FCC Test Report

Equipment	:	**AC1350 Wi-Fi Range Extender , AV1300 Powerline Edition**
Brand Name	:	**tp-link**
Model No.	:	**TL-WPA8630**
FCC ID	:	**TE7WPA8630V2**
Standard	:	**47 CFR FCC Part 15.247**
Operating Band	:	**2400 MHz – 2483.5 MHz**
Function	:	**☒ Point-to-multipoint; ☐ Point-to-point**
Applicant	:	**TP-Link Technologies Co., Ltd. Building 24 (floors 1,3,4,5) and 28 (floors1-4), Central Science and Technology Park,Nanshan Shenzhen, 518057 China**
Manufacturer	:	**TP-Link Technologies Co., Ltd. Building 24 (floors 1,3,4,5) and 28 (floors1-4), Central Science and Technology Park,Nanshan Shenzhen, 518057 China**

The product sample received on Mar. 23, 2017 and completely tested on Jul. 17, 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

Cliff Chang
SPORTON INTERNATIONAL INC.

Testing Laboratory
1190

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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
FR642705-01AA	Rev. 01	Initial issue of report	Jul. 28, 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)	2412-2462	1-11 [11]
2400-2483.5	n (HT40)	2422-2452	3-9 [7]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	3TX
2.4-2.4835GHz	802.11g	20	3TX
2.4-2.4835GHz	802.11n HT20	20	3TX
2.4-2.4835GHz	802.11n HT40	40	3TX

Note:
- 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- 11g, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- BWch is the nominal channel bandwidth.
- Nss-Min is the minimum number of spatial streams.
- Nant is the number of outputs. e.g., 2(2,3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.

1.1.2 Antenna Information

Ant.	Port		Brand	P/N	Antenna Type	Connector	Gain (dBi)	
	2.4GHz	5GHz					2.4GHz	5GHz
1	1	1	TP-LINK	3101501205	Omni Antenna	I-PEX	2.0	2.5
2	2	-	TP-LINK	3101501205	Omni Antenna	N/A	2.0	-
3	3	2	TP-LINK	3101501205	Omni Antenna	I-PEX	2.0	2.5

Note: The EUT has three antennas.

<For 2.4GHz Band>

For IEEE 802.11b/g/n mode (3TX/3RX)

Port 1, Port 2 and Port 3 can be used as transmitting/receiving antenna.

Port 1, Port 2 and Port 3 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)
802.11b	0.998	0.009
802.11g	0.993	0.031
802.11n HT20	0.991	0.039
802.11n HT40	0.982	0.079

1.1.4 EUT Operational Condition

EUT Power Type	Internal power supply			
Beamforming Function	☐	With beamforming	☒	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	Lucke Hsieh	22°C / 54%	Jun. 07, 2017~ Jul, 06, 2017
Radiated	03CH01-CB	Justin Lin	22°C / 54%	Jun. 07, 2017~ Jul, 17, 2017
AC Conduction	CO01-CB	Deven Huang	23°C / 60%	May 31, 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)_3TX	-
2412MHz	30
2437MHz	30
2462MHz	28.5
802.11g_(6Mbps)_3TX	-
2412MHz	28
2437MHz	28
2462MHz	27
802.11n HT20_Nss1,(MCS0)_3TX	-
2412MHz	28
2437MHz	31.5
2462MHz	28
802.11n HT40_Nss1,(MCS0)_3TX	-
2422MHz	25
2437MHz	29
2452MHz	26

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	CTX

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	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.: FA642705-01 for Co-location RF Exposure Evaluation.	

2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

N/A

2.5 Support Equipment

For Test Site No: CO01-CB

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

For Test Site No: 03CH01-CB

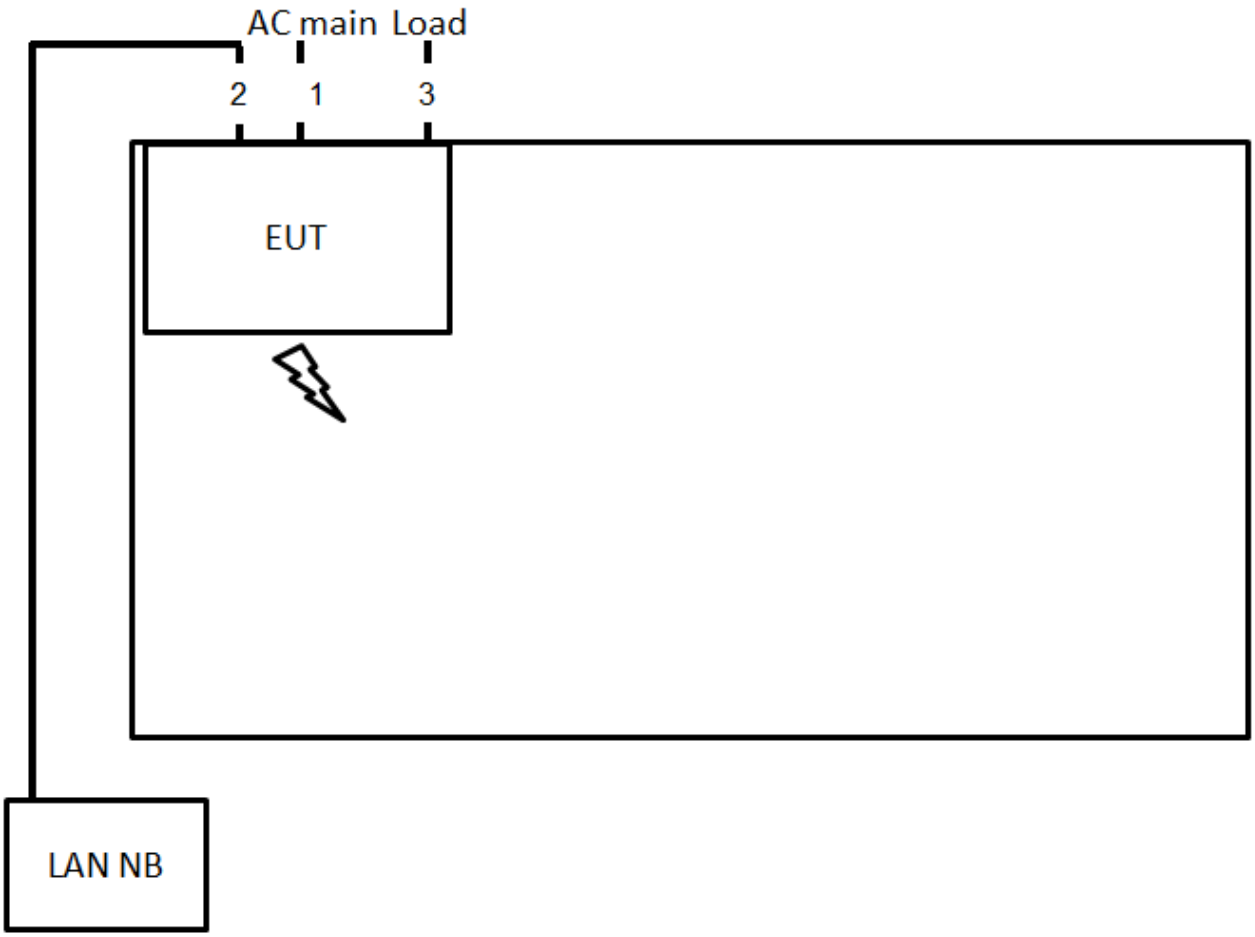
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB	DELL	E4300	DoC

For Test Site No: TH01-CB

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

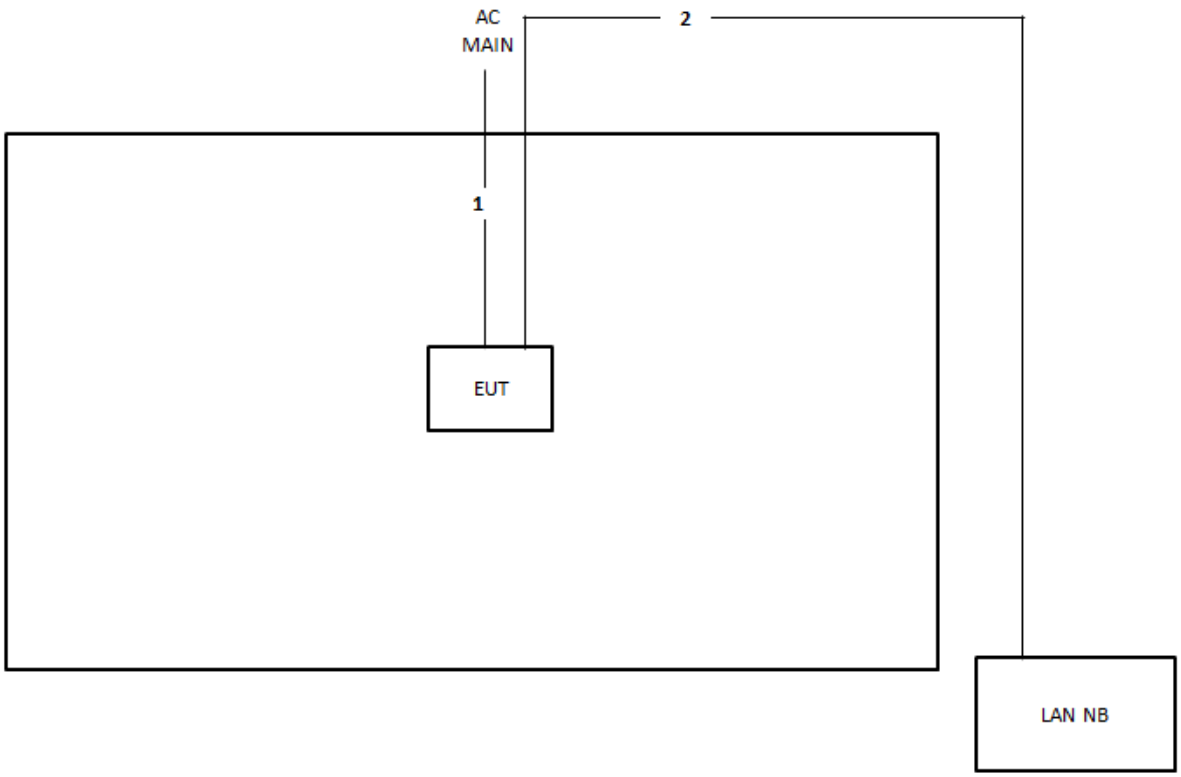
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length
1	Power cable	No	0.8m
2	RJ-45 cable	No	10m
3	RJ-45 cable*2	No	1.5m

Test Setup Diagram - Radiated Test



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

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

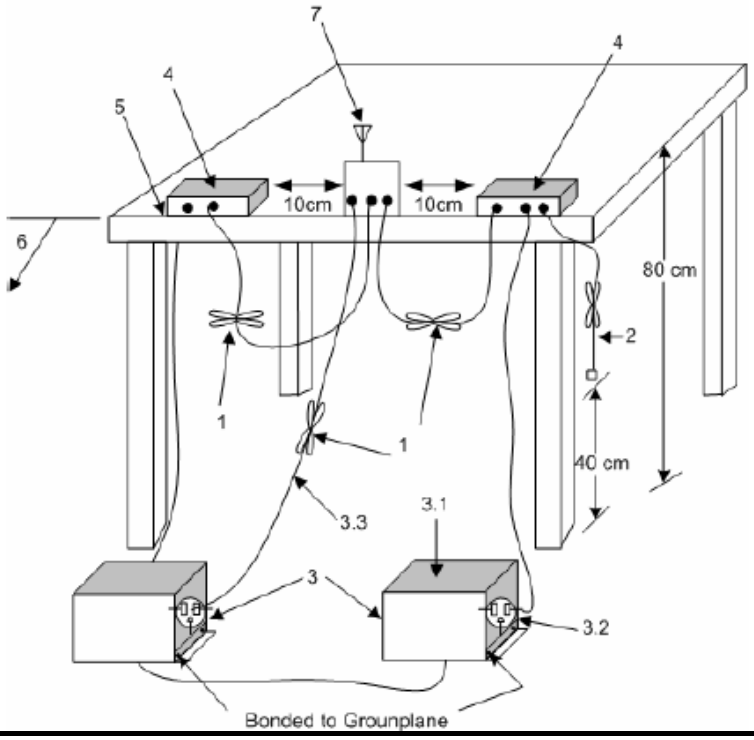
Refer a test equipment and calibration data table in this test report.

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.

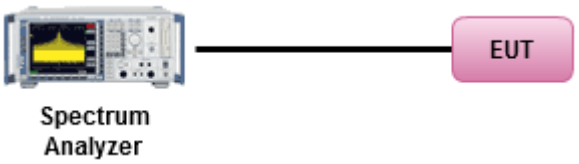
3.2.2 Measuring Instruments

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

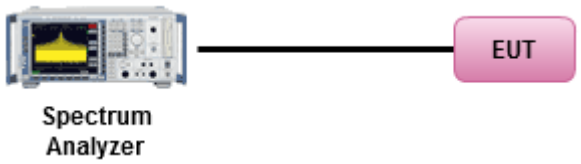
3.4.2 Measuring Instruments

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
 Spectrum Analyzer

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.	

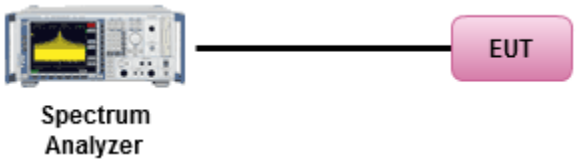
3.5.2 Measuring Instruments

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.

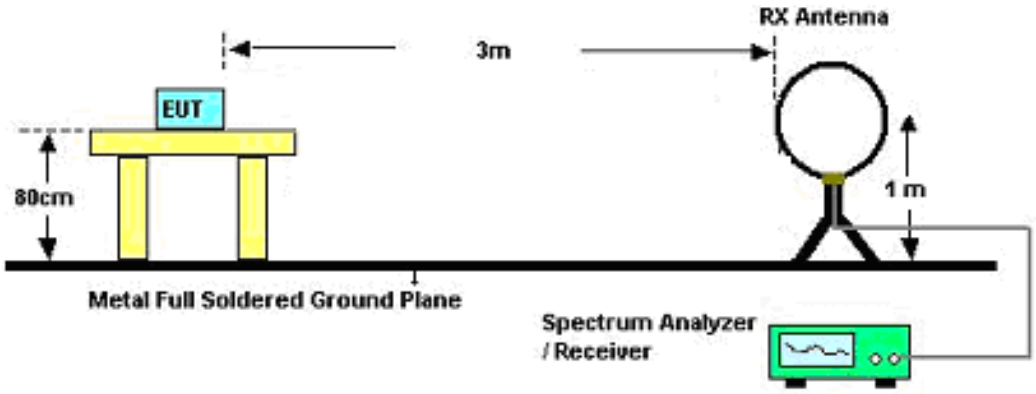
3.6.3 Test Procedures

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.	

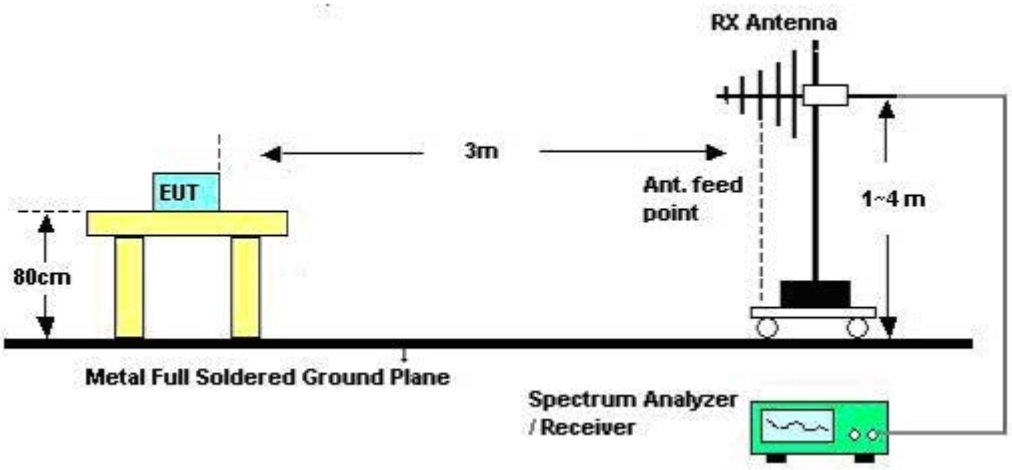
3.6.4 Test Setup

Transmitter Radiated Emissions

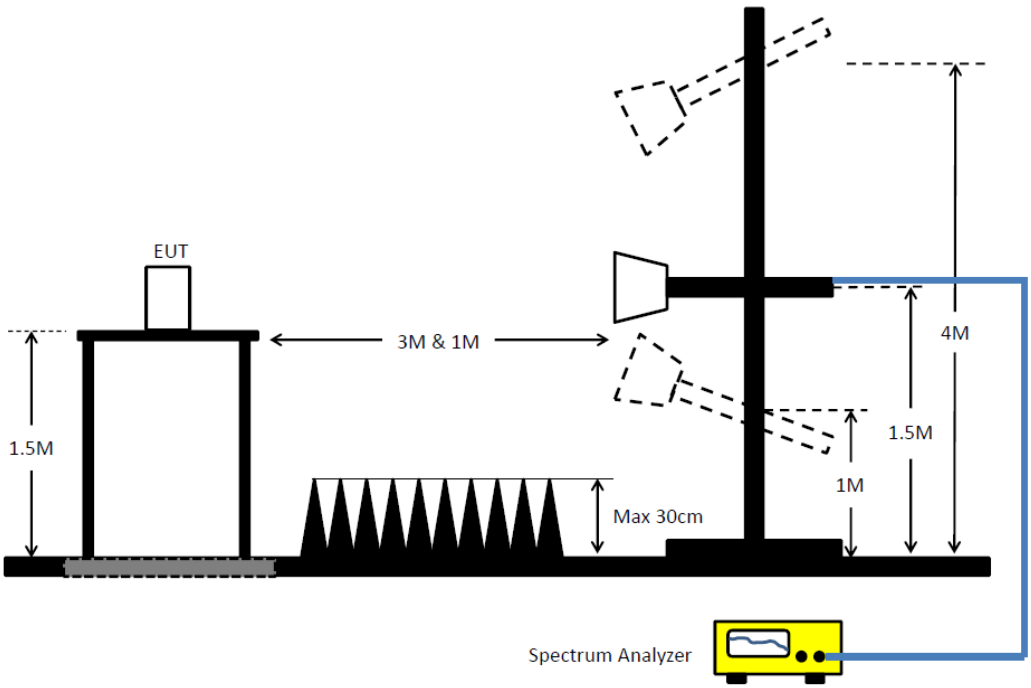
9kHz ~30MHz



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 Test 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 24, 2016	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)
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	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jun. 28, 2016	Radiation (03CH01-CB)
Pre-Amplifier	-	-	TF-130N-R1	26GHz ~ 40GHz	Jun. 20, 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)
RF Cable-high	Woken	High Cable-40G#1	N/A	18GHz ~ 40 GHz	Oct. 24, 2016	Radiation (03CH01-CB)

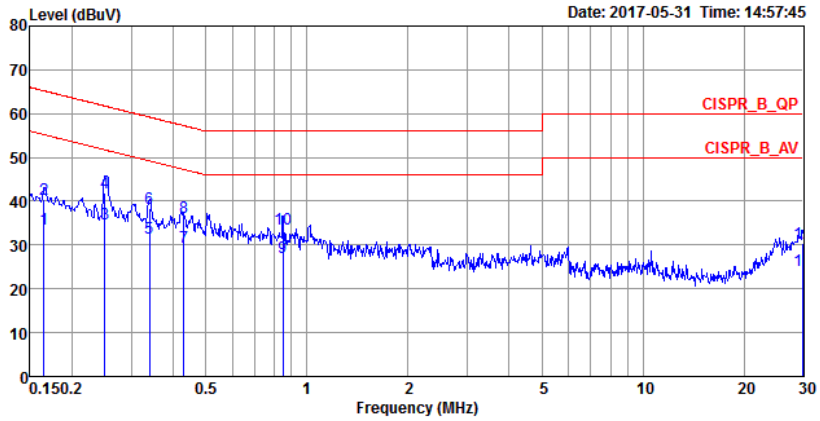
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
Test Software	Audix	E3	6.2009-l0-7	N/A	N/A	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 26, 2016	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.

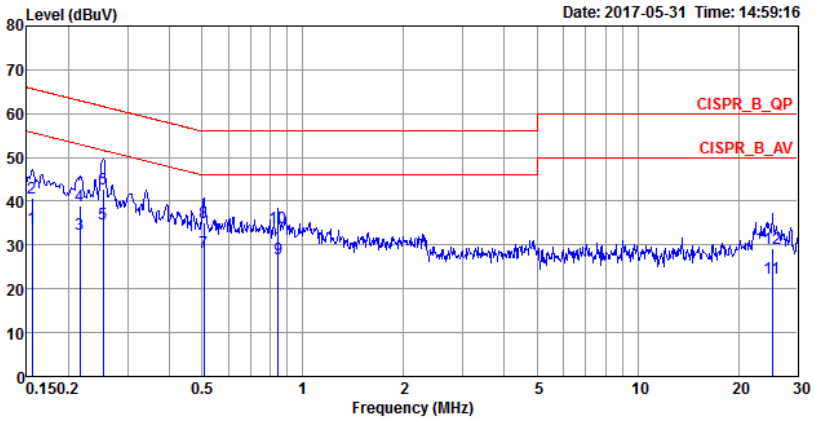
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	CTX		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1650	33.66	-21.55	55.21	23.41	10.10	0.15	Average	NEUTRAL
2	0.1650	40.50	-24.71	65.21	30.25	10.10	0.15	QP	NEUTRAL
3	0.2508	34.76	-16.97	51.73	24.59	10.08	0.09	Average	NEUTRAL
4	0.2508	41.91	-19.82	61.73	31.74	10.08	0.09	QP	NEUTRAL
5	0.3392	31.65	-17.57	49.22	21.42	10.19	0.04	Average	NEUTRAL
6	0.3392	38.41	-20.81	59.22	28.18	10.19	0.04	QP	NEUTRAL
7	0.4305	29.57	-17.67	47.24	19.30	10.25	0.02	Average	NEUTRAL
8	0.4305	36.35	-20.89	57.24	26.08	10.25	0.02	QP	NEUTRAL
9	0.8483	27.11	-18.89	46.00	16.85	10.10	0.16	Average	NEUTRAL
10	0.8483	33.79	-22.21	56.00	23.53	10.10	0.16	QP	NEUTRAL
11	29.8415	24.06	-25.94	50.00	13.19	10.58	0.29	Average	NEUTRAL
12	29.8415	30.55	-29.45	60.00	19.68	10.58	0.29	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	CTX		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1557	33.98	-21.71	55.69	23.82	10.00	0.16	Average	LINE
2	0.1557	40.78	-24.91	65.69	30.62	10.00	0.16	QP	LINE
3	0.2162	32.37	-20.59	52.96	22.33	9.92	0.12	Average	LINE
4	0.2162	38.96	-24.00	62.96	28.92	9.92	0.12	QP	LINE
5	0.2535	34.88	-16.76	51.64	24.87	9.92	0.09	Average	LINE
6	0.2535	42.76	-18.88	61.64	32.75	9.92	0.09	QP	LINE
7	0.5074	28.25	-17.75	46.00	18.24	9.95	0.06	Average	LINE
8	0.5074	35.24	-20.76	56.00	25.23	9.95	0.06	QP	LINE
9	0.8438	26.88	-19.12	46.00	16.76	9.96	0.16	Average	LINE
10	0.8438	33.84	-22.16	56.00	23.72	9.96	0.16	QP	LINE
11	25.1876	22.39	-27.61	50.00	11.71	10.43	0.25	Average	LINE
12	25.1876	29.15	-30.85	60.00	18.47	10.43	0.25	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)_3TX	-	-	-	-	-
2.4-2.4835GHz	7.025M	11.744M	11M7G1D	6.05M	10.72M
802.11g_(6Mbps)_3TX	-	-	-	-	-
2.4-2.4835GHz	15.875M	16.267M	16M3D1D	14.025M	16.217M
802.11n HT20_Nss1,(MCS0)_3TX	-	-	-	-	-
2.4-2.4835GHz	15.625M	17.416M	17M4D1D	14.25M	17.341M
802.11n HT40_Nss1,(MCS0)_3TX	-	-	-	-	-
2.4-2.4835GHz	33.75M	35.832M	35M8D1D	27.5M	35.732M

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;

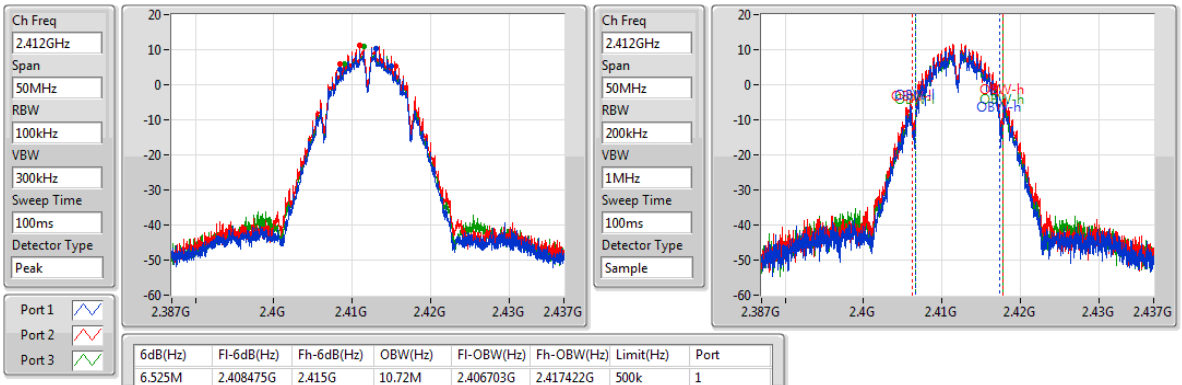
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)
802.11b_(1Mbps)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	6.525M	10.72M	7.025M	11.644M	6.05M	11.094M
2437MHz	Pass	500k	6.525M	11.569M	7M	11.744M	7.025M	10.945M
2462MHz	Pass	500k	6.55M	10.82M	7M	10.92M	6.525M	10.72M
802.11g_(6Mbps)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	14.025M	16.242M	15.875M	16.242M	15.075M	16.242M
2437MHz	Pass	500k	14.95M	16.217M	15M	16.267M	15.075M	16.267M
2462MHz	Pass	500k	14.975M	16.242M	15.125M	16.242M	15.05M	16.242M
802.11n HT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	15.625M	17.341M	14.8M	17.416M	15M	17.366M
2437MHz	Pass	500k	14.8M	17.391M	14.975M	17.391M	14.25M	17.416M
2462MHz	Pass	500k	14.875M	17.341M	14.7M	17.416M	15.05M	17.391M
802.11n HT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	31.25M	35.782M	28.75M	35.732M	31.3M	35.782M
2437MHz	Pass	500k	30M	35.782M	33.75M	35.832M	31.25M	35.782M
2452MHz	Pass	500k	33.75M	35.732M	28.75M	35.782M	27.5M	35.732M

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

802.11b_(1Mbps)_3TX **EBW**

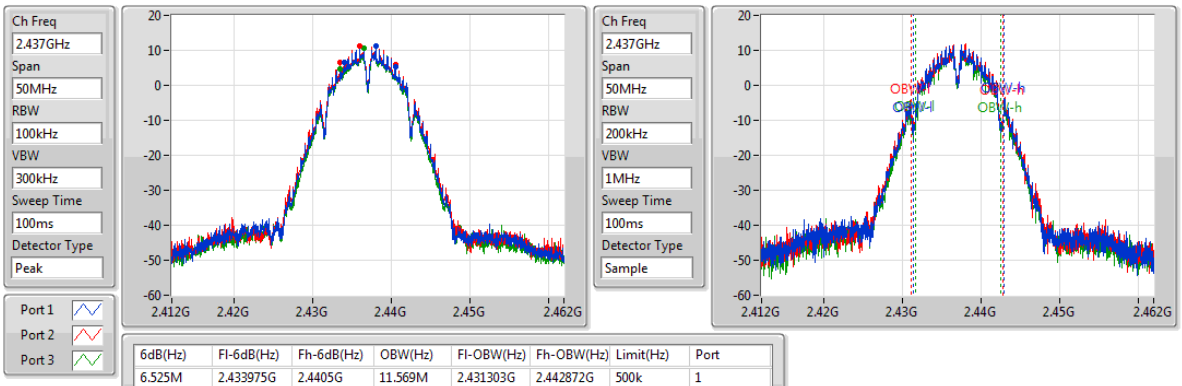
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
6.525M	2.408475G	2.415G	10.72M	2.406703G	2.417422G	500k	1
7.025M	2.408475G	2.4155G	11.644M	2.406178G	2.417822G	500k	2
6.05M	2.408975G	2.415025G	11.094M	2.406628G	2.417722G	500k	3

802.11b_(1Mbps)_3TX **EBW**

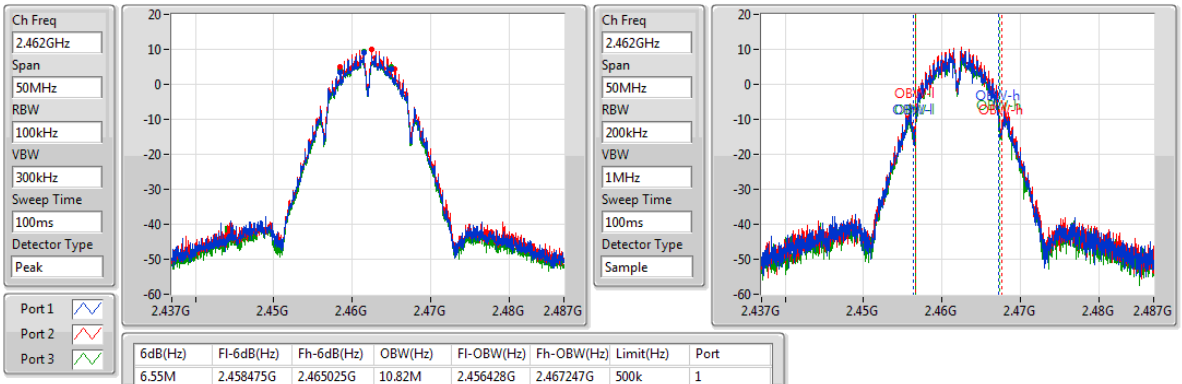
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
6.525M	2.433975G	2.4405G	11.569M	2.431303G	2.442872G	500k	1
7M	2.4335G	2.4405G	11.744M	2.431103G	2.442847G	500k	2
7.025M	2.433475G	2.4405G	10.945M	2.431603G	2.442547G	500k	3

802.11b_(1Mbps)_3TX **EBW**

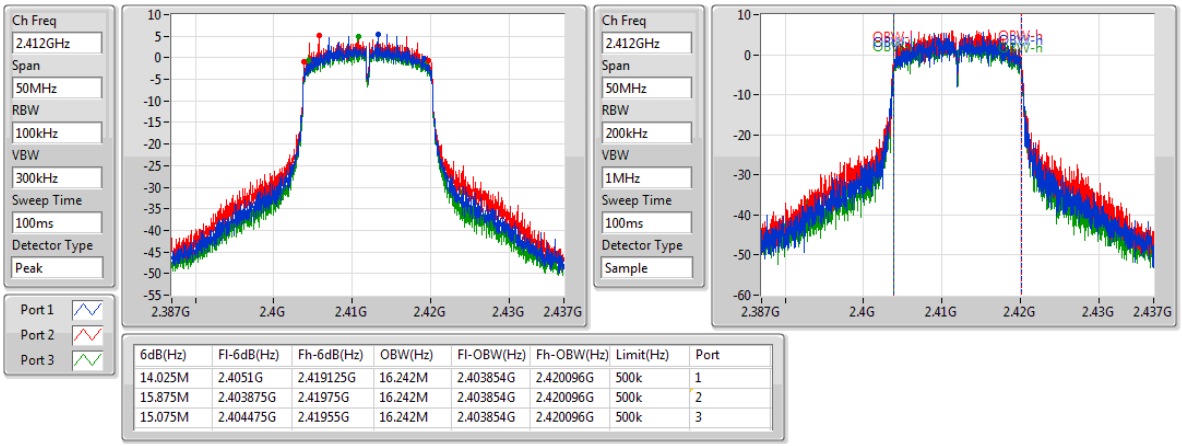
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
6.55M	2.458475G	2.465025G	10.82M	2.456428G	2.467247G	500k	1
7M	2.458475G	2.465475G	10.92M	2.456678G	2.467597G	500k	2
6.525M	2.458475G	2.465G	10.72M	2.456603G	2.467322G	500k	3

802.11g_(6Mbps)_3TX **EBW**

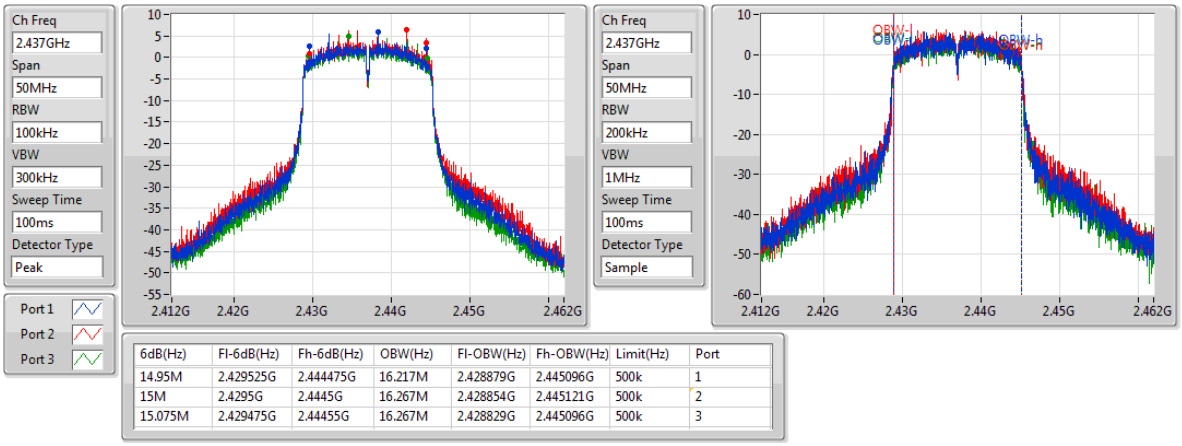
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
14.025M	2.4051G	2.419125G	16.242M	2.403854G	2.420096G	500k	1
15.875M	2.403875G	2.41975G	16.242M	2.403854G	2.420096G	500k	2
15.075M	2.404475G	2.41955G	16.242M	2.403854G	2.420096G	500k	3

802.11g_(6Mbps)_3TX **EBW**

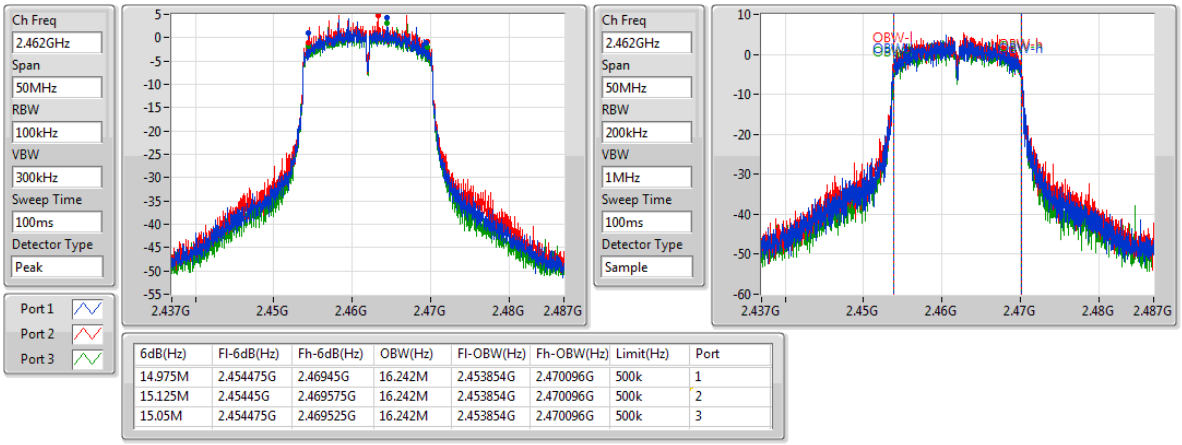
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
14.95M	2.429525G	2.444475G	16.217M	2.428879G	2.445096G	500k	1
15M	2.4295G	2.4445G	16.267M	2.428854G	2.445121G	500k	2
15.075M	2.429475G	2.44455G	16.267M	2.428829G	2.445096G	500k	3

802.11g_(6Mbps)_3TX **EBW**

2462MHz

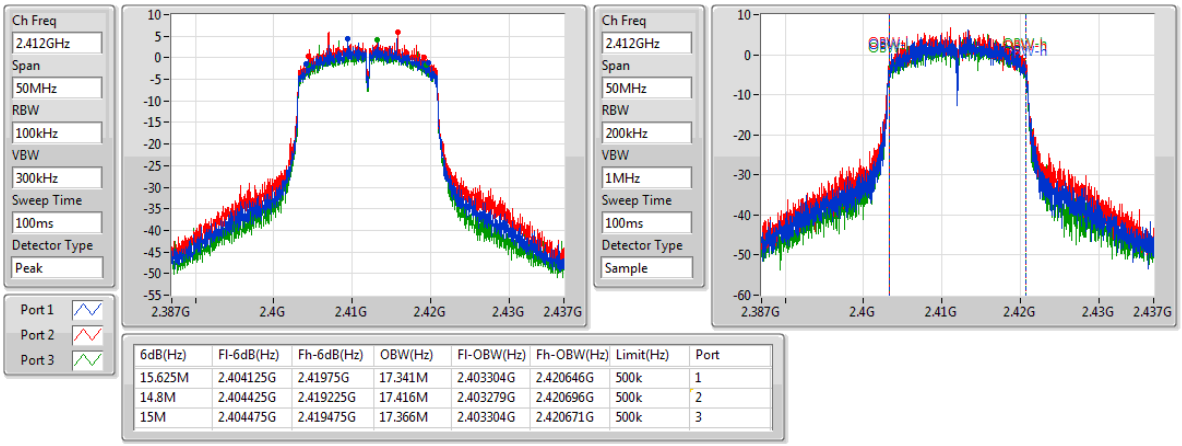


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
14.975M	2.454475G	2.46945G	16.242M	2.453854G	2.470096G	500k	1
15.125M	2.45445G	2.469575G	16.242M	2.453854G	2.470096G	500k	2
15.05M	2.454475G	2.469525G	16.242M	2.453854G	2.470096G	500k	3

802.11n HT20_Nss1,(MCS0)_3TX

EBW

2412MHz

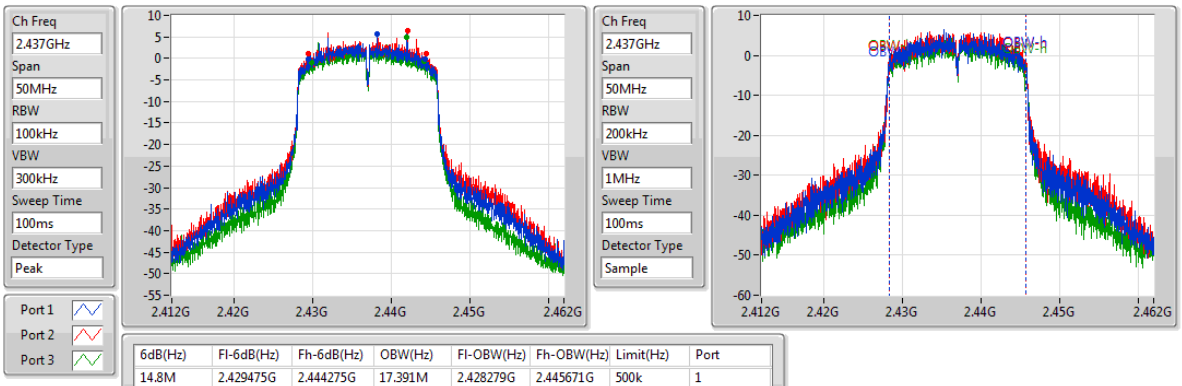


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.625M	2.404125G	2.41975G	17.341M	2.403304G	2.420646G	500k	1
14.8M	2.404425G	2.419225G	17.416M	2.403279G	2.420696G	500k	2
15M	2.404475G	2.419475G	17.366M	2.403304G	2.420671G	500k	3

802.11n HT20_Nss1,(MCS0)_3TX

EBW

2437MHz

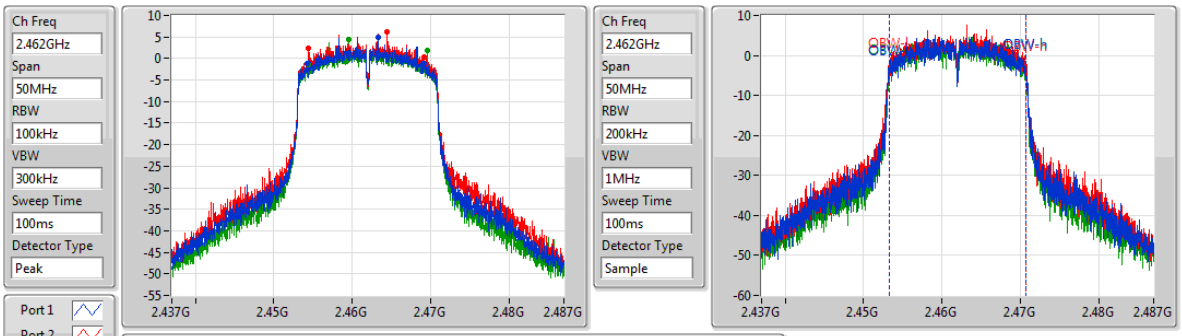


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
14.8M	2.429475G	2.444275G	17.391M	2.428279G	2.445671G	500k	1
14.975M	2.429425G	2.4444G	17.391M	2.428279G	2.445671G	500k	2
14.25M	2.429875G	2.444125G	17.416M	2.428254G	2.445671G	500k	3

802.11n HT20_Nss1,(MCS0)_3TX

EBW

2462MHz

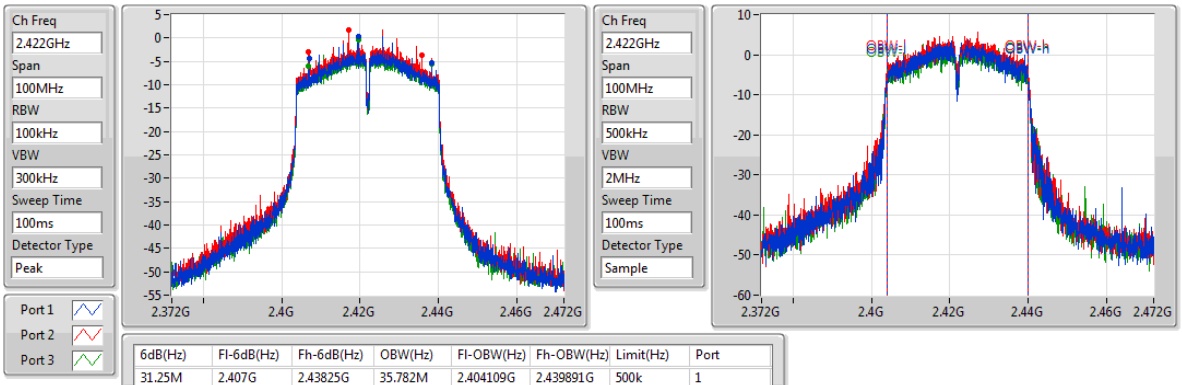


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
14.875M	2.454275G	2.46915G	17.341M	2.453304G	2.470646G	500k	1
14.7M	2.45445G	2.46915G	17.416M	2.453254G	2.470671G	500k	2
15.05M	2.454475G	2.469525G	17.391M	2.453304G	2.470696G	500k	3

802.11n HT40_Nss1,(MCS0)_3TX

EBW

2422MHz

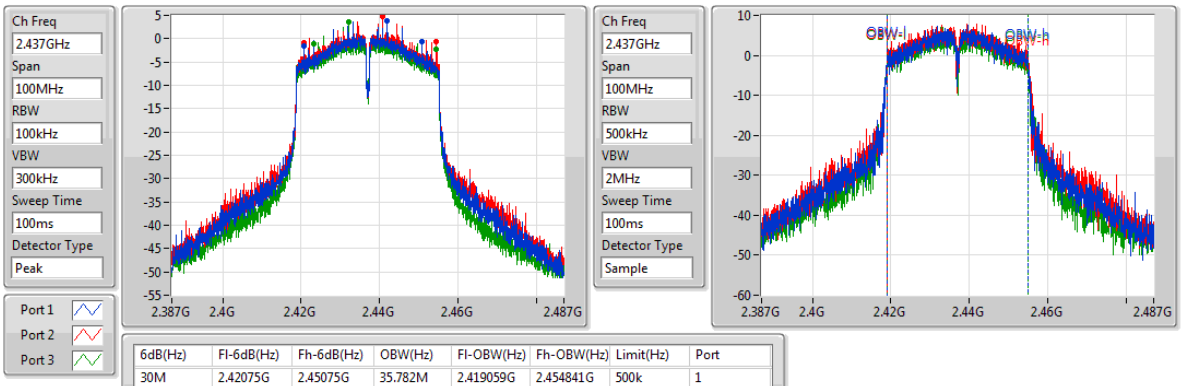


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
31.25M	2.407G	2.43825G	35.782M	2.404109G	2.439891G	500k	1
28.75M	2.40695G	2.4357G	35.732M	2.404109G	2.439841G	500k	2
31.3M	2.40695G	2.43825G	35.782M	2.404059G	2.439841G	500k	3

802.11n HT40_Nss1,(MCS0)_3TX

EBW

2437MHz

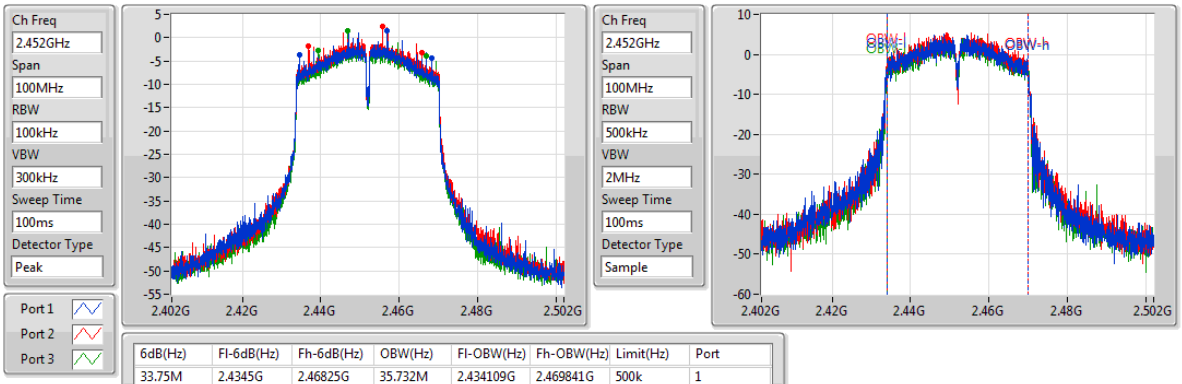


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
30M	2.42075G	2.45075G	35.782M	2.419059G	2.454841G	500k	1
33.75M	2.42075G	2.4545G	35.832M	2.419059G	2.454891G	500k	2
31.25M	2.42325G	2.4545G	35.782M	2.419059G	2.454841G	500k	3

802.11n HT40_Nss1,(MCS0)_3TX

EBW

2452MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
33.75M	2.4345G	2.46825G	35.732M	2.434109G	2.469841G	500k	1
28.75M	2.43695G	2.4657G	35.782M	2.434059G	2.469841G	500k	2
27.5M	2.43945G	2.46695G	35.732M	2.434109G	2.469841G	500k	3

Summary

Mode	Total Power (dBm)	Total Power (W)
802.11b_(1Mbps)_3TX	-	-
2.4-2.4835GHz	23.41	0.21928
802.11g_(6Mbps)_3TX	-	-
2.4-2.4835GHz	21.40	0.13804
802.11n HT20_Nss1,(MCS0)_3TX	-	-
2.4-2.4835GHz	21.67	0.14689
802.11n HT40_Nss1,(MCS0)_3TX	-	-
2.4-2.4835GHz	21.50	0.14125

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_(1Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	2.00	18.15	19.32	18.23	23.37	30.00
2437MHz	Pass	2.00	18.30	19.11	18.45	23.41	30.00
2462MHz	Pass	2.00	17.00	17.45	17.26	22.01	30.00
802.11g_(6Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	2.00	16.36	16.55	15.95	21.07	30.00
2437MHz	Pass	2.00	16.25	16.94	16.68	21.40	30.00
2462MHz	Pass	2.00	15.24	15.64	15.36	20.19	30.00
802.11n HT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	2.00	15.62	16.19	15.74	20.63	30.00
2437MHz	Pass	2.00	16.25	17.65	16.67	21.67	30.00
2462MHz	Pass	2.00	16.16	17.57	16.60	21.59	30.00
802.11n HT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	2.00	12.82	14.42	13.12	18.28	30.00
2437MHz	Pass	2.00	16.25	17.46	16.36	21.50	30.00
2452MHz	Pass	2.00	16.35	17.51	15.63	21.34	30.00

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

Summary

Mode	PD (dBm/RBW)
802.11b_(1Mbps)_3TX	-
2.4-2.4835GHz	-0.71
802.11g_(6Mbps)_3TX	-
2.4-2.4835GHz	-5.56
802.11n HT20_Nss1,(MCS0)_3TX	-
2.4-2.4835GHz	-5.70
802.11n HT40_Nss1,(MCS0)_3TX	-
2.4-2.4835GHz	-8.07

RBW=3kHz.

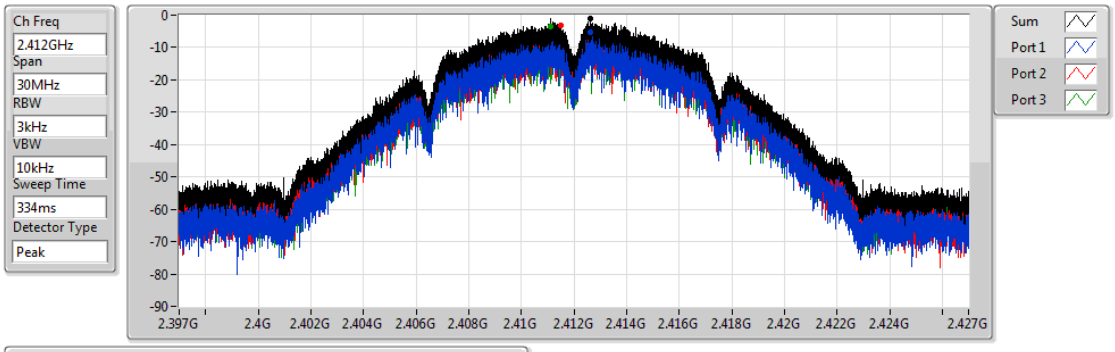
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_(1Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	6.77	-5.42	-3.17	-3.64	-1.20	7.23
2437MHz	Pass	6.77	-3.89	-3.28	-4.43	-0.71	7.23
2462MHz	Pass	6.77	-5.08	-5.00	-6.72	-2.83	7.23
802.11g_(6Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	6.77	-8.84	-7.06	-10.43	-5.65	7.23
2437MHz	Pass	6.77	-7.42	-8.28	-8.81	-5.56	7.23
2462MHz	Pass	6.77	-8.38	-9.53	-10.78	-6.98	7.23
802.11n HT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	6.77	-10.40	-8.30	-8.96	-6.36	7.23
2437MHz	Pass	6.77	-9.54	-6.95	-9.03	-5.70	7.23
2462MHz	Pass	6.77	-9.04	-8.89	-8.85	-6.75	7.23
802.11n HT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	6.77	-14.31	-13.33	-14.92	-12.06	7.23
2437MHz	Pass	6.77	-10.28	-10.57	-11.21	-8.07	7.23
2452MHz	Pass	6.77	-12.08	-11.74	-13.78	-10.77	7.23

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)_3TX **PSD**

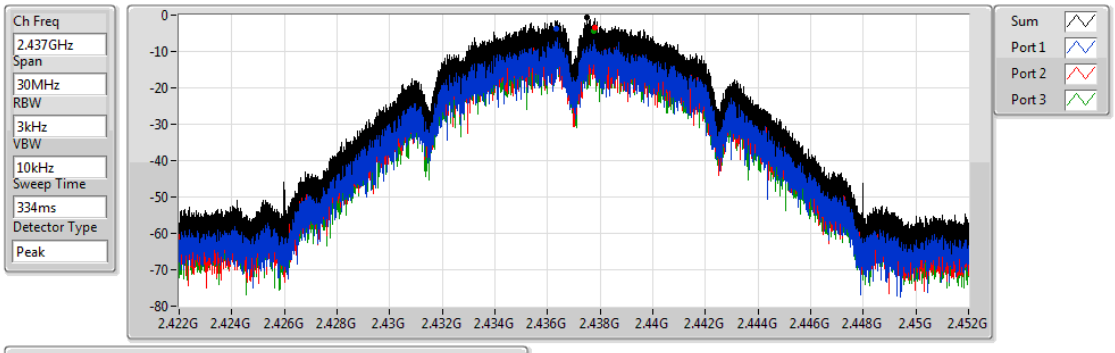
2412MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.20	-1.20	-5.42	-3.17	-3.64

802.11b_(1Mbps)_3TX **PSD**

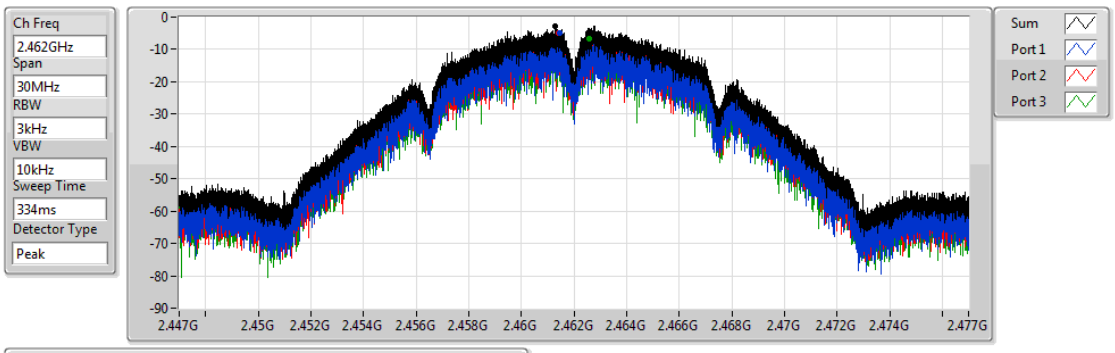
2437MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.71	-0.71	-3.89	-3.28	-4.43

802.11b_(1Mbps)_3TX **PSD**

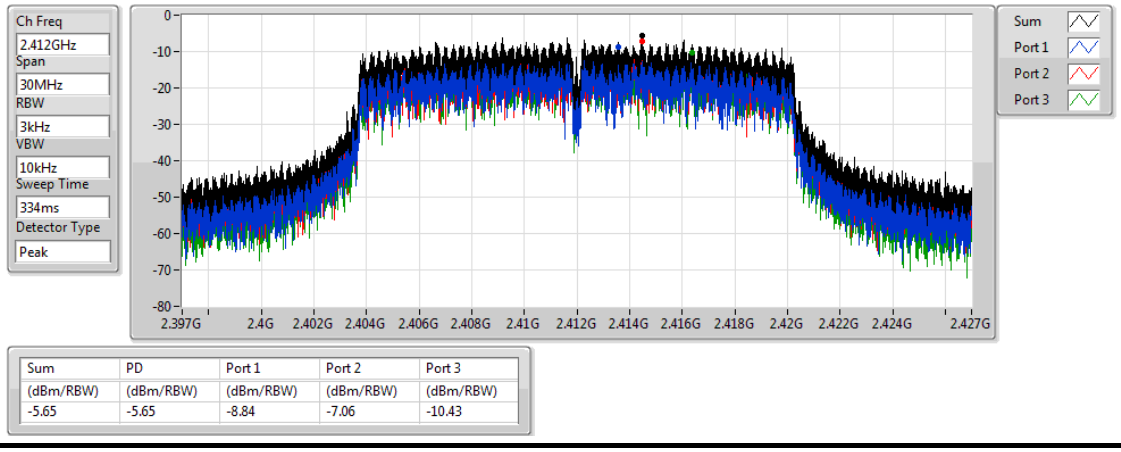
2462MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.83	-2.83	-5.08	-5.00	-6.72

802.11g_(6Mbps)_3TX PSD

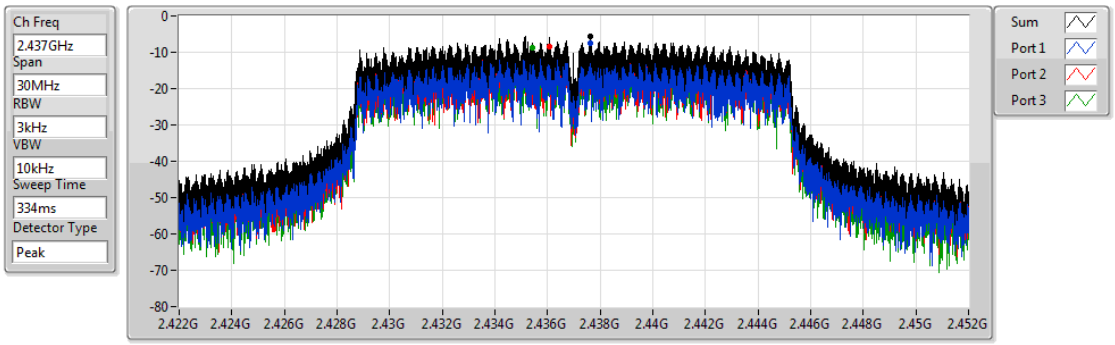
2412MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.65	-5.65	-8.84	-7.06	-10.43

802.11g_(6Mbps)_3TX PSD

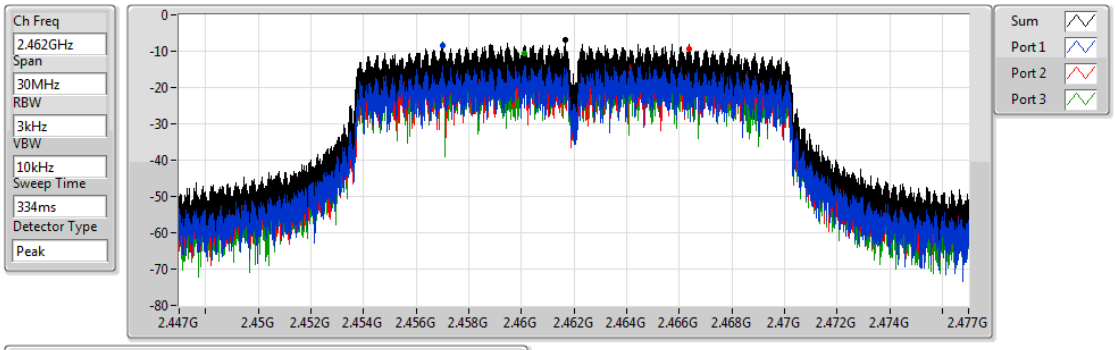
2437MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.56	-5.56	-7.42	-8.28	-8.81

802.11g_(6Mbps)_3TX PSD

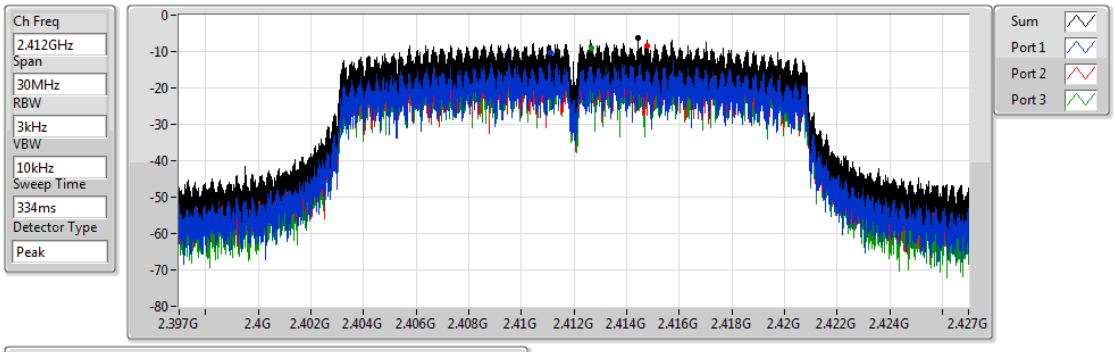
2462MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.98	-6.98	-8.38	-9.53	-10.78

802.11n HT20_Nss1,(MCS0)_3TX PSD

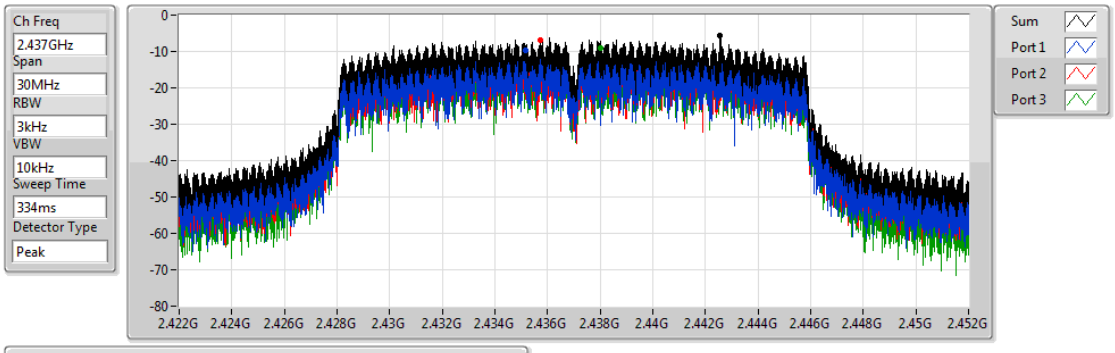
2412MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.36	-6.36	-10.40	-8.30	-8.96

802.11n HT20_Nss1,(MCS0)_3TX PSD

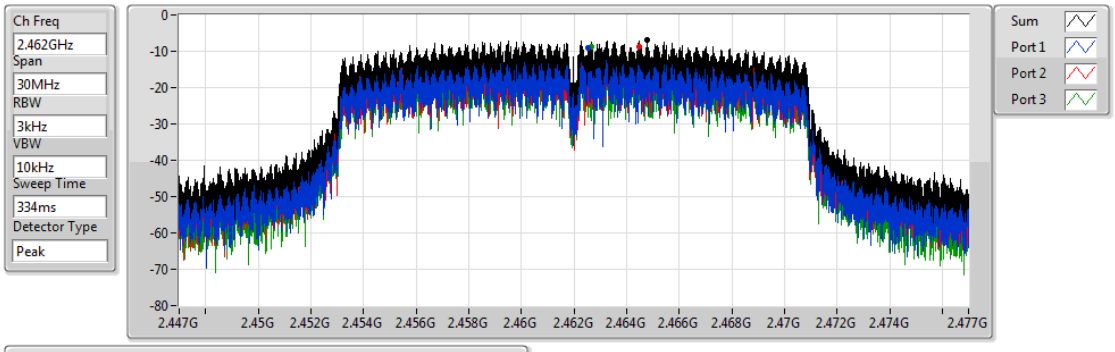
2437MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.70	-5.70	-9.54	-6.95	-9.03

802.11n HT20_Nss1,(MCS0)_3TX PSD

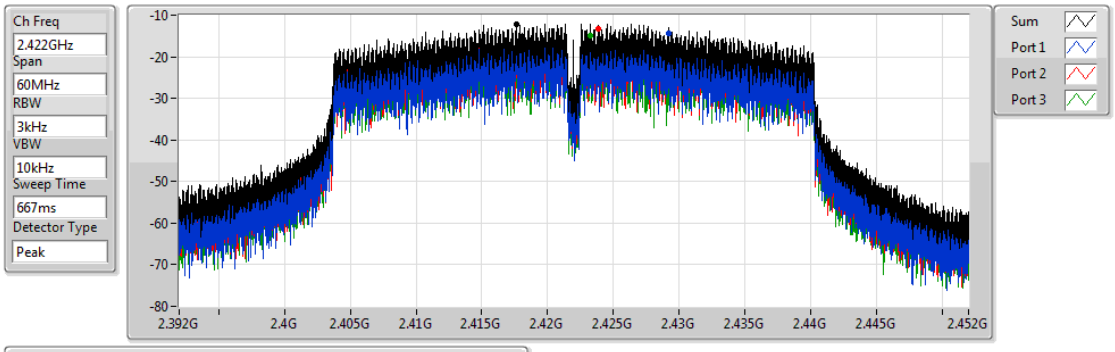
2462MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.75	-6.75	-9.04	-8.89	-8.85

802.11n HT40_Nss1,(MCS0)_3TX **PSD**

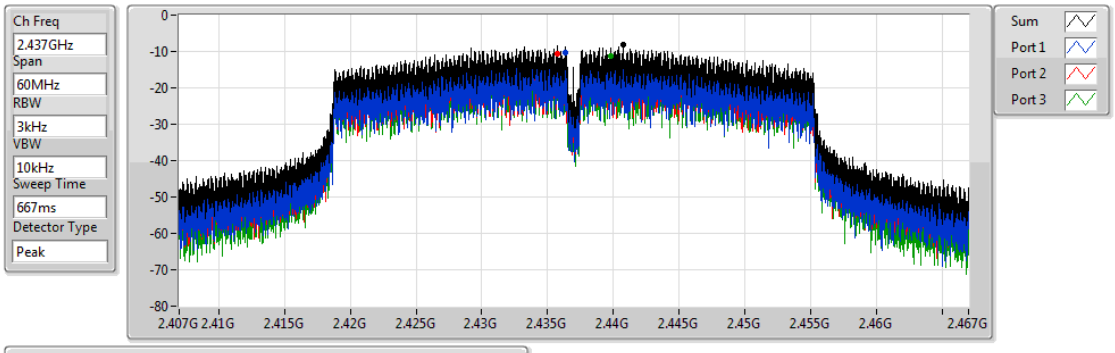
2422MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-12.06	-12.06	-14.31	-13.33	-14.92

802.11n HT40_Nss1,(MCS0)_3TX **PSD**

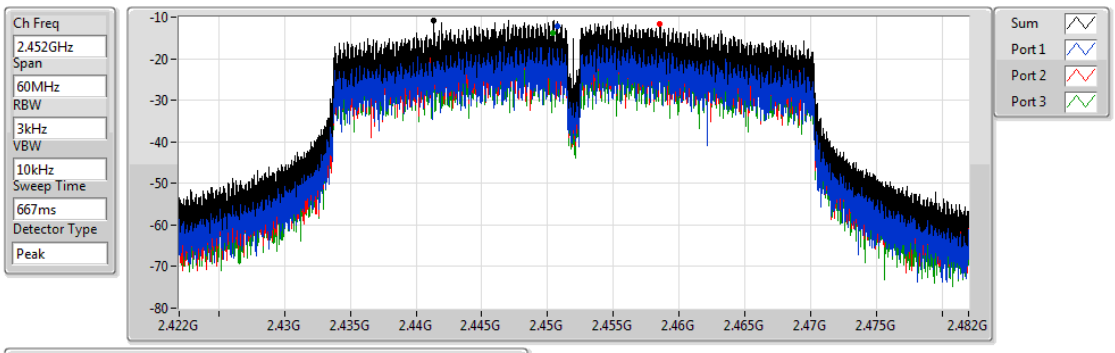
2437MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.07	-8.07	-10.28	-10.57	-11.21

802.11n HT40_Nss1,(MCS0)_3TX **PSD**

2452MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.77	-10.77	-12.08	-11.74	-13.78

Summary

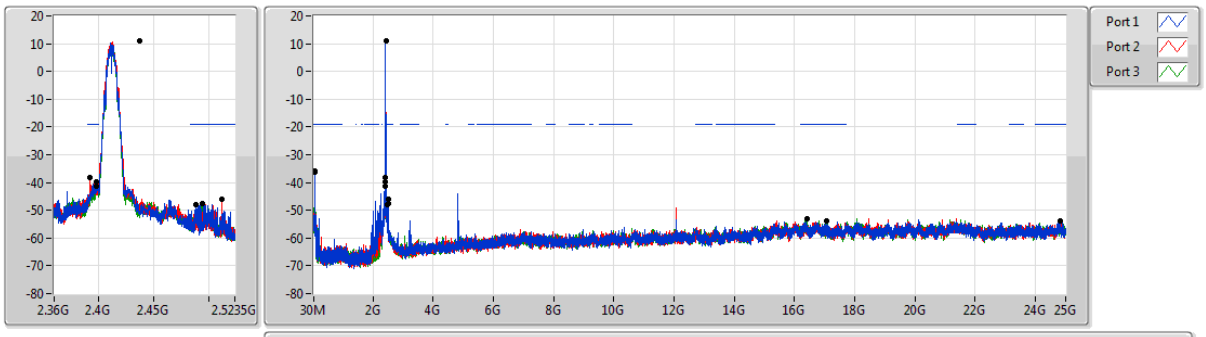
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11g_(6Mbps)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	2.435738G	5.46	-24.54	49.805M	-35.96	2.39992G	-26.88	2.49478G	-47.55	16.725838G	-53.03	2

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)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.437575G	11.13	-18.87	49.805M	-35.98	2.39792G	-39.79	2.48822G	-47.93	17.051748G	-53.79	1
2412MHz	Pass	2.437575G	11.13	-18.87	49.805M	-36.07	2.39272G	-38.28	2.5119G	-46.20	24.837045G	-53.93	2
2412MHz	Pass	2.437575G	11.13	-18.87	49.805M	-35.69	2.39816G	-41.52	2.49414G	-47.48	16.430834G	-53.24	3
2437MHz	Pass	2.437575G	11.13	-18.87	49.805M	-35.86	2.39232G	-43.33	2.48942G	-45.08	16.708981G	-53.54	1
2437MHz	Pass	2.437575G	11.13	-18.87	49.805M	-36.20	2.39816G	-44.75	2.48718G	-45.26	2.52631G	-52.25	2
2437MHz	Pass	2.437575G	11.13	-18.87	49.805M	-34.61	2.39904G	-46.08	2.51838G	-46.59	16.71741G	-53.50	3
2462MHz	Pass	2.437575G	11.13	-18.87	49.805M	-36.11	2.39016G	-45.63	2.50142G	-45.36	2.551596G	-52.91	1
2462MHz	Pass	2.437575G	11.13	-18.87	49.805M	-36.00	2.39944G	-49.88	2.48366G	-44.85	2.5235G	-51.62	2
2462MHz	Pass	2.437575G	11.13	-18.87	49.805M	-35.79	2.3956G	-48.93	2.4935G	-46.98	2.537548G	-53.21	3
802.11g_(6Mbps)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.435738G	5.46	-24.54	49.805M	-36.11	2.3992G	-30.74	2.49934G	-48.40	2.568453G	-53.14	1
2412MHz	Pass	2.435738G	5.46	-24.54	49.805M	-35.96	2.39992G	-26.88	2.49478G	-47.55	16.725838G	-53.03	2
2412MHz	Pass	2.435738G	5.46	-24.54	49.805M	-36.03	2.39952G	-31.63	2.4991G	-47.29	17.442277G	-53.58	3
2437MHz	Pass	2.435738G	5.46	-24.54	49.805M	-35.88	2.39432G	-45.65	2.48494G	-47.05	21.40095G	-53.03	1
2437MHz	Pass	2.435738G	5.46	-24.54	49.805M	-36.41	2.398G	-45.11	2.48958G	-46.34	2.52631G	-52.94	2
2437MHz	Pass	2.435738G	5.46	-24.54	49.805M	-35.89	2.398G	-44.83	2.48438G	-45.42	2.52631G	-51.56	3
2462MHz	Pass	2.435738G	5.46	-24.54	49.805M	-35.85	2.39816G	-51.86	2.48558G	-43.12	16.78203G	-53.26	1
2462MHz	Pass	2.435738G	5.46	-24.54	49.805M	-35.99	2.39984G	-49.72	2.4871G	-44.94	2.5235G	-52.34	2
2462MHz	Pass	2.435738G	5.46	-24.54	49.805M	-35.86	2.39672G	-50.88	2.48934G	-45.62	2.5235G	-50.74	3
802.11n HT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.440748G	4.83	-25.17	49.805M	-35.76	2.39952G	-29.42	2.49766G	-48.23	3.214652G	-52.58	1
2412MHz	Pass	2.440748G	4.83	-25.17	49.805M	-35.69	2.39696G	-28.50	2.49646G	-49.51	21.665049G	-53.94	2
2412MHz	Pass	2.440748G	4.83	-25.17	49.805M	-35.62	2.39976G	-33.26	2.49902G	-47.81	16.692124G	-54.12	3
2437MHz	Pass	2.440748G	4.83	-25.17	49.805M	-35.78	2.39064G	-46.22	2.48574G	-46.43	2.52631G	-52.94	1
2437MHz	Pass	2.440748G	4.83	-25.17	49.805M	-35.64	2.39584G	-46.48	2.48606G	-46.53	2.531929G	-52.48	2
2437MHz	Pass	2.440748G	4.83	-25.17	49.805M	-36.12	2.39152G	-45.33	2.48598G	-45.98	16.748315G	-51.91	3
2462MHz	Pass	2.440748G	4.83	-25.17	49.805M	-35.65	2.39904G	-51.05	2.4847G	-41.15	2.545977G	-52.70	1
2462MHz	Pass	2.440748G	4.83	-25.17	49.805M	-35.48	2.39728G	-50.21	2.48382G	-40.82	2.548786G	-51.61	2
2462MHz	Pass	2.440748G	4.83	-25.17	49.805M	-35.72	2.39528G	-49.47	2.48494G	-43.55	2.551596G	-50.62	3
802.11n HT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.434569G	4.63	-25.37	49.465M	-36.17	2.39792G	-33.49	2.5203G	-50.28	16.650817G	-53.15	1
2422MHz	Pass	2.434569G	4.63	-25.37	49.465M	-35.57	2.39984G	-33.17	2.50318G	-50.26	16.331097G	-52.98	2
2422MHz	Pass	2.434569G	4.63	-25.37	49.465M	-36.02	2.39984G	-34.78	2.49038G	-51.59	16.712518G	-53.26	3
2437MHz	Pass	2.434569G	4.63	-25.37	49.465M	-36.14	2.39952G	-37.62	2.48862G	-44.88	21.746708G	-53.01	1
2437MHz	Pass	2.434569G	4.63	-25.37	49.465M	-36.48	2.39952G	-33.58	2.4875G	-45.35	24.775635G	-53.79	2
2437MHz	Pass	2.434569G	4.63	-25.37	49.465M	-36.10	2.39808G	-40.33	2.49566G	-45.91	21.516733G	-53.91	3
2452MHz	Pass	2.445758G	3.70	-26.30	49.465M	-35.71	2.39776G	-49.12	2.4859G	-43.89	16.748977G	-53.32	1
2452MHz	Pass	2.445758G	3.70	-26.30	49.465M	-35.78	2.39888G	-47.14	2.48542G	-43.34	16.718127G	-53.60	2
2452MHz	Pass	2.445758G	3.70	-26.30	49.465M	-36.00	2.39424G	-48.43	2.48606G	-42.44	24.770026G	-53.58	3

802.11b_(1Mbps)_3TX **CSE NdB**

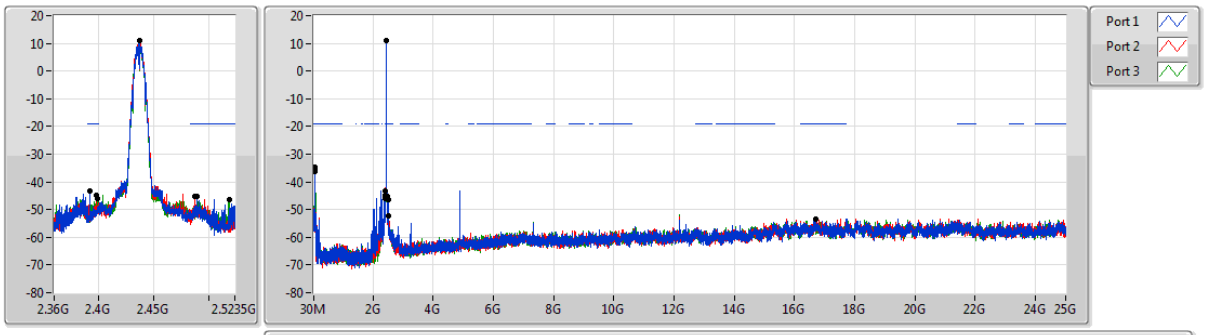
2412MHz



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	11.13	-18.87	49.805M	-35.98	2.39792G	-39.79	2.48822G	-47.93	17.051748G	-53.79	1
2.437575G	11.13	-18.87	49.805M	-36.07	2.39272G	-38.28	2.5119G	-46.20	24.837045G	-53.93	2
2.437575G	11.13	-18.87	49.805M	-35.69	2.39816G	-41.52	2.49414G	-47.48	16.430834G	-53.24	3

802.11b_(1Mbps)_3TX **CSE NdB**

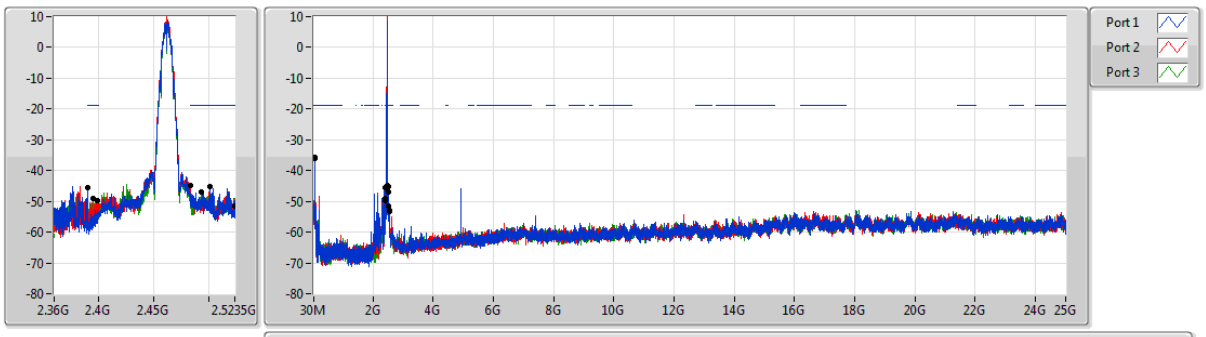
2437MHz



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	11.13	-18.87	49.805M	-35.86	2.39232G	-43.33	2.48942G	-45.08	16.708981G	-53.54	1
2.437575G	11.13	-18.87	49.805M	-36.20	2.39816G	-44.75	2.48718G	-45.26	2.52631G	-52.25	2
2.437575G	11.13	-18.87	49.805M	-34.61	2.39904G	-46.08	2.51838G	-46.59	16.71741G	-53.50	3

802.11b_(1Mbps)_3TX **CSE NdB**

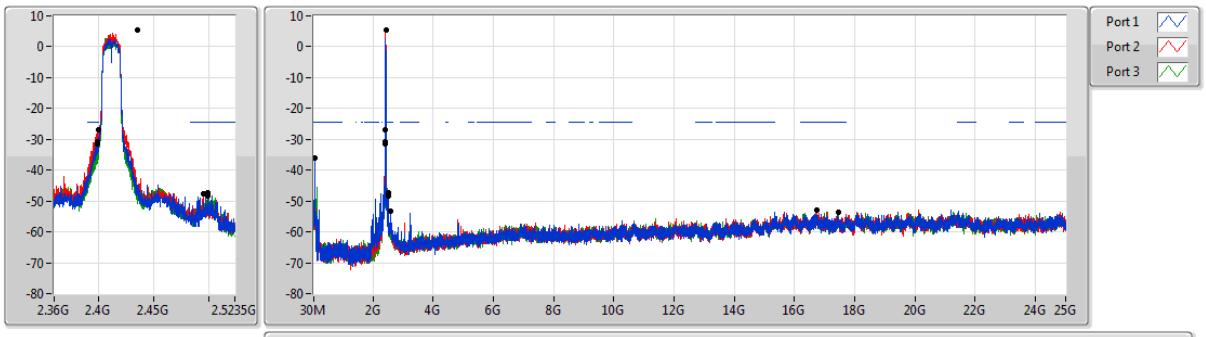
2462MHz



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	11.13	-18.87	49.805M	-36.11	2.39016G	-45.63	2.50142G	-45.36	2.551596G	-52.91	1
2.437575G	11.13	-18.87	49.805M	-36.00	2.39944G	-49.88	2.48366G	-44.85	2.5235G	-51.62	2
2.437575G	11.13	-18.87	49.805M	-35.79	2.3956G	-48.93	2.4935G	-46.98	2.537548G	-53.21	3

802.11g_(6Mbps)_3TX **CSE NdB**

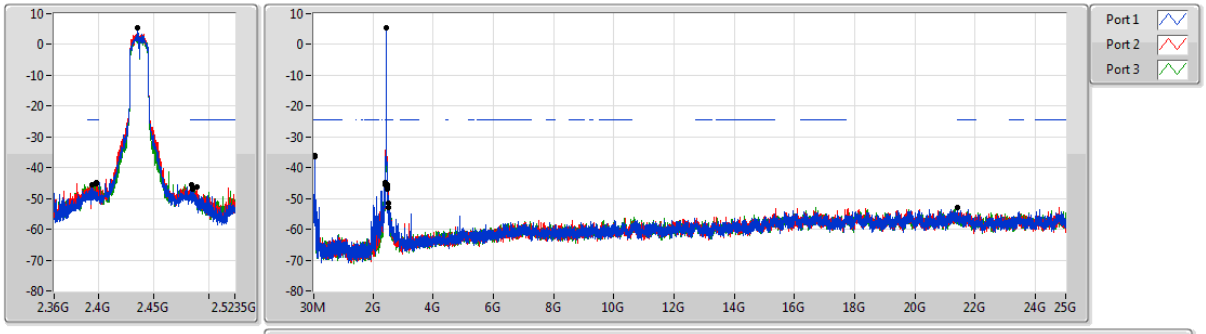
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.435738G	5.46	-24.54	49.805M	-36.11	2.3992G	-30.74	2.49934G	-48.40	2.568453G	-53.14	1
2.435738G	5.46	-24.54	49.805M	-35.96	2.39992G	-26.88	2.49478G	-47.55	16.725838G	-53.03	2
2.435738G	5.46	-24.54	49.805M	-36.03	2.39952G	-31.63	2.4991G	-47.29	17.442277G	-53.58	3

802.11g_(6Mbps)_3TX **CSE NdB**

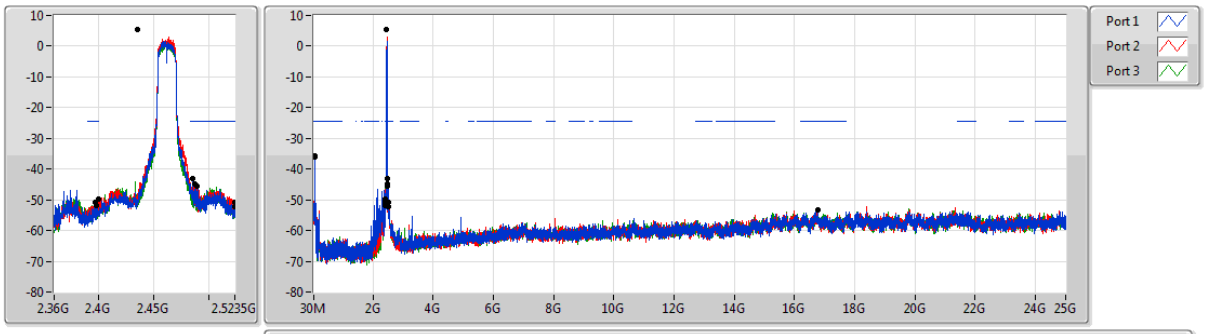
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.435738G	5.46	-24.54	49.805M	-35.88	2.39432G	-45.65	2.48494G	-47.05	21.40095G	-53.03	1
2.435738G	5.46	-24.54	49.805M	-36.41	2.398G	-45.11	2.48958G	-46.34	2.52631G	-52.94	2
2.435738G	5.46	-24.54	49.805M	-35.89	2.398G	-44.83	2.48438G	-45.42	2.52631G	-51.56	3

802.11g_(6Mbps)_3TX **CSE NdB**

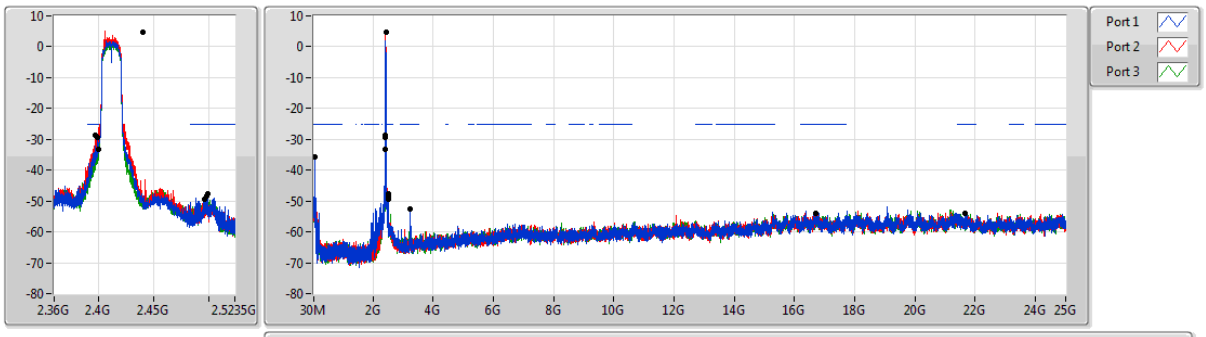
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.435738G	5.46	-24.54	49.805M	-35.85	2.39816G	-51.86	2.48558G	-43.12	16.78203G	-53.26	1
2.435738G	5.46	-24.54	49.805M	-35.99	2.39984G	-49.72	2.4871G	-44.94	2.5235G	-52.34	2
2.435738G	5.46	-24.54	49.805M	-35.86	2.39672G	-50.88	2.48934G	-45.62	2.5235G	-50.74	3

802.11n HT20_Nss1,(MCS0)_3TX **CSE NdB**

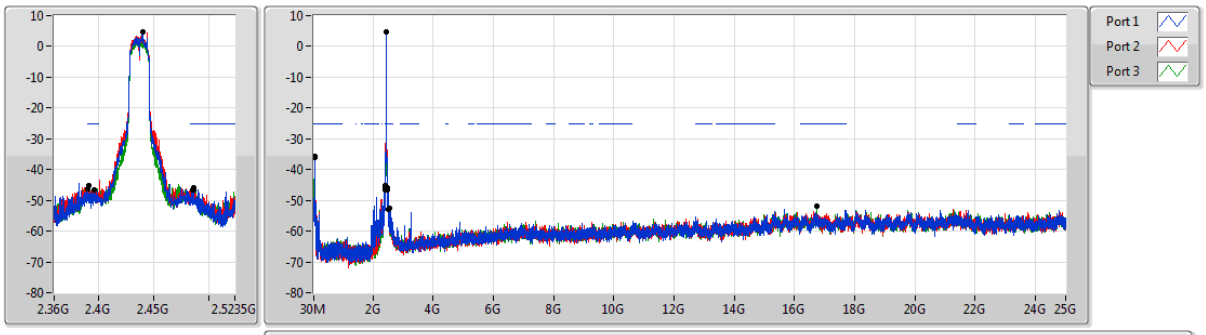
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.440748G	4.83	-25.17	49.805M	-35.76	2.39952G	-29.42	2.49766G	-48.23	3.214652G	-52.58	1
2.440748G	4.83	-25.17	49.805M	-35.69	2.39696G	-28.50	2.49646G	-49.51	21.665049G	-53.94	2
2.440748G	4.83	-25.17	49.805M	-35.62	2.39976G	-33.26	2.49902G	-47.81	16.692124G	-54.12	3

802.11n HT20_Nss1,(MCS0)_3TX **CSE NdB**

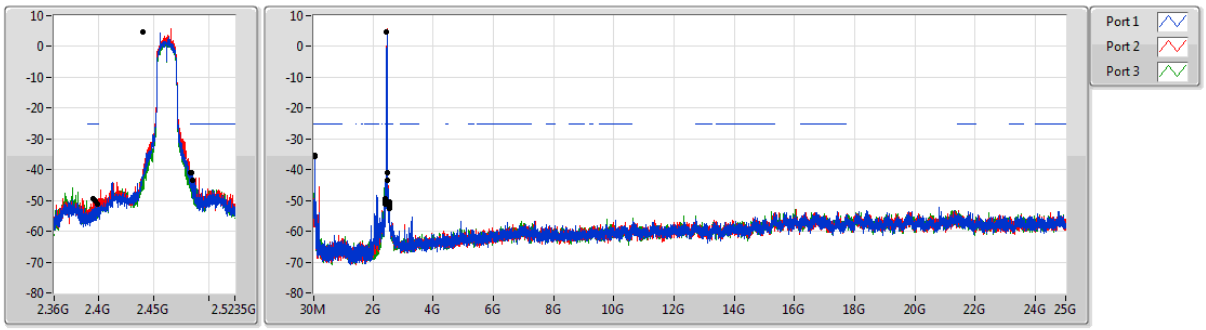
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.440748G	4.83	-25.17	49.805M	-35.78	2.39064G	-46.22	2.48574G	-46.43	2.52631G	-52.94	1
2.440748G	4.83	-25.17	49.805M	-35.64	2.39584G	-46.48	2.48606G	-46.53	2.531929G	-52.48	2
2.440748G	4.83	-25.17	49.805M	-36.12	2.39152G	-45.33	2.48598G	-45.98	16.748315G	-51.91	3

802.11n HT20_Nss1,(MCS0)_3TX **CSE NdB**

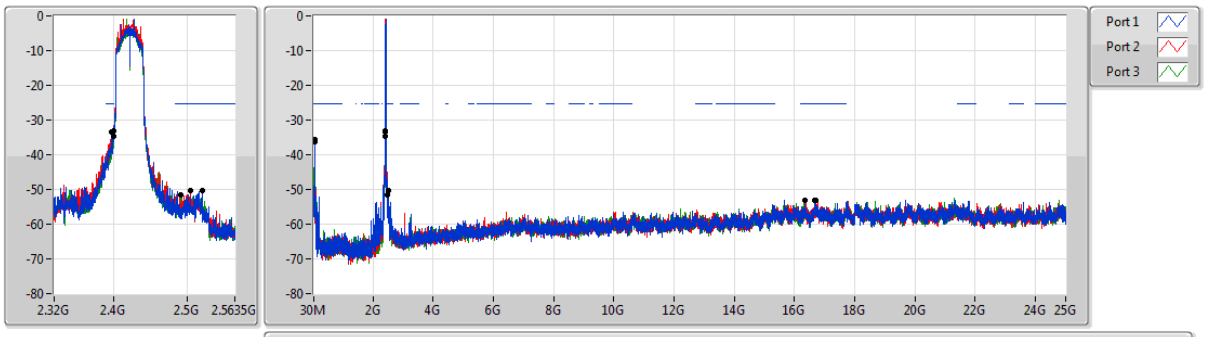
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.440748G	4.83	-25.17	49.805M	-35.65	2.39904G	-51.05	2.4847G	-41.15	2.545977G	-52.70	1
2.440748G	4.83	-25.17	49.805M	-35.48	2.39728G	-50.21	2.48382G	-40.82	2.548786G	-51.61	2
2.440748G	4.83	-25.17	49.805M	-35.72	2.39528G	-49.47	2.48494G	-43.55	2.551596G	-50.62	3

802.11n HT40_Nss1,(MCS0)_3TX **CSE NdB**

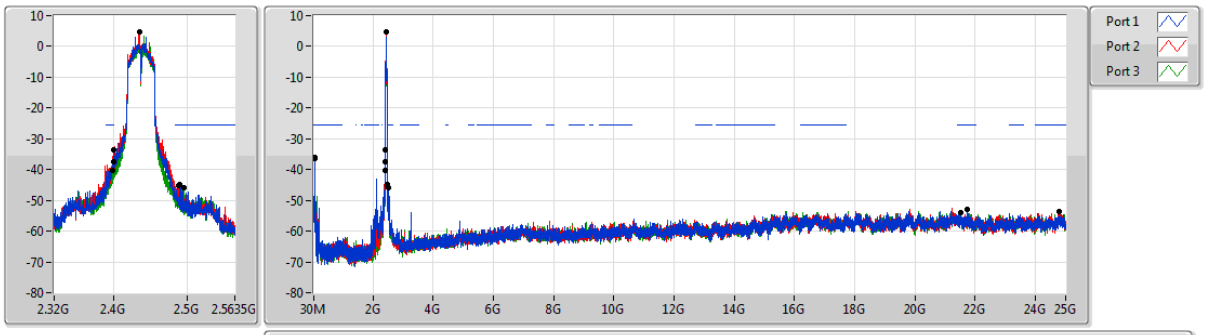
2422MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.434569G	4.63	-25.37	49.465M	-36.17	2.39792G	-33.49	2.5203G	-50.28	16.650817G	-53.15	1
2.434569G	4.63	-25.37	49.465M	-35.57	2.39984G	-33.17	2.50318G	-50.26	16.331097G	-52.98	2
2.434569G	4.63	-25.37	49.465M	-36.02	2.39984G	-34.78	2.49038G	-51.59	16.712518G	-53.26	3

802.11n HT40_Nss1,(MCS0)_3TX **CSE NdB**

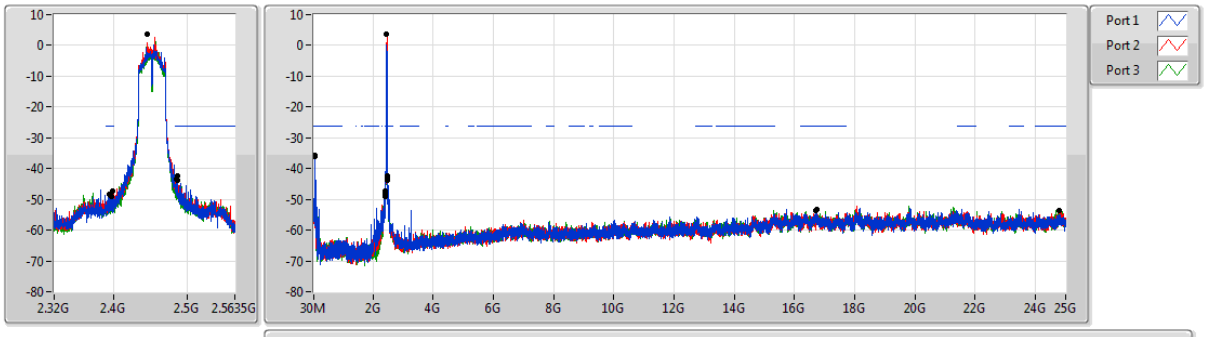
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.434569G	4.63	-25.37	49.465M	-36.14	2.39952G	-37.62	2.48862G	-44.88	21.746708G	-53.01	1
2.434569G	4.63	-25.37	49.465M	-36.48	2.39952G	-33.58	2.4875G	-45.35	24.775635G	-53.79	2
2.434569G	4.63	-25.37	49.465M	-36.10	2.39808G	-40.33	2.49566G	-45.91	21.516733G	-53.91	3

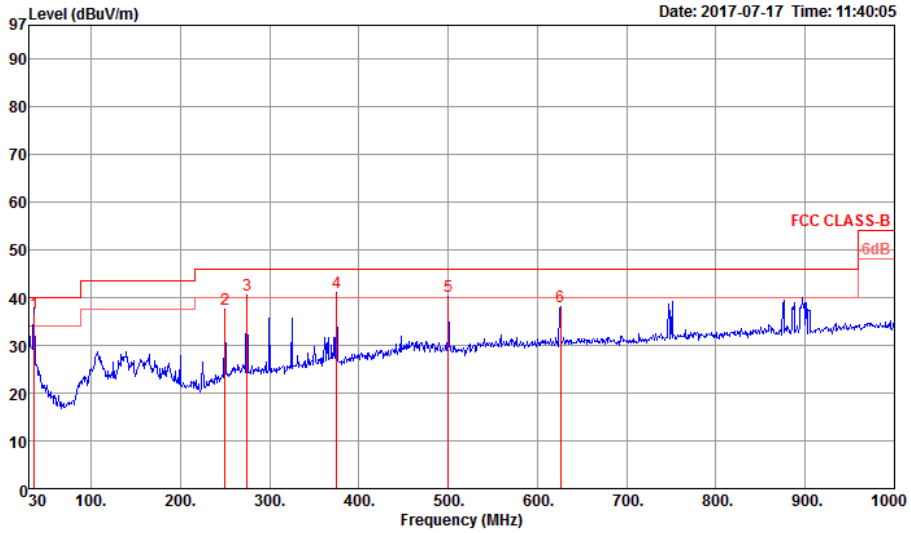
802.11n HT40_Nss1,(MCS0)_3TX **CSE NdB**

2452MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.445758G	3.70	-26.30	49.465M	-35.71	2.39776G	-49.12	2.4859G	-43.89	16.748977G	-53.32	1
2.445758G	3.70	-26.30	49.465M	-35.78	2.39888G	-47.14	2.48542G	-43.34	16.718127G	-53.60	2
2.445758G	3.70	-26.30	49.465M	-36.00	2.39424G	-48.43	2.48606G	-42.44	24.770026G	-53.58	3

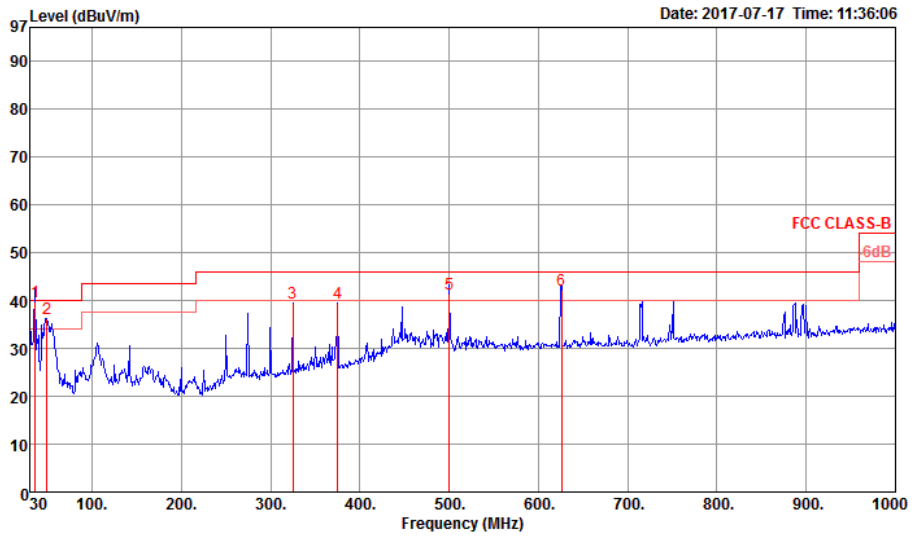
RSE below 1GHz Result			
Operating Mode	1	**Polarization**	Horizontal
Operating Function	CTX		



	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	35.82	36.74	40.00	-3.26	40.70	2.15	22.47	28.58	104	352	QP	HORIZONTAL
2	250.19	37.44	46.00	-8.56	44.41	2.59	18.36	27.92	100	360	Peak	HORIZONTAL
3	274.44	40.41	46.00	-5.59	46.73	2.68	18.87	27.87	100	360	Peak	HORIZONTAL
4	375.32	41.16	46.00	-4.84	45.91	3.04	20.73	28.52	100	360	Peak	HORIZONTAL
5	500.45	40.23	46.00	-5.77	42.60	3.45	23.46	29.28	100	360	Peak	HORIZONTAL
6	625.58	38.02	46.00	-7.98	38.53	3.80	25.06	29.37	100	360	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	CTX		



	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	35.82	39.74	40.00	-0.26	43.70	2.15	22.47	28.58	101	204	QP	VERTICAL
2	49.40	36.31	40.00	-3.69	48.20	2.16	14.52	28.57	300	0	Peak	VERTICAL
3	324.88	39.35	46.00	-6.65	45.03	2.88	19.49	28.05	300	0	Peak	VERTICAL
4	375.32	39.44	46.00	-6.56	44.19	3.04	20.73	28.52	300	0	Peak	VERTICAL
5	500.45	41.43	46.00	-4.57	43.80	3.45	23.46	29.28	138	301	QP	VERTICAL
6	625.58	42.18	46.00	-3.82	42.69	3.80	25.06	29.37	115	257	QP	VERTICAL

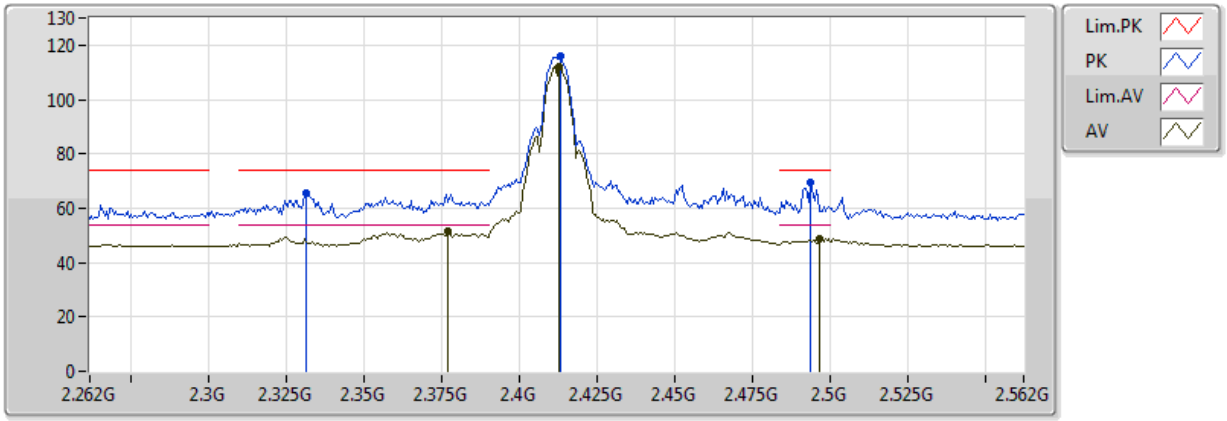
Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

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
802.11n HT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	AV	2.4836G	53.95	54.00	-0.05	32.78	3	V	167	1.69	-

802.11b_(1Mbps)_3TX

2412MHz_TX

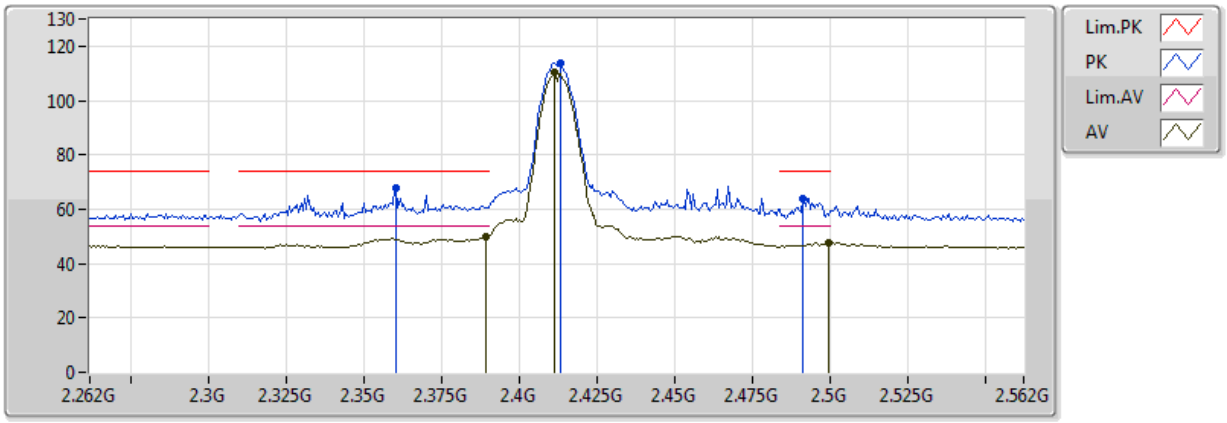


20170606
EUT Z_3TX
Setting 30
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3772G	51.28	54.00	-2.72	32.66	3	V	172	1.77	-
AV	2.4126G	112.12	Inf	-Inf	32.69	3	V	172	1.77	-
AV	2.4966G	48.93	54.00	-5.07	32.80	3	V	172	1.77	-
PK	2.3316G	65.59	74.00	-8.41	32.65	3	V	172	1.77	-
PK	2.4132G	115.93	Inf	-Inf	32.69	3	V	172	1.77	-
PK	2.4936G	69.73	74.00	-4.27	32.79	3	V	172	1.77	-

802.11b_(1Mbps)_3TX

2412MHz_TX

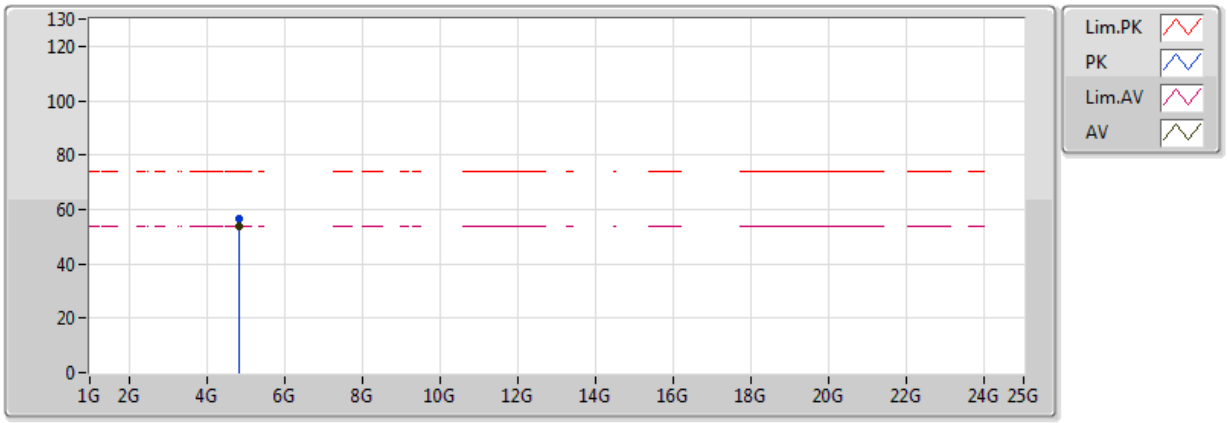


20170606
EUT Z_3TX
Setting 30
04-M-01
FSP(100142)

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	49.82	54.00	-4.18	32.67	3	H	223	1.50	-
AV	2.4114G	110.20	Inf	-Inf	32.68	3	H	223	1.50	-
AV	2.4996G	47.58	54.00	-6.42	32.80	3	H	223	1.50	-
PK	2.3604G	68.01	74.00	-5.99	32.66	3	H	223	1.50	-
PK	2.4132G	113.70	Inf	-Inf	32.69	3	H	223	1.50	-
PK	2.4912G	64.09	74.00	-9.91	32.79	3	H	223	1.50	-

802.11b_(1Mbps)_3TX

2412MHz_TX

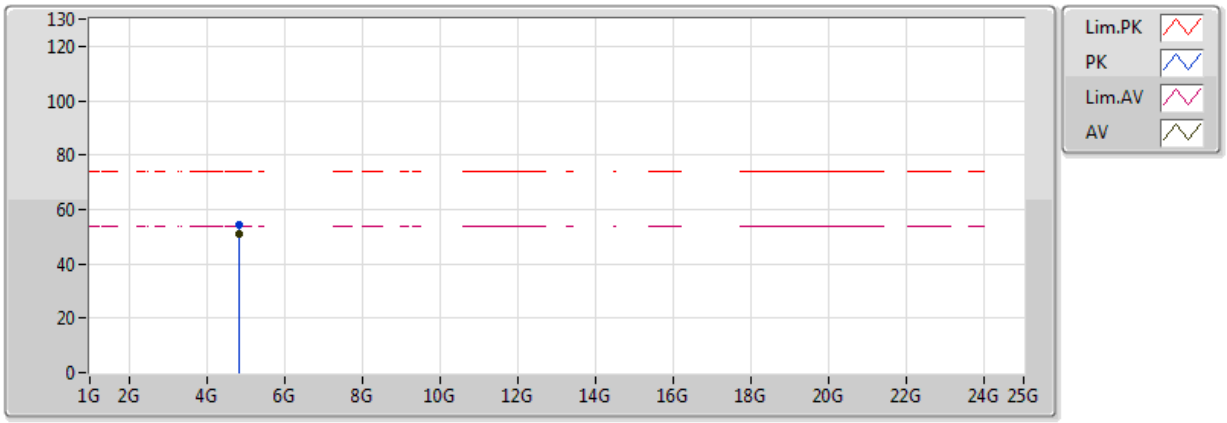


20170606
EUT Z_3TX
Setting 30
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.824G	53.65	54.00	-0.35	3.52	3	V	84	1.70	-
PK	4.82392G	56.55	74.00	-17.45	3.52	3	V	84	1.70	-

802.11b_(1Mbps)_3TX

2412MHz_TX

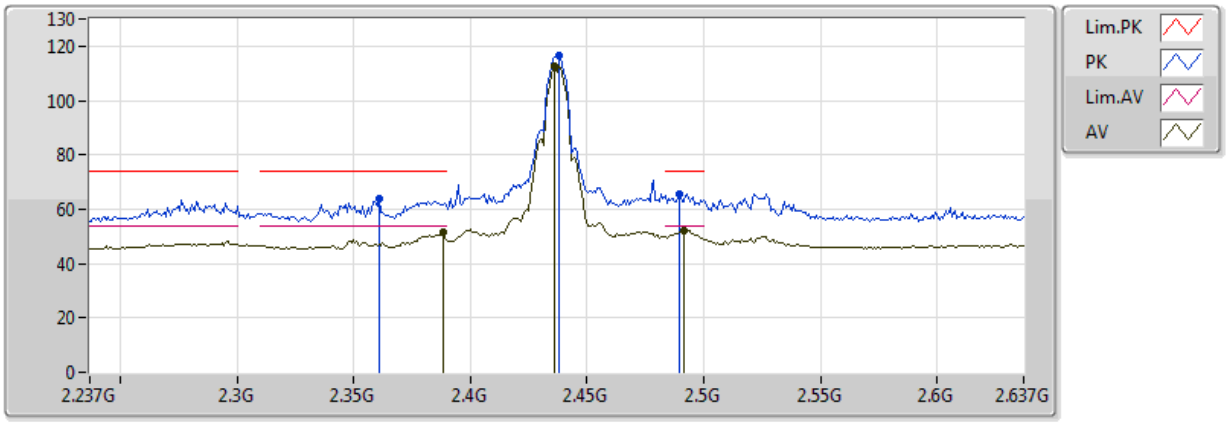


20170606
EUT Z_3TX
Setting 30
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.824G	50.99	54.00	-3.01	3.52	3	H	147	1.98	-
PK	4.82398G	54.49	74.00	-19.51	3.52	3	H	147	1.98	-

802.11b_(1Mbps)_3TX

2437MHz_TX

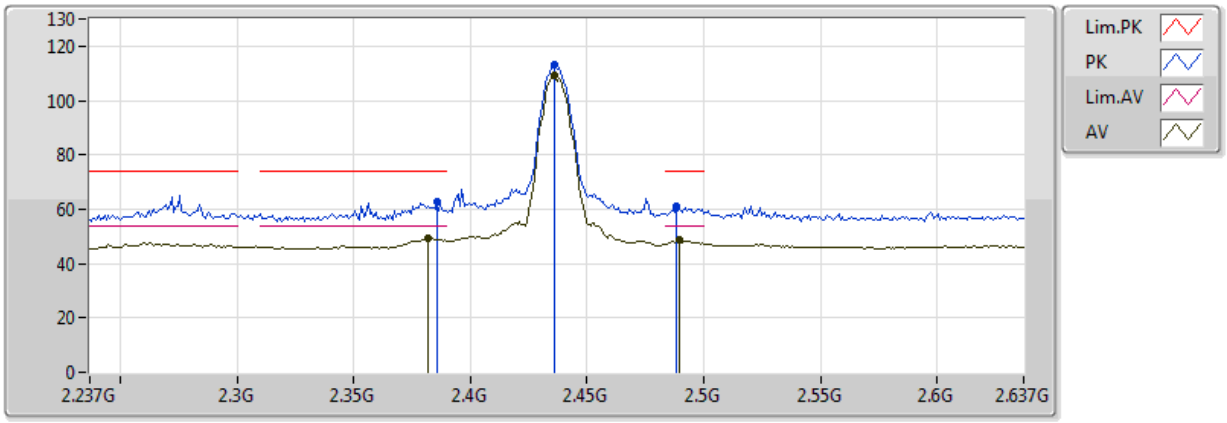


20170606
EUT Z_3TX
Setting 30
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3882G	51.39	54.00	-2.61	32.67	3	V	173	1.83	-
AV	2.4362G	112.70	Inf	-Inf	32.72	3	V	173	1.83	-
AV	2.4914G	52.06	54.00	-1.94	32.79	3	V	173	1.83	-
PK	2.361G	64.09	74.00	-9.91	32.66	3	V	173	1.83	-
PK	2.4378G	116.43	Inf	-Inf	32.72	3	V	173	1.83	-
PK	2.4898G	65.62	74.00	-8.38	32.79	3	V	173	1.83	-

802.11b_(1Mbps)_3TX

2437MHz_TX

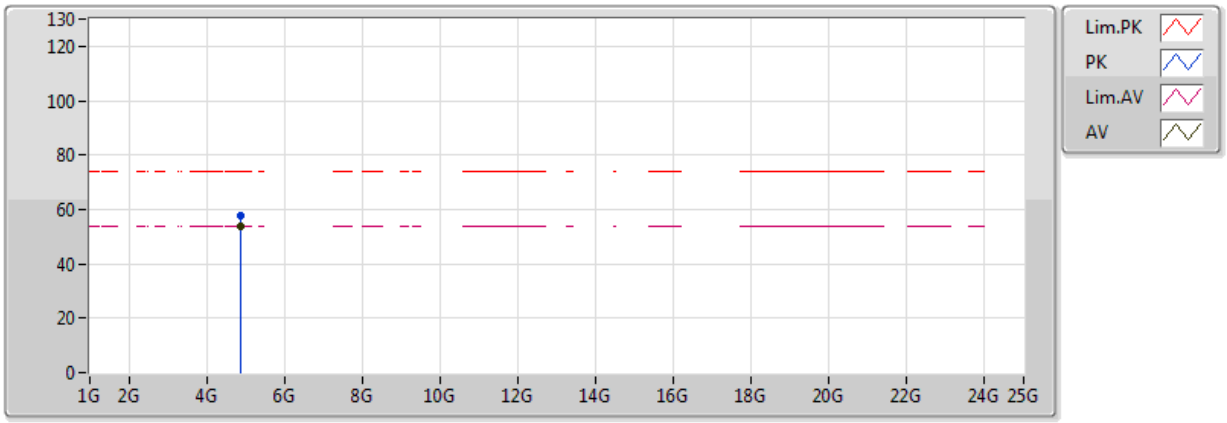


20170606
EUT Z_3TX
Setting 30
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3818G	49.18	54.00	-4.82	32.66	3	H	179	1.86	-
AV	2.4362G	109.44	Inf	-Inf	32.72	3	H	179	1.86	-
AV	2.4898G	48.47	54.00	-5.53	32.79	3	H	179	1.86	-
PK	2.3858G	62.55	74.00	-11.45	32.67	3	H	179	1.86	-
PK	2.4362G	113.10	Inf	-Inf	32.72	3	H	179	1.86	-
PK	2.4882G	60.80	74.00	-13.20	32.78	3	H	179	1.86	-

802.11b_(1Mbps)_3TX

2437MHz_TX

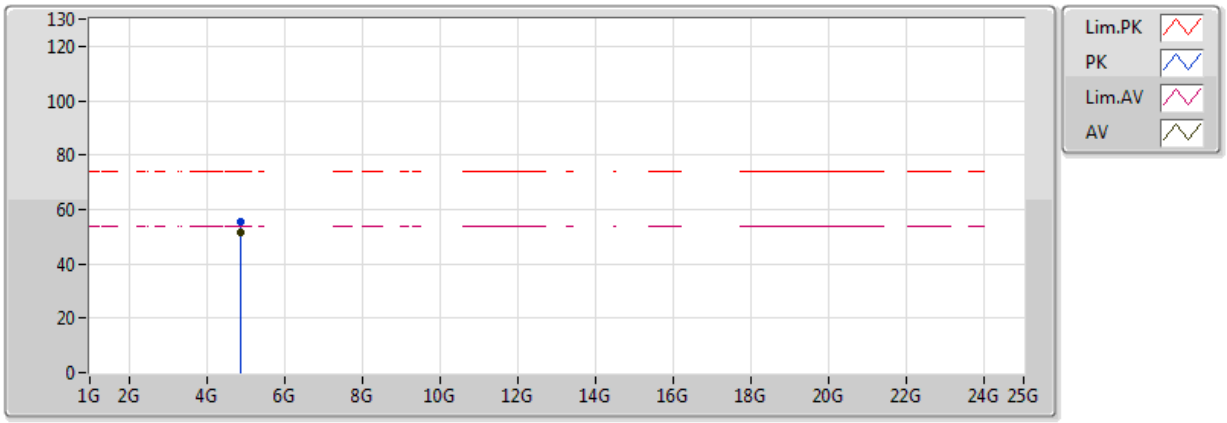


20170606
EUT Z_3TX
Setting 30
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87398G	53.93	54.00	-0.07	3.66	3	V	92	1.89	-
PK	4.874G	57.58	74.00	-16.42	3.66	3	V	92	1.89	-

802.11b_(1Mbps)_3TX

2437MHz_TX

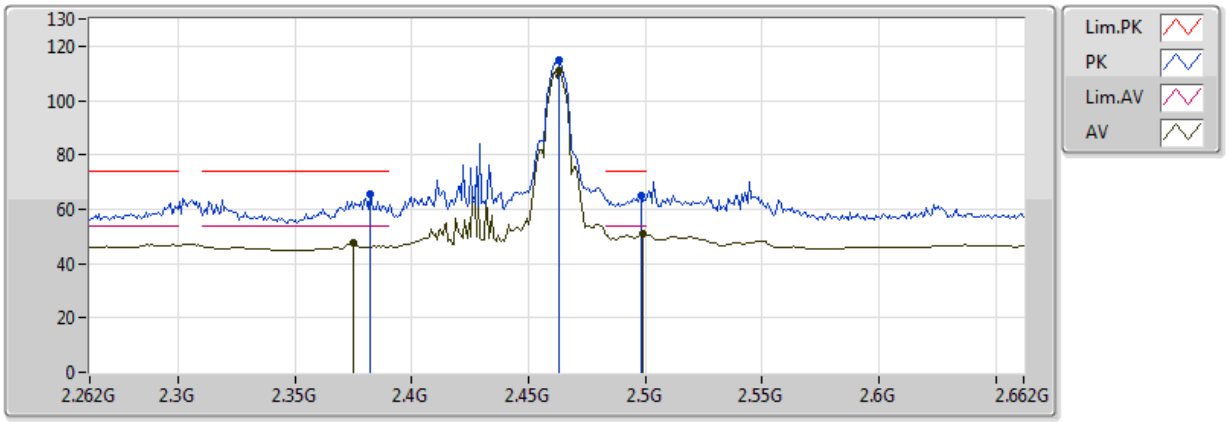


20170606
EUT Z_3TX
Setting 30
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8741G	51.32	54.00	-2.68	3.66	3	H	144	1.96	-
PK	4.87402G	55.54	74.00	-18.46	3.66	3	H	144	1.96	-

802.11b_(1Mbps)_3TX

2462MHz_TX

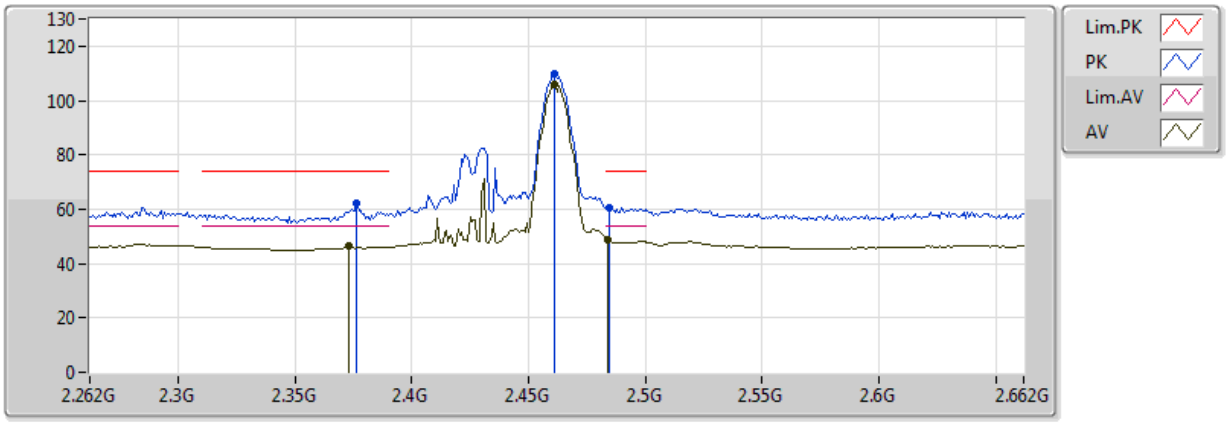


20170606
EUT Z_3TX
Setting 28.5
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3748G	47.38	54.00	-6.62	32.66	3	V	172	1.68	-
AV	2.4628G	110.83	Inf	-Inf	32.75	3	V	172	1.68	-
AV	2.4988G	50.80	54.00	-3.20	32.80	3	V	172	1.68	-
PK	2.382G	65.80	74.00	-8.20	32.66	3	V	172	1.68	-
PK	2.4628G	114.72	Inf	-Inf	32.75	3	V	172	1.68	-
PK	2.498G	65.17	74.00	-8.83	32.80	3	V	172	1.68	-

802.11b_(1Mbps)_3TX

2462MHz_TX

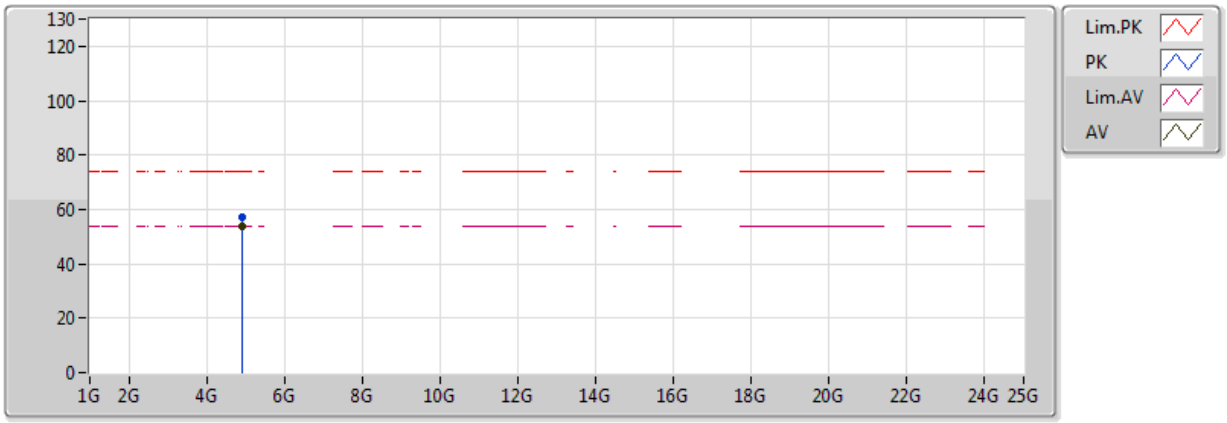


20170606
EUT Z_3TX
Setting 28.5
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3732G	46.25	54.00	-7.75	32.66	3	H	188	1.50	-
AV	2.4612G	106.01	Inf	-Inf	32.75	3	H	188	1.50	-
AV	2.4836G	48.57	54.00	-5.43	32.78	3	H	188	1.50	-
PK	2.3764G	62.21	74.00	-11.79	32.66	3	H	188	1.50	-
PK	2.4612G	109.73	Inf	-Inf	32.75	3	H	188	1.50	-
PK	2.4844G	60.63	74.00	-13.37	32.78	3	H	188	1.50	-

802.11b_(1Mbps)_3TX

2462MHz_TX

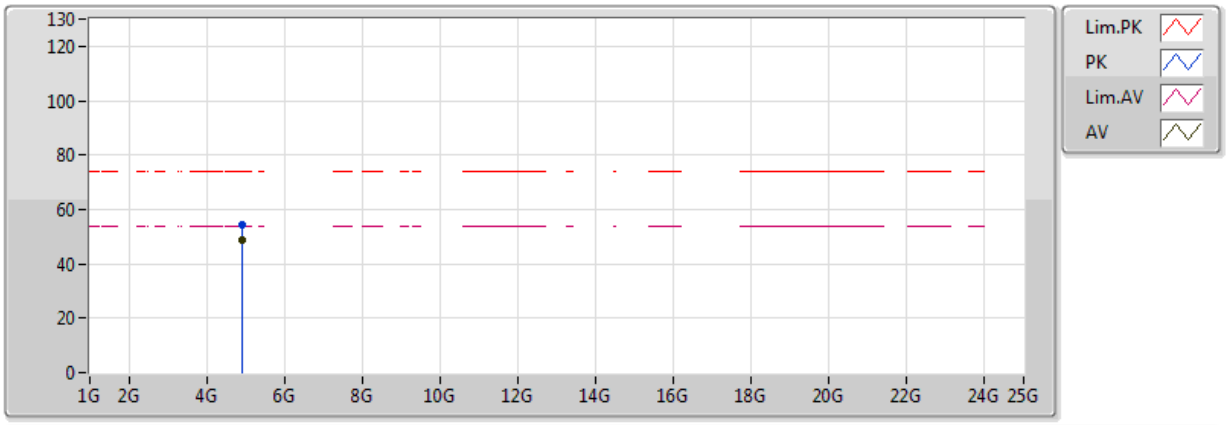


20170606
EUT Z_3TX
Setting 28.5
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92396G	53.54	54.00	-0.46	3.81	3	V	81	1.73	-
PK	4.924G	56.92	74.00	-17.08	3.81	3	V	81	1.73	-

802.11b_(1Mbps)_3TX

2462MHz_TX

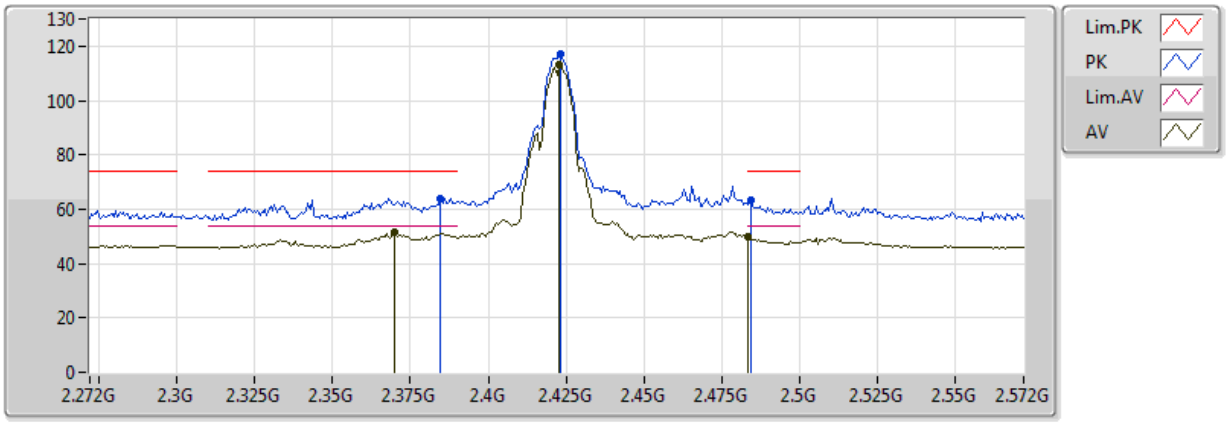


20170606
EUT Z_3TX
Setting 28.5
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92398G	49.01	54.00	-4.99	3.81	3	H	147	2.02	-
PK	4.924G	54.39	74.00	-19.61	3.81	3	H	147	2.02	-

802.11b_(1Mbps)_3TX

2422MHz_TX

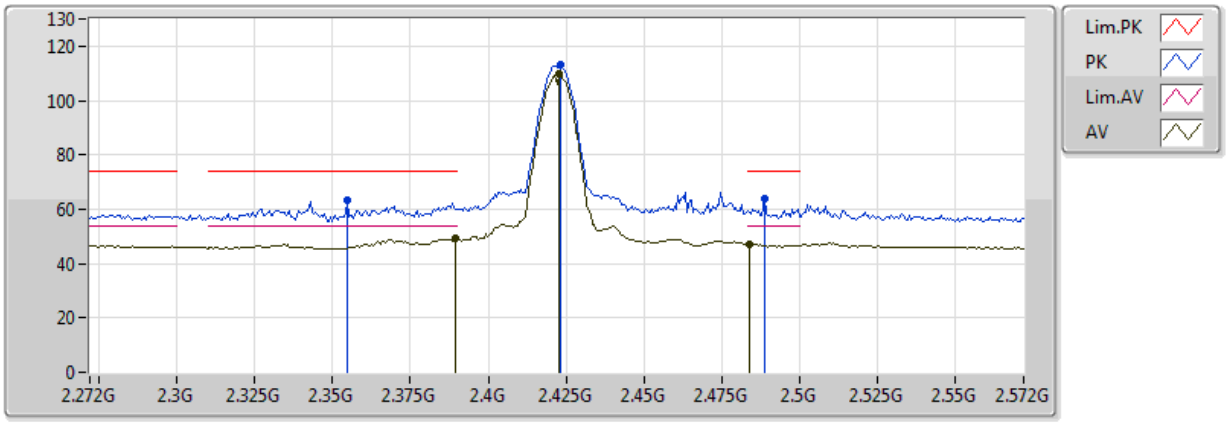


20170606
EUT Z_3TX
Setting 30
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3698G	51.62	54.00	-2.38	32.66	3	V	163	1.95	-
AV	2.4226G	113.08	Inf	-Inf	32.70	3	V	163	1.95	-
AV	2.483502G	49.76	54.00	-4.24	32.78	3	V	163	1.95	-
PK	2.3848G	64.06	74.00	-9.94	32.67	3	V	163	1.95	-
PK	2.4232G	116.91	Inf	-Inf	32.70	3	V	163	1.95	-
PK	2.4844G	63.29	74.00	-10.71	32.78	3	V	163	1.95	-

802.11b_(1Mbps)_3TX

2422MHz_TX

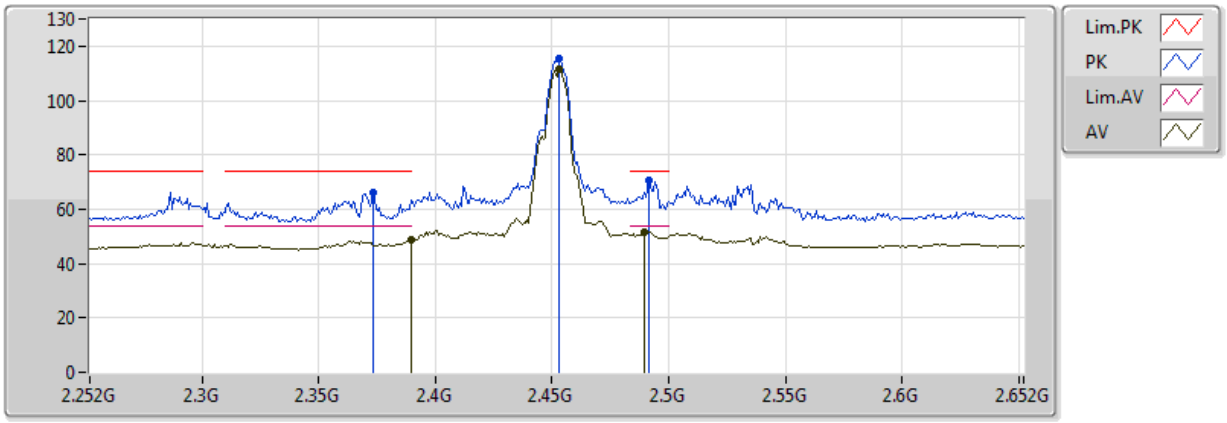


20170606
EUT Z_3TX
Setting 30
04-M-01
FSP(100142)

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	49.26	54.00	-4.74	32.67	3	H	132	1.82	-
AV	2.4226G	109.55	Inf	-Inf	32.70	3	H	132	1.82	-
AV	2.4838G	47.24	54.00	-6.76	32.78	3	H	132	1.82	-
PK	2.3548G	63.21	74.00	-10.79	32.66	3	H	132	1.82	-
PK	2.4232G	113.37	Inf	-Inf	32.70	3	H	132	1.82	-
PK	2.4886G	63.89	74.00	-10.11	32.79	3	H	132	1.82	-

802.11b_(1Mbps)_3TX

2452MHz_TX

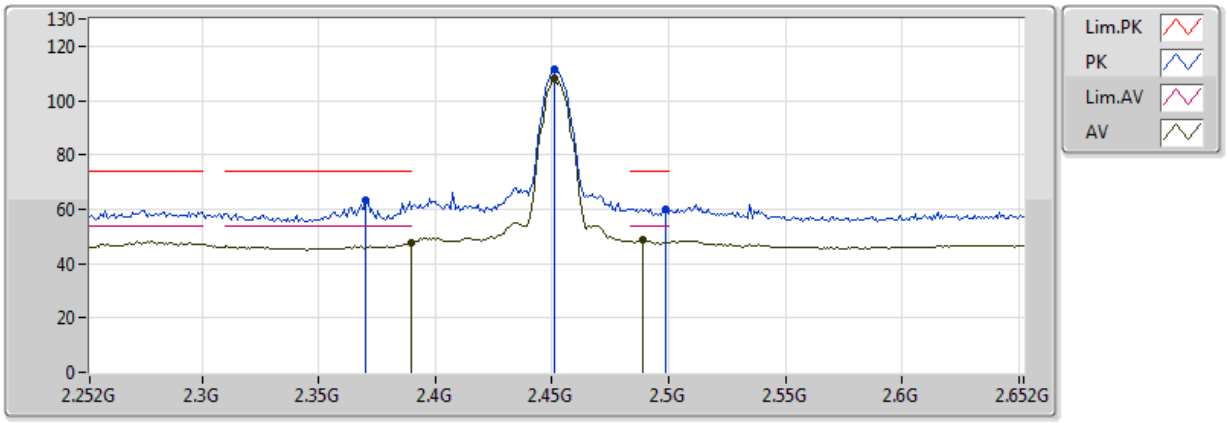


20170606
EUT Z_3TX
Setting 29
04-M-01
FSP(100142)

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	48.69	54.00	-5.31	32.67	3	V	163	1.49	-
AV	2.4528G	111.67	Inf	-Inf	32.74	3	V	163	1.49	-
AV	2.4896G	51.62	54.00	-2.38	32.79	3	V	163	1.49	-
PK	2.3736G	66.36	74.00	-7.64	32.66	3	V	163	1.49	-
PK	2.4528G	115.53	Inf	-Inf	32.74	3	V	163	1.49	-
PK	2.4912G	70.36	74.00	-3.64	32.79	3	V	163	1.49	-

802.11b_(1Mbps)_3TX

2452MHz_TX

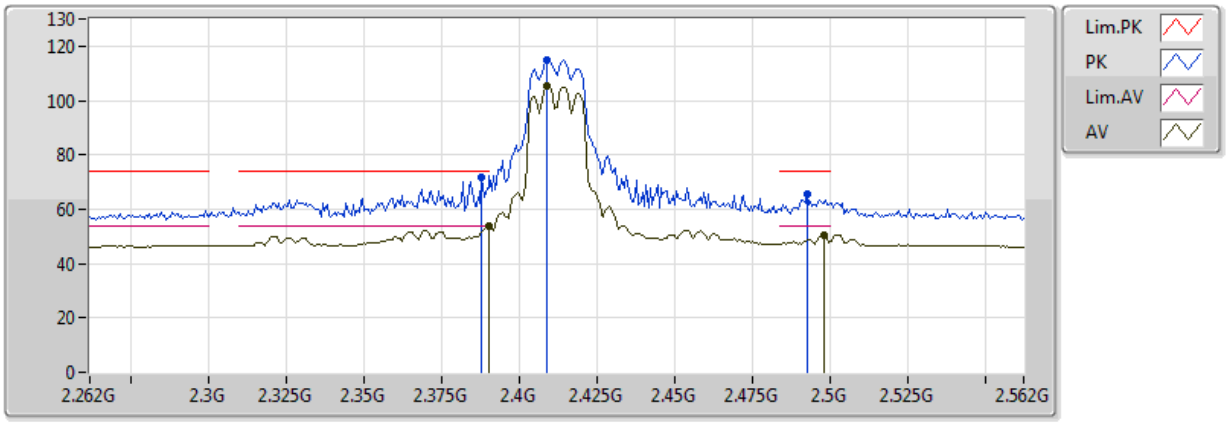


20170606
EUT Z_3TX
Setting 29
04-M-01
FSP(100142)

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	47.85	54.00	-6.15	32.67	3	H	194	1.34	-
AV	2.4512G	108.01	Inf	-Inf	32.74	3	H	194	1.34	-
AV	2.4888G	48.49	54.00	-5.51	32.79	3	H	194	1.34	-
PK	2.3704G	63.13	74.00	-10.87	32.66	3	H	194	1.34	-
PK	2.4512G	111.62	Inf	-Inf	32.74	3	H	194	1.34	-
PK	2.4984G	60.18	74.00	-13.82	32.80	3	H	194	1.34	-

802.11g_(6Mbps)_3TX

2412MHz_TX

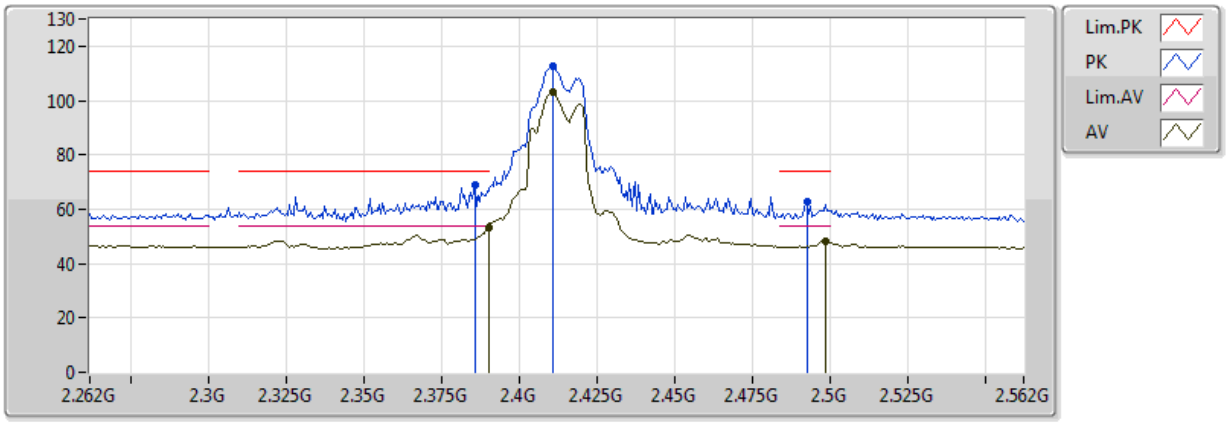


20170606
EUT Z_3TX
Setting 28
04-M-01
FSP(100142)

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	32.67	3	V	163	2.75	-
AV	2.409G	105.07	Inf	-Inf	32.68	3	V	163	2.75	-
AV	2.4978G	50.45	54.00	-3.55	32.80	3	V	163	2.75	-
PK	2.388G	71.61	74.00	-2.39	32.67	3	V	163	2.75	-
PK	2.409G	114.78	Inf	-Inf	32.68	3	V	163	2.75	-
PK	2.4924G	65.69	74.00	-8.31	32.79	3	V	163	2.75	-

802.11g_(6Mbps)_3TX

2412MHz_TX

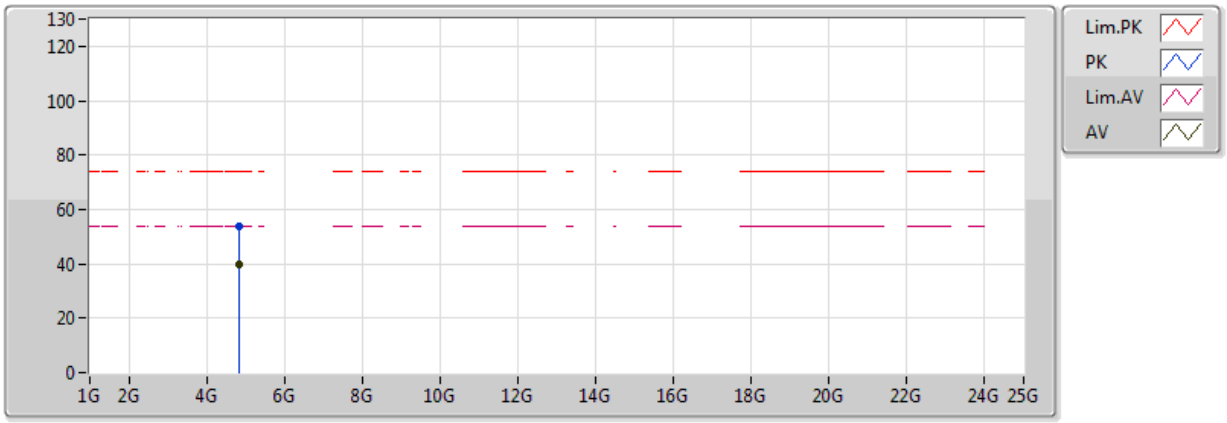


20170606
EUT Z_3TX
Setting 28
04-M-01
FSP(100142)

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	53.43	54.00	-0.57	32.67	3	H	217	1.01	-
AV	2.4108G	102.92	Inf	-Inf	32.68	3	H	217	1.01	-
AV	2.4984G	48.19	54.00	-5.81	32.80	3	H	217	1.01	-
PK	2.3856G	68.78	74.00	-5.22	32.67	3	H	217	1.01	-
PK	2.4108G	112.81	Inf	-Inf	32.68	3	H	217	1.01	-
PK	2.4924G	62.82	74.00	-11.18	32.79	3	H	217	1.01	-

802.11g_(6Mbps)_3TX

2412MHz_TX

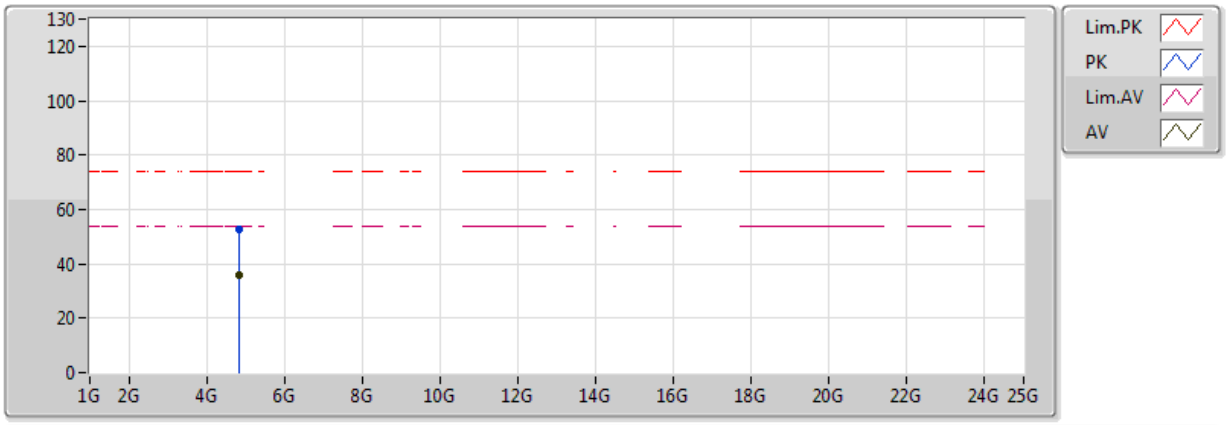


20170606
EUT Z_3TX
Setting 28
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.81912G	39.54	54.00	-14.46	3.51	3	V	144	1.73	-
PK	4.82554G	53.73	74.00	-20.27	3.52	3	V	144	1.73	-

802.11g_(6Mbps)_3TX

2412MHz_TX

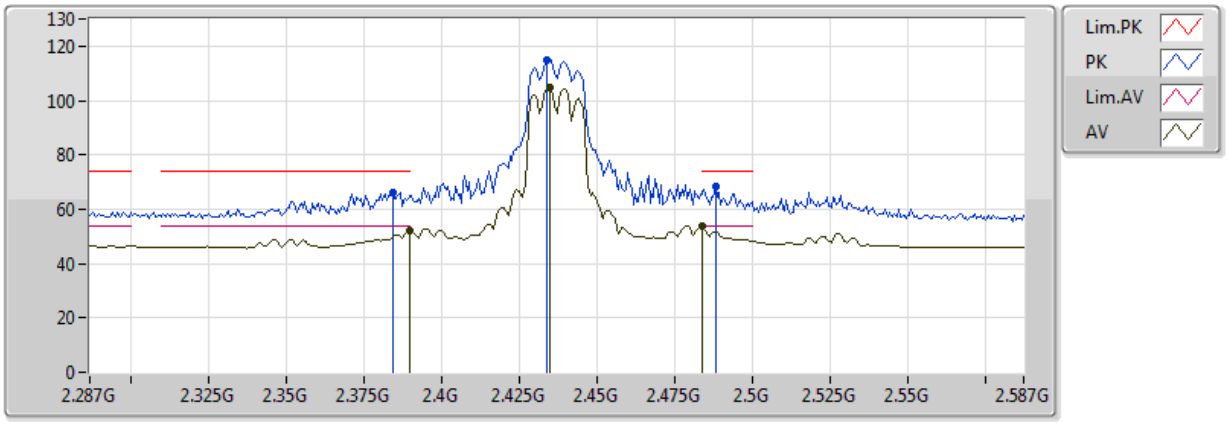


20170606
EUT Z_3TX
Setting 28
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82194G	36.06	54.00	-17.94	3.51	3	H	144	1.73	-
PK	4.8213G	52.61	74.00	-21.39	3.51	3	H	144	1.73	-

802.11g_(6Mbps)_3TX

2437MHz_TX

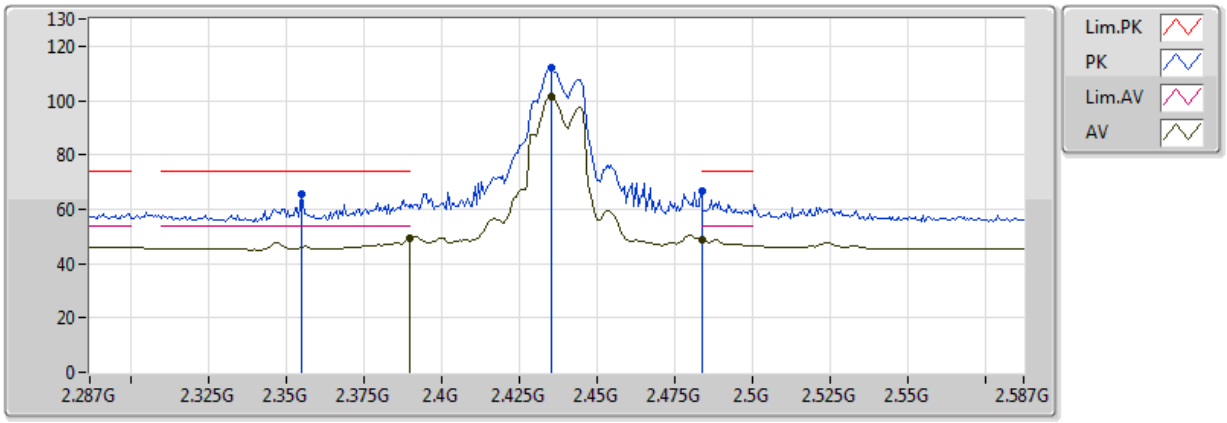


20170606
EUT Z_3TX
Setting 28
04-M-01
FSP(100142)

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	52.26	54.00	-1.74	32.67	3	V	171	1.89	-
AV	2.4346G	104.53	Inf	-Inf	32.71	3	V	171	1.89	-
AV	2.4838G	53.53	54.00	-0.47	32.78	3	V	171	1.89	-
PK	2.3842G	66.24	74.00	-7.76	32.67	3	V	171	1.89	-
PK	2.434G	115.01	Inf	-Inf	32.71	3	V	171	1.89	-
PK	2.488G	68.15	74.00	-5.85	32.78	3	V	171	1.89	-

802.11g_(6Mbps)_3TX

2437MHz_TX

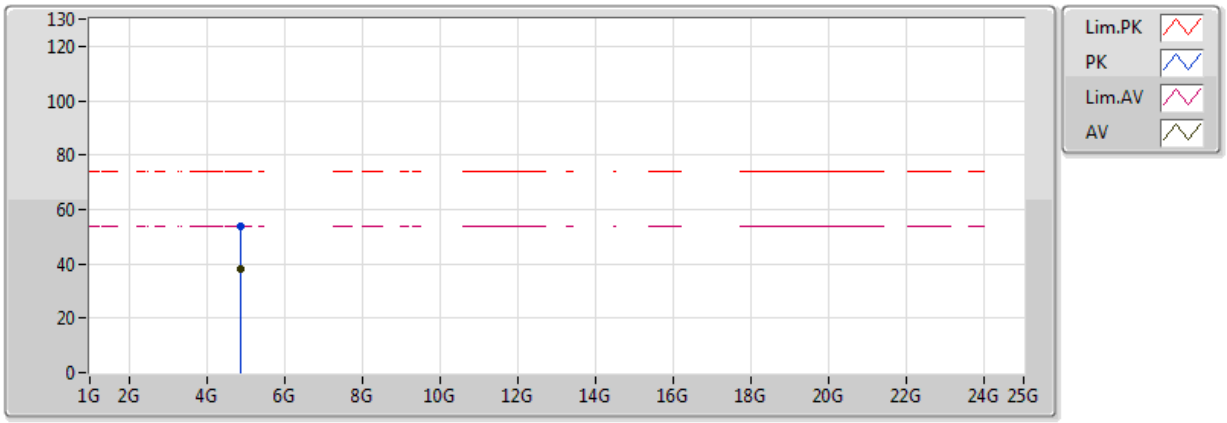


20170606
EUT Z_3TX
Setting 28
04-M-01
FSP(100142)

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	49.48	54.00	-4.52	32.67	3	H	219	1.02	-
AV	2.4352G	101.22	Inf	-Inf	32.72	3	H	219	1.02	-
AV	2.483502G	48.92	54.00	-5.08	32.78	3	H	219	1.02	-
PK	2.3548G	65.33	74.00	-8.67	32.66	3	H	219	1.02	-
PK	2.4352G	111.89	Inf	-Inf	32.72	3	H	219	1.02	-
PK	2.483502G	66.74	74.00	-7.26	32.78	3	H	219	1.02	-

802.11g_(6Mbps)_3TX

2437MHz_TX

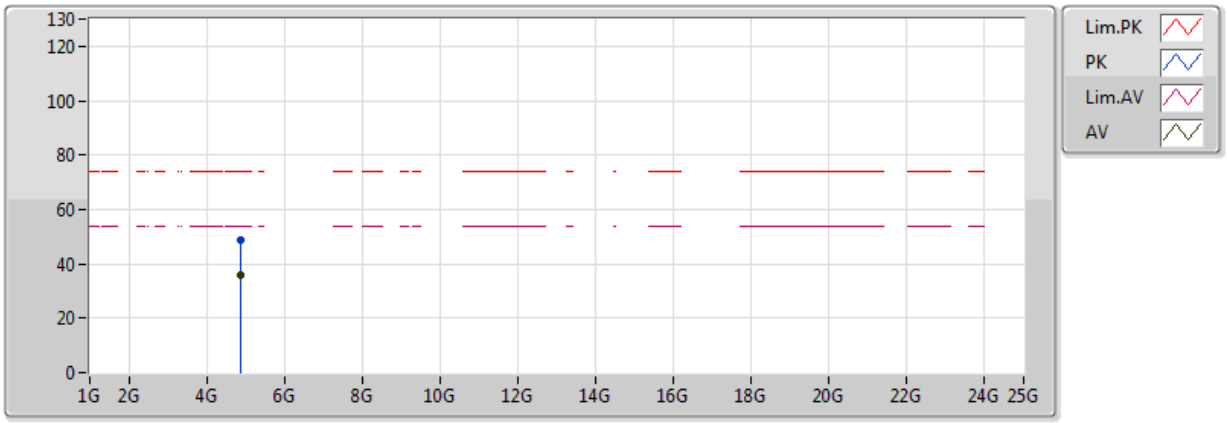


20170606
EUT Z_3TX
Setting 28
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87558G	38.34	54.00	-15.66	3.67	3	V	78	1.50	-
PK	4.87484G	53.76	74.00	-20.24	3.67	3	V	78	1.50	-

802.11g_(6Mbps)_3TX

2437MHz_TX

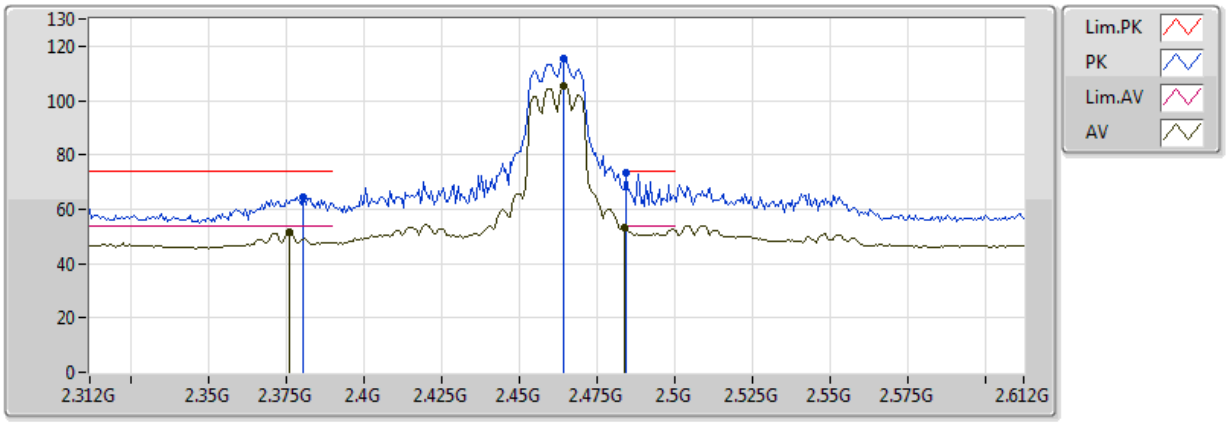


20170606
EUT Z_3TX
Setting 28
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8726G	35.75	54.00	-18.25	3.66	3	H	144	1.73	-
PK	4.8742G	49.02	74.00	-24.98	3.67	3	H	144	1.73	-

802.11g_(6Mbps)_3TX

2462MHz_TX

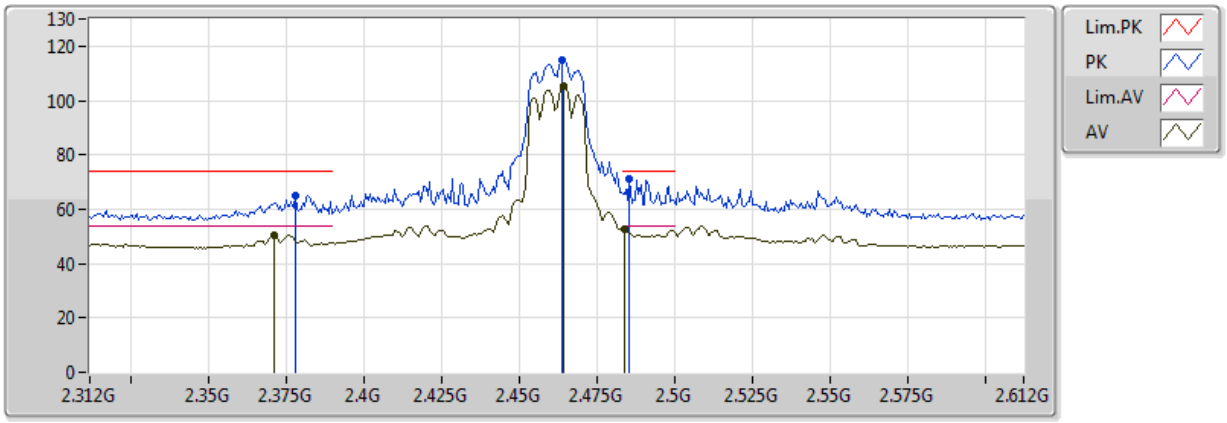


20170606
EUT Z_3TX
Setting 27
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3762G	51.42	54.00	-2.58	32.66	3	V	175	1.69	-
AV	2.4644G	105.39	Inf	-Inf	32.75	3	V	175	1.69	-
AV	2.4836G	53.35	54.00	-0.65	32.78	3	V	175	1.69	-
PK	2.3804G	64.66	74.00	-9.34	32.66	3	V	175	1.69	-
PK	2.4644G	115.27	Inf	-Inf	32.75	3	V	175	1.69	-
PK	2.4842G	73.63	74.00	-0.37	32.78	3	V	175	1.69	-

802.11g_(6Mbps)_3TX

2462MHz_TX

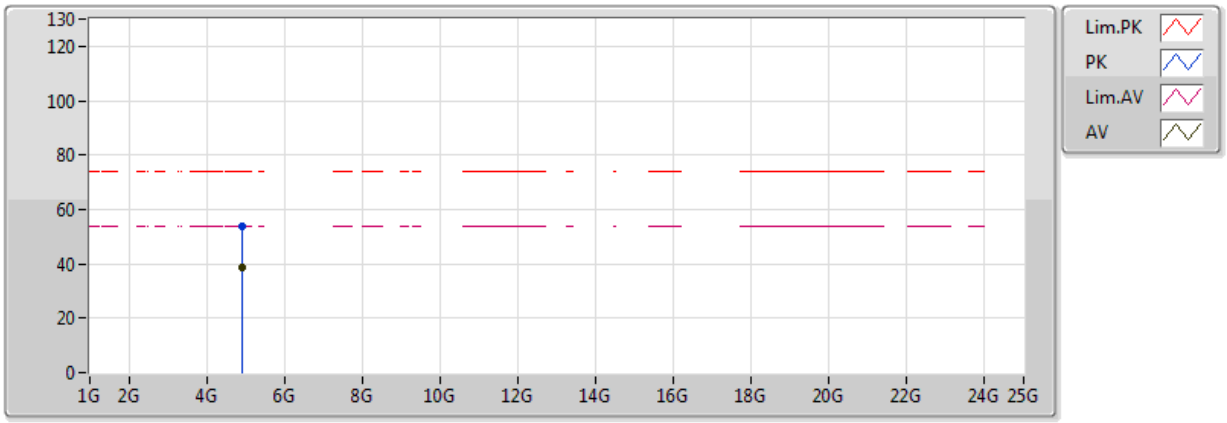


20170606
EUT Z_3TX
Setting 27
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3714G	50.34	54.00	-3.66	32.66	3	H	167	1.70	-
AV	2.4644G	105.20	Inf	-Inf	32.75	3	H	167	1.70	-
AV	2.4836G	52.71	54.00	-1.29	32.78	3	H	167	1.70	-
PK	2.378G	64.89	74.00	-9.11	32.66	3	H	167	1.70	-
PK	2.4638G	114.68	Inf	-Inf	32.75	3	H	167	1.70	-
PK	2.4854G	71.01	74.00	-2.99	32.78	3	H	167	1.70	-

802.11g_(6Mbps)_3TX

2462MHz_TX

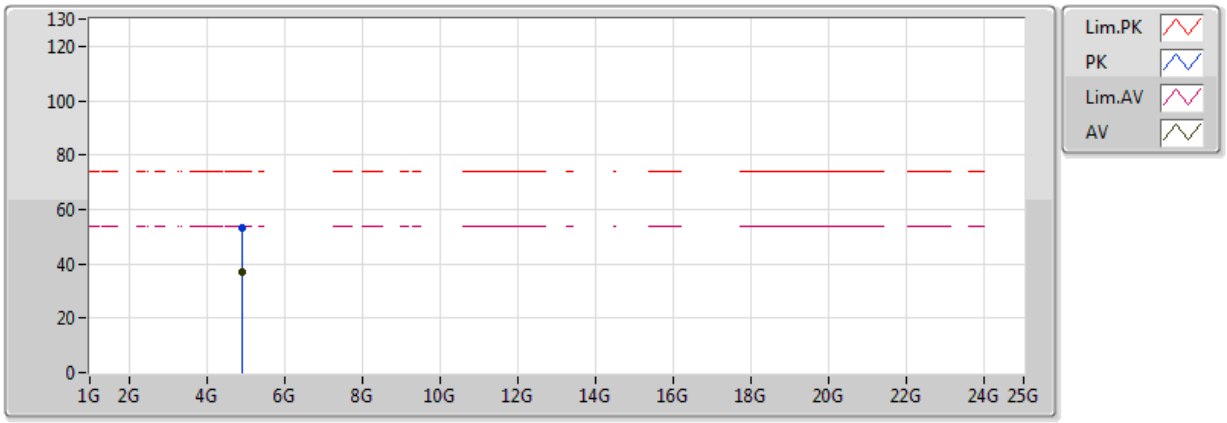


20170606
EUT Z_3TX
Setting 27
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92478G	38.67	54.00	-15.33	3.81	3	V	144	1.73	-
PK	4.91984G	53.95	74.00	-20.05	3.80	3	V	144	1.73	-

802.11g_(6Mbps)_3TX

2462MHz_TX

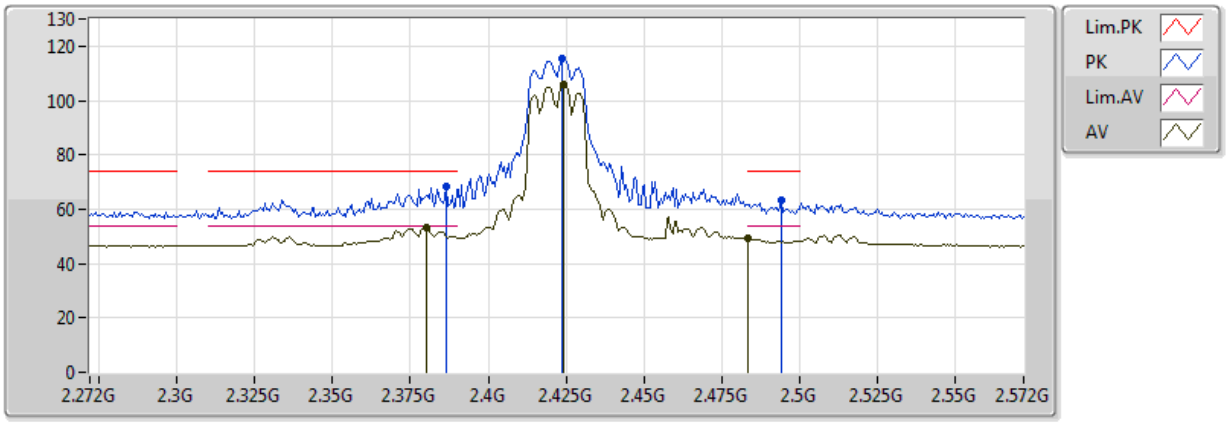


20170606
EUT Z_3TX
Setting 27
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92404G	36.80	54.00	-17.20	3.81	3	H	144	1.73	-
PK	4.92098G	53.03	74.00	-20.97	3.80	3	H	144	1.73	-

802.11g_(6Mbps)_3TX

2422MHz_TX

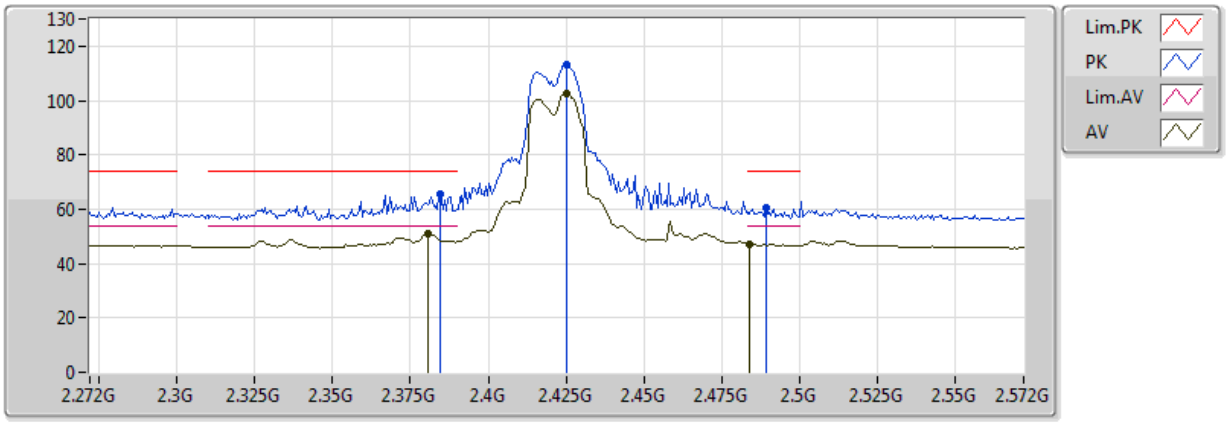


20170606
EUT Z_3TX
Setting 28
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.38G	53.44	54.00	-0.56	32.66	3	V	169	1.95	-
AV	2.4244G	105.92	Inf	-Inf	32.70	3	V	169	1.95	-
AV	2.483502G	49.17	54.00	-4.83	32.78	3	V	169	1.95	-
PK	2.3866G	68.38	74.00	-5.62	32.67	3	V	169	1.95	-
PK	2.4238G	115.29	Inf	-Inf	32.70	3	V	169	1.95	-
PK	2.494G	63.19	74.00	-10.81	32.79	3	V	169	1.95	-

802.11g_(6Mbps)_3TX

2422MHz_TX

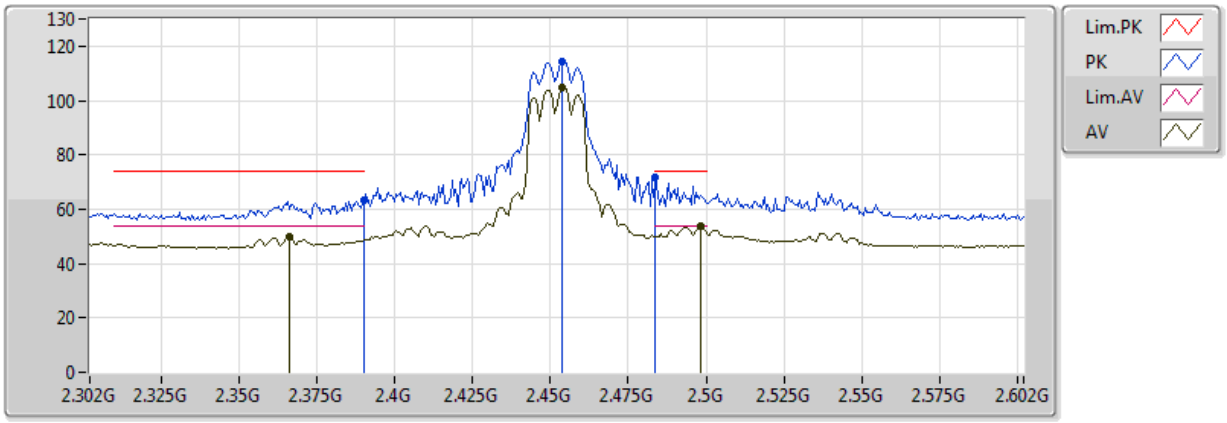


20170606
EUT Z_3TX
Setting 28
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3806G	50.98	54.00	-3.02	32.66	3	H	219	1.50	-
AV	2.425G	102.78	Inf	-Inf	32.70	3	H	219	1.50	-
AV	2.4838G	47.26	54.00	-6.74	32.78	3	H	219	1.50	-
PK	2.3848G	65.84	74.00	-8.16	32.67	3	H	219	1.50	-
PK	2.425G	113.37	Inf	-Inf	32.70	3	H	219	1.50	-
PK	2.4892G	60.54	74.00	-13.46	32.79	3	H	219	1.50	-

802.11g_(6Mbps)_3TX

2452MHz_TX

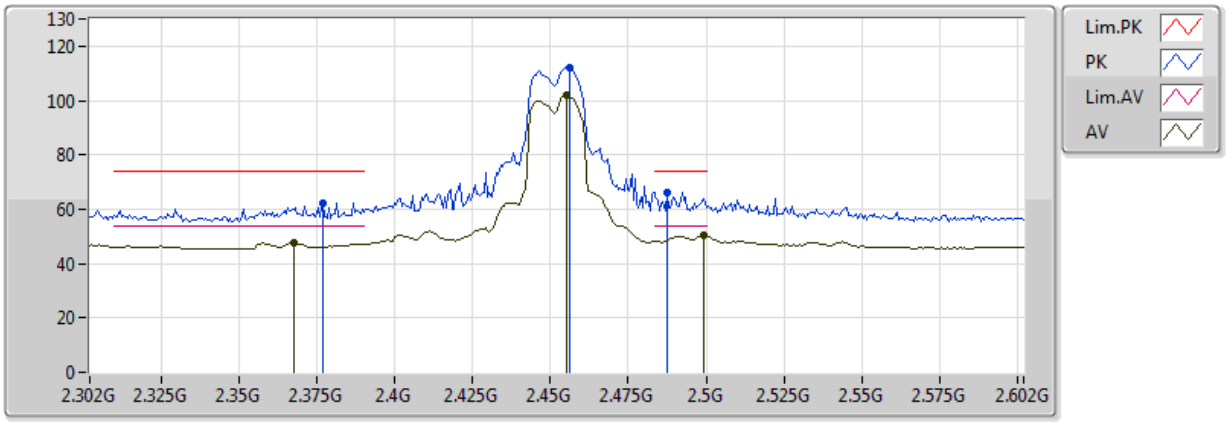


20170606
EUT Z_3TX
Setting 28
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3662G	49.85	54.00	-4.15	32.66	3	V	163	1.50	-
AV	2.4538G	104.60	Inf	-Inf	32.74	3	V	163	1.50	-
AV	2.4982G	53.52	54.00	-0.48	32.80	3	V	163	1.50	-
PK	2.389998G	63.25	74.00	-10.75	32.67	3	V	163	1.50	-
PK	2.4538G	114.17	Inf	-Inf	32.74	3	V	163	1.50	-
PK	2.4838G	71.93	74.00	-2.07	32.78	3	V	163	1.50	-

802.11g_(6Mbps)_3TX

2452MHz_TX

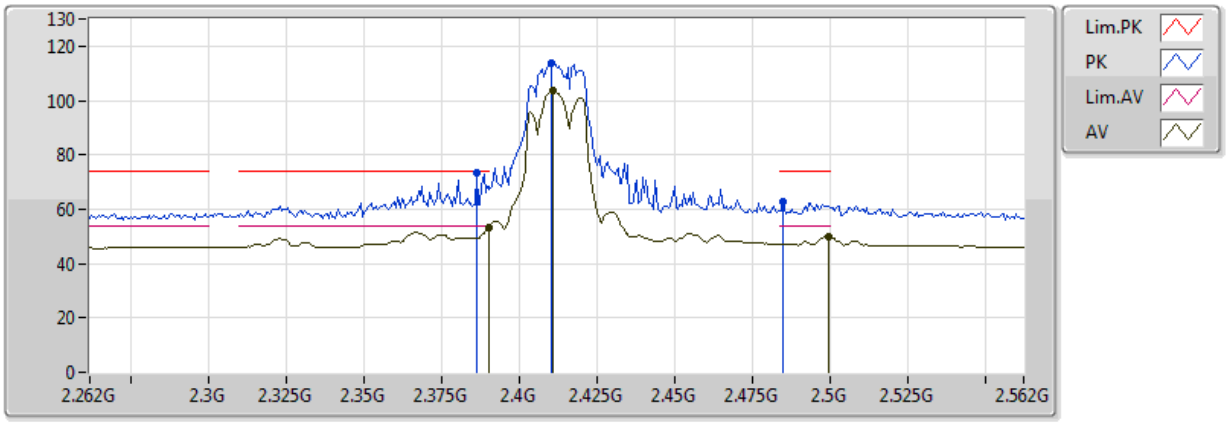


20170606
EUT Z_3TX
Setting 28
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3674G	47.75	54.00	-6.25	32.66	3	H	218	1.49	-
AV	2.455G	102.04	Inf	-Inf	32.74	3	H	218	1.49	-
AV	2.4994G	50.60	54.00	-3.40	32.80	3	H	218	1.49	-
PK	2.377G	62.29	74.00	-11.71	32.66	3	H	218	1.49	-
PK	2.4562G	112.07	Inf	-Inf	32.74	3	H	218	1.49	-
PK	2.4874G	66.30	74.00	-7.70	32.78	3	H	218	1.49	-

802.11n HT20_Nss1,(MCS0)_3TX

2412MHz_TX

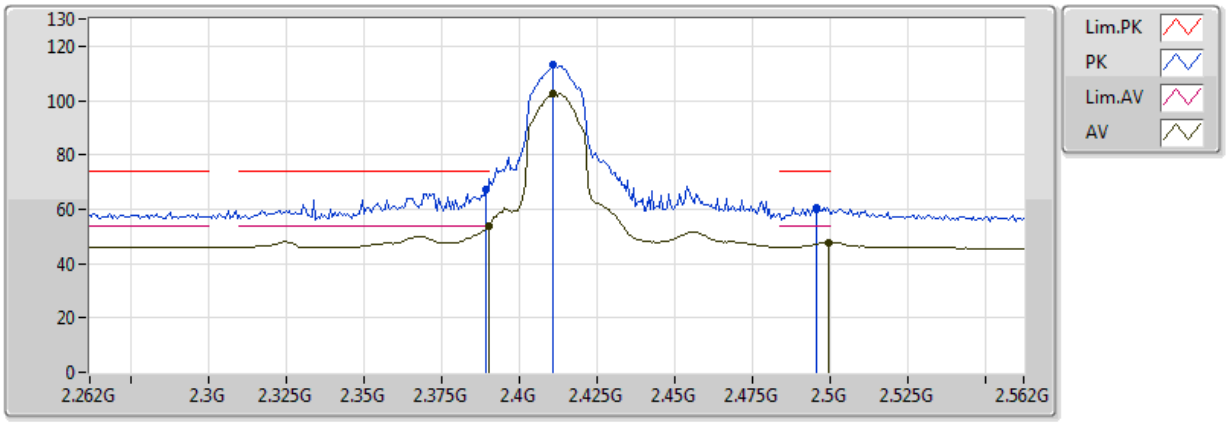


20170606
EUT Z_3TX
Setting 28
04-M-01
FSP(100142)

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	53.09	54.00	-0.91	32.67	3	V	162	1.93	-
AV	2.4108G	103.76	Inf	-Inf	32.68	3	V	162	1.93	-
AV	2.4996G	50.09	54.00	-3.91	32.80	3	V	162	1.93	-
PK	2.3862G	73.39	74.00	-0.61	32.67	3	V	162	1.93	-
PK	2.4102G	113.87	Inf	-Inf	32.68	3	V	162	1.93	-
PK	2.4846G	62.84	74.00	-11.16	32.78	3	V	162	1.93	-

802.11n HT20_Nss1,(MCS0)_3TX

2412MHz_TX

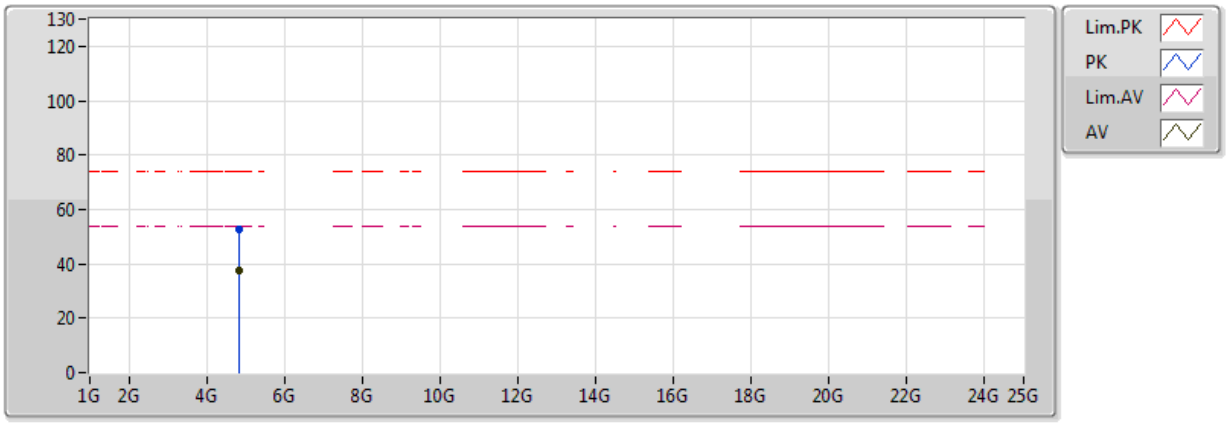


20170606
EUT Z_3TX
Setting 28
04-M-01
FSP(100142)

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	53.60	54.00	-0.40	32.67	3	H	220	1.50	-
AV	2.4108G	102.40	Inf	-Inf	32.68	3	H	220	1.50	-
AV	2.4996G	47.85	54.00	-6.15	32.80	3	H	220	1.50	-
PK	2.3892G	67.40	74.00	-6.60	32.67	3	H	220	1.50	-
PK	2.4108G	113.44	Inf	-Inf	32.68	3	H	220	1.50	-
PK	2.4954G	60.67	74.00	-13.33	32.79	3	H	220	1.50	-

802.11n HT20_Nss1,(MCS0)_3TX

2412MHz_TX

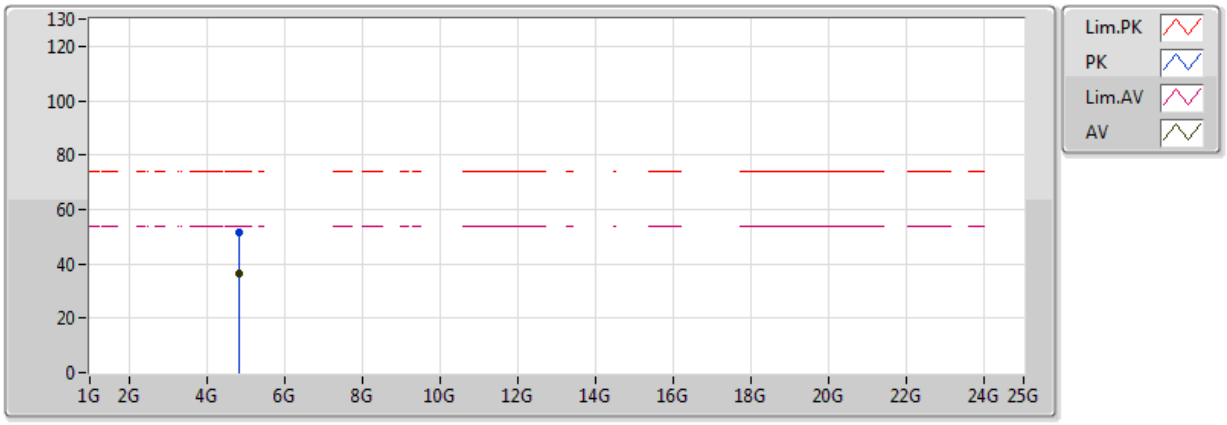


20170606
EUT Z_3TX
Setting 28
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82816G	37.32	54.00	-16.68	3.53	3	V	144	1.89	-
PK	4.82608G	52.79	74.00	-21.21	3.53	3	V	144	1.89	-

802.11n HT20_Nss1,(MCS0)_3TX

2412MHz_TX

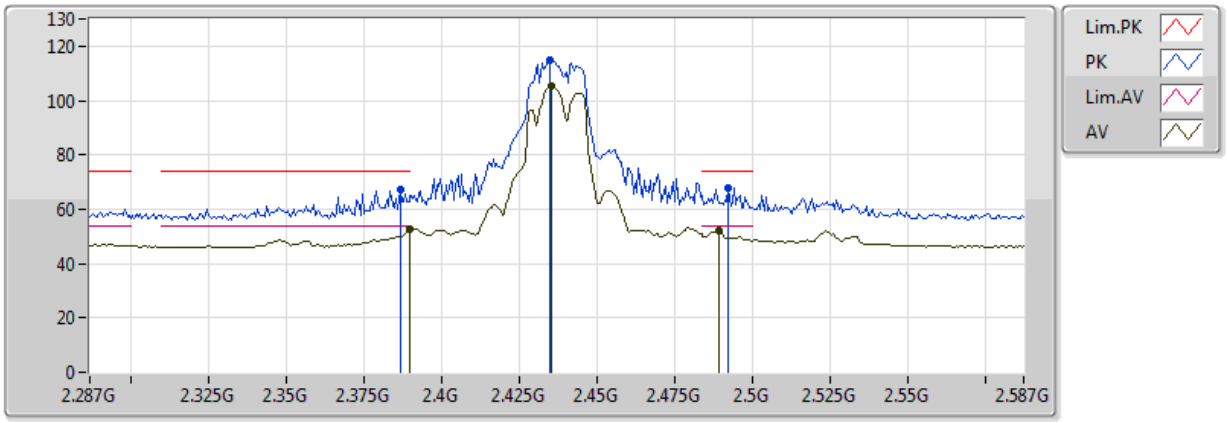


20170606
EUT Z_3TX
Setting 28
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82542G	36.35	54.00	-17.65	3.52	3	H	144	1.89	-
PK	4.81906G	51.33	74.00	-22.67	3.51	3	H	144	1.89	-

802.11n HT20_Nss1,(MCS0)_3TX

2437MHz_TX

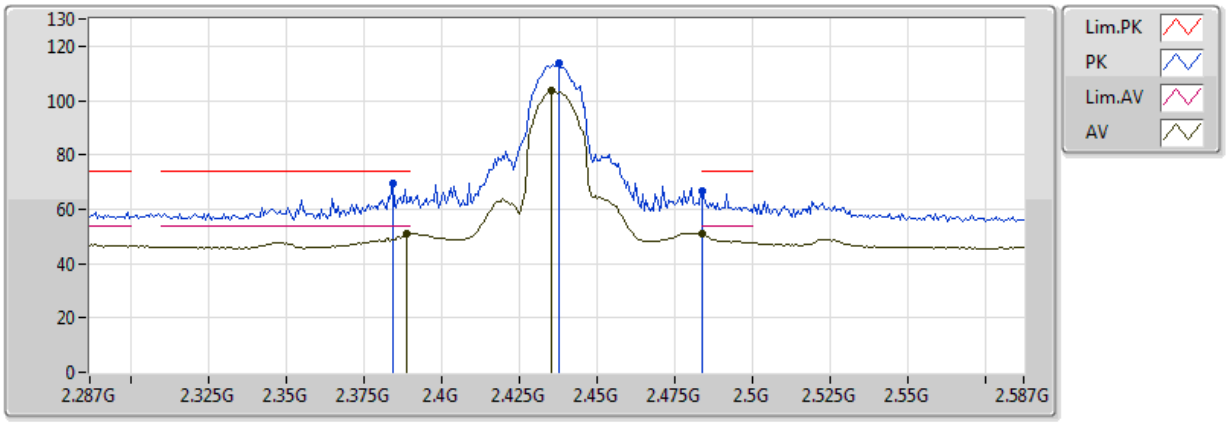


20170606
EUT Z_3TX
Setting 31.5
04-M-01
FSP(100142)

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	32.67	3	V	153	1.50	-
AV	2.4352G	105.18	Inf	-Inf	32.72	3	V	153	1.50	-
AV	2.4892G	51.95	54.00	-2.05	32.79	3	V	153	1.50	-
PK	2.3866G	67.29	74.00	-6.71	32.67	3	V	153	1.50	-
PK	2.4346G	114.66	Inf	-Inf	32.71	3	V	153	1.50	-
PK	2.4922G	68.07	74.00	-5.93	32.79	3	V	153	1.50	-

802.11n HT20_Nss1,(MCS0)_3TX

2437MHz_TX

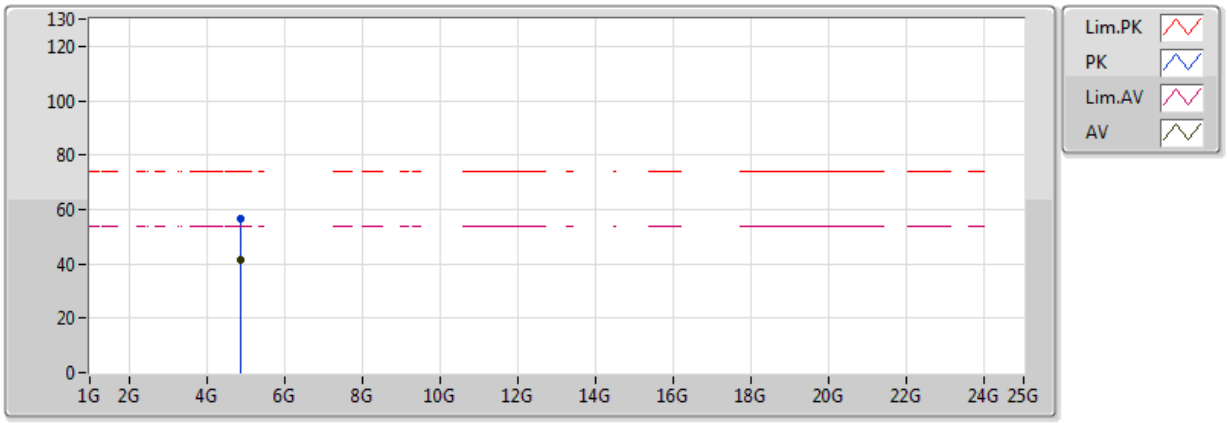


20170606
EUT Z_3TX
Setting 31.5
04-M-01
FSP(100142)

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	50.81	54.00	-3.19	32.67	3	H	217	2.03	-
AV	2.4352G	103.44	Inf	-Inf	32.72	3	H	217	2.03	-
AV	2.483502G	50.92	54.00	-3.08	32.78	3	H	217	2.03	-
PK	2.3842G	69.47	74.00	-4.53	32.67	3	H	217	2.03	-
PK	2.4376G	113.50	Inf	-Inf	32.72	3	H	217	2.03	-
PK	2.483502G	66.81	74.00	-7.19	32.78	3	H	217	2.03	-

802.11n HT20_Nss1,(MCS0)_3TX

2437MHz_TX

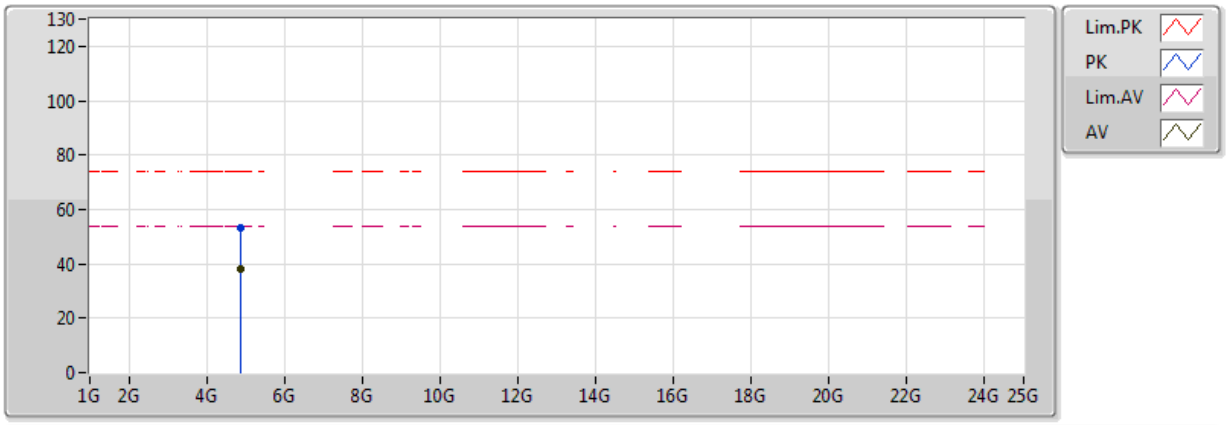


20170606
EUT Z_3TX
Setting 31.5
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87764G	41.59	54.00	-12.41	3.68	3	V	80	1.73	-
PK	4.87542G	56.62	74.00	-17.38	3.67	3	V	80	1.73	-

802.11n HT20_Nss1,(MCS0)_3TX

2437MHz_TX

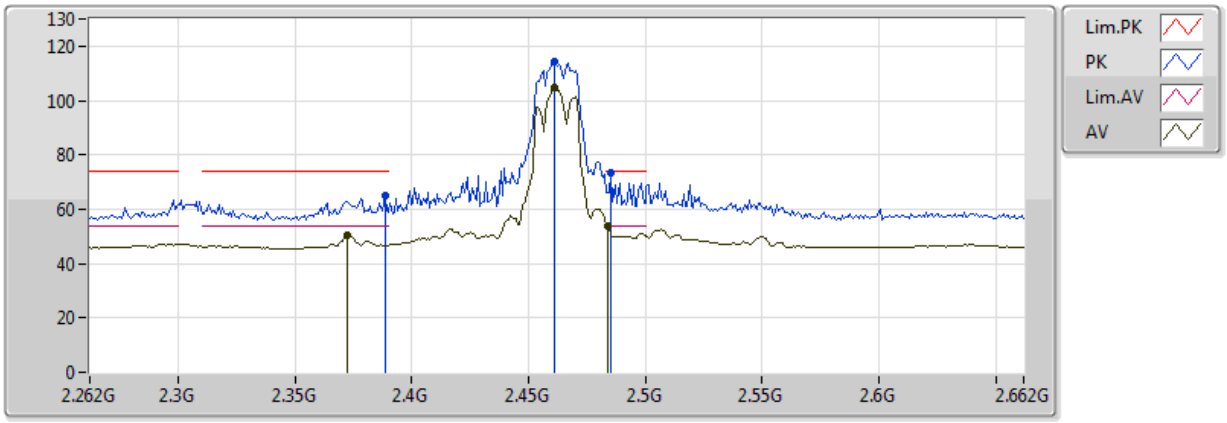


20170606
EUT Z_3TX
Setting 31.5
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87236G	37.88	54.00	-16.12	3.66	3	H	144	1.89	-
PK	4.87272G	53.25	74.00	-20.75	3.66	3	H	144	1.89	-

802.11n HT20_Nss1,(MCS0)_3TX

2462MHz_TX

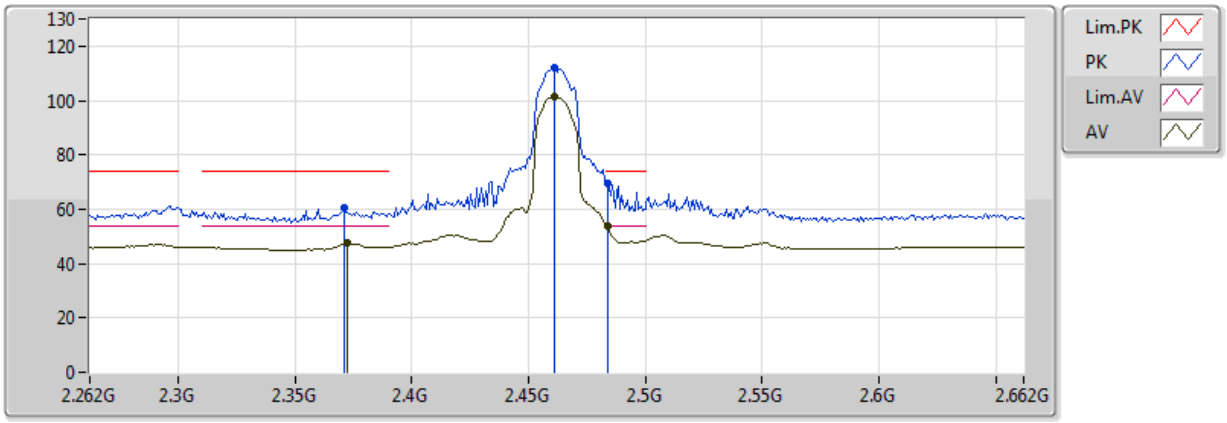


20170606
EUT Z_3TX
Setting 28
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3724G	50.51	54.00	-3.49	32.66	3	V	167	1.69	-
AV	2.4612G	104.57	Inf	-Inf	32.75	3	V	167	1.69	-
AV	2.4836G	53.95	54.00	-0.05	32.78	3	V	167	1.69	-
PK	2.3884G	64.83	74.00	-9.17	32.67	3	V	167	1.69	-
PK	2.4612G	114.36	Inf	-Inf	32.75	3	V	167	1.69	-
PK	2.4852G	73.64	74.00	-0.36	32.78	3	V	167	1.69	-

802.11n HT20_Nss1,(MCS0)_3TX

2462MHz_TX

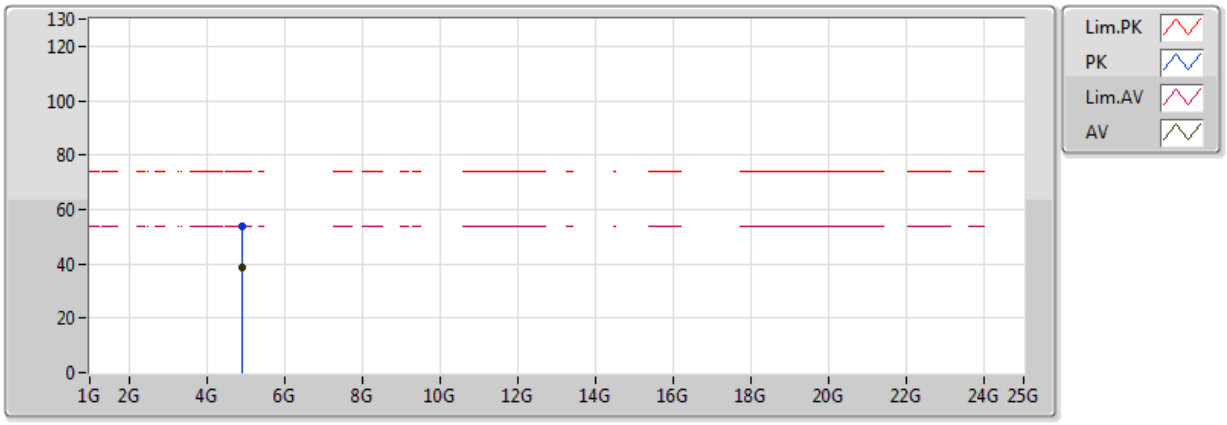


20170606
EUT Z_3TX
Setting 28
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3724G	47.47	54.00	-6.53	32.66	3	H	219	1.49	-
AV	2.4612G	101.58	Inf	-Inf	32.75	3	H	219	1.49	-
AV	2.4836G	53.94	54.00	-0.06	32.78	3	H	219	1.49	-
PK	2.3708G	60.47	74.00	-13.53	32.66	3	H	219	1.49	-
PK	2.4612G	112.24	Inf	-Inf	32.75	3	H	219	1.49	-
PK	2.4836G	69.36	74.00	-4.64	32.78	3	H	219	1.49	-

802.11n HT20_Nss1,(MCS0)_3TX

2462MHz_TX

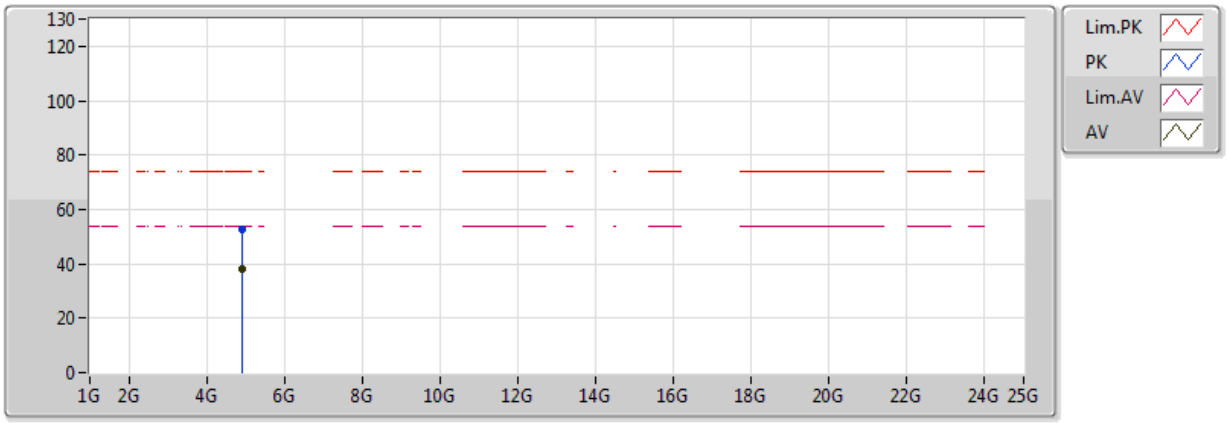


20170606
EUT Z_3TX
Setting 28
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.9289G	38.53	54.00	-15.47	3.82	3	V	144	1.89	-
PK	4.92894G	53.96	74.00	-20.04	3.82	3	V	144	1.89	-

802.11n HT20_Nss1,(MCS0)_3TX

2462MHz_TX

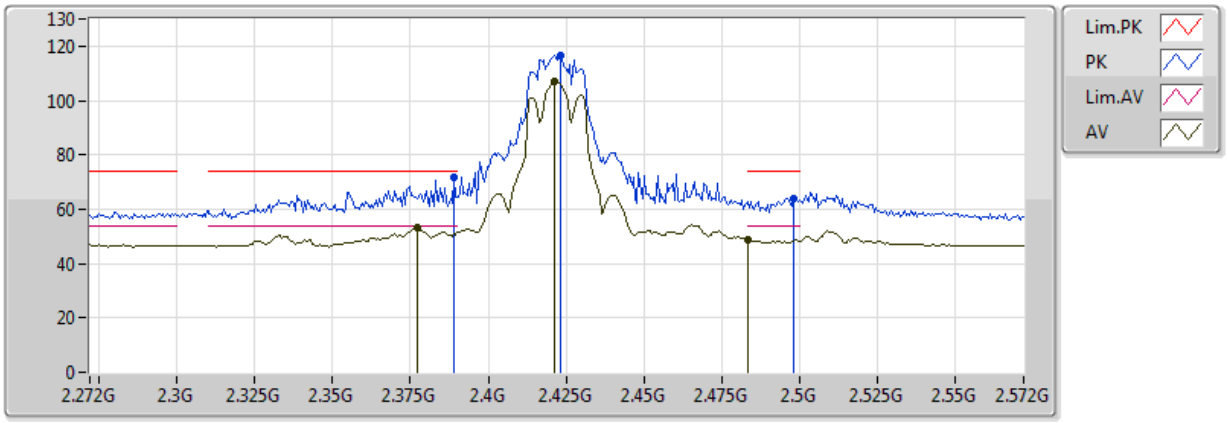


20170606
EUT Z_3TX
Setting 28
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92594G	37.91	54.00	-16.09	3.82	3	H	144	1.89	-
PK	4.92034G	52.45	74.00	-21.55	3.80	3	H	144	1.89	-

802.11n HT20_Nss1,(MCS0)_3TX

2422MHz_TX

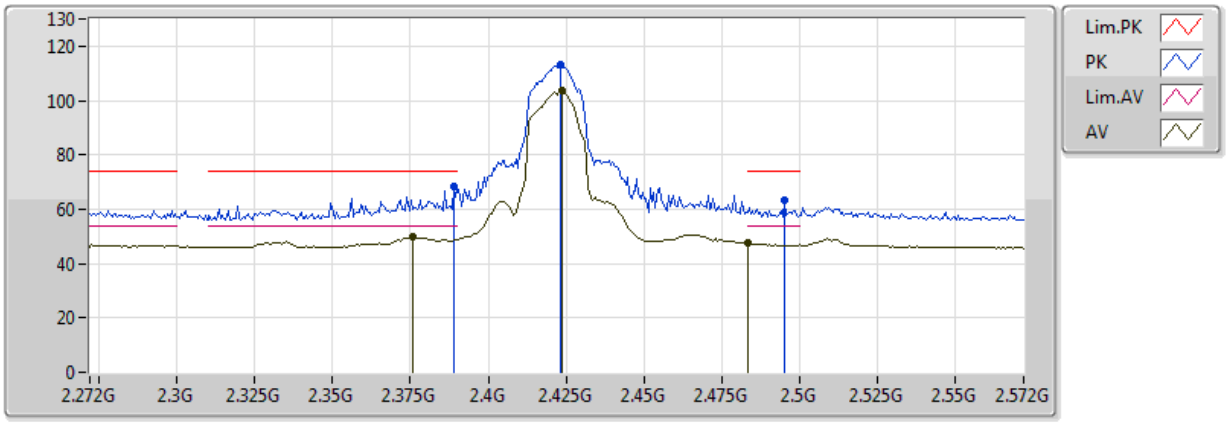


20170606
EUT Z_3TX
Setting 30
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.377G	53.41	54.00	-0.59	32.66	3	V	172	1.68	-
AV	2.4214G	106.90	Inf	-Inf	32.70	3	V	172	1.68	-
AV	2.483502G	48.72	54.00	-5.28	32.78	3	V	172	1.68	-
PK	2.389G	71.74	74.00	-2.26	32.67	3	V	172	1.68	-
PK	2.4232G	116.67	Inf	-Inf	32.70	3	V	172	1.68	-
PK	2.4982G	64.10	74.00	-9.90	32.80	3	V	172	1.68	-

802.11n HT20_Nss1,(MCS0)_3TX

2422MHz_TX

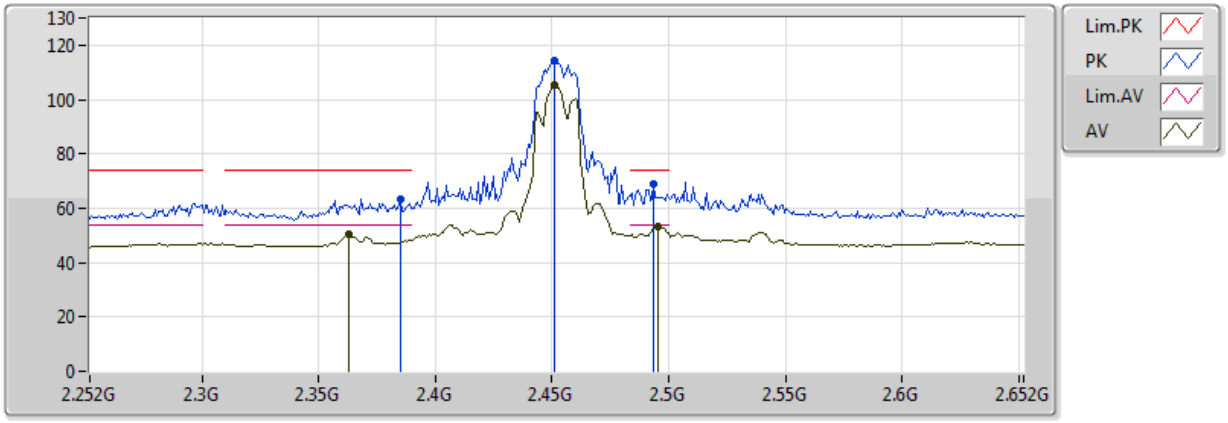


20170606
EUT Z_3TX
Setting 30
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3758G	49.67	54.00	-4.33	32.66	3	H	222	1.30	-
AV	2.4238G	103.86	Inf	-Inf	32.70	3	H	222	1.30	-
AV	2.483502G	47.51	54.00	-6.49	32.78	3	H	222	1.30	-
PK	2.389G	68.21	74.00	-5.79	32.67	3	H	222	1.30	-
PK	2.4232G	113.29	Inf	-Inf	32.70	3	H	222	1.30	-
PK	2.4952G	63.04	74.00	-10.96	32.79	3	H	222	1.30	-

802.11n HT20_Nss1,(MCS0)_3TX

2452MHz_TX

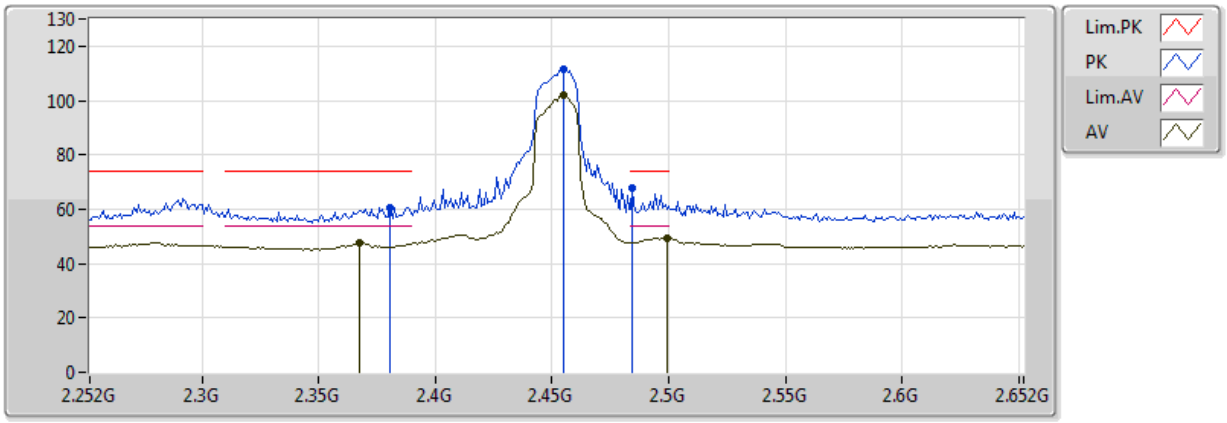


20170606
EUT Z_3TX
Setting 28
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3632G	50.40	54.00	-3.60	32.66	3	V	165	1.69	-
AV	2.4512G	105.20	Inf	-Inf	32.74	3	V	165	1.69	-
AV	2.4952G	53.51	54.00	-0.49	32.79	3	V	165	1.69	-
PK	2.3848G	63.37	74.00	-10.63	32.67	3	V	165	1.69	-
PK	2.4512G	114.50	Inf	-Inf	32.74	3	V	165	1.69	-
PK	2.4936G	68.68	74.00	-5.32	32.79	3	V	165	1.69	-

802.11n HT20_Nss1,(MCS0)_3TX

2452MHz_TX

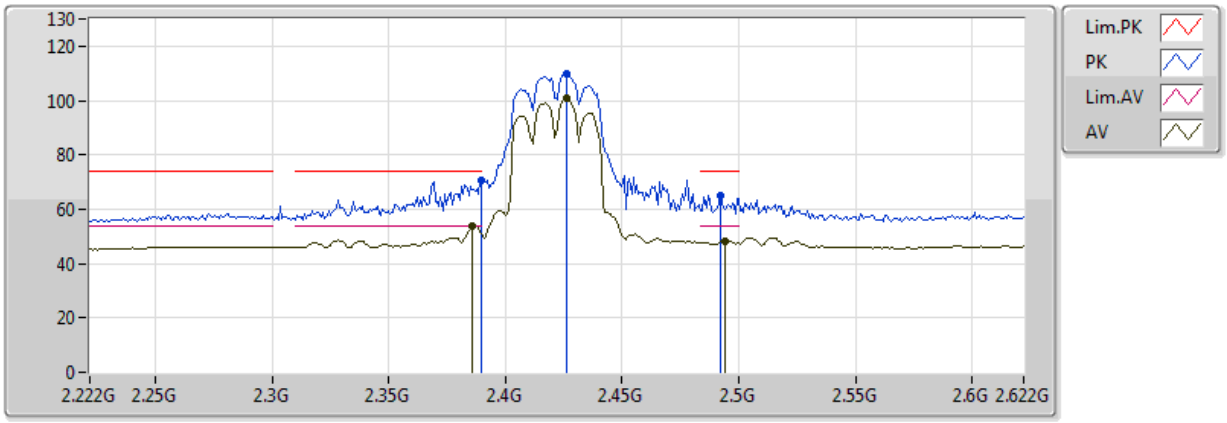


20170606
EUT Z_3TX
Setting 28
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3672G	47.62	54.00	-6.38	32.66	3	H	168	2.23	-
AV	2.4552G	101.83	Inf	-Inf	32.74	3	H	168	2.23	-
AV	2.4992G	49.52	54.00	-4.48	32.80	3	H	168	2.23	-
PK	2.3808G	60.63	74.00	-13.37	32.66	3	H	168	2.23	-
PK	2.4552G	111.46	Inf	-Inf	32.74	3	H	168	2.23	-
PK	2.484G	67.82	74.00	-6.18	32.78	3	H	168	2.23	-

802.11n HT40_Nss1,(MCS0)_3TX

2422MHz_TX

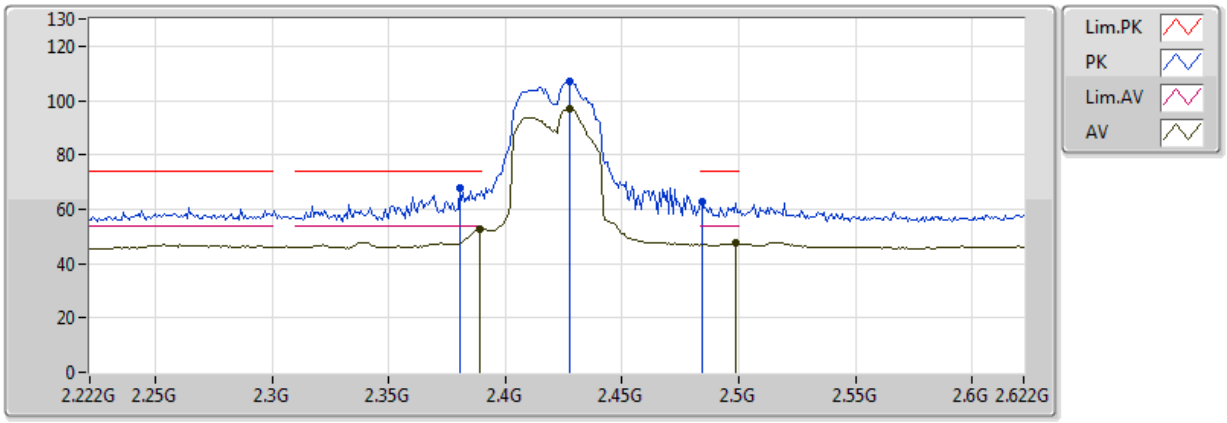


20170606
EUT Z_3TX
Setting 25
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.386G	53.63	54.00	-0.37	32.67	3	V	166	1.94	-
AV	2.426G	100.66	Inf	-Inf	32.70	3	V	166	1.94	-
AV	2.494G	48.43	54.00	-5.57	32.79	3	V	166	1.94	-
PK	2.39G	70.65	74.00	-3.35	32.67	3	V	166	1.94	-
PK	2.426G	110.03	Inf	-Inf	32.70	3	V	166	1.94	-
PK	2.4924G	64.81	74.00	-9.19	32.79	3	V	166	1.94	-

802.11n HT40_Nss1,(MCS0)_3TX

2422MHz_TX

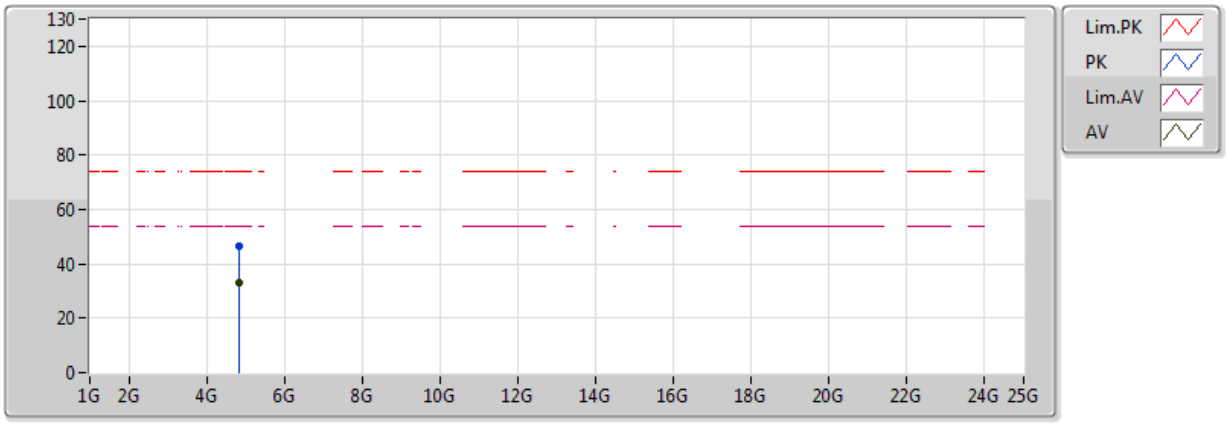


20170606
EUT Z_3TX
Setting 25
04-M-01
FSP(100142)

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	52.80	54.00	-1.20	32.67	3	H	222	1.50	-
AV	2.4276G	96.92	Inf	-Inf	32.71	3	H	222	1.50	-
AV	2.4988G	47.53	54.00	-6.47	32.80	3	H	222	1.50	-
PK	2.3804G	67.66	74.00	-6.34	32.66	3	H	222	1.50	-
PK	2.4276G	107.03	Inf	-Inf	32.71	3	H	222	1.50	-
PK	2.4844G	62.65	74.00	-11.35	32.78	3	H	222	1.50	-

802.11n HT40_Nss1,(MCS0)_3TX

2422MHz_TX

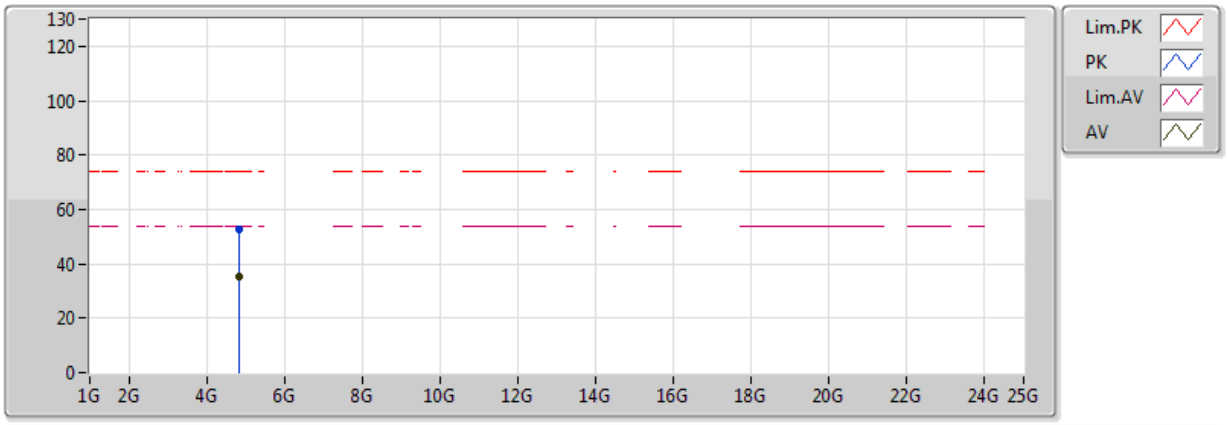


20170606
EUT Z_3TX
Setting 25
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.84548G	33.10	54.00	-20.90	3.58	3	V	87	1.62	-
PK	4.84646G	46.63	74.00	-27.37	3.58	3	V	87	1.62	-

802.11n HT40_Nss1,(MCS0)_3TX

2422MHz_TX

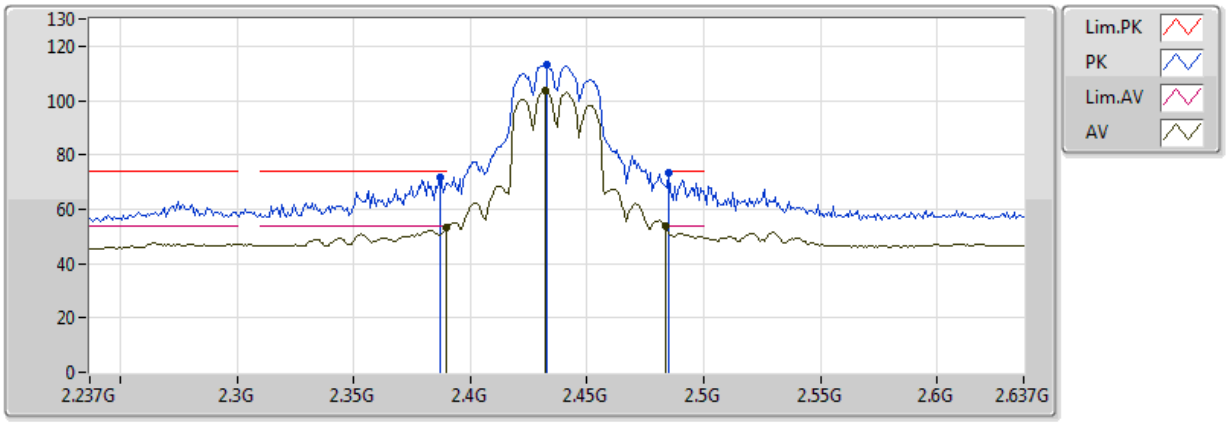


20170606
EUT Z_3TX
Setting 25
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.84068G	35.03	54.00	-18.97	3.57	3	H	87	1.62	-
PK	4.84362G	52.52	74.00	-21.48	3.58	3	H	87	1.62	-

802.11n HT40_Nss1,(MCS0)_3TX

2437MHz_TX

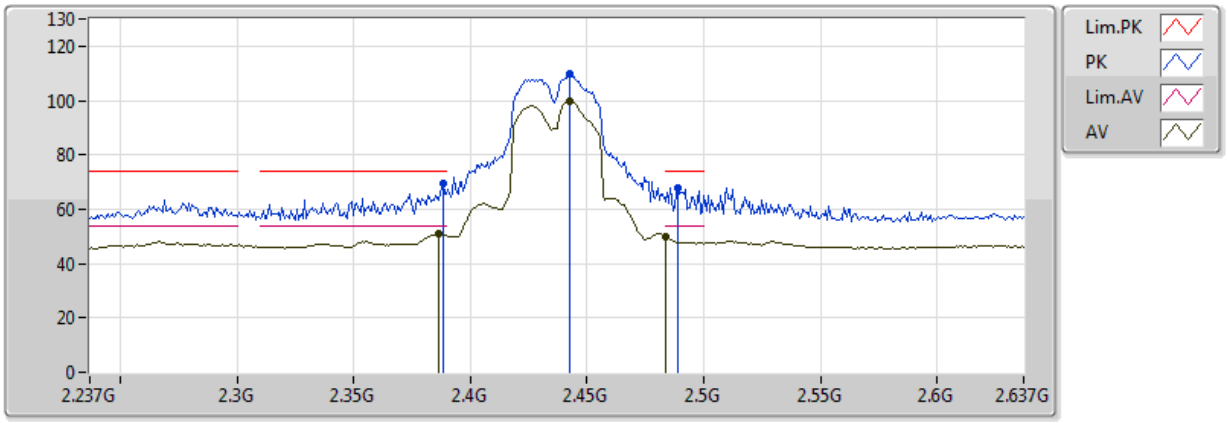


20170606
EUT Z_3TX
Setting 29
04-M-01
FSP(100142)

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	53.27	54.00	-0.73	32.67	3	V	172	1.95	-
AV	2.4322G	103.63	Inf	-Inf	32.71	3	V	172	1.95	-
AV	2.483502G	53.70	54.00	-0.30	32.78	3	V	172	1.95	-
PK	2.3874G	71.55	74.00	-2.45	32.67	3	V	172	1.95	-
PK	2.433G	113.01	Inf	-Inf	32.71	3	V	172	1.95	-
PK	2.485G	73.66	74.00	-0.34	32.78	3	V	172	1.95	-

802.11n HT40_Nss1,(MCS0)_3TX

2437MHz_TX

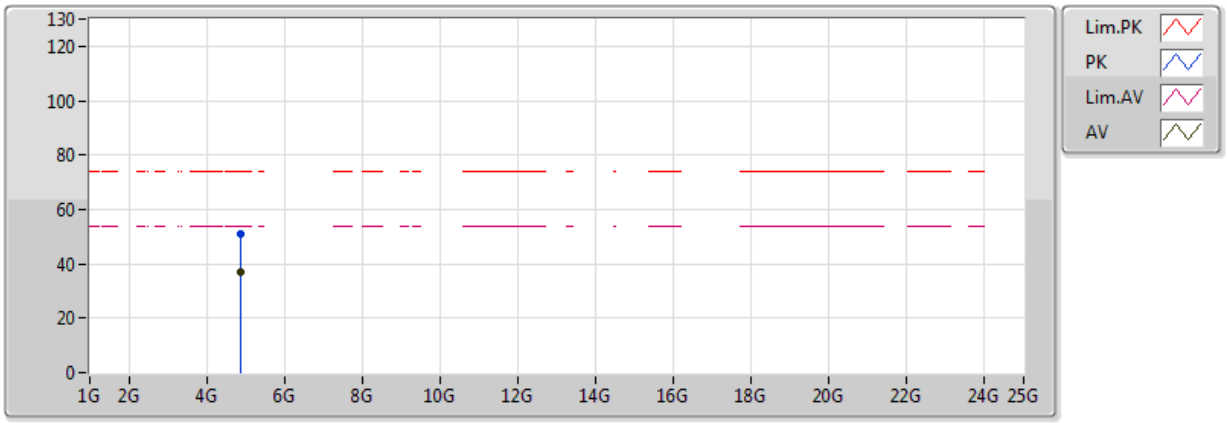


20170606
EUT Z_3TX
Setting 29
04-M-01
FSP(100142)

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	50.89	54.00	-3.11	32.67	3	H	218	1.53	-
AV	2.4426G	99.81	Inf	-Inf	32.73	3	H	218	1.53	-
AV	2.483502G	50.11	54.00	-3.89	32.78	3	H	218	1.53	-
PK	2.3882G	69.72	74.00	-4.28	32.67	3	H	218	1.53	-
PK	2.4426G	109.74	Inf	-Inf	32.73	3	H	218	1.53	-
PK	2.489G	67.54	74.00	-6.46	32.79	3	H	218	1.53	-

802.11n HT40_Nss1,(MCS0)_3TX

2437MHz_TX

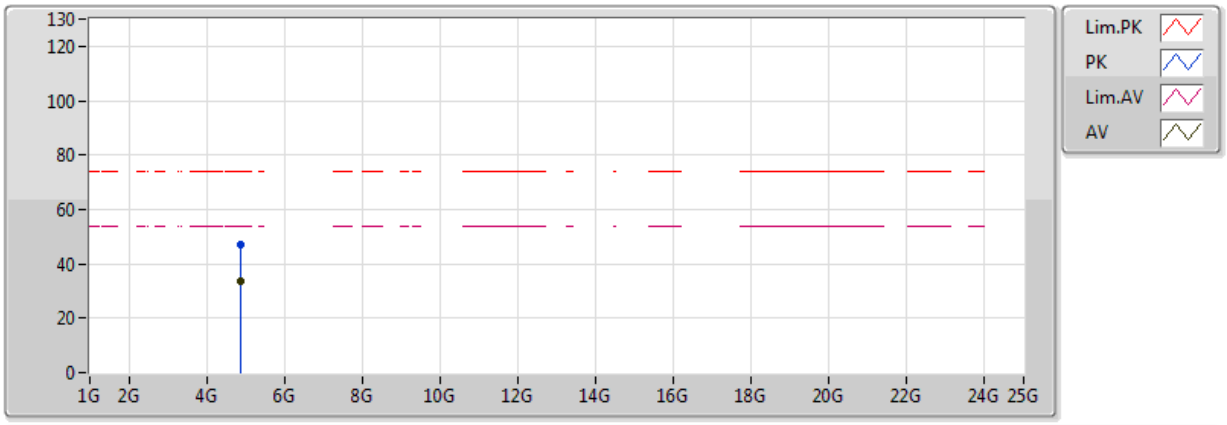


20170606
EUT Z_3TX
Setting 29
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.86912G	36.77	54.00	-17.23	3.65	3	V	87	1.62	-
PK	4.86982G	50.88	74.00	-23.12	3.65	3	V	87	1.62	-

802.11n HT40_Nss1,(MCS0)_3TX

2437MHz_TX

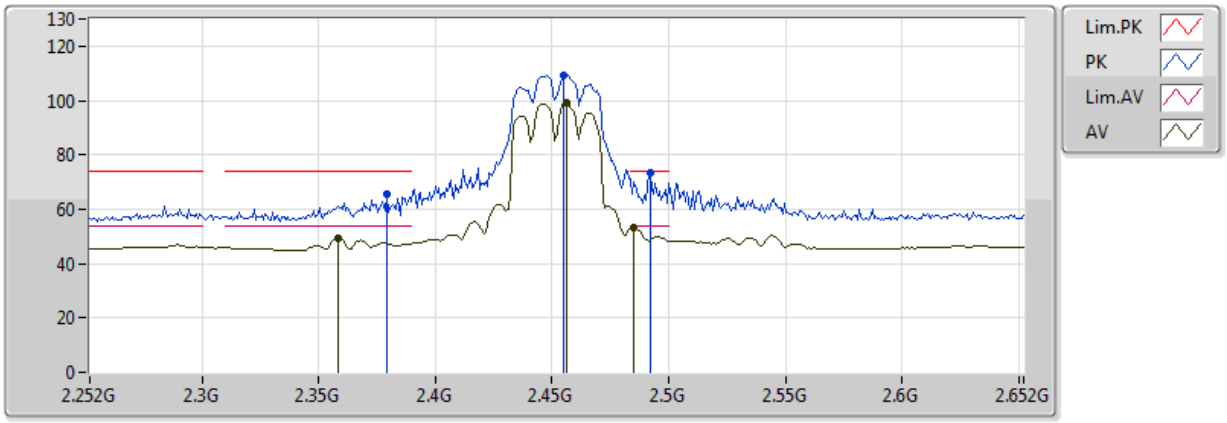


20170606
EUT Z_3TX
Setting 29
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87024G	33.64	54.00	-20.36	3.65	3	H	87	1.62	-
PK	4.87528G	47.17	74.00	-26.83	3.67	3	H	87	1.62	-

802.11n HT40_Nss1,(MCS0)_3TX

2452MHz_TX

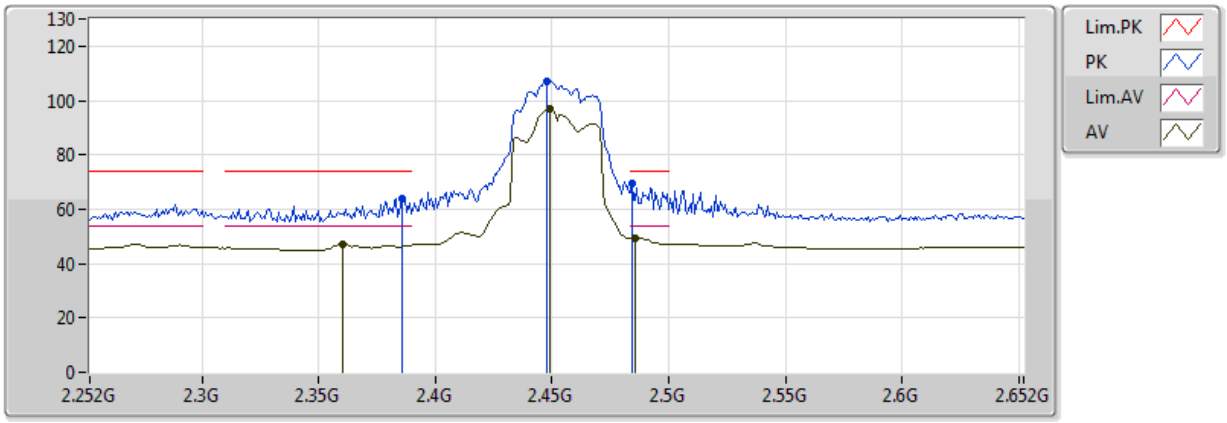


20170606
EUT Z_3TX
Setting 26
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3584G	49.05	54.00	-4.95	32.66	3	V	166	1.50	-
AV	2.456G	99.08	Inf	-Inf	32.74	3	V	166	1.50	-
AV	2.4848G	53.03	54.00	-0.97	32.78	3	V	166	1.50	-
PK	2.3792G	65.32	74.00	-8.68	32.66	3	V	166	1.50	-
PK	2.4552G	109.47	Inf	-Inf	32.74	3	V	166	1.50	-
PK	2.492G	73.42	74.00	-0.58	32.79	3	V	166	1.50	-

802.11n HT40_Nss1,(MCS0)_3TX

2452MHz_TX

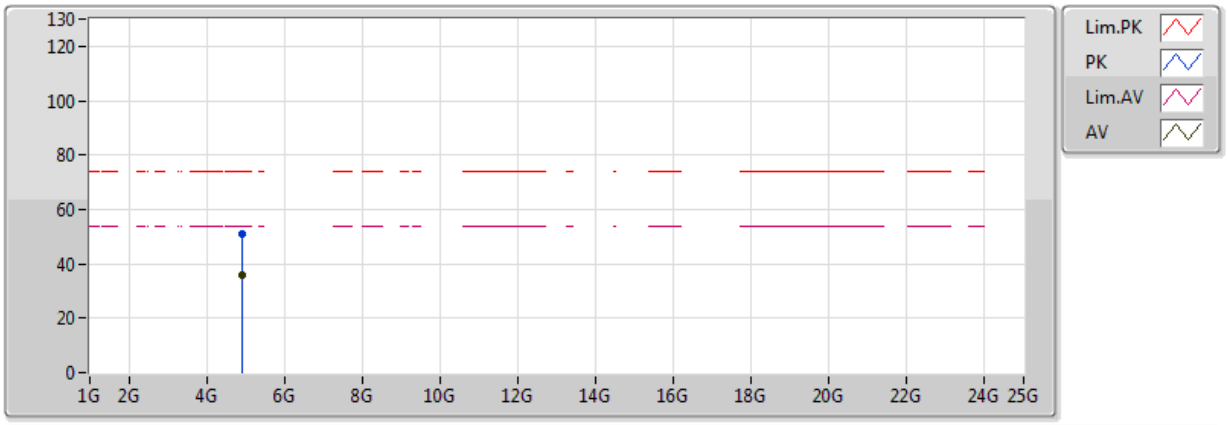


20170606
EUT Z_3TX
Setting 26
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.36G	47.19	54.00	-6.81	32.66	3	H	217	1.50	-
AV	2.4488G	96.74	Inf	-Inf	32.73	3	H	217	1.50	-
AV	2.4856G	49.51	54.00	-4.49	32.78	3	H	217	1.50	-
PK	2.3856G	64.12	74.00	-9.88	32.67	3	H	217	1.50	-
PK	2.448G	107.27	Inf	-Inf	32.73	3	H	217	1.50	-
PK	2.484G	69.42	74.00	-4.58	32.78	3	H	217	1.50	-

802.11n HT40_Nss1,(MCS0)_3TX

2452MHz_TX

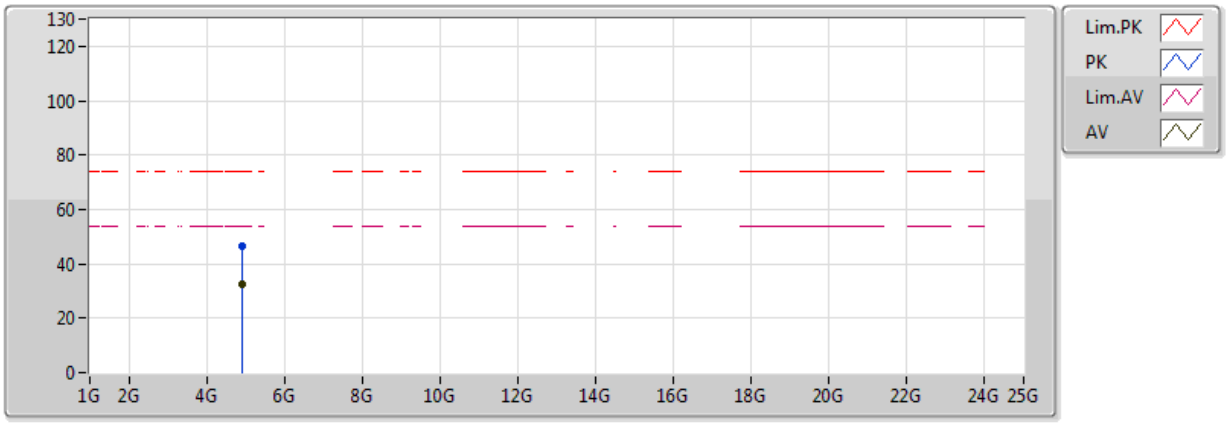


20170606
EUT Z_3TX
Setting 26
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.90018G	35.70	54.00	-18.30	3.74	3	V	213	1.50	-
PK	4.9023G	50.73	74.00	-23.27	3.75	3	V	213	1.50	-

802.11n HT40_Nss1,(MCS0)_3TX

2452MHz_TX

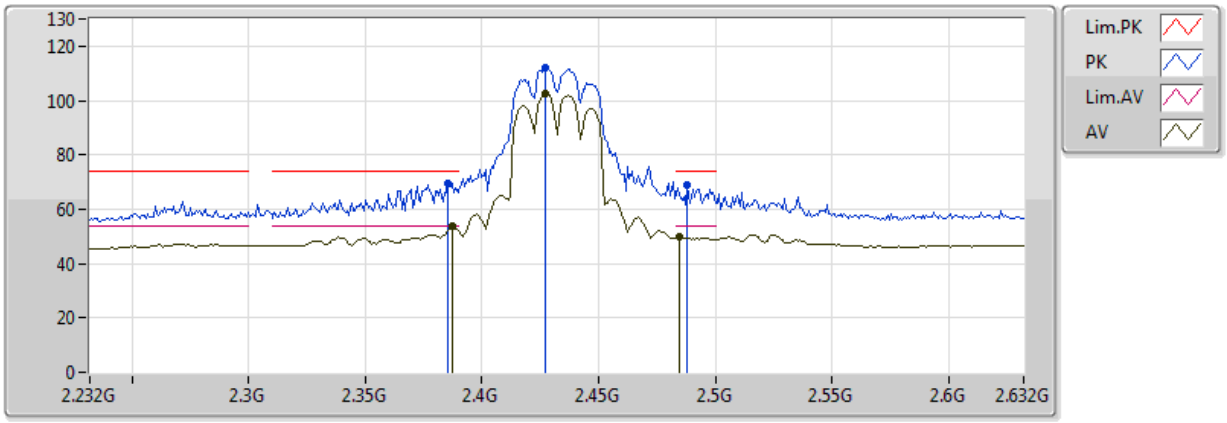


20170606
EUT Z_3TX
Setting 26
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.90442G	32.69	54.00	-21.31	3.75	3	H	0	1.50	-
PK	4.90446G	46.71	74.00	-27.29	3.75	3	H	0	1.50	-

802.11n HT40_Nss1,(MCS0)_3TX

2432MHz_TX

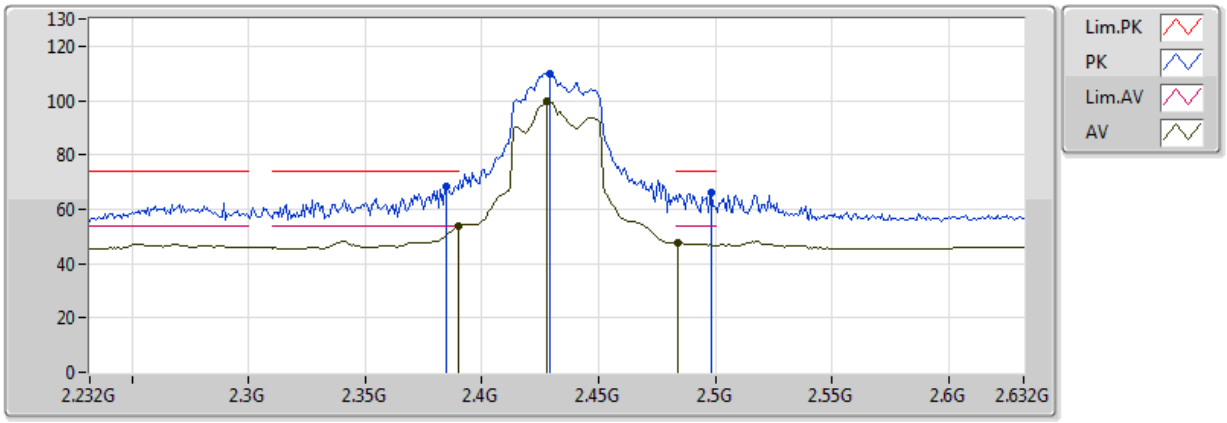


20170606
EUT Z_3TX
Setting 28
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3872G	53.53	54.00	-0.47	32.67	3	V	180	1.99	-
AV	2.4272G	102.48	Inf	-Inf	32.71	3	V	180	1.99	-
AV	2.4848G	49.82	54.00	-4.18	32.78	3	V	180	1.99	-
PK	2.3856G	69.65	74.00	-4.35	32.67	3	V	180	1.99	-
PK	2.4272G	112.28	Inf	-Inf	32.71	3	V	180	1.99	-
PK	2.488G	68.81	74.00	-5.19	32.78	3	V	180	1.99	-

802.11n HT40_Nss1,(MCS0)_3TX

2432MHz_TX

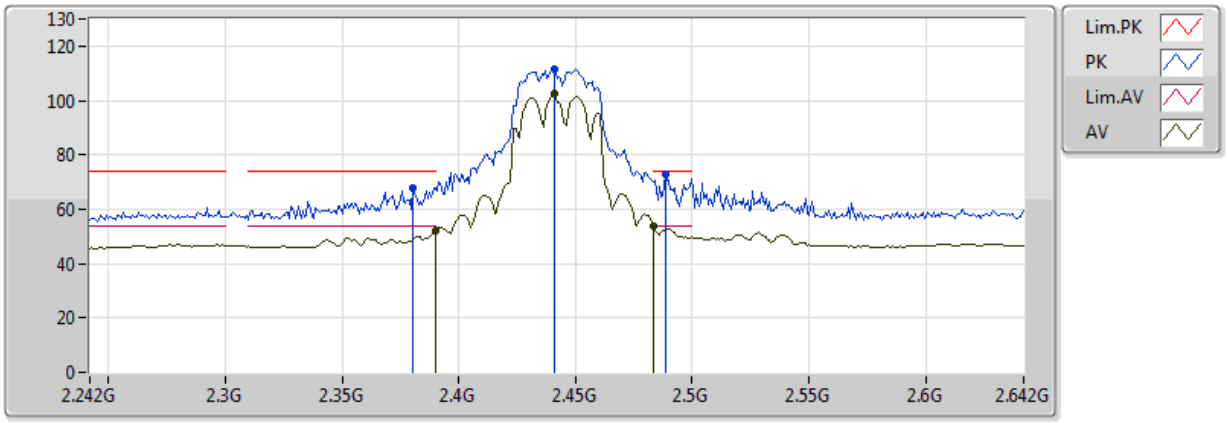


20170606
EUT Z_3TX
Setting 28
04-M-01
FSP(100142)

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	53.52	54.00	-0.48	32.67	3	H	214	1.52	-
AV	2.428G	99.59	Inf	-Inf	32.71	3	H	214	1.52	-
AV	2.484G	47.53	54.00	-6.47	32.78	3	H	214	1.52	-
PK	2.3848G	68.53	74.00	-5.47	32.67	3	H	214	1.52	-
PK	2.4288G	110.09	Inf	-Inf	32.71	3	H	214	1.52	-
PK	2.4984G	66.33	74.00	-7.67	32.80	3	H	214	1.52	-

802.11n HT40_Nss1,(MCS0)_3TX

2442MHz_TX

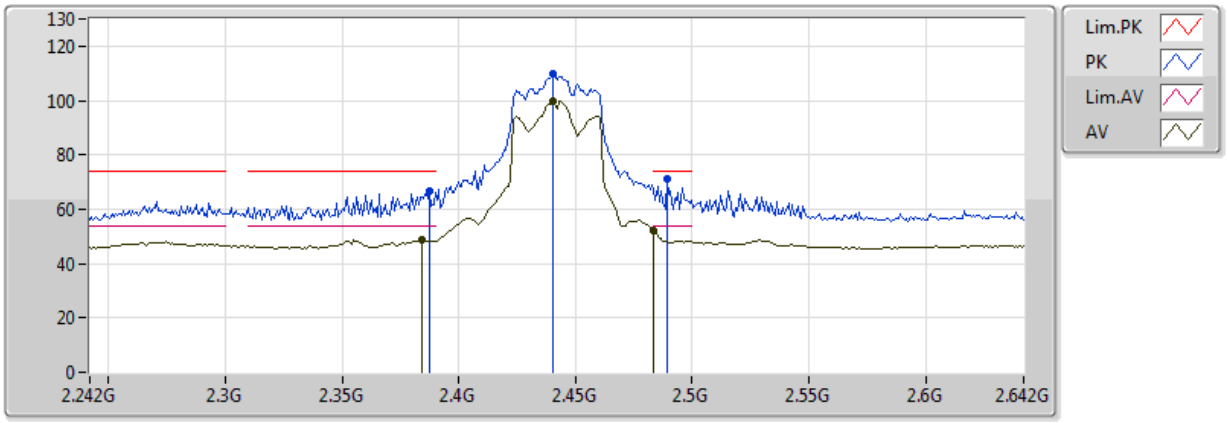


20170606
EUT Z_3TX
Setting 29
04-M-01
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.39G	51.92	54.00	-2.08	32.67	3	V	160	1.50	-
AV	2.4412G	102.28	Inf	-Inf	32.72	3	V	160	1.50	-
AV	2.4836G	53.93	54.00	-0.07	32.78	3	V	160	1.50	-
PK	2.3804G	67.93	74.00	-6.07	32.66	3	V	160	1.50	-
PK	2.4412G	111.77	Inf	-Inf	32.72	3	V	160	1.50	-
PK	2.4884G	72.91	74.00	-1.09	32.78	3	V	160	1.50	-

802.11n HT40_Nss1,(MCS0)_3TX

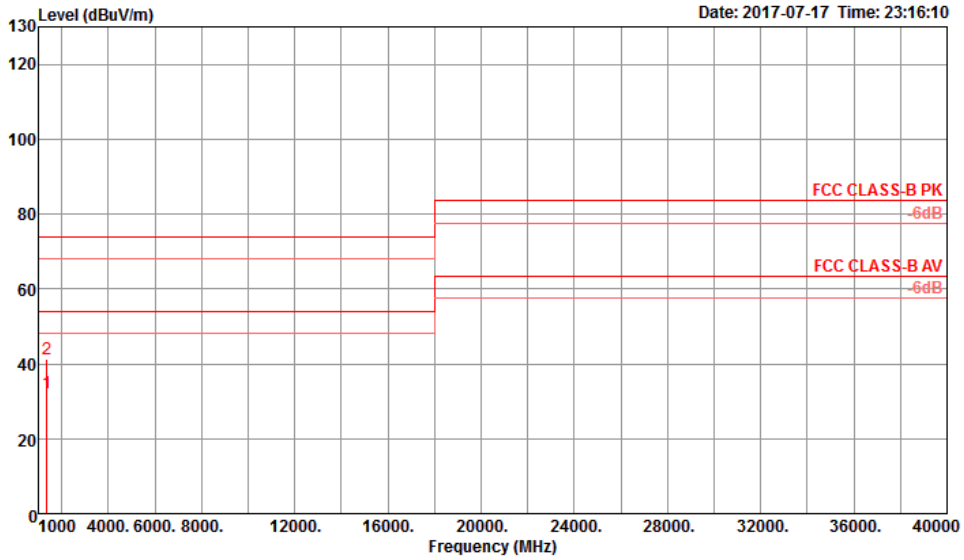
2442MHz_TX



20170606
EUT Z_3TX
Setting 29
04-M-01
FSP(100142)

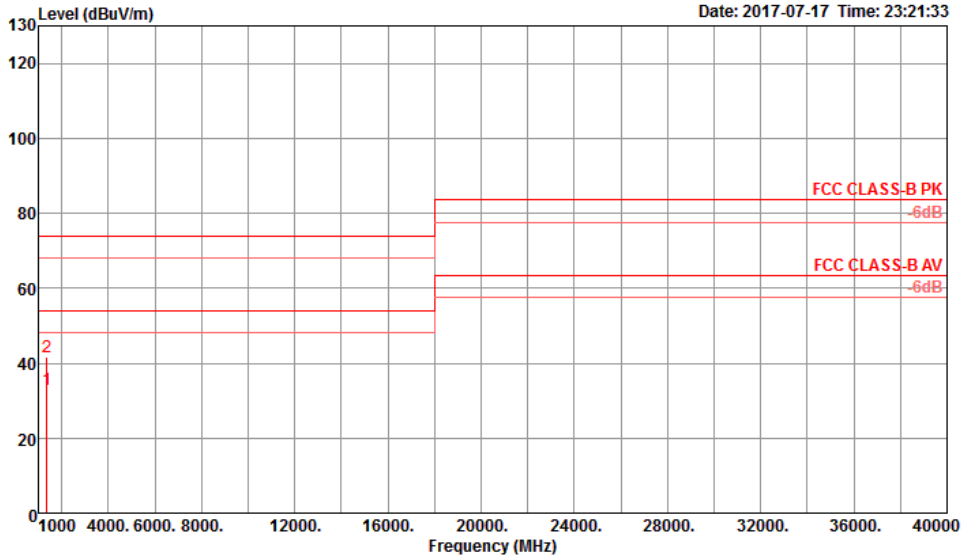
Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3844G	48.71	54.00	-5.29	32.67	3	H	218	1.50	-
AV	2.4404G	99.72	Inf	-Inf	32.72	3	H	218	1.50	-
AV	2.4836G	51.97	54.00	-2.03	32.78	3	H	218	1.50	-
PK	2.3876G	66.71	74.00	-7.29	32.67	3	H	218	1.50	-
PK	2.4404G	109.72	Inf	-Inf	32.72	3	H	218	1.50	-
PK	2.4892G	71.12	74.00	-2.88	32.79	3	H	218	1.50	-

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



	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	1375.02	32.30	54.00	-21.70	38.73	3.13	24.90	34.46	195	251	Average	HORIZONTAL
2	1375.28	41.37	74.00	-32.63	47.80	3.13	24.90	34.46	195	251	Peak	HORIZONTAL

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



	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	1375.00	32.95	54.00	-21.05	39.38	3.13	24.90	34.46	143	306	Average	VERTICAL
2	1375.09	41.72	74.00	-32.28	48.15	3.13	24.90	34.46	143	306	Peak	VERTICAL