



FCC Test Report

Equipment : AC1350 Wireless Dual Band Router
Brand Name : TP-Link
Model No. : Archer C59
FCC ID : TE7C59V3
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 Apr. 18, 2017 and completely tested on May 25, 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

Revision History

[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	3TX
2.4-2.4835GHz	802.11g	20	3TX
2.4-2.4835GHz	802.11n HT20	20	3TX
2.4-2.4835GHz	802.11n HT40	40	3TX

Note:

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

1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	
						2.4GHz	5GHz
1	1	TP-Link	3101500863	Omni-Directional	I-PEX	2.70	3.87
2	2	TP-Link	3101500863	Omni-Directional	I-PEX	2.70	3.87
3	3	TP-Link	3101500862	Omni-Directional	I-PEX	3.27	-

Note: The EUT has three antennas.

<For 2.4GHz Band>

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

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

Port 1, Port 2 and Port 3 could transmit/receive simultaneously.

<For 5GHz Band>

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

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

Port 1 and Port 2 could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)
802.11b	0.978	0.097
802.11g	0.948	0.232
802.11n HT20	0.932	0.306
802.11n HT40	0.768	1.146

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter		
Beamforming Function	☒	With beamforming for 802.11ac in 5GHz	☐ Without beamforming

1.2 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR FCC Part 15
- ♦ ANSI C63.10-2013
- ♦ FCC KDB 558074 D01 v04
- ♦ FCC KDB 662911 D01 v02r01
- ♦ FCC KDB 412172 D01 v01r01

1.3 Testing Location Information

Testing Location				
☐	HWA YA	ADD : No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.	TEL : 886-3-327-3456	FAX : 886-3-318-0055
☒	JHUBEI	ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.	TEL : 886-3-656-9065	FAX : 886-3-656-9085

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-CB	Brian Sun	22°C / 54%	May 19, 2017
Radiated	03CH01-CB	Zero Chen / Mason Chen	22°C / 54%	May 15, 2017~ May 24, 2017
AC Conduction	CO02-CB	Wei Li	23°C / 56%	May 25, 2017

Test site Designation No. TW0006 with FCC.

Test site registered number IC 4086D with Industry Canada.

1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.7 dB	Confidence levels of 95%
Output Power Measurement	1.33 dB	Confidence levels of 95%
Power Density Measurement	1.27 dB	Confidence levels of 95%
Bandwidth Measurement	9.74 x10 ⁻⁸	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	Power Setting
802.11b_(1Mbps)_3TX	-
2412MHz	19
2437MHz	24
2462MHz	19
802.11g_(6Mbps)_3TX	-
2412MHz	18
2437MHz	22
2462MHz	14
802.11n HT20_Nss1,(MCS0)_3TX	-
2412MHz	16
2437MHz	23
2462MHz	13
802.11n HT40_Nss1,(MCS0)_3TX	-
2422MHz	12
2437MHz	15
2452MHz	10

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	WLAN 2.4GHz
2	WLAN 5GHz
For operating mode 2 is the worst case and it was record in this test report.	

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
Y-axis generated the worst result for Radiated Emissions test <Above 1GHz>, thus the measurement will follow this same test configuration.	
1	WLAN 2.4GHz_EUT at Y-axis
2	WLAN 5GHz_EUT at Y-axis
For operating mode 1 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
The EUT can be placed in Y-axis and Z-axis. After evaluating, Y-axis was the worst case, so it's recorded in this report.	
1	2.4G WLAN_EUT at Y-axis

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	CTX
1	WLAN 2.4GHz + WLAN 5GHz
Refer to Sporton Test Report No.: FA651919-01 for Co-location RF Exposure Evaluation.	

2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

Accessories				
No.	Equipment Name	Brand Name	Model Name	Rating
1	Adapter	TP-LINK	T120100-2B1	INPUT: 100-240V ~50/60Hz 0.3A OUTPUT: 12V, 1A

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

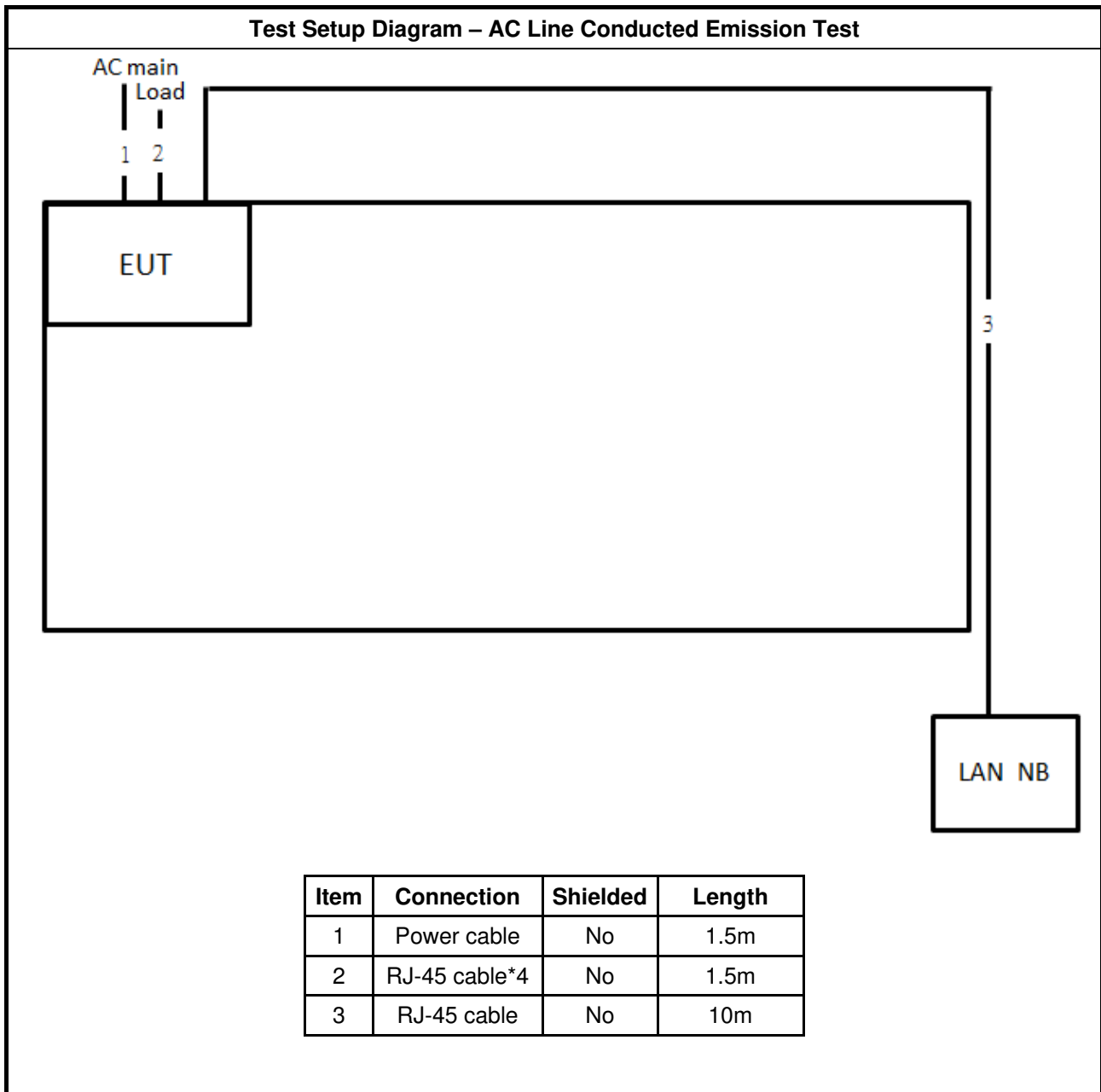
For Test Site No: 03CH01-CB

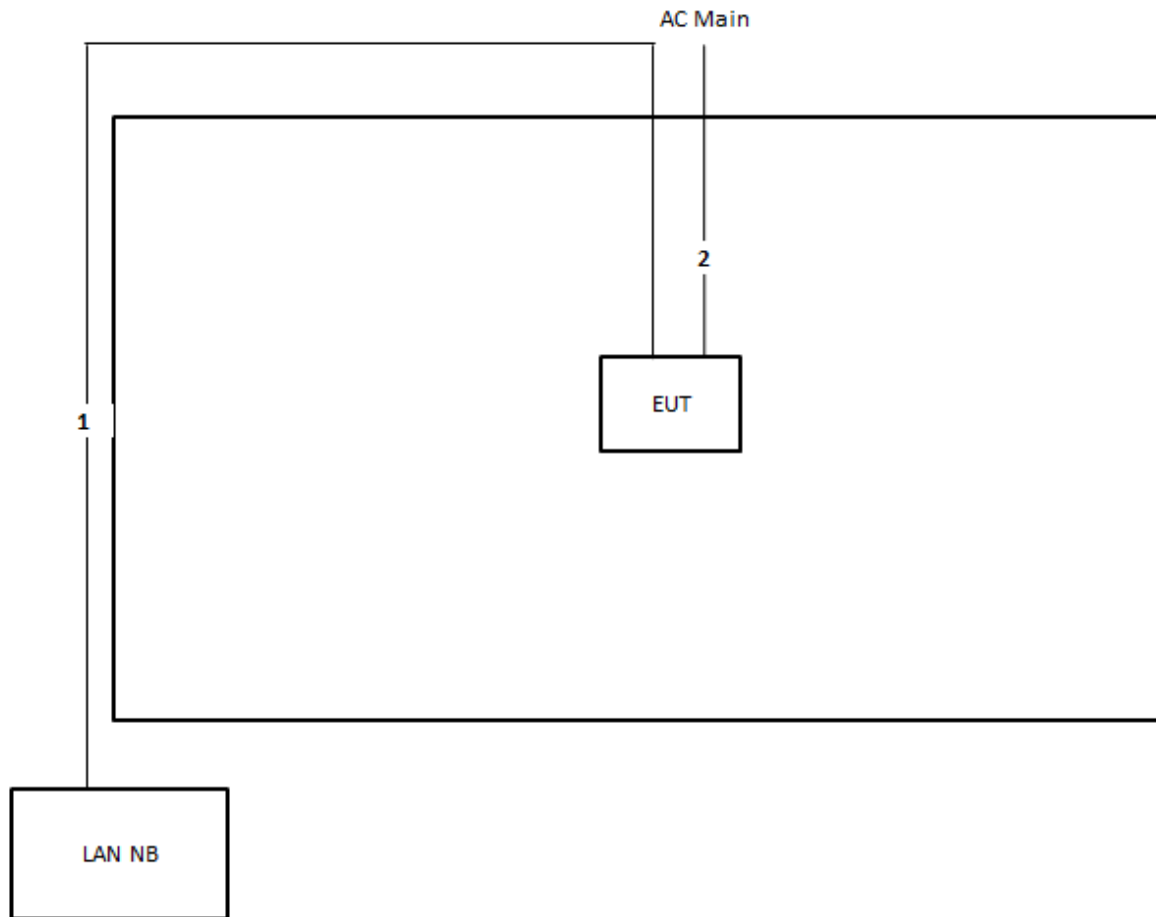
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB	DELL	E4300	DoC

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	Power cable	No	1.5m

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

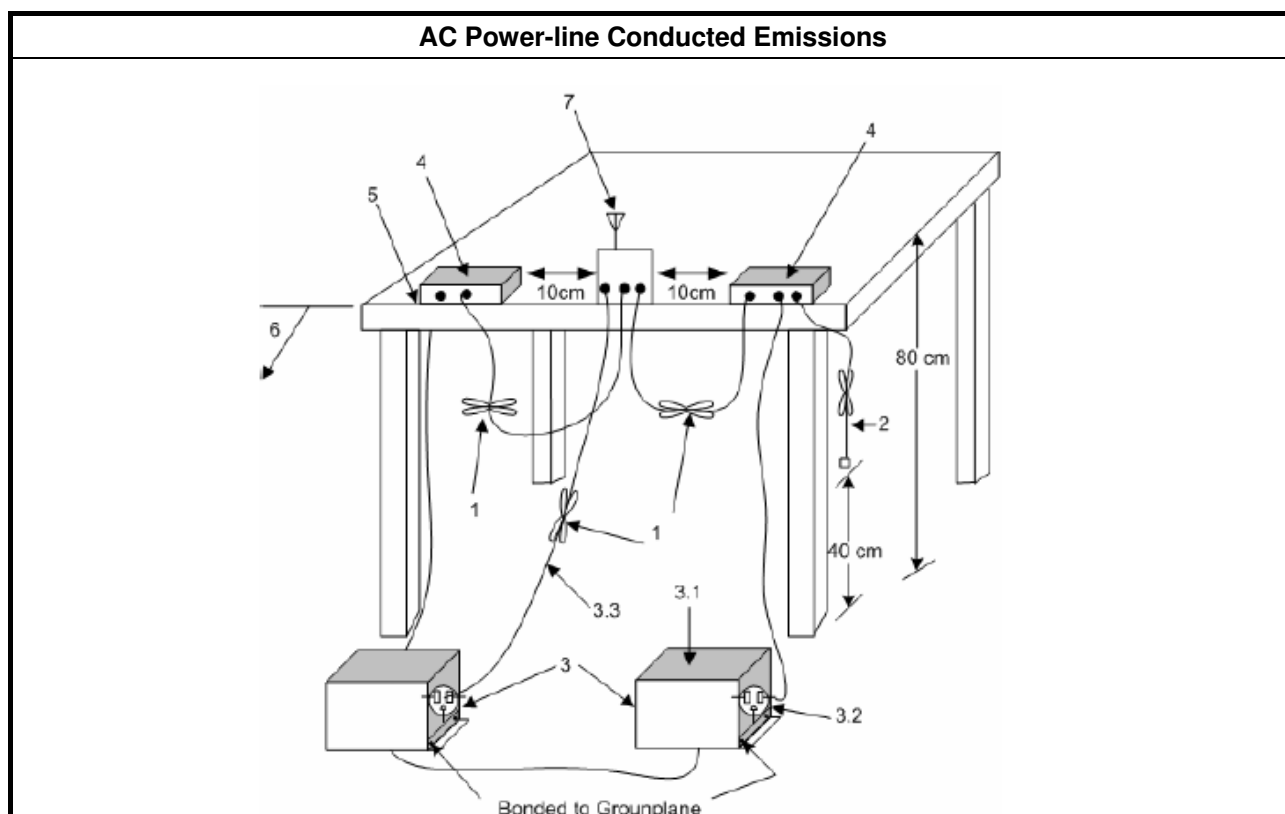
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

Test Method
☒ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup





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.

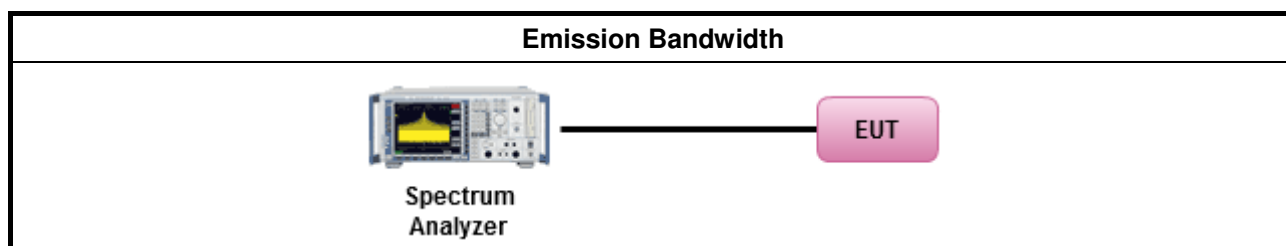
3.2.2 Measuring Instruments

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.	

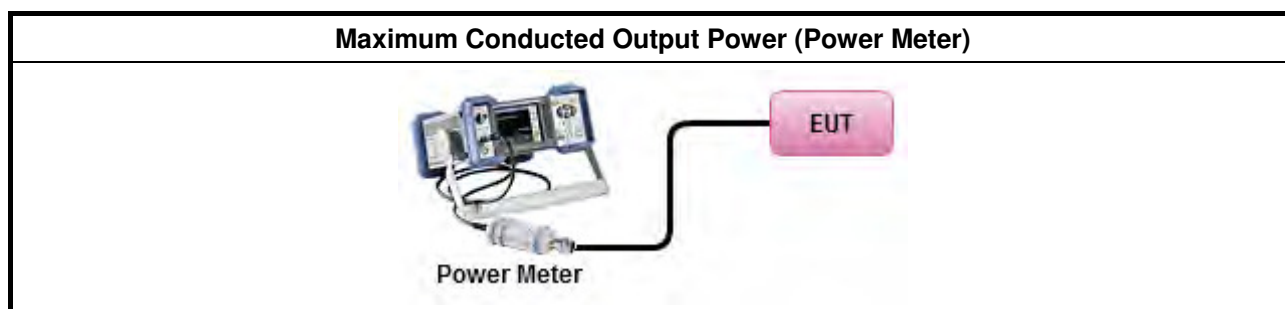
3.3.2 Measuring Instruments

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

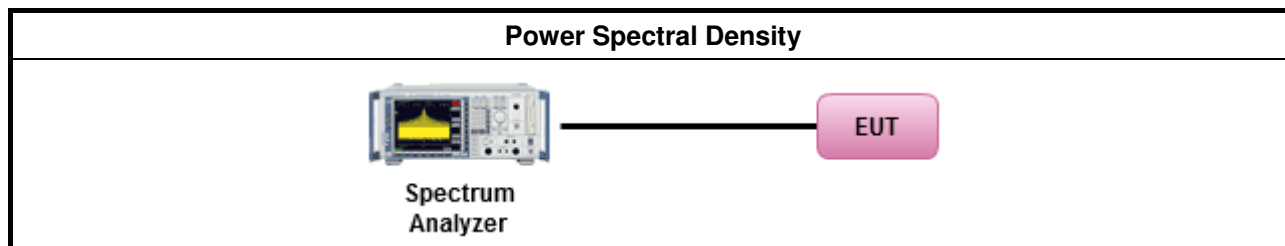
3.4.2 Measuring Instruments

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.	

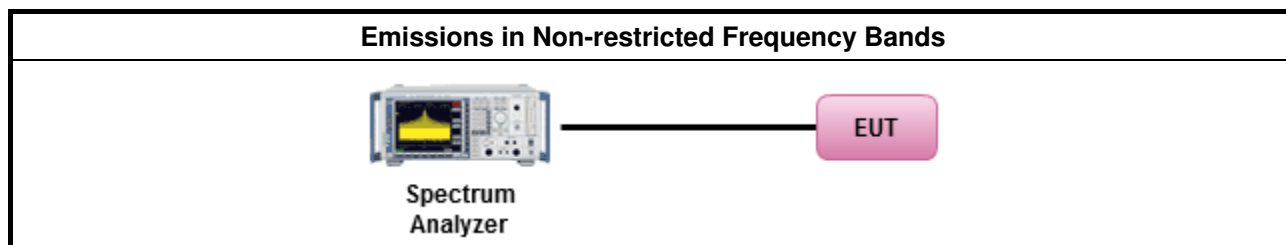
3.5.2 Measuring Instruments

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.

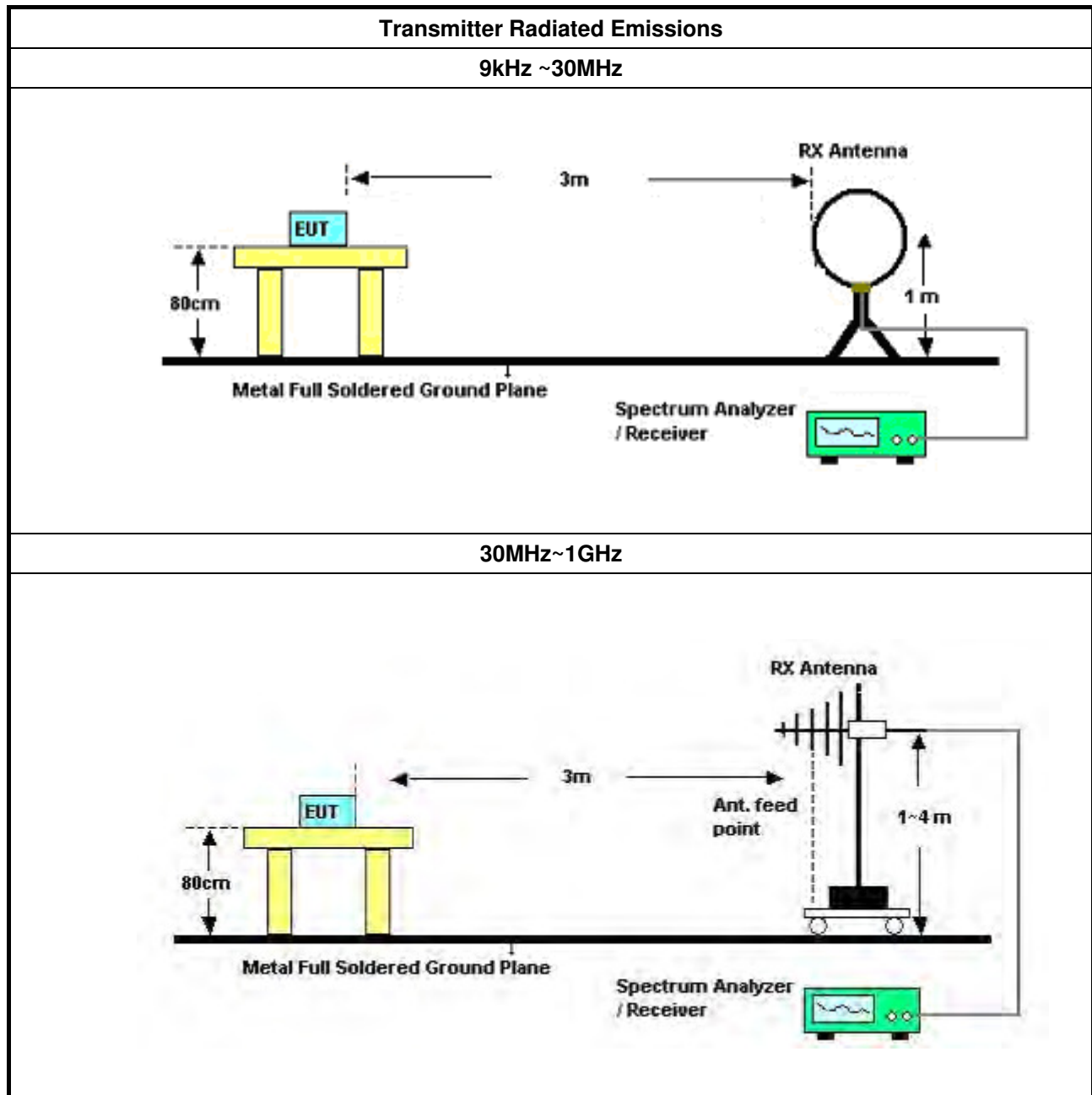
3.6.2 Measuring Instruments

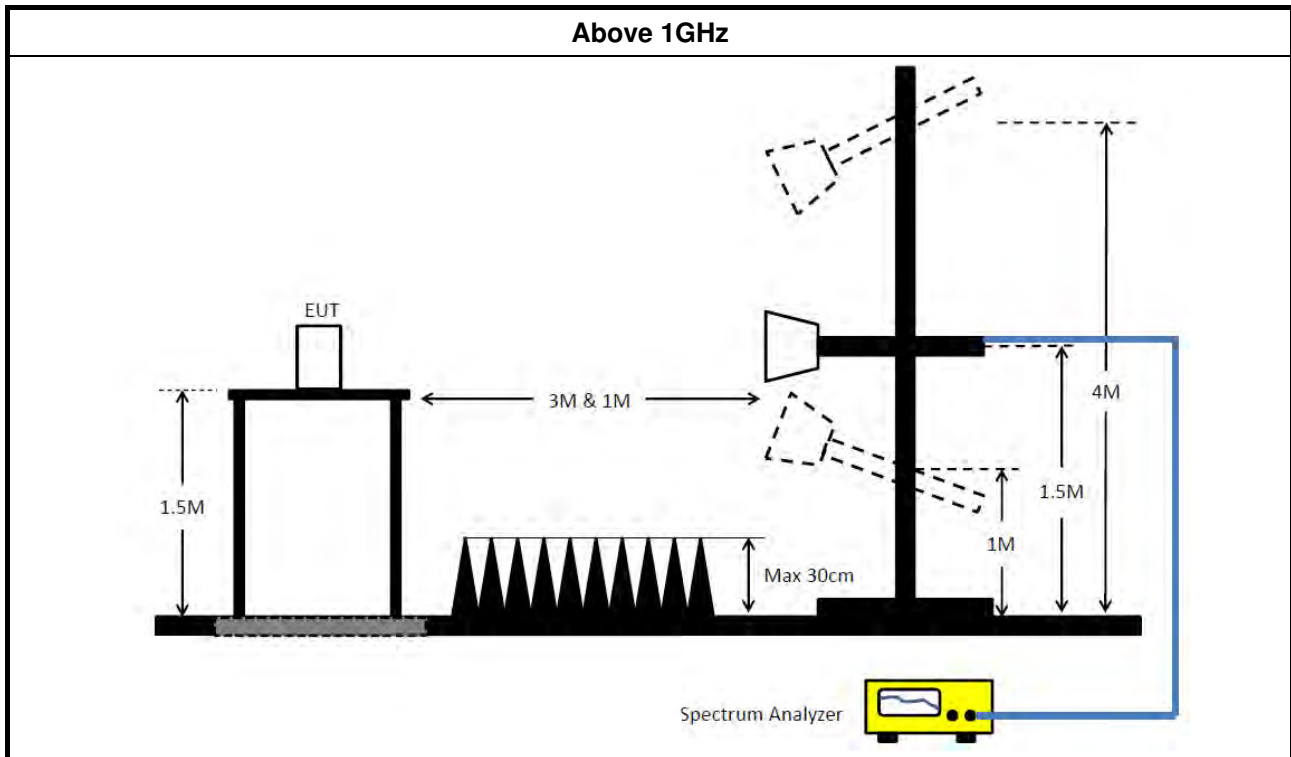
Refer a test equipment and calibration data table in this test report.

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)

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)



FCC Test Report

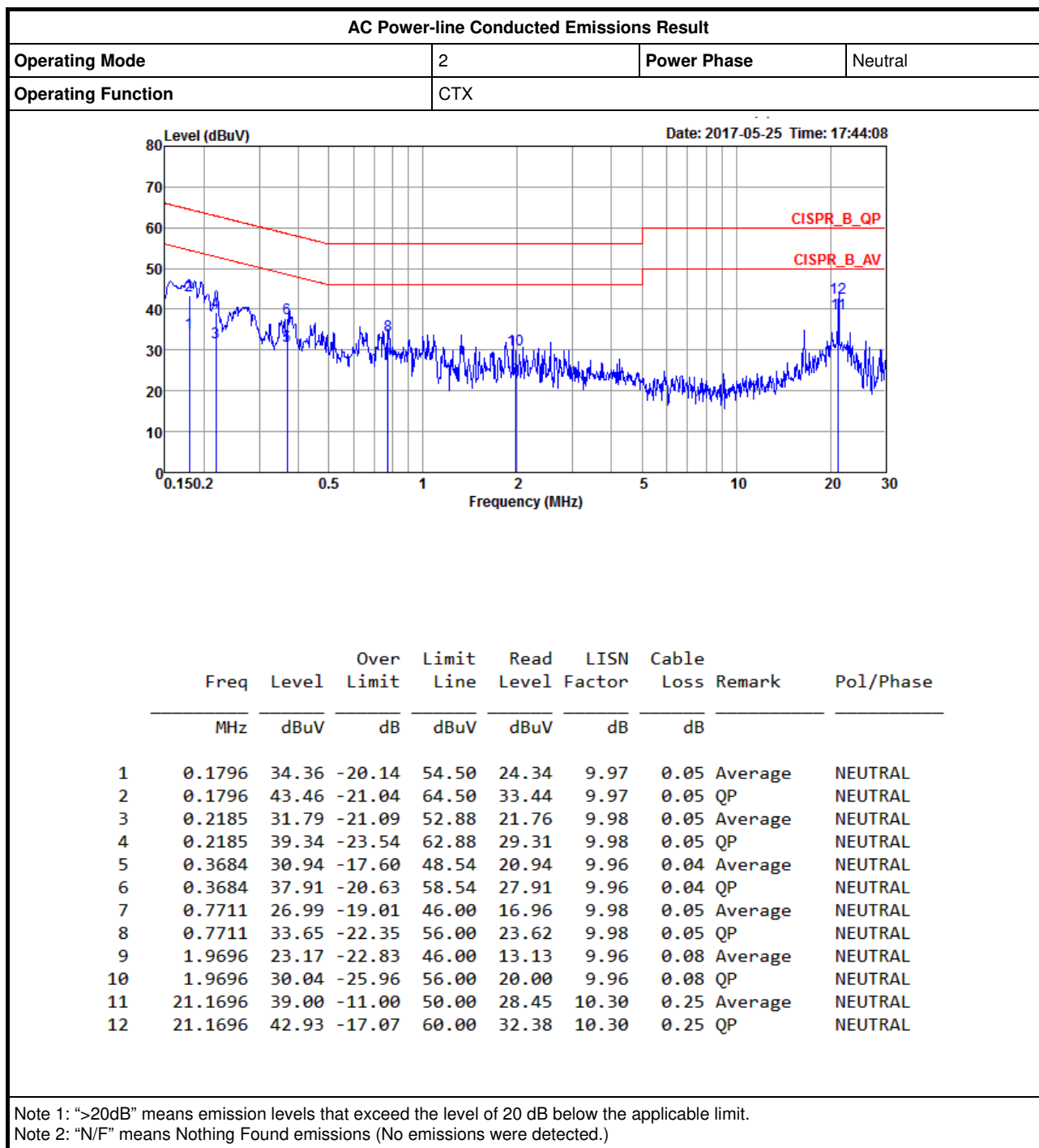
Report No. : FR651919-01AA

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
Test Software	Audix	E3	6.2009-I0-7	N/A	N/A	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 26, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-6	1 GHz – 26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-7	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-8	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-9	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 22, 2016	Conducted (TH01-CB)

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

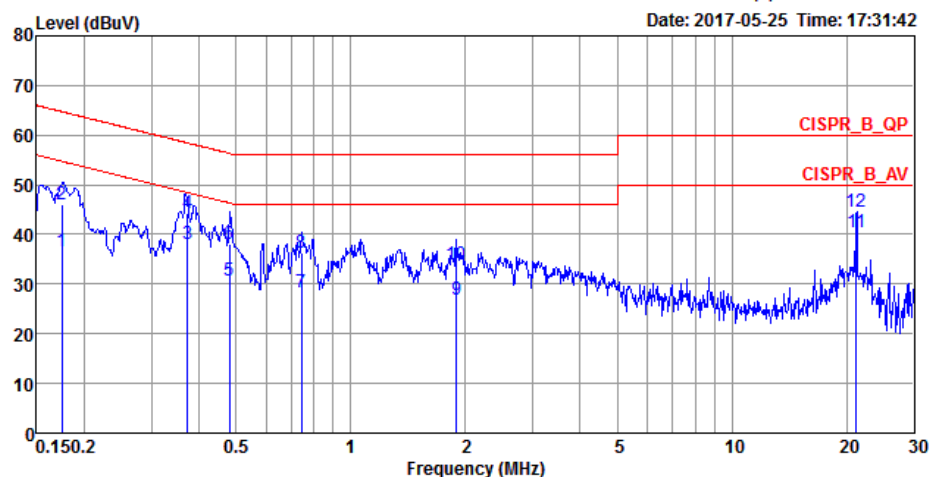
“**” Calibration Interval of instruments listed above is two years.

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



AC Power-line Conducted Emissions Result

Operating Mode	2	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	0.1749	36.56	-18.16	54.72	26.57	9.94	0.05	Average	LINE
2	0.1749	46.15	-18.57	64.72	36.16	9.94	0.05	QP	LINE
3	0.3724	38.16	-10.29	48.45	28.23	9.89	0.04	Average	LINE
4	0.3724	44.28	-14.17	58.45	34.35	9.89	0.04	QP	LINE
5	0.4812	30.78	-15.54	46.32	20.83	9.91	0.04	Average	LINE
6	0.4812	38.22	-18.10	56.32	28.27	9.91	0.04	QP	LINE
7	0.7430	28.31	-17.69	46.00	18.32	9.94	0.05	Average	LINE
8	0.7430	36.42	-19.58	56.00	26.43	9.94	0.05	QP	LINE
9	1.8979	26.88	-19.12	46.00	16.78	10.02	0.08	Average	LINE
10	1.8979	34.02	-21.98	56.00	23.92	10.02	0.08	QP	LINE
11	21.1683	40.35	-9.65	50.00	29.86	10.24	0.25	Average	LINE
12	21.1683	44.46	-15.54	60.00	33.97	10.24	0.25	QP	LINE

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

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

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
802.11b_(1Mbps)_3TX	-	-	-	-	-
2.4-2.4835GHz	10.45M	13.843M	13M9G1D	8.875M	13.568M
802.11g_(6Mbps)_3TX	-	-	-	-	-
2.4-2.4835GHz	15.05M	16.467M	16M5D1D	12.575M	16.167M
802.11n HT20_Nss1,(MCS0)_3TX	-	-	-	-	-
2.4-2.4835GHz	15.05M	17.666M	17M7D1D	10.625M	17.216M
802.11n HT40_Nss1,(MCS0)_3TX	-	-	-	-	-
2.4-2.4835GHz	32.6M	35.882M	35M9D1D	25M	35.632M

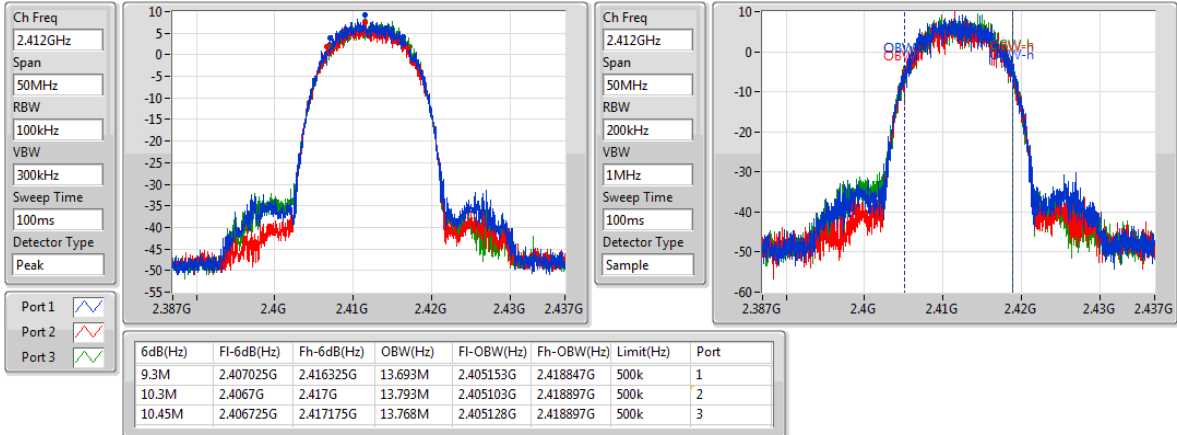
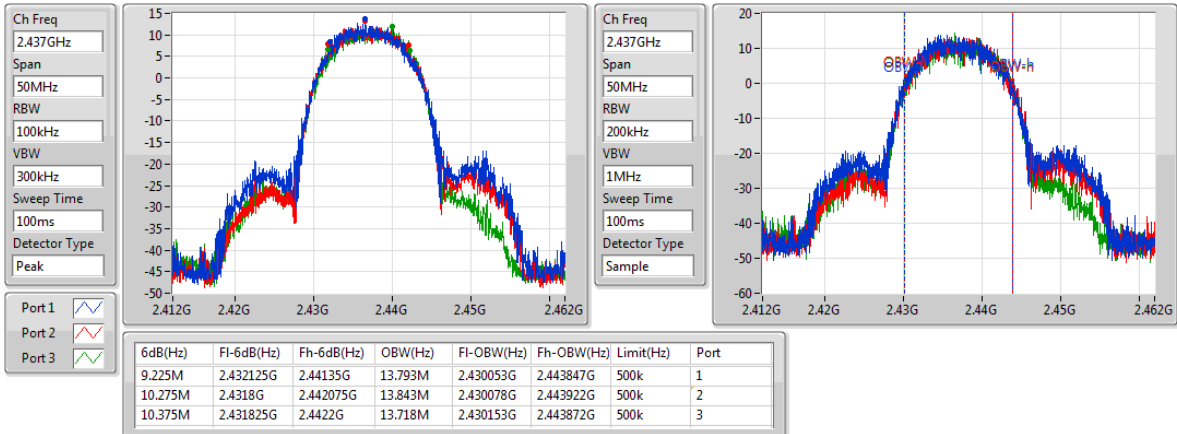
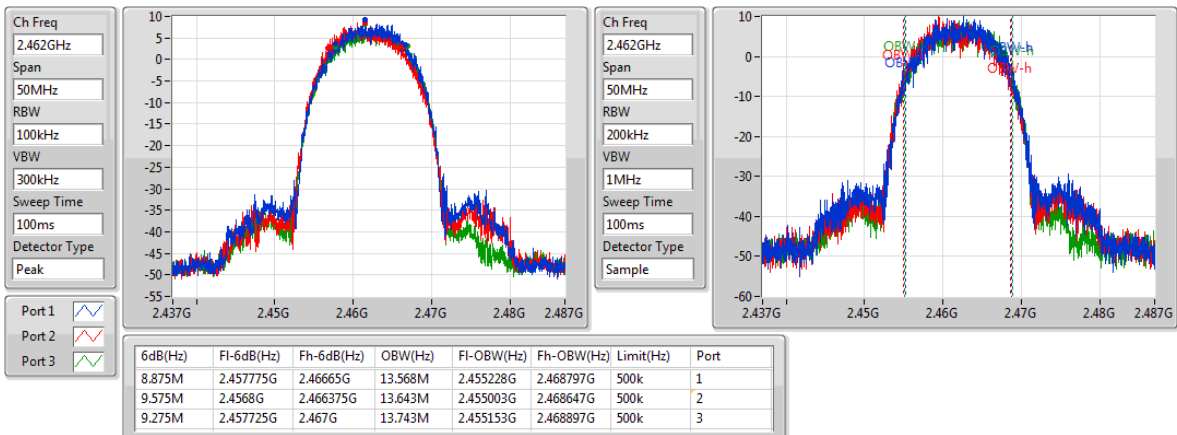
Max-N dB = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;

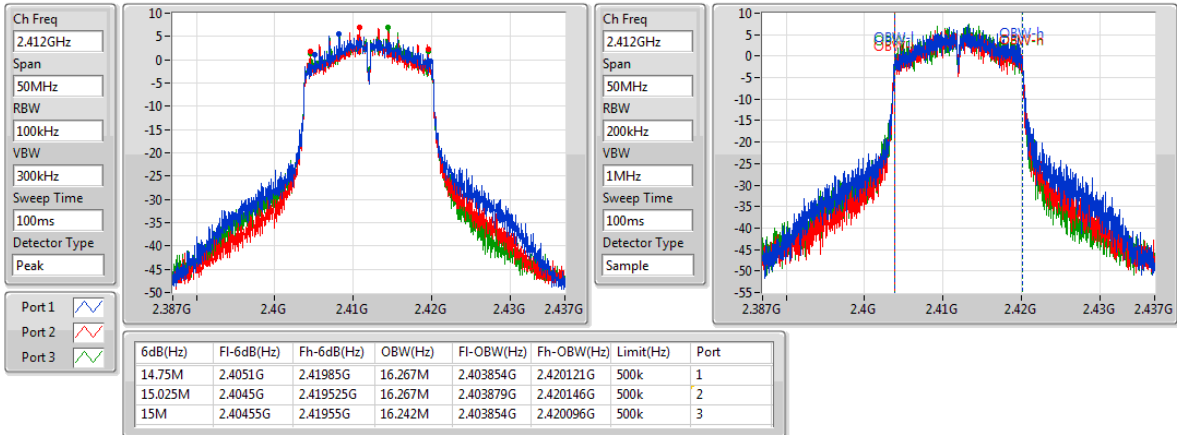
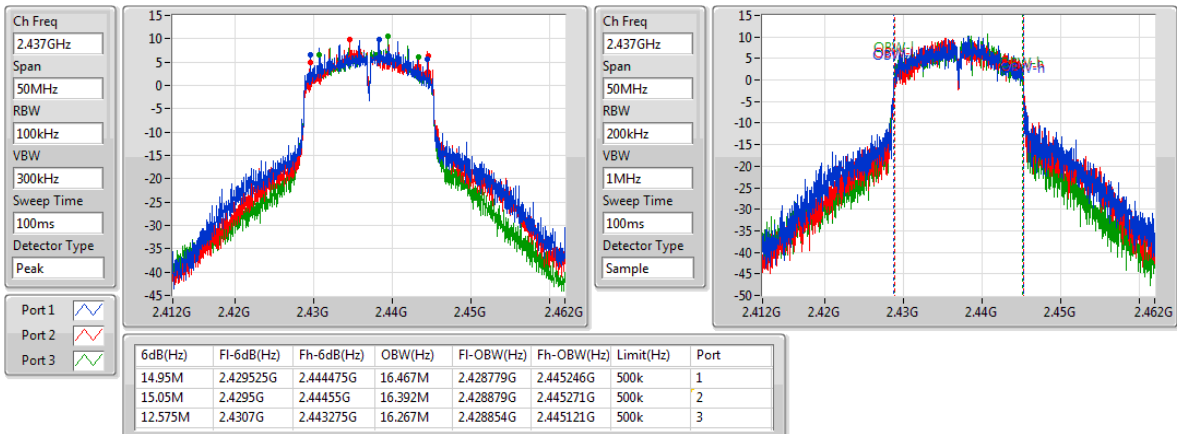
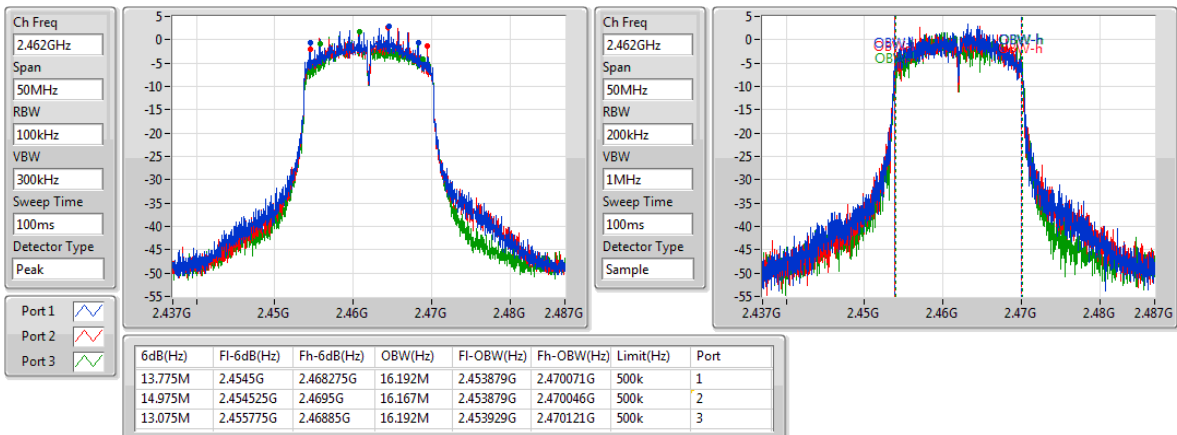
Min-N dB = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

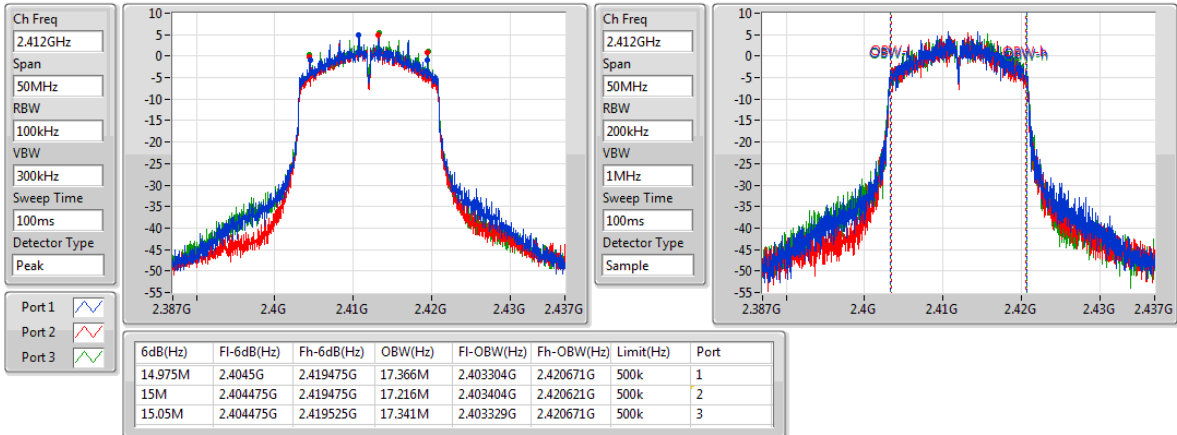
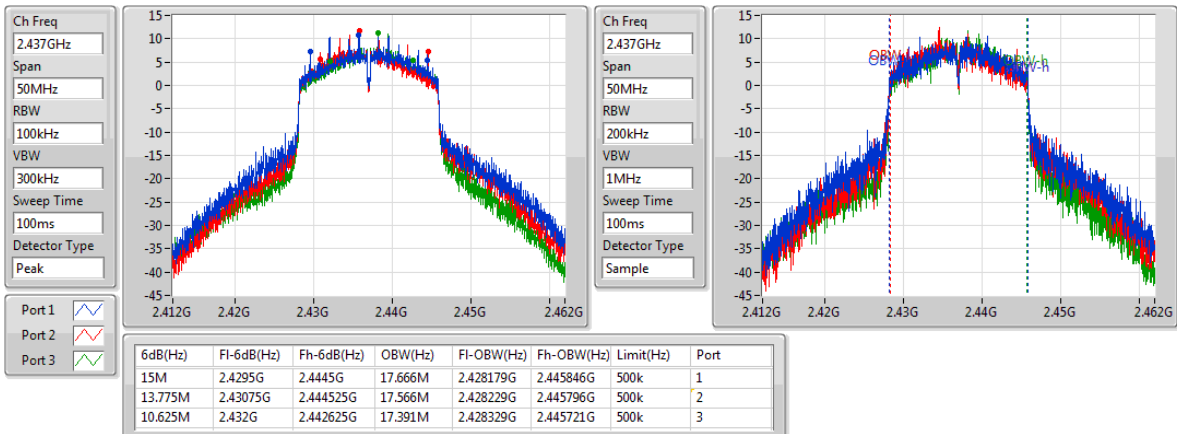
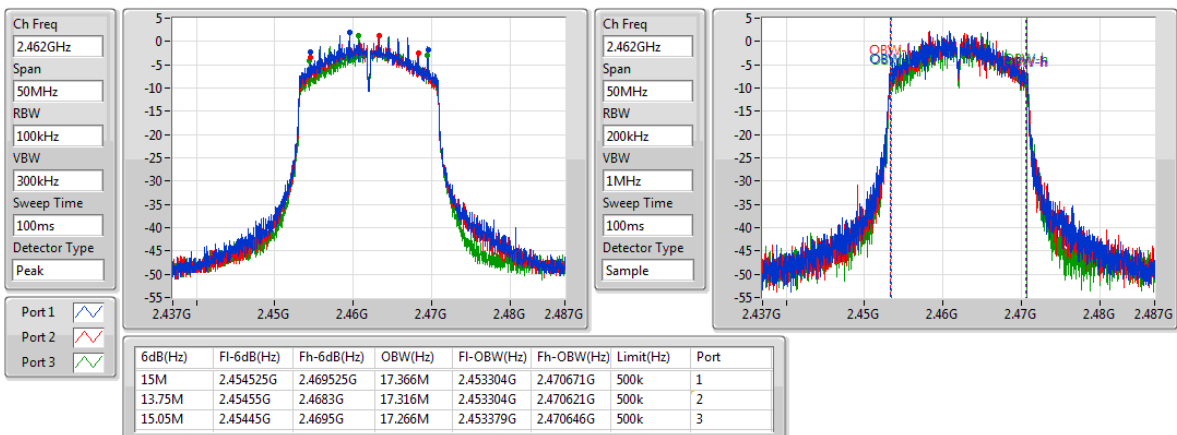
Result

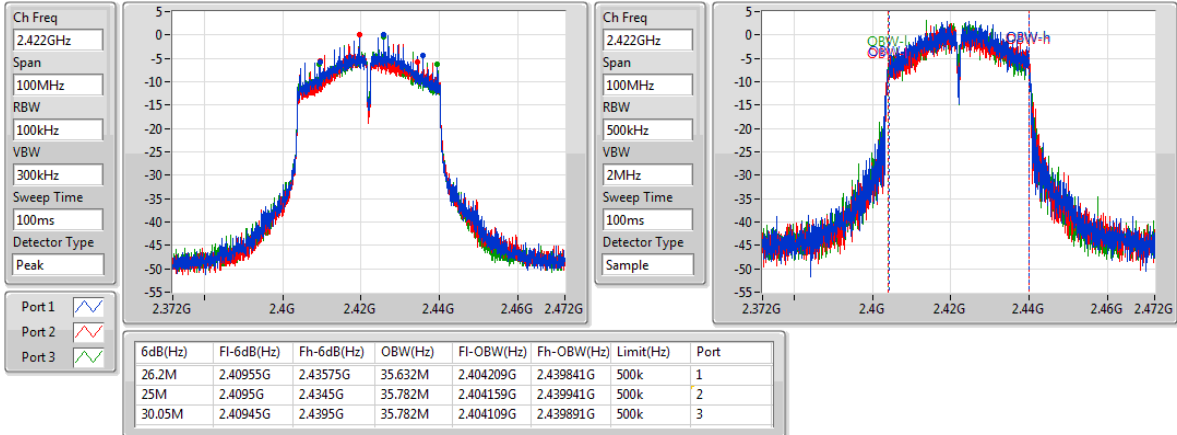
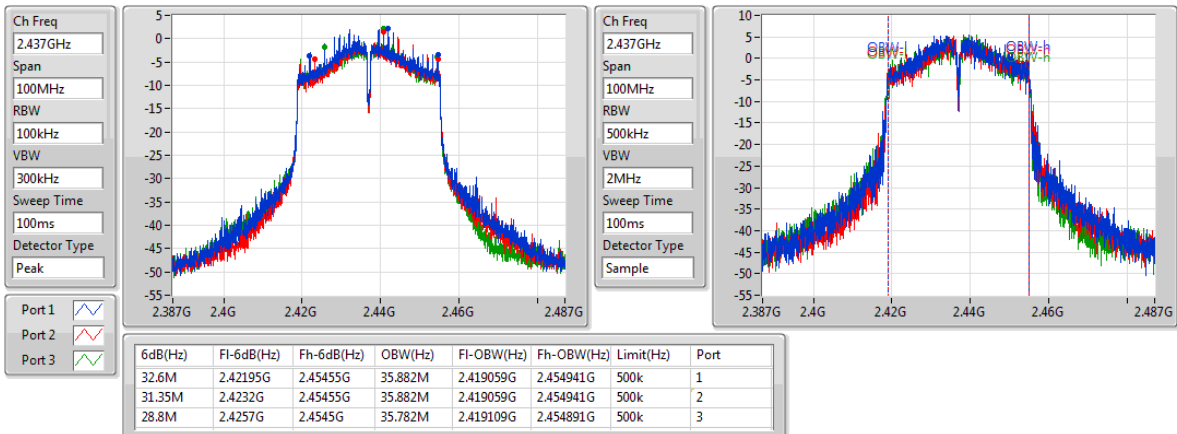
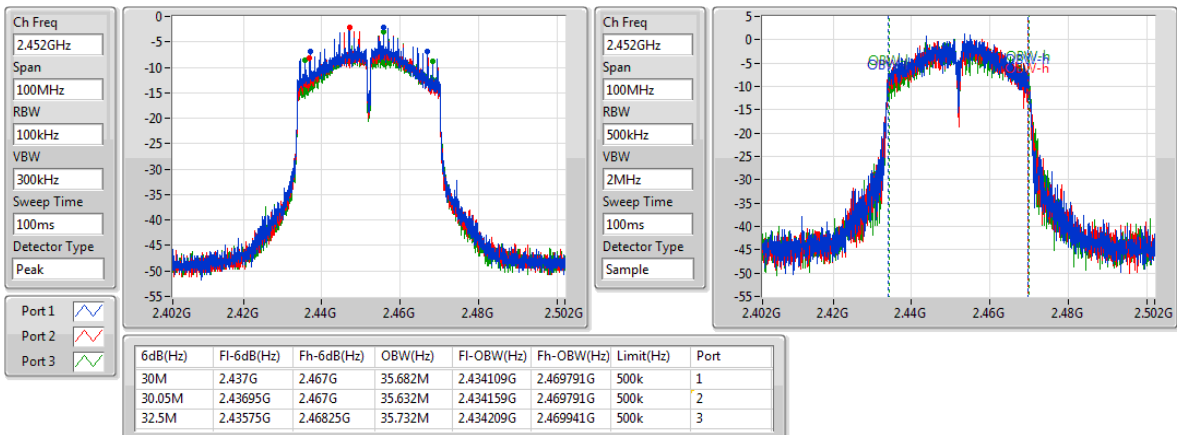
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)
802.11b_(1Mbps)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	9.3M	13.693M	10.3M	13.793M	10.45M	13.768M
2437MHz	Pass	500k	9.225M	13.793M	10.275M	13.843M	10.375M	13.718M
2462MHz	Pass	500k	8.875M	13.568M	9.575M	13.643M	9.275M	13.743M
802.11g_(6Mbps)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	14.75M	16.267M	15.025M	16.267M	15M	16.242M
2437MHz	Pass	500k	14.95M	16.467M	15.05M	16.392M	12.575M	16.267M
2462MHz	Pass	500k	13.775M	16.192M	14.975M	16.167M	13.075M	16.192M
802.11n HT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	14.975M	17.366M	15M	17.216M	15.05M	17.341M
2437MHz	Pass	500k	15M	17.666M	13.775M	17.566M	10.625M	17.391M
2462MHz	Pass	500k	15M	17.366M	13.75M	17.316M	15.05M	17.266M
802.11n HT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	26.2M	35.632M	25M	35.782M	30.05M	35.782M
2437MHz	Pass	500k	32.6M	35.882M	31.35M	35.882M	28.8M	35.782M
2452MHz	Pass	500k	30M	35.682M	30.05M	35.632M	32.5M	35.732M

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

802.11b_(1Mbps)_3TX
EBW
2412MHz

802.11b_(1Mbps)_3TX
EBW
2437MHz

802.11b_(1Mbps)_3TX
EBW
2462MHz


802.11g_(6Mbps)_3TX
EBW
2412MHz

802.11g_(6Mbps)_3TX
EBW
2437MHz

802.11g_(6Mbps)_3TX
EBW
2462MHz


802.11n HT20_Nss1,(MCS0)_3TX
EBW
2412MHz

802.11n HT20_Nss1,(MCS0)_3TX
EBW
2437MHz

802.11n HT20_Nss1,(MCS0)_3TX
EBW
2462MHz


802.11n HT40_Nss1,(MCS0)_3TX
EBW
2422MHz

802.11n HT40_Nss1,(MCS0)_3TX
EBW
2437MHz

802.11n HT40_Nss1,(MCS0)_3TX
EBW
2452MHz


Summary

Mode	Total Power (dBm)	Total Power (W)
802.11b_(1Mbps)_3TX	-	-
2.4-2.4835GHz	26.84	0.48306
802.11g_(6Mbps)_3TX	-	-
2.4-2.4835GHz	24.50	0.28184
802.11n HT20_Nss1,(MCS0)_3TX	-	-
2.4-2.4835GHz	25.01	0.31696
802.11n HT40_Nss1,(MCS0)_3TX	-	-
2.4-2.4835GHz	18.78	0.07551

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_(1Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	3.27	18.61	17.49	17.35	22.63	30.00
2437MHz	Pass	3.27	22.07	22.07	22.07	26.84	30.00
2462MHz	Pass	3.27	17.89	17.59	17.98	22.59	30.00
802.11g_(6Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	3.27	16.51	16.51	16.51	21.28	30.00
2437MHz	Pass	3.27	19.96	19.96	19.22	24.50	30.00
2462MHz	Pass	3.27	13.48	13.48	13.48	18.25	30.00
802.11n HT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	3.27	14.95	14.93	14.52	19.58	30.00
2437MHz	Pass	3.27	20.24	20.24	20.24	25.01	30.00
2462MHz	Pass	3.27	12.66	12.03	12.03	17.02	30.00
802.11n HT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	3.27	10.55	10.55	10.55	15.32	30.00
2437MHz	Pass	3.27	14.01	14.01	14.00	18.78	30.00
2452MHz	Pass	3.27	9.70	9.05	9.05	14.05	30.00

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

Summary

Mode	PD (dBm/RBW)
802.11b_(1Mbps)_3TX	-
2.4-2.4835GHz	2.36
802.11g_(6Mbps)_3TX	-
2.4-2.4835GHz	-0.79
802.11n HT20_Nss1,(MCS0)_3TX	-
2.4-2.4835GHz	0.24
802.11n HT40_Nss1,(MCS0)_3TX	-
2.4-2.4835GHz	-9.05

RBW=3kHz.

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_(1Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	7.67	-6.31	-5.73	-6.68	-2.50	6.33
2437MHz	Pass	7.67	-2.26	-0.58	-1.76	2.36	6.33
2462MHz	Pass	7.67	-6.16	-4.84	-6.43	-1.16	6.33
802.11g_(6Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	7.67	-7.23	-7.39	-6.81	-4.08	6.33
2437MHz	Pass	7.67	-4.09	-3.42	-4.10	-0.79	6.33
2462MHz	Pass	7.67	-9.81	-10.81	-11.34	-7.93	6.33
802.11n HT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	7.67	-8.49	-9.14	-8.99	-6.11	6.33
2437MHz	Pass	7.67	-3.04	-3.26	-3.66	0.24	6.33
2462MHz	Pass	7.67	-12.08	-10.97	-13.15	-8.67	6.33
802.11n HT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	7.67	-14.47	-14.28	-14.90	-11.25	6.33
2437MHz	Pass	7.67	-11.72	-11.26	-11.79	-9.05	6.33
2452MHz	Pass	7.67	-17.22	-16.00	-16.03	-13.79	6.33

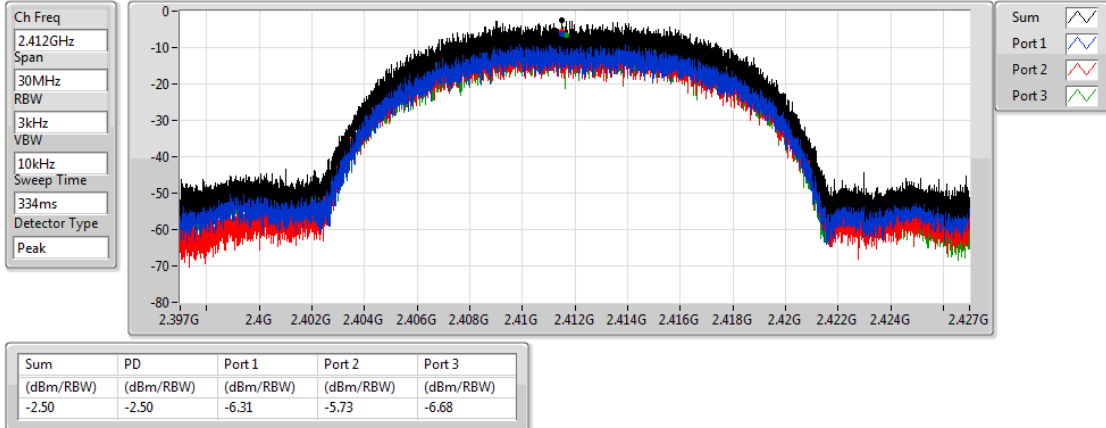
DG = Directional Gain; RBW=3kHz;

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

802.11b_(1Mbps)_3TX

PSD

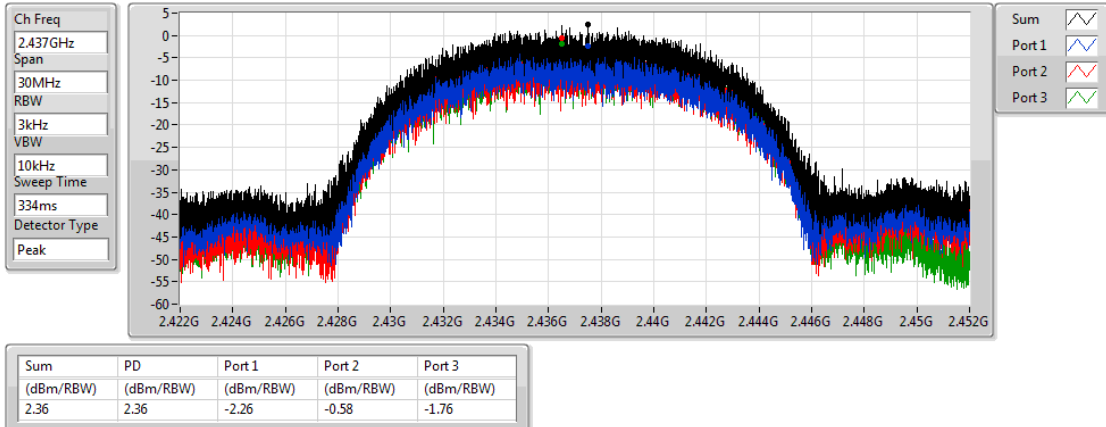
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802.11b_(1Mbps)_3TX

PSD

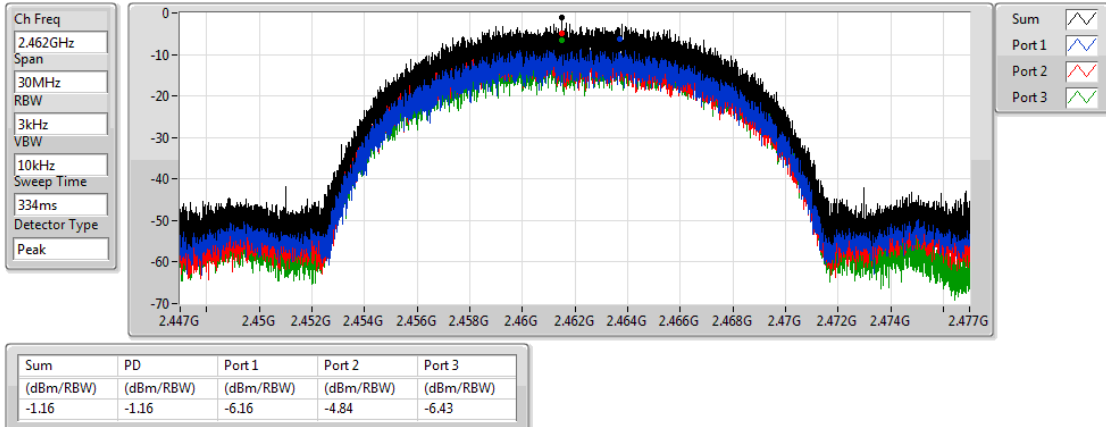
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802.11b_(1Mbps)_3TX

PSD

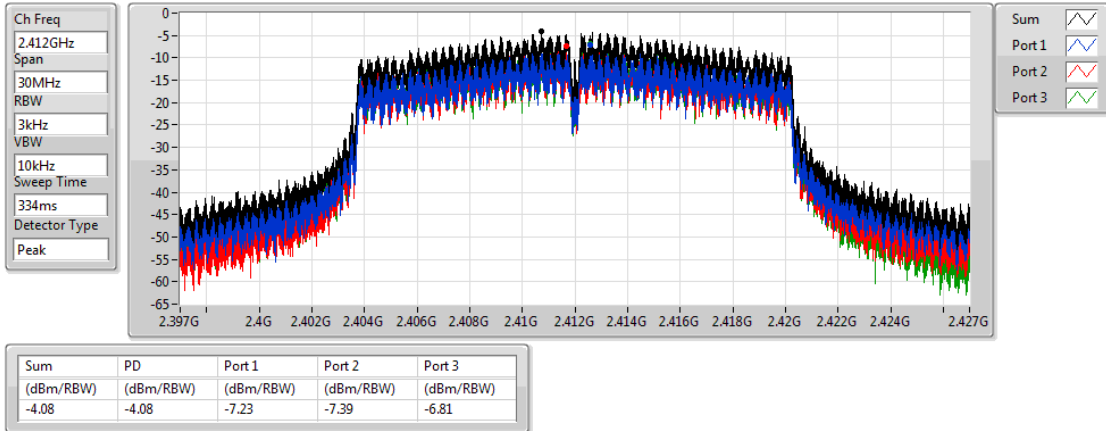
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802.11g_(6Mbps)_3TX

PSD

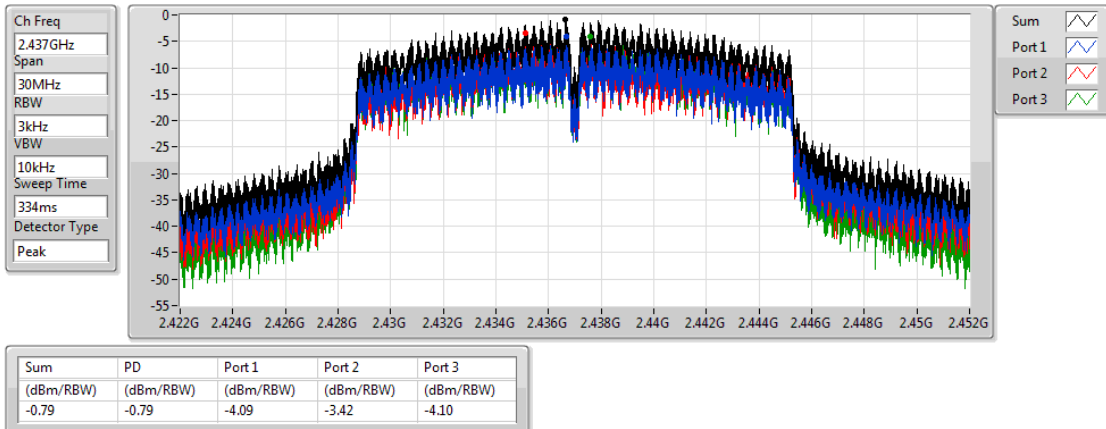
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802.11g_(6Mbps)_3TX

PSD

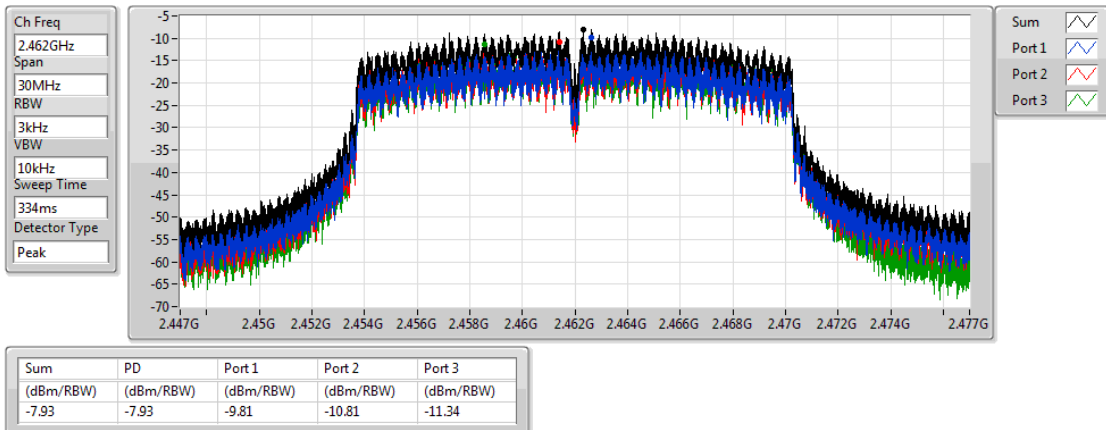
2437MHz



802.11g_(6Mbps)_3TX

PSD

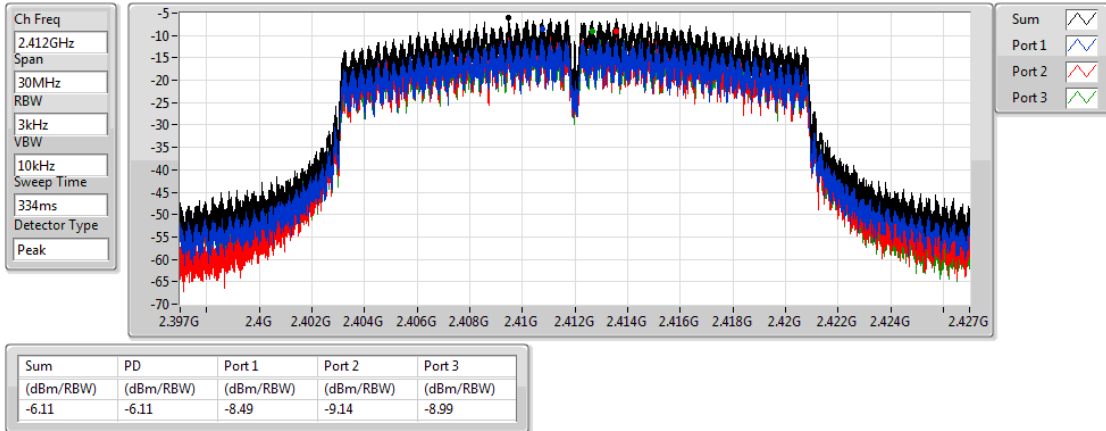
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802.11n HT20_Nss1,(MCS0)_3TX

PSD

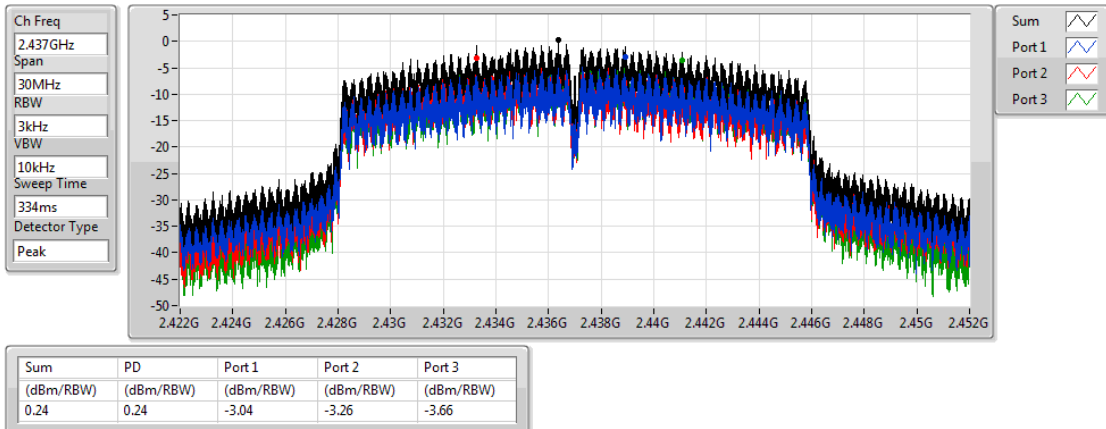
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802.11n HT20_Nss1,(MCS0)_3TX

PSD

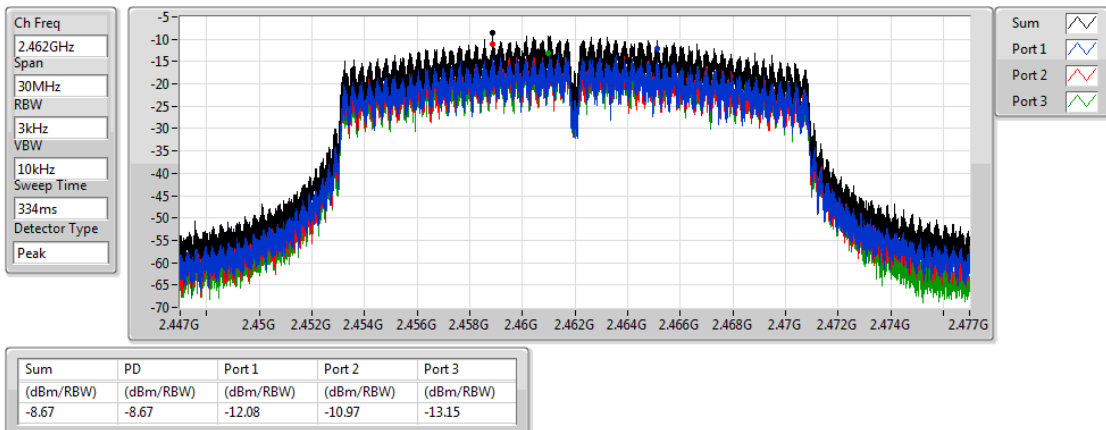
2437MHz



802.11n HT20_Nss1,(MCS0)_3TX

PSD

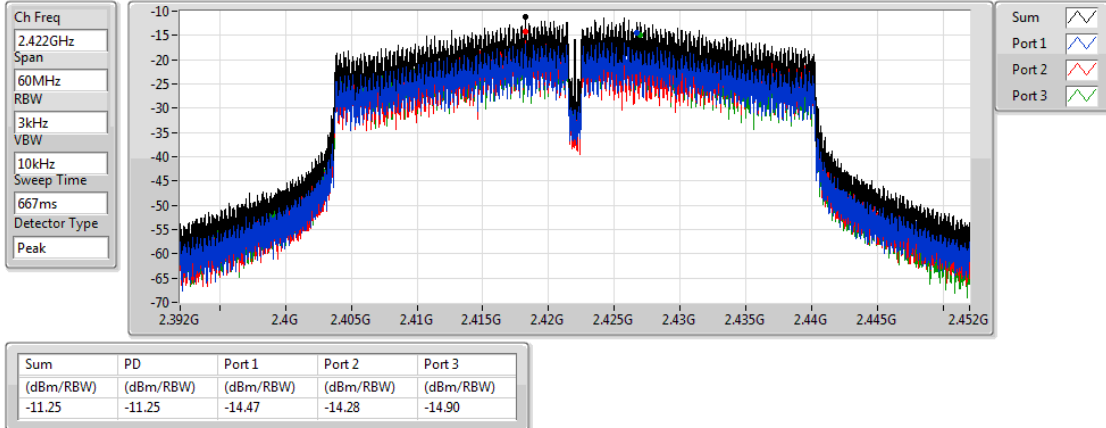
2462MHz



802.11n HT40_Nss1,(MCS0)_3TX

PSD

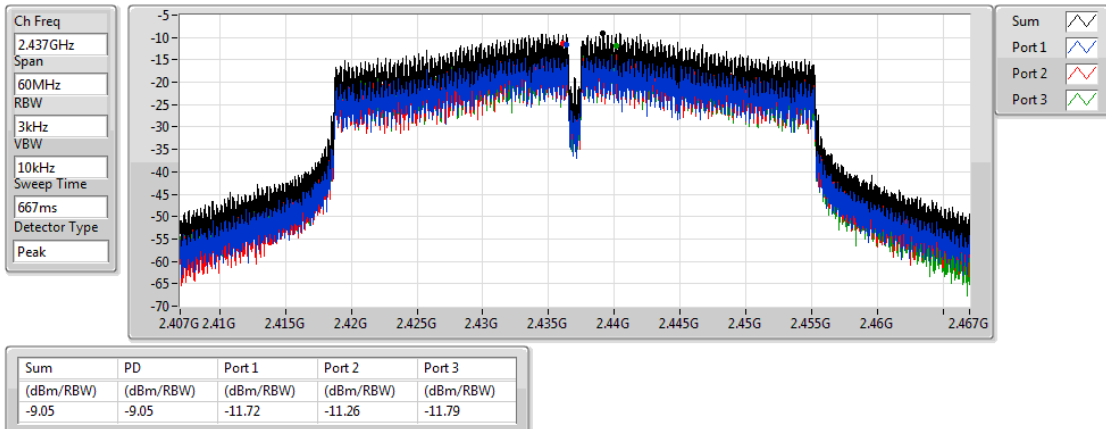
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802.11n HT40_Nss1,(MCS0)_3TX

PSD

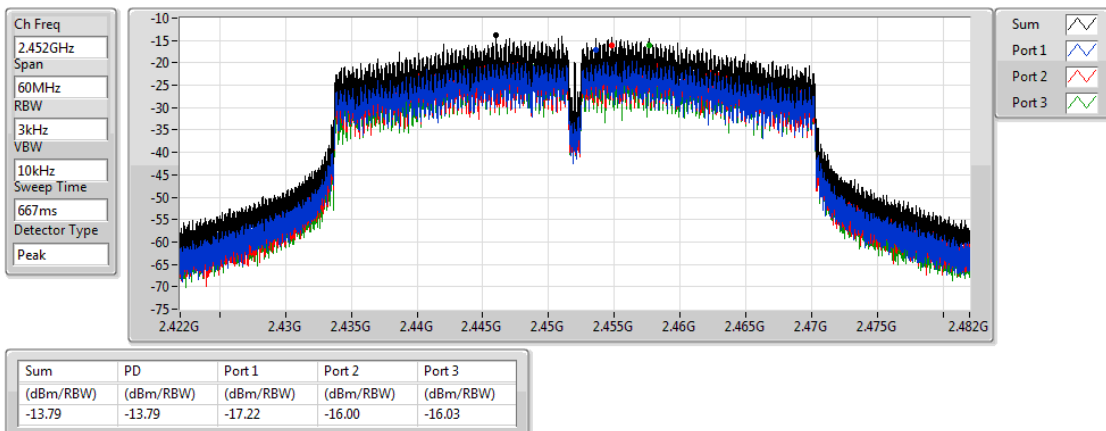
2437MHz



802.11n HT40_Nss1,(MCS0)_3TX

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
802.11n HT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	2.443253G	1.19	-28.81	649.445M	-53.37	2.39552G	-36.83	2.48846G	-53.54	6.986295G	-50.51	1

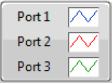
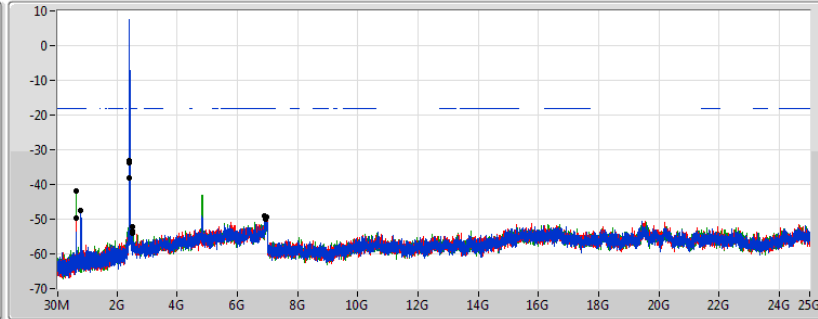
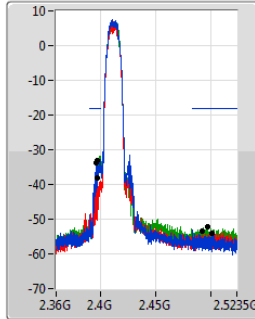
Result

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)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.436573G	11.90	-18.10	801.23M	-47.54	2.3972G	-33.21	2.50126G	-53.98	6.900798G	-49.03	1
2412MHz	Pass	2.436573G	11.90	-18.10	649.78M	-49.77	2.39704G	-38.25	2.49222G	-53.59	6.945751G	-49.91	2
2412MHz	Pass	2.436573G	11.90	-18.10	649.78M	-41.77	2.39648G	-33.69	2.49726G	-52.30	6.95699G	-49.53	3
2437MHz	Pass	2.436573G	11.90	-18.10	814.045M	-48.96	2.39416G	-50.81	2.4847G	-53.22	6.987895G	-49.55	1
2437MHz	Pass	2.436573G	11.90	-18.10	810.55M	-49.31	2.39648G	-51.80	2.48494G	-51.61	6.993514G	-49.81	2
2437MHz	Pass	2.436573G	11.90	-18.10	649.78M	-41.17	2.39408G	-51.42	2.4859G	-49.59	6.934513G	-50.20	3
2462MHz	Pass	2.436573G	11.90	-18.10	823.365M	-49.64	2.39584G	-55.12	2.4863G	-50.66	6.976657G	-49.04	1
2462MHz	Pass	2.436573G	11.90	-18.10	649.78M	-49.49	2.39624G	-54.54	2.4847G	-49.24	6.95699G	-49.79	2
2462MHz	Pass	2.436573G	11.90	-18.10	649.78M	-41.45	2.39312G	-53.90	2.49718G	-49.29	6.999133G	-49.34	3
802.11g_(6Mbps)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.439412G	10.26	-19.74	805.89M	-53.21	2.39832G	-28.78	2.5179G	-54.34	6.971037G	-49.97	1
2412MHz	Pass	2.439412G	10.26	-19.74	649.78M	-50.02	2.39768G	-32.26	2.51502G	-53.60	6.959799G	-49.80	2
2412MHz	Pass	2.439412G	10.26	-19.74	649.78M	-41.82	2.39824G	-28.35	2.49806G	-51.77	6.999133G	-49.81	3
2437MHz	Pass	2.439412G	10.26	-19.74	815.21M	-51.33	2.39272G	-50.84	2.48358G	-52.90	6.962609G	-50.40	1
2437MHz	Pass	2.439412G	10.26	-19.74	809.385M	-49.25	2.39736G	-49.98	2.48582G	-52.06	6.973847G	-49.40	2
2437MHz	Pass	2.439412G	10.26	-19.74	649.78M	-42.79	2.39768G	-49.28	2.4859G	-47.62	6.993514G	-49.83	3
2462MHz	Pass	2.439412G	10.26	-19.74	822.2M	-54.80	2.3976G	-54.92	2.48438G	-49.68	6.968228G	-49.45	1
2462MHz	Pass	2.439412G	10.26	-19.74	649.78M	-48.63	2.39448G	-55.14	2.48382G	-48.87	6.976657G	-49.95	2
2462MHz	Pass	2.439412G	10.26	-19.74	649.78M	-41.47	2.39736G	-54.28	2.50094G	-50.83	6.948561G	-50.19	3
802.11n HT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.439412G	11.13	-18.87	802.395M	-52.06	2.3976G	-33.50	2.49838G	-53.94	6.987895G	-49.83	1
2412MHz	Pass	2.439412G	11.13	-18.87	649.78M	-48.60	2.39696G	-40.03	2.4975G	-53.52	6.979466G	-49.20	2
2412MHz	Pass	2.439412G	11.13	-18.87	649.78M	-41.40	2.39768G	-33.74	2.5039G	-52.84	6.976657G	-49.66	3
2437MHz	Pass	2.439412G	11.13	-18.87	815.21M	-51.52	2.39832G	-47.66	2.48446G	-50.26	6.993514G	-50.00	1
2437MHz	Pass	2.439412G	11.13	-18.87	810.55M	-52.04	2.39424G	-46.09	2.4863G	-49.11	6.985085G	-49.89	2
2437MHz	Pass	2.439412G	11.13	-18.87	649.78M	-42.22	2.39824G	-45.90	2.48398G	-47.80	5.807879G	-50.06	3
2462MHz	Pass	2.439412G	11.13	-18.87	649.78M	-54.87	2.39792G	-54.73	2.4839G	-49.83	6.951371G	-49.90	1
2462MHz	Pass	2.439412G	11.13	-18.87	649.78M	-48.76	2.39112G	-54.22	2.48358G	-49.36	6.987895G	-49.18	2
2462MHz	Pass	2.439412G	11.13	-18.87	649.78M	-41.60	2.39312G	-54.46	2.51246G	-51.52	6.971037G	-50.23	3
802.11n HT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.443253G	1.19	-28.81	649.445M	-53.37	2.39552G	-36.83	2.48846G	-53.54	6.986295G	-50.51	1
2422MHz	Pass	2.443253G	1.19	-28.81	649.445M	-48.89	2.39472G	-38.33	2.49294G	-53.94	6.958249G	-49.95	2
2422MHz	Pass	2.443253G	1.19	-28.81	649.445M	-40.93	2.39568G	-37.31	2.53998G	-53.10	6.949836G	-48.94	3
2437MHz	Pass	2.443253G	1.19	-28.81	816.615M	-53.81	2.39648G	-45.78	2.48478G	-50.18	6.972272G	-49.75	1
2437MHz	Pass	2.443253G	1.19	-28.81	649.445M	-48.39	2.39632G	-47.87	2.48526G	-49.81	5.729851G	-50.36	2
2437MHz	Pass	2.443253G	1.19	-28.81	649.445M	-41.36	2.39648G	-45.35	2.48942G	-48.76	6.983491G	-48.73	3
2452MHz	Pass	2.443253G	1.19	-28.81	649.445M	-53.63	2.39168G	-54.72	2.48382G	-47.42	6.935813G	-49.71	1
2452MHz	Pass	2.443253G	1.19	-28.81	649.445M	-49.23	2.39392G	-53.98	2.48446G	-46.73	6.949836G	-48.68	2
2452MHz	Pass	2.443253G	1.19	-28.81	649.445M	-41.49	2.39424G	-55.84	2.48798G	-49.92	6.986295G	-49.51	3

802.11b_(1Mbps)_3TX

CSE NdB

2412MHz

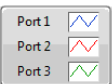
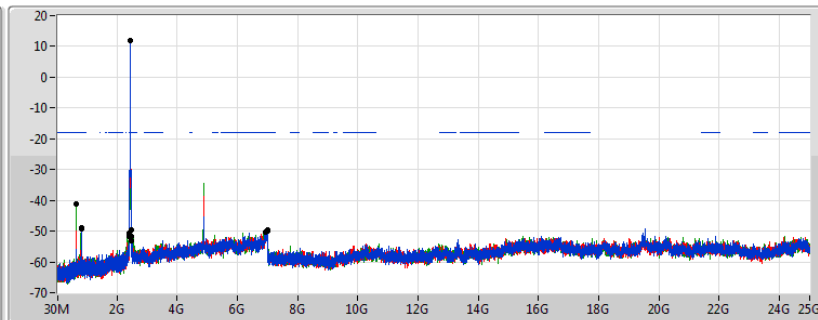
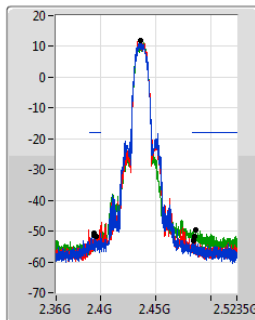


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.436573G	11.90	-18.10	801.23M	-47.54	2.3972G	-33.21	2.50126G	-53.98	6.900798G	-49.03	1
2.436573G	11.90	-18.10	649.78M	-49.77	2.39704G	-38.25	2.49222G	-53.59	6.945751G	-49.91	2
2.436573G	11.90	-18.10	649.78M	-41.77	2.39648G	-33.69	2.49726G	-52.30	6.95699G	-49.53	3

802.11b_(1Mbps)_3TX

CSE NdB

2437MHz

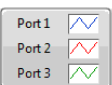
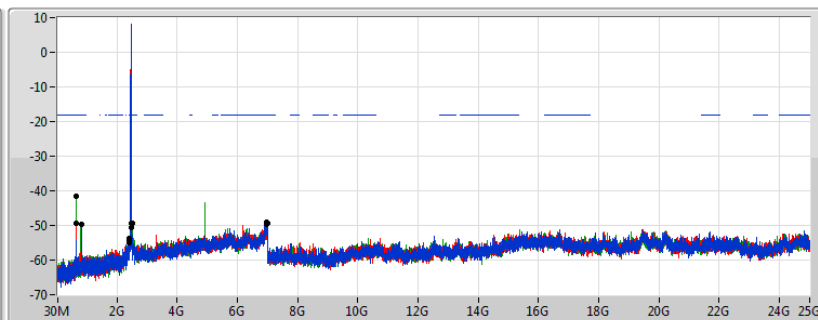
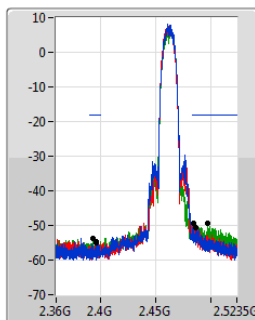


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.436573G	11.90	-18.10	814.045M	-48.96	2.39416G	-50.81	2.4847G	-53.22	6.987895G	-49.55	1
2.436573G	11.90	-18.10	810.55M	-49.31	2.39648G	-51.80	2.48494G	-51.61	6.993514G	-49.81	2
2.436573G	11.90	-18.10	649.78M	-41.17	2.39408G	-51.42	2.4859G	-49.59	6.934513G	-50.20	3

802.11b_(1Mbps)_3TX

CSE NdB

2462MHz

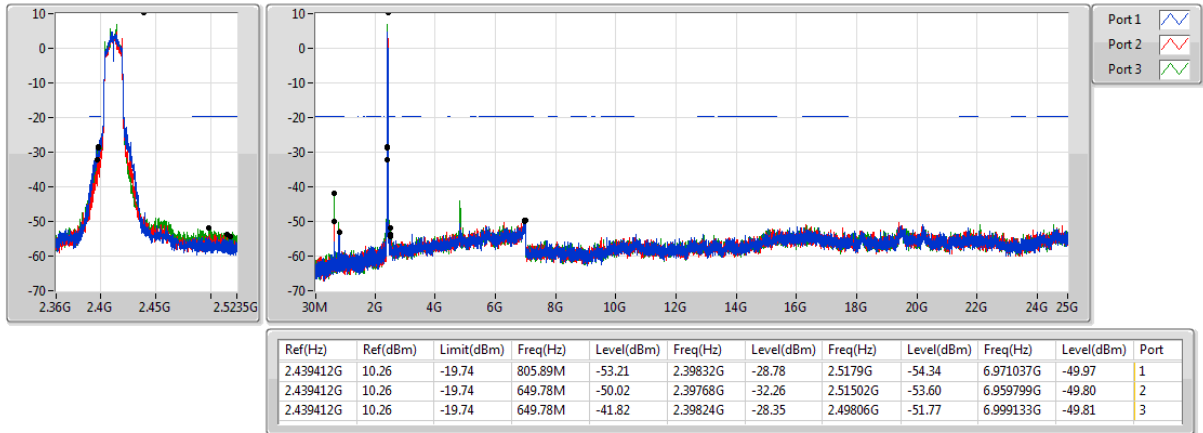


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.436573G	11.90	-18.10	823.365M	-49.64	2.39584G	-55.12	2.4863G	-50.66	6.976657G	-49.04	1
2.436573G	11.90	-18.10	649.78M	-49.49	2.39624G	-54.54	2.4847G	-49.24	6.95699G	-49.79	2
2.436573G	11.90	-18.10	649.78M	-41.45	2.39312G	-53.90	2.49718G	-49.29	6.999133G	-49.34	3

802.11g_(6Mbps)_3TX

CSE NdB

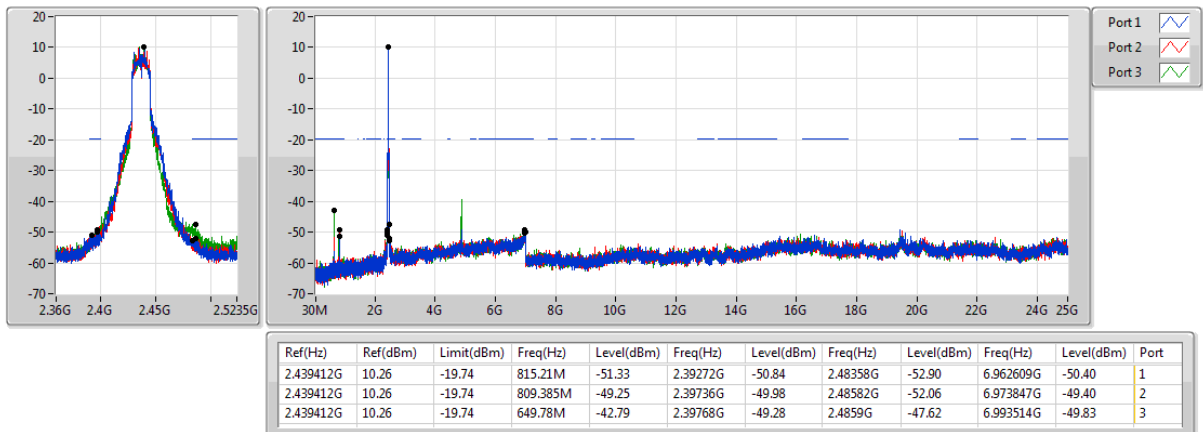
2412MHz



802.11g_(6Mbps)_3TX

CSE NdB

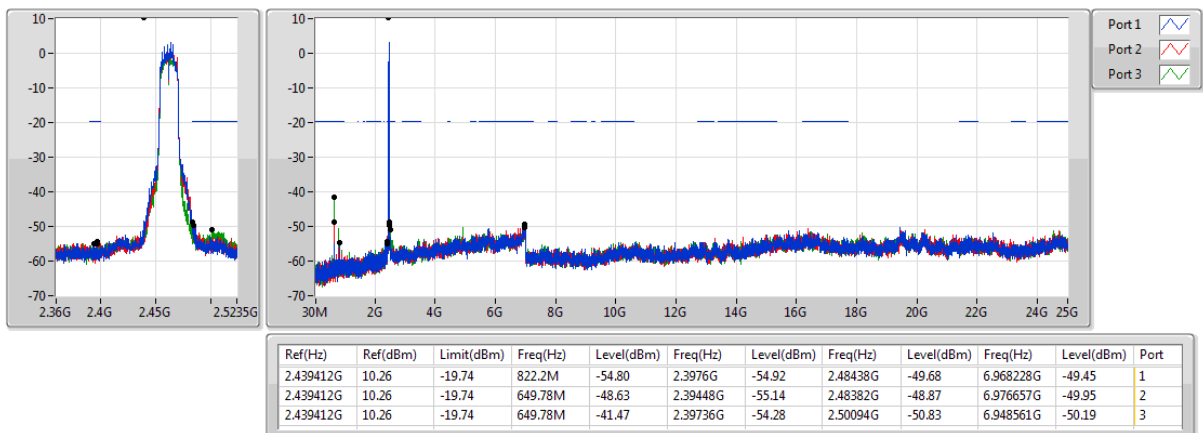
2437MHz



802.11g_(6Mbps)_3TX

CSE NdB

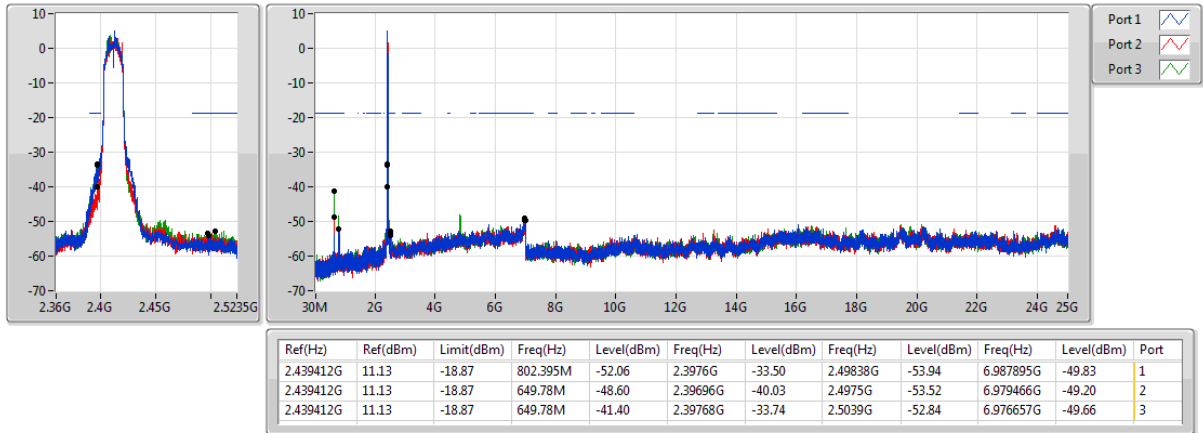
2462MHz



802.11n HT20_Nss1,(MCS0)_3TX

CSE NdB

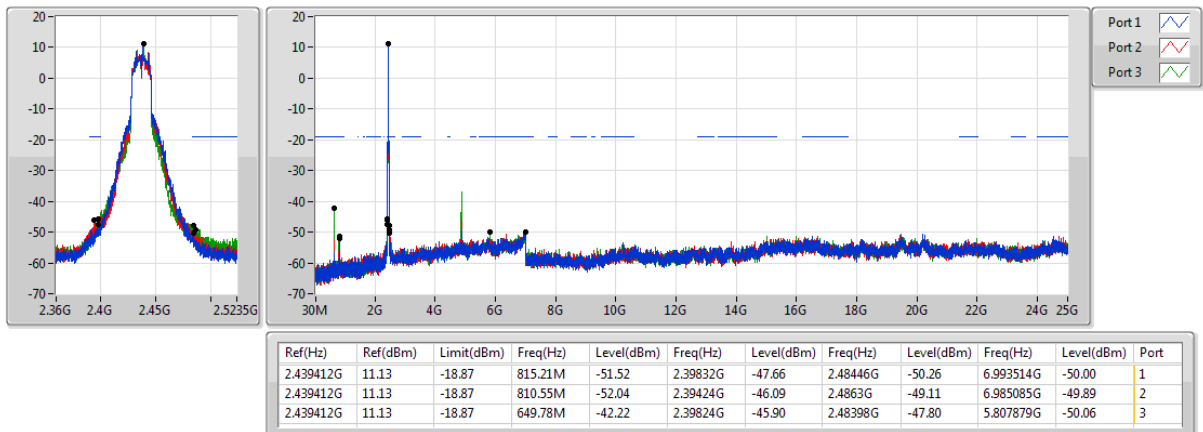
2412MHz



802.11n HT20_Nss1,(MCS0)_3TX

CSE NdB

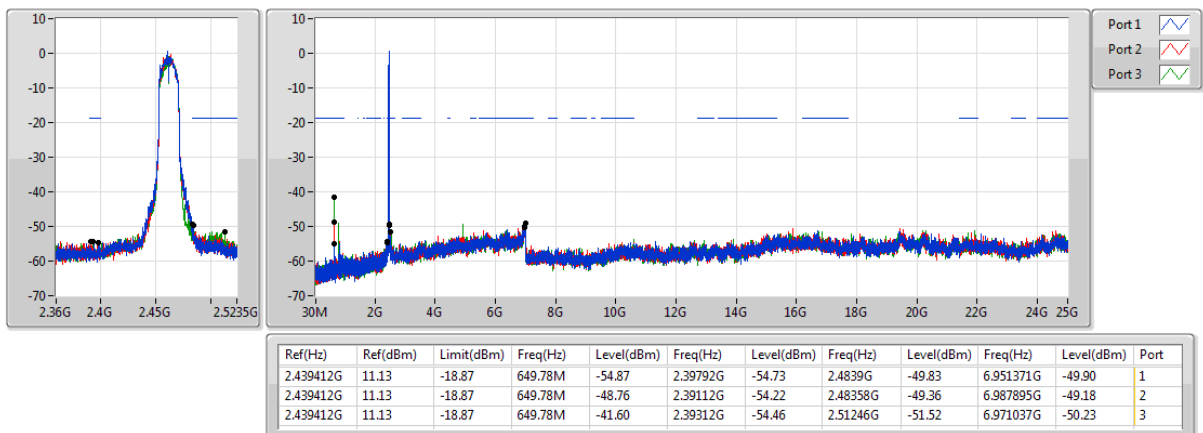
2437MHz



802.11n HT20_Nss1,(MCS0)_3TX

CSE NdB

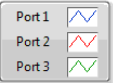
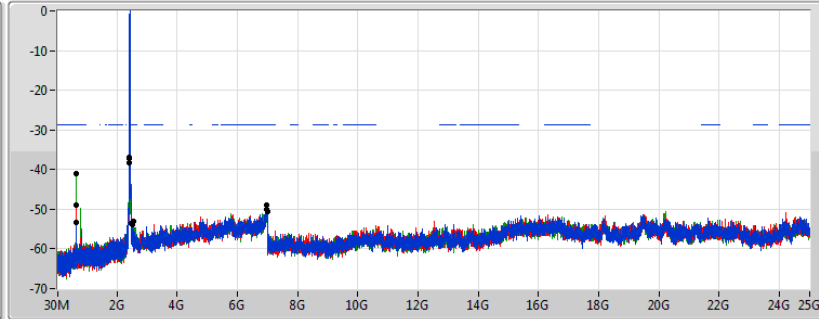
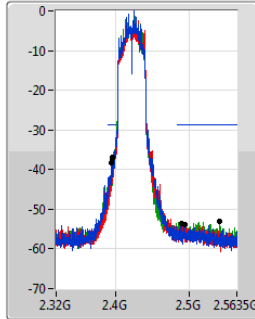
2462MHz



802.11n HT40_Nss1,(MCS0)_3TX

CSE NdB

2422MHz

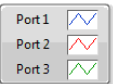
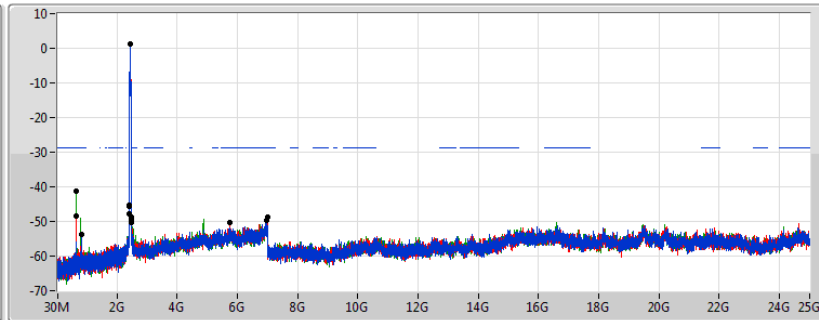
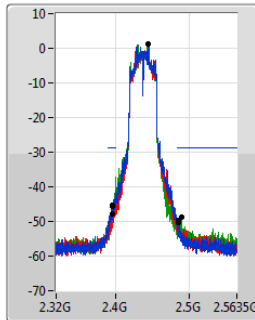


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.443253G	1.19	-28.81	649.445M	-53.37	2.39552G	-36.83	2.48846G	-53.54	6.986295G	-50.51	1
2.443253G	1.19	-28.81	649.445M	-48.89	2.39472G	-38.33	2.49294G	-53.94	6.958249G	-49.95	2
2.443253G	1.19	-28.81	649.445M	-40.93	2.39568G	-37.31	2.53998G	-53.10	6.949836G	-48.94	3

802.11n HT40_Nss1,(MCS0)_3TX

CSE NdB

2437MHz

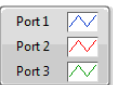
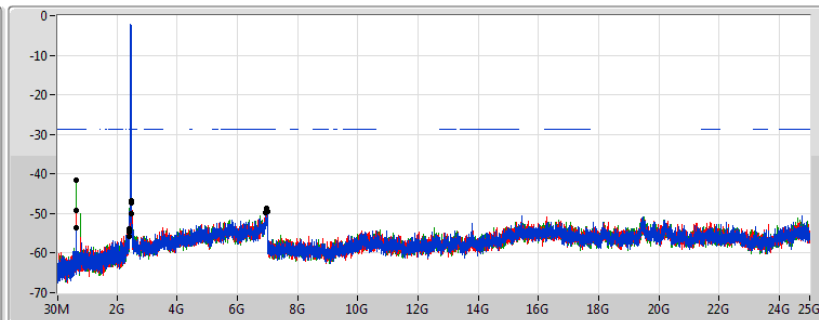
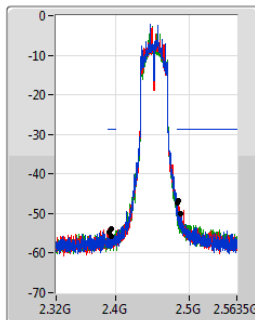


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.443253G	1.19	-28.81	816.615M	-53.81	2.39648G	-45.78	2.48478G	-50.18	6.972272G	-49.75	1
2.443253G	1.19	-28.81	649.445M	-48.39	2.39632G	-47.87	2.48526G	-49.81	5.729851G	-50.36	2
2.443253G	1.19	-28.81	649.445M	-41.36	2.39648G	-45.35	2.48942G	-48.76	6.983491G	-48.73	3

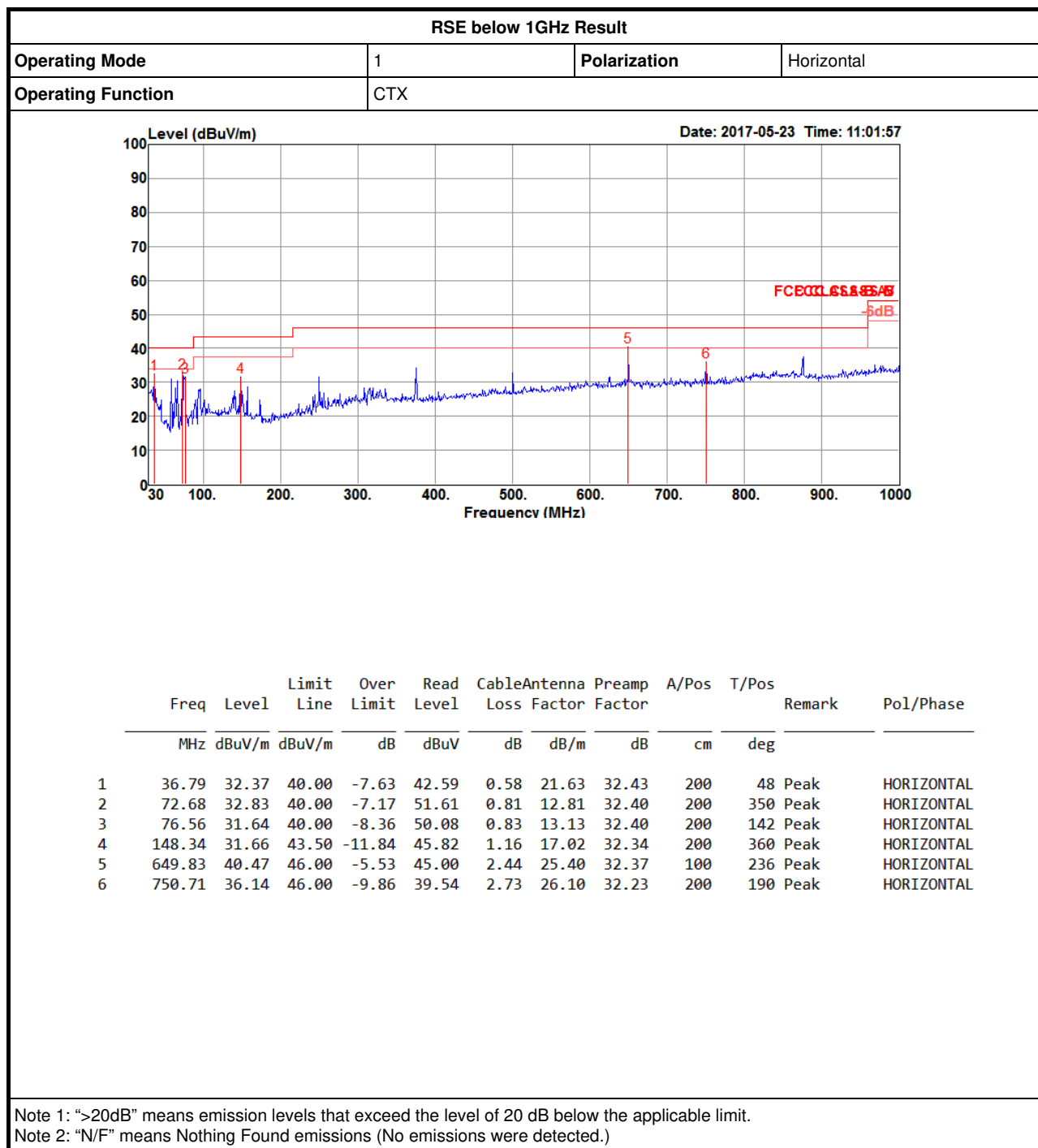
802.11n HT40_Nss1,(MCS0)_3TX

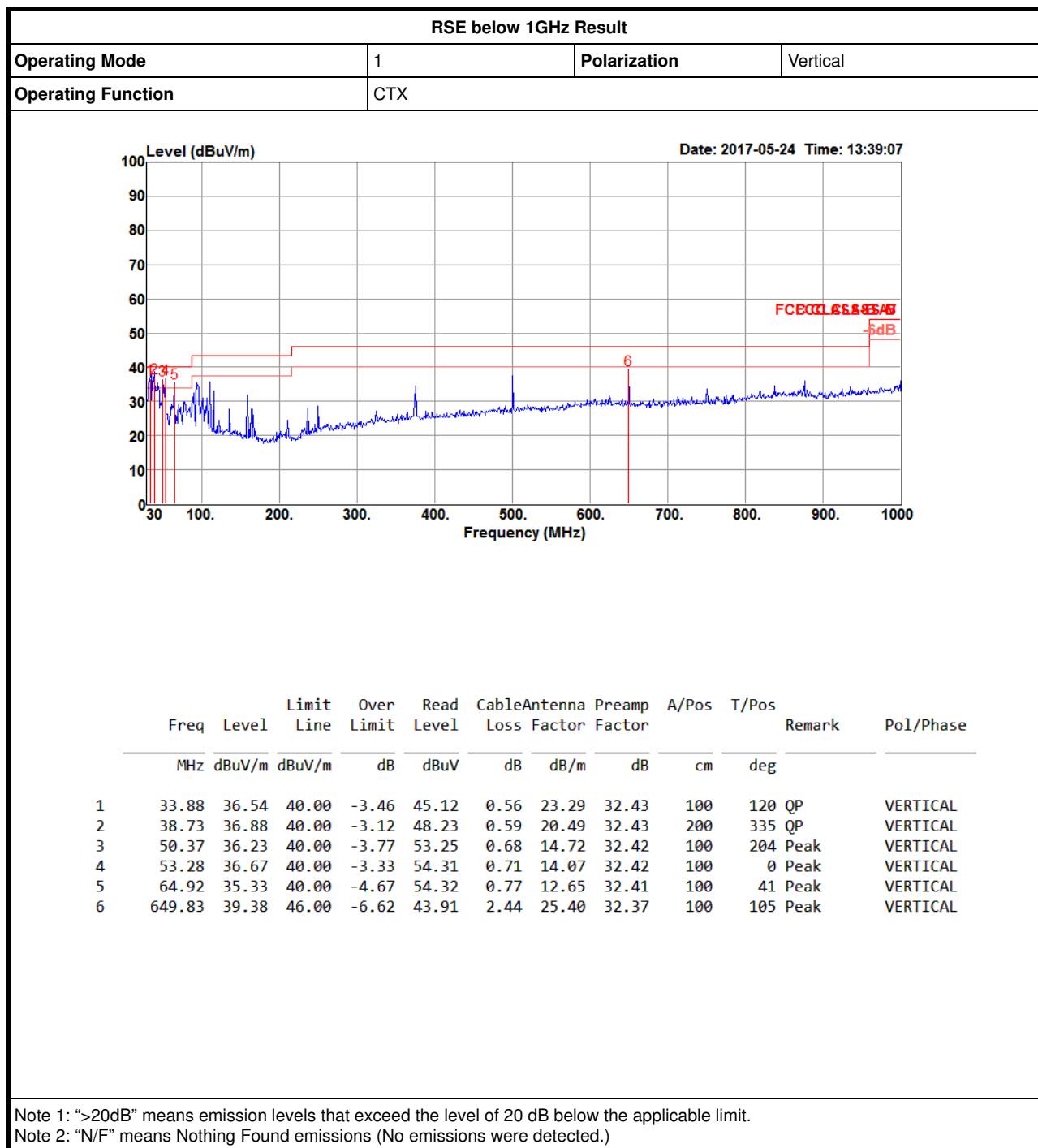
CSE NdB

2452MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.443253G	1.19	-28.81	649.445M	-53.63	2.39168G	-54.72	2.48382G	-47.42	6.935813G	-49.71	1
2.443253G	1.19	-28.81	649.445M	-49.23	2.39392G	-53.98	2.48446G	-46.73	6.949836G	-48.68	2
2.443253G	1.19	-28.81	649.445M	-41.49	2.39424G	-55.84	2.48798G	-49.92	6.986295G	-49.51	3







RSE TX above 1GHz Result

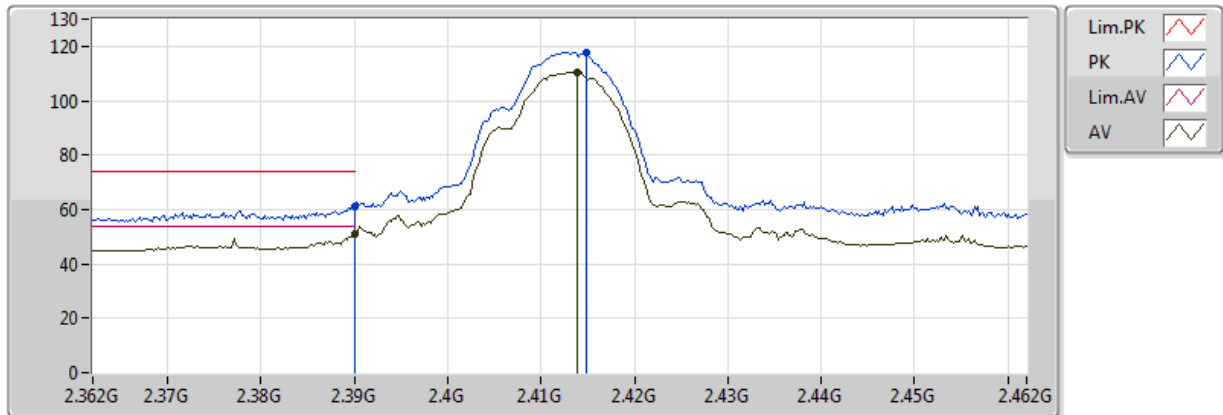
Appendix E.2

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
802.11n HT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	AV	4.8744G	53.98	54.00	-0.02	6.73	3	V	310	2.02	-

802.11b_(1Mbps)_3TX

2412MHz_TX

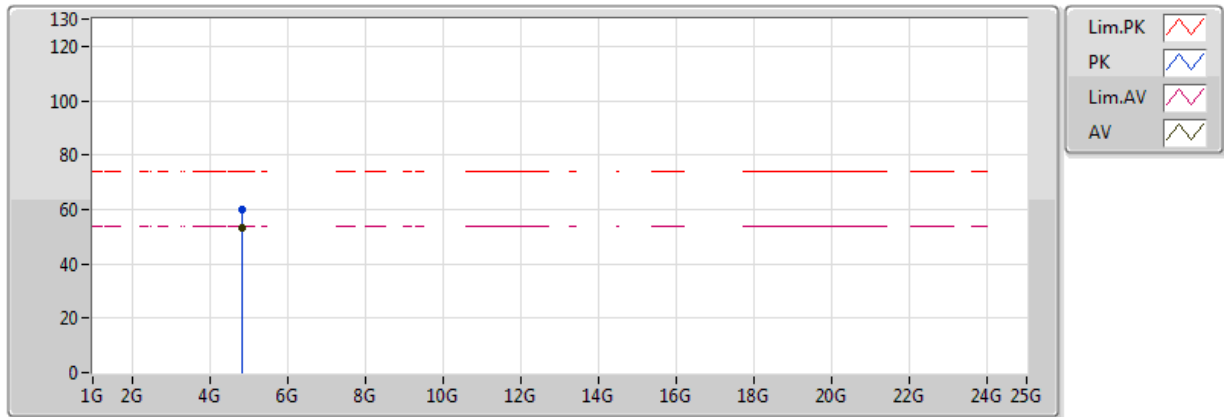


20170512
EUT Y_3TX
Setting 19
03-E-2
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.39G	51.13	54.00	-2.87	31.91	3	V	196	2.41	-
AV	2.4138G	110.54	Inf	-Inf	31.97	3	V	196	2.41	-
PK	2.39G	61.03	74.00	-12.97	31.91	3	V	196	2.41	-
PK	2.4148G	117.81	Inf	-Inf	31.98	3	V	196	2.41	-

802.11b_(1Mbps)_3TX

2412MHz_TX

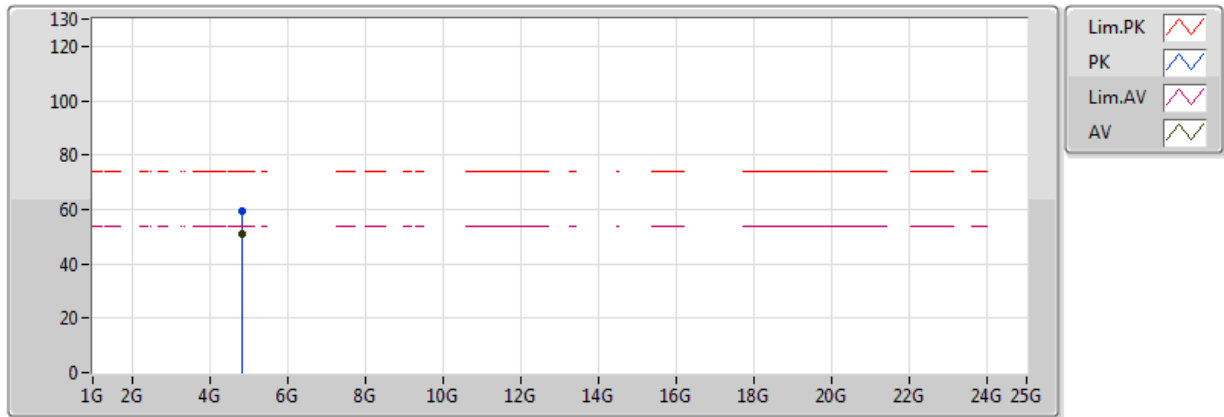


20170512
EUT Y_3TX
Setting 19
03-E-2
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82924G	53.37	54.00	-0.63	4.73	3	V	145	1.58	-
PK	4.82948G	59.75	74.00	-14.25	4.73	3	V	145	1.58	-

802.11b_(1Mbps)_3TX

2412MHz_TX

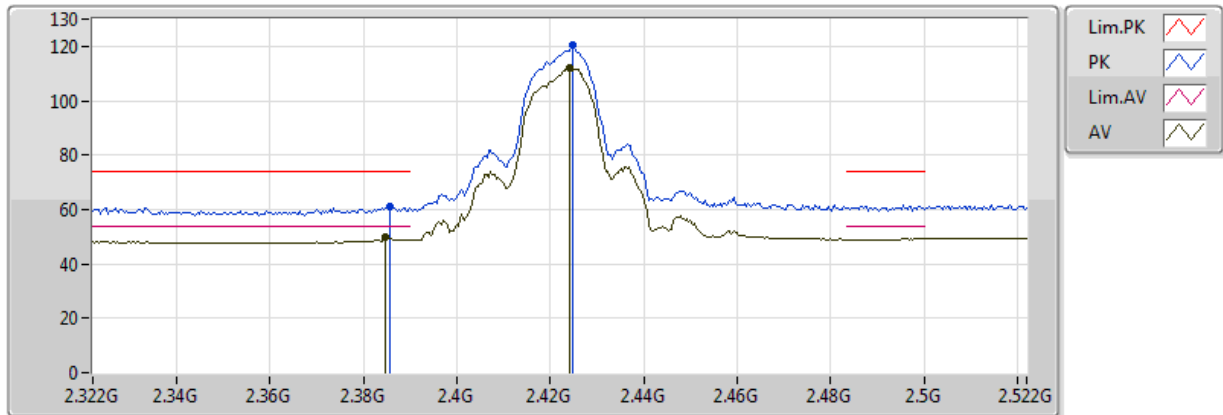


20170512
EUT Y_3TX
Setting 19
03-E-2
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82406G	51.11	54.00	-2.89	4.72	3	H	124	1.90	-
PK	4.824G	59.60	74.00	-14.40	4.72	3	H	124	1.90	-

802.11b_(1Mbps)_3TX

2422MHz_TX

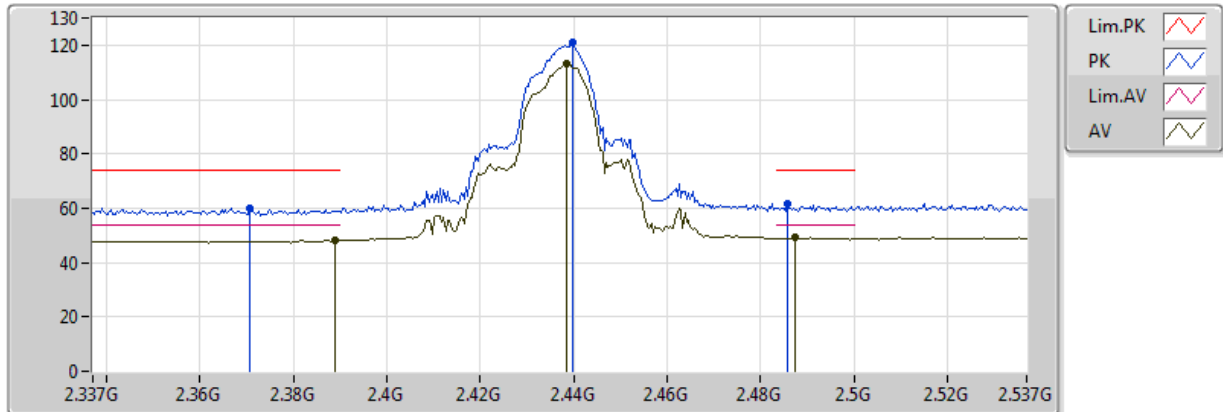


20170510
EUT Y 3TX ANT Dipole
Setting 23
05-Z-1
FSU(100015)
Non-TXBF

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3848G	49.78	54.00	-4.22	32.35	3	V	7	1.40	-
AV	2.424G	112.17	Inf	-Inf	32.50	3	V	7	1.40	-
PK	2.3856G	61.26	74.00	-12.74	32.36	3	V	7	1.40	-
PK	2.4248G	120.48	Inf	-Inf	32.50	3	V	7	1.40	-

802.11b_(1Mbps)_3TX

2437MHz_TX

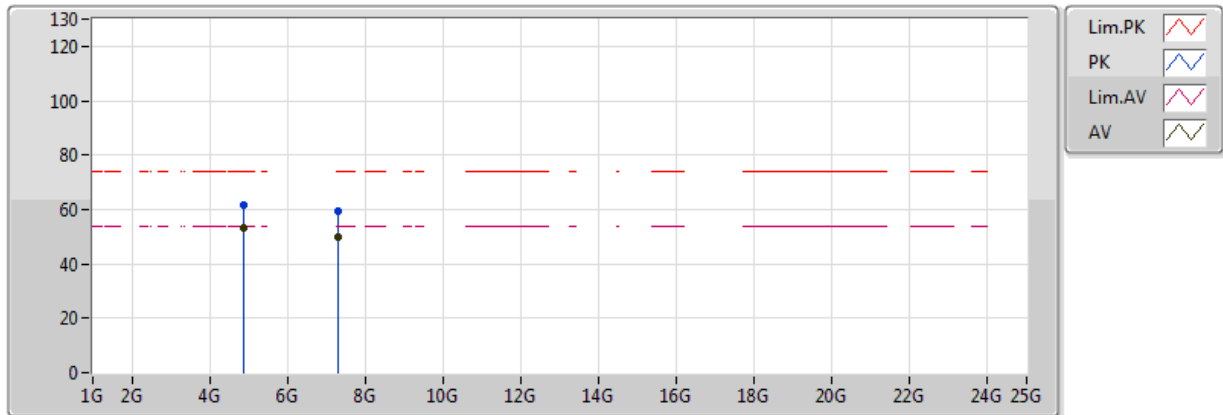


20170510
EUT Y 3TX ANT Dipole
Setting 24
05-Z-1
FSU(100015)
Non-TXBF

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	48.32	54.00	-5.68	32.37	3	V	15	1.44	-
AV	2.4386G	113.20	Inf	-Inf	32.55	3	V	15	1.44	-
AV	2.4874G	49.23	54.00	-4.77	32.72	3	V	15	1.44	-
PK	2.3706G	59.95	74.00	-14.05	32.30	3	V	15	1.44	-
PK	2.4398G	120.97	Inf	-Inf	32.55	3	V	15	1.44	-
PK	2.4858G	61.38	74.00	-12.62	32.72	3	V	15	1.44	-

802.11b_(1Mbps)_3TX

2437MHz_TX

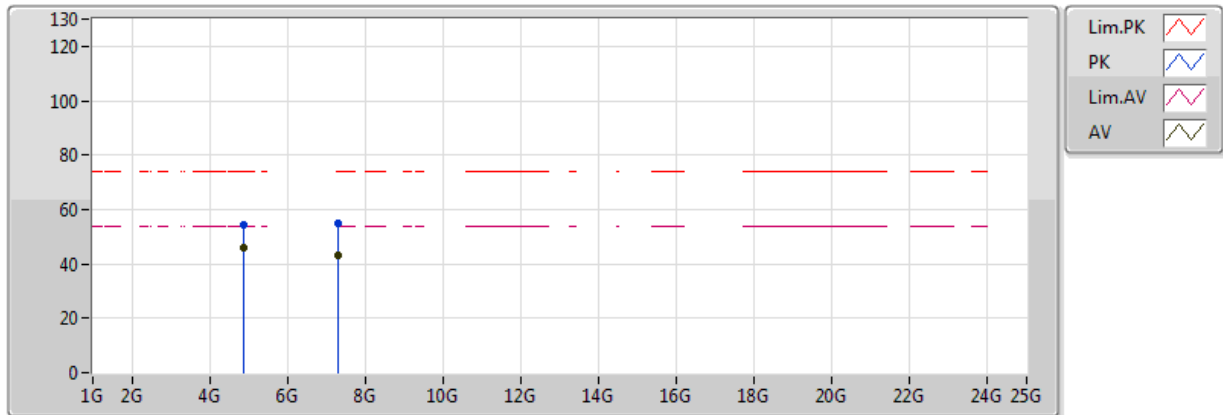


20170510
EUT Y 3TX ANT Dipole
Setting 24
05-Z-1
FSU(100015)
Non-TXBF

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87928G	53.51	54.00	-0.49	6.74	3	V	228	2.20	-
AV	7.31852G	49.80	54.00	-4.20	13.03	3	V	147	2.68	-
PK	4.87396G	61.60	74.00	-12.40	6.73	3	V	228	2.20	-
PK	7.31908G	59.29	74.00	-14.71	13.03	3	V	147	2.68	-

802.11b_(1Mbps)_3TX

2437MHz_TX

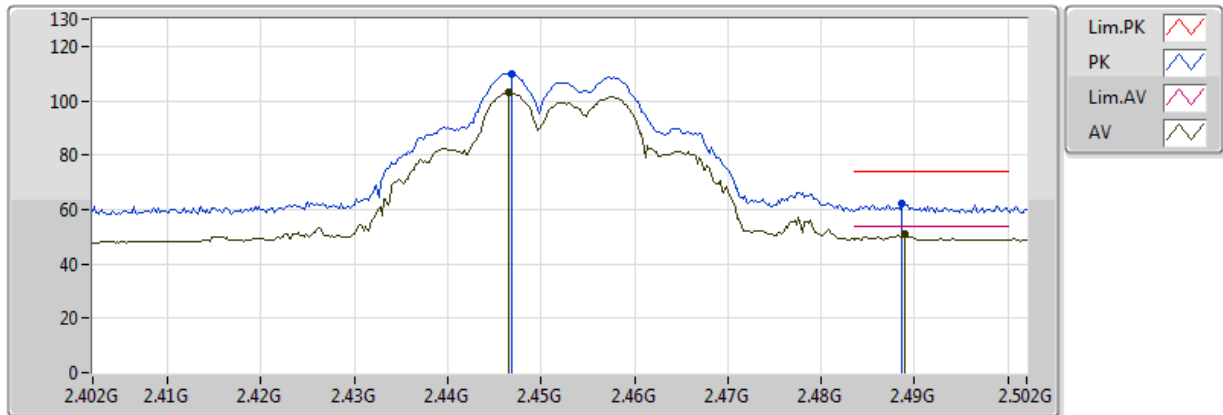


20170510
EUT Y 3TX ANT Dipole
Setting 24
05-Z-1
FSU(100015)
Non-TXBF

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87404G	45.75	54.00	-8.25	6.73	3	H	202	2.08	-
AV	7.31996G	43.38	54.00	-10.62	13.04	3	H	241	2.45	-
PK	4.87952G	54.63	74.00	-19.37	6.74	3	H	202	2.08	-
PK	7.31868G	54.99	74.00	-19.01	13.03	3	H	241	2.45	-

802.11b_(1Mbps)_3TX

2452MHz_TX

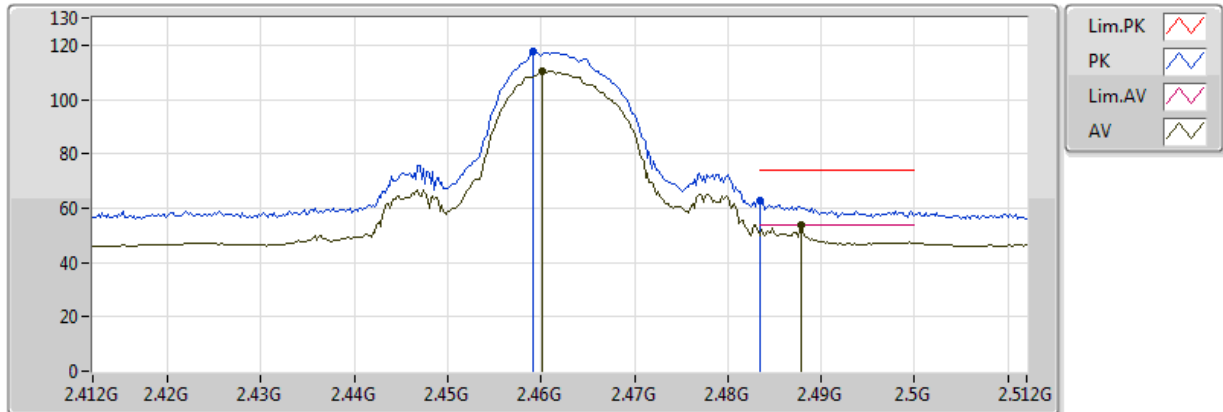


20170510
EUT Y 3TX ANT Dipole
Setting 23
05-Z-1
FSU(100015)
Non-TXBF

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4466G	102.99	Inf	-Inf	32.58	3	V	0	1.89	-
AV	2.489G	50.98	54.00	-3.02	32.73	3	V	0	1.89	-
PK	2.4468G	110.03	Inf	-Inf	32.58	3	V	0	1.89	-
PK	2.4886G	62.26	74.00	-11.74	32.73	3	V	0	1.89	-

802.11b_(1Mbps)_3TX

2462MHz_TX

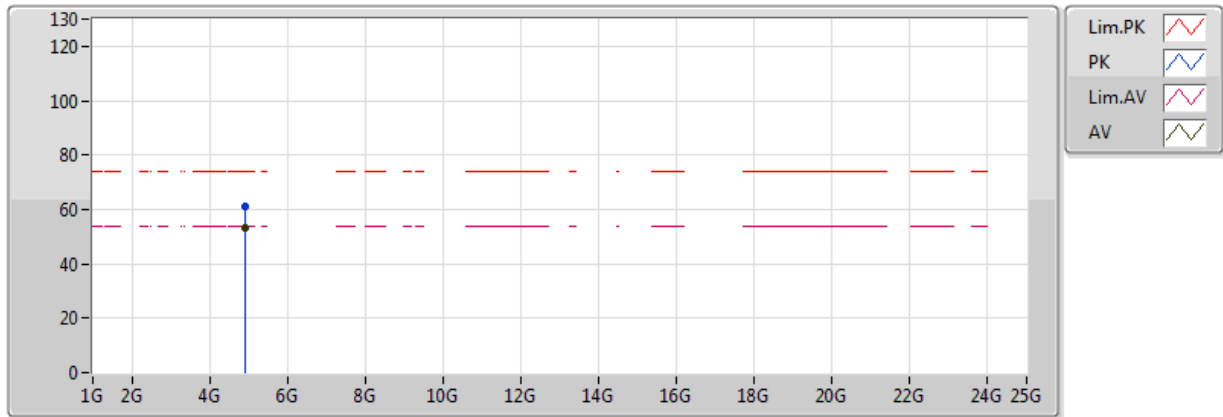


20170515
EUT Y 3TX ANT Dipole
Setting 19
04-J-6
FSU(100142)
Non-TXBF

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4602G	110.36	Inf	-Inf	32.63	3	V	190	1.50	-
AV	2.4878G	53.76	54.00	-0.24	32.73	3	V	190	1.50	-
PK	2.4592G	117.81	Inf	-Inf	32.62	3	V	190	1.50	-
PK	2.483502G	62.59	74.00	-11.41	32.71	3	V	190	1.50	-

802.11b_(1Mbps)_3TX

2462MHz_TX

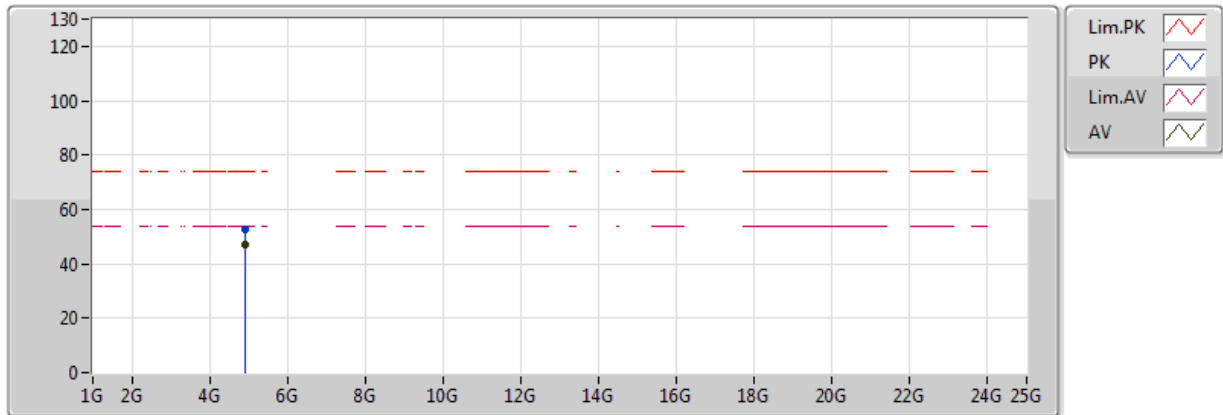


20170515
EUT Y 3TX ANT Dipole
Setting 19
04-J-6
FSU(100142)
Non-TXBF

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.91884G	53.45	54.00	-0.55	6.85	3	V	201	2.03	-
PK	4.92408G	60.88	74.00	-13.12	6.86	3	V	201	2.03	-

802.11b_(1Mbps)_3TX

2462MHz_TX

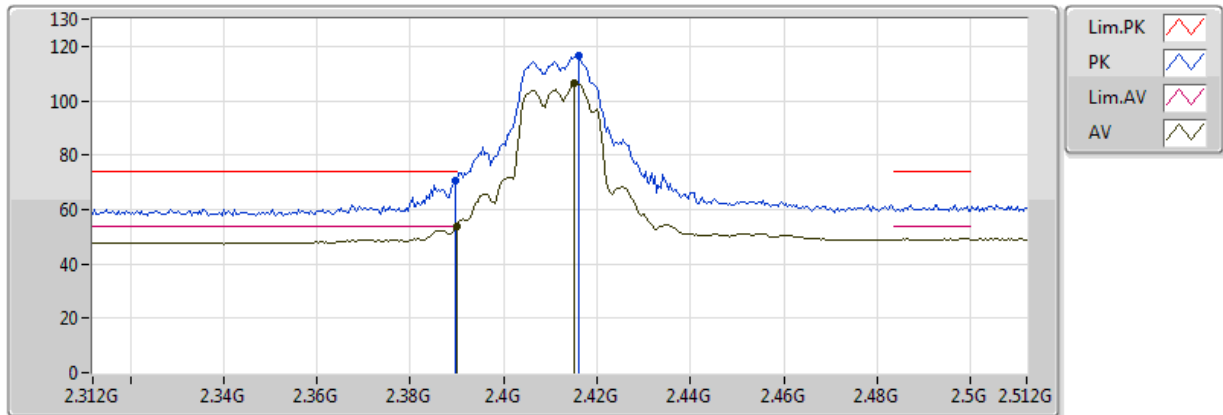


20170515
EUT Y 3TX ANT Dipole
Setting 19
04-J-6
FSU(100142)
Non-TXBF

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92392G	46.86	54.00	-7.14	6.86	3	H	287	1.69	-
PK	4.92384G	52.47	74.00	-21.53	6.86	3	H	287	1.69	-

802.11g_(6Mbps)_3TX

2412MHz_TX

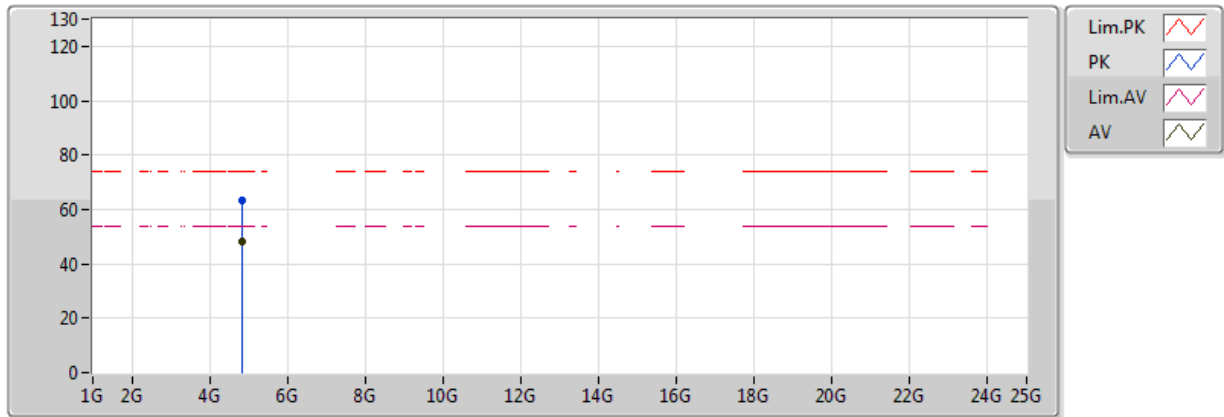


20170510
EUT Y_3TX
Setting 18
05-W-3
FSU

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	53.96	54.00	-0.04	32.37	3	V	15	1.76	-
AV	2.4152G	106.31	Inf	-Inf	32.46	3	V	15	1.76	-
PK	2.3896G	70.78	74.00	-3.22	32.37	3	V	15	1.76	-
PK	2.416G	116.44	Inf	-Inf	32.47	3	V	15	1.76	-

802.11g_(6Mbps)_3TX

2412MHz_TX

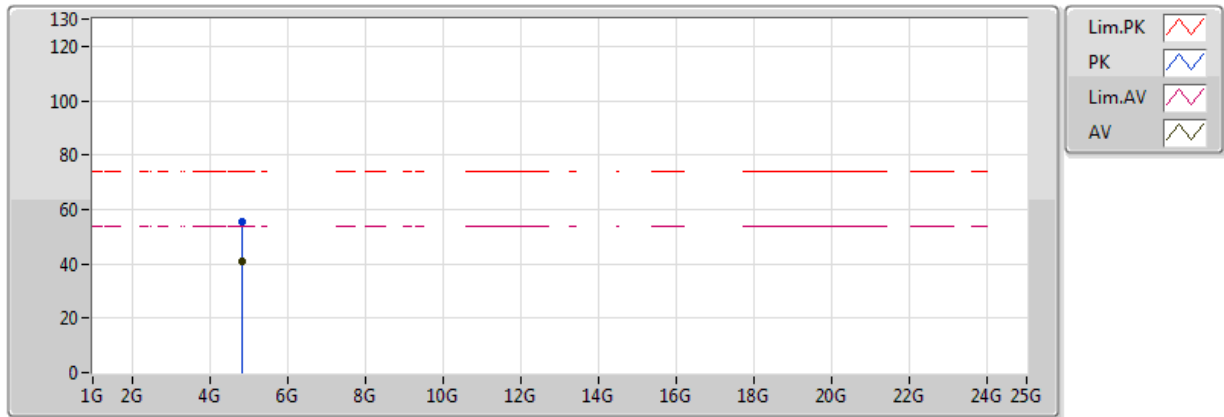


20170510
EUT_Y_3TX
Setting 18
05-Z-1
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82484G	47.96	54.00	-6.04	6.60	3	V	39	1.50	-
PK	4.82284G	63.22	74.00	-10.78	6.59	3	V	39	1.50	-

802.11g_(6Mbps)_3TX

2412MHz_TX

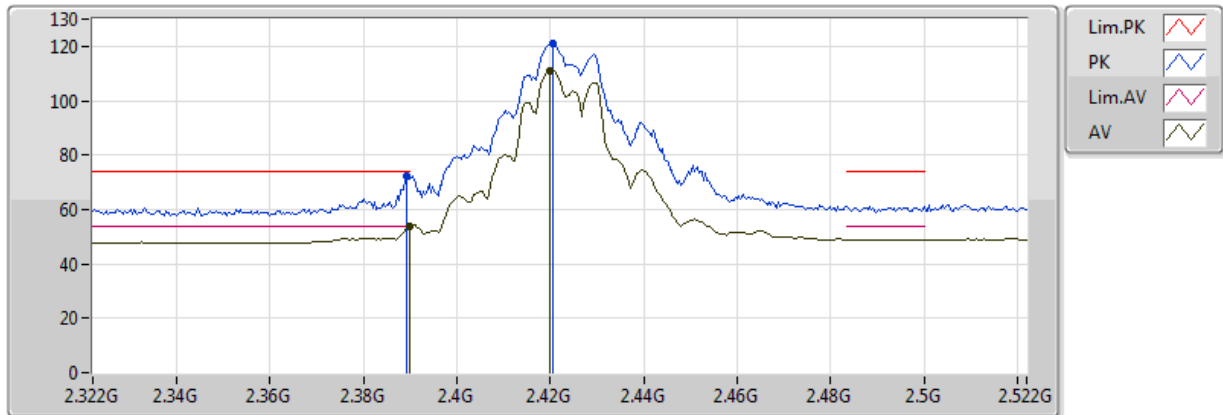


20170510
EUT Y_3TX
Setting 18
05-Z-1
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82368G	41.15	54.00	-12.85	6.59	3	H	290	2.37	-
PK	4.82408G	55.25	74.00	-18.75	6.60	3	H	290	2.37	-

802.11g_(6Mbps)_3TX

2422MHz_TX

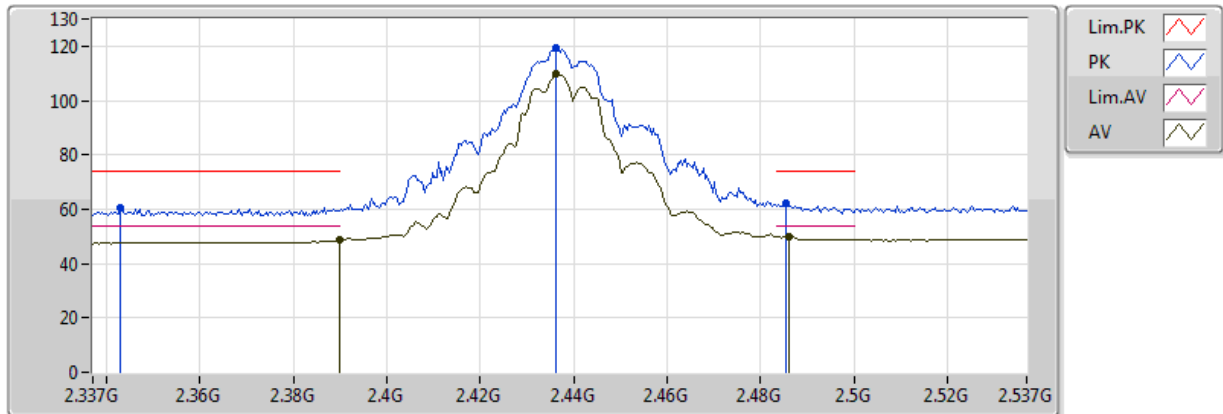


20170510
EUT Y_3TX
Setting 21
05-W-3
FSU

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	53.92	54.00	-0.08	32.37	3	V	346	1.43	-
AV	2.42G	111.13	Inf	-Inf	32.48	3	V	346	1.43	-
PK	2.3892G	72.28	74.00	-1.72	32.37	3	V	346	1.43	-
PK	2.4204G	121.07	Inf	-Inf	32.48	3	V	346	1.43	-

802.11g_(6Mbps)_3TX

2437MHz_TX

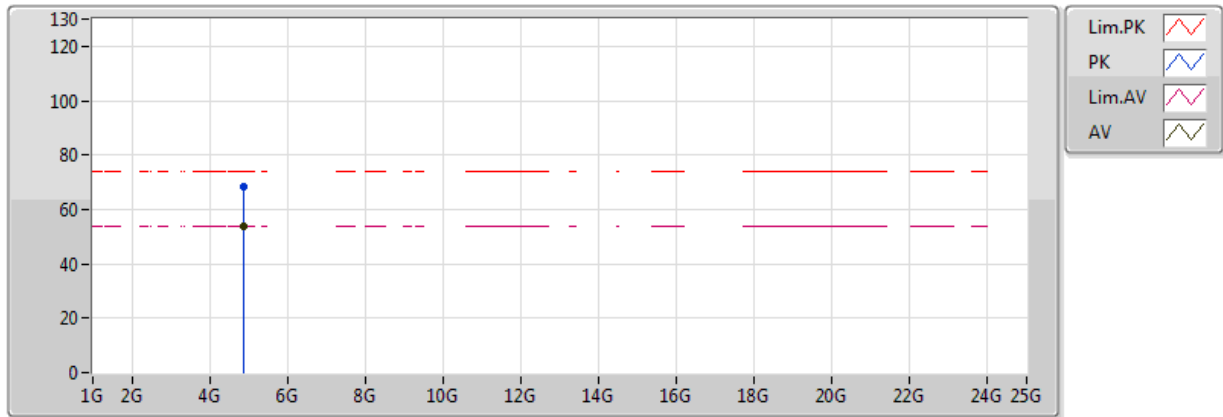


20170510
EUT Y_3TX
Setting 22
05-W-3
FSU

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	48.61	54.00	-5.39	32.37	3	V	338	1.84	-
AV	2.4362G	110.07	Inf	-Inf	32.54	3	V	338	1.84	-
AV	2.4862G	50.00	54.00	-4.00	32.72	3	V	338	1.84	-
PK	2.343G	60.67	74.00	-13.33	32.20	3	V	338	1.84	-
PK	2.4362G	119.63	Inf	-Inf	32.54	3	V	338	1.84	-
PK	2.4854G	62.16	74.00	-11.84	32.72	3	V	338	1.84	-

802.11g_(6Mbps)_3TX

2437MHz_TX

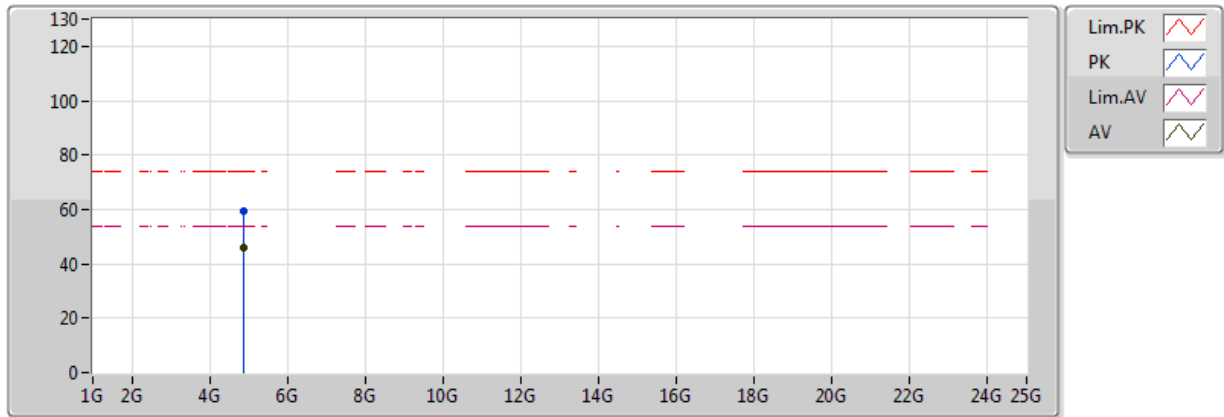


20170510
EUT Y_3TX
Setting 22
05-Z-1
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8728G	53.74	54.00	-0.26	6.73	3	V	126	1.34	-
PK	4.87264G	68.60	74.00	-5.40	6.73	3	V	126	1.34	-

802.11g_(6Mbps)_3TX

2437MHz_TX

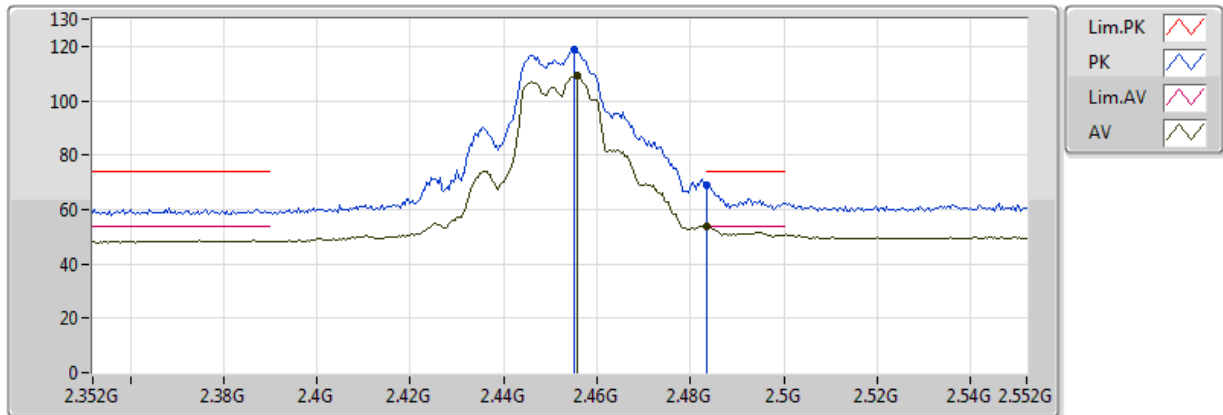


20170510
EUT Y_3TX
Setting 22
05-Z-1
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87528G	46.05	54.00	-7.95	6.73	3	H	296	2.14	-
PK	4.87504G	59.66	74.00	-14.34	6.73	3	H	296	2.14	-

802.11g_(6Mbps)_3TX

2452MHz_TX

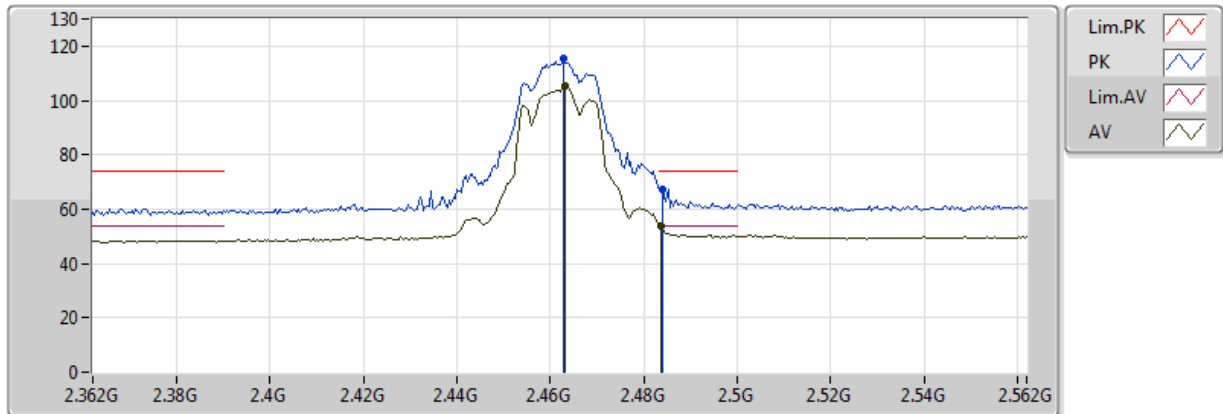


20170510
EUT Y_3TX
Setting 20
05-W-3
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4556G	109.21	Inf	-Inf	32.61	3	V	163	1.49	-
AV	2.4836G	53.65	54.00	-0.35	32.71	3	V	163	1.49	-
PK	2.4552G	118.72	Inf	-Inf	32.61	3	V	163	1.49	-
PK	2.4836G	68.77	74.00	-5.23	32.71	3	V	163	1.49	-

802.11g_(6Mbps)_3TX

2462MHz_TX

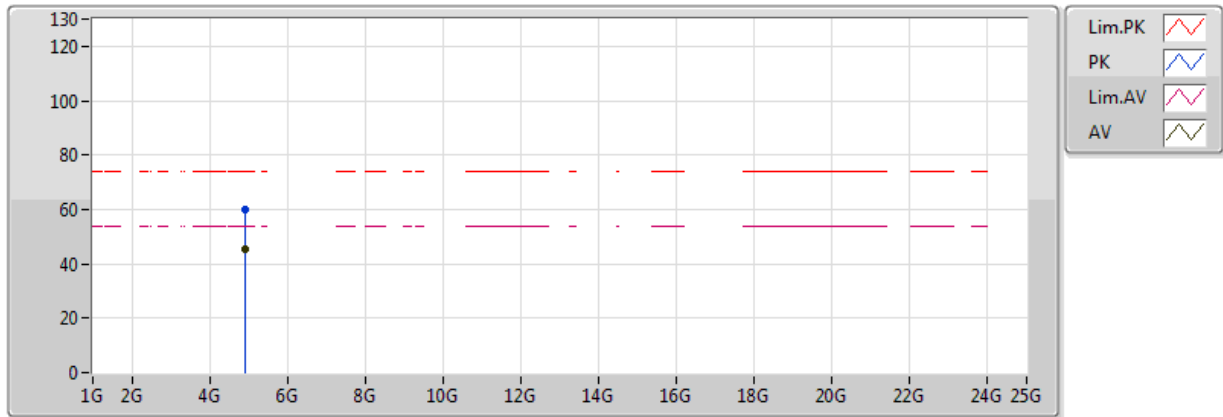


20170510
EUT Y_3TX
Setting 14
05-W-3
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4632G	105.08	Inf	-Inf	32.64	3	V	351	2.03	-
AV	2.4836G	53.63	54.00	-0.37	32.71	3	V	351	2.03	-
PK	2.4628G	115.56	Inf	-Inf	32.64	3	V	351	2.03	-
PK	2.484G	67.39	74.00	-6.61	32.71	3	V	351	2.03	-

802.11g_(6Mbps)_3TX

2462MHz_TX

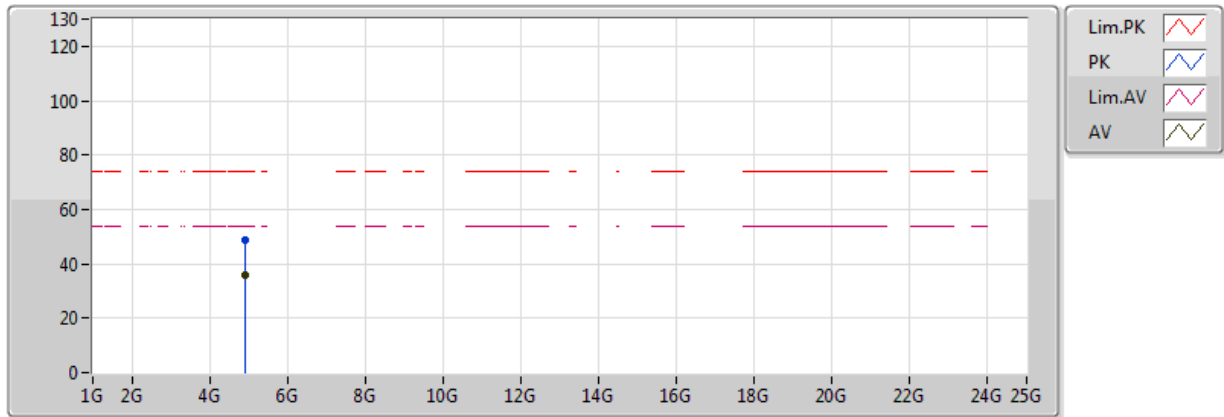


20170510
EUT Y_3TX
Setting 14
05-Z-1
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92424G	45.12	54.00	-8.88	6.86	3	V	33	1.49	-
PK	4.92504G	60.17	74.00	-13.83	6.87	3	V	33	1.49	-

802.11g_(6Mbps)_3TX

2462MHz_TX

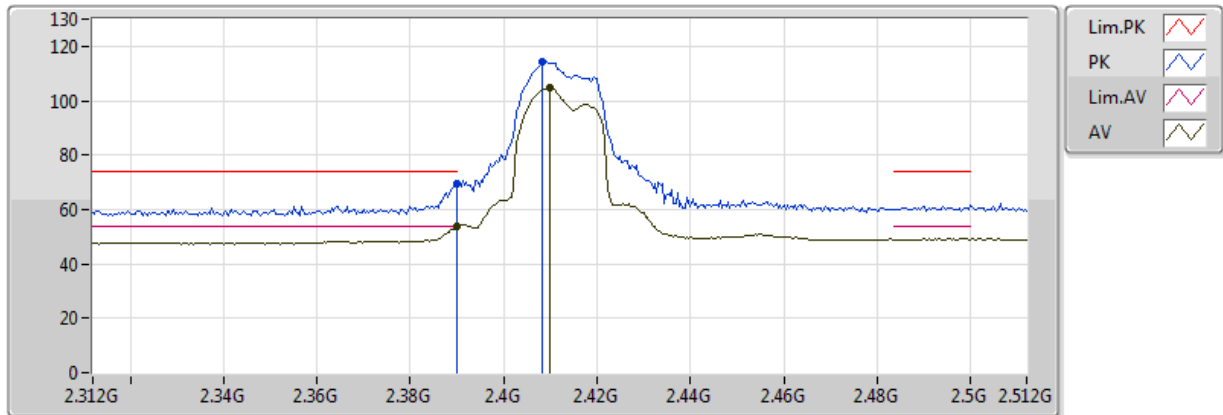


20170510
EUT Y_3TX
Setting 14
05-Z-1
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92448G	35.90	54.00	-18.10	6.86	3	H	339	2.38	-
PK	4.92504G	48.52	74.00	-25.48	6.87	3	H	339	2.38	-

802.11n HT20_Nss1,(MCS0)_3TX

2412MHz_TX

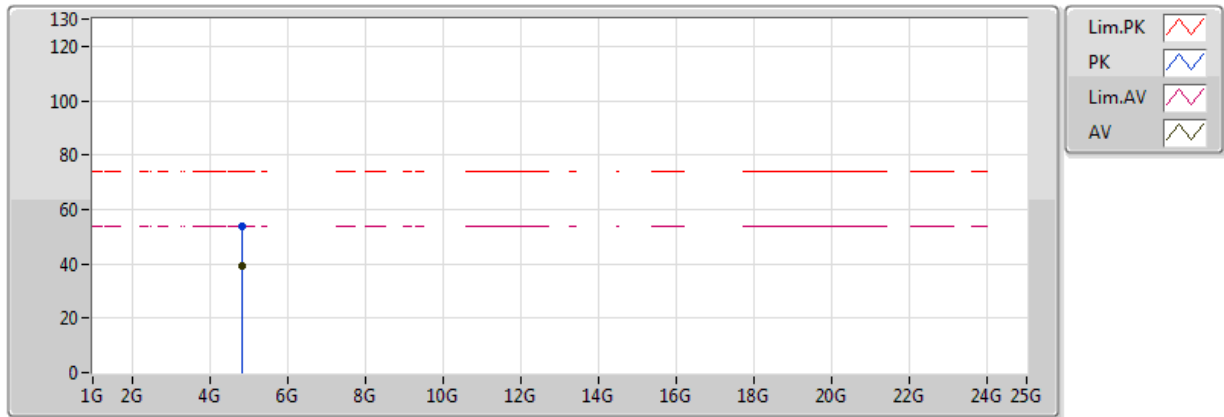


20170510
EUT Y_3TX
Setting 16
05-W-3
FSU

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	53.75	54.00	-0.25	32.37	3	V	10	1.69	-
AV	2.41G	104.55	Inf	-Inf	32.45	3	V	10	1.69	-
PK	2.39G	69.68	74.00	-4.32	32.37	3	V	10	1.69	-
PK	2.4084G	114.12	Inf	-Inf	32.44	3	V	10	1.69	-

802.11n HT20_Nss1,(MCS0)_3TX

2412MHz_TX

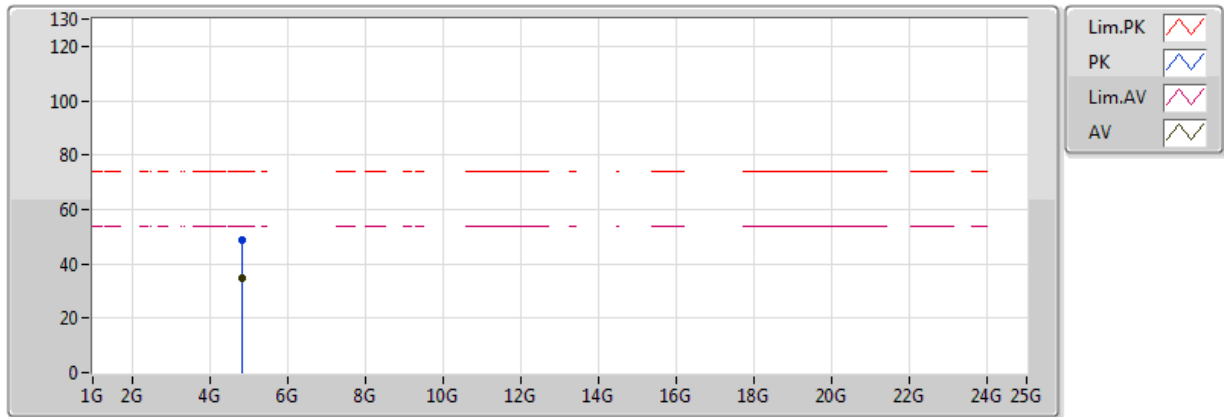


20170510
EUT Y_3TX
Setting 16
05-Z-1
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82224G	39.14	54.00	-14.86	6.59	3	V	188	2.02	-
PK	4.82224G	54.00	74.00	-20.00	6.59	3	V	188	2.02	-

802.11n HT20_Nss1,(MCS0)_3TX

2412MHz_TX

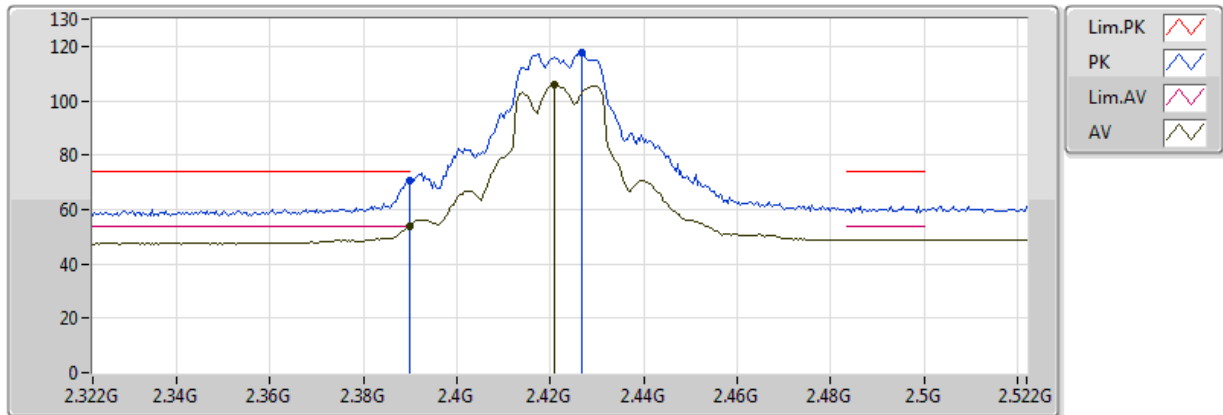


20170510
EUT Y_3TX
Setting 16
05-Z-1
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82112G	34.99	54.00	-19.01	6.59	3	H	68	2.42	-
PK	4.8216G	48.84	74.00	-25.16	6.59	3	H	68	2.42	-

802.11n HT20_Nss1,(MCS0)_3TX

2422MHz_TX

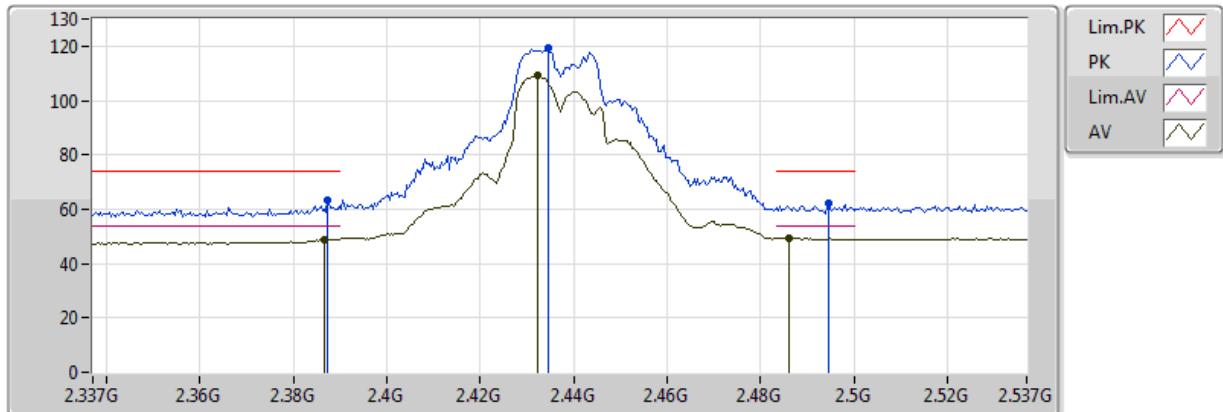


20170510
EUT Y_3TX
Setting 21
05-W-3
FSU

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	53.97	54.00	-0.03	32.37	3	V	152	1.88	-
AV	2.4208G	106.14	Inf	-Inf	32.48	3	V	152	1.88	-
PK	2.39G	70.65	74.00	-3.35	32.37	3	V	152	1.88	-
PK	2.4268G	117.83	Inf	-Inf	32.51	3	V	152	1.88	-

802.11n HT20_Nss1,(MCS0)_3TX

2437MHz_TX

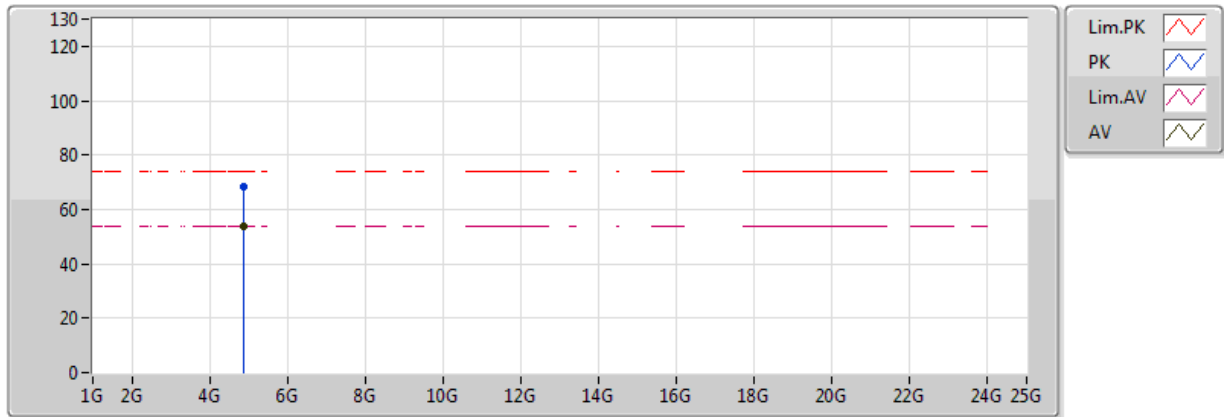


20170510
EUT Y_3TX
Setting 23
05-W-3
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3866G	48.96	54.00	-5.04	32.36	3	V	156	1.50	-
AV	2.4322G	109.05	Inf	-Inf	32.53	3	V	156	1.50	-
AV	2.4862G	49.47	54.00	-4.53	32.72	3	V	156	1.50	-
PK	2.3874G	63.20	74.00	-10.80	32.36	3	V	156	1.50	-
PK	2.4346G	119.13	Inf	-Inf	32.53	3	V	156	1.50	-
PK	2.4946G	61.98	74.00	-12.02	32.75	3	V	156	1.50	-

802.11n HT20_Nss1,(MCS0)_3TX

2437MHz_TX

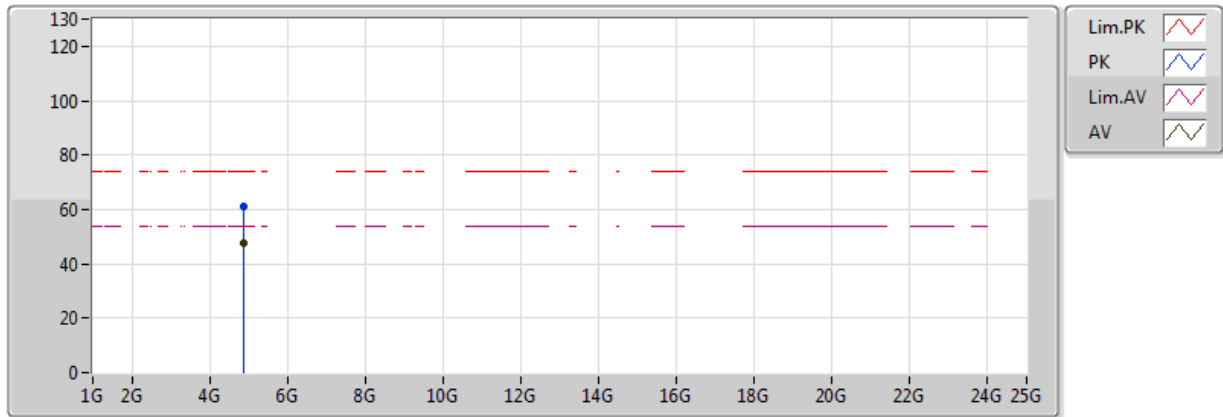


20170510
EUT Y_3TX
Setting 23
05-Z-1
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8744G	53.98	54.00	-0.02	6.73	3	V	310	2.02	-
PK	4.874G	68.41	74.00	-5.59	6.73	3	V	310	2.02	-

802.11n HT20_Nss1,(MCS0)_3TX

2437MHz_TX

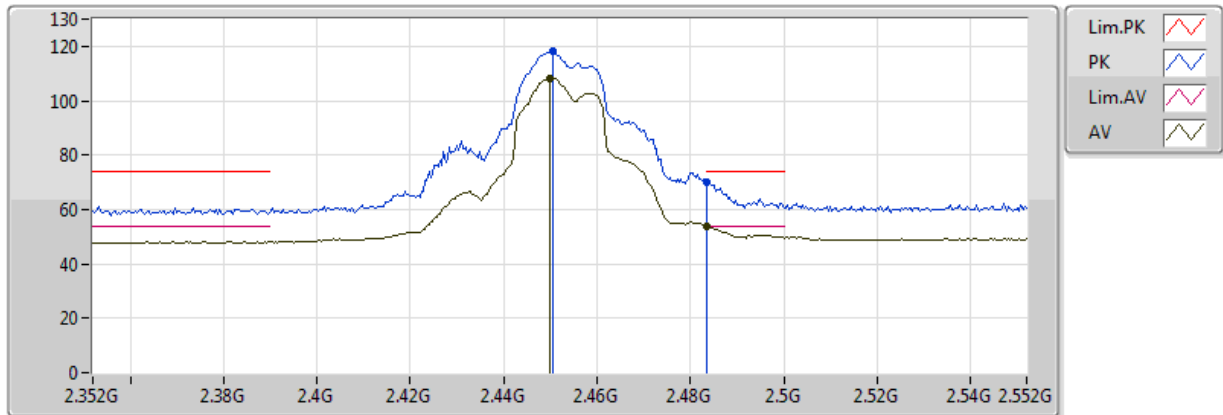


20170510
EUT Y_3TX
Setting 23
05-Z-1
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87288G	47.84	54.00	-6.16	6.73	3	H	293	2.13	-
PK	4.87424G	61.27	74.00	-12.73	6.73	3	H	293	2.13	-

802.11n HT20_Nss1,(MCS0)_3TX

2452MHz_TX

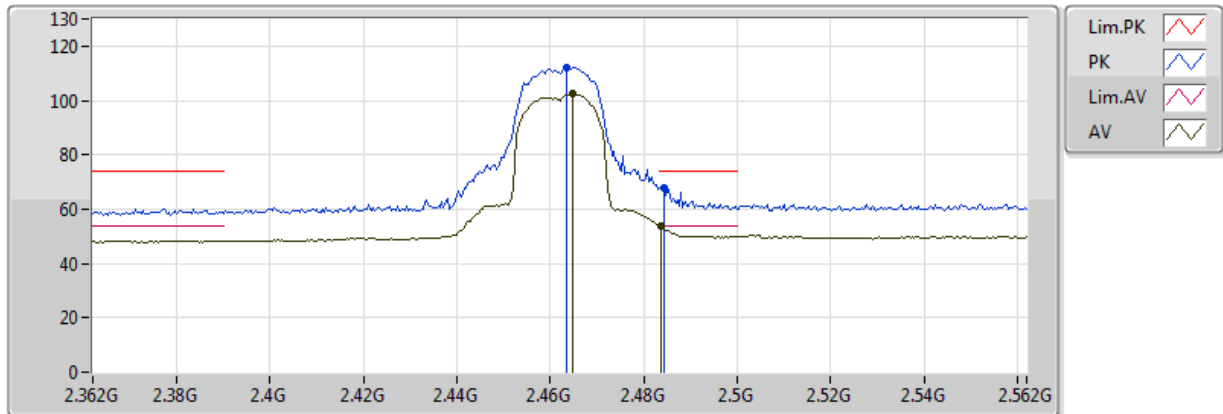


20170510
EUT Y_3TX
Setting 21
05-W-3
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.45G	108.40	Inf	-Inf	32.59	3	V	102	1.69	-
AV	2.4836G	53.63	54.00	-0.37	32.71	3	V	102	1.69	-
PK	2.4504G	118.33	Inf	-Inf	32.59	3	V	102	1.69	-
PK	2.4836G	69.90	74.00	-4.10	32.71	3	V	102	1.69	-

802.11n HT20_Nss1,(MCS0)_3TX

2462MHz_TX

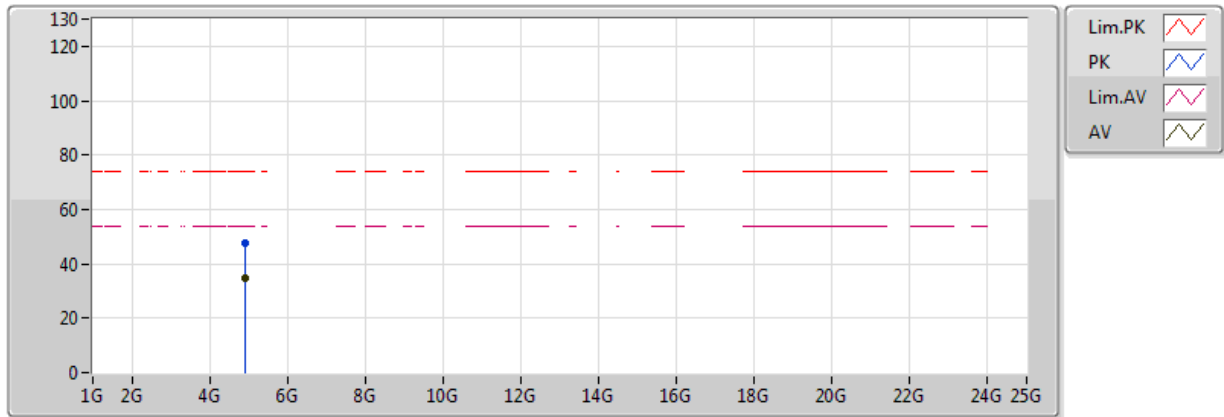


20170510
EUT Y_3TX
Setting 13
05-W-3
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4648G	102.36	Inf	-Inf	32.64	3	V	0	1.79	-
AV	2.4836G	53.87	54.00	-0.13	32.71	3	V	0	1.79	-
PK	2.4636G	112.23	Inf	-Inf	32.64	3	V	0	1.79	-
PK	2.4844G	67.91	74.00	-6.09	32.71	3	V	0	1.79	-

802.11n HT20_Nss1,(MCS0)_3TX

2462MHz_TX

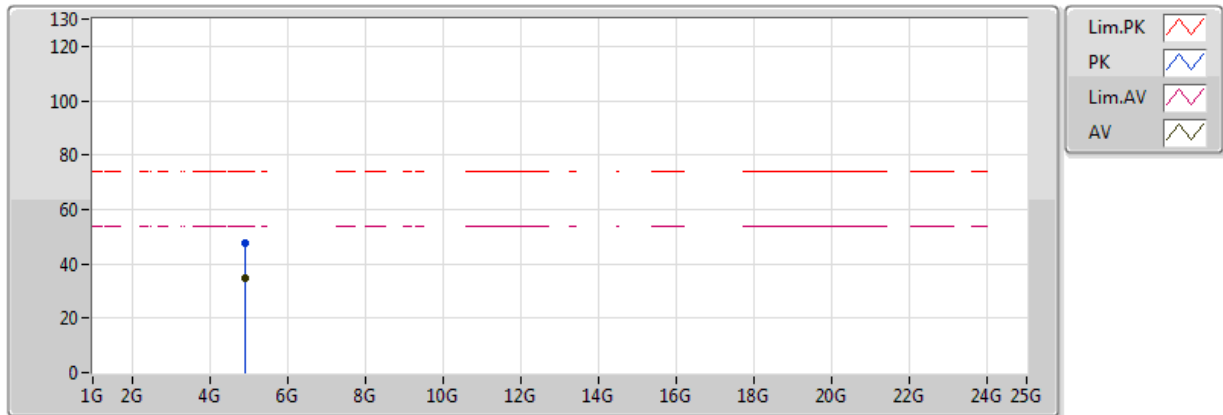


20170510
EUT Y_3TX
Setting 13
05-Z-1
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92248G	34.80	54.00	-19.20	6.86	3	V	309	2.31	-
PK	4.92112G	47.86	74.00	-26.14	6.85	3	V	309	2.31	-

802.11n HT20_Nss1,(MCS0)_3TX

2462MHz_TX

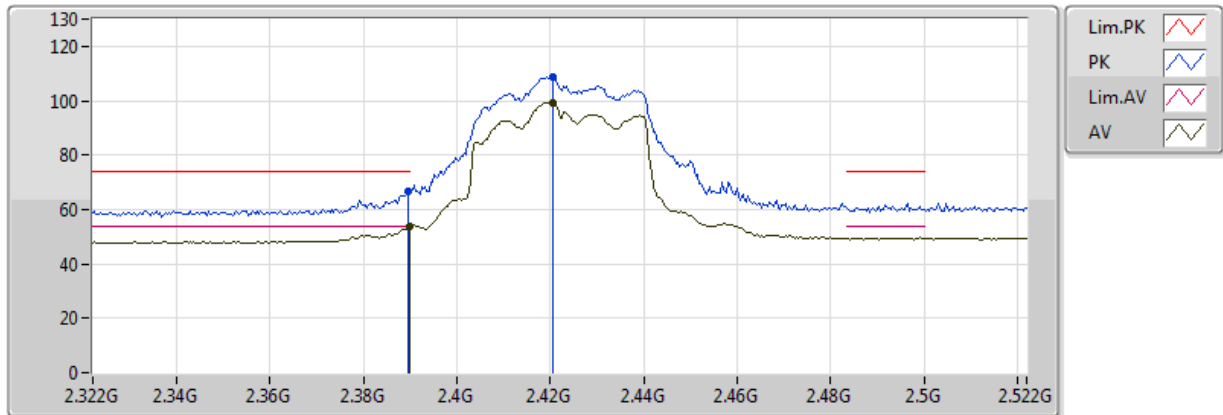


20170510
EUT Y_3TX
Setting 13
05-Z-1
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.9224G	34.66	54.00	-19.34	6.86	3	H	131	1.31	-
PK	4.93408G	47.53	74.00	-26.47	6.89	3	H	131	1.31	-

802.11n HT40_Nss1,(MCS0)_3TX

2422MHz_TX

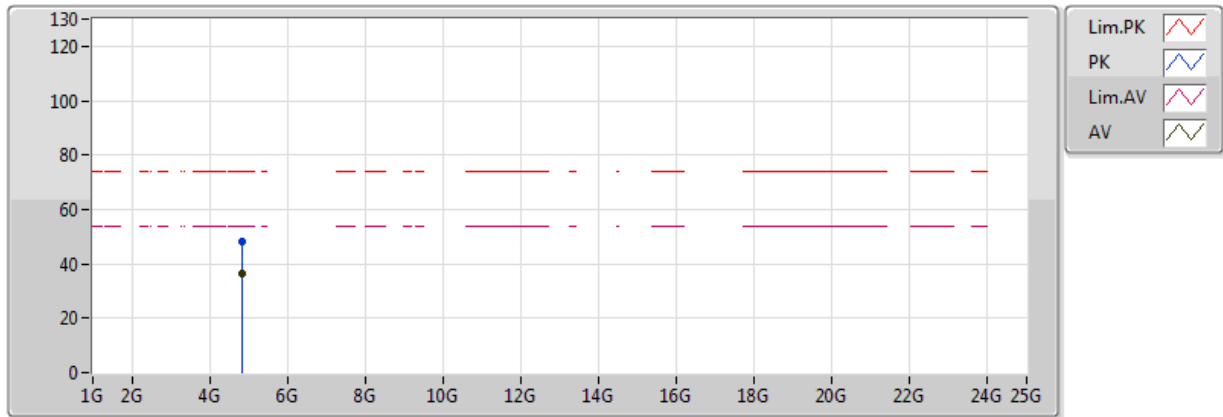


20170510
EUT Y_3TX
Setting 12
05-W-3
FSU

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	53.61	54.00	-0.39	32.37	3	V	14	2.02	-
AV	2.4204G	99.44	Inf	-Inf	32.48	3	V	14	2.02	-
PK	2.3896G	66.72	74.00	-7.28	32.37	3	V	14	2.02	-
PK	2.4204G	108.92	Inf	-Inf	32.48	3	V	14	2.02	-

802.11n HT40_Nss1,(MCS0)_3TX

2422MHz_TX

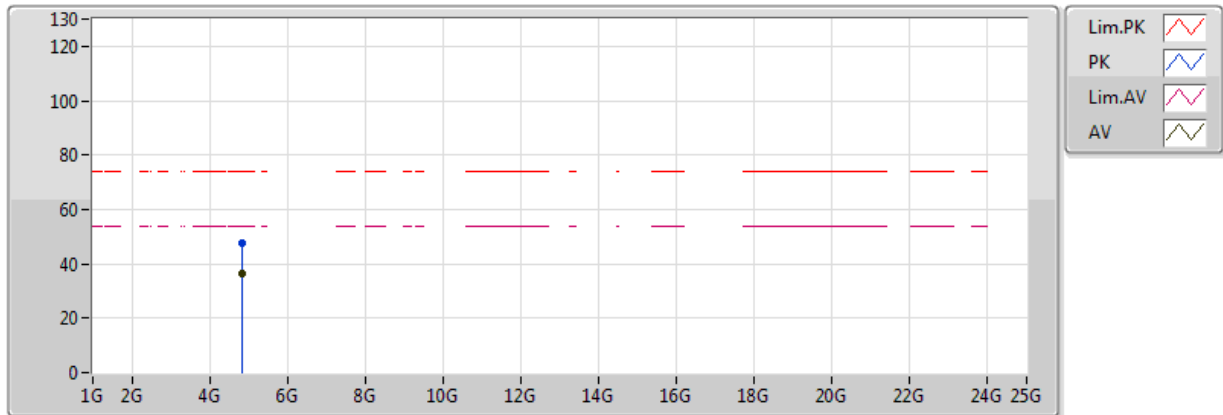


20170510
EUT Y_3TX
Setting 12
05-Z-1
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8428G	36.56	54.00	-17.44	6.65	3	V	273	1.87	-
PK	4.84936G	48.30	74.00	-25.70	6.66	3	V	273	1.87	-

802.11n HT40_Nss1,(MCS0)_3TX

2422MHz_TX

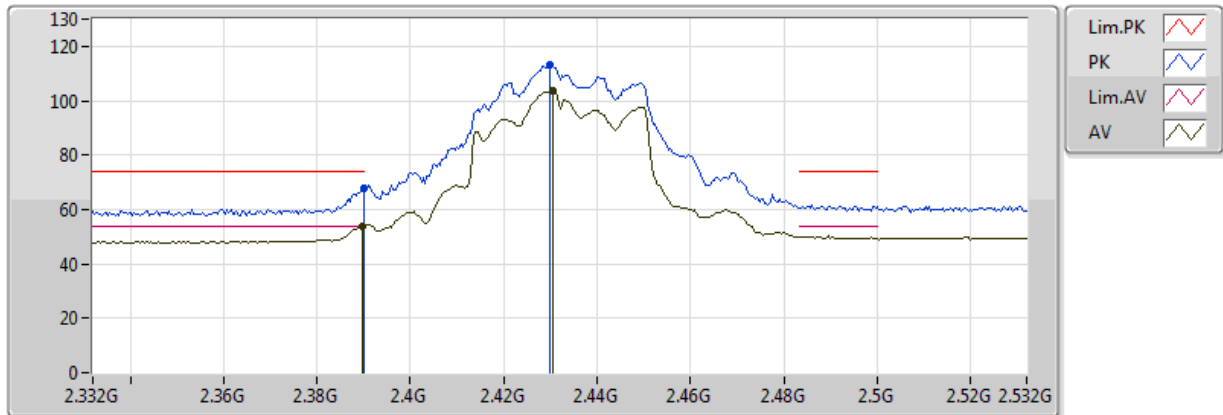


20170510
EUT Y_3TX
Setting 12
05-Z-1
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8456G	36.24	54.00	-17.76	6.65	3	H	249	1.81	-
PK	4.85608G	47.79	74.00	-26.21	6.68	3	H	249	1.81	-

802.11n HT40_Nss1,(MCS0)_3TX

2432MHz_TX

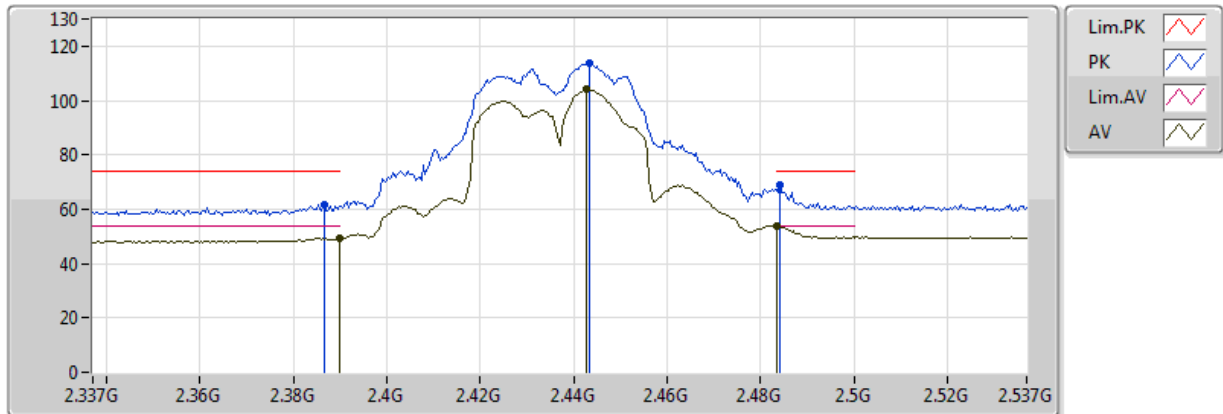


20170510
EUT Y_3TX
Setting 15
05-W-3
FSU

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	53.95	54.00	-0.05	32.37	3	V	159	1.14	-
AV	2.4304G	103.39	Inf	-Inf	32.52	3	V	159	1.14	-
PK	2.39G	67.56	74.00	-6.44	32.37	3	V	159	1.14	-
PK	2.43G	113.09	Inf	-Inf	32.52	3	V	159	1.14	-

802.11n HT40_Nss1,(MCS0)_3TX

2437MHz_TX

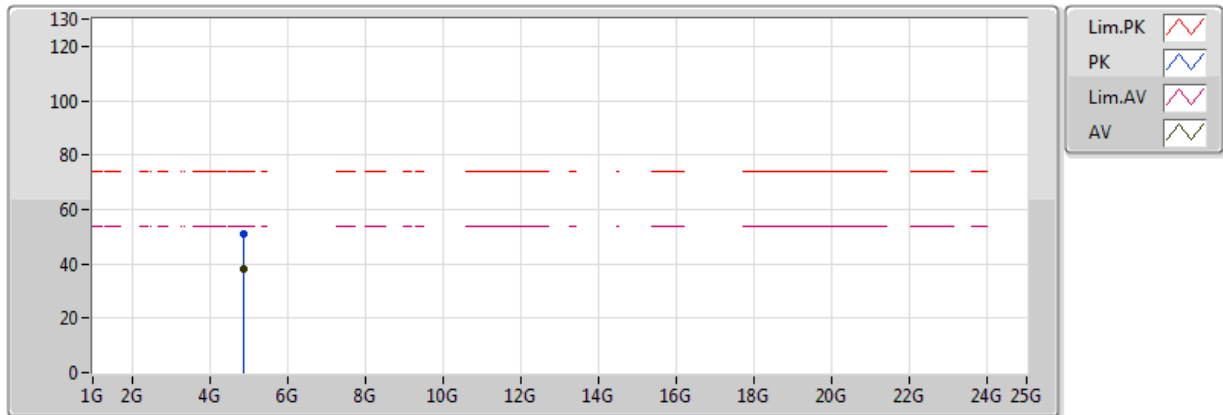


20170510
EUT Y_3TX
Setting 15
05-W-3
FSU

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	49.33	54.00	-4.67	32.37	3	V	348	1.85	-
AV	2.4426G	104.12	Inf	-Inf	32.56	3	V	348	1.85	-
AV	2.483502G	53.71	54.00	-0.29	32.71	3	V	348	1.85	-
PK	2.3866G	61.61	74.00	-12.39	32.36	3	V	348	1.85	-
PK	2.4434G	113.55	Inf	-Inf	32.57	3	V	348	1.85	-
PK	2.4842G	68.85	74.00	-5.15	32.71	3	V	348	1.85	-

802.11n HT40_Nss1,(MCS0)_3TX

2437MHz_TX

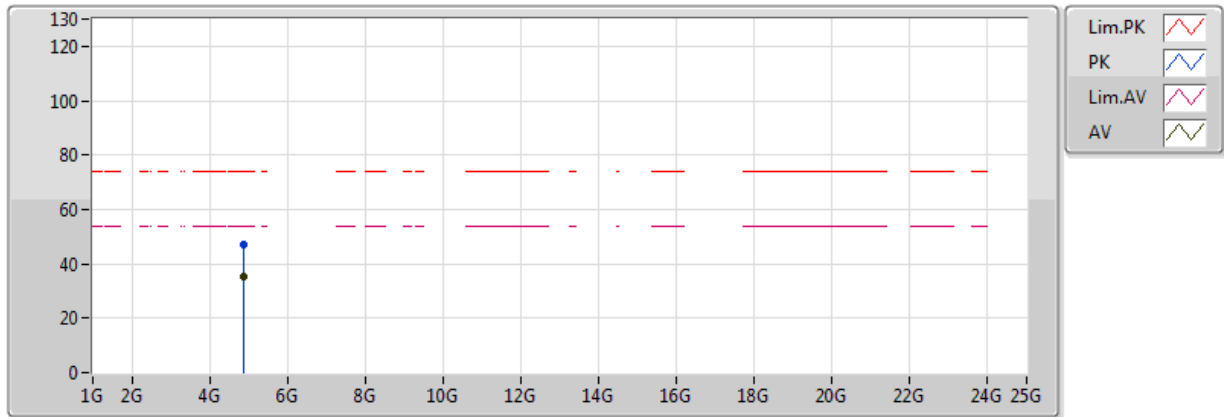


20170510
EUT Y_3TX
Setting 15
05-Z-1
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87768G	38.14	54.00	-15.86	6.74	3	V	91	2.07	-
PK	4.87656G	50.79	74.00	-23.21	6.74	3	V	91	2.07	-

802.11n HT40_Nss1,(MCS0)_3TX

2437MHz_TX

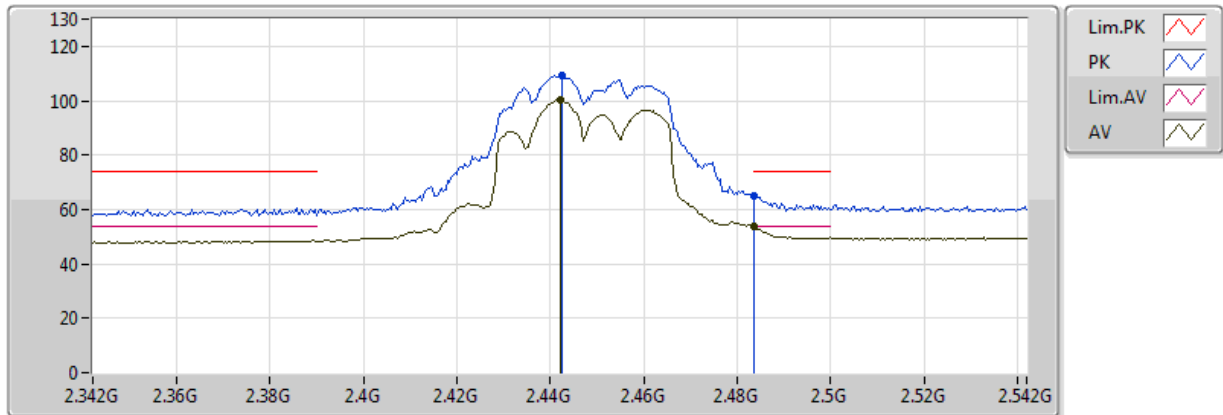


20170510
EUT Y_3TX
Setting 15
05-Z-1
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.86928G	35.11	54.00	-18.89	6.72	3	H	292	1.09	-
PK	4.86312G	46.87	74.00	-27.13	6.70	3	H	292	1.09	-

802.11n HT40_Nss1,(MCS0)_3TX

2442MHz_TX

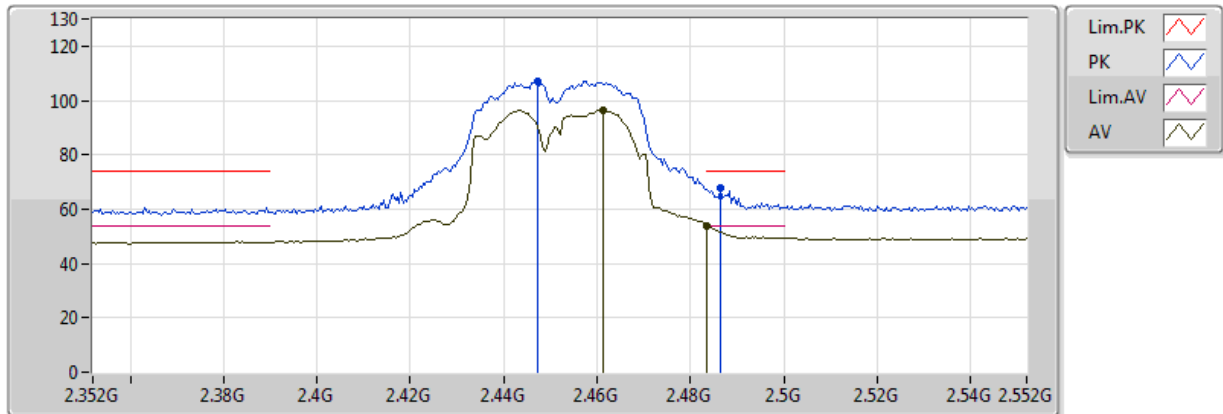


20170510
EUT Y_3TX
Setting 12
05-W-3
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.442G	100.16	Inf	-Inf	32.56	3	V	153	1.48	-
AV	2.4836G	53.52	54.00	-0.48	32.71	3	V	153	1.48	-
PK	2.4424G	109.35	Inf	-Inf	32.56	3	V	153	1.48	-
PK	2.4836G	64.98	74.00	-9.02	32.71	3	V	153	1.48	-

802.11n HT40_Nss1,(MCS0)_3TX

2452MHz_TX

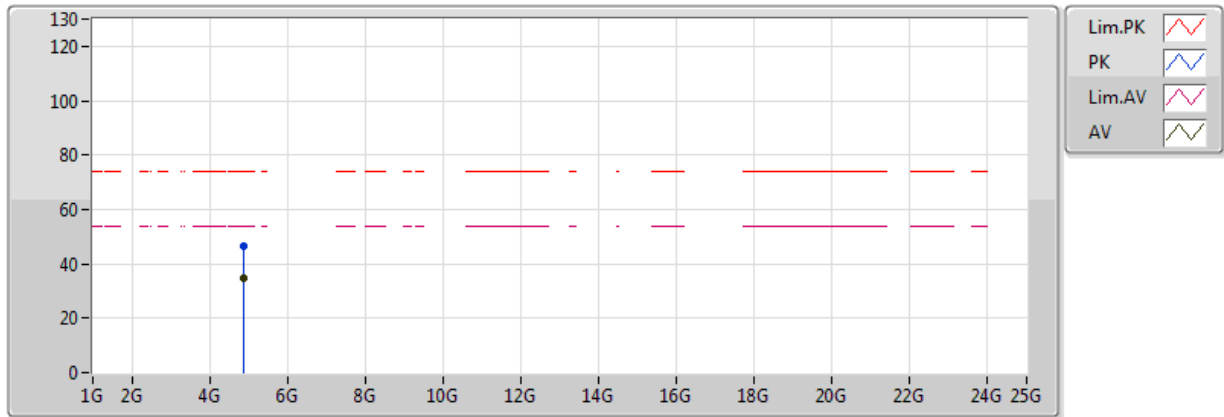


20170510
EUT Y_3TX
Setting 10
05-W-3
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4612G	96.45	Inf	-Inf	32.63	3	V	344	1.68	-
AV	2.4836G	53.96	54.00	-0.04	32.71	3	V	344	1.68	-
PK	2.4472G	107.26	Inf	-Inf	32.58	3	V	344	1.68	-
PK	2.4864G	67.75	74.00	-6.25	32.72	3	V	344	1.68	-

802.11n HT40_Nss1,(MCS0)_3TX

2452MHz_TX

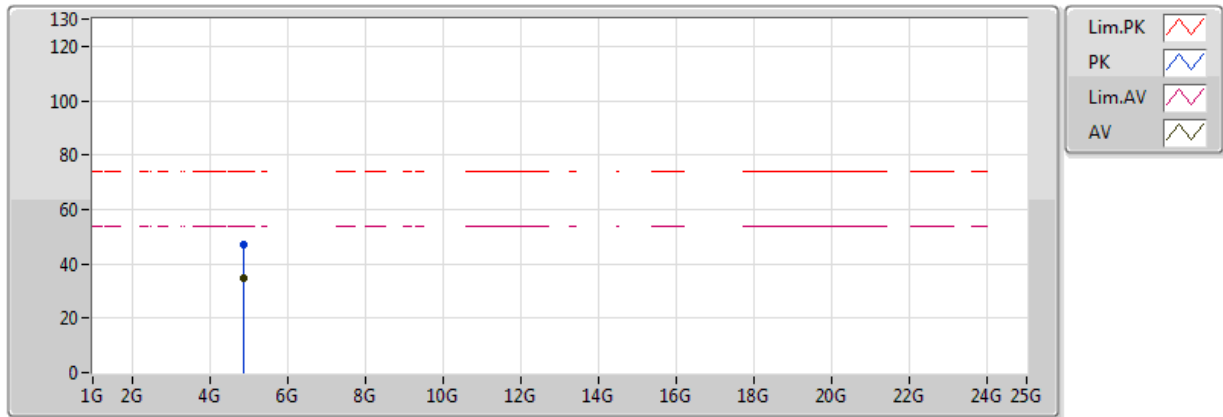


20170510
EUT Y_3TX
Setting 10
05-Z-1
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8668G	34.68	54.00	-19.32	6.71	3	V	37	1.53	-
PK	4.864G	46.74	74.00	-27.26	6.70	3	V	37	1.53	-

802.11n HT40_Nss1,(MCS0)_3TX

2452MHz_TX



20170510
EUT Y_3TX
Setting 10
05-Z-1
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8644G	34.62	54.00	-19.38	6.70	3	H	134	1.87	-
PK	4.86416G	47.28	74.00	-26.72	6.70	3	H	134	1.87	-

