



FCC Test Report

Equipment : 300Mbps Wi-Fi Range Extender,AV600 Powerline Edition
Brand Name : tp-link
Model No. : TL-WPA4220
FCC ID : TE7TLWPA4220V3
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 Aug. 22, 2017 and completely tested on Sep. 07, 2017. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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


Cliff Chang
SPORTON INTERNATIONAL INC.



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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



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FCC ID: TE7TLWPA4220V3

1 General Description

1.1 Information

1.1.1 RF General Information

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

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

Note:

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

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	-	-	Printed Antenna	N/A	2
2	-	-	Printed Antenna	N/A	2

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

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

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

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.973	0.119	8.418m	300
802.11g	0.861	0.65	1.397m	1k
802.11n HT20	0.841	0.752	1.309m	1k
802.11n HT40	0.729	1.373	617.5u	3k

1.1.4 EUT Operational Condition

EUT Power Type	From Internal Power Supply			
Beamforming Function	☐	With beamforming	☒	Without beamforming

1.1.5 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

1.2 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%	Sep. 01, 2017~Sep. 02, 2017
Radiated	03CH01-CB	Mars Lin / Welson Chen	22°C / 54%	Aug. 31, 2017~Sep. 07, 2017
AC Conduction	CO01-CB	Deven Huang	23C / 60%	Sep. 05, 2017

Test site Designation No. TW0006 with FCC.

Test site registered number IC 4086D with Industry Canada.

1.3 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 x10 ⁻⁸	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	Power Setting
802.11b_(1Mbps)_2TX	-
2412MHz	22
2437MHz	28
2462MHz	24
802.11g_(6Mbps)_2TX	-
2412MHz	1A
2437MHz	2A
2462MHz	1B
802.11n HT20_Nss1,(MCS0)_2TX	-
2412MHz	1A
2437MHz	2A
2462MHz	1B
802.11n HT40_Nss1,(MCS0)_2TX	-
2422MHz	15
2437MHz	1D
2452MHz	16

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 < 1GHz	CTX
The EUT was performed at Y axis and Z axis position for Radiated emission above 1GHz test, and the worst case was found at Y axis. So the measurement will follow this same test configuration.	
1	EUT in Y axis
Operating Mode > 1GHz	CTX
1	EUT in Z axis
2	EUT in Y axis
Mode 2 has been evaluated to be the worst case after evaluating. Consequently, measurement will follow this same test mode.	

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

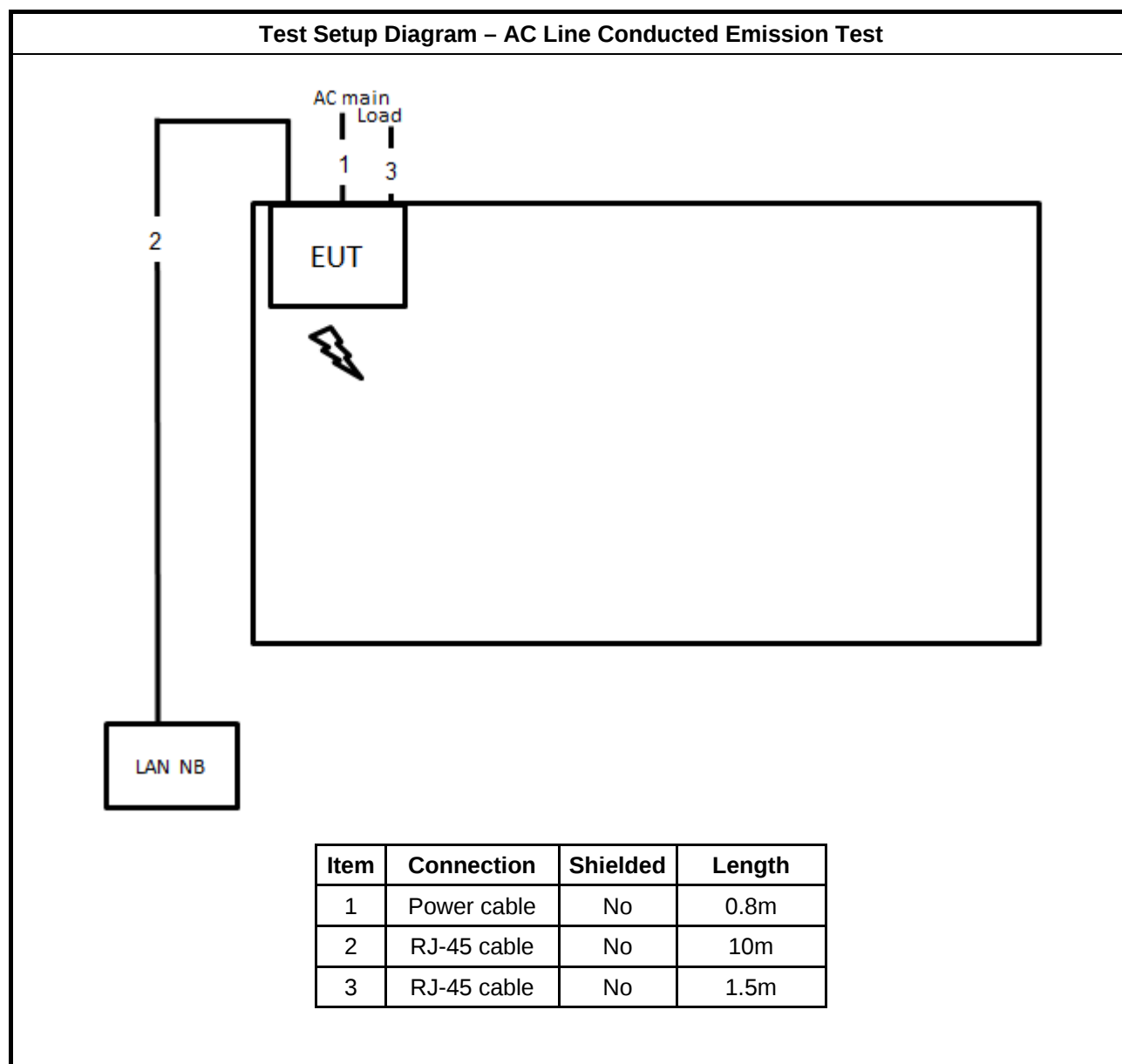
For Test Site No: CO01-CB

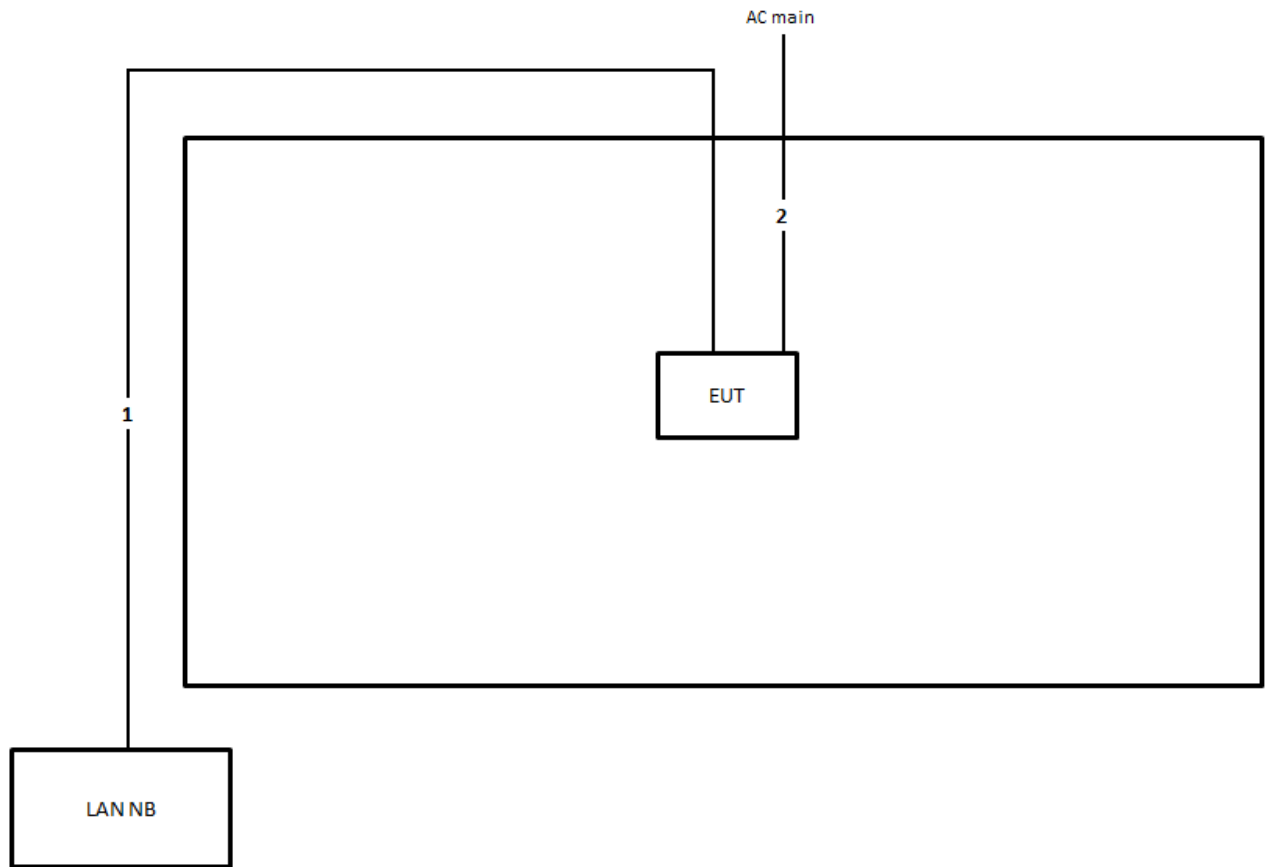
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB	DELL	E6430	DoC

For Test Site No: 03CH01-CB, 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 - Radiated Test


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

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.

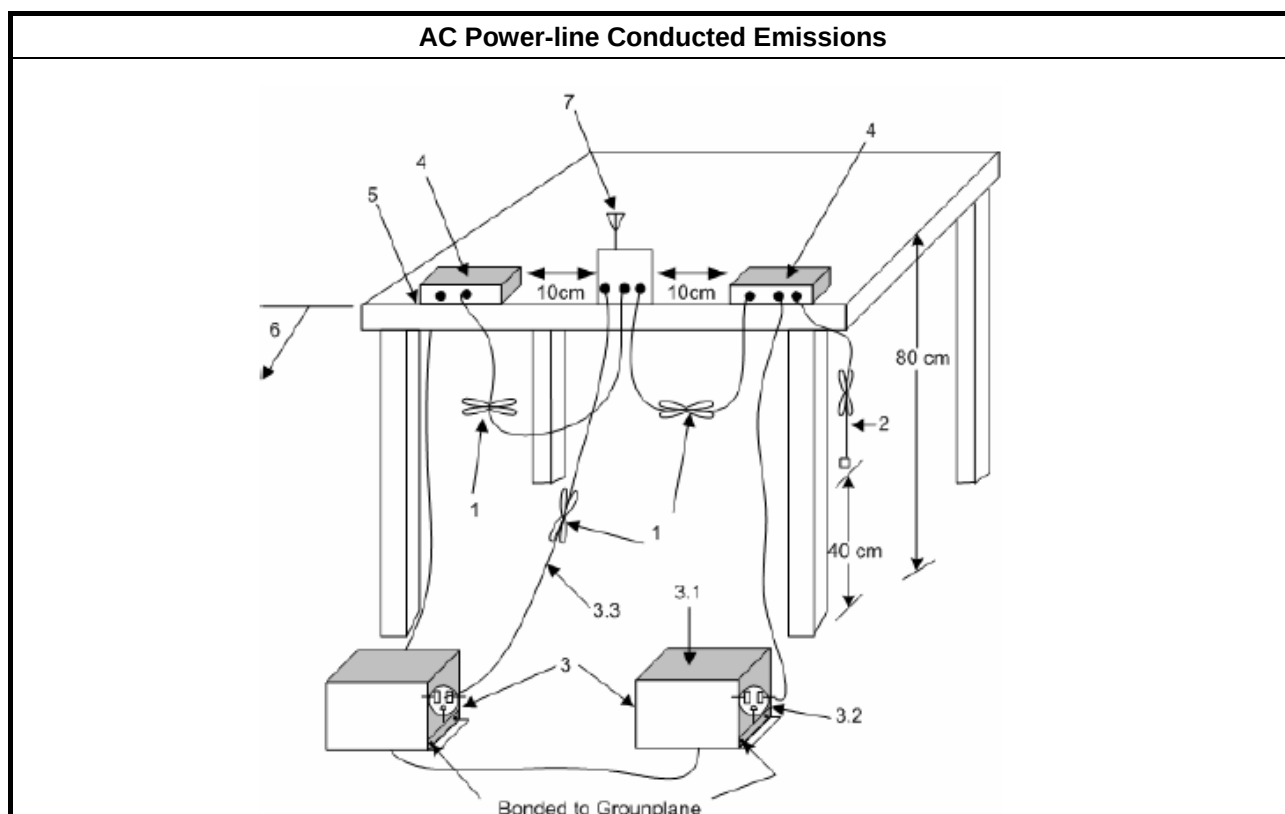
3.1.2 Measuring Instruments

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





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 $\geq$ 500 kHz.

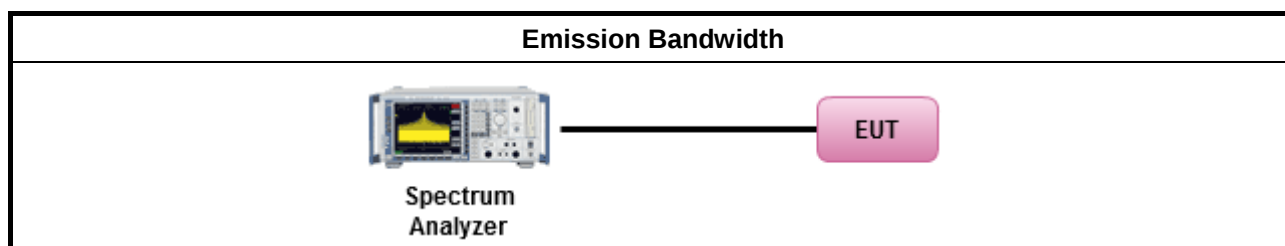
3.2.2 Measuring Instruments

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



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.	

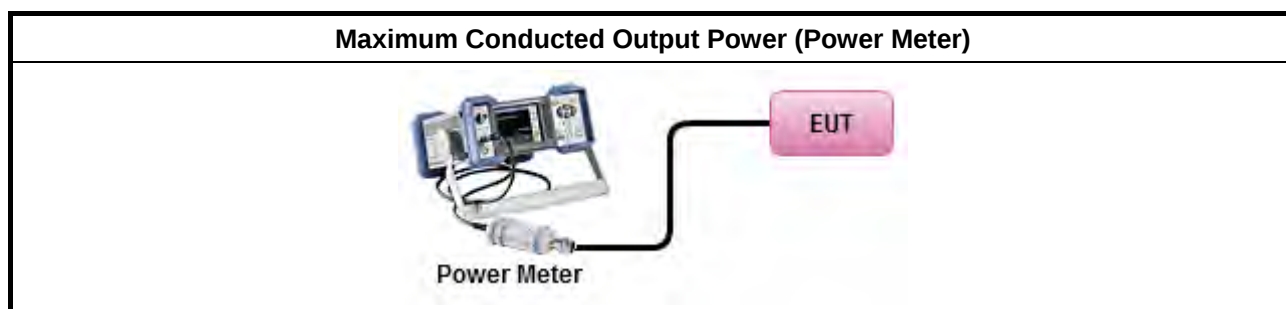
3.3.2 Measuring Instruments

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: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$	

3.3.4 Test Setup



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

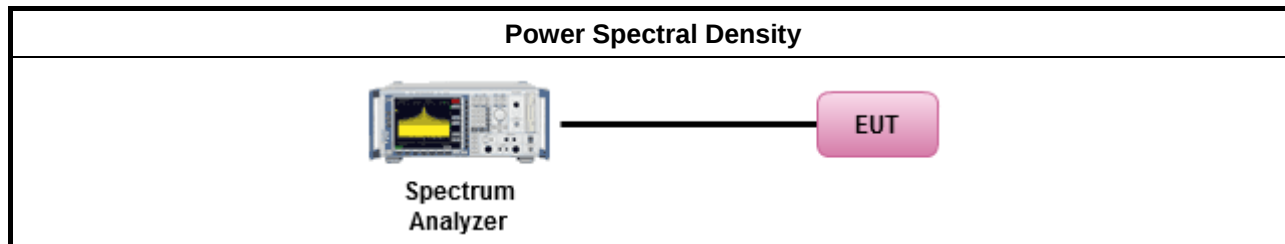
3.4.2 Measuring Instruments

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 $\geq 98\%$ 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



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.	

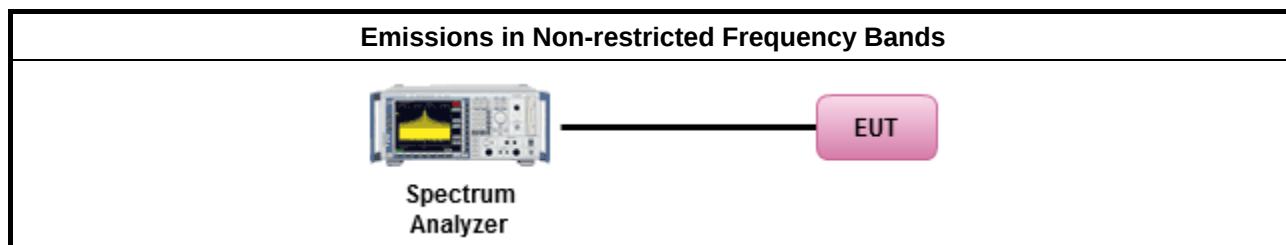
3.5.2 Measuring Instruments

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



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.

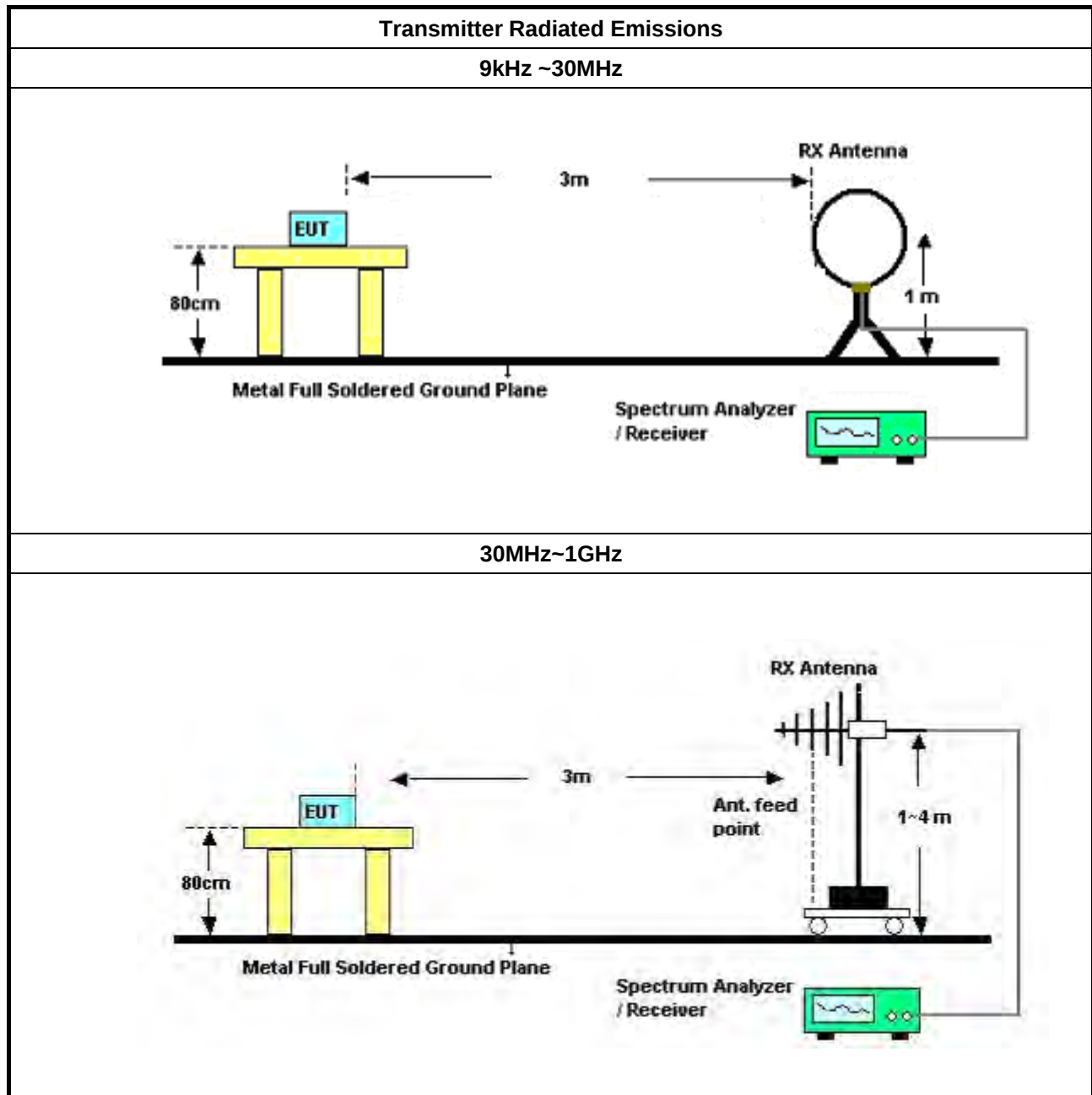
3.6.2 Measuring Instruments

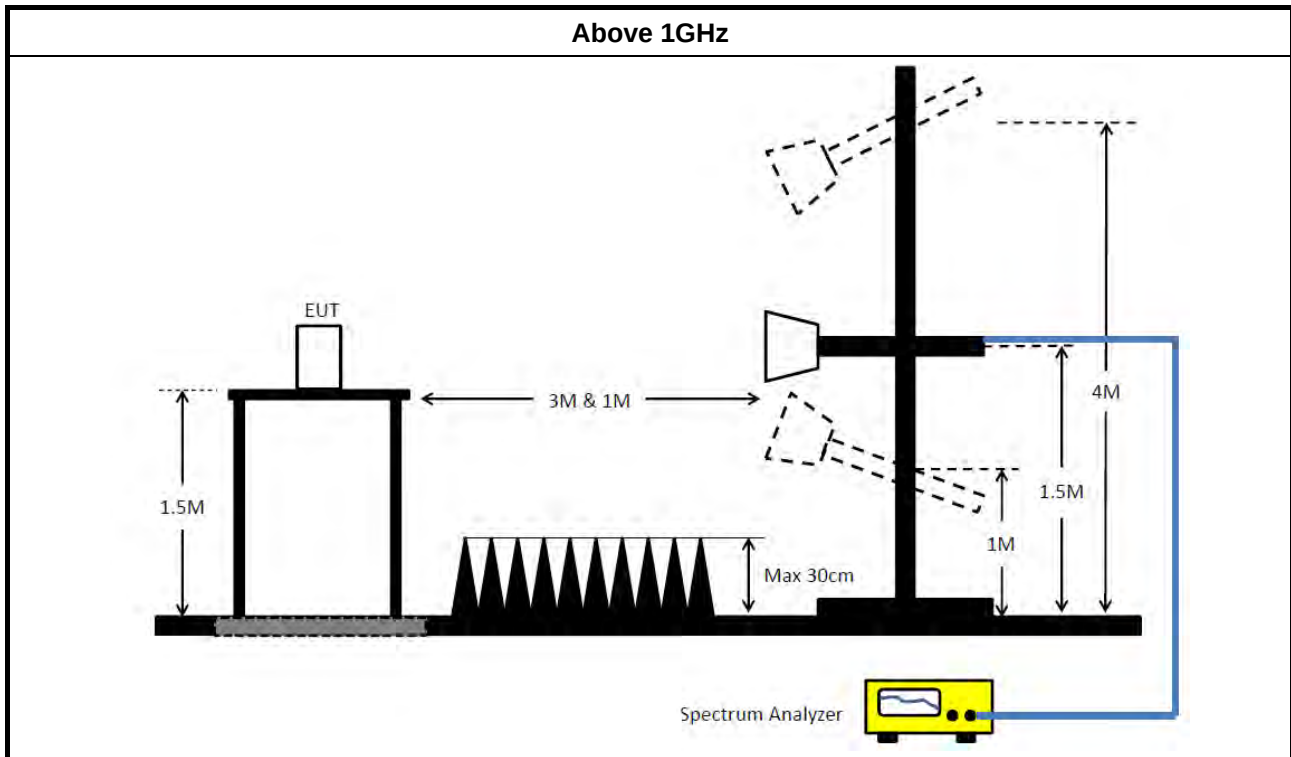
Refer a test equipment and calibration data table in this test report.

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 $\geq 98\%$)
	☐ 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 $\geq 1/T$).
	☐ Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW $\geq 1/T$, 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





3.6.5 Transmitter Radiated Unwanted Emissions (Below 30MHz)

The definitive verification that the radio spectrum below 30 MHz was investigated down to at least 25 MHz. Due to spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

3.6.6 Test Result of Transmitter Radiated Unwanted Emissions

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 23, 2017	Jan. 22, 2018	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 14, 2016	Dec. 13, 2017	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Dec. 21, 2016	Dec. 20, 2017	Conduction (CO01-CB)
COND Cable	Woken	Cable	01	150kHz ~ 30MHz	May 23, 2017	May 22, 2018	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2016*	Mar. 15, 2018*	Radiation (03CH01-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Aug. 30, 2017	Aug. 29, 2018	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 10, 2016	Nov. 09, 2017	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 05, 2017	Jul. 04, 2018	Radiation (03CH01-CB)
Pre-Amplifier	EMCI	EMC330N	980332	20MHz ~ 3GHz	May 02, 2017	May 01, 2018	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 16, 2017	Jan. 15, 2018	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Nov. 22, 2016	Nov. 21, 2017	Radiation (03CH01-CB)
EMI Test	R&S	ESCS	100355	9kHz ~ 2.75GHz	May 06, 2017	May 05, 2018	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-16+17	N/A	30 MHz ~ 1 GHz	Oct. 24, 2016	Oct. 23, 2017	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Oct. 24, 2016	Oct. 23, 2017	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16+17	N/A	1 GHz ~ 18 GHz	Oct. 24, 2016	Oct. 23, 2017	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#1	N/A	18GHz ~ 40 GHz	Oct. 24, 2016	Oct. 23, 2017	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Oct. 24, 2016	Oct. 23, 2017	Radiation (03CH01-CB)
Test Software	Audix	E3	6.2009-10-7	N/A	N/A	N/A	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 26, 2016	Dec. 25, 2017	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-6	1 GHz ~ 26.5 GHz	Oct. 24, 2016	Oct. 23, 2017	Conducted (TH01-CB)



FCC Test Report

Report No. : FR782206

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-7	1 GHz –26.5 GHz	Oct. 24, 2016	Oct. 23, 2017	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-8	1 GHz –26.5 GHz	Oct. 24, 2016	Oct. 23, 2017	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-9	1 GHz –26.5 GHz	Oct. 24, 2016	Oct. 23, 2017	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 24, 2016	Oct. 23, 2017	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 22, 2016	Nov. 21, 2017	Conducted (TH01-CB)

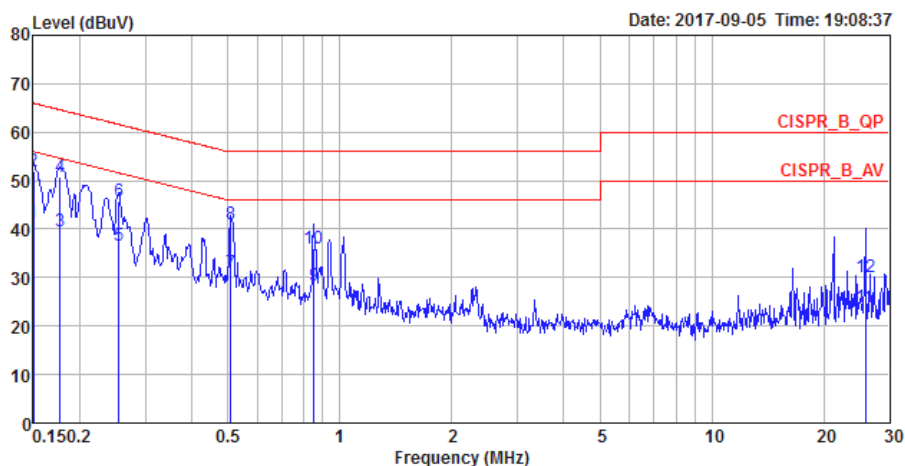
Note: Calibration Interval of instruments listed above is one year.

“*” Calibration Interval of instruments listed above is two years.

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

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Neutral
Operating Function	CTX		



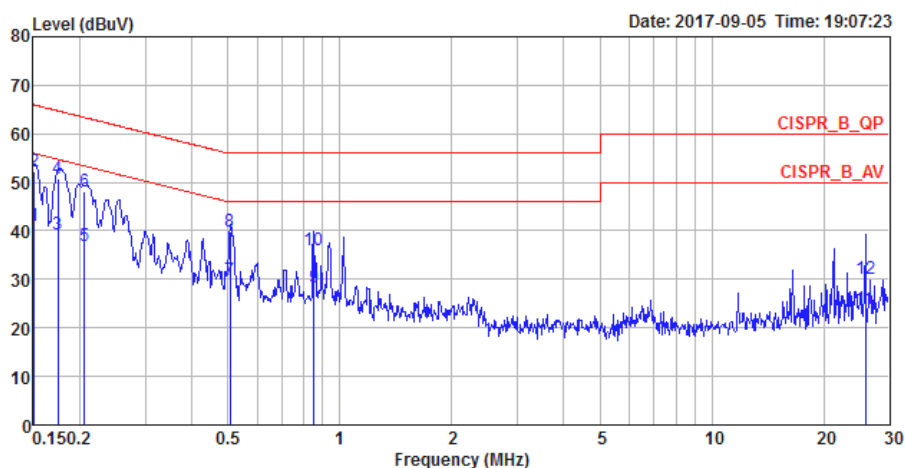
	Freq	Level	Over	Limit	Read	LISN	Cable	Remark	Pol/Phase
	MHz	dBuV	Limit	Line	Level	Factor	Loss		
			dB	dBuV	dBuV	dB	dB		
1	0.1500	41.20	-14.80	56.00	30.94	10.10	0.16	Average	NEUTRAL
2	0.1500	51.94	-14.06	66.00	41.68	10.10	0.16	QP	NEUTRAL
3	0.1768	39.53	-15.11	54.64	29.38	10.01	0.14	Average	NEUTRAL
4	0.1768	50.87	-13.77	64.64	40.72	10.01	0.14	QP	NEUTRAL
5	0.2548	36.67	-14.93	51.60	26.50	10.08	0.09	Average	NEUTRAL
6	0.2548	45.78	-15.82	61.60	35.61	10.08	0.09	QP	NEUTRAL
7	0.5101	30.90	-15.10	46.00	20.62	10.22	0.06	Average	NEUTRAL
8	0.5101	40.99	-15.01	56.00	30.71	10.22	0.06	QP	NEUTRAL
9	0.8528	28.35	-17.65	46.00	18.09	10.10	0.16	Average	NEUTRAL
10	0.8528	36.04	-19.96	56.00	25.78	10.10	0.16	QP	NEUTRAL
11	25.8638	23.91	-26.09	50.00	13.17	10.48	0.26	Average	NEUTRAL
12	25.8638	30.26	-29.74	60.00	19.52	10.48	0.26	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	Read	LISN	Cable	Remark	Pol/Phase
	MHz	dBuV	Limit	Line	Level	Factor	Loss		
			dB	dBuV	dBuV	dB	dB		
1	0.1508	41.06	-14.90	55.96	30.90	10.00	0.16	Average	LINE
2	0.1508	52.27	-13.69	65.96	42.11	10.00	0.16	QP	LINE
3	0.1749	39.15	-15.57	54.72	29.10	9.91	0.14	Average	LINE
4	0.1749	50.72	-14.00	64.72	40.67	9.91	0.14	QP	LINE
5	0.2061	37.01	-16.35	53.36	26.97	9.92	0.12	Average	LINE
6	0.2061	48.03	-15.33	63.36	37.99	9.92	0.12	QP	LINE
7	0.5074	29.91	-16.09	46.00	19.90	9.95	0.06	Average	LINE
8	0.5074	39.80	-16.20	56.00	29.79	9.95	0.06	QP	LINE
9	0.8528	28.43	-17.57	46.00	18.31	9.96	0.16	Average	LINE
10	0.8528	36.13	-19.87	56.00	26.01	9.96	0.16	QP	LINE
11	25.8638	23.81	-26.19	50.00	13.10	10.45	0.26	Average	LINE
12	25.8638	30.24	-29.76	60.00	19.53	10.45	0.26	QP	LINE

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
802.11b_(1Mbps)_2TX	-	-	-	-	-
2.4-2.4835GHz	10.075M	19.515M	19M5G1D	10.025M	14.943M
802.11g_(6Mbps)_2TX	-	-	-	-	-
2.4-2.4835GHz	15.025M	26.162M	26M2D1D	14.425M	16.317M
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-
2.4-2.4835GHz	16.025M	27.186M	27M2D1D	13.85M	17.541M
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-
2.4-2.4835GHz	35.05M	36.232M	36M2D1D	32.6M	35.832M

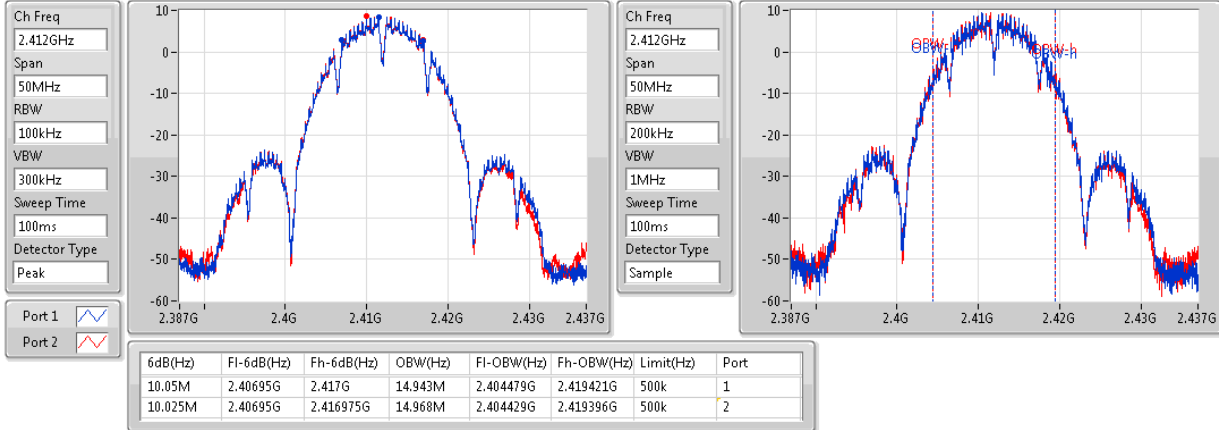
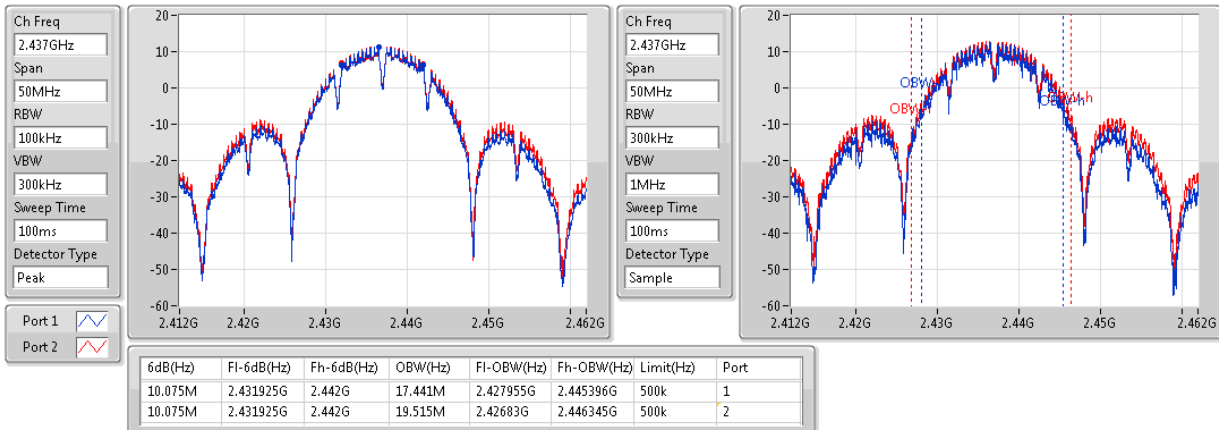
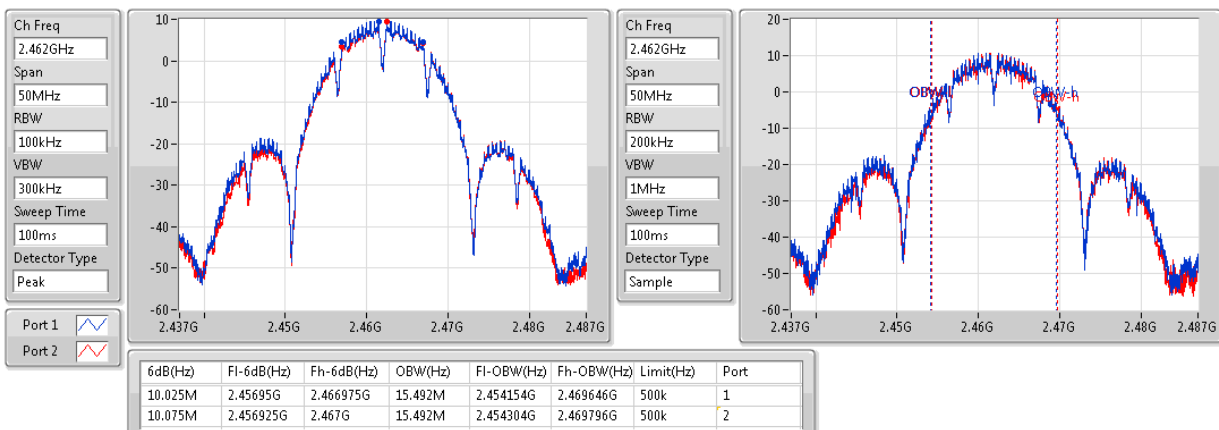
Max-N dB = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;

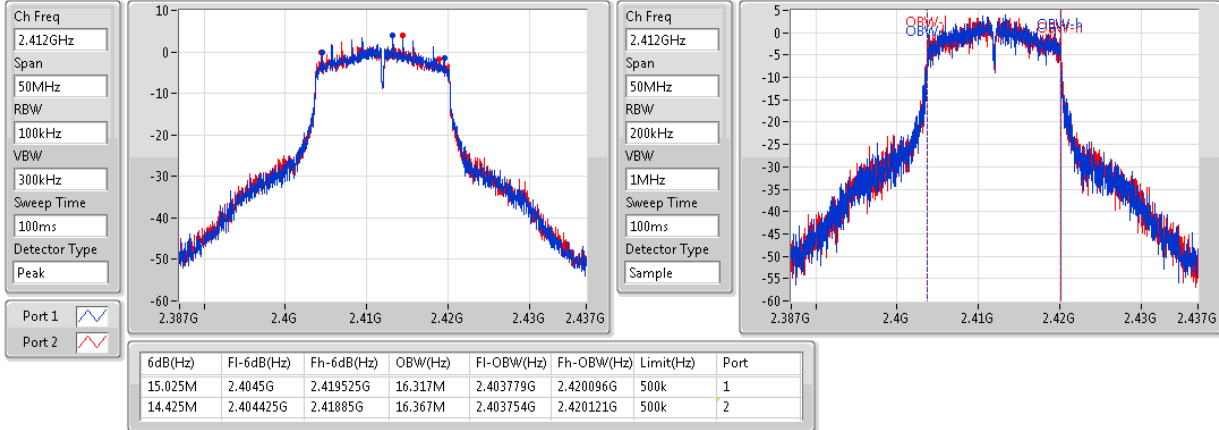
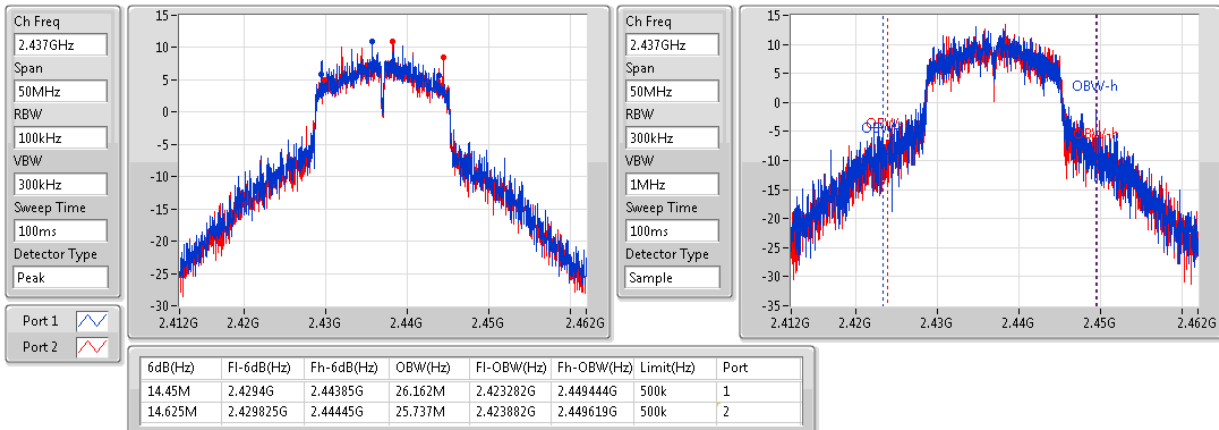
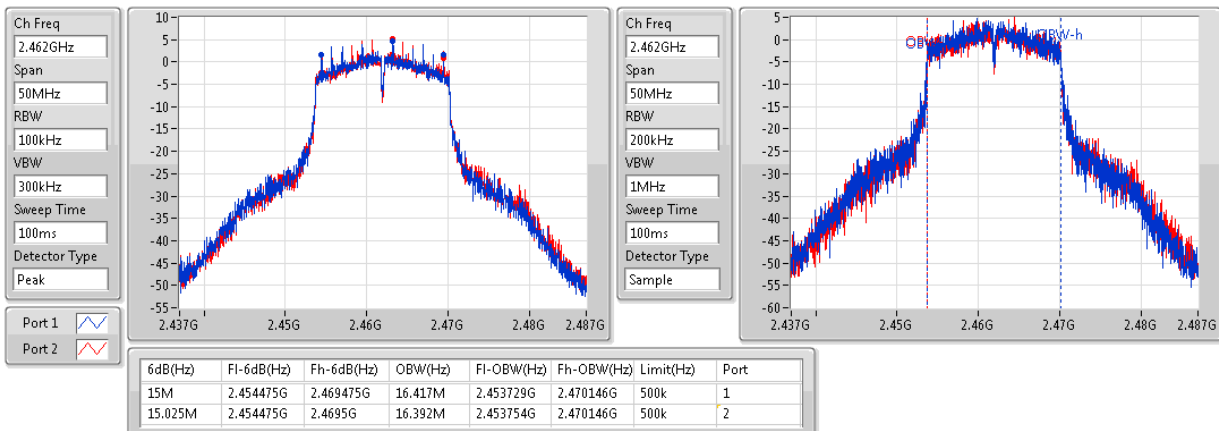
Min-N dB = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

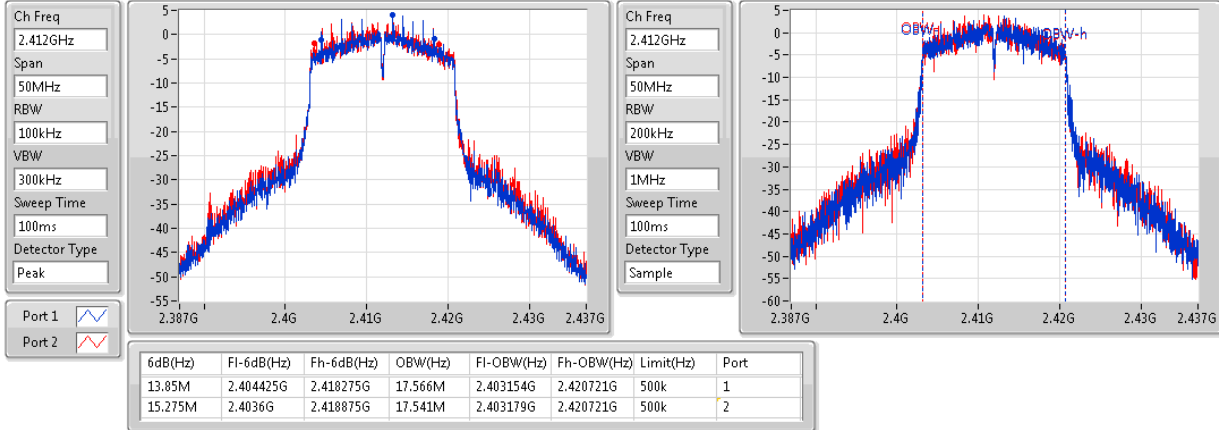
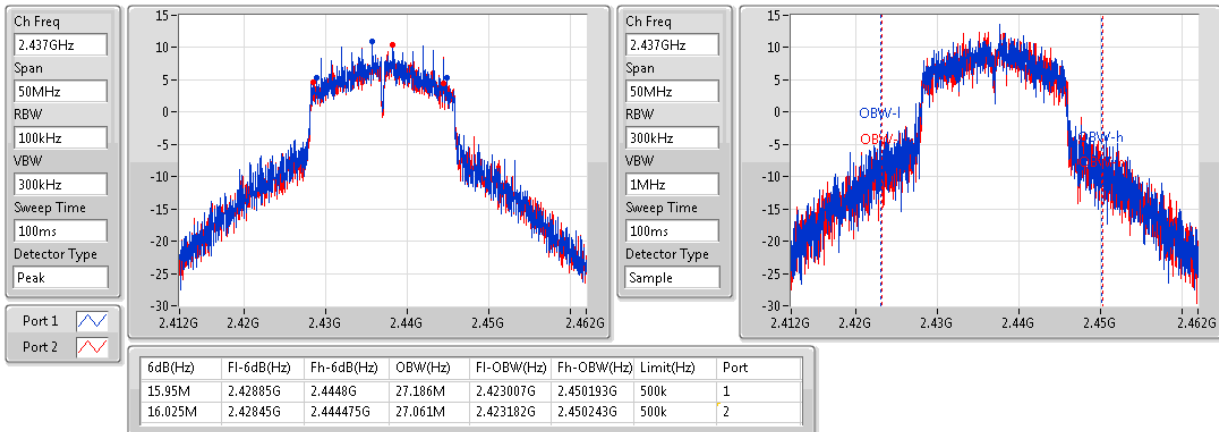
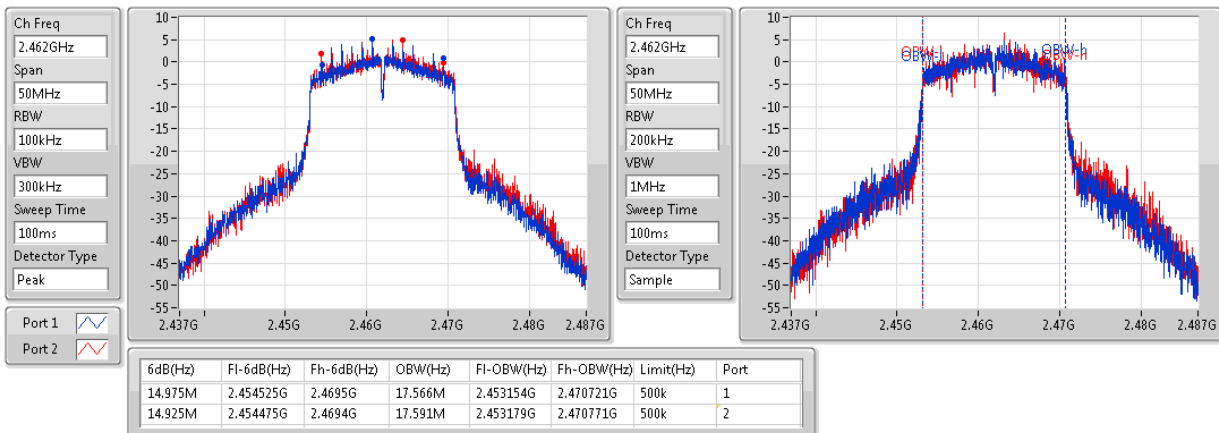
Result

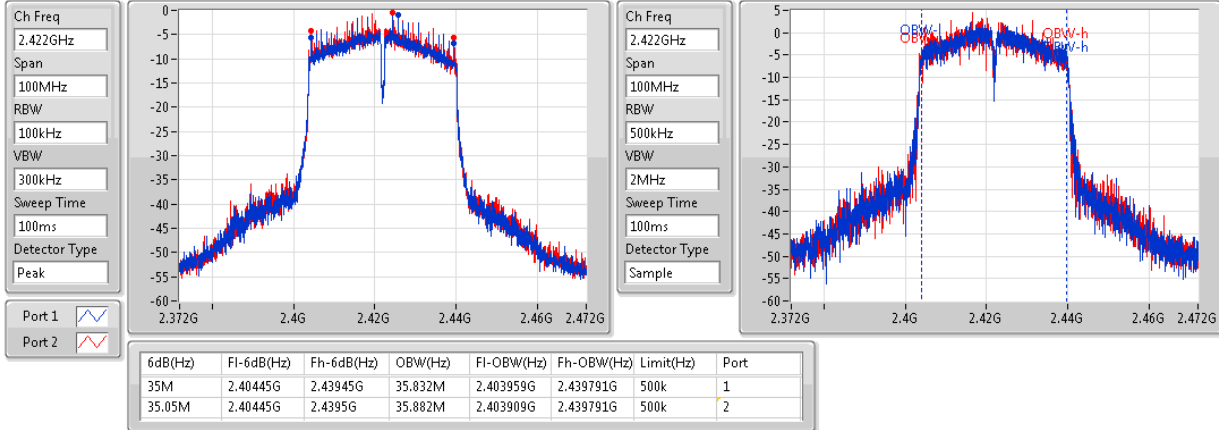
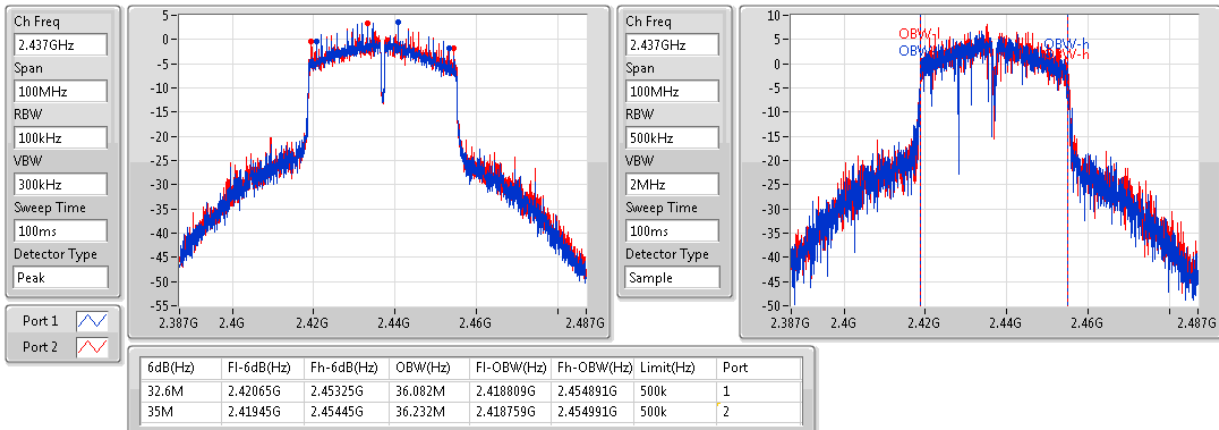
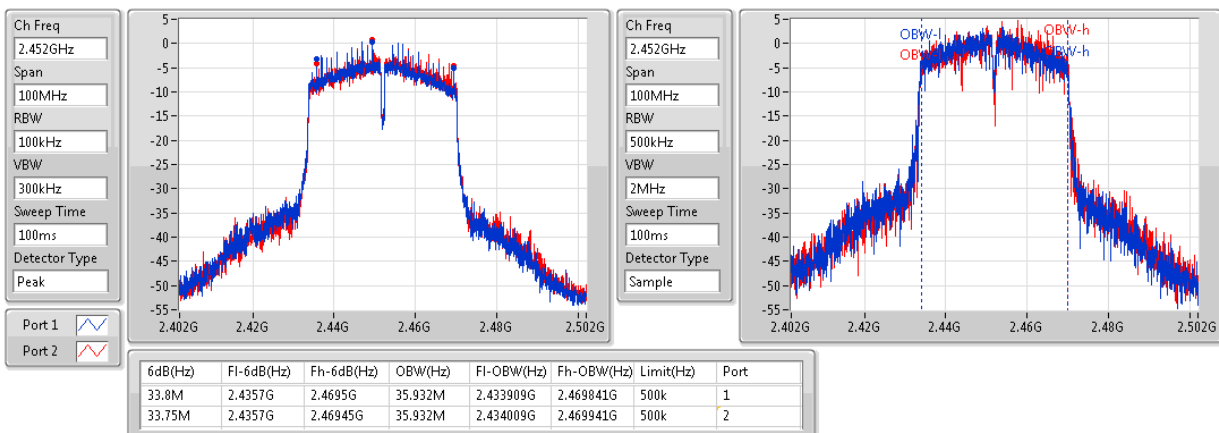
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	10.05M	14.943M	10.025M	14.968M
2437MHz	Pass	500k	10.075M	17.441M	10.075M	19.515M
2462MHz	Pass	500k	10.025M	15.492M	10.075M	15.492M
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	15.025M	16.317M	14.425M	16.367M
2437MHz	Pass	500k	14.45M	26.162M	14.625M	25.737M
2462MHz	Pass	500k	15M	16.417M	15.025M	16.392M
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	13.85M	17.566M	15.275M	17.541M
2437MHz	Pass	500k	15.95M	27.186M	16.025M	27.061M
2462MHz	Pass	500k	14.975M	17.566M	14.925M	17.591M
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	35M	35.832M	35.05M	35.882M
2437MHz	Pass	500k	32.6M	36.082M	35M	36.232M
2452MHz	Pass	500k	33.8M	35.932M	33.75M	35.932M

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

802.11b_(1Mbps)_2TX
EBW
2412MHz

802.11b_(1Mbps)_2TX
EBW
2437MHz

802.11b_(1Mbps)_2TX
EBW
2462MHz


802.11g_(6Mbps)_2TX
EBW
2412MHz

802.11g_(6Mbps)_2TX
EBW
2437MHz

802.11g_(6Mbps)_2TX
EBW
2462MHz


802.11n HT20_Nss1,(MCS0)_2TX
EBW
2412MHz

802.11n HT20_Nss1,(MCS0)_2TX
EBW
2437MHz

802.11n HT20_Nss1,(MCS0)_2TX
EBW
2462MHz


802.11n HT40_Nss1,(MCS0)_2TX
EBW
2422MHz

802.11n HT40_Nss1,(MCS0)_2TX
EBW
2437MHz

802.11n HT40_Nss1,(MCS0)_2TX
EBW
2452MHz


Summary

Mode	Total Power (dBm)	Total Power (W)
802.11b_(1Mbps)_2TX	-	-
2.4-2.4835GHz	25.66	0.36813
802.11g_(6Mbps)_2TX	-	-
2.4-2.4835GHz	25.16	0.32810
802.11n HT20_Nss1,(MCS0)_2TX	-	-
2.4-2.4835GHz	25.11	0.32434
802.11n HT40_Nss1,(MCS0)_2TX	-	-
2.4-2.4835GHz	20.34	0.10814

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.00	19.46	19.41	22.45	30.00
2437MHz	Pass	2.00	22.44	22.85	25.66	30.00
2462MHz	Pass	2.00	20.77	20.61	23.70	30.00
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.00	15.46	15.48	18.48	30.00
2437MHz	Pass	2.00	22.33	21.97	25.16	30.00
2462MHz	Pass	2.00	16.03	16.12	19.08	30.00
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.00	15.16	15.41	18.30	30.00
2437MHz	Pass	2.00	22.18	22.01	25.11	30.00
2462MHz	Pass	2.00	16.05	16.21	19.14	30.00
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	2.00	12.97	13.05	16.02	30.00
2437MHz	Pass	2.00	17.31	17.35	20.34	30.00
2452MHz	Pass	2.00	13.97	14.04	17.02	30.00

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

Summary

Mode	PD (dBm/RBW)
802.11b_(1Mbps)_2TX	-
2.4-2.4835GHz	-3.68
802.11g_(6Mbps)_2TX	-
2.4-2.4835GHz	-3.44
802.11n HT20_Nss1,(MCS0)_2TX	-
2.4-2.4835GHz	-4.28
802.11n HT40_Nss1,(MCS0)_2TX	-
2.4-2.4835GHz	-10.85

RBW=3kHz.

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.01	-8.70	-6.79	-5.72	8.00
2437MHz	Pass	5.01	-5.40	-4.62	-3.68	8.00
2462MHz	Pass	5.01	-5.88	-7.00	-4.36	8.00
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.01	-13.06	-13.11	-10.70	8.00
2437MHz	Pass	5.01	-5.79	-5.63	-3.44	8.00
2462MHz	Pass	5.01	-11.54	-11.74	-9.81	8.00
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.01	-13.03	-11.11	-10.01	8.00
2437MHz	Pass	5.01	-5.73	-6.40	-4.28	8.00
2462MHz	Pass	5.01	-12.08	-11.74	-10.17	8.00
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	5.01	-18.04	-16.79	-14.87	8.00
2437MHz	Pass	5.01	-13.35	-12.99	-10.85	8.00
2452MHz	Pass	5.01	-16.82	-16.56	-14.06	8.00

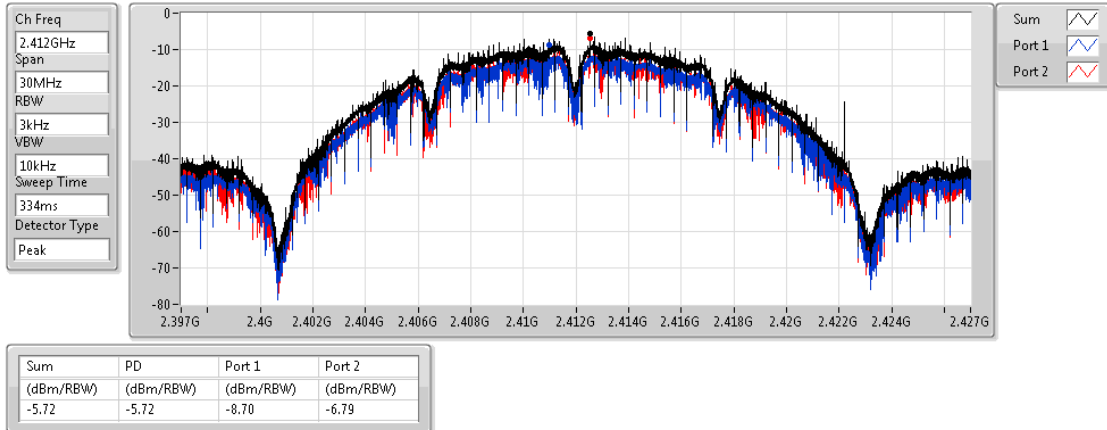
DG = Directional Gain; RBW=3kHz;

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

802.11b_(1Mbps)_2TX

PSD

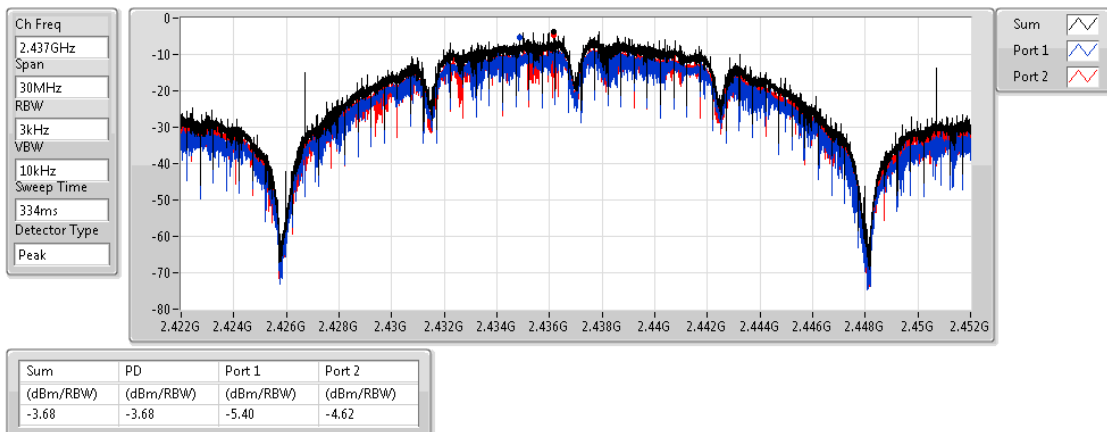
2412MHz



802.11b_(1Mbps)_2TX

PSD

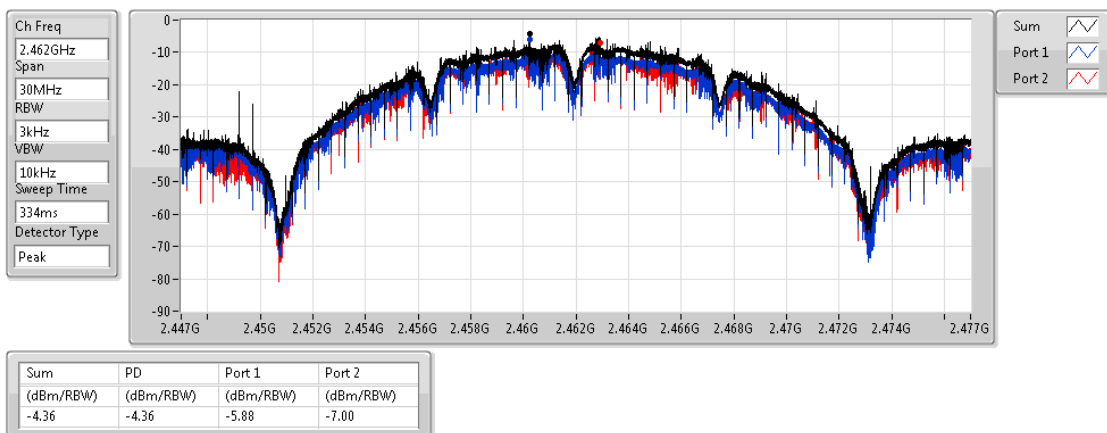
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802.11b_(1Mbps)_2TX

PSD

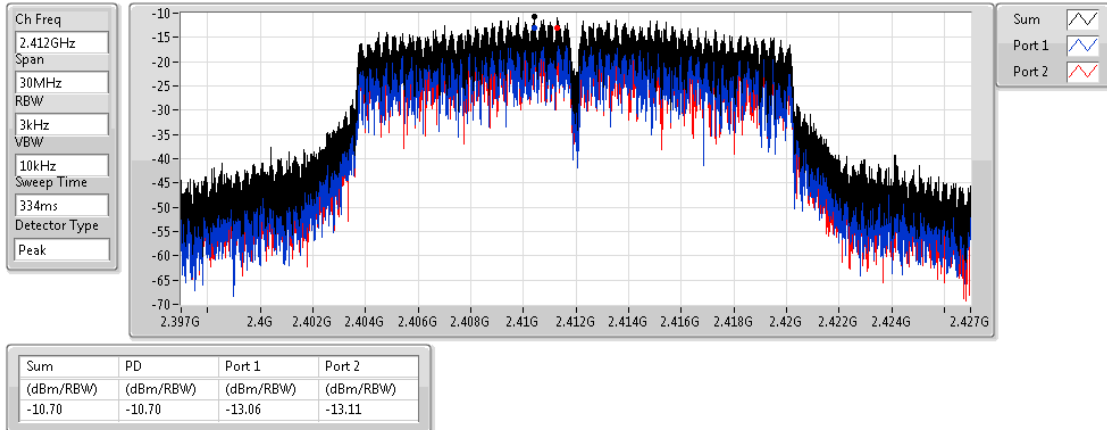
2462MHz



802.11g_(6Mbps)_2TX

PSD

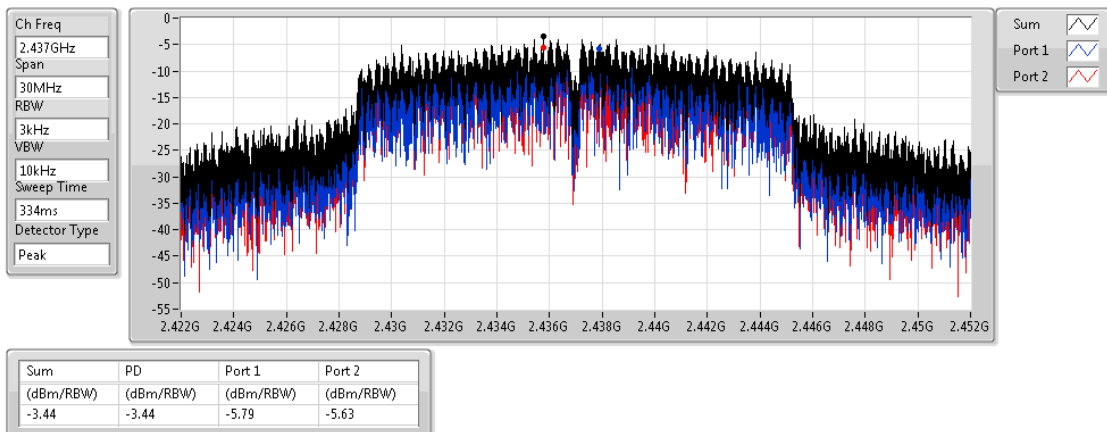
2412MHz



802.11g_(6Mbps)_2TX

PSD

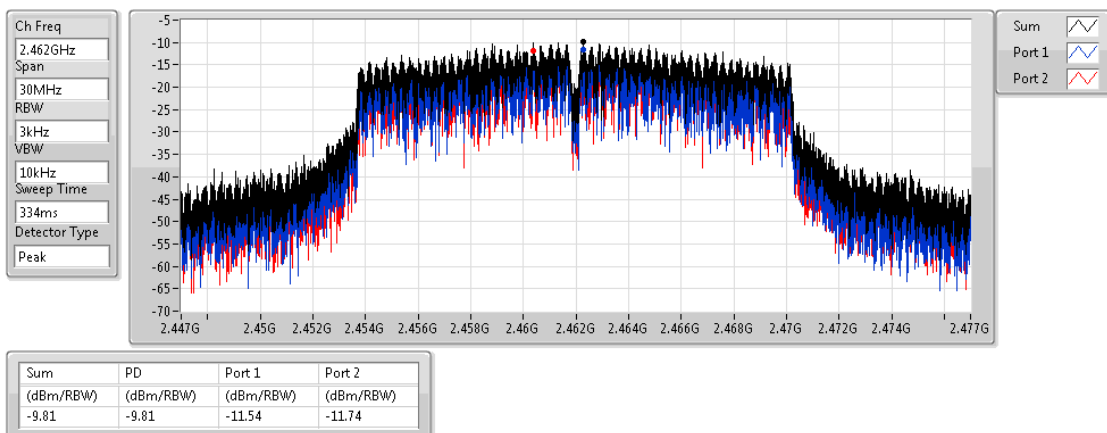
2437MHz



802.11g_(6Mbps)_2TX

PSD

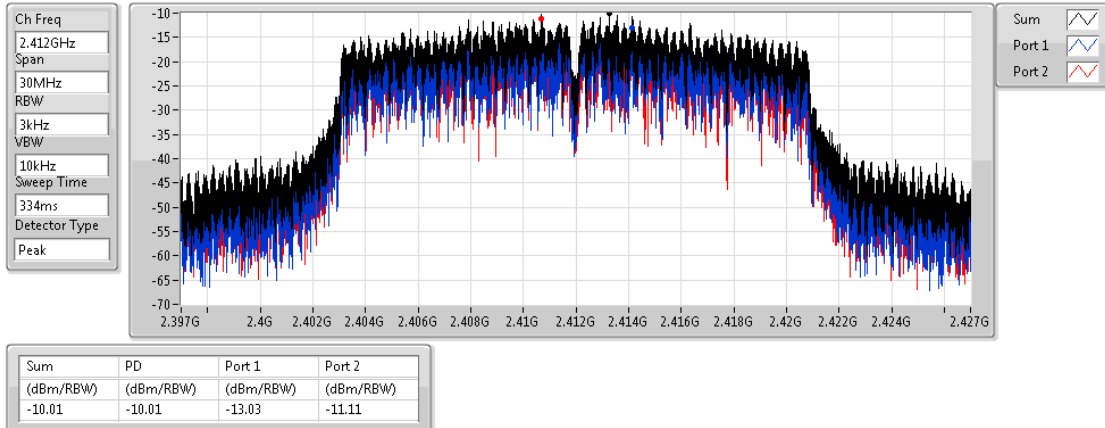
2462MHz



802.11n HT20_Nss1,(MCS0)_2TX

PSD

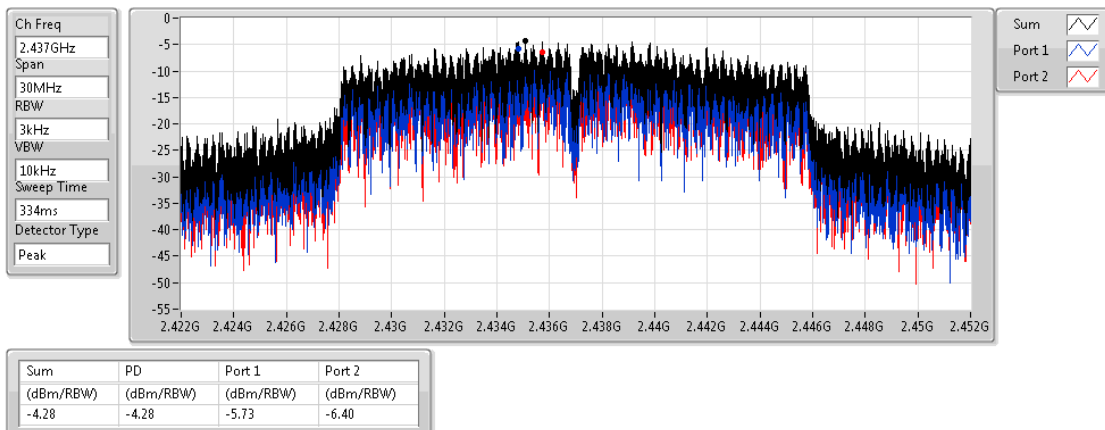
2412MHz



802.11n HT20_Nss1,(MCS0)_2TX

PSD

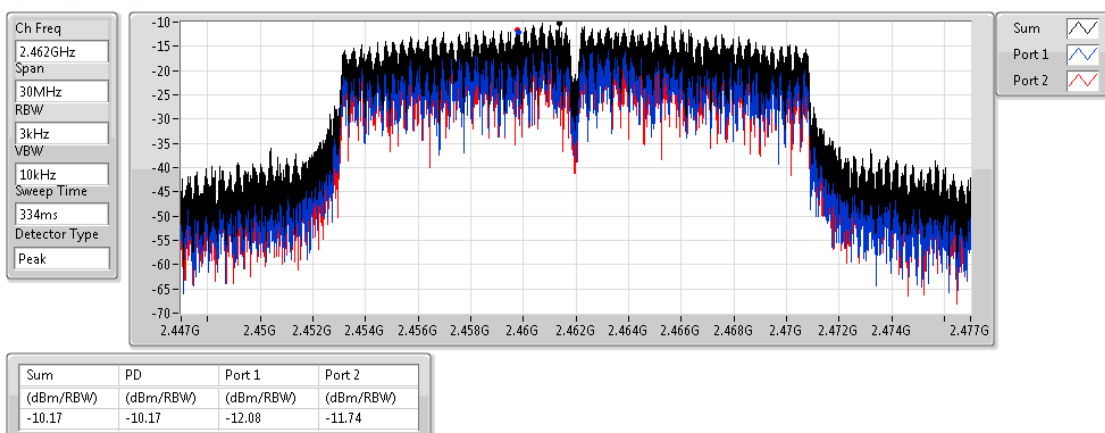
2437MHz



802.11n HT20_Nss1,(MCS0)_2TX

PSD

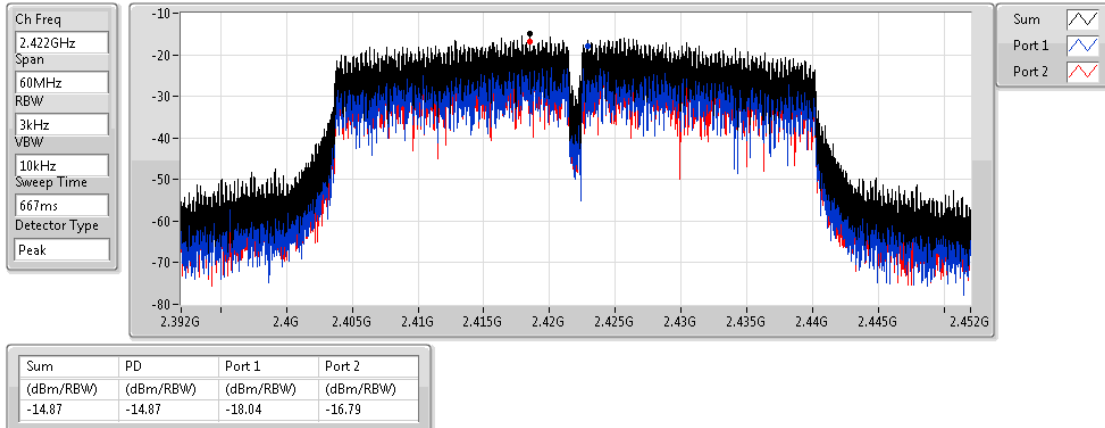
2462MHz



802.11n HT40_Nss1,(MCS0)_2TX

PSD

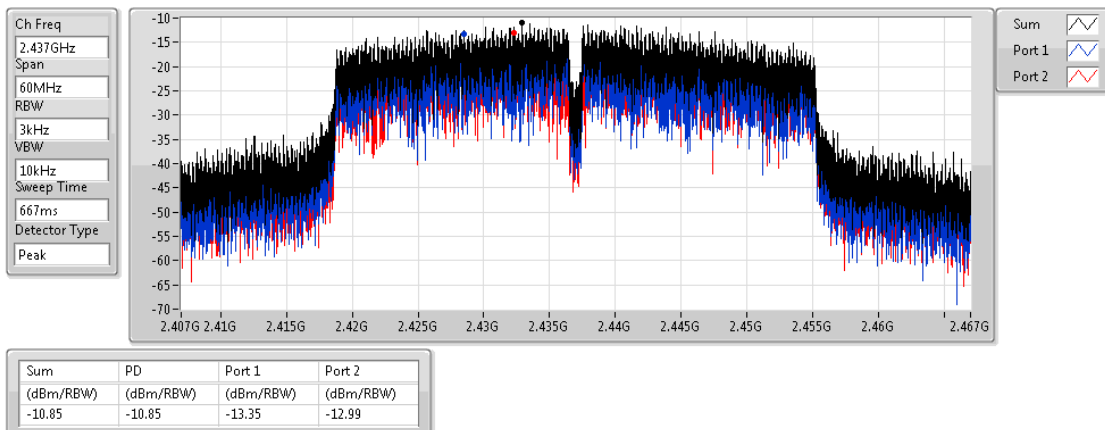
2422MHz



802.11n HT40_Nss1,(MCS0)_2TX

PSD

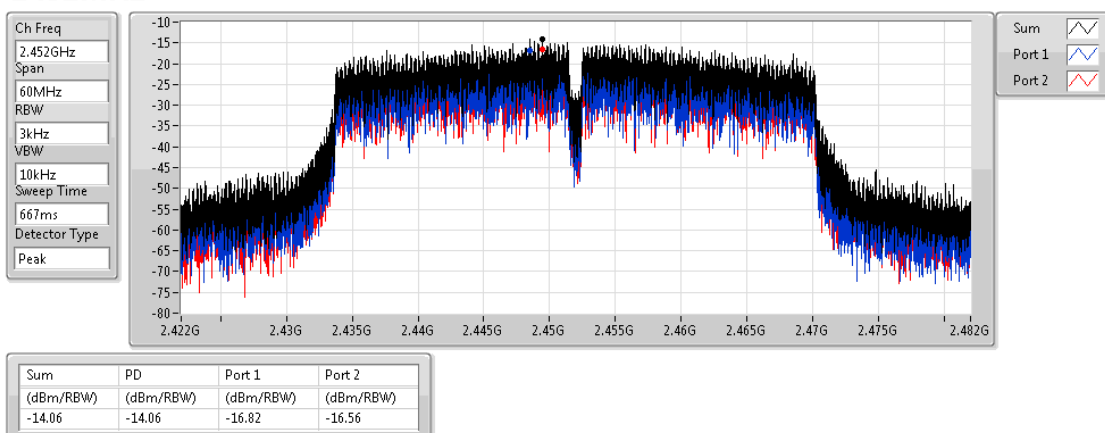
2437MHz



802.11n HT40_Nss1,(MCS0)_2TX

PSD

2452MHz



**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
802.11n HT40_Nss1(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	2.434402G	4.07	-25.93	2.307405G	-58.33	2.39968G	-28.52	2.48446G	-44.09	16.255374G	-52.48	1

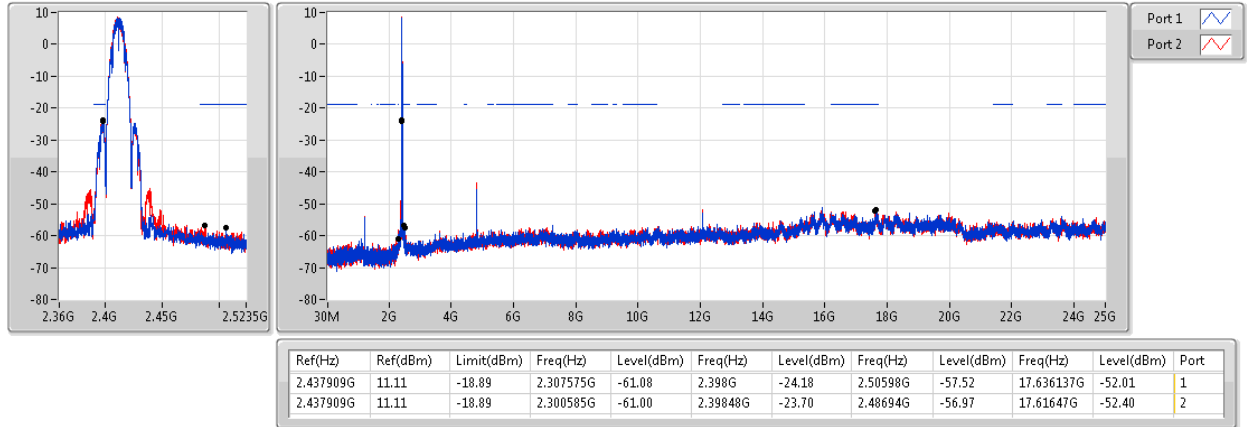
Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.437909G	11.11	-18.89	2.307575G	-61.08	2.398G	-24.18	2.50598G	-57.52	17.636137G	-52.01	1
2412MHz	Pass	2.437909G	11.11	-18.89	2.300585G	-61.00	2.39848G	-23.70	2.48694G	-56.97	17.61647G	-52.40	2
2437MHz	Pass	2.437909G	11.11	-18.89	2.30175G	-60.55	2.39952G	-38.86	2.48798G	-51.52	17.644565G	-52.52	1
2437MHz	Pass	2.437909G	11.11	-18.89	479.69M	-60.42	2.39952G	-34.50	2.48742G	-44.24	16.574122G	-52.55	2
2462MHz	Pass	2.437909G	11.11	-18.89	2.302915G	-59.37	2.39896G	-53.08	2.4879G	-46.80	16.251022G	-52.31	1
2462MHz	Pass	2.437909G	11.11	-18.89	479.69M	-60.69	2.398G	-52.08	2.49046G	-43.24	17.605232G	-52.16	2
802.11g_(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.435738G	11.08	-18.92	2.305245G	-56.14	2.39952G	-27.72	2.4859G	-53.93	16.343738G	-52.86	1
2412MHz	Pass	2.435738G	11.08	-18.92	2.30175G	-57.02	2.39992G	-24.81	2.5019G	-51.75	17.602422G	-52.57	2
2437MHz	Pass	2.435738G	11.08	-18.92	2.300585G	-57.03	2.39984G	-32.75	2.48398G	-43.58	16.534788G	-52.21	1
2437MHz	Pass	2.435738G	11.08	-18.92	2.30874G	-57.18	2.39992G	-33.34	2.48446G	-44.40	16.301595G	-52.65	2
2462MHz	Pass	2.435738G	11.08	-18.92	2.30641G	-57.92	2.39696G	-50.17	2.48358G	-42.89	16.245403G	-51.70	1
2462MHz	Pass	2.435738G	11.08	-18.92	479.69M	-56.70	2.3956G	-49.81	2.48382G	-41.75	16.565693G	-52.92	2
802.11n HT20_Nss1(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.438243G	10.16	-19.84	2.309905G	-57.40	2.39984G	-26.24	2.48462G	-54.36	16.20326G	-52.59	1
2412MHz	Pass	2.438243G	10.16	-19.84	2.309905G	-56.20	2.39976G	-24.51	2.5083G	-51.39	16.248213G	-52.59	2
2437MHz	Pass	2.438243G	10.16	-19.84	2.30641G	-56.42	2.39704G	-30.47	2.48782G	-41.78	16.256642G	-52.13	1
2437MHz	Pass	2.438243G	10.16	-19.84	2.30641G	-56.80	2.39608G	-32.76	2.48566G	-40.60	16.222927G	-52.38	2
2462MHz	Pass	2.438243G	10.16	-19.84	2.300585G	-57.67	2.39856G	-50.06	2.48438G	-40.20	16.270689G	-52.24	1
2462MHz	Pass	2.438243G	10.16	-19.84	479.69M	-58.40	2.3912G	-50.23	2.4839G	-38.30	16.225736G	-51.57	2
802.11n HT40_Nss1(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.434402G	4.07	-25.93	2.307405G	-58.72	2.3992G	-35.22	2.4851G	-55.80	16.648013G	-52.15	1
2422MHz	Pass	2.434402G	4.07	-25.93	2.307405G	-58.91	2.39616G	-34.82	2.49694G	-54.76	16.577899G	-52.11	2
2437MHz	Pass	2.434402G	4.07	-25.93	2.307405G	-58.33	2.39968G	-28.52	2.48446G	-44.09	16.255374G	-52.48	1
2437MHz	Pass	2.434402G	4.07	-25.93	2.30626G	-56.50	2.39952G	-29.68	2.48622G	-42.70	16.235742G	-51.94	2
2452MHz	Pass	2.434402G	4.07	-25.93	2.307405G	-57.48	2.3992G	-51.10	2.48446G	-38.52	16.619967G	-52.27	1
2452MHz	Pass	2.434402G	4.07	-25.93	479.985M	-56.72	2.39952G	-50.14	2.48446G	-37.52	17.604369G	-51.74	2

802.11b_(1Mbps)_2TX

CSE NdB

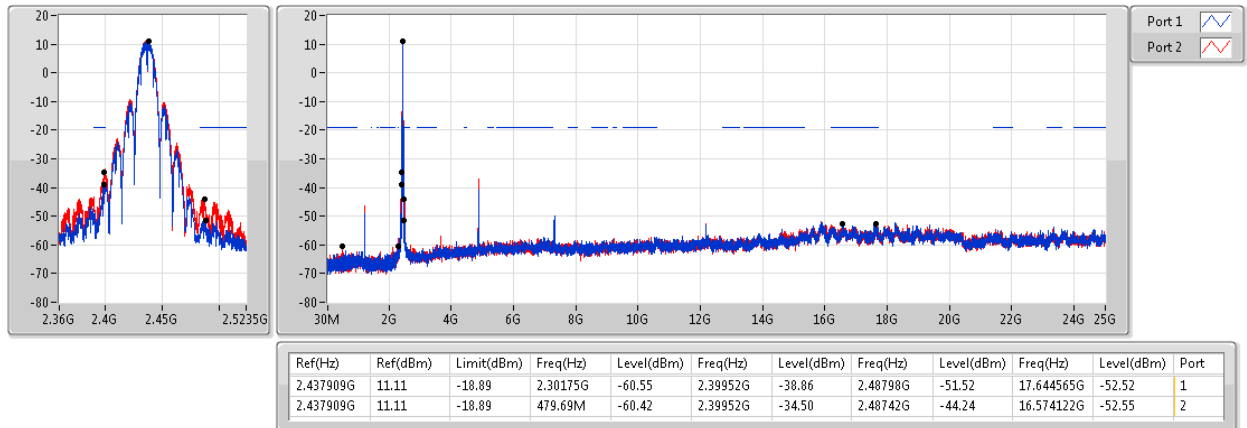
2412MHz



802.11b_(1Mbps)_2TX

CSE NdB

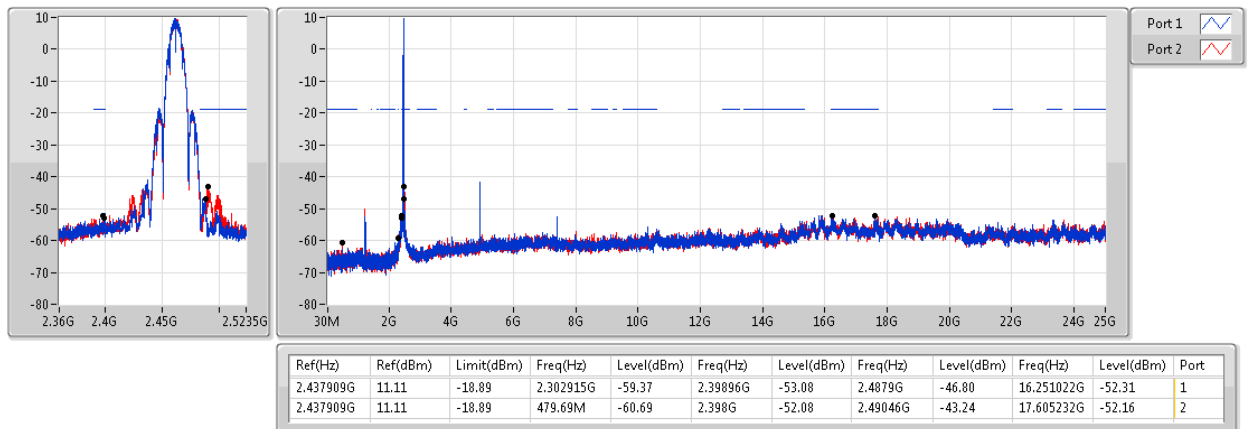
2437MHz



802.11b_(1Mbps)_2TX

CSE NdB

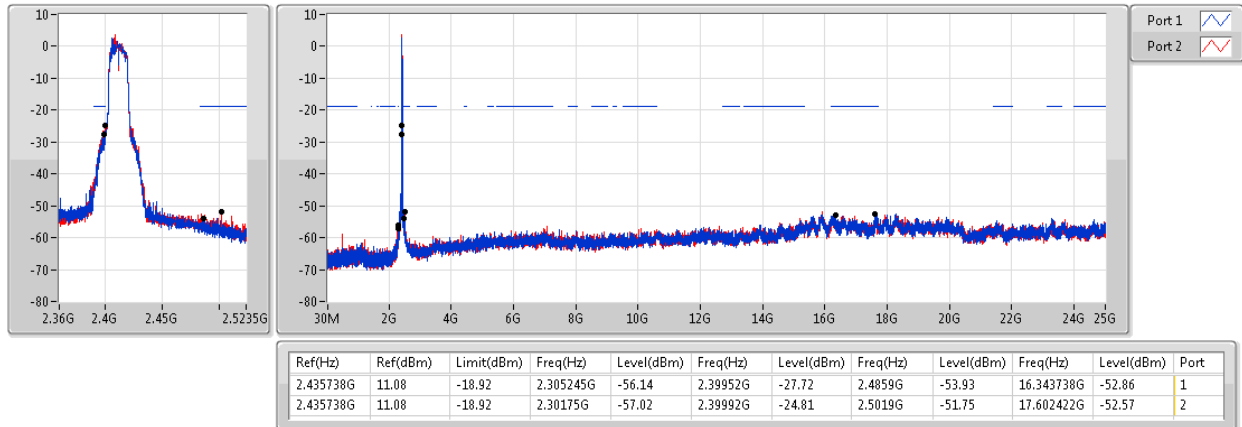
2462MHz



802.11g_(6Mbps)_2TX

CSE NdB

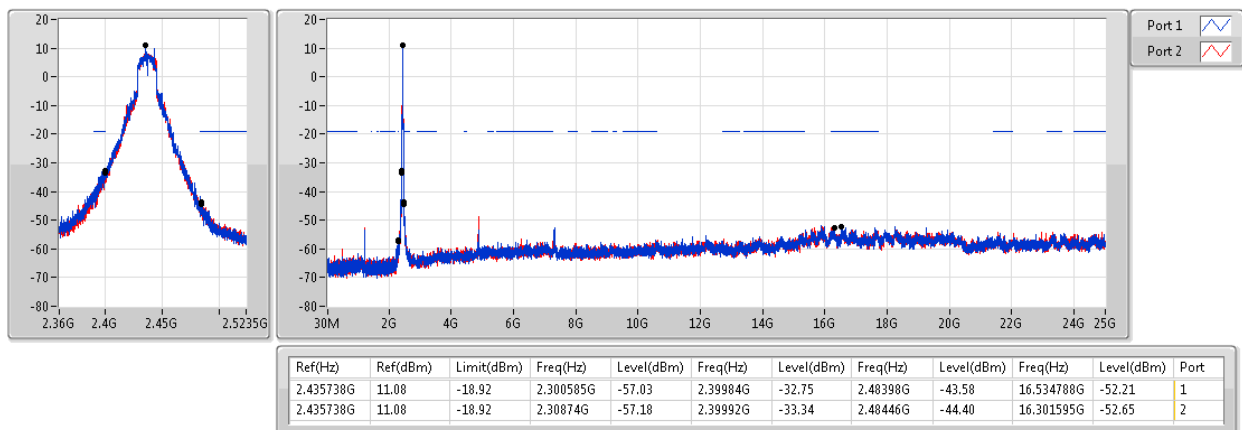
2412MHz



802.11g_(6Mbps)_2TX

CSE NdB

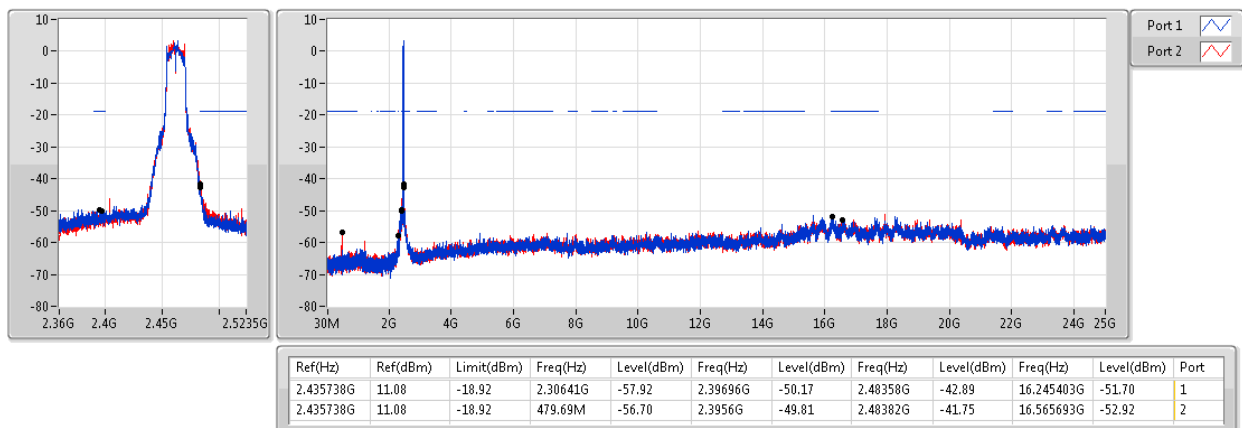
2437MHz



802.11g_(6Mbps)_2TX

CSE NdB

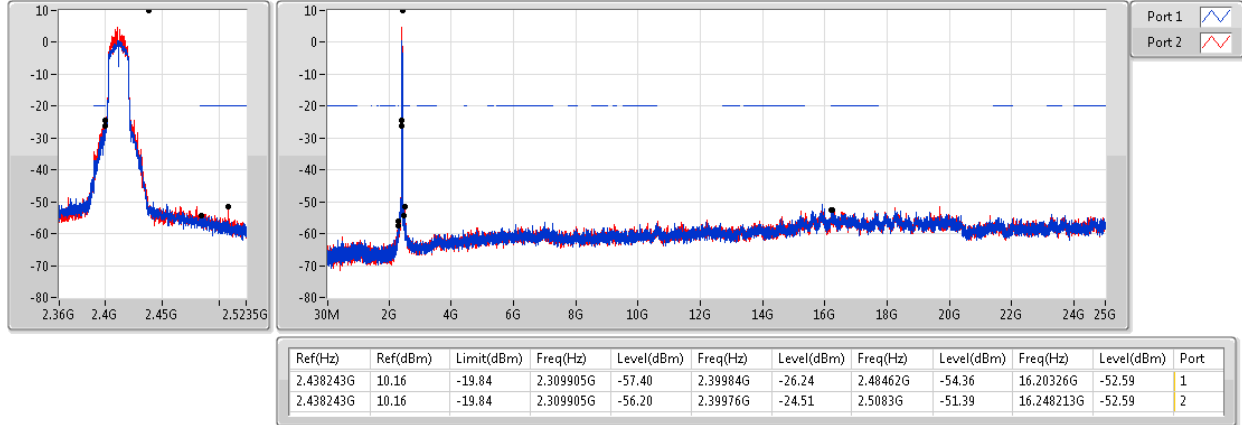
2462MHz



802.11n HT20_Nss1,(MCS0)_2TX

CSE NdB

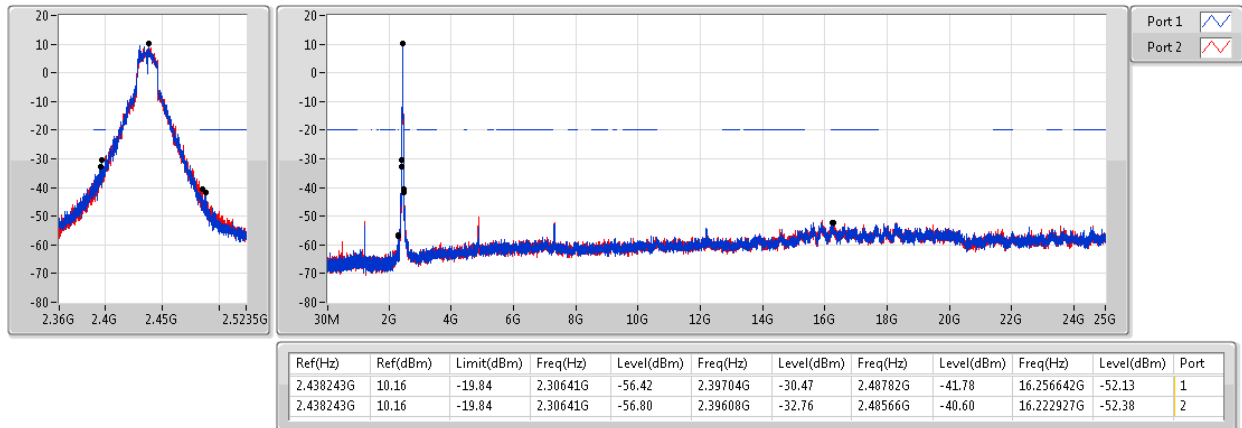
2412MHz



802.11n HT20_Nss1,(MCS0)_2TX

CSE NdB

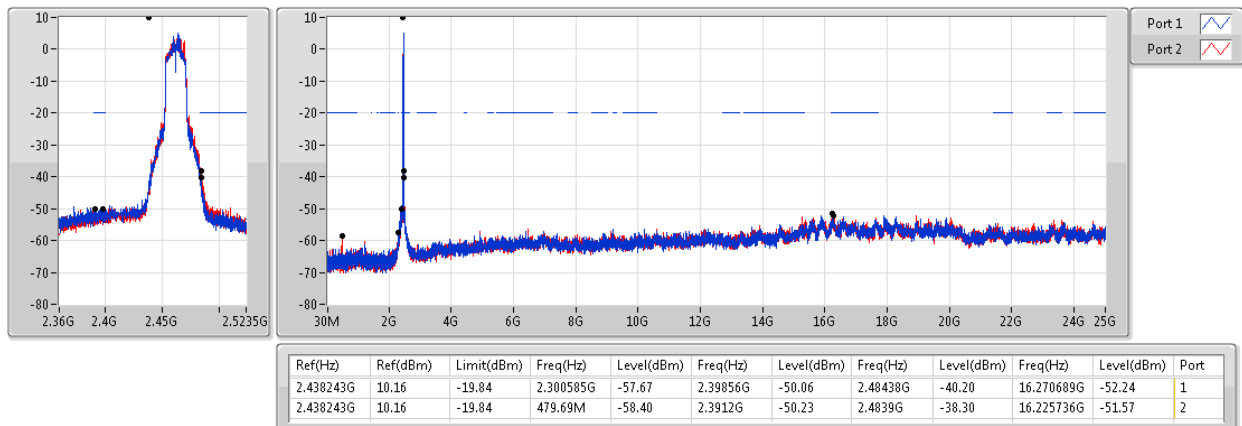
2437MHz



802.11n HT20_Nss1,(MCS0)_2TX

CSE NdB

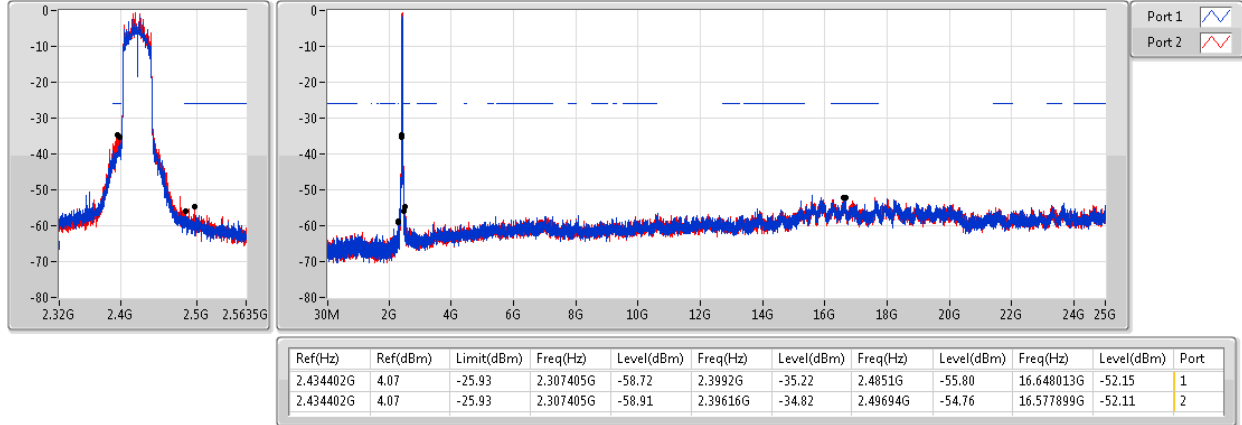
2462MHz



802.11n HT40_Nss1,(MCS0)_2TX

CSE NdB

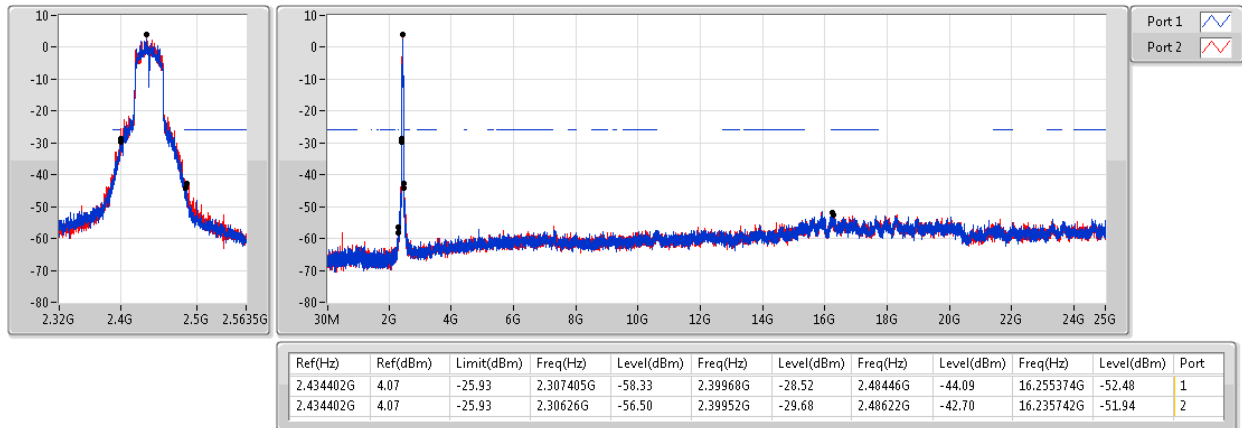
2422MHz



802.11n HT40_Nss1,(MCS0)_2TX

CSE NdB

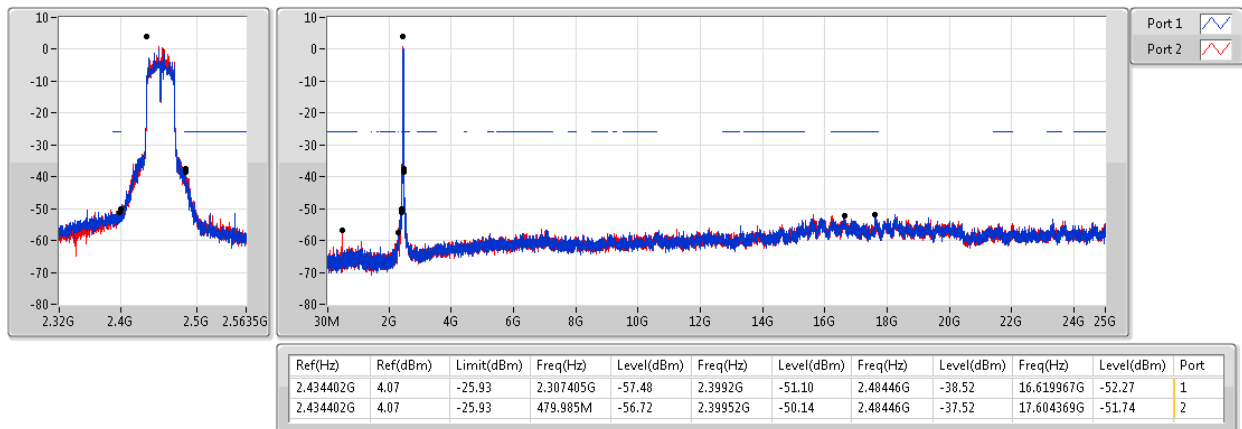
2437MHz

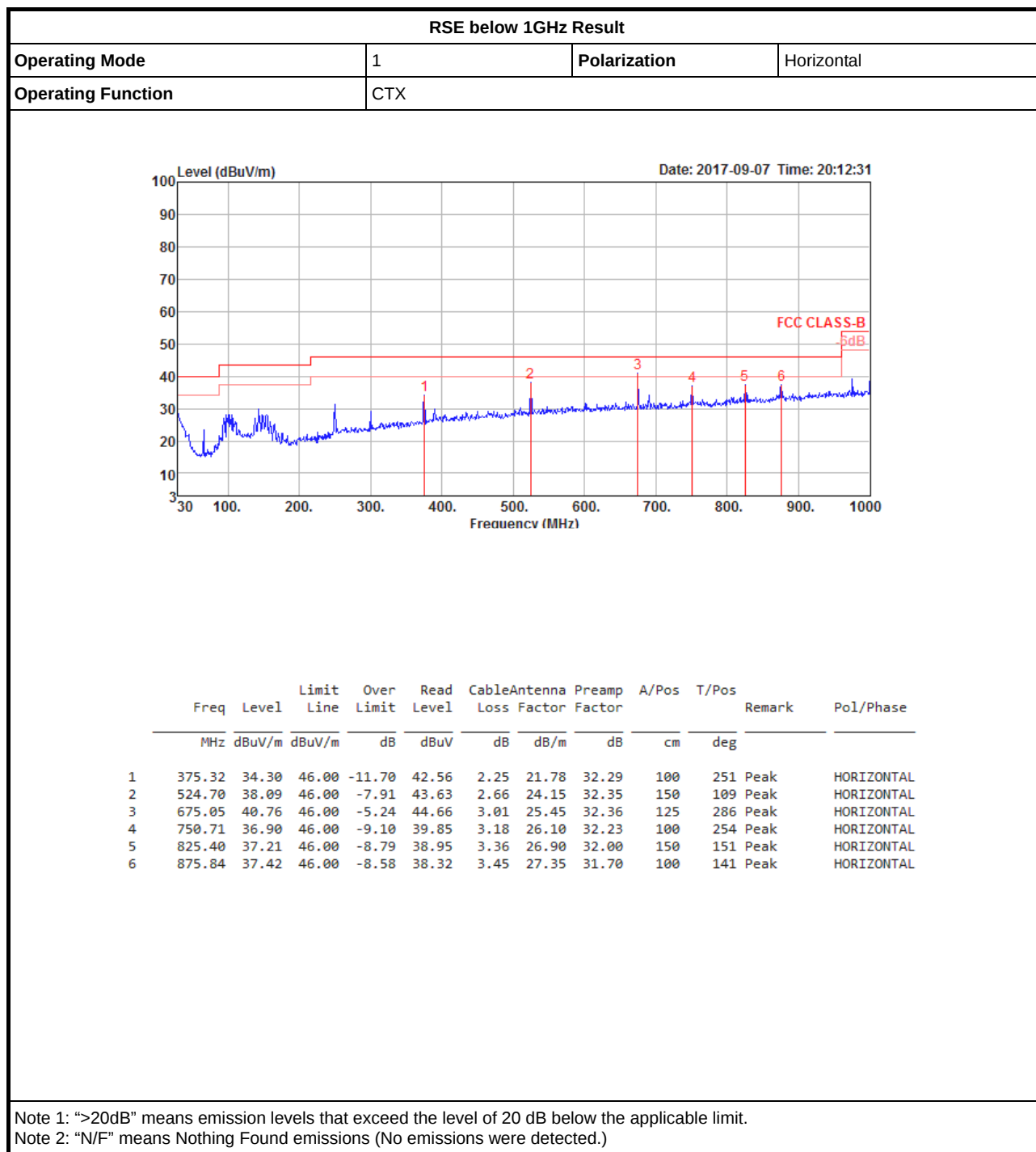


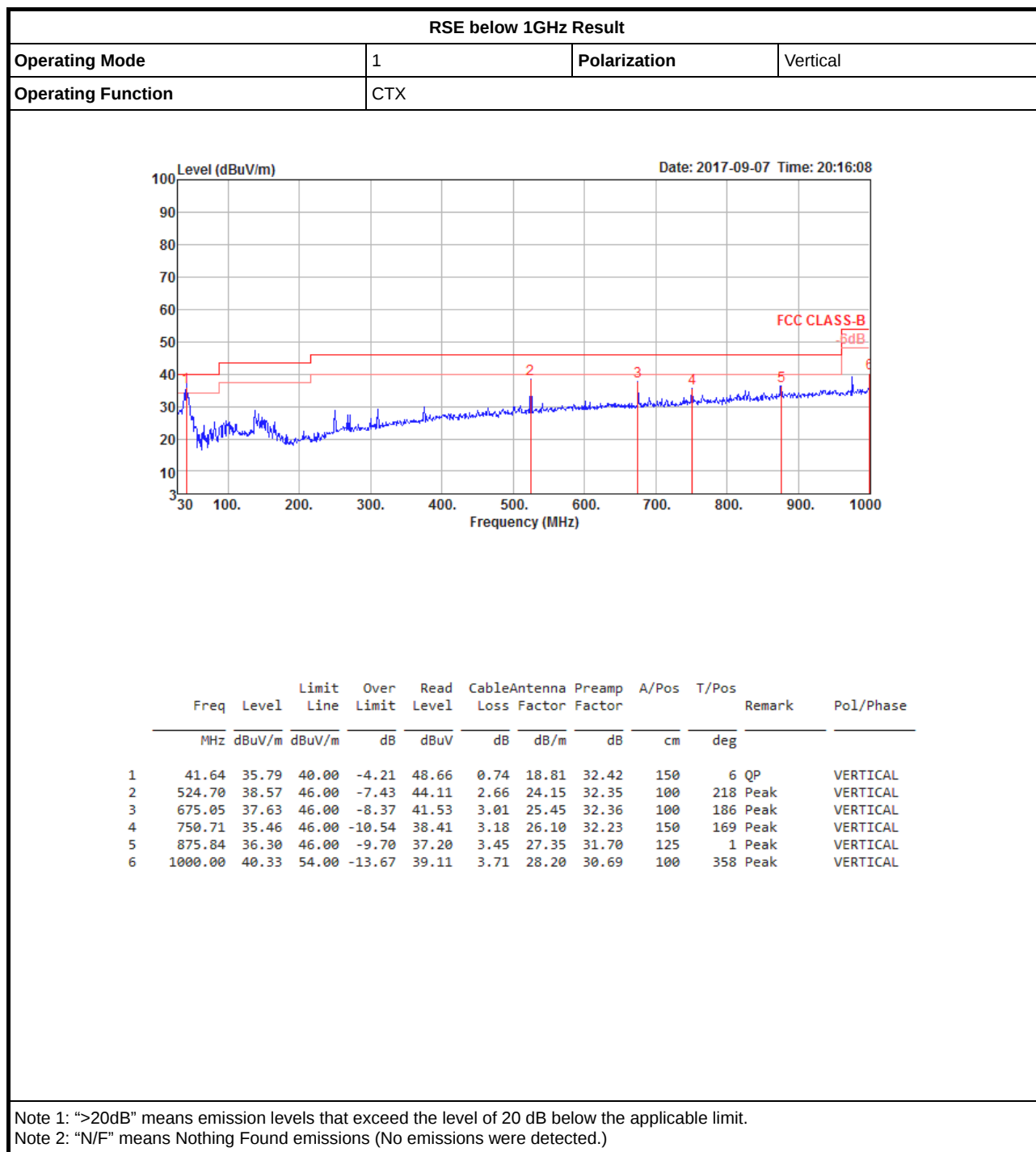
802.11n HT40_Nss1,(MCS0)_2TX

CSE NdB

2452MHz





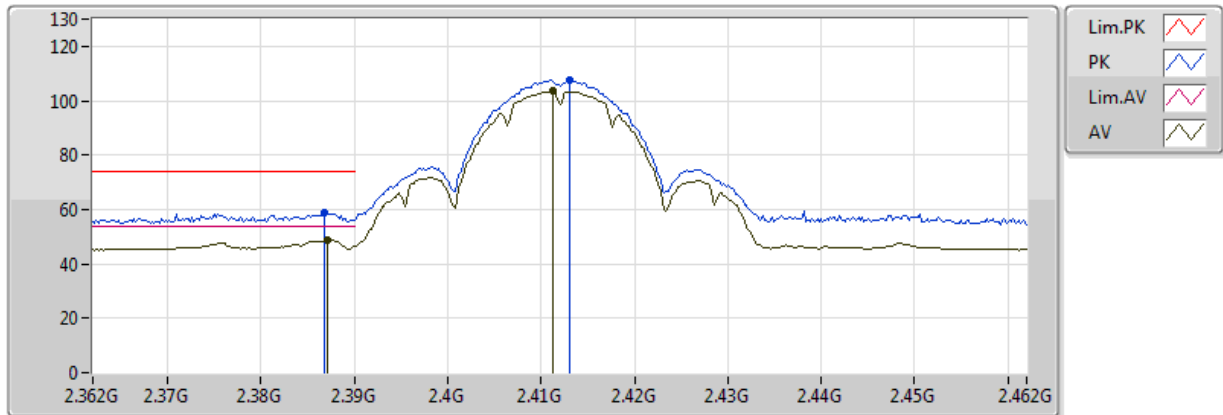


**Summary**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
802.11b_(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	AV	2.4868G	53.99	54.00	-0.01	33.19	3	H	170	1.98	-

802.11b_(1Mbps)_2TX

2412MHz_TX

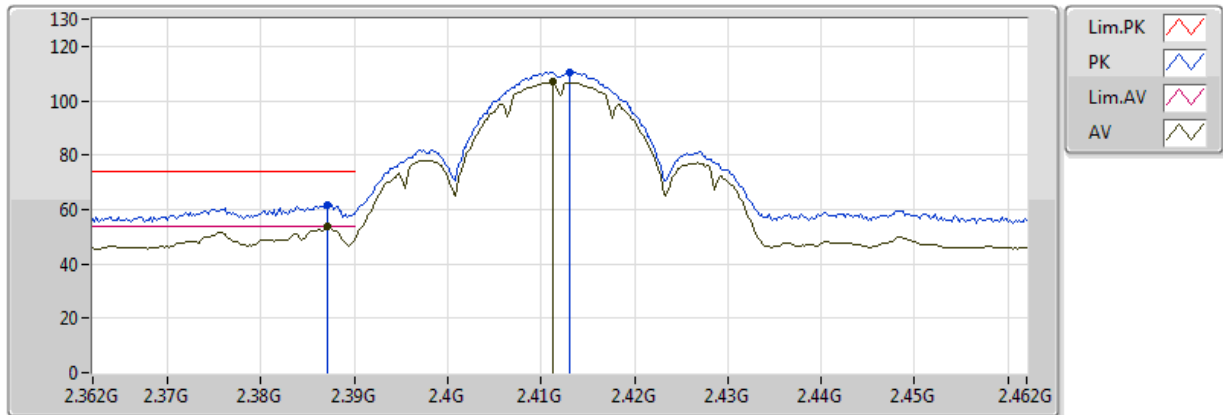


20170831
EUT Y 2TX
04-M-0
FSP
Setting 22

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	48.71	54.00	-5.29	33.15	3	V	151	1.17	-
AV	2.4112G	103.54	Inf	-Inf	33.15	3	V	151	1.17	-
PK	2.3868G	58.94	74.00	-15.06	33.15	3	V	151	1.17	-
PK	2.413G	107.35	Inf	-Inf	33.15	3	V	151	1.17	-

802.11b_(1Mbps)_2TX

2412MHz_TX

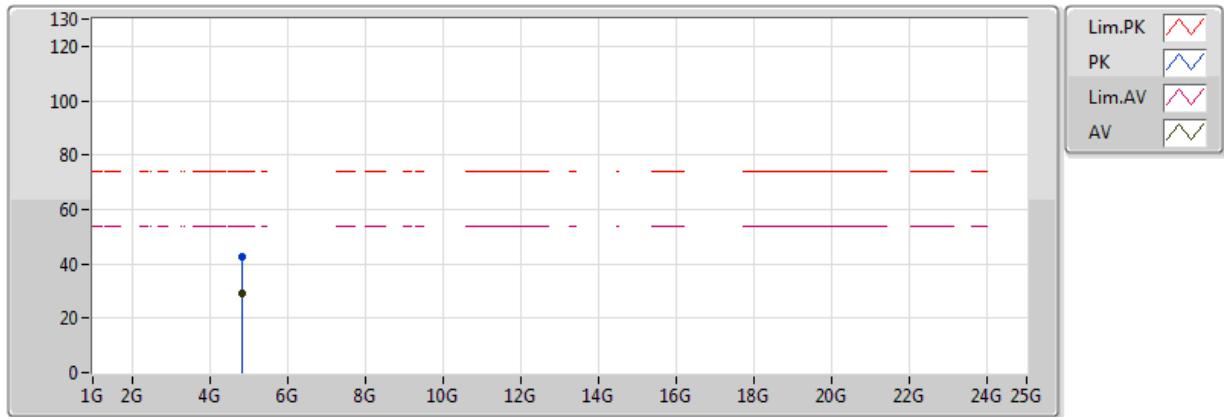


20170831
EUT Y 2TX
04-M-0
FSP
Setting 22

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	53.67	54.00	-0.33	33.15	3	H	166	1.86	-
AV	2.4112G	106.79	Inf	-Inf	33.15	3	H	166	1.86	-
PK	2.3872G	61.60	74.00	-12.40	33.15	3	H	166	1.86	-
PK	2.413G	110.64	Inf	-Inf	33.15	3	H	166	1.86	-

802.11b_(1Mbps)_2TX

2412MHz_TX

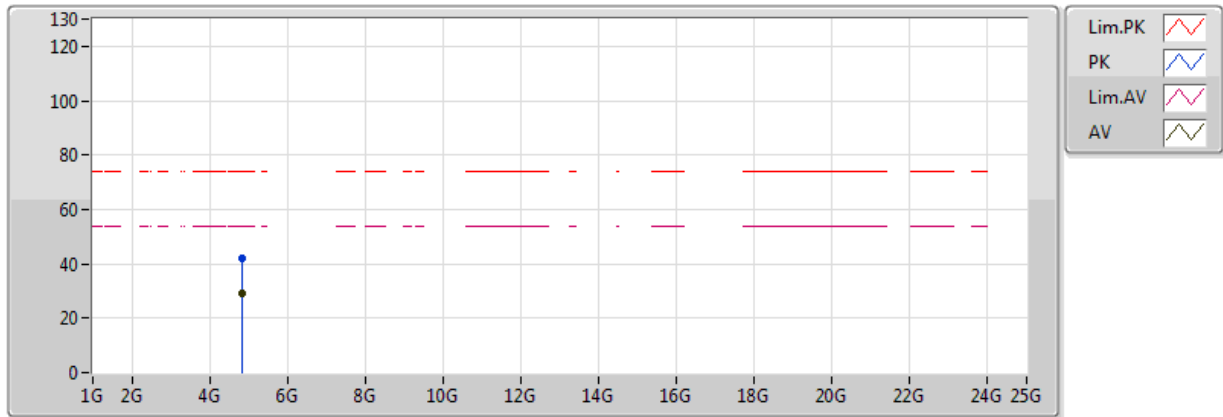


20170831
EUT Y 2TX
04-M-0
FSP
Setting 22

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82856G	29.17	54.00	-24.83	4.20	3	V	162	1.50	-
PK	4.82764G	42.45	74.00	-31.55	4.20	3	V	162	1.50	-

802.11b_(1Mbps)_2TX

2412MHz_TX

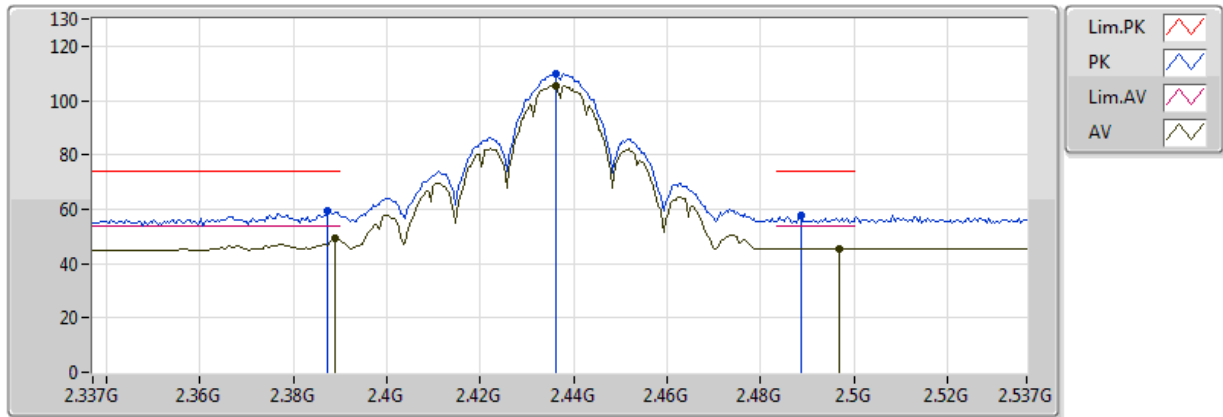


20170831
EUT Y 2TX
04-M-0
FSP
Setting 22

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82834G	29.20	54.00	-24.80	4.20	3	H	204	1.50	-
PK	4.82338G	42.15	74.00	-31.85	4.18	3	H	204	1.50	-

802.11b_(1Mbps)_2TX

2437MHz_TX

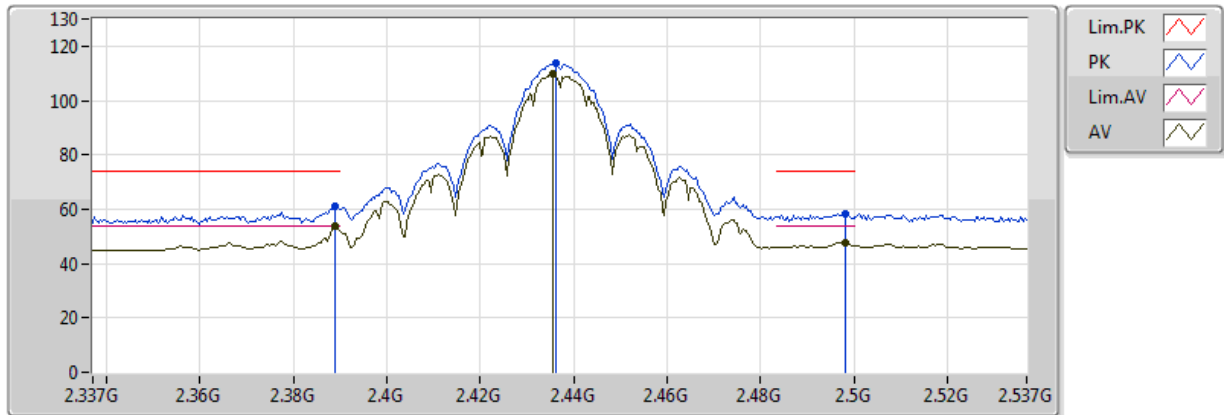


20170831
EUT Y 2TX
04-M-0
FSP
Setting 28

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	49.52	54.00	-4.48	33.15	3	V	162	1.11	-
AV	2.4362G	105.60	Inf	-Inf	33.16	3	V	162	1.11	-
AV	2.497G	45.56	54.00	-8.44	33.20	3	V	162	1.11	-
PK	2.3874G	59.24	74.00	-14.76	33.15	3	V	162	1.11	-
PK	2.4362G	109.70	Inf	-Inf	33.16	3	V	162	1.11	-
PK	2.4886G	57.78	74.00	-16.22	33.19	3	V	162	1.11	-

802.11b_(1Mbps)_2TX

2437MHz_TX

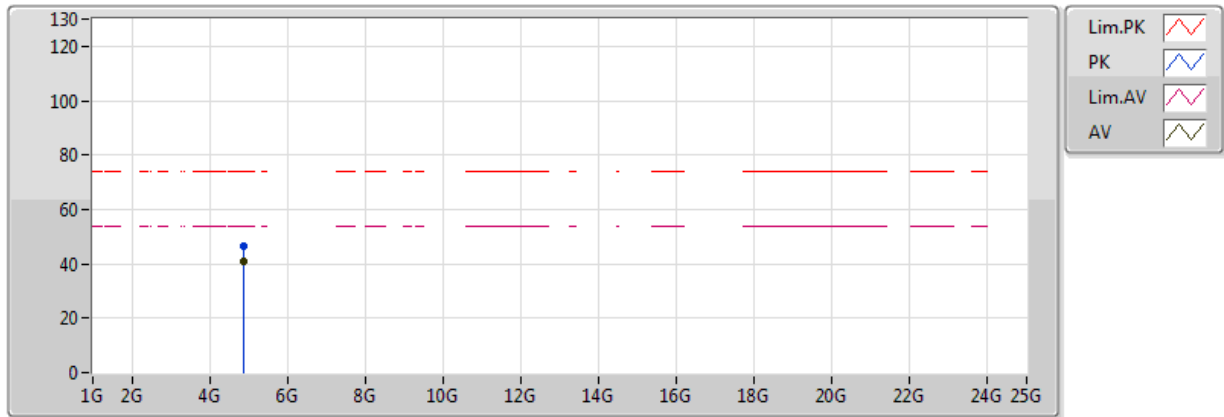


20170831
EUT Y 2TX
04-M-0
FSP
Setting 28

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.389G	53.97	54.00	-0.03	33.15	3	H	167	1.98	-
AV	2.4354G	109.58	Inf	-Inf	33.16	3	H	167	1.98	-
AV	2.4982G	47.85	54.00	-6.15	33.20	3	H	167	1.98	-
PK	2.389G	61.04	74.00	-12.96	33.15	3	H	167	1.98	-
PK	2.4362G	113.60	Inf	-Inf	33.16	3	H	167	1.98	-
PK	2.4982G	58.54	74.00	-15.46	33.20	3	H	167	1.98	-

802.11b_(1Mbps)_2TX

2437MHz_TX

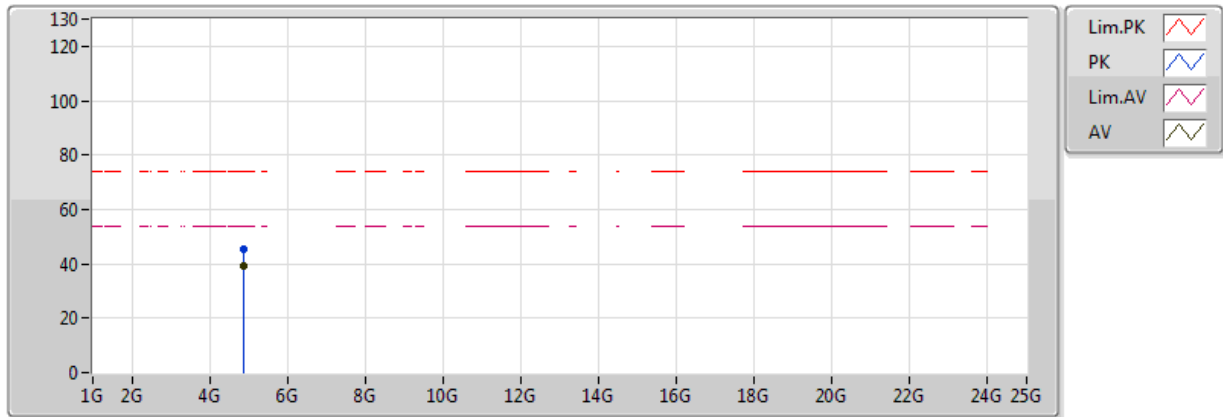


20170831
EUT Y 2TX
04-M-0
FSP
Setting 28

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87392G	41.11	54.00	-12.89	4.34	3	V	225	1.08	-
PK	4.87392G	46.25	74.00	-27.75	4.34	3	V	225	1.08	-

802.11b_(1Mbps)_2TX

2437MHz_TX

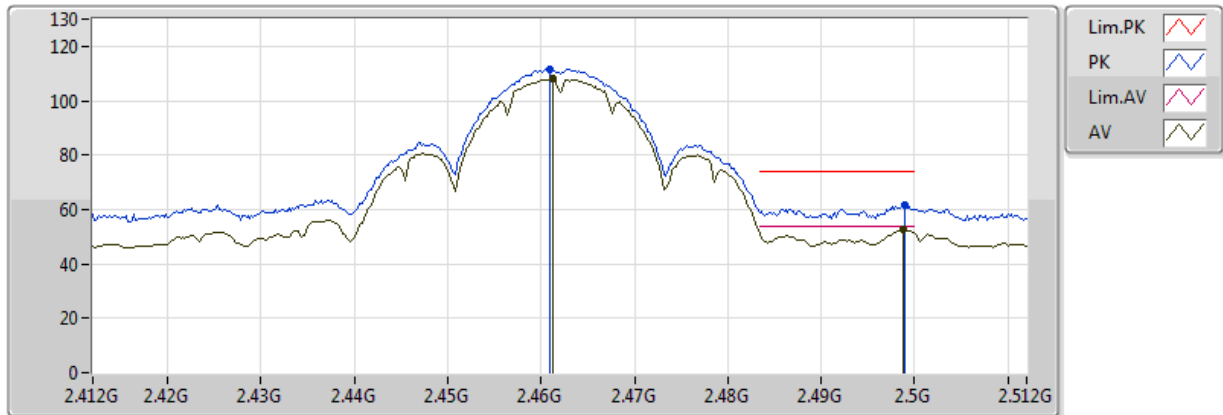


20170831
EUT Y 2TX
04-M-0
FSP
Setting 28

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87396G	39.20	54.00	-14.80	4.34	3	H	140	1.93	-
PK	4.87402G	45.16	74.00	-28.84	4.34	3	H	140	1.93	-

802.11b_(1Mbps)_2TX

2462MHz_TX

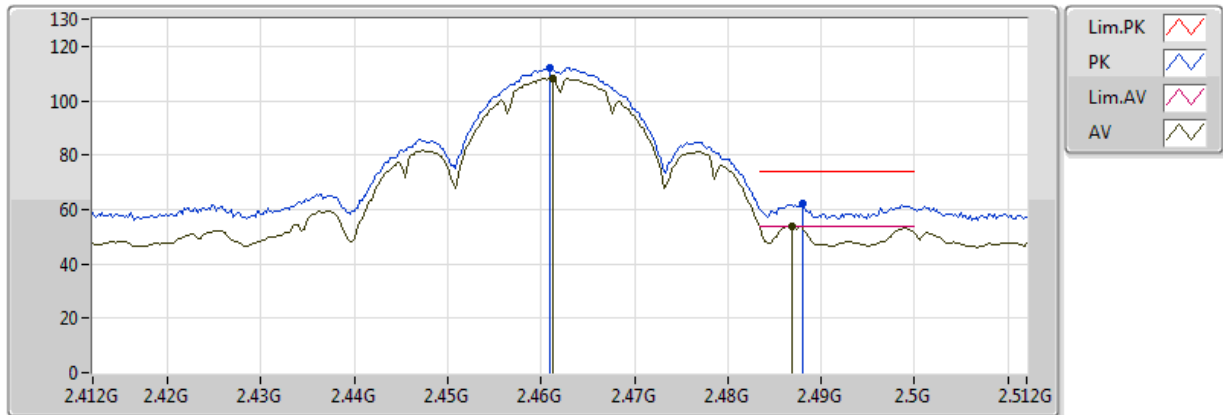


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EUT Y 2TX
04-M-0
FSP
Setting 24

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4612G	108.03	Inf	-Inf	33.18	3	V	170	1.98	-
AV	2.4988G	52.53	54.00	-1.47	33.20	3	V	170	1.98	-
PK	2.461G	111.75	Inf	-Inf	33.18	3	V	170	1.98	-
PK	2.499G	61.60	74.00	-12.40	33.20	3	V	170	1.98	-

802.11b_(1Mbps)_2TX

2462MHz_TX

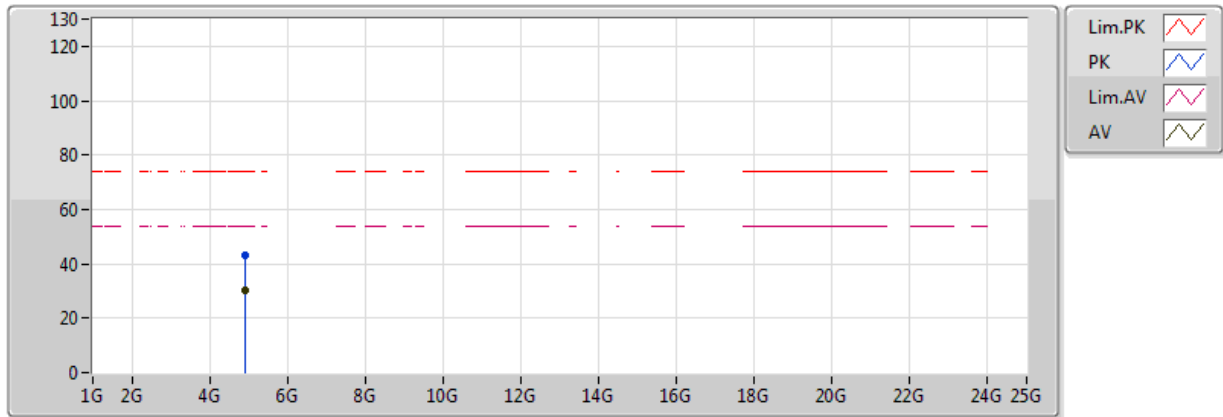


20170831
EUT Y 2TX
04-M-0
FSP
Setting 24

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4612G	108.20	Inf	-Inf	33.18	3	H	170	1.98	-
AV	2.4868G	53.99	54.00	-0.01	33.19	3	H	170	1.98	-
PK	2.461G	111.96	Inf	-Inf	33.18	3	H	170	1.98	-
PK	2.488G	62.08	74.00	-11.92	33.19	3	H	170	1.98	-

802.11b_(1Mbps)_2TX

2462MHz_TX

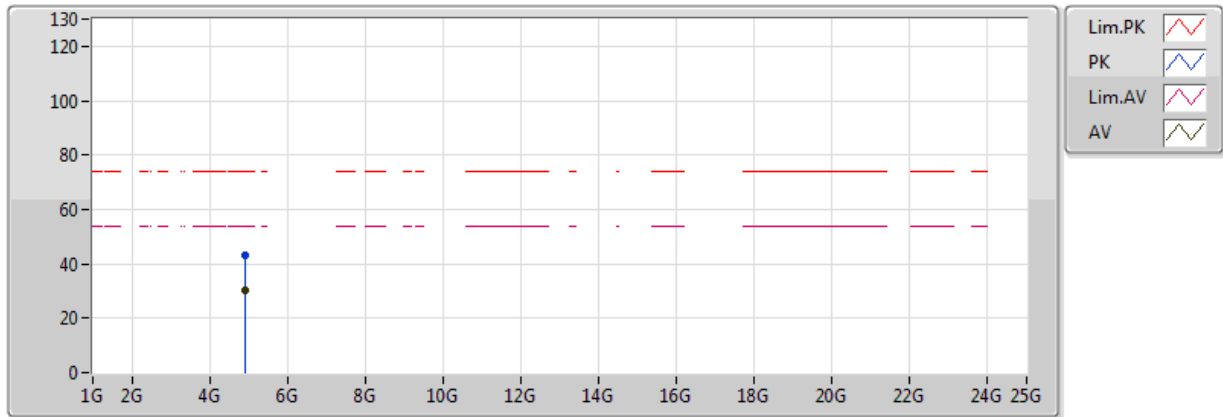


20170831
EUT Y 2TX
04-M-0
FSP
Setting 24

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92076G	30.33	54.00	-23.67	4.48	3	V	306	1.50	-
PK	4.92452G	43.03	74.00	-30.97	4.50	3	V	306	1.50	-

802.11b_(1Mbps)_2TX

2462MHz_TX

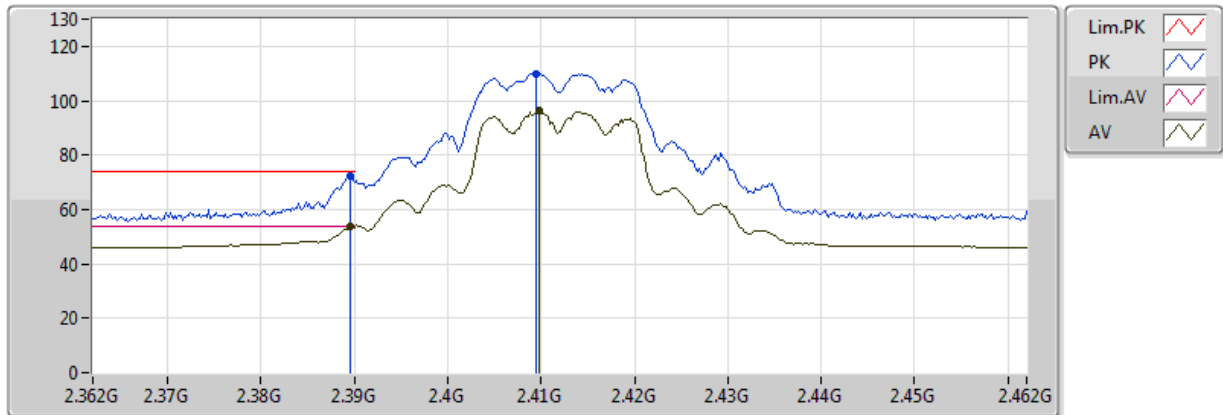


20170831
EUT Y 2TX
04-M-0
FSP
Setting 24

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92112G	30.23	54.00	-23.77	4.49	3	H	162	1.50	-
PK	4.92384G	42.99	74.00	-31.01	4.49	3	H	162	1.50	-

802.11g_(6Mbps)_2TX

2412MHz_TX

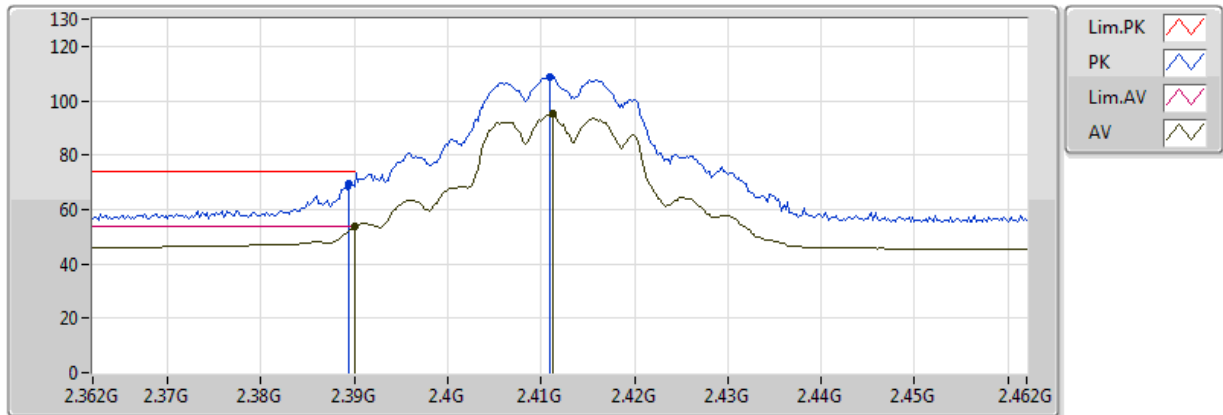


20170831
EUT Y 2TX
04-M-0
FSP
Setting 1A

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3896G	53.64	54.00	-0.36	33.15	3	V	225	1.98	-
AV	2.4098G	96.20	Inf	-Inf	33.15	3	V	225	1.98	-
PK	2.3896G	72.15	74.00	-1.85	33.15	3	V	225	1.98	-
PK	2.4094G	110.01	Inf	-Inf	33.15	3	V	225	1.98	-

802.11g_(6Mbps)_2TX

2412MHz_TX

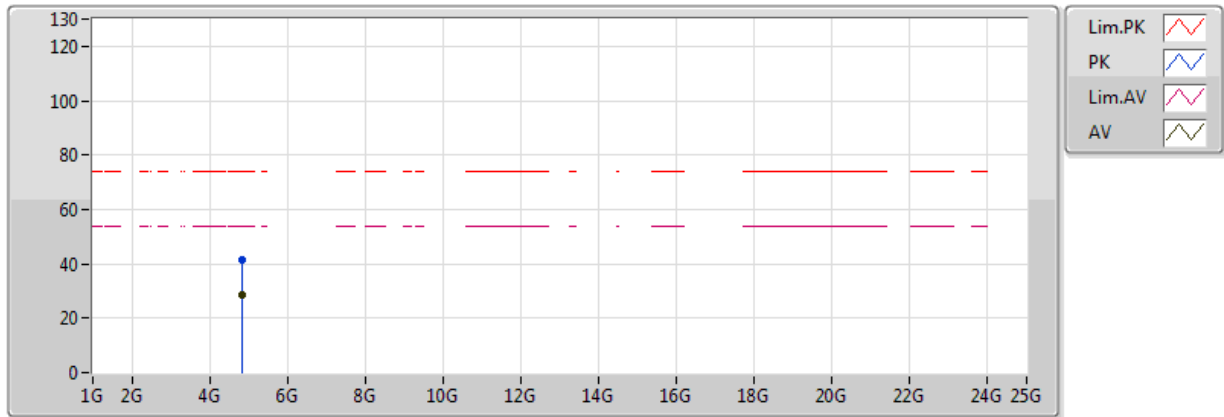


20170831
EUT Y 2TX
04-M-0
FSP
Setting 1A

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	53.78	54.00	-0.22	33.15	3	H	169	1.89	-
AV	2.4112G	95.03	Inf	-Inf	33.15	3	H	169	1.89	-
PK	2.3894G	69.69	74.00	-4.31	33.15	3	H	169	1.89	-
PK	2.411G	108.67	Inf	-Inf	33.15	3	H	169	1.89	-

802.11g_(6Mbps)_2TX

2412MHz_TX

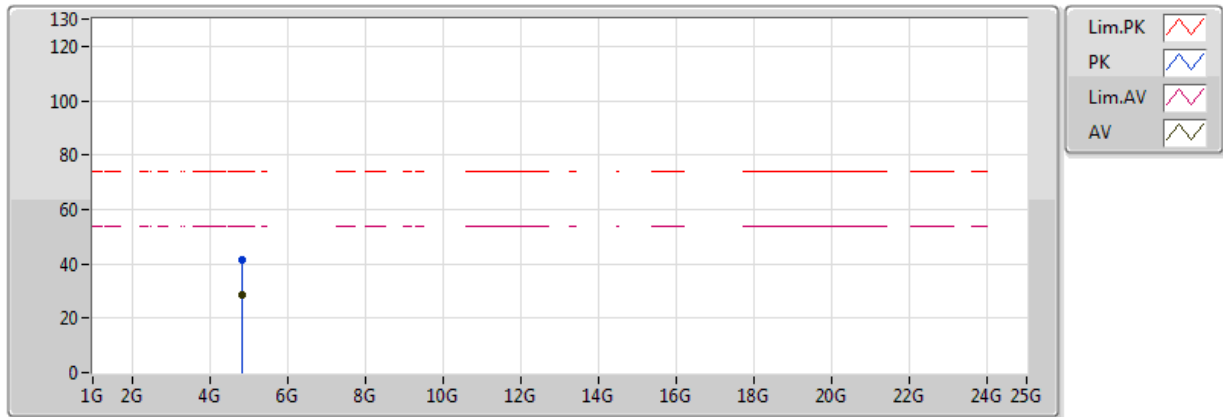


20170831
EUT Y 2TX
04-M-0
FSP
Setting 1A

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.829G	28.59	54.00	-25.41	4.20	3	V	192	1.50	-
PK	4.82478G	41.48	74.00	-32.52	4.19	3	V	192	1.50	-

802.11g_(6Mbps)_2TX

2412MHz_TX

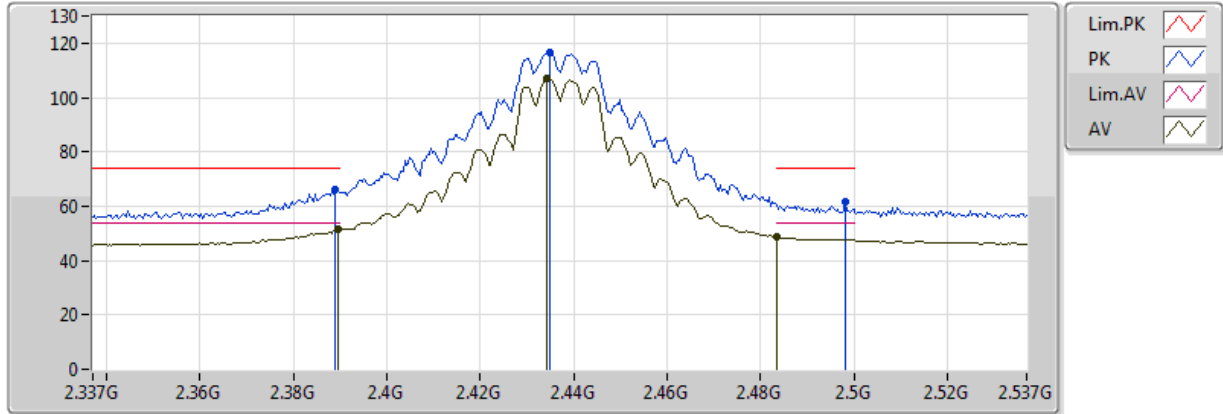


20170831
EUT Y 2TX
04-M-0
FSP
Setting 1A

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82856G	28.35	54.00	-25.65	4.20	3	H	262	1.50	-
PK	4.8262G	41.38	74.00	-32.62	4.19	3	H	262	1.50	-

802.11g_(6Mbps)_2TX

2437MHz_TX

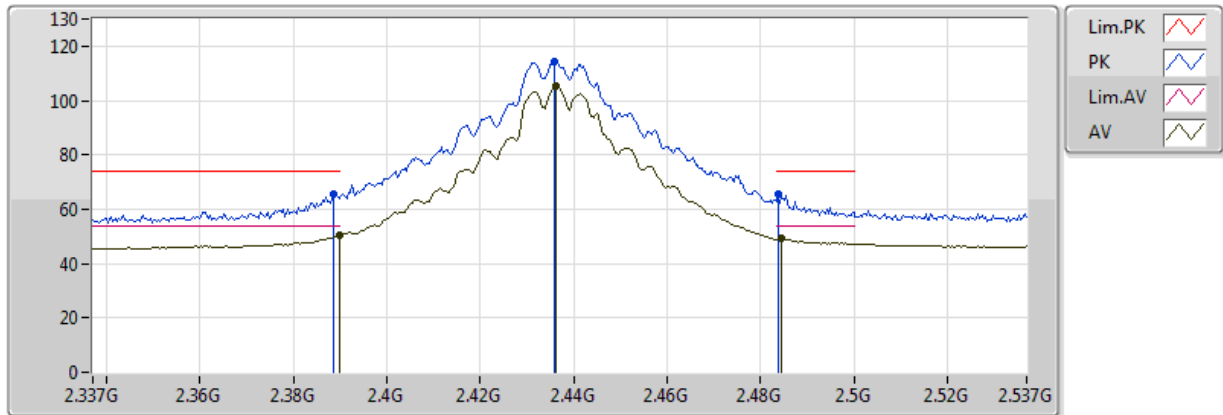


20170831
EUT Y 2TX
04-M-0
FSP
Setting 2A

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3894G	51.42	54.00	-2.58	33.15	3	V	225	1.95	-
AV	2.4342G	106.92	Inf	-Inf	33.16	3	V	225	1.95	-
AV	2.483502G	48.62	54.00	-5.38	33.19	3	V	225	1.95	-
PK	2.389G	65.87	74.00	-8.13	33.15	3	V	225	1.95	-
PK	2.435G	116.70	Inf	-Inf	33.16	3	V	225	1.95	-
PK	2.4982G	61.54	74.00	-12.46	33.20	3	V	225	1.95	-

802.11g_(6Mbps)_2TX

2437MHz_TX

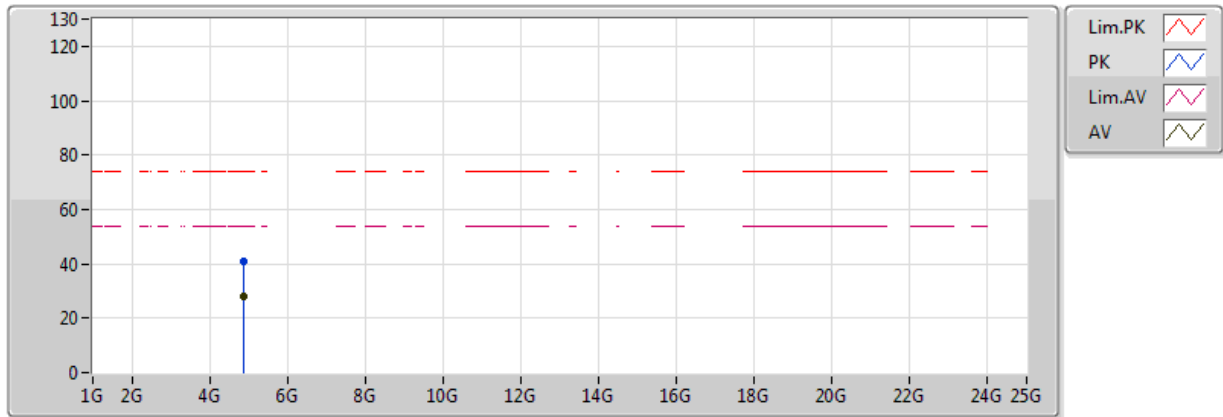


20170831
EUT Y 2TX
04-M-0
FSP
Setting 2A

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3898G	50.66	54.00	-3.34	33.15	3	H	170	1.98	-
AV	2.4362G	105.10	Inf	-Inf	33.16	3	H	170	1.98	-
AV	2.4846G	49.04	54.00	-4.96	33.19	3	H	170	1.98	-
PK	2.3886G	65.78	74.00	-8.22	33.15	3	H	170	1.98	-
PK	2.4358G	114.59	Inf	-Inf	33.16	3	H	170	1.98	-
PK	2.4838G	65.63	74.00	-8.37	33.19	3	H	170	1.98	-

802.11g_(6Mbps)_2TX

2437MHz_TX

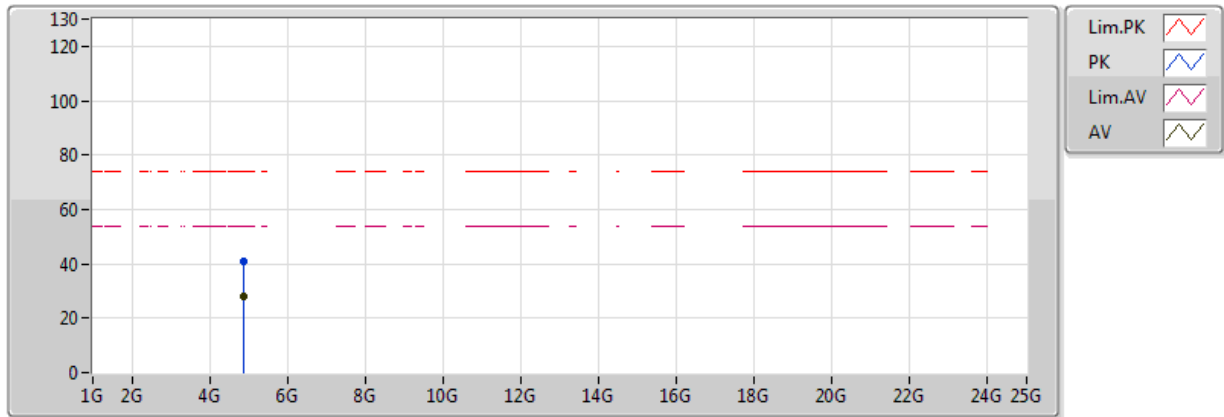


20170831
EUT Y 2TX
04-M-0
FSP
Setting 2A

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87556G	28.28	54.00	-25.72	4.34	3	V	180	1.50	-
PK	4.87442G	40.74	74.00	-33.26	4.34	3	V	180	1.50	-

802.11g_(6Mbps)_2TX

2437MHz_TX

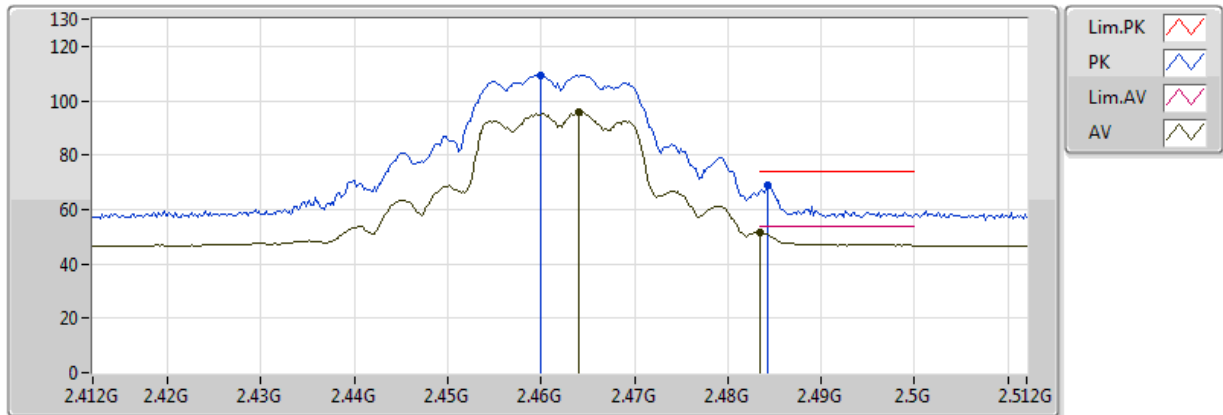


20170831
EUT Y 2TX
04-M-0
FSP
Setting 2A

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87038G	27.91	54.00	-26.09	4.33	3	H	117	1.50	-
PK	4.86988G	41.14	74.00	-32.86	4.33	3	H	117	1.50	-

802.11g_(6Mbps)_2TX

2462MHz_TX

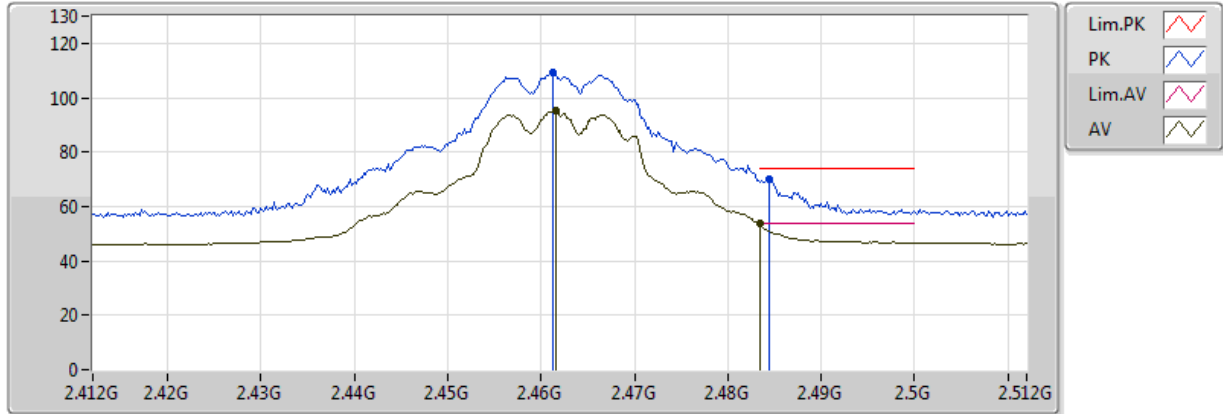


20170831
EUT Y 2TX
04-M-0
FSP
Setting 1B

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.464G	96.00	Inf	-Inf	33.18	3	V	227	1.94	-
AV	2.483502G	51.72	54.00	-2.28	33.19	3	V	227	1.94	-
PK	2.46G	109.52	Inf	-Inf	33.18	3	V	227	1.94	-
PK	2.4842G	68.85	74.00	-5.15	33.19	3	V	227	1.94	-

802.11g_(6Mbps)_2TX

2462MHz_TX

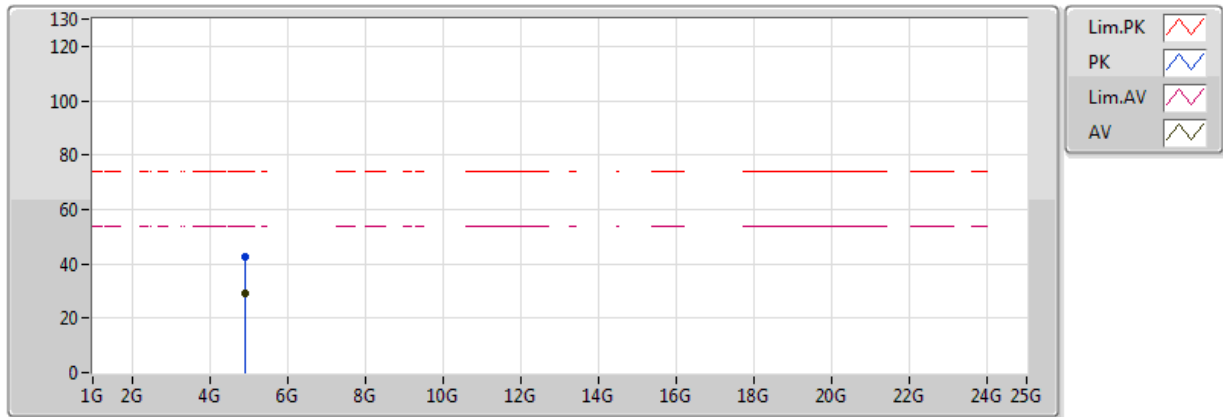


20170831
EUT Y 2TX
04-M-0
FSP
Setting 1B

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4616G	95.13	Inf	-Inf	33.18	3	H	174	1.98	-
AV	2.483502G	53.78	54.00	-0.22	33.19	3	H	174	1.98	-
PK	2.4612G	109.54	Inf	-Inf	33.18	3	H	174	1.98	-
PK	2.4844G	70.20	74.00	-3.80	33.19	3	H	174	1.98	-

802.11g_(6Mbps)_2TX

2462MHz_TX

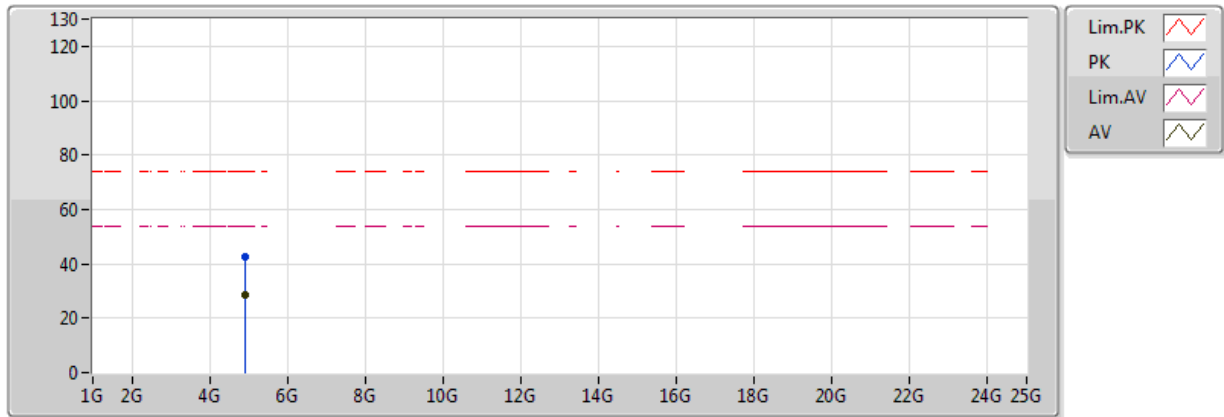


20170831
EUT Y 2TX
04-M-0
FSP
Setting 1B

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92052G	28.91	54.00	-25.09	4.48	3	V	117	1.50	-
PK	4.92598G	42.36	74.00	-31.64	4.50	3	V	117	1.50	-

802.11g_(6Mbps)_2TX

2462MHz_TX

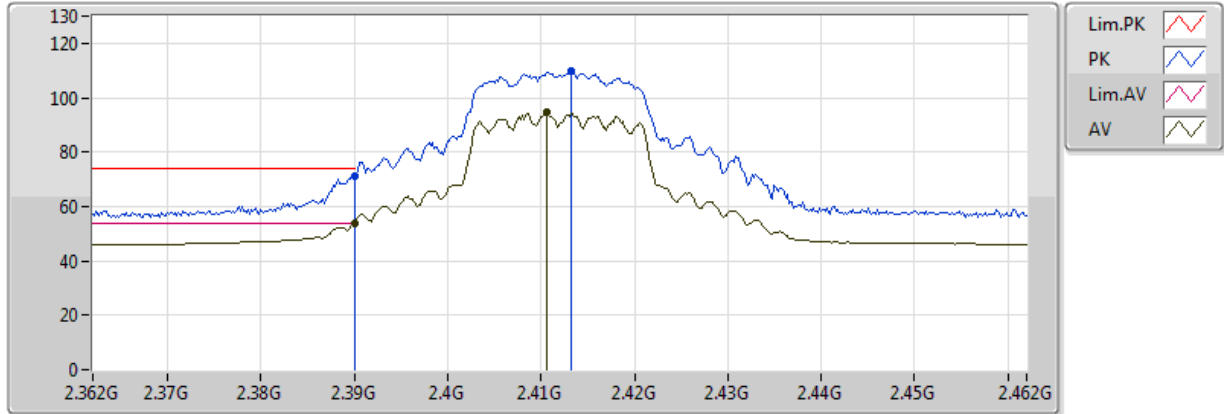


20170831
EUT Y 2TX
04-M-0
FSP
Setting 1B

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.9208G	28.84	54.00	-25.16	4.48	3	H	148	1.50	-
PK	4.92526G	42.41	74.00	-31.59	4.50	3	H	148	1.50	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

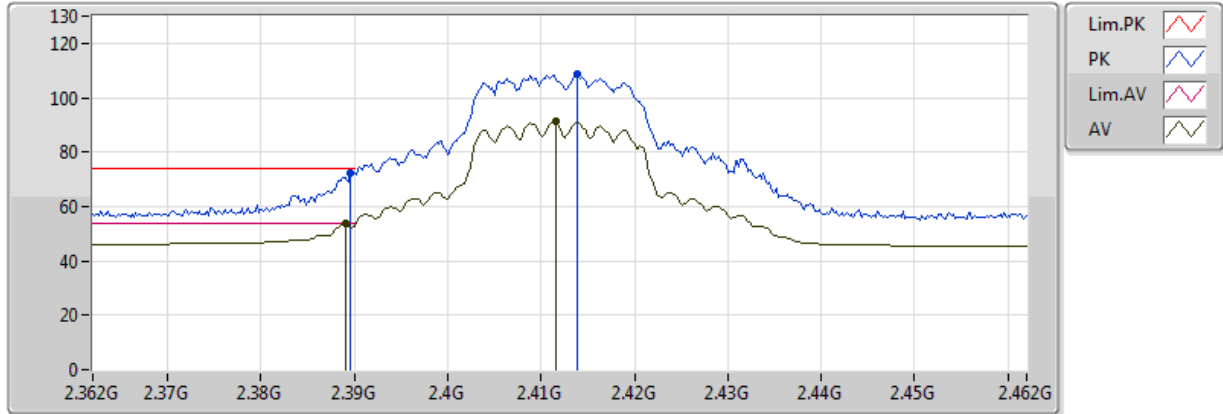


20170831
EUT Y 2TX
04-M-0
FSP
Setting 1A

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	53.92	54.00	-0.08	33.15	3	V	224	1.98	-
AV	2.4106G	94.58	Inf	-Inf	33.15	3	V	224	1.98	-
PK	2.389998G	71.09	74.00	-2.91	33.15	3	V	224	1.98	-
PK	2.4132G	109.65	Inf	-Inf	33.15	3	V	224	1.98	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

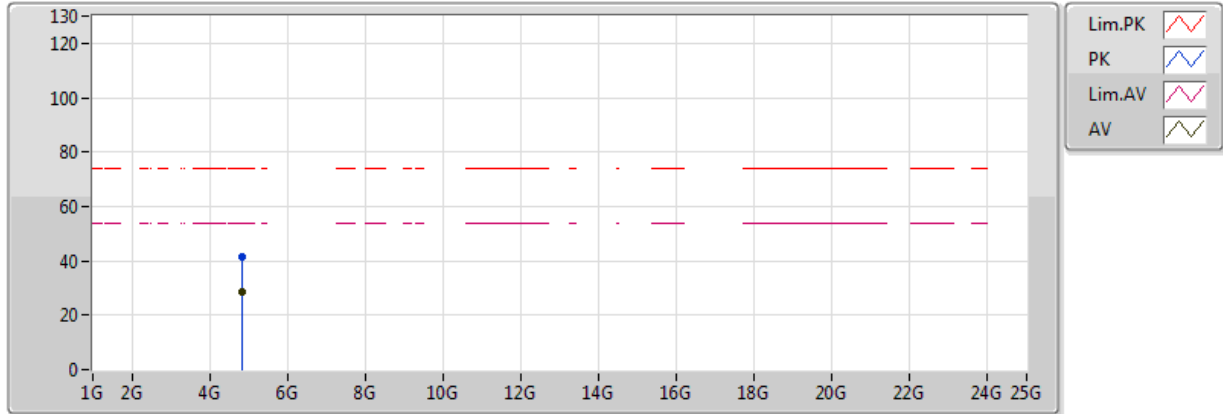


20170831
EUT Y 2TX
04-M-0
FSP
Setting 1A

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.389G	53.73	54.00	-0.27	33.15	3	H	167	1.91	-
AV	2.4116G	91.15	Inf	-Inf	33.15	3	H	167	1.91	-
PK	2.3896G	72.29	74.00	-1.71	33.15	3	H	167	1.91	-
PK	2.4138G	108.54	Inf	-Inf	33.15	3	H	167	1.91	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

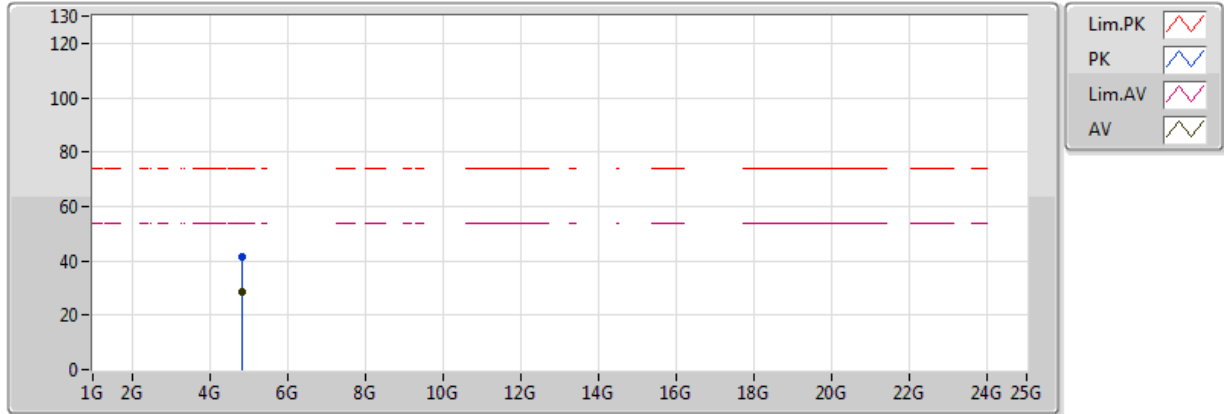


20170831
EUT Y 2TX
04-M-0
FSP
Setting 1A

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.83308G	28.59	54.00	-25.41	4.21	3	V	248	1.50	-
PK	4.82328G	41.35	74.00	-32.65	4.18	3	V	248	1.50	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

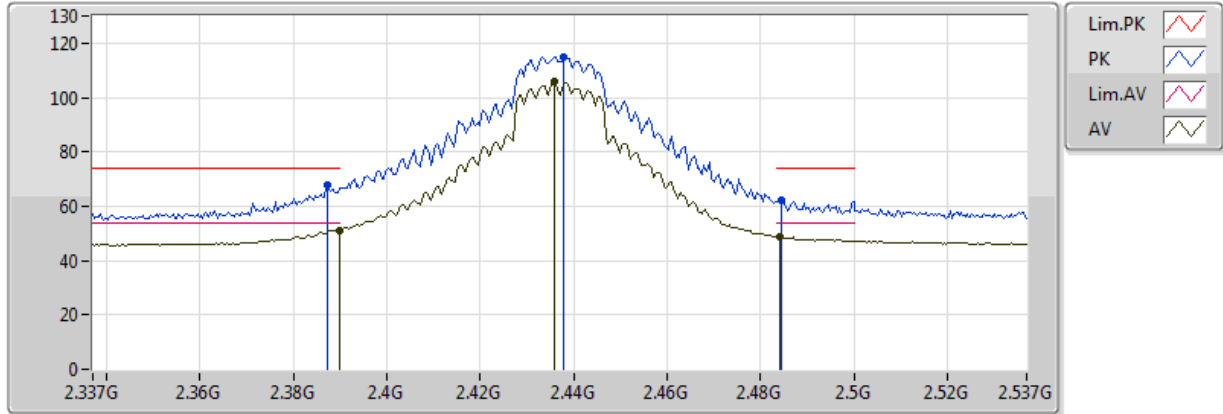


20170831
EUT Y 2TX
04-M-0
FSP
Setting 1A

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.83308G	28.54	54.00	-25.46	4.21	3	H	202	1.50	-
PK	4.834G	41.42	74.00	-32.58	4.22	3	H	202	1.50	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

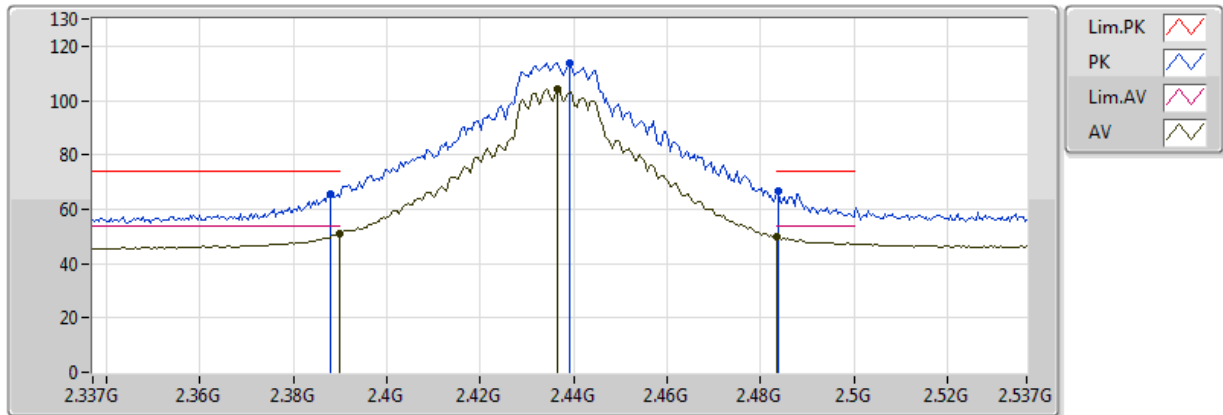


20170831
EUT Y 2TX
04-M-0
FSP
Setting 2A

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3898G	51.14	54.00	-2.86	33.15	3	V	227	1.96	-
AV	2.4358G	105.69	Inf	-Inf	33.16	3	V	227	1.96	-
AV	2.4842G	48.62	54.00	-5.38	33.19	3	V	227	1.96	-
PK	2.3874G	68.02	74.00	-5.98	33.15	3	V	227	1.96	-
PK	2.4378G	114.89	Inf	-Inf	33.16	3	V	227	1.96	-
PK	2.4846G	62.12	74.00	-11.88	33.19	3	V	227	1.96	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

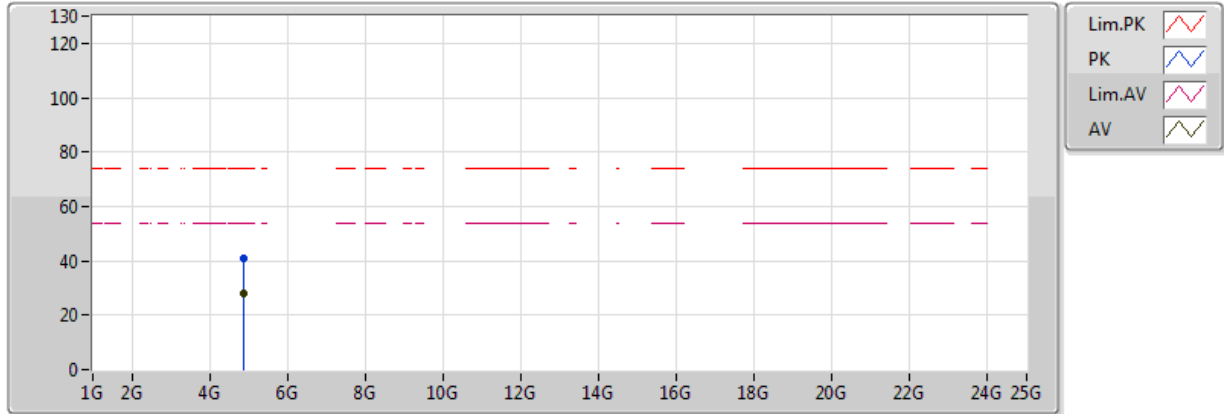


20170831
EUT Y 2TX
04-M-0
FSP
Setting 2A

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3898G	50.98	54.00	-3.02	33.15	3	H	169	1.98	-
AV	2.4366G	104.11	Inf	-Inf	33.16	3	H	169	1.98	-
AV	2.483502G	49.97	54.00	-4.03	33.19	3	H	169	1.98	-
PK	2.3878G	65.64	74.00	-8.36	33.15	3	H	169	1.98	-
PK	2.439G	113.87	Inf	-Inf	33.16	3	H	169	1.98	-
PK	2.4838G	66.61	74.00	-7.39	33.19	3	H	169	1.98	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

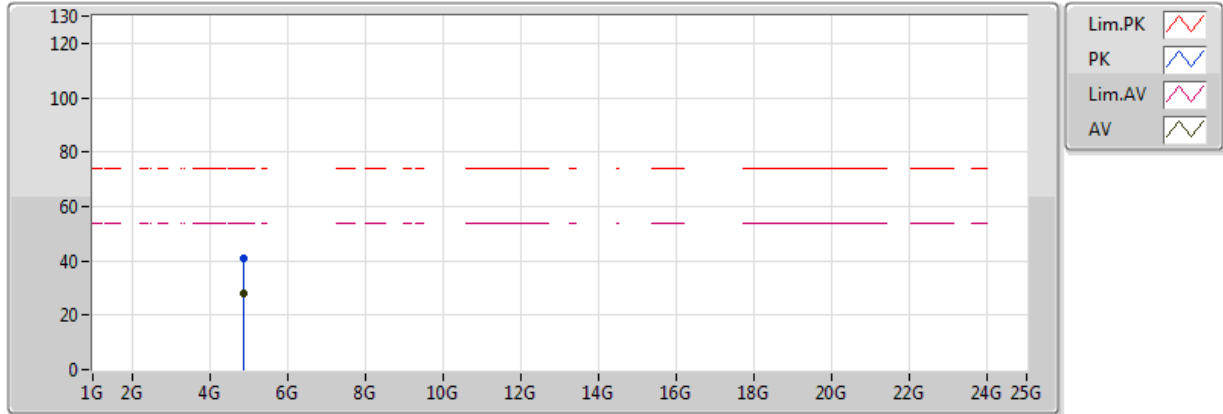


20170831
EUT Y 2TX
04-M-0
FSP
Setting 2A

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.88276G	28.08	54.00	-25.92	4.37	3	V	183	1.50	-
PK	4.87456G	40.99	74.00	-33.01	4.34	3	V	183	1.50	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

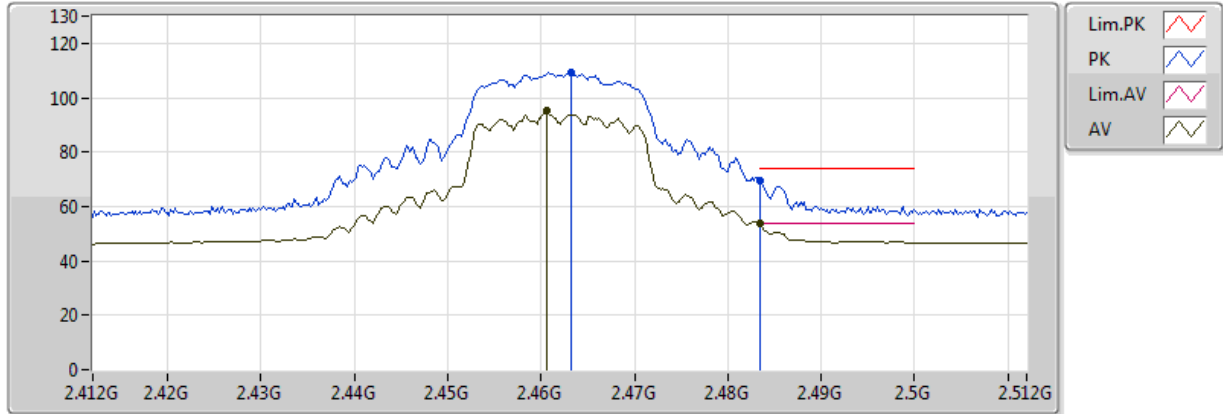


20170831
EUT Y 2TX
04-M-0
FSP
Setting 2A

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.86524G	28.24	54.00	-25.76	4.31	3	H	141	1.50	-
PK	4.87596G	40.74	74.00	-33.26	4.35	3	H	141	1.50	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

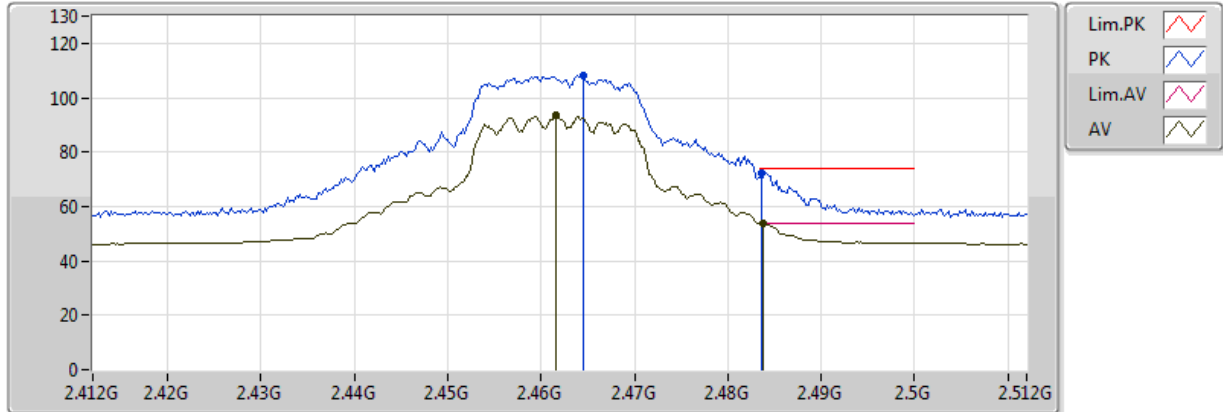


20170831
EUT Y 2TX
04-M-0
FSP
Setting 1B

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4606G	95.18	Inf	-Inf	33.18	3	V	226	1.93	-
AV	2.483502G	53.99	54.00	-0.01	33.19	3	V	226	1.93	-
PK	2.4632G	109.43	Inf	-Inf	33.18	3	V	226	1.93	-
PK	2.483502G	69.57	74.00	-4.43	33.19	3	V	226	1.93	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

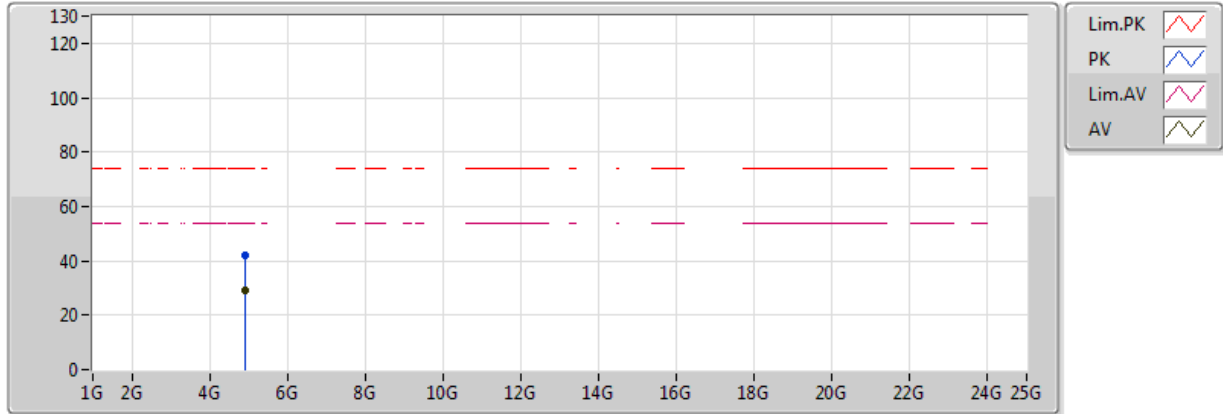


20170831
EUT Y 2TX
04-M-0
FSP
Setting 1B

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4616G	93.43	Inf	-Inf	33.18	3	H	169	1.97	-
AV	2.4838G	53.67	54.00	-0.33	33.19	3	H	169	1.97	-
PK	2.4646G	108.09	Inf	-Inf	33.18	3	H	169	1.97	-
PK	2.4836G	72.37	74.00	-1.63	33.19	3	H	169	1.97	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

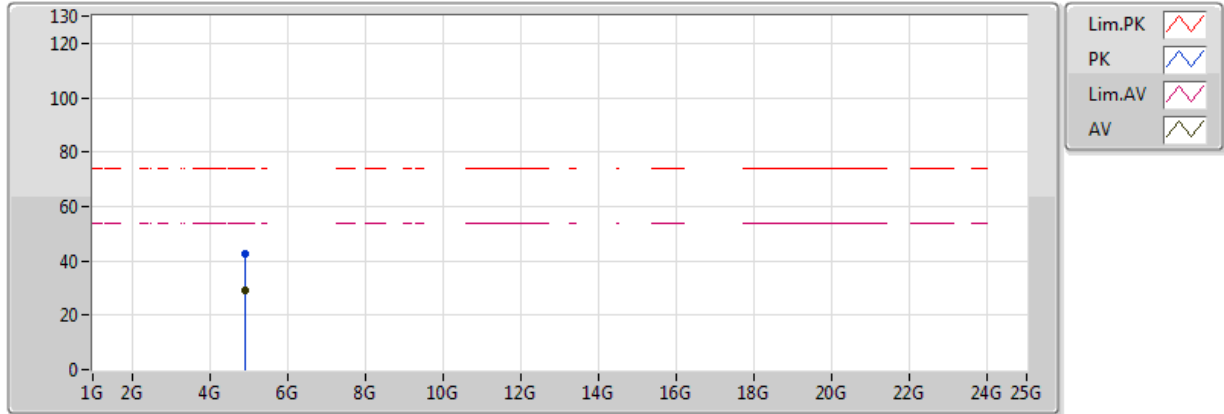


20170831
EUT Y 2TX
04-M-0
FSP
Setting 1B

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.91596G	29.08	54.00	-24.92	4.47	3	V	123	1.50	-
PK	4.9228G	42.30	74.00	-31.70	4.49	3	V	123	1.50	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

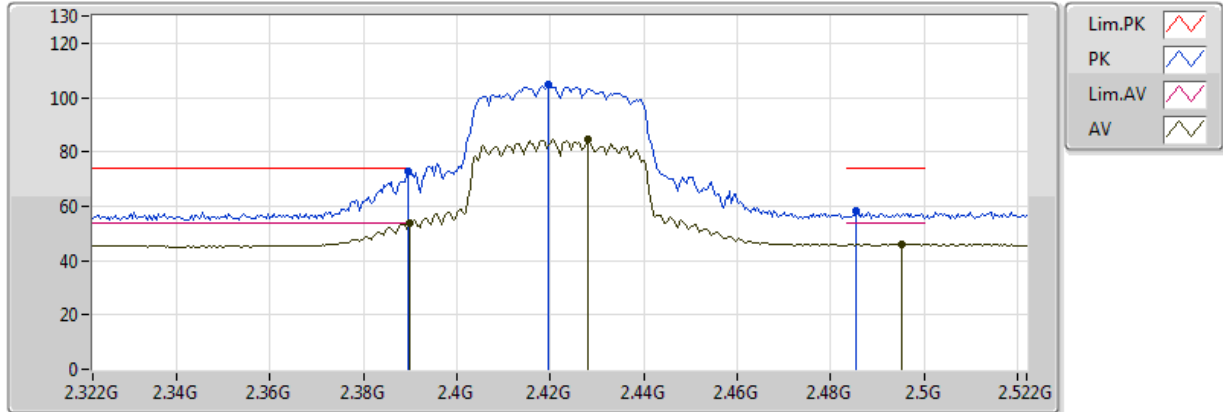


20170831
EUT Y 2TX
04-M-0
FSP
Setting 1B

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.918G	29.09	54.00	-24.91	4.48	3	H	97	1.50	-
PK	4.91452G	42.45	74.00	-31.55	4.47	3	H	97	1.50	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

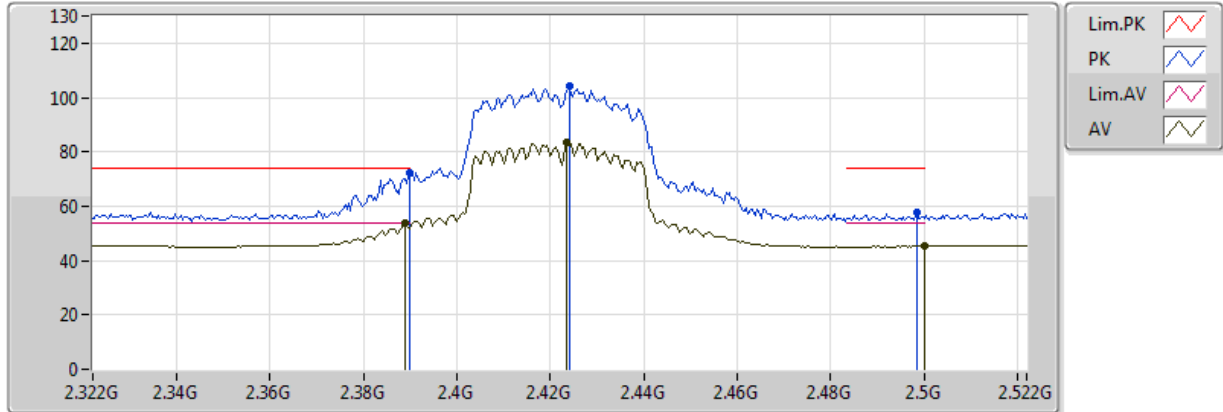


20170831
EUT Y 2TX
04-M-0
FSP
Setting 15

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.389998G	53.98	54.00	-0.02	33.15	3	V	224	1.98	-
AV	2.428G	84.56	Inf	-Inf	33.16	3	V	224	1.98	-
AV	2.4952G	45.98	54.00	-8.02	33.20	3	V	224	1.98	-
PK	2.3896G	72.86	74.00	-1.14	33.15	3	V	224	1.98	-
PK	2.4196G	104.77	Inf	-Inf	33.15	3	V	224	1.98	-
PK	2.4856G	58.10	74.00	-15.90	33.19	3	V	224	1.98	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

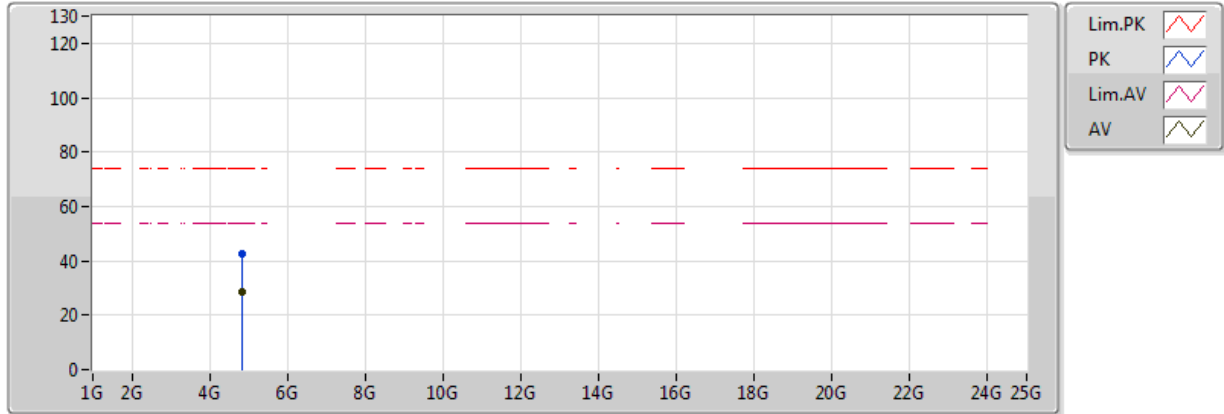


20170831
EUT Y 2TX
04-M-0
FSP
Setting 15

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3888G	53.71	54.00	-0.29	33.15	3	H	160	1.49	-
AV	2.4236G	83.33	Inf	-Inf	33.15	3	H	160	1.49	-
AV	2.5G	45.23	54.00	-8.77	33.20	3	H	160	1.49	-
PK	2.389998G	72.03	74.00	-1.97	33.15	3	H	160	1.49	-
PK	2.424G	103.98	Inf	-Inf	33.15	3	H	160	1.49	-
PK	2.4984G	57.57	74.00	-16.43	33.20	3	H	160	1.49	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

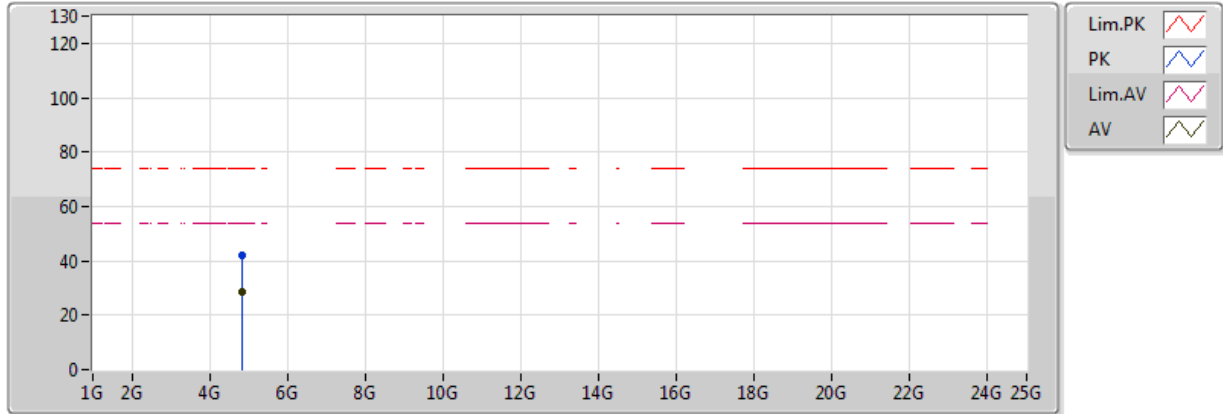


20170831
EUT Y 2TX
04-M-0
FSP
Setting 15

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.84724G	28.59	54.00	-25.41	4.26	3	V	148	1.50	-
PK	4.84648G	42.71	74.00	-31.29	4.25	3	V	148	1.50	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

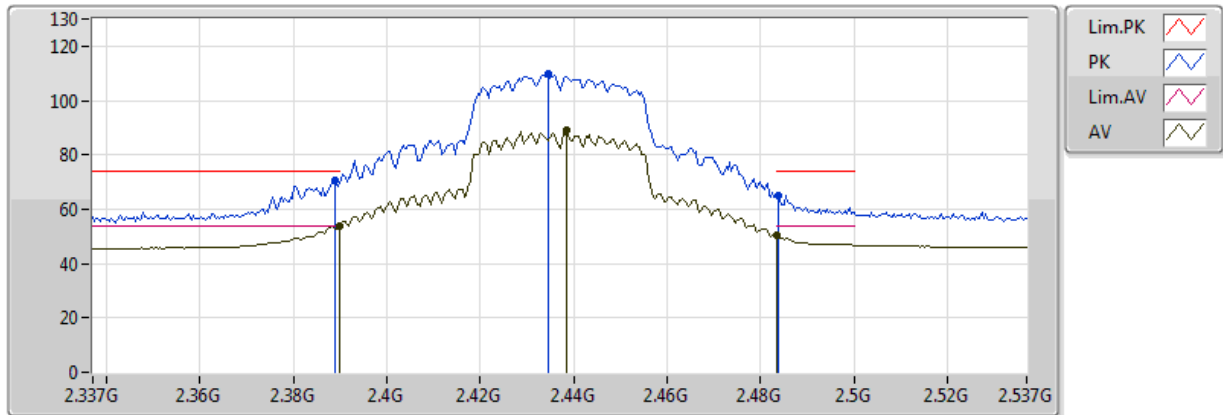


20170831
EUT Y 2TX
04-M-0
FSP
Setting 15

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.84452G	28.41	54.00	-25.59	4.25	3	H	263	1.50	-
PK	4.83624G	42.03	74.00	-31.97	4.22	3	H	263	1.50	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

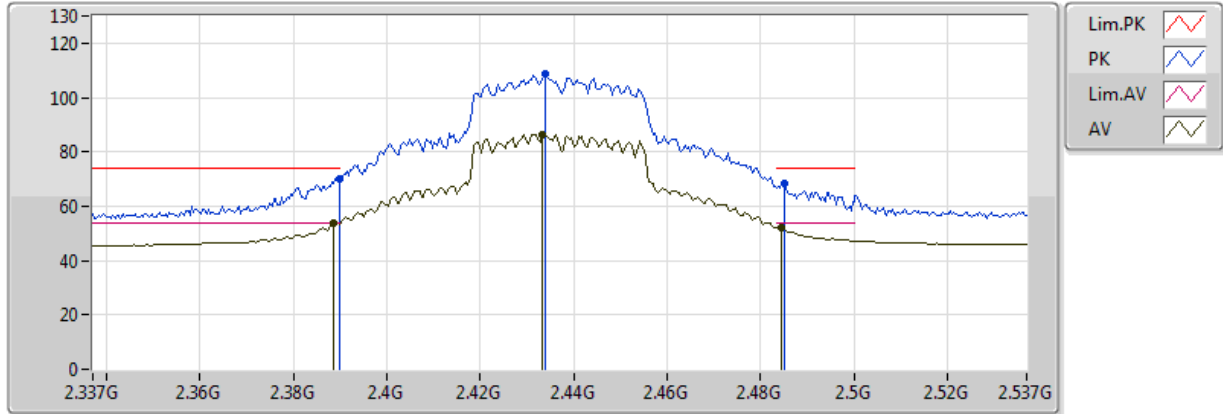


20170831
EUT Y 2TX
04-M-0
FSP
Setting 1D

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3898G	53.95	54.00	-0.05	33.15	3	V	226	1.95	-
AV	2.4386G	88.82	Inf	-Inf	33.16	3	V	226	1.95	-
AV	2.483502G	50.63	54.00	-3.37	33.19	3	V	226	1.95	-
PK	2.389G	70.60	74.00	-3.40	33.15	3	V	226	1.95	-
PK	2.4346G	109.85	Inf	-Inf	33.16	3	V	226	1.95	-
PK	2.4838G	65.02	74.00	-8.98	33.19	3	V	226	1.95	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

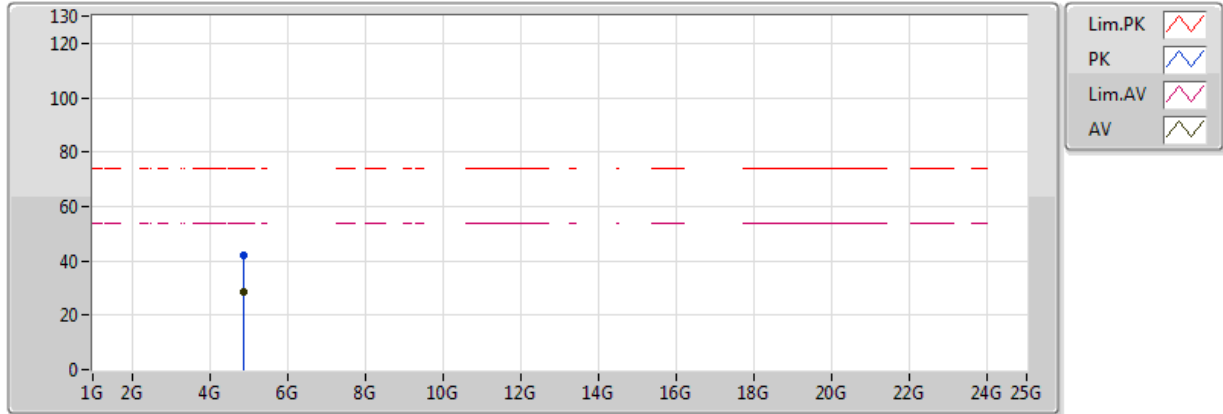


20170831
EUT Y 2TX
04-M-0
FSP
Setting 1D

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3886G	53.99	54.00	-0.01	33.15	3	H	169	1.98	-
AV	2.4334G	86.56	Inf	-Inf	33.16	3	H	169	1.98	-
AV	2.4846G	52.08	54.00	-1.92	33.19	3	H	169	1.98	-
PK	2.3898G	70.00	74.00	-4.00	33.15	3	H	169	1.98	-
PK	2.4338G	108.96	Inf	-Inf	33.16	3	H	169	1.98	-
PK	2.485G	68.20	74.00	-5.80	33.19	3	H	169	1.98	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

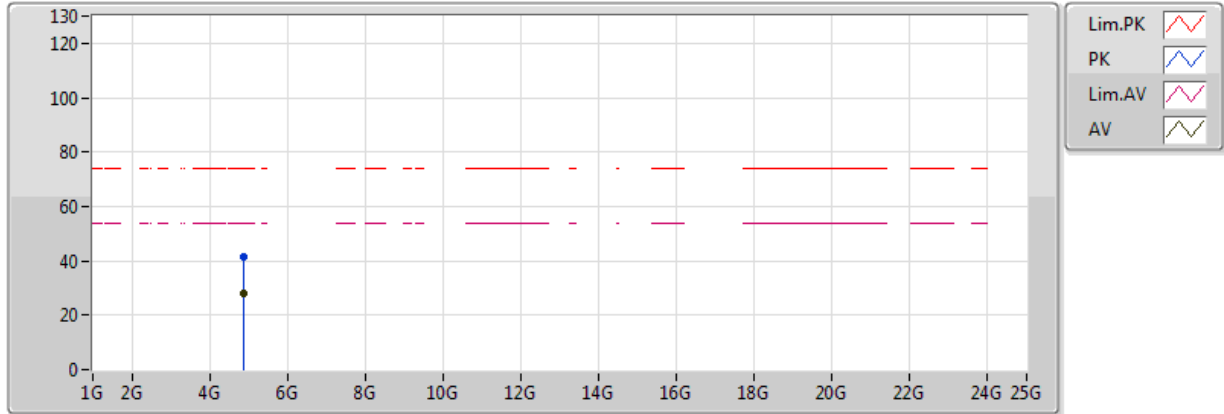


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Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8758G	28.32	54.00	-25.68	4.34	3	V	120	1.50	-
PK	4.87584G	42.15	74.00	-31.85	4.35	3	V	120	1.50	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

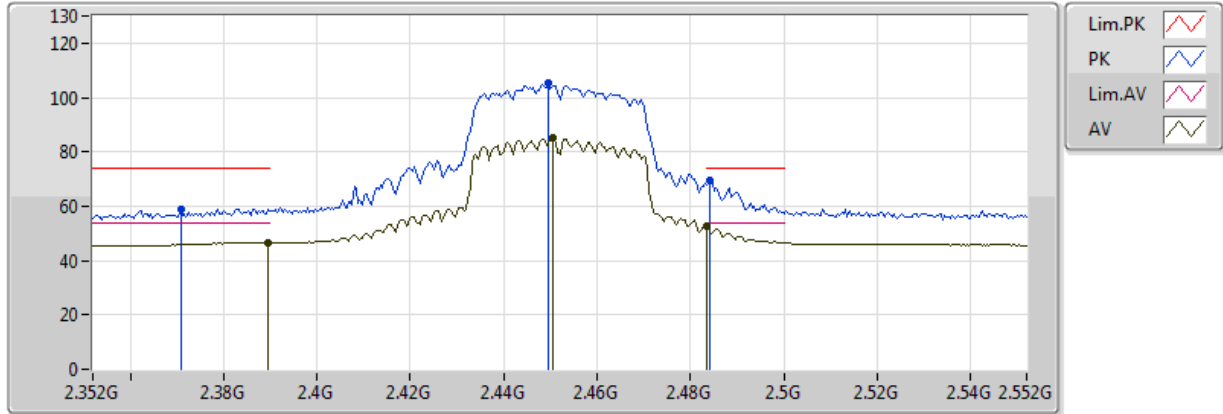


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Setting 1D

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87416G	28.28	54.00	-25.72	4.34	3	H	102	1.50	-
PK	4.87488G	41.49	74.00	-32.51	4.34	3	H	102	1.50	-

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX

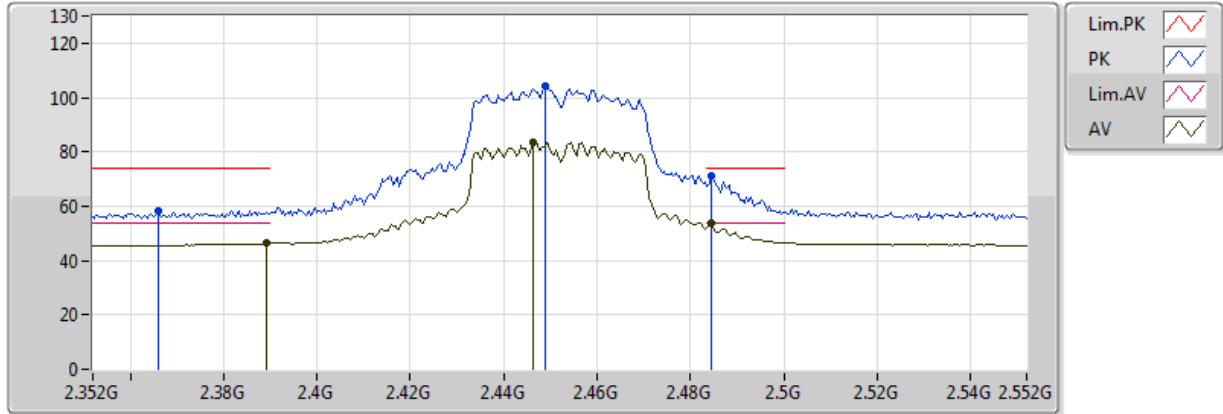


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Setting 16

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	46.63	54.00	-7.37	33.15	3	V	221	1.97	-
AV	2.4504G	85.09	Inf	-Inf	33.17	3	V	221	1.97	-
AV	2.4836G	52.48	54.00	-1.52	33.19	3	V	221	1.97	-
PK	2.3708G	59.10	74.00	-14.90	33.15	3	V	221	1.97	-
PK	2.4496G	105.14	Inf	-Inf	33.17	3	V	221	1.97	-
PK	2.484G	69.69	74.00	-4.31	33.19	3	V	221	1.97	-

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX

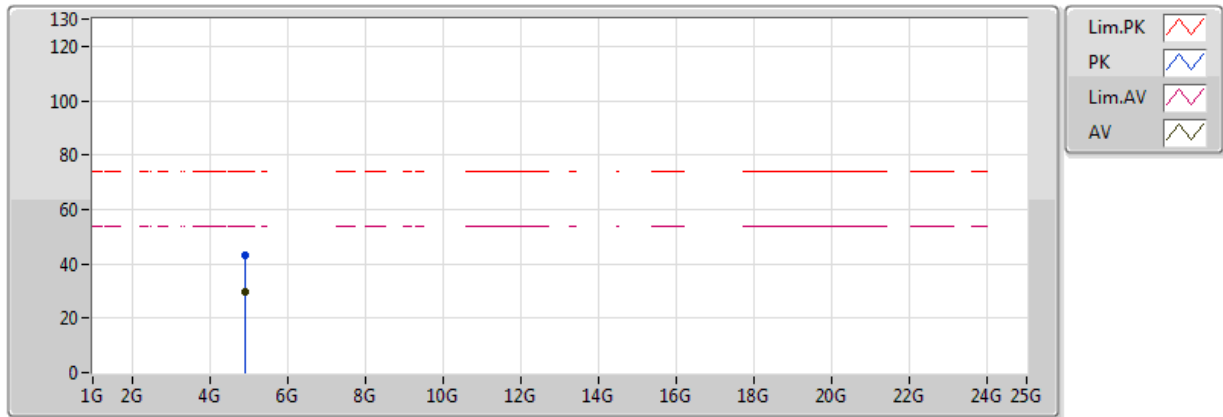


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Setting 16

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	46.30	54.00	-7.70	33.15	3	H	168	1.98	-
AV	2.4464G	83.49	Inf	-Inf	33.17	3	H	168	1.98	-
AV	2.4844G	53.72	54.00	-0.28	33.19	3	H	168	1.98	-
PK	2.366G	58.45	74.00	-15.55	33.16	3	H	168	1.98	-
PK	2.4488G	104.07	Inf	-Inf	33.17	3	H	168	1.98	-
PK	2.4844G	71.33	74.00	-2.67	33.19	3	H	168	1.98	-

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX

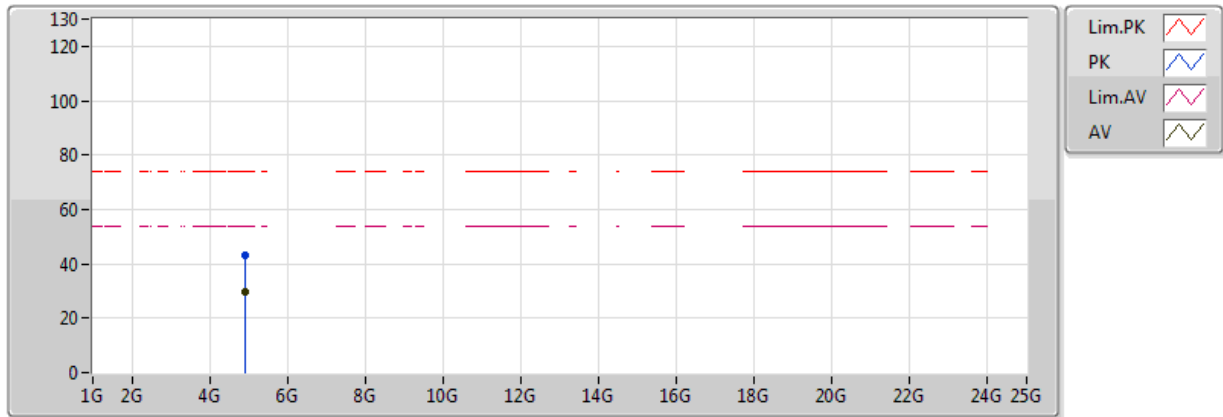


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Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.90916G	29.53	54.00	-24.47	4.45	3	V	180	1.50	-
PK	4.90492G	43.00	74.00	-31.00	4.44	3	V	180	1.50	-

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Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.91156G	29.55	54.00	-24.45	4.46	3	H	137	1.50	-
PK	4.91104G	43.29	74.00	-30.71	4.45	3	H	137	1.50	-