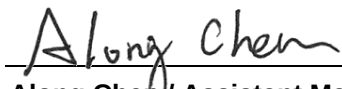


FCC Test Report

FCC ID : SWX-M2LW
Equipment : NanoStation locoM
Model No. : LocoM2
Brand Name : UBIQUITI
Applicant : Ubiquiti Inc.
Address : 685 Third Avenue, New York, New York 10017
USA
Standard : 47 CFR FCC Part 15.247
Received Date : May 14, 2019
Tested Date : Jun. 18 ~ Jul. 29, 2019

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
FR951401	Rev. 01	Initial issue	Oct. 22, 2019

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 0.426MHz 36.05 (Margin -11.24dB) - AV	Pass
15.247(d) 15.209	Radiated Emissions	[dBuV/m at 3m]: 2390.00MHz 53.84 (Margin -0.16dB) - AV	Pass
15.247(b)(3)	Maximum Output Power	Max Power [dBm]: Wi-Fi point-to- point : 29.26 Wi-Fi point-to-multipoint : 27.96	Pass
15.247(a)(2)	6dB Bandwidth	Meet the requirement of limit	Pass
15.247(e)	Power Spectral Density	Meet the requirement of limit	Pass
15.203	Antenna Requirement	Meet the requirement of limit	Pass

Declaration of Conformity:

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

Comments and Explanations:

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

1 General Description

1.1 Information

1.1.1 Specification of the Equipment under Test (EUT)

RF General Information						
Frequency Range (MHz)	IEEE Std. 802.11	BW (MHz)	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N _{TX})	Data Rate / MCS
2400-2483.5	b	5	2412-2462	1-11 [11]	2	1-11 Mbps
		8	2412-2462	1-11 [11]		
		10	2412-2462	1-11 [11]		
		20	2412-2462	1-11 [11]		
2400-2483.5	g	5	2412-2462	1-11 [11]	2	6-54 Mbps
		8	2412-2462	1-11 [11]		
		10	2412-2462	1-11 [11]		
		20	2412-2462	1-11 [11]		
2400-2483.5	n	5	2412-2462	1-11 [11]	2	MCS 0-15
		8	2412-2462	1-11 [11]		
		10	2412-2462	1-11 [11]		
		20	2412-2462	1-11 [11]		
		30	2417-2457	2-10 [9]		
		40	2422-2452	3-9 [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.	Type	Gain (dBi)	Connector	Remark
1	Internal	8	N/A	---

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	24Vdc from POE
-------------------	----------------

1.1.4 Accessories

Accessories		
No.	Equipment	Description
1	POE	Brand: UBIQUITI NETWORKS Model: GP-A240-050 Power Rating: I/P: 100-240Vac, 50/60Hz, 0.3A Max O/P: 24Vdc, 0.5A Power Line: 0.7m non-shielded without core

1.1.5 Channel List

Frequency band (MHz)		2400~2483.5
802.11 b / g		
BW(MHz)	Channel	Frequency(MHz)
5 8 10 20	1	2412
	2	2417
	3	2422
	4	2427
	5	2432
	6	2437
	7	2442
	8	2447
	9	2452
	10	2457
	11	2462

Frequency band (MHz)				2400~2483.5				
802.11n								
BW(MHz)	Channel	Frequency (MHz)	BW(MHz)	Channel	Frequency (MHz)	BW(MHz)	Channel	Frequency (MHz)
5 8 10 20	1	2412	30	2	2417	40	3	2422
	2	2417		3	2422		4	2427
	3	2422		4	2427		5	2432
	4	2427		5	2432		6	2437
	5	2432		6	2437		7	2442
	6	2437		7	2442		8	2447
	7	2442		8	2447		9	2452
	8	2447		9	2452		---	---
	9	2452		10	2457		---	---
	10	2457		---	---		---	---
	11	2462		---	---		---	---

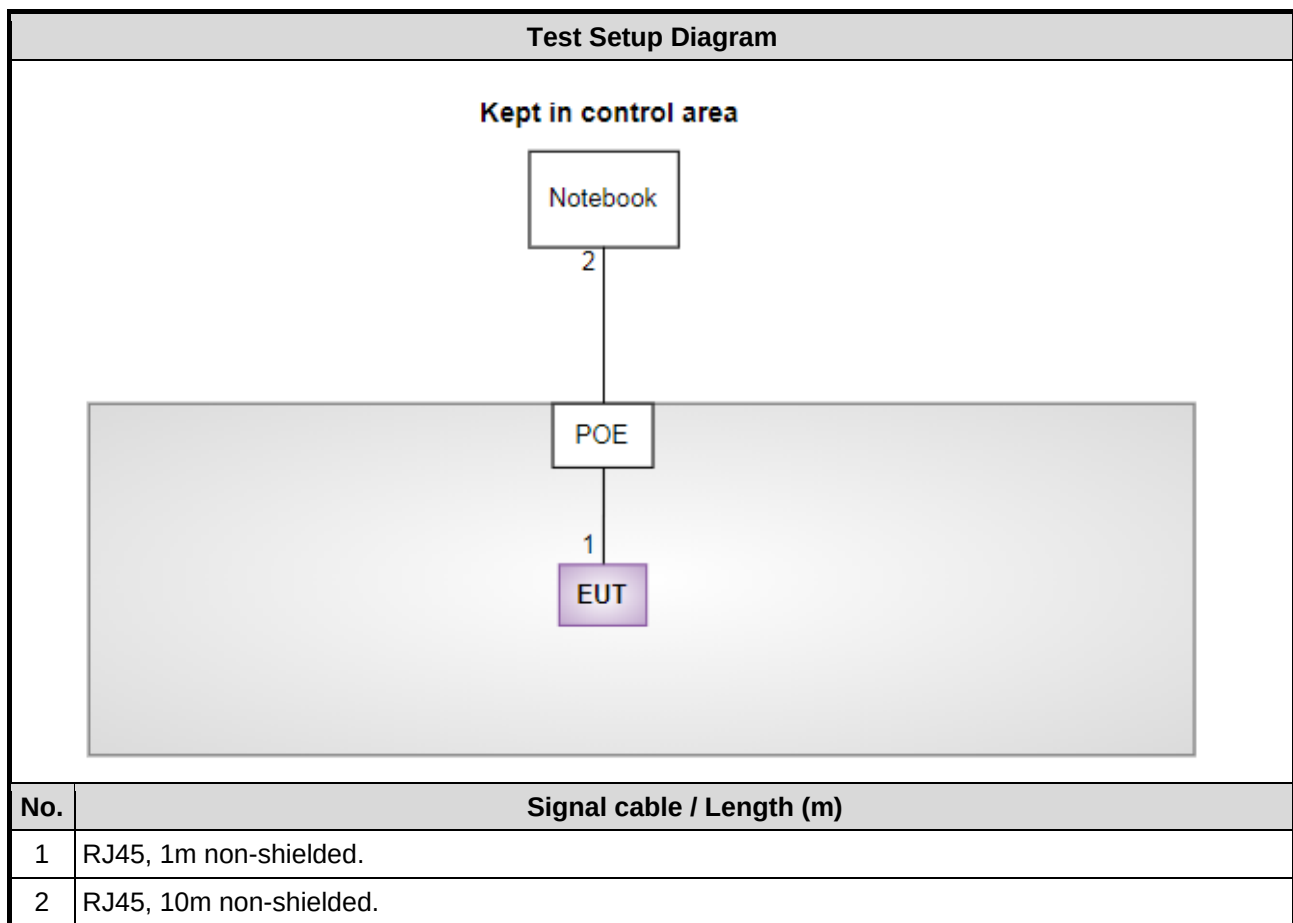
1.1.6 Test Tool and Duty Cycle

Test Tool	Putty, V0.60.0.0			
Duty Cycle and Duty Factor	Mode	BW(MHz)	Duty Cycle (%)	Duty Factor (dB)
	11b	5	100.00%	0.00
	11b	8	100.00%	0.00
	11b	10	100.00%	0.00
	11b	20	100.00%	0.00
	11g	5	98.06%	0.08
	11g	8	98.36%	0.07
	11g	10	98.54%	0.06
	11g	20	98.35%	0.07
	n	5	98.34%	0.07
	n	8	98.25%	0.08
	n	10	98.08%	0.08
	n	20	98.01%	0.09
	n	30	96.56%	0.15
	n	40	95.67%	0.19

1.2 Local Support Equipment List

Support Equipment List					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	Notebook	DELL	Latitude E5470	DoC	---

1.3 Test Setup Chart



1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Jul. 25, 2019				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Receiver	R&S	ESR3	101657	Jan. 08, 2019	Jan. 07, 2020
LISN	R&S	ENV216	101579	Mar. 08, 2019	Mar. 07, 2020
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 23, 2018	Oct. 22, 2019
Measurement Software	AUDIX	e3	6.120210k	NA	NA

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

Test Item	Radiated Emission				
Test Site	966 chamber1 / (03CH03-WS)				
Tested Date	Jun. 18 ~ Jul. 24, 2019				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101499	Jan. 07, 2019	Jan. 06, 2020
Receiver	R&S	ESR3	101658	Dec. 11, 2018	Dec. 10, 2019
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-685	Apr. 17, 2019	Apr. 16, 2020
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Jan. 07, 2019	Jan. 06, 2020
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 15, 2018	Nov. 14, 2019
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 09, 2018	Nov. 08, 2019
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 08, 2018	Oct. 07, 2019
Preamplifier	EMC	EMC02325	980194	Sep. 18, 2018	Sep. 17, 2019
Preamplifier	Agilent	83017A	MY39501308	Oct. 04, 2018	Oct. 03, 2019
Preamplifier	EMC	EMC184045B	980192	Aug. 09, 2018	Aug. 08, 2019
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Oct. 01, 2018	Sep. 30, 2019
RF cable-8M	EMC	EMC104-SM-SM-8000	181107	Oct. 01, 2018	Sep. 30, 2019
RF cable-1M	HUBER+SUHNER	SUCOFLEX104	MY22624/4	Oct. 01, 2018	Sep. 30, 2019
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800-001	Oct. 01, 2018	Sep. 30, 2019
LF cable-3M	EMC	EMC8D-NM-NM-3000	131103	Oct. 01, 2018	Sep. 30, 2019
LF cable-13M	EMC	EMC8D-NM-NM-13000	131104	Oct. 01, 2018	Sep. 30, 2019
Measurement Software	AUDIX	e3	6.120210g	NA	NA

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

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Tested Date	Jul. 29, 2019				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101063	Apr. 17, 2019	Apr. 16, 2020
Power Meter	Anritsu	ML2495A	1241002	Oct. 09, 2018	Oct. 08, 2019
Power Sensor	Anritsu	MA2411B	1207366	Oct. 09, 2018	Oct. 08, 2019
DC POWER SOURCE	GW INSTEK	GPC-6030D	EM892433	Oct. 25, 2018	Oct. 24, 2019
Measurement Software	Sporton	SENSE-15247_DTS	V5.10	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 Test Standards

According to the specification of EUT, the EUT must comply with following standards and KDB documents.

47 CFR FCC Part 15.247

ANSI C63.10-2013

FCC KDB 558074 D01 15.247 Meas Guidance v05r02

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

1.6 Deviation from Test Standard and Measurement Procedure

None

1.7 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

Measurement Uncertainty	
Parameters	Uncertainty
Bandwidth	±34.130 Hz
Conducted power	±0.808 dB
Power density	±0.583 dB
Conducted emission	±2.715 dB
AC conducted emission	±2.92 dB
Radiated emission ≤ 1GHz	±3.96 dB
Radiated emission > 1GHz	±4.51 dB

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	24°C / 62%	Alex Tsai
Radiated Emissions	03CH03-WS	24-25°C / 61-63%	Roger Lu
RF Conducted	TH01-WS	21°C / 64%	Brad Wu

- FCC Designation No.: TW0009
- FCC site registration No.: 207696
- ISSED#: 10807A
- CAB identifier: TW2732

2.2 The Worst Test Modes and Channel Details

Test item	Modulation Mode	BW (MHz)	Test Frequency (MHz)	Data Rate	Test Configuration
Conducted Emissions	11n 11n	5 10	2412 2412	MCS 0	1
					2
Radiated Emissions ≤1GHz	11n 11n	5 10	2412 2412	MCS 0	1
					2
Radiated Emissions >1GHz	11b	5, 8, 10, 20	2412 / 2437 / 2462	1 Mbps	1, 2
Maximum Output Power	11g	5, 8, 10, 20	2412 / 2437 / 2462	6 Mbps	1, 2
6dB bandwidth Power spectral density	11n	5, 8, 10, 20 30 40	2412 / 2437 / 2462 2417 / 2437 / 2457 2422 / 2437 / 2452	MCS 0	1, 2

NOTE:

1. The EUT had been tested by following test configurations.
 - 1) Configuration 1: Wi-Fi point-to- point
 - 2) Configuration 2: Wi-Fi point-to-multipoint

3 Transmitter Test Results

3.1 Conducted Emissions

3.1.1 Limit of Conducted Emissions

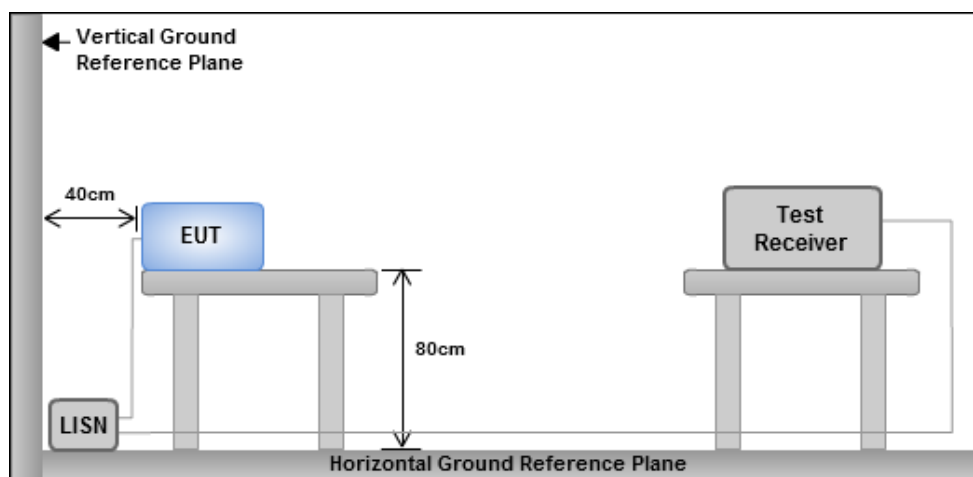
Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

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 Ω LISN port.
3. AC conducted emission measurements is made over frequency range from 150 kHz to 30 MHz.
4. This measurement was performed with AC 120V / 60Hz.

3.1.3 Test Setup

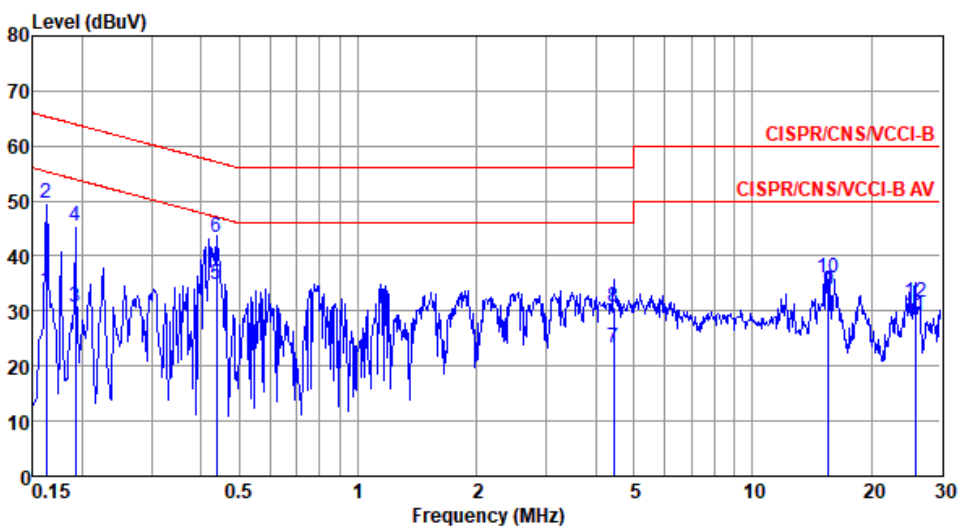


- Note: 1. Support units were connected to second LISN.
 2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

3.1.4 Test Result of Conducted Emissions

BW(MHz) : 5MHz

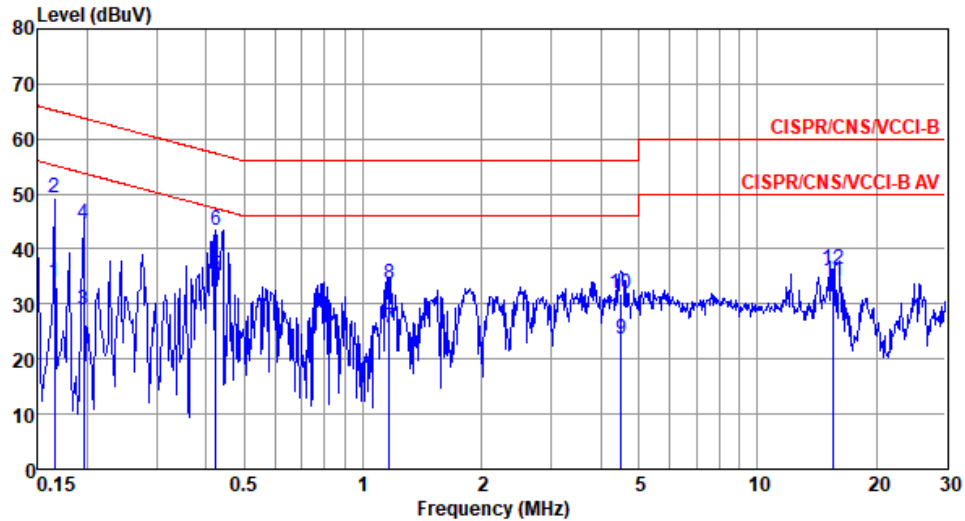
Modulation	11n	Test Freq. (MHz)	2412
Power Phase	Line	Test Configuration	1



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.162	33.57	55.34	-21.77	23.98	9.53	0.06	Average
2	0.162	49.45	65.34	-15.89	39.86	9.53	0.06	QP
3	0.192	30.69	53.93	-23.24	21.08	9.54	0.07	Average
4	0.192	45.46	63.93	-18.47	35.85	9.54	0.07	QP
5*	0.437	34.76	47.11	-12.35	25.11	9.57	0.08	Average
6	0.437	43.27	57.11	-13.84	33.62	9.57	0.08	QP
7	4.454	23.22	46.00	-22.78	13.31	9.61	0.30	Average
8	4.454	30.58	56.00	-25.42	20.67	9.61	0.30	QP
9	15.619	33.56	50.00	-16.44	23.33	9.66	0.57	Average
10	15.619	35.89	60.00	-24.11	25.66	9.66	0.57	QP
11	25.878	29.27	50.00	-20.73	18.94	9.63	0.70	Average
12	25.878	31.71	60.00	-28.29	21.38	9.63	0.70	QP

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

Modulation	11n	Test Freq. (MHz)	2412
Power Phase	Neutral	Test Configuration	1

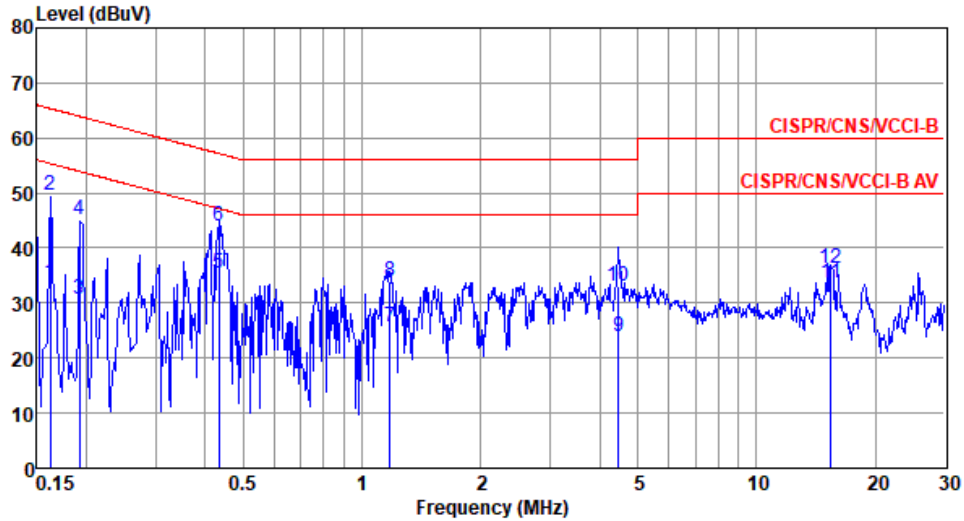


	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.165	33.86	55.21	-21.35	24.23	9.57	0.06	Average
2	0.165	49.27	65.21	-15.94	39.64	9.57	0.06	QP
3	0.195	28.80	53.80	-25.00	19.15	9.58	0.07	Average
4	0.195	44.58	63.80	-19.22	34.93	9.58	0.07	QP
5*	0.424	35.13	47.37	-12.24	25.44	9.61	0.08	Average
6	0.424	43.51	57.37	-13.86	33.82	9.61	0.08	QP
7	1.166	25.54	46.00	-20.46	15.79	9.64	0.11	Average
8	1.166	33.54	56.00	-22.46	23.79	9.64	0.11	QP
9	4.501	23.74	46.00	-22.26	13.77	9.67	0.30	Average
10	4.501	31.99	56.00	-24.01	22.02	9.67	0.30	QP
11	15.617	34.23	50.00	-15.77	23.89	9.77	0.57	Average
12	15.617	36.35	60.00	-23.65	26.01	9.77	0.57	QP

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

BW(MHz) : 10MHz

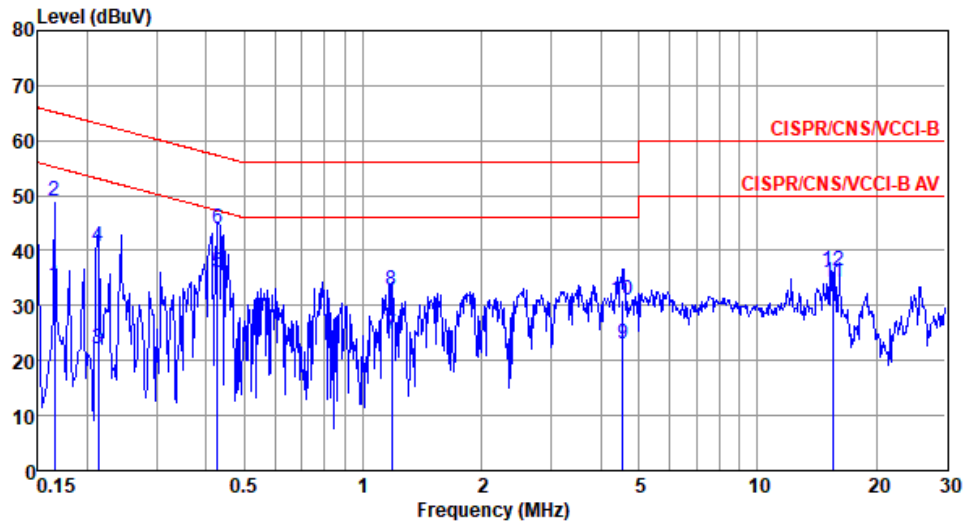
Modulation	11n	Test Freq. (MHz)	2412
Power Phase	Line	Test Configuration	2



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.162	33.75	55.34	-21.59	24.16	9.53	0.06	Average
2	0.162	49.50	65.34	-15.84	39.91	9.53	0.06	QP
3	0.192	30.68	53.93	-23.25	21.07	9.54	0.07	Average
4	0.192	45.26	63.93	-18.67	35.65	9.54	0.07	QP
5*	0.433	35.52	47.20	-11.68	25.87	9.57	0.08	Average
6	0.433	43.89	57.20	-13.31	34.24	9.57	0.08	QP
7	1.178	25.54	46.00	-20.46	15.83	9.60	0.11	Average
8	1.178	33.98	56.00	-22.02	24.27	9.60	0.11	QP
9	4.463	24.03	46.00	-21.97	14.12	9.61	0.30	Average
10	4.463	33.06	56.00	-22.94	23.15	9.61	0.30	QP
11	15.435	33.78	50.00	-16.22	23.56	9.66	0.56	Average
12	15.435	36.20	60.00	-23.80	25.98	9.66	0.56	QP

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

Modulation	11n	Test Freq. (MHz)	2412
Power Phase	Neutral	Test Configuration	2



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.165	33.70	55.21	-21.51	24.07	9.57	0.06	Average
2	0.165	49.06	65.21	-16.15	39.43	9.57	0.06	QP
3	0.213	22.18	53.10	-30.92	12.53	9.58	0.07	Average
4	0.213	40.85	63.10	-22.25	31.20	9.58	0.07	QP
5*	0.428	36.05	47.29	-11.24	26.36	9.61	0.08	Average
6	0.428	43.96	57.29	-13.33	34.27	9.61	0.08	QP
7	1.184	24.78	46.00	-21.22	15.03	9.64	0.11	Average
8	1.184	32.81	56.00	-23.19	23.06	9.64	0.11	QP
9	4.549	23.00	46.00	-23.00	13.03	9.67	0.30	Average
10	4.549	31.09	56.00	-24.91	21.12	9.67	0.30	QP
11	15.617	34.24	50.00	-15.76	23.90	9.77	0.57	Average
12	15.617	36.23	60.00	-23.77	25.89	9.77	0.57	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).
 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

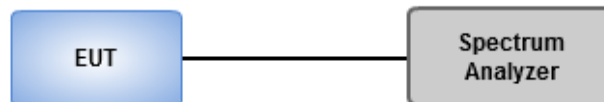
6dB Bandwidth

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

Configuration 1: Wi-Fi point-to-point

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
11b-5M_Nss1,(1Mbps)_2TX	2.572M	3.509M	3M51G1D	2.572M	3.509M
11b-8M_Nss1,(1Mbps)_2TX	4.058M	5.557M	5M56G1D	4.058M	5.557M
11b-10M_Nss1,(1Mbps)_2TX	5.072M	7.019M	7M02G1D	5.036M	6.983M
11b-20M_Nss1,(1Mbps)_2TX	10.072M	14.11M	14M1G1D	10M	13.965M
11g-5M_Nss1,(6Mbps)_2TX	4.13M	4.161M	4M16D1D	4.112M	4.143M
11g-8M_Nss1,(6Mbps)_2TX	6.58M	6.599M	6M60D1D	6.522M	6.57M
11g-10M_Nss1,(6Mbps)_2TX	8.225M	8.249M	8M25D1D	8.225M	8.249M
11g-20M_Nss1,(6Mbps)_2TX	16.449M	16.787M	16M8D1D	16.377M	16.643M
HT-5M_Nss1,(MCS0)_2TX	4.475M	4.45M	4M45D1D	4.42M	4.45M
HT-8M_Nss1,(MCS0)_2TX	7.043M	7.062M	7M06D1D	7.014M	7.033M
HT-10M_Nss1,(MCS0)_2TX	8.841M	8.828M	8M83D1D	8.804M	8.828M
HT-20M_Nss1,(MCS0)_2TX	17.609M	17.945M	17M9D1D	17.609M	17.8M
HT-30M_Nss1,(MCS0)_2TX	26.522M	26.809M	26M8D1D	26.304M	26.7M
HT-40M_Nss1,(MCS0)_2TX	36.522M	37.482M	37M5D1D	36.377M	36.903M

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

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

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
11b-5M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	2.572M	3.509M	2.572M	3.509M
2437MHz	Pass	500k	2.572M	3.509M	2.572M	3.509M
2462MHz	Pass	500k	2.572M	3.509M	2.572M	3.509M
11b-8M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	4.058M	5.557M	4.058M	5.557M
2437MHz	Pass	500k	4.058M	5.557M	4.058M	5.557M
2462MHz	Pass	500k	4.058M	5.557M	4.058M	5.557M
11b-10M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	5.072M	7.019M	5.072M	7.019M
2437MHz	Pass	500k	5.036M	6.983M	5.036M	6.983M
2462MHz	Pass	500k	5.036M	6.983M	5.036M	6.983M

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
11b-20M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	10.072M	13.965M	10.072M	13.965M
2437MHz	Pass	500k	10M	13.965M	10M	13.965M
2462MHz	Pass	500k	10.072M	14.11M	10.072M	13.965M
11g-5M_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	4.112M	4.143M	4.112M	4.161M
2437MHz	Pass	500k	4.13M	4.143M	4.13M	4.143M
2462MHz	Pass	500k	4.112M	4.143M	4.13M	4.143M
11g-8M_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	6.522M	6.599M	6.58M	6.599M
2437MHz	Pass	500k	6.551M	6.57M	6.551M	6.57M
2462MHz	Pass	500k	6.551M	6.57M	6.551M	6.57M
11g-10M_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	8.225M	8.249M	8.225M	8.249M
2437MHz	Pass	500k	8.225M	8.249M	8.225M	8.249M
2462MHz	Pass	500k	8.225M	8.249M	8.225M	8.249M
11g-20M_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.377M	16.787M	16.377M	16.643M
2437MHz	Pass	500k	16.377M	16.787M	16.449M	16.787M
2462MHz	Pass	500k	16.377M	16.643M	16.377M	16.643M
HT-5M_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	4.457M	4.45M	4.438M	4.45M
2437MHz	Pass	500k	4.457M	4.45M	4.42M	4.45M
2462MHz	Pass	500k	4.475M	4.45M	4.457M	4.45M
HT-8M_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	7.014M	7.062M	7.014M	7.062M
2437MHz	Pass	500k	7.014M	7.033M	7.043M	7.062M
2462MHz	Pass	500k	7.043M	7.033M	7.014M	7.062M
HT-10M_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	8.804M	8.828M	8.841M	8.828M
2437MHz	Pass	500k	8.804M	8.828M	8.804M	8.828M
2462MHz	Pass	500k	8.804M	8.828M	8.804M	8.828M
HT-20M_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	17.609M	17.8M	17.609M	17.8M
2437MHz	Pass	500k	17.609M	17.945M	17.609M	17.945M

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
2462MHz	Pass	500k	17.609M	17.873M	17.609M	17.8M
HT-30M_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2417MHz	Pass	500k	26.522M	26.809M	26.413M	26.809M
2437MHz	Pass	500k	26.304M	26.809M	26.304M	26.809M
2457MHz	Pass	500k	26.522M	26.809M	26.413M	26.7M
HT-40M_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	36.522M	37.192M	36.377M	36.903M
2437MHz	Pass	500k	36.377M	37.482M	36.377M	37.048M
2452MHz	Pass	500k	36.522M	37.192M	36.522M	36.903M

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

Configuration 2: Wi-Fi point-to-multipoint Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
11b-5M_Nss1,(1Mbps)_2TX	2.572M	3.509M	3M51G1D	2.572M	3.509M
11b-8M_Nss1,(1Mbps)_2TX	4.058M	5.557M	5M56G1D	4.058M	5.557M
11b-10M_Nss1,(1Mbps)_2TX	5.072M	7.019M	7M02G1D	5.036M	6.983M
11b-20M_Nss1,(1Mbps)_2TX	10.072M	14.11M	14M1G1D	10M	13.965M
11g-5M_Nss1,(6Mbps)_2TX	4.13M	4.143M	4M14D1D	4.112M	4.124M
11g-8M_Nss1,(6Mbps)_2TX	6.551M	6.57M	6M57D1D	6.551M	6.541M
11g-10M_Nss1,(6Mbps)_2TX	8.225M	8.213M	8M21D1D	8.225M	8.177M
11g-20M_Nss1,(6Mbps)_2TX	16.377M	16.787M	16M8D1D	16.377M	16.643M
HT-5M_Nss1,(MCS0)_2TX	4.457M	4.45M	4M45D1D	4.42M	4.414M
HT-8M_Nss1,(MCS0)_2TX	7.043M	7.033M	7M03D1D	6.986M	7.004M
HT-10M_Nss1,(MCS0)_2TX	8.841M	8.828M	8M83D1D	8.804M	8.828M
HT-20M_Nss1,(MCS0)_2TX	17.609M	17.945M	17M9D1D	17.609M	17.8M
HT-30M_Nss1,(MCS0)_2TX	26.522M	26.809M	26M8D1D	26.413M	26.7M
HT-40M_Nss1,(MCS0)_2TX	36.522M	37.482M	37M5D1D	36.377M	36.903M

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

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
11b-5M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	2.572M	3.509M	2.572M	3.509M
2437MHz	Pass	500k	2.572M	3.509M	2.572M	3.509M
2462MHz	Pass	500k	2.572M	3.509M	2.572M	3.509M
11b-8M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	4.058M	5.557M	4.058M	5.557M
2437MHz	Pass	500k	4.058M	5.557M	4.058M	5.557M
2462MHz	Pass	500k	4.058M	5.557M	4.058M	5.557M
11b-10M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	5.072M	7.019M	5.072M	7.019M
2437MHz	Pass	500k	5.036M	6.983M	5.036M	6.983M
2462MHz	Pass	500k	5.036M	6.983M	5.036M	6.983M
11b-20M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
2412MHz	Pass	500k	10.072M	13.965M	10.072M	13.965M
2437MHz	Pass	500k	10M	13.965M	10M	13.965M
2462MHz	Pass	500k	10.072M	14.11M	10.072M	13.965M
11g-5M_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	4.112M	4.124M	4.13M	4.124M
2437MHz	Pass	500k	4.13M	4.124M	4.112M	4.143M
2462MHz	Pass	500k	4.112M	4.124M	4.112M	4.124M
11g-8M_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	6.551M	6.541M	6.551M	6.541M
2437MHz	Pass	500k	6.551M	6.541M	6.551M	6.541M
2462MHz	Pass	500k	6.551M	6.57M	6.551M	6.541M
11g-10M_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	8.225M	8.213M	8.225M	8.213M
2437MHz	Pass	500k	8.225M	8.213M	8.225M	8.213M
2462MHz	Pass	500k	8.225M	8.177M	8.225M	8.177M
11g-20M_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.377M	16.787M	16.377M	16.643M
2437MHz	Pass	500k	16.377M	16.787M	16.377M	16.643M
2462MHz	Pass	500k	16.377M	16.715M	16.377M	16.643M
HT-5M_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	4.438M	4.45M	4.42M	4.45M
2437MHz	Pass	500k	4.457M	4.45M	4.457M	4.432M
2462MHz	Pass	500k	4.438M	4.432M	4.438M	4.414M
HT-8M_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	7.014M	7.004M	6.986M	7.033M
2437MHz	Pass	500k	7.043M	7.004M	7.014M	7.004M
2462MHz	Pass	500k	7.043M	7.033M	7.014M	7.004M
HT-10M_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	8.804M	8.828M	8.804M	8.828M
2437MHz	Pass	500k	8.804M	8.828M	8.804M	8.828M
2462MHz	Pass	500k	8.841M	8.828M	8.804M	8.828M
HT-20M_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	17.609M	17.8M	17.609M	17.8M
2437MHz	Pass	500k	17.609M	17.8M	17.609M	17.945M
2462MHz	Pass	500k	17.609M	17.873M	17.609M	17.8M

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
HT-30M_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2417MHz	Pass	500k	26.522M	26.809M	26.413M	26.809M
2437MHz	Pass	500k	26.413M	26.809M	26.413M	26.7M
2457MHz	Pass	500k	26.522M	26.809M	26.413M	26.7M
HT-40M_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	36.522M	37.192M	36.377M	36.903M
2437MHz	Pass	500k	36.377M	37.482M	36.377M	37.048M
2452MHz	Pass	500k	36.522M	37.192M	36.522M	36.903M

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

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.

Antenna gain $> 6\text{dBi}$

Non Fixed, point to point operations.

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

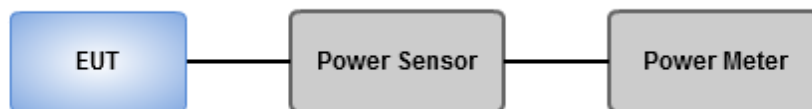
Fixed, point to point operations

Systems operating in the 2400–2483.5 MHz band that are used exclusively for fixed, point-to-point Operations, maximum peak output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

3.3.2 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

Configuration 1: Wi-Fi point-to-point

Summary of Peak Conducted Output Power

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
11b-5M_Nss1,(1Mbps)_2TX	25.70	0.37154
11b-8M_Nss1,(1Mbps)_2TX	26.08	0.40551
11b-10M_Nss1,(1Mbps)_2TX	26.11	0.40832
11b-20M_Nss1,(1Mbps)_2TX	26.10	0.40738
11g-5M_Nss1,(6Mbps)_2TX	29.25	0.84140
11g-8M_Nss1,(6Mbps)_2TX	29.22	0.83560
11g-10M_Nss1,(6Mbps)_2TX	29.21	0.83368
11g-20M_Nss1,(6Mbps)_2TX	29.08	0.80910
HT-5M_Nss1,(MCS0)_2TX	29.26	0.84333
HT-8M_Nss1,(MCS0)_2TX	29.22	0.83560
HT-10M_Nss1,(MCS0)_2TX	29.21	0.83368
HT-20M_Nss1,(MCS0)_2TX	29.14	0.82035
HT-30M_Nss1,(MCS0)_2TX	29.08	0.80910
HT-40M_Nss1,(MCS0)_2TX	23.97	0.24946

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
11b-5M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	22.71	22.41	25.57	29.33	33.57	Inf
2437MHz	Pass	8.00	22.72	22.65	25.70	29.33	33.70	Inf
2462MHz	Pass	8.00	22.26	21.82	25.06	29.33	33.06	Inf
11b-8M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	22.91	22.68	25.81	29.33	33.81	Inf
2437MHz	Pass	8.00	23.09	22.94	26.03	29.33	34.03	Inf
2462MHz	Pass	8.00	23.14	22.99	26.08	29.33	34.08	Inf
11b-10M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	22.96	22.71	25.85	29.33	33.85	Inf
2437MHz	Pass	8.00	22.78	22.7	25.75	29.33	33.75	Inf

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
2462MHz	Pass	8.00	23.15	23.04	26.11	29.33	34.11	Inf
11b-20M_Nss1,(1Mbps)_2 TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	21.86	21.55	24.72	29.33	32.72	Inf
2437MHz	Pass	8.00	22.42	22.21	25.33	29.33	33.33	Inf
2462MHz	Pass	8.00	23.15	23.02	26.10	29.33	34.10	Inf
11g-5M_Nss1,(6Mbps)_2T X	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	26.34	26.11	29.24	29.33	37.24	Inf
2437MHz	Pass	8.00	26.38	26.05	29.23	29.33	37.23	Inf
2462MHz	Pass	8.00	26.41	26.06	29.25	29.33	37.25	Inf
11g-8M_Nss1,(6Mbps)_2T X	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	26.33	25.92	29.14	29.33	37.14	Inf
2437MHz	Pass	8.00	26.34	26.01	29.19	29.33	37.19	Inf
2462MHz	Pass	8.00	26.39	26.02	29.22	29.33	37.22	Inf
11g-10M_Nss1,(6Mbps)_2 TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	26.35	25.86	29.12	29.33	37.12	Inf
2437MHz	Pass	8.00	26.28	25.95	29.13	29.33	37.13	Inf
2462MHz	Pass	8.00	26.41	25.98	29.21	29.33	37.21	Inf
11g-20M_Nss1,(6Mbps)_2 TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	23.98	24.21	27.11	29.33	35.11	Inf
2437MHz	Pass	8.00	26.22	25.91	29.08	29.33	37.08	Inf
2462MHz	Pass	8.00	25.45	24.96	28.22	29.33	36.22	Inf
HT-5M_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	26.56	25.91	29.26	29.33	37.26	Inf
2437MHz	Pass	8.00	26.45	26.01	29.25	29.33	37.25	Inf
2462MHz	Pass	8.00	26.43	26.02	29.24	29.33	37.24	Inf
HT-8M_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	26.49	25.86	29.20	29.33	37.20	Inf
2437MHz	Pass	8.00	26.48	25.93	29.22	29.33	37.22	Inf
2462MHz	Pass	8.00	26.42	25.98	29.22	29.33	37.22	Inf
HT-10M_Nss1,(MCS0)_2T X	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	26.32	25.61	28.99	29.33	36.99	Inf

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
2437MHz	Pass	8.00	26.34	25.96	29.16	29.33	37.16	Inf
2462MHz	Pass	8.00	26.44	25.94	29.21	29.33	37.21	Inf
HT-20M_Nss1,(MCS0)_2T X	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	23.49	22.95	26.24	29.33	34.24	Inf
2437MHz	Pass	8.00	26.34	25.9	29.14	29.33	37.14	Inf
2462MHz	Pass	8.00	25.28	24.45	27.90	29.33	35.90	Inf
HT-30M_Nss1,(MCS0)_2T X	-	-	-	-	-	-	-	-
2417MHz	Pass	8.00	20.31	19.76	23.05	29.33	31.05	Inf
2437MHz	Pass	8.00	26.27	25.86	29.08	29.33	37.08	Inf
2457MHz	Pass	8.00	21.12	20.53	23.85	29.33	31.85	Inf
HT-40M_Nss1,(MCS0)_2T X	-	-	-	-	-	-	-	-
2422MHz	Pass	8.00	18.22	17.75	21.00	29.33	29.00	Inf
2437MHz	Pass	8.00	21.03	20.89	23.97	29.33	31.97	Inf
2452MHz	Pass	8.00	20.25	19.32	22.82	29.33	30.82	Inf

DG = Directional Gain = 8 dBi > 6dBi

Power limit shall be reduced to 30 dBm – (8 dBi – 6 dBi)/3 = 29.33 dBm

Port X = Port X output power

Summary of Conducted (Average) Output Power

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
11b-5M_Nss1,(1Mbps)_2TX	23.60	0.22909
11b-8M_Nss1,(1Mbps)_2TX	23.79	0.23933
11b-10M_Nss1,(1Mbps)_2TX	23.81	0.24044
11b-20M_Nss1,(1Mbps)_2TX	23.78	0.23878
11g-5M_Nss1,(6Mbps)_2TX	21.95	0.15668
11g-8M_Nss1,(6Mbps)_2TX	21.94	0.15631
11g-10M_Nss1,(6Mbps)_2TX	21.92	0.15560
11g-20M_Nss1,(6Mbps)_2TX	21.84	0.15276
HT-5M_Nss1,(MCS0)_2TX	21.92	0.15560
HT-8M_Nss1,(MCS0)_2TX	21.85	0.15311
HT-10M_Nss1,(MCS0)_2TX	21.93	0.15596
HT-20M_Nss1,(MCS0)_2TX	21.71	0.14825
HT-30M_Nss1,(MCS0)_2TX	21.82	0.15205
HT-40M_Nss1,(MCS0)_2TX	15.69	0.03707

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
11b-5M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	20.56	20.3	23.44	-	31.44	Inf
2437MHz	Pass	8.00	20.65	20.53	23.60	-	31.60	Inf
2462MHz	Pass	8.00	19.95	19.66	22.82	-	30.82	Inf
11b-8M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	20.62	20.25	23.45	-	31.45	Inf
2437MHz	Pass	8.00	20.83	20.72	23.79	-	31.79	Inf
2462MHz	Pass	8.00	20.86	20.68	23.78	-	31.78	Inf
11b-10M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	20.55	20.41	23.49	-	31.49	Inf
2437MHz	Pass	8.00	20.51	20.4	23.47	-	31.47	Inf
2462MHz	Pass	8.00	20.88	20.71	23.81	-	31.81	Inf
11b-20M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	19.55	19.28	22.43	-	30.43	Inf

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
2437MHz	Pass	8.00	20.31	20.01	23.17	-	31.17	Inf
2462MHz	Pass	8.00	20.88	20.65	23.78	-	31.78	Inf
11g-5M_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	18.82	18.86	21.85	-	29.85	Inf
2437MHz	Pass	8.00	18.79	18.56	21.69	-	29.69	Inf
2462MHz	Pass	8.00	18.86	19.02	21.95	-	29.95	Inf
11g-8M_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	18.83	18.46	21.66	-	29.66	Inf
2437MHz	Pass	8.00	18.55	18.39	21.48	-	29.48	Inf
2462MHz	Pass	8.00	18.84	19.01	21.94	-	29.94	Inf
11g-10M_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	18.91	18.38	21.66	-	29.66	Inf
2437MHz	Pass	8.00	18.72	18.49	21.62	-	29.62	Inf
2462MHz	Pass	8.00	18.96	18.85	21.92	-	29.92	Inf
11g-20M_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	14.82	14.91	17.88	-	25.88	Inf
2437MHz	Pass	8.00	18.93	18.73	21.84	-	29.84	Inf
2462MHz	Pass	8.00	16.17	15.76	18.98	-	26.98	Inf
HT-5M_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	19.09	18.54	21.83	-	29.83	Inf
2437MHz	Pass	8.00	18.78	18.63	21.72	-	29.72	Inf
2462MHz	Pass	8.00	18.98	18.83	21.92	-	29.92	Inf
HT-8M_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	18.93	18.53	21.74	-	29.74	Inf
2437MHz	Pass	8.00	18.65	18.49	21.58	-	29.58	Inf
2462MHz	Pass	8.00	18.9	18.78	21.85	-	29.85	Inf
HT-10M_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	18.88	18.29	21.61	-	29.61	Inf
2437MHz	Pass	8.00	18.7	18.56	21.64	-	29.64	Inf
2462MHz	Pass	8.00	19.02	18.81	21.93	-	29.93	Inf
HT-20M_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	14.88	14.6	17.75	-	25.75	Inf
2437MHz	Pass	8.00	18.81	18.59	21.71	-	29.71	Inf
2462MHz	Pass	8.00	16.25	15.77	19.03	-	27.03	Inf

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
HT-30M_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2417MHz	Pass	8.00	11.69	11.25	14.49	-	22.49	Inf
2437MHz	Pass	8.00	18.91	18.71	21.82	-	29.82	Inf
2457MHz	Pass	8.00	12.82	12.22	15.54	-	23.54	Inf
HT-40M_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2422MHz	Pass	8.00	9.56	9.12	12.36	-	20.36	Inf
2437MHz	Pass	8.00	12.71	12.65	15.69	-	23.69	Inf
2452MHz	Pass	8.00	11.56	10.77	14.19	-	22.19	Inf

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

Note : Conducted average output power is for reference only

Configuration 2: Wi-Fi point-to-multipoint

Summary of Peak Conducted Output Power

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
11b-5M_Nss1,(1Mbps)_2TX	25.70	0.37154
11b-8M_Nss1,(1Mbps)_2TX	26.08	0.40551
11b-10M_Nss1,(1Mbps)_2TX	26.11	0.40832
11b-20M_Nss1,(1Mbps)_2TX	26.10	0.40738
11g-5M_Nss1,(6Mbps)_2TX	27.79	0.60117
11g-8M_Nss1,(6Mbps)_2TX	27.69	0.58749
11g-10M_Nss1,(6Mbps)_2TX	27.93	0.62087
11g-20M_Nss1,(6Mbps)_2TX	27.86	0.61094
HT-5M_Nss1,(MCS0)_2TX	27.63	0.57943
HT-8M_Nss1,(MCS0)_2TX	27.82	0.60534
HT-10M_Nss1,(MCS0)_2TX	27.96	0.62517
HT-20M_Nss1,(MCS0)_2TX	27.90	0.61660
HT-30M_Nss1,(MCS0)_2TX	27.70	0.58884
HT-40M_Nss1,(MCS0)_2TX	23.97	0.24946

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
11b-5M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	22.71	22.41	25.57	28.00	33.57	36.00
2437MHz	Pass	8.00	22.72	22.65	25.70	28.00	33.70	36.00
2462MHz	Pass	8.00	22.26	21.82	25.06	28.00	33.06	36.00
11b-8M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	22.91	22.68	25.81	28.00	33.81	36.00
2437MHz	Pass	8.00	23.09	22.94	26.03	28.00	34.03	36.00
2462MHz	Pass	8.00	23.14	22.99	26.08	28.00	34.08	36.00
11b-10M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	22.96	22.71	25.85	28.00	33.85	36.00
2437MHz	Pass	8.00	22.78	22.7	25.75	28.00	33.75	36.00
2462MHz	Pass	8.00	23.15	23.04	26.11	28.00	34.11	36.00

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
11b-20M_Nss1,(1Mbps)_2 TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	21.86	21.55	24.72	28.00	32.72	36.00
2437MHz	Pass	8.00	22.42	22.21	25.33	28.00	33.33	36.00
2462MHz	Pass	8.00	23.15	23.02	26.10	28.00	34.10	36.00
11g-5M_Nss1,(6Mbps)_2T X	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	25.01	24.46	27.75	28.00	35.75	36.00
2437MHz	Pass	8.00	24.95	24.61	27.79	28.00	35.79	36.00
2462MHz	Pass	8.00	24.88	24.34	27.63	28.00	35.63	36.00
11g-8M_Nss1,(6Mbps)_2T X	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	24.94	24.41	27.69	28.00	35.69	36.00
2437MHz	Pass	8.00	24.75	24.45	27.61	28.00	35.61	36.00
2462MHz	Pass	8.00	25.12	24.16	27.68	28.00	35.68	36.00
11g-10M_Nss1,(6Mbps)_2 TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	25.01	24.36	27.71	28.00	35.71	36.00
2437MHz	Pass	8.00	25.06	24.78	27.93	28.00	35.93	36.00
2462MHz	Pass	8.00	25.14	24.29	27.75	28.00	35.75	36.00
11g-20M_Nss1,(6Mbps)_2 TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	23.98	24.21	27.11	28.00	35.11	36.00
2437MHz	Pass	8.00	24.95	24.75	27.86	28.00	35.86	36.00
2462MHz	Pass	8.00	24.21	24.04	27.14	28.00	35.14	36.00
HT-5M_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	24.81	24.38	27.61	28.00	35.61	36.00
2437MHz	Pass	8.00	24.82	24.41	27.63	28.00	35.63	36.00
2462MHz	Pass	8.00	24.86	24.31	27.60	28.00	35.60	36.00
HT-8M_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	24.83	24.52	27.69	28.00	35.69	36.00
2437MHz	Pass	8.00	24.72	24.40	27.57	28.00	35.57	36.00
2462MHz	Pass	8.00	24.95	24.67	27.82	28.00	35.82	36.00
HT-10M_Nss1,(MCS0)_2T X	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	25.08	24.82	27.96	28.00	35.96	36.00
2437MHz	Pass	8.00	25.02	24.66	27.85	28.00	35.85	36.00

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
2462MHz	Pass	8.00	25.04	24.81	27.94	28.00	35.94	36.00
HT-20M_Nss1,(MCS0)_2T X	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	23.49	22.95	26.24	28.00	34.24	36.00
2437MHz	Pass	8.00	24.81	24.46	27.65	28.00	35.65	36.00
2462MHz	Pass	8.00	25.28	24.45	27.90	28.00	35.90	36.00
HT-30M_Nss1,(MCS0)_2T X	-	-	-	-	-	-	-	-
2417MHz	Pass	8.00	20.31	19.76	23.05	28.00	31.05	36.00
2437MHz	Pass	8.00	24.91	24.45	27.70	28.00	35.70	36.00
2457MHz	Pass	8.00	21.12	20.53	23.85	28.00	31.85	36.00
HT-40M_Nss1,(MCS0)_2T X	-	-	-	-	-	-	-	-
2422MHz	Pass	8.00	18.22	17.75	21.00	28.00	29.00	36.00
2437MHz	Pass	8.00	21.03	20.89	23.97	28.00	31.97	36.00
2452MHz	Pass	8.00	20.25	19.32	22.82	28.00	30.82	36.00

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

DG = Directional Gain = 8 dBi > 6dBi

Power limit shall be reduced to 30 dBm – (8 dBi – 6 dBi) = 28 dBm

Summary of Conducted (Average) Output Power

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
11b-5M_Nss1,(1Mbps)_2TX	23.60	0.22909
11b-8M_Nss1,(1Mbps)_2TX	23.79	0.23933
11b-10M_Nss1,(1Mbps)_2TX	23.81	0.24044
11b-20M_Nss1,(1Mbps)_2TX	23.78	0.23878
11g-5M_Nss1,(6Mbps)_2TX	18.95	0.07852
11g-8M_Nss1,(6Mbps)_2TX	18.76	0.07516
11g-10M_Nss1,(6Mbps)_2TX	19.59	0.09099
11g-20M_Nss1,(6Mbps)_2TX	19.79	0.09528
HT-5M_Nss1,(MCS0)_2TX	18.82	0.07621
HT-8M_Nss1,(MCS0)_2TX	18.95	0.07852
HT-10M_Nss1,(MCS0)_2TX	19.89	0.09750
HT-20M_Nss1,(MCS0)_2TX	19.85	0.09661
HT-30M_Nss1,(MCS0)_2TX	19.64	0.09204
HT-40M_Nss1,(MCS0)_2TX	15.69	0.03707

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
11b-5M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	20.56	20.3	23.44	-	31.44	-
2437MHz	Pass	8.00	20.65	20.53	23.60	-	31.60	-
2462MHz	Pass	8.00	19.95	19.66	22.82	-	30.82	-
11b-8M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	20.62	20.25	23.45	-	31.45	-
2437MHz	Pass	8.00	20.83	20.72	23.79	-	31.79	-
2462MHz	Pass	8.00	20.86	20.68	23.78	-	31.78	-
11b-10M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	20.55	20.41	23.49	-	31.49	-
2437MHz	Pass	8.00	20.51	20.4	23.47	-	31.47	-
2462MHz	Pass	8.00	20.88	20.71	23.81	-	31.81	-
11b-20M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	19.55	19.28	22.43	-	30.43	-

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
2437MHz	Pass	8.00	20.31	20.01	23.17	-	31.17	-
2462MHz	Pass	8.00	20.88	20.65	23.78	-	31.78	-
11g-5M_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	16.04	15.64	18.85	-	26.85	-
2437MHz	Pass	8.00	16.06	15.82	18.95	-	26.95	-
2462MHz	Pass	8.00	15.98	15.52	18.77	-	26.77	-
11g-8M_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	15.89	15.61	18.76	-	26.76	-
2437MHz	Pass	8.00	15.82	15.65	18.75	-	26.75	-
2462MHz	Pass	8.00	15.94	15.32	18.65	-	26.65	-
11g-10M_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	15.86	15.64	18.76	-	26.76	-
2437MHz	Pass	8.00	16.65	16.50	19.59	-	27.59	-
2462MHz	Pass	8.00	15.98	15.62	18.81	-	26.81	-
11g-20M_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	14.82	14.91	17.88	-	25.88	-
2437MHz	Pass	8.00	16.81	16.74	19.79	-	27.79	-
2462MHz	Pass	8.00	15.25	14.94	18.11	-	26.11	-
HT-5M_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	15.96	15.65	18.82	-	26.82	-
2437MHz	Pass	8.00	15.94	15.68	18.82	-	26.82	-
2462MHz	Pass	8.00	15.91	15.54	18.74	-	26.74	-
HT-8M_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	15.95	15.71	18.84	-	26.84	-
2437MHz	Pass	8.00	15.86	15.66	18.77	-	26.77	-
2462MHz	Pass	8.00	16.01	15.86	18.95	-	26.95	-
HT-10M_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	16.95	16.81	19.89	-	27.89	-
2437MHz	Pass	8.00	16.88	16.66	19.78	-	27.78	-
2462MHz	Pass	8.00	16.92	16.74	19.84	-	27.84	-
HT-20M_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	14.88	14.6	17.75	-	25.75	-
2437MHz	Pass	8.00	16.92	16.75	19.85	-	27.85	-
2462MHz	Pass	8.00	16.25	15.77	19.03	-	27.03	-

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
HT-30M_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2417MHz	Pass	8.00	11.69	11.25	14.49	-	22.49	-
2437MHz	Pass	8.00	16.75	16.50	19.64	-	27.64	-
2457MHz	Pass	8.00	12.82	12.22	15.54	-	23.54	-
HT-40M_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2422MHz	Pass	8.00	9.56	9.12	12.36	-	20.36	-
2437MHz	Pass	8.00	12.71	12.65	15.69	-	23.69	-
2452MHz	Pass	8.00	11.56	10.77	14.19	-	22.19	-

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

Note : Conducted average output power is for reference only

3.4 Power Spectral Density

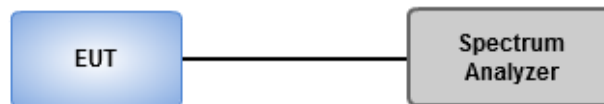
3.4.1 Limit of Power Spectral Density

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

Configuration 1: Wi-Fi point-to-point Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
11b-5M_Nss1,(1Mbps)_2TX	3.24
11b-8M_Nss1,(1Mbps)_2TX	1.53
11b-10M_Nss1,(1Mbps)_2TX	1.62
11b-20M_Nss1,(1Mbps)_2TX	-2.25
11g-5M_Nss1,(6Mbps)_2TX	0.31
11g-8M_Nss1,(6Mbps)_2TX	-1.12
11g-10M_Nss1,(6Mbps)_2TX	-2.10
11g-20M_Nss1,(6Mbps)_2TX	-5.48
HT-5M_Nss1,(MCS0)_2TX	0.23
HT-8M_Nss1,(MCS0)_2TX	-1.31
HT-10M_Nss1,(MCS0)_2TX	-0.99
HT-20M_Nss1,(MCS0)_2TX	-4.60
HT-30M_Nss1,(MCS0)_2TX	-7.15
HT-40M_Nss1,(MCS0)_2TX	-14.72

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
11b-5M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	1.58	0.21	3.24	8.00
2437MHz	Pass	8.00	0.92	0.41	3.02	8.00
2462MHz	Pass	8.00	0.33	0.11	2.39	8.00
11b-8M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	-0.65	-0.87	1.15	8.00
2437MHz	Pass	8.00	-1.13	-1.59	1.47	8.00
2462MHz	Pass	8.00	-0.61	-0.22	1.53	8.00
11b-10M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	-1.81	-1.05	0.76	8.00
2437MHz	Pass	8.00	-1.80	-2.18	0.18	8.00
2462MHz	Pass	8.00	0.21	-1.79	1.62	8.00
11b-20M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
2412MHz	Pass	8.00	-4.72	-5.22	-2.57	8.00
2437MHz	Pass	8.00	-4.35	-4.75	-2.39	8.00
2462MHz	Pass	8.00	-4.60	-4.74	-2.25	8.00
11g-5M_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	-2.77	-2.91	-0.30	8.00
2437MHz	Pass	8.00	-2.13	-1.31	0.31	8.00
2462MHz	Pass	8.00	-2.34	-1.33	0.25	8.00
11g-8M_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	-1.93	-3.01	-1.12	8.00
2437MHz	Pass	8.00	-4.10	-3.92	-1.94	8.00
2462MHz	Pass	8.00	-4.57	-3.23	-2.10	8.00
11g-10M_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	-4.32	-3.59	-2.10	7.33
2437MHz	Pass	8.00	-5.20	-4.96	-3.11	7.33
2462MHz	Pass	8.00	-4.83	-4.90	-2.84	7.33
11g-20M_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	-10.85	-11.31	-9.42	7.33
2437MHz	Pass	8.00	-7.72	-7.11	-5.48	7.33
2462MHz	Pass	8.00	-10.44	-10.39	-8.33	7.33
HT-5M_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	-2.22	-1.60	0.23	7.33
2437MHz	Pass	8.00	-2.69	-3.21	-0.69	7.33
2462MHz	Pass	8.00	-2.73	-1.80	-0.27	7.33
HT-8M_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	-3.67	-5.14	-1.85	7.33
2437MHz	Pass	8.00	-3.63	-5.08	-1.31	7.33
2462MHz	Pass	8.00	-4.69	-3.92	-2.06	7.33
HT-10M_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	-5.62	-5.62	-2.96	7.33
2437MHz	Pass	8.00	-5.46	-4.84	-3.51	7.33
2462MHz	Pass	8.00	-5.40	-2.24	-0.99	7.33
HT-20M_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	-12.13	-11.55	-9.67	7.33
2437MHz	Pass	8.00	-7.73	-7.25	-4.60	7.33
2462MHz	Pass	8.00	-10.14	-11.21	-8.31	7.33
HT-30M_Nss1,(MCS0)_2TX	-	-	-	-	-	-

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
2417MHz	Pass	8.00	-16.36	-17.46	-14.25	7.33
2437MHz	Pass	8.00	-9.80	-8.86	-7.15	7.33
2457MHz	Pass	8.00	-15.15	-15.26	-12.55	7.33
HT-40M_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	8.00	-19.21	-19.99	-17.09	7.33
2437MHz	Pass	8.00	-16.80	-17.48	-14.72	7.33
2452MHz	Pass	8.00	-18.31	-18.66	-15.74	7.33

DG = Directional Gain;

DG = Directional Gain = 8 dBi > 6dBi

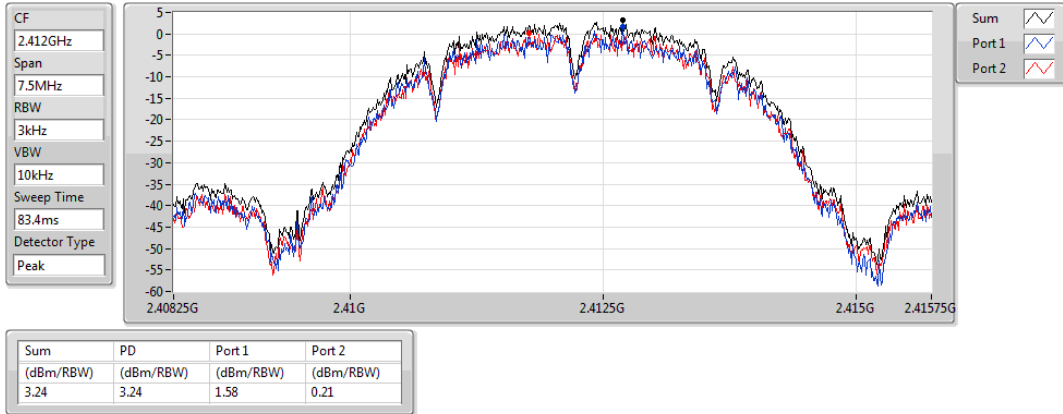
Power limit shall be reduced to 8 dBm – (8 dBi – 6 dBi)/3 = 7.33 dBm

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

11b-5M_Nss1,(1Mbps)_2TX

PSD

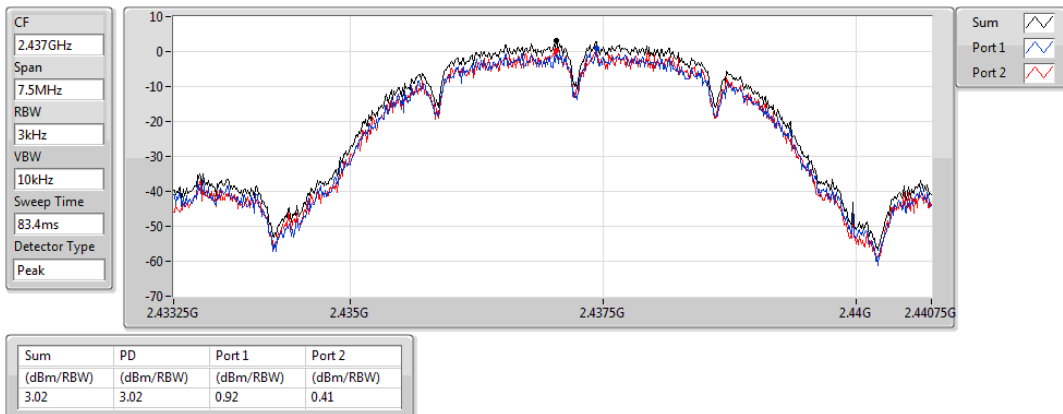
2412MHz



11b-5M_Nss1,(1Mbps)_2TX

PSD

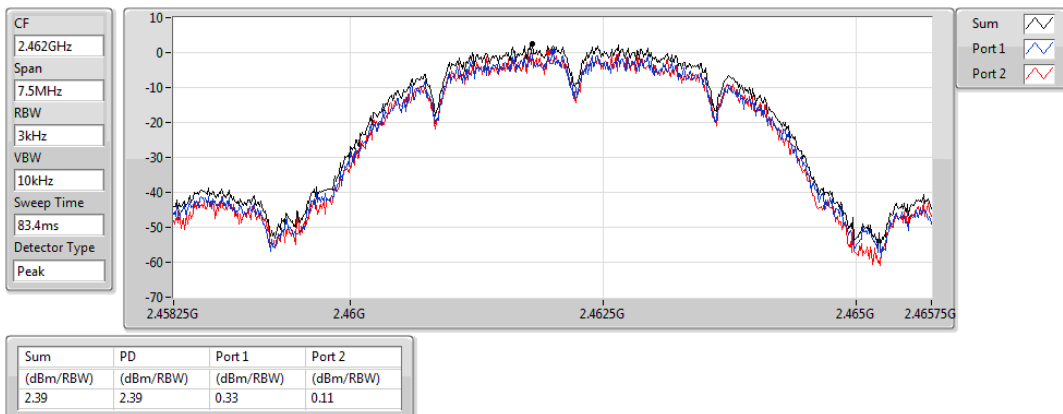
2437MHz



11b-5M_Nss1,(1Mbps)_2TX

PSD

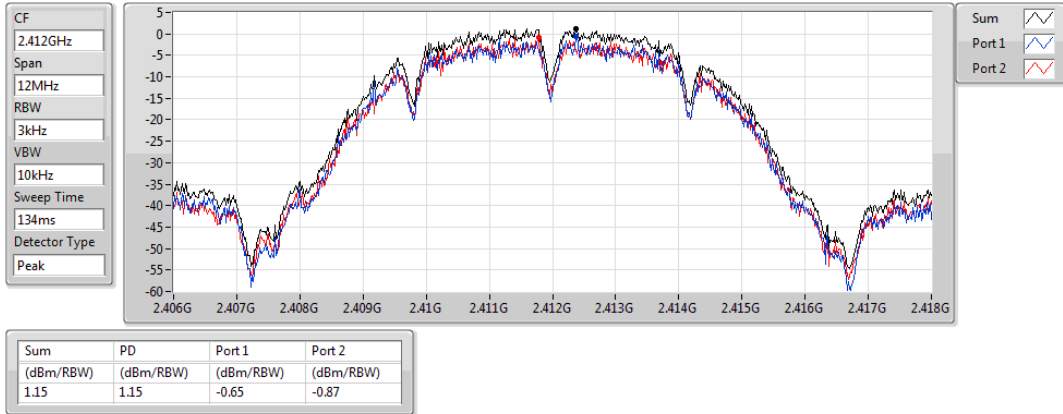
2462MHz



11b-8M_Nss1,(1Mbps)_2TX

PSD

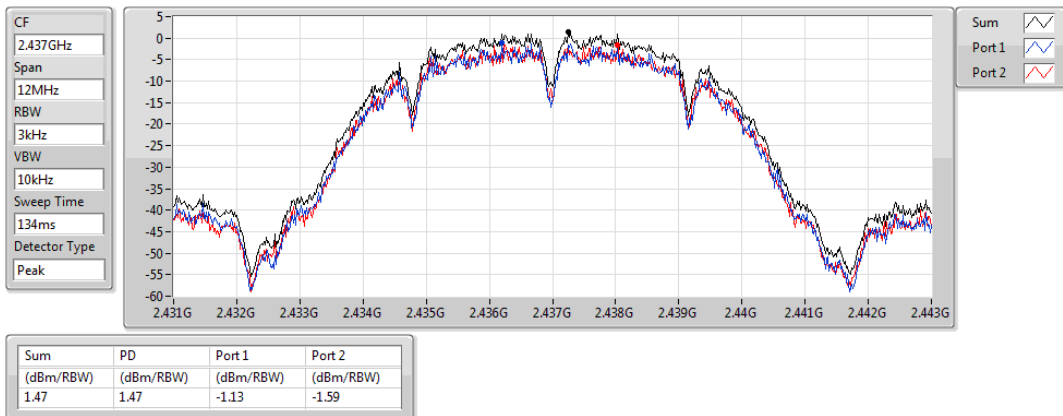
2412MHz



11b-8M_Nss1,(1Mbps)_2TX

PSD

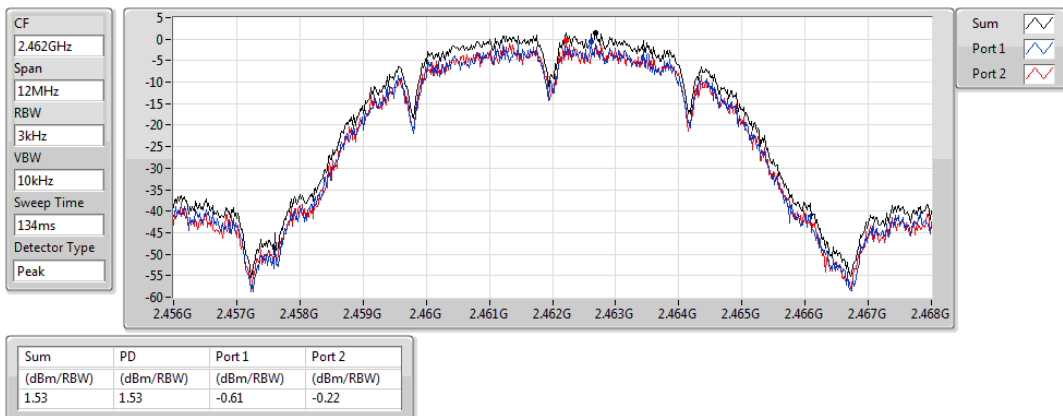
2437MHz



11b-8M_Nss1,(1Mbps)_2TX

PSD

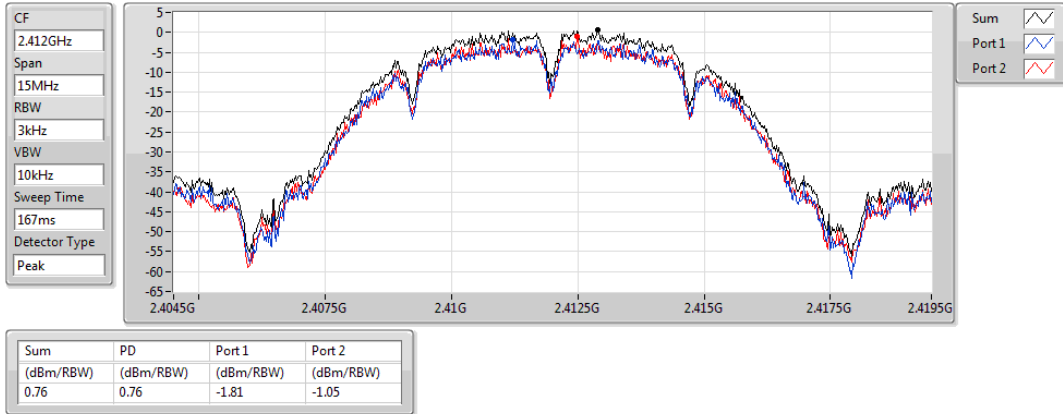
2462MHz



11b-10M_Nss1,(1Mbps)_2TX

PSD

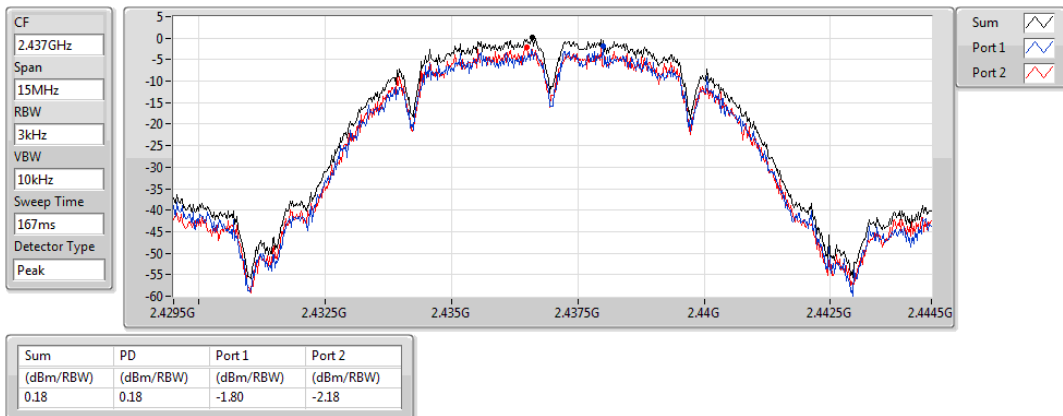
2412MHz



11b-10M_Nss1,(1Mbps)_2TX

PSD

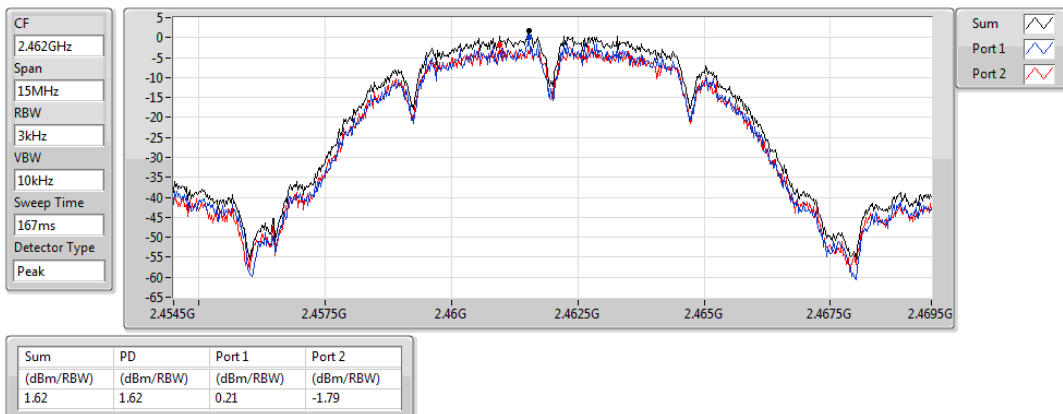
2437MHz



11b-10M_Nss1,(1Mbps)_2TX

PSD

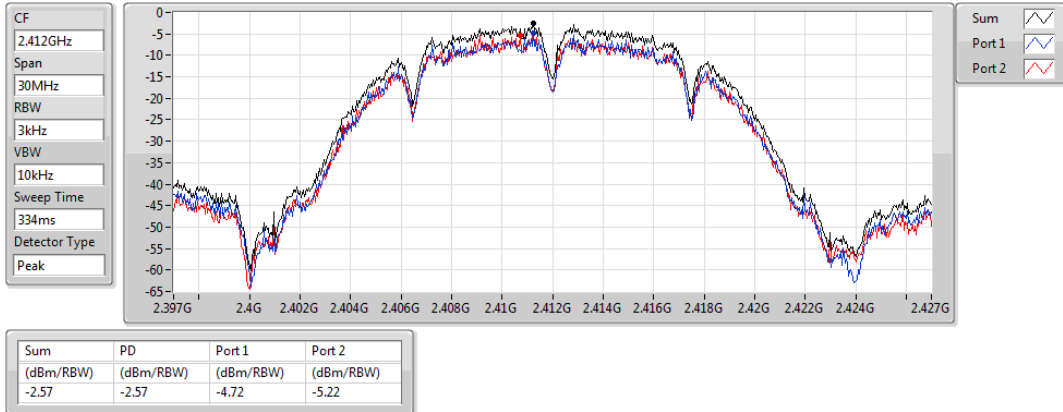
2462MHz



11b-20M_Nss1,(1Mbps)_2TX

PSD

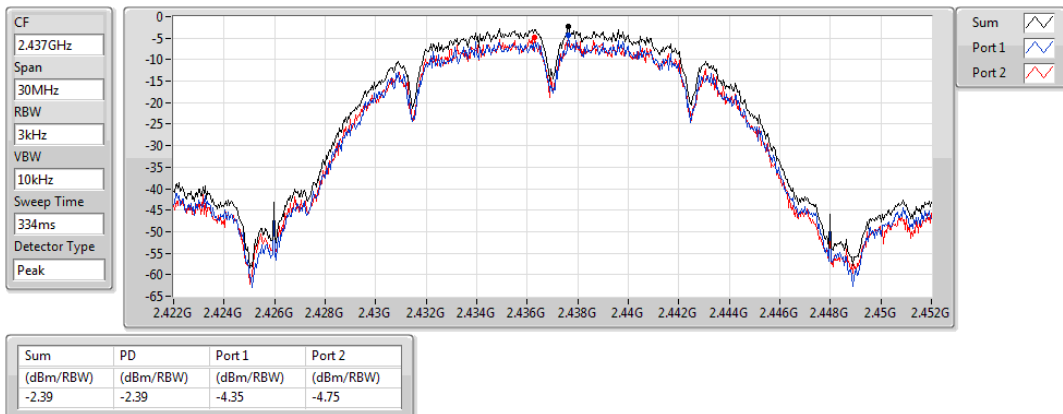
2412MHz



11b-20M_Nss1,(1Mbps)_2TX

PSD

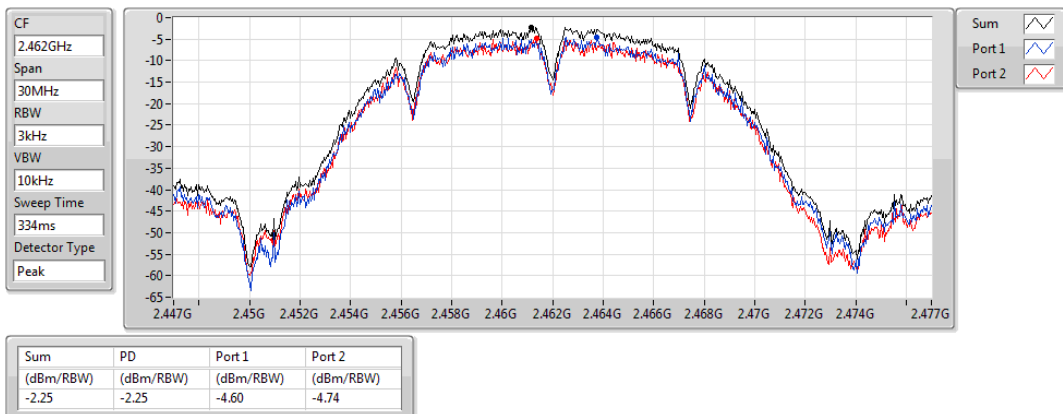
2437MHz



11b-20M_Nss1,(1Mbps)_2TX

PSD

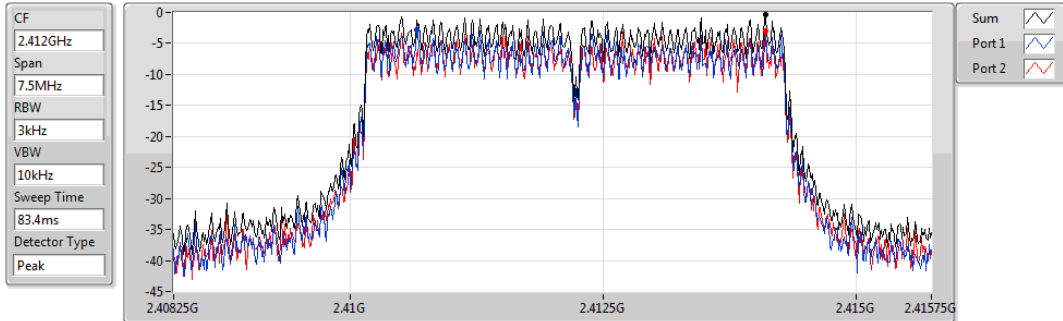
2462MHz



11g-5M_Nss1,(6Mbps)_2TX

PSD

2412MHz

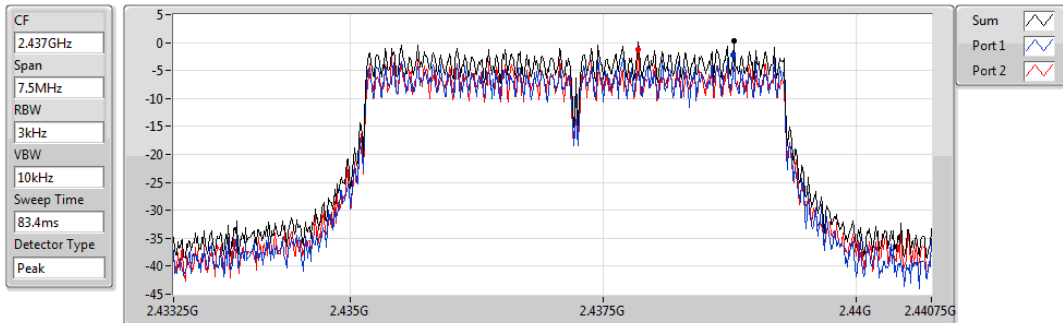


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.30	-0.30	-2.77	-2.91

11g-5M_Nss1,(6Mbps)_2TX

PSD

2437MHz

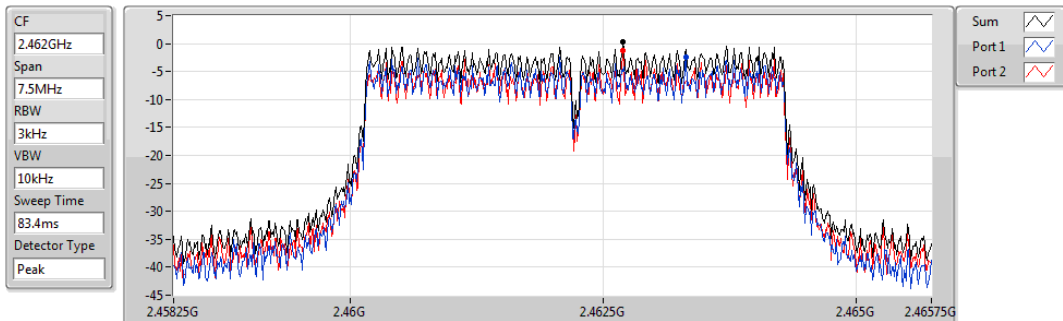


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.31	0.31	-2.13	-1.31

11g-5M_Nss1,(6Mbps)_2TX

PSD

2462MHz

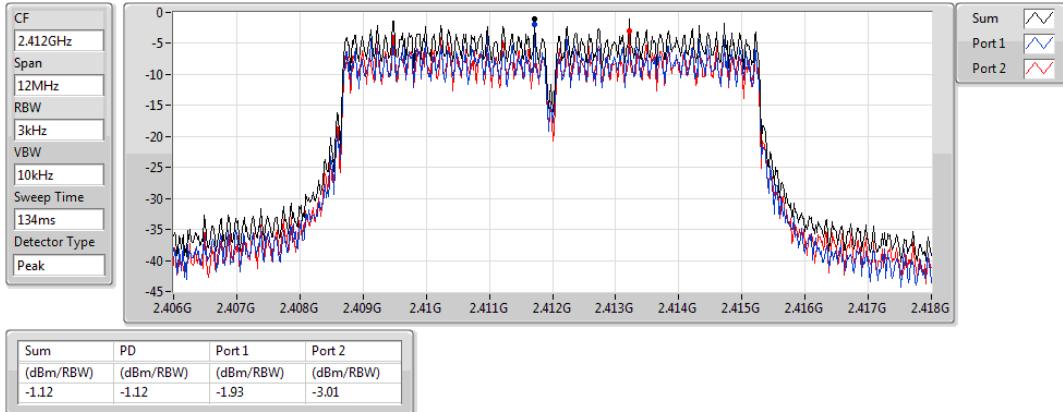


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.25	0.25	-2.34	-1.33

11g-8M_Nss1,(6Mbps)_2TX

PSD

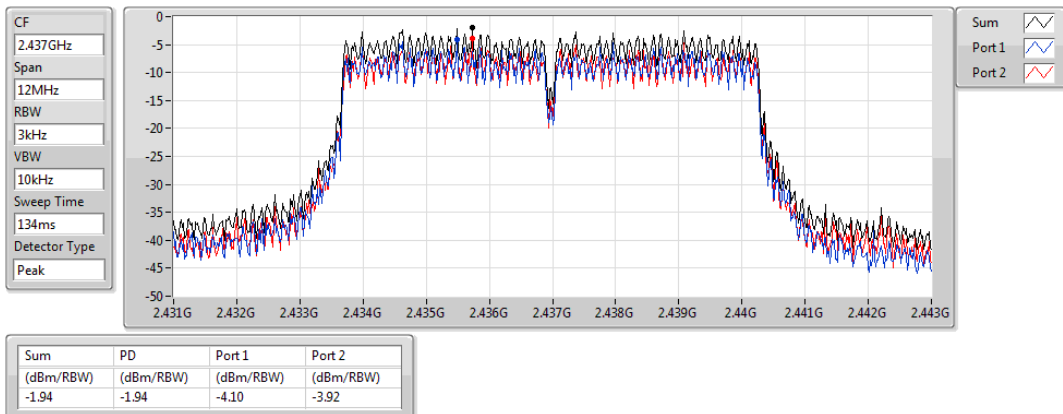
2412MHz



11g-8M_Nss1,(6Mbps)_2TX

PSD

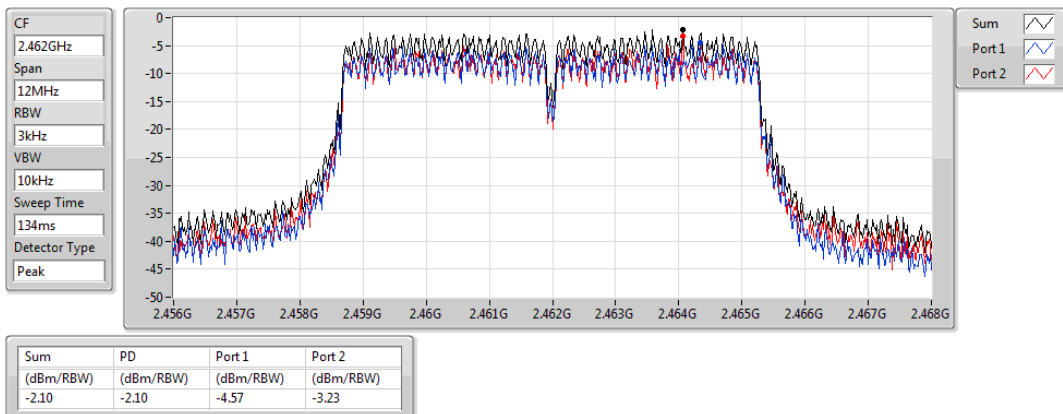
2437MHz



11g-8M_Nss1,(6Mbps)_2TX

PSD

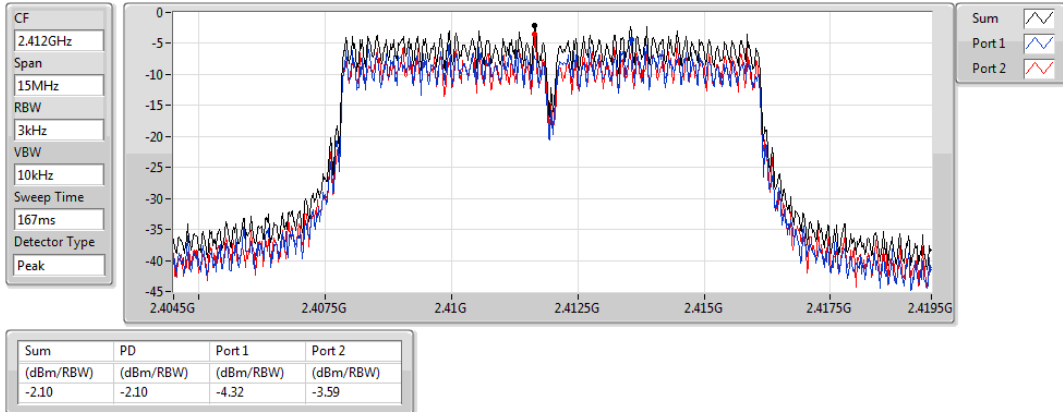
2462MHz



11g-10M_Nss1,(6Mbps)_2TX

PSD

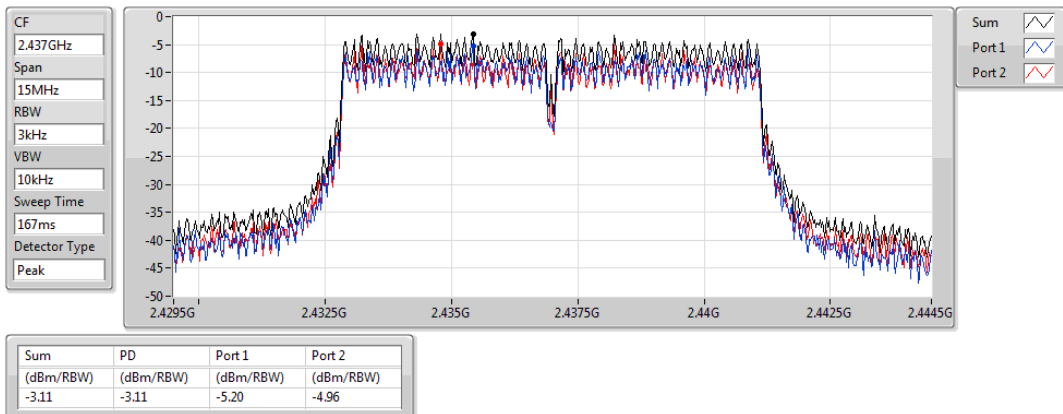
2412MHz



11g-10M_Nss1,(6Mbps)_2TX

PSD

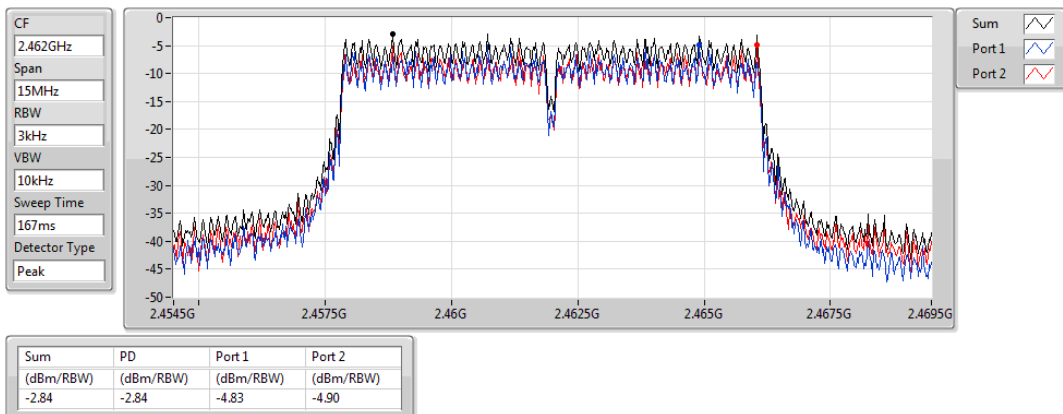
2437MHz



11g-10M_Nss1,(6Mbps)_2TX

PSD

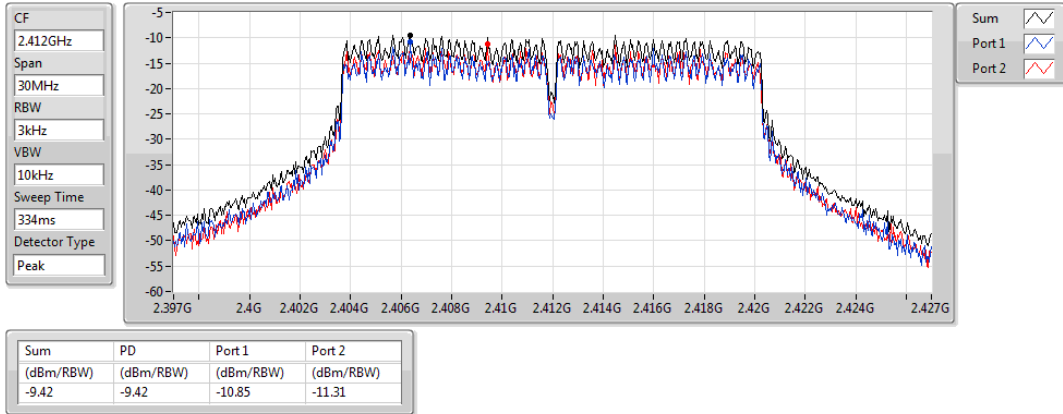
2462MHz



11g-20M_Nss1,(6Mbps)_2TX

PSD

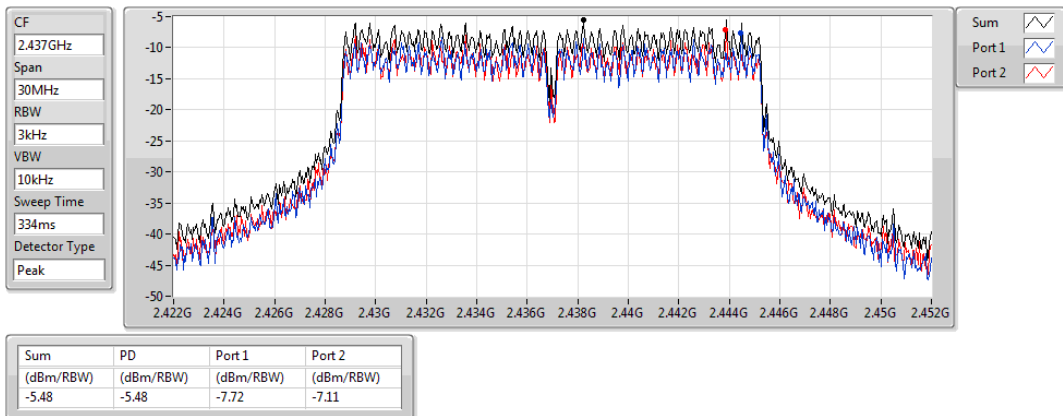
2412MHz



11g-20M_Nss1,(6Mbps)_2TX

PSD

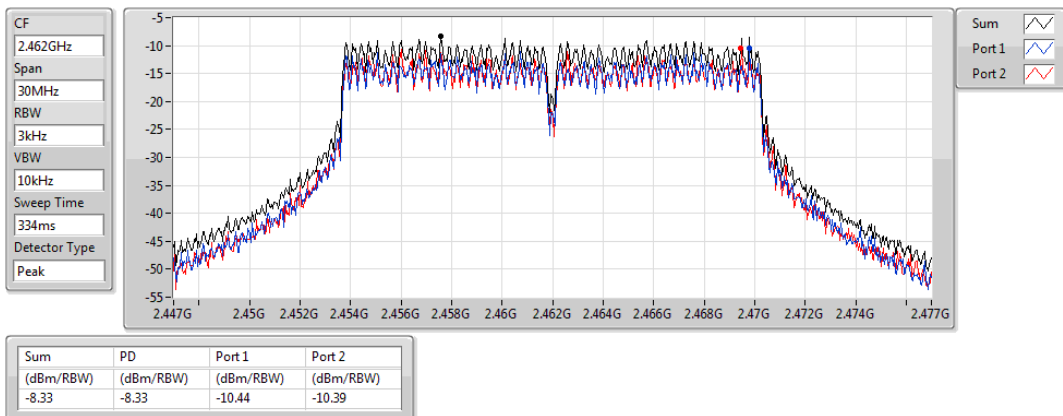
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11g-20M_Nss1,(6Mbps)_2TX

PSD

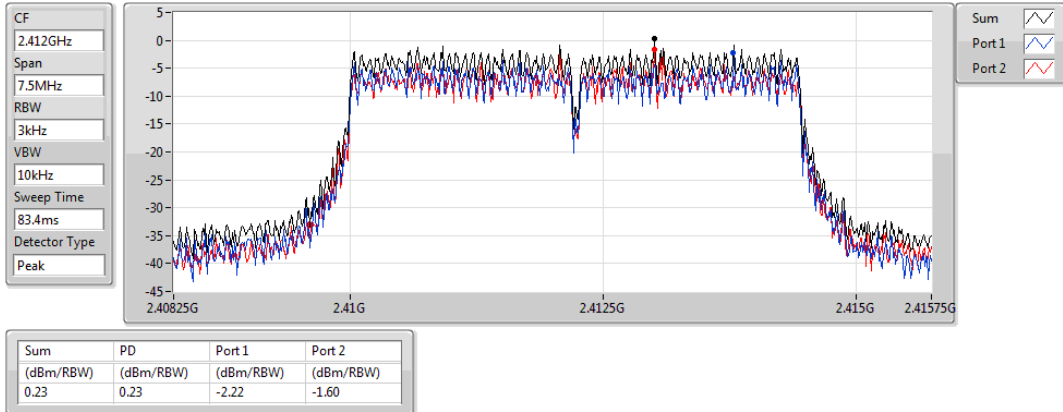
2462MHz



HT-5M_Nss1,(MCS0)_2TX

PSD

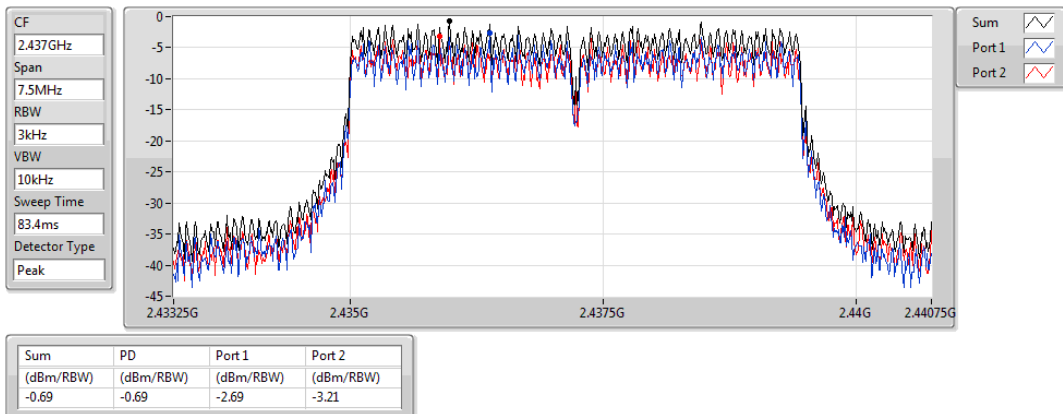
2412MHz



HT-5M_Nss1,(MCS0)_2TX

PSD

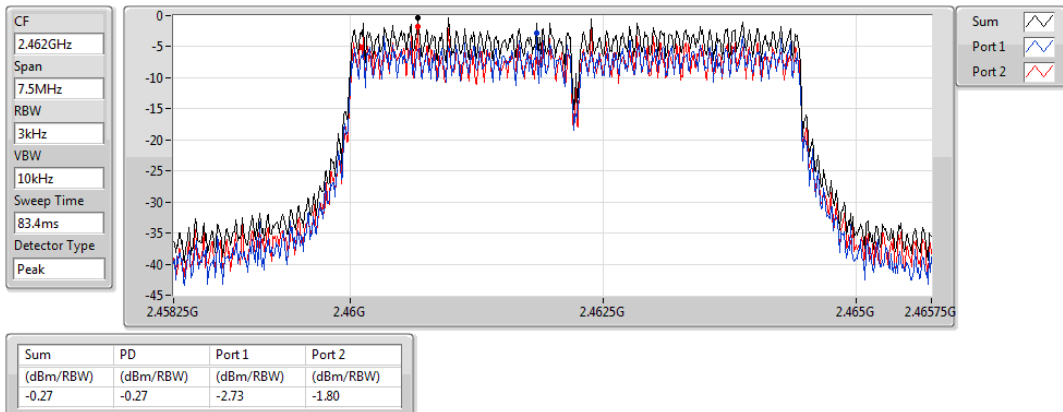
2437MHz



HT-5M_Nss1,(MCS0)_2TX

PSD

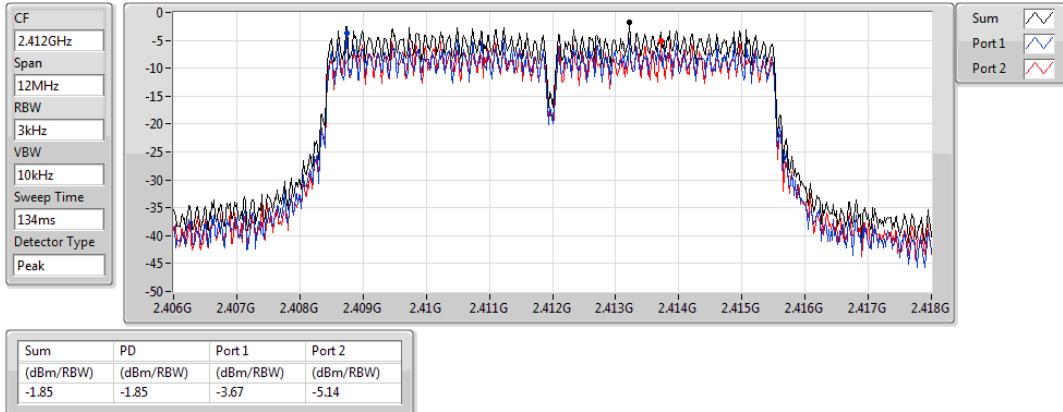
2462MHz



HT-8M_Nss1,(MCS0)_2TX

PSD

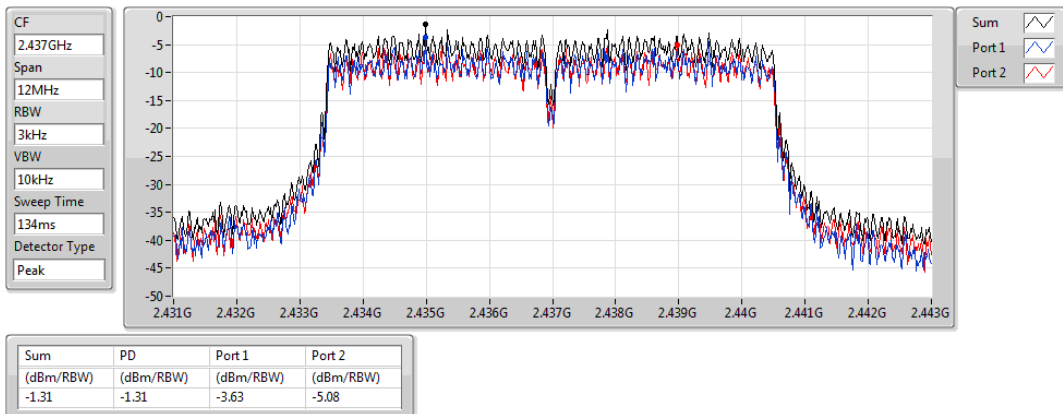
2412MHz



HT-8M_Nss1,(MCS0)_2TX

PSD

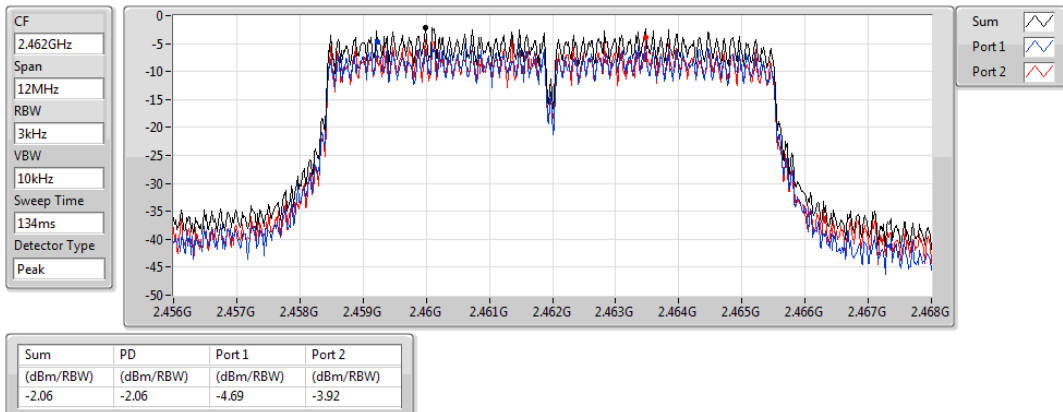
2437MHz



HT-8M_Nss1,(MCS0)_2TX

PSD

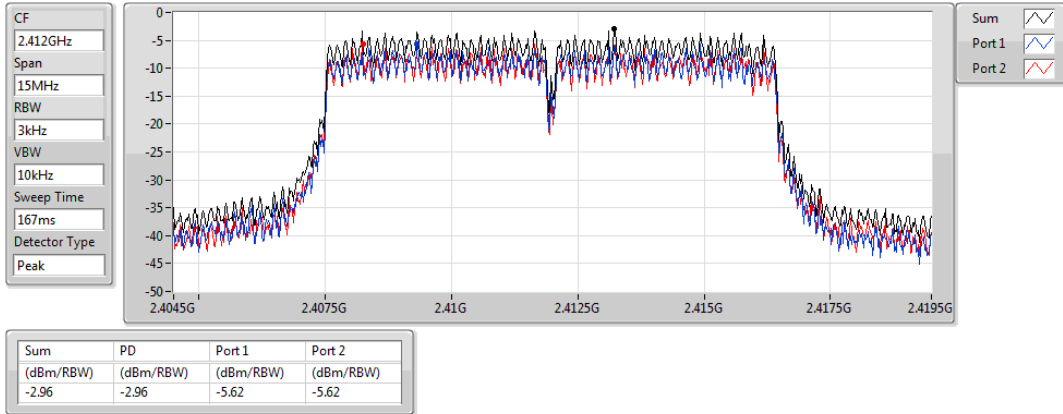
2462MHz



HT-10M_Nss1,(MCS0)_2TX

PSD

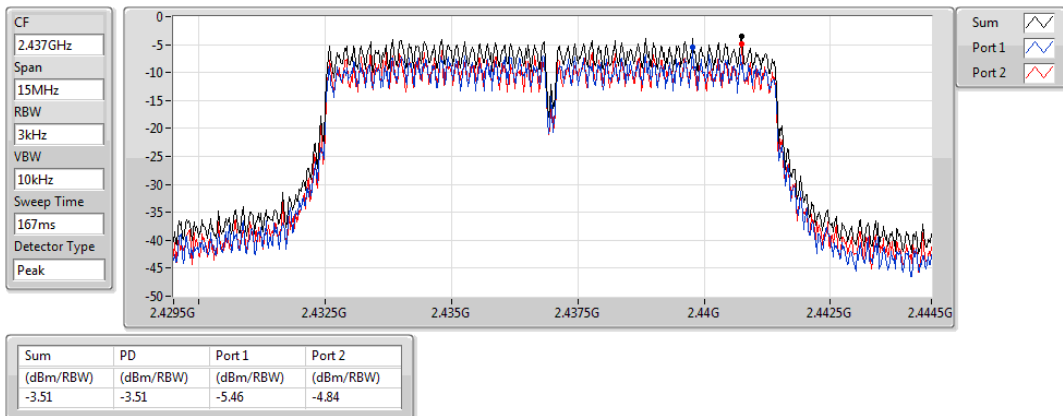
2412MHz



HT-10M_Nss1,(MCS0)_2TX

PSD

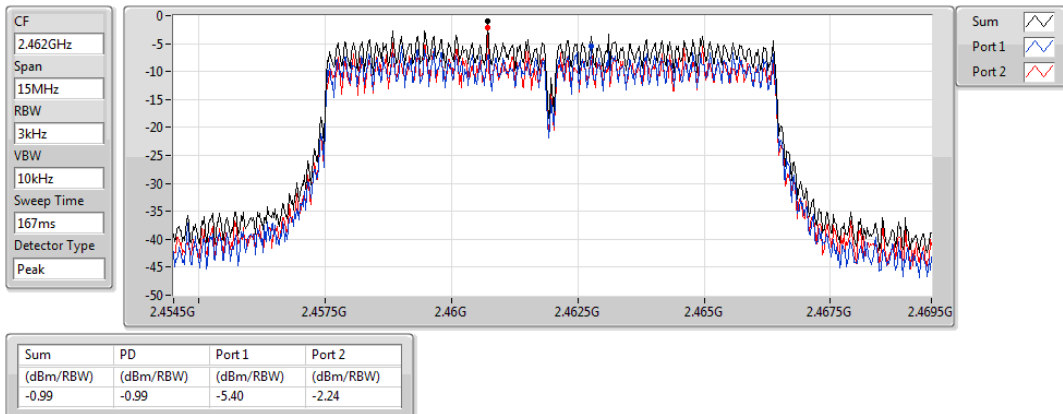
2437MHz



HT-10M_Nss1,(MCS0)_2TX

PSD

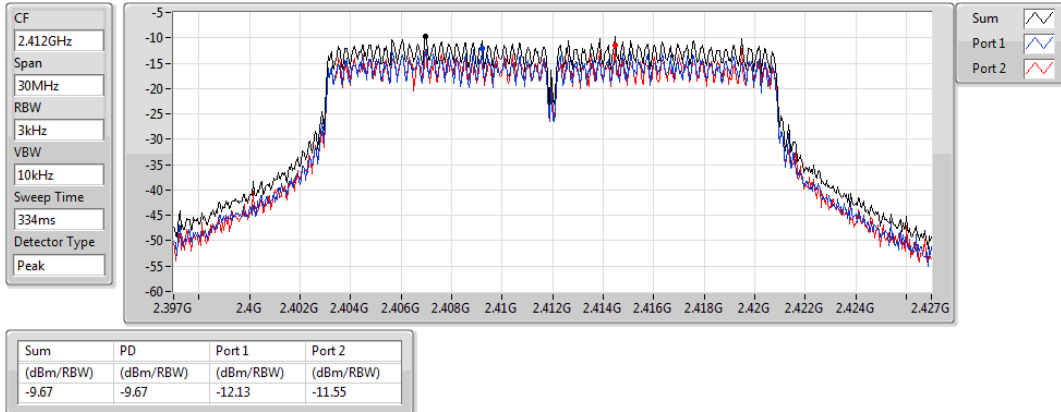
2462MHz



HT-20M_Nss1,(MCS0)_2TX

PSD

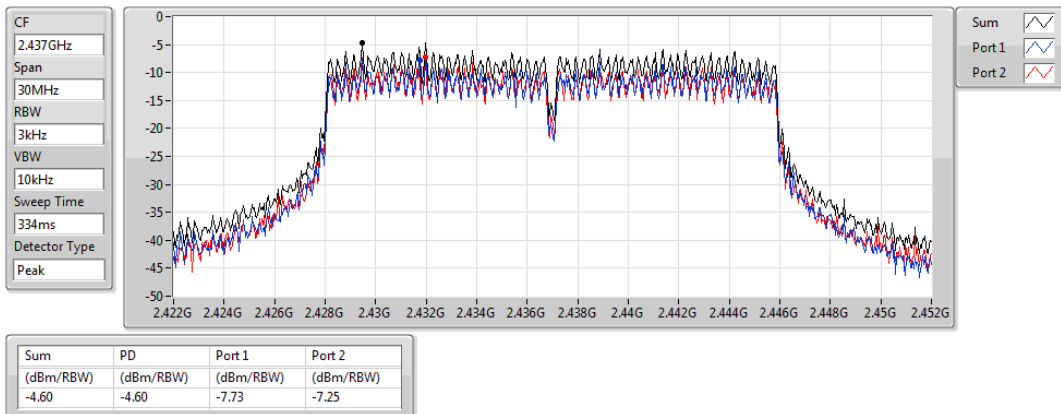
2412MHz



HT-20M_Nss1,(MCS0)_2TX

PSD

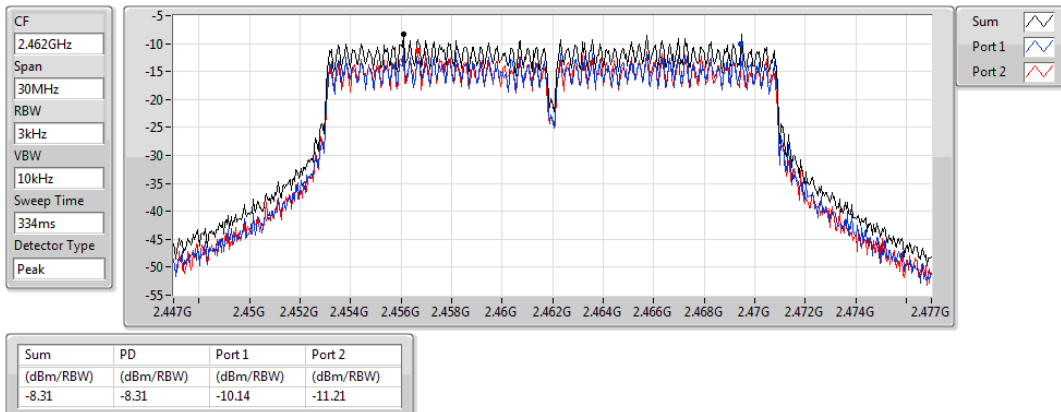
2437MHz



HT-20M_Nss1,(MCS0)_2TX

PSD

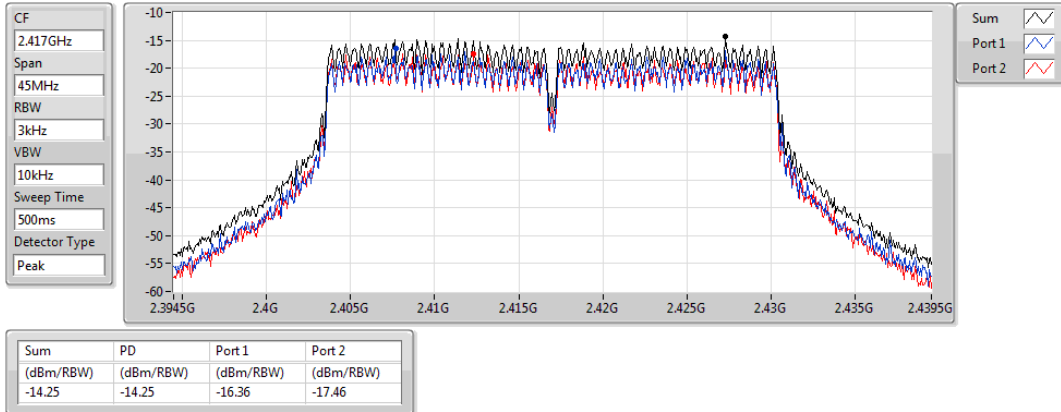
2462MHz



HT-30M_Nss1,(MCS0)_2TX

PSD

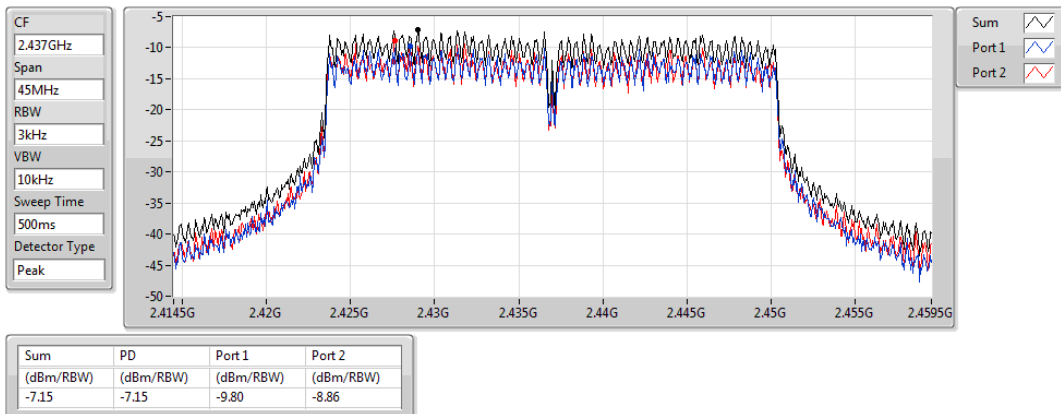
2417MHz



HT-30M_Nss1,(MCS0)_2TX

PSD

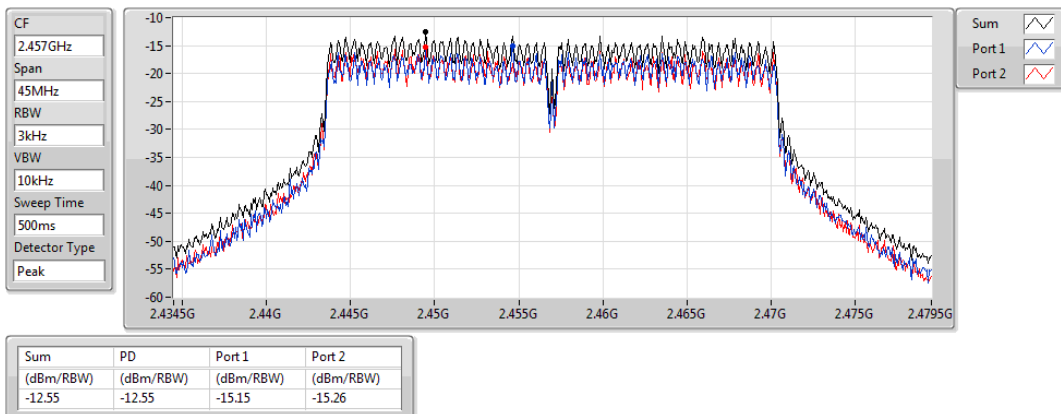
2437MHz



HT-30M_Nss1,(MCS0)_2TX

PSD

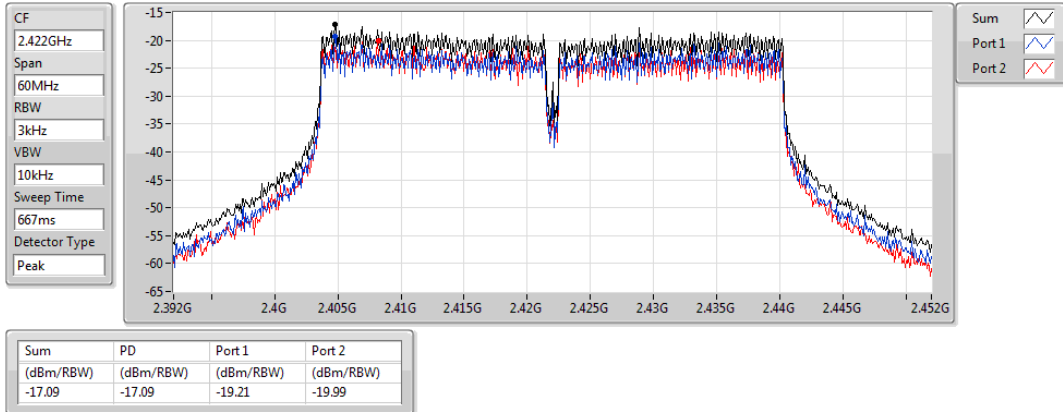
2457MHz



HT-40M_Nss1,(MCS0)_2TX

PSD

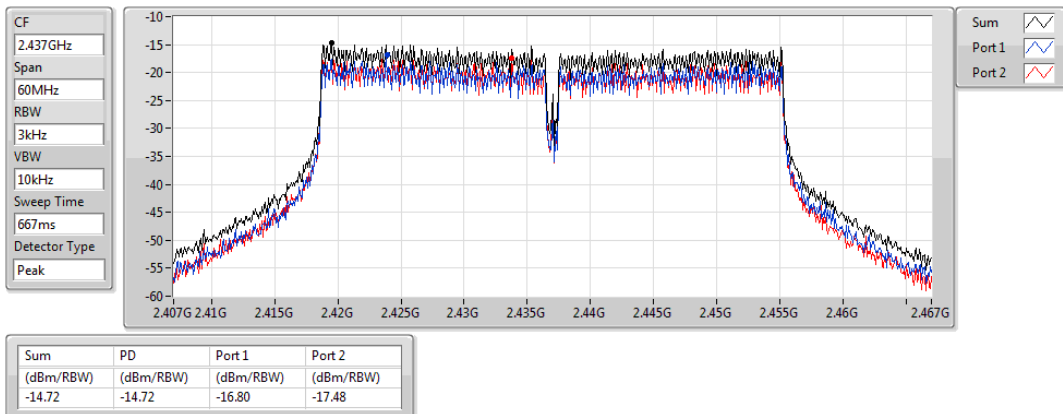
2422MHz



HT-40M_Nss1,(MCS0)_2TX

PSD

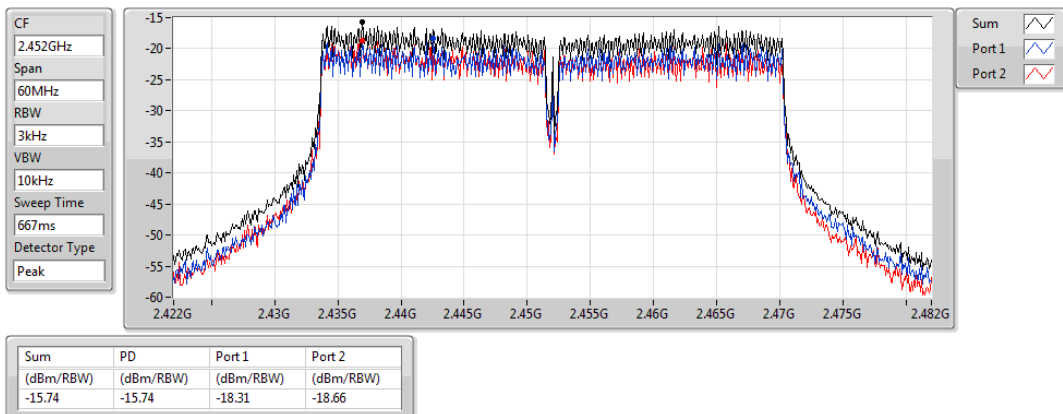
2437MHz



HT-40M_Nss1,(MCS0)_2TX

PSD

2452MHz



Configuration 2: Wi-Fi point-to-multipoint Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
11b-5M_Nss1,(1Mbps)_2TX	3.24
11b-8M_Nss1,(1Mbps)_2TX	1.53
11b-10M_Nss1,(1Mbps)_2TX	1.62
11b-20M_Nss1,(1Mbps)_2TX	-2.25
11g-5M_Nss1,(6Mbps)_2TX	-1.84
11g-8M_Nss1,(6Mbps)_2TX	-4.38
11g-10M_Nss1,(6Mbps)_2TX	-4.07
11g-20M_Nss1,(6Mbps)_2TX	-7.28
HT-5M_Nss1,(MCS0)_2TX	-2.56
HT-8M_Nss1,(MCS0)_2TX	-3.27
HT-10M_Nss1,(MCS0)_2TX	-4.62
HT-20M_Nss1,(MCS0)_2TX	-7.47
HT-30M_Nss1,(MCS0)_2TX	-9.36
HT-40M_Nss1,(MCS0)_2TX	-14.72

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
11b-5M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	1.58	0.21	3.24	6.00
2437MHz	Pass	8.00	0.92	0.41	3.02	6.00
2462MHz	Pass	8.00	0.33	0.11	2.39	6.00
11b-8M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	-0.65	-0.87	1.15	6.00
2437MHz	Pass	8.00	-1.13	-1.59	1.47	6.00
2462MHz	Pass	8.00	-0.61	-0.22	1.53	6.00
11b-10M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	-1.81	-1.05	0.76	6.00
2437MHz	Pass	8.00	-1.80	-2.18	0.18	6.00
2462MHz	Pass	8.00	0.21	-1.79	1.62	6.00
11b-20M_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	-4.72	-5.22	-2.57	6.00
2437MHz	Pass	8.00	-4.35	-4.75	-2.39	6.00

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
2462MHz	Pass	8.00	-4.60	-4.74	-2.25	6.00
11g-5M_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	-4.90	-3.27	-1.84	6.00
2437MHz	Pass	8.00	-2.96	-5.17	-1.92	6.00
2462MHz	Pass	8.00	-3.90	-3.51	-1.89	6.00
11g-8M_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	-7.21	-6.20	-4.38	6.00
2437MHz	Pass	8.00	-6.74	-6.73	-4.66	6.00
2462MHz	Pass	8.00	-6.23	-7.67	-4.72	6.00
11g-10M_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	-8.16	-8.47	-5.87	6.00
2437MHz	Pass	8.00	-6.86	-6.59	-4.07	6.00
2462MHz	Pass	8.00	-7.71	-8.13	-5.61	6.00
11g-20M_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	-10.85	-11.31	-9.42	6.00
2437MHz	Pass	8.00	-9.47	-10.06	-7.28	6.00
2462MHz	Pass	8.00	-11.78	-12.00	-9.35	6.00
HT-5M_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	-5.46	-4.84	-3.29	6.00
2437MHz	Pass	8.00	-4.44	-5.93	-2.56	6.00
2462MHz	Pass	8.00	-5.39	-6.06	-3.67	6.00
HT-8M_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	-7.70	-6.27	-4.82	6.00
2437MHz	Pass	8.00	-5.46	-6.89	-4.37	6.00
2462MHz	Pass	8.00	-4.33	-7.05	-3.27	6.00
HT-10M_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	-7.35	-7.53	-5.21	6.00
2437MHz	Pass	8.00	-6.52	-8.18	-4.99	6.00
2462MHz	Pass	8.00	-7.18	-7.45	-4.62	6.00
HT-20M_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.00	-12.13	-11.55	-9.67	6.00
2437MHz	Pass	8.00	-10.01	-9.68	-7.47	6.00
2462MHz	Pass	8.00	-10.14	-11.21	-8.31	6.00
HT-30M_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2417MHz	Pass	8.00	-16.36	-17.46	-14.25	6.00
2437MHz	Pass	8.00	-11.61	-11.61	-9.36	6.00

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
2457MHz	Pass	8.00	-15.15	-15.26	-12.55	6.00
HT-40M_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	8.00	-19.21	-19.99	-17.09	6.00
2437MHz	Pass	8.00	-16.80	-17.48	-14.72	6.00
2452MHz	Pass	8.00	-18.31	-18.66	-15.74	6.00

DG = Directional Gain =8 dBi > 6dBi

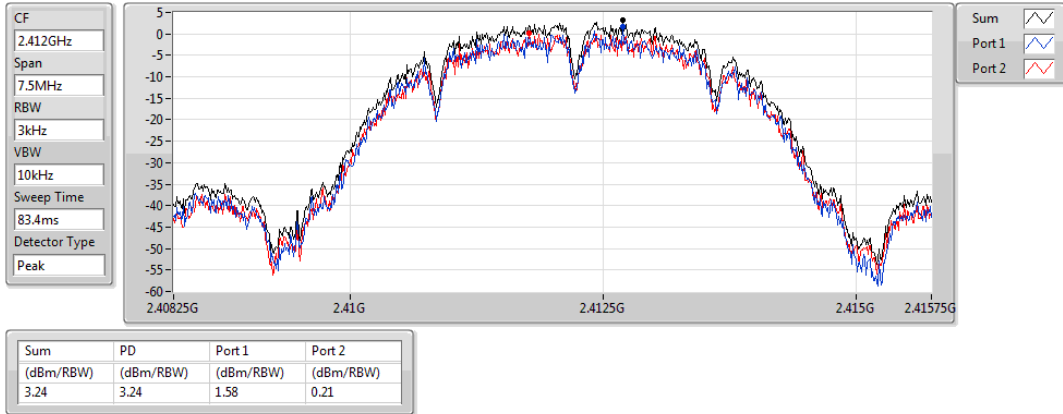
Power limit shall be reduced to 8 dBm – (8 dBi – 6 dBi) = 6 dBm

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

11b-5M_Nss1,(1Mbps)_2TX

PSD

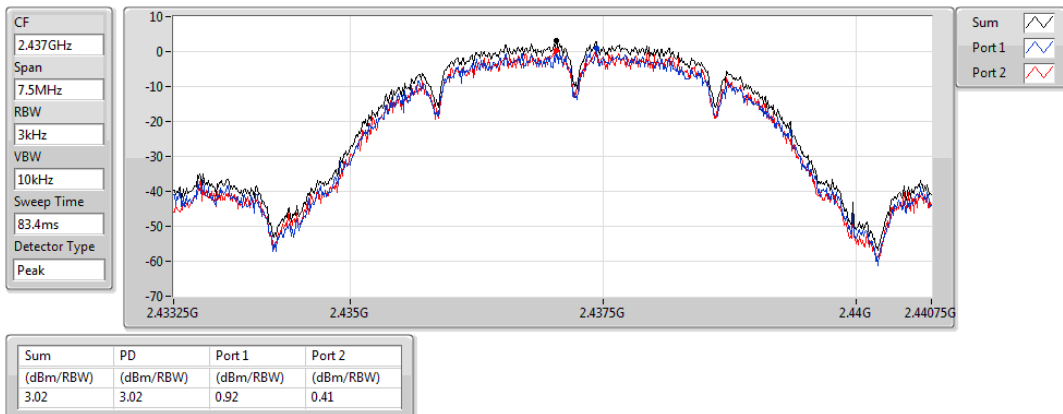
2412MHz



11b-5M_Nss1,(1Mbps)_2TX

PSD

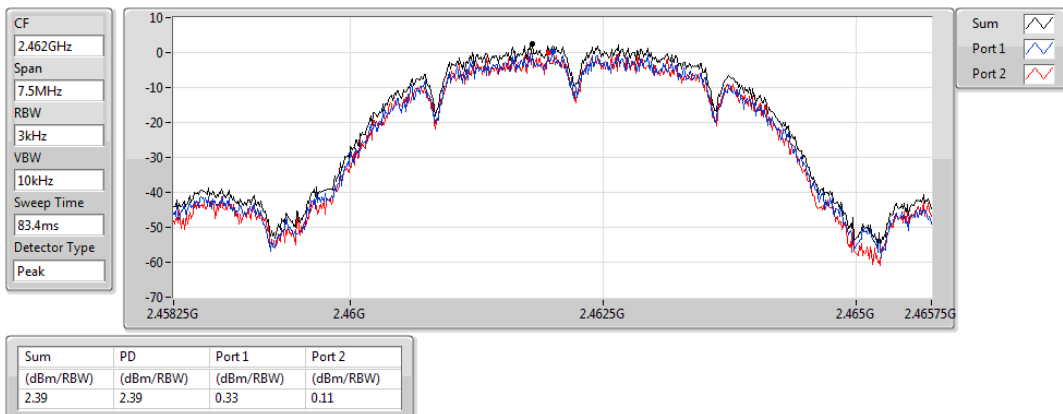
2437MHz



11b-5M_Nss1,(1Mbps)_2TX

PSD

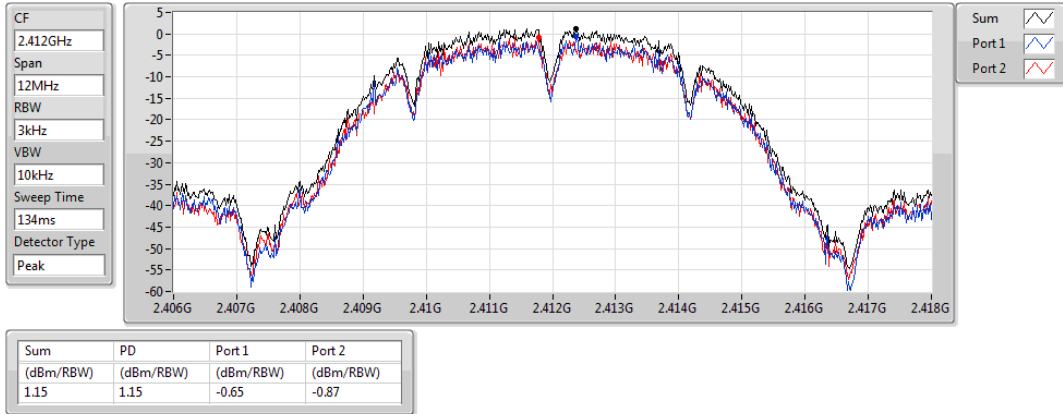
2462MHz



11b-8M_Nss1,(1Mbps)_2TX

PSD

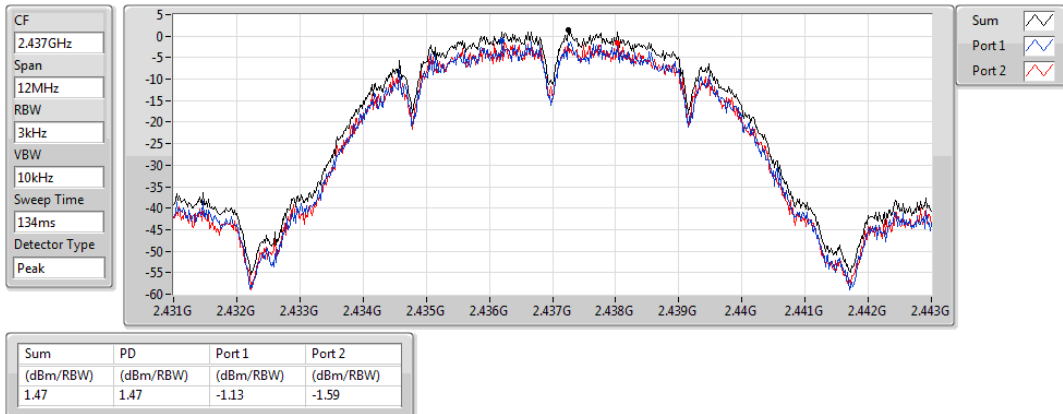
2412MHz



11b-8M_Nss1,(1Mbps)_2TX

PSD

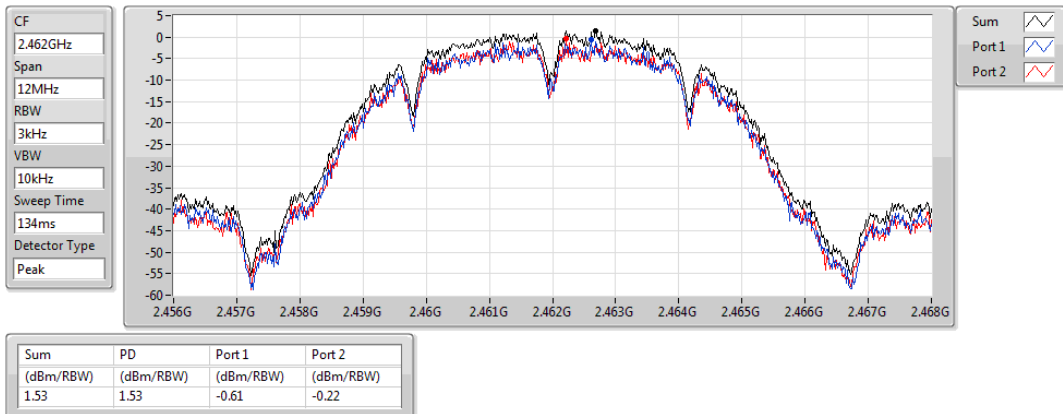
2437MHz



11b-8M_Nss1,(1Mbps)_2TX

PSD

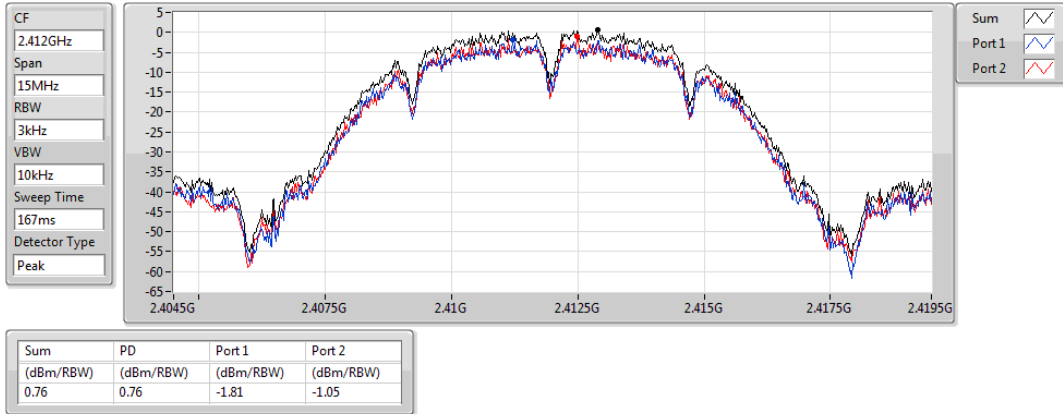
2462MHz



11b-10M_Nss1,(1Mbps)_2TX

PSD

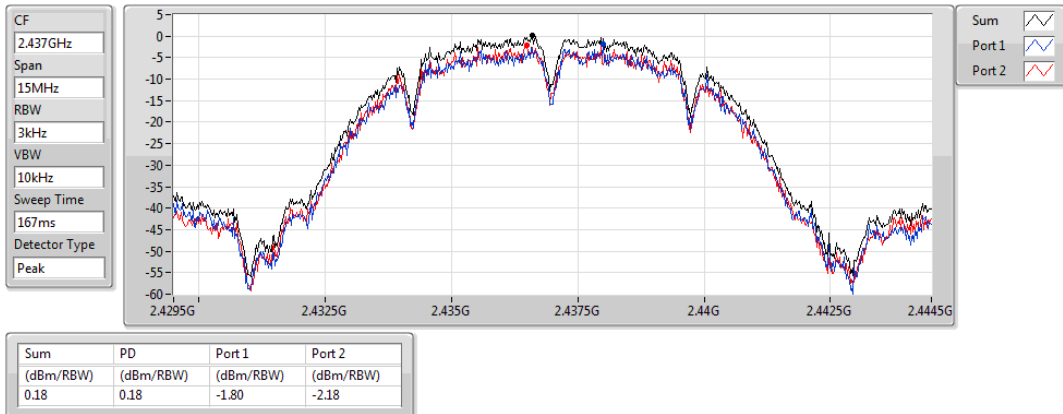
2412MHz



11b-10M_Nss1,(1Mbps)_2TX

PSD

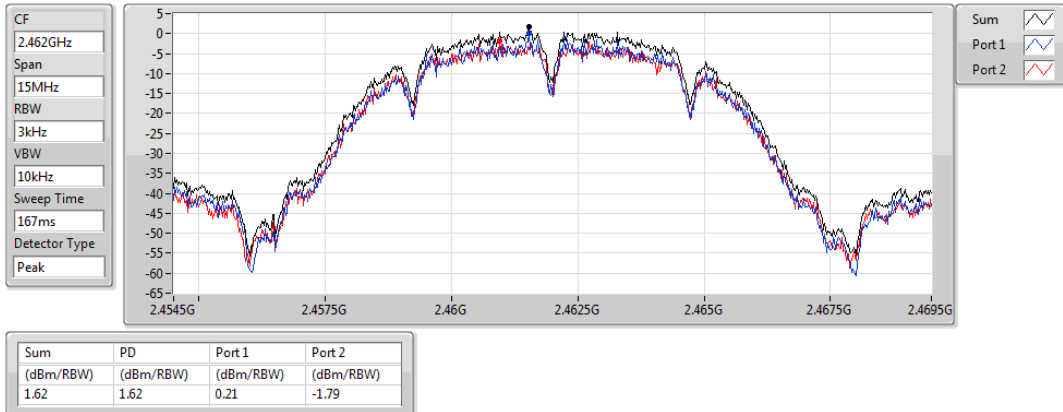
2437MHz



11b-10M_Nss1,(1Mbps)_2TX

PSD

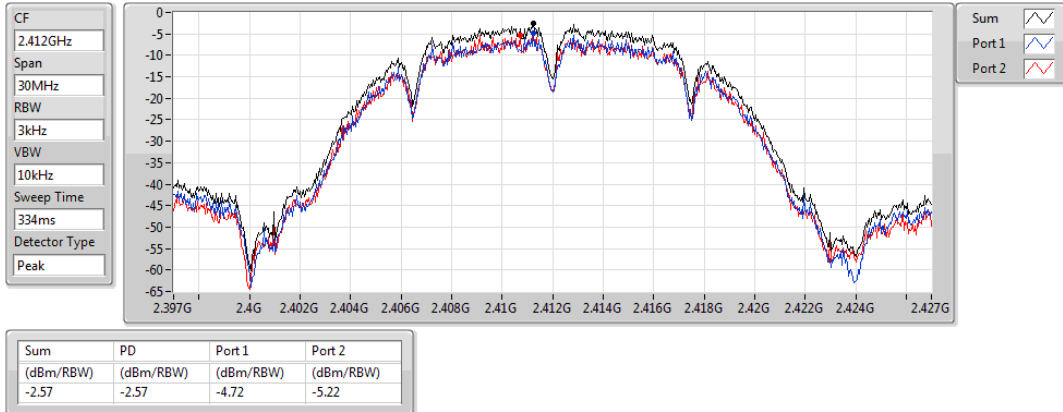
2462MHz



11b-20M_Nss1,(1Mbps)_2TX

PSD

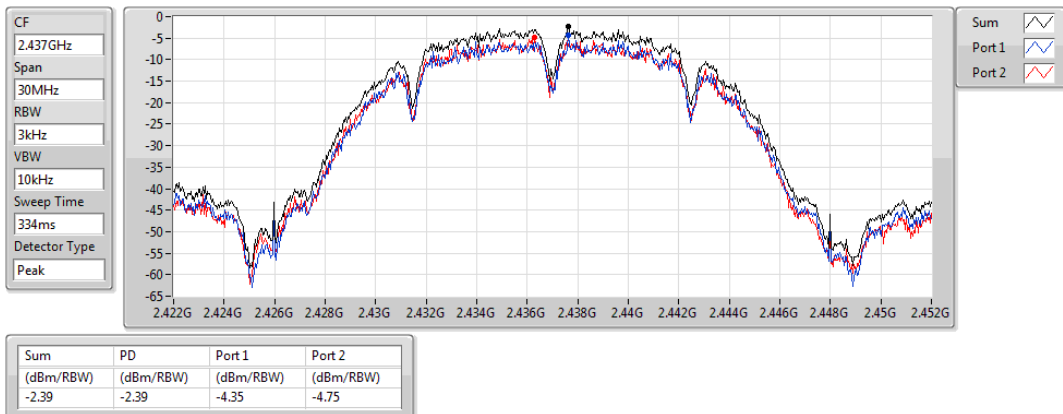
2412MHz



11b-20M_Nss1,(1Mbps)_2TX

PSD

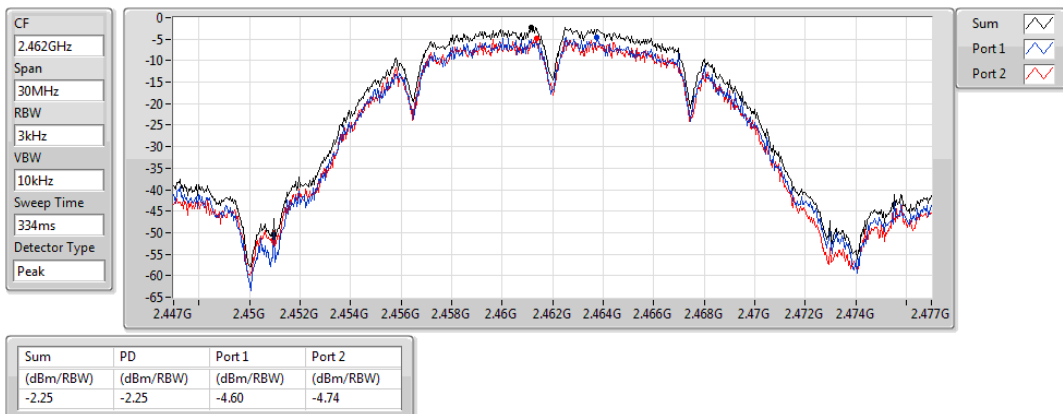
2437MHz



11b-20M_Nss1,(1Mbps)_2TX

PSD

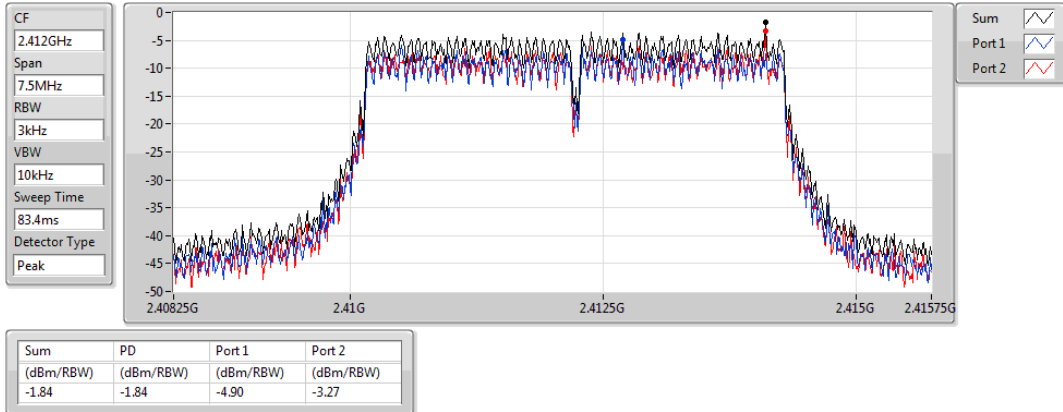
2462MHz



11g-5M_Nss1,(6Mbps)_2TX

PSD

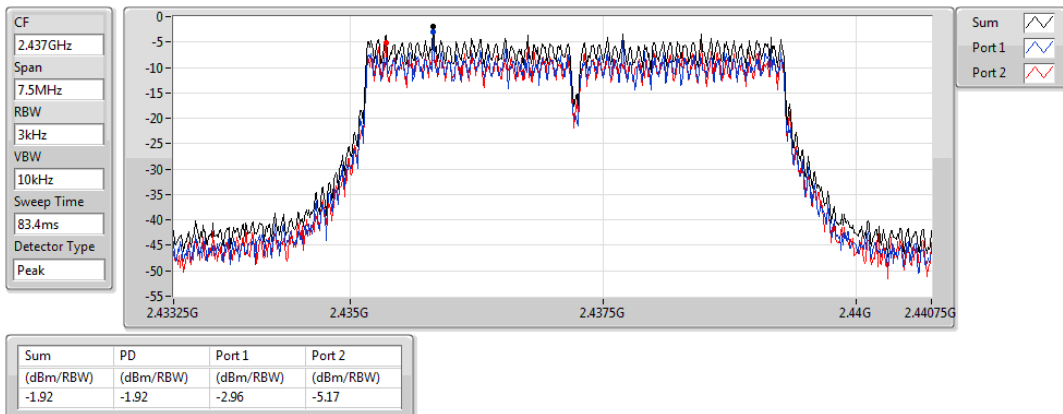
2412MHz



11g-5M_Nss1,(6Mbps)_2TX

PSD

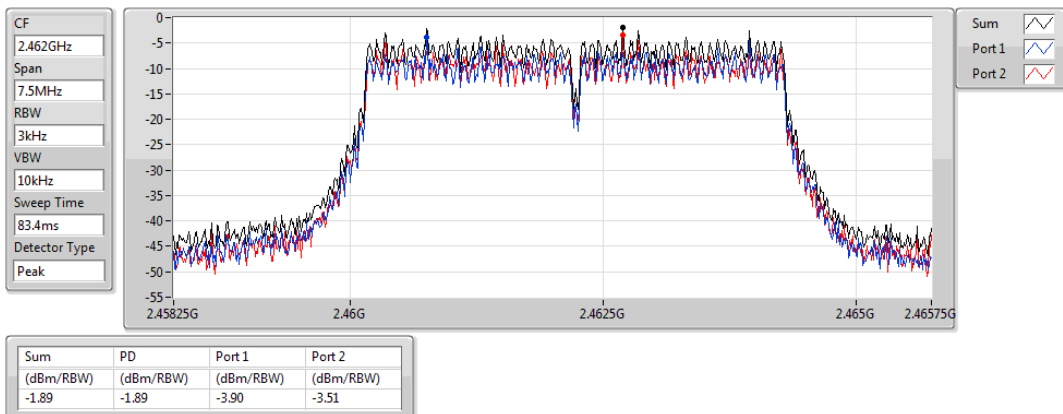
2437MHz



11g-5M_Nss1,(6Mbps)_2TX

PSD

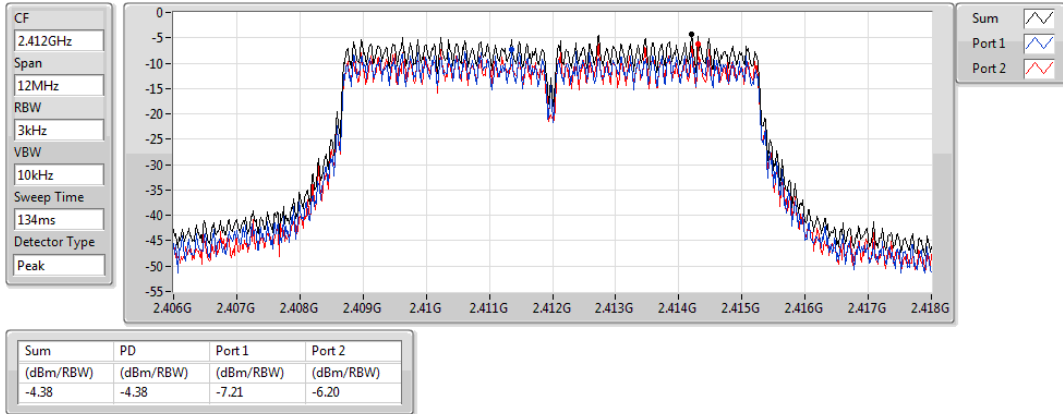
2462MHz



11g-8M_Nss1,(6Mbps)_2TX

PSD

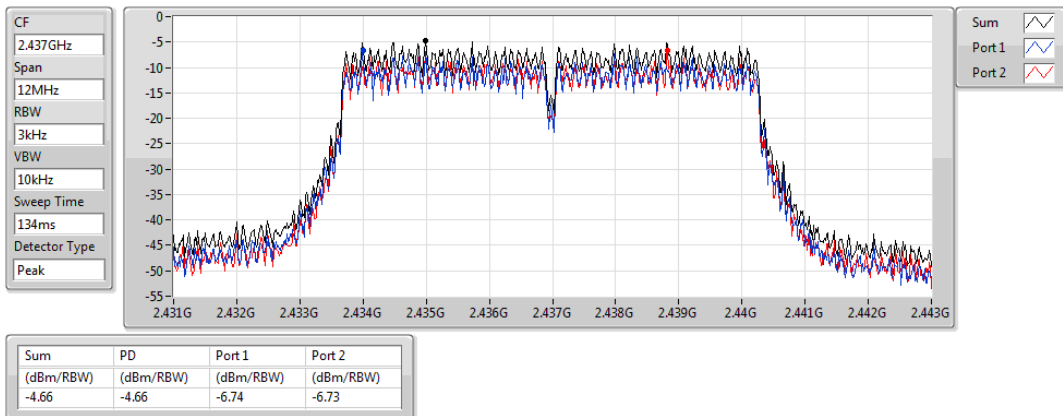
2412MHz



11g-8M_Nss1,(6Mbps)_2TX

PSD

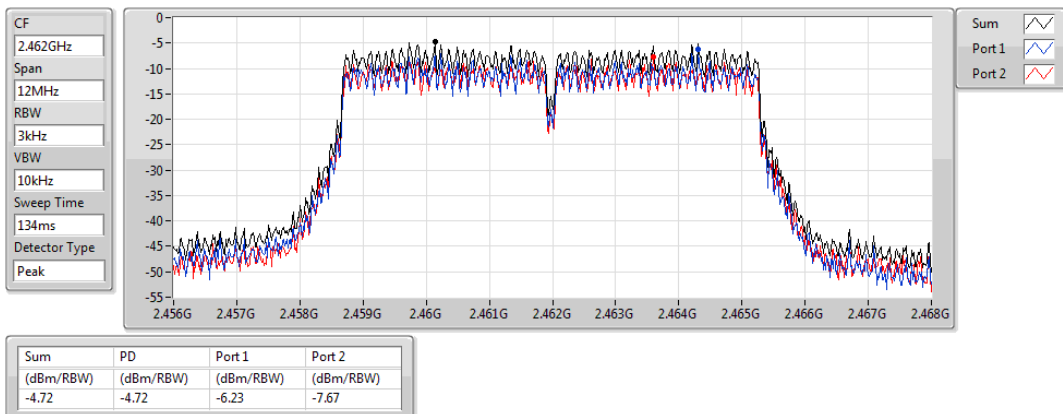
2437MHz



11g-8M_Nss1,(6Mbps)_2TX

PSD

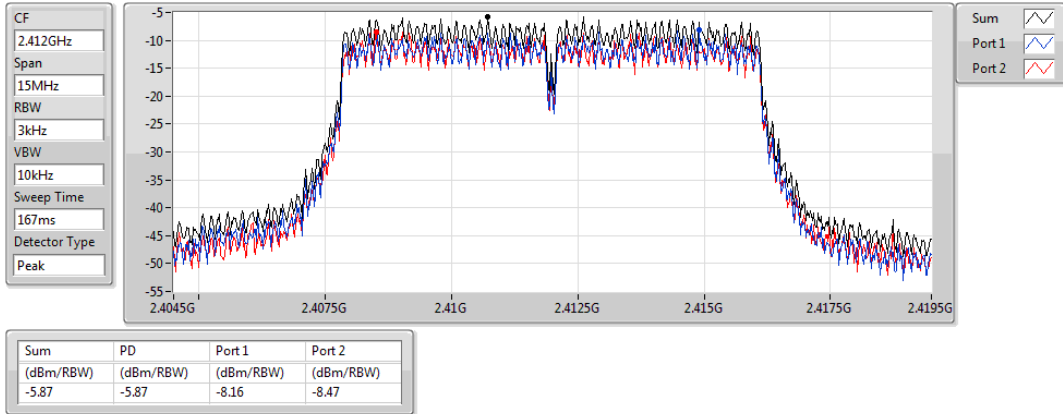
2462MHz



11g-10M_Nss1,(6Mbps)_2TX

PSD

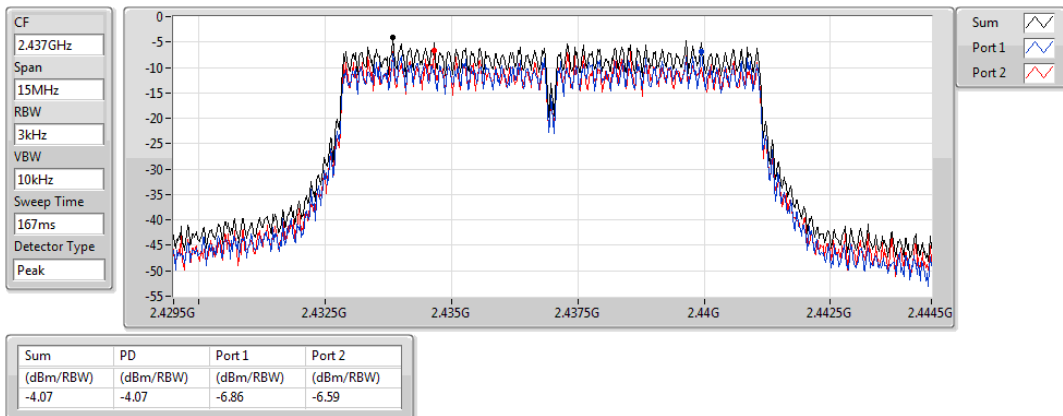
2412MHz



11g-10M_Nss1,(6Mbps)_2TX

PSD

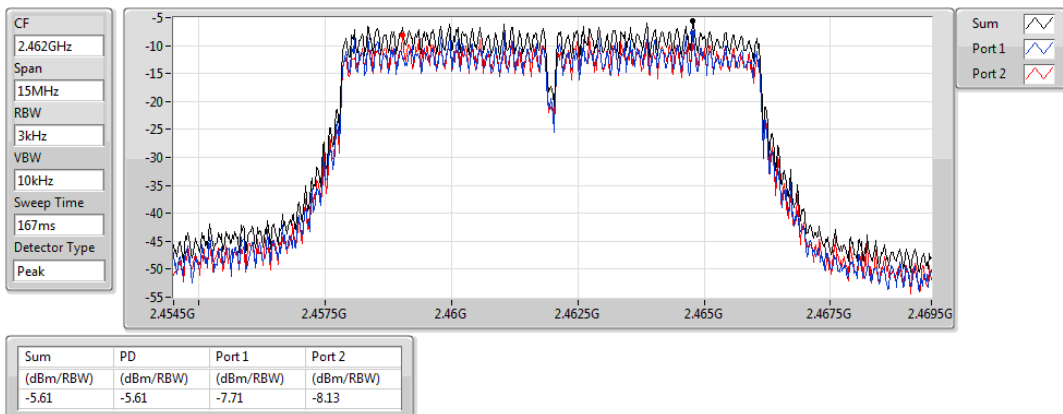
2437MHz



11g-10M_Nss1,(6Mbps)_2TX

PSD

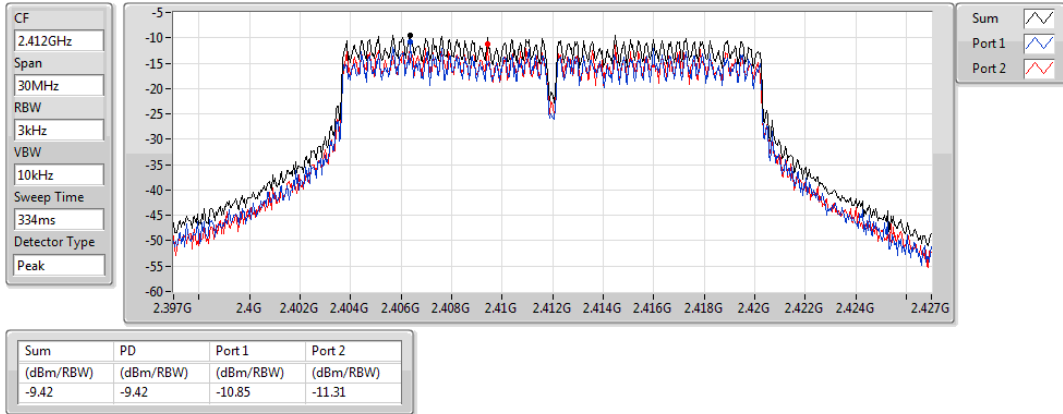
2462MHz



11g-20M_Nss1,(6Mbps)_2TX

PSD

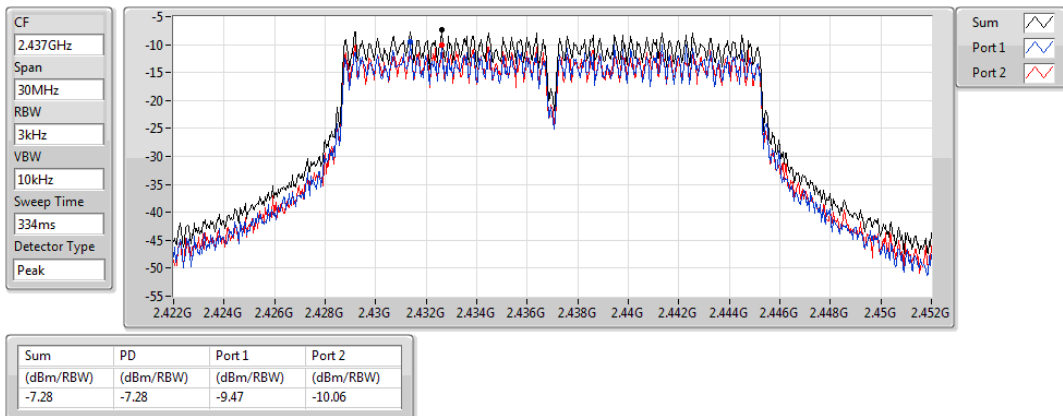
2412MHz



11g-20M_Nss1,(6Mbps)_2TX

PSD

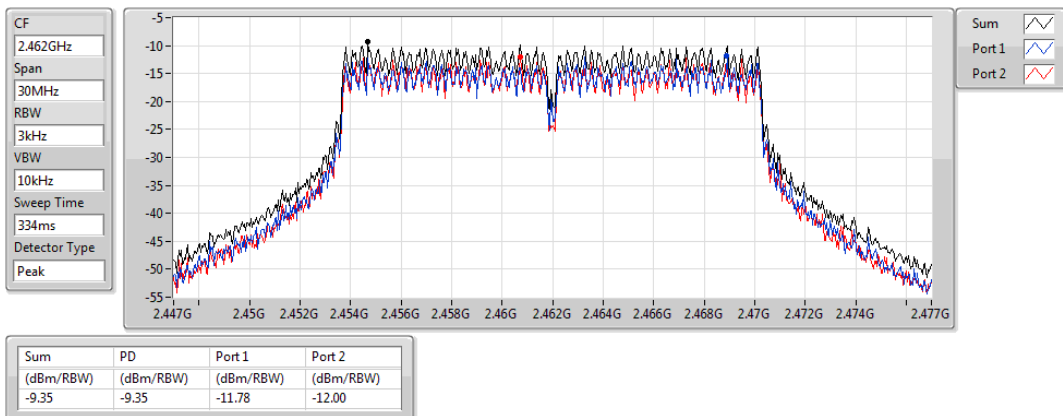
2437MHz



11g-20M_Nss1,(6Mbps)_2TX

PSD

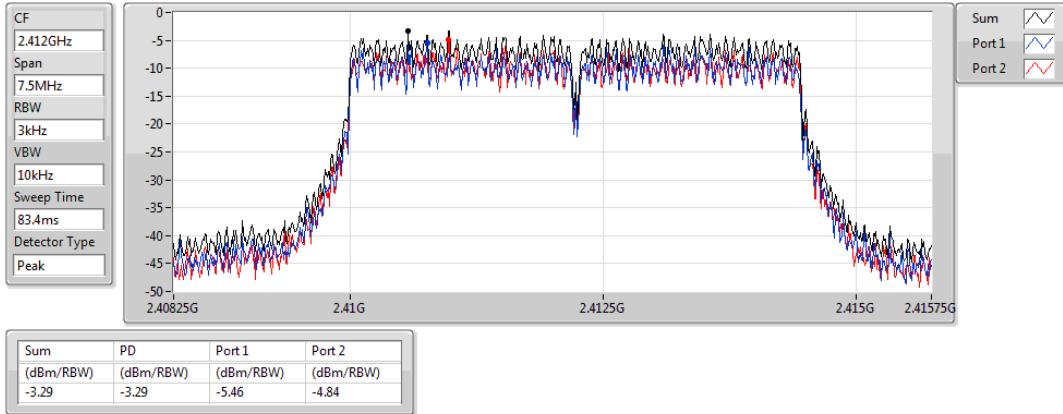
2462MHz



HT-5M_Nss1,(MCS0)_2TX

PSD

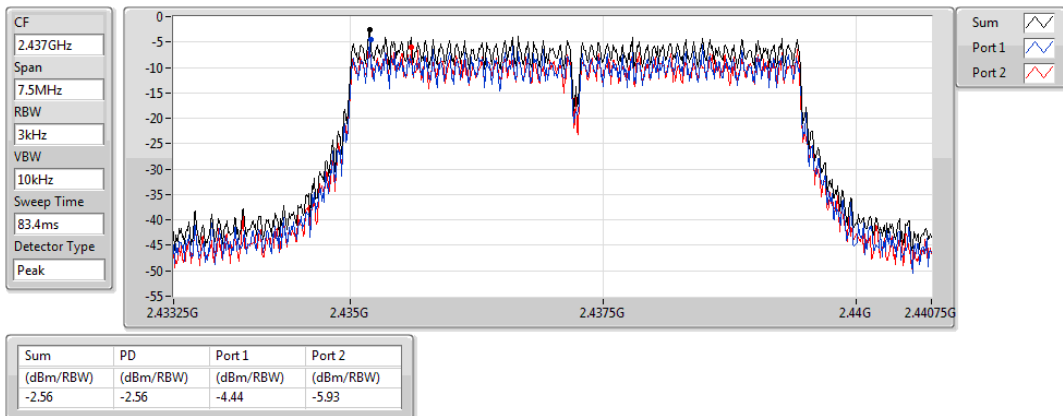
2412MHz



HT-5M_Nss1,(MCS0)_2TX

PSD

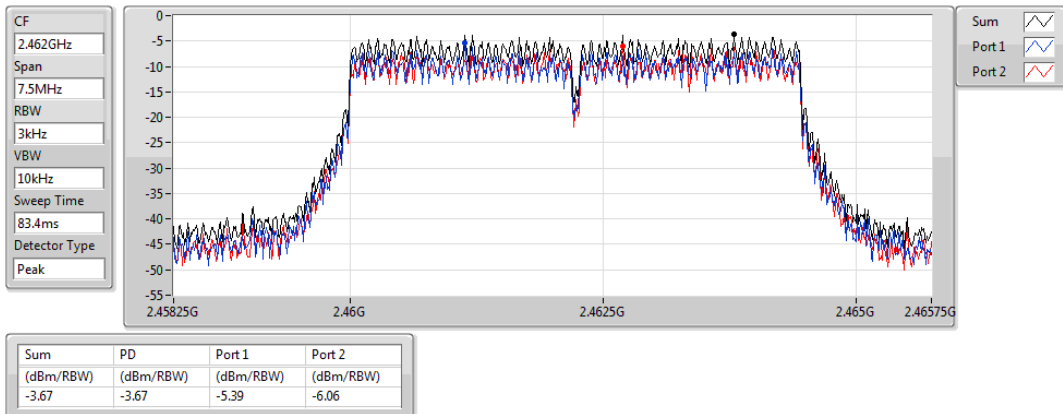
2437MHz



HT-5M_Nss1,(MCS0)_2TX

PSD

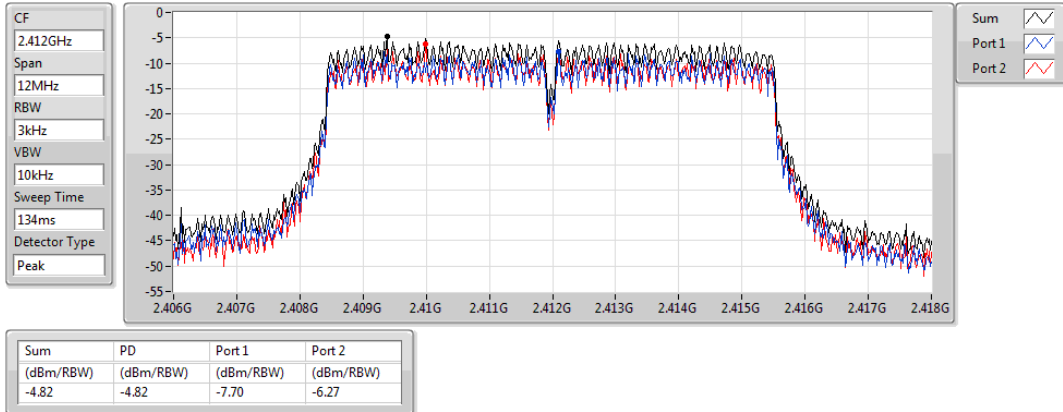
2462MHz



HT-8M_Nss1,(MCS0)_2TX

PSD

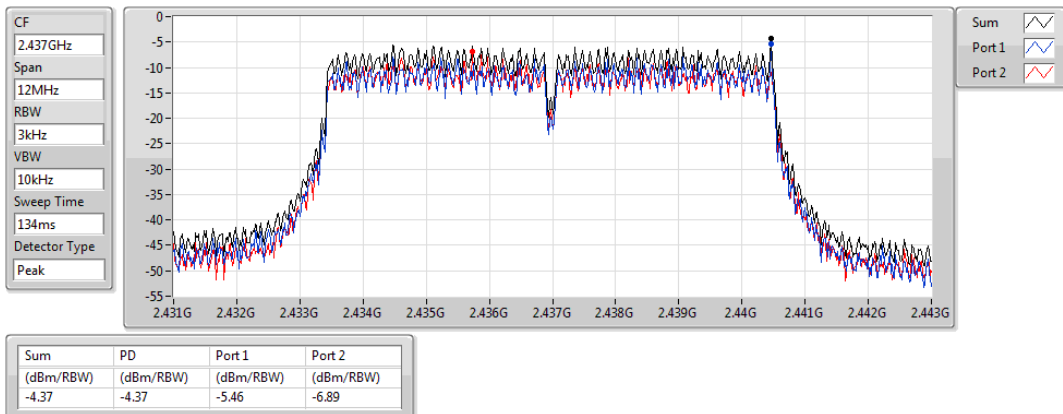
2412MHz



HT-8M_Nss1,(MCS0)_2TX

PSD

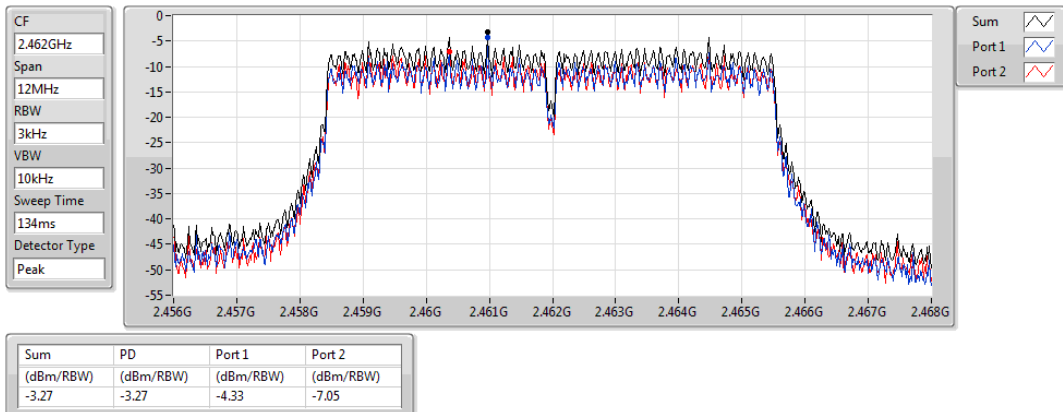
2437MHz



HT-8M_Nss1,(MCS0)_2TX

PSD

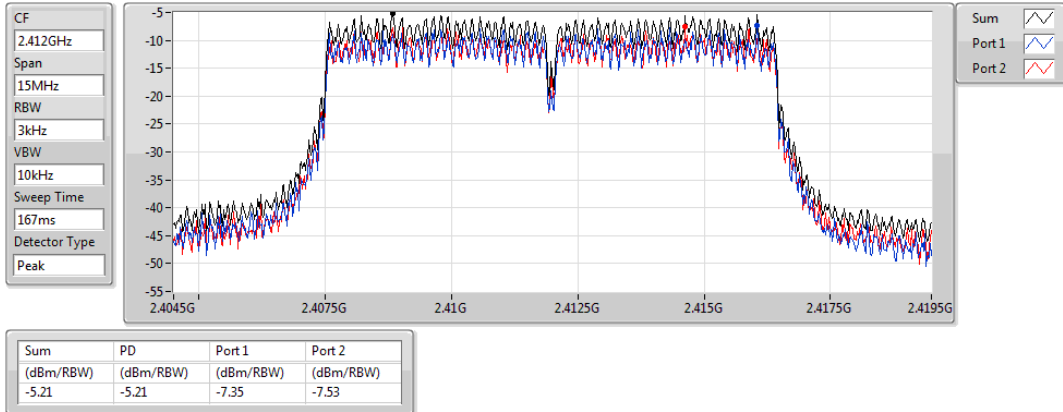
2462MHz



HT-10M_Nss1,(MCS0)_2TX

PSD

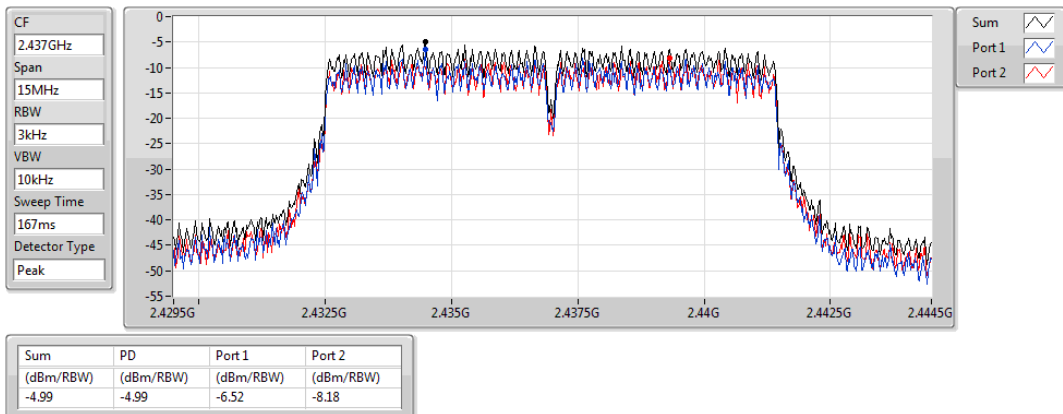
2412MHz



HT-10M_Nss1,(MCS0)_2TX

PSD

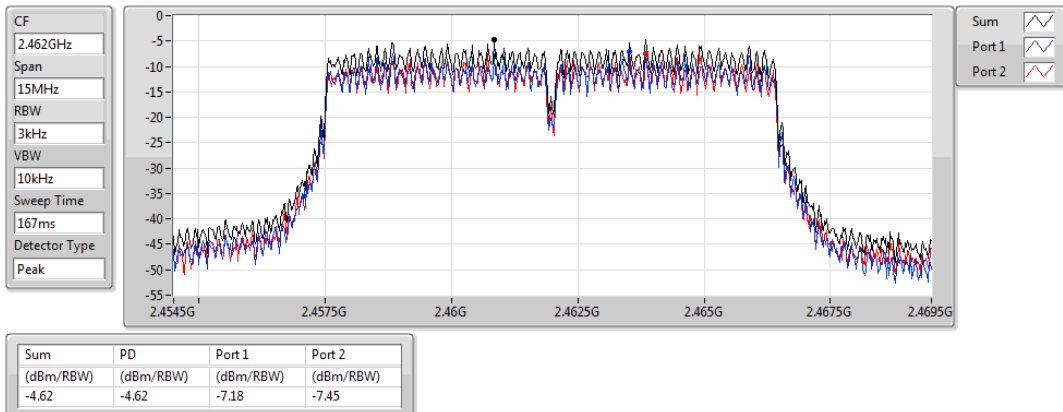
2437MHz



HT-10M_Nss1,(MCS0)_2TX

PSD

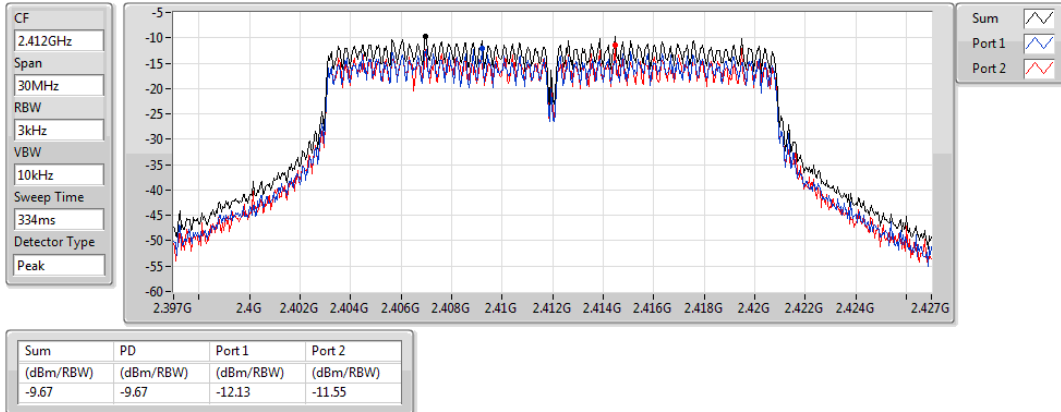
2462MHz



HT-20M_Nss1,(MCS0)_2TX

PSD

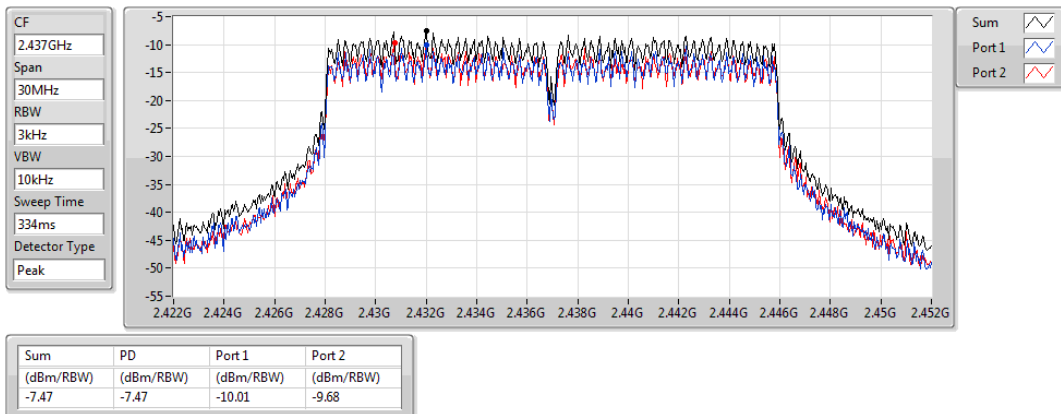
2412MHz



HT-20M_Nss1,(MCS0)_2TX

PSD

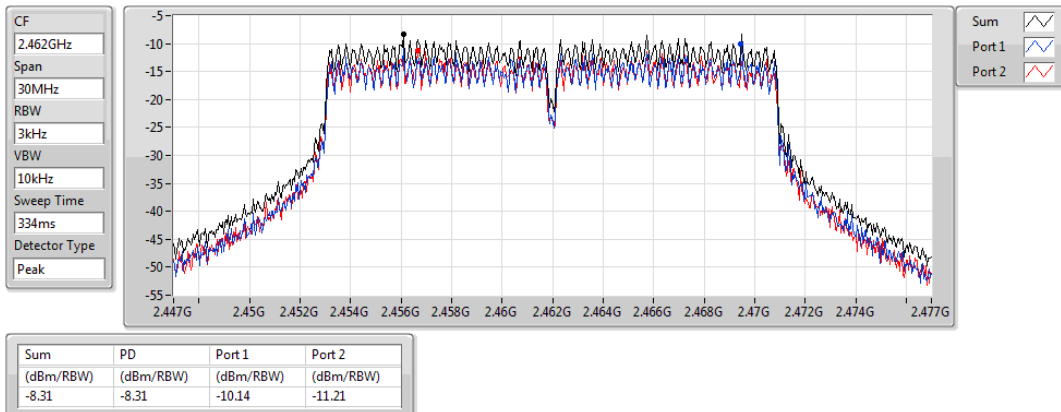
2437MHz



HT-20M_Nss1,(MCS0)_2TX

PSD

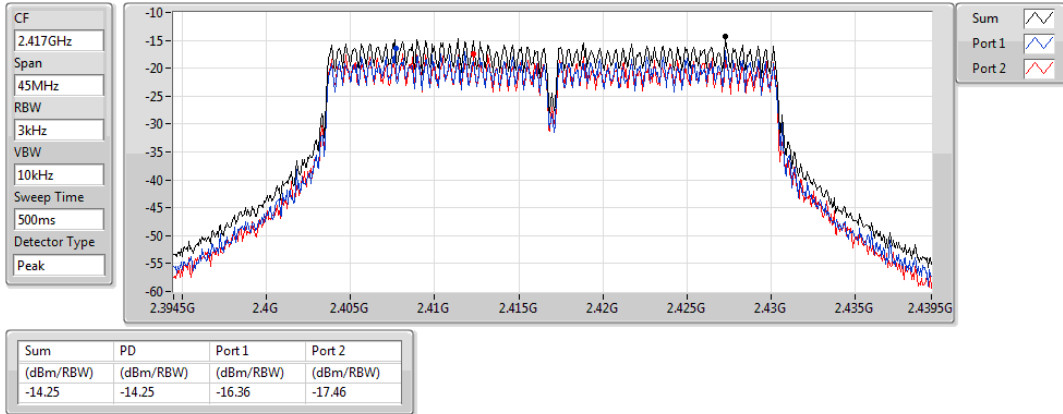
2462MHz



HT-30M_Nss1,(MCS0)_2TX

PSD

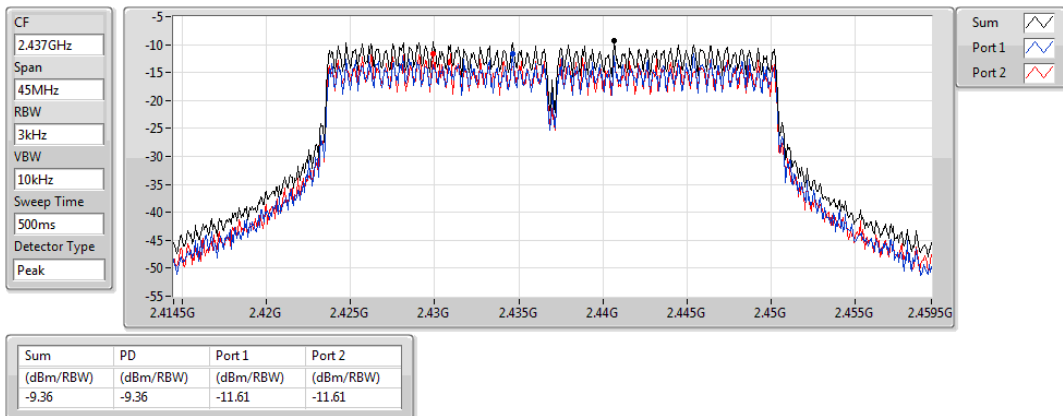
2417MHz



HT-30M_Nss1,(MCS0)_2TX

PSD

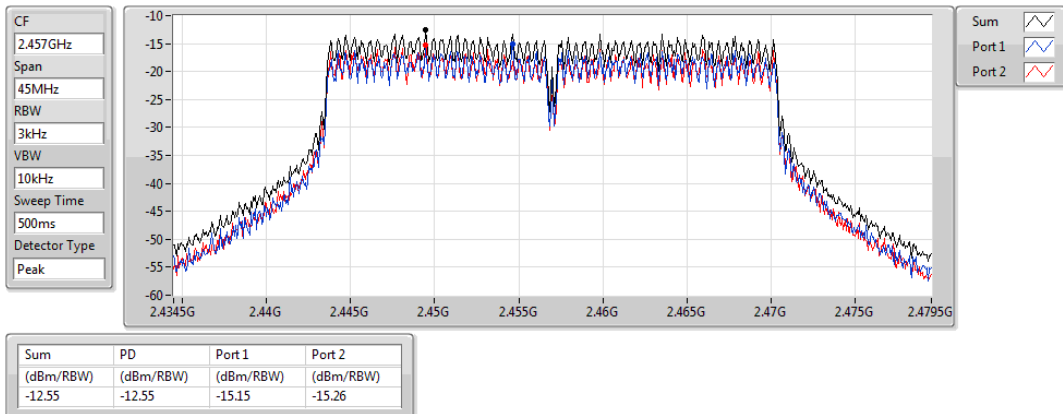
2437MHz



HT-30M_Nss1,(MCS0)_2TX

PSD

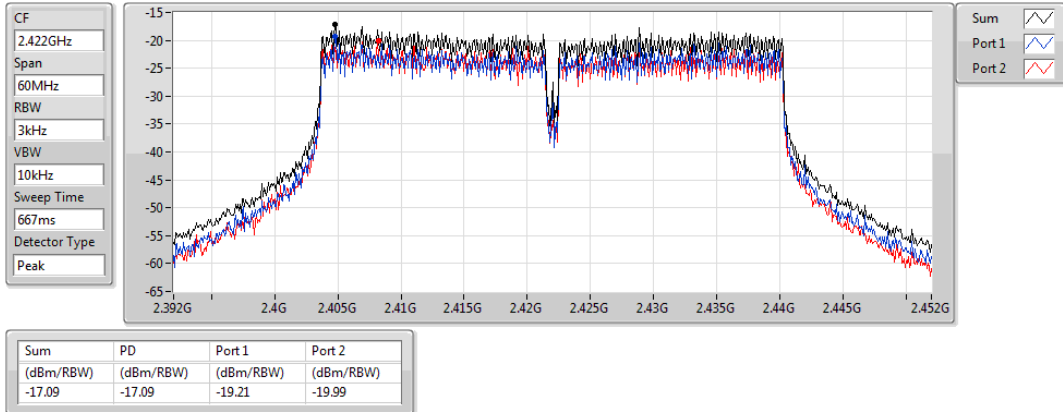
2457MHz



HT-40M_Nss1,(MCS0)_2TX

PSD

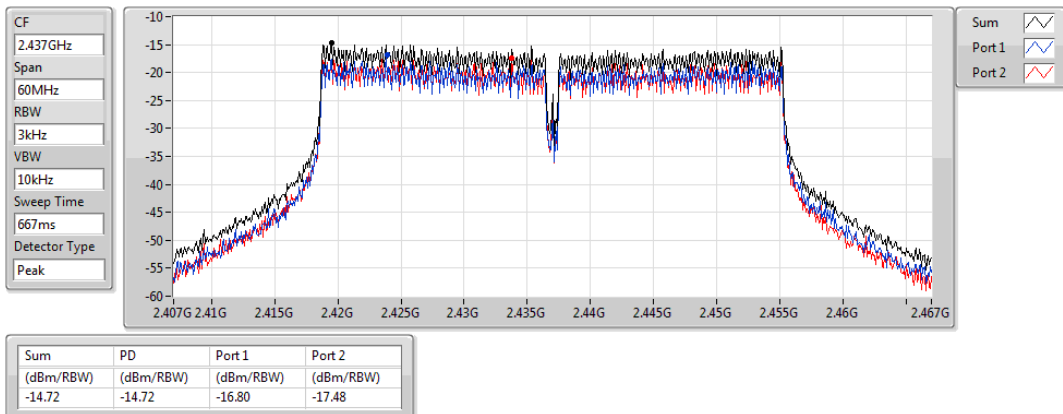
2422MHz



HT-40M_Nss1,(MCS0)_2TX

PSD

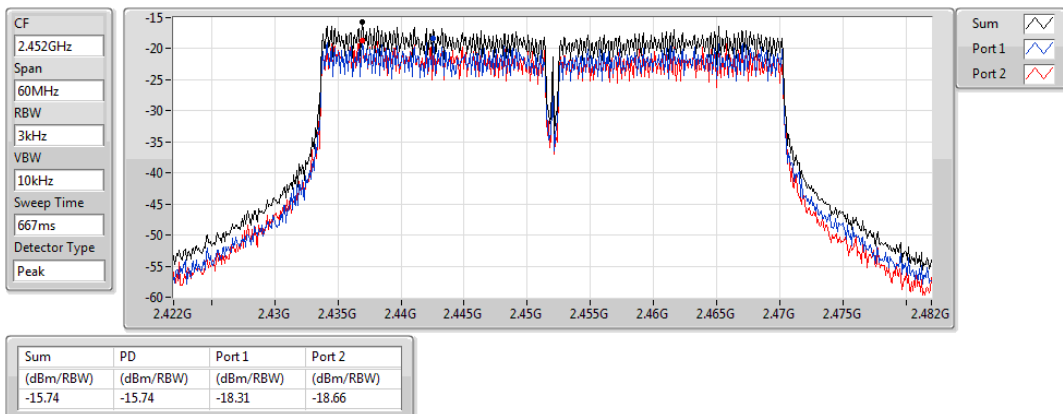
2437MHz



HT-40M_Nss1,(MCS0)_2TX

PSD

2452MHz



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

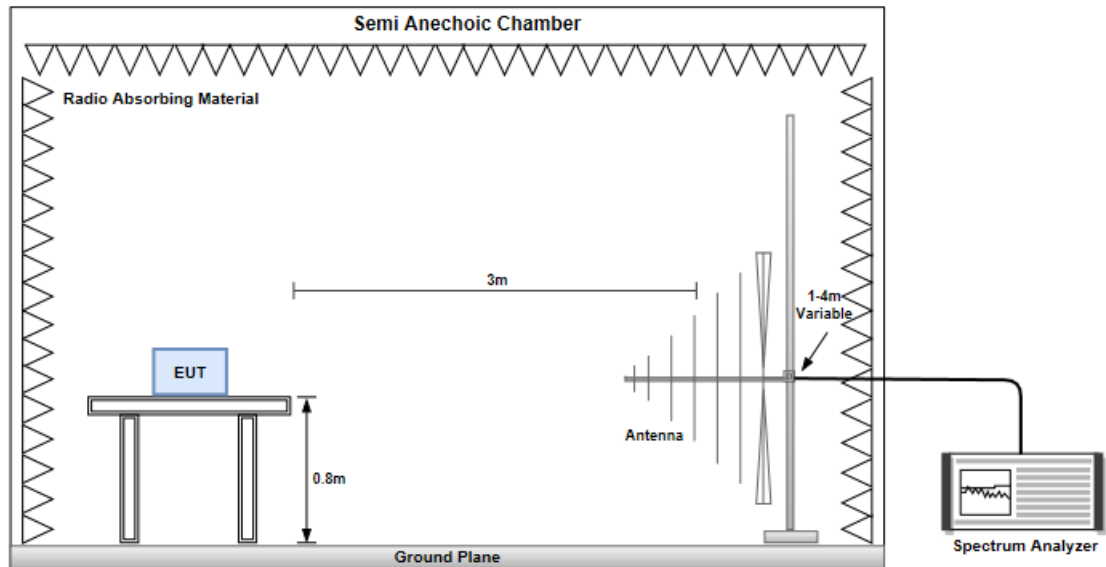
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

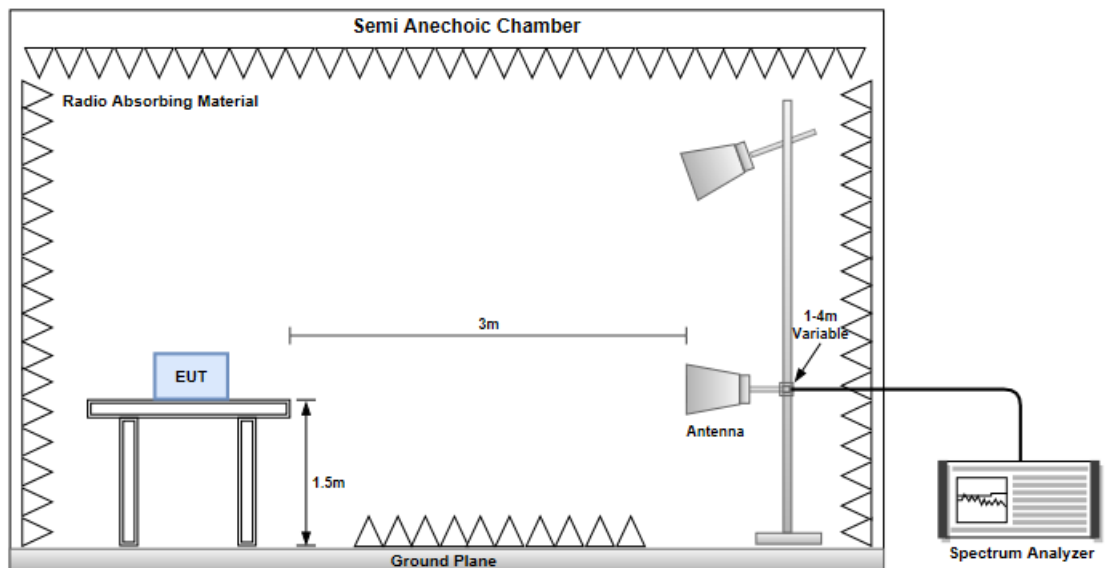
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.5.3 Test Setup

Radiated Emissions below 1 GHz



Radiated Emissions above 1 GHz

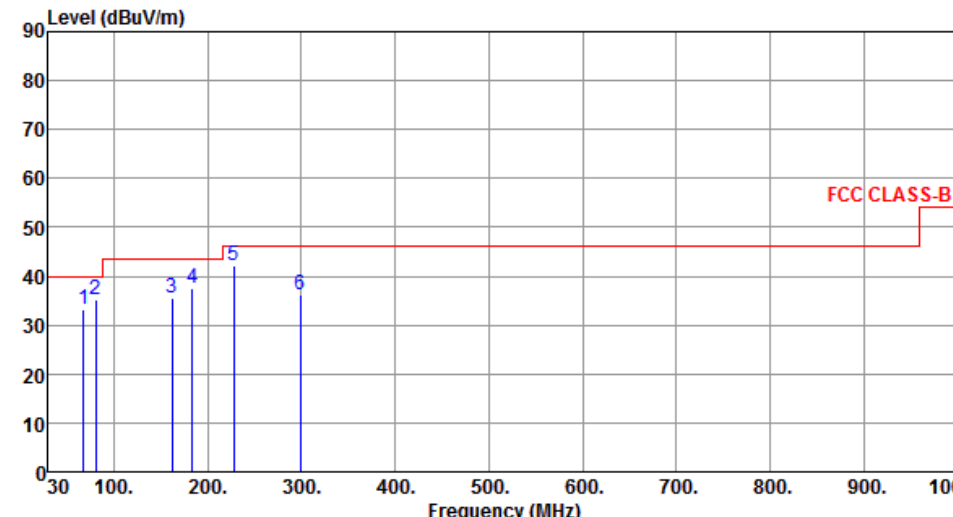


Configuration 1: Wi-Fi point-to-point

3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

BW(MHz): 5MHz

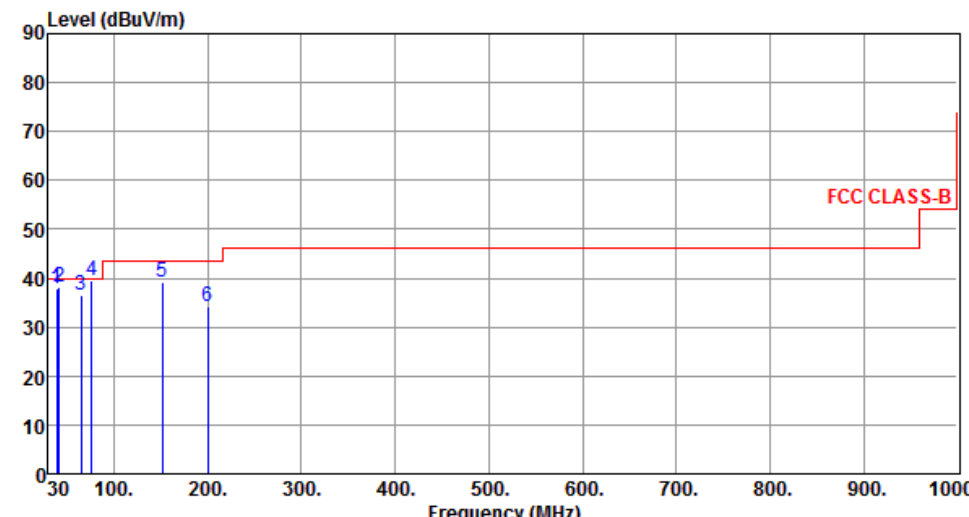
Modulation	11n	Test Freq. (MHz)	2412
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	67.83	33.25	40.00	-6.75	43.57	-10.32	Peak	---	---
2	80.44	35.31	40.00	-4.69	48.78	-13.47	Peak	---	---
3	161.92	35.38	43.50	-8.12	44.18	-8.80	Peak	---	---
4	183.26	37.59	43.50	-5.91	48.21	-10.62	Peak	---	---
5	227.88	42.28	46.00	-3.72	54.23	-11.95	Peak	---	---
6	298.69	36.17	46.00	-9.83	44.67	-8.50	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.

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



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	38.94	38.01	40.00	-1.99	47.40	-9.39	QP	100	98
2	41.62	38.08	40.00	-1.92	47.21	-9.13	QP	100	109
3	64.92	36.61	40.00	-3.39	46.53	-9.92	Peak	---	---
4	76.56	39.50	40.00	-0.50	52.01	-12.51	QP	100	202
5	151.25	39.03	43.50	-4.47	47.75	-8.72	Peak	---	---
6	199.75	34.19	43.50	-9.31	46.21	-12.02	Peak	---	---

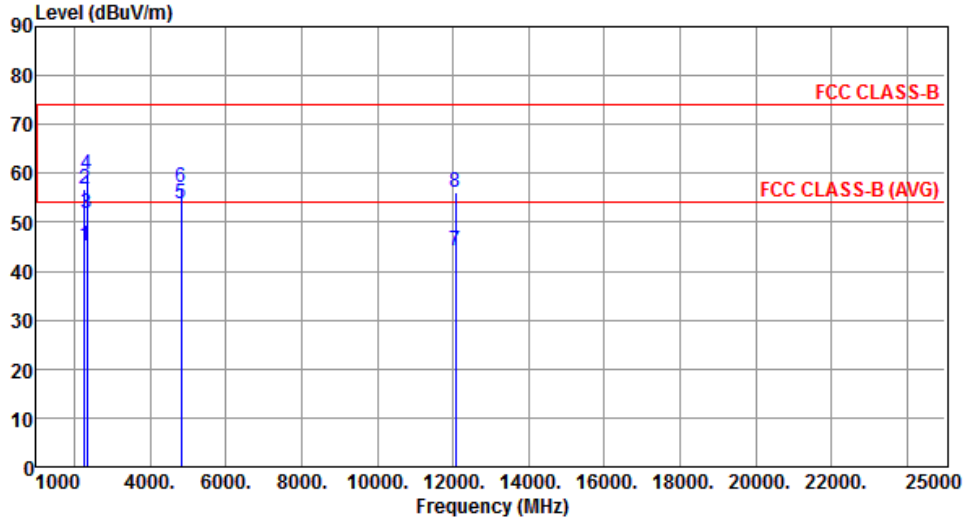
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

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

BW(MHz): 5MHz

Modulation	11b	Test Freq. (MHz)	2412
Polarization	Horizontal		
Level (dBuV/m) </			

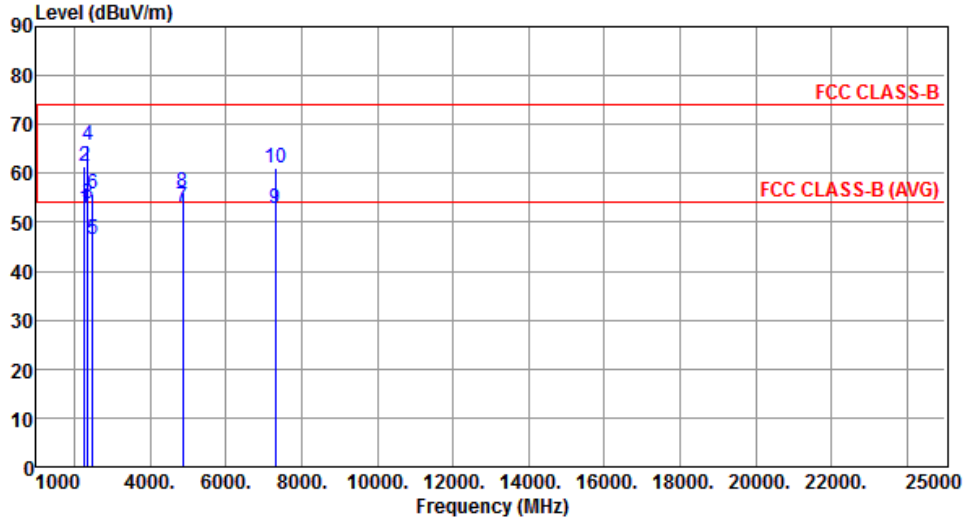
Modulation	11b	Test Freq. (MHz)	2412
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2280.00	45.06	54.00	-8.94	45.85	-0.79	Average	156	183
2	2280.00	56.69	74.00	-17.31	57.48	-0.79	Peak	156	183
3	2332.00	51.65	54.00	-2.35	52.46	-0.81	Average	156	183
4	2332.00	59.75	74.00	-14.25	60.56	-0.81	Peak	156	183
5	4824.00	53.65	54.00	-0.35	48.78	4.87	Average	100	351
6	4824.00	57.23	74.00	-16.77	52.36	4.87	Peak	100	351
7	12060.00	44.08	54.00	-9.92	29.16	14.92	Average	100	40
8	12060.00	56.20	74.00	-17.80	41.28	14.92	Peak	100	40

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).

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



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2280.00	52.80	54.00	-1.20	53.59	-0.79	Average	160	185
2	2280.00	61.32	74.00	-12.68	62.11	-0.79	Peak	160	185
3	2357.00	53.64	54.00	-0.36	54.52	-0.88	Average	160	185
4	2357.00	65.71	74.00	-8.29	66.59	-0.88	Peak	160	185
5	2483.50	46.34	54.00	-7.66	47.46	-1.12	Average	160	185
6	2483.50	55.80	74.00	-18.20	56.92	-1.12	Peak	160	185
7	4874.00	53.12	54.00	-0.88	48.21	4.91	Average	201	325
8	4874.00	56.19	74.00	-17.81	51.28	4.91	Peak	201	325
9	7311.00	52.78	54.00	-1.22	42.43	10.35	Average	223	63
10	7311.00	60.96	74.00	-13.04	50.61	10.35	Peak	223	63

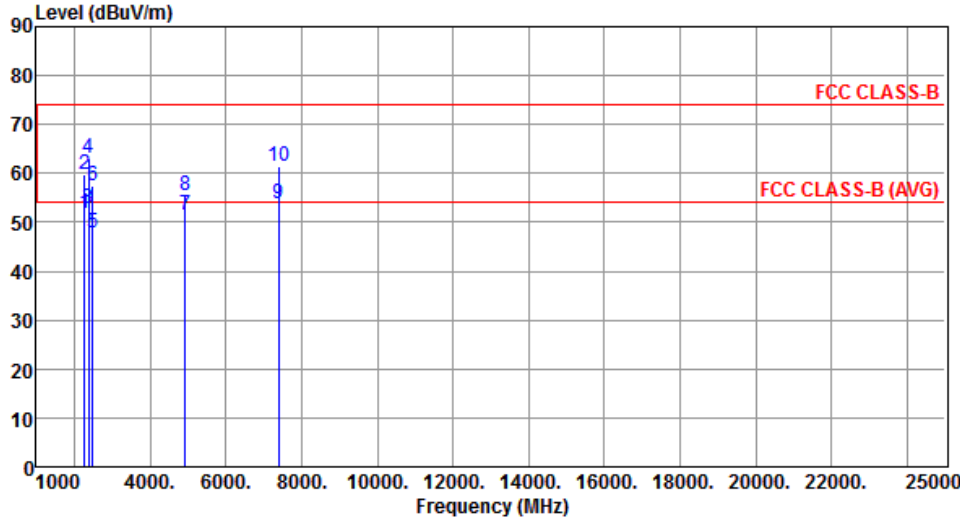
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Modulation	11b	Test Freq. (MHz)	2437
Polarization	Vertical		
Level (dBuV/m) </			

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



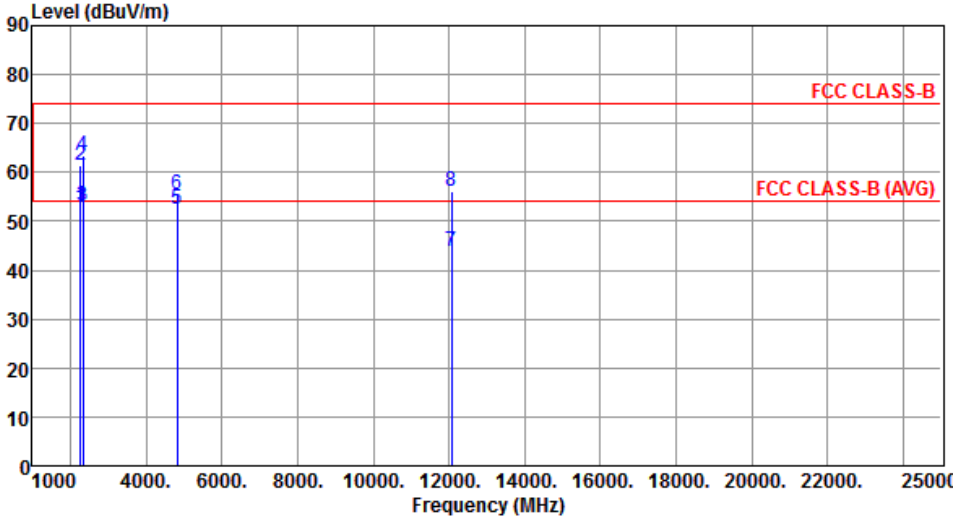
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2280.00	51.94	54.00	-2.06	52.73	-0.79	Average	189	185
2	2280.00	59.74	74.00	-14.26	60.53	-0.79	Peak	189	185
3	2382.00	52.65	54.00	-1.35	53.59	-0.94	Average	189	185
4	2382.00	63.01	74.00	-10.99	63.95	-0.94	Peak	189	185
5	2483.50	47.92	54.00	-6.08	49.04	-1.12	Average	189	185
6	2483.50	57.37	74.00	-16.63	58.49	-1.12	Peak	189	185
7	4924.00	51.63	54.00	-2.37	46.62	5.01	Average	202	326
8	4924.00	55.57	74.00	-18.43	50.56	5.01	Peak	202	326
9	7386.00	53.80	54.00	-0.20	43.65	10.15	Average	187	40
10	7386.00	61.42	74.00	-12.58	51.27	10.15	Peak	187	40

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).

Modulation	11b	Test Freq. (MHz)	2462
Polarization	Vertical		
Level (dBUV/m) </			

BW(MHz): 8MHz

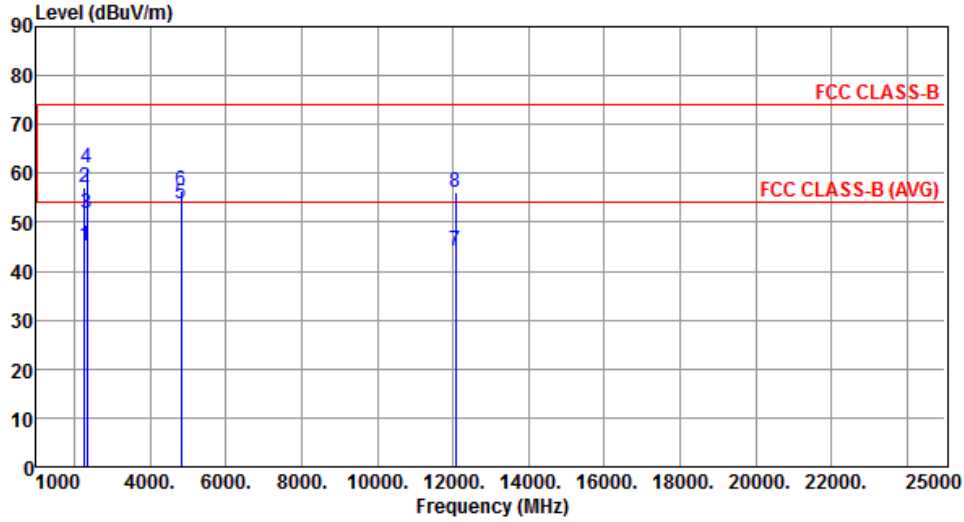
Modulation	11b	Test Freq. (MHz)	2412
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2280.00	52.76	54.00	-1.24	53.55	-0.79	Average	124	185
2	2280.00	61.29	74.00	-12.71	62.08	-0.79	Peak	124	185
3	2340.00	53.23	54.00	-0.77	54.06	-0.83	Average	124	185
4	2340.00	63.38	74.00	-10.62	64.21	-0.83	Peak	124	185
5	4824.00	52.40	54.00	-1.60	47.53	4.87	Average	213	339
6	4824.00	55.32	74.00	-18.68	50.45	4.87	Peak	213	339
7	12060.00	43.96	54.00	-10.04	29.04	14.92	Average	100	60
8	12060.00	56.14	74.00	-17.86	41.22	14.92	Peak	100	60

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).

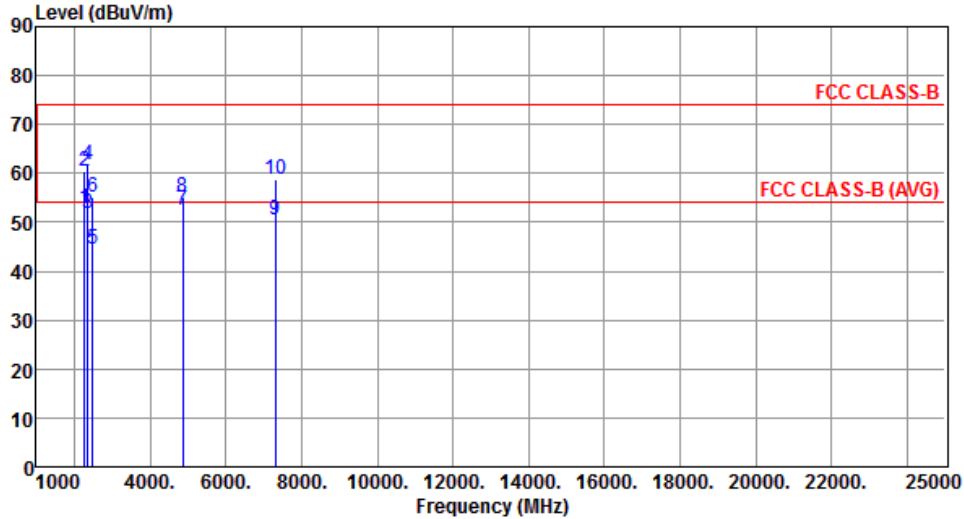
Modulation	11b	Test Freq. (MHz)	2412
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2280.00	45.04	54.00	-8.96	45.83	-0.79	Average	124	185
2	2280.00	56.99	74.00	-17.01	57.78	-0.79	Peak	124	185
3	2340.00	51.97	54.00	-2.03	52.80	-0.83	Average	124	185
4	2340.00	60.99	74.00	-13.01	61.82	-0.83	Peak	124	185
5	4824.00	53.76	54.00	-0.24	48.89	4.87	Average	100	356
6	4824.00	56.43	74.00	-17.57	51.56	4.87	Peak	100	356
7	12060.00	44.04	54.00	-9.96	29.12	14.92	Average	100	80
8	12060.00	56.24	74.00	-17.76	41.32	14.92	Peak	100	80

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).

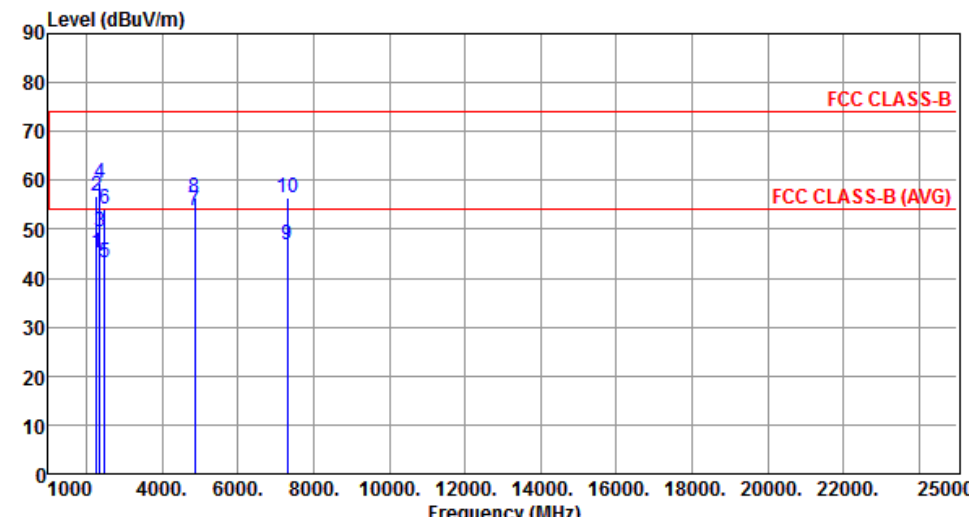
Modulation	11b	Test Freq. (MHz)	2437
Polarization	Horizontal		



	Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANT	Turn
	MHz	level	dBUV/m	dB	reading	dB		High	Table
		dBUV/m			dBuV			cm	deg
1	2280.00	52.91	54.00	-1.09	53.70	-0.79	Average	160	188
2	2280.00	60.53	74.00	-13.47	61.32	-0.79	Peak	160	188
3	2367.00	51.89	54.00	-2.11	52.79	-0.90	Average	160	188
4	2367.00	61.89	74.00	-12.11	62.79	-0.90	Peak	160	188
5	2483.50	44.34	54.00	-9.66	45.46	-1.12	Average	160	188
6	2483.50	55.28	74.00	-18.72	56.40	-1.12	Peak	160	188
7	4874.00	52.54	54.00	-1.46	47.63	4.91	Average	187	343
8	4874.00	55.23	74.00	-18.77	50.32	4.91	Peak	187	343
9	7311.00	50.37	54.00	-3.63	40.02	10.35	Average	218	66
10	7311.00	58.73	74.00	-15.27	48.38	10.35	Peak	218	66

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).

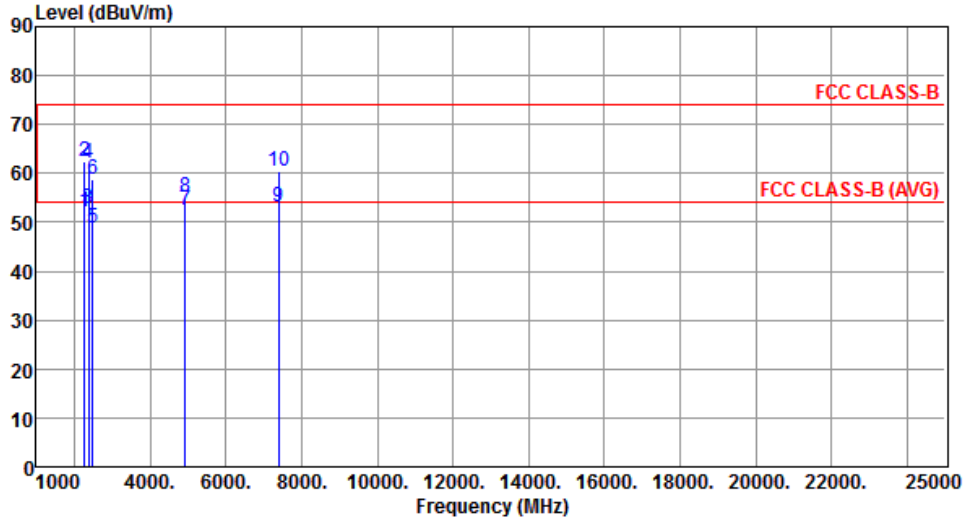
Modulation	11b	Test Freq. (MHz)	2437
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2280.00	45.06	54.00	-8.94	45.85	-0.79	Average	155	181
2	2280.00	56.81	74.00	-17.19	57.60	-0.79	Peak	155	181
3	2367.00	49.55	54.00	-4.45	50.45	-0.90	Average	155	181
4	2367.00	59.46	74.00	-14.54	60.36	-0.90	Peak	155	181
5	2483.50	43.20	54.00	-10.80	44.32	-1.12	Average	155	181
6	2483.50	54.27	74.00	-19.73	55.39	-1.12	Peak	155	181
7	4874.00	53.66	54.00	-0.34	48.75	4.91	Average	131	352
8	4874.00	56.36	74.00	-17.64	51.45	4.91	Peak	131	352
9	7311.00	46.75	54.00	-7.25	36.40	10.35	Average	110	332
10	7311.00	56.36	74.00	-17.64	46.01	10.35	Peak	110	332

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).

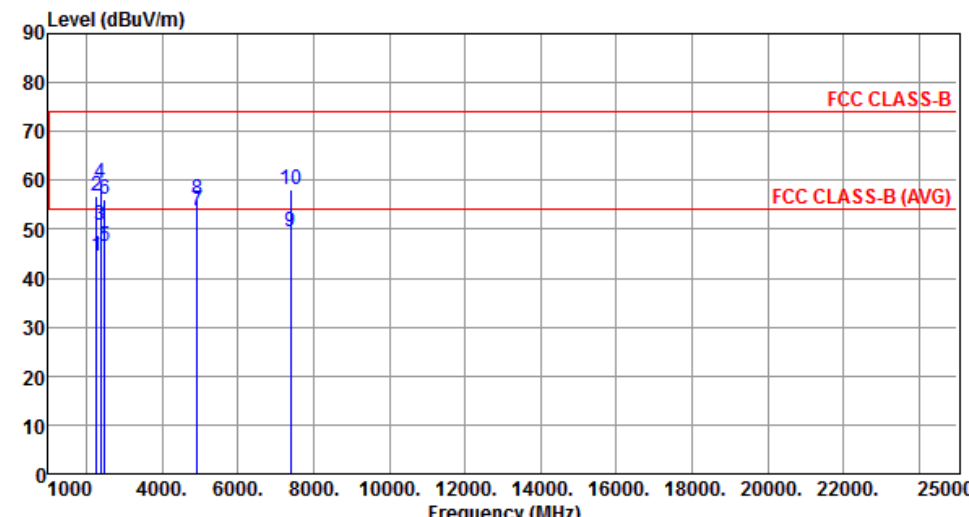
Modulation	11b	Test Freq. (MHz)	2462
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2280.00	52.27	54.00	-1.73	53.06	-0.79	Average	211	185
2	2280.00	62.32	74.00	-11.68	63.11	-0.79	Peak	211	185
3	2382.00	52.91	54.00	-1.09	53.85	-0.94	Average	211	185
4	2382.00	62.06	74.00	-11.94	63.00	-0.94	Peak	211	185
5	2483.50	48.88	54.00	-5.12	50.00	-1.12	Average	211	185
6	2483.50	58.66	74.00	-15.34	59.78	-1.12	Peak	211	185
7	4924.00	52.42	54.00	-1.58	47.41	5.01	Average	185	346
8	4924.00	55.29	74.00	-18.71	50.28	5.01	Peak	185	346
9	7386.00	53.04	54.00	-0.96	42.89	10.15	Average	167	40
10	7386.00	60.38	74.00	-13.62	50.23	10.15	Peak	167	40

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).

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

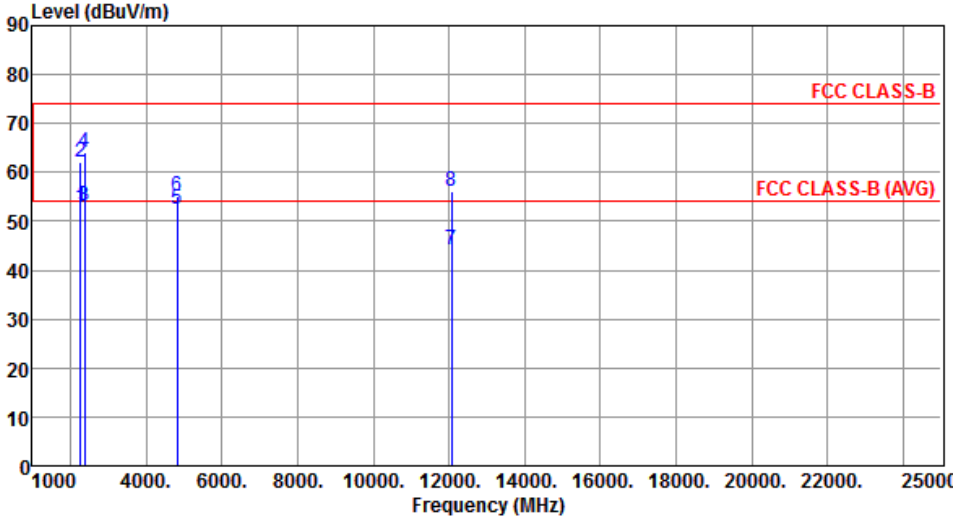


	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2280.00	44.56	54.00	-9.44	45.35	-0.79	Average	184	186
2	2280.00	56.69	74.00	-17.31	57.48	-0.79	Peak	184	186
3	2382.00	50.73	54.00	-3.27	51.67	-0.94	Average	184	186
4	2382.00	59.59	74.00	-14.41	60.53	-0.94	Peak	184	186
5	2483.50	46.53	54.00	-7.47	47.65	-1.12	Average	184	186
6	2483.50	56.04	74.00	-17.96	57.16	-1.12	Peak	184	186
7	4924.00	53.70	54.00	-0.30	48.69	5.01	Average	100	5
8	4924.00	56.22	74.00	-17.78	51.21	5.01	Peak	100	5
9	7386.00	49.60	54.00	-4.40	39.45	10.15	Average	115	333
10	7386.00	58.27	74.00	-15.73	48.12	10.15	Peak	115	333

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).

BW(MHz): 10MHz

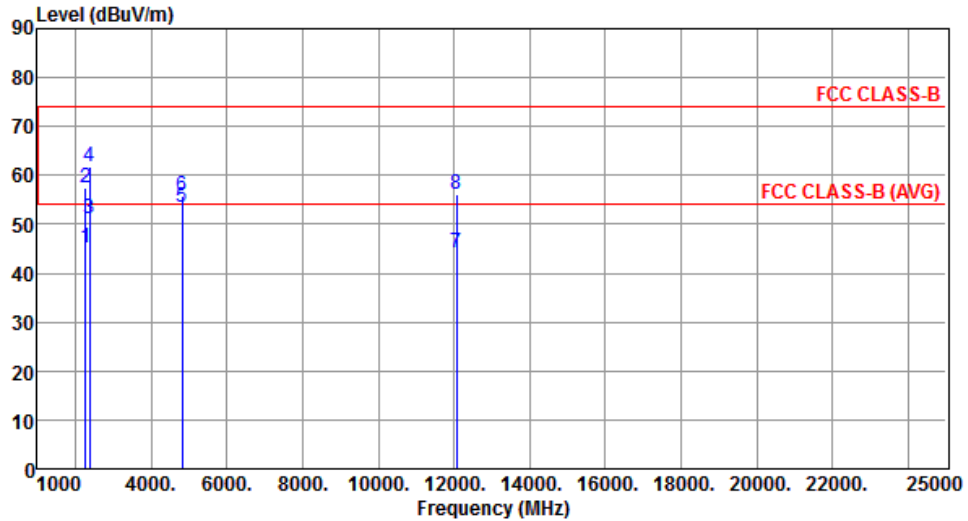
Modulation	11b	Test Freq. (MHz)	2412
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2280.00	52.78	54.00	-1.22	53.57	-0.79	Average	183	174
2	2280.00	61.94	74.00	-12.06	62.73	-0.79	Peak	183	174
3	2390.00	53.24	54.00	-0.76	54.20	-0.96	Average	183	174
4	2390.00	64.07	74.00	-9.93	65.03	-0.96	Peak	183	174
5	4824.00	52.47	54.00	-1.53	47.60	4.87	Average	216	333
6	4824.00	55.22	74.00	-18.78	50.35	4.87	Peak	216	333
7	12060.00	44.05	54.00	-9.95	29.13	14.92	Average	100	50
8	12060.00	56.18	74.00	-17.82	41.26	14.92	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).

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



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2280.00	45.13	54.00	-8.87	45.92	-0.79	Average	124	185
2	2280.00	57.43	74.00	-16.57	58.22	-0.79	Peak	124	185
3	2390.00	51.02	54.00	-2.98	51.98	-0.96	Average	124	185
4	2390.00	61.91	74.00	-12.09	62.87	-0.96	Peak	124	185
5	4824.00	53.61	54.00	-0.39	48.74	4.87	Average	100	2
6	4824.00	55.93	74.00	-18.07	51.06	4.87	Peak	100	2
7	12060.00	44.06	54.00	-9.94	29.14	14.92	Average	100	70
8	12060.00	56.17	74.00	-17.83	41.25	14.92	Peak	100	70

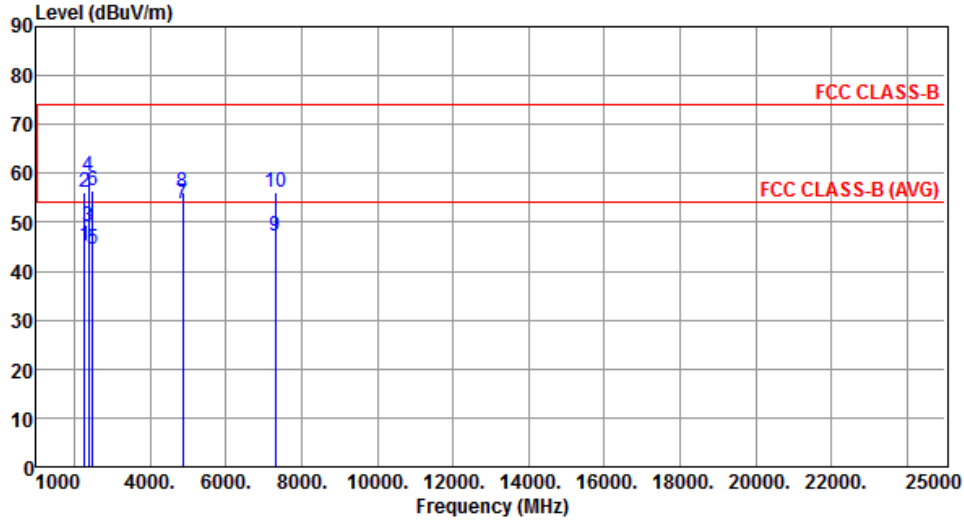
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Modulation	11b	Test Freq. (MHz)	2437
Polarization	Horizontal		
Level (dBuV/m) </			

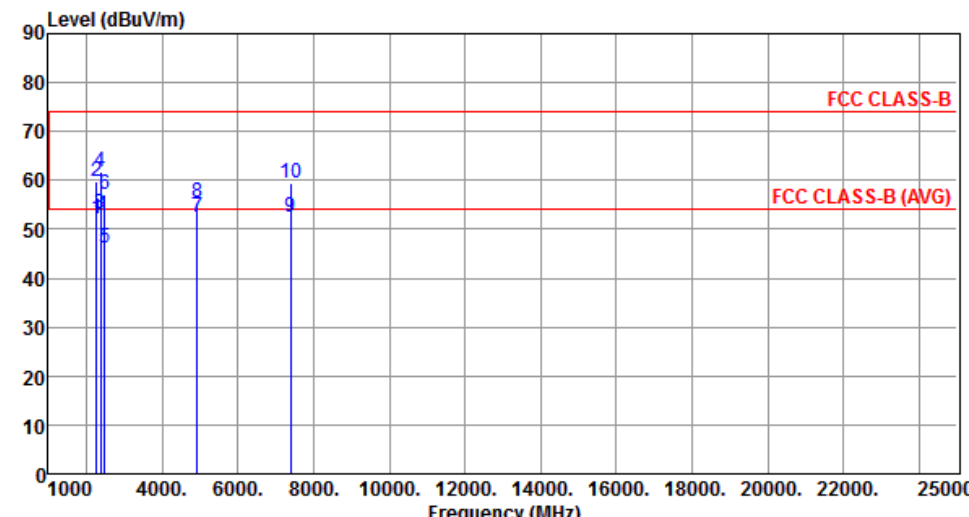
Modulation	11b	Test Freq. (MHz)	2437
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2280.00	45.09	54.00	-8.91	45.88	-0.79	Average	166	182
2	2280.00	56.06	74.00	-17.94	56.85	-0.79	Peak	166	182
3	2390.00	49.06	54.00	-4.94	50.02	-0.96	Average	166	182
4	2390.00	59.33	74.00	-14.67	60.29	-0.96	Peak	166	182
5	2483.50	44.47	54.00	-9.53	45.59	-1.12	Average	166	182
6	2483.50	56.37	74.00	-17.63	57.49	-1.12	Peak	166	182
7	4874.00	53.70	54.00	-0.30	48.79	4.91	Average	100	4
8	4874.00	56.15	74.00	-17.85	51.24	4.91	Peak	100	4
9	7311.00	47.25	54.00	-6.75	36.90	10.35	Average	110	334
10	7311.00	56.28	74.00	-17.72	45.93	10.35	Peak	110	334

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).

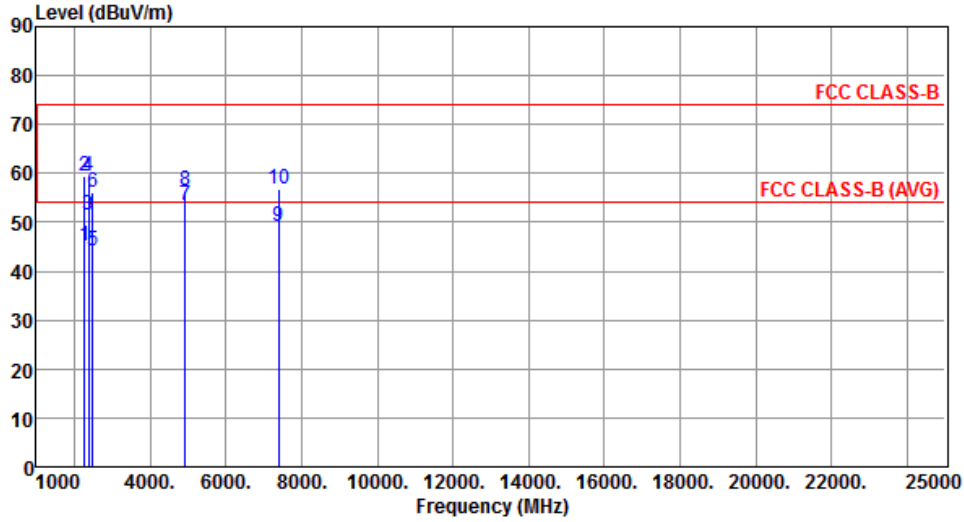
Modulation	11b	Test Freq. (MHz)	2462
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2280.00	52.16	54.00	-1.84	52.95	-0.79	Average	123	185
2	2280.00	59.76	74.00	-14.24	60.55	-0.79	Peak	123	185
3	2382.00	53.16	54.00	-0.84	54.10	-0.94	Average	123	185
4	2382.00	61.61	74.00	-12.39	62.55	-0.94	Peak	123	185
5	2483.50	46.30	54.00	-7.70	47.42	-1.12	Average	123	185
6	2483.50	57.02	74.00	-16.98	58.14	-1.12	Peak	123	185
7	4924.00	52.33	54.00	-1.67	47.32	5.01	Average	186	345
8	4924.00	55.62	74.00	-18.38	50.61	5.01	Peak	186	345
9	7386.00	52.43	54.00	-1.57	42.28	10.15	Average	185	46
10	7386.00	59.41	74.00	-14.59	49.26	10.15	Peak	185	46

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).

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

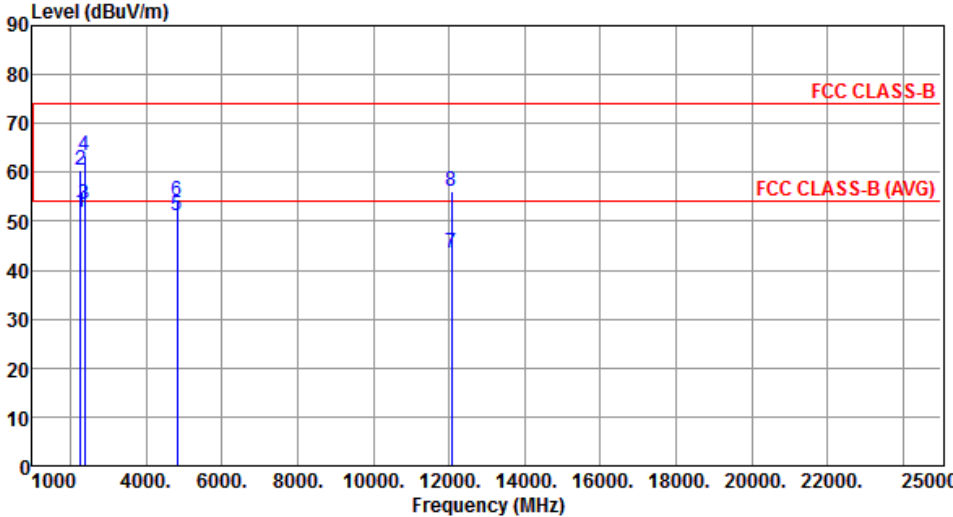


	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2280.00	45.06	54.00	-8.94	45.85	-0.79	Average	176	182
2	2280.00	59.48	74.00	-14.52	60.27	-0.79	Peak	176	182
3	2382.00	51.52	54.00	-2.48	52.46	-0.94	Average	176	182
4	2382.00	59.55	74.00	-14.45	60.49	-0.94	Peak	176	182
5	2483.50	44.27	54.00	-9.73	45.39	-1.12	Average	176	182
6	2483.50	56.00	74.00	-18.00	57.12	-1.12	Peak	176	182
7	4924.00	53.56	54.00	-0.44	48.55	5.01	Average	100	6
8	4924.00	56.50	74.00	-17.50	51.49	5.01	Peak	100	6
9	7386.00	49.28	54.00	-4.72	39.13	10.15	Average	111	336
10	7386.00	56.74	74.00	-17.26	46.59	10.15	Peak	111	336

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).

BW(MHz): 20MHz

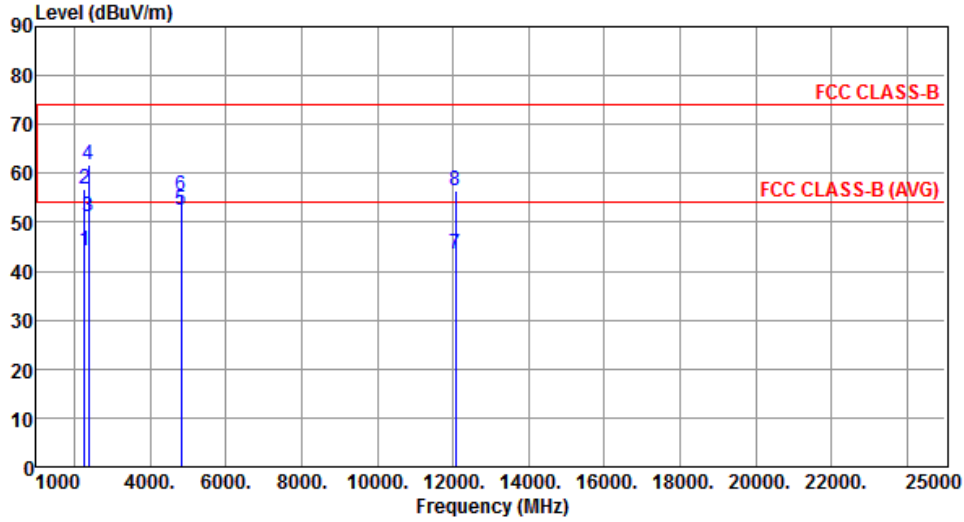
Modulation	11b	Test Freq. (MHz)	2412
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2280.00	51.65	54.00	-2.35	52.44	-0.79	Average	178	183
2	2280.00	60.55	74.00	-13.45	61.34	-0.79	Peak	178	183
3	2390.00	53.55	54.00	-0.45	54.51	-0.96	Average	178	183
4	2390.00	63.38	74.00	-10.62	64.34	-0.96	Peak	178	183
5	4824.00	51.11	54.00	-2.89	46.24	4.87	Average	210	332
6	4824.00	54.27	74.00	-19.73	49.40	4.87	Peak	210	332
7	12060.00	43.61	54.00	-10.39	28.69	14.92	Average	100	50
8	12060.00	56.13	74.00	-17.87	41.21	14.92	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).

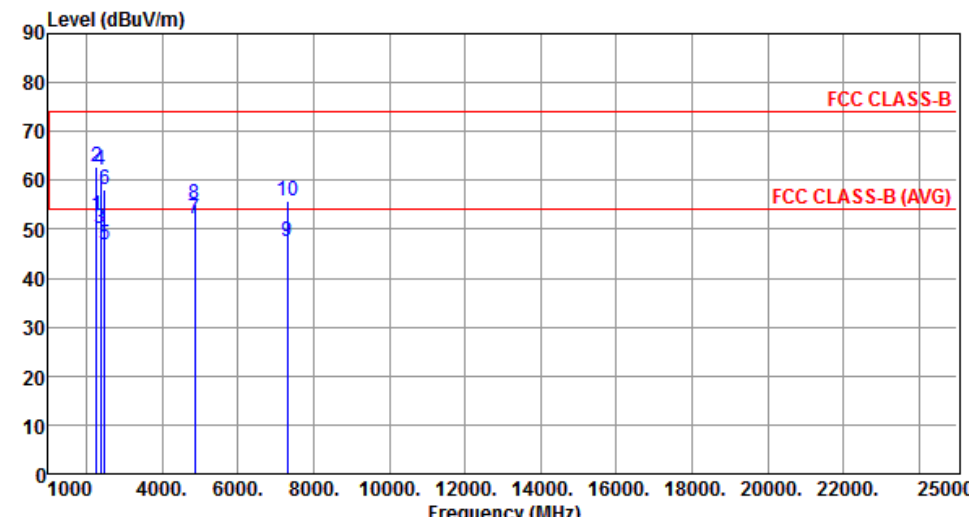
Modulation	11b	Test Freq. (MHz)	2412
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2280.00	44.21	54.00	-9.79	45.00	-0.79	Average	107	181
2	2280.00	56.72	74.00	-17.28	57.51	-0.79	Peak	107	181
3	2390.00	51.10	54.00	-2.90	52.06	-0.96	Average	107	181
4	2390.00	61.62	74.00	-12.38	62.58	-0.96	Peak	107	181
5	4824.00	52.60	54.00	-1.40	47.73	4.87	Average	100	5
6	4824.00	55.35	74.00	-18.65	50.48	4.87	Peak	100	5
7	12060.00	43.38	54.00	-10.62	28.46	14.92	Average	100	30
8	12060.00	56.31	74.00	-17.69	41.39	14.92	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).

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

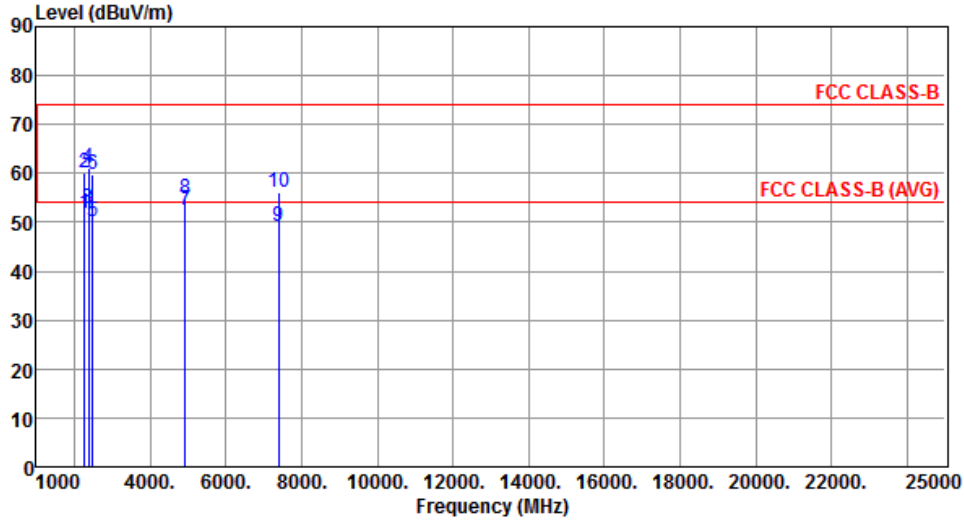


	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2280.00	52.89	54.00	-1.11	53.68	-0.79	Average	160	181
2	2280.00	62.61	74.00	-11.39	63.40	-0.79	Peak	160	181
3	2390.00	50.17	54.00	-3.83	51.13	-0.96	Average	160	181
4	2390.00	62.11	74.00	-11.89	63.07	-0.96	Peak	160	181
5	2483.50	46.72	54.00	-7.28	47.84	-1.12	Average	160	181
6	2483.50	58.22	74.00	-15.78	59.34	-1.12	Peak	160	181
7	4874.00	52.19	54.00	-1.81	47.28	4.91	Average	215	332
8	4874.00	55.03	74.00	-18.97	50.12	4.91	Peak	215	332
9	7311.00	47.65	54.00	-6.35	37.30	10.35	Average	234	60
10	7311.00	55.64	74.00	-18.36	45.29	10.35	Peak	234	60

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).

Modulation	11b	Test Freq. (MHz)	2437
Polarization	Vertical		
Level (dBuV/m)			

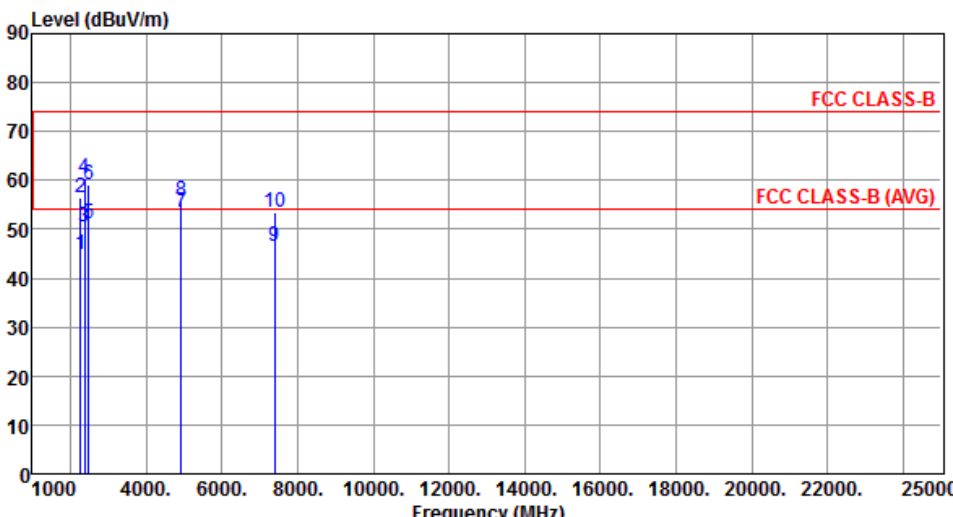
Modulation	11b	Test Freq. (MHz)	2462
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2280.00	51.66	54.00	-2.34	52.45	-0.79	Average	176	180
2	2280.00	60.00	74.00	-14.00	60.79	-0.79	Peak	176	180
3	2382.00	52.68	54.00	-1.32	53.62	-0.94	Average	176	180
4	2382.00	61.02	74.00	-12.98	61.96	-0.94	Peak	176	180
5	2483.50	50.05	54.00	-3.95	51.17	-1.12	Average	176	180
6	2483.50	59.74	74.00	-14.26	60.86	-1.12	Peak	176	180
7	4924.00	52.42	54.00	-1.58	47.41	5.01	Average	216	333
8	4924.00	54.64	74.00	-19.36	49.63	5.01	Peak	216	333
9	7386.00	49.27	54.00	-4.73	39.12	10.15	Average	194	41
10	7386.00	56.00	74.00	-18.00	45.85	10.15	Peak	194	41

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).

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



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2280.00	44.87	54.00	-9.13	45.66	-0.79	Average	169	182
2	2280.00	56.51	74.00	-17.49	57.30	-0.79	Peak	169	182
3	2382.00	50.42	54.00	-3.58	51.36	-0.94	Average	169	182
4	2382.00	60.32	74.00	-13.68	61.26	-0.94	Peak	169	182
5	2483.50	51.13	54.00	-2.87	52.25	-1.12	Average	169	182
6	2483.50	59.20	74.00	-14.80	60.32	-1.12	Peak	169	182
7	4924.00	53.57	54.00	-0.43	48.56	5.01	Average	184	3
8	4924.00	55.71	74.00	-18.29	50.70	5.01	Peak	184	3
9	7386.00	46.41	54.00	-7.59	36.26	10.15	Average	145	355
10	7386.00	53.63	74.00	-20.37	43.48	10.15	Peak	145	355

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).