FCC Test Report

Equipment	:	Araknis Networks 110-series Single-WAN Gigabit VPN Router with Wi-Fi
Brand Name	:	Araknis Networks
Model No.	:	AN-110-RT-2L1W-WIFI
FCC ID	:	2AJAC-110WIFI
Standard	:	47 CFR FCC Part 15.247
Operating Band	:	2400 MHz – 2483.5 MHz
Function	:	☒ Point-to-multipoint; ☐ Point-to-point
Applicant	:	Wirepath Home Systems. DBA SnapAV 1800 Continental Blvd. Suite 200 Charlotte, NC 28273 USA
Manufacturer	:	Wirepath Home Systems. DBA SnapAV 1800 Continental Blvd. Suite 200 Charlotte, NC 28273 USA

The product sample received on Jun. 02, 2017 and completely tested on Aug. 02, 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.

Testing Laboratory
1190

Cliff Chang
SPORTON INTERNATIONAL INC.

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 11
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 V01

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
FR731408AA	Rev. 01	Initial issue of report	Feb. 12, 2018

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 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	P/N	Antenna Type	Connector	Gain (dBi)	
					2.4GHz	5GHz
1	LYNwave	ALX17M-052XX2-00	PIFA Antenna	I-PEX	3.67	-
2	LYNwave	ALX17M-052XX2-01	PIFA Antenna	I-PEX	3.07	-
3	LYNwave	ALX17M-092XX1-00	PIFA Antenna	I-PEX	-	3.80
4	LYNwave	ALX17M-092XX1-01	PIFA Antenna	I-PEX	-	3.19

Note: The EUT has four antennas.

For WLAN 2.4GHz (2TX/2RX):

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

For WLAN 5GHz (2TX/2RX):

Ant. 3 (Port 1) and Ant. 4 (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	0.953	0.209	8.418m	300
802.11g	0.809	0.921	1.4m	1k
802.11ac VHT20	0.807	0.931	1.313m	1k
802.11ac VHT40	0.663	1.785	652.5u	3k

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter			
Beamforming Function	☒	With beamforming	☐	Without beamforming
	The product has beamforming function for 802.11n/ac in 5GHz.			
Test Software Version	QA UI (MT7615) Version:0.0.1.71			

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	Serway Li & Gino Huang & Peter Wu	20°C / 55%	Jun. 21, 2017~Jul. 24, 2017
Radiated	03CH01-CB	Jay Luo & Joy Tseng	22°C / 54%	Jun. 02, 2017~Jul. 27, 2017
AC Conduction	CO01-CB	Wei Li	26°C / 63%	Aug. 02, 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	25
2437MHz	2A
2462MHz	23
802.11g_(6Mbps)_2TX	-
2412MHz	20
2437MHz	2C
2462MHz	1D
802.11ac VHT20_Nss1,(MCS0)_2TX	-
2412MHz	20
2437MHz	2C
2462MHz	1E
802.11ac VHT40_Nss1,(MCS0)_2TX	-
2422MHz	19
2437MHz	24
2452MHz	1E

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	Place EUT in Z axis + Adapter
2	Place EUT in Y axis + Adapter
For operating mode 1 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
The EUT was performed at Z axis and Y axis position. The worst case was found at Z axis, so it was selected to perform test and its test result was written in the report.	
1	Place EUT in Z axis

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 was performed at Z axis and Y axis position. The worst case was found at Z axis, so it was selected to perform test and its test result was written in the report.	
1	Place EUT in Z axis - WLAN 2.4GHz + WLAN 5GHz + WWAN
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	
1	WLAN 2.4GHz + WLAN 5GHz + WWAN
Refer to Sporton Test Report No.: FA731408 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			
Equipment Name	**Brand Name**	**Model Name**	**Rating**
Adapter	APD	WA-24Q12R	INPUT: 100-240V~50-60Hz, 0.7A Max OUTPUT: 12V, 2A
Other			
Plug*1			

2.5 Support Equipment

For Test Site No: CO01-CB

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB*4	DELL	E6430	DoC
2	LTE Base station	Anritsu	MT8820C	DoC
3	4G Dongle	HUAWEI	E3372h	QISE3372H-510

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

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB*2	DELL	E4300	DoC
2	NB*2	Apple	Mac Book	DoC
3	LTE Base station	Anritsu	MT8820C	DoC
4	4G Dongle	HUAWEI	E3372h	QISE3372H-510

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

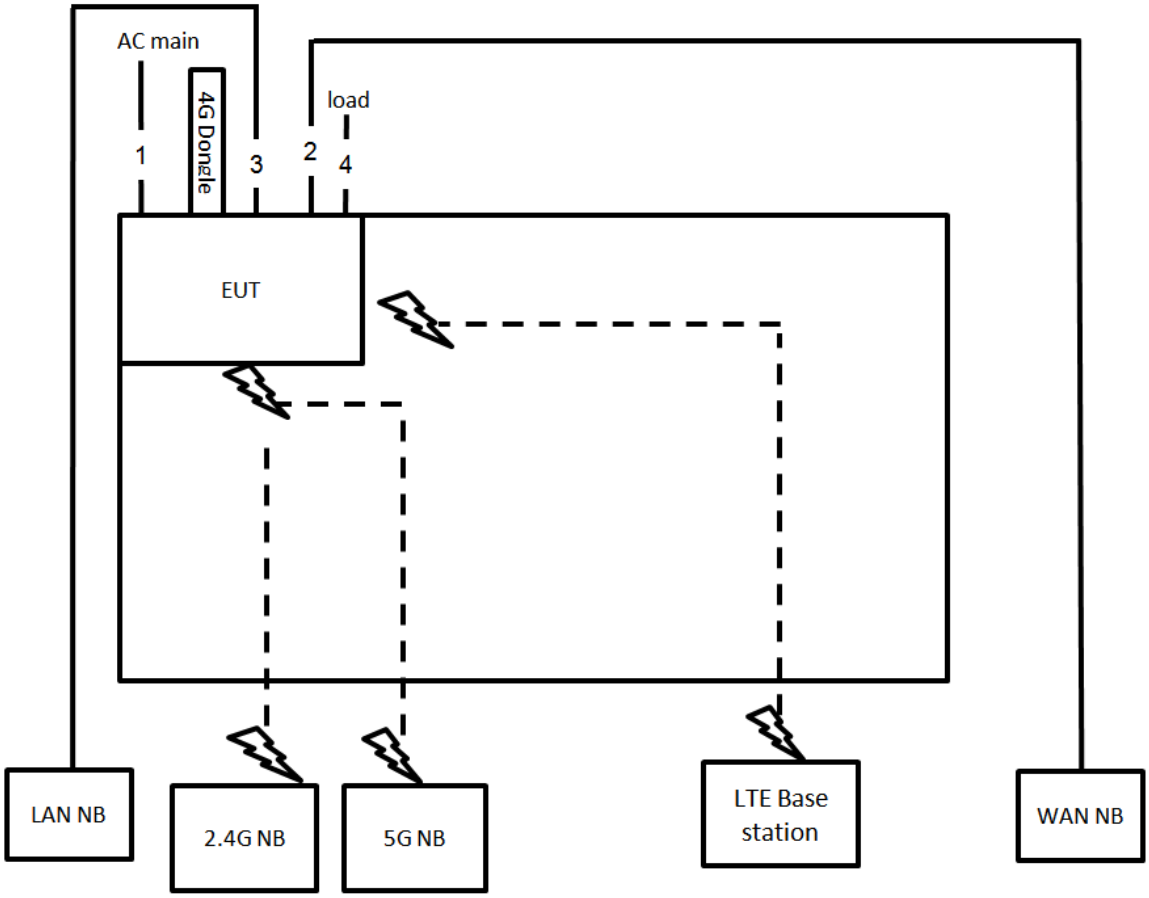
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB	DELL	E4300	DoC

For Test Site No: TH01-CB

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

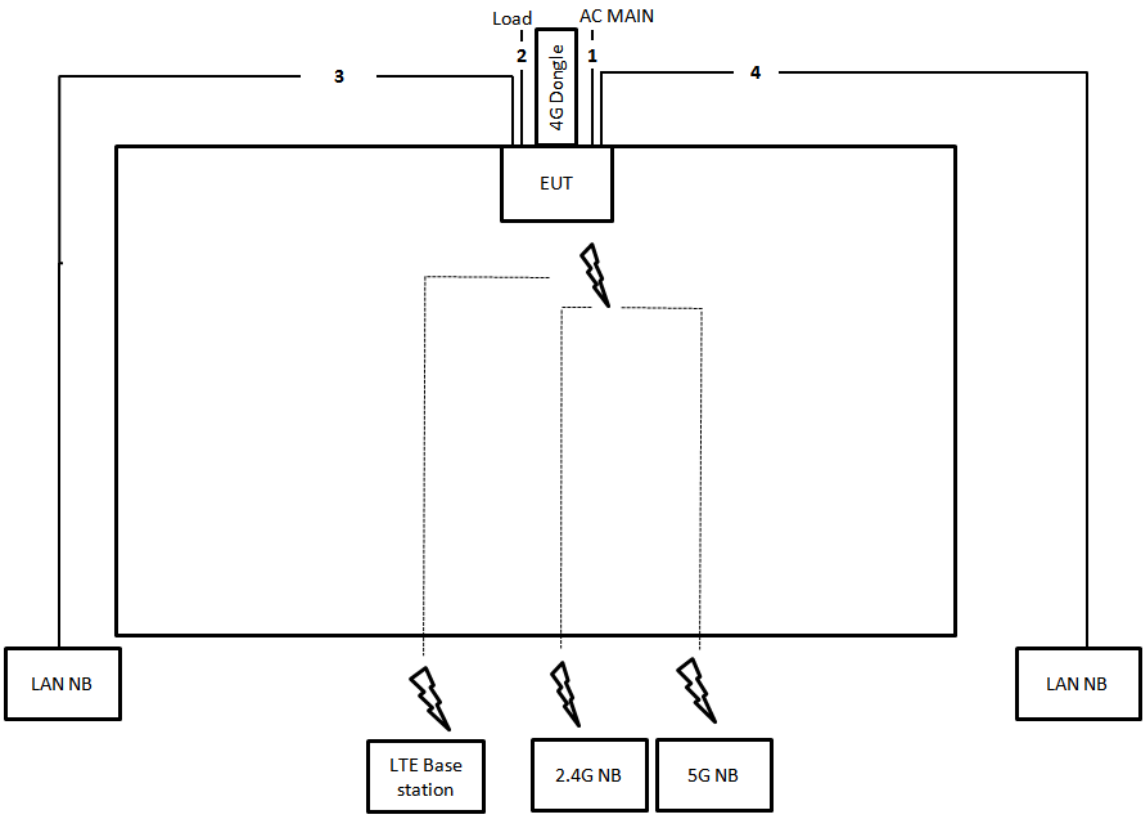
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



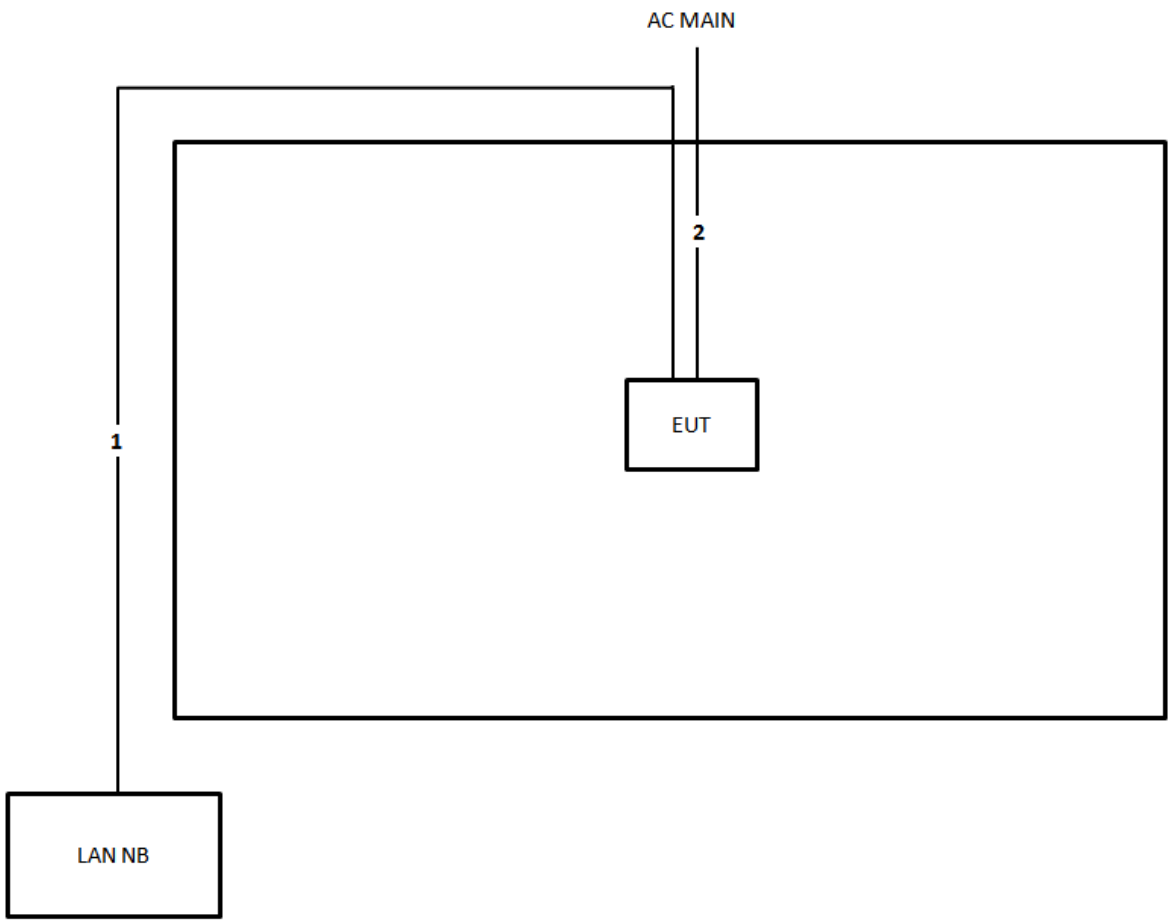
Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	10m
4	RJ-45 cable	No	1.5m

Test Setup Diagram - Radiated Test < 1GHz



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

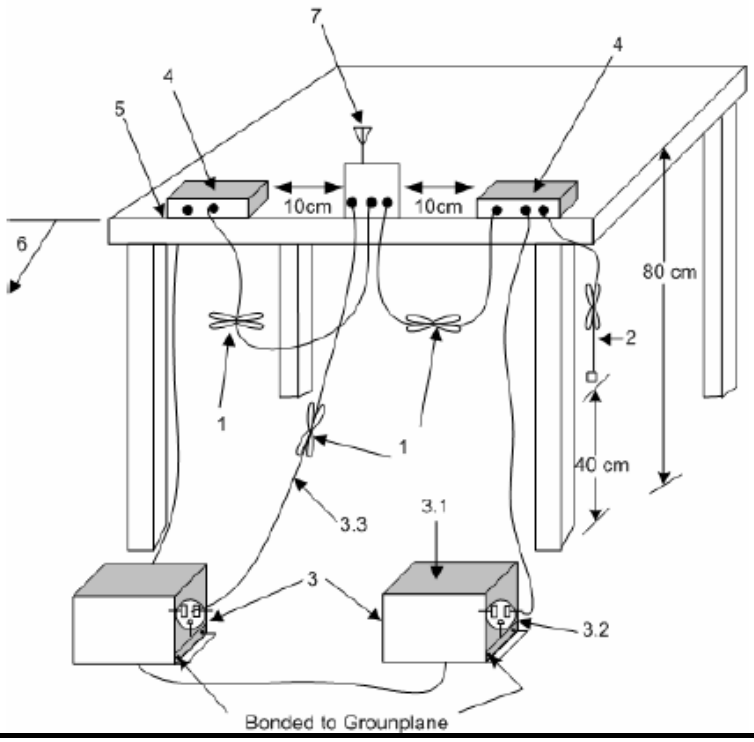
Refer a test equipment and calibration data table in this test report.

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

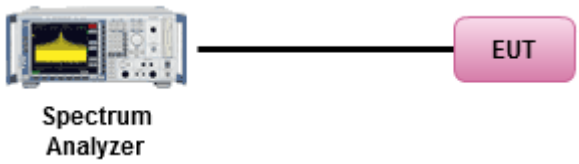
Refer a test equipment and calibration data table in this test report.

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

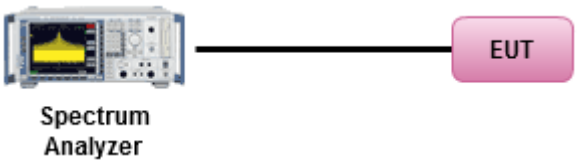
3.4.2 Measuring Instruments

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

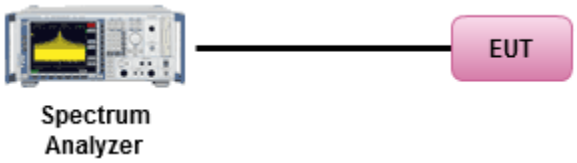
Refer a test equipment and calibration data table in this test report.

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.

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

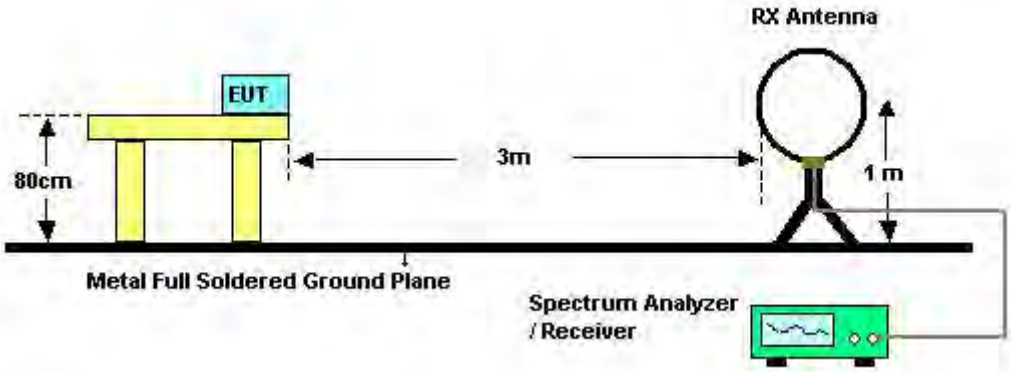
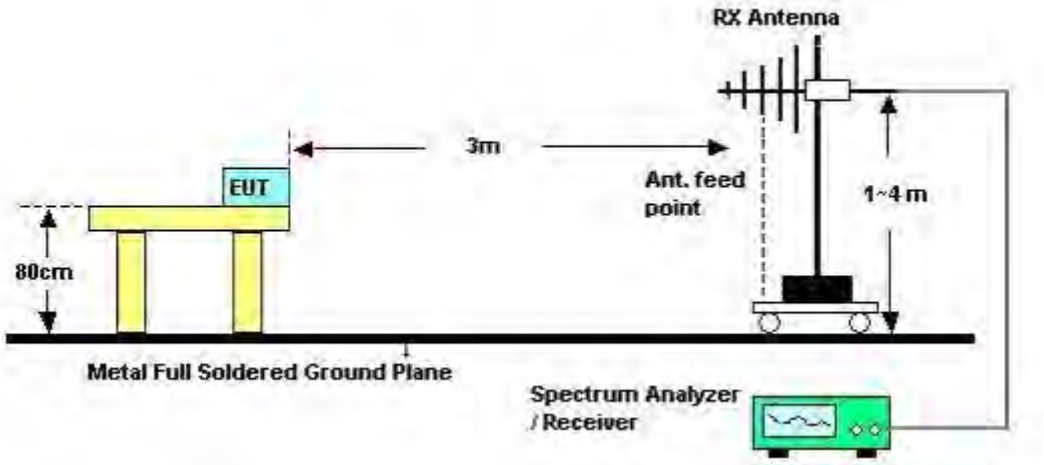
3.6.2 Measuring Instruments

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

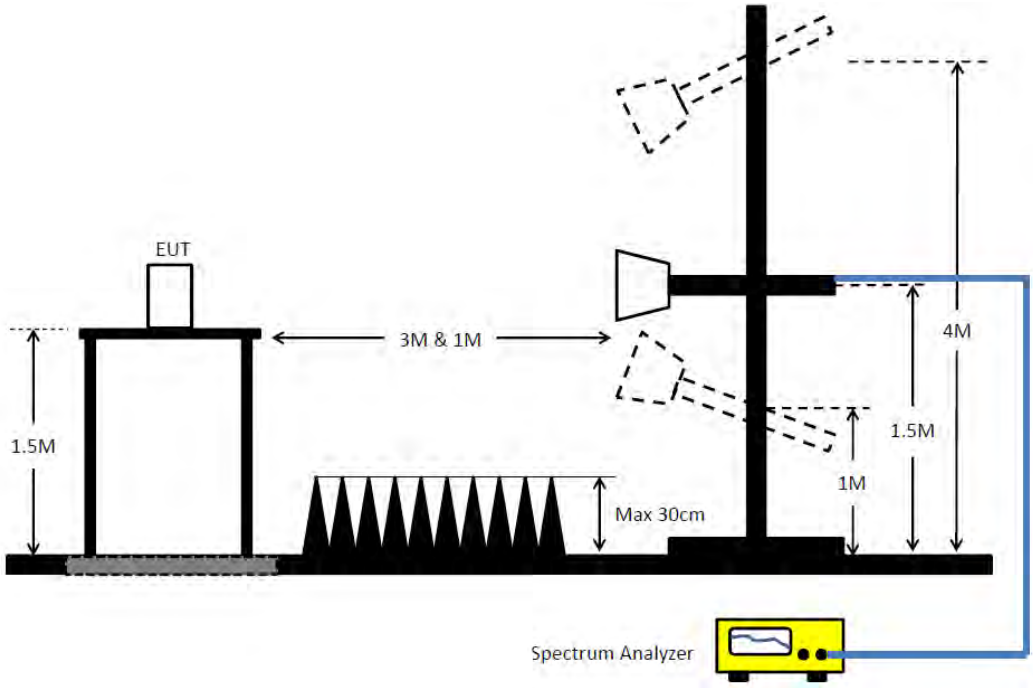
3.6.3 Test Procedures

Test Method			
▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].			
▪ Refer as ANSI C63.10, clause 6.9.2.2 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

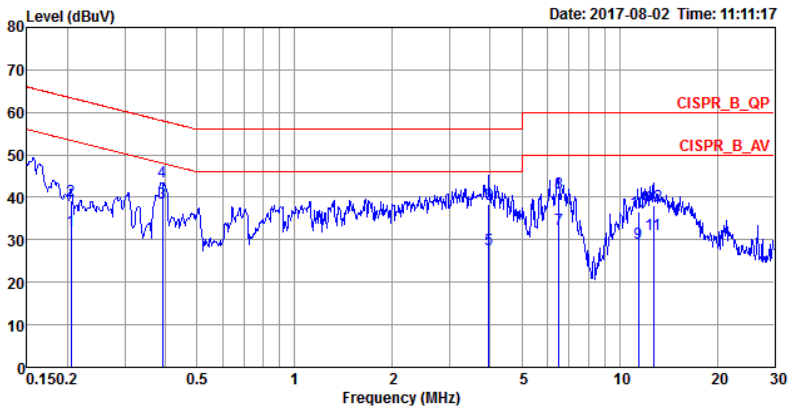
4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 23, 2017	Jan. 22, 2018	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 14, 2016	Dec. 13, 2017	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Dec. 21, 2016	Dec. 20, 2017	Conduction (CO01-CB)
COND Cable	Woken	Cable	01	150kHz ~ 30MHz	May 23, 2017	May 22, 2018	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	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	Aug. 29, 2017	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 10, 2016	Nov. 09, 2017	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 25, 2016	Jul. 24, 2017	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 16, 2017	Jun. 15, 2018	Radiation (03CH01-CB)
Pre-Amplifier	EMCI	EMC330N	980332	20MHz ~ 3GHz	May 02, 2017	May 01, 2018	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 16, 2017	Jan. 15, 2018	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jun. 28, 2016	Jun. 27, 2017	Radiation (03CH01-CB)
Pre-Amplifier	-	-	TF-130N-R1	26GHz ~ 40GHz	Jun. 20, 2017	Jun. 19, 2018	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Nov. 22, 2016	Nov. 21, 2017	Radiation (03CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2016*	Mar. 15, 2018*	Radiation (03CH01-CB)
EMI Test	R&S	ESCS	100355	9kHz ~ 2.75GHz	May 06, 2017	May 05, 2018	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-16+17	N/A	30 MHz ~ 1 GHz	Oct. 24, 2016	Oct. 23, 2017	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Oct. 24, 2016	Oct. 23, 2017	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16+17	N/A	1 GHz ~ 18 GHz	Oct. 24, 2016	Oct. 23, 2017	Radiation (03CH01-CB)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	High Cable-40G#1	N/A	18GHz ~ 40 GHz	Oct. 24, 2016	Oct. 23, 2017	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Oct. 24, 2016	Oct. 23, 2017	Radiation (03CH01-CB)
Test Software	Audix	E3	6.2009-l0-7	N/A	N/A	N/A	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 26, 2016	Dec. 25, 2017	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-6	1 GHz – 26.5 GHz	Oct. 24, 2016	Oct. 23, 2017	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-7	1 GHz –26.5 GHz	Oct. 24, 2016	Oct. 23, 2017	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-8	1 GHz –26.5 GHz	Oct. 24, 2016	Oct. 23, 2017	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-9	1 GHz –26.5 GHz	Oct. 24, 2016	Oct. 23, 2017	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 24, 2016	Oct. 23, 2017	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 22, 2016	Nov. 21, 2017	Conducted (TH01-CB)

Note: Calibration Interval of instruments listed above is one year.
"*" Calibration Interval of instruments listed above is two years.
NCR means Non-Calibration required.

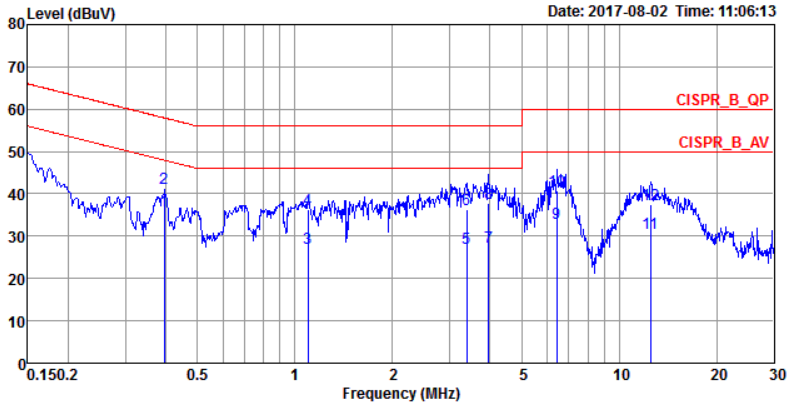
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	Normal Link		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.2050	32.30	-21.10	53.40	22.27	9.98	0.05	Average	NEUTRAL
2	0.2050	39.34	-24.06	63.40	29.31	9.98	0.05	QP	NEUTRAL
3	0.3918	38.56	-9.46	48.02	28.56	9.96	0.04	Average	NEUTRAL
4	0.3918	43.71	-14.31	58.02	33.71	9.96	0.04	QP	NEUTRAL
5	3.9621	27.86	-18.14	46.00	17.65	10.08	0.13	Average	NEUTRAL
6	3.9621	38.44	-17.56	56.00	28.23	10.08	0.13	QP	NEUTRAL
7	6.4956	32.46	-17.54	50.00	22.19	10.12	0.15	Average	NEUTRAL
8	6.4956	40.91	-19.09	60.00	30.64	10.12	0.15	QP	NEUTRAL
9	11.4158	29.28	-20.72	50.00	18.90	10.18	0.20	Average	NEUTRAL
10	11.4158	36.51	-23.49	60.00	26.13	10.18	0.20	QP	NEUTRAL
11	12.6950	31.15	-18.85	50.00	20.74	10.20	0.21	Average	NEUTRAL
12	12.6950	37.99	-22.01	60.00	27.58	10.20	0.21	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	0.3955	35.99	-11.96	47.95	26.06	9.89	0.04	Average	LINE
2	0.3955	41.30	-16.65	57.95	31.37	9.89	0.04	QP	LINE
3	1.0997	27.13	-18.87	46.00	17.09	9.98	0.06	Average	LINE
4	1.0997	36.36	-19.64	56.00	26.32	9.98	0.06	QP	LINE
5	3.3814	27.14	-18.86	46.00	17.06	9.97	0.11	Average	LINE
6	3.3814	36.45	-19.55	56.00	26.37	9.97	0.11	QP	LINE
7	3.9602	27.59	-18.41	46.00	17.51	9.95	0.13	Average	LINE
8	3.9602	37.82	-18.18	56.00	27.74	9.95	0.13	QP	LINE
9	6.4258	32.96	-17.04	50.00	22.80	10.01	0.15	Average	LINE
10	6.4258	40.88	-19.12	60.00	30.72	10.01	0.15	QP	LINE
11	12.5156	30.83	-19.17	50.00	20.51	10.11	0.21	Average	LINE
12	12.5156	37.53	-22.47	60.00	27.21	10.11	0.21	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	10.075M	16.642M	16M6G1D	9.075M	14.618M
802.11g_(6Mbps)_2TX	-	-	-	-	-
2.4-2.4835GHz	15.65M	21.939M	21M9D1D	13.8M	16.442M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-
2.4-2.4835GHz	15.7M	19.915M	19M9D1D	13.825M	17.541M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-
2.4-2.4835GHz	35.1M	36.032M	36M0D1D	23.75M	35.682M

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;

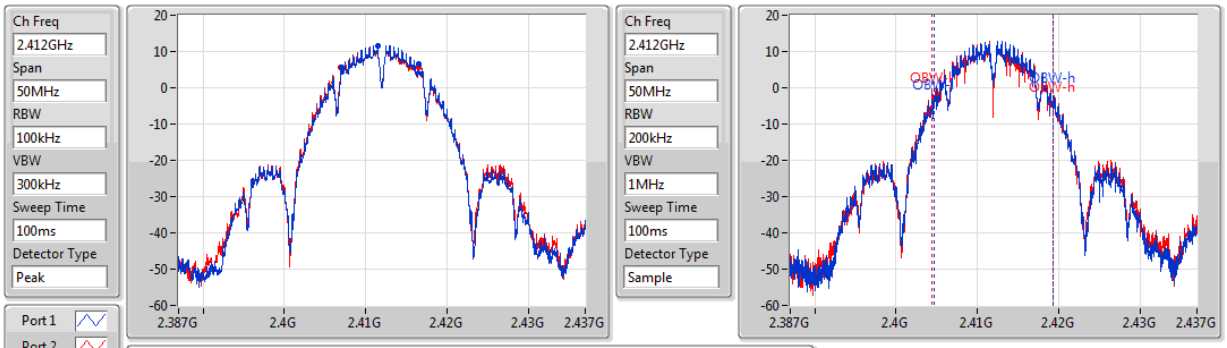
Result

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	9.5M	14.618M	9.575M	14.918M
2437MHz	Pass	500k	10.075M	16.392M	10.075M	16.642M
2462MHz	Pass	500k	9.075M	15.042M	10.05M	15.842M
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	15.025M	16.442M	15.65M	16.492M
2437MHz	Pass	500k	15.1M	21.939M	15.1M	19.09M
2462MHz	Pass	500k	15.4M	16.542M	13.8M	16.592M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	15.075M	17.541M	15.05M	17.616M
2437MHz	Pass	500k	13.825M	19.915M	15.675M	19.215M
2462MHz	Pass	500k	15.1M	17.566M	15.7M	17.666M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	35.1M	36.032M	35.1M	36.032M
2437MHz	Pass	500k	28.75M	35.782M	33.8M	35.882M
2452MHz	Pass	500k	32.55M	35.782M	23.75M	35.682M

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

802.11b_(1Mbps)_2TX — EBW

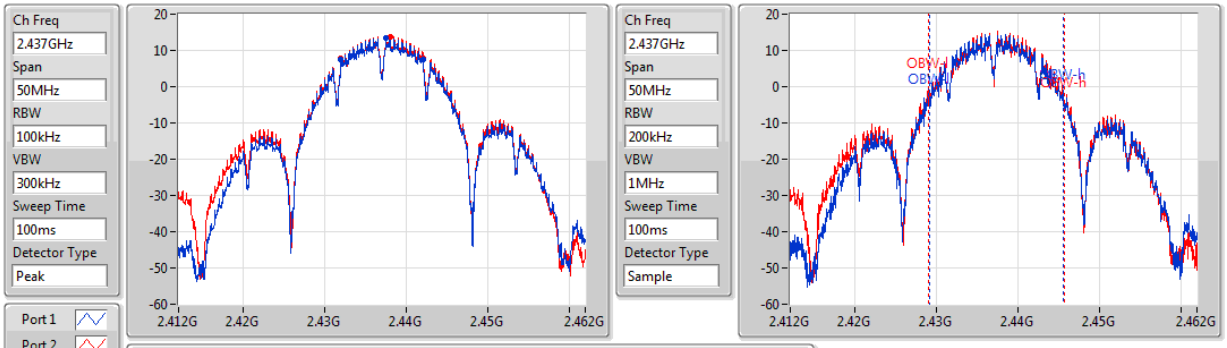
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
9.5M	2.407G	2.4165G	14.618M	2.404629G	2.419246G	500k	1
9.575M	2.40695G	2.416525G	14.918M	2.404429G	2.419346G	500k	2

802.11b_(1Mbps)_2TX — EBW

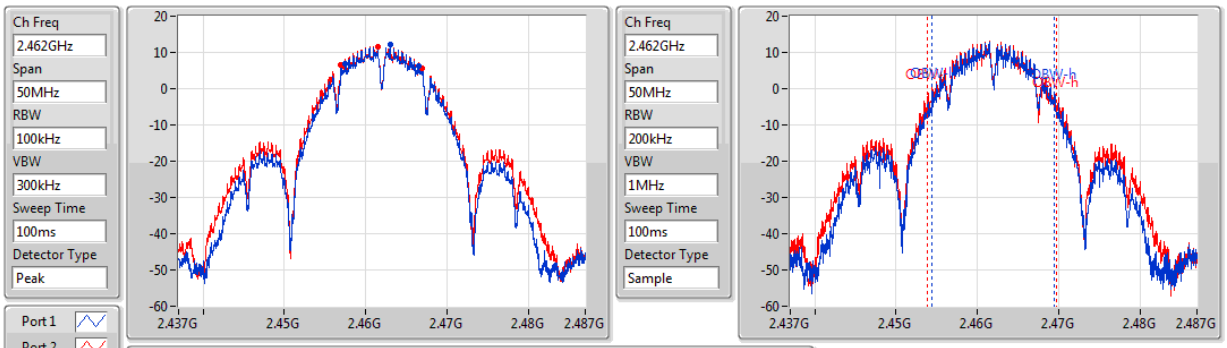
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
10.075M	2.431975G	2.44205G	16.392M	2.429154G	2.445546G	500k	1
10.075M	2.431975G	2.44205G	16.642M	2.429004G	2.445646G	500k	2

802.11b_(1Mbps)_2TX — EBW

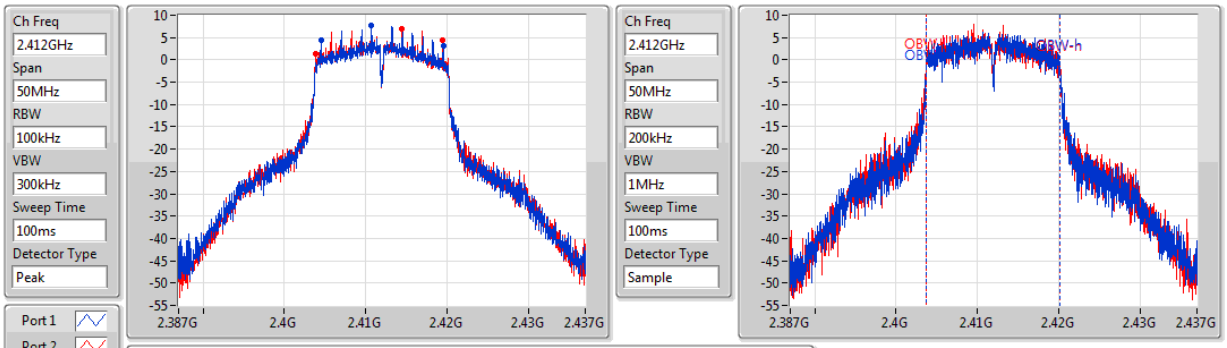
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
9.075M	2.45745G	2.466525G	15.042M	2.454404G	2.469446G	500k	1
10.05M	2.45695G	2.467G	15.842M	2.453904G	2.469746G	500k	2

802.11g_(6Mbps)_2TX EBW

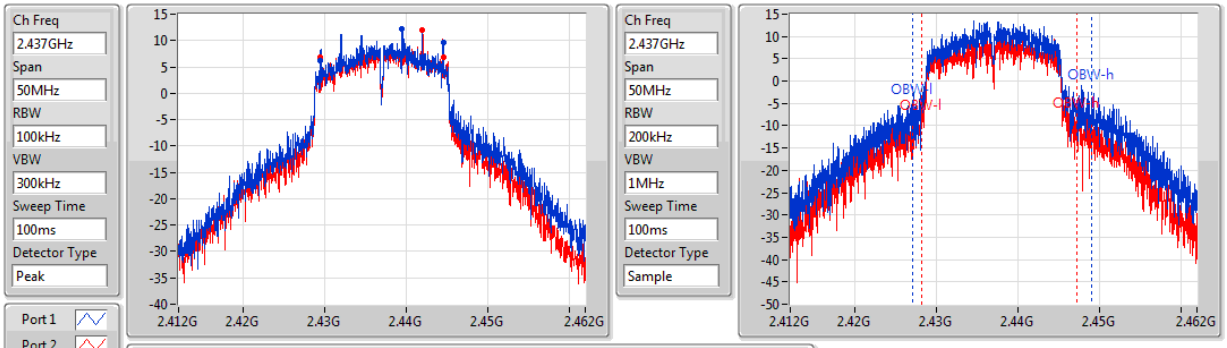
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.025M	2.4045G	2.419525G	16.442M	2.403729G	2.420171G	500k	1
15.65M	2.40385G	2.4195G	16.492M	2.403679G	2.420171G	500k	2

802.11g_(6Mbps)_2TX EBW

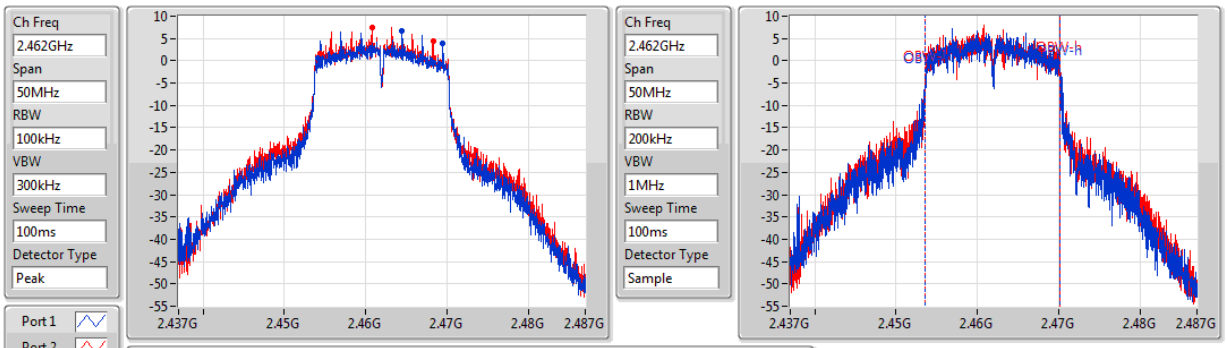
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.1M	2.429425G	2.444525G	21.939M	2.42708G	2.449019G	500k	1
15.1M	2.42945G	2.44455G	19.09M	2.428129G	2.44722G	500k	2

802.11g_(6Mbps)_2TX EBW

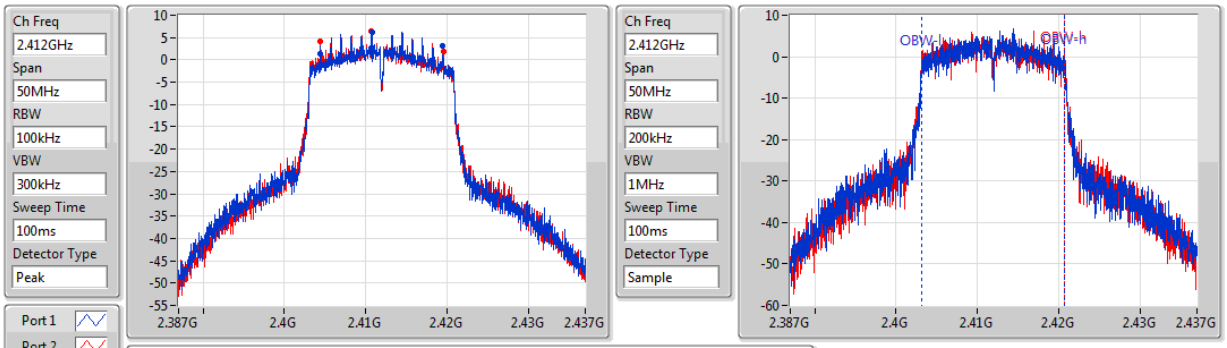
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.4M	2.4541G	2.4695G	16.542M	2.453629G	2.470171G	500k	1
13.8M	2.454475G	2.468275G	16.592M	2.453579G	2.470171G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX — EBW

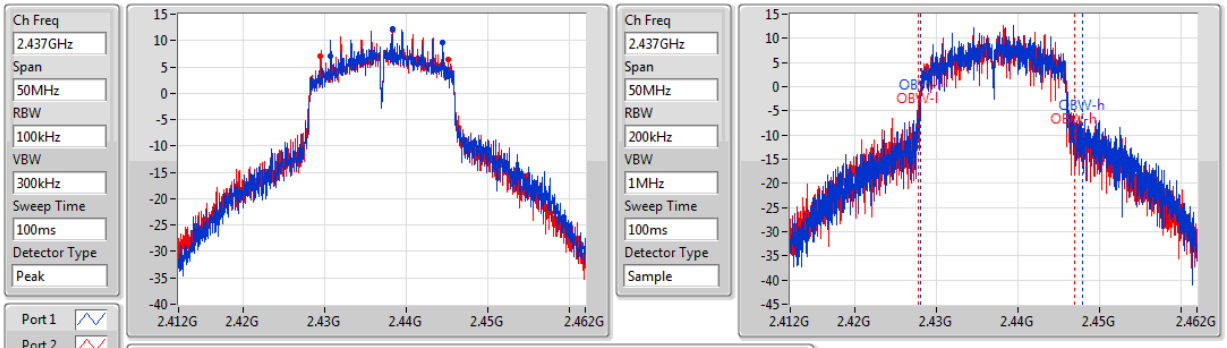
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.075M	2.404425G	2.4195G	17.541M	2.403179G	2.420721G	500k	1
15.05M	2.404475G	2.419525G	17.616M	2.403154G	2.420771G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX — EBW

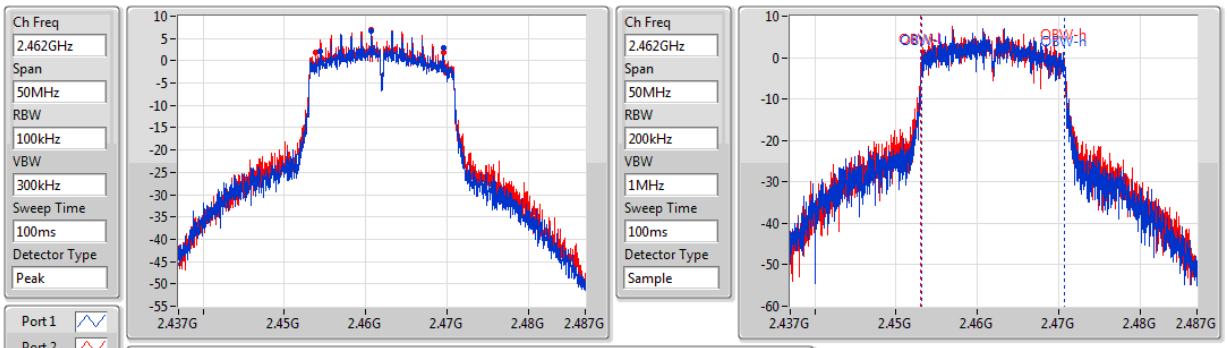
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
13.825M	2.430675G	2.4445G	19.915M	2.42798G	2.447895G	500k	1
15.675M	2.42945G	2.445125G	19.215M	2.42773G	2.446945G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX — EBW

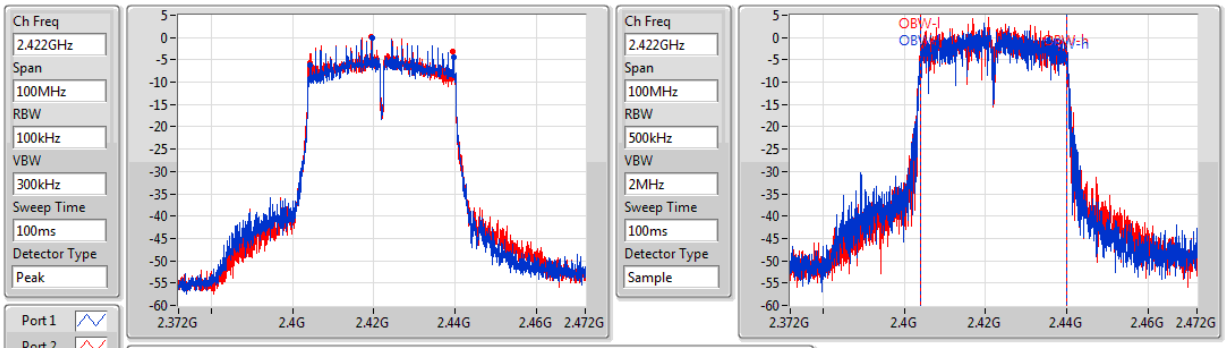
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.1M	2.454425G	2.469525G	17.566M	2.453154G	2.470721G	500k	1
15.7M	2.45385G	2.46955G	17.666M	2.453079G	2.470746G	500k	2

802.11ac VHT40_Nss1,(MCS0)_2TX — EBW

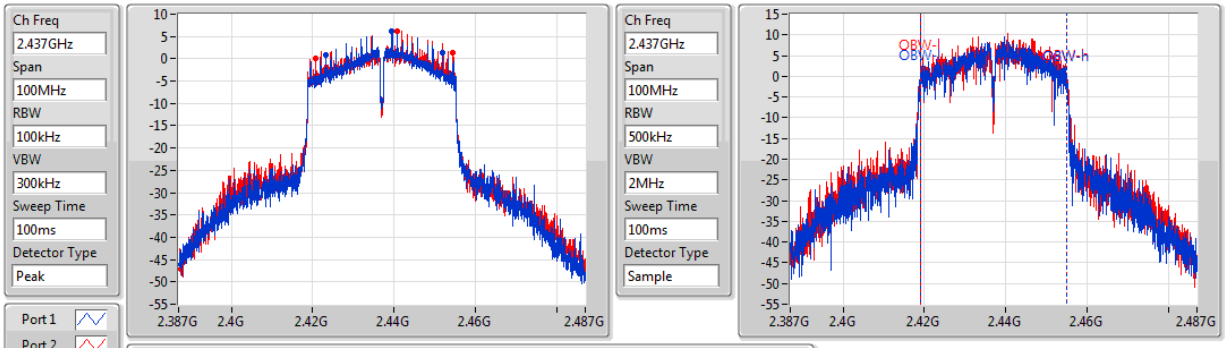
2422MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.1M	2.40445G	2.43955G	36.032M	2.404009G	2.440041G	500k	1
35.1M	2.4044G	2.4395G	36.032M	2.403909G	2.439941G	500k	2

802.11ac VHT40_Nss1,(MCS0)_2TX — EBW

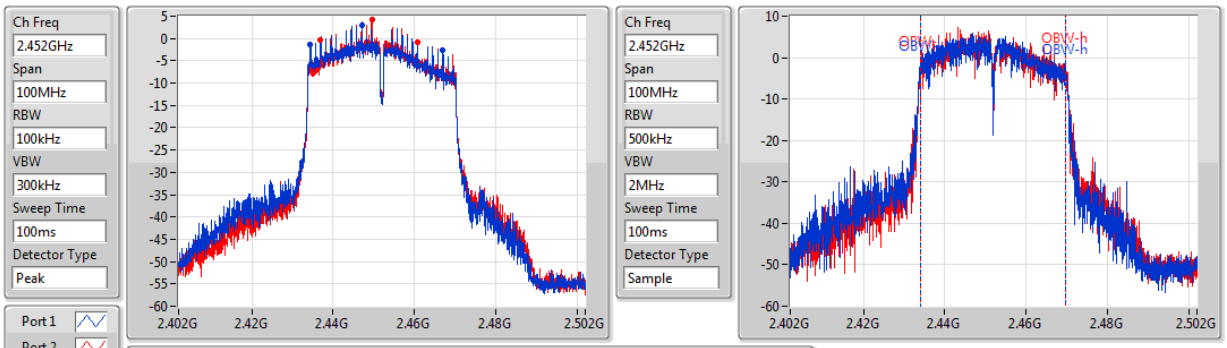
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
28.75M	2.4232G	2.45195G	35.782M	2.419059G	2.454841G	500k	1
33.8M	2.4207G	2.4545G	35.882M	2.419009G	2.454891G	500k	2

802.11ac VHT40_Nss1,(MCS0)_2TX — EBW

2452MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
32.55M	2.43445G	2.467G	35.782M	2.433959G	2.469741G	500k	1
23.75M	2.43695G	2.4607G	35.682M	2.434109G	2.469791G	500k	2

Summary

Mode	Total Power (dBm)	Total Power (W)
802.11b_(1Mbps)_2TX	-	-
2.4-2.4835GHz	27.32	0.53951
802.11g_(6Mbps)_2TX	-	-
2.4-2.4835GHz	26.15	0.41210
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-
2.4-2.4835GHz	25.77	0.37757
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-
2.4-2.4835GHz	22.24	0.16749

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.67	22.25	22.08	25.18	30.00
2437MHz	Pass	3.67	24.15	24.46	27.32	30.00
2462MHz	Pass	3.67	22.21	22.3	25.27	30.00
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.67	18.37	18.4	21.40	30.00
2437MHz	Pass	3.67	23.42	22.85	26.15	30.00
2462MHz	Pass	3.67	18.05	18.23	21.15	30.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.67	17.5	17.32	20.42	30.00
2437MHz	Pass	3.67	22.6	22.91	25.77	30.00
2462MHz	Pass	3.67	17.51	17.79	20.66	30.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	3.67	13.79	14.1	16.96	30.00
2437MHz	Pass	3.67	19.31	19.15	22.24	30.00
2452MHz	Pass	3.67	17.58	17.75	20.68	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	-2.9
802.11ac VHT20_Nss1,(MCS0)_2TX	-
2.4-2.4835GHz	-3.43
802.11ac VHT40_Nss1,(MCS0)_2TX	-
2.4-2.4835GHz	-8.39

RBW=3kHz.

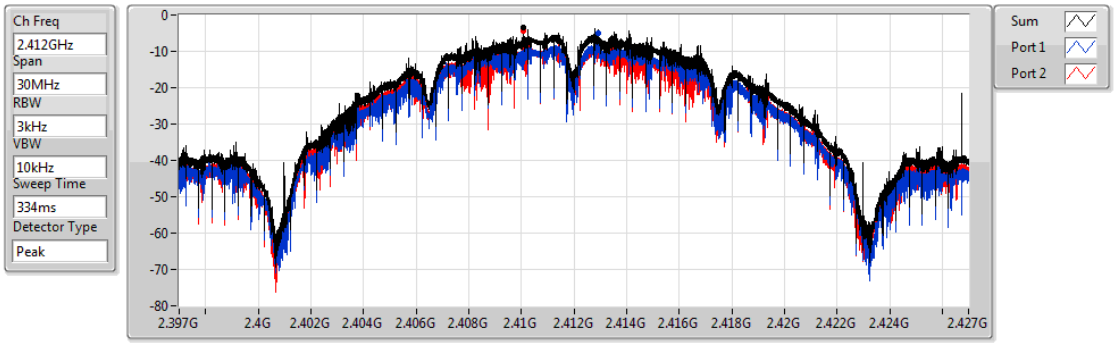
Result

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	6.39	-5.14	-4.52	-3.51	7.61
2437MHz	Pass	6.39	-4.07	-3.14	-2.10	7.61
2462MHz	Pass	6.39	-5.76	-3.93	-2.70	7.61
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.39	-9.96	-10.09	-7.45	7.61
2437MHz	Pass	6.39	-4.53	-5.86	-2.90	7.61
2462MHz	Pass	6.39	-9.92	-9.59	-7.95	7.61
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.39	-10.51	-10.72	-8.22	7.61
2437MHz	Pass	6.39	-4.21	-5.32	-3.43	7.61
2462MHz	Pass	6.39	-10.12	-10.12	-8.75	7.61
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	6.39	-17.09	-16.32	-15.43	7.61
2437MHz	Pass	6.39	-9.8	-10.81	-8.39	7.61
2452MHz	Pass	6.39	-13.38	-12.12	-11.05	7.61

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

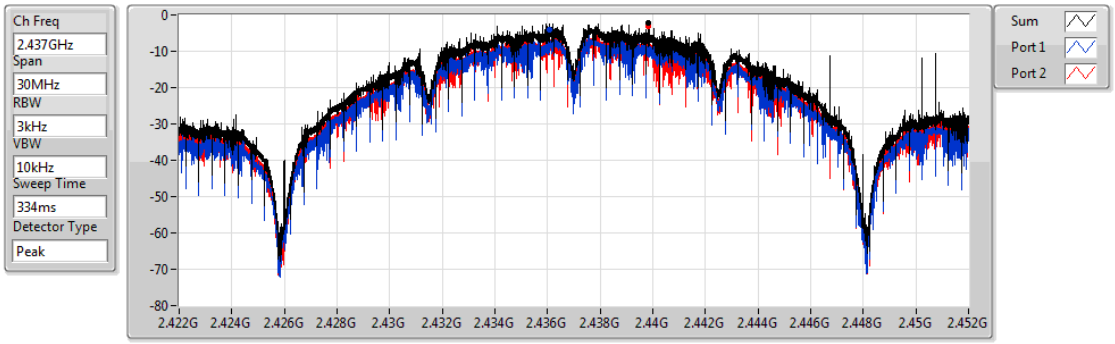
2412MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.51	-3.51	-5.14	-4.52

802.11b_(1Mbps)_2TX PSD

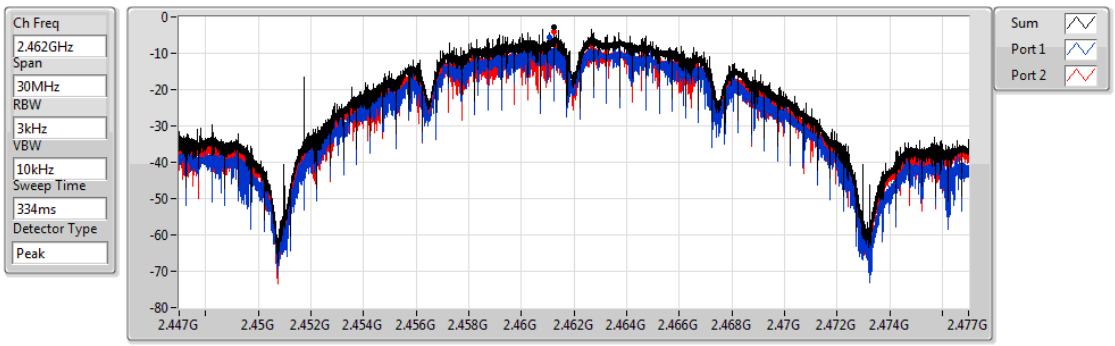
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.10	-2.10	-4.07	-3.14

802.11b_(1Mbps)_2TX PSD

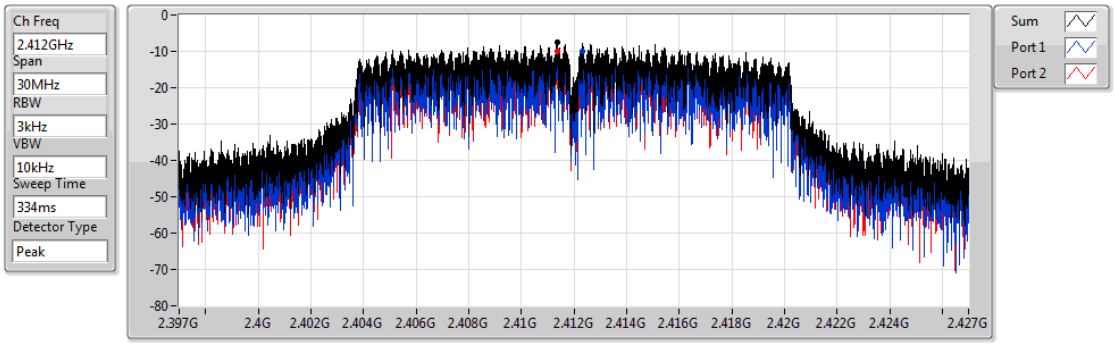
2462MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.70	-2.70	-5.76	-3.93

802.11g_(6Mbps)_2TX PSD

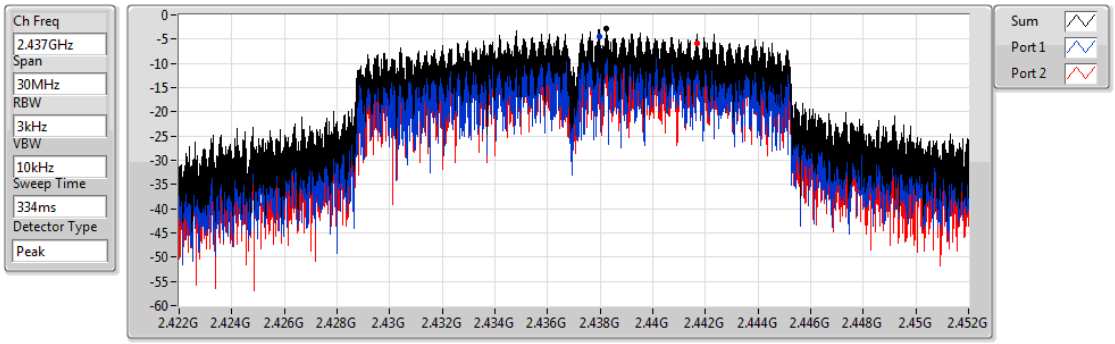
2412MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.45	-7.45	-9.96	-10.09

802.11g_(6Mbps)_2TX PSD

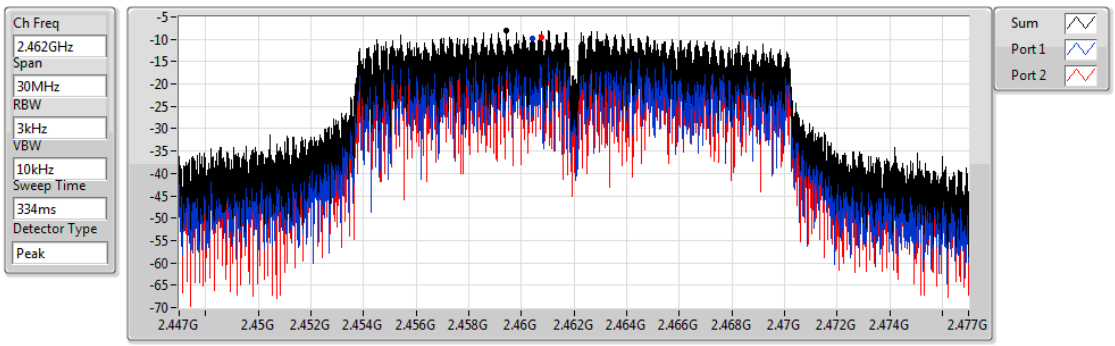
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.90	-2.90	-4.53	-5.86

802.11g_(6Mbps)_2TX PSD

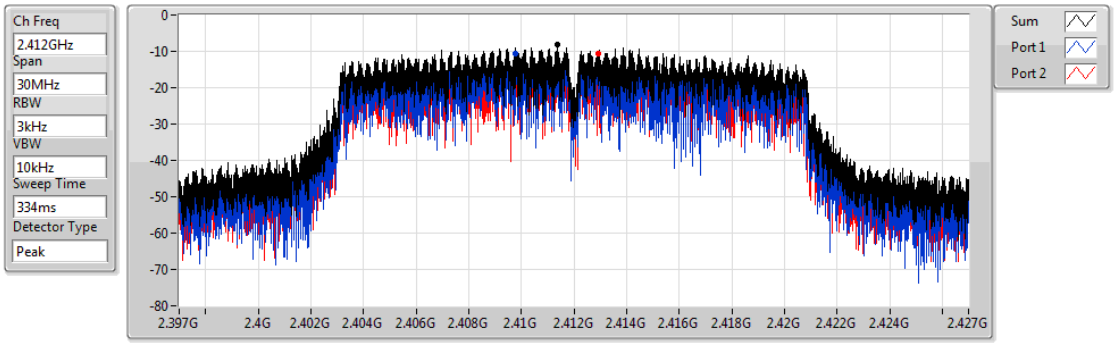
2462MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.95	-7.95	-9.92	-9.59

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

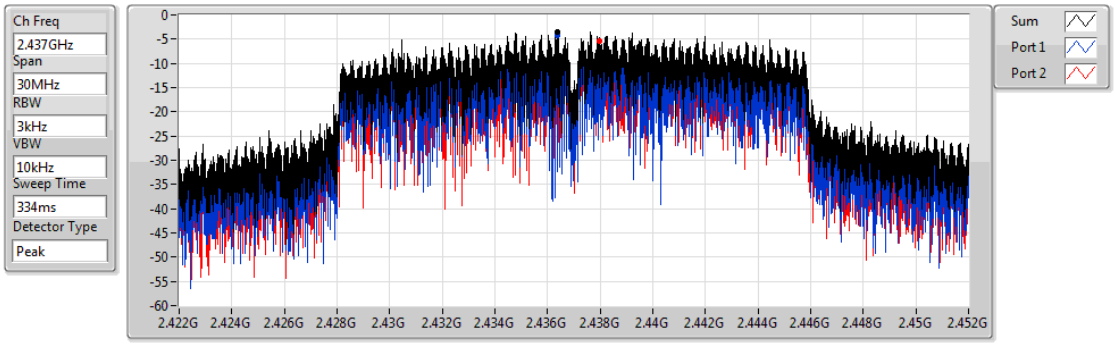
2412MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.22	-8.22	-10.51	-10.72

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

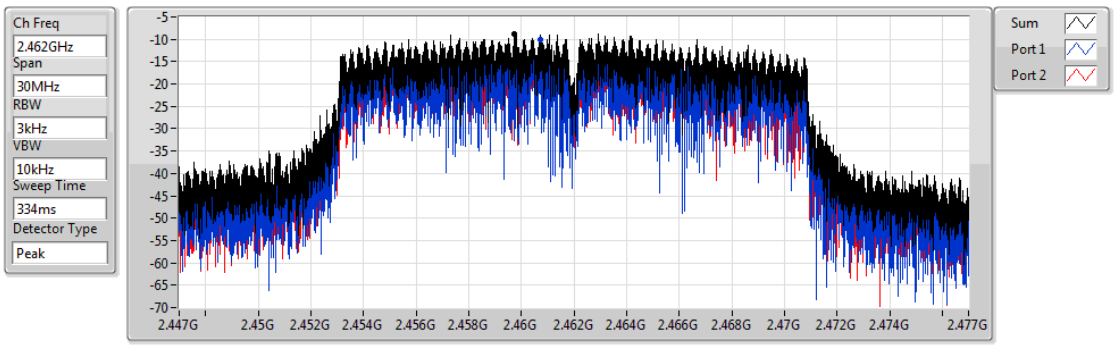
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.43	-3.43	-4.21	-5.32

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

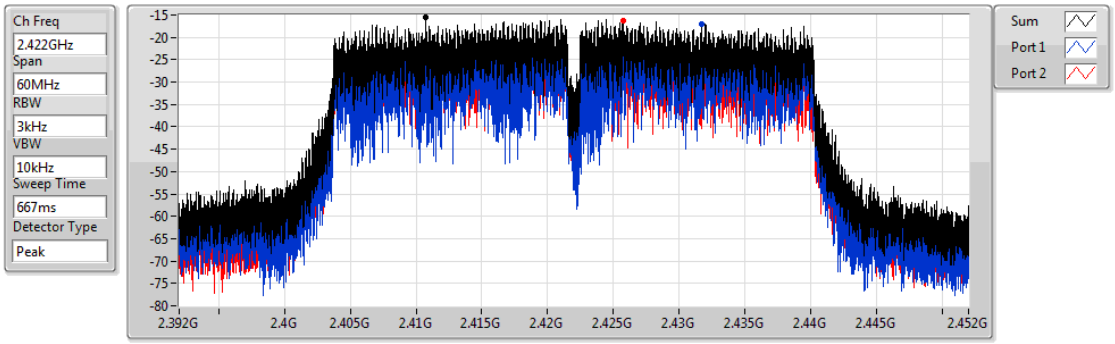
2462MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.75	-8.75	-10.12	-10.12

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

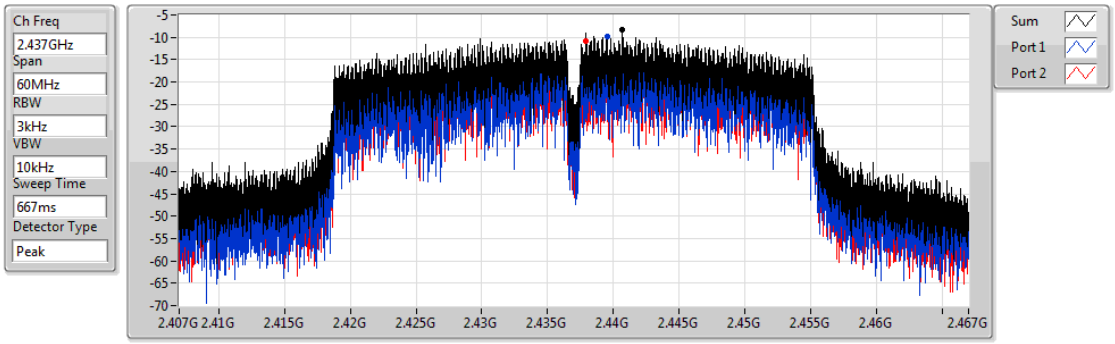
2422MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-15.43	-15.43	-17.09	-16.32

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

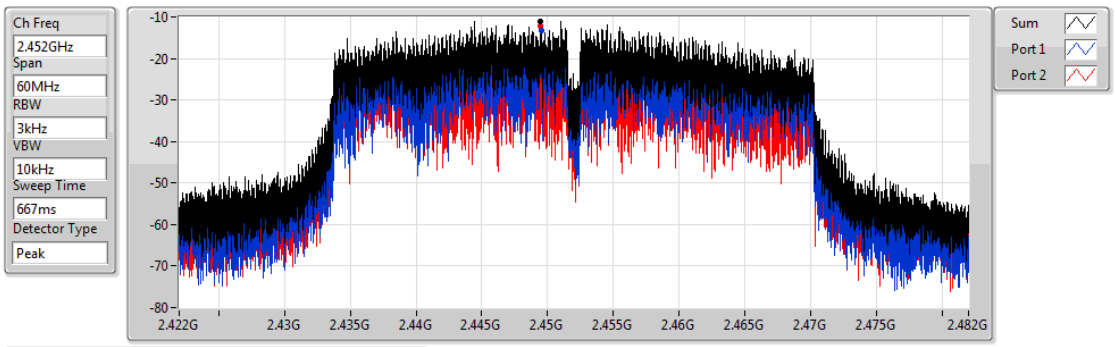
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.39	-8.39	-9.80	-10.81

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

2452MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-11.05	-11.05	-13.38	-12.12

Summary

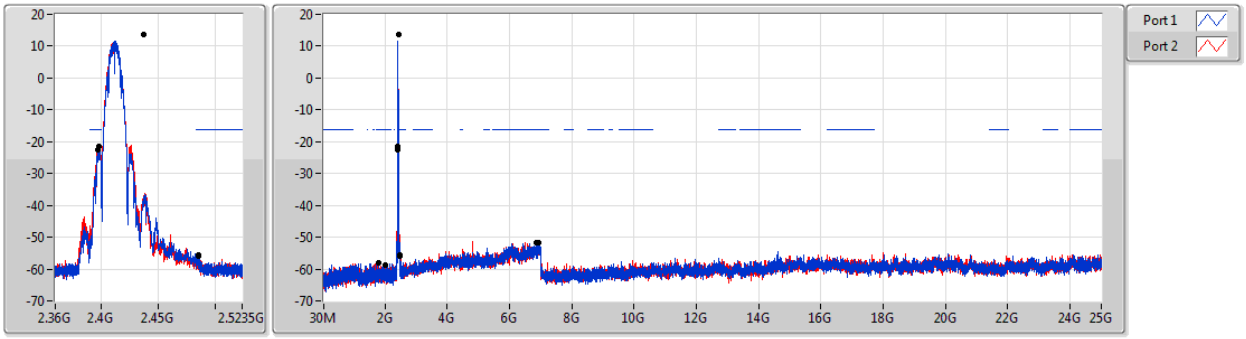
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11g_(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	2.438243G	11.41	-18.59	925.885M	-57.75	2.39704G	-22.36	2.48462G	-55.14	6.971037G	-51.71	2

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	2.437575G	13.82	-16.18	1.799635G	-58.02	2.39704G	-22.48	2.48542G	-55.99	6.931704G	-51.78	1
2412MHz	Pass	2.437575G	13.82	-16.18	1.993025G	-58.63	2.398G	-21.32	2.48502G	-55.43	6.869893G	-51.79	2
2437MHz	Pass	2.437575G	13.82	-16.18	1.84973G	-57.59	2.398G	-42.54	2.48494G	-45.36	6.333267G	-51.17	1
2437MHz	Pass	2.437575G	13.82	-16.18	1.6377G	-57.4	2.39808G	-35.84	2.48398G	-43.65	6.220884G	-52.2	2
2462MHz	Pass	2.437575G	13.82	-16.18	660.265M	-57.75	2.39104G	-55.01	2.48646G	-45.68	6.926084G	-51.05	1
2462MHz	Pass	2.437575G	13.82	-16.18	825.695M	-58.08	2.39232G	-54.92	2.48598G	-44.78	6.959799G	-50.93	2
802.11g_(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.438243G	11.41	-18.59	216.4M	-57.86	2.39824G	-22.54	2.4839G	-54.26	6.965418G	-51.08	1
2412MHz	Pass	2.438243G	11.41	-18.59	925.885M	-57.75	2.39704G	-22.36	2.48462G	-55.14	6.971037G	-51.71	2
2437MHz	Pass	2.438243G	11.41	-18.59	1.997685G	-57.42	2.39832G	-42.78	2.4839G	-45.23	6.799654G	-51.41	1
2437MHz	Pass	2.438243G	11.41	-18.59	851.325M	-56.74	2.39832G	-41.99	2.4851G	-48.36	6.881131G	-51.31	2
2462MHz	Pass	2.438243G	11.41	-18.59	2.097875G	-57.37	2.39208G	-52.77	2.48358G	-41.27	6.608604G	-51.92	1
2462MHz	Pass	2.438243G	11.41	-18.59	2.14564G	-57.94	2.39584G	-52.77	2.48358G	-41.1	6.917656G	-51.86	2
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.442084G	11.97	-18.03	2.088555G	-57.28	2.39768G	-26.95	2.48446G	-52.89	6.659176G	-51.22	1
2412MHz	Pass	2.442084G	11.97	-18.03	2.1969G	-56.57	2.39736G	-26.96	2.48382G	-55.17	6.937323G	-51.83	2
2437MHz	Pass	2.442084G	11.97	-18.03	1.86371G	-57.18	2.39296G	-45.4	2.4847G	-46.32	5.903404G	-51.91	1
2437MHz	Pass	2.442084G	11.97	-18.03	950.35M	-57.7	2.398G	-43.72	2.48446G	-49.78	6.687272G	-51.05	2
2462MHz	Pass	2.442084G	11.97	-18.03	875.79M	-57.86	2.3908G	-51.58	2.48358G	-40.93	6.895179G	-51.54	1
2462MHz	Pass	2.442084G	11.97	-18.03	1.81012G	-57.05	2.39824G	-53.14	2.48358G	-39.13	6.76313G	-51.09	2
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.439579G	5.98	-24.02	920.81M	-57.96	2.39424G	-36.75	2.48398G	-54.16	6.203822G	-51.72	1
2422MHz	Pass	2.439579G	5.98	-24.02	842.95M	-57.31	2.39456G	-39.53	2.48366G	-57.12	6.686207G	-51.61	2
2437MHz	Pass	2.439579G	5.98	-24.02	2.110465G	-58.54	2.396G	-34.15	2.48446G	-41.19	6.82924G	-52.36	1
2437MHz	Pass	2.439579G	5.98	-24.02	2.121915G	-58.29	2.39584G	-33.14	2.48558G	-41.05	6.885331G	-51.44	2
2452MHz	Pass	2.439579G	5.98	-24.02	1.82994G	-58.33	2.39328G	-55.1	2.48414G	-40.43	6.876917G	-50.46	1
2452MHz	Pass	2.439579G	5.98	-24.02	823.485M	-58.37	2.39136G	-53.49	2.48494G	-41.68	6.899354G	-50.87	2

802.11b_(1Mbps)_2TX CSE NdB

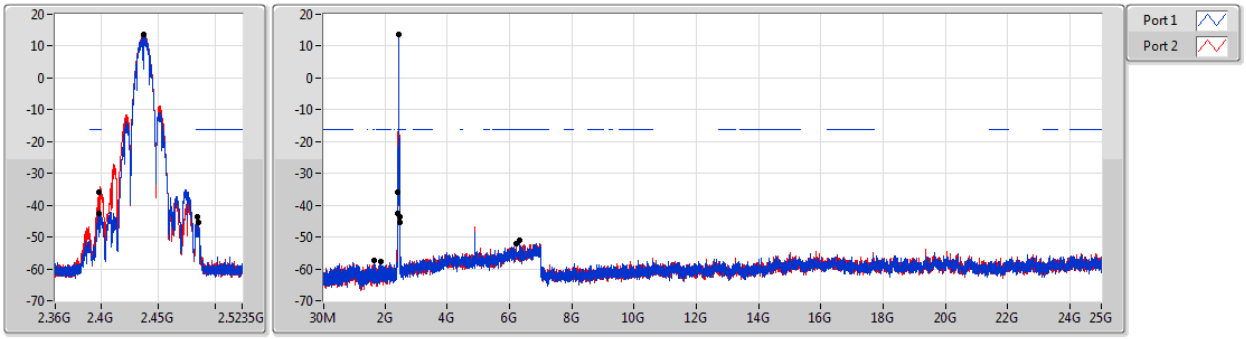
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.437575G	13.82	-16.18	1.799635G	-58.02	2.39704G	-22.48	2.48542G	-55.99	6.931704G	-51.78	1
2.437575G	13.82	-16.18	1.993025G	-58.63	2.398G	-21.32	2.48502G	-55.43	6.869893G	-51.79	2

802.11b_(1Mbps)_2TX CSE NdB

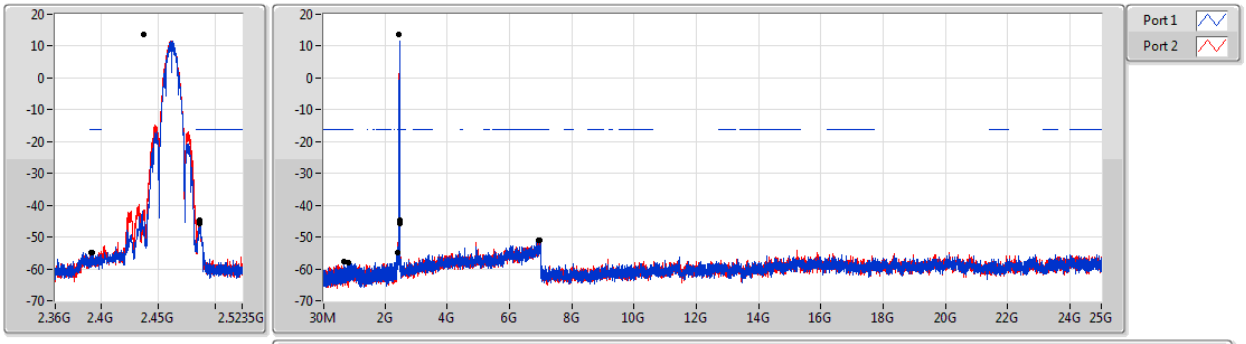
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.437575G	13.82	-16.18	1.84973G	-57.59	2.398G	-42.54	2.48494G	-45.36	6.333267G	-51.17	1
2.437575G	13.82	-16.18	1.6377G	-57.40	2.39808G	-35.84	2.48398G	-43.65	6.220884G	-52.20	2

802.11b_(1Mbps)_2TX CSE NdB

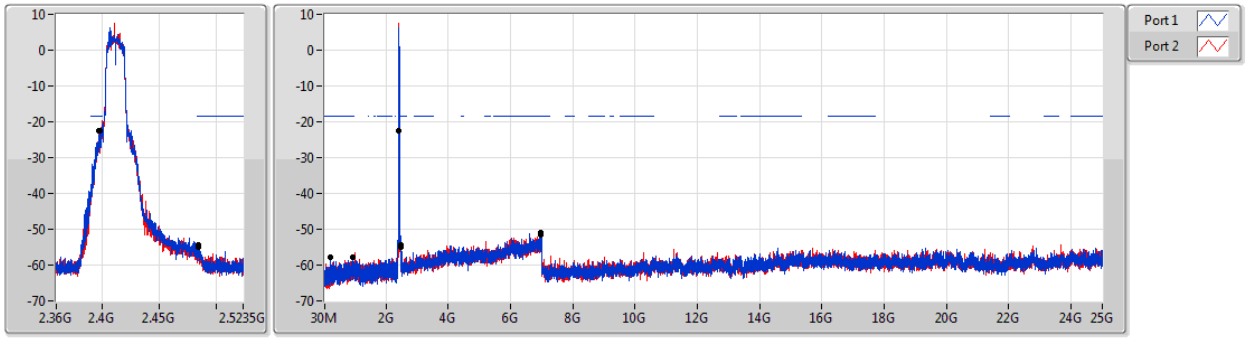
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.437575G	13.82	-16.18	660.265M	-57.75	2.39104G	-55.01	2.48646G	-45.68	6.926084G	-51.05	1
2.437575G	13.82	-16.18	825.695M	-58.08	2.39232G	-54.92	2.48598G	-44.78	6.959799G	-50.93	2

802.11g_(6Mbps)_2TX **CSE NdB**

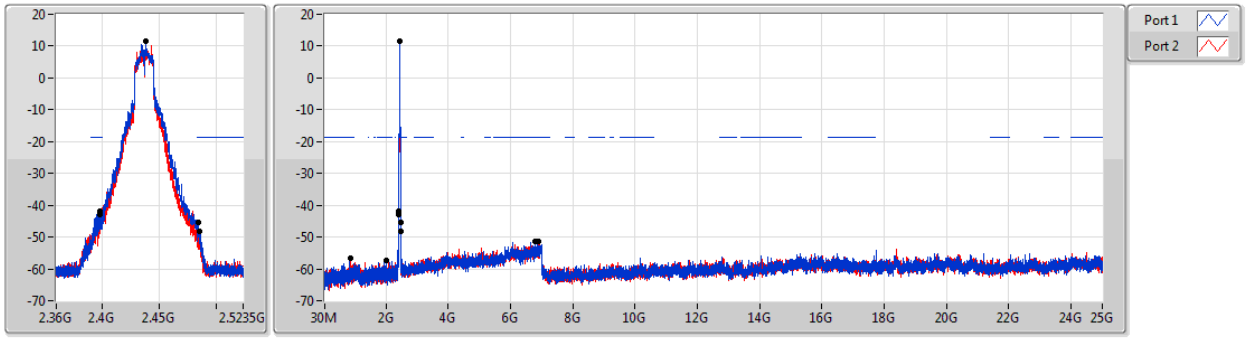
2412MHz



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	11.41	-18.59	216.4M	-57.86	2.39824G	-22.54	2.4839G	-54.26	6.965418G	-51.08	1
2.438243G	11.41	-18.59	925.885M	-57.75	2.39704G	-22.36	2.48462G	-55.14	6.971037G	-51.71	2

802.11g_(6Mbps)_2TX **CSE NdB**

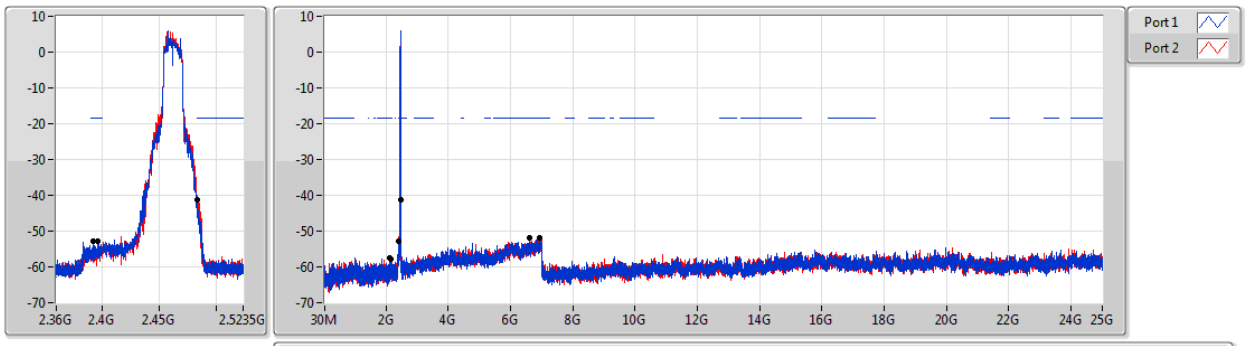
2437MHz



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	11.41	-18.59	1.997685G	-57.42	2.39832G	-42.78	2.4839G	-45.23	6.799654G	-51.41	1
2.438243G	11.41	-18.59	851.325M	-56.74	2.39832G	-41.99	2.4851G	-48.36	6.881131G	-51.31	2

802.11g_(6Mbps)_2TX **CSE NdB**

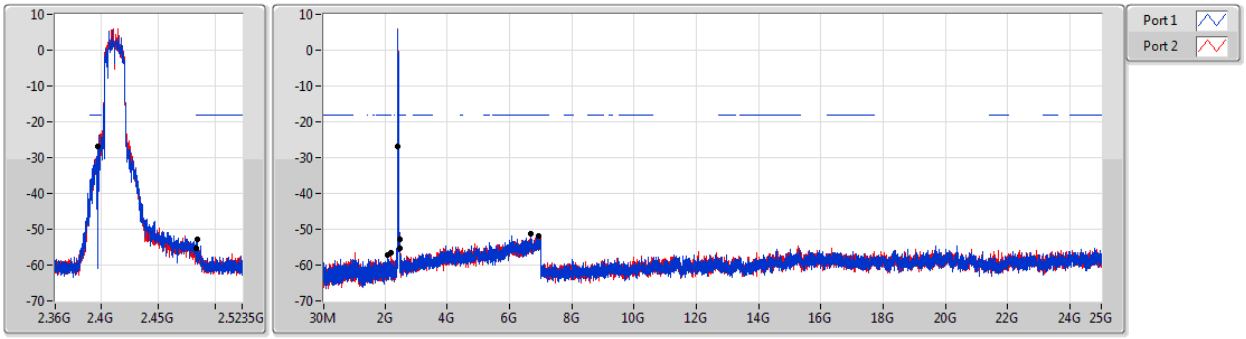
2462MHz



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	11.41	-18.59	2.097875G	-57.37	2.39208G	-52.77	2.48358G	-41.27	6.608604G	-51.92	1
2.438243G	11.41	-18.59	2.14564G	-57.94	2.39584G	-52.77	2.48358G	-41.10	6.917656G	-51.86	2

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

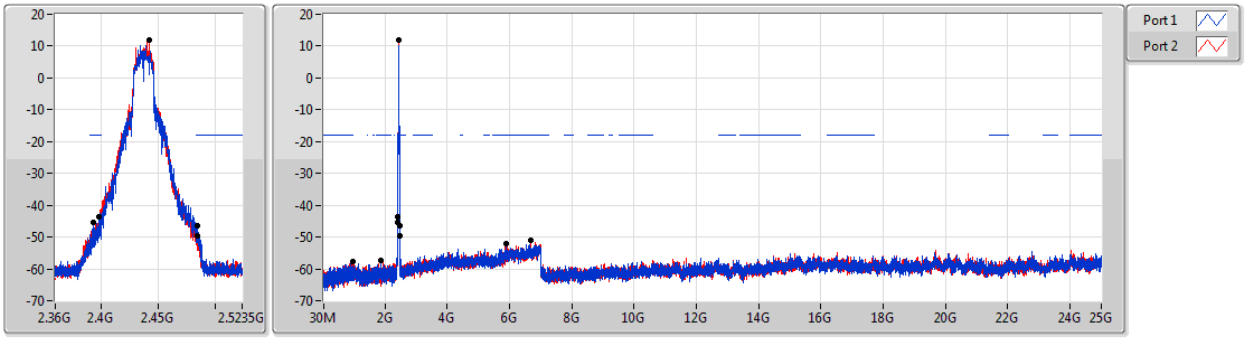
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.442084G	11.97	-18.03	2.088555G	-57.28	2.39768G	-26.95	2.48446G	-52.89	6.659176G	-51.22	1
2.442084G	11.97	-18.03	2.1969G	-56.57	2.39736G	-26.96	2.48382G	-55.17	6.937323G	-51.83	2

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

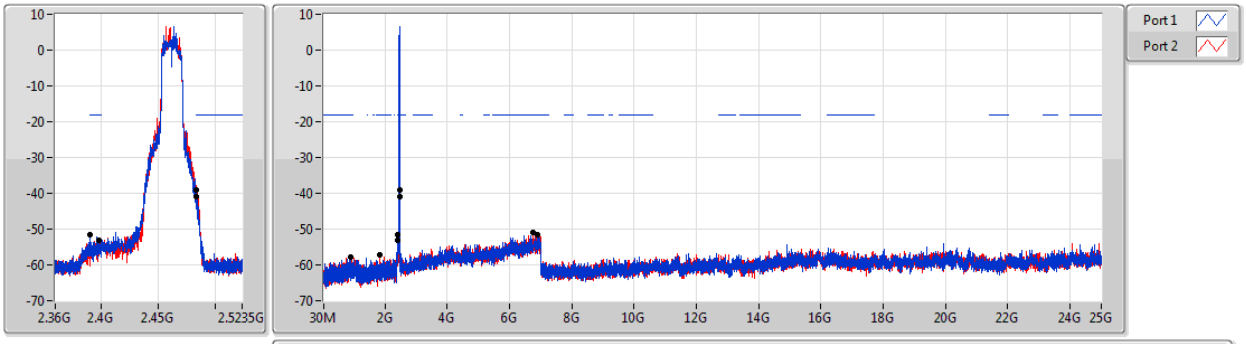
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.442084G	11.97	-18.03	1.86371G	-57.18	2.39296G	-45.40	2.4847G	-46.32	5.903404G	-51.91	1
2.442084G	11.97	-18.03	950.35M	-57.70	2.398G	-43.72	2.48446G	-49.78	6.687272G	-51.05	2

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

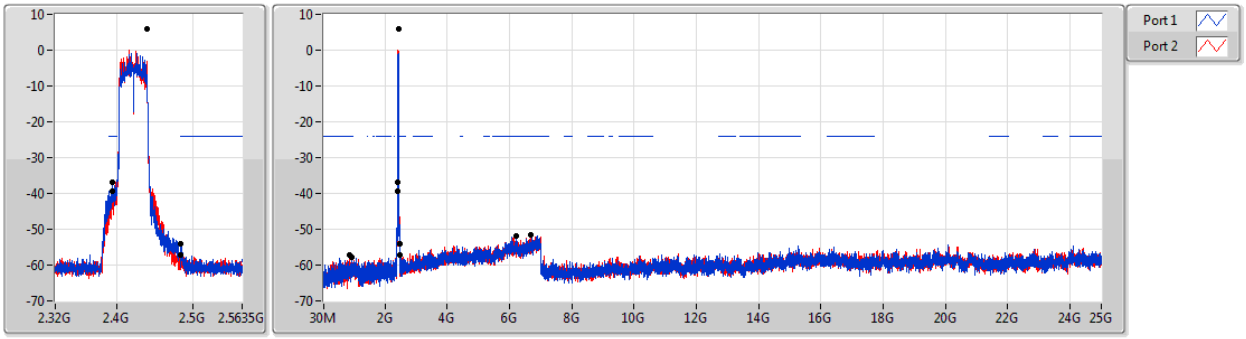
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.442084G	11.97	-18.03	875.79M	-57.86	2.3908G	-51.58	2.48358G	-40.93	6.895179G	-51.54	1
2.442084G	11.97	-18.03	1.81012G	-57.05	2.39824G	-53.14	2.48358G	-39.13	6.76313G	-51.09	2

802.11ac VHT40_Nss1,(MCS0)_2TX **CSE NdB**

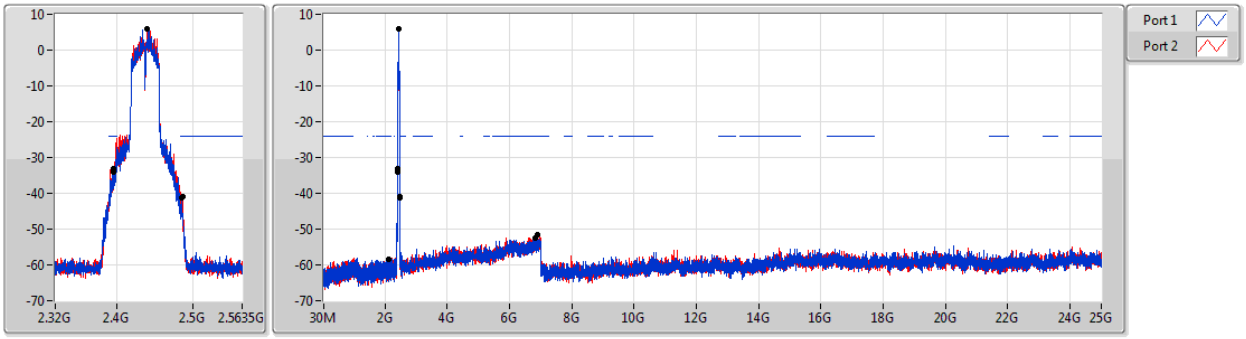
2422MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.439579G	5.98	-24.02	920.81M	-57.96	2.39424G	-36.75	2.48398G	-54.16	6.203822G	-51.72	1
2.439579G	5.98	-24.02	842.95M	-57.31	2.39456G	-39.53	2.48366G	-57.12	6.686207G	-51.61	2

802.11ac VHT40_Nss1,(MCS0)_2TX **CSE NdB**

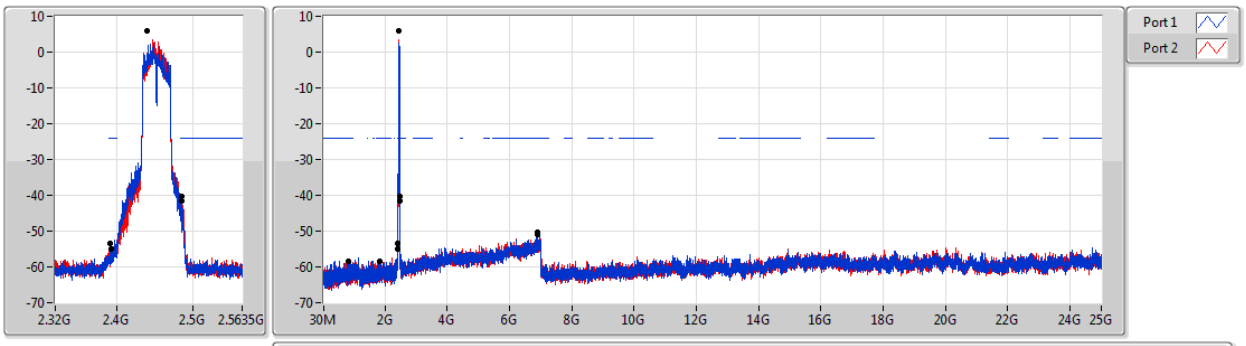
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.439579G	5.98	-24.02	2.110465G	-58.54	2.396G	-34.15	2.48446G	-41.19	6.82924G	-52.36	1
2.439579G	5.98	-24.02	2.121915G	-58.29	2.39584G	-33.14	2.48558G	-41.05	6.885331G	-51.44	2

802.11ac VHT40_Nss1,(MCS0)_2TX **CSE NdB**

2452MHz

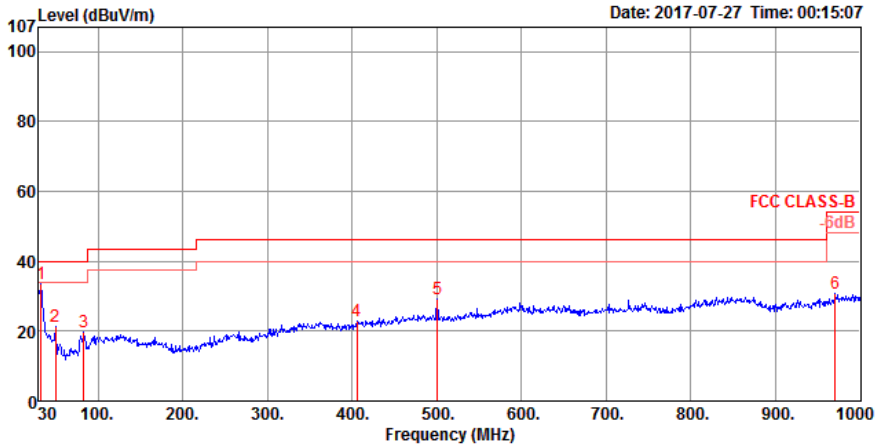


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.439579G	5.98	-24.02	1.82994G	-58.33	2.39328G	-55.10	2.48414G	-40.43	6.876917G	-50.46	1
2.439579G	5.98	-24.02	823.485M	-58.37	2.39136G	-53.49	2.48494G	-41.68	6.899354G	-50.87	2

TEL : 886-3-327-3456

FAX : 886-3-327-0973

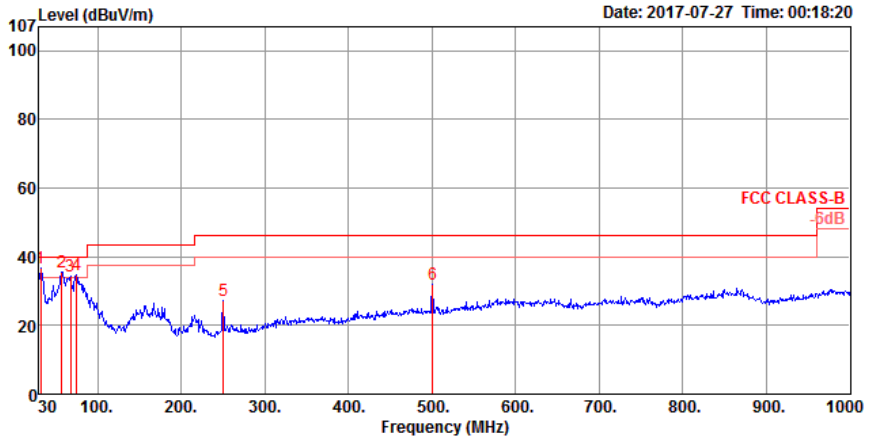
RSE below 1GHz Result			
Operating Mode	1	**Polarization**	Horizontal
Operating Function	Normal Link		



	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	32.91	33.68	40.00	-6.32	43.06	0.53	22.62	32.53	150	347	Peak	HORIZONTAL
2	49.40	21.15	40.00	-18.85	38.95	0.61	14.09	32.50	100	245	Peak	HORIZONTAL
3	83.35	19.65	40.00	-20.35	38.12	0.75	13.32	32.54	100	127	Peak	HORIZONTAL
4	405.39	22.76	46.00	-23.24	31.96	1.55	21.70	32.45	200	344	Peak	HORIZONTAL
5	500.45	29.16	46.00	-16.84	36.58	1.76	23.31	32.49	100	35	Peak	HORIZONTAL
6	970.90	30.76	54.00	-23.24	32.39	2.46	27.08	31.17	150	243	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	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	31.94	36.72	40.00	-3.28	45.53	0.53	23.19	32.53	150	292	Peak	VERTICAL
2	57.16	35.44	40.00	-4.56	54.77	0.61	12.57	32.51	100	184	Peak	VERTICAL
3	67.83	34.37	40.00	-5.63	53.89	0.69	12.32	32.53	100	78	Peak	VERTICAL
4	74.62	34.83	40.00	-5.17	54.45	0.75	12.16	32.53	200	157	Peak	VERTICAL
5	250.19	27.11	46.00	-18.89	39.94	1.25	18.38	32.46	100	29	Peak	VERTICAL
6	500.45	31.82	46.00	-14.18	39.24	1.76	23.31	32.49	100	283	Peak	VERTICAL

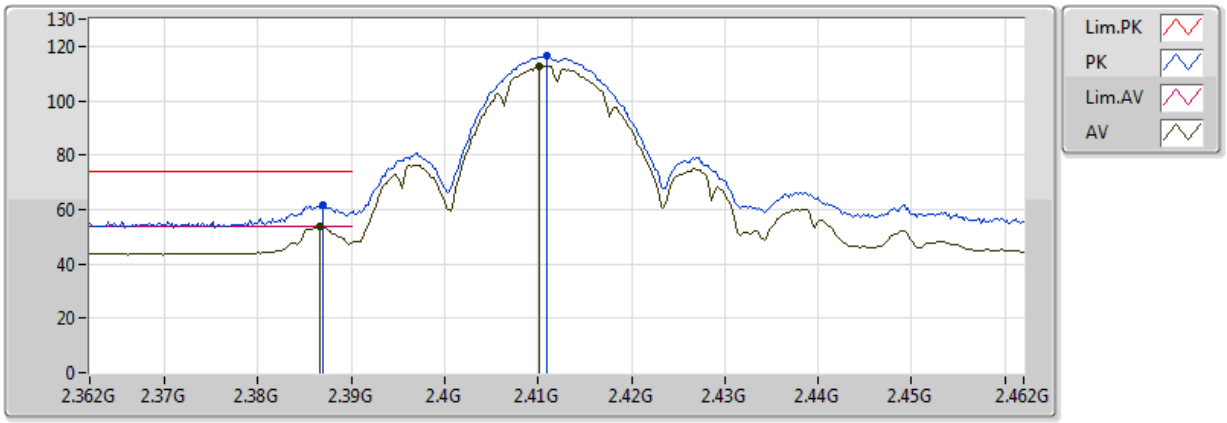
Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

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	2.389998G	53.98	54.00	-0.02	31.04	3	V	312	2.99	-

802.11b_(1Mbps)_2TX

2412MHz_TX

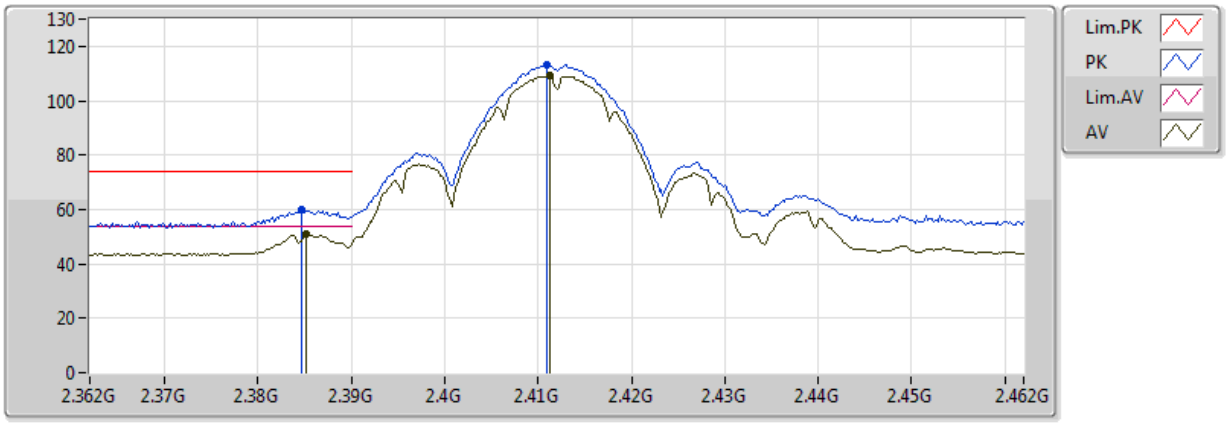


20170602
EUT Z_2TX
Setting 25
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3866G	53.70	54.00	-0.30	31.04	3	V	301	2.97	-
AV	2.4102G	112.71	Inf	-Inf	31.01	3	V	301	2.97	-
PK	2.387G	61.48	74.00	-12.52	31.04	3	V	301	2.97	-
PK	2.411G	116.53	Inf	-Inf	31.01	3	V	301	2.97	-

802.11b_(1Mbps)_2TX

2412MHz_TX

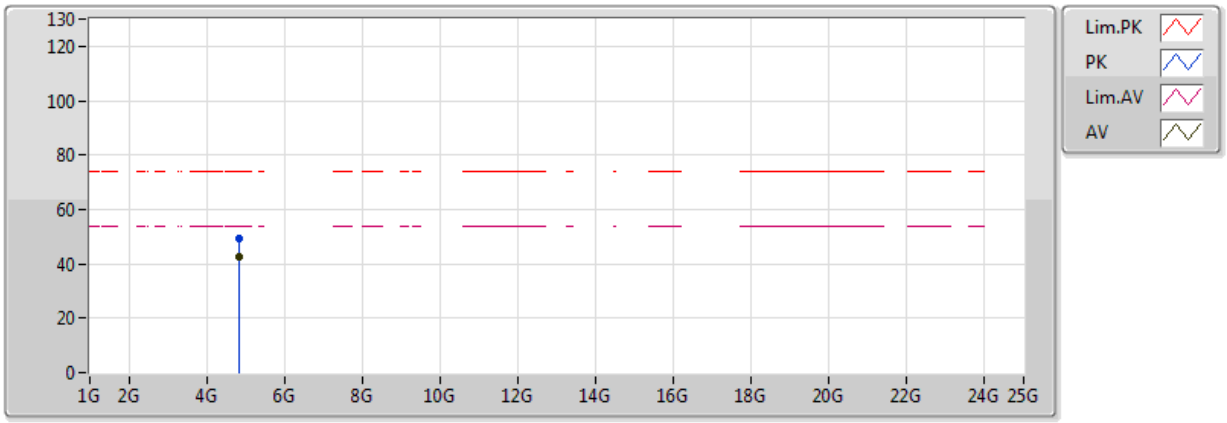


20170602
EUT Z_2TX
Setting 25
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3852G	51.09	54.00	-2.91	31.04	3	H	283	1.40	-
AV	2.4112G	109.27	Inf	-Inf	31.01	3	H	283	1.40	-
PK	2.3846G	59.76	74.00	-14.24	31.04	3	H	283	1.40	-
PK	2.411G	113.11	Inf	-Inf	31.01	3	H	283	1.40	-

802.11b_(1Mbps)_2TX

2412MHz_TX

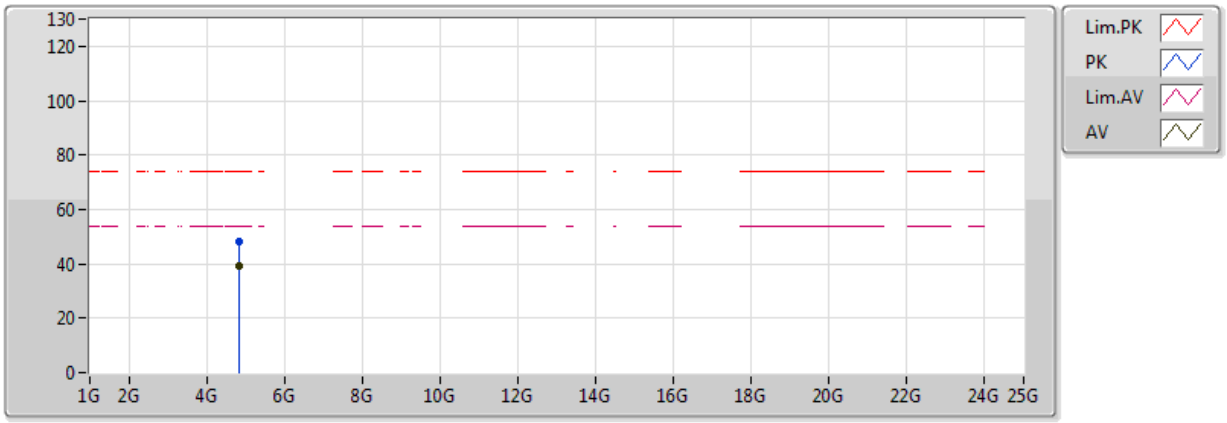


20170602
EUT Z_2TX
Setting 25
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82397G	42.51	54.00	-11.49	3.40	3	V	285	1.21	-
PK	4.82426G	49.06	74.00	-24.94	3.40	3	V	285	1.21	-

802.11b_(1Mbps)_2TX

2412MHz_TX

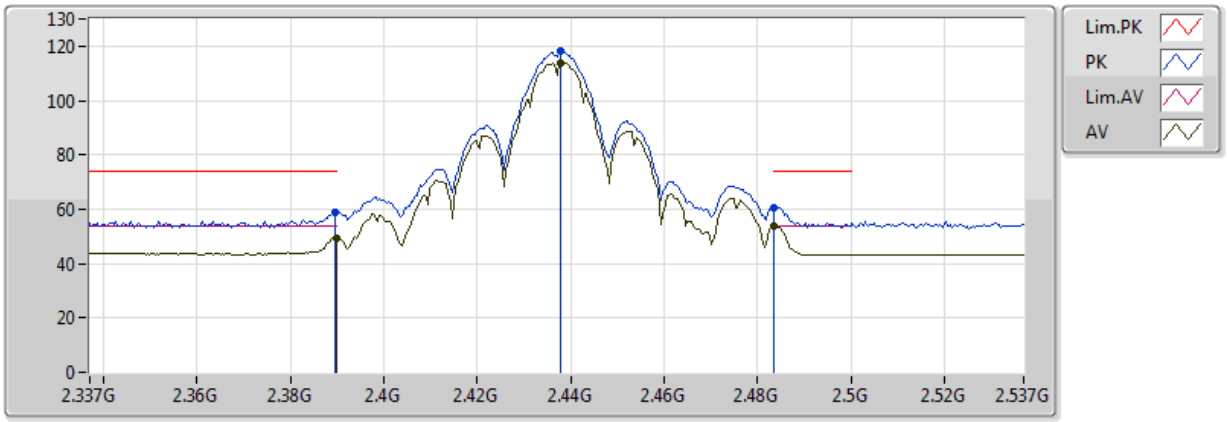


20170602
EUT Z_2TX
Setting 25
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82394G	39.33	54.00	-14.67	3.40	3	H	21	1.05	-
PK	4.82409G	48.29	74.00	-25.71	3.40	3	H	21	1.05	-

802.11b_(1Mbps)_2TX

2437MHz_TX

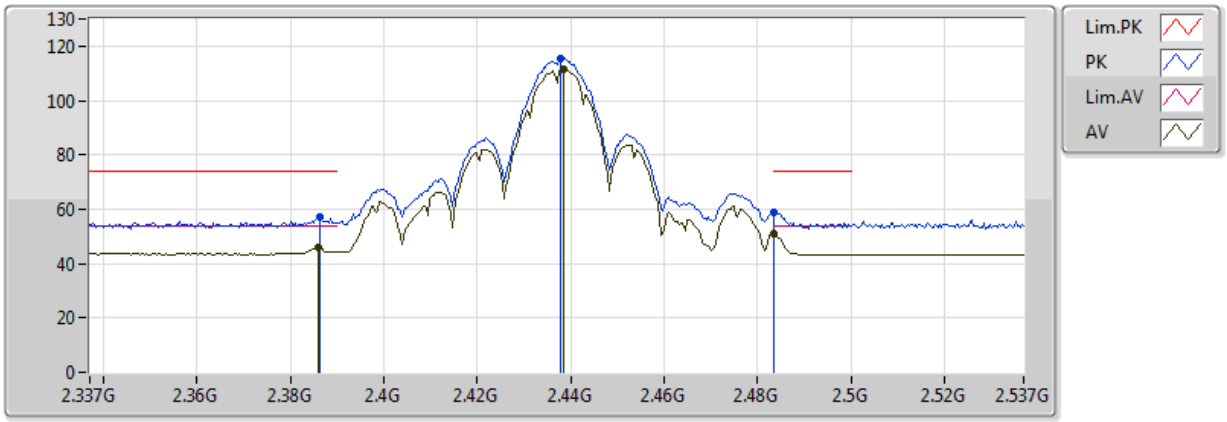


20170602
EUT Z_2TX
Setting 2A
01-J-5
FSP(100080)

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	49.47	54.00	-4.53	31.04	3	V	301	2.94	-
AV	2.4378G	113.93	Inf	-Inf	30.97	3	V	301	2.94	-
AV	2.483502G	53.72	54.00	-0.28	30.92	3	V	301	2.94	-
PK	2.3894G	58.58	74.00	-15.42	31.04	3	V	301	2.94	-
PK	2.4378G	118.02	Inf	-Inf	30.97	3	V	301	2.94	-
PK	2.483502G	60.59	74.00	-13.41	30.92	3	V	301	2.94	-

802.11b_(1Mbps)_2TX

2437MHz_TX

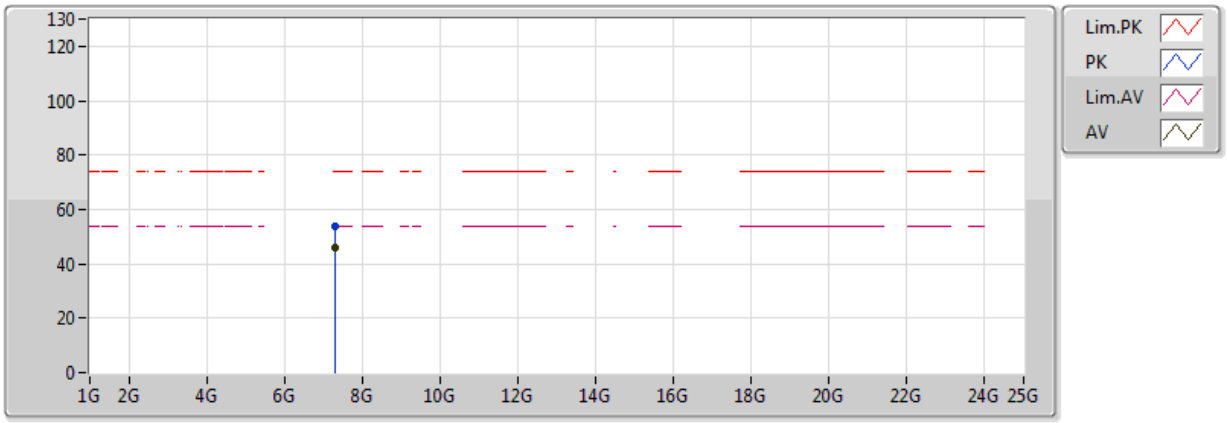


20170602
EUT Z_2TX
Setting 2A
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3858G	45.70	54.00	-8.30	31.04	3	H	282	1.36	-
AV	2.4386G	111.47	Inf	-Inf	30.97	3	H	282	1.36	-
AV	2.483502G	50.87	54.00	-3.13	30.92	3	H	282	1.36	-
PK	2.3862G	57.28	74.00	-16.72	31.04	3	H	282	1.36	-
PK	2.4378G	115.42	Inf	-Inf	30.97	3	H	282	1.36	-
PK	2.483502G	58.77	74.00	-15.23	30.92	3	H	282	1.36	-

802.11b_(1Mbps)_2TX

2437MHz_TX

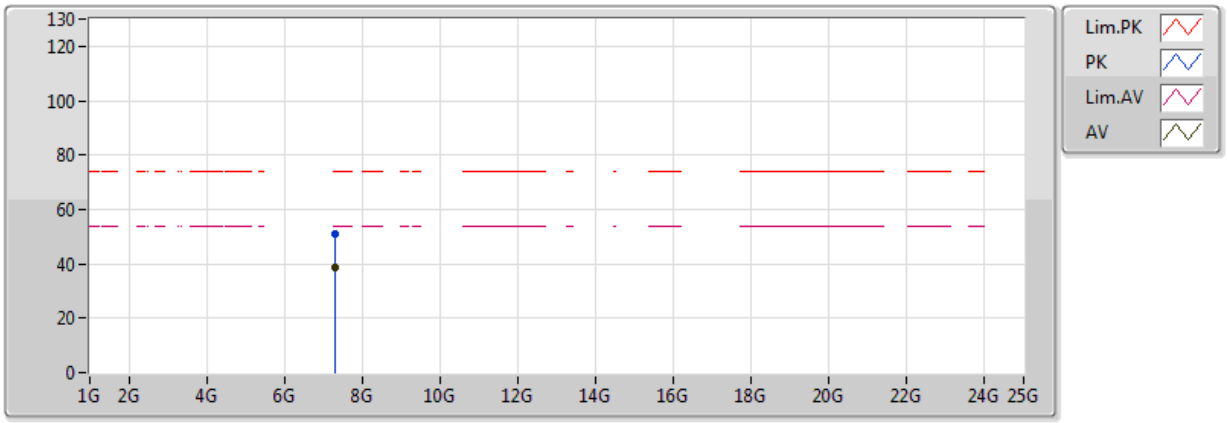


20170602
EUT Z_2TX
Setting 2A
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.3127G	45.92	54.00	-8.08	8.76	3	V	88	2.63	-
PK	7.3115G	54.02	74.00	-19.98	8.75	3	V	88	2.63	-

802.11b_(1Mbps)_2TX

2437MHz_TX

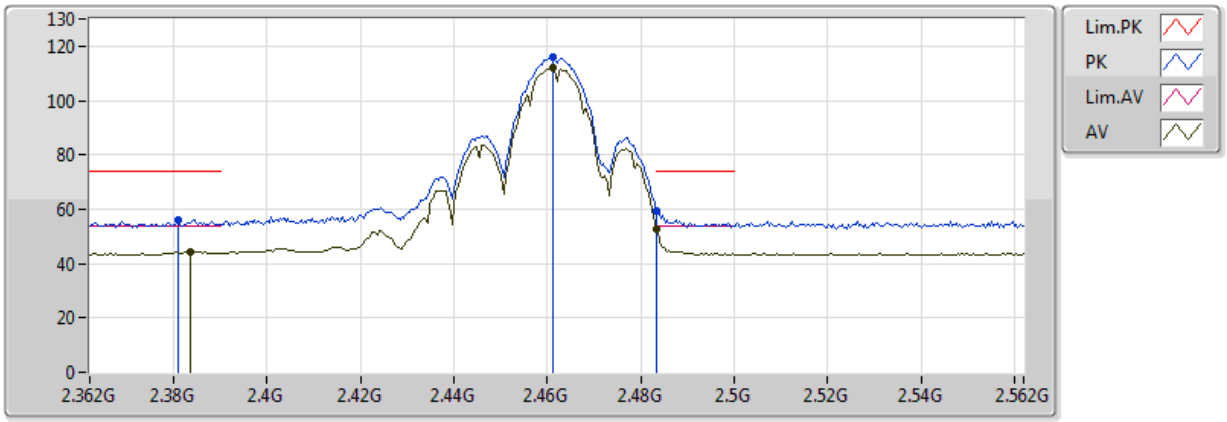


20170602
EUT Z_2TX
Setting 2A
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.3129G	38.86	54.00	-15.14	8.76	3	H	203	2.32	-
PK	7.3088G	50.83	74.00	-23.17	8.75	3	H	203	2.32	-

802.11b_(1Mbps)_2TX

2462MHz_TX

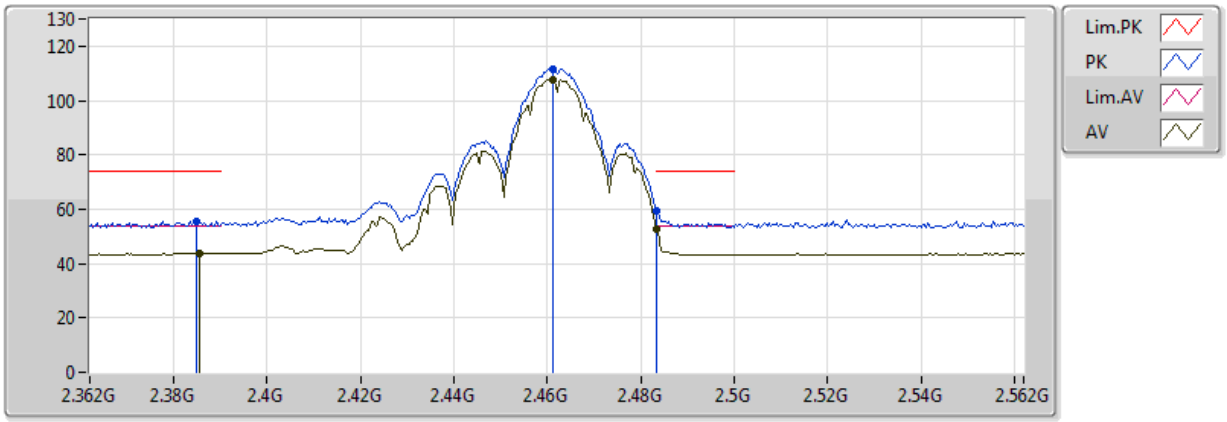


20170602
EUT Z_2TX
Setting 23(升1 OVER2.65)
01-J-5
FSP(100080)

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	44.40	54.00	-9.60	31.04	3	V	318	2.59	-
AV	2.4612G	112.02	Inf	-Inf	30.95	3	V	318	2.59	-
AV	2.483502G	52.77	54.00	-1.23	30.92	3	V	318	2.59	-
PK	2.3808G	55.89	74.00	-18.11	31.05	3	V	318	2.59	-
PK	2.4612G	115.90	Inf	-Inf	30.95	3	V	318	2.59	-
PK	2.483502G	59.33	74.00	-14.67	30.92	3	V	318	2.59	-

802.11b_(1Mbps)_2TX

2462MHz_TX

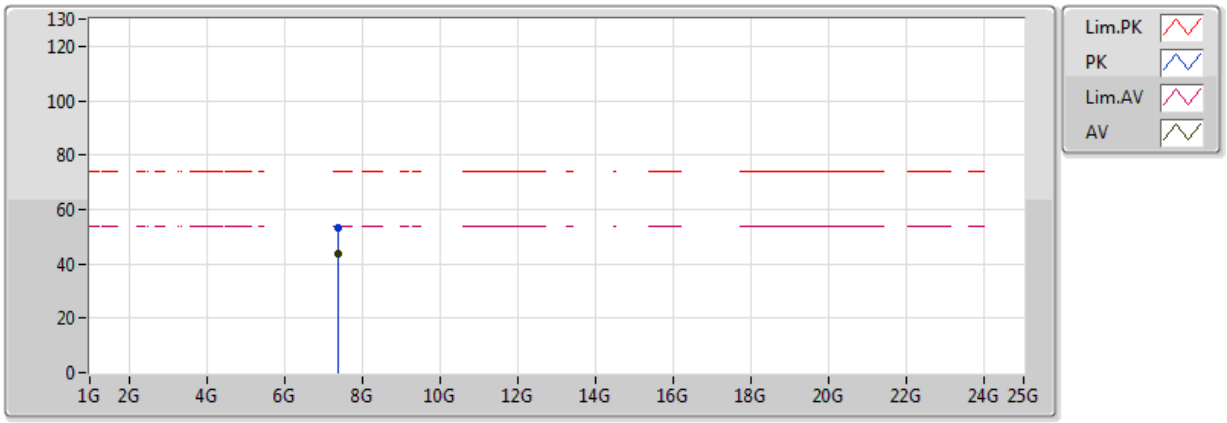


20170602
EUT Z_2TX
Setting 23
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3856G	43.95	54.00	-10.05	31.04	3	H	279	2.49	-
AV	2.4612G	107.82	Inf	-Inf	30.95	3	H	279	2.49	-
AV	2.483502G	52.53	54.00	-1.47	30.92	3	H	279	2.49	-
PK	2.3848G	55.45	74.00	-18.55	31.04	3	H	279	2.49	-
PK	2.4612G	111.69	Inf	-Inf	30.95	3	H	279	2.49	-
PK	2.483502G	59.12	74.00	-14.88	30.92	3	H	279	2.49	-

802.11b_(1Mbps)_2TX

2462MHz_TX

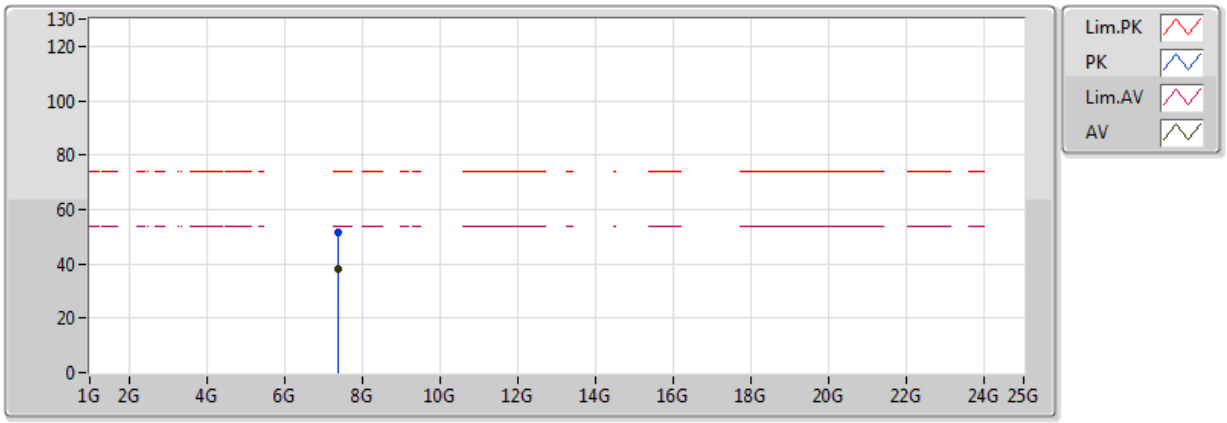


20170602
EUT Z_2TX
Setting 23
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.38678G	43.70	54.00	-10.30	8.90	3	V	85	2.68	-
PK	7.38498G	53.47	74.00	-20.53	8.90	3	V	85	2.68	-

802.11b_(1Mbps)_2TX

2462MHz_TX

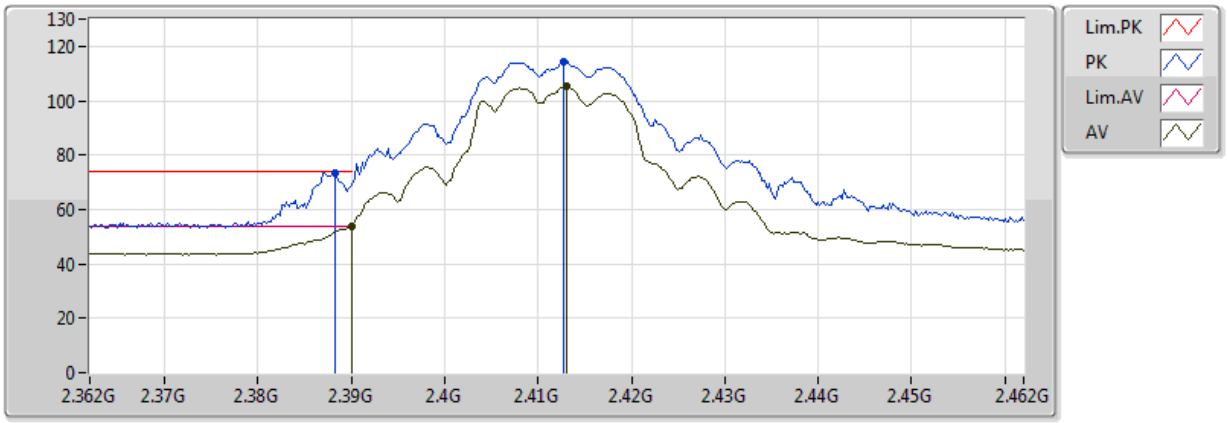


20170602
EUT Z_2TX
Setting 23
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.38516G	38.37	54.00	-15.63	8.90	3	H	48	1.01	-
PK	7.38448G	51.74	74.00	-22.26	8.90	3	H	48	1.01	-

802.11g_(6Mbps)_2TX

2412MHz_TX

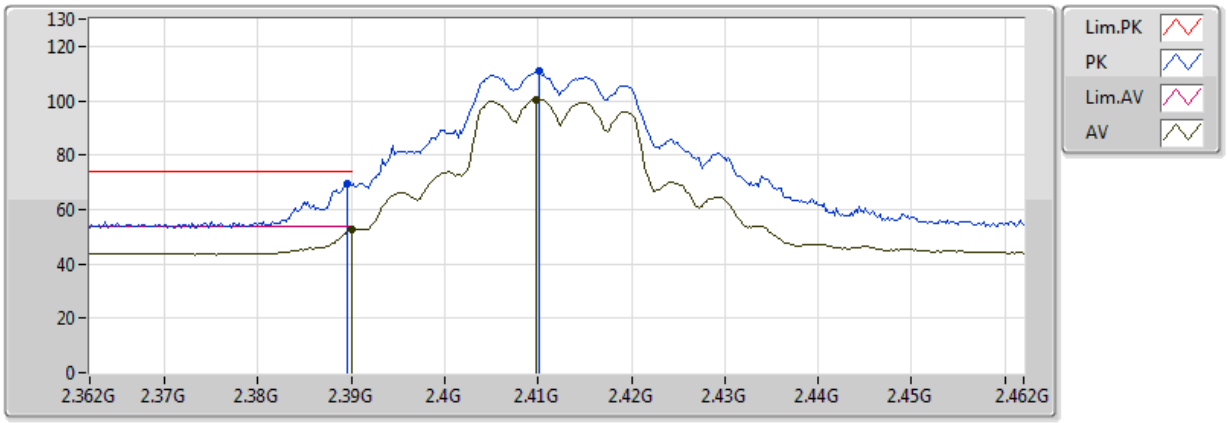


20170602
EUT Z_2TX
Setting 20
01-J-5
FSP(100080)

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	53.77	54.00	-0.23	31.04	3	V	313	2.99	-
AV	2.413G	105.17	Inf	-Inf	31.00	3	V	313	2.99	-
PK	2.3882G	73.35	74.00	-0.65	31.04	3	V	313	2.99	-
PK	2.4128G	114.20	Inf	-Inf	31.00	3	V	313	2.99	-

802.11g_(6Mbps)_2TX

2412MHz_TX

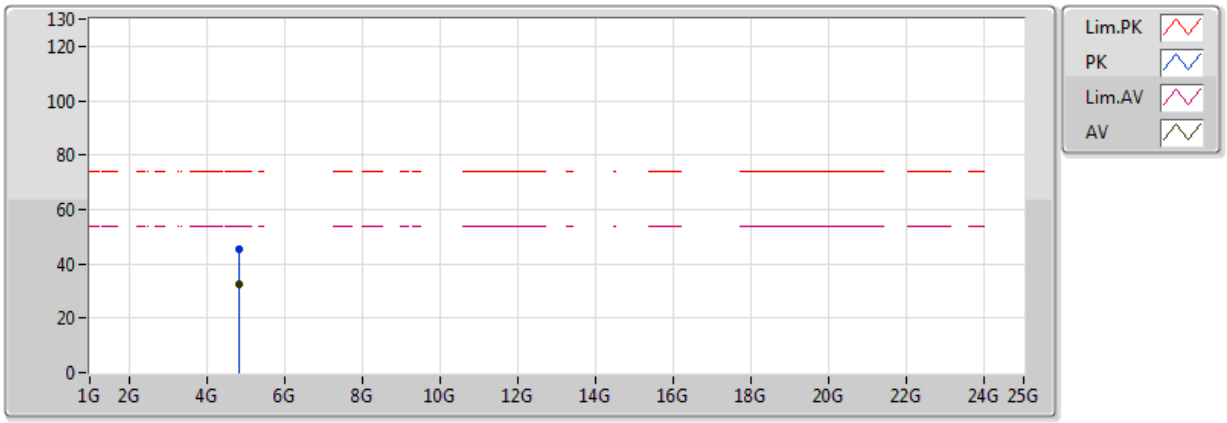


20170602
EUT Z_2TX
Setting 20
01-J-5
FSP(100080)

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	52.50	54.00	-1.50	31.04	3	H	251	1.82	-
AV	2.4098G	100.48	Inf	-Inf	31.01	3	H	251	1.82	-
PK	2.3896G	69.51	74.00	-4.49	31.04	3	H	251	1.82	-
PK	2.4102G	110.72	Inf	-Inf	31.01	3	H	251	1.82	-

802.11g_(6Mbps)_2TX

2412MHz_TX

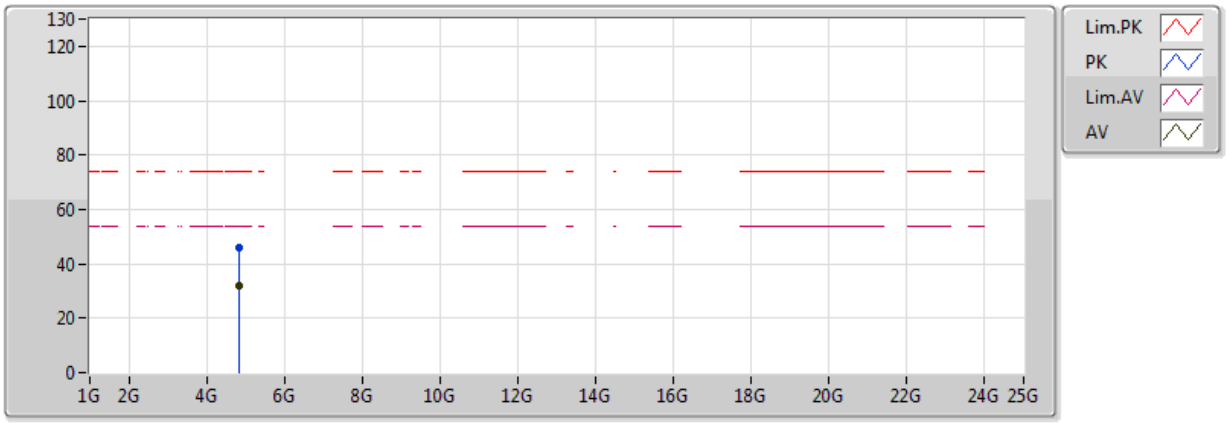


20170602
EUT Z_2TX
Setting 20
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.83028G	32.37	54.00	-21.63	3.42	3	V	284	1.19	-
PK	4.81772G	45.53	74.00	-28.47	3.38	3	V	284	1.19	-

802.11g_(6Mbps)_2TX

2412MHz_TX

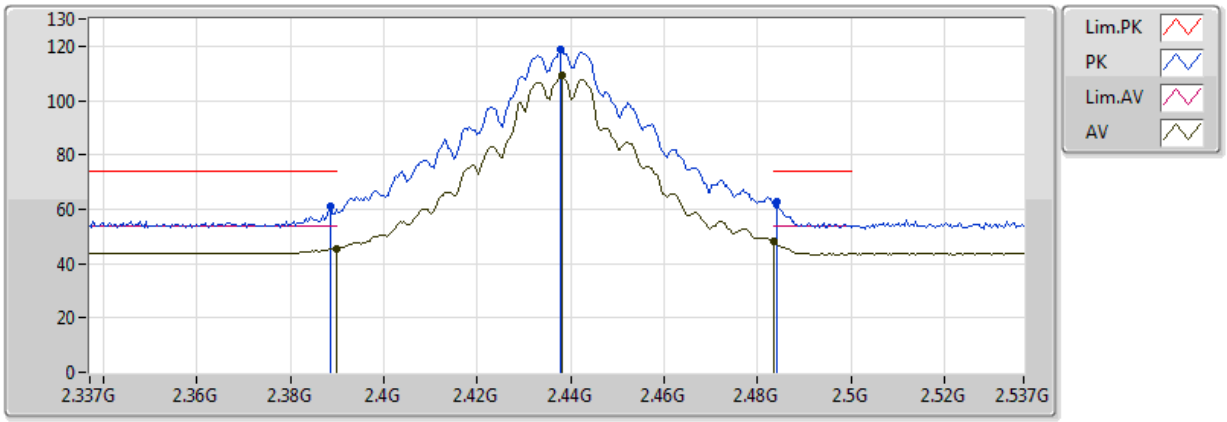


20170602
EUT Z_2TX
Setting 20
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82216G	32.18	54.00	-21.82	3.40	3	H	95	1.82	-
PK	4.83004G	45.67	74.00	-28.33	3.42	3	H	95	1.82	-

802.11g_(6Mbps)_2TX

2437MHz_TX

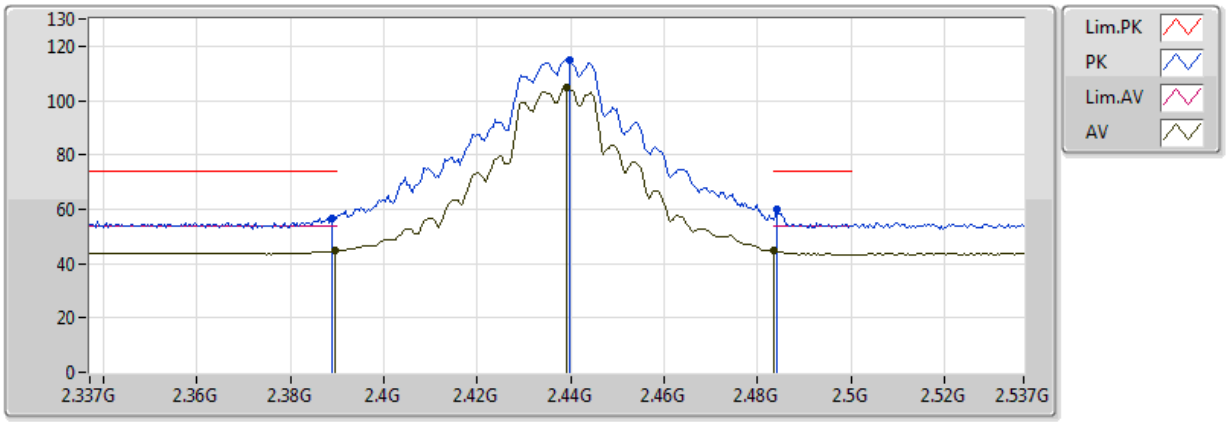


20170602
EUT Z_2TX
Setting 2C
01-J-5
FSP(100080)

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	45.58	54.00	-8.42	31.04	3	V	322	2.55	-
AV	2.4382G	109.16	Inf	-Inf	30.97	3	V	322	2.55	-
AV	2.483502G	48.02	54.00	-5.98	30.92	3	V	322	2.55	-
PK	2.3886G	60.83	74.00	-13.17	31.04	3	V	322	2.55	-
PK	2.4378G	118.78	Inf	-Inf	30.97	3	V	322	2.55	-
PK	2.4842G	63.02	74.00	-10.98	30.92	3	V	322	2.55	-

802.11g_(6Mbps)_2TX

2437MHz_TX

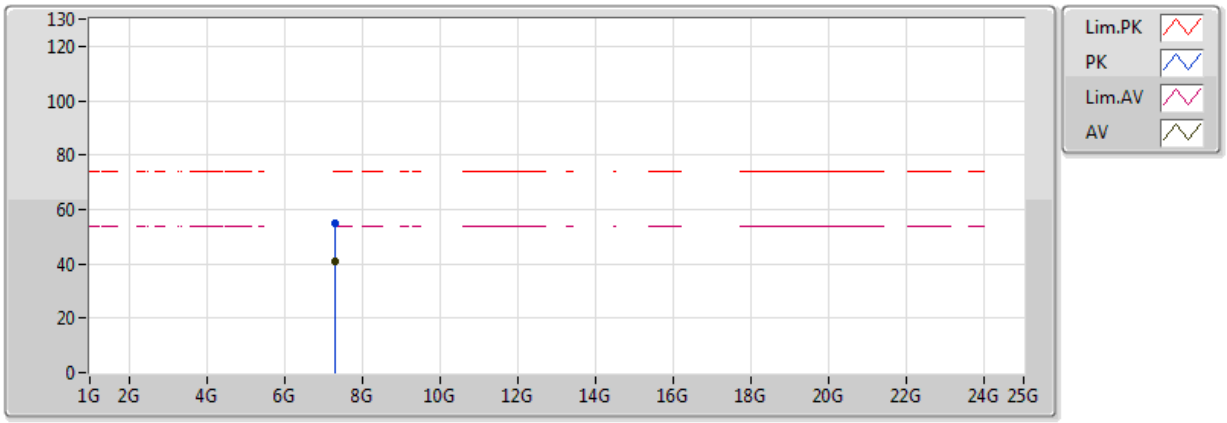


20170602
EUT Z_2TX
Setting 2C
01-J-5
FSP(100080)

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	44.77	54.00	-9.23	31.04	3	H	261	2.48	-
AV	2.439G	104.73	Inf	-Inf	30.97	3	H	261	2.48	-
AV	2.483502G	44.76	54.00	-9.24	30.92	3	H	261	2.48	-
PK	2.389G	56.64	74.00	-17.36	31.04	3	H	261	2.48	-
PK	2.4398G	114.68	Inf	-Inf	30.97	3	H	261	2.48	-
PK	2.4842G	59.74	74.00	-14.26	30.92	3	H	261	2.48	-

802.11g_(6Mbps)_2TX

2437MHz_TX

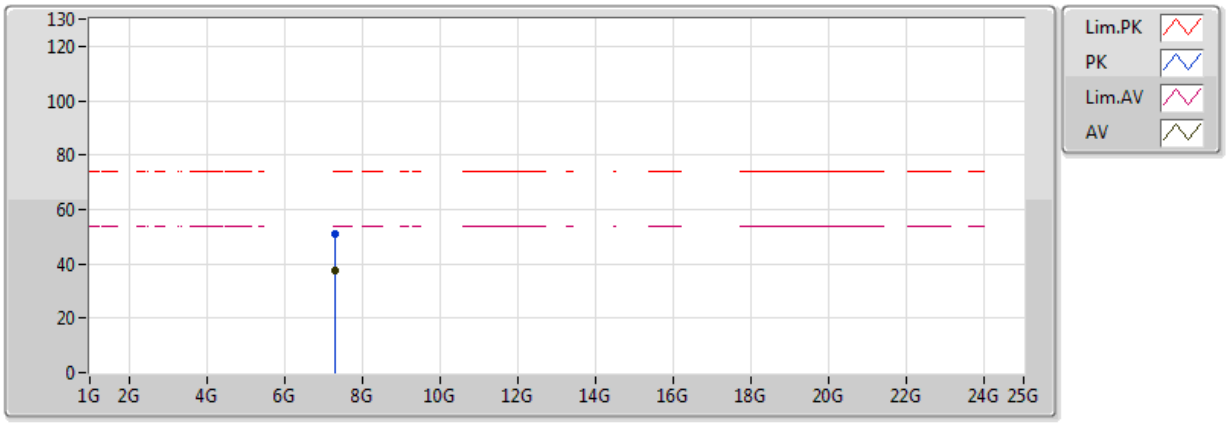


20170602
EUT Z_2TX
Setting 2C
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.31324G	40.88	54.00	-13.12	8.76	3	V	117	2.48	-
PK	7.30892G	54.66	74.00	-19.34	8.75	3	V	117	2.48	-

802.11g_(6Mbps)_2TX

2437MHz_TX

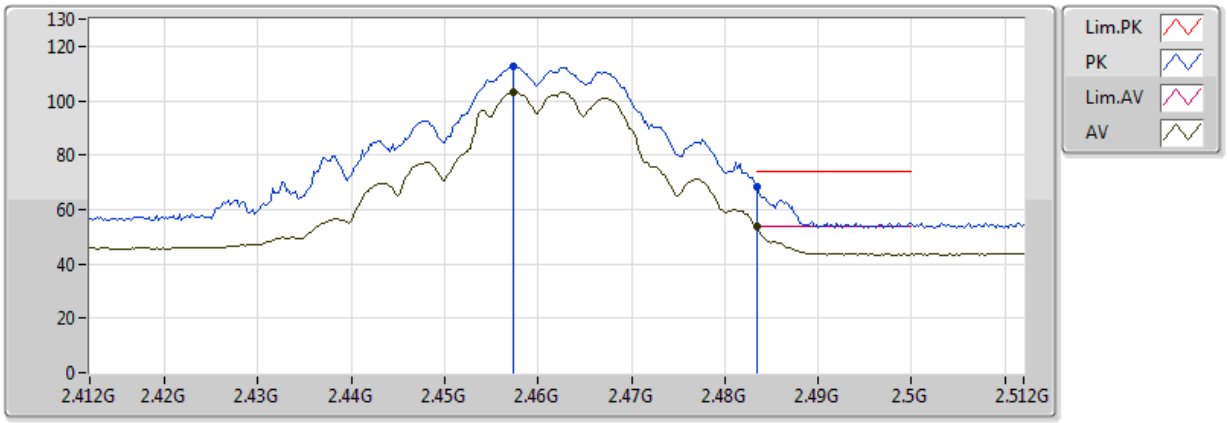


20170602
EUT Z_2TX
Setting 2C
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.30336G	37.31	54.00	-16.69	8.74	3	H	263	2.98	-
PK	7.30804G	50.97	74.00	-23.03	8.75	3	H	263	2.98	-

802.11g_(6Mbps)_2TX

2462MHz_TX

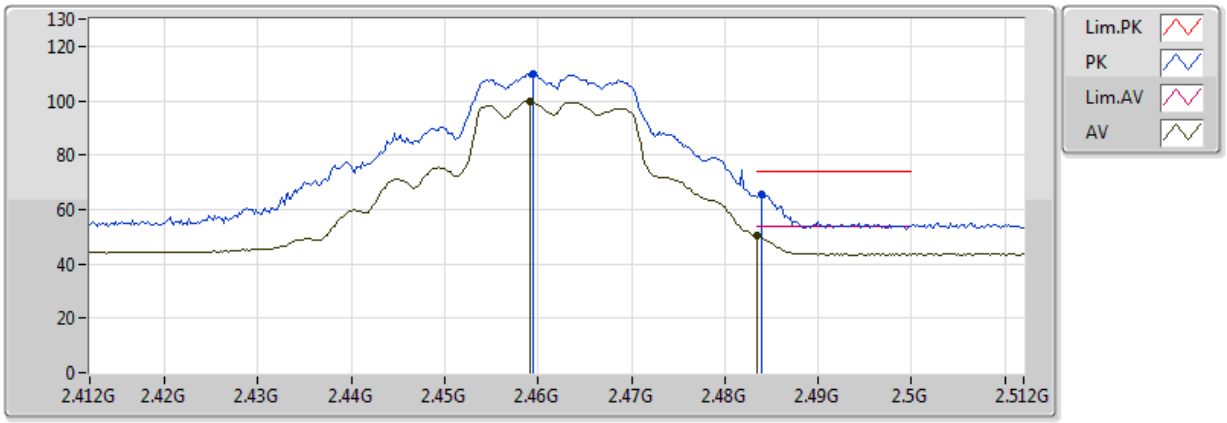


20170602
EUT Z_2TX
Setting 1D
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4574G	103.14	Inf	-Inf	30.95	3	V	315	2.99	-
AV	2.483502G	53.57	54.00	-0.43	30.92	3	V	315	2.99	-
PK	2.4574G	112.51	Inf	-Inf	30.95	3	V	315	2.99	-
PK	2.483502G	68.27	74.00	-5.73	30.92	3	V	315	2.99	-

802.11g_(6Mbps)_2TX

2462MHz_TX

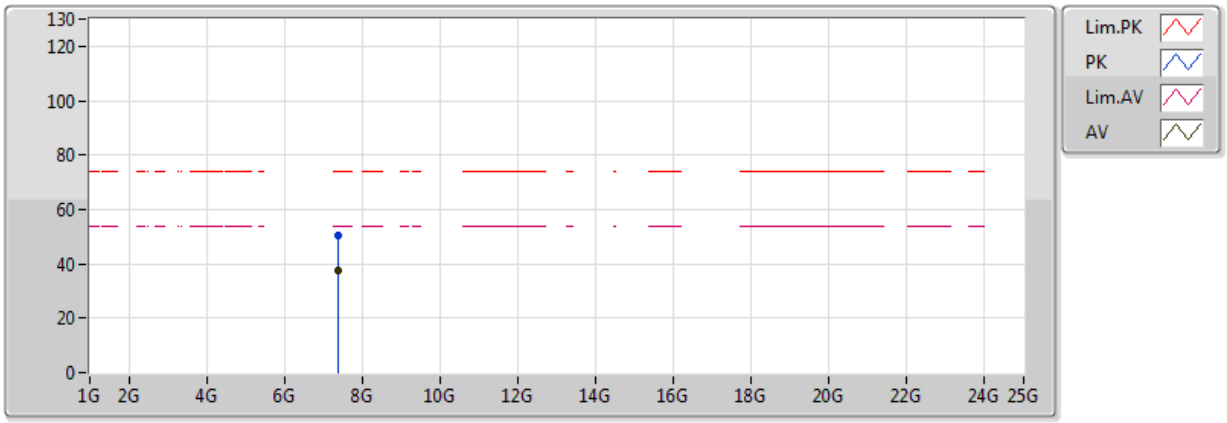


20170602
EUT Z_2TX
Setting 1D
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4592G	99.67	Inf	-Inf	30.95	3	H	260	2.48	-
AV	2.483502G	50.18	54.00	-3.82	30.92	3	H	260	2.48	-
PK	2.4594G	109.73	Inf	-Inf	30.95	3	H	260	2.48	-
PK	2.484G	65.60	74.00	-8.40	30.92	3	H	260	2.48	-

802.11g_(6Mbps)_2TX

2462MHz_TX

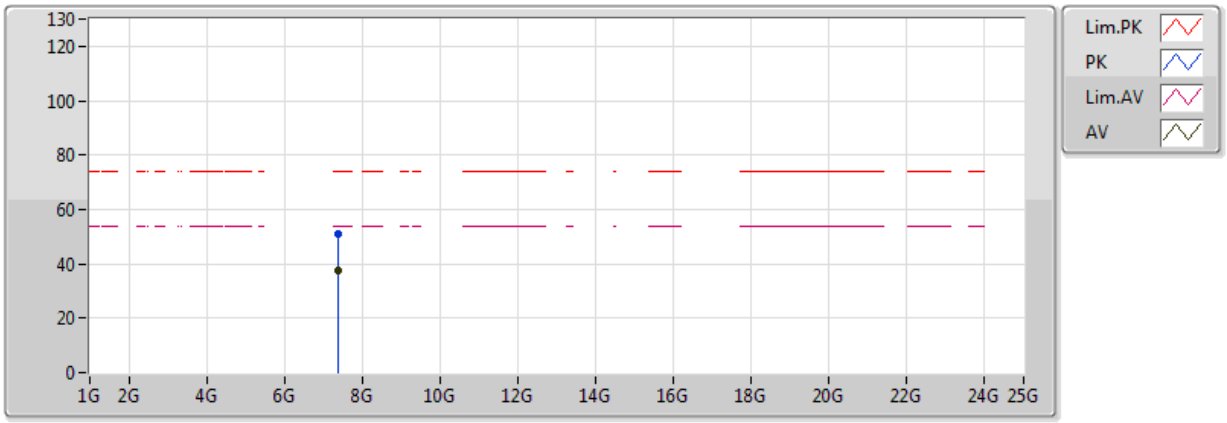


20170602
EUT Z_2TX
Setting 1D
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.3962G	37.71	54.00	-16.29	8.92	3	V	216	1.58	-
PK	7.3932G	50.67	74.00	-23.33	8.92	3	V	216	1.58	-

802.11g_(6Mbps)_2TX

2462MHz_TX

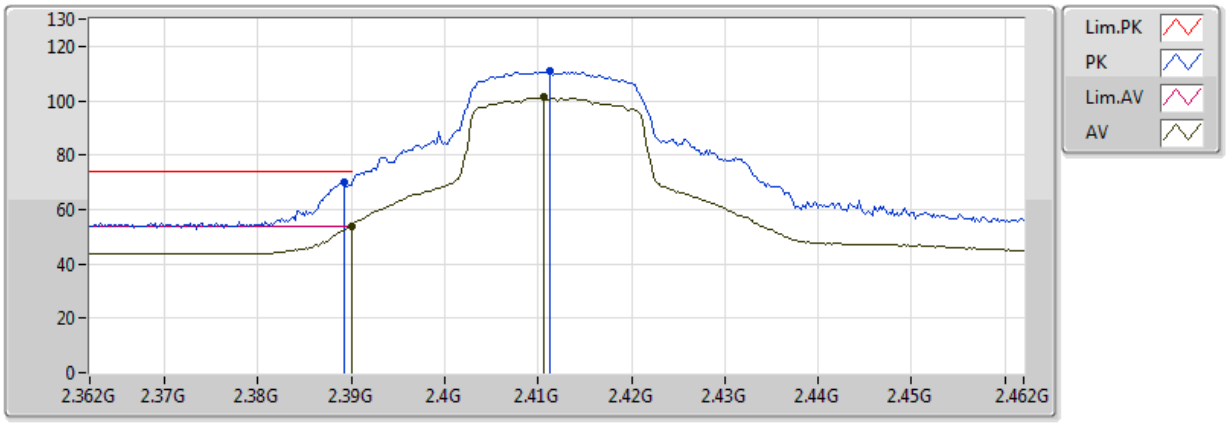


20170602
EUT Z_2TX
Setting 1D
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.39506G	37.73	54.00	-16.27	8.92	3	H	340	1.59	-
PK	7.38024G	51.22	74.00	-22.78	8.89	3	H	340	1.59	-

802.11ac VHT20_Nss1,(MCS0)_2TX

2412MHz_TX

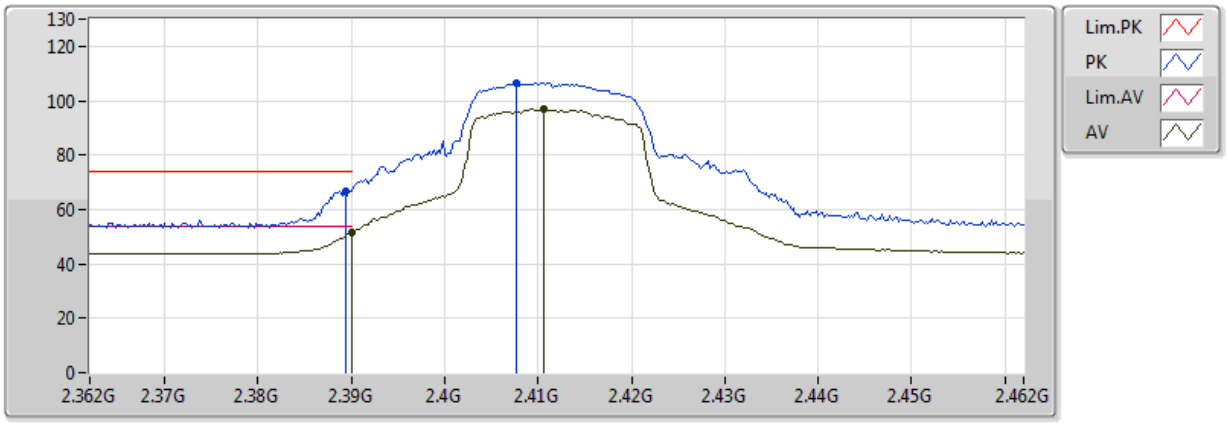


20170602
EUT Z_2TX
Setting 20
01-J-5
FSP(100080)

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	53.98	54.00	-0.02	31.04	3	V	312	2.99	-
AV	2.4106G	101.22	Inf	-Inf	31.01	3	V	312	2.99	-
PK	2.3892G	70.01	74.00	-3.99	31.04	3	V	312	2.99	-
PK	2.4112G	110.76	Inf	-Inf	31.01	3	V	312	2.99	-

802.11ac VHT20_Nss1,(MCS0)_2TX

2412MHz_TX

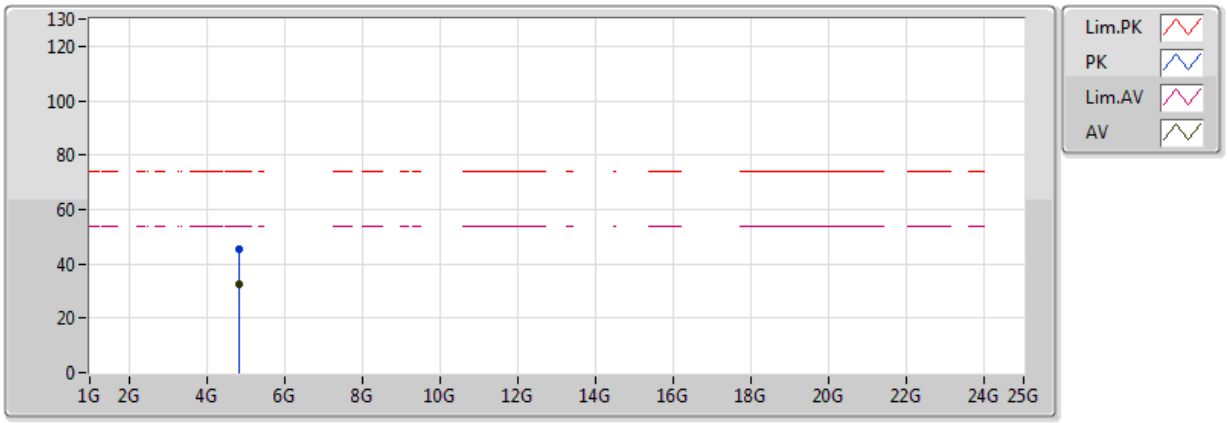


20170602
EUT Z_2TX
Setting 20
01-J-5
FSP(100080)

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	51.40	54.00	-2.60	31.04	3	H	166	1.47	-
AV	2.4106G	96.96	Inf	-Inf	31.01	3	H	166	1.47	-
PK	2.3894G	66.57	74.00	-7.43	31.04	3	H	166	1.47	-
PK	2.4076G	106.62	Inf	-Inf	31.01	3	H	166	1.47	-

802.11ac VHT20_Nss1,(MCS0)_2TX

2412MHz_TX

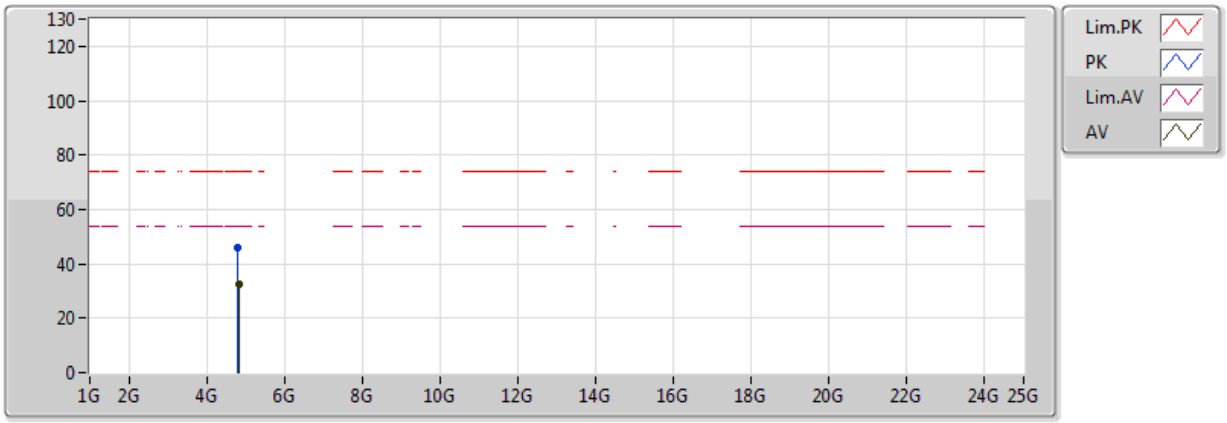


20170602
EUT Z_2TX
Setting 20
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82556G	32.50	54.00	-21.50	3.41	3	V	314	1.25	-
PK	4.82346G	45.33	74.00	-28.67	3.40	3	V	314	1.25	-

802.11ac VHT20_Nss1,(MCS0)_2TX

2412MHz_TX

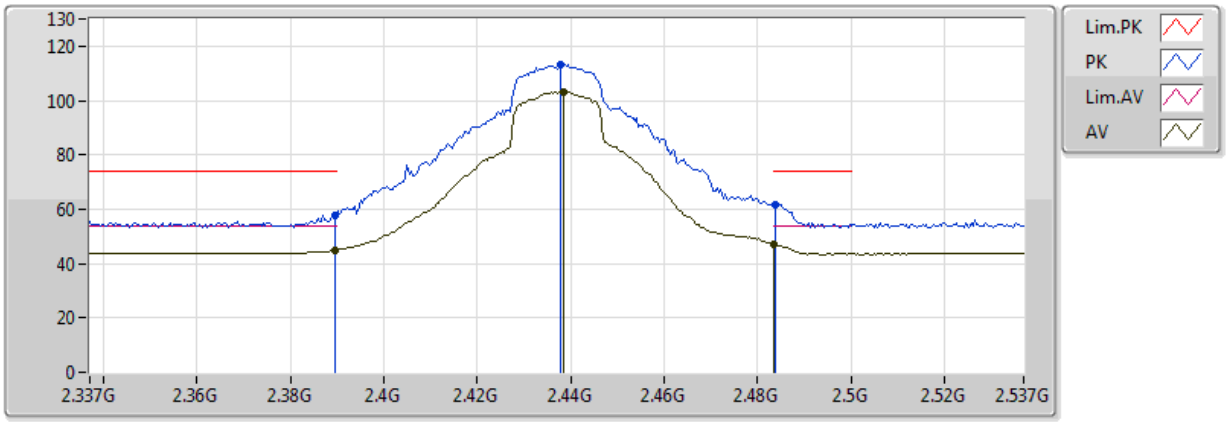


20170602
EUT Z_2TX
Setting 20
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82946G	32.52	54.00	-21.48	3.42	3	H	291	2.42	-
PK	4.81488G	46.18	74.00	-27.82	3.37	3	H	291	2.42	-

802.11ac VHT20_Nss1,(MCS0)_2TX

2437MHz_TX

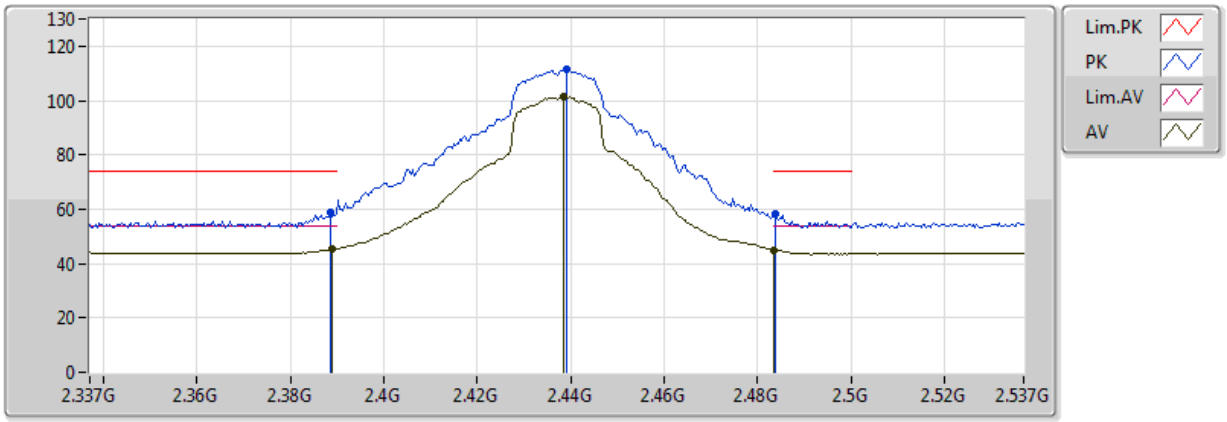


20170602
EUT Z_2TX
Setting 2C
01-J-5
FSP(100080)

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	44.89	54.00	-9.11	31.04	3	V	33	2.93	-
AV	2.4386G	103.21	Inf	-Inf	30.97	3	V	33	2.93	-
AV	2.483502G	47.00	54.00	-7.00	30.92	3	V	33	2.93	-
PK	2.3894G	57.98	74.00	-16.02	31.04	3	V	33	2.93	-
PK	2.4378G	113.16	Inf	-Inf	30.97	3	V	33	2.93	-
PK	2.4838G	61.86	74.00	-12.14	30.92	3	V	33	2.93	-

802.11ac VHT20_Nss1,(MCS0)_2TX

2437MHz_TX

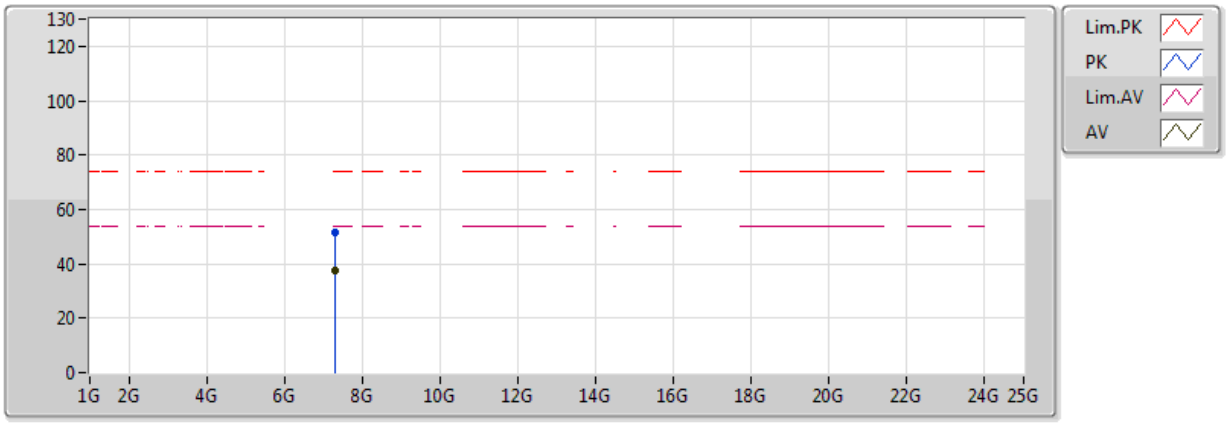


20170602
EUT Z_2TX
Setting 2C
01-J-5
FSP(100080)

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	45.40	54.00	-8.60	31.04	3	H	165	1.45	-
AV	2.4386G	101.58	Inf	-Inf	30.97	3	H	165	1.45	-
AV	2.483502G	45.01	54.00	-8.99	30.92	3	H	165	1.45	-
PK	2.3886G	59.10	74.00	-14.90	31.04	3	H	165	1.45	-
PK	2.439G	111.47	Inf	-Inf	30.97	3	H	165	1.45	-
PK	2.4838G	58.41	74.00	-15.59	30.92	3	H	165	1.45	-

802.11ac VHT20_Nss1,(MCS0)_2TX

2437MHz_TX

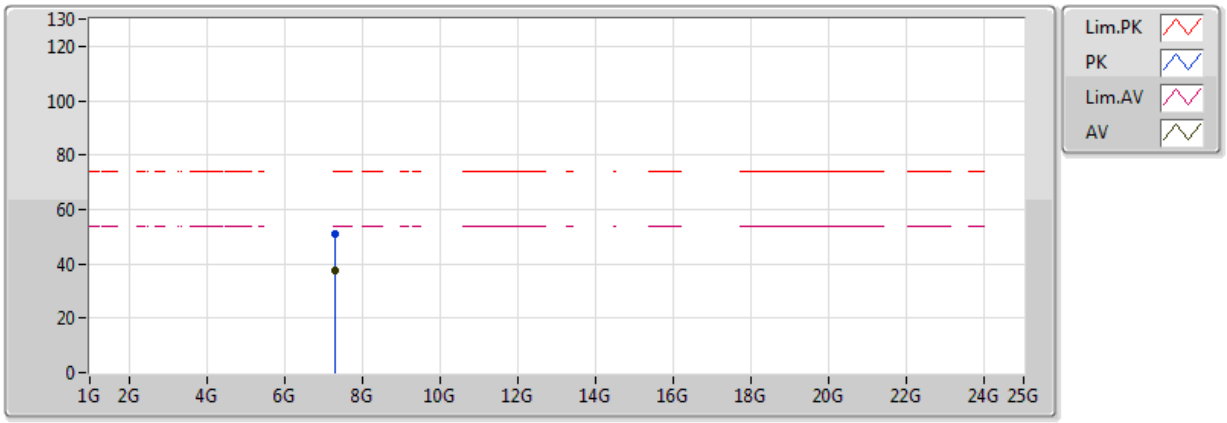


20170602
EUT Z_2TX
Setting 2C
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.29816G	37.52	54.00	-16.48	8.73	3	V	337	1.10	-
PK	7.31106G	51.66	74.00	-22.34	8.75	3	V	337	1.10	-

802.11ac VHT20_Nss1,(MCS0)_2TX

2437MHz_TX

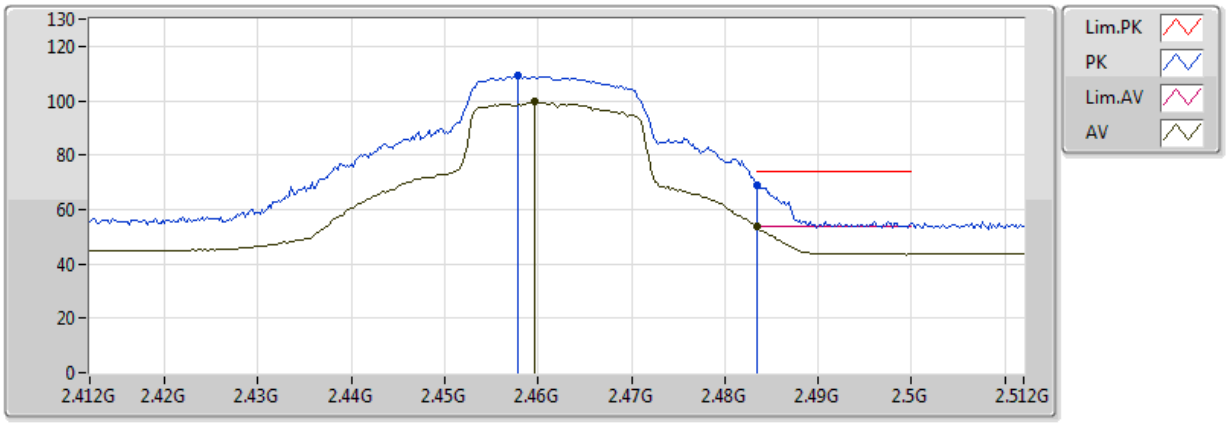


20170602
EUT Z_2TX
Setting 2C
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.29624G	37.63	54.00	-16.37	8.72	3	H	230	2.20	-
PK	7.3119G	50.76	74.00	-23.24	8.75	3	H	230	2.20	-

802.11ac VHT20_Nss1,(MCS0)_2TX

2462MHz_TX

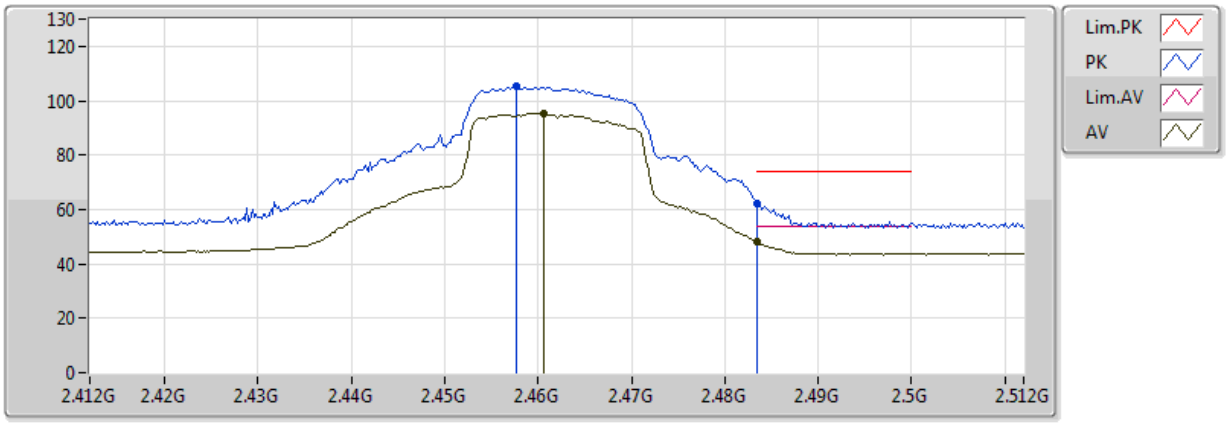


20170602
EUT Z_2TX
Setting 1E
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4596G	99.59	Inf	-Inf	30.95	3	V	323	2.50	-
AV	2.483502G	53.74	54.00	-0.26	30.92	3	V	323	2.50	-
PK	2.4578G	108.99	Inf	-Inf	30.95	3	V	323	2.50	-
PK	2.483502G	69.07	74.00	-4.93	30.92	3	V	323	2.50	-

802.11ac VHT20_Nss1,(MCS0)_2TX

2462MHz_TX

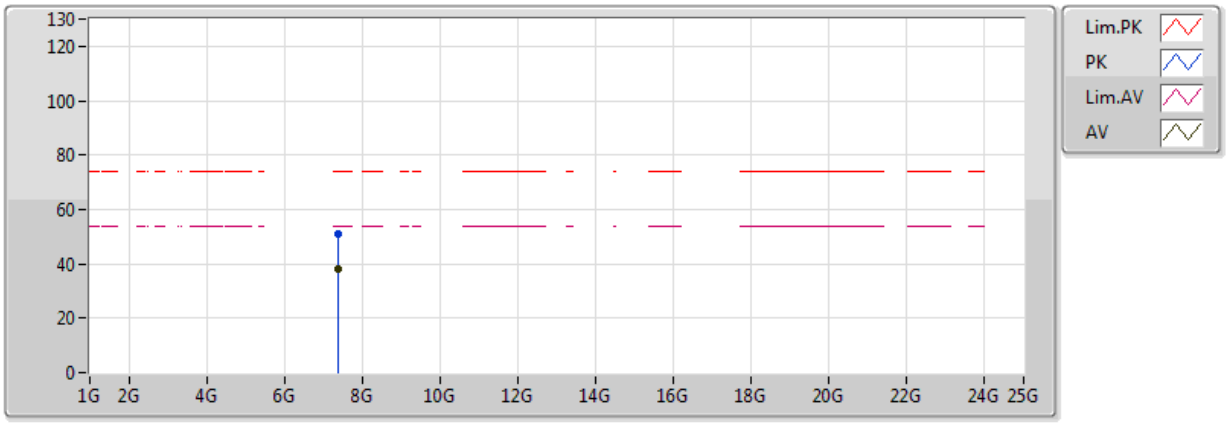


20170602
EUT Z_2TX
Setting 1E
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4606G	95.41	Inf	-Inf	30.95	3	H	165	1.22	-
AV	2.483502G	48.08	54.00	-5.92	30.92	3	H	165	1.22	-
PK	2.4576G	105.39	Inf	-Inf	30.95	3	H	165	1.22	-
PK	2.483502G	62.11	74.00	-11.89	30.92	3	H	165	1.22	-

802.11ac VHT20_Nss1,(MCS0)_2TX

2462MHz_TX

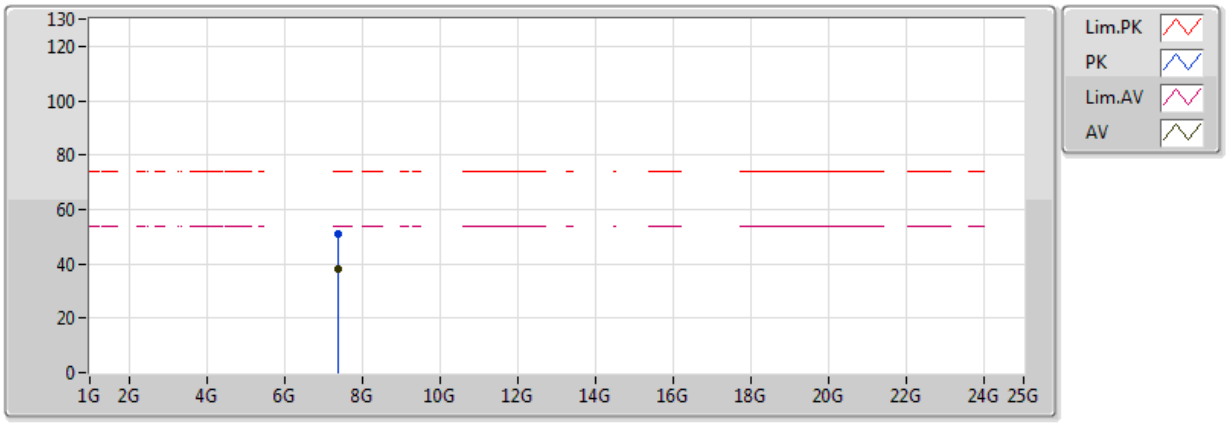


20170602
EUT Z_2TX
Setting 1E
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.40094G	37.86	54.00	-16.14	8.93	3	V	202	1.12	-
PK	7.39662G	50.82	74.00	-23.18	8.92	3	V	202	1.12	-

802.11ac VHT20_Nss1,(MCS0)_2TX

2462MHz_TX

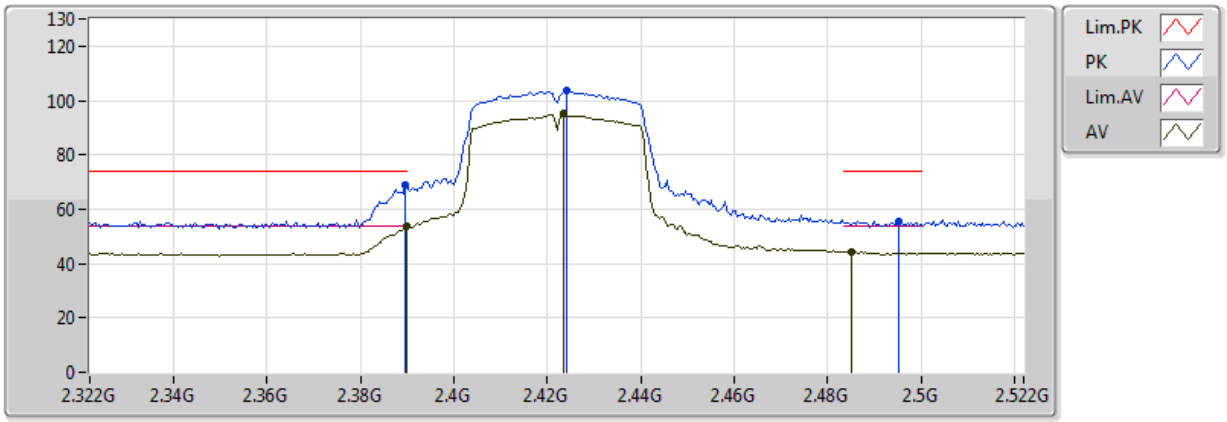


20170602
EUT Z_2TX
Setting 1E
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.40082G	38.02	54.00	-15.98	8.93	3	H	101	1.01	-
PK	7.3818G	51.05	74.00	-22.95	8.89	3	H	101	1.01	-

802.11ac VHT40_Nss1,(MCS0)_2TX

2422MHz_TX

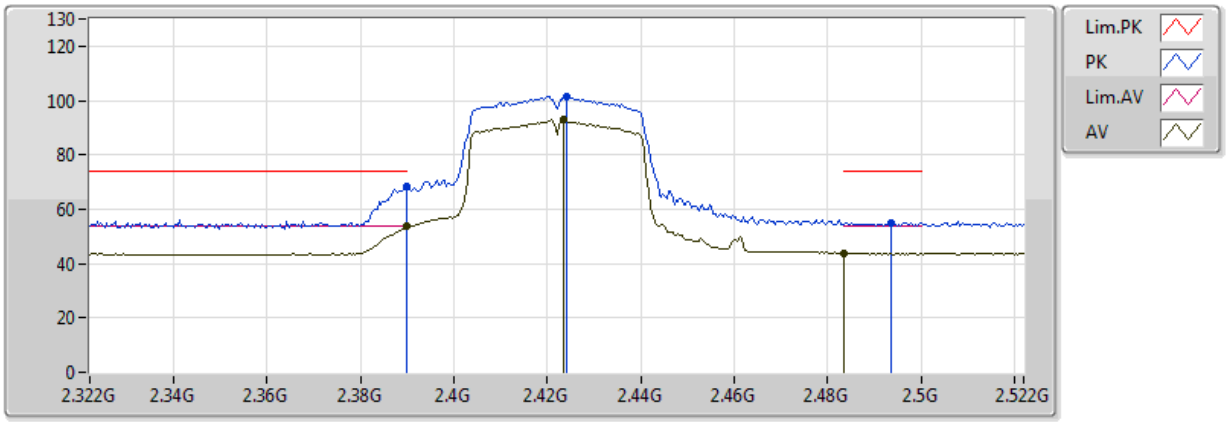


20170614
EUT Z_2TX
Setting 19
01-J-5
FSP(100080)

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	53.88	54.00	-0.12	31.04	3	V	296	2.96	-
AV	2.4236G	95.15	Inf	-Inf	30.99	3	V	296	2.96	-
AV	2.4852G	44.36	54.00	-9.64	30.92	3	V	296	2.96	-
PK	2.3896G	68.78	74.00	-5.22	31.04	3	V	296	2.96	-
PK	2.424G	103.39	Inf	-Inf	30.99	3	V	296	2.96	-
PK	2.4952G	55.69	74.00	-18.31	30.91	3	V	296	2.96	-

802.11ac VHT40_Nss1,(MCS0)_2TX

2422MHz_TX

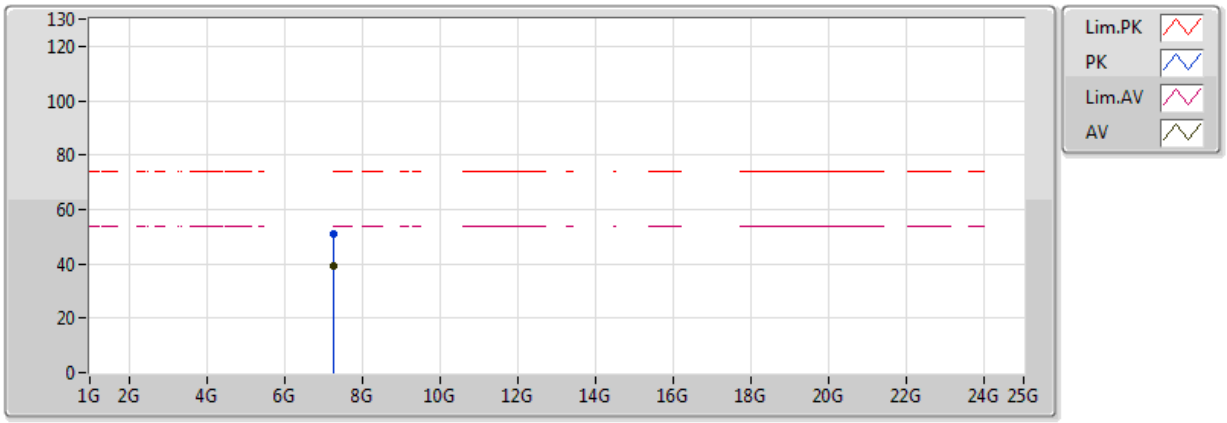


20170614
EUT Z_2TX
Setting 19
01-J-5
FSP(100080)

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	53.56	54.00	-0.44	31.04	3	H	150	1.01	-
AV	2.4236G	92.97	Inf	-Inf	30.99	3	H	150	1.01	-
AV	2.483502G	43.95	54.00	-10.05	30.92	3	H	150	1.01	-
PK	2.389998G	68.19	74.00	-5.81	31.04	3	H	150	1.01	-
PK	2.424G	101.42	Inf	-Inf	30.99	3	H	150	1.01	-
PK	2.4936G	55.11	74.00	-18.89	30.91	3	H	150	1.01	-

802.11ac VHT40_Nss1,(MCS0)_2TX

2422MHz_TX

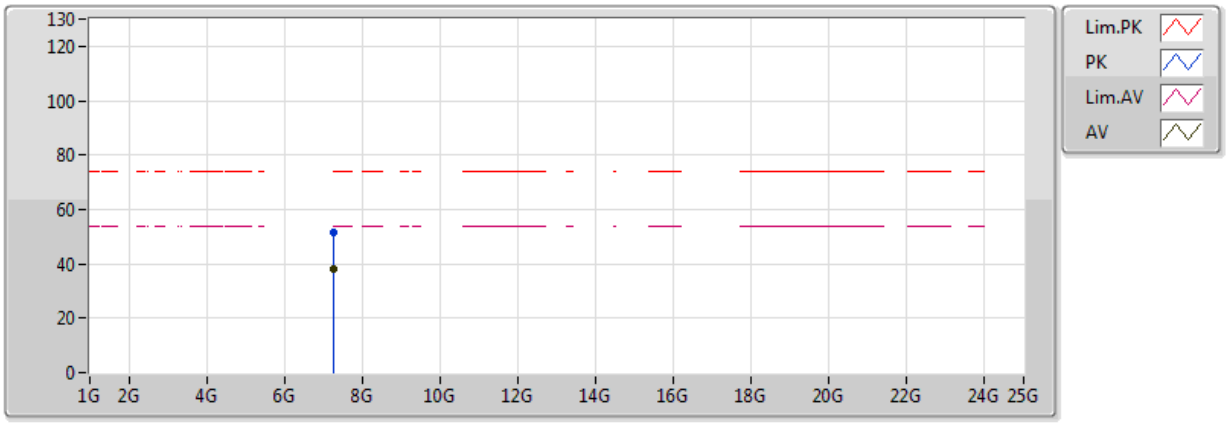


20170614
EUT Z_2TX
Setting 19
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.27506G	39.08	54.00	-14.92	8.67	3	V	44	1.48	-
PK	7.27344G	51.22	74.00	-22.78	8.66	3	V	44	1.48	-

802.11ac VHT40_Nss1,(MCS0)_2TX

2422MHz_TX

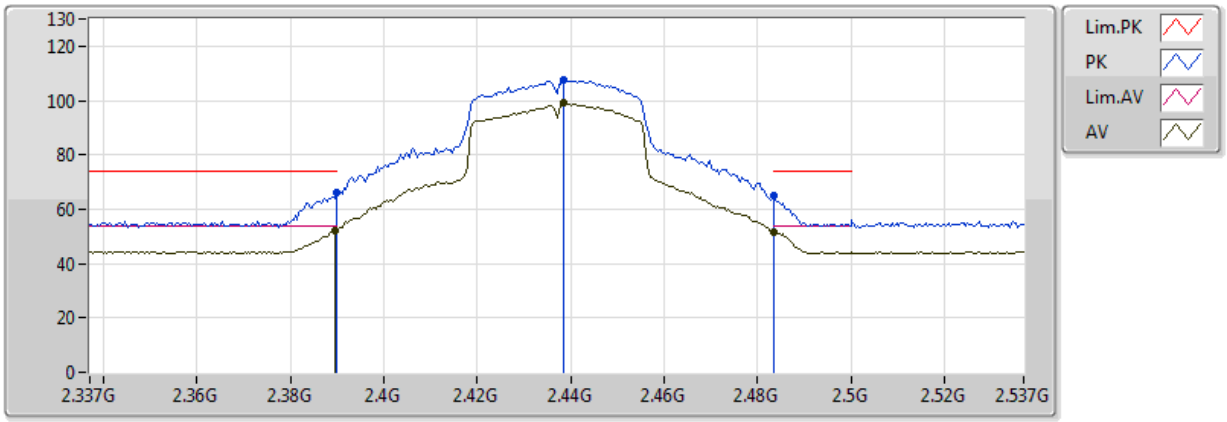


20170614
EUT Z_2TX
Setting 19
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.28022G	38.02	54.00	-15.98	8.68	3	H	45	1.06	-
PK	7.27956G	51.36	74.00	-22.64	8.68	3	H	45	1.06	-

802.11ac VHT40_Nss1,(MCS0)_2TX

2437MHz_TX

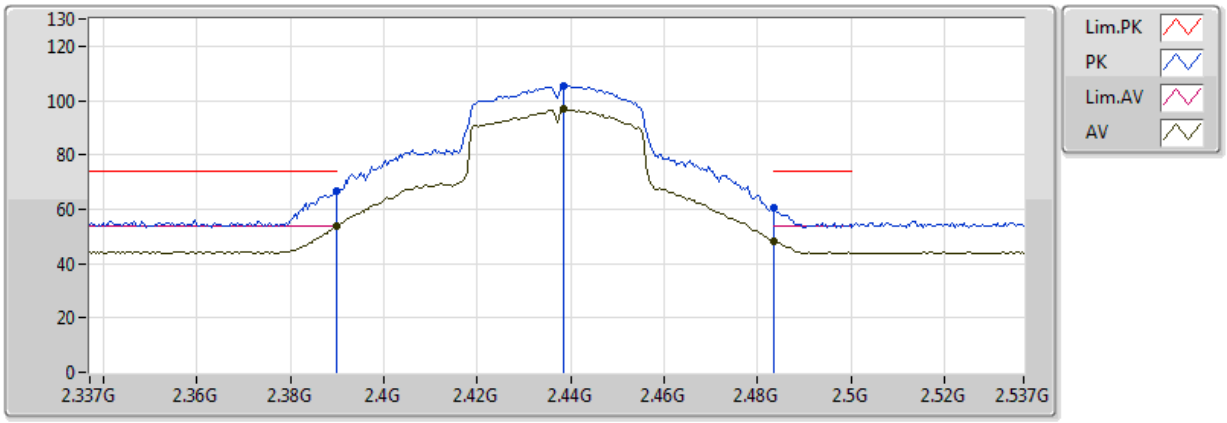


20170602
EUT Z_2TX
Setting 24
01-J-5
FSP(100080)

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	52.31	54.00	-1.69	31.04	3	V	21	2.96	-
AV	2.4386G	98.95	Inf	-Inf	30.97	3	V	21	2.96	-
AV	2.483502G	51.56	54.00	-2.44	30.92	3	V	21	2.96	-
PK	2.3898G	66.07	74.00	-7.93	31.04	3	V	21	2.96	-
PK	2.4386G	107.35	Inf	-Inf	30.97	3	V	21	2.96	-
PK	2.483502G	64.72	74.00	-9.28	30.92	3	V	21	2.96	-

802.11ac VHT40_Nss1,(MCS0)_2TX

2437MHz_TX

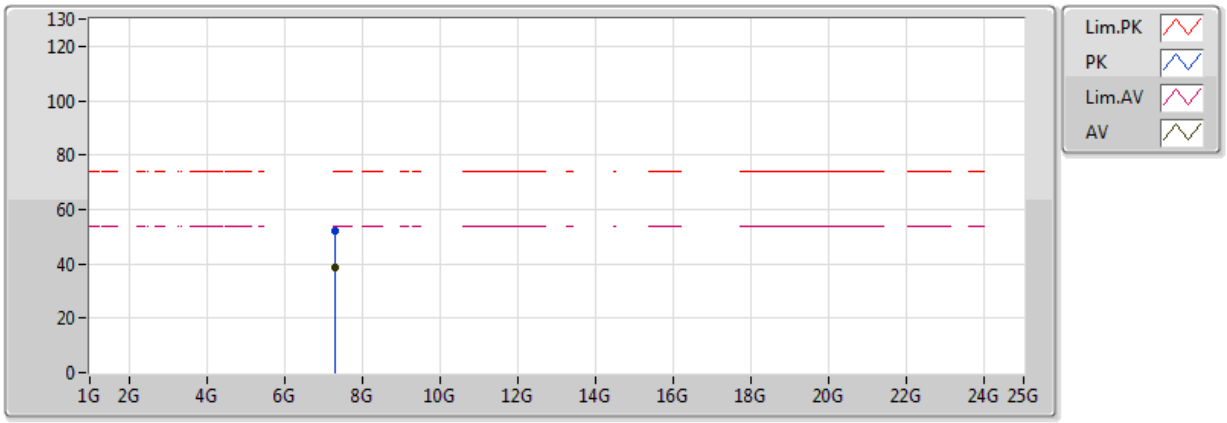


20170602
EUT Z_2TX
Setting 24
01-J-5
FSP(100080)

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	53.65	54.00	-0.35	31.04	3	H	166	1.46	-
AV	2.4386G	96.99	Inf	-Inf	30.97	3	H	166	1.46	-
AV	2.483502G	48.11	54.00	-5.89	30.92	3	H	166	1.46	-
PK	2.3898G	66.91	74.00	-7.09	31.04	3	H	166	1.46	-
PK	2.4386G	105.44	Inf	-Inf	30.97	3	H	166	1.46	-
PK	2.483502G	60.46	74.00	-13.54	30.92	3	H	166	1.46	-

802.11ac VHT40_Nss1,(MCS0)_2TX

2437MHz_TX

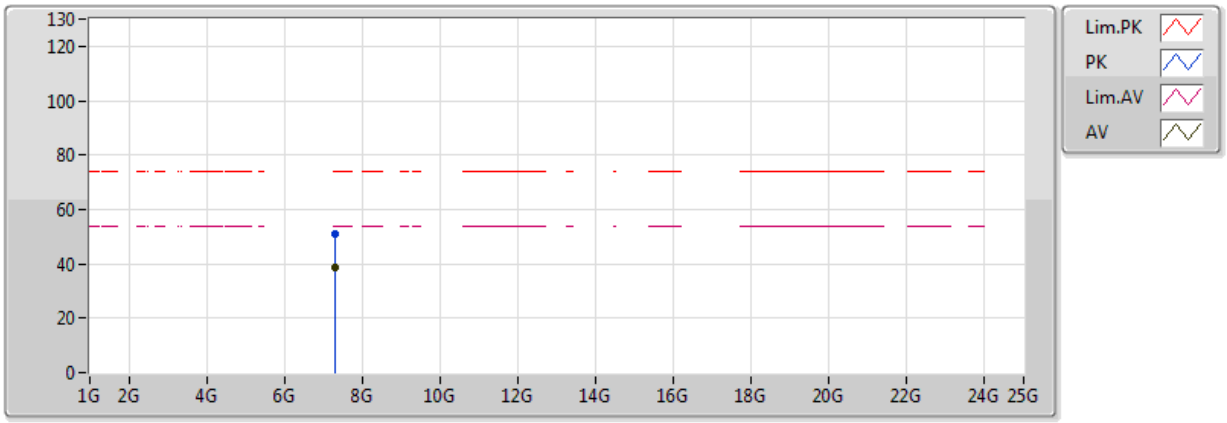


20170602
EUT Z_2TX
Setting 24
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.29858G	38.87	54.00	-15.13	8.73	3	V	90	1.30	-
PK	7.29876G	51.86	74.00	-22.14	8.73	3	V	90	1.30	-

802.11ac VHT40_Nss1,(MCS0)_2TX

2437MHz_TX

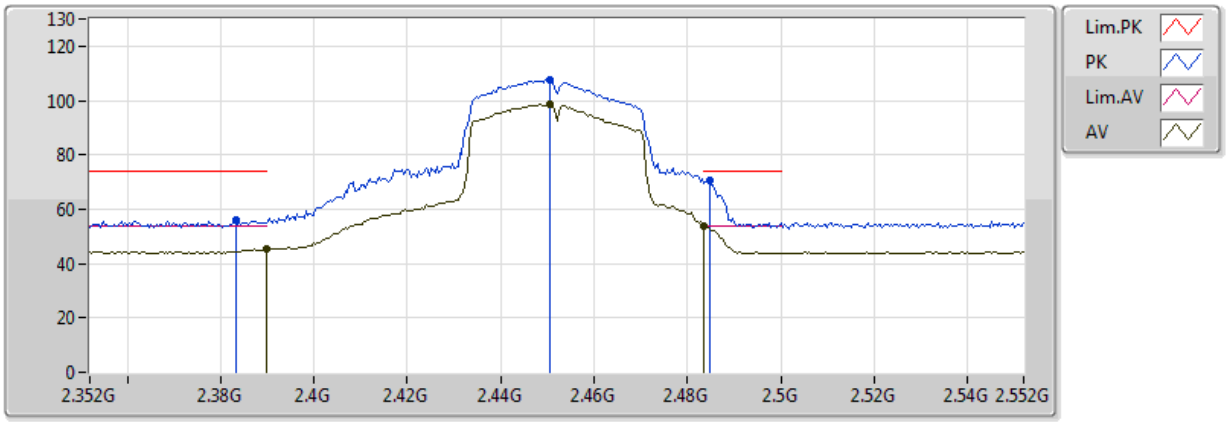


20170602
EUT Z_2TX
Setting 24
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.296G	38.69	54.00	-15.31	8.72	3	H	72	1.18	-
PK	7.3086G	51.11	74.00	-22.89	8.75	3	H	72	1.18	-

802.11ac VHT40_Nss1,(MCS0)_2TX

2452MHz_TX

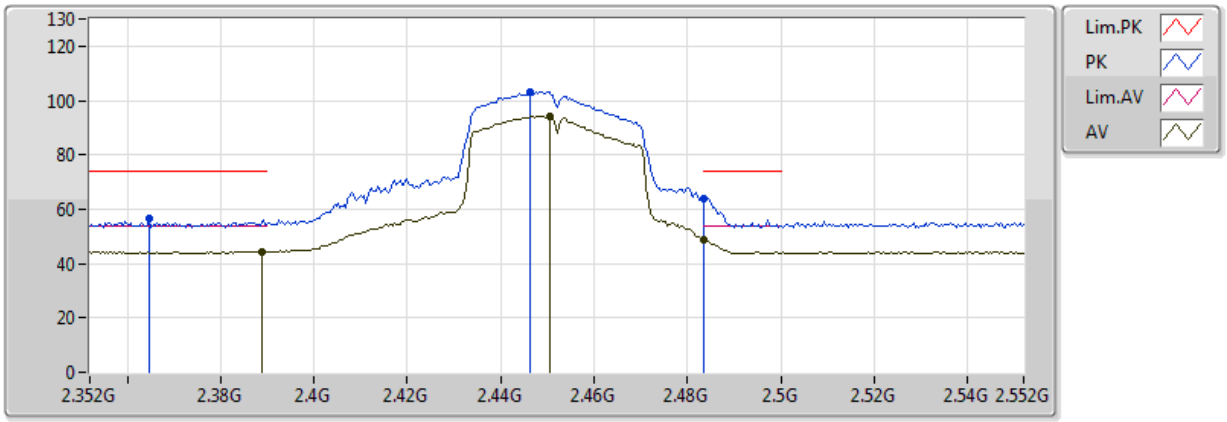


20170602
EUT Z_2TX
Setting 1E
01-J-5
FSP(100080)

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	45.34	54.00	-8.66	31.04	3	V	314	2.88	-
AV	2.4504G	98.86	Inf	-Inf	30.96	3	V	314	2.88	-
AV	2.483502G	53.92	54.00	-0.08	30.92	3	V	314	2.88	-
PK	2.3832G	56.15	74.00	-17.85	31.05	3	V	314	2.88	-
PK	2.4504G	107.56	Inf	-Inf	30.96	3	V	314	2.88	-
PK	2.4848G	70.83	74.00	-3.17	30.92	3	V	314	2.88	-

802.11ac VHT40_Nss1,(MCS0)_2TX

2452MHz_TX

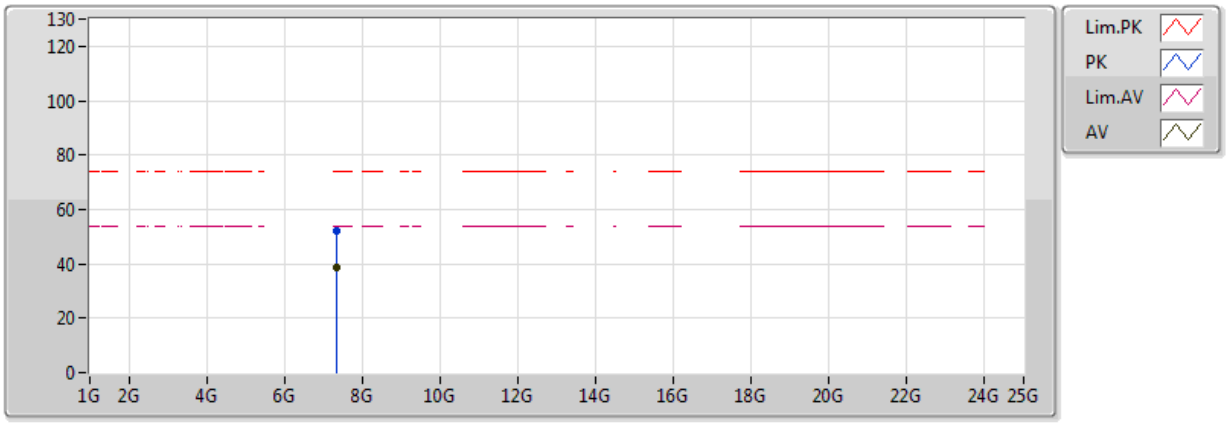


20170602
EUT Z_2TX
Setting 1E
01-J-5
FSP(100080)

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	44.51	54.00	-9.49	31.04	3	H	166	1.32	-
AV	2.4504G	94.30	Inf	-Inf	30.96	3	H	166	1.32	-
AV	2.483502G	48.61	54.00	-5.39	30.92	3	H	166	1.32	-
PK	2.3648G	56.47	74.00	-17.53	31.07	3	H	166	1.32	-
PK	2.4464G	103.03	Inf	-Inf	30.96	3	H	166	1.32	-
PK	2.483502G	64.00	74.00	-10.00	30.92	3	H	166	1.32	-

802.11ac VHT40_Nss1,(MCS0)_2TX

2452MHz_TX

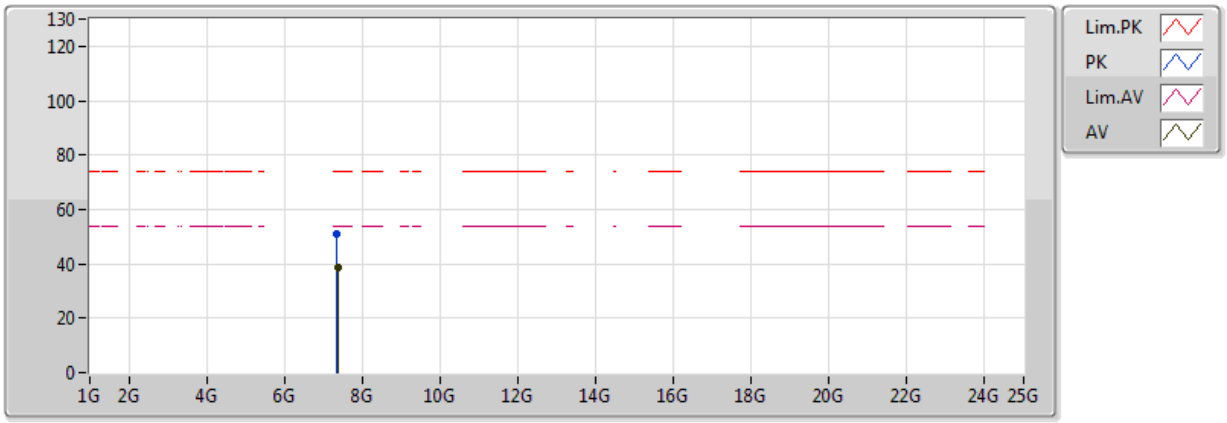


20170602
EUT Z_2TX
Setting 1E
01-J-5
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.35438G	38.77	54.00	-15.23	8.84	3	V	284	1.10	-
PK	7.34376G	52.04	74.00	-21.96	8.82	3	V	284	1.10	-

802.11ac VHT40_Nss1,(MCS0)_2TX

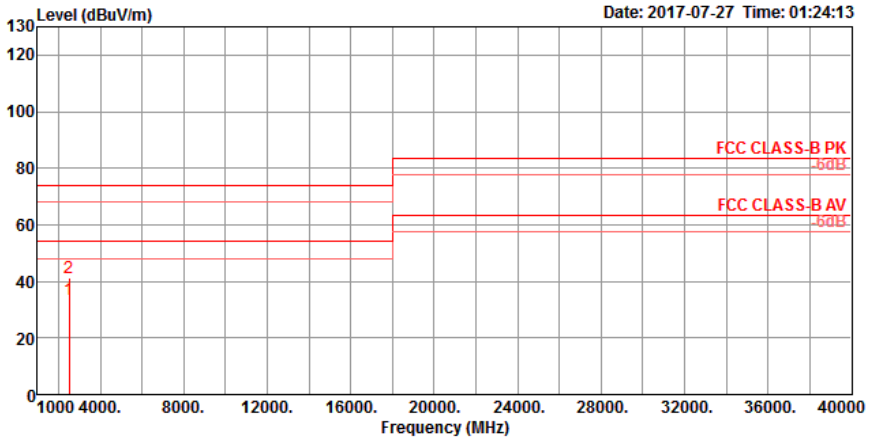
2452MHz_TX



20170602
EUT Z_2TX
Setting 1E
01-J-5
FSP(100080)

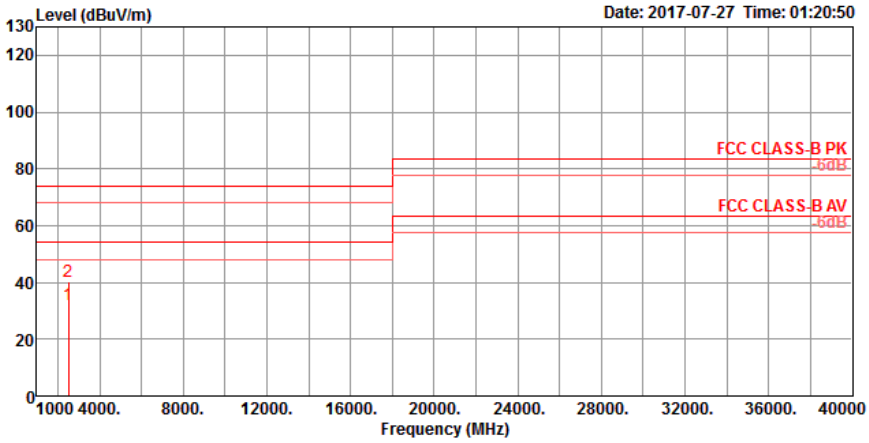
Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.36296G	38.87	54.00	-15.13	8.86	3	H	270	1.74	-
PK	7.34664G	51.16	74.00	-22.84	8.82	3	H	270	1.74	-

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	2500.03	33.79	54.00	-20.21	37.41	5.51	28.20	37.33	148	219	Average	HORIZONTAL
2	2500.08	41.44	74.00	-32.56	45.06	5.51	28.20	37.33	148	219	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	2500.00	32.23	54.00	-21.77	35.85	5.51	28.20	37.33	196	138	Average	VERTICAL
2	2500.06	40.19	74.00	-33.81	43.81	5.51	28.20	37.33	196	138	Peak	VERTICAL