FCC Test Report

FCC ID	:	**COF-MS01**
Equipment	:	**WiFi SOM Module**
Brand Name	:	**USI**
Model Name	:	**MS-01**
Applicant	:	**Universal Global Scientific Industrial Co., Ltd 141, Lane 351, Sec. 1, Taiping Road, Tsaotuen, Nantou 54261, Taiwan**
Manufacturer	:	**Universal Global Scientific Industrial Co., Ltd 141, Lane 351, Sec. 1, Taiping Road, Tsaotuen, Nantou 54261, Taiwan**
Standard	:	**47 CFR FCC Part 15.247**

The product was received on Mar. 04, 2019, and testing was started from Mar. 12, 2019 and completed on Mar. 15, 2019. . We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Allen Lin

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

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History of this test report

Report No.	Version	Description	Issued Date
FR922713-01AC	01	Initial issue of report	Apr. 25, 2019

Summary of Test Result

Report Clause	Ref. Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	FCC 15.203
3.1	15.207	AC Power-line Conducted Emissions	PASS	FCC 15.207
3.2	15.247(a)	DTS Bandwidth	PASS	≥500kHz
3.3	15.247(b)	Maximum Conducted Output Power	PASS	Power [dBm]: 30
3.4	15.247(e)	Power Spectral Density	PASS	PSD [dBm/3kHz]: 8
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	Non-Restricted Bands: > 30 dBc
3.6	15.247(d)	Emissions in Restricted Frequency Bands	PASS	Restricted Bands: FCC 15.209

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:
None

Reviewed by: Jackson Tsai

Report Producer: Jenny Yang

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
2400-2483.5	b, g, n (HT20)	2412-2462	1-11 [11]
2400-2483.5	n (HT40)	2422-2452	3-9 [7]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	2TX
2.4-2.4835GHz	802.11g	20	2TX
2.4-2.4835GHz	802.11n HT20	20	2TX
2.4-2.4835GHz	802.11n HT40	40	2TX

Note:
- 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- 11g, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector
1	Aristotle	RFA-25-C2H1-70-250A1	Dipole antenna	I-pex
2	Aristotle	RFA-25-C2H1-70-250A1	Dipole antenna	I-pex

Ant.	Port	Gain (dBi)		
		2.4G	5G	BT
1	1	1.44	2.16	1.44
2	2	1.44	2.16	-

Note 1: The EUT has two antennas.

Note 2: The antenna mentioned above will not be sold with the EUT in the market.

For 2.4GHz function:

For IEEE 802.11 b/g/n mode (2TX/2RX)

Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.

For BT function:

For IEEE 802.15.1 Bluetooth mode (1TX/1RX)

Only Ant. 1 (port 1) can be used as transmitting/receiving antenna.

For 5GHz function:

For IEEE 802.11 a/n/ac mode (2TX/2RX)

Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.

1.1.3 EUT Information

Operational Condition				
EUT Power Type	From AC Adapter			
EUT Function	☒	Point-to-multipoint	☐	Point-to-point
Beamforming Function	☐	With beamforming	☒	Without beamforming

Type of EUT		
☒	Stand-alone	
☐	Combined (EUT where the radio part is fully integrated within another device)	
	Combined Equipment - Brand Name / Model No.:	…
☐	Plug-in radio (EUT intended for a variety of host systems)	
	Host System - Brand Name / Model No.:	…
☐	Other:	

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.99	0.044	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11g	0.948	0.232	2.029m	1k
802.11n HT20	0.947	0.237	1.89m	1k
802.11n HT40	0.888	0.516	929.062u	3k

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

1.2 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR FCC Part 15
- ANSI C63.10-2013
- KDB 558074 D01 v05r02
- KDB 662911 D01 v02r01

1.3 Testing Location Information

Testing Location			
☒	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)	
		TEL : 886-3-327-3456	FAX : 886-3-327-0973
Test site Designation No. TW1190 with FCC.			
☐	JHUBEI	ADD : No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County, Taiwan (R.O.C.)	
		TEL : 886-3-656-9065	FAX : 886-3-656-9085
Test site Designation No. TW0006 with FCC.			

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Lego	22.1~23.6°C / 57.6~58.4%	13/Mar/2019
RF Conducted	TH06-HY	Clara	20.8~22.6°C / 59.5~61.7%	13/Mar/2019~ 15/Mar/2019
Radiated	03CH02-HY	Lego	20.3~22.8°C / 60.1~65.3%	12/Mar/2019~ 14/Mar/2019

1.4 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)

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.54 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	1.6 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	Confidence levels of 95%
Temperature	0.7 ℃	Confidence levels of 95%
Humidity	4 %	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Condition

RF Conducted	Abbreviation	Remark
TnomVnom	Tnom	20°C
-	Vnom	120V

2.2 Test Channel Mode

Test Software Version	QRCT v3.0.297.0

Mode	Power Setting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	18
2417MHz	18
2437MHz	18
2457MHz	18
2462MHz	18
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	18.5
2417MHz	18.5
2437MHz	18.5
2457MHz	18.5
2462MHz	18.5
802.11n HT20_Nss1,(MCS0)_2TX	-
2412MHz	17
2417MHz	17.5
2437MHz	17.5
2457MHz	17.5
2462MHz	17.5
802.11n HT40_Nss1,(MCS0)_2TX	-
2422MHz	16
2427MHz	17.5
2437MHz	17.5
2447MHz	17.5
2452MHz	16.5

2.3 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	CTX
1	Adapter mode

The Worst Case Mode for Following Conformance Tests	
Tests Item	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in Non-restricted Frequency Bands
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	CTX
1	Adapter mode
Operating Mode > 1GHz	CTX
Orthogonal Planes of EUT	**Z Plane**
	
Worst Planes of EUT	V

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Operating Mode	CTX
1	Bluetooth+WLAN 2.4GHz
2	Bluetooth+WLAN 5GHz
Refer to Sporton Test Report No.: FA922713 for Co-location RF Exposure Evaluation.	

2.4 Support Equipment

Support Equipment – AC Conduction				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	AC Adapter	FUJITSU	US-05	-
2	Test Fixture	-	-	-

Note: Support equipment No.1 & 2 were provided by customer.

Support Equipment – RF Conducted				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	Notebook	DELL	E5410	DoC
2	Adapter for NB	DELL	HA65NM130	DoC
3	AC Power Source	GW	APS-9102	-
4	Test Fixture	-	-	-

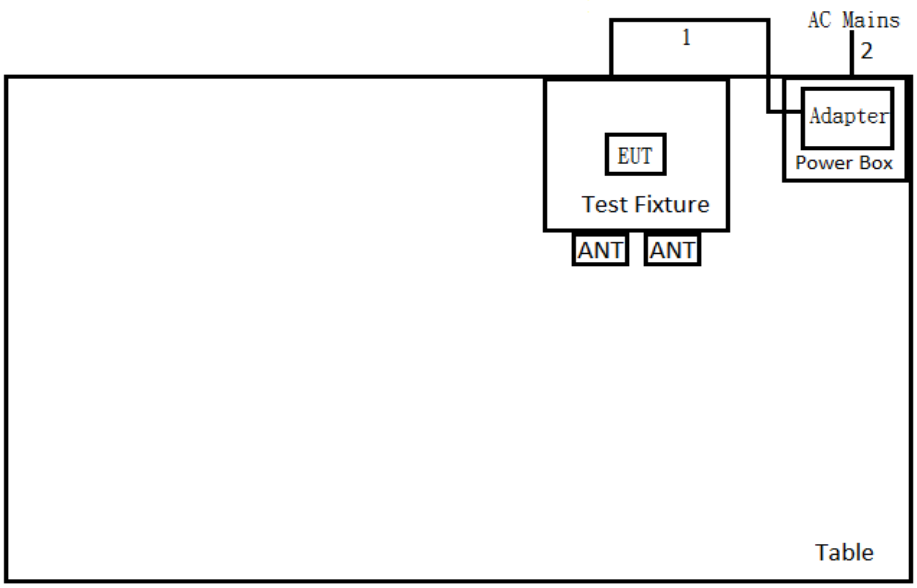
Note: Support equipment No.4 was provided by customer.

Support Equipment – Radiated Emission				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	AC Adapter	FUJITSU	US-05	-
2	Test Fixture	-	-	-

Note: Support equipment No.1 & 2 were provided by customer.

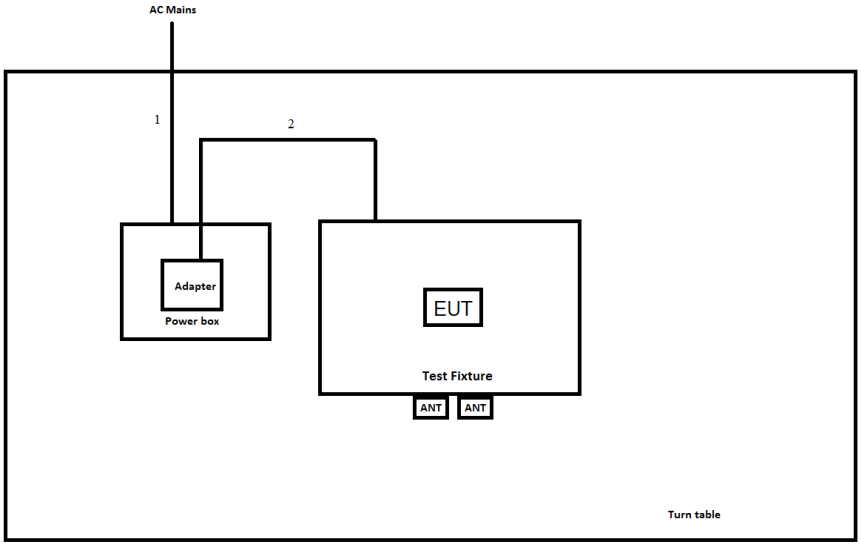
2.5 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length(m)	Remark
1	DC Power line	No	2.0	-
2	AC Power line	No	1.5	-

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1.5	-
2	DC Power line	No	2.0	-

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line 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 Measuring Instruments

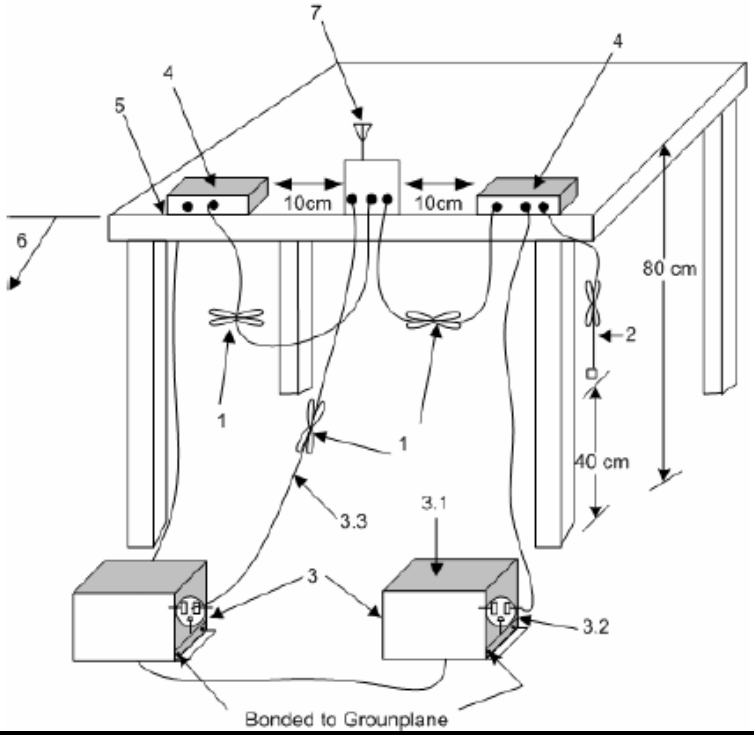
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

Test Method
☒ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup

AC Power-line Conducted Emissions



3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit
Systems using digital modulation techniques:
▪ 6 dB bandwidth ≥ 500 kHz.

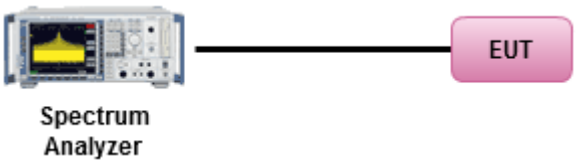
3.2.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

Test Method	
▪ For the emission bandwidth shall be measured using one of the options below:	
	☒ Refer as KDB 558074. clause 8.2 (11.8 of ANSI C63.10) DTS bandwidth measurement.
	☐ Refer as RSS-Gen, clause 6.7 for occupied bandwidth testing.
	☐ Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.

3.2.4 Test Setup

Emission Bandwidth


3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit		
	▪ If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)	
	▪ Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)$ dBm	
	▪ Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)/3$ dBm	
	▪ Smart antenna system (SAS):	
		- Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)/3$ dBm
		- Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)/3$ dBm
		- Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)/3 + 8$dB dBm
e.i.r.p. Power Limit:		
▪ 2400-2483.5 MHz Band		
	▪ Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)	
	▪ Point-to-point systems (P2P): $P_{eirp} \leq MAX(36, [P_{Out} + G_{TX}])$ dBm	
	▪ Smart antenna system (SAS)	
		- Single beam: $P_{eirp} \leq MAX(36, P_{Out} + G_{TX})$ dBm
		- Overlap beam: $P_{eirp} \leq MAX(36, P_{Out} + G_{TX})$ dBm
		- Aggregate power on all beams: $P_{eirp} \leq MAX(36, [P_{Out} + G_{TX} + 8])$ dBm
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, **G_{TX}** = the maximum transmitting antenna directional gain in dBi.		

3.3.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

Test Method	
▪ Maximum Peak Conducted Output Power	
	☐ Refer as KDB 558074, clause 8.3.1.1 (11.9.1.1 of ANSI C63.10) RBW ≥ EBW method.
	☐ Refer as KDB 558074, clause 8.3.1.2 (11.9.1.2 of ANSI C63.10) integrated band power method.
	☐ Refer as KDB 558074, clause 8.3.1.3 (11.9.1.3 of ANSI C63.10) peak power meter.
▪ Maximum Average Conducted Output Power	
	☐ Refer as KDB 558074, clause 8.3.2.2 (11.9.2.2 of ANSI C63.10) using a spectrum analyzer.
	☒ Refer as KDB 558074, clause 8.3.2.3 (11.9.2.3 of ANSI C63.10) using a power meter.
▪ For conducted measurement.	
	▪ If the EUT supports multiple transmit chains using options given below: Refer as KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup

Maximum Conducted Output Power (Power Meter)


3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit
▪ Power Spectral Density (PSD) ≤ 8 dBm/3kHz

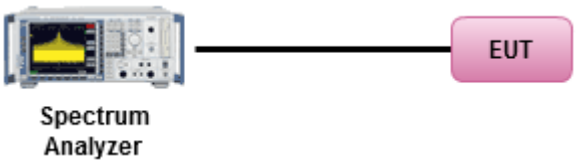
3.4.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

Test Method		
▪ Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).		
	☒ Refer as KDB 558074, clause 8.4 (11.10 of ANSI C63.10) Method PKPSD.	
▪ For conducted measurement.		
	▪ If The EUT supports multiple transmit chains using options given below:	
		▪ Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.

3.4.4 Test Setup

Power Spectral Density


3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	**Limit (dB)**
Peak output power procedure	20
Average output power procedure	30
Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak PSD level. Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average PSD level.	

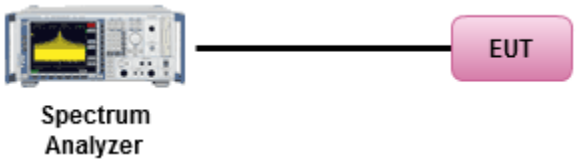
3.5.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method
▪ Refer as KDB 558074, clause 8.5 (11.11 of ANSI C63.10) for non-restricted frequency bands.

3.5.4 Test Setup

Emissions in Non-restricted Frequency Bands


3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E

3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

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: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.

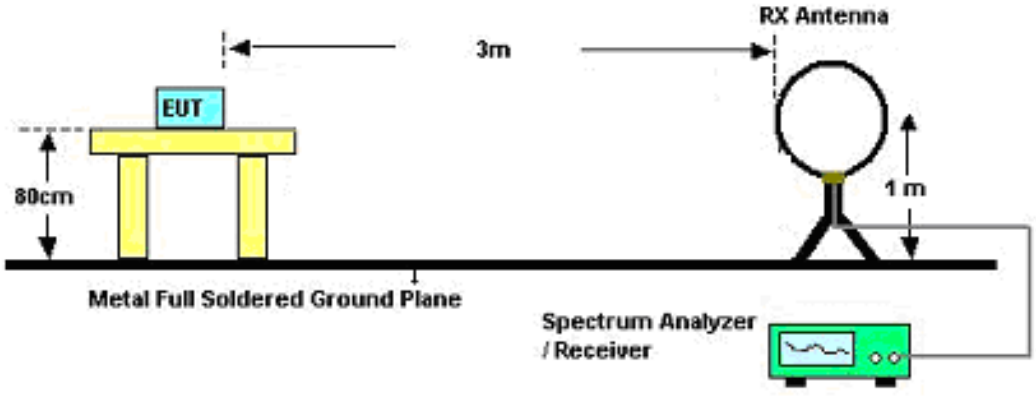
3.6.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

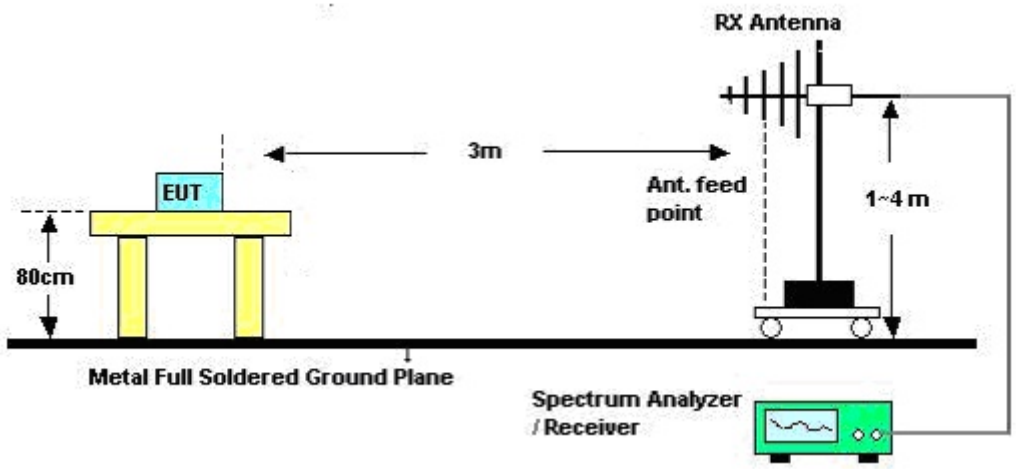
3.6.3 Test Procedures

Test Method	
▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].	
▪ Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.	
▪ For the transmitter unwanted emissions shall be measured using following options below:	
	▪ Refer as KDB 558074, clause 8.6 (11.12 of ANSI C63.10) for restricted frequency bands.
▪ For the transmitter band-edge emissions shall be measured using following options below:	
	▪ Refer as KDB 558074 clause 8.7.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.
	▪ Refer as KDB 558074, clause 8.7.2 (6.10.6 of ANSI C63.10) for marker-delta method for band-edge measurements.
	▪ Refer as KDB 558074, clause 8.7.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
▪ Use the following spectrum analyzer settings:	
	▪ Set RBW=100 kHz for f < 1 GHz; VBW=3 * RBW; Sweep = auto; Detector function = peak; Trace = max hold.
	▪ Set RBW = 1 MHz, VBW= 3MHz for f ≥ 1 GHz for peak measurement. For average measurement, refer as 1.1.4.

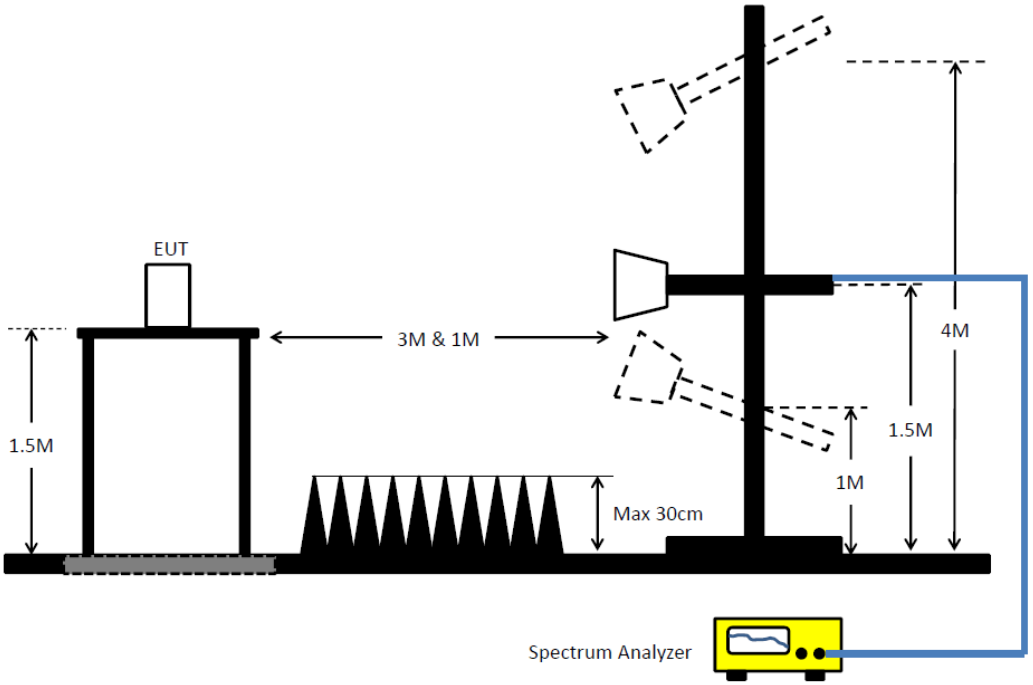
3.6.4 Test Setup

Emissions in Restricted Frequency Bands
9kHz ~30MHz


30MHz~1GHz



Above 1GHz



3.6.5 Test Result of Emissions in Restricted Frequency Bands (Below 30MHz)

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

3.6.6 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMC Receiver	R&S	ESR	102051	9KHz ~ 3.6GHz	03/May/2018	02/May/2019
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	08/Nov/2018	07/Nov/2019
RF Cable-CON	MTJ	RG142	CB002-CO	9kHz ~ 200MHz	17/Sep/2018	16/Sep/2019
AC POWER	APC	AFC-11005G	F310050055	47Hz~63Hz 5~300V	NCR	NCR
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9 kHz ~ 30 MHz	12/Oct/2018	11/Oct/2019

NCR : Non-Calibration Require

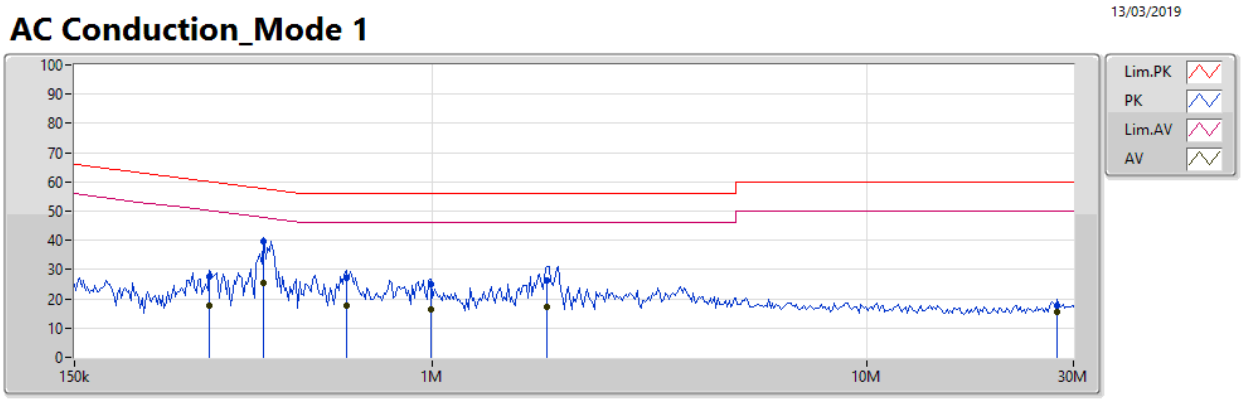
Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101500	10Hz~40GHz	18/Jul/2018	17/Jul/2019
Power Sensor	Anritsu	MA2411B	1339407	300MHz ~ 40GHz	17/Nov/2018	16/Nov/2019
Power Meter	Anritsu	ML2495A	1517010	300MHz ~ 40GHz	17/Nov/2018	16/Nov/2019
Cable 0.2m	HUBER	MY10710/4	RF Cable - 01	30MHz ~18G	10/Jan/2019	09/Jan/2020
Cable 0.2m	HUBER	MY10711/4	RF Cable - 02	30MHz ~18G	10/Jan/2019	09/Jan/2020
Cable 0.5m	HUBER	MY39470/4	RF Cable - 29	30MHz ~18G	10/Jan/2019	09/Jan/2020
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	12/Nov/2018	10/Nov/2020

Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz ~ 1GHz 3m	19/Oct/2018	18/Oct/2019
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz ~ 18GHz 3m	17/Oct/2018	16/Oct/2019
Amplifier	Agilent	8447D	2944A11149	100kHz ~ 1.3GHz	27Jul/2018	02/Jul/2019
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz ~ 26.5GHz	23/Oct/2018	22/Oct/2019
Signal Analyzer	R&S	FSV40	101500	10Hz ~ 40GHz	18/Jul/2018	17/Jul/2019
RF Cable-R03m	Jye Bao	RG142	CB017	9kHz ~ 1GHz	18/Jan/2019	17/Jan/2020
RF Cable-high	SUHNER	SUCOFLEX104	MY34918/4	1GHz ~ 40GHz	18/Jan/2019	17/Jan/2020
Bilog Antenna & 5dB Attenuator	SCHAFFNER / MTJ	CBL 6112B / MTJ6102-05	2723 / 2	30MHz ~ 1GHz	08/Sep/2018	07/Sep/2019
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	24/Aug/2018	23/Aug/2019
EMI Test Receiver	R&S	ESR3	102052	9kHz ~ 3.6GHz	10/Apr/2018	09/Apr/2019
Loop Antenna	TESEQ	HLA 6120	31244	9k-30MHz	29/Mar/2018	28/Mar/2019
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170339	18GHz ~ 40GHz	11/Apr/2018	10/Apr/2019
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 01543	1GHz ~ 18GHz	11/May/2018	10/May/2019

AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	Adapter mode		

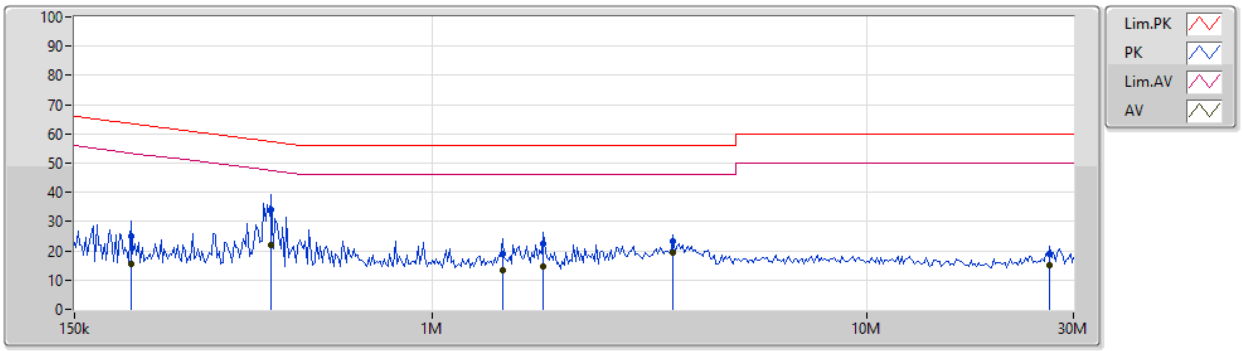


Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	307.065k	27.42	60.05	-32.63	19.48	Neutral	-	7.94	9.59	0.01	9.88
AV	307.065k	17.76	50.05	-32.29	19.48	Neutral	-	-1.72	9.59	0.01	9.88
QP	409.779k	39.48	57.64	-18.16	19.48	Neutral	"Worst"	20.00	9.59	0.01	9.88
AV	409.779k	25.33	47.64	-22.31	19.48	Neutral	-	5.85	9.59	0.01	9.88
QP	634.878k	27.19	56.00	-28.81	19.48	Neutral	-	7.71	9.59	0.01	9.88
AV	634.878k	17.81	46.00	-28.19	19.48	Neutral	-	-1.67	9.59	0.01	9.88
QP	993.464k	24.97	56.00	-31.03	19.49	Neutral	-	5.48	9.59	0.02	9.88
AV	993.464k	16.47	46.00	-29.53	19.49	Neutral	-	-3.02	9.59	0.02	9.88
QP	1.841M	26.13	56.00	-29.87	19.53	Neutral	-	6.60	9.61	0.03	9.89
AV	1.841M	17.19	46.00	-28.81	19.53	Neutral	-	-2.34	9.61	0.03	9.89
QP	27.573M	17.51	60.00	-42.49	19.70	Neutral	-	-2.19	9.67	0.13	9.90
AV	27.573M	15.37	50.00	-34.63	19.70	Neutral	-	-4.33	9.67	0.13	9.90

AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Line
Operating Function	Adapter mode		

AC Conduction_Mode 1

13/03/2019



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	202.177k	25.19	63.51	-38.32	19.48	Line	-	5.71	9.60	0.01	9.87
AV	202.177k	15.48	53.51	-38.03	19.48	Line	-	-4.00	9.60	0.01	9.87
QP	426.418k	34.07	57.32	-23.25	19.48	Line	"Worst"	14.59	9.59	0.01	9.88
AV	426.418k	21.93	47.32	-25.39	19.48	Line	-	2.45	9.59	0.01	9.88
QP	1.45M	18.85	56.00	-37.15	19.53	Line	-	-0.68	9.61	0.03	9.89
AV	1.45M	13.49	46.00	-32.51	19.53	Line	-	-6.04	9.61	0.03	9.89
QP	1.805M	22.23	56.00	-33.77	19.54	Line	-	2.69	9.62	0.03	9.89
AV	1.805M	14.78	46.00	-31.22	19.54	Line	-	-4.76	9.62	0.03	9.89
QP	3.586M	23.49	56.00	-32.51	19.56	Line	-	3.93	9.63	0.04	9.89
AV	3.586M	19.36	46.00	-26.64	19.56	Line	-	-0.20	9.63	0.04	9.89
QP	26.498M	19.10	60.00	-40.90	19.59	Line	-	-0.49	9.57	0.12	9.90
AV	26.498M	15.15	50.00	-34.85	19.59	Line	-	-4.44	9.57	0.12	9.90

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	8.55M	13.168M	13M2G1D	7.075M	12.544M
802.11g_Nss1,(6Mbps)_2TX	16.25M	16.567M	16M6D1D	14.65M	16.492M
802.11n HT20_Nss1,(MCS0)_2TX	17.525M	17.791M	17M8D1D	15.1M	17.641M
802.11n HT40_Nss1,(MCS0)_2TX	35.9M	36.232M	36M2D1D	35M	36.082M

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

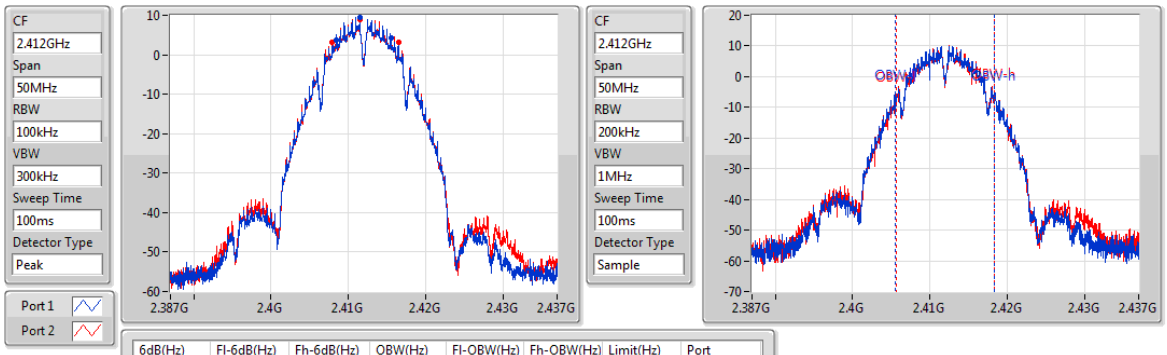
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	7.075M	12.844M	8.55M	12.769M
2437MHz	Pass	500k	8M	12.894M	8.05M	12.944M
2462MHz	Pass	500k	7.975M	13.168M	7.55M	12.544M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	14.65M	16.517M	15.05M	16.492M
2437MHz	Pass	500k	15M	16.517M	15.325M	16.517M
2462MHz	Pass	500k	15.65M	16.567M	16.25M	16.492M
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	15.2M	17.766M	16.275M	17.666M
2437MHz	Pass	500k	17.525M	17.691M	15.1M	17.641M
2462MHz	Pass	500k	16.35M	17.791M	17.125M	17.741M
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	35M	36.182M	35.3M	36.232M
2437MHz	Pass	500k	35.9M	36.232M	35.25M	36.132M
2452MHz	Pass	500k	35.1M	36.182M	35.25M	36.082M

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

802.11b_Nss1,(1Mbps)_2TX
2412MHz
EBW

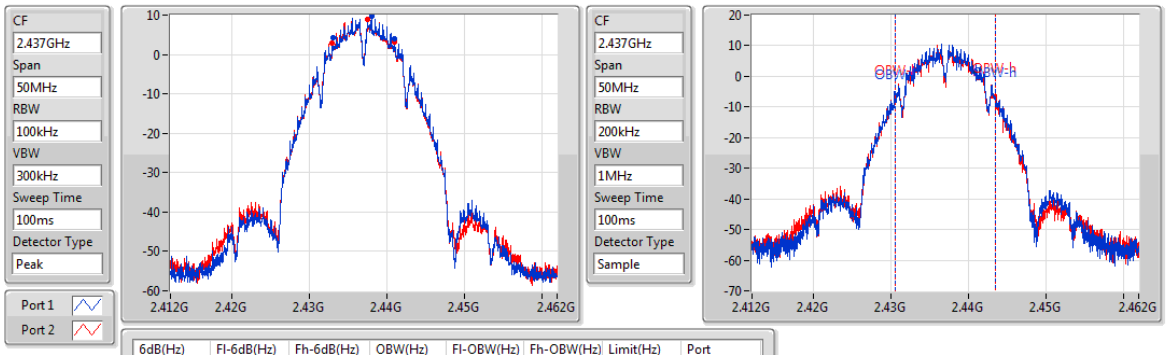
13/03/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.075M	2.40845G	2.415525G	12.844M	2.405553G	2.418397G	500k	1
8.55M	2.40795G	2.4165G	12.769M	2.405628G	2.418397G	500k	2

802.11b_Nss1,(1Mbps)_2TX
2437MHz
EBW

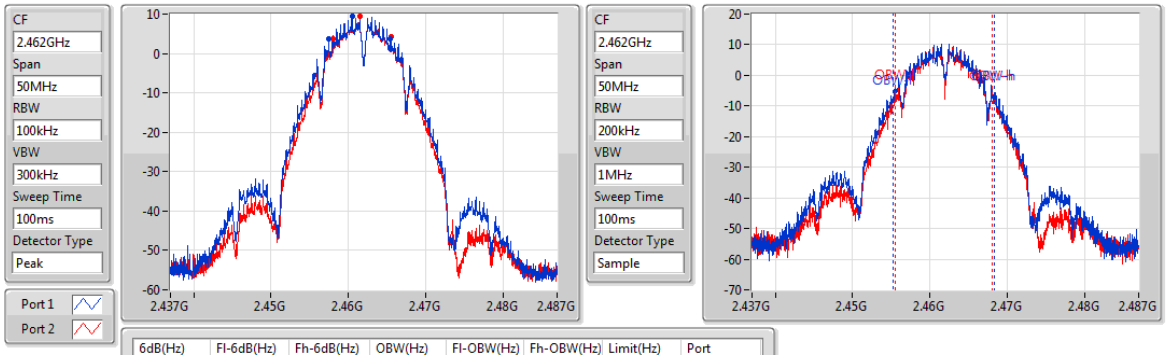
13/03/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8M	2.432975G	2.440975G	12.894M	2.430553G	2.443447G	500k	1
8.05M	2.43295G	2.441G	12.944M	2.430503G	2.443447G	500k	2

802.11b_Nss1,(1Mbps)_2TX
2462MHz
EBW

13/03/2019



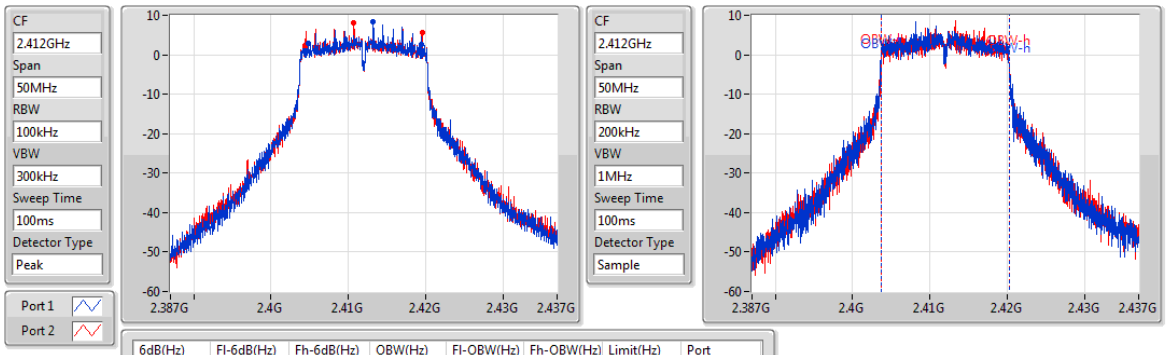
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.975M	2.4575G	2.465475G	13.168M	2.455203G	2.468372G	500k	1
7.55M	2.457975G	2.465525G	12.544M	2.455553G	2.468097G	500k	2

802.11g_Nss1,(6Mbps)_2TX

EBW

2412MHz

13/03/2019



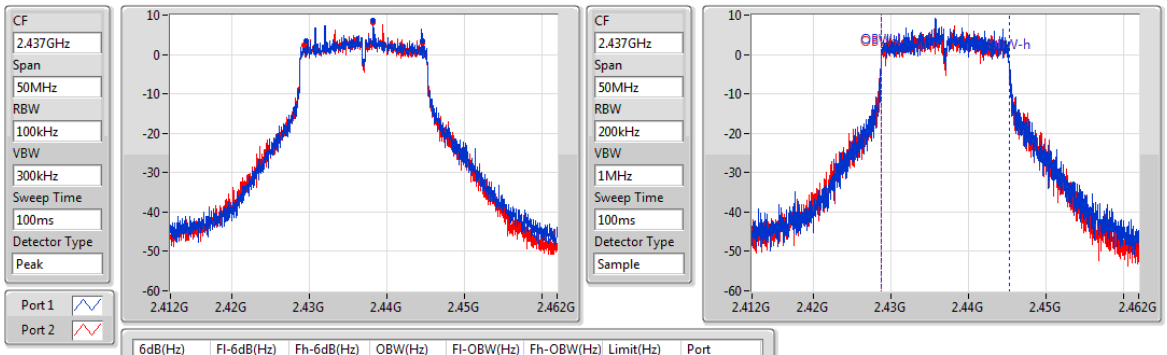
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
14.65M	2.40485G	2.4195G	16.517M	2.403704G	2.420221G	500k	1
15.05M	2.404475G	2.419525G	16.492M	2.403754G	2.420246G	500k	2

802.11g_Nss1,(6Mbps)_2TX

EBW

2437MHz

13/03/2019



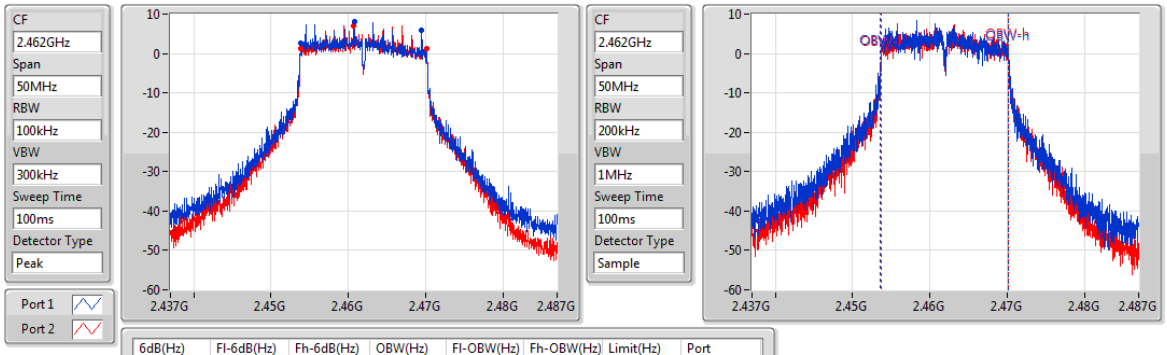
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15M	2.42955G	2.44455G	16.517M	2.428729G	2.445246G	500k	1
15.325M	2.429225G	2.44455G	16.517M	2.428704G	2.445221G	500k	2

802.11g_Nss1,(6Mbps)_2TX

EBW

2462MHz

13/03/2019



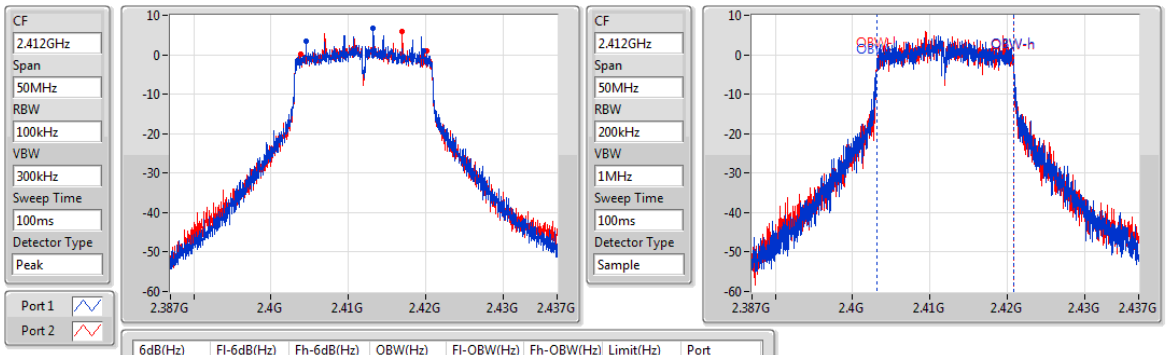
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.65M	2.45385G	2.4695G	16.567M	2.453629G	2.470196G	500k	1
16.25M	2.45385G	2.4701G	16.492M	2.453704G	2.470196G	500k	2

802.11n HT20_Nss1,(MCS0)_2TX

EBW

2412MHz

13/03/2019



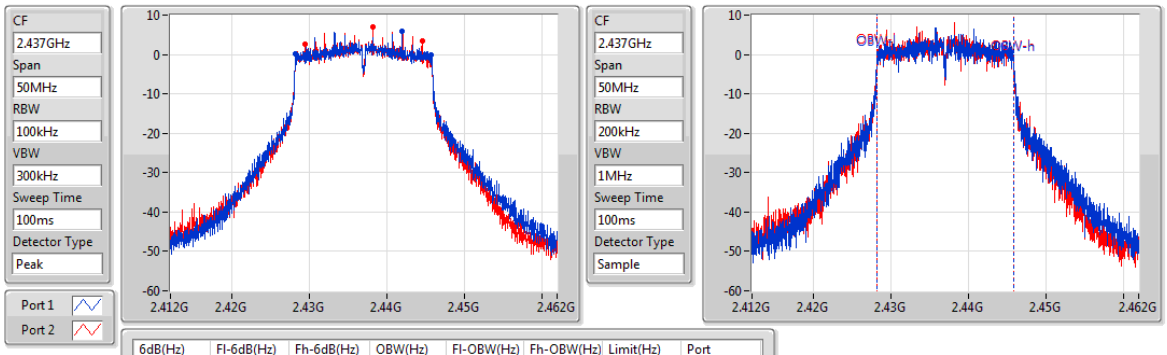
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.2M	2.404525G	2.419725G	17.766M	2.403104G	2.420871G	500k	1
16.275M	2.40385G	2.420125G	17.666M	2.403154G	2.420821G	500k	2

802.11n HT20_Nss1,(MCS0)_2TX

EBW

2437MHz

13/03/2019



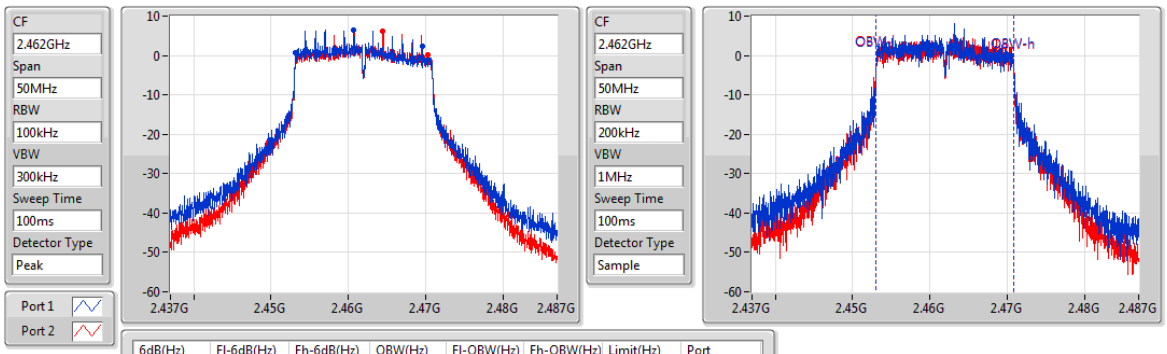
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.525M	2.428225G	2.44575G	17.691M	2.428154G	2.445846G	500k	1
15.1M	2.429425G	2.444525G	17.641M	2.428154G	2.445796G	500k	2

802.11n HT20_Nss1,(MCS0)_2TX

EBW

2462MHz

13/03/2019

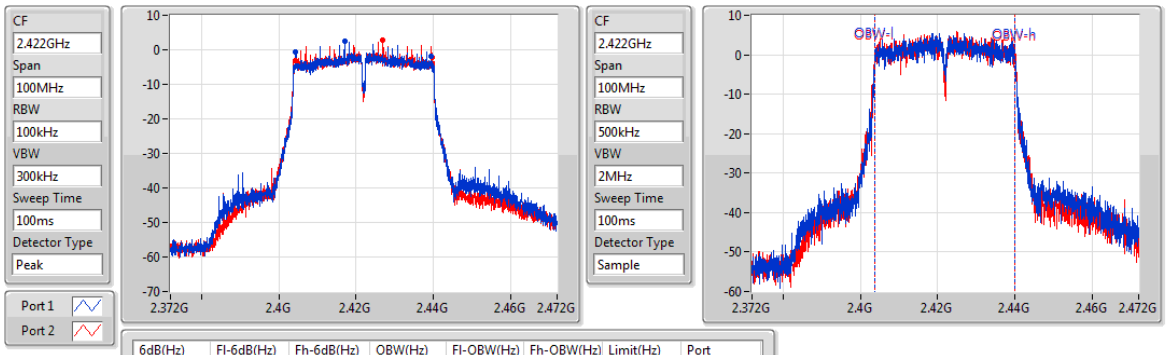


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.35M	2.4532G	2.46955G	17.791M	2.453029G	2.470821G	500k	1
17.125M	2.453225G	2.47035G	17.741M	2.453079G	2.470821G	500k	2

802.11n HT40_Nss1,(MCS0)_2TX **EBW**

2422MHz

14/03/2019

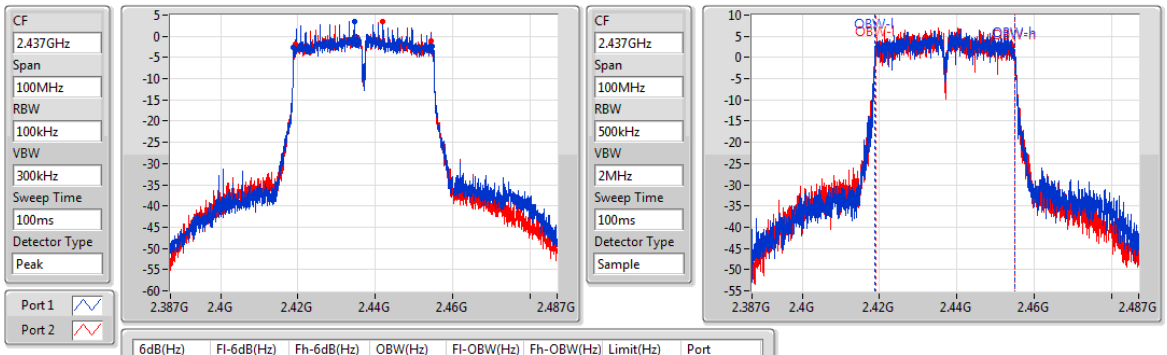


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35M	2.40445G	2.43945G	36.182M	2.403859G	2.440041G	500k	1
35.3M	2.40425G	2.43955G	36.232M	2.403859G	2.440091G	500k	2

802.11n HT40_Nss1,(MCS0)_2TX **EBW**

2437MHz

15/03/2019

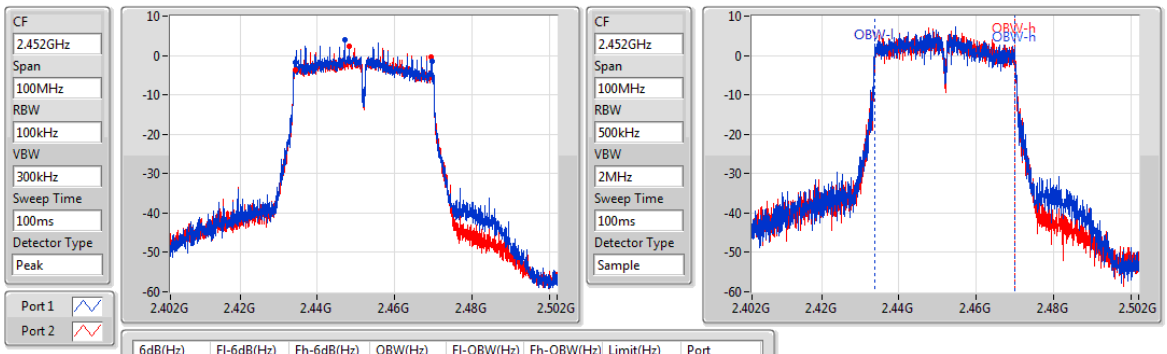


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.9M	2.41885G	2.45475G	36.232M	2.418809G	2.455041G	500k	1
35.25M	2.41925G	2.4545G	36.132M	2.418909G	2.455041G	500k	2

802.11n HT40_Nss1,(MCS0)_2TX **EBW**

2452MHz

14/03/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.1M	2.43445G	2.46955G	36.182M	2.433759G	2.469941G	500k	1
35.25M	2.43425G	2.4695G	36.082M	2.433859G	2.469941G	500k	2

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	21.37	0.13709
802.11g_Nss1,(6Mbps)_2TX	21.27	0.13397
802.11n HT20_Nss1,(MCS0)_2TX	20.13	0.10304
802.11n HT40_Nss1,(MCS0)_2TX	20.44	0.11066

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	1.44	18.11	18.13	21.13	30.00
2417MHz	Pass	1.44	18.18	18.29	21.25	30.00
2437MHz	Pass	1.44	18.32	18.09	21.22	30.00
2457MHz	Pass	1.44	18.50	18.21	21.37	30.00
2462MHz	Pass	1.44	18.36	18.09	21.24	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	1.44	18.17	18.11	21.15	30.00
2417MHz	Pass	1.44	18.33	18.17	21.26	30.00
2437MHz	Pass	1.44	18.36	18.15	21.27	30.00
2457MHz	Pass	1.44	18.40	18.06	21.24	30.00
2462MHz	Pass	1.44	18.33	18.02	21.19	30.00
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	1.44	16.46	16.59	19.54	30.00
2417MHz	Pass	1.44	17.21	17.03	20.13	30.00
2437MHz	Pass	1.44	17.09	17.08	20.10	30.00
2457MHz	Pass	1.44	17.17	17.04	20.12	30.00
2462MHz	Pass	1.44	17.05	17.02	20.05	30.00
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	1.44	16.07	15.88	18.99	30.00
2427MHz	Pass	1.44	17.40	17.28	20.35	30.00
2437MHz	Pass	1.44	17.40	17.46	20.44	30.00
2447MHz	Pass	1.44	17.38	17.36	20.38	30.00
2452MHz	Pass	1.44	16.36	16.38	19.38	30.00

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

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_2TX	-1.75
802.11g_Nss1,(6Mbps)_2TX	-5.99
802.11n HT20_Nss1,(MCS0)_2TX	-7.18
802.11n HT40_Nss1,(MCS0)_2TX	-2.09

RBW=3kHz.

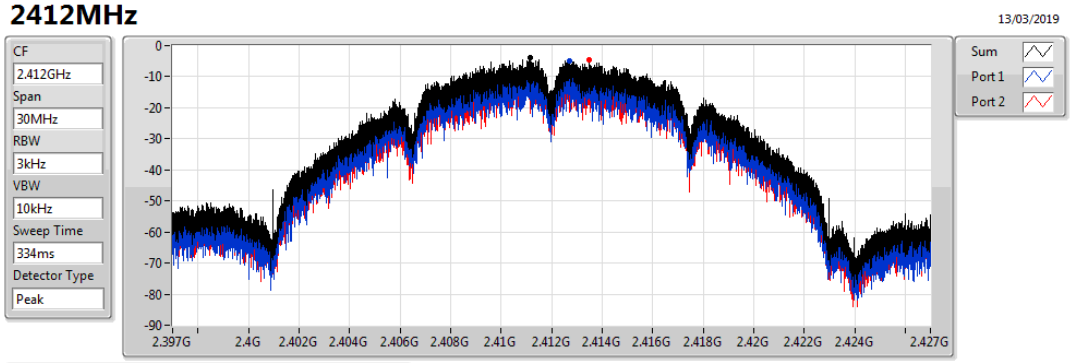
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.45	-5.09	-4.57	-3.76	8.00
2437MHz	Pass	4.45	-4.38	-3.38	-1.75	8.00
2462MHz	Pass	4.45	-5.84	-5.79	-3.59	8.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.45	-8.26	-7.91	-6.33	8.00
2437MHz	Pass	4.45	-6.68	-6.95	-5.99	8.00
2462MHz	Pass	4.45	-7.81	-7.46	-6.69	8.00
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.45	-10.67	-9.14	-8.04	8.00
2437MHz	Pass	4.45	-8.44	-8.86	-7.18	8.00
2462MHz	Pass	4.45	-9.59	-8.56	-7.54	8.00
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	4.45	-13.26	-13.01	-11.30	8.00
2437MHz	Pass	4.45	-4.78	-5.45	-2.09	8.00
2452MHz	Pass	4.45	-11.20	-12.63	-10.24	8.00

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

802.11b_Nss1,(1Mbps)_2TX **PSD**

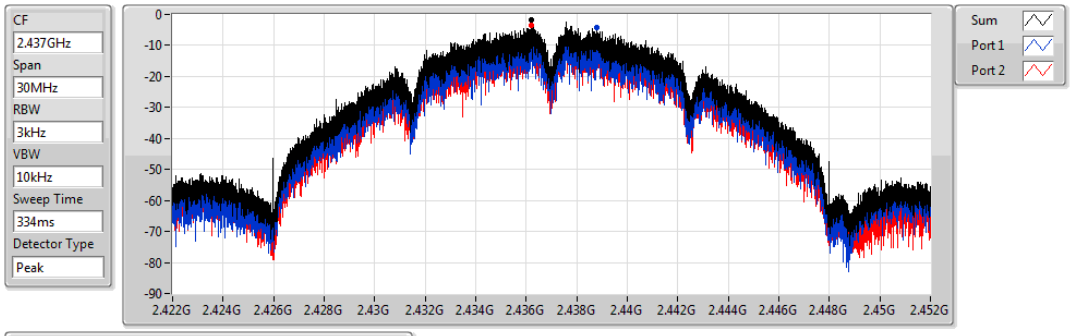
2412MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.76	-3.76	-5.09	-4.57

802.11b_Nss1,(1Mbps)_2TX **PSD**

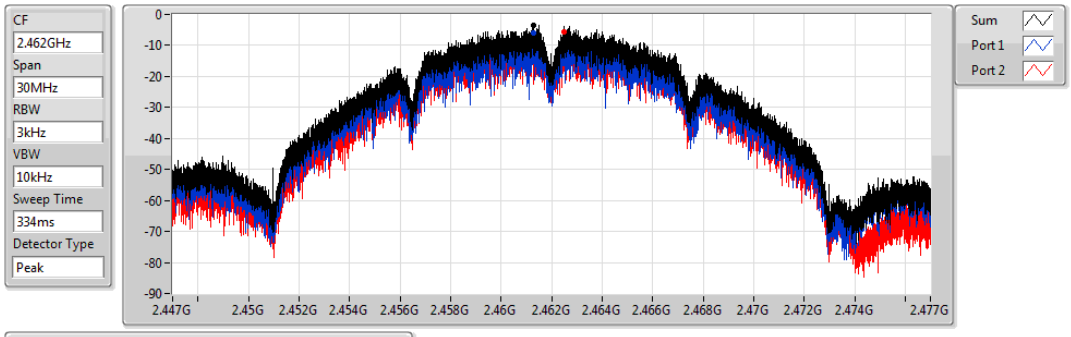
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.75	-1.75	-4.38	-3.38

802.11b_Nss1,(1Mbps)_2TX **PSD**

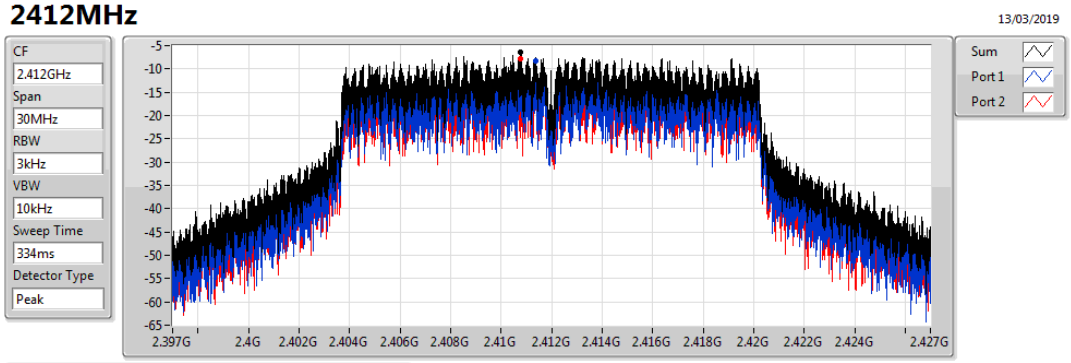
2462MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.59	-3.59	-5.84	-5.79

802.11g_Nss1,(6Mbps)_2TX **PSD**

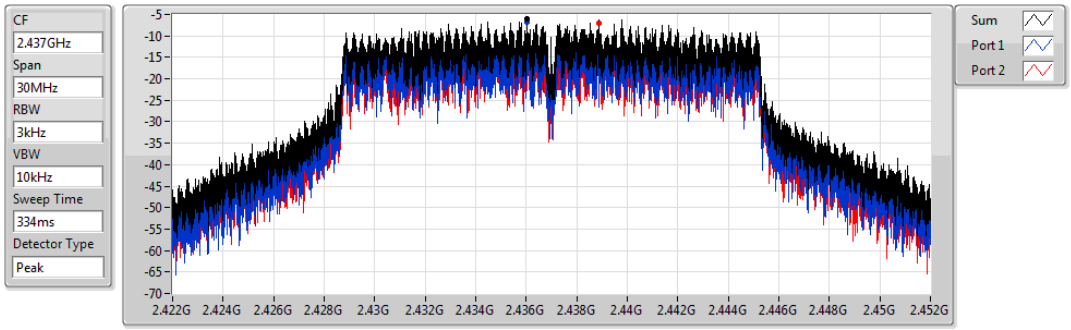
2412MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.33	-6.33	-8.26	-7.91

802.11g_Nss1,(6Mbps)_2TX **PSD**

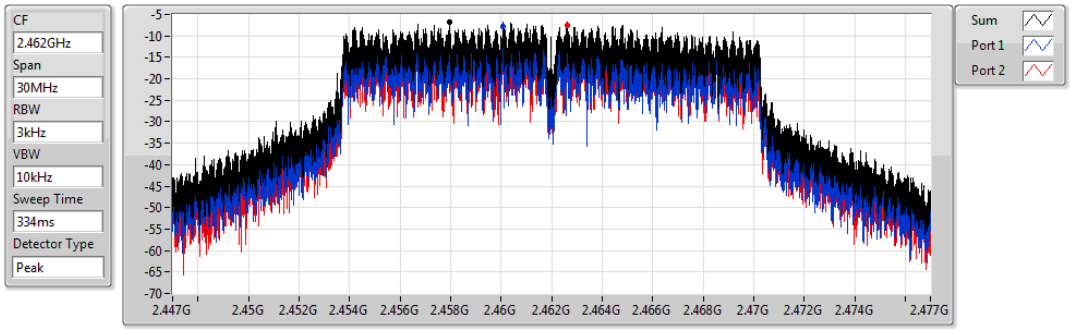
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.99	-5.99	-6.68	-6.95

802.11g_Nss1,(6Mbps)_2TX **PSD**

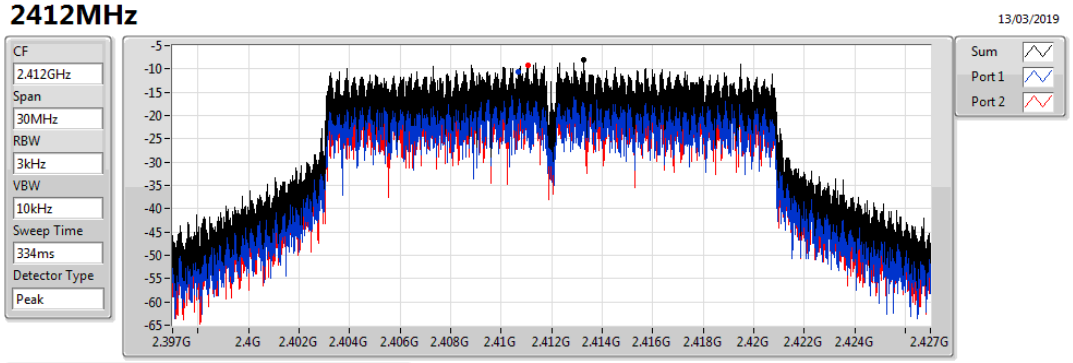
2462MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.69	-6.69	-7.81	-7.46

802.11n HT20_Nss1,(MCS0)_2TX PSD

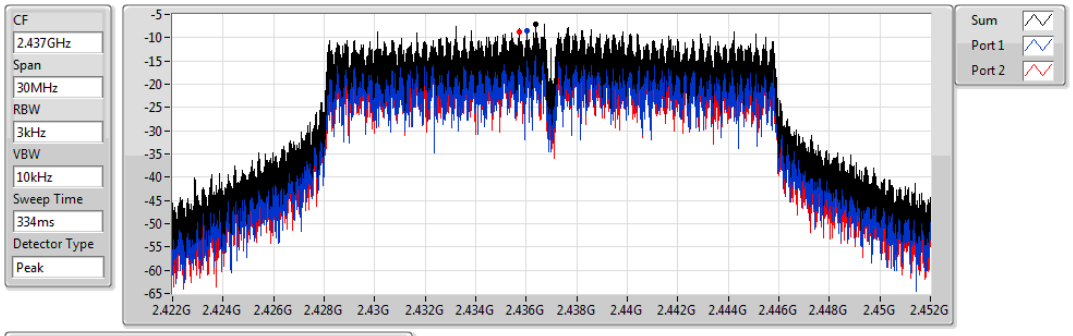
2412MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.04	-8.04	-10.67	-9.14

802.11n HT20_Nss1,(MCS0)_2TX PSD

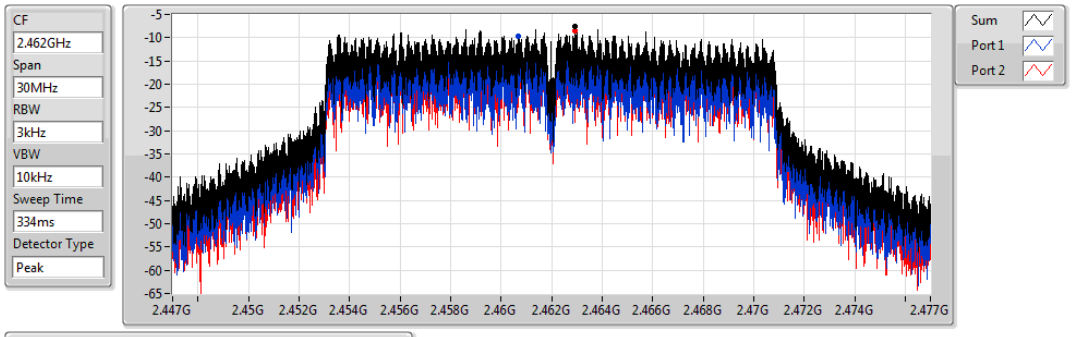
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.18	-7.18	-8.44	-8.86

802.11n HT20_Nss1,(MCS0)_2TX PSD

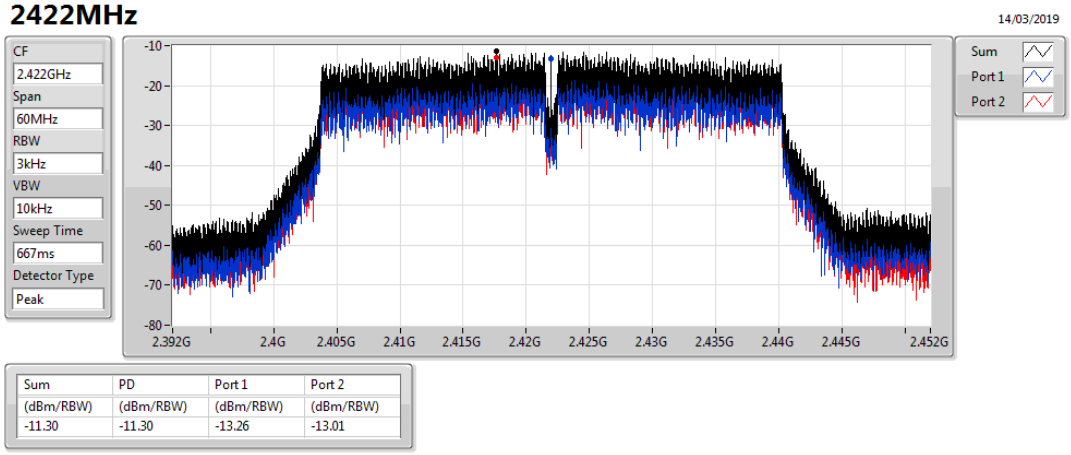
2462MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.54	-7.54	-9.59	-8.56

802.11n HT40_Nss1,(MCS0)_2TX PSD

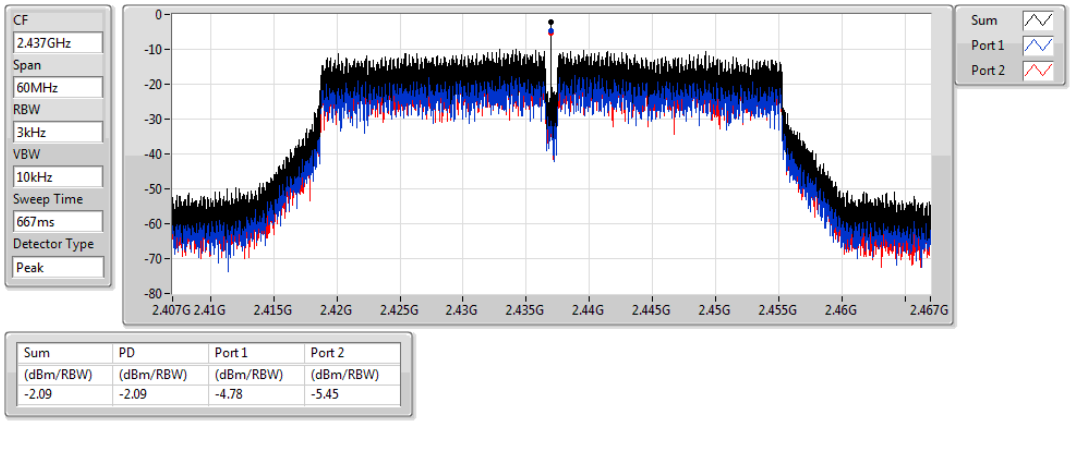
2422MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-11.30	-11.30	-13.26	-13.01

802.11n HT40_Nss1,(MCS0)_2TX PSD

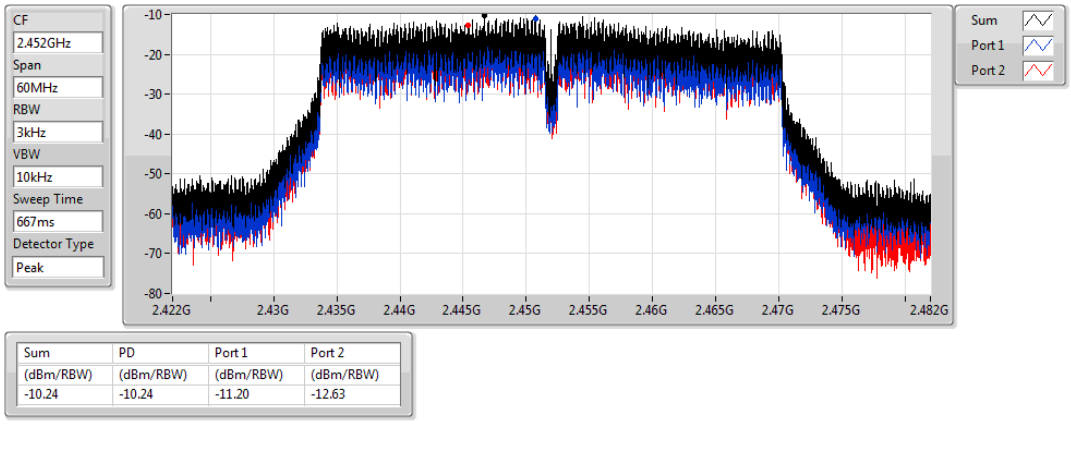
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.09	-2.09	-4.78	-5.45

802.11n HT40_Nss1,(MCS0)_2TX PSD

2452MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.24	-10.24	-11.20	-12.63

Summary

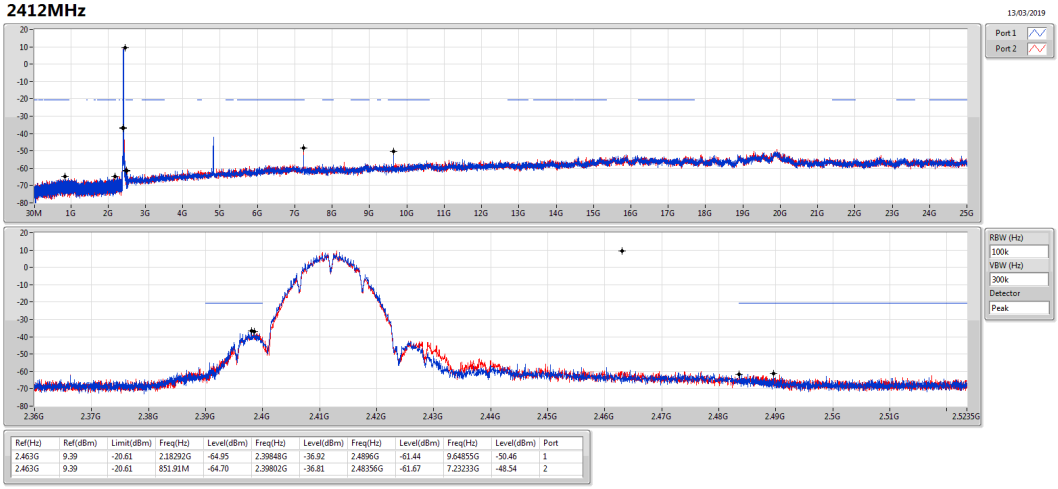
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	2.463G	9.39	-20.61	851.91M	-64.70	2.39802G	-36.81	2.48356G	-61.67	7.23233G	-48.54	2
802.11g_Nss1,(6Mbps)_2TX	Pass	2.4357G	7.95	-22.05	912.78M	-64.86	2.39972G	-22.58	2.48402G	-57.18	9.64855G	-49.96	1
802.11n HT20_Nss1,(MCS0)_2TX	Pass	2.43578G	6.04	-23.96	955.88M	-65.12	2.39974G	-24.42	2.48702G	-58.37	9.64855G	-50.25	1
802.11n HT40_Nss1,(MCS0)_2TX	Pass	2.43198G	4.35	-25.65	2.0223G	-65.07	2.39952G	-32.38	2.48702G	-43.23	9.74879G	-51.59	1

Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.463G	9.39	-20.61	2.18292G	-64.95	2.39848G	-36.92	2.4896G	-61.44	9.64855G	-50.46	1
2412MHz	Pass	2.463G	9.39	-20.61	851.91M	-64.70	2.39802G	-36.81	2.48356G	-61.67	7.23233G	-48.54	2
2437MHz	Pass	2.463G	9.39	-20.61	2.10545G	-65.28	2.39936G	-55.32	2.4847G	-60.56	17.57995G	-52.88	1
2437MHz	Pass	2.463G	9.39	-20.61	892.1M	-65.59	2.39998G	-55.77	2.48896G	-60.09	16.43645G	-52.47	2
2462MHz	Pass	2.463G	9.39	-20.61	2.16137G	-65.22	2.39324G	-57.90	2.4854G	-57.21	16.96746G	-51.87	1
2462MHz	Pass	2.463G	9.39	-20.61	2.02332G	-65.30	2.39998G	-56.85	2.48474G	-56.60	16.73989G	-51.89	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.4357G	7.95	-22.05	912.78M	-64.86	2.39972G	-22.58	2.48402G	-57.18	9.64855G	-49.96	1
2412MHz	Pass	2.4357G	7.95	-22.05	1.80459G	-64.34	2.39974G	-24.36	2.48356G	-55.80	9.64855G	-51.08	2
2437MHz	Pass	2.4357G	7.95	-22.05	1.73148G	-65.35	2.39922G	-45.07	2.48588G	-49.83	9.74689G	-50.48	1
2437MHz	Pass	2.4357G	7.95	-22.05	2.07778G	-64.16	2.39702G	-47.47	2.4837G	-52.45	17.59961G	-52.91	2
2462MHz	Pass	2.4357G	7.95	-22.05	2.11477G	-65.65	2.39986G	-48.35	2.48416G	-40.72	9.84803G	-52.54	1
2462MHz	Pass	2.4357G	7.95	-22.05	2.16719G	-64.95	2.39644G	-53.13	2.48508G	-44.96	15.25644G	-52.87	2
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43578G	6.04	-23.96	955.88M	-65.12	2.39974G	-24.42	2.48702G	-58.37	9.64855G	-50.25	1
2412MHz	Pass	2.43578G	6.04	-23.96	2.13778G	-65.11	2.39976G	-25.00	2.48626G	-57.61	15.19182G	-53.34	2
2437MHz	Pass	2.43578G	6.04	-23.96	794.53M	-65.92	2.39706G	-44.84	2.48488G	-48.20	9.74689G	-49.38	1
2437MHz	Pass	2.43578G	6.04	-23.96	2.14273G	-65.73	2.3998G	-47.54	2.48574G	-53.28	14.58495G	-51.97	2
2462MHz	Pass	2.43578G	6.04	-23.96	2.1302G	-65.45	2.39616G	-50.53	2.48354G	-40.84	16.84946G	-52.70	1
2462MHz	Pass	2.43578G	6.04	-23.96	2.05594G	-65.30	2.3989G	-53.61	2.48452G	-46.90	15.16372G	-52.97	2
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.43198G	4.35	-25.65	2.15111G	-64.03	2.3998G	-35.81	2.48354G	-52.96	9.68709G	-51.66	1
2422MHz	Pass	2.43198G	4.35	-25.65	947.15M	-65.09	2.39996G	-35.82	2.48818G	-50.59	9.68709G	-51.71	2
2437MHz	Pass	2.43198G	4.35	-25.65	2.0223G	-65.07	2.39952G	-32.38	2.48702G	-43.23	9.74879G	-51.59	1
2437MHz	Pass	2.43198G	4.35	-25.65	2.07211G	-64.80	2.39664G	-42.40	2.4841G	-48.07	16.42084G	-53.14	2
2452MHz	Pass	2.43198G	4.35	-25.65	2.15941G	-64.76	2.39924G	-48.11	2.48442G	-36.27	9.80768G	-52.94	1
2452MHz	Pass	2.43198G	4.35	-25.65	2.17688G	-65.24	2.39456G	-47.37	2.4845G	-44.61	24.91867G	-52.72	2

802.11b_Nss1,(1Mbps)_2TX **CSE NdB**

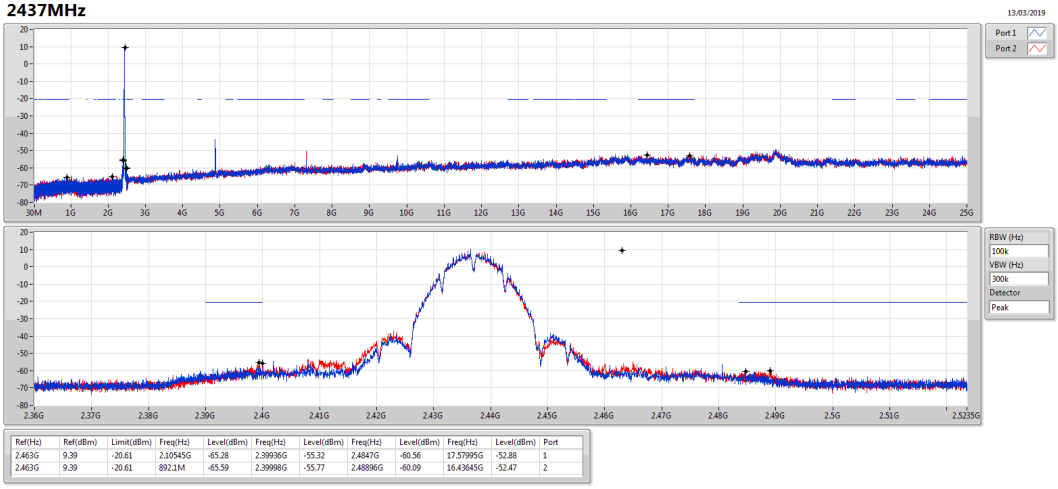
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.463G	9.39	-20.61	2.18292G	-64.95	2.39848G	-36.92	2.4896G	-61.44	9.64855G	-50.46	1
2.463G	9.39	-20.61	851.91M	-64.70	2.39802G	-36.81	2.48356G	-61.67	7.23233G	-48.54	2

802.11b_Nss1,(1Mbps)_2TX **CSE NdB**

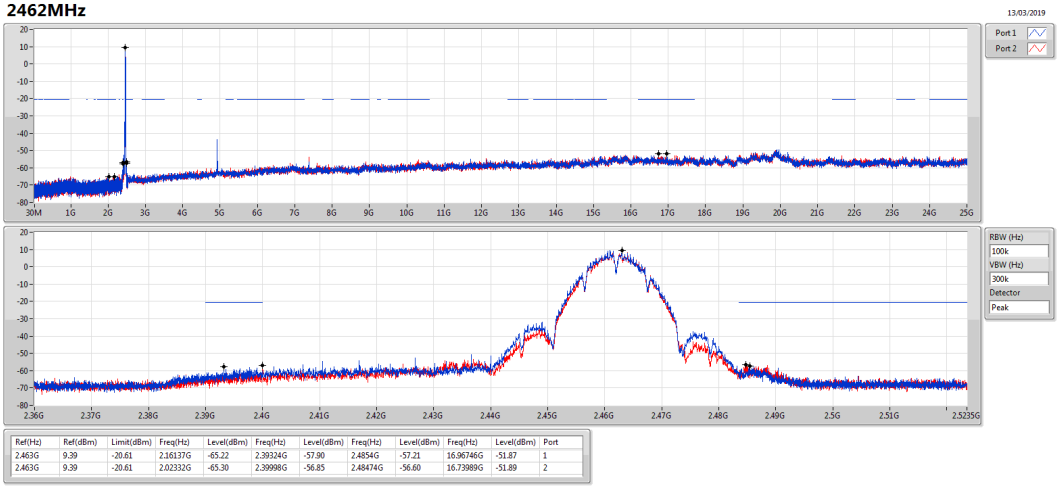
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.463G	9.39	-20.61	2.10545G	-65.28	2.39936G	-55.32	2.4847G	-60.56	17.57995G	-52.88	1
2.463G	9.39	-20.61	892.1M	-65.59	2.39998G	-55.77	2.48896G	-60.09	16.43645G	-52.47	2

802.11b_Nss1,(1Mbps)_2TX **CSE NdB**

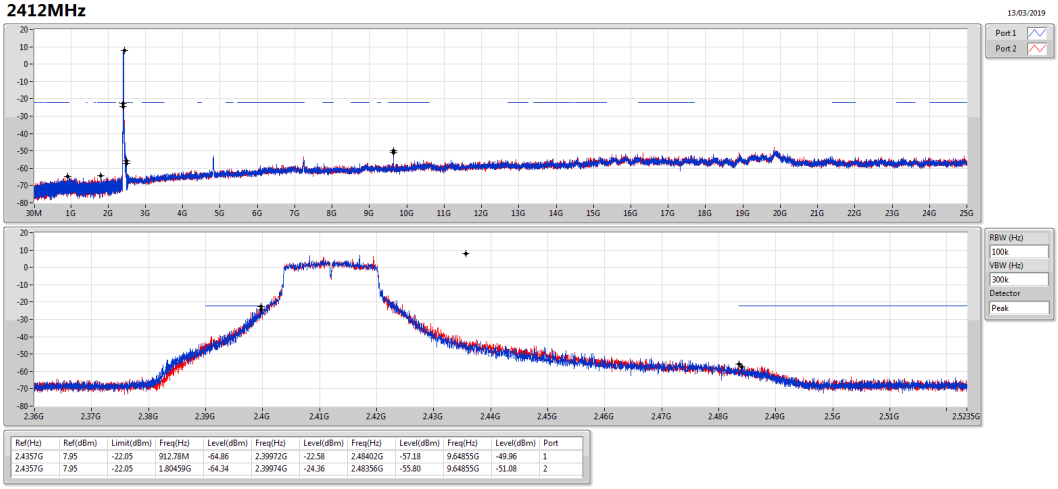
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.463G	9.39	-20.61	2.16137G	-65.22	2.39324G	-57.90	2.4854G	-57.21	16.96746G	-51.87	1
2.463G	9.39	-20.61	2.02332G	-65.30	2.39998G	-56.85	2.48474G	-56.60	16.73989G	-51.89	2

802.11g_Nss1,(6Mbps)_2TX **CSE NdB**

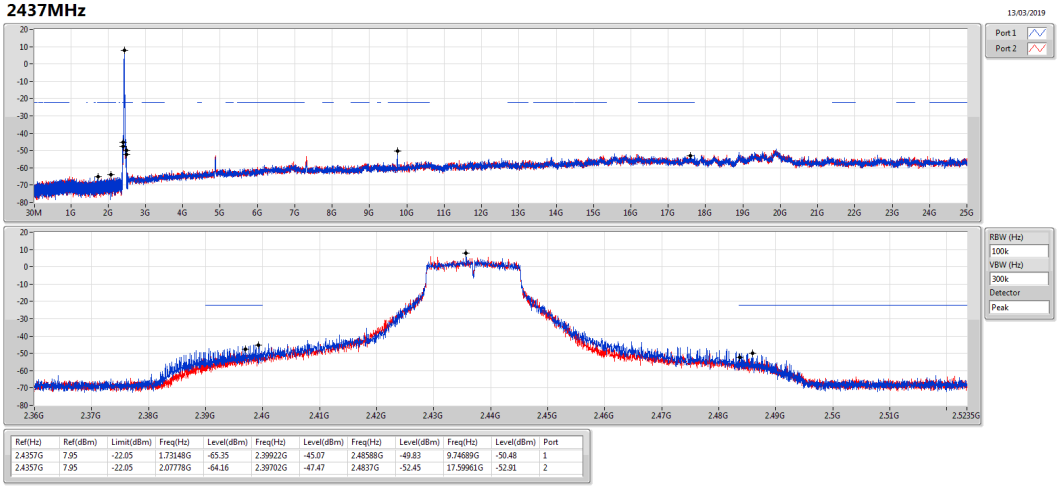
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4357G	7.95	-22.05	912.78M	-64.86	2.39972G	-22.58	2.48402G	-57.18	9.64855G	-49.96	1
2.4357G	7.95	-22.05	1.80459G	-64.34	2.39974G	-24.36	2.48356G	-55.80	9.64855G	-51.08	2

802.11g_Nss1,(6Mbps)_2TX **CSE NdB**

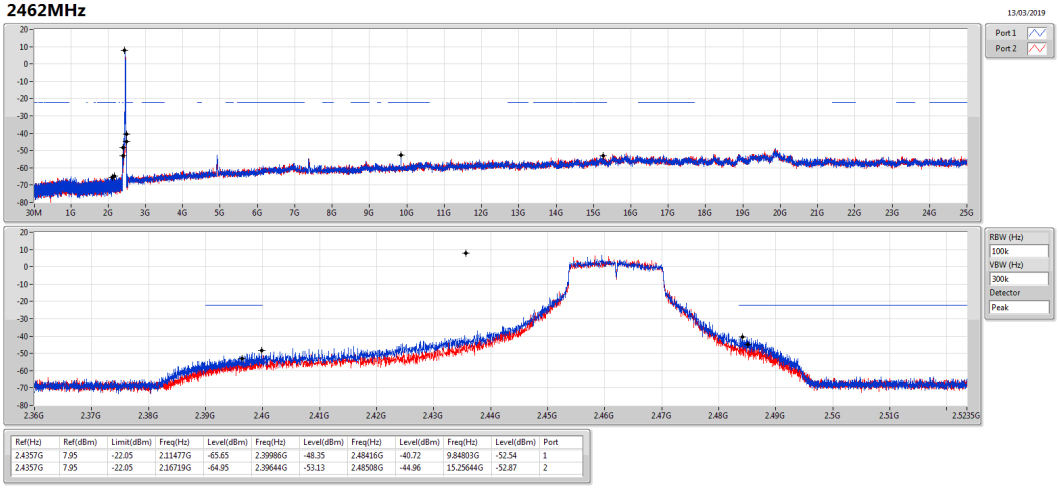
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4357G	7.95	-22.05	1.72148G	-65.35	2.39922G	-45.07	2.48588G	-49.83	9.74689G	-50.48	1
2.4357G	7.95	-22.05	2.07778G	-64.16	2.39702G	-47.47	2.4837G	-52.45	17.59961G	-52.91	2

802.11g_Nss1,(6Mbps)_2TX **CSE NdB**

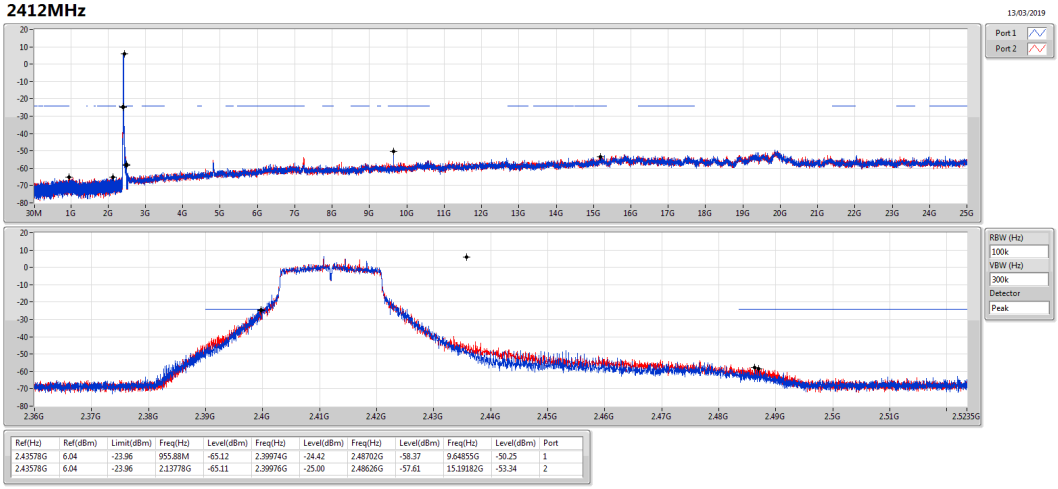
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4357G	7.95	-22.05	2.11477G	-65.65	2.39986G	-48.35	2.48416G	-40.72	9.84803G	-52.54	1
2.4357G	7.95	-22.05	2.16719G	-64.95	2.39644G	-53.13	2.48508G	-44.96	15.25644G	-52.87	2

802.11n HT20_Nss1,(MCS0)_2TX **CSE NdB**

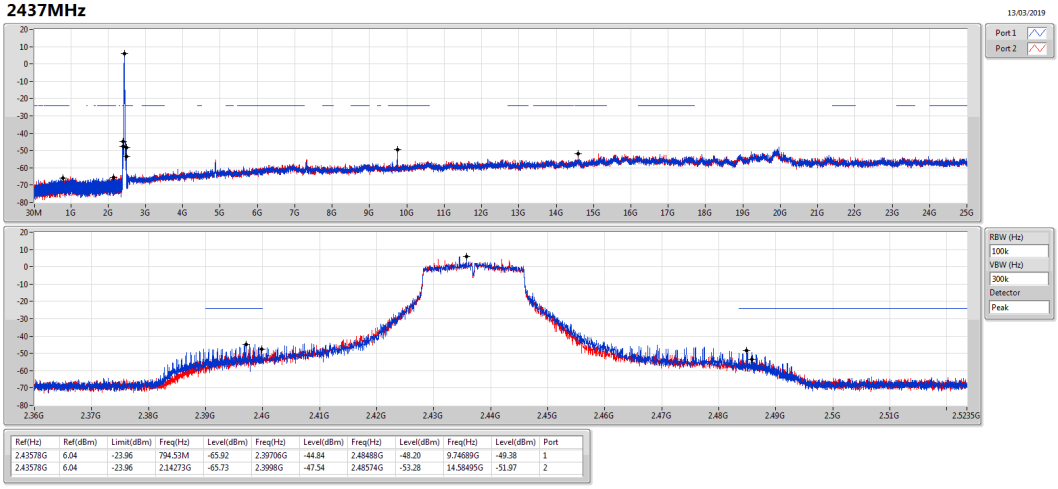
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43578G	6.04	-23.96	955.88M	-65.12	2.39974G	-24.42	2.48702G	-58.37	9.64855G	-50.25	1
2.43578G	6.04	-23.96	2.13778G	-65.11	2.39976G	-25.00	2.48626G	-57.61	15.19182G	-53.34	2

802.11n HT20_Nss1,(MCS0)_2TX **CSE NdB**

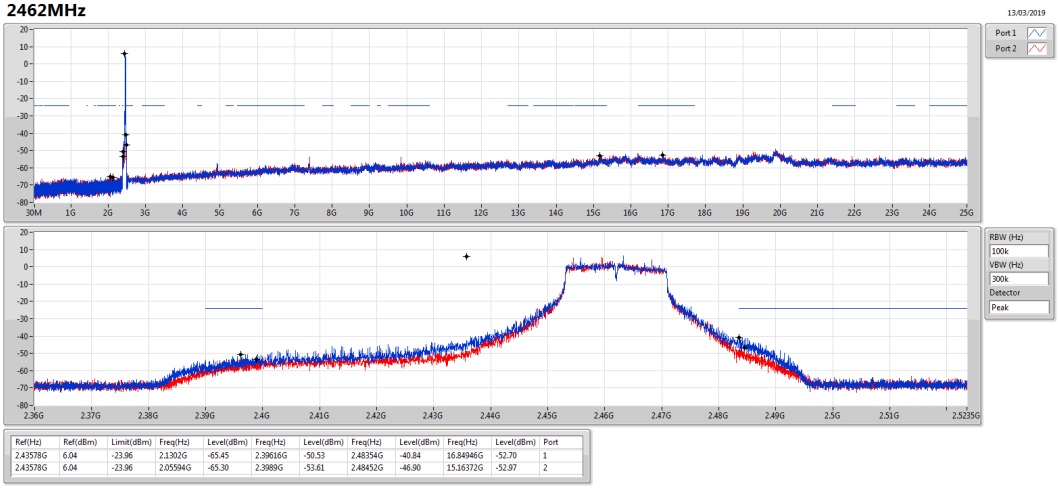
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43578G	6.04	-23.96	794.53M	-65.92	2.39706G	-44.84	2.48488G	-48.20	9.74689G	-49.38	1
2.43578G	6.04	-23.96	2.14273G	-65.73	2.3998G	-47.54	2.48574G	-53.28	14.58495G	-51.97	2

802.11n HT20_Nss1,(MCS0)_2TX **CSE NdB**

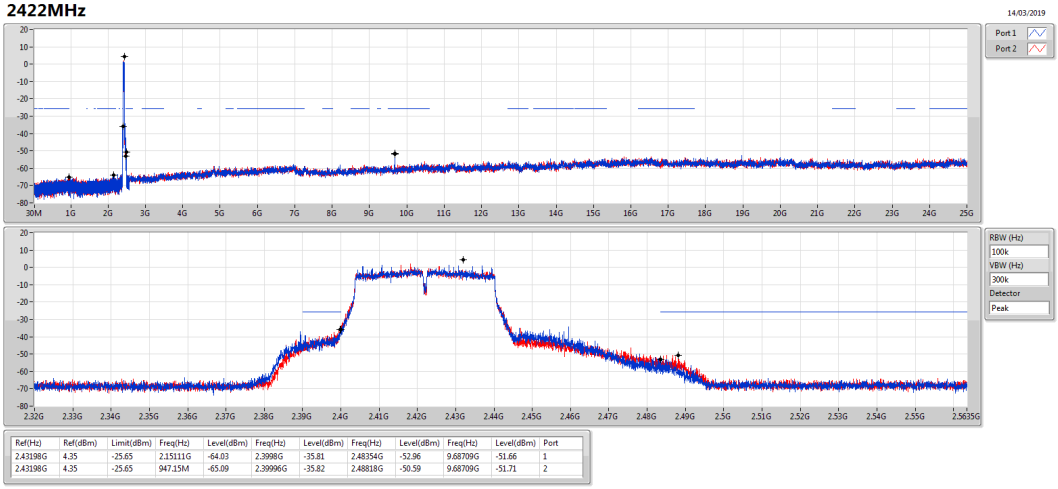
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43578G	6.04	-23.96	2.1302G	-65.45	2.39616G	-50.53	2.48354G	-40.84	16.84946G	-52.70	1
2.43578G	6.04	-23.96	2.05594G	-65.30	2.3989G	-53.61	2.48452G	-46.90	15.16372G	-52.97	2

802.11n HT40_Nss1,(MCS0)_2TX **CSE NdB**

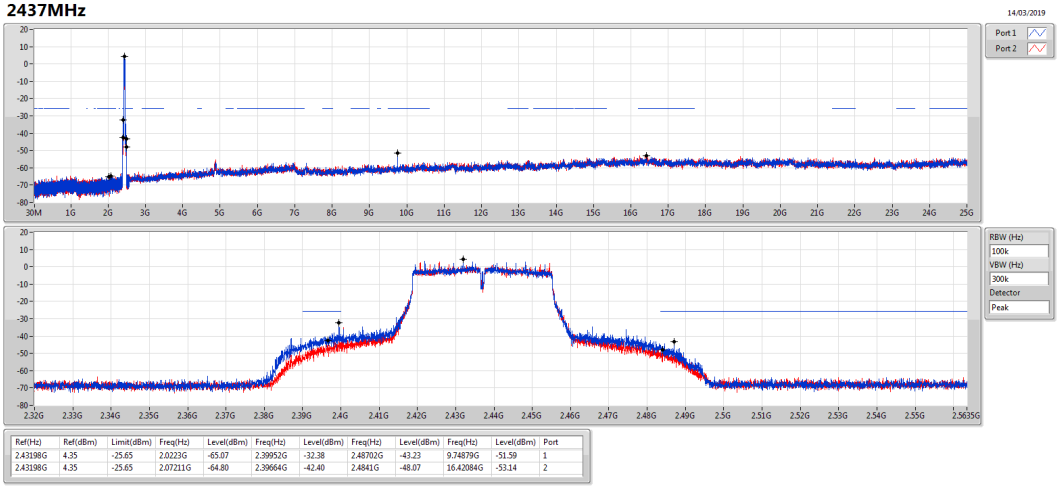
2422MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43198G	4.35	-25.65	2.15111G	-64.03	2.3998G	-35.81	2.48354G	-52.96	9.68709G	-51.66	1
2.43198G	4.35	-25.65	947.15M	-65.09	2.39996G	-35.82	2.48818G	-50.59	9.68709G	-51.71	2

802.11n HT40_Nss1,(MCS0)_2TX **CSE NdB**

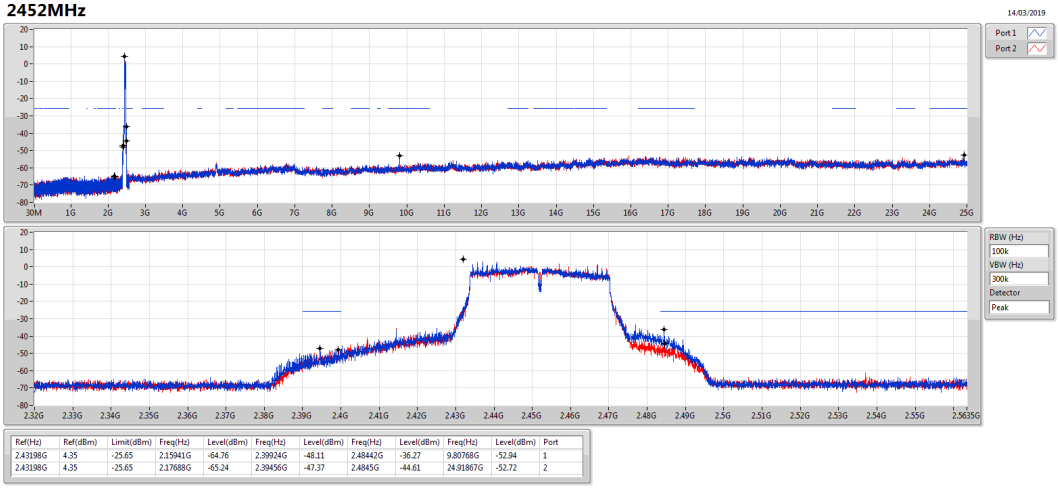
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43198G	4.35	-25.65	2.02233G	-65.07	2.39952G	-32.38	2.48702G	-43.23	9.74879G	-51.59	1
2.43198G	4.35	-25.65	2.07211G	-64.80	2.39664G	-42.40	2.4841G	-48.07	16.42084G	-53.14	2

802.11n HT40_Nss1,(MCS0)_2TX **CSE NdB**

2452MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43198G	4.35	-25.65	2.15941G	-64.76	2.39924G	-48.11	2.48442G	-36.27	9.80768G	-52.94	1
2.43198G	4.35	-25.65	2.17688G	-65.24	2.39456G	-47.37	2.4845G	-44.61	24.91867G	-52.72	2

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11n HT40_Nss1,(MCS0)_2TX	Pass	PK	873.9M	33.33	46.00	-12.67	2.12	3	Vertical	360	1.00	-

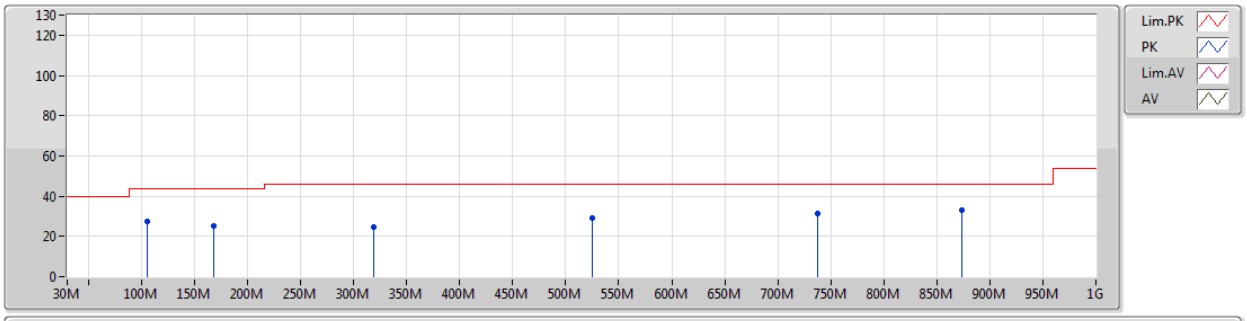
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2437MHz	Pass	PK	105.66M	27.60	43.50	-15.90	-9.66	3	Vertical	360	1.00	-
2437MHz	Pass	PK	167.74M	25.00	43.50	-18.50	-10.72	3	Vertical	360	1.00	-
2437MHz	Pass	PK	319.06M	24.81	46.00	-21.19	-5.51	3	Vertical	360	1.00	-
2437MHz	Pass	PK	524.7M	29.09	46.00	-16.91	-2.11	3	Vertical	360	1.00	-
2437MHz	Pass	PK	738.1M	31.57	46.00	-14.43	0.72	3	Vertical	360	1.00	-
2437MHz	Pass	PK	873.9M	33.33	46.00	-12.67	2.12	3	Vertical	360	1.00	-
2437MHz	Pass	PK	138.64M	26.13	43.50	-17.37	-9.58	3	Horizontal	0	2.00	-
2437MHz	Pass	PK	169.68M	24.53	43.50	-18.97	-10.75	3	Horizontal	0	2.00	-
2437MHz	Pass	PK	313.24M	25.08	46.00	-20.92	-5.62	3	Horizontal	0	2.00	-
2437MHz	Pass	PK	573.2M	30.03	46.00	-15.97	-1.25	3	Horizontal	0	2.00	-
2437MHz	Pass	PK	743.92M	31.45	46.00	-14.55	0.82	3	Horizontal	0	2.00	-
2437MHz	Pass	PK	883.6M	32.88	46.00	-13.12	2.22	3	Horizontal	0	2.00	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_Adapter

14/03/2019

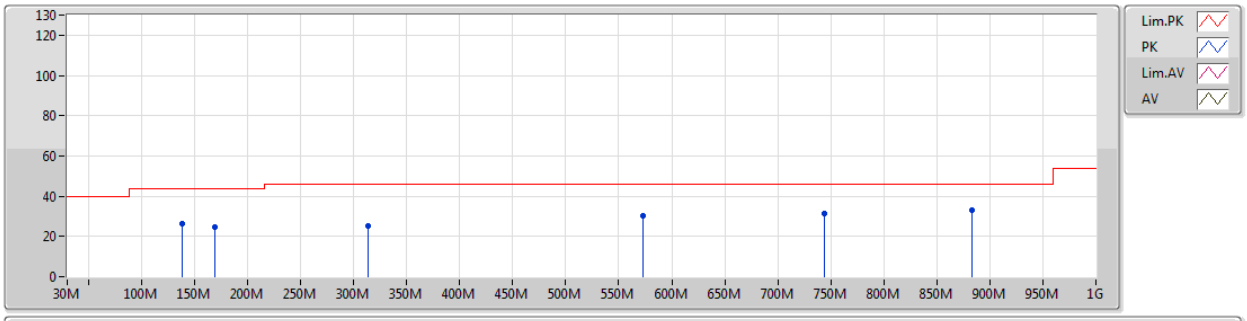


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	105.66M	27.60	43.50	-15.90	-9.66	3	Vertical	360	1.00	-
PK	167.74M	25.00	43.50	-18.50	-10.72	3	Vertical	360	1.00	-
PK	319.06M	24.81	46.00	-21.19	-5.51	3	Vertical	360	1.00	-
PK	524.7M	29.09	46.00	-16.91	-2.11	3	Vertical	360	1.00	-
PK	738.1M	31.57	46.00	-14.43	0.72	3	Vertical	360	1.00	-
PK	873.9M	33.33	46.00	-12.67	2.12	3	Vertical	360	1.00	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_Adapter

14/03/2019



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	138.64M	26.13	43.50	-17.37	-9.58	3	Horizontal	0	2.00	-
PK	169.68M	24.53	43.50	-18.97	-10.75	3	Horizontal	0	2.00	-
PK	313.24M	25.08	46.00	-20.92	-5.62	3	Horizontal	0	2.00	-
PK	573.2M	30.03	46.00	-15.97	-1.25	3	Horizontal	0	2.00	-
PK	743.92M	31.45	46.00	-14.55	0.82	3	Horizontal	0	2.00	-
PK	883.6M	32.88	46.00	-13.12	2.22	3	Horizontal	0	2.00	-

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	AV	2.3882G	52.39	54.00	-1.61	32.06	3	Vertical	291	1.50	-
802.11g_Nss1,(6Mbps)_2TX	Pass	AV	2.4835G	52.45	54.00	-1.55	32.38	3	Vertical	195	1.01	-
802.11n HT20_Nss1,(MCS0)_2TX	Pass	AV	2.4835G	52.44	54.00	-1.56	32.38	3	Vertical	4	1.50	-
802.11n HT40_Nss1,(MCS0)_2TX	Pass	AV	2.4838G	52.48	54.00	-1.52	32.29	3	Vertical	104	1.50	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3882G	52.39	54.00	-1.61	32.06	3	Vertical	291	1.50	-
2412MHz	Pass	AV	2.4112G	107.87	Inf	-Inf	32.14	3	Vertical	291	1.50	-
2412MHz	Pass	PK	2.388G	60.70	74.00	-13.30	32.06	3	Vertical	291	1.50	-
2412MHz	Pass	PK	2.411G	111.57	Inf	-Inf	32.14	3	Vertical	291	1.50	-
2412MHz	Pass	AV	4.82399G	43.10	54.00	-10.90	3.53	3	Vertical	315	2.18	-
2412MHz	Pass	PK	4.82413G	49.33	74.00	-24.67	3.53	3	Vertical	315	2.18	-
2412MHz	Pass	AV	4.82394G	35.04	54.00	-18.96	3.53	3	Horizontal	162	2.99	-
2412MHz	Pass	PK	4.82388G	44.94	74.00	-29.06	3.53	3	Horizontal	162	2.99	-
2417MHz	Pass	AV	2.39G	51.42	54.00	-2.58	32.06	3	Vertical	199	1.50	-
2417MHz	Pass	AV	2.4178G	110.01	Inf	-Inf	32.16	3	Vertical	199	1.50	-
2417MHz	Pass	PK	2.389G	62.01	74.00	-11.99	32.06	3	Vertical	199	1.50	-
2417MHz	Pass	PK	2.418G	114.09	Inf	-Inf	32.16	3	Vertical	199	1.50	-
2437MHz	Pass	AV	2.3858G	45.91	54.00	-8.09	32.05	3	Vertical	352	1.50	-
2437MHz	Pass	AV	2.4362G	108.96	Inf	-Inf	32.22	3	Vertical	352	1.50	-
2437MHz	Pass	AV	2.4874G	50.51	54.00	-3.49	32.39	3	Vertical	352	1.50	-
2437MHz	Pass	PK	2.3886G	58.61	74.00	-15.39	32.06	3	Vertical	352	1.50	-
2437MHz	Pass	PK	2.4362G	112.69	Inf	-Inf	32.22	3	Vertical	352	1.50	-
2437MHz	Pass	PK	2.4838G	60.77	74.00	-13.23	32.38	3	Vertical	352	1.50	-
2437MHz	Pass	AV	4.87401G	42.84	54.00	-11.16	3.64	3	Vertical	165	1.50	-
2437MHz	Pass	PK	4.87393G	48.96	74.00	-25.04	3.64	3	Vertical	165	1.50	-
2437MHz	Pass	AV	4.87396G	38.32	54.00	-15.68	3.64	3	Horizontal	212	2.99	-
2437MHz	Pass	PK	4.87402G	47.15	74.00	-26.85	3.64	3	Horizontal	212	2.99	-
2457MHz	Pass	AV	2.4562G	109.60	Inf	-Inf	32.29	3	Vertical	355	1.50	-
2457MHz	Pass	AV	2.4852G	52.01	54.00	-1.99	32.39	3	Vertical	355	1.50	-
2457MHz	Pass	PK	2.456G	113.37	Inf	-Inf	32.29	3	Vertical	355	1.50	-
2457MHz	Pass	PK	2.4848G	63.82	74.00	-10.18	32.39	3	Vertical	355	1.50	-
2462MHz	Pass	AV	2.4612G	108.75	Inf	-Inf	32.31	3	Vertical	294	1.50	-
2462MHz	Pass	AV	2.4835G	51.81	54.00	-2.19	32.38	3	Vertical	294	1.50	-
2462MHz	Pass	PK	2.461G	112.50	Inf	-Inf	32.31	3	Vertical	294	1.50	-
2462MHz	Pass	PK	2.4856G	61.53	74.00	-12.47	32.39	3	Vertical	294	1.50	-
2462MHz	Pass	AV	4.92398G	37.26	54.00	-16.74	3.76	3	Vertical	163	1.50	-
2462MHz	Pass	PK	4.92408G	47.05	74.00	-26.95	3.76	3	Vertical	163	1.50	-
2462MHz	Pass	AV	4.92392G	32.59	54.00	-21.41	3.76	3	Horizontal	22	1.10	-
2462MHz	Pass	PK	4.92415G	46.14	74.00	-27.86	3.76	3	Horizontal	22	1.10	-
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.39G	52.12	54.00	-1.88	32.06	3	Vertical	195	1.01	-
2412MHz	Pass	AV	2.4132G	102.67	Inf	-Inf	32.15	3	Vertical	195	1.01	-
2412MHz	Pass	PK	2.39G	66.37	74.00	-7.63	32.06	3	Vertical	195	1.01	-
2412MHz	Pass	PK	2.4132G	112.44	Inf	-Inf	32.15	3	Vertical	195	1.01	-
2412MHz	Pass	AV	4.82415G	31.59	54.00	-22.41	3.53	3	Vertical	38	1.50	-
2412MHz	Pass	PK	4.82455G	45.07	74.00	-28.93	3.53	3	Vertical	38	1.50	-
2412MHz	Pass	AV	4.82537G	31.52	54.00	-22.48	3.53	3	Horizontal	264	1.91	-
2412MHz	Pass	PK	4.82501G	44.68	74.00	-29.32	3.53	3	Horizontal	264	1.91	-
2417MHz	Pass	AV	2.3894G	52.33	54.00	-1.67	32.06	3	Vertical	197	1.49	-
2417MHz	Pass	AV	2.418G	104.57	Inf	-Inf	32.16	3	Vertical	197	1.49	-
2417MHz	Pass	PK	2.3884G	65.92	74.00	-8.08	32.06	3	Vertical	197	1.49	-
2417MHz	Pass	PK	2.4178G	114.05	Inf	-Inf	32.16	3	Vertical	197	1.49	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2437MHz	Pass	AV	2.3898G	48.92	54.00	-5.08	32.06	3	Vertical	196	1.00	-
2437MHz	Pass	AV	2.4378G	105.38	Inf	-Inf	32.23	3	Vertical	196	1.00	-
2437MHz	Pass	AV	2.4838G	51.71	54.00	-2.29	32.38	3	Vertical	196	1.00	-
2437MHz	Pass	PK	2.3894G	65.70	74.00	-8.30	32.06	3	Vertical	196	1.00	-
2437MHz	Pass	PK	2.4378G	115.26	Inf	-Inf	32.23	3	Vertical	196	1.00	-
2437MHz	Pass	PK	2.4846G	65.12	74.00	-8.88	32.39	3	Vertical	196	1.00	-
2437MHz	Pass	AV	4.87388G	31.81	54.00	-22.19	3.64	3	Vertical	229	1.16	-
2437MHz	Pass	PK	4.86812G	45.31	74.00	-28.69	3.63	3	Vertical	229	1.16	-
2437MHz	Pass	AV	4.889G	31.57	54.00	-22.43	3.68	3	Horizontal	174	1.60	-
2437MHz	Pass	PK	4.87382G	44.72	74.00	-29.28	3.64	3	Horizontal	174	1.60	-
2457MHz	Pass	AV	2.455G	103.45	Inf	-Inf	32.28	3	Vertical	196	1.50	-
2457MHz	Pass	AV	2.4842G	52.09	54.00	-1.91	32.39	3	Vertical	196	1.50	-
2457MHz	Pass	PK	2.4552G	113.40	Inf	-Inf	32.28	3	Vertical	196	1.50	-
2457MHz	Pass	PK	2.4838G	65.01	74.00	-8.99	32.38	3	Vertical	196	1.50	-
2462MHz	Pass	AV	2.463G	102.89	Inf	-Inf	32.32	3	Vertical	195	1.01	-
2462MHz	Pass	AV	2.4835G	52.45	54.00	-1.55	32.38	3	Vertical	195	1.01	-
2462MHz	Pass	PK	2.4628G	112.23	Inf	-Inf	32.32	3	Vertical	195	1.01	-
2462MHz	Pass	PK	2.4835G	69.15	74.00	-4.85	32.38	3	Vertical	195	1.01	-
2462MHz	Pass	AV	4.9216G	32.05	54.00	-21.95	3.75	3	Vertical	212	1.78	-
2462MHz	Pass	PK	4.91866G	45.22	74.00	-28.78	3.75	3	Vertical	212	1.78	-
2462MHz	Pass	AV	4.91938G	32.09	54.00	-21.91	3.75	3	Horizontal	360	1.38	-
2462MHz	Pass	PK	4.92208G	45.27	74.00	-28.73	3.76	3	Horizontal	360	1.38	-
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.39G	52.39	54.00	-1.61	32.06	3	Vertical	197	1.50	-
2412MHz	Pass	AV	2.415G	101.71	Inf	-Inf	32.15	3	Vertical	197	1.50	-
2412MHz	Pass	PK	2.39G	64.80	74.00	-9.20	32.06	3	Vertical	197	1.50	-
2412MHz	Pass	PK	2.4136G	111.53	Inf	-Inf	32.15	3	Vertical	197	1.50	-
2412MHz	Pass	AV	4.81524G	31.67	54.00	-22.33	3.50	3	Vertical	140	1.27	-
2412MHz	Pass	PK	4.81506G	44.98	74.00	-29.02	3.50	3	Vertical	140	1.27	-
2412MHz	Pass	AV	4.83876G	31.75	54.00	-22.25	3.56	3	Horizontal	196	2.16	-
2412MHz	Pass	PK	4.81956G	45.18	74.00	-28.82	3.52	3	Horizontal	196	2.16	-
2417MHz	Pass	AV	2.3896G	52.13	54.00	-1.87	32.06	3	Vertical	202	1.00	-
2417MHz	Pass	AV	2.4198G	104.01	Inf	-Inf	32.17	3	Vertical	202	1.00	-
2417MHz	Pass	PK	2.39G	67.85	74.00	-6.15	32.06	3	Vertical	202	1.00	-
2417MHz	Pass	PK	2.418G	114.20	Inf	-Inf	32.16	3	Vertical	202	1.00	-
2437MHz	Pass	AV	2.3898G	47.24	54.00	-6.76	32.06	3	Vertical	4	1.50	-
2437MHz	Pass	AV	2.4378G	103.83	Inf	-Inf	32.23	3	Vertical	4	1.50	-
2437MHz	Pass	AV	2.4835G	52.44	54.00	-1.56	32.38	3	Vertical	4	1.50	-
2437MHz	Pass	PK	2.3898G	63.40	74.00	-10.60	32.06	3	Vertical	4	1.50	-
2437MHz	Pass	PK	2.4378G	114.47	Inf	-Inf	32.23	3	Vertical	4	1.50	-
2437MHz	Pass	PK	2.4835G	66.64	74.00	-7.36	32.38	3	Vertical	4	1.50	-
2437MHz	Pass	AV	4.88024G	31.78	54.00	-22.22	3.65	3	Vertical	30	1.65	-
2437MHz	Pass	PK	4.88456G	45.61	74.00	-28.39	3.67	3	Vertical	30	1.65	-
2437MHz	Pass	AV	4.8611G	31.65	54.00	-22.35	3.61	3	Horizontal	12	1.62	-
2437MHz	Pass	PK	4.87976G	45.03	74.00	-28.97	3.65	3	Horizontal	12	1.62	-
2457MHz	Pass	AV	2.4576G	102.89	Inf	-Inf	32.29	3	Vertical	196	1.50	-
2457MHz	Pass	AV	2.4835G	51.33	54.00	-2.67	32.38	3	Vertical	196	1.50	-
2457MHz	Pass	PK	2.4586G	113.18	Inf	-Inf	32.30	3	Vertical	196	1.50	-
2457MHz	Pass	PK	2.4868G	65.05	74.00	-8.95	32.39	3	Vertical	196	1.50	-

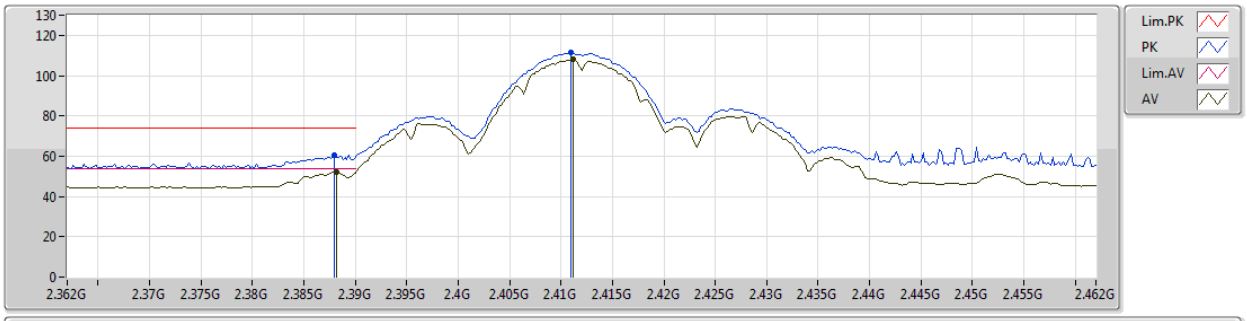
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2462MHz	Pass	AV	2.4644G	100.46	Inf	-Inf	32.32	3	Vertical	197	1.50	-
2462MHz	Pass	AV	2.4835G	51.92	54.00	-2.08	32.38	3	Vertical	197	1.50	-
2462MHz	Pass	PK	2.4634G	110.71	Inf	-Inf	32.32	3	Vertical	197	1.50	-
2462MHz	Pass	PK	2.4844G	66.25	74.00	-7.75	32.39	3	Vertical	197	1.50	-
2462MHz	Pass	AV	4.91836G	32.19	54.00	-21.81	3.75	3	Vertical	221	1.03	-
2462MHz	Pass	PK	4.91932G	45.21	74.00	-28.79	3.75	3	Vertical	221	1.03	-
2462MHz	Pass	AV	4.9195G	32.41	54.00	-21.59	3.75	3	Horizontal	259	1.15	-
2462MHz	Pass	PK	4.93342G	45.42	74.00	-28.58	3.77	3	Horizontal	259	1.15	-
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	AV	2.3896G	52.08	54.00	-1.92	32.01	3	Vertical	103	1.50	-
2422MHz	Pass	AV	2.4196G	96.75	Inf	-Inf	32.10	3	Vertical	103	1.50	-
2422MHz	Pass	AV	2.4844G	46.37	54.00	-7.63	32.29	3	Vertical	103	1.50	-
2422MHz	Pass	PK	2.3888G	62.79	74.00	-11.21	32.00	3	Vertical	103	1.50	-
2422MHz	Pass	PK	2.4192G	106.02	Inf	-Inf	32.10	3	Vertical	103	1.50	-
2422MHz	Pass	PK	2.484G	62.20	74.00	-11.80	32.29	3	Vertical	103	1.50	-
2422MHz	Pass	AV	4.85834G	32.28	54.00	-21.72	3.58	3	Vertical	354	1.73	-
2422MHz	Pass	PK	4.8362G	45.17	74.00	-28.83	3.52	3	Vertical	354	1.73	-
2422MHz	Pass	AV	4.85402G	32.29	54.00	-21.71	3.57	3	Horizontal	29	2.10	-
2422MHz	Pass	PK	4.85042G	45.20	74.00	-28.80	3.56	3	Horizontal	29	2.10	-
2427MHz	Pass	AV	2.3898G	52.26	54.00	-1.74	32.01	3	Vertical	102	1.50	-
2427MHz	Pass	AV	2.4246G	97.97	Inf	-Inf	32.11	3	Vertical	102	1.50	-
2427MHz	Pass	AV	2.4835G	47.10	54.00	-6.90	32.29	3	Vertical	102	1.50	-
2427MHz	Pass	PK	2.3898G	64.17	74.00	-9.83	32.01	3	Vertical	102	1.50	-
2427MHz	Pass	PK	2.4258G	106.89	Inf	-Inf	32.12	3	Vertical	102	1.50	-
2427MHz	Pass	PK	2.4835G	61.68	74.00	-12.32	32.29	3	Vertical	102	1.50	-
2437MHz	Pass	AV	2.3898G	48.62	54.00	-5.38	32.01	3	Vertical	104	1.50	-
2437MHz	Pass	AV	2.435G	97.76	Inf	-Inf	32.14	3	Vertical	104	1.50	-
2437MHz	Pass	AV	2.4838G	52.48	54.00	-1.52	32.29	3	Vertical	104	1.50	-
2437MHz	Pass	PK	2.3898G	64.10	74.00	-9.90	32.01	3	Vertical	104	1.50	-
2437MHz	Pass	PK	2.4354G	106.78	Inf	-Inf	32.14	3	Vertical	104	1.50	-
2437MHz	Pass	PK	2.4838G	64.12	74.00	-9.88	32.29	3	Vertical	104	1.50	-
2437MHz	Pass	AV	4.87754G	32.65	54.00	-21.35	3.62	3	Vertical	93	1.49	-
2437MHz	Pass	PK	4.88648G	44.89	74.00	-29.11	3.65	3	Vertical	93	1.49	-
2437MHz	Pass	AV	4.88222G	32.52	54.00	-21.48	3.63	3	Horizontal	331	1.65	-
2437MHz	Pass	PK	4.86356G	44.95	74.00	-29.05	3.59	3	Horizontal	331	1.65	-
2447MHz	Pass	AV	2.3894G	47.58	54.00	-6.42	32.00	3	Vertical	159	1.50	-
2447MHz	Pass	AV	2.449G	97.91	Inf	-Inf	32.19	3	Vertical	159	1.50	-
2447MHz	Pass	AV	2.485G	52.30	54.00	-1.70	32.29	3	Vertical	159	1.50	-
2447MHz	Pass	PK	2.3898G	63.91	74.00	-10.09	32.01	3	Vertical	159	1.50	-
2447MHz	Pass	PK	2.449G	106.84	Inf	-Inf	32.19	3	Vertical	159	1.50	-
2447MHz	Pass	PK	2.4835G	64.21	74.00	-9.79	32.29	3	Vertical	159	1.50	-
2452MHz	Pass	AV	2.3896G	46.47	54.00	-7.53	32.01	3	Vertical	104	1.50	-
2452MHz	Pass	AV	2.45G	97.85	Inf	-Inf	32.19	3	Vertical	104	1.50	-
2452MHz	Pass	AV	2.4835G	52.26	54.00	-1.74	32.29	3	Vertical	104	1.50	-
2452MHz	Pass	PK	2.388G	61.71	74.00	-12.29	32.00	3	Vertical	104	1.50	-
2452MHz	Pass	PK	2.448G	106.86	Inf	-Inf	32.19	3	Vertical	104	1.50	-
2452MHz	Pass	PK	2.4864G	64.02	74.00	-9.98	32.30	3	Vertical	104	1.50	-
2452MHz	Pass	AV	4.91894G	32.83	54.00	-21.17	3.73	3	Vertical	266	1.51	-
2452MHz	Pass	PK	4.91G	45.15	74.00	-28.85	3.70	3	Vertical	266	1.51	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2452MHz	Pass	AV	4.8983G	32.93	54.00	-21.07	3.68	3	Horizontal	157	1.28	-
2452MHz	Pass	PK	4.91756G	46.09	74.00	-27.91	3.73	3	Horizontal	157	1.28	-

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

12/03/2019

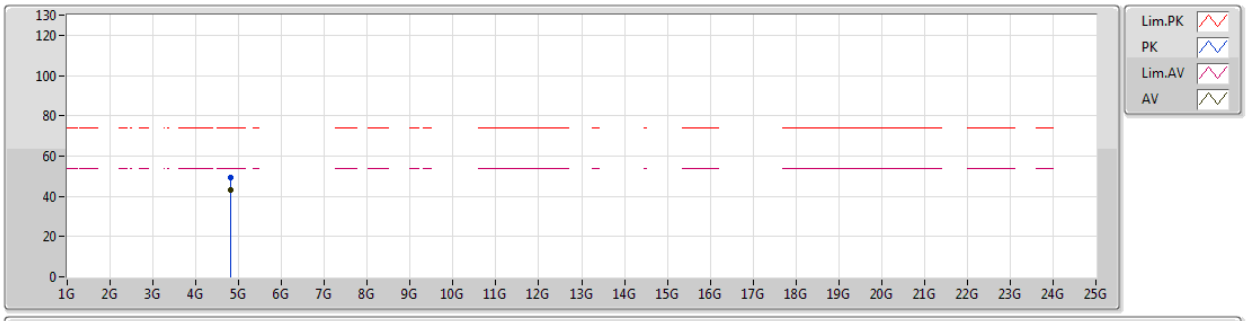


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3882G	52.39	54.00	-1.61	32.06	3	Vertical	291	1.50	-
AV	2.4112G	107.87	Inf	-Inf	32.14	3	Vertical	291	1.50	-
PK	2.388G	60.70	74.00	-13.30	32.06	3	Vertical	291	1.50	-
PK	2.411G	111.57	Inf	-Inf	32.14	3	Vertical	291	1.50	-

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

12/03/2019

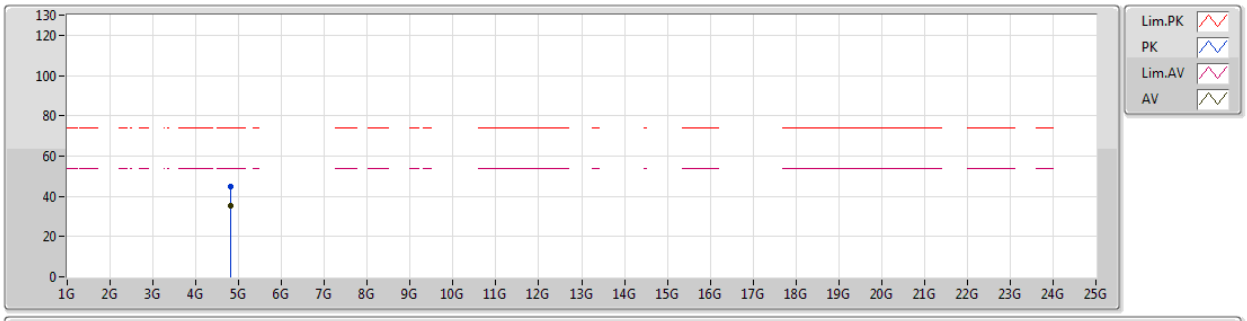


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.82399G	43.10	54.00	-10.90	3.53	3	Vertical	315	2.18	-
PK	4.82413G	49.33	74.00	-24.67	3.53	3	Vertical	315	2.18	-

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

12/03/2019

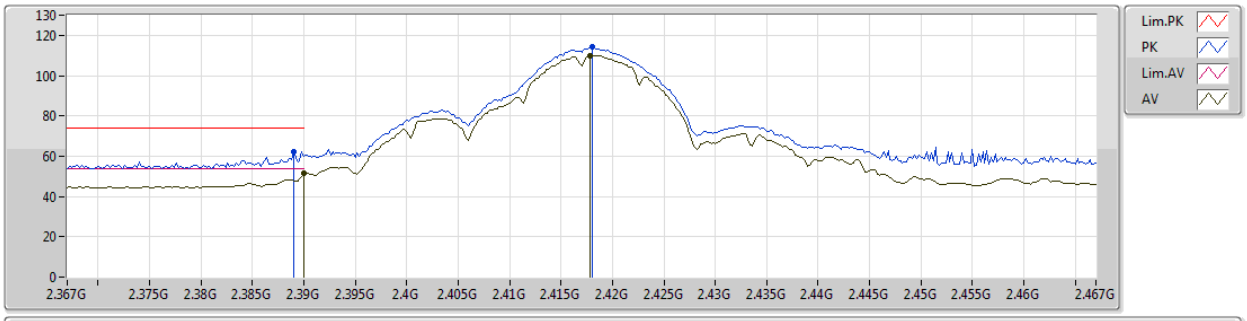


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.82394G	35.04	54.00	-18.96	3.53	3	Horizontal	162	2.99	-
PK	4.82388G	44.94	74.00	-29.06	3.53	3	Horizontal	162	2.99	-

802.11b_Nss1,(1Mbps)_2TX

2417MHz_TX

12/03/2019

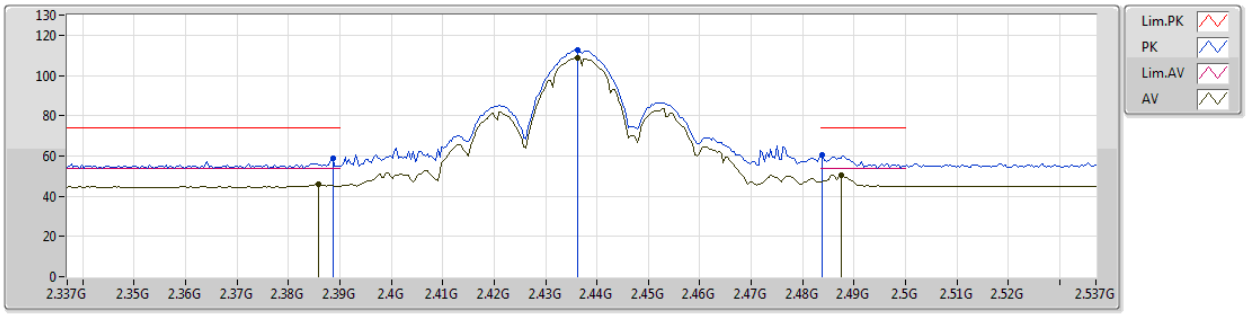


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.39G	51.42	54.00	-2.58	32.06	3	Vertical	199	1.50	-
AV	2.4178G	110.01	Inf	-Inf	32.16	3	Vertical	199	1.50	-
PK	2.389G	62.01	74.00	-11.99	32.06	3	Vertical	199	1.50	-
PK	2.418G	114.09	Inf	-Inf	32.16	3	Vertical	199	1.50	-

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

12/03/2019

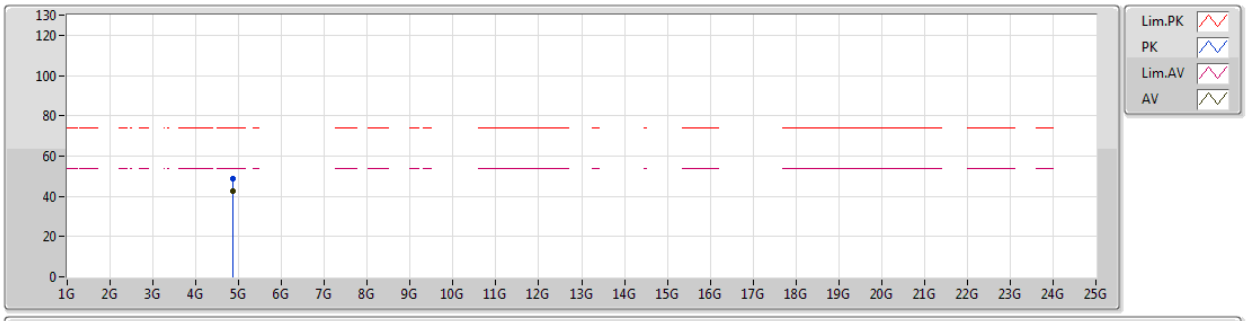


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3858G	45.91	54.00	-8.09	32.05	3	Vertical	352	1.50	-
AV	2.4362G	108.96	Inf	-Inf	32.22	3	Vertical	352	1.50	-
AV	2.4874G	50.51	54.00	-3.49	32.39	3	Vertical	352	1.50	-
PK	2.3886G	58.61	74.00	-15.39	32.06	3	Vertical	352	1.50	-
PK	2.4362G	112.69	Inf	-Inf	32.22	3	Vertical	352	1.50	-
PK	2.4838G	60.77	74.00	-13.23	32.38	3	Vertical	352	1.50	-

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

12/03/2019

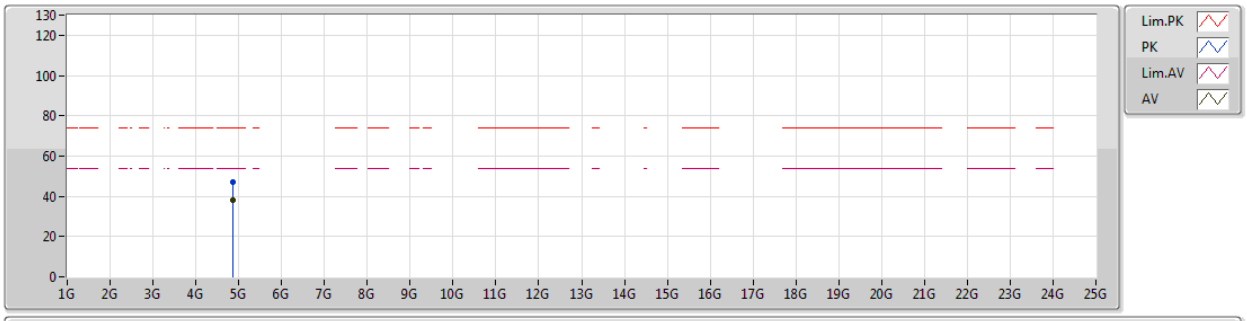


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.87401G	42.84	54.00	-11.16	3.64	3	Vertical	165	1.50	-
PK	4.87393G	48.96	74.00	-25.04	3.64	3	Vertical	165	1.50	-

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

12/03/2019

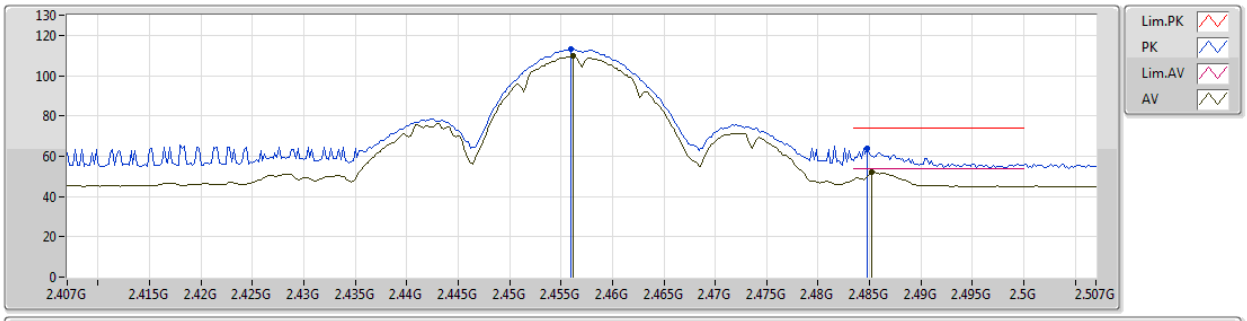


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.87396G	38.32	54.00	-15.68	3.64	3	Horizontal	212	2.99	-
PK	4.87402G	47.15	74.00	-26.85	3.64	3	Horizontal	212	2.99	-

802.11b_Nss1,(1Mbps)_2TX

2457MHz_TX

12/03/2019

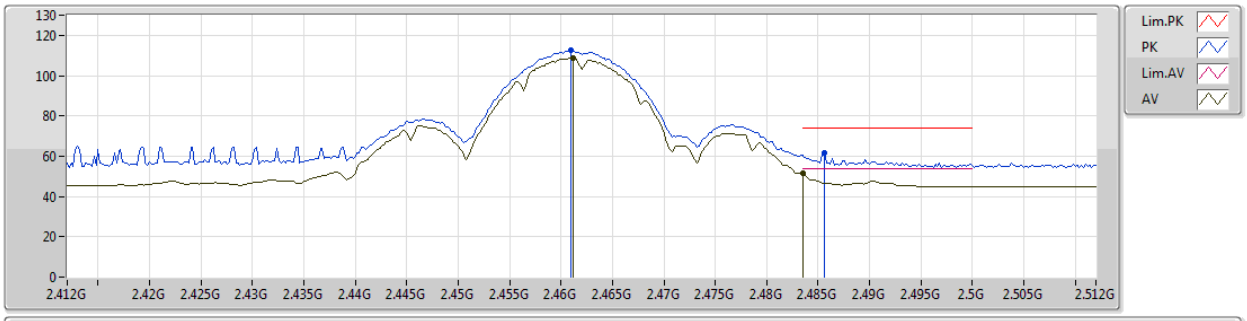


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.4562G	109.60	Inf	-Inf	32.29	3	Vertical	355	1.50	-
AV	2.4852G	52.01	54.00	-1.99	32.39	3	Vertical	355	1.50	-
PK	2.456G	113.37	Inf	-Inf	32.29	3	Vertical	355	1.50	-
PK	2.4848G	63.82	74.00	-10.18	32.39	3	Vertical	355	1.50	-

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

12/03/2019

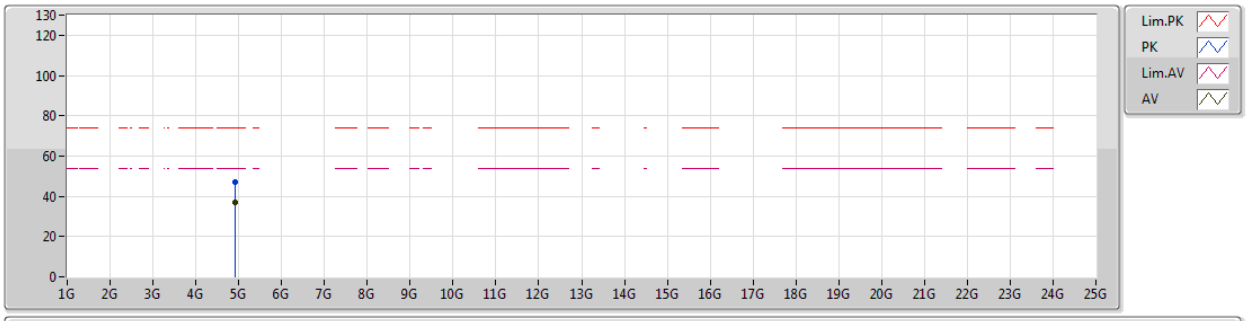


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.4612G	108.75	Inf	-Inf	32.31	3	Vertical	294	1.50	-
AV	2.4835G	51.81	54.00	-2.19	32.38	3	Vertical	294	1.50	-
PK	2.461G	112.50	Inf	-Inf	32.31	3	Vertical	294	1.50	-
PK	2.4856G	61.53	74.00	-12.47	32.39	3	Vertical	294	1.50	-

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

12/03/2019

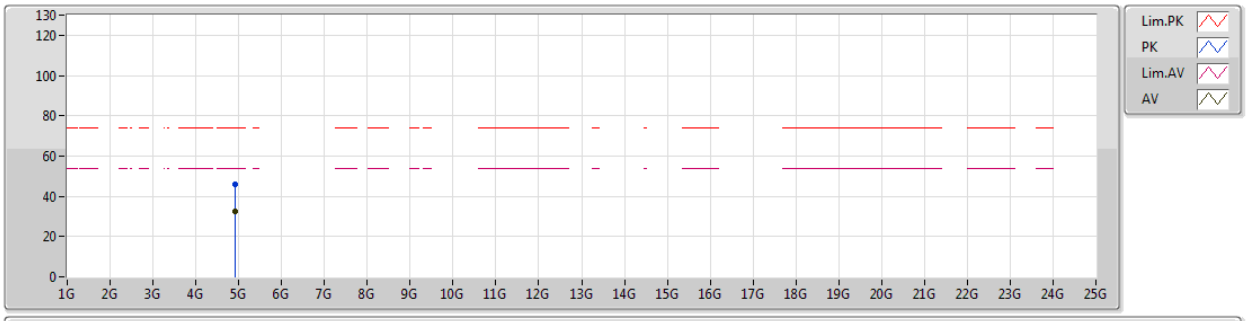


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.92398G	37.26	54.00	-16.74	3.76	3	Vertical	163	1.50	-
PK	4.92408G	47.05	74.00	-26.95	3.76	3	Vertical	163	1.50	-

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

12/03/2019

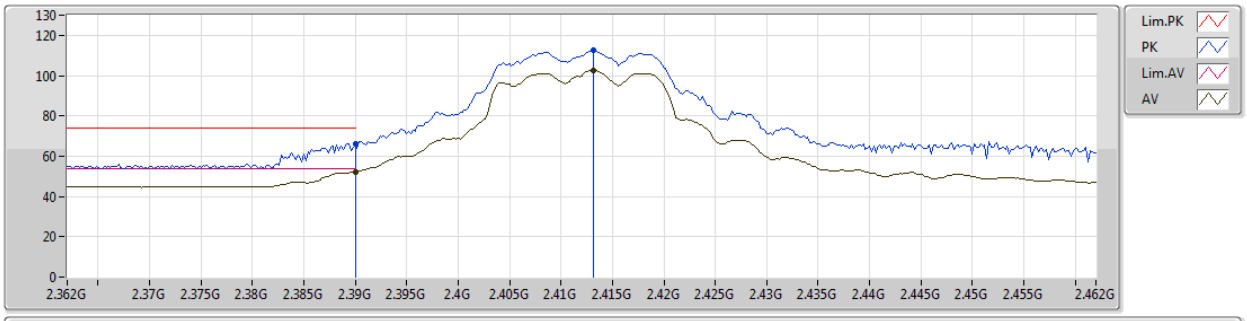


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.92392G	32.59	54.00	-21.41	3.76	3	Horizontal	22	1.10	-
PK	4.92415G	46.14	74.00	-27.86	3.76	3	Horizontal	22	1.10	-

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

13/03/2019

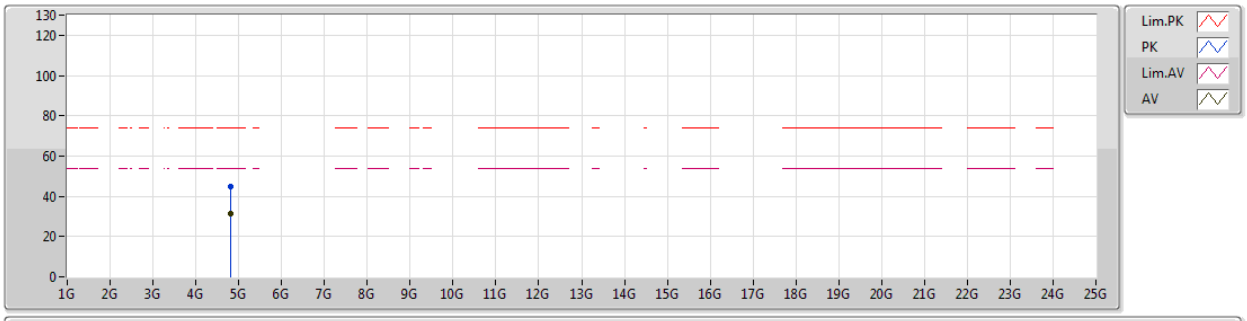


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.39G	52.12	54.00	-1.88	32.06	3	Vertical	195	1.01	-
AV	2.4132G	102.67	Inf	-Inf	32.15	3	Vertical	195	1.01	-
PK	2.39G	66.37	74.00	-7.63	32.06	3	Vertical	195	1.01	-
PK	2.4132G	112.44	Inf	-Inf	32.15	3	Vertical	195	1.01	-

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

13/03/2019

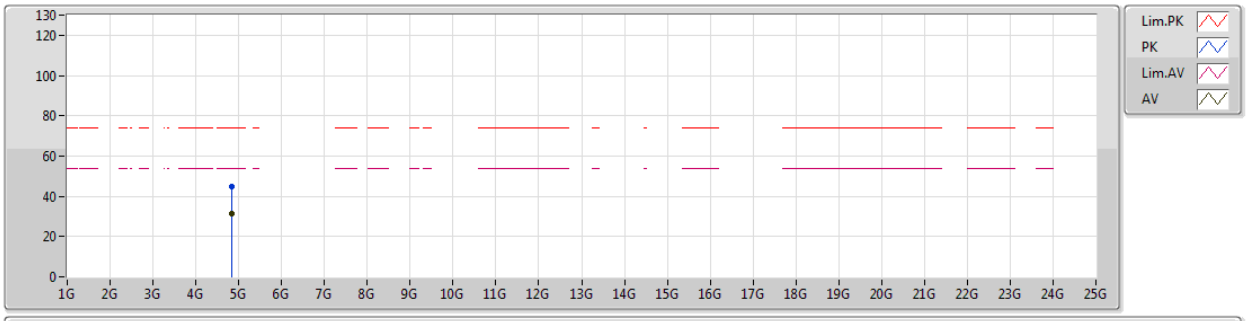


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.82415G	31.59	54.00	-22.41	3.53	3	Vertical	38	1.50	-
PK	4.82455G	45.07	74.00	-28.93	3.53	3	Vertical	38	1.50	-

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

13/03/2019

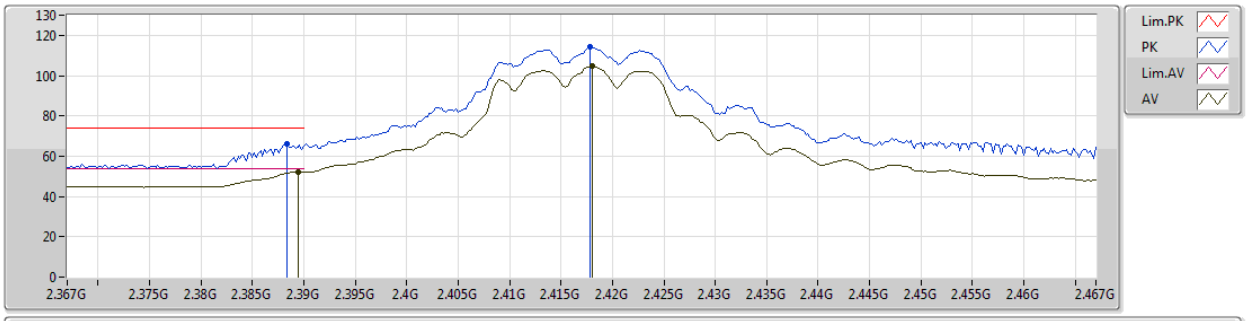


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.82537G	31.52	54.00	-22.48	3.53	3	Horizontal	264	1.91	-
PK	4.82501G	44.68	74.00	-29.32	3.53	3	Horizontal	264	1.91	-

802.11g_Nss1,(6Mbps)_2TX

2417MHz_TX

13/03/2019

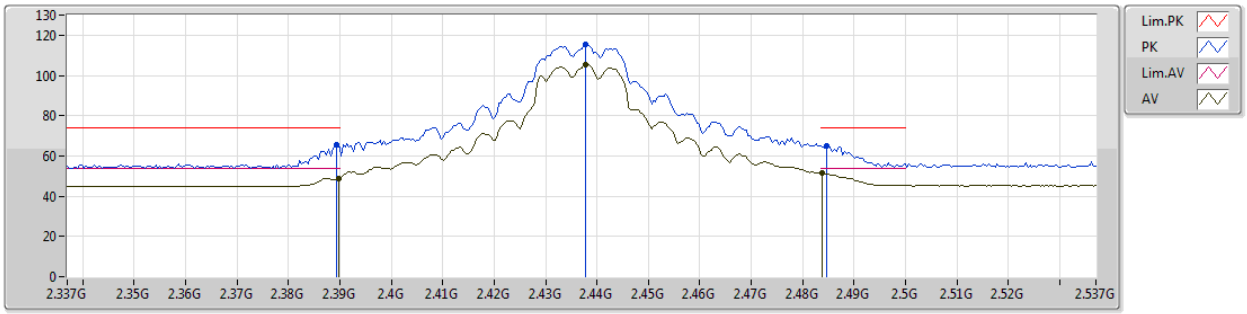


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3894G	52.33	54.00	-1.67	32.06	3	Vertical	197	1.49	-
AV	2.418G	104.57	Inf	-Inf	32.16	3	Vertical	197	1.49	-
PK	2.3884G	65.92	74.00	-8.08	32.06	3	Vertical	197	1.49	-
PK	2.4178G	114.05	Inf	-Inf	32.16	3	Vertical	197	1.49	-

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

13/03/2019

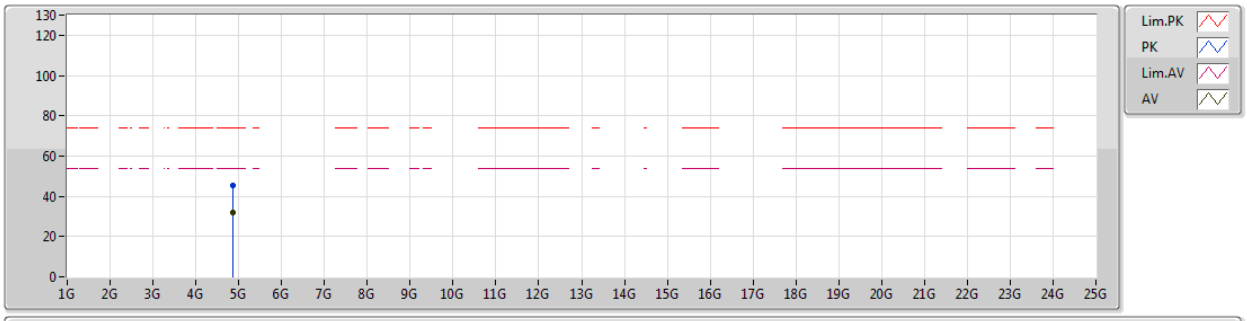


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3898G	48.92	54.00	-5.08	32.06	3	Vertical	196	1.00	-
AV	2.4378G	105.38	Inf	-Inf	32.23	3	Vertical	196	1.00	-
AV	2.4838G	51.71	54.00	-2.29	32.38	3	Vertical	196	1.00	-
PK	2.3894G	65.70	74.00	-8.30	32.06	3	Vertical	196	1.00	-
PK	2.4378G	115.26	Inf	-Inf	32.23	3	Vertical	196	1.00	-
PK	2.4846G	65.12	74.00	-8.88	32.39	3	Vertical	196	1.00	-

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

13/03/2019

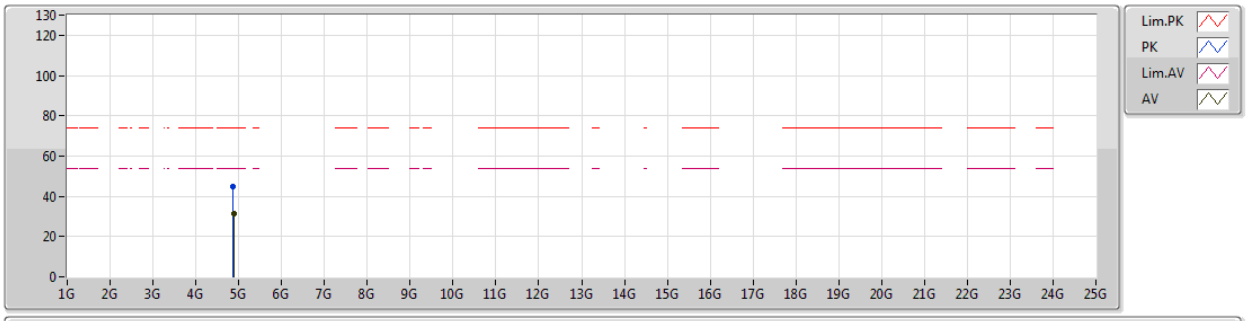


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.87388G	31.81	54.00	-22.19	3.64	3	Vertical	229	1.16	-
PK	4.86812G	45.31	74.00	-28.69	3.63	3	Vertical	229	1.16	-

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

13/03/2019

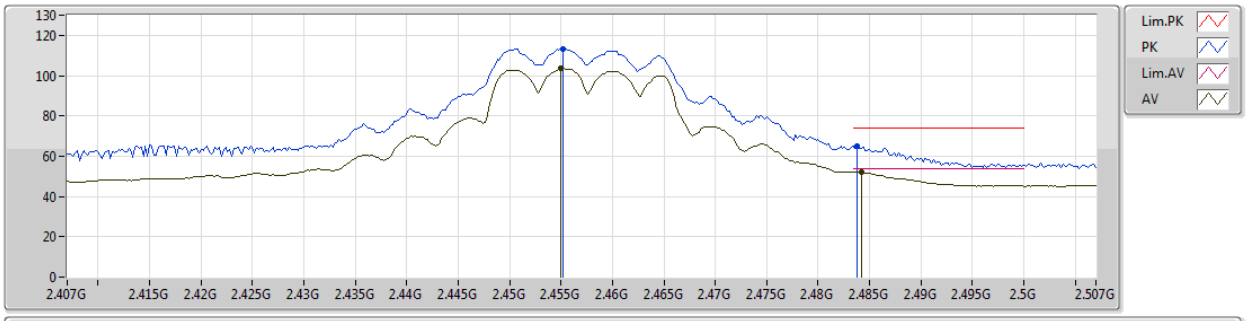


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.889G	31.57	54.00	-22.43	3.68	3	Horizontal	174	1.60	-
PK	4.87382G	44.72	74.00	-29.28	3.64	3	Horizontal	174	1.60	-

802.11g_Nss1,(6Mbps)_2TX

2457MHz_TX

13/03/2019

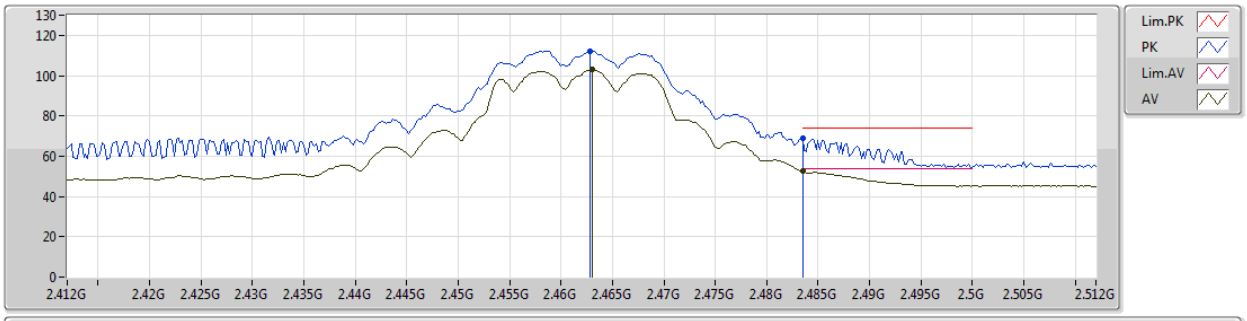


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.455G	103.45	Inf	-Inf	32.28	3	Vertical	196	1.50	-
AV	2.4842G	52.09	54.00	-1.91	32.39	3	Vertical	196	1.50	-
PK	2.4552G	113.40	Inf	-Inf	32.28	3	Vertical	196	1.50	-
PK	2.4838G	65.01	74.00	-8.99	32.38	3	Vertical	196	1.50	-

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

13/03/2019

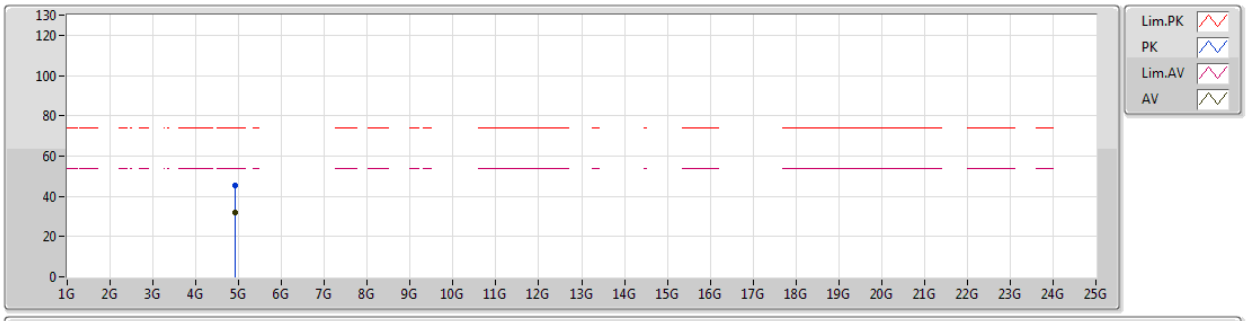


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.463G	102.89	Inf	-Inf	32.32	3	Vertical	195	1.01	-
AV	2.4835G	52.45	54.00	-1.55	32.38	3	Vertical	195	1.01	-
PK	2.4628G	112.23	Inf	-Inf	32.32	3	Vertical	195	1.01	-
PK	2.4835G	69.15	74.00	-4.85	32.38	3	Vertical	195	1.01	-

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

13/03/2019

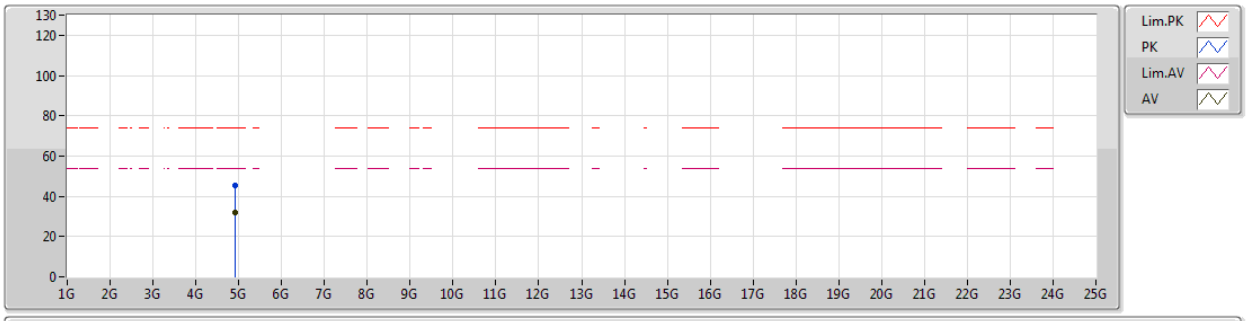


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.9216G	32.05	54.00	-21.95	3.75	3	Vertical	212	1.78	-
PK	4.91866G	45.22	74.00	-28.78	3.75	3	Vertical	212	1.78	-

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

13/03/2019

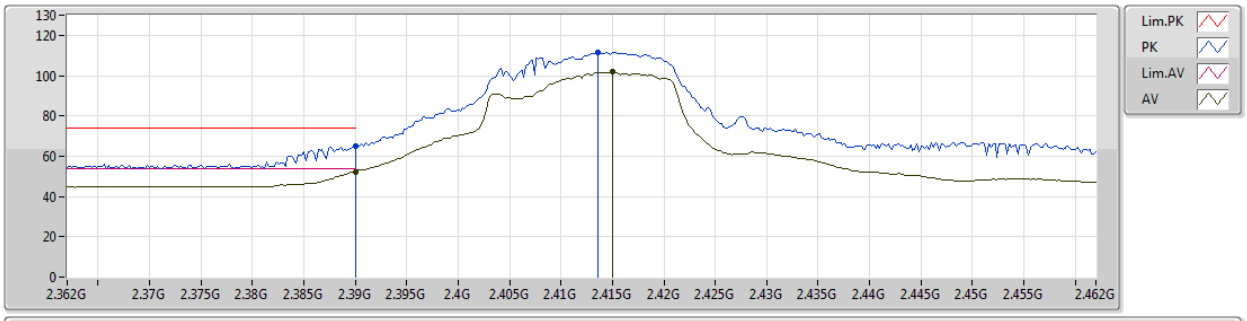


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.91938G	32.09	54.00	-21.91	3.75	3	Horizontal	360	1.38	-
PK	4.92208G	45.27	74.00	-28.73	3.76	3	Horizontal	360	1.38	-

802.11n HT20_Nss1,(MCS0)_2TX

13/03/2019

2412MHz_TX

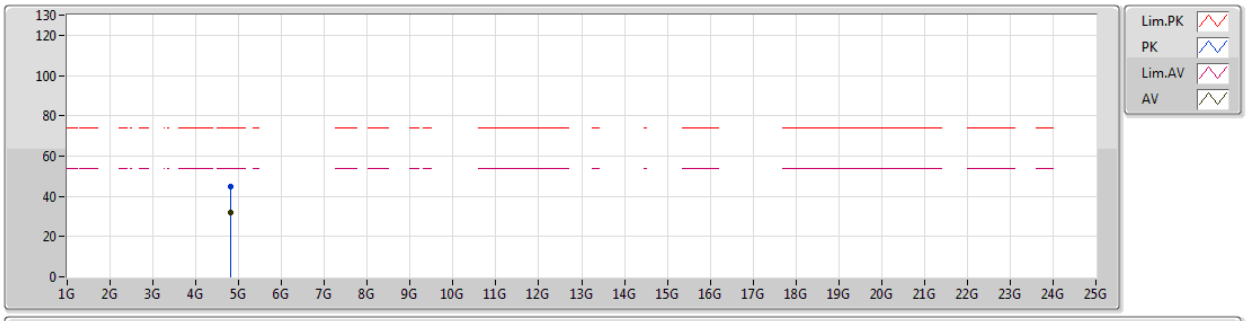


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.39G	52.39	54.00	-1.61	32.06	3	Vertical	197	1.50	-
AV	2.415G	101.71	Inf	-Inf	32.15	3	Vertical	197	1.50	-
PK	2.39G	64.80	74.00	-9.20	32.06	3	Vertical	197	1.50	-
PK	2.4136G	111.53	Inf	-Inf	32.15	3	Vertical	197	1.50	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

13/03/2019

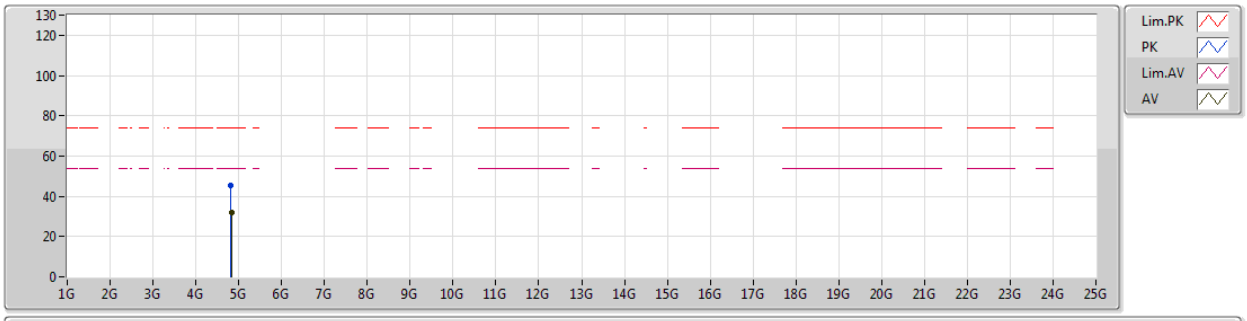


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.81524G	31.67	54.00	-22.33	3.50	3	Vertical	140	1.27	-
PK	4.81506G	44.98	74.00	-29.02	3.50	3	Vertical	140	1.27	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

13/03/2019

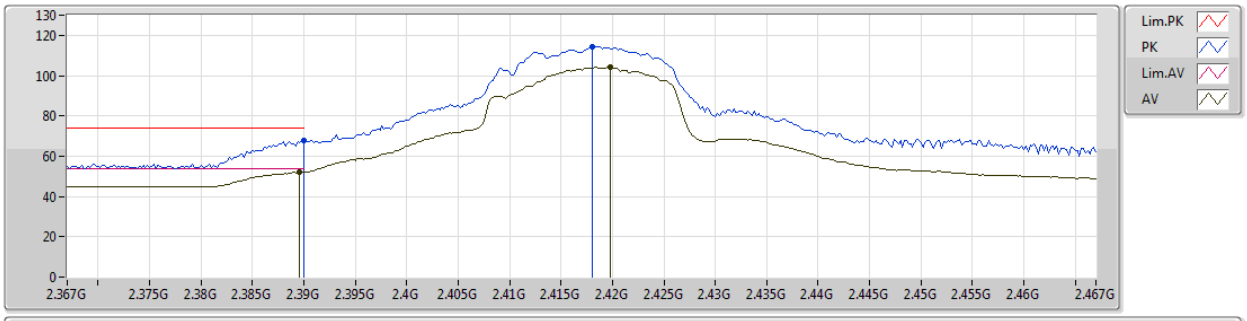


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.83876G	31.75	54.00	-22.25	3.56	3	Horizontal	196	2.16	-
PK	4.81956G	45.18	74.00	-28.82	3.52	3	Horizontal	196	2.16	-

802.11n HT20_Nss1,(MCS0)_2TX

2417MHz_TX

13/03/2019

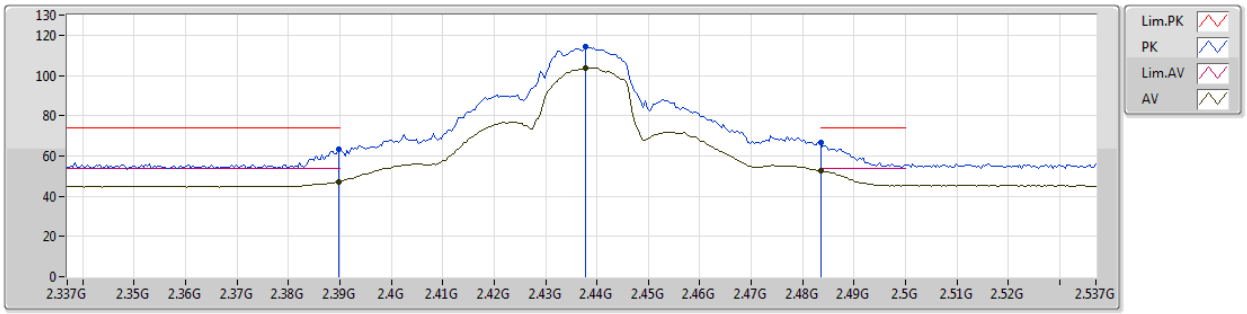


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3896G	52.13	54.00	-1.87	32.06	3	Vertical	202	1.00	-
AV	2.4198G	104.01	Inf	-Inf	32.17	3	Vertical	202	1.00	-
PK	2.39G	67.85	74.00	-6.15	32.06	3	Vertical	202	1.00	-
PK	2.418G	114.20	Inf	-Inf	32.16	3	Vertical	202	1.00	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

13/03/2019

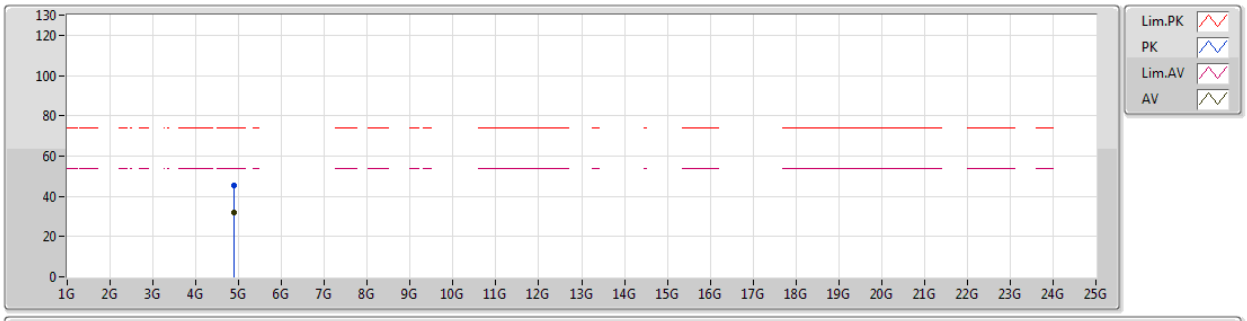


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3898G	47.24	54.00	-6.76	32.06	3	Vertical	4	1.50	-
AV	2.4378G	103.83	Inf	-Inf	32.23	3	Vertical	4	1.50	-
AV	2.4835G	52.44	54.00	-1.56	32.38	3	Vertical	4	1.50	-
PK	2.3898G	63.40	74.00	-10.60	32.06	3	Vertical	4	1.50	-
PK	2.4378G	114.47	Inf	-Inf	32.23	3	Vertical	4	1.50	-
PK	2.4835G	66.64	74.00	-7.36	32.38	3	Vertical	4	1.50	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

13/03/2019

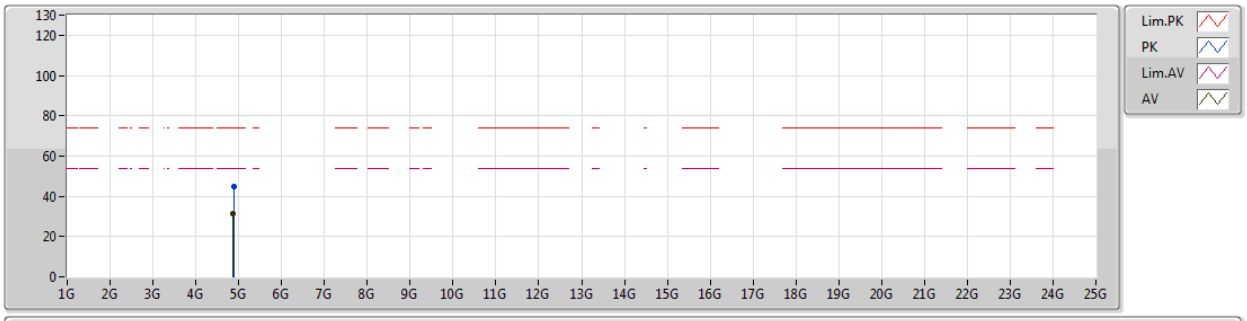


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.88024G	31.78	54.00	-22.22	3.65	3	Vertical	30	1.65	-
PK	4.88456G	45.61	74.00	-28.39	3.67	3	Vertical	30	1.65	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

13/03/2019

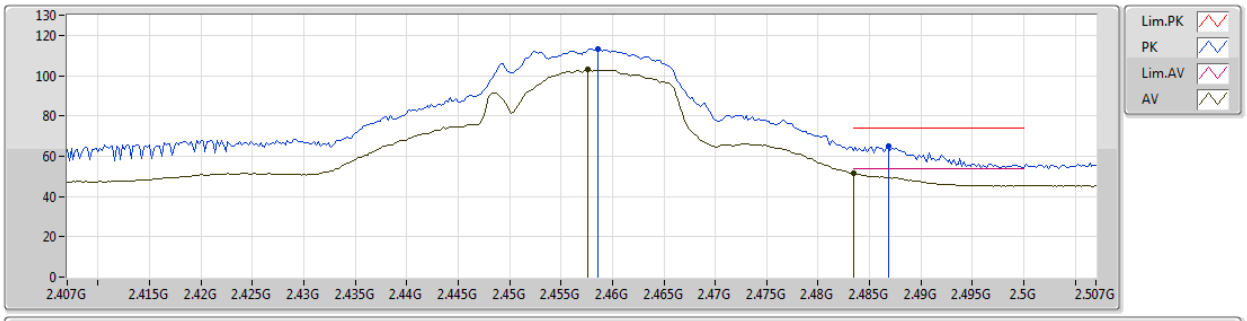


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.8611G	31.65	54.00	-22.35	3.61	3	Horizontal	12	1.62	-
PK	4.87976G	45.03	74.00	-28.97	3.65	3	Horizontal	12	1.62	-

802.11n HT20_Nss1,(MCS0)_2TX

2457MHz_TX

13/03/2019

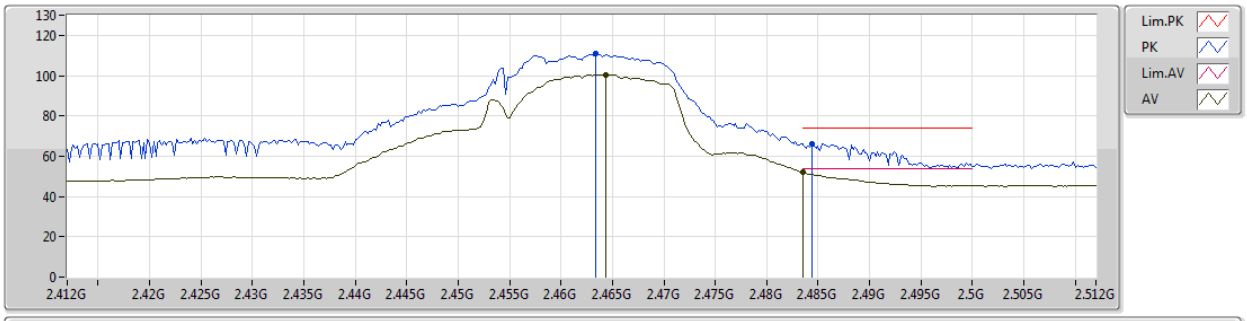


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.4576G	102.89	Inf	-Inf	32.29	3	Vertical	196	1.50	-
AV	2.4835G	51.33	54.00	-2.67	32.38	3	Vertical	196	1.50	-
PK	2.4586G	113.18	Inf	-Inf	32.30	3	Vertical	196	1.50	-
PK	2.4868G	65.05	74.00	-8.95	32.39	3	Vertical	196	1.50	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

13/03/2019

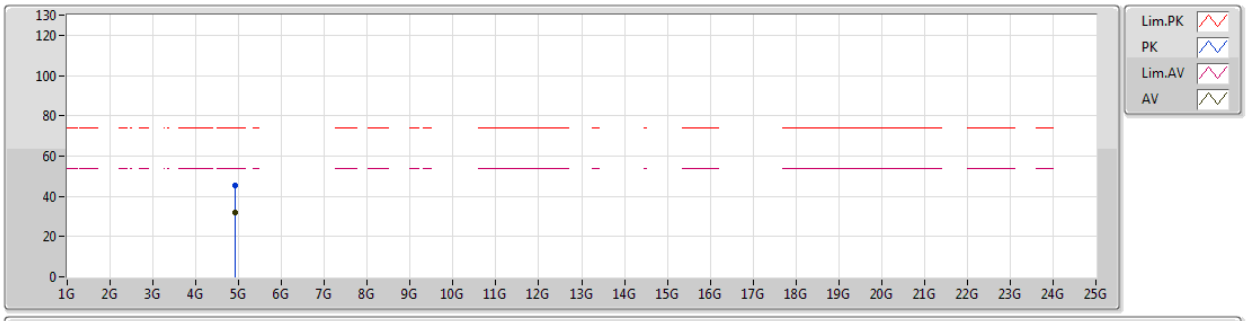


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.4644G	100.46	Inf	-Inf	32.32	3	Vertical	197	1.50	-
AV	2.4835G	51.92	54.00	-2.08	32.38	3	Vertical	197	1.50	-
PK	2.4634G	110.71	Inf	-Inf	32.32	3	Vertical	197	1.50	-
PK	2.4844G	66.25	74.00	-7.75	32.39	3	Vertical	197	1.50	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

13/03/2019

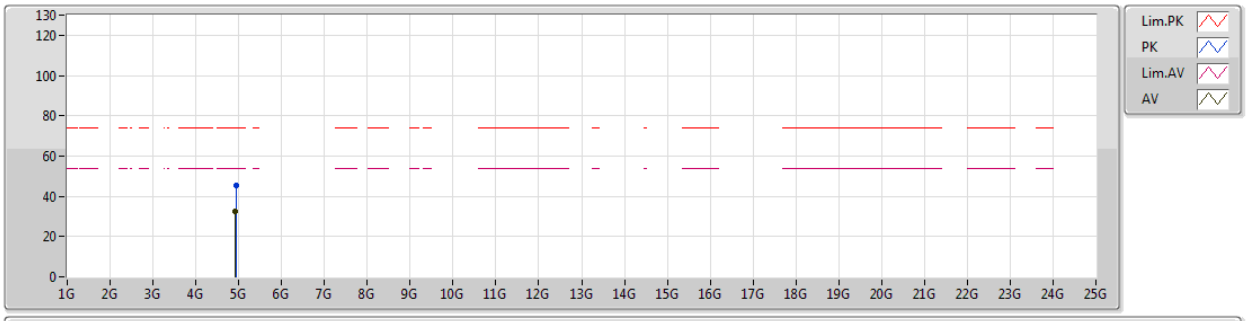


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.91836G	32.19	54.00	-21.81	3.75	3	Vertical	221	1.03	-
PK	4.91932G	45.21	74.00	-28.79	3.75	3	Vertical	221	1.03	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

13/03/2019

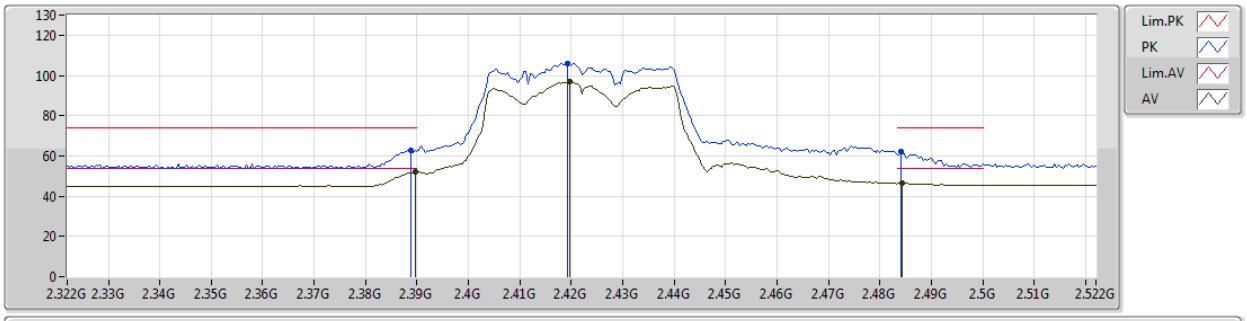


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.9195G	32.41	54.00	-21.59	3.75	3	Horizontal	259	1.15	-
PK	4.93342G	45.42	74.00	-28.58	3.77	3	Horizontal	259	1.15	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

14/03/2019

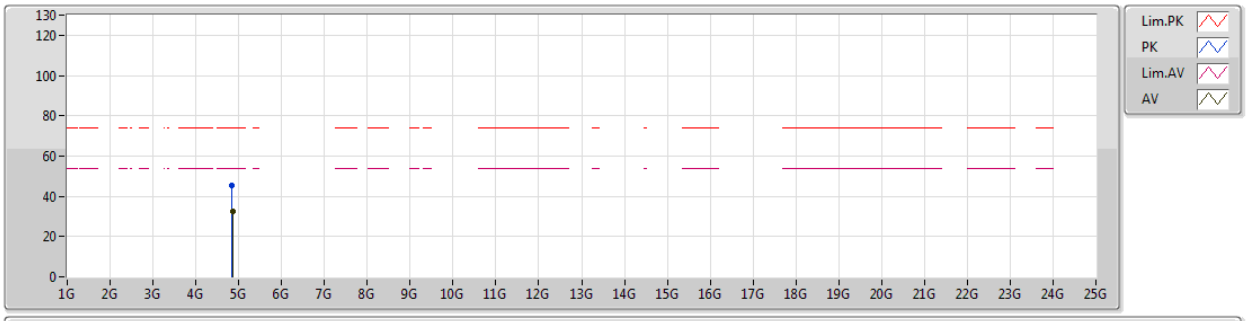


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3896G	52.08	54.00	-1.92	32.01	3	Vertical	103	1.50	-
AV	2.4196G	96.75	Inf	-Inf	32.10	3	Vertical	103	1.50	-
AV	2.4844G	46.37	54.00	-7.63	32.29	3	Vertical	103	1.50	-
PK	2.3888G	62.79	74.00	-11.21	32.00	3	Vertical	103	1.50	-
PK	2.4192G	106.02	Inf	-Inf	32.10	3	Vertical	103	1.50	-
PK	2.484G	62.20	74.00	-11.80	32.29	3	Vertical	103	1.50	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

14/03/2019

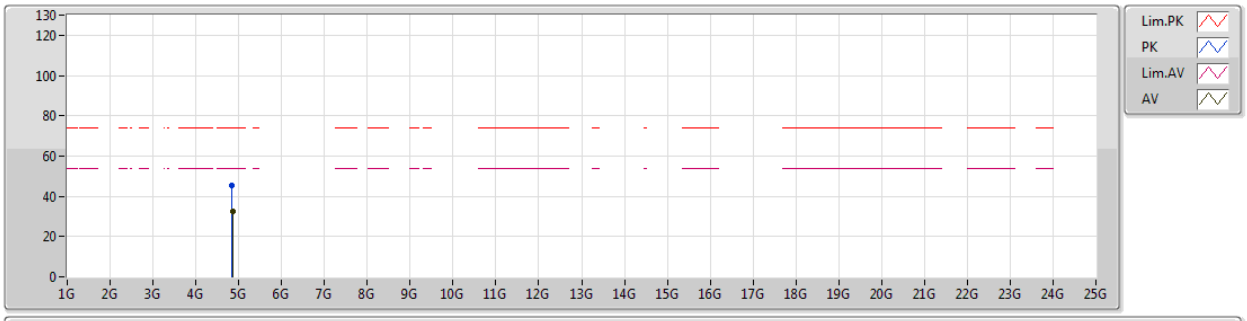


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.85834G	32.28	54.00	-21.72	3.58	3	Vertical	354	1.73	-
PK	4.8362G	45.17	74.00	-28.83	3.52	3	Vertical	354	1.73	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

14/03/2019

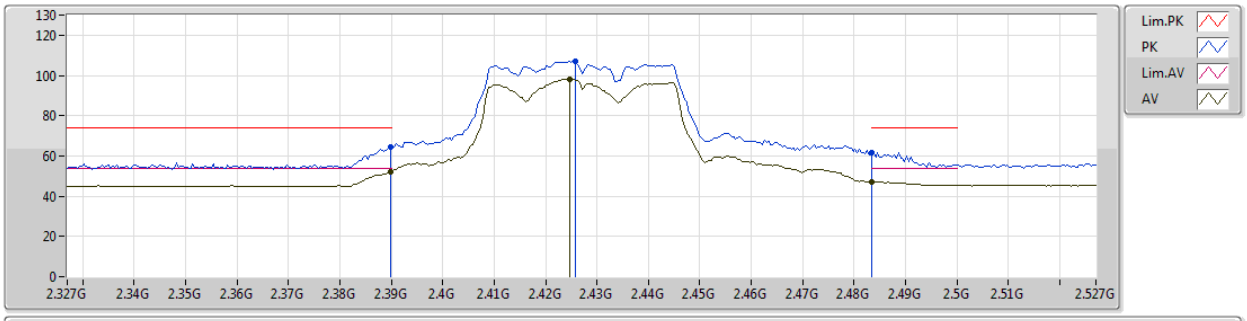


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.85402G	32.29	54.00	-21.71	3.57	3	Horizontal	29	2.10	-
PK	4.85042G	45.20	74.00	-28.80	3.56	3	Horizontal	29	2.10	-

802.11n HT40_Nss1,(MCS0)_2TX

2427MHz_TX

14/03/2019

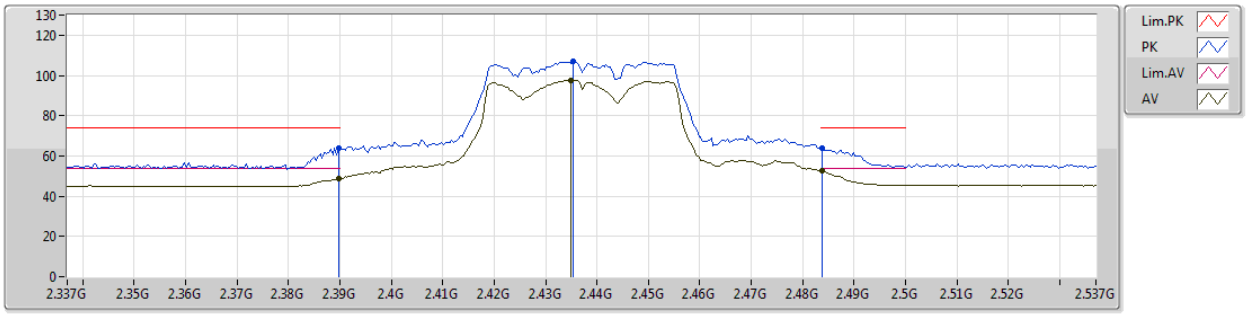


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3898G	52.26	54.00	-1.74	32.01	3	Vertical	102	1.50	-
AV	2.4246G	97.97	Inf	-Inf	32.11	3	Vertical	102	1.50	-
AV	2.4835G	47.10	54.00	-6.90	32.29	3	Vertical	102	1.50	-
PK	2.3898G	64.17	74.00	-9.83	32.01	3	Vertical	102	1.50	-
PK	2.4258G	106.89	Inf	-Inf	32.12	3	Vertical	102	1.50	-
PK	2.4835G	61.68	74.00	-12.32	32.29	3	Vertical	102	1.50	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

14/03/2019

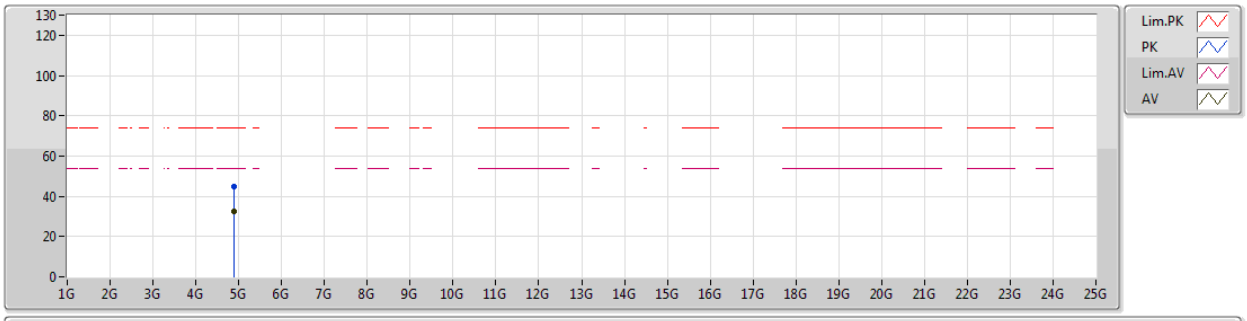


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3898G	48.62	54.00	-5.38	32.01	3	Vertical	104	1.50	-
AV	2.435G	97.76	Inf	-Inf	32.14	3	Vertical	104	1.50	-
AV	2.4838G	52.48	54.00	-1.52	32.29	3	Vertical	104	1.50	-
PK	2.3898G	64.10	74.00	-9.90	32.01	3	Vertical	104	1.50	-
PK	2.4354G	106.78	Inf	-Inf	32.14	3	Vertical	104	1.50	-
PK	2.4838G	64.12	74.00	-9.88	32.29	3	Vertical	104	1.50	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

14/03/2019

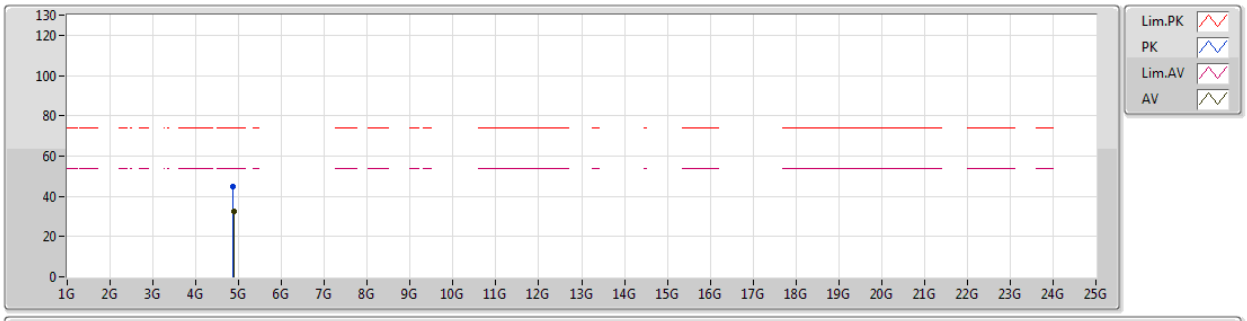


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.87754G	32.65	54.00	-21.35	3.62	3	Vertical	93	1.49	-
PK	4.88648G	44.89	74.00	-29.11	3.65	3	Vertical	93	1.49	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

14/03/2019

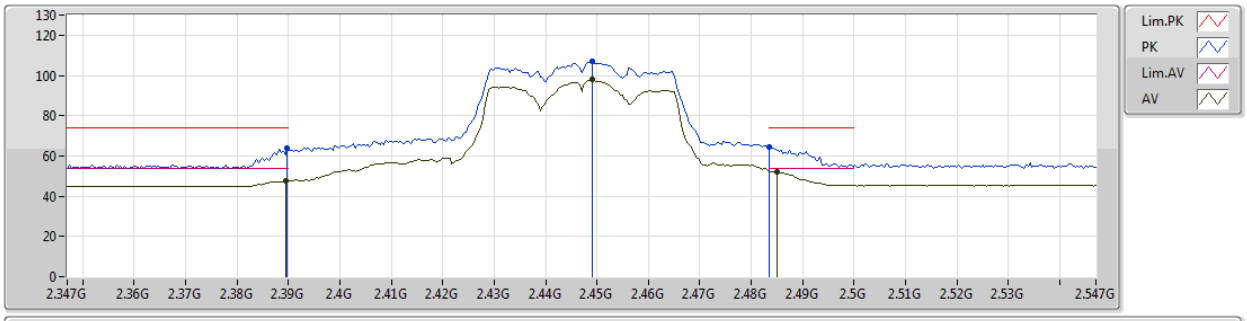


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.88222G	32.52	54.00	-21.48	3.63	3	Horizontal	331	1.65	-
PK	4.86356G	44.95	74.00	-29.05	3.59	3	Horizontal	331	1.65	-

802.11n HT40_Nss1,(MCS0)_2TX

2447MHz_TX

14/03/2019

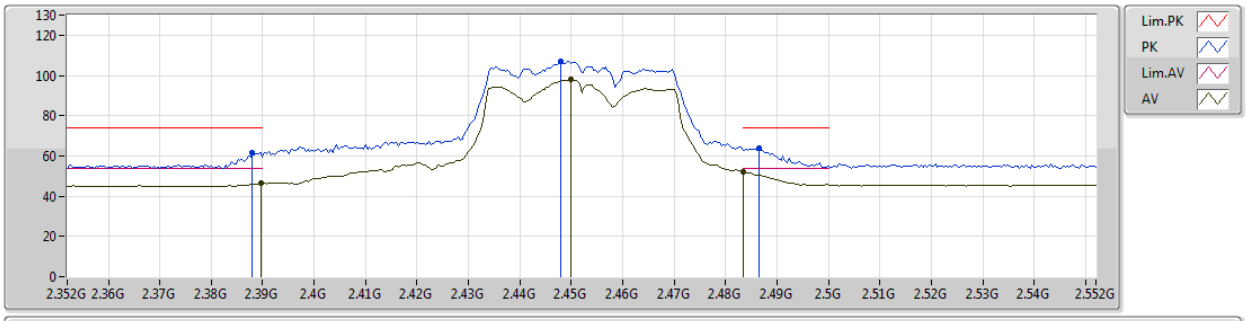


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3894G	47.58	54.00	-6.42	32.00	3	Vertical	159	1.50	-
AV	2.449G	97.91	Inf	-Inf	32.19	3	Vertical	159	1.50	-
AV	2.485G	52.30	54.00	-1.70	32.29	3	Vertical	159	1.50	-
PK	2.3898G	63.91	74.00	-10.09	32.01	3	Vertical	159	1.50	-
PK	2.449G	106.84	Inf	-Inf	32.19	3	Vertical	159	1.50	-
PK	2.4835G	64.21	74.00	-9.79	32.29	3	Vertical	159	1.50	-

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX

14/03/2019

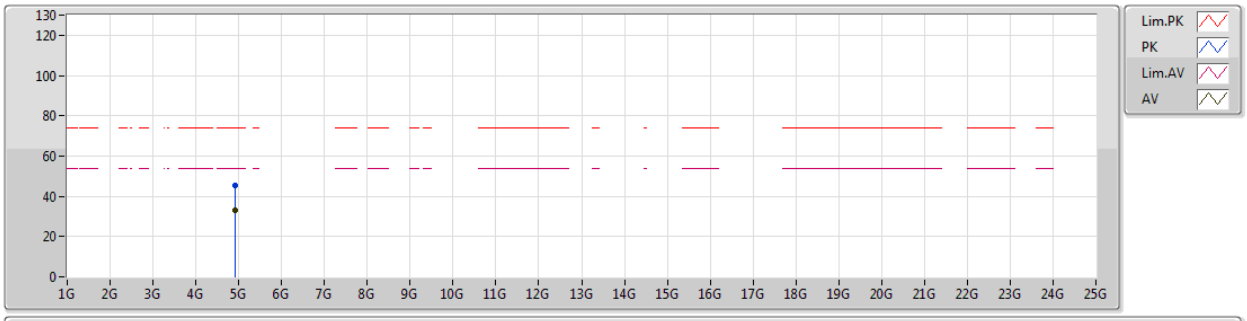


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3896G	46.47	54.00	-7.53	32.01	3	Vertical	104	1.50	-
AV	2.45G	97.85	Inf	-Inf	32.19	3	Vertical	104	1.50	-
AV	2.4835G	52.26	54.00	-1.74	32.29	3	Vertical	104	1.50	-
PK	2.388G	61.71	74.00	-12.29	32.00	3	Vertical	104	1.50	-
PK	2.448G	106.86	Inf	-Inf	32.19	3	Vertical	104	1.50	-
PK	2.4864G	64.02	74.00	-9.98	32.30	3	Vertical	104	1.50	-

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX

14/03/2019

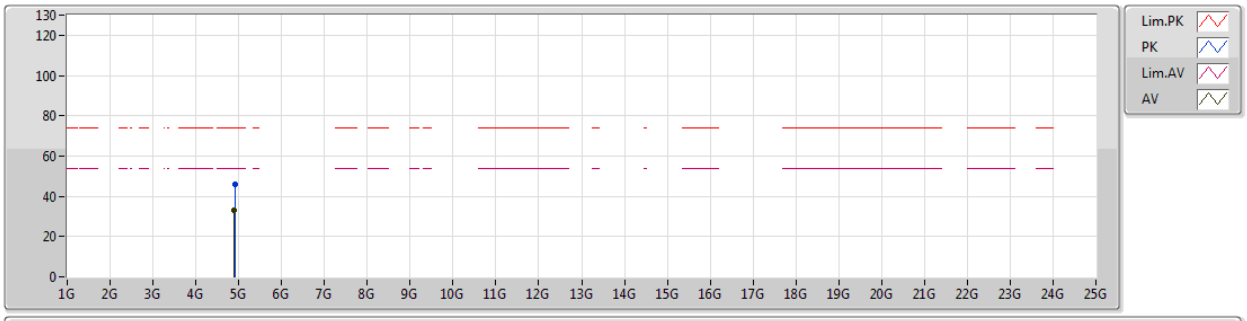


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.91894G	32.83	54.00	-21.17	3.73	3	Vertical	266	1.51	-
PK	4.91G	45.15	74.00	-28.85	3.70	3	Vertical	266	1.51	-

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX

14/03/2019



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.8983G	32.93	54.00	-21.07	3.68	3	Horizontal	157	1.28	-
PK	4.91756G	46.09	74.00	-27.91	3.73	3	Horizontal	157	1.28	-