FCC Test Report

FCC ID	:	**AK8NSDG3000T**
Equipment	:	**XGS-PON**
Model No.	:	**NSD-G3000T**
Brand Name	:	**SONY**
Applicant	:	**Sony Group Corporation**
Address	:	**1-7-1 Konan Minato-ku, Tokyo, Japan, 108-0075**
Standard	:	**47 CFR FCC Part 15.247**
Received Date	:	**Mar. 17, 2023**
Tested Date	:	**Mar. 21 ~ Apr. 06, 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

Release Record

Report No.	Version	Description	Issued Date
FR331701AC	Rev. 01	Initial issue	Apr. 28, 2023

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	AC Power Line Conducted Emission	[dBuV]: 8.279MHz 28.86 (Margin -21.14dB) - AV	Pass
15.247(d) 15.209	Unwanted Emissions	[dBuV/m at 3m]: 2390.00MHz 73.86 (Margin -0.14dB) - PK [dBuV/m at 3m]: 2483.50MHz 73.86 (Margin -0.14dB) - PK	Pass
15.247(b)(3)	Conducted Output Power	Max Power [dBm]: ***Non-beamforming mode*** 29.75 ***Beamforming mode*** 26.87	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_{TX})**	**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	ac (VHT20)	2412-2462	1-11 [11]	4	MCS 0-9
2400-2483.5	ac (VHT40)	2422-2452	3-9 [7]	4	MCS 0-9
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: DSSS-DBPSK, DQPSK, CCK modulation OFDM/OFDMA- BPSK, QPSK, 16QAM, 64QAM, 256QAM and 1024QAM modulation. Note 3: 802.11ac/ax supports beamforming function.					

1.1.2 Antenna Details

Ant. No.	Model	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)				
				2400~2483.5	5150~5250	5250~5350	5470~5725	5725~5850
1	Ant 1	Dipole	IPEX	3.3	2.9	2.9	3	3.1
2	Ant 2	Dipole	IPEX	2.7	2.7	2.7	2.7	2.8
3	Ant 3	Dipole	IPEX	2.9	3.3	3.3	3.5	3.4
4	Ant 4	Dipole	IPEX	3.1	3.2	3.2	2.9	2.7

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	12Vdc from adapter

1.1.4 Accessories

Accessories		
No.	**Equipment**	**Description**
1	AC adapter	Brand: LEADER ELECTRONICS INC. Model: MU30AY120250-A1 I/P: 100-240Vac, 50/60Hz, 0.8A O/P: 12Vdc, 2.5A Power Line: 1.0m non-shielded without core
2	RJ45 cable	1.45m shielded without core

1.1.5 Channel List

Frequency band (MHz)		**2400~2483.5**	
802.11 b / g / n HT20 / ac VHT20 / ax HE20		**802.11n HT40 / ac VHT40 / 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	Non-beamforming: access Mtool, V3.2.1.5 Beamforming: Tera Term, V4.74				
Duty Cycle and Duty Factor	**Mode**	**Non-beamforming**		**Beamforming**	
		Duty cycle (%)	**Duty factor (dB)**	**Duty cycle (%)**	**Duty factor (dB)**
	11b	95.61%	0.19	---	---
	11g	95.68%	0.19	---	---
	ax HE20-OFDMA	99.06%	0.04	95.42%	0.20
	ax HE40-OFDMA	98.39%	0.07	95.19%	0.21

1.1.7 Power Index of Test Tool

Modulation Mode	Test Frequency (MHz)	Power Index	
		Non-beamforming	Beamforming
11b	2412	88	---
11b	2437	92	---
11b	2462	84	---
11g	2412	66	---
11g	2437	88	---
11g	2462	60	---
ax HE20-OFDMA	2412	60	60
ax HE20-OFDMA	2437	86	84
ax HE20-OFDMA	2462	54	54
ax HE40-OFDMA	2422	60	60
ax HE40-OFDMA	2437	70	66
ax HE40-OFDMA	2452	54	54

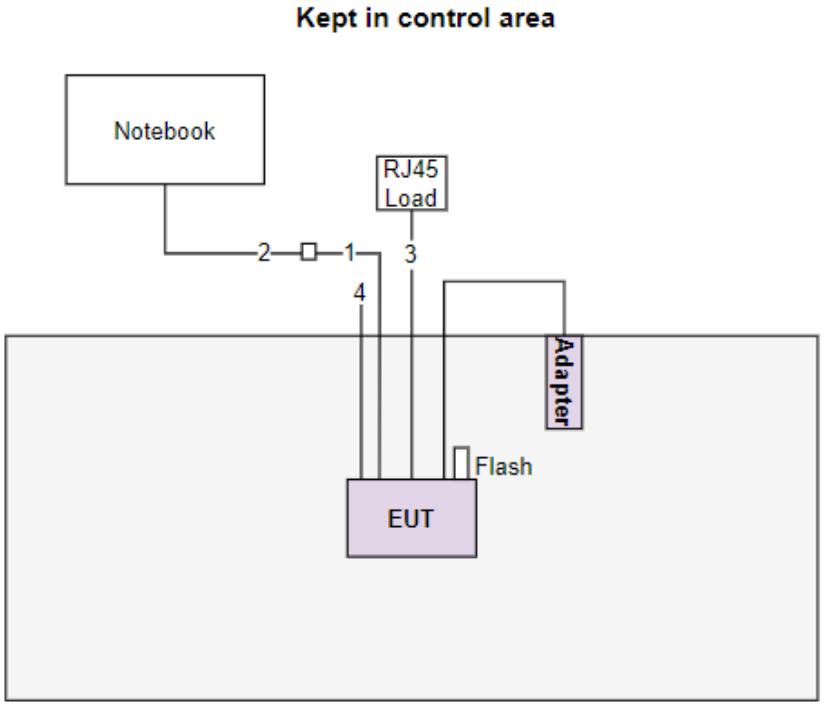
1.2 Local Support Equipment List

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Remarks**
1	Notebook	DELL	Latitude E5420	DoC	---
2	USB 3.0 Flash	pqi	JetFlash 700	---	---
3	RJ45 Load	ICC	---	---	---
4	Notebook	DELL	Latitude 5400	DoC	For Beamforming mode only.
5	BF Client	SONY	NSD-G3000T	---	For Beamforming mode only. (Provided by applicant.)

1.3 Test Setup Chart

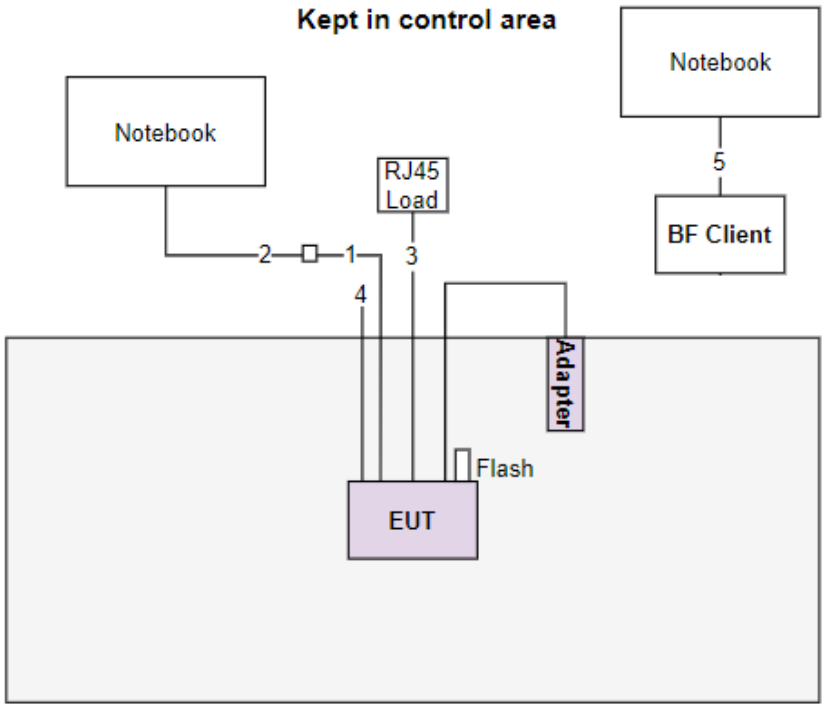
Non-beamforming mode

Test Setup Diagram



No.	Signal cable / Length (m)
1	RJ45, 1.45m shielded.
2	RJ45, 10m shielded.
3	RJ45, 1.3m(x3) non-shielded with load.
4	Fiber, 10m non-shielded.

Beamforming mode

Test Setup Diagram


No.	Signal cable / Length (m)
1	RJ45, 1.45m shielded.
2	RJ45, 10m shielded.
3	RJ45, 1.3m(x3) non-shielded with load.
4	Fiber, 10m non-shielded.
5	RJ45, 10m non-shielded.

1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Apr. 06, 2023				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101658	Feb. 17, 2023	Feb. 16, 2024
LISN	R&S	ENV216	101579	Apr. 21, 2022	Apr. 20, 2023
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.					

Test Item	Radiated Emission				
Test Site	966 chamber3 / (03CH03-WS)				
Tested Date	Mar. 21 ~ Mar. 28, 2023				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101657	Mar. 03, 2023	Mar. 02, 2024
Spectrum Analyzer	R&S	FSV40	101499	Mar. 16, 2023	Mar. 15, 2024
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 01, 2022	Oct. 31, 2023
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-685	Jun. 28, 2022	Jun. 27, 2023
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Dec. 15, 2022	Dec. 14, 2023
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Oct. 27, 2022	Oct. 26, 2023
Preamplifier	EMC	EMC02325	980187	Jul. 16, 2022	Jul. 15, 2023
Preamplifier	EMC	EMC184045SE	980897	Aug. 01, 2022	Jul. 31, 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-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800 -001	Sep. 23, 2022	Sep. 22, 2023
LF cable-3M	EMC	EMC8D-NM-NM-3000	131103	Sep. 23, 2022	Sep. 22, 2023
LF cable-13M	EMC	EMC8D-NM-NM-13000	131104	Sep. 23, 2022	Sep. 22, 2023
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Sep. 23, 2022	Sep. 22, 2023
RF cable-8M	EMC	EMC104-SM-SM-8000	181107	Sep. 23, 2022	Sep. 22, 2023
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Tested Date	Mar. 31, 2023				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101910	Apr. 18, 2022	Apr. 17, 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	±3.96 dB
Unwanted Emission > 1GHz	±4.51 dB

2 Test Configuration

2.1 Testing Facility

Test Laboratory	International Certification Corporation
Test Site	CO01-WS, TH01-WS
Address of Test Site	No.3-1, Lane 6, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)
Test Site	03CH03-WS
Address of Test Site	No.14-1, Lane 19, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)

- FCC Designation No.: TW0009
- FCC site registration No.: 207696
- ISED#: 10807C
- CAB identifier: TW2732

2.2 The Worst Test Modes and Channel Details

Test item	Modulation Mode	Test Frequency (MHz)	Data Rate	Test Configuration
Non-beamforming mode				
AC Power Line Conducted Emission	11b	2437	1 Mbps	---
Unwanted Emissions ≤ 1GHz	11b	2437	1 Mbps	---
Unwanted Emissions >1GHz Conducted Output Power 6dB bandwidth Power spectral density	11b 11g ax HE20-OFDMA ax HE40-OFDMA	2412 / 2437 / 2462 2412 / 2437 / 2462 2412 / 2437 / 2462 2422 / 2437 / 2452	1 Mbps 6 Mbps MCS 0 MCS 0	---
Beamforming mode				
AC Power Line Conducted Emission	ax HE20-OFDMA	2437	MCS 0	---
Unwanted Emissions ≤1GHz	ax HE20-OFDMA	2437	MCS 0	---
Unwanted Emissions >1GHz Conducted Output Power 6dB bandwidth Power spectral density	ax HE20-OFDMA ax HE40-OFDMA	2412 / 2437 / 2462 2422 / 2437 / 2452	MCS 0 MCS 0	---

NOTE:

1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Z-plane** 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

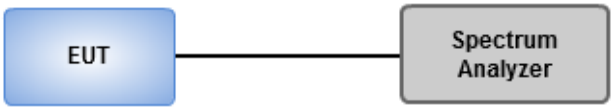
6dB Bandwidth

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

Ambient Condition	24°C / 66%	**Tested By**	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 <= 6dBi, no any corresponding reduction is in output power limit.

Antenna gain > 6dBi

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

Ambient Condition	24°C / 66%	**Tested By**	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 ≥ 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.

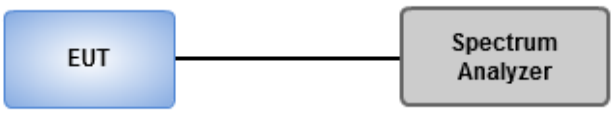
2 Set the sweep time to: ≥ 10 (number of measurement points in sweep) x (total on/off period of the transmitted signal).

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

Ambient Condition	24°C / 66%	**Tested By**	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

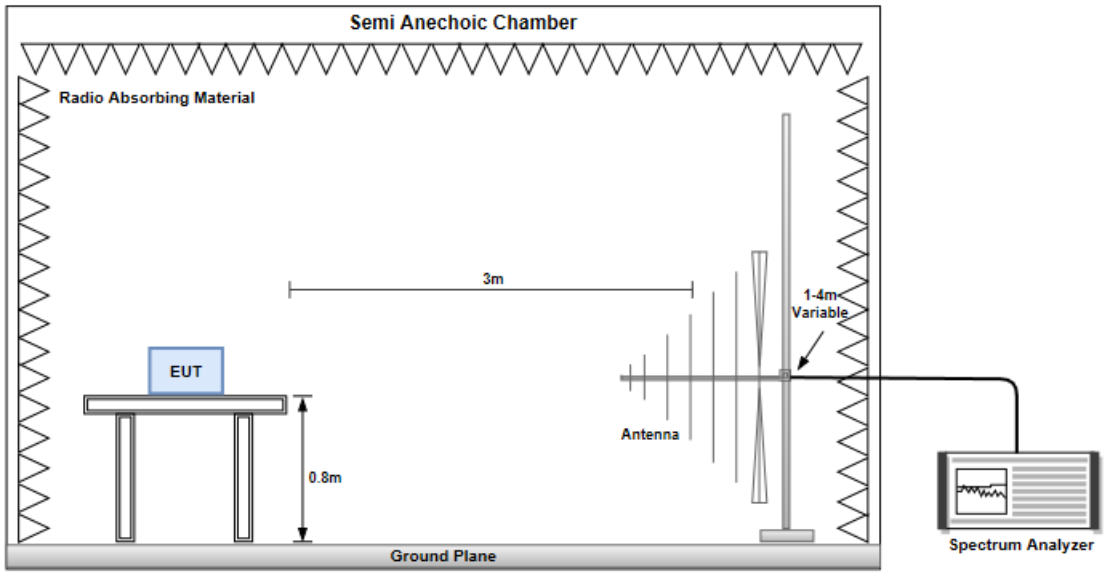
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission 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:

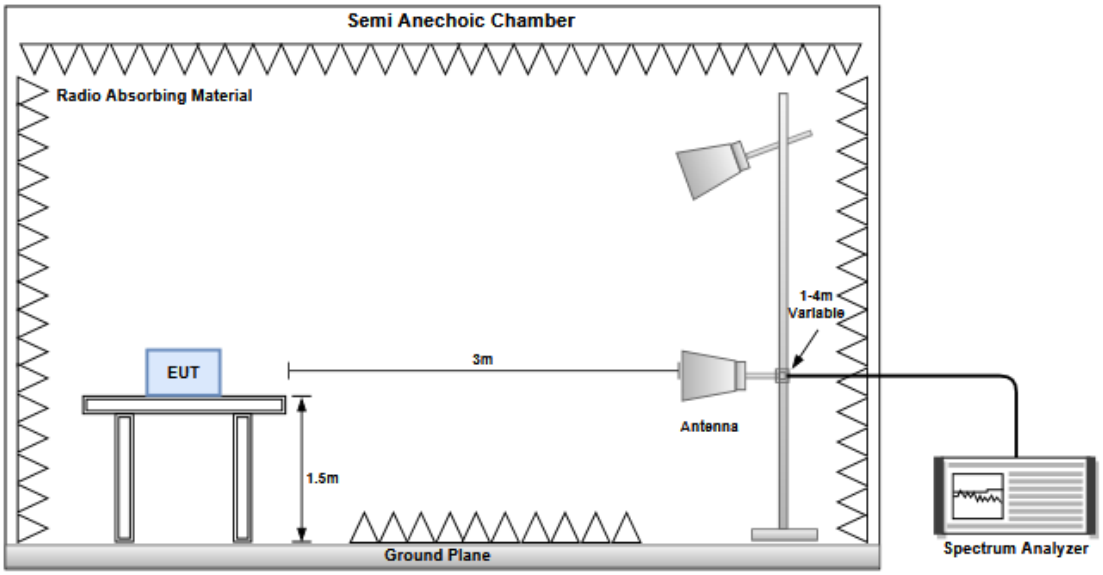
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

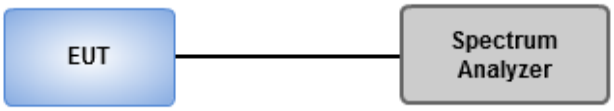
Reference level measurement

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

Ambient Condition	24°C / 66%	Tested By	Akun Chung

Refer to Appendix E.

3.6 AC Power Line Conducted Emissions

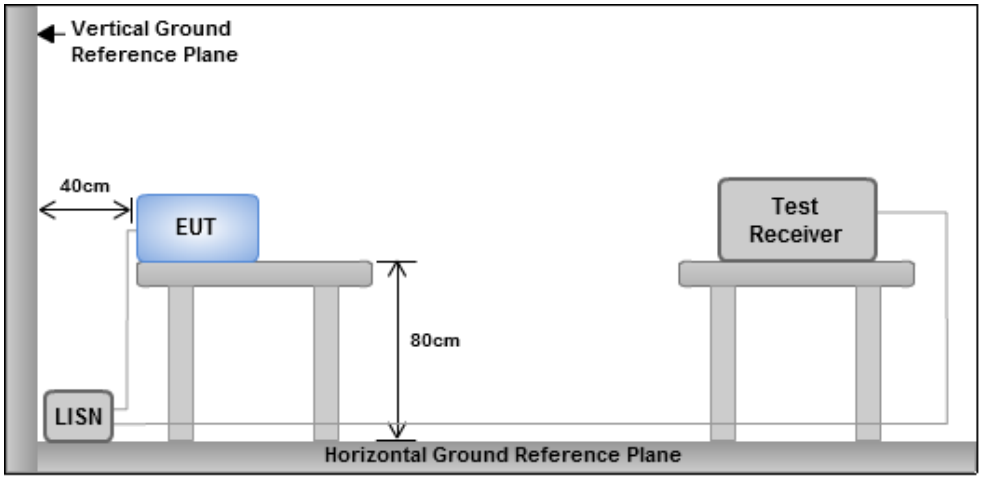
3.6.1 Limit of AC Power Line Conducted Emissions

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 Ω 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==

Non-beamforming mode

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	7.075M	12.504M	12M5G1D	6.5M	10.39M
802.11g_Nss1,(6Mbps)_4TX	16.35M	17.855M	17M9D1D	16.325M	16.668M
802.11ax HEW20_Nss1,(MCS0)_4TX-OFDMA	19.05M	19.34M	19M3D1D	18.65M	18.991M
802.11ax HEW40_Nss1,(MCS0)_4TX-OFDMA	37.65M	37.581M	37M6D1D	37.35M	37.481M

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

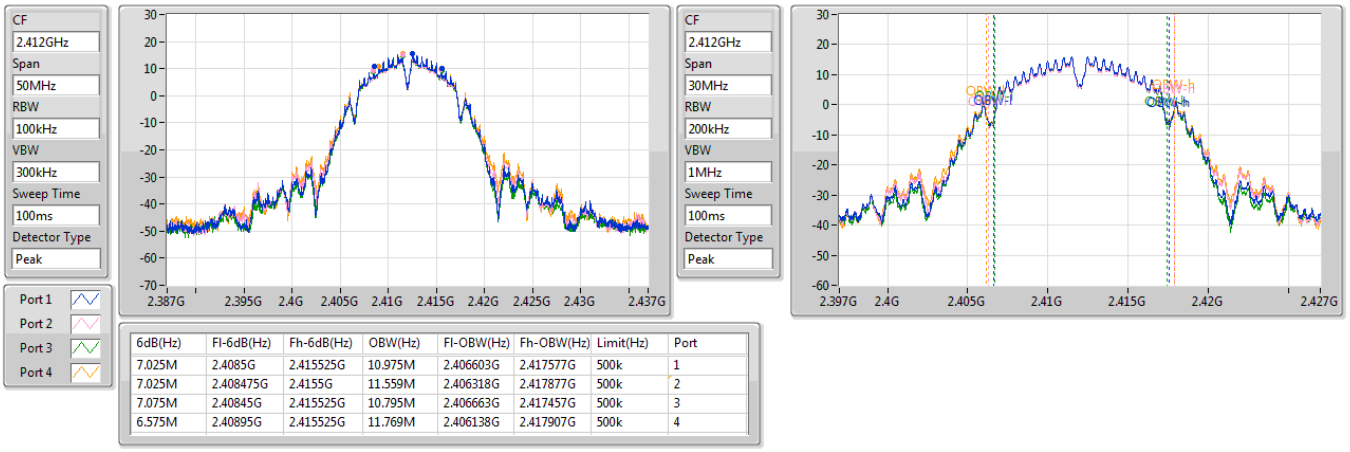
Result

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	7.025M	10.975M	7.025M	11.559M	7.075M	10.795M	6.575M	11.769M
2437MHz	Pass	500k	6.5M	11.904M	7M	12.204M	7.025M	11.724M	7.05M	12.504M
2462MHz	Pass	500k	7.05M	10.48M	7.05M	11.484M	7.05M	10.39M	7.05M	11.694M
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	16.35M	16.8M	16.325M	16.756M	16.35M	16.69M	16.35M	16.734M
2437MHz	Pass	500k	16.325M	17.261M	16.325M	17.657M	16.325M	17.085M	16.35M	17.855M
2462MHz	Pass	500k	16.35M	16.778M	16.35M	16.756M	16.35M	16.668M	16.35M	16.734M
802.11ax HEW20_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	18.85M	19.015M	18.9M	18.991M	19.05M	19.09M	18.675M	19.04M
2437MHz	Pass	500k	18.8M	19.165M	18.9M	19.24M	18.95M	19.215M	18.65M	19.34M
2462MHz	Pass	500k	18.975M	19.04M	18.975M	19.015M	19.05M	19.09M	18.9M	19.04M
802.11ax HEW40_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	37.4M	37.531M	37.5M	37.531M	37.4M	37.531M	37.4M	37.481M
2437MHz	Pass	500k	37.5M	37.481M	37.55M	37.581M	37.35M	37.531M	37.45M	37.531M
2452MHz	Pass	500k	37.35M	37.481M	37.65M	37.481M	37.45M	37.531M	37.55M	37.481M

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**

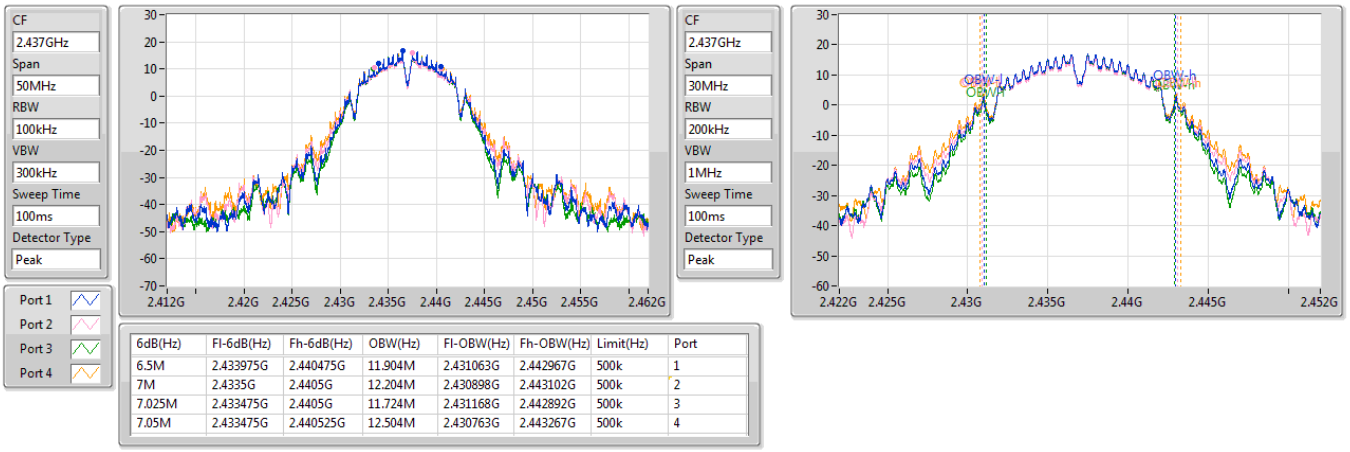
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.025M	2.4085G	2.415525G	10.975M	2.406603G	2.417577G	500k	1
7.025M	2.408475G	2.4155G	11.559M	2.406318G	2.417877G	500k	2
7.075M	2.40845G	2.415525G	10.795M	2.406663G	2.417457G	500k	3
6.575M	2.40895G	2.415525G	11.769M	2.406138G	2.417907G	500k	4

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_4TX **EBW**

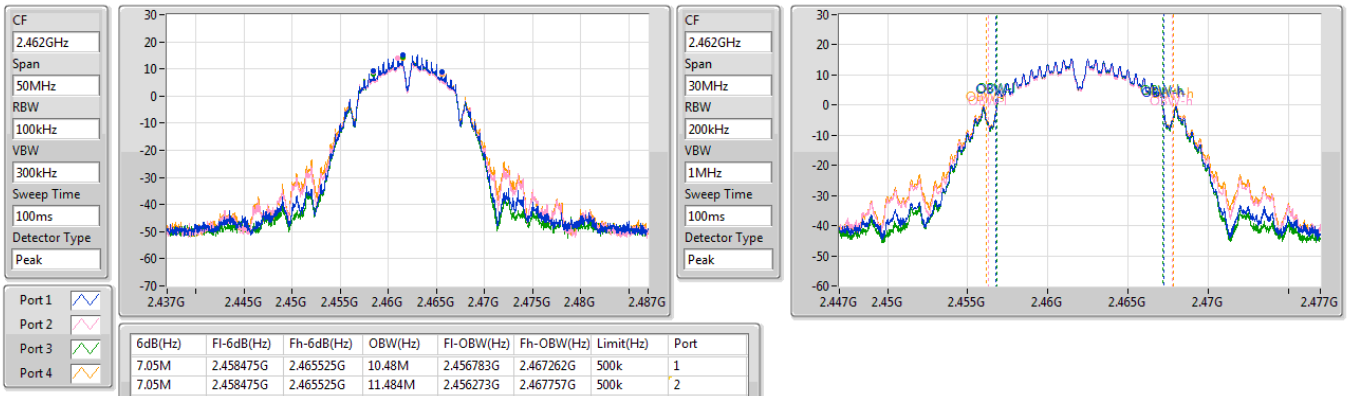
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
6.5M	2.433975G	2.440475G	11.904M	2.431063G	2.442967G	500k	1
7M	2.4335G	2.4405G	12.204M	2.430898G	2.443102G	500k	2
7.025M	2.433475G	2.4405G	11.724M	2.431168G	2.442892G	500k	3
7.05M	2.433475G	2.440525G	12.504M	2.430763G	2.443267G	500k	4

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_4TX **EBW**

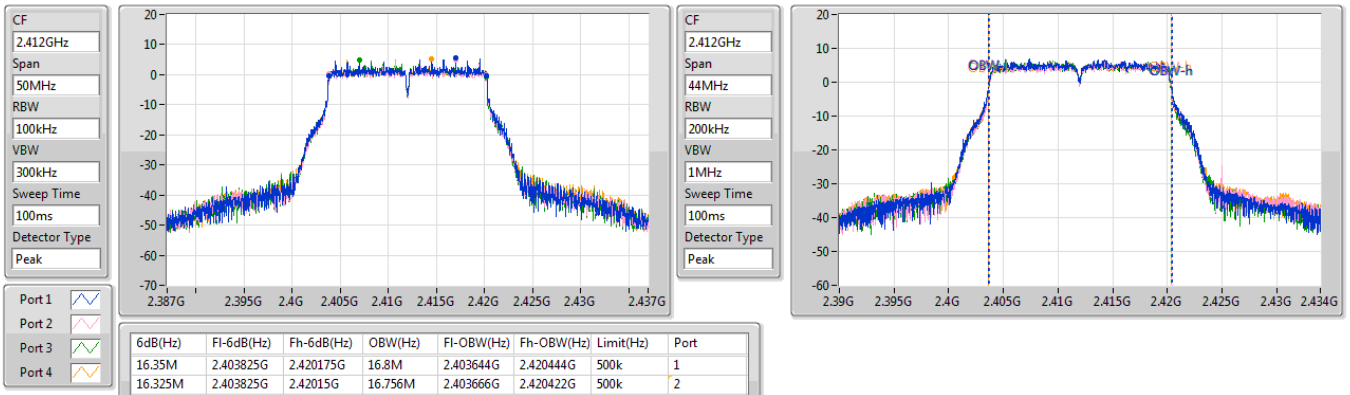
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.05M	2.458475G	2.465525G	10.48M	2.456783G	2.467262G	500k	1
7.05M	2.458475G	2.465525G	11.484M	2.456273G	2.467757G	500k	2
7.05M	2.458475G	2.465525G	10.39M	2.456813G	2.467202G	500k	3
7.05M	2.458475G	2.465525G	11.694M	2.456168G	2.467862G	500k	4

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_4TX **EBW**

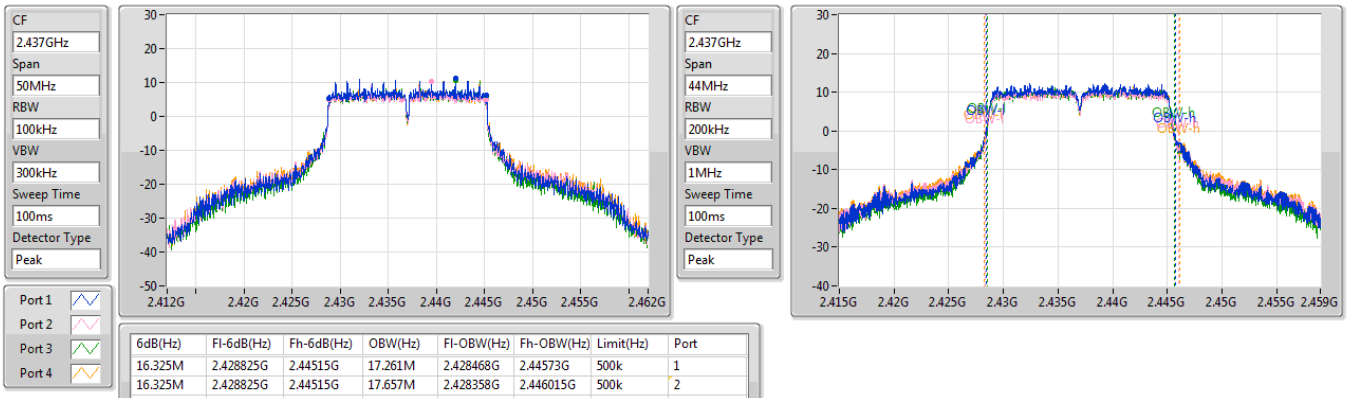
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.35M	2.403825G	2.420175G	16.8M	2.403644G	2.420444G	500k	1
16.325M	2.403825G	2.42015G	16.756M	2.403666G	2.420422G	500k	2
16.35M	2.403825G	2.420175G	16.69M	2.403688G	2.420378G	500k	3
16.35M	2.403825G	2.420175G	16.734M	2.403644G	2.420378G	500k	4

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_4TX **EBW**

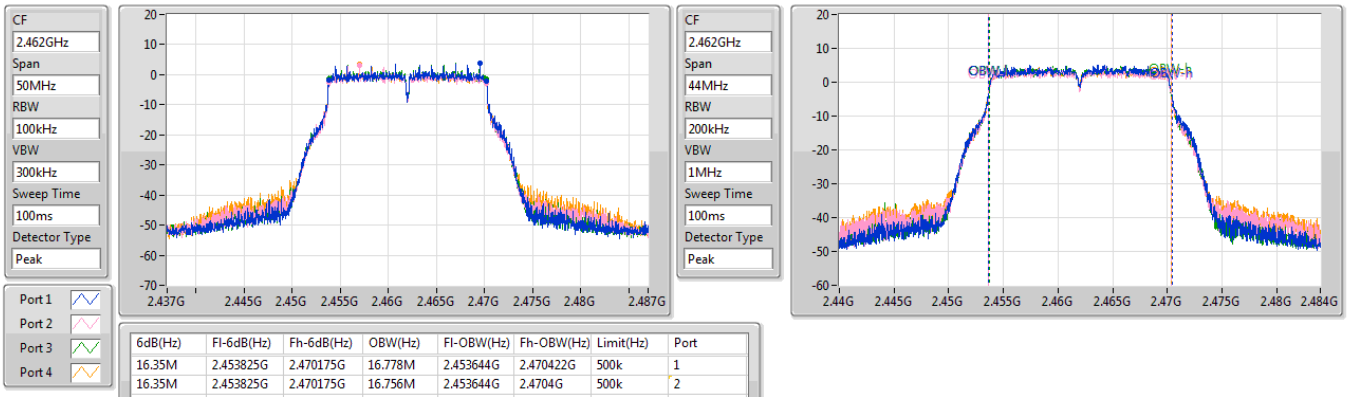
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.428825G	2.44515G	17.261M	2.428468G	2.44573G	500k	1
16.325M	2.428825G	2.44515G	17.657M	2.428358G	2.446015G	500k	2
16.325M	2.428825G	2.44515G	17.085M	2.428556G	2.445642G	500k	3
16.35M	2.428825G	2.445175G	17.855M	2.428248G	2.446103G	500k	4

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_4TX **EBW**

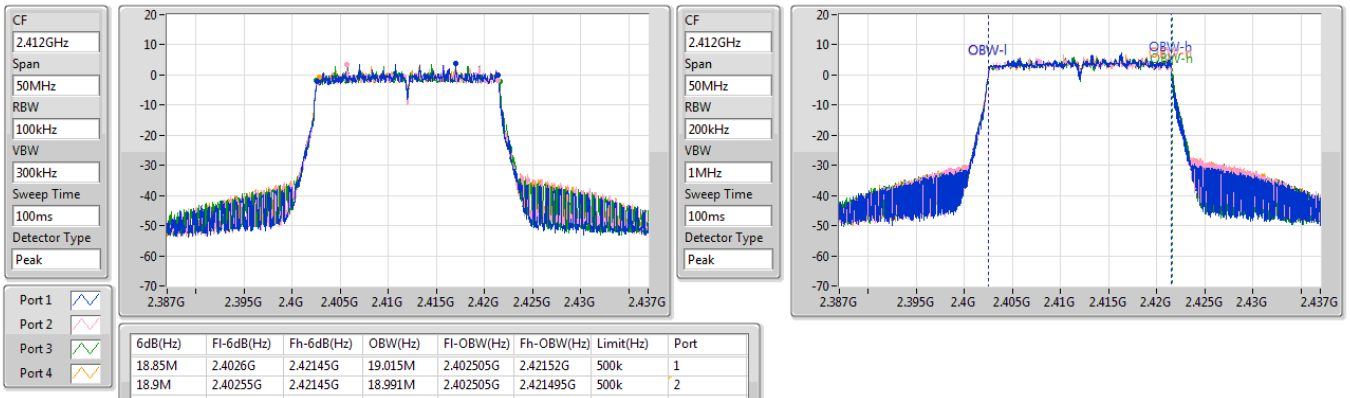
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.35M	2.453825G	2.470175G	16.778M	2.453644G	2.470422G	500k	1
16.35M	2.453825G	2.470175G	16.756M	2.453644G	2.4704G	500k	2
16.35M	2.453825G	2.470175G	16.668M	2.453688G	2.470356G	500k	3
16.35M	2.453825G	2.470175G	16.734M	2.453622G	2.470356G	500k	4

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_4TX **EBW**

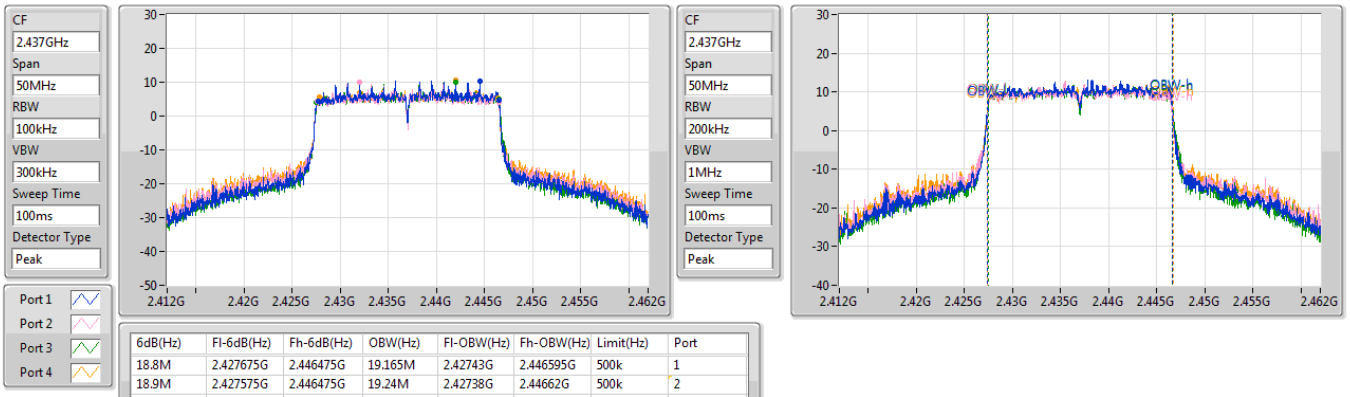
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.85M	2.4026G	2.42145G	19.015M	2.402505G	2.42152G	500k	1
18.9M	2.40255G	2.42145G	18.991M	2.402505G	2.421495G	500k	2
19.05M	2.402525G	2.421575G	19.09M	2.402505G	2.421595G	500k	3
18.675M	2.402775G	2.42145G	19.04M	2.402505G	2.421545G	500k	4

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_4TX **EBW**

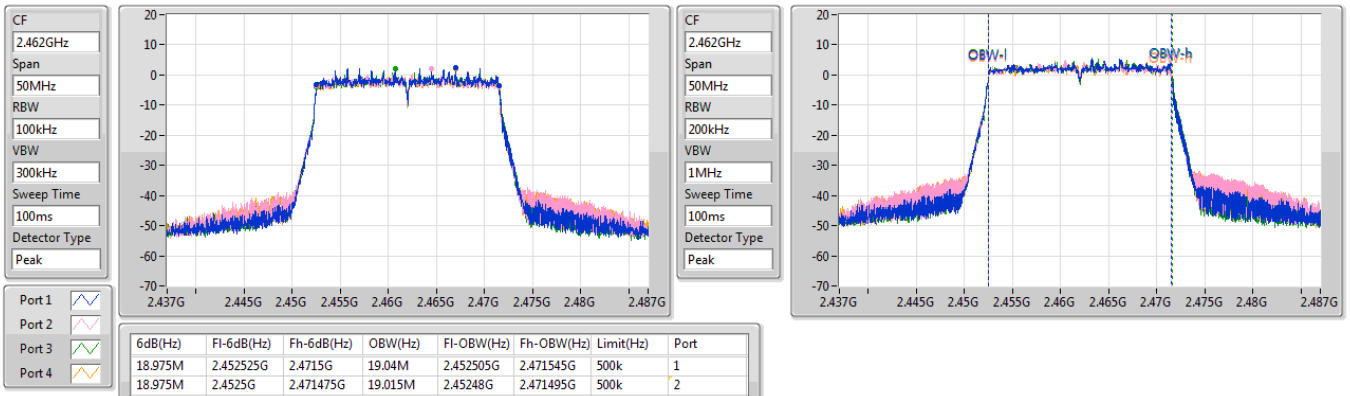
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.8M	2.427675G	2.446475G	19.165M	2.42743G	2.446595G	500k	1
18.9M	2.427575G	2.446475G	19.24M	2.42738G	2.44662G	500k	2
18.95M	2.427525G	2.446475G	19.215M	2.427455G	2.44667G	500k	3
18.65M	2.427775G	2.446425G	19.34M	2.427355G	2.446695G	500k	4

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_4TX **EBW**

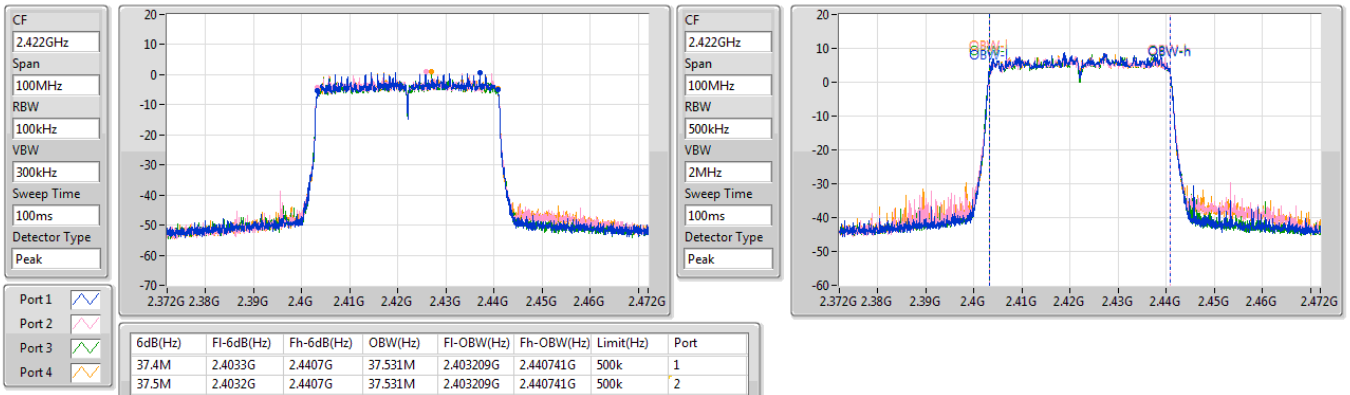
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.975M	2.452525G	2.4715G	19.04M	2.452505G	2.471545G	500k	1
18.975M	2.4525G	2.471475G	19.015M	2.45248G	2.471495G	500k	2
19.05M	2.4525G	2.47155G	19.09M	2.452505G	2.471595G	500k	3
18.9M	2.45255G	2.47145G	19.04M	2.452505G	2.471545G	500k	4

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_4TX **EBW**

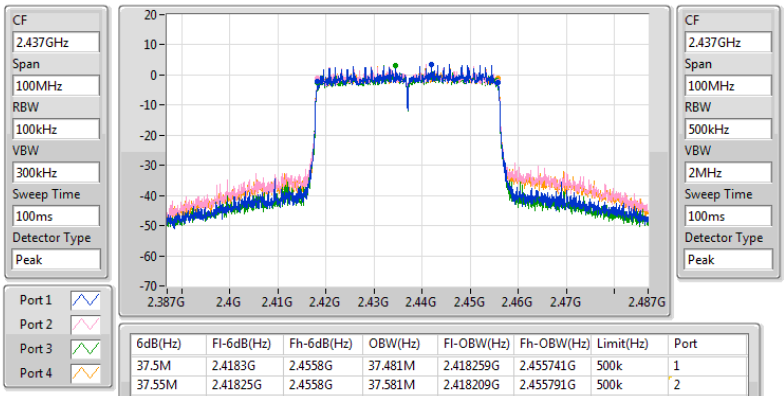
2422MHz

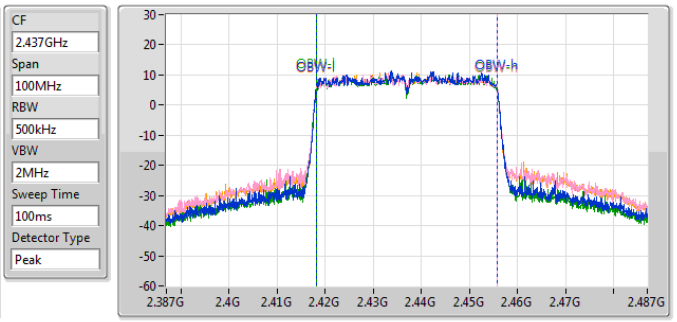


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.4M	2.4033G	2.4407G	37.531M	2.403209G	2.440741G	500k	1
37.5M	2.4032G	2.4407G	37.531M	2.403209G	2.440741G	500k	2
37.4M	2.4032G	2.4406G	37.531M	2.403209G	2.440741G	500k	3
37.4M	2.40335G	2.44075G	37.481M	2.403259G	2.440741G	500k	4

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_4TX **EBW**

2437MHz

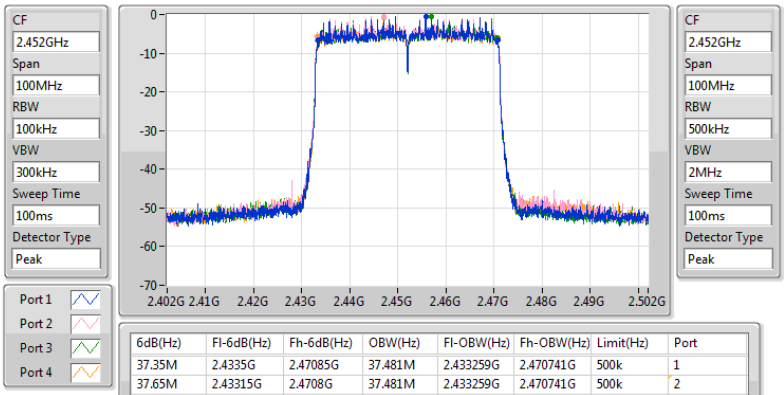


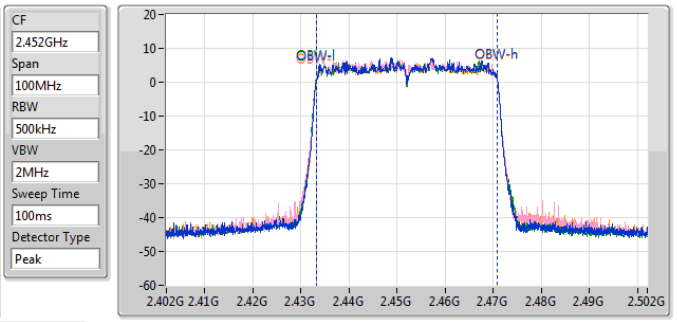


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.5M	2.4183G	2.4558G	37.481M	2.418259G	2.455741G	500k	1
37.55M	2.41825G	2.4558G	37.581M	2.418209G	2.455791G	500k	2
37.35M	2.4182G	2.45555G	37.531M	2.418209G	2.455741G	500k	3
37.45M	2.41825G	2.4557G	37.531M	2.418259G	2.455791G	500k	4

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_4TX **EBW**

2452MHz





6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.35M	2.4335G	2.47085G	37.481M	2.433259G	2.470741G	500k	1
37.65M	2.43315G	2.4708G	37.481M	2.433259G	2.470741G	500k	2
37.45M	2.43315G	2.4706G	37.531M	2.433209G	2.470741G	500k	3
37.55M	2.4332G	2.47075G	37.481M	2.433259G	2.470741G	500k	4

Beamforming mode

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX-OFDMA	17M	19.215M	19M2D1D	10.975M	18.966M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX-OFDMA	37.9M	37.881M	37M9D1D	4.8M	37.431M

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

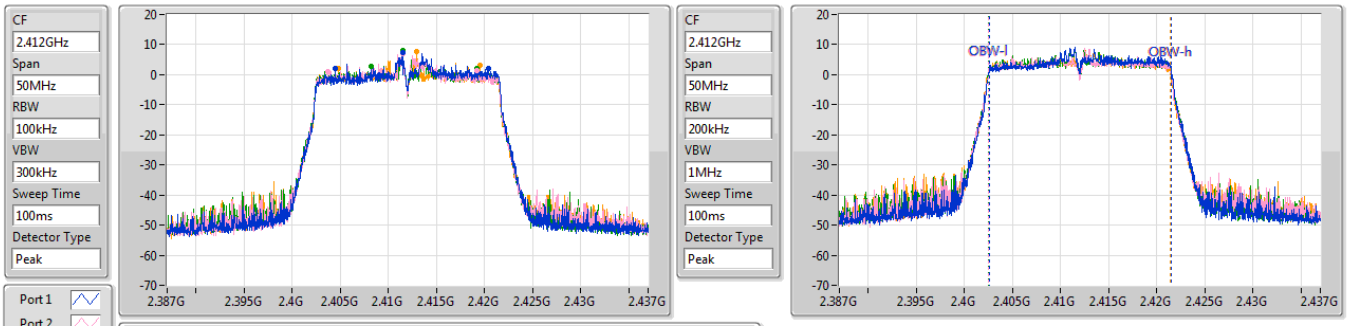
Result

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)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	15.95M	18.966M	15.5M	18.991M	10.975M	19.015M	14.625M	18.966M
2437MHz	Pass	500k	13.5M	19.14M	16.525M	19.165M	12.525M	19.115M	16.575M	19.215M
2462MHz	Pass	500k	15.9M	19.015M	16.25M	19.015M	15.925M	18.991M	17M	18.991M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	33.65M	37.481M	27.95M	37.731M	27.7M	37.531M	4.8M	37.431M
2437MHz	Pass	500k	32.5M	37.431M	32.65M	37.481M	32.5M	37.481M	37.3M	37.881M
2452MHz	Pass	500k	37.3M	37.431M	27.2M	37.481M	29.5M	37.481M	37.9M	37.631M

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

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX **EBW**

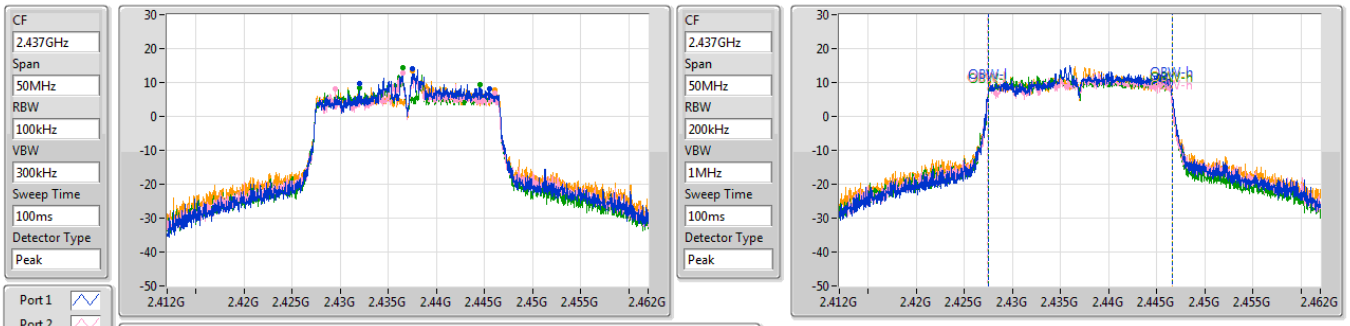
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.95M	2.404475G	2.420425G	18.966M	2.402555G	2.42152G	500k	1
15.5M	2.4037G	2.4192G	18.991M	2.402505G	2.421495G	500k	2
10.975M	2.408225G	2.4192G	19.015M	2.402505G	2.42152G	500k	3
14.625M	2.40485G	2.419475G	18.966M	2.40248G	2.421445G	500k	4

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX **EBW**

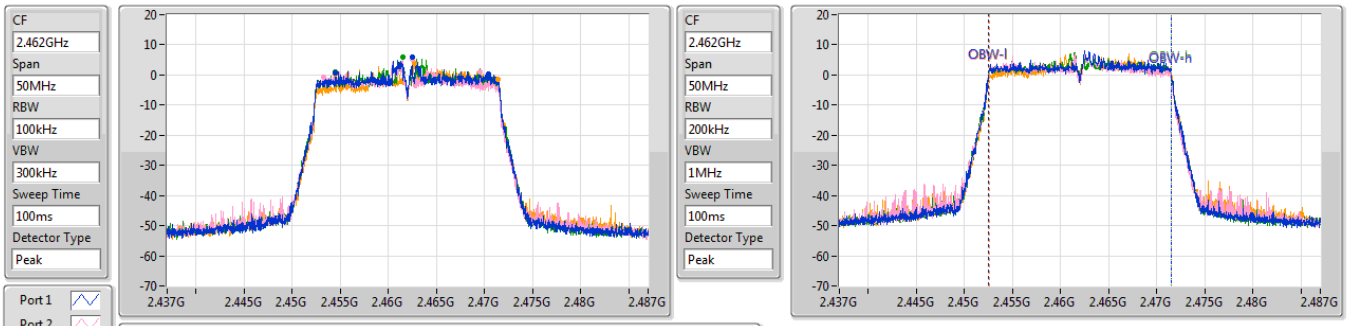
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
13.5M	2.431975G	2.445475G	19.14M	2.42748G	2.44662G	500k	1
16.525M	2.4295G	2.446025G	19.165M	2.42743G	2.446595G	500k	2
12.525M	2.43195G	2.444475G	19.115M	2.427455G	2.44657G	500k	3
16.575M	2.4295G	2.446075G	19.215M	2.427405G	2.44662G	500k	4

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX **EBW**

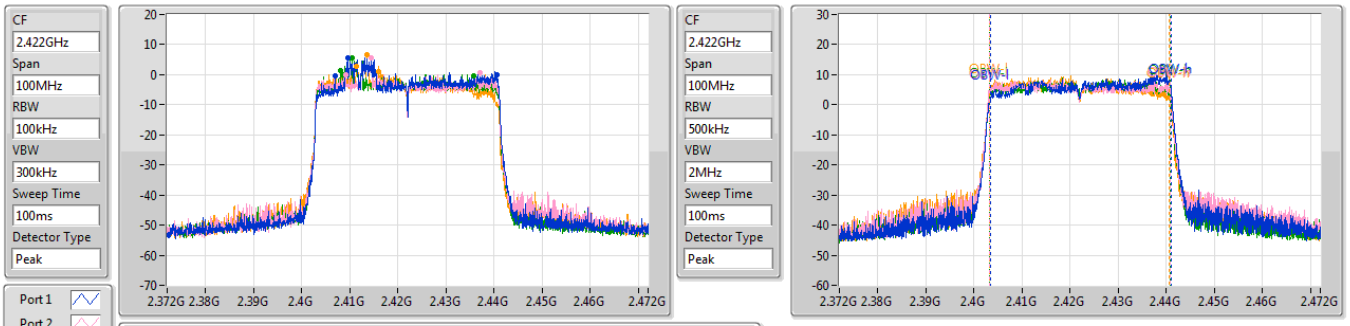
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.9M	2.454475G	2.470375G	19.015M	2.452505G	2.47152G	500k	1
16.25M	2.453225G	2.469475G	19.015M	2.452455G	2.47147G	500k	2
15.925M	2.4545G	2.470425G	18.991M	2.452505G	2.471495G	500k	3
17M	2.45445G	2.47145G	18.991M	2.452555G	2.471545G	500k	4

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX **EBW**

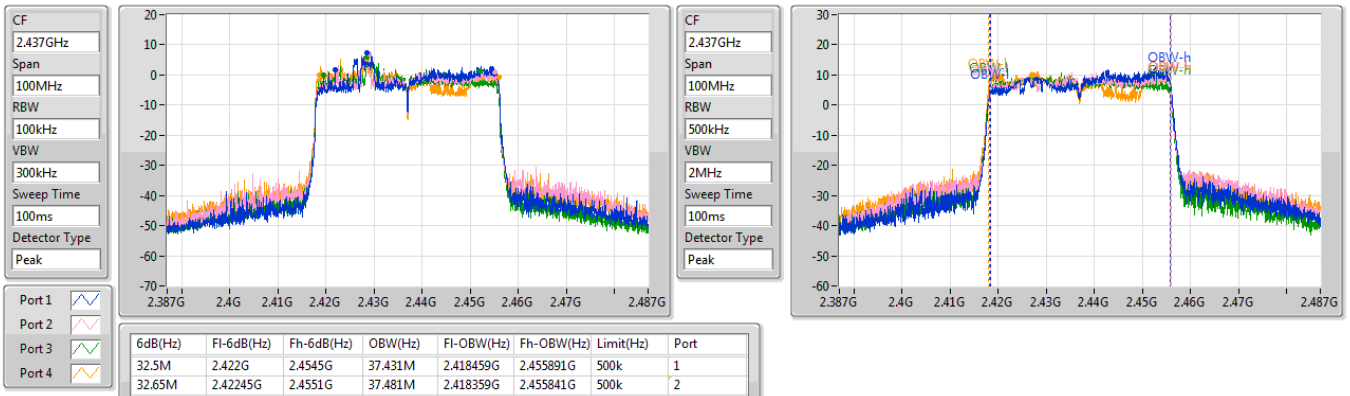
2422MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
33.65M	2.40695G	2.4406G	37.481M	2.403459G	2.440941G	500k	1
27.95M	2.40905G	2.437G	37.731M	2.403109G	2.440841G	500k	2
27.7M	2.408G	2.4357G	37.531M	2.403259G	2.440791G	500k	3
4.8M	2.41125G	2.41605G	37.431M	2.403159G	2.440591G	500k	4

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX **EBW**

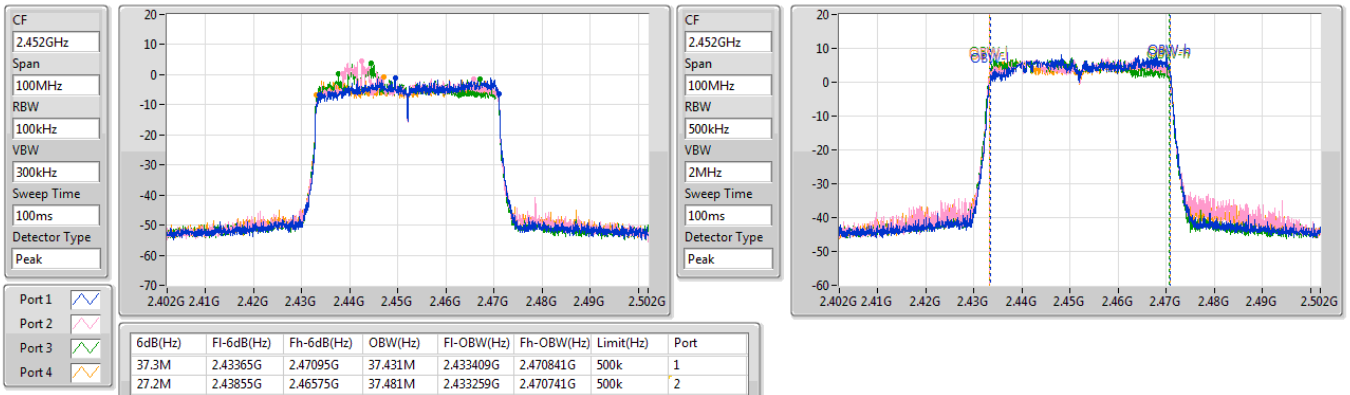
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
32.5M	2.422G	2.4545G	37.431M	2.418459G	2.455891G	500k	1
32.65M	2.42245G	2.4551G	37.481M	2.418359G	2.455841G	500k	2
32.5M	2.4195G	2.452G	37.481M	2.418259G	2.455741G	500k	3
37.3M	2.41865G	2.45595G	37.881M	2.418059G	2.455941G	500k	4

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX **EBW**

2452MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.3M	2.43365G	2.47095G	37.431M	2.433409G	2.470841G	500k	1
27.2M	2.43855G	2.46575G	37.481M	2.433259G	2.470741G	500k	2
29.5M	2.4375G	2.467G	37.481M	2.433159G	2.470641G	500k	3
37.9M	2.43305G	2.47095G	37.631M	2.433159G	2.470791G	500k	4

Non-beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_4TX	29.75	0.94406
802.11g_Nss1,(6Mbps)_4TX	27.95	0.62373
802.11ax HEW20_Nss1,(MCS0)_4TX-OFDMA	27.85	0.60954
802.11ax HEW40_Nss1,(MCS0)_4TX-OFDMA	23.98	0.25003

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	3.30	23.02	23.12	23.26	22.95	29.11	30.00	32.41	36.00
2437MHz	Pass	3.30	24.11	23.66	23.26	23.83	29.75	30.00	33.05	36.00
2462MHz	Pass	3.30	21.76	22.23	22.13	22.05	28.07	30.00	31.37	36.00
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	3.30	16.79	16.86	16.99	16.94	22.92	30.00	26.22	36.00
2437MHz	Pass	3.30	21.61	22.32	21.99	21.76	27.95	30.00	31.25	36.00
2462MHz	Pass	3.30	15.09	15.41	15.31	15.25	21.29	30.00	24.59	36.00
802.11ax HEW20_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	3.30	15.38	15.62	15.89	15.68	21.67	30.00	24.97	36.00
2437MHz	Pass	3.30	21.51	22.11	21.96	21.71	27.85	30.00	31.15	36.00
2462MHz	Pass	3.30	13.88	13.96	13.84	13.95	19.93	30.00	23.23	36.00
802.11ax HEW40_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	3.30	15.64	15.68	15.65	15.44	21.62	30.00	24.92	36.00
2437MHz	Pass	3.30	18.02	17.96	18.11	17.75	23.98	30.00	27.28	36.00
2452MHz	Pass	3.30	14.17	14.06	13.88	13.75	19.99	30.00	23.29	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-OFDMA	26.87	0.48641
802.11ax HEW40-BF_Nss1,(MCS0)_4TX-OFDMA	23.04	0.20137

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-OFDMA	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	9.02	15.45	15.02	15.43	15.56	21.39	26.98	30.41	36.00
2437MHz	Pass	9.02	21.04	20.62	20.91	20.82	26.87	26.98	35.89	36.00
2462MHz	Pass	9.02	13.67	13.26	13.69	13.59	19.58	26.98	28.60	36.00
802.11ax HEW40-BF_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	9.02	15.79	15.61	15.56	15.47	21.63	26.98	30.65	36.00
2437MHz	Pass	9.02	17.42	16.85	16.71	17.08	23.04	26.98	32.06	36.00
2452MHz	Pass	9.02	14.22	14.21	13.87	13.71	20.03	26.98	29.05	36.00

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

Note:
Directional gain = 10 x log($(10^{3.3/20}+10^{2.7/20}+10^{2.9/20}+10^{3.1/20})^2/4$) = 9.02 dBi > 6 dBi, limit shall be reduced to 30 dBm – (9.02dBi – 6dBi) = 26.98 dBm

Non-beamforming mode

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_4TX	-0.37
802.11g_Nss1,(6Mbps)_4TX	-2.04
802.11ax HEW20_Nss1,(MCS0)_4TX-OFDMA	-3.52
802.11ax HEW40_Nss1,(MCS0)_4TX-OFDMA	-9.88

RBW = 3kHz;

Result

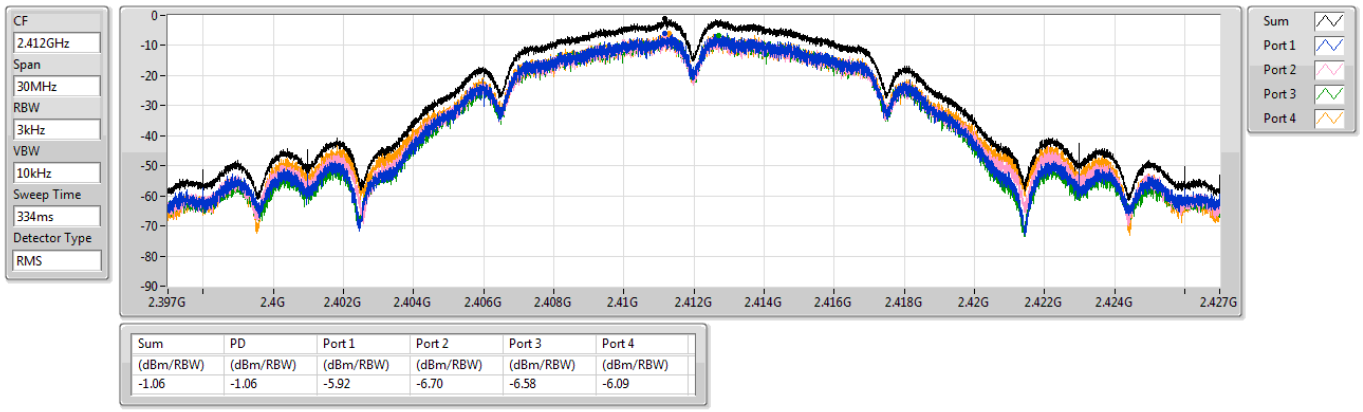
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	9.02	-5.92	-6.70	-6.58	-6.09	-1.06	4.98
2437MHz	Pass	9.02	-4.79	-6.08	-5.30	-5.10	-0.37	4.98
2462MHz	Pass	9.02	-6.66	-7.76	-7.07	-6.97	-2.19	4.98
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	9.02	-13.28	-13.70	-13.04	-13.35	-7.58	4.98
2437MHz	Pass	9.02	-7.44	-8.62	-7.40	-8.42	-2.04	4.98
2462MHz	Pass	9.02	-14.50	-15.75	-14.09	-15.10	-8.93	4.98
802.11ax HEW20_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-
2412MHz	Pass	9.02	-16.32	-14.74	-15.64	-15.43	-10.48	4.98
2437MHz	Pass	9.02	-9.09	-9.10	-9.46	-8.12	-3.52	4.98
2462MHz	Pass	9.02	-17.13	-16.11	-16.52	-15.69	-10.78	4.98
802.11ax HEW40_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-
2422MHz	Pass	9.02	-16.95	-18.03	-17.68	-17.24	-12.29	4.98
2437MHz	Pass	9.02	-15.28	-15.40	-15.51	-15.61	-9.88	4.98
2452MHz	Pass	9.02	-19.25	-19.00	-19.69	-20.16	-14.15	4.98

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 = 10 x log($(10^{3.3/20}+10^{2.7/20}+10^{2.9/20}+10^{3.1/20})^2/4$) = 9.02 dBi > 6 dBi, limit shall be reduced to 8 dBm – (9.02dBi – 6dBi) = 4.98 dBm

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_4TX **PSD**

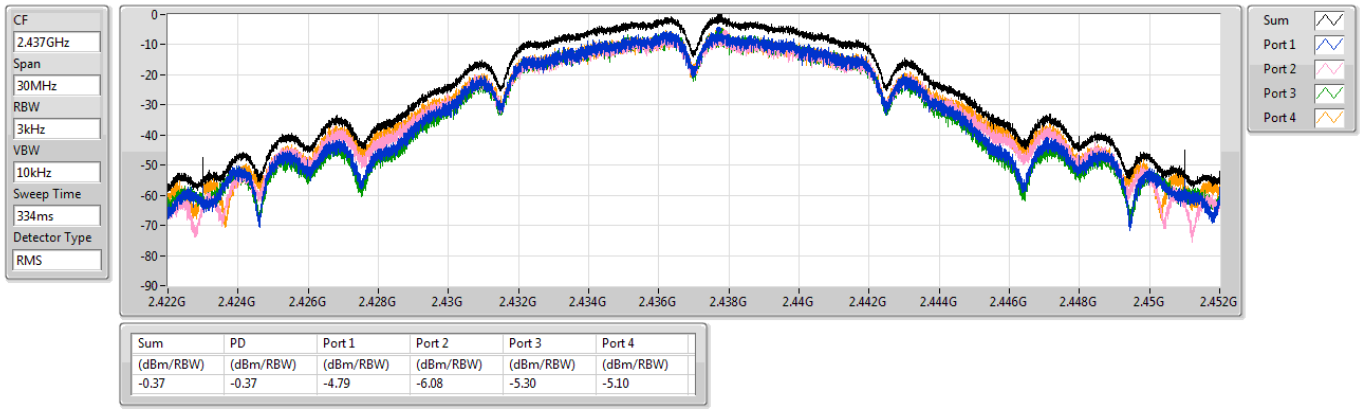
2412MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.06	-1.06	-5.92	-6.70	-6.58	-6.09

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_4TX **PSD**

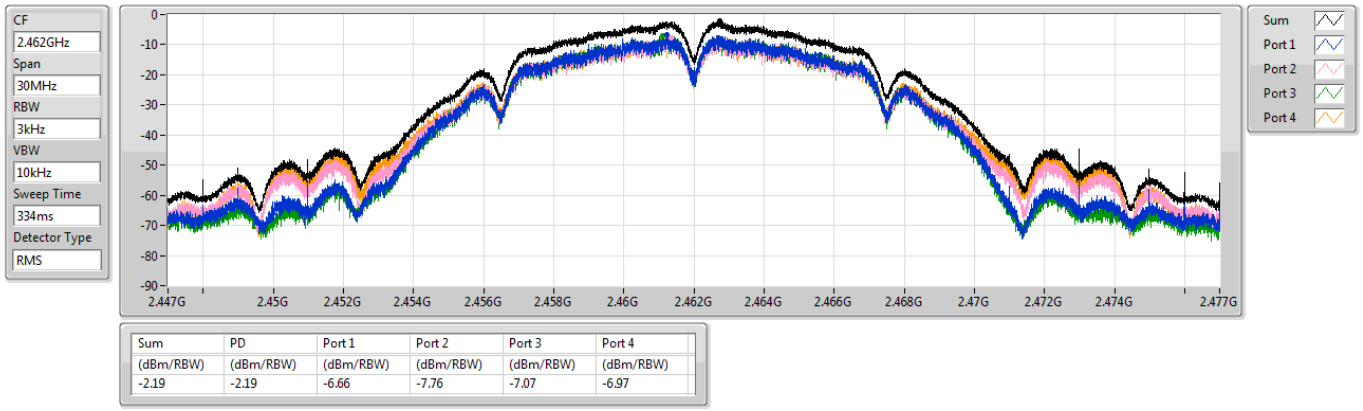
2437MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.37	-0.37	-4.79	-6.08	-5.30	-5.10

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_4TX **PSD**

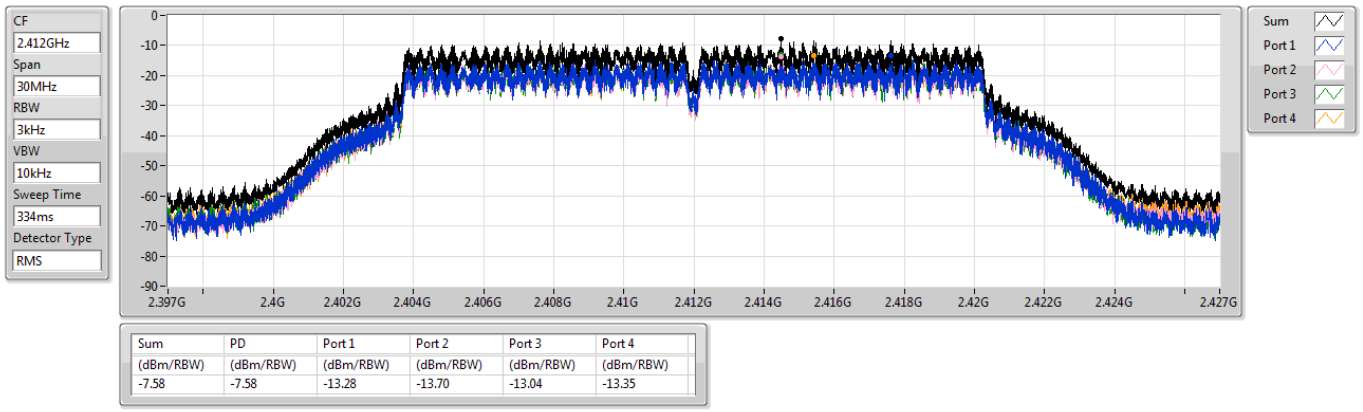
2462MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.19	-2.19	-6.66	-7.76	-7.07	-6.97

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_4TX **PSD**

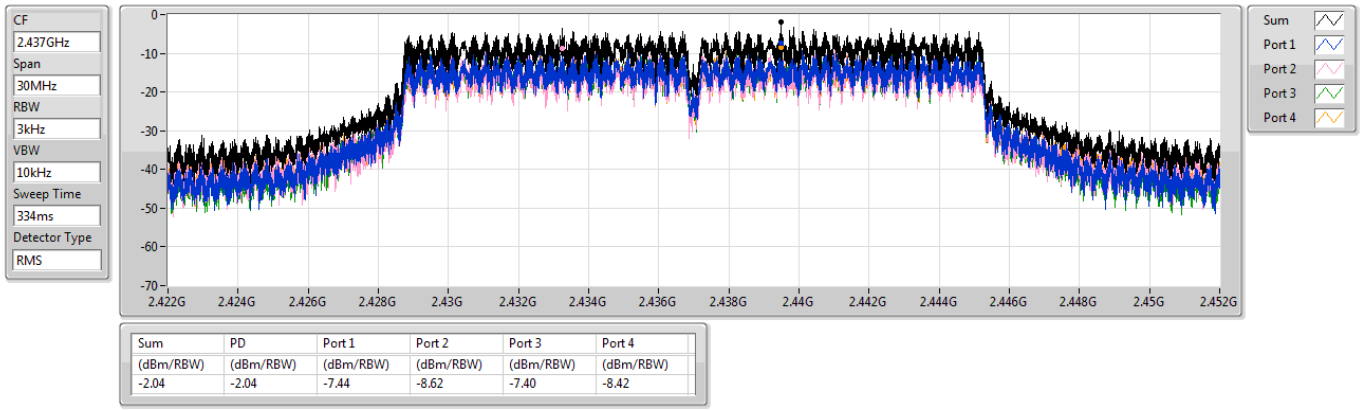
2412MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.58	-7.58	-13.28	-13.70	-13.04	-13.35

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_4TX **PSD**

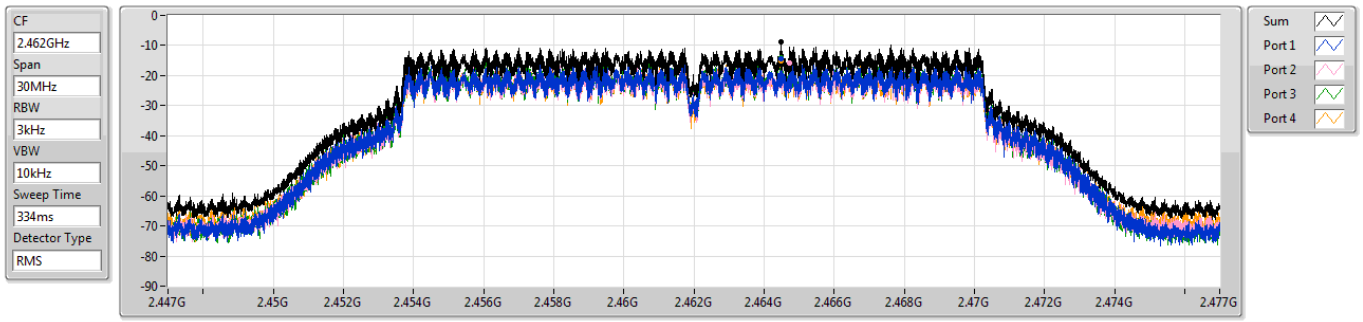
2437MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.04	-2.04	-7.44	-8.62	-7.40	-8.42

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_4TX **PSD**

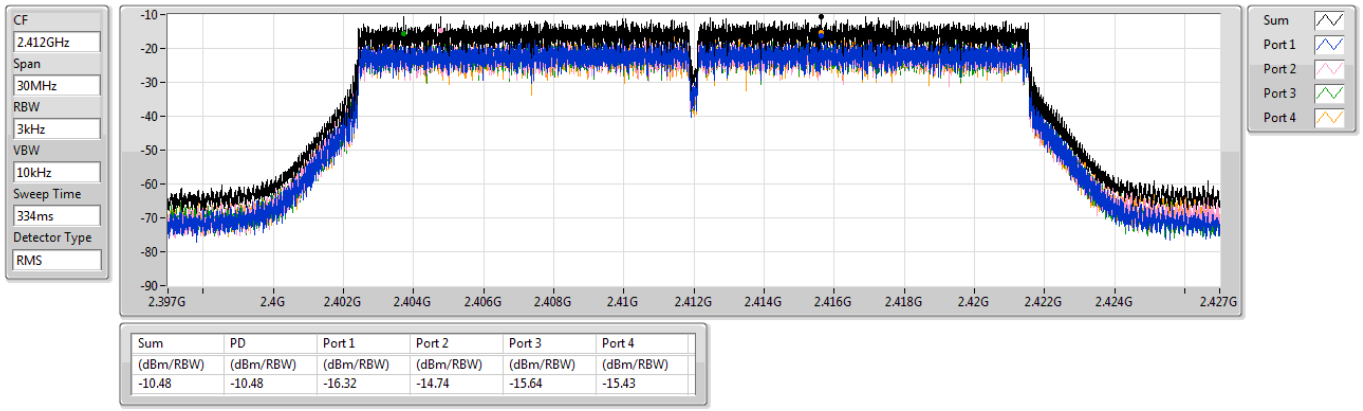
2462MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.93	-8.93	-14.50	-15.75	-14.09	-15.10

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_4TX **PSD**

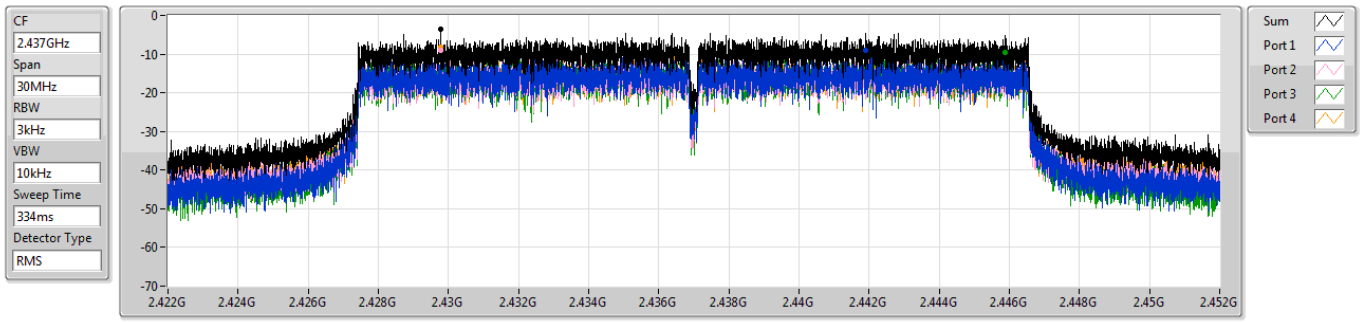
2412MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.48	-10.48	-16.32	-14.74	-15.64	-15.43

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_4TX **PSD**

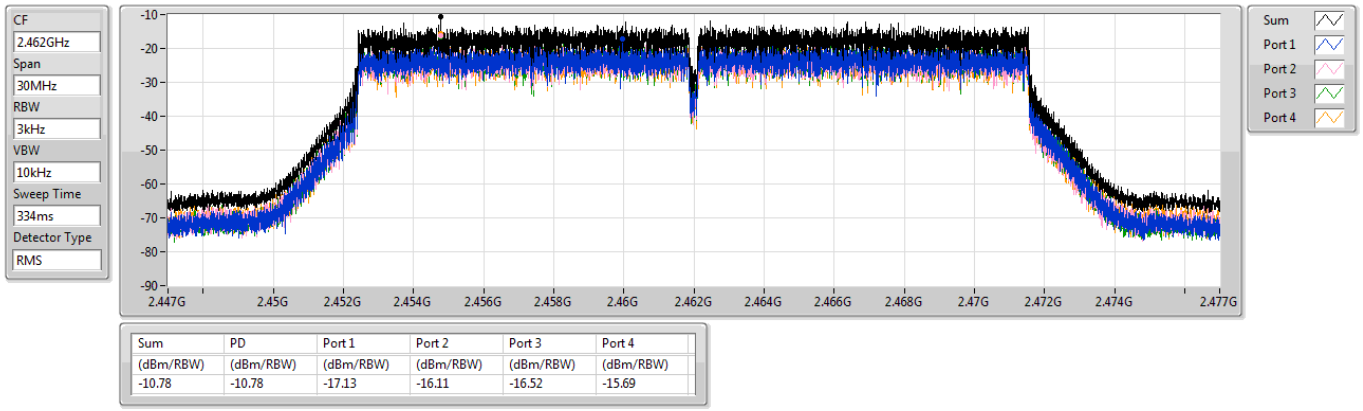
2437MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.52	-3.52	-9.09	-9.10	-9.46	-8.12

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_4TX **PSD**

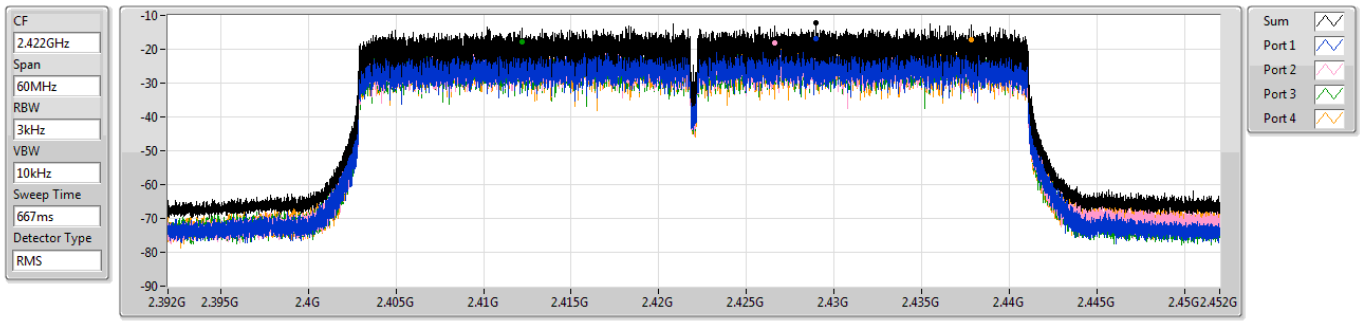
2462MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.78	-10.78	-17.13	-16.11	-16.52	-15.69

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_4TX **PSD**

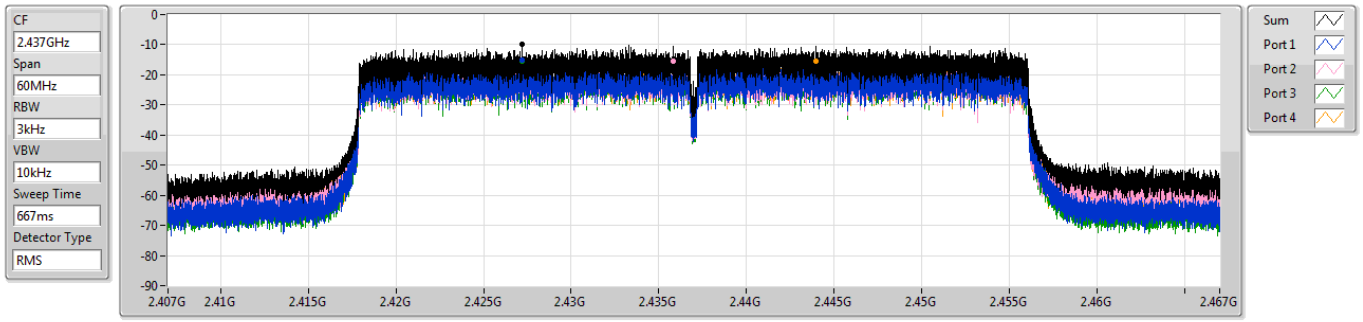
2422MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-12.29	-12.29	-16.95	-18.03	-17.68	-17.24

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_4TX **PSD**

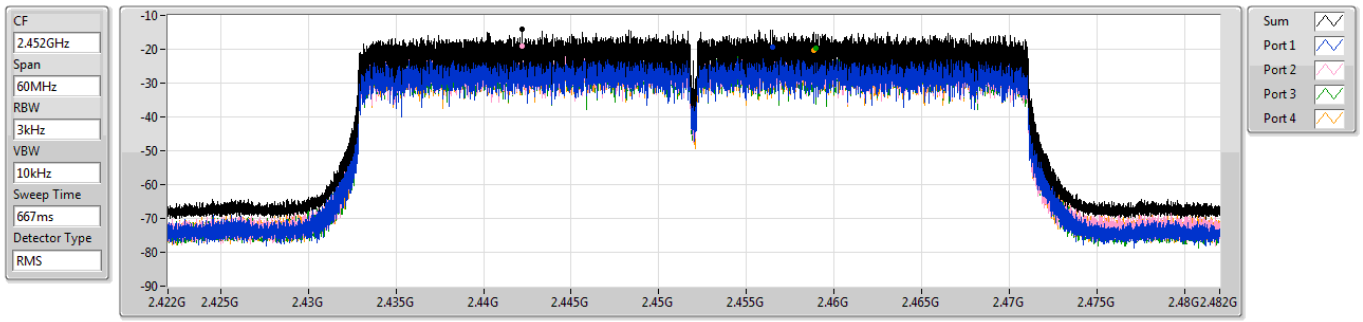
2437MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.88	-9.88	-15.28	-15.40	-15.51	-15.61

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_4TX **PSD**

2452MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-14.15	-14.15	-19.25	-19.00	-19.69	-20.16

Beamforming mode

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX-OFDMA	-6.03
802.11ax HEW40-BF_Nss1,(MCS0)_4TX-OFDMA	-13.59

RBW = 3kHz;

Result

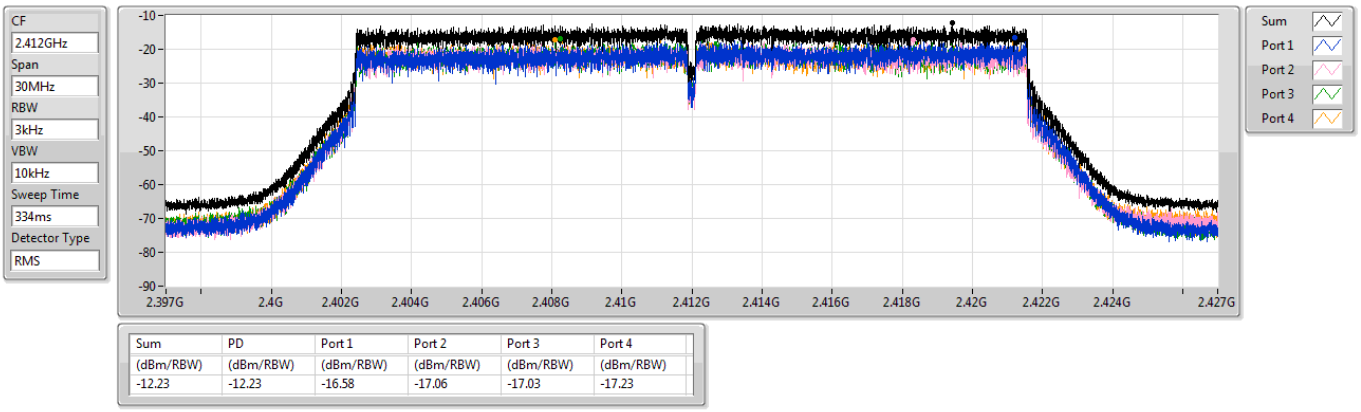
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-
2412MHz	Pass	9.02	-16.58	-17.06	-17.03	-17.23	-12.23	4.98
2437MHz	Pass	9.02	-11.16	-10.34	-8.74	-11.31	-6.03	4.98
2462MHz	Pass	9.02	-18.26	-19.09	-18.64	-18.30	-13.77	4.98
802.11ax HEW40-BF_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-
2422MHz	Pass	9.02	-20.26	-19.44	-20.12	-18.36	-14.56	4.98
2437MHz	Pass	9.02	-18.03	-17.55	-18.64	-18.43	-13.59	4.98
2452MHz	Pass	9.02	-21.40	-21.46	-21.18	-21.05	-16.92	4.98

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 = 10 x log($(10^{3.3/20}+10^{2.7/20}+10^{2.9/20}+10^{3.1/20})^2/4$) = 9.02 dBi > 6 dBi, limit shall be reduced to 8 dBm – (9.02dBi – 6dBi) = 4.98 dBm

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX **PSD**

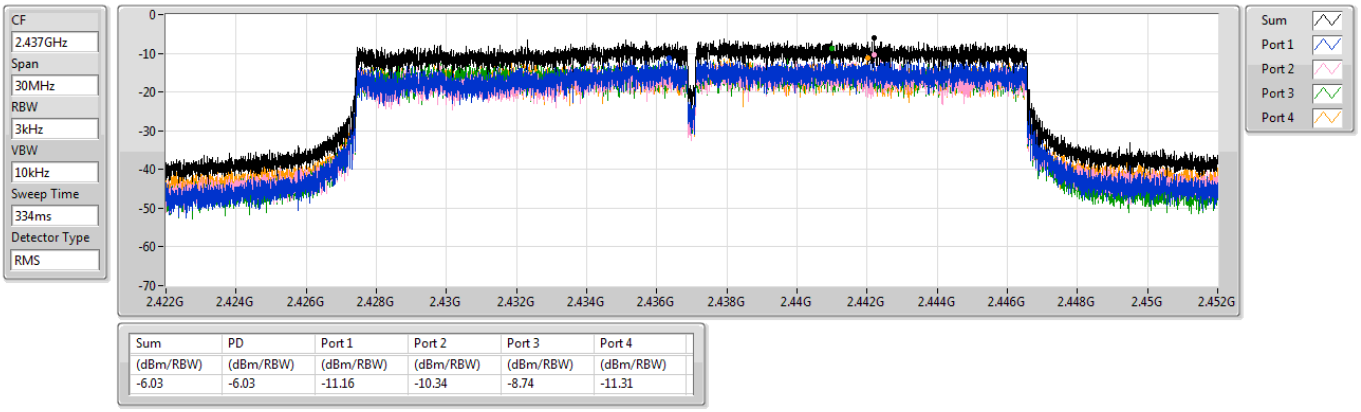
2412MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-12.23	-12.23	-16.58	-17.06	-17.03	-17.23

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX **PSD**

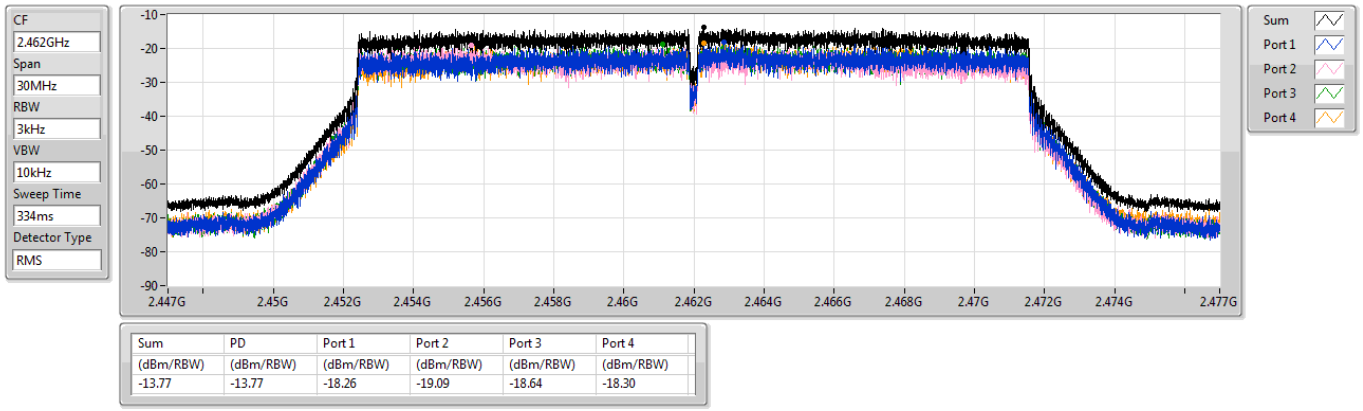
2437MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.03	-6.03	-11.16	-10.34	-8.74	-11.31

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX **PSD**

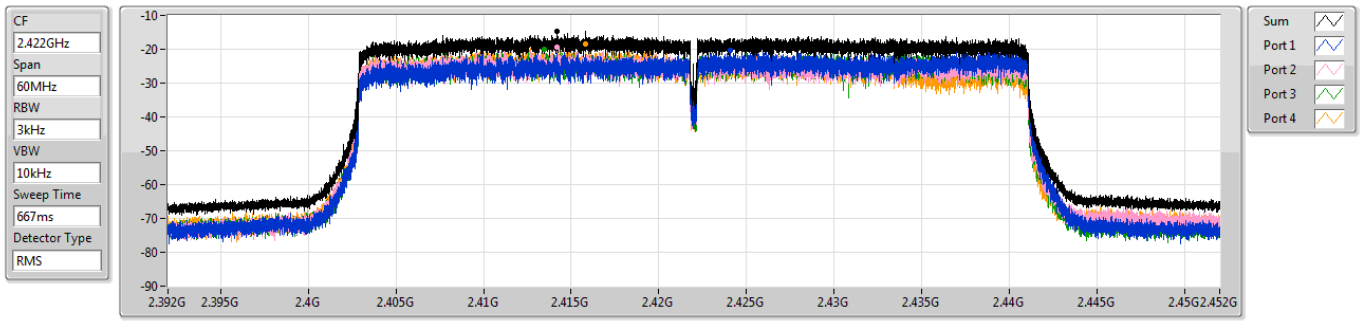
2462MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.77	-13.77	-18.26	-19.09	-18.64	-18.30

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX **PSD**

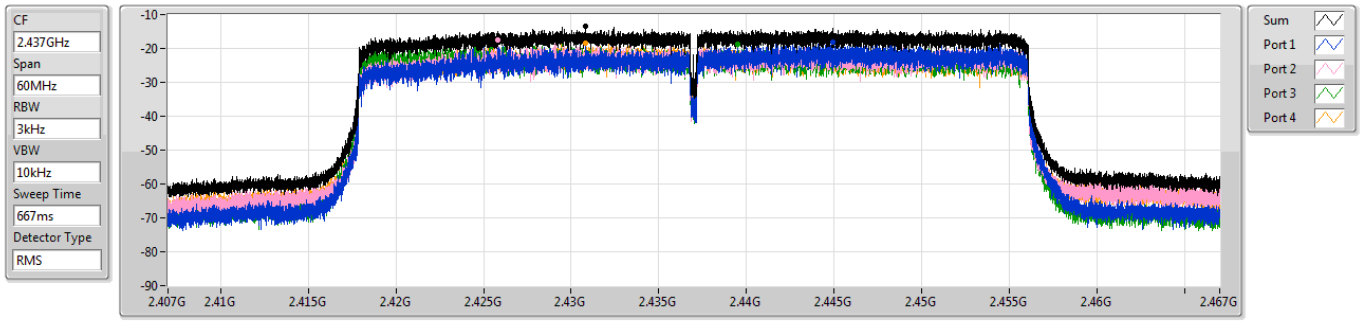
2422MHz



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	-20.26	-19.44	-20.12	-18.36

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX **PSD**

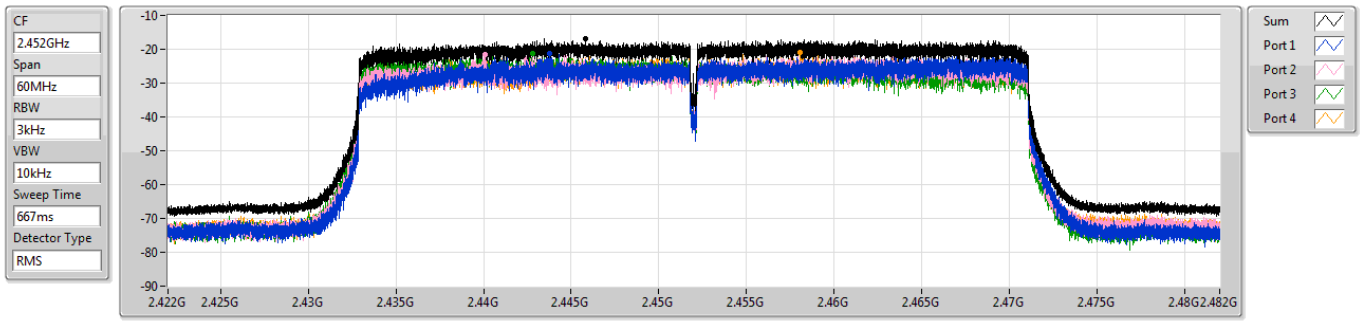
2437MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.59	-13.59	-18.03	-17.55	-18.64	-18.43

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX **PSD**

2452MHz



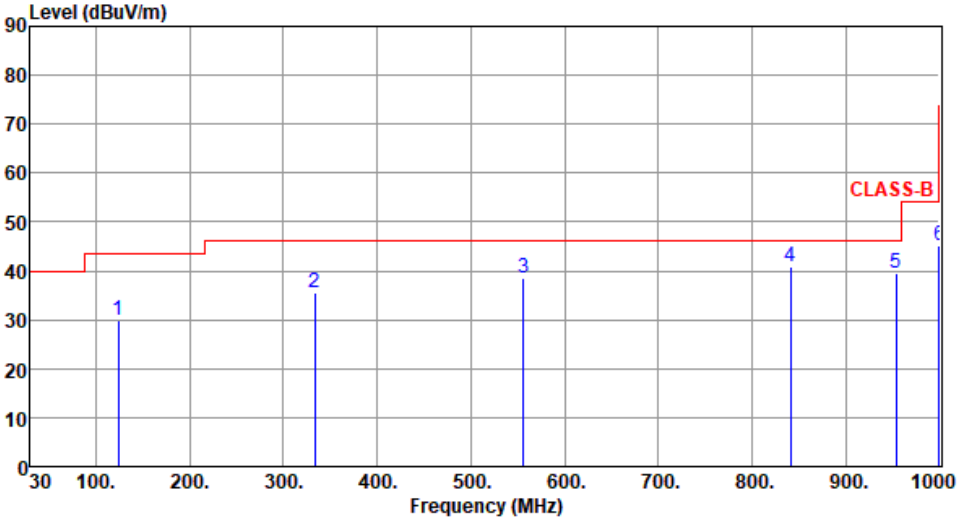
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-16.92	-16.92	-21.40	-21.46	-21.18	-21.05

Non-beamforming mode

Unwanted Emissions (Below 1GHz)

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

Test By :Sean Yu Temperature(℃):22 Humidity(%):64

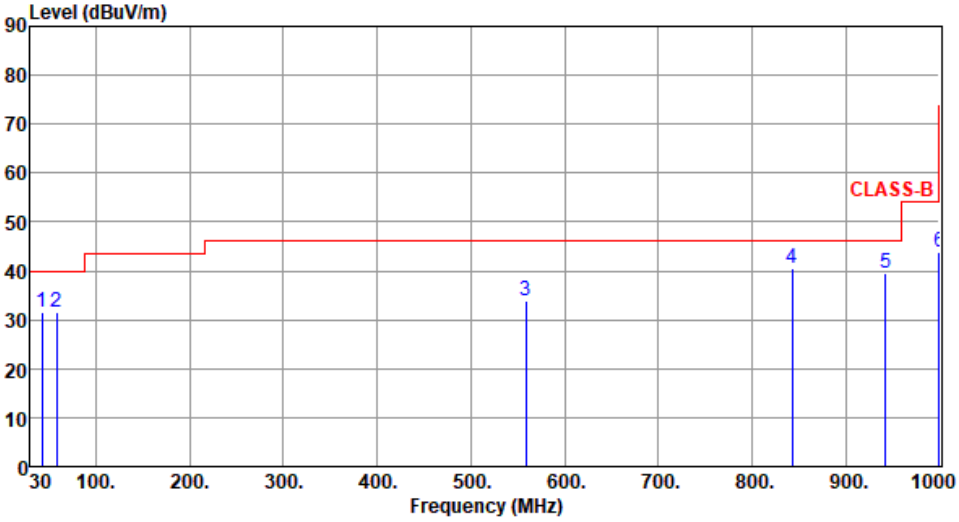


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	124.09	29.94	43.50	-13.56	40.86	-10.92	Peak	---	---
2	333.61	35.44	46.00	-10.56	42.24	-6.80	Peak	---	---
3	555.74	38.62	46.00	-7.38	39.97	-1.35	Peak	---	---
4	840.92	40.86	46.00	-5.14	36.10	4.76	Peak	---	---
5	953.44	39.44	46.00	-6.56	32.79	6.65	Peak	---	---
6	1000.00	45.32	54.00	-8.68	38.56	6.76	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 :Sean Yu Temperature(℃):22 Humidity(%):64



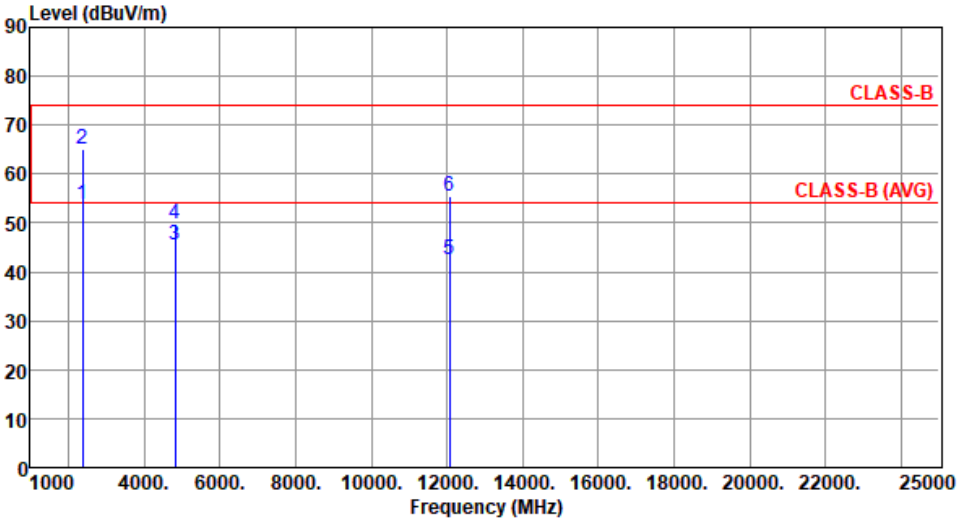
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	42.61	31.46	40.00	-8.54	40.31	-8.85	QP	144	76
2	58.13	31.43	40.00	-8.57	40.46	-9.03	Peak	---	---
3	558.65	33.96	46.00	-12.04	35.18	-1.22	Peak	---	---
4	842.86	40.46	46.00	-5.54	35.65	4.81	Peak	---	---
5	942.77	39.66	46.00	-6.34	33.26	6.40	Peak	---	---
6	1000.00	43.76	54.00	-10.24	37.00	6.76	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 :Sean Yu Temperature(℃):23 Humidity(%):62

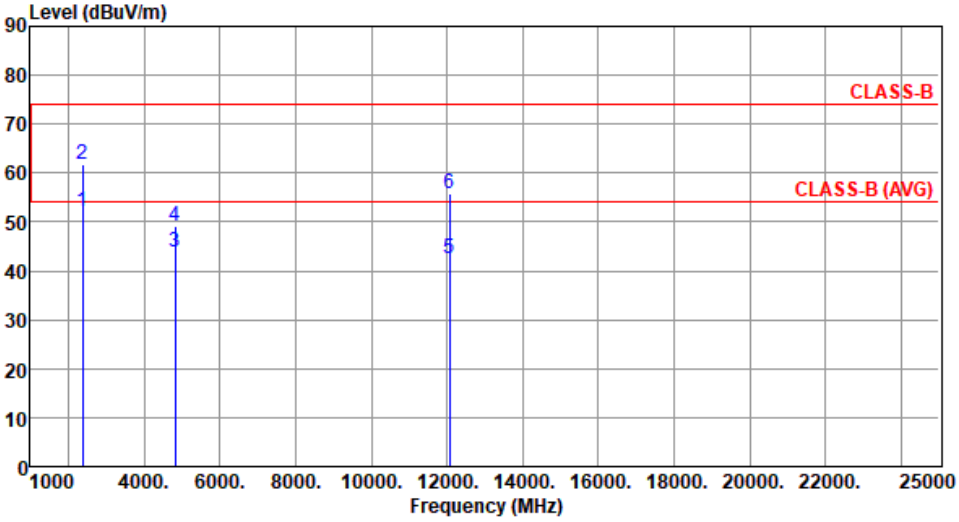


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	53.77	54.00	-0.23	57.56	-3.79	Average	148	101
2	2390.00	65.05	74.00	-8.95	68.84	-3.79	Peak	148	101
3	4824.00	45.59	54.00	-8.41	45.47	0.12	Average	198	55
4	4824.00	49.74	74.00	-24.26	49.62	0.12	Peak	198	55
5	12060.00	42.38	54.00	-11.62	34.58	7.80	Average	100	126
6	12060.00	55.46	74.00	-18.54	47.66	7.80	Peak	100	126

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 :Sean Yu Temperature(℃):23 Humidity(%):62

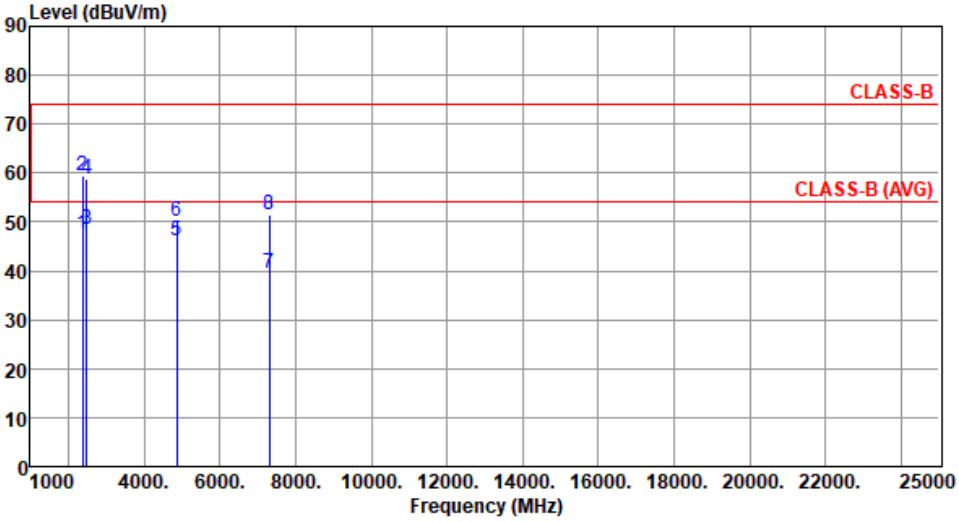


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	52.03	54.00	-1.97	55.82	-3.79	Average	223	78
2	2390.00	61.82	74.00	-12.18	65.61	-3.79	Peak	223	78
3	4824.00	43.90	54.00	-10.10	43.78	0.12	Average	321	110
4	4824.00	49.24	74.00	-24.76	49.12	0.12	Peak	321	110
5	12060.00	42.42	54.00	-11.58	34.62	7.80	Average	100	178
6	12060.00	55.63	74.00	-18.37	47.83	7.80	Peak	100	178

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 :Sean Yu Temperature(℃):23 Humidity(%):62

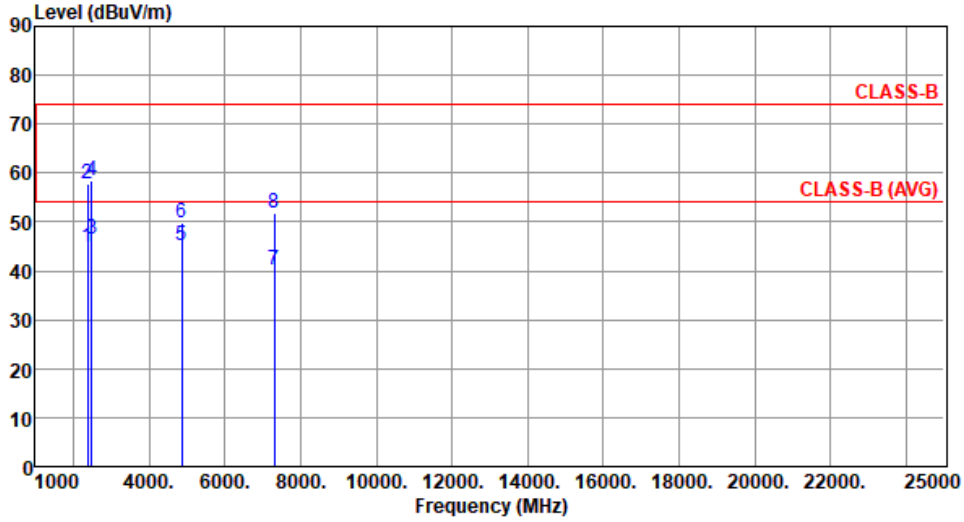


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	47.37	54.00	-6.63	51.16	-3.79	Average	149	102
2	2390.00	59.39	74.00	-14.61	63.18	-3.79	Peak	149	102
3	2483.50	48.60	54.00	-5.40	52.69	-4.09	Average	149	102
4	2483.50	58.86	74.00	-15.14	62.95	-4.09	Peak	149	102
5	4874.00	46.26	54.00	-7.74	46.14	0.12	Average	195	56
6	4874.00	50.24	74.00	-23.76	50.12	0.12	Peak	195	56
7	7311.00	39.51	54.00	-14.49	33.57	5.94	Average	100	4
8	7311.00	51.49	74.00	-22.51	45.55	5.94	Peak	100	4

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 :Sean Yu Temperature(℃):23 Humidity(%):62

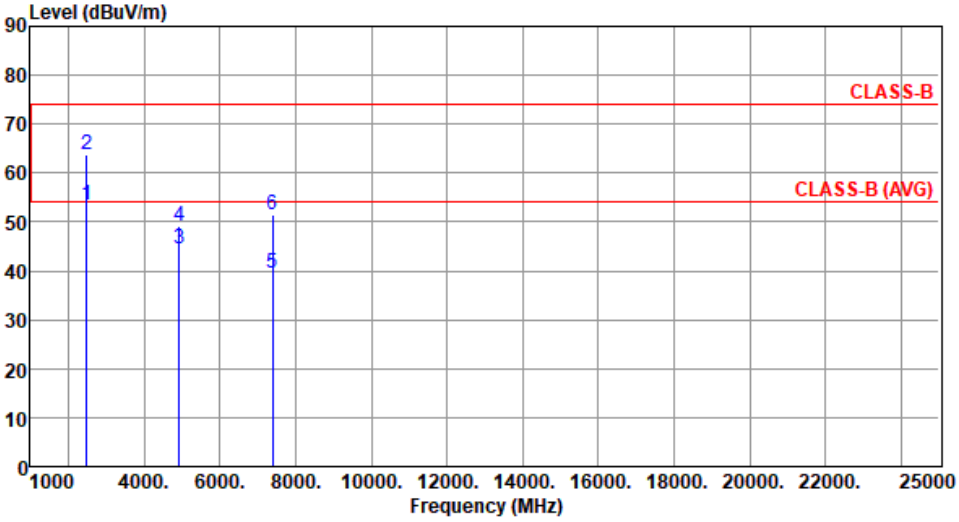


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	44.75	54.00	-9.25	48.54	-3.79	Average	232	81
2	2390.00	57.95	74.00	-16.05	61.74	-3.79	Peak	232	81
3	2483.50	46.41	54.00	-7.59	50.50	-4.09	Average	232	81
4	2483.50	58.30	74.00	-15.70	62.39	-4.09	Peak	232	81
5	4874.00	45.14	54.00	-8.86	45.02	0.12	Average	320	106
6	4874.00	49.93	74.00	-24.07	49.81	0.12	Peak	320	106
7	7311.00	40.06	54.00	-13.94	34.12	5.94	Average	100	98
8	7311.00	51.91	74.00	-22.09	45.97	5.94	Peak	100	98

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 :Sean Yu Temperature(℃):23 Humidity(%):62

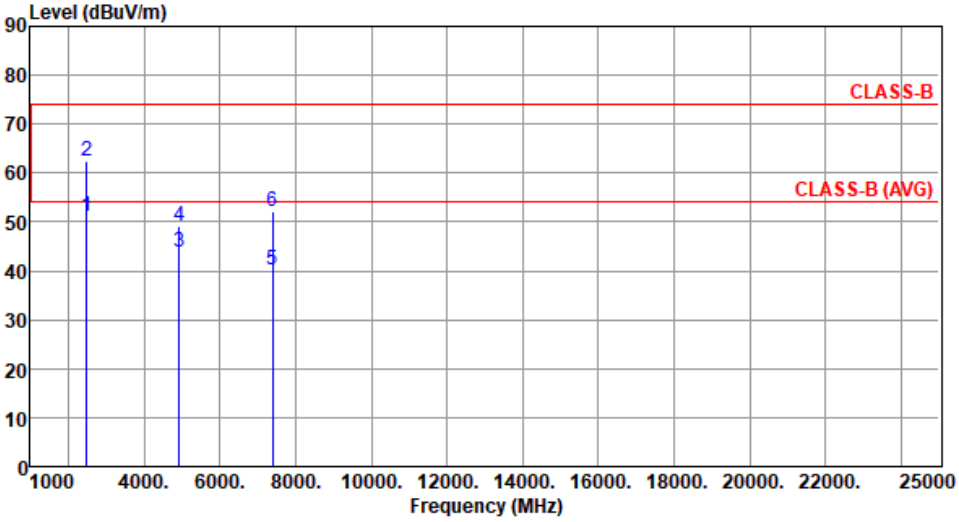


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	53.54	54.00	-0.46	57.63	-4.09	Average	149	107
2	2483.50	63.86	74.00	-10.14	67.95	-4.09	Peak	149	107
3	4924.00	44.64	54.00	-9.36	44.56	0.08	Average	193	55
4	4924.00	49.11	74.00	-24.89	49.03	0.08	Peak	193	55
5	7386.00	39.51	54.00	-14.49	33.62	5.89	Average	100	113
6	7386.00	51.47	74.00	-22.53	45.58	5.89	Peak	100	113

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 :Sean Yu Temperature(℃):23 Humidity(%):62



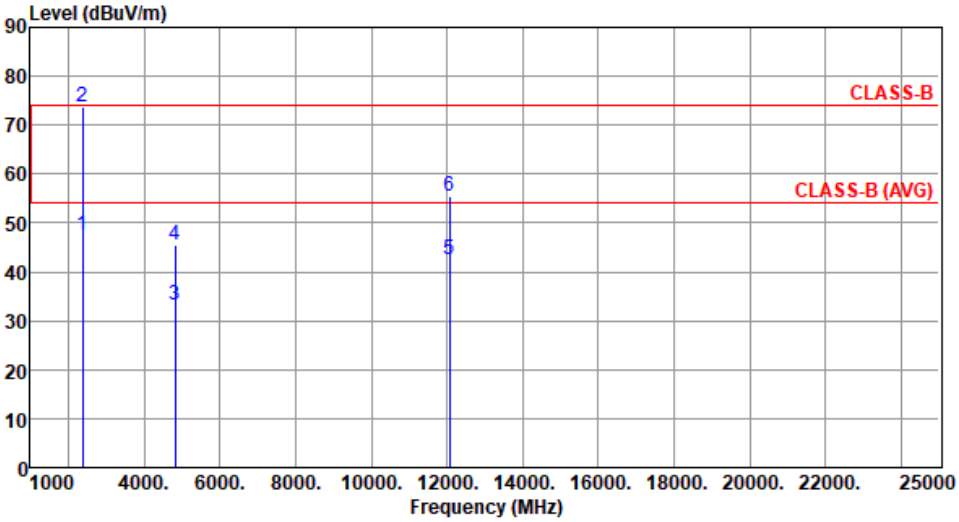
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	51.05	54.00	-2.95	55.14	-4.09	Average	214	81
2	2483.50	62.27	74.00	-11.73	66.36	-4.09	Peak	214	81
3	4924.00	43.94	54.00	-10.06	43.86	0.08	Average	331	108
4	4924.00	49.01	74.00	-24.99	48.93	0.08	Peak	331	108
5	7386.00	40.13	54.00	-13.87	34.24	5.89	Average	100	111
6	7386.00	52.01	74.00	-21.99	46.12	5.89	Peak	100	111

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 :Sean Yu Temperature(℃):23 Humidity(%):62

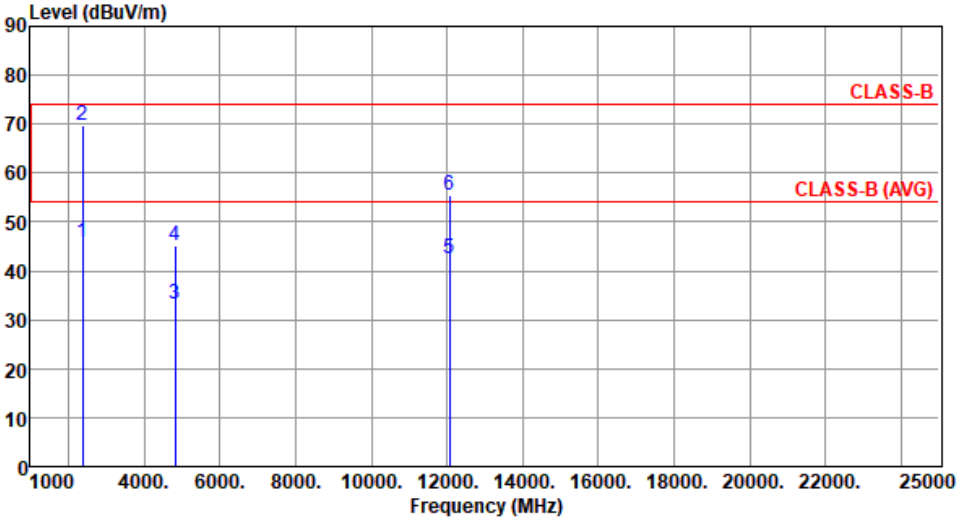


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	47.33	54.00	-6.67	51.12	-3.79	Average	198	103
2	2390.00	73.86	74.00	-0.14	77.65	-3.79	Peak	198	103
3	4824.00	33.27	54.00	-20.73	33.15	0.12	Average	100	227
4	4824.00	45.39	74.00	-28.61	45.27	0.12	Peak	100	227
5	12060.00	42.48	54.00	-11.52	34.68	7.80	Average	100	117
6	12060.00	55.42	74.00	-18.58	47.62	7.80	Peak	100	117

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 :Sean Yu Temperature(℃):23 Humidity(%):62

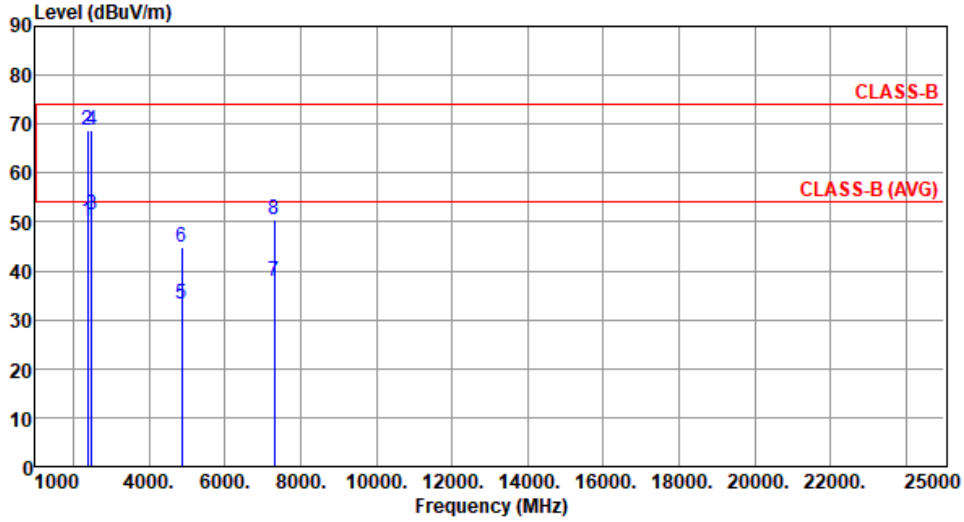


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	45.88	54.00	-8.12	49.67	-3.79	Average	227	109
2	2390.00	69.87	74.00	-4.13	73.66	-3.79	Peak	227	109
3	4824.00	33.27	54.00	-20.73	33.15	0.12	Average	100	224
4	4824.00	45.24	74.00	-28.76	45.12	0.12	Peak	100	224
5	12060.00	42.46	54.00	-11.54	34.66	7.80	Average	100	128
6	12060.00	55.39	74.00	-18.61	47.59	7.80	Peak	100	128

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 :Sean Yu Temperature(℃):23 Humidity(%):62

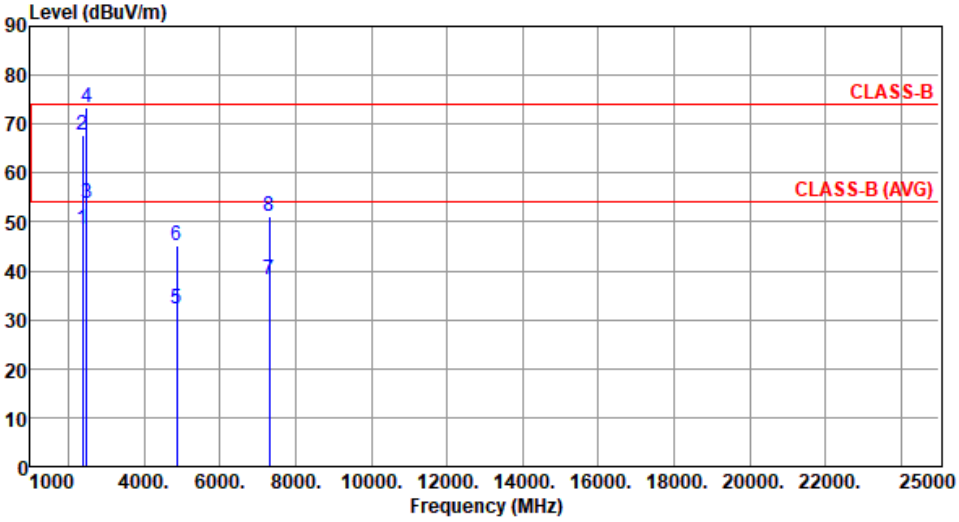


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	50.26	54.00	-3.74	54.05	-3.79	Average	191	102
2	2390.00	68.78	74.00	-5.22	72.57	-3.79	Peak	191	102
3	2483.50	51.53	54.00	-2.47	55.62	-4.09	Average	191	102
4	2483.50	68.84	74.00	-5.16	72.93	-4.09	Peak	191	102
5	4874.00	33.18	54.00	-20.82	33.06	0.12	Average	100	248
6	4874.00	44.78	74.00	-29.22	44.66	0.12	Peak	100	248
7	7311.00	38.00	54.00	-16.00	32.06	5.94	Average	100	133
8	7311.00	50.39	74.00	-23.61	44.45	5.94	Peak	100	133

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 :Sean Yu Temperature(℃):23 Humidity(%):62

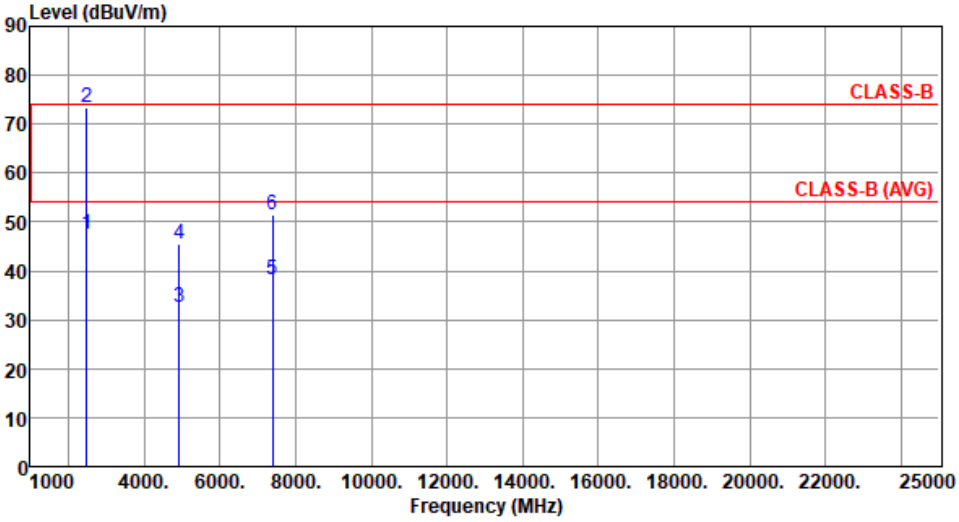


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	48.44	54.00	-5.56	52.23	-3.79	Average	243	109
2	2390.00	67.65	74.00	-6.35	71.44	-3.79	Peak	243	109
3	2483.50	53.74	54.00	-0.26	57.83	-4.09	Average	243	109
4	2483.50	73.38	74.00	-0.62	77.47	-4.09	Peak	243	109
5	4874.00	32.24	54.00	-21.76	32.12	0.12	Average	100	23
6	4874.00	45.16	74.00	-28.84	45.04	0.12	Peak	100	23
7	7311.00	38.21	54.00	-15.79	32.27	5.94	Average	100	158
8	7311.00	51.09	74.00	-22.91	45.15	5.94	Peak	100	158

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 :Sean Yu Temperature(℃):23 Humidity(%):62

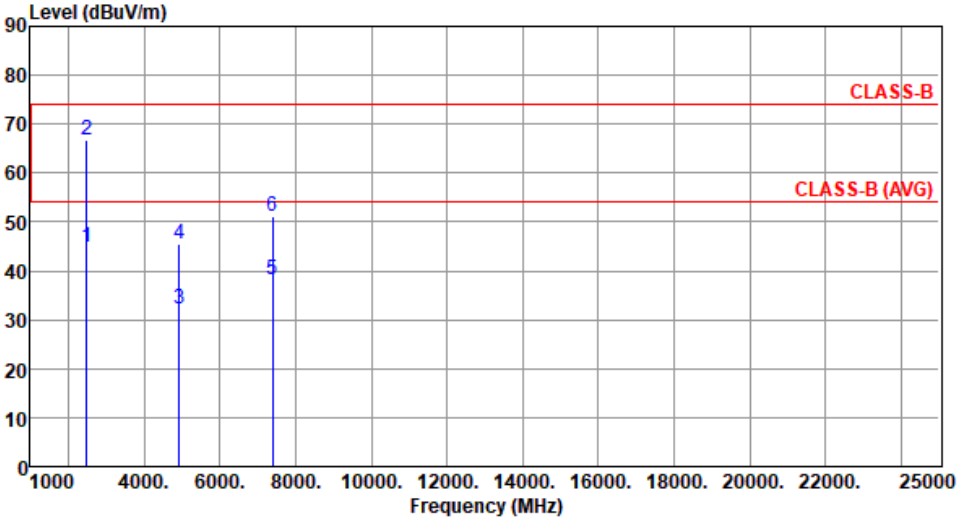


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	47.60	54.00	-6.40	51.69	-4.09	Average	185	100
2	2483.50	73.52	74.00	-0.48	77.61	-4.09	Peak	185	100
3	4924.00	32.52	54.00	-21.48	32.44	0.08	Average	100	113
4	4924.00	45.34	74.00	-28.66	45.26	0.08	Peak	100	113
5	7386.00	38.20	54.00	-15.80	32.31	5.89	Average	100	105
6	7386.00	51.36	74.00	-22.64	45.47	5.89	Peak	100	105

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 :Sean Yu Temperature(℃):23 Humidity(%):62



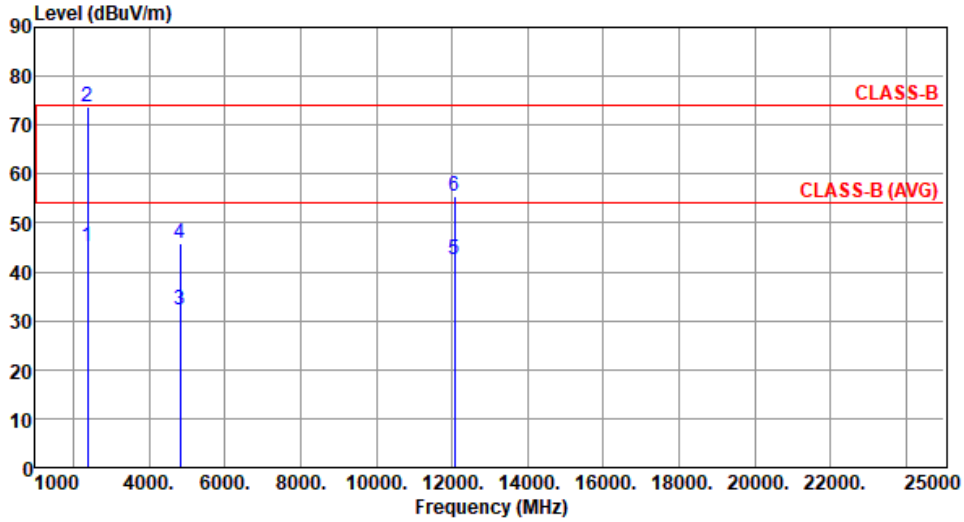
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	44.80	54.00	-9.20	48.89	-4.09	Average	256	112
2	2483.50	66.91	74.00	-7.09	71.00	-4.09	Peak	256	112
3	4924.00	32.32	54.00	-21.68	32.24	0.08	Average	100	117
4	4924.00	45.40	74.00	-28.60	45.32	0.08	Peak	100	117
5	7386.00	38.14	54.00	-15.86	32.25	5.89	Average	100	258
6	7386.00	51.26	74.00	-22.74	45.37	5.89	Peak	100	258

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-OFDMA

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

Test By :Sean Yu Temperature(℃):23 Humidity(%):62

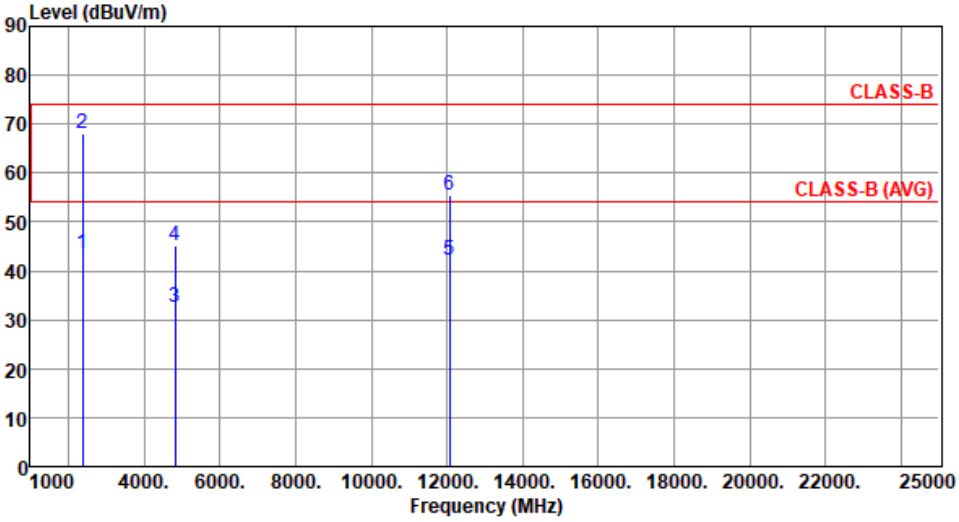


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	45.09	54.00	-8.91	48.88	-3.79	Average	200	71
2	2390.00	73.65	74.00	-0.35	77.44	-3.79	Peak	200	71
3	4824.00	32.27	54.00	-21.73	32.15	0.12	Average	100	119
4	4824.00	45.74	74.00	-28.26	45.62	0.12	Peak	100	119
5	12060.00	42.41	54.00	-11.59	34.61	7.80	Average	100	245
6	12060.00	55.39	74.00	-18.61	47.59	7.80	Peak	100	245

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-OFDMA	**Test Freq. (MHz)**	2412
Polarization	Vertical		

Test By :Sean Yu Temperature(℃):23 Humidity(%):62

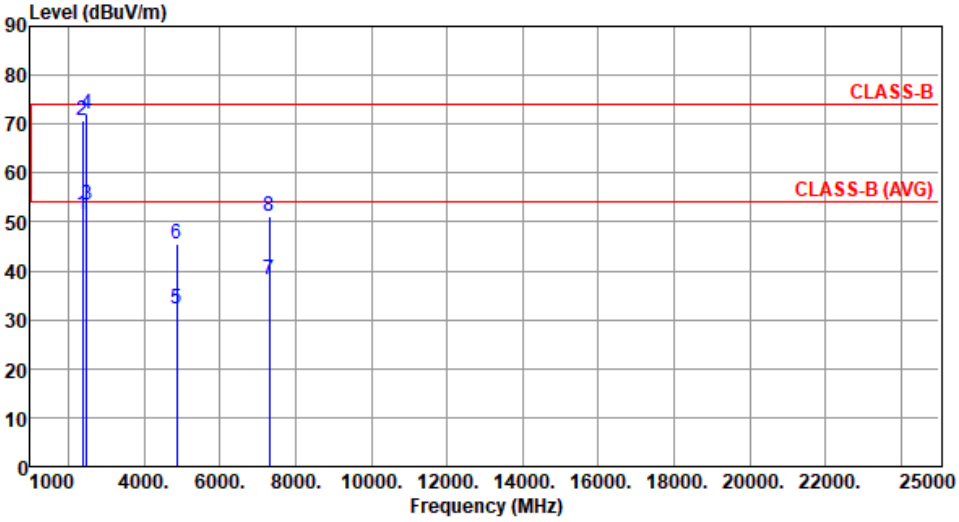


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	43.58	54.00	-10.42	47.37	-3.79	Average	223	112
2	2390.00	68.16	74.00	-5.84	71.95	-3.79	Peak	223	112
3	4824.00	32.41	54.00	-21.59	32.29	0.12	Average	100	105
4	4824.00	45.33	74.00	-28.67	45.21	0.12	Peak	100	105
5	12060.00	42.27	54.00	-11.73	34.47	7.80	Average	100	222
6	12060.00	55.43	74.00	-18.57	47.63	7.80	Peak	100	222

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-OFDMA	**Test Freq. (MHz)**	2437
Polarization	Horizontal		

Test By :Sean Yu Temperature(℃):23 Humidity(%):62

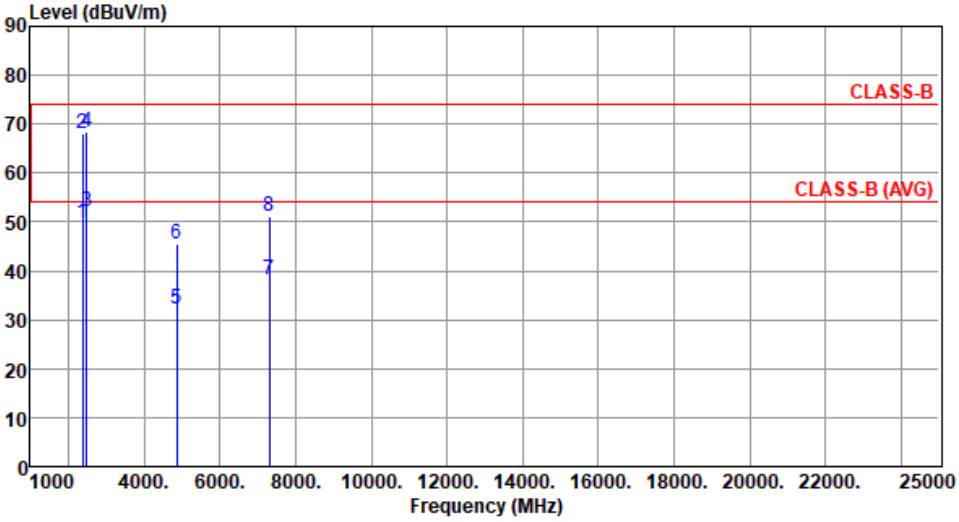


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	51.63	54.00	-2.37	55.42	-3.79	Average	187	107
2	2390.00	70.71	74.00	-3.29	74.50	-3.79	Peak	187	107
3	2483.50	53.56	54.00	-0.44	57.65	-4.09	Average	187	107
4	2483.50	71.95	74.00	-2.05	76.04	-4.09	Peak	187	107
5	4874.00	32.29	54.00	-21.71	32.17	0.12	Average	100	125
6	4874.00	45.40	74.00	-28.60	45.28	0.12	Peak	100	125
7	7311.00	38.18	54.00	-15.82	32.24	5.94	Average	100	107
8	7311.00	51.20	74.00	-22.80	45.26	5.94	Peak	100	107

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-OFDMA	**Test Freq. (MHz)**	2437
Polarization	Vertical		

Test By :Sean Yu Temperature(℃):23 Humidity(%):62

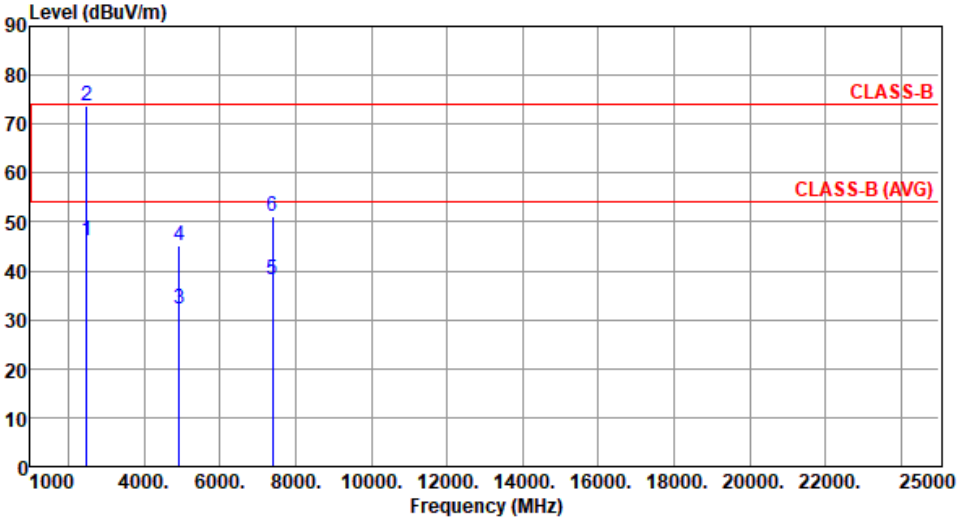


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	49.93	54.00	-4.07	53.72	-3.79	Average	234	107
2	2390.00	68.15	74.00	-5.85	71.94	-3.79	Peak	234	107
3	2483.50	52.27	54.00	-1.73	56.36	-4.09	Average	234	107
4	2483.50	68.54	74.00	-5.46	72.63	-4.09	Peak	234	107
5	4874.00	32.34	54.00	-21.66	32.22	0.12	Average	100	178
6	4874.00	45.39	74.00	-28.61	45.27	0.12	Peak	100	178
7	7311.00	38.25	54.00	-15.75	32.31	5.94	Average	100	245
8	7311.00	51.13	74.00	-22.87	45.19	5.94	Peak	100	245

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-OFDMA	**Test Freq. (MHz)**	2462
Polarization	Horizontal		

Test By :Sean Yu Temperature(℃):23 Humidity(%):62

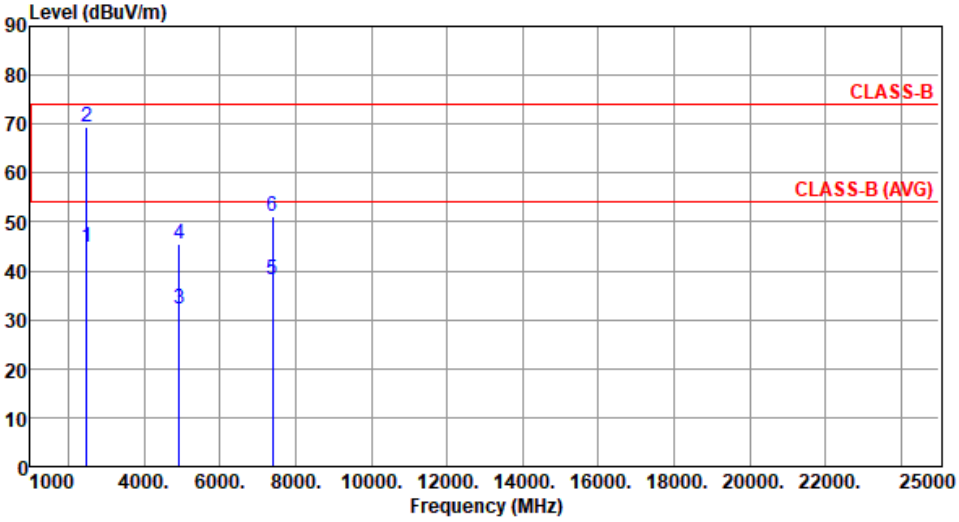


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	46.08	54.00	-7.92	50.17	-4.09	Average	209	85
2	2483.50	73.64	74.00	-0.36	77.73	-4.09	Peak	209	85
3	4924.00	32.27	54.00	-21.73	32.19	0.08	Average	100	118
4	4924.00	45.30	74.00	-28.70	45.22	0.08	Peak	100	118
5	7386.00	38.07	54.00	-15.93	32.18	5.89	Average	100	145
6	7386.00	51.23	74.00	-22.77	45.34	5.89	Peak	100	145

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-OFDMA	**Test Freq. (MHz)**	2462
Polarization	Vertical		

Test By :Sean Yu Temperature(℃):23 Humidity(%):62



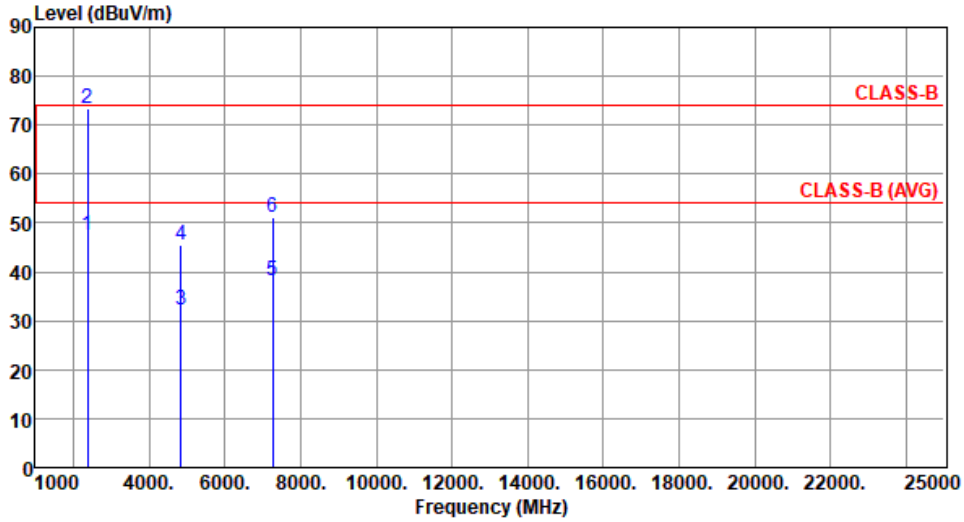
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	44.75	54.00	-9.25	48.84	-4.09	Average	248	109
2	2483.50	69.35	74.00	-4.65	73.44	-4.09	Peak	248	109
3	4924.00	32.19	54.00	-21.81	32.11	0.08	Average	100	105
4	4924.00	45.35	74.00	-28.65	45.27	0.08	Peak	100	105
5	7386.00	38.03	54.00	-15.97	32.14	5.89	Average	100	246
6	7386.00	51.05	74.00	-22.95	45.16	5.89	Peak	100	246

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-OFDMA

Modulation	ax HE40-OFDMA	**Test Freq. (MHz)**	2422
Polarization	Horizontal		

Test By :Brad Wu Temperature(℃):24 Humidity(%):62

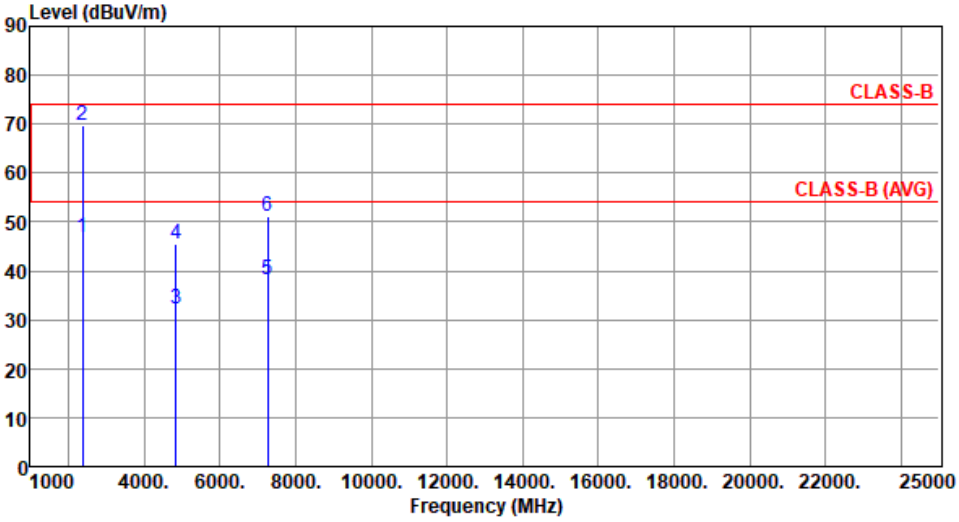


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	47.45	54.00	-6.55	51.24	-3.79	Average	194	103
2	2390.00	73.55	74.00	-0.45	77.34	-3.79	Peak	194	103
3	4844.00	32.30	54.00	-21.70	32.10	0.20	Average	100	173
4	4844.00	45.45	74.00	-28.55	45.25	0.20	Peak	100	173
5	7266.00	38.16	54.00	-15.84	32.18	5.98	Average	100	148
6	7266.00	51.22	74.00	-22.78	45.24	5.98	Peak	100	148

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-OFDMA	**Test Freq. (MHz)**	2422
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):24 Humidity(%):62

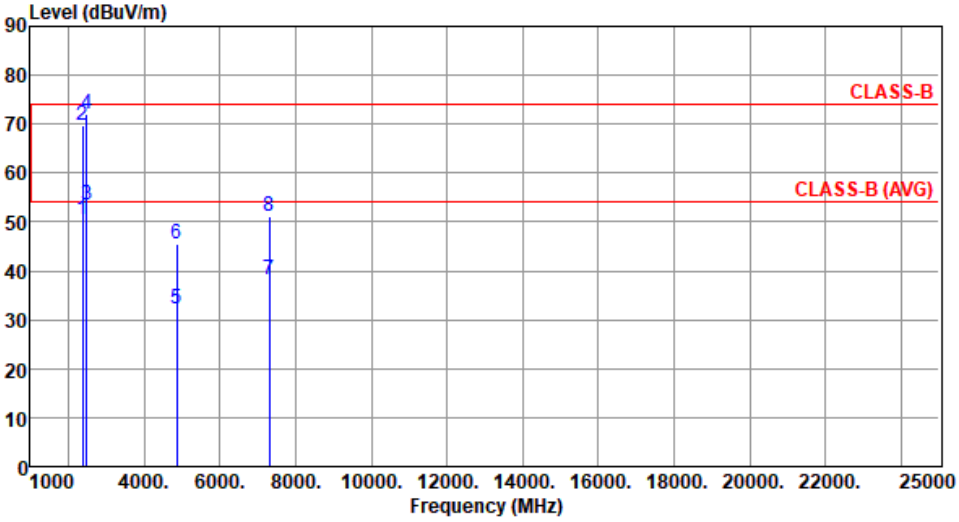


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	46.93	54.00	-7.07	50.72	-3.79	Average	204	107
2	2390.00	69.86	74.00	-4.14	73.65	-3.79	Peak	204	107
3	4844.00	32.35	54.00	-21.65	32.15	0.20	Average	100	251
4	4844.00	45.37	74.00	-28.63	45.17	0.20	Peak	100	251
5	7266.00	38.26	54.00	-15.74	32.28	5.98	Average	100	107
6	7266.00	51.25	74.00	-22.75	45.27	5.98	Peak	100	107

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-OFDMA	**Test Freq. (MHz)**	2437
Polarization	Horizontal		

Test By :Brad Wu Temperature(℃):24 Humidity(%):62

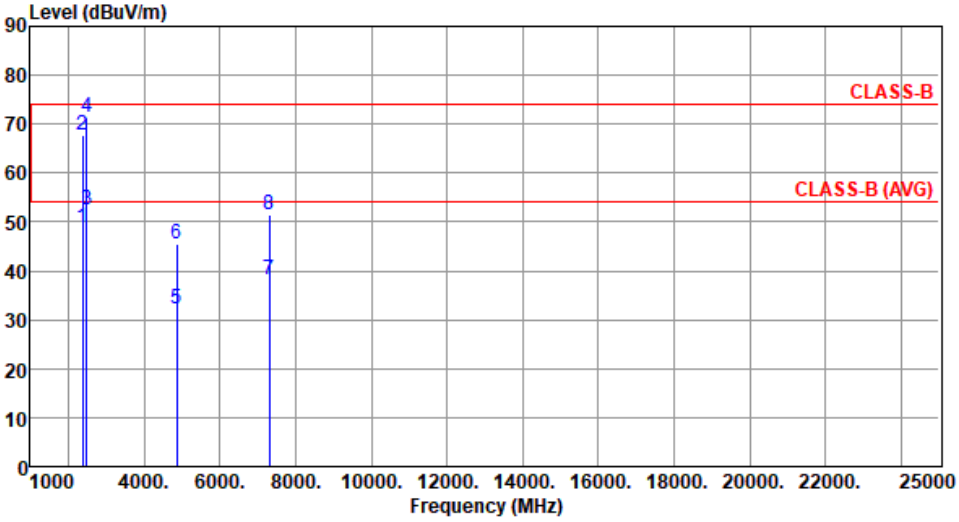


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	50.57	54.00	-3.43	54.36	-3.79	Average	211	103
2	2390.00	69.66	74.00	-4.34	73.45	-3.79	Peak	211	103
3	2483.50	53.54	54.00	-0.46	57.63	-4.09	Average	211	103
4	2483.50	72.03	74.00	-1.97	76.12	-4.09	Peak	211	103
5	4874.00	32.27	54.00	-21.73	32.15	0.12	Average	100	113
6	4874.00	45.40	74.00	-28.60	45.28	0.12	Peak	100	113
7	7311.00	38.10	54.00	-15.90	32.16	5.94	Average	100	15
8	7311.00	51.15	74.00	-22.85	45.21	5.94	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).

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

Test By :Brad Wu Temperature(℃):24 Humidity(%):62

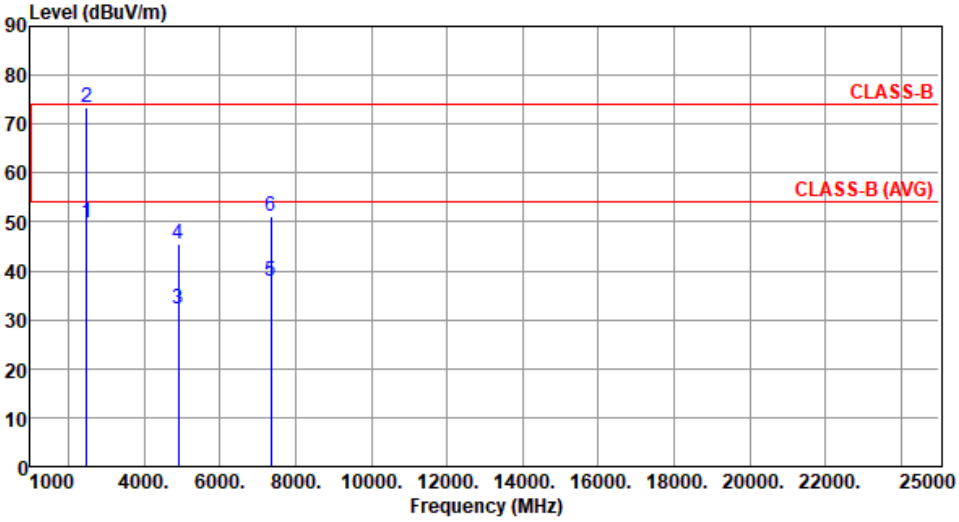


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	48.74	54.00	-5.26	52.53	-3.79	Average	209	110
2	2390.00	67.82	74.00	-6.18	71.61	-3.79	Peak	209	110
3	2483.50	52.50	54.00	-1.50	56.59	-4.09	Average	209	110
4	2483.50	71.27	74.00	-2.73	75.36	-4.09	Peak	209	110
5	4874.00	32.37	54.00	-21.63	32.25	0.12	Average	100	108
6	4874.00	45.39	74.00	-28.61	45.27	0.12	Peak	100	108
7	7311.00	38.25	54.00	-15.75	32.31	5.94	Average	100	223
8	7311.00	51.35	74.00	-22.65	45.41	5.94	Peak	100	223

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-OFDMA	**Test Freq. (MHz)**	2452
Polarization	Horizontal		

Test By :Brad Wu Temperature(℃):24 Humidity(%):62

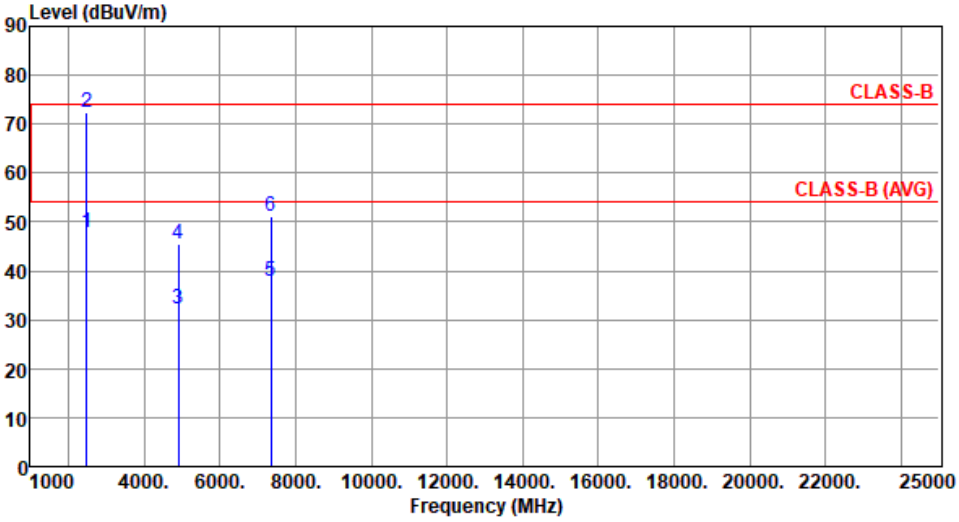


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2484.00	49.76	54.00	-4.24	53.85	-4.09	Average	202	78
2	2484.00	73.56	74.00	-0.44	77.65	-4.09	Peak	202	78
3	4904.00	32.20	54.00	-21.80	32.17	0.03	Average	100	176
4	4904.00	45.36	74.00	-28.64	45.33	0.03	Peak	100	176
5	7356.00	38.00	54.00	-16.00	32.15	5.85	Average	100	254
6	7356.00	51.21	74.00	-22.79	45.36	5.85	Peak	100	254

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-OFDMA	**Test Freq. (MHz)**	2452
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):24 Humidity(%):62



	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	2484.00	47.87	54.00	-6.13	51.96	-4.09	Average	243	111
2	2484.00	72.33	74.00	-1.67	76.42	-4.09	Peak	243	111
3	4904.00	32.20	54.00	-21.80	32.17	0.03	Average	100	178
4	4904.00	45.46	74.00	-28.54	45.43	0.03	Peak	100	178
5	7356.00	37.96	54.00	-16.04	32.11	5.85	Average	100	258
6	7356.00	51.16	74.00	-22.84	45.31	5.85	Peak	100	258

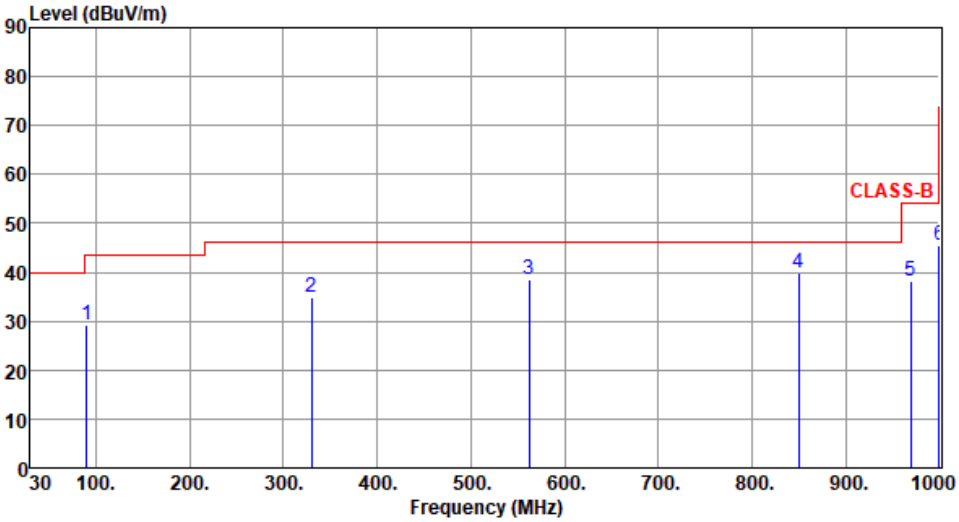
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Beamforming mode

Unwanted Emissions (Below 1GHz)

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

Test By :Sean Yu Temperature(℃):22 Humidity(%):64

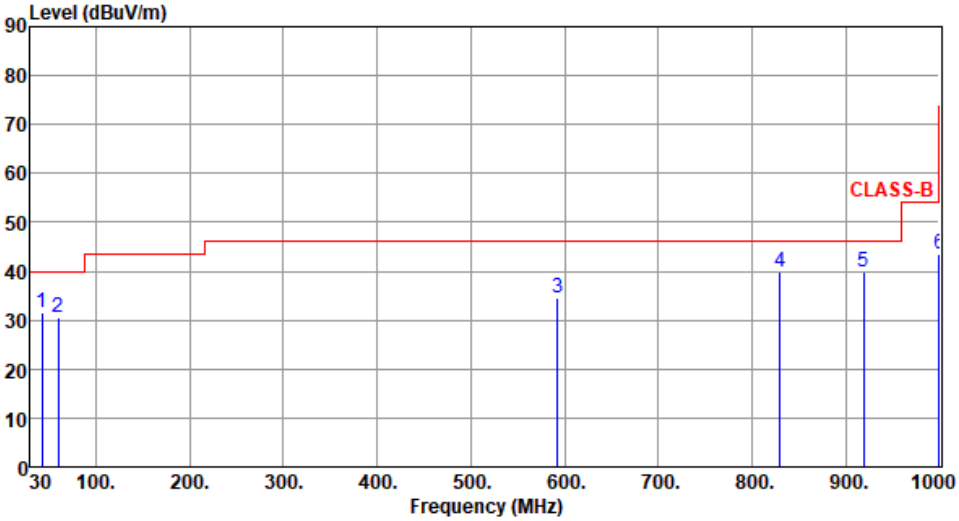


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	90.14	29.30	43.50	-14.20	43.87	-14.57	Peak	---	---
2	329.73	34.82	46.00	-11.18	41.72	-6.90	Peak	---	---
3	562.53	38.56	46.00	-7.44	39.65	-1.09	Peak	---	---
4	849.65	39.83	46.00	-6.17	34.93	4.90	Peak	---	---
5	968.96	38.16	54.00	-15.84	31.34	6.82	Peak	---	---
6	1000.00	45.41	54.00	-8.59	38.65	6.76	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	ax HE20-OFDMA	**Test Freq. (MHz)**	2437
Polarization	Vertical		

Test By :Sean Yu Temperature(℃):22 Humidity(%):64



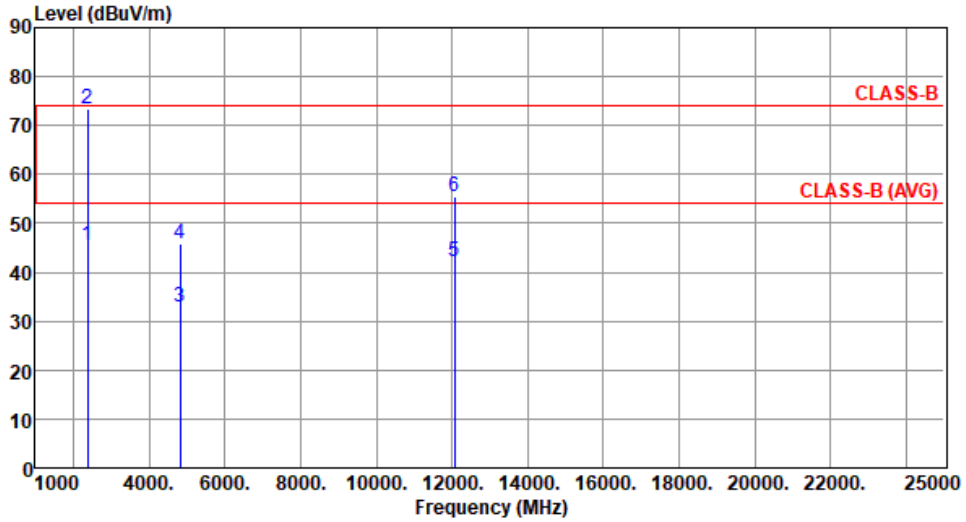
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	42.61	31.55	40.00	-8.45	40.40	-8.85	QP	142	78
2	60.07	30.39	40.00	-9.61	39.53	-9.14	Peak	---	---
3	592.60	34.45	46.00	-11.55	34.61	-0.16	Peak	---	---
4	830.25	39.79	46.00	-6.21	35.43	4.36	Peak	---	---
5	919.49	39.84	46.00	-6.16	33.84	6.00	Peak	---	---
6	1000.00	43.53	54.00	-10.47	36.77	6.76	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 Emissions (Above 1GHz) for ax HE20-OFDMA

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

Test By :Akun Chung Temperature(℃):25 Humidity(%):66

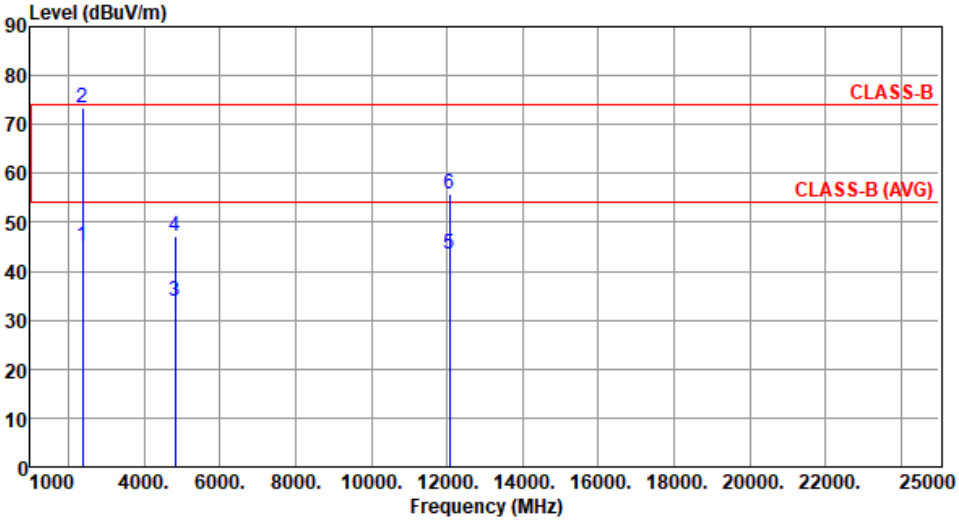


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	45.56	54.00	-8.44	49.35	-3.79	Average	246	189
2	2390.00	73.56	74.00	-0.44	77.35	-3.79	Peak	246	189
3	4824.00	32.86	54.00	-21.14	32.74	0.12	Average	100	115
4	4824.00	45.96	74.00	-28.04	45.84	0.12	Peak	100	115
5	12060.00	42.32	54.00	-11.68	34.52	7.80	Average	100	120
6	12060.00	55.46	74.00	-18.54	47.66	7.80	Peak	100	120

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-OFDMA	**Test Freq. (MHz)**	2412
Polarization	Vertical		

Test By :Akun Chung Temperature(°C):25 Humidity(%):66

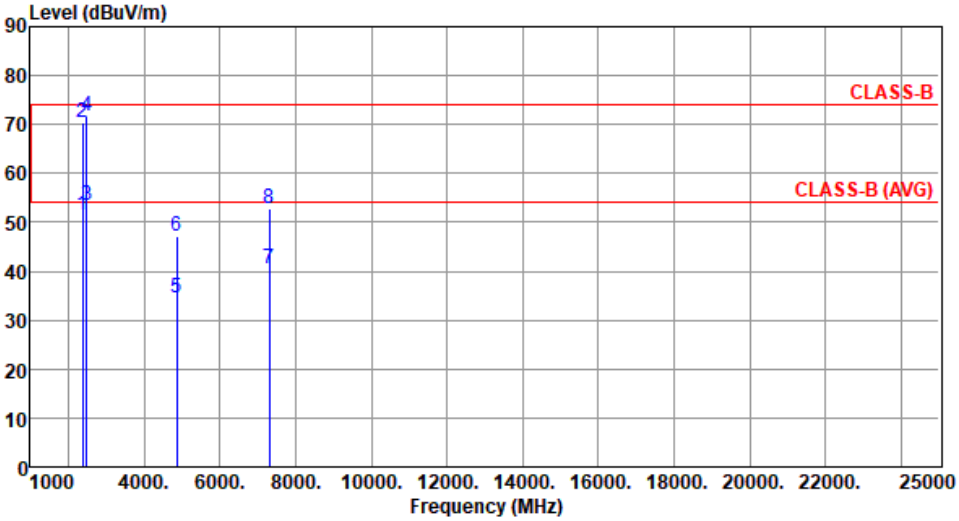


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	45.09	54.00	-8.91	48.88	-3.79	Average	303	82
2	2390.00	73.28	74.00	-0.72	77.07	-3.79	Peak	303	82
3	4824.00	33.96	54.00	-20.04	33.84	0.12	Average	100	95
4	4824.00	47.02	74.00	-26.98	46.90	0.12	Peak	100	95
5	12060.00	43.55	54.00	-10.45	35.75	7.80	Average	100	110
6	12060.00	55.68	74.00	-18.32	47.88	7.80	Peak	100	110

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-OFDMA	**Test Freq. (MHz)**	2437
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):25 Humidity(%):66

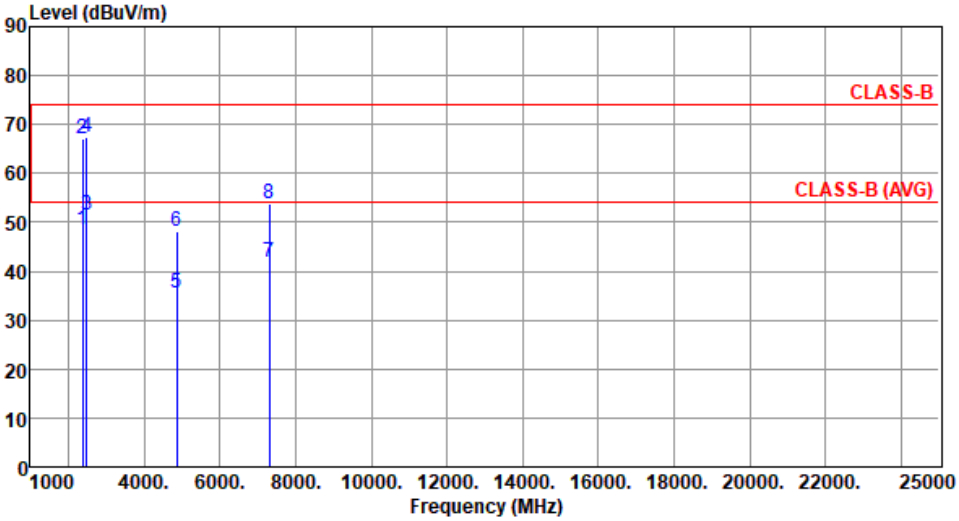


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	51.54	54.00	-2.46	55.33	-3.79	Average	266	99
2	2390.00	70.46	74.00	-3.54	74.25	-3.79	Peak	266	99
3	2483.50	53.52	54.00	-0.48	57.61	-4.09	Average	274	103
4	2483.50	71.66	74.00	-2.34	75.75	-4.09	Peak	274	103
5	4874.00	34.68	54.00	-19.32	34.56	0.12	Average	100	133
6	4874.00	47.08	74.00	-26.92	46.96	0.12	Peak	100	133
7	7311.00	40.41	54.00	-13.59	34.47	5.94	Average	100	112
8	7311.00	52.72	74.00	-21.28	46.78	5.94	Peak	100	112

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-OFDMA	**Test Freq. (MHz)**	2437
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):25 Humidity(%):66

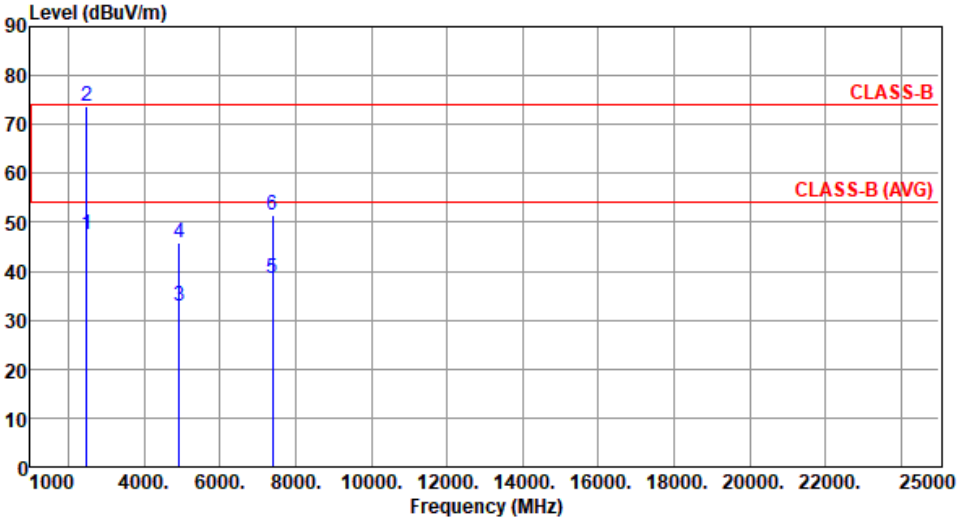


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	48.58	54.00	-5.42	52.37	-3.79	Average	233	109
2	2390.00	67.05	74.00	-6.95	70.84	-3.79	Peak	233	109
3	2483.50	51.50	54.00	-2.50	55.59	-4.09	Average	233	109
4	2483.50	67.45	74.00	-6.55	71.54	-4.09	Peak	233	109
5	4874.00	35.70	54.00	-18.30	35.58	0.12	Average	100	96
6	4874.00	48.01	74.00	-25.99	47.89	0.12	Peak	100	96
7	7311.00	41.82	54.00	-12.18	35.88	5.94	Average	100	101
8	7311.00	53.82	74.00	-20.18	47.88	5.94	Peak	100	101

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-OFDMA	**Test Freq. (MHz)**	2462
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):25 Humidity(%):66

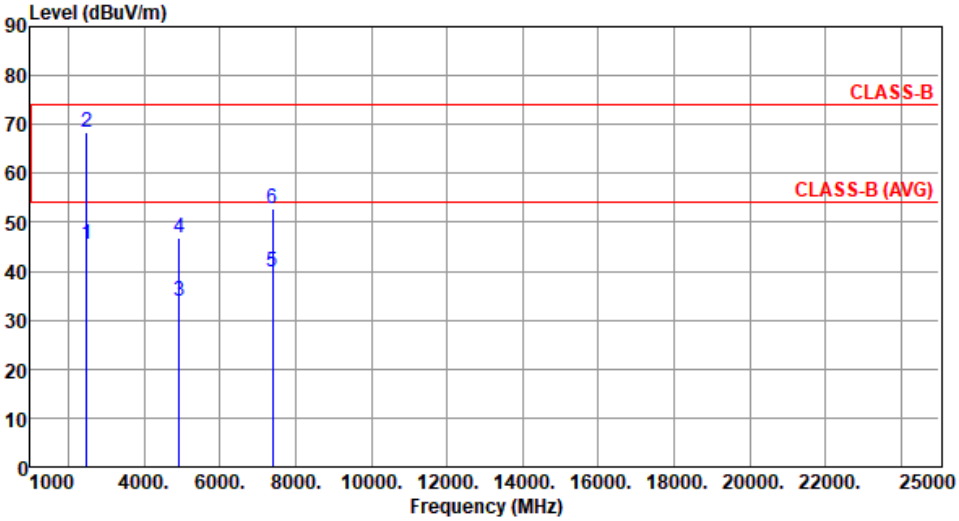


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	47.61	54.00	-6.39	51.70	-4.09	Average	196	336
2	2483.50	73.62	74.00	-0.38	77.71	-4.09	Peak	196	336
3	4924.00	32.79	54.00	-21.21	32.71	0.08	Average	100	123
4	4924.00	45.76	74.00	-28.24	45.68	0.08	Peak	100	123
5	7386.00	38.58	54.00	-15.42	32.69	5.89	Average	100	129
6	7386.00	51.61	74.00	-22.39	45.72	5.89	Peak	100	129

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-OFDMA	**Test Freq. (MHz)**	2462
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):25 Humidity(%):66



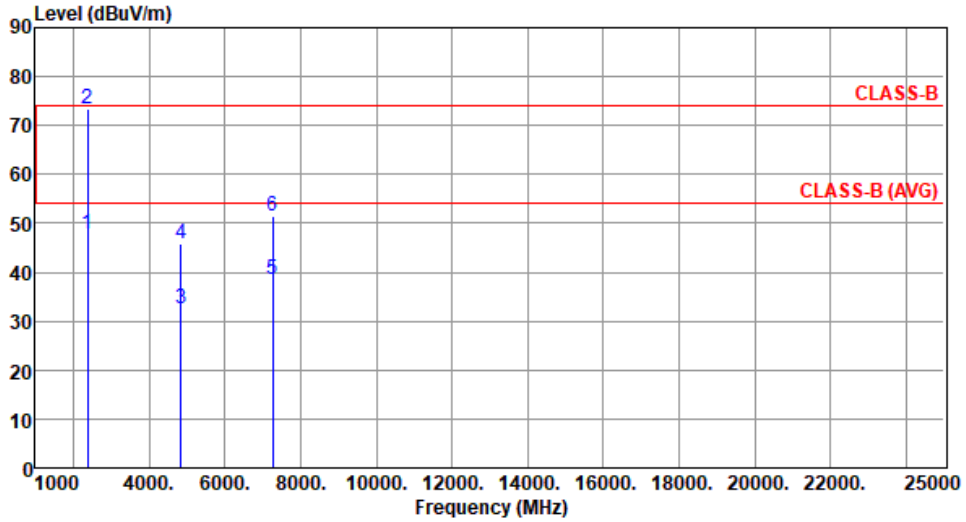
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	45.45	54.00	-8.55	49.54	-4.09	Average	222	101
2	2483.50	68.48	74.00	-5.52	72.57	-4.09	Peak	222	101
3	4924.00	33.83	54.00	-20.17	33.75	0.08	Average	100	94
4	4924.00	46.93	74.00	-27.07	46.85	0.08	Peak	100	94
5	7386.00	39.71	54.00	-14.29	33.82	5.89	Average	100	102
6	7386.00	52.68	74.00	-21.32	46.79	5.89	Peak	100	102

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-OFDMA

Modulation	ax HE40-OFDMA	**Test Freq. (MHz)**	2422
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):25 Humidity(%):66

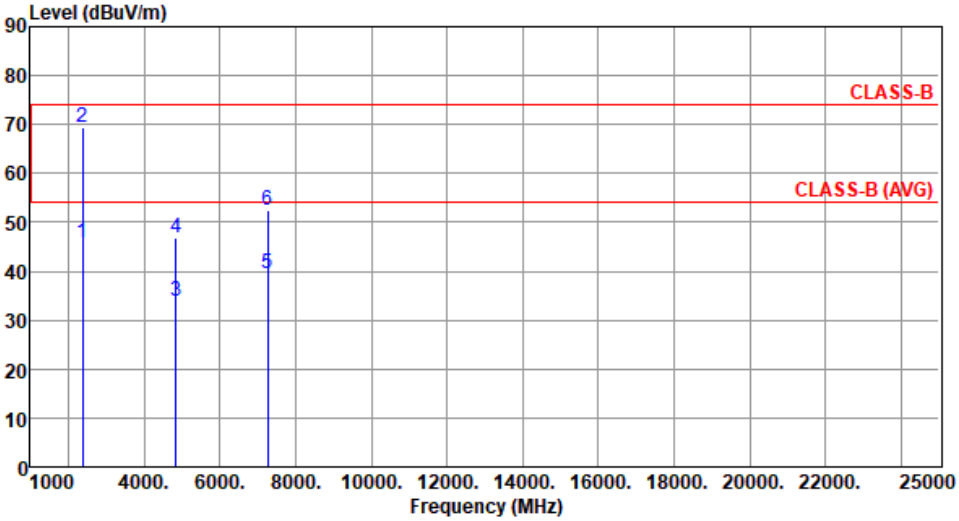


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	47.68	54.00	-6.32	51.47	-3.79	Average	202	343
2	2390.00	73.55	74.00	-0.45	77.34	-3.79	Peak	202	343
3	4844.00	32.64	54.00	-21.36	32.44	0.20	Average	100	117
4	4844.00	45.77	74.00	-28.23	45.57	0.20	Peak	100	117
5	7266.00	38.37	54.00	-15.63	32.39	5.98	Average	100	113
6	7266.00	51.46	74.00	-22.54	45.48	5.98	Peak	100	113

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-OFDMA	**Test Freq. (MHz)**	2422
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):25 Humidity(%):66

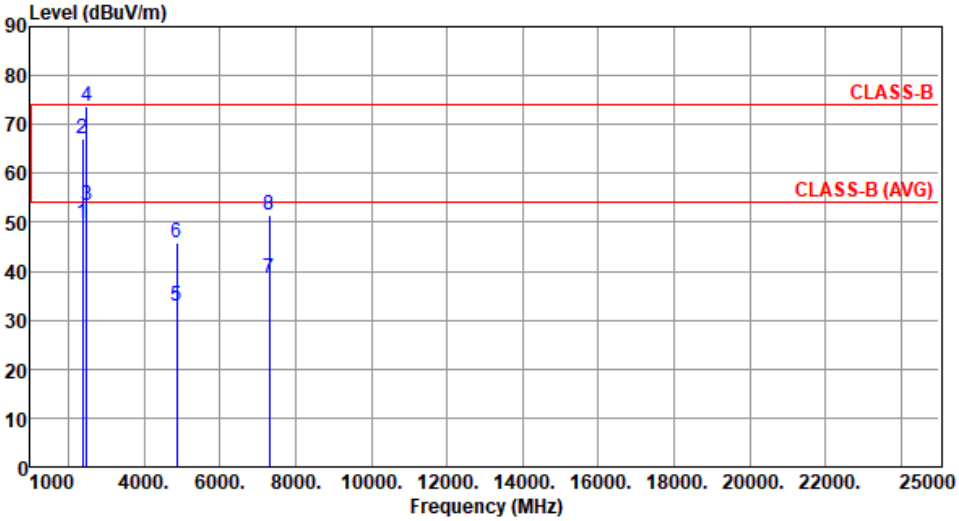


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	45.73	54.00	-8.27	49.52	-3.79	Average	215	112
2	2390.00	69.46	74.00	-4.54	73.25	-3.79	Peak	215	112
3	4844.00	33.74	54.00	-20.26	33.54	0.20	Average	100	100
4	4844.00	46.76	74.00	-27.24	46.56	0.20	Peak	100	100
5	7266.00	39.40	54.00	-14.60	33.42	5.98	Average	100	95
6	7266.00	52.33	74.00	-21.67	46.35	5.98	Peak	100	95

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-OFDMA	**Test Freq. (MHz)**	2437
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):25 Humidity(%):66

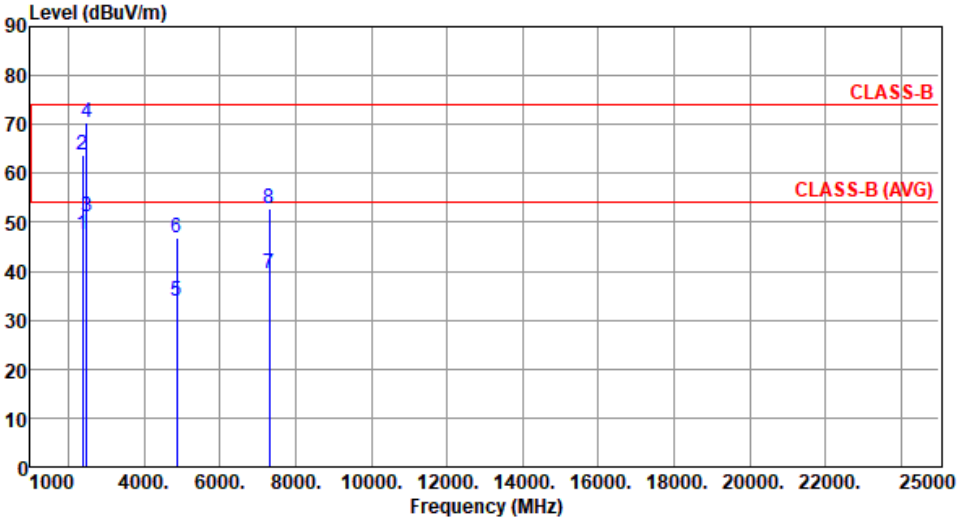


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	49.69	54.00	-4.31	53.48	-3.79	Average	242	338
2	2390.00	67.06	74.00	-6.94	70.85	-3.79	Peak	242	338
3	2483.50	53.56	54.00	-0.44	57.65	-4.09	Average	242	8
4	2483.50	73.86	74.00	-0.14	77.95	-4.09	Peak	242	8
5	4874.00	32.78	54.00	-21.22	32.66	0.12	Average	100	120
6	4874.00	45.69	74.00	-28.31	45.57	0.12	Peak	100	120
7	7311.00	38.53	54.00	-15.47	32.59	5.94	Average	100	120
8	7311.00	51.57	74.00	-22.43	45.63	5.94	Peak	100	120

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-OFDMA	**Test Freq. (MHz)**	2437
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):25 Humidity(%):66

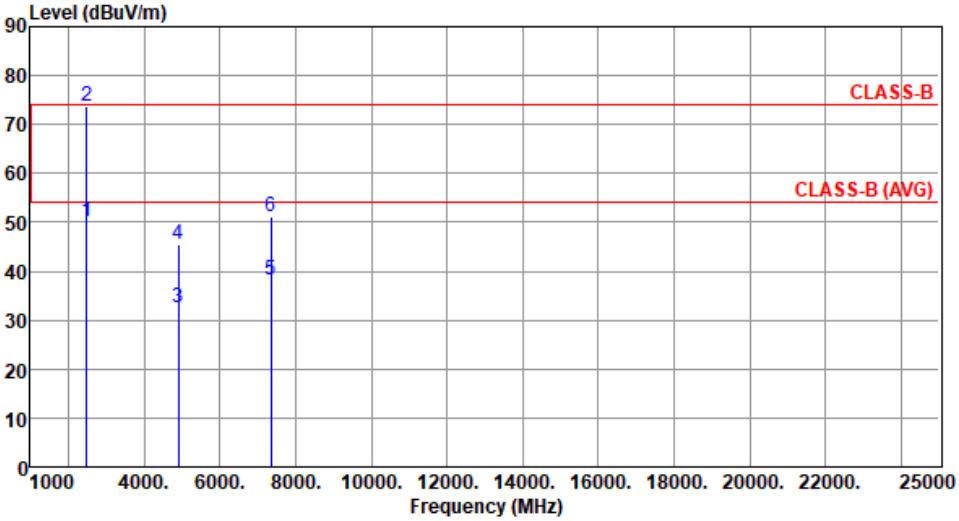


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	47.42	54.00	-6.58	51.21	-3.79	Average	206	117
2	2390.00	63.79	74.00	-10.21	67.58	-3.79	Peak	206	117
3	2483.50	51.24	54.00	-2.76	55.33	-4.09	Average	206	117
4	2483.50	70.49	74.00	-3.51	74.58	-4.09	Peak	206	117
5	4874.00	34.01	54.00	-19.99	33.89	0.12	Average	100	98
6	4874.00	46.88	74.00	-27.12	46.76	0.12	Peak	100	98
7	7311.00	39.65	54.00	-14.35	33.71	5.94	Average	100	102
8	7311.00	52.76	74.00	-21.24	46.82	5.94	Peak	100	102

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-OFDMA	**Test Freq. (MHz)**	2452
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):25 Humidity(%):66

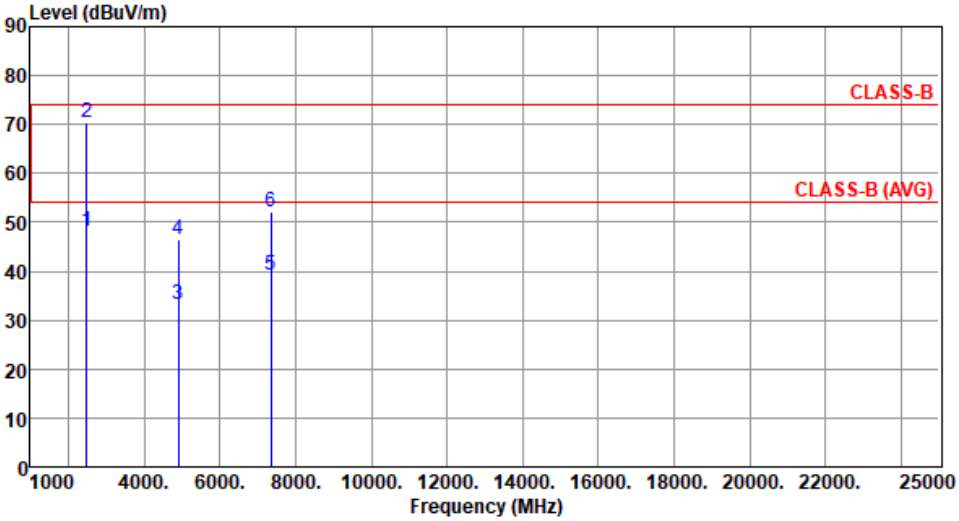


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	50.16	54.00	-3.84	54.25	-4.09	Average	174	335
2	2483.50	73.69	74.00	-0.31	77.78	-4.09	Peak	174	335
3	4904.00	32.42	54.00	-21.58	32.39	0.03	Average	100	117
4	4904.00	45.48	74.00	-28.52	45.45	0.03	Peak	100	117
5	7356.00	38.20	54.00	-15.80	32.35	5.85	Average	100	114
6	7356.00	51.24	74.00	-22.76	45.39	5.85	Peak	100	114

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-OFDMA	**Test Freq. (MHz)**	2452
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):25 Humidity(%):66



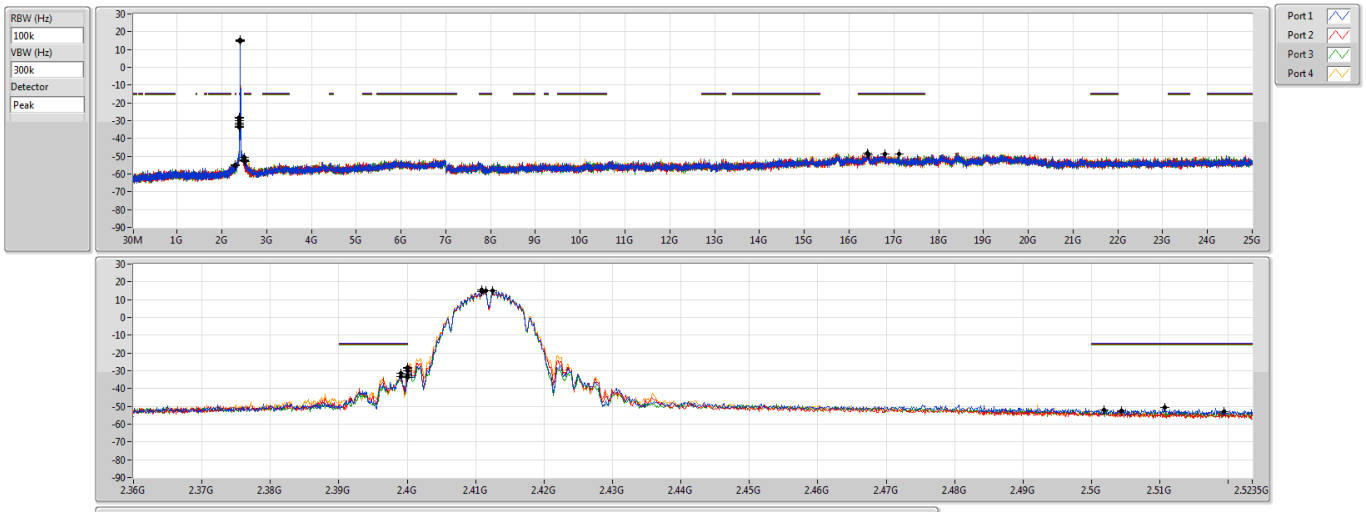
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	48.22	54.00	-5.78	52.31	-4.09	Average	182	105
2	2483.50	70.36	74.00	-3.64	74.45	-4.09	Peak	182	105
3	4904.00	33.28	54.00	-20.72	33.25	0.03	Average	100	94
4	4904.00	46.54	74.00	-27.46	46.51	0.03	Peak	100	94
5	7356.00	39.18	54.00	-14.82	33.33	5.85	Average	100	99
6	7356.00	52.30	74.00	-21.70	46.45	5.85	Peak	100	99

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).

Non-beamforming mode

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_4TX CSENdB

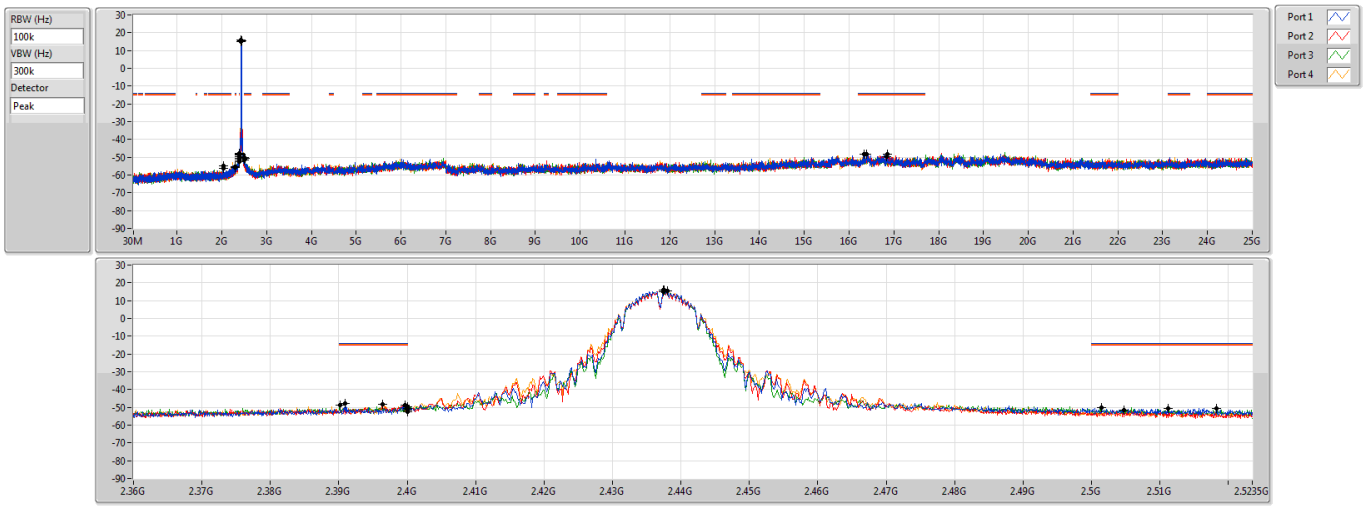
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.41086G	15.37	-14.63	2.30059G	-55.38	2.39904G	-31.39	2.4G	-32.56	2.5107G	-50.52	16.8017G	-48.68	1
2.41152G	14.90	-15.10	2.30525G	-54.98	2.4G	-30.11	2.4G	-29.82	2.51942G	-52.77	16.4196G	-49.04	2
2.41086G	14.41	-15.59	2.30408G	-54.86	2.39904G	-33.09	2.4G	-33.93	2.50182G	-51.99	17.12199G	-48.97	3
2.41253G	14.88	-15.12	2.30641G	-55.51	2.4G	-27.94	2.4G	-28.77	2.50438G	-52.33	16.41679G	-48.39	4

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_4TX CSENdB

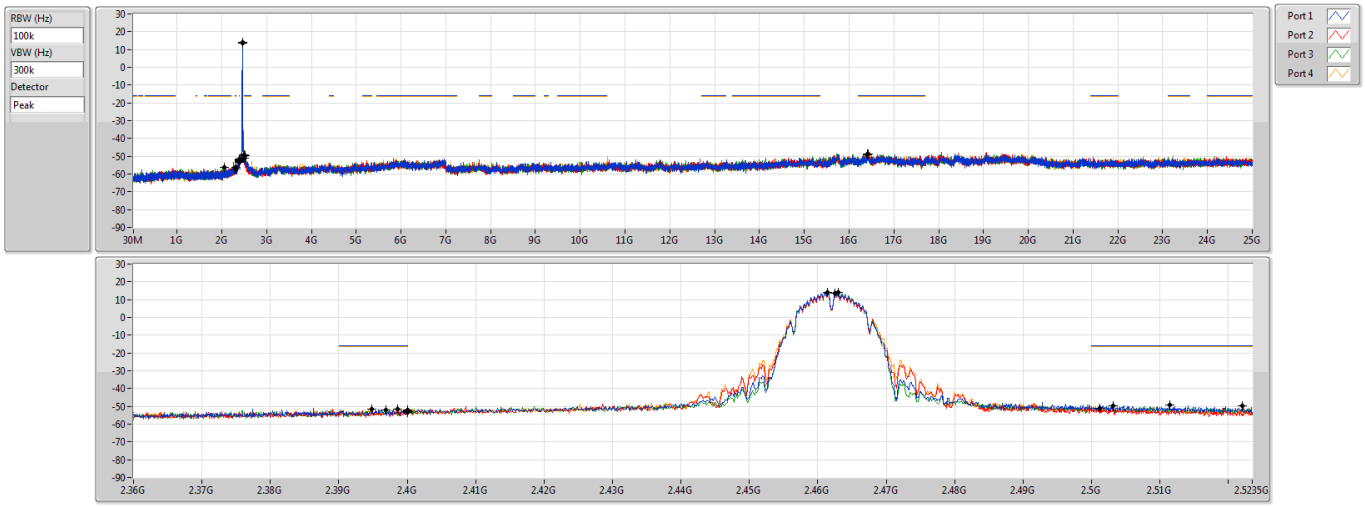
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43758G	15.89	-14.11	2.30292G	-55.65	2.39096G	-47.86	2.4G	-51.61	2.5183G	-50.63	16.32688G	-48.19	1
2.43741G	15.08	-14.92	2.03147G	-56.17	2.39968G	-48.69	2.4G	-52.32	2.5047G	-51.57	16.85227G	-48.43	2
2.43741G	15.94	-14.06	2.30059G	-55.34	2.39016G	-48.85	2.4G	-50.69	2.50142G	-50.10	16.39712G	-48.30	3
2.43808G	15.27	-14.73	2.03147G	-55.03	2.3964G	-48.28	2.4G	-49.67	2.51126G	-50.63	16.82979G	-49.48	4

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_4TX **CSENdB**

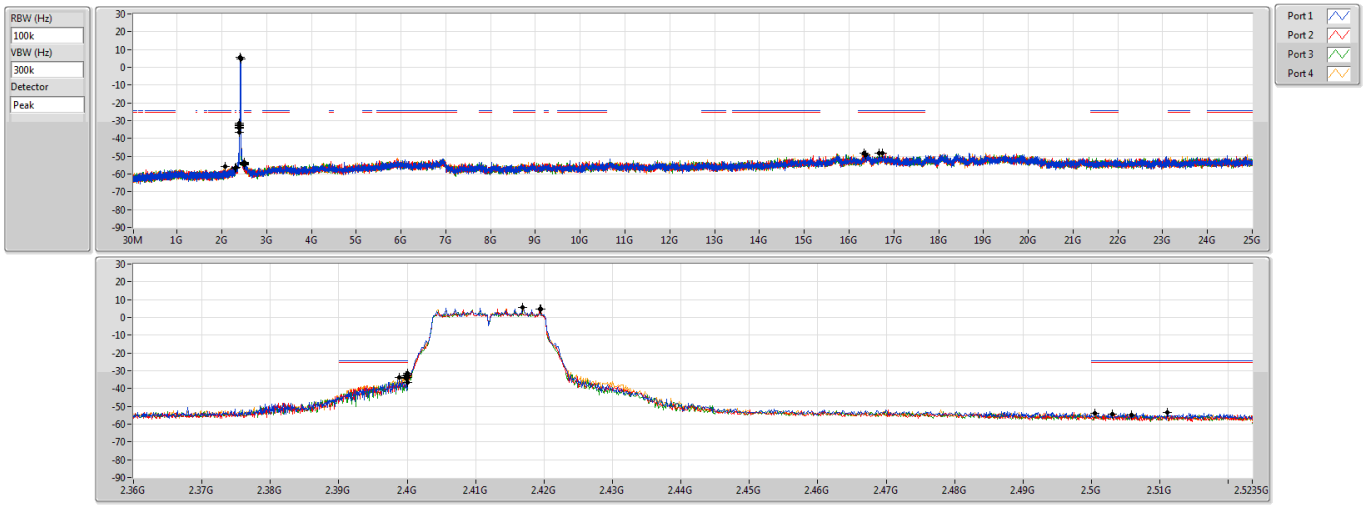
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.46296G	14.14	-15.86	2.30991G	-57.32	2.39688G	-51.80	2.4G	-52.88	2.51142G	-49.32	16.40836G	-49.06	1
2.46146G	14.11	-15.89	2.05244G	-56.03	2.4G	-52.13	2.4G	-52.75	2.50126G	-50.92	16.41679G	-49.18	2
2.46146G	14.14	-15.86	2.30408G	-56.98	2.39864G	-51.76	2.4G	-52.50	2.50318G	-49.71	16.42241G	-48.92	3
2.46246G	13.80	-16.20	2.30874G	-56.41	2.3948G	-51.43	2.4G	-53.57	2.52198G	-49.59	16.40836G	-48.72	4

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_4TX **CSENdB**

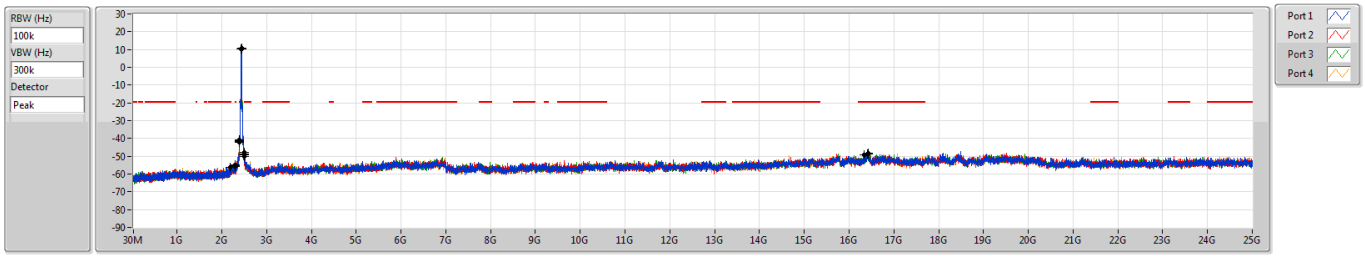
2412MHz

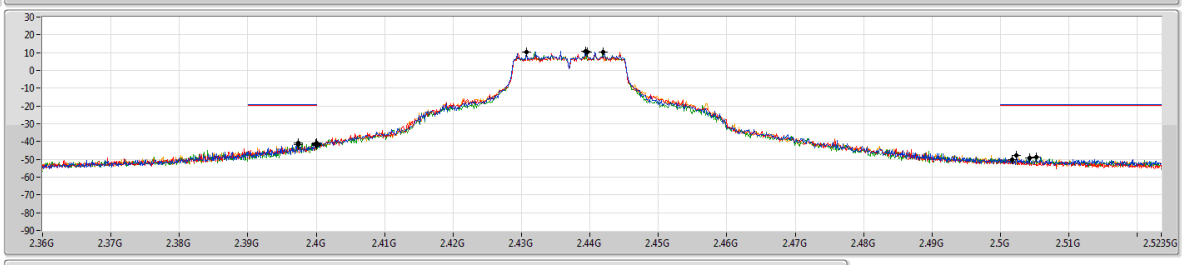


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.41687G	5.51	-24.49	2.06875G	-56.01	2.39984G	-34.21	2.4G	-33.93	2.5111G	-53.58	16.36621G	-49.03	1
2.41954G	4.77	-25.23	2.30175G	-56.64	2.4G	-36.33	2.4G	-36.59	2.5059G	-54.64	16.75393G	-48.13	2
2.41937G	4.52	-25.48	2.30641G	-56.72	2.39888G	-33.93	2.4G	-32.42	2.50302G	-54.26	16.34374G	-48.17	3
2.41687G	5.50	-24.50	2.30991G	-56.35	2.39984G	-32.69	2.4G	-31.45	2.50054G	-53.98	16.66684G	-48.31	4

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_4TX **CSENdB**

2437MHz

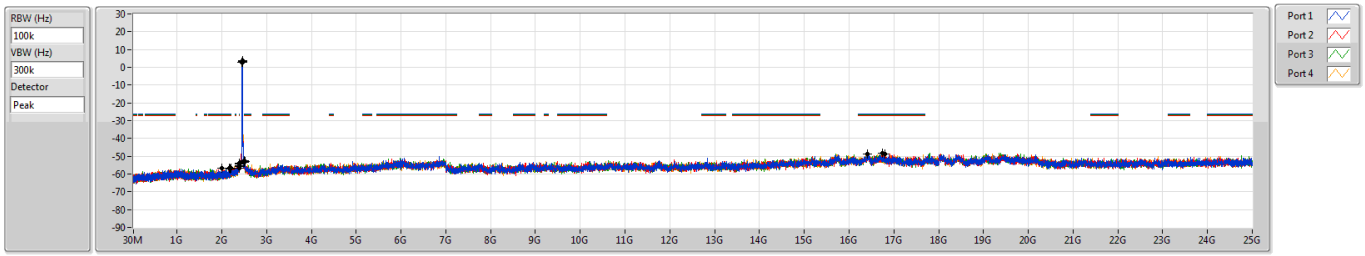


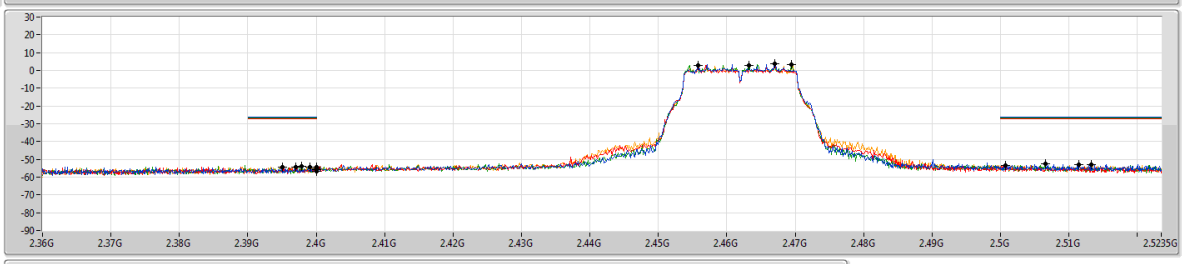


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43941G	10.74	-19.26	2.30175G	-55.73	2.39992G	-41.05	2.4G	-40.61	2.5023G	-47.62	16.33531G	-49.11	1
2.43073G	10.09	-19.91	2.19108G	-56.32	2.4G	-41.94	2.4G	-42.13	2.50174G	-49.99	16.43364G	-48.50	2
2.44192G	10.53	-19.47	2.30408G	-55.14	2.39736G	-40.64	2.4G	-41.67	2.50518G	-48.88	16.42522G	-48.94	3
2.43958G	10.25	-19.75	2.30059G	-54.92	2.39736G	-41.84	2.4G	-41.97	2.50422G	-49.23	16.41117G	-48.82	4

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_4TX **CSENdB**

2462MHz

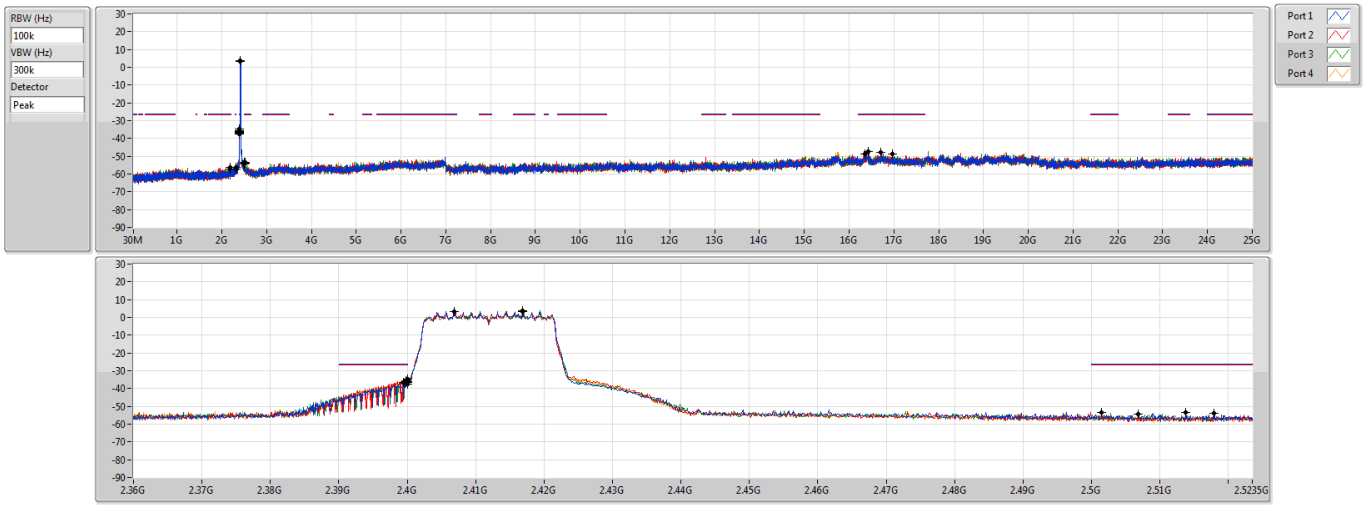




Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.46697G	3.66	-26.34	2.00934G	-56.92	2.39912G	-54.49	2.4G	-56.65	2.50662G	-52.43	16.79327G	-48.61	1
2.45578G	2.96	-27.04	2.16778G	-56.61	2.39504G	-54.26	2.4G	-55.24	2.5007G	-53.51	16.75393G	-48.27	2
2.46947G	3.45	-26.55	2.19807G	-56.79	2.39704G	-54.44	2.4G	-55.99	2.51326G	-53.03	16.41398G	-48.61	3
2.46329G	2.75	-27.25	2.19224G	-57.36	2.39784G	-53.74	2.4G	-54.27	2.5115G	-53.20	16.41679G	-48.57	4

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_4TX **CSENdB**

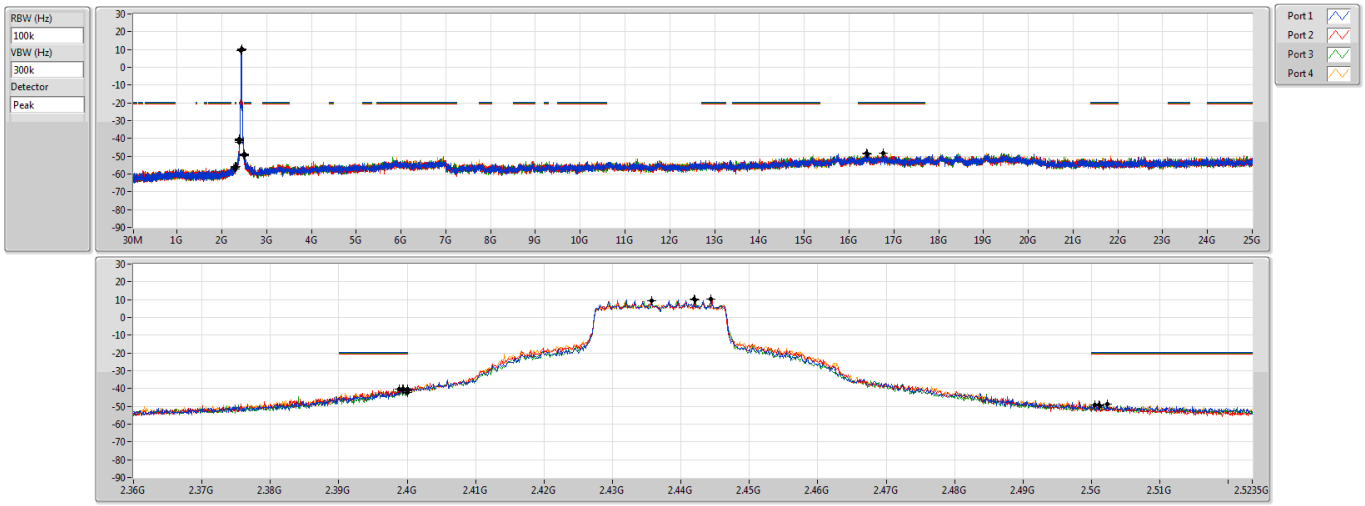
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.41687G	3.71	-26.29	2.18409G	-56.24	2.39968G	-37.19	2.4G	-37.31	2.51382G	-53.31	16.42802G	-47.56	1
2.41687G	3.48	-26.52	2.30991G	-57.13	2.39984G	-35.52	2.4G	-34.69	2.5179G	-54.11	16.70617G	-48.03	2
2.40685G	3.46	-26.54	2.30874G	-56.41	2.39944G	-36.55	2.4G	-36.48	2.5015G	-53.38	16.3606G	-48.71	3
2.41687G	3.69	-26.31	2.18409G	-57.03	2.39992G	-36.03	2.4G	-36.24	2.50678G	-54.51	16.95903G	-48.63	4

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_4TX **CSENdB**

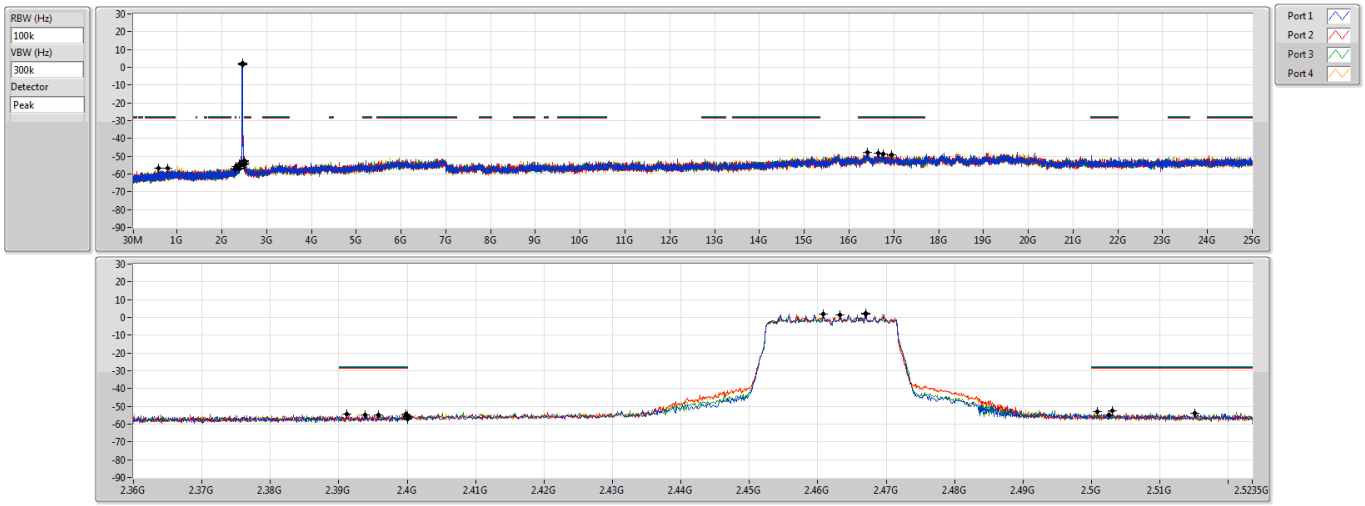
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44442G	10.43	-19.57	2.30292G	-56.19	2.39928G	-40.09	2.4G	-42.04	2.5023G	-48.85	16.41117G	-48.80	1
2.43574G	9.46	-20.54	2.30874G	-55.70	2.39944G	-40.20	2.4G	-41.28	2.5011G	-49.22	16.40836G	-48.90	2
2.44208G	9.78	-20.22	2.30408G	-57.09	2.39928G	-40.93	2.4G	-40.44	2.50118G	-49.64	16.3915G	-48.24	3
2.44192G	10.41	-19.59	2.30525G	-55.81	2.39888G	-40.40	2.4G	-41.42	2.50054G	-49.41	16.76517G	-48.17	4

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_4TX **CSENdB**

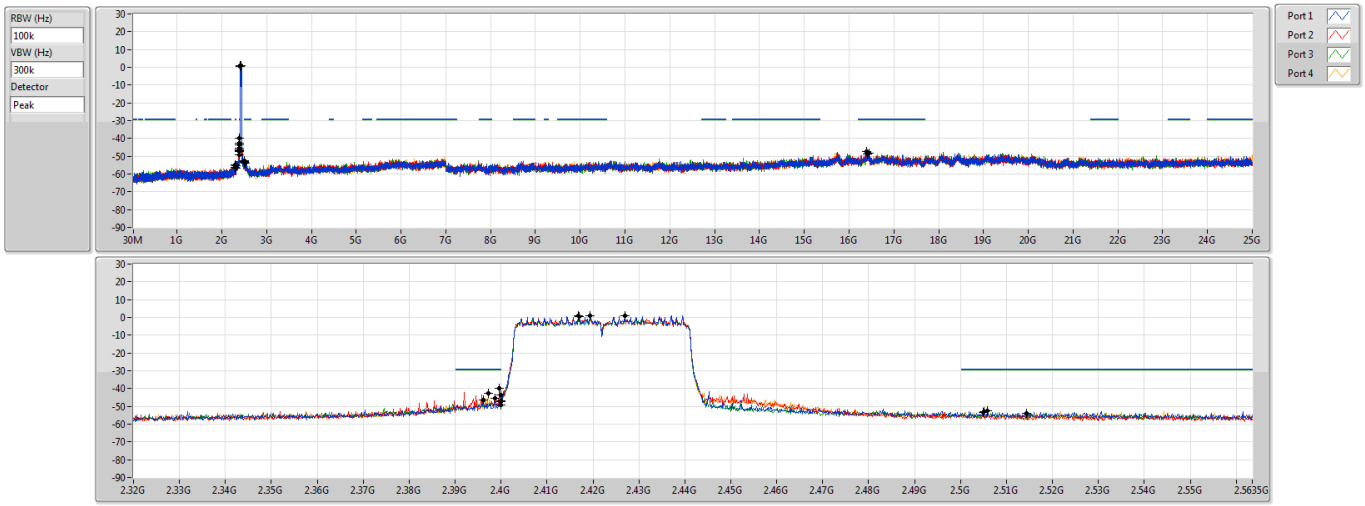
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.46079G	1.92	-28.08	2.30874G	-55.59	2.39384G	-54.73	2.4G	-57.03	2.5151G	-53.93	16.94217G	-49.08	1
2.46329G	1.59	-28.41	784.92M	-56.73	2.3912G	-54.30	2.4G	-55.95	2.50262G	-54.66	16.41117G	-47.71	2
2.46697G	2.20	-27.80	2.30525G	-57.09	2.39576G	-54.76	2.4G	-56.72	2.50302G	-52.37	16.64717G	-48.36	3
2.46697G	1.95	-28.05	596.19M	-56.88	2.39976G	-54.31	2.4G	-55.49	2.50086G	-53.12	16.76517G	-48.78	4

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_4TX **CSENdB**

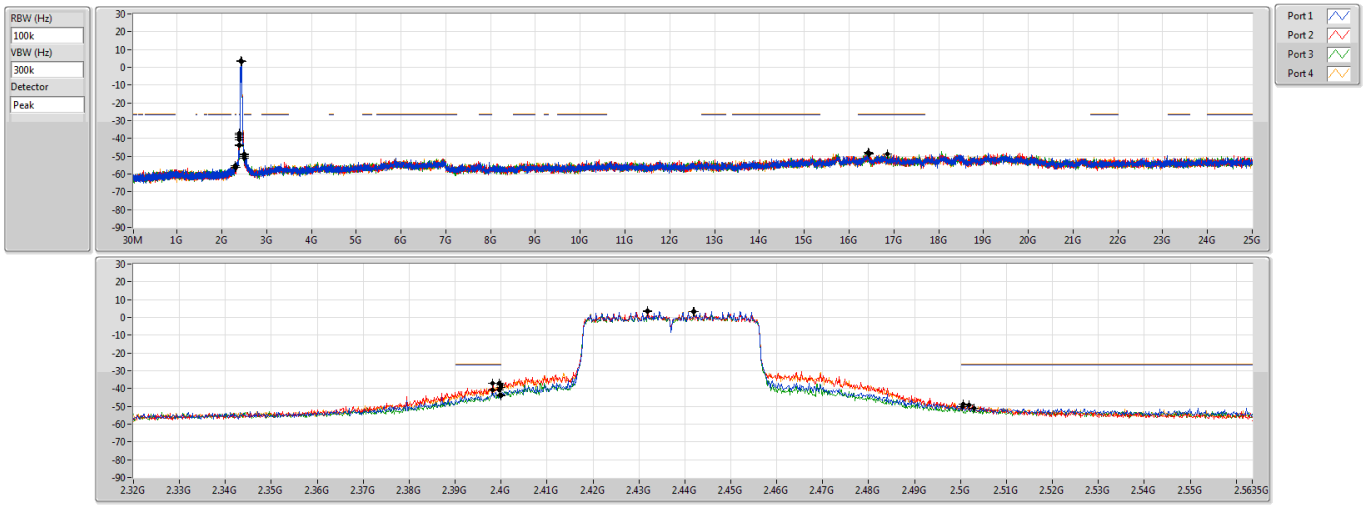
2422MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.41937G	0.96	-29.04	2.30283G	-56.27	2.39616G	-46.43	2.4G	-49.15	2.5059G	-52.29	16.41804G	-48.57	1
2.42689G	0.83	-29.17	2.3097G	-56.56	2.39968G	-39.75	2.4G	-46.78	2.51438G	-53.85	16.44889G	-48.28	2
2.41703G	0.34	-29.66	2.30397G	-54.99	2.39872G	-45.41	2.4G	-47.35	2.50494G	-53.39	16.39841G	-47.54	3
2.41687G	0.88	-29.12	2.30855G	-55.27	2.39728G	-42.73	2.4G	-43.59	2.5051G	-52.89	16.41804G	-48.55	4

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_4TX **CSENdB**

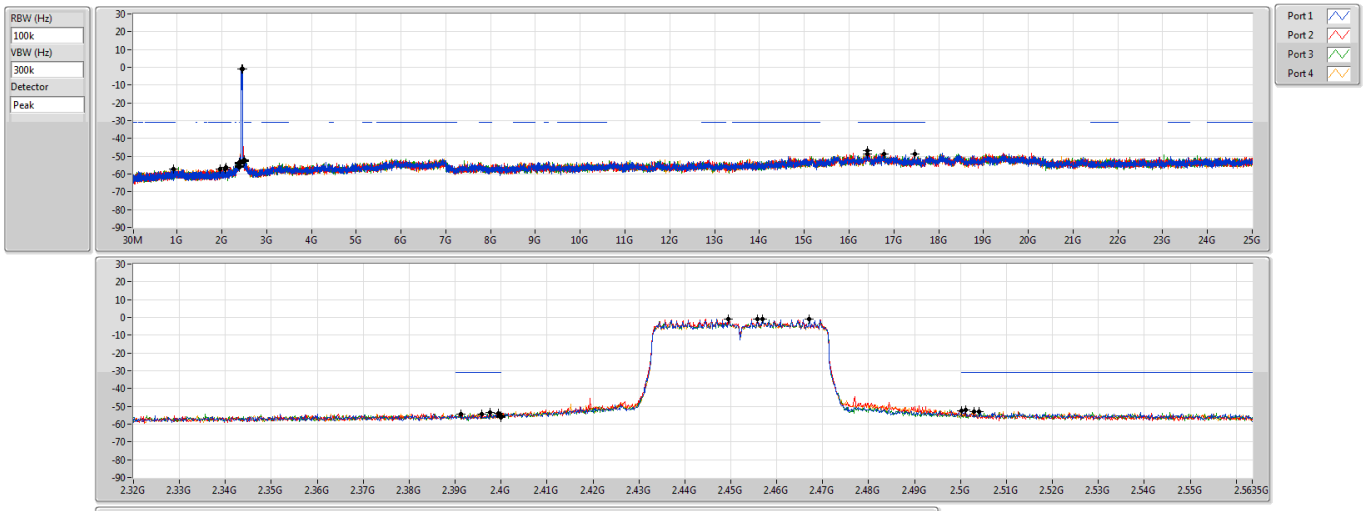
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44192G	3.39	-26.61	2.3097G	-56.44	2.39808G	-40.62	2.4G	-43.86	2.50046G	-49.96	16.42926G	-47.97	1
2.44208G	3.19	-26.81	2.30626G	-56.42	2.39808G	-37.17	2.4G	-39.39	2.50062G	-48.90	16.44608G	-48.94	2
2.4319G	3.05	-26.95	2.30626G	-56.47	2.39952G	-40.62	2.4G	-43.51	2.50302G	-50.89	16.44608G	-48.24	3
2.4319G	3.57	-26.43	2.30397G	-55.39	2.39968G	-37.10	2.4G	-38.17	2.5019G	-49.45	16.86396G	-48.97	4

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_4TX **CSENdB**

2452MHz

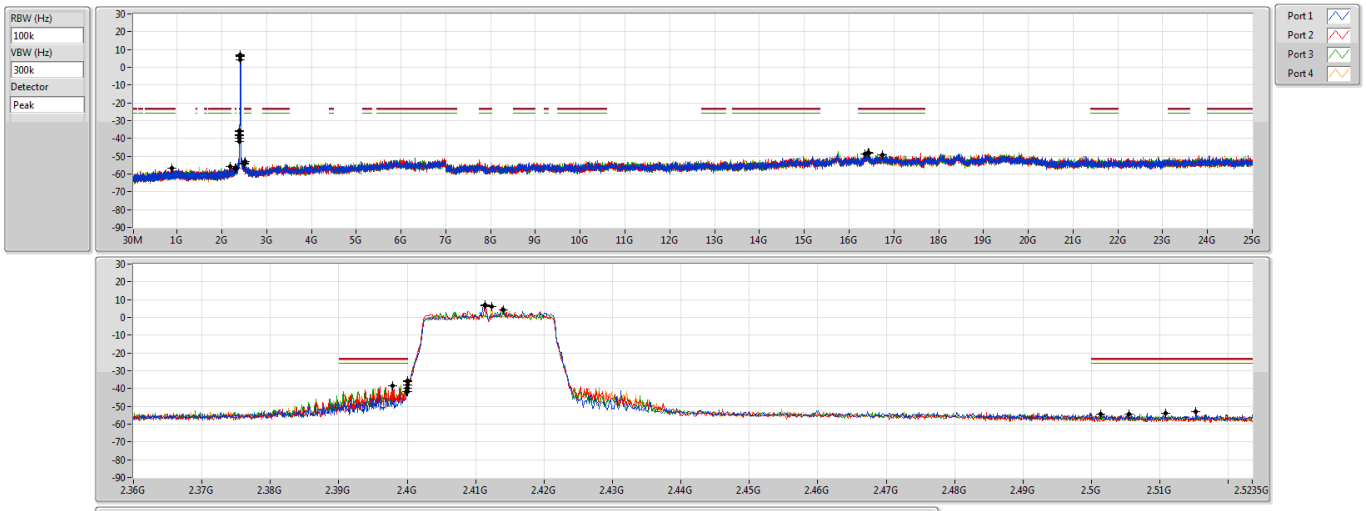


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.45578G	-0.81	-30.81	1.96391G	-57.19	2.3976G	-53.37	2.4G	-55.22	2.5011G	-52.24	16.78544G	-48.85	1
2.44943G	-0.80	-30.80	2.09902G	-56.47	2.39584G	-54.37	2.4G	-55.56	2.50286G	-52.80	16.41523G	-48.67	2
2.45695G	-1.00	-31.00	2.08413G	-57.07	2.39936G	-53.76	2.4G	-56.16	2.50398G	-52.85	17.46134G	-48.82	3
2.46697G	-1.15	-31.15	918.52M	-57.17	2.3912G	-54.47	2.4G	-56.39	2.50014G	-52.33	16.40121G	-47.03	4

Beamforming mode

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX CSENdB

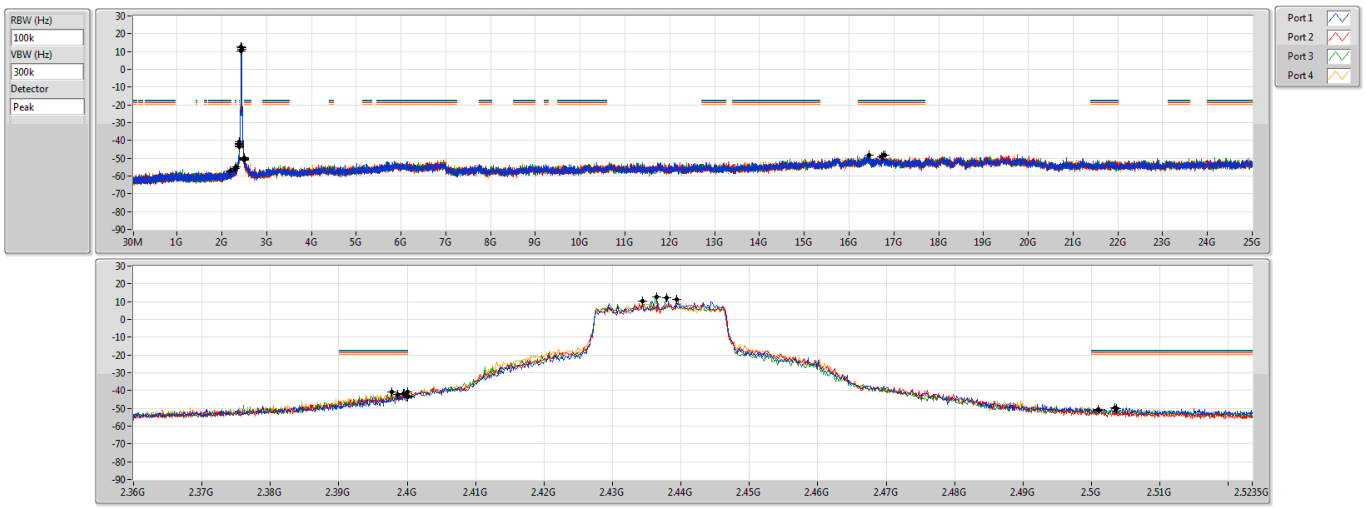
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.41136G	6.34	-23.66	2.30991G	-56.91	2.39992G	-41.58	2.4G	-39.89	2.51526G	-53.16	16.35498G	-48.66	1
2.41136G	6.95	-23.05	2.30175G	-56.85	2.39792G	-38.48	2.4G	-37.84	2.5055G	-54.58	16.4196G	-47.85	2
2.41403G	4.02	-25.98	2.18176G	-55.79	2.4G	-36.32	2.4G	-39.86	2.50134G	-54.40	16.73989G	-49.43	3
2.41236G	6.07	-23.93	879.29M	-56.79	2.4G	-35.58	2.4G	-41.50	2.51078G	-53.76	16.45612G	-48.48	4

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX CSENdB

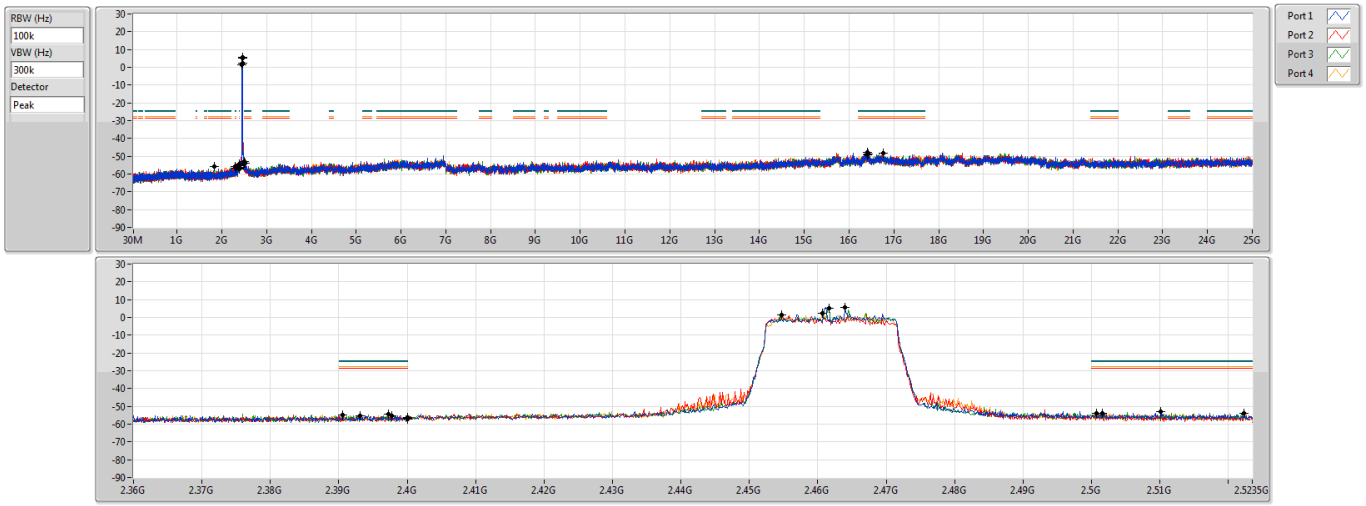
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43791G	12.05	-17.95	2.30525G	-55.70	2.39856G	-42.42	2.4G	-43.49	2.50342G	-49.55	16.43926G	-48.33	1
2.43941G	11.03	-18.97	2.18875G	-57.07	2.39952G	-41.90	2.4G	-43.14	2.50102G	-51.24	16.73146G	-49.11	2
2.43641G	12.66	-17.34	2.30991G	-54.81	2.39768G	-40.75	2.4G	-40.63	2.50366G	-50.04	16.80451G	-48.45	3
2.4344G	10.34	-19.66	2.30874G	-54.86	2.39944G	-41.70	2.4G	-42.99	2.50102G	-50.41	16.75955G	-48.25	4

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX **CSENdB**

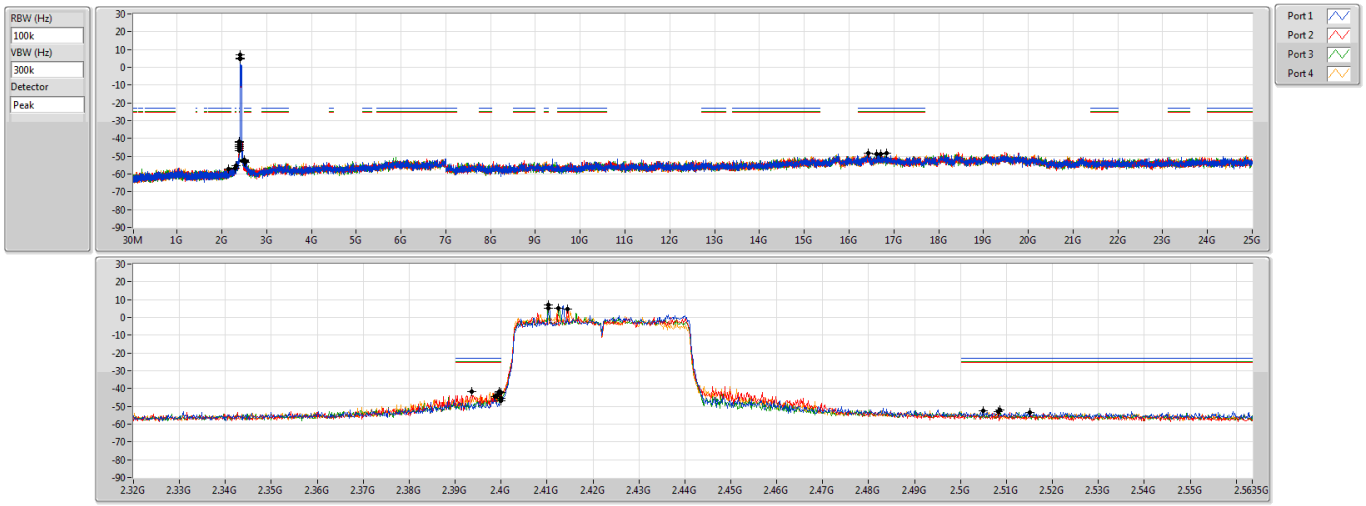
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.46396G	5.73	-24.27	2.30292G	-55.91	2.39312G	-55.32	2.4G	-56.72	2.50078G	-53.96	16.41679G	-49.16	1
2.45478G	1.26	-28.74	2.30874G	-56.74	2.3972G	-54.38	2.4G	-56.05	2.50158G	-53.98	16.75955G	-48.16	2
2.46162G	5.37	-24.63	2.30874G	-56.64	2.39056G	-54.79	2.4G	-57.05	2.51006G	-52.98	16.41117G	-47.85	3
2.46062G	2.45	-27.55	1.83575G	-55.90	2.39768G	-55.21	2.4G	-56.26	2.5223G	-53.74	16.4196G	-48.79	4

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX **CSENdB**

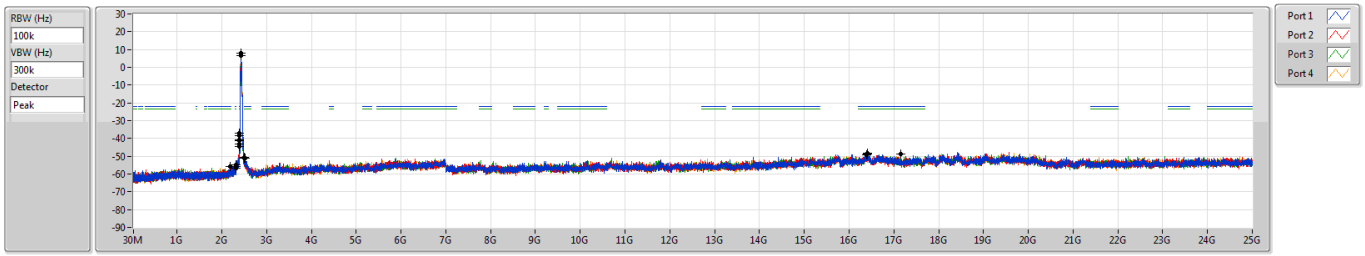
2422MHz

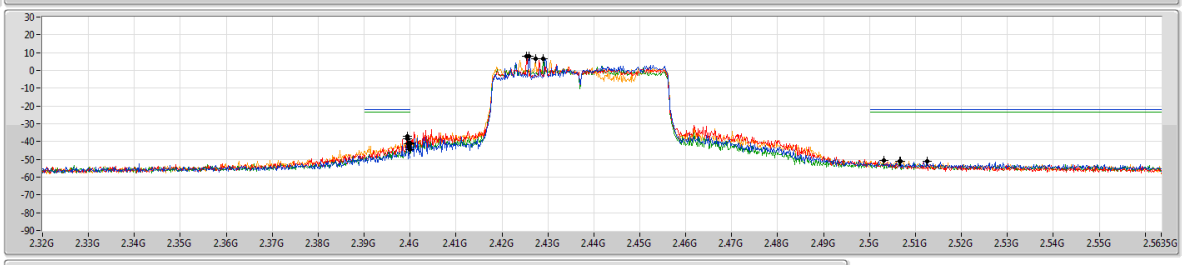


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.41035G	6.84	-23.16	2.15856G	-57.30	2.39872G	-44.57	2.4G	-46.73	2.50494G	-52.71	16.42926G	-48.45	1
2.41453G	4.79	-25.21	2.30397G	-56.90	2.3936G	-41.86	2.4G	-45.27	2.51502G	-53.49	16.83872G	-48.37	2
2.41035G	5.09	-24.91	2.3097G	-55.18	2.3992G	-43.81	2.4G	-46.99	2.50862G	-51.99	16.62277G	-48.97	3
2.41253G	5.04	-24.96	2.30397G	-56.59	2.39952G	-41.84	2.4G	-41.97	2.50814G	-53.14	16.71532G	-48.57	4

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX **CSENdB**

2437MHz

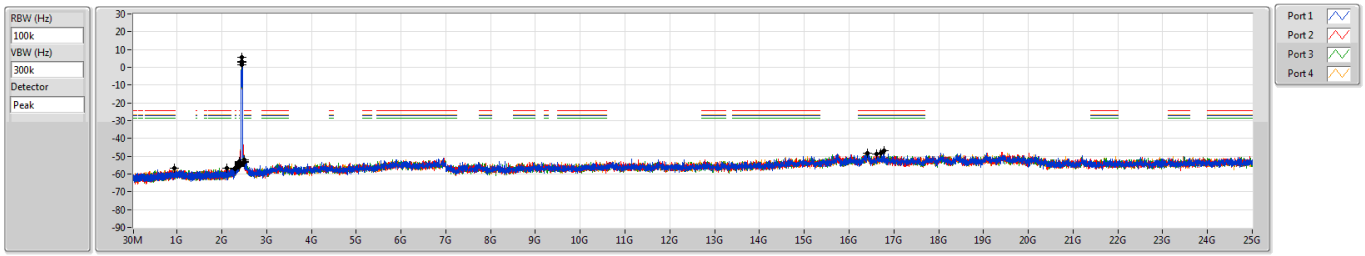


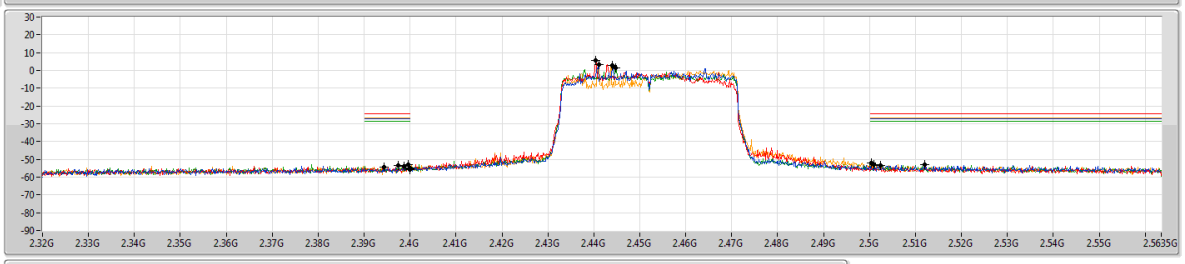


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.42589G	7.91	-22.09	2.18489G	-55.93	2.39936G	-38.46	2.4G	-44.75	2.51262G	-50.95	16.40682G	-48.34	1
2.42538G	7.94	-22.06	2.30855G	-56.77	2.39936G	-37.14	2.4G	-41.31	2.5067G	-51.10	16.40963G	-48.71	2
2.42889G	6.72	-23.28	2.3097G	-54.66	2.39984G	-43.07	2.4G	-44.76	2.50654G	-51.01	17.15844G	-48.88	3
2.42739G	6.50	-23.50	2.30855G	-55.70	2.39952G	-41.13	2.4G	-40.98	2.50318G	-50.54	16.38719G	-49.25	4

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX **CSENdB**

2452MHz



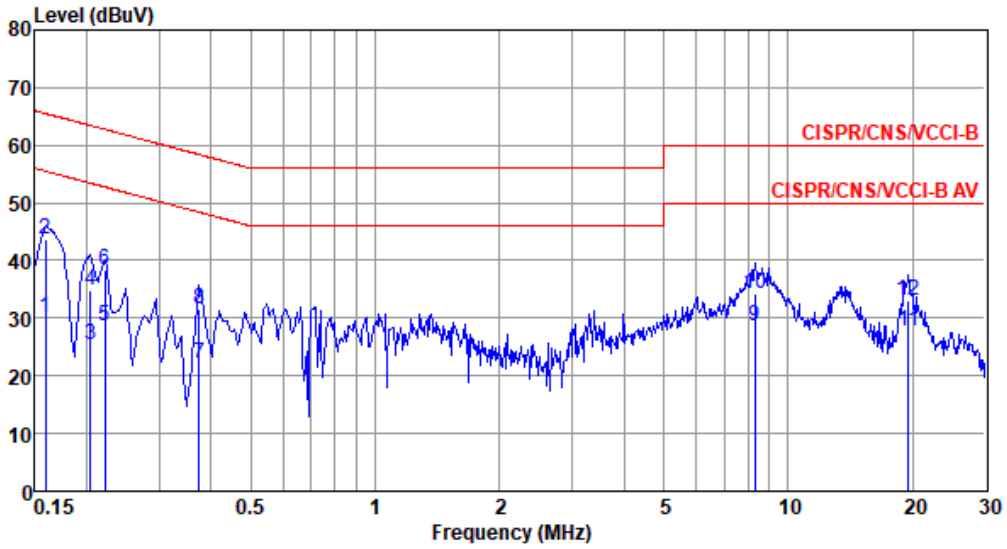


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44409G	2.84	-27.16	2.30512G	-57.20	2.39968G	-52.97	2.4G	-55.82	2.51198G	-53.08	16.78544G	-47.10	1
2.44041G	5.49	-24.51	941.42M	-56.70	2.39872G	-53.88	2.4G	-54.98	2.50238G	-53.24	16.61716G	-48.92	2
2.44476G	1.24	-28.76	2.30283G	-56.53	2.39744G	-53.67	2.4G	-55.41	2.50094G	-53.20	16.41243G	-48.45	3
2.44108G	3.19	-26.81	2.1036G	-56.85	2.3944G	-54.55	2.4G	-55.20	2.50046G	-52.18	16.7041G	-48.26	4

Non-beamforming mode

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

Test by : Joe Liao Temperature: 24°C Humidity: 66%

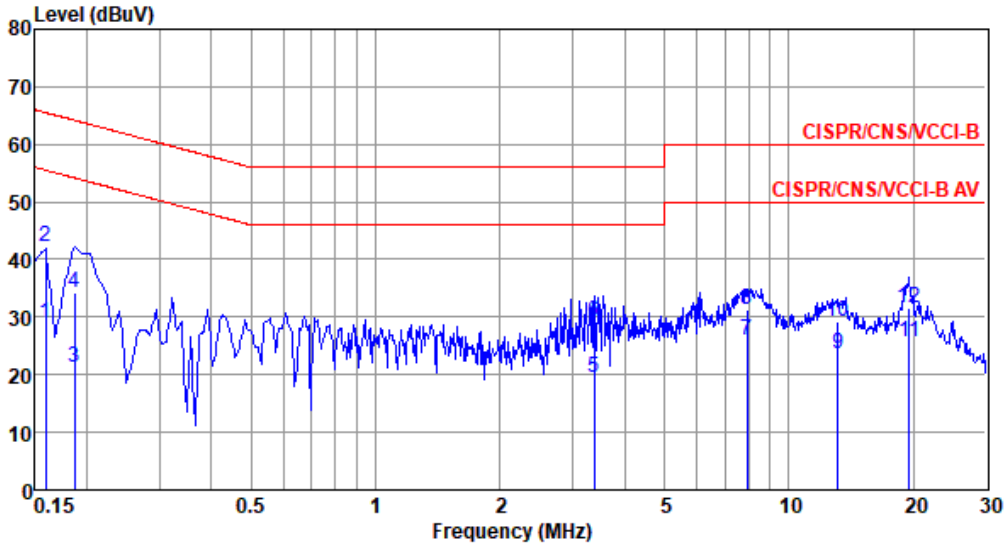


	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.159	30.08	55.52	-25.44	20.16	9.68	0.06	0.18	Average
2	0.159	43.62	65.52	-21.90	33.70	9.68	0.06	0.18	QP
3	0.204	25.52	53.45	-27.93	15.59	9.68	0.06	0.19	Average
4	0.204	34.77	63.45	-28.68	24.84	9.68	0.06	0.19	QP
5	0.222	28.53	52.74	-24.21	18.58	9.68	0.06	0.21	Average
6	0.222	38.25	62.74	-24.49	28.30	9.68	0.06	0.21	QP
7	0.375	21.99	48.39	-26.40	11.97	9.67	0.06	0.29	Average
8	0.375	31.53	58.39	-26.86	21.51	9.67	0.06	0.29	QP
9*	8.323	28.67	50.00	-21.33	18.18	9.73	0.32	0.44	Average
10	8.323	34.28	60.00	-25.72	23.79	9.73	0.32	0.44	QP
11	19.532	27.84	50.00	-22.16	17.09	9.73	0.50	0.52	Average
12	19.532	33.04	60.00	-26.96	22.29	9.73	0.50	0.52	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 Mode	11b	**Test Freq. (MHz)**	2437
Power Phase	Neutral		

Test by : Joe Liao Temperature: 24°C Humidity: 66%



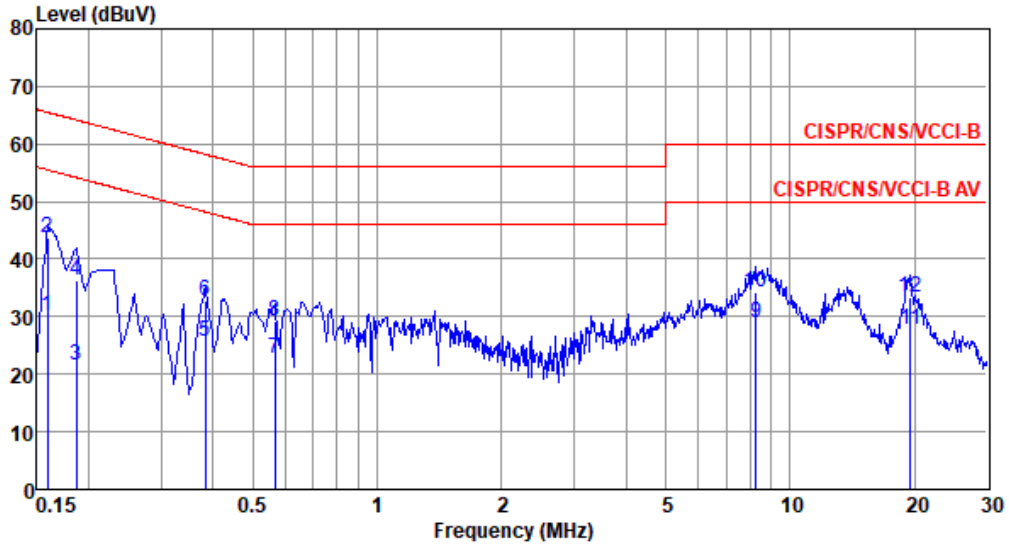
	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.159	28.94	55.52	-26.58	19.09	9.61	0.06	0.18	Average
2*	0.159	42.34	65.52	-23.18	32.49	9.61	0.06	0.18	QP
3	0.186	21.32	54.20	-32.88	11.46	9.61	0.06	0.19	Average
4	0.186	34.29	64.20	-29.91	24.43	9.61	0.06	0.19	QP
5	3.381	19.34	46.00	-26.66	9.12	9.64	0.17	0.41	Average
6	3.381	29.28	56.00	-26.72	19.06	9.64	0.17	0.41	QP
7	7.935	25.94	50.00	-24.06	15.52	9.68	0.31	0.43	Average
8	7.935	31.29	60.00	-28.71	20.87	9.68	0.31	0.43	QP
9	13.127	23.50	50.00	-26.50	12.89	9.73	0.41	0.47	Average
10	13.127	29.25	60.00	-30.75	18.64	9.73	0.41	0.47	QP
11	19.532	25.79	50.00	-24.21	14.98	9.79	0.50	0.52	Average
12	19.532	31.61	60.00	-28.39	20.80	9.79	0.50	0.52	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).

Beamforming mode

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

Test by : Joe Liao Temperature: 24°C Humidity: 66%

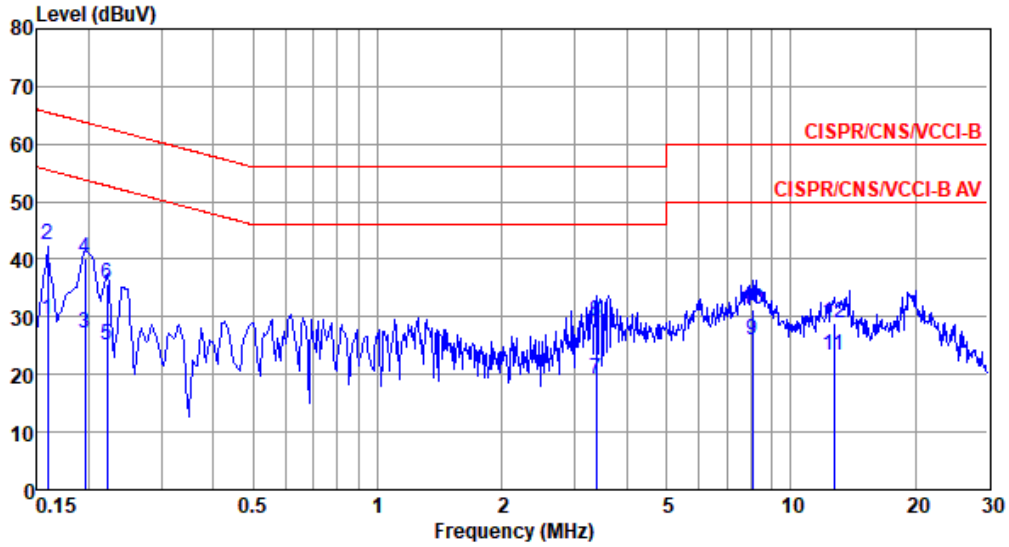


	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.159	30.05	55.52	-25.47	20.13	9.68	0.06	0.18	Average
2	0.159	43.70	65.52	-21.82	33.78	9.68	0.06	0.18	QP
3	0.186	21.48	54.20	-32.72	11.55	9.68	0.06	0.19	Average
4	0.186	36.35	64.20	-27.85	26.42	9.68	0.06	0.19	QP
5	0.383	25.71	48.21	-22.50	15.69	9.67	0.06	0.29	Average
6	0.383	32.69	58.21	-25.52	22.67	9.67	0.06	0.29	QP
7	0.564	22.72	46.00	-23.28	12.66	9.67	0.08	0.31	Average
8	0.564	29.32	56.00	-26.68	19.26	9.67	0.08	0.31	QP
9*	8.279	28.86	50.00	-21.14	18.37	9.73	0.32	0.44	Average
10	8.279	34.17	60.00	-25.83	23.68	9.73	0.32	0.44	QP
11	19.532	27.81	50.00	-22.19	17.06	9.73	0.50	0.52	Average
12	19.532	33.27	60.00	-26.73	22.52	9.73	0.50	0.52	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 Mode	ax HE20-OFDMA	**Test Freq. (MHz)**	2437
Power Phase	Neutral		

Test by : Joe Liao Temperature: 24°C Humidity: 66%



	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.159	29.61	55.52	-25.91	19.76	9.61	0.06	0.18	Average
2*	0.159	42.40	65.52	-23.12	32.55	9.61	0.06	0.18	QP
3	0.195	27.15	53.80	-26.65	17.29	9.61	0.06	0.19	Average
4	0.195	40.08	63.80	-23.72	30.22	9.61	0.06	0.19	QP
5	0.222	24.95	52.74	-27.79	15.07	9.61	0.06	0.21	Average
6	0.222	35.61	62.74	-27.13	25.73	9.61	0.06	0.21	QP
7	3.381	19.22	46.00	-26.78	9.00	9.64	0.17	0.41	Average
8	3.381	29.32	56.00	-26.68	19.10	9.64	0.17	0.41	QP
9	8.062	26.10	50.00	-23.90	15.66	9.68	0.32	0.44	Average
10	8.062	31.43	60.00	-28.57	20.99	9.68	0.32	0.44	QP
11	12.716	23.37	50.00	-26.63	12.77	9.72	0.41	0.47	Average
12	12.716	29.00	60.00	-31.00	18.40	9.72	0.41	0.47	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).