



FCC Test Report

Equipment : 802.11 a/b/g/n/ac 2x2 WiFi module
Brand Name : LITE-ON
Model No. : WCBN4521R18
FCC ID : PPQ-WCBN4521R18
Standard : 47 CFR FCC Part 15.247
Operating Band : 2400 MHz – 2483.5 MHz
Function : ☒ Point-to-multipoint; ☐ Point-to-point
Applicant : Lite-On Technology Corp.
Bldg. C, 90, Chien 1 Road, Chung Ho, New Taipei City
23585, Taiwan, R.O.C
Manufacturer : LITE-ON TECHNOLOGY (Changzhou) CO., LTD
A9 Building, No.88 Yanghu Road, Wujin Hi-Tech
Industrial Development Zone, Changzhou City,
Jiangsu Province 213100 China

The product sample received on Nov. 08, 2017 and completely tested on Nov. 22, 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



SPORTON INTERNATIONAL INC.
TEL : 886-3-3273456
FAX : 886-3-3270973
FCC ID: PPQ-WCBN4521R18

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
2400-2483.5	b, g, n (HT20), ac (VHT20)	2412-2462	1-11 [11]
2400-2483.5	n (HT40), ac (VHT40)	2422-2452	3-9 [7]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	2TX
2.4-2.4835GHz	802.11g	20	2TX
2.4-2.4835GHz	802.11n HT20	20	2TX
2.4-2.4835GHz	802.11ac VHT20	20	2TX
2.4-2.4835GHz	802.11n HT40	40	2TX
2.4-2.4835GHz	802.11ac VHT40	40	2TX

Note:

- 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- 11g, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- VHT20, VHT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- BWch is the nominal channel bandwidth.
- Nss-Min is the minimum number of spatial streams.
- Nant is the number of outputs. e.g., 2(2,3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.

1.1.2 Antenna Information

Ant.	Brand Holder	Model Name	Antenna Type	Connector	Gain (dBi)	
					2.4GHz	5GHz
1	HUN PAI ENTERPRISE Co.	W4521R-A0001	PIFA Antenna	N/A	3.27	4.72
2	HUN PAI ENTERPRISE Co.	W4521R-A0002	PIFA Antenna	N/A	4.30	4.20

Note: The EUT has two antennas.

For 2.4GHz WLAN function

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

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

For 5GHz WLAN function

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

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

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11b	0.997	0.013	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11g	0.964	0.159	1.393m	1k
802.11ac VHT20	0.961	0.173	1.313m	1k
802.11ac VHT40	0.909	0.414	637.5u	3k

1.1.4 EUT Operational Condition

EUT Power Type	From Host System			
Beamforming Function	☐	With beamforming	☒	Without beamforming
Test Software Version	QATool_Dbg			

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	Paul Chen	22°C / 54%	Nov. 13, 2017
Radiated	03CH01-CB	Welson Chen / Cola Fan	22°C / 54%	Nov. 09, 2017~Nov. 18, 2017
AC Conduction	CO01-CB	Max Lin	23°C / 55%	Nov. 22, 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)_2TX	-
2412MHz	24
2437MHz	24
2462MHz	21
802.11g_(6Mbps)_2TX	-
2412MHz	1F
2417MHz	24
2437MHz	24
2457MHz	24
2462MHz	20
802.11ac VHT20_Nss1,(MCS0)_2TX	-
2412MHz	1F
2417MHz	24
2437MHz	24
2457MHz	24
2462MHz	20
802.11ac VHT40_Nss1,(MCS0)_2TX	-
2422MHz	16
2427MHz	17
2432MHz	1A
2437MHz	22
2442MHz	20
2447MHz	1E
2452MHz	1A

Note:

- ♦ VHT20/VHT40 covers HT20/HT40, due to same modulation. The power setting for 802.11n HT20 and HT40 are the same or lower than 802.11ac VHT20 and VHT40.

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	Normal Link
1	Normal Link - 2.4GHz
2	Normal Link - 5GHz
For operating mode 1 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	Normal Link
1	Normal Link - EUT in Y axis - 2.4GHz
2	Normal Link - EUT in Z axis - 2.4GHz
Mode 2 has been evaluated to be the worst case among Mode 1~2, thus measurement for Mode 3 will follow this same test mode.	
3	Normal Link - EUT in Z axis - 5GHz
For operating mode 2 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
The EUT was performed in X axis, Y axis and Z axis position. The worst case was found in X axis, so it was selected to perform test and its test result was written in the report.	
1	EUT in X axis - 2.4GHz

2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

N/A

2.5 Support Equipment

For Test Site No: CO01-CB

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	AP Router	ASUS	RP-N53	MSQ-RPN53
2	NB	Lenovo	TP00018A	DoC
3	Earphone	SHYARO CHI	MIC-04	DoC
4	Mouse	HP	FM100	DoC

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

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB	DELL	E4300	DoC
2	WLAN AP	D-LINK	DIR860L	KA2IR860LA1
3	Mouse	Logitech	M-U0026	DoC
4	Earphone	SHYARO CHI	MIC-04	N/A

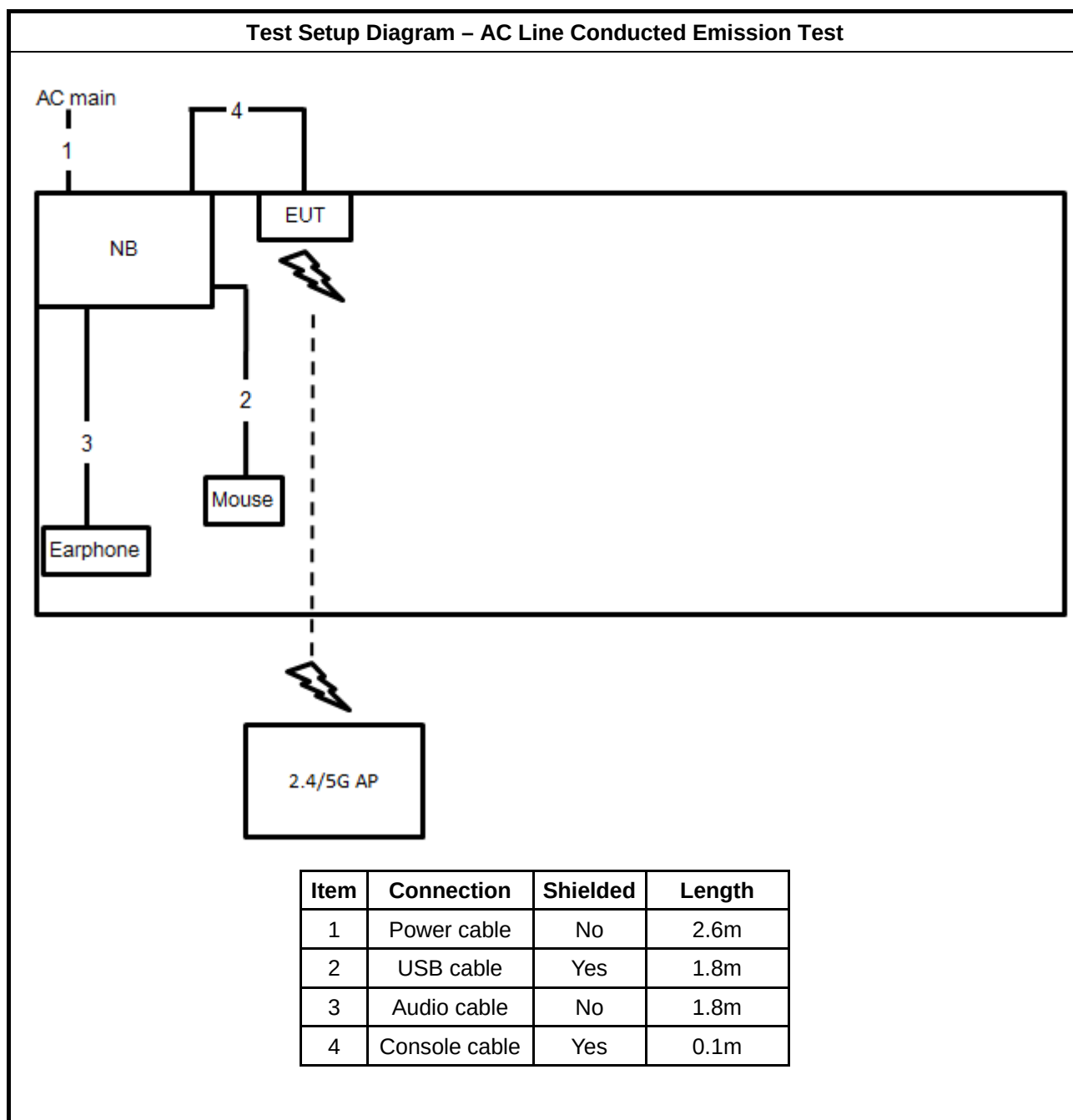
For Test Site No: 03CH01-CB (above 1GHz)

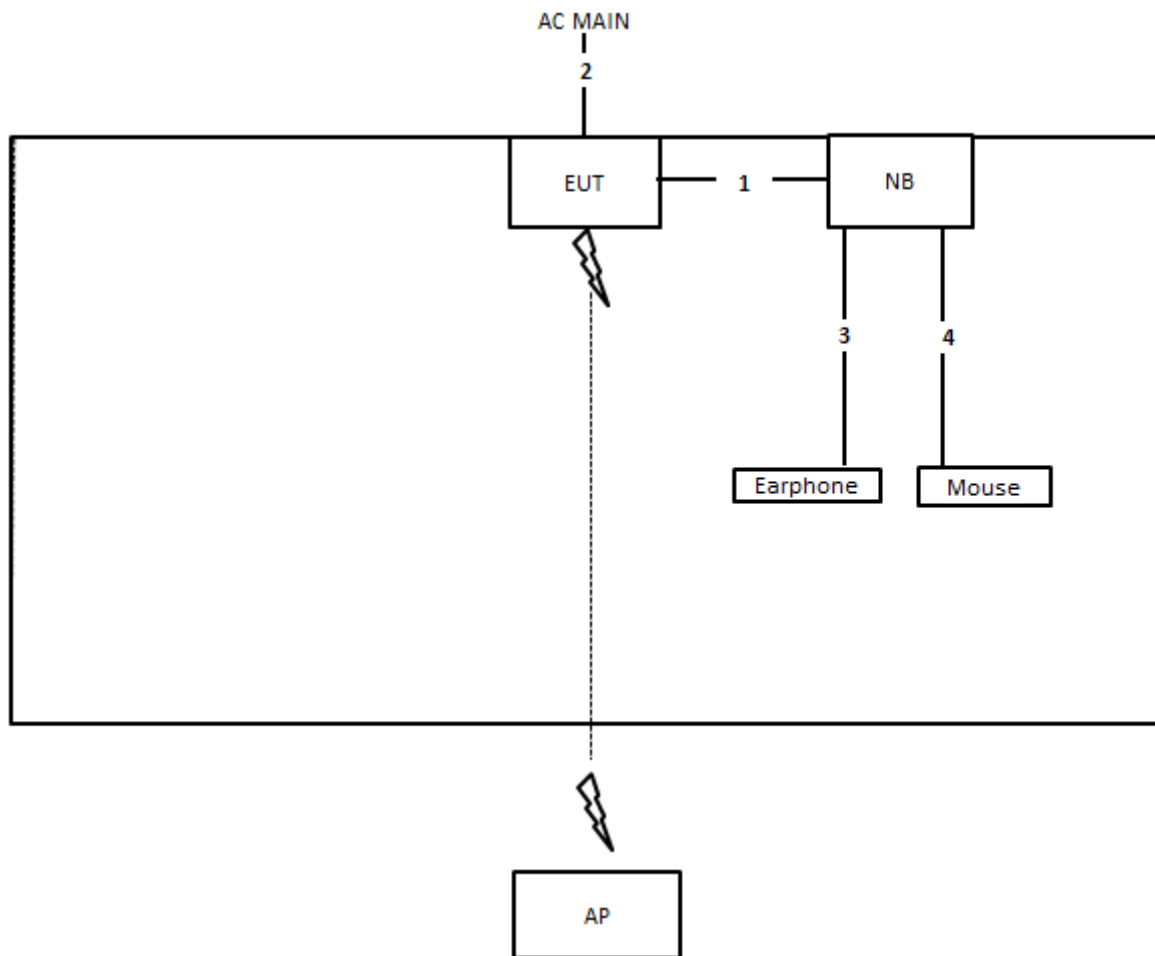
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB	DELL	E4300	DoC

For Test Site No: TH01-CB

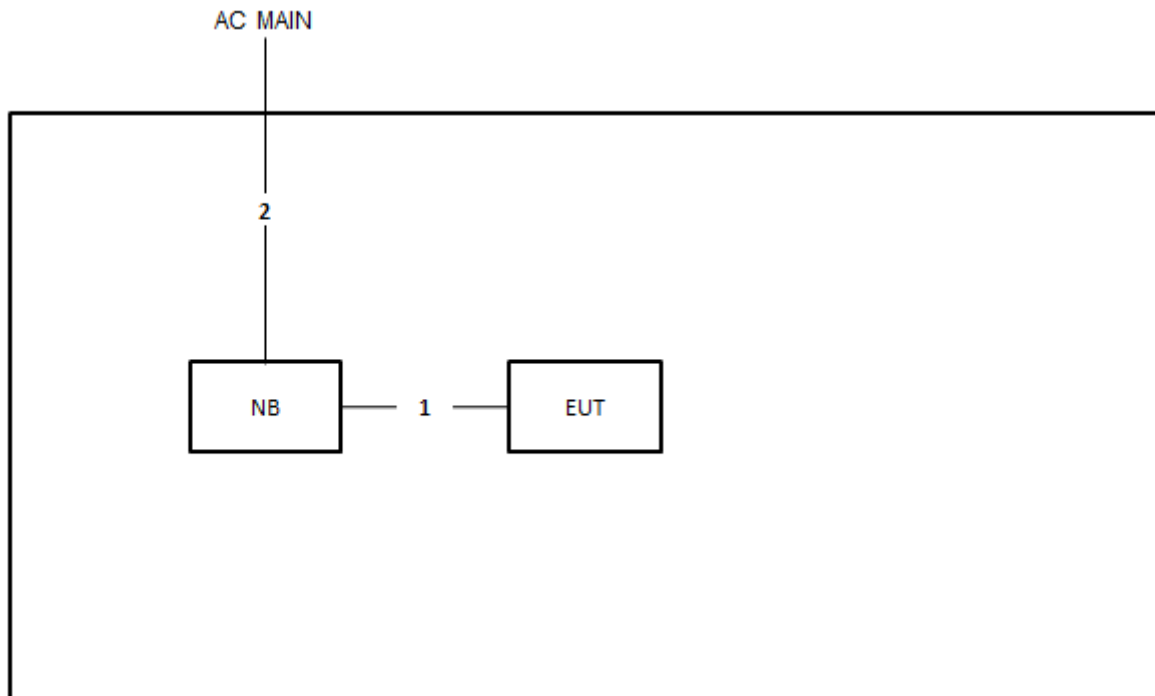
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB	DELL	E4300	DoC

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test < 1GHz


Item	Connection	Shielded	Length
1	Console cable	Yes	0.1m
2	Power cable	No	1.5m
3	Audio cable	No	1.1m
4	USB cable	Yes	1.8m

Test Setup Diagram - Radiated Test > 1GHz


Item	Connection	Shielded	Length
1	Console cable	Yes	0.1m
2	Power cable	No	2.6m

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.		

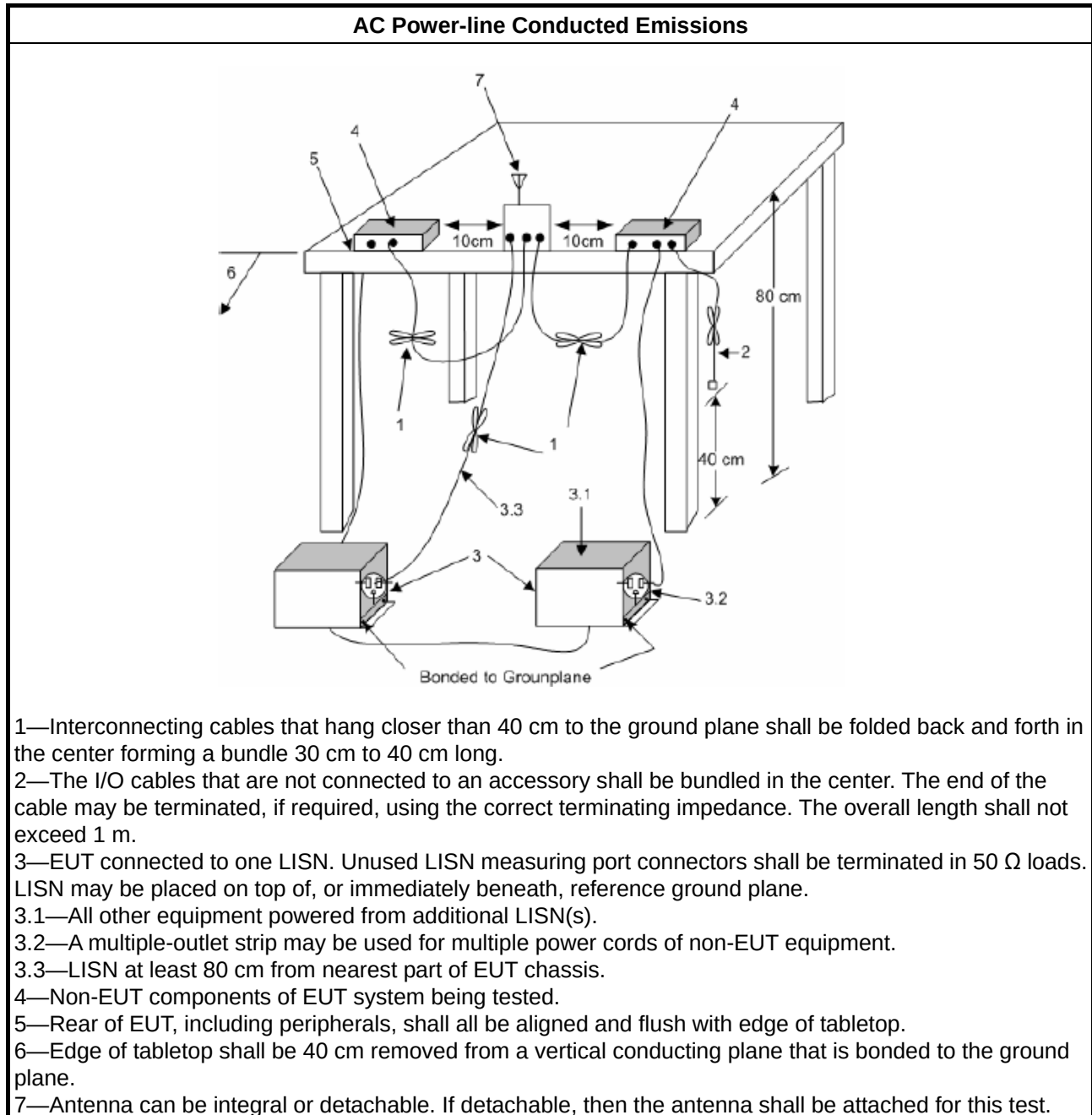
3.1.2 Measuring Instruments

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.

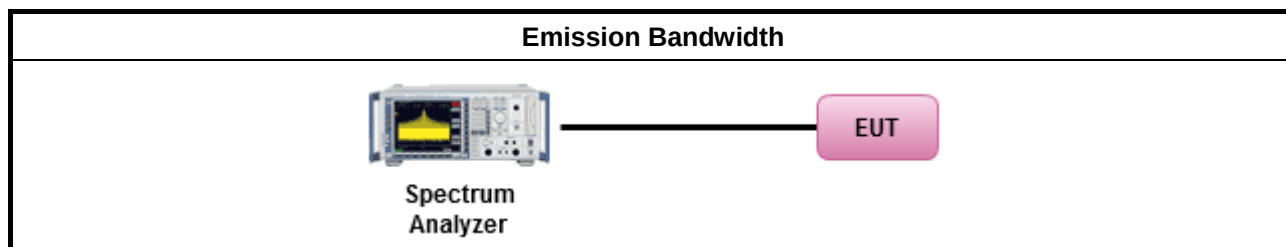
3.2.2 Measuring Instruments

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 maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

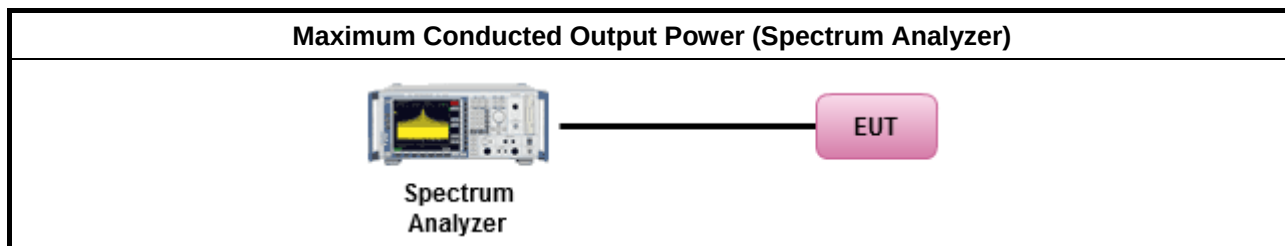
3.3.2 Measuring Instruments

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 $\geq$ EBW method).
	☐ Refer as FCC KDB 558074, clause 9.1.2 Option 2 (peak power meter for VBW $\geq$ DTS BW)
▪ Maximum Conducted Output Power	
	[duty cycle $\geq$ 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) $\leq$ 8 dBm/3kHz

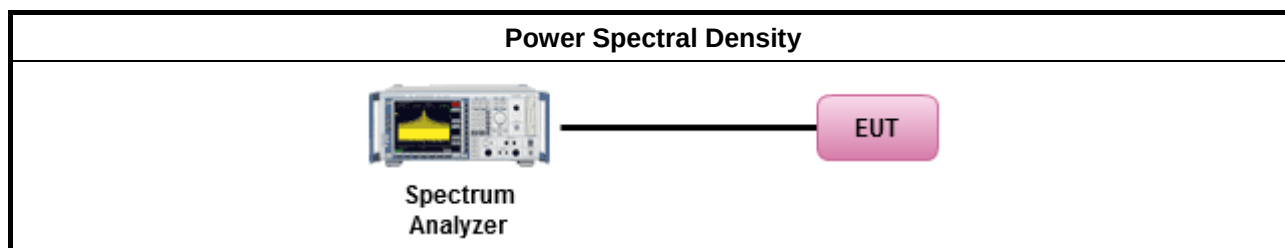
3.4.2 Measuring Instruments

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).
☒	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 AVGPS-1 (spectral trace averaging).
☐	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
☐	Refer as FCC KDB 558074, clause 10.5 Method AVGPS-1 Alt (spectral trace averaging).
☐	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:
☒	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.	

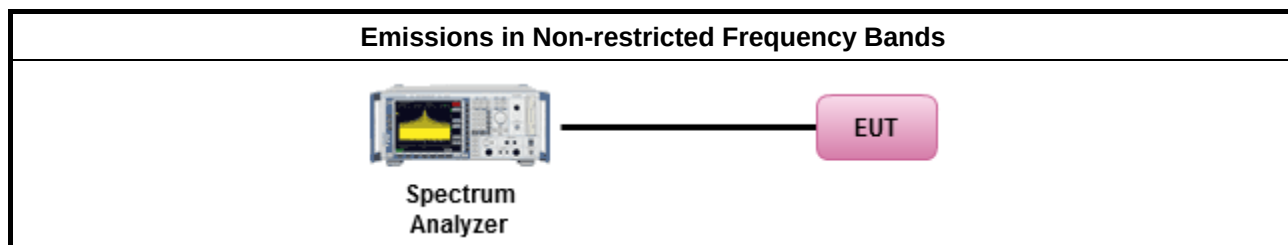
3.5.2 Measuring Instruments

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.

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

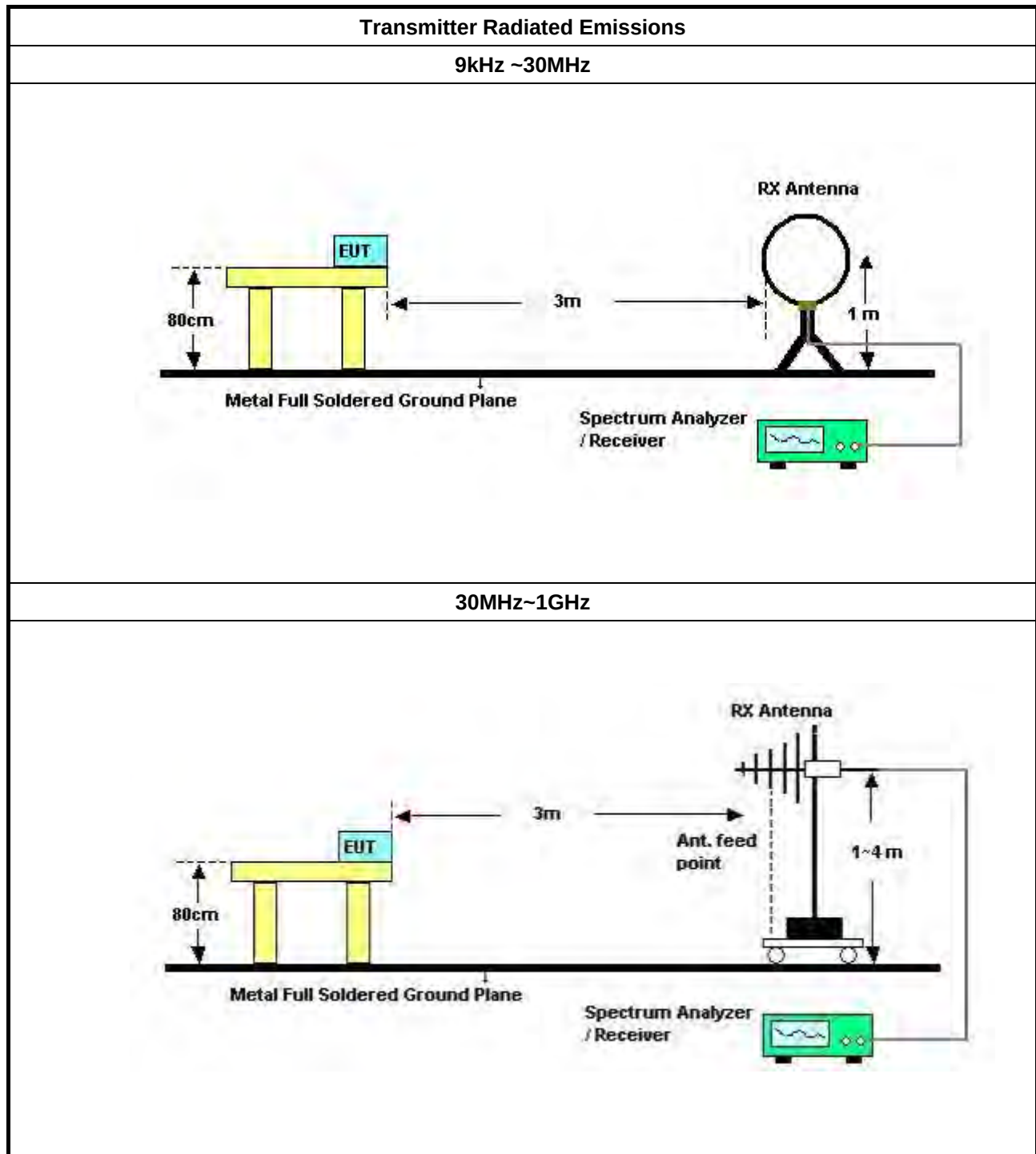
3.6.2 Measuring Instruments

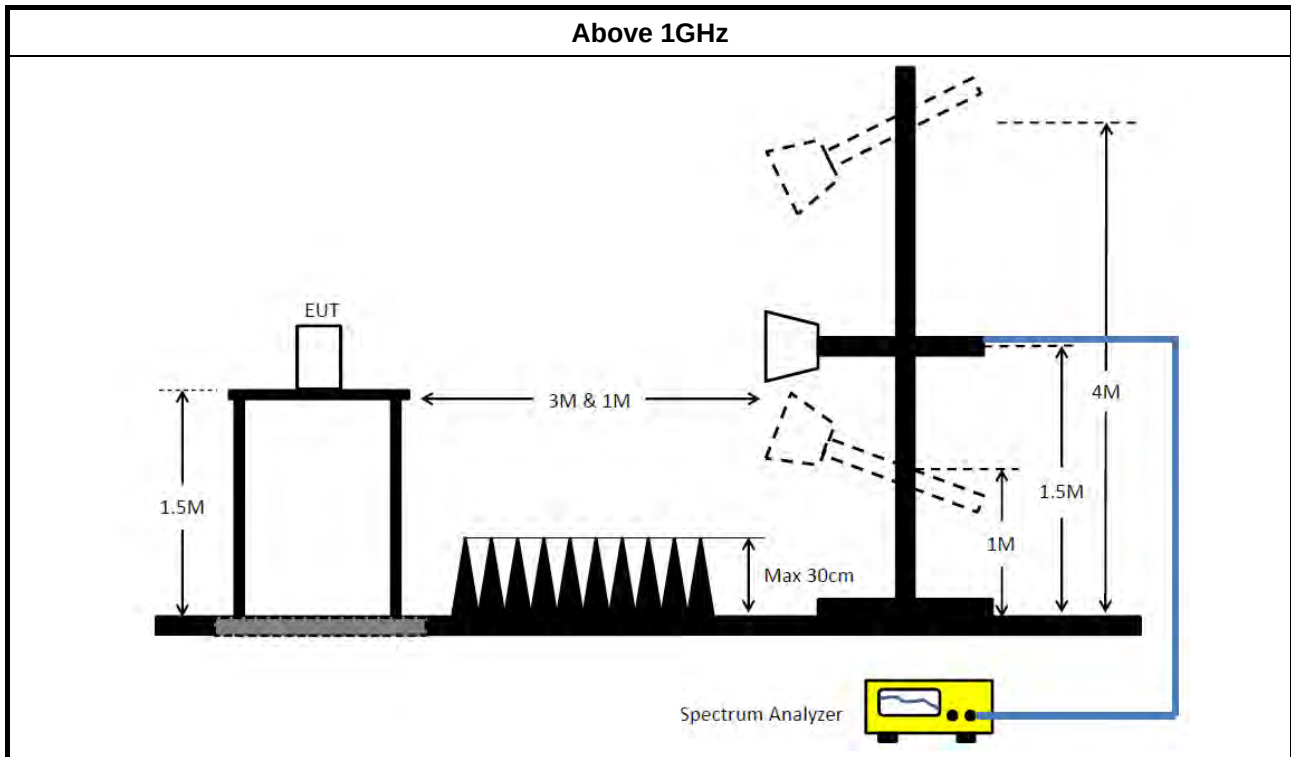
Refer a test equipment and calibration data table in this test report.

3.6.3 Test Procedures

Test Method	
The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].	
Refer as ANSI C63.10, clause 6.9.2.2 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.	
For the transmitter unwanted emissions shall be measured using following options below:	
	Refer as FCC KDB 558074, clause 12 for unwanted emissions into restricted bands.
	☐ Refer as FCC KDB 558074, clause 12.2.5.1 Option 1 (trace averaging for duty cycle $\geq 98\%$)
	☐ 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	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 23, 2017	Jan. 22, 2018	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 14, 2016	Dec. 13, 2017	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Dec. 21, 2016	Dec. 20, 2017	Conduction (CO01-CB)
COND Cable	Woken	Cable	01	150kHz ~ 30MHz	May 23, 2017	May 22, 2018	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2016*	Mar. 15, 2018*	Radiation (03CH01-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Aug. 30, 2017	Aug. 29, 2018	Radiation (03CH01-CB)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1370	1GHz~18GHz	Jun. 23, 2017	Jun. 22, 2018	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 05, 2017	Jul. 04, 2018	Radiation (03CH01-CB)
Pre-Amplifier	EMCI	EMC330N	980332	20MHz ~ 3GHz	May 02, 2017	May 01, 2018	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 16, 2017	Jan. 15, 2018	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Nov. 22, 2016	Nov. 21, 2017	Radiation (03CH01-CB)
EMI Test	R&S	ESCS	100355	9kHz ~ 2.75GHz	May 06, 2017	May 05, 2018	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-16+17	N/A	30 MHz ~ 1 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16+17	N/A	1 GHz ~ 18 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#1	N/A	18GHz ~ 40 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
Test Software	Audix	E3	6.2009-I0-7	N/A	N/A	N/A	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 26, 2016	Dec. 25, 2017	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz ~ 26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz ~ 26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz ~ 26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz ~ 26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)



FCC Test Report

Report No. : FR7N0309AA

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-10	1 GHz ~26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410002	50MHz~18GHz	Nov. 22, 2016	Nov. 21, 2017	Conducted (TH01-CB)

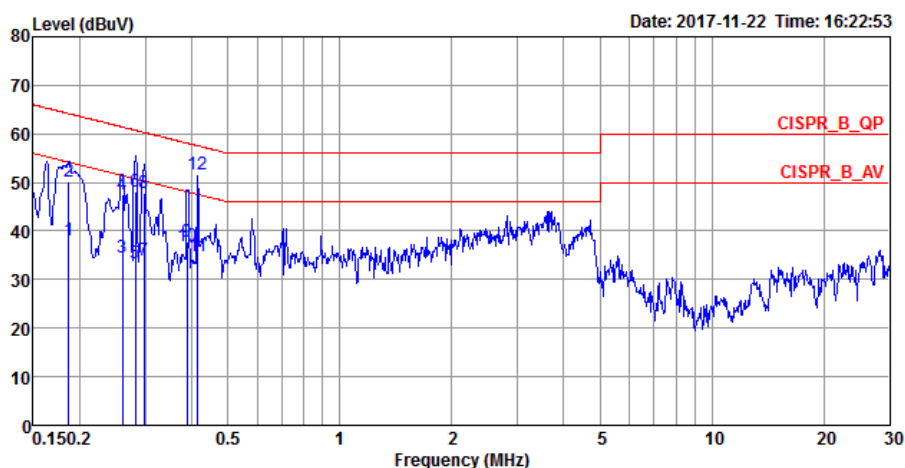
Note: Calibration Interval of instruments listed above is one year.

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

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

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Neutral
Operating Function	Normal Link		



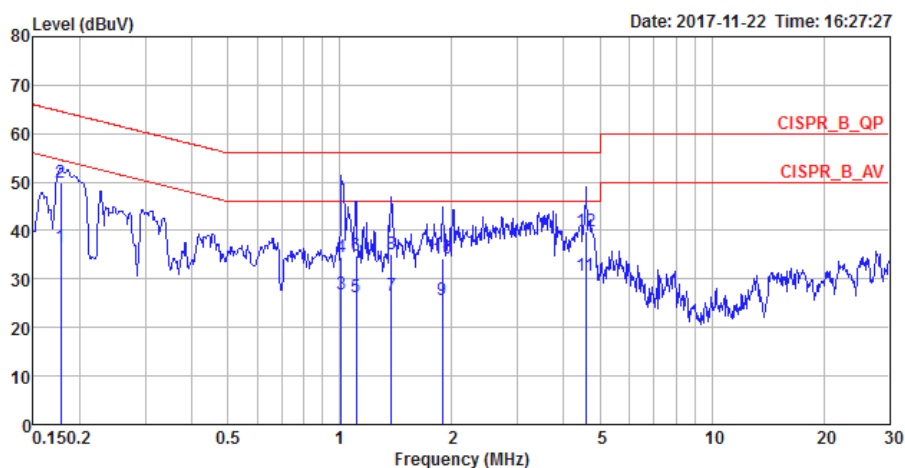
	Freq	Level	Over	Limit	Read	LISN	Cable	Remark	Pol/Phase
	MHz	dBuV	Limit	Line	Level	Factor	Loss		
			dB	dBuV	dBuV	dB	dB		
1	0.1864	38.16	-16.04	54.20	28.17	9.98	0.01	Average	NEUTRAL
2	0.1864	50.23	-13.97	64.20	40.24	9.98	0.01	QP	NEUTRAL
3	0.2603	34.65	-16.77	51.42	24.68	9.95	0.02	Average	NEUTRAL
4	0.2603	47.39	-14.03	61.42	37.42	9.95	0.02	QP	NEUTRAL
5	0.2824	33.32	-17.43	50.75	23.35	9.95	0.02	Average	NEUTRAL
6	0.2824	48.23	-12.52	60.75	38.26	9.95	0.02	QP	NEUTRAL
7	0.2977	33.88	-16.43	50.31	23.91	9.95	0.02	Average	NEUTRAL
8	0.2977	47.82	-12.49	60.31	37.85	9.95	0.02	QP	NEUTRAL
9	0.3889	37.66	-10.43	48.09	27.69	9.94	0.03	Average	NEUTRAL
10	0.3889	37.02	-21.07	58.09	27.05	9.94	0.03	QP	NEUTRAL
11	0.4144	34.88	-12.68	47.56	24.91	9.94	0.03	Average	NEUTRAL
12	0.4144	51.52	-6.04	57.56	41.55	9.94	0.03	QP	NEUTRAL

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

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

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	Normal Link		



	Freq	Level	Over	Limit	Read	LISN	Cable	Remark	Pol/Phase
	MHz	dBuV	Limit	Line	Level	Factor	Loss		
			dB	dBuV	dBuV	dB	dB		
1	0.1777	36.70	-17.89	54.59	26.75	9.94	0.01	Average	LINE
2	0.1777	49.89	-14.70	64.59	39.94	9.94	0.01	QP	LINE
3	1.0101	26.78	-19.22	46.00	16.80	9.96	0.02	Average	LINE
4	1.0101	34.45	-21.55	56.00	24.47	9.96	0.02	QP	LINE
5	1.1062	26.22	-19.78	46.00	16.23	9.97	0.02	Average	LINE
6	1.1062	34.93	-21.07	56.00	24.94	9.97	0.02	QP	LINE
7	1.3732	26.60	-19.40	46.00	16.59	9.98	0.03	Average	LINE
8	1.3732	35.07	-20.93	56.00	25.06	9.98	0.03	QP	LINE
9	1.8887	25.59	-20.41	46.00	15.53	10.01	0.05	Average	LINE
10	1.8887	34.39	-21.61	56.00	24.33	10.01	0.05	QP	LINE
11	4.5736	30.56	-15.44	46.00	20.54	9.95	0.07	Average	LINE
12	4.5736	39.71	-16.29	56.00	29.69	9.95	0.07	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

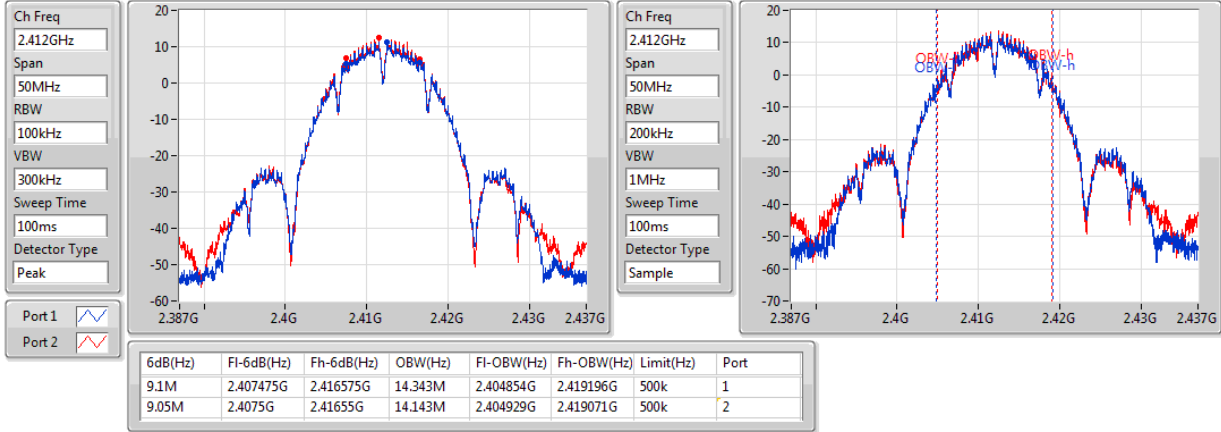
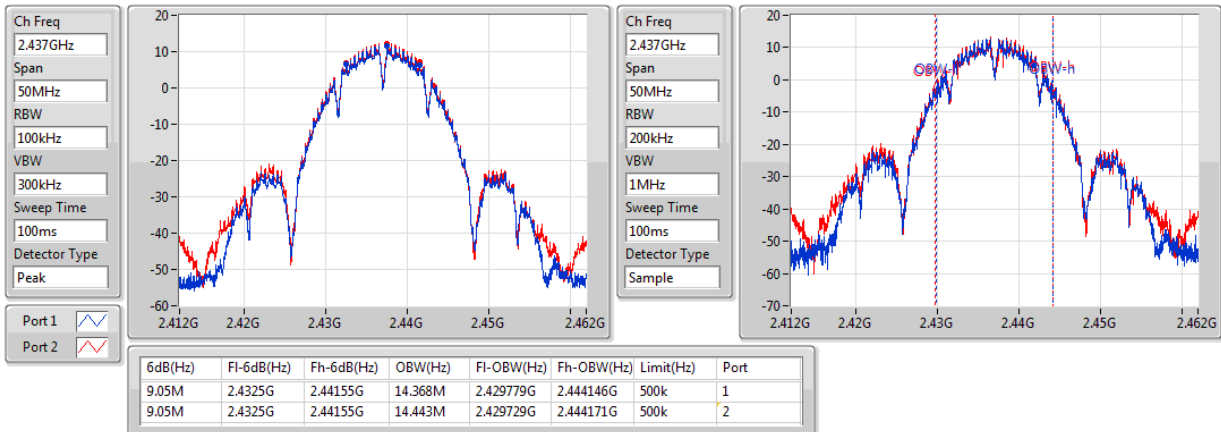
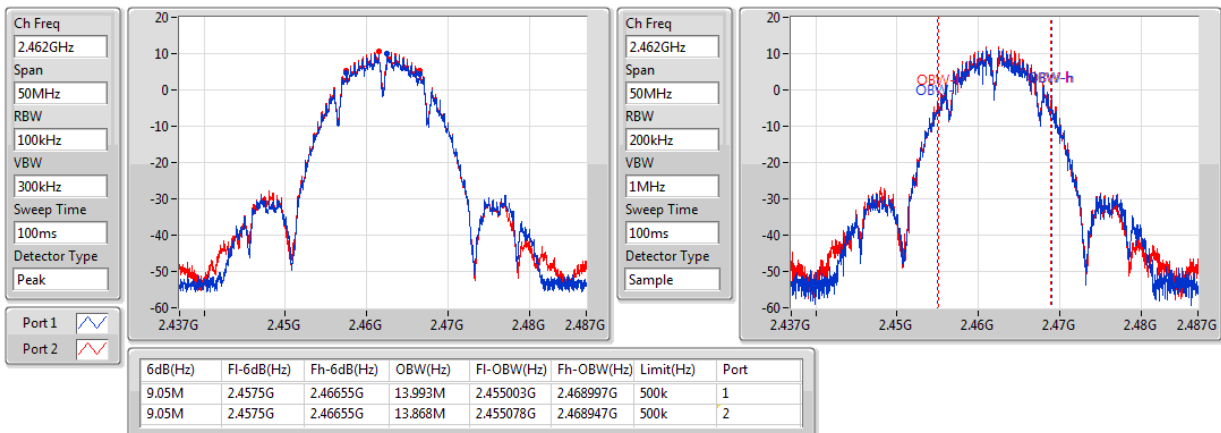
Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	9.1M	14.443M	14M4G1D	9.05M	13.868M
802.11g_Nss1,(6Mbps)_2TX	15.65M	16.492M	16M5D1D	13.825M	16.342M
802.11ac VHT20_Nss1,(MCS0)_2TX	16.25M	17.566M	17M6D1D	15.025M	17.516M
802.11ac VHT40_Nss1,(MCS0)_2TX	35.3M	36.032M	36M0D1D	33.2M	35.932M

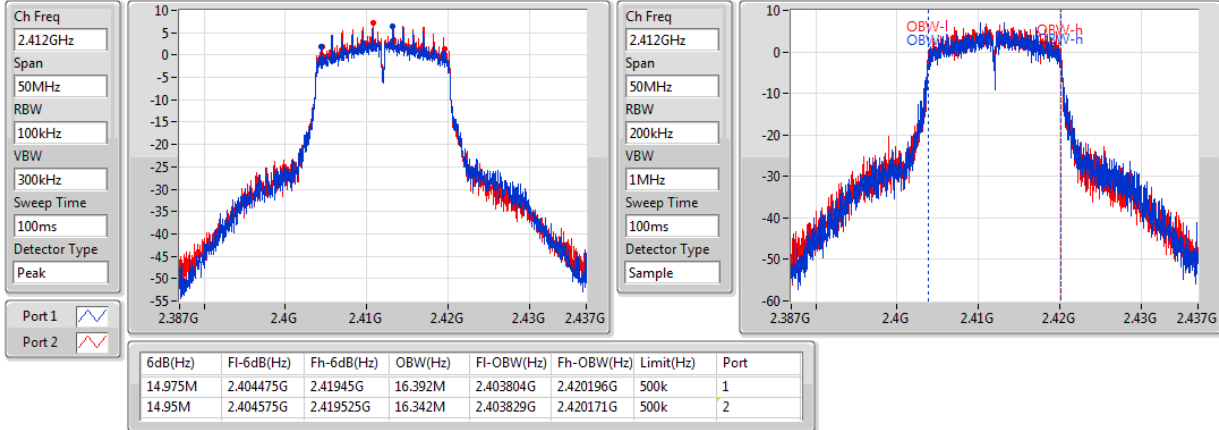
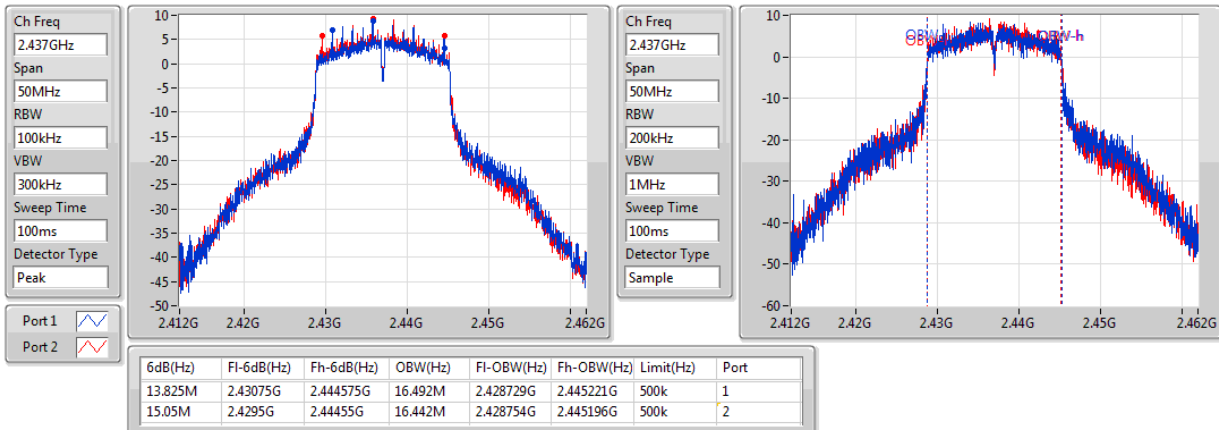
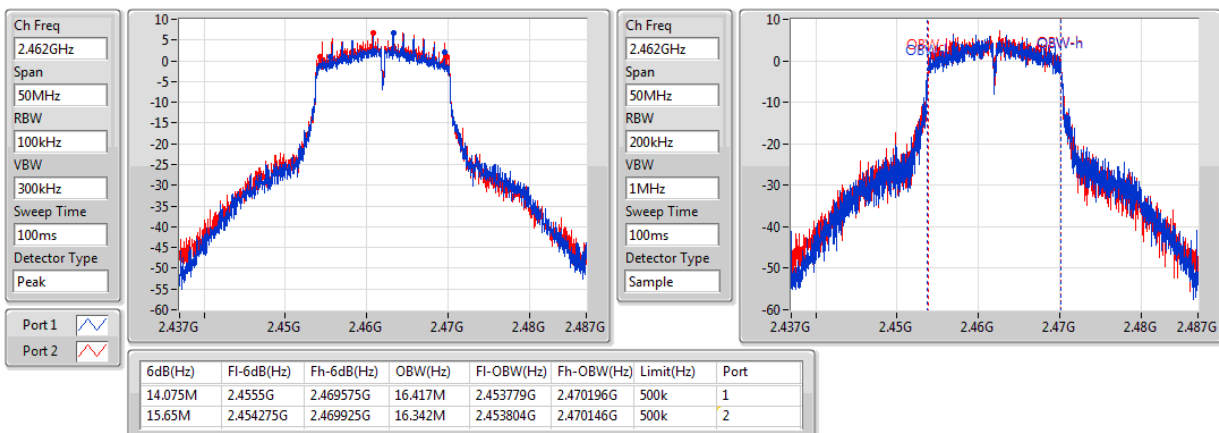
Max-N dB = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

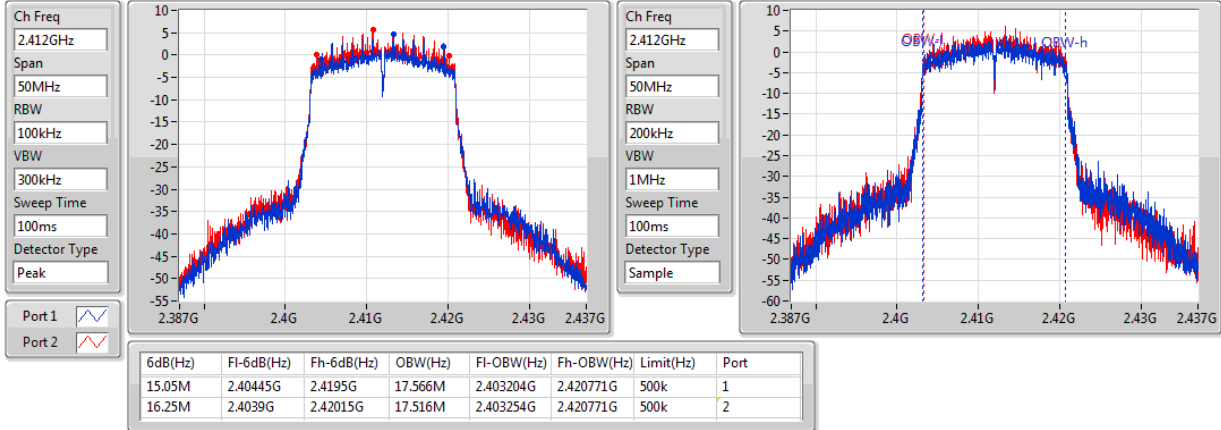
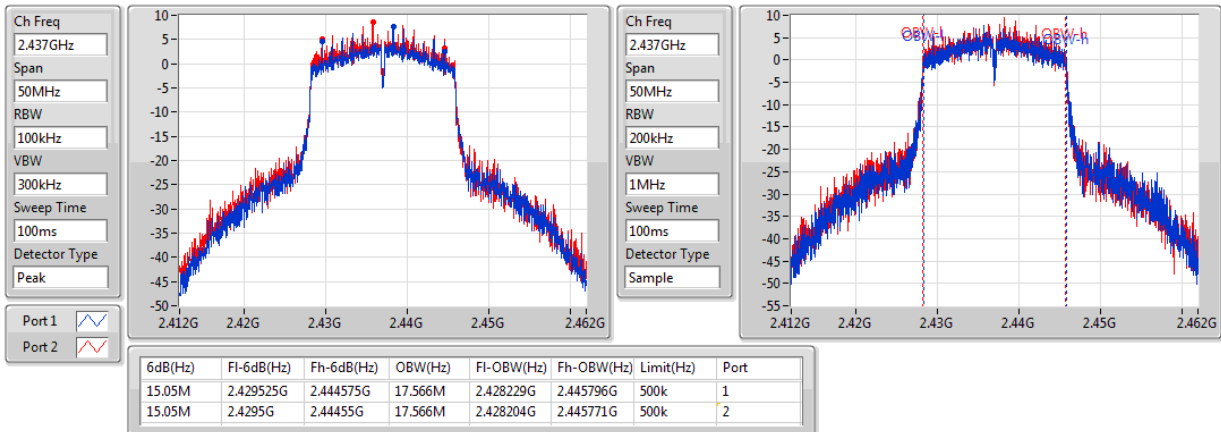
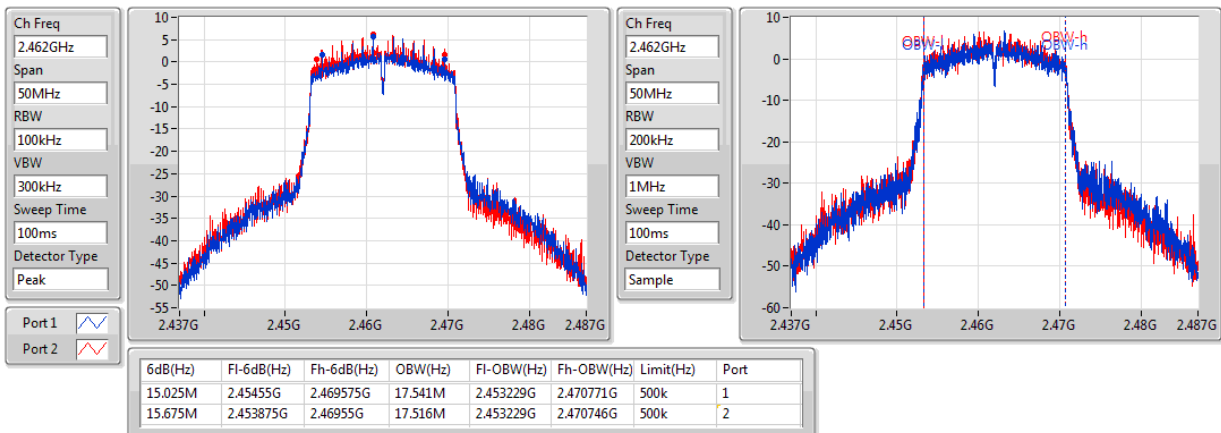
Result

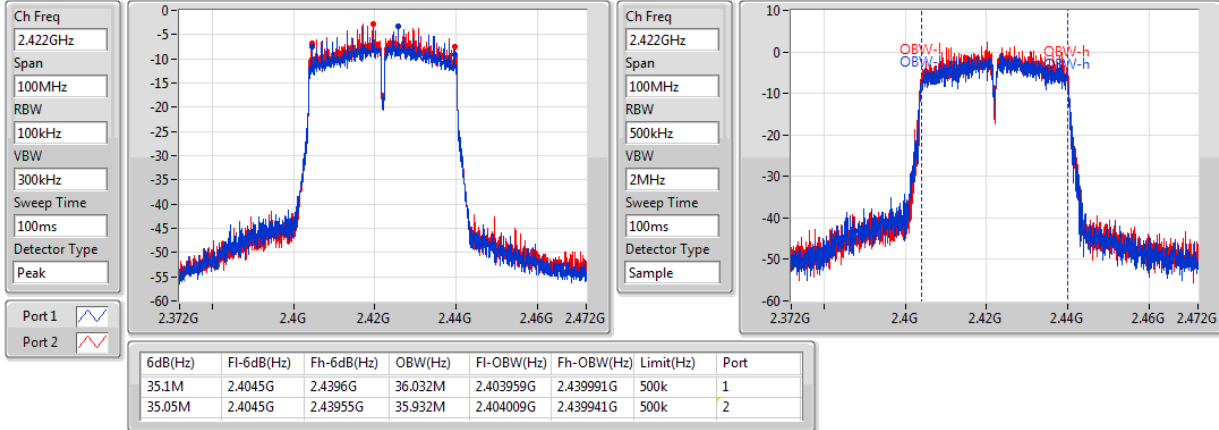
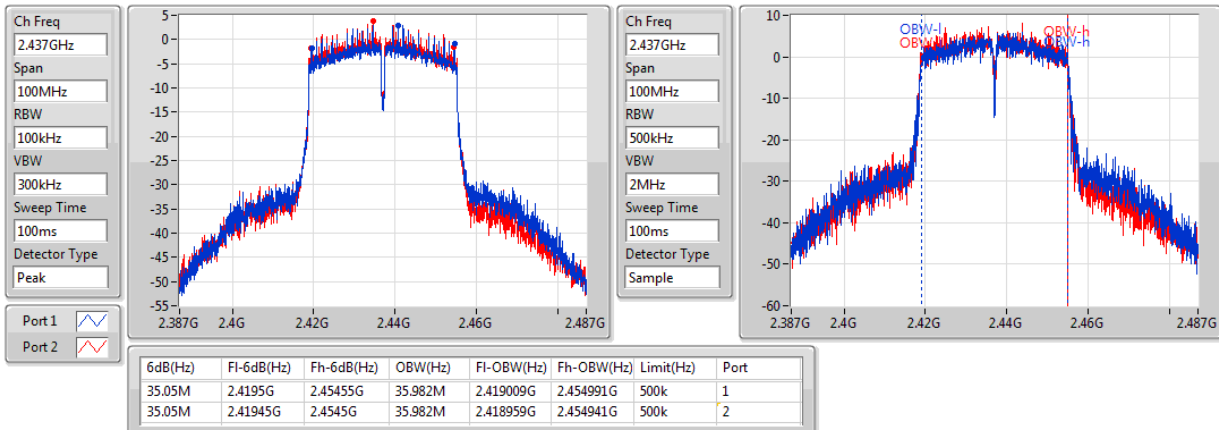
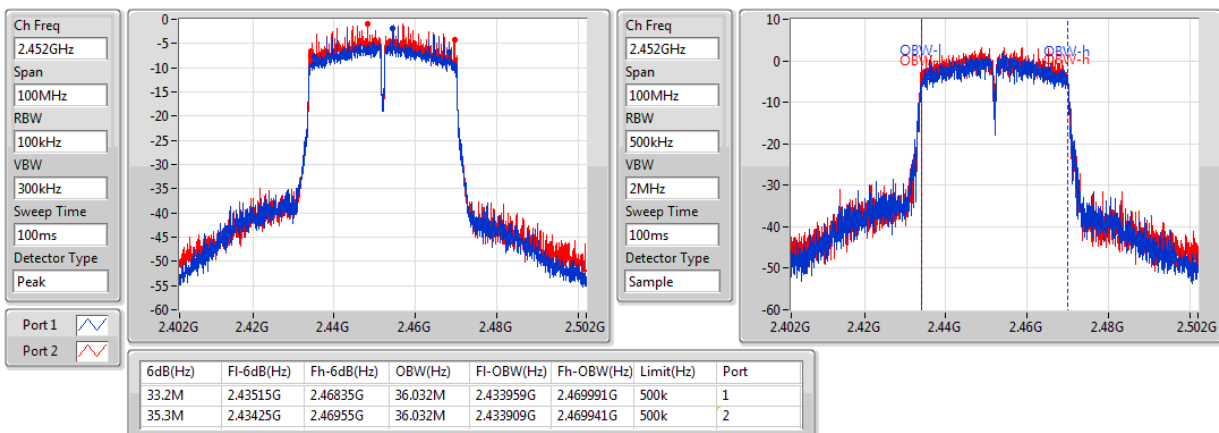
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	9.1M	14.343M	9.05M	14.143M
2437MHz	Pass	500k	9.05M	14.368M	9.05M	14.443M
2462MHz	Pass	500k	9.05M	13.993M	9.05M	13.868M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	14.975M	16.392M	14.95M	16.342M
2437MHz	Pass	500k	13.825M	16.492M	15.05M	16.442M
2462MHz	Pass	500k	14.075M	16.417M	15.65M	16.342M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	15.05M	17.566M	16.25M	17.516M
2437MHz	Pass	500k	15.05M	17.566M	15.05M	17.566M
2462MHz	Pass	500k	15.025M	17.541M	15.675M	17.516M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	35.1M	36.032M	35.05M	35.932M
2437MHz	Pass	500k	35.05M	35.982M	35.05M	35.982M
2452MHz	Pass	500k	33.2M	36.032M	35.3M	36.032M

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

802.11b_(1Mbps)_2TX
EBW
2412MHz

802.11b_(1Mbps)_2TX
EBW
2437MHz

802.11b_(1Mbps)_2TX
EBW
2462MHz


802.11g_(6Mbps)_2TX
EBW
2412MHz

802.11g_(6Mbps)_2TX
EBW
2437MHz

802.11g_(6Mbps)_2TX
EBW
2462MHz


802.11ac VHT20_Nss1,(MCS0)_2TX
EBW
2412MHz

802.11ac VHT20_Nss1,(MCS0)_2TX
EBW
2437MHz

802.11ac VHT20_Nss1,(MCS0)_2TX
EBW
2462MHz


802.11ac VHT40_Nss1,(MCS0)_2TX
EBW
2422MHz

802.11ac VHT40_Nss1,(MCS0)_2TX
EBW
2437MHz

802.11ac VHT40_Nss1,(MCS0)_2TX
EBW
2452MHz


**Summary**

Mode	Total Power (dBm)	Total Power (W)
802.11b_(1Mbps)_2TX	-	-
2.4-2.4835GHz	24.81	0.30269
802.11g_(6Mbps)_2TX	-	-
2.4-2.4835GHz	22.42	0.17458
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-
2.4-2.4835GHz	21.47	0.14028
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-
2.4-2.4835GHz	19.59	0.09099

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.30	21.38	22.09	24.76	30.00
2437MHz	Pass	4.30	21.47	22.10	24.81	30.00
2462MHz	Pass	4.30	19.78	20.41	23.12	30.00
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.30	17.16	17.86	20.53	30.00
2417MHz	Pass	4.30	18.63	19.45	22.07	30.00
2437MHz	Pass	4.30	19.21	19.61	22.42	30.00
2457MHz	Pass	4.30	19.05	19.44	22.26	30.00
2462MHz	Pass	4.30	17.16	17.86	20.53	30.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.30	15.33	16.23	18.81	30.00
2417MHz	Pass	4.30	17.85	18.57	21.24	30.00
2437MHz	Pass	4.30	17.97	18.90	21.47	30.00
2457MHz	Pass	4.30	17.80	18.63	21.25	30.00
2462MHz	Pass	4.30	16.00	16.83	19.45	30.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	4.30	10.07	10.87	13.50	30.00
2427MHz	Pass	4.30	9.77	11.32	13.62	30.00
2432MHz	Pass	4.30	11.32	12.85	15.16	30.00
2437MHz	Pass	4.30	16.27	16.87	19.59	30.00
2442MHz	Pass	4.30	14.75	15.78	18.31	30.00
2447MHz	Pass	4.30	13.95	14.61	17.30	30.00
2452MHz	Pass	4.30	12.21	13.14	15.71	30.00

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

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_2TX	-2.45
802.11g_Nss1,(6Mbps)_2TX	-5.20
802.11ac VHT20_Nss1,(MCS0)_2TX	-6.68
802.11ac VHT40_Nss1,(MCS0)_2TX	-9.17

RBW=3kHz.

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.81	-4.34	-3.93	-2.45	7.19
2437MHz	Pass	6.81	-3.60	-4.10	-2.60	7.19
2462MHz	Pass	6.81	-5.85	-3.28	-2.66	7.19
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.81	-8.98	-8.93	-7.31	7.19
2437MHz	Pass	6.81	-6.80	-6.49	-5.20	7.19
2462MHz	Pass	6.81	-10.63	-8.03	-7.40	7.19
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.81	-11.63	-10.58	-9.53	7.19
2437MHz	Pass	6.81	-9.26	-7.71	-6.68	7.19
2462MHz	Pass	6.81	-10.59	-9.96	-7.29	7.19
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	6.81	-19.13	-18.31	-16.98	7.19
2437MHz	Pass	6.81	-13.28	-10.83	-9.17	7.19
2452MHz	Pass	6.81	-17.08	-16.37	-14.16	7.19

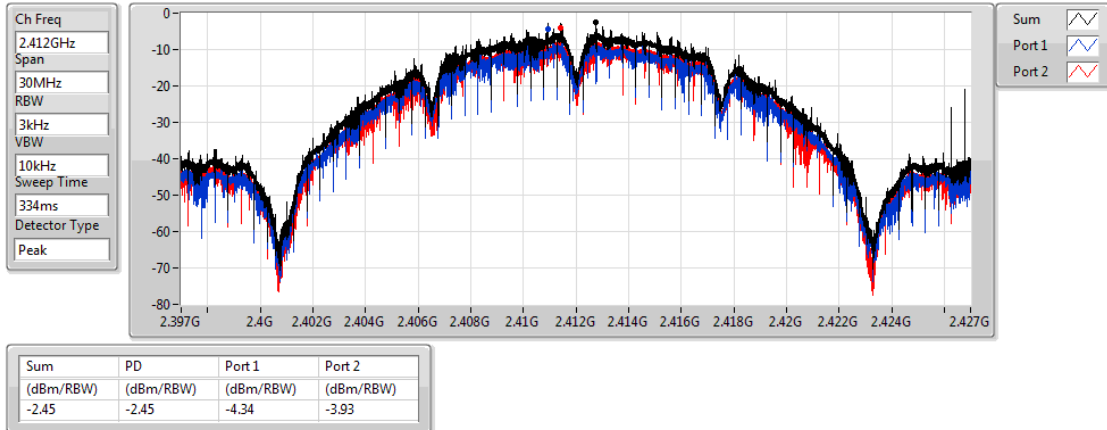
DG = Directional Gain; RBW=3kHz;

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)_2TX

PSD

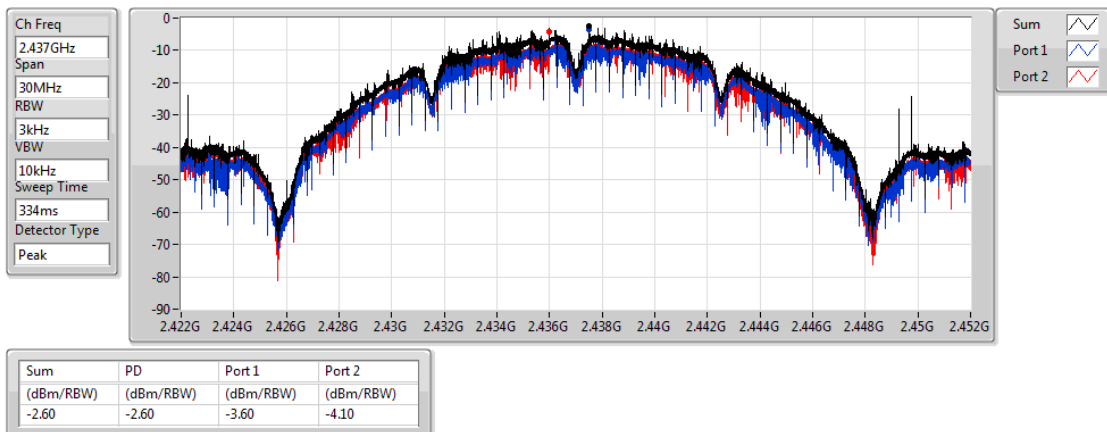
2412MHz



802.11b_(1Mbps)_2TX

PSD

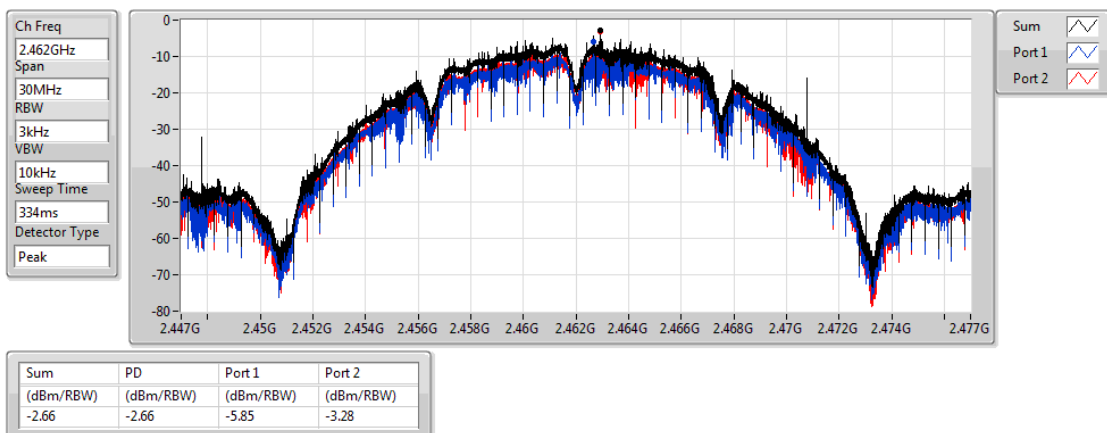
2437MHz



802.11b_(1Mbps)_2TX

PSD

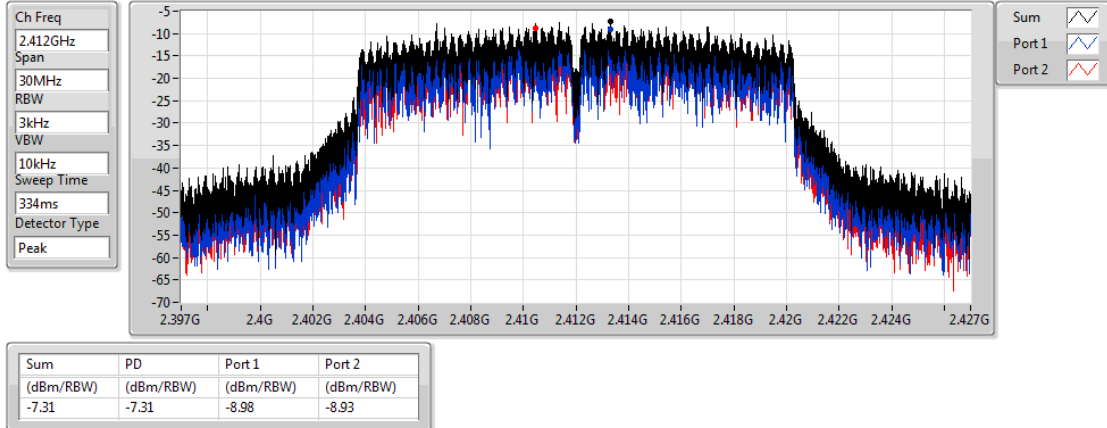
2462MHz



802.11g_(6Mbps)_2TX

PSD

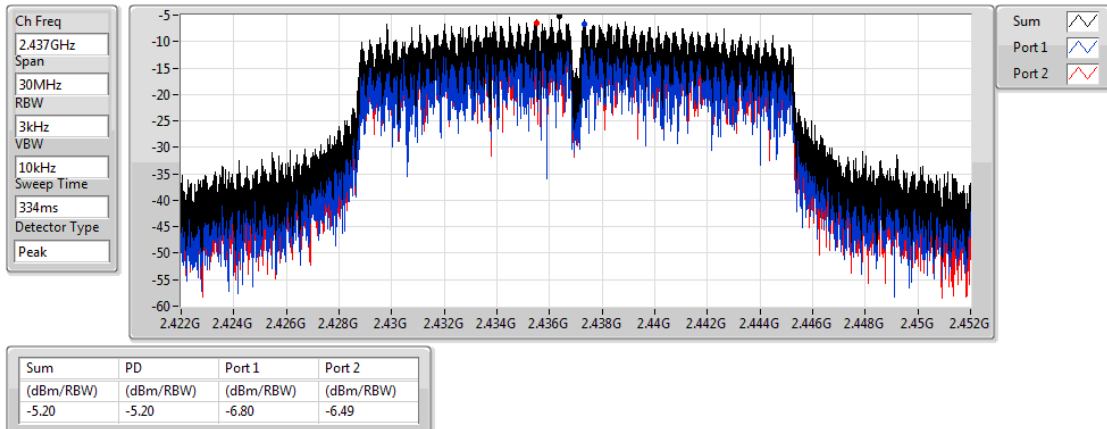
2412MHz



802.11g_(6Mbps)_2TX

PSD

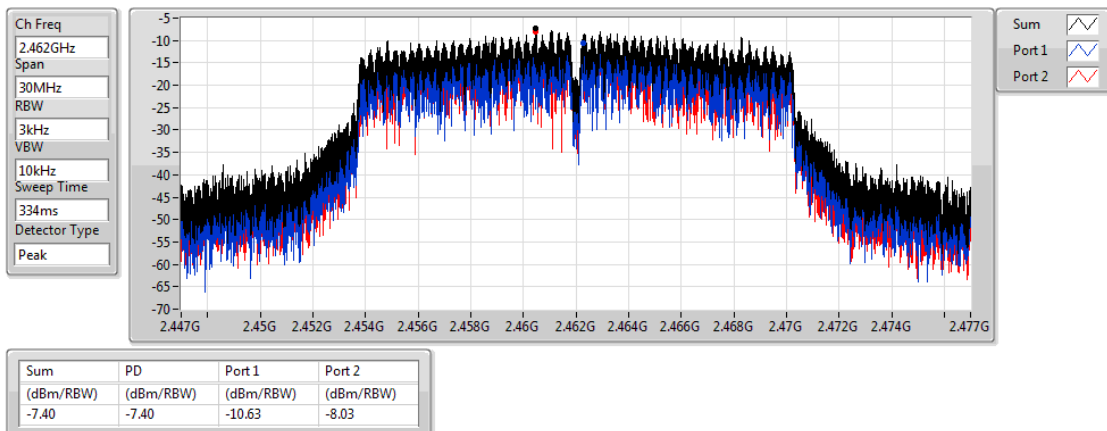
2437MHz



802.11g_(6Mbps)_2TX

PSD

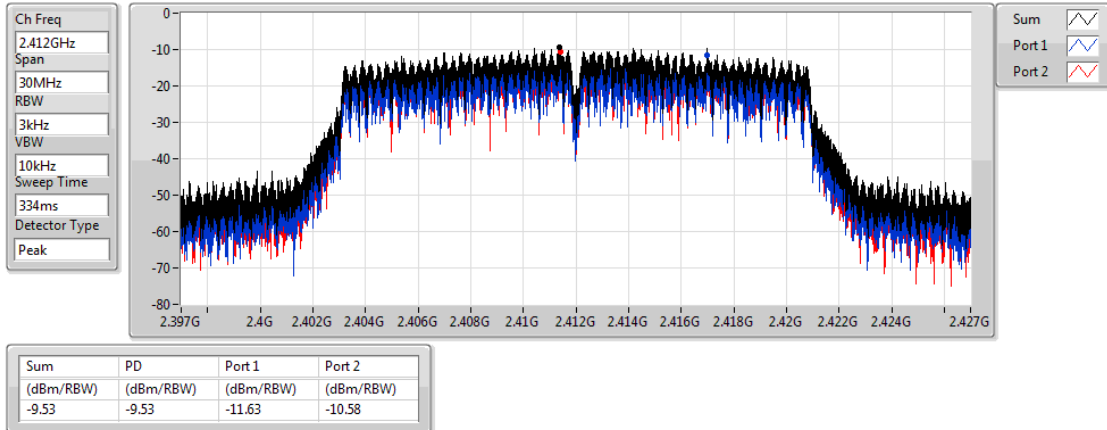
2462MHz



802.11ac VHT20_Nss1,(MCS0)_2TX

PSD

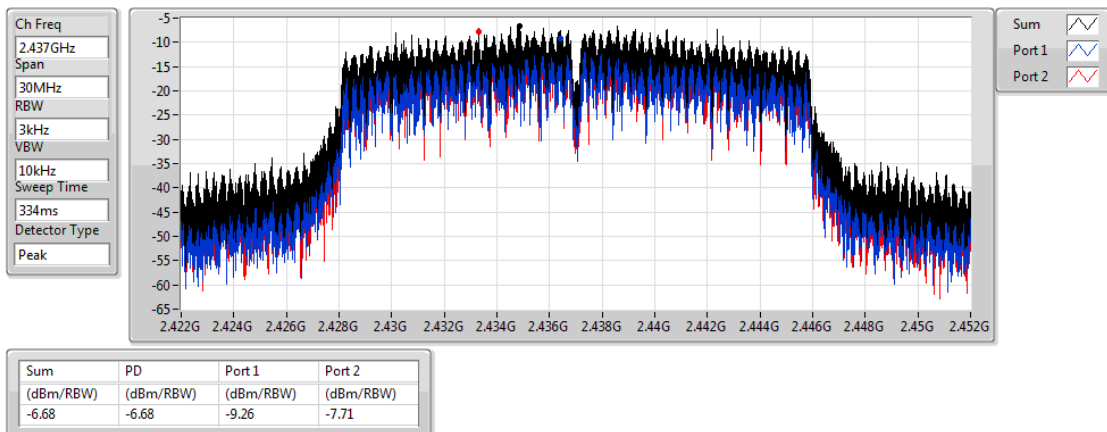
2412MHz



802.11ac VHT20_Nss1,(MCS0)_2TX

PSD

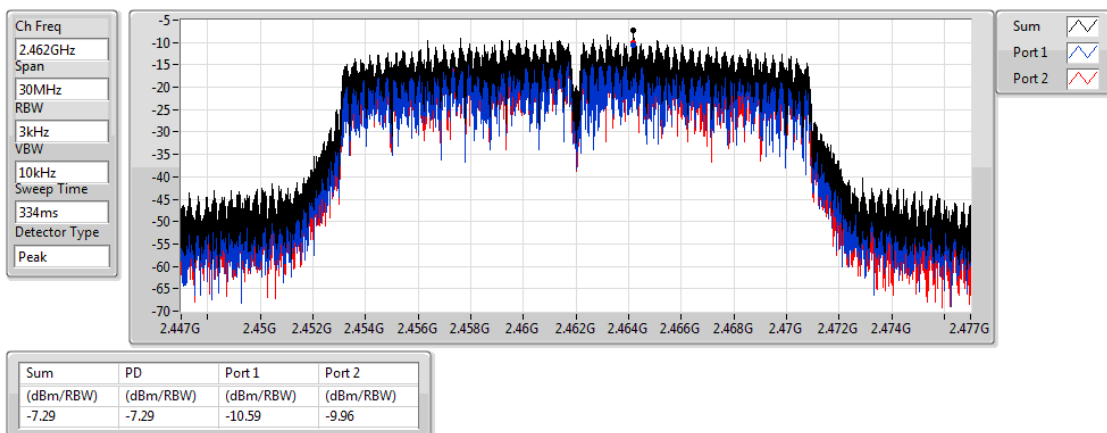
2437MHz



802.11ac VHT20_Nss1,(MCS0)_2TX

PSD

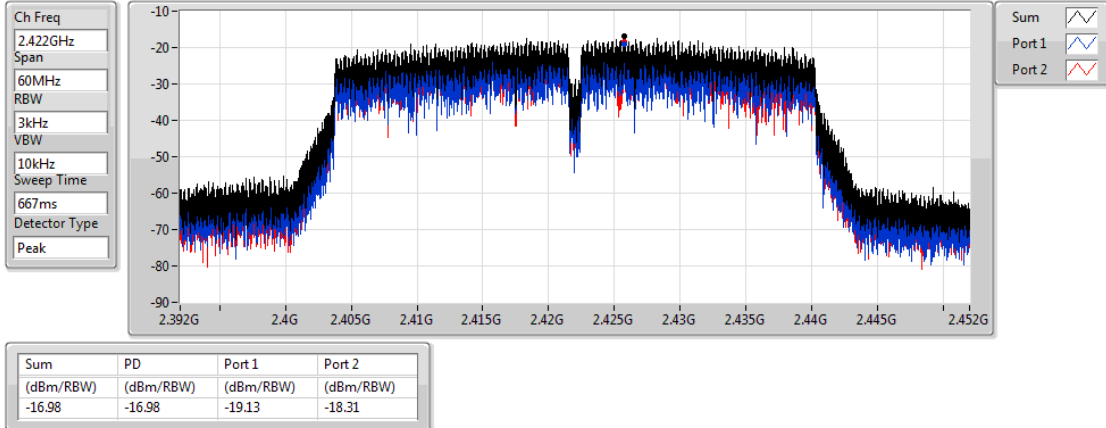
2462MHz



802.11ac VHT40_Nss1,(MCS0)_2TX

PSD

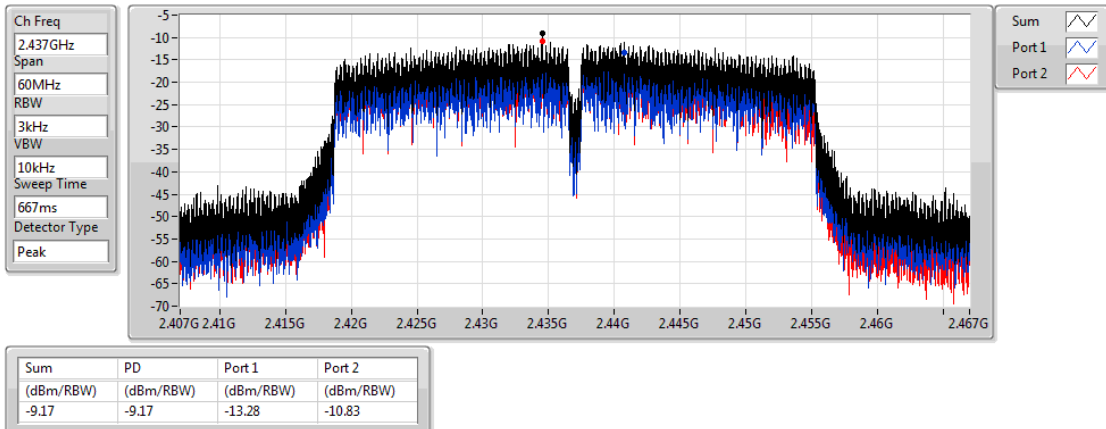
2422MHz



802.11ac VHT40_Nss1,(MCS0)_2TX

PSD

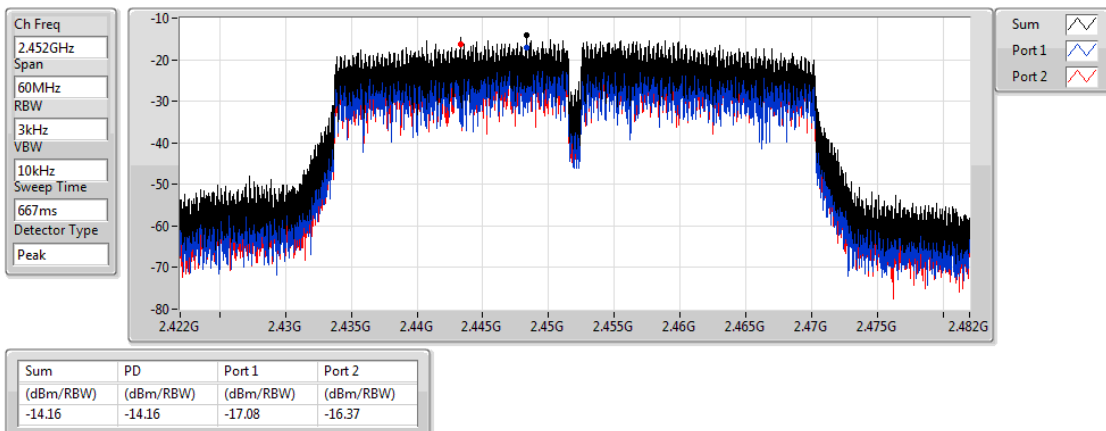
2437MHz



802.11ac VHT40_Nss1,(MCS0)_2TX

PSD

2452MHz



Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	2.438076G	11.79	-18.21	2.167775G	-60.78	2.39704G	-23.79	2.49502G	-58.28	7.235136G	-37.43	1
802.11g_Nss1,(6Mbps)_2TX	Pass	2.438243G	8.56	-21.44	2.309905G	-57.99	2.39992G	-24.48	2.48838G	-57.68	7.235136G	-42.75	2
802.11ac_VHT20_Nss1,(MCS0)_2TX	Pass	2.435738G	7.22	-22.78	2.30641G	-59.50	2.39888G	-30.14	2.48446G	-57.75	7.235136G	-44.34	2
802.11ac_VHT40_Nss1,(MCS0)_2TX	Pass	2.432064G	3.89	-26.11	2.307405G	-61.09	2.39952G	-34.64	2.48382G	-47.14	21.774753G	-54.03	1

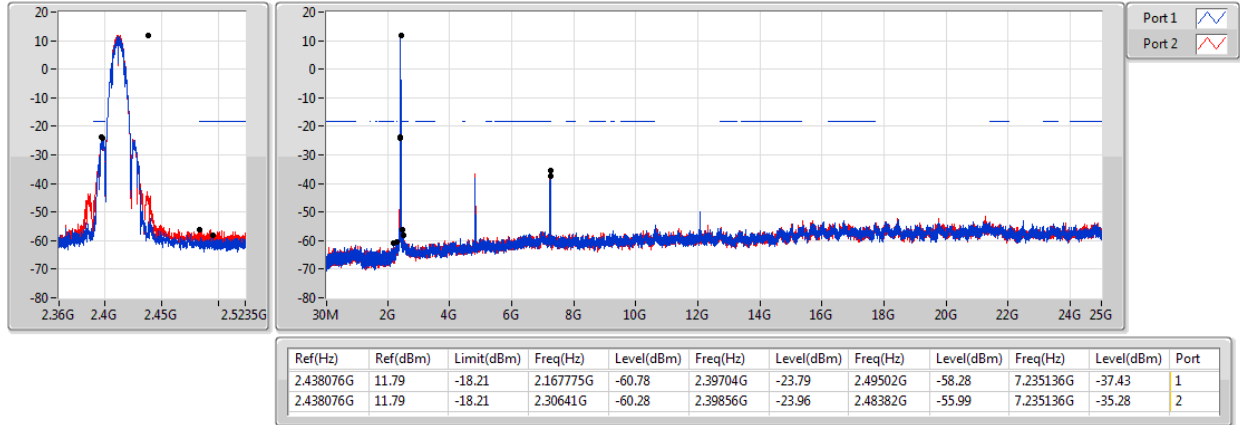
Result

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_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.438076G	11.79	-18.21	2.167775G	-60.78	2.39704G	-23.79	2.49502G	-58.28	7.235136G	-37.43	1
2412MHz	Pass	2.438076G	11.79	-18.21	2.30641G	-60.28	2.39856G	-23.96	2.48382G	-55.99	7.235136G	-35.28	2
2437MHz	Pass	2.438076G	11.79	-18.21	2.30408G	-61.66	2.39136G	-57.06	2.49254G	-57.71	16.751125G	-52.61	1
2437MHz	Pass	2.438076G	11.79	-18.21	920.06M	-61.70	2.39136G	-54.49	2.49598G	-56.44	16.599408G	-53.67	2
2462MHz	Pass	2.438076G	11.79	-18.21	860.645M	-61.75	2.39912G	-58.10	2.48358G	-55.25	24.651614G	-53.04	1
2462MHz	Pass	2.438076G	11.79	-18.21	934.04M	-61.96	2.39016G	-58.58	2.4875G	-47.06	21.40657G	-52.68	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.438243G	8.56	-21.44	755.795M	-60.99	2.39768G	-26.53	2.48614G	-57.98	7.229517G	-45.10	1
2412MHz	Pass	2.438243G	8.56	-21.44	2.309905G	-57.99	2.39992G	-24.48	2.48838G	-57.68	7.235136G	-42.75	2
2437MHz	Pass	2.438243G	8.56	-21.44	2.307575G	-59.56	2.39816G	-52.89	2.48742G	-55.65	21.426237G	-53.26	1
2437MHz	Pass	2.438243G	8.56	-21.44	2.309905G	-58.15	2.39728G	-48.35	2.48406G	-54.92	23.390121G	-53.77	2
2462MHz	Pass	2.438243G	8.56	-21.44	2.305245G	-61.60	2.3964G	-58.68	2.48382G	-40.59	16.357786G	-53.08	1
2462MHz	Pass	2.438243G	8.56	-21.44	892.1M	-61.44	2.3984G	-56.42	2.48422G	-38.84	21.437475G	-53.66	2
802.11ac_VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.435738G	7.22	-22.78	2.307575G	-61.52	2.39992G	-31.15	2.48446G	-58.15	7.237946G	-46.15	1
2412MHz	Pass	2.435738G	7.22	-22.78	2.30641G	-59.50	2.39888G	-30.14	2.48446G	-57.75	7.235136G	-44.34	2
2437MHz	Pass	2.435738G	7.22	-22.78	2.30408G	-60.12	2.39992G	-56.89	2.49462G	-57.49	16.686505G	-53.14	1
2437MHz	Pass	2.435738G	7.22	-22.78	2.305245G	-60.99	2.39952G	-50.76	2.48382G	-56.21	16.644361G	-52.87	2
2462MHz	Pass	2.435738G	7.22	-22.78	2.1969G	-62.08	2.39992G	-57.82	2.48358G	-41.13	21.412189G	-53.84	1
2462MHz	Pass	2.435738G	7.22	-22.78	702.205M	-61.97	2.39368G	-56.83	2.4847G	-41.01	21.712812G	-53.34	2
802.11ac_VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.432064G	3.89	-26.11	847.53M	-61.80	2.39808G	-41.88	2.50494G	-58.96	15.290605G	-52.37	1
2422MHz	Pass	2.432064G	3.89	-26.11	2.300535G	-61.13	2.39712G	-42.79	2.48526G	-58.22	16.648013G	-53.50	2
2437MHz	Pass	2.432064G	3.89	-26.11	2.307405G	-61.09	2.39952G	-34.64	2.48382G	-47.14	21.774753G	-54.03	1
2437MHz	Pass	2.432064G	3.89	-26.11	30M	-56.80	2.39952G	-34.71	2.48382G	-46.10	21.418574G	-53.30	2
2452MHz	Pass	2.432064G	3.89	-26.11	800.585M	-61.86	2.3976G	-55.49	2.48574G	-42.90	16.743368G	-53.07	1
2452MHz	Pass	2.432064G	3.89	-26.11	32.29M	-61.77	2.39952G	-50.66	2.48574G	-40.77	17.436095G	-53.56	2

802.11b_Nss1,(1Mbps)_2TX

CSE NdB

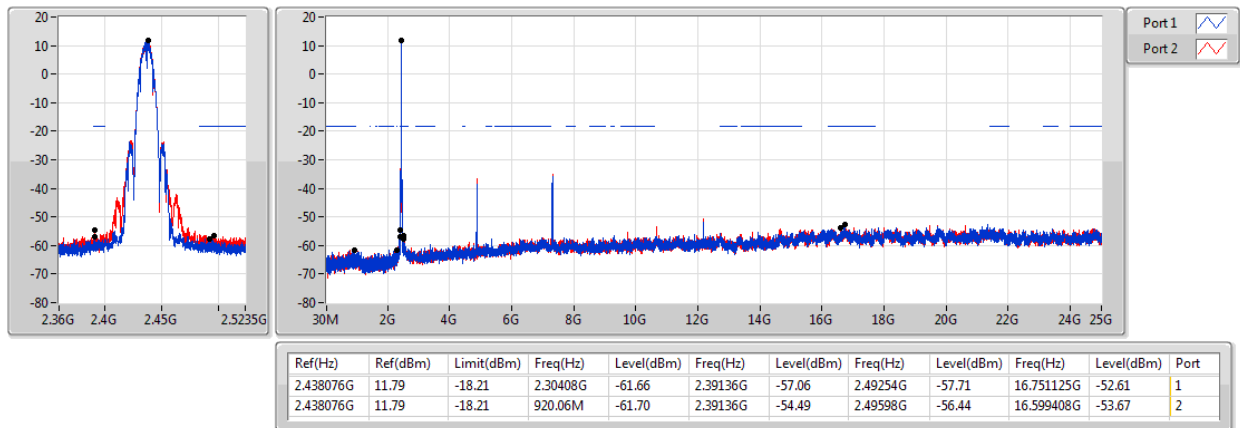
2412MHz



802.11b_Nss1,(1Mbps)_2TX

CSE NdB

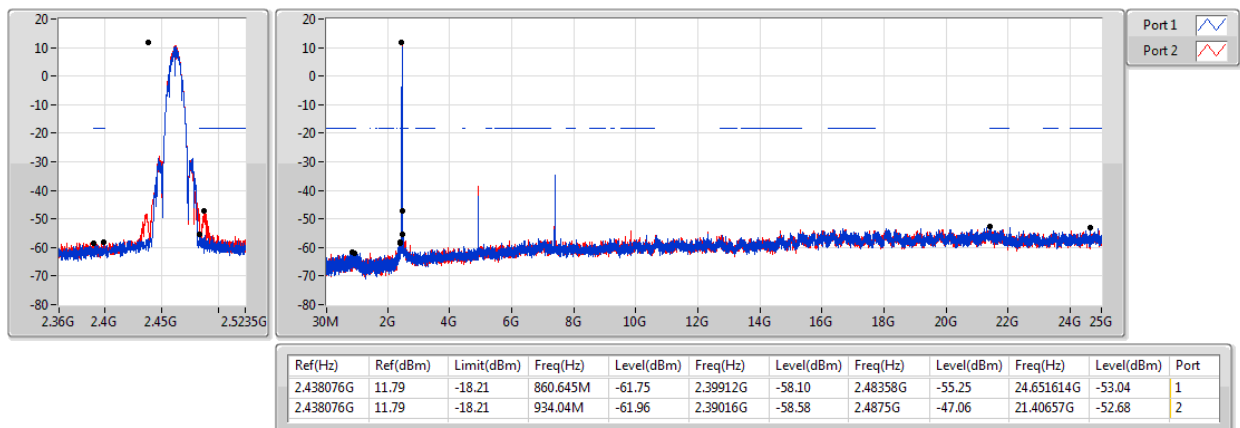
2437MHz



802.11b_Nss1,(1Mbps)_2TX

CSE NdB

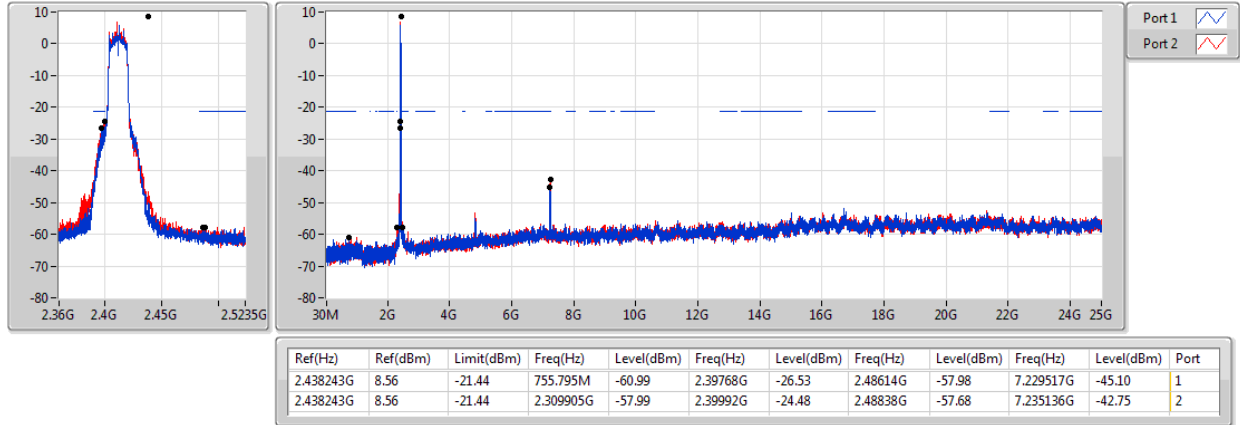
2462MHz



802.11g_Nss1,(6Mbps)_2TX

CSE NdB

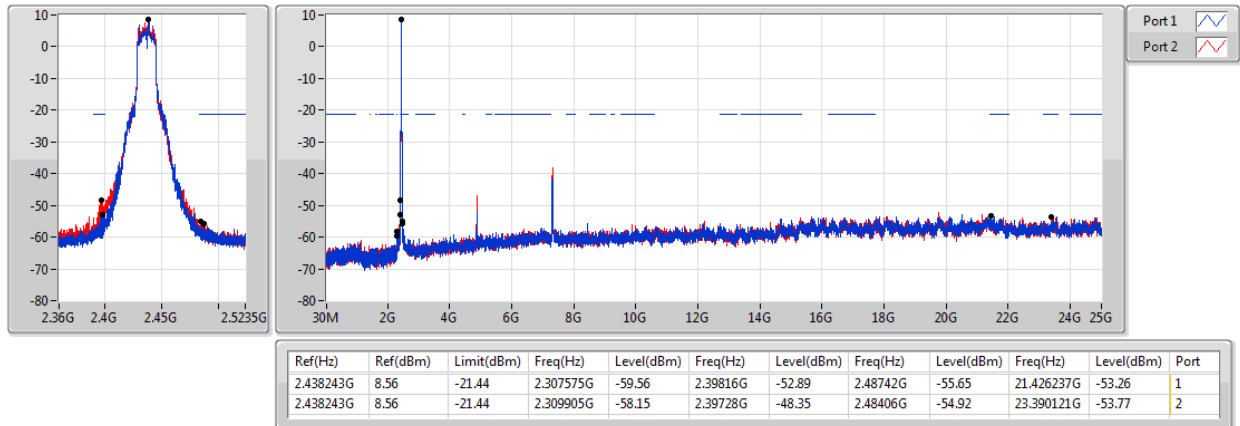
2412MHz



802.11g_Nss1,(6Mbps)_2TX

CSE NdB

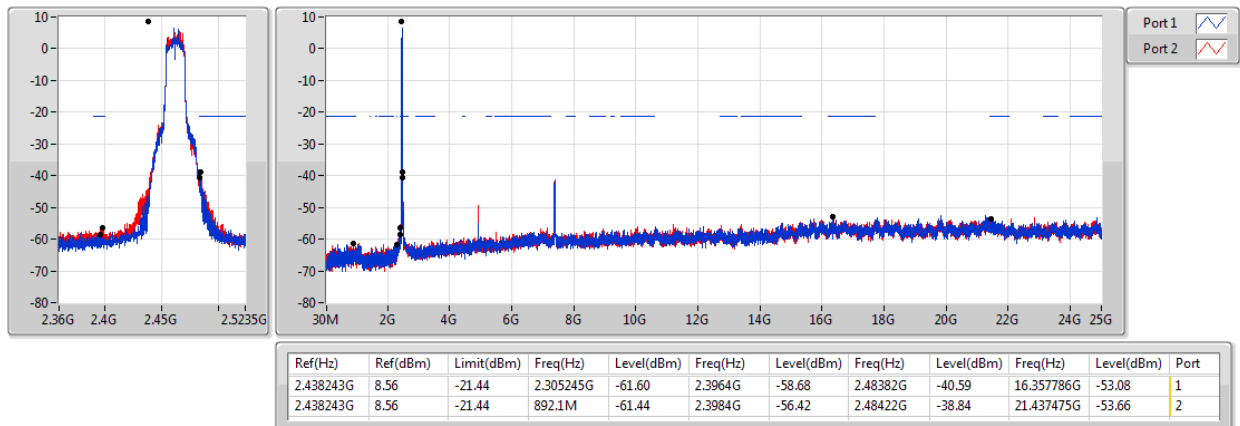
2437MHz



802.11g_Nss1,(6Mbps)_2TX

CSE NdB

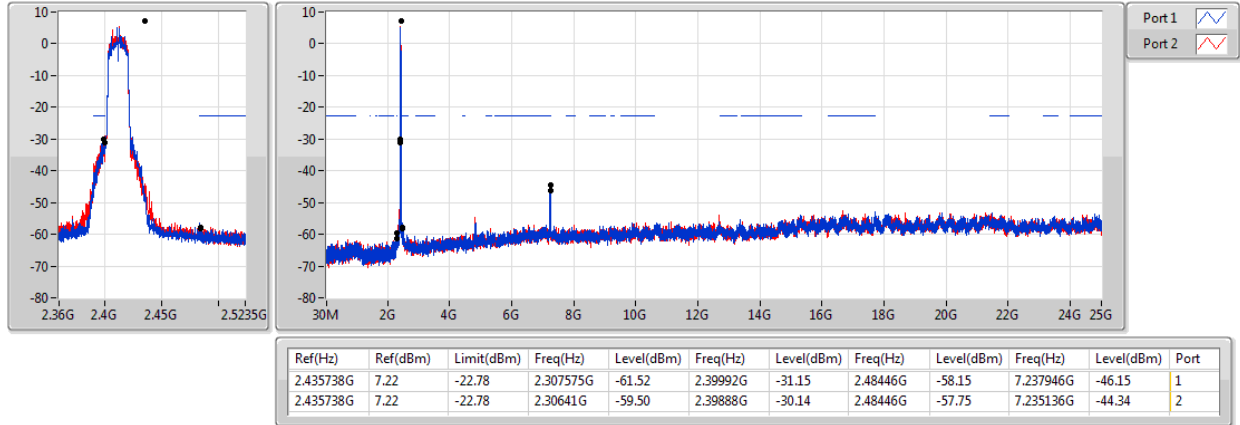
2462MHz



802.11ac VHT20_Nss1,(MCS0)_2TX

CSE NdB

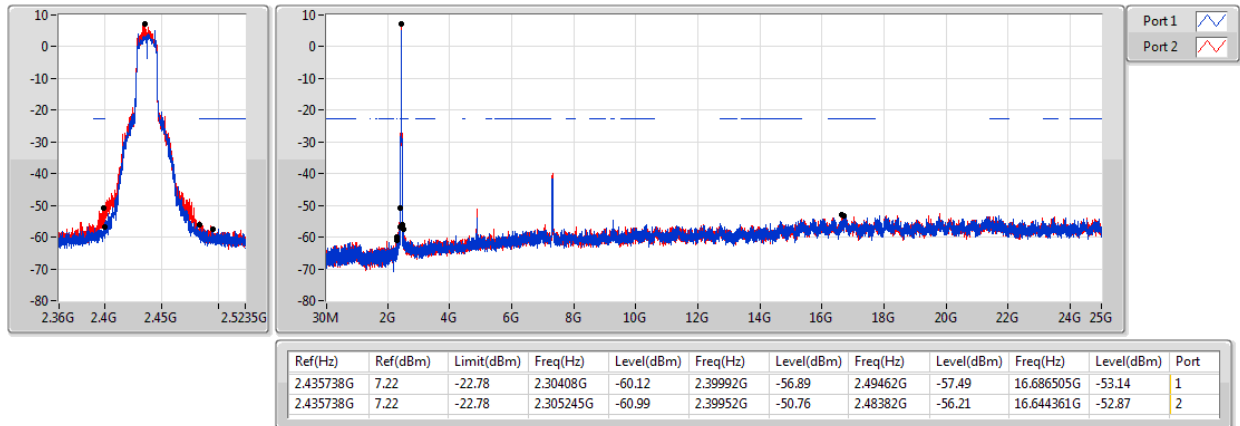
2412MHz



802.11ac VHT20_Nss1,(MCS0)_2TX

CSE NdB

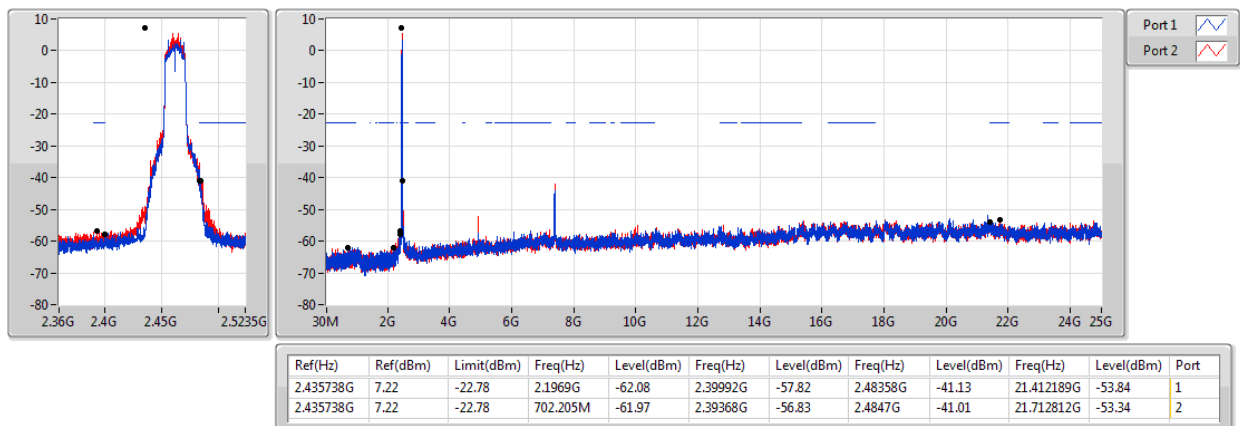
2437MHz



802.11ac VHT20_Nss1,(MCS0)_2TX

CSE NdB

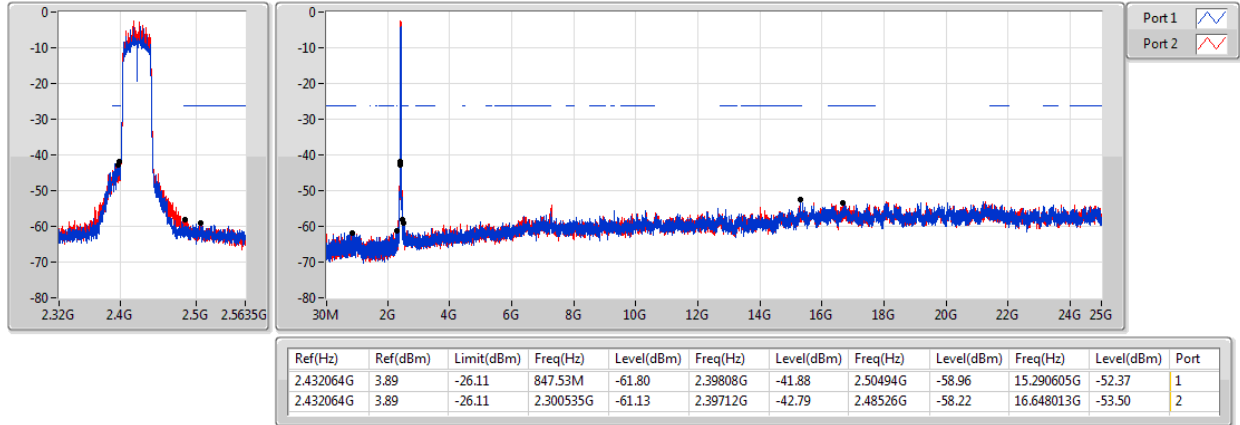
2462MHz



802.11ac VHT40_Nss1,(MCS0)_2TX

CSE NdB

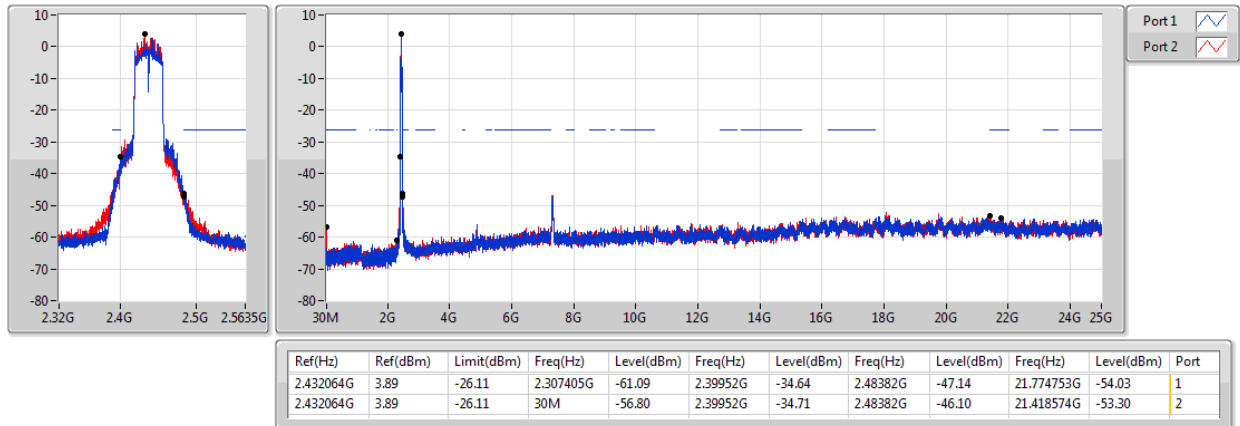
2422MHz



802.11ac VHT40_Nss1,(MCS0)_2TX

CSE NdB

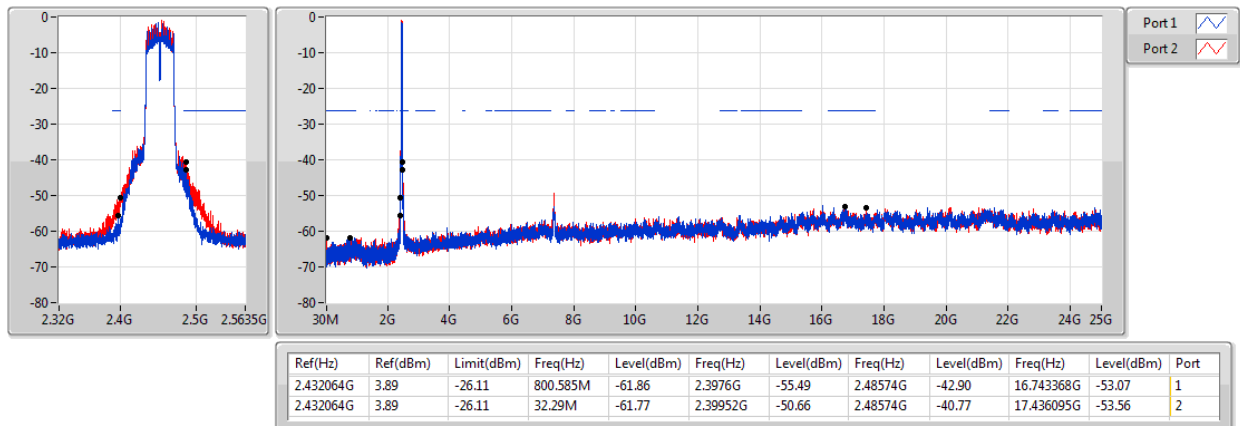
2437MHz

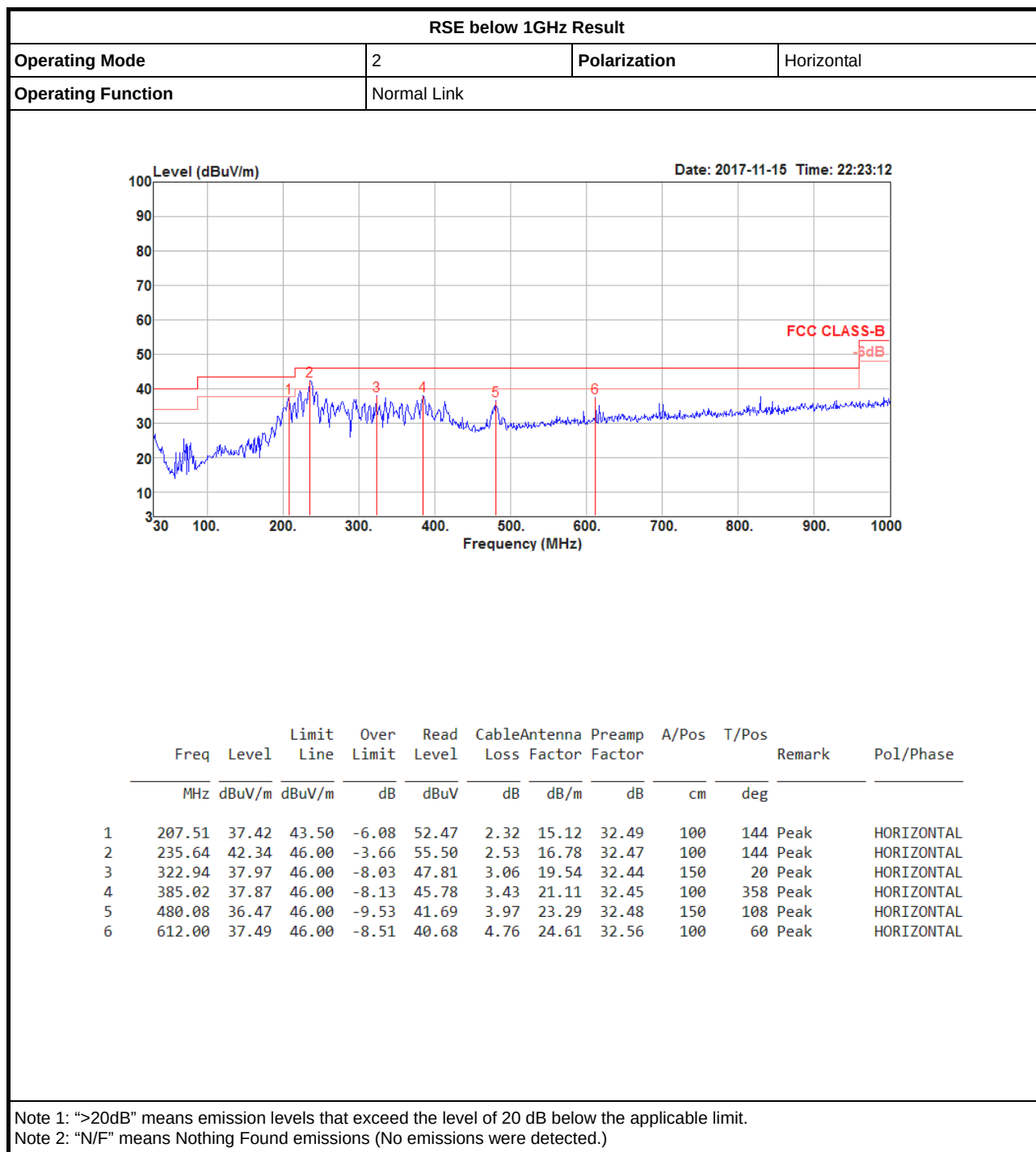


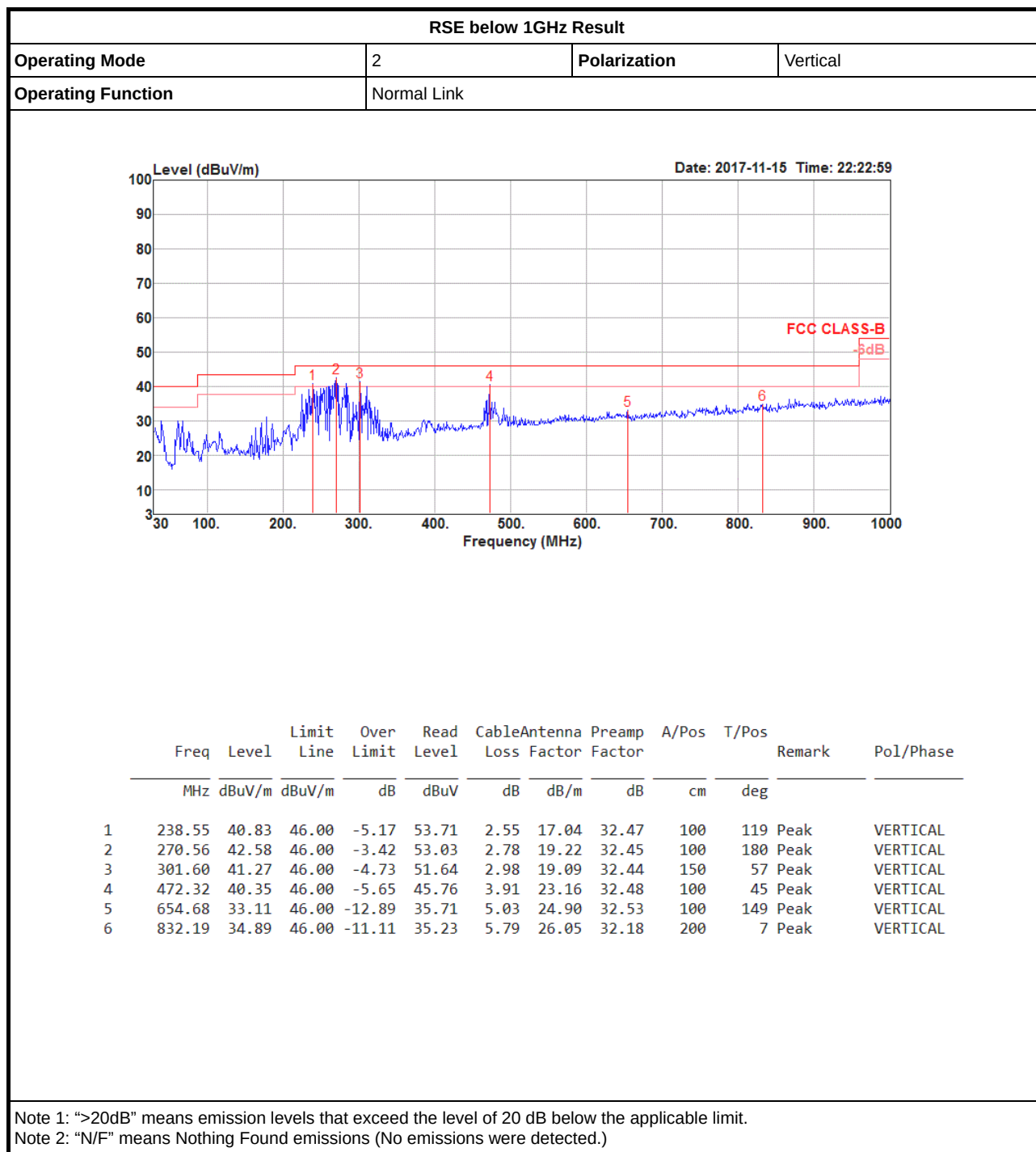
802.11ac VHT40_Nss1,(MCS0)_2TX

CSE NdB

2452MHz









RSE TX above 1GHz Result

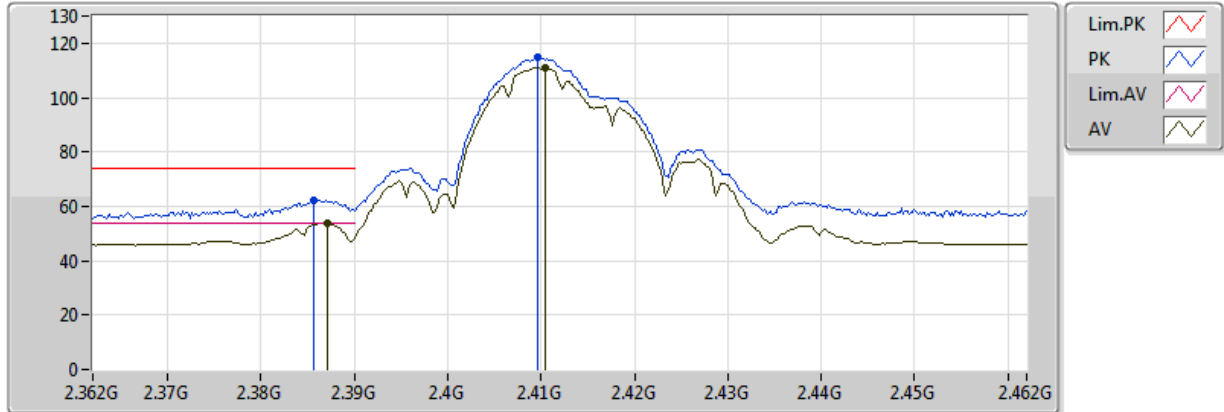
Appendix F.2

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT40_Nss1,(MCS0)_2TX	Pass	AV	2.4846G	53.99	54.00	-0.01	33.49	3	Vertical	132	1.41	-

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

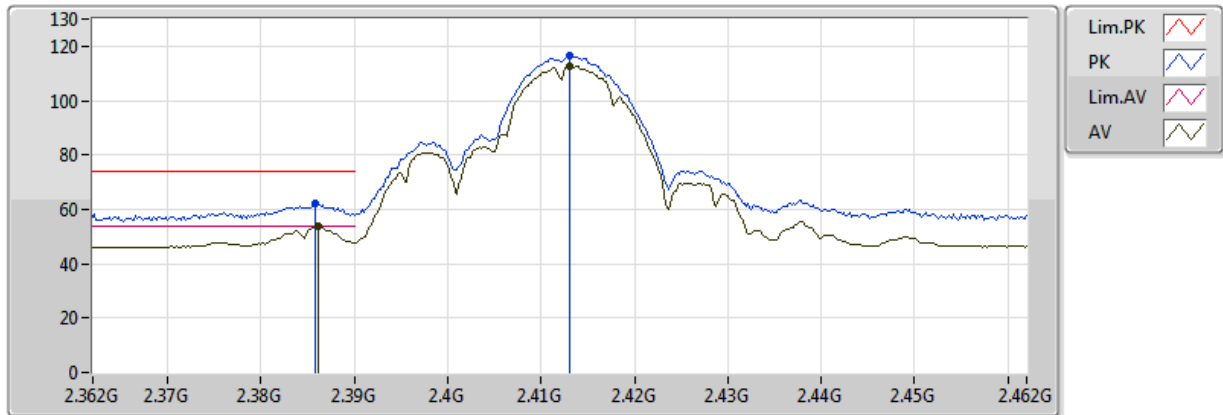


20171111
EUT X_2TX
Setting 24
04-J-4
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	2.3872G	53.97	54.00	-0.03	33.48	3	Vertical	105	2.46					
AV	2.4104G	110.91	Inf	-Inf	33.48	3	Vertical	105	2.46					
PK	2.3856G	62.37	74.00	-11.63	33.48	3	Vertical	105	2.46					
PK	2.4096G	114.81	Inf	-Inf	33.48	3	Vertical	105	2.46					

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

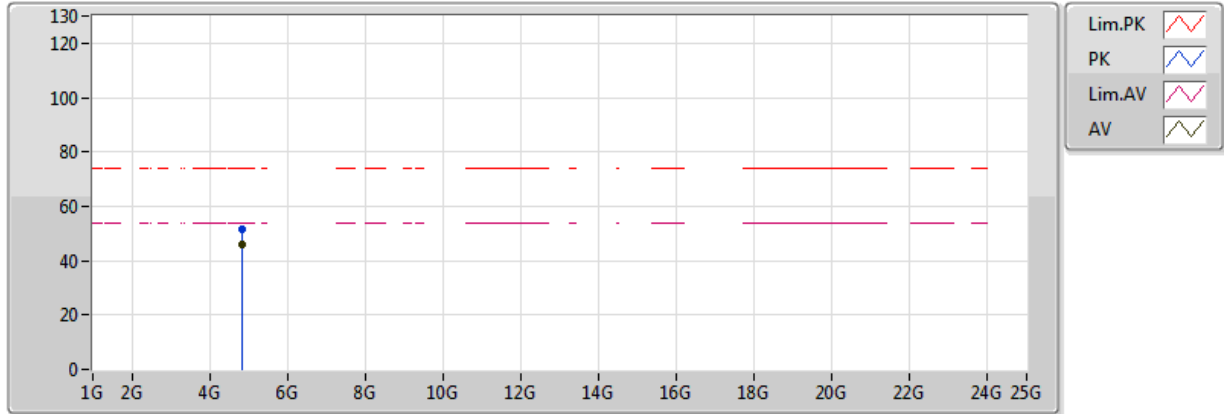


20171111
EUT X_2TX
Setting 24
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3862G	53.63	54.00	-0.37	33.48	3	Horizontal	134	1.10					
AV	2.413G	112.51	Inf	-Inf	33.48	3	Horizontal	134	1.10					
PK	2.3858G	62.01	74.00	-11.99	33.48	3	Horizontal	134	1.10					
PK	2.413G	116.56	Inf	-Inf	33.48	3	Horizontal	134	1.10					

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

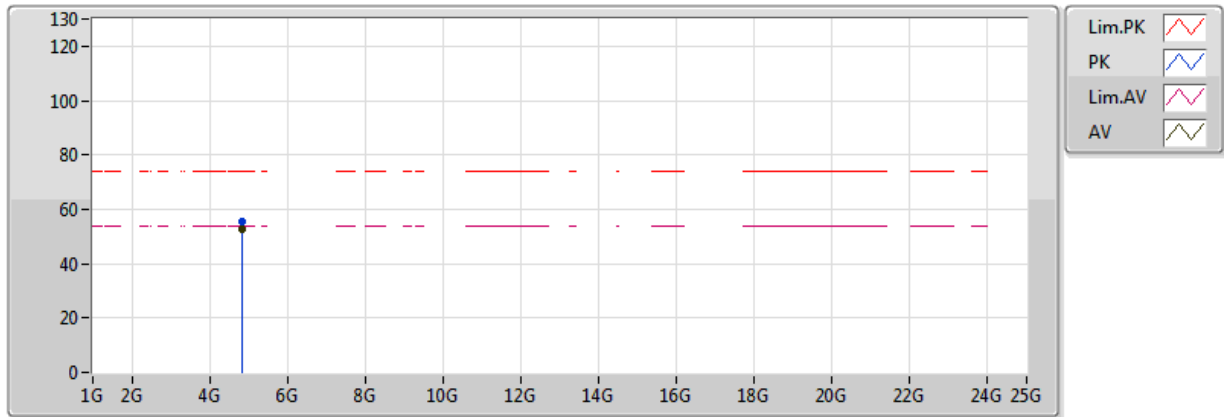


20171111
EUT X_2TX
Setting 24
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.82428G	46.08	54.00	-7.92	3.86	3	Vertical	107	1.50					
PK	4.82442G	51.30	74.00	-22.70	3.86	3	Vertical	107	1.50					

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

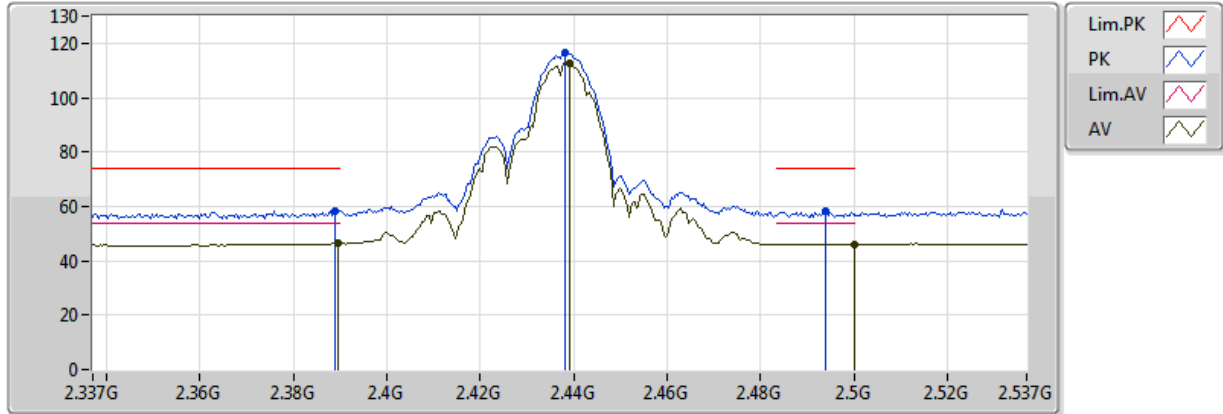


20171111
EUT X_2TX
Setting 24
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.82424G	52.87	54.00	-1.13	3.86	3	Horizontal	26	1.01					
PK	4.8242G	55.73	74.00	-18.27	3.86	3	Horizontal	26	1.01					

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

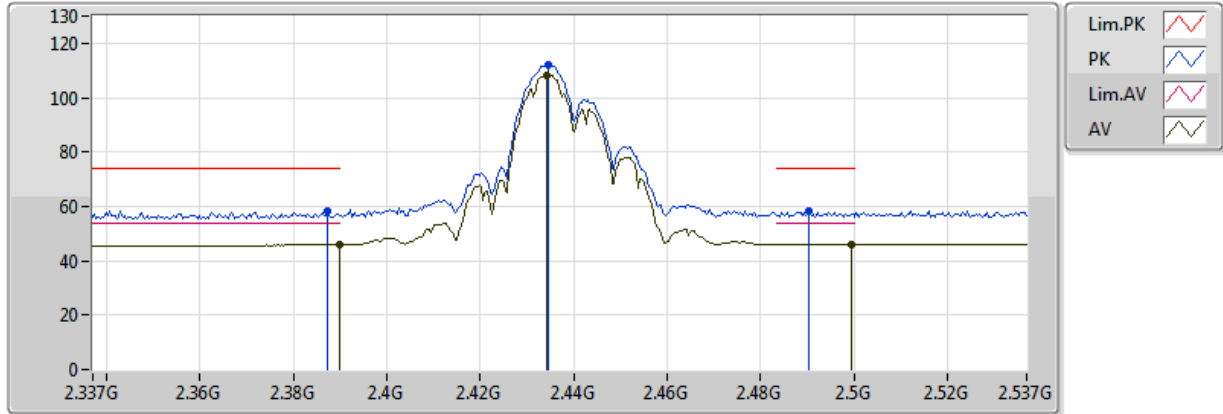


20171111
EUT X_2TX
Setting 24
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3894G	46.57	54.00	-7.43	33.48	3	Vertical	129	1.17					
AV	2.439G	112.61	Inf	-Inf	33.48	3	Vertical	129	1.17					
AV	2.499998G	46.16	54.00	-7.84	33.49	3	Vertical	129	1.17					
PK	2.389G	58.42	74.00	-15.58	33.48	3	Vertical	129	1.17					
PK	2.4382G	116.64	Inf	-Inf	33.48	3	Vertical	129	1.17					
PK	2.4938G	58.10	74.00	-15.90	33.49	3	Vertical	129	1.17					

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

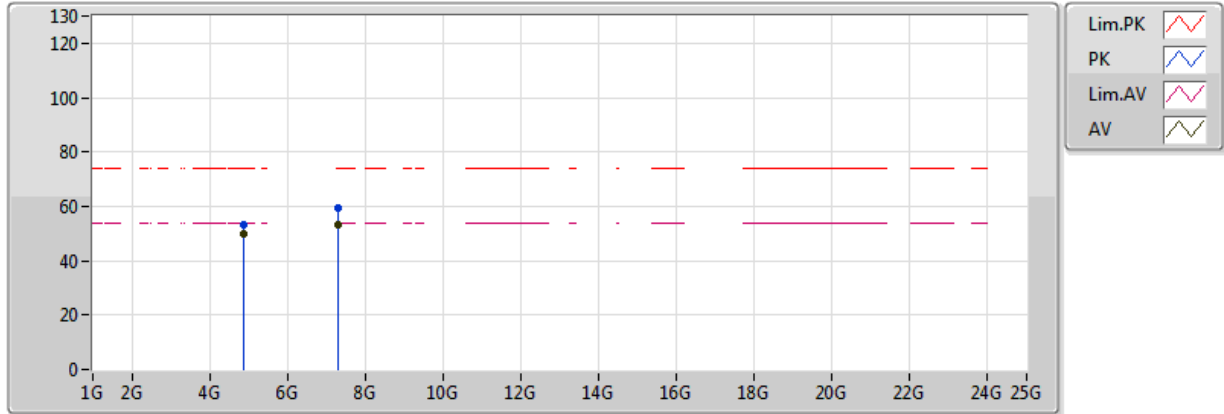


20171111
EUT X_2TX
Setting 24
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.389998G	45.92	54.00	-8.08	33.48	3	Horizontal	124	1.01					
AV	2.4342G	108.20	Inf	-Inf	33.48	3	Horizontal	124	1.01					
AV	2.4994G	46.03	54.00	-7.97	33.49	3	Horizontal	124	1.01					
PK	2.3874G	58.46	74.00	-15.54	33.48	3	Horizontal	124	1.01					
PK	2.4346G	112.03	Inf	-Inf	33.48	3	Horizontal	124	1.01					
PK	2.4902G	58.19	74.00	-15.81	33.49	3	Horizontal	124	1.01					

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

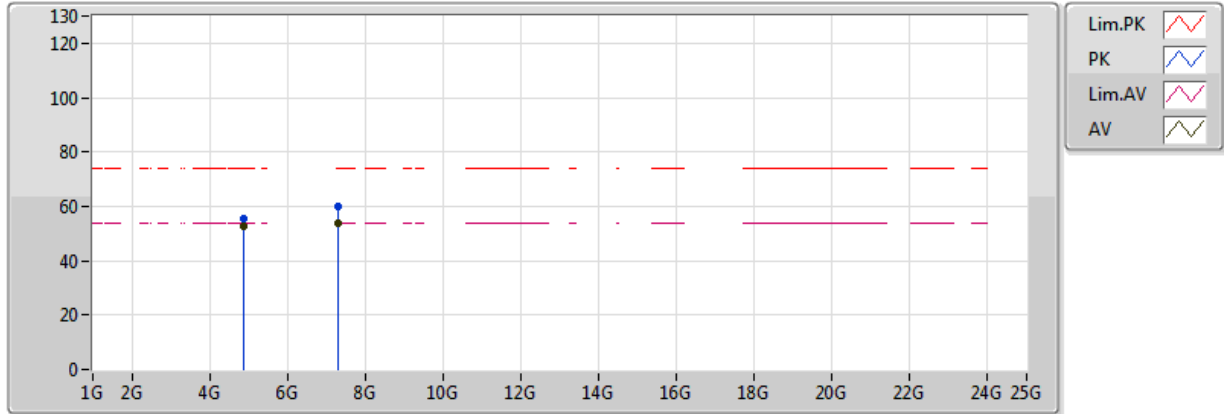


20171111
EUT X_2TX
Setting 24
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.87424G	50.00	54.00	-4.00	3.97	3	Vertical	254	2.99					
AV	7.31208G	53.21	54.00	-0.79	10.31	3	Vertical	324	2.36					
PK	4.87428G	53.44	74.00	-20.56	3.97	3	Vertical	254	2.99					
PK	7.31232G	59.23	74.00	-14.77	10.31	3	Vertical	324	2.36					

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

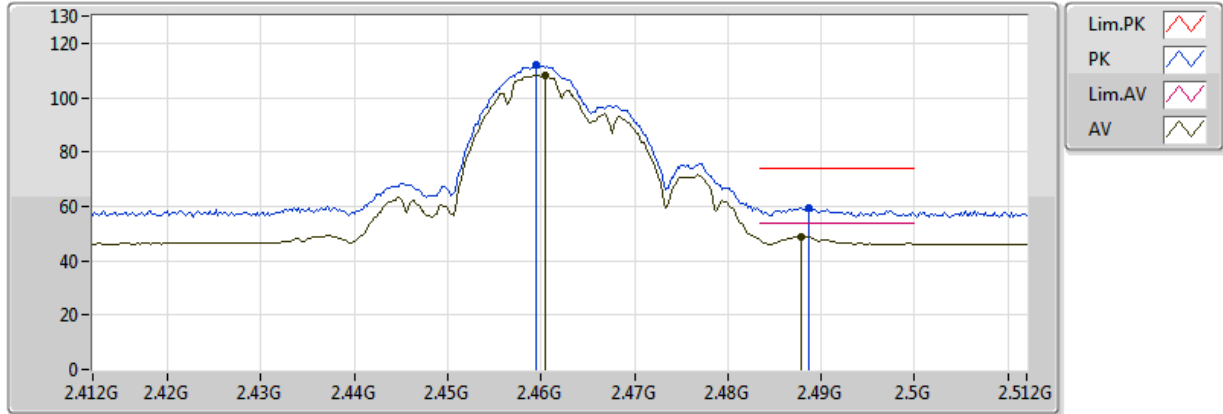


20171111
EUT X_2TX
Setting 24
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.87424G	52.73	54.00	-1.27	3.97	3	Horizontal	24	1.01					
AV	7.31208G	53.96	54.00	-0.04	10.31	3	Horizontal	333	2.32					
PK	4.87422G	55.25	74.00	-18.75	3.97	3	Horizontal	24	1.01					
PK	7.31232G	59.80	74.00	-14.20	10.31	3	Horizontal	333	2.32					

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

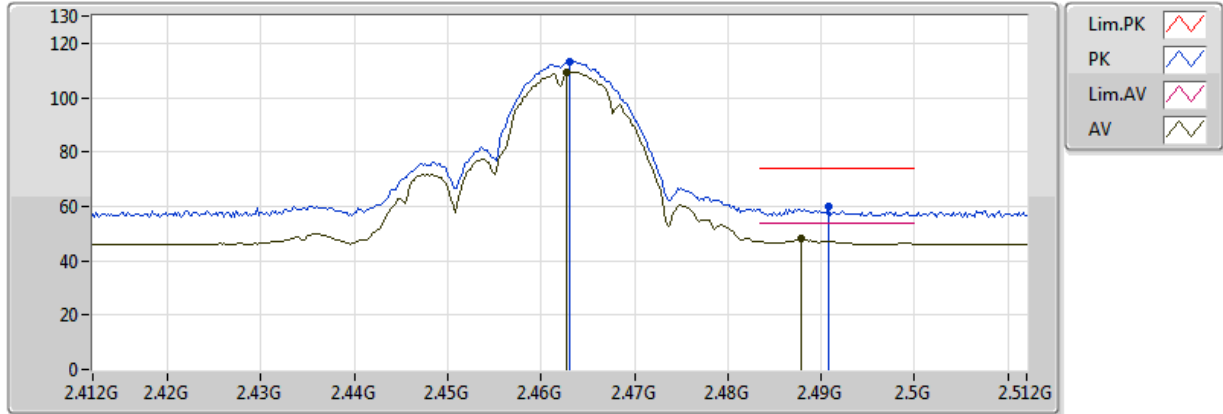


20171111
EUT X_2TX
Setting 21
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.4604G	108.14	Inf	-Inf	33.49	3	Vertical	132	1.30					
AV	2.4878G	48.80	54.00	-5.20	33.49	3	Vertical	132	1.30					
PK	2.4594G	111.97	Inf	-Inf	33.49	3	Vertical	132	1.30					
PK	2.4886G	59.67	74.00	-14.33	33.49	3	Vertical	132	1.30					

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

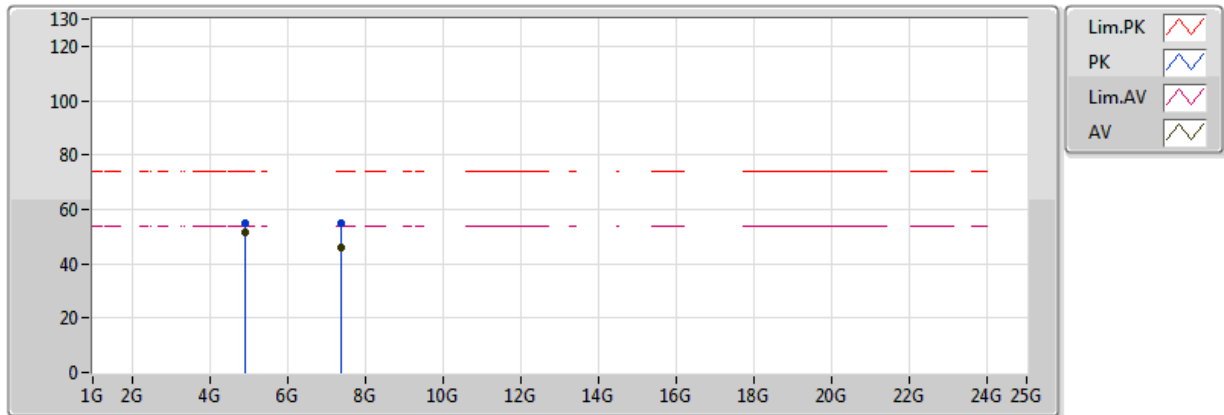


20171111
EUT X_2TX
Setting 21
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.4628G	109.31	Inf	-Inf	33.49	3	Horizontal	143	1.01					
AV	2.4878G	48.12	54.00	-5.88	33.49	3	Horizontal	143	1.01					
PK	2.463G	113.43	Inf	-Inf	33.49	3	Horizontal	143	1.01					
PK	2.4908G	59.98	74.00	-14.02	33.49	3	Horizontal	143	1.01					

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

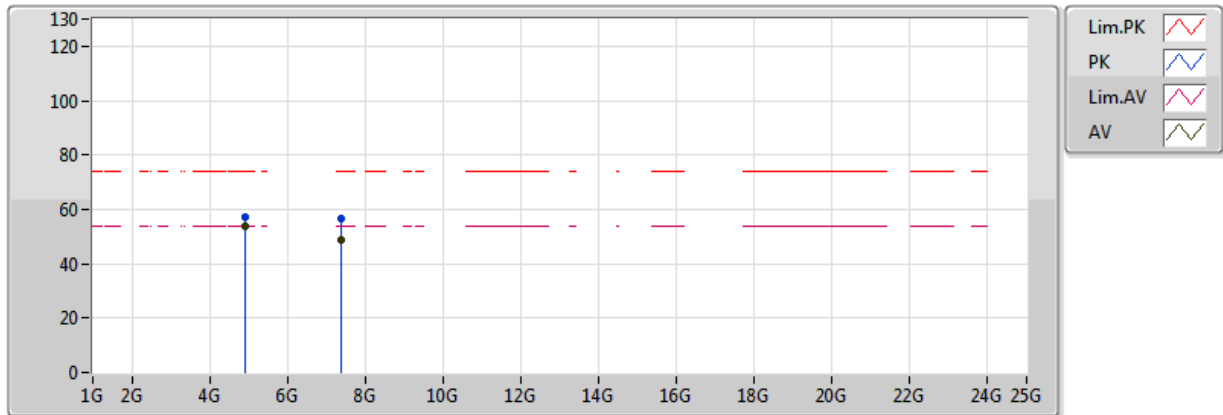


20171111
EUT X_2TX
Setting 21
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.92414G	51.37	54.00	-2.63	4.08	3	Vertical	270	1.02					
AV	7.38702G	45.84	54.00	-8.16	10.34	3	Vertical	152	2.64					
PK	4.92414G	54.81	74.00	-19.19	4.08	3	Vertical	270	1.02					
PK	7.38726G	54.83	74.00	-19.17	10.34	3	Vertical	152	2.64					

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

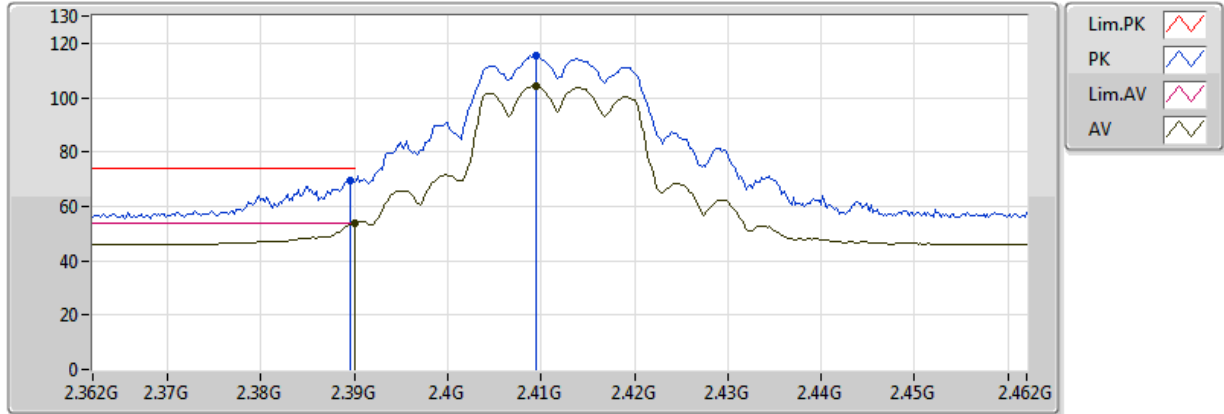


20171111
EUT X_2TX
Setting 21
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.92418G	53.74	54.00	-0.26	4.08	3	Horizontal	37	1.01					
AV	7.38798G	48.82	54.00	-5.18	10.34	3	Horizontal	316	1.01					
PK	4.92414G	56.94	74.00	-17.06	4.08	3	Horizontal	37	1.01					
PK	7.38726G	56.58	74.00	-17.42	10.34	3	Horizontal	316	1.01					

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

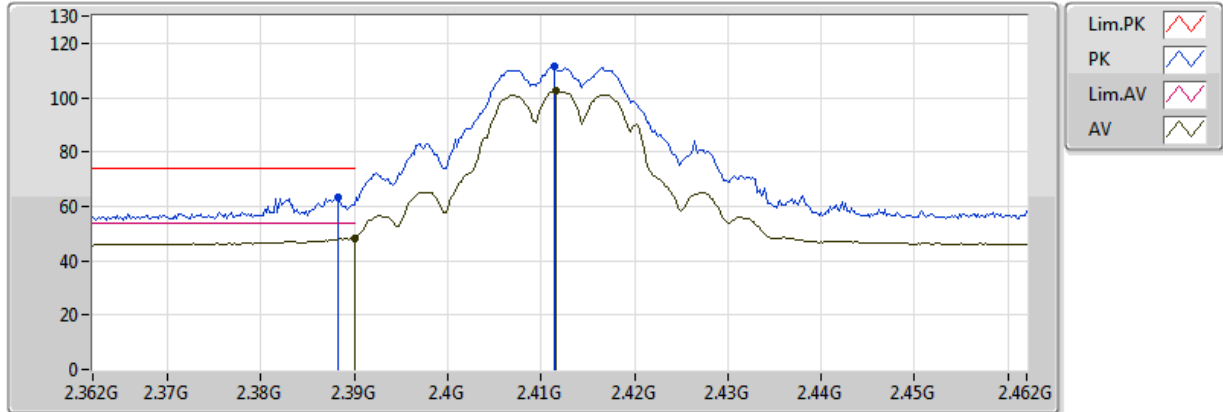


20171111
EUT X_2TX
Setting 1F
04-J-4
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	2.39G	53.92	54.00	-0.08	33.48	3	Vertical	126	1.06					
AV	2.4094G	104.31	Inf	-Inf	33.48	3	Vertical	126	1.06					
PK	2.3896G	69.73	74.00	-4.27	33.48	3	Vertical	126	1.06					
PK	2.4094G	115.65	Inf	-Inf	33.48	3	Vertical	126	1.06					

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

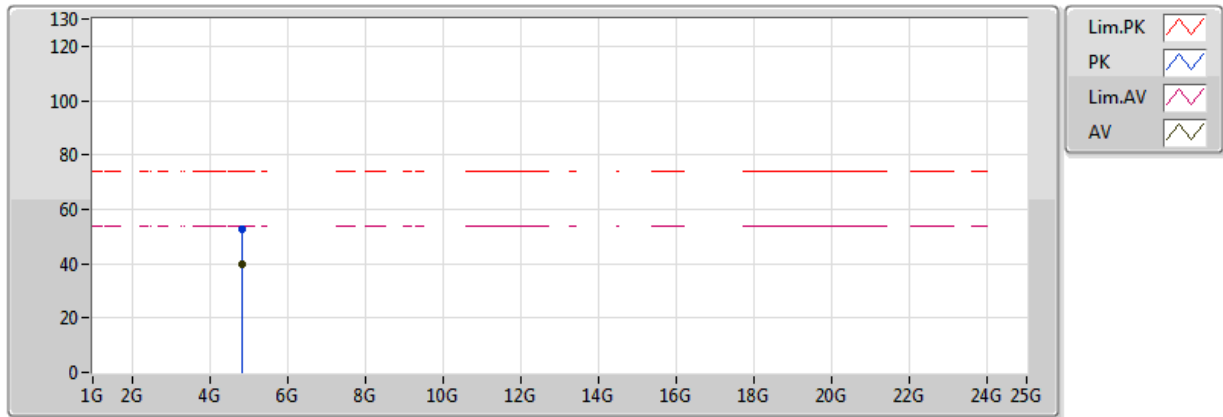


20171111
EUT X_2TX
Setting 1F
04-J-4
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	2.39G	48.35	54.00	-5.65	33.48	3	Horizontal	135	1.10					
AV	2.4116G	102.67	Inf	-Inf	33.48	3	Horizontal	135	1.10					
PK	2.3882G	63.44	74.00	-10.56	33.48	3	Horizontal	135	1.10					
PK	2.4114G	111.67	Inf	-Inf	33.48	3	Horizontal	135	1.10					

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

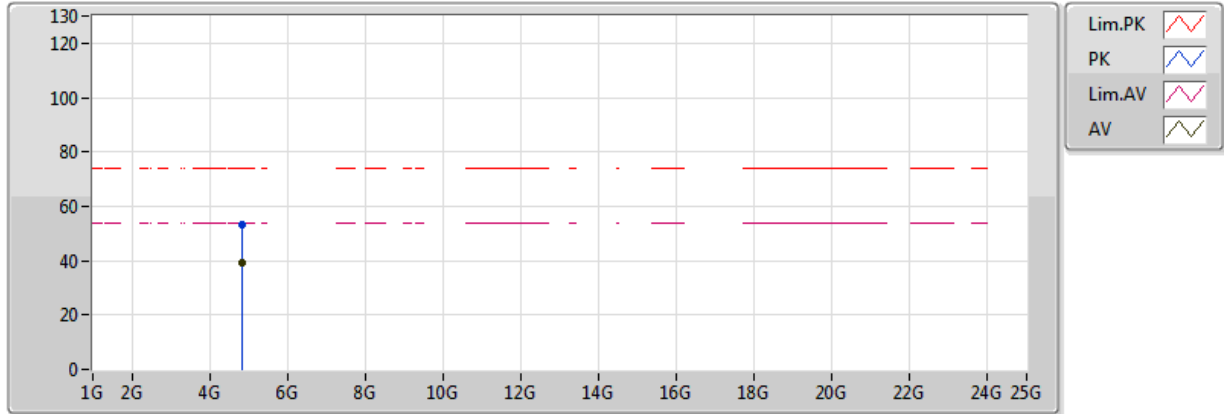


20171111
EUT X_2TX
Setting 1F
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.824G	39.54	54.00	-14.46	3.86	3	Vertical	327	1.01					
PK	4.82358G	52.53	74.00	-21.47	3.86	3	Vertical	327	1.01					

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

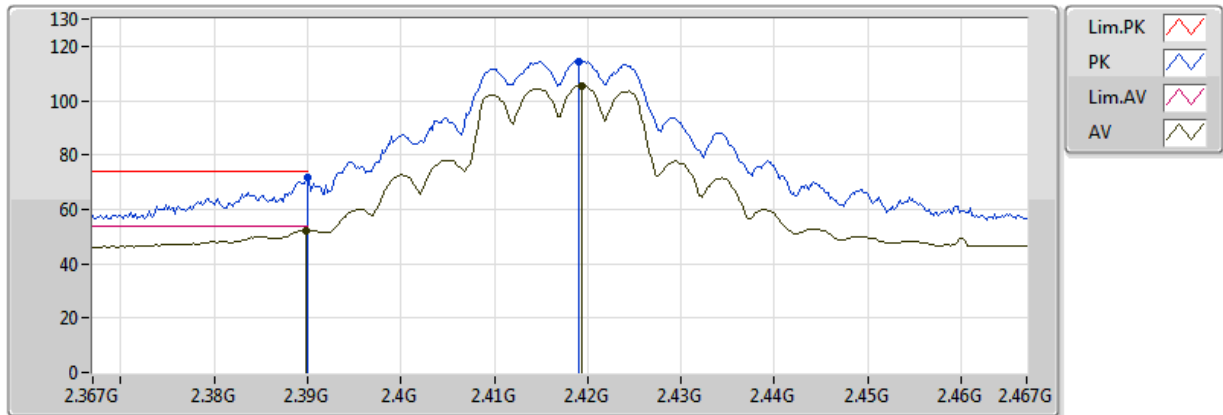


20171111
EUT X_2TX
Setting 1F
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.824G	39.03	54.00	-14.97	3.86	3	Horizontal	340	1.07					
PK	4.82376G	52.97	74.00	-21.03	3.86	3	Horizontal	340	1.07					

802.11g_Nss1,(6Mbps)_2TX

2417MHz_TX

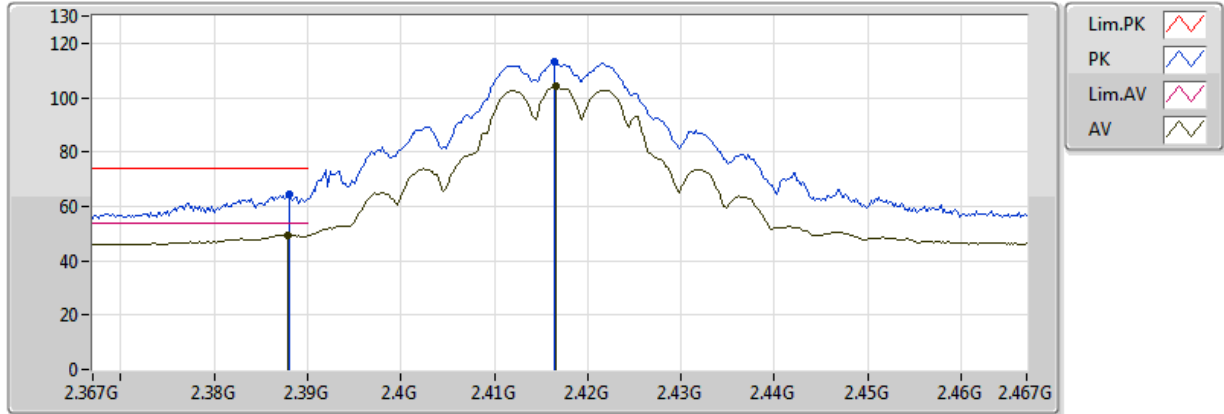


20171111
EUT X_2TX
Setting 24
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3898G	52.39	54.00	-1.61	33.48	3	Vertical	45	1.51					
AV	2.4194G	105.57	Inf	-Inf	33.48	3	Vertical	45	1.51					
PK	2.39G	71.54	74.00	-2.46	33.48	3	Vertical	45	1.51					
PK	2.419G	114.56	Inf	-Inf	33.48	3	Vertical	45	1.51					

802.11g_Nss1,(6Mbps)_2TX

2417MHz_TX

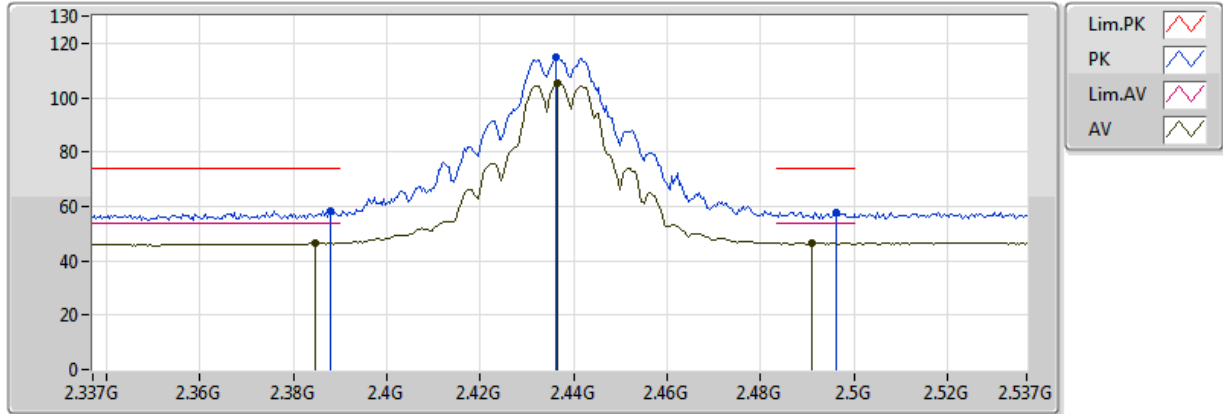


20171111
EUT X_2TX
Setting 24
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3878G	49.58	54.00	-4.42	33.48	3	Horizontal	137	2.94					
AV	2.4166G	104.03	Inf	-Inf	33.48	3	Horizontal	137	2.94					
PK	2.388G	64.30	74.00	-9.70	33.48	3	Horizontal	137	2.94					
PK	2.4164G	113.37	Inf	-Inf	33.48	3	Horizontal	137	2.94					

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

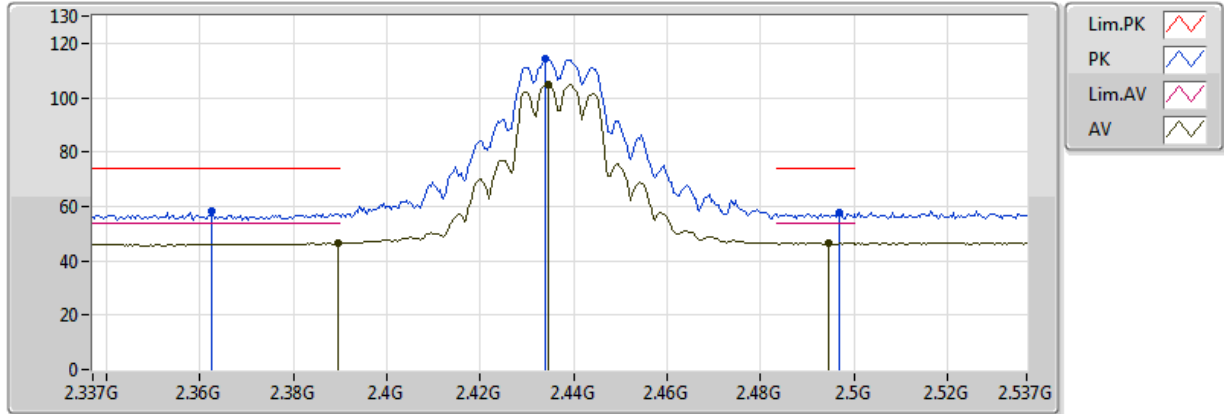


20171111
EUT X_2TX
Setting 24
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3846G	46.48	54.00	-7.52	33.48	3	Vertical	134	2.42					
AV	2.4366G	105.61	Inf	-Inf	33.48	3	Vertical	134	2.42					
AV	2.491G	46.40	54.00	-7.60	33.49	3	Vertical	134	2.42					
PK	2.3878G	58.45	74.00	-15.55	33.48	3	Vertical	134	2.42					
PK	2.4362G	114.94	Inf	-Inf	33.48	3	Vertical	134	2.42					
PK	2.4962G	57.86	74.00	-16.14	33.49	3	Vertical	134	2.42					

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

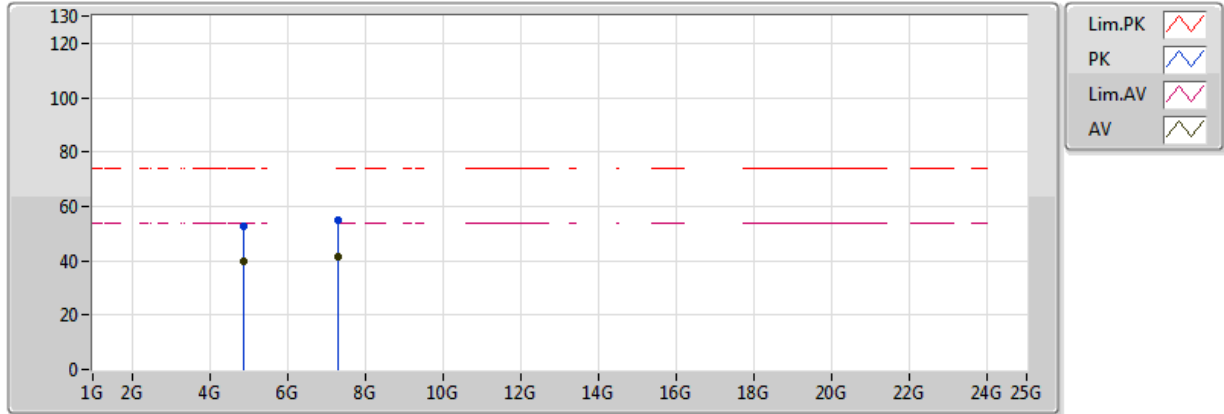


20171111
EUT X_2TX
Setting 24
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3894G	46.42	54.00	-7.58	33.48	3	Horizontal	127	1.00					
AV	2.4346G	104.80	Inf	-Inf	33.48	3	Horizontal	127	1.00					
AV	2.4946G	46.43	54.00	-7.57	33.49	3	Horizontal	127	1.00					
PK	2.3626G	58.25	74.00	-15.75	33.47	3	Horizontal	127	1.00					
PK	2.4338G	114.48	Inf	-Inf	33.48	3	Horizontal	127	1.00					
PK	2.497G	57.58	74.00	-16.42	33.49	3	Horizontal	127	1.00					

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

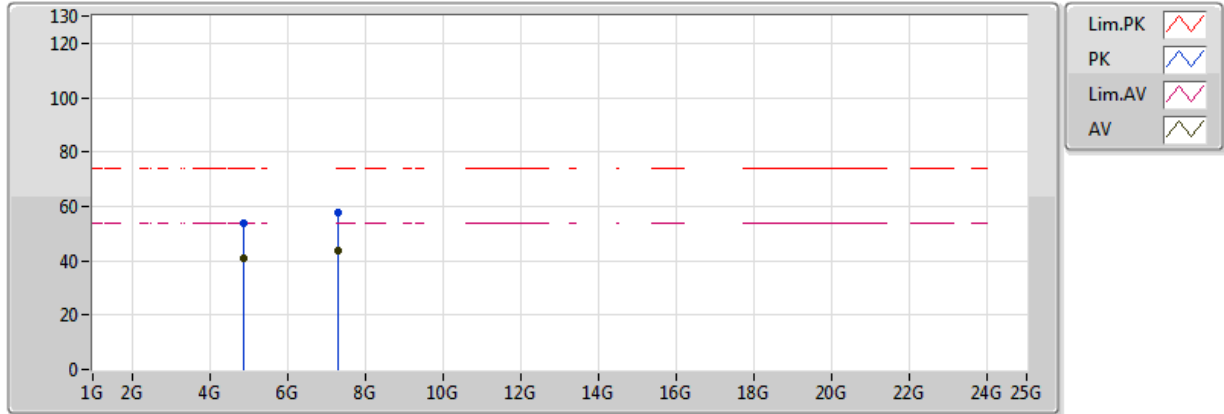


20171111
EUT X_2TX
Setting 24
04-J-4
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	4.87418G	39.87	54.00	-14.13	3.97	3	Vertical	322	1.01					
AV	7.31154G	41.25	54.00	-12.75	10.31	3	Vertical	319	2.79					
PK	4.87388G	52.81	74.00	-21.19	3.97	3	Vertical	322	1.01					
PK	7.31214G	55.10	74.00	-18.90	10.31	3	Vertical	319	2.79					

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

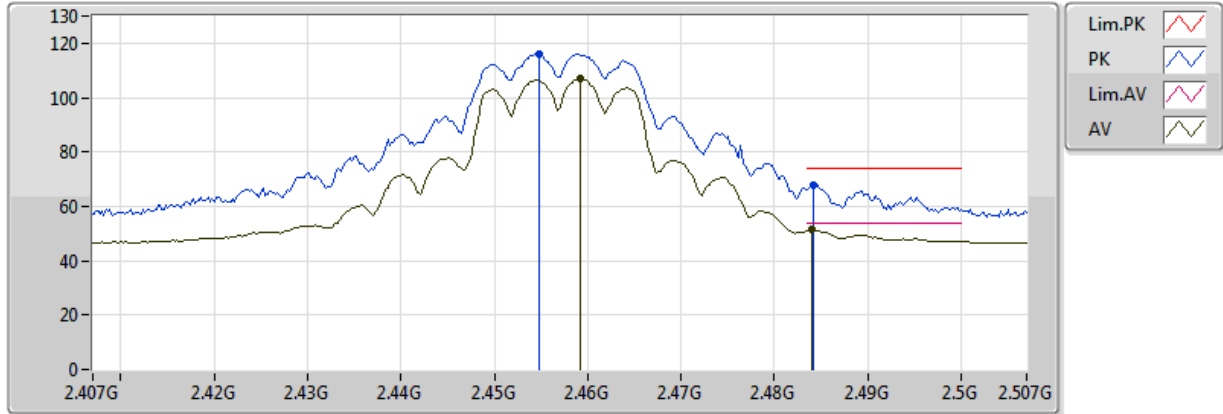


20171111
EUT X_2TX
Setting 24
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.87418G	40.73	54.00	-13.27	3.97	3	Horizontal	330	2.58					
AV	7.30758G	43.49	54.00	-10.51	10.31	3	Horizontal	322	2.34					
PK	4.87412G	53.75	74.00	-20.25	3.97	3	Horizontal	330	2.58					
PK	7.3128G	57.50	74.00	-16.50	10.31	3	Horizontal	322	2.34					

802.11g_Nss1,(6Mbps)_2TX

2457MHz_TX

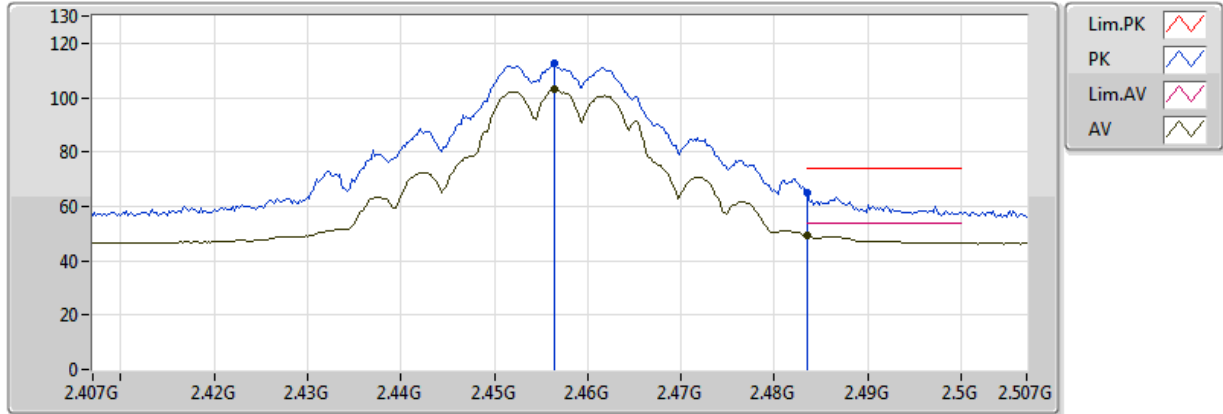


20171111
EUT X_2TX
Setting 24
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.4592G	106.83	Inf	-Inf	33.49	3	Vertical	128	1.28					
AV	2.484G	51.44	54.00	-2.56	33.49	3	Vertical	128	1.28					
PK	2.4548G	116.11	Inf	-Inf	33.49	3	Vertical	128	1.28					
PK	2.4842G	67.61	74.00	-6.39	33.49	3	Vertical	128	1.28					

802.11g_Nss1,(6Mbps)_2TX

2457MHz_TX

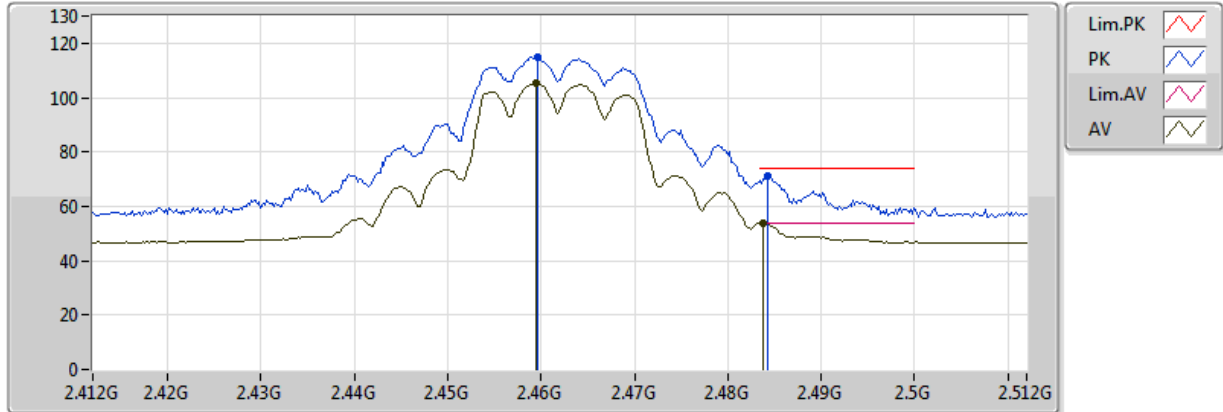


20171111
EUT X_2TX
Setting 24
04-J-4
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	2.4564G	102.88	Inf	-Inf	33.49	3	Horizontal	152	2.58					
AV	2.483502G	49.38	54.00	-4.62	33.49	3	Horizontal	152	2.58					
PK	2.4564G	112.43	Inf	-Inf	33.49	3	Horizontal	152	2.58					
PK	2.483502G	65.19	74.00	-8.81	33.49	3	Horizontal	152	2.58					

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

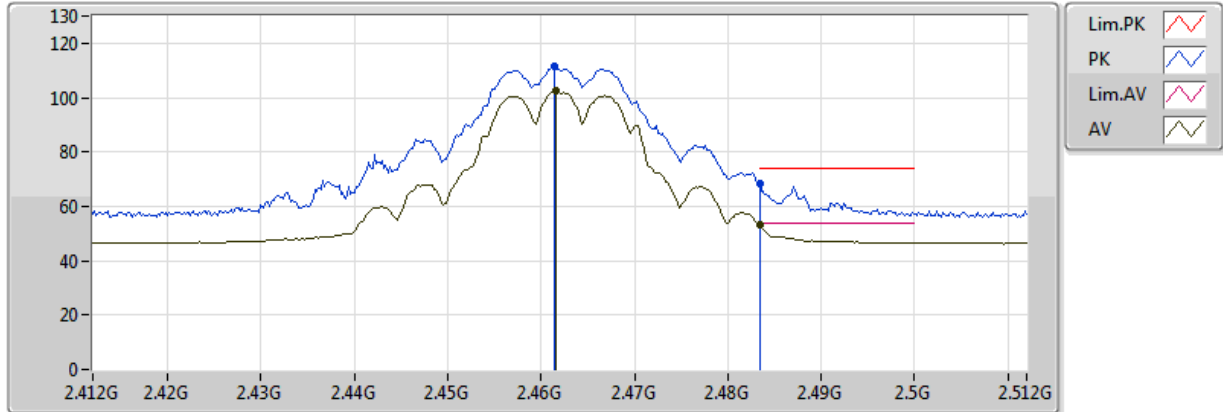


20171111
EUT X_2TX
Setting 20
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.4594G	105.08	Inf	-Inf	33.49	3	Vertical	131	1.31					
AV	2.4838G	53.95	54.00	-0.05	33.49	3	Vertical	131	1.31					
PK	2.4596G	114.77	Inf	-Inf	33.49	3	Vertical	131	1.31					
PK	2.4842G	71.06	74.00	-2.94	33.49	3	Vertical	131	1.31					

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

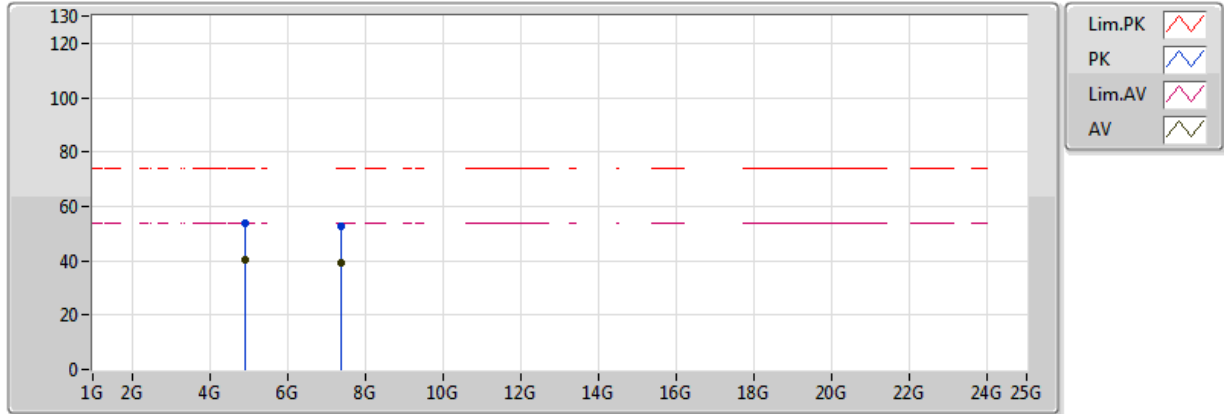


20171111
EUT X_2TX
Setting 20
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.4616G	102.27	Inf	-Inf	33.49	3	Horizontal	139	1.02					
AV	2.483502G	52.99	54.00	-1.01	33.49	3	Horizontal	139	1.02					
PK	2.4614G	111.45	Inf	-Inf	33.49	3	Horizontal	139	1.02					
PK	2.483502G	68.29	74.00	-5.71	33.49	3	Horizontal	139	1.02					

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

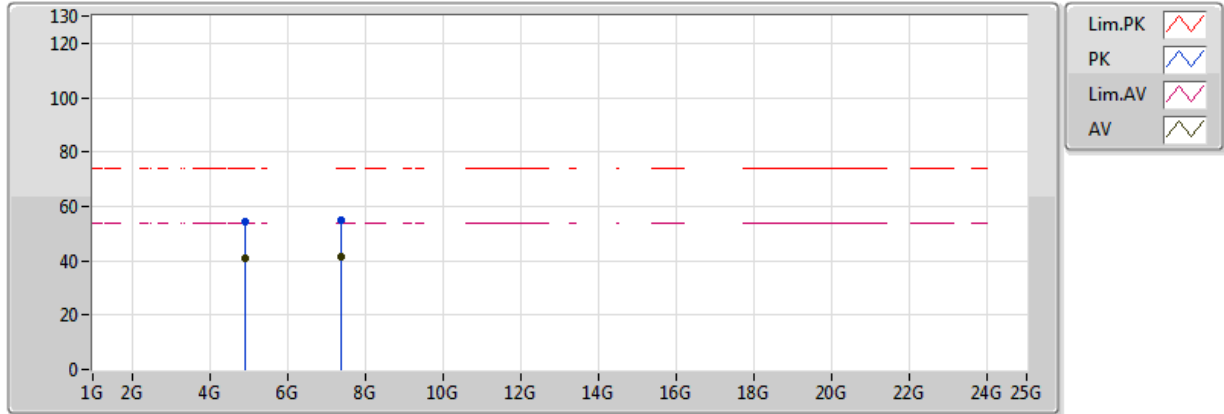


20171111
EUT X_2TX
Setting 20
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.92502G	40.19	54.00	-13.81	4.09	3	Vertical	295	1.13					
AV	7.39836G	39.21	54.00	-14.79	10.34	3	Vertical	238	1.34					
PK	4.92448G	53.68	74.00	-20.32	4.08	3	Vertical	295	1.13					
PK	7.40094G	52.40	74.00	-21.60	10.34	3	Vertical	238	1.34					

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

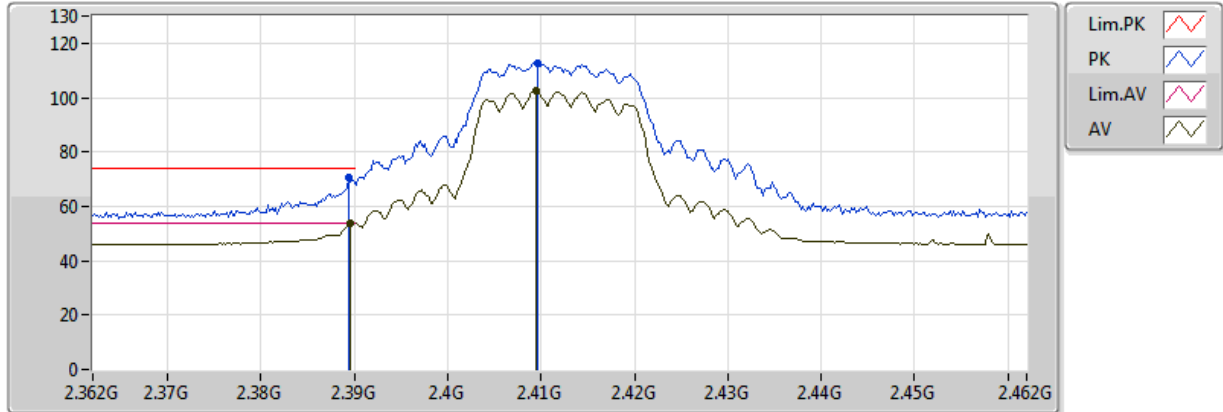


20171111
EUT X_2TX
Setting 20
04-J-4
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	4.9243G	40.83	54.00	-13.17	4.08	3	Horizontal	29	1.00					
AV	7.38942G	41.35	54.00	-12.65	10.34	3	Horizontal	322	2.41					
PK	4.92376G	54.26	74.00	-19.74	4.08	3	Horizontal	29	1.00					
PK	7.39002G	54.92	74.00	-19.08	10.34	3	Horizontal	322	2.41					

802.11ac VHT20_Nss1,(MCS0)_2TX

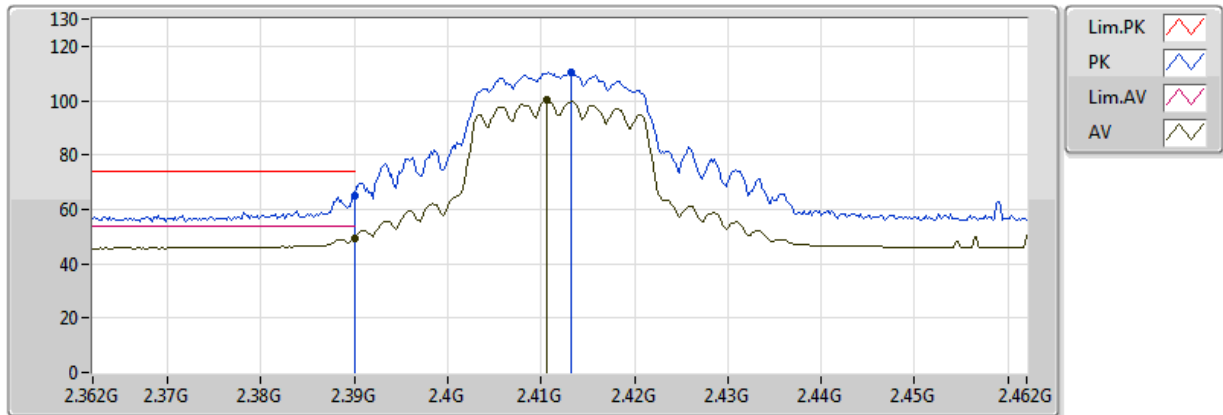
2412MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	2.3896G	53.60	54.00	-0.40	33.48	3	Vertical	125	1.07					
AV	2.4094G	102.50	Inf	-Inf	33.48	3	Vertical	125	1.07					
PK	2.3894G	70.42	74.00	-3.58	33.48	3	Vertical	125	1.07					
PK	2.4096G	112.82	Inf	-Inf	33.48	3	Vertical	125	1.07					

802.11ac VHT20_Nss1,(MCS0)_2TX

2412MHz_TX

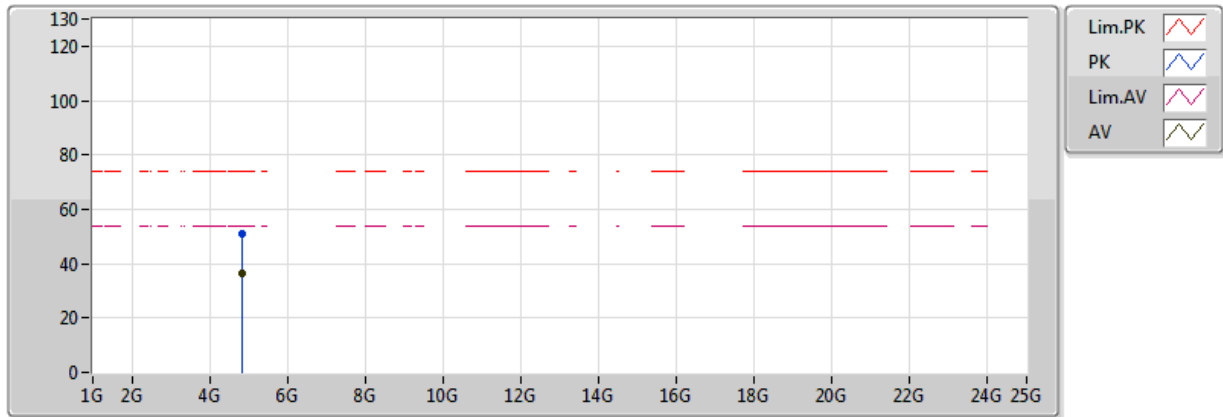


20171111
EUT X_2TX
Setting 1F
04-J-4
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	2.39G	49.40	54.00	-4.60	33.48	3	Horizontal	141	1.08					
AV	2.4106G	100.19	Inf	-Inf	33.48	3	Horizontal	141	1.08					
PK	2.39G	65.21	74.00	-8.79	33.48	3	Horizontal	141	1.08					
PK	2.4132G	110.54	Inf	-Inf	33.48	3	Horizontal	141	1.08					

802.11ac VHT20_Nss1,(MCS0)_2TX

2412MHz_TX

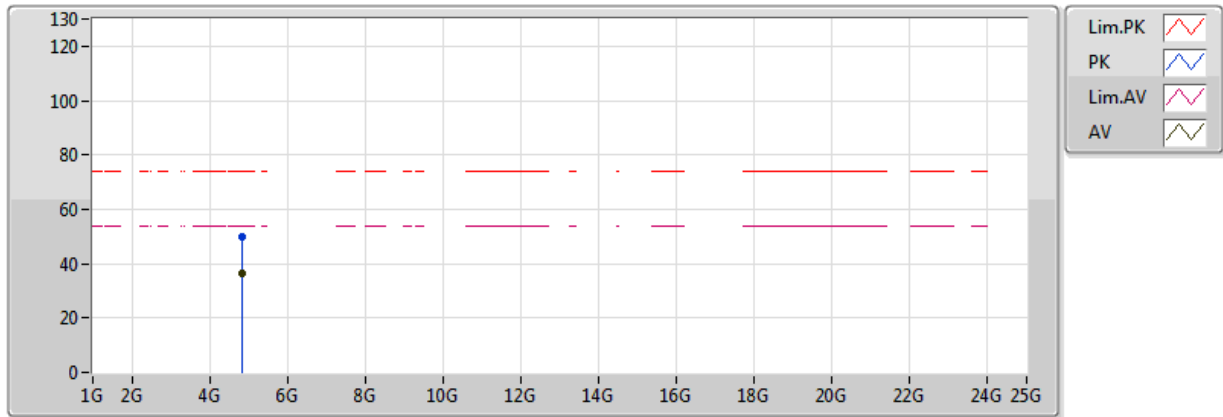


20171111
EUT X_2TX
Setting 1F
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.82388G	36.26	54.00	-17.74	3.86	3	Vertical	250	1.11					
PK	4.8261G	50.74	74.00	-23.26	3.87	3	Vertical	250	1.11					

802.11ac VHT20_Nss1,(MCS0)_2TX

2412MHz_TX

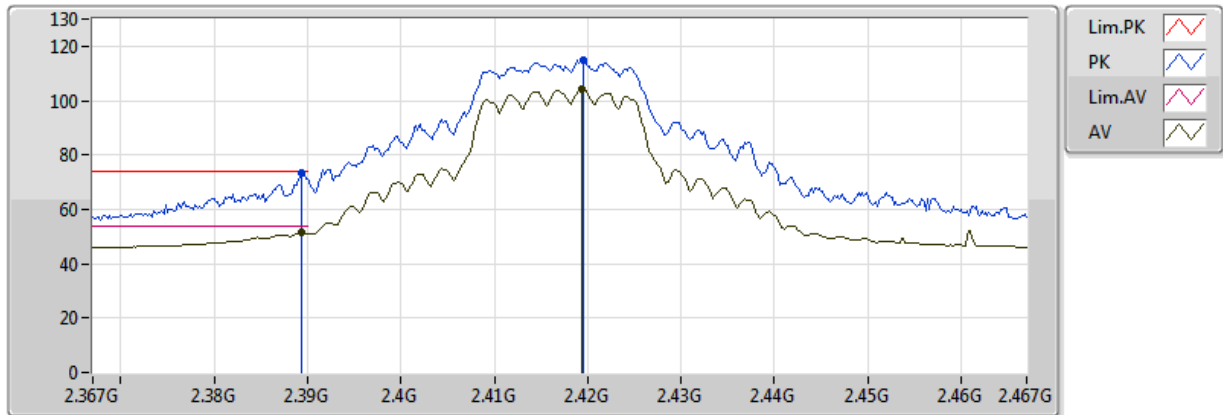


20171111
EUT X_2TX
Setting 1F
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.8237G	36.22	54.00	-17.78	3.86	3	Horizontal	308	1.38					
PK	4.8213G	50.08	74.00	-23.92	3.86	3	Horizontal	308	1.38					

802.11ac VHT20_Nss1,(MCS0)_2TX

2417MHz_TX

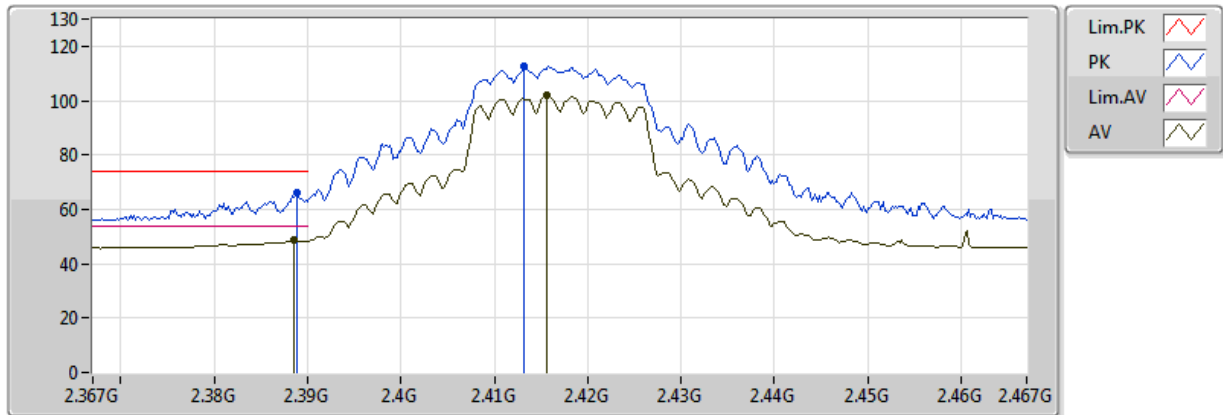


20171111
EUT X_2TX
Setting 24
04-J-4
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	2.3894G	51.40	54.00	-2.60	33.48	3	Vertical	126	1.26					
AV	2.4194G	104.36	Inf	-Inf	33.48	3	Vertical	126	1.26					
PK	2.3894G	73.25	74.00	-0.75	33.48	3	Vertical	126	1.26					
PK	2.4196G	114.95	Inf	-Inf	33.48	3	Vertical	126	1.26					

802.11ac VHT20_Nss1,(MCS0)_2TX

2417MHz_TX

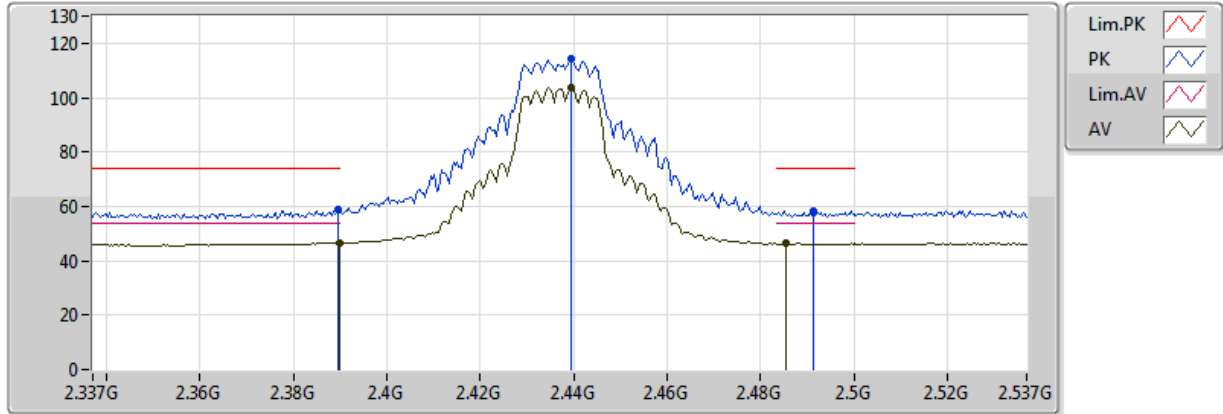


20171111
EUT X_2TX
Setting 24
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3886G	48.55	54.00	-5.45	33.48	3	Horizontal	138	1.07					
AV	2.4156G	102.02	Inf	-Inf	33.48	3	Horizontal	138	1.07					
PK	2.3888G	65.88	74.00	-8.12	33.48	3	Horizontal	138	1.07					
PK	2.4132G	112.56	Inf	-Inf	33.48	3	Horizontal	138	1.07					

802.11ac VHT20_Nss1,(MCS0)_2TX

2437MHz_TX

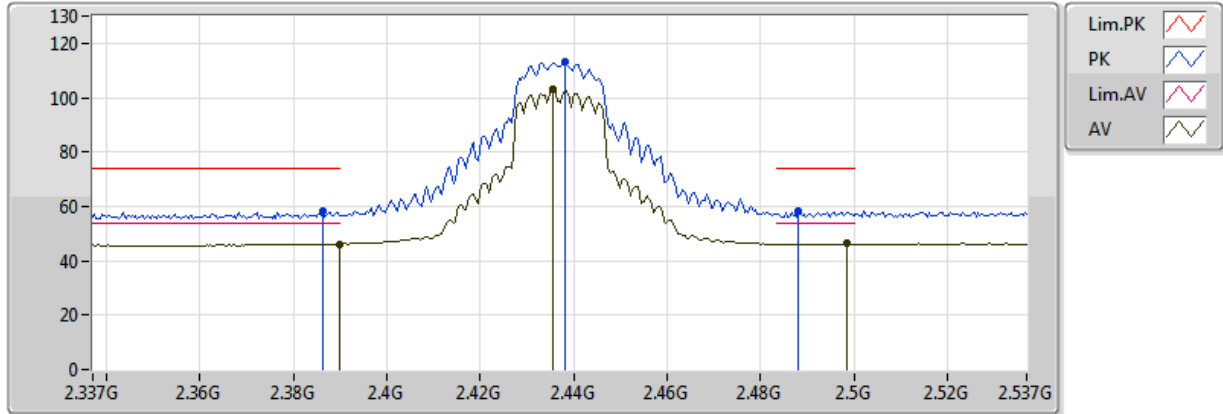


20171111
EUT X_2TX
Setting 24
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.389998G	46.52	54.00	-7.48	33.48	3	Vertical	53	1.14					
AV	2.4394G	103.85	Inf	-Inf	33.48	3	Vertical	53	1.14					
AV	2.4854G	46.30	54.00	-7.70	33.49	3	Vertical	53	1.14					
PK	2.3894G	58.66	74.00	-15.34	33.48	3	Vertical	53	1.14					
PK	2.4394G	114.17	Inf	-Inf	33.48	3	Vertical	53	1.14					
PK	2.4914G	58.46	74.00	-15.54	33.49	3	Vertical	53	1.14					

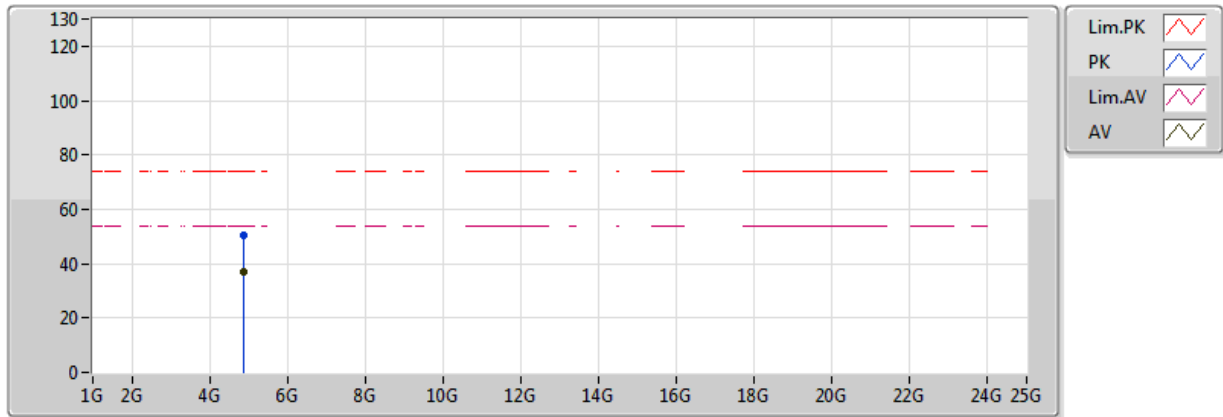
802.11ac VHT20_Nss1,(MCS0)_2TX

2437MHz_TX



802.11ac VHT20_Nss1,(MCS0)_2TX

2437MHz_TX

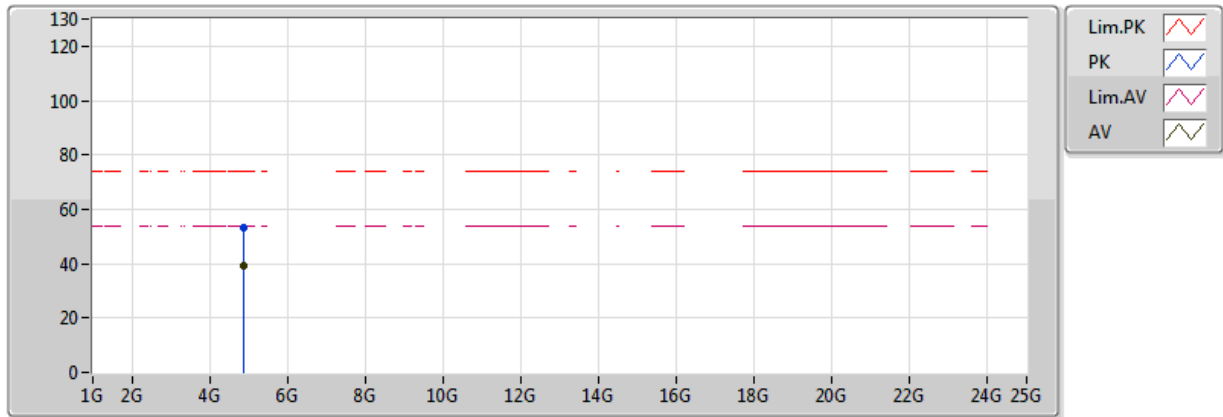


20171111
EUT X_2TX
Setting 24
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.87388G	37.19	54.00	-16.81	3.97	3	Vertical	154	1.50					
PK	4.8716G	50.26	74.00	-23.74	3.97	3	Vertical	154	1.50					

802.11ac VHT20_Nss1,(MCS0)_2TX

2437MHz_TX

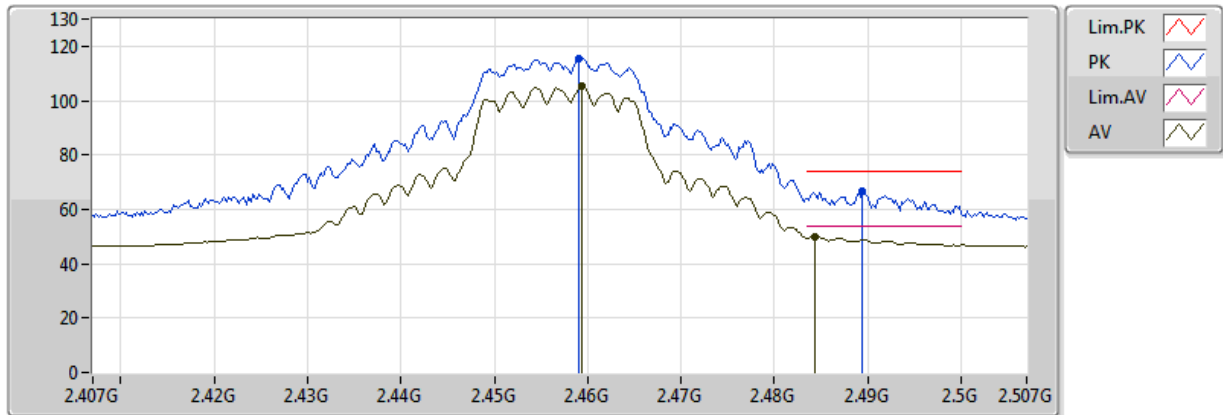


20171111
EUT X_2TX
Setting 24
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.87394G	39.44	54.00	-14.56	3.97	3	Horizontal	40	1.95					
PK	4.8713G	53.38	74.00	-20.62	3.97	3	Horizontal	40	1.95					

802.11ac VHT20_Nss1,(MCS0)_2TX

2457MHz_TX

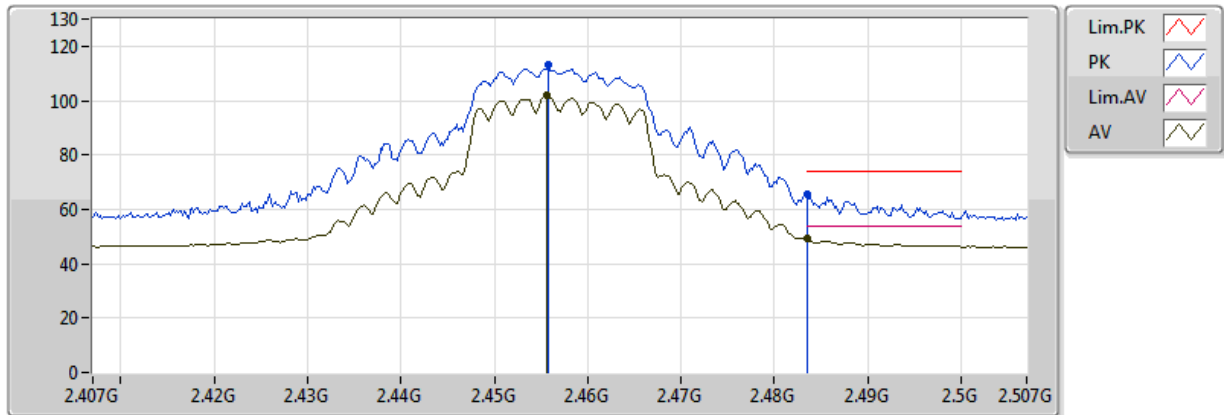


20171111
EUT X_2TX
Setting 24
04-J-4
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	2.4594G	105.14	Inf	-Inf	33.49	3	Vertical	127	1.29					
AV	2.4844G	50.09	54.00	-3.91	33.49	3	Vertical	127	1.29					
PK	2.459G	115.39	Inf	-Inf	33.49	3	Vertical	127	1.29					
PK	2.4894G	66.78	74.00	-7.22	33.49	3	Vertical	127	1.29					

802.11ac VHT20_Nss1,(MCS0)_2TX

2457MHz_TX

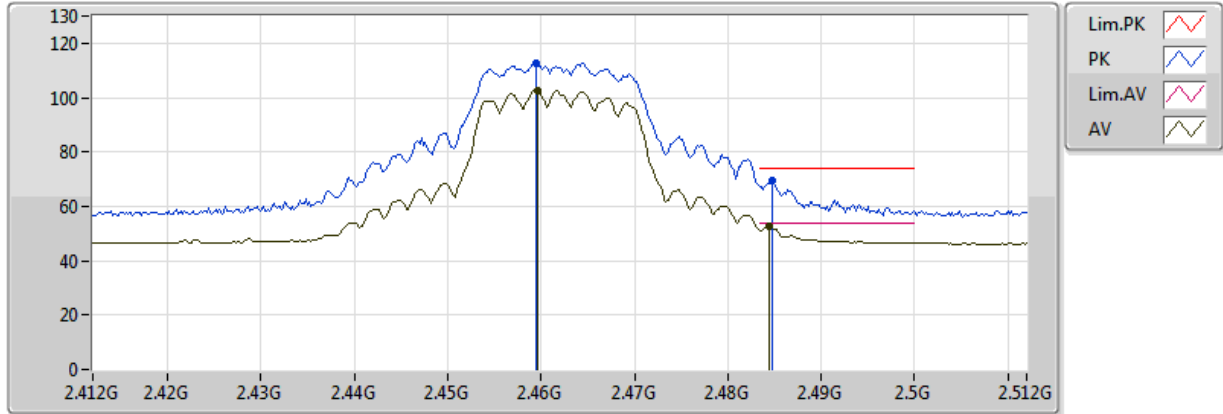


20171111
EUT X_2TX
Setting 24
04-J-4
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	2.4556G	101.92	Inf	-Inf	33.49	3	Horizontal	147	2.59					
AV	2.483502G	49.13	54.00	-4.87	33.49	3	Horizontal	147	2.59					
PK	2.4558G	112.92	Inf	-Inf	33.49	3	Horizontal	147	2.59					
PK	2.483502G	65.46	74.00	-8.54	33.49	3	Horizontal	147	2.59					

802.11ac VHT20_Nss1,(MCS0)_2TX

2462MHz_TX

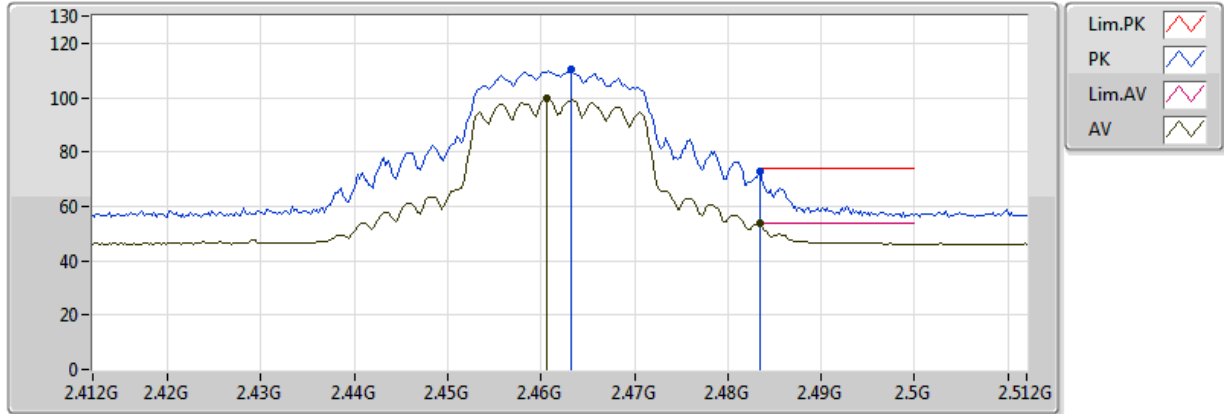


20171111
EUT X_2TX
Setting 20
04-J-4
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	2.4596G	102.64	Inf	-Inf	33.49	3	Vertical	126	1.29					
AV	2.4844G	52.58	54.00	-1.42	33.49	3	Vertical	126	1.29					
PK	2.4594G	112.85	Inf	-Inf	33.49	3	Vertical	126	1.29					
PK	2.4848G	69.28	74.00	-4.72	33.49	3	Vertical	126	1.29					

802.11ac VHT20_Nss1,(MCS0)_2TX

2462MHz_TX

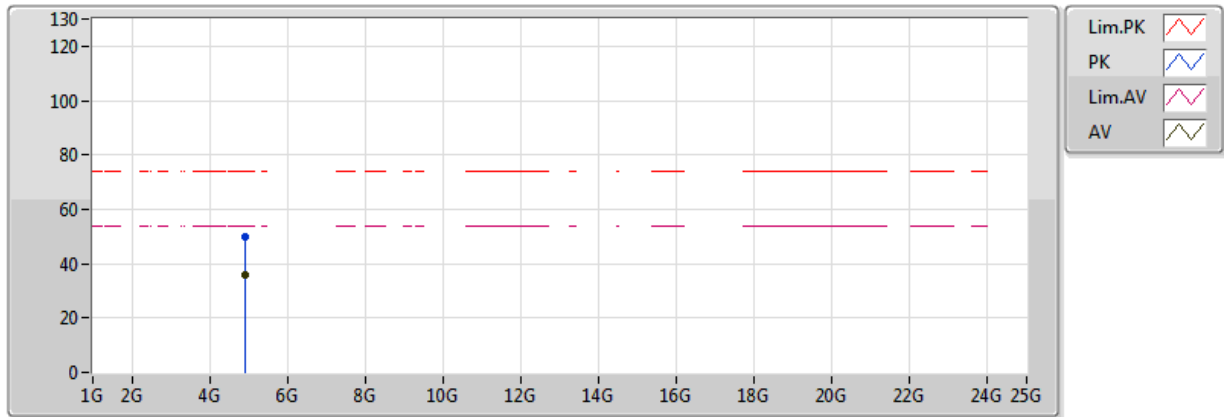


20171111
EUT X_2TX
Setting 20
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.4606G	99.68	Inf	-Inf	33.49	3	Horizontal	147	1.79					
AV	2.483502G	53.55	54.00	-0.45	33.49	3	Horizontal	147	1.79					
PK	2.4632G	110.11	Inf	-Inf	33.49	3	Horizontal	147	1.79					
PK	2.483502G	72.60	74.00	-1.40	33.49	3	Horizontal	147	1.79					

802.11ac VHT20_Nss1,(MCS0)_2TX

2462MHz_TX

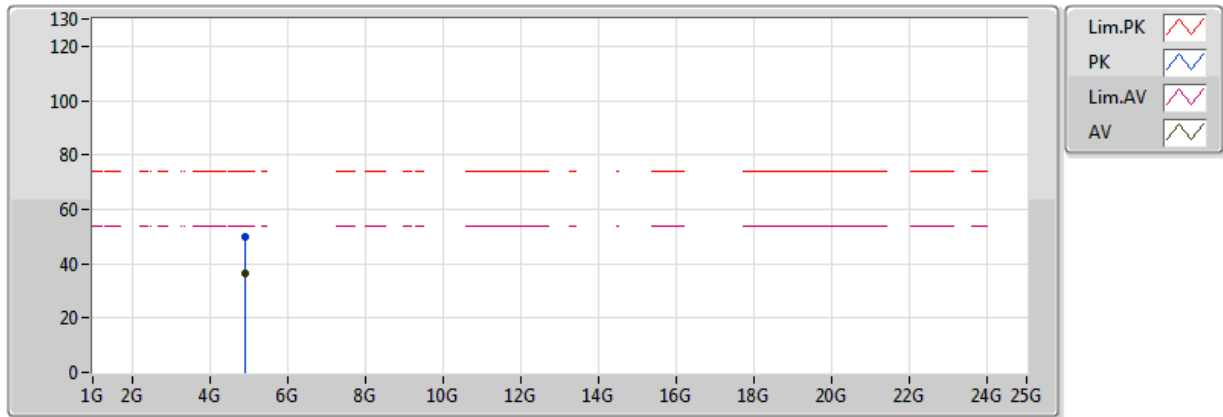


20171111
EUT X_2TX
Setting 20
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.92394G	36.08	54.00	-17.92	4.08	3	Vertical	265	1.94					
PK	4.92664G	49.65	74.00	-24.35	4.09	3	Vertical	265	1.94					

802.11ac VHT20_Nss1,(MCS0)_2TX

2462MHz_TX

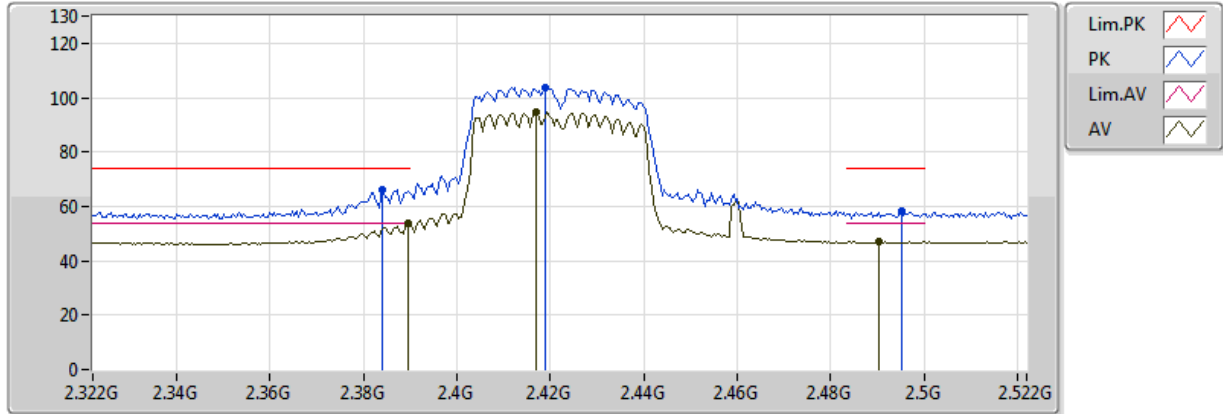


20171111
EUT X_2TX
Setting 20
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.92412G	36.68	54.00	-17.32	4.08	3	Horizontal	277	2.07					
PK	4.92154G	50.05	74.00	-23.95	4.08	3	Horizontal	277	2.07					

802.11ac VHT40_Nss1,(MCS0)_2TX

2422MHz_TX

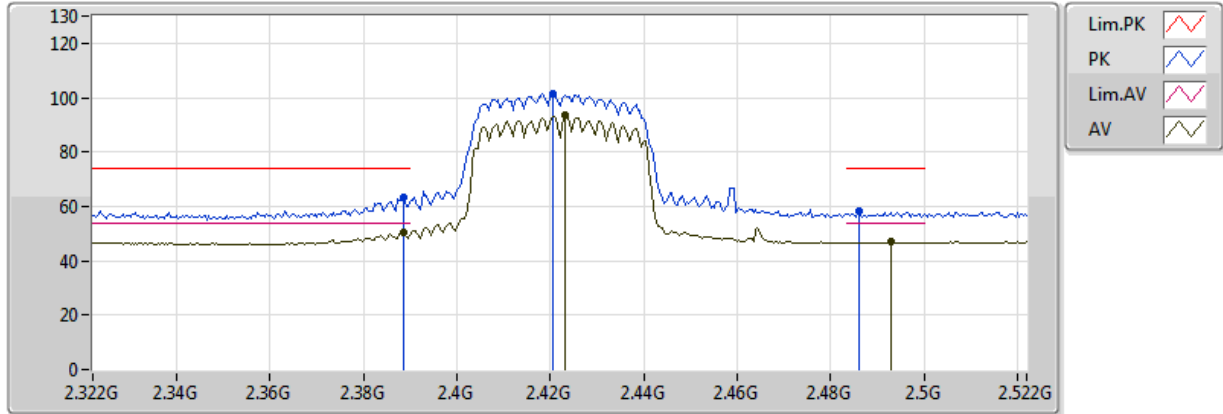


20171111
EUT X_2TX
Setting 16
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3896G	53.58	54.00	-0.42	33.48	3	Vertical	127	1.02					
AV	2.4168G	94.56	Inf	-Inf	33.48	3	Vertical	127	1.02					
AV	2.4904G	46.90	54.00	-7.10	33.49	3	Vertical	127	1.02					
PK	2.384G	65.94	74.00	-8.06	33.48	3	Vertical	127	1.02					
PK	2.4188G	103.69	Inf	-Inf	33.48	3	Vertical	127	1.02					
PK	2.4952G	58.40	74.00	-15.60	33.49	3	Vertical	127	1.02					

802.11ac VHT40_Nss1,(MCS0)_2TX

2422MHz_TX

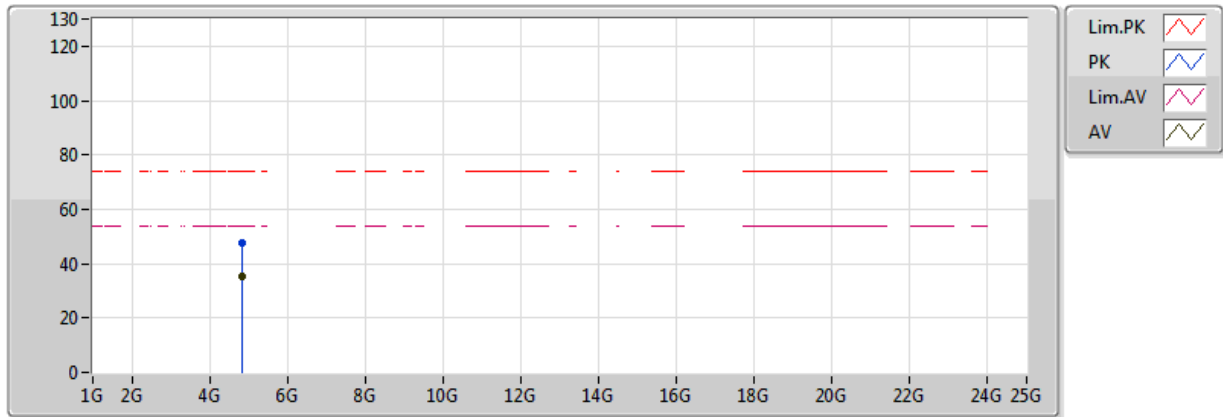


20171111
EUT X_2TX
Setting 16
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3884G	50.21	54.00	-3.79	33.48	3	Horizontal	137	1.45					
AV	2.4232G	93.46	Inf	-Inf	33.48	3	Horizontal	137	1.45					
AV	2.4928G	46.80	54.00	-7.20	33.49	3	Horizontal	137	1.45					
PK	2.3884G	63.29	74.00	-10.71	33.48	3	Horizontal	137	1.45					
PK	2.4204G	101.35	Inf	-Inf	33.48	3	Horizontal	137	1.45					
PK	2.486G	58.28	74.00	-15.72	33.49	3	Horizontal	137	1.45					

802.11ac VHT40_Nss1,(MCS0)_2TX

2422MHz_TX

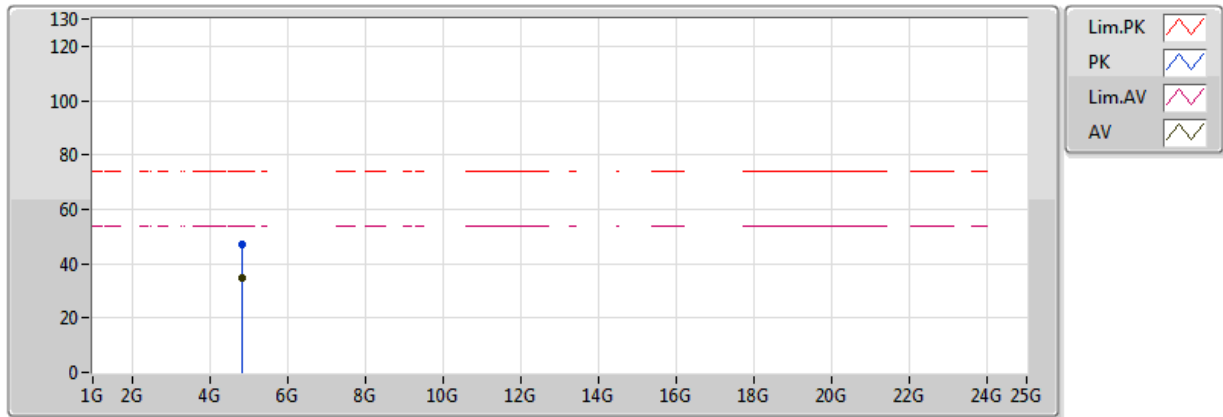


20171111
EUT X_2TX
Setting 16
04-J-4
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	4.84394G	35.23	54.00	-18.77	3.91	3	Vertical	230	1.34					
PK	4.8512G	47.40	74.00	-26.60	3.92	3	Vertical	230	1.34					

802.11ac VHT40_Nss1,(MCS0)_2TX

2422MHz_TX

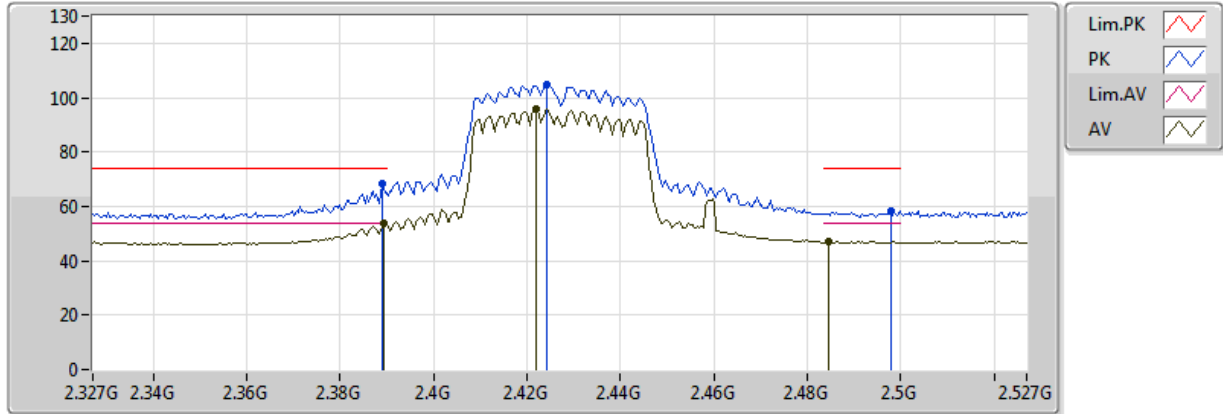


20171111
EUT X_2TX
Setting 16
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.84592G	34.87	54.00	-19.13	3.91	3	Horizontal	95	2.44					
PK	4.84796G	47.03	74.00	-26.97	3.92	3	Horizontal	95	2.44					

802.11ac VHT40_Nss1,(MCS0)_2TX

2427MHz_TX

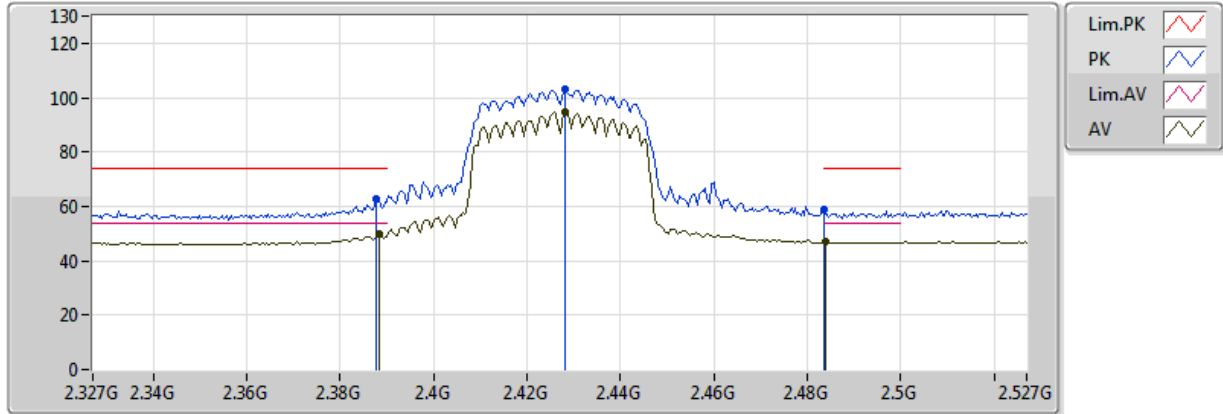


20171111
EUT X_2TX
Setting 17
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3894G	53.91	54.00	-0.09	33.48	3	Vertical	127	1.29					
AV	2.4218G	95.75	Inf	-Inf	33.48	3	Vertical	127	1.29					
AV	2.4846G	47.05	54.00	-6.95	33.49	3	Vertical	127	1.29					
PK	2.389G	68.17	74.00	-5.83	33.48	3	Vertical	127	1.29					
PK	2.4242G	104.67	Inf	-Inf	33.48	3	Vertical	127	1.29					
PK	2.4978G	58.34	74.00	-15.66	33.49	3	Vertical	127	1.29					

802.11ac VHT40_Nss1,(MCS0)_2TX

2427MHz_TX

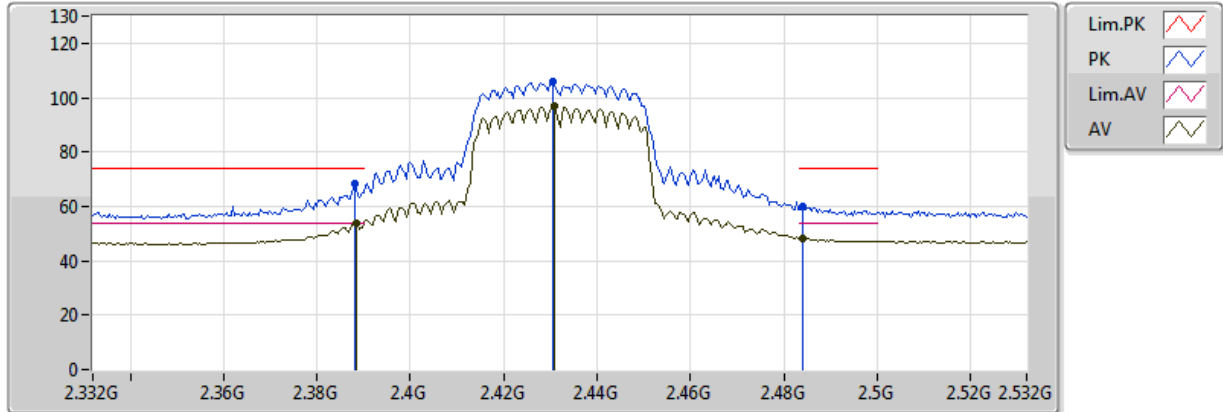


20171111
EUT X_2TX
Setting 17
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3882G	49.70	54.00	-4.30	33.48	3	Horizontal	136	1.01					
AV	2.4282G	94.57	Inf	-Inf	33.48	3	Horizontal	136	1.01					
AV	2.4838G	46.99	54.00	-7.01	33.49	3	Horizontal	136	1.01					
PK	2.3878G	62.89	74.00	-11.11	33.48	3	Horizontal	136	1.01					
PK	2.4282G	102.87	Inf	-Inf	33.48	3	Horizontal	136	1.01					
PK	2.483502G	58.85	74.00	-15.15	33.49	3	Horizontal	136	1.01					

802.11ac VHT40_Nss1,(MCS0)_2TX

2432MHz_TX

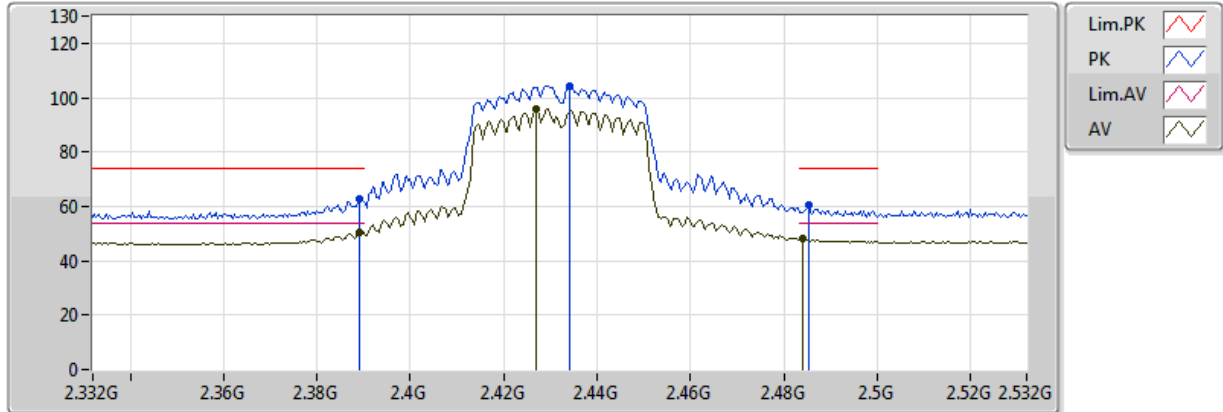


20171111
EUT X_2TX
Setting 1A
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3884G	53.91	54.00	-0.09	33.48	3	Vertical	128	1.16					
AV	2.4308G	96.85	Inf	-Inf	33.48	3	Vertical	128	1.16					
AV	2.484G	48.19	54.00	-5.81	33.49	3	Vertical	128	1.16					
PK	2.388G	68.56	74.00	-5.44	33.48	3	Vertical	128	1.16					
PK	2.4304G	105.77	Inf	-Inf	33.48	3	Vertical	128	1.16					
PK	2.484G	59.69	74.00	-14.31	33.49	3	Vertical	128	1.16					

802.11ac VHT40_Nss1,(MCS0)_2TX

2432MHz_TX

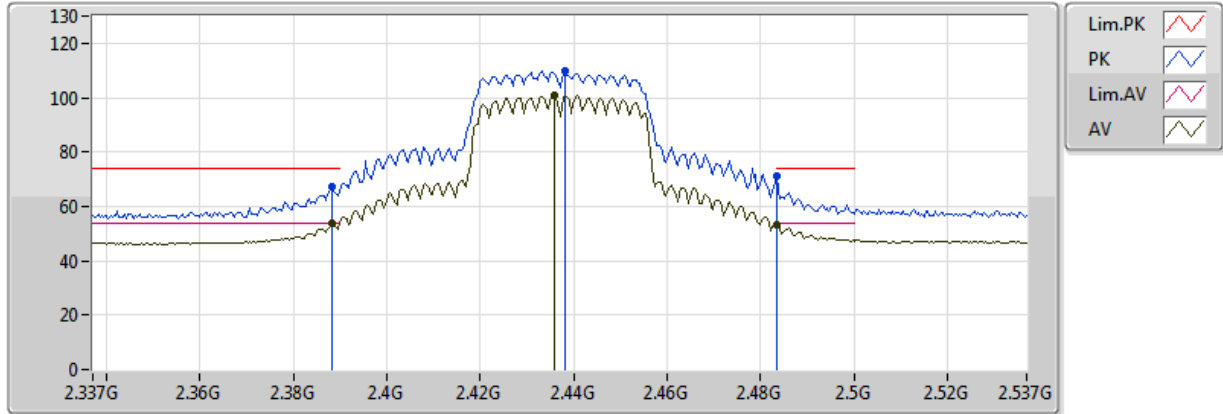


20171111
EUT X_2TX
Setting 1A
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3892G	50.62	54.00	-3.38	33.48	3	Horizontal	131	1.01					
AV	2.4268G	95.67	Inf	-Inf	33.48	3	Horizontal	131	1.01					
AV	2.484G	48.03	54.00	-5.97	33.49	3	Horizontal	131	1.01					
PK	2.3892G	63.01	74.00	-10.99	33.48	3	Horizontal	131	1.01					
PK	2.434G	104.22	Inf	-Inf	33.48	3	Horizontal	131	1.01					
PK	2.4852G	60.58	74.00	-13.42	33.49	3	Horizontal	131	1.01					

802.11ac VHT40_Nss1,(MCS0)_2TX

2437MHz_TX

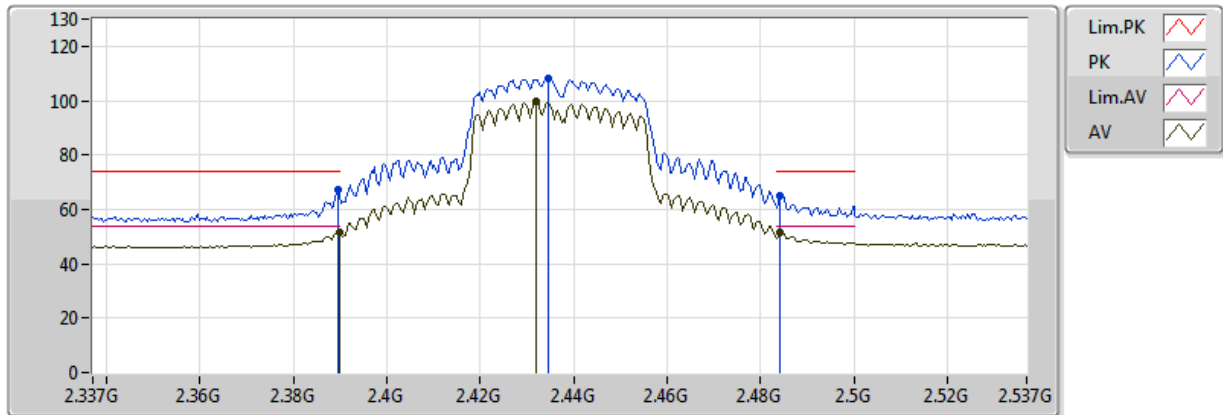


20171111
EUT X_2TX
Setting 22
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3882G	53.91	54.00	-0.09	33.48	3	Vertical	129	1.50					
AV	2.4358G	100.93	Inf	-Inf	33.48	3	Vertical	129	1.50					
AV	2.483502G	53.34	54.00	-0.66	33.49	3	Vertical	129	1.50					
PK	2.3882G	67.08	74.00	-6.92	33.48	3	Vertical	129	1.50					
PK	2.4382G	110.10	Inf	-Inf	33.48	3	Vertical	129	1.50					
PK	2.483502G	71.07	74.00	-2.93	33.49	3	Vertical	129	1.50					

802.11ac VHT40_Nss1,(MCS0)_2TX

2437MHz_TX

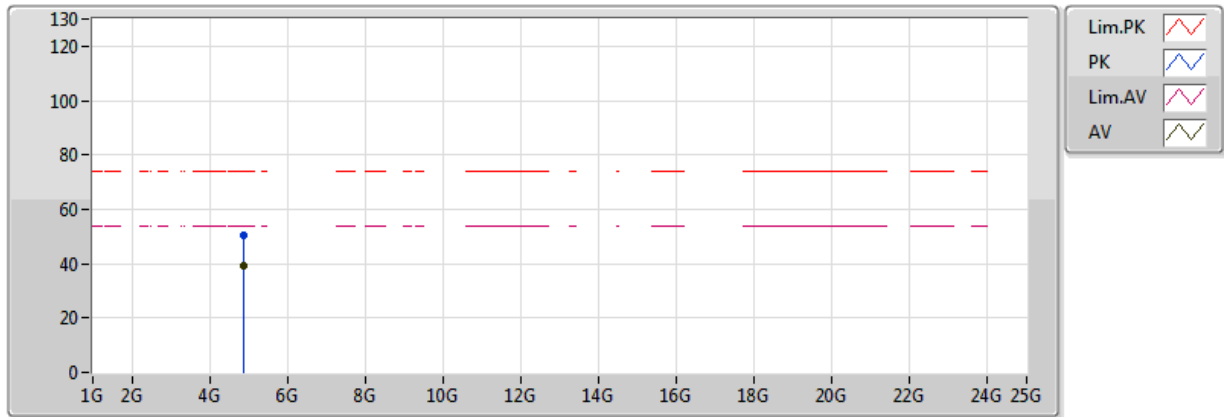


20171111
EUT X_2TX
Setting 22
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.389998G	51.64	54.00	-2.36	33.48	3	Horizontal	126	1.00					
AV	2.4318G	99.87	Inf	-Inf	33.48	3	Horizontal	126	1.00					
AV	2.4842G	51.46	54.00	-2.54	33.49	3	Horizontal	126	1.00					
PK	2.3894G	66.98	74.00	-7.02	33.48	3	Horizontal	126	1.00					
PK	2.4346G	108.34	Inf	-Inf	33.48	3	Horizontal	126	1.00					
PK	2.4842G	65.16	74.00	-8.84	33.49	3	Horizontal	126	1.00					

802.11ac VHT40_Nss1,(MCS0)_2TX

2437MHz_TX

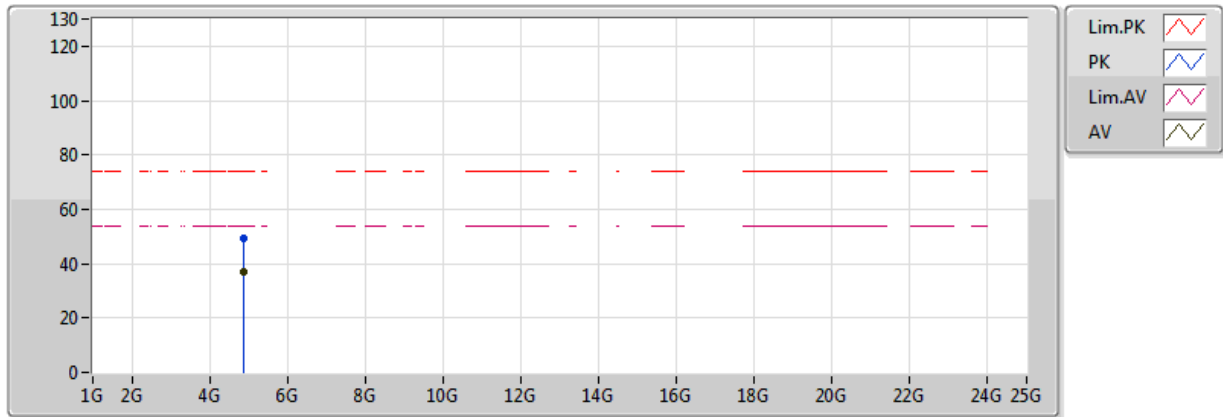


20171111
EUT X_2TX
Setting 22
04-J-4
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	4.874G	39.00	54.00	-15.00	3.97	3	Vertical	243	2.11					
PK	4.87388G	50.65	74.00	-23.35	3.97	3	Vertical	243	2.11					

802.11ac VHT40_Nss1,(MCS0)_2TX

2437MHz_TX

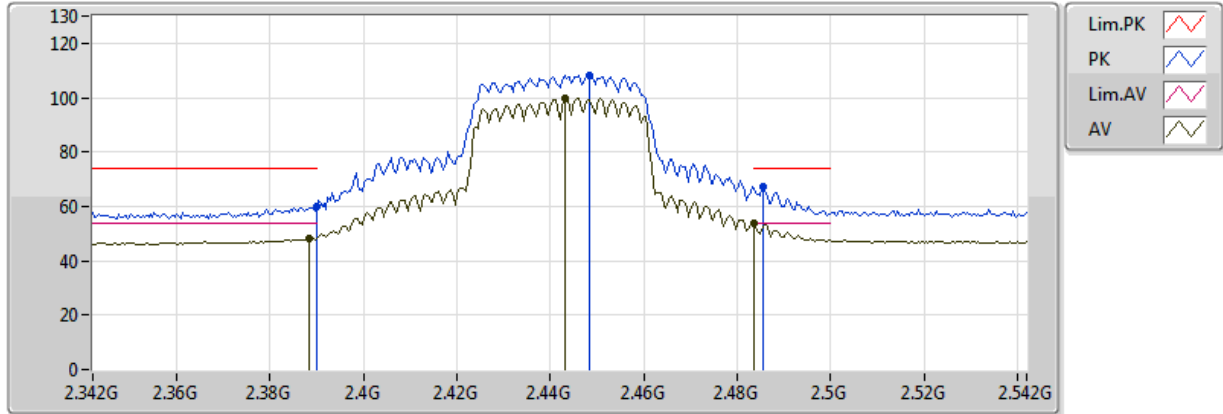


20171111
EUT X_2TX
Setting 22
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.8734G	36.72	54.00	-17.28	3.97	3	Horizontal	123	2.44					
PK	4.87118G	49.35	74.00	-24.65	3.97	3	Horizontal	123	2.44					

802.11ac VHT40_Nss1,(MCS0)_2TX

2442MHz_TX

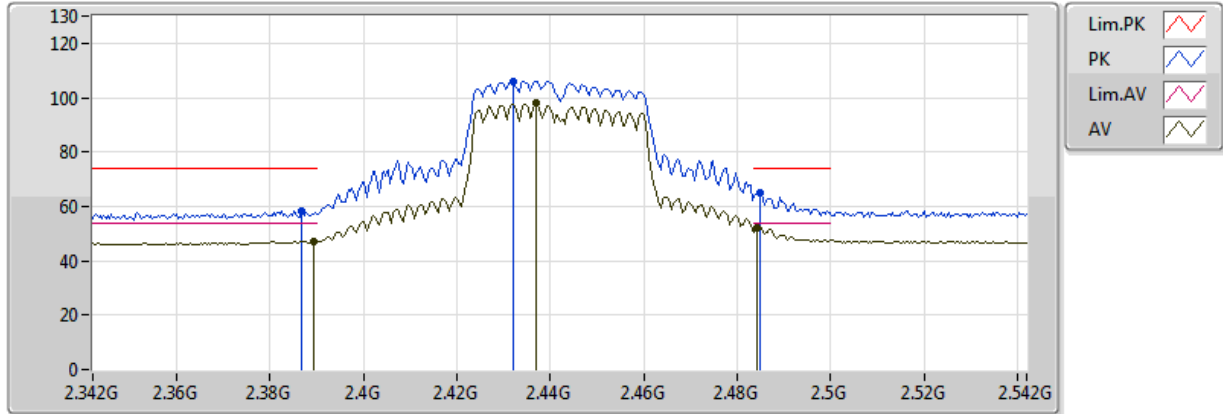


20171111
EUT X_2TX
Setting 20
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3884G	48.21	54.00	-5.79	33.48	3	Vertical	129	1.38					
AV	2.4432G	99.97	Inf	-Inf	33.48	3	Vertical	129	1.38					
AV	2.4836G	53.59	54.00	-0.41	33.49	3	Vertical	129	1.38					
PK	2.39G	59.74	74.00	-14.26	33.48	3	Vertical	129	1.38					
PK	2.4484G	107.99	Inf	-Inf	33.48	3	Vertical	129	1.38					
PK	2.4856G	67.10	74.00	-6.90	33.49	3	Vertical	129	1.38					

802.11ac VHT40_Nss1,(MCS0)_2TX

2442MHz_TX

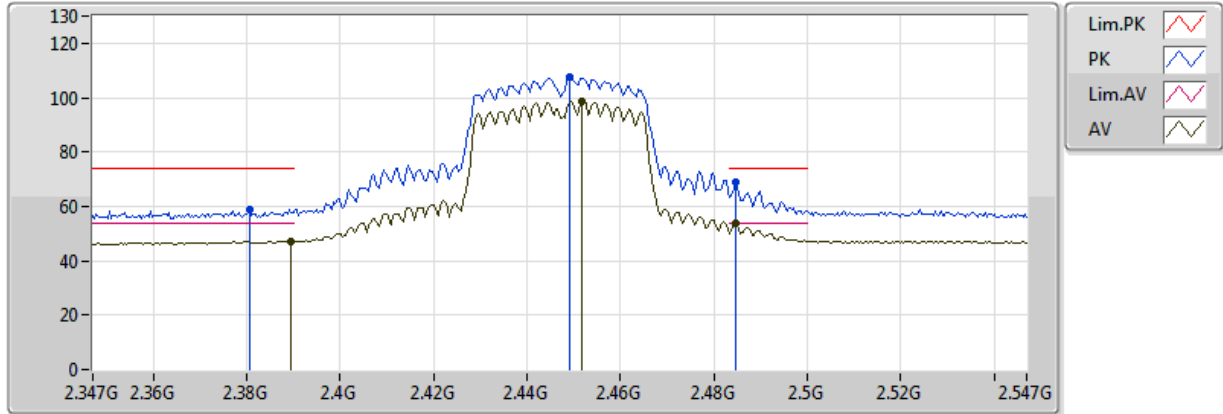


20171111
EUT X_2TX
Setting 20
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3892G	47.26	54.00	-6.74	33.48	3	Horizontal	132	1.01					
AV	2.4368G	97.84	Inf	-Inf	33.48	3	Horizontal	132	1.01					
AV	2.4844G	52.35	54.00	-1.65	33.49	3	Horizontal	132	1.01					
PK	2.3868G	58.38	74.00	-15.62	33.48	3	Horizontal	132	1.01					
PK	2.432G	105.93	Inf	-Inf	33.48	3	Horizontal	132	1.01					
PK	2.4848G	64.73	74.00	-9.27	33.49	3	Horizontal	132	1.01					

802.11ac VHT40_Nss1,(MCS0)_2TX

2447MHz_TX

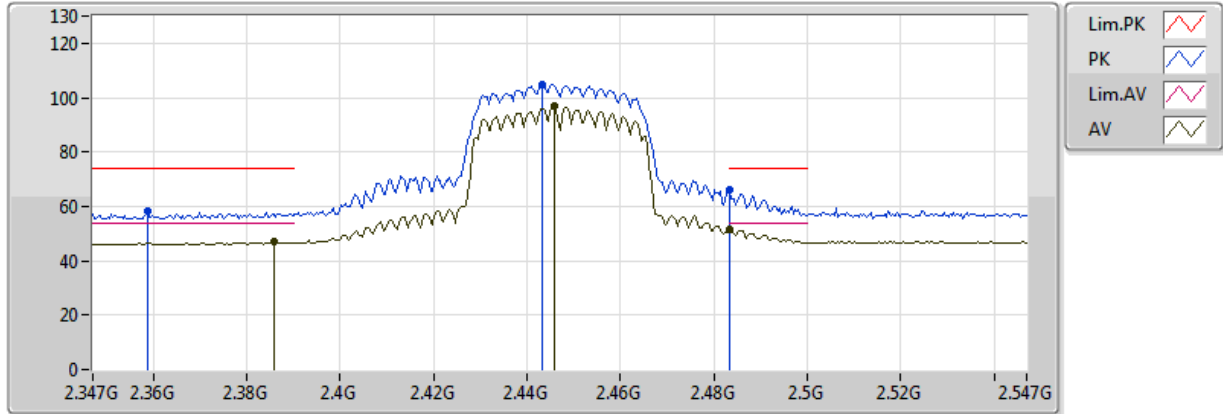


20171111
EUT X_2TX
Setting 1E
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3894G	47.13	54.00	-6.87	33.48	3	Vertical	132	1.41					
AV	2.4518G	98.83	Inf	-Inf	33.49	3	Vertical	132	1.41					
AV	2.4846G	53.99	54.00	-0.01	33.49	3	Vertical	132	1.41					
PK	2.3806G	59.05	74.00	-14.95	33.47	3	Vertical	132	1.41					
PK	2.449G	107.38	Inf	-Inf	33.48	3	Vertical	132	1.41					
PK	2.4846G	68.82	74.00	-5.18	33.49	3	Vertical	132	1.41					

802.11ac VHT40_Nss1,(MCS0)_2TX

2447MHz_TX

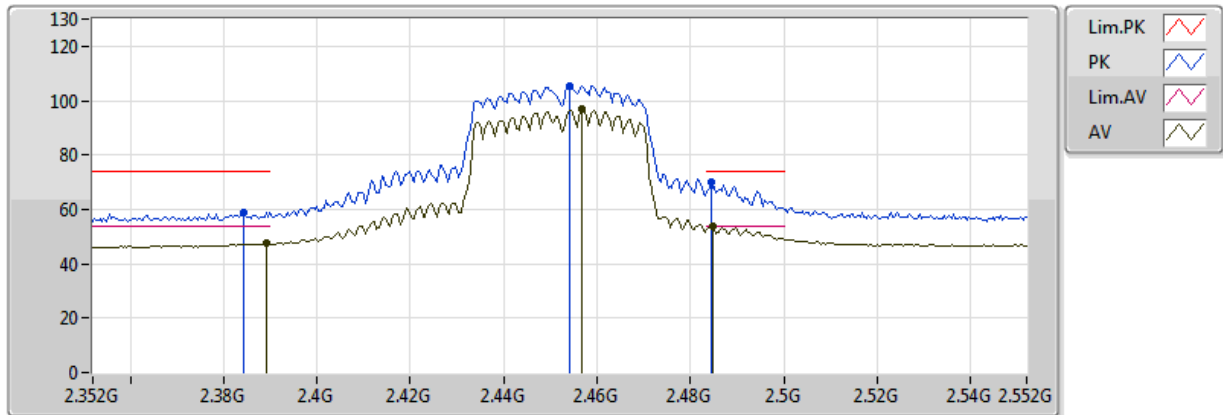


20171111
EUT X_2TX
Setting 1E
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3858G	46.83	54.00	-7.17	33.48	3	Horizontal	145	1.28					
AV	2.4458G	96.79	Inf	-Inf	33.48	3	Horizontal	145	1.28					
AV	2.483502G	51.82	54.00	-2.18	33.49	3	Horizontal	145	1.28					
PK	2.3586G	58.17	74.00	-15.83	33.47	3	Horizontal	145	1.28					
PK	2.4434G	105.01	Inf	-Inf	33.48	3	Horizontal	145	1.28					
PK	2.483502G	66.02	74.00	-7.98	33.49	3	Horizontal	145	1.28					

802.11ac VHT40_Nss1,(MCS0)_2TX

2452MHz_TX

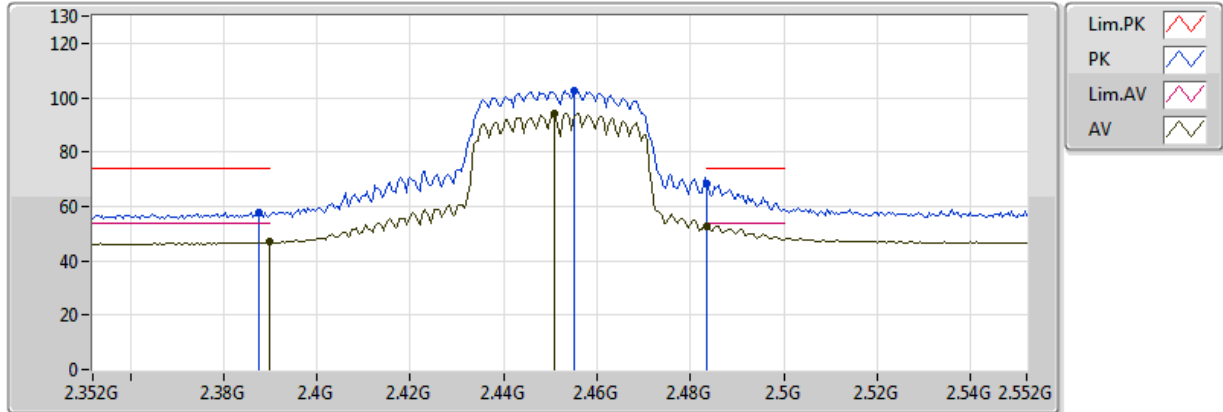


20171111
EUT X_2TX
Setting 1A
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.3892G	47.61	54.00	-6.39	33.48	3	Vertical	135	1.29					
AV	2.4568G	96.66	Inf	-Inf	33.49	3	Vertical	135	1.29					
AV	2.4848G	53.94	54.00	-0.06	33.49	3	Vertical	135	1.29					
PK	2.3844G	58.89	74.00	-15.11	33.48	3	Vertical	135	1.29					
PK	2.454G	105.33	Inf	-Inf	33.49	3	Vertical	135	1.29					
PK	2.4844G	69.85	74.00	-4.15	33.49	3	Vertical	135	1.29					

802.11ac VHT40_Nss1,(MCS0)_2TX

2452MHz_TX

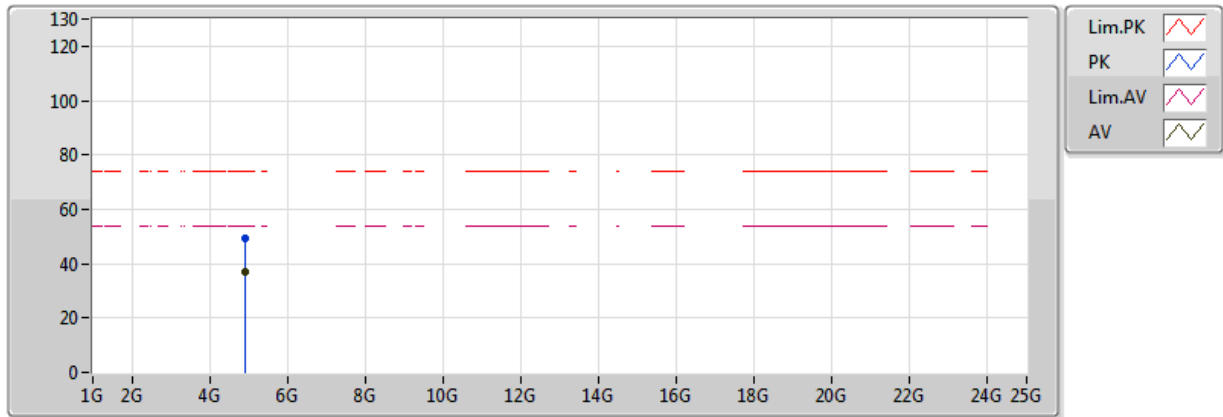


20171111
EUT X_2TX
Setting 1A
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	2.39G	46.87	54.00	-7.13	33.48	3	Horizontal	137	1.23					
AV	2.4508G	94.16	Inf	-Inf	33.49	3	Horizontal	137	1.23					
AV	2.4836G	52.89	54.00	-1.11	33.49	3	Horizontal	137	1.23					
PK	2.3876G	57.83	74.00	-16.17	33.48	3	Horizontal	137	1.23					
PK	2.4552G	102.39	Inf	-Inf	33.49	3	Horizontal	137	1.23					
PK	2.4836G	68.28	74.00	-5.72	33.49	3	Horizontal	137	1.23					

802.11ac VHT40_Nss1,(MCS0)_2TX

2452MHz_TX

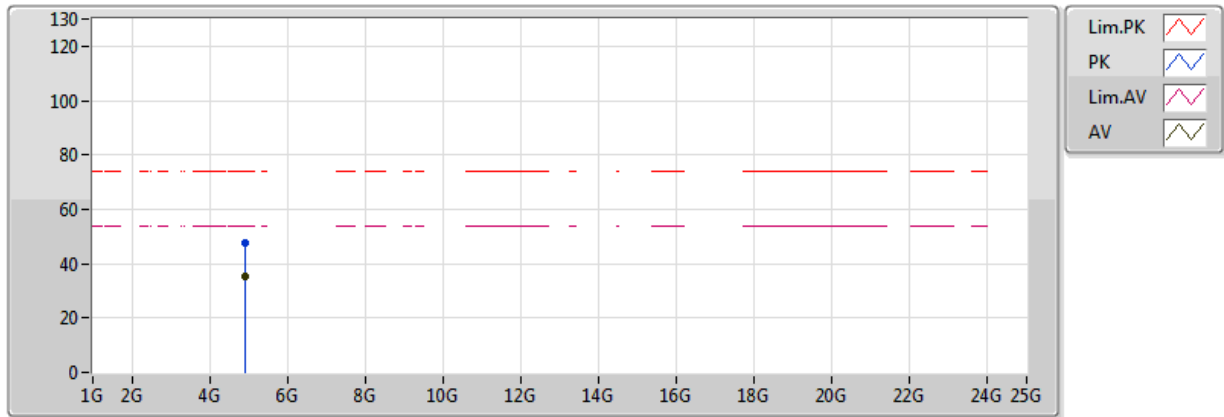


20171111
EUT X_2TX
Setting 1A
04-J-4
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height					
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)					
AV	4.90406G	37.06	54.00	-16.94	4.04	3	Vertical	314	2.44					
PK	4.9067G	49.20	74.00	-24.80	4.04	3	Vertical	314	2.44					

802.11ac VHT40_Nss1,(MCS0)_2TX

2452MHz_TX



20171111
EUT X_2TX
Setting 1A
04-J-4
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)					
AV	4.91672G	35.37	54.00	-18.63	4.07	3	Horizontal	269	1.54					
PK	4.91402G	47.35	74.00	-26.65	4.06	3	Horizontal	269	1.54					