



FCC RADIO TEST REPORT

FCC ID : PPQ-WN3501M
Equipment : 802.11n Dual Band Wireless Lan Module
Brand Name : LITE-ON
Model Name : WN3501M
Applicant : LITE-ON Technology Corp.
Bldg. C, 90, Chien 1 Road, Chung Ho, New Taipei
City 23585, Taiwan, R.O.C
Manufacturer : LITE-ON TECHNOLOGY (Changzhou) CO., LTD
A9 Building, No.88 Yanghu Road, Wujin Hi-Tech
Industrial Development Zone, Changzhou City,
Jiangsu Province 213100 China
Standard : 47 CFR FCC Part 15.247

The product was received on Dec. 21, 2018, and testing was started from Dec. 27, 2018 and completed on Jan. 09, 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 variant 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: Cliff Chang

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description	5
1.1 Information.....	5
1.2 Testing Applied Standards	7
1.3 Testing Location Information	7
1.4 Measurement Uncertainty	7
2 Test Configuration of EUT	8
2.1 Test Channel Mode	8
2.2 The Worst Case Measurement Configuration.....	9
2.3 EUT Operation during Test	9
2.4 Accessories	9
2.5 Support Equipment.....	9
2.6 Test Setup Diagram	10
3 Transmitter Test Result	11
3.1 DTS Bandwidth	11
3.2 Maximum Conducted Output Power	12
3.3 Power Spectral Density	15
3.4 Emissions in Non-restricted Frequency Bands	17
3.5 Emissions in Restricted Frequency Bands.....	18
4 Test Equipment and Calibration Data	21
Appendix A. Test Results of DTS Bandwidth	
Appendix B. Test Results of Maximum Conducted Output Power	
Appendix C. Test Results of Power Spectral Density	
Appendix D. Test Results of Emissions in Non-restricted Frequency Bands	
Appendix E. Test Results of Emissions in Restricted Frequency Bands	
Appendix F. Test Photos	
Photographs of EUT v01	



History of this test report

TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB Ver1.0

Page Number : 3 of 21
Issued Date : Feb. 01, 2019
Report Version : 01



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.247(a)	DTS Bandwidth	PASS	-
3.2	15.247(b)	Maximum Conducted Output Power	PASS	-
3.3	15.247(e)	Power Spectral Density	PASS	-
3.4	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	-
3.5	15.247(d)	Emissions in Restricted Frequency Bands	PASS	-

Declaration of Conformity:

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

Comments and Explanations:

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

Reviewed by: Cliff Chang

Report Producer: Wendy Pan

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	1TX
2.4-2.4835GHz	802.11g	20	1TX
2.4-2.4835GHz	802.11n HT20	20	1TX
2.4-2.4835GHz	802.11n HT40	40	1TX

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.
- ♦ Nss-Min is the minimum number of spatial streams.
- ♦ Nant is the number of outputs. e.g., 2(2,3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	
					2.4GHz	5GHz
1	LITE-ON	WN3501M	Printed Antenna	N/A	0.95	3.22
2	LITE-ON	WN3501M	Printed Antenna	N/A	0.60	3.10

Note1: The EUT has two antennas. (1TX/1RX)

The EUT supports the antenna with TX and RX diversity functions.

Both Ant. 1 and Ant. 2 support transmit and receive functions, but only one of them will be used at one time.

The Ant. 1 generated the worst case, so it was selected to test and record in the report.

Note2: The above information was declared by manufacturer.

**1.1.3 Mode Test Duty Cycle**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11b				
802.11g	1	0	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11n HT20	1	0	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11n HT40	1	0	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)

Note:

- ♦ DC is Duty Cycle.
- ♦ DCF is Duty Cycle Factor.

1.1.4 EUT Operational Condition

EUT Power Type	From host system			
Beamforming Function	☐	With beamforming	☒	Without beamforming
Function	☒	Point-to-multipoint	☐	Point-to-point
Test Software Version	DutApiBRIDGEETH8782.exe			

Note: The above information was declared by manufacturer.

1.1.5 Table for Class II Change

This product is an extension of original one reported under Sporton project number: FR6N0506AA

Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
1. Changing the power source to "1.8V" from "3.3V". 2. Changing the FFC connector.	1. DTS Bandwidth 2. Maximum Conducted Output Power 3. Power Spectral Density 4. Emissions in Non-restricted Frequency Bands 5. Emissions in Restricted Frequency Bands Above 1GHz



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
- ♦ FCC KDB 558074 D01 v05

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
☒	JHUBEI	ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.	TEL : 886-3-656-9065	FAX : 886-3-656-9085

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-CB	Eason Chen	26°C / 53%	Dec. 31, 2018 ~ Jan. 07, 2019
Radiated	03CH01-CB	KJ Chang	26°C / 53%	Dec. 27, 2018 ~ Jan. 09, 2019

Test site Designation No. TW0006 with FCC.

Test site registered number IC 4086D with Industry Canada.

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
Radiated Emission (1GHz ~ 18GHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.7 dB	Confidence levels of 95%
Output Power Measurement	1.33 dB	Confidence levels of 95%
Power Density Measurement	1.27 dB	Confidence levels of 95%
Bandwidth Measurement	9.74×10^{-8}	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	PowerSetting
802.11b_Nss1,(1Mbps)_1TX	-
2412MHz	16
2437MHz	15
2462MHz	15
802.11g_Nss1,(6Mbps)_1TX	-
2412MHz	15
2437MHz	20
2462MHz	14
802.11n HT20_Nss1,(MCS0)_1TX	-
2412MHz	14
2437MHz	20
2462MHz	13
802.11n HT40_Nss1,(MCS0)_1TX	-
2422MHz	10
2437MHz	14
2452MHz	11

2.2 The Worst Case Measurement Configuration

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
For Radiated Emission The EUT was performed at X axis, Y axis and Z axis and the worst case was found at X axis. So the measurement will follow this same test configuration. For Band Edge Emission The EUT was performed at X axis, Y axis and Z axis and the worst case was found at Z axis. So the measurement will follow this same test configuration.	

2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

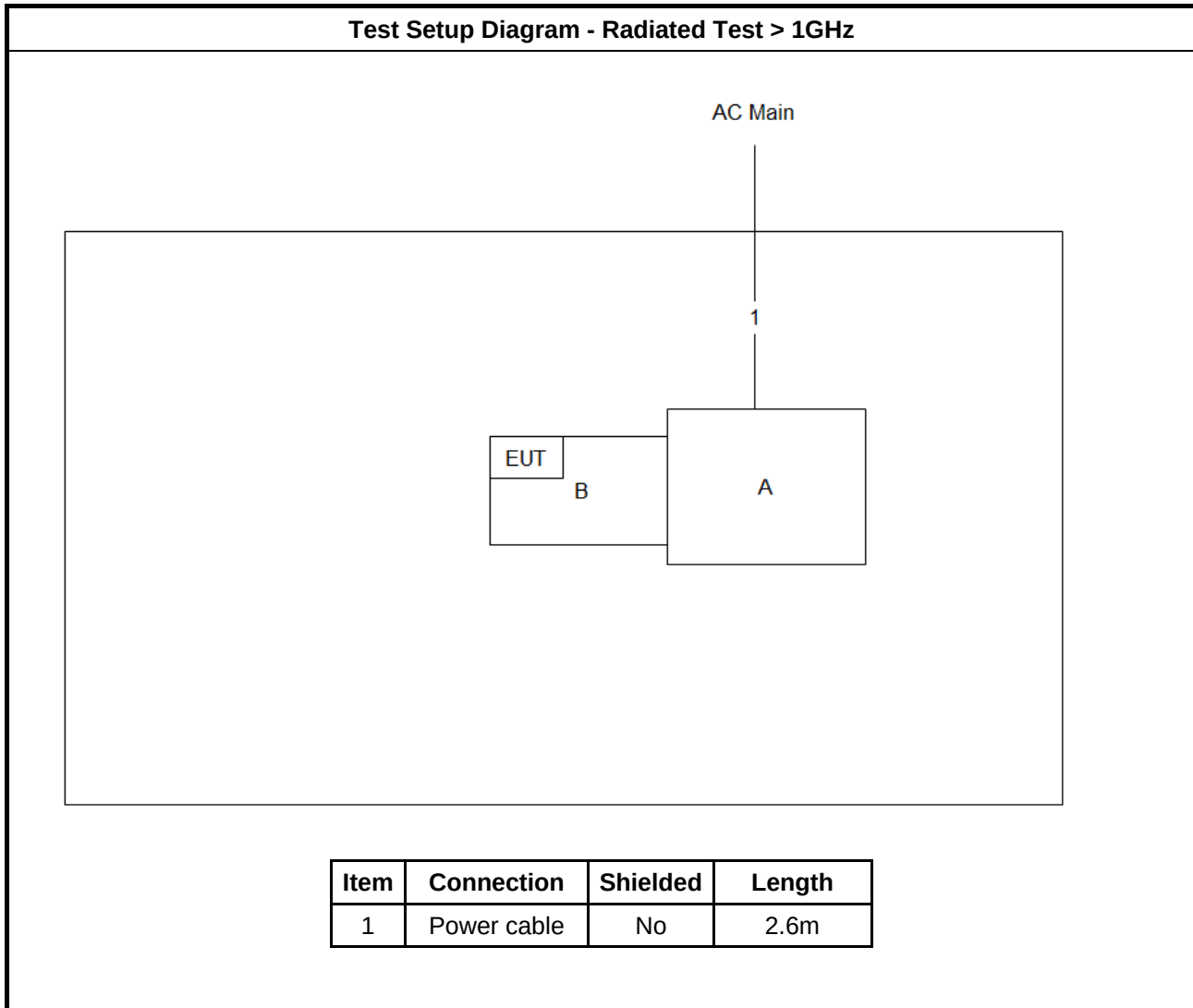
N/A

2.5 Support Equipment

For Test Site No: TH01-CB and 03CH01-CB

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	Lenovo	TP00001A	N/A
B	Test Fixture	Liteo	WN3501M_EVB	N/A

2.6 Test Setup Diagram



3 Transmitter Test Result

3.1 DTS Bandwidth

3.1.1 6dB Bandwidth Limit

6dB Bandwidth Limit
Systems using digital modulation techniques:
6 dB bandwidth $\geq$ 500 kHz.

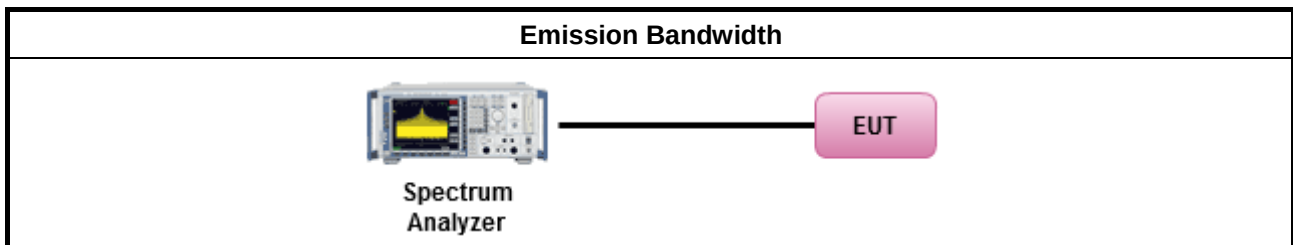
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

Test Method
For the emission bandwidth shall be measured using one of the options below:
☒ Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.1 Option 1 for 6 dB bandwidth measurement.
☐ Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.2 Option 2 for 6 dB bandwidth measurement.
☐ Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.

3.1.4 Test Setup



3.1.5 Test Result of Emission Bandwidth

Refer as Appendix A

3.2 Maximum Conducted Output Power

3.2.1 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
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

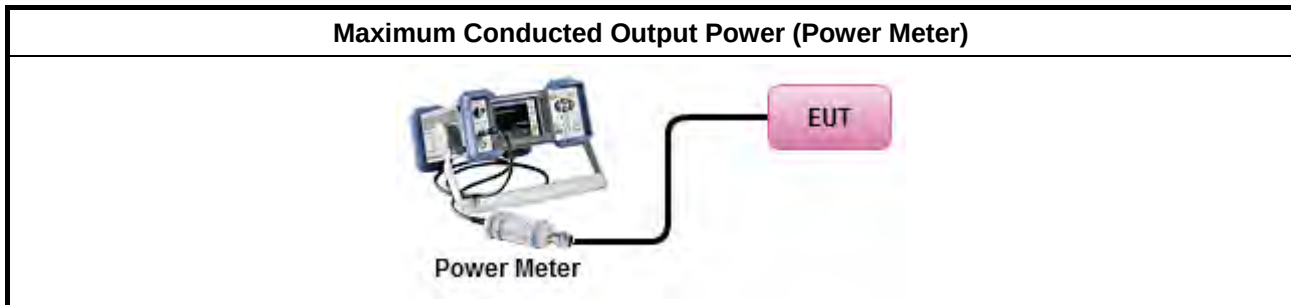
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
Maximum Peak Conducted Output Power	
☐	Refer as FCC KDB 558074, clause 8.3.1.1 & C63.10 clause 11.9.1.1 (RBW ≥ EBW method).
☐	Refer as FCC KDB 558074, clause 8.3.1.3 & C63.10 clause 11.9.1.3 (peak power meter).
Maximum Conducted Output Power	
[duty cycle ≥ 98% or external video / power trigger]	
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.2 Method AVGSA-1.
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.3 Method AVGSA-1A. (alternative)
duty cycle < 98% and average over on/off periods with duty factor	
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.4 Method AVGSA-2.
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.5 Method AVGSA-2A (alternative)
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.6 Method AVGSA-3
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.7 Method AVGSA-3A (alternative)
Measurement using a power meter (PM)	
☒	Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.1 Method AVGPM (using an RF average power meter).
☐	Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.2 Method AVGPM-G (using an gate RF average power meter).
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below: Refer as FCC 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: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$	

3.2.4 Test Setup



3.2.5 Test Result of Maximum Conducted Output Power

Refer as Appendix B



3.3 Power Spectral Density

3.3.1 Power Spectral Density Limit

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

3.3.2 Measuring Instruments

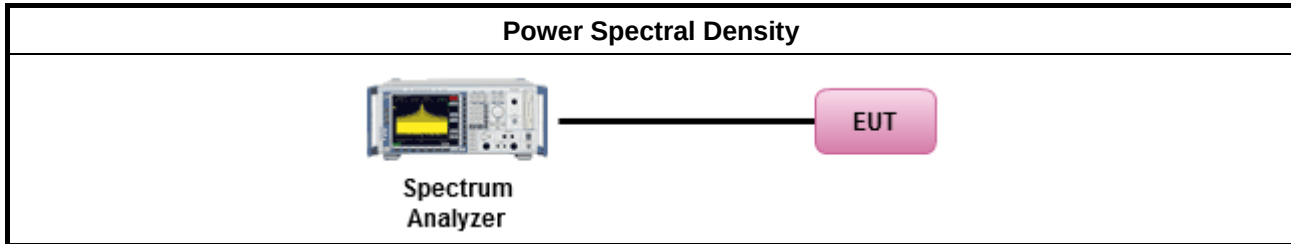
Refer a test equipment and calibration data table in this test report.

3.3.3 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 FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.2 Method PKPSD. [duty cycle $\geq 98\%$ or external video / power trigger]
☐	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.3 Method AVGPS-1.
☐	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.5 Method AVGPS-2.
☐	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.7 Method AVGPS-3.
duty cycle $< 98\%$ and average over on/off periods with duty factor	
☐	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.4 Method AVGPS-1A. (alternative).
☐	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.6 Method AVGPS-2A. (alternative)
☐	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.8 Method AVGPS-3A. (alternative)
▪ For conducted measurement.	
▪ If The EUT supports multiple transmit chains using options given below:	
☒	Option 1: Measure and sum the spectra across the outputs. Refer as FCC 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.
☐	Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,

- | | |
|--|--|
| | ☐ Option 3: Measure and add $10 \log(N)$ dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with $10 \log(N)$. Or each transmit chains shall be add $10 \log(N)$ to compared with the limit. |
|--|--|

3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Refer as Appendix C

3.4 Emissions in Non-restricted Frequency Bands

3.4.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	Limit (dBc)
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.	

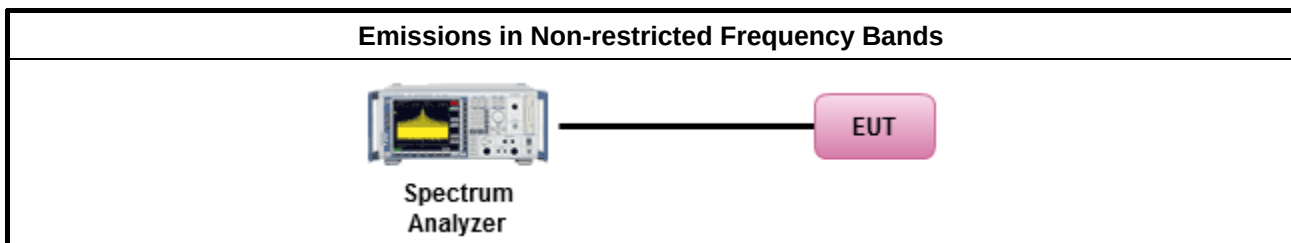
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method
Refer as FCC KDB 558074, clause 8.5 for unwanted emissions into non-restricted bands.

3.4.4 Test Setup



3.4.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix D

3.5 Emissions in Restricted Frequency Bands

3.5.1 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.

3.5.2 Measuring Instruments

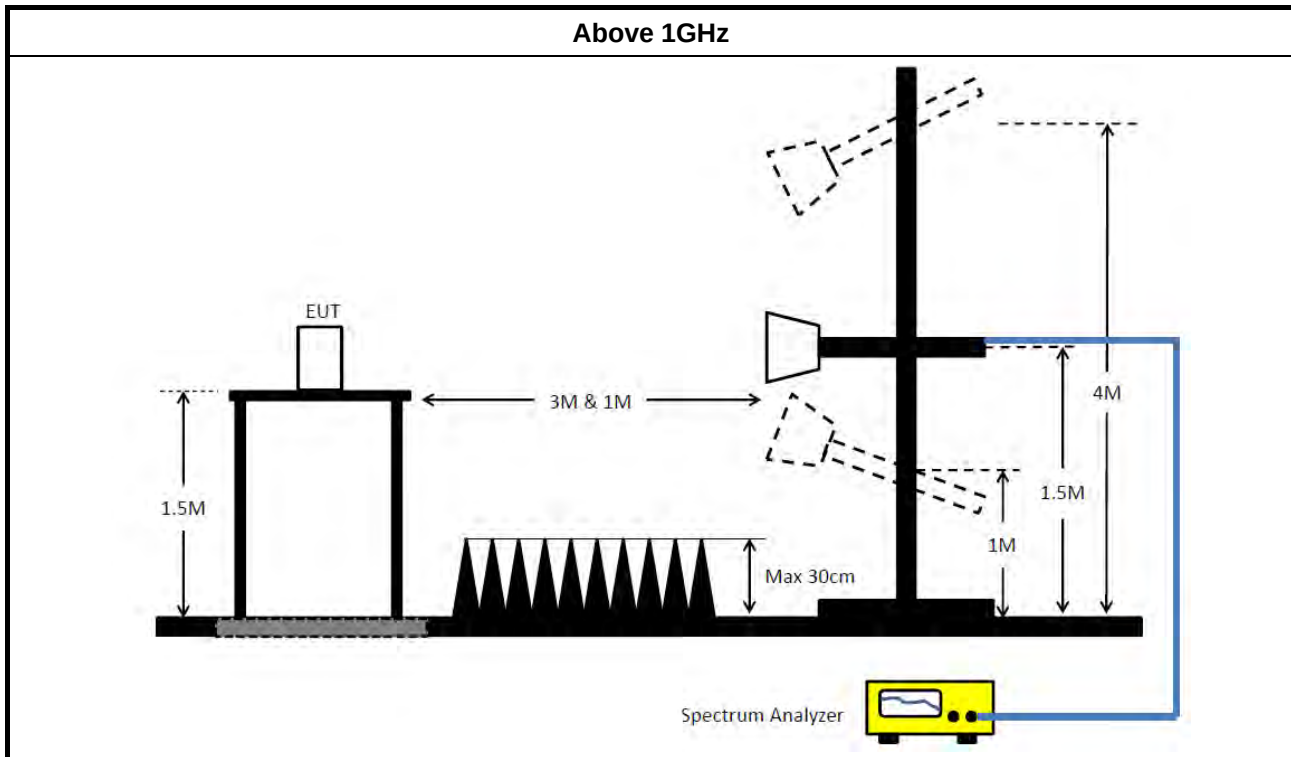
Refer a test equipment and calibration data table in this test report.



3.5.3 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 FCC KDB 558074, clause 8.6 for unwanted emissions into restricted bands.
	☐ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.1(trace averaging for duty cycle $\geq 98\%$).
	☐ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.2(trace averaging + duty factor).
	☒ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.3(Reduced VBW $\geq 1/T$).
	☐ Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq 1/T$, where T is pulse time.
	☐ Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	☒ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.4 measurement procedure peak limit.
▪ For the transmitter band-edge emissions shall be measured using following options below:	
	▪ Refer as FCC KDB 558074 clause 8.7 & C63.10 clause 11.13.1, 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 FCC KDB 558074, clause 8.7 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.
	▪ Refer as FCC KDB 558074, clause 8.7 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
	▪ For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB
	▪ For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.

3.5.4 Test Setup



3.5.5 Emissions in Restricted Frequency Bands (Below 30MHz)

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

The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10 harmonic or 40 GHz, whichever is appropriate.

3.5.6 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix E



4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 13, 2018	Nov. 12, 2019	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jun. 28, 2018	Jun. 27, 2019	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 09, 2018	Jan. 08, 2019	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 08, 2019	Jan. 07, 2020	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 04, 2018	Jul. 03, 2019	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Oct. 03, 2018	Oct. 02, 2019	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16+17	N/A	1 GHz ~ 18 GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#1	N/A	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Jun. 22, 2018	Jun. 21, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz ~ 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz ~ 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz ~ 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz ~ 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz ~ 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-28	1 GHz ~ 26.5 GHz	Nov. 19, 2018	Nov. 18, 2019	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 05, 2018	Nov. 04, 2019	Conducted (TH01-CB)

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

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	10.025M	13.768M	13M8G1D	10.025M	13.568M
802.11g_Nss1,(6Mbps)_1TX	16.575M	16.967M	17M0D1D	16.525M	16.517M
802.11n HT20_Nss1,(MCS0)_1TX	17.825M	17.991M	18M0D1D	17.8M	17.716M
802.11n HT40_Nss1,(MCS0)_1TX	36.5M	36.332M	36M3D1D	36.45M	36.232M

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;

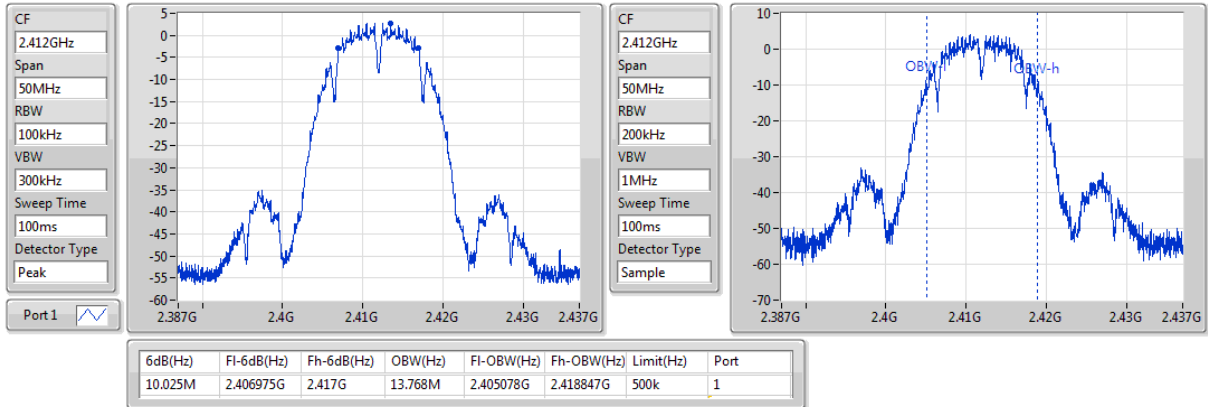
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	10.025M	13.768M
2437MHz	Pass	500k	10.025M	13.568M
2462MHz	Pass	500k	10.025M	13.693M
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	16.525M	16.542M
2437MHz	Pass	500k	16.525M	16.967M
2462MHz	Pass	500k	16.575M	16.517M
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	17.825M	17.766M
2437MHz	Pass	500k	17.8M	17.991M
2462MHz	Pass	500k	17.8M	17.716M
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-
2422MHz	Pass	500k	36.5M	36.232M
2437MHz	Pass	500k	36.45M	36.332M
2452MHz	Pass	500k	36.5M	36.332M

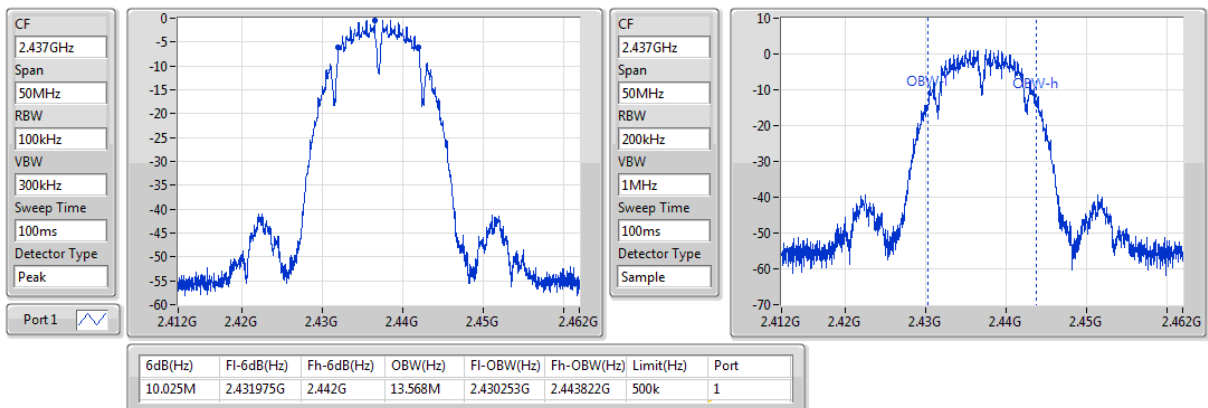
Port X-N dB = Port X 6dB down bandwidth; **Port X-OBW** = Port X 99% occupied bandwidth;

802.11b_Nss1,(1Mbps)_1TX
EBW
2412MHz

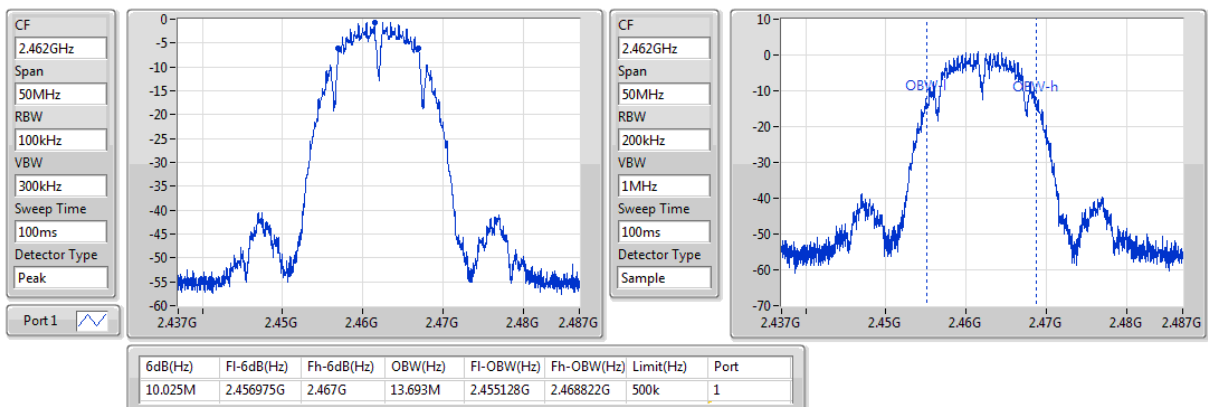
04/01/2019


802.11b_Nss1,(1Mbps)_1TX
EBW
2437MHz

04/01/2019

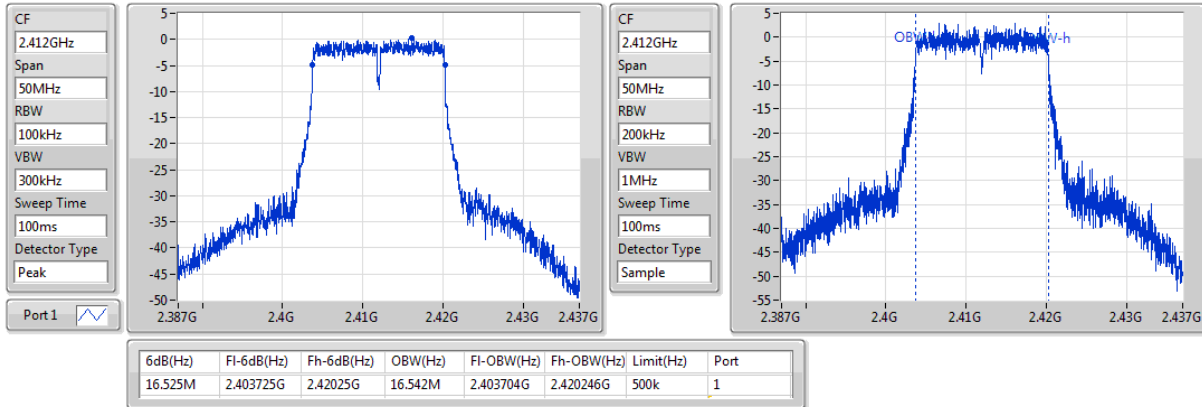

802.11b_Nss1,(1Mbps)_1TX
EBW
2462MHz

04/01/2019

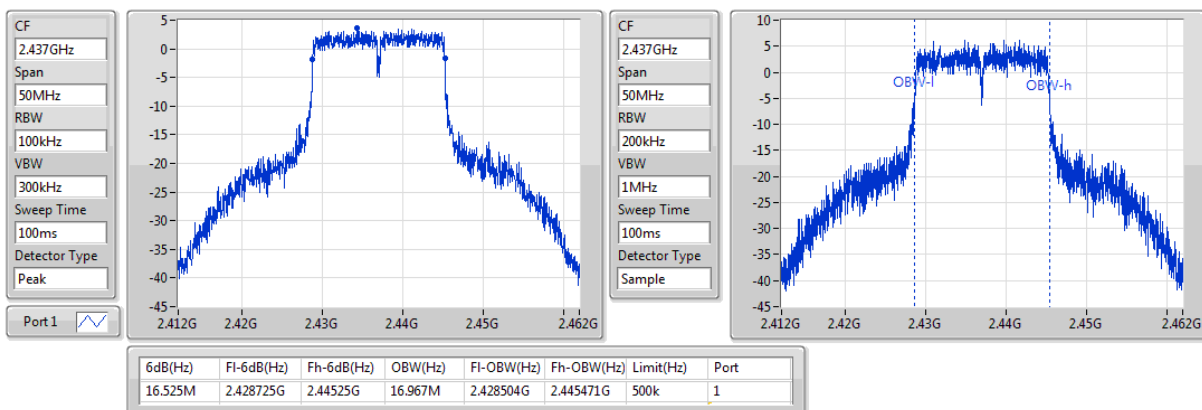


802.11g_Nss1,(6Mbps)_1TX
EBW
2412MHz

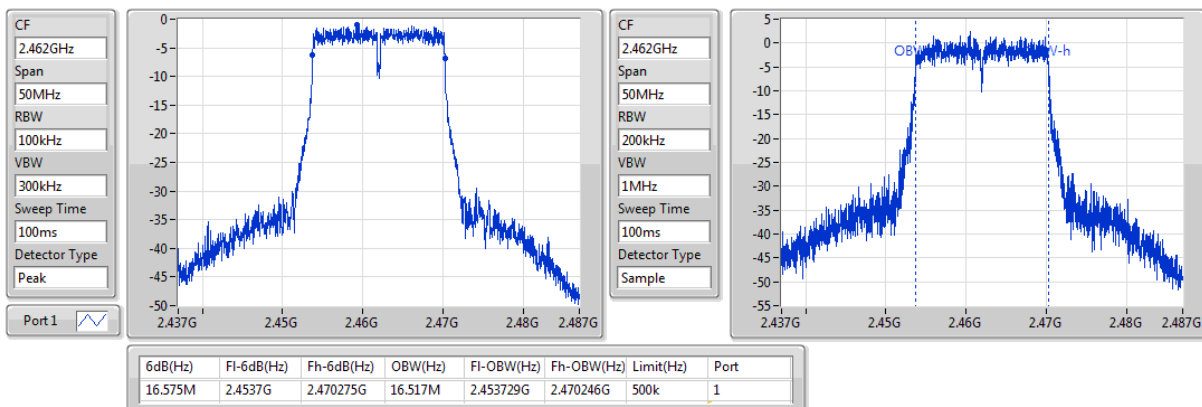
04/01/2019


802.11g_Nss1,(6Mbps)_1TX
EBW
2437MHz

04/01/2019

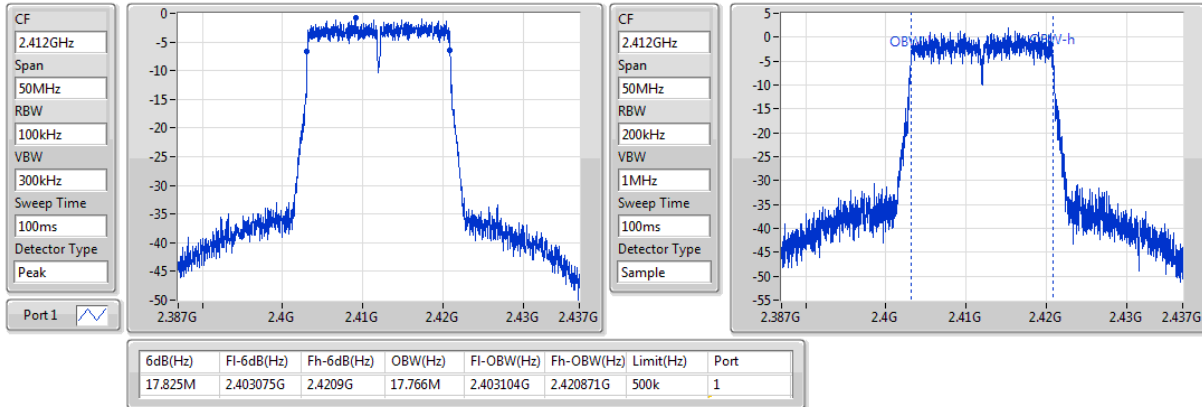

802.11g_Nss1,(6Mbps)_1TX
EBW
2462MHz

04/01/2019

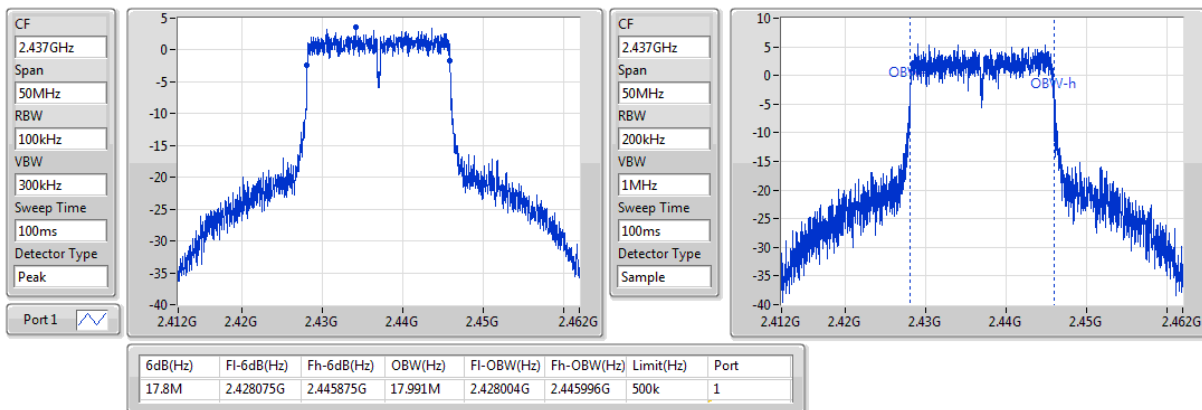


802.11n HT20_Nss1,(MCS0)_1TX
EBW
2412MHz

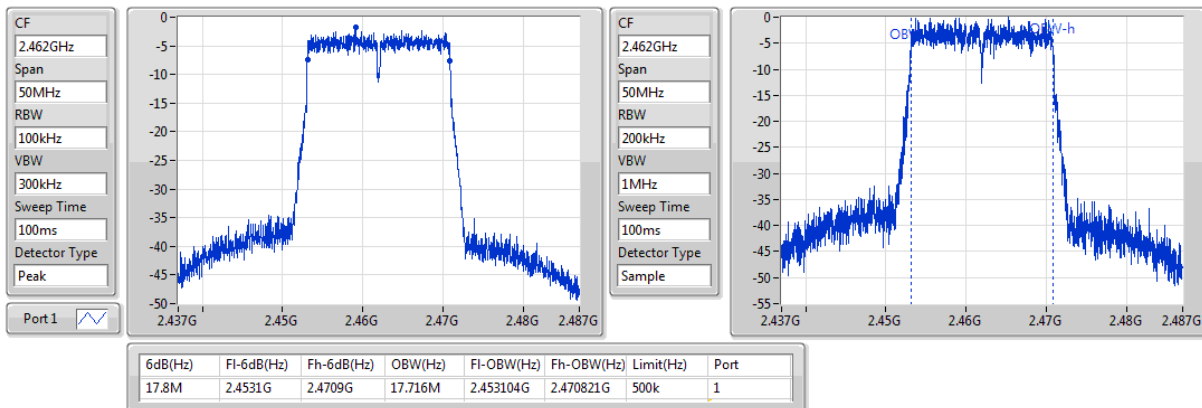
04/01/2019


802.11n HT20_Nss1,(MCS0)_1TX
EBW
2437MHz

04/01/2019

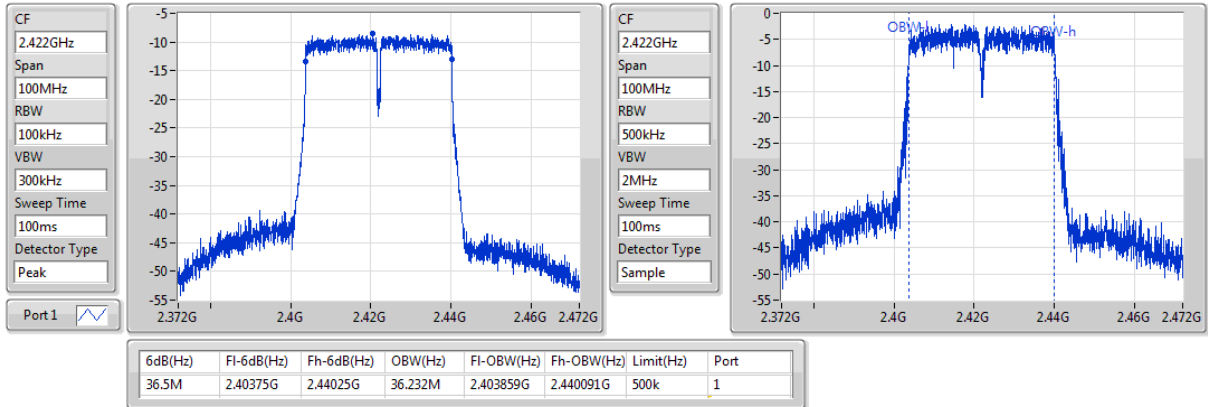

802.11n HT20_Nss1,(MCS0)_1TX
EBW
2462MHz

04/01/2019

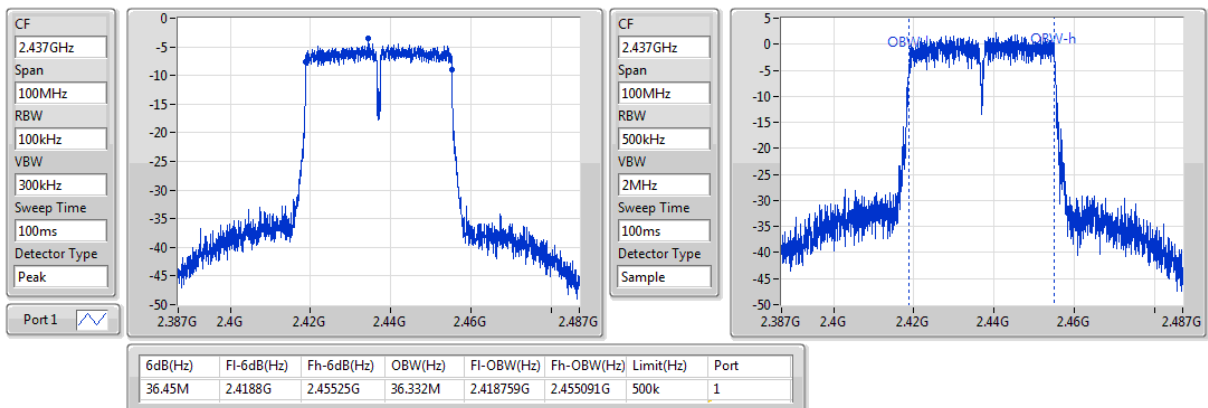


802.11n HT40_Nss1,(MCS0)_1TX
EBW
2422MHz

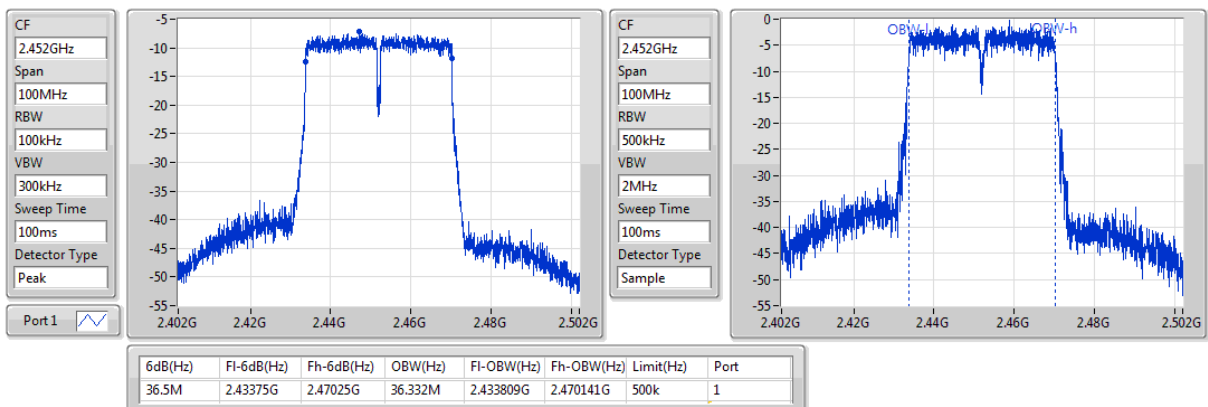
04/01/2019


802.11n HT40_Nss1,(MCS0)_1TX
EBW
2437MHz

04/01/2019


802.11n HT40_Nss1,(MCS0)_1TX
EBW
2452MHz

04/01/2019



**Summary**

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	13.50	0.02239
802.11g_Nss1,(6Mbps)_1TX	17.61	0.05768
802.11n HT20_Nss1,(MCS0)_1TX	17.61	0.05768
802.11n HT40_Nss1,(MCS0)_1TX	13.82	0.02410

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	0.95	13.50	13.50	30.00
2437MHz	Pass	0.95	11.10	11.10	30.00
2462MHz	Pass	0.95	10.65	10.65	30.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	0.95	14.71	14.71	30.00
2437MHz	Pass	0.95	17.61	17.61	30.00
2462MHz	Pass	0.95	13.68	13.68	30.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	0.95	13.75	13.75	30.00
2437MHz	Pass	0.95	17.61	17.61	30.00
2462MHz	Pass	0.95	13.09	13.09	30.00
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-
2422MHz	Pass	0.95	9.15	9.15	30.00
2437MHz	Pass	0.95	13.82	13.82	30.00
2452MHz	Pass	0.95	10.91	10.91	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)_1TX	-15.50
802.11g_Nss1,(6Mbps)_1TX	-10.09
802.11n HT20_Nss1,(MCS0)_1TX	-10.04
802.11n HT40_Nss1,(MCS0)_1TX	-15.34

RBW=3kHz.

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	0.95	-15.50	-15.50	8.00
2437MHz	Pass	0.95	-18.69	-18.69	8.00
2462MHz	Pass	0.95	-18.84	-18.84	8.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	0.95	-13.95	-13.95	8.00
2437MHz	Pass	0.95	-10.09	-10.09	8.00
2462MHz	Pass	0.95	-15.38	-15.38	8.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	0.95	-14.63	-14.63	8.00
2437MHz	Pass	0.95	-10.04	-10.04	8.00
2462MHz	Pass	0.95	-14.19	-14.19	8.00
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-
2422MHz	Pass	0.95	-19.97	-19.97	8.00
2437MHz	Pass	0.95	-15.34	-15.34	8.00
2452MHz	Pass	0.95	-19.67	-19.67	8.00

DG = Directional Gain; RBW=3kHz;

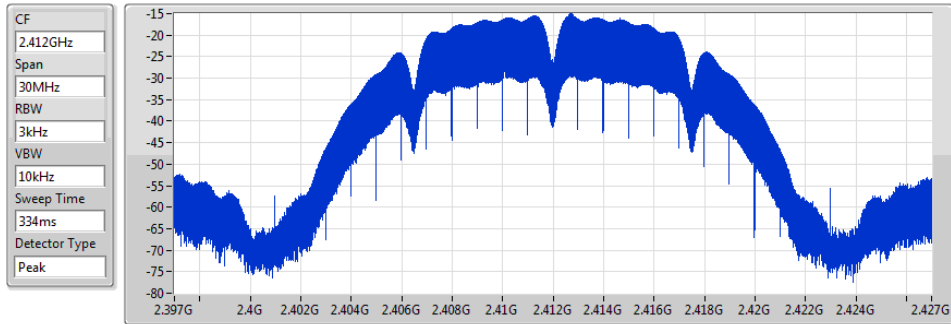
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port Xpower density;

802.11b_Nss1,(1Mbps)_1TX

PSD

2412MHz

04/01/2019



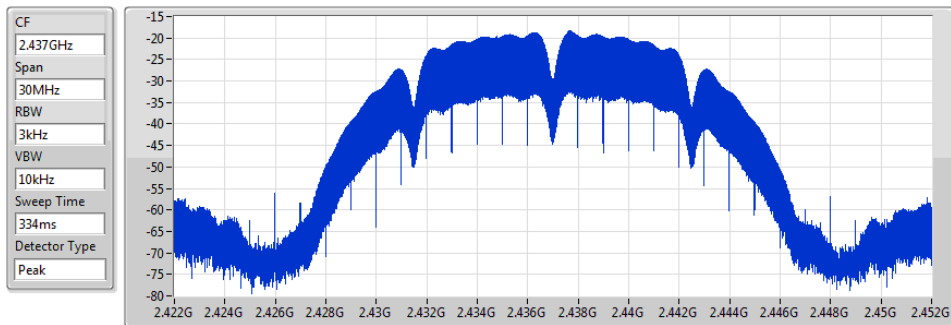
Sum	PD	Port 1
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-15.50	-15.50	-15.50

802.11b_Nss1,(1Mbps)_1TX

PSD

2437MHz

04/01/2019



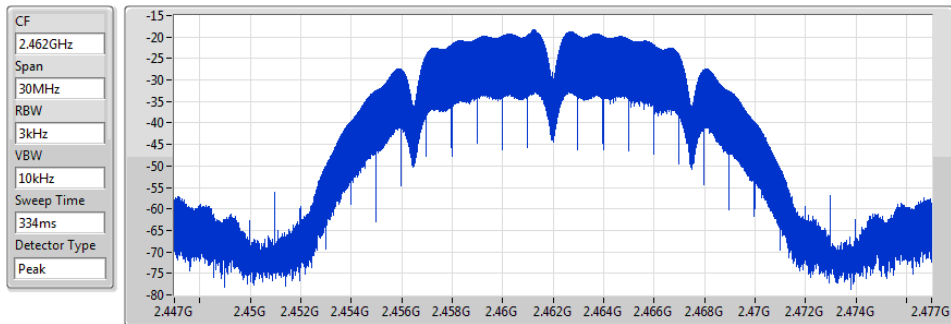
Sum	PD	Port 1
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-18.69	-18.69	-18.69

802.11b_Nss1,(1Mbps)_1TX

PSD

2462MHz

04/01/2019



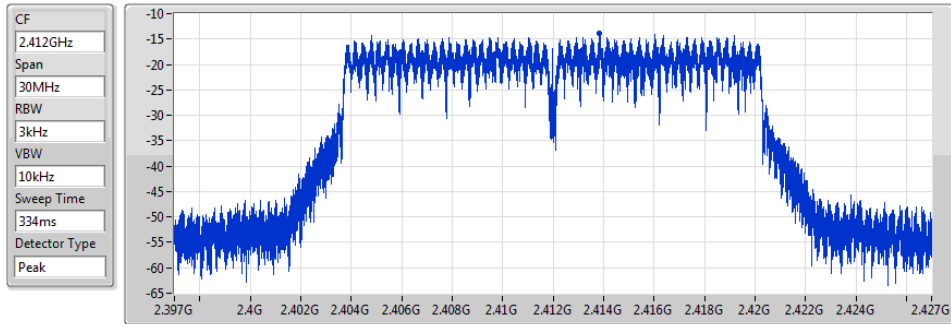
Sum	PD	Port 1
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-18.84	-18.84	-18.84

802.11g_Nss1,(6Mbps)_1TX

PSD

2412MHz

04/01/2019



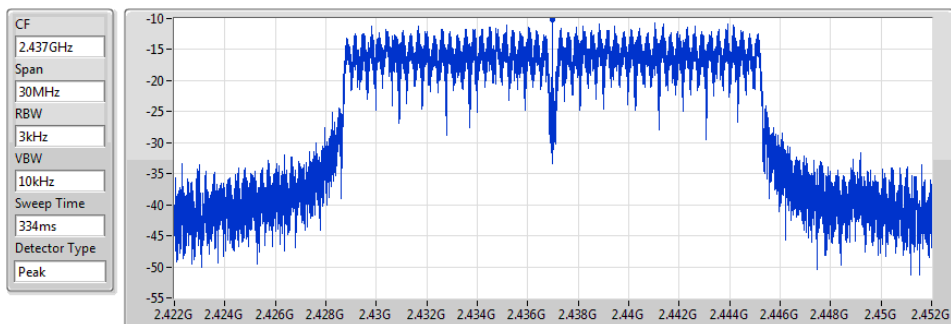
Sum	PD	Port 1
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-13.95	-13.95	-13.95

802.11g_Nss1,(6Mbps)_1TX

PSD

2437MHz

04/01/2019



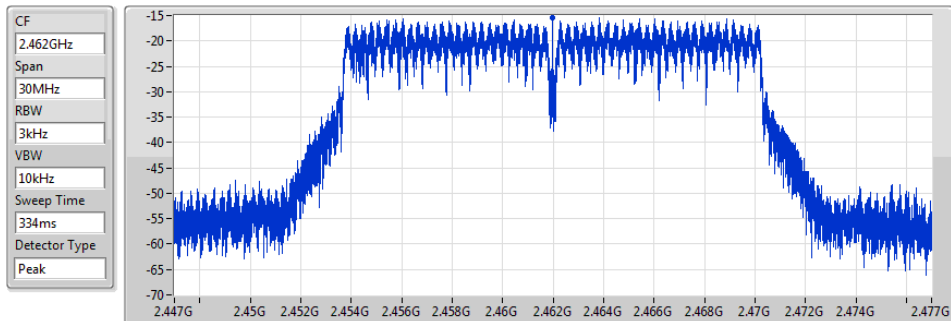
Sum	PD	Port 1
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-10.09	-10.09	-10.09

802.11g_Nss1,(6Mbps)_1TX

PSD

2462MHz

04/01/2019



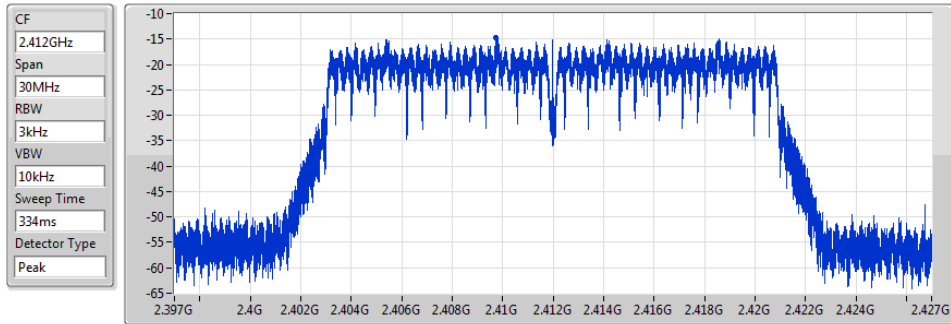
Sum	PD	Port 1
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-15.38	-15.38	-15.38

802.11n HT20_Nss1,(MCS0)_1TX

PSD

2412MHz

04/01/2019



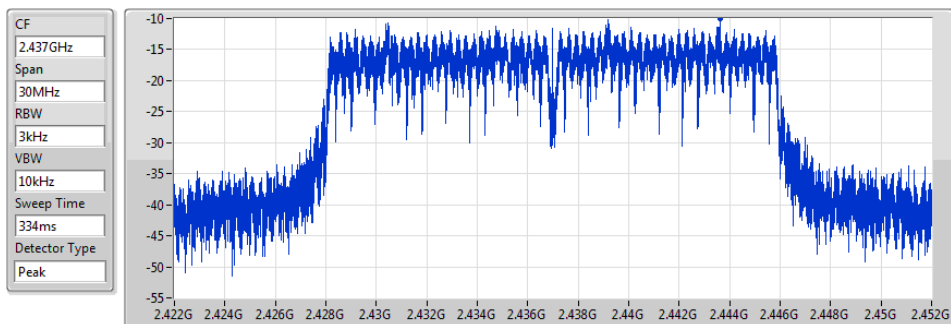
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-14.63	-14.63	-14.63

802.11n HT20_Nss1,(MCS0)_1TX

PSD

2437MHz

04/01/2019



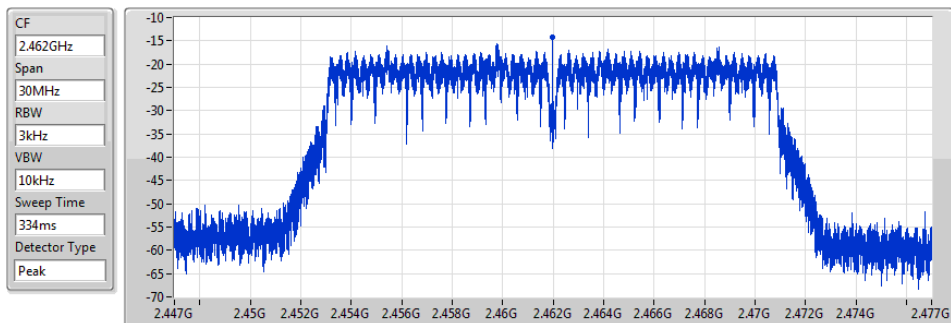
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.04	-10.04	-10.04

802.11n HT20_Nss1,(MCS0)_1TX

PSD

2462MHz

04/01/2019



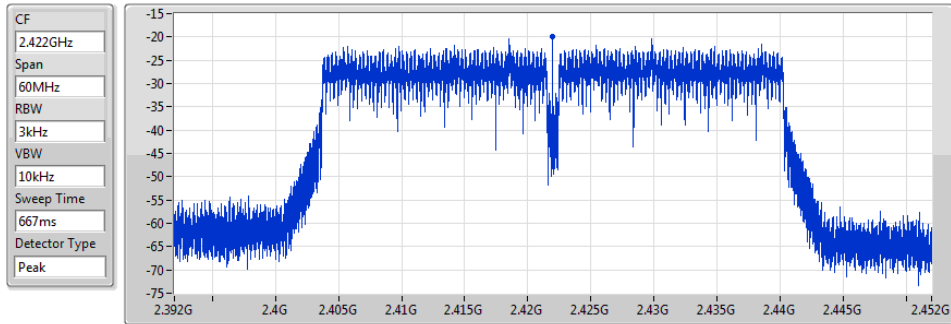
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-14.19	-14.19	-14.19

802.11n HT40_Nss1,(MCS0)_1TX

PSD

2422MHz

04/01/2019



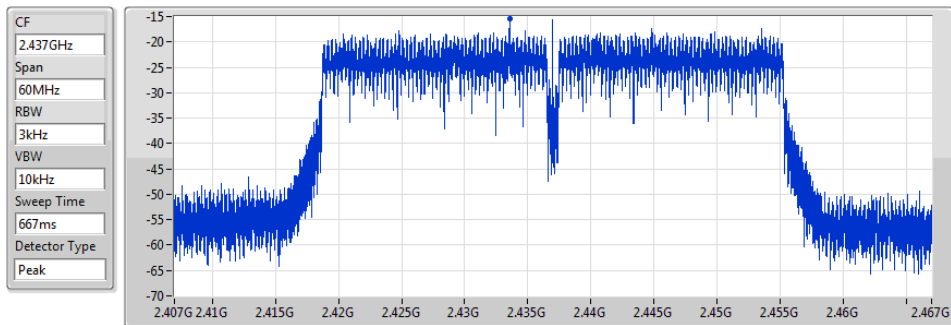
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-19.97	-19.97	-19.97

802.11n HT40_Nss1,(MCS0)_1TX

PSD

2437MHz

04/01/2019



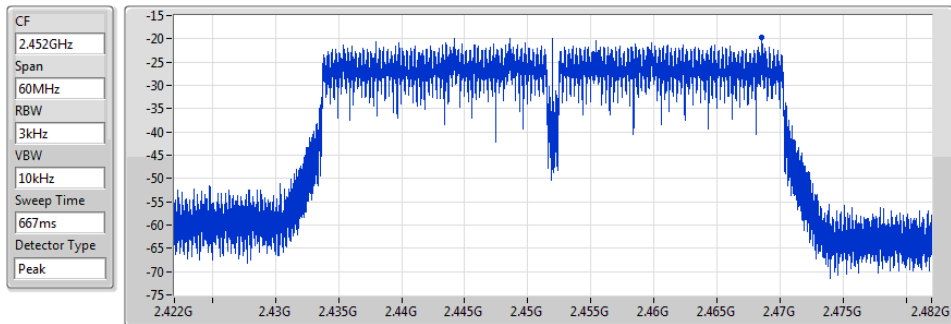
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-15.34	-15.34	-15.34

802.11n HT40_Nss1,(MCS0)_1TX

PSD

2452MHz

04/01/2019



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-19.67	-19.67	-19.67

**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)_1TX	Pass	2.41248G	2.63	-27.37	2.11448G	-43.17	2.3975G	-35.30	2.49378G	-42.12	16.7427G	-37.40	1
802.11g_Nss1,(6Mbps)_1TX	Pass	2.43261G	2.96	-27.04	2.09322G	-42.28	2.39966G	-30.00	2.51214G	-43.05	6.14222G	-36.75	1
802.11n HT20_Nss1,(MCS0)_1TX	Pass	2.44451G	2.92	-27.08	719.39M	-43.14	2.39798G	-32.32	2.48458G	-42.24	16.22574G	-37.47	1
802.11n HT40_Nss1,(MCS0)_1TX	Pass	2.44659G	-4.60	-34.60	1.9891G	-43.16	2.3988G	-36.42	2.48386G	-40.34	17.53145G	-36.71	1

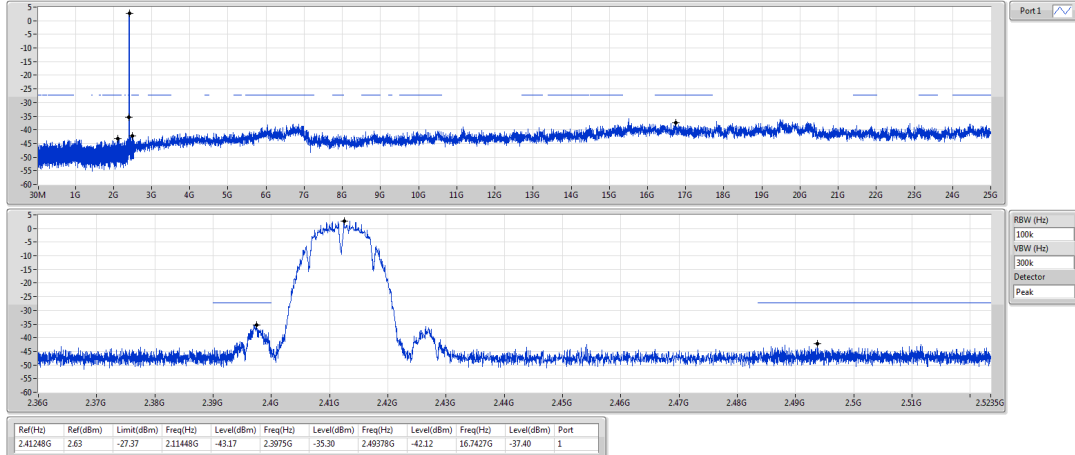
Result

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)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.41248G	2.63	-27.37	2.11448G	-43.17	2.3975G	-35.30	2.49378G	-42.12	16.7427G	-37.40	1
2437MHz	Pass	2.41248G	2.63	-27.37	302.61M	-43.11	2.3994G	-43.81	2.49468G	-42.67	15.16091G	-36.49	1
2462MHz	Pass	2.41248G	2.63	-27.37	1.95167G	-43.11	2.3994G	-42.63	2.48524G	-42.07	16.4196G	-36.59	1
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43261G	2.96	-27.04	2.09322G	-42.28	2.39966G	-30.00	2.51214G	-43.05	6.14222G	-36.75	1
2437MHz	Pass	2.43261G	2.96	-27.04	2.14127G	-43.13	2.39904G	-41.62	2.52264G	-40.88	16.44207G	-36.83	1
2462MHz	Pass	2.43261G	2.96	-27.04	2.10399G	-43.69	2.39126G	-42.43	2.48362G	-39.76	24.50271G	-36.56	1
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.44451G	2.92	-27.08	719.39M	-43.14	2.39798G	-32.32	2.48458G	-42.24	16.22574G	-37.47	1
2437MHz	Pass	2.44451G	2.92	-27.08	1.79468G	-43.78	2.39982G	-38.77	2.48554G	-42.05	16.79889G	-35.97	1
2462MHz	Pass	2.44451G	2.92	-27.08	2.18146G	-43.38	2.39074G	-43.70	2.48512G	-40.20	16.82136G	-36.70	1
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.44659G	-4.60	-34.60	944.57M	-43.07	2.39984G	-38.81	2.48846G	-42.57	15.2289G	-36.93	1
2437MHz	Pass	2.44659G	-4.60	-34.60	1.9891G	-43.16	2.3988G	-36.42	2.48386G	-40.34	17.53145G	-36.71	1
2452MHz	Pass	2.44659G	-4.60	-34.60	957.16M	-42.58	2.39536G	-44.39	2.48414G	-40.70	16.75739G	-36.73	1

802.11b_Nss1,(1Mbps)_1TX

CSE NdB

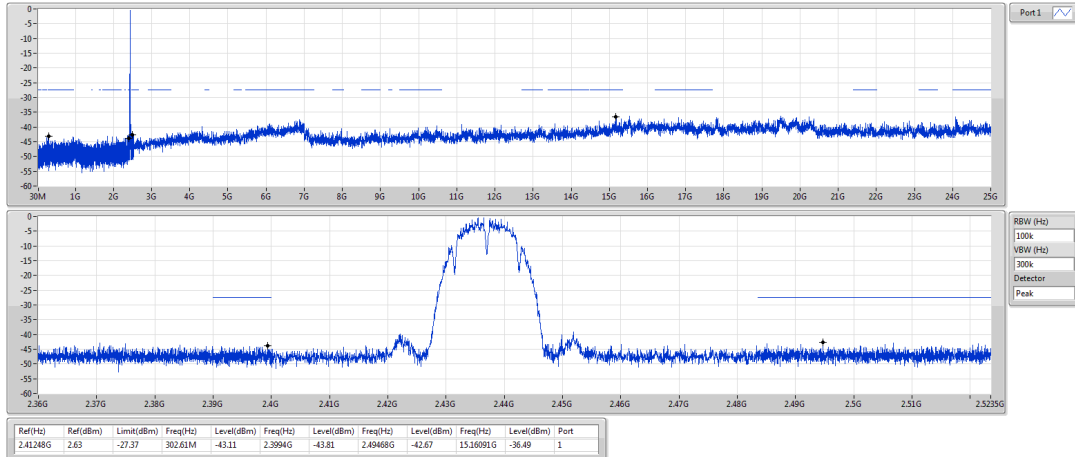
2412MHz



802.11b_Nss1,(1Mbps)_1TX

CSE NdB

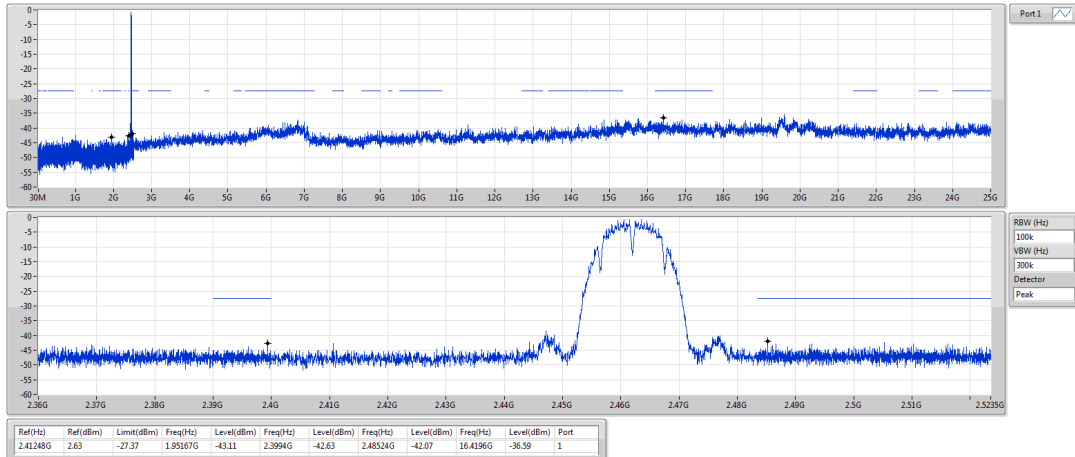
2437MHz



802.11b_Nss1,(1Mbps)_1TX

CSE NdB

2462MHz

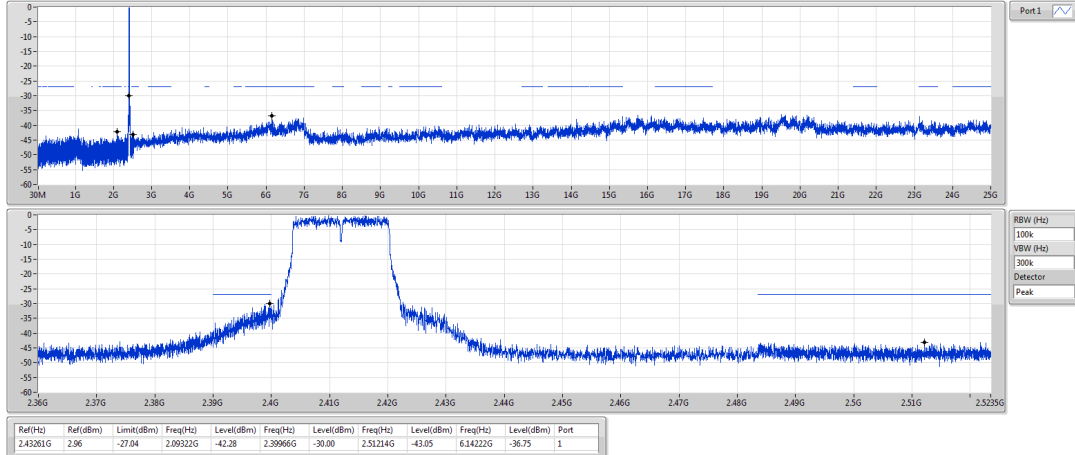


802.11g_Nss1,(6Mbps)_1TX

CSE NdB

2412MHz

04/01/2019

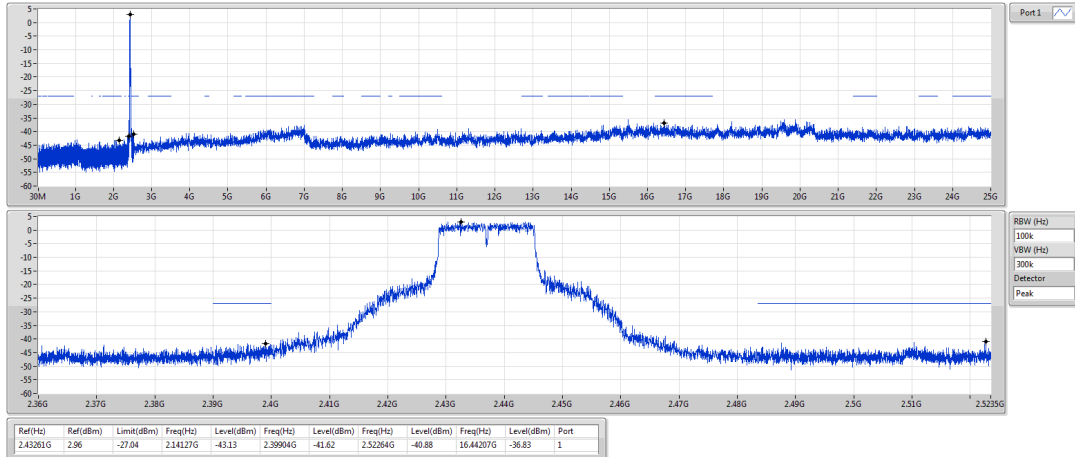


802.11g_Nss1,(6Mbps)_1TX

CSE NdB

2437MHz

04/01/2019

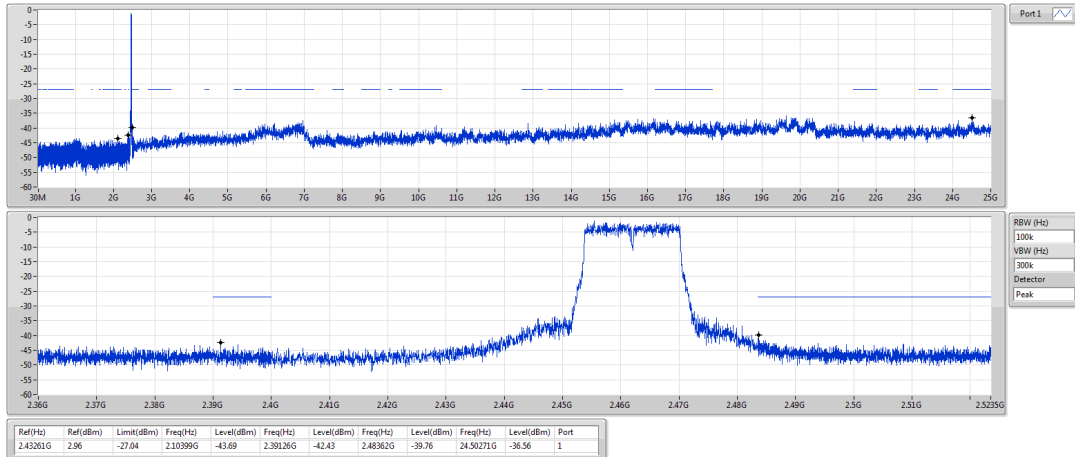


802.11g_Nss1,(6Mbps)_1TX

CSE NdB

2462MHz

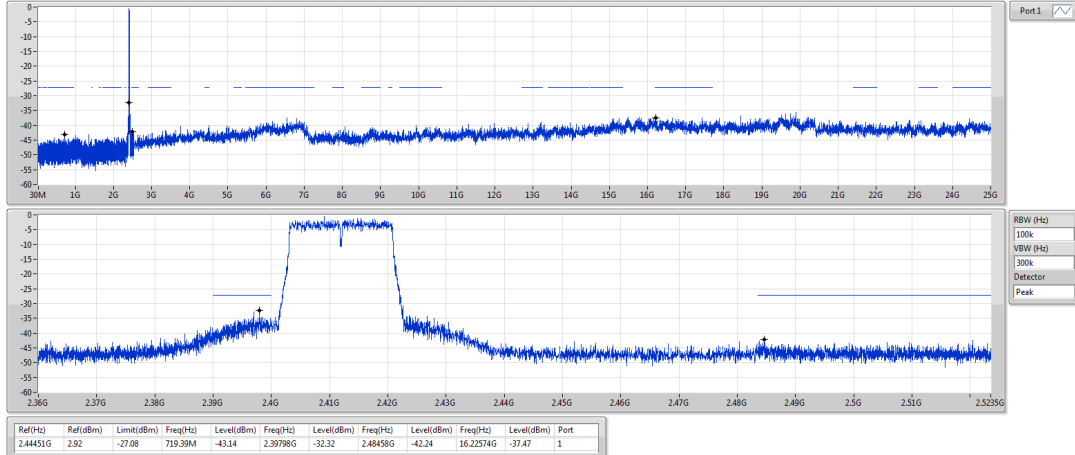
04/01/2019



802.11n HT20_Nss1,(MCS0)_1TX

CSE NdB

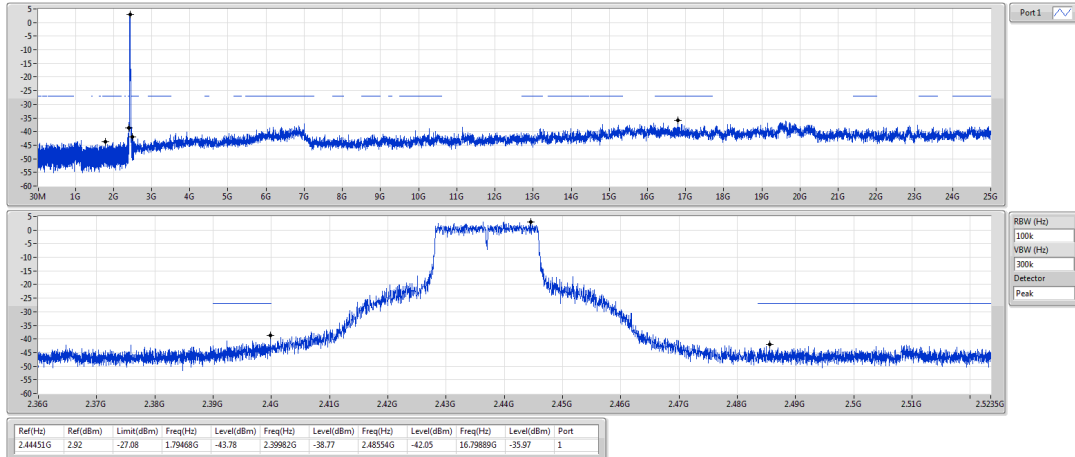
2412MHz



802.11n HT20_Nss1,(MCS0)_1TX

CSE NdB

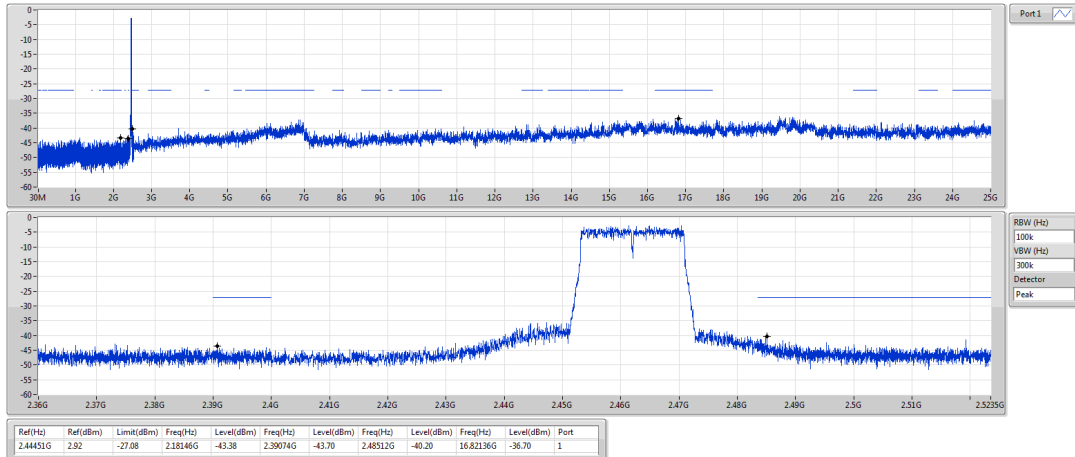
2437MHz



802.11n HT20_Nss1,(MCS0)_1TX

CSE NdB

2462MHz

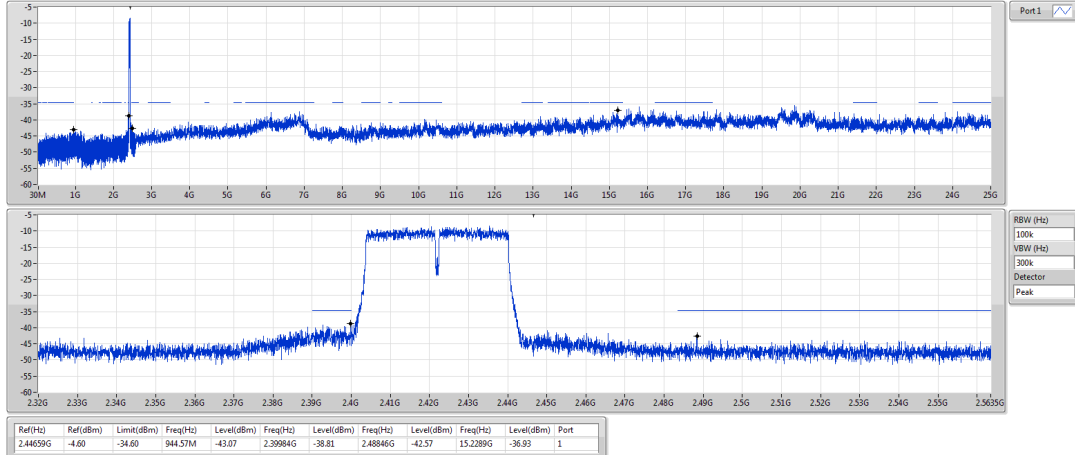


802.11n HT40_Nss1,(MCS0)_1TX

CSE NdB

2422MHz

04/01/2019

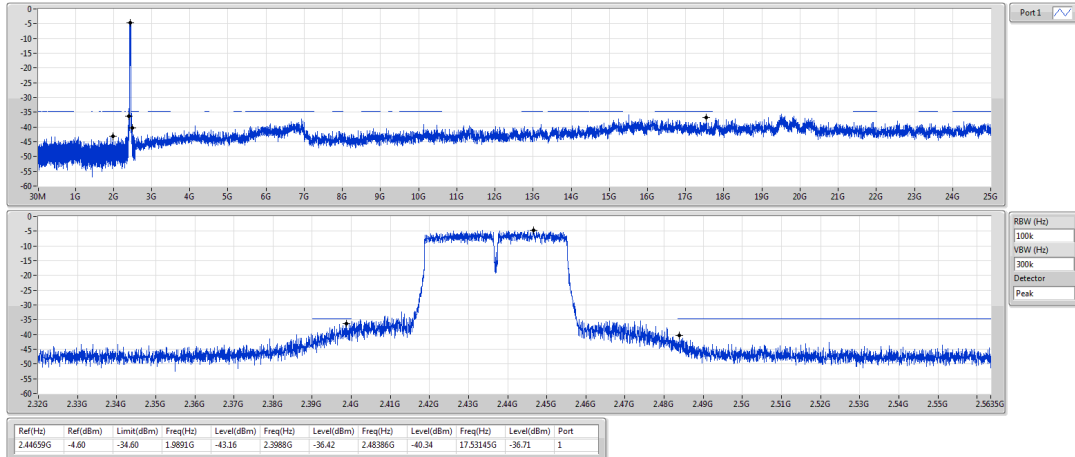


802.11n HT40_Nss1,(MCS0)_1TX

CSE NdB

2437MHz

04/01/2019

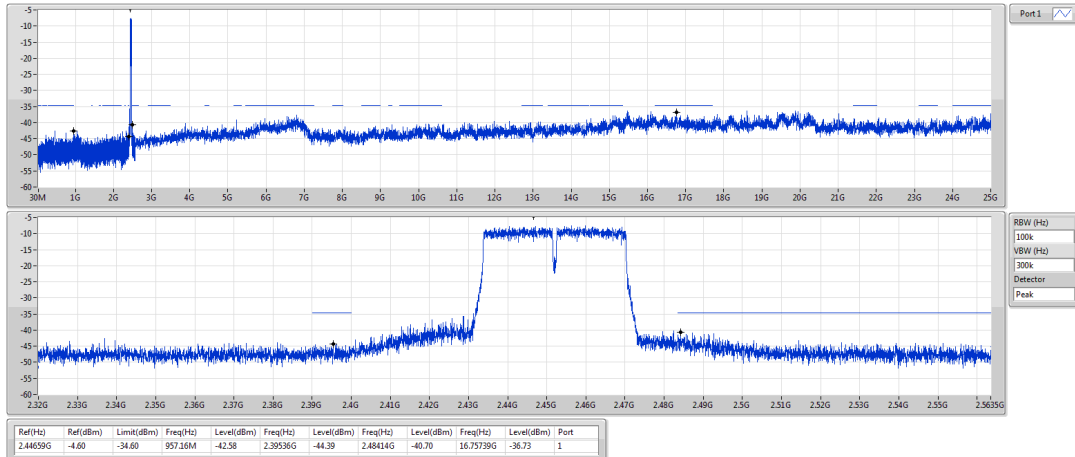


802.11n HT40_Nss1,(MCS0)_1TX

CSE NdB

2452MHz

04/01/2019





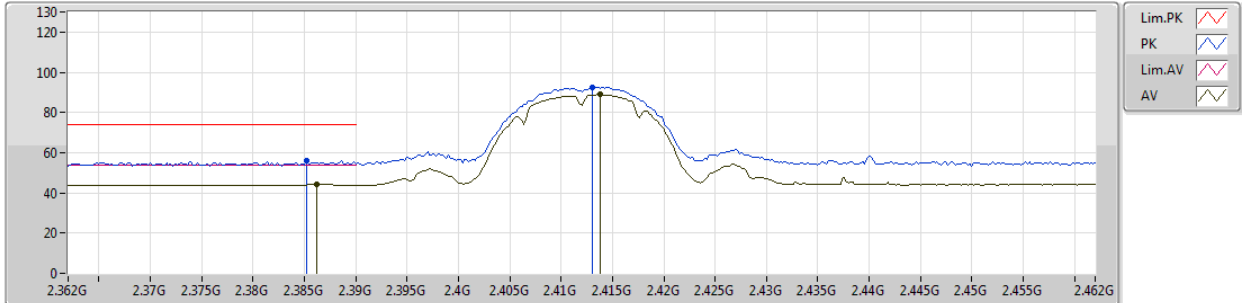
Summary

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 HT20_Nss1,(MCS0)_1TX	Pass	AV	2.39G	53.57	54.00	-0.43	33.08	3	Horizontal	229	1.09	-

802.11b_Nss1,(1Mbps)_1TX

09/01/2019

2412MHz_TX



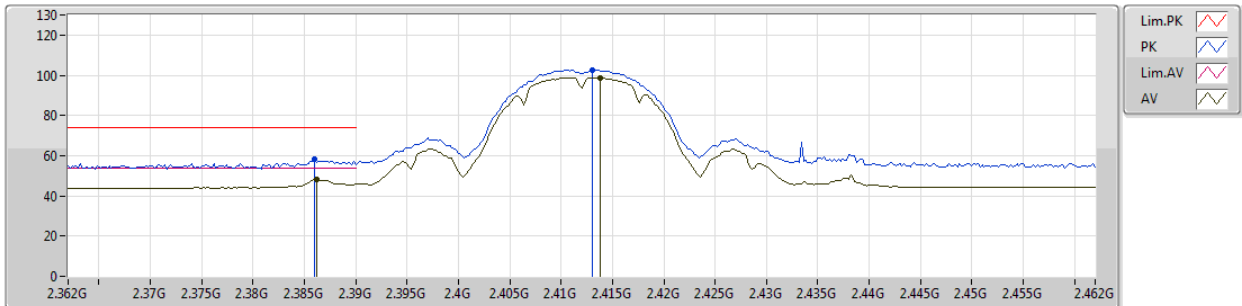
EUT_Z_1TX
Setting 16
06-S-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments						
PK	2.3852G	56.05	74.00	-17.95	32.11	3	Vertical	130	1.50	-						
AV	2.3862G	44.20	54.00	-9.80	32.11	3	Vertical	130	1.50	-						
PK	2.413G	92.54	Inf	-Inf	32.20	3	Vertical	130	1.50	-						
AV	2.4138G	88.84	Inf	-Inf	32.20	3	Vertical	130	1.50	-						

802.11b_Nss1,(1Mbps)_1TX

09/01/2019

2412MHz_TX



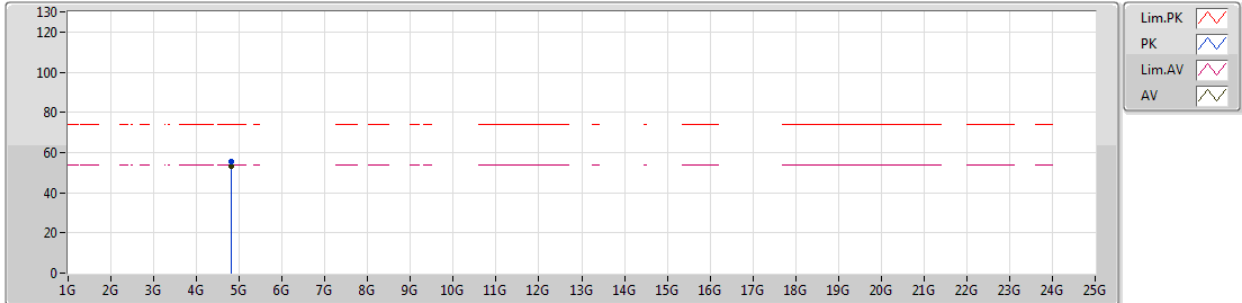
EUT_Z_1TX
Setting 16
06-S-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	2.386G	58.12	74.00	-15.88	32.11	3	Horizontal	225	1.00	-
AV	2.3862G	47.93	54.00	-6.07	32.11	3	Horizontal	225	1.00	-
PK	2.413G	102.64	Inf	-Inf	32.20	3	Horizontal	225	1.00	-
AV	2.4138G	98.78	Inf	-Inf	32.20	3	Horizontal	225	1.00	-

802.11b_Nss1,(1Mbps)_1TX

09/01/2019

2412MHz_TX



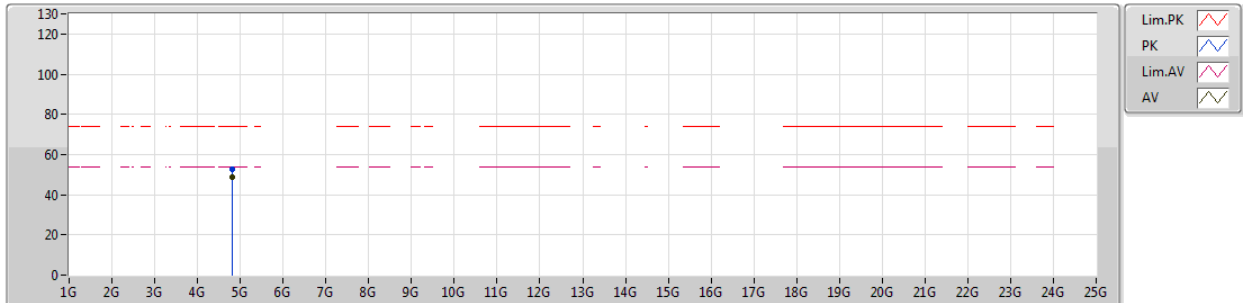
EUT X_1TX
Setting 16
06-S-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments						
PK	4.82398G	55.53	74.00	-18.47	6.59	3	Vertical	279	2.66	-						
AV	4.82396G	52.97	54.00	-1.03	6.59	3	Vertical	279	2.66	-						

802.11b_Nss1,(1Mbps)_1TX

09/01/2019

2412MHz_TX



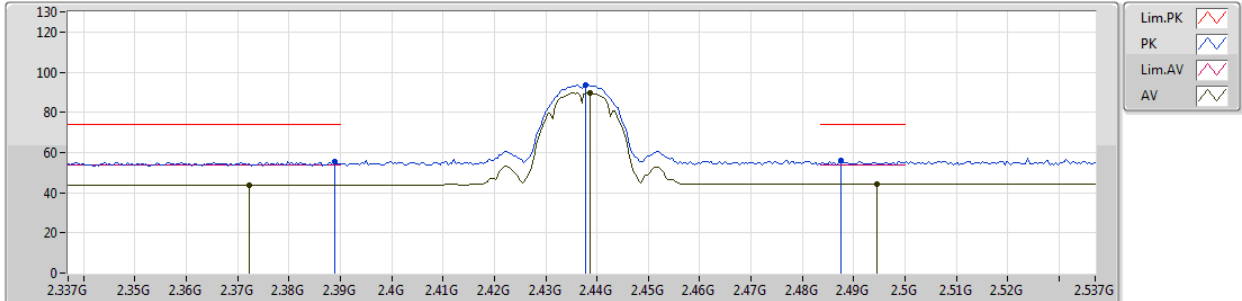
EUT X_1TX
Setting 16
06-S-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments						
PK	4.82396G	52.63	74.00	-21.37	6.59	3	Horizontal	352	2.28	-						
AV	4.82394G	48.98	54.00	-5.02	6.59	3	Horizontal	352	2.28	-						

802.11b_Nss1,(1Mbps)_1TX

09/01/2019

2437MHz_TX



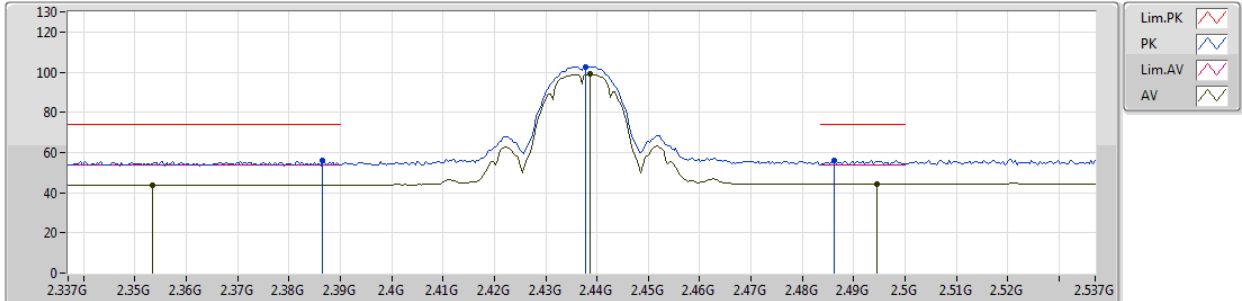
EUT Z_1TX
Setting 15
06-S-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	2.389G	55.69	74.00	-18.31	32.12	3	Vertical	132	1.98	-
AV	2.3722G	43.86	54.00	-10.14	32.06	3	Vertical	132	1.98	-
PK	2.4378G	93.46	Inf	-Inf	32.27	3	Vertical	132	1.98	-
AV	2.4386G	89.61	Inf	-Inf	32.27	3	Vertical	132	1.98	-
PK	2.4874G	56.06	74.00	-17.94	32.42	3	Vertical	132	1.98	-
AV	2.4946G	44.24	54.00	-9.76	32.45	3	Vertical	132	1.98	-

802.11b_Nss1,(1Mbps)_1TX

09/01/2019

2437MHz_TX



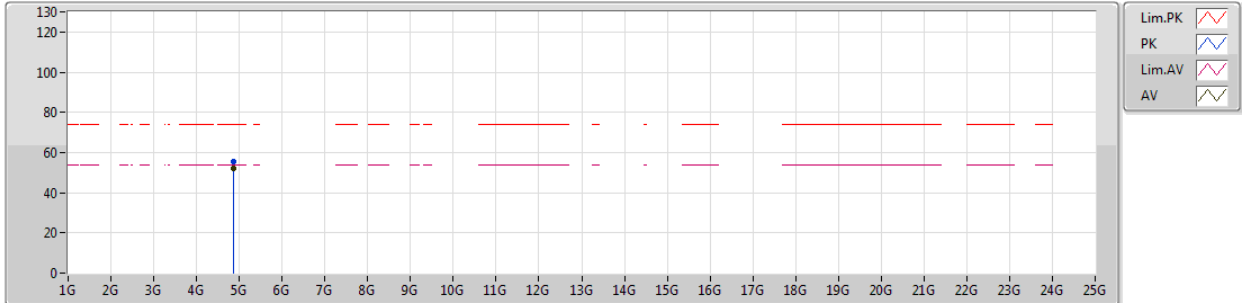
EUT_Z_1TX
Setting 15
06-S-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	2.3866G	56.16	74.00	-17.84	32.11	3	Horizontal	224	1.01	-
AV	2.3534G	43.90	54.00	-10.10	31.99	3	Horizontal	224	1.01	-
PK	2.4378G	102.76	Inf	-Inf	32.27	3	Horizontal	224	1.01	-
AV	2.4386G	98.99	Inf	-Inf	32.27	3	Horizontal	224	1.01	-
PK	2.4862G	55.81	74.00	-18.19	32.42	3	Horizontal	224	1.01	-
AV	2.4946G	44.37	54.00	-9.63	32.45	3	Horizontal	224	1.01	-

802.11b_Nss1,(1Mbps)_1TX

09/01/2019

2437MHz_TX



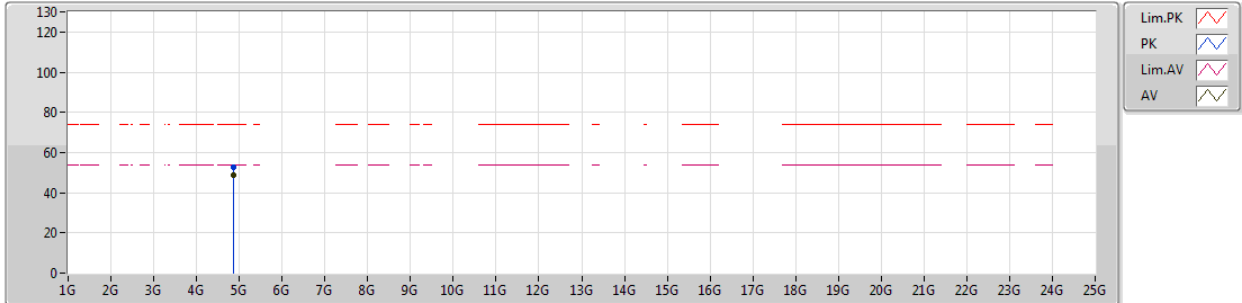
EUT X_1TX
Setting 15
06-S-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments						
PK	4.87396G	55.52	74.00	-18.48	6.71	3	Vertical	273	2.63	-						
AV	4.87396G	52.29	54.00	-1.71	6.71	3	Vertical	273	2.63	-						

802.11b_Nss1,(1Mbps)_1TX

09/01/2019

2437MHz_TX



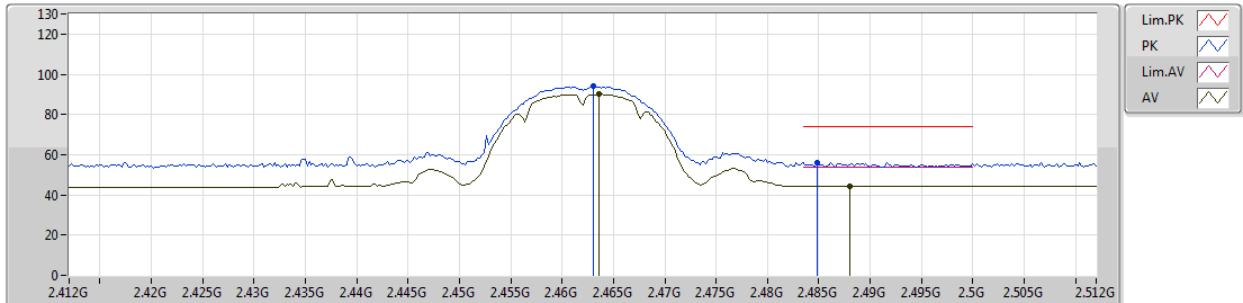
EUT X_1TX
Setting 15
06-S-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments						
PK	4.87396G	52.92	74.00	-21.08	6.71	3	Horizontal	348	2.38	-						
AV	4.87396G	48.93	54.00	-5.07	6.71	3	Horizontal	348	2.38	-						

802.11b_Nss1,(1Mbps)_1TX

09/01/2019

2462MHz_TX



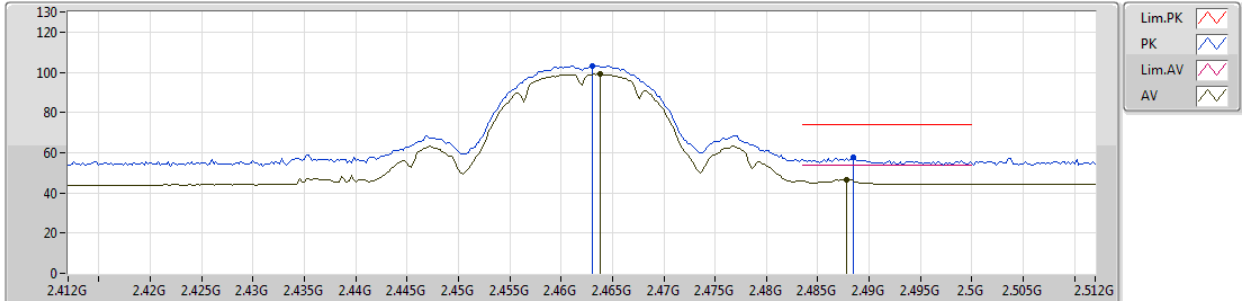
EUT Z_1TX
Setting 15
06-S-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments						
PK	2.463G	93.98	Inf	-Inf	32.35	3	Vertical	128	2.60	-						
AV	2.4636G	90.13	Inf	-Inf	32.35	3	Vertical	128	2.60	-						
PK	2.4848G	56.29	74.00	-17.71	32.42	3	Vertical	128	2.60	-						
AV	2.488G	44.35	54.00	-9.65	32.42	3	Vertical	128	2.60	-						

802.11b_Nss1,(1Mbps)_1TX

09/01/2019

2462MHz_TX



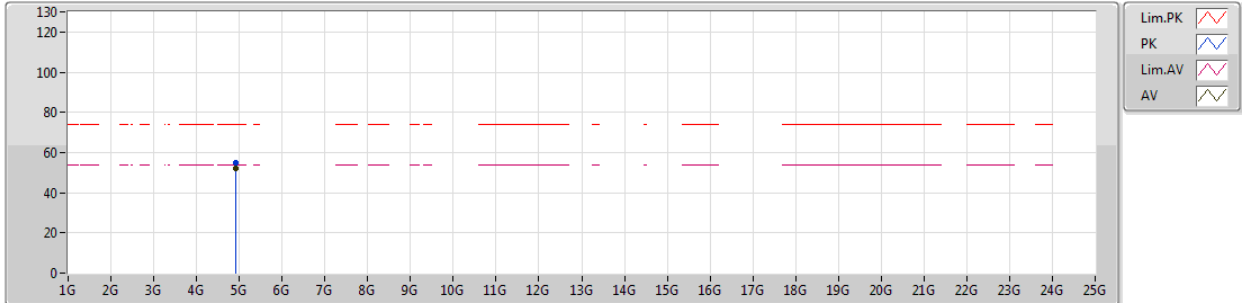
EUT Z_1TX
Setting 15
06-S-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	2.463G	103.22	Inf	-Inf	32.35	3	Horizontal	197	1.17	-
AV	2.4638G	99.23	Inf	-Inf	32.35	3	Horizontal	197	1.17	-
PK	2.4884G	57.64	74.00	-16.36	32.42	3	Horizontal	197	1.17	-
AV	2.4878G	46.51	54.00	-7.49	32.42	3	Horizontal	197	1.17	-

802.11b_Nss1,(1Mbps)_1TX

09/01/2019

2462MHz_TX



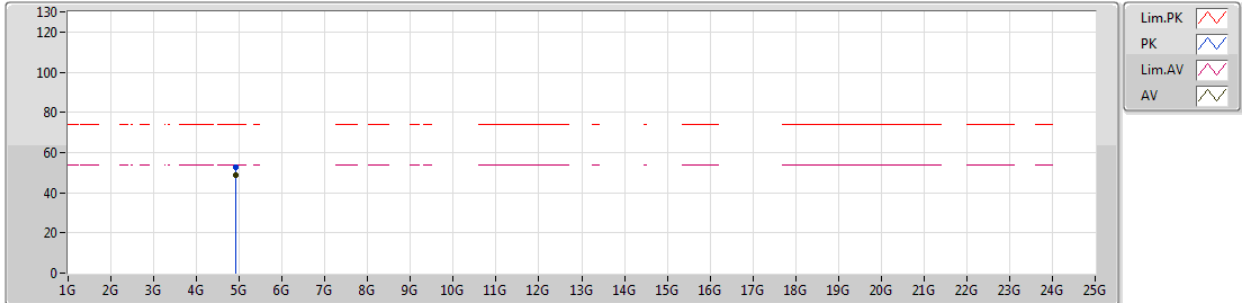
EUT X_1TX
Setting 15
06-S-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments						
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)							
PK	4.924G	54.78	74.00	-19.22	6.83	3	Vertical	275	2.17	-						
AV	4.92396G	52.14	54.00	-1.86	6.83	3	Vertical	275	2.17	-						

802.11b_Nss1,(1Mbps)_1TX

09/01/2019

2462MHz_TX



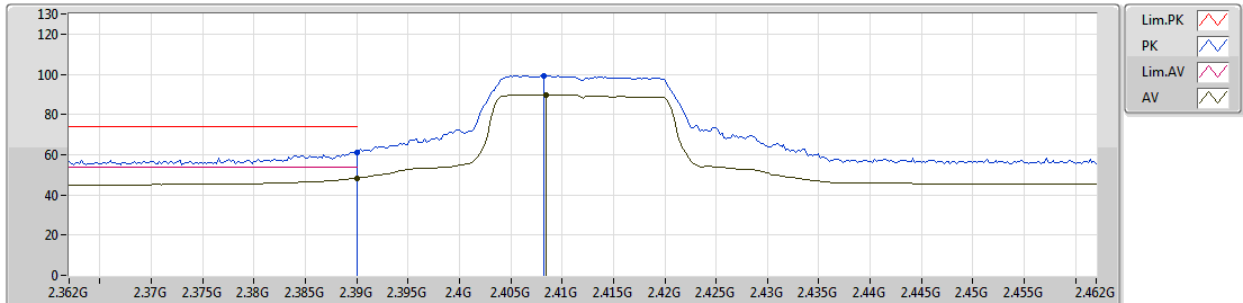
EUT X_1TX
Setting 15
06-S-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	4.92396G	52.48	74.00	-21.52	6.83	3	Horizontal	338	2.17	-
AV	4.92396G	48.82	54.00	-5.18	6.83	3	Horizontal	338	2.17	-

802.11g_Nss1,(6Mbps)_1TX

27/12/2018

2412MHz_TX



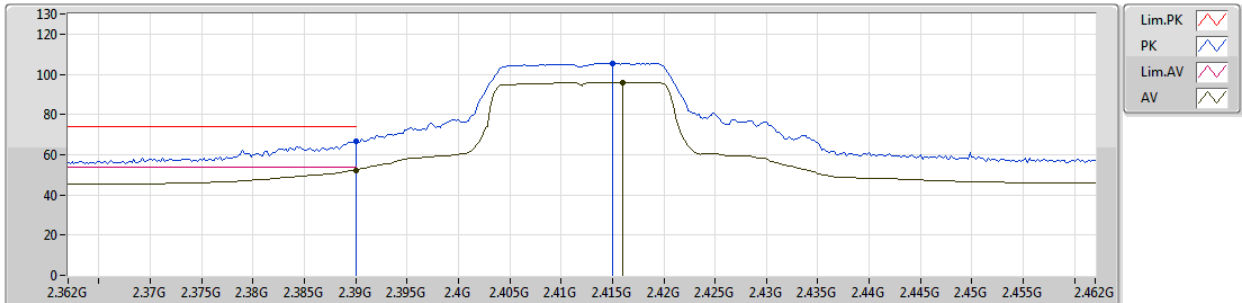
EUT Z_1TX
Setting15
04-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	2.39G	61.28	74.00	-12.72	33.08	3	Vertical	134	2.37	-
AV	2.39G	48.29	54.00	-5.71	33.08	3	Vertical	134	2.37	-
PK	2.4082G	99.41	Inf	-Inf	33.12	3	Vertical	134	2.37	-
AV	2.4084G	89.83	Inf	-Inf	33.12	3	Vertical	134	2.37	-

802.11g_Nss1,(6Mbps)_1TX

27/12/2018

2412MHz_TX



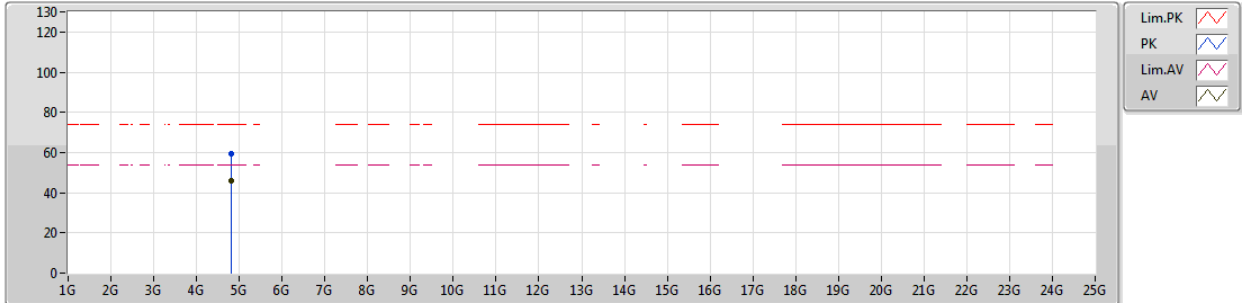
EUT_Z_1TX
Setting15
04-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments						
PK	2.39G	66.44	74.00	-7.56	33.08	3	Horizontal	230	1.09	-						
AV	2.39G	52.32	54.00	-1.68	33.08	3	Horizontal	230	1.09	-						
PK	2.415G	105.59	Inf	-Inf	33.14	3	Horizontal	230	1.09	-						
AV	2.416G	96.07	Inf	-Inf	33.14	3	Horizontal	230	1.09	-						

802.11g_Nss1,(6Mbps)_1TX

27/12/2018

2412MHz_TX



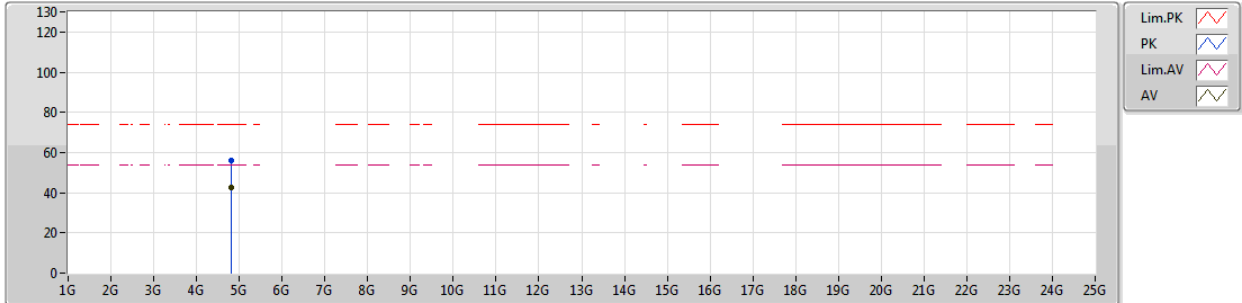
EUT X_1TX
Setting 15
04-E-2
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments						
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)							
PK	4.82448G	59.42	74.00	-14.58	7.16	3	Vertical	276	2.54	-						
AV	4.82412G	45.83	54.00	-8.17	7.16	3	Vertical	276	2.54	-						

802.11g_Nss1,(6Mbps)_1TX

27/12/2018

2412MHz_TX



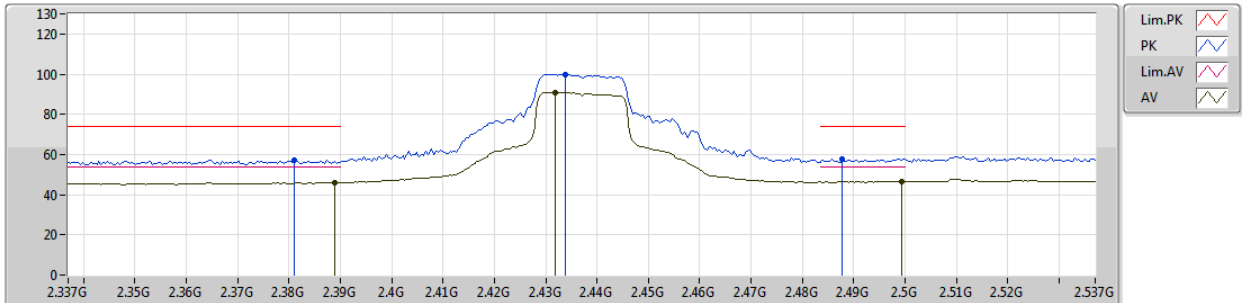
EUT X_1TX
Setting 15
04-E-2
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	4.8246G	55.96	74.00	-18.04	7.16	3	Horizontal	341	2.23	-
AV	4.82394G	42.76	54.00	-11.24	7.16	3	Horizontal	341	2.23	-

802.11g_Nss1,(6Mbps)_1TX

27/12/2018

2437MHz_TX



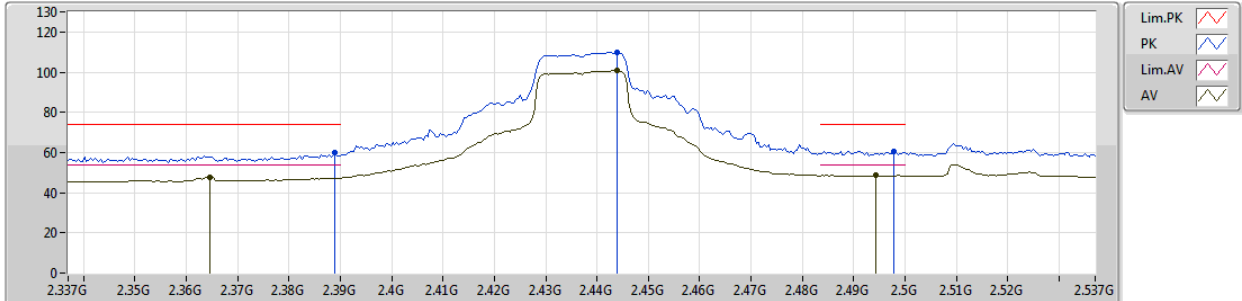
EUT_Z_1TX
Setting 20
04-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	2.381G	57.38	74.00	-16.62	33.07	3	Vertical	232	1.39	-
AV	2.389G	45.94	54.00	-8.06	33.08	3	Vertical	232	1.39	-
PK	2.4338G	99.99	Inf	-Inf	33.20	3	Vertical	232	1.39	-
AV	2.4318G	90.91	Inf	-Inf	33.19	3	Vertical	232	1.39	-
PK	2.4878G	57.83	74.00	-16.17	33.38	3	Vertical	232	1.39	-
AV	2.4994G	46.59	54.00	-7.41	33.41	3	Vertical	232	1.39	-

802.11g_Nss1,(6Mbps)_1TX

27/12/2018

2437MHz_TX



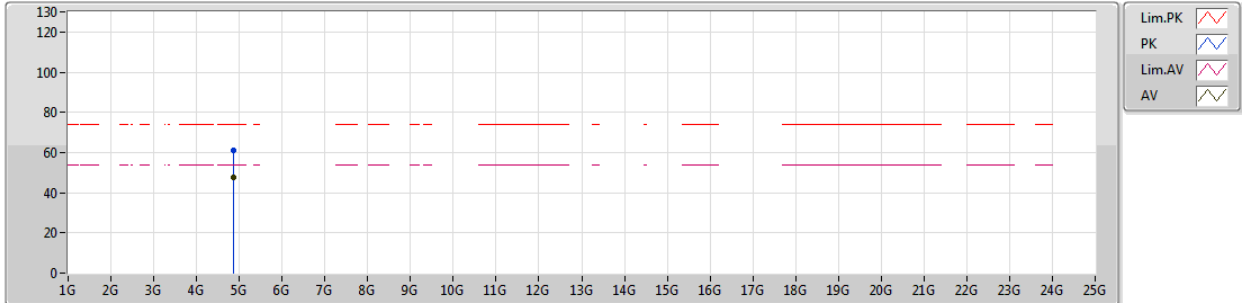
EUT_Z_1TX
Setting 20
04-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	2.389G	59.74	74.00	-14.26	33.08	3	Horizontal	226	1.03	-
AV	2.3646G	47.77	54.00	-6.23	33.06	3	Horizontal	226	1.03	-
PK	2.4438G	109.68	Inf	-Inf	33.23	3	Horizontal	226	1.03	-
AV	2.4438G	100.70	Inf	-Inf	33.23	3	Horizontal	226	1.03	-
PK	2.4978G	60.63	74.00	-13.37	33.41	3	Horizontal	226	1.03	-
AV	2.4942G	48.63	54.00	-5.37	33.39	3	Horizontal	226	1.03	-

802.11g_Nss1,(6Mbps)_1TX

27/12/2018

2437MHz_TX



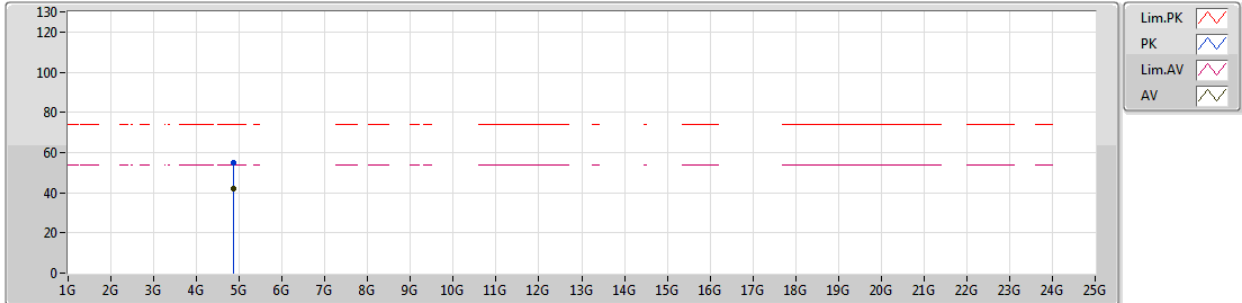
EUT X_1TX
Setting 20
04-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments						
PK	4.87484G	61.35	74.00	-12.65	7.37	3	Vertical	272	2.81	-						
AV	4.87406G	47.78	54.00	-6.22	7.37	3	Vertical	272	2.81	-						

802.11g_Nss1,(6Mbps)_1TX

27/12/2018

2437MHz_TX



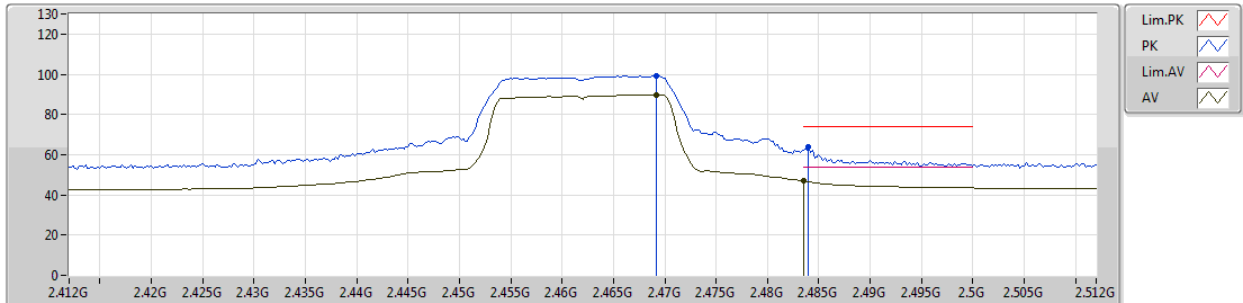
EUT X_1TX
Setting 20
04-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	4.87556G	55.19	74.00	-18.81	7.38	3	Horizontal	194	2.98	-
AV	4.87394G	42.08	54.00	-11.92	7.37	3	Horizontal	194	2.98	-

802.11g_Nss1,(6Mbps)_1TX

27/12/2018

2462MHz_TX



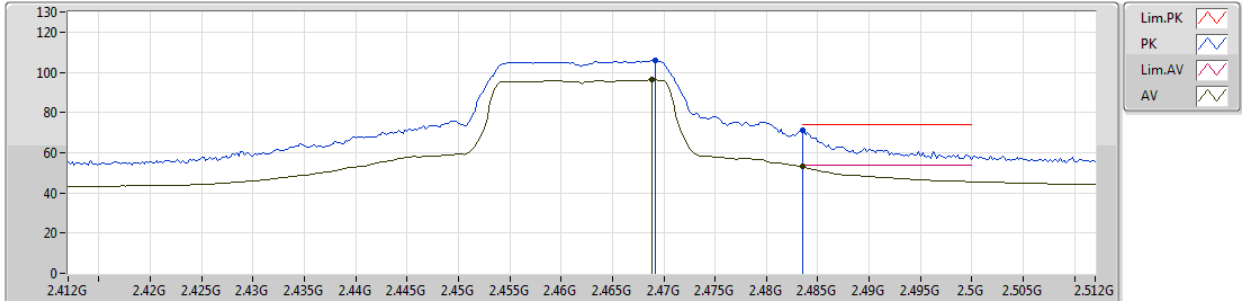
EUT_Z_1TX
Setting14
02-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	2.4692G	99.32	Inf	-Inf	31.56	3	Vertical	114	2.92	-
AV	2.4692G	89.69	Inf	-Inf	31.56	3	Vertical	114	2.92	-
PK	2.484G	63.61	74.00	-10.39	31.59	3	Vertical	114	2.92	-
AV	2.4835G	47.04	54.00	-6.96	31.59	3	Vertical	114	2.92	-

802.11g_Nss1,(6Mbps)_1TX

27/12/2018

2462MHz_TX



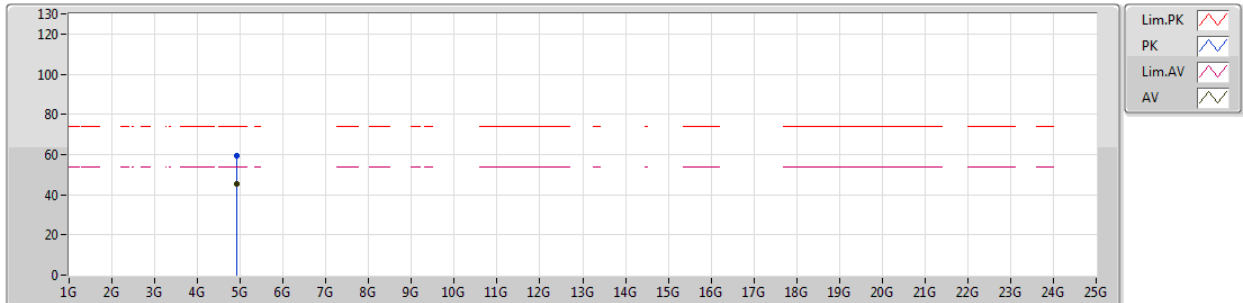
EUT Z_1TX
Setting 14
02-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	2.4692G	105.75	Inf	-Inf	31.56	3	Horizontal	220	1.00	-
AV	2.4688G	96.24	Inf	-Inf	31.56	3	Horizontal	220	1.00	-
PK	2.4835G	71.25	74.00	-2.75	31.59	3	Horizontal	220	1.00	-
AV	2.4835G	53.06	54.00	-0.94	31.59	3	Horizontal	220	1.00	-

802.11g_Nss1,(6Mbps)_1TX

27/12/2018

2462MHz_TX



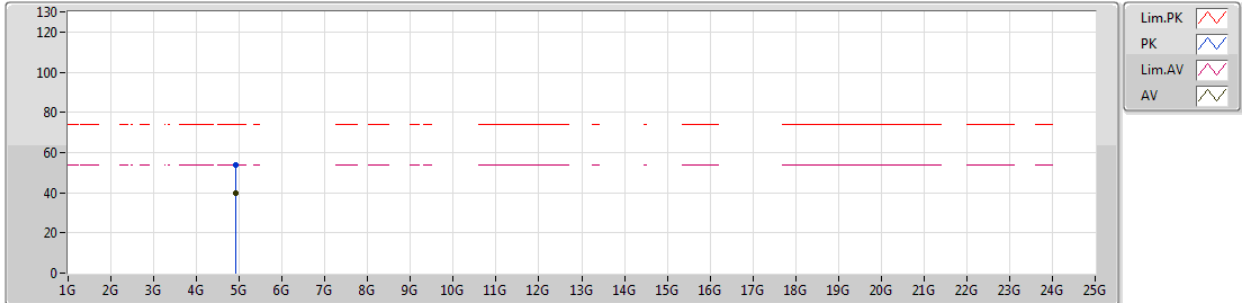
EUT X_1TX
Setting 14
02-L-3
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments						
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)							
PK	4.92036G	59.18	74.00	-14.82	7.50	3	Vertical	179	2.62	-						
AV	4.92406G	45.28	54.00	-8.72	7.51	3	Vertical	179	2.62	-						

802.11g_Nss1,(6Mbps)_1TX

27/12/2018

2462MHz_TX



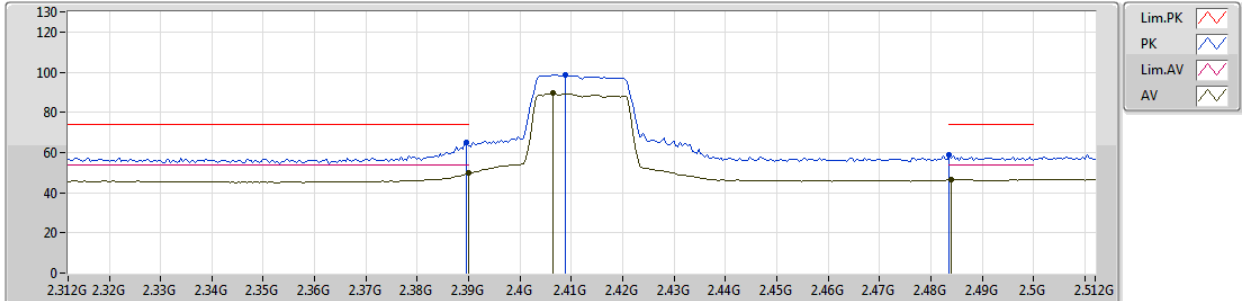
EUT X_1TX
Setting 14
02-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	4.9202G	54.02	74.00	-19.98	7.50	3	Horizontal	108	1.01	-
AV	4.92396G	39.54	54.00	-14.46	7.51	3	Horizontal	108	1.01	-

802.11n HT20_Nss1,(MCS0)_1TX

27/12/2018

2412MHz_TX



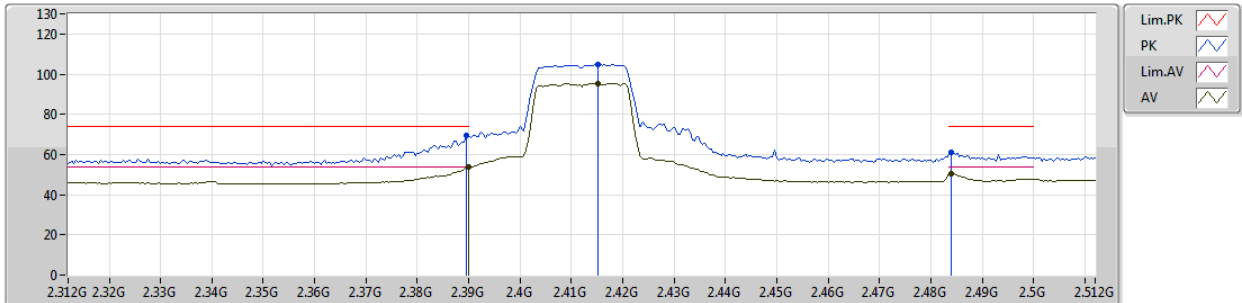
EUT_Z_1TX
Setting 14
04-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	2.3896G	64.77	74.00	-9.23	33.08	3	Vertical	130	2.37	-
AV	2.39G	49.64	54.00	-4.36	33.08	3	Vertical	130	2.37	-
PK	2.4088G	98.52	Inf	-Inf	33.12	3	Vertical	130	2.37	-
AV	2.4064G	89.40	Inf	-Inf	33.11	3	Vertical	130	2.37	-
PK	2.4835G	58.64	74.00	-15.36	33.36	3	Vertical	130	2.37	-
AV	2.484G	46.65	54.00	-7.35	33.36	3	Vertical	130	2.37	-

802.11n HT20_Nss1,(MCS0)_1TX

27/12/2018

2412MHz_TX



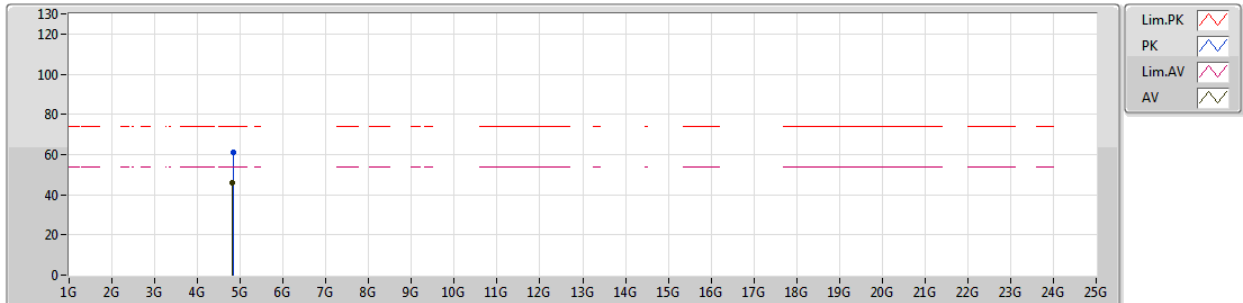
EUT Z_1TX
Setting 14
04-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	2.3896G	69.25	74.00	-4.75	33.08	3	Horizontal	229	1.09	-
AV	2.39G	53.57	54.00	-0.43	33.08	3	Horizontal	229	1.09	-
PK	2.4152G	104.73	Inf	-Inf	33.14	3	Horizontal	229	1.09	-
AV	2.4152G	95.53	Inf	-Inf	33.14	3	Horizontal	229	1.09	-
PK	2.484G	60.86	74.00	-13.14	33.36	3	Horizontal	229	1.09	-
AV	2.484G	50.39	54.00	-3.61	33.36	3	Horizontal	229	1.09	-

802.11n HT20_Nss1,(MCS0)_1TX

27/12/2018

2412MHz_TX



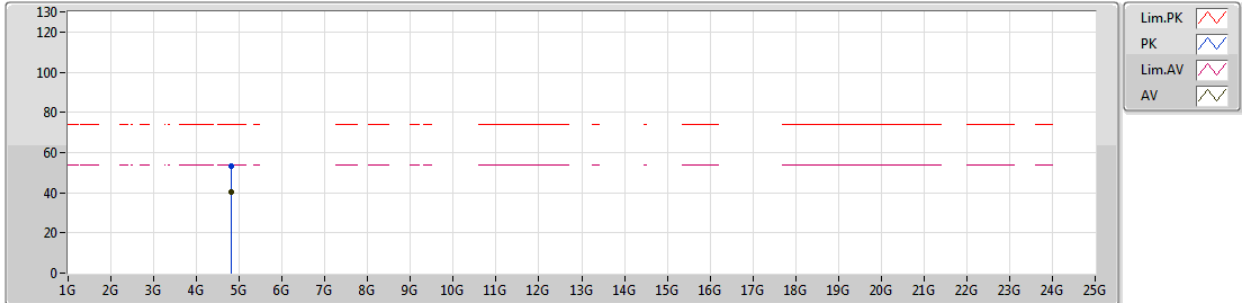
EUT X_1TX
Setting 14
04-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments						
PK	4.82664G	60.95	74.00	-13.05	7.17	3	Vertical	271	2.84	-						
AV	4.82394G	45.69	54.00	-8.31	7.16	3	Vertical	271	2.84	-						

802.11n HT20_Nss1,(MCS0)_1TX

27/12/2018

2412MHz_TX



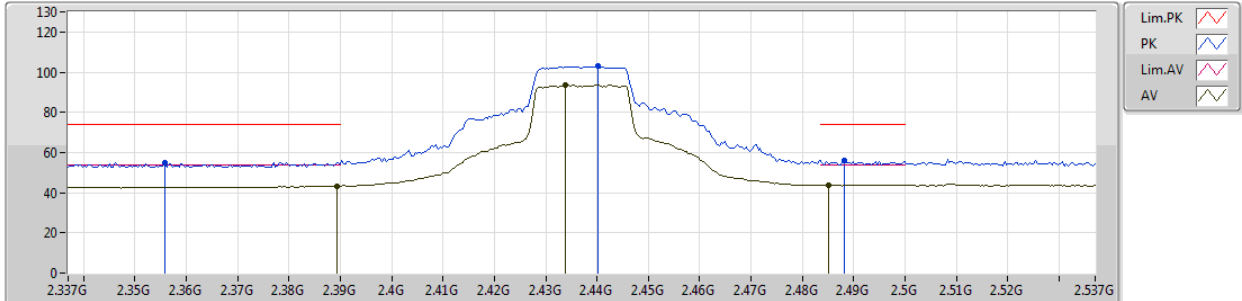
EUT X_1TX
Setting 14
04-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments						
PK	4.8219G	53.21	74.00	-20.79	7.15	3	Horizontal	201	1.40	-						
AV	4.82406G	40.15	54.00	-13.85	7.16	3	Horizontal	201	1.40	-						

802.11n HT20_Nss1,(MCS0)_1TX

27/12/2018

2437MHz_TX



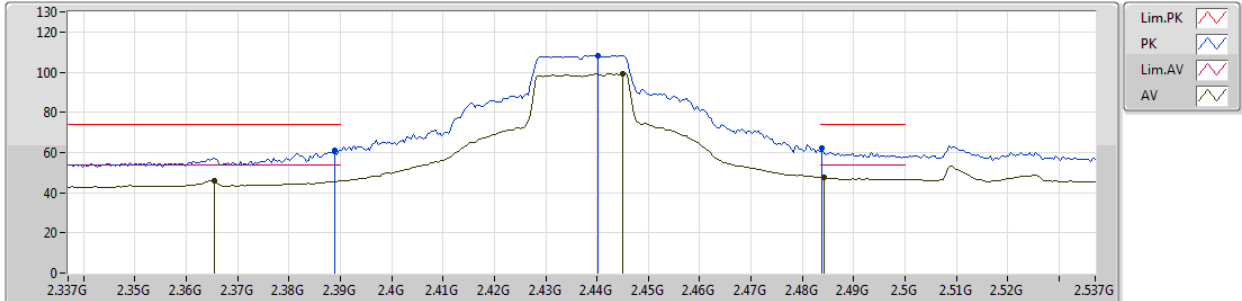
EUT Z_1TX
Setting 20
02-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	2.3558G	54.98	74.00	-19.02	31.29	3	Vertical	134	2.95	-
AV	2.3894G	43.29	54.00	-10.71	31.38	3	Vertical	134	2.95	-
PK	2.4402G	102.92	Inf	-Inf	31.50	3	Vertical	134	2.95	-
AV	2.4338G	93.55	Inf	-Inf	31.48	3	Vertical	134	2.95	-
PK	2.4882G	56.05	74.00	-17.95	31.61	3	Vertical	134	2.95	-
AV	2.485G	43.81	54.00	-10.19	31.59	3	Vertical	134	2.95	-

802.11n HT20_Nss1,(MCS0)_1TX

27/12/2018

2437MHz_TX



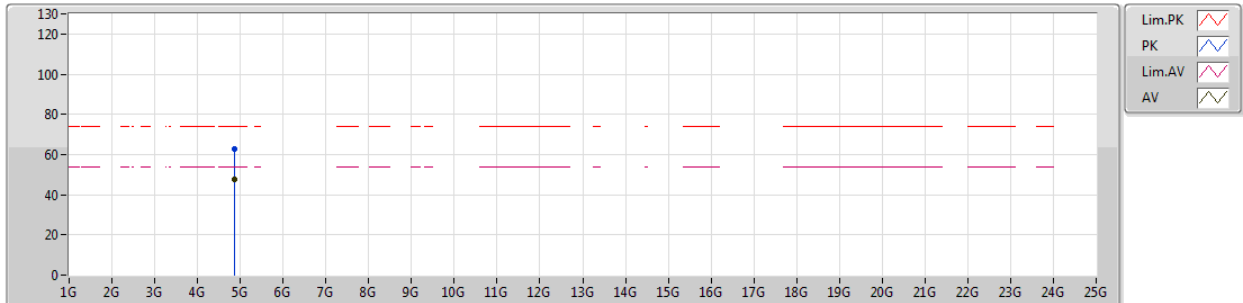
EUT_Z_1TX
Setting 20
02-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	2.389G	61.02	74.00	-12.98	31.38	3	Horizontal	227	1.20	-
AV	2.3654G	46.16	54.00	-7.84	31.32	3	Horizontal	227	1.20	-
PK	2.4402G	108.41	Inf	-Inf	31.50	3	Horizontal	227	1.20	-
AV	2.445G	99.29	Inf	-Inf	31.51	3	Horizontal	227	1.20	-
PK	2.4838G	62.12	74.00	-11.88	31.59	3	Horizontal	227	1.20	-
AV	2.4842G	47.77	54.00	-6.23	31.59	3	Horizontal	227	1.20	-

802.11n HT20_Nss1,(MCS0)_1TX

27/12/2018

2437MHz_TX



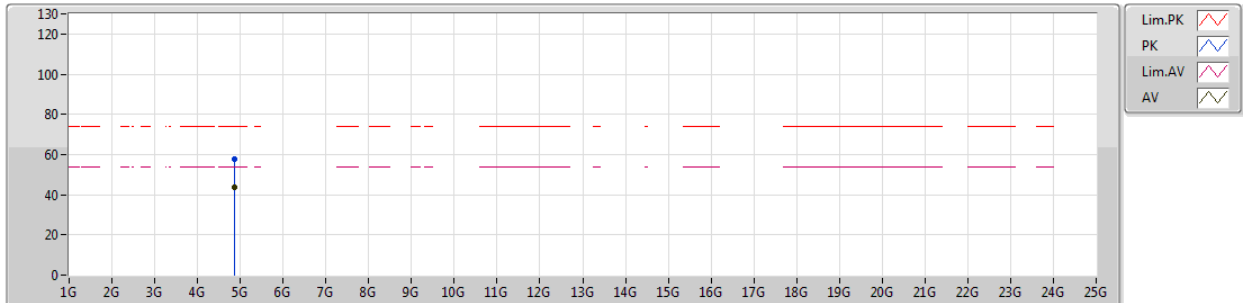
EUT X_1TX
Setting 20
02-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	4.87658G	62.92	74.00	-11.08	7.42	3	Vertical	182	2.67	-
AV	4.87396G	47.81	54.00	-6.19	7.41	3	Vertical	182	2.67	-

802.11n HT20_Nss1,(MCS0)_1TX

27/12/2018

2437MHz_TX



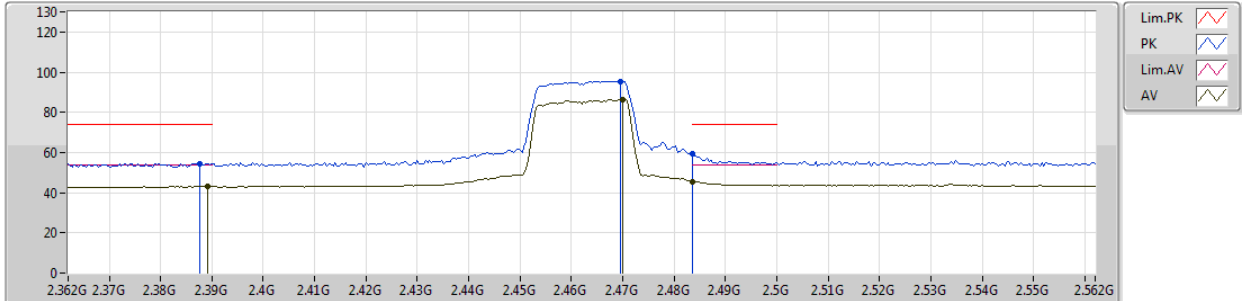
EUT X_1TX
Setting 20
02-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments						
PK	4.8766G	57.89	74.00	-16.11	7.42	3	Horizontal	82	2.81	-						
AV	4.87362G	43.56	54.00	-10.44	7.41	3	Horizontal	82	2.81	-						

802.11n HT20_Nss1,(MCS0)_1TX

27/12/2018

2462MHz_TX



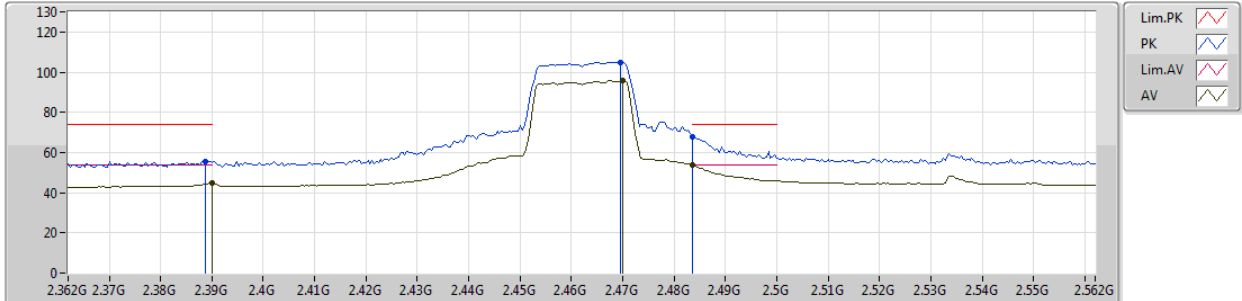
EUT Z_1TX
Setting 13
02-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	2.3876G	54.62	74.00	-19.38	31.38	3	Vertical	190	1.50	-
AV	2.3892G	43.18	54.00	-10.82	31.38	3	Vertical	190	1.50	-
PK	2.4696G	95.42	Inf	-Inf	31.57	3	Vertical	190	1.50	-
AV	2.47G	86.48	Inf	-Inf	31.57	3	Vertical	190	1.50	-
PK	2.4835G	59.24	74.00	-14.76	31.59	3	Vertical	190	1.50	-
AV	2.4835G	45.55	54.00	-8.45	31.59	3	Vertical	190	1.50	-

802.11n HT20_Nss1,(MCS0)_1TX

27/12/2018

2462MHz_TX



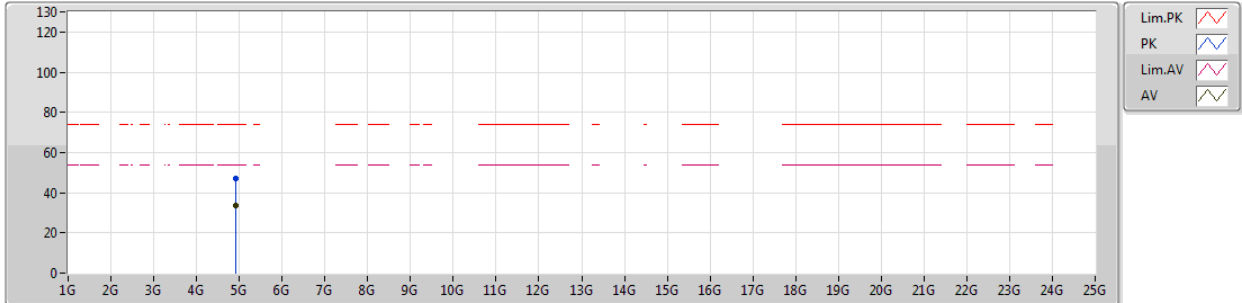
EUT_Z_1TX
Setting 13
02-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	2.3888G	55.61	74.00	-18.39	31.38	3	Horizontal	223	1.19	-
AV	2.39G	44.81	54.00	-9.19	31.38	3	Horizontal	223	1.19	-
PK	2.4696G	104.87	Inf	-Inf	31.57	3	Horizontal	223	1.19	-
AV	2.47G	95.79	Inf	-Inf	31.57	3	Horizontal	223	1.19	-
PK	2.4835G	67.79	74.00	-6.21	31.59	3	Horizontal	223	1.19	-
AV	2.4835G	53.55	54.00	-0.45	31.59	3	Horizontal	223	1.19	-

802.11n HT20_Nss1,(MCS0)_1TX

27/12/2018

2462MHz_TX



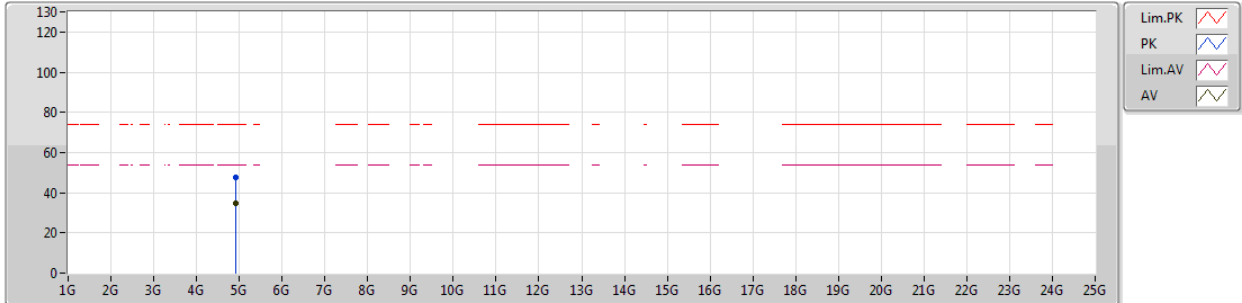
EUT X_1TX
Setting 13
02-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments						
PK	4.92686G	46.90	74.00	-27.10	7.54	3	Vertical	91	1.31	-						
AV	4.92702G	33.57	54.00	-20.43	7.54	3	Vertical	91	1.31	-						

802.11n HT20_Nss1,(MCS0)_1TX

27/12/2018

2462MHz_TX



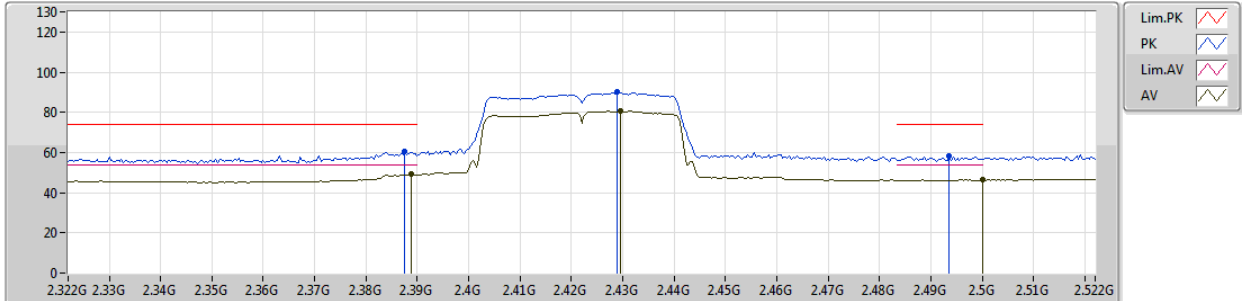
EUT X_1TX
Setting 13
02-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	4.92122G	47.87	74.00	-26.13	7.51	3	Horizontal	109	1.48	-
AV	4.91916G	34.53	54.00	-19.47	7.50	3	Horizontal	109	1.48	-

802.11n HT40_Nss1,(MCS0)_1TX

27/12/2018

2422MHz_TX



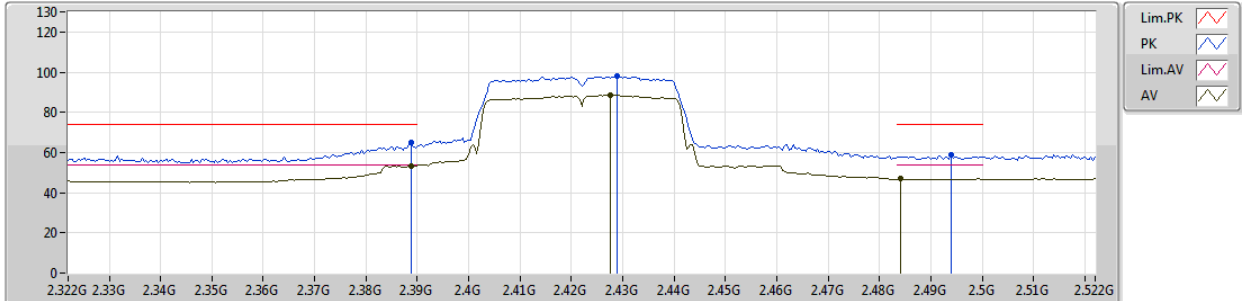
EUT Z_1TX
Setting 10
04-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	2.3876G	60.75	74.00	-13.25	33.08	3	Vertical	232	1.38	-
AV	2.3888G	49.07	54.00	-4.93	33.08	3	Vertical	232	1.38	-
PK	2.4288G	90.18	Inf	-Inf	33.18	3	Vertical	232	1.38	-
AV	2.4296G	80.49	Inf	-Inf	33.19	3	Vertical	232	1.38	-
PK	2.4936G	58.08	74.00	-15.92	33.39	3	Vertical	232	1.38	-
AV	2.5G	46.35	54.00	-7.65	33.41	3	Vertical	232	1.38	-

802.11n HT40_Nss1,(MCS0)_1TX

27/12/2018

2422MHz_TX



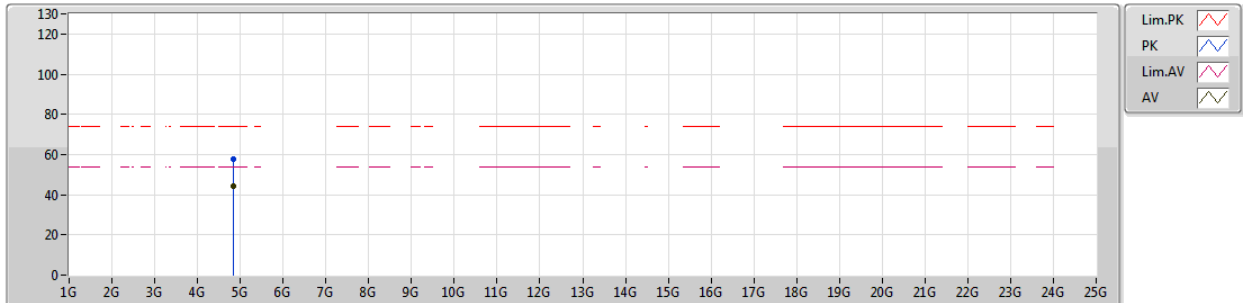
EUT Z_1TX
Setting 10
04-L-3
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.3888G	65.15	74.00	-8.85	33.08	3	Horizontal	227	1.14	-
AV	2.3888G	53.44	54.00	-0.56	33.08	3	Horizontal	227	1.14	-
PK	2.4288G	97.94	Inf	-Inf	33.18	3	Horizontal	227	1.14	-
AV	2.4276G	88.58	Inf	-Inf	33.18	3	Horizontal	227	1.14	-
PK	2.494G	58.56	74.00	-15.44	33.39	3	Horizontal	227	1.14	-
AV	2.484G	46.90	54.00	-7.10	33.36	3	Horizontal	227	1.14	-

802.11n HT40_Nss1,(MCS0)_1TX

27/12/2018

2422MHz_TX



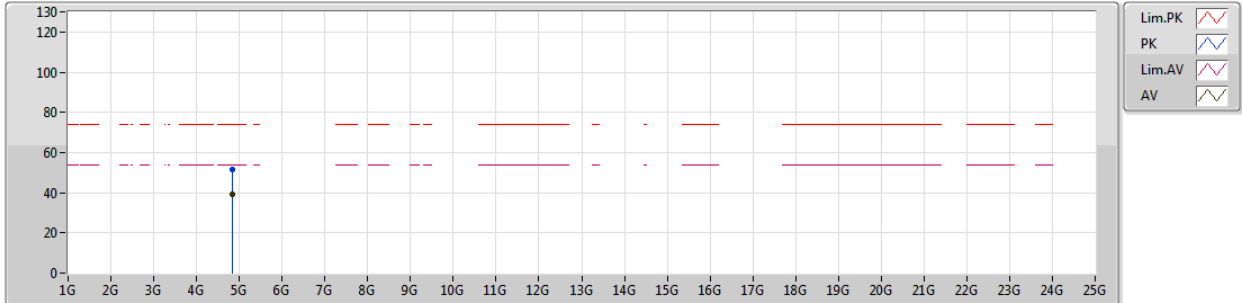
EUT X_1TX
Setting 10
04-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments						
PK	4.84454G	57.49	74.00	-16.51	7.24	3	Vertical	272	2.66	-						
AV	4.844G	44.38	54.00	-9.62	7.24	3	Vertical	272	2.66	-						

802.11n HT40_Nss1,(MCS0)_1TX

27/12/2018

2422MHz_TX



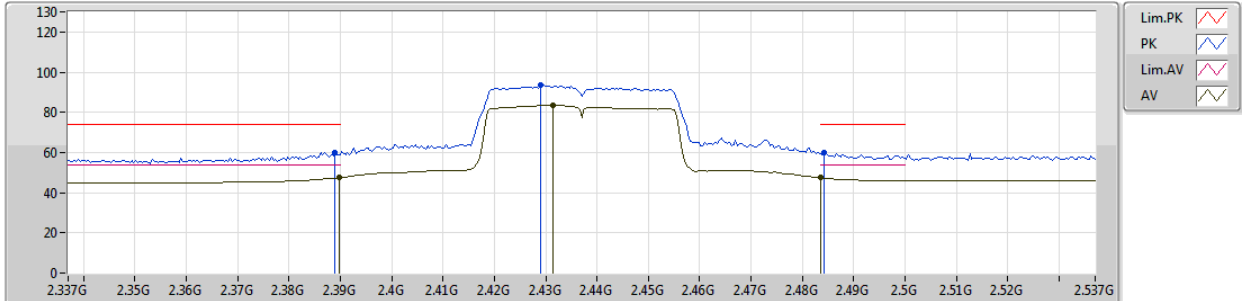
EUT X_1TX
Setting 10
04-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments						
PK	4.84325G	51.51	74.00	-22.49	7.24	3	Horizontal	196	1.11	-						
AV	4.84403G	39.06	54.00	-14.94	7.24	3	Horizontal	196	1.11	-						

802.11n HT40_Nss1,(MCS0)_1TX

27/12/2018

2437MHz_TX



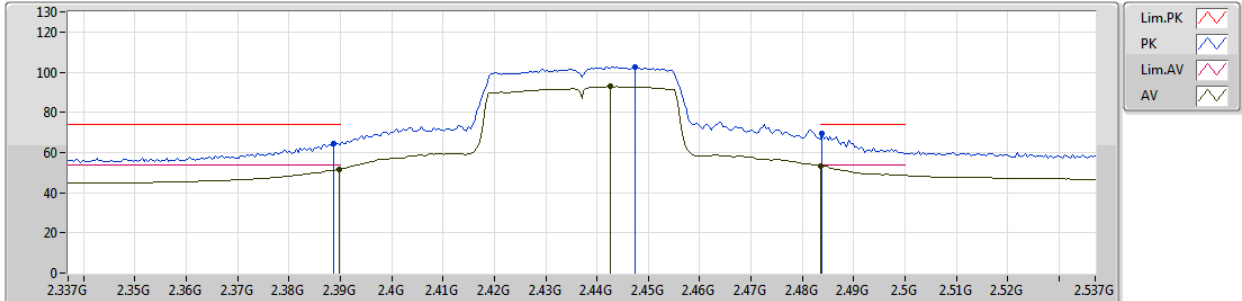
EUT_Z_1TX
Setting 14
04-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	2.389G	60.13	74.00	-13.87	33.08	3	Vertical	234	1.37	-
AV	2.3898G	47.42	54.00	-6.58	33.08	3	Vertical	234	1.37	-
PK	2.429G	93.68	Inf	-Inf	33.18	3	Vertical	234	1.37	-
AV	2.4314G	83.52	Inf	-Inf	33.19	3	Vertical	234	1.37	-
PK	2.4842G	60.13	74.00	-13.87	33.36	3	Vertical	234	1.37	-
AV	2.4835G	47.46	54.00	-6.54	33.36	3	Vertical	234	1.37	-

802.11n HT40_Nss1,(MCS0)_1TX

27/12/2018

2437MHz_TX



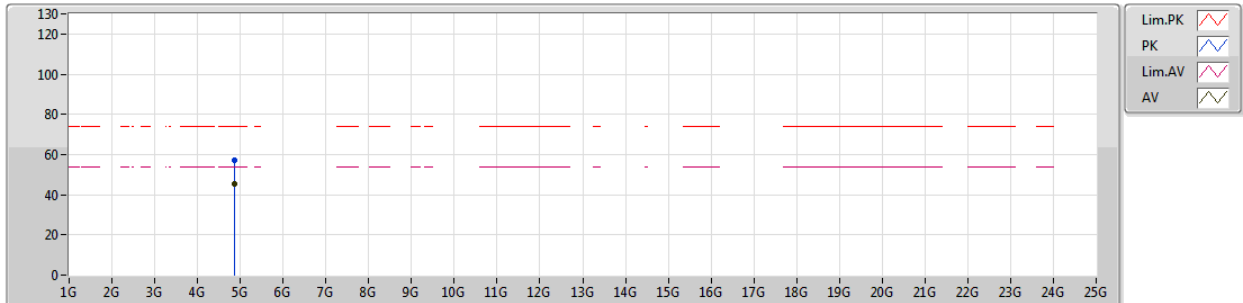
EUT Z_1TX
Setting 14
04-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	2.3886G	64.50	74.00	-9.50	33.08	3	Horizontal	227	1.02	-
AV	2.3898G	51.47	54.00	-2.53	33.08	3	Horizontal	227	1.02	-
PK	2.4474G	102.61	Inf	-Inf	33.24	3	Horizontal	227	1.02	-
AV	2.4426G	92.83	Inf	-Inf	33.23	3	Horizontal	227	1.02	-
PK	2.4838G	69.26	74.00	-4.74	33.36	3	Horizontal	227	1.02	-
AV	2.4835G	53.47	54.00	-0.53	33.36	3	Horizontal	227	1.02	-

802.11n HT40_Nss1,(MCS0)_1TX

27/12/2018

2437MHz_TX



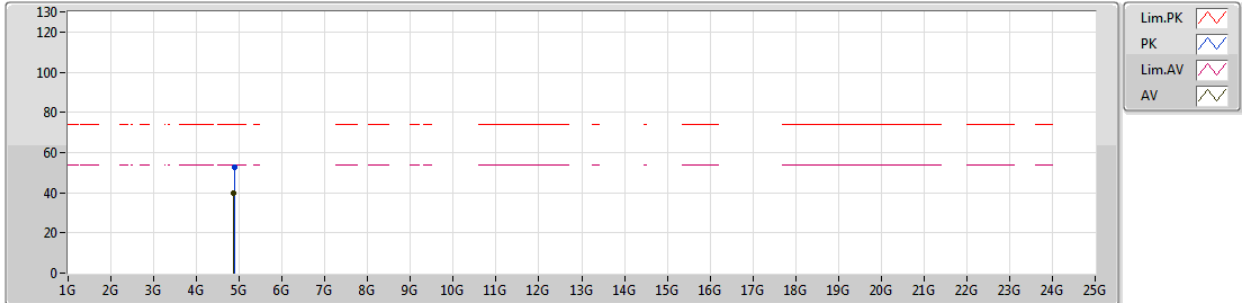
EUT X_1TX
Setting 14
04-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments						
PK	4.8744G	57.29	74.00	-16.71	7.37	3	Vertical	269	2.80	-						
AV	4.8738G	45.36	54.00	-8.64	7.37	3	Vertical	269	2.80	-						

802.11n HT40_Nss1,(MCS0)_1TX

27/12/2018

2437MHz_TX



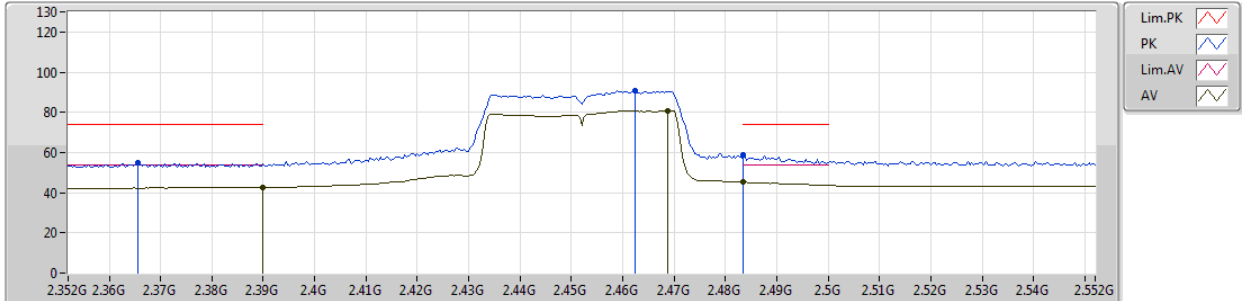
EUT X_1TX
Setting 14
04-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	4.8794G	52.62	74.00	-21.38	7.40	3	Horizontal	196	1.49	-
AV	4.874G	39.71	54.00	-14.29	7.37	3	Horizontal	196	1.49	-

802.11n HT40_Nss1,(MCS0)_1TX

27/12/2018

2452MHz_TX



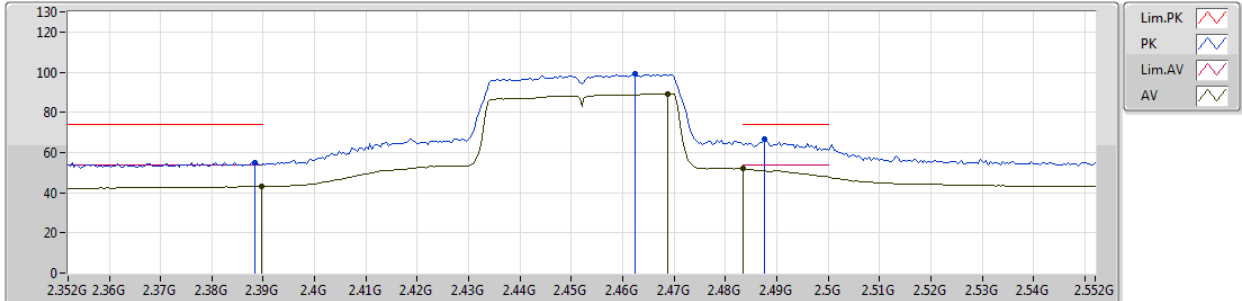
EUT_Z_1TX
Setting11
02-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	2.3656G	54.91	74.00	-19.09	31.32	3	Vertical	185	1.51	-
AV	2.39G	42.73	54.00	-11.27	31.38	3	Vertical	185	1.51	-
PK	2.4624G	90.67	Inf	-Inf	31.54	3	Vertical	185	1.51	-
AV	2.4688G	80.64	Inf	-Inf	31.56	3	Vertical	185	1.51	-
PK	2.4835G	58.93	74.00	-15.07	31.59	3	Vertical	185	1.51	-
AV	2.4835G	45.26	54.00	-8.74	31.59	3	Vertical	185	1.51	-

802.11n HT40_Nss1,(MCS0)_1TX

27/12/2018

2452MHz_TX



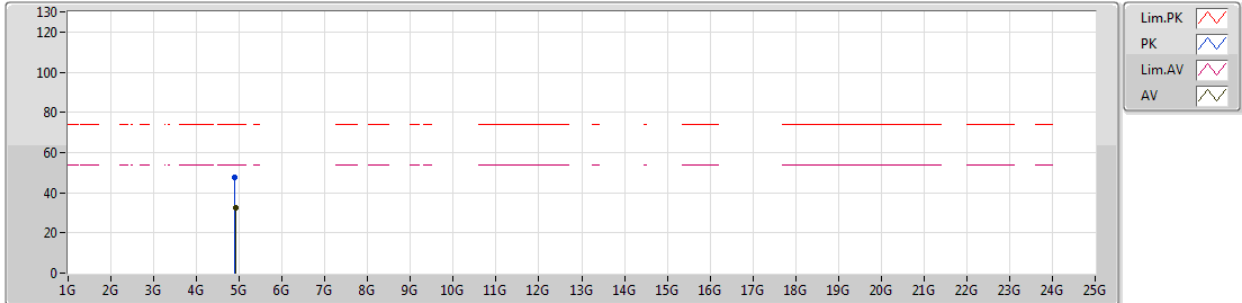
EUT Z_1TX
Setting 11
02-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	2.3884G	54.87	74.00	-19.13	31.38	3	Horizontal	228	1.18	-
AV	2.3896G	43.13	54.00	-10.87	31.38	3	Horizontal	228	1.18	-
PK	2.4624G	98.95	Inf	-Inf	31.54	3	Horizontal	228	1.18	-
AV	2.4688G	89.26	Inf	-Inf	31.56	3	Horizontal	228	1.18	-
PK	2.4876G	66.51	74.00	-7.49	31.61	3	Horizontal	228	1.18	-
AV	2.4835G	51.88	54.00	-2.12	31.59	3	Horizontal	228	1.18	-

802.11n HT40_Nss1,(MCS0)_1TX

27/12/2018

2452MHz_TX



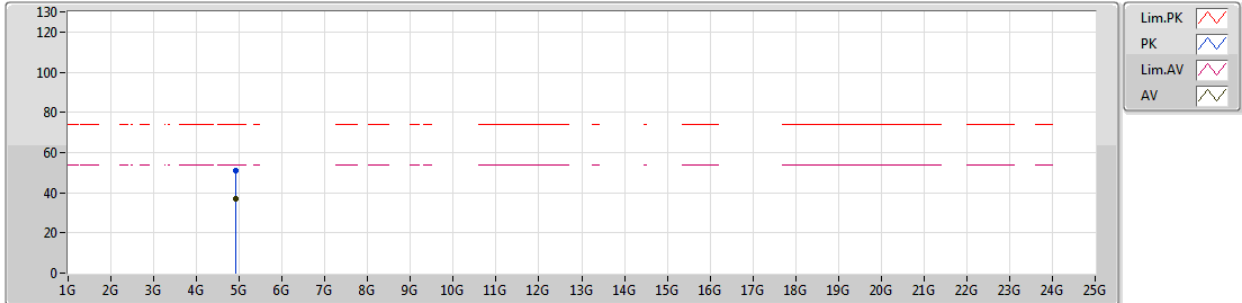
EUT X_1TX
Setting 11
02-L-3
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments						
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)							
PK	4.9011G	47.37	74.00	-26.63	7.47	3	Vertical	178	2.45	-						
AV	4.90742G	32.74	54.00	-21.26	7.48	3	Vertical	178	2.45	-						

802.11n HT40_Nss1,(MCS0)_1TX

27/12/2018

2452MHz_TX



EUT X_1TX
Setting 11
02-L-3
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments						
PK	4.90482G	50.72	74.00	-23.28	7.48	3	Horizontal	147	1.45	-						
AV	4.90402G	37.08	54.00	-16.92	7.48	3	Horizontal	147	1.45	-						