

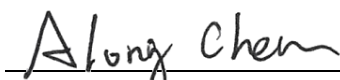
# FCC Test Report

**FCC ID** : 2AYRA-03749  
**Equipment** : AX4200 WiFi 6 Mesh Router  
**Model No.** : MX4200 V2  
(Refer to item 1.1.1 for more details)  
**Brand Name** : LINKSYS  
**Applicant** : Linksys USA, Inc.  
**Address** : 121 Theory, Irvine, CA 92617, USA  
**Standard** : 47 CFR FCC Part 15.247  
**Received Date** : Mar. 09, 2022  
**Tested Date** : Mar. 15 ~ Apr. 01, 2022

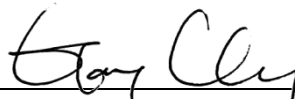
We, International Certification Corporation, would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It shall not be reproduced except in full without the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

Reviewed by:

Approved by:



Along Chen / Assistant Manager



Gary Chang / Manager

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**Appendix A. 6dB and Occupied Bandwidth**

**Appendix B. Conducted Output Power**

**Appendix C. Power Spectral Density**

**Appendix D. Unwanted Emissions into Restricted Frequency Bands**

**Appendix E. Emissions in Non-Restricted Frequency Bands**

**Appendix F. AC Power Line Conducted Emissions**

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## Release Record

Report No.	Version	Description	Issued Date
FR230904AC	Rev. 01	Initial issue	May 11, 2022

## Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	AC Power Line Conducted Emission	[dBuV]: 0.168MHz 46.94 (Margin -18.14dB) - QP	Pass
15.247(d) 15.209	Unwanted Emissions	[dBuV/m at 3m]: 2390.00MHz 53.69 (Margin -0.31dB) - AV	Pass
15.247(b)(3)	Conducted Output Power	Max Power [dBm]: <b>Non-beamforming mode</b> 28.36 <b>Beamforming mode</b> 24.58	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 Product Details

The following models are provided to this EUT.

Brand Name	Model Name	Product Name	Description
LINKSYS	MX4200 V2	AX4200 WiFi 6 Mesh Router	For Marketing purpose
	MX4050 V2		
	MX4000 V2		
	MX4200C V2		
	SPNMX42		

† All models are electrically identical, different model names are for marketing purpose.  
 † The above models, model **MX4200 V2** was selected as a representative one for the final test and only its data was recorded in this report.

### 1.1.2 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]	2	1-11 Mbps
2400-2483.5	g	2412-2462	1-11 [11]	2	6-54 Mbps
2400-2483.5	n (HT20)	2412-2462	1-11 [11]	2	MCS 0-15
2400-2483.5	n (HT40)	2422-2452	3-9 [7]	2	MCS 0-15
2400-2483.5	ax (HE20)	2412-2462	1-11 [11]	2	MCS 0-11
2400-2483.5	ax (HE40)	2422-2452	3-9 [7]	2	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: 802.11ax supports beamforming function.

### 1.1.3 Antenna Details

Ant. No.	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)				
			2400~2483.5	5150~5250	5250~5350	5470~5725	5725~5850
1	Dipole	UFL	2.45	4	4.07	--	--
2	Dipole	UFL	2.45	4	4.07	--	--
3	Monopole	UFL	--	--	--	5.01	5.13
4	Monopole	UFL	--	--	--	5.12	5.09
5	Monopole	UFL	--	--	--	5.2	5.65
6	Monopole	UFL	--	--	--	5.2	5.65

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

<b>Power Supply Type</b>	12Vdc from adapter
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### 1.1.5 Accessories

Accessories		
No.	Equipment	Description
1	AC adapter	Brand: Ktec Model: KSA-36W-120300HU (US plug non-detachable) KSA-36W-120300D5 (US plug detachable) I/P: 100-240Vac, 50/60Hz, 1.0A O/P: 12.0V=3.0A 36.0W Power Line: DC 1.5m non-shielded without core
2	AC adapter	Brand: APD Model: WA-36N12FU (US plug non-detachable) WA-36N12R (US plug detachable) I/P: 100-240Vac, 50-60Hz, 0.9A Max O/P: 12.0V=3.0A 36.0W Power Line: DC 1.2m non-shielded without core
3	RJ45	1m non-shielded without core
4	RJ45	1.8m non-shielded without core

### 1.1.6 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	---	---

### 1.1.7 Test Tool and Duty Cycle

<b>Test Tool</b>	QPSR, V5.0-00200		
<b>Duty Cycle and Duty Factor</b>	<b>Mode</b>	<b>Duty Cycle (%)</b>	<b>Duty Factor (dB)</b>
	11b	60.94%	2.15
	11g	94.20%	0.26
	ax HE20	94.77%	0.23
	ax HE40	95.74%	0.19

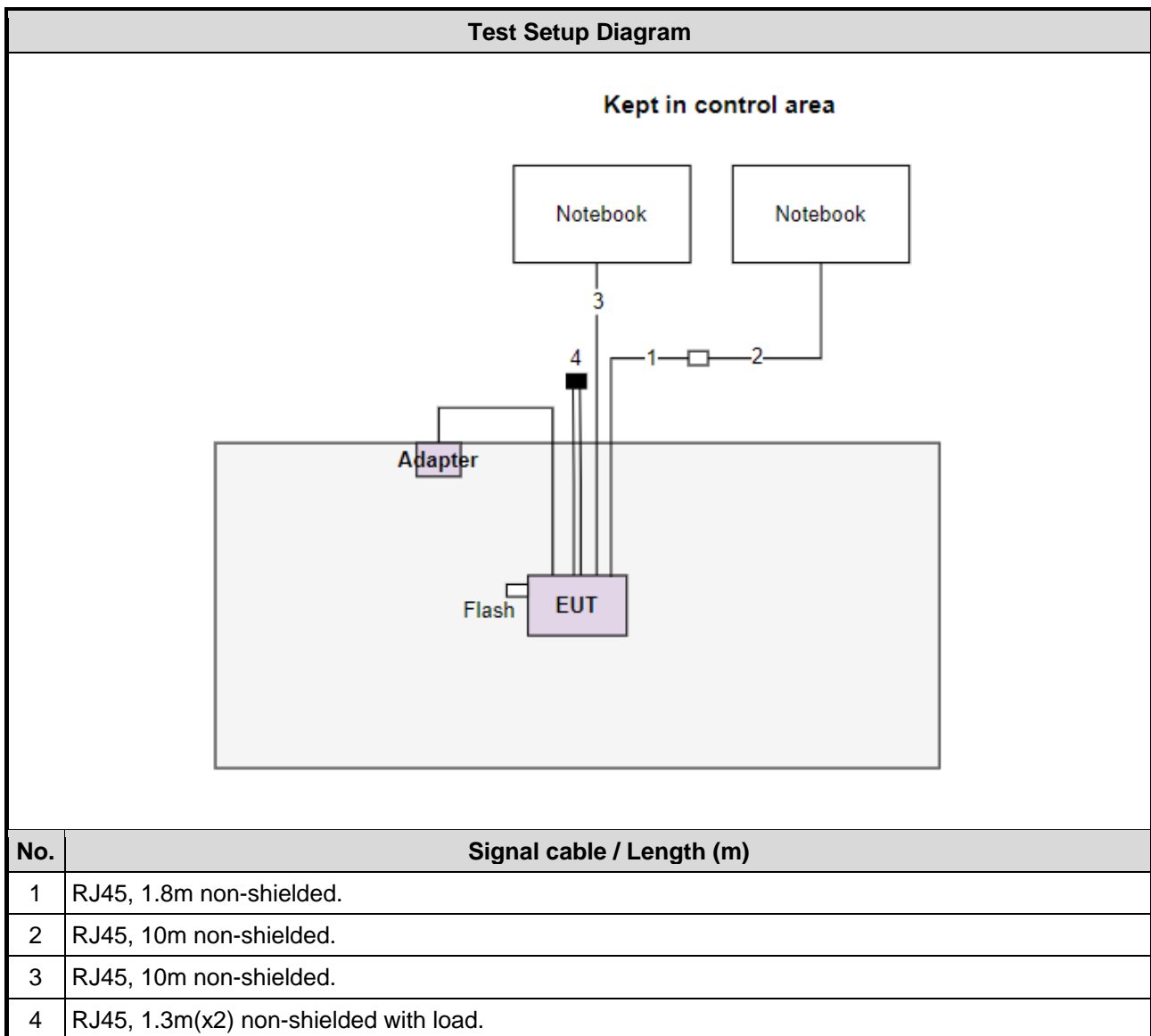
### 1.1.8 Power Index of Test Tool

Modulation Mode	Test Frequency (MHz)	Power Index
11b	2412	24.5
11b	2437	27.5
11b	2462	24.5
11g	2412	21.5
11g	2437	25.5
11g	2462	21.5
ax HE20	2412	21
ax HE20	2437	25.5
ax HE20	2462	21
ax HE40	2422	19
ax HE40	2437	20
ax HE40	2452	19.5

## 1.2 Local Support Equipment List

Support Equipment List					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	Notebook	DELL	Latitude E5470	DoC	---
2	Notebook	DELL	Latitude 5400	DoC	---
3	USB 3.0 flash	Transcend	JetFlash 700	---	---
4	Load	ICC	---	---	---

## 1.3 Test Setup Chart





## 1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Mar. 22, 2022				
Instrument	Brand	Model No.	Serial No.	Calibration Date	Calibration Until
Receiver	R&S	ESR3	101658	Feb. 16, 2022	Feb. 15, 2023
LISN	R&S	ENV216	101295	Jan. 12, 2022	Jan. 11, 2023
LISN (Support Unit)	SCHWARZBECK	NSLK 8127	8127667	Jan .07, 2022	Jan .06, 2023
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 19, 2021	Oct. 18, 2022
50 ohm terminal (Support Unit)	NA	50	04	May 25, 2021	May 24, 2022
Measurement Software	AUDIX	e3	6.120210k	NA	NA

Note: Calibration Interval of instruments listed above is one year.

Test Item	Radiated Emission				
Test Site	966 chamber1 / (03CH01-WS)				
Tested Date	Mar. 15 ~ Apr. 01, 2022				
Instrument	Brand	Model No.	Serial No.	Calibration Date	Calibration Until
Receiver	R&S	ESR3	101657	Mar. 15, 2022	Mar. 14, 2023
Spectrum Analyzer	R&S	FSV40	101063	Apr. 19, 2021	Apr. 18, 2022
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 08, 2021	Nov. 07, 2022
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jun. 30, 2021	Jun. 29, 2022
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Dec. 03, 2021	Dec. 02, 2022
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170508	Jan. 11, 2022	Jan. 10, 2023
Preamplifier	EMC	EMC02325	980225	Jun. 29, 2021	Jun. 28, 2022
Preamplifier	Agilent	83017A	MY39501308	Sep. 28, 2021	Sep. 27, 2022
Preamplifier	EMC	EMC184045B	980192	Jul. 14, 2021	Jul. 13, 2022
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 05, 2021	Oct. 04, 2022
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Oct. 05, 2021	Oct. 04, 2022
LF cable 11M	EMC	EMCCFD400-NW-N W-11000	200801	Oct. 05, 2021	Oct. 04, 2022
LF cable 1M	EMC	EMCCFD400-NM-N M-1000	160502	Oct. 05, 2021	Oct. 04, 2022
RF Cable	EMC	EMC104-35M-35M-8000	210920	Oct. 05, 2021	Oct. 04, 2022
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Oct. 05, 2021	Oct. 04, 2022
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>	Mar. 24, 2022				
<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. 29, 2021	Nov. 28, 2022
Power Meter	Anritsu	ML2495A	1241002	Nov. 07, 2021	Nov. 06, 2022
Power Sensor	Anritsu	MA2411B	1207366	Nov. 07, 2021	Nov. 06, 2022
Measurement Software	Sporton	SENSE-15247_DTS	V5.10	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	11b	2437	1 Mbps	---
Unwanted Emissions ≤ 1GHz	11b	2437	1 Mbps	---
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) Two RJ45 cables (1m & 1.8m) had been covered during the pretest and found that RJ45 <b>1.8m</b> cable was the worst case and was selected for final testing.				
2) Two adapters had been covered during the pretest and found that <b>KSA-36W-120300HU</b> adapter was the worst case for conducted emission test and <b>WA-36N12R</b> adapter was the worst case for radiated emission test.				

### 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

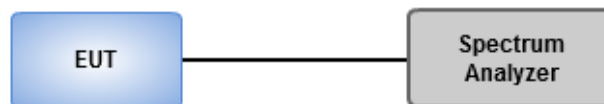
###### 6dB Bandwidth

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>	20°C / 67%	<b>Tested By</b>	Aska Huang
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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

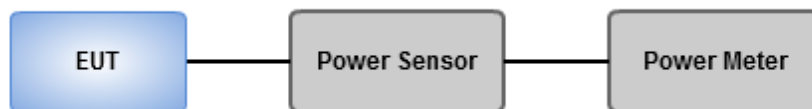
Fixed, point to point operations

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>	20°C / 67%	<b>Tested By</b>	Aska Huang
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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.

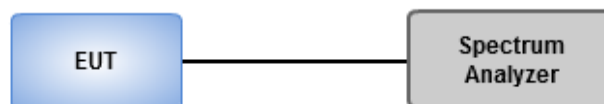
##### Average PSD, duty cycle $\geq 98\%$

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>	20°C / 67%	<b>Tested By</b>	Aska Huang
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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.

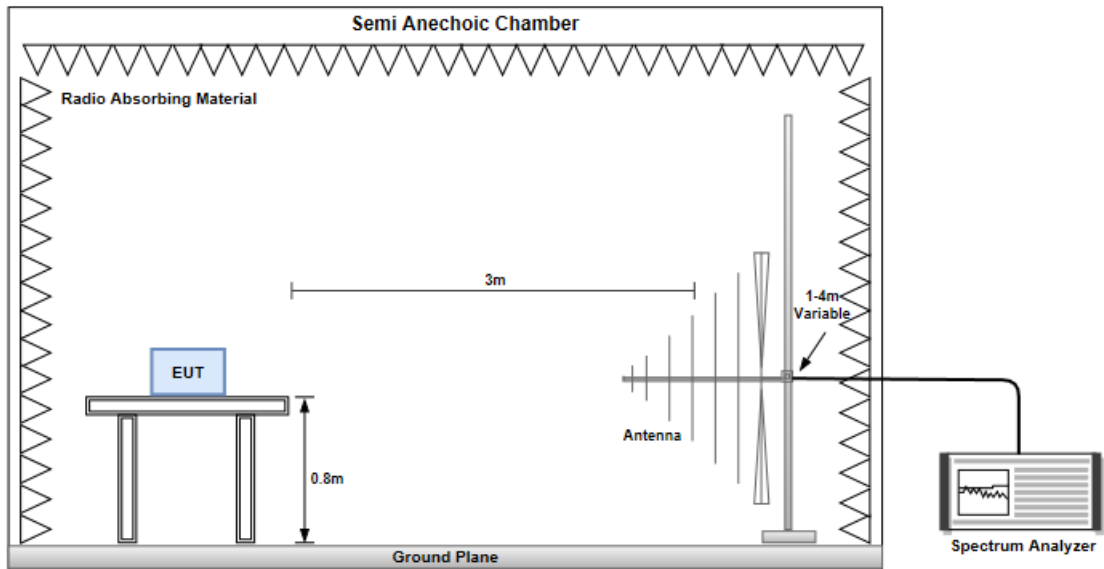
Note:

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.

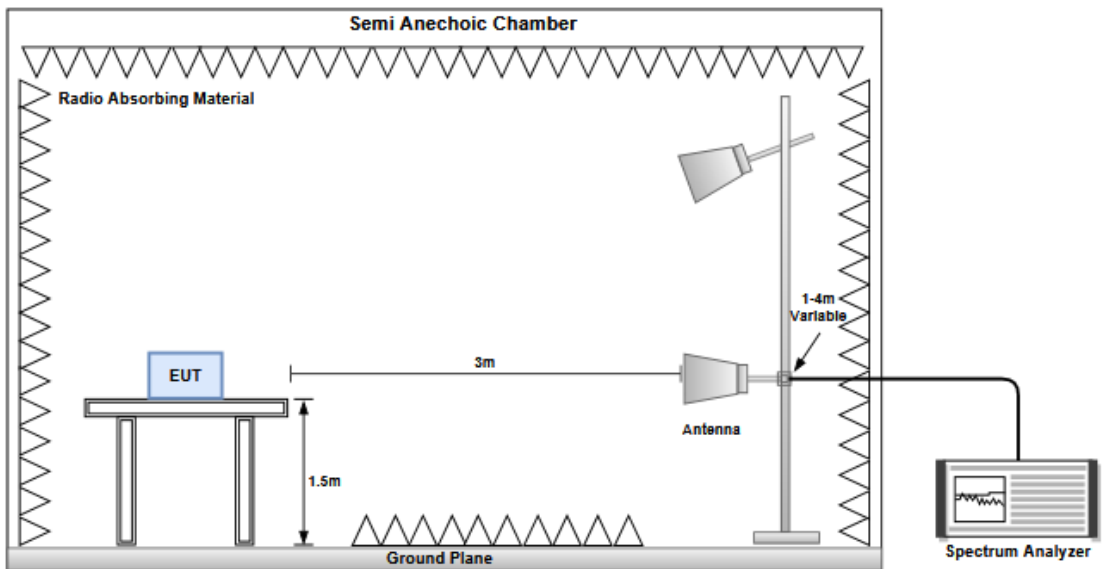


### 3.4.3 Test Setup

#### 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

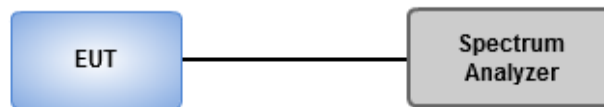
#### Reference level measurement

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>	20°C / 67%	<b>Tested By</b>	Aska Huang
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Refer to Appendix E.

## 3.6 AC Power Line Conducted Emissions

### 3.6.1 Limit of AC Power Line Conducted Emissions

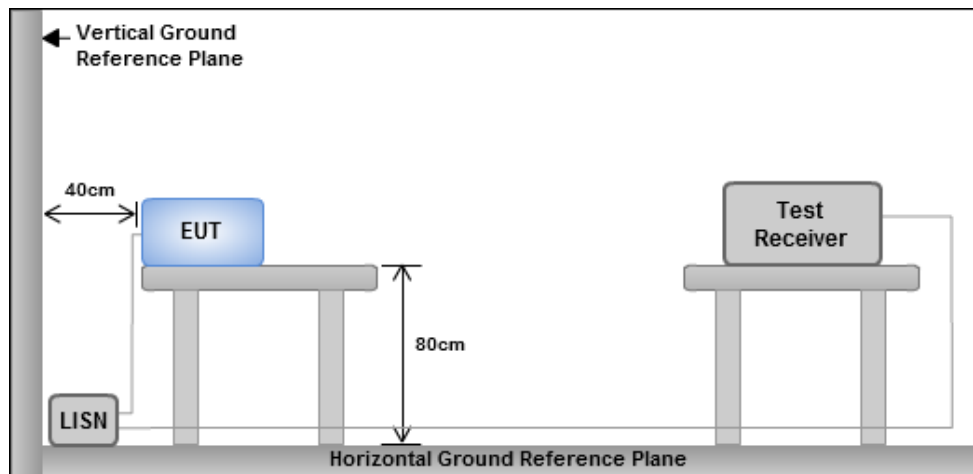
Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

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**

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==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)_2TX	8.043M	14.038M	14M0G1D	7.101M	12.808M
802.11g_Nss1,(6Mbps)_2TX	16.377M	21.491M	21M5D1D	15.942M	16.281M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.841M	22.214M	22M2D1D	18.261M	18.886M
802.11ax HEW40_Nss1,(MCS0)_2TX	38.261M	38.061M	38M1D1D	35.942M	37.627M

**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)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	8.043M	13.025M	7.101M	12.808M
2437MHz	Pass	500k	8.043M	13.314M	8.043M	14.038M
2462MHz	Pass	500k	7.609M	13.314M	7.536M	12.952M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.377M	16.281M	16.304M	16.353M
2437MHz	Pass	500k	16.377M	18.958M	16.304M	21.491M
2462MHz	Pass	500k	15.942M	16.353M	16.377M	16.281M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.768M	18.886M	18.841M	18.886M
2437MHz	Pass	500k	18.841M	19.899M	18.623M	22.214M
2462MHz	Pass	500k	18.551M	18.958M	18.261M	18.886M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.971M	37.916M	38.116M	37.771M
2437MHz	Pass	500k	37.826M	37.771M	38.261M	38.061M
2452MHz	Pass	500k	35.942M	37.627M	36.522M	37.627M

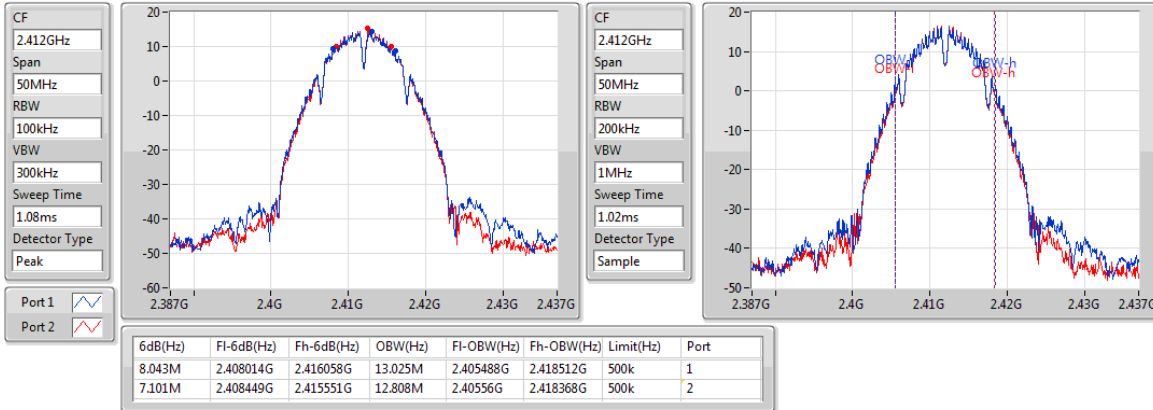
**Port X-N dB** = Port X 6dB down bandwidth; **Port X-OBW** = Port X 99% occupied bandwidth;



802.11b\_Nss1,(1Mbps)\_2TX

EBW

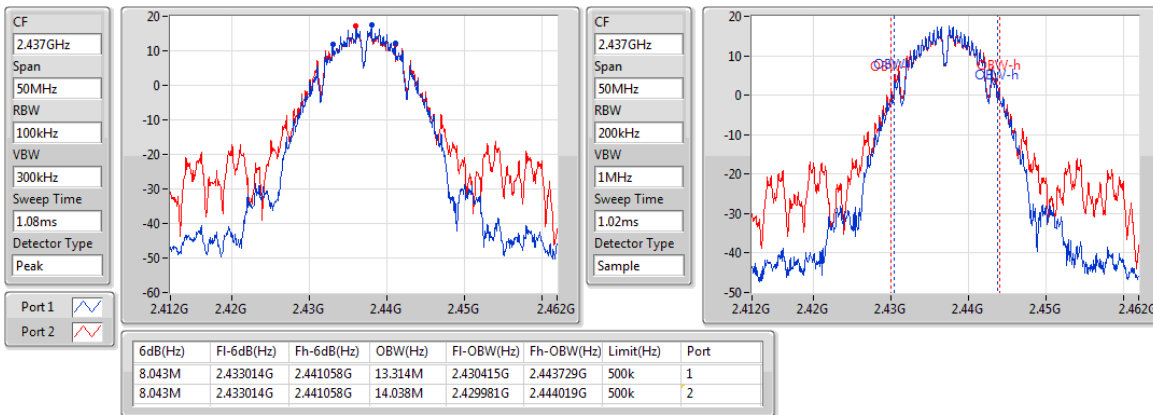
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802.11b\_Nss1,(1Mbps)\_2TX

EBW

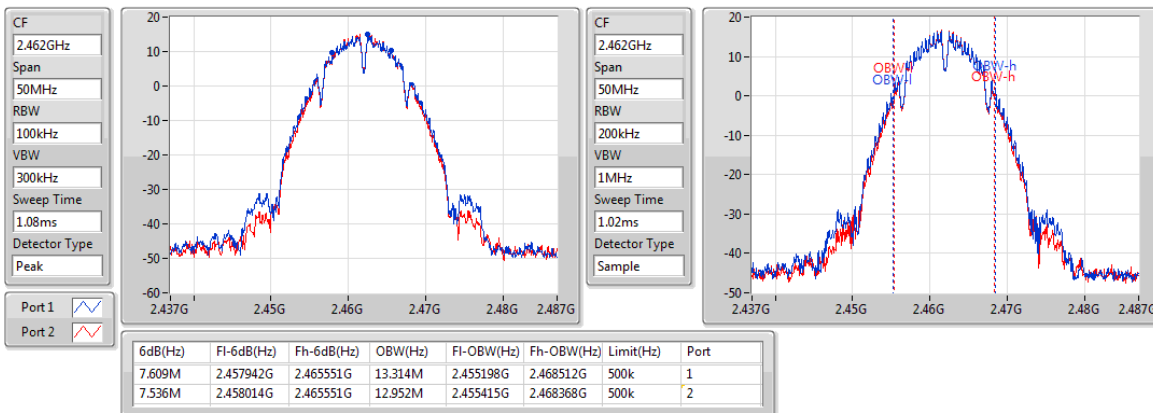
2437MHz



802.11b\_Nss1,(1Mbps)\_2TX

EBW

2462MHz

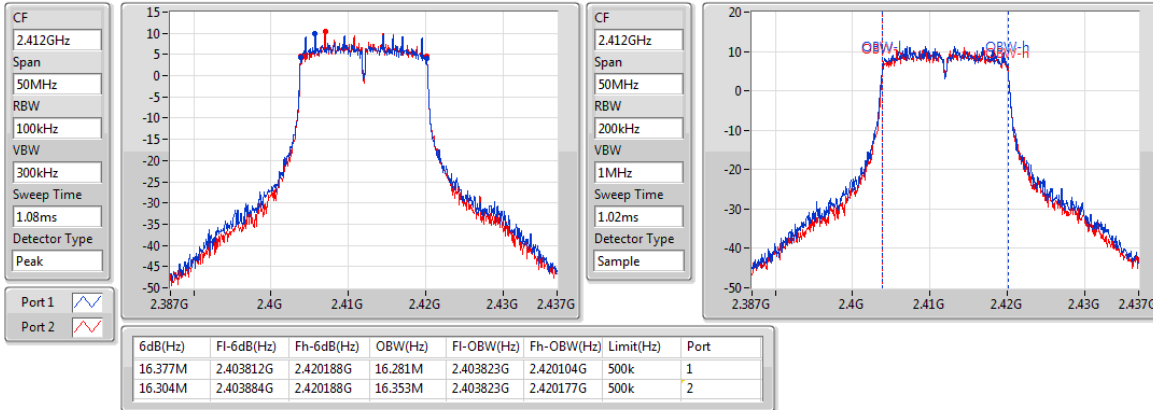




802.11g\_Nss1,(6Mbps)\_2TX

EBW

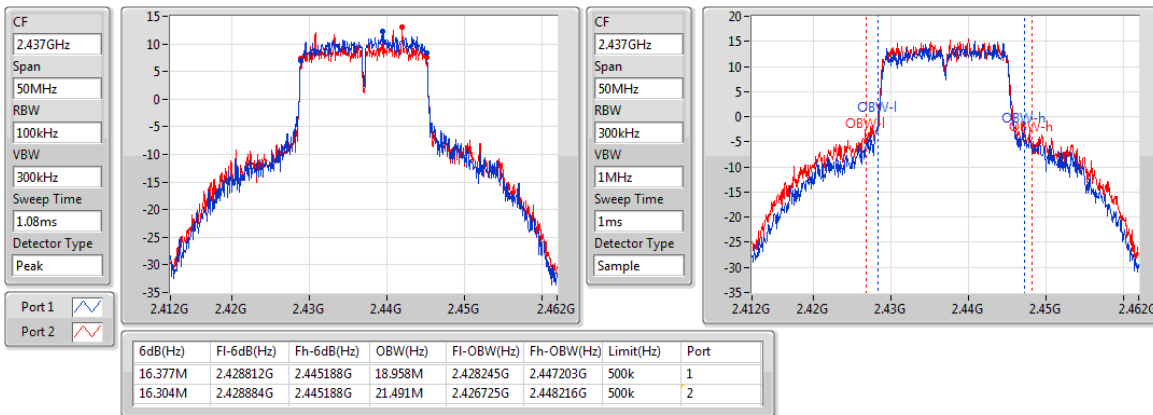
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802.11g\_Nss1,(6Mbps)\_2TX

EBW

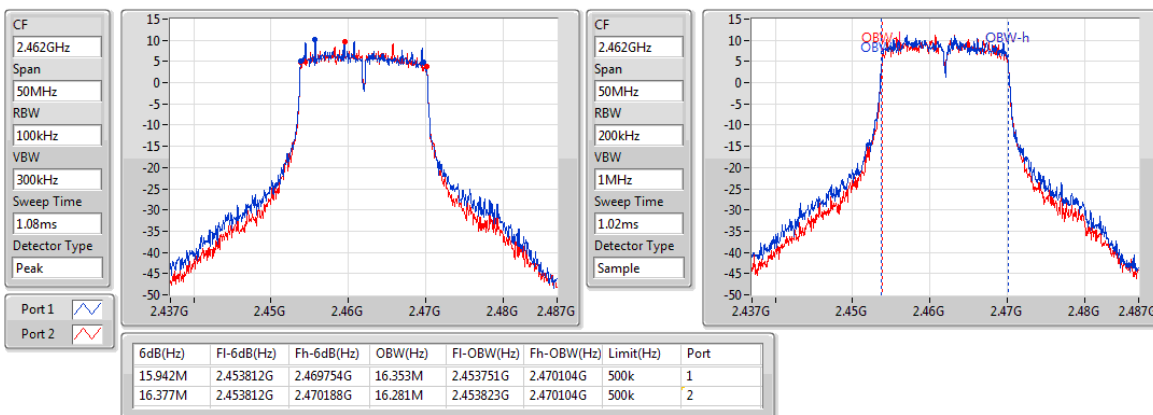
2437MHz



802.11g\_Nss1,(6Mbps)\_2TX

EBW

2462MHz

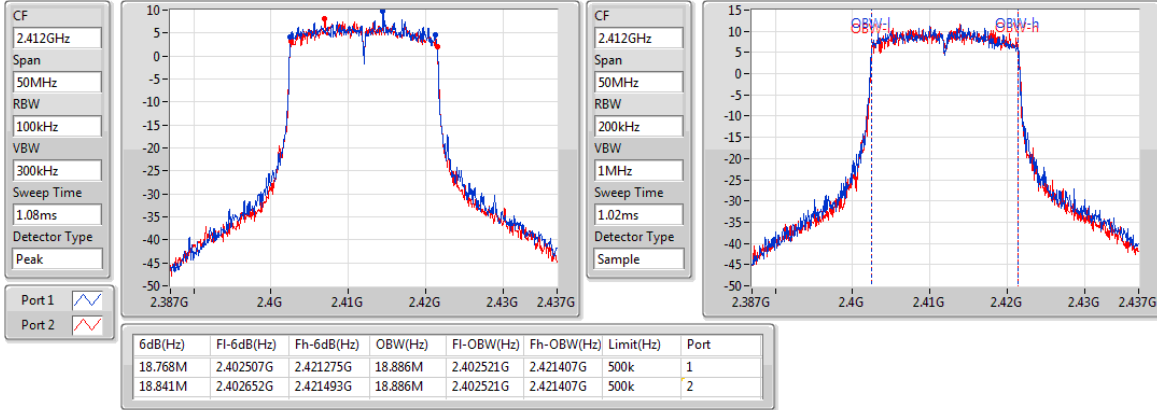




802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

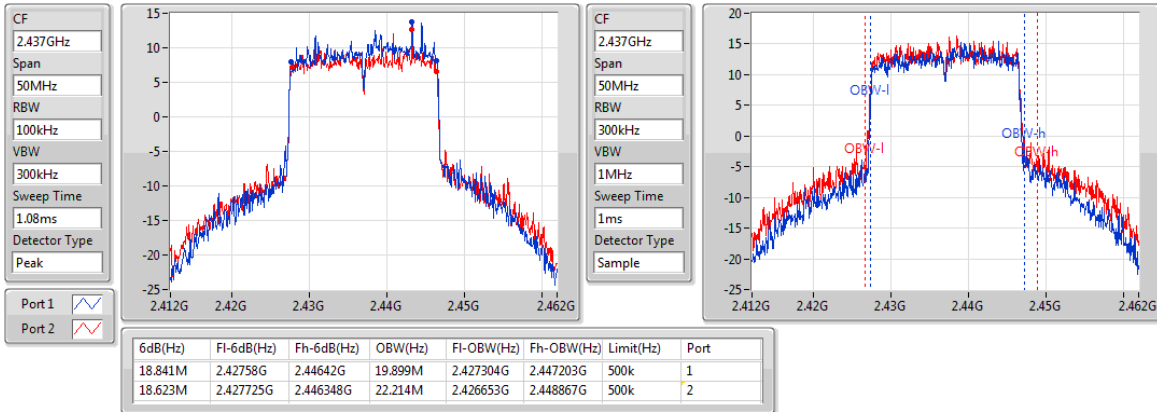
2412MHz



802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

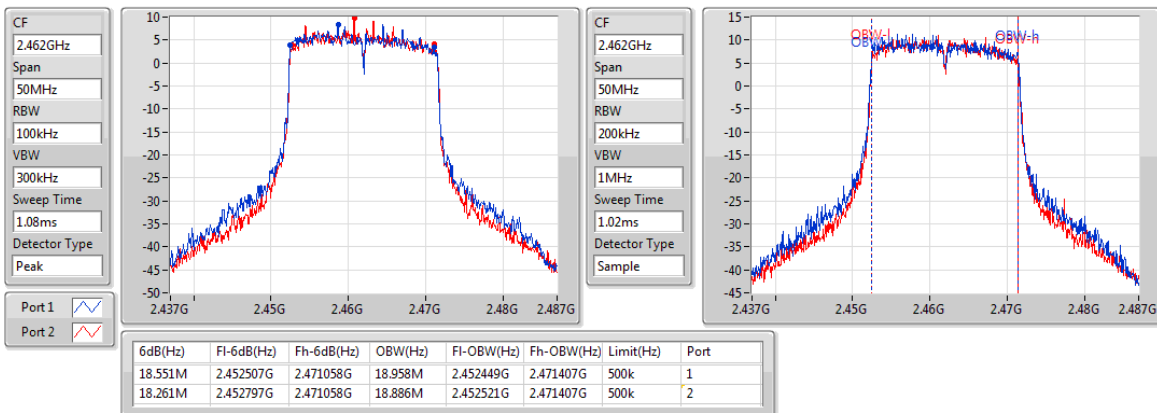
2437MHz



802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

2462MHz



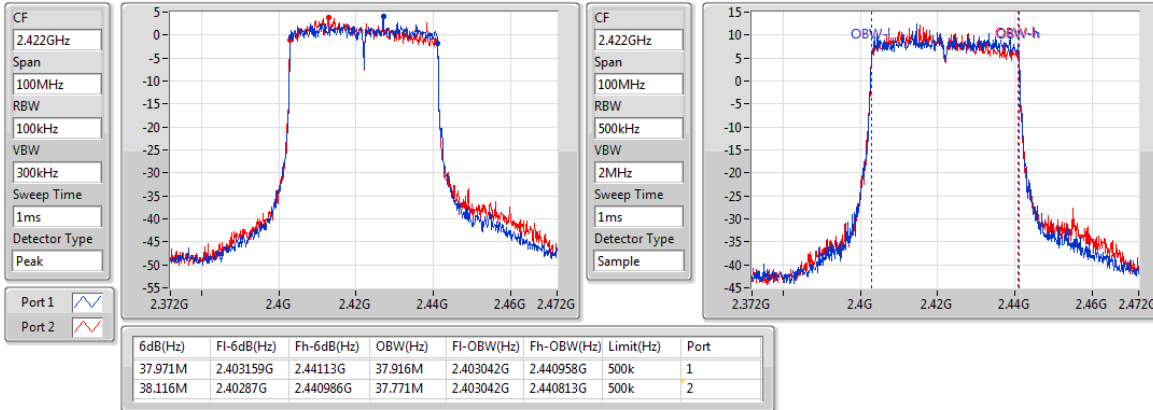




802.11ax HEW40\_Nss1,(MCS0)\_2TX

EBW

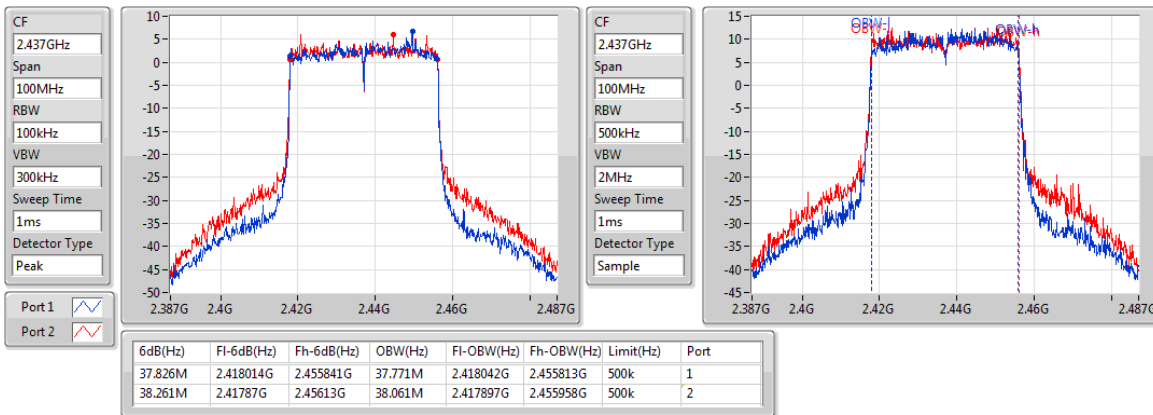
2422MHz



802.11ax HEW40\_Nss1,(MCS0)\_2TX

EBW

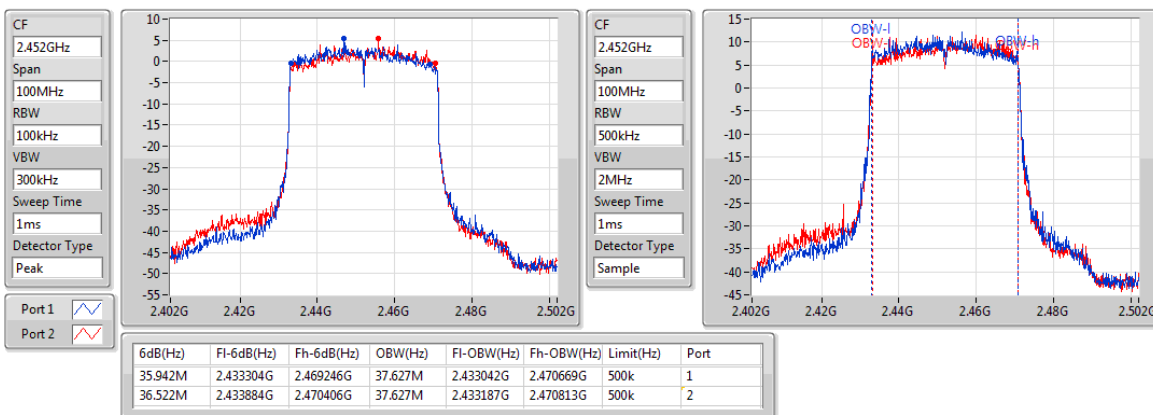
2437MHz



802.11ax HEW40\_Nss1,(MCS0)\_2TX

EBW

2452MHz





Non-Beamforming

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	28.36	0.68549
802.11g_Nss1,(6Mbps)_2TX	27.58	0.57280
802.11ax HEW20_Nss1,(MCS0)_2TX	27.59	0.57412
802.11ax HEW40_Nss1,(MCS0)_2TX	23.77	0.23823

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	2.45	24.49	24.68	27.60	30.00	30.05	36.00
2437MHz	Pass	2.45	25.41	25.29	28.36	30.00	30.81	36.00
2462MHz	Pass	2.45	24.26	24.31	27.30	30.00	29.75	36.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	2.45	21.63	21.58	24.62	30.00	27.07	36.00
2437MHz	Pass	2.45	25.12	23.93	27.58	30.00	30.03	36.00
2462MHz	Pass	2.45	21.31	21.49	24.41	30.00	26.86	36.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	2.45	21.12	21.08	24.11	30.00	26.56	36.00
2437MHz	Pass	2.45	25.13	23.96	27.59	30.00	30.04	36.00
2462MHz	Pass	2.45	20.82	21.03	23.94	30.00	26.39	36.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2422MHz	Pass	2.45	19.26	19.35	22.32	30.00	24.77	36.00
2437MHz	Pass	2.45	20.67	20.85	23.77	30.00	26.22	36.00
2452MHz	Pass	2.45	19.75	19.52	22.65	30.00	25.10	36.00

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



Beamforming

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	24.58	0.28708
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	20.76	0.11912

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	5.46	18.11	18.07	21.10	30.00	26.56	36.00
2437MHz	Pass	5.46	22.12	20.95	24.58	30.00	30.04	36.00
2462MHz	Pass	5.46	17.81	18.02	20.93	30.00	26.39	36.00
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2422MHz	Pass	5.46	16.25	16.34	19.31	30.00	24.77	36.00
2437MHz	Pass	5.46	17.66	17.84	20.76	30.00	26.22	36.00
2452MHz	Pass	5.46	16.74	16.51	19.64	30.00	25.10	36.00

DG = Directional Gain =  $10 \log [(10^{2.45/20} + 10^{2.45/20})^2/2] = 5.46$  dBi; Port X = Port X output power



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_2TX	2.34
802.11g_Nss1,(6Mbps)_2TX	-4.04
802.11ax HEW20_Nss1,(MCS0)_2TX	-6.76
802.11ax HEW40_Nss1,(MCS0)_2TX	-13.76

RBW= 3 kHz

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.46	-1.74	-1.03	1.47	8.00
2437MHz	Pass	5.46	-0.08	-0.76	2.34	8.00
2462MHz	Pass	5.46	-1.05	-1.47	1.35	8.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.46	-9.93	-9.82	-7.04	8.00
2437MHz	Pass	5.46	-6.16	-7.21	-4.04	8.00
2462MHz	Pass	5.46	-9.75	-9.86	-7.01	8.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.46	-11.41	-12.30	-9.15	8.00
2437MHz	Pass	5.46	-8.22	-9.92	-6.76	8.00
2462MHz	Pass	5.46	-12.10	-12.90	-10.23	8.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	5.46	-17.38	-15.57	-14.66	8.00
2437MHz	Pass	5.46	-15.64	-15.91	-13.76	8.00
2452MHz	Pass	5.46	-16.21	-16.76	-14.43	8.00

DG = Directional Gain =  $10 \log [(10^{2.45/20} + 10^{2.45/20})^2/2] = 5.46$  dBi;

PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;  
RBW= 3 kHz

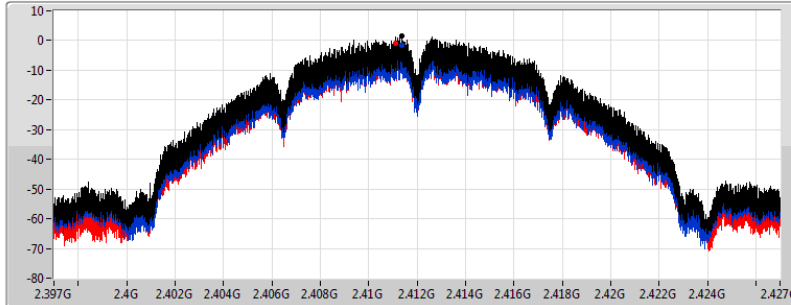


802.11b\_Nss1,(1Mbps)\_2TX

PSD

2412MHz

CF  
2412GHz  
Span  
30MHz  
RBW  
3kHz  
VBW  
10kHz  
Sweep Time  
334ms  
Detector Type  
RMS



Sum   
Port 1   
Port 2

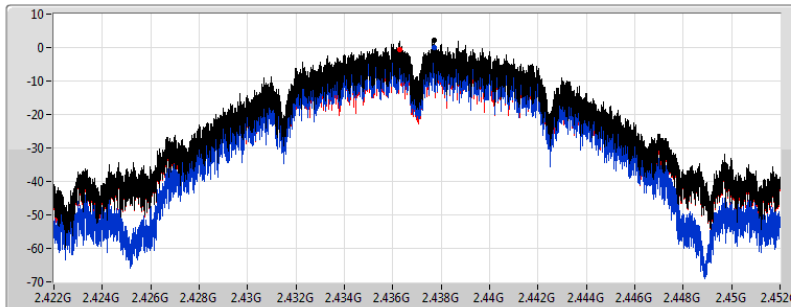
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.47	1.47	-1.74	-1.03

802.11b\_Nss1,(1Mbps)\_2TX

PSD

2437MHz

CF  
2437GHz  
Span  
30MHz  
RBW  
3kHz  
VBW  
10kHz  
Sweep Time  
334ms  
Detector Type  
RMS



Sum   
Port 1   
Port 2

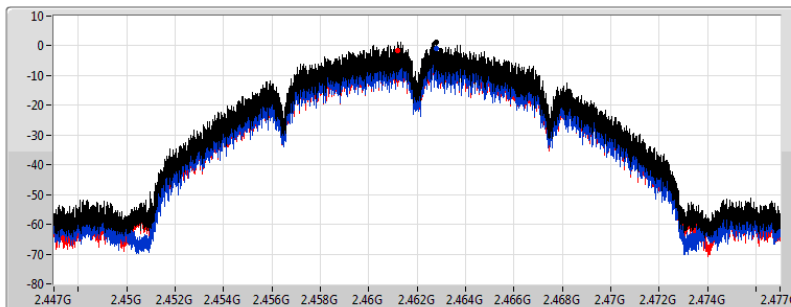
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.34	2.34	-0.08	-0.76

802.11b\_Nss1,(1Mbps)\_2TX

PSD

2462MHz

CF  
2462GHz  
Span  
30MHz  
RBW  
3kHz  
VBW  
10kHz  
Sweep Time  
334ms  
Detector Type  
RMS



Sum   
Port 1   
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.35	1.35	-1.05	-1.47

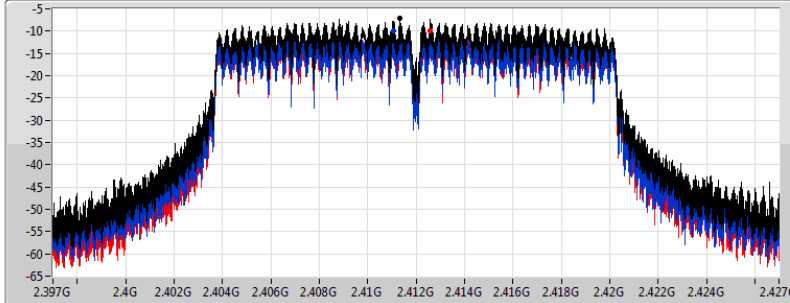


802.11g\_Nss1,(6Mbps)\_2TX

PSD

2412MHz

CF  
2412GHz  
Span  
30MHz  
RBW  
3kHz  
VBW  
10kHz  
Sweep Time  
334ms  
Detector Type  
RMS



Sum   
Port 1   
Port 2

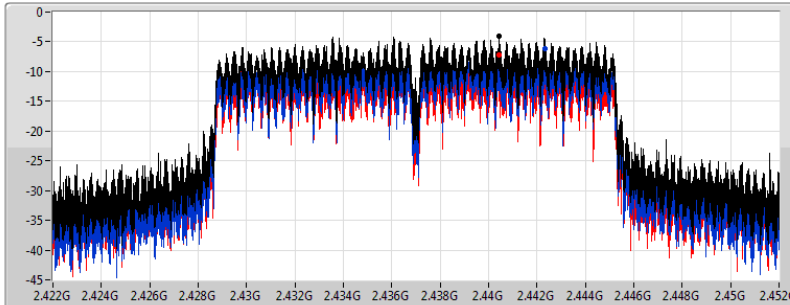
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.04	-7.04	-9.93	-9.82

802.11g\_Nss1,(6Mbps)\_2TX

PSD

2437MHz

CF  
2437GHz  
Span  
30MHz  
RBW  
3kHz  
VBW  
10kHz  
Sweep Time  
334ms  
Detector Type  
RMS



Sum   
Port 1   
Port 2

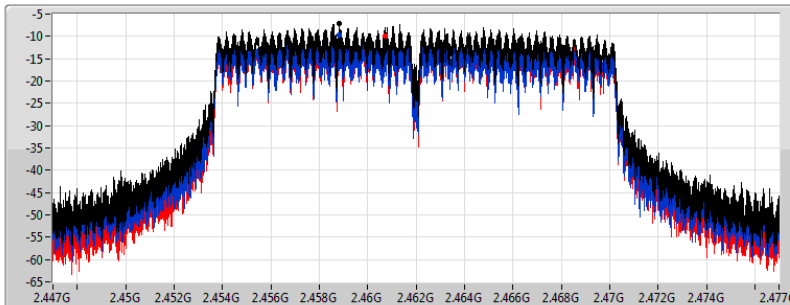
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.04	-4.04	-6.16	-7.21

802.11g\_Nss1,(6Mbps)\_2TX

PSD

2462MHz

CF  
2462GHz  
Span  
30MHz  
RBW  
3kHz  
VBW  
10kHz  
Sweep Time  
334ms  
Detector Type  
RMS



Sum   
Port 1   
Port 2

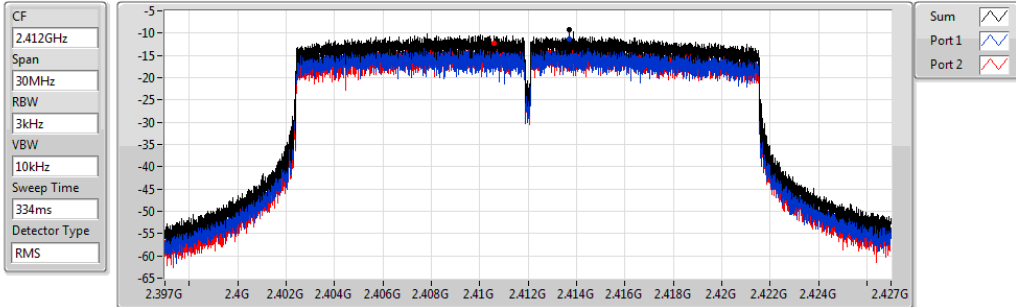
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.01	-7.01	-9.75	-9.86



802.11ax HEW20\_Nss1,(MCS0)\_2TX

PSD

2412MHz

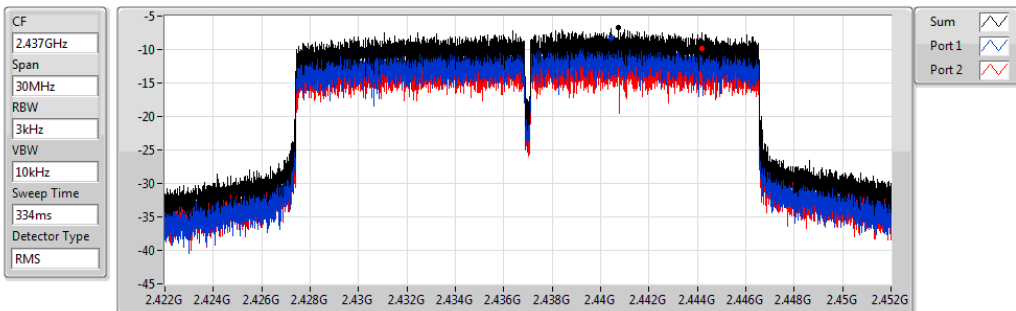


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.15	-9.15	-11.41	-12.30

802.11ax HEW20\_Nss1,(MCS0)\_2TX

PSD

2437MHz

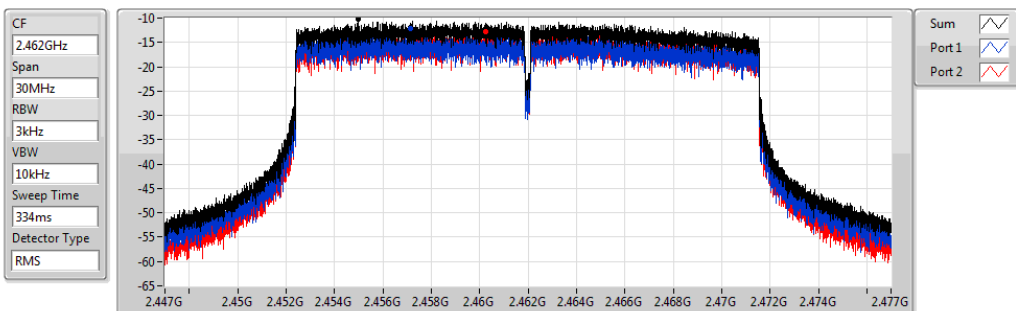


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.76	-6.76	-8.22	-9.92

802.11ax HEW20\_Nss1,(MCS0)\_2TX

PSD

2462MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.23	-10.23	-12.10	-12.90

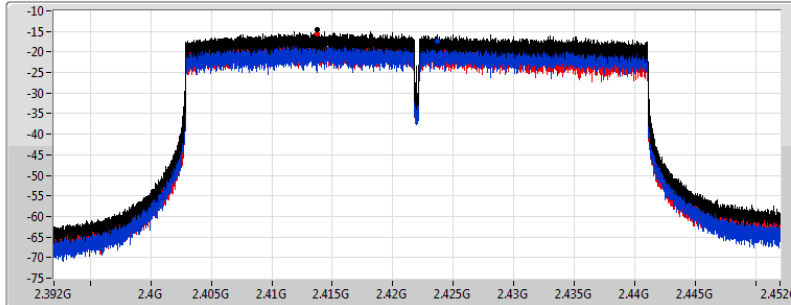


802.11ax HEW40\_Nss1,(MCS0)\_2TX

PSD

2422MHz

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



Sum   
Port 1   
Port 2

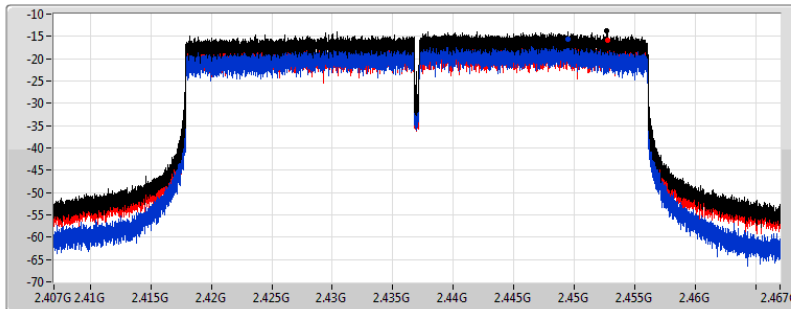
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-14.66	-14.66	-17.38	-15.57

802.11ax HEW40\_Nss1,(MCS0)\_2TX

PSD

2437MHz

CF  
2.437GHz  
Span  
60MHz  
RBW  
3kHz  
VBW  
10kHz  
Sweep Time  
667ms  
Detector Type  
RMS



Sum   
Port 1   
Port 2

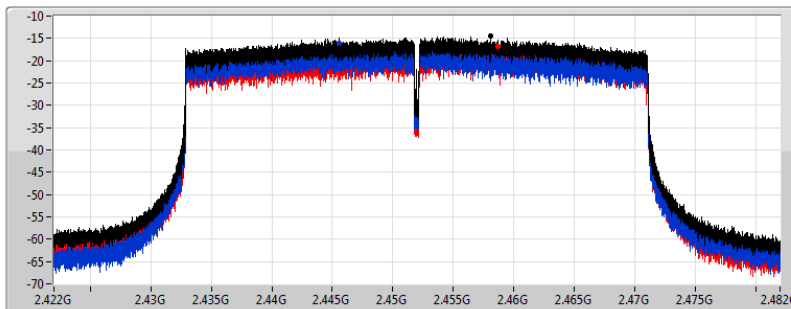
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.76	-13.76	-15.64	-15.91

802.11ax HEW40\_Nss1,(MCS0)\_2TX

PSD

2452MHz

CF  
2.452GHz  
Span  
60MHz  
RBW  
3kHz  
VBW  
10kHz  
Sweep Time  
667ms  
Detector Type  
RMS



Sum   
Port 1   
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-14.43	-14.43	-16.21	-16.76

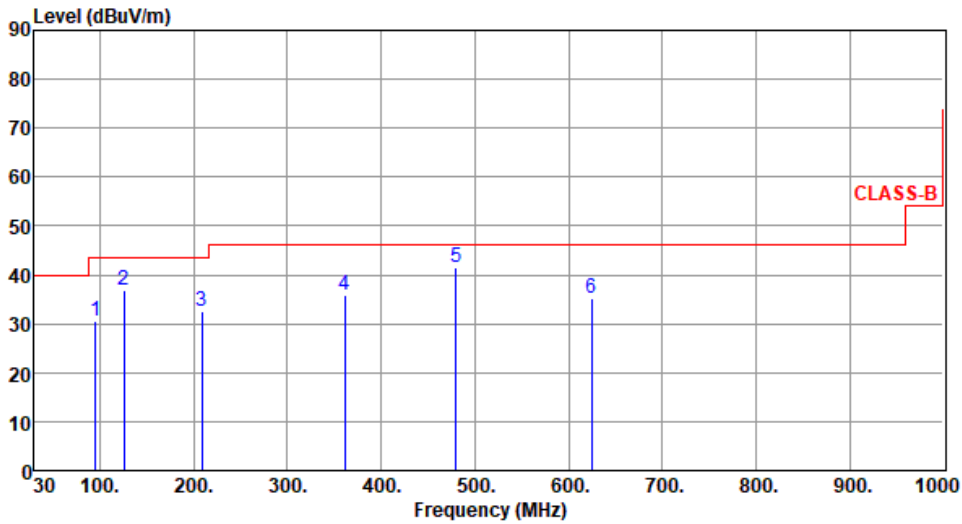




Emission Below 1GHz

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

Test By :Roger Lu      Temperature(°C):24      Humidity(%):65



	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	95.56	30.58	43.50	-12.92	44.81	-14.23	Peak	---	---
2	125.66	36.94	43.50	-6.56	47.15	-10.21	Peak	---	---
3	208.49	32.48	43.50	-11.02	44.44	-11.96	Peak	---	---
4	361.28	35.97	46.00	-10.03	42.60	-6.63	Peak	---	---
5	480.15	41.65	46.00	-4.35	45.40	-3.75	Peak	---	---
6	624.86	35.16	46.00	-10.84	35.62	-0.46	Peak	---	---

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

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

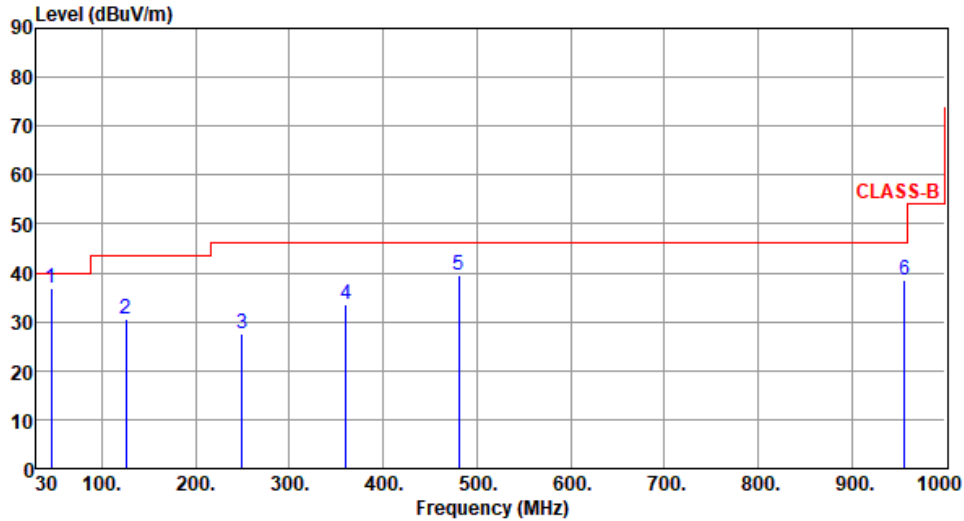
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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



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

Test By :Roger Lu      Temperature(°C):24      Humidity(%):65



	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	45.65	36.77	40.00	-3.23	45.29	-8.52	QP	100	18
2	125.26	30.50	43.50	-13.00	40.75	-10.25	Peak	---	---
3	249.65	27.46	46.00	-18.54	37.53	-10.07	Peak	---	---
4	360.12	33.45	46.00	-12.55	40.11	-6.66	Peak	---	---
5	480.52	39.67	46.00	-6.33	43.42	-3.75	Peak	---	---
6	956.15	38.59	46.00	-7.41	34.15	4.44	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.



Emission Above 1GHz for 11b

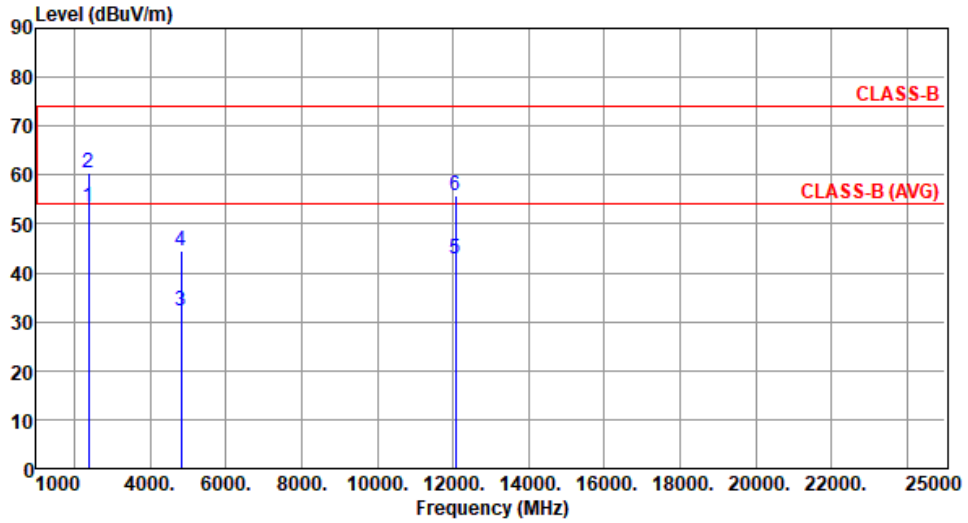
<b>Modulation</b>	11b	<b>Test Freq. (MHz)</b>	2412						
<b>Polarization</b>	Horizontal								
Test By :Brad Wu      Temperature(°C):24      Humidity(%):65									
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	45.40	54.00	-8.60	48.15	-2.75	Average	163	342
2	2390.00	54.70	74.00	-19.30	57.45	-2.75	Peak	163	342
3	4824.00	32.16	54.00	-21.84	28.02	4.14	Average	100	30
4	4824.00	44.29	74.00	-29.71	40.15	4.14	Peak	100	30
5	12060.00	42.35	54.00	-11.65	28.56	13.79	Average	100	90
6	12060.00	55.36	74.00	-18.64	41.57	13.79	Peak	100	90

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)	2412
Polarization	Vertical		

Test By :Brad Wu      Temperature(°C):24      Humidity(%):65



	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	53.52	54.00	-0.48	56.27	-2.75	Average	232	110
2	2390.00	60.34	74.00	-13.66	63.09	-2.75	Peak	232	110
3	4824.00	32.26	54.00	-21.74	28.12	4.14	Average	100	49
4	4824.00	44.50	74.00	-29.50	40.36	4.14	Peak	100	49
5	12060.00	42.83	54.00	-11.17	29.04	13.79	Average	100	30
6	12060.00	55.94	74.00	-18.06	42.15	13.79	Peak	100	30

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

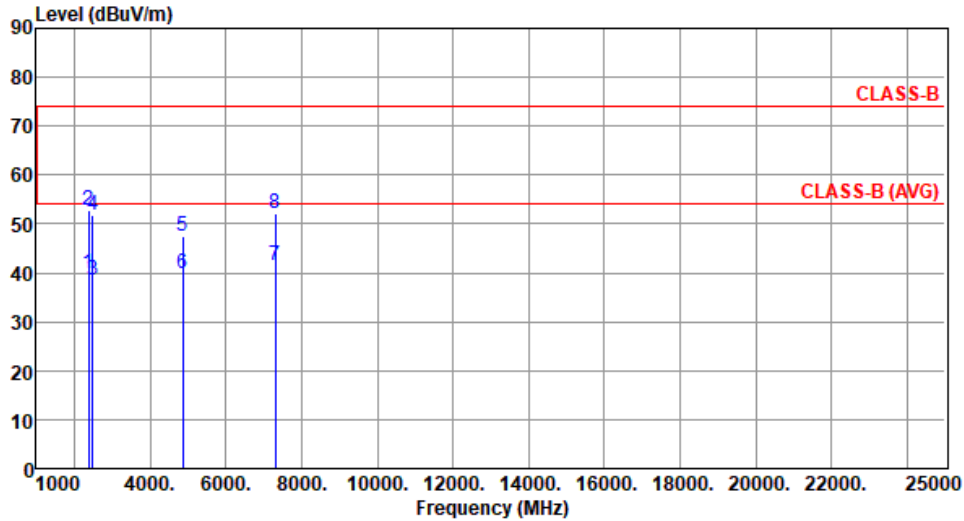
\*Factor includes antenna factor , cable loss and amplifier gain

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



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

Test By :Brad Wu      Temperature(°C):24      Humidity(%):65



	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	39.80	54.00	-14.20	42.55	-2.75	Average	165	344
2	2390.00	52.84	74.00	-21.16	55.59	-2.75	Peak	165	344
3	2483.50	38.59	54.00	-15.41	41.29	-2.70	Average	165	344
4	2483.50	51.89	74.00	-22.11	54.59	-2.70	Peak	165	344
5	4874.00	47.55	54.00	-6.45	43.42	4.13	Average	100	203
6	4874.00	39.93	54.00	-14.07	35.80	4.13	Average	100	203
7	7311.00	41.37	54.00	-12.63	32.09	9.28	Average	101	269
8	7311.00	52.26	74.00	-21.74	42.98	9.28	Peak	101	269

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

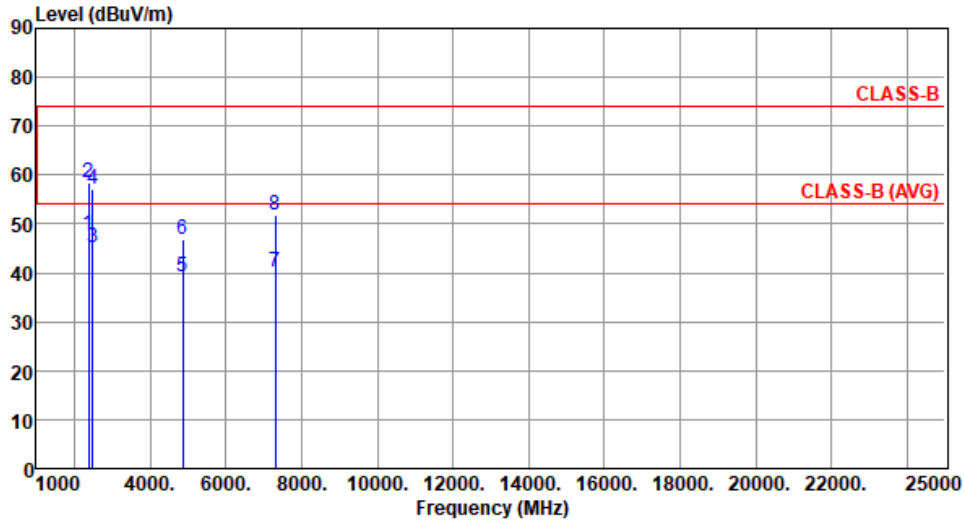
\*Factor includes antenna factor , cable loss and amplifier gain

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



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

Test By :Brad Wu      Temperature(°C):24      Humidity(%):65



	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	47.66	54.00	-6.34	50.41	-2.75	Average	160	22
2	2390.00	58.32	74.00	-15.68	61.07	-2.75	Peak	160	22
3	2483.50	45.11	54.00	-8.89	47.81	-2.70	Average	160	22
4	2483.50	57.22	74.00	-16.78	59.92	-2.70	Peak	160	22
5	4874.00	39.18	54.00	-14.82	35.05	4.13	Average	100	160
6	4874.00	46.76	74.00	-27.24	42.63	4.13	Peak	100	160
7	7311.00	40.09	54.00	-13.91	30.81	9.28	Average	264	251
8	7311.00	51.72	74.00	-22.28	42.44	9.28	Peak	264	251

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

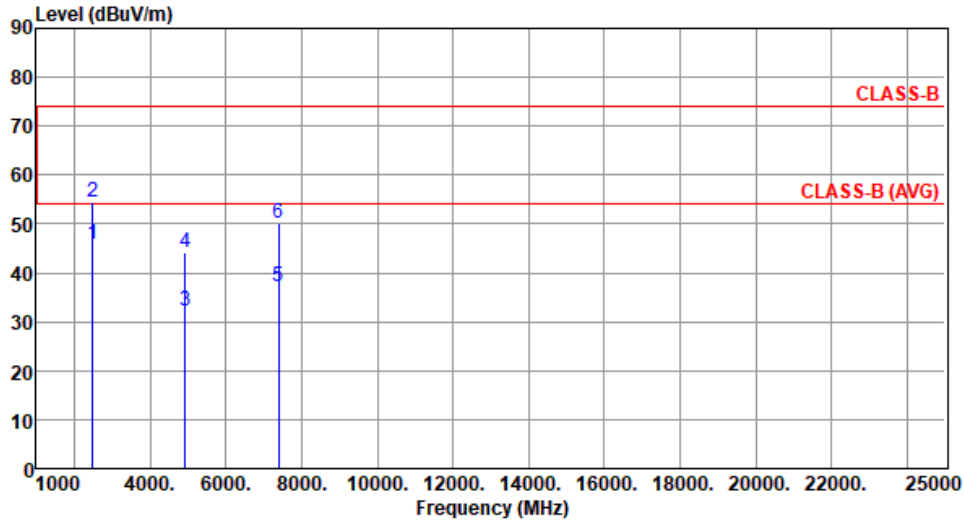
\*Factor includes antenna factor , cable loss and amplifier gain

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



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

Test By :Brad Wu      Temperature(°C):24      Humidity(%):65



	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	45.86	54.00	-8.14	48.56	-2.70	Average	158	341
2	2483.50	54.48	74.00	-19.52	57.18	-2.70	Peak	158	341
3	4924.00	32.08	54.00	-21.92	28.02	4.06	Average	100	30
4	4924.00	44.21	74.00	-29.79	40.15	4.06	Peak	100	30
5	7386.00	37.36	54.00	-16.64	28.11	9.25	Average	100	50
6	7386.00	50.05	74.00	-23.95	40.80	9.25	Peak	100	50

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>	2462																																																																							
<b>Polarization</b>	Vertical																																																																									
Test By :Brad Wu      Temperature(°C):24      Humidity(%):65																																																																										
<p>The graph plots Level (dBuV/m) on the y-axis (0 to 90) against Frequency (MHz) on the x-axis (1000 to 25000). Two horizontal red lines represent limits: CLASS-B at approximately 75 dBuV/m and CLASS-B (AVG) at approximately 55 dBuV/m. Six vertical blue lines indicate emission peaks labeled 2, 3, 4, 5, and 6. Peak 2 is at 2483.50 MHz, peak 3 at 4924.00 MHz, peak 4 at 4924.00 MHz, peak 5 at 7386.00 MHz, and peak 6 at 7386.00 MHz.</p>																																																																										
	<table border="1"> <thead> <tr> <th></th> <th>Freq. MHz</th> <th>Emission level dBuV/m</th> <th>Limit dBuV/m</th> <th>Margin dB</th> <th>SA reading dBuV</th> <th>Factor dB/m</th> <th>Remark</th> <th>ANT High cm</th> <th>Turn Table deg</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2483.50</td> <td>53.54</td> <td>54.00</td> <td>-0.46</td> <td>56.24</td> <td>-2.70</td> <td>Average</td> <td>187</td> <td>112</td> </tr> <tr> <td>2</td> <td>2483.50</td> <td>60.42</td> <td>74.00</td> <td>-13.58</td> <td>63.12</td> <td>-2.70</td> <td>Peak</td> <td>187</td> <td>112</td> </tr> <tr> <td>3</td> <td>4924.00</td> <td>32.22</td> <td>54.00</td> <td>-21.78</td> <td>28.16</td> <td>4.06</td> <td>Average</td> <td>100</td> <td>48</td> </tr> <tr> <td>4</td> <td>4924.00</td> <td>44.32</td> <td>74.00</td> <td>-29.68</td> <td>40.26</td> <td>4.06</td> <td>Peak</td> <td>100</td> <td>48</td> </tr> <tr> <td>5</td> <td>7386.00</td> <td>37.47</td> <td>54.00</td> <td>-16.53</td> <td>28.22</td> <td>9.25</td> <td>Average</td> <td>100</td> <td>20</td> </tr> <tr> <td>6</td> <td>7386.00</td> <td>50.31</td> <td>74.00</td> <td>-23.69</td> <td>41.06</td> <td>9.25</td> <td>Peak</td> <td>100</td> <td>20</td> </tr> </tbody> </table>		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	53.54	54.00	-0.46	56.24	-2.70	Average	187	112	2	2483.50	60.42	74.00	-13.58	63.12	-2.70	Peak	187	112	3	4924.00	32.22	54.00	-21.78	28.16	4.06	Average	100	48	4	4924.00	44.32	74.00	-29.68	40.26	4.06	Peak	100	48	5	7386.00	37.47	54.00	-16.53	28.22	9.25	Average	100	20	6	7386.00	50.31	74.00	-23.69	41.06	9.25	Peak	100	20			
	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	53.54	54.00	-0.46	56.24	-2.70	Average	187	112																																																																	
2	2483.50	60.42	74.00	-13.58	63.12	-2.70	Peak	187	112																																																																	
3	4924.00	32.22	54.00	-21.78	28.16	4.06	Average	100	48																																																																	
4	4924.00	44.32	74.00	-29.68	40.26	4.06	Peak	100	48																																																																	
5	7386.00	37.47	54.00	-16.53	28.22	9.25	Average	100	20																																																																	
6	7386.00	50.31	74.00	-23.69	41.06	9.25	Peak	100	20																																																																	
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).																																																																										

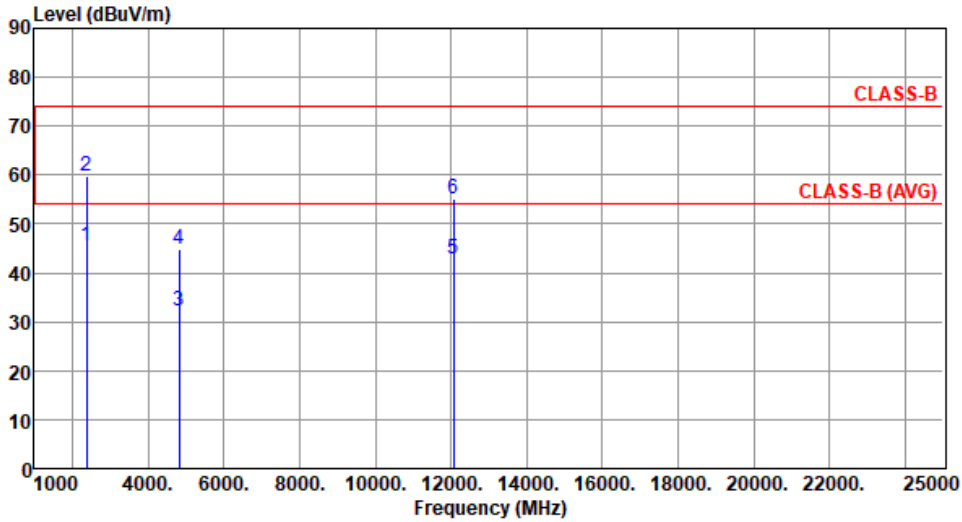




Emission Above 1GHz for 11g

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

Test By :Roger Lu      Temperature(°C):24      Humidity(%):65



	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	45.54	54.00	-8.46	48.29	-2.75	Average	169	346
2	2390.00	59.73	74.00	-14.27	62.48	-2.75	Peak	169	346
3	4824.00	32.37	54.00	-21.63	28.23	4.14	Average	100	50
4	4824.00	44.80	74.00	-29.20	40.66	4.14	Peak	100	50
5	12060.00	42.93	54.00	-11.07	29.14	13.79	Average	100	30
6	12060.00	55.06	74.00	-18.94	41.27	13.79	Peak	100	30

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

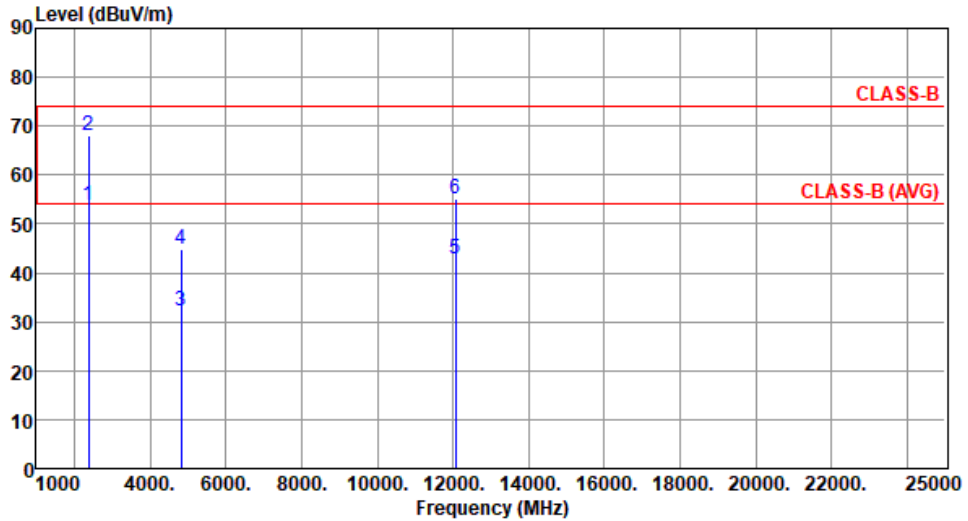
\*Factor includes antenna factor , cable loss and amplifier gain

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



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

Test By : Roger Lu      Temperature(°C):24      Humidity(%):65



	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	53.69	54.00	-0.31	56.44	-2.75	Average	121	287
2	2390.00	67.94	74.00	-6.06	70.69	-2.75	Peak	121	287
3	4824.00	32.29	54.00	-21.71	28.15	4.14	Average	100	60
4	4824.00	44.73	74.00	-29.27	40.59	4.14	Peak	100	60
5	12060.00	43.00	54.00	-11.00	29.21	13.79	Average	100	40
6	12060.00	55.16	74.00	-18.84	41.37	13.79	Peak	100	40

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

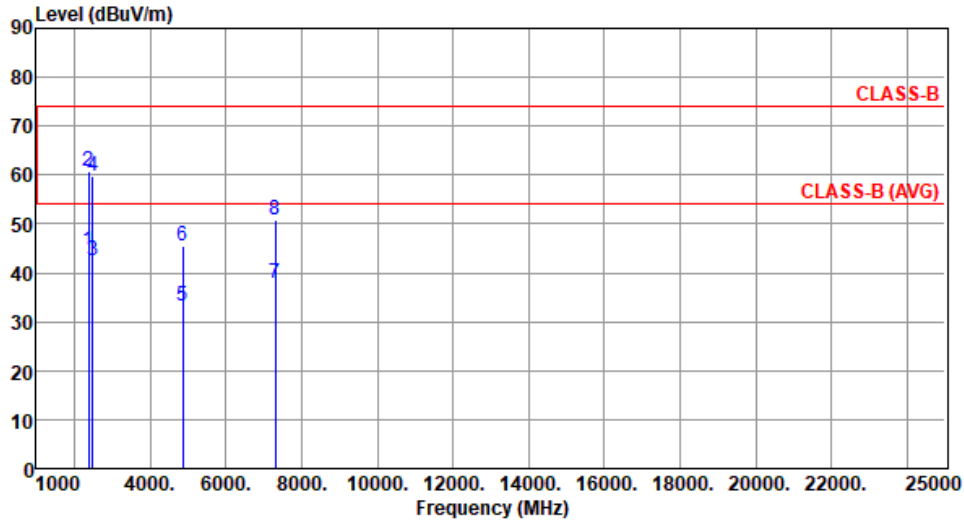
\*Factor includes antenna factor , cable loss and amplifier gain

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



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

Test By : Roger Lu      Temperature(°C):24      Humidity(%):65



	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	44.46	54.00	-9.54	47.21	-2.75	Average	166	342
2	2390.00	60.81	74.00	-13.19	63.56	-2.75	Peak	166	342
3	2483.50	42.59	54.00	-11.41	45.29	-2.70	Average	166	342
4	2483.50	59.67	74.00	-14.33	62.37	-2.70	Peak	166	342
5	4874.00	33.12	54.00	-20.88	28.99	4.13	Average	100	336
6	4874.00	45.46	74.00	-28.54	41.33	4.13	Peak	100	336
7	7311.00	37.80	54.00	-16.20	28.52	9.28	Average	100	40
8	7311.00	50.95	74.00	-23.05	41.67	9.28	Peak	100	40

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

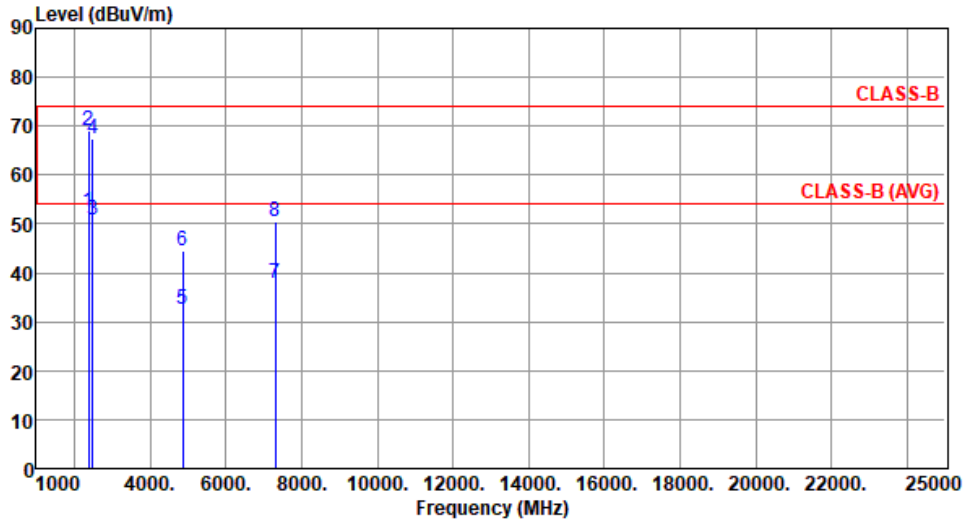
\*Factor includes antenna factor , cable loss and amplifier gain

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



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

Test By : Roger Lu      Temperature(°C):24      Humidity(%):65



	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	52.38	54.00	-1.62	55.13	-2.75	Average	107	289
2	2390.00	69.18	74.00	-4.82	71.93	-2.75	Peak	107	289
3	2483.50	50.82	54.00	-3.18	53.52	-2.70	Average	107	289
4	2483.50	67.34	74.00	-6.66	70.04	-2.70	Peak	107	289
5	4874.00	32.52	54.00	-21.48	28.39	4.13	Average	100	49
6	4874.00	44.55	74.00	-29.45	40.42	4.13	Peak	100	49
7	7311.00	37.73	54.00	-16.27	28.45	9.28	Average	100	50
8	7311.00	50.50	74.00	-23.50	41.22	9.28	Peak	100	50

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

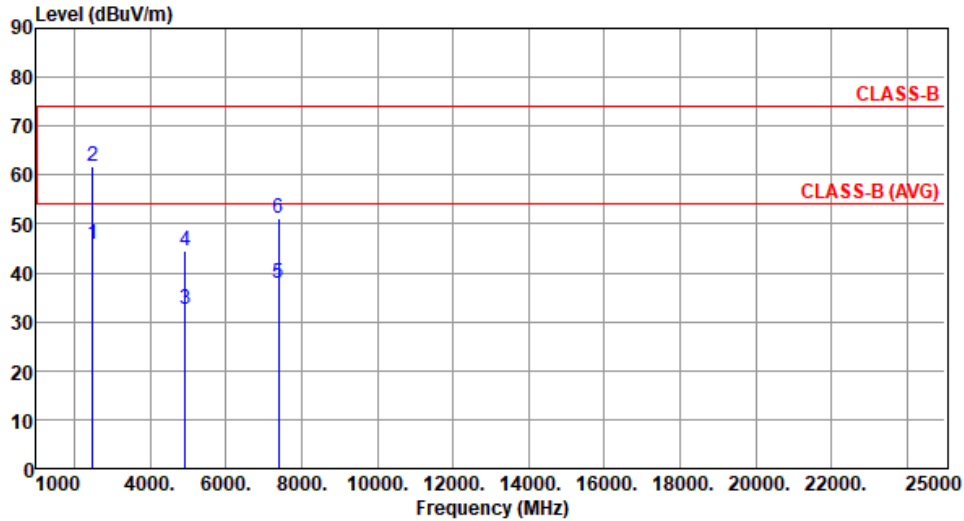
\*Factor includes antenna factor , cable loss and amplifier gain

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



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

Test By : Roger Lu      Temperature(°C):24      Humidity(%):65



	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	45.89	54.00	-8.11	48.59	-2.70	Average	160	342
2	2483.50	61.88	74.00	-12.12	64.58	-2.70	Peak	160	342
3	4924.00	32.39	54.00	-21.61	28.33	4.06	Average	100	30
4	4924.00	44.62	74.00	-29.38	40.56	4.06	Peak	100	30
5	7386.00	37.74	54.00	-16.26	28.49	9.25	Average	100	50
6	7386.00	51.04	74.00	-22.96	41.79	9.25	Peak	100	50

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

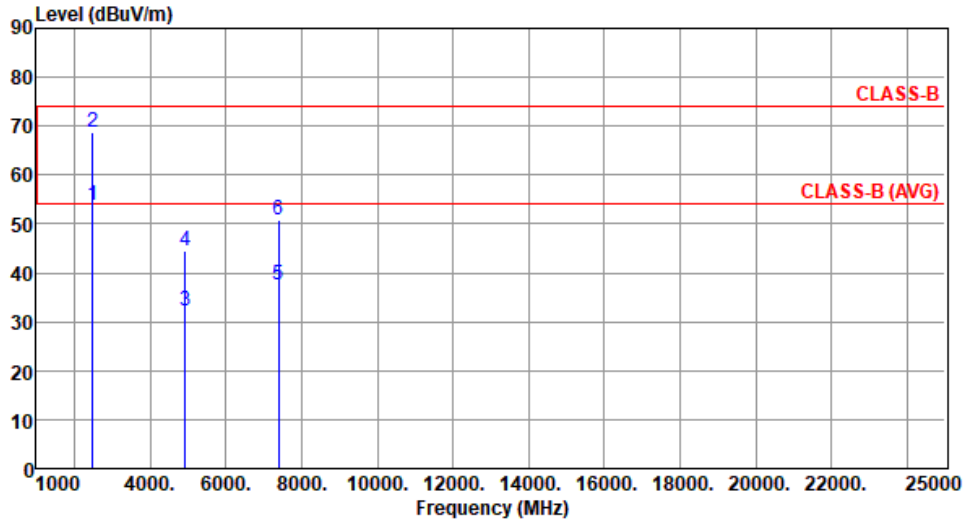
\*Factor includes antenna factor , cable loss and amplifier gain

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



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

Test By : Roger Lu      Temperature(°C):24      Humidity(%):65



	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	53.64	54.00	-0.36	56.34	-2.70	Average	120	300
2	2483.50	68.71	74.00	-5.29	71.41	-2.70	Peak	120	300
3	4924.00	32.35	54.00	-21.65	28.29	4.06	Average	100	60
4	4924.00	44.55	74.00	-29.45	40.49	4.06	Peak	100	60
5	7386.00	37.63	54.00	-16.37	28.38	9.25	Average	100	40
6	7386.00	50.92	74.00	-23.08	41.67	9.25	Peak	100	40

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

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

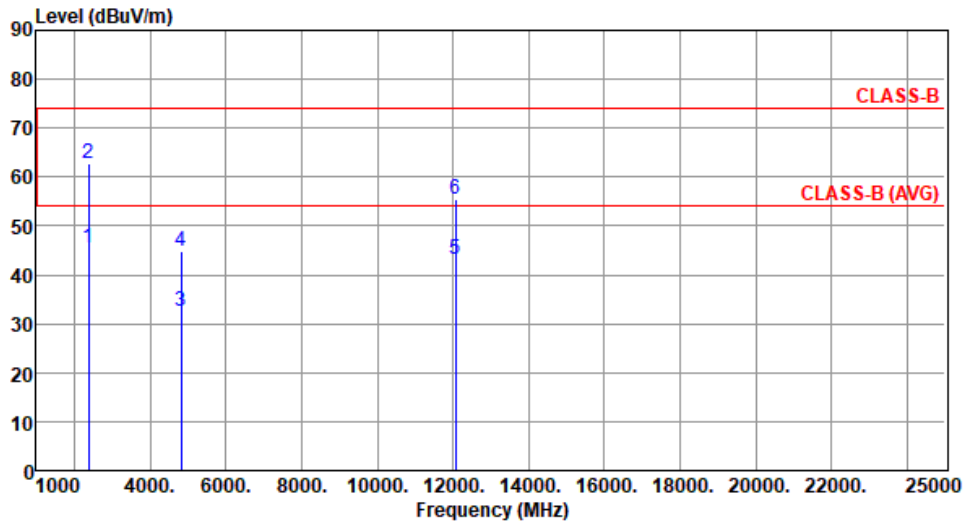
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).



Emission Above 1GHz for ax HE20

Modulation	ax HE20	Test Freq. (MHz)	2412
Polarization	Horizontal		

Test By :Roger Lu      Temperature(°C):24      Humidity(%):65



	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	45.59	54.00	-8.41	48.34	-2.75	Average	159	344
2	2390.00	62.77	74.00	-11.23	65.52	-2.75	Peak	159	344
3	4824.00	32.56	54.00	-21.44	28.42	4.14	Average	100	40
4	4824.00	44.73	74.00	-29.27	40.59	4.14	Peak	100	40
5	12060.00	43.11	54.00	-10.89	29.32	13.79	Average	100	50
6	12060.00	55.52	74.00	-18.48	41.73	13.79	Peak	100	50

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

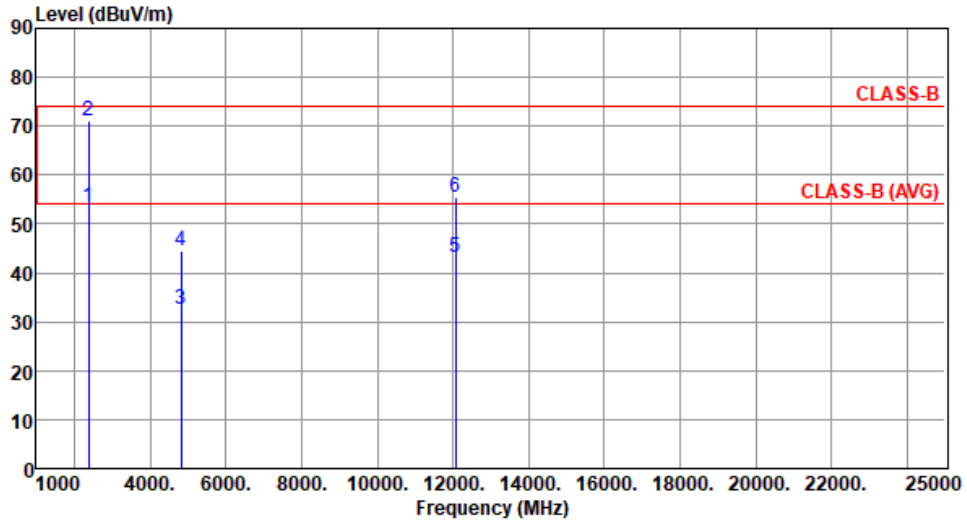
\*Factor includes antenna factor , cable loss and amplifier gain

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



Modulation	ax HE20	Test Freq. (MHz)	2412
Polarization	Vertical		

Test By : Roger Lu      Temperature(°C):24      Humidity(%):65



	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	53.53	54.00	-0.47	56.28	-2.75	Average	126	282
2	2390.00	71.19	74.00	-2.81	73.94	-2.75	Peak	126	282
3	4824.00	32.53	54.00	-21.47	28.39	4.14	Average	100	50
4	4824.00	44.60	74.00	-29.40	40.46	4.14	Peak	100	50
5	12060.00	43.01	54.00	-10.99	29.22	13.79	Average	100	80
6	12060.00	55.42	74.00	-18.58	41.63	13.79	Peak	100	80

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

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

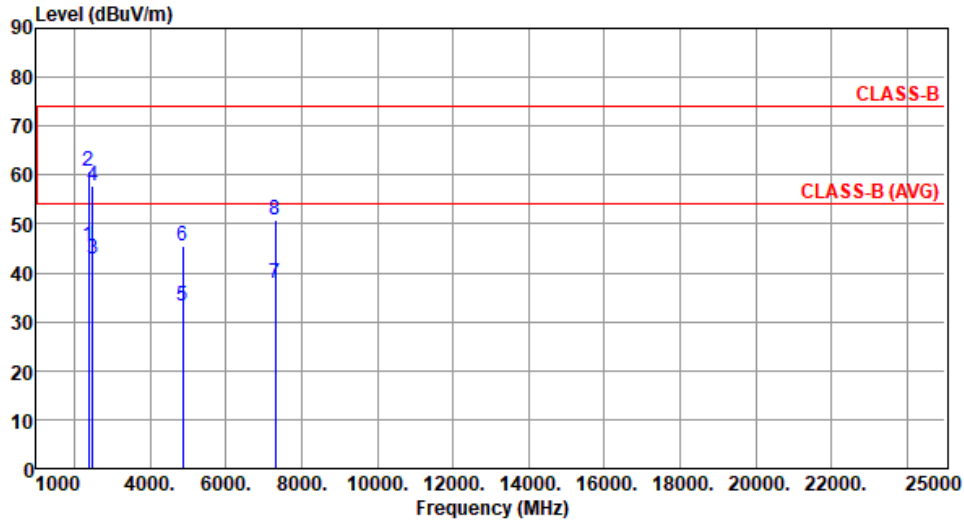
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).





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

Test By : Roger Lu      Temperature(°C):24      Humidity(%):65



	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	45.53	54.00	-8.47	48.28	-2.75	Average	166	344
2	2390.00	60.80	74.00	-13.20	63.55	-2.75	Peak	166	344
3	2483.50	42.98	54.00	-11.02	45.68	-2.70	Average	166	344
4	2483.50	57.86	74.00	-16.14	60.56	-2.70	Peak	166	344
5	4874.00	33.09	54.00	-20.91	28.96	4.13	Average	100	335
6	4874.00	45.38	74.00	-28.62	41.25	4.13	Peak	100	335
7	7311.00	37.76	54.00	-16.24	28.48	9.28	Average	100	60
8	7311.00	50.84	74.00	-23.16	41.56	9.28	Peak	100	60

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

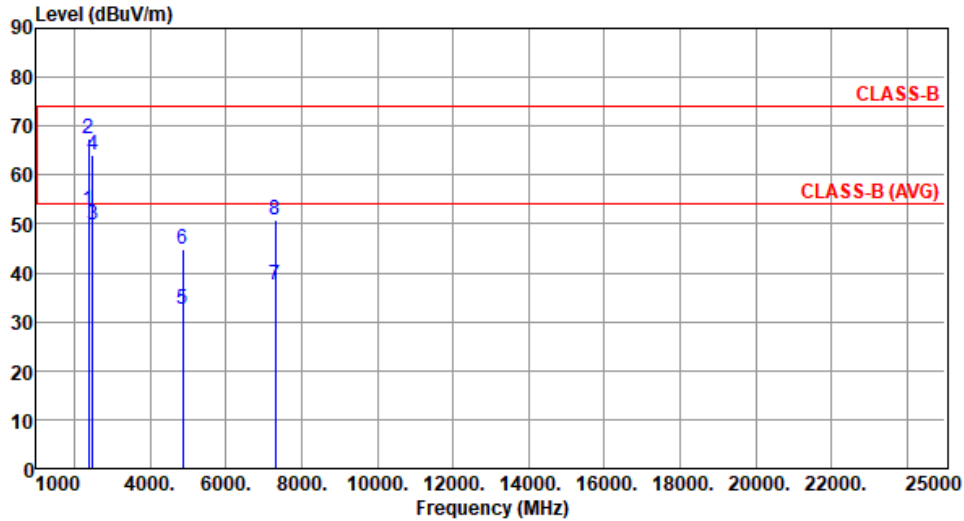
\*Factor includes antenna factor , cable loss and amplifier gain

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



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

Test By : Roger Lu      Temperature(°C):24      Humidity(%):65



	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	52.64	54.00	-1.36	55.39	-2.75	Average	135	293
2	2390.00	67.47	74.00	-6.53	70.22	-2.75	Peak	135	293
3	2483.50	49.74	54.00	-4.26	52.44	-2.70	Average	135	293
4	2483.50	64.20	74.00	-9.80	66.90	-2.70	Peak	135	293
5	4874.00	32.39	54.00	-21.61	28.26	4.13	Average	100	52
6	4874.00	44.77	74.00	-29.23	40.64	4.13	Peak	100	52
7	7311.00	37.57	54.00	-16.43	28.29	9.28	Average	100	80
8	7311.00	50.71	74.00	-23.29	41.43	9.28	Peak	100	80

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

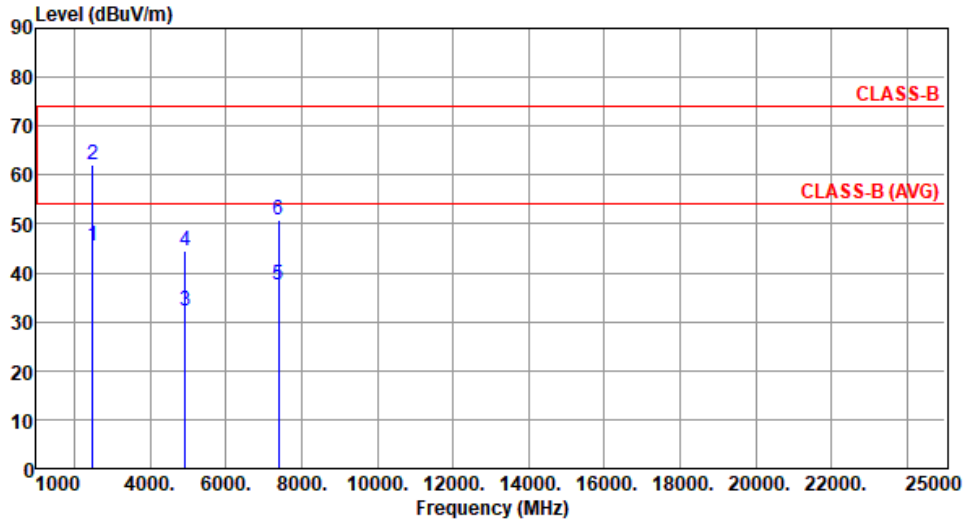
\*Factor includes antenna factor , cable loss and amplifier gain

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>	Horizontal		

Test By :Roger Lu      Temperature(°C):24      Humidity(%):65



	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	45.45	54.00	-8.55	48.15	-2.70	Average	166	338
2	2483.50	61.97	74.00	-12.03	64.67	-2.70	Peak	166	338
3	4924.00	32.31	54.00	-21.69	28.25	4.06	Average	100	40
4	4924.00	44.65	74.00	-29.35	40.59	4.06	Peak	100	40
5	7386.00	37.68	54.00	-16.32	28.43	9.25	Average	100	90
6	7386.00	50.92	74.00	-23.08	41.67	9.25	Peak	100	90

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

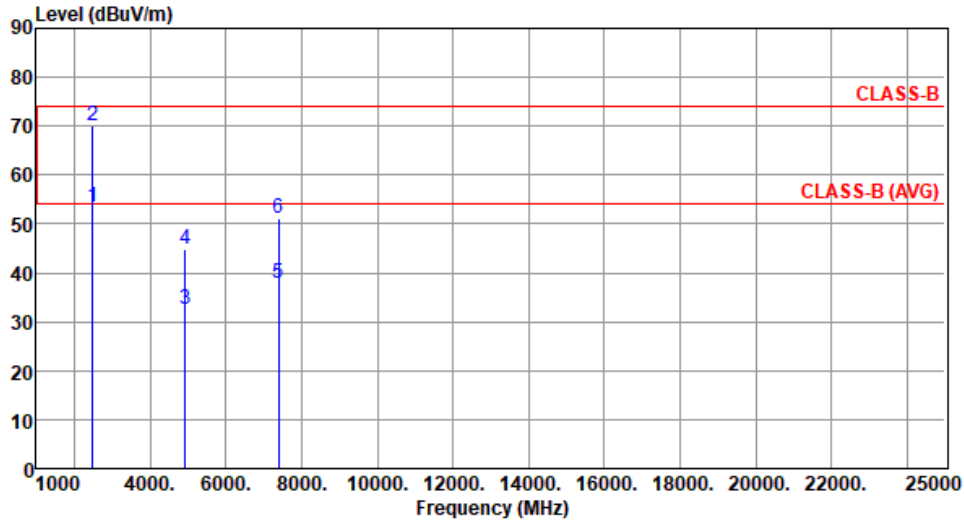
\*Factor includes antenna factor , cable loss and amplifier gain

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



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

Test By : Roger Lu      Temperature(°C):24      Humidity(%):65



	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	53.56	54.00	-0.44	56.26	-2.70	Average	124	291
2	2483.50	70.21	74.00	-3.79	72.91	-2.70	Peak	124	291
3	4924.00	32.52	54.00	-21.48	28.46	4.06	Average	100	50
4	4924.00	44.84	74.00	-29.16	40.78	4.06	Peak	100	50
5	7386.00	37.81	54.00	-16.19	28.56	9.25	Average	100	80
6	7386.00	51.13	74.00	-22.87	41.88	9.25	Peak	100	80

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).



Emission Above 1GHz for ax HE40

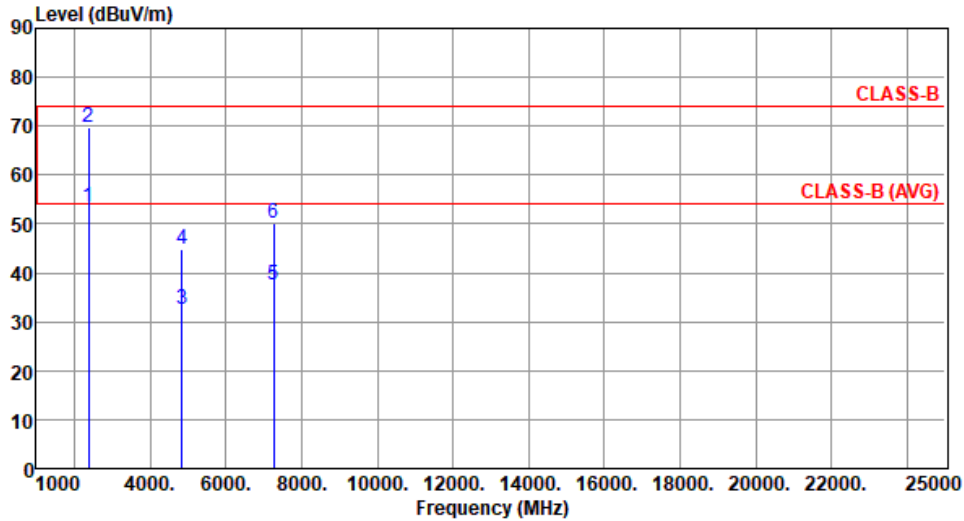
Modulation	ax HE40	Test Freq. (MHz)	2422						
Polarization	Horizontal								
Test By :Roger Lu      Temperature(°C):24      Humidity(%):65									
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	45.84	54.00	-8.16	48.59	-2.75	Average	162	348
2	2390.00	61.73	74.00	-12.27	64.48	-2.75	Peak	162	348
3	4844.00	32.51	54.00	-21.49	28.35	4.16	Average	100	20
4	4844.00	44.94	74.00	-29.06	40.78	4.16	Peak	100	20
5	7266.00	37.72	54.00	-16.28	28.49	9.23	Average	100	60
6	7266.00	50.09	74.00	-23.91	40.86	9.23	Peak	100	60

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 : Roger Lu      Temperature(°C):24      Humidity(%):65



	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	53.60	54.00	-0.40	56.35	-2.75	Average	156	293
2	2390.00	69.77	74.00	-4.23	72.52	-2.75	Peak	156	293
3	4844.00	32.42	54.00	-21.58	28.26	4.16	Average	100	30
4	4844.00	44.80	74.00	-29.20	40.64	4.16	Peak	100	30
5	7266.00	37.62	54.00	-16.38	28.39	9.23	Average	100	90
6	7266.00	49.99	74.00	-24.01	40.76	9.23	Peak	100	90

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

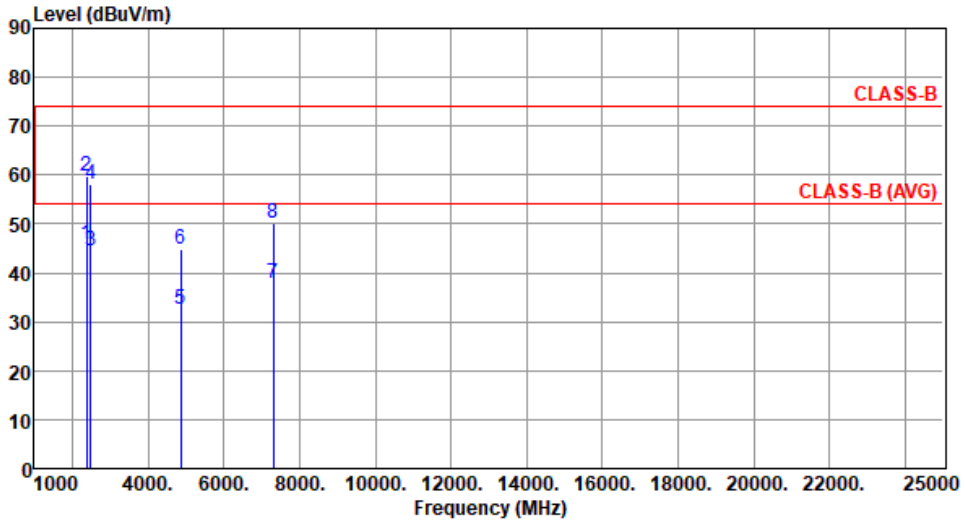
\*Factor includes antenna factor , cable loss and amplifier gain

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



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

Test By : Roger Lu      Temperature(°C):24      Humidity(%):65



	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	45.81	54.00	-8.19	48.56	-2.75	Average	121	339
2	2390.00	59.70	74.00	-14.30	62.45	-2.75	Peak	121	339
3	2483.50	44.58	54.00	-9.42	47.28	-2.70	Average	121	339
4	2483.50	58.19	74.00	-15.81	60.89	-2.70	Peak	121	339
5	4874.00	32.48	54.00	-21.52	28.35	4.13	Average	100	90
6	4874.00	44.77	74.00	-29.23	40.64	4.13	Peak	100	90
7	7311.00	37.75	54.00	-16.25	28.47	9.28	Average	100	40
8	7311.00	50.10	74.00	-23.90	40.82	9.28	Peak	100	40

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

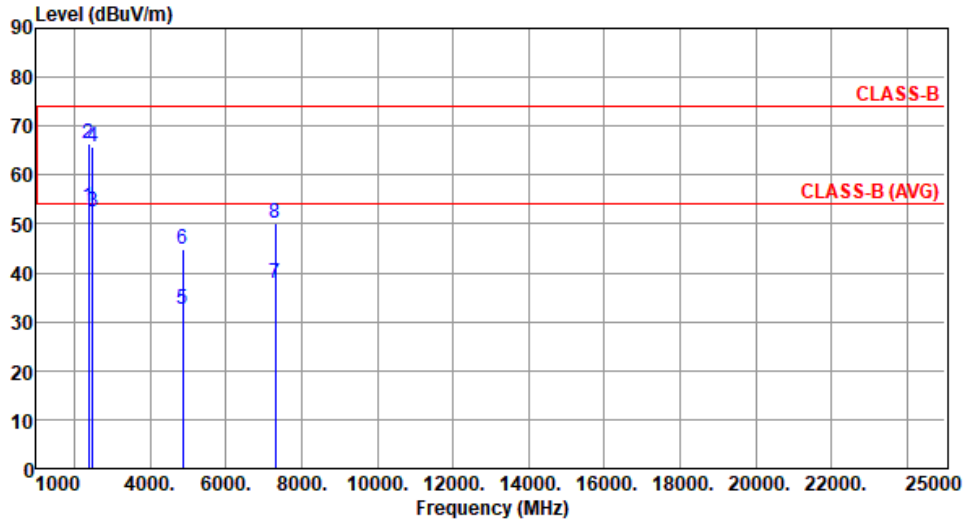
\*Factor includes antenna factor , cable loss and amplifier gain

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



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

Test By : Roger Lu      Temperature(°C):24      Humidity(%):65



	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	53.60	54.00	-0.40	56.35	-2.75	Average	112	292
2	2390.00	66.58	74.00	-7.42	69.33	-2.75	Peak	112	292
3	2483.50	52.31	54.00	-1.69	55.01	-2.70	Average	112	292
4	2483.50	65.70	74.00	-8.30	68.40	-2.70	Peak	112	292
5	4874.00	32.39	54.00	-21.61	28.26	4.13	Average	100	40
6	4874.00	44.81	74.00	-29.19	40.68	4.13	Peak	100	40
7	7311.00	37.83	54.00	-16.17	28.55	9.28	Average	100	10
8	7311.00	50.26	74.00	-23.74	40.98	9.28	Peak	100	10

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

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

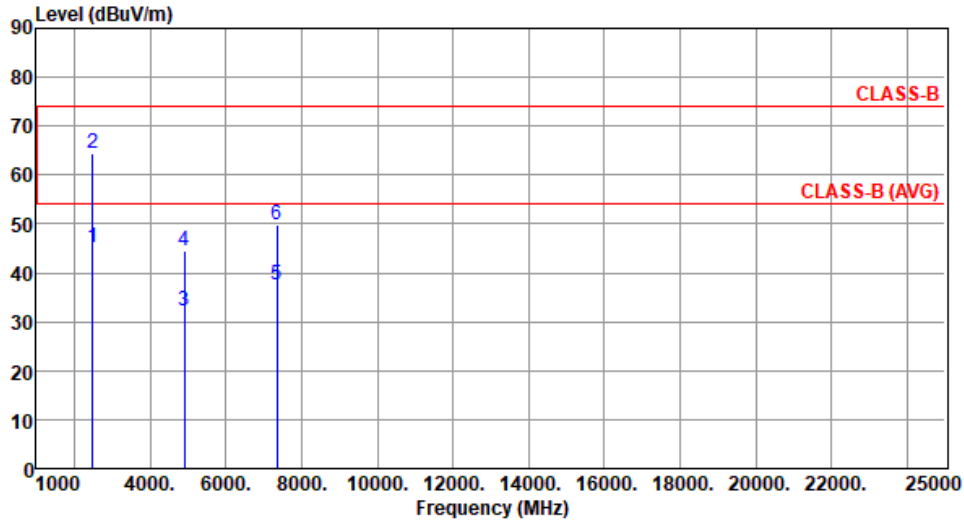
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).





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

Test By : Roger Lu      Temperature(°C):24      Humidity(%):65



	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	45.25	54.00	-8.75	47.95	-2.70	Average	157	337
2	2483.50	64.58	74.00	-9.42	67.28	-2.70	Peak	157	337
3	4904.00	32.37	54.00	-21.63	28.28	4.09	Average	100	20
4	4904.00	44.47	74.00	-29.53	40.38	4.09	Peak	100	20
5	7356.00	37.69	54.00	-16.31	28.43	9.26	Average	100	90
6	7356.00	49.74	74.00	-24.26	40.48	9.26	Peak	100	90

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

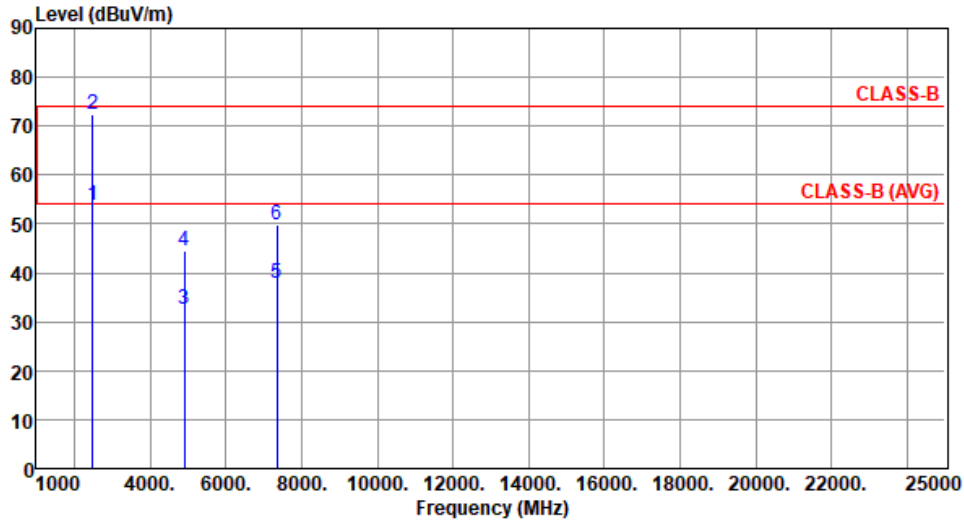
\*Factor includes antenna factor , cable loss and amplifier gain

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



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

Test By :Roger Lu      Temperature(°C):24      Humidity(%):65

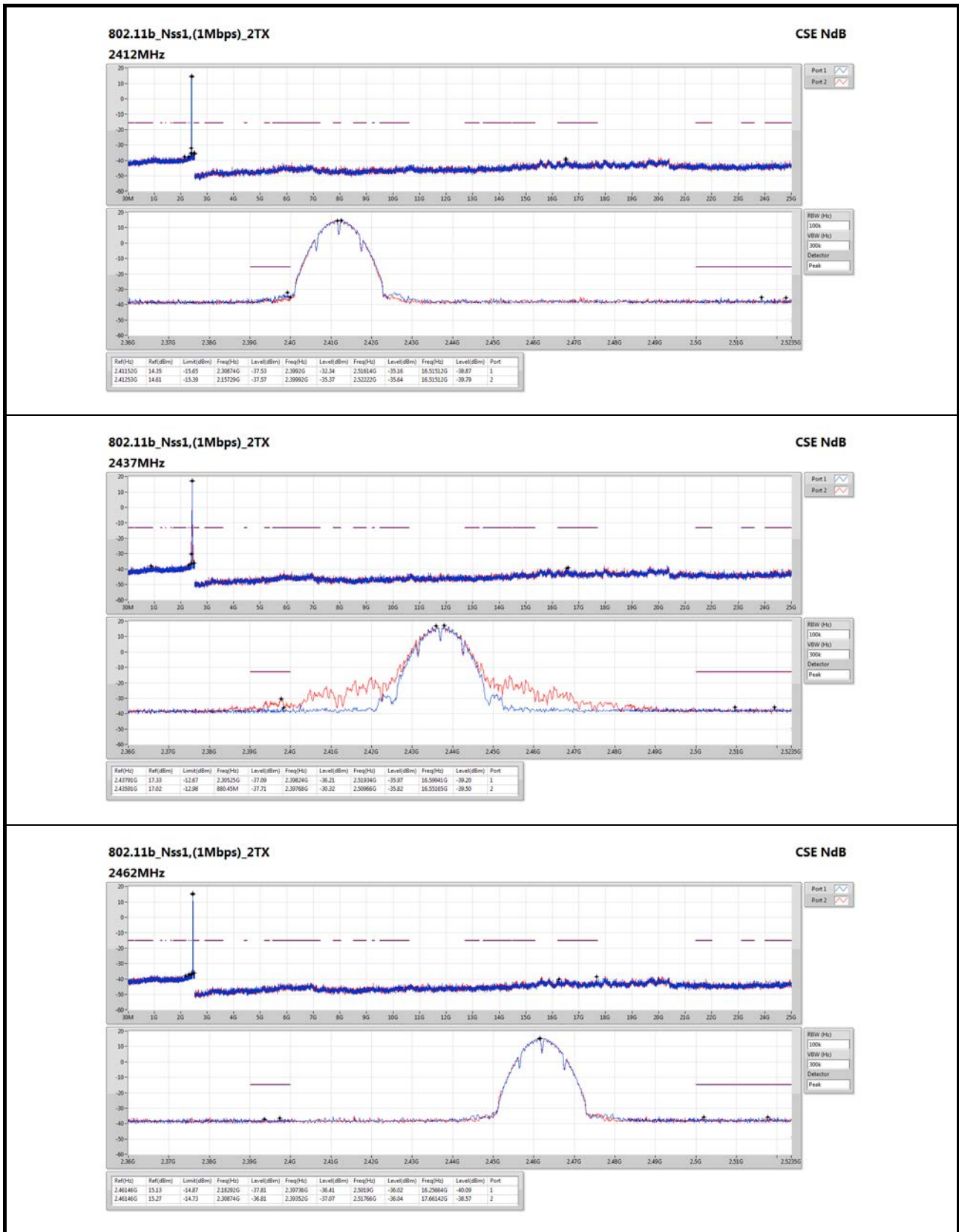


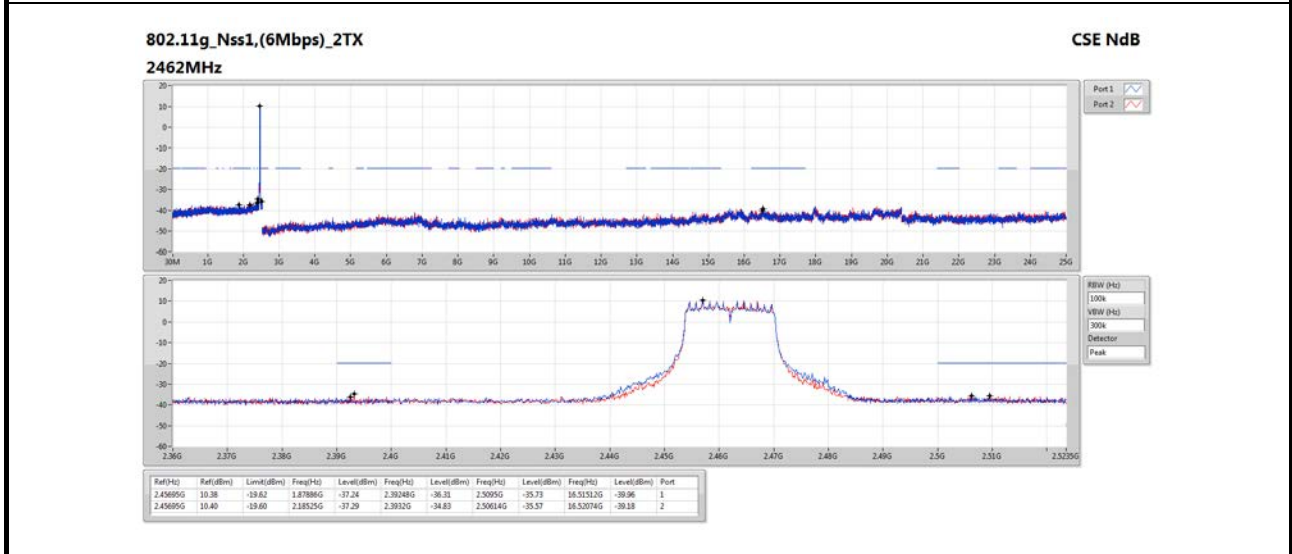
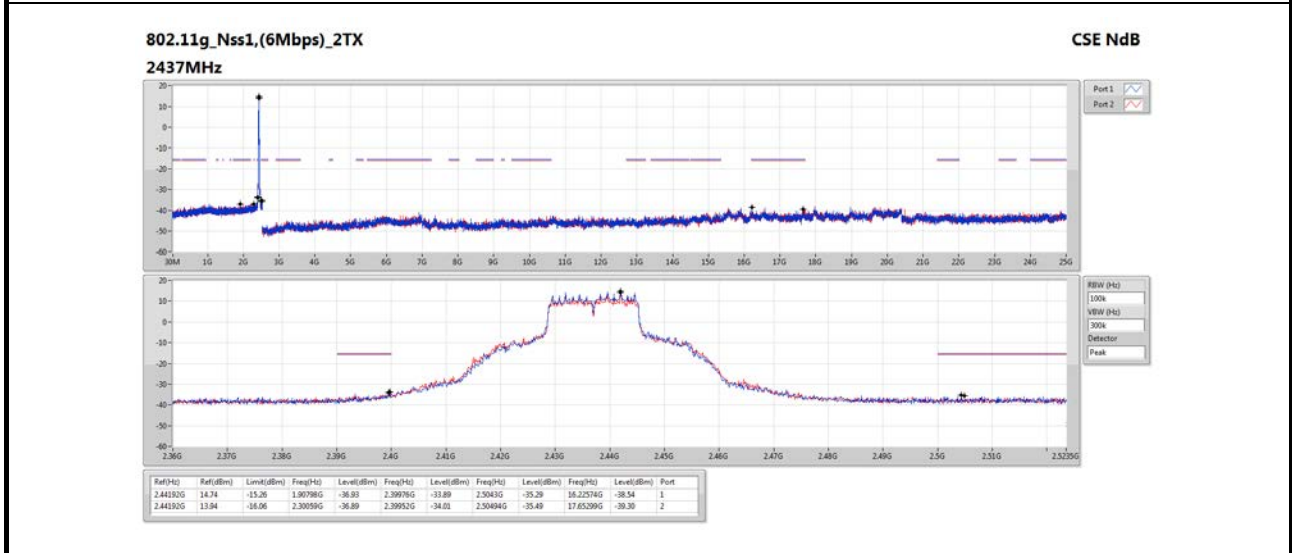
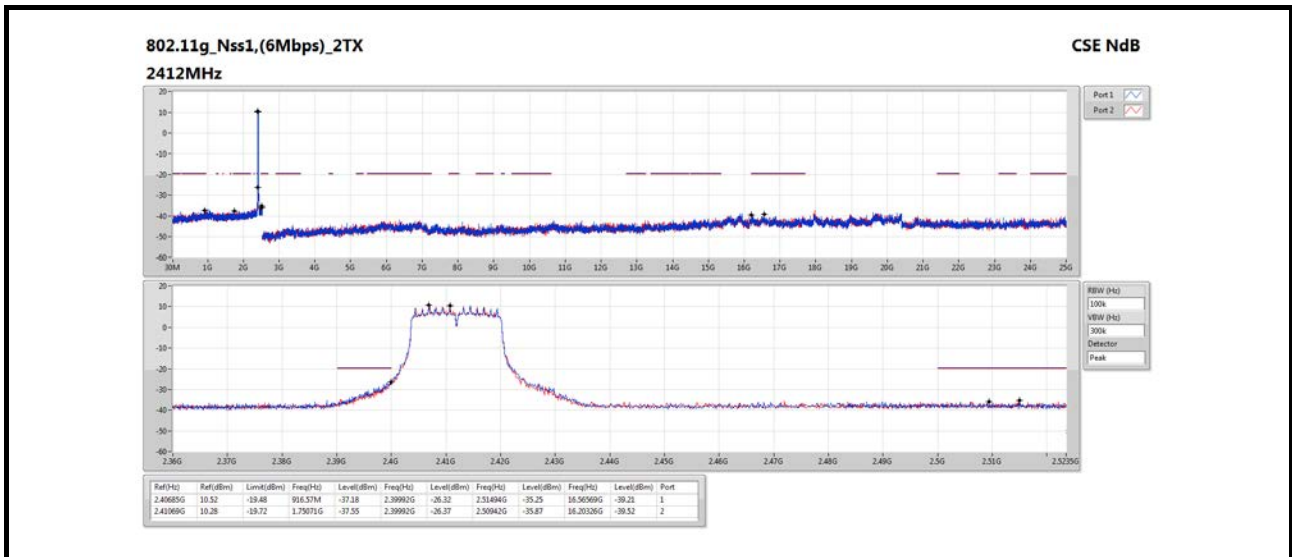
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	53.68	54.00	-0.32	56.38	-2.70	Average	106	297
2	2483.50	72.29	74.00	-1.71	74.99	-2.70	Peak	106	297
3	4904.00	32.43	54.00	-21.57	28.34	4.09	Average	100	60
4	4904.00	44.55	74.00	-29.45	40.46	4.09	Peak	100	60
5	7356.00	37.83	54.00	-16.17	28.57	9.26	Average	100	80
6	7356.00	49.85	74.00	-24.15	40.59	9.26	Peak	100	80

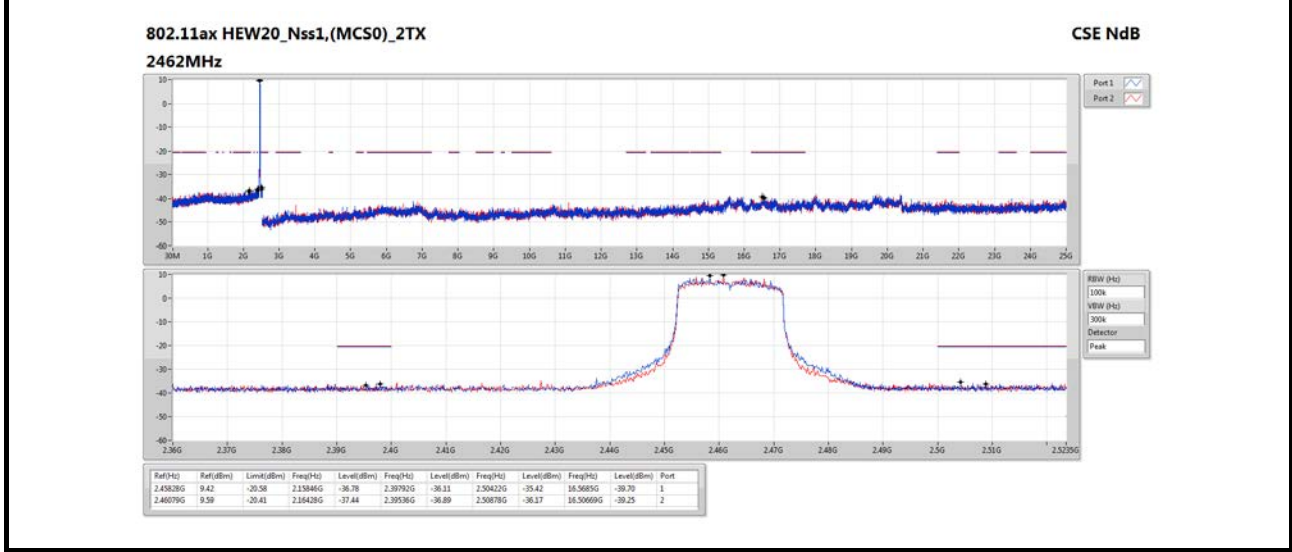
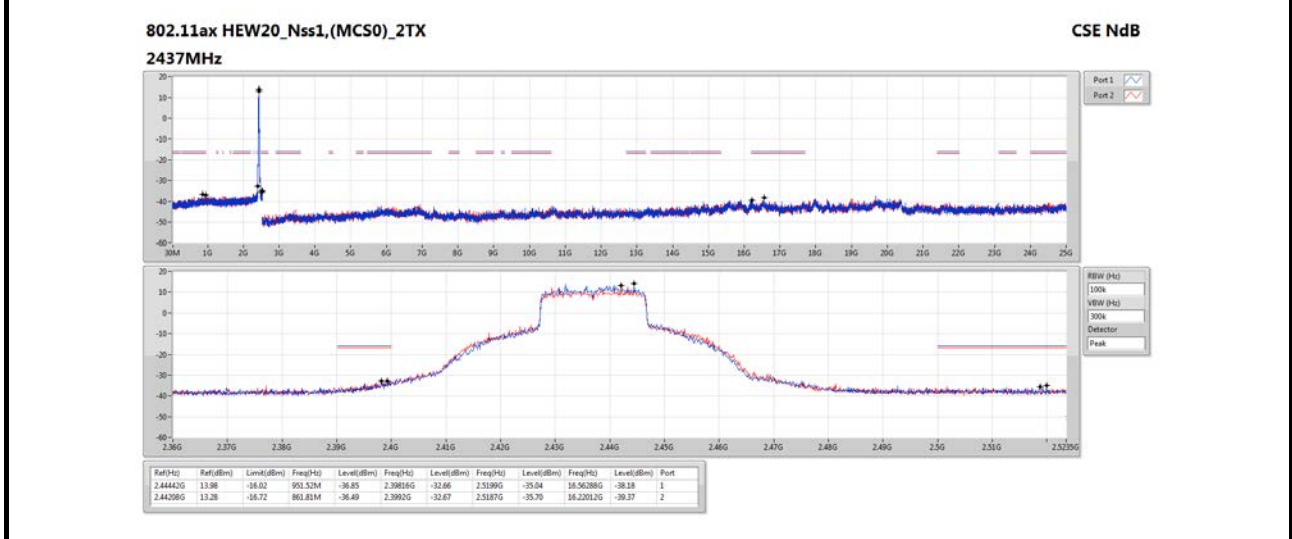
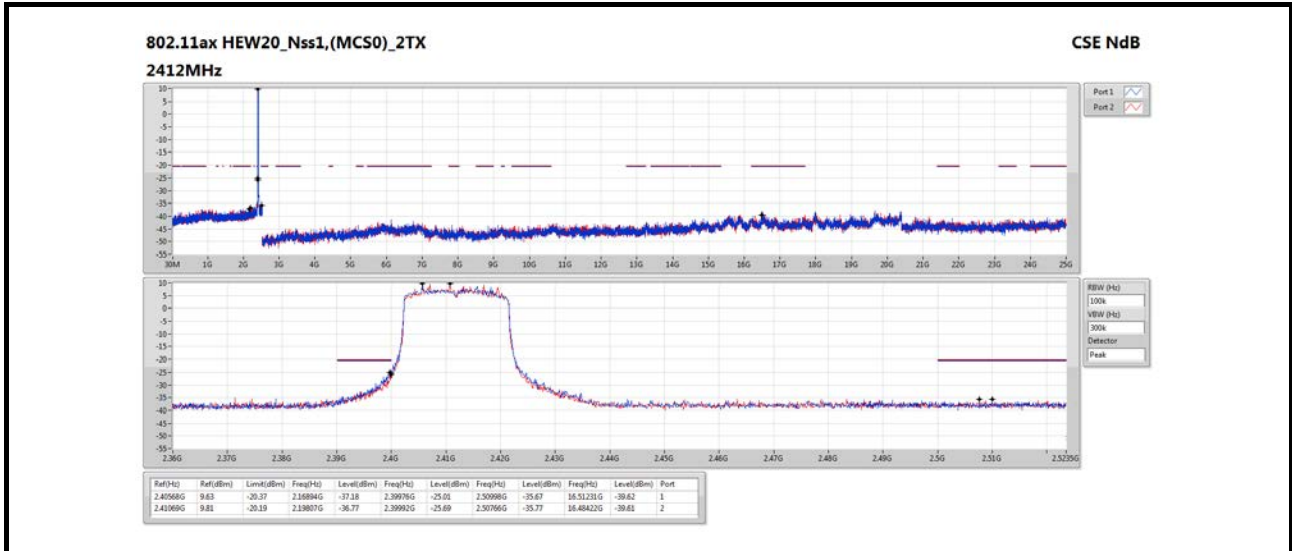
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor\* (dB/m)

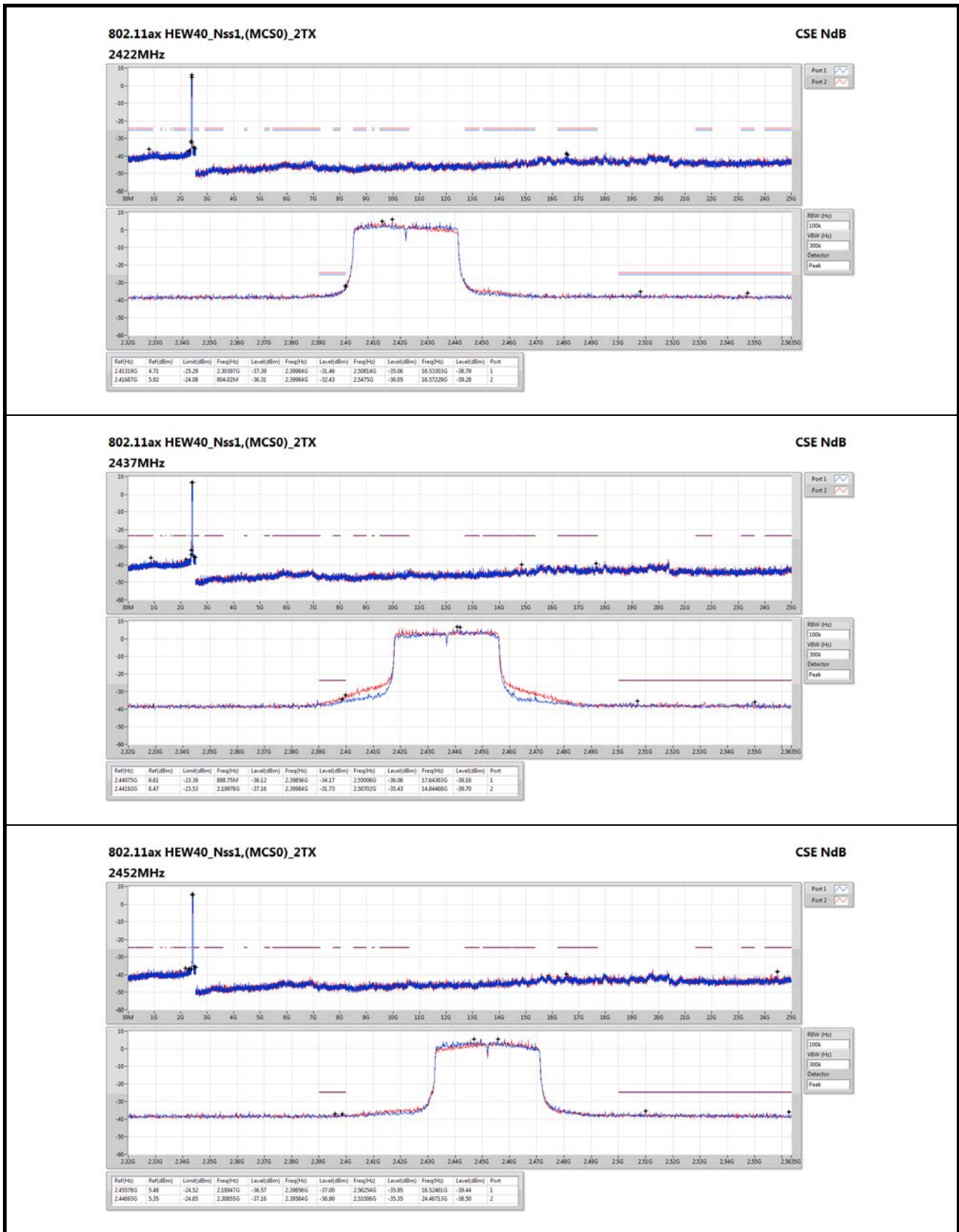
\*Factor includes antenna factor , cable loss and amplifier gain

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





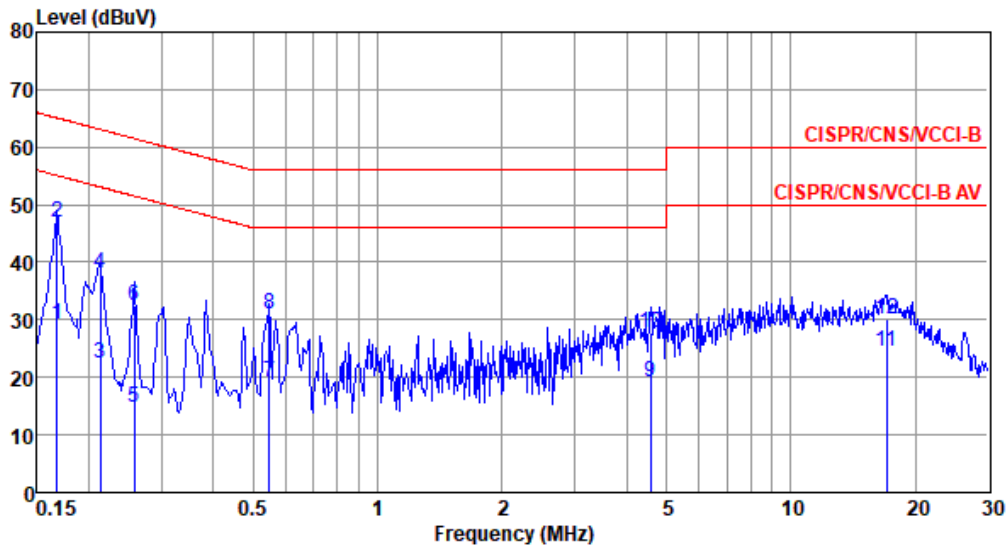






Modulation Mod	11b	Test Freq. (MHz)	2437
Power Phase	Line		

Test by : Joe Liao      Temperature: 20°C      Humidity: 60%



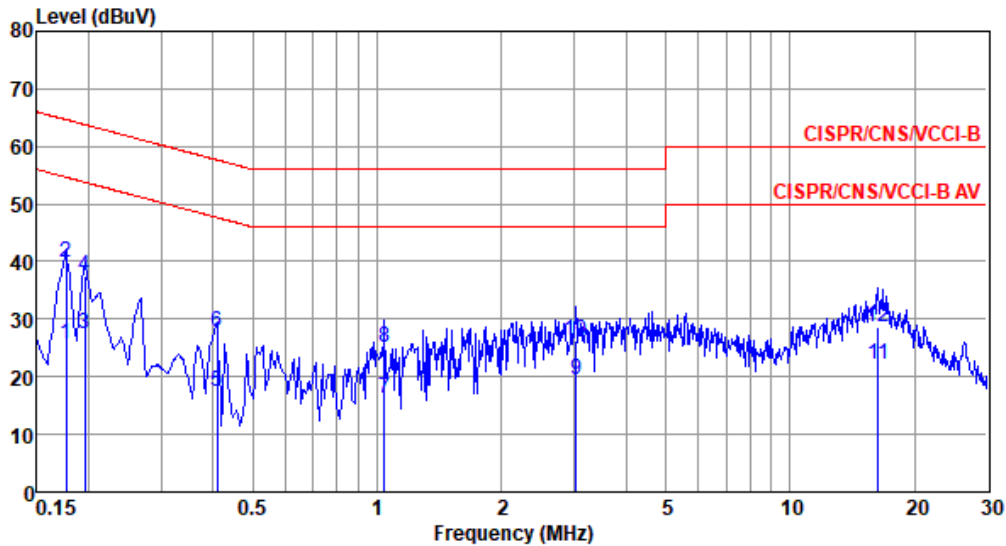
	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	Factor dB	Cable loss dB	Aux dB	Remark
1	0.168	29.14	55.08	-25.94	19.25	9.60	0.08	0.21	Average
2*	0.168	46.94	65.08	-18.14	37.05	9.60	0.08	0.21	QP
3	0.213	22.58	53.10	-30.52	12.66	9.61	0.08	0.23	Average
4	0.213	37.98	63.10	-25.12	28.06	9.61	0.08	0.23	QP
5	0.258	14.88	51.51	-36.63	4.92	9.61	0.08	0.27	Average
6	0.258	32.61	61.51	-28.90	22.65	9.61	0.08	0.27	QP
7	0.546	19.17	46.00	-26.83	9.10	9.60	0.11	0.36	Average
8	0.546	31.00	56.00	-25.00	20.93	9.60	0.11	0.36	QP
9	4.574	19.06	46.00	-26.94	8.77	9.63	0.24	0.42	Average
10	4.574	27.78	56.00	-28.22	17.49	9.63	0.24	0.42	QP
11	17.018	24.45	50.00	-25.55	13.67	9.60	0.60	0.58	Average
12	17.018	30.05	60.00	-29.95	19.27	9.60	0.60	0.58	QP

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



Modulation Mod	11b	Test Freq. (MHz)	2437
Power Phase	Neutral		

Test by : Joe Liao      Temperature: 20°C      Humidity: 60%



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	Factor dB	Cable loss dB	Aux dB	Remark
1	0.177	25.57	54.64	-29.07	15.73	9.59	0.08	0.17	Average
2*	0.177	39.81	64.64	-24.83	29.97	9.59	0.08	0.17	QP
3	0.195	27.57	53.80	-26.23	17.72	9.59	0.08	0.18	Average
4	0.195	37.59	63.80	-26.21	27.74	9.59	0.08	0.18	QP
5	0.410	17.52	47.64	-30.12	7.67	9.58	0.08	0.19	Average
6	0.410	27.78	57.64	-29.86	17.93	9.58	0.08	0.19	QP
7	1.043	16.22	46.00	-29.78	6.19	9.59	0.16	0.28	Average
8	1.043	25.16	56.00	-30.84	15.13	9.59	0.16	0.28	QP
9	3.025	19.34	46.00	-26.66	9.20	9.61	0.21	0.32	Average
10	3.025	26.37	56.00	-29.63	16.23	9.61	0.21	0.32	QP
11	16.312	22.22	50.00	-27.78	11.50	9.67	0.59	0.46	Average
12	16.312	28.64	60.00	-31.36	17.92	9.67	0.59	0.46	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).