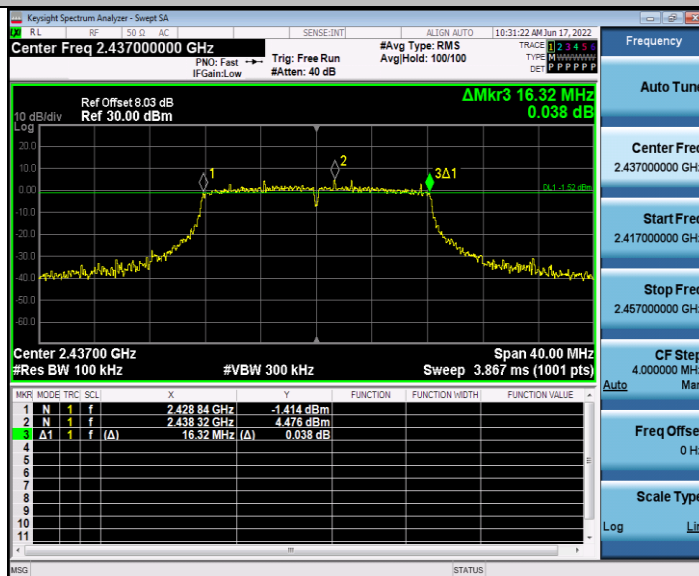
11G-CDD_Ant1_2412



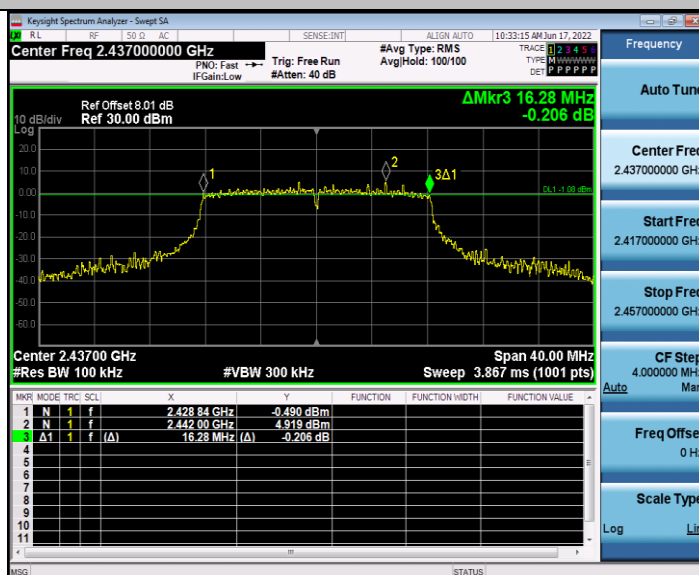
11G-CDD_Ant2_2412



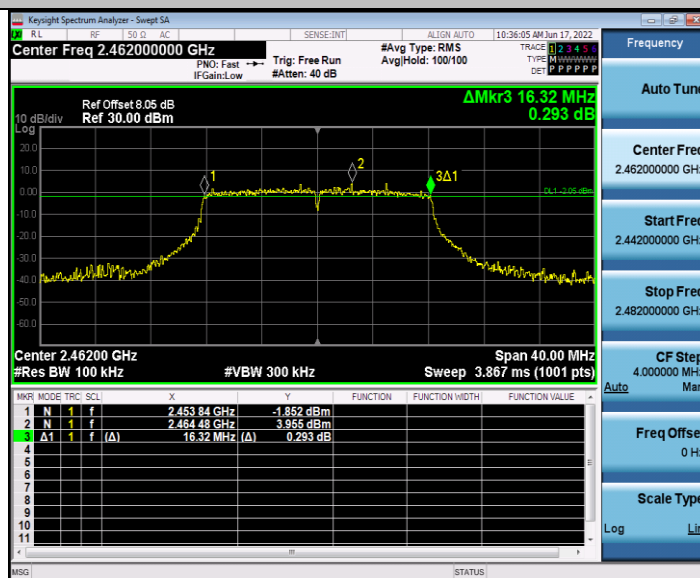
11G-CDD_Ant1_2437



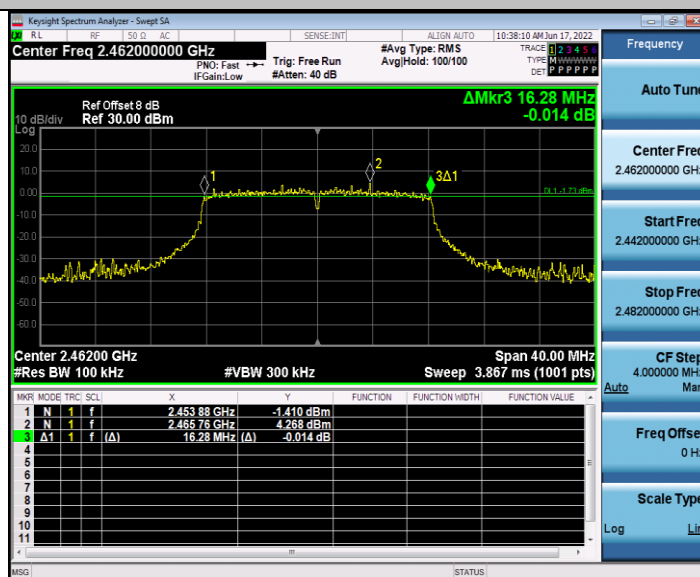
11G-CDD_Ant2_2437



11G-CDD_Ant1_2462



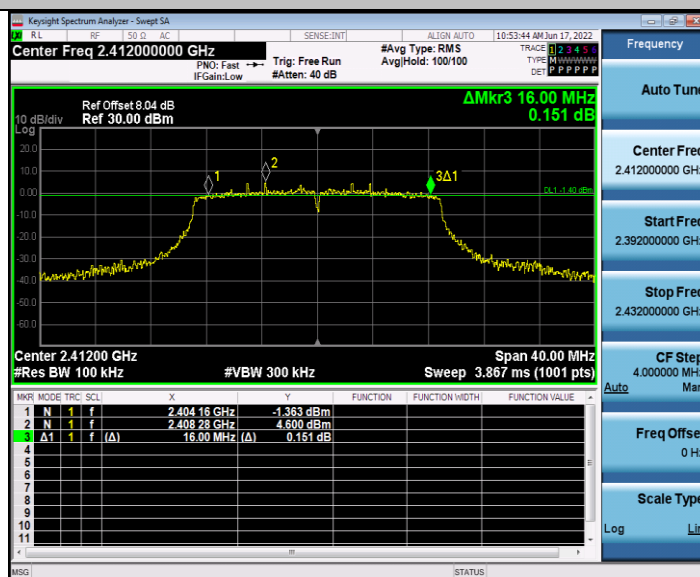
11G-CDD Ant2 2462



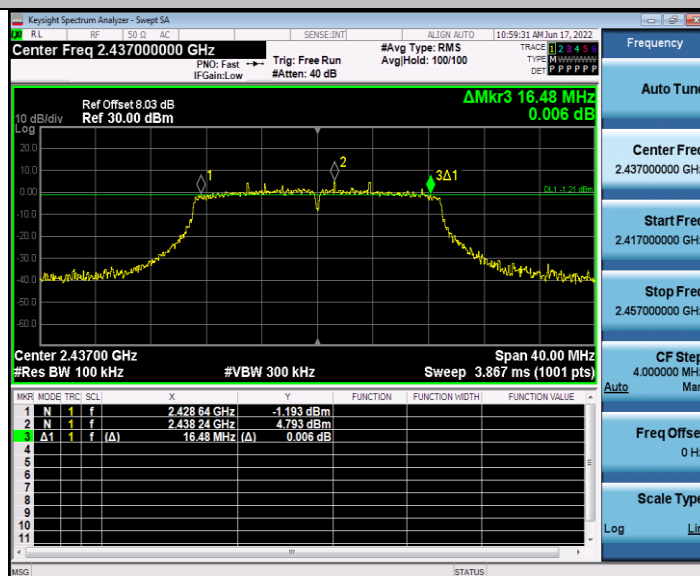
11N20MIMO_Ant1_2412



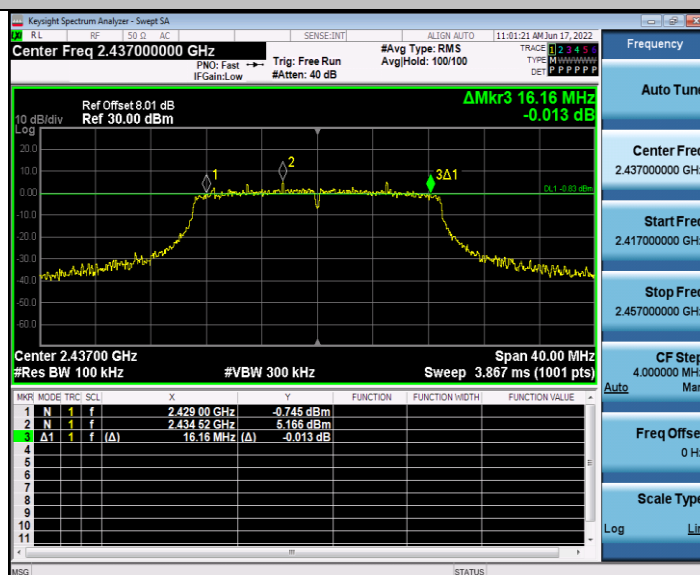
11N20MIMO_Ant2_2412



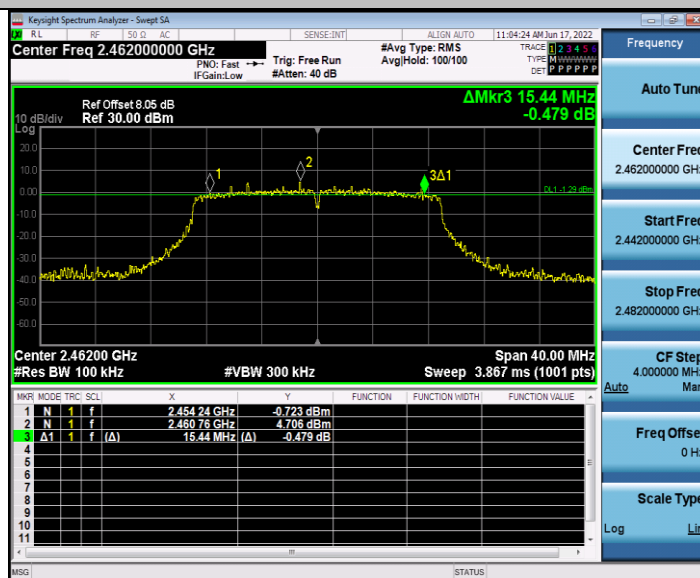
11N20MIMO_Ant1_2437



11N20MIMO_Ant2_2437



11N20MIMO_Ant1_2462



11N20MIMO_Ant2_2462

