

# FCC Test Report

**FCC ID** : SQG-LWB5PLUS  
**Equipment** : Sterling-LWB5+ 802.11a/b/g/n/ac Module with Bluetooth 5.0  
**Model No.** : Sterling LWB5+  
**Brand Name** : Laird Connectivity  
**Applicant** : Laird Connectivity  
**Address** : W66N220 Commerce Court, Cedarburg, Wisconsin 53012, USA  
**Standard** : 47 CFR FCC Part 15.247  
**Received Date** : Jun. 11, 2020  
**Tested Date** : Jul. 15 ~ Aug. 20, 2020

We, International Certification Corp., 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 may be duplicated completely for legal use with the approval of the applicant. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by:

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

Approved by:

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



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## Release Record

Report No.	Version	Description	Issued Date
FR061103AC	Rev. 01	Initial issue	Nov. 10, 2020

## Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 4.478MHz 49.70 (Margin -6.30dB) - QP	Pass
15.247(d) 15.209	Radiated Emissions	[dBuV/m at 3m]:80.46MHz 36.95 (Margin -3.05dB) - QP	Pass
15.247(b)(3)	Maximum Output Power	Max Power [dBm]: 24.65	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

The device has 5 configurations as below:

Brand name	Model Name	Product Name	Part Number	Description
Laird Connectivity	Sterling LWB5+	Sterling-LWB5+ 802.11a/b/g/n/ac Module with Bluetooth 5.0	453-00045	Chip Antenna
Laird Connectivity	Sterling LWB5+	Sterling-LWB5+ 802.11a/b/g/n/ac Module with Bluetooth 5.0	453-00046	MHF4 Connector
Laird Connectivity	Sterling LWB5+	Sterling-LWB5+ 802.11a/b/g/n/ac Module with Bluetooth 5.0	453-00047	RF Trace Pin
Laird Connectivity	Sterling LWB5+	Sterling-LWB5+ 802.11a/b/g/n/ac Module with Bluetooth 5.0	453-00048	M.2 PCI-E Card w/SDIO and UART Interface
Laird Connectivity	Sterling LWB5+	Sterling-LWB5+ 802.11a/b/g/n/ac Module with Bluetooth 5.0	453-00049	M.2 PCI-E Card w/USB and USB Interface

† Part Number: 453-00046 was selected as a representative one for the final test

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

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

Note 1: RF output power specifies that Maximum Peak Conducted Output Power.  
 Note 2: 802.11b uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.  
 Note 3: 802.11g/n uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.

### 1.1.2 Antenna Details

Ant. No.	Manufacturer	Model	Laird Part Number	Type	Connector	Antenna Gain (dBi)
1	Laird	2.4/5.5 GHz Dipole Antenna	001-0009	Dipole	RP-SMA	2.0
2	Laird	FlexPIFA	001-0021	PIFA	IPEX MHF4L	2.5
3	Laird	Mini NanoBlade Flex	EMF2449A1-10MH4L	PCB Dipole	IPEX MHF4L	2.79
4	Laird	Nanoblade	ENB2449A1-10MH4L	PCB Dipole	IPEX MHF4L	2.0
5	ACX	AD1608-A2455AAT/LF	NA	Chip Antenna	N/A	1.0

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

<b>Power Supply Type</b>	3.3 Vdc
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### 1.1.4 Accessories

N/A

### 1.1.5 Channel List

Frequency band (MHz)		2400~2483.5	
802.11 b / g / n HT20		802.11n HT40	
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	Putty, Version: 0.60.0.0		
Duty Cycle and Duty Factor	Mode	Duty Cycle (%)	Duty Factor (dB)
	11b	100.00%	0.00
	11g	99.66%	0.01
	HT20	99.64%	0.02
	HT40	98.14%	0.08

### 1.1.7 Power Index of Test Tool

Modulation Mode	Test Frequency (MHz)	Power Index	
		Part Number : 453-00046	Part Number : 453-00048
11b	2412	68	62
11b	2437	72	65
11b	2462	66	60
11g	2412	52	47
11g	2437	74	66
11g	2462	58	53
HT20	2412	48	42
HT20	2437	74	66
HT20	2462	52	47
HT40	2422	38	33
HT40	2437	48	43
HT40	2452	42	35

## 1.2 Local Support Equipment List

Support Equipment List (Part Number: 453-00046_ SDIO)					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	Carrier Board	Laird	DVK-LWB5+	---	Provided by applicant.
2	Fixture	Laird	SU60-SOMC	---	Provided by applicant.
3	DC Cable	ICC	DCC-10m-R	---	---
4	DC Cable	ICC	DCC-10m-B	---	---
5	Notebook	DELL	Latitude E6430	---	---
6	DC Power Supply	GWINSTEK	GPC-60300	---	---
7	50Ω terminator	---	---	---	---

Support Equipment List (Part Number: 453-00046_ USB)					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	Carrier Board	Laird	DVK-LWB5+	---	Provided by applicant.
2	USB Cable	I-Gota	micro to A	---	---
3	Fixture	Laird	SU60-SOMC	---	Provided by applicant.
4	DC Cable	ICC	DCC-10m-R	---	---
5	DC Cable	ICC	DCC-10m-B	---	---
6	Notebook	DELL	Latitude E6430	---	---
7	DC Power Supply	GWINSTEK	GPC-60300	---	---
8	50Ω terminator	---	---	---	---

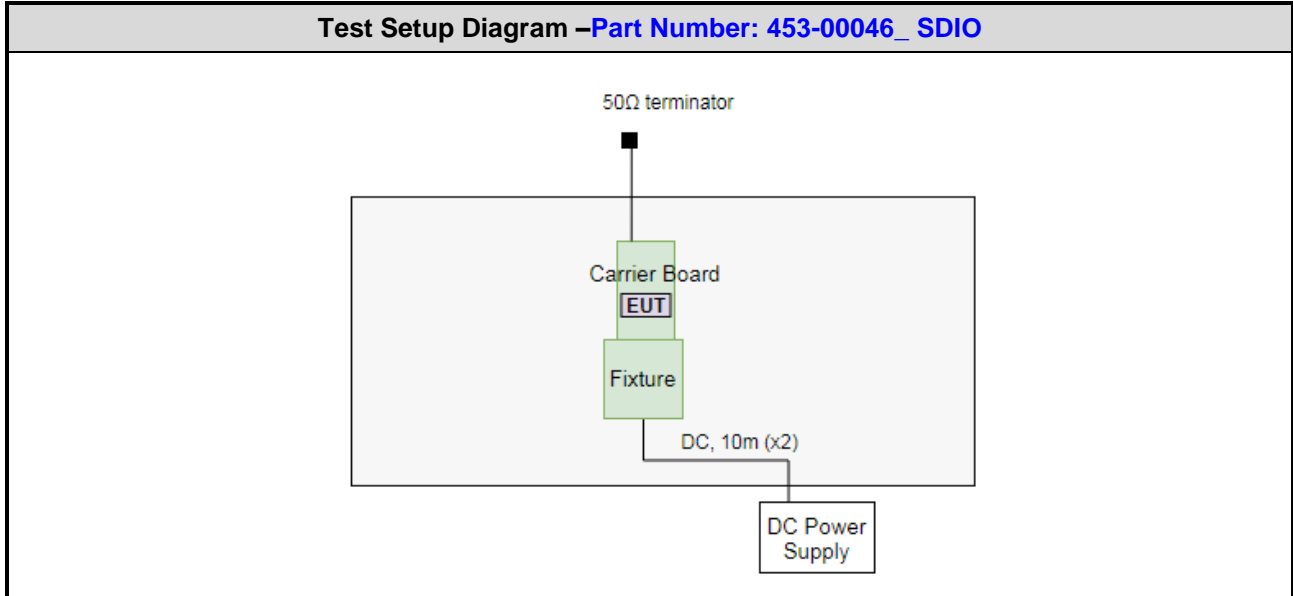


Support Equipment List (Part Number: 453-00048_ SDIO)					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	Carrier Board	Laird	LWB5+,M.2	---	Provided by applicant.
2	Fixture	Laird	SU60-SOMC	---	Provided by applicant.
3	DC Cable	ICC	DCC-10m-R	---	---
4	DC Cable	ICC	DCC-10m-B	---	---
5	Notebook	DELL	Latitude E6430	---	---
6	DC Power Supply	GWINSTEK	GPC-60300	---	---
7	50Ω terminator	---	---	---	---

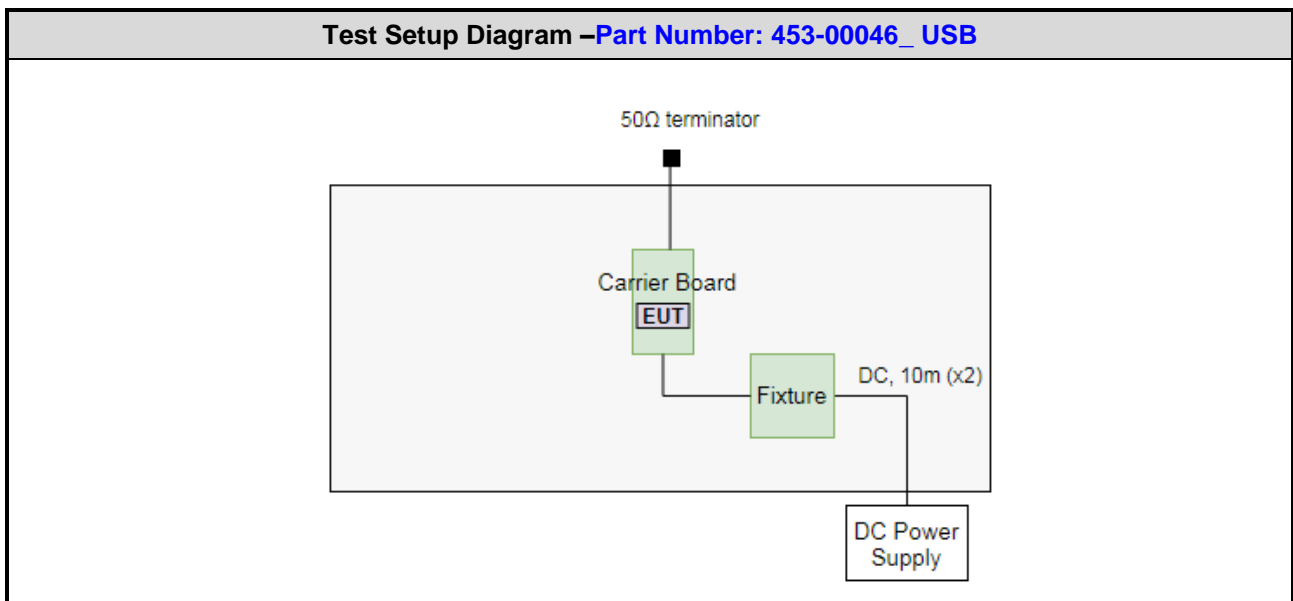
Support Equipment List (Part Number: 453-00049_ USB)					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	Carrier Board	Laird	LWB5+,M.2	---	Provided by applicant.
2	USB Cable	I-Gota	micro to A	---	---
3	Fixture	Laird	SU60-SOMC	---	Provided by applicant.
4	DC Cable	ICC	DCC-10m-R	---	---
5	DC Cable	ICC	DCC-10m-B	---	---
6	Notebook	DELL	Latitude E6430	---	---
7	DC Power Supply	GWINSTEK	GPC-60300	---	---
8	50Ω terminator	---	---	---	---

## 1.3 Test Setup Chart

### For radiated emission

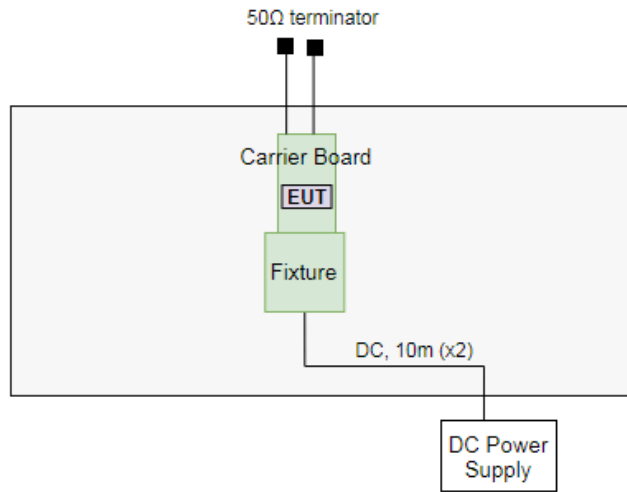


Note: The notebook is disconnected from EUT and removed from test table when EUT is set to transmit continuously.



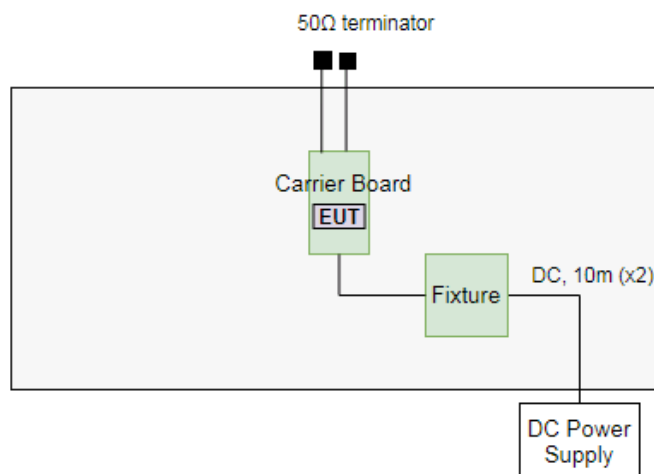
Note: The notebook is disconnected from EUT and removed from test table when EUT is set to transmit continuously.

**Test Setup Diagram –Part Number: 453-00048\_ SDIO**



Note: The notebook is disconnected from EUT and removed from test table when EUT is set to transmit continuously.

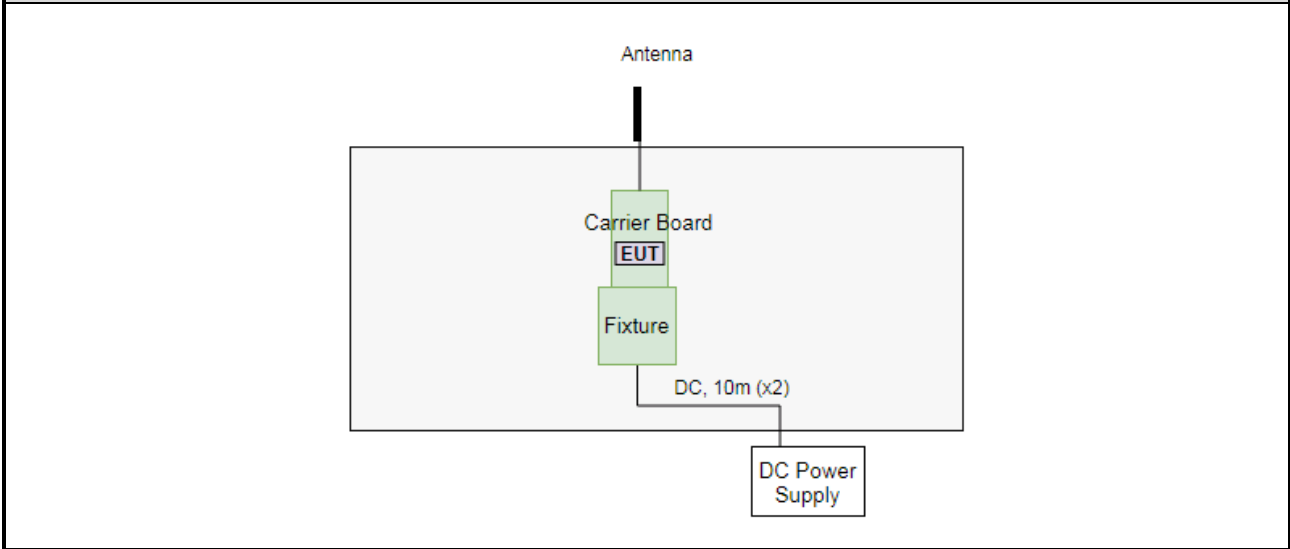
**Test Setup Diagram –Part Number: 453-00049\_ USB**



Note: The notebook is disconnected from EUT and removed from test table when EUT is set to transmit continuously.

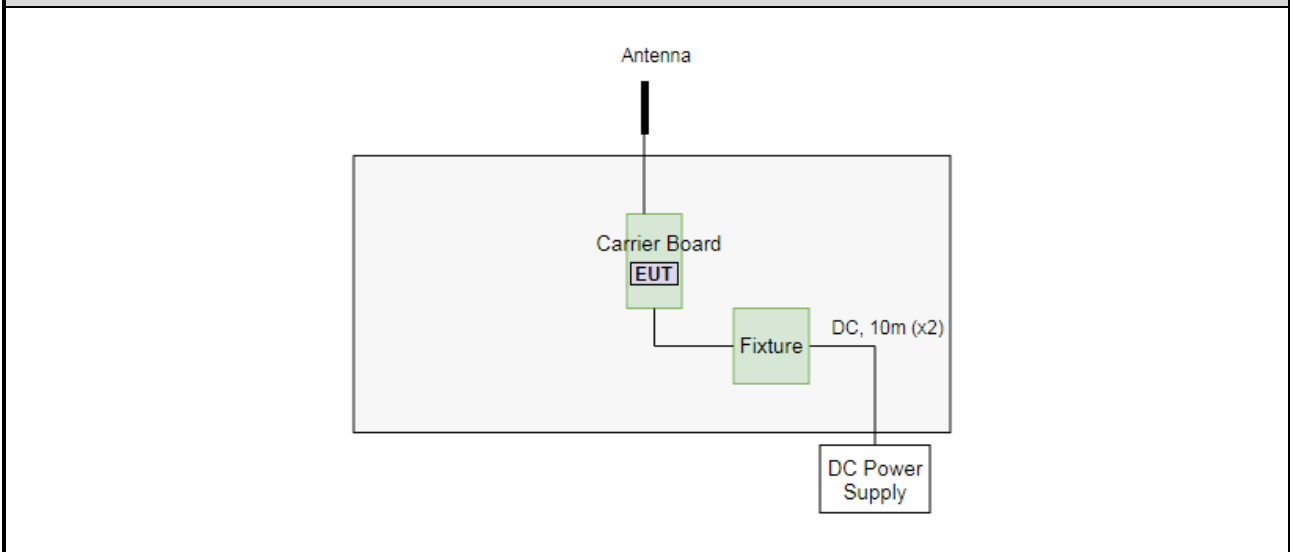
**For conducted emission**

**Test Setup Diagram –Part Number: 453-00046\_ SDIO**



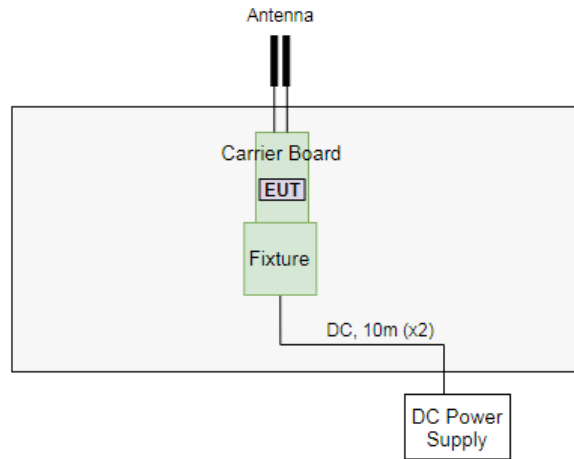
Note: The notebook is disconnected from EUT and removed from test table when EUT is set to transmit continuously.

**Test Setup Diagram –Part Number: 453-00046\_ USB**



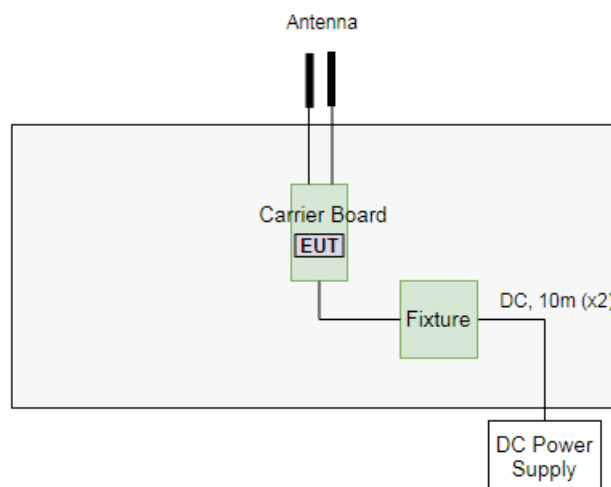
Note: The notebook is disconnected from EUT and removed from test table when EUT is set to transmit continuously.

**Test Setup Diagram –Part Number: 453-00048\_ SDIO**



Note: The notebook is disconnected from EUT and removed from test table when EUT is set to transmit continuously.

**Test Setup Diagram –Part Number: 453-00049\_ USB**



Note: The notebook is disconnected from EUT and removed from test table when EUT is set to transmit continuously.

## 1.4 The Equipment List

<b>Test Item</b>	Conducted Emission				
<b>Test Site</b>	Conduction room 1 / (CO01-WS)				
<b>Test Date</b>	Aug. 18, 2020				
<b>Instrument</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Calibration Date</b>	<b>Calibration Until</b>
Receiver	R&S	ESR3	101658	Dec. 12, 2019	Dec. 11, 2020
LISN	R&S	ENV216	101579	Mar. 12, 2020	Mar. 11, 2021
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 22, 2019	Oct. 21, 2020
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

<b>Test Item</b>	Radiated Emission				
<b>Test Site</b>	966 chamber1 / (03CH01-WS)				
<b>Test Date</b>	Jul. 15 ~ Aug. 10, 2020				
<b>Instrument</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Calibration Date</b>	<b>Calibration Until</b>
Spectrum Analyzer	R&S	FSV40	101498	Dec. 17, 2019	Dec. 16, 2020
Receiver	R&S	ESR3	101657	Feb. 14, 2020	Feb. 13, 2021
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jul. 10, 2020	Jul. 09, 2021
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Dec. 12, 2019	Dec. 11, 2020
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 15, 2019	Nov. 14, 2020
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 13, 2019	Nov. 12, 2020
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 07, 2019	Oct. 06, 2020
Preamplifier	EMC	EMC02325	980225	Jul. 03, 2020	Jul. 02, 2021
Preamplifier	Agilent	83017A	MY39501308	Oct. 08, 2019	Oct. 07, 2020
Preamplifier	EMC	EMC184045B	980194	Sep. 18, 2019	Sep. 17, 2020
RF Cable	EMC	EMC104-SM-SM-8000	181106	Oct. 07, 2019	Oct. 06, 2020
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Oct. 07, 2019	Oct. 06, 2020
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16014/4	Oct. 07, 2019	Oct. 06, 2020
LF cable 1M	EMC	EMCCFD400-NM-NM-1000	160502	Oct. 07, 2019	Oct. 06, 2020
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Oct. 07, 2019	Oct. 06, 2020
LF cable 10M	EMC	CFD400-E	CFD400-001	Oct. 18, 2019	Oct. 17, 2020
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

<b>Test Item</b>	RF Conducted				
<b>Test Site</b>	(TH01-WS)				
<b>Test Date</b>	Aug. 20, 2020				
<b>Instrument</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Calibration Date</b>	<b>Calibration Until</b>
Spectrum Analyzer	R&S	FSV40	101063	Apr. 30, 2020	Apr. 29, 2021
Power Meter	Anritsu	ML2495A	1241002	Oct. 23, 2019	Oct. 22, 2020
Power Sensor	Anritsu	MA2411B	1207366	Oct. 23, 2019	Oct. 22, 2020
DC POWER SOURCE	GW INSTRON	GPC-6030D	GES855395	Oct. 29, 2019	Oct. 28, 2020
Measurement Software	Sporton	Sporton_1	1.3.30	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	$\pm 34.130$ Hz
Conducted power	$\pm 0.808$ dB
Power density	$\pm 0.583$ dB
Conducted emission	$\pm 2.715$ dB
AC conducted emission	$\pm 2.92$ dB
Radiated emission $\leq 1$ GHz	$\pm 3.41$ dB
Radiated emission $> 1$ GHz	$\pm 4.59$ dB

## 2 Test Configuration

### 2.1 Testing Facility

<b>Test Laboratory</b>	International Certification Corp.
<b>Test Site</b>	CO01-WS, 03CH01-WS, TH01-WS
<b>Address of Test Site</b>	No. 3-1, Lane 6, Wen San 3rd St., Kwei Shan District, Tao Yuan City 333, Taiwan, R.O.C.

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

### 2.2 The Worst Test Modes and Channel Details

Test item	Modulation Mode	Test Frequency (MHz)	Data Rate	Test Configuration
Conducted Emissions	11g	2437	6 Mbps	1, 2, 3, 4
Radiated Emissions $\leq 1$ GHz	11g	2437	6 Mbps	1, 2, 3, 4
Radiated Emissions $> 1$ GHz	11b 11g HT20 HT40	2412 / 2437 / 2462 2412 / 2437 / 2462 2412 / 2437 / 2462 2422 / 2437 / 2452	1 Mbps 6 Mbps MCS 0 MCS 0	1
	11b 11g	2437 2437	1 Mbps 6 Mbps	3
Maximum Output Power	11b 11g HT20 HT40	2412 / 2437 / 2462 2412 / 2437 / 2462 2412 / 2437 / 2462 2422 / 2437 / 2452	1 Mbps 6 Mbps MCS 0 MCS 0	1, 3
6dB bandwidth	11b 11g	2412 / 2437 / 2462 2412 / 2437 / 2462	1 Mbps 6 Mbps	1
Power spectral density	HT20 HT40	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.
2. Test configurations are as below  
 Configuration 1: Part Number: 453-00046(SDIO) with PCB Dipole Antenna  
 Configuration 2: Part Number: 453-00046(USB) with PCB Dipole Antenna  
 Configuration 3: Part Number: 453-00048 with PCB Dipole Antenna  
 Configuration 4: Part Number: 453-00049 with PCB Dipole Antenna
3. 50 $\Omega$  terminator was connected to antenna port of EUT for radiated emission measurement.
4. Test data rate is worst data rate found after pretest.
5. Test antenna port of configuration 3 is worst antenna port found after pretest.



## 3 Transmitter Test Results

### 3.1 Conducted Emissions

#### 3.1.1 Limit of Conducted Emissions

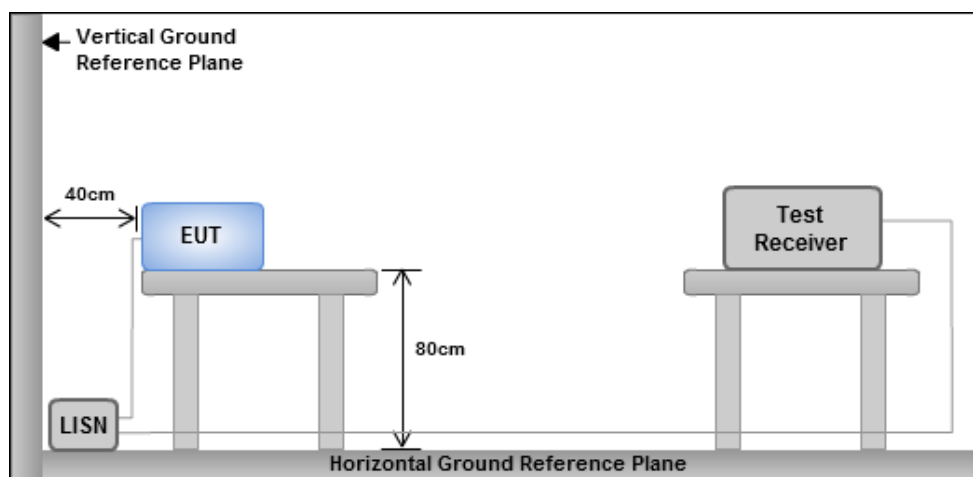
Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

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

#### 3.1.2 Test Procedures

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

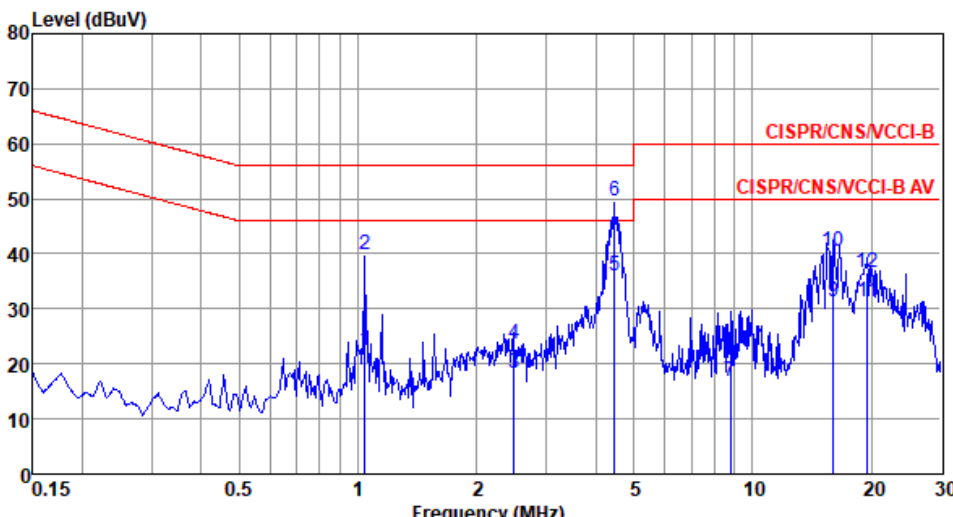
#### 3.1.3 Test Setup



- 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

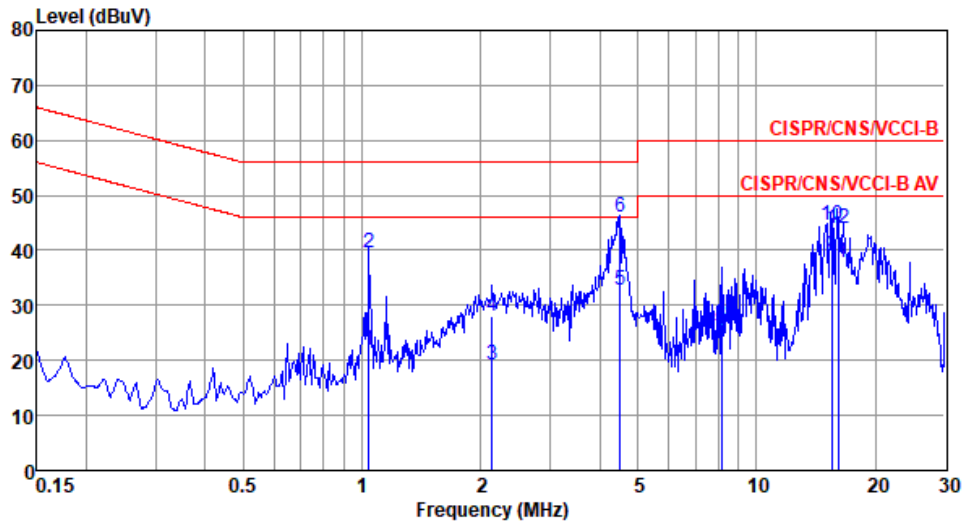
### 3.1.4 Test Result of Conducted Emissions

#### Configuration 1

Modulation	11g	Test Freq. (MHz)	2437																																																																																																																					
Power Phase	Line																																																																																																																							
<p>Test by : Alex Tsai      Temperature: 24°C      Humidity: 60%</p>																																																																																																																								
																																																																																																																								
<table border="1"> <thead> <tr> <th></th> <th>Freq MHz</th> <th>Level dBuV</th> <th>Limit Line dBuV</th> <th>Over Limit dB</th> <th>Read Level dBuV</th> <th>LISN factor dB</th> <th>cable loss dB</th> <th>Remark</th> </tr> </thead> <tbody> <tr><td>1</td><td>1.043</td><td>22.51</td><td>46.00</td><td>-23.49</td><td>12.76</td><td>9.63</td><td>0.12</td><td>Average</td></tr> <tr><td>2</td><td>1.043</td><td>39.86</td><td>56.00</td><td>-16.14</td><td>30.11</td><td>9.63</td><td>0.12</td><td>QP</td></tr> <tr><td>3</td><td>2.487</td><td>18.19</td><td>46.00</td><td>-27.81</td><td>8.34</td><td>9.64</td><td>0.21</td><td>Average</td></tr> <tr><td>4</td><td>2.487</td><td>23.53</td><td>56.00</td><td>-32.47</td><td>13.68</td><td>9.64</td><td>0.21</td><td>QP</td></tr> <tr><td>5</td><td>4.478</td><td>35.93</td><td>46.00</td><td>-10.07</td><td>25.98</td><td>9.65</td><td>0.30</td><td>Average</td></tr> <tr><td>6*</td><td>4.478</td><td>49.70</td><td>56.00</td><td>-6.30</td><td>39.75</td><td>9.65</td><td>0.30</td><td>QP</td></tr> <tr><td>7</td><td>8.776</td><td>16.70</td><td>50.00</td><td>-33.30</td><td>6.65</td><td>9.68</td><td>0.37</td><td>Average</td></tr> <tr><td>8</td><td>8.776</td><td>22.09</td><td>60.00</td><td>-37.91</td><td>12.04</td><td>9.68</td><td>0.37</td><td>QP</td></tr> <tr><td>9</td><td>16.055</td><td>31.24</td><td>50.00</td><td>-18.76</td><td>20.92</td><td>9.71</td><td>0.61</td><td>Average</td></tr> <tr><td>10</td><td>16.055</td><td>40.38</td><td>60.00</td><td>-19.62</td><td>30.06</td><td>9.71</td><td>0.61</td><td>QP</td></tr> <tr><td>11</td><td>19.532</td><td>31.40</td><td>50.00</td><td>-18.60</td><td>21.03</td><td>9.72</td><td>0.65</td><td>Average</td></tr> <tr><td>12</td><td>19.532</td><td>36.53</td><td>60.00</td><td>-23.47</td><td>26.16</td><td>9.72</td><td>0.65</td><td>QP</td></tr> </tbody> </table>					Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark	1	1.043	22.51	46.00	-23.49	12.76	9.63	0.12	Average	2	1.043	39.86	56.00	-16.14	30.11	9.63	0.12	QP	3	2.487	18.19	46.00	-27.81	8.34	9.64	0.21	Average	4	2.487	23.53	56.00	-32.47	13.68	9.64	0.21	QP	5	4.478	35.93	46.00	-10.07	25.98	9.65	0.30	Average	6*	4.478	49.70	56.00	-6.30	39.75	9.65	0.30	QP	7	8.776	16.70	50.00	-33.30	6.65	9.68	0.37	Average	8	8.776	22.09	60.00	-37.91	12.04	9.68	0.37	QP	9	16.055	31.24	50.00	-18.76	20.92	9.71	0.61	Average	10	16.055	40.38	60.00	-19.62	30.06	9.71	0.61	QP	11	19.532	31.40	50.00	-18.60	21.03	9.72	0.65	Average	12	19.532	36.53	60.00	-23.47	26.16	9.72	0.65	QP
	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark																																																																																																																
1	1.043	22.51	46.00	-23.49	12.76	9.63	0.12	Average																																																																																																																
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<p>Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).          Note 2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).</p>																																																																																																																								

<b>Modulation</b>	11g	<b>Test Freq. (MHz)</b>	2437
<b>Power Phase</b>	Neutral		

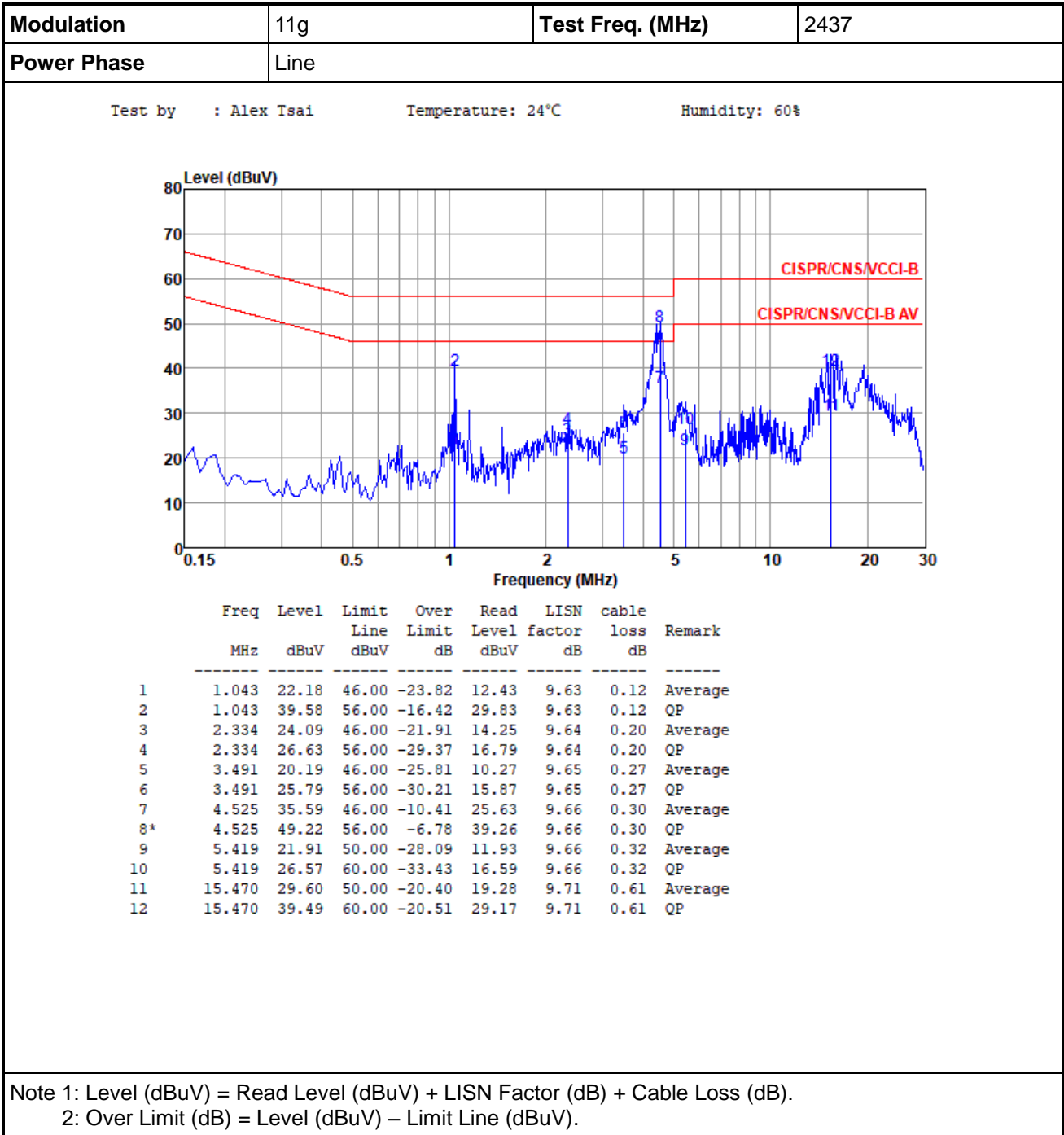
Test by : Alex Tsai      Temperature: 24°C      Humidity: 60%



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	1.043	21.97	46.00	-24.03	12.20	9.65	0.12	Average
2	1.043	39.51	56.00	-16.49	29.74	9.65	0.12	QP
3	2.133	19.30	46.00	-26.70	9.45	9.66	0.19	Average
4	2.133	28.06	56.00	-27.94	18.21	9.66	0.19	QP
5	4.501	32.65	46.00	-13.35	22.67	9.68	0.30	Average
6*	4.501	45.94	56.00	-10.06	35.96	9.68	0.30	QP
7	8.148	23.91	50.00	-26.09	13.82	9.72	0.37	Average
8	8.148	26.68	60.00	-33.32	16.59	9.72	0.37	QP
9	15.503	38.98	50.00	-11.02	28.57	9.80	0.61	Average
10	15.503	44.53	60.00	-15.47	34.12	9.80	0.61	QP
11	16.090	37.87	50.00	-12.13	27.45	9.81	0.61	Average
12	16.090	43.87	60.00	-16.13	33.45	9.81	0.61	QP

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

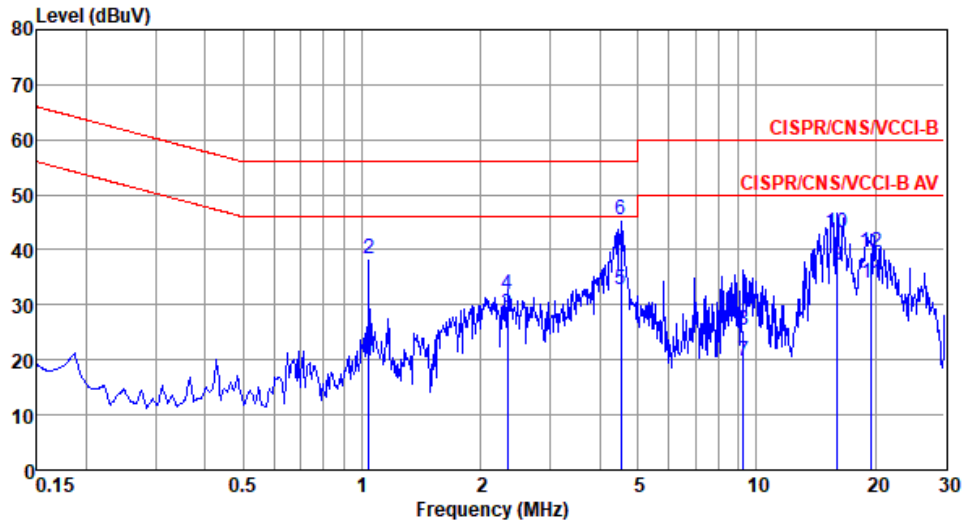
### Configuration 2



<b>Modulation</b>	11g	<b>Test Freq. (MHz)</b>	2437
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<b>Power Phase</b>	Neutral
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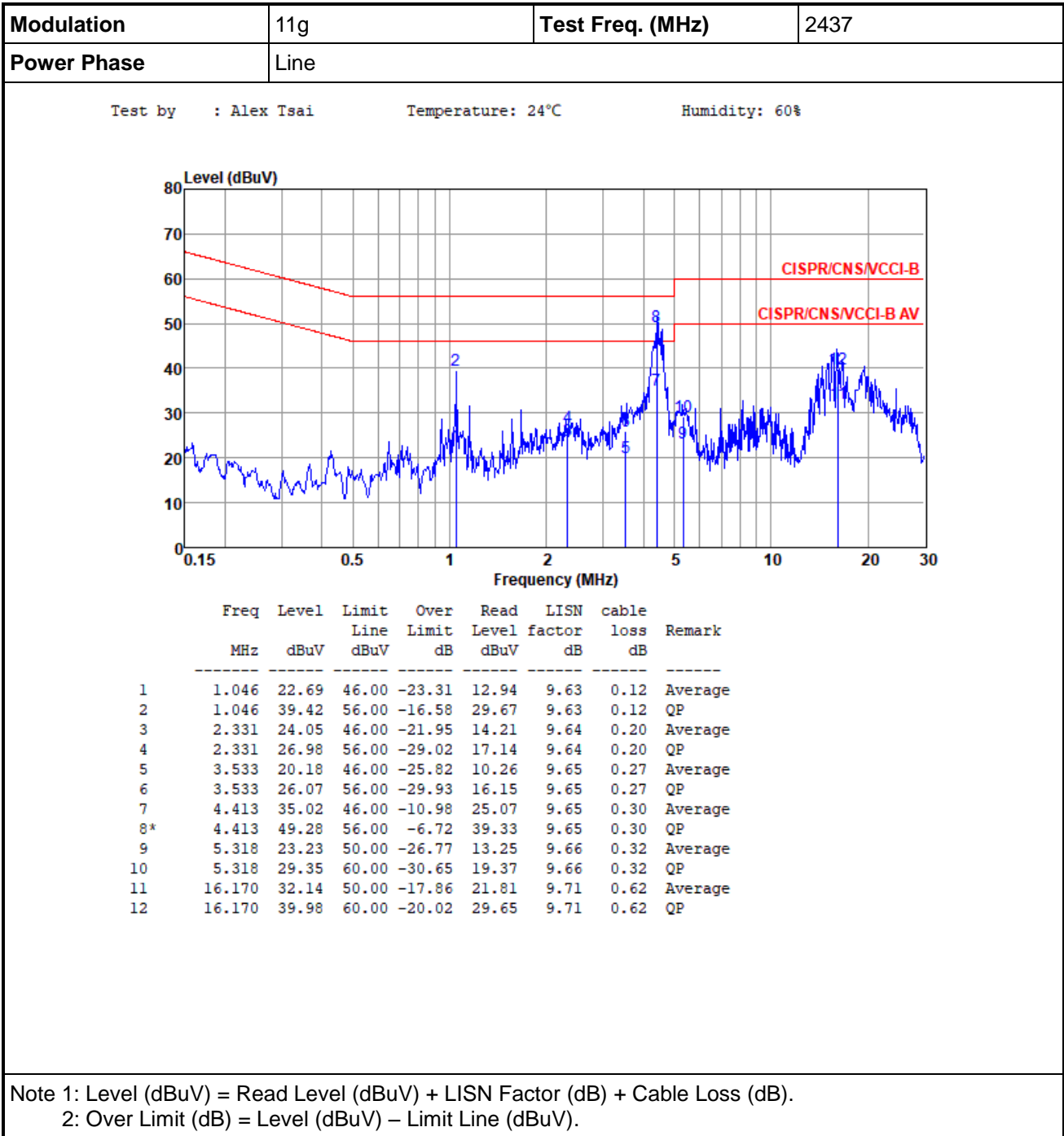
Test by : Alex Tsai      Temperature: 24°C      Humidity: 60%



	Freq	Level	Limit	Over	Read	LISN	cable	Remark
	MHz	dBuV	Line	Limit	Level	factor	loss	
			dBuV	dB	dBuV	dB	dB	
1	1.043	20.71	46.00	-25.29	10.94	9.65	0.12	Average
2	1.043	38.24	56.00	-17.76	28.47	9.65	0.12	QP
3	2.334	28.44	46.00	-17.56	18.58	9.66	0.20	Average
4	2.334	31.74	56.00	-24.26	21.88	9.66	0.20	QP
5	4.525	32.64	46.00	-13.36	22.66	9.68	0.30	Average
6*	4.525	45.36	56.00	-10.64	35.38	9.68	0.30	QP
7	9.253	19.70	50.00	-30.30	9.60	9.72	0.38	Average
8	9.253	25.46	60.00	-34.54	15.36	9.72	0.38	QP
9	16.055	37.17	50.00	-12.83	26.75	9.81	0.61	Average
10	16.055	43.18	60.00	-16.82	32.76	9.81	0.61	QP
11	19.532	34.01	50.00	-15.99	23.52	9.84	0.65	Average
12	19.532	39.55	60.00	-20.45	29.06	9.84	0.65	QP

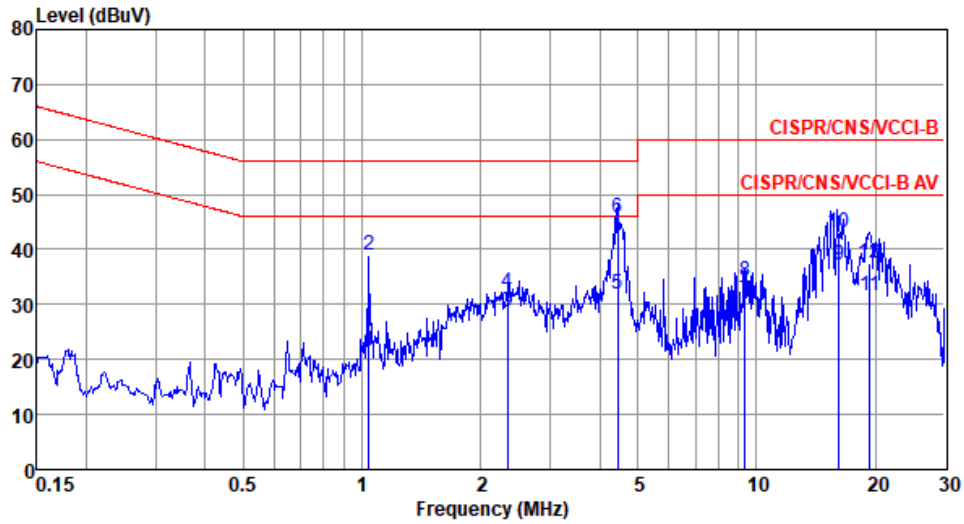
Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).  
 2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

### Configuration 3



<b>Modulation</b>	11g	<b>Test Freq. (MHz)</b>	2437
<b>Power Phase</b>	Neutral		

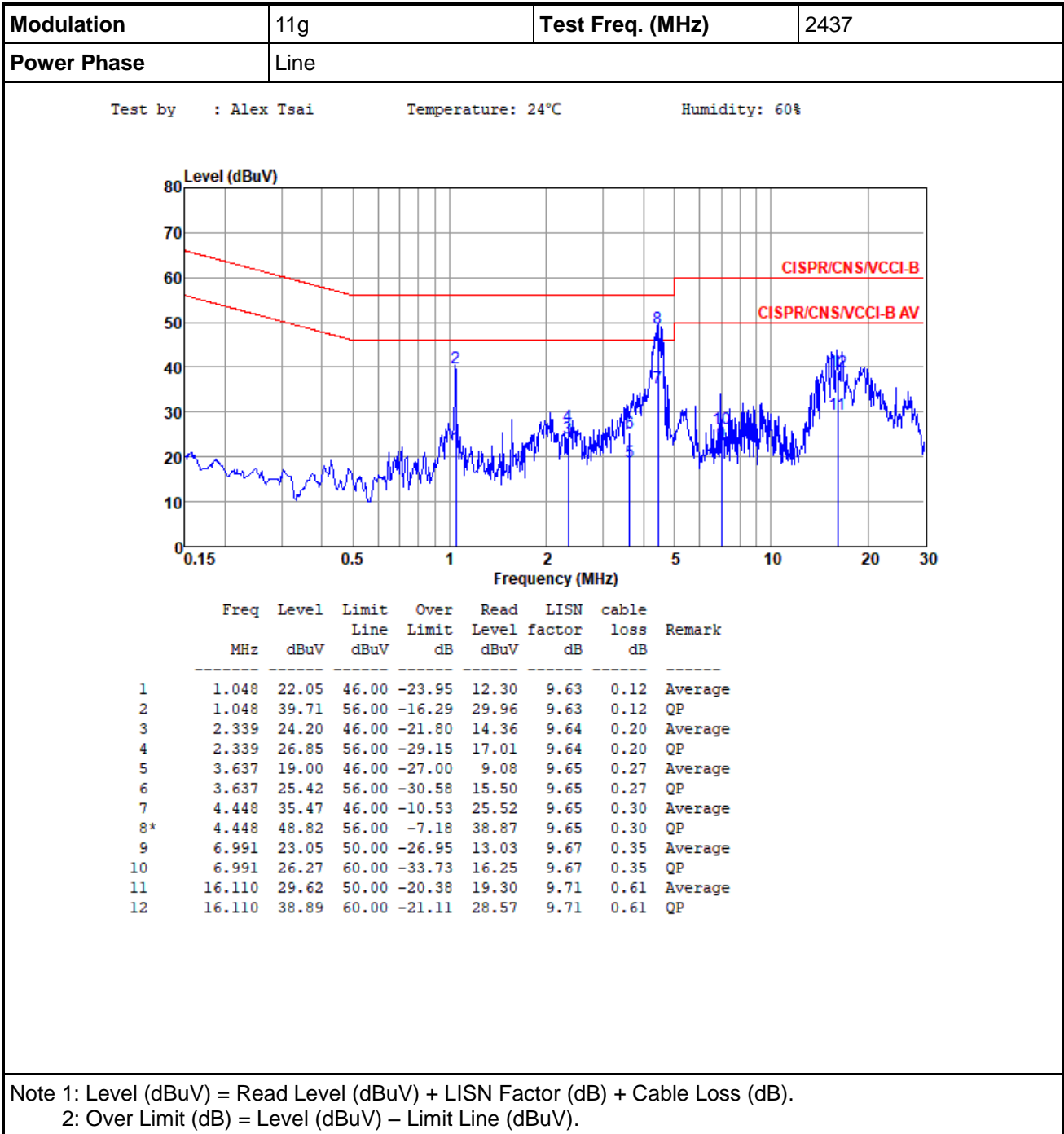
Test by : Alex Tsai      Temperature: 24°C      Humidity: 60%



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	1.042	21.58	46.00	-24.42	11.81	9.65	0.12	Average
2	1.042	38.87	56.00	-17.13	29.10	9.65	0.12	QP
3	2.339	28.57	46.00	-17.43	18.71	9.66	0.20	Average
4	2.339	32.15	56.00	-23.85	22.29	9.66	0.20	QP
5	4.448	31.77	46.00	-14.23	21.79	9.68	0.30	Average
6*	4.448	45.83	56.00	-10.17	35.85	9.68	0.30	QP
7	9.344	30.67	50.00	-19.33	20.56	9.73	0.38	Average
8	9.352	34.33	60.00	-25.67	24.22	9.73	0.38	QP
9	16.200	37.12	50.00	-12.88	26.69	9.81	0.62	Average
10	16.200	43.18	60.00	-16.82	32.75	9.81	0.62	QP
11	19.370	31.62	50.00	-18.38	21.14	9.83	0.65	Average
12	19.370	37.54	60.00	-22.46	27.06	9.83	0.65	QP

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

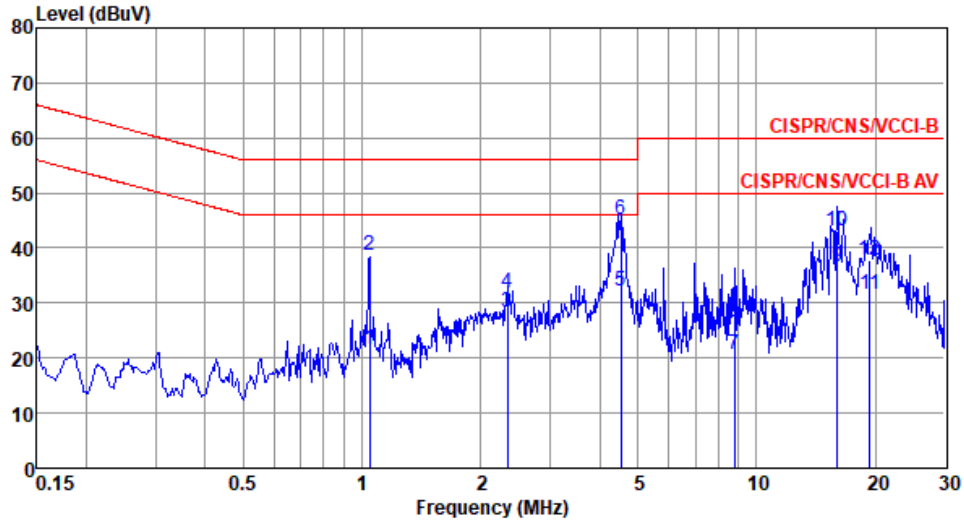
### Configuration 4





<b>Modulation</b>	11g	<b>Test Freq. (MHz)</b>	2437
<b>Power Phase</b>	Neutral		

Test by : Alex Tsai      Temperature: 24°C      Humidity: 60%



	Freq	Level	Limit	Over	Read	LISN	cable	Remark
	MHz	dBuV	Line	Limit	Level	factor	loss	
			dBuV	dB	dBuV	dB	dB	
1	1.048	21.48	46.00	-24.52	11.71	9.65	0.12	Average
2	1.048	38.69	56.00	-17.31	28.92	9.65	0.12	QP
3	2.338	28.47	46.00	-17.53	18.61	9.66	0.20	Average
4	2.338	31.85	56.00	-24.15	21.99	9.66	0.20	QP
5	4.544	32.23	46.00	-13.77	22.25	9.68	0.30	Average
6*	4.544	45.28	56.00	-10.72	35.30	9.68	0.30	QP
7	8.777	20.72	50.00	-29.28	10.63	9.72	0.37	Average
8	8.777	26.71	60.00	-33.29	16.62	9.72	0.37	QP
9	16.051	36.58	50.00	-13.42	26.16	9.81	0.61	Average
10	16.051	43.15	60.00	-16.85	32.73	9.81	0.61	QP
11	19.338	31.66	50.00	-18.34	21.18	9.83	0.65	Average
12	19.338	37.85	60.00	-22.15	27.37	9.83	0.65	QP

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

## 3.2 6dB and Occupied Bandwidth

### 3.2.1 Limit of 6dB Bandwidth

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

### 3.2.2 Test Procedures

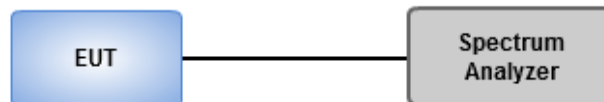
#### 6dB Bandwidth

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.

### 3.2.3 Test Setup



### 3.2.4 Test Result of 6dB and Occupied Bandwidth

<b>Ambient Condition</b>	21°C / 64%	<b>Tested By</b>	Alex Huang
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#### Configuration 1

##### 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)_1TX	9.058M	12.041M	12M0G1D	8.986M	11.983M
802.11g_Nss1,(6Mbps)_1TX	16.377M	16.787M	16M8D1D	16.377M	16.614M
802.11n HT20_Nss1,(MCS0)_1TX	17.609M	17.945M	17M9D1D	17.536M	17.829M
802.11n HT40_Nss1,(MCS0)_1TX	36.377M	36.353M	36M4D1D	36.232M	36.353M

**Max-N dB** = Maximum6dB downbandwidth;**Max-OBW** = Maximum99% occupied bandwidth;

**Min-N dB** = Minimum6dB downbandwidth;**Min-OBW** = Minimum99% occupied bandwidth;

##### Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	8.986M	12.041M
2437MHz	Pass	500k	9.058M	11.983M
2462MHz	Pass	500k	8.986M	11.983M
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	16.377M	16.614M
2437MHz	Pass	500k	16.377M	16.787M
2462MHz	Pass	500k	16.377M	16.614M
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	17.536M	17.829M
2437MHz	Pass	500k	17.536M	17.945M
2462MHz	Pass	500k	17.609M	17.829M
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-
2422MHz	Pass	500k	36.232M	36.353M
2437MHz	Pass	500k	36.377M	36.353M
2452MHz	Pass	500k	36.377M	36.353M

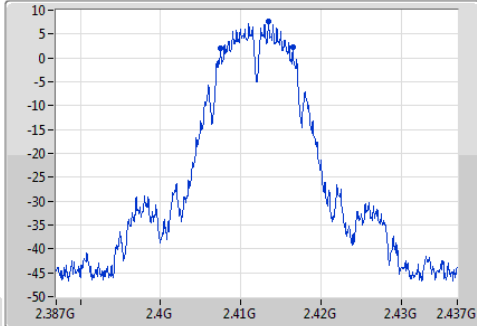
**Port X-N dB** = Port X6dB downbandwidth; **Port X-OBW** = Port X99% occupied bandwidth;

### 802.11b\_Nss1,(1Mbps)\_1TX

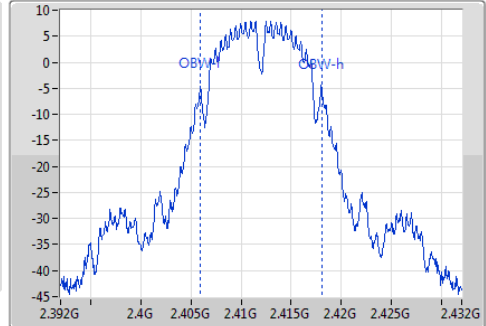
EBW

2412MHz

CF  
2.412GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
1.08ms  
Detector Type  
Peak



CF  
2.412GHz  
Span  
40MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
1ms  
Detector Type  
Sample



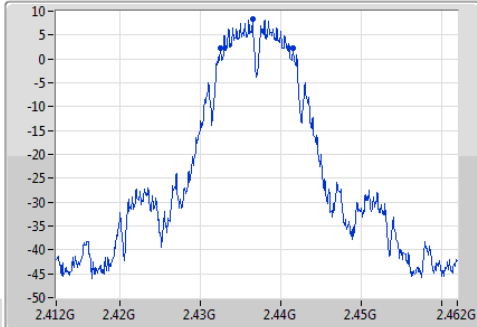
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.986M	2.407507G	2.416493G	12.041M	2.40598G	2.41802G	500k	1

### 802.11b\_Nss1,(1Mbps)\_1TX

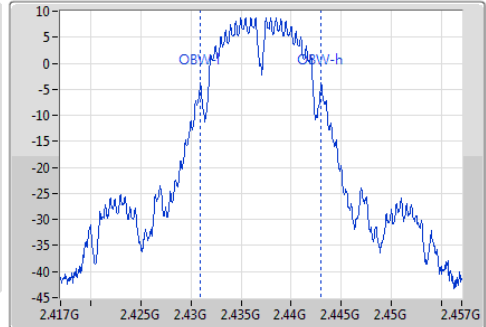
EBW

2437MHz

CF  
2.437GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
1.08ms  
Detector Type  
Peak



CF  
2.437GHz  
Span  
40MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
1ms  
Detector Type  
Sample



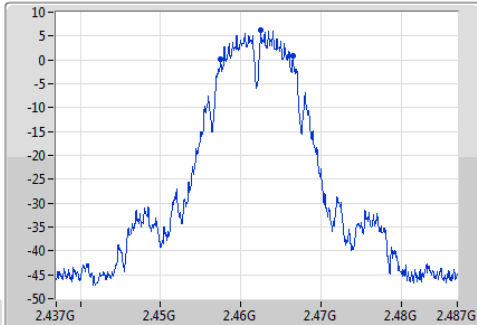
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
9.058M	2.432435G	2.441493G	11.983M	2.43098G	2.442962G	500k	1

### 802.11b\_Nss1,(1Mbps)\_1TX

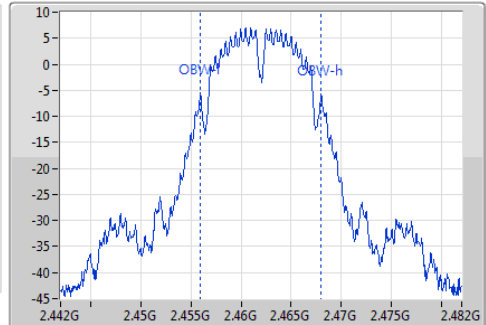
EBW

2462MHz

CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
1.08ms  
Detector Type  
Peak



CF  
2.462GHz  
Span  
40MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
1ms  
Detector Type  
Sample



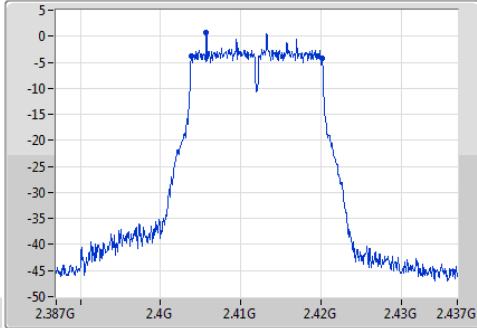
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.986M	2.457507G	2.466493G	11.983M	2.45598G	2.467962G	500k	1

### 802.11g\_Nss1,(6Mbps)\_1TX

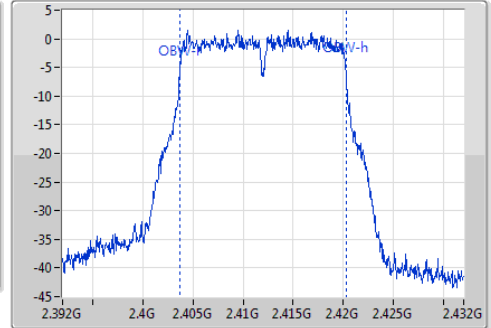
EBW

2412MHz

CF  
2.412GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
1.08ms  
Detector Type  
Peak



CF  
2.412GHz  
Span  
40MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
1ms  
Detector Type  
Sample



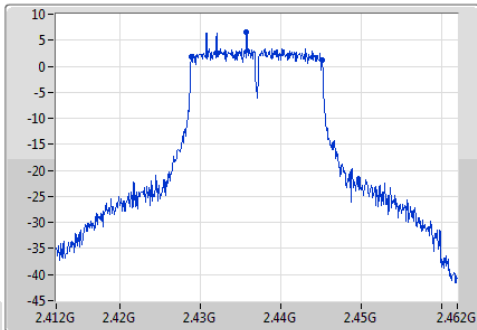
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.377M	2.403812G	2.420188G	16.614M	2.403664G	2.420278G	500k	1

### 802.11g\_Nss1,(6Mbps)\_1TX

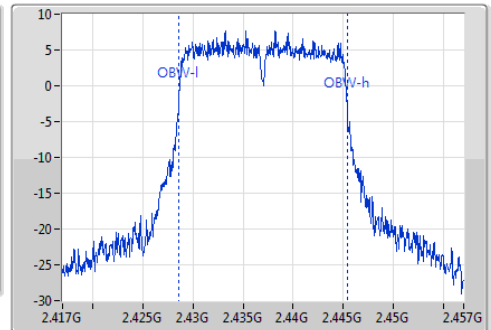
EBW

2437MHz

CF  
2.437GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
1.08ms  
Detector Type  
Peak



CF  
2.437GHz  
Span  
40MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
1ms  
Detector Type  
Sample



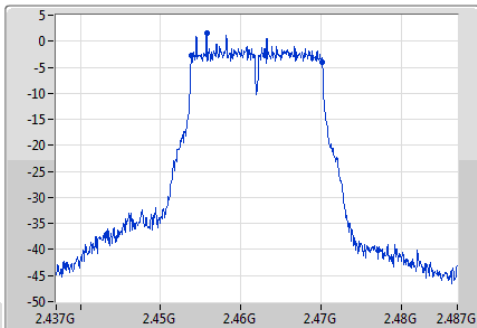
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.377M	2.428812G	2.445188G	16.787M	2.428606G	2.445394G	500k	1

### 802.11g\_Nss1,(6Mbps)\_1TX

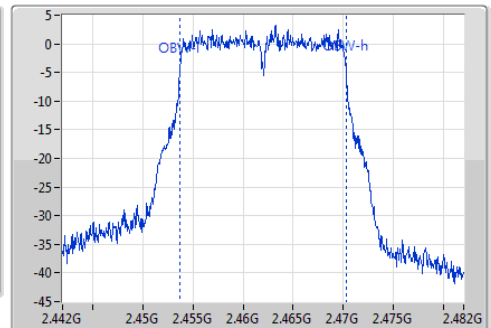
EBW

2462MHz

CF  
2.462GHz  
Span  
50MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
1.08ms  
Detector Type  
Peak



CF  
2.462GHz  
Span  
40MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
1ms  
Detector Type  
Sample

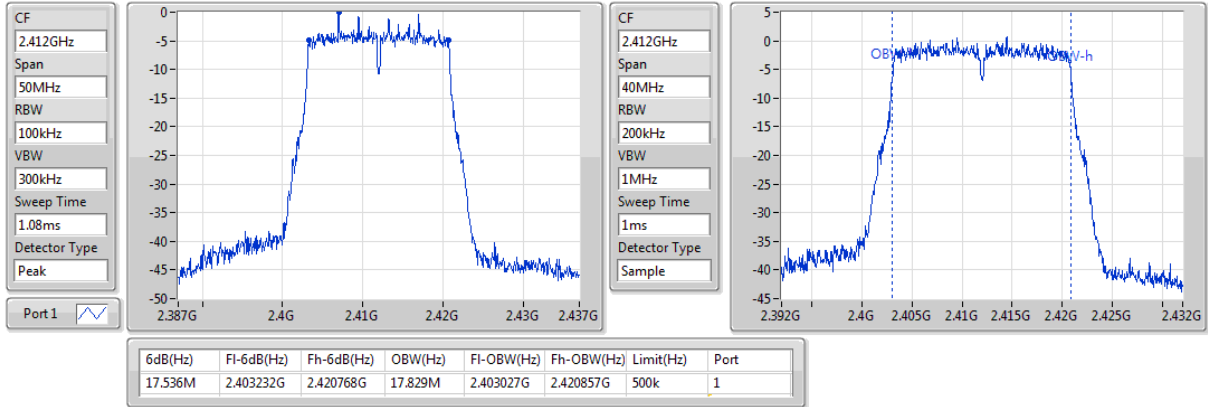


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.377M	2.453812G	2.470188G	16.614M	2.453664G	2.470278G	500k	1

### 802.11n HT20\_Nss1,(MCS0)\_1TX

EBW

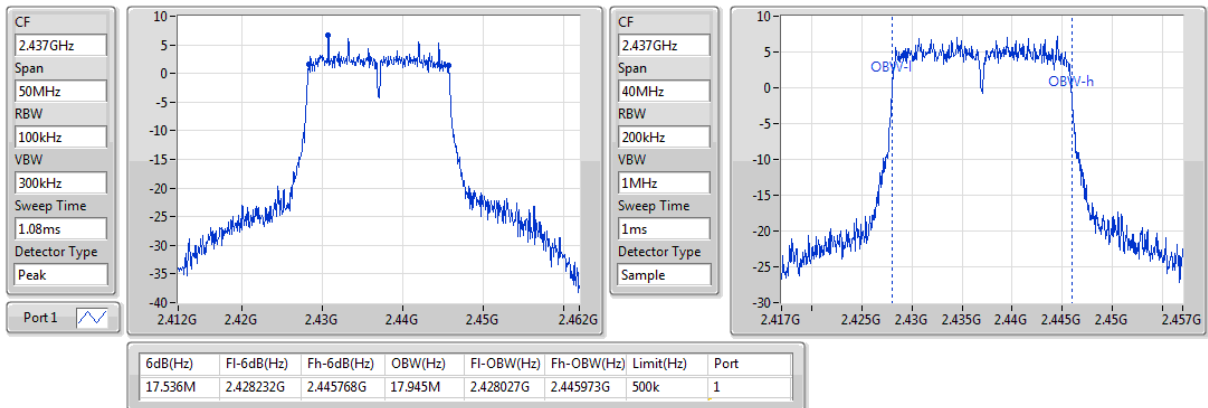
2412MHz



### 802.11n HT20\_Nss1,(MCS0)\_1TX

EBW

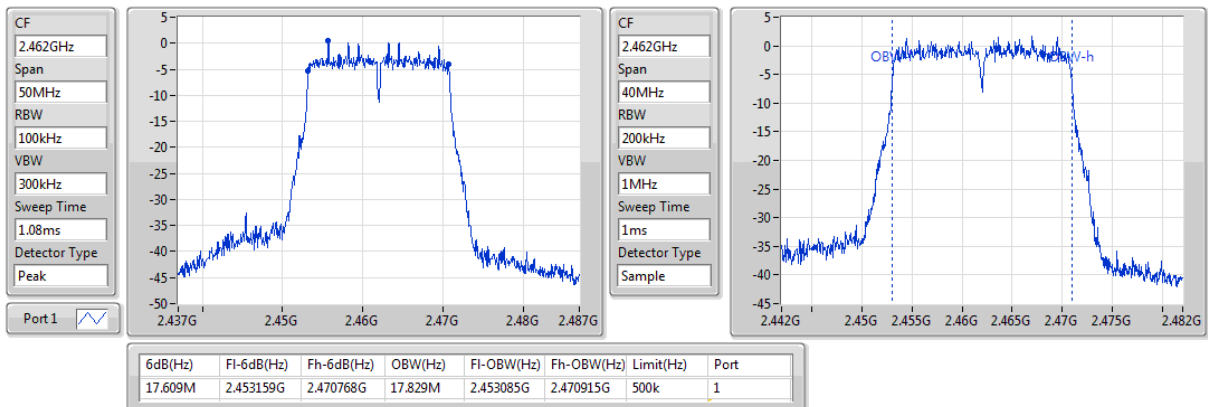
2437MHz



### 802.11n HT20\_Nss1,(MCS0)\_1TX

EBW

2462MHz

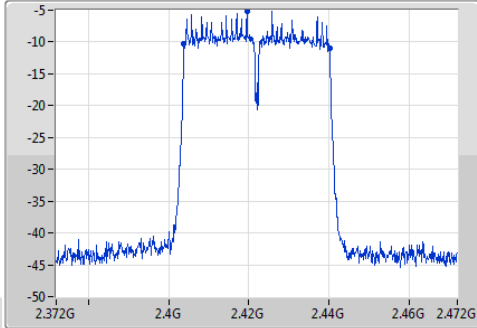


### 802.11n HT40\_Nss1,(MCS0)\_1TX

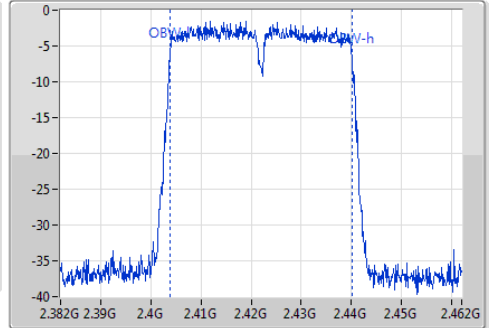
EBW

2422MHz

CF  
2.422GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
1ms  
Detector Type  
Peak



CF  
2.422GHz  
Span  
80MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
1ms  
Detector Type  
Sample



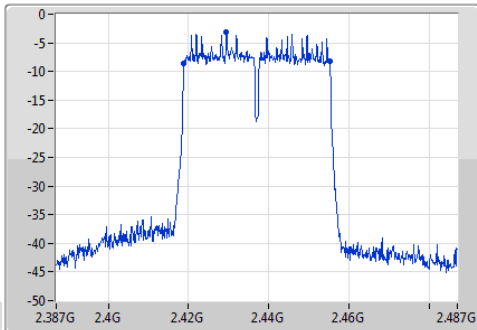
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.232M	2.403884G	2.440116G	36.353M	2.403823G	2.440177G	500k	1

### 802.11n HT40\_Nss1,(MCS0)\_1TX

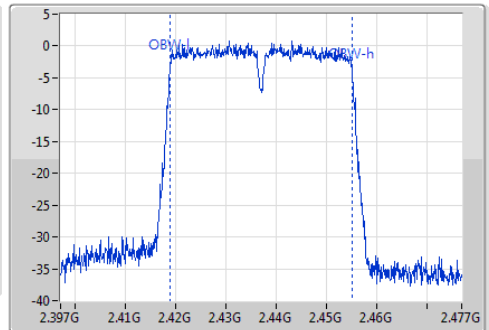
EBW

2437MHz

CF  
2.437GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
1ms  
Detector Type  
Peak



CF  
2.437GHz  
Span  
80MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
1ms  
Detector Type  
Sample



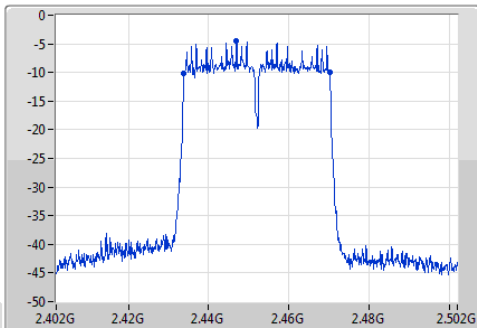
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.377M	2.418884G	2.455261G	36.353M	2.418823G	2.455177G	500k	1

### 802.11n HT40\_Nss1,(MCS0)\_1TX

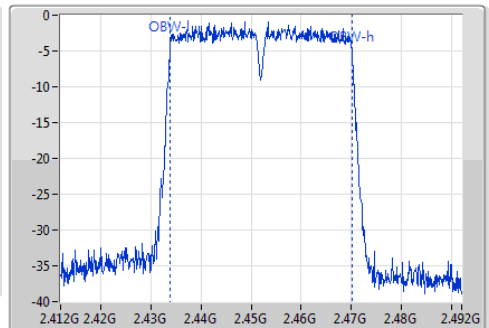
EBW

2452MHz

CF  
2.452GHz  
Span  
100MHz  
RBW  
100kHz  
VBW  
300kHz  
Sweep Time  
1ms  
Detector Type  
Peak



CF  
2.452GHz  
Span  
80MHz  
RBW  
500kHz  
VBW  
2MHz  
Sweep Time  
1ms  
Detector Type  
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.377M	2.433884G	2.470261G	36.353M	2.433823G	2.470177G	500k	1

### 3.3 RF Output Power

#### 3.3.1 Limit of RF Output Power

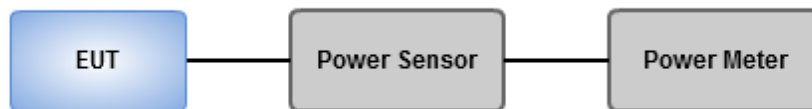
Conducted power shall not exceed 1Watt.

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

#### 3.3.2 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.

#### 3.3.3 Test Setup





### 3.3.4 Test Result of Maximum Output Power

<b>Ambient Condition</b>	21°C / 64%	<b>Tested By</b>	Alex Huang
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#### Configuration 1

##### Summary of Peak Conducted Output Power

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	20.73	0.11830
802.11g_Nss1,(6Mbps)_1TX	24.65	0.29174
802.11n HT20_Nss1,(MCS0)_1TX	24.63	0.29040
802.11n HT40_Nss1,(MCS0)_1TX	19.84	0.09638

#### Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-
2412MHz	Pass	2.79	19.43	19.43	30.00	22.22	36.00
2437MHz	Pass	2.79	20.73	20.73	30.00	23.52	36.00
2462MHz	Pass	2.79	18.69	18.69	30.00	21.48	36.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-
2412MHz	Pass	2.79	21.69	21.69	30.00	24.48	36.00
2437MHz	Pass	2.79	24.65	24.65	30.00	27.44	36.00
2462MHz	Pass	2.79	22.22	22.22	30.00	25.01	36.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
2412MHz	Pass	2.79	20.31	20.31	30.00	23.10	36.00
2437MHz	Pass	2.79	24.63	24.63	30.00	27.42	36.00
2462MHz	Pass	2.79	20.92	20.92	30.00	23.71	36.00
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
2422MHz	Pass	2.79	17.81	17.81	30.00	20.60	36.00
2437MHz	Pass	2.79	19.84	19.84	30.00	22.63	36.00
2452MHz	Pass	2.79	18.27	18.27	30.00	21.06	36.00

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

**Summary of Conducted (Average) Output Power**

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	17.82	0.06053
802.11g_Nss1,(6Mbps)_1TX	18.44	0.06982
802.11n HT20_Nss1,(MCS0)_1TX	18.43	0.06966
802.11n HT40_Nss1,(MCS0)_1TX	11.46	0.01400

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-
2412MHz	Pass	2.79	16.53	16.53	-	19.32	-
2437MHz	Pass	2.79	17.82	17.82	-	20.61	-
2462MHz	Pass	2.79	15.67	15.67	-	18.46	-
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-
2412MHz	Pass	2.79	12.72	12.72	-	15.51	-
2437MHz	Pass	2.79	18.44	18.44	-	21.23	-
2462MHz	Pass	2.79	13.61	13.61	-	16.40	-
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
2412MHz	Pass	2.79	11.70	11.70	-	14.49	-
2437MHz	Pass	2.79	18.43	18.43	-	21.22	-
2462MHz	Pass	2.79	12.32	12.32	-	15.11	-
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
2422MHz	Pass	2.79	9.24	9.24	-	12.03	-
2437MHz	Pass	2.79	11.46	11.46	-	14.25	-
2452MHz	Pass	2.79	9.89	9.89	-	12.68	-

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

**Note** :Conducted average output power is for reference only

### Configuration 3

#### Summary of Peak Conducted Output Power

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	19.86	0.09683
802.11g_Nss1,(6Mbps)_1TX	23.58	0.22803
802.11n HT20_Nss1,(MCS0)_1TX	23.56	0.22699
802.11n HT40_Nss1,(MCS0)_1TX	19.32	0.08551

#### Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-
2412MHz	Pass	2.79	18.87	18.87	30.00	21.66	36.00
2437MHz	Pass	2.79	19.86	19.86	30.00	22.65	36.00
2462MHz	Pass	2.79	17.87	17.87	30.00	20.66	36.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-
2412MHz	Pass	2.79	20.84	20.84	30.00	23.63	36.00
2437MHz	Pass	2.79	23.58	23.58	30.00	26.37	36.00
2462MHz	Pass	2.79	21.61	21.61	30.00	24.40	36.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
2412MHz	Pass	2.79	19.7	19.70	30.00	22.49	36.00
2437MHz	Pass	2.79	23.56	23.56	30.00	26.35	36.00
2462MHz	Pass	2.79	20.31	20.31	30.00	23.10	36.00
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
2422MHz	Pass	2.79	17.17	17.17	30.00	19.96	36.00
2437MHz	Pass	2.79	19.32	19.32	30.00	22.11	36.00
2452MHz	Pass	2.79	17.52	17.52	30.00	20.31	36.00

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

**Summary of Conducted (Average) Output Power**

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	17.16	0.05200
802.11g_Nss1,(6Mbps)_1TX	18.07	0.06412
802.11n HT20_Nss1,(MCS0)_1TX	17.97	0.06266
802.11n HT40_Nss1,(MCS0)_1TX	11.39	0.01377

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-
2412MHz	Pass	2.79	16.06	16.06	-	18.85	-
2437MHz	Pass	2.79	17.16	17.16	-	19.95	-
2462MHz	Pass	2.79	15.12	15.12	-	17.91	-
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-
2412MHz	Pass	2.79	12.4	12.40	-	15.19	-
2437MHz	Pass	2.79	18.07	18.07	-	20.86	-
2462MHz	Pass	2.79	13.51	13.51	-	16.30	-
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
2412MHz	Pass	2.79	11.57	11.57	-	14.36	-
2437MHz	Pass	2.79	17.97	17.97	-	20.76	-
2462MHz	Pass	2.79	12.27	12.27	-	15.06	-
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
2422MHz	Pass	2.79	9.22	9.22	-	12.01	-
2437MHz	Pass	2.79	11.39	11.39	-	14.18	-
2452MHz	Pass	2.79	9.68	9.68	-	12.47	-

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

Note : Conducted average output power is for reference only

### 3.4 Power Spectral Density

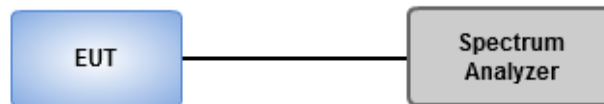
#### 3.4.1 Limit of Power Spectral Density

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

#### 3.4.2 Test Procedures

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.

#### 3.4.3 Test Setup



### 3.4.4 Test Result of Power Spectral Density

<b>Ambient Condition</b>	21°C / 64%	<b>Tested By</b>	Alex Huang
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#### Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_1TX	-5.73
802.11g_Nss1,(6Mbps)_1TX	-8.21
802.11n HT20_Nss1,(MCS0)_1TX	-7.46
802.11n HT40_Nss1,(MCS0)_1TX	-17.09

#### Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	2.79	-7.24	-7.24	8.00
2437MHz	Pass	2.79	-5.73	-5.73	8.00
2462MHz	Pass	2.79	-8.32	-8.32	8.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	2.79	-13.03	-13.03	8.00
2437MHz	Pass	2.79	-8.21	-8.21	8.00
2462MHz	Pass	2.79	-12.61	-12.61	8.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	2.79	-14.04	-14.04	8.00
2437MHz	Pass	2.79	-7.46	-7.46	8.00
2462MHz	Pass	2.79	-13.54	-13.54	8.00
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-
2422MHz	Pass	2.79	-18.52	-18.52	8.00
2437MHz	Pass	2.79	-17.09	-17.09	8.00
2452MHz	Pass	2.79	-18.75	-18.75	8.00

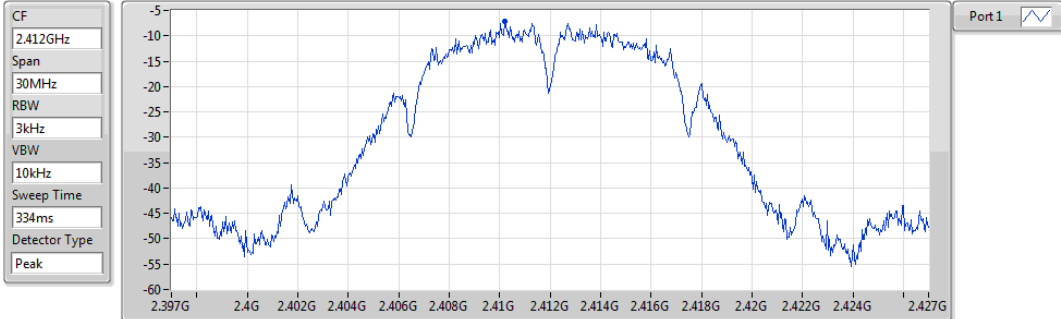
**DG** = Directional Gain;

**PD** = Maximum power density; **Port X** = Port X power density;

### 802.11b\_Nss1,(1Mbps)\_1TX

PSD

#### 2412MHz

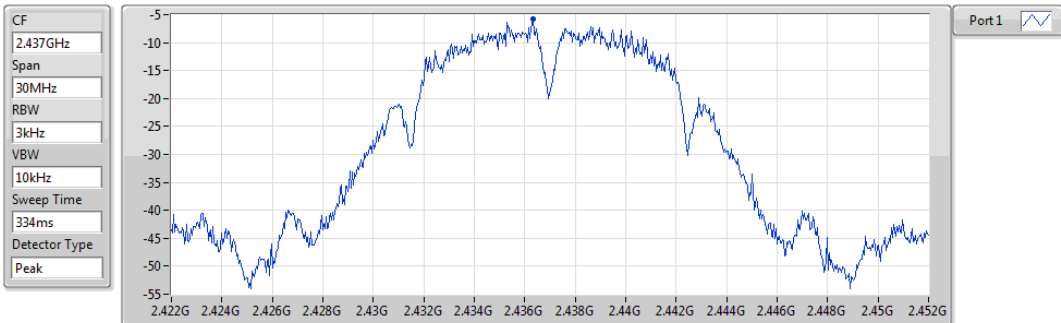


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.24	-7.24	-7.24

### 802.11b\_Nss1,(1Mbps)\_1TX

PSD

#### 2437MHz

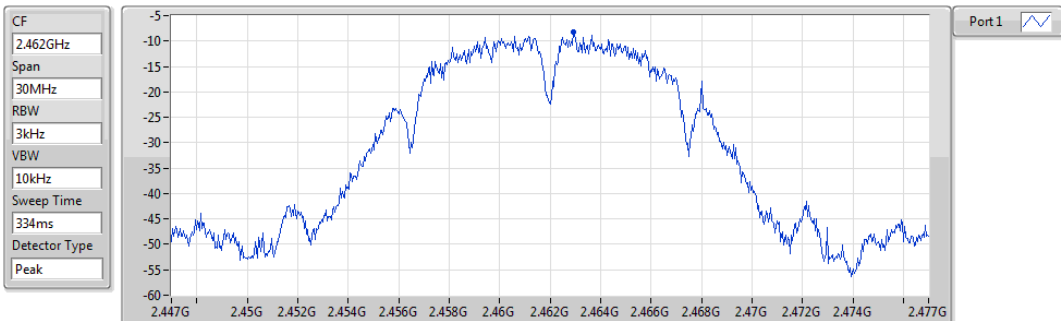


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.73	-5.73	-5.73

### 802.11b\_Nss1,(1Mbps)\_1TX

PSD

#### 2462MHz

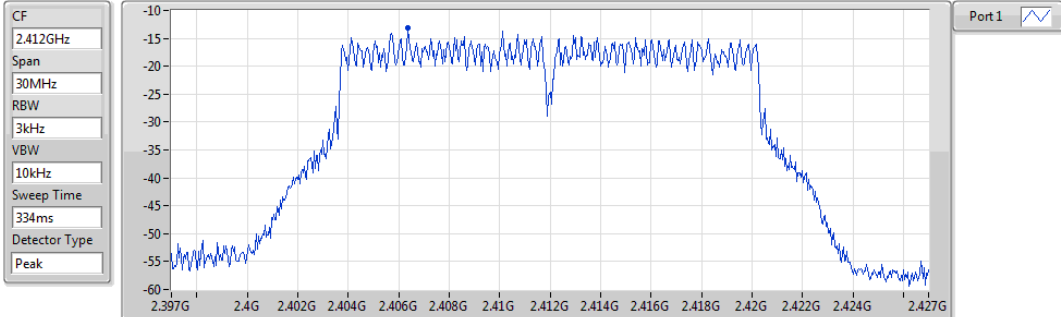


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.32	-8.32	-8.32

### 802.11g\_Nss1,(6Mbps)\_1TX

PSD

2412MHz

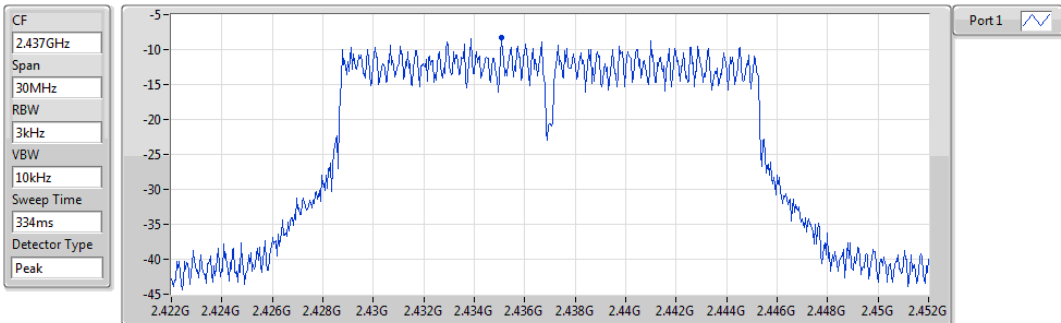


Sum	PD	Port 1
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-13.03	-13.03	-13.03

### 802.11g\_Nss1,(6Mbps)\_1TX

PSD

2437MHz

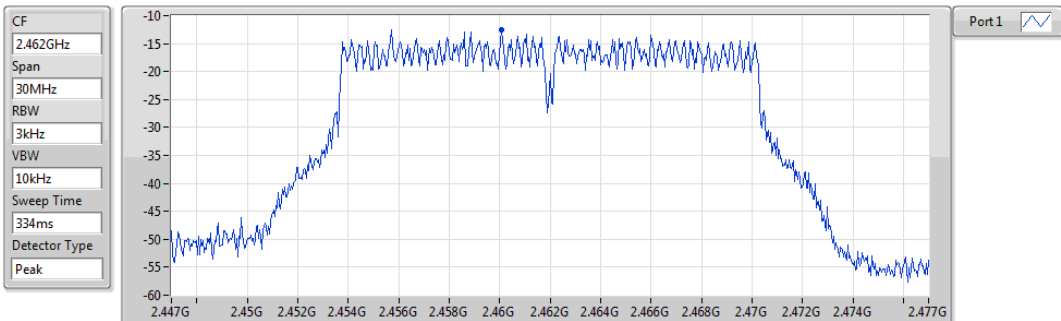


Sum	PD	Port 1
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-8.21	-8.21	-8.21

### 802.11g\_Nss1,(6Mbps)\_1TX

PSD

2462MHz



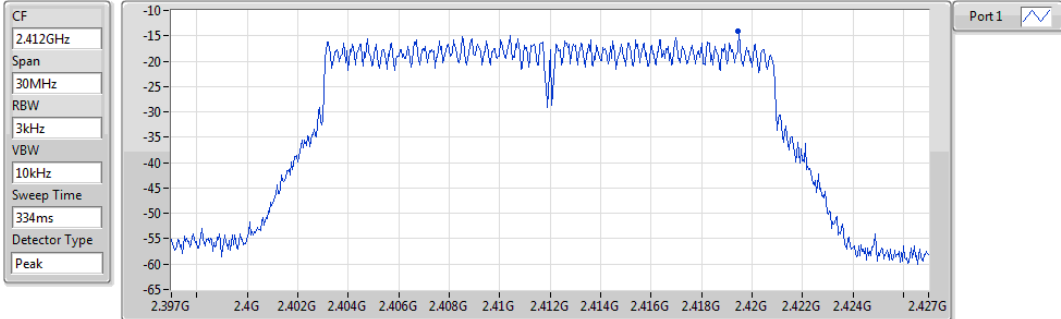
Sum	PD	Port 1
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-12.61	-12.61	-12.61



### 802.11n HT20\_Nss1,(MCS0)\_1TX

PSD

2412MHz

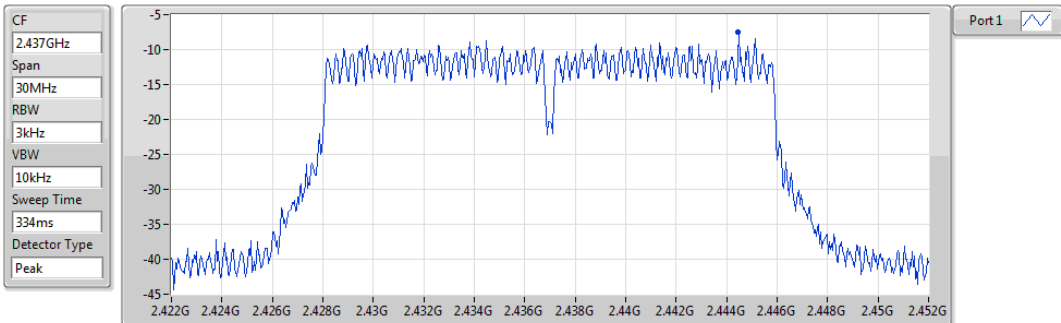


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-14.04	-14.04	-14.04

### 802.11n HT20\_Nss1,(MCS0)\_1TX

PSD

2437MHz

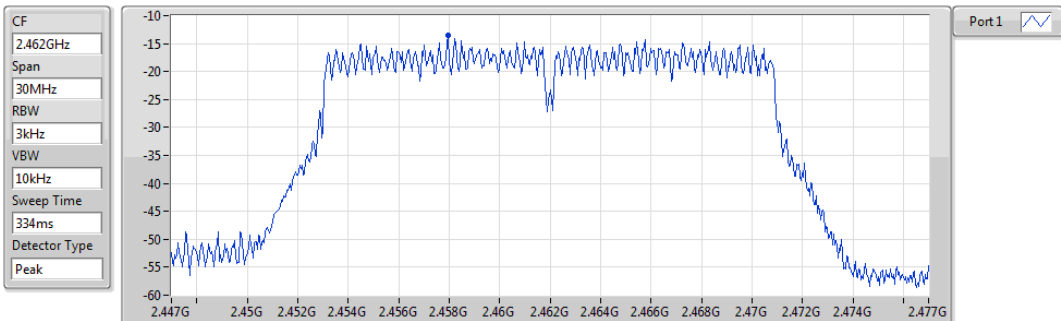


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.46	-7.46	-7.46

### 802.11n HT20\_Nss1,(MCS0)\_1TX

PSD

2462MHz

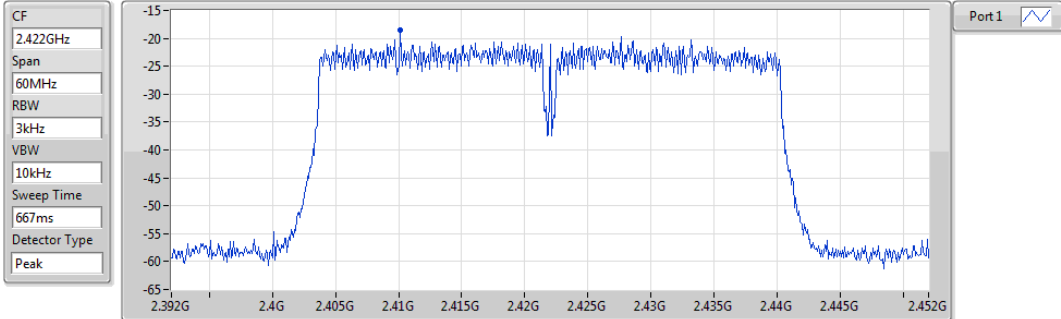


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.54	-13.54	-13.54

### 802.11n HT40\_Nss1,(MCS0)\_1TX

PSD

2422MHz

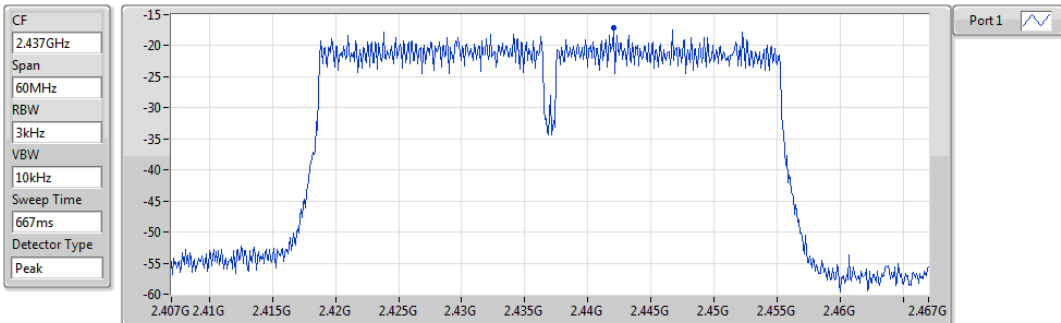


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-18.52	-18.52	-18.52

### 802.11n HT40\_Nss1,(MCS0)\_1TX

PSD

2437MHz

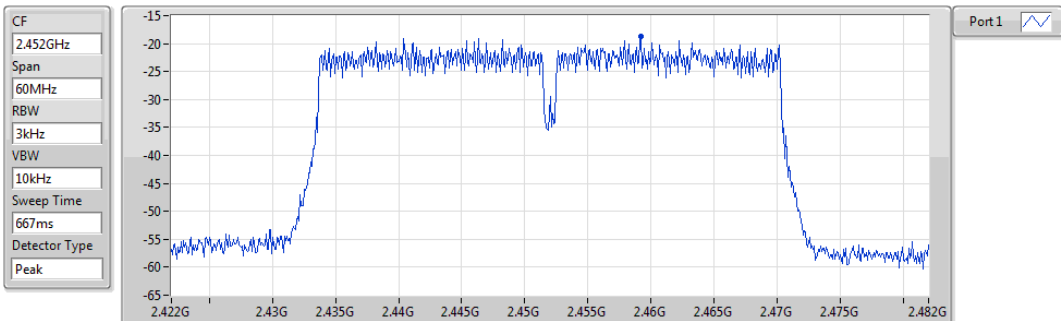


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-17.09	-17.09	-17.09

### 802.11n HT40\_Nss1,(MCS0)\_1TX

PSD

2452MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-18.75	-18.75	-18.75

## 3.5 Unwanted Emissions into Restricted Frequency Bands

### 3.5.1 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:**  
Quasi-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.

### 3.5.2 Test Procedures

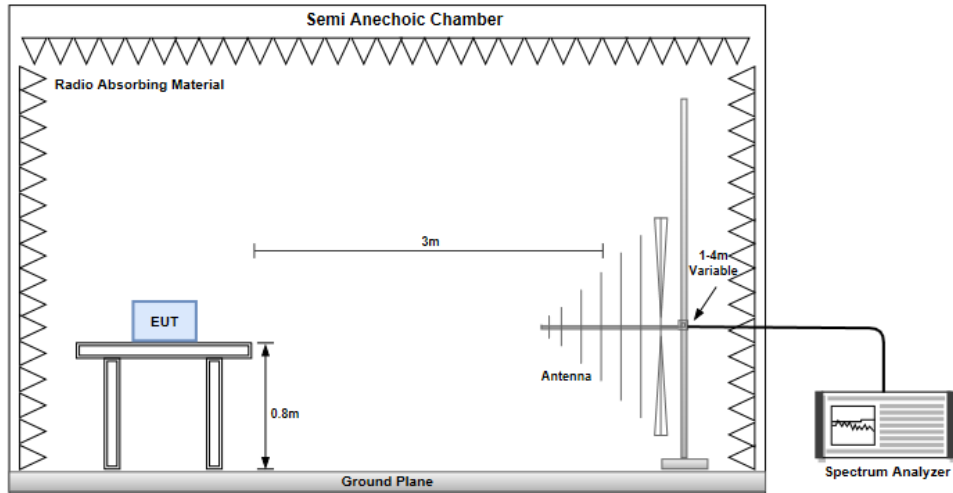
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

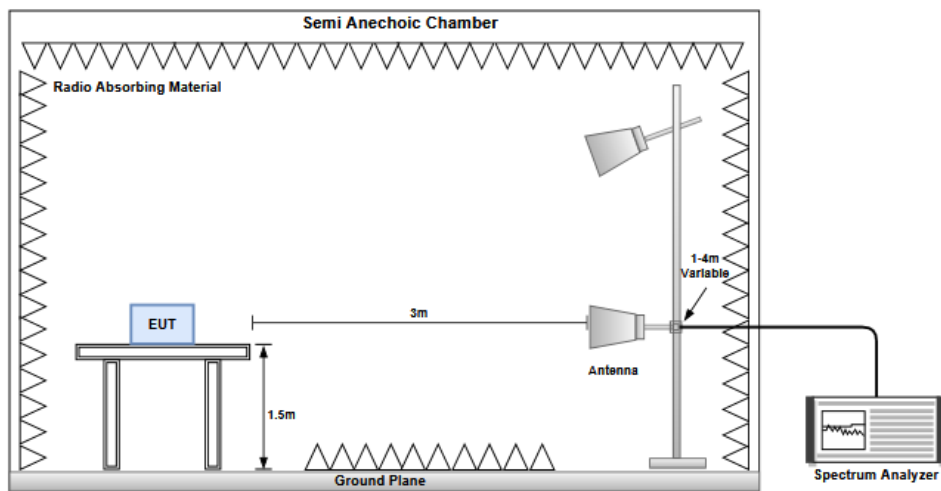
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

### 3.5.3 Test Setup

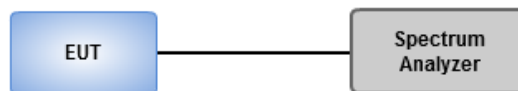
#### Radiated Emissions below 1 GHz



#### Radiated Emissions above 1 GHz

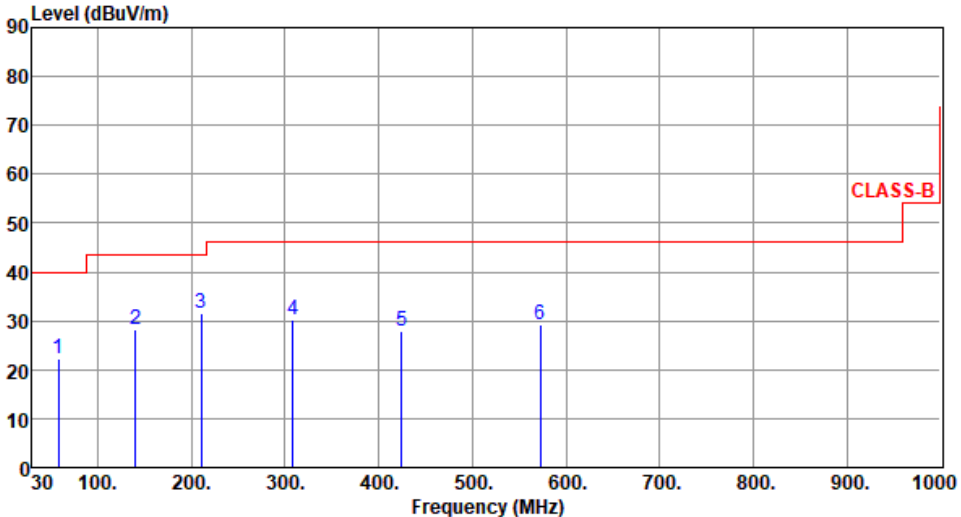


#### Transmitter Conducted Unwanted Emissions (30MHz ~ 25GHz)



### Configuration 1

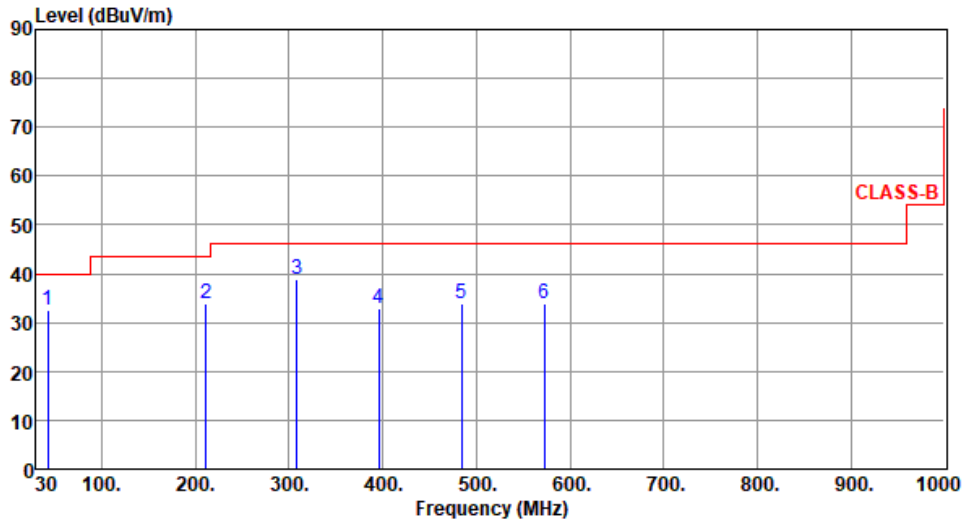
#### 3.5.4 Transmitter Radiated Unwanted Emissions

<b>Modulation</b>	11g	<b>Test Freq. (MHz)</b>	2437						
<b>Polarization</b>	Horizontal								
Test By : Roger Lu      Temperature(°C): 23      Humidity(%): 64									
 <p>The graph plots Level (dBuV/m) on the y-axis (0 to 90) against Frequency (MHz) on the x-axis (30 to 1000). A red step function represents the CLASS-B limit, starting at 40 dBuV/m from 30 MHz to 100 MHz, rising to 45 dBuV/m at 100 MHz, and rising to 55 dBuV/m at 950 MHz. Six blue vertical lines indicate emission peaks at 58.13, 140.58, 210.42, 308.39, 424.79, and 572.23 MHz, labeled 1 through 6 respectively.</p>									
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	58.13	22.31	40.00	-17.69	31.03	-8.72	Peak	---	---
2	140.58	28.08	43.50	-15.42	37.12	-9.04	Peak	---	---
3	210.42	31.57	43.50	-11.93	43.45	-11.88	Peak	---	---
4	308.39	30.17	46.00	-15.83	37.89	-7.72	Peak	---	---
5	424.79	27.85	46.00	-18.15	32.72	-4.87	Peak	---	---
6	572.23	29.38	46.00	-16.62	31.01	-1.63	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)  
 \*Factor includes antenna factor , cable loss and amplifier gain  
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).  
 Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

<b>Modulation</b>	11g	<b>Test Freq. (MHz)</b>	2437
<b>Polarization</b>	Vertical		

Test By :Roger Lu      Temperature(°C):23      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	42.61	32.70	40.00	-7.30	40.71	-8.01	Peak	---	---
2	211.39	33.88	43.50	-9.62	45.76	-11.88	Peak	---	---
3	308.39	38.69	46.00	-7.31	46.41	-7.72	Peak	---	---
4	395.69	32.93	46.00	-13.07	38.60	-5.67	Peak	---	---
5	483.96	33.97	46.00	-12.03	37.39	-3.42	Peak	---	---
6	572.23	33.83	46.00	-12.17	35.46	-1.63	Peak	---	---

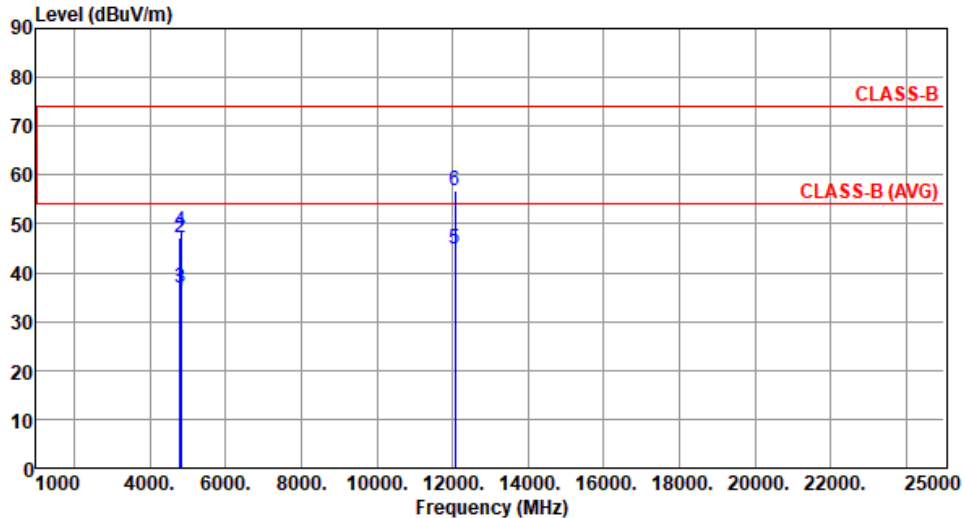
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

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

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

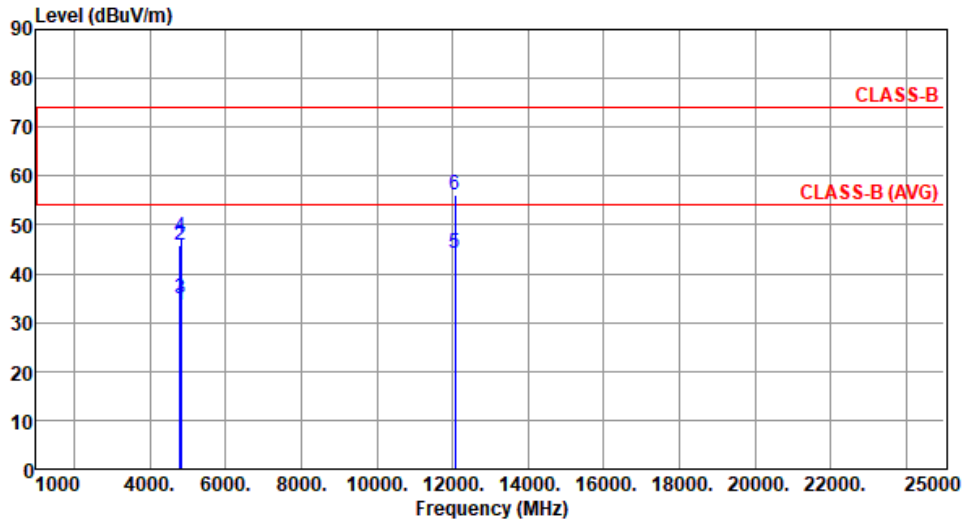
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

### 3.5.5 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11b

<b>Modulation</b>	11b	<b>Test Freq. (MHz)</b>	2412						
<b>Polarization</b>	Horizontal								
Test By : Akun Chung      Temperature(°C): 24      Humidity(%): 60									
									
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	4801.00	36.34	54.00	-17.66	32.82	3.52	Average	201	159
2	4801.00	47.27	74.00	-26.73	43.75	3.52	Peak	201	159
3	4824.00	36.70	54.00	-17.30	33.10	3.60	Average	262	321
4	4824.00	48.47	74.00	-25.53	44.87	3.60	Peak	262	321
5	12060.00	44.73	54.00	-9.27	30.88	13.85	Average	100	50
6	12060.00	56.65	74.00	-17.35	42.80	13.85	Peak	100	50
<p>Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)          *Factor includes antenna factor , cable loss and amplifier gain          Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).</p>									

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

Test By :Akun Chung      Temperature(°C):24      Humidity(%):60



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4801.00	33.67	54.00	-20.33	30.15	3.52	Average	100	35
2	4801.00	45.85	74.00	-28.15	42.33	3.52	Peak	100	35
3	4824.00	34.85	54.00	-19.15	31.25	3.60	Average	100	348
4	4824.00	47.45	74.00	-26.55	43.85	3.60	Peak	100	348
5	12060.00	44.29	54.00	-9.71	30.44	13.85	Average	100	101
6	12060.00	56.28	74.00	-17.72	42.43	13.85	Peak	100	101

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

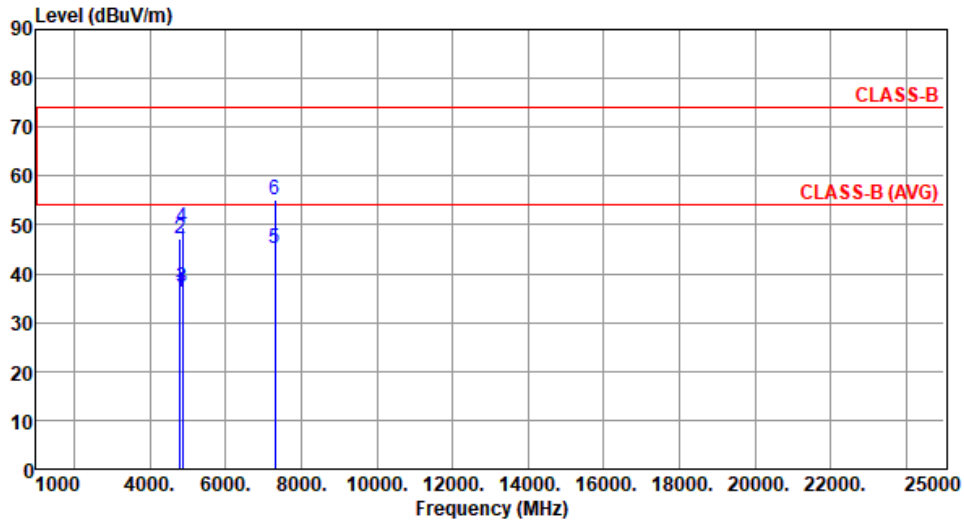
\*Factor includes antenna factor , cable loss and amplifier gain

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



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

Test By :Akun Chung      Temperature(°C):24      Humidity(%) :60



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4801.00	36.10	54.00	-17.90	32.58	3.52	Average	200	166
2	4801.00	47.29	74.00	-26.71	43.77	3.52	Peak	200	166
3	4874.00	37.30	54.00	-16.70	33.66	3.64	Average	260	320
4	4874.00	49.35	74.00	-24.65	45.71	3.64	Peak	260	320
5	7311.00	45.09	54.00	-8.91	35.82	9.27	Average	199	305
6	7311.00	55.12	74.00	-18.88	45.85	9.27	Peak	199	305

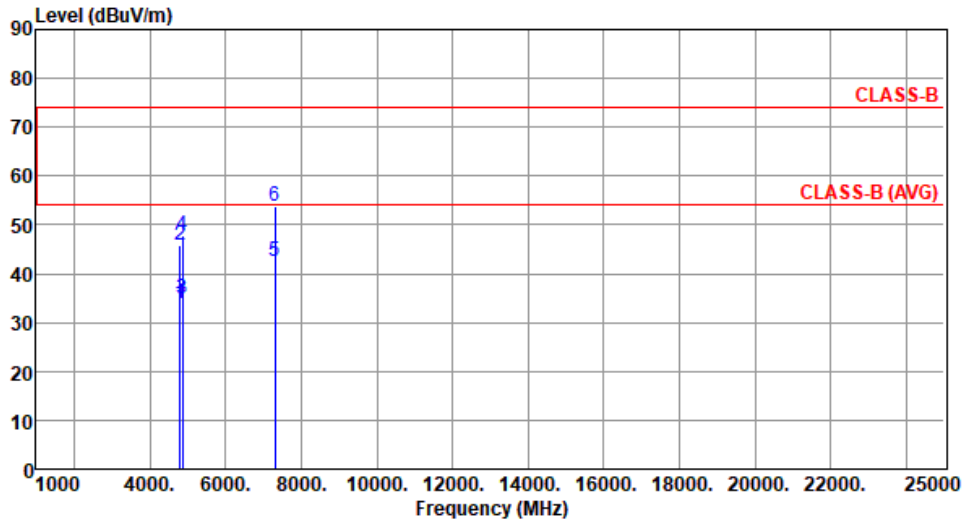
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

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

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

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

Test By :Akun Chung      Temperature(°C):24      Humidity(%):60



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4801.00	33.74	54.00	-20.26	30.22	3.52	Average	100	33
2	4801.00	45.77	74.00	-28.23	42.25	3.52	Peak	100	33
3	4874.00	34.75	54.00	-19.25	31.11	3.64	Average	100	354
4	4874.00	47.75	74.00	-26.25	44.11	3.64	Peak	100	354
5	7311.00	42.55	54.00	-11.45	33.28	9.27	Average	263	19
6	7311.00	53.67	74.00	-20.33	44.40	9.27	Peak	263	19

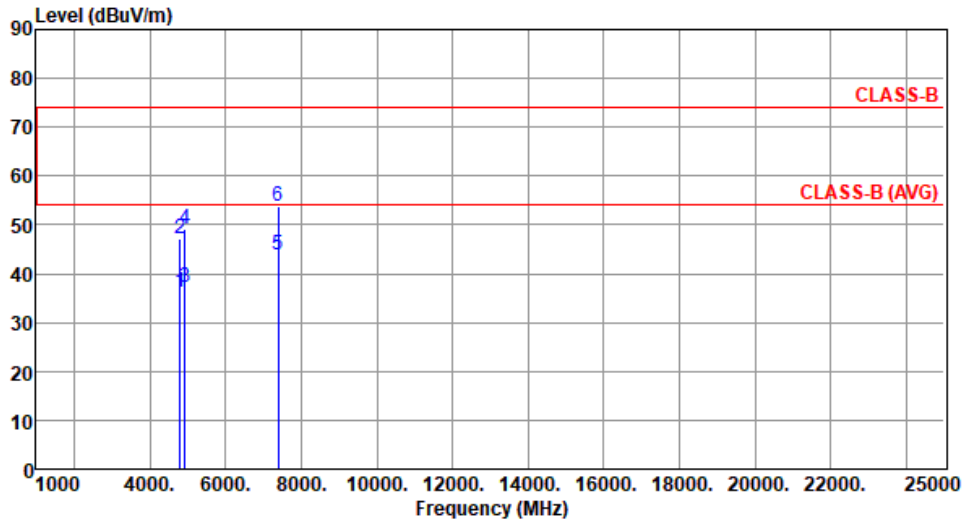
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

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

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

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

Test By :Akun Chung      Temperature(°C):24      Humidity(%) :60



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4801.00	36.12	54.00	-17.88	32.60	3.52	Average	204	168
2	4801.00	47.24	74.00	-26.76	43.72	3.52	Peak	204	168
3	4924.00	37.27	54.00	-16.73	33.58	3.69	Average	253	317
4	4924.00	49.25	74.00	-24.75	45.56	3.69	Peak	253	317
5	7386.00	43.75	54.00	-10.25	34.68	9.07	Average	195	302
6	7386.00	53.82	74.00	-20.18	44.75	9.07	Peak	195	302

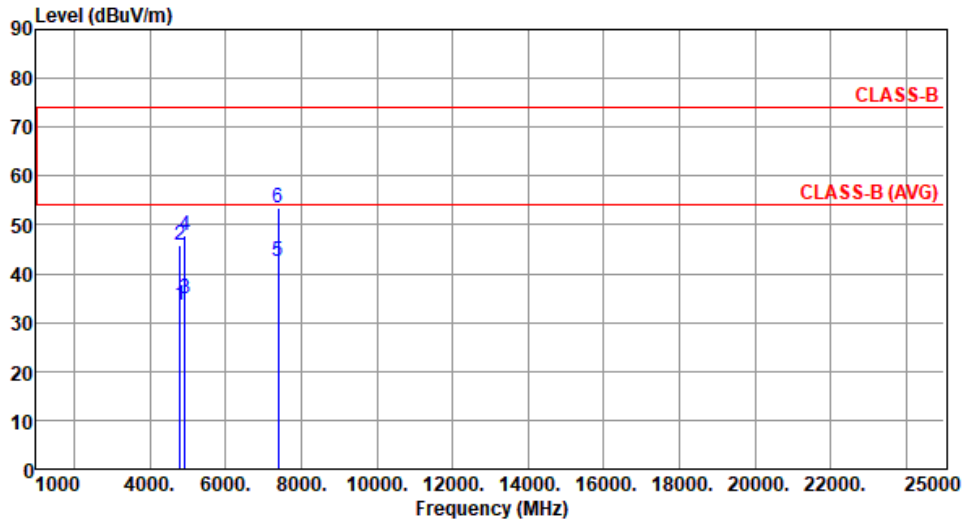
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor\* (dB)

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

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

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

Test By :Akun Chung      Temperature(°C):24      Humidity(%) :60



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4801.00	33.67	54.00	-20.33	30.15	3.52	Average	100	32
2	4801.00	45.71	74.00	-28.29	42.19	3.52	Peak	100	32
3	4924.00	34.94	54.00	-19.06	31.25	3.69	Average	100	351
4	4924.00	47.81	74.00	-26.19	44.12	3.69	Peak	100	351
5	7386.00	42.42	54.00	-11.58	33.35	9.07	Average	269	21
6	7386.00	53.52	74.00	-20.48	44.45	9.07	Peak	269	21

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

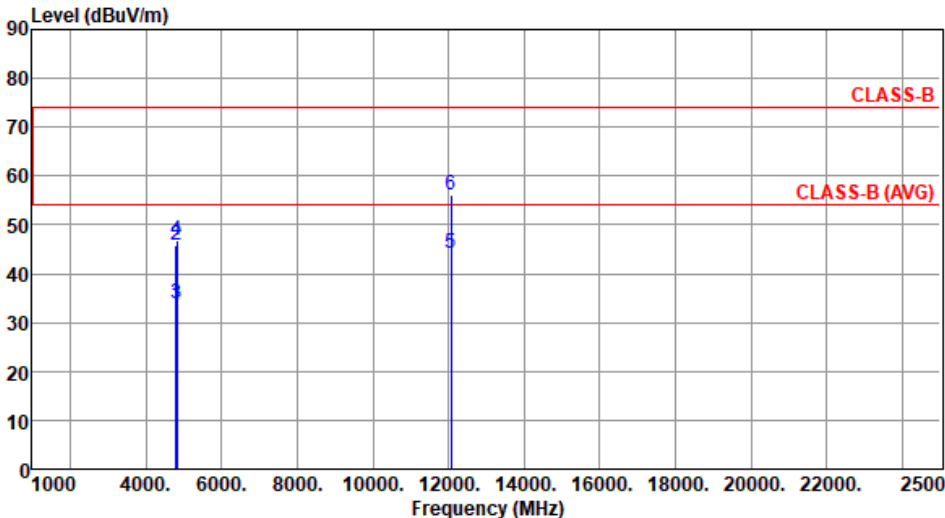
\*Factor includes antenna factor , cable loss and amplifier gain

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

### 3.5.6 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11g

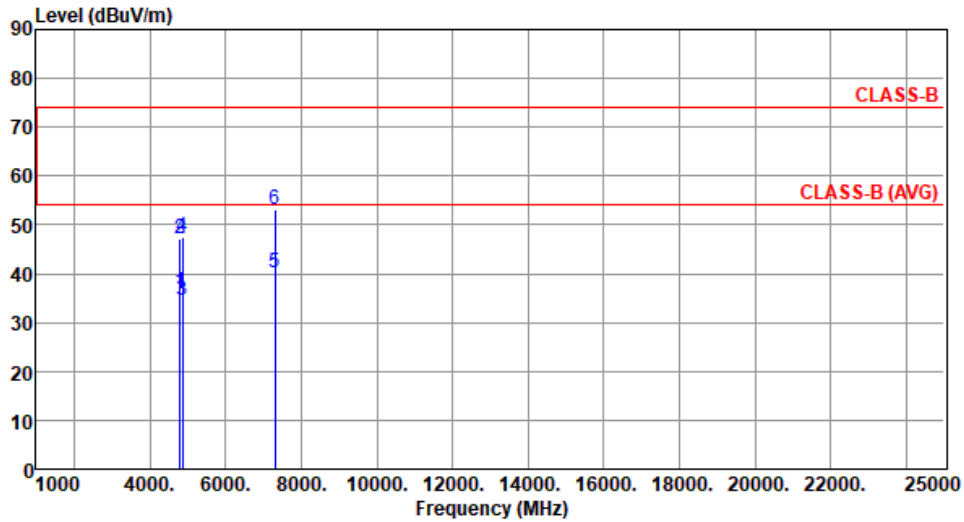
<b>Modulation</b>	11g	<b>Test Freq. (MHz)</b>	2412						
<b>Polarization</b>	Horizontal								
Test By : Akun Chung      Temperature(°C): 24      Humidity(%): 60									
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	4801.00	36.18	54.00	-17.82	32.66	3.52	Average	200	152
2	4801.00	47.37	74.00	-26.63	43.85	3.52	Peak	200	152
3	4824.00	34.22	54.00	-19.78	30.62	3.60	Average	100	325
4	4824.00	47.46	74.00	-26.54	43.86	3.60	Peak	100	325
5	12060.00	44.60	54.00	-9.40	30.75	13.85	Average	100	56
6	12060.00	56.62	74.00	-17.38	42.77	13.85	Peak	100	56

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

<b>Modulation</b>	11g	<b>Test Freq. (MHz)</b>	2412						
<b>Polarization</b>	Vertical								
Test By :Akun Chung      Temperature(°C):24      Humidity(%):60									
									
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4801.00	33.53	54.00	-20.47	30.01	3.52	Average	100	33
2	4801.00	45.92	74.00	-28.08	42.40	3.52	Peak	100	33
3	4824.00	33.84	54.00	-20.16	30.24	3.60	Average	100	347
4	4824.00	46.82	74.00	-27.18	43.22	3.60	Peak	100	347
5	12060.00	44.08	54.00	-9.92	30.23	13.85	Average	100	103
6	12060.00	56.17	74.00	-17.83	42.32	13.85	Peak	100	103
<p>Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)          *Factor includes antenna factor , cable loss and amplifier gain          Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).</p>									

<b>Modulation</b>	11g	<b>Test Freq. (MHz)</b>	2437
<b>Polarization</b>	Horizontal		

Test By :Akun Chung      Temperature(°C):24      Humidity(%):60



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4801.00	36.11	54.00	-17.89	32.59	3.52	Average	203	167
2	4801.00	47.20	74.00	-26.80	43.68	3.52	Peak	203	167
3	4874.00	34.43	54.00	-19.57	30.79	3.64	Average	100	326
4	4874.00	47.52	74.00	-26.48	43.88	3.64	Peak	100	326
5	7311.00	40.14	54.00	-13.86	30.87	9.27	Average	100	304
6	7311.00	53.14	74.00	-20.86	43.87	9.27	Peak	100	304

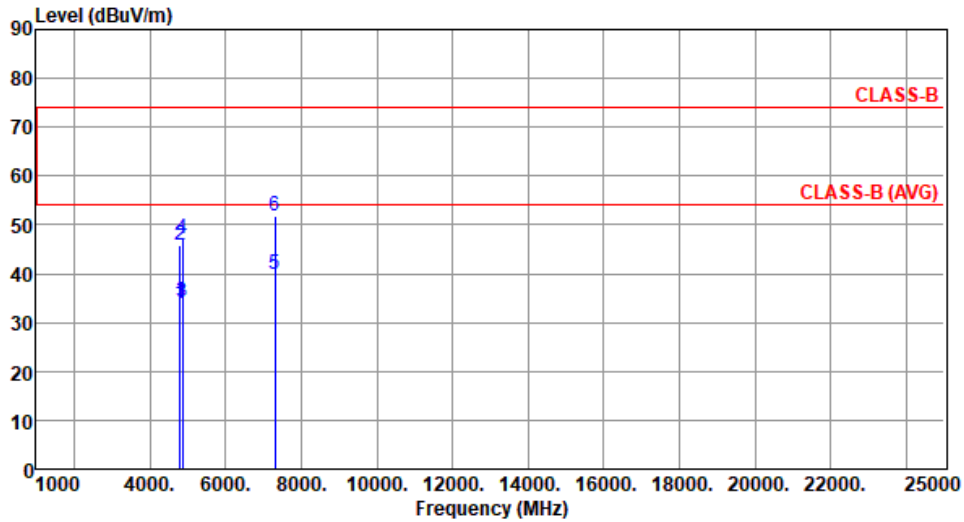
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

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

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

<b>Modulation</b>	11g	<b>Test Freq. (MHz)</b>	2437
<b>Polarization</b>	Vertical		

Test By :Akun Chung      Temperature(°C):24      Humidity(%):60



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4801.00	33.83	54.00	-20.17	30.31	3.52	Average	100	38
2	4801.00	45.82	74.00	-28.18	42.30	3.52	Peak	100	38
3	4874.00	34.08	54.00	-19.92	30.44	3.64	Average	100	351
4	4874.00	47.05	74.00	-26.95	43.41	3.64	Peak	100	351
5	7311.00	39.95	54.00	-14.05	30.68	9.27	Average	100	23
6	7311.00	51.67	74.00	-22.33	42.40	9.27	Peak	100	23

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

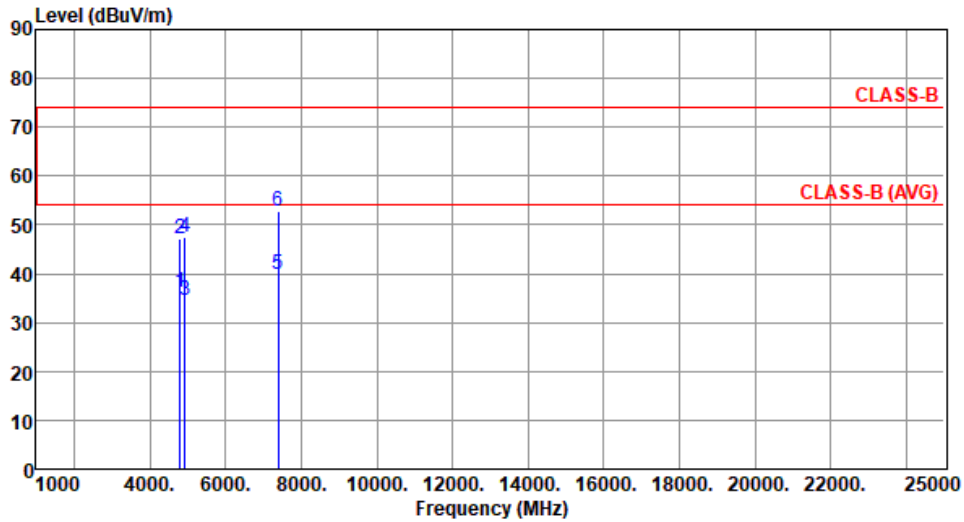
\*Factor includes antenna factor , cable loss and amplifier gain

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



<b>Modulation</b>	11g	<b>Test Freq. (MHz)</b>	2462
<b>Polarization</b>	Horizontal		

Test By :Akun Chung      Temperature(°C):24      Humidity(%) :60



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4801.00	36.06	54.00	-17.94	32.54	3.52	Average	201	166
2	4801.00	47.19	74.00	-26.81	43.67	3.52	Peak	201	166
3	4924.00	34.51	54.00	-19.49	30.82	3.69	Average	100	314
4	4924.00	47.54	74.00	-26.46	43.85	3.69	Peak	100	314
5	7386.00	39.92	54.00	-14.08	30.85	9.07	Average	100	303
6	7386.00	52.84	74.00	-21.16	43.77	9.07	Peak	100	303

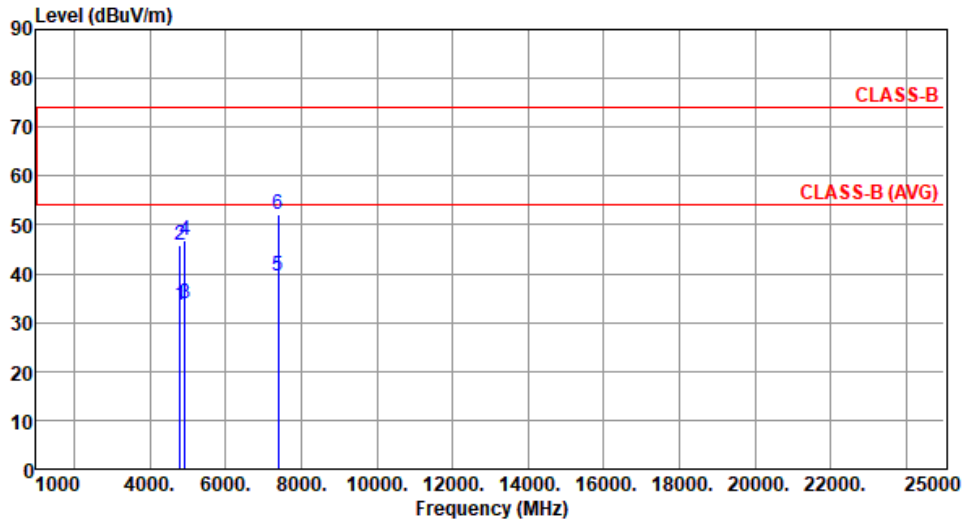
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

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

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

<b>Modulation</b>	11g	<b>Test Freq. (MHz)</b>	2462
<b>Polarization</b>	Vertical		

Test By :Akun Chung      Temperature(°C):24      Humidity(%):60



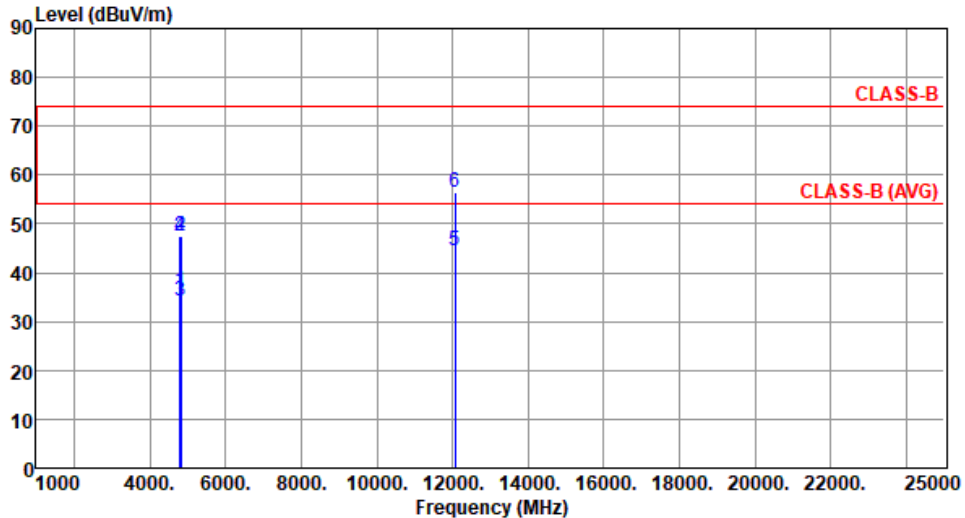
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4801.00	33.62	54.00	-20.38	30.10	3.52	Average	100	29
2	4801.00	45.67	74.00	-28.33	42.15	3.52	Peak	100	29
3	4924.00	33.89	54.00	-20.11	30.20	3.69	Average	100	355
4	4924.00	46.92	74.00	-27.08	43.23	3.69	Peak	100	355
5	7386.00	39.51	54.00	-14.49	30.44	9.07	Average	100	23
6	7386.00	52.28	74.00	-21.72	43.21	9.07	Peak	100	23

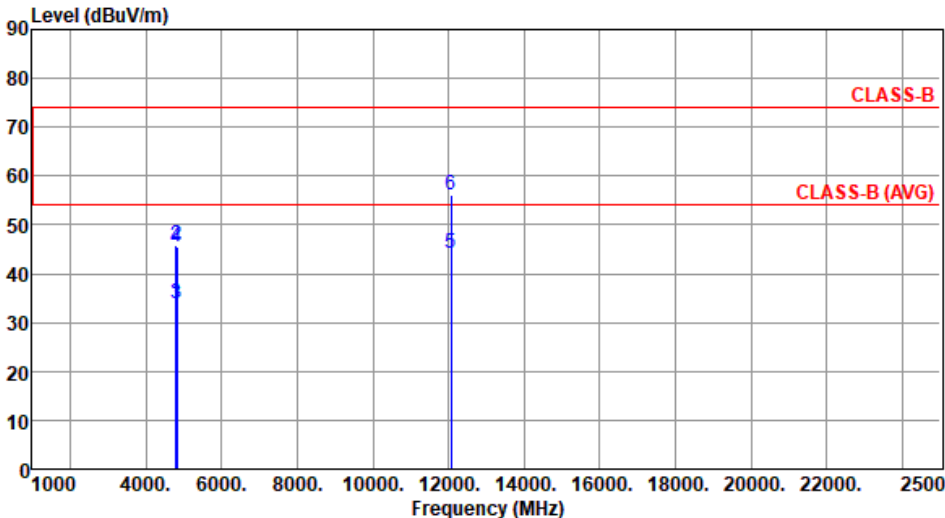
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

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

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

### 3.5.7 Transmitter Radiated Unwanted Emissions (Above 1GHz) for HT20

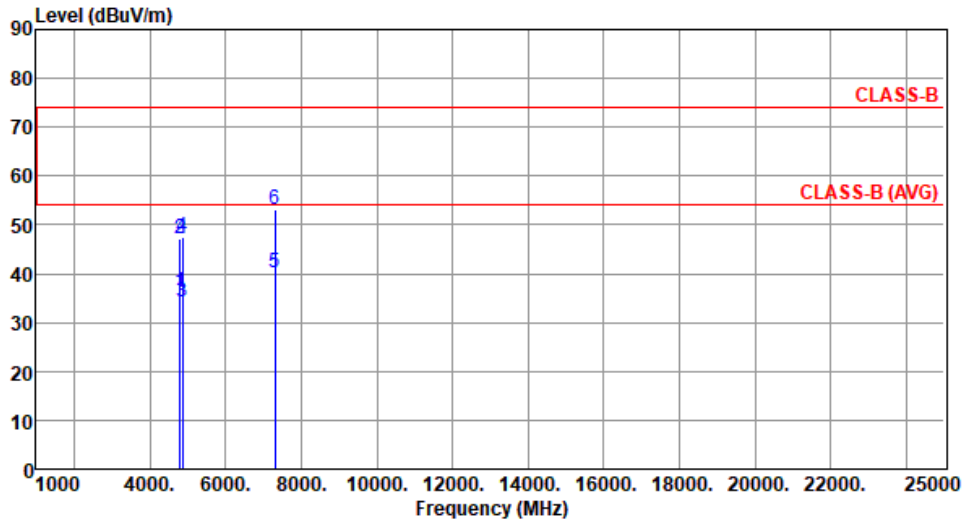
<b>Modulation</b>	HT20	<b>Test Freq. (MHz)</b>	2412						
<b>Polarization</b>	Horizontal								
Test By : Akun Chung      Temperature(°C): 24      Humidity(%): 60									
									
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	4801.00	36.21	54.00	-17.79	32.69	3.52	Average	204	159
2	4801.00	47.39	74.00	-26.61	43.87	3.52	Peak	204	159
3	4824.00	34.19	54.00	-19.81	30.59	3.60	Average	100	326
4	4824.00	47.36	74.00	-26.64	43.76	3.60	Peak	100	326
5	12060.00	44.57	54.00	-9.43	30.72	13.85	Average	100	57
6	12060.00	56.60	74.00	-17.40	42.75	13.85	Peak	100	57
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB) *Factor includes antenna factor , cable loss and amplifier gain Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).									

<b>Modulation</b>	HT20	<b>Test Freq. (MHz)</b>	2412						
<b>Polarization</b>	Vertical								
Test By :Akun Chung      Temperature(°C):24      Humidity(%):60									
									
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	4801.00	33.72	54.00	-20.28	30.20	3.52	Average	100	34
2	4801.00	45.94	74.00	-28.06	42.42	3.52	Peak	100	34
3	4824.00	33.85	54.00	-20.15	30.25	3.60	Average	100	350
4	4824.00	45.59	74.00	-28.41	41.99	3.60	Peak	100	350
5	12060.00	44.04	54.00	-9.96	30.19	13.85	Average	100	104
6	12060.00	56.10	74.00	-17.90	42.25	13.85	Peak	100	104

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

<b>Modulation</b>	HT20	<b>Test Freq. (MHz)</b>	2437
<b>Polarization</b>	Horizontal		

Test By :Akun Chung      Temperature(°C):24      Humidity(%):60



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4801.00	36.07	54.00	-17.93	32.55	3.52	Average	198	170
2	4801.00	47.11	74.00	-26.89	43.59	3.52	Peak	198	170
3	4874.00	34.30	54.00	-19.70	30.66	3.64	Average	100	329
4	4874.00	47.44	74.00	-26.56	43.80	3.64	Peak	100	329
5	7311.00	40.04	54.00	-13.96	30.77	9.27	Average	100	302
6	7311.00	53.01	74.00	-20.99	43.74	9.27	Peak	100	302

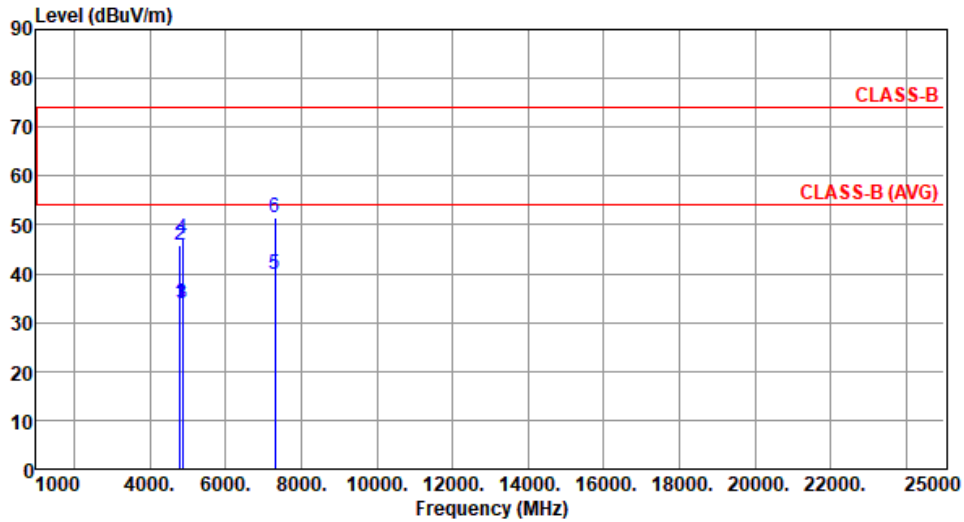
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

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

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

<b>Modulation</b>	HT20	<b>Test Freq. (MHz)</b>	2437
<b>Polarization</b>	Vertical		

Test By :Akun Chung      Temperature(°C):24      Humidity(%):60



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4801.00	33.78	54.00	-20.22	30.26	3.52	Average	100	42
2	4801.00	45.77	74.00	-28.23	42.25	3.52	Peak	100	42
3	4874.00	34.01	54.00	-19.99	30.37	3.64	Average	100	352
4	4874.00	47.00	74.00	-27.00	43.36	3.64	Peak	100	352
5	7311.00	39.89	54.00	-14.11	30.62	9.27	Average	100	25
6	7311.00	51.61	74.00	-22.39	42.34	9.27	Peak	100	25

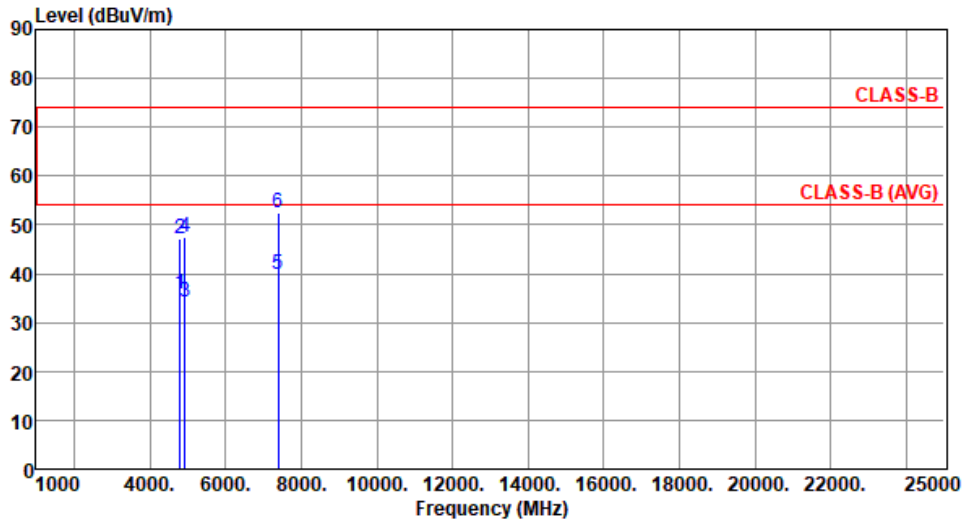
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor\* (dB)

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

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

<b>Modulation</b>	HT20	<b>Test Freq. (MHz)</b>	2462
<b>Polarization</b>	Horizontal		

Test By :Akun Chung      Temperature(°C):24      Humidity(%) :60



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4801.00	36.03	54.00	-17.97	32.51	3.52	Average	211	167
2	4801.00	47.12	74.00	-26.88	43.60	3.52	Peak	211	167
3	4924.00	34.37	54.00	-19.63	30.68	3.69	Average	100	321
4	4924.00	47.44	74.00	-26.56	43.75	3.69	Peak	100	321
5	7386.00	39.79	54.00	-14.21	30.72	9.07	Average	100	306
6	7386.00	52.61	74.00	-21.39	43.54	9.07	Peak	100	306

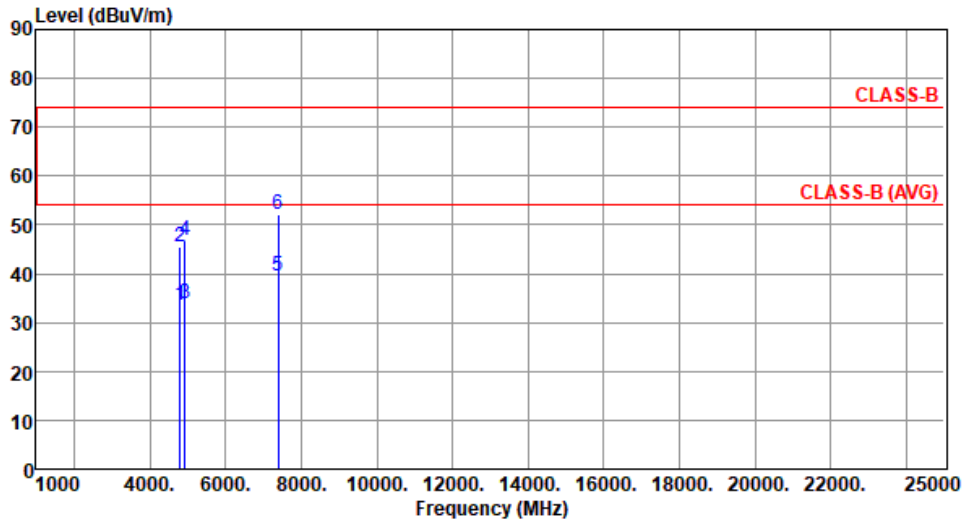
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

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

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

<b>Modulation</b>	HT20	<b>Test Freq. (MHz)</b>	2462
<b>Polarization</b>	Vertical		

Test By :Akun Chung      Temperature(°C):24      Humidity(%) :60



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4801.00	33.56	54.00	-20.44	30.04	3.52	Average	100	35
2	4801.00	45.57	74.00	-28.43	42.05	3.52	Peak	100	35
3	4924.00	33.88	54.00	-20.12	30.19	3.69	Average	100	348
4	4924.00	46.80	74.00	-27.20	43.11	3.69	Peak	100	348
5	7386.00	39.39	54.00	-14.61	30.32	9.07	Average	100	32
6	7386.00	52.27	74.00	-21.73	43.20	9.07	Peak	100	32

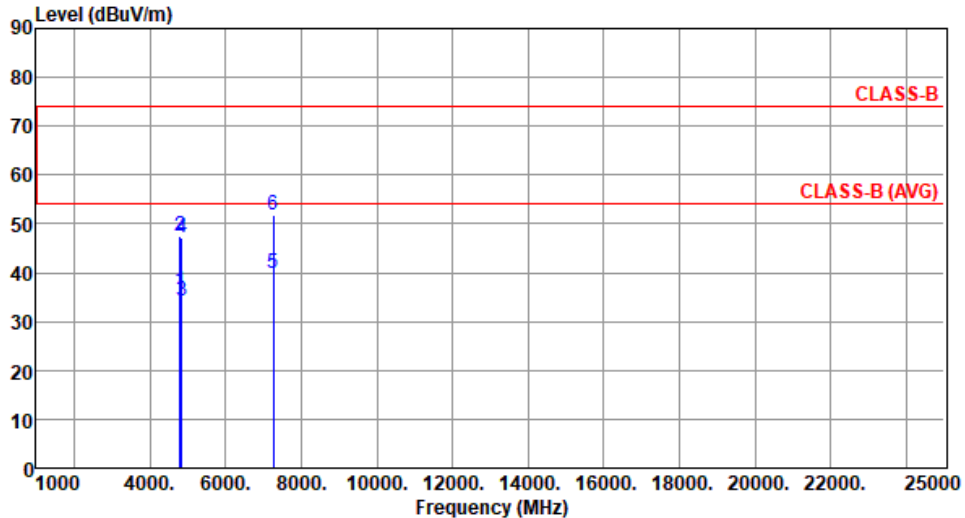
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

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

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



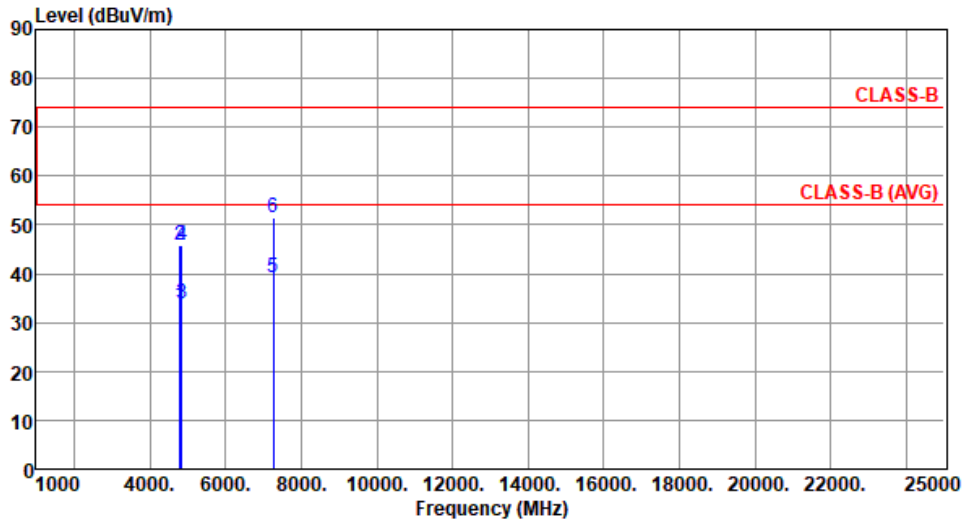
### 3.5.8 Transmitter Radiated Unwanted Emissions (Above 1GHz) for HT40

<b>Modulation</b>	HT40	<b>Test Freq. (MHz)</b>	2422						
<b>Polarization</b>	Horizontal								
Test By : Akun Chung      Temperature(°C): 24      Humidity(%): 60									
									
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	4801.00	36.10	54.00	-17.90	32.58	3.52	Average	202	155
2	4801.00	47.36	74.00	-26.64	43.84	3.52	Peak	202	155
3	4844.00	34.10	54.00	-19.90	30.45	3.65	Average	100	328
4	4844.00	47.17	74.00	-26.83	43.52	3.65	Peak	100	328
5	7266.00	39.85	54.00	-14.15	30.52	9.33	Average	100	50
6	7266.00	51.89	74.00	-22.11	42.56	9.33	Peak	100	50

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

<b>Modulation</b>	HT40	<b>Test Freq. (MHz)</b>	2422
<b>Polarization</b>	Vertical		

Test By :Akun Chung      Temperature(°C):24      Humidity(%):60



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4801.00	33.67	54.00	-20.33	30.15	3.52	Average	100	39
2	4801.00	45.77	74.00	-28.23	42.25	3.52	Peak	100	39
3	4844.00	33.93	54.00	-20.07	30.28	3.65	Average	100	356
4	4844.00	45.75	74.00	-28.25	42.10	3.65	Peak	100	356
5	7266.00	39.35	54.00	-14.65	30.02	9.33	Average	100	101
6	7266.00	51.35	74.00	-22.65	42.02	9.33	Peak	100	101

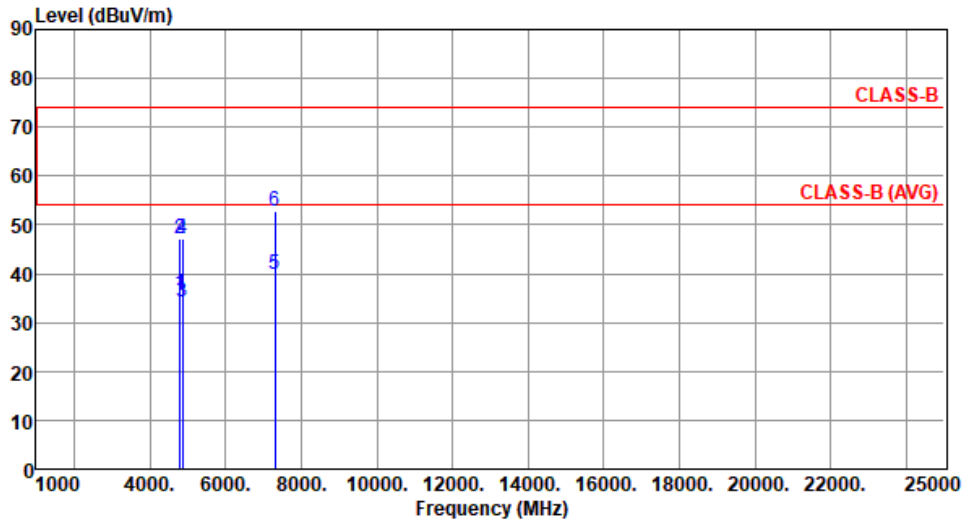
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

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

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

<b>Modulation</b>	HT40	<b>Test Freq. (MHz)</b>	2437
<b>Polarization</b>	Horizontal		

Test By :Akun Chung      Temperature(°C):24      Humidity(%) :60



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4801.00	36.03	54.00	-17.97	32.51	3.52	Average	206	181
2	4801.00	47.15	74.00	-26.85	43.63	3.52	Peak	206	181
3	4874.00	34.19	54.00	-19.81	30.55	3.64	Average	100	333
4	4874.00	47.16	74.00	-26.84	43.52	3.64	Peak	100	333
5	7311.00	39.82	54.00	-14.18	30.55	9.27	Average	100	301
6	7311.00	52.88	74.00	-21.12	43.61	9.27	Peak	100	301

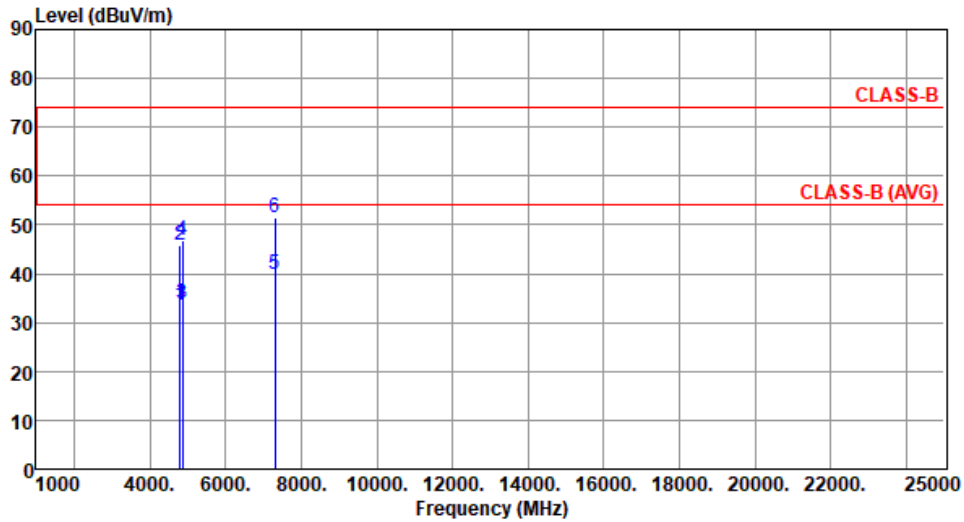
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

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

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

<b>Modulation</b>	HT40	<b>Test Freq. (MHz)</b>	2437
<b>Polarization</b>	Vertical		

Test By :Akun Chung      Temperature(°C):24      Humidity(%):60



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4801.00	33.67	54.00	-20.33	30.15	3.52	Average	100	48
2	4801.00	45.75	74.00	-28.25	42.23	3.52	Peak	100	48
3	4874.00	33.89	54.00	-20.11	30.25	3.64	Average	100	351
4	4874.00	46.85	74.00	-27.15	43.21	3.64	Peak	100	351
5	7311.00	39.76	54.00	-14.24	30.49	9.27	Average	100	30
6	7311.00	51.49	74.00	-22.51	42.22	9.27	Peak	100	30

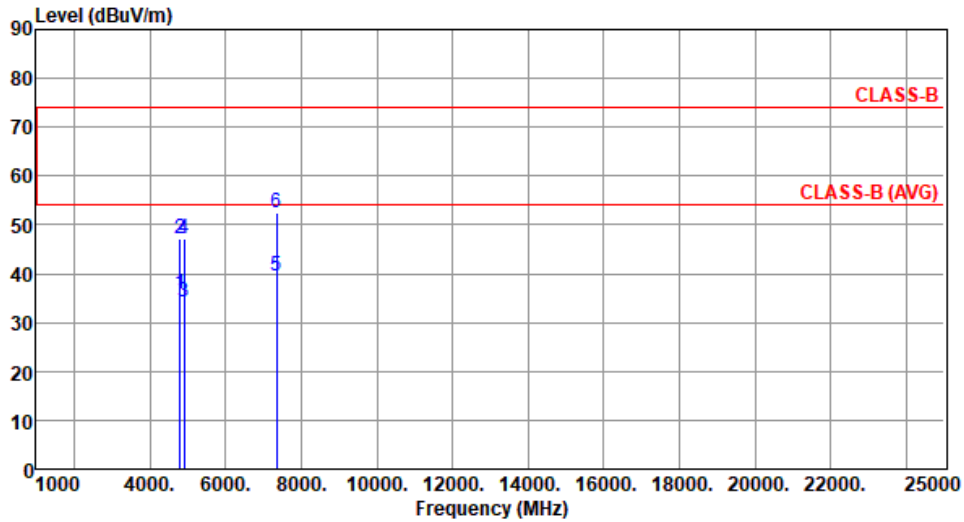
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

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

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

<b>Modulation</b>	HT40	<b>Test Freq. (MHz)</b>	2452
<b>Polarization</b>	Horizontal		

Test By :Akun Chung      Temperature(°C):24      Humidity(%):60



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4801.00	35.96	54.00	-18.04	32.44	3.52	Average	215	168
2	4801.00	47.04	74.00	-26.96	43.52	3.52	Peak	215	168
3	4904.00	34.18	54.00	-19.82	30.55	3.63	Average	100	329
4	4904.00	47.15	74.00	-26.85	43.52	3.63	Peak	100	329
5	7356.00	39.60	54.00	-14.40	30.52	9.08	Average	100	301
6	7356.00	52.59	74.00	-21.41	43.51	9.08	Peak	100	301

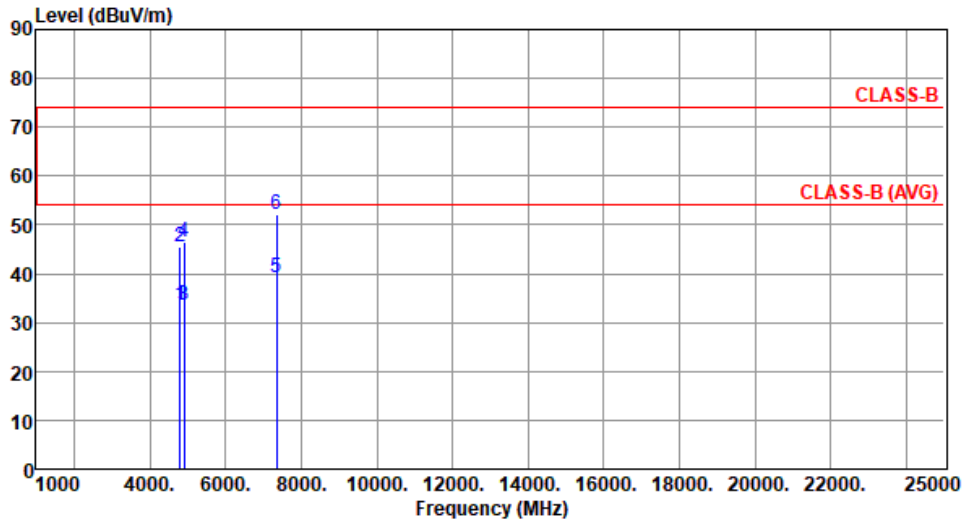
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

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

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

<b>Modulation</b>	HT40	<b>Test Freq. (MHz)</b>	2452
<b>Polarization</b>	Vertical		

Test By :Akun Chung      Temperature(°C):24      Humidity(%):60



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4801.00	33.53	54.00	-20.47	30.01	3.52	Average	100	37
2	4801.00	45.53	74.00	-28.47	42.01	3.52	Peak	100	37
3	4904.00	33.68	54.00	-20.32	30.05	3.63	Average	100	351
4	4904.00	46.66	74.00	-27.34	43.03	3.63	Peak	100	351
5	7356.00	39.30	54.00	-14.70	30.22	9.08	Average	100	33
6	7356.00	52.11	74.00	-21.89	43.03	9.08	Peak	100	33

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

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

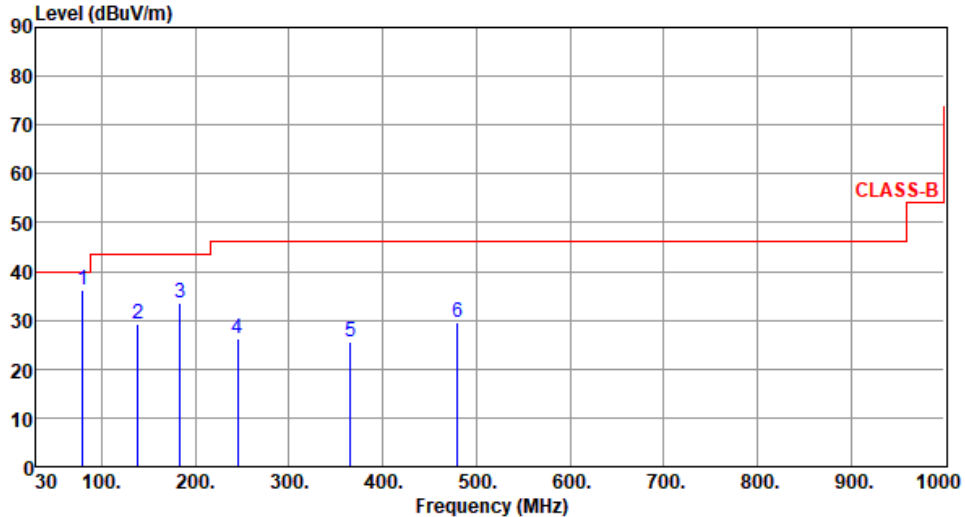
Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

## Configuration 2

### 3.5.9 Transmitter Radiated Unwanted Emissions

<b>Modulation</b>	11g	<b>Test Freq. (MHz)</b>	2437
<b>Polarization</b>	Horizontal		
Test By : Roger Lu		Temperature(°C): 23	Humidity(%): 64



The graph plots Level (dBuV/m) on the y-axis (0 to 90) against Frequency (MHz) on the x-axis (30 to 1000). A red step function represents the CLASS-B limit, starting at 40 dBuV/m from 30 MHz to 100 MHz, then stepping up to 45 dBuV/m from 100 MHz to 1000 MHz. Six blue vertical lines indicate emission peaks at 79.47, 138.64, 183.26, 245.34, 365.62, and 480.08 MHz, with levels ranging from 25.69 to 36.13 dBuV/m.

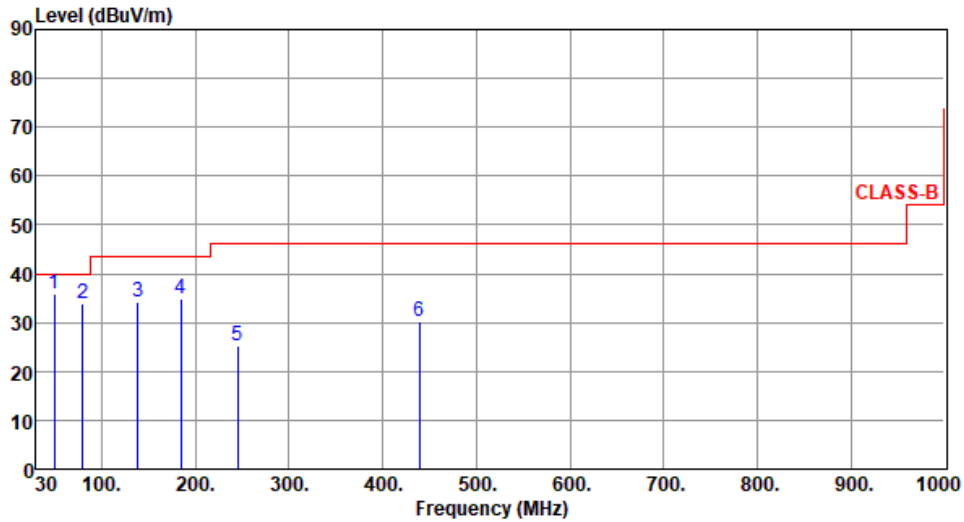
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	79.47	36.13	40.00	-3.87	48.99	-12.86	Peak	---	---
2	138.64	29.24	43.50	-14.26	38.29	-9.05	Peak	---	---
3	183.26	33.44	43.50	-10.06	43.96	-10.52	Peak	---	---
4	245.34	26.10	46.00	-19.90	36.32	-10.22	Peak	---	---
5	365.62	25.69	46.00	-20.31	31.88	-6.19	Peak	---	---
6	480.08	29.46	46.00	-16.54	32.90	-3.44	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)  
 \*Factor includes antenna factor , cable loss and amplifier gain  
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).  
 Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

<b>Modulation</b>	11g	<b>Test Freq. (MHz)</b>	2437
<b>Polarization</b>	Vertical		

Test By :Roger Lu      Temperature(°C):23      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	49.40	35.81	40.00	-4.19	44.00	-8.19	Peak	---	---
2	79.47	33.96	40.00	-6.04	46.82	-12.86	Peak	---	---
3	138.64	34.18	43.50	-9.32	43.23	-9.05	Peak	---	---
4	184.23	34.81	43.50	-8.69	45.42	-10.61	Peak	---	---
5	245.34	25.39	46.00	-20.61	35.61	-10.22	Peak	---	---
6	439.34	30.22	46.00	-15.78	34.63	-4.41	Peak	---	---

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

\*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.

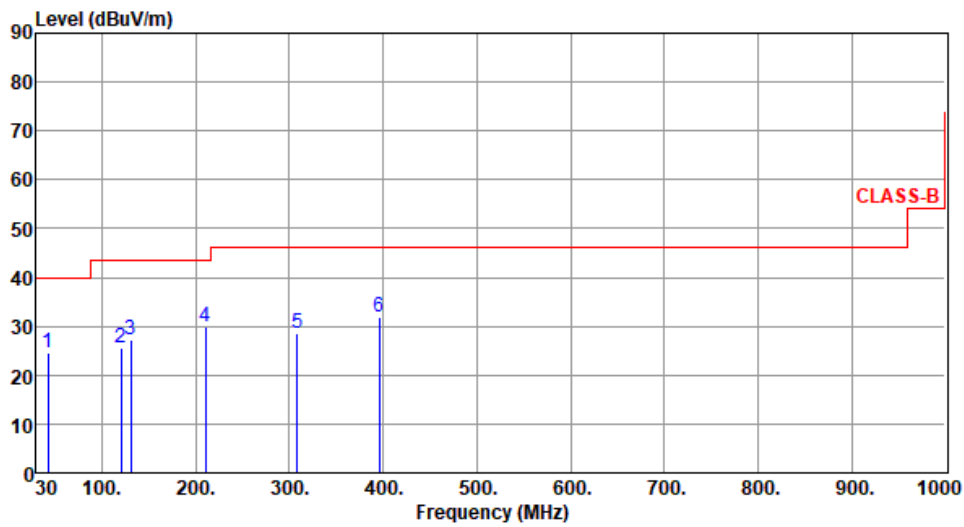


### Configuration 3

#### 3.5.10 Transmitter Radiated Unwanted Emissions

<b>Modulation</b>	11g	<b>Test Freq. (MHz)</b>	2437
<b>Polarization</b>	Horizontal		

Test By : Roger Lu      Temperature(°C):23      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	42.61	24.55	40.00	-15.45	32.56	-8.01	Peak	---	---
2	120.21	25.71	43.50	-17.79	36.14	-10.43	Peak	---	---
3	130.88	27.37	43.50	-16.13	36.97	-9.60	Peak	---	---
4	210.42	29.95	43.50	-13.55	41.83	-11.88	Peak	---	---
5	308.39	28.70	46.00	-17.30	36.42	-7.72	Peak	---	---
6	395.69	31.72	46.00	-14.28	37.39	-5.67	Peak	---	---

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

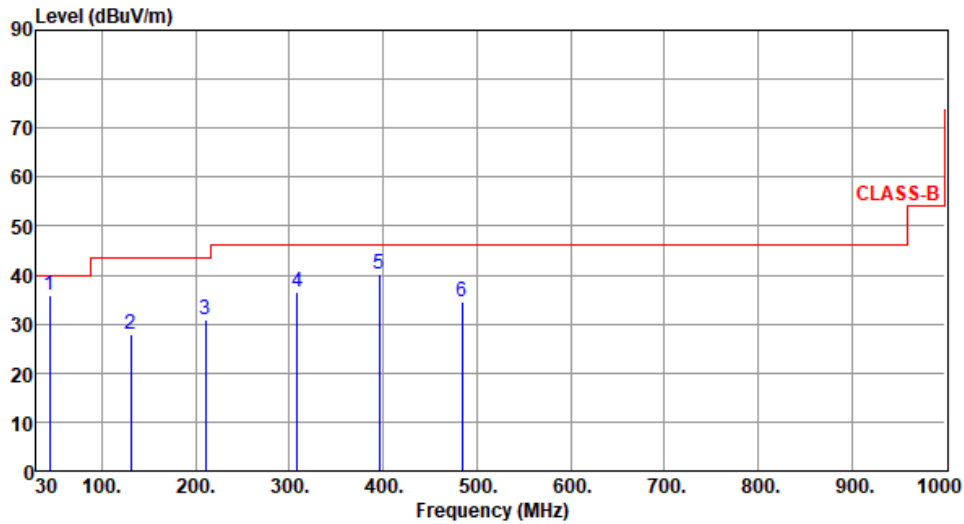
\*Factor includes antenna factor, cable loss and amplifier gain

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

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

<b>Modulation</b>	11g	<b>Test Freq. (MHz)</b>	2437
<b>Polarization</b>	Vertical		

Test By :Roger Lu      Temperature(°C):23      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	44.02	35.93	40.00	-4.07	44.19	-8.26	QP	100	122
2	130.88	27.91	43.50	-15.59	37.51	-9.60	Peak	---	---
3	210.42	30.82	43.50	-12.68	42.70	-11.88	Peak	---	---
4	308.39	36.65	46.00	-9.35	44.37	-7.72	Peak	---	---
5	395.69	40.10	46.00	-5.90	45.77	-5.67	Peak	---	---
6	483.96	34.53	46.00	-11.47	37.95	-3.42	Peak	---	---

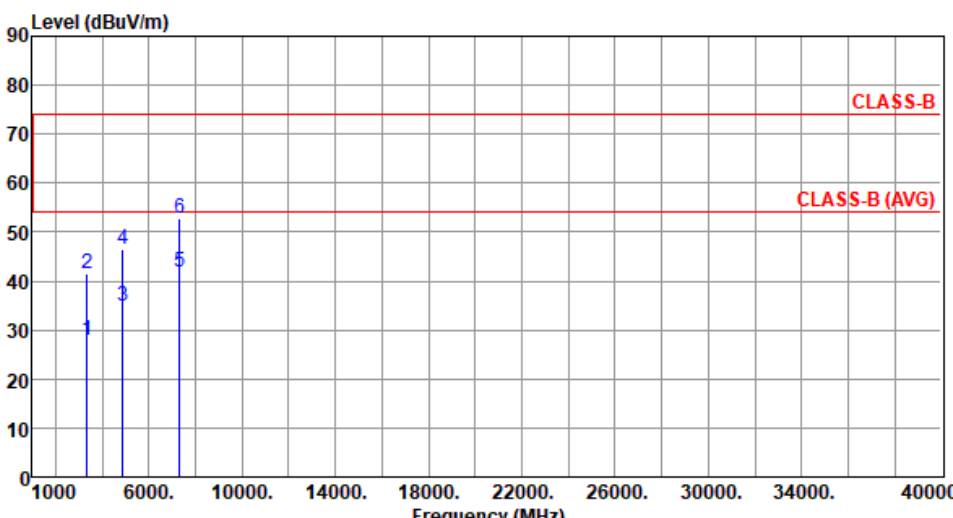
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

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

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

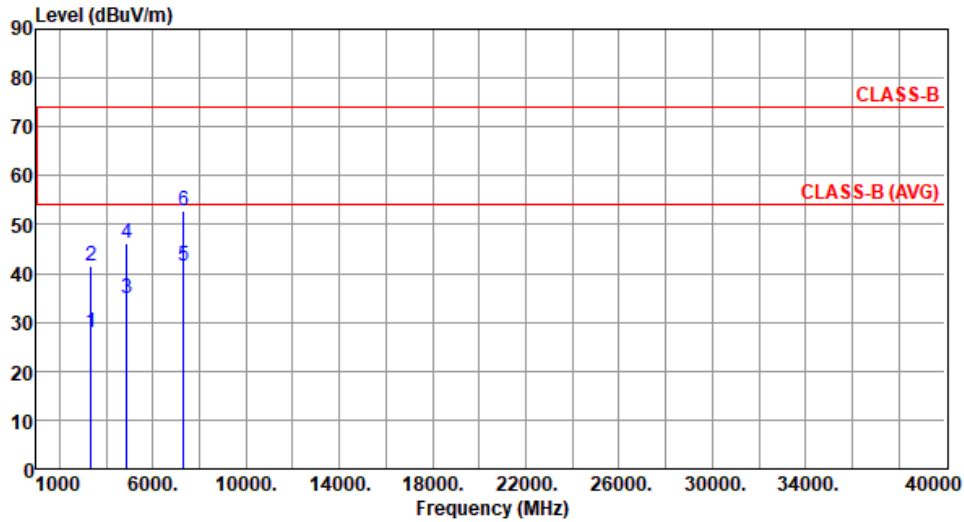
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

### 3.5.11 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11b

<b>Modulation</b>	11b	<b>Test Freq. (MHz)</b>	2437						
<b>Polarization</b>	Horizontal								
Test By : BRAD WU      Temperature(°C): 24      Humidity(%): 63									
									
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	3360.00	27.79	54.00	-26.21	28.93	-1.14	Average	100	15
2	3360.00	41.36	74.00	-32.64	42.50	-1.14	Peak	100	15
3	4874.00	34.72	54.00	-19.28	31.08	3.64	Average	100	29
4	4874.00	46.50	74.00	-27.50	42.86	3.64	Peak	100	29
5	7311.00	41.94	54.00	-12.06	32.67	9.27	Average	100	36
6	7311.00	52.71	74.00	-21.29	43.44	9.27	Peak	100	36
<p>Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)  *Factor includes antenna factor , cable loss and amplifier gain  Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).</p>									

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

Test By :BRAD WU      Temperature(°C):24      Humidity(%):63



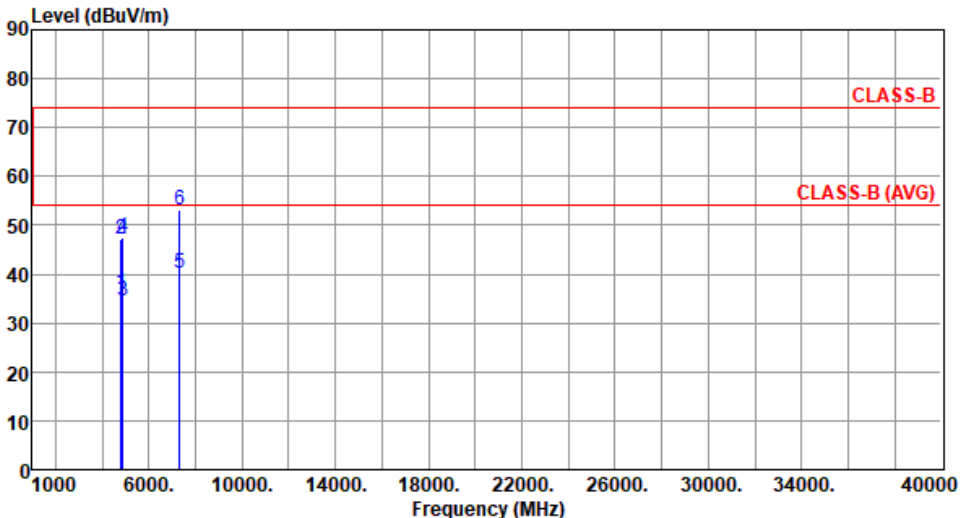
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	3360.00	27.89	54.00	-26.11	29.03	-1.14	Average	100	48
2	3360.00	41.48	74.00	-32.52	42.62	-1.14	Peak	100	48
3	4874.00	34.72	54.00	-19.28	31.08	3.64	Average	100	45
4	4874.00	46.12	74.00	-27.88	42.48	3.64	Peak	100	45
5	7311.00	41.55	54.00	-12.45	32.28	9.27	Average	100	22
6	7311.00	52.86	74.00	-21.14	43.59	9.27	Peak	100	22

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

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

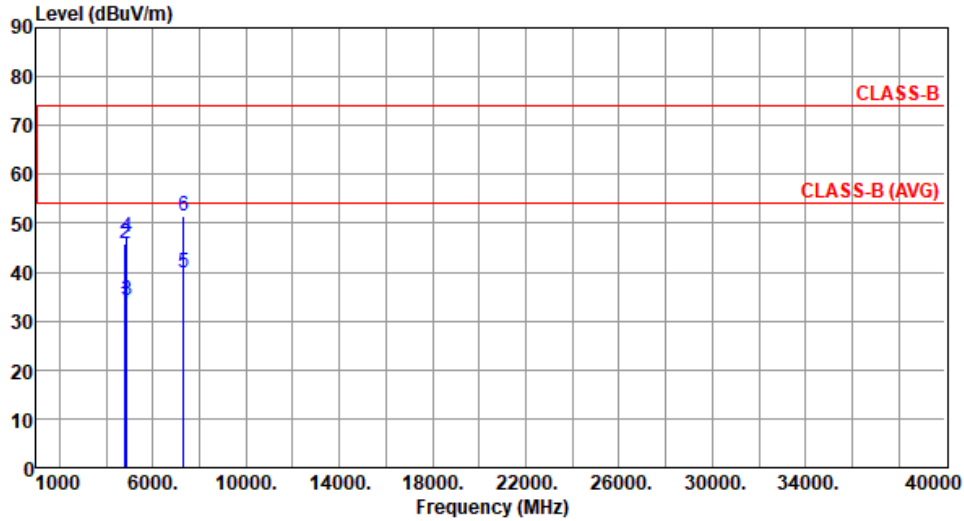
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

### 3.5.12 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11g

<b>Modulation</b>	11b	<b>Test Freq. (MHz)</b>	2437																																																																																																																																			
<b>Polarization</b>	Horizontal																																																																																																																																					
Test By :BRAD WU      Temperature(°C):24      Humidity(%):63																																																																																																																																						
																																																																																																																																						
	<table border="1"> <thead> <tr> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> </tr> </thead> <tbody> <tr> <td>4801.00</td> <td>4801.00</td> <td>4874.00</td> <td>4874.00</td> <td>7311.00</td> <td>7311.00</td> </tr> <tr> <td>36.24</td> <td>47.26</td> <td>34.52</td> <td>47.64</td> <td>40.06</td> <td>53.02</td> </tr> <tr> <td>54.00</td> <td>74.00</td> <td>54.00</td> <td>74.00</td> <td>54.00</td> <td>74.00</td> </tr> <tr> <td>-17.76</td> <td>-26.74</td> <td>-19.48</td> <td>-26.36</td> <td>-13.94</td> <td>-20.98</td> </tr> <tr> <td>32.72</td> <td>43.74</td> <td>30.88</td> <td>44.00</td> <td>30.79</td> <td>43.75</td> </tr> <tr> <td>3.52</td> <td>3.52</td> <td>3.64</td> <td>3.64</td> <td>9.27</td> <td>9.27</td> </tr> <tr> <td>Average</td> <td>Peak</td> <td>Average</td> <td>Peak</td> <td>Average</td> <td>Peak</td> </tr> <tr> <td>201</td> <td>201</td> <td>100</td> <td>100</td> <td>100</td> <td>100</td> </tr> <tr> <td>165</td> <td>165</td> <td>315</td> <td>315</td> <td>306</td> <td>306</td> </tr> </tbody> </table>	1	2	3	4	5	6	4801.00	4801.00	4874.00	4874.00	7311.00	7311.00	36.24	47.26	34.52	47.64	40.06	53.02	54.00	74.00	54.00	74.00	54.00	74.00	-17.76	-26.74	-19.48	-26.36	-13.94	-20.98	32.72	43.74	30.88	44.00	30.79	43.75	3.52	3.52	3.64	3.64	9.27	9.27	Average	Peak	Average	Peak	Average	Peak	201	201	100	100	100	100	165	165	315	315	306	306	<table border="1"> <thead> <tr> <th>Freq.</th> <th>Emission level</th> <th>Limit</th> <th>Margin</th> <th>SA reading</th> <th>Factor</th> <th>Remark</th> <th>ANT High cm</th> <th>Turn Table deg</th> </tr> <tr> <th>MHz</th> <th>dBuV/m</th> <th>dBuV/m</th> <th>dB</th> <th>dBuV</th> <th>dB</th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>4801.00</td> <td>36.24</td> <td>54.00</td> <td>-17.76</td> <td>32.72</td> <td>3.52</td> <td>Average</td> <td>201</td> <td>165</td> </tr> <tr> <td>4801.00</td> <td>47.26</td> <td>74.00</td> <td>-26.74</td> <td>43.74</td> <td>3.52</td> <td>Peak</td> <td>201</td> <td>165</td> </tr> <tr> <td>4874.00</td> <td>34.52</td> <td>54.00</td> <td>-19.48</td> <td>30.88</td> <td>3.64</td> <td>Average</td> <td>100</td> <td>315</td> </tr> <tr> <td>4874.00</td> <td>47.64</td> <td>74.00</td> <td>-26.36</td> <td>44.00</td> <td>3.64</td> <td>Peak</td> <td>100</td> <td>315</td> </tr> <tr> <td>7311.00</td> <td>40.06</td> <td>54.00</td> <td>-13.94</td> <td>30.79</td> <td>9.27</td> <td>Average</td> <td>100</td> <td>306</td> </tr> <tr> <td>7311.00</td> <td>53.02</td> <td>74.00</td> <td>-20.98</td> <td>43.75</td> <td>9.27</td> <td>Peak</td> <td>100</td> <td>306</td> </tr> </tbody> </table>	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High cm	Turn Table deg	MHz	dBuV/m	dBuV/m	dB	dBuV	dB				4801.00	36.24	54.00	-17.76	32.72	3.52	Average	201	165	4801.00	47.26	74.00	-26.74	43.74	3.52	Peak	201	165	4874.00	34.52	54.00	-19.48	30.88	3.64	Average	100	315	4874.00	47.64	74.00	-26.36	44.00	3.64	Peak	100	315	7311.00	40.06	54.00	-13.94	30.79	9.27	Average	100	306	7311.00	53.02	74.00	-20.98	43.75	9.27	Peak	100	306
1	2	3	4	5	6																																																																																																																																	
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<b>Modulation</b>	11b	<b>Test Freq. (MHz)</b>	2437
<b>Polarization</b>	Vertical		

Test By :BRAD WU      Temperature(°C):24      Humidity(%):63



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4801.00	33.69	54.00	-20.31	30.17	3.52	Average	100	41
2	4801.00	45.78	74.00	-28.22	42.26	3.52	Peak	100	41
3	4874.00	34.13	54.00	-19.87	30.49	3.64	Average	100	345
4	4874.00	47.11	74.00	-26.89	43.47	3.64	Peak	100	345
5	7311.00	39.84	54.00	-14.16	30.57	9.27	Average	100	26
6	7311.00	51.52	74.00	-22.48	42.25	9.27	Peak	100	26

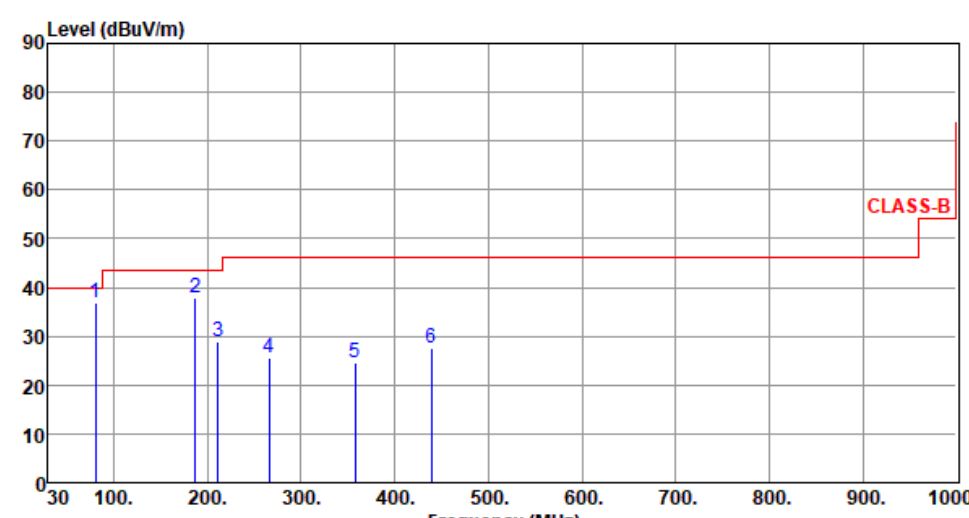
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

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

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

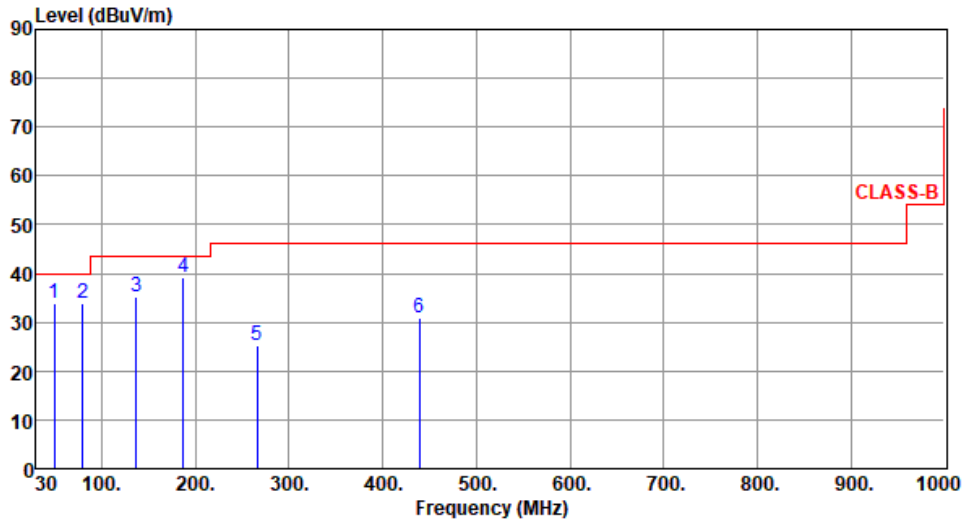
## Configuration 4

### 3.5.13 Transmitter Radiated Unwanted Emissions

Modulation	11g	Test Freq. (MHz)	2437																																																																						
Polarization	Horizontal																																																																								
Test By : Roger Lu      Temperature(°C):23      Humidity(%):64																																																																									
 <p>The graph plots Level (dBuV/m) on the y-axis (0 to 90) against Frequency (MHz) on the x-axis (30 to 1000). A red line represents the CLASS-B limit, which is constant at 40 dBuV/m from 30 MHz to 100 MHz, then steps up to 45 dBuV/m from 100 MHz to 950 MHz, and finally steps up to 70 dBuV/m from 950 MHz to 1000 MHz. Six blue vertical lines represent measured peaks at 80.46 MHz, 187.14 MHz, 211.39 MHz, 265.71 MHz, 357.86 MHz, and 439.34 MHz. The emission levels for these peaks are 36.95, 37.99, 28.92, 25.47, 24.59, and 27.55 dBuV/m respectively.</p>																																																																									
<table border="1"> <thead> <tr> <th></th> <th>Freq. MHz</th> <th>Emission level dBuV/m</th> <th>Limit dBuV/m</th> <th>Margin dB</th> <th>SA reading dBuV</th> <th>Factor dB</th> <th>Remark</th> <th>ANT High cm</th> <th>Turn Table deg</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>80.46</td> <td>36.95</td> <td>40.00</td> <td>-3.05</td> <td>50.06</td> <td>-13.11</td> <td>QP</td> <td>199</td> <td>136</td> </tr> <tr> <td>2</td> <td>187.14</td> <td>37.99</td> <td>43.50</td> <td>-5.51</td> <td>48.98</td> <td>-10.99</td> <td>Peak</td> <td>---</td> <td>---</td> </tr> <tr> <td>3</td> <td>211.39</td> <td>28.92</td> <td>43.50</td> <td>-14.58</td> <td>40.80</td> <td>-11.88</td> <td>Peak</td> <td>---</td> <td>---</td> </tr> <tr> <td>4</td> <td>265.71</td> <td>25.47</td> <td>46.00</td> <td>-20.53</td> <td>34.82</td> <td>-9.35</td> <td>Peak</td> <td>---</td> <td>---</td> </tr> <tr> <td>5</td> <td>357.86</td> <td>24.59</td> <td>46.00</td> <td>-21.41</td> <td>30.96</td> <td>-6.37</td> <td>Peak</td> <td>---</td> <td>---</td> </tr> <tr> <td>6</td> <td>439.34</td> <td>27.55</td> <td>46.00</td> <td>-18.45</td> <td>31.96</td> <td>-4.41</td> <td>Peak</td> <td>---</td> <td>---</td> </tr> </tbody> </table>					Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg	1	80.46	36.95	40.00	-3.05	50.06	-13.11	QP	199	136	2	187.14	37.99	43.50	-5.51	48.98	-10.99	Peak	---	---	3	211.39	28.92	43.50	-14.58	40.80	-11.88	Peak	---	---	4	265.71	25.47	46.00	-20.53	34.82	-9.35	Peak	---	---	5	357.86	24.59	46.00	-21.41	30.96	-6.37	Peak	---	---	6	439.34	27.55	46.00	-18.45	31.96	-4.41	Peak	---	---
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg																																																																
1	80.46	36.95	40.00	-3.05	50.06	-13.11	QP	199	136																																																																
2	187.14	37.99	43.50	-5.51	48.98	-10.99	Peak	---	---																																																																
3	211.39	28.92	43.50	-14.58	40.80	-11.88	Peak	---	---																																																																
4	265.71	25.47	46.00	-20.53	34.82	-9.35	Peak	---	---																																																																
5	357.86	24.59	46.00	-21.41	30.96	-6.37	Peak	---	---																																																																
6	439.34	27.55	46.00	-18.45	31.96	-4.41	Peak	---	---																																																																
<p>Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)            *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.</p>																																																																									

<b>Modulation</b>	11g	<b>Test Freq. (MHz)</b>	2437
<b>Polarization</b>	Vertical		

Test By :Roger Lu      Temperature(°C):23      Humidity(%):64



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	49.40	33.98	40.00	-6.02	42.17	-8.19	Peak	---	---
2	79.47	33.96	40.00	-6.04	46.82	-12.86	Peak	---	---
3	136.70	35.16	43.50	-8.34	44.37	-9.21	Peak	---	---
4	187.14	39.34	43.50	-4.16	50.33	-10.99	Peak	---	---
5	265.71	25.33	46.00	-20.67	34.68	-9.35	Peak	---	---
6	439.34	31.00	46.00	-15.00	35.41	-4.41	Peak	---	---

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

\*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.



## Configuration 1

### 3.5.14 Transmitter Conducted Unwanted Emissions (30MHz ~ 1GHz)

#### Summary

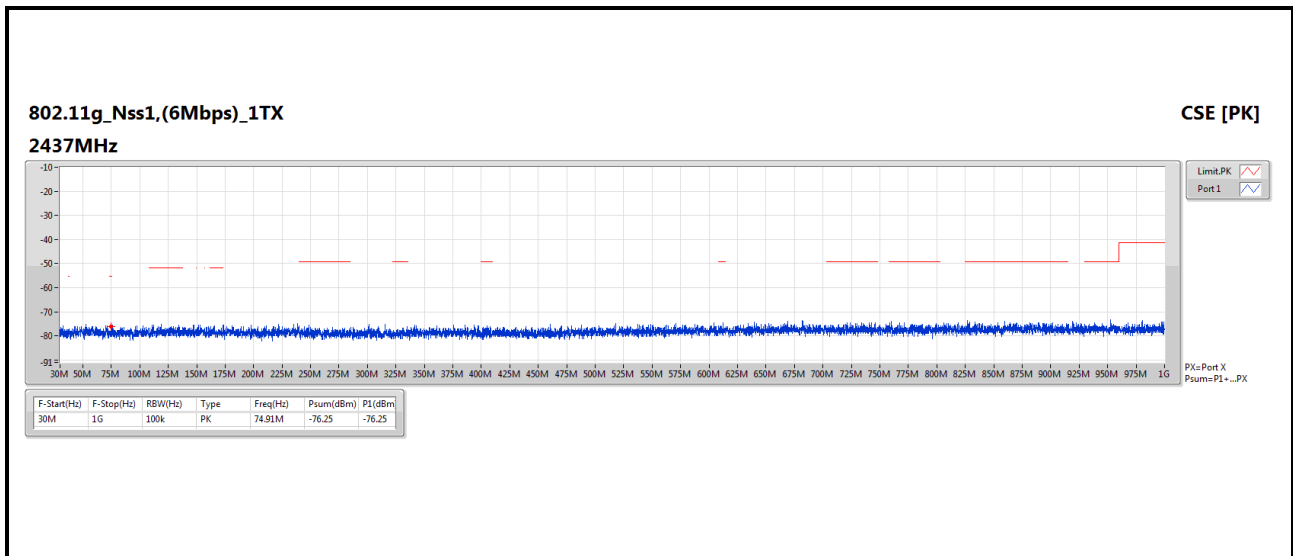
Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	Psum (dBm)	GRF (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11g_Nss1,(6Mbps)_1TX	Pass	30M	1G	PK	74.91M	2.79	-76.25	-76.25	4.7	-68.76	-55.20	-13.56

DG = Directional Gain;  
PX=Port X; Psum=P1+.P2+..PX

#### Result

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	Psum (dBm)	GRF (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
2437MHz	Pass	30M	1G	PK	74.91M	2.79	-76.25	-76.25	4.7	-68.76	-55.20	-13.56

DG = Directional Gain;  
PX=Port X; Psum =P1+.P2+..PX



### 3.5.15 Transmitter Conducted Unwanted Emissions (1GHz ~ 3.1GHz)

#### Summary

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	Pass	2.4835G	2.5G	AV	2.4835G	2.79	-47.07	-47.07	-44.28	-41.20	-3.08
802.11g_Nss1,(6Mbps)_1TX	Pass	2.4835G	2.5G	AV	2.48357G	2.79	-47.68	-47.68	-44.89	-41.20	-3.69
802.11n HT20_Nss1,(MCS0)_1TX	Pass	2.31G	2.39G	AV	2.39G	2.79	-47.09	-47.09	-44.30	-41.20	-3.10
802.11n HT40_Nss1,(MCS0)_1TX	Pass	2.31G	2.39G	AV	2.39G	2.79	-47.15	-47.15	-44.36	-41.20	-3.16

DG = Directional Gain;

PX=Port X; Psum=P1+.P2+..PX

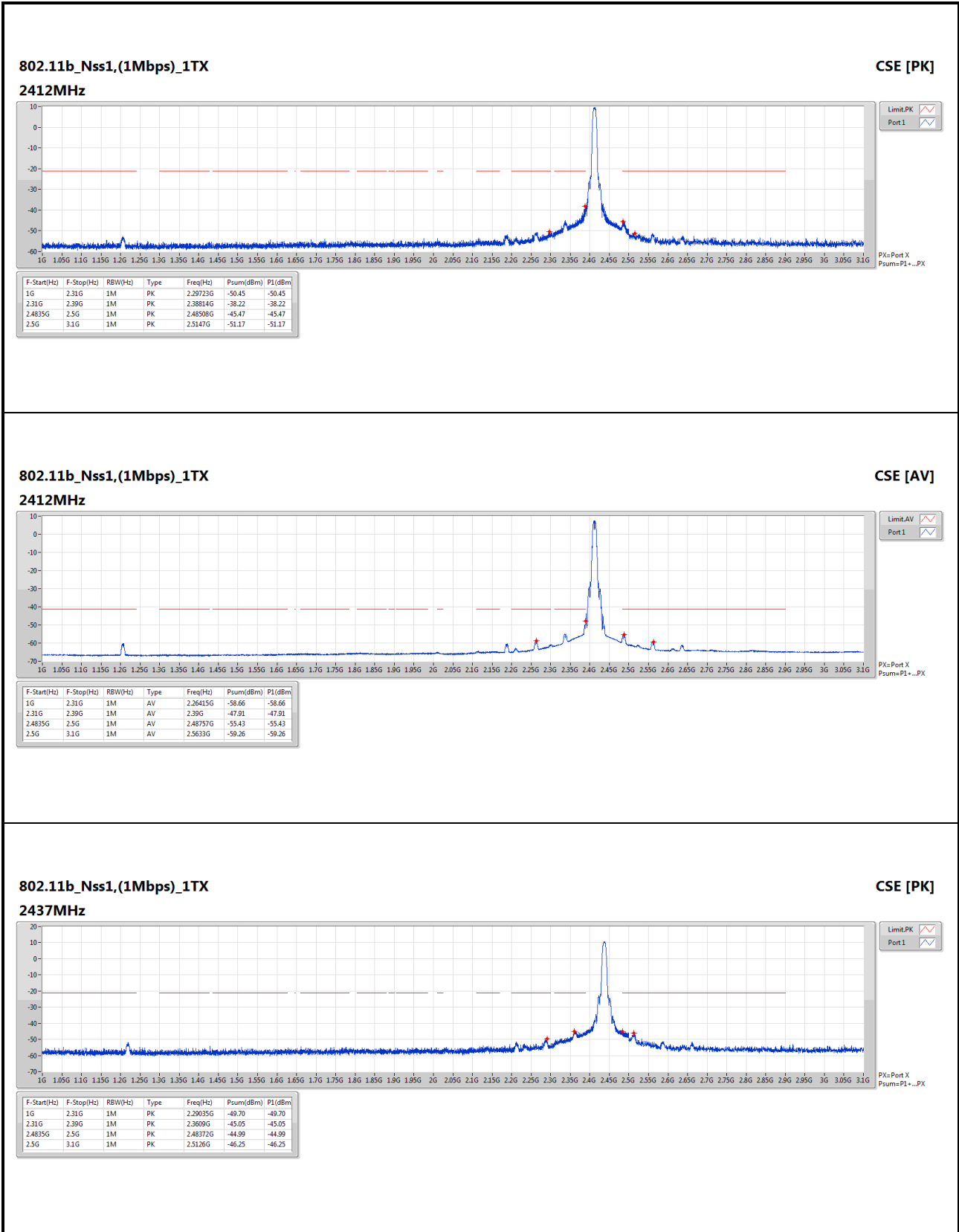
#### Result

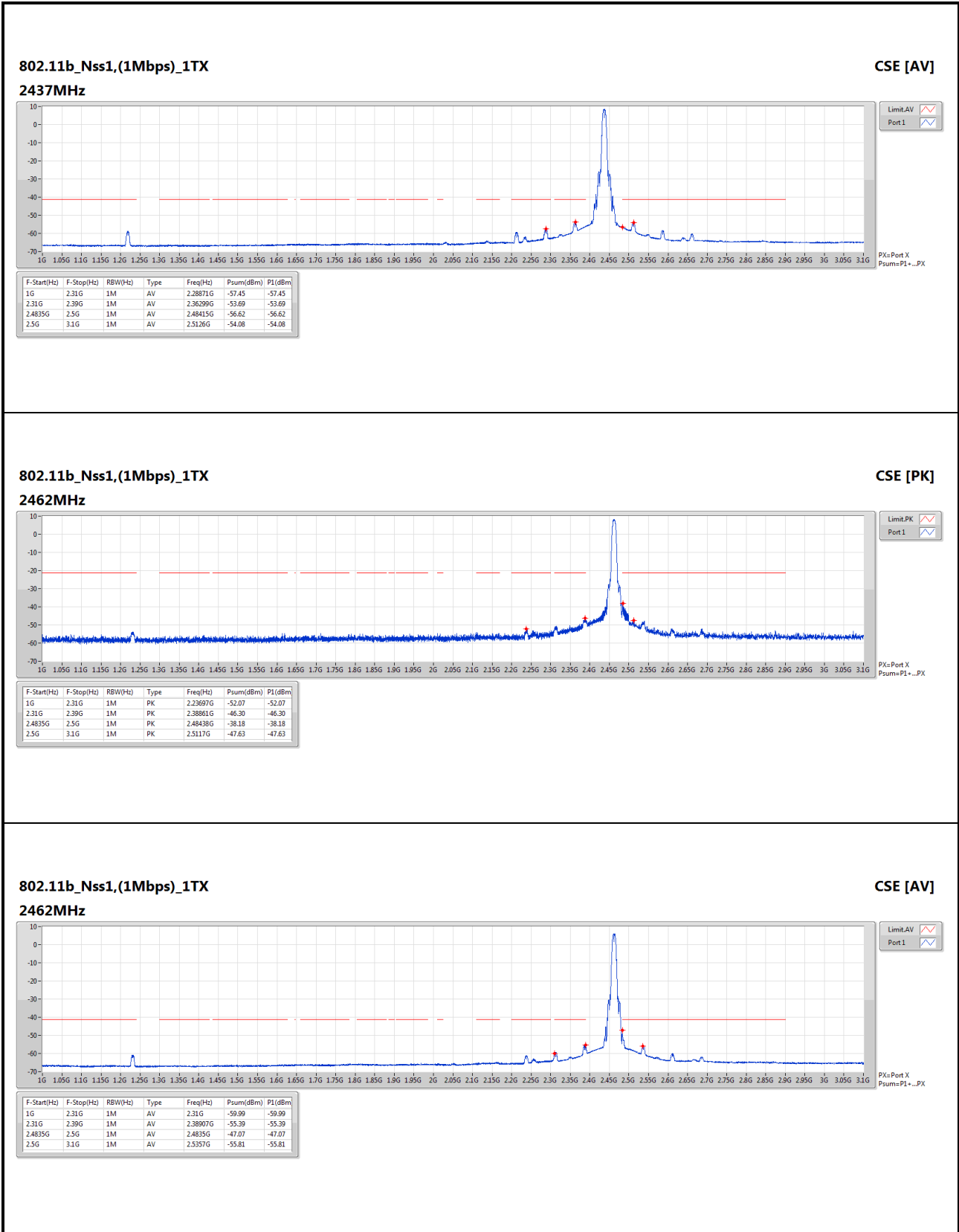
Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	1G	2.31G	AV	2.26415G	2.79	-58.66	-58.66	-55.87	-41.20	-14.67
2412MHz	Pass	2.31G	2.39G	AV	2.39G	2.79	-47.91	-47.91	-45.12	-41.20	-3.92
2412MHz	Pass	2.4835G	2.5G	AV	2.48757G	2.79	-55.43	-55.43	-52.64	-41.20	-11.44
2412MHz	Pass	2.5G	3.1G	AV	2.5633G	2.79	-59.26	-59.26	-56.47	-41.20	-15.27
2412MHz	Pass	1G	2.31G	PK	2.29723G	2.79	-50.45	-50.45	-47.66	-21.20	-26.46
2412MHz	Pass	2.31G	2.39G	PK	2.38814G	2.79	-38.22	-38.22	-35.43	-21.20	-14.23
2412MHz	Pass	2.4835G	2.5G	PK	2.48508G	2.79	-45.47	-45.47	-42.68	-21.20	-21.48
2412MHz	Pass	2.5G	3.1G	PK	2.5147G	2.79	-51.17	-51.17	-48.38	-21.20	-27.18
2437MHz	Pass	1G	2.31G	AV	2.28871G	2.79	-57.45	-57.45	-54.66	-41.20	-13.46
2437MHz	Pass	2.31G	2.39G	AV	2.36299G	2.79	-53.69	-53.69	-50.90	-41.20	-9.70
2437MHz	Pass	2.4835G	2.5G	AV	2.48415G	2.79	-56.62	-56.62	-53.83	-41.20	-12.63
2437MHz	Pass	2.5G	3.1G	AV	2.5126G	2.79	-54.08	-54.08	-51.29	-41.20	-10.09
2437MHz	Pass	1G	2.31G	PK	2.29035G	2.79	-49.70	-49.70	-46.91	-21.20	-25.71
2437MHz	Pass	2.31G	2.39G	PK	2.3609G	2.79	-45.05	-45.05	-42.26	-21.20	-21.06
2437MHz	Pass	2.4835G	2.5G	PK	2.48372G	2.79	-44.99	-44.99	-42.20	-21.20	-21.00
2437MHz	Pass	2.5G	3.1G	PK	2.5126G	2.79	-46.25	-46.25	-43.46	-21.20	-22.26
2462MHz	Pass	1G	2.31G	AV	2.31G	2.79	-59.99	-59.99	-57.20	-41.20	-16.00
2462MHz	Pass	2.31G	2.39G	AV	2.38907G	2.79	-55.39	-55.39	-52.60	-41.20	-11.40
2462MHz	Pass	2.4835G	2.5G	AV	2.4835G	2.79	-47.07	-47.07	-44.28	-41.20	-3.08
2462MHz	Pass	2.5G	3.1G	AV	2.5357G	2.79	-55.81	-55.81	-53.02	-41.20	-11.82
2462MHz	Pass	1G	2.31G	PK	2.23697G	2.79	-52.07	-52.07	-49.28	-21.20	-28.08
2462MHz	Pass	2.31G	2.39G	PK	2.38861G	2.79	-46.30	-46.30	-43.51	-21.20	-22.31
2462MHz	Pass	2.4835G	2.5G	PK	2.48438G	2.79	-38.18	-38.18	-35.39	-21.20	-14.19
2462MHz	Pass	2.5G	3.1G	PK	2.5117G	2.79	-47.63	-47.63	-44.84	-21.20	-23.64
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	1G	2.31G	AV	2.2653G	2.79	-62.80	-62.80	-60.01	-41.20	-18.81
2412MHz	Pass	2.31G	2.39G	AV	2.39G	2.79	-47.79	-47.79	-45.00	-41.20	-3.80
2412MHz	Pass	2.4835G	2.5G	AV	2.48584G	2.79	-59.88	-59.88	-57.09	-41.20	-15.89

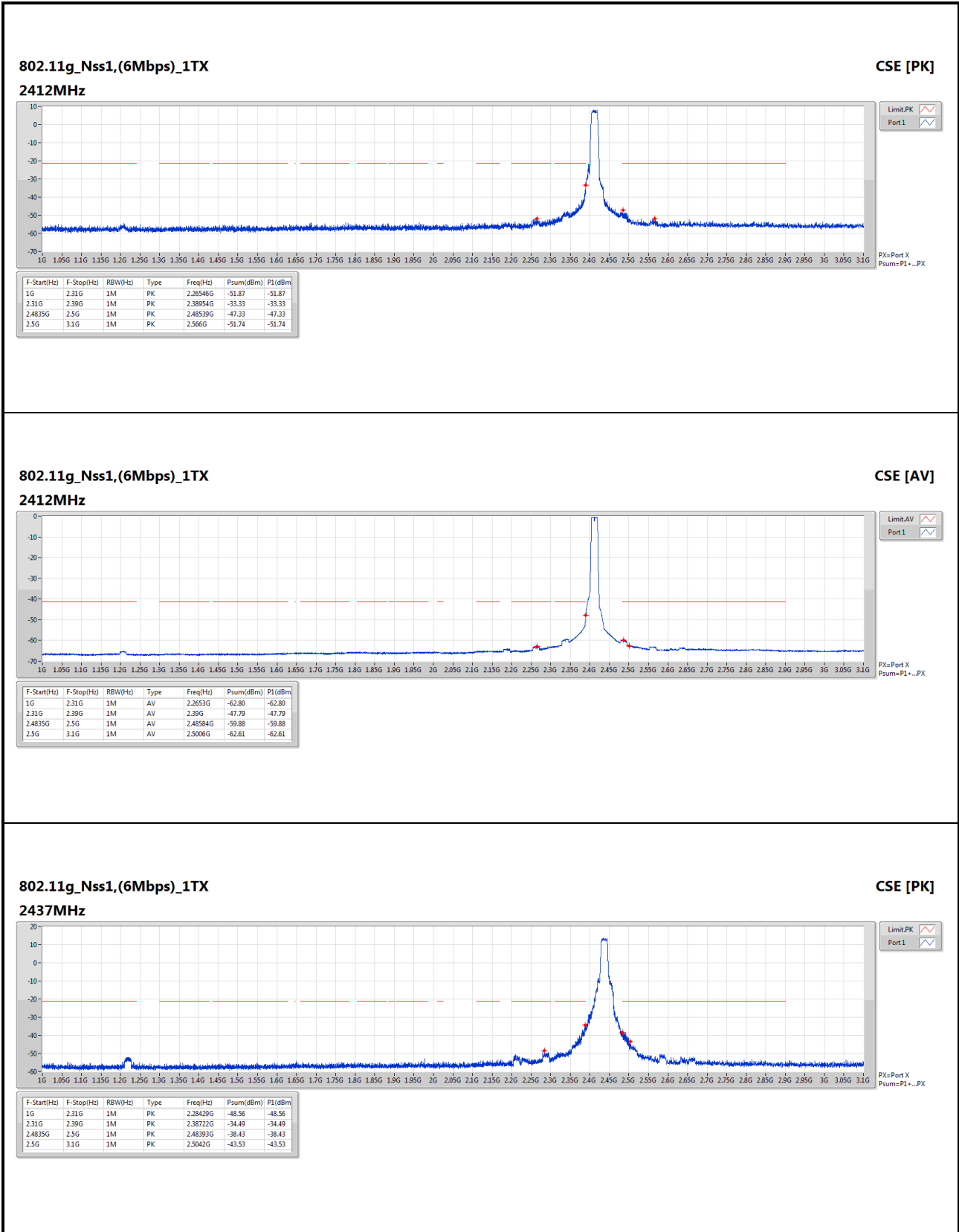
Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
2412MHz	Pass	2.5G	3.1G	AV	2.5006G	2.79	-62.61	-62.61	-59.82	-41.20	-18.62
2412MHz	Pass	1G	2.31G	PK	2.26546G	2.79	-51.87	-51.87	-49.08	-21.20	-27.88
2412MHz	Pass	2.31G	2.39G	PK	2.38954G	2.79	-33.33	-33.33	-30.54	-21.20	-9.34
2412MHz	Pass	2.4835G	2.5G	PK	2.48539G	2.79	-47.33	-47.33	-44.54	-21.20	-23.34
2412MHz	Pass	2.5G	3.1G	PK	2.566G	2.79	-51.74	-51.74	-48.95	-21.20	-27.75
2437MHz	Pass	1G	2.31G	AV	2.29477G	2.79	-59.53	-59.53	-56.74	-41.20	-15.54
2437MHz	Pass	2.31G	2.39G	AV	2.38977G	2.79	-50.64	-50.64	-47.85	-41.20	-6.65
2437MHz	Pass	2.4835G	2.5G	AV	2.48374G	2.79	-52.41	-52.41	-49.62	-41.20	-8.42
2437MHz	Pass	2.5G	3.1G	AV	2.5051G	2.79	-55.48	-55.48	-52.69	-41.20	-11.49
2437MHz	Pass	1G	2.31G	PK	2.28429G	2.79	-48.56	-48.56	-45.77	-21.20	-24.57
2437MHz	Pass	2.31G	2.39G	PK	2.38722G	2.79	-34.49	-34.49	-31.70	-21.20	-10.50
2437MHz	Pass	2.4835G	2.5G	PK	2.48393G	2.79	-38.43	-38.43	-35.64	-21.20	-14.44
2437MHz	Pass	2.5G	3.1G	PK	2.5042G	2.79	-43.53	-43.53	-40.74	-21.20	-19.54
2462MHz	Pass	1G	2.31G	AV	2.31G	2.79	-62.46	-62.46	-59.67	-41.20	-18.47
2462MHz	Pass	2.31G	2.39G	AV	2.3893G	2.79	-58.34	-58.34	-55.55	-41.20	-14.35
2462MHz	Pass	2.4835G	2.5G	AV	2.48357G	2.79	-47.68	-47.68	-44.89	-41.20	-3.69
2462MHz	Pass	2.5G	3.1G	AV	2.5G	2.79	-55.73	-55.73	-52.94	-41.20	-11.74
2462MHz	Pass	1G	2.31G	PK	2.24532G	2.79	-51.90	-51.90	-49.11	-21.20	-27.91
2462MHz	Pass	2.31G	2.39G	PK	2.38513G	2.79	-48.03	-48.03	-45.24	-21.20	-24.04
2462MHz	Pass	2.4835G	2.5G	PK	2.48367G	2.79	-29.49	-29.49	-26.70	-21.20	-5.50
2462MHz	Pass	2.5G	3.1G	PK	2.5003G	2.79	-42.64	-42.64	-39.85	-21.20	-18.65
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	1G	2.31G	AV	2.26743G	2.79	-63.14	-63.14	-60.35	-41.20	-19.15
2412MHz	Pass	2.31G	2.39G	AV	2.39G	2.79	-47.09	-47.09	-44.30	-41.20	-3.10
2412MHz	Pass	2.4835G	2.5G	AV	2.48474G	2.79	-60.28	-60.28	-57.49	-41.20	-16.29
2412MHz	Pass	2.5G	3.1G	AV	2.5096G	2.79	-62.78	-62.78	-59.99	-41.20	-18.79
2412MHz	Pass	1G	2.31G	PK	2.26595G	2.79	-51.72	-51.72	-48.93	-21.20	-27.73
2412MHz	Pass	2.31G	2.39G	PK	2.38861G	2.79	-31.44	-31.44	-28.65	-21.20	-7.45
2412MHz	Pass	2.4835G	2.5G	PK	2.49153G	2.79	-48.52	-48.52	-45.73	-21.20	-24.53
2412MHz	Pass	2.5G	3.1G	PK	2.5057G	2.79	-51.94	-51.94	-49.15	-21.20	-27.95
2437MHz	Pass	1G	2.31G	AV	2.28855G	2.79	-59.66	-59.66	-56.87	-41.20	-15.67
2437MHz	Pass	2.31G	2.39G	AV	2.38988G	2.79	-48.42	-48.42	-45.63	-41.20	-4.43
2437MHz	Pass	2.4835G	2.5G	AV	2.48403G	2.79	-50.98	-50.98	-48.19	-41.20	-6.99
2437MHz	Pass	2.5G	3.1G	AV	2.5036G	2.79	-55.02	-55.02	-52.23	-41.20	-11.03
2437MHz	Pass	1G	2.31G	PK	2.29346G	2.79	-48.56	-48.56	-45.77	-21.20	-24.57
2437MHz	Pass	2.31G	2.39G	PK	2.38838G	2.79	-30.33	-30.33	-27.54	-21.20	-6.34
2437MHz	Pass	2.4835G	2.5G	PK	2.48568G	2.79	-34.55	-34.55	-31.76	-21.20	-10.56
2437MHz	Pass	2.5G	3.1G	PK	2.5036G	2.79	-42.94	-42.94	-40.15	-21.20	-18.95
2462MHz	Pass	1G	2.31G	AV	2.31G	2.79	-62.99	-62.99	-60.20	-41.20	-19.00
2462MHz	Pass	2.31G	2.39G	AV	2.39G	2.79	-59.19	-59.19	-56.40	-41.20	-15.20
2462MHz	Pass	2.4835G	2.5G	AV	2.48352G	2.79	-47.81	-47.81	-45.02	-41.20	-3.82
2462MHz	Pass	2.5G	3.1G	AV	2.5006G	2.79	-56.59	-56.59	-53.80	-41.20	-12.60

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
2462MHz	Pass	1G	2.31G	PK	2.27267G	2.79	-53.04	-53.04	-50.25	-21.20	-29.05
2462MHz	Pass	2.31G	2.39G	PK	2.38814G	2.79	-48.73	-48.73	-45.94	-21.20	-24.74
2462MHz	Pass	2.4835G	2.5G	PK	2.48352G	2.79	-30.92	-30.92	-28.13	-21.20	-6.93
2462MHz	Pass	2.5G	3.1G	PK	2.5012G	2.79	-46.45	-46.45	-43.66	-21.20	-22.46
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	1G	2.31G	AV	2.29985G	2.79	-63.37	-63.37	-60.58	-41.20	-19.38
2422MHz	Pass	2.31G	2.39G	AV	2.3893G	2.79	-47.27	-47.27	-44.48	-41.20	-3.28
2422MHz	Pass	2.4835G	2.5G	AV	2.4835G	2.79	-59.37	-59.37	-56.58	-41.20	-15.38
2422MHz	Pass	2.5G	3.1G	AV	2.5012G	2.79	-61.12	-61.12	-58.33	-41.20	-17.13
2422MHz	Pass	1G	2.31G	PK	2.28855G	2.79	-52.56	-52.56	-49.77	-21.20	-28.57
2422MHz	Pass	2.31G	2.39G	PK	2.38038G	2.79	-33.35	-33.35	-30.56	-21.20	-9.36
2422MHz	Pass	2.4835G	2.5G	PK	2.48381G	2.79	-48.13	-48.13	-45.34	-21.20	-24.14
2422MHz	Pass	2.5G	3.1G	PK	2.5018G	2.79	-50.85	-50.85	-48.06	-21.20	-26.86
2437MHz	Pass	1G	2.31G	AV	2.29968G	2.79	-62.63	-62.63	-59.84	-41.20	-18.64
2437MHz	Pass	2.31G	2.39G	AV	2.39G	2.79	-47.15	-47.15	-44.36	-41.20	-3.16
2437MHz	Pass	2.4835G	2.5G	AV	2.48367G	2.79	-51.82	-51.82	-49.03	-41.20	-7.83
2437MHz	Pass	2.5G	3.1G	AV	2.5006G	2.79	-57.75	-57.75	-54.96	-41.20	-13.76
2437MHz	Pass	1G	2.31G	PK	2.26972G	2.79	-53.18	-53.18	-50.39	-21.20	-29.19
2437MHz	Pass	2.31G	2.39G	PK	2.38896G	2.79	-32.70	-32.70	-29.91	-21.20	-8.71
2437MHz	Pass	2.4835G	2.5G	PK	2.4835G	2.79	-35.53	-35.53	-32.74	-21.20	-11.54
2437MHz	Pass	2.5G	3.1G	PK	2.5033G	2.79	-47.59	-47.59	-44.80	-21.20	-23.60
2452MHz	Pass	1G	2.31G	AV	2.28871G	2.79	-63.18	-63.18	-60.39	-41.20	-19.19
2452MHz	Pass	2.31G	2.39G	AV	2.38988G	2.79	-57.74	-57.74	-54.95	-41.20	-13.75
2452MHz	Pass	2.4835G	2.5G	AV	2.48383G	2.79	-47.49	-47.49	-44.70	-41.20	-3.50
2452MHz	Pass	2.5G	3.1G	AV	2.5G	2.79	-54.80	-54.80	-52.01	-41.20	-10.81
2452MHz	Pass	1G	2.31G	PK	2.29919G	2.79	-53.22	-53.22	-50.43	-21.20	-29.23
2452MHz	Pass	2.31G	2.39G	PK	2.38443G	2.79	-43.79	-43.79	-41.00	-21.20	-19.80
2452MHz	Pass	2.4835G	2.5G	PK	2.48455G	2.79	-32.95	-32.95	-30.16	-21.20	-8.96
2452MHz	Pass	2.5G	3.1G	PK	2.5018G	2.79	-42.29	-42.29	-39.50	-21.20	-18.30

DG = Directional Gain;  
PX=Port X; Psum=P1+.P2+..PX



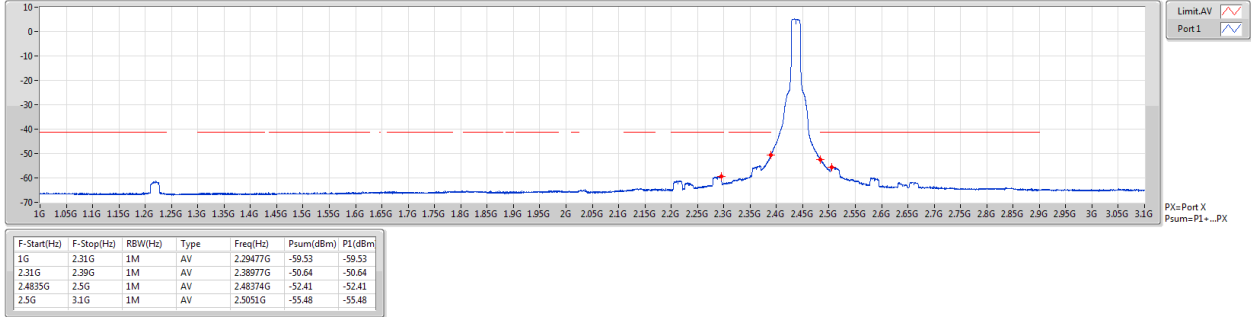




802.11g\_Nss1,(6Mbps)\_1TX

CSE [AV]

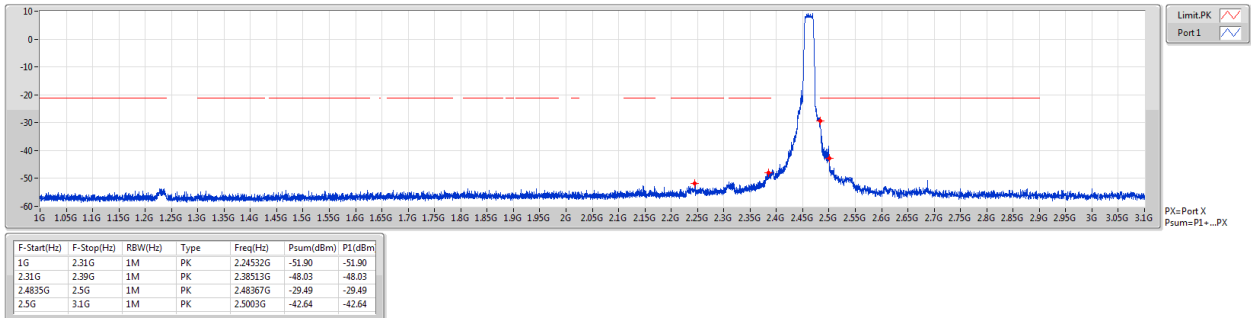
2437MHz



802.11g\_Nss1,(6Mbps)\_1TX

CSE [PK]

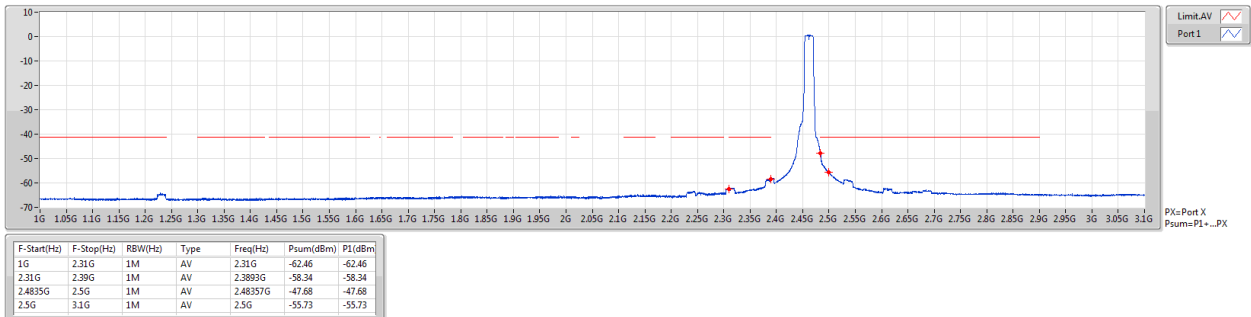
2462MHz



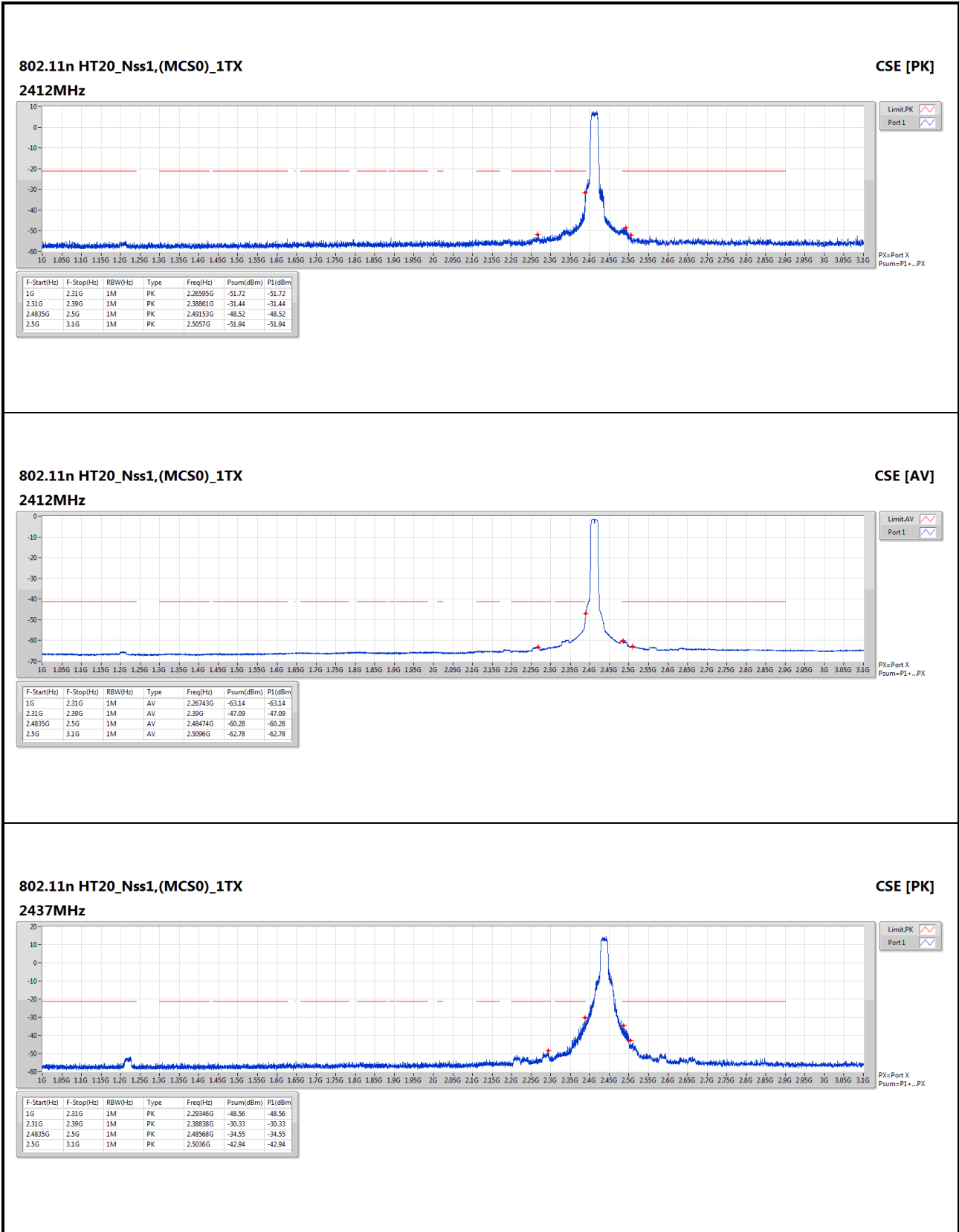
802.11g\_Nss1,(6Mbps)\_1TX

CSE [AV]

2462MHz



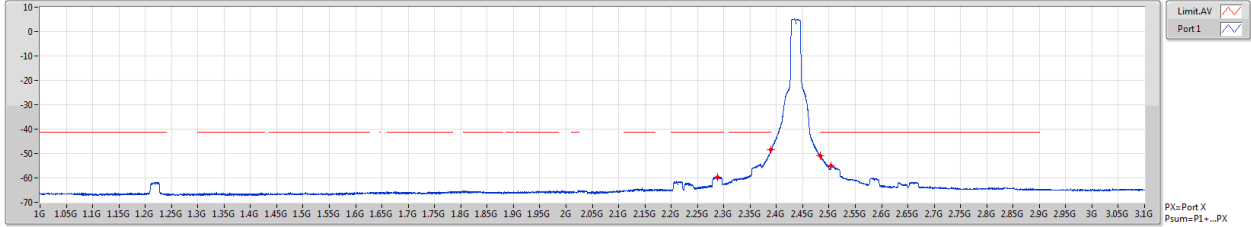




802.11n HT20\_Nss1,(MCS0)\_1TX

CSE [AV]

2437MHz

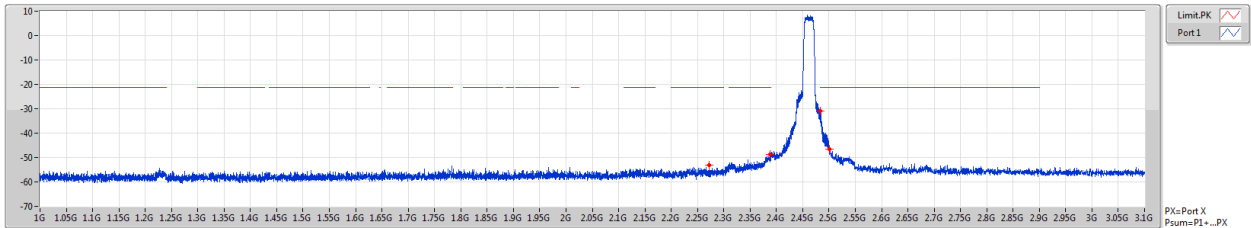


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
1G	2.31G	1M	AV	2.28855G	-59.66	-59.66
2.31G	2.39G	1M	AV	2.38988G	-48.42	-48.42
2.4835G	2.5G	1M	AV	2.48403G	-50.98	-50.98
2.5G	3.1G	1M	AV	2.5036G	-55.02	-55.02

802.11n HT20\_Nss1,(MCS0)\_1TX

CSE [PK]

2462MHz

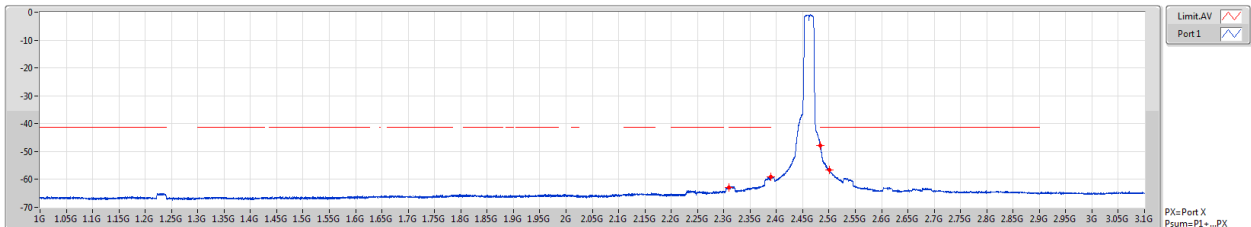


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
1G	2.31G	1M	PK	2.27267G	-53.04	-53.04
2.31G	2.39G	1M	PK	2.38814G	-48.73	-48.73
2.4835G	2.5G	1M	PK	2.48352G	-30.92	-30.92
2.5G	3.1G	1M	PK	2.5012G	-46.45	-46.45

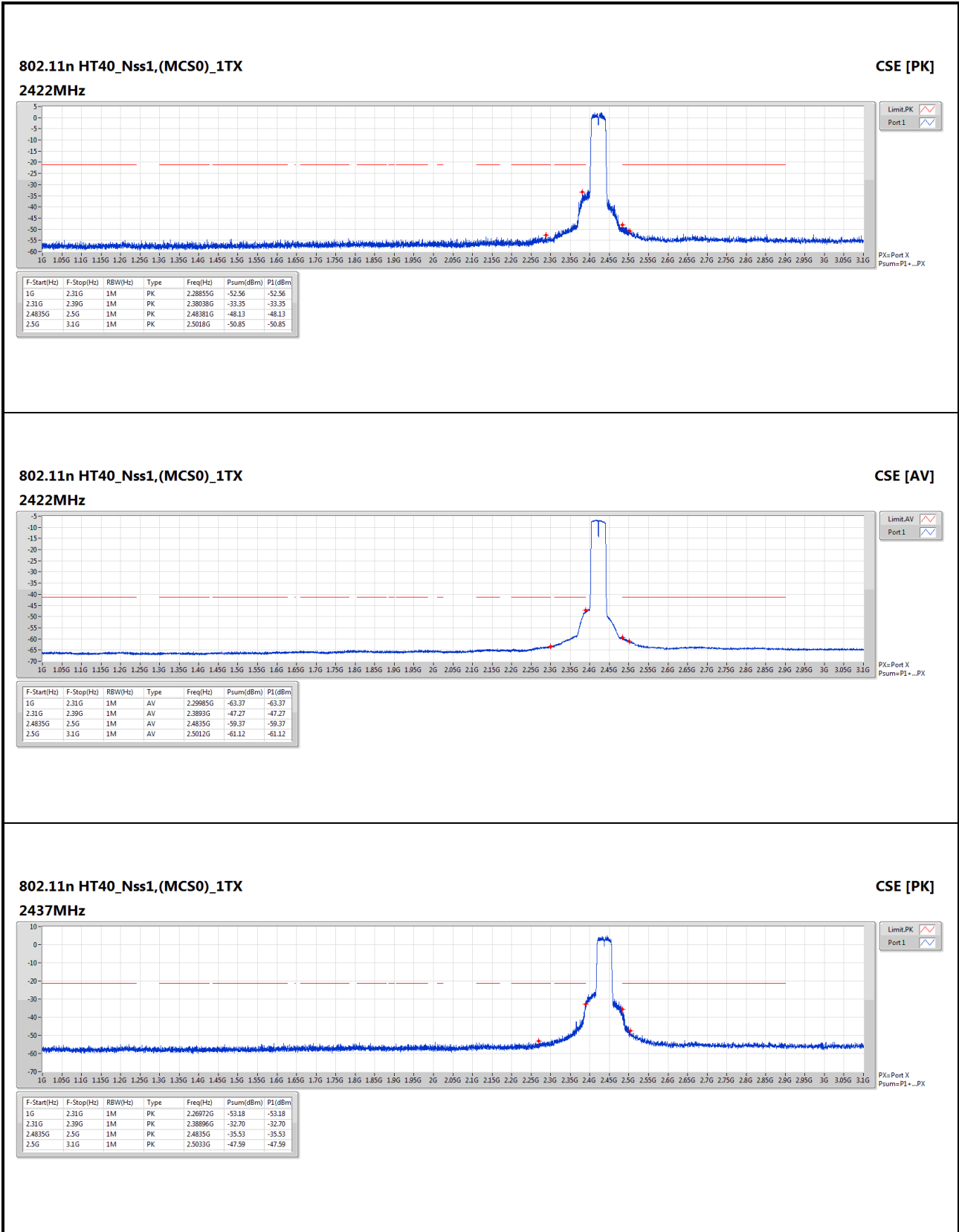
802.11n HT20\_Nss1,(MCS0)\_1TX

CSE [AV]

2462MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
1G	2.31G	1M	AV	2.31G	-62.99	-62.99
2.31G	2.39G	1M	AV	2.39G	-59.19	-59.19
2.4835G	2.5G	1M	AV	2.48352G	-47.81	-47.81
2.5G	3.1G	1M	AV	2.5006G	-56.59	-56.59



**802.11n HT40\_Nss1,(MCS0)\_1TX**

**2437MHz**

**CSE [PK]**

Limit:PK

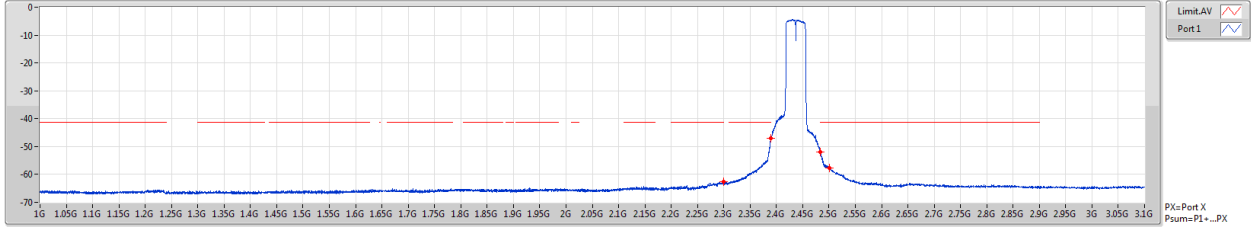
Port:1

PX=Port X  
Psum=P1+...PX

802.11n HT40\_Nss1,(MCS0)\_1TX

CSE [AV]

2437MHz

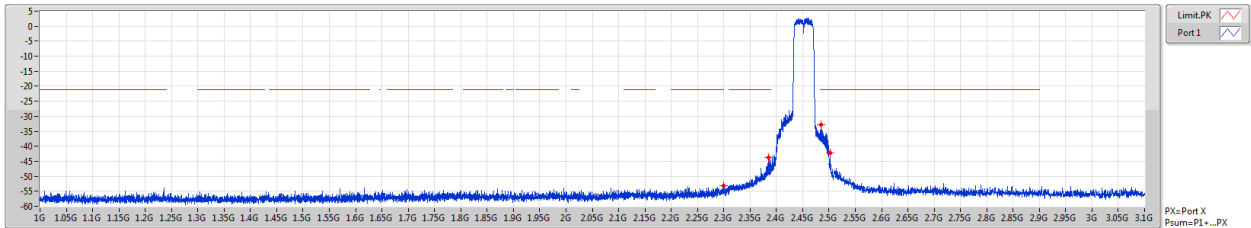


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
1G	2.31G	1M	AV	2.29968G	-62.63	-62.63
2.31G	2.39G	1M	AV	2.39G	-47.15	-47.15
2.4835G	2.5G	1M	AV	2.48367G	-51.82	-51.82
2.5G	3.1G	1M	AV	2.5006G	-57.75	-57.75

802.11n HT40\_Nss1,(MCS0)\_1TX

CSE [PK]

2452MHz

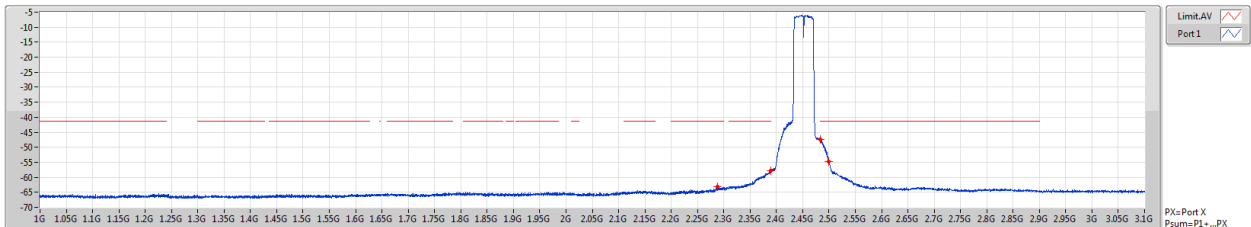


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
1G	2.31G	1M	PK	2.29919G	-53.22	-53.22
2.31G	2.39G	1M	PK	2.38443G	-43.79	-43.79
2.4835G	2.5G	1M	PK	2.48455G	-32.95	-32.95
2.5G	3.1G	1M	PK	2.5018G	-42.29	-42.29

802.11n HT40\_Nss1,(MCS0)\_1TX

CSE [AV]

2452MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
1G	2.31G	1M	AV	2.28871G	-63.18	-63.18
2.31G	2.39G	1M	AV	2.38988G	-57.74	-57.74
2.4835G	2.5G	1M	AV	2.48383G	-47.49	-47.49
2.5G	3.1G	1M	AV	2.5G	-54.80	-54.80

### 3.5.16 Transmitter Conducted Unwanted Emissions (3.1GHz ~ 25GHz)

#### Summary

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	Pass	7G	8G	AV	7.31175G	2.79	-47.42	-47.42	-44.63	-41.20	-3.43
802.11g_Nss1,(6Mbps)_1TX	Pass	7G	8G	AV	7.311G	2.79	-49.92	-49.92	-47.13	-41.20	-5.93
802.11n HT20_Nss1,(MCS0)_1TX	Pass	7G	8G	AV	7.311G	2.79	-49.86	-49.86	-47.07	-41.20	-5.87
802.11n HT40_Nss1,(MCS0)_1TX	Pass	7G	8G	AV	7.311G	2.79	-53.40	-53.40	-50.61	-41.20	-9.41

DG = Directional Gain;

PX=Port X; Psum=P1+.P2+..PX

#### Result

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	3.1G	4G	AV	3.61795G	2.79	-59.69	-59.69	-56.90	-41.20	-15.70
2412MHz	Pass	4G	5G	AV	4.824G	2.79	-48.45	-48.45	-45.66	-41.20	-4.46
2412MHz	Pass	5G	7G	AV	5.1095G	2.79	-77.75	-77.75	-74.96	-41.20	-33.76
2412MHz	Pass	7G	8G	AV	7.25G	2.79	-71.44	-71.44	-68.65	-41.20	-27.45
2412MHz	Pass	8G	25G	AV	20.13747G	2.79	-68.69	-68.69	-65.90	-41.20	-24.70
2412MHz	Pass	3.1G	4G	PK	3.61818G	2.79	-53.91	-53.91	-51.12	-21.20	-29.92
2412MHz	Pass	4G	5G	PK	4.82425G	2.79	-47.17	-47.17	-44.38	-21.20	-23.18
2412MHz	Pass	5G	7G	PK	5.12G	2.79	-66.34	-66.34	-63.55	-21.20	-42.35
2412MHz	Pass	7G	8G	PK	7.25075G	2.79	-65.22	-65.22	-62.43	-21.20	-41.23
2412MHz	Pass	8G	25G	PK	19.42878G	2.79	-58.68	-58.68	-55.89	-21.20	-34.69
2437MHz	Pass	3.1G	4G	AV	3.65553G	2.79	-59.20	-59.20	-56.41	-41.20	-15.21
2437MHz	Pass	4G	5G	AV	4.874G	2.79	-51.89	-51.89	-49.10	-41.20	-7.90
2437MHz	Pass	5G	7G	AV	5.1055G	2.79	-77.76	-77.76	-74.97	-41.20	-33.77
2437MHz	Pass	7G	8G	AV	7.31175G	2.79	-47.42	-47.42	-44.63	-41.20	-3.43
2437MHz	Pass	8G	25G	AV	20.13853G	2.79	-68.94	-68.94	-66.15	-41.20	-24.95
2437MHz	Pass	3.1G	4G	PK	3.65553G	2.79	-53.69	-53.69	-50.90	-21.20	-29.70
2437MHz	Pass	4G	5G	PK	4.87425G	2.79	-50.70	-50.70	-47.91	-21.20	-26.71
2437MHz	Pass	5G	7G	PK	5.0775G	2.79	-66.62	-66.62	-63.83	-21.20	-42.63
2437MHz	Pass	7G	8G	PK	7.311G	2.79	-43.77	-43.77	-40.98	-21.20	-19.78
2437MHz	Pass	8G	25G	PK	20.13003G	2.79	-59.16	-59.16	-56.37	-21.20	-35.17
2462MHz	Pass	3.1G	4G	AV	3.6931G	2.79	-60.12	-60.12	-57.33	-41.20	-16.13
2462MHz	Pass	4G	5G	AV	4.924G	2.79	-55.37	-55.37	-52.58	-41.20	-11.38
2462MHz	Pass	5G	7G	AV	5.109G	2.79	-77.75	-77.75	-74.96	-41.20	-33.76
2462MHz	Pass	7G	8G	AV	7.386G	2.79	-51.37	-51.37	-48.58	-41.20	-7.38
2462MHz	Pass	8G	25G	AV	20.13322G	2.79	-68.81	-68.81	-66.02	-41.20	-24.82
2462MHz	Pass	3.1G	4G	PK	3.6931G	2.79	-54.56	-54.56	-51.77	-21.20	-30.57
2462MHz	Pass	4G	5G	PK	4.92425G	2.79	-54.00	-54.00	-51.21	-21.20	-30.01
2462MHz	Pass	5G	7G	PK	5.116G	2.79	-67.00	-67.00	-64.21	-21.20	-43.01
2462MHz	Pass	7G	8G	PK	7.38625G	2.79	-47.47	-47.47	-44.68	-21.20	-23.48

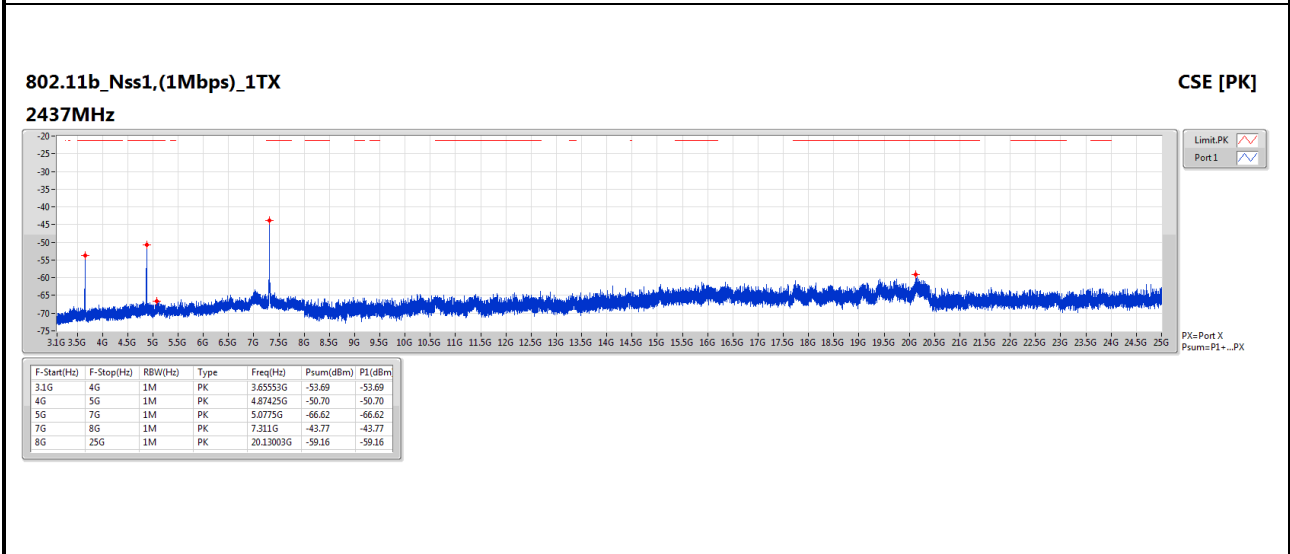
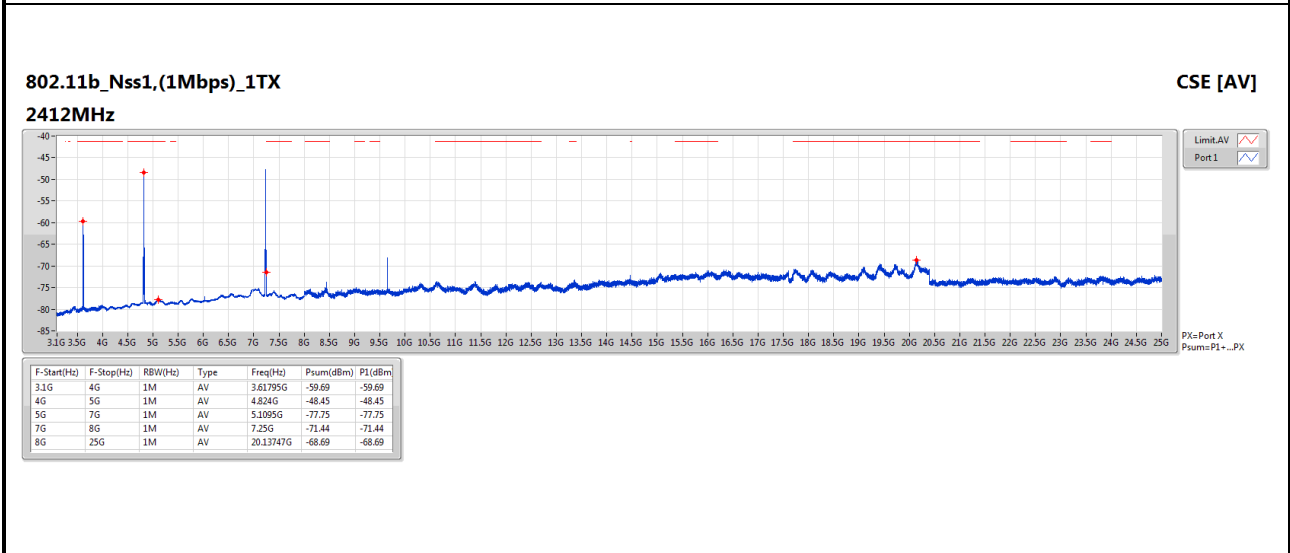
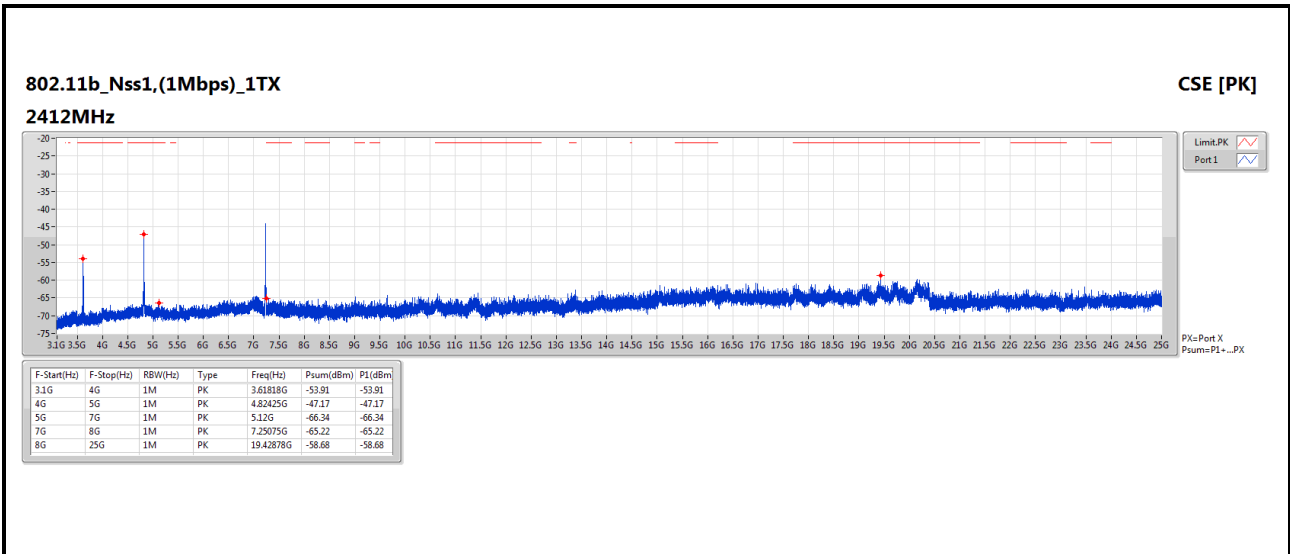
Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
2462MHz	Pass	8G	25G	PK	19.73691G	2.79	-60.16	-60.16	-57.37	-21.20	-36.17
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	3.1G	4G	AV	3.61795G	2.79	-61.47	-61.47	-58.68	-41.20	-17.48
2412MHz	Pass	4G	5G	AV	4.824G	2.79	-65.25	-65.25	-62.46	-41.20	-21.26
2412MHz	Pass	5G	7G	AV	5.3975G	2.79	-68.43	-68.43	-65.64	-41.20	-24.44
2412MHz	Pass	7G	8G	AV	7.25025G	2.79	-66.29	-66.29	-63.50	-41.20	-22.30
2412MHz	Pass	8G	25G	AV	15.88534G	2.79	-63.58	-63.58	-60.79	-41.20	-19.59
2412MHz	Pass	3.1G	4G	PK	3.6184G	2.79	-54.45	-54.45	-51.66	-21.20	-30.46
2412MHz	Pass	4G	5G	PK	4.82275G	2.79	-54.70	-54.70	-51.91	-21.20	-30.71
2412MHz	Pass	5G	7G	PK	5.3905G	2.79	-56.96	-56.96	-54.17	-21.20	-32.97
2412MHz	Pass	7G	8G	PK	7.25025G	2.79	-52.82	-52.82	-50.03	-21.20	-28.83
2412MHz	Pass	8G	25G	PK	15.58731G	2.79	-53.12	-53.12	-50.33	-21.20	-29.13
2437MHz	Pass	3.1G	4G	AV	3.65553G	2.79	-59.87	-59.87	-57.08	-41.20	-15.88
2437MHz	Pass	4G	5G	AV	4.874G	2.79	-62.90	-62.90	-60.11	-41.20	-18.91
2437MHz	Pass	5G	7G	AV	5.1385G	2.79	-77.76	-77.76	-74.97	-41.20	-33.77
2437MHz	Pass	7G	8G	AV	7.311G	2.79	-49.92	-49.92	-47.13	-41.20	-5.93
2437MHz	Pass	8G	25G	AV	20.15181G	2.79	-68.84	-68.84	-66.05	-41.20	-24.85
2437MHz	Pass	3.1G	4G	PK	3.65553G	2.79	-52.96	-52.96	-50.17	-21.20	-28.97
2437MHz	Pass	4G	5G	PK	4.873G	2.79	-51.34	-51.34	-48.55	-21.20	-27.35
2437MHz	Pass	5G	7G	PK	5.064G	2.79	-66.02	-66.02	-63.23	-21.20	-42.03
2437MHz	Pass	7G	8G	PK	7.30475G	2.79	-41.15	-41.15	-38.36	-21.20	-17.16
2437MHz	Pass	8G	25G	PK	19.39584G	2.79	-59.22	-59.22	-56.43	-21.20	-35.23
2462MHz	Pass	3.1G	4G	AV	3.69288G	2.79	-60.67	-60.67	-57.88	-41.20	-16.68
2462MHz	Pass	4G	5G	AV	4.924G	2.79	-66.61	-66.61	-63.82	-41.20	-22.62
2462MHz	Pass	4G	5G	AV	4.92425G	2.79	-66.61	-66.61	-63.82	-41.20	-22.62
2462MHz	Pass	5G	7G	AV	5.4025G	2.79	-68.47	-68.47	-65.68	-41.20	-24.48
2462MHz	Pass	7G	8G	AV	7.38625G	2.79	-56.46	-56.46	-53.67	-41.20	-12.47
2462MHz	Pass	8G	25G	AV	16.0155G	2.79	-63.69	-63.69	-60.90	-41.20	-19.70
2462MHz	Pass	3.1G	4G	PK	3.6931G	2.79	-53.39	-53.39	-50.60	-21.20	-29.40
2462MHz	Pass	4G	5G	PK	4.92325G	2.79	-56.53	-56.53	-53.74	-21.20	-32.54
2462MHz	Pass	5G	7G	PK	5.386G	2.79	-57.10	-57.10	-54.31	-21.20	-33.11
2462MHz	Pass	7G	8G	PK	7.38725G	2.79	-48.90	-48.90	-46.11	-21.20	-24.91
2462MHz	Pass	8G	25G	PK	18.00344G	2.79	-53.46	-53.46	-50.67	-21.20	-29.47
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	3.1G	4G	AV	3.61795G	2.79	-60.87	-60.87	-58.08	-41.20	-16.88
2412MHz	Pass	4G	5G	AV	4.82375G	2.79	-66.70	-66.70	-63.91	-41.20	-22.71
2412MHz	Pass	4G	5G	AV	4.8245G	2.79	-66.70	-66.70	-63.91	-41.20	-22.71
2412MHz	Pass	5G	7G	AV	5.3995G	2.79	-68.37	-68.37	-65.58	-41.20	-24.38
2412MHz	Pass	7G	8G	AV	7.251G	2.79	-67.38	-67.38	-64.59	-41.20	-23.39
2412MHz	Pass	8G	25G	AV	15.69516G	2.79	-63.79	-63.79	-61.00	-41.20	-19.80
2412MHz	Pass	3.1G	4G	PK	3.61818G	2.79	-54.50	-54.50	-51.71	-21.20	-30.51
2412MHz	Pass	4G	5G	PK	4.8255G	2.79	-55.88	-55.88	-53.09	-21.20	-31.89

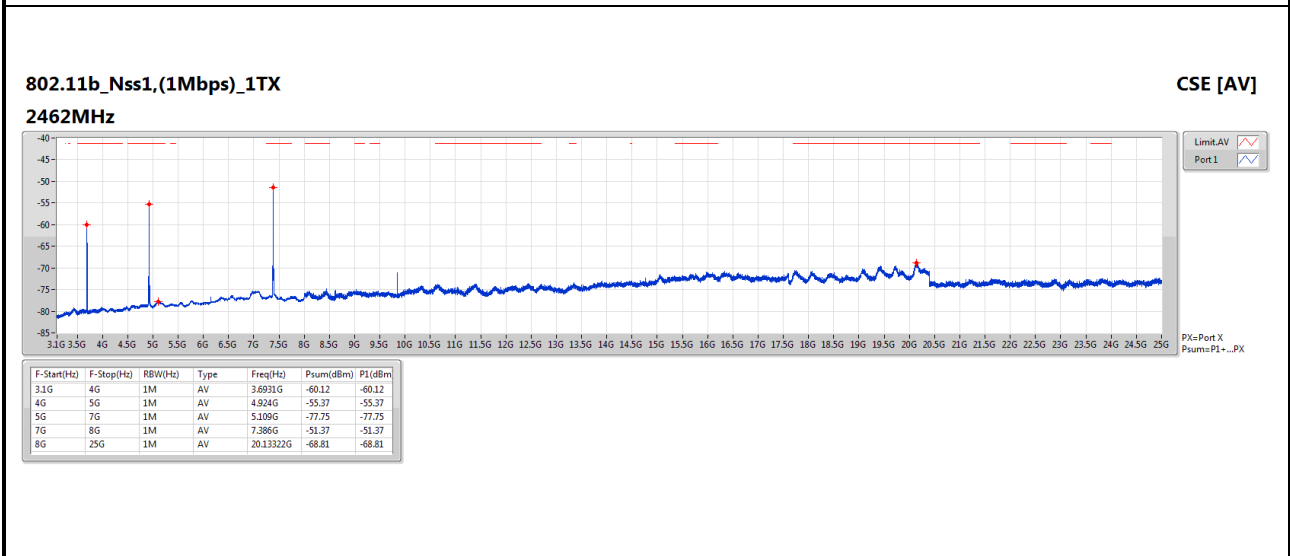
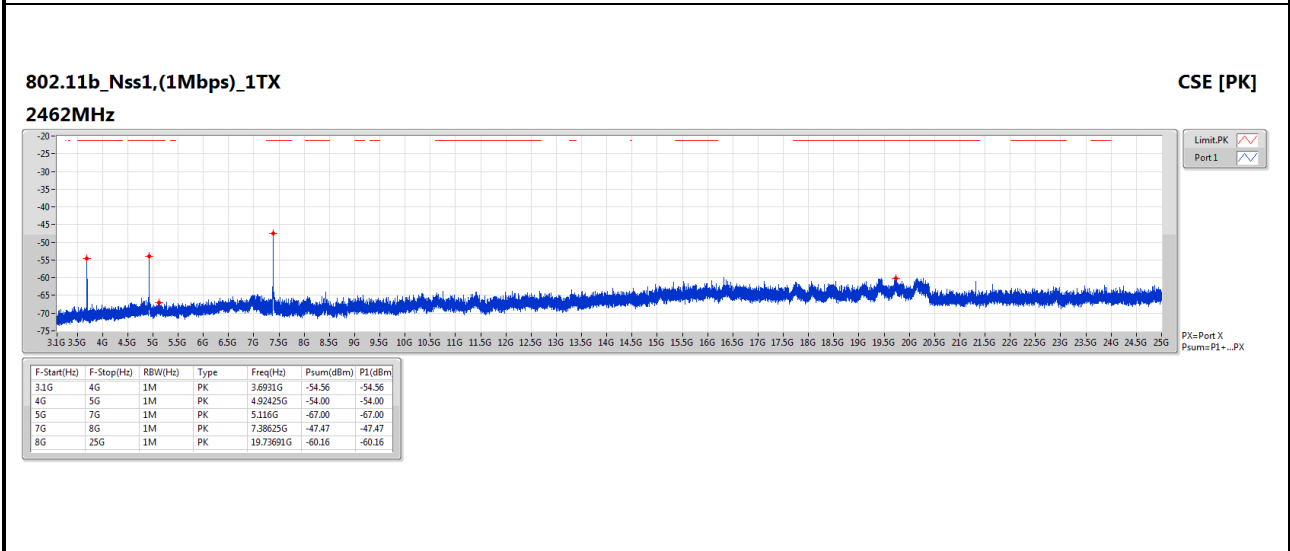
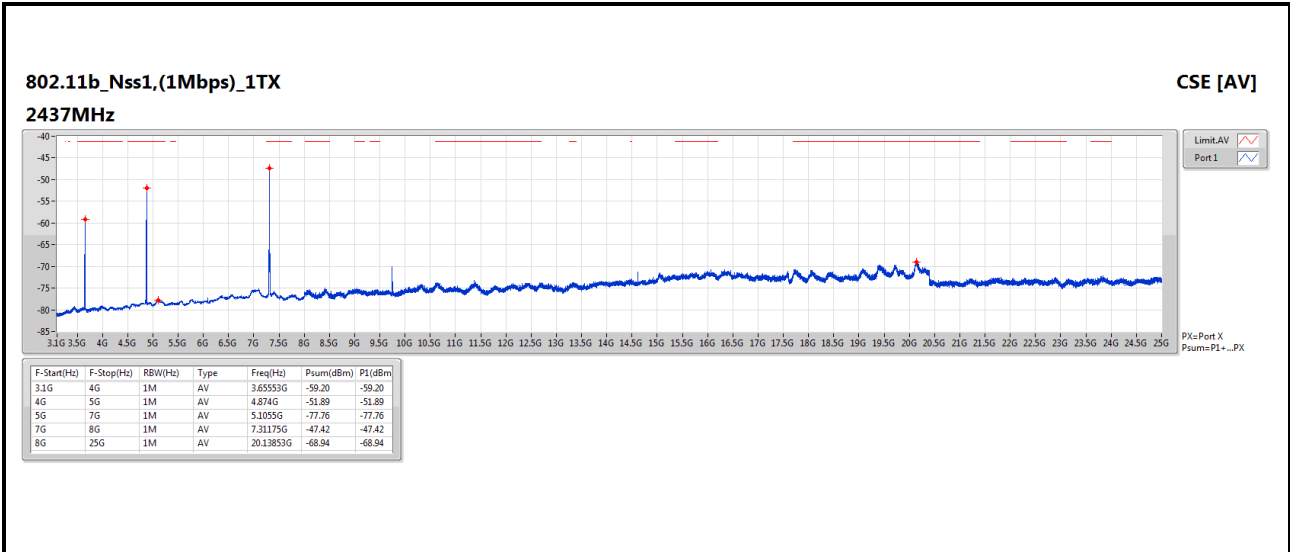
Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
2412MHz	Pass	5G	7G	PK	5.3945G	2.79	-57.74	-57.74	-54.95	-21.20	-33.75
2412MHz	Pass	7G	8G	PK	7.25025G	2.79	-57.50	-57.50	-54.71	-21.20	-33.51
2412MHz	Pass	8G	25G	PK	15.57509G	2.79	-53.87	-53.87	-51.08	-21.20	-29.88
2437MHz	Pass	3.1G	4G	AV	3.6553G	2.79	-61.23	-61.23	-58.44	-41.20	-17.24
2437MHz	Pass	4G	5G	AV	4.87175G	2.79	-60.65	-60.65	-57.86	-41.20	-16.66
2437MHz	Pass	4G	5G	AV	4.87225G	2.79	-60.65	-60.65	-57.86	-41.20	-16.66
2437MHz	Pass	5G	7G	AV	5.3995G	2.79	-68.37	-68.37	-65.58	-41.20	-24.38
2437MHz	Pass	7G	8G	AV	7.311G	2.79	-49.86	-49.86	-47.07	-41.20	-5.87
2437MHz	Pass	8G	25G	AV	15.67656G	2.79	-63.48	-63.48	-60.69	-41.20	-19.49
2437MHz	Pass	3.1G	4G	PK	3.65575G	2.79	-53.52	-53.52	-50.73	-21.20	-29.53
2437MHz	Pass	4G	5G	PK	4.87475G	2.79	-50.04	-50.04	-47.25	-21.20	-26.05
2437MHz	Pass	5G	7G	PK	5.392G	2.79	-57.58	-57.58	-54.79	-21.20	-33.59
2437MHz	Pass	7G	8G	PK	7.3115G	2.79	-39.74	-39.74	-36.95	-21.20	-15.75
2437MHz	Pass	8G	25G	PK	15.86728G	2.79	-53.98	-53.98	-51.19	-21.20	-29.99
2462MHz	Pass	3.1G	4G	AV	3.6931G	2.79	-60.66	-60.66	-57.87	-41.20	-16.67
2462MHz	Pass	4G	5G	AV	4.924G	2.79	-65.87	-65.87	-63.08	-41.20	-21.88
2462MHz	Pass	5G	7G	AV	5.249G	2.79	-68.37	-68.37	-65.58	-41.20	-24.38
2462MHz	Pass	7G	8G	AV	7.38575G	2.79	-54.03	-54.03	-51.24	-41.20	-10.04
2462MHz	Pass	8G	25G	AV	16.02719G	2.79	-63.65	-63.65	-60.86	-41.20	-19.66
2462MHz	Pass	3.1G	4G	PK	3.6931G	2.79	-54.68	-54.68	-51.89	-21.20	-30.69
2462MHz	Pass	4G	5G	PK	4.931G	2.79	-57.65	-57.65	-54.86	-21.20	-33.66
2462MHz	Pass	5G	7G	PK	5.4055G	2.79	-56.79	-56.79	-54.00	-21.20	-32.80
2462MHz	Pass	7G	8G	PK	7.38625G	2.79	-49.58	-49.58	-46.79	-21.20	-25.59
2462MHz	Pass	8G	25G	PK	15.84231G	2.79	-53.72	-53.72	-50.93	-21.20	-29.73
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	3.1G	4G	AV	3.63303G	2.79	-60.85	-60.85	-58.06	-41.20	-16.86
2422MHz	Pass	4G	5G	AV	4.844G	2.79	-66.06	-66.06	-63.27	-41.20	-22.07
2422MHz	Pass	5G	7G	AV	5.249G	2.79	-67.97	-67.97	-65.18	-41.20	-23.98
2422MHz	Pass	7G	8G	AV	7.266G	2.79	-53.67	-53.67	-50.88	-41.20	-9.68
2422MHz	Pass	8G	25G	AV	15.68188G	2.79	-63.79	-63.79	-61.00	-41.20	-19.80
2422MHz	Pass	3.1G	4G	PK	3.63325G	2.79	-56.91	-56.91	-54.12	-21.20	-32.92
2422MHz	Pass	4G	5G	PK	4.844G	2.79	-58.29	-58.29	-55.50	-21.20	-34.30
2422MHz	Pass	4G	5G	PK	4.84425G	2.79	-58.29	-58.29	-55.50	-21.20	-34.30
2422MHz	Pass	5G	7G	PK	5.4055G	2.79	-58.16	-58.16	-55.37	-21.20	-34.17
2422MHz	Pass	7G	8G	PK	7.266G	2.79	-51.13	-51.13	-48.34	-21.20	-27.14
2422MHz	Pass	8G	25G	PK	15.58147G	2.79	-53.72	-53.72	-50.93	-21.20	-29.73
2437MHz	Pass	3.1G	4G	AV	3.65553G	2.79	-61.33	-61.33	-58.54	-41.20	-17.34
2437MHz	Pass	4G	5G	AV	4.874G	2.79	-65.59	-65.59	-62.80	-41.20	-21.60
2437MHz	Pass	5G	7G	AV	5.245G	2.79	-67.72	-67.72	-64.93	-41.20	-23.73
2437MHz	Pass	7G	8G	AV	7.311G	2.79	-53.40	-53.40	-50.61	-41.20	-9.41
2437MHz	Pass	8G	25G	AV	15.67869G	2.79	-63.48	-63.48	-60.69	-41.20	-19.49
2437MHz	Pass	3.1G	4G	PK	3.65575G	2.79	-57.31	-57.31	-54.52	-21.20	-33.32

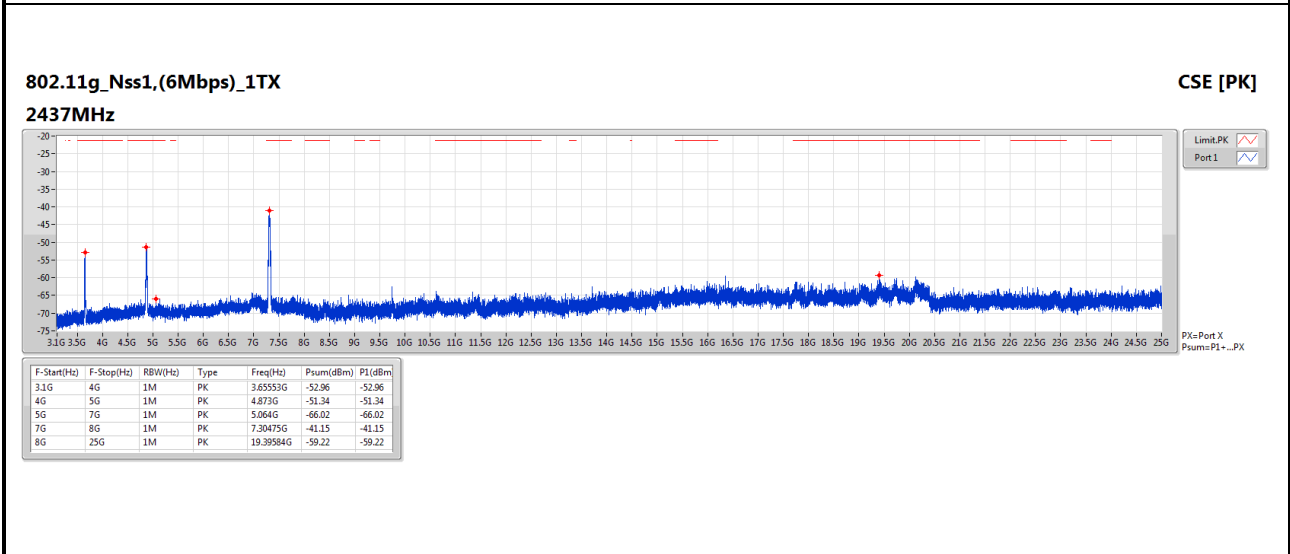
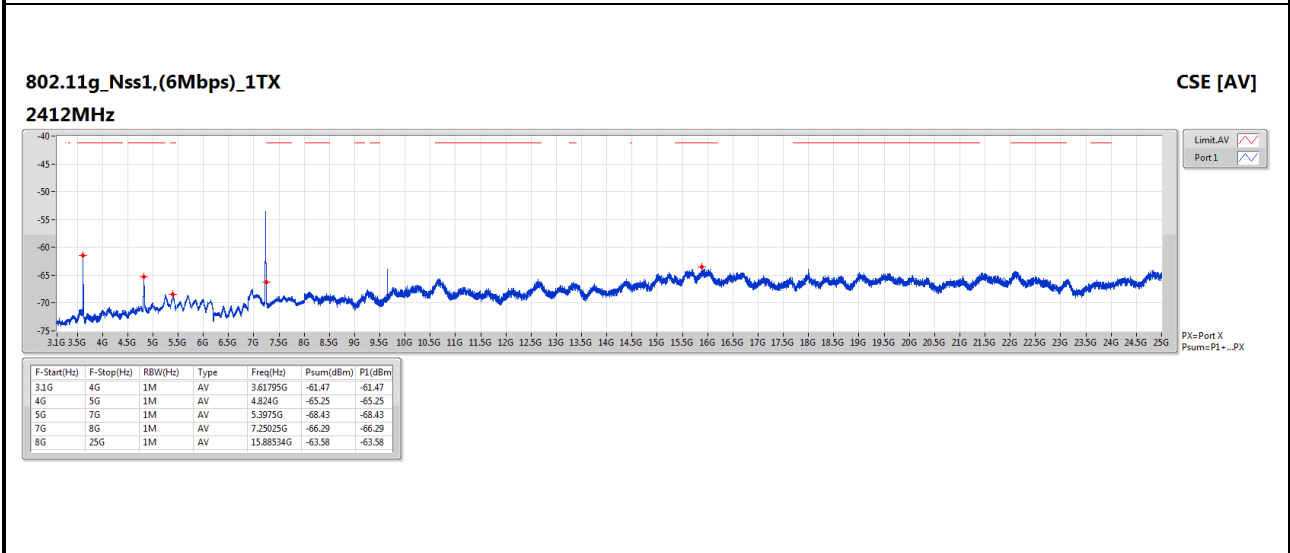
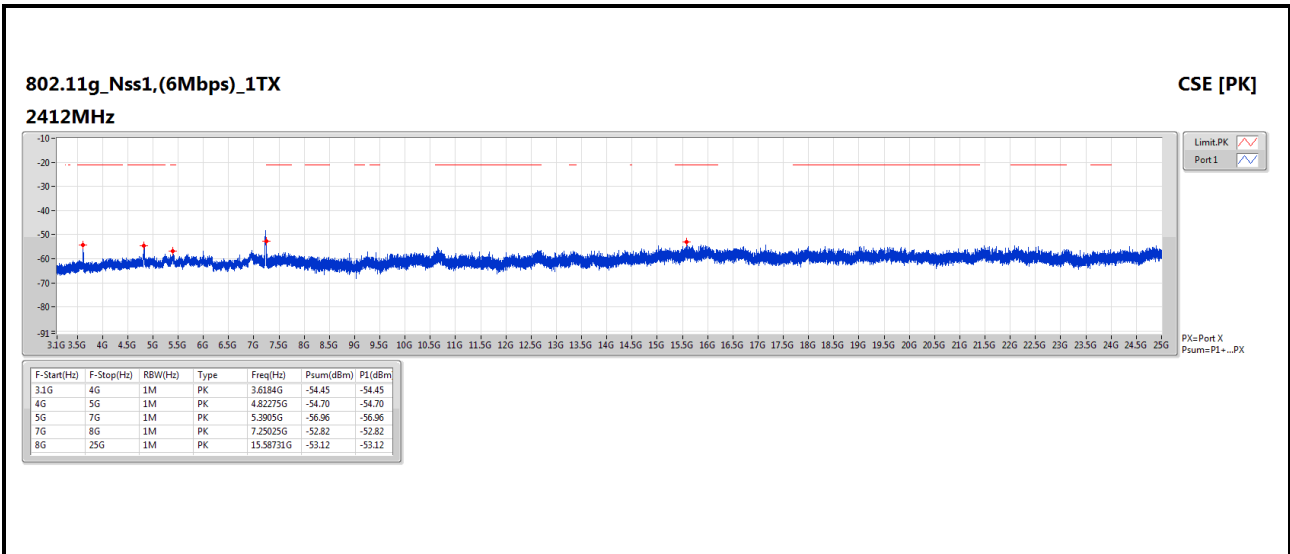
Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
2437MHz	Pass	4G	5G	PK	4.8745G	2.79	-58.15	-58.15	-55.36	-21.20	-34.16
2437MHz	Pass	4G	5G	PK	4.994G	2.79	-57.87	-57.87	-55.08	-21.20	-33.88
2437MHz	Pass	5G	7G	PK	5.415G	2.79	-57.73	-57.73	-54.94	-21.20	-33.74
2437MHz	Pass	7G	8G	PK	7.31125G	2.79	-50.63	-50.63	-47.84	-21.20	-26.64
2437MHz	Pass	8G	25G	PK	20.38025G	2.79	-53.84	-53.84	-51.05	-21.20	-29.85
2452MHz	Pass	3.1G	4G	AV	3.67803G	2.79	-60.29	-60.29	-57.50	-41.20	-16.30
2452MHz	Pass	4G	5G	AV	4.90425G	2.79	-65.63	-65.63	-62.84	-41.20	-21.64
2452MHz	Pass	5G	7G	AV	5.25G	2.79	-67.96	-67.96	-65.17	-41.20	-23.97
2452MHz	Pass	7G	8G	AV	7.356G	2.79	-53.56	-53.56	-50.77	-41.20	-9.57
2452MHz	Pass	8G	25G	AV	16.007G	2.79	-63.38	-63.38	-60.59	-41.20	-19.39
2452MHz	Pass	3.1G	4G	PK	3.67825G	2.79	-55.99	-55.99	-53.20	-21.20	-32.00
2452MHz	Pass	4G	5G	PK	4.904G	2.79	-58.90	-58.90	-56.11	-21.20	-34.91
2452MHz	Pass	5G	7G	PK	5.3925G	2.79	-57.68	-57.68	-54.89	-21.20	-33.69
2452MHz	Pass	7G	8G	PK	7.356G	2.79	-51.34	-51.34	-48.55	-21.20	-27.35
2452MHz	Pass	8G	25G	PK	20.01741G	2.79	-53.59	-53.59	-50.80	-21.20	-29.60

**DG** = Directional Gain;  
**PX**=Port X; **Psum**=P1+.P2+..PX





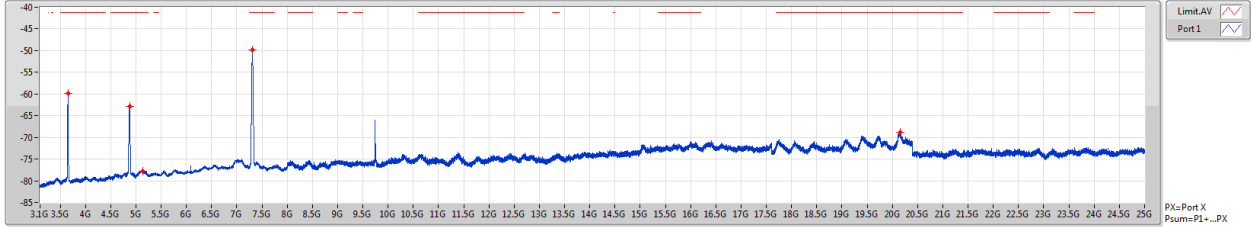




802.11g\_Nss1,(6Mbps)\_1TX

CSE [AV]

2437MHz

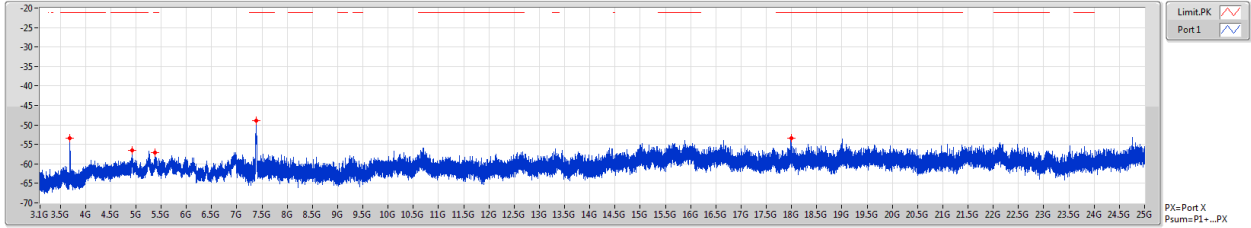


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
3.1G	4G	1M	AV	3.65553G	-59.87	-59.87
4G	5G	1M	AV	4.874G	-62.90	-62.90
5G	7G	1M	AV	5.1385G	-77.76	-77.76
7G	8G	1M	AV	7.311G	-49.92	-49.92
8G	25G	1M	AV	20.15181G	-68.84	-68.84

802.11g\_Nss1,(6Mbps)\_1TX

CSE [PK]

2462MHz

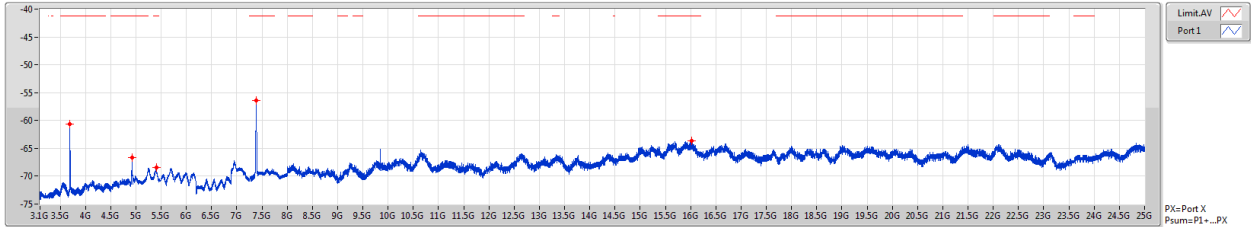


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
3.1G	4G	1M	PK	3.6931G	-53.39	-53.39
4G	5G	1M	PK	4.92325G	-56.53	-56.53
5G	7G	1M	PK	5.386G	-57.10	-57.10
7G	8G	1M	PK	7.38725G	-48.90	-48.90
8G	25G	1M	PK	18.00344G	-53.46	-53.46

802.11g\_Nss1,(6Mbps)\_1TX

CSE [AV]

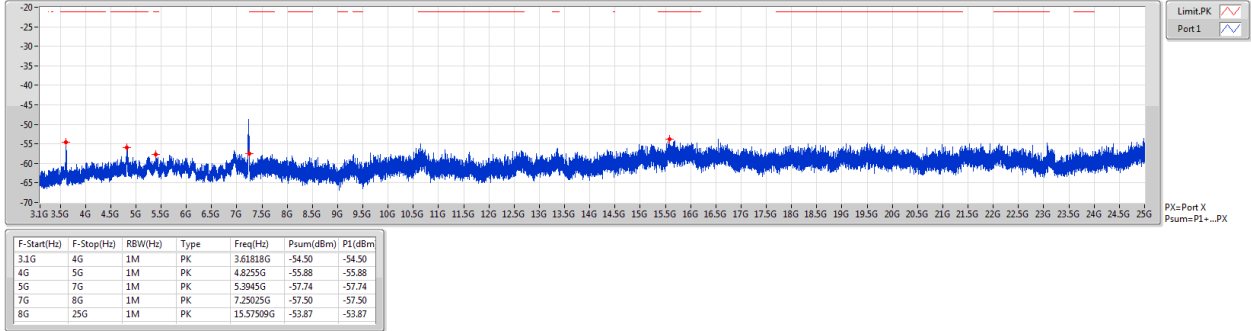
2462MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
3.1G	4G	1M	AV	3.69288G	-60.67	-60.67
4G	5G	1M	AV	4.924G	-66.61	-66.61
4G	5G	1M	AV	4.92425G	-66.61	-66.61
5G	7G	1M	AV	5.4025G	-68.47	-68.47
7G	8G	1M	AV	7.38625G	-56.46	-56.46
8G	25G	1M	AV	16.0155G	-63.69	-63.69

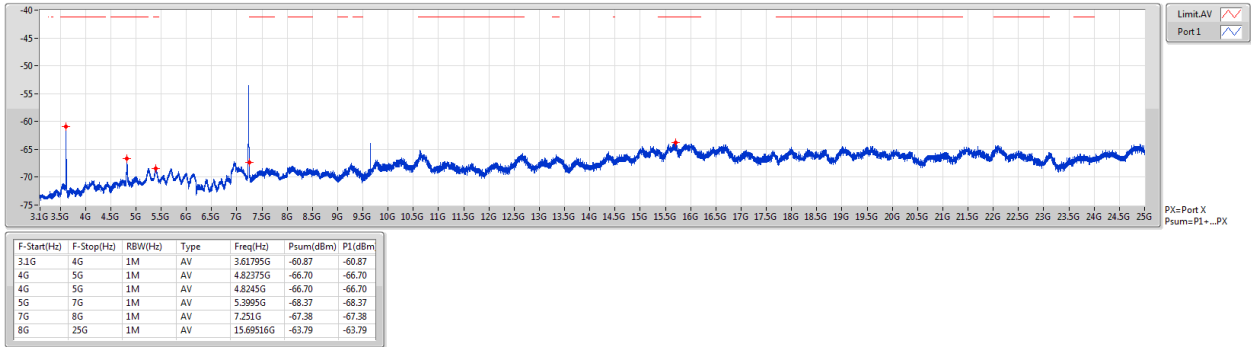
**802.11n HT20\_Nss1,(MCS0)\_1TX**  
**2412MHz**

CSE [PK]



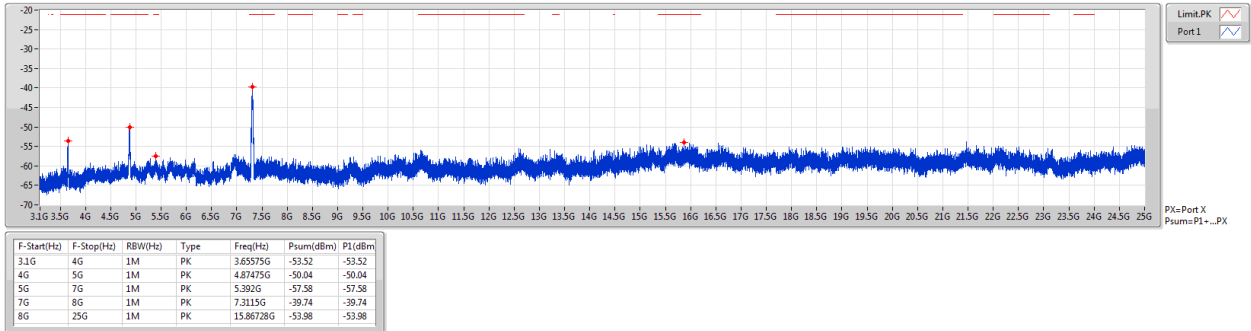
**802.11n HT20\_Nss1,(MCS0)\_1TX**  
**2412MHz**

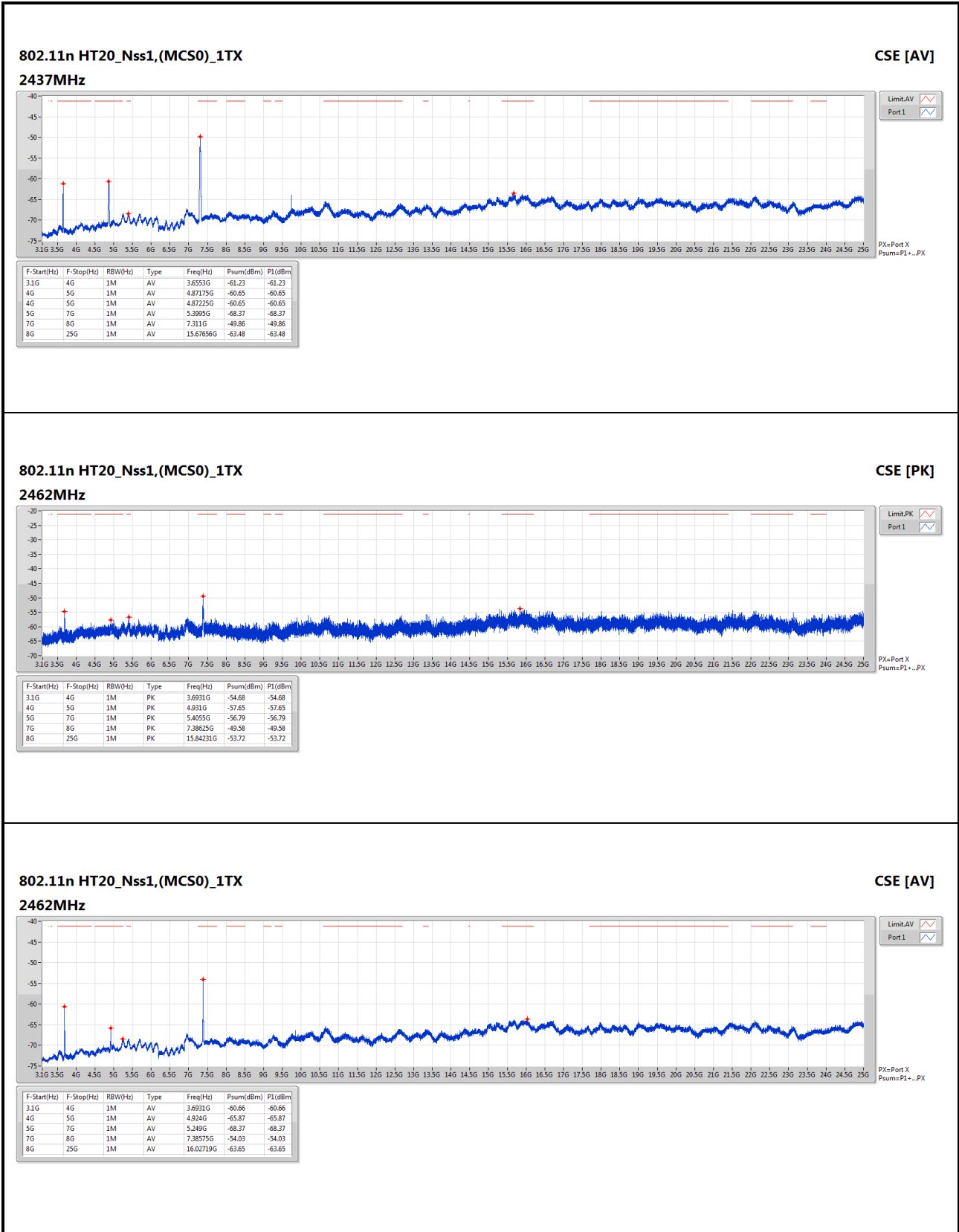
CSE [AV]



**802.11n HT20\_Nss1,(MCS0)\_1TX**  
**2437MHz**

CSE [PK]

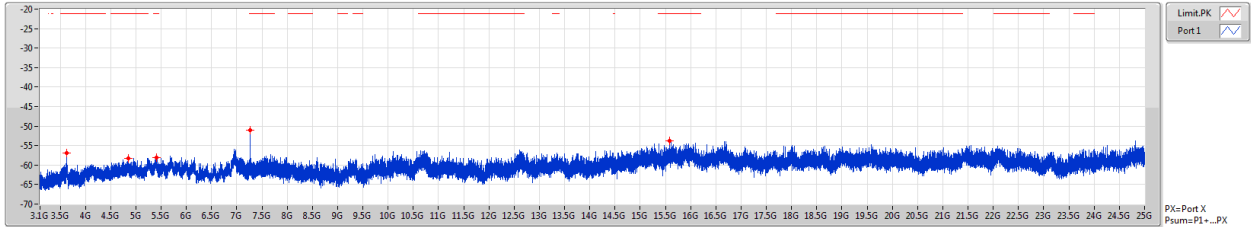




802.11n HT40\_Nss1,(MCS0)\_1TX

CSE [PK]

2422MHz

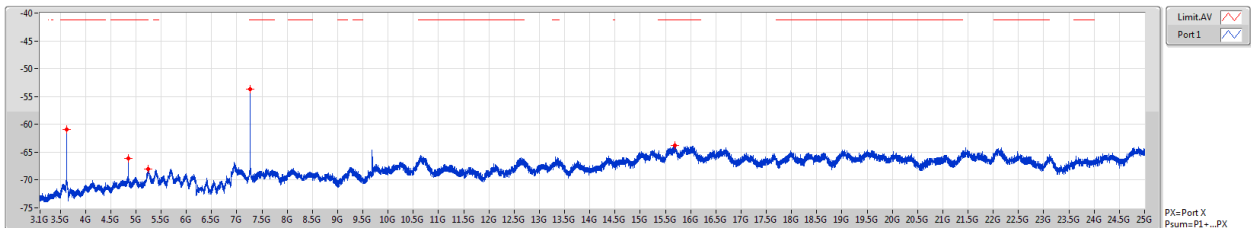


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
3.1G	4G	1M	PK	3.63325G	-56.91	-56.91
4G	5G	1M	PK	4.8444G	-58.29	-58.29
4G	5G	1M	PK	4.84425G	-58.29	-58.29
5G	7G	1M	PK	5.4055G	-58.16	-58.16
7G	8G	1M	PK	7.266G	-51.13	-51.13
8G	25G	1M	PK	15.58147G	-53.72	-53.72

802.11n HT40\_Nss1,(MCS0)\_1TX

CSE [AV]

2422MHz

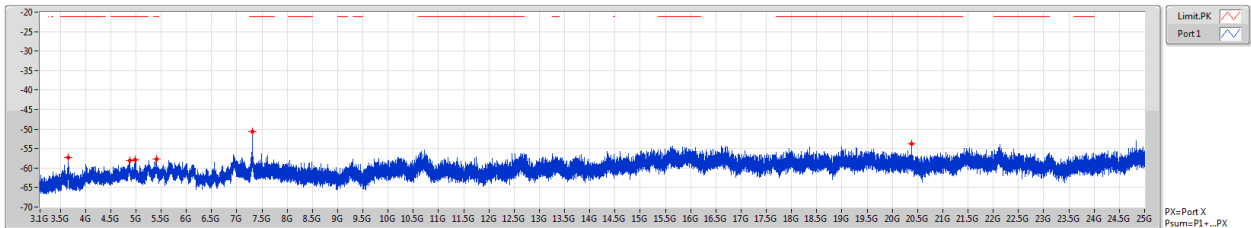


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
3.1G	4G	1M	AV	3.63303G	-60.85	-60.85
4G	5G	1M	AV	4.8444G	-66.06	-66.06
5G	7G	1M	AV	5.249G	-67.97	-67.97
7G	8G	1M	AV	7.266G	-53.67	-53.67
8G	25G	1M	AV	15.68188G	-63.79	-63.79

802.11n HT40\_Nss1,(MCS0)\_1TX

CSE [PK]

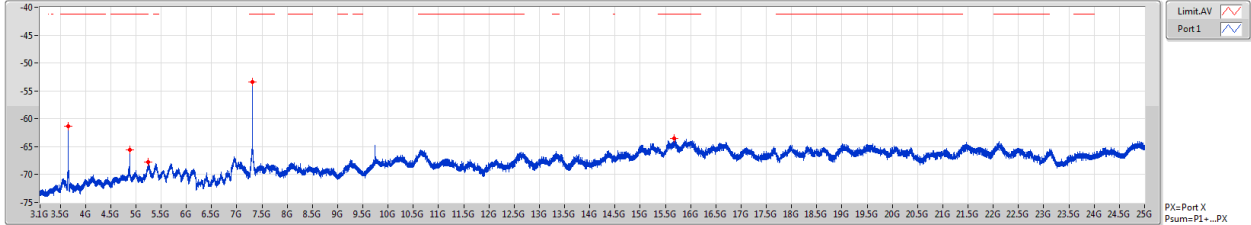
2437MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
3.1G	4G	1M	PK	3.65575G	-57.31	-57.31
4G	5G	1M	PK	4.8745G	-58.15	-58.15
4G	5G	1M	PK	4.994G	-57.87	-57.87
5G	7G	1M	PK	5.415G	-57.73	-57.73
7G	8G	1M	PK	7.31125G	-50.63	-50.63
8G	25G	1M	PK	20.38025G	-53.84	-53.84

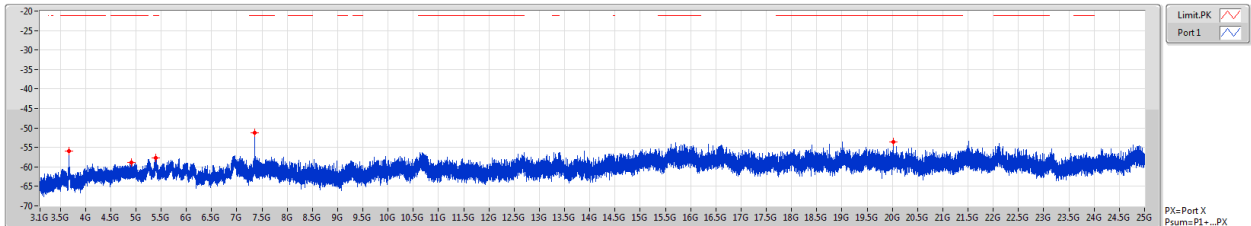
**802.11n HT40\_Nss1,(MCS0)\_1TX**  
**2437MHz**

CSE [AV]



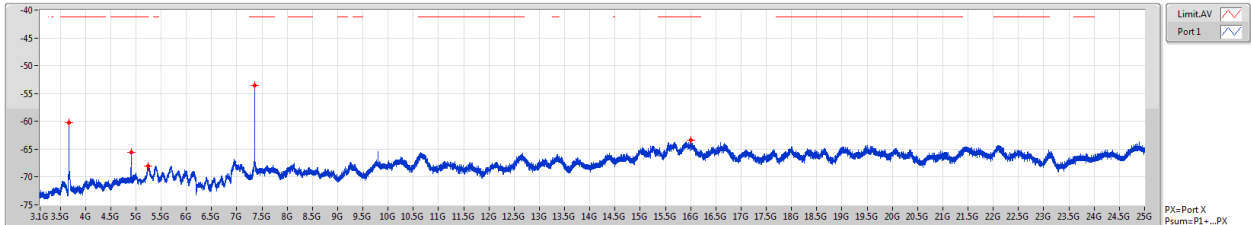
**802.11n HT40\_Nss1,(MCS0)\_1TX**  
**2452MHz**

CSE [PK]



**802.11n HT40\_Nss1,(MCS0)\_1TX**  
**2452MHz**

CSE [AV]





### Configuration 3

#### 3.5.17 Transmitter Conducted Unwanted Emissions (30MHz ~ 1GHz)

##### Summary

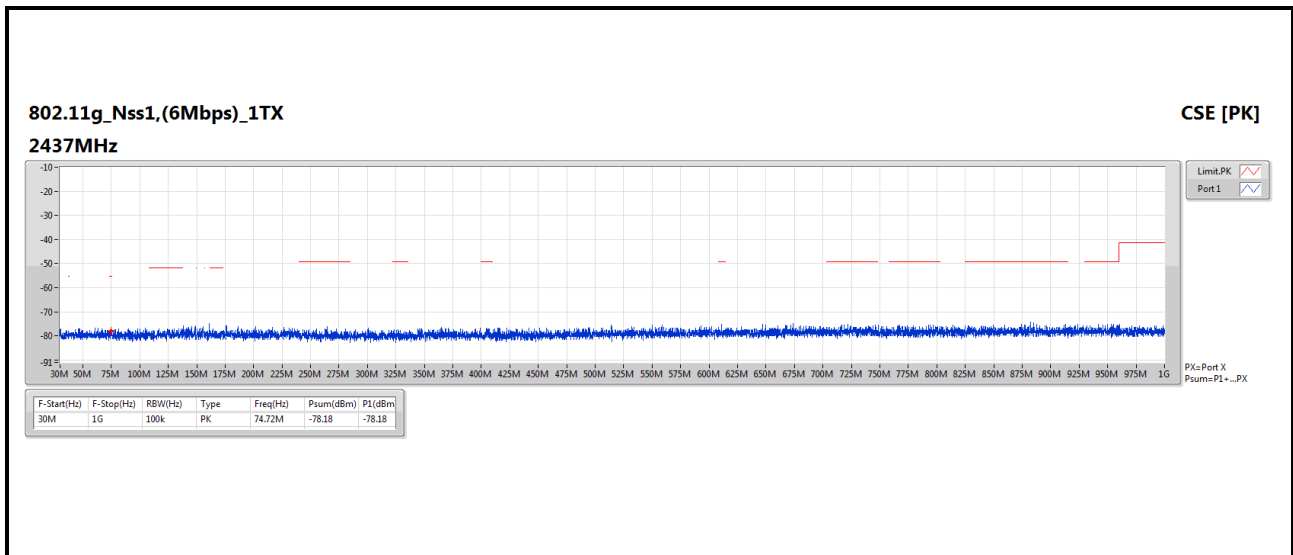
Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	Psum (dBm)	GRF (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11g_Nss1,(6Mbps)_1TX	Pass	30M	1G	PK	74.72M	2.79	-78.18	-78.18	4.7	-70.69	-55.20	-15.49

DG = Directional Gain;  
PX=Port X; Psum=P1+.P2+..PX

##### Result

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	Psum (dBm)	GRF (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
2437MHz	Pass	30M	1G	PK	74.72M	2.79	-78.18	-78.18	4.7	-70.69	-55.20	-15.49

DG = Directional Gain;  
PX=Port X; Psum=P1+.P2+..PX



### 3.5.18 Transmitter Conducted Unwanted Emissions (1GHz ~ 3.1GHz)

#### Summary

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	Pass	2.4835G	2.5G	AV	2.4835G	2.79	-47.07	-47.07	-44.28	-41.20	-3.08
802.11g_Nss1,(6Mbps)_1TX	Pass	2.4835G	2.5G	AV	2.48357G	2.79	-47.68	-47.68	-44.89	-41.20	-3.69
802.11n HT20_Nss1,(MCS0)_1TX	Pass	2.31G	2.39G	AV	2.39G	2.79	-47.09	-47.09	-44.30	-41.20	-3.10
802.11n HT40_Nss1,(MCS0)_1TX	Pass	2.31G	2.39G	AV	2.39G	2.79	-47.15	-47.15	-44.36	-41.20	-3.16

DG = Directional Gain;

PX=Port X; Psum=P1+.P2+..PX

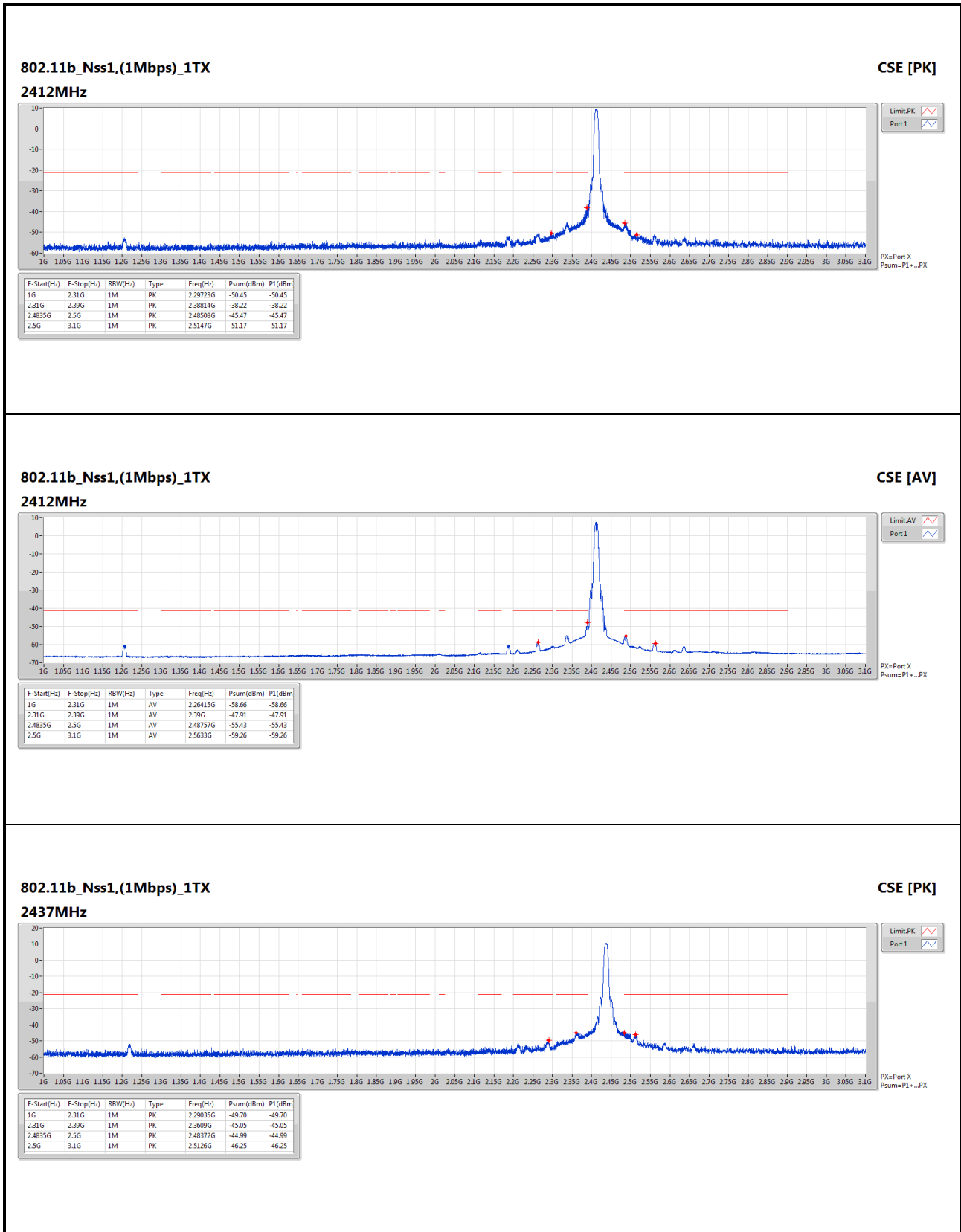
#### Result

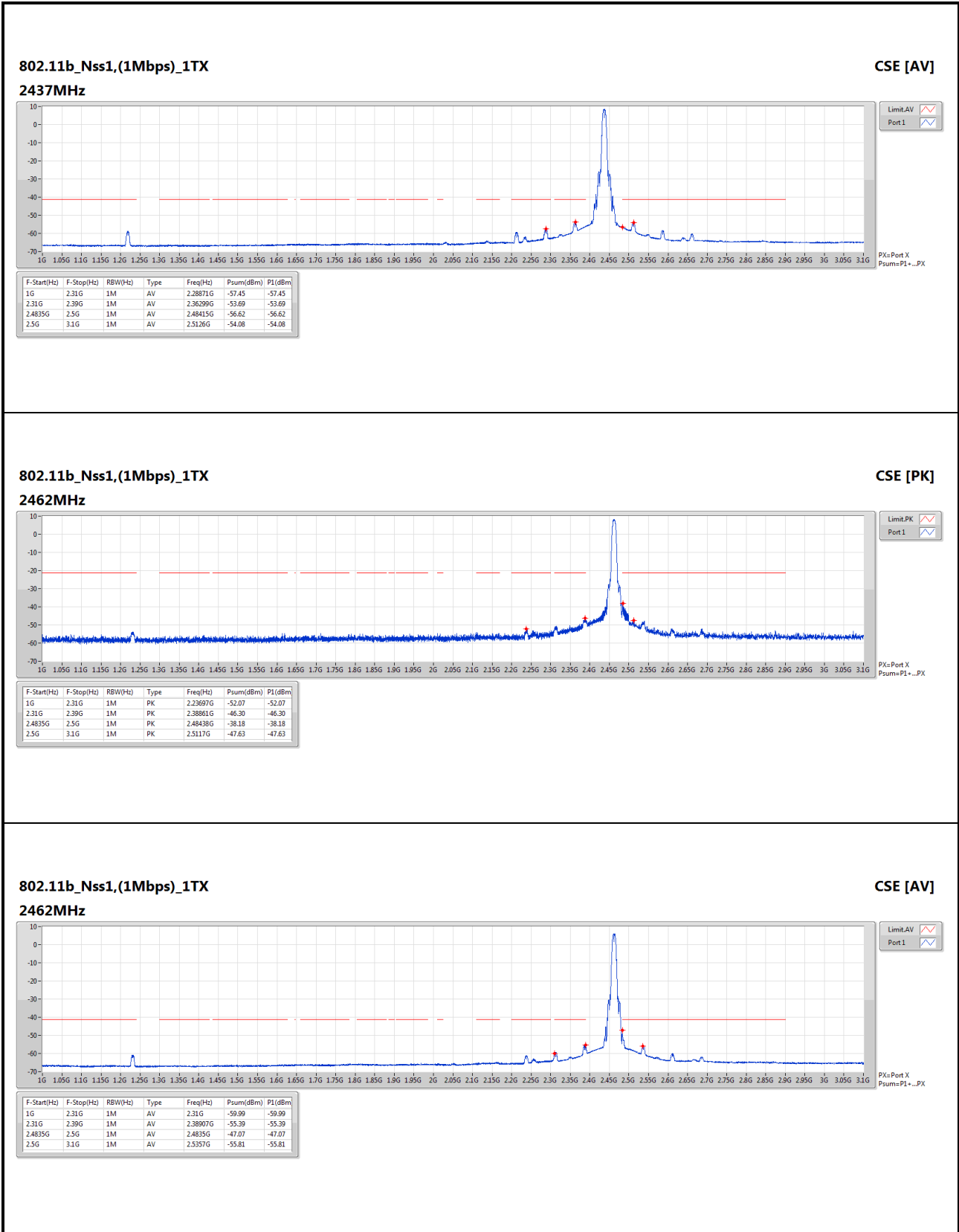
Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	1G	2.31G	AV	2.26415G	2.79	-58.66	-58.66	-55.87	-41.20	-14.67
2412MHz	Pass	2.31G	2.39G	AV	2.39G	2.79	-47.91	-47.91	-45.12	-41.20	-3.92
2412MHz	Pass	2.4835G	2.5G	AV	2.48757G	2.79	-55.43	-55.43	-52.64	-41.20	-11.44
2412MHz	Pass	2.5G	3.1G	AV	2.5633G	2.79	-59.26	-59.26	-56.47	-41.20	-15.27
2412MHz	Pass	1G	2.31G	PK	2.29723G	2.79	-50.45	-50.45	-47.66	-21.20	-26.46
2412MHz	Pass	2.31G	2.39G	PK	2.38814G	2.79	-38.22	-38.22	-35.43	-21.20	-14.23
2412MHz	Pass	2.4835G	2.5G	PK	2.48508G	2.79	-45.47	-45.47	-42.68	-21.20	-21.48
2412MHz	Pass	2.5G	3.1G	PK	2.5147G	2.79	-51.17	-51.17	-48.38	-21.20	-27.18
2437MHz	Pass	1G	2.31G	AV	2.28871G	2.79	-57.45	-57.45	-54.66	-41.20	-13.46
2437MHz	Pass	2.31G	2.39G	AV	2.36299G	2.79	-53.69	-53.69	-50.90	-41.20	-9.70
2437MHz	Pass	2.4835G	2.5G	AV	2.48415G	2.79	-56.62	-56.62	-53.83	-41.20	-12.63
2437MHz	Pass	2.5G	3.1G	AV	2.5126G	2.79	-54.08	-54.08	-51.29	-41.20	-10.09
2437MHz	Pass	1G	2.31G	PK	2.29035G	2.79	-49.70	-49.70	-46.91	-21.20	-25.71
2437MHz	Pass	2.31G	2.39G	PK	2.3609G	2.79	-45.05	-45.05	-42.26	-21.20	-21.06
2437MHz	Pass	2.4835G	2.5G	PK	2.48372G	2.79	-44.99	-44.99	-42.20	-21.20	-21.00
2437MHz	Pass	2.5G	3.1G	PK	2.5126G	2.79	-46.25	-46.25	-43.46	-21.20	-22.26
2462MHz	Pass	1G	2.31G	AV	2.31G	2.79	-59.99	-59.99	-57.20	-41.20	-16.00
2462MHz	Pass	2.31G	2.39G	AV	2.38907G	2.79	-55.39	-55.39	-52.60	-41.20	-11.40
2462MHz	Pass	2.4835G	2.5G	AV	2.4835G	2.79	-47.07	-47.07	-44.28	-41.20	-3.08
2462MHz	Pass	2.5G	3.1G	AV	2.5357G	2.79	-55.81	-55.81	-53.02	-41.20	-11.82
2462MHz	Pass	1G	2.31G	PK	2.23697G	2.79	-52.07	-52.07	-49.28	-21.20	-28.08
2462MHz	Pass	2.31G	2.39G	PK	2.38861G	2.79	-46.30	-46.30	-43.51	-21.20	-22.31
2462MHz	Pass	2.4835G	2.5G	PK	2.48438G	2.79	-38.18	-38.18	-35.39	-21.20	-14.19
2462MHz	Pass	2.5G	3.1G	PK	2.5117G	2.79	-47.63	-47.63	-44.84	-21.20	-23.64
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	1G	2.31G	AV	2.2653G	2.79	-62.80	-62.80	-60.01	-41.20	-18.81
2412MHz	Pass	2.31G	2.39G	AV	2.39G	2.79	-47.79	-47.79	-45.00	-41.20	-3.80

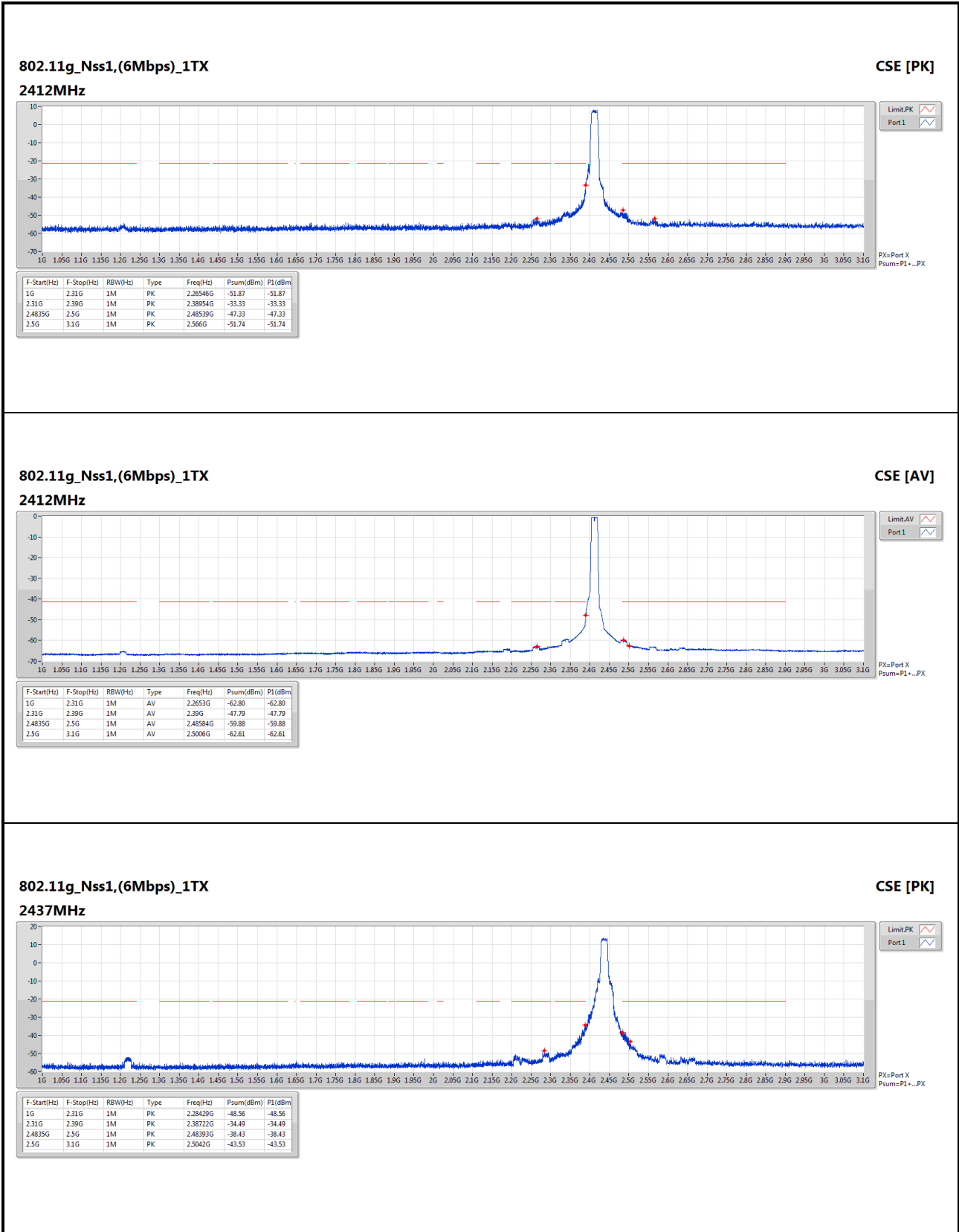
Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
2412MHz	Pass	2.4835G	2.5G	AV	2.48584G	2.79	-59.88	-59.88	-57.09	-41.20	-15.89
2412MHz	Pass	2.5G	3.1G	AV	2.5006G	2.79	-62.61	-62.61	-59.82	-41.20	-18.62
2412MHz	Pass	1G	2.31G	PK	2.26546G	2.79	-51.87	-51.87	-49.08	-21.20	-27.88
2412MHz	Pass	2.31G	2.39G	PK	2.38954G	2.79	-33.33	-33.33	-30.54	-21.20	-9.34
2412MHz	Pass	2.4835G	2.5G	PK	2.48539G	2.79	-47.33	-47.33	-44.54	-21.20	-23.34
2412MHz	Pass	2.5G	3.1G	PK	2.566G	2.79	-51.74	-51.74	-48.95	-21.20	-27.75
2437MHz	Pass	1G	2.31G	AV	2.29477G	2.79	-59.53	-59.53	-56.74	-41.20	-15.54
2437MHz	Pass	2.31G	2.39G	AV	2.38977G	2.79	-50.64	-50.64	-47.85	-41.20	-6.65
2437MHz	Pass	2.4835G	2.5G	AV	2.48374G	2.79	-52.41	-52.41	-49.62	-41.20	-8.42
2437MHz	Pass	2.5G	3.1G	AV	2.5051G	2.79	-55.48	-55.48	-52.69	-41.20	-11.49
2437MHz	Pass	1G	2.31G	PK	2.28429G	2.79	-48.56	-48.56	-45.77	-21.20	-24.57
2437MHz	Pass	2.31G	2.39G	PK	2.38722G	2.79	-34.49	-34.49	-31.70	-21.20	-10.50
2437MHz	Pass	2.4835G	2.5G	PK	2.48393G	2.79	-38.43	-38.43	-35.64	-21.20	-14.44
2437MHz	Pass	2.5G	3.1G	PK	2.5042G	2.79	-43.53	-43.53	-40.74	-21.20	-19.54
2462MHz	Pass	1G	2.31G	AV	2.31G	2.79	-62.46	-62.46	-59.67	-41.20	-18.47
2462MHz	Pass	2.31G	2.39G	AV	2.3893G	2.79	-58.34	-58.34	-55.55	-41.20	-14.35
2462MHz	Pass	2.4835G	2.5G	AV	2.48357G	2.79	-47.68	-47.68	-44.89	-41.20	-3.69
2462MHz	Pass	2.5G	3.1G	AV	2.5G	2.79	-55.73	-55.73	-52.94	-41.20	-11.74
2462MHz	Pass	1G	2.31G	PK	2.24532G	2.79	-51.90	-51.90	-49.11	-21.20	-27.91
2462MHz	Pass	2.31G	2.39G	PK	2.38513G	2.79	-48.03	-48.03	-45.24	-21.20	-24.04
2462MHz	Pass	2.4835G	2.5G	PK	2.48367G	2.79	-29.49	-29.49	-26.70	-21.20	-5.50
2462MHz	Pass	2.5G	3.1G	PK	2.5003G	2.79	-42.64	-42.64	-39.85	-21.20	-18.65
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	1G	2.31G	AV	2.26743G	2.79	-63.14	-63.14	-60.35	-41.20	-19.15
2412MHz	Pass	2.31G	2.39G	AV	2.39G	2.79	-47.09	-47.09	-44.30	-41.20	-3.10
2412MHz	Pass	2.4835G	2.5G	AV	2.48474G	2.79	-60.28	-60.28	-57.49	-41.20	-16.29
2412MHz	Pass	2.5G	3.1G	AV	2.5096G	2.79	-62.78	-62.78	-59.99	-41.20	-18.79
2412MHz	Pass	1G	2.31G	PK	2.26595G	2.79	-51.72	-51.72	-48.93	-21.20	-27.73
2412MHz	Pass	2.31G	2.39G	PK	2.38861G	2.79	-31.44	-31.44	-28.65	-21.20	-7.45
2412MHz	Pass	2.4835G	2.5G	PK	2.49153G	2.79	-48.52	-48.52	-45.73	-21.20	-24.53
2412MHz	Pass	2.5G	3.1G	PK	2.5057G	2.79	-51.94	-51.94	-49.15	-21.20	-27.95
2437MHz	Pass	1G	2.31G	AV	2.28855G	2.79	-59.66	-59.66	-56.87	-41.20	-15.67
2437MHz	Pass	2.31G	2.39G	AV	2.38988G	2.79	-48.42	-48.42	-45.63	-41.20	-4.43
2437MHz	Pass	2.4835G	2.5G	AV	2.48403G	2.79	-50.98	-50.98	-48.19	-41.20	-6.99
2437MHz	Pass	2.5G	3.1G	AV	2.5036G	2.79	-55.02	-55.02	-52.23	-41.20	-11.03
2437MHz	Pass	1G	2.31G	PK	2.29346G	2.79	-48.56	-48.56	-45.77	-21.20	-24.57
2437MHz	Pass	2.31G	2.39G	PK	2.38838G	2.79	-30.33	-30.33	-27.54	-21.20	-6.34
2437MHz	Pass	2.4835G	2.5G	PK	2.48568G	2.79	-34.55	-34.55	-31.76	-21.20	-10.56
2437MHz	Pass	2.5G	3.1G	PK	2.5036G	2.79	-42.94	-42.94	-40.15	-21.20	-18.95
2462MHz	Pass	1G	2.31G	AV	2.31G	2.79	-62.99	-62.99	-60.20	-41.20	-19.00
2462MHz	Pass	2.31G	2.39G	AV	2.39G	2.79	-59.19	-59.19	-56.40	-41.20	-15.20
2462MHz	Pass	2.4835G	2.5G	AV	2.48352G	2.79	-47.81	-47.81	-45.02	-41.20	-3.82

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
2462MHz	Pass	2.5G	3.1G	AV	2.5006G	2.79	-56.59	-56.59	-53.80	-41.20	-12.60
2462MHz	Pass	1G	2.31G	PK	2.27267G	2.79	-53.04	-53.04	-50.25	-21.20	-29.05
2462MHz	Pass	2.31G	2.39G	PK	2.38814G	2.79	-48.73	-48.73	-45.94	-21.20	-24.74
2462MHz	Pass	2.4835G	2.5G	PK	2.48352G	2.79	-30.92	-30.92	-28.13	-21.20	-6.93
2462MHz	Pass	2.5G	3.1G	PK	2.5012G	2.79	-46.45	-46.45	-43.66	-21.20	-22.46
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	1G	2.31G	AV	2.29985G	2.79	-63.37	-63.37	-60.58	-41.20	-19.38
2422MHz	Pass	2.31G	2.39G	AV	2.3893G	2.79	-47.27	-47.27	-44.48	-41.20	-3.28
2422MHz	Pass	2.4835G	2.5G	AV	2.4835G	2.79	-59.37	-59.37	-56.58	-41.20	-15.38
2422MHz	Pass	2.5G	3.1G	AV	2.5012G	2.79	-61.12	-61.12	-58.33	-41.20	-17.13
2422MHz	Pass	1G	2.31G	PK	2.28855G	2.79	-52.56	-52.56	-49.77	-21.20	-28.57
2422MHz	Pass	2.31G	2.39G	PK	2.38038G	2.79	-33.35	-33.35	-30.56	-21.20	-9.36
2422MHz	Pass	2.4835G	2.5G	PK	2.48381G	2.79	-48.13	-48.13	-45.34	-21.20	-24.14
2422MHz	Pass	2.5G	3.1G	PK	2.5018G	2.79	-50.85	-50.85	-48.06	-21.20	-26.86
2437MHz	Pass	1G	2.31G	AV	2.29968G	2.79	-62.63	-62.63	-59.84	-41.20	-18.64
2437MHz	Pass	2.31G	2.39G	AV	2.39G	2.79	-47.15	-47.15	-44.36	-41.20	-3.16
2437MHz	Pass	2.4835G	2.5G	AV	2.48367G	2.79	-51.82	-51.82	-49.03	-41.20	-7.83
2437MHz	Pass	2.5G	3.1G	AV	2.5006G	2.79	-57.75	-57.75	-54.96	-41.20	-13.76
2437MHz	Pass	1G	2.31G	PK	2.26972G	2.79	-53.18	-53.18	-50.39	-21.20	-29.19
2437MHz	Pass	2.31G	2.39G	PK	2.38896G	2.79	-32.70	-32.70	-29.91	-21.20	-8.71
2437MHz	Pass	2.4835G	2.5G	PK	2.4835G	2.79	-35.53	-35.53	-32.74	-21.20	-11.54
2437MHz	Pass	2.5G	3.1G	PK	2.5033G	2.79	-47.59	-47.59	-44.80	-21.20	-23.60
2452MHz	Pass	1G	2.31G	AV	2.28871G	2.79	-63.18	-63.18	-60.39	-41.20	-19.19
2452MHz	Pass	2.31G	2.39G	AV	2.38988G	2.79	-57.74	-57.74	-54.95	-41.20	-13.75
2452MHz	Pass	2.4835G	2.5G	AV	2.48383G	2.79	-47.49	-47.49	-44.70	-41.20	-3.50
2452MHz	Pass	2.5G	3.1G	AV	2.5G	2.79	-54.80	-54.80	-52.01	-41.20	-10.81
2452MHz	Pass	1G	2.31G	PK	2.29919G	2.79	-53.22	-53.22	-50.43	-21.20	-29.23
2452MHz	Pass	2.31G	2.39G	PK	2.38443G	2.79	-43.79	-43.79	-41.00	-21.20	-19.80
2452MHz	Pass	2.4835G	2.5G	PK	2.48455G	2.79	-32.95	-32.95	-30.16	-21.20	-8.96
2452MHz	Pass	2.5G	3.1G	PK	2.5018G	2.79	-42.29	-42.29	-39.50	-21.20	-18.30

DG = Directional Gain;  
PX=Port X; Psum=P1+.P2+..PX







**802.11g\_Nss1,(6Mbps)\_1TX**

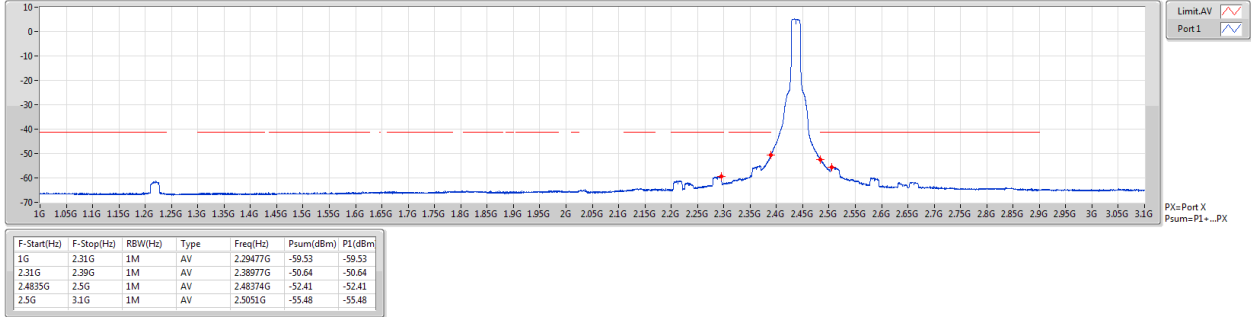
**2437MHz**

**CSE [PK]**

802.11g\_Nss1,(6Mbps)\_1TX

CSE [AV]

2437MHz



802.11g\_Nss1,(6Mbps)\_1TX

CSE [PK]

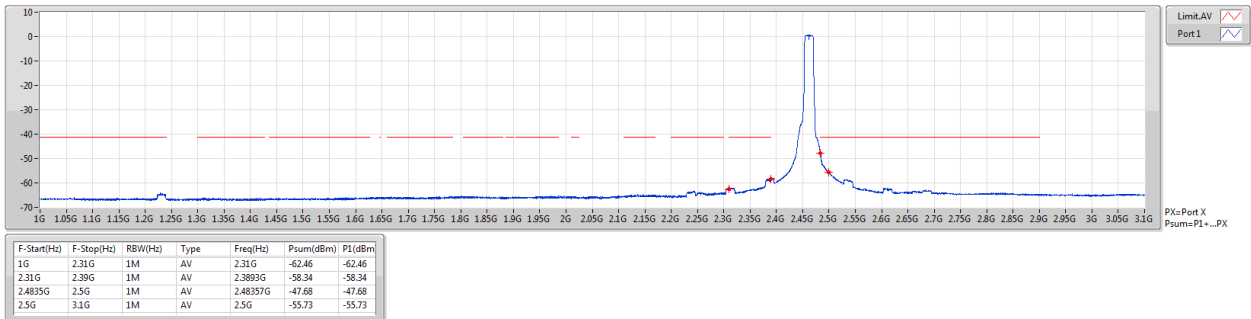
2462MHz



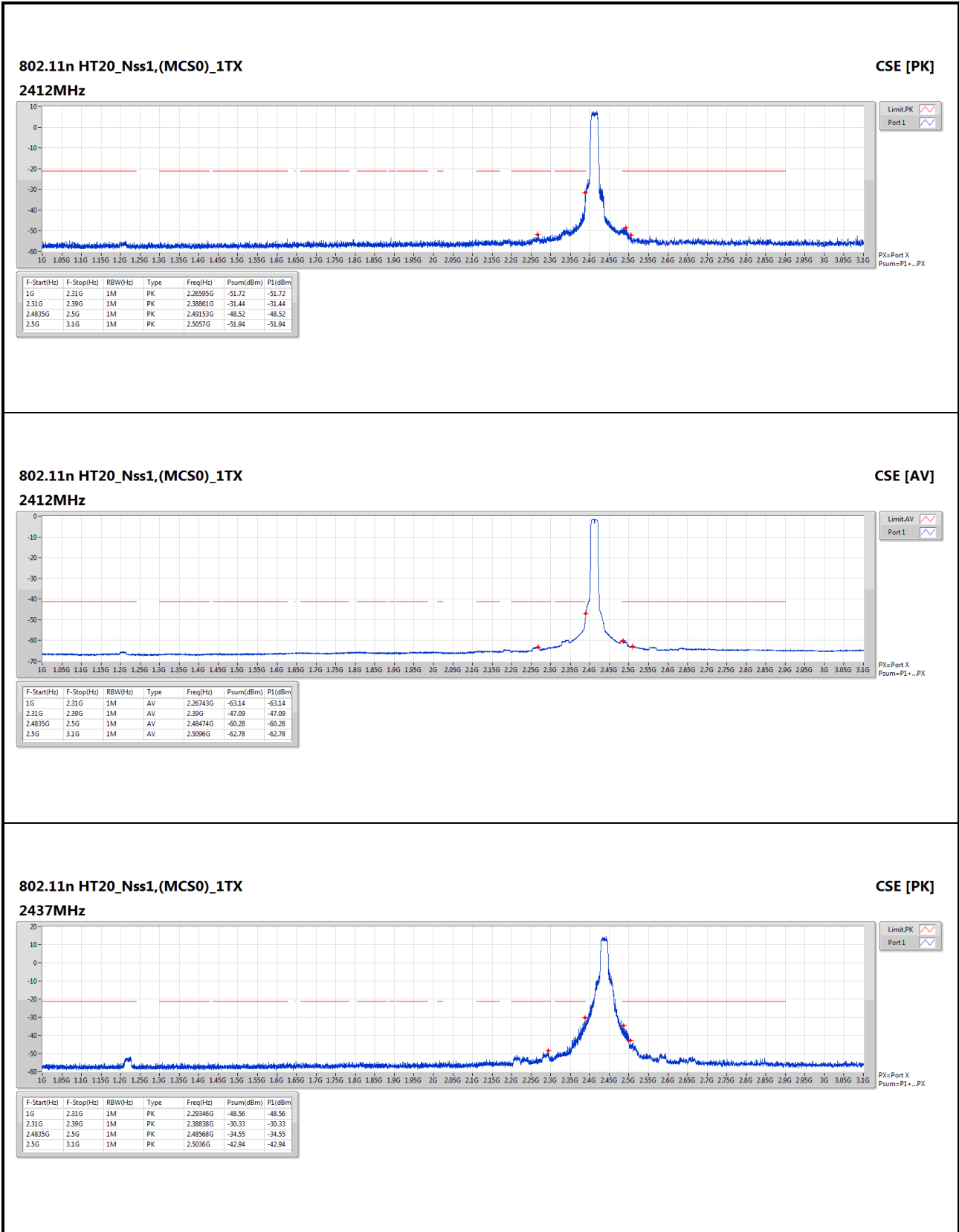
802.11g\_Nss1,(6Mbps)\_1TX

CSE [AV]

2462MHz



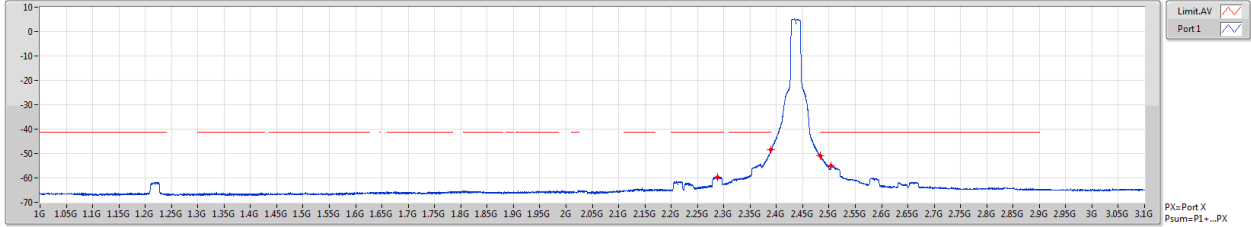




802.11n HT20\_Nss1,(MCS0)\_1TX

CSE [AV]

2437MHz

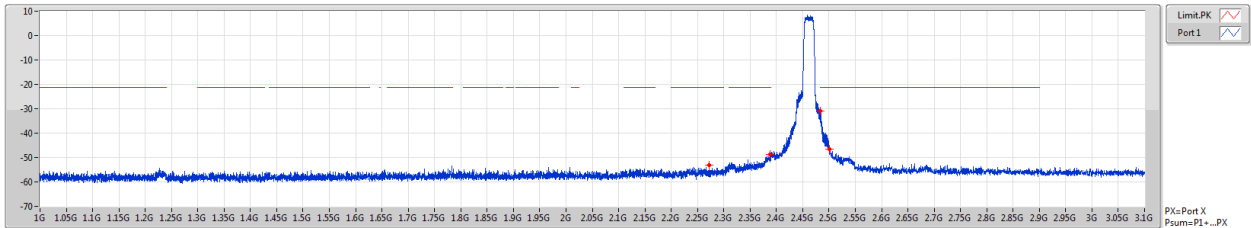


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
1G	2.31G	1M	AV	2.28855G	-59.66	-59.66
2.31G	2.39G	1M	AV	2.38988G	-48.42	-48.42
2.4835G	2.5G	1M	AV	2.48403G	-50.98	-50.98
2.5G	3.1G	1M	AV	2.5036G	-55.02	-55.02

802.11n HT20\_Nss1,(MCS0)\_1TX

CSE [PK]

2462MHz

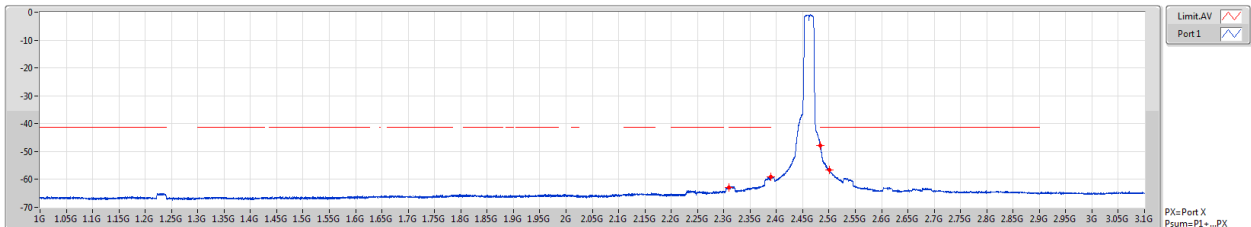


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
1G	2.31G	1M	PK	2.27267G	-53.04	-53.04
2.31G	2.39G	1M	PK	2.38814G	-48.73	-48.73
2.4835G	2.5G	1M	PK	2.48352G	-30.92	-30.92
2.5G	3.1G	1M	PK	2.5012G	-46.45	-46.45

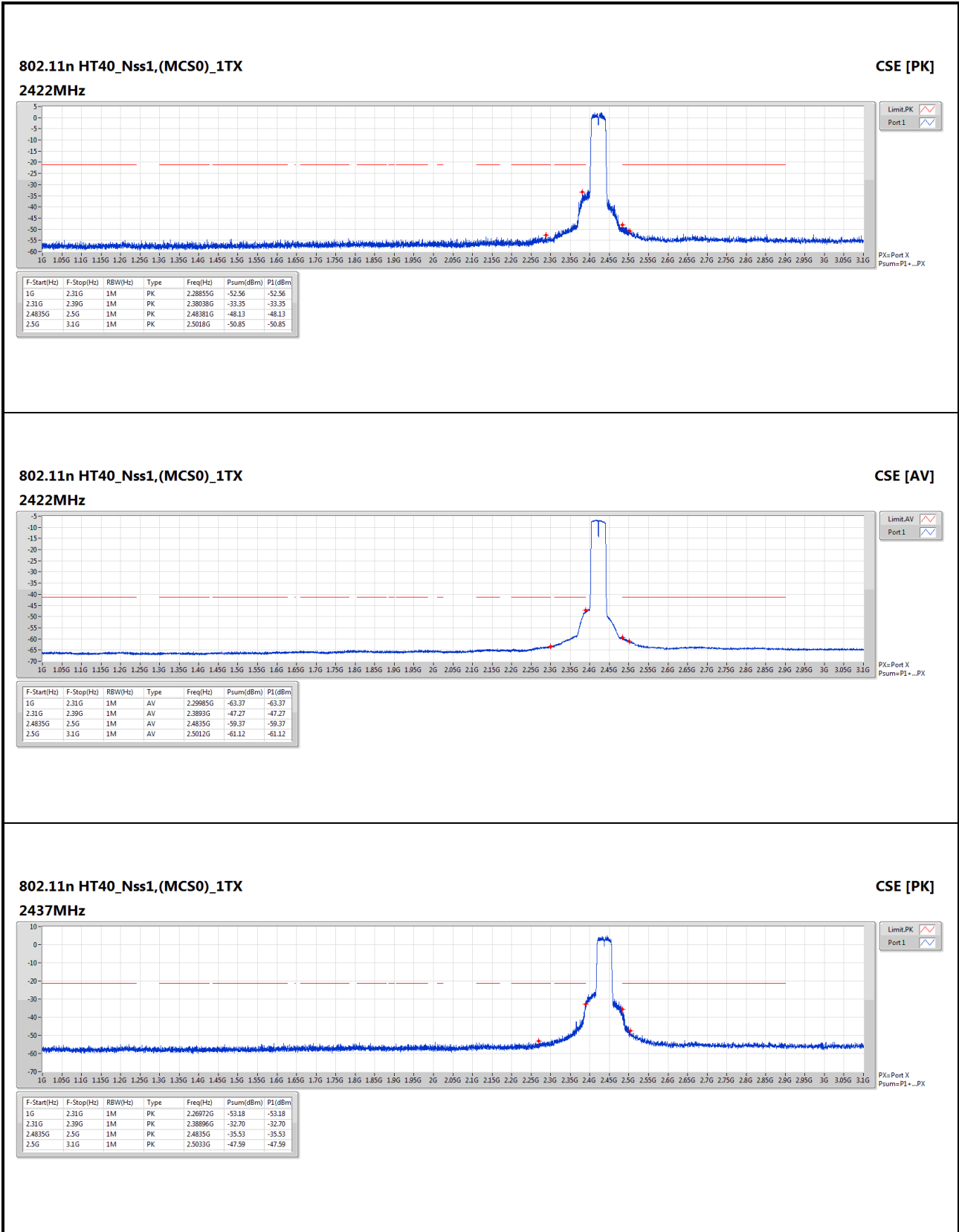
802.11n HT20\_Nss1,(MCS0)\_1TX

CSE [AV]

2462MHz



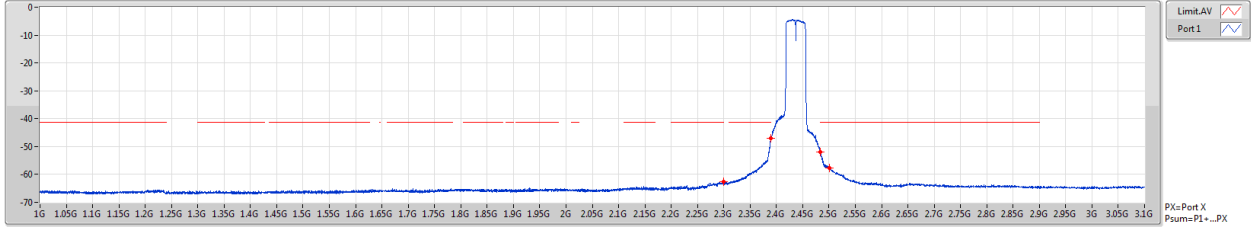
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
1G	2.31G	1M	AV	2.31G	-62.99	-62.99
2.31G	2.39G	1M	AV	2.39G	-59.19	-59.19
2.4835G	2.5G	1M	AV	2.48352G	-47.81	-47.81
2.5G	3.1G	1M	AV	2.5006G	-56.59	-56.59



802.11n HT40\_Nss1,(MCS0)\_1TX

CSE [AV]

2437MHz

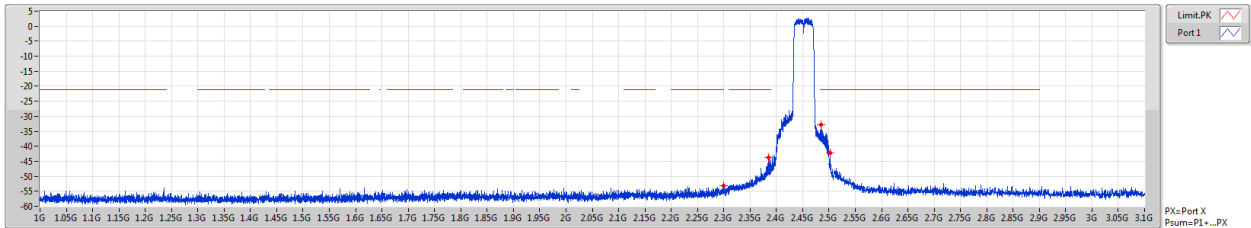


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
1G	2.31G	1M	AV	2.29968G	-62.63	-62.63
2.31G	2.39G	1M	AV	2.39G	-47.15	-47.15
2.4835G	2.5G	1M	AV	2.48367G	-51.82	-51.82
2.5G	3.1G	1M	AV	2.5006G	-57.75	-57.75

802.11n HT40\_Nss1,(MCS0)\_1TX

CSE [PK]

2452MHz

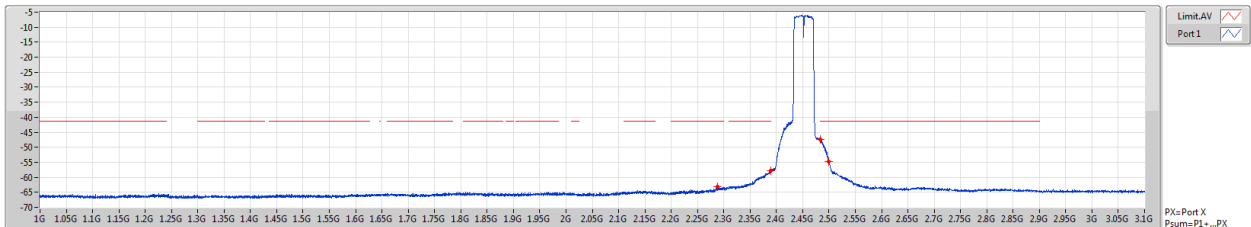


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
1G	2.31G	1M	PK	2.29919G	-53.22	-53.22
2.31G	2.39G	1M	PK	2.38443G	-43.79	-43.79
2.4835G	2.5G	1M	PK	2.48455G	-32.95	-32.95
2.5G	3.1G	1M	PK	2.5018G	-42.29	-42.29

802.11n HT40\_Nss1,(MCS0)\_1TX

CSE [AV]

2452MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
1G	2.31G	1M	AV	2.28871G	-63.18	-63.18
2.31G	2.39G	1M	AV	2.38988G	-57.74	-57.74
2.4835G	2.5G	1M	AV	2.48383G	-47.49	-47.49
2.5G	3.1G	1M	AV	2.5G	-54.80	-54.80

### 3.5.19 Transmitter Conducted Unwanted Emissions (3.1GHz ~ 25GHz)

#### Summary

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	Pass	7G	8G	AV	7.31175G	2.79	-47.42	-47.42	-44.63	-41.20	-3.43
802.11g_Nss1,(6Mbps)_1TX	Pass	7G	8G	AV	7.311G	2.79	-49.92	-49.92	-47.13	-41.20	-5.93
802.11n HT20_Nss1,(MCS0)_1TX	Pass	7G	8G	AV	7.311G	2.79	-49.86	-49.86	-47.07	-41.20	-5.87
802.11n HT40_Nss1,(MCS0)_1TX	Pass	7G	8G	AV	7.311G	2.79	-53.40	-53.40	-50.61	-41.20	-9.41

DG = Directional Gain;

PX=Port X; Psum=P1+.P2+..PX

#### Result

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	3.1G	4G	AV	3.61795G	2.79	-59.69	-59.69	-56.90	-41.20	-15.70
2412MHz	Pass	4G	5G	AV	4.824G	2.79	-48.45	-48.45	-45.66	-41.20	-4.46
2412MHz	Pass	5G	7G	AV	5.1095G	2.79	-77.75	-77.75	-74.96	-41.20	-33.76
2412MHz	Pass	7G	8G	AV	7.25G	2.79	-71.44	-71.44	-68.65	-41.20	-27.45
2412MHz	Pass	8G	25G	AV	20.13747G	2.79	-68.69	-68.69	-65.90	-41.20	-24.70
2412MHz	Pass	3.1G	4G	PK	3.61818G	2.79	-53.91	-53.91	-51.12	-21.20	-29.92
2412MHz	Pass	4G	5G	PK	4.82425G	2.79	-47.17	-47.17	-44.38	-21.20	-23.18
2412MHz	Pass	5G	7G	PK	5.12G	2.79	-66.34	-66.34	-63.55	-21.20	-42.35
2412MHz	Pass	7G	8G	PK	7.25075G	2.79	-65.22	-65.22	-62.43	-21.20	-41.23
2412MHz	Pass	8G	25G	PK	19.42878G	2.79	-58.68	-58.68	-55.89	-21.20	-34.69
2437MHz	Pass	3.1G	4G	AV	3.65553G	2.79	-59.20	-59.20	-56.41	-41.20	-15.21
2437MHz	Pass	4G	5G	AV	4.874G	2.79	-51.89	-51.89	-49.10	-41.20	-7.90
2437MHz	Pass	5G	7G	AV	5.1055G	2.79	-77.76	-77.76	-74.97	-41.20	-33.77
2437MHz	Pass	7G	8G	AV	7.31175G	2.79	-47.42	-47.42	-44.63	-41.20	-3.43
2437MHz	Pass	8G	25G	AV	20.13853G	2.79	-68.94	-68.94	-66.15	-41.20	-24.95
2437MHz	Pass	3.1G	4G	PK	3.65553G	2.79	-53.69	-53.69	-50.90	-21.20	-29.70
2437MHz	Pass	4G	5G	PK	4.87425G	2.79	-50.70	-50.70	-47.91	-21.20	-26.71
2437MHz	Pass	5G	7G	PK	5.0775G	2.79	-66.62	-66.62	-63.83	-21.20	-42.63
2437MHz	Pass	7G	8G	PK	7.311G	2.79	-43.77	-43.77	-40.98	-21.20	-19.78
2437MHz	Pass	8G	25G	PK	20.13003G	2.79	-59.16	-59.16	-56.37	-21.20	-35.17
2462MHz	Pass	3.1G	4G	AV	3.6931G	2.79	-60.12	-60.12	-57.33	-41.20	-16.13
2462MHz	Pass	4G	5G	AV	4.924G	2.79	-55.37	-55.37	-52.58	-41.20	-11.38
2462MHz	Pass	5G	7G	AV	5.109G	2.79	-77.75	-77.75	-74.96	-41.20	-33.76
2462MHz	Pass	7G	8G	AV	7.386G	2.79	-51.37	-51.37	-48.58	-41.20	-7.38
2462MHz	Pass	8G	25G	AV	20.13322G	2.79	-68.81	-68.81	-66.02	-41.20	-24.82
2462MHz	Pass	3.1G	4G	PK	3.6931G	2.79	-54.56	-54.56	-51.77	-21.20	-30.57
2462MHz	Pass	4G	5G	PK	4.92425G	2.79	-54.00	-54.00	-51.21	-21.20	-30.01
2462MHz	Pass	5G	7G	PK	5.116G	2.79	-67.00	-67.00	-64.21	-21.20	-43.01
2462MHz	Pass	7G	8G	PK	7.38625G	2.79	-47.47	-47.47	-44.68	-21.20	-23.48

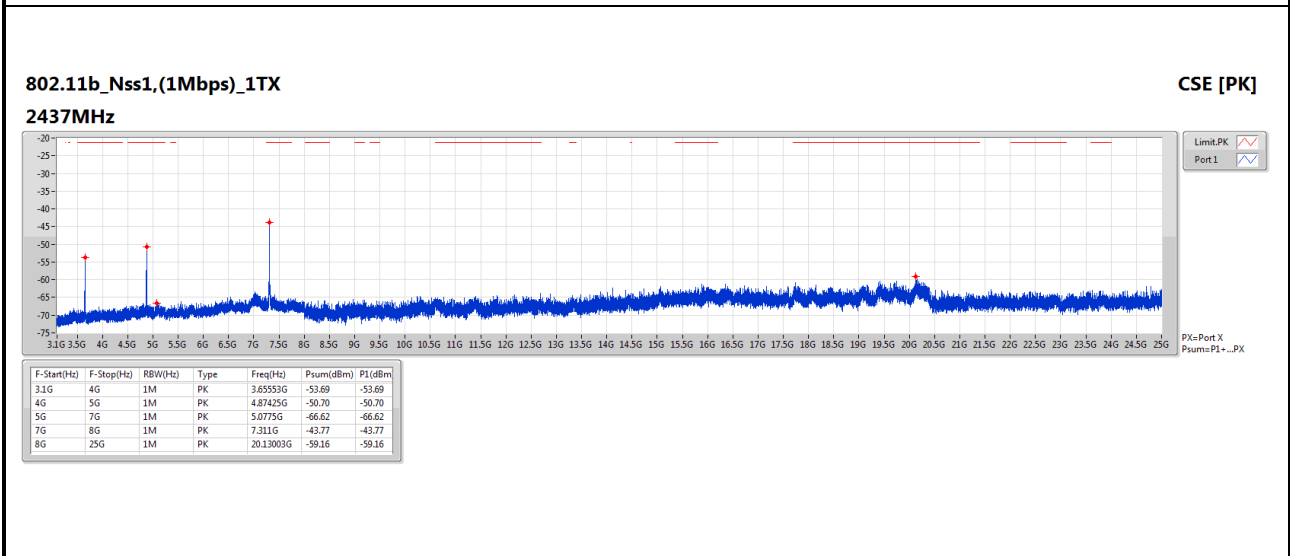
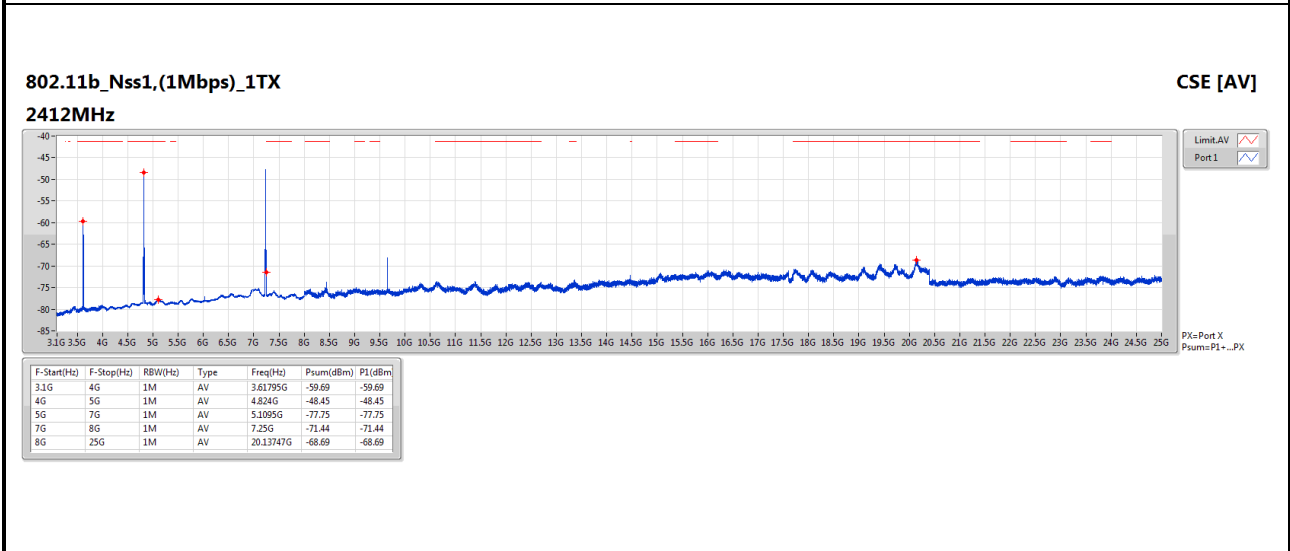
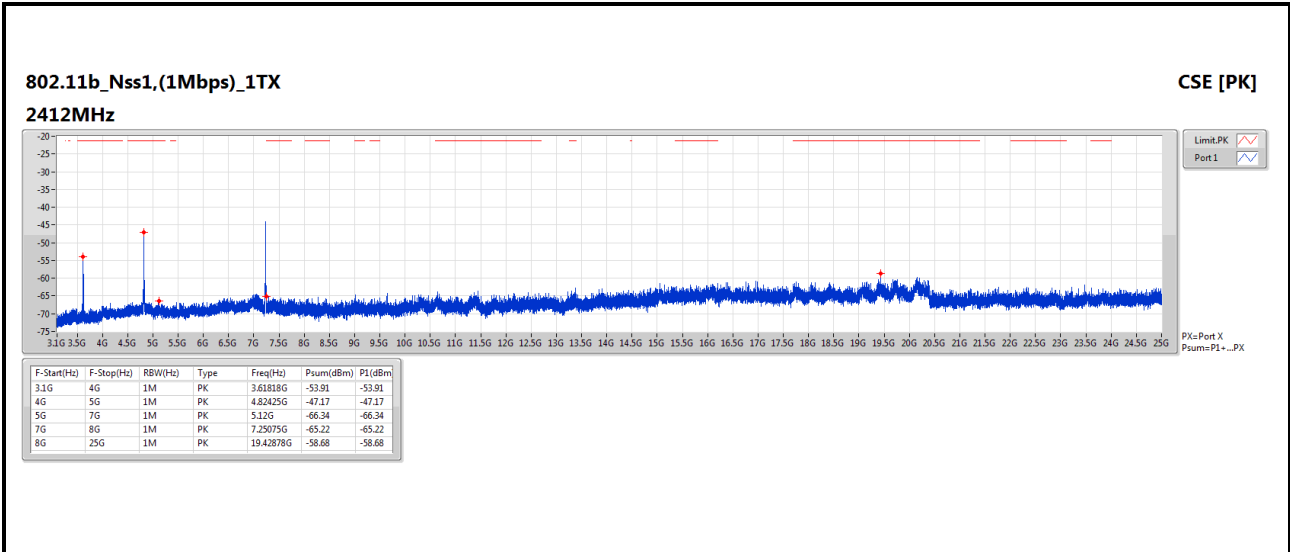
Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
2462MHz	Pass	8G	25G	PK	19.73691G	2.79	-60.16	-60.16	-57.37	-21.20	-36.17
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	3.1G	4G	AV	3.61795G	2.79	-61.47	-61.47	-58.68	-41.20	-17.48
2412MHz	Pass	4G	5G	AV	4.824G	2.79	-65.25	-65.25	-62.46	-41.20	-21.26
2412MHz	Pass	5G	7G	AV	5.3975G	2.79	-68.43	-68.43	-65.64	-41.20	-24.44
2412MHz	Pass	7G	8G	AV	7.25025G	2.79	-66.29	-66.29	-63.50	-41.20	-22.30
2412MHz	Pass	8G	25G	AV	15.88534G	2.79	-63.58	-63.58	-60.79	-41.20	-19.59
2412MHz	Pass	3.1G	4G	PK	3.6184G	2.79	-54.45	-54.45	-51.66	-21.20	-30.46
2412MHz	Pass	4G	5G	PK	4.82275G	2.79	-54.70	-54.70	-51.91	-21.20	-30.71
2412MHz	Pass	5G	7G	PK	5.3905G	2.79	-56.96	-56.96	-54.17	-21.20	-32.97
2412MHz	Pass	7G	8G	PK	7.25025G	2.79	-52.82	-52.82	-50.03	-21.20	-28.83
2412MHz	Pass	8G	25G	PK	15.58731G	2.79	-53.12	-53.12	-50.33	-21.20	-29.13
2437MHz	Pass	3.1G	4G	AV	3.65553G	2.79	-59.87	-59.87	-57.08	-41.20	-15.88
2437MHz	Pass	4G	5G	AV	4.874G	2.79	-62.90	-62.90	-60.11	-41.20	-18.91
2437MHz	Pass	5G	7G	AV	5.1385G	2.79	-77.76	-77.76	-74.97	-41.20	-33.77
2437MHz	Pass	7G	8G	AV	7.311G	2.79	-49.92	-49.92	-47.13	-41.20	-5.93
2437MHz	Pass	8G	25G	AV	20.15181G	2.79	-68.84	-68.84	-66.05	-41.20	-24.85
2437MHz	Pass	3.1G	4G	PK	3.65553G	2.79	-52.96	-52.96	-50.17	-21.20	-28.97
2437MHz	Pass	4G	5G	PK	4.873G	2.79	-51.34	-51.34	-48.55	-21.20	-27.35
2437MHz	Pass	5G	7G	PK	5.064G	2.79	-66.02	-66.02	-63.23	-21.20	-42.03
2437MHz	Pass	7G	8G	PK	7.30475G	2.79	-41.15	-41.15	-38.36	-21.20	-17.16
2437MHz	Pass	8G	25G	PK	19.39584G	2.79	-59.22	-59.22	-56.43	-21.20	-35.23
2462MHz	Pass	3.1G	4G	AV	3.69288G	2.79	-60.67	-60.67	-57.88	-41.20	-16.68
2462MHz	Pass	4G	5G	AV	4.924G	2.79	-66.61	-66.61	-63.82	-41.20	-22.62
2462MHz	Pass	4G	5G	AV	4.92425G	2.79	-66.61	-66.61	-63.82	-41.20	-22.62
2462MHz	Pass	5G	7G	AV	5.4025G	2.79	-68.47	-68.47	-65.68	-41.20	-24.48
2462MHz	Pass	7G	8G	AV	7.38625G	2.79	-56.46	-56.46	-53.67	-41.20	-12.47
2462MHz	Pass	8G	25G	AV	16.0155G	2.79	-63.69	-63.69	-60.90	-41.20	-19.70
2462MHz	Pass	3.1G	4G	PK	3.6931G	2.79	-53.39	-53.39	-50.60	-21.20	-29.40
2462MHz	Pass	4G	5G	PK	4.92325G	2.79	-56.53	-56.53	-53.74	-21.20	-32.54
2462MHz	Pass	5G	7G	PK	5.386G	2.79	-57.10	-57.10	-54.31	-21.20	-33.11
2462MHz	Pass	7G	8G	PK	7.38725G	2.79	-48.90	-48.90	-46.11	-21.20	-24.91
2462MHz	Pass	8G	25G	PK	18.00344G	2.79	-53.46	-53.46	-50.67	-21.20	-29.47
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	3.1G	4G	AV	3.61795G	2.79	-60.87	-60.87	-58.08	-41.20	-16.88
2412MHz	Pass	4G	5G	AV	4.82375G	2.79	-66.70	-66.70	-63.91	-41.20	-22.71
2412MHz	Pass	4G	5G	AV	4.8245G	2.79	-66.70	-66.70	-63.91	-41.20	-22.71
2412MHz	Pass	5G	7G	AV	5.3995G	2.79	-68.37	-68.37	-65.58	-41.20	-24.38
2412MHz	Pass	7G	8G	AV	7.251G	2.79	-67.38	-67.38	-64.59	-41.20	-23.39
2412MHz	Pass	8G	25G	AV	15.69516G	2.79	-63.79	-63.79	-61.00	-41.20	-19.80
2412MHz	Pass	3.1G	4G	PK	3.61818G	2.79	-54.50	-54.50	-51.71	-21.20	-30.51
2412MHz	Pass	4G	5G	PK	4.8255G	2.79	-55.88	-55.88	-53.09	-21.20	-31.89

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
2412MHz	Pass	5G	7G	PK	5.3945G	2.79	-57.74	-57.74	-54.95	-21.20	-33.75
2412MHz	Pass	7G	8G	PK	7.25025G	2.79	-57.50	-57.50	-54.71	-21.20	-33.51
2412MHz	Pass	8G	25G	PK	15.57509G	2.79	-53.87	-53.87	-51.08	-21.20	-29.88
2437MHz	Pass	3.1G	4G	AV	3.6553G	2.79	-61.23	-61.23	-58.44	-41.20	-17.24
2437MHz	Pass	4G	5G	AV	4.87175G	2.79	-60.65	-60.65	-57.86	-41.20	-16.66
2437MHz	Pass	4G	5G	AV	4.87225G	2.79	-60.65	-60.65	-57.86	-41.20	-16.66
2437MHz	Pass	5G	7G	AV	5.3995G	2.79	-68.37	-68.37	-65.58	-41.20	-24.38
2437MHz	Pass	7G	8G	AV	7.311G	2.79	-49.86	-49.86	-47.07	-41.20	-5.87
2437MHz	Pass	8G	25G	AV	15.67656G	2.79	-63.48	-63.48	-60.69	-41.20	-19.49
2437MHz	Pass	3.1G	4G	PK	3.65575G	2.79	-53.52	-53.52	-50.73	-21.20	-29.53
2437MHz	Pass	4G	5G	PK	4.87475G	2.79	-50.04	-50.04	-47.25	-21.20	-26.05
2437MHz	Pass	5G	7G	PK	5.392G	2.79	-57.58	-57.58	-54.79	-21.20	-33.59
2437MHz	Pass	7G	8G	PK	7.3115G	2.79	-39.74	-39.74	-36.95	-21.20	-15.75
2437MHz	Pass	8G	25G	PK	15.86728G	2.79	-53.98	-53.98	-51.19	-21.20	-29.99
2462MHz	Pass	3.1G	4G	AV	3.6931G	2.79	-60.66	-60.66	-57.87	-41.20	-16.67
2462MHz	Pass	4G	5G	AV	4.924G	2.79	-65.87	-65.87	-63.08	-41.20	-21.88
2462MHz	Pass	5G	7G	AV	5.249G	2.79	-68.37	-68.37	-65.58	-41.20	-24.38
2462MHz	Pass	7G	8G	AV	7.38575G	2.79	-54.03	-54.03	-51.24	-41.20	-10.04
2462MHz	Pass	8G	25G	AV	16.02719G	2.79	-63.65	-63.65	-60.86	-41.20	-19.66
2462MHz	Pass	3.1G	4G	PK	3.6931G	2.79	-54.68	-54.68	-51.89	-21.20	-30.69
2462MHz	Pass	4G	5G	PK	4.931G	2.79	-57.65	-57.65	-54.86	-21.20	-33.66
2462MHz	Pass	5G	7G	PK	5.4055G	2.79	-56.79	-56.79	-54.00	-21.20	-32.80
2462MHz	Pass	7G	8G	PK	7.38625G	2.79	-49.58	-49.58	-46.79	-21.20	-25.59
2462MHz	Pass	8G	25G	PK	15.84231G	2.79	-53.72	-53.72	-50.93	-21.20	-29.73
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	3.1G	4G	AV	3.63303G	2.79	-60.85	-60.85	-58.06	-41.20	-16.86
2422MHz	Pass	4G	5G	AV	4.844G	2.79	-66.06	-66.06	-63.27	-41.20	-22.07
2422MHz	Pass	5G	7G	AV	5.249G	2.79	-67.97	-67.97	-65.18	-41.20	-23.98
2422MHz	Pass	7G	8G	AV	7.266G	2.79	-53.67	-53.67	-50.88	-41.20	-9.68
2422MHz	Pass	8G	25G	AV	15.68188G	2.79	-63.79	-63.79	-61.00	-41.20	-19.80
2422MHz	Pass	3.1G	4G	PK	3.63325G	2.79	-56.91	-56.91	-54.12	-21.20	-32.92
2422MHz	Pass	4G	5G	PK	4.844G	2.79	-58.29	-58.29	-55.50	-21.20	-34.30
2422MHz	Pass	4G	5G	PK	4.84425G	2.79	-58.29	-58.29	-55.50	-21.20	-34.30
2422MHz	Pass	5G	7G	PK	5.4055G	2.79	-58.16	-58.16	-55.37	-21.20	-34.17
2422MHz	Pass	7G	8G	PK	7.266G	2.79	-51.13	-51.13	-48.34	-21.20	-27.14
2422MHz	Pass	8G	25G	PK	15.58147G	2.79	-53.72	-53.72	-50.93	-21.20	-29.73
2437MHz	Pass	3.1G	4G	AV	3.65553G	2.79	-61.33	-61.33	-58.54	-41.20	-17.34
2437MHz	Pass	4G	5G	AV	4.874G	2.79	-65.59	-65.59	-62.80	-41.20	-21.60
2437MHz	Pass	5G	7G	AV	5.245G	2.79	-67.72	-67.72	-64.93	-41.20	-23.73
2437MHz	Pass	7G	8G	AV	7.311G	2.79	-53.40	-53.40	-50.61	-41.20	-9.41
2437MHz	Pass	8G	25G	AV	15.67869G	2.79	-63.48	-63.48	-60.69	-41.20	-19.49
2437MHz	Pass	3.1G	4G	PK	3.65575G	2.79	-57.31	-57.31	-54.52	-21.20	-33.32

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	P1 (dBm)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
2437MHz	Pass	4G	5G	PK	4.8745G	2.79	-58.15	-58.15	-55.36	-21.20	-34.16
2437MHz	Pass	4G	5G	PK	4.994G	2.79	-57.87	-57.87	-55.08	-21.20	-33.88
2437MHz	Pass	5G	7G	PK	5.415G	2.79	-57.73	-57.73	-54.94	-21.20	-33.74
2437MHz	Pass	7G	8G	PK	7.31125G	2.79	-50.63	-50.63	-47.84	-21.20	-26.64
2437MHz	Pass	8G	25G	PK	20.38025G	2.79	-53.84	-53.84	-51.05	-21.20	-29.85
2452MHz	Pass	3.1G	4G	AV	3.67803G	2.79	-60.29	-60.29	-57.50	-41.20	-16.30
2452MHz	Pass	4G	5G	AV	4.90425G	2.79	-65.63	-65.63	-62.84	-41.20	-21.64
2452MHz	Pass	5G	7G	AV	5.25G	2.79	-67.96	-67.96	-65.17	-41.20	-23.97
2452MHz	Pass	7G	8G	AV	7.356G	2.79	-53.56	-53.56	-50.77	-41.20	-9.57
2452MHz	Pass	8G	25G	AV	16.007G	2.79	-63.38	-63.38	-60.59	-41.20	-19.39
2452MHz	Pass	3.1G	4G	PK	3.67825G	2.79	-55.99	-55.99	-53.20	-21.20	-32.00
2452MHz	Pass	4G	5G	PK	4.904G	2.79	-58.90	-58.90	-56.11	-21.20	-34.91
2452MHz	Pass	5G	7G	PK	5.3925G	2.79	-57.68	-57.68	-54.89	-21.20	-33.69
2452MHz	Pass	7G	8G	PK	7.356G	2.79	-51.34	-51.34	-48.55	-21.20	-27.35
2452MHz	Pass	8G	25G	PK	20.01741G	2.79	-53.59	-53.59	-50.80	-21.20	-29.60

**DG** = Directional Gain;  
**PX**=Port X; **Psum**=P1+.P2+..PX

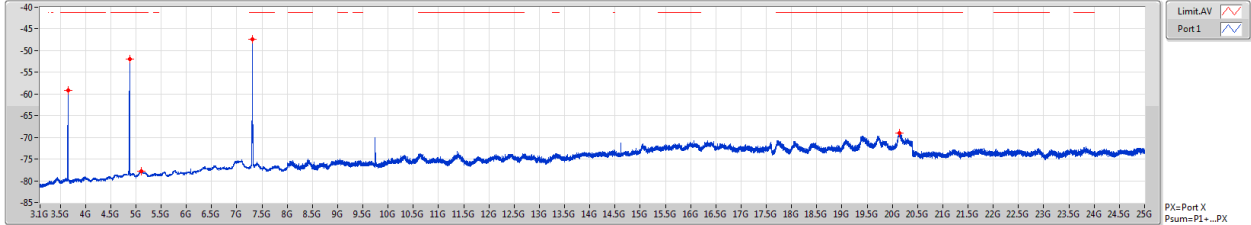




802.11b\_Nss1,(1Mbps)\_1TX

CSE [AV]

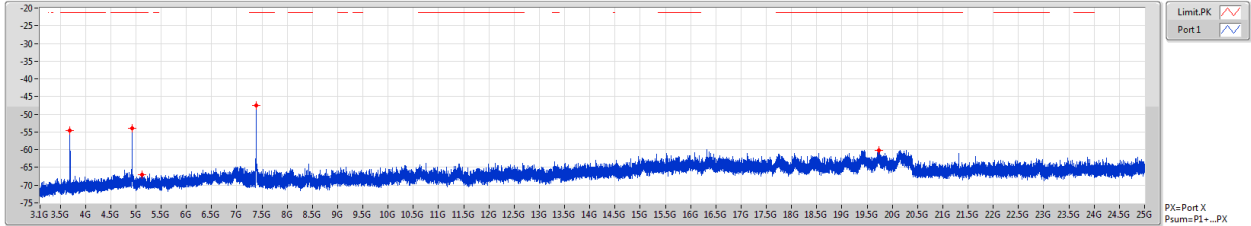
2437MHz



802.11b\_Nss1,(1Mbps)\_1TX

CSE [PK]

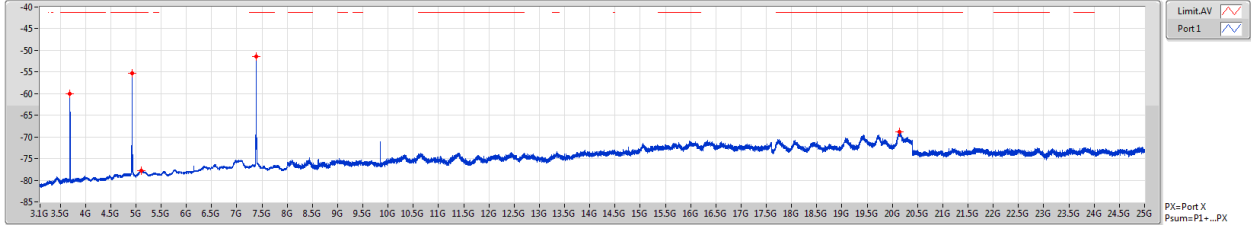
2462MHz

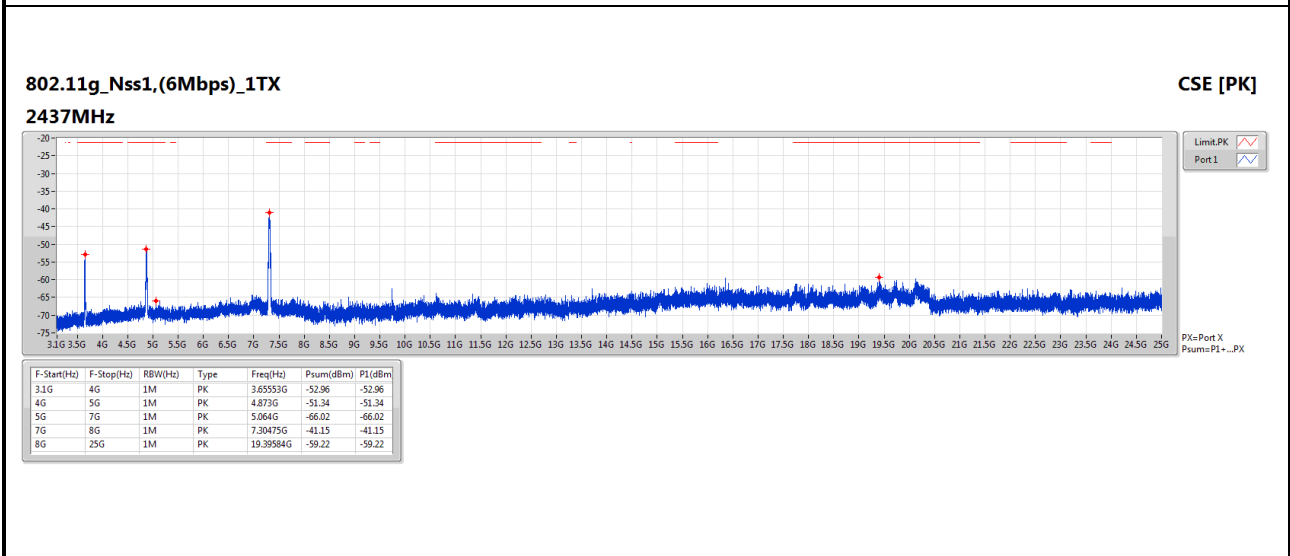
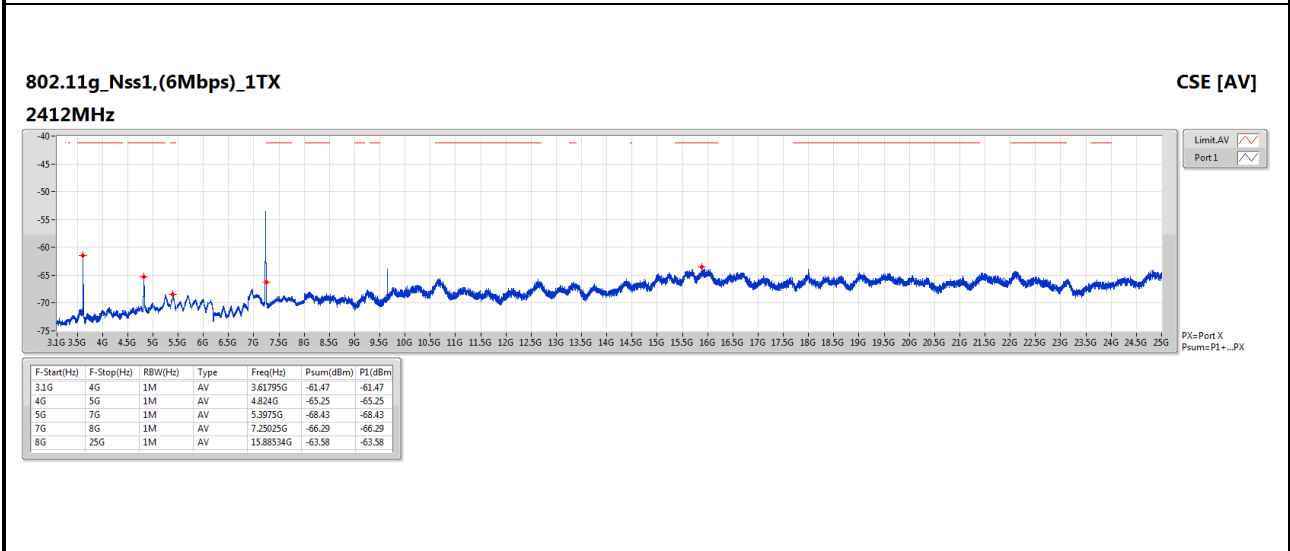
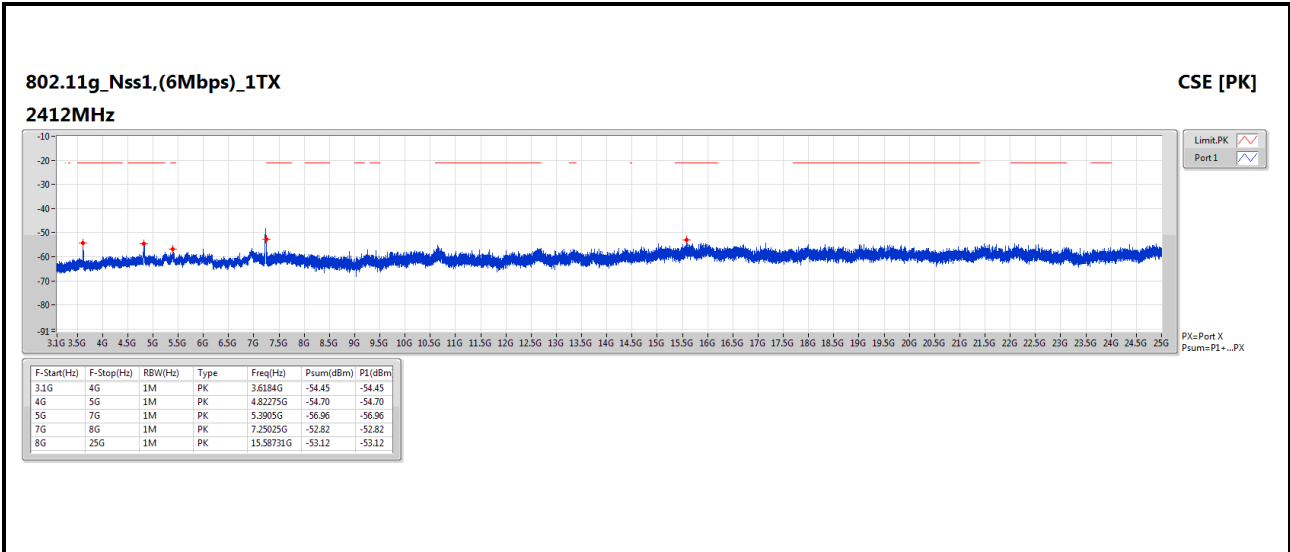


802.11b\_Nss1,(1Mbps)\_1TX

CSE [AV]

2462MHz

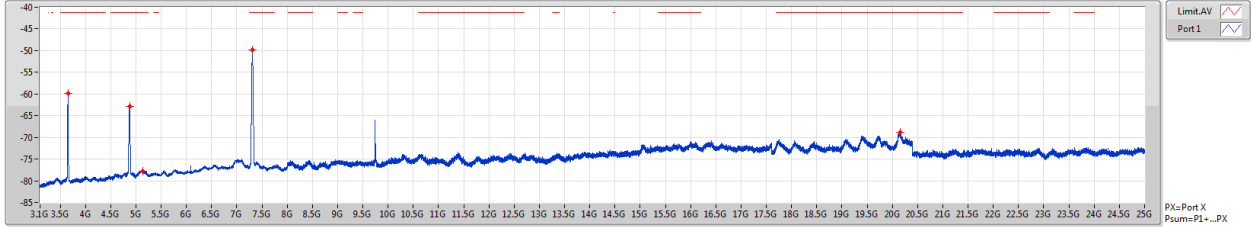




802.11g\_Nss1,(6Mbps)\_1TX

CSE [AV]

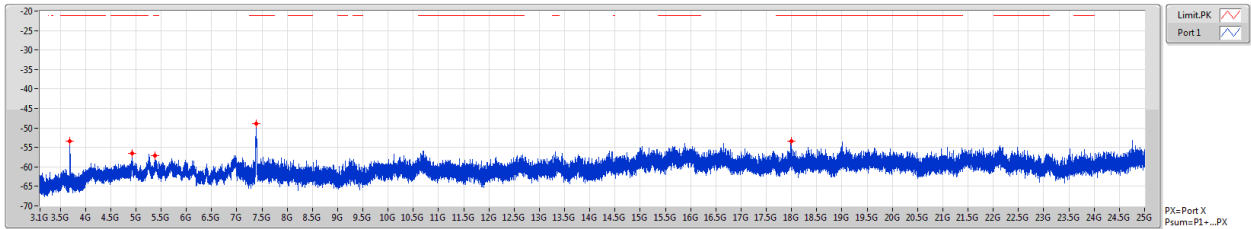
2437MHz



802.11g\_Nss1,(6Mbps)\_1TX

CSE [PK]

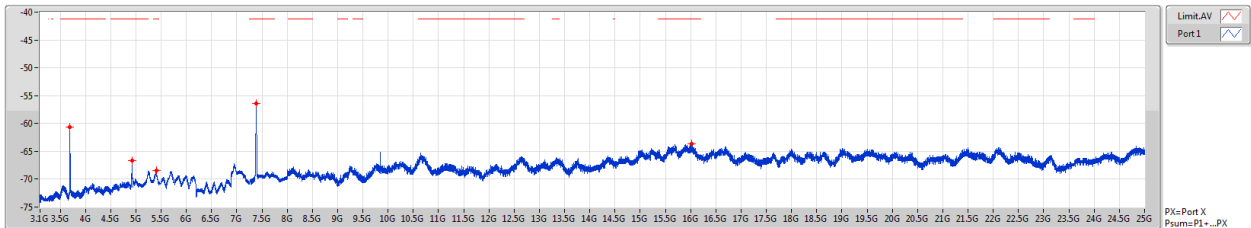
2462MHz



802.11g\_Nss1,(6Mbps)\_1TX

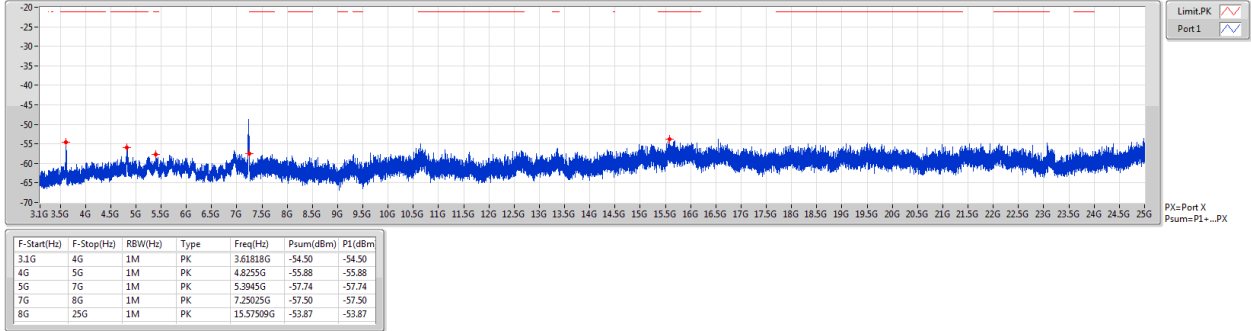
CSE [AV]

2462MHz



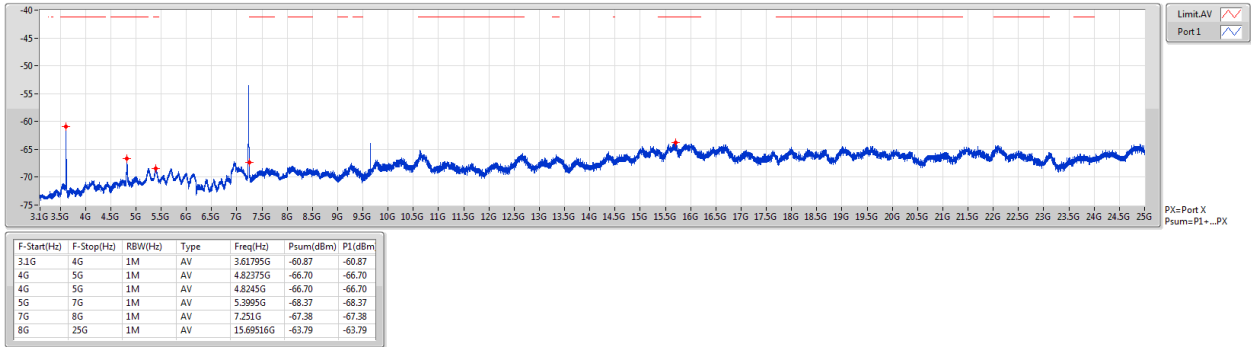
**802.11n HT20\_Nss1,(MCS0)\_1TX**  
**2412MHz**

CSE [PK]



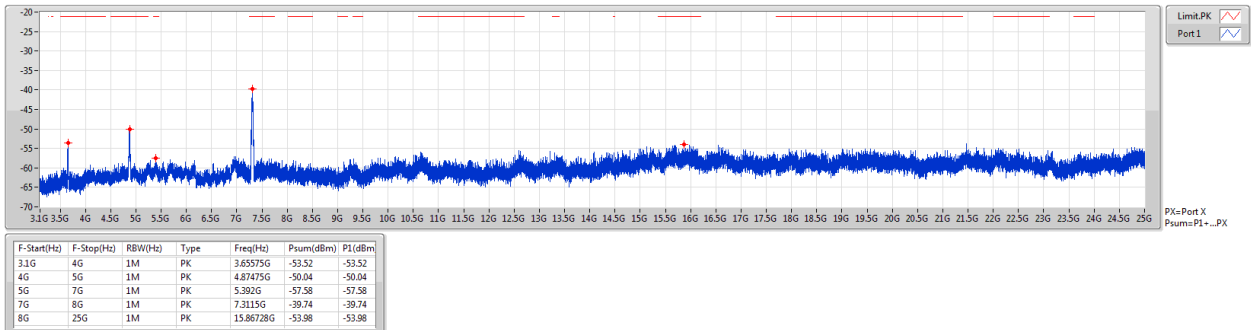
**802.11n HT20\_Nss1,(MCS0)\_1TX**  
**2412MHz**

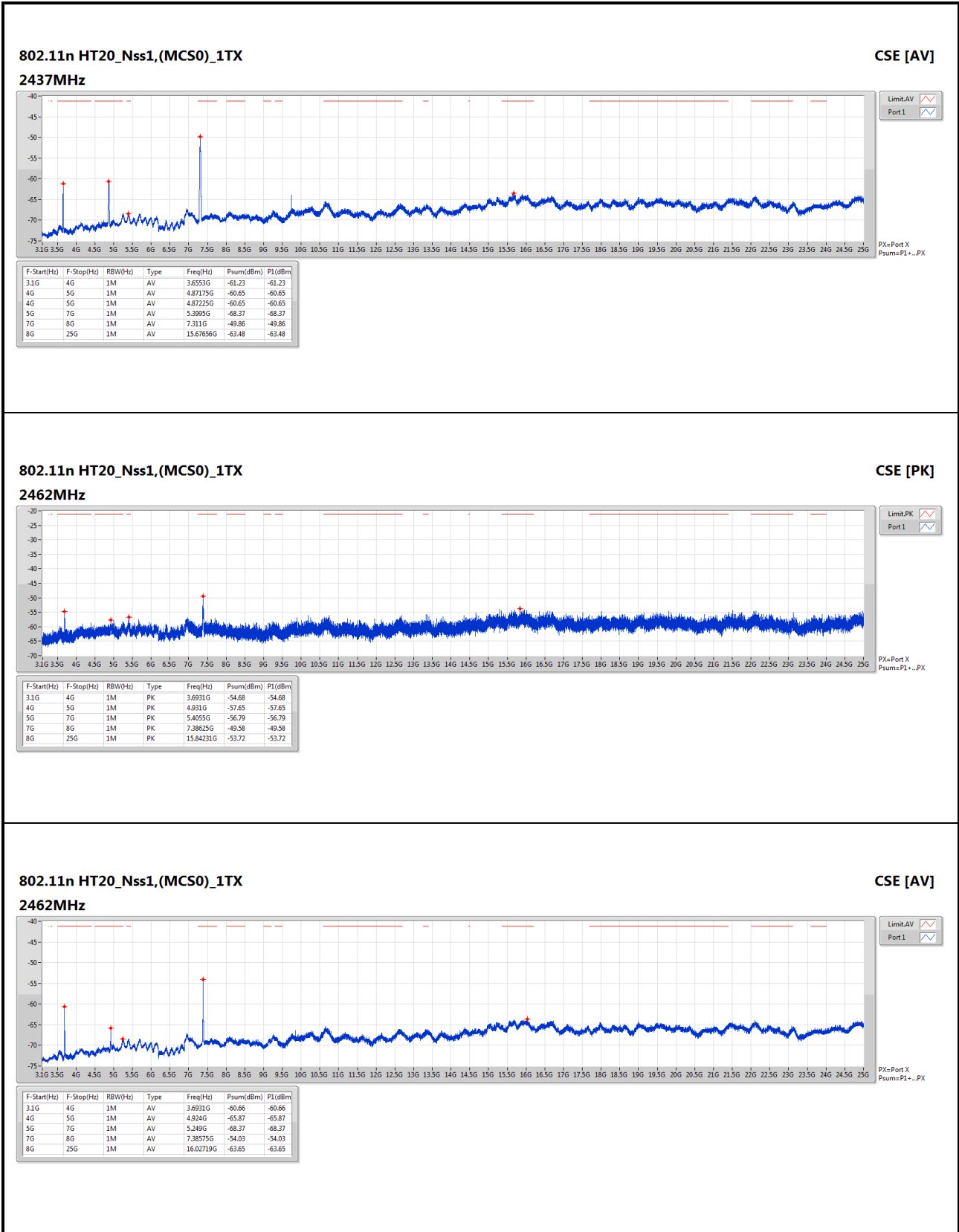
CSE [AV]



**802.11n HT20\_Nss1,(MCS0)\_1TX**  
**2437MHz**

CSE [PK]





**802.11n HT20\_Nss1,(MCS0)\_1TX**

**2462MHz**

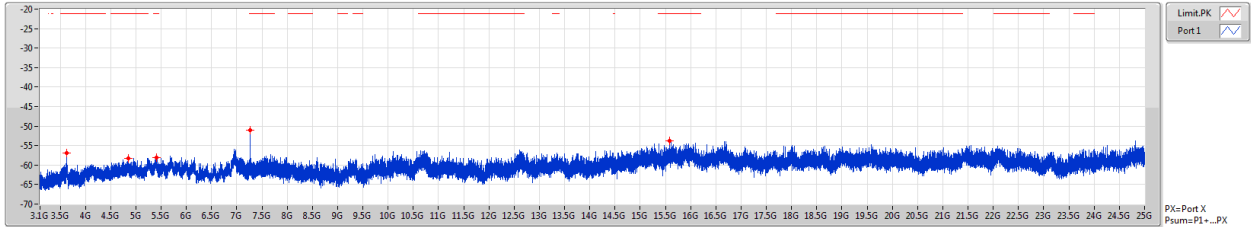
**CSE [AV]**

 Limit AV  
 Port 1  
 PX=Port X  
 Psum=P1+...PX

802.11n HT40\_Nss1,(MCS0)\_1TX

CSE [PK]

2422MHz

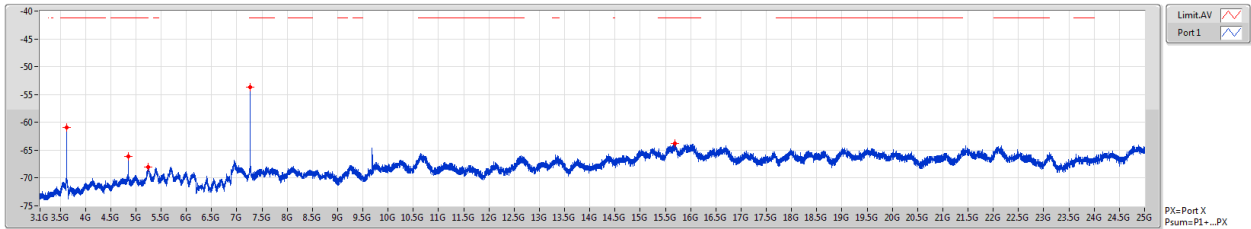


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
3.1G	4G	1M	PK	3.63325G	-56.91	-56.91
4G	5G	1M	PK	4.8444G	-58.29	-58.29
4G	5G	1M	PK	4.84425G	-58.29	-58.29
5G	7G	1M	PK	5.4055G	-58.16	-58.16
7G	8G	1M	PK	7.266G	-51.13	-51.13
8G	25G	1M	PK	15.58147G	-53.72	-53.72

802.11n HT40\_Nss1,(MCS0)\_1TX

CSE [AV]

2422MHz

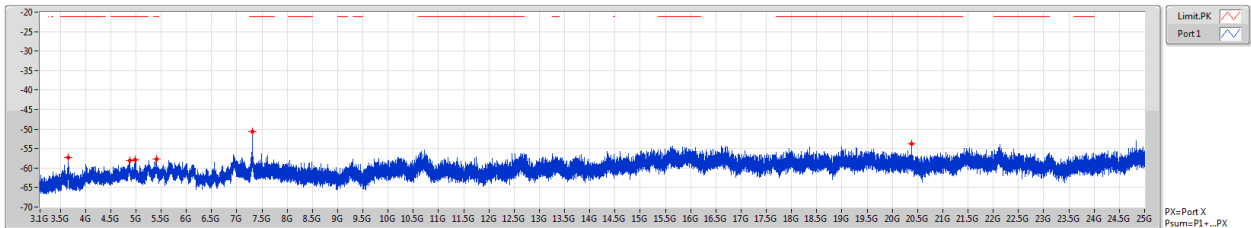


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
3.1G	4G	1M	AV	3.63303G	-60.85	-60.85
4G	5G	1M	AV	4.8444G	-66.06	-66.06
5G	7G	1M	AV	5.249G	-67.97	-67.97
7G	8G	1M	AV	7.266G	-53.67	-53.67
8G	25G	1M	AV	15.68188G	-63.79	-63.79

802.11n HT40\_Nss1,(MCS0)\_1TX

CSE [PK]

2437MHz

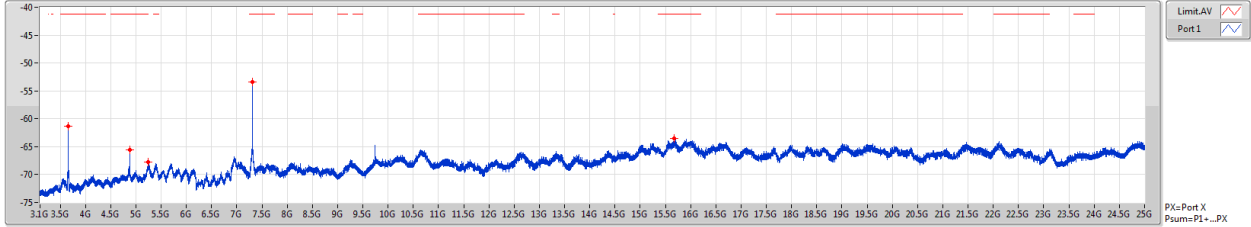


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
3.1G	4G	1M	PK	3.65575G	-57.31	-57.31
4G	5G	1M	PK	4.8745G	-58.15	-58.15
4G	5G	1M	PK	4.994G	-57.87	-57.87
5G	7G	1M	PK	5.415G	-57.73	-57.73
7G	8G	1M	PK	7.31125G	-50.63	-50.63
8G	25G	1M	PK	20.38025G	-53.84	-53.84

802.11n HT40\_Nss1,(MCS0)\_1TX

CSE [AV]

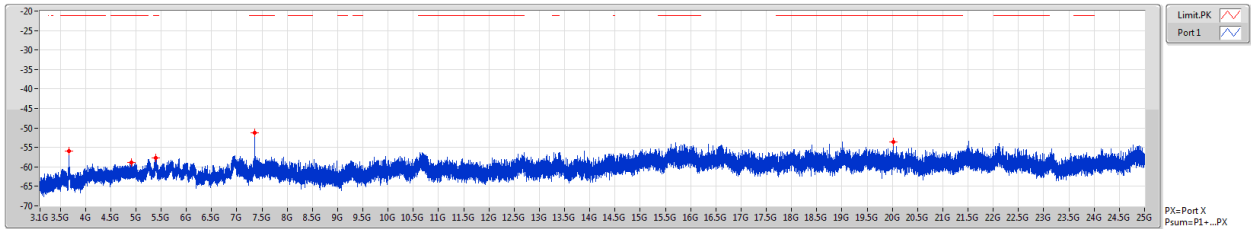
2437MHz



802.11n HT40\_Nss1,(MCS0)\_1TX

CSE [PK]

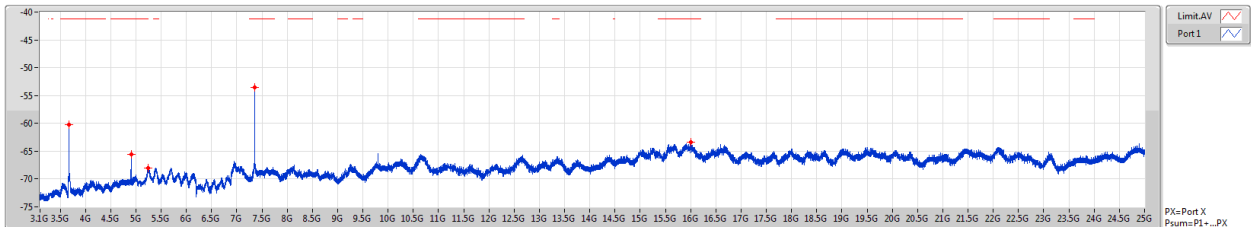
2452MHz



802.11n HT40\_Nss1,(MCS0)\_1TX

CSE [AV]

2452MHz





## 3.6 Emissions in Non-Restricted Frequency Bands

### 3.6.1 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 20 dB relative to the maximum in-band peak PSD level in 100 kHz.

### 3.6.2 Test Procedures

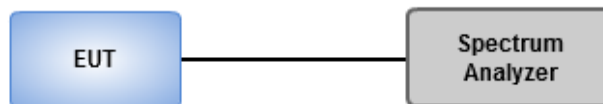
#### Reference level measurement

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

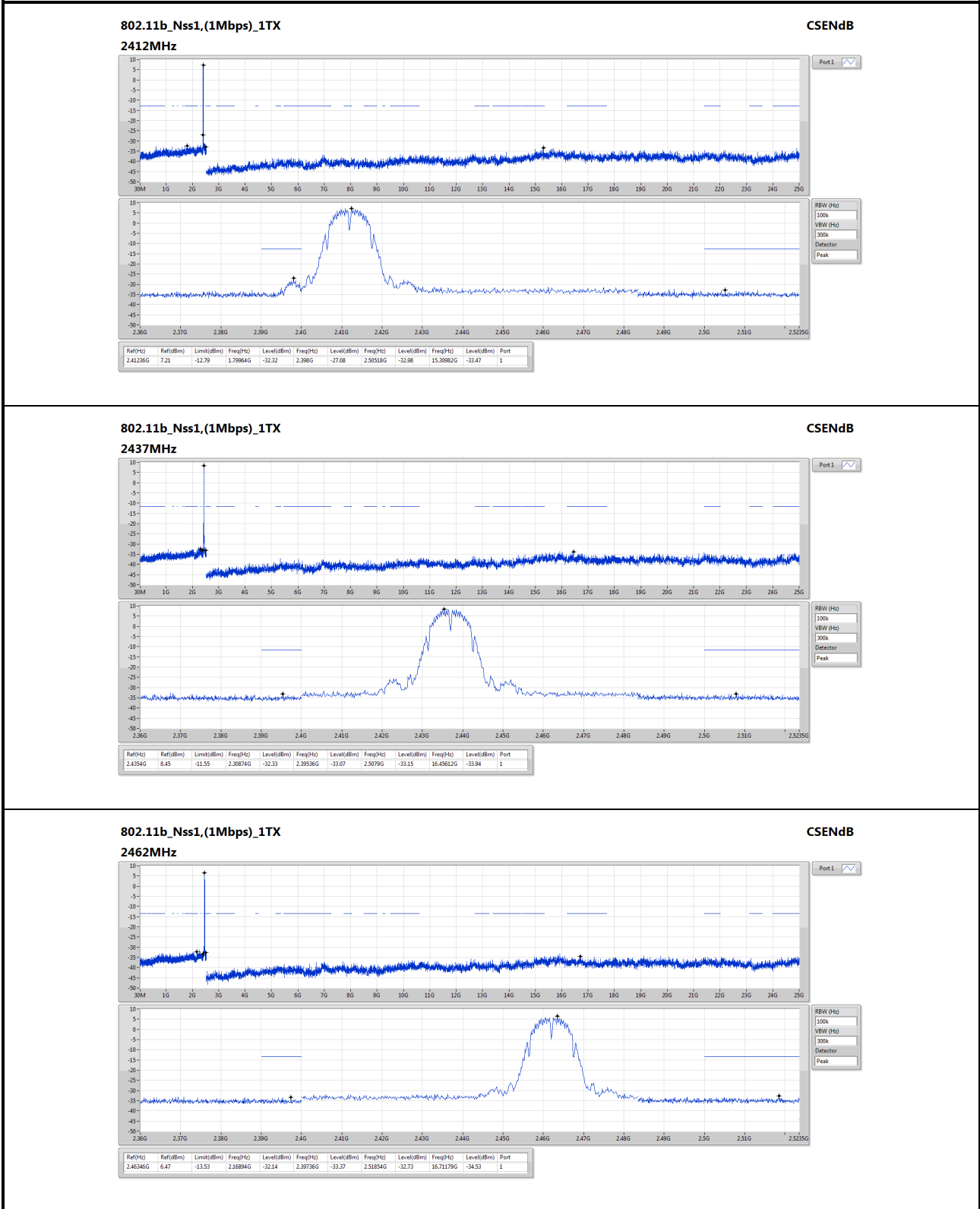
### 3.6.3 Test Setup

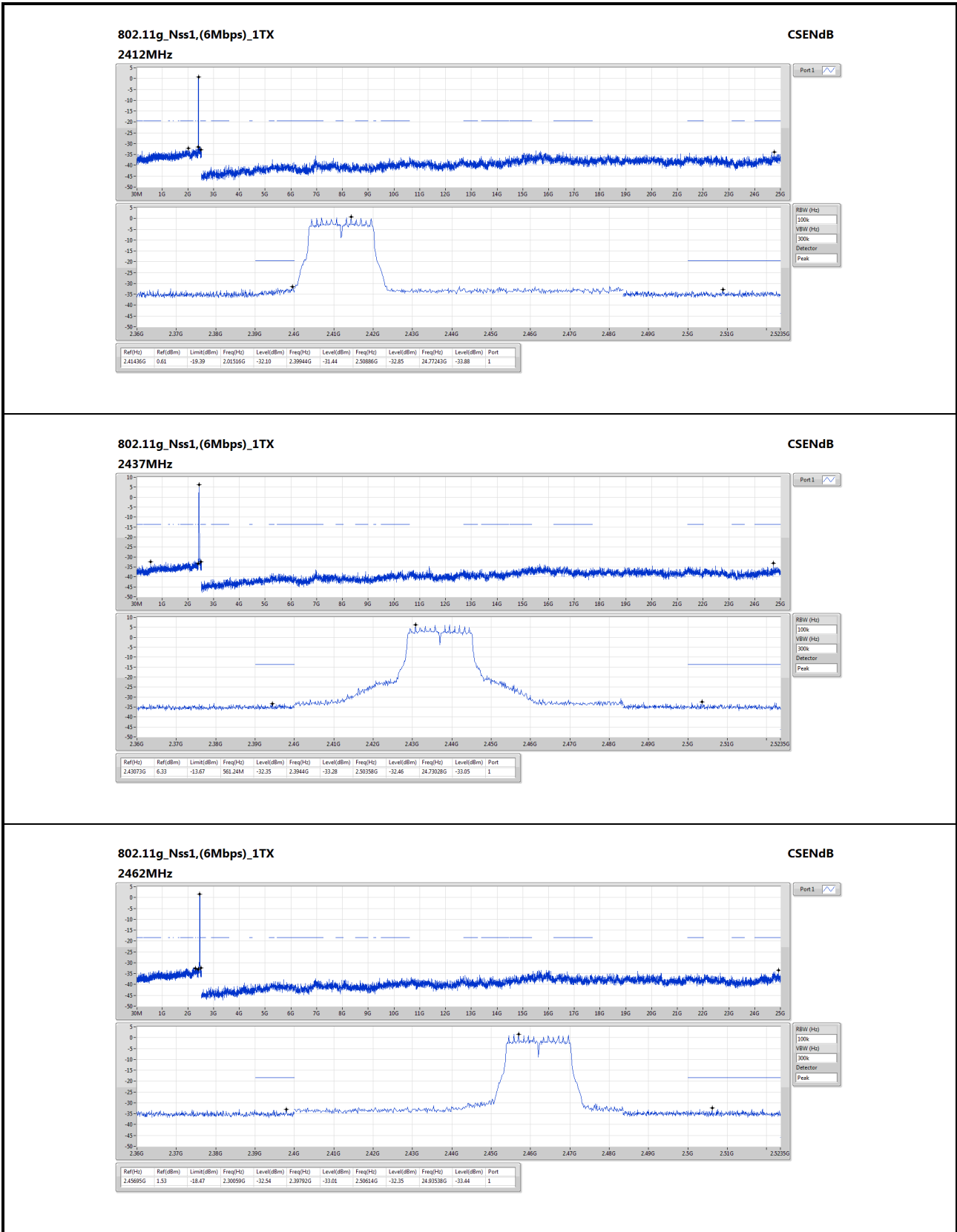


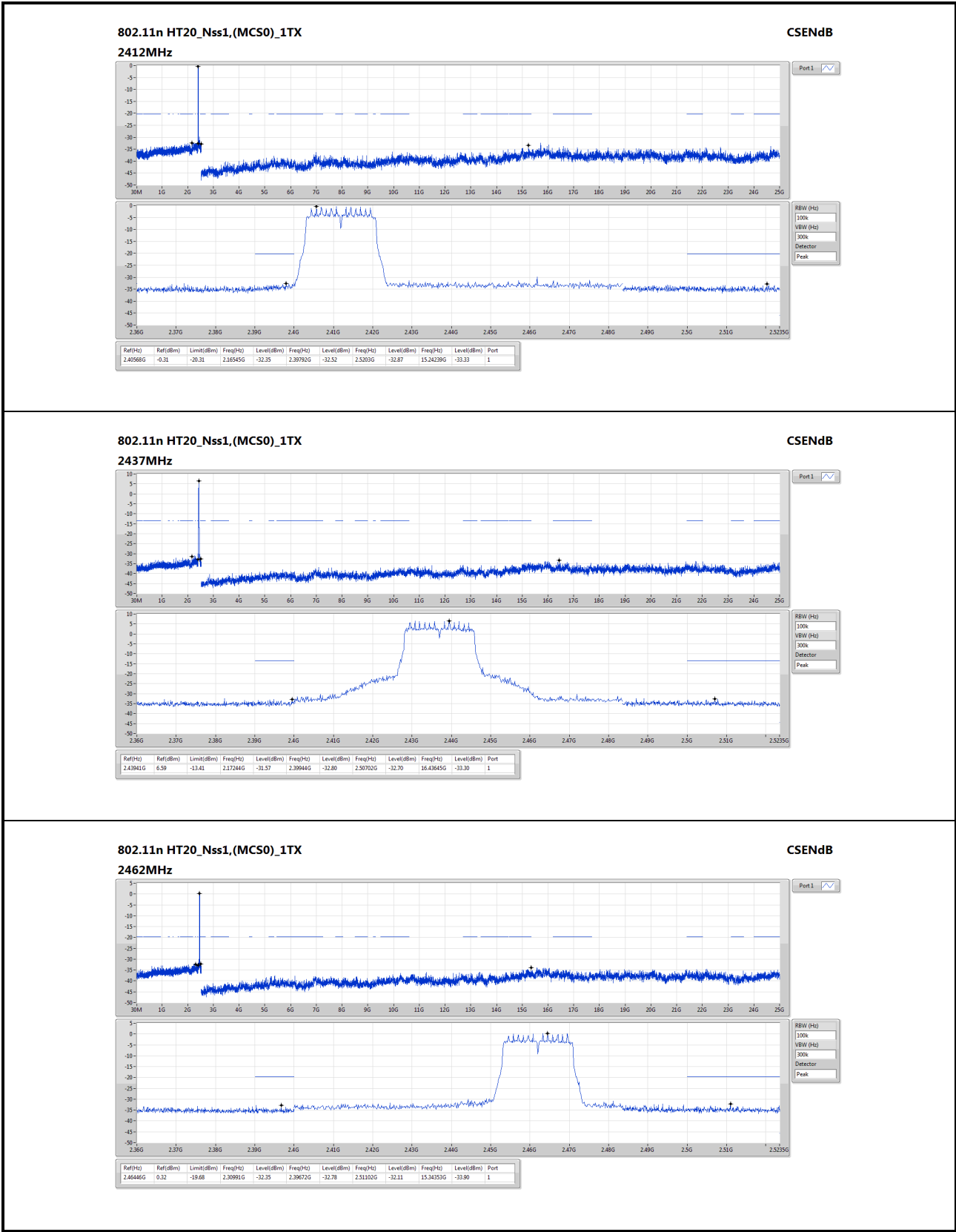
### 3.6.4 Unwanted Emissions into Non-Restricted Frequency Bands

Ambient Condition	21°C / 64%	Tested By	Alex Huang
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#### Configuration 1

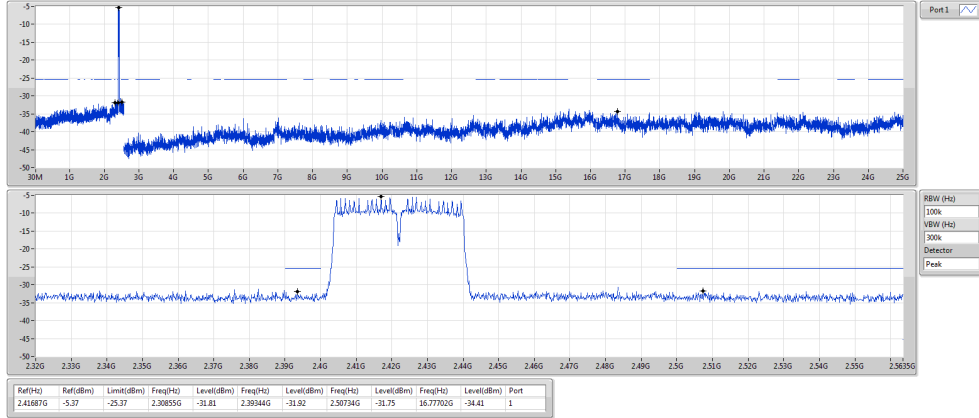






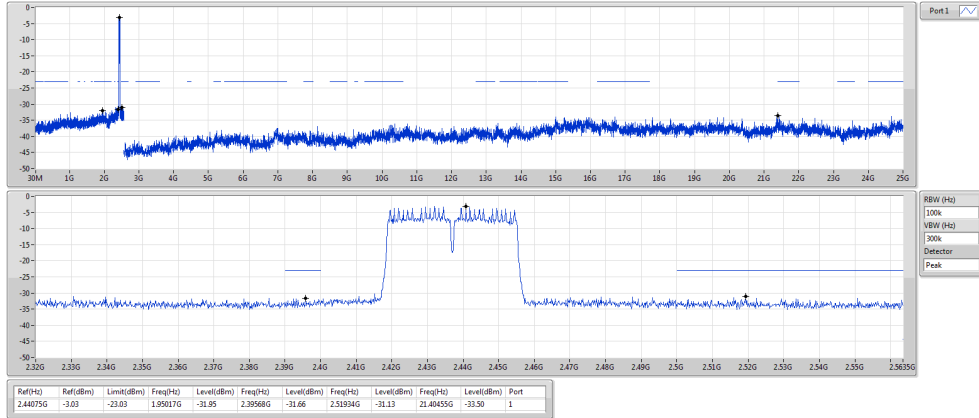
802.11n HT40\_Nss1,(MCS0)\_1TX  
2422MHz

CSEndB



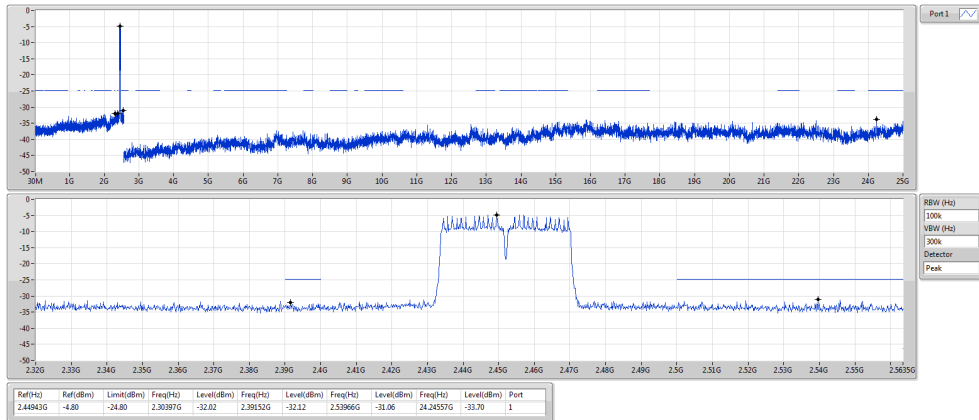
802.11n HT40\_Nss1,(MCS0)\_1TX  
2437MHz

CSEndB

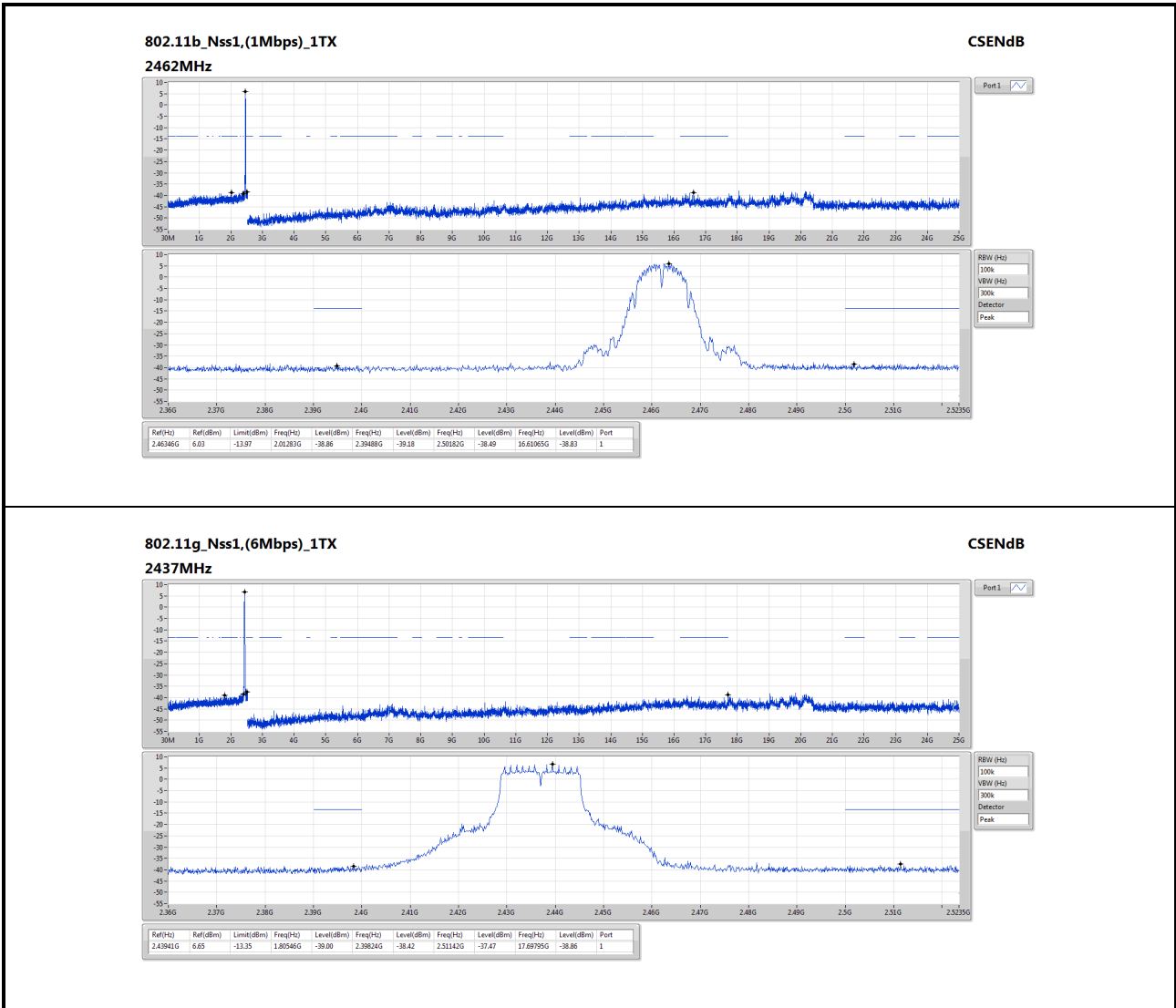


802.11n HT40\_Nss1,(MCS0)\_1TX  
2452MHz

CSEndB



### Configuration 3



## 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 Corp (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 District, Tao Yuan City  
333, Taiwan, R.O.C.

### **Kwei Shan Site II**

Tel: 886-3-271-8640

No. 14-1, Lane 19, Wen San 3rd  
St., Kwei Shan District, Tao Yuan  
City 333, Taiwan, R.O.C.

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

Tel: 886-3-271-8666

Fax: 886-3-318-0155

Email: ICC\_Service@icertifi.com.tw

==END==