FCC Test Report

Equipment	:	Whole Home Smart Wi-Fi Range Extender
Brand Name	:	Amped Wireless
Model No.	:	AEX1200L
FCC ID	:	ZTT-AEX1200L
Standard	:	47 CFR FCC Part 15.247
Operating Band	:	2400 MHz – 2483.5 MHz
Function	:	☒ Point-to-multipoint; ☐ Point-to-point
Applicant	:	Amped Wireless 13089 Peyton Dr. #C307 Chino Hills, CA 91709 USA
Manufacturer	:	Amped Wireless 13089 Peyton Dr. #C307 Chino Hills, CA 91709 USA

The product sample received on Jul. 06, 2017 and completely tested on Jul. 14, 2017. We, SPORTON, 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 test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Cliff Chang
SPORTON INTERNATIONAL INC.

Testing Laboratory
1190

Table of Contents

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 10
2.4 Accessories 10
2.5 Support Equipment 11
2.6 Test Setup Diagram 12

3 TRANSMITTER TEST RESULT 15

3.1 AC Power-line Conducted Emissions 15
3.2 DTS Bandwidth 17
3.3 Maximum Conducted Output Power 18
3.4 Power Spectral Density 20
3.5 Emissions in Non-restricted Frequency Bands 22
3.6 Emissions in Restricted Frequency Bands 23

4 TEST EQUIPMENT AND CALIBRATION DATA 27

APPENDIX A. TEST RESULTS OF AC POWER-LINE CONDUCTED EMISSIONS

APPENDIX B. TEST RESULTS OF DTS BANDWIDTH

APPENDIX C. TEST RESULTS OF MAXIMUM CONDUCTED OUTPUT POWER

APPENDIX D. TEST RESULTS OF POWER SPECTRAL DENSITY

APPENDIX E. TEST RESULTS OF EMISSIONS IN NON-RESTRICTED FREQUENCY BANDS

APPENDIX F. TEST RESULTS OF EMISSIONS IN RESTRICTED FREQUENCY BANDS

APPENDIX G. TEST RESULTS OF RADIATED EMISSION CO-LOCATION

APPENDIX H. TEST PHOTOS

PHOTOGRAPHS OF EUT V02

Summary of Test Result

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

Revision History

Report No.	Version	Description	Issued Date
FR770425AA	Rev. 01	Initial issue of report	Aug. 07, 2017
FR770425AA	Rev. 02	Changing the Brand Name to "Amped Wireless".	Aug. 11, 2017

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), ac (VHT20)	2412-2462	1-11 [11]
2400-2483.5	n (HT40) , ac (VHT40)	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	802.11ac VHT20	20	2TX
2.4-2.4835GHz	802.11n HT40	40	2TX
2.4-2.4835GHz	802.11ac VHT40	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.
- VHT20, VHT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM 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.	Port	Brand	P/N	Antenna Type	Connector	Gain (dBi)		
						2.4GHz	5GHz (Band 1)	5GHz (Band 4)
1	1	Airgain	N2420DG-G200U	PIFA Antenna	I-PEX	2.71	3.05	4.20
2	2	Airgain	N2425DR-G150U	PIFA Antenna	I-PEX	2.71	3.05	4.20

Note: The EUT has two antennas.

<For 2.4GHz Band>

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

Port 1 and Port 2 can be used as transmitting/receiving antenna.

Port 1 and Port 2 could transmit/receive simultaneously.

<For 5GHz Band>

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

Port 1 and Port 2 can be used as transmitting/receiving antenna.

Port 1 and Port 2 could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.968	0.141	8.42m	300
802.11g	0.81	0.915	1.4m	1k
802.11ac VHT20	0.809	0.921	1.315m	1k
802.11ac VHT40	0.655	1.838	660u	3k

1.1.4 EUT Operational Condition

EUT Power Type	From power adapter			
Beamforming Function	☒	With beamforming for 802.11n/ac in 5GHz	☐	Without beamforming

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 v04
- FCC KDB 662911 D01 v02r01
- FCC KDB 412172 D01 v01r01

1.3 Testing Location Information

Testing Location							
☐	HWA YA	ADD	:	No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.			
		TEL	:	886-3-327-3456	FAX	:	886-3-318-0055
☒	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	Brian Sun	22°C / 54%	Jul. 11, 2017~ Jul, 14, 2017
Radiated	03CH01-CB	Welson Chen	22°C / 54%	Jul. 07, 2017~ Jul, 12, 2017
AC Conduction	CO01-CB	Ryo Fan	23°C / 60%	Jul. 14, 2017

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
Conducted Emission (150kHz ~ 30MHz)	3.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.6 dB	Confidence levels of 95%
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	Power Setting
802.11b_(1Mbps)_2TX	-
2412MHz	20
2437MHz	22
2462MHz	1D
802.11g_(6Mbps)_2TX	-
2412MHz	1D
2437MHz	2D
2462MHz	1C
802.11ac VHT20_Nss1,(MCS0)_2TX	-
2412MHz	1B
2437MHz	2C
2462MHz	1C
802.11ac VHT40_Nss1,(MCS0)_2TX	-
2422MHz	19
2437MHz	1B
2452MHz	19

Note:
- VHT20/VHT40 covers HT20/HT40, due to same modulation. The power setting for 802.11n HT20 and HT40 are the same or lower than 802.11ac VHT20 and VHT40.

2.2 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	Normal Link

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	Normal Link
1	Normal link - EUT in Y axis
2	Normal link - EUT in Z axis
For operating mode 2 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
The EUT can be placed in Y-axis and Z-axis. After evaluating, Z-axis was the worst case, so it's recorded in this report.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Normal Link
The EUT can be placed in Y-axis and Z-axis. After evaluating, Z-axis was the worst case, so it's recorded in this report.	
1	WLAN 2.4GHz + WLAN 5GHz
Refer to Appendix G for Radiated Emission Co-location.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	CTX
1	WLAN 2.4GHz + WLAN 5GHz
Refer to Sporton Test Report No.: FA770425 for Co-location RF Exposure Evaluation.	

2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

Accessories				
No.	**Equipment Name**	**Brand Name**	**Model Name**	**Rating**
1	Adapter	DVE	DSA-18PFM-12 FUS 120150	Input:100-240V~50/60Hz, 0.6A Ouput:+12V, 1.5A

2.5 Support Equipment

For Test Site No: CO01-CB

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	Notebook*4	DELL	E6430	DoC

For Test Site No: 03CH01-CB (Below 1GHz)

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	Notebook*2	DELL	E4300	DoC
2	Notebook*2	Apple	Mac Book	DoC

For Test Site No: 03CH01-CB (Above 1GHz)

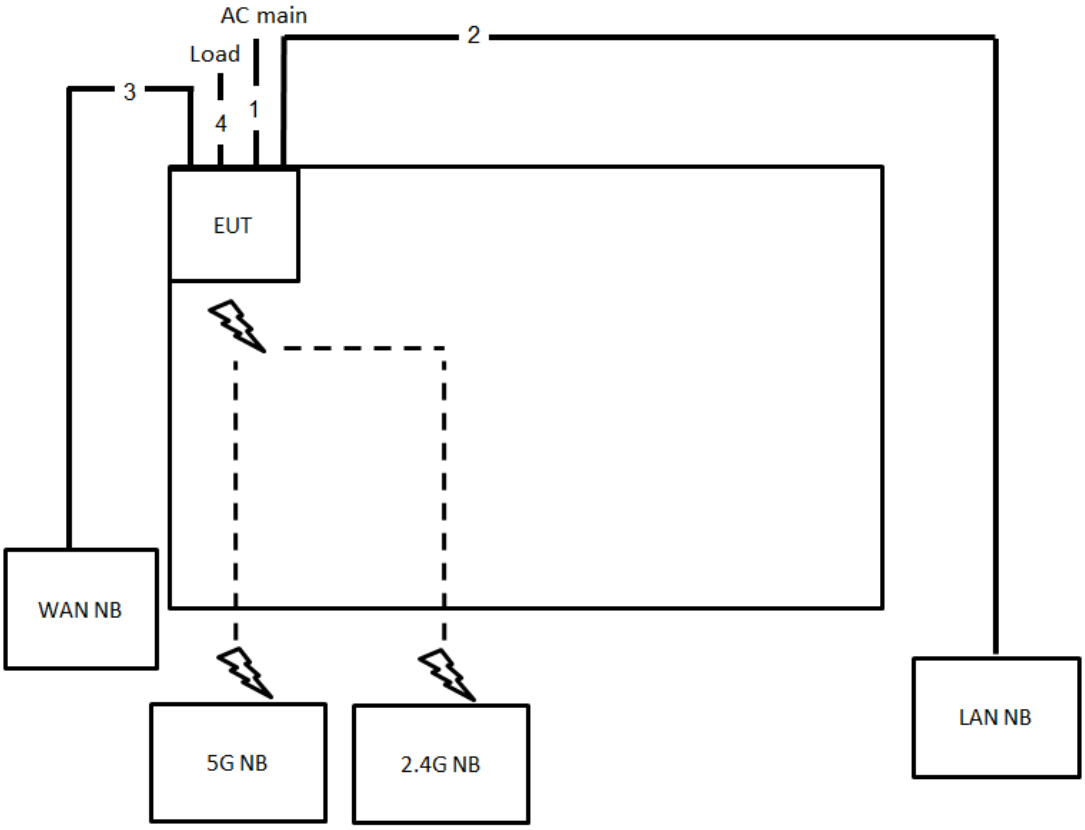
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	Notebook	DELL	E4300	DoC

For Test Site No: TH01-CB

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	Notebook	DELL	E4300	DoC

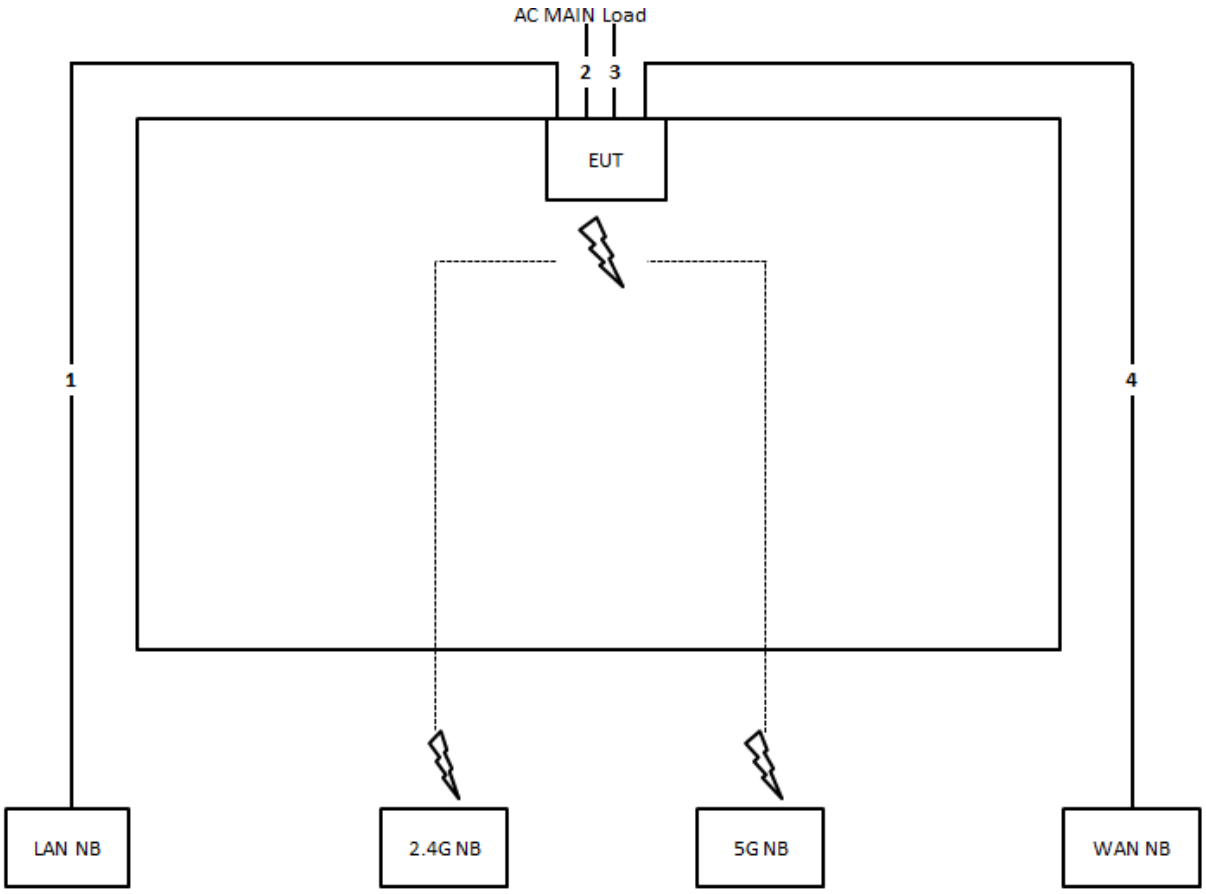
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



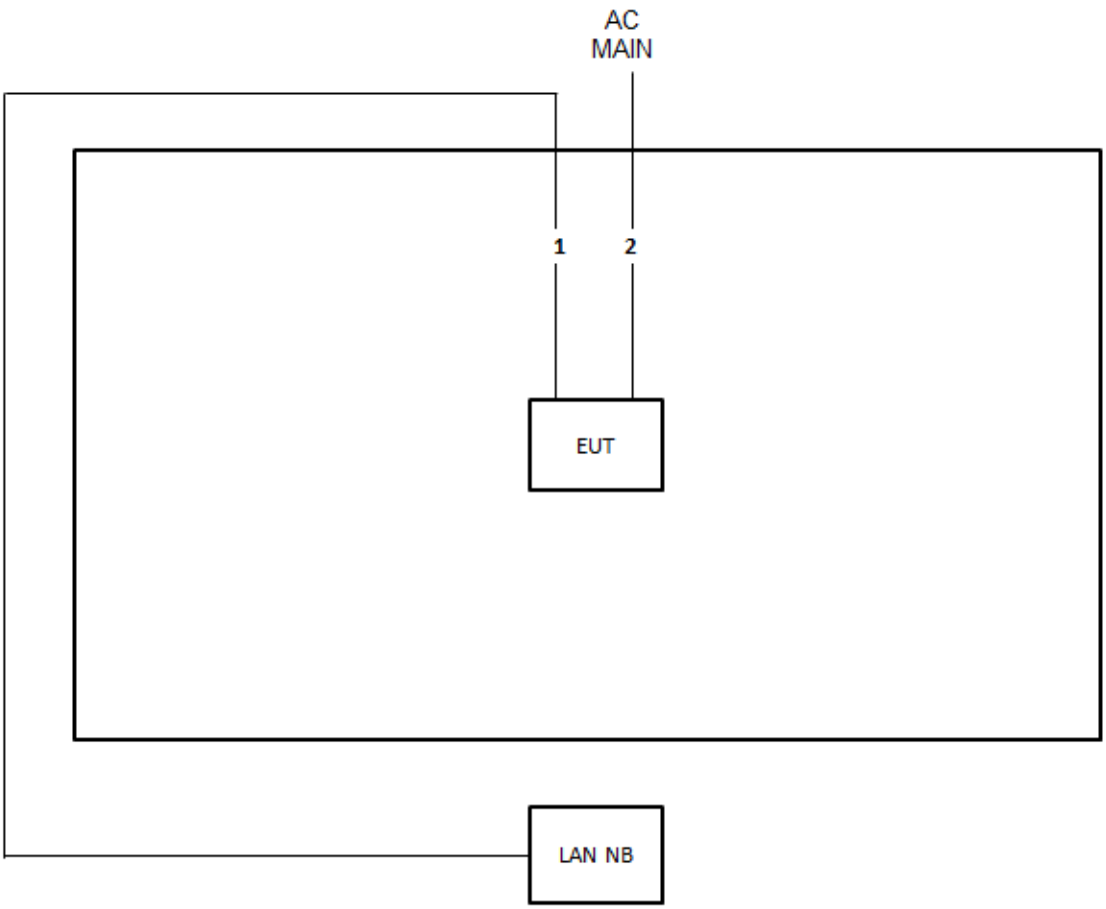
Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	10m
4	RJ-45 cable*2	No	1.5m

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	1.5m
3	RJ-45 cable*2	No	1.5m
4	RJ-45 cable	No	10m

Test Setup Diagram - Radiated Test < 1GHz



Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	1.5m

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

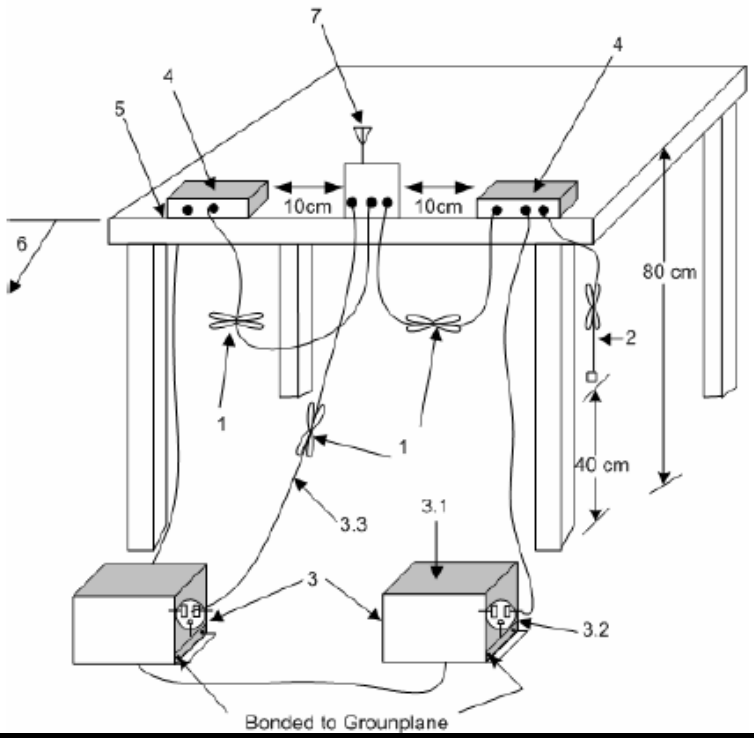
Refer a test equipment and calibration data table in this test report.

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

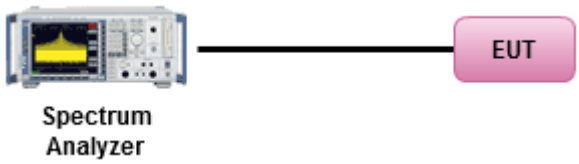
Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

Test Method	
▪ For the emission bandwidth shall be measured using one of the options below:	
	☒ Refer as FCC KDB 558074, clause 8.1 Option 1 for 6 dB bandwidth measurement.
	☐ Refer as FCC KDB 558074, clause 8.2 Option 2 for 6 dB bandwidth measurement.
	☐ Refer as ANSI C63.10, clause 6.9.1 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	
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 FCC KDB 558074, clause 9.1.1 Option 1 (RBW ≥ EBW method).
	☐ Refer as FCC KDB 558074, clause 9.1.2 Option 2 (peak power meter for VBW ≥ DTS BW)
▪ Maximum Conducted Output Power	
	[duty cycle ≥ 98% or external video / power trigger]
	☐ Refer as FCC KDB 558074, clause 9.2.2.2 Method AVGSA-1 (spectral trace averaging).
	☐ Refer as FCC KDB 558074, clause 9.2.2.3 Method AVGSA-1 Alt. (slow sweep speed)
	duty cycle < 98% and average over on/off periods with duty factor
	☐ Refer as FCC KDB 558074, clause 9.2.2.4 Method AVGSA-2 (spectral trace averaging).
	☐ Refer as FCC KDB 558074, clause 9.2.2.5 Method AVGSA-2 Alt. (slow sweep speed)
	RF power meter and average over on/off periods with duty factor or gated trigger
	☒ Refer as FCC KDB 558074, clause 9.2.3 Method AVGPM-G (using an RF average power meter).
	☐ Refer as FCC KDB 558074, clause 9.1.2 PKPM1 Peak power meter method.
▪ 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: $P_{total} = P_1 + P_2 + \ldots + P_n$ (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

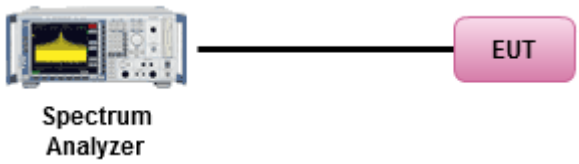
Refer a test equipment and calibration data table in this test report.

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 FCC KDB 558074, clause 10.2 Method PKPSD (RBW=3-100kHz; Detector=peak).		
	[duty cycle ≥ 98% or external video / power trigger]		
	☐ Refer as FCC KDB 558074, clause 10.3 Method AVGPSD-1 (spectral trace averaging).		
	☐ Refer as FCC KDB 558074, clause 10.4 Method AVGPSD-2 (slow sweep speed)		
	duty cycle < 98% and average over on/off periods with duty factor		
	☐ Refer as FCC KDB 558074, clause 10.5 Method AVGPSD-1 Alt (spectral trace averaging).		
	☐ Refer as FCC KDB 558074, clause 10.6 Method AVGPSD-2 Alt. (slow sweep speed)		
▪ 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.	

3.4.4 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

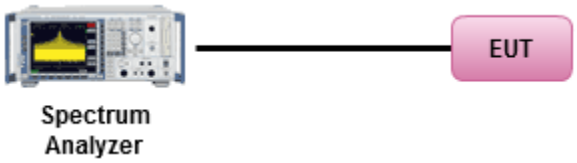
Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method
▪ Refer as FCC KDB 558074, clause 11 for unwanted emissions into non-restricted 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.

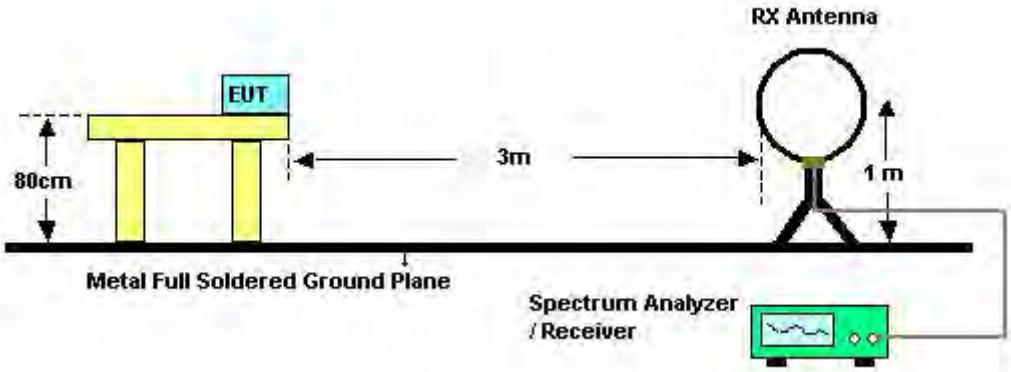
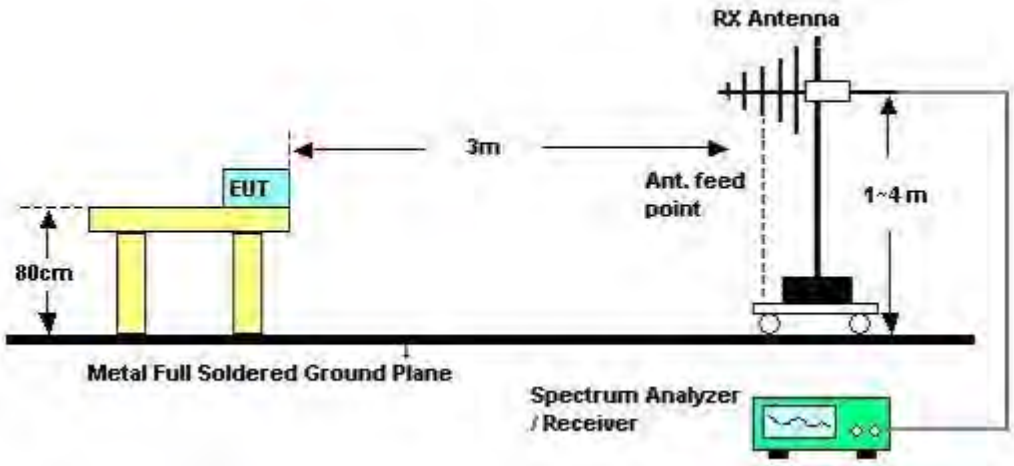
3.6.2 Measuring Instruments

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

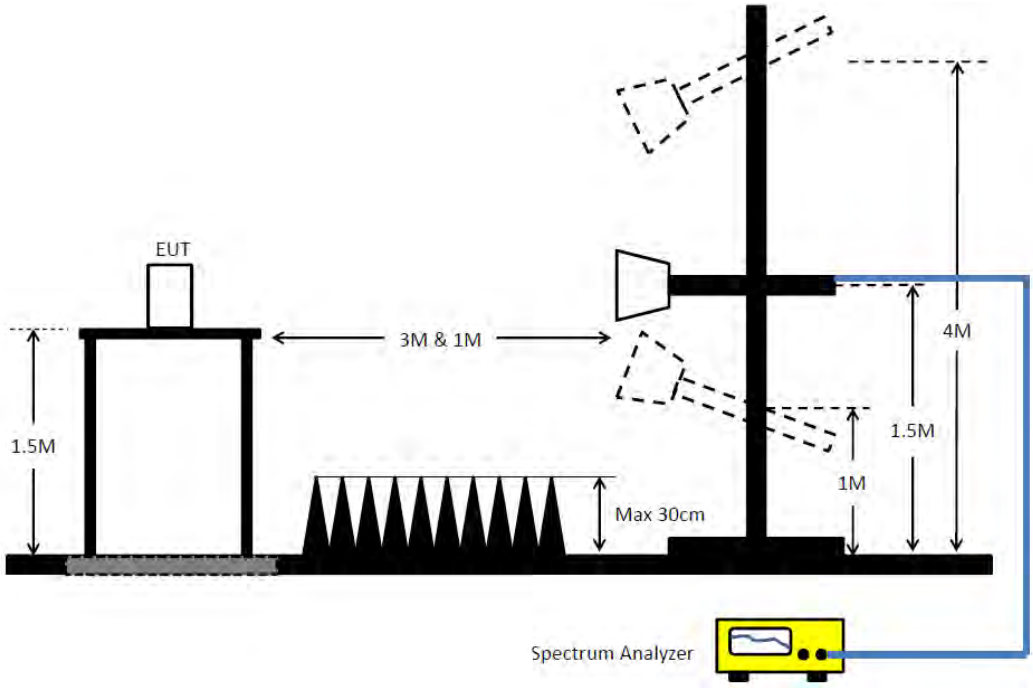
3.6.3 Test Procedures

Test Method			
▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].			
▪ Refer as ANSI C63.10, clause 6.9.2.2 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 12 for unwanted emissions into restricted bands.		
		☐	Refer as FCC KDB 558074, clause 12.2.5.1 Option 1 (trace averaging for duty cycle ≥98%)
		☐	Refer as FCC KDB 558074, clause 12.2.5.2 Option 2 (trace averaging + duty factor).
		☒	Refer as FCC KDB 558074, clause 12.2.5.3 Option 3 (Reduced VBW≥1/T).
		☐	Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.
		☐	Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.
		☒	Refer as FCC KDB 558074, clause 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 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 13.2 (ANSI C63.10, clause 6.9.3) for marker-delta method for band-edge measurements.		
	▪ Refer as FCC KDB 558074, clause 13.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).		
▪ For conducted and cabinet radiation measurement, refer as FCC KDB 558074, clause 12.2.2.			
	▪ 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.		

3.6.4 Test Setup

Transmitter Radiated Emissions
9kHz ~30MHz

30MHz~1GHz


Above 1GHz



3.6.5 Transmitter Radiated Unwanted Emissions (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.

3.6.6 Test Result of Transmitter Radiated Unwanted Emissions

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 23, 2017	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 14, 2016	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Dec. 21, 2016	Conduction (CO01-CB)
COND Cable	Woken	Cable	01	150kHz ~ 30MHz	May 23, 2017	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	Conduction (CO01-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Aug. 30, 2016	Radiation (03CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2016*	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 10, 2016	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 25, 2016	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 05, 2017	Radiation (03CH01-CB)
Pre-Amplifier	EMCI	EMC330N	980332	20MHz ~ 3GHz	May 02, 2017	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 16, 2017	Radiation (03CH01-CB)
Pre-Amplifier	-	-	TF-130N-R1	26GHz ~ 40GHz	Jun. 20, 2017	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 10, 2017	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Nov. 22, 2016	Radiation (03CH01-CB)
EMI Test	R&S	ESCS	100355	9kHz ~ 2.75GHz	May 06, 2017	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-16+17	N/A	30 MHz ~ 1 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16+17	N/A	1 GHz ~ 18 GHz	Oct. 24, 2016	Radiation (03CH01-CB)

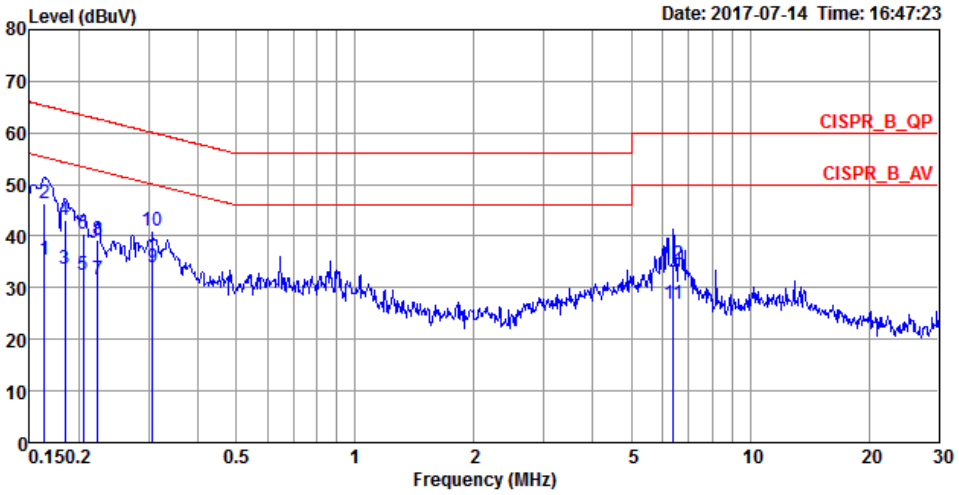
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
RF Cable-high	Woken	High Cable-40G#1	N/A	18GHz ~ 40 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
Test Software	Audix	E3	6.2009-l0-7	N/A	N/A	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 26, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-6	1 GHz – 26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-7	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-8	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-9	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 22, 2016	Conducted (TH01-CB)

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

"*" Calibration Interval of instruments listed above is two years.

N.C.R. means Non-Calibration required.

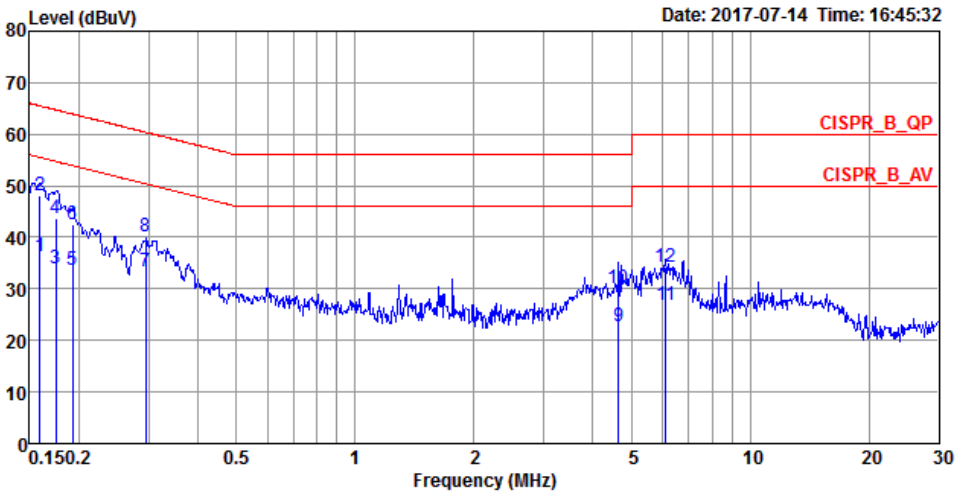
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	Normal Link		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1633	35.53	-19.77	55.30	25.54	9.95	0.04	Average	NEUTRAL
2	0.1633	46.30	-19.00	65.30	36.31	9.95	0.04	QP	NEUTRAL
3	0.1844	33.78	-20.50	54.28	23.76	9.97	0.05	Average	NEUTRAL
4	0.1844	42.99	-21.29	64.28	32.97	9.97	0.05	QP	NEUTRAL
5	0.2050	32.47	-20.93	53.40	22.44	9.98	0.05	Average	NEUTRAL
6	0.2050	40.53	-22.87	63.40	30.50	9.98	0.05	QP	NEUTRAL
7	0.2232	31.54	-21.16	52.70	21.51	9.98	0.05	Average	NEUTRAL
8	0.2232	39.31	-23.39	62.70	29.28	9.98	0.05	QP	NEUTRAL
9	0.3067	34.01	-16.05	50.06	24.00	9.97	0.04	Average	NEUTRAL
10	0.3067	41.11	-18.95	60.06	31.10	9.97	0.04	QP	NEUTRAL
11	6.3859	26.98	-23.02	50.00	16.71	10.12	0.15	Average	NEUTRAL
12	6.3859	34.61	-25.39	60.00	24.34	10.12	0.15	QP	NEUTRAL

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Line
Operating Function	Normal Link		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1590	36.43	-19.09	55.52	26.44	9.95	0.04	Average	LINE
2	0.1590	48.08	-17.44	65.52	38.09	9.95	0.04	QP	LINE
3	0.1749	33.82	-20.90	54.72	23.83	9.94	0.05	Average	LINE
4	0.1749	43.82	-20.90	64.72	33.83	9.94	0.05	QP	LINE
5	0.1924	33.53	-20.40	53.93	23.55	9.93	0.05	Average	LINE
6	0.1924	42.39	-21.54	63.93	32.41	9.93	0.05	QP	LINE
7	0.2955	33.26	-17.11	50.37	23.31	9.91	0.04	Average	LINE
8	0.2955	40.18	-20.19	60.37	30.23	9.91	0.04	QP	LINE
9	4.6469	22.66	-23.34	46.00	12.55	9.97	0.14	Average	LINE
10	4.6469	30.25	-25.75	56.00	20.14	9.97	0.14	QP	LINE
11	6.1209	26.76	-23.24	50.00	16.61	10.00	0.15	Average	LINE
12	6.1209	34.13	-25.87	60.00	23.98	10.00	0.15	QP	LINE

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
802.11b_(1Mbps)_2TX	-	-	-	-	-
2.4-2.4835GHz	8.075M	12.944M	12M9G1D	8.025M	12.569M
802.11g_(6Mbps)_2TX	-	-	-	-	-
2.4-2.4835GHz	15.9M	22.364M	22M4D1D	14.4M	16.292M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-
2.4-2.4835GHz	15.65M	23.438M	23M4D1D	13.8M	17.491M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-
2.4-2.4835GHz	35.05M	35.932M	35M9D1D	32.55M	35.832M

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;

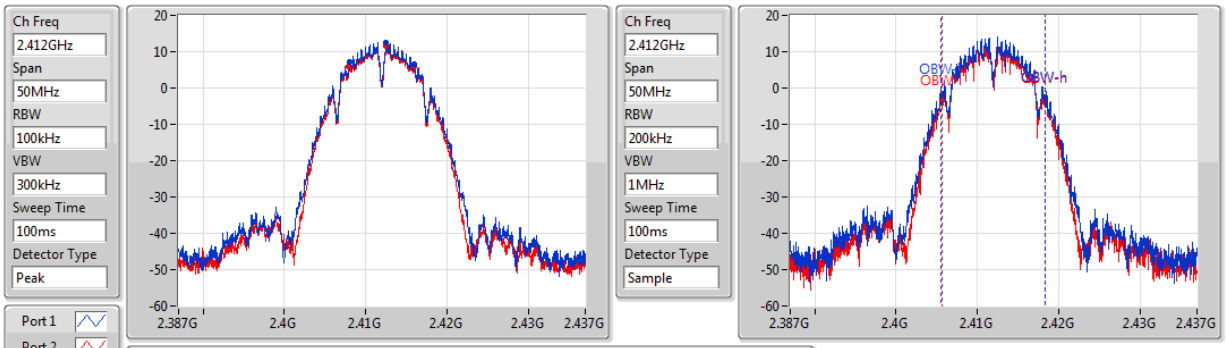
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	8.025M	12.844M	8.075M	12.694M
2437MHz	Pass	500k	8.05M	12.944M	8.025M	12.644M
2462MHz	Pass	500k	8.05M	12.644M	8.05M	12.569M
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	14.4M	16.367M	14.975M	16.292M
2437MHz	Pass	500k	15.1M	22.364M	15.025M	19.965M
2462MHz	Pass	500k	15.075M	16.367M	15.9M	16.317M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	15M	17.541M	15.05M	17.491M
2437MHz	Pass	500k	15M	23.438M	15.05M	21.789M
2462MHz	Pass	500k	13.8M	17.541M	15.65M	17.516M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	32.55M	35.832M	34.95M	35.882M
2437MHz	Pass	500k	35M	35.932M	34.95M	35.882M
2452MHz	Pass	500k	35.05M	35.832M	33.8M	35.832M

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

802.11b_(1Mbps)_2TX EBW

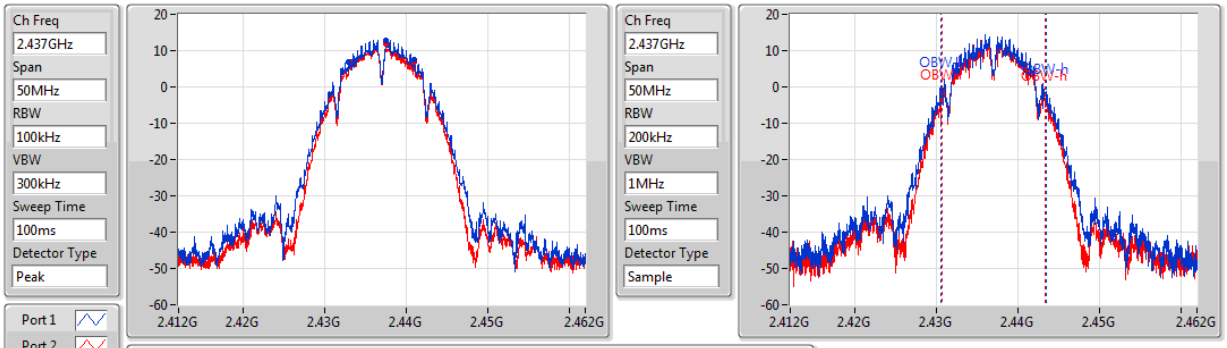
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.025M	2.407975G	2.416G	12.844M	2.405528G	2.418372G	500k	1
8.075M	2.40795G	2.416025G	12.694M	2.405603G	2.418297G	500k	2

802.11b_(1Mbps)_2TX EBW

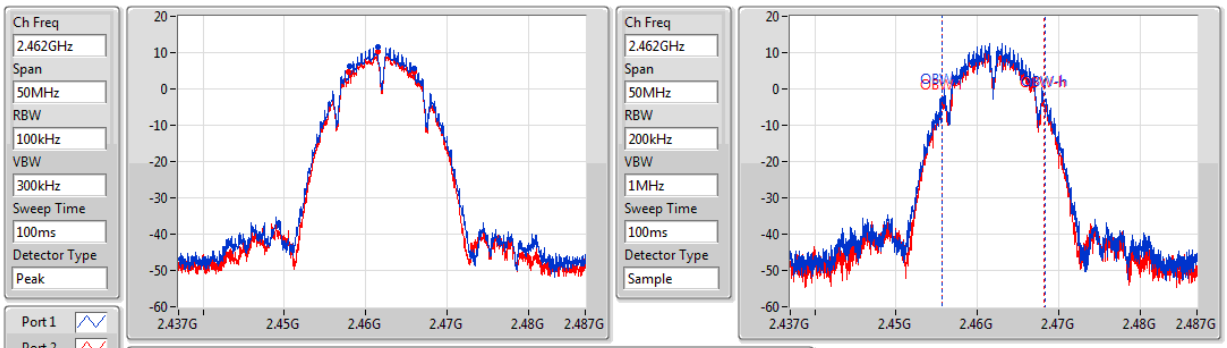
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.05M	2.43295G	2.441G	12.944M	2.430478G	2.443422G	500k	1
8.025M	2.432975G	2.441G	12.644M	2.430628G	2.443272G	500k	2

802.11b_(1Mbps)_2TX EBW

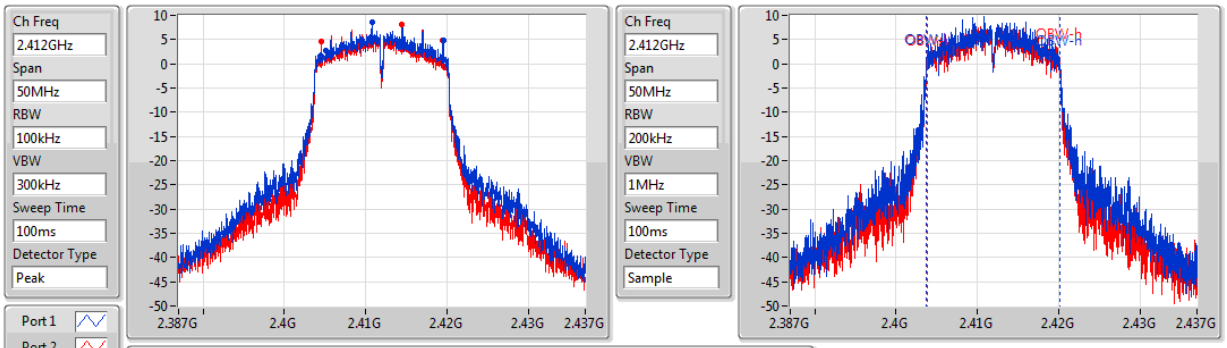
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.05M	2.457975G	2.466025G	12.644M	2.455653G	2.468297G	500k	1
8.05M	2.45795G	2.466G	12.569M	2.455678G	2.468247G	500k	2

802.11g_(6Mbps)_2TX — EBW

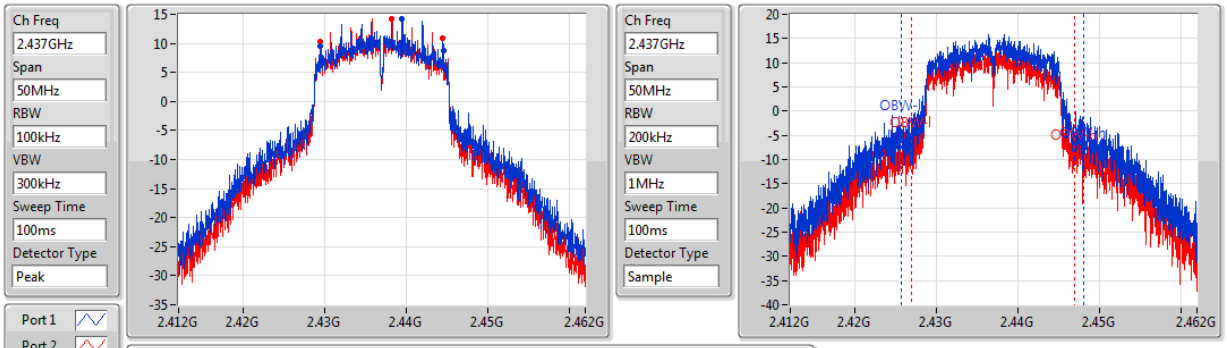
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
14.4M	2.405125G	2.419525G	16.367M	2.403779G	2.420146G	500k	1
14.975M	2.404525G	2.4195G	16.292M	2.403804G	2.420096G	500k	2

802.11g_(6Mbps)_2TX — EBW

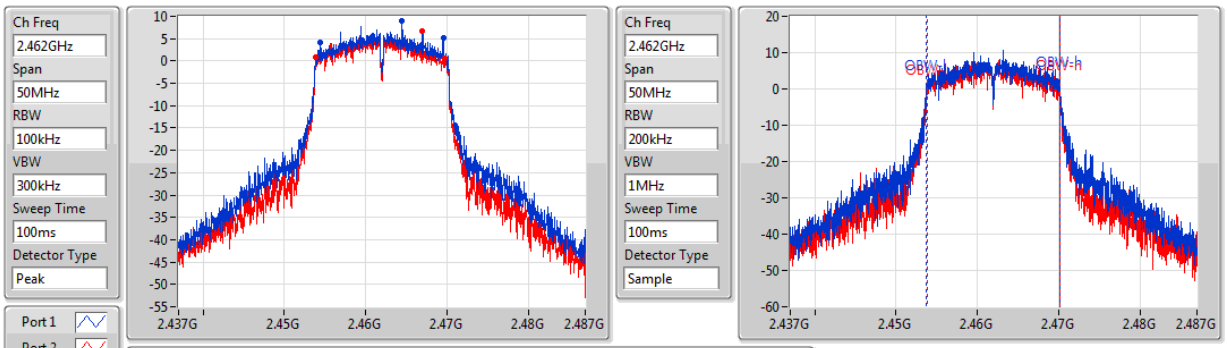
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.1M	2.42945G	2.44455G	22.364M	2.425681G	2.448044G	500k	1
15.025M	2.42945G	2.444475G	19.965M	2.426955G	2.44692G	500k	2

802.11g_(6Mbps)_2TX — EBW

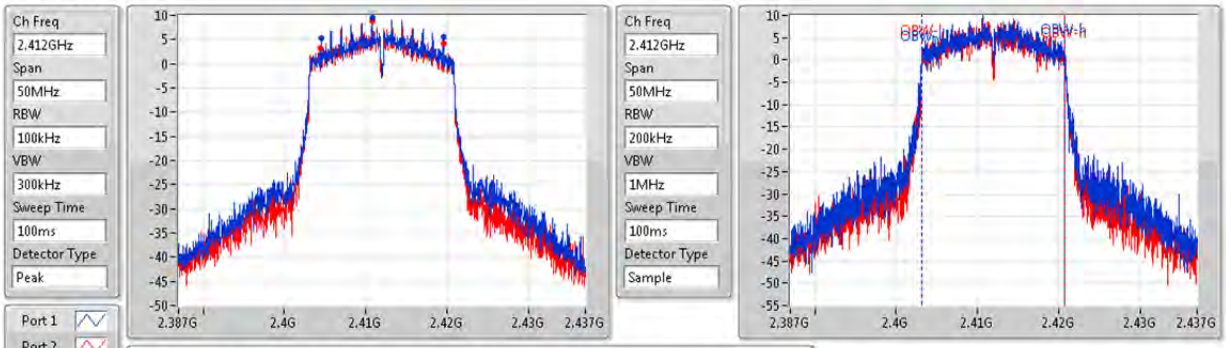
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.075M	2.45445G	2.469525G	16.367M	2.453779G	2.470146G	500k	1
15.9M	2.45385G	2.46975G	16.317M	2.453804G	2.470121G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

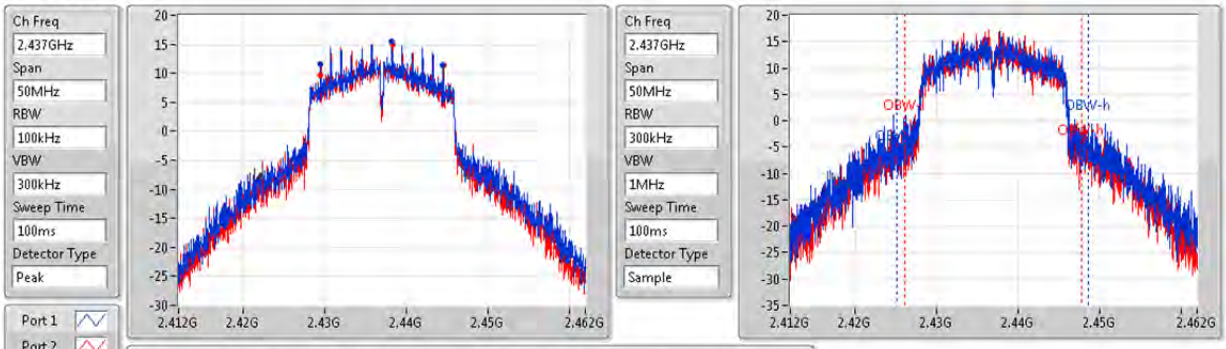
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15M	2.404525G	2.419525G	17.541M	2.403204G	2.420746G	500k	1
15.05M	2.404475G	2.419525G	17.491M	2.403204G	2.420696G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

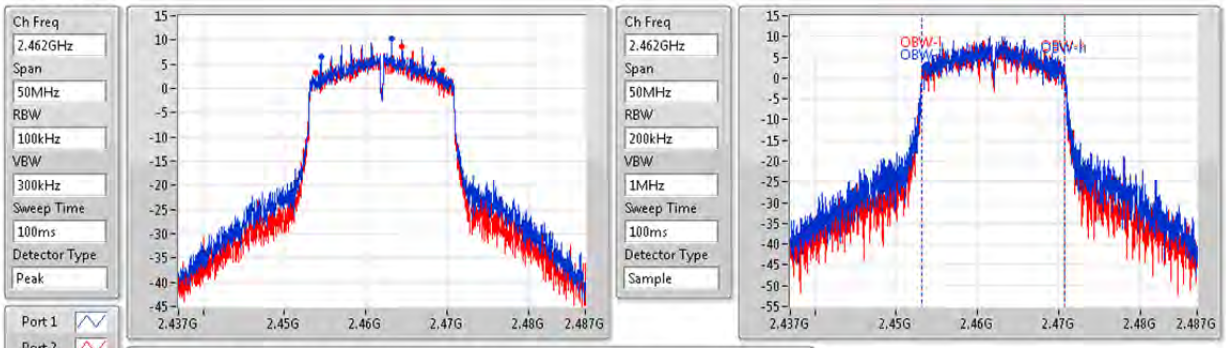
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15M	2.429475G	2.444475G	23.438M	2.425156G	2.448594G	500k	1
15.05M	2.429475G	2.444525G	21.789M	2.42603G	2.44782G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

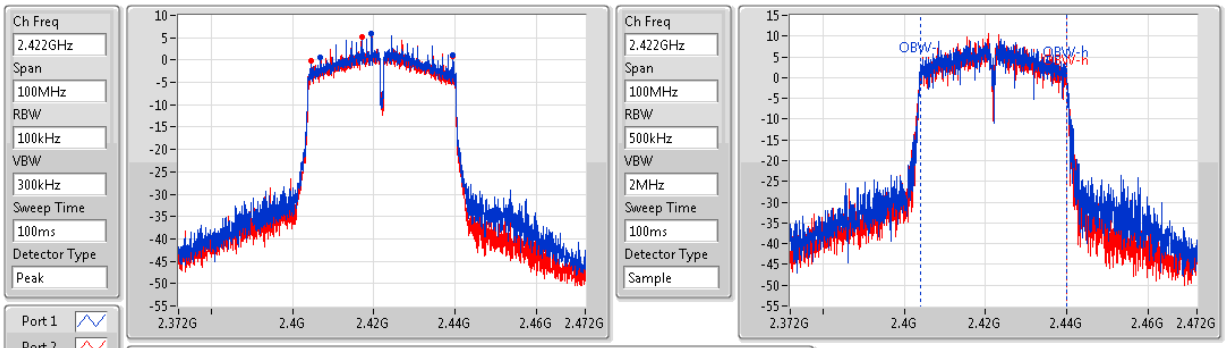
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
13.8M	2.4545G	2.4683G	17.541M	2.453204G	2.470746G	500k	1
15.65M	2.45385G	2.4695G	17.516M	2.453204G	2.470721G	500k	2

802.11n HT40_Nss1,(MCS0)_2TX — EBW

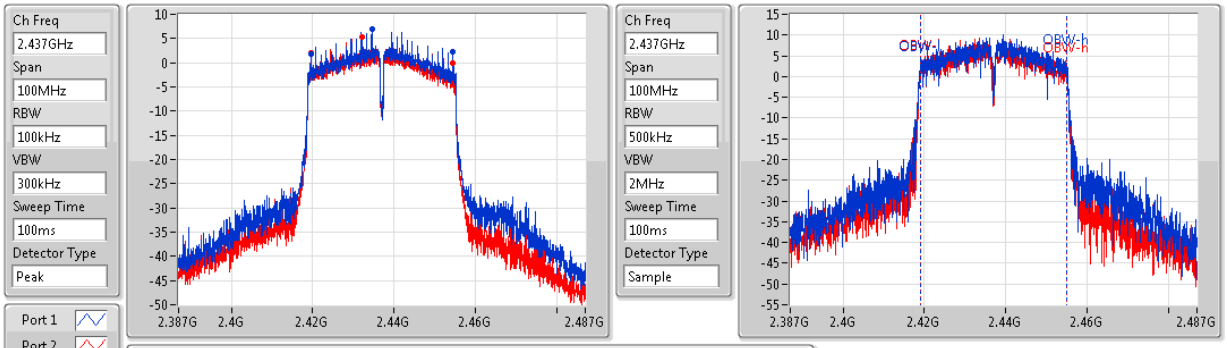
2422MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
32.55M	2.40695G	2.4395G	35.832M	2.404009G	2.439841G	500k	1
34.95M	2.40455G	2.4395G	35.882M	2.404009G	2.439891G	500k	2

802.11n HT40_Nss1,(MCS0)_2TX — EBW

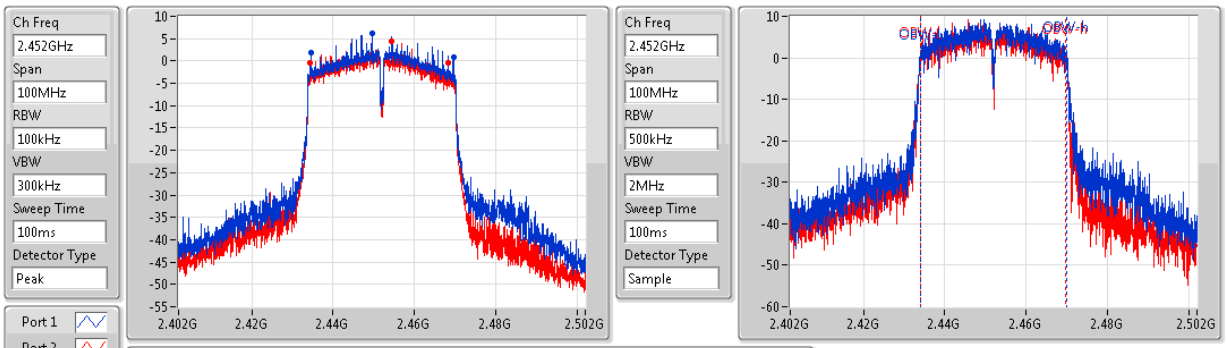
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35M	2.4195G	2.4545G	35.932M	2.418959G	2.454891G	500k	1
34.95M	2.4195G	2.45445G	35.882M	2.418959G	2.454841G	500k	2

802.11n HT40_Nss1,(MCS0)_2TX — EBW

2452MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.05M	2.4345G	2.46955G	35.832M	2.434059G	2.469891G	500k	1
33.8M	2.43445G	2.46825G	35.832M	2.433959G	2.469791G	500k	2

Summary

Mode	Total Power (dBm)	Total Power (W)
802.11b_(1Mbps)_2TX	-	-
2.4-2.4835GHz	25.69	0.37068
802.11g_(6Mbps)_2TX	-	-
2.4-2.4835GHz	27.93	0.62087
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-
2.4-2.4835GHz	28.20	0.66069
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-
2.4-2.4835GHz	21.69	0.14757

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.71	21.93	21.17	24.58	30.00
2437MHz	Pass	2.71	22.68	22.67	25.69	30.00
2462MHz	Pass	2.71	19.83	19.73	22.79	30.00
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.71	20.24	19.42	22.86	30.00
2437MHz	Pass	2.71	25.15	24.68	27.93	30.00
2462MHz	Pass	2.71	19.99	19	22.53	30.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.71	19.09	18.79	21.95	30.00
2437MHz	Pass	2.71	25.23	25.15	28.20	30.00
2462MHz	Pass	2.71	19.88	19.28	22.60	30.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	2.71	18.34	17.62	21.01	30.00
2437MHz	Pass	2.71	19.07	18.24	21.69	30.00
2452MHz	Pass	2.71	18.56	17.55	21.09	30.00

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

Summary

Mode	PD (dBm/RBW)
802.11b_(1Mbps)_2TX	-
2.4-2.4835GHz	-2.1
802.11g_(6Mbps)_2TX	-
2.4-2.4835GHz	-0.56
802.11ac VHT20_Nss1,(MCS0)_2TX	-
2.4-2.4835GHz	0.53
802.11ac VHT40_Nss1,(MCS0)_2TX	-
2.4-2.4835GHz	-7.99

RBW=3kHz.

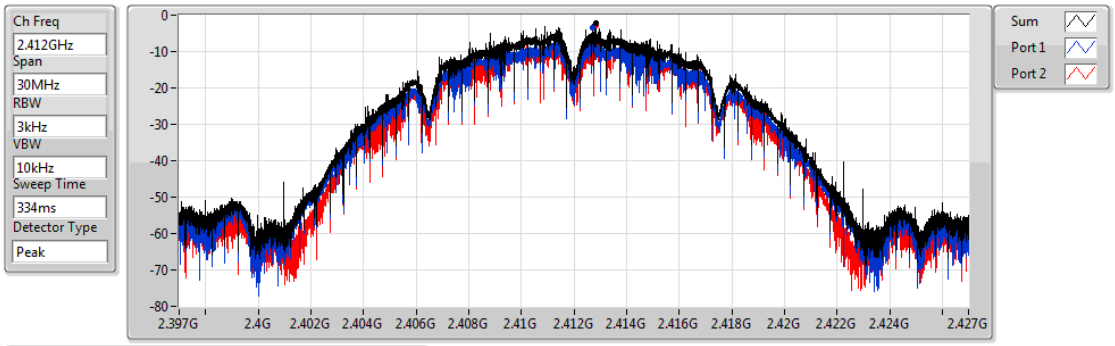
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.72	-3.53	-2.91	-2.10	8.00
2437MHz	Pass	5.72	-3.99	-5.01	-2.23	8.00
2462MHz	Pass	5.72	-4.7	-7.14	-4.17	8.00
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.72	-7.55	-7.59	-5.10	8.00
2437MHz	Pass	5.72	-2.37	-3.47	-0.56	8.00
2462MHz	Pass	5.72	-7.53	-8.17	-5.64	8.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.72	-6.52	-6.31	-4.60	8.00
2437MHz	Pass	5.72	-2.22	-0.83	0.53	8.00
2462MHz	Pass	5.72	-6.65	-6.47	-4.41	8.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	5.72	-9.88	-11.08	-9.25	8.00
2437MHz	Pass	5.72	-9.16	-8.82	-7.99	8.00
2452MHz	Pass	5.72	-9.95	-10.77	-8.80	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 X power density;

802.11b_(1Mbps)_2TX PSD

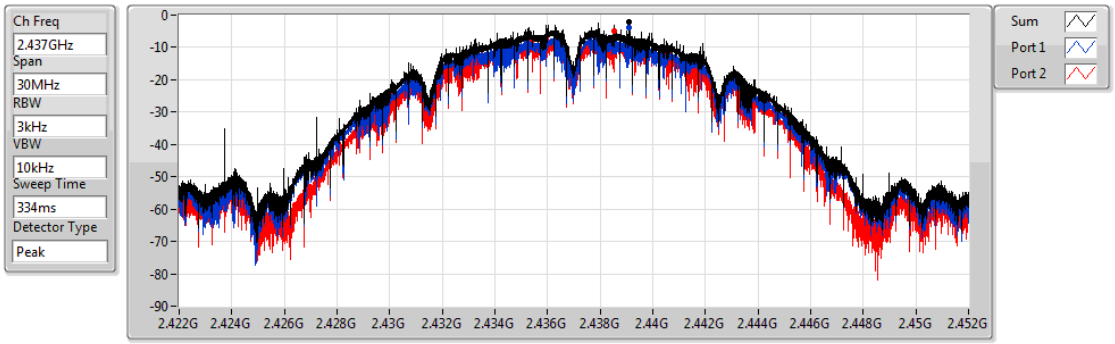
2412MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.10	-2.10	-3.53	-2.91

802.11b_(1Mbps)_2TX PSD

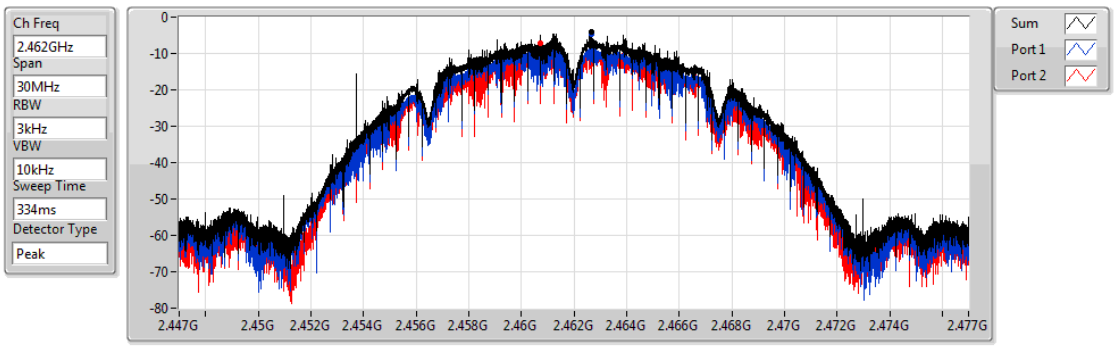
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.23	-2.23	-3.99	-5.01

802.11b_(1Mbps)_2TX PSD

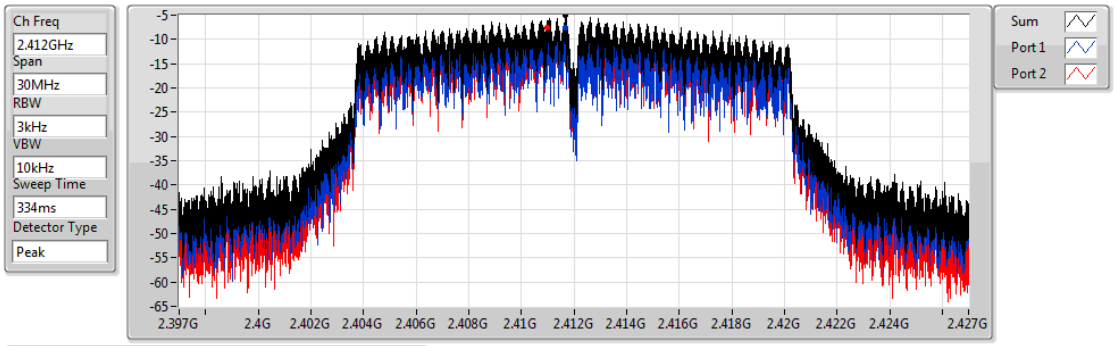
2462MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.17	-4.17	-4.70	-7.14

802.11g_(6Mbps)_2TX PSD

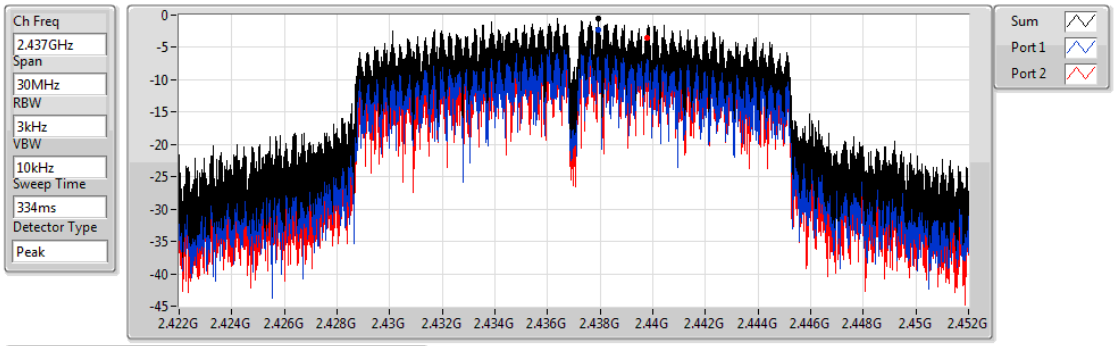
2412MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.10	-5.10	-7.55	-7.59

802.11g_(6Mbps)_2TX PSD

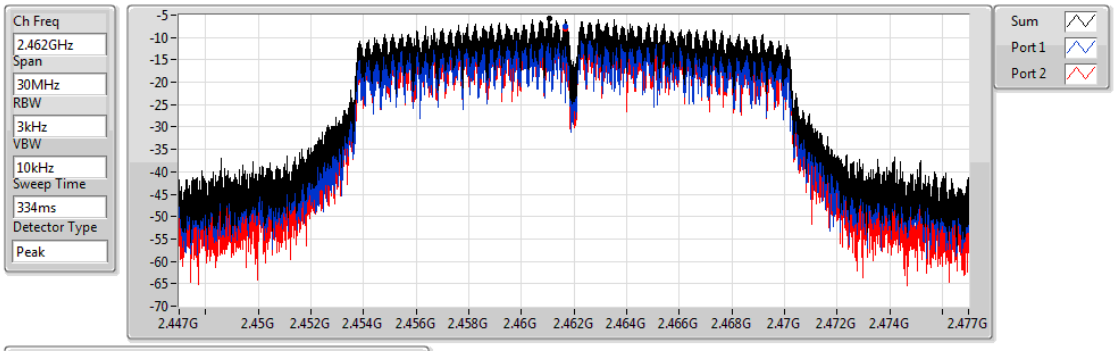
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.56	-0.56	-2.37	-3.47

802.11g_(6Mbps)_2TX PSD

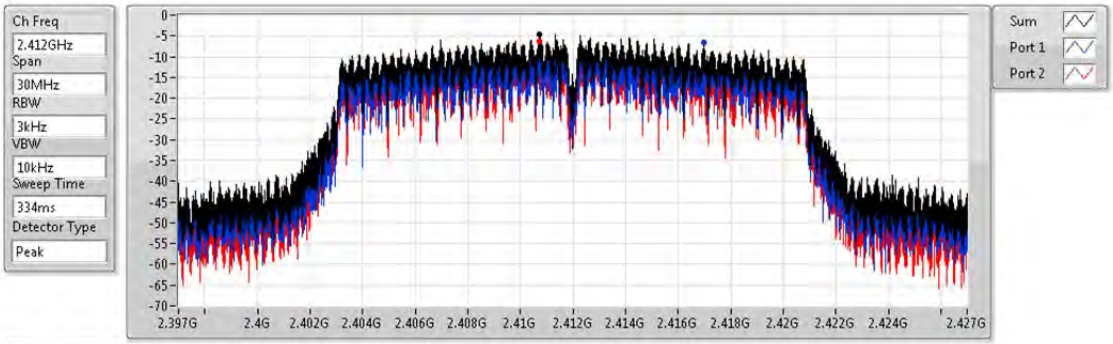
2462MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.64	-5.64	-7.53	-8.17

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

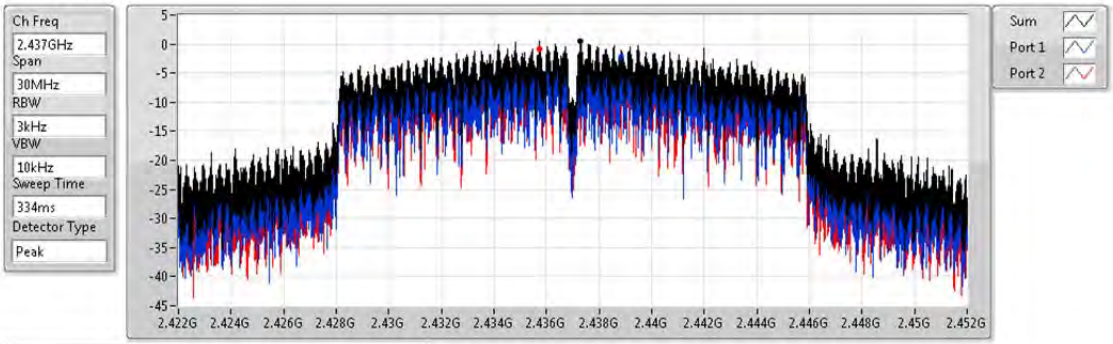
2412MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.60	-4.60	-6.52	-6.31

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

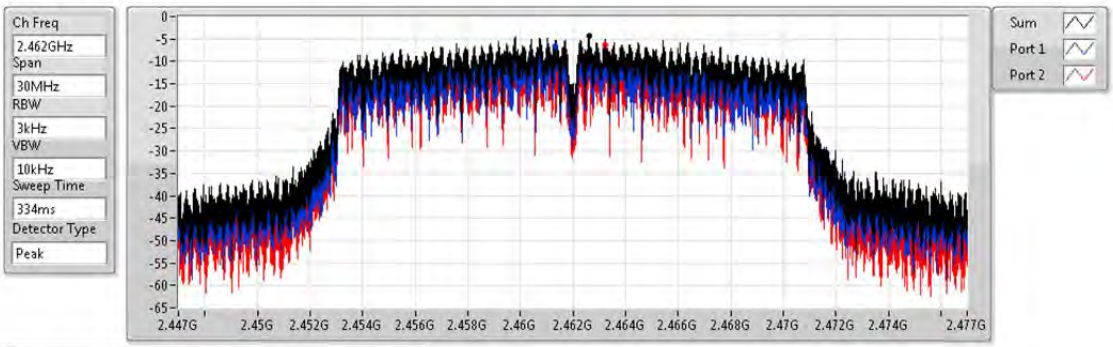
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.53	0.53	-2.22	-0.83

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

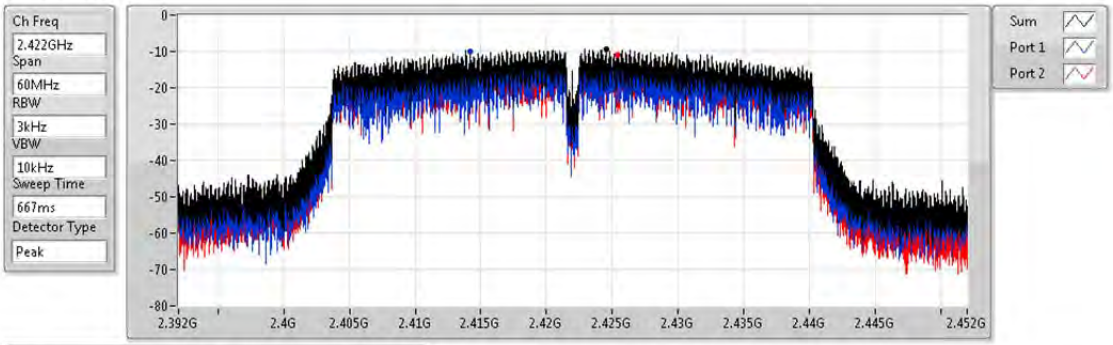
2462MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.41	-4.41	-6.65	-6.47

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

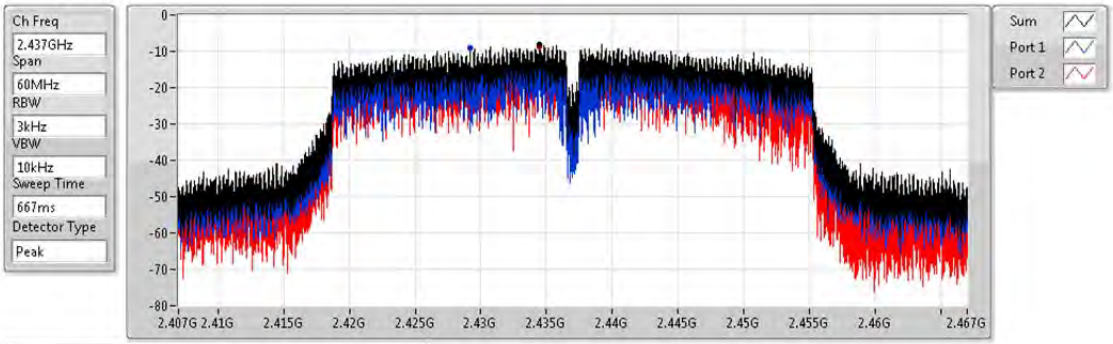
2422MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.25	-9.25	-9.88	-11.08

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

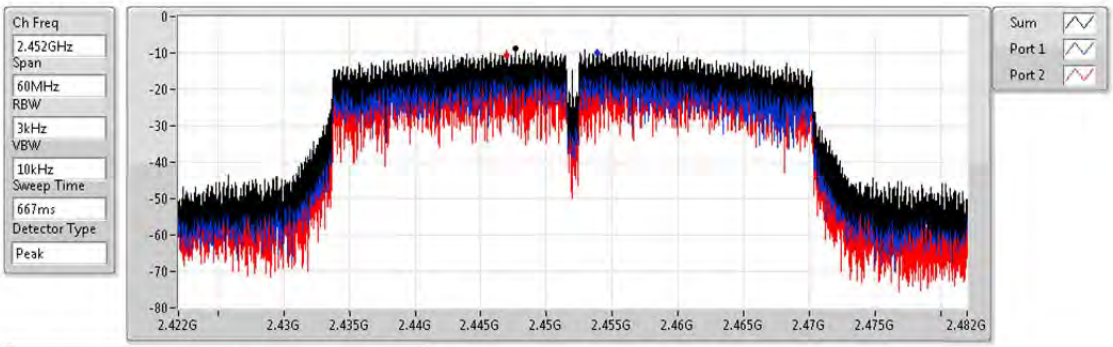
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.99	-7.99	-9.16	-8.82

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

2452MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.80	-8.80	-9.95	-10.77

Summary

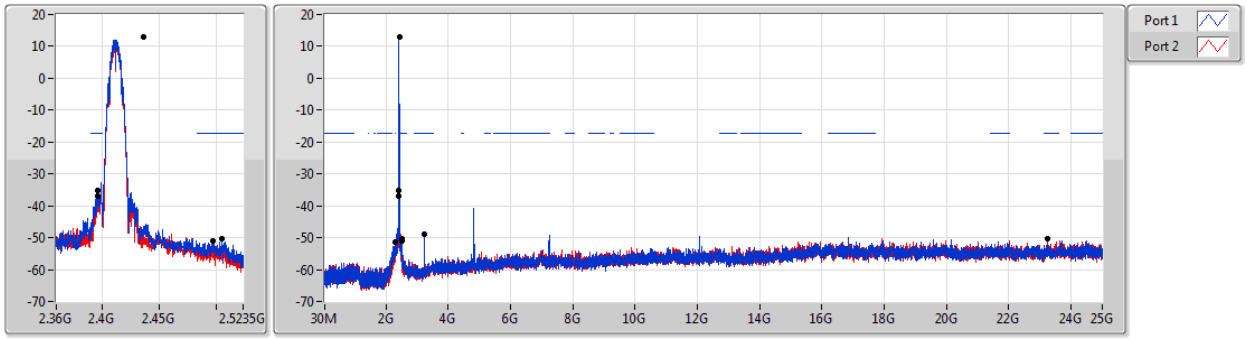
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	2.429559G	5.42	-24.58	2.160845G	-58.11	2.39584G	-29.18	2.50574G	-49.9	16.398407G	-53.81	2

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_(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.435905G	12.81	-17.19	2.307575G	-51.29	2.396G	-35.2	2.50478G	-50.15	3.214652G	-48.83	1
2412MHz	Pass	2.435905G	12.81	-17.19	2.300585G	-51.51	2.39648G	-37.07	2.49694G	-51	23.246833G	-50.18	2
2437MHz	Pass	2.435905G	12.81	-17.19	2.30874G	-51.09	2.396G	-48.56	2.48486G	-49.09	3.248367G	-49.86	1
2437MHz	Pass	2.435905G	12.81	-17.19	2.309905G	-53	2.39408G	-46.76	2.48494G	-50.12	16.638742G	-51.04	2
2462MHz	Pass	2.435905G	12.81	-17.19	2.30408G	-52.65	2.39192G	-49.09	2.4859G	-47.39	23.339549G	-49.53	1
2462MHz	Pass	2.435905G	12.81	-17.19	2.305245G	-52.9	2.39744G	-49.17	2.4839G	-49.01	16.242594G	-51.15	2
802.11g_(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.438243G	14.14	-15.86	2.309905G	-47.47	2.3976G	-22.59	2.4895G	-46.2	3.214652G	-47.38	1
2412MHz	Pass	2.438243G	14.14	-15.86	2.30408G	-49.26	2.39776G	-26.42	2.49638G	-48.46	16.52636G	-50.74	2
2437MHz	Pass	2.438243G	14.14	-15.86	2.30874G	-51.98	2.398G	-35.75	2.48414G	-40.88	2.543167G	-47.34	1
2437MHz	Pass	2.438243G	14.14	-15.86	2.30641G	-48.8	2.39448G	-34.61	2.48446G	-44.24	17.352371G	-51.04	2
2462MHz	Pass	2.438243G	14.14	-15.86	2.30175G	-51.39	2.39688G	-46.43	2.48382G	-35.99	3.282082G	-50.06	1
2462MHz	Pass	2.438243G	14.14	-15.86	2.30641G	-51.7	2.39144G	-46.52	2.48438G	-38.62	23.218737G	-50.29	2
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.432064G	13.91	-16.09	2.30874G	-47.92	2.39832G	-25.37	2.4875G	-47.19	3.214652G	-47.1	1
2412MHz	Pass	2.432064G	13.91	-16.09	2.30874G	-47.78	2.3968G	-27.22	2.4895G	-48.48	7.232327G	-52.65	2
2437MHz	Pass	2.432064G	13.91	-16.09	2.300585G	-51.28	2.39616G	-35.13	2.48374G	-39.55	2.5235G	-50.49	1
2437MHz	Pass	2.432064G	13.91	-16.09	2.30874G	-47.43	2.39696G	-33.38	2.4851G	-40.25	17.675471G	-51.92	2
2462MHz	Pass	2.432064G	13.91	-16.09	2.300585G	-51.54	2.39512G	-45.24	2.48406G	-33.1	2.5235G	-48.17	1
2462MHz	Pass	2.432064G	13.91	-16.09	2.30874G	-50.66	2.39792G	-44.75	2.4867G	-35.34	2.529119G	-52.81	2
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.429559G	5.42	-24.58	2.18489G	-53.48	2.39584G	-30.1	2.48974G	-45.27	3.228181G	-46.86	1
2422MHz	Pass	2.429559G	5.42	-24.58	2.160845G	-58.11	2.39584G	-29.18	2.50574G	-49.9	16.398407G	-53.81	2
2437MHz	Pass	2.429559G	5.42	-24.58	2.197485G	-53.16	2.3936G	-35.62	2.48542G	-40.91	3.247813G	-48.23	1
2437MHz	Pass	2.429559G	5.42	-24.58	2.19634G	-55.66	2.39584G	-38.44	2.48494G	-45.68	16.241351G	-53.57	2
2452MHz	Pass	2.429559G	5.42	-24.58	2.18947G	-51.72	2.39616G	-42.94	2.48366G	-30.34	3.267445G	-48.94	1
2452MHz	Pass	2.429559G	5.42	-24.58	2.18947G	-57.16	2.39408G	-44.97	2.48462G	-38.48	17.682896G	-54.28	2

802.11b_(1Mbps)_2TX CSE NdB

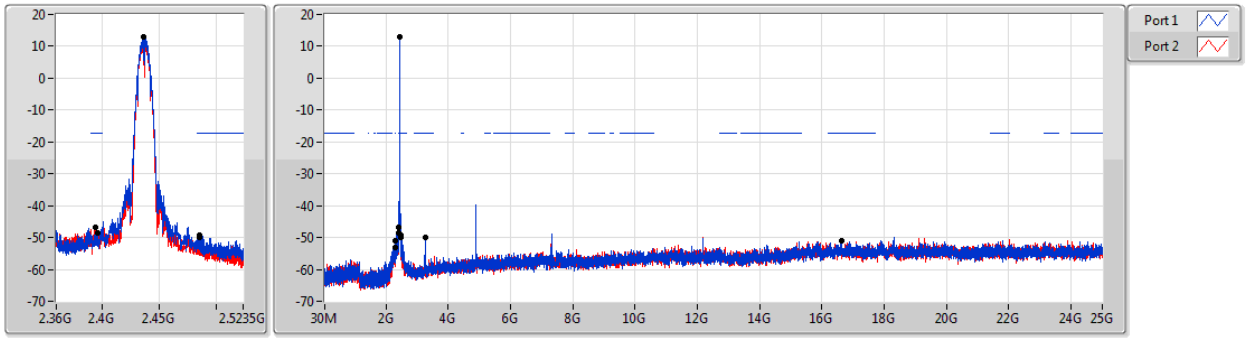
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.435905G	12.81	-17.19	2.307575G	-51.29	2.396G	-35.20	2.50478G	-50.15	3.214652G	-48.83	1
2.435905G	12.81	-17.19	2.300585G	-51.51	2.39648G	-37.07	2.49694G	-51.00	23.246833G	-50.18	2

802.11b_(1Mbps)_2TX CSE NdB

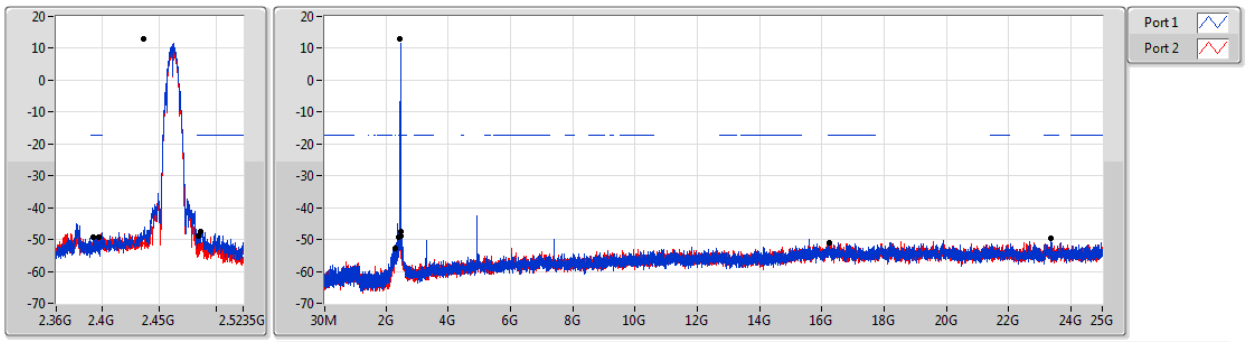
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.435905G	12.81	-17.19	2.30874G	-51.09	2.396G	-48.56	2.48486G	-49.09	3.248367G	-49.86	1
2.435905G	12.81	-17.19	2.309905G	-53.00	2.39408G	-46.76	2.48494G	-50.12	16.638742G	-51.04	2

802.11b_(1Mbps)_2TX CSE NdB

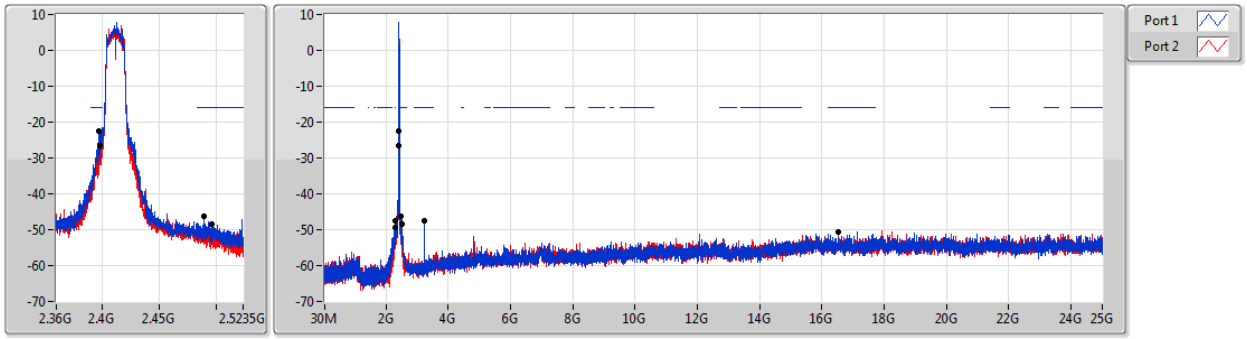
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.435905G	12.81	-17.19	2.30408G	-52.65	2.39192G	-49.09	2.4859G	-47.39	23.339549G	-49.53	1
2.435905G	12.81	-17.19	2.305245G	-52.90	2.39744G	-49.17	2.4839G	-49.01	16.242594G	-51.15	2

802.11g_(6Mbps)_2TX — CSE NdB

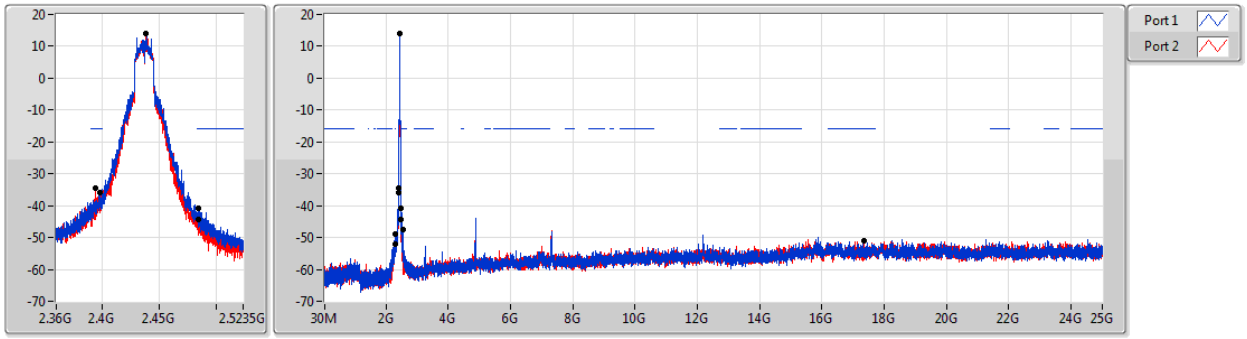
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.438243G	14.14	-15.86	2.309905G	-47.47	2.3976G	-22.59	2.4895G	-46.20	3.214652G	-47.38	1
2.438243G	14.14	-15.86	2.30408G	-49.26	2.39776G	-26.42	2.49638G	-48.46	16.52636G	-50.74	2

802.11g_(6Mbps)_2TX — CSE NdB

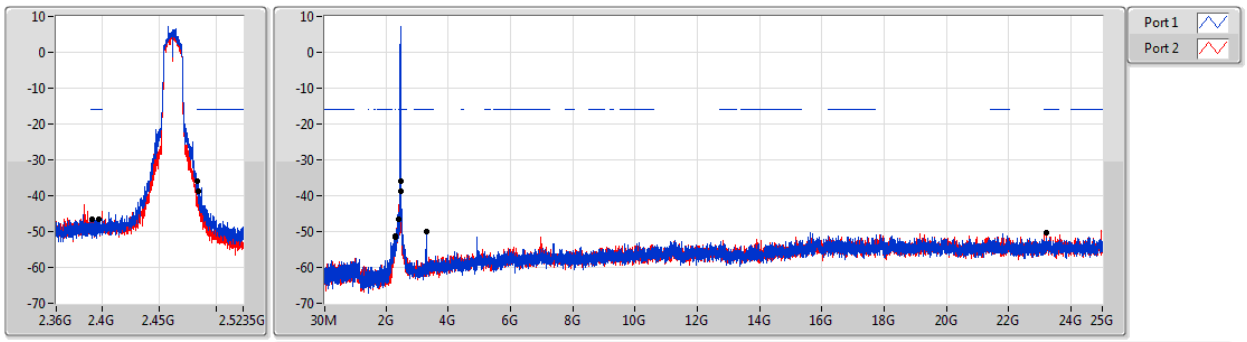
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.438243G	14.14	-15.86	2.30874G	-51.98	2.398G	-35.75	2.48414G	-40.88	2.543167G	-47.34	1
2.438243G	14.14	-15.86	2.30641G	-48.80	2.39448G	-34.61	2.48446G	-44.24	17.352371G	-51.04	2

802.11g_(6Mbps)_2TX — CSE NdB

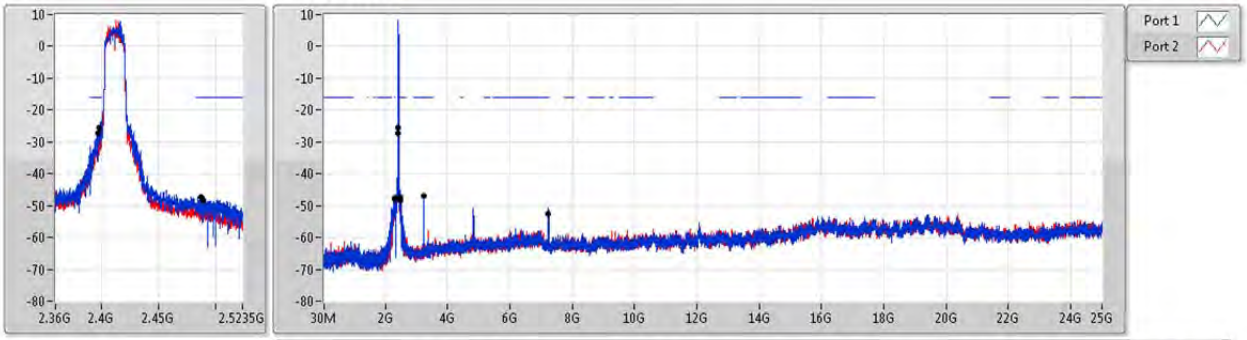
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.438243G	14.14	-15.86	2.30175G	-51.39	2.39688G	-46.43	2.48382G	-35.99	3.282082G	-50.06	1
2.438243G	14.14	-15.86	2.30641G	-51.70	2.39144G	-46.52	2.48438G	-38.62	23.218737G	-50.29	2

802.11ac VHT20_Nss1,(MCS0)_2TX **CSE NdB**

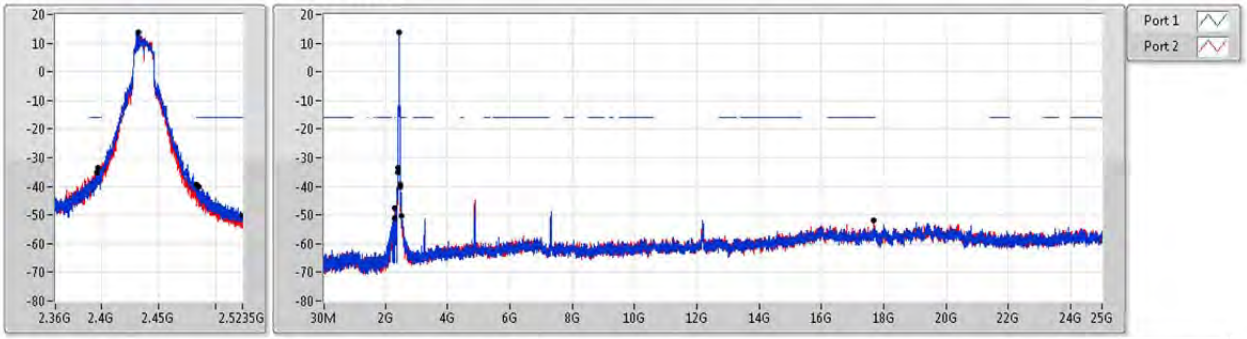
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.432064G	13.91	-16.09	2.30874G	-47.92	2.39832G	-25.37	2.4875G	-47.19	3.214652G	-47.10	1
2.432064G	13.91	-16.09	2.30874G	-47.78	2.3968G	-27.22	2.4895G	-48.48	7.232327G	-52.65	2

802.11ac VHT20_Nss1,(MCS0)_2TX **CSE NdB**

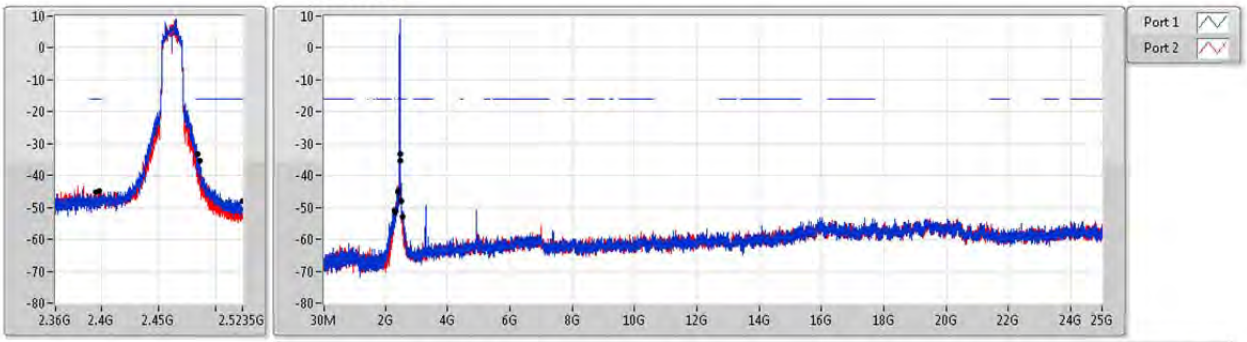
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.432064G	13.91	-16.09	2.300585G	-51.28	2.39616G	-35.13	2.48374G	-39.55	2.5235G	-50.49	1
2.432064G	13.91	-16.09	2.30874G	-47.43	2.39696G	-33.38	2.4851G	-40.25	17.675471G	-51.92	2

802.11ac VHT20_Nss1,(MCS0)_2TX **CSE NdB**

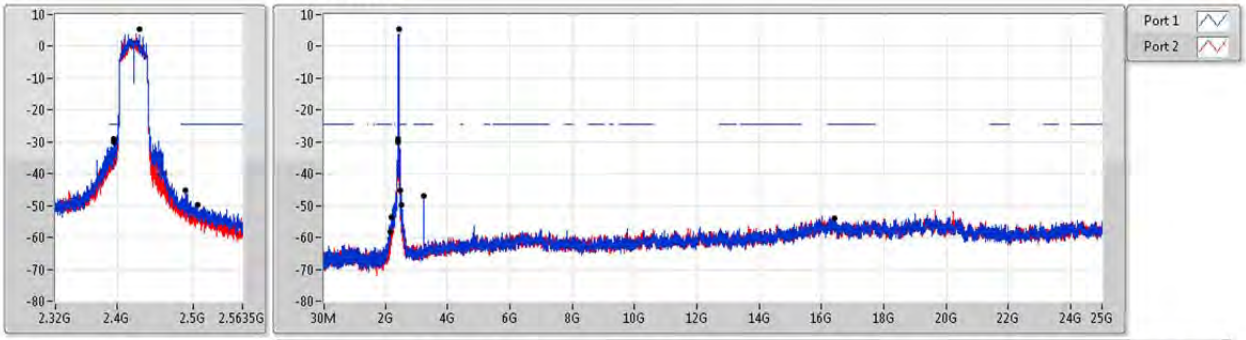
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.432064G	13.91	-16.09	2.300585G	-51.54	2.39512G	-45.24	2.48406G	-33.10	2.5235G	-48.17	1
2.432064G	13.91	-16.09	2.30874G	-50.66	2.39792G	-44.75	2.4867G	-35.34	2.529119G	-52.81	2

802.11ac VHT40_Nss1,(MCS0)_2TX CSE NdB

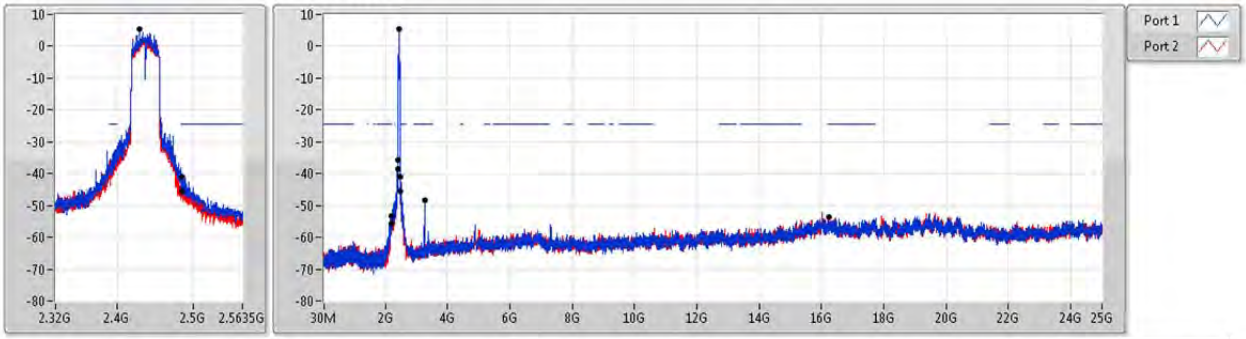
2422MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.429559G	5.42	-24.58	2.18489G	-53.48	2.39584G	-30.10	2.48974G	-45.27	3.228181G	-46.86	1
2.429559G	5.42	-24.58	2.160845G	-58.11	2.39584G	-29.18	2.50574G	-49.90	16.398407G	-53.81	2

802.11ac VHT40_Nss1,(MCS0)_2TX CSE NdB

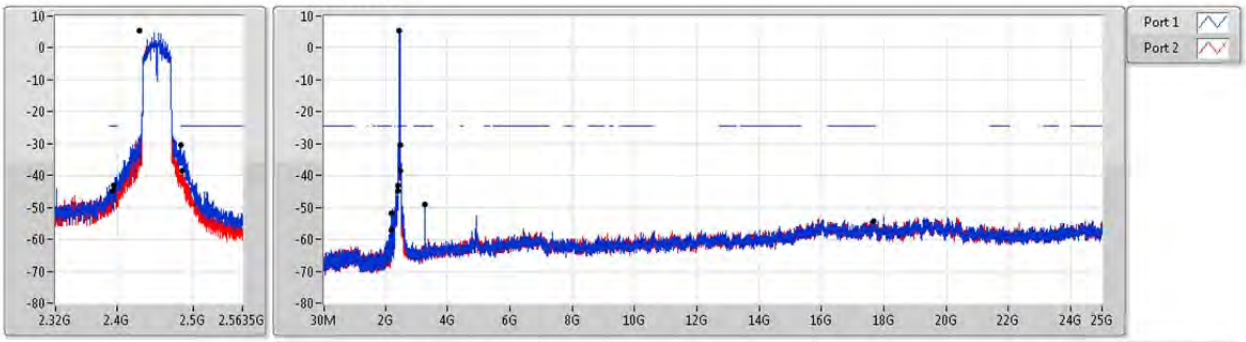
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.429559G	5.42	-24.58	2.197485G	-53.16	2.3936G	-35.62	2.48542G	-40.91	3.247813G	-48.23	1
2.429559G	5.42	-24.58	2.19634G	-55.66	2.39584G	-38.44	2.48494G	-45.68	16.241351G	-53.57	2

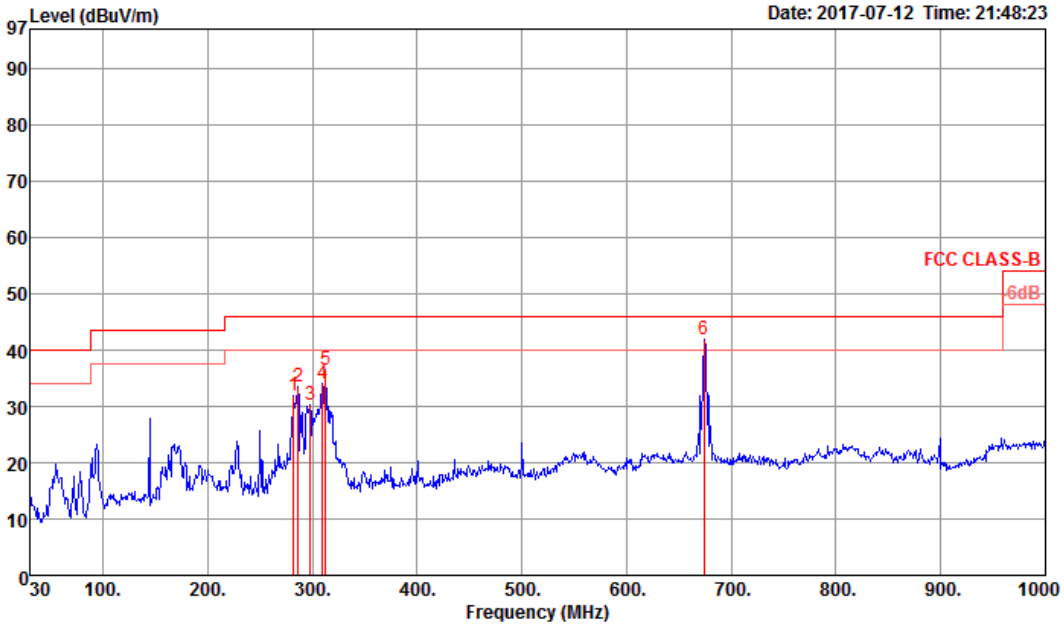
802.11ac VHT40_Nss1,(MCS0)_2TX CSE NdB

2452MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.429559G	5.42	-24.58	2.18947G	-51.72	2.39616G	-42.94	2.48366G	-30.34	3.267445G	-48.94	1
2.429559G	5.42	-24.58	2.18947G	-57.16	2.39408G	-44.97	2.48462G	-38.48	17.682896G	-54.28	2

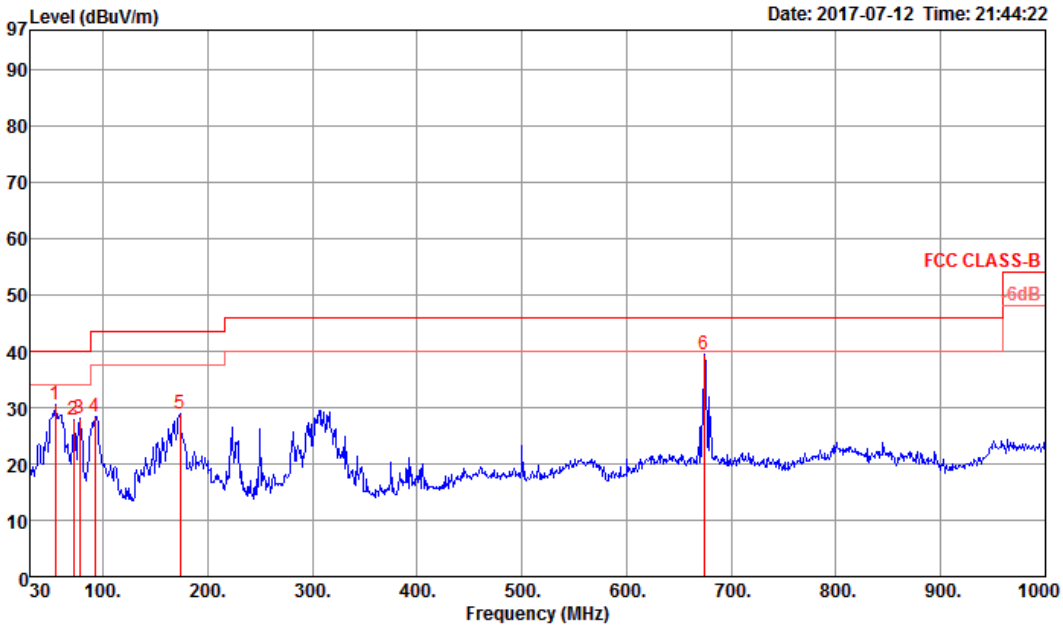
RSE below 1GHz Result			
Operating Mode	2	**Polarization**	Horizontal
Operating Function	Normal Link		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	282.20	31.82	46.00	-14.18	49.19	1.44	19.34	31.95	100	0	Peak	HORIZONTAL
2	286.08	33.64	46.00	-12.36	51.30	1.46	19.42	31.94	100	0	Peak	HORIZONTAL
3	297.72	30.22	46.00	-15.78	48.04	1.50	19.64	31.96	100	0	Peak	HORIZONTAL
4	309.36	33.99	46.00	-12.01	51.47	1.54	19.95	31.97	100	0	Peak	HORIZONTAL
5	312.27	36.54	46.00	-9.46	53.91	1.55	20.05	31.97	100	0	Peak	HORIZONTAL
6	674.08	41.91	46.00	-4.09	52.16	2.48	25.46	32.39	100	0	Peak	HORIZONTAL

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

RSE below 1GHz Result			
Operating Mode	2	**Polarization**	Vertical
Operating Function	Normal Link		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	54.25	30.45	40.00	-9.55	54.87	0.41	13.78	31.71	300	0	Peak	VERTICAL
2	71.71	27.82	40.00	-12.18	53.42	0.51	12.57	31.78	300	0	Peak	VERTICAL
3	77.53	28.15	40.00	-11.85	53.03	0.58	13.09	31.80	300	0	Peak	VERTICAL
4	92.08	28.25	43.50	-15.25	50.77	0.64	15.64	31.80	300	0	Peak	VERTICAL
5	173.56	28.83	43.50	-14.67	50.07	1.05	15.91	31.84	300	0	Peak	VERTICAL
6	674.08	39.33	46.00	-6.67	49.58	2.48	25.46	32.39	300	0	Peak	VERTICAL

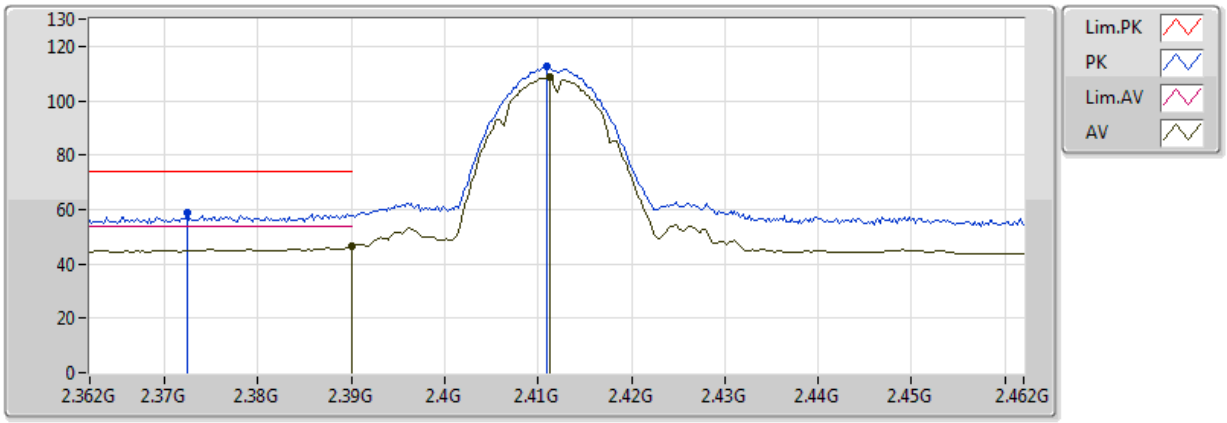
Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	AV	2.3898G	53.98	54.00	-0.02	31.04	3	H	0	1.42	-

802.11b_(1Mbps)_2TX

2412MHz_TX

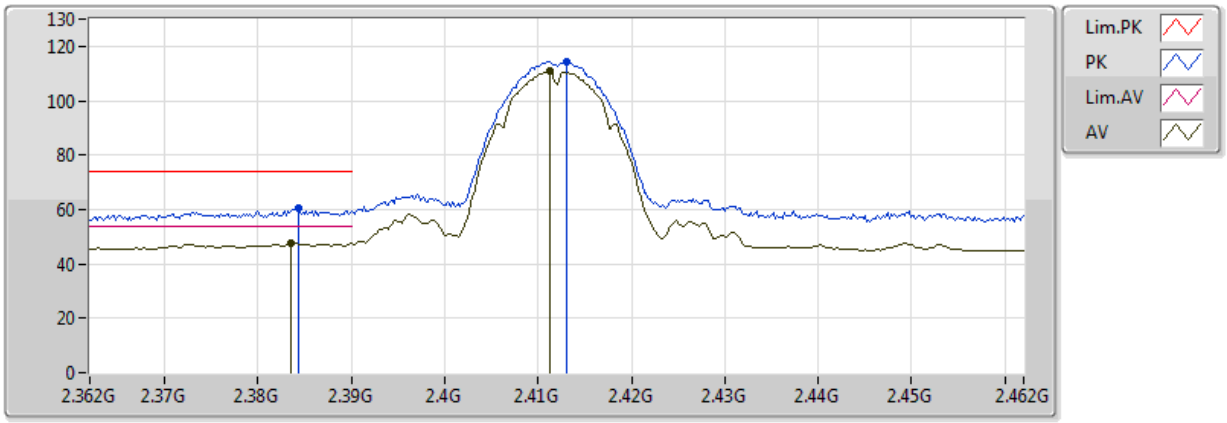


20170707
EUT Z_2TX
Setting 20
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.389998G	46.62	54.00	-7.38	31.04	3	V	83	2.62	-
AV	2.4112G	108.65	Inf	-Inf	31.01	3	V	83	2.62	-
PK	2.3724G	58.76	74.00	-15.24	31.06	3	V	83	2.62	-
PK	2.411G	112.42	Inf	-Inf	31.01	3	V	83	2.62	-

802.11b_(1Mbps)_2TX

2412MHz_TX

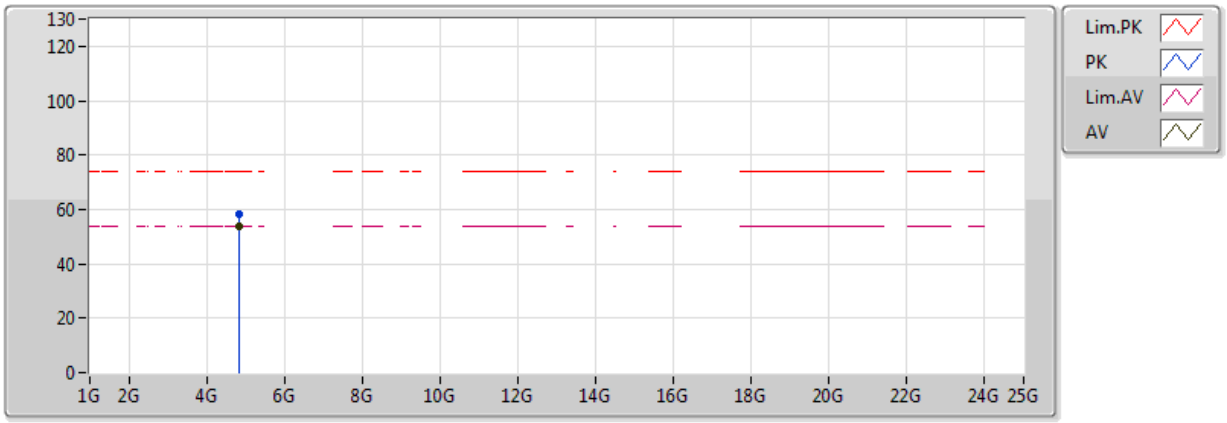


20170707
EUT Z_2TX
Setting 20
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3836G	47.72	54.00	-6.28	31.04	3	H	42	1.44	-
AV	2.4112G	110.77	Inf	-Inf	31.01	3	H	42	1.44	-
PK	2.3844G	60.37	74.00	-13.63	31.04	3	H	42	1.44	-
PK	2.413G	114.59	Inf	-Inf	31.00	3	H	42	1.44	-

802.11b_(1Mbps)_2TX

2412MHz_TX

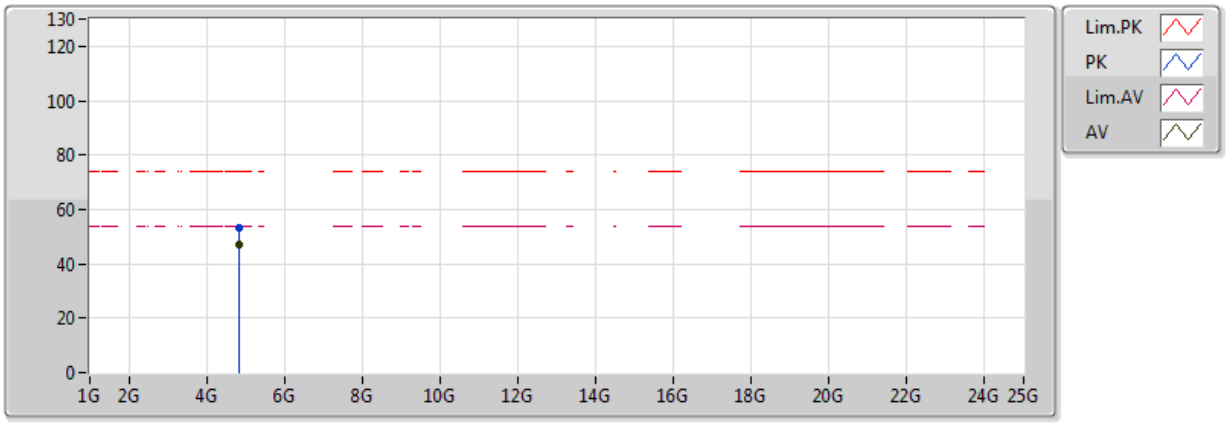


20170707
EUT Z_2TX
Setting 20
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.823966G	53.76	54.00	-0.24	3.40	3	V	291	2.90	-
PK	4.82392G	58.36	74.00	-15.64	3.40	3	V	291	2.90	-

802.11b_(1Mbps)_2TX

2412MHz_TX

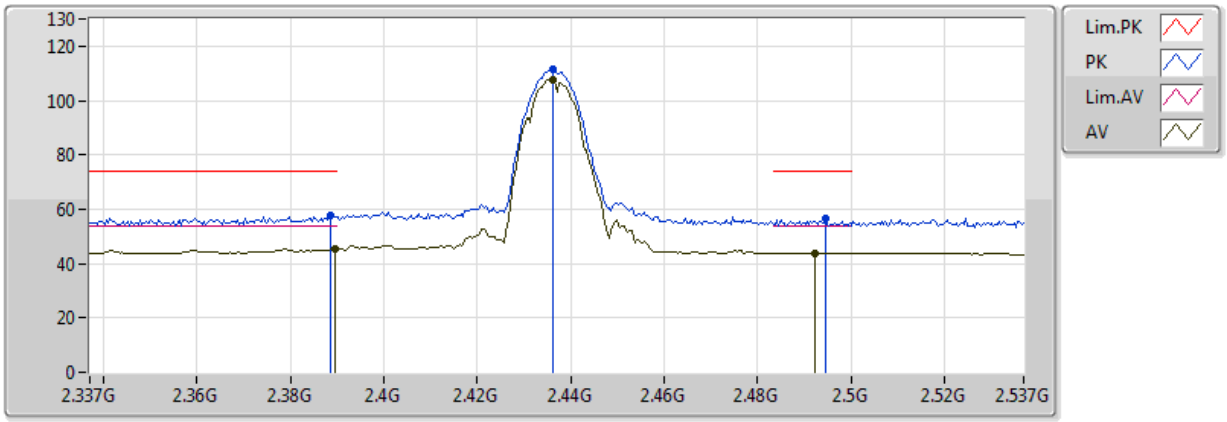


20170707
EUT Z_2TX
Setting 20
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.823982G	47.11	54.00	-6.89	3.40	3	H	102	1.11	-
PK	4.824058G	53.32	74.00	-20.68	3.40	3	H	102	1.11	-

802.11b_(1Mbps)_2TX

2437MHz_TX

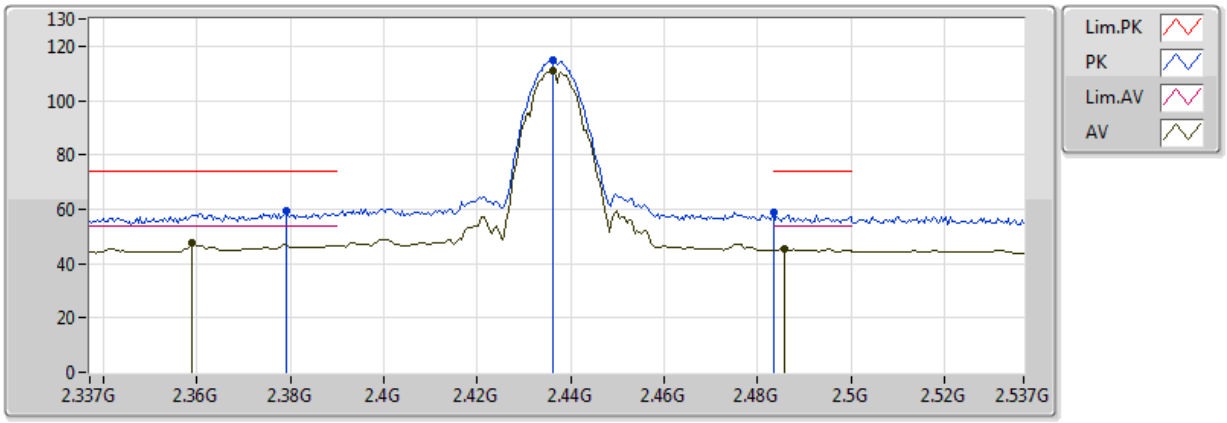


20170707
EUT Z_2TX
Setting 22
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3894G	45.55	54.00	-8.45	31.04	3	V	83	2.58	-
AV	2.4362G	107.76	Inf	-Inf	30.98	3	V	83	2.58	-
AV	2.4922G	43.80	54.00	-10.20	30.91	3	V	83	2.58	-
PK	2.3886G	57.48	74.00	-16.52	31.04	3	V	83	2.58	-
PK	2.4362G	111.62	Inf	-Inf	30.98	3	V	83	2.58	-
PK	2.4946G	56.36	74.00	-17.64	30.91	3	V	83	2.58	-

802.11b_(1Mbps)_2TX

2437MHz_TX

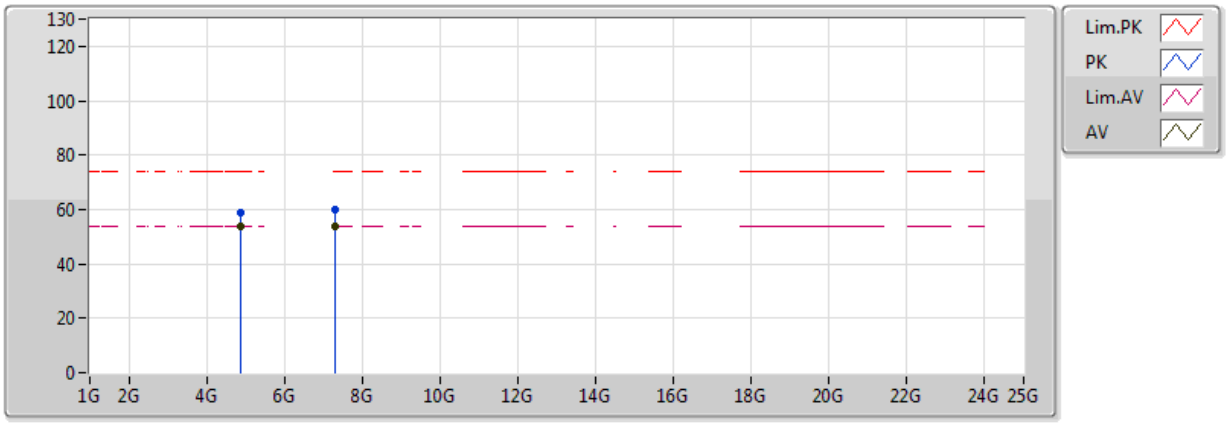


20170707
EUT Z_2TX
Setting 22
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.359G	47.35	54.00	-6.65	31.08	3	H	39	1.39	-
AV	2.4362G	111.15	Inf	-Inf	30.98	3	H	39	1.39	-
AV	2.4858G	45.43	54.00	-8.57	30.92	3	H	39	1.39	-
PK	2.379G	59.24	74.00	-14.76	31.05	3	H	39	1.39	-
PK	2.4362G	114.94	Inf	-Inf	30.98	3	H	39	1.39	-
PK	2.483502G	58.80	74.00	-15.20	30.92	3	H	39	1.39	-

802.11b_(1Mbps)_2TX

2437MHz_TX

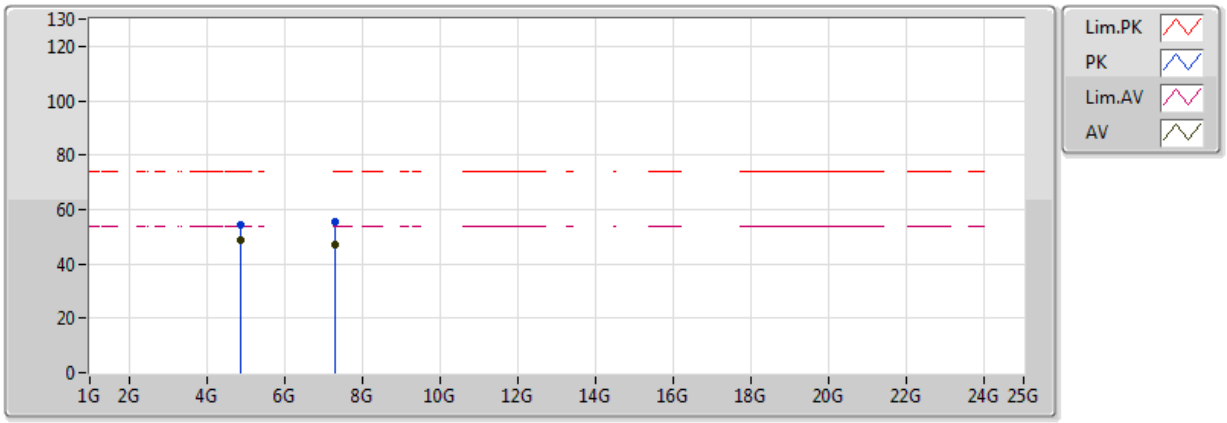


20170707
EUT Z_2TX
Setting 22
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.874G	53.90	54.00	-0.10	3.55	3	V	248	1.25	-
AV	7.310268G	53.96	54.00	-0.04	8.75	3	V	45	1.04	-
PK	4.87399G	58.63	74.00	-15.37	3.55	3	V	248	1.25	-
PK	7.311876G	59.97	74.00	-14.03	8.75	3	V	45	1.04	-

802.11b_(1Mbps)_2TX

2437MHz_TX

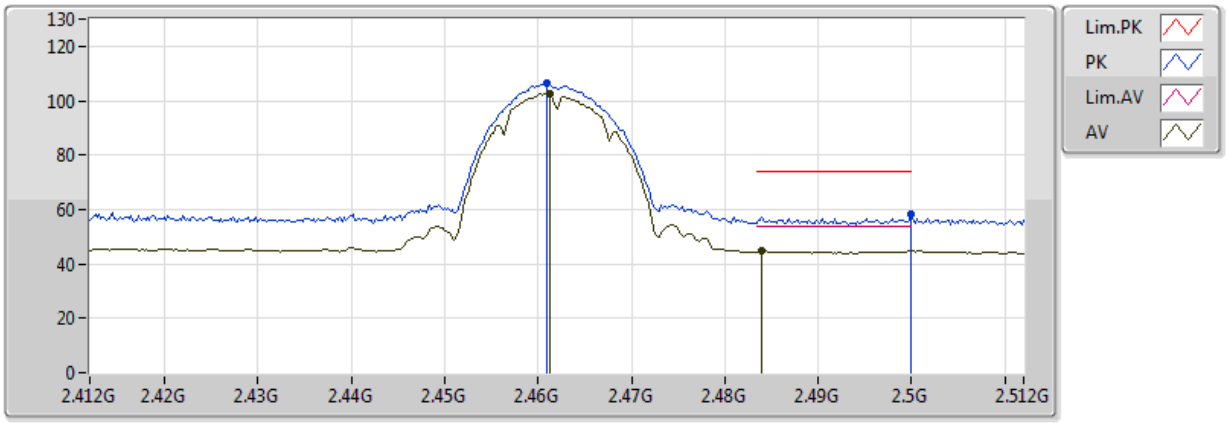


20170707
EUT Z_2TX
Setting 22
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.874G	48.91	54.00	-5.09	3.55	3	H	103	1.18	-
AV	7.311744G	46.85	54.00	-7.15	8.75	3	H	277	1.05	-
PK	4.874032G	54.52	74.00	-19.48	3.55	3	H	103	1.18	-
PK	7.310844G	55.21	74.00	-18.79	8.75	3	H	277	1.05	-

802.11b_(1Mbps)_2TX

2462MHz_TX

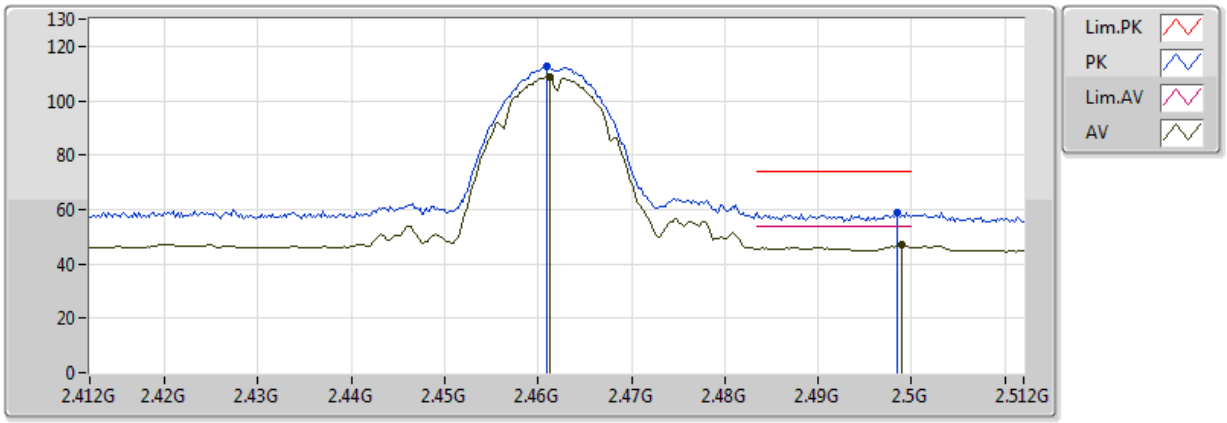


20170707
EUT Z_2TX
Setting 1D
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4612G	102.39	Inf	-Inf	30.95	3	V	27	1.49	-
AV	2.484G	44.81	54.00	-9.19	30.92	3	V	27	1.49	-
PK	2.461G	106.22	Inf	-Inf	30.95	3	V	27	1.49	-
PK	2.499998G	58.50	74.00	-15.50	30.90	3	V	27	1.49	-

802.11b_(1Mbps)_2TX

2462MHz_TX

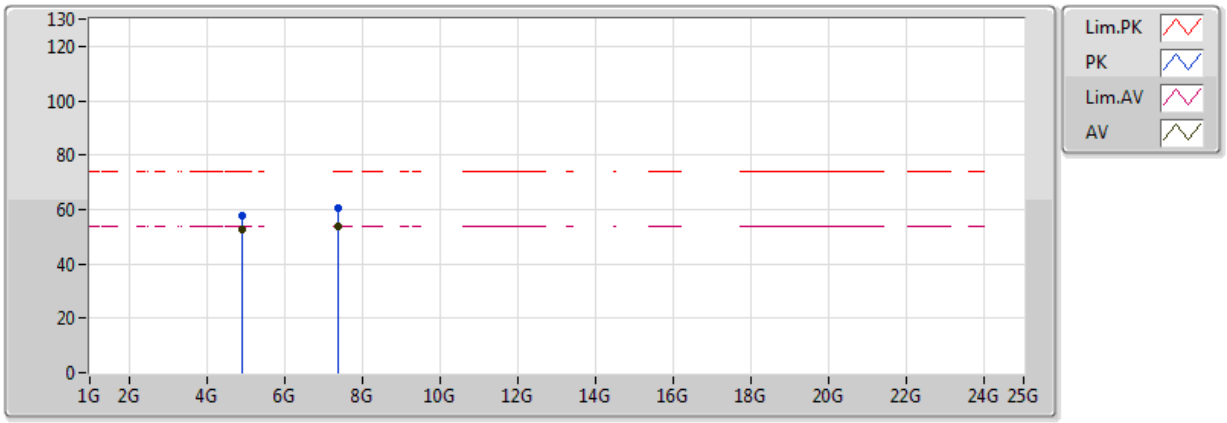


20170707
EUT Z_2TX
Setting 1D
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4612G	108.83	Inf	-Inf	30.95	3	H	43	1.37	-
AV	2.499G	46.99	54.00	-7.01	30.90	3	H	43	1.37	-
PK	2.461G	112.59	Inf	-Inf	30.95	3	H	43	1.37	-
PK	2.4984G	58.91	74.00	-15.09	30.90	3	H	43	1.37	-

802.11b_(1Mbps)_2TX

2462MHz_TX

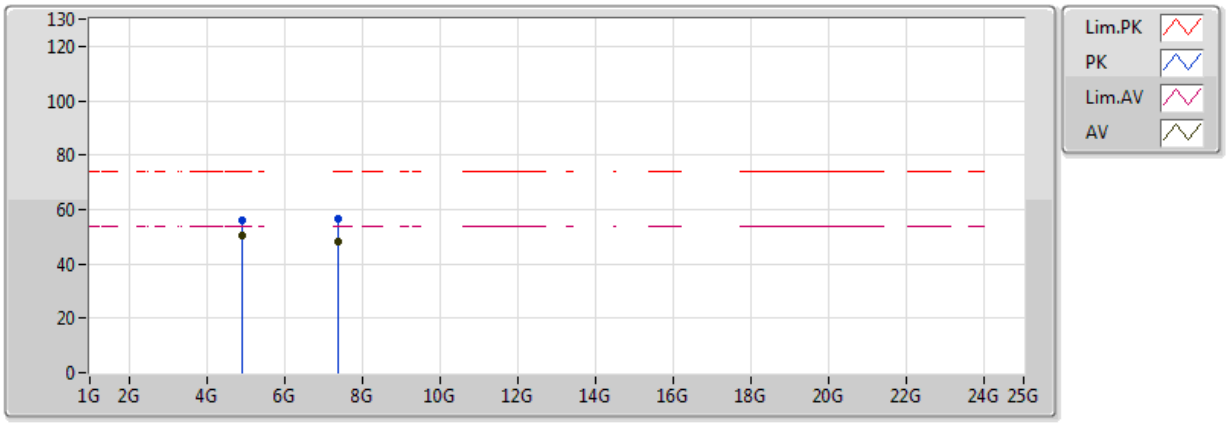


20170707
EUT Z_2TX
Setting 1D
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.923974G	52.90	54.00	-1.10	3.70	3	V	248	1.08	-
AV	7.38523G	53.91	54.00	-0.09	8.90	3	V	47	1.10	-
PK	4.923988G	57.73	74.00	-16.27	3.70	3	V	248	1.08	-
PK	7.384488G	60.59	74.00	-13.41	8.90	3	V	47	1.10	-

802.11b_(1Mbps)_2TX

2462MHz_TX

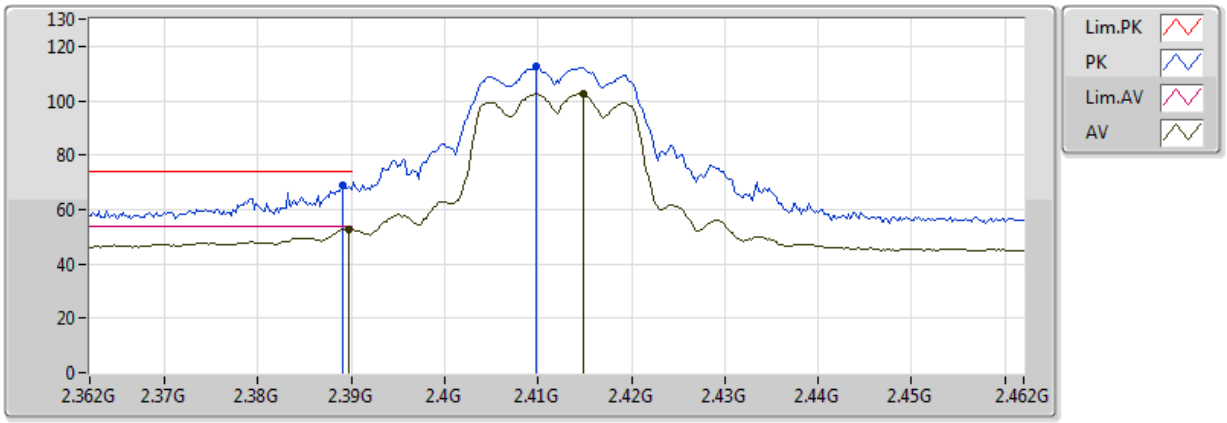


20170707
EUT Z_2TX
Setting 1D
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.923974G	50.38	54.00	-3.62	3.70	3	H	105	1.04	-
AV	7.386726G	48.07	54.00	-5.93	8.90	3	H	269	1.02	-
PK	4.923966G	55.98	74.00	-18.02	3.70	3	H	105	1.04	-
PK	7.387068G	56.75	74.00	-17.25	8.90	3	H	269	1.02	-

802.11g_(6Mbps)_2TX

2412MHz_TX

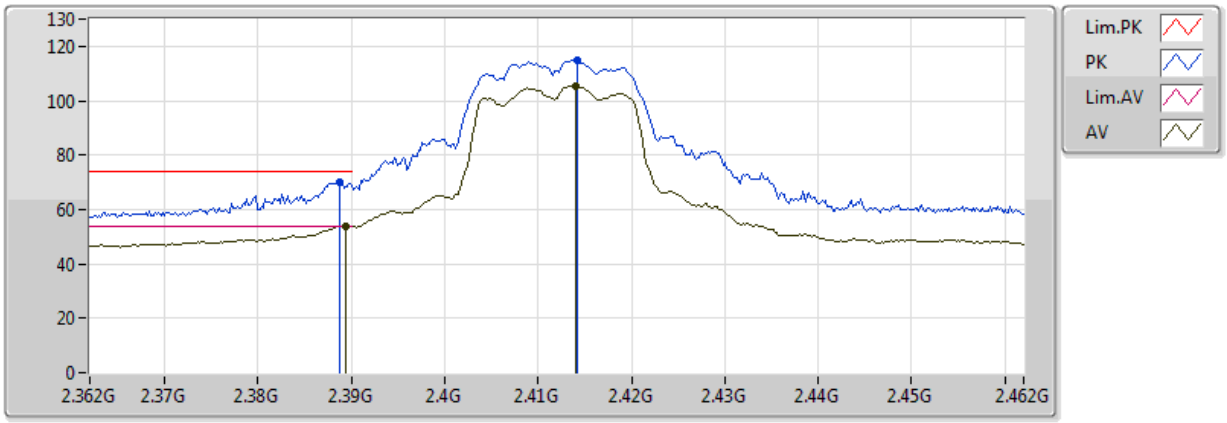


20170707
EUT Z_2TX
Setting 1D
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3898G	52.69	54.00	-1.31	31.04	3	V	9	1.54	-
AV	2.4148G	102.57	Inf	-Inf	31.00	3	V	9	1.54	-
PK	2.389G	69.03	74.00	-4.97	31.04	3	V	9	1.54	-
PK	2.4098G	112.44	Inf	-Inf	31.01	3	V	9	1.54	-

802.11g_(6Mbps)_2TX

2412MHz_TX

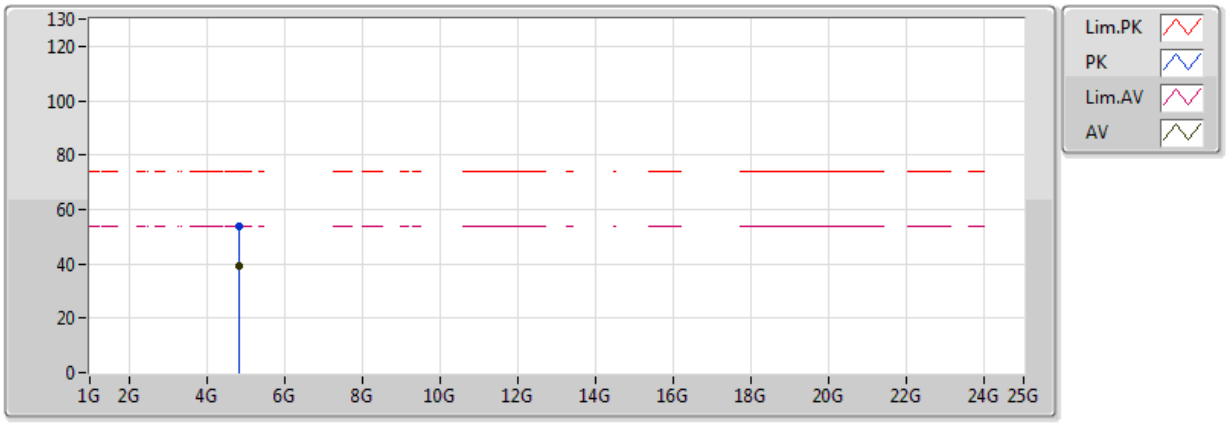


20170707
EUT Z_2TX
Setting 1D
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3894G	53.95	54.00	-0.05	31.04	3	H	2	1.38	-
AV	2.414G	105.56	Inf	-Inf	31.00	3	H	2	1.38	-
PK	2.3888G	69.85	74.00	-4.15	31.04	3	H	2	1.38	-
PK	2.4142G	114.92	Inf	-Inf	31.00	3	H	2	1.38	-

802.11g_(6Mbps)_2TX

2412MHz_TX

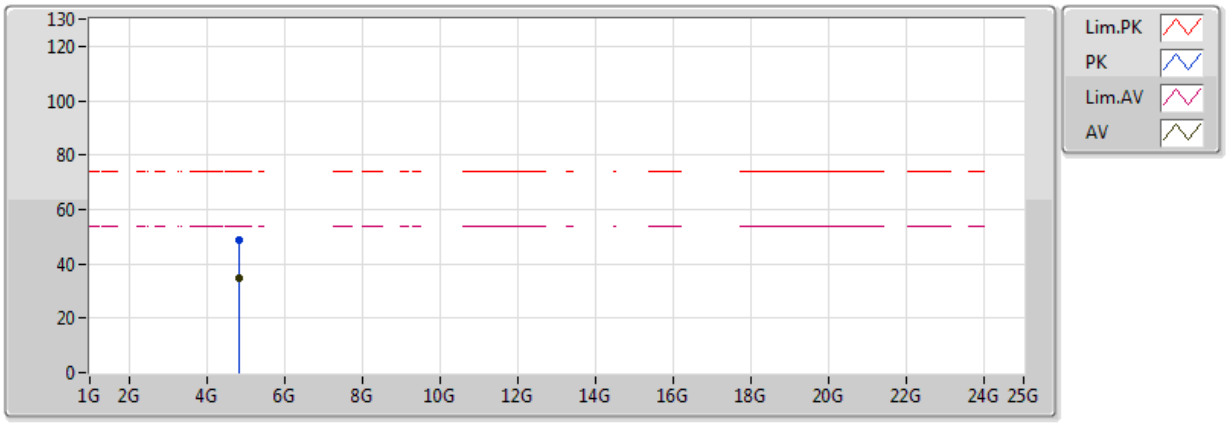


20170707
EUT Z_2TX
Setting 1D
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82386G	38.99	54.00	-15.01	3.40	3	V	293	2.89	-
PK	4.82406G	53.53	74.00	-20.47	3.40	3	V	293	2.89	-

802.11g_(6Mbps)_2TX

2412MHz_TX

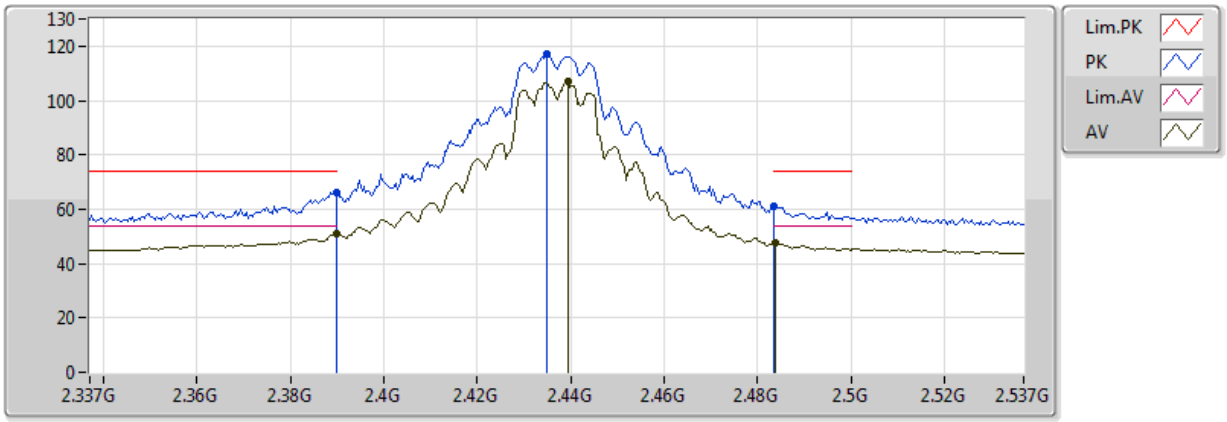


20170707
EUT Z_2TX
Setting 1D
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8222G	35.00	54.00	-19.00	3.40	3	H	103	1.01	-
PK	4.82282G	48.84	74.00	-25.16	3.40	3	H	103	1.01	-

802.11g_(6Mbps)_2TX

2437MHz_TX

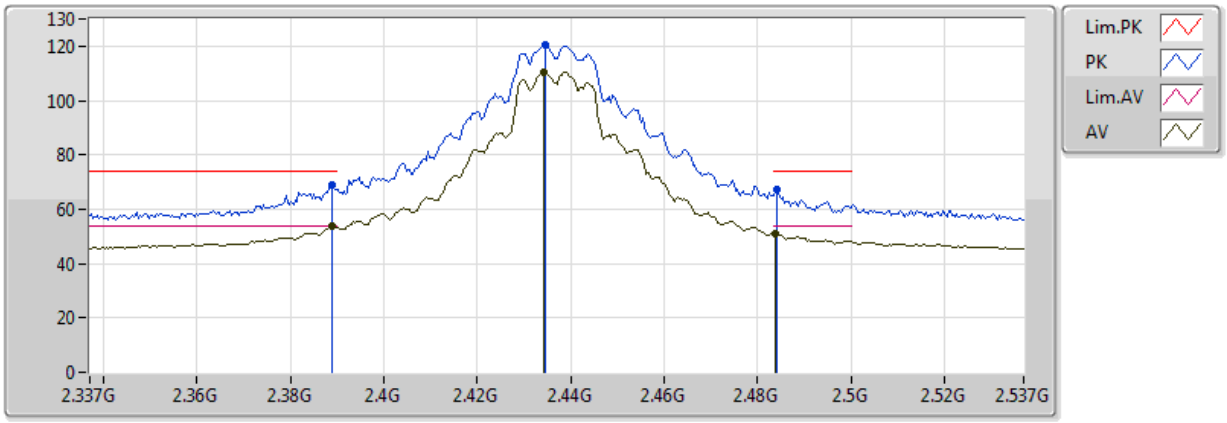


20170707
EUT Z_2TX
Setting 2D
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3898G	50.97	54.00	-3.03	31.04	3	V	12	1.49	-
AV	2.4394G	106.78	Inf	-Inf	30.97	3	V	12	1.49	-
AV	2.4838G	47.38	54.00	-6.62	30.92	3	V	12	1.49	-
PK	2.3898G	66.34	74.00	-7.66	31.04	3	V	12	1.49	-
PK	2.435G	117.13	Inf	-Inf	30.98	3	V	12	1.49	-
PK	2.483502G	61.15	74.00	-12.85	30.92	3	V	12	1.49	-

802.11g_(6Mbps)_2TX

2437MHz_TX

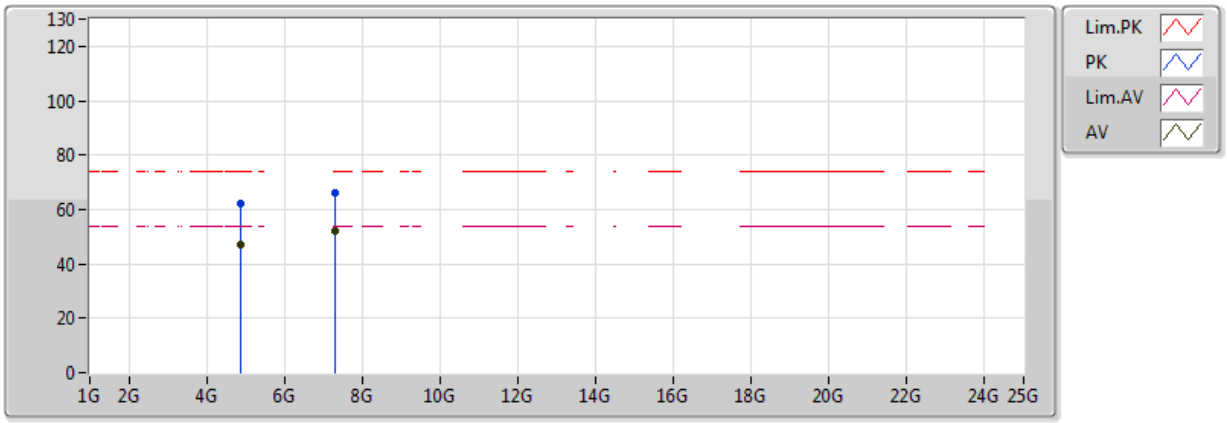


20170707
EUT Z_2TX
Setting 2D
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.389G	53.83	54.00	-0.17	31.04	3	H	5	1.59	-
AV	2.4342G	110.52	Inf	-Inf	30.98	3	H	5	1.59	-
AV	2.4838G	50.82	54.00	-3.18	30.92	3	H	5	1.59	-
PK	2.389G	69.04	74.00	-4.96	31.04	3	H	5	1.59	-
PK	2.4346G	120.51	Inf	-Inf	30.98	3	H	5	1.59	-
PK	2.4842G	67.06	74.00	-6.94	30.92	3	H	5	1.59	-

802.11g_(6Mbps)_2TX

2437MHz_TX

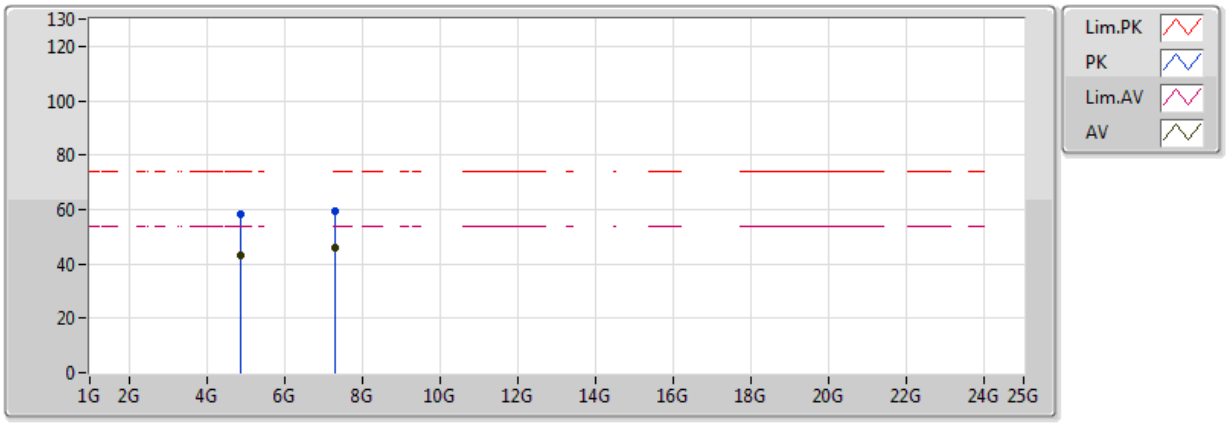


20170707
EUT Z_2TX
Setting 2D
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.873762G	47.10	54.00	-6.90	3.55	3	V	249	1.24	-
AV	7.310678G	52.38	54.00	-1.62	8.75	3	V	43	1.04	-
PK	4.872894G	62.42	74.00	-11.58	3.55	3	V	249	1.24	-
PK	7.311196G	65.97	74.00	-8.03	8.75	3	V	43	1.04	-

802.11g_(6Mbps)_2TX

2437MHz_TX

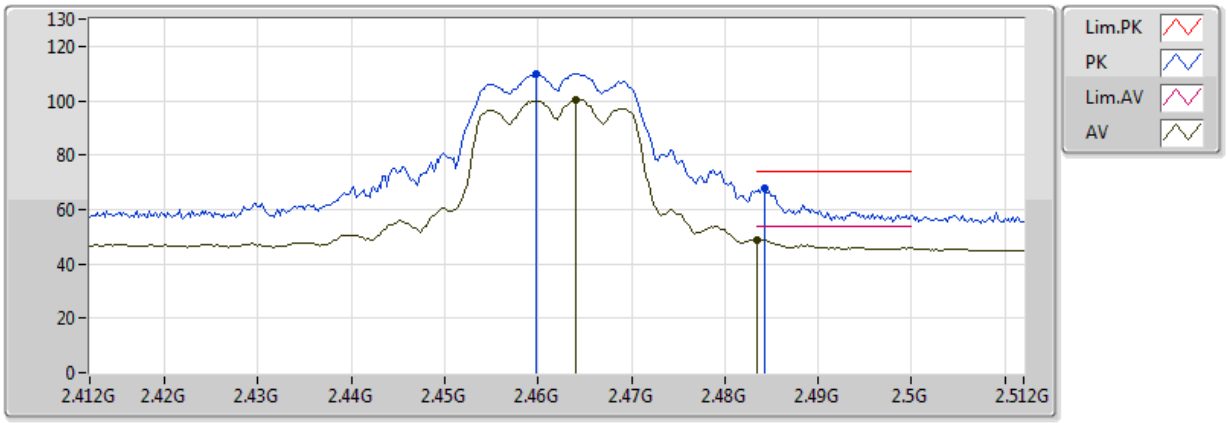


20170707
EUT Z_2TX
Setting 2D
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87334G	43.24	54.00	-10.76	3.55	3	H	103	1.18	-
AV	7.31274G	46.11	54.00	-7.89	8.76	3	H	50	1.00	-
PK	4.87278G	58.51	74.00	-15.49	3.55	3	H	103	1.18	-
PK	7.31482G	59.13	74.00	-14.87	8.76	3	H	50	1.00	-

802.11g_(6Mbps)_2TX

2462MHz_TX

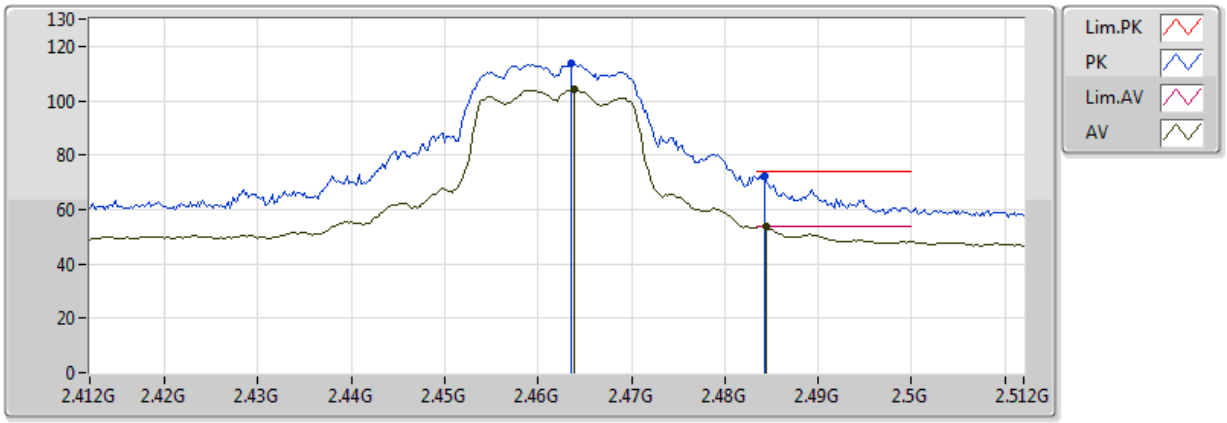


20170707
EUT Z_2TX
Setting 1C
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.464G	100.58	Inf	-Inf	30.94	3	V	14	1.42	-
AV	2.483502G	48.94	54.00	-5.06	30.92	3	V	14	1.42	-
PK	2.4598G	110.05	Inf	-Inf	30.95	3	V	14	1.42	-
PK	2.4842G	67.69	74.00	-6.31	30.92	3	V	14	1.42	-

802.11g_(6Mbps)_2TX

2462MHz_TX

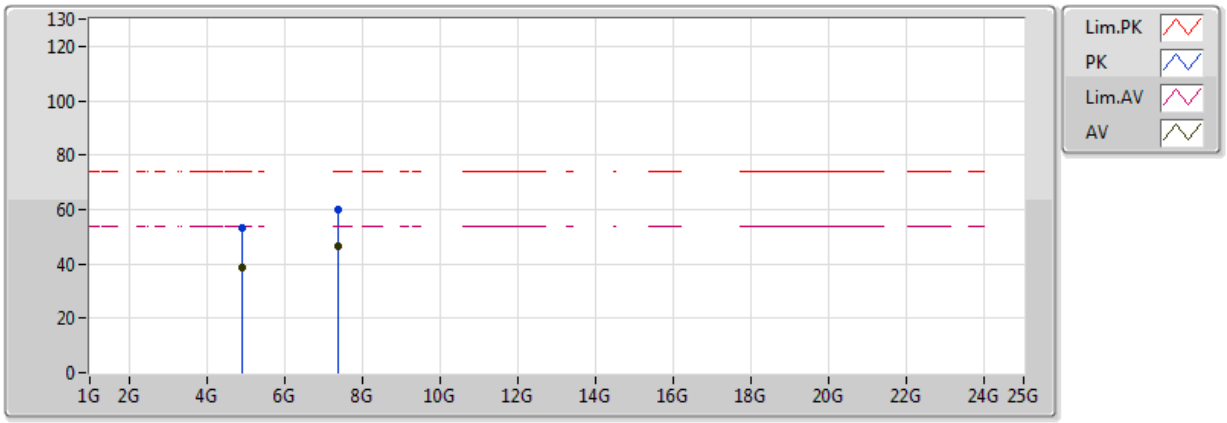


20170707
EUT Z_2TX
Setting 1C
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4638G	104.18	Inf	-Inf	30.94	3	H	4	1.36	-
AV	2.4844G	53.70	54.00	-0.30	30.92	3	H	4	1.36	-
PK	2.4636G	113.58	Inf	-Inf	30.94	3	H	4	1.36	-
PK	2.4842G	72.31	74.00	-1.69	30.92	3	H	4	1.36	-

802.11g_(6Mbps)_2TX

2462MHz_TX

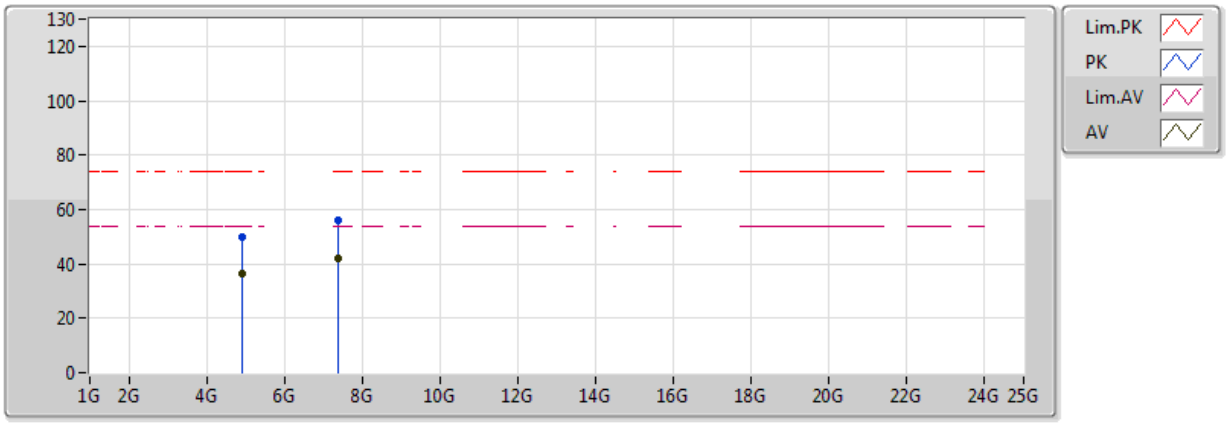


20170707
EUT Z_2TX
Setting 1C
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92532G	38.56	54.00	-15.44	3.70	3	V	273	1.02	-
AV	7.38598G	46.46	54.00	-7.54	8.90	3	V	45	1.01	-
PK	4.92478G	53.05	74.00	-20.95	3.70	3	V	273	1.02	-
PK	7.38988G	60.16	74.00	-13.84	8.91	3	V	45	1.01	-

802.11g_(6Mbps)_2TX

2462MHz_TX

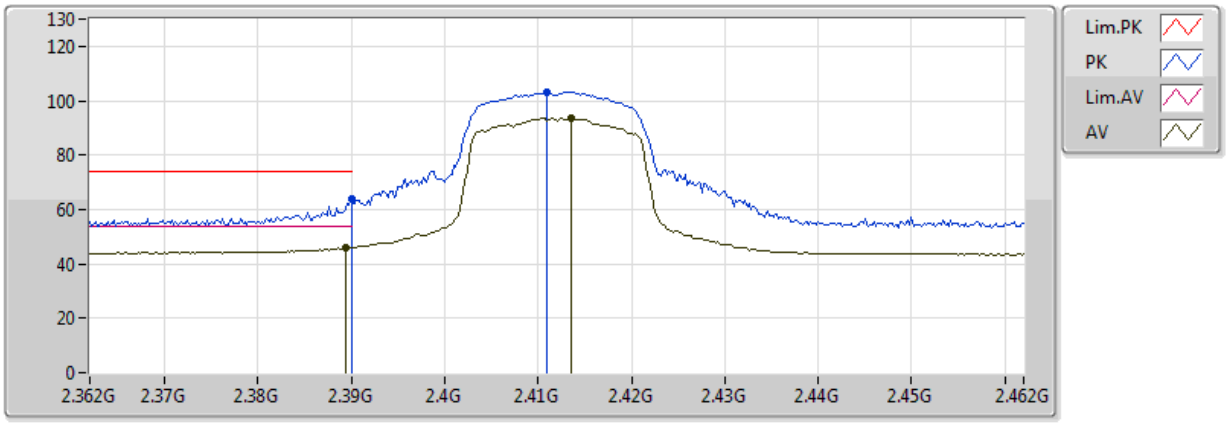


20170707
EUT Z_2TX
Setting 1C
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92428G	36.36	54.00	-17.64	3.70	3	H	103	1.01	-
AV	7.38832G	41.76	54.00	-12.24	8.91	3	H	52	1.11	-
PK	4.92386G	50.06	74.00	-23.94	3.70	3	H	103	1.01	-
PK	7.38354G	56.24	74.00	-17.76	8.90	3	H	52	1.11	-

802.11ac VHT20_Nss1,(MCS0)_2TX

2412MHz_TX

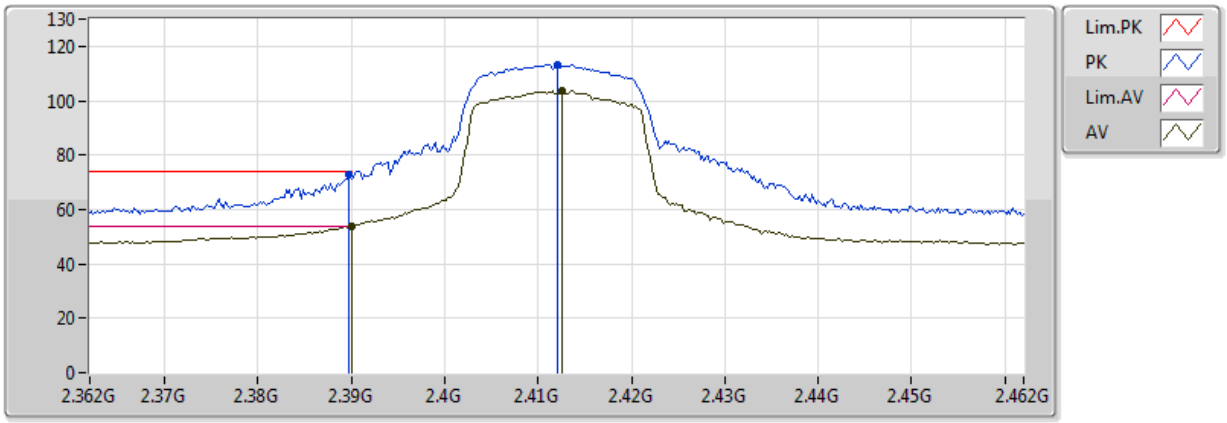


20170707
EUT Z_2TX
Setting 1B
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3894G	46.11	54.00	-7.89	31.04	3	V	9	1.51	-
AV	2.4136G	93.53	Inf	-Inf	31.00	3	V	9	1.51	-
PK	2.389998G	63.92	74.00	-10.08	31.04	3	V	9	1.51	-
PK	2.411G	103.21	Inf	-Inf	31.01	3	V	9	1.51	-

802.11ac VHT20_Nss1,(MCS0)_2TX

2412MHz_TX

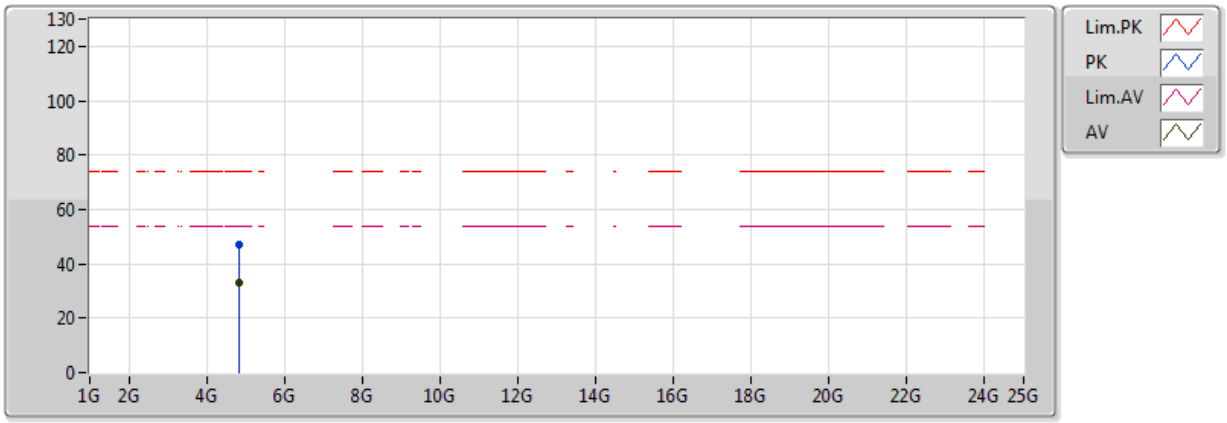


20170707
EUT Z_2TX
Setting 1B
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.389998G	53.93	54.00	-0.07	31.04	3	H	7	1.17	-
AV	2.4126G	103.44	Inf	-Inf	31.00	3	H	7	1.17	-
PK	2.3898G	72.70	74.00	-1.30	31.04	3	H	7	1.17	-
PK	2.412G	113.28	Inf	-Inf	31.01	3	H	7	1.17	-

802.11ac VHT20_Nss1,(MCS0)_2TX

2412MHz_TX

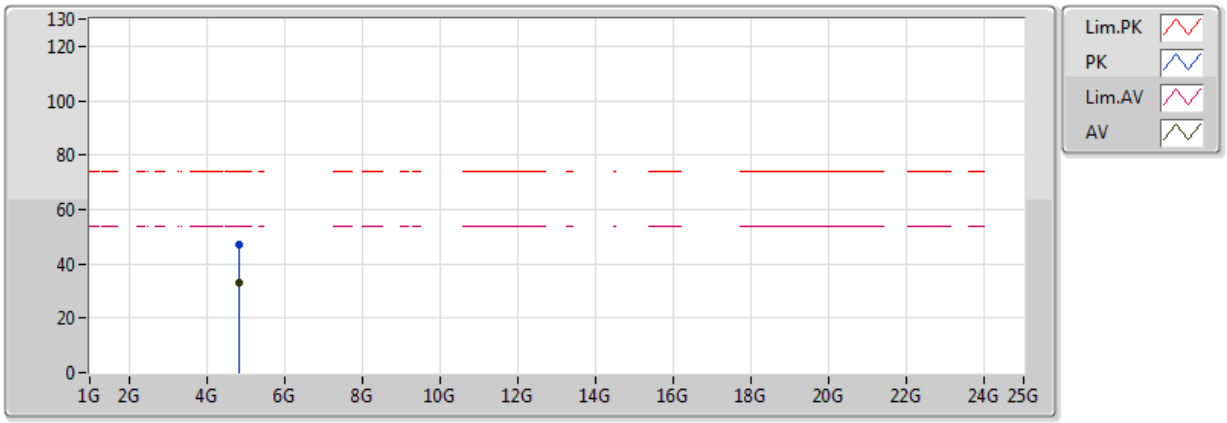


20170707
EUT Z_2TX
Setting 1B
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82576G	33.30	54.00	-20.70	3.41	3	V	164	1.36	-
PK	4.82382G	46.87	74.00	-27.13	3.40	3	V	164	1.36	-

802.11ac VHT20_Nss1,(MCS0)_2TX

2412MHz_TX

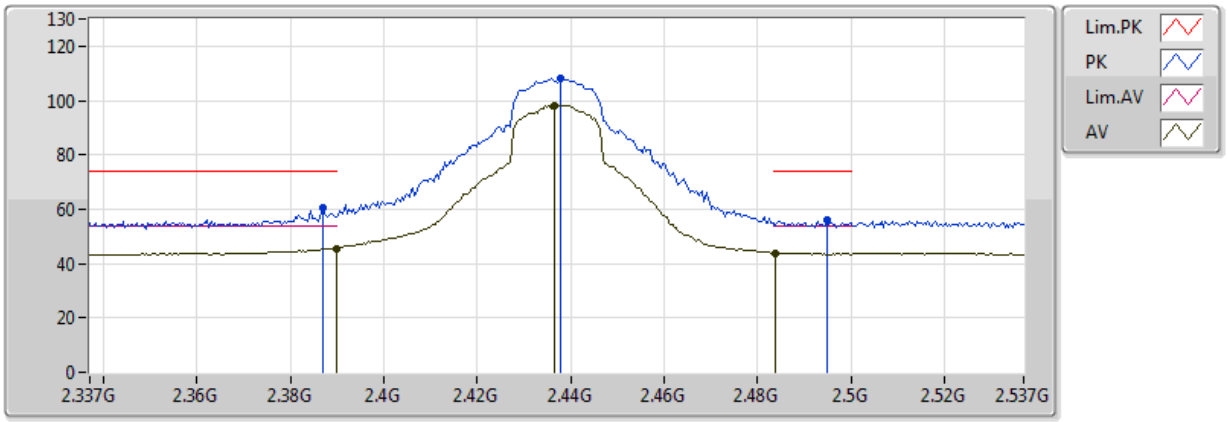


20170707
EUT Z_2TX
Setting 1B
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82515G	33.22	54.00	-20.78	3.41	3	H	185	1.88	-
PK	4.82283G	46.90	74.00	-27.10	3.40	3	H	185	1.88	-

802.11ac VHT20_Nss1,(MCS0)_2TX

2437MHz_TX

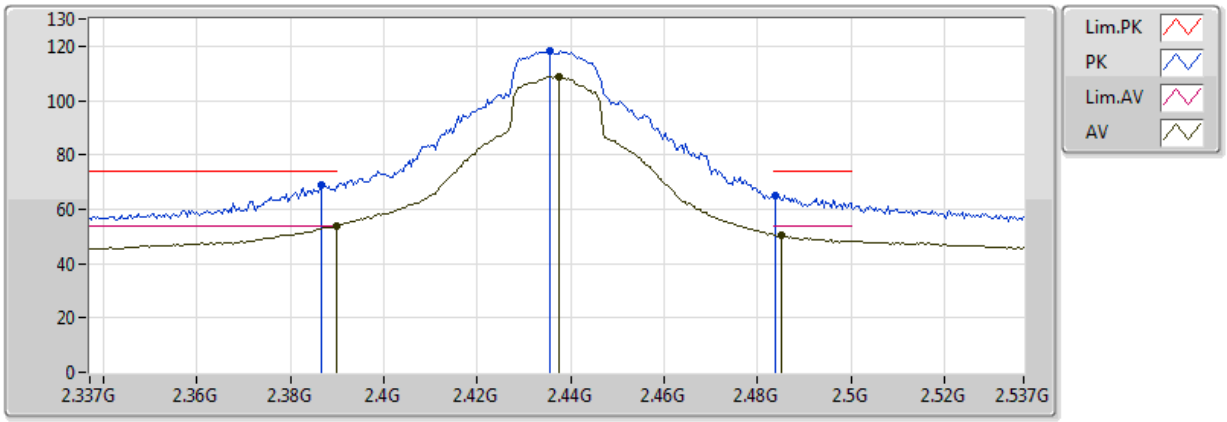


20170707
EUT Z_2TX
Setting 2C
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3898G	45.61	54.00	-8.39	31.04	3	V	10	1.46	-
AV	2.4366G	98.25	Inf	-Inf	30.98	3	V	10	1.46	-
AV	2.4838G	43.98	54.00	-10.02	30.92	3	V	10	1.46	-
PK	2.387G	60.63	74.00	-13.37	31.04	3	V	10	1.46	-
PK	2.4378G	108.17	Inf	-Inf	30.97	3	V	10	1.46	-
PK	2.495G	55.77	74.00	-18.23	30.91	3	V	10	1.46	-

802.11ac VHT20_Nss1,(MCS0)_2TX

2437MHz_TX

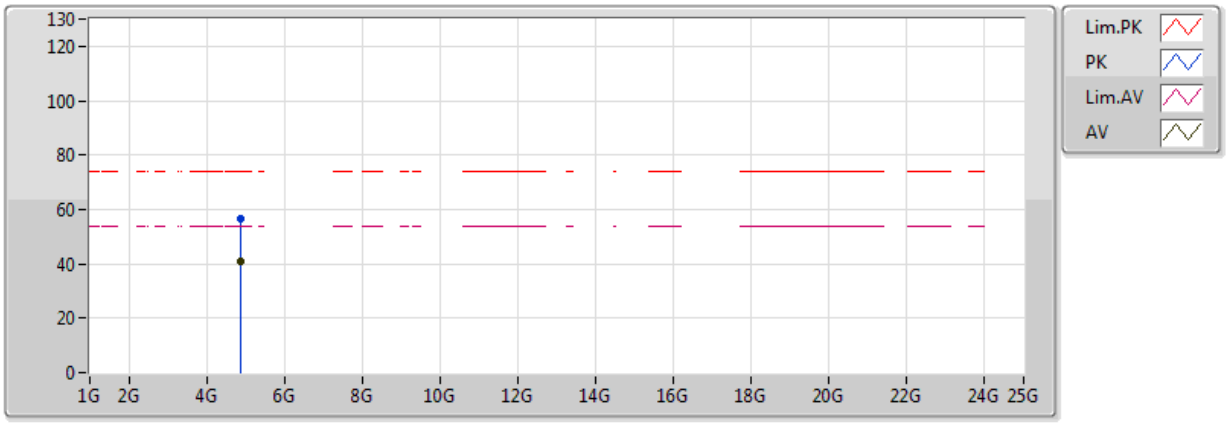


20170707
EUT Z_2TX
Setting 2C
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3898G	53.98	54.00	-0.02	31.04	3	H	0	1.42	-
AV	2.4374G	108.61	Inf	-Inf	30.98	3	H	0	1.42	-
AV	2.485G	50.37	54.00	-3.63	30.92	3	H	0	1.42	-
PK	2.3866G	68.82	74.00	-5.18	31.04	3	H	0	1.42	-
PK	2.4354G	118.45	Inf	-Inf	30.98	3	H	0	1.42	-
PK	2.4838G	65.13	74.00	-8.87	30.92	3	H	0	1.42	-

802.11ac VHT20_Nss1,(MCS0)_2TX

2437MHz_TX

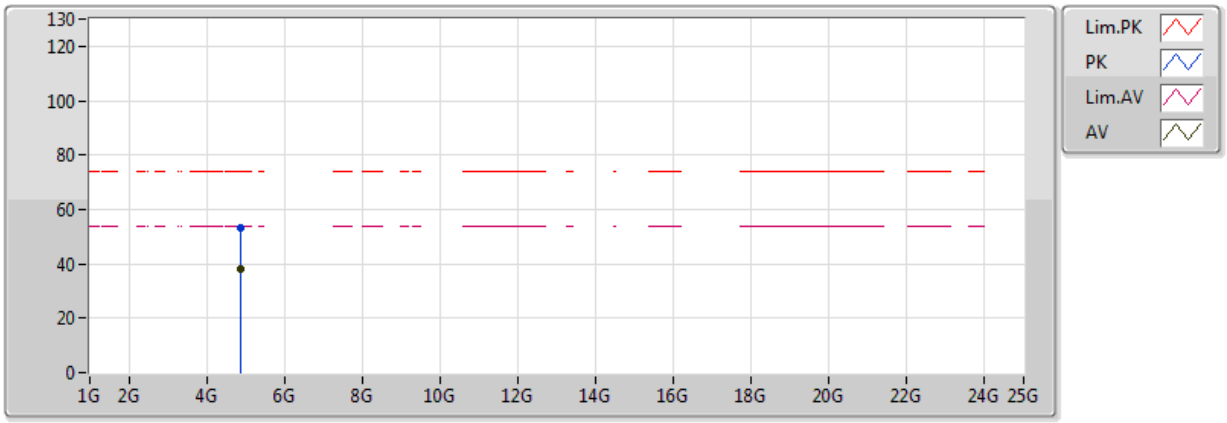


20170707
EUT Z_2TX
Setting 2C
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87404G	41.08	54.00	-12.92	3.55	3	V	143	1.77	-
PK	4.87501G	56.77	74.00	-17.23	3.56	3	V	143	1.77	-

802.11ac VHT20_Nss1,(MCS0)_2TX

2437MHz_TX

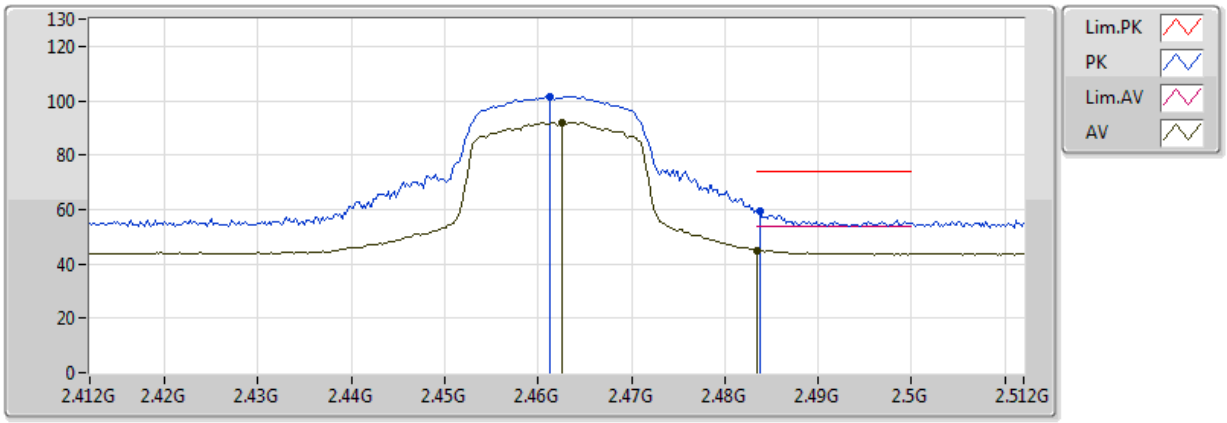


20170707
EUT Z_2TX
Setting 2C
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87203G	37.96	54.00	-16.04	3.55	3	H	300	2.62	-
PK	4.87499G	53.04	74.00	-20.96	3.55	3	H	300	2.62	-

802.11ac VHT20_Nss1,(MCS0)_2TX

2462MHz_TX

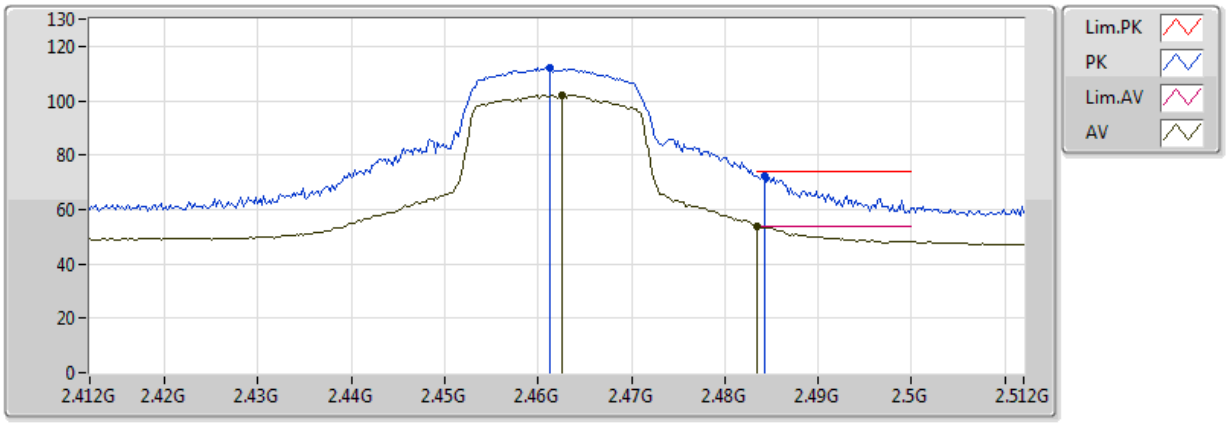


20170707
EUT Z_2TX
Setting 1C
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4626G	92.05	Inf	-Inf	30.94	3	V	10	1.40	-
AV	2.483502G	45.01	54.00	-8.99	30.92	3	V	10	1.40	-
PK	2.4612G	101.65	Inf	-Inf	30.95	3	V	10	1.40	-
PK	2.4838G	59.55	74.00	-14.45	30.92	3	V	10	1.40	-

802.11ac VHT20_Nss1,(MCS0)_2TX

2462MHz_TX

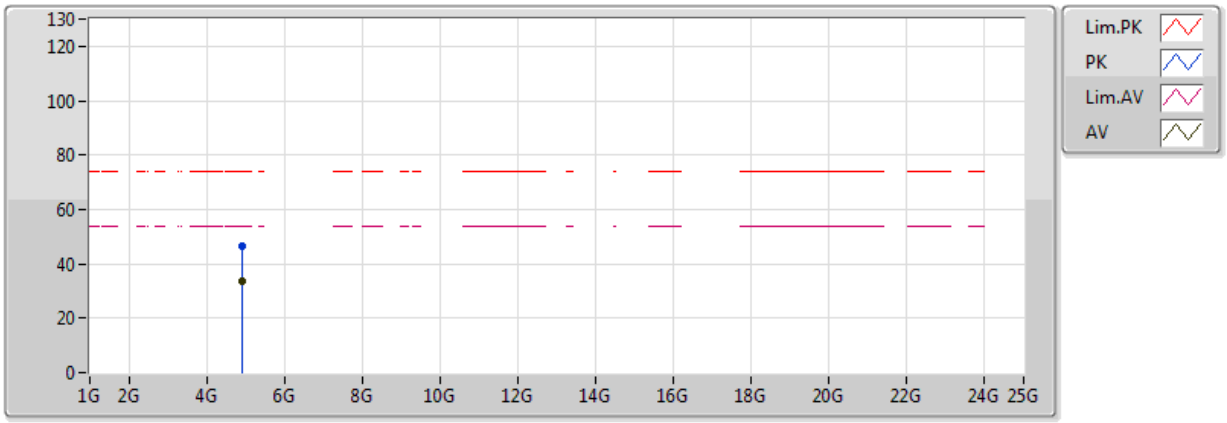


20170707
EUT Z_2TX
Setting 1C
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4626G	102.21	Inf	-Inf	30.94	3	H	359	1.36	-
AV	2.483502G	53.94	54.00	-0.06	30.92	3	H	359	1.36	-
PK	2.4612G	111.91	Inf	-Inf	30.95	3	H	359	1.36	-
PK	2.4842G	72.37	74.00	-1.63	30.92	3	H	359	1.36	-

802.11ac VHT20_Nss1,(MCS0)_2TX

2462MHz_TX

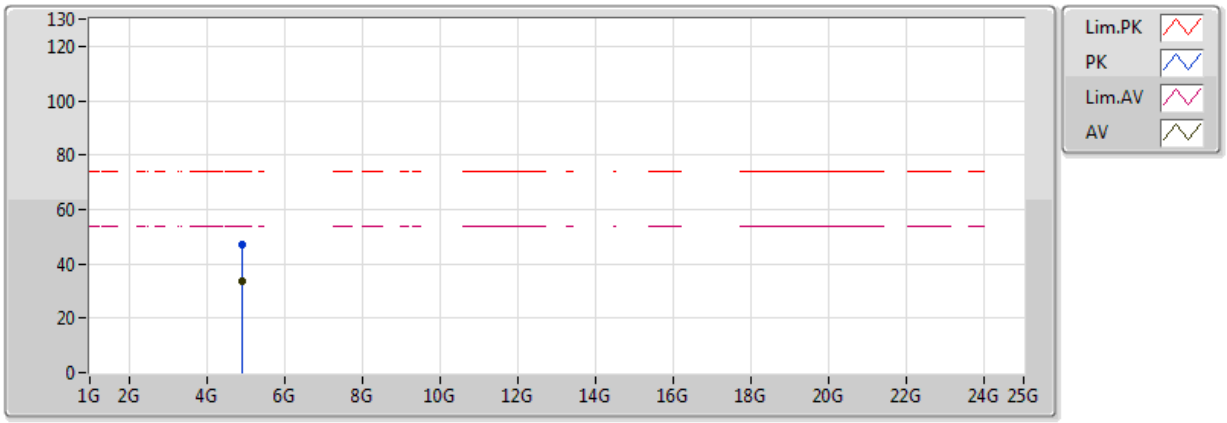


20170707
EUT Z_2TX
Setting 1C
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.926272G	33.62	54.00	-20.38	3.71	3	V	356	2.38	-
PK	4.92608G	46.72	74.00	-27.28	3.71	3	V	356	2.38	-

802.11ac VHT20_Nss1,(MCS0)_2TX

2462MHz_TX

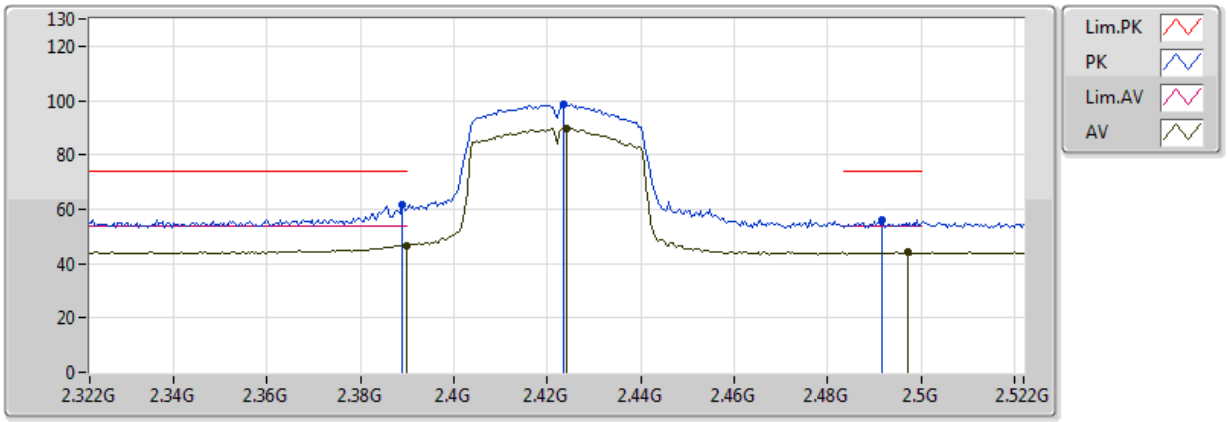


20170707
EUT Z_2TX
Setting 1C
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92592G	33.70	54.00	-20.30	3.71	3	H	333	2.22	-
PK	4.920224G	46.95	74.00	-27.05	3.69	3	H	333	2.22	-

802.11ac VHT40_Nss1,(MCS0)_2TX

2422MHz_TX

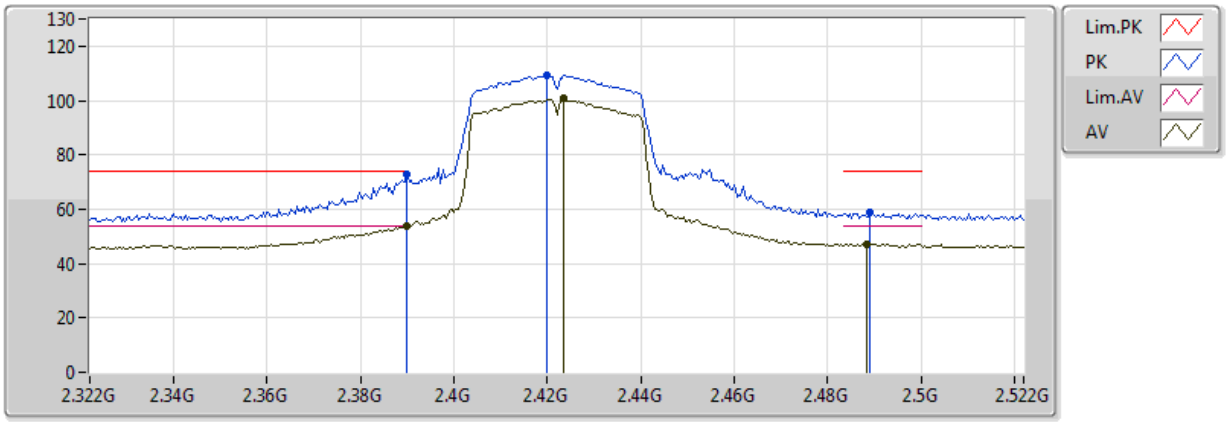


20170707
EUT Z_2TX
Setting 19
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.389998G	46.63	54.00	-7.37	31.04	3	V	11	2.37	-
AV	2.424G	89.92	Inf	-Inf	30.99	3	V	11	2.37	-
AV	2.4972G	44.02	54.00	-9.98	30.90	3	V	11	2.37	-
PK	2.3888G	61.71	74.00	-12.29	31.04	3	V	11	2.37	-
PK	2.4236G	98.64	Inf	-Inf	30.99	3	V	11	2.37	-
PK	2.4916G	56.01	74.00	-17.99	30.91	3	V	11	2.37	-

802.11ac VHT40_Nss1,(MCS0)_2TX

2422MHz_TX

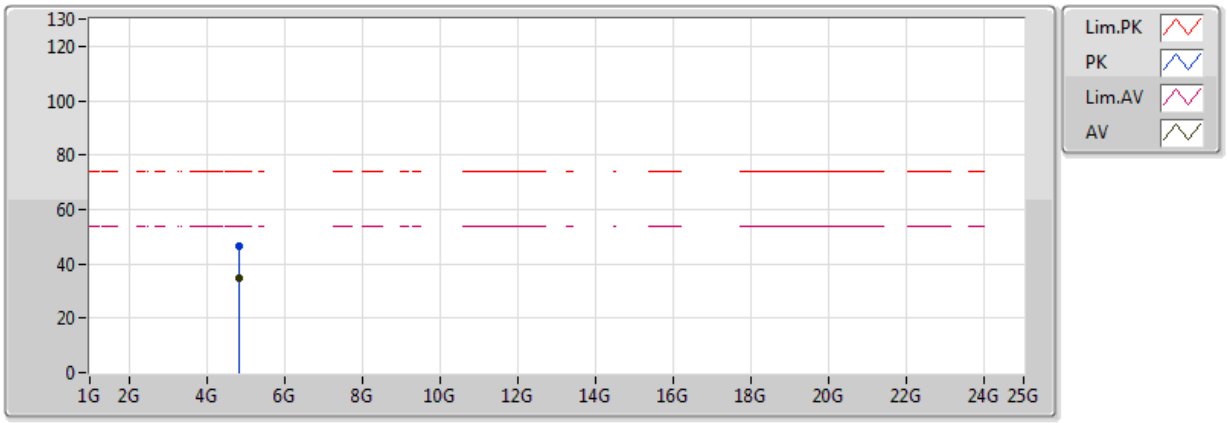


20170707
EUT Z_2TX
Setting 19
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.389998G	53.74	54.00	-0.26	31.04	3	H	0	1.36	-
AV	2.4236G	100.83	Inf	-Inf	30.99	3	H	0	1.36	-
AV	2.4884G	47.21	54.00	-6.79	30.91	3	H	0	1.36	-
PK	2.389998G	72.94	74.00	-1.06	31.04	3	H	0	1.36	-
PK	2.42G	109.27	Inf	-Inf	31.00	3	H	0	1.36	-
PK	2.4892G	59.10	74.00	-14.90	30.91	3	H	0	1.36	-

802.11ac VHT40_Nss1,(MCS0)_2TX

2422MHz_TX

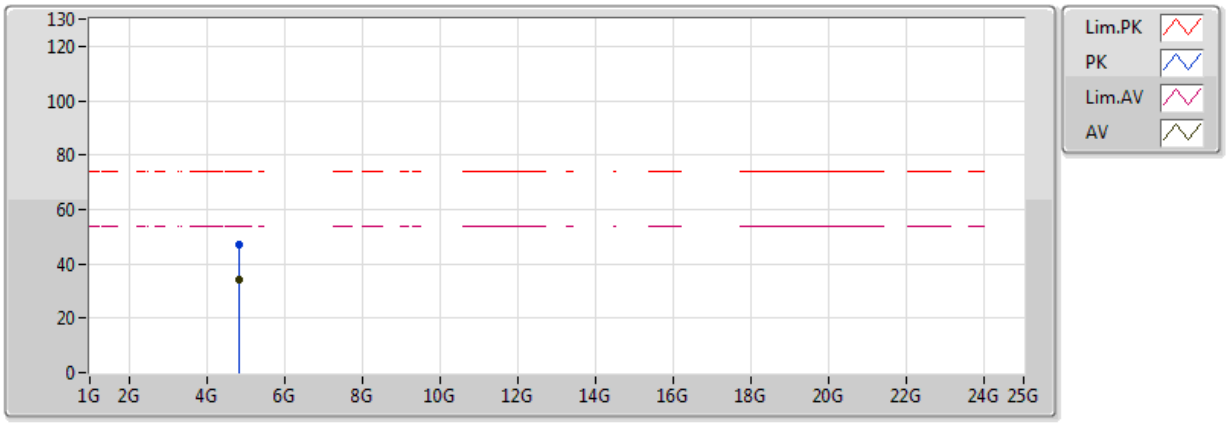


20170707
EUT Z_2TX
Setting 19
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.845408G	34.67	54.00	-19.33	3.47	3	V	163	1.54	-
PK	4.845088G	46.60	74.00	-27.40	3.47	3	V	163	1.54	-

802.11ac VHT40_Nss1,(MCS0)_2TX

2422MHz_TX

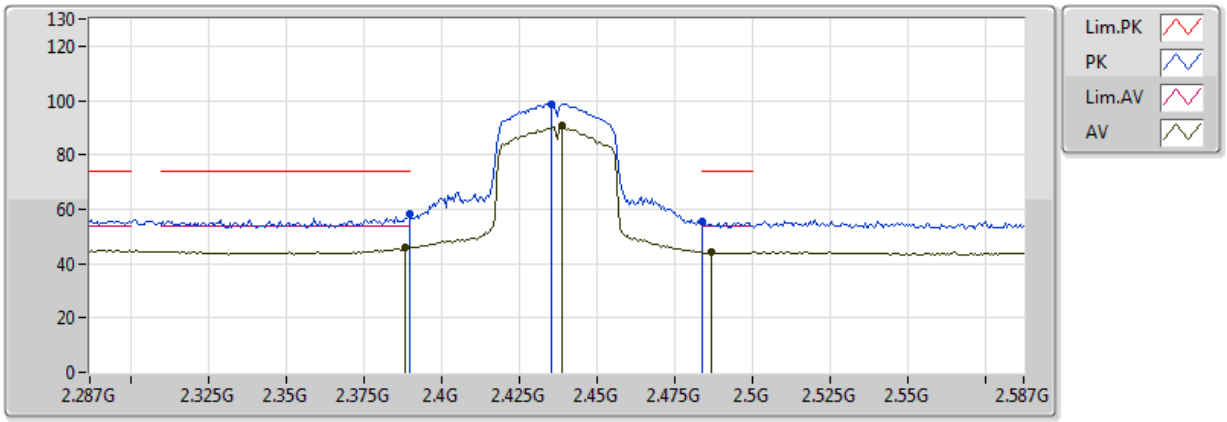


20170707
EUT Z_2TX
Setting 19
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8452G	34.05	54.00	-19.95	3.47	3	H	12	1.96	-
PK	4.846896G	46.93	74.00	-27.07	3.47	3	H	12	1.96	-

802.11ac VHT40_Nss1,(MCS0)_2TX

2437MHz_TX

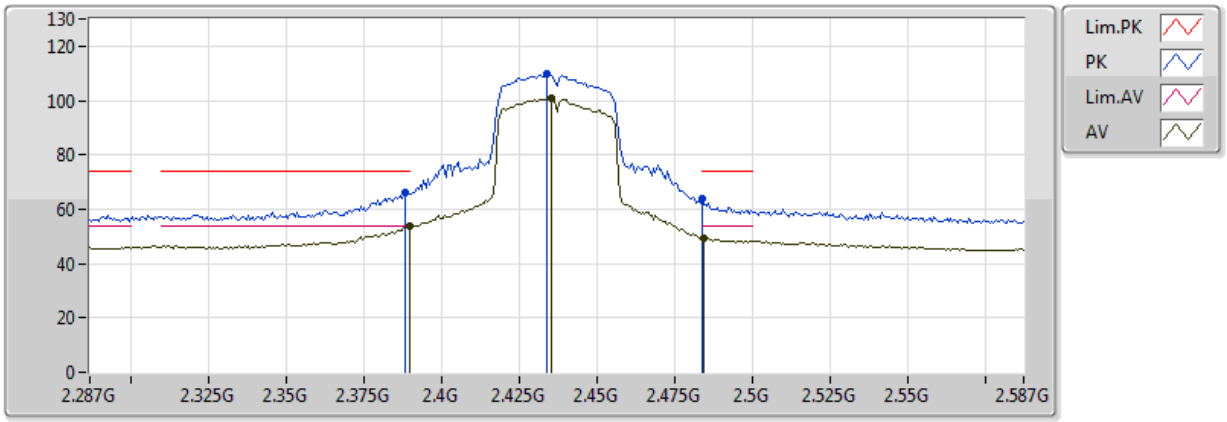


20170707
EUT Z_2TX
Setting 1B
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3884G	46.14	54.00	-7.86	31.04	3	V	10	1.45	-
AV	2.4388G	90.78	Inf	-Inf	30.97	3	V	10	1.45	-
AV	2.4868G	44.09	54.00	-9.91	30.92	3	V	10	1.45	-
PK	2.3896G	58.51	74.00	-15.49	31.04	3	V	10	1.45	-
PK	2.4352G	98.89	Inf	-Inf	30.98	3	V	10	1.45	-
PK	2.483502G	55.33	74.00	-18.67	30.92	3	V	10	1.45	-

802.11ac VHT40_Nss1,(MCS0)_2TX

2437MHz_TX

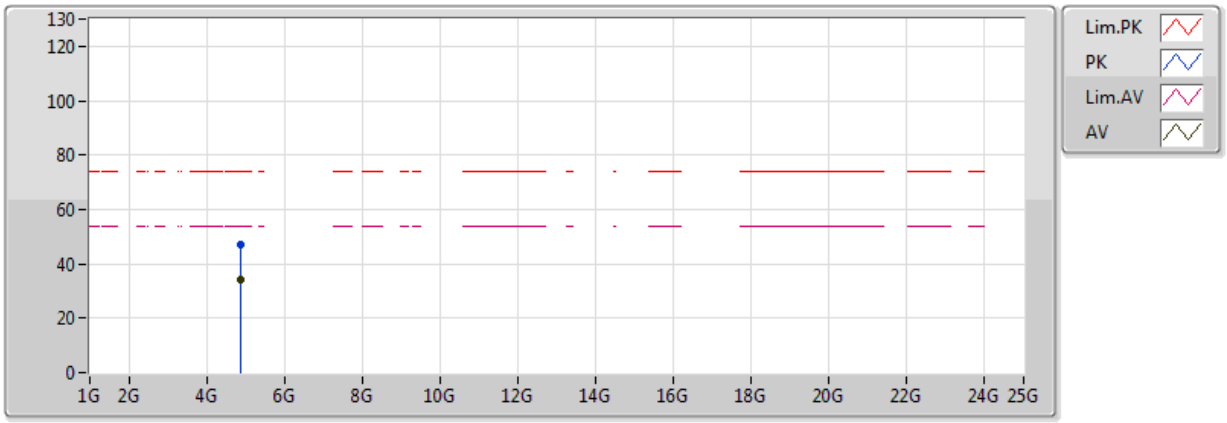


20170707
EUT Z_2TX
Setting 1B
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3896G	53.73	54.00	-0.27	31.04	3	H	0	1.41	-
AV	2.4352G	100.72	Inf	-Inf	30.98	3	H	0	1.41	-
AV	2.4844G	49.46	54.00	-4.54	30.92	3	H	0	1.41	-
PK	2.3884G	66.05	74.00	-7.95	31.04	3	H	0	1.41	-
PK	2.434G	109.57	Inf	-Inf	30.98	3	H	0	1.41	-
PK	2.4838G	63.92	74.00	-10.08	30.92	3	H	0	1.41	-

802.11ac VHT40_Nss1,(MCS0)_2TX

2437MHz_TX

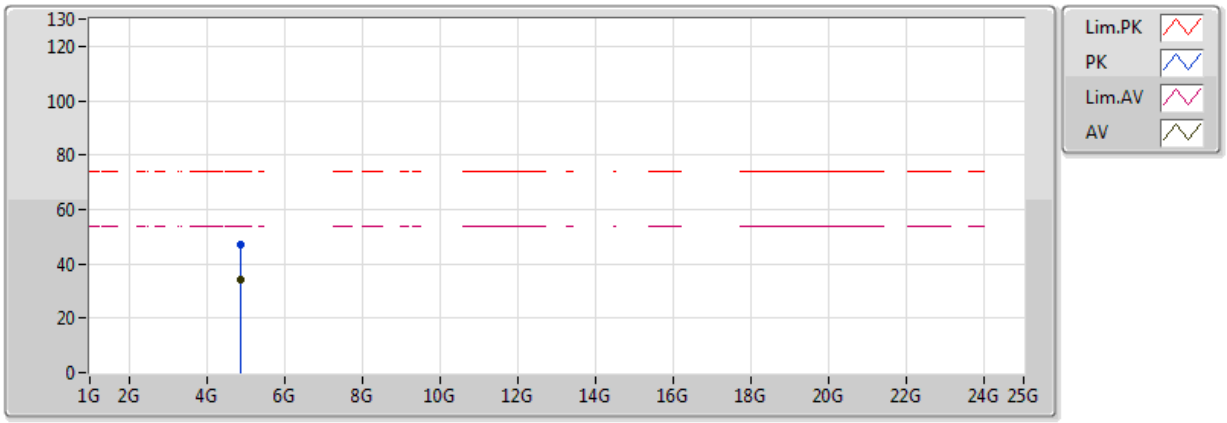


20170707
EUT Z_2TX
Setting 1B
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87283G	34.20	54.00	-19.80	3.55	3	V	114	1.80	-
PK	4.87333G	47.14	74.00	-26.86	3.55	3	V	114	1.80	-

802.11ac VHT40_Nss1,(MCS0)_2TX

2437MHz_TX

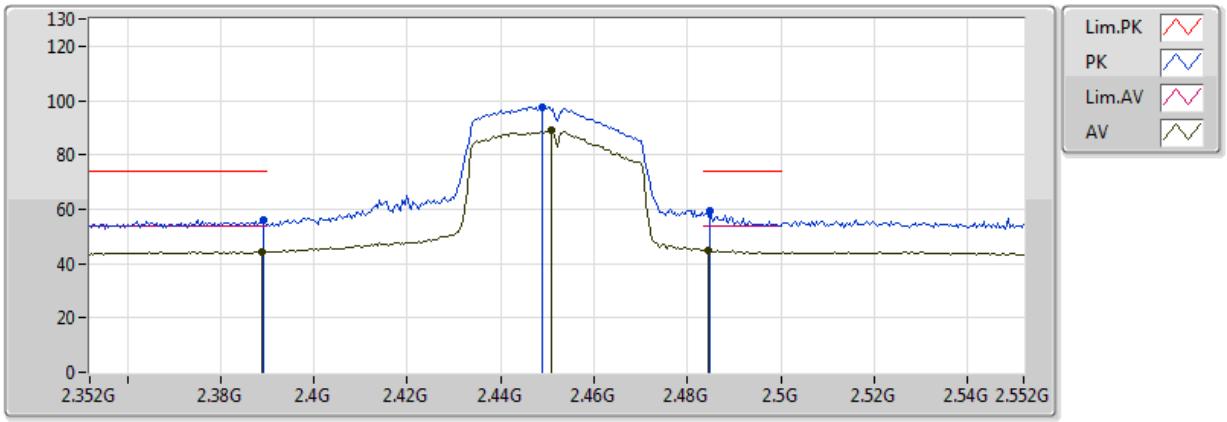


20170707
EUT Z_2TX
Setting 1B
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87168G	34.42	54.00	-19.58	3.55	3	H	30	1.65	-
PK	4.87445G	46.86	74.00	-27.14	3.55	3	H	30	1.65	-

802.11ac VHT40_Nss1,(MCS0)_2TX

2452MHz_TX

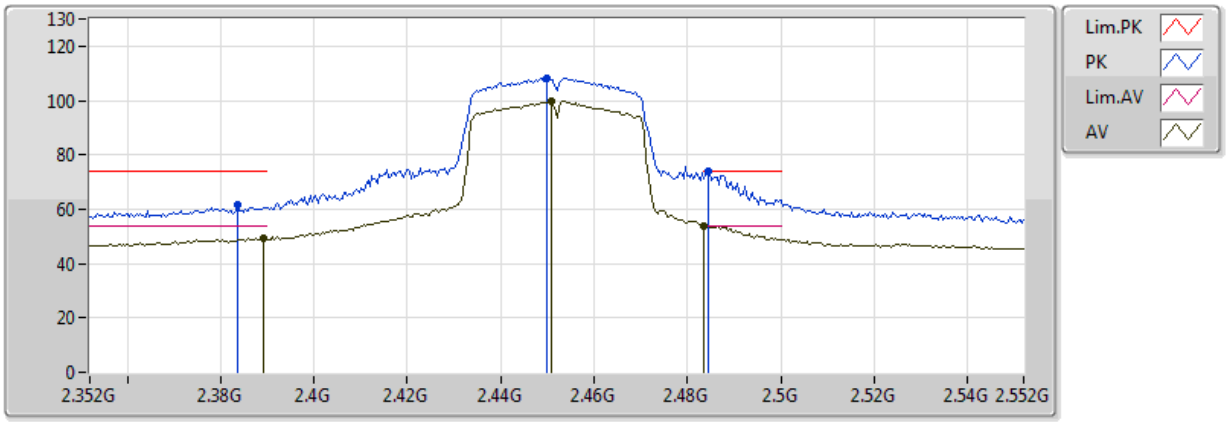


20170707
EUT Z_2TX
Setting 19
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3888G	44.42	54.00	-9.58	31.04	3	V	11	1.48	-
AV	2.4508G	88.83	Inf	-Inf	30.96	3	V	11	1.48	-
AV	2.4844G	45.04	54.00	-8.96	30.92	3	V	11	1.48	-
PK	2.3892G	56.16	74.00	-17.84	31.04	3	V	11	1.48	-
PK	2.4488G	97.50	Inf	-Inf	30.96	3	V	11	1.48	-
PK	2.4848G	59.43	74.00	-14.57	30.92	3	V	11	1.48	-

802.11ac VHT40_Nss1,(MCS0)_2TX

2452MHz_TX

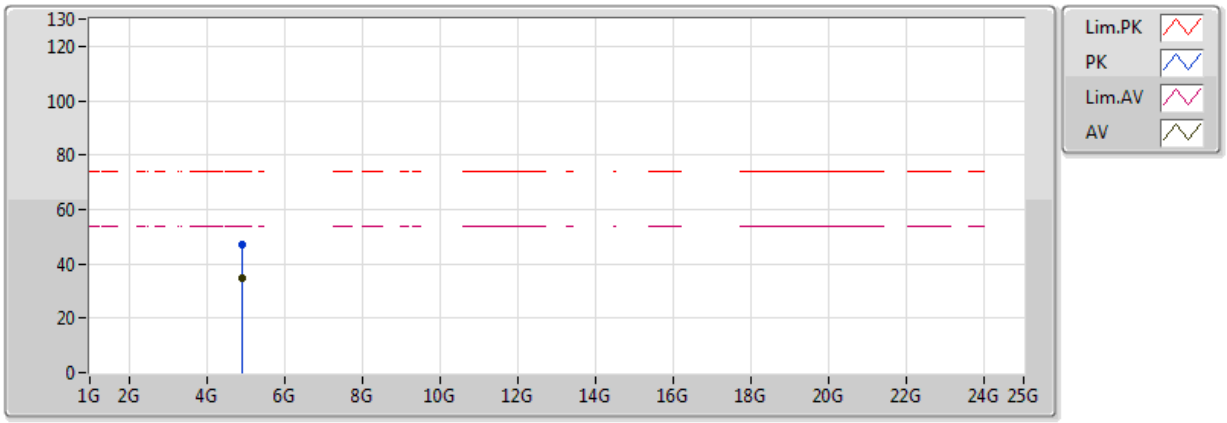


20170707
EUT Z_2TX
Setting 19
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3892G	49.15	54.00	-4.85	31.04	3	H	6	1.01	-
AV	2.4508G	99.74	Inf	-Inf	30.96	3	H	6	1.01	-
AV	2.483502G	53.94	54.00	-0.06	30.92	3	H	6	1.01	-
PK	2.3836G	61.41	74.00	-12.59	31.04	3	H	6	1.01	-
PK	2.45G	108.25	Inf	-Inf	30.96	3	H	6	1.01	-
PK	2.4844G	73.96	74.00	-0.04	30.92	3	H	6	1.01	-

802.11ac VHT40_Nss1,(MCS0)_2TX

2452MHz_TX

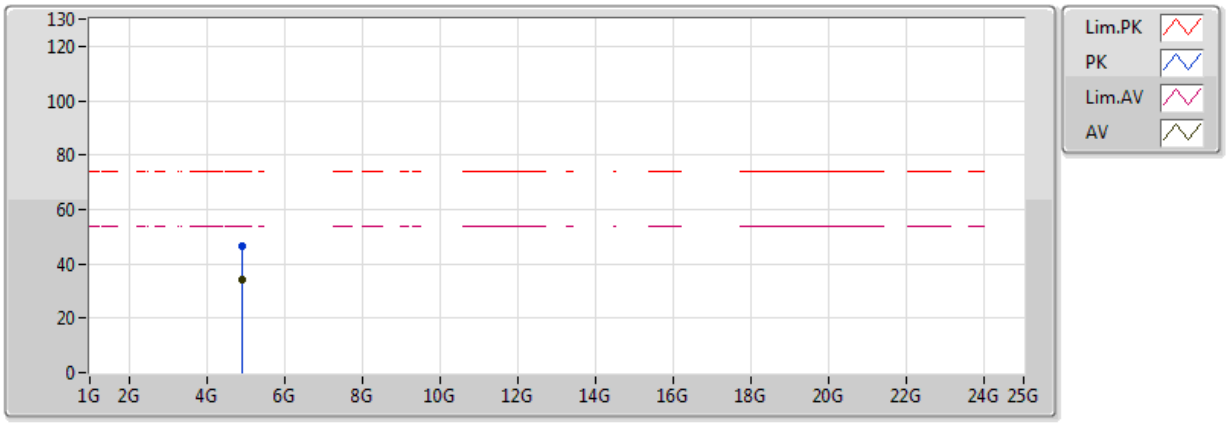


20170707
EUT Z_2TX
Setting 19
01-W-3
FSP(100056)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.90226G	34.51	54.00	-19.49	3.64	3	V	287	1.06	-
PK	4.90276G	47.19	74.00	-26.81	3.64	3	V	287	1.06	-

802.11ac VHT40_Nss1,(MCS0)_2TX

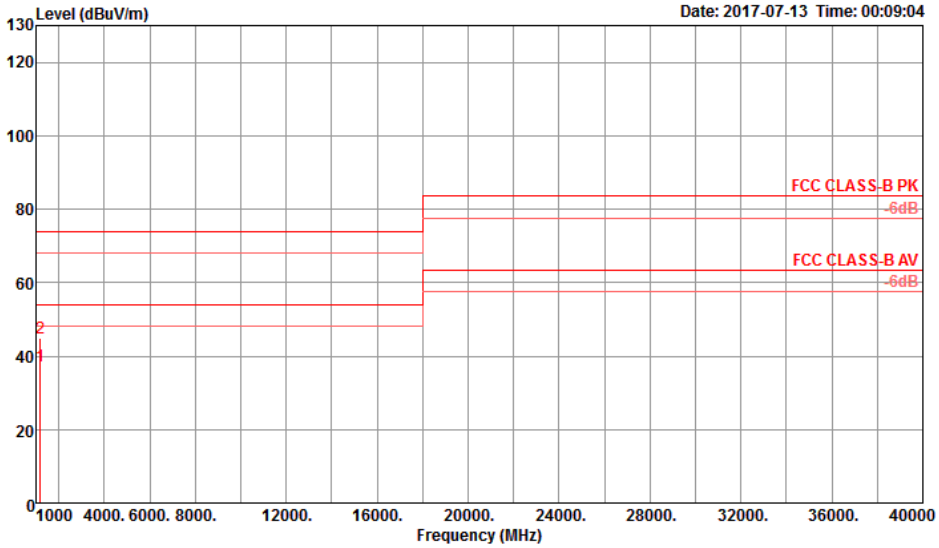
2452MHz_TX



20170707
EUT Z_2TX
Setting 19
01-W-3
FSP(100056)

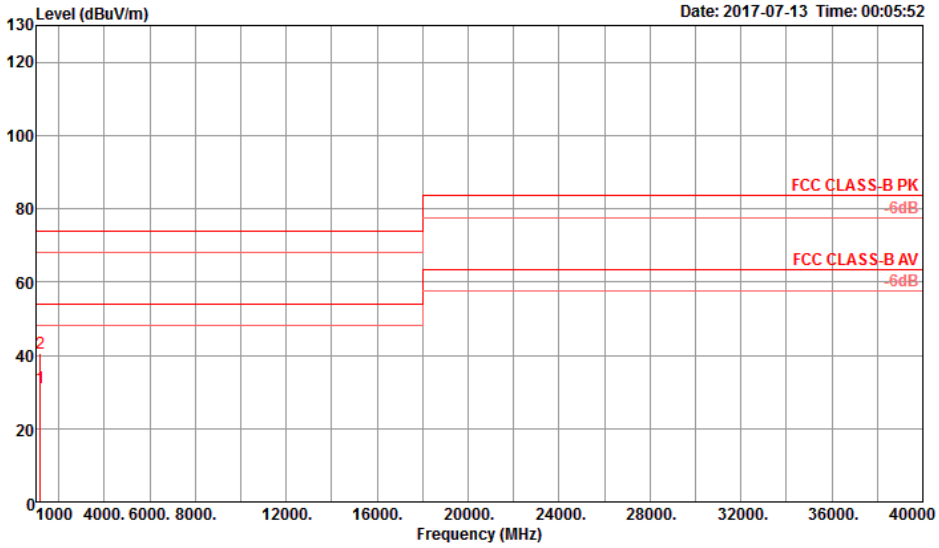
Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.90537G	34.22	54.00	-19.78	3.65	3	H	279	2.47	-
PK	4.9019G	46.61	74.00	-27.39	3.64	3	H	279	2.47	-

RSE Co-location Result			
Operating Mode	1	**Polarization**	Horizontal
Operating Function	Normal Link		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	1199.49	37.31	54.00	-16.69	45.59	2.60	24.51	35.39	102	165	Average	HORIZONTAL
2	1199.92	45.05	74.00	-28.95	53.33	2.60	24.51	35.39	102	165	Peak	HORIZONTAL

RSE Co-location Result			
Operating Mode	1	**Polarization**	Vertical
Operating Function	Normal Link		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	1199.68	31.06	54.00	-22.94	39.34	2.60	24.51	35.39	121	128	Average	VERTICAL
2	1199.78	40.47	74.00	-33.53	48.75	2.60	24.51	35.39	121	128	Peak	VERTICAL