

FCC Test Report

Equipment : AC1200 Dual-Band Outdoor Wireless Access Point
Brand Name : Luxul
Model No. : XAP-1440
FCC ID : W59XAP1440
Standard : 47 CFR FCC Part 15.247
Operating Band : 2400 MHz – 2483.5 MHz
Function : ☒ Point-to-multipoint; ☐ Point-to-point
Applicant : Luxul Wireless
12884 S Frontrunner Blvd, Suite 201, Draper, UT 84020
USA

The product sample received on May 02, 2017 and completely tested on May 23, 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.



Table of Contents

1	GENERAL DESCRIPTION	5
1.1	Information.....	5
1.2	Testing Location Information.....	7
1.3	Measurement Uncertainty	7
2	TEST CONFIGURATION OF EUT	8
2.1	Test Channel Mode	8
2.2	The Worst Case Measurement Configuration.....	9
2.3	EUT Operation during Test	9
2.4	Accessories	10
2.5	Support Equipment.....	10
2.6	Test Setup Diagram	11
3	TRANSMITTER TEST RESULT	13
3.1	AC Power-line Conducted Emissions	13
3.2	DTS Bandwidth	15
3.3	Maximum Conducted Output Power	16
3.4	Power Spectral Density	18
3.5	Emissions in Non-restricted Frequency Bands	20
3.6	Emissions in Restricted Frequency Bands.....	21
4	TEST EQUIPMENT AND CALIBRATION DATA	25
APPENDIX A. TEST RESULTS OF AC POWER-LINE CONDUCTED EMISSIONS		
APPENDIX B. TEST RESULTS OF DTS BANDWIDTH		
APPENDIX C. TEST RESULTS OF MAXIMUM CONDUCTED OUTPUT POWER		
APPENDIX D. TEST RESULTS OF POWER SPECTRAL DENSITY		
APPENDIX E. TEST RESULTS OF EMISSIONS IN NON-RESTRICTED FREQUENCY BANDS		
APPENDIX F. TEST RESULTS OF EMISSIONS IN RESTRICTED FREQUENCY BANDS		
APPENDIX G. TEST PHOTOS		
PHOTOGRAPHS OF EUT V01		

Summary of Test Result

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

[illegible]

1 General Description

1.1 Information

1.1.1 RF General Information

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

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	1TX(Port 2)
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.	Port	Brand	Vender No.	Antenna Type	Connector	Gain (dBi)	
						2.4GHz	5GHz
1	1	Nienyi	NYS2817	Dipole Antenna	MHF-I Plug	5.8	4.8
2	2	Nienyi	NYS2817	Dipole Antenna	MHF-I Plug	5.8	4.8

Note: The EUT has two antennas.

<For 2.4GHz Band>

For IEEE 802.11b mode (1TX/1RX)

It fixed Port 2 as transmitting and receiving antenna.

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

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

Port 1 and Port 2 could transmit/receive simultaneously.

<For 5GHz Band>

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

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

Port 1 and Port 2 could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)
802.11b	0.898	0.467
802.11g	0.881	0.55
802.11n HT20	0.952	0.214
802.11n HT40	0.88	0.555

1.1.4 EUT Operational Condition

EUT Power Type	From PoE		
Beamforming Function	<input checked="" type="checkbox"/>	With beamforming for 802.11n/ac in 5GHz	<input type="checkbox"/> 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				
<input type="checkbox"/>	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
<input checked="" type="checkbox"/>	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	Stim Sung / Brian Sun	20°C / 50%	May 15, 2017~ May 17, 2017
Radiated	03CH01-CB	Joy Luo	22°C / 54%	May 15, 2017~ May 23, 2017
AC Conduction	CO02-CB	Kane Liu	22°C / 61%	May 23, 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)_1TX	-
2412MHz	88
2437MHz	86
2462MHz	80
802.11g_(6Mbps)_2TX	-
2412MHz	69
2437MHz	80
2462MHz	70
802.11n HT20_Nss1,(MCS0)_2TX	-
2412MHz	59
2437MHz	81
2462MHz	61
802.11n HT40_Nss1,(MCS0)_2TX	-
2422MHz	47
2437MHz	65
2452MHz	56

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
1	EUT with PoE

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
1	EUT in Y axis with PoE
Operating Mode > 1GHz	CTX
1	EUT in Y axis with PoE

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.: FA750948 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

Accessories				
No.	Equipment Name	Brand Name	Model Name	Rating
1	PoE	PHIHONG	POE29U-560	INPUT: 100-240V~0.8A 50-60Hz OUTPUT: 56V, 0.536A
Others				
Power Cable*1: Non-Shielded, 1.8m				
RJ-45 Cable*1: Non-Shielded, 1.0m				

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

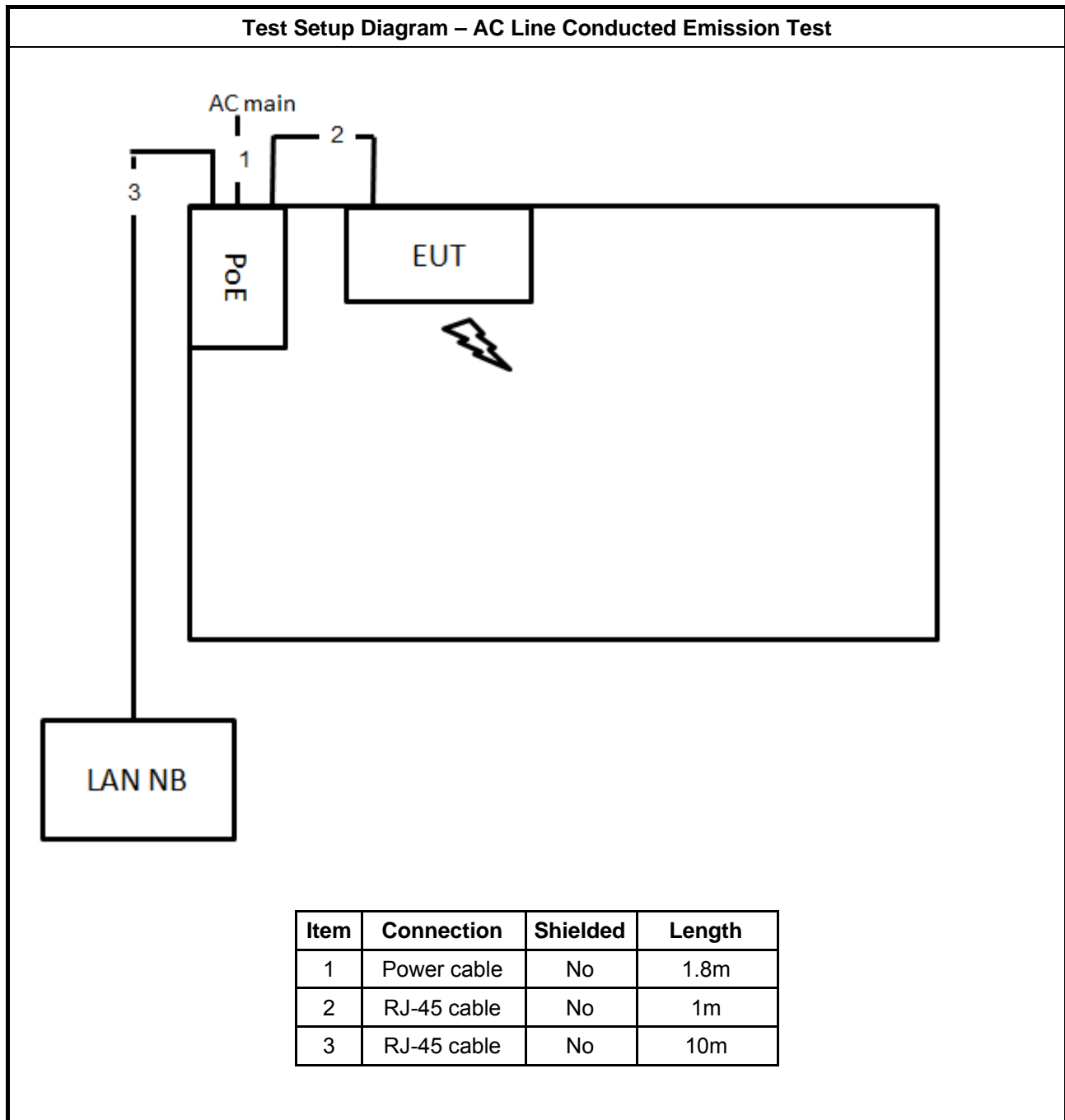
For Test Site No: 03CH01-CB

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

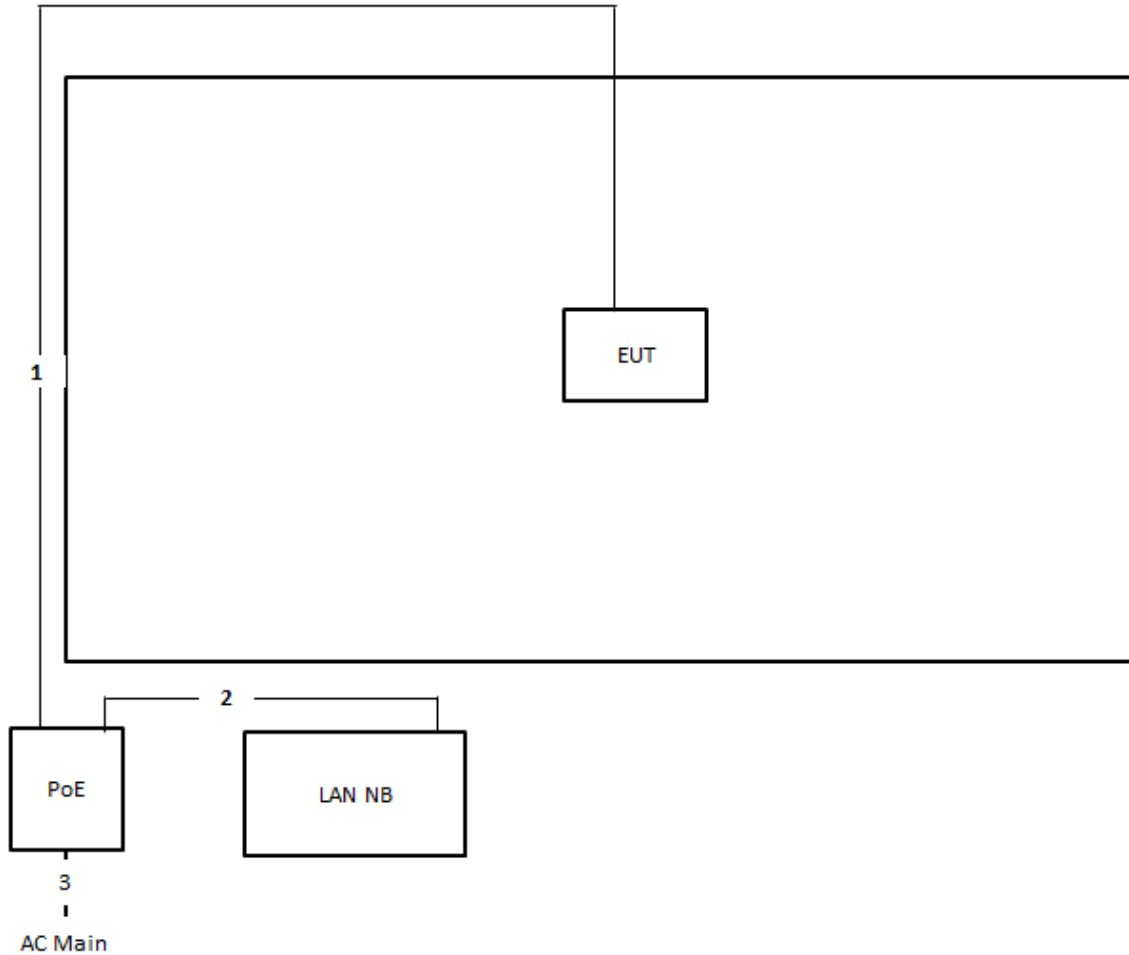
For Test Site No: TH01-CB

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

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	RJ-45 cable	No	0.5m
3	Power cable	No	1.8m

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.

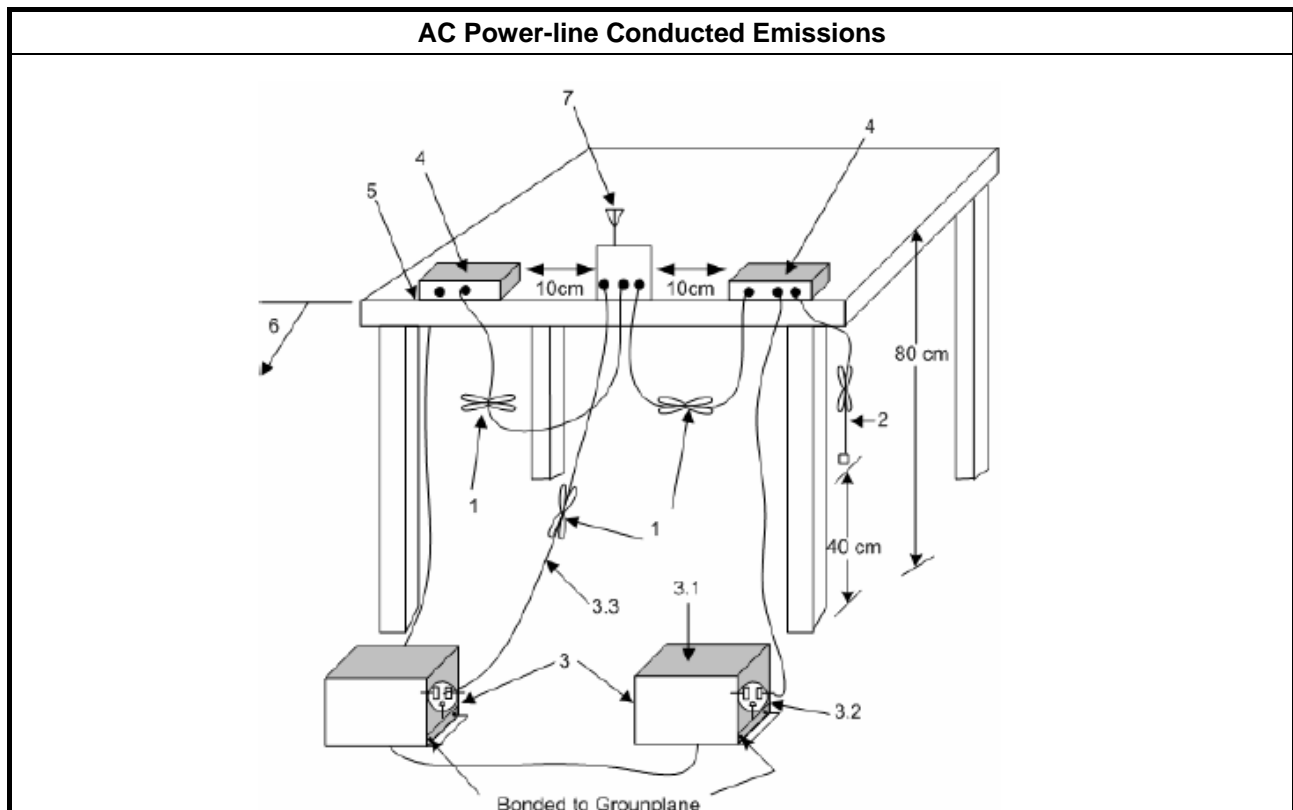
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

Test Method
<input checked="" type="checkbox"/> 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.

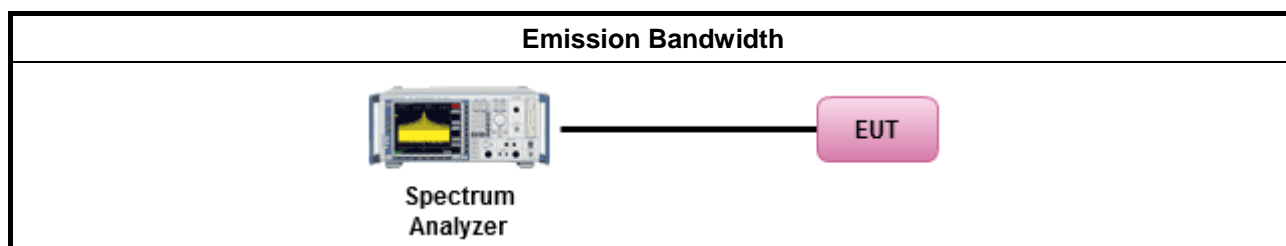
3.2.2 Measuring Instruments

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:
<input checked="" type="checkbox"/>	Refer as FCC KDB 558074, clause 8.1 Option 1 for 6 dB bandwidth measurement.
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.2 Option 2 for 6 dB bandwidth measurement.
<input type="checkbox"/>	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.	

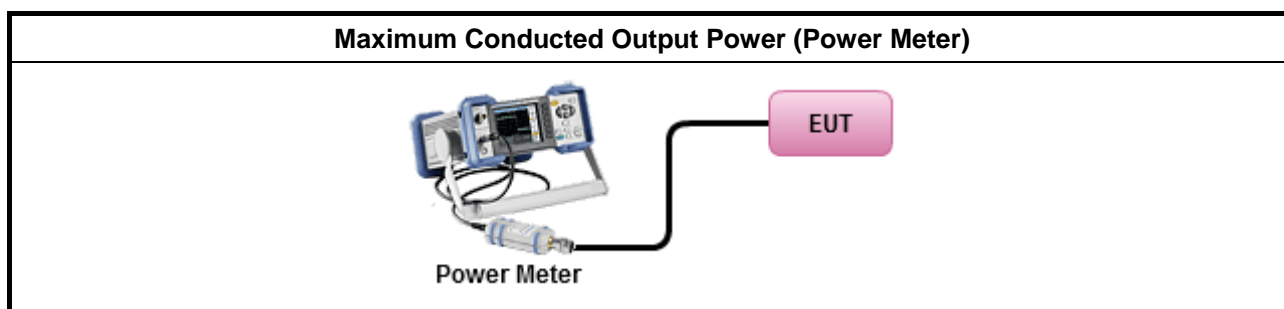
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> Maximum Peak Conducted Output Power 	
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 9.1.1 Option 1 (RBW ≥ EBW method).
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 9.1.2 Option 2 (peak power meter for VBW ≥ DTS BW)
<ul style="list-style-type: none"> Maximum Conducted Output Power 	
[duty cycle ≥ 98% or external video / power trigger]	
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 9.2.2.2 Method AVGSA-1 (spectral trace averaging).
<input type="checkbox"/>	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	
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 9.2.2.4 Method AVGSA-2 (spectral trace averaging).
<input type="checkbox"/>	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	
<input checked="" type="checkbox"/>	Refer as FCC KDB 558074, clause 9.2.3 Method AVGPM-G (using an RF average power meter).
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 9.1.2 PKPM1 Peak power meter method.
<ul style="list-style-type: none"> For conducted measurement. 	
<ul style="list-style-type: none"> 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. 	
<ul style="list-style-type: none"> 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) \leq 8 dBm/3kHz

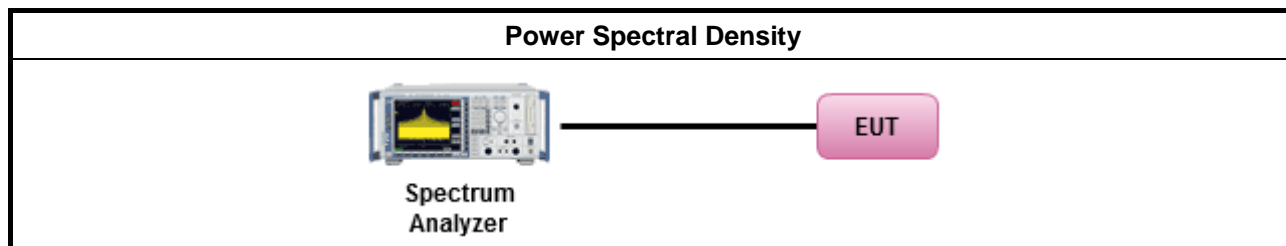
3.4.2 Measuring Instruments

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).
<input checked="" type="checkbox"/>	Refer as FCC KDB 558074, clause 10.2 Method PKPSD (RBW=3-100kHz; Detector=peak). [duty cycle \geq 98% or external video / power trigger]
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 10.3 Method AVGPS-1 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 10.4 Method AVGPS-2 (slow sweep speed)
	duty cycle $<$ 98% and average over on/off periods with duty factor
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 10.5 Method AVGPS-1 Alt (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 10.6 Method AVGPS-2 Alt. (slow sweep speed)
▪	For conducted measurement.
▪	If The EUT supports multiple transmit chains using options given below:
<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	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,
<input type="checkbox"/>	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
<p>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.</p> <p>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.</p>	

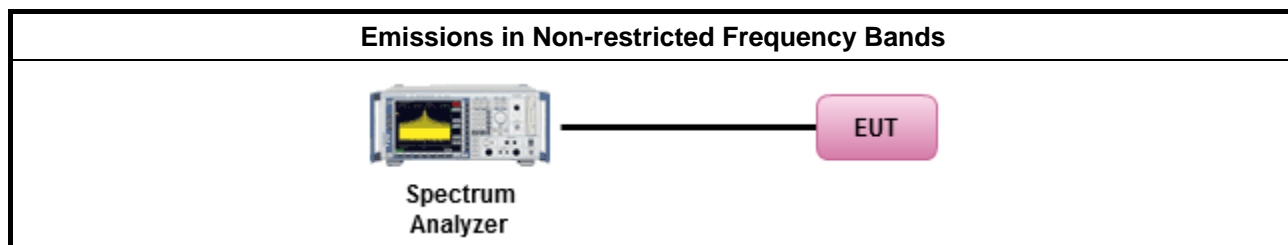
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
<ul style="list-style-type: none"> 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.

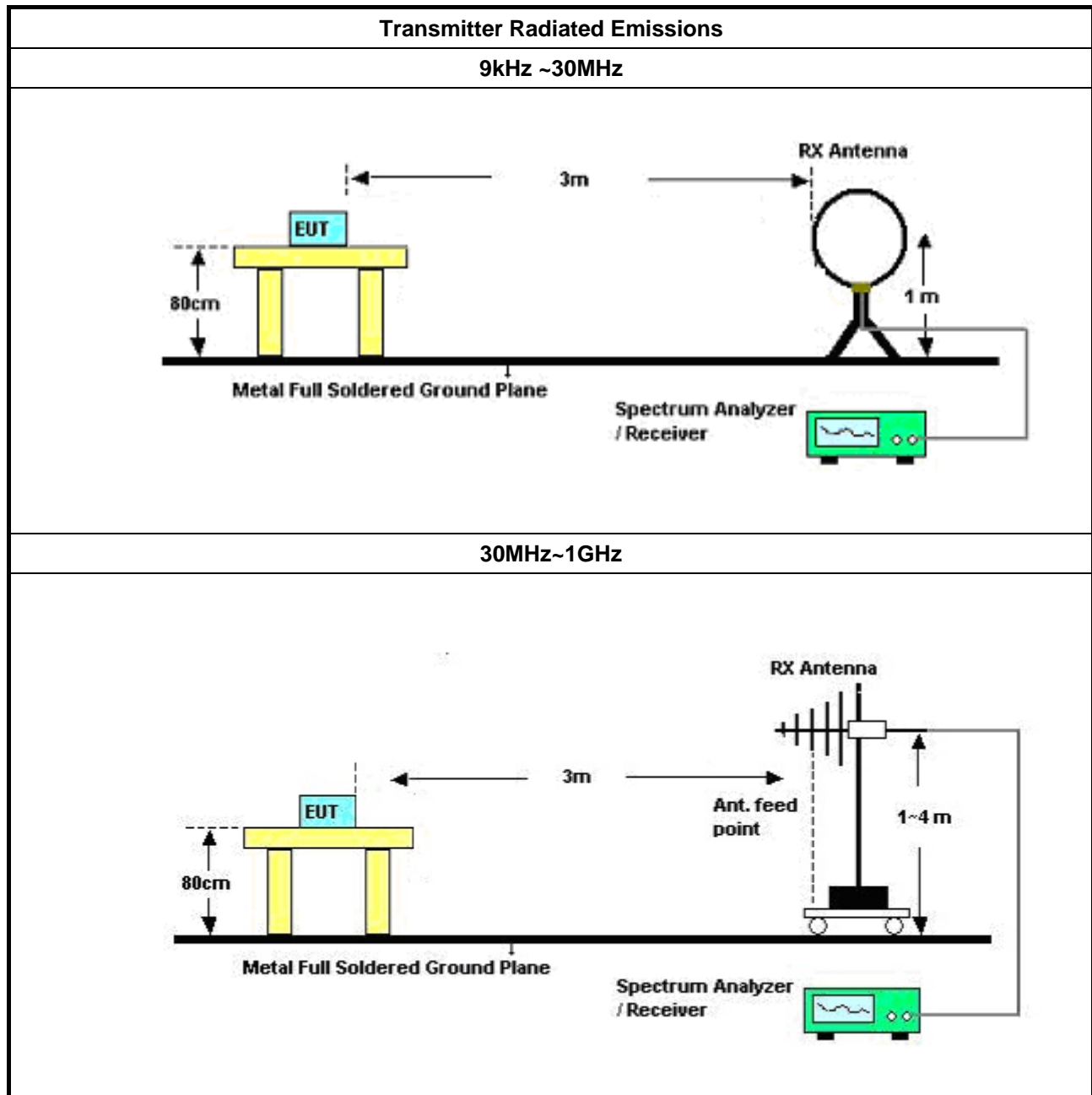
3.6.2 Measuring Instruments

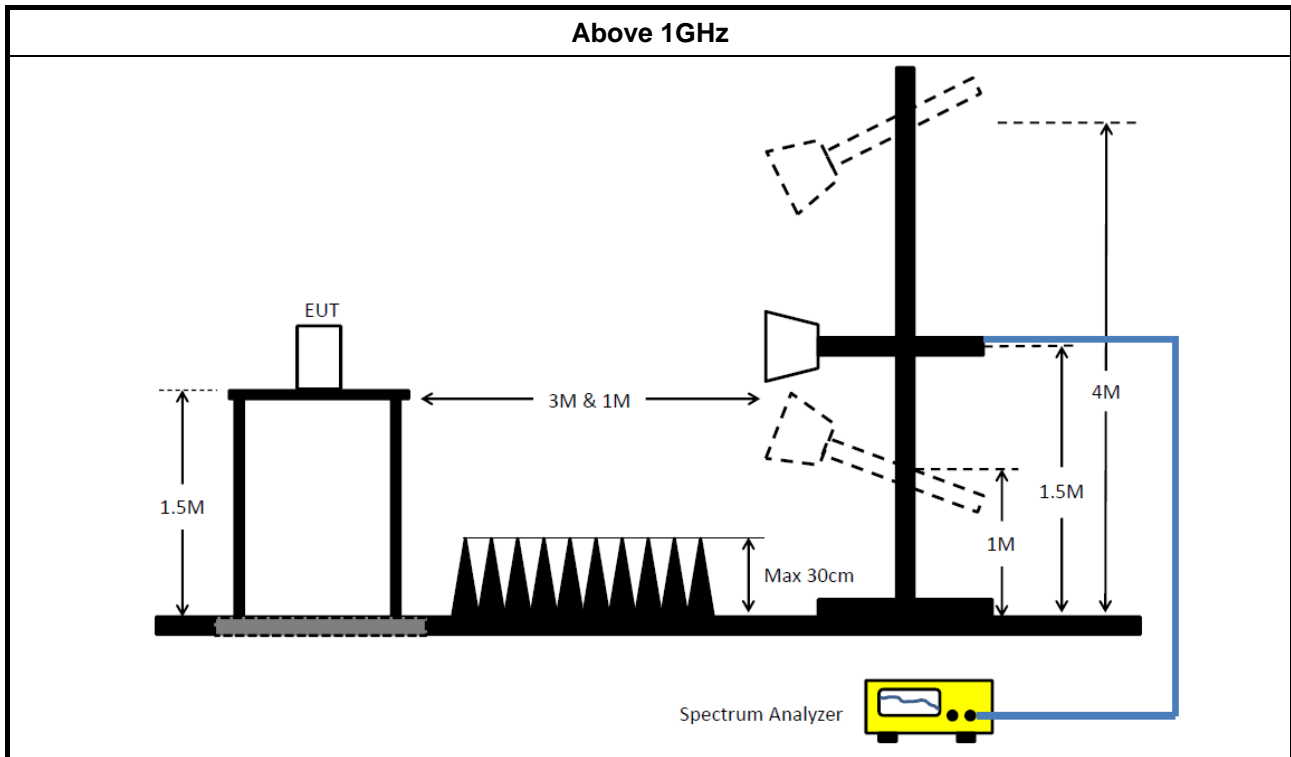
Refer a test equipment and calibration data table in this test report.

3.6.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor]. 	
<ul style="list-style-type: none"> 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. 	
<ul style="list-style-type: none"> For the transmitter unwanted emissions shall be measured using following options below: 	
	<ul style="list-style-type: none"> Refer as FCC KDB 558074, clause 12 for unwanted emissions into restricted bands.
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 12.2.5.1 Option 1 (trace averaging for duty cycle $\geq 98\%$)
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 12.2.5.2 Option 2 (trace averaging + duty factor).
	<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 12.2.5.3 Option 3 (Reduced VBW $\geq 1/T$).
	<input type="checkbox"/> Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW $\geq 1/T$, where T is pulse time.
	<input type="checkbox"/> Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.
	<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 12.2.4 measurement procedure peak limit.
<ul style="list-style-type: none"> For the transmitter band-edge emissions shall be measured using following options below: 	
	<ul style="list-style-type: none"> 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.
	<ul style="list-style-type: none"> Refer as FCC KDB 558074, clause 13.2 (ANSI C63.10, clause 6.9.3) for marker-delta method for band-edge measurements.
	<ul style="list-style-type: none"> 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).
<ul style="list-style-type: none"> For conducted and cabinet radiation measurement, refer as FCC KDB 558074, clause 12.2.2. 	
	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> 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)

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
LISN	Schwarzbeck	NSLK 8127	8127650	9kHz ~ 30MHz	Nov. 23, 2016	Conduction (CO02-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Nov. 15, 2016	Conduction (CO02-CB)
EMI Receiver	Agilent	N9038A	MY52260140	9kHz ~ 8.4GHz	Jan. 16, 2017	Conduction (CO02-CB)
COND Cable	Woken	Cable	01	0.15MHz ~ 30MHz	Nov. 30, 2016	Conduction (CO02-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	Conduction (CO02-CB)
Pulse Limiter	Schwarzbeck	VTSD 9561F	9561-F073	9kHz ~ 30MHz	Sep. 29, 2016	Conduction (CO02-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	Agilent	8447D	2944A10991	0.1MHz ~ 1.3GHz	Mar. 13, 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)
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)

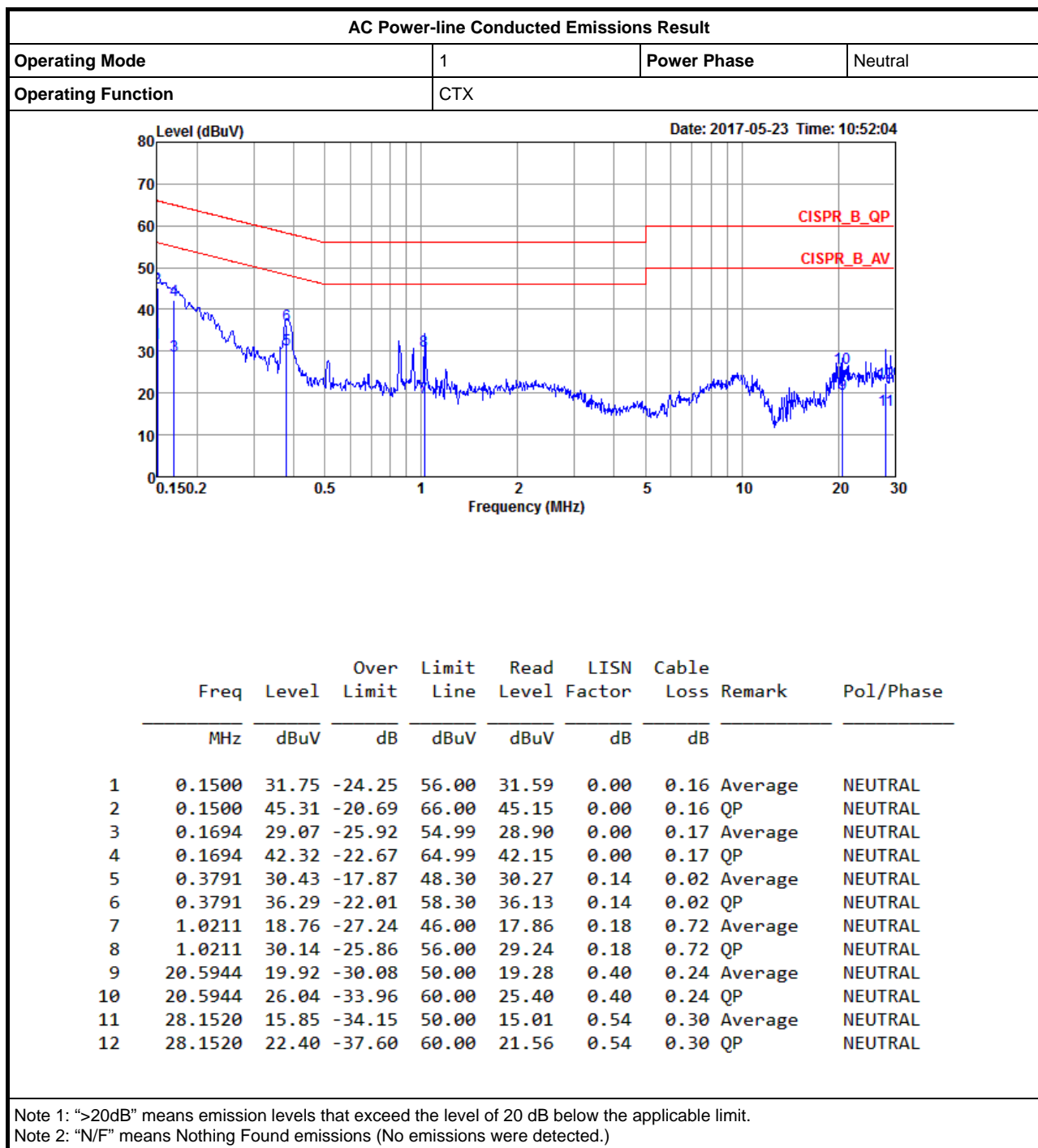


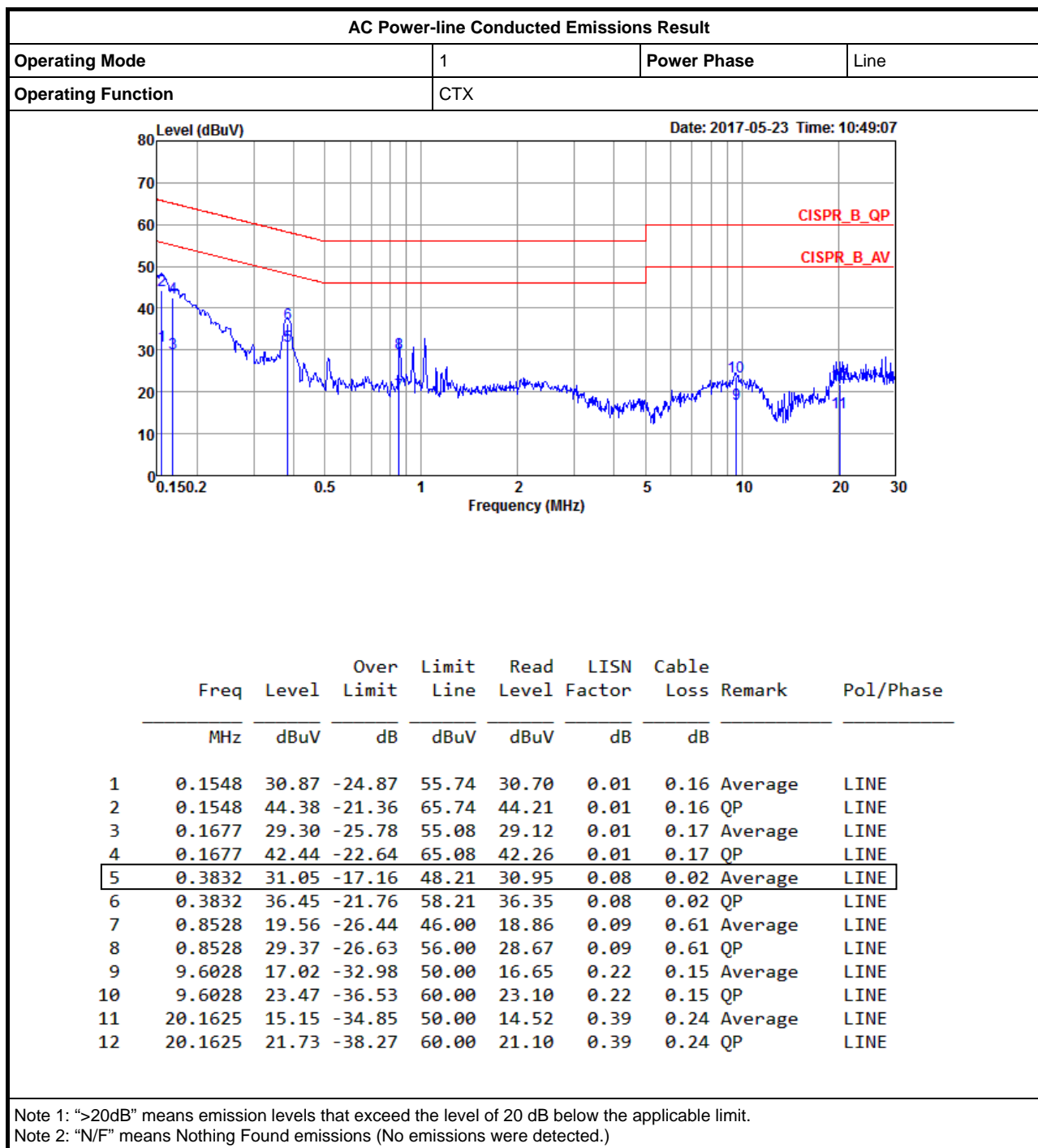
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
Test Software	Audix	E3	6.2009-10-7	N/A	N/A	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 26, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-6	1 GHz – 26.5 GHz	Oct. 24, 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.





Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
802.11b_(1Mbps)_1TX	-	-	-	-	-
2.4-2.4835GHz	8.05M	10.42M	10M4G1D	7.575M	9.995M
802.11g_(6Mbps)_2TX	-	-	-	-	-
2.4-2.4835GHz	16.425M	16.642M	16M6D1D	11.3M	16.492M
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-
2.4-2.4835GHz	17.625M	17.791M	17M8D1D	15.7M	17.641M
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-
2.4-2.4835GHz	35.85M	36.082M	36M1D1D	34.45M	35.982M

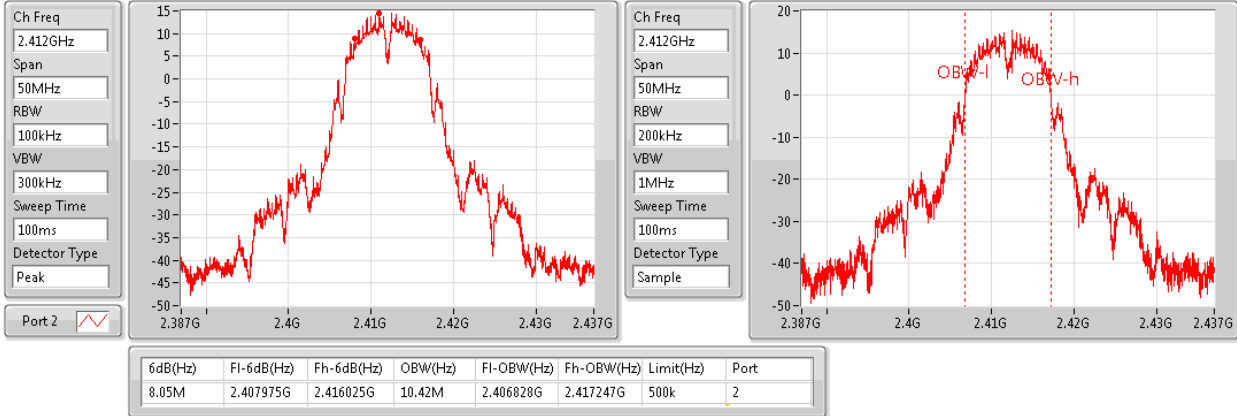
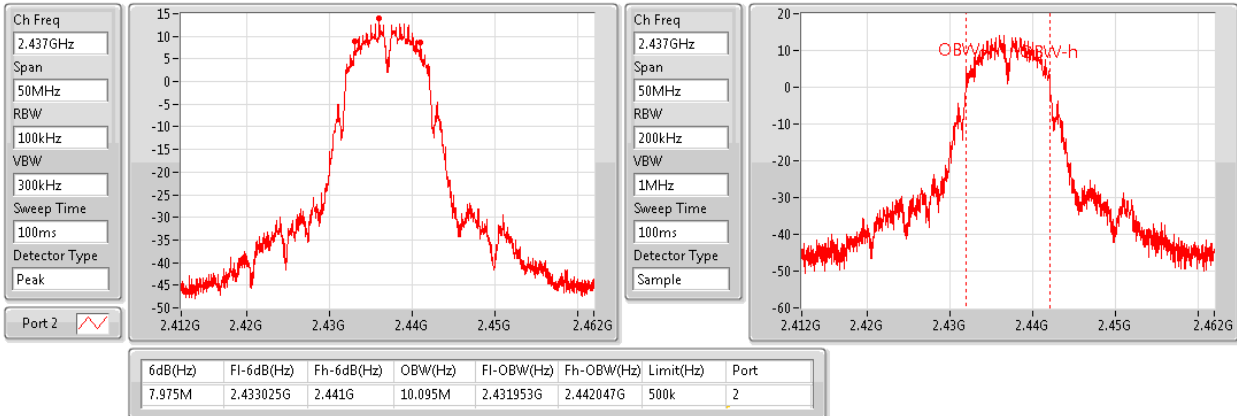
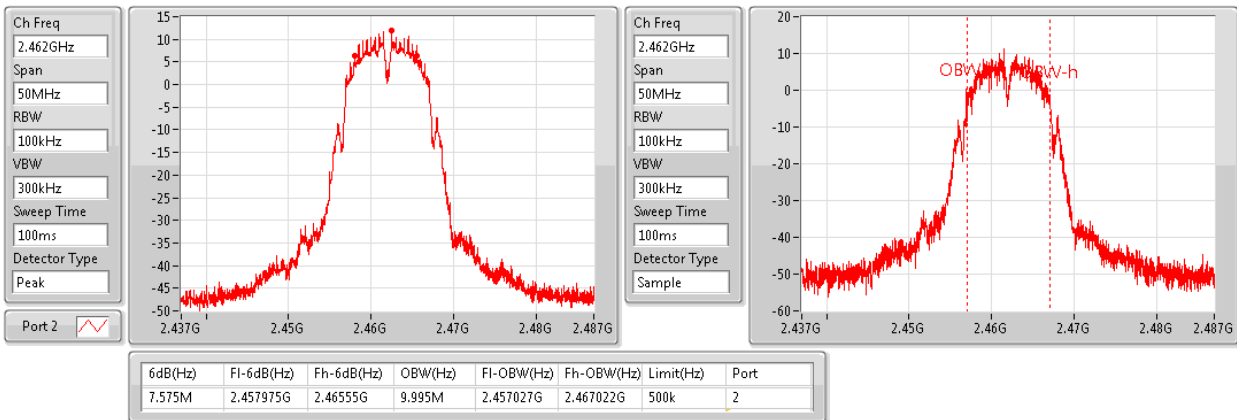
Max-N dB = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;

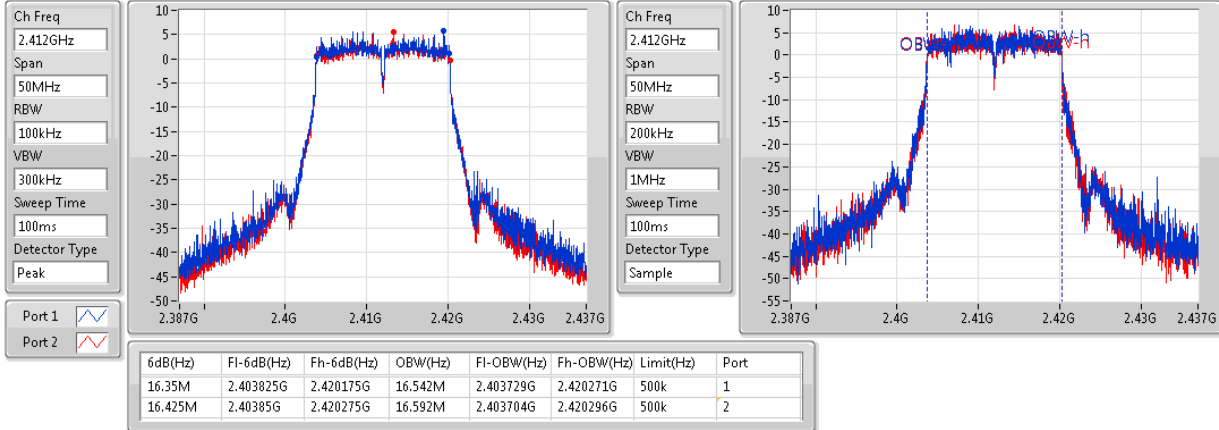
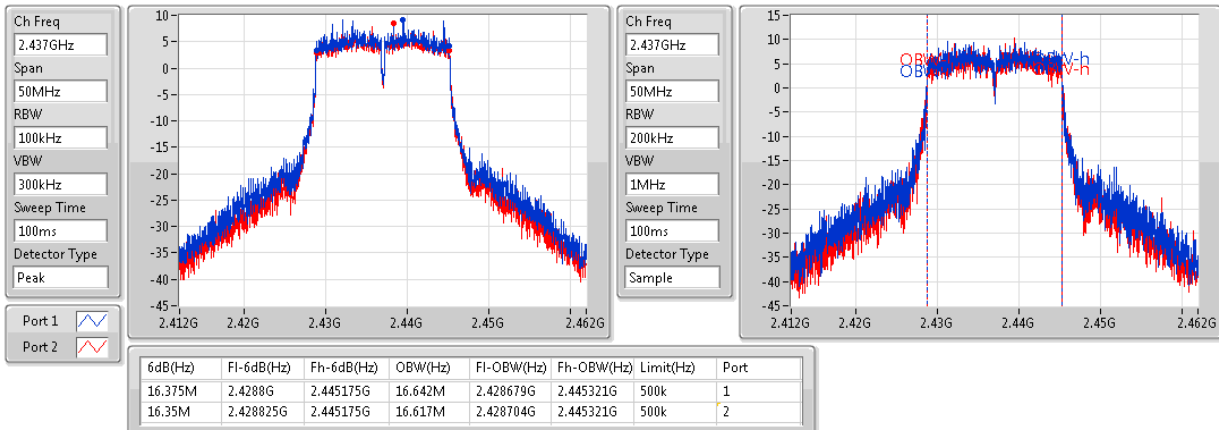
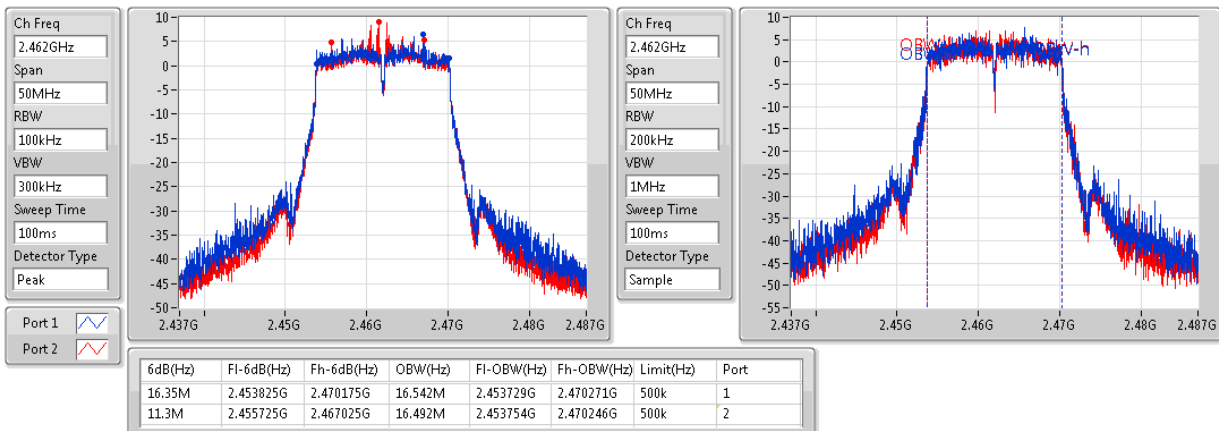
Min-N dB = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

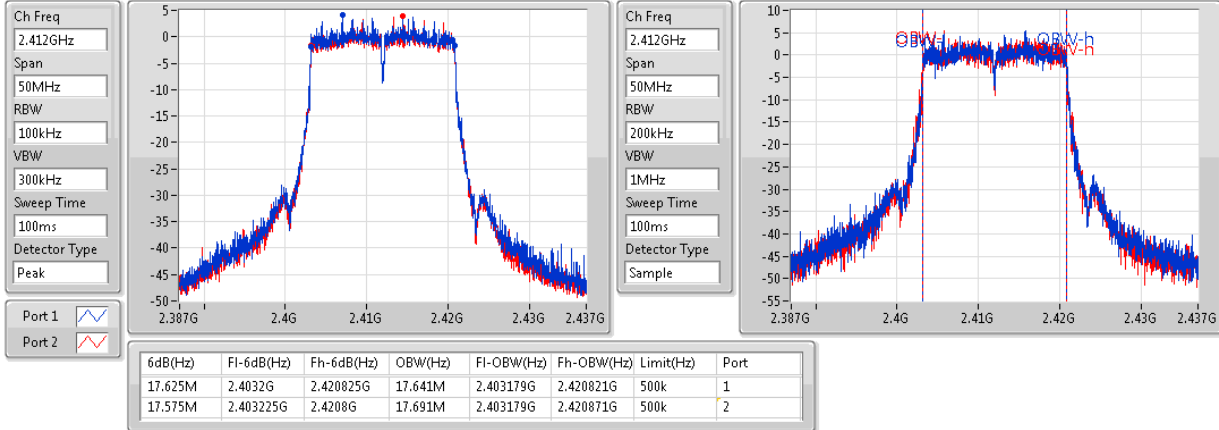
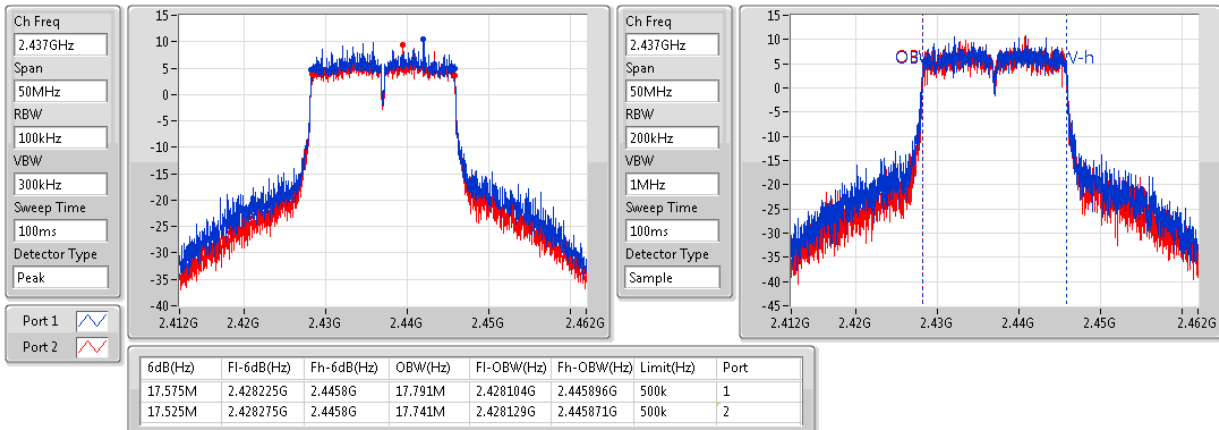
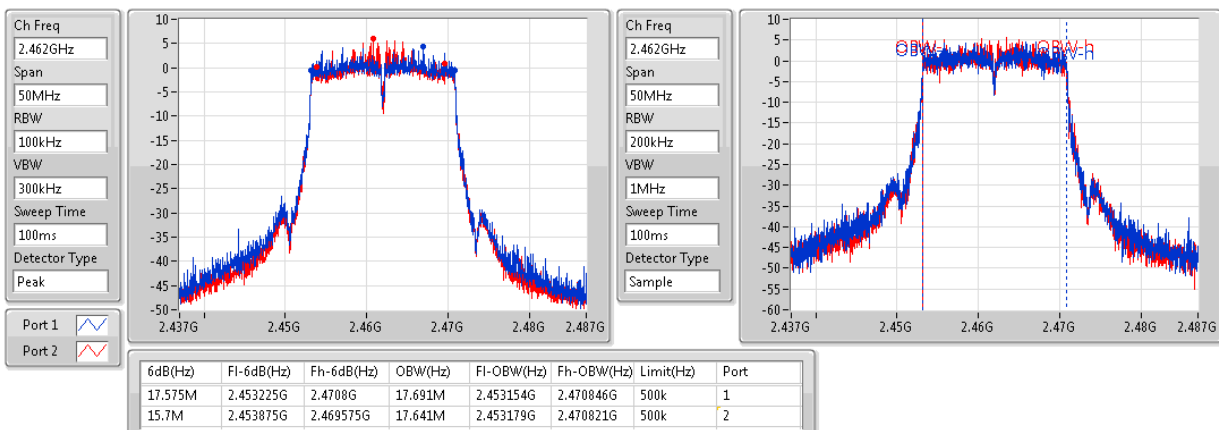
Result

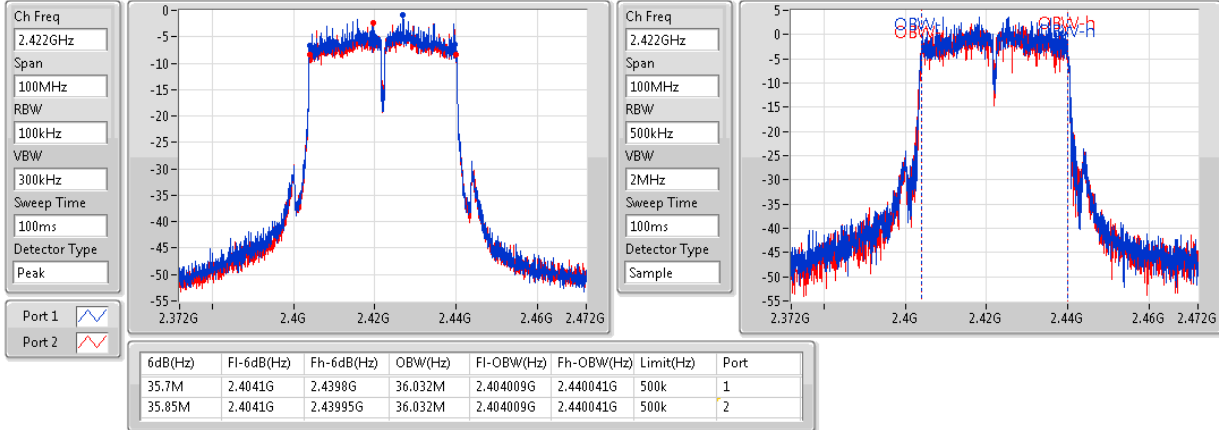
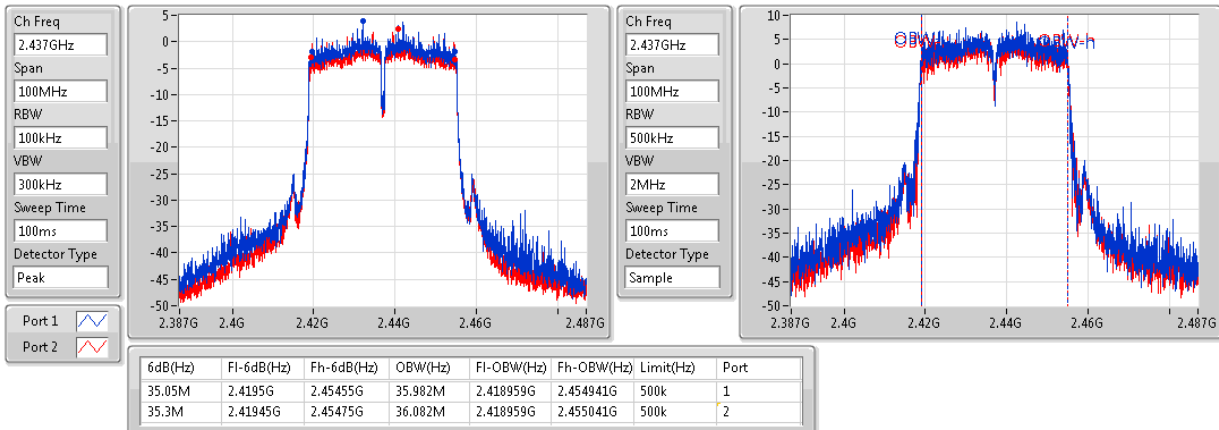
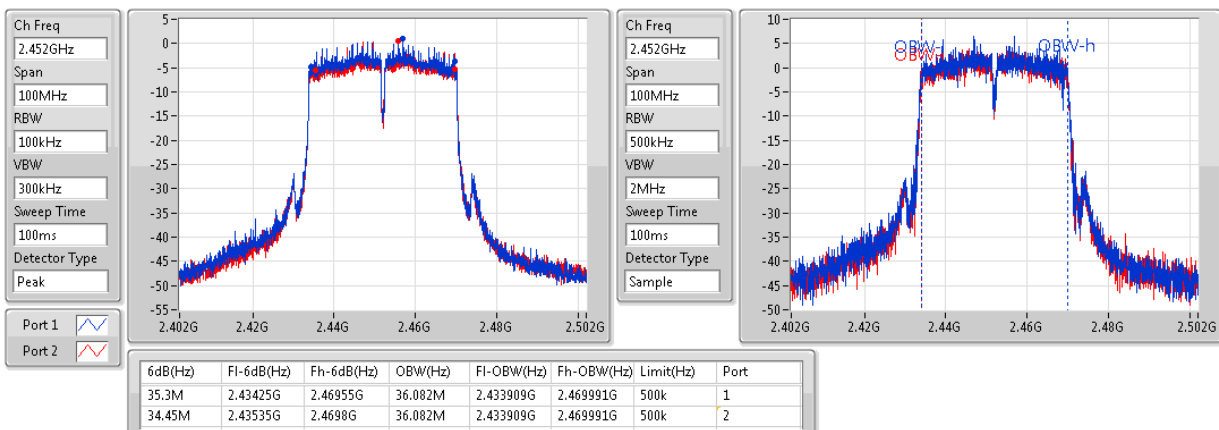
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_(1Mbps)_1TX	-	-	-	-	-	-
2412MHz	Pass	500k			8.05M	10.42M
2437MHz	Pass	500k			7.975M	10.095M
2462MHz	Pass	500k			7.575M	9.995M
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.35M	16.542M	16.425M	16.592M
2437MHz	Pass	500k	16.375M	16.642M	16.35M	16.617M
2462MHz	Pass	500k	16.35M	16.542M	11.3M	16.492M
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	17.625M	17.641M	17.575M	17.691M
2437MHz	Pass	500k	17.575M	17.791M	17.525M	17.741M
2462MHz	Pass	500k	17.575M	17.691M	15.7M	17.641M
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	35.7M	36.032M	35.85M	36.032M
2437MHz	Pass	500k	35.05M	35.982M	35.3M	36.082M
2452MHz	Pass	500k	35.3M	36.082M	34.45M	36.082M

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

802.11b_(1Mbps)_1TX
EBW
2412MHz

802.11b_(1Mbps)_1TX
EBW
2437MHz

802.11b_(1Mbps)_1TX
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)_1TX	-	-
2.4-2.4835GHz	23.65	0.23174
802.11g_(6Mbps)_2TX	-	-
2.4-2.4835GHz	23.96	0.24889
802.11n HT20_Nss1,(MCS0)_2TX	-	-
2.4-2.4835GHz	24.57	0.28642
802.11n HT40_Nss1,(MCS0)_2TX	-	-
2.4-2.4835GHz	20.37	0.10889

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_(1Mbps)_1TX	-	-	-	-	-	-
2412MHz	Pass	5.80		23.65	23.65	30.00
2437MHz	Pass	5.80		22.23	22.23	30.00
2462MHz	Pass	5.80		20.06	20.06	30.00
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.80	18.34	18.04	21.20	30.00
2437MHz	Pass	5.80	20.95	20.95	23.96	30.00
2462MHz	Pass	5.80	18.08	18.10	21.10	30.00
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.80	16.38	16.37	19.39	30.00
2437MHz	Pass	5.80	21.52	21.59	24.57	30.00
2462MHz	Pass	5.80	16.15	16.11	19.14	30.00
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	5.80	13.55	13.29	16.43	30.00
2437MHz	Pass	5.80	17.41	17.30	20.37	30.00
2452MHz	Pass	5.80	14.87	14.92	17.91	30.00

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

Summary

Mode	PD (dBm/RBW)
802.11b_(1Mbps)_1TX	-
2.4-2.4835GHz	-0.35
802.11g_(6Mbps)_2TX	-
2.4-2.4835GHz	-4.08
802.11n HT20_Nss1,(MCS0)_2TX	-
2.4-2.4835GHz	-2.88
802.11n HT40_Nss1,(MCS0)_2TX	-
2.4-2.4835GHz	-10.35

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)_1TX	-	-	-	-	-	-
2412MHz	Pass	5.80		-0.43	-0.43	8.00
2437MHz	Pass	5.80		-0.35	-0.35	8.00
2462MHz	Pass	5.80		-3.67	-3.67	8.00
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.81	-7.17	-7.56	-6.25	5.19
2437MHz	Pass	8.81	-5.45	-5.67	-4.08	5.19
2462MHz	Pass	8.81	-7.76	-7.50	-6.37	5.19
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	8.81	-10.05	-9.46	-8.16	5.19
2437MHz	Pass	8.81	-4.00	-4.61	-2.88	5.19
2462MHz	Pass	8.81	-8.93	-10.72	-7.48	5.19
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	8.81	-15.14	-16.73	-13.97	5.19
2437MHz	Pass	8.81	-10.97	-11.27	-10.35	5.19
2452MHz	Pass	8.81	-13.00	-13.97	-12.36	5.19

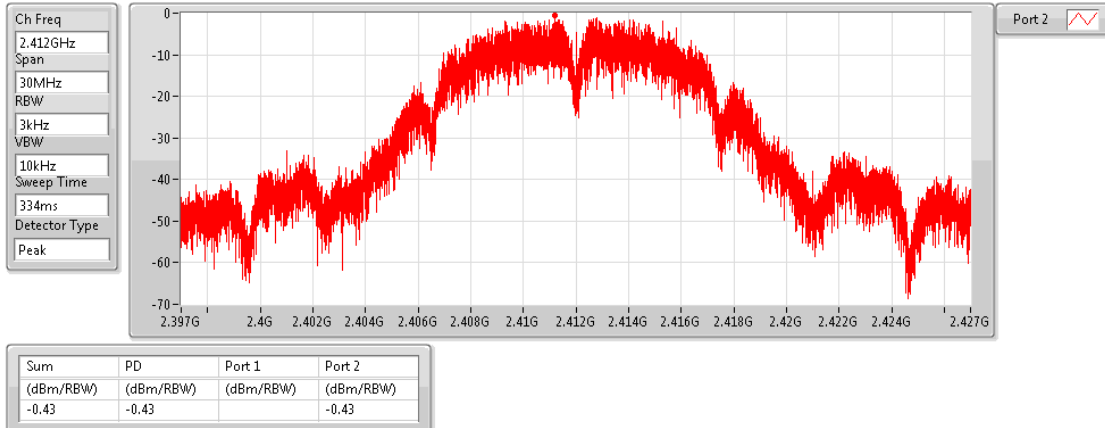
DG = Directional Gain; RBW=3kHz;

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)_1TX

PSD

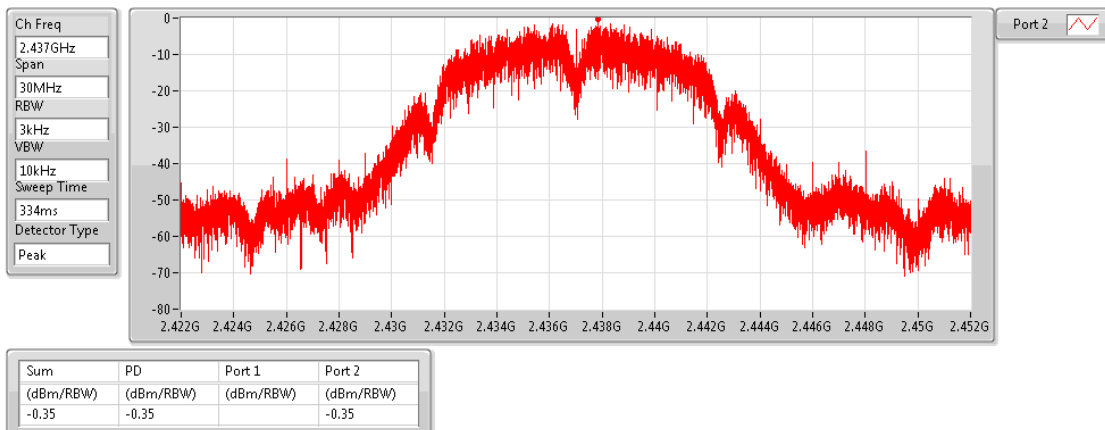
2412MHz



802.11b_(1Mbps)_1TX

PSD

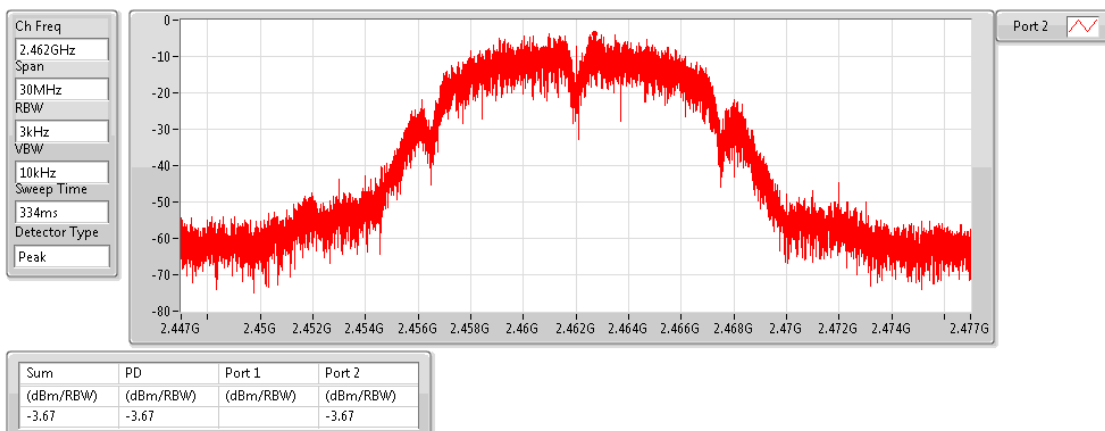
2437MHz



802.11b_(1Mbps)_1TX

PSD

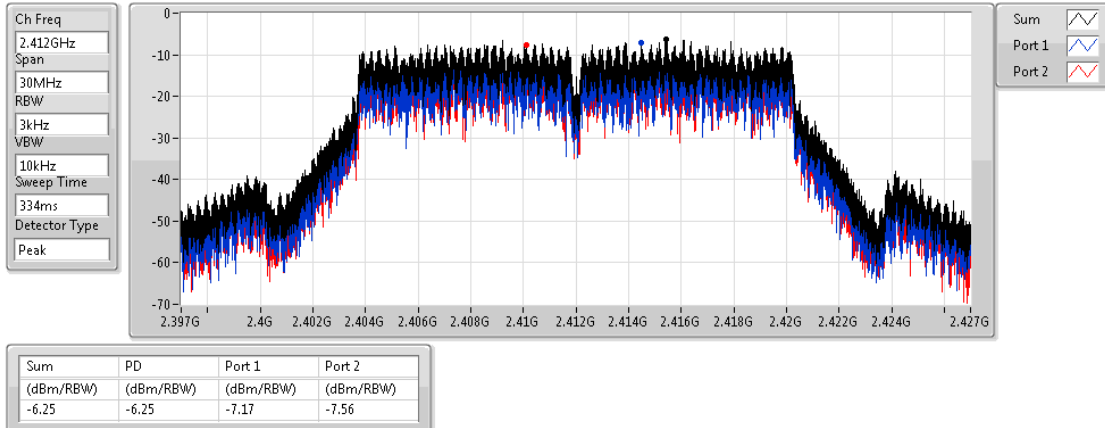
2462MHz



802.11g_(6Mbps)_2TX

PSD

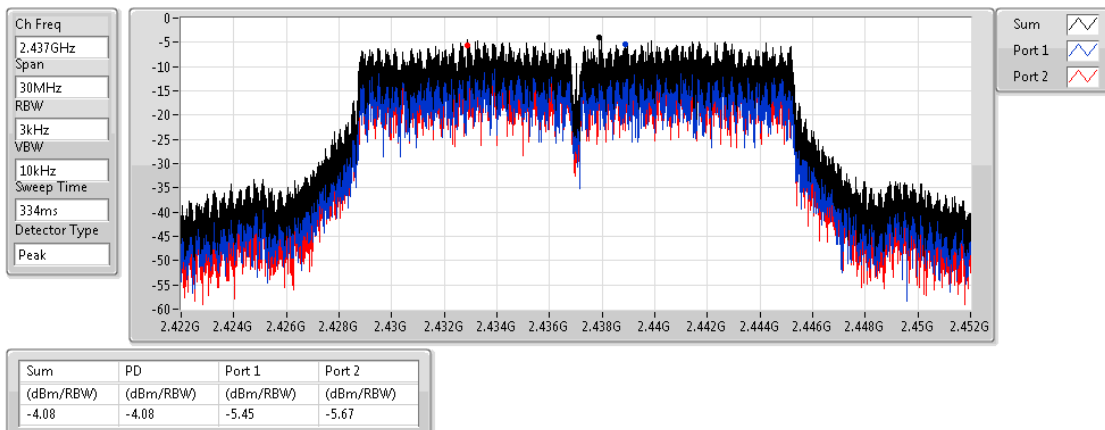
2412MHz



802.11g_(6Mbps)_2TX

PSD

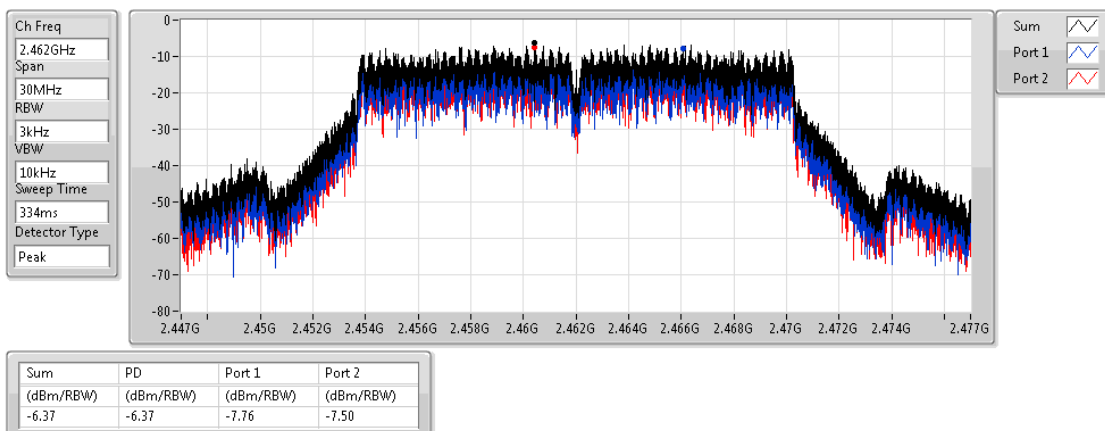
2437MHz



802.11g_(6Mbps)_2TX

PSD

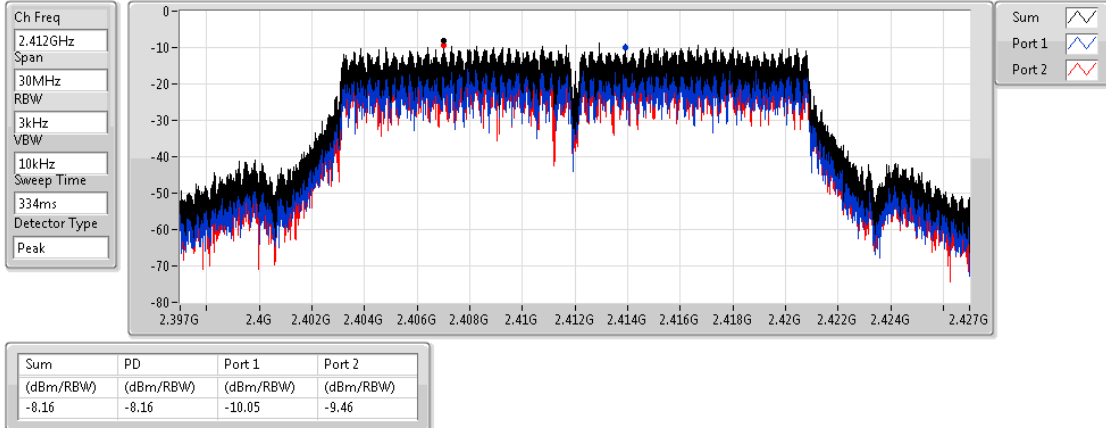
2462MHz



802.11n HT20_Nss1,(MCS0)_2TX

PSD

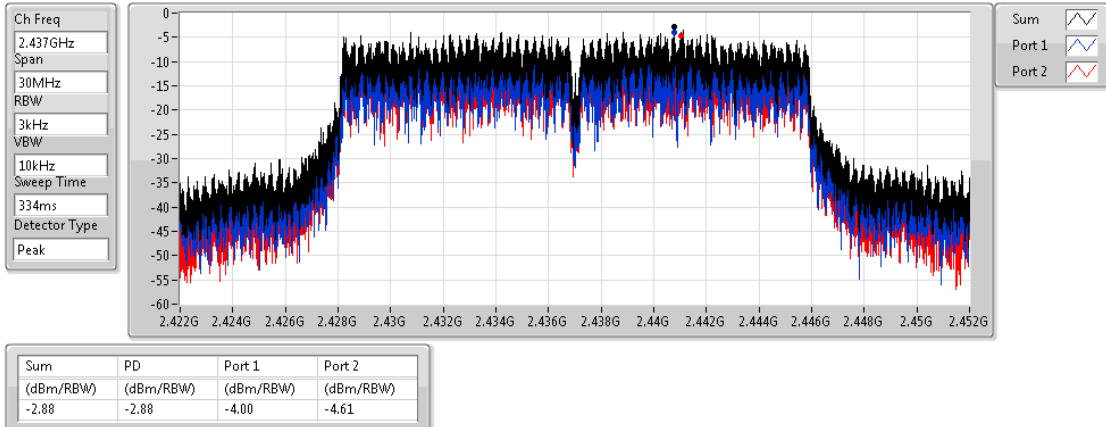
2412MHz



802.11n HT20_Nss1,(MCS0)_2TX

PSD

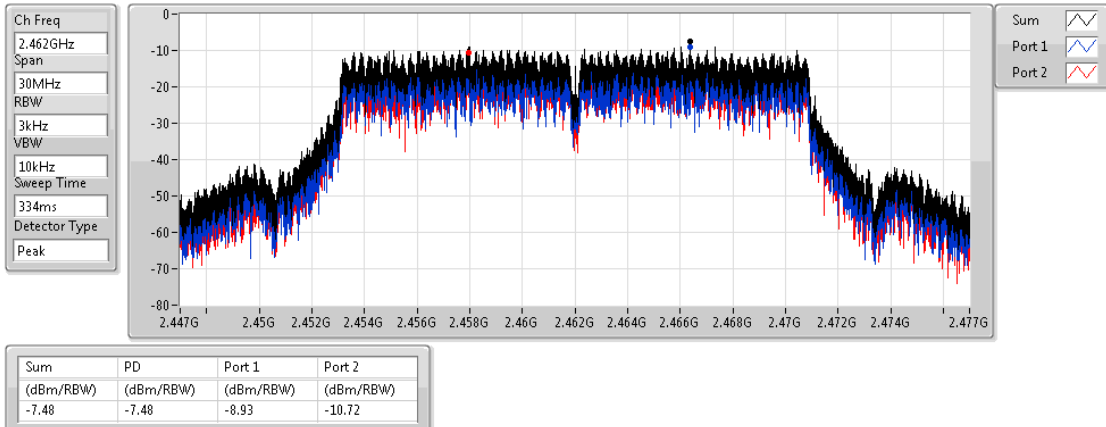
2437MHz



802.11n HT20_Nss1,(MCS0)_2TX

PSD

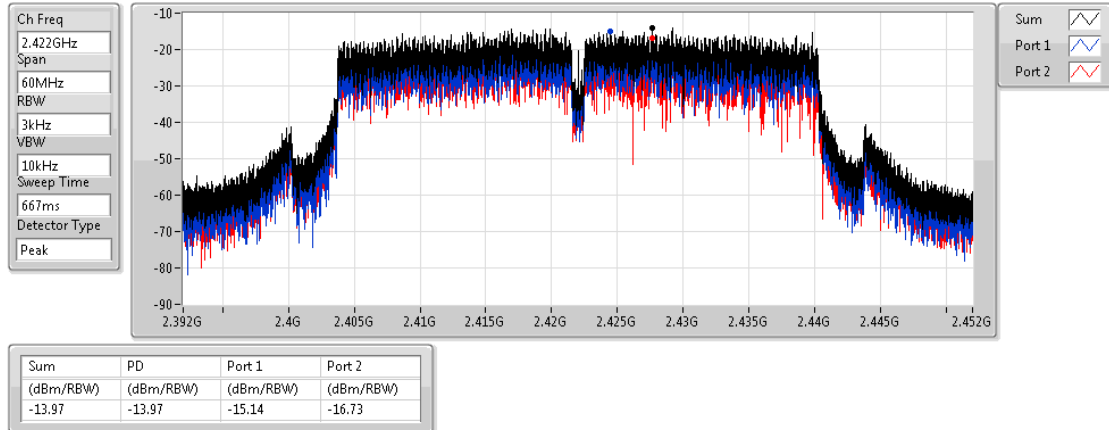
2462MHz



802.11n HT40_Nss1,(MCS0)_2TX

PSD

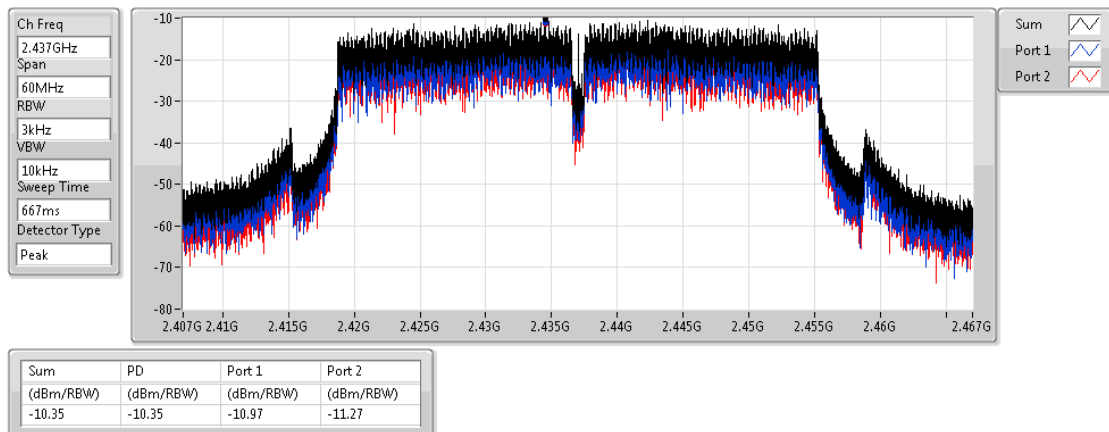
2422MHz



802.11n HT40_Nss1,(MCS0)_2TX

PSD

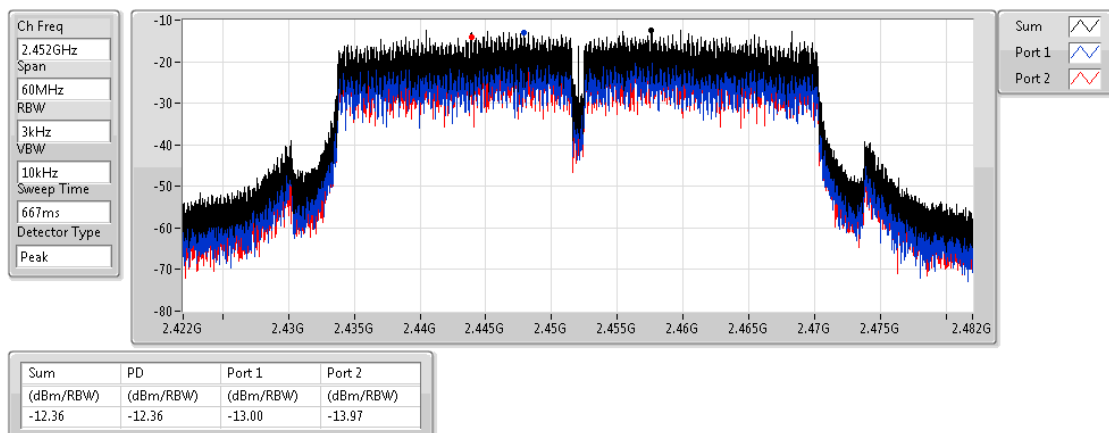
2437MHz



802.11n HT40_Nss1,(MCS0)_2TX

PSD

2452MHz





CSE Non-restricted Band Result

Appendix E

Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11g_(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	2.439412G	8.96	-21.04	2.000015G	-48.99	2.39576G	-28.18	2.48966G	-46.73	2.529119G	-50.71	1

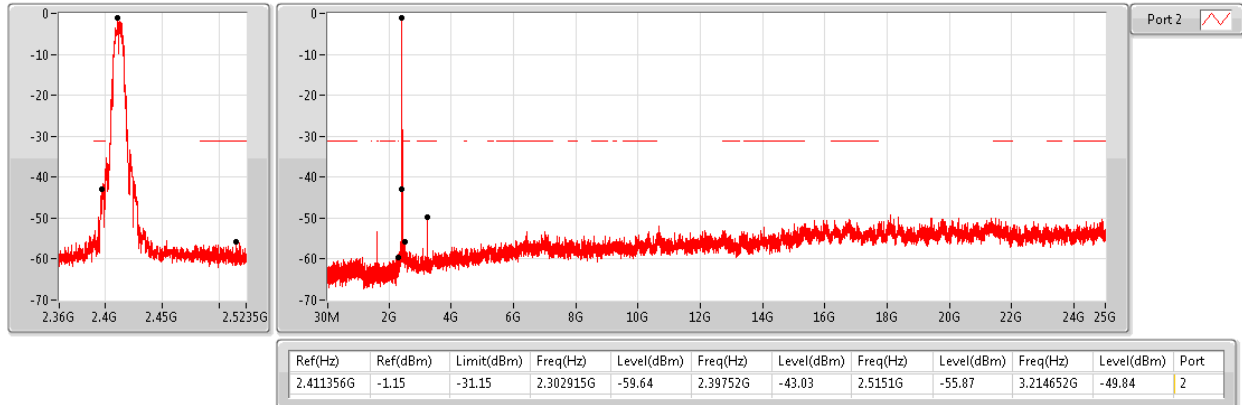
Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.411356G	-1.15	-31.15	2.302915G	-59.64	2.39752G	-43.03	2.5151G	-55.87	3.214652G	-49.84	2
2437MHz	Pass	2.43507G	-1.15	-31.15	1.624885G	-56.47	2.39072G	-57.22	2.51838G	-56.36	16.753934G	-49.72	2
2462MHz	Pass	2.461456G	-1.15	-31.15	867.635M	-58.51	2.39648G	-58.00	2.48702G	-54.34	16.39712G	-49.46	2
802.11g_(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.439412G	8.96	-21.04	2.000015G	-48.99	2.39576G	-28.18	2.48966G	-46.73	2.529119G	-50.71	1
2412MHz	Pass	2.439412G	8.96	-21.04	2.30408G	-52.75	2.39776G	-30.76	2.49382G	-46.73	3.214652G	-34.17	2
2437MHz	Pass	2.439412G	8.96	-21.04	2.000015G	-47.95	2.39824G	-39.91	2.48502G	-44.18	2.5235G	-46.22	1
2437MHz	Pass	2.439412G	8.96	-21.04	2.309905G	-50.29	2.39712G	-44.99	2.51134G	-43.13	3.248367G	-37.08	2
2462MHz	Pass	2.439412G	8.96	-21.04	2.000015G	-49.29	2.39688G	-47.74	2.48414G	-37.53	2.537548G	-48.12	1
2462MHz	Pass	2.439412G	8.96	-21.04	1.641195G	-54.51	2.39488G	-48.11	2.4851G	-39.65	3.282082G	-39.32	2
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.441917G	8.18	-21.82	2.160785G	-49.27	2.39824G	-31.94	2.4867G	-47.06	2.537548G	-50.30	1
2412MHz	Pass	2.441917G	8.18	-21.82	2.30408G	-51.97	2.39824G	-32.19	2.50422G	-46.76	3.214652G	-33.84	2
2437MHz	Pass	2.441917G	8.18	-21.82	2.000015G	-48.41	2.39792G	-38.45	2.48638G	-42.92	2.5235G	-46.57	1
2437MHz	Pass	2.441917G	8.18	-21.82	2.307575G	-51.26	2.39824G	-42.27	2.49398G	-43.74	3.248367G	-37.12	2
2462MHz	Pass	2.441917G	8.18	-21.82	2.000015G	-49.15	2.39736G	-47.47	2.48486G	-40.10	2.52631G	-47.67	1
2462MHz	Pass	2.441917G	8.18	-21.82	1.641195G	-53.95	2.39672G	-48.49	2.48382G	-44.29	3.282082G	-39.21	2
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.431897G	3.58	-26.42	2.080695G	-46.22	2.39648G	-37.86	2.49102G	-50.79	2.569109G	-53.28	1
2422MHz	Pass	2.431897G	3.58	-26.42	2.080695G	-55.46	2.39568G	-41.84	2.49998G	-47.25	3.228181G	-34.64	2
2437MHz	Pass	2.431897G	3.58	-26.42	2.080695G	-44.54	2.39616G	-38.64	2.48446G	-42.63	2.569109G	-52.05	1
2437MHz	Pass	2.431897G	3.58	-26.42	1.760095G	-56.36	2.39648G	-42.43	2.49454G	-44.77	3.247813G	-36.66	2
2452MHz	Pass	2.431897G	3.58	-26.42	2.080695G	-44.63	2.39488G	-47.46	2.48494G	-43.24	2.566305G	-50.66	1
2452MHz	Pass	2.431897G	3.58	-26.42	31.145M	-54.78	2.39248G	-48.00	2.48398G	-43.15	3.267445G	-38.01	2

802.11b_(1Mbps)_1TX

CSE NdB

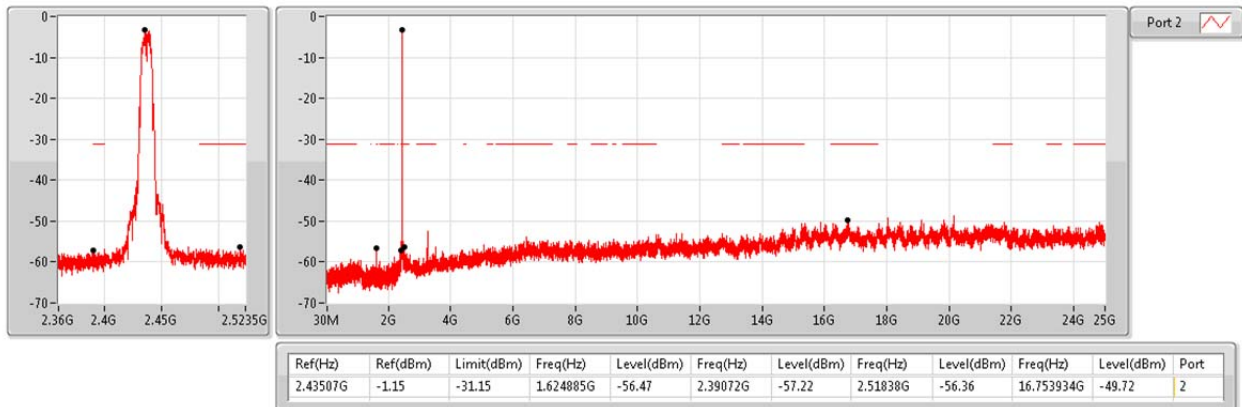
2412MHz



802.11b_(1Mbps)_1TX

CSE NdB

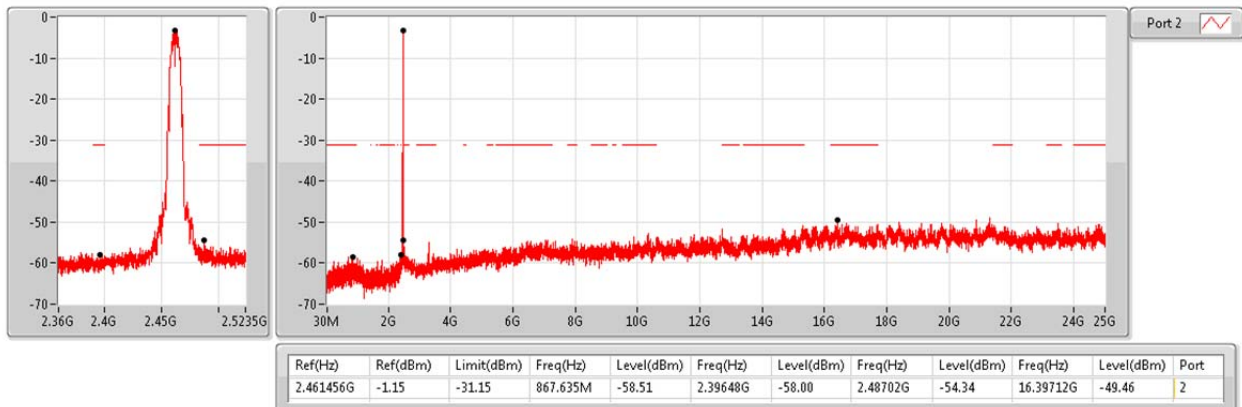
2437MHz



802.11b_(1Mbps)_1TX

CSE NdB

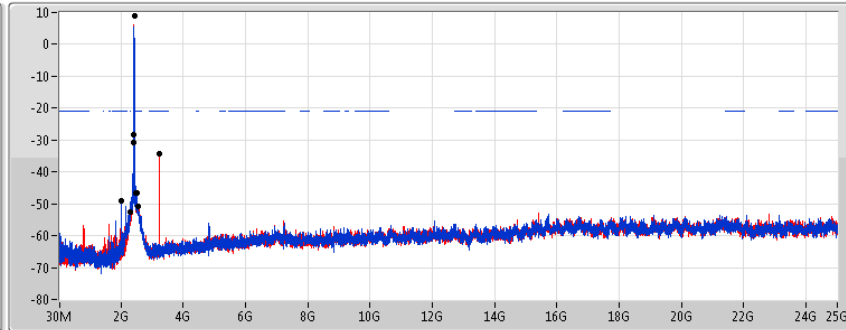
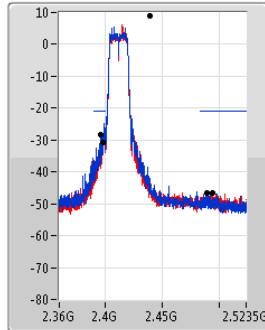
2462MHz



802.11g_(6Mbps)_2TX

CSE NdB

2412MHz



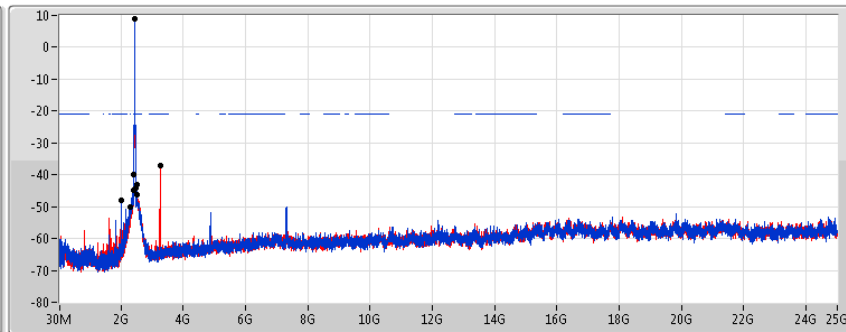
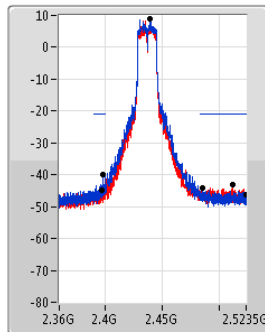
Port 1
Port 2

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.439412G	8.96	-21.04	2.000015G	-48.99	2.39576G	-28.18	2.48966G	-46.73	2.529119G	-50.71	1
2.439412G	8.96	-21.04	2.30408G	-52.75	2.39776G	-30.76	2.49382G	-46.73	3.214652G	-34.17	2

802.11g_(6Mbps)_2TX

CSE NdB

2437MHz



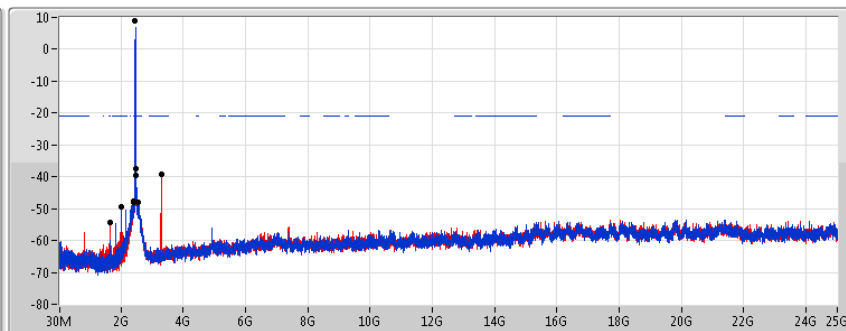
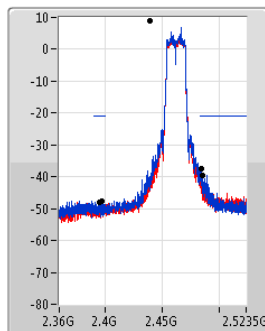
Port 1
Port 2

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.439412G	8.96	-21.04	2.000015G	-47.95	2.39824G	-39.91	2.48502G	-44.18	2.5235G	-46.22	1
2.439412G	8.96	-21.04	2.309905G	-50.29	2.39712G	-44.99	2.51134G	-43.13	3.248367G	-37.08	2

802.11g_(6Mbps)_2TX

CSE NdB

2462MHz



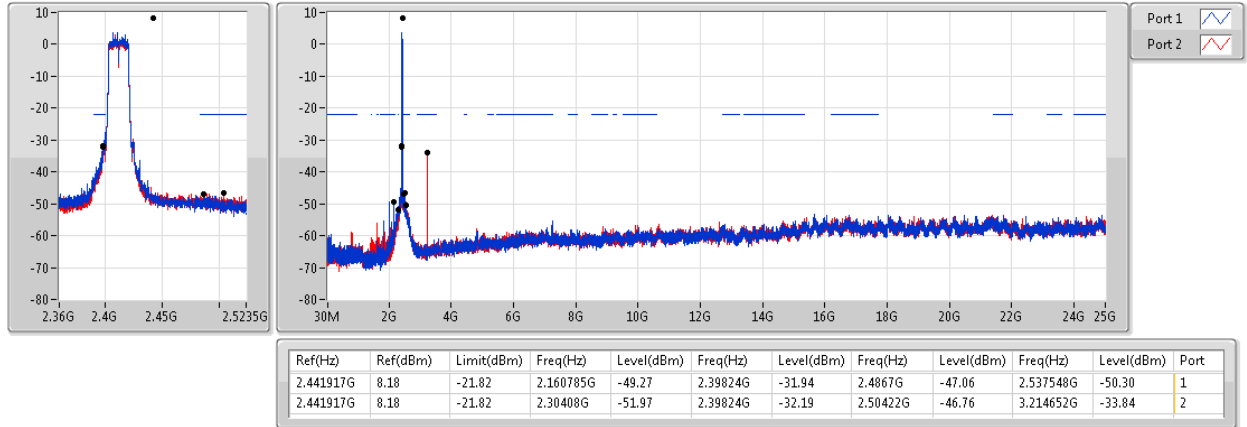
Port 1
Port 2

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.439412G	8.96	-21.04	2.000015G	-49.29	2.39688G	-47.74	2.48414G	-37.53	2.537548G	-48.12	1
2.439412G	8.96	-21.04	1.641195G	-54.51	2.39488G	-48.11	2.4851G	-39.65	3.282082G	-39.32	2

802.11n HT20_Nss1,(MCS0)_2TX

CSE NdB

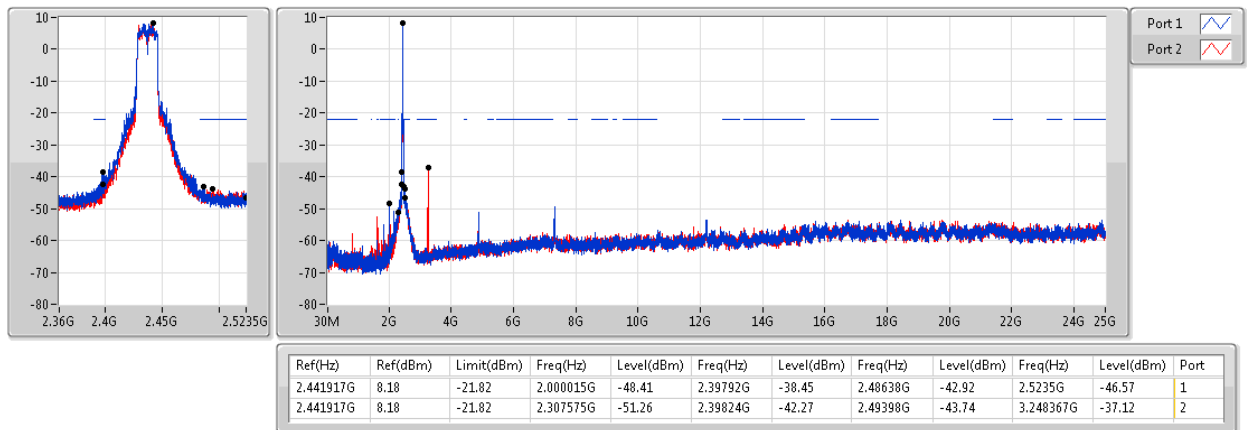
2412MHz



802.11n HT20_Nss1,(MCS0)_2TX

CSE NdB

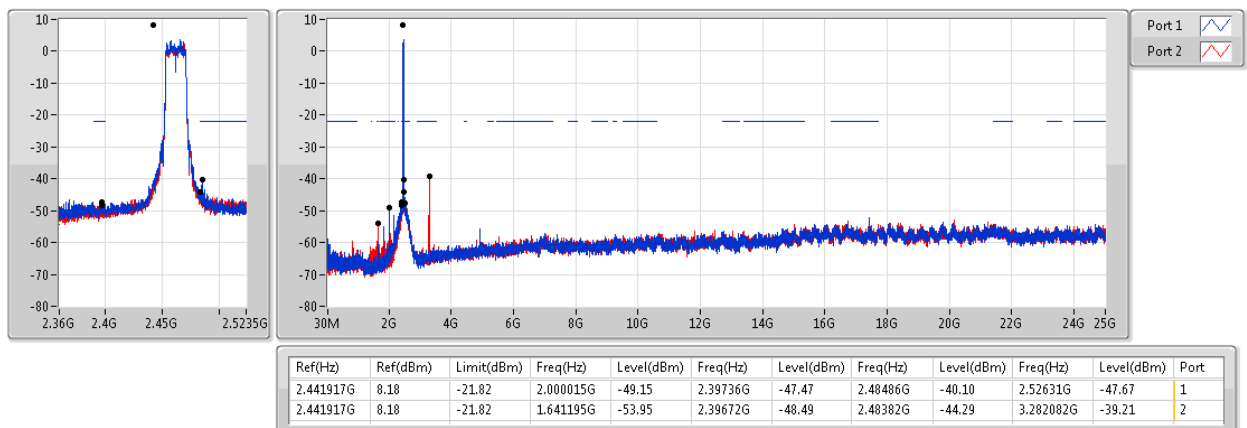
2437MHz



802.11n HT20_Nss1,(MCS0)_2TX

CSE NdB

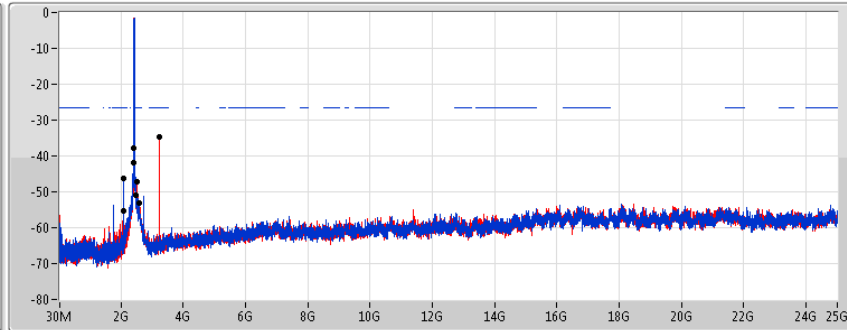
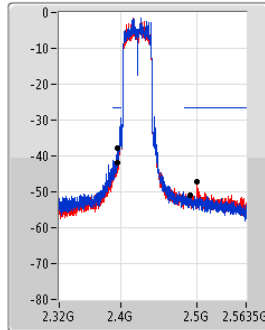
2462MHz



802.11n HT40_Nss1,(MCS0)_2TX

CSE NdB

2422MHz

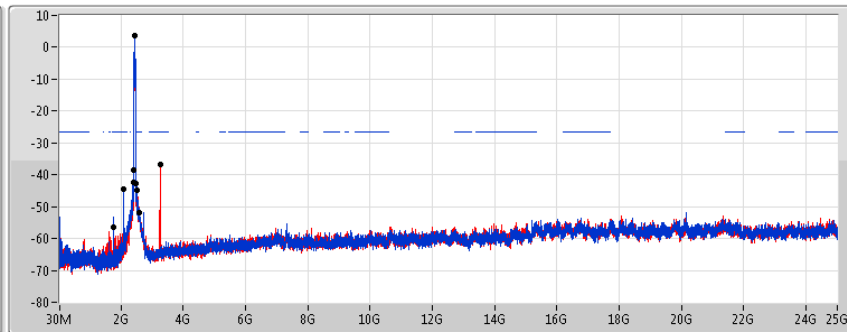
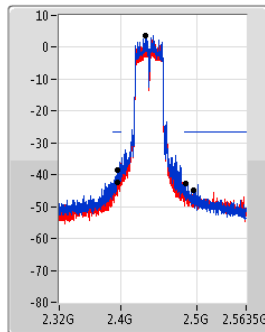

Port 1
Port 2

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.431897G	3.58	-26.42	2.080695G	-46.22	2.39648G	-37.86	2.49102G	-50.79	2.569109G	-53.28	1
2.431897G	3.58	-26.42	2.080695G	-55.46	2.39568G	-41.84	2.49998G	-47.25	3.228181G	-34.64	2

802.11n HT40_Nss1,(MCS0)_2TX

CSE NdB

2437MHz

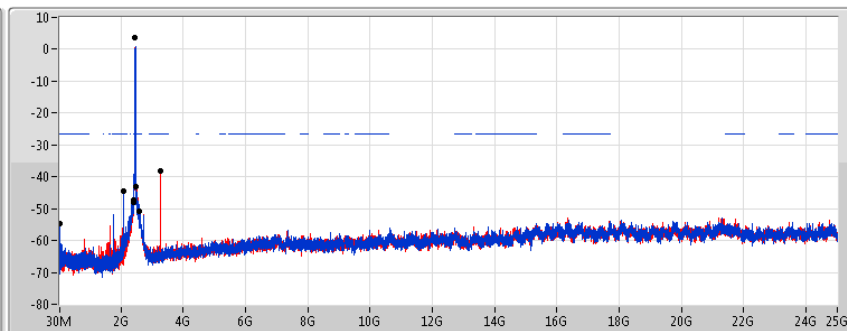
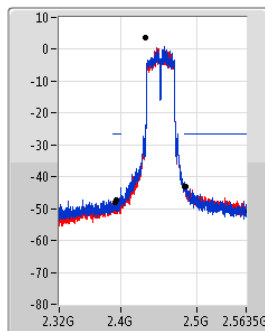

Port 1
Port 2

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.431897G	3.58	-26.42	2.080695G	-44.54	2.39616G	-38.64	2.48446G	-42.63	2.569109G	-52.05	1
2.431897G	3.58	-26.42	1.760095G	-56.36	2.39648G	-42.43	2.49454G	-44.77	3.247813G	-36.66	2

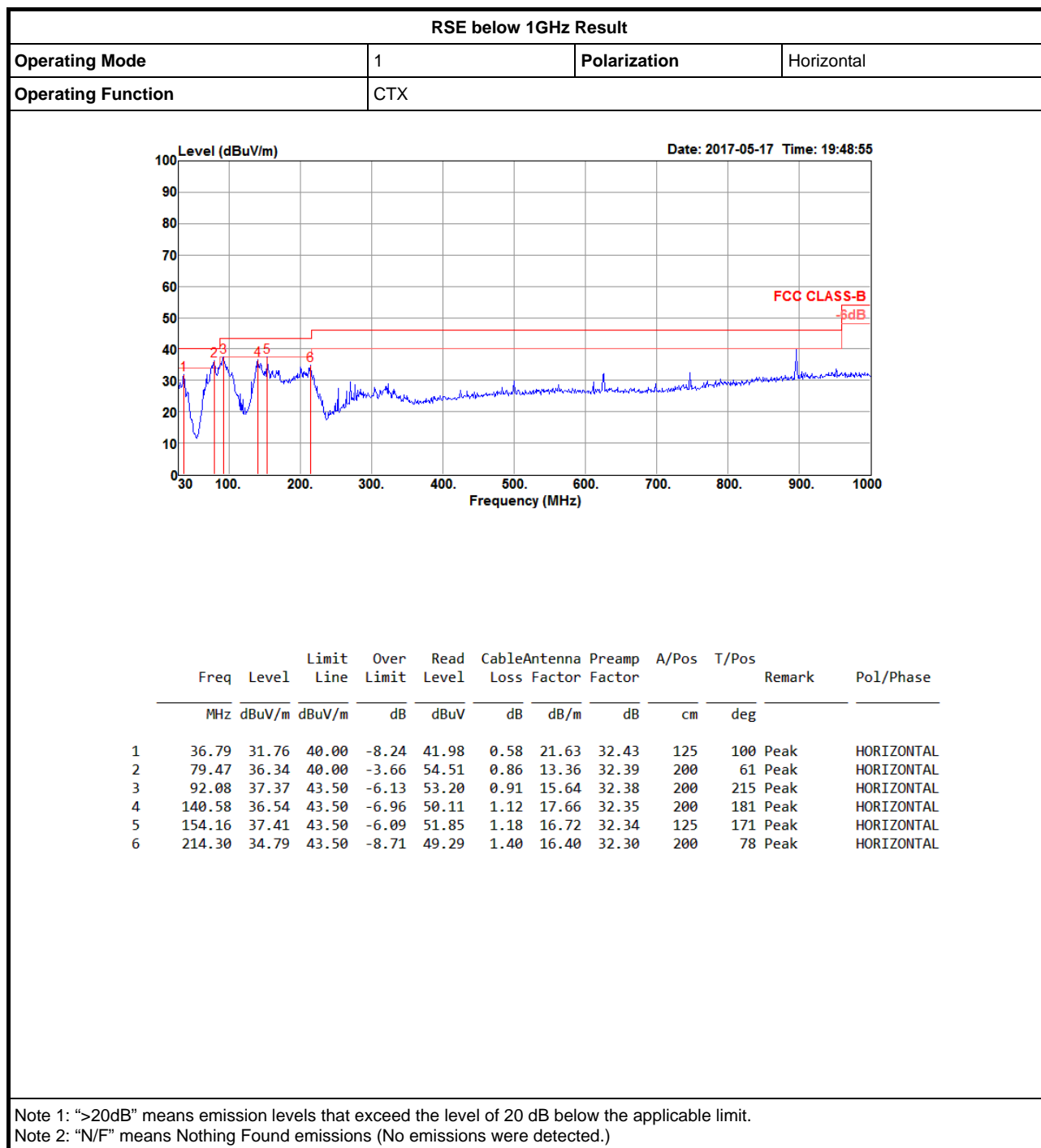
802.11n HT40_Nss1,(MCS0)_2TX

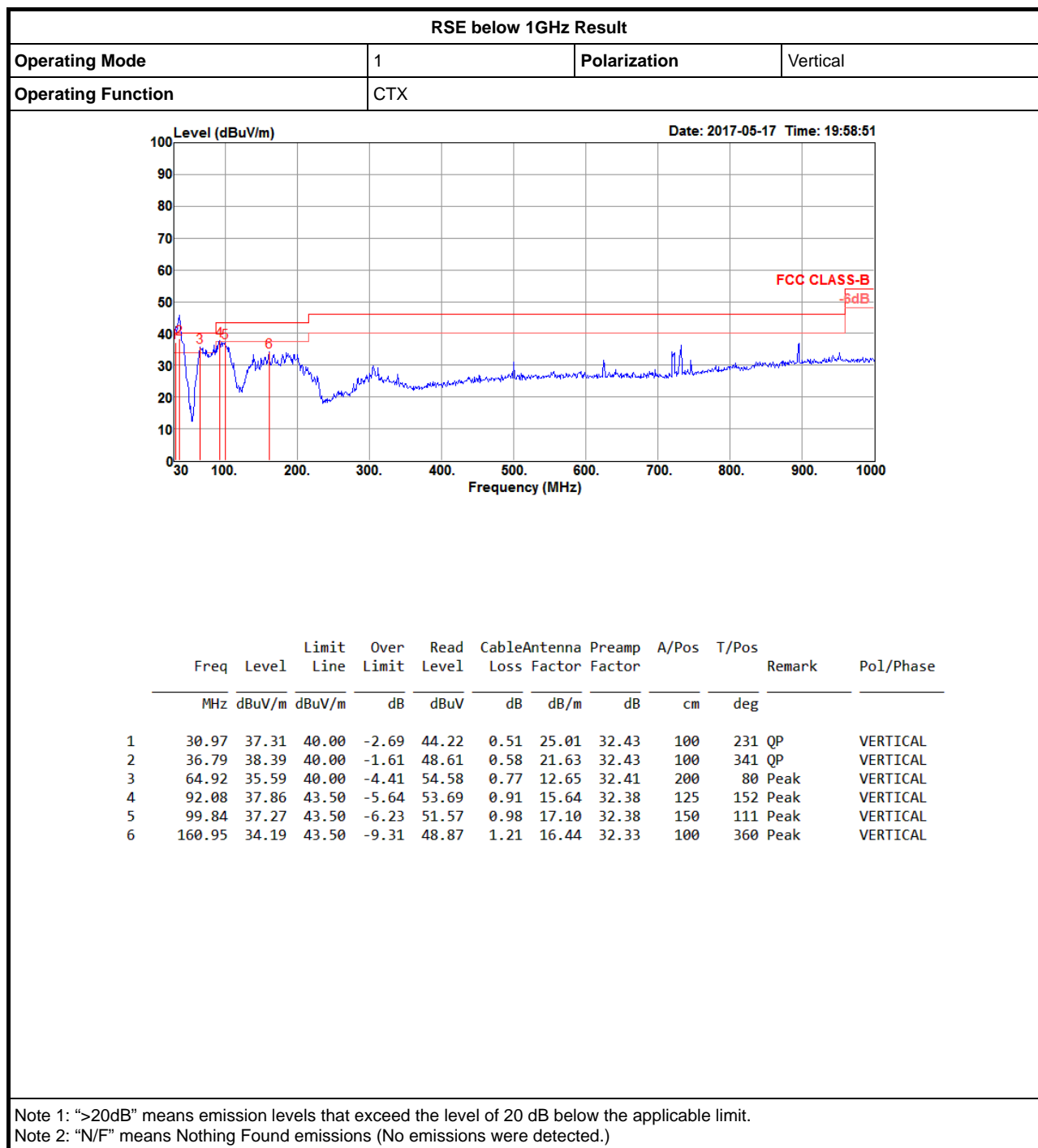
CSE NdB

2452MHz


Port 1
Port 2

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.431897G	3.58	-26.42	2.080695G	-44.63	2.39488G	-47.46	2.48494G	-43.24	2.566305G	-50.66	1
2.431897G	3.58	-26.42	31.145M	-54.78	2.39248G	-48.00	2.48398G	-43.15	3.267445G	-38.01	2



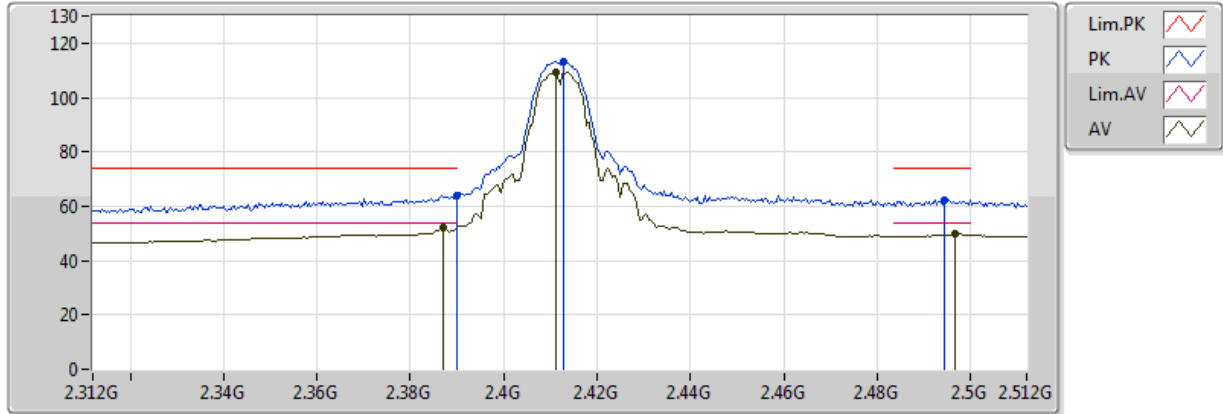


Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
802.11g_(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	PK	2.4848G	73.98	74.00	-0.02	30.92	3	H	359	2.38	-

802.11b_(1Mbps)_1TX

2412MHz_TX

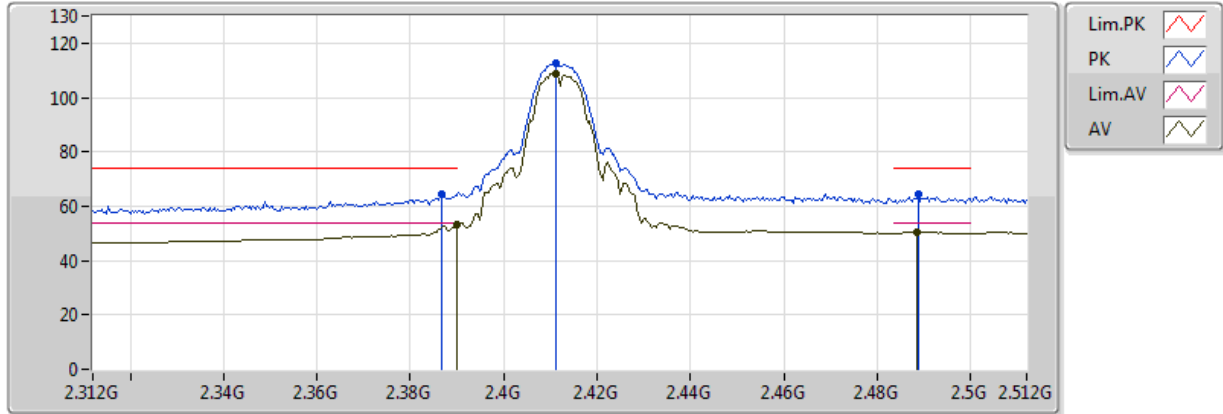


20170504
EUT Y_1TX
Setting 88
02-W-3
FSU

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	52.29	54.00	-1.71	30.61	3	V	358	2.33	-
AV	2.4112G	109.45	Inf	-Inf	30.69	3	V	358	2.33	-
AV	2.4968G	49.76	54.00	-4.24	30.96	3	V	358	2.33	-
PK	2.39G	63.93	74.00	-10.07	30.62	3	V	358	2.33	-
PK	2.4128G	113.33	Inf	-Inf	30.69	3	V	358	2.33	-
PK	2.4944G	62.46	74.00	-11.54	30.95	3	V	358	2.33	-

802.11b_(1Mbps)_1TX

2412MHz_TX

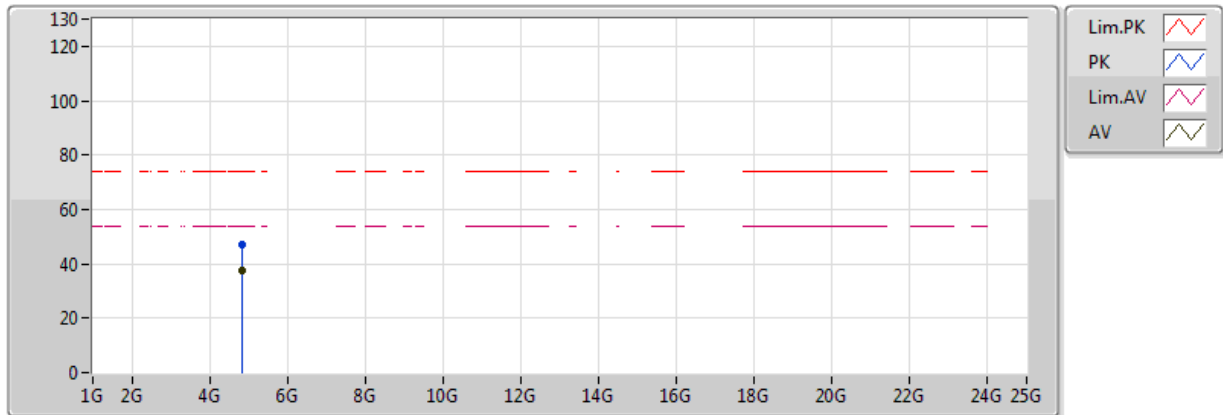


20170504
EUT Y_1TX
Setting 88
02-W-3
FSU

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	53.26	54.00	-0.74	30.62	3	H	360	1.00	-
AV	2.4112G	108.66	Inf	-Inf	30.69	3	H	360	1.00	-
AV	2.4884G	50.46	54.00	-3.54	30.93	3	H	360	1.00	-
PK	2.3868G	64.35	74.00	-9.65	30.61	3	H	360	1.00	-
PK	2.4112G	112.45	Inf	-Inf	30.69	3	H	360	1.00	-
PK	2.4888G	64.21	74.00	-9.79	30.93	3	H	360	1.00	-

802.11b_(1Mbps)_1TX

2412MHz_TX

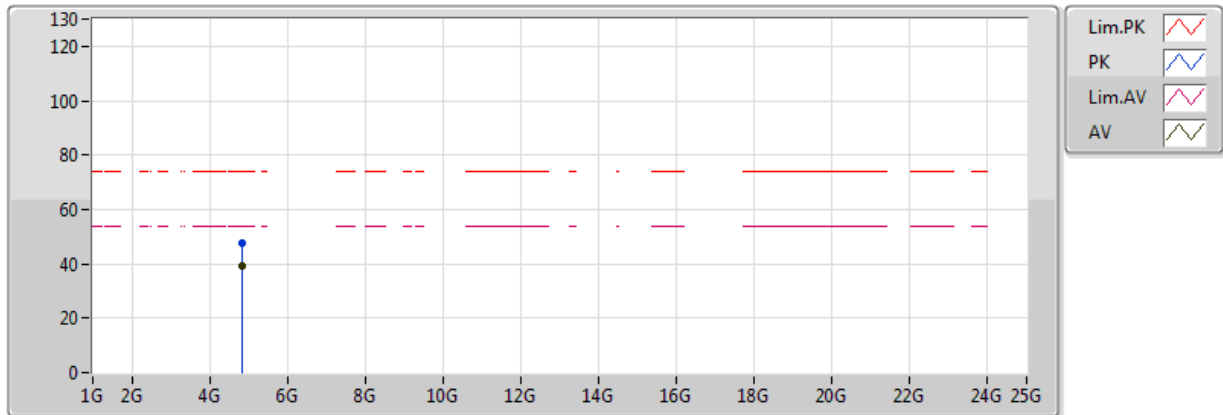


20170512
EUT Y_1TX
Setting 88
01-L-2
FSP

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	37.38	54.00	-16.62	3.40	3	V	295	1.50	-
PK	4.82388G	46.97	74.00	-27.03	3.40	3	V	295	1.50	-

802.11b_(1Mbps)_1TX

2412MHz_TX

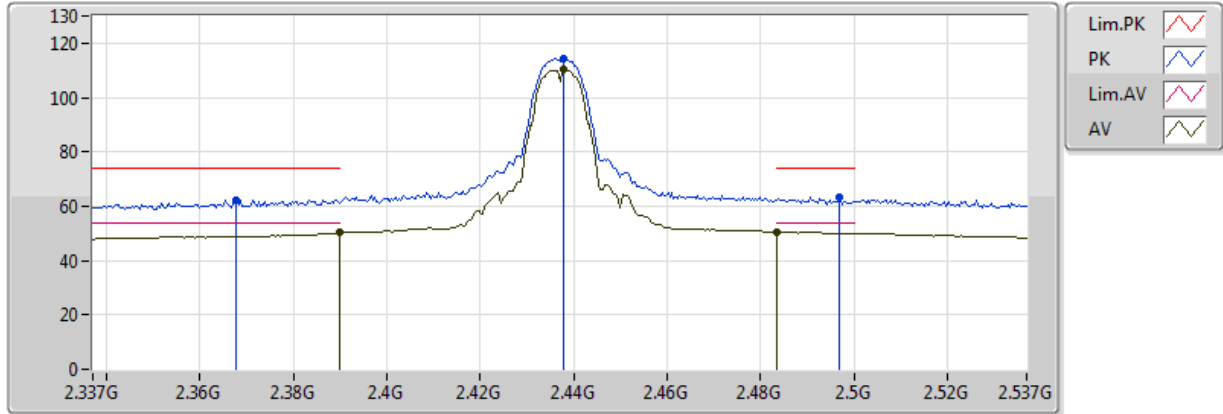


20170512
EUT Y_1TX
Setting 88
01-L-2
FSP

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	39.30	54.00	-14.70	3.40	3	H	317	1.02	-
PK	4.82388G	47.56	74.00	-26.44	3.40	3	H	317	1.02	-

802.11b_(1Mbps)_1TX

2437MHz_TX

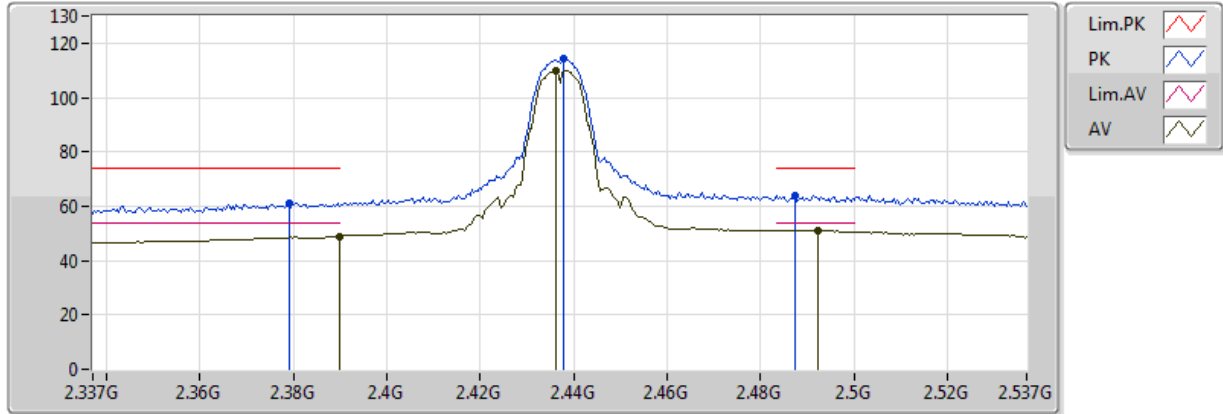


20170512
EUT Y_1TX
Setting 86
01-S-5
FSP

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	50.29	54.00	-3.71	31.04	3	V	359	2.56	-
AV	2.4378G	110.29	Inf	-Inf	30.97	3	V	359	2.56	-
AV	2.483502G	50.37	54.00	-3.63	30.92	3	V	359	2.56	-
PK	2.3678G	62.17	74.00	-11.83	31.07	3	V	359	2.56	-
PK	2.4378G	114.49	Inf	-Inf	30.97	3	V	359	2.56	-
PK	2.497G	63.22	74.00	-10.78	30.90	3	V	359	2.56	-

802.11b_(1Mbps)_1TX

2437MHz_TX

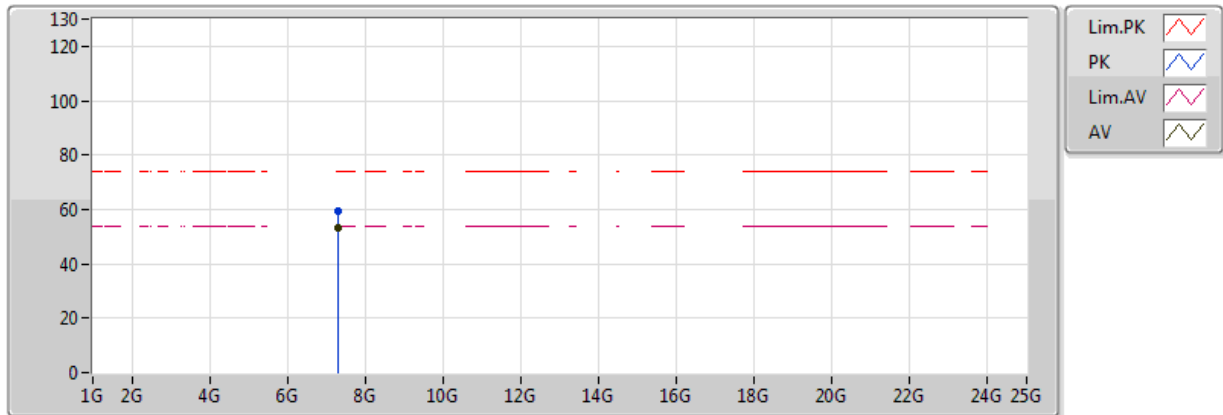


20170512
EUT Y_1TX
Setting 86
01-S-5
FSP

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	48.94	54.00	-5.06	31.04	3	H	2	1.33	-
AV	2.4362G	109.95	Inf	-Inf	30.98	3	H	2	1.33	-
AV	2.4922G	51.06	54.00	-2.94	30.91	3	H	2	1.33	-
PK	2.379G	61.11	74.00	-12.89	31.05	3	H	2	1.33	-
PK	2.4378G	114.04	Inf	-Inf	30.97	3	H	2	1.33	-
PK	2.4874G	64.07	74.00	-9.93	30.92	3	H	2	1.33	-

802.11b_(1Mbps)_1TX

2437MHz_TX

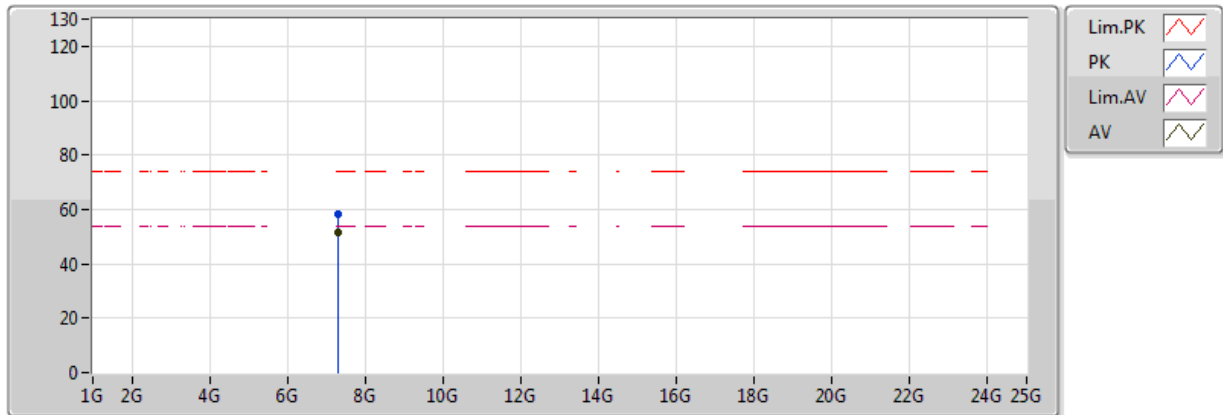


20170504
EUT Y_1TX
Setting 86
02-W-3
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.31176G	53.46	54.00	-0.54	12.16	3	V	183	2.01	-
PK	7.31141G	59.47	74.00	-14.53	12.16	3	V	183	2.01	-

802.11b_(1Mbps)_1TX

2437MHz_TX

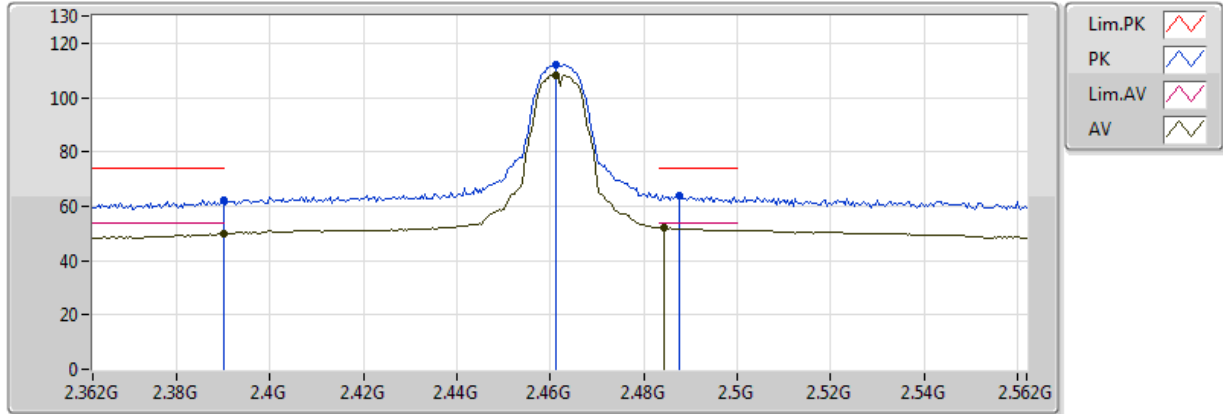


20170504
EUT Y_1TX
Setting 86
02-W-3
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.31177G	51.44	54.00	-2.56	12.16	3	H	293	1.38	-
PK	7.31193G	58.23	74.00	-15.77	12.16	3	H	293	1.38	-

802.11b_(1Mbps)_1TX

2462MHz_TX

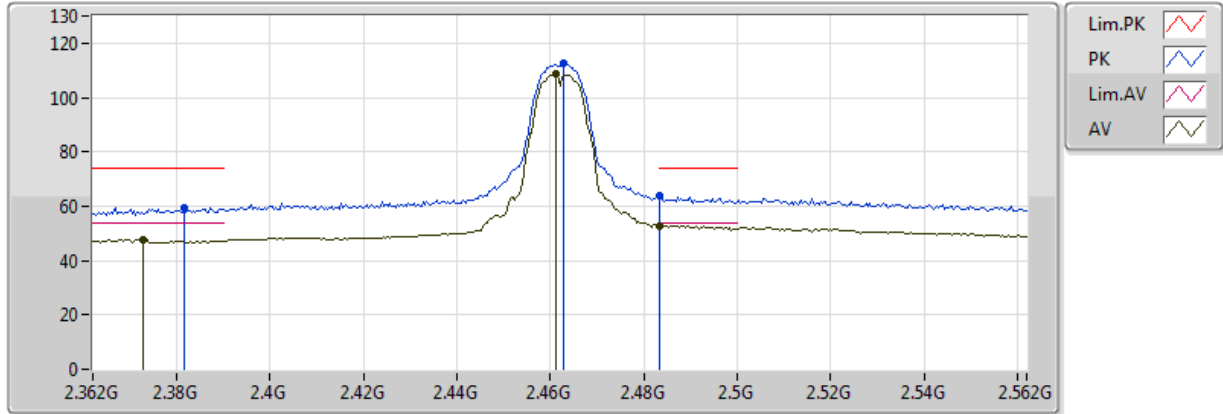


20170512
EUT Y_1TX
Setting 80
01-L-2
FSP

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	49.82	54.00	-4.18	31.04	3	V	357	2.55	-
AV	2.4612G	108.41	Inf	-Inf	30.95	3	V	357	2.55	-
AV	2.4844G	51.96	54.00	-2.04	30.92	3	V	357	2.55	-
PK	2.389998G	62.10	74.00	-11.90	31.04	3	V	357	2.55	-
PK	2.4612G	112.27	Inf	-Inf	30.95	3	V	357	2.55	-
PK	2.4876G	64.01	74.00	-9.99	30.91	3	V	357	2.55	-

802.11b_(1Mbps)_1TX

2462MHz_TX

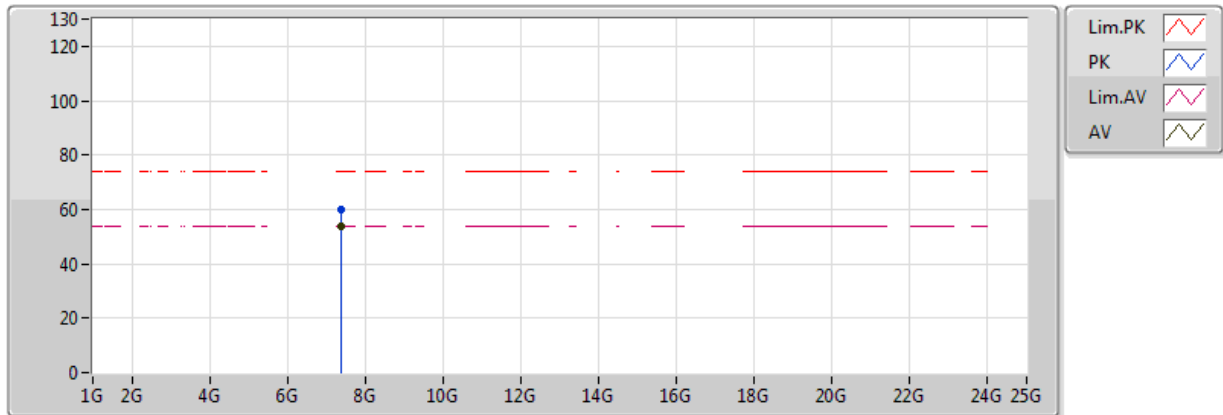


20170512
EUT Y_1TX
Setting 80
01-L-2
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3728G	47.60	54.00	-6.40	31.06	3	H	2	1.30	-
AV	2.4612G	108.52	Inf	-Inf	30.95	3	H	2	1.30	-
AV	2.483502G	52.80	54.00	-1.20	30.92	3	H	2	1.30	-
PK	2.3816G	59.29	74.00	-14.71	31.05	3	H	2	1.30	-
PK	2.4628G	112.45	Inf	-Inf	30.94	3	H	2	1.30	-
PK	2.483502G	63.72	74.00	-10.28	30.92	3	H	2	1.30	-

802.11b_(1Mbps)_1TX

2462MHz_TX

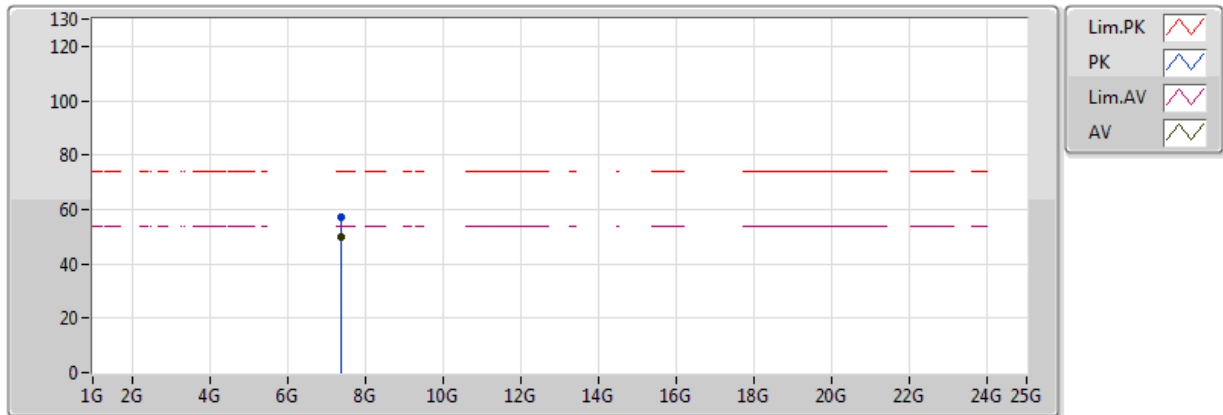


20170512
EUT Y_1TX
Setting 80
01-L-2
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.38528G	53.95	54.00	-0.05	8.90	3	V	354	2.01	-
PK	7.3856G	59.99	74.00	-14.01	8.90	3	V	354	2.01	-

802.11b_(1Mbps)_1TX

2462MHz_TX

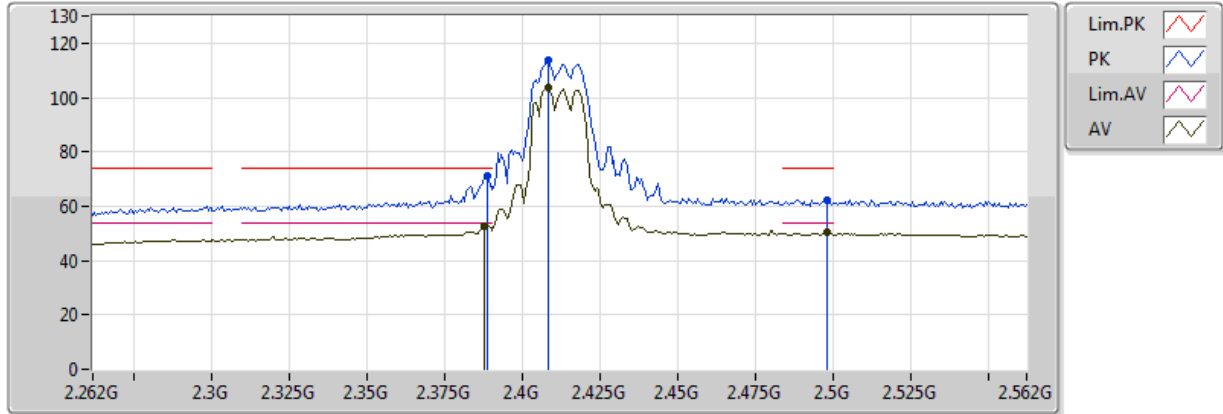


20170512
EUT Y_1TX
Setting 80
01-L-2
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.38528G	50.07	54.00	-3.93	8.90	3	H	302	1.50	-
PK	7.387G	56.97	74.00	-17.03	8.90	3	H	302	1.50	-

802.11g_(6Mbps)_2TX

2412MHz_TX

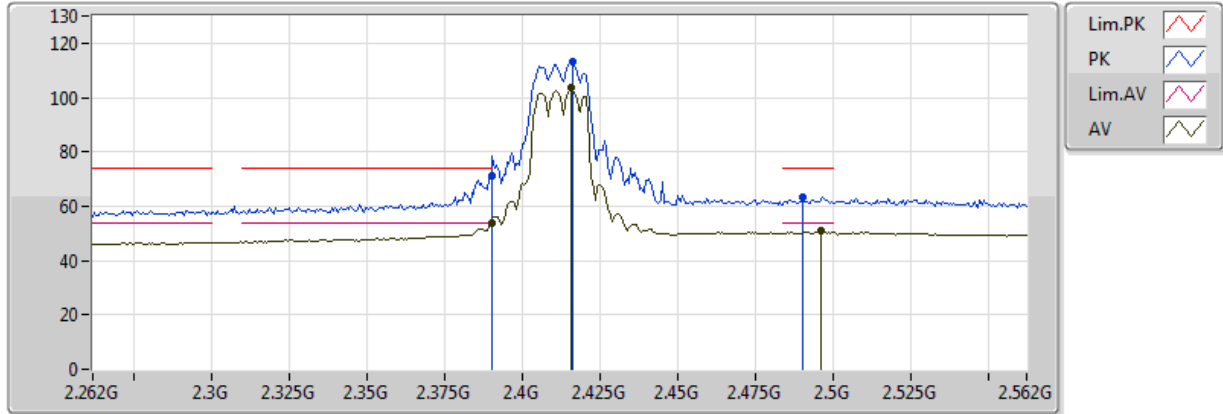


20170504
EUT Y_2TX
Setting 69
02-W-3
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.388G	52.95	54.00	-1.05	30.61	3	V	356	2.46	-
AV	2.4084G	103.65	Inf	-Inf	30.68	3	V	356	2.46	-
AV	2.4978G	50.33	54.00	-3.67	30.96	3	V	356	2.46	-
PK	2.3886G	71.32	74.00	-2.68	30.61	3	V	356	2.46	-
PK	2.4084G	113.50	Inf	-Inf	30.68	3	V	356	2.46	-
PK	2.4978G	62.40	74.00	-11.60	30.96	3	V	356	2.46	-

802.11g_(6Mbps)_2TX

2412MHz_TX

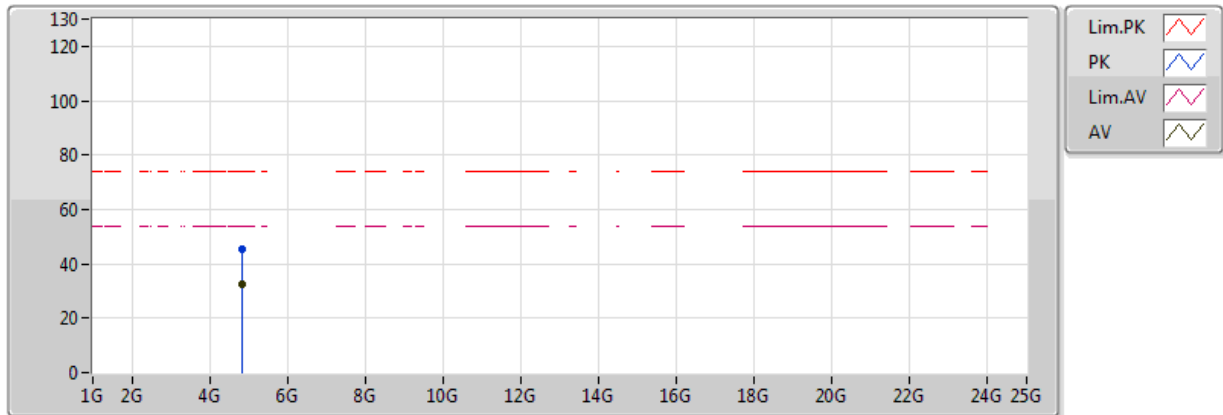


20170504
EUT Y_2TX
Setting 69
02-W-3
FSU

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	53.89	54.00	-0.11	30.62	3	H	358	2.13	-
AV	2.4156G	103.49	Inf	-Inf	30.70	3	H	358	2.13	-
AV	2.496G	50.82	54.00	-3.18	30.96	3	H	358	2.13	-
PK	2.389998G	71.27	74.00	-2.73	30.62	3	H	358	2.13	-
PK	2.4162G	113.12	Inf	-Inf	30.70	3	H	358	2.13	-
PK	2.49G	63.14	74.00	-10.86	30.94	3	H	358	2.13	-

802.11g_(6Mbps)_2TX

2412MHz_TX

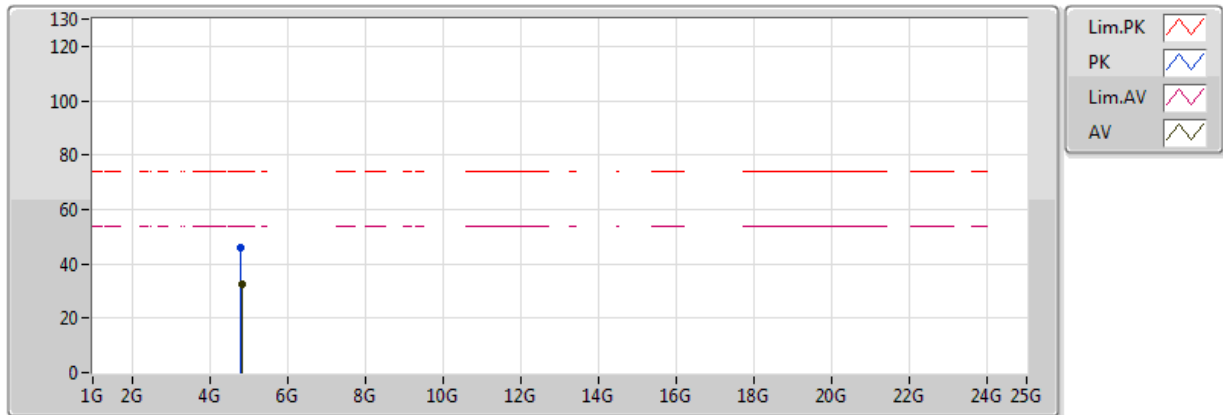


20170512
EUT Y_2TX
Setting 69
01-L-2
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82824G	32.57	54.00	-21.43	3.41	3	V	81	2.68	-
PK	4.82528G	45.55	74.00	-28.45	3.41	3	V	81	2.68	-

802.11g_(6Mbps)_2TX

2412MHz_TX

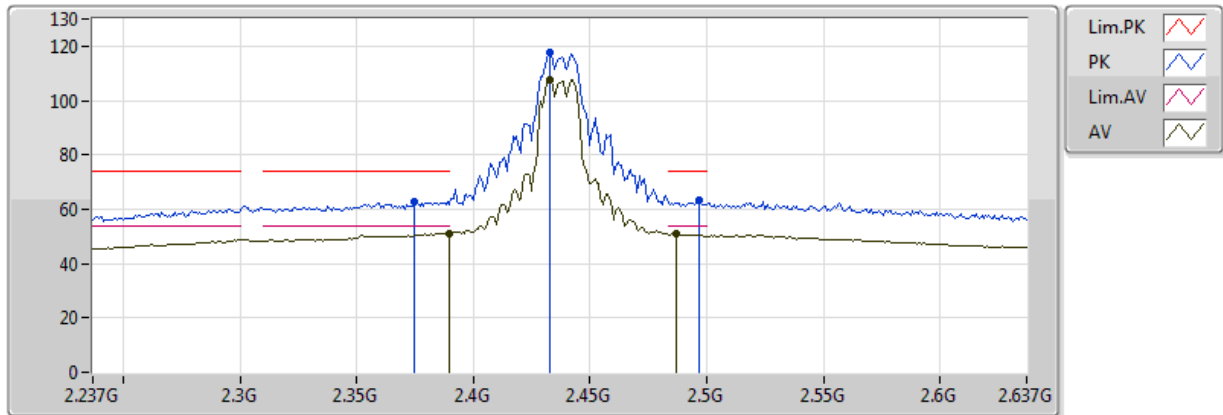


20170512
EUT Y_2TX
Setting 69
01-L-2
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82348G	32.62	54.00	-21.38	3.40	3	H	320	1.99	-
PK	4.814G	45.98	74.00	-28.02	3.37	3	H	320	1.99	-

802.11g_(6Mbps)_2TX

2437MHz_TX

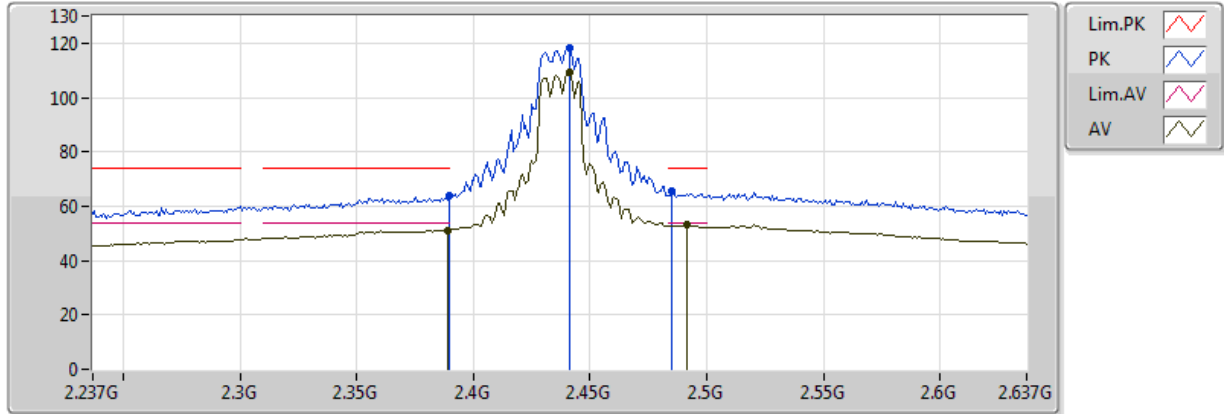


20170512
EUT Y_2TX
Setting 80
01-S-5
FSP

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	51.23	54.00	-2.77	31.04	3	V	0	2.96	-
AV	2.433G	107.58	Inf	-Inf	30.98	3	V	0	2.96	-
AV	2.4866G	50.76	54.00	-3.24	30.92	3	V	0	2.96	-
PK	2.3746G	62.80	74.00	-11.20	31.06	3	V	0	2.96	-
PK	2.433G	117.45	Inf	-Inf	30.98	3	V	0	2.96	-
PK	2.497G	63.30	74.00	-10.70	30.90	3	V	0	2.96	-

802.11g_(6Mbps)_2TX

2437MHz_TX

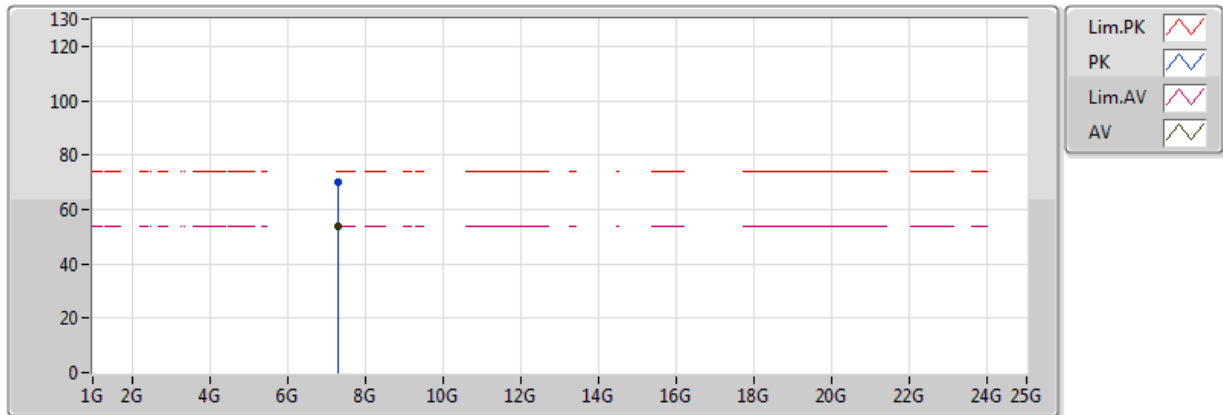


20170512
EUT Y_2TX
Setting 80
01-S-5
FSP

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	51.21	54.00	-2.79	31.04	3	H	0	2.31	-
AV	2.441G	108.99	Inf	-Inf	30.97	3	H	0	2.31	-
AV	2.4914G	53.02	54.00	-0.98	30.91	3	H	0	2.31	-
PK	2.3898G	63.85	74.00	-10.15	31.04	3	H	0	2.31	-
PK	2.441G	118.23	Inf	-Inf	30.97	3	H	0	2.31	-
PK	2.485G	65.72	74.00	-8.28	30.92	3	H	0	2.31	-

802.11g_(6Mbps)_2TX

2437MHz_TX

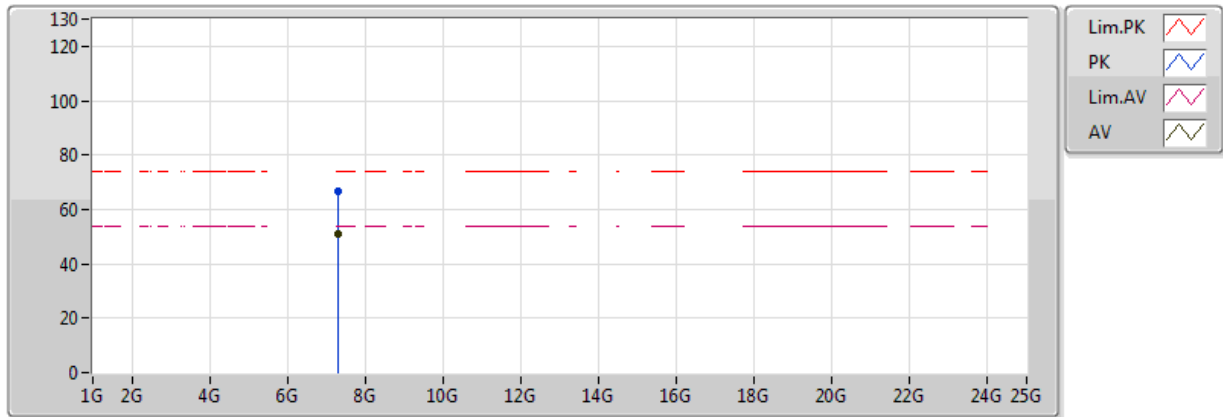


20170504
EUT Y_2TX
Setting 80
02-W-3
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.30828G	53.82	54.00	-0.18	8.75	3	V	0	2.96	-
PK	7.3132G	69.96	74.00	-4.04	8.76	3	V	0	2.96	-

802.11g_(6Mbps)_2TX

2437MHz_TX

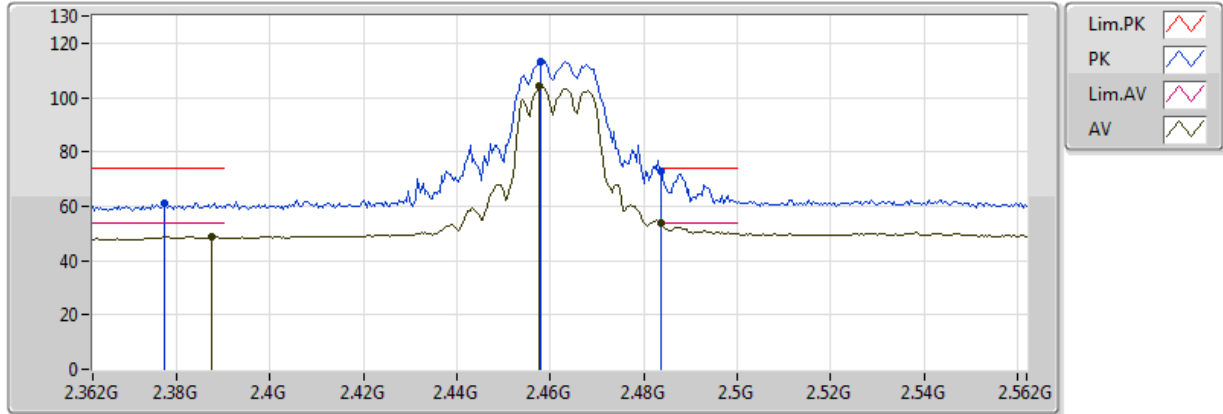


20170504
EUT Y_2TX
Setting 80
02-W-3
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.3134G	51.08	54.00	-2.92	12.16	3	H	296	1.44	-
PK	7.31386G	66.90	74.00	-7.10	12.16	3	H	296	1.44	-

802.11g_(6Mbps)_2TX

2462MHz_TX

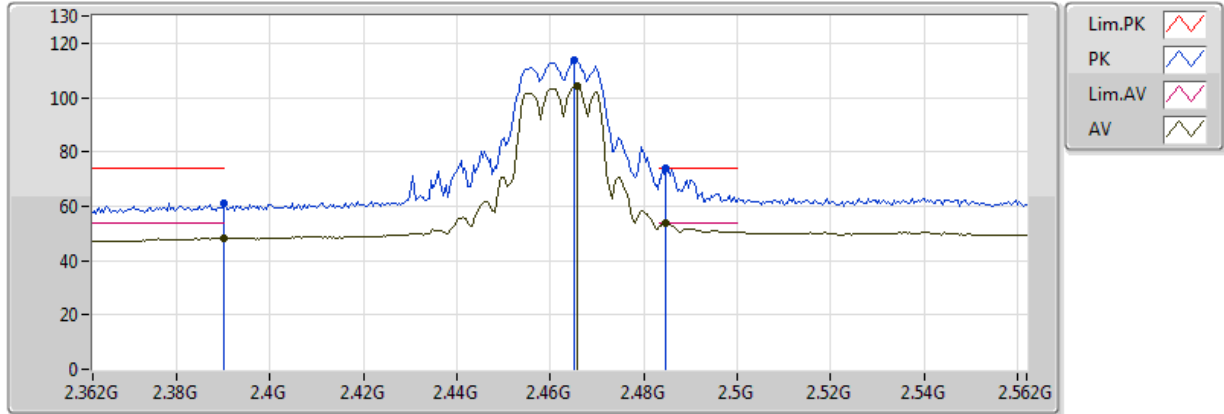


20170504
EUT Y_2TX
Setting 70
02-W-3
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3876G	48.72	54.00	-5.28	30.61	3	V	359	2.21	-
AV	2.4576G	104.00	Inf	-Inf	30.83	3	V	359	2.21	-
AV	2.4836G	53.67	54.00	-0.33	30.92	3	V	359	2.21	-
PK	2.3772G	61.06	74.00	-12.94	30.57	3	V	359	2.21	-
PK	2.458G	113.41	Inf	-Inf	30.84	3	V	359	2.21	-
PK	2.4836G	72.65	74.00	-1.35	30.92	3	V	359	2.21	-

802.11g_(6Mbps)_2TX

2462MHz_TX

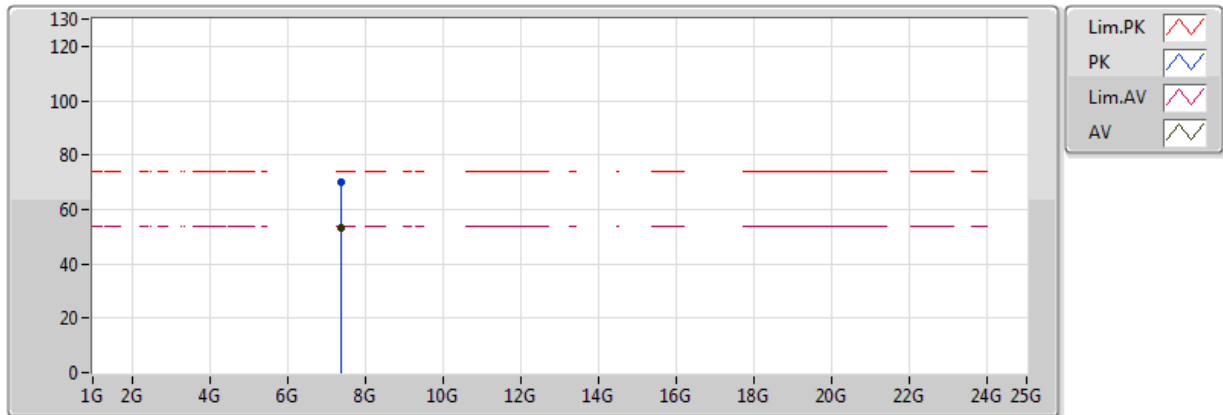


20170504
EUT Y_2TX
Setting 70
02-W-3
FSU

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	48.37	54.00	-5.63	30.62	3	H	359	2.38	-
AV	2.4656G	104.34	Inf	-Inf	30.86	3	H	359	2.38	-
AV	2.4848G	53.85	54.00	-0.15	30.92	3	H	359	2.38	-
PK	2.39G	61.29	74.00	-12.71	30.62	3	H	359	2.38	-
PK	2.4652G	114.00	Inf	-Inf	30.86	3	H	359	2.38	-
PK	2.4848G	73.98	74.00	-0.02	30.92	3	H	359	2.38	-

802.11g_(6Mbps)_2TX

2462MHz_TX

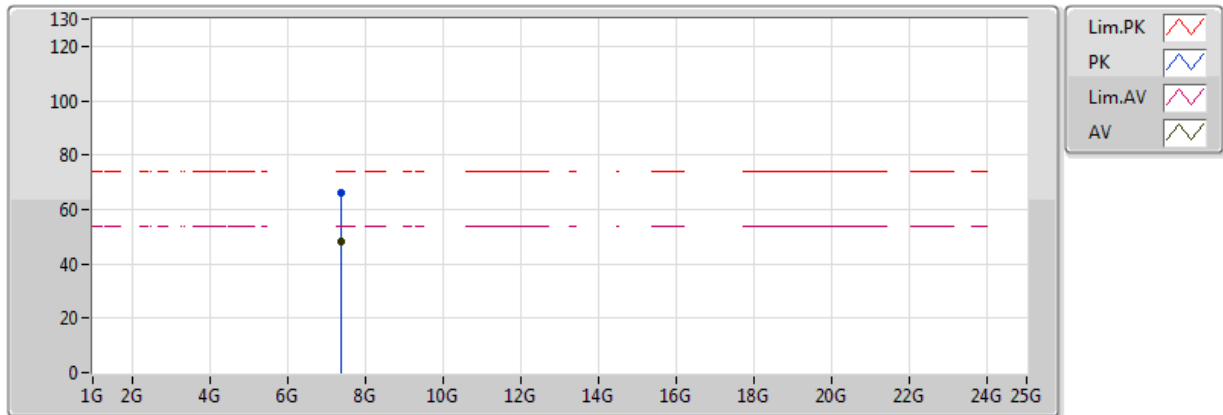


20170504
EUT Y_2TX
Setting 70
02-W-3
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.38392G	53.24	54.00	-0.76	12.32	3	V	360	2.96	-
PK	7.38786G	70.31	74.00	-3.69	12.33	3	V	360	2.96	-

802.11g_(6Mbps)_2TX

2462MHz_TX

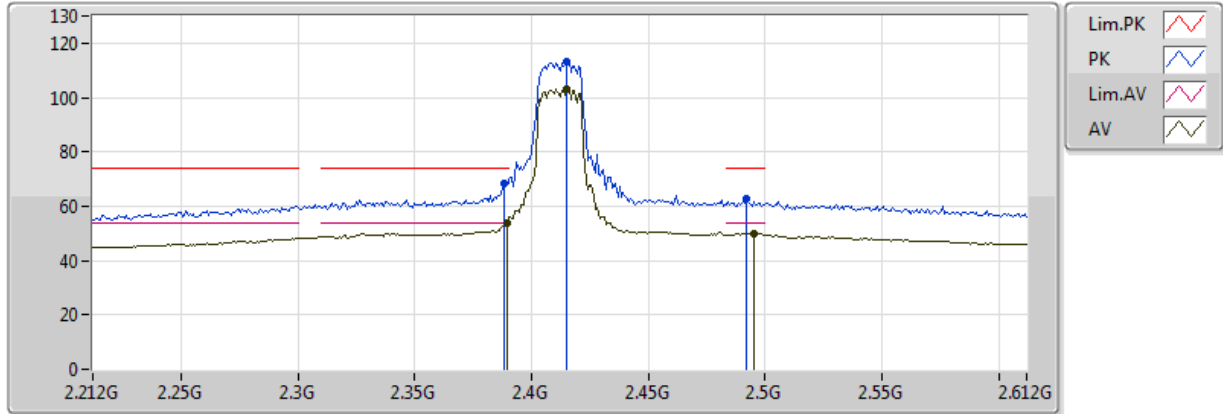


20170504
EUT Y_2TX
Setting 70
02-W-3
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.3836G	48.34	54.00	-5.66	12.32	3	H	295	1.42	-
PK	7.38792G	66.34	74.00	-7.66	12.33	3	H	295	1.42	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

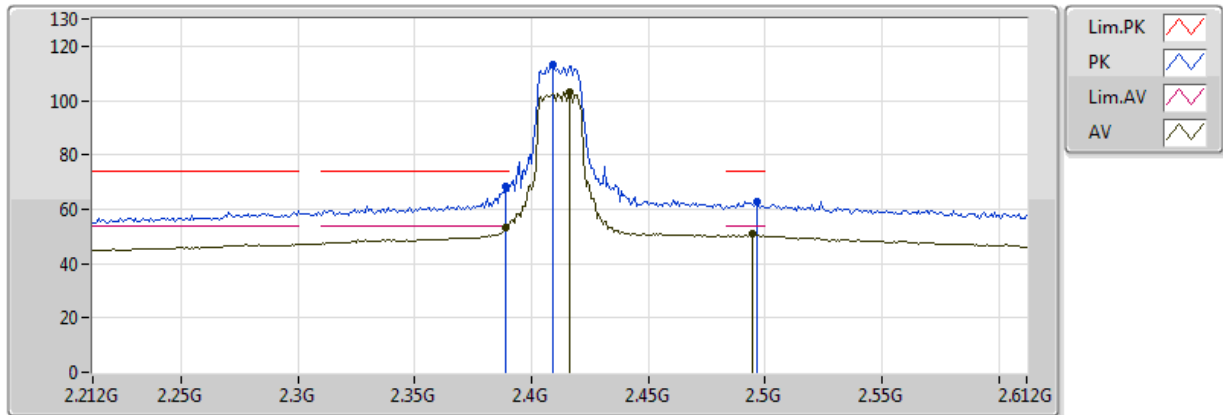


20170512
EUT Y_2TX
Setting 59
01-S-5
FSP

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	53.89	54.00	-0.11	31.04	3	V	358	1.39	-
AV	2.4152G	103.29	Inf	-Inf	31.00	3	V	358	1.39	-
AV	2.4952G	49.97	54.00	-4.03	30.91	3	V	358	1.39	-
PK	2.388G	68.64	74.00	-5.36	31.04	3	V	358	1.39	-
PK	2.4152G	113.16	Inf	-Inf	31.00	3	V	358	1.39	-
PK	2.492G	62.85	74.00	-11.15	30.91	3	V	358	1.39	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

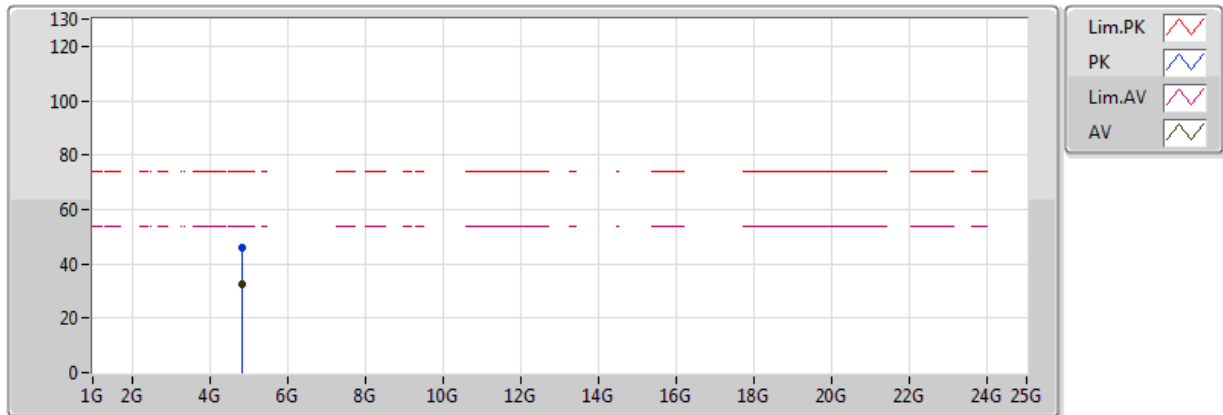


20170512
EUT Y_2TX
Setting 59
01-S-5
FSP

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	53.32	54.00	-0.68	31.04	3	H	354	2.47	-
AV	2.416G	103.04	Inf	-Inf	31.00	3	H	354	2.47	-
AV	2.4944G	50.78	54.00	-3.22	30.91	3	H	354	2.47	-
PK	2.3888G	68.47	74.00	-5.53	31.04	3	H	354	2.47	-
PK	2.4088G	113.45	Inf	-Inf	31.01	3	H	354	2.47	-
PK	2.4968G	62.81	74.00	-11.19	30.90	3	H	354	2.47	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

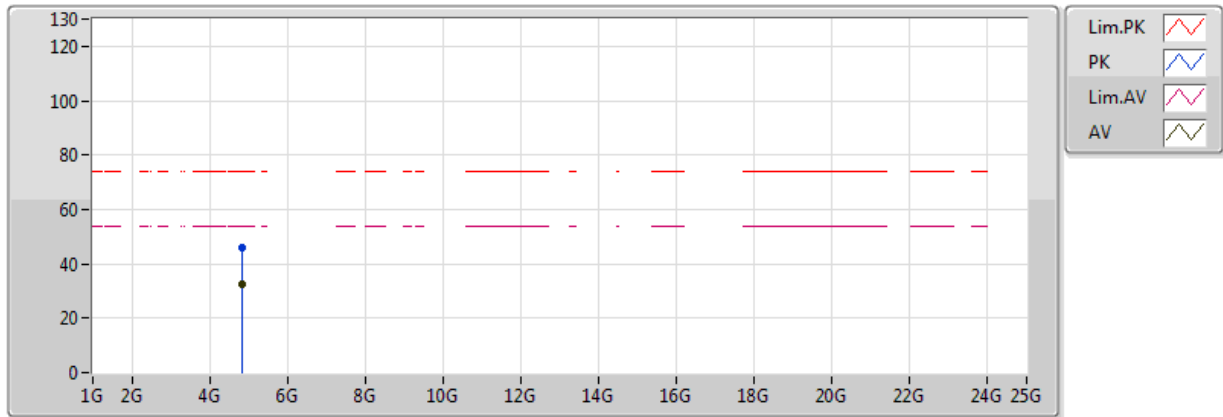


20170512
EUT Y_2TX
Setting 59
01-L-2
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8286G	32.46	54.00	-21.54	3.42	3	V	172	1.50	-
PK	4.82944G	45.91	74.00	-28.09	3.42	3	V	172	1.50	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

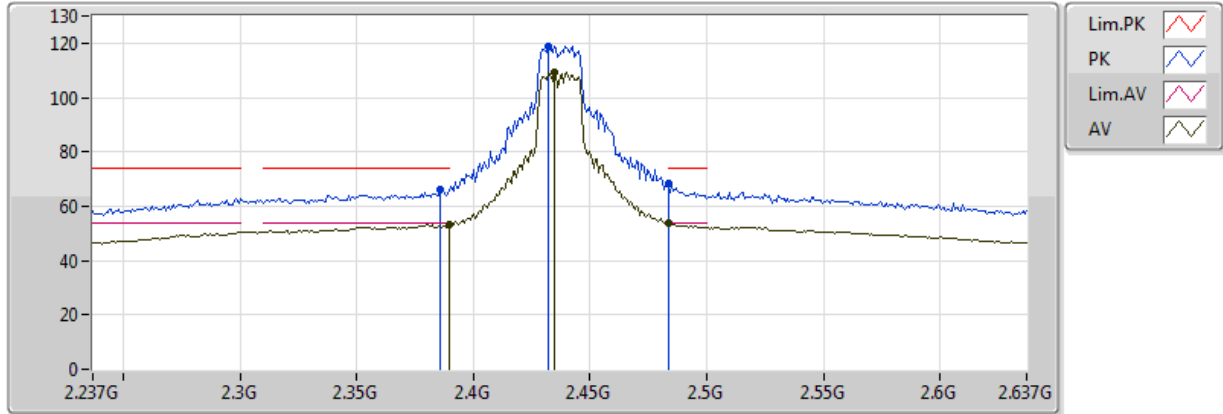


20170512
EUT Y_2TX
Setting 59
01-L-2
FSP

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	32.54	54.00	-21.46	3.42	3	H	352	1.50	-
PK	4.82264G	46.09	74.00	-27.91	3.40	3	H	352	1.50	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

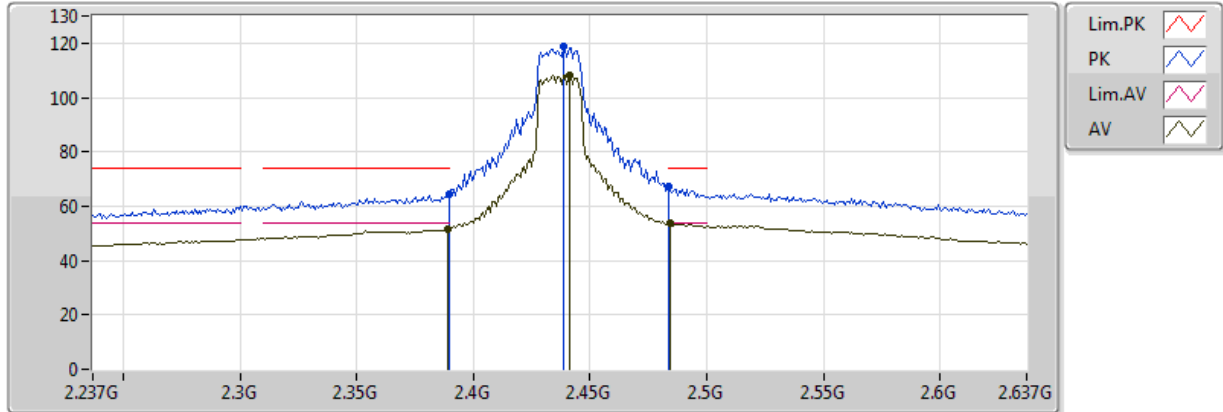


20170512
EUT Y_2TX
Setting 81
01-L-2
FSP

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	53.03	54.00	-0.97	31.04	3	V	1	2.40	-
AV	2.4346G	109.32	Inf	-Inf	30.98	3	V	1	2.40	-
AV	2.483502G	53.70	54.00	-0.30	30.92	3	V	1	2.40	-
PK	2.3858G	65.88	74.00	-8.12	31.04	3	V	1	2.40	-
PK	2.4322G	118.87	Inf	-Inf	30.98	3	V	1	2.40	-
PK	2.483502G	68.40	74.00	-5.60	30.92	3	V	1	2.40	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

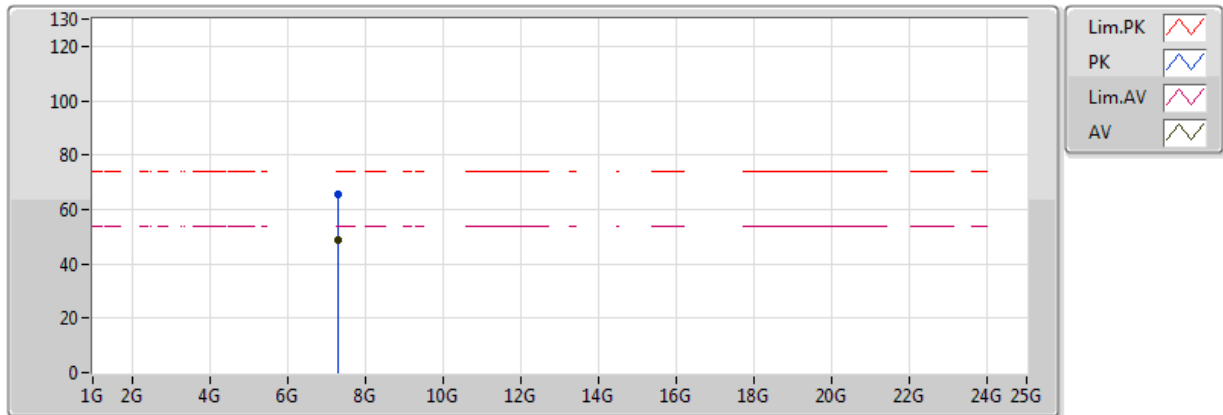


20170512
EUT Y_2TX
Setting 81
01-L-2
FSP

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	51.54	54.00	-2.46	31.04	3	H	1	2.30	-
AV	2.441G	108.31	Inf	-Inf	30.97	3	H	1	2.30	-
AV	2.4842G	53.86	54.00	-0.14	30.92	3	H	1	2.30	-
PK	2.3898G	64.25	74.00	-9.75	31.04	3	H	1	2.30	-
PK	2.4386G	118.63	Inf	-Inf	30.97	3	H	1	2.30	-
PK	2.483502G	67.20	74.00	-6.80	30.92	3	H	1	2.30	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

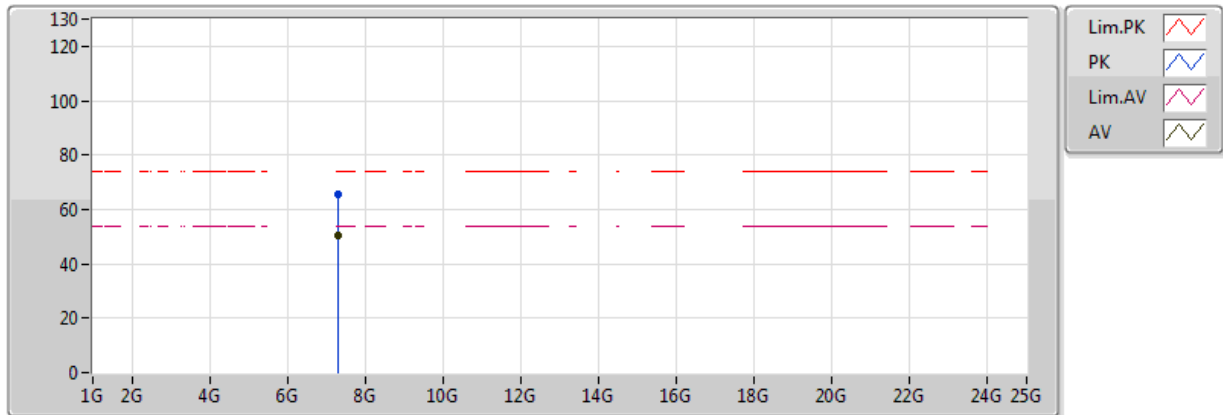


20170512
EUT Y_2TX
Setting 81
01-L-2
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.30968G	48.52	54.00	-5.48	8.75	3	V	4	2.96	-
PK	7.31228G	65.56	74.00	-8.44	8.75	3	V	4	2.96	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

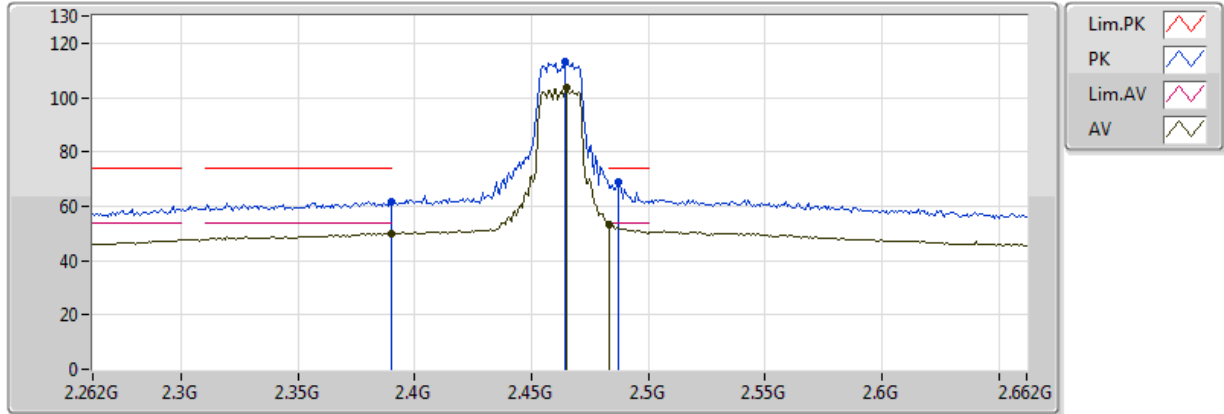


20170512
EUT Y_2TX
Setting 81
01-L-2
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.30972G	50.23	54.00	-3.77	8.75	3	H	302	1.61	-
PK	7.30984G	65.33	74.00	-8.67	8.75	3	H	302	1.61	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

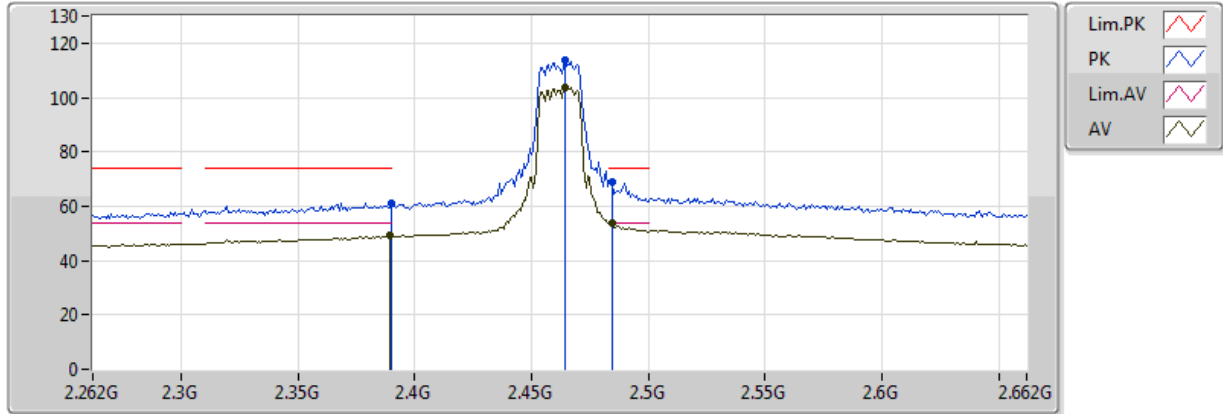


20170512
EUT Y_2TX
Setting 61
01-L-2
FSP

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	50.03	54.00	-3.97	31.04	3	V	0	2.16	-
AV	2.4652G	103.53	Inf	-Inf	30.94	3	V	0	2.16	-
AV	2.483502G	53.33	54.00	-0.67	30.92	3	V	0	2.16	-
PK	2.389998G	61.53	74.00	-12.47	31.04	3	V	0	2.16	-
PK	2.4644G	113.26	Inf	-Inf	30.94	3	V	0	2.16	-
PK	2.4868G	69.13	74.00	-4.87	30.92	3	V	0	2.16	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

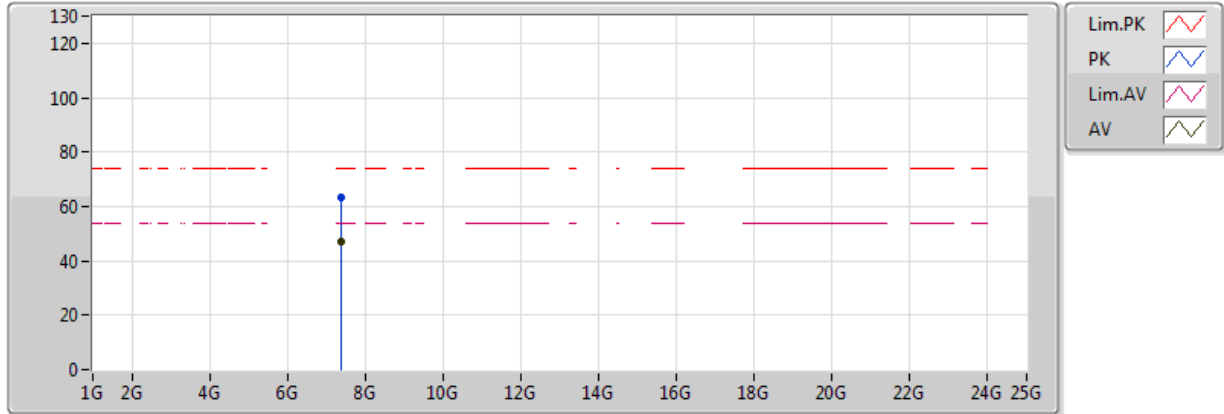


20170512
EUT Y_2TX
Setting 61
01-L-2
FSP

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	49.05	54.00	-4.95	31.04	3	H	4	1.04	-
AV	2.4644G	103.71	Inf	-Inf	30.94	3	H	4	1.04	-
AV	2.4844G	53.78	54.00	-0.22	30.92	3	H	4	1.04	-
PK	2.389998G	61.34	74.00	-12.66	31.04	3	H	4	1.04	-
PK	2.4644G	113.52	Inf	-Inf	30.94	3	H	4	1.04	-
PK	2.4844G	68.75	74.00	-5.25	30.92	3	H	4	1.04	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

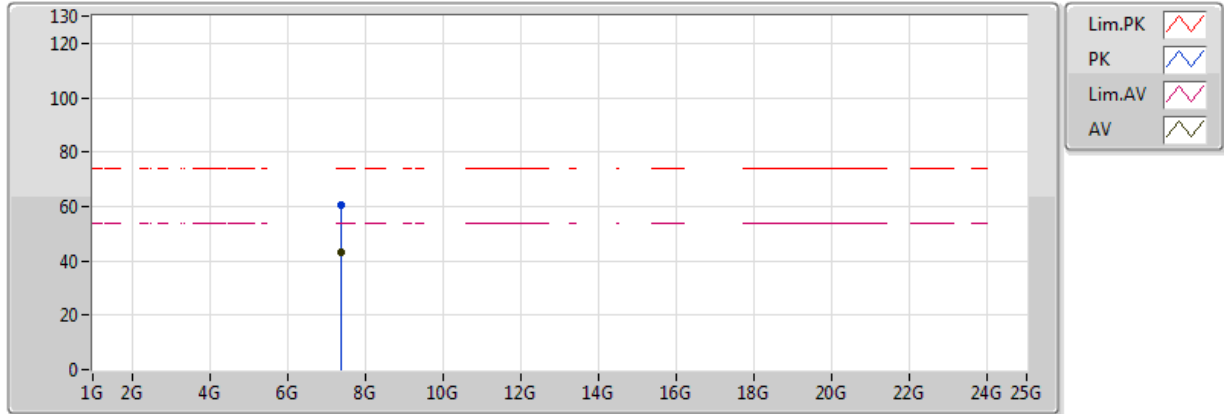


20170512
EUT Y_2TX
Setting 61
01-L-2
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.38696G	46.90	54.00	-7.10	8.90	3	V	358	1.97	-
PK	7.39484G	63.57	74.00	-10.43	8.92	3	V	358	1.97	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

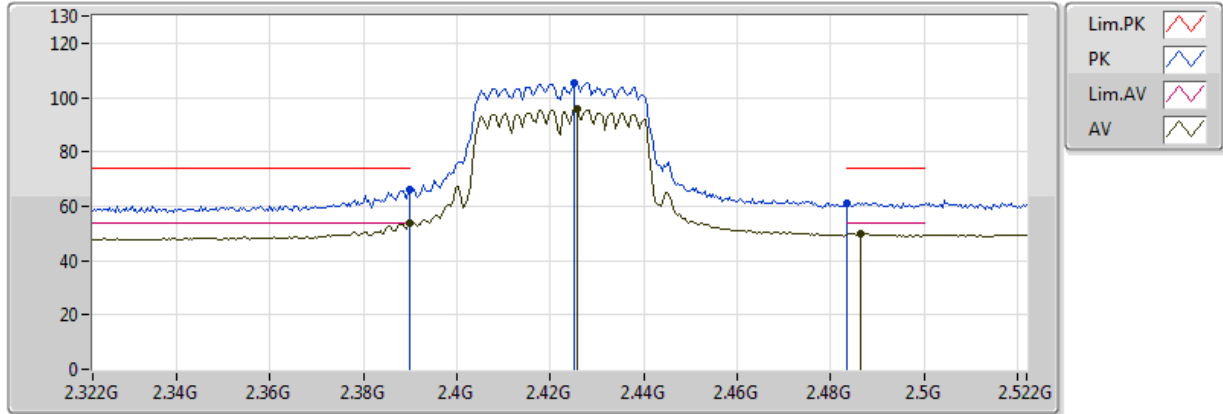


20170512
EUT Y_2TX
Setting 61
01-L-2
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.38728G	43.36	54.00	-10.64	8.90	3	H	300	1.50	-
PK	7.3872G	60.59	74.00	-13.41	8.90	3	H	300	1.50	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

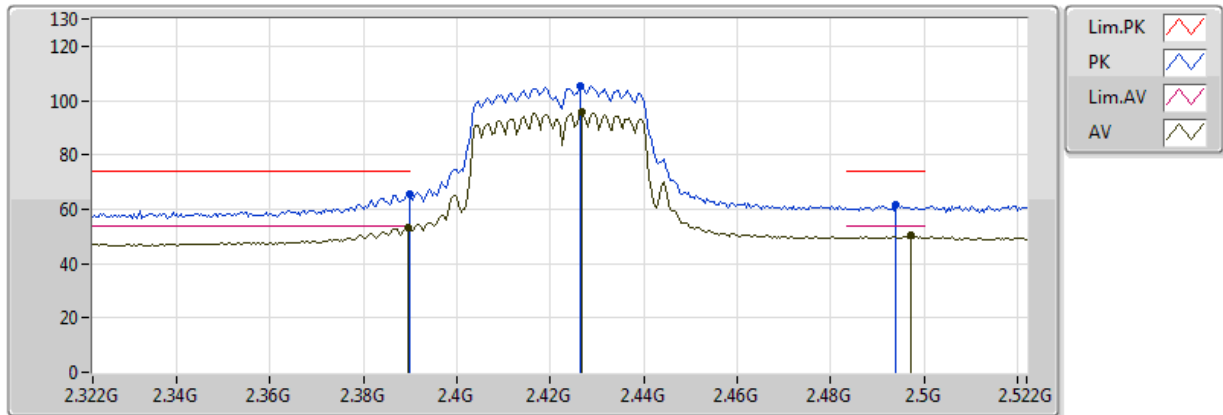


20170504
EUT Y_2TX
Setting 47
02-W-3
FSU

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	53.71	54.00	-0.29	30.62	3	V	354	1.38	-
AV	2.4256G	95.80	Inf	-Inf	30.73	3	V	354	1.38	-
AV	2.4864G	50.00	54.00	-4.00	30.93	3	V	354	1.38	-
PK	2.39G	66.00	74.00	-8.00	30.62	3	V	354	1.38	-
PK	2.4252G	105.54	Inf	-Inf	30.73	3	V	354	1.38	-
PK	2.4836G	61.34	74.00	-12.66	30.92	3	V	354	1.38	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

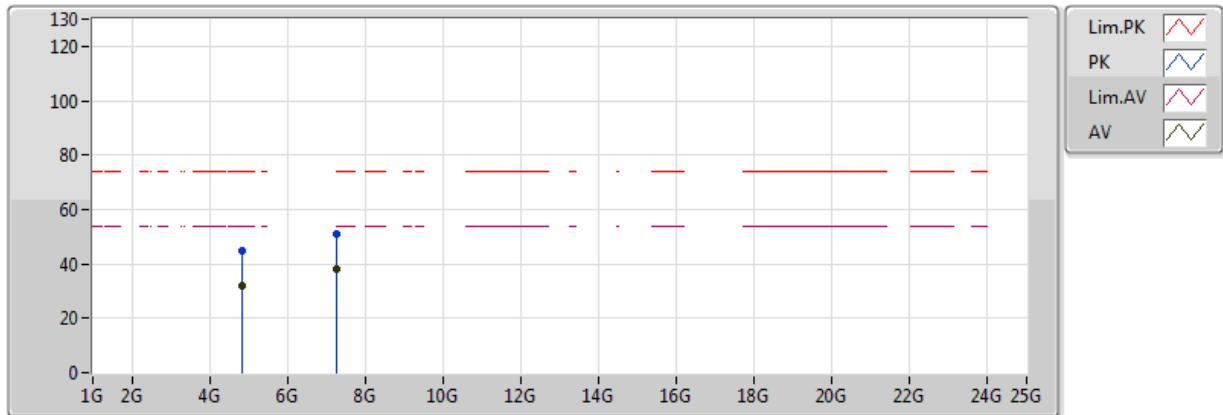


20170504
EUT Y_2TX
Setting 47
02-W-3
FSU

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	53.18	54.00	-0.82	30.62	3	H	353	1.49	-
AV	2.4268G	95.81	Inf	-Inf	30.74	3	H	353	1.49	-
AV	2.4972G	50.31	54.00	-3.69	30.96	3	H	353	1.49	-
PK	2.39G	65.62	74.00	-8.38	30.62	3	H	353	1.49	-
PK	2.4264G	105.59	Inf	-Inf	30.73	3	H	353	1.49	-
PK	2.494G	61.88	74.00	-12.12	30.95	3	H	353	1.49	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

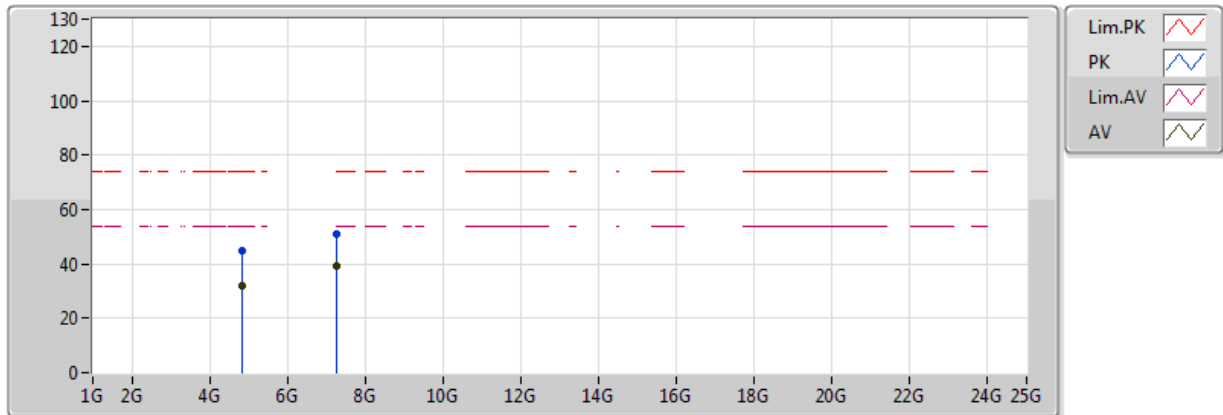


20170504
EUT Y_2TX
Setting 47
02-W-3
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8411G	31.96	54.00	-22.04	6.23	3	V	113	2.46	-
AV	7.2686G	38.34	54.00	-15.66	12.04	3	V	160	2.94	-
PK	4.84562G	44.79	74.00	-29.21	6.24	3	V	113	2.46	-
PK	7.26994G	50.99	74.00	-23.01	12.05	3	V	160	2.94	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

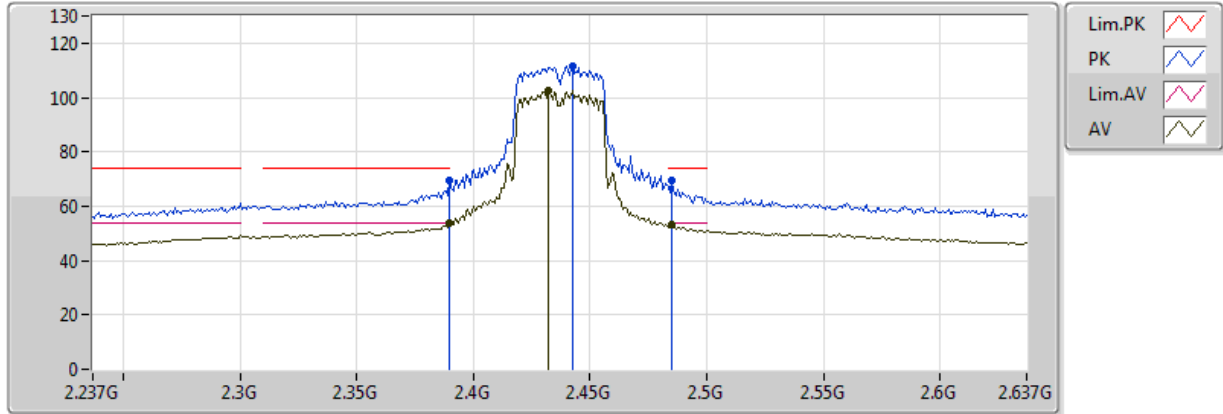


20170504
EUT Y_2TX
Setting 47
02-W-3
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.84106G	32.03	54.00	-21.97	6.23	3	H	133	1.50	-
AV	7.26798G	39.11	54.00	-14.89	12.04	3	H	285	2.70	-
PK	4.84584G	44.77	74.00	-29.23	6.24	3	H	133	1.50	-
PK	7.26902G	51.27	74.00	-22.73	12.04	3	H	285	2.70	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

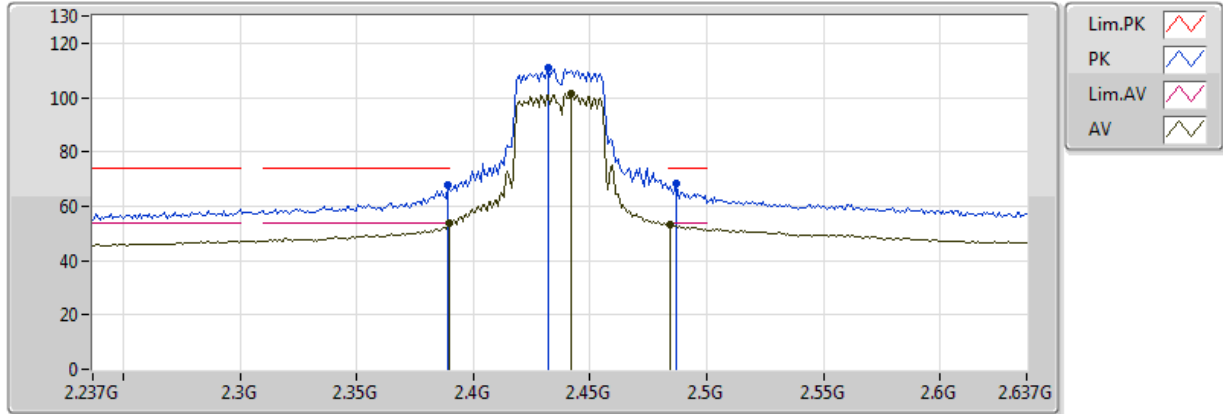


20170512
EUT Y_2TX
Setting 65
01-L-2
FSP

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	53.80	54.00	-0.20	31.04	3	V	0	2.40	-
AV	2.4322G	102.43	Inf	-Inf	30.98	3	V	0	2.40	-
AV	2.485G	53.03	54.00	-0.97	30.92	3	V	0	2.40	-
PK	2.3898G	69.25	74.00	-4.75	31.04	3	V	0	2.40	-
PK	2.4426G	111.59	Inf	-Inf	30.97	3	V	0	2.40	-
PK	2.485G	69.34	74.00	-4.66	30.92	3	V	0	2.40	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

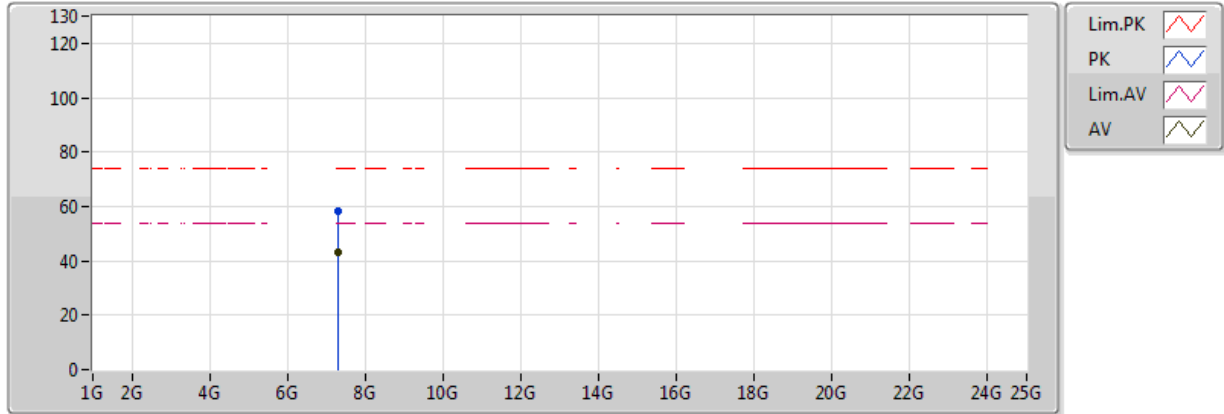


20170512
EUT Y_2TX
Setting 65
01-L-2
FSP

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	53.71	54.00	-0.29	31.04	3	H	4	1.13	-
AV	2.4418G	101.58	Inf	-Inf	30.97	3	H	4	1.13	-
AV	2.4842G	53.24	54.00	-0.76	30.92	3	H	4	1.13	-
PK	2.389G	67.81	74.00	-6.19	31.04	3	H	4	1.13	-
PK	2.4322G	110.68	Inf	-Inf	30.98	3	H	4	1.13	-
PK	2.4866G	68.35	74.00	-5.65	30.92	3	H	4	1.13	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

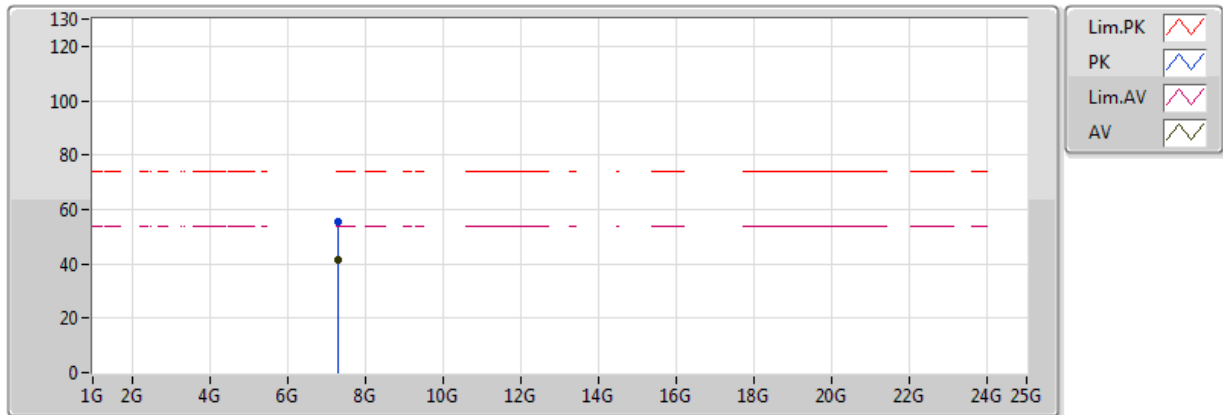


20170512
EUT Y_2TX
Setting 65
01-L-2
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.31444G	43.26	54.00	-10.74	8.76	3	V	0	1.94	-
PK	7.31476G	58.06	74.00	-15.94	8.76	3	V	0	1.94	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

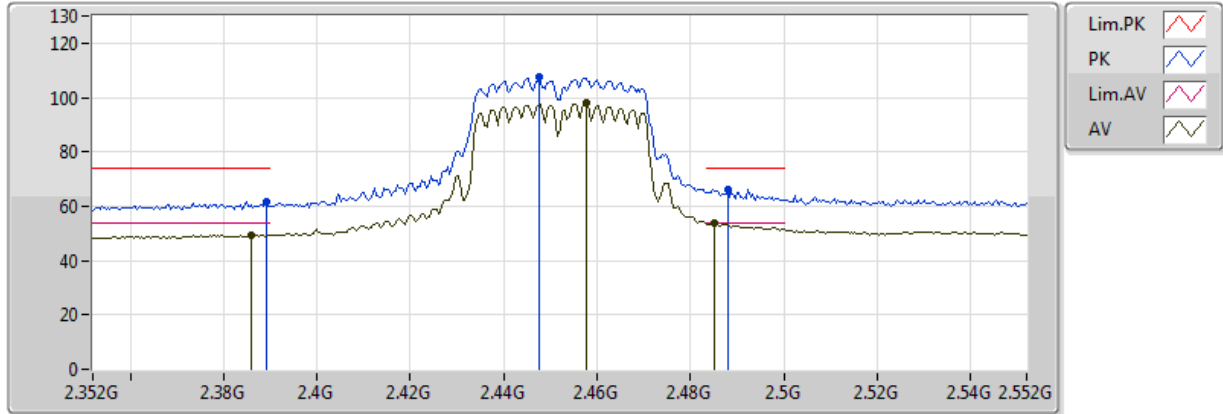


20170512
EUT Y_2TX
Setting 65
01-L-2
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.3026G	41.22	54.00	-12.78	8.74	3	H	287	2.87	-
PK	7.30252G	55.69	74.00	-18.31	8.74	3	H	287	2.87	-

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX

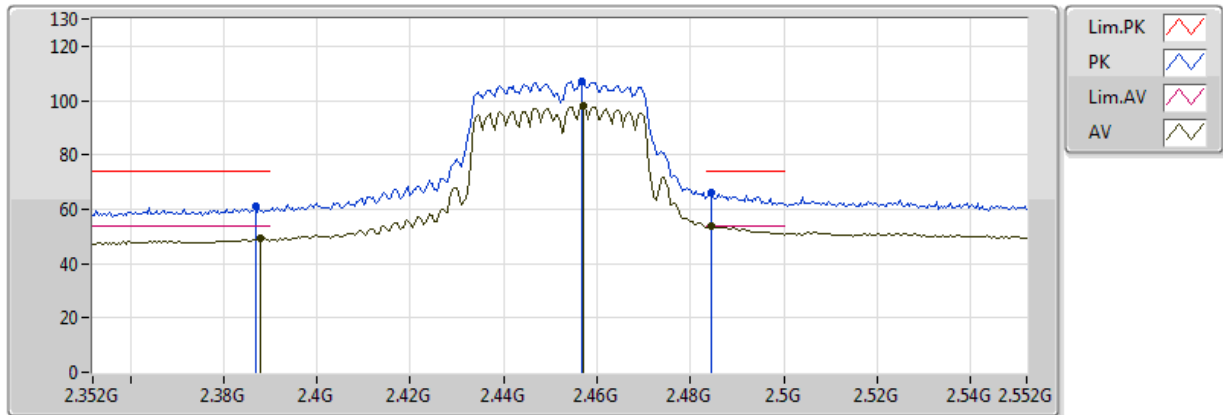


20170504
EUT Y_2TX
Setting 56
02-W-3
FSU

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	49.29	54.00	-4.71	30.60	3	V	360	2.24	-
AV	2.4576G	97.89	Inf	-Inf	30.83	3	V	360	2.24	-
AV	2.4852G	53.83	54.00	-0.17	30.92	3	V	360	2.24	-
PK	2.3892G	61.70	74.00	-12.30	30.61	3	V	360	2.24	-
PK	2.4476G	107.33	Inf	-Inf	30.80	3	V	360	2.24	-
PK	2.488G	66.11	74.00	-7.89	30.93	3	V	360	2.24	-

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX

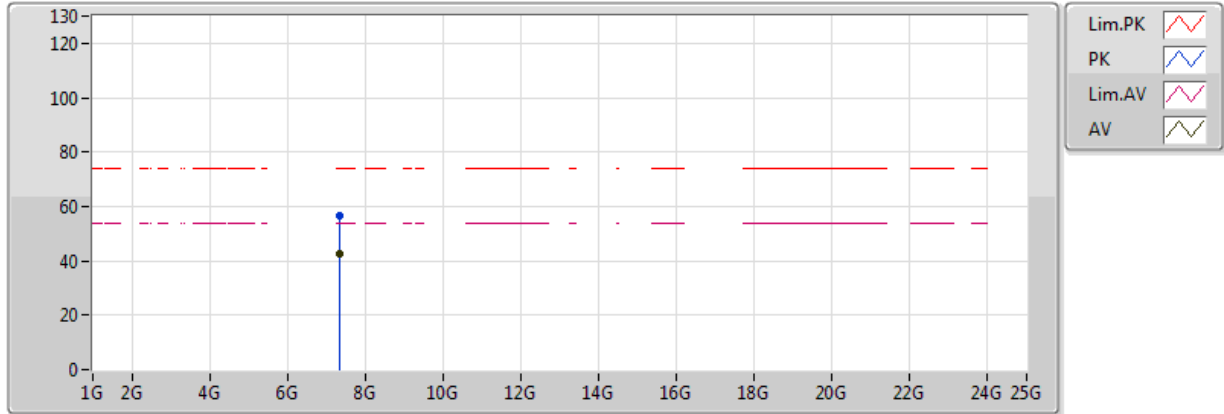


20170504
EUT Y_2TX
Setting 56
02-W-3
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.388G	49.19	54.00	-4.81	30.61	3	H	355	1.05	-
AV	2.4572G	97.90	Inf	-Inf	30.83	3	H	355	1.05	-
AV	2.4844G	53.79	54.00	-0.21	30.92	3	H	355	1.05	-
PK	2.3868G	60.81	74.00	-13.19	30.61	3	H	355	1.05	-
PK	2.4568G	107.28	Inf	-Inf	30.83	3	H	355	1.05	-
PK	2.4844G	66.17	74.00	-7.83	30.92	3	H	355	1.05	-

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX

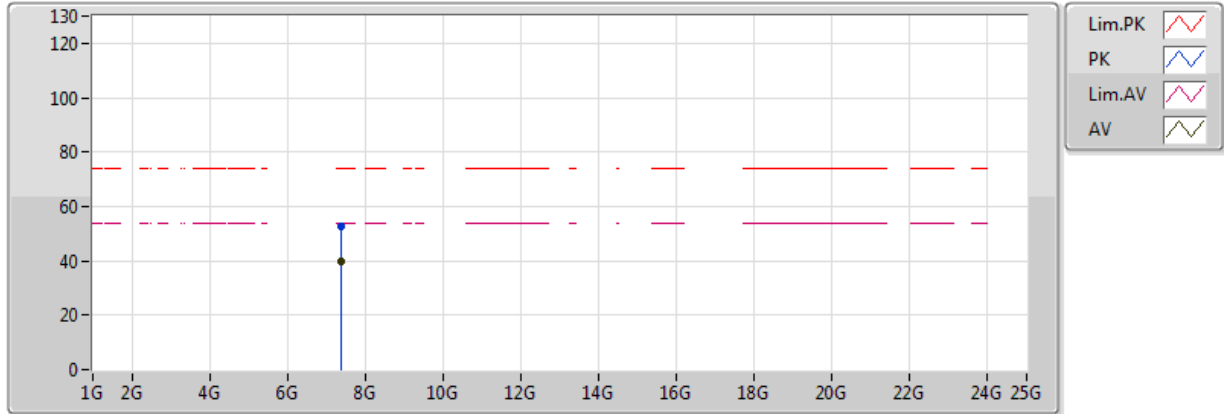


20170512
EUT Y_2TX
Setting 56
01-L-2
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.3598G	42.57	54.00	-11.43	8.85	3	V	3	2.81	-
PK	7.35472G	56.85	74.00	-17.15	8.84	3	V	3	2.81	-

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX



20170512
EUT Y_2TX
Setting 56
01-L-2
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.36252G	40.02	54.00	-13.98	8.86	3	H	301	1.66	-
PK	7.36252G	52.84	74.00	-21.16	8.86	3	H	301	1.66	-