

# FCC Test Report

**FCC ID** : 2AAS9-MI12  
**Equipment** : Wi-Fi 6 AX6000 Dual-Radio Indoor Router  
**Model No.** : MI12  
**Brand Name** : PRISM  
**Applicant** : BROWAN COMMUNICATIONS  
INCORPORATION  
**Address** : No.15-1, Zhonghua Rd., Hsinchu Industrial  
Park, Hukou Hsinchu Hsien Taiwan 303  
**Standard** : 47 CFR FCC Part 15.247  
**Received Date** : Mar. 17, 2023  
**Tested Date** : Mar. 22 ~ May 02, 2023

We, International Certification Corporation, would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by:

Approved by:

  
\_\_\_\_\_  
Along Chen / Assistant Manager

  
\_\_\_\_\_  
Gary Chang / Manager

## Table of Contents

<b>1</b>	<b>GENERAL DESCRIPTION .....</b>	<b>5</b>
1.1	Information.....	5
1.2	Local Support Equipment List .....	8
1.3	Test Setup Chart .....	8
1.4	The Equipment List .....	9
1.5	Test Standards .....	10
1.6	Reference Guidance .....	10
1.7	Deviation from Test Standard and Measurement Procedure.....	10
1.8	Measurement Uncertainty .....	10
<b>2</b>	<b>TEST CONFIGURATION.....</b>	<b>11</b>
2.1	Testing Facility .....	11
2.2	The Worst Test Modes and Channel Details .....	11
<b>3</b>	<b>TRANSMITTER TEST RESULTS .....</b>	<b>12</b>
3.1	6dB and Occupied Bandwidth .....	12
3.2	Conducted Output Power .....	13
3.3	Power Spectral Density .....	14
3.4	Unwanted Emissions into Restricted Frequency Bands .....	15
3.5	Emissions in Non-Restricted Frequency Bands.....	17
3.6	AC Power Line Conducted Emissions .....	18
<b>4</b>	<b>TEST LABORATORY INFORMATION .....</b>	<b>19</b>
<b>Appendix A. 6dB and Occupied Bandwidth</b>		
<b>Appendix B. Conducted Output Power</b>		
<b>Appendix C. Power Spectral Density</b>		
<b>Appendix D. Unwanted Emissions into Restricted Frequency Bands</b>		
<b>Appendix E. Emissions in Non-Restricted Frequency Bands</b>		
<b>Appendix F. AC Power Line Conducted Emissions</b>		

---

## Release Record

Report No.	Version	Description	Issued Date
FR331702AC	Rev. 01	Initial issue	May 17, 2023

## Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	AC Power Line Conducted Emission	[dBuV]: 0.476MHz 35.17 (Margin -11.24dB) - AV	Pass
15.247(d) 15.209	Unwanted Emissions	[dBuV/m at 3m]: 7386.00MHz 53.29 (Margin -0.71dB) - AV	Pass
15.247(b)(3)	Conducted Output Power	Max Power [dBm]: <b>Non-beamforming mode</b> 26.81 <b>Beamforming mode</b> 20.79	Pass
15.247(a)(2)	6dB Bandwidth	Meet the requirement of limit	Pass
15.247(e)	Power Spectral Density	Meet the requirement of limit	Pass
15.203	Antenna Requirement	Meet the requirement of limit	Pass

### Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

### Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

# 1 General Description

## 1.1 Information

### 1.1.1 Specification of the Equipment under Test (EUT)

RF General Information					
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N <sub>TX</sub> )	Data Rate / MCS
2400-2483.5	b	2412-2462	1-11 [11]	4	1-11 Mbps
2400-2483.5	g	2412-2462	1-11 [11]	4	6-54 Mbps
2400-2483.5	n (HT20)	2412-2462	1-11 [11]	4	MCS 0-31
2400-2483.5	n (HT40)	2422-2452	3-9 [7]	4	MCS 0-31
2400-2483.5	ax (HE20)	2412-2462	1-11 [11]	4	MCS 0-11
2400-2483.5	ax (HE40)	2422-2452	3-9 [7]	4	MCS 0-11

Note 1: RF output power specifies that Maximum Conducted (Average) Output Power.  
 Note 2: DBPSK, DQPSK, CCK modulation  
 BPSK, QPSK, 16QAM, 64QAM, 256QAM and 1024QAM modulation.  
 Note 3: 802.11n/ax supports beamforming function.

### 1.1.2 Antenna Details

Ant. No.	Brand	Model	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)		
					2400~2483.5	5150~5250	5725~5850
Ant 1	LYNwave	AEX22M-222AA1-00	PIFA	UFL	2.71	2.13	2.9
Ant 2	LYNwave	AEX22M-222AA2-00	PIFA	UFL	2.71	2.13	2.9
Ant 3	LYNwave	AEX22M-222AA4-00	PIFA	UFL	2.71	2.13	2.9
Ant 4	LYNwave	AEX22M-222AA3-00	PIFA	UFL	2.71	2.13	2.9

### 1.1.3 Power Supply Type of Equipment under Test (EUT)

<b>Power Supply Type</b>	56Vdc from POE
--------------------------	----------------

Note: The above power supply is not bundled in market.

### 1.1.4 Accessories

Accessories		
No.	Equipment	Description
1	MOUNTING-BRACKET	--

### 1.1.5 Channel List

Frequency band (MHz)		2400~2483.5	
802.11 b / g / n HT20 / ax HE20		802.11n HT40 / ax HE40	
Channel	Frequency(MHz)	Channel	Frequency(MHz)
1	2412	3	2422
2	2417	4	2427
3	2422	5	2432
4	2427	6	2437
5	2432	7	2442
6	2437	8	2447
7	2442	9	2452
8	2447	---	---
9	2452	---	---
10	2457	---	---
11	2462	---	---

### 1.1.6 Test Tool and Duty Cycle

Test Tool	QATool, Version: UIv2.88_DLLv6.93_ap_2022.01.04(V14)c		
Duty Cycle and Duty Factor	Mode	Duty Cycle (%)	Duty Factor (dB)
	11b	100.00%	0.00
	11g	98.97%	0.04
	ax HE20	98.29%	0.07
	ax HE40	95.97%	0.18

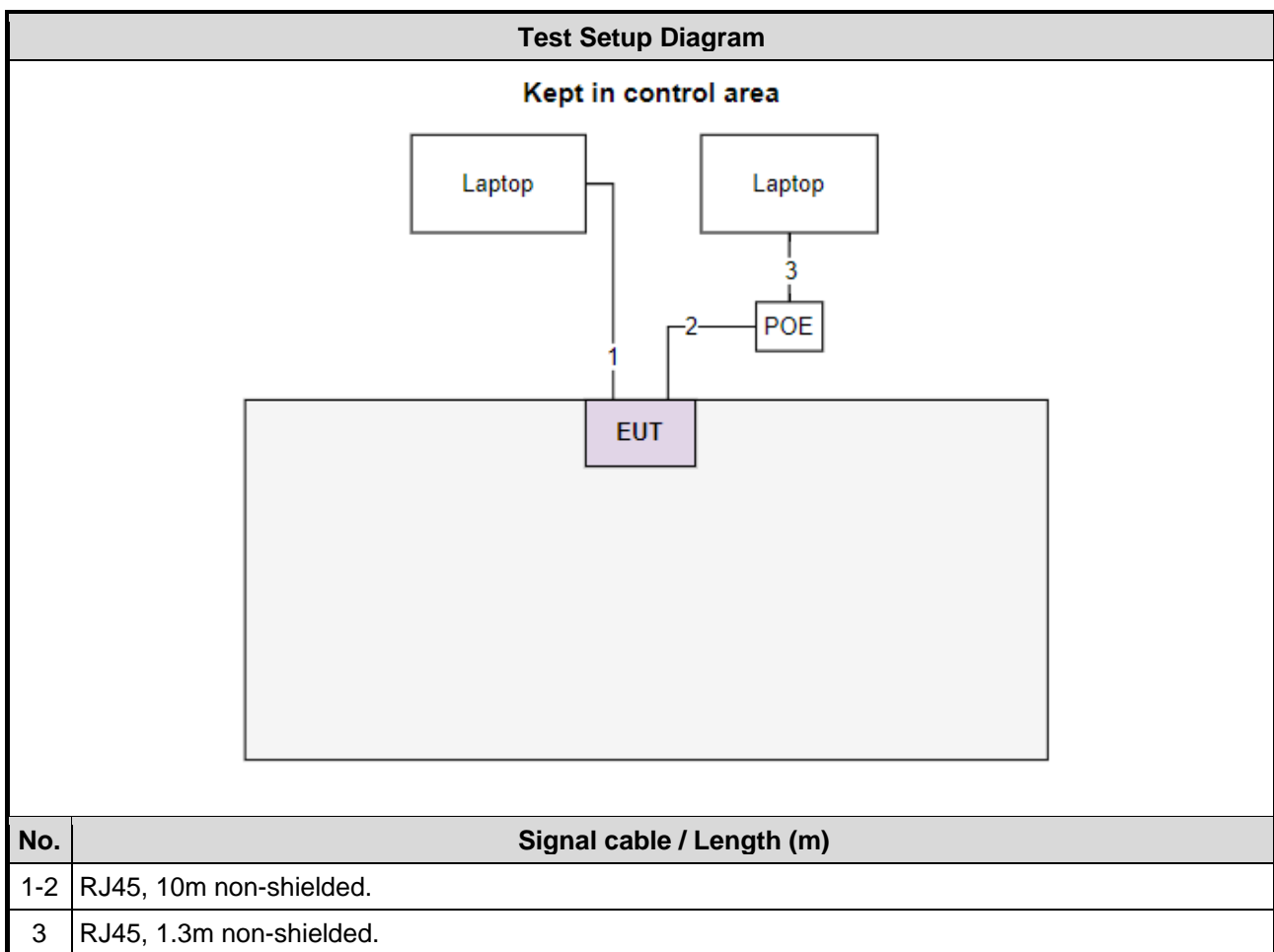
### 1.1.7 Power Index of Test Tool

Modulation Mode	Test Frequency (MHz)	Power Index
11b	2412	16
11b	2437	15.5
11b	2462	14.5
11g	2412	15
11g	2437	17.5
11g	2462	14.5
ax HE20	2412	14.5
ax HE20	2437	18.5
ax HE20	2462	14.5
ax HE40	2422	14
ax HE40	2437	16.5
ax HE40	2452	15

## 1.2 Local Support Equipment List

Support Equipment List					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	Laptop	DELL	Latitude 5400	DoC	---
2	Laptop	DELL	Latitude E5470	DoC	---
3	POE	DELTA	ADH-45AR B	---	I/P: 100-240V~, 1.5A, 50-60Hz O/P: 56Vdc, 0.805A, 45.08W

## 1.3 Test Setup Chart





## 1.4 The Equipment List

<b>Test Item</b>	Conducted Emission				
<b>Test Site</b>	Conduction room 1 / (CO01-WS)				
<b>Tested Date</b>	May 02, 2023				
<b>Instrument</b>	<b>Brand</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Calibration Date</b>	<b>Calibration Until</b>
Receiver	R&S	ESR3	101658	Feb. 17, 2023	Feb. 16, 2024
LISN	R&S	ENV216	101295	Jan. 31, 2023	Jan. 30, 2024
LISN (Support Unit)	SCHWARZBECK	Schwarzbeck 8127	8127667	Jan .03, 2023	Jan .02, 2024
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 17, 2022	Oct. 16, 2023
50 ohm terminal (Support Unit)	NA	50	01	May 10, 2022	May 09, 2023
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

<b>Test Item</b>	Radiated Emission				
<b>Test Site</b>	966 chamber1 / (03CH01-WS)				
<b>Tested Date</b>	Mar. 22 ~ Apr. 21, 2023				
<b>Instrument</b>	<b>Brand</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Calibration Date</b>	<b>Calibration Until</b>
Receiver	R&S	ESR3	101657	Mar. 03, 2023	Mar. 02, 2024
Spectrum Analyzer	R&S	FSV40	101498	Nov. 21, 2022	Nov. 20, 2023
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 01, 2022	Oct. 31, 2023
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Aug. 03, 2022	Aug. 02, 2023
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Nov. 25, 2022	Nov. 24, 2023
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Oct. 27, 2022	Oct. 26, 2023
Preamplifier	EMC	EMC02325	980225	Jun. 28, 2022	Jun. 27, 2023
Preamplifier	EMC	EMC118A45SE	980898	Jul. 16, 2022	Jul. 15, 2023
Preamplifier	EMC	EMC184045SE	980903	Jul. 16, 2022	Jul. 15, 2023
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 04, 2022	Oct. 03, 2023
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Oct. 04, 2022	Oct. 03, 2023
LF cable 11M	EMC	EMCCFD400-NW-N W-11000	200801	Oct. 04, 2022	Oct. 03, 2023
LF cable 1M	EMC	EMCCFD400-NM-N M-1000	160502	Oct. 04, 2022	Oct. 03, 2023
RF Cable	EMC	EMC104-35M-35M-8000	210920	Oct. 04, 2022	Oct. 03, 2023
RF Cable	EMC	EMC104-35M-35M-3000	210922	Oct. 04, 2022	Oct. 03, 2023
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

<b>Test Item</b>	RF Conducted				
<b>Test Site</b>	(TH01-WS)				
<b>Tested Date</b>	Apr. 07 ~ Apr. 10, 2023				
<b>Instrument</b>	<b>Brand</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Calibration Date</b>	<b>Calibration Until</b>
Spectrum Analyzer	R&S	FSV40	101498	Nov. 21, 2022	Nov. 20, 2023
Power Meter	Anritsu	ML2495A	1241002	Nov. 23, 2022	Nov. 22, 2023
Power Sensor	Anritsu	MA2411B	1207366	Nov. 23, 2022	Nov. 22, 2023
Measurement Software	Sporton	SENSE-15247_DTS	V5.11	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

## 1.5 Test Standards

47 CFR FCC Part 15.247  
ANSI C63.10-2013

## 1.6 Reference Guidance

FCC KDB 558074 D01 15.247 Meas Guidance v05r02  
FCC KDB 662911 D01 Multiple Transmitter Output v02r01

## 1.7 Deviation from Test Standard and Measurement Procedure

None

## 1.8 Measurement Uncertainty

The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)).

Measurement Uncertainty	
Parameters	Uncertainty
Bandwidth	±34.130 Hz
Conducted power	±0.808 dB
Power density	±0.583 dB
Conducted emission	±2.715 dB
AC conducted emission	±2.92 dB
Unwanted Emission ≤ 1GHz	±3.41 dB
Unwanted Emission > 1GHz	±4.59 dB

## 2 Test Configuration

### 2.1 Testing Facility

<b>Test Laboratory</b>	International Certification Corporation
<b>Test Site</b>	CO01-WS, 03CH01-WS, TH01-WS
<b>Address of Test Site</b>	No.3-1, Lane 6, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)

- FCC Designation No.: TW2732
- FCC site registration No.: 181692
- ISED#: 10807A
- CAB identifier: TW2732

### 2.2 The Worst Test Modes and Channel Details

Test item	Modulation Mode	Test Frequency (MHz)	Data Rate	Test Configuration
<b>Non-beamforming mode</b>				
AC Power Line Conducted Emission	ax HE20	2437	MCS 0	---
Unwanted Emissions ≤ 1GHz	ax HE20	2437	MCS 0	---
Unwanted Emissions >1GHz	11b	2412 / 2437 / 2462	1 Mbps	---
Conducted Output Power	11g	2412 / 2437 / 2462	6 Mbps	
6dB bandwidth	ax HE20	2412 / 2437 / 2462	MCS 0	
Power spectral density	ax HE40	2422 / 2437 / 2452	MCS 0	
<b>Beamforming mode</b>				
Conducted Output Power	ax HE20 ax HE40	2412 / 2437 / 2462 2422 / 2437 / 2452	MCS 0 MCS 0	---
<b>NOTE:</b>				
1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The <b>Z-plane</b> results were found as the worst case and were shown in this report.				

### 3 Transmitter Test Results

#### 3.1 6dB and Occupied Bandwidth

##### 3.1.1 Limit of 6dB Bandwidth

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

##### 3.1.2 Test Procedures

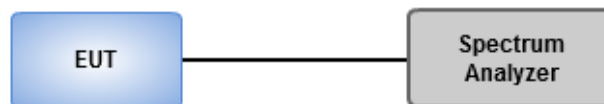
###### 6dB Bandwidth

1. Set resolution bandwidth (RBW) = 100 kHz, Video bandwidth = 300 kHz.
2. Detector = Peak, Trace mode = max hold.
3. Sweep = auto couple, Allow the trace to stabilize.
4. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 6dB relative to the maximum level measured in the fundamental emission.

###### Occupied Bandwidth

1. Set resolution bandwidth (RBW) = 1% ~ 5 % of OBW, Video bandwidth = 3 x RBW
2. Detector = Sample, Trace mode = max hold.
3. Sweep = auto couple, Allow the trace to stabilize.
4. Use the OBW measurement function of spectrum analyzer to measure the occupied bandwidth.

##### 3.1.3 Test Setup



##### 3.1.4 Test Results

<b>Ambient Condition</b>	24-25°C / 65-66%	<b>Tested By</b>	Akun Chung
--------------------------	------------------	------------------	------------

Refer to Appendix A.

## 3.2 Conducted Output Power

### 3.2.1 Limit of Conducted Output Power

Conducted power shall not exceed 1Watt.

Antenna gain  $\leq 6\text{dBi}$ , no any corresponding reduction is in output power limit.

Antenna gain  $> 6\text{dBi}$

Non Fixed, point to point operations.

The conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dB

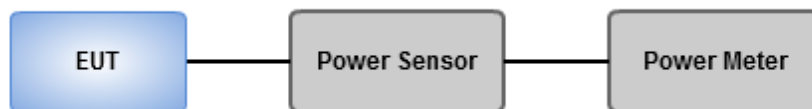
Fixed, point to point operations

Systems operating in the 2400–2483.5 MHz band that are used exclusively for fixed, point-to-point Operations, 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 6 dBi.

### 3.2.2 Test Procedures

A broadband RF power meter is used for output power measurement. The video bandwidth of power meter is greater than DTS bandwidth of EUT. If duty cycle of test signal is not 100 %, trigger and gating function of power meter will be enabled to capture transmission burst for measuring output power.

### 3.2.3 Test Setup



### 3.2.4 Test Results

<b>Ambient Condition</b>	24-25°C / 65-66%	<b>Tested By</b>	Akun Chung
--------------------------	------------------	------------------	------------

Refer to Appendix B.

### 3.3 Power Spectral Density

#### 3.3.1 Limit of Power Spectral Density

Power spectral density shall not be greater than 8 dBm in any 3 kHz band.

#### 3.3.2 Test Procedures

##### Peak PSD

1. Set the RBW = 3 kHz, VBW = 10 kHz.
2. Detector = Peak, Sweep time = auto couple.
3. Trace mode = max hold, allow trace to fully stabilize.
4. Use the peak marker function to determine the maximum amplitude level.

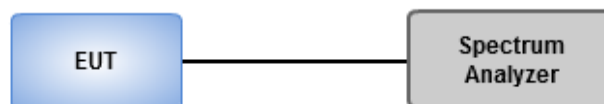
##### Average PSD, duty cycle $\geq$ 98%

1. Set the RBW = 30 kHz, VBW = 100 kHz.
2. Detector = RMS, Sweep time = auto couple.
3. Sweep time = auto couple.
4. Employ trace averaging (RMS) mode over a minimum of 100 traces.
5. Use the peak marker function to determine the maximum amplitude level.

##### Average PSD, duty cycle $<$ 98%

1. Set the RBW = 30 kHz, VBW = 100 kHz. Detector = RMS.
2. Set the sweep time to:  $\geq 10$  (number of measurement points in sweep) x (total on/off period of the transmitted signal).
3. Perform the measurement over a single sweep.
4. Use the peak marker function to determine the maximum amplitude level.
5. Add  $10 \log (1/x)$ , where x is the duty cycle.

#### 3.3.3 Test Setup



#### 3.3.4 Test Results

<b>Ambient Condition</b>	24-25°C / 65-66%	<b>Tested By</b>	Akun Chung
--------------------------	------------------	------------------	------------

Refer to Appendix C.

### 3.4 Unwanted Emissions into Restricted Frequency Bands

#### 3.4.1 Limit of Unwanted Emissions into Restricted Frequency Bands

Restricted Band Emissions Limit			
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

**Note 1:**  
 Qusai-Peak value is measured for frequency below 1GHz except for 9–90 kHz, 110–490 kHz frequency band. Peak and average value are measured for frequency above 1GHz. The limit on average radio frequency emission is as above table. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit

**Note 2:**  
 Measurements may be performed at a distance other than what is specified provided. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor as below, Frequency at or above 30 MHz: 20 dB/decade Frequency below 30 MHz: 40 dB/decade.

#### 3.4.2 Test Procedures

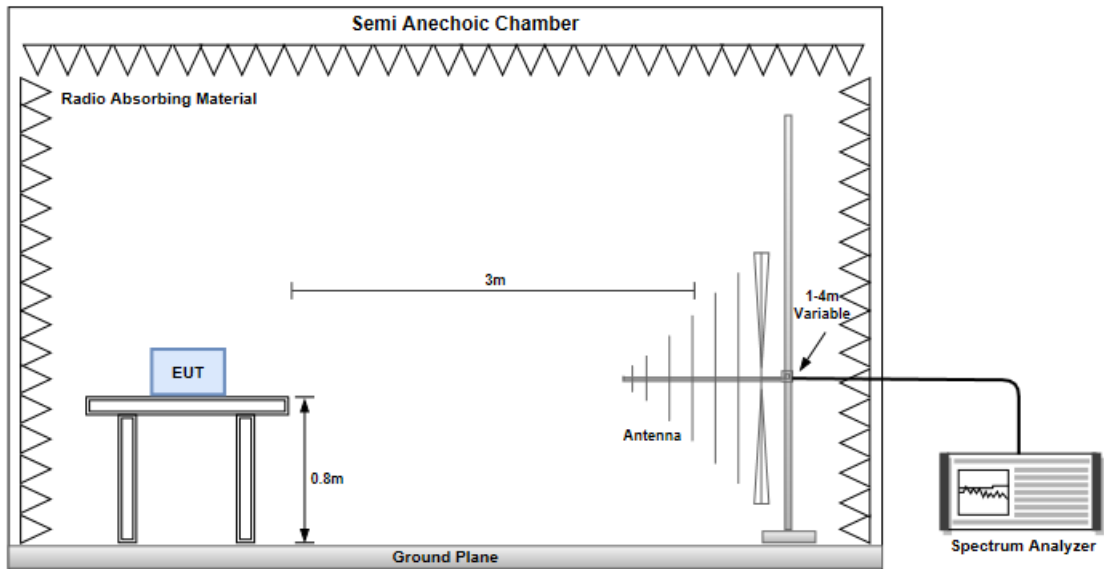
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at test table. For emissions testing at or below 1 GHz, the table height is 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height is 1.5 m
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.

Note:

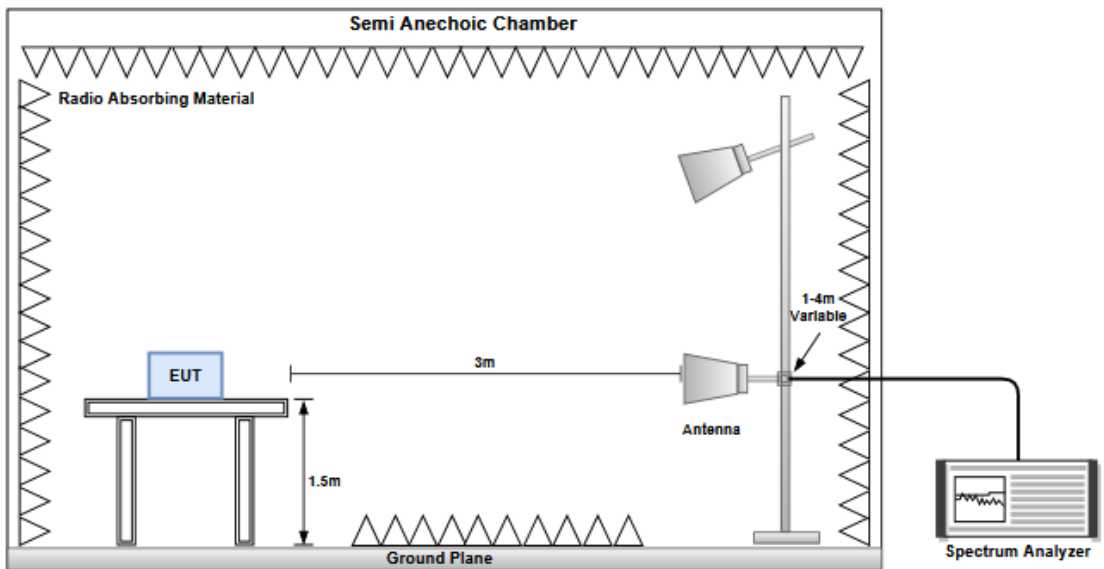
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above 1GHz.

### 3.4.3 Test Setup

#### Radiated Emissions below 1 GHz



#### Radiated Emissions above 1 GHz



### 3.4.4 Test Results

Refer to Appendix D.



## 3.5 Emissions in Non-Restricted Frequency Bands

### 3.5.1 Emissions in Non-Restricted Frequency Bands Limit

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.

### 3.5.2 Test Procedures

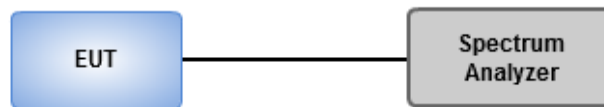
#### Reference level measurement

1. Set RBW=100kHz, VBW = 300kHz , Detector = Peak, Sweep time = Auto
2. Trace = max hold , Allow Trace to fully stabilize
3. Use the peak marker function to determine the maximum PSD level

#### Emission level measurement

1. Set RBW=100kHz, VBW = 300kHz , Detector = Peak, Sweep time = Auto
2. Trace = max hold , Allow Trace to fully stabilize
3. Scan Frequency range is up to 25GHz
4. Use the peak marker function to determine the maximum amplitude level

### 3.5.3 Test Setup



### 3.5.4 Test Results

<b>Ambient Condition</b>	24-25°C / 65-66%	<b>Tested By</b>	Akun Chung
--------------------------	------------------	------------------	------------

Refer to Appendix E.

## 3.6 AC Power Line Conducted Emissions

### 3.6.1 Limit of AC Power Line Conducted Emissions

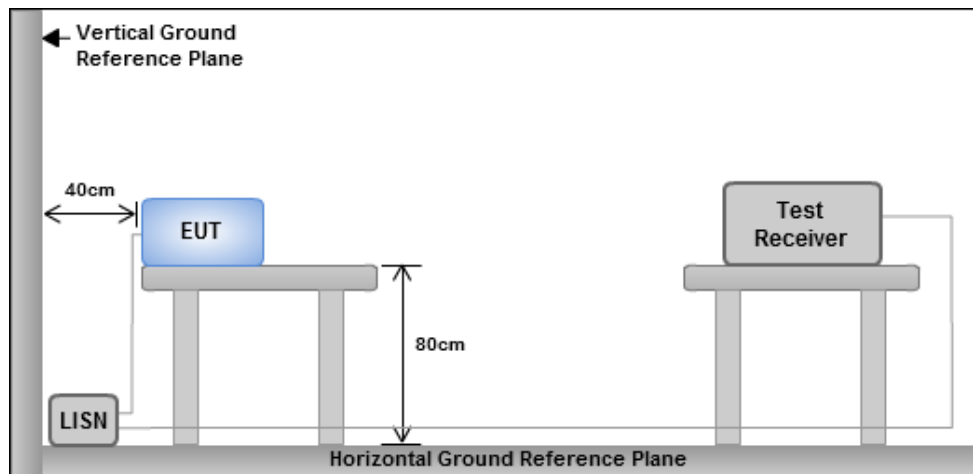
Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: \* Decreases with the logarithm of the frequency.

### 3.6.2 Test Procedures

1. The device is placed on a test table, raised 80 cm above the reference ground plane. The vertical conducting plane is located 40 cm to the rear of the device.
2. The device is connected to line impedance stabilization network (LISN) and other accessories are connected to other LISN. Measured levels of AC power line conducted emission are across the 50  $\Omega$  LISN port.
3. AC conducted emission measurements is made over frequency range from 150 kHz to 30 MHz.
4. This measurement was performed with AC 120V / 60Hz.

### 3.6.3 Test Setup



- Note: 1. Support units were connected to second LISN.  
 2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

### 3.6.4 Test Results

Refer to Appendix F.

## 4 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corporation (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan District. Location map can be found on our website <http://www.icertifi.com.tw>.

### **Linkou**

Tel: 886-2-2601-1640

No.30-2, Ding Fwu Tsuen, Lin Kou  
District, New Taipei City, Taiwan  
(R.O.C.)

### **Kwei Shan**

Tel: 886-3-271-8666

No.3-1, Lane 6, Wen San 3rd  
St., Kwei Shan Dist., Tao Yuan  
City 33381, Taiwan (R.O.C.)  
No.2-1, Lane 6, Wen San 3rd  
St., Kwei Shan Dist., Tao Yuan  
City 33381, Taiwan (R.O.C.)

### **Kwei Shan Site II**

Tel: 886-3-271-8640

No.14-1, Lane 19, Wen San 3rd  
St., Kwei Shan Dist., Tao Yuan  
City 33381, Taiwan (R.O.C.)

If you have any suggestion, please feel free to contact us as below information.

Tel: 886-3-271-8666

Fax: 886-3-318-0345

Email: ICC\_Service@icertifi.com.tw

==END==



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_4TX	8.05M	12.819M	12M8G1D	7.075M	12.534M
802.11g_Nss1,(6Mbps)_4TX	16.325M	16.932M	16M9D1D	15.65M	16.624M
802.11ax HEW20_Nss1,(MCS0)_4TX	18.675M	19.14M	19M1D1D	17.325M	18.891M
802.11ax HEW40_Nss1,(MCS0)_4TX	37.5M	37.731M	37M7D1D	35.1M	37.631M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;  
 Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

Result

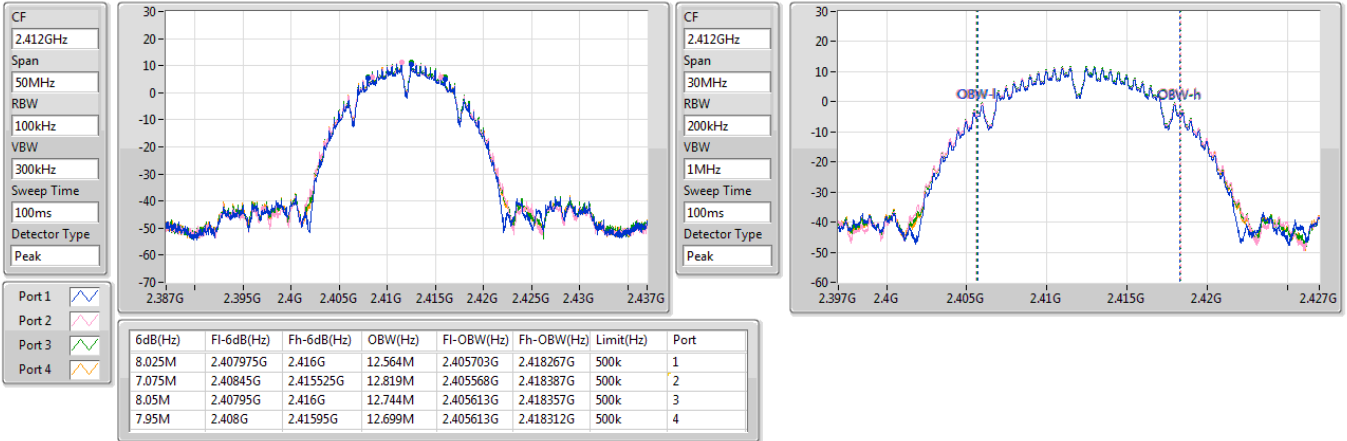
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	8.025M	12.564M	7.075M	12.819M	8.05M	12.744M	7.95M	12.699M
2437MHz	Pass	500k	8.025M	12.534M	7.55M	12.774M	8.025M	12.684M	8M	12.684M
2462MHz	Pass	500k	8.05M	12.639M	8.025M	12.714M	8.025M	12.729M	8.05M	12.699M
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	16.3M	16.734M	16.275M	16.69M	16.3M	16.668M	16.325M	16.668M
2437MHz	Pass	500k	16.275M	16.91M	16.275M	16.822M	15.65M	16.866M	16.25M	16.932M
2462MHz	Pass	500k	16.275M	16.646M	16.3M	16.668M	16.275M	16.624M	16.275M	16.646M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	18.6M	18.891M	18.2M	18.916M	18.25M	18.891M	18.2M	18.891M
2437MHz	Pass	500k	18.175M	19.115M	18.225M	19.115M	18.25M	19.14M	18.15M	19.115M
2462MHz	Pass	500k	17.325M	19.015M	18.325M	18.991M	18.225M	19.015M	18.675M	18.991M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	35.2M	37.631M	35.65M	37.631M	35.9M	37.681M	35.85M	37.631M
2437MHz	Pass	500k	36.05M	37.681M	35.15M	37.731M	35.1M	37.731M	35.25M	37.731M
2452MHz	Pass	500k	35.15M	37.681M	35.2M	37.681M	37.5M	37.681M	36.1M	37.631M

Port X-N dB = Port X 6dB down bandwidth;  
 Port X-OBW = Port X 99% occupied bandwidth

2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_4TX

EBW

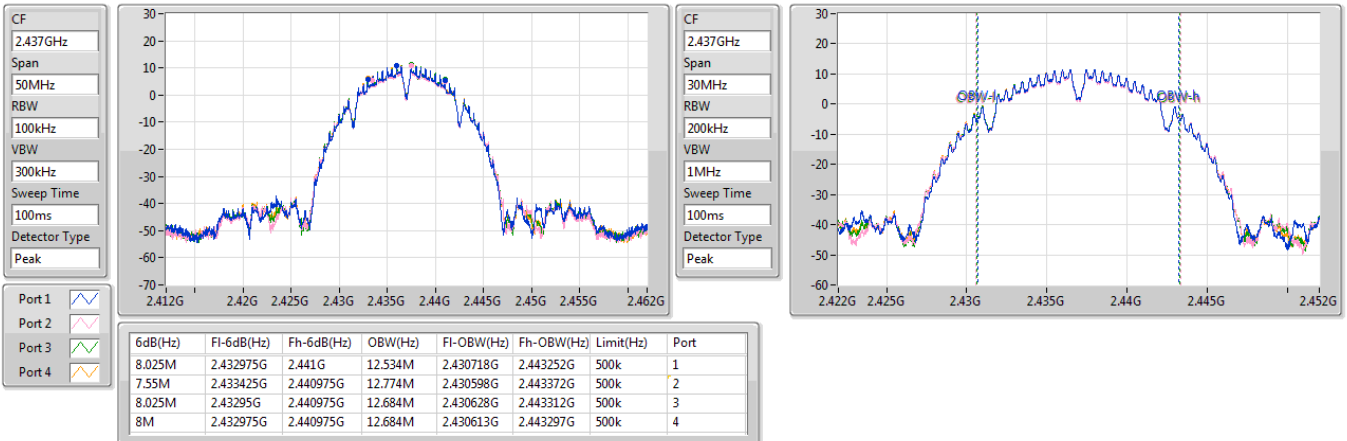
2412MHz



2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_4TX

EBW

2437MHz

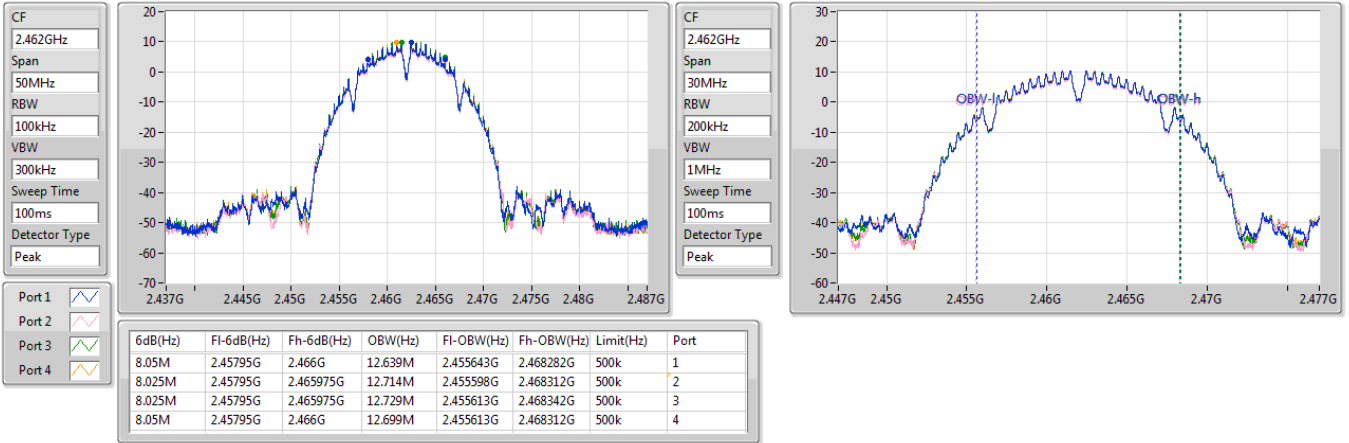




2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_4TX

EBW

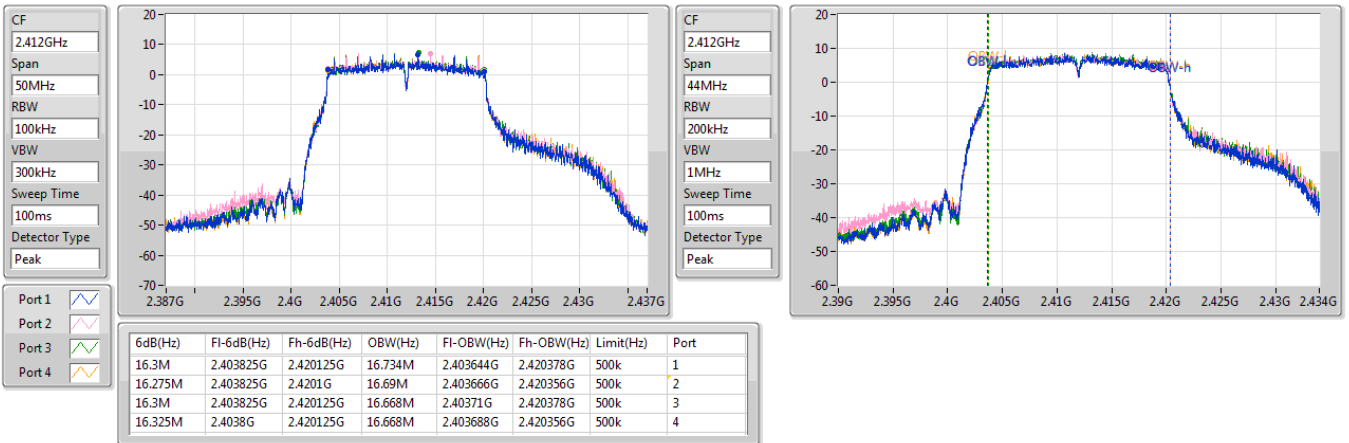
2462MHz



2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_4TX

EBW

2412MHz

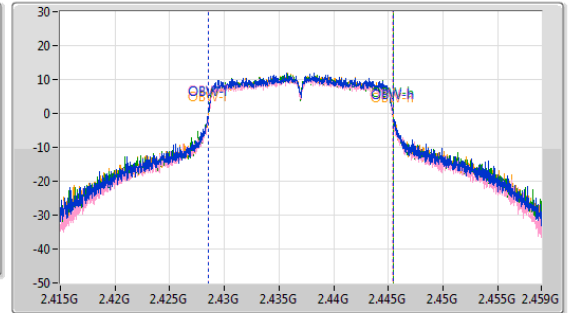
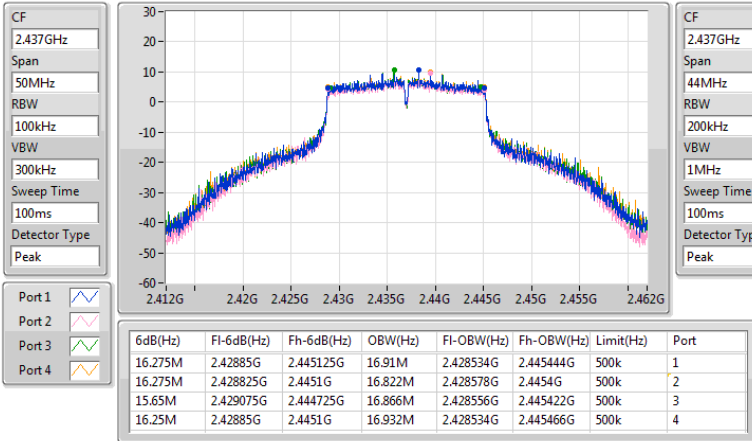




2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_4TX

EBW

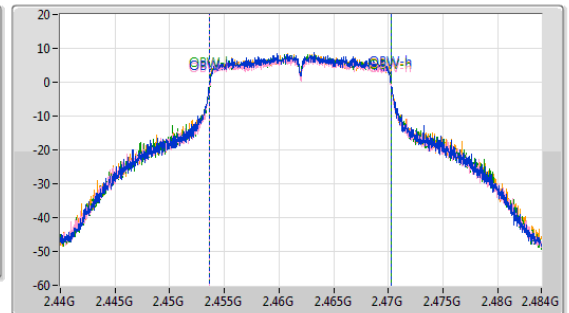
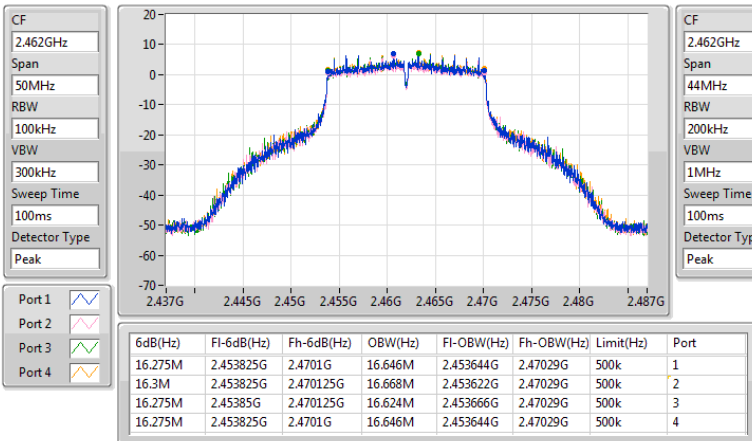
2437MHz



2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_4TX

EBW

2462MHz

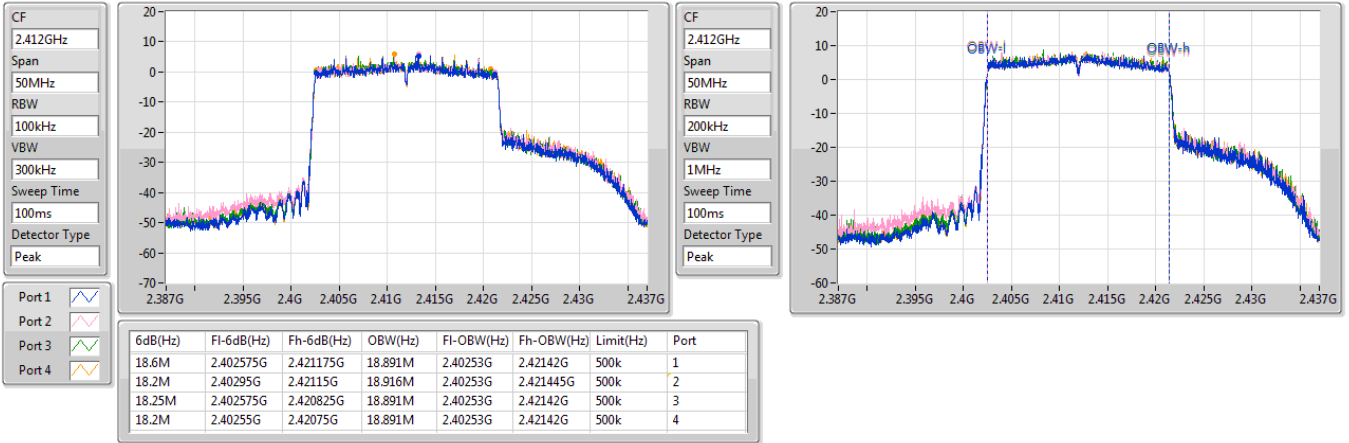




2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_4TX

EBW

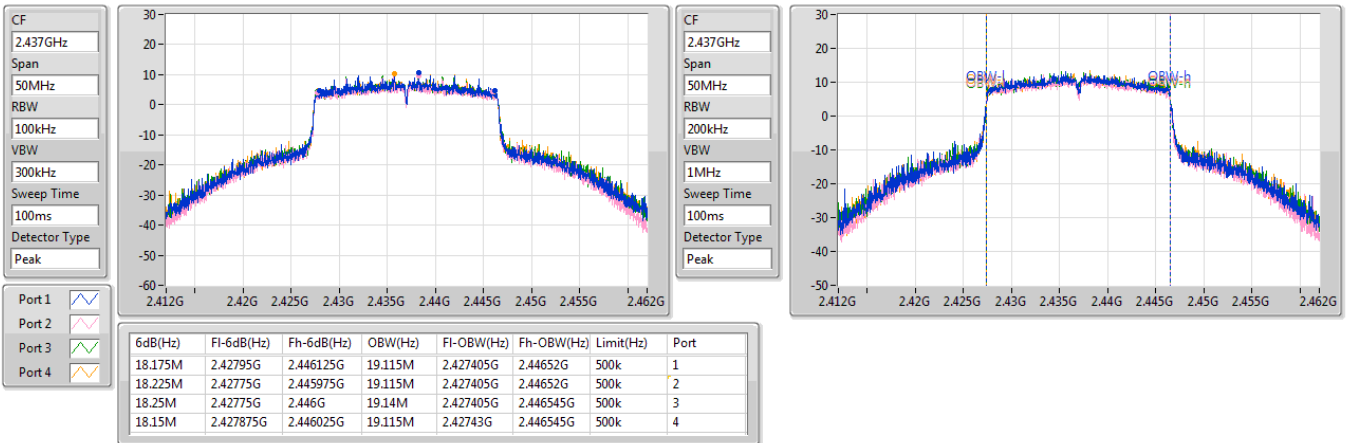
2412MHz



2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_4TX

EBW

2437MHz





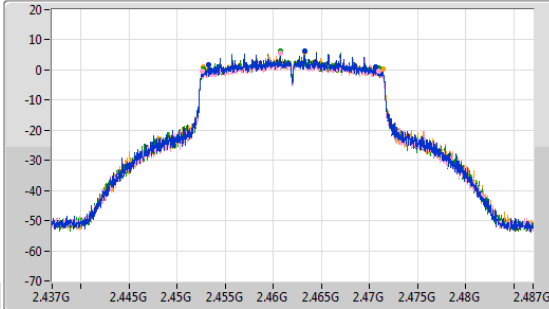


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_4TX

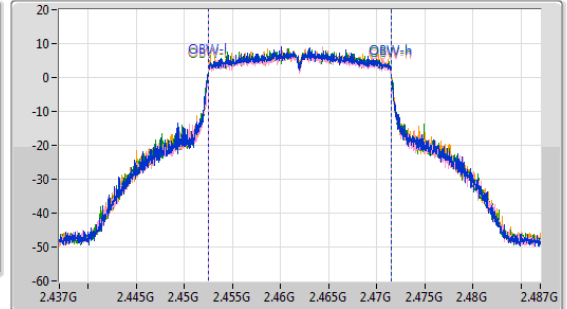
EBW

2462MHz

CF: 2.462GHz  
 Span: 50MHz  
 RBW: 100kHz  
 VBW: 300kHz  
 Sweep Time: 100ms  
 Detector Type: Peak



CF: 2.462GHz  
 Span: 50MHz  
 RBW: 200kHz  
 VBW: 1MHz  
 Sweep Time: 100ms  
 Detector Type: Peak



Port 1: [Waveform]  
 Port 2: [Waveform]  
 Port 3: [Waveform]  
 Port 4: [Waveform]

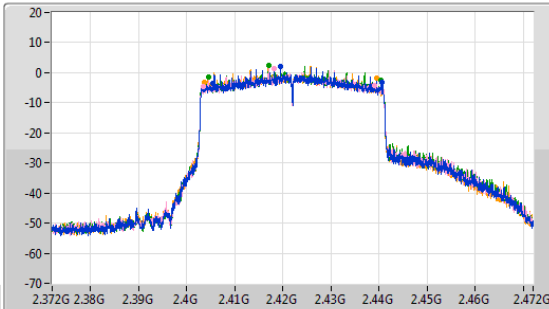
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.325M	2.4533G	2.470625G	19.015M	2.452455G	2.47147G	500k	1
18.325M	2.45265G	2.470975G	18.991M	2.45248G	2.47147G	500k	2
18.225M	2.4527G	2.470925G	19.015M	2.452455G	2.47147G	500k	3
18.675M	2.452675G	2.47135G	18.991M	2.45248G	2.47147G	500k	4

2.4-2.4835GHz\_802.11ax HEW40\_Nss1,(MCS0)\_4TX

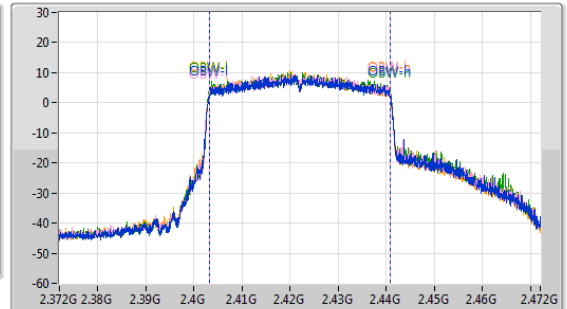
EBW

2422MHz

CF: 2.422GHz  
 Span: 100MHz  
 RBW: 100kHz  
 VBW: 300kHz  
 Sweep Time: 100ms  
 Detector Type: Peak



CF: 2.422GHz  
 Span: 100MHz  
 RBW: 500kHz  
 VBW: 2MHz  
 Sweep Time: 100ms  
 Detector Type: Peak



Port 1: [Waveform]  
 Port 2: [Waveform]  
 Port 3: [Waveform]  
 Port 4: [Waveform]

6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.2M	2.4054G	2.4406G	37.631M	2.403209G	2.440841G	500k	1
35.65M	2.4034G	2.43905G	37.631M	2.403209G	2.440841G	500k	2
35.9M	2.4045G	2.4404G	37.681M	2.403159G	2.440841G	500k	3
35.85M	2.40365G	2.4395G	37.631M	2.403159G	2.440791G	500k	4

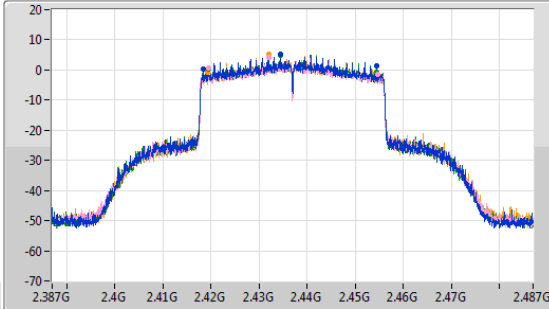


2.4-2.4835GHz\_802.11ax HEW40\_Nss1,(MCS0)\_4TX

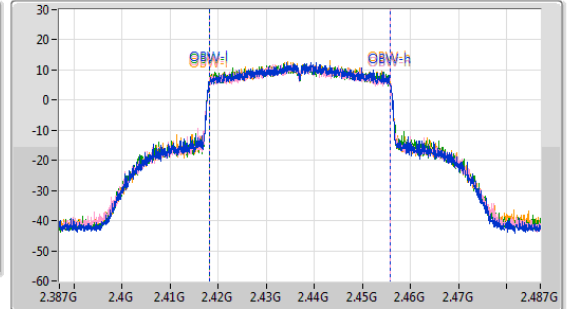
EBW

2437MHz

CF: 2.437GHz  
 Span: 100MHz  
 RBW: 100kHz  
 VBW: 300kHz  
 Sweep Time: 100ms  
 Detector Type: Peak



CF: 2.437GHz  
 Span: 100MHz  
 RBW: 500kHz  
 VBW: 2MHz  
 Sweep Time: 100ms  
 Detector Type: Peak



- Port 1
- Port 2
- Port 3
- Port 4

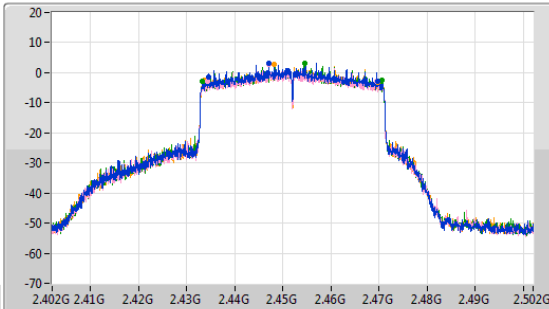
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.05M	2.41845G	2.4545G	37.681M	2.418109G	2.455791G	500k	1
35.15M	2.41945G	2.4546G	37.731M	2.418109G	2.455841G	500k	2
35.1M	2.41945G	2.45455G	37.731M	2.418109G	2.455841G	500k	3
35.25M	2.41925G	2.4545G	37.731M	2.418109G	2.455841G	500k	4

2.4-2.4835GHz\_802.11ax HEW40\_Nss1,(MCS0)\_4TX

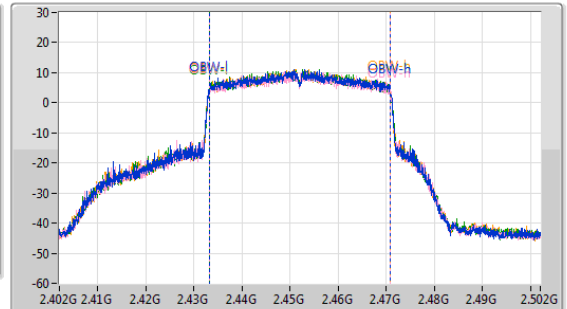
EBW

2452MHz

CF: 2.452GHz  
 Span: 100MHz  
 RBW: 100kHz  
 VBW: 300kHz  
 Sweep Time: 100ms  
 Detector Type: Peak



CF: 2.452GHz  
 Span: 100MHz  
 RBW: 500kHz  
 VBW: 2MHz  
 Sweep Time: 100ms  
 Detector Type: Peak



- Port 1
- Port 2
- Port 3
- Port 4

6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.15M	2.43445G	2.4696G	37.681M	2.433109G	2.470791G	500k	1
35.2M	2.43435G	2.46955G	37.681M	2.433109G	2.470791G	500k	2
37.5M	2.43315G	2.47065G	37.681M	2.433109G	2.470791G	500k	3
36.1M	2.4336G	2.4697G	37.631M	2.433109G	2.470741G	500k	4



**Non-beamforming mode**

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_4TX	25.17	0.32885
802.11g_Nss1,(6Mbps)_4TX	26.68	0.46559
802.11ax HEW20_Nss1,(MCS0)_4TX	26.81	0.47973
802.11ax HEW40_Nss1,(MCS0)_4TX	24.09	0.25645

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.71	18.93	19.05	19.32	19.27	25.17	30.00	27.88	36.00
2437MHz	Pass	2.71	18.89	18.42	18.88	18.82	24.78	30.00	27.49	36.00
2462MHz	Pass	2.71	17.63	17.08	17.66	17.76	23.56	30.00	26.27	36.00
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.71	17.87	18.08	18.26	18.15	24.11	30.00	26.82	36.00
2437MHz	Pass	2.71	20.86	20.25	20.72	20.79	26.68	30.00	29.39	36.00
2462MHz	Pass	2.71	17.53	17.16	17.56	17.68	23.51	30.00	26.22	36.00
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.71	16.35	16.62	16.83	16.85	22.69	30.00	25.40	36.00
2437MHz	Pass	2.71	21.05	20.31	20.92	20.84	26.81	30.00	29.52	36.00
2462MHz	Pass	2.71	16.72	16.17	16.76	16.63	22.60	30.00	25.31	36.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.71	15.11	15.36	15.69	15.47	21.43	30.00	24.14	36.00
2437MHz	Pass	2.71	18.21	17.68	18.19	18.18	24.09	30.00	26.80	36.00
2452MHz	Pass	2.71	16.58	16.18	16.64	16.56	22.51	30.00	25.22	36.00

DG = Directional Gain; Port X = Port X output power

Note : Conducted average output power is for reference



Beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	20.79	0.11995
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	18.07	0.06412

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	8.73	10.33	10.6	10.81	10.83	16.67	27.27	25.40	36.00
2437MHz	Pass	8.73	15.03	14.29	14.9	14.82	20.79	27.27	29.52	36.00
2462MHz	Pass	8.73	10.7	10.15	10.74	10.61	16.58	27.27	25.31	36.00
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	8.73	9.09	9.34	9.67	9.45	15.41	27.27	24.14	36.00
2437MHz	Pass	8.73	12.19	11.66	12.17	12.16	18.07	27.27	26.80	36.00
2452MHz	Pass	8.73	10.56	10.16	10.62	10.54	16.49	27.27	25.22	36.00

DG = Directional Gain; Port X = Port X output power  
Note : Conducted average output power is for reference

Note:

Directional gain =  $2.71 + 10 \cdot \log(4/1) = 8.73 \text{ dBi} > 6 \text{ dBi}$ , so the limit of output power shall be reduced to  $30 \text{ dBm} - (8.73 \text{ dBi} - 6 \text{ dBi}) = 27.27 \text{ dBm}$



**Summary**

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_4TX	-4.80
802.11g_Nss1,(6Mbps)_4TX	-5.75
802.11ax HEW20_Nss1,(MCS0)_4TX	-5.61
802.11ax HEW40_Nss1,(MCS0)_4TX	-12.21

RBW = 3kHz;

**Result**

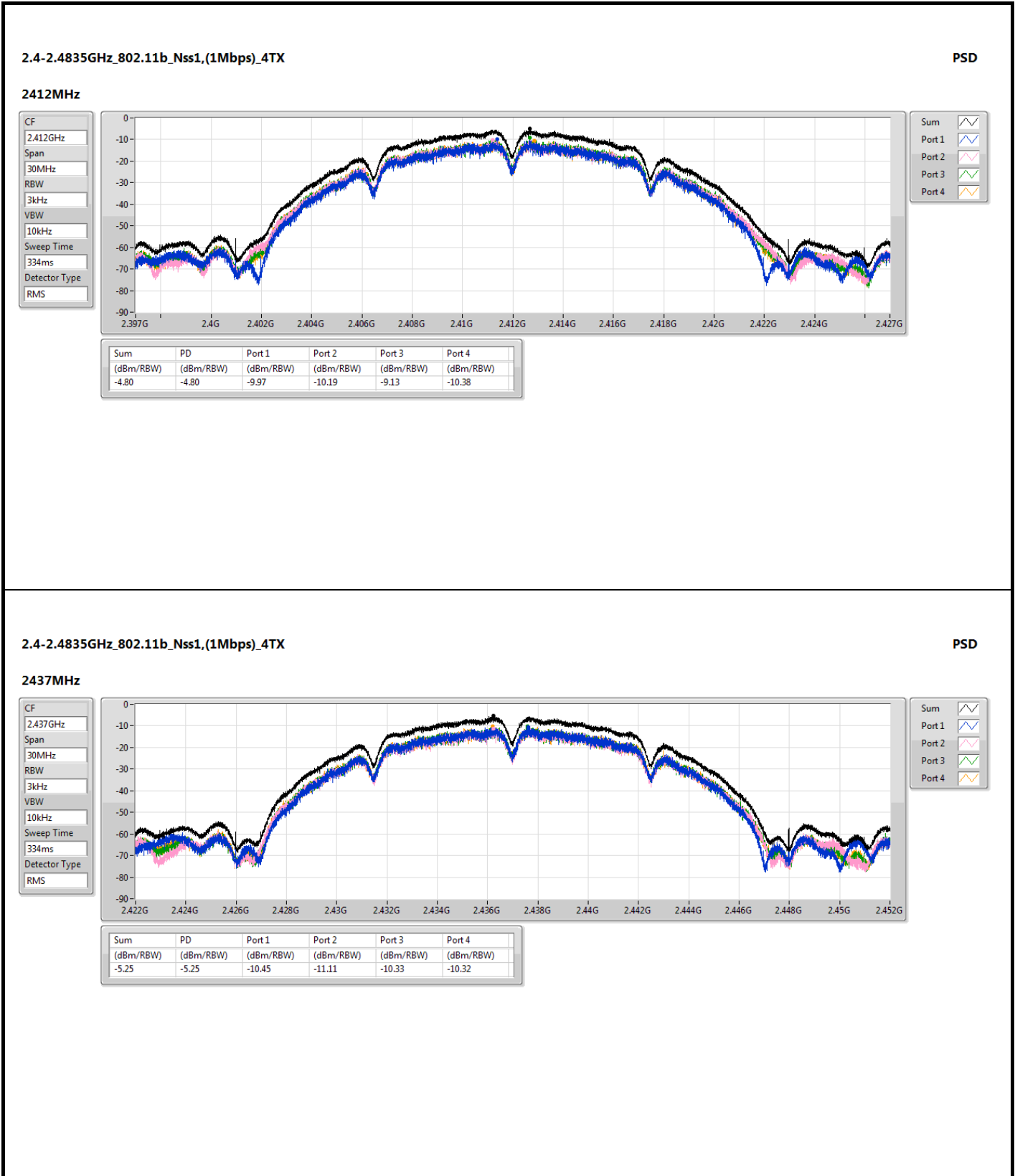
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.73	-9.97	-10.19	-9.13	-10.38	-4.80	5.27
2437MHz	Pass	8.73	-10.45	-11.11	-10.33	-10.32	-5.25	5.27
2462MHz	Pass	8.73	-11.16	-11.36	-11.55	-11.63	-6.78	5.27
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.73	-14.55	-14.05	-14.01	-13.69	-9.10	5.27
2437MHz	Pass	8.73	-10.56	-11.35	-10.81	-10.42	-5.75	5.27
2462MHz	Pass	8.73	-13.89	-14.26	-13.59	-13.69	-9.02	5.27
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.73	-15.65	-16.69	-15.40	-16.04	-10.05	5.27
2437MHz	Pass	8.73	-11.49	-11.64	-11.92	-10.56	-5.61	5.27
2462MHz	Pass	8.73	-15.90	-15.60	-15.36	-15.79	-9.97	5.27
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	8.73	-20.44	-19.49	-19.55	-19.79	-14.56	5.27
2437MHz	Pass	8.73	-16.91	-17.32	-17.82	-16.75	-12.21	5.27
2452MHz	Pass	8.73	-18.93	-19.23	-17.75	-18.65	-13.36	5.27

DG = Directional Gain; RBW = 3kHz;

PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

Note:

Directional gain =  $2.71 + 10 \cdot \log(4/1) = 8.73 \text{ dBi} > 6\text{dBi}$ , so the limit of output power shall be reduced to 8 dBm – (8.73dBi – 6dBi ) =5.27 dBm



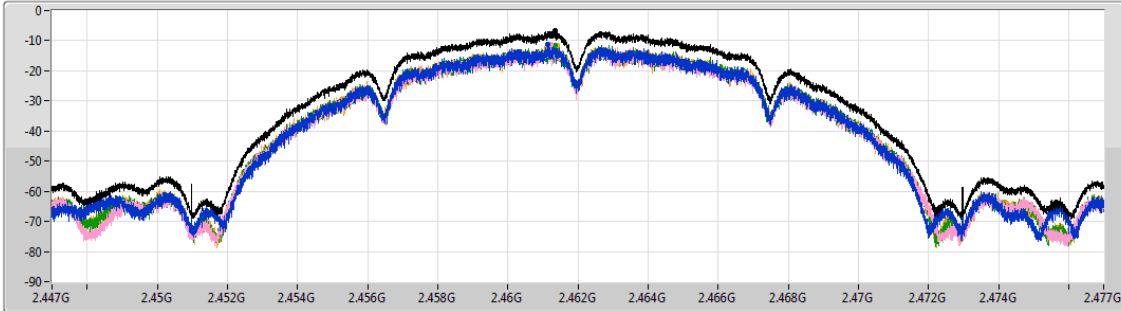


2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_4TX

PSD

2462MHz

CF  
2.462GHz  
Span  
30MHz  
RBW  
3kHz  
VBW  
10kHz  
Sweep Time  
334ms  
Detector Type  
RMS



Sum  
Port 1  
Port 2  
Port 3  
Port 4

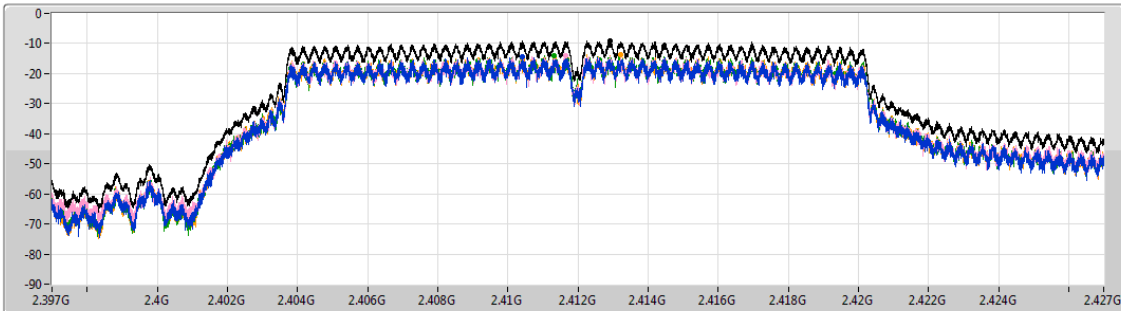
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.78	-6.78	-11.16	-11.36	-11.55	-11.63

2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_4TX

PSD

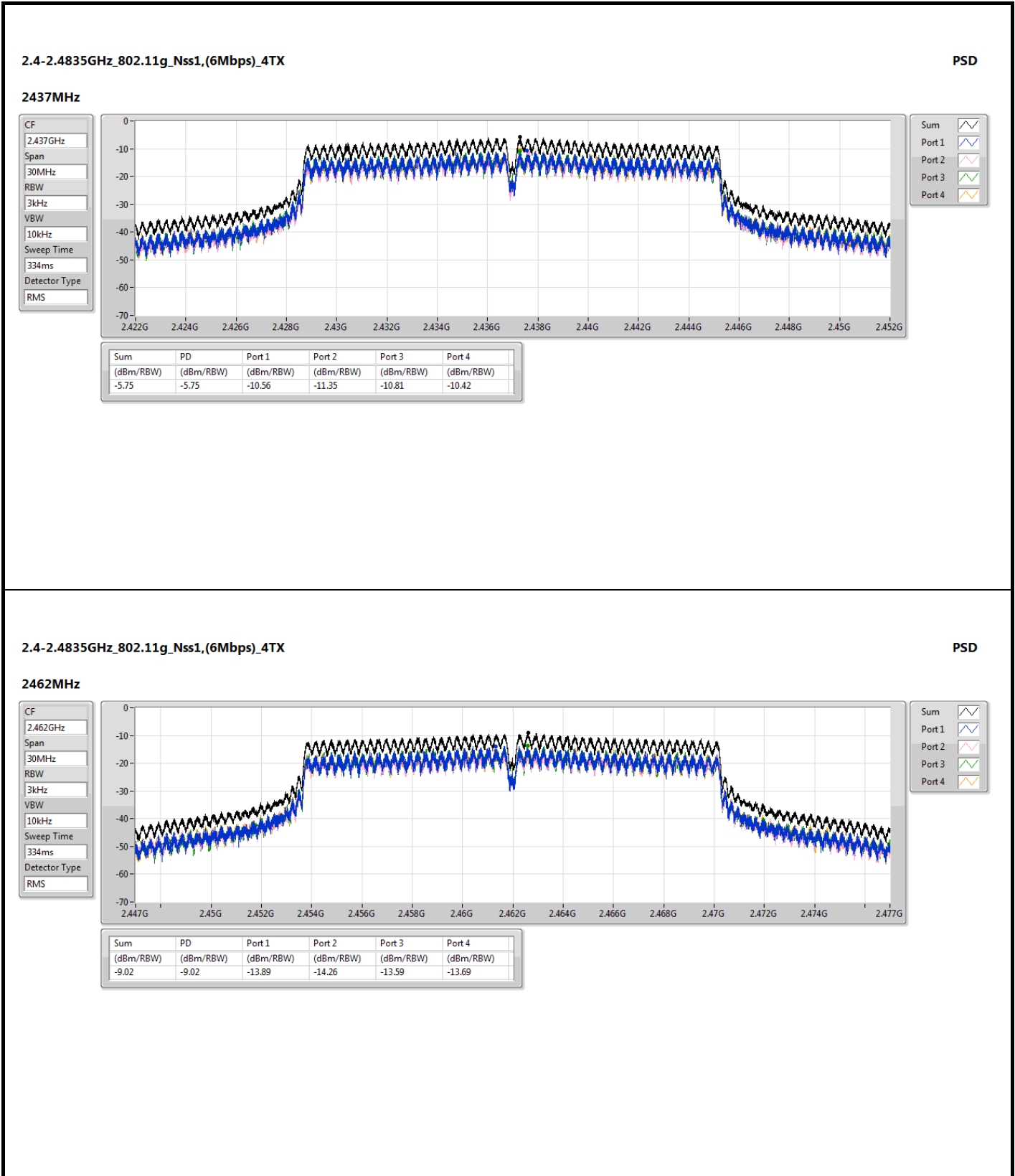
2412MHz

CF  
2.412GHz  
Span  
30MHz  
RBW  
3kHz  
VBW  
10kHz  
Sweep Time  
334ms  
Detector Type  
RMS



Sum  
Port 1  
Port 2  
Port 3  
Port 4

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.10	-9.10	-14.55	-14.05	-14.01	-13.69





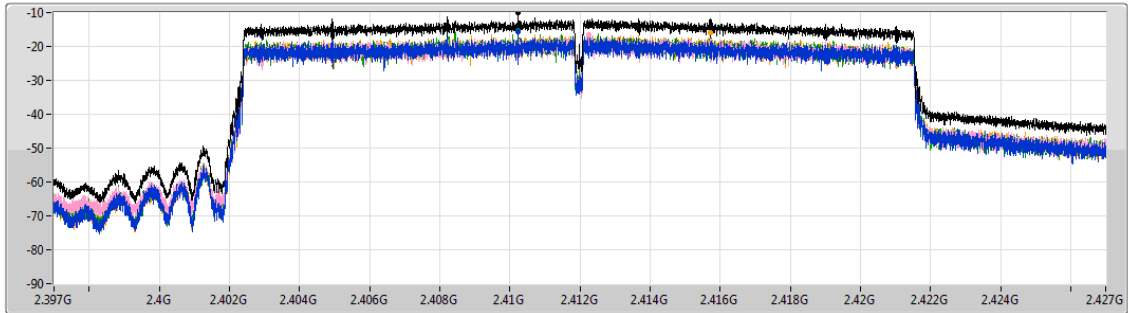


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_4TX

PSD

2412MHz

CF  
2.412GHz  
Span  
30MHz  
RBW  
3kHz  
VBW  
10kHz  
Sweep Time  
334ms  
Detector Type  
RMS



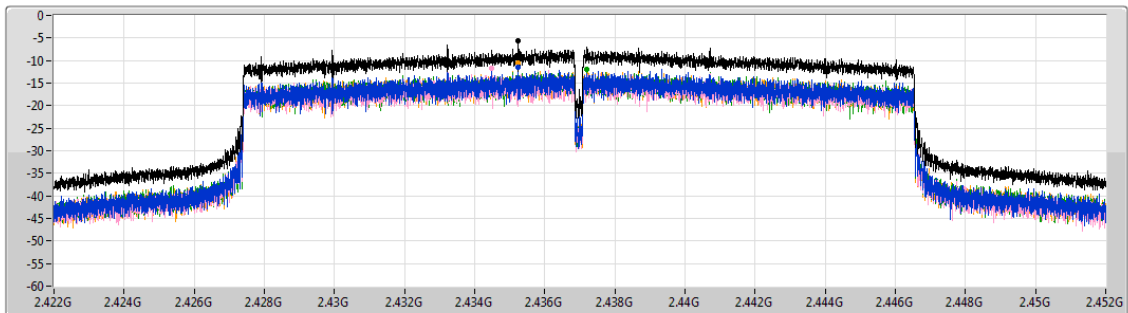
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.05	-10.05	-15.65	-16.69	-15.40	-16.04

2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_4TX

PSD

2437MHz

CF  
2.437GHz  
Span  
30MHz  
RBW  
3kHz  
VBW  
10kHz  
Sweep Time  
334ms  
Detector Type  
RMS



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.61	-5.61	-11.49	-11.64	-11.92	-10.56

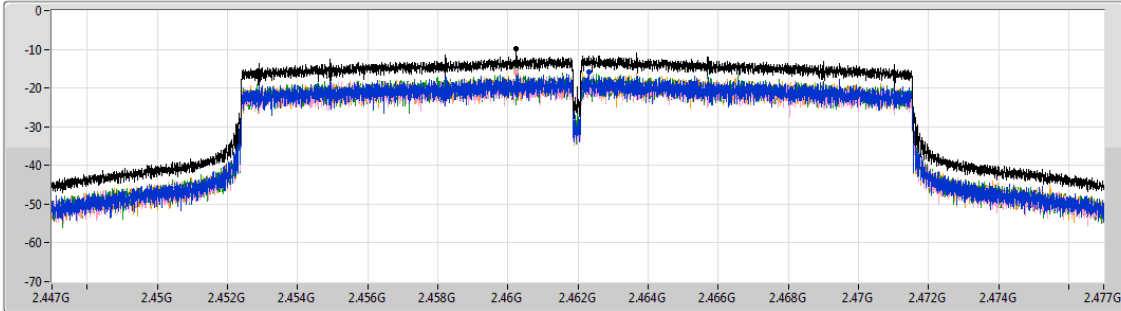


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_4TX

PSD

2462MHz

CF  
2.462GHz  
Span  
30MHz  
RBW  
3kHz  
VBW  
10kHz  
Sweep Time  
334ms  
Detector Type  
RMS



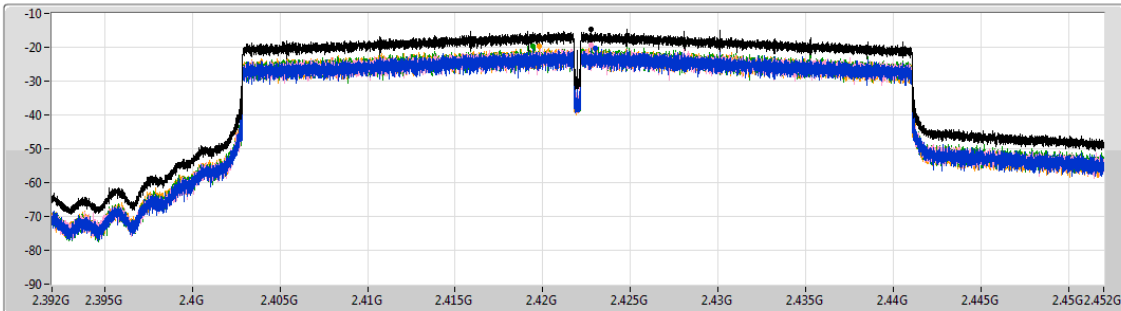
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.97	-9.97	-15.90	-15.60	-15.36	-15.79

2.4-2.4835GHz\_802.11ax HEW40\_Nss1,(MCS0)\_4TX

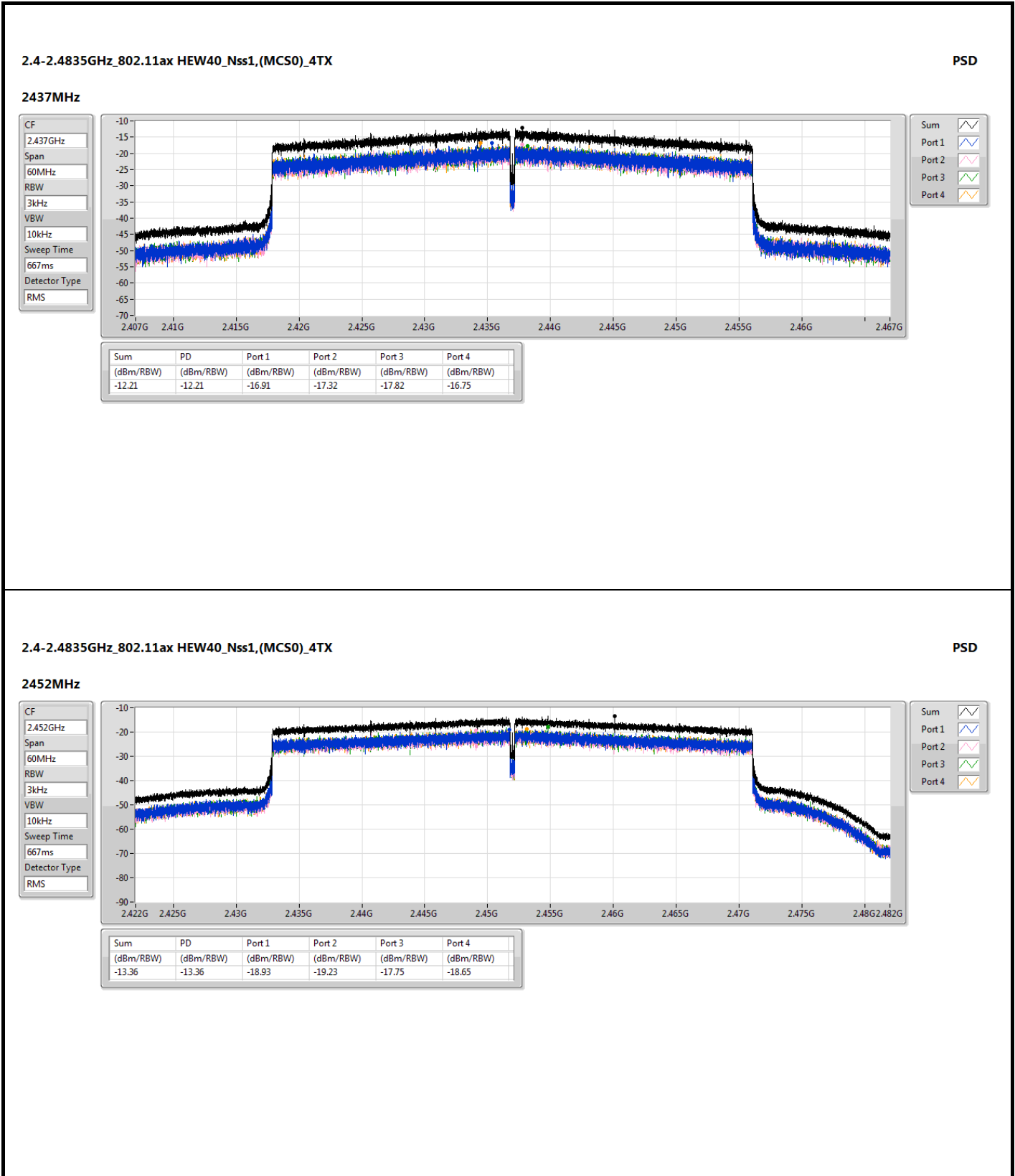
PSD

2422MHz

CF  
2.422GHz  
Span  
60MHz  
RBW  
3kHz  
VBW  
10kHz  
Sweep Time  
667ms  
Detector Type  
RMS



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-14.56	-14.56	-20.44	-19.49	-19.55	-19.79

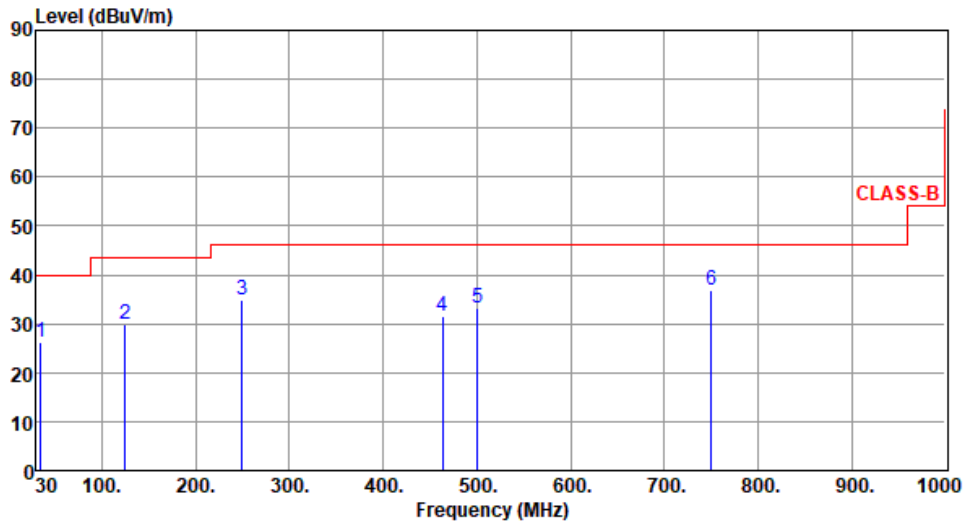




Unwanted Emissions (Below 1GHz)

Modulation	ax HE20	Test Freq. (MHz)	2437
Polarization	Horizontal		

Test By :Paul Lin      Temperature(°C):26      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	34.95	26.16	40.00	-13.84	35.41	-9.25	Peak	---	---
2	124.97	29.98	43.50	-13.52	40.80	-10.82	Peak	---	---
3	249.84	34.96	46.00	-11.04	45.03	-10.07	Peak	---	---
4	463.75	31.67	46.00	-14.33	35.55	-3.88	Peak	---	---
5	500.54	33.21	46.00	-12.79	36.41	-3.20	Peak	---	---
6	750.27	36.75	46.00	-9.25	35.14	1.61	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor , cable loss and amplifier gain

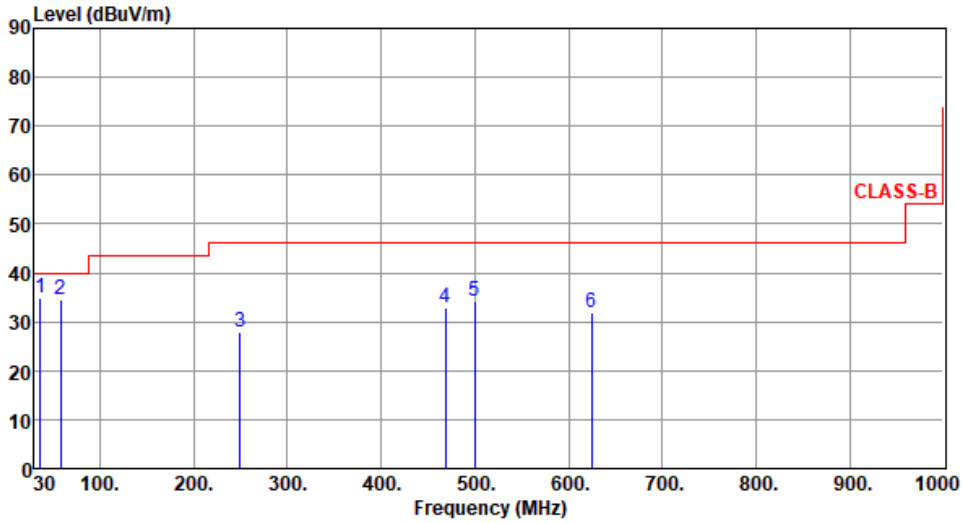
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.



<b>Modulation</b>	ax HE20	<b>Test Freq. (MHz)</b>	2437
<b>Polarization</b>	Vertical		

Test By :Paul Lin      Temperature(°C):26      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	36.79	35.02	40.00	-4.98	44.20	-9.18	QP	100	48
2	58.13	34.64	40.00	-5.36	43.65	-9.01	Peak	---	---
3	249.22	27.85	46.00	-18.15	37.94	-10.09	Peak	---	---
4	468.44	32.77	46.00	-13.23	36.61	-3.84	Peak	---	---
5	499.48	34.16	46.00	-11.84	37.38	-3.22	Peak	---	---
6	624.61	32.00	46.00	-14.00	32.35	-0.35	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

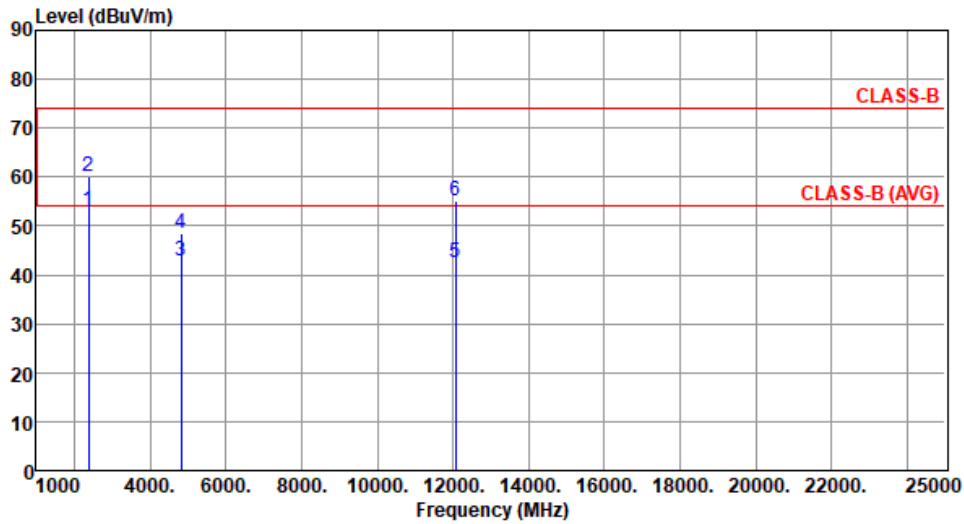
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.



Unwanted Emission (Above 1GHz) for 11b

Modulation	11b	Test Freq. (MHz)	2412
Polarization	Horizontal		

Test By :Akun Chung      Temperature(°C):25      Humidity(%):64



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	53.00	54.00	-1.00	57.65	-4.65	Average	127	55
2	2390.00	60.20	74.00	-13.80	64.85	-4.65	Peak	127	55
3	4824.00	42.75	54.00	-11.25	43.28	-0.53	Average	146	216
4	4824.00	48.41	74.00	-25.59	48.94	-0.53	Peak	146	216
5	12060.00	42.36	54.00	-11.64	35.99	6.37	Average	100	220
6	12060.00	55.29	74.00	-18.71	48.92	6.37	Peak	100	220

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV) + Factor\* (dB/m)

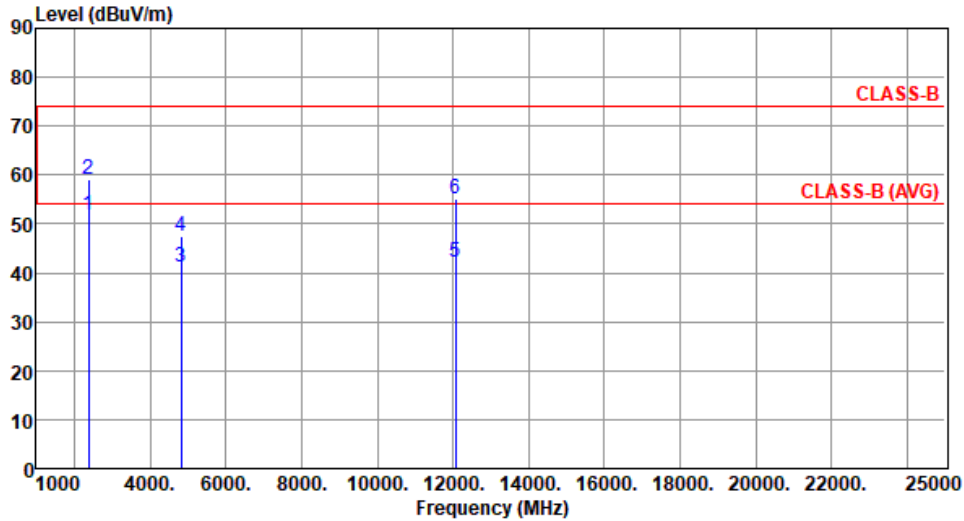
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).



<b>Modulation</b>	11b	<b>Test Freq. (MHz)</b>	2412
<b>Polarization</b>	Vertical		

Test By :Akun Chung      Temperature(°C):25      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	51.89	54.00	-2.11	56.54	-4.65	Average	374	358
2	2390.00	59.06	74.00	-14.94	63.71	-4.65	Peak	374	358
3	4824.00	41.30	54.00	-12.70	41.83	-0.53	Average	300	228
4	4824.00	47.39	74.00	-26.61	47.92	-0.53	Peak	300	228
5	12060.00	42.26	54.00	-11.74	35.89	6.37	Average	100	15
6	12060.00	55.24	74.00	-18.76	48.87	6.37	Peak	100	15

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



<b>Modulation</b>	11b	<b>Test Freq. (MHz)</b>	2437						
<b>Polarization</b>	Horizontal								
Test By :Paul Lin      Temperature(°C):25      Humidity(%):64									
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m		cm	deg
1	2390.00	42.94	54.00	-11.06	47.59	-4.65	Average	241	54
2	2390.00	56.15	74.00	-17.85	60.80	-4.65	Peak	241	54
3	2483.50	43.37	54.00	-10.63	48.26	-4.89	Average	241	54
4	2483.50	55.35	74.00	-18.65	60.24	-4.89	Peak	241	54
5	4874.00	43.75	54.00	-10.25	44.29	-0.54	Average	150	208
6	4874.00	48.13	74.00	-25.87	48.67	-0.54	Peak	150	208
7	7311.00	52.12	54.00	-1.88	46.90	5.22	Average	229	172
8	7311.00	57.42	74.00	-16.58	52.20	5.22	Peak	229	172

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)  
 \*Factor includes antenna factor , cable loss and amplifier gain  
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).





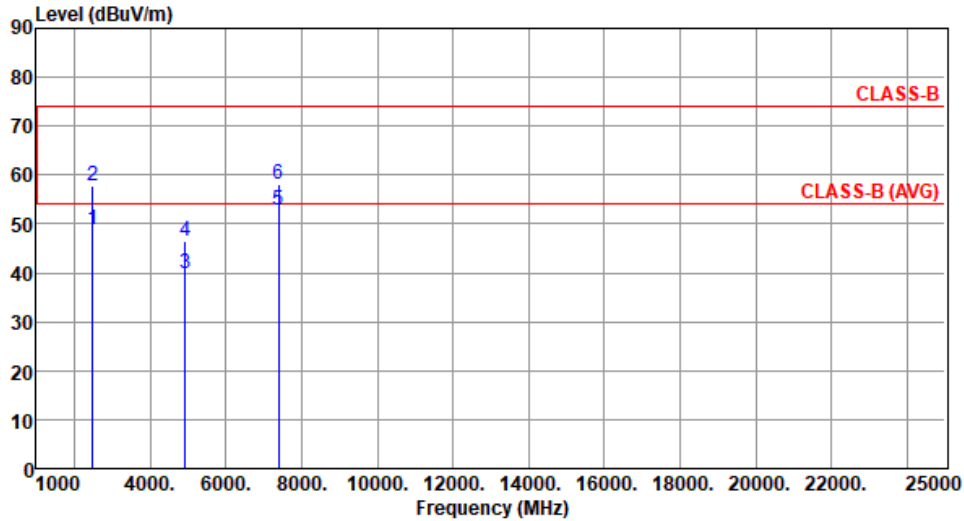
<b>Modulation</b>	11b	<b>Test Freq. (MHz)</b>	2437						
<b>Polarization</b>	Vertical								
Test By : Paul Lin      Temperature(°C): 25      Humidity(%): 64									
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m		cm	deg
1	2390.00	40.98	54.00	-13.02	45.63	-4.65	Average	350	343
2	2390.00	54.48	74.00	-19.52	59.13	-4.65	Peak	350	343
3	2483.50	41.13	54.00	-12.87	46.02	-4.89	Average	350	343
4	2483.50	51.88	74.00	-22.12	56.77	-4.89	Peak	350	343
5	4874.00	40.95	54.00	-13.05	41.49	-0.54	Average	303	226
6	4874.00	47.07	74.00	-26.93	47.61	-0.54	Peak	303	226
7	7311.00	52.56	54.00	-1.44	47.34	5.22	Average	113	161
8	7311.00	58.06	74.00	-15.94	52.84	5.22	Peak	113	161

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)  
 \*Factor includes antenna factor , cable loss and amplifier gain  
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	11b	Test Freq. (MHz)	2462
Polarization	Horizontal		

Test By : Akun Chung      Temperature(°C): 25      Humidity(%): 64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	48.79	54.00	-5.21	53.68	-4.89	Average	118	49
2	2483.50	57.71	74.00	-16.29	62.60	-4.89	Peak	118	49
3	4924.00	39.94	54.00	-14.06	40.45	-0.51	Average	151	212
4	4924.00	46.65	74.00	-27.35	47.16	-0.51	Peak	151	212
5	7386.00	52.71	54.00	-1.29	47.64	5.07	Average	160	187
6	7386.00	58.25	74.00	-15.75	53.18	5.07	Peak	160	187

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

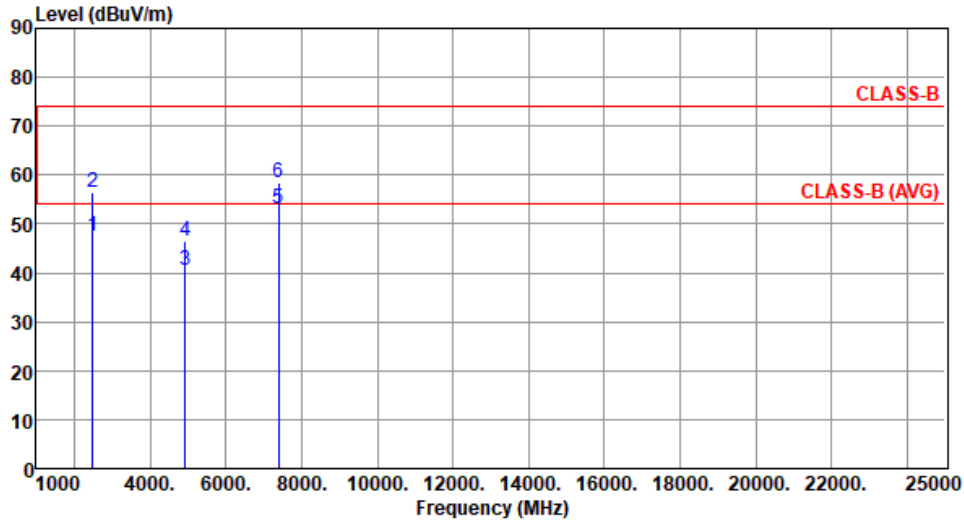
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	11b	Test Freq. (MHz)	2462
Polarization	Vertical		

Test By : Akun Chung      Temperature(°C): 25      Humidity(%): 64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	47.56	54.00	-6.44	52.45	-4.89	Average	374	1
2	2483.50	56.51	74.00	-17.49	61.40	-4.89	Peak	374	1
3	4924.00	40.55	54.00	-13.45	41.06	-0.51	Average	297	221
4	4924.00	46.62	74.00	-27.38	47.13	-0.51	Peak	297	221
5	7386.00	53.29	54.00	-0.71	48.22	5.07	Average	104	163
6	7386.00	58.33	74.00	-15.67	53.26	5.07	Peak	104	163

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor , cable loss and amplifier gain

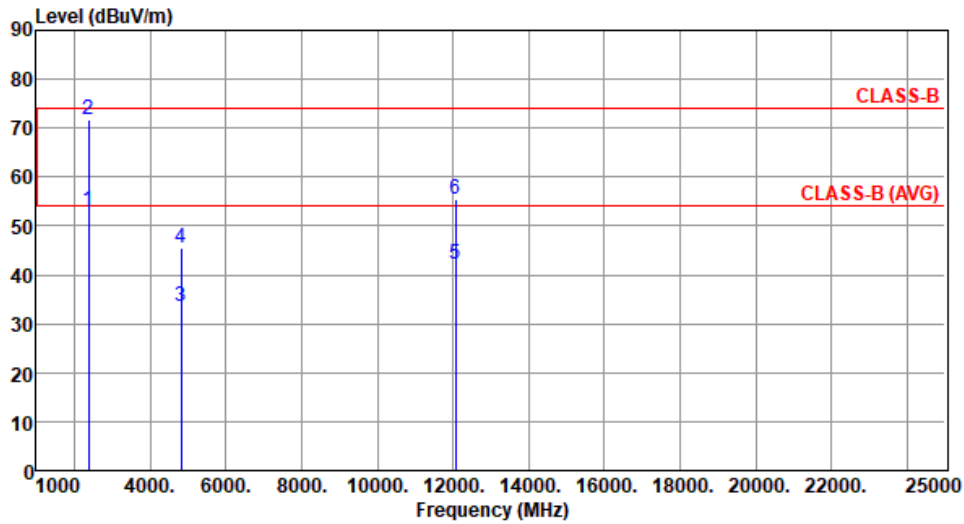
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Unwanted Emissions (Above 1GHz) for 11g

Modulation	11g	Test Freq. (MHz)	2412
Polarization	Horizontal		

Test By :Akun Chung      Temperature(°C):25      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	53.01	54.00	-0.99	57.66	-4.65	Average	235	295
2	2390.00	71.64	74.00	-2.36	76.29	-4.65	Peak	235	295
3	4824.00	33.64	54.00	-20.36	34.17	-0.53	Average	178	215
4	4824.00	45.60	74.00	-28.40	46.13	-0.53	Peak	178	215
5	12060.00	42.18	54.00	-11.82	35.81	6.37	Average	100	226
6	12060.00	55.52	74.00	-18.48	49.15	6.37	Peak	100	226

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

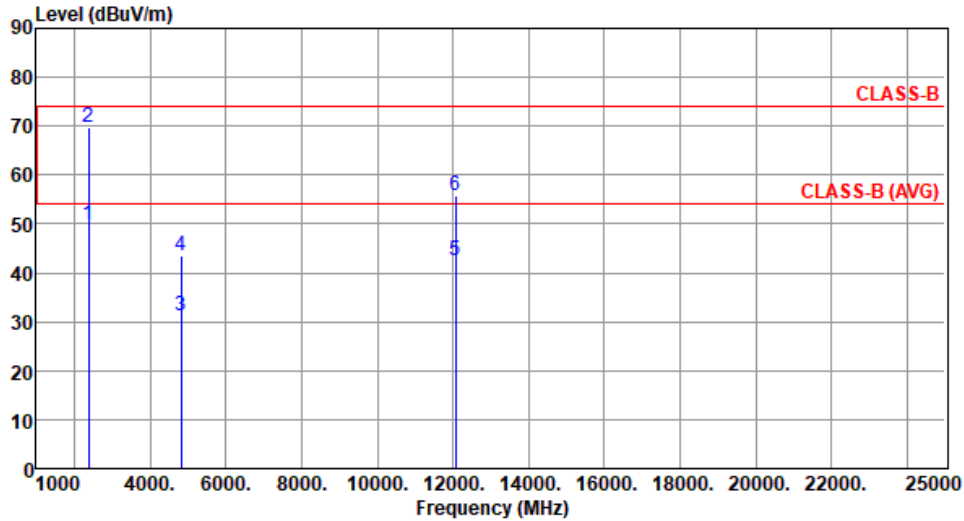
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	11g	Test Freq. (MHz)	2412
Polarization	Vertical		

Test By :Akun Chung      Temperature(°C):25      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	49.87	54.00	-4.13	54.52	-4.65	Average	355	359
2	2390.00	69.80	74.00	-4.20	74.45	-4.65	Peak	355	359
3	4824.00	31.33	54.00	-22.67	31.86	-0.53	Average	177	231
4	4824.00	43.67	74.00	-30.33	44.20	-0.53	Peak	177	231
5	12060.00	42.44	54.00	-11.56	36.07	6.37	Average	100	25
6	12060.00	55.71	74.00	-18.29	49.34	6.37	Peak	100	25

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

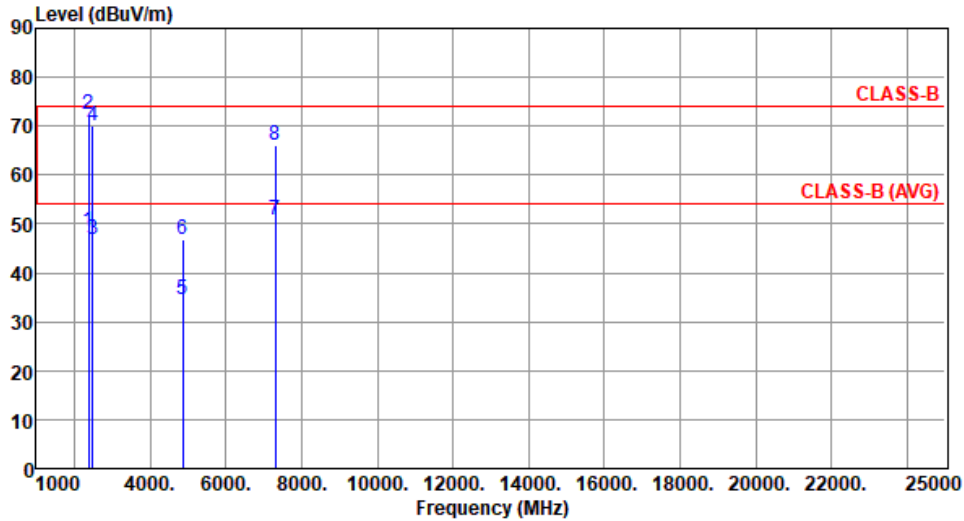
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	11g	Test Freq. (MHz)	2437
Polarization	Horizontal		

Test By :Akun Chung      Temperature(°C):25      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	48.50	54.00	-5.50	53.15	-4.65	Average	268	293
2	2390.00	72.52	74.00	-1.48	77.17	-4.65	Peak	268	293
3	2483.50	46.89	54.00	-7.11	51.78	-4.89	Average	115	51
4	2483.50	70.05	74.00	-3.95	74.94	-4.89	Peak	115	51
5	4874.00	34.47	54.00	-19.53	35.01	-0.54	Average	176	209
6	4874.00	46.81	74.00	-27.19	47.35	-0.54	Peak	176	209
7	7311.00	50.83	54.00	-3.17	45.61	5.22	Average	220	174
8	7311.00	65.95	74.00	-8.05	60.73	5.22	Peak	220	174

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

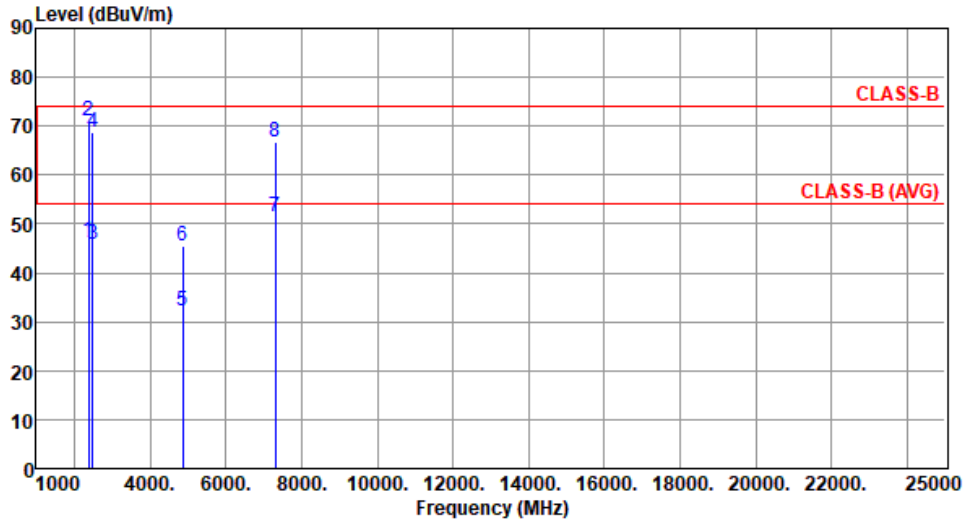
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	11g	Test Freq. (MHz)	2437
Polarization	Vertical		

Test By :Akun Chung      Temperature(°C):25      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	46.56	54.00	-7.44	51.21	-4.65	Average	380	2
2	2390.00	71.20	74.00	-2.80	75.85	-4.65	Peak	380	2
3	2483.50	45.83	54.00	-8.17	50.72	-4.89	Average	380	2
4	2483.50	68.74	74.00	-5.26	73.63	-4.89	Peak	380	2
5	4874.00	32.09	54.00	-21.91	32.63	-0.54	Average	172	224
6	4874.00	45.41	74.00	-28.59	45.95	-0.54	Peak	172	224
7	7311.00	51.61	54.00	-2.39	46.39	5.22	Average	101	164
8	7311.00	66.85	74.00	-7.15	61.63	5.22	Peak	101	164

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

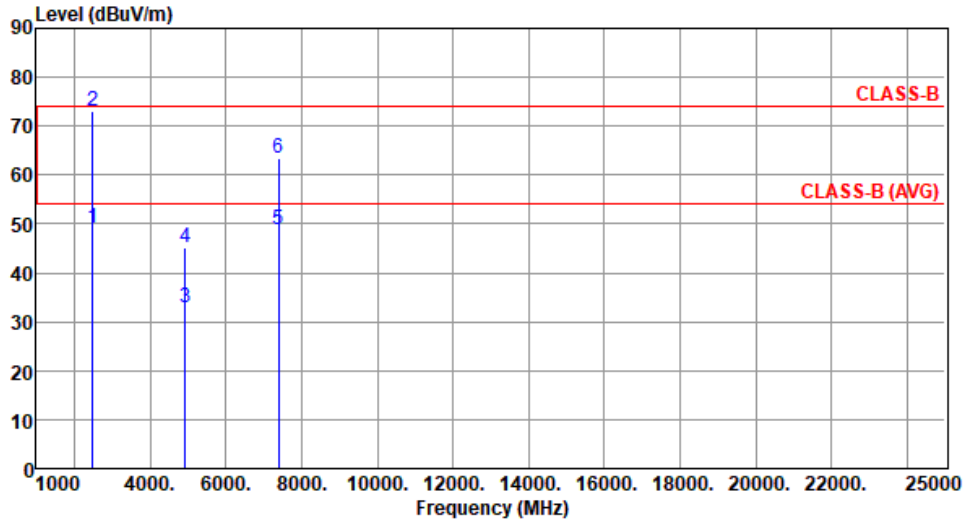
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	11g	Test Freq. (MHz)	2462
Polarization	Horizontal		

Test By :Akun Chung      Temperature(°C):25      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	49.05	54.00	-4.95	53.94	-4.89	Average	103	314
2	2483.50	73.18	74.00	-0.82	78.07	-4.89	Peak	103	314
3	4924.00	32.97	54.00	-21.03	33.48	-0.51	Average	170	210
4	4924.00	45.10	74.00	-28.90	45.61	-0.51	Peak	170	210
5	7386.00	48.78	54.00	-5.22	43.71	5.07	Average	223	172
6	7386.00	63.43	74.00	-10.57	58.36	5.07	Peak	223	172

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor , cable loss and amplifier gain

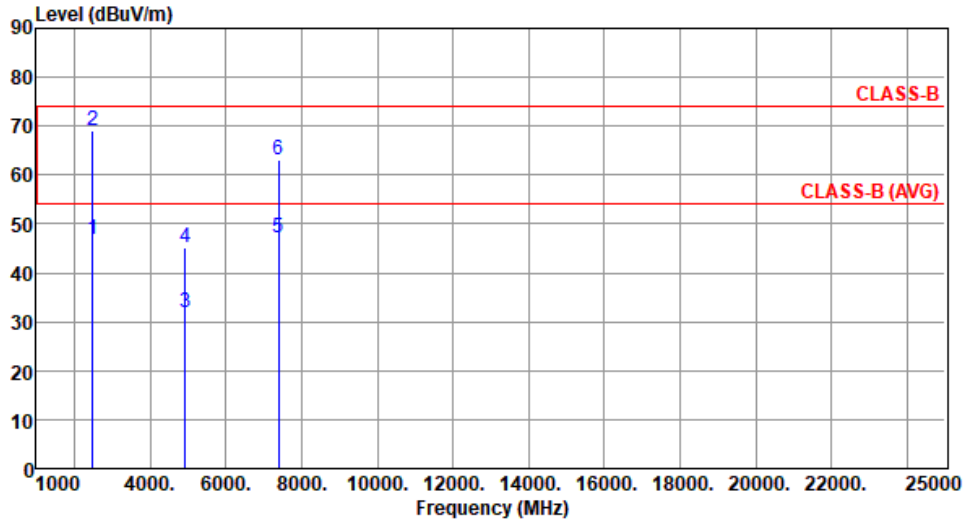
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).





Modulation	11g	Test Freq. (MHz)	2462
Polarization	Vertical		

Test By :Akun Chung      Temperature(°C):25      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	46.97	54.00	-7.03	51.86	-4.89	Average	363	344
2	2483.50	68.99	74.00	-5.01	73.88	-4.89	Peak	363	344
3	4924.00	32.01	54.00	-21.99	32.52	-0.51	Average	170	231
4	4924.00	45.07	74.00	-28.93	45.58	-0.51	Peak	170	231
5	7386.00	47.05	54.00	-6.95	41.98	5.07	Average	103	163
6	7386.00	63.03	74.00	-10.97	57.96	5.07	Peak	103	163

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Unwanted Emissions (Above 1GHz) for ax HE20

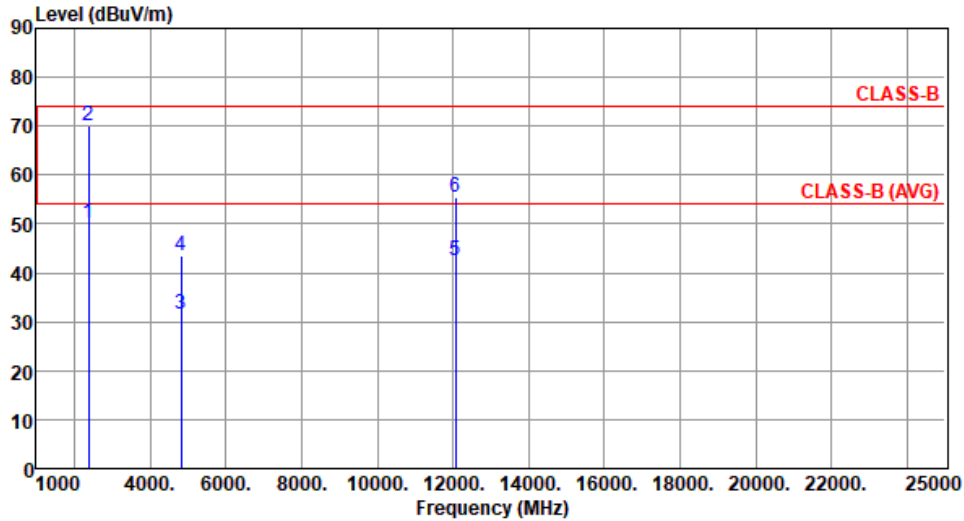
Modulation	ax HE20	Test Freq. (MHz)	2412						
Polarization	Horizontal								
Test By :Akun Chung      Temperature(°C):25      Humidity(%):64									
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	51.85	54.00	-2.15	56.50	-4.65	Average	222	56
2	2390.00	73.24	74.00	-0.76	77.89	-4.65	Peak	222	56
3	4824.00	33.53	54.00	-20.47	34.06	-0.53	Average	176	219
4	4824.00	45.36	74.00	-28.64	45.89	-0.53	Peak	176	219
5	12060.00	42.14	54.00	-11.86	35.77	6.37	Average	100	206
6	12060.00	55.60	74.00	-18.40	49.23	6.37	Peak	100	206

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)  
 \*Factor includes antenna factor , cable loss and amplifier gain  
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



<b>Modulation</b>	ax HE20	<b>Test Freq. (MHz)</b>	2412
<b>Polarization</b>	Vertical		

Test By :Akun Chung      Temperature(°C):25      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	50.08	54.00	-3.92	54.73	-4.65	Average	347	13
2	2390.00	70.15	74.00	-3.85	74.80	-4.65	Peak	347	13
3	4824.00	31.53	54.00	-22.47	32.06	-0.53	Average	179	228
4	4824.00	43.59	74.00	-30.41	44.12	-0.53	Peak	179	228
5	12060.00	42.55	54.00	-11.45	36.18	6.37	Average	100	38
6	12060.00	55.60	74.00	-18.40	49.23	6.37	Peak	100	38

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

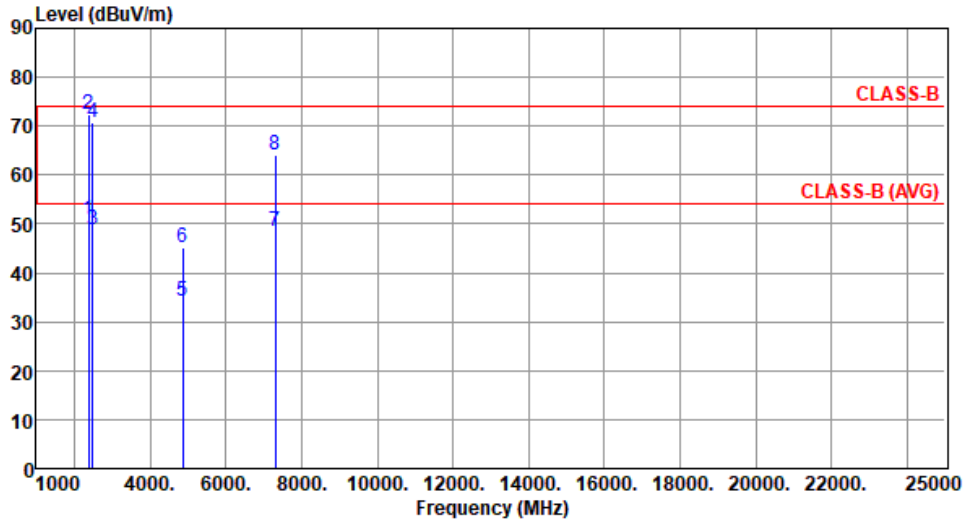
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	ax HE20	Test Freq. (MHz)	2437
Polarization	Horizontal		

Test By :Akun Chung      Temperature(°C):25      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	50.83	54.00	-3.17	55.48	-4.65	Average	209	290
2	2390.00	72.52	74.00	-1.48	77.17	-4.65	Peak	209	290
3	2483.50	48.67	54.00	-5.33	53.56	-4.89	Average	209	290
4	2483.50	70.66	74.00	-3.34	75.55	-4.89	Peak	209	290
5	4874.00	34.33	54.00	-19.67	34.87	-0.54	Average	133	210
6	4874.00	45.21	74.00	-28.79	45.75	-0.54	Peak	133	210
7	7311.00	48.49	54.00	-5.51	43.27	5.22	Average	162	190
8	7311.00	63.95	74.00	-10.05	58.73	5.22	Peak	162	190

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

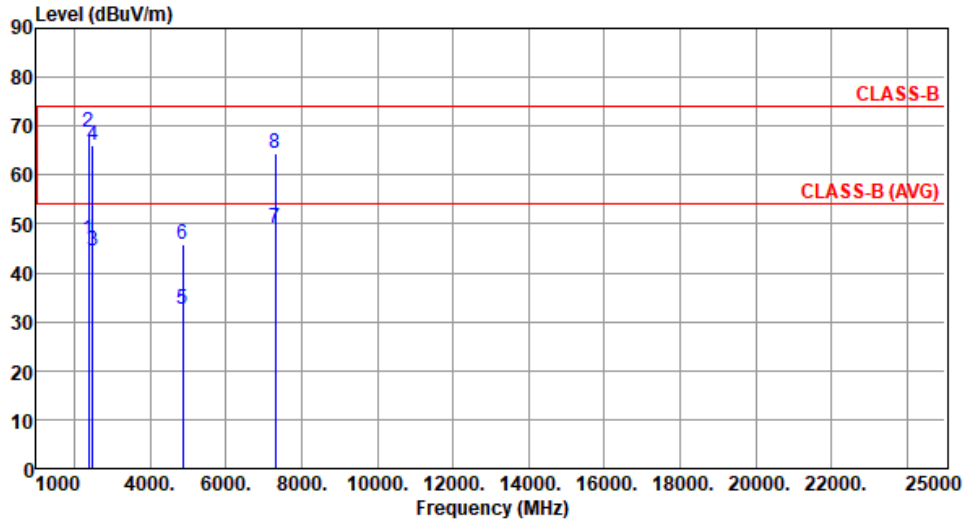
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	ax HE20	Test Freq. (MHz)	2437
Polarization	Vertical		

Test By :Akun Chung      Temperature(°C):25      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	46.90	54.00	-7.10	51.55	-4.65	Average	317	8
2	2390.00	68.67	74.00	-5.33	73.32	-4.65	Peak	317	8
3	2483.50	44.65	54.00	-9.35	49.54	-4.89	Average	317	8
4	2483.50	65.96	74.00	-8.04	70.85	-4.89	Peak	317	8
5	4874.00	32.62	54.00	-21.38	33.16	-0.54	Average	175	222
6	4874.00	45.74	74.00	-28.26	46.28	-0.54	Peak	175	222
7	7311.00	49.24	54.00	-4.76	44.02	5.22	Average	125	166
8	7311.00	64.33	74.00	-9.67	59.11	5.22	Peak	125	166

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

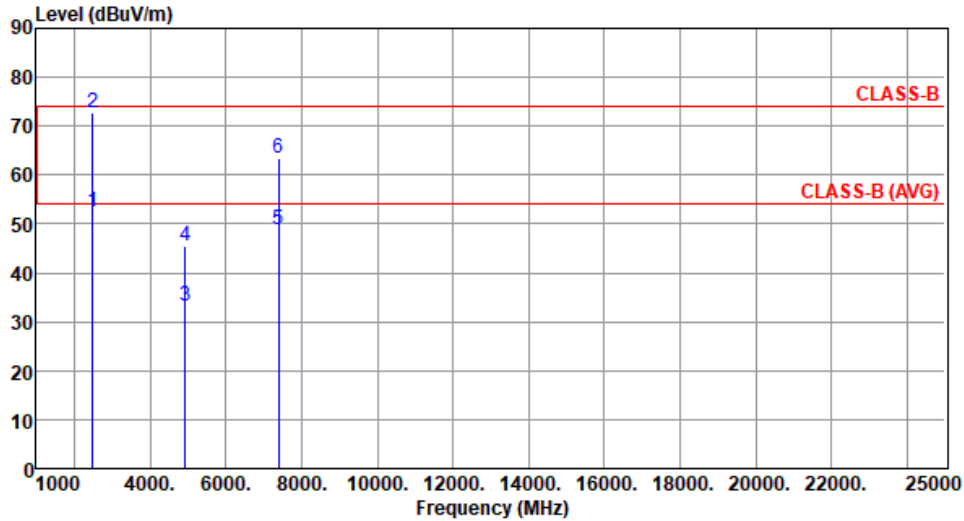
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	ax HE20	Test Freq. (MHz)	2462
Polarization	Horizontal		

Test By : Akun Chung      Temperature(°C): 25      Humidity(%): 64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	52.55	54.00	-1.45	57.44	-4.89	Average	270	56
2	2483.50	72.68	74.00	-1.32	77.57	-4.89	Peak	270	56
3	4924.00	33.05	54.00	-20.95	33.56	-0.51	Average	171	218
4	4924.00	45.42	74.00	-28.58	45.93	-0.51	Peak	171	218
5	7386.00	48.88	54.00	-5.12	43.81	5.07	Average	220	176
6	7386.00	63.55	74.00	-10.45	58.48	5.07	Peak	220	176

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

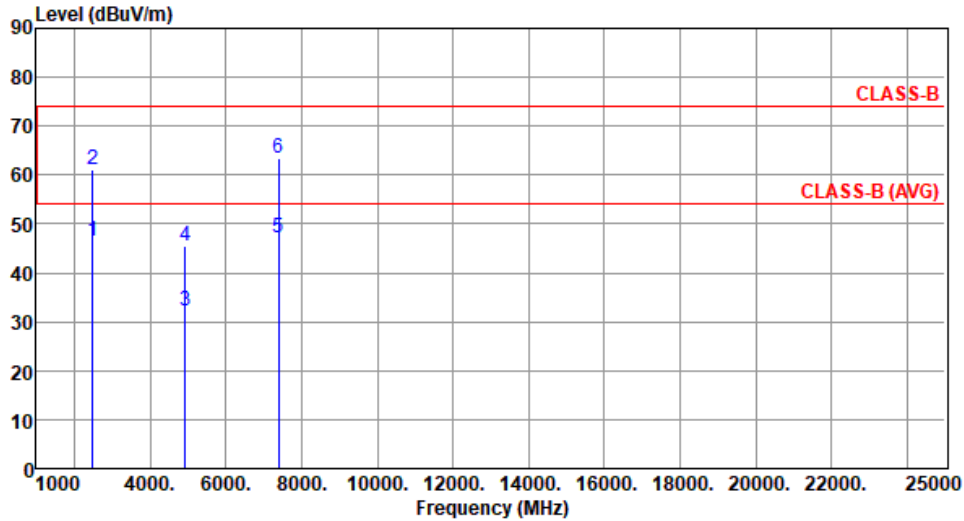
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



<b>Modulation</b>	ax HE20	<b>Test Freq. (MHz)</b>	2462
<b>Polarization</b>	Vertical		

Test By :Akun Chung      Temperature(°C):25      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	46.62	54.00	-7.38	51.51	-4.89	Average	376	4
2	2483.50	61.06	74.00	-12.94	65.95	-4.89	Peak	376	4
3	4924.00	32.17	54.00	-21.83	32.68	-0.51	Average	178	243
4	4924.00	45.35	74.00	-28.65	45.86	-0.51	Peak	178	243
5	7386.00	47.21	54.00	-6.79	42.14	5.07	Average	100	161
6	7386.00	63.32	74.00	-10.68	58.25	5.07	Peak	100	161

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Unwanted Emissions (Above 1GHz) for ax HE40

Modulation	ax HE40	Test Freq. (MHz)	2422						
Polarization	Horizontal								
Test By :Akun Chung      Temperature(°C):25      Humidity(%):64									
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	52.51	54.00	-1.49	57.16	-4.65	Average	232	298
2	2390.00	67.26	74.00	-6.74	71.91	-4.65	Peak	232	298
3	4844.00	31.55	54.00	-22.45	32.08	-0.53	Average	100	152
4	4844.00	44.83	74.00	-29.17	45.36	-0.53	Peak	100	152
5	7266.00	38.30	54.00	-15.70	33.15	5.15	Average	100	197
6	7266.00	51.41	74.00	-22.59	46.26	5.15	Peak	100	197

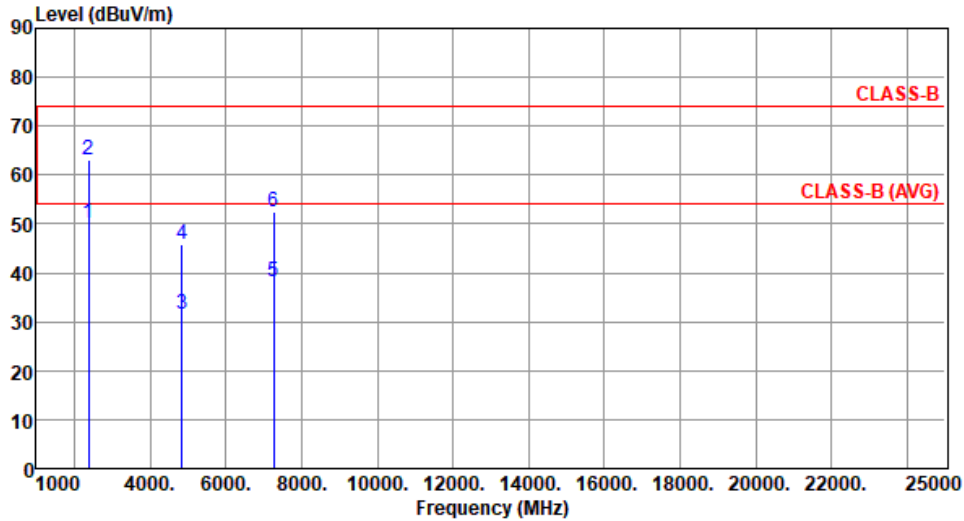
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)  
 \*Factor includes antenna factor , cable loss and amplifier gain  
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).





Modulation	ax HE40	Test Freq. (MHz)	2422
Polarization	Vertical		

Test By :Akun Chung      Temperature(°C):25      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	50.05	54.00	-3.95	54.70	-4.65	Average	387	346
2	2390.00	63.17	74.00	-10.83	67.82	-4.65	Peak	387	346
3	4844.00	31.66	54.00	-22.34	32.19	-0.53	Average	100	96
4	4844.00	45.78	74.00	-28.22	46.31	-0.53	Peak	100	96
5	7266.00	38.31	54.00	-15.69	33.16	5.15	Average	100	181
6	7266.00	52.33	74.00	-21.67	47.18	5.15	Peak	100	181

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

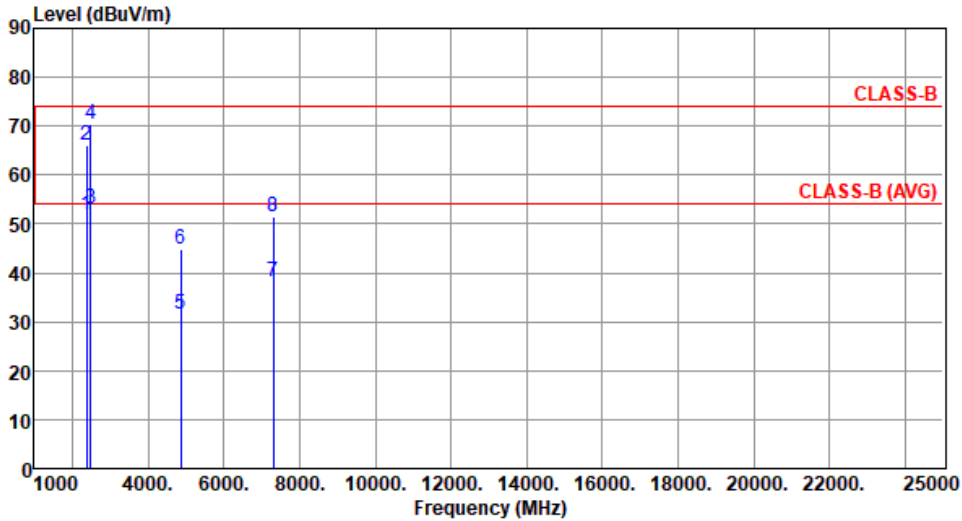
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	ax HE40	Test Freq. (MHz)	2437
Polarization	Horizontal		

Test By :Akun Chung      Temperature(°C):25      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	51.83	54.00	-2.17	56.48	-4.65	Average	248	56
2	2390.00	66.23	74.00	-7.77	70.88	-4.65	Peak	248	56
3	2483.50	53.16	54.00	-0.84	58.05	-4.89	Average	248	56
4	2483.50	70.26	74.00	-3.74	75.15	-4.89	Peak	248	56
5	4874.00	31.62	54.00	-22.38	32.16	-0.54	Average	100	184
6	4874.00	44.72	74.00	-29.28	45.26	-0.54	Peak	100	184
7	7311.00	38.36	54.00	-15.64	33.14	5.22	Average	100	123
8	7311.00	51.33	74.00	-22.67	46.11	5.22	Peak	100	123

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

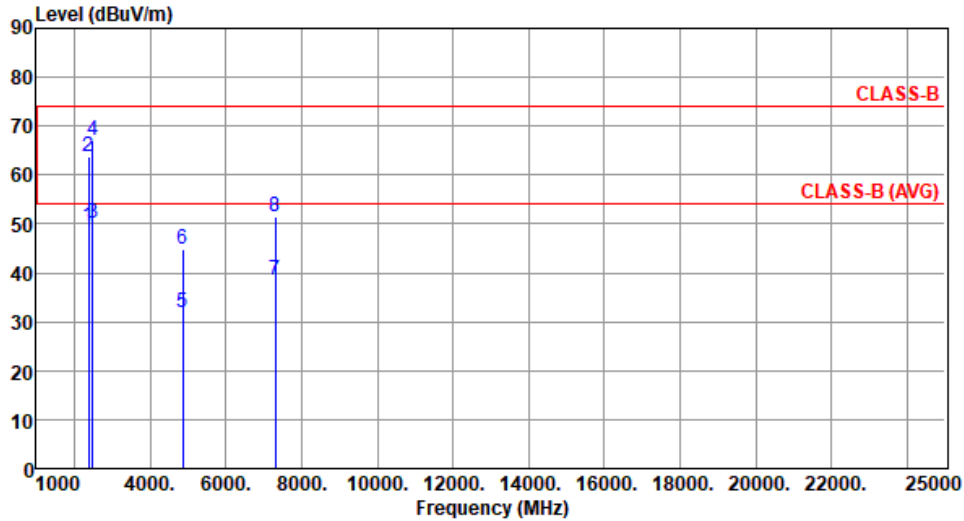
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	ax HE40	Test Freq. (MHz)	2437
Polarization	Vertical		

Test By :Akun Chung      Temperature(°C):25      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	49.41	54.00	-4.59	54.06	-4.65	Average	365	355
2	2390.00	63.81	74.00	-10.19	68.46	-4.65	Peak	365	355
3	2483.50	50.18	54.00	-3.82	55.07	-4.89	Average	365	355
4	2483.50	67.22	74.00	-6.78	72.11	-4.89	Peak	365	355
5	4874.00	31.74	54.00	-22.26	32.28	-0.54	Average	100	102
6	4874.00	44.75	74.00	-29.25	45.29	-0.54	Peak	100	102
7	7311.00	38.63	54.00	-15.37	33.41	5.22	Average	100	152
8	7311.00	51.35	74.00	-22.65	46.13	5.22	Peak	100	152

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

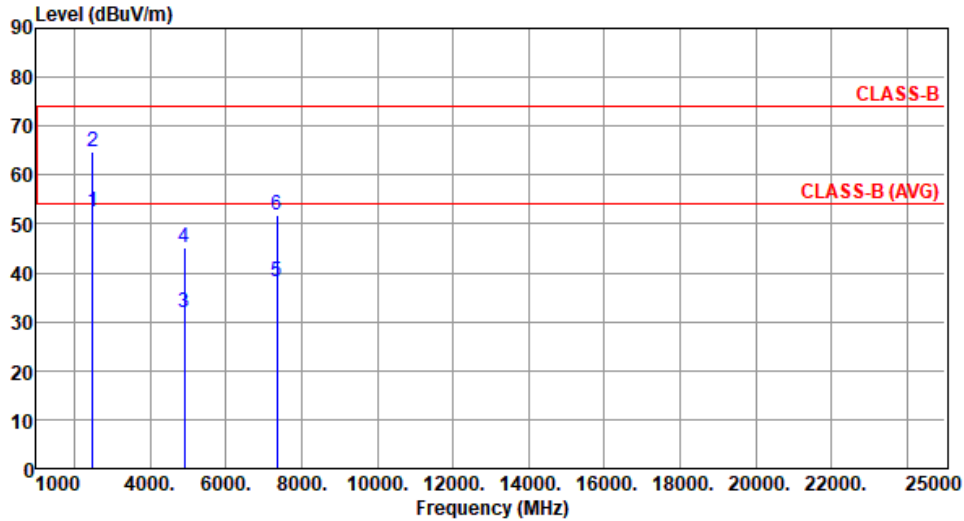
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



<b>Modulation</b>	ax HE40	<b>Test Freq. (MHz)</b>	2452
<b>Polarization</b>	Horizontal		

Test By :Akun Chung      Temperature(°C):25      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	52.53	54.00	-1.47	57.42	-4.89	Average	249	55
2	2483.50	64.61	74.00	-9.39	69.50	-4.89	Peak	249	55
3	4904.00	31.98	54.00	-22.02	32.52	-0.54	Average	100	115
4	4904.00	45.18	74.00	-28.82	45.72	-0.54	Peak	100	115
5	7356.00	38.23	54.00	-15.77	33.14	5.09	Average	100	176
6	7356.00	51.68	74.00	-22.32	46.59	5.09	Peak	100	176

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

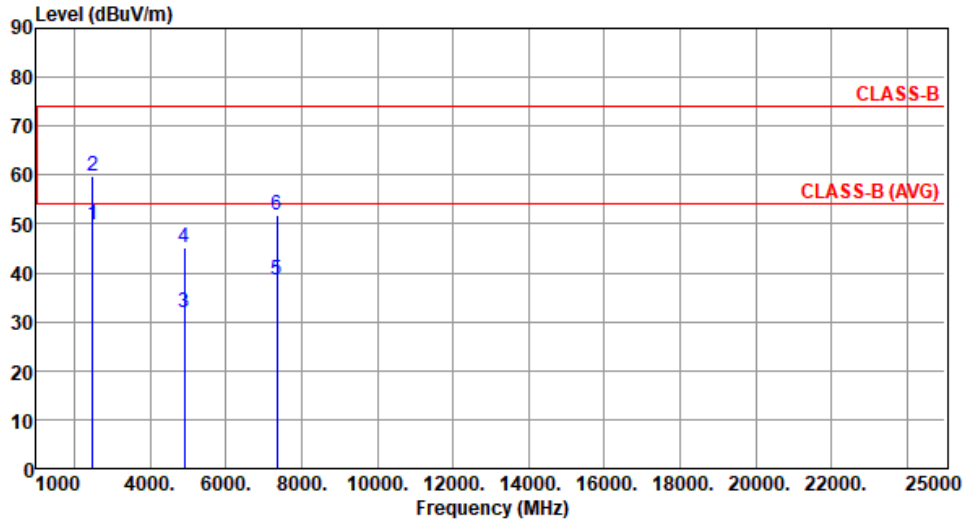
\*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Modulation	ax HE40	Test Freq. (MHz)	2452
Polarization	Vertical		

Test By :Akun Chung      Temperature(°C):25      Humidity(%):64

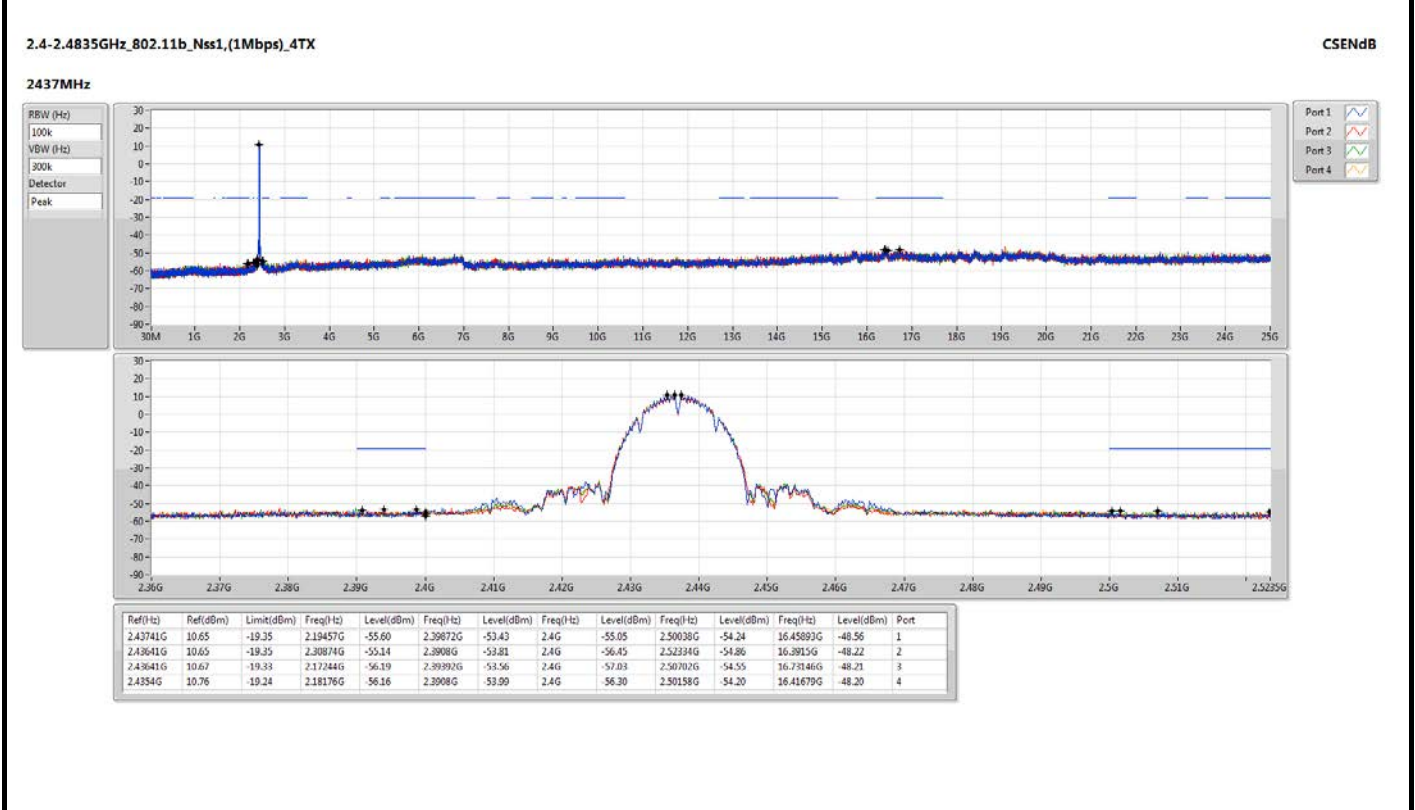
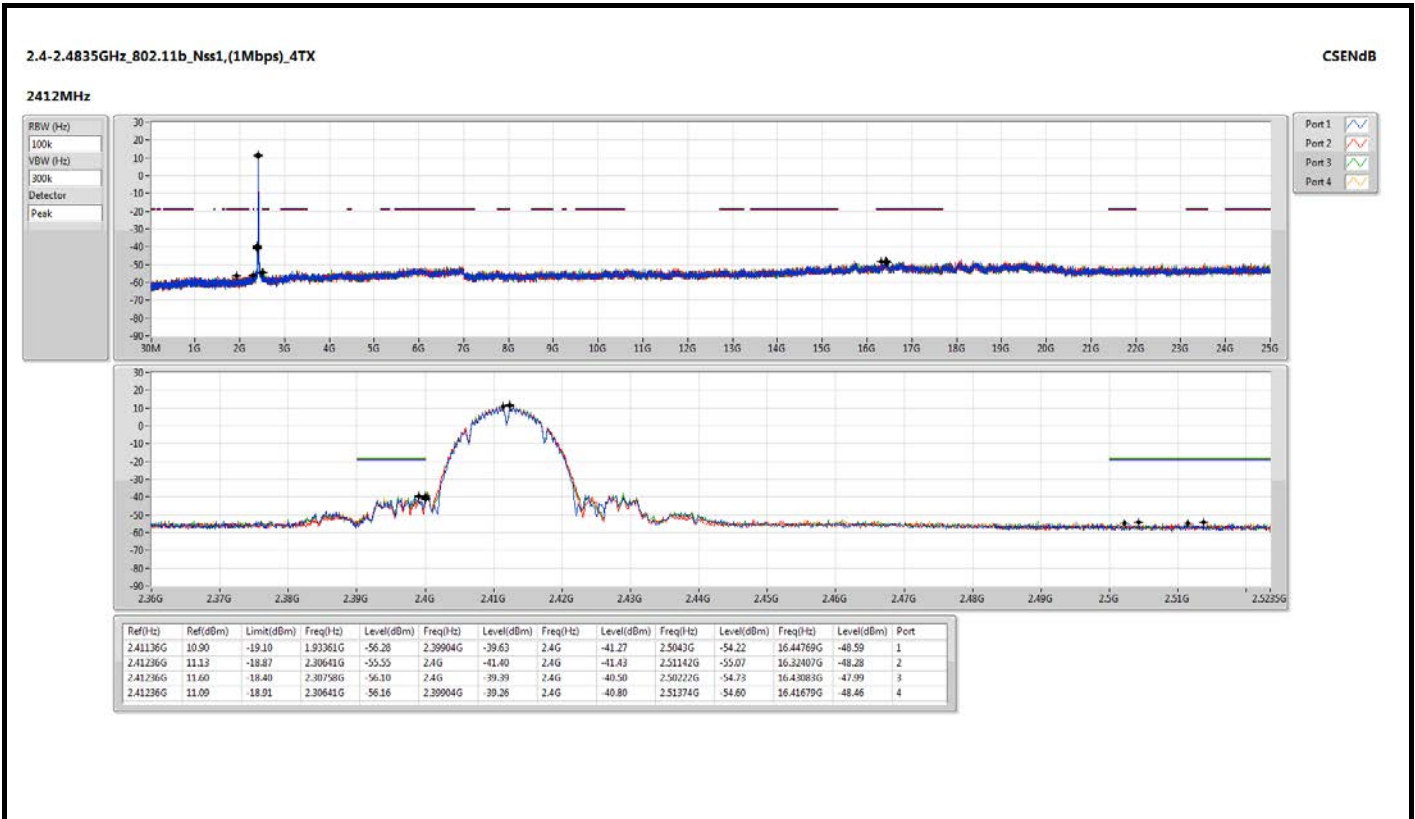


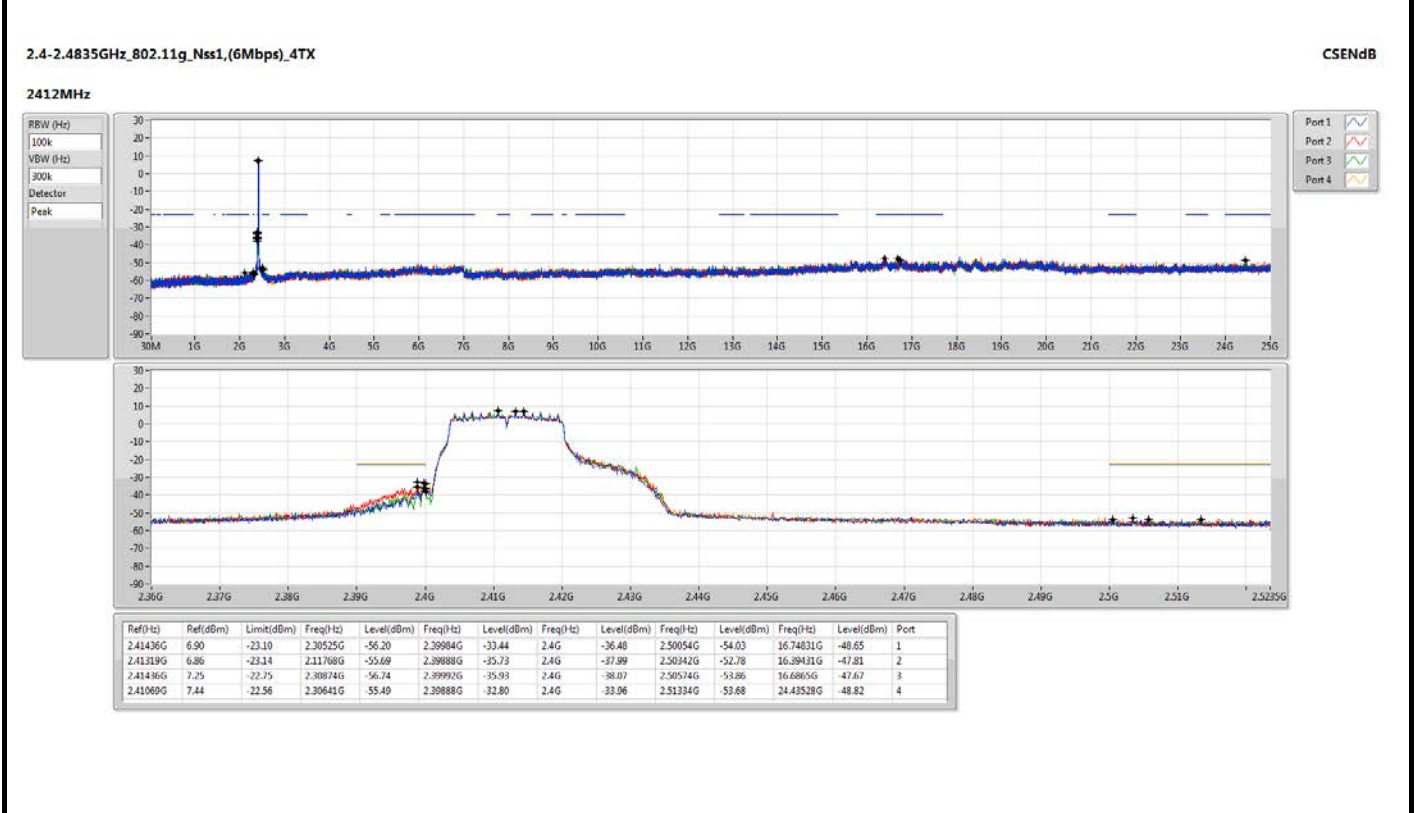
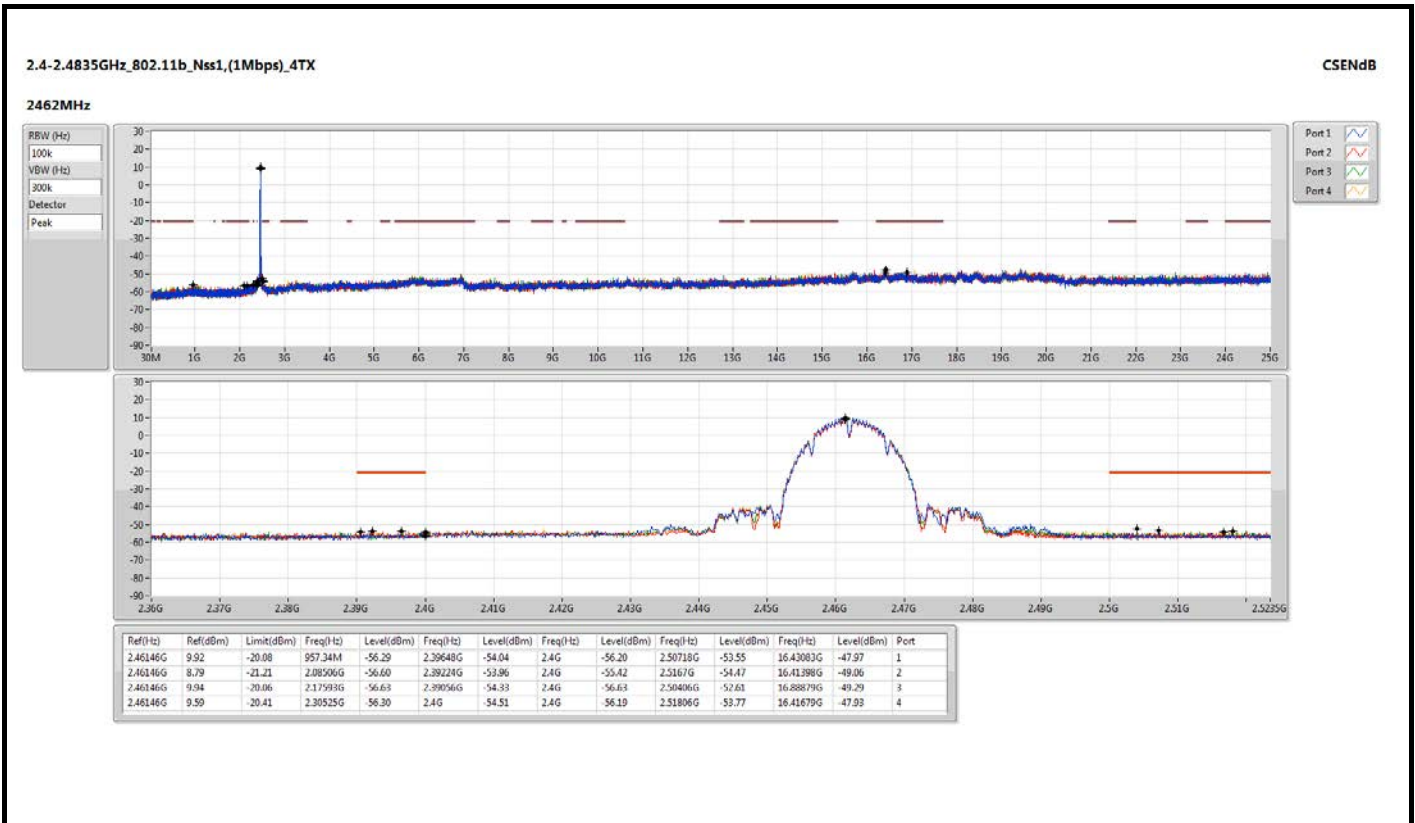
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	49.67	54.00	-4.33	54.56	-4.89	Average	374	349
2	2483.50	59.80	74.00	-14.20	64.69	-4.89	Peak	374	349
3	4904.00	32.02	54.00	-21.98	32.56	-0.54	Average	100	117
4	4904.00	45.07	74.00	-28.93	45.61	-0.54	Peak	100	117
5	7356.00	38.37	54.00	-15.63	33.28	5.09	Average	100	203
6	7356.00	51.87	74.00	-22.13	46.78	5.09	Peak	100	203

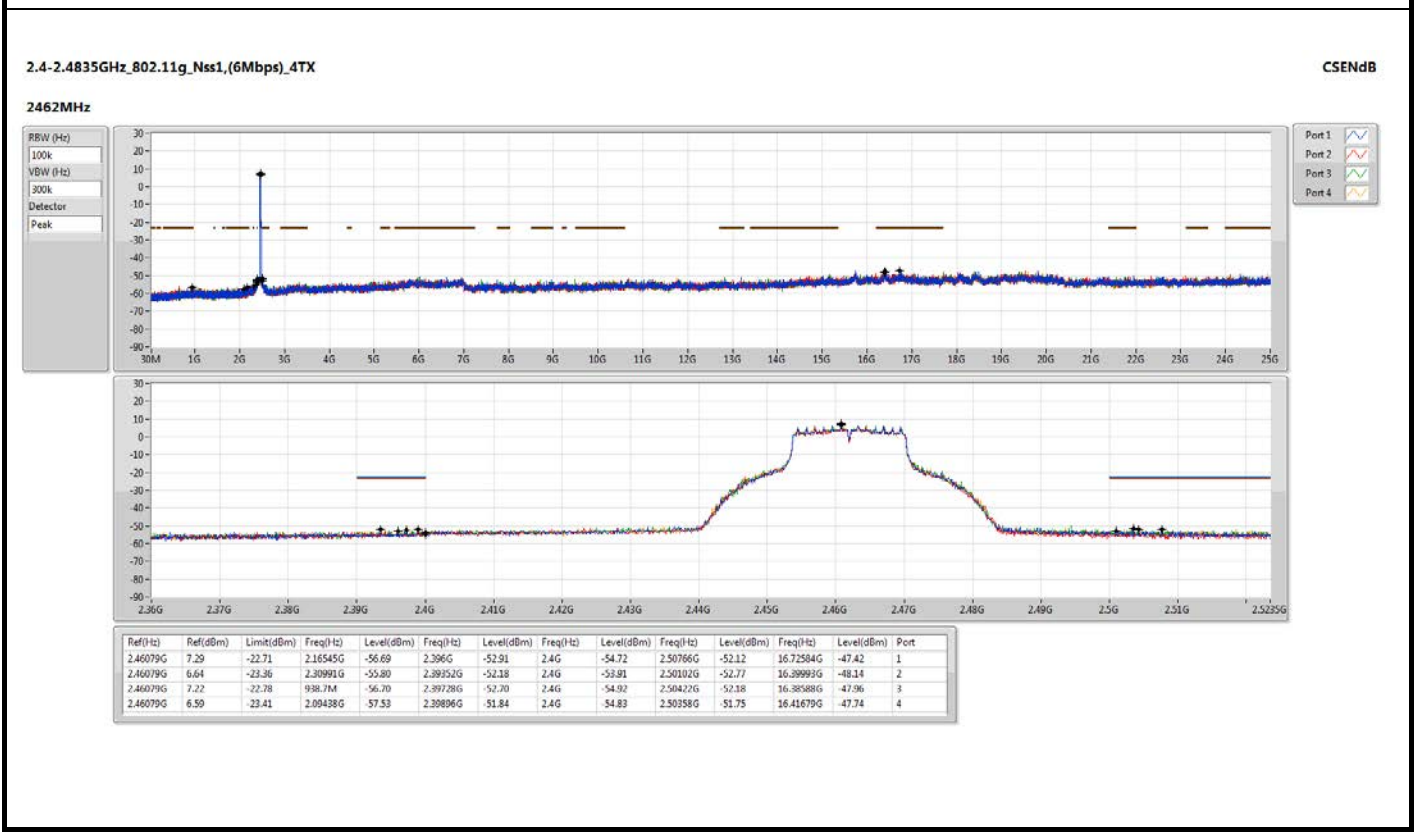
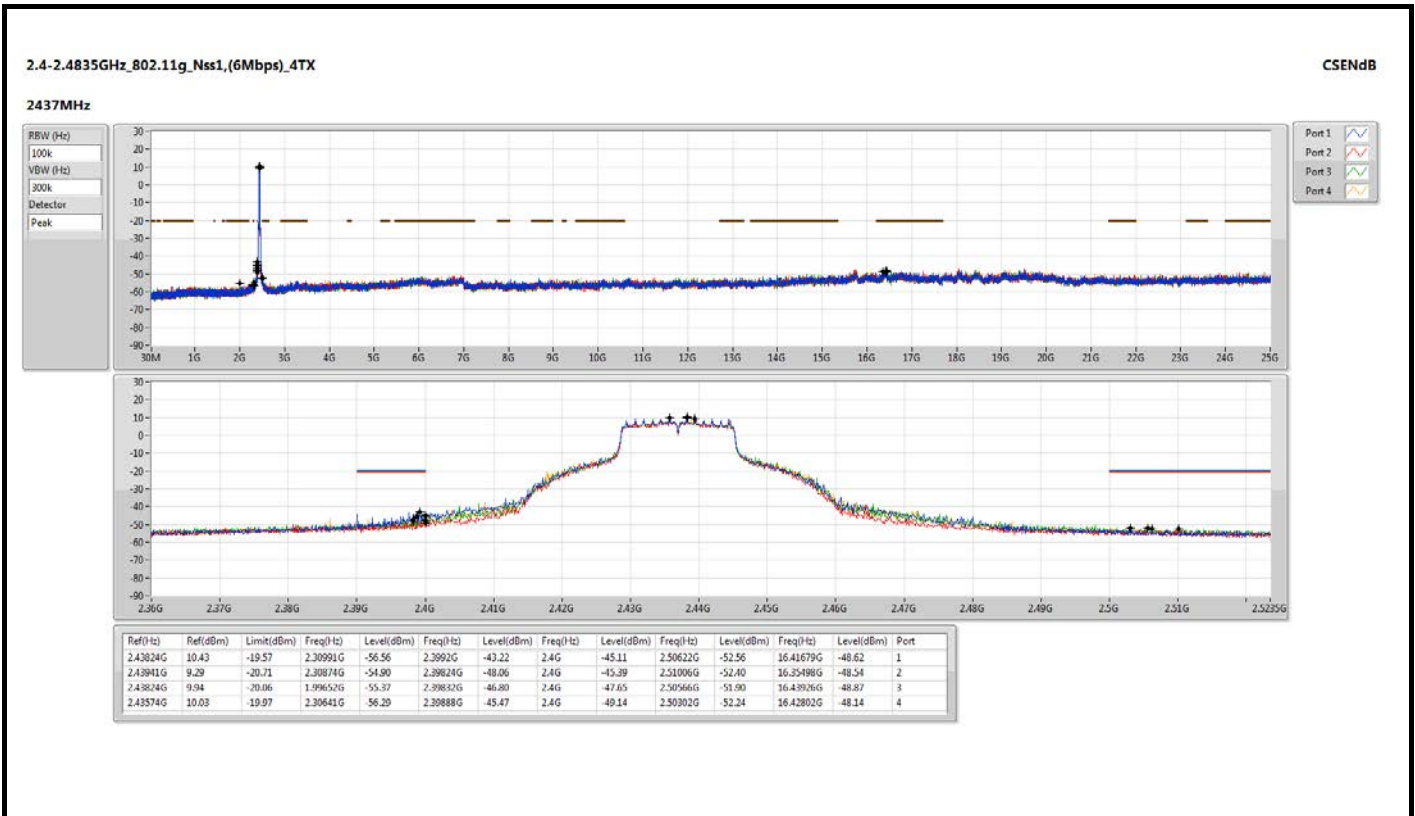
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

\*Factor includes antenna factor , cable loss and amplifier gain

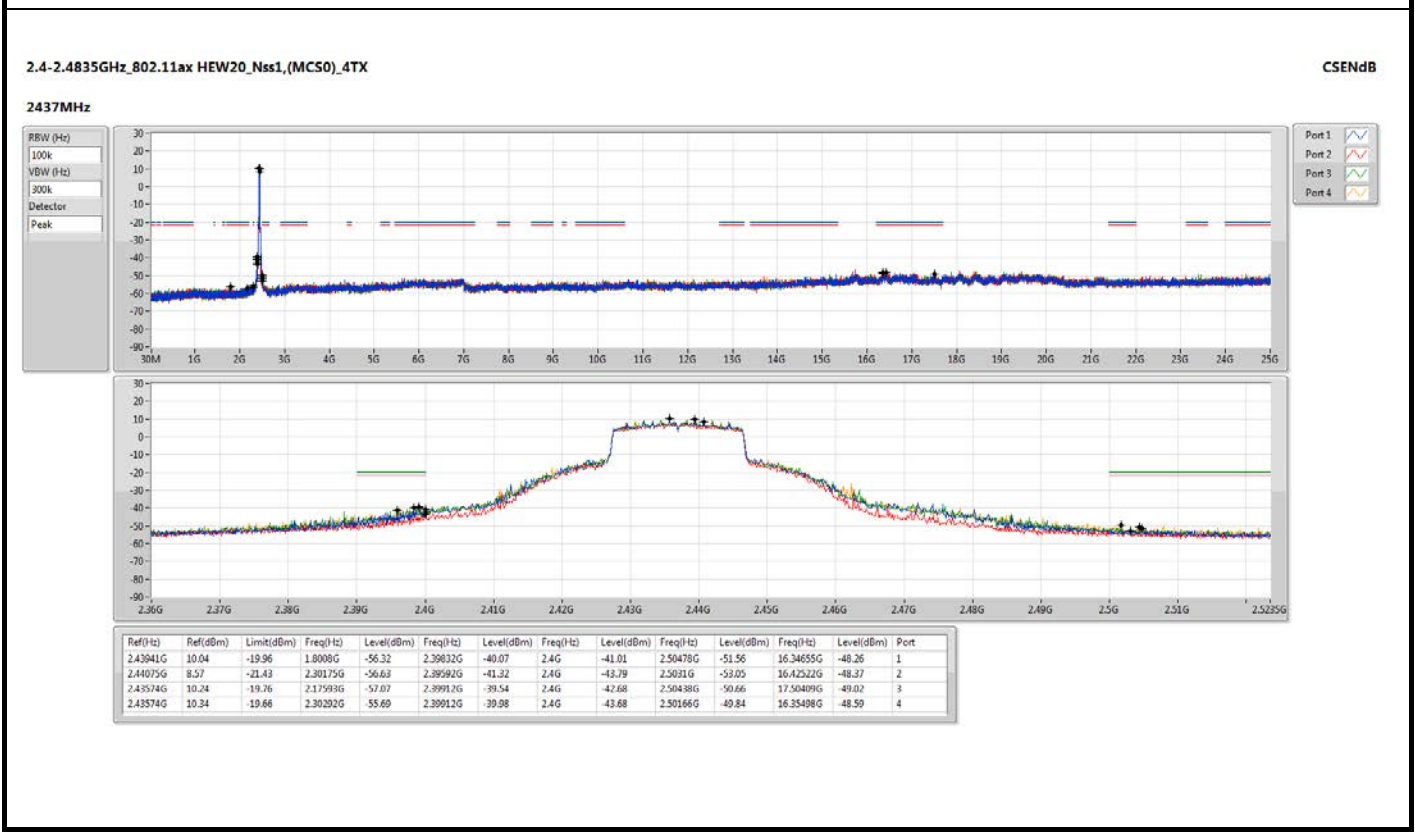
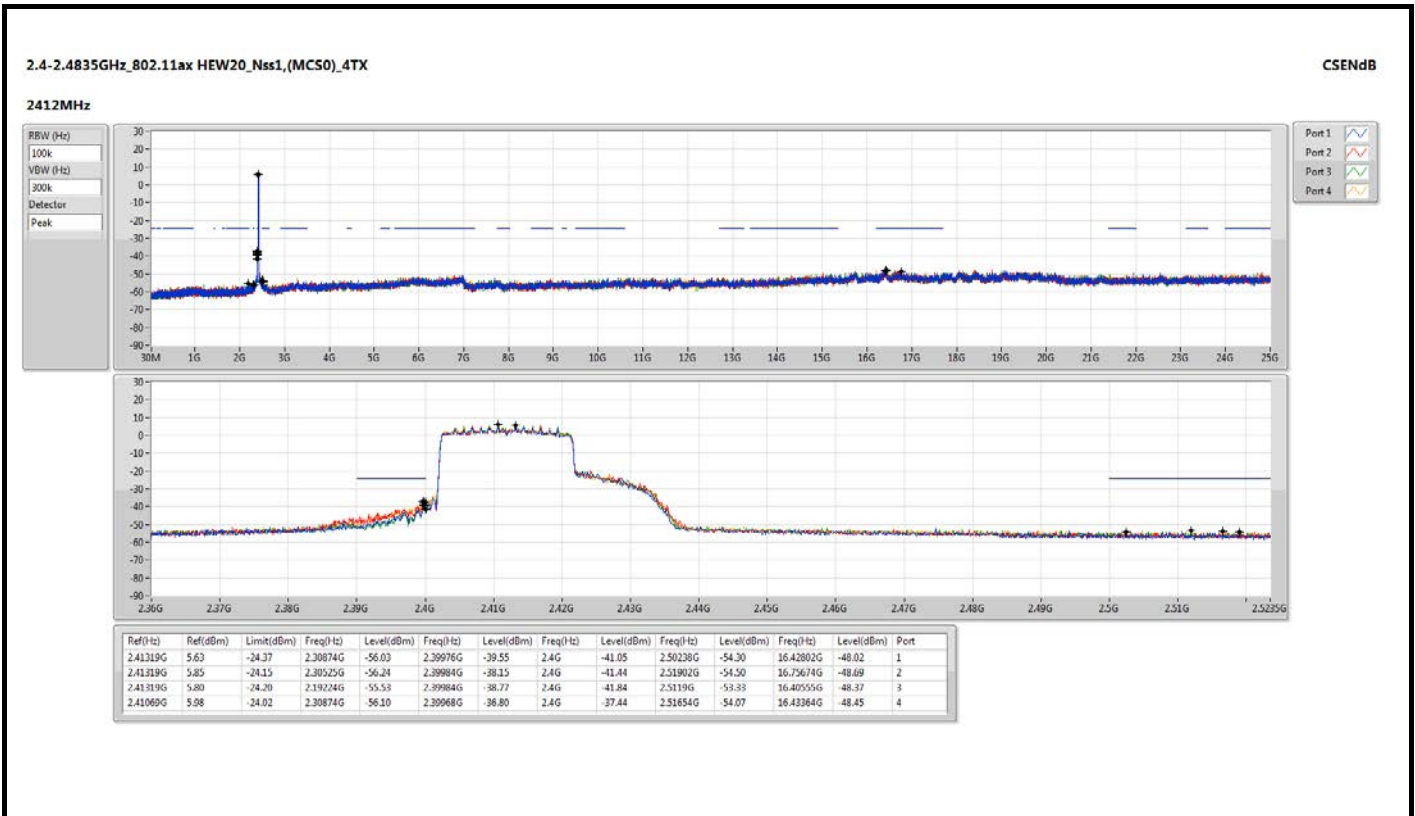
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

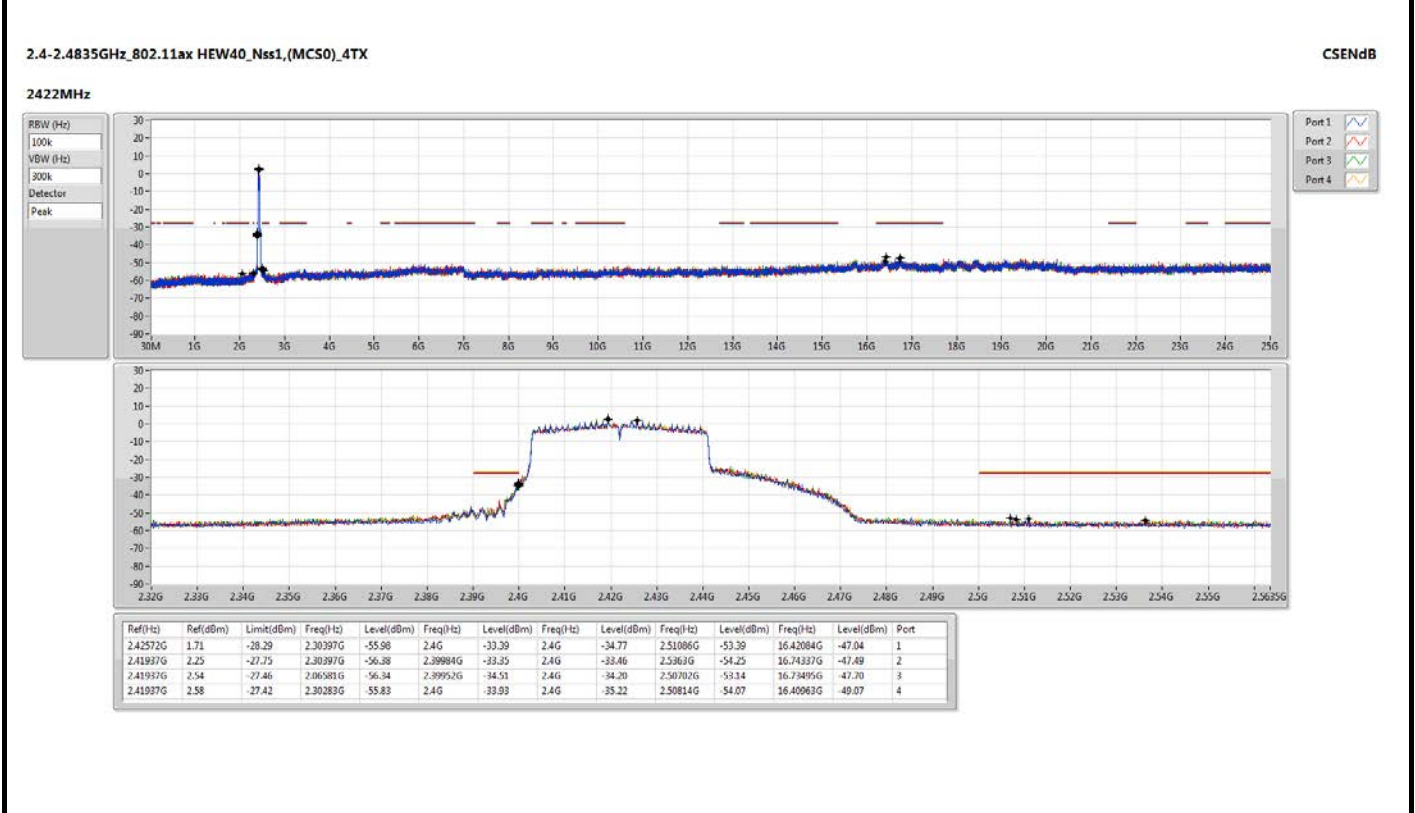
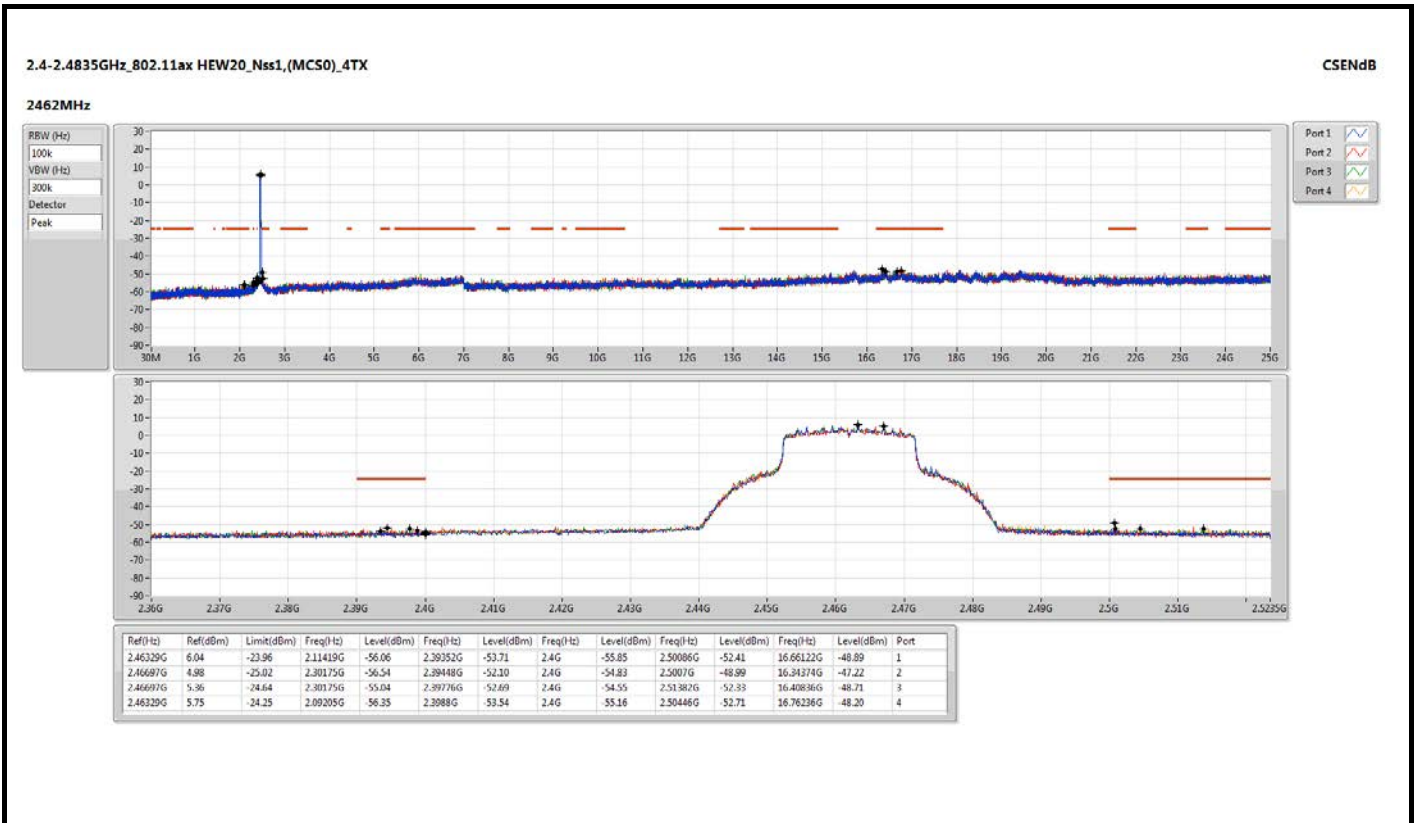


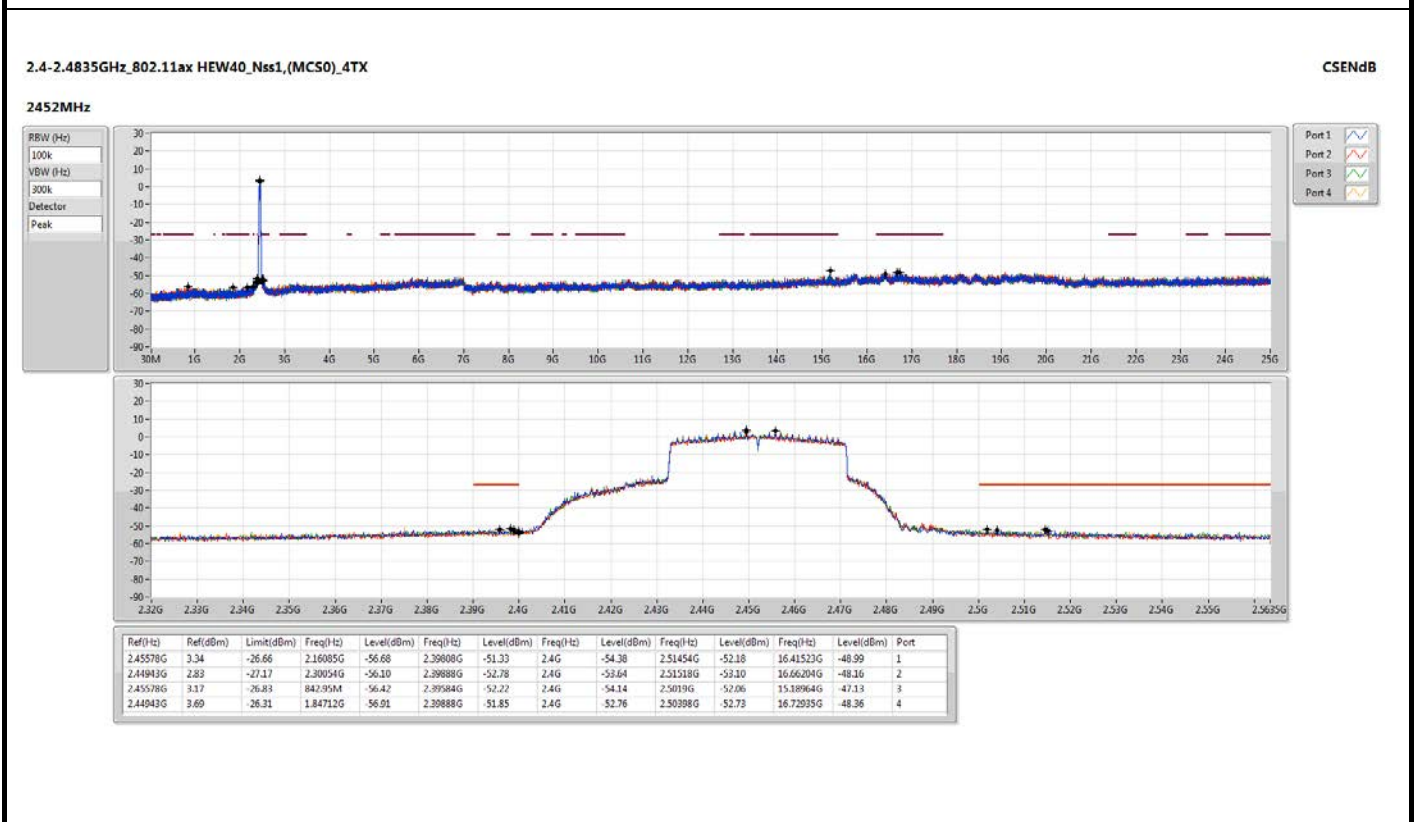
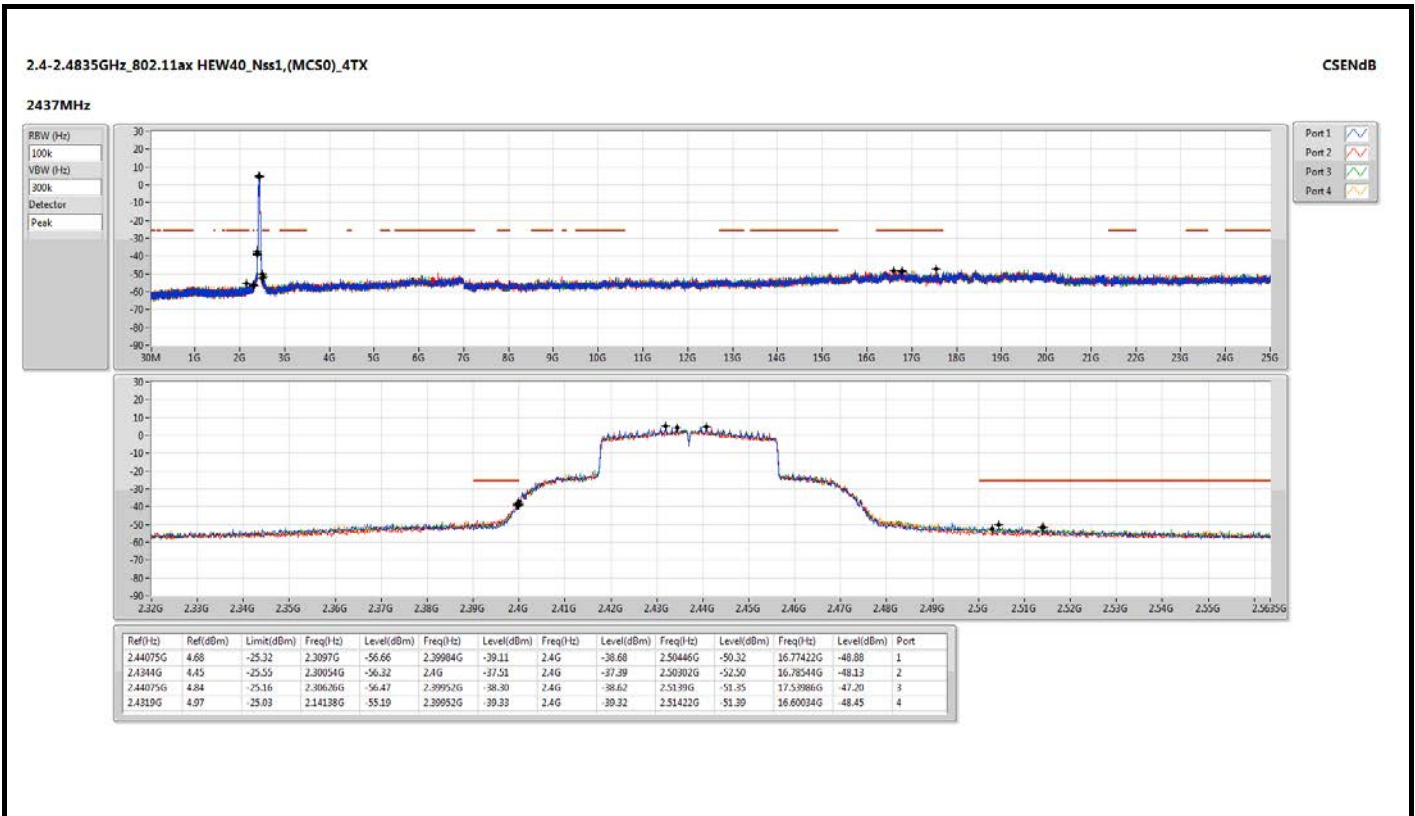








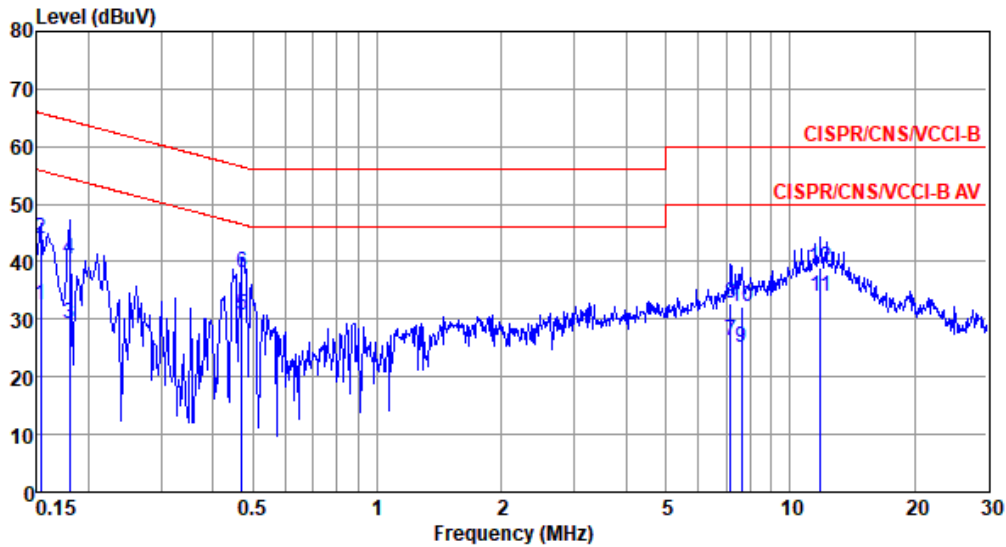






Modulation Mode	ax HE20	Test Freq. (MHz)	2437
Power Phase	Line		

Test by : Wish Yu      Temperature: 22°C      Humidity: 62%



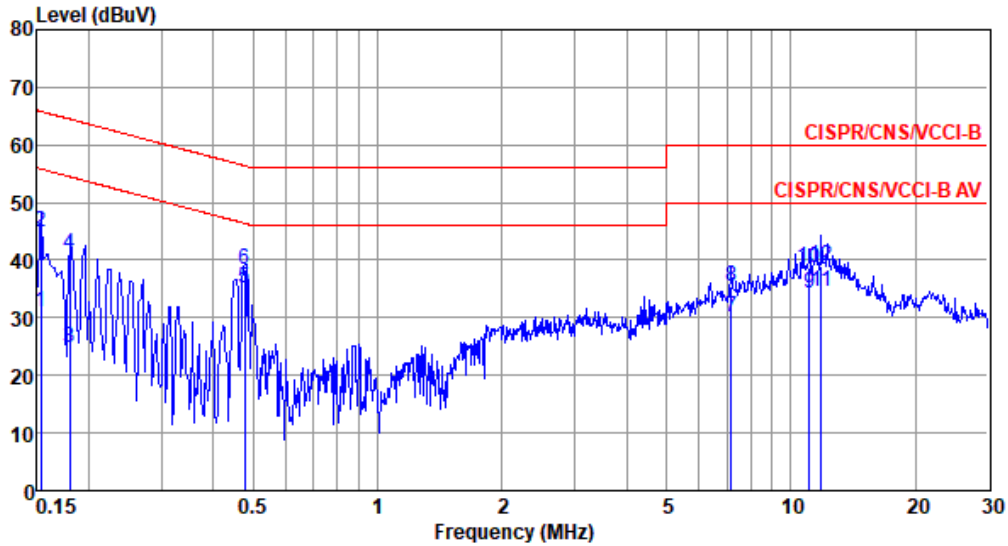
	Freq	Level	Limit	Over	Read	Factor	Cable	Aux	
	MHz	dBuV	Line	Limit	Level	dB	loss	dB	Remark
			dBuV	dB	dBuV		dB		
1	0.153	32.54	55.82	-23.28	22.89	9.59	0.06	0.00	Average
2	0.153	44.11	65.82	-21.71	34.46	9.59	0.06	0.00	QP
3	0.180	29.13	54.50	-25.37	19.48	9.59	0.06	0.00	Average
4	0.180	40.49	64.50	-24.01	30.84	9.59	0.06	0.00	QP
5*	0.471	30.72	46.49	-15.77	21.06	9.59	0.07	0.00	Average
6	0.471	38.04	56.49	-18.45	28.38	9.59	0.07	0.00	QP
7	7.175	26.31	50.00	-23.69	16.38	9.64	0.29	0.00	Average
8	7.175	32.79	60.00	-27.21	22.86	9.64	0.29	0.00	QP
9	7.646	25.23	50.00	-24.77	15.28	9.64	0.31	0.00	Average
10	7.646	32.09	60.00	-27.91	22.14	9.64	0.31	0.00	QP
11	11.870	34.03	50.00	-15.97	24.00	9.64	0.39	0.00	Average
12	11.870	38.82	60.00	-21.18	28.79	9.64	0.39	0.00	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).  
 Note 2: Over Limit (dB) = Level (dBuV) - Limit Line (dBuV).



Modulation Mode	ax HE20	Test Freq. (MHz)	2437
Power Phase	Neutral		

Test by : Wish Yu      Temperature: 22°C      Humidity: 62%



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	Factor dB	Cable loss dB	Aux dB	Remark
1	0.153	31.05	55.82	-24.77	21.39	9.60	0.06	0.00	Average
2	0.153	44.98	65.82	-20.84	35.32	9.60	0.06	0.00	QP
3	0.180	24.74	54.50	-29.76	15.08	9.60	0.06	0.00	Average
4	0.180	40.95	64.50	-23.55	31.29	9.60	0.06	0.00	QP
5*	0.476	35.17	46.41	-11.24	25.50	9.60	0.07	0.00	Average
6	0.476	38.35	56.41	-18.06	28.68	9.60	0.07	0.00	QP
7	7.175	30.07	50.00	-19.93	20.13	9.65	0.29	0.00	Average
8	7.175	35.37	60.00	-24.63	25.43	9.65	0.29	0.00	QP
9	11.080	34.25	50.00	-15.75	24.20	9.67	0.38	0.00	Average
10	11.080	38.71	60.00	-21.29	28.66	9.67	0.38	0.00	QP
11	11.870	34.62	50.00	-15.38	24.56	9.67	0.39	0.00	Average
12	11.870	38.94	60.00	-21.06	28.88	9.67	0.39	0.00	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).  
 Note 2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).