



FCC RADIO TEST REPORT

FCC ID : PPQ-WP8333V5
Equipment : 802.11ac Tri Band PoE Access Point
Brand Name : LITE-ON, WatchGuard
Model Name : WP8333V5, C-110, AP325
Applicant : LITE-ON Technology Corp.
Bldg. C, 90, Chien 1 Rd., Chung-Ho, New Taipei
City, 23585 Taiwan
Manufacturer (1) : Lite-On Network Communication (Dongguan)
Limited
30#Keji Rd., Yin Hu Industrial Area, Qingxi
Town, DongGuan City, Guangdong, China
Manufacturer (2) : LITE-ON Technology Corp. Networking Plant
No. 101, Neihuan N. Rd., Nanzi Processing Export,
Nanzi Dist., Kaohsiung City 811, Taiwan
Standard : 47 CFR FCC Part 15.247

The product was received on Nov. 11, 2019, and testing was started from Nov. 11, 2019 and completed on Dec. 26, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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


Approved by: Cliff Chang

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



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TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB-A10_10 Ver1.0



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.247(a)	DTS Bandwidth	PASS	-
3.3	15.247(b)	Maximum Conducted Output Power	PASS	-
3.4	15.247(e)	Power Spectral Density	PASS	-
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	-
3.6	15.247(d)	Emissions in Restricted Frequency Bands	PASS	-

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen

Report Producer: Wendy Pan



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), VHT20	2412-2462	1-11 [11]
2400-2483.5	n (HT40), 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	VHT20	20	2TX
2.4-2.4835GHz	802.11n HT40	40	2TX
2.4-2.4835GHz	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

Set	Ant.	Port	Brand	P/N	Antenna Type	Connector	Radio
1	1	1	LYNwave	MLX19X-126AA1-A	PIFA Antenna	I-PEX	R1
	2	2	LYNwave	MLX19X-126AA1-A	PIFA Antenna	I-PEX	R1
	3	1	LYNwave	MLX19X-126AA1-A	PIFA Antenna	I-PEX	R2
	4	2	LYNwave	MLX19X-126AA1-A	PIFA Antenna	I-PEX	R2
	5	1	LYNwave	MLX19X-126AA1-A	PCB Antenna	I-PEX	R4
	6	1	LYNwave	MLX19X-126AA1-A	PCB Antenna	I-PEX	R3
	7	2	LYNwave	MLX19X-126AA1-A	PCB Antenna	I-PEX	R3

Ant.	Gain (dBi)						
	Radio 1	Radio 2		Radio 3			Radio 4
	WLAN 2.4GHz	WLAN 5GHz B1	WLAN 5GHz B4	WLAN 2.4GHz	WLAN 5GHz B1	WLAN 5GHz B4	Buletooth
1	6.3	-	-	-	-	-	-
2	6.5	-	-	-	-	-	-
3	-	5.6	5.9	-	-	-	-
4	-	5.6	4.6	-	-	-	-
5	-	-	-	-	-	-	2.1
6	-	-	-	6.5	4.7	6.0	-
7	-	-	-	6.5	4.8	5.5	-

Note: The above information was declared by manufacturer.

The EUT contain Radio 3 (2.4G)/(5G) RF module (Model Name: WM862FEMD / FCC ID: PQ-WM862FEMD).

For 2.4GHz function:

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

Radio 1

Ant. 1 and Ant. 2 could transmit/receive simultaneously.

Radio 3

Ant. 6 and Ant. 7 could transmit/receive simultaneously.

For 5GHz function:

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

Radio 2 (For Band 1/Band 4)

Ant. 3 and Ant. 4 could transmit/receive simultaneously.

Radio 3 (For Band 1/Band 4)

Ant. 6 and Ant. 7 could transmit/receive simultaneously.

For Bluetooth function:

For bluetooth mode (1TX/1RX)

Only Ant. 5 can be used as transmitting/receiving antenna.

**1.1.3 Mode Test Duty Cycle**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11b	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11g	0.964	0.16	2.068m	1k
VHT20	0.985	0.07	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
VHT40	0.967	0.15	2.44m	1k

Note:

- ♦ DC is Duty Cycle.
- ♦ DCF is Duty Cycle Factor.

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter or PoE			
Beamforming Function	☐	With beamforming	☒	Without beamforming
Function	☒	Point-to-multipoint	☐	Point-to-point
Test Software Version	QRCT V3.0.210			

Note: The above information was declared by manufacturer.

1.1.5 Table for Multiple Listing

The brand/model names in the following table are all refer to the identical product.

Brand Name	Model Name	Description
LITE-ON	WP8333V5	All the models are identical, the difference model for difference brand served as marketing strategy.
WatchGuard	C-110, AP325	

From the above models, model: AP325 was selected as representative model for the test and its data was recorded in this report.

1.1.6 Table for Explanation of Flash

Brand name	Model name	Flash
winbond	25Q256JVFQ	32M+32M



1.2 Applicable 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 v05r02
- ◆ FCC KDB 662911 D01 v02r01
- ◆ FCC KDB 414788 D01 v01r01

1.3 Testing Location Information

Testing Location		
☐	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL : 886-3-327-3456 FAX : 886-3-327-0973
☒	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	Owen Hsu	23.2~24.4°C / 60~62%	Nov. 26, 2019 ~ Dec. 13, 2019
Radiated < 1GHz	03CH05-CB	Eason Chen	23.7~24°C / 60~62%	Nov. 25, 2019 ~ Nov. 26, 2019
Radiated > 1GHz	03CH06-CB	Stim Sung	25.3~25.9°C / 55~58%	Nov. 11, 2019 ~ Dec. 26, 2019
AC Conduction	CO02-CB	Rick Yeh	20~21°C / 49~50%	Dec. 03, 2019 ~ Dec. 04, 2019

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)	2.0 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	5.1 dB	Confidence levels of 95%
Conducted Emission	2.4 dB	Confidence levels of 95%
Output Power Measurement	1.5 dB	Confidence levels of 95%
Power Density Measurement	2.4 dB	Confidence levels of 95%
Bandwidth Measurement	2%	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	PowerSetting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	20.5
2437MHz	20.5
2462MHz	20.5
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	21
2437MHz	19.5
2462MHz	19.5
VHT20_Nss1,(MCS0)_2TX	-
2412MHz	20
2437MHz	19
2462MHz	19
VHT40_Nss1,(MCS0)_2TX	-
2422MHz	19.5
2437MHz	20
2452MHz	17.5

Note:VHT20/VHT40 covers HT20/HT40, due to same modulation. The power setting for HT20 and HT40 are the same or lower than 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	EUT - R1 (2.4G) + R2 (5G) + R3 (2.4G) + R4 (BT) + Adapter
2	EUT - R1 (2.4G) + R2 (5G) + R3 (5G) + R4 (BT) + Adapter
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	EUT in Z axis - R1 (2.4G) + R2 (5G) + R3 (2.4G) + R4 (BT) + Adapter
2	EUT in Y axis - R1 (2.4G) + R2 (5G) + R3 (2.4G) + R4 (BT) + Adapter
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	EUT in Y axis - R1 (2.4G) + R2 (5G) + R3 (5G) + R4 (BT) + Adapter
Mode 2 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4 will follow this same test mode.	
4	EUT in Y axis - R1 (2.4G) + R2 (5G) + R3 (2.4G) + R4 (BT) + PoE
For operating mode 4 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
For Radiated Emission The EUT was performed at X axis, Y axis and Z axis and the worst case was found at X axis. So the measurement will follow this same test configuration.	
For Band Edge Emission The EUT was performed at X axis, Y axis and Z axis position and the worst case was found at Y axis. So the measurement will follow this same test configuration.	



The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz (Radio 1) + WLAN 5GHz (Radio 2) + WLAN 2.4GHz (Radio 3) + Bluetooth (Radio 4)
2	WLAN 2.4GHz (Radio 1) + WLAN 5GHz (Radio 2) + WLAN 5GHz (Radio 3) + Bluetooth (Radio 4)
Refer to Sporton Test Report No.: FA741722-10 for Co-location RF Exposure Evaluation.	

Note: The PoE and Adapter were for measurement only, would not be marketed.

The PoE and Adapter information as below:

Support Unit	Brand	Model Number
PoE	Ruckus	740-64214-001
Adapter	APD	WB-18D12FU

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 AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Flash disk3.0	Transcend	639205 7755	N/A
B	Notebook	DELL	E6430	N/A
C	Notebook	DELL	E6430	N/A
D	Notebook	DELL	E6430	N/A
E	Notebook	DELL	E6430	N/A
F	BT Device	WatchGuard	C-110	PPQ-WP8333V5
G	Notebook	DELL	E6430	N/A
H	LAN2 NB	DELL	E6430	N/A
I	Adapter	APD	WA-24Q12FU	N/A

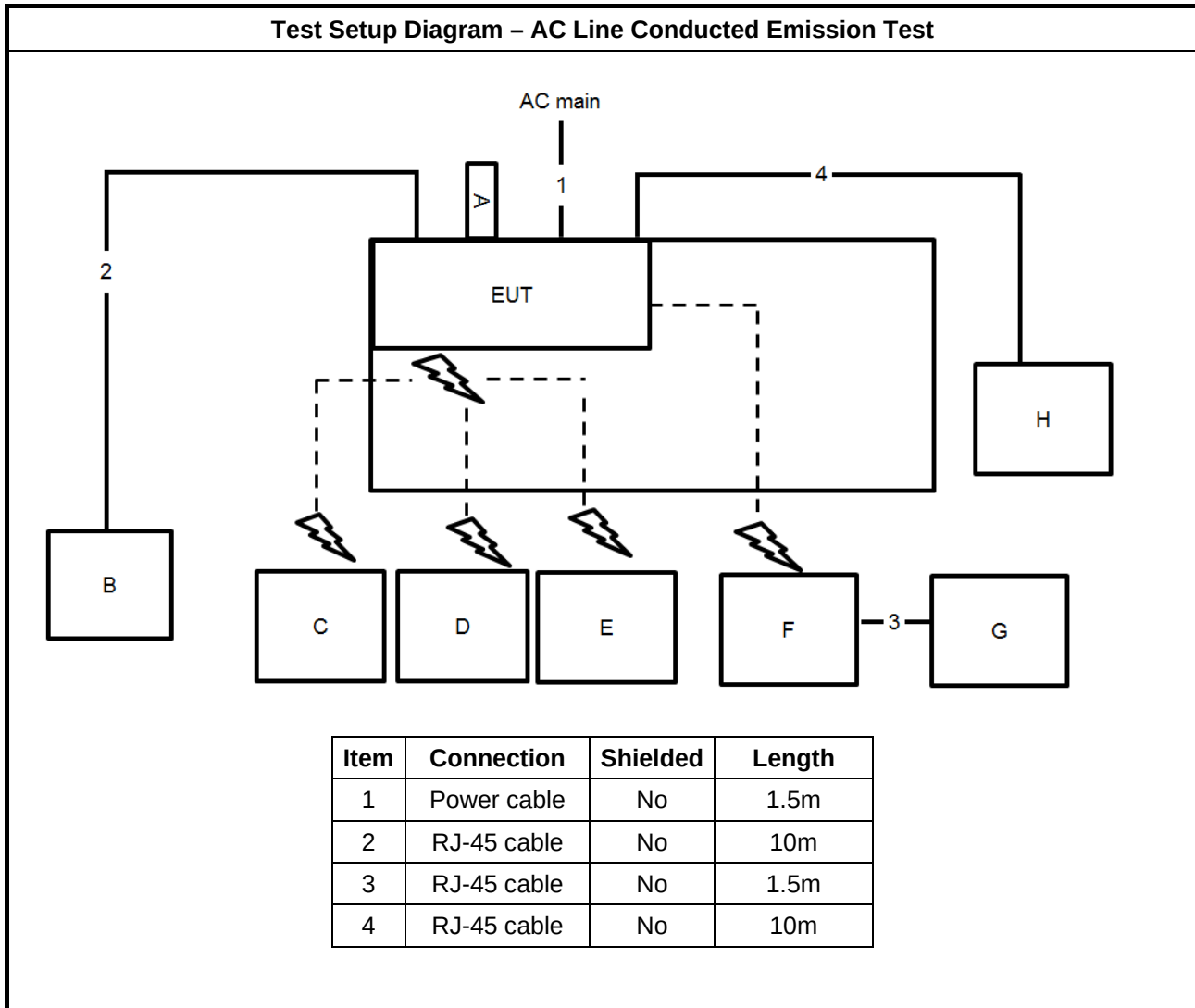
For Radiated (below 1GHz):

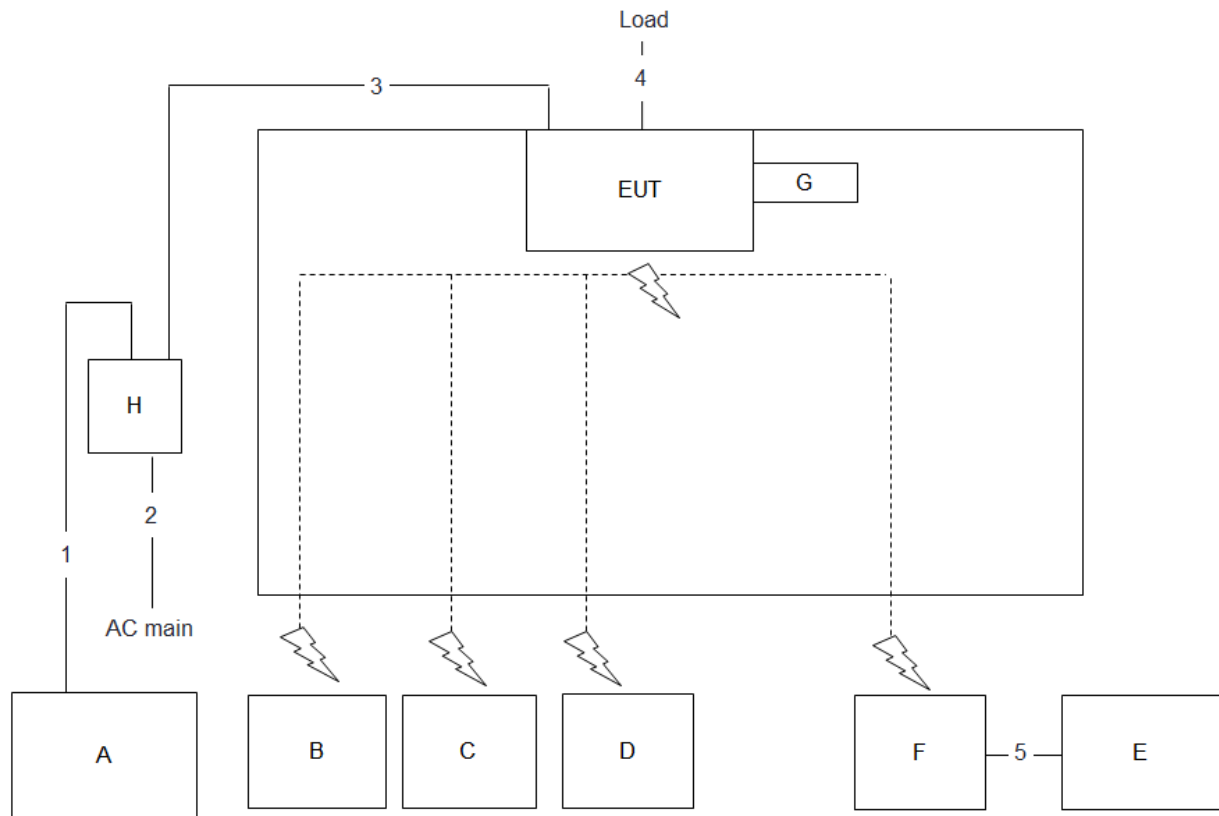
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	Notebook	DELL	E4300	N/A
C	Notebook	DELL	E4300	N/A
D	Notebook	DELL	E4300	N/A
E	Notebook	DELL	E4300	N/A
F	BT Device	WatchGuard	C-110	PPQ-WP8333V5
G	Flash disk3.0	Silicon Power	B06	N/A
H	PoE	Ruckus	740-64214-001	N/A

For Radiated (above 1GHz) and RF Conducted :

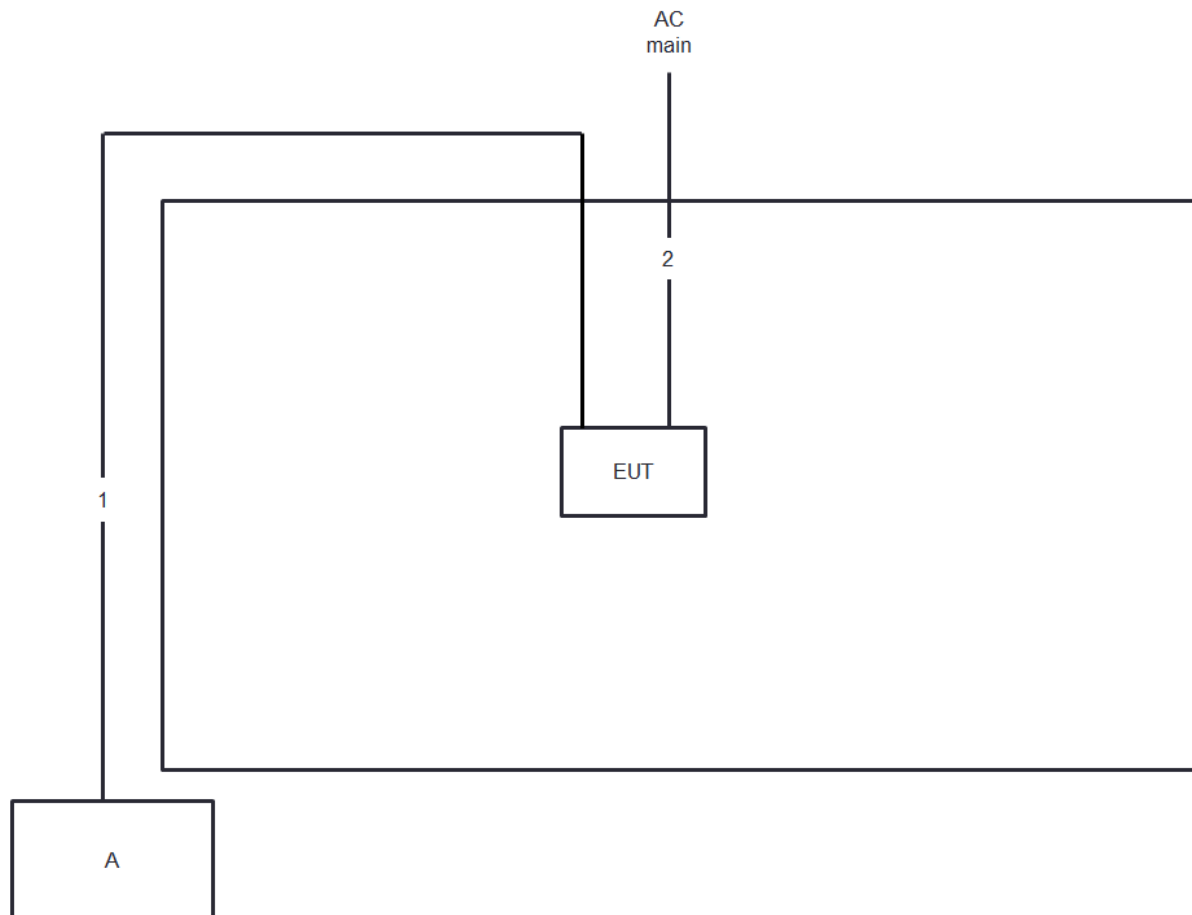
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	AC Adapter	APD	WB-18D12FU	N/A

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test < 1GHz


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

Test Setup Diagram - Radiated Test > 1GHz


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.

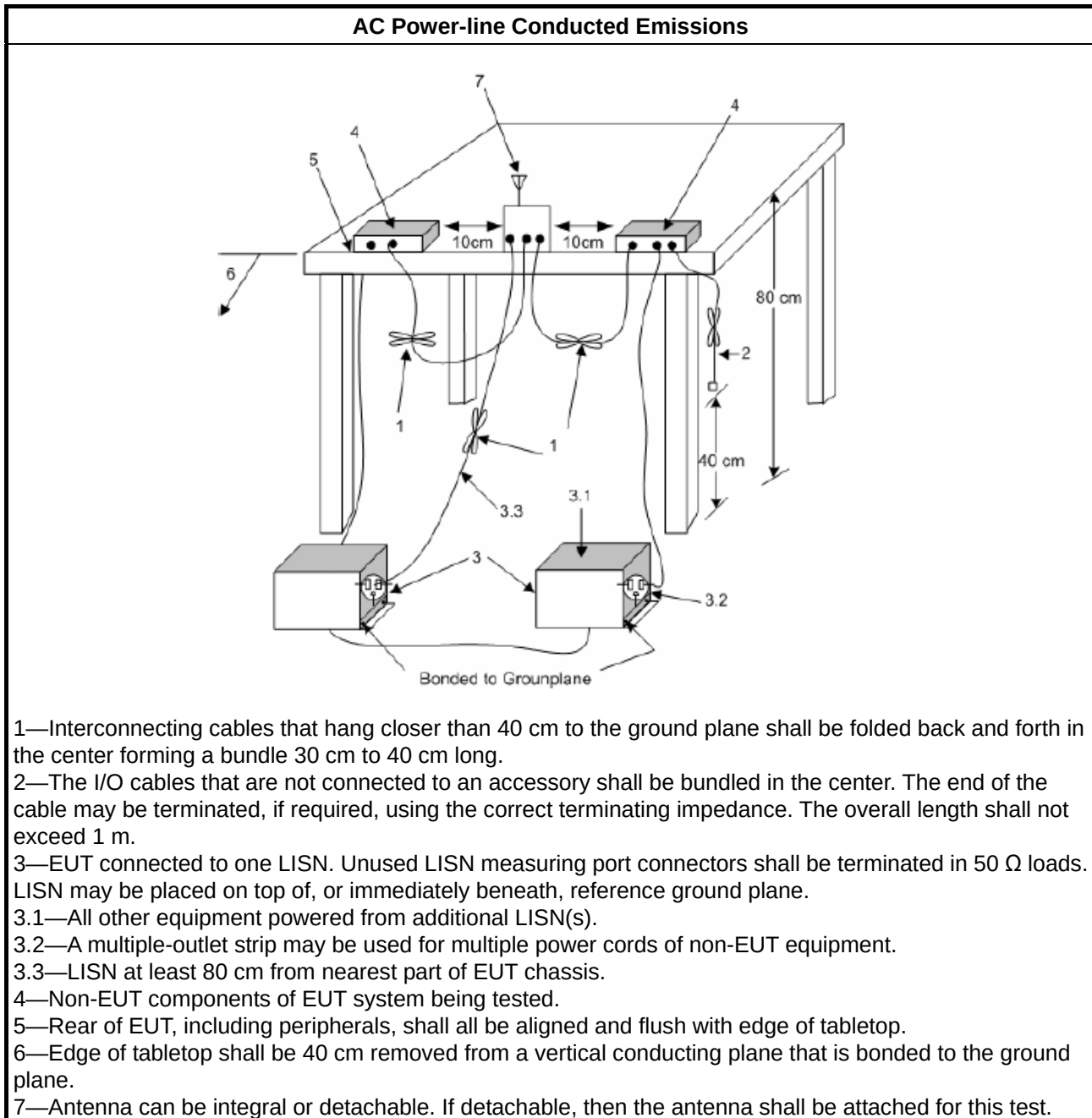
3.1.2 Measuring Instruments

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.

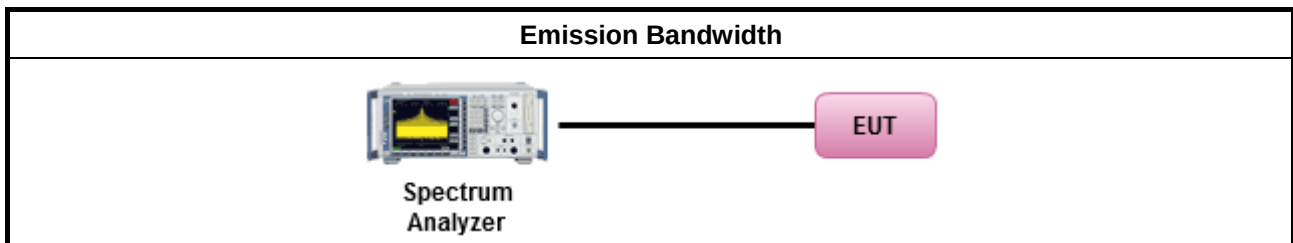
3.2.2 Measuring Instruments

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 8.2 & C63.10 clause 11.8.1 Option 1 for 6 dB bandwidth measurement.
☐ Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.2 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.	

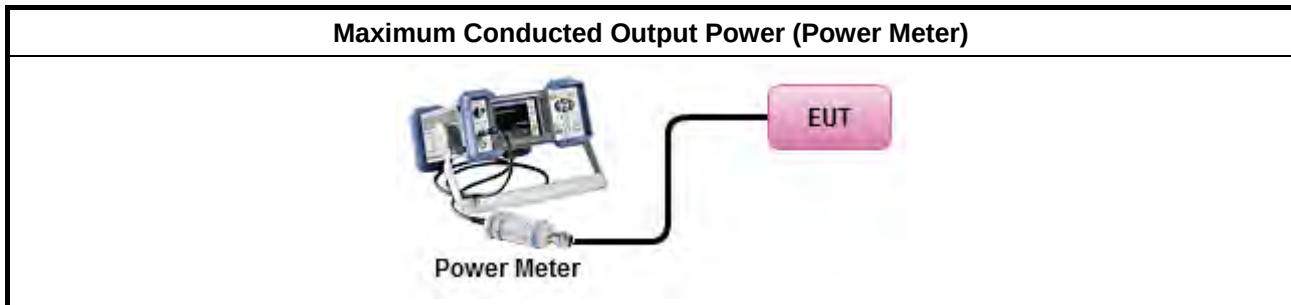
3.3.2 Measuring Instruments

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 8.3.1.1 & C63.10 clause 11.9.1.1 (RBW ≥ EBW method).
☐	Refer as FCC KDB 558074, clause 8.3.1.3 & C63.10 clause 11.9.1.3 (peak power meter).
Maximum Conducted Output Power	
[duty cycle ≥ 98% or external video / power trigger]	
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.2 Method AVGSA-1.
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.3 Method AVGSA-1A. (alternative)
duty cycle < 98% and average over on/off periods with duty factor	
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.4 Method AVGSA-2.
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.5 Method AVGSA-2A (alternative)
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.6 Method AVGSA-3
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.7 Method AVGSA-3A (alternative)
Measurement using a power meter (PM)	
☐	Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.1 Method AVGPM (using an RF average power meter).
☒	Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.2 Method AVGPM-G (using an gate RF average power meter).
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

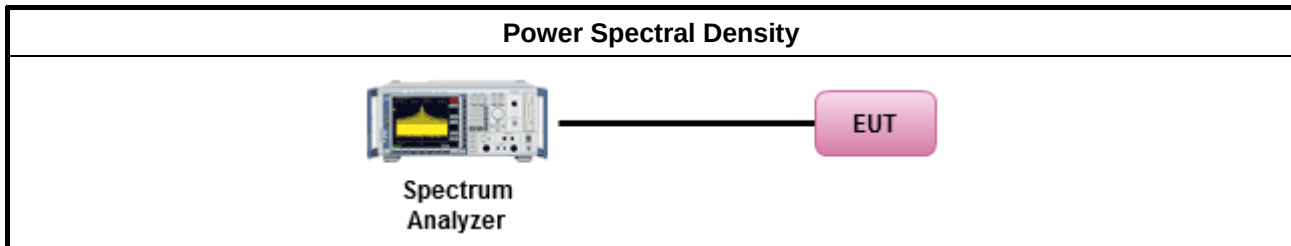
Refer a test equipment and calibration data table in this test report.

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 8.4 & C63.10 clause 11.10.2 Method PKPSD. [duty cycle $\geq 98\%$ or external video / power trigger]
☐ Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.3 Method AVGPS-1.
☐ Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.5 Method AVGPS-2.
☐ Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.7 Method AVGPS-3.
duty cycle $< 98\%$ and average over on/off periods with duty factor
☐ Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.4 Method AVGPS-1A. (alternative).
☐ Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.6 Method AVGPS-2A. (alternative)
☐ Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.8 Method AVGPS-3A. (alternative)
▪ 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 (dBc)
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.	

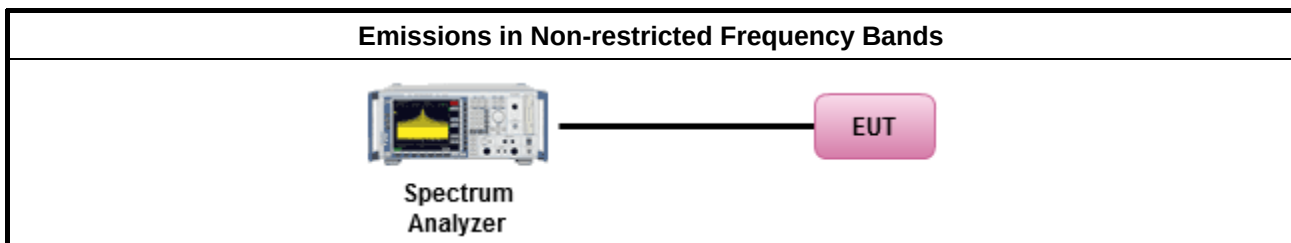
3.5.2 Measuring Instruments

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 8.5 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.

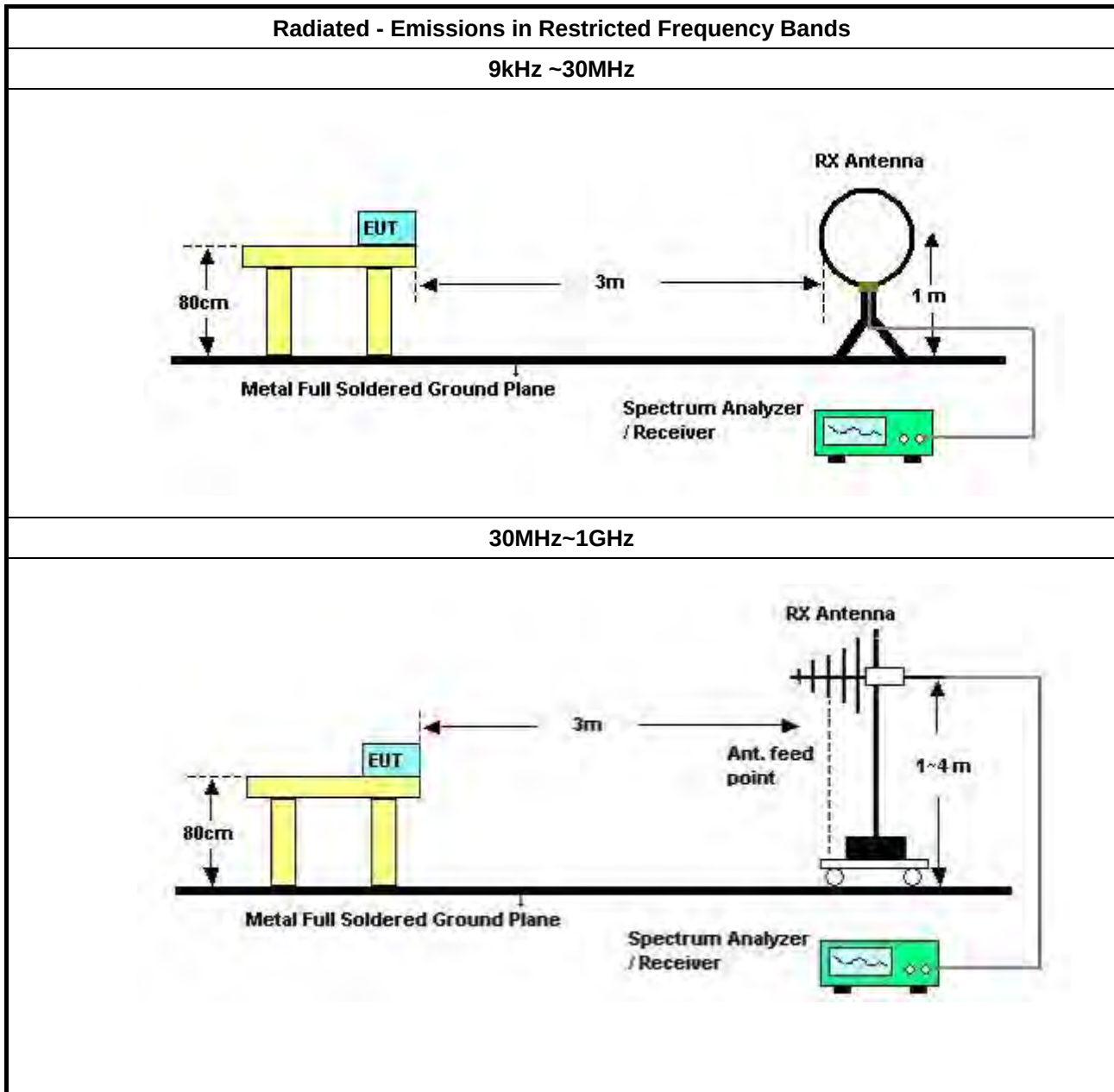
3.6.2 Measuring Instruments

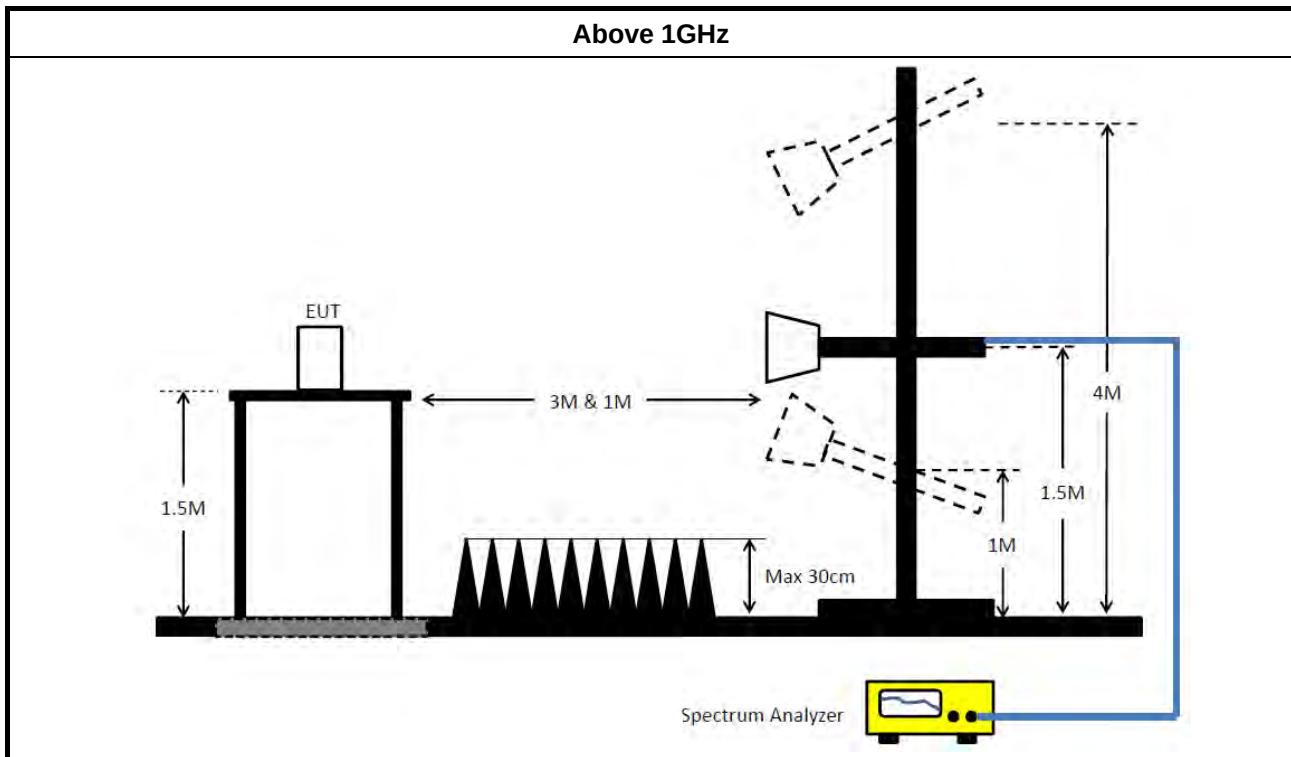
Refer a test equipment and calibration data table in this test report.

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 6.10.3 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 8.6 for unwanted emissions into restricted bands.
	☐ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.1(trace averaging for duty cycle $\geq 98\%$).
	☐ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.2(trace averaging + duty factor).
	☒ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.3(Reduced VBW $\geq 1/T$).
	☐ Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq 1/T$, where T is pulse time.
	☐ Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	☒ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.4 measurement procedure peak limit.
For the transmitter band-edge emissions shall be measured using following options below:	
	Refer as FCC KDB 558074 clause 8.7 & C63.10 clause 11.13.1, 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 8.7 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.
	Refer as FCC KDB 558074, clause 8.7 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
	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 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

3.6.6 Emissions in Restricted Frequency Bands (Below 30MHz)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.

All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10 harmonic or 40 GHz, whichever is appropriate.

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F



4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
LISN	Schwarzbeck	NSLK 8127	8127650	9kHz ~ 30MHz	Nov. 21, 2019	Nov. 20, 2020	Conduction (CO02-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Oct. 30, 2019	Oct. 29, 2020	Conduction (CO02-CB)
EMI Receiver	Agilent	N9038A	MY52260140	9kHz ~ 8.4GHz	Jan. 16, 2019	Jan. 15, 2020	Conduction (CO02-CB)
COND Cable	Woken	Cable	2	0.15MHz ~ 30MHz	Oct. 21, 2019	Oct. 20, 2020	Conduction (CO02-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO02-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 29, 2019	Mar. 28, 2020	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESE & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 28, 2019	Mar. 27, 2020	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	May 01, 2019	Apr. 30, 2020	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Aug. 15, 2019	Aug. 14, 2020	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	May 15, 2019	May 14, 2020	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	LOW Cable-04+23	30MHz~1GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1292	1GHz~18GHz	Jul. 17, 2019	Jul. 16, 2020	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 12, 2019	Jun. 11, 2020	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	83017A	MY53270064	0.5GHz ~ 26.5GHz	May 08, 2019	May 07, 2020	Radiation (03CH06-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Oct. 21, 2019	Oct. 20, 2020	Radiation (03CH06-CB)
RF Cable-high	HUBER+SUHNER	RG402	High Cable-05	1GHz~18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH06-CB)
RF Cable-high	HUBER+SUHNER	RG402	High Cable-05+24	1GHz~18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Feb. 25, 2019	Feb. 24, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz ~ 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-07	1 GHz ~26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz ~26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz ~26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz ~26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-28	1 GHz ~26.5 GHz	Nov. 18, 2019	Nov. 17, 2020	Conducted (TH01-CB)
Power Sensor	Agilent	E9327A	US40442088	50MHz~18GHz	Jan. 15, 2019	Jan. 14, 2020	Conducted (TH01-CB)
Power Meter	Agilent	E4416A	GB41291199	50MHz~18GHz	Jan. 15, 2019	Jan. 14, 2020	Conducted (TH01-CB)

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

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

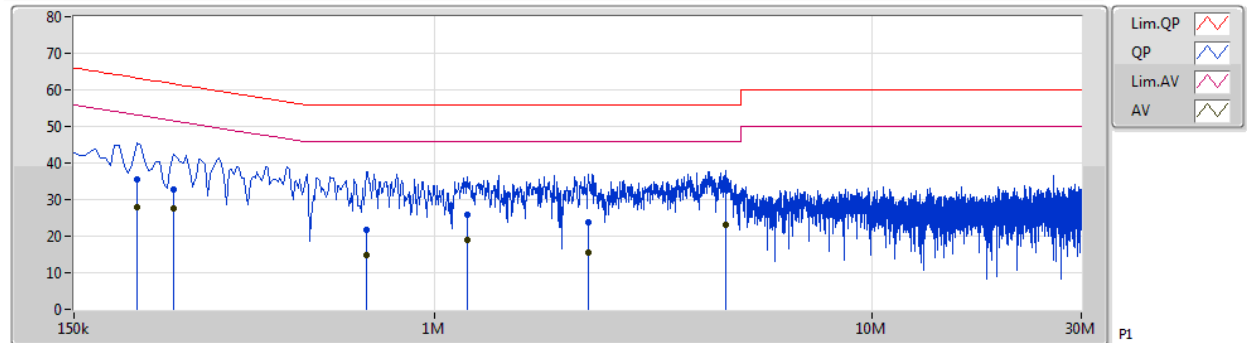


Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition
Mode 1	Pass	AV	388.5k	29.07	48.10	-19.03	10.22	Neutral

Mode 1

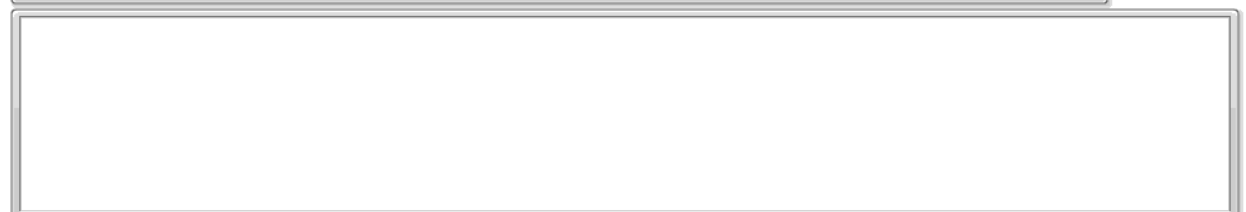
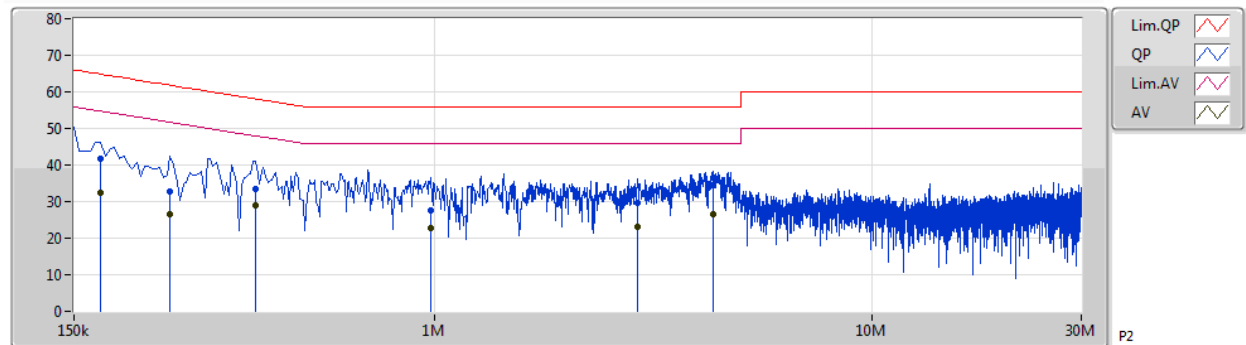
04/12/2019



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	AF (dB)	CL (dB)	AT (dB)			
QP	208.5k	35.49	63.27	-27.78	10.22	Line	-	25.27	0.05	0.07	10.10			
AV	208.5k	27.96	53.27	-25.31	10.22	Line	-	17.74	0.05	0.07	10.10			
QP	253.5k	32.83	61.64	-28.81	10.22	Line	-	22.61	0.05	0.07	10.10			
AV	253.5k	27.46	51.64	-24.18	10.22	Line	-	17.24	0.05	0.07	10.10			
QP	699k	21.60	56.00	-34.40	10.27	Line	-	11.33	0.07	0.10	10.10			
AV	699k	15.00	46.00	-31.00	10.27	Line	-	4.73	0.07	0.10	10.10			
QP	1.19M	26.00	56.00	-30.00	10.31	Line	-	15.69	0.08	0.13	10.10			
AV	1.19M	18.84	46.00	-27.16	10.31	Line	-	8.53	0.08	0.13	10.10			
QP	2.243M	23.67	56.00	-32.33	10.35	Line	-	13.32	0.09	0.16	10.10			
AV	2.243M	15.51	46.00	-30.49	10.35	Line	-	5.16	0.09	0.16	10.10			
QP	4.637M	32.74	56.00	-23.26	10.38	Line	-	22.36	0.13	0.15	10.10			
AV	4.637M	23.01	46.00	-22.99	10.38	Line	"Worst"	12.63	0.13	0.15	10.10			

Mode 1

04/12/2019



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	AF (dB)	CL (dB)	AT (dB)			
QP	172.5k	41.78	64.83	-23.05	10.19	Neutral	-	31.59	0.03	0.06	10.10			
AV	172.5k	32.27	54.83	-22.56	10.19	Neutral	-	22.08	0.03	0.06	10.10			
QP	249k	32.83	61.79	-28.96	10.20	Neutral	-	22.63	0.03	0.07	10.10			
AV	249k	26.61	51.79	-25.18	10.20	Neutral	-	16.41	0.03	0.07	10.10			
QP	388.5k	33.29	58.10	-24.81	10.22	Neutral	-	23.07	0.04	0.08	10.10			
AV	388.5k	29.07	48.10	-19.03	10.22	Neutral	"Worst"	18.85	0.04	0.08	10.10			
QP	982.5k	27.65	56.00	-28.35	10.26	Neutral	-	17.39	0.04	0.12	10.10			
AV	982.5k	22.71	46.00	-23.29	10.26	Neutral	-	12.45	0.04	0.12	10.10			
QP	2.909M	29.80	56.00	-26.20	10.32	Neutral	-	19.48	0.07	0.15	10.10			
AV	2.909M	23.00	46.00	-23.00	10.32	Neutral	-	12.68	0.07	0.15	10.10			
QP	4.335M	34.58	56.00	-21.42	10.34	Neutral	-	24.24	0.09	0.15	10.10			
AV	4.335M	26.44	46.00	-19.56	10.34	Neutral	-	16.10	0.09	0.15	10.10			

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	8M	12.869M	12M9G1D	7.575M	12.694M
802.11g_Nss1,(6Mbps)_2TX	16.35M	16.417M	16M4D1D	16.3M	16.392M
VHT20_Nss1,(MCS0)_2TX	17.575M	17.641M	17M6D1D	17.55M	17.591M
VHT40_Nss1,(MCS0)_2TX	35.1M	35.982M	36M0D1D	31.15M	35.882M

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;

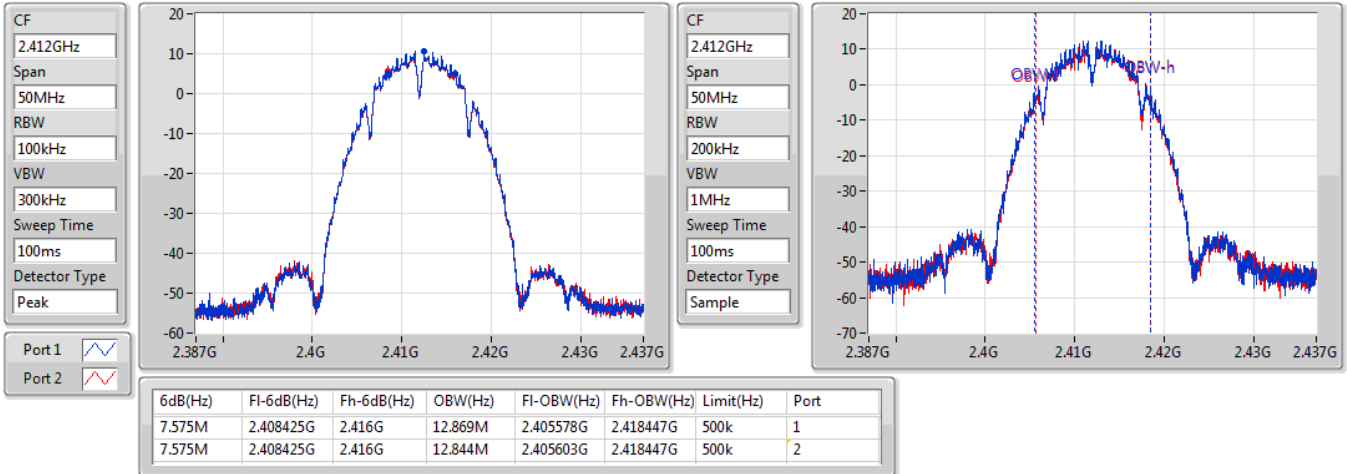
Result

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	7.575M	12.869M	7.575M	12.844M
2437MHz	Pass	500k	7.65M	12.694M	7.575M	12.744M
2462MHz	Pass	500k	7.575M	12.844M	8M	12.769M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.35M	16.392M	16.325M	16.417M
2437MHz	Pass	500k	16.325M	16.392M	16.325M	16.392M
2462MHz	Pass	500k	16.325M	16.392M	16.3M	16.392M
VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	17.575M	17.616M	17.55M	17.591M
2437MHz	Pass	500k	17.55M	17.591M	17.55M	17.616M
2462MHz	Pass	500k	17.575M	17.616M	17.575M	17.641M
VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	31.15M	35.982M	33.8M	35.932M
2437MHz	Pass	500k	34.4M	35.932M	32.8M	35.932M
2452MHz	Pass	500k	35.1M	35.882M	31.5M	35.932M

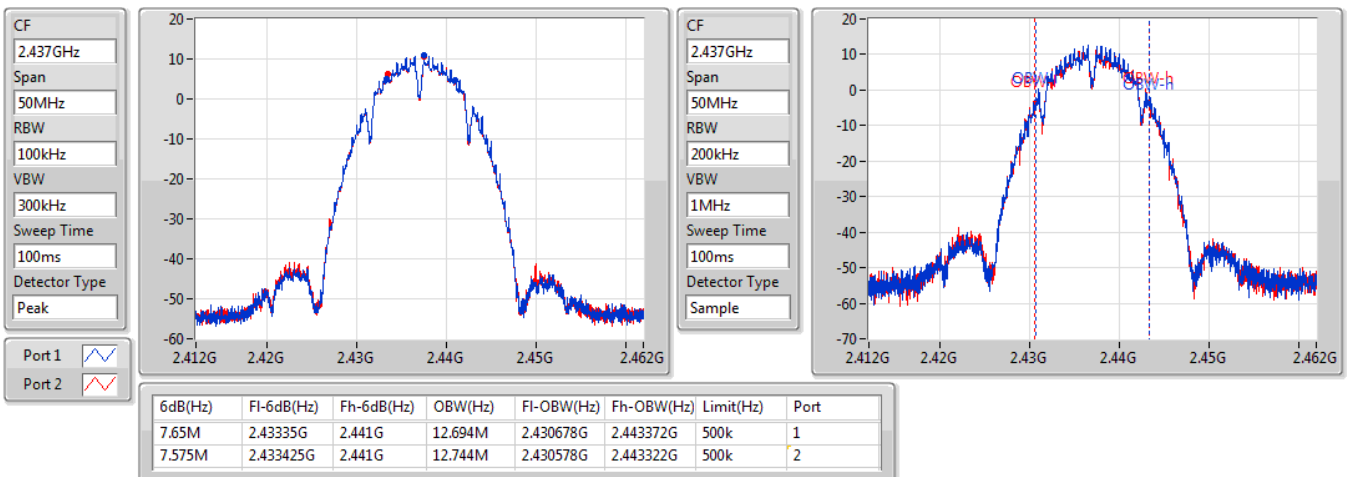
Port X-N dB = Port X 6dB down bandwidth; **Port X-OBW** = Port X 99% occupied bandwidth;

802.11b_Nss1,(1Mbps)_2TX
EBW
2412MHz

26/11/2019


802.11b_Nss1,(1Mbps)_2TX
EBW
2437MHz

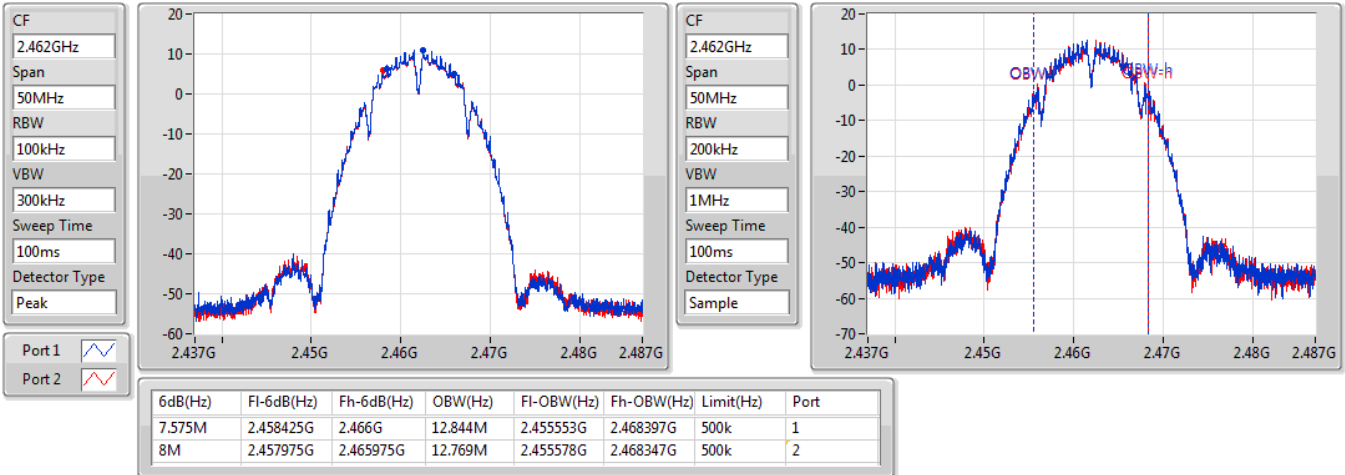
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802.11b_Nss1,(1Mbps)_2TX

2462MHz

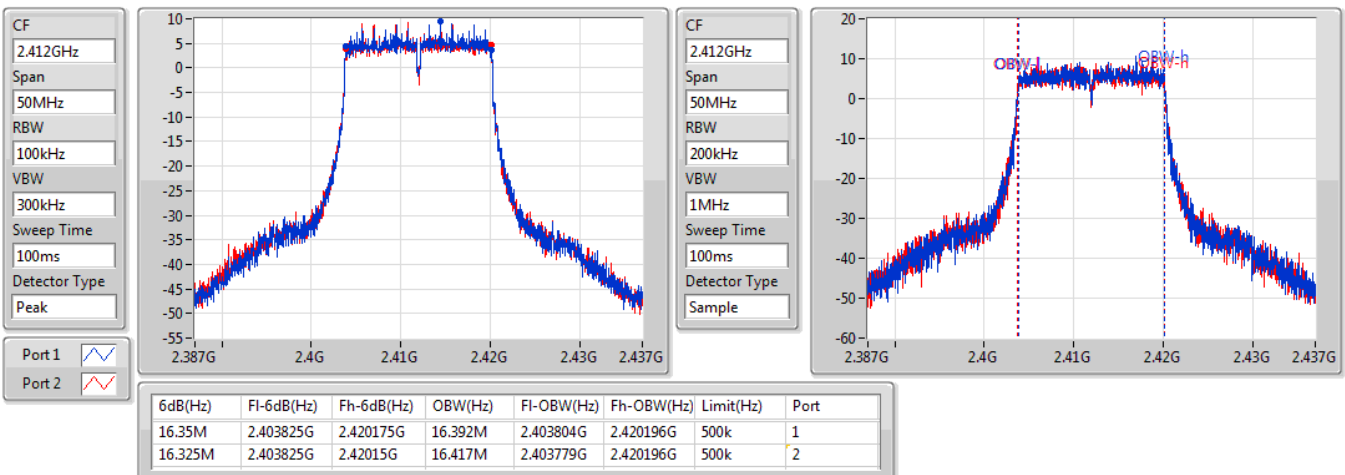
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802.11g_Nss1,(6Mbps)_2TX

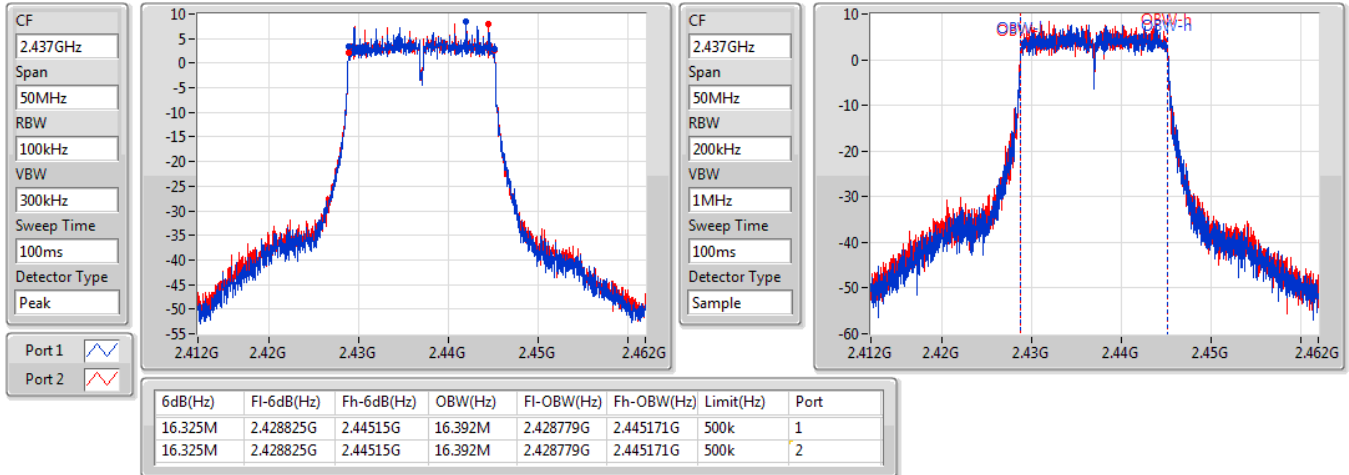
2412MHz

26/11/2019

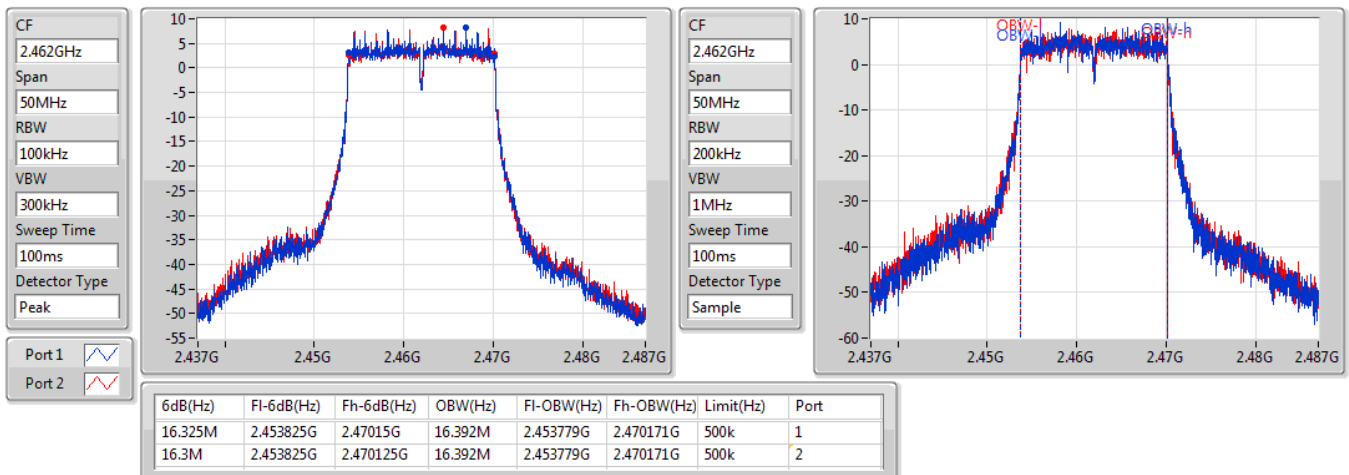


802.11g_Nss1,(6Mbps)_2TX
EBW
2437MHz

26/11/2019

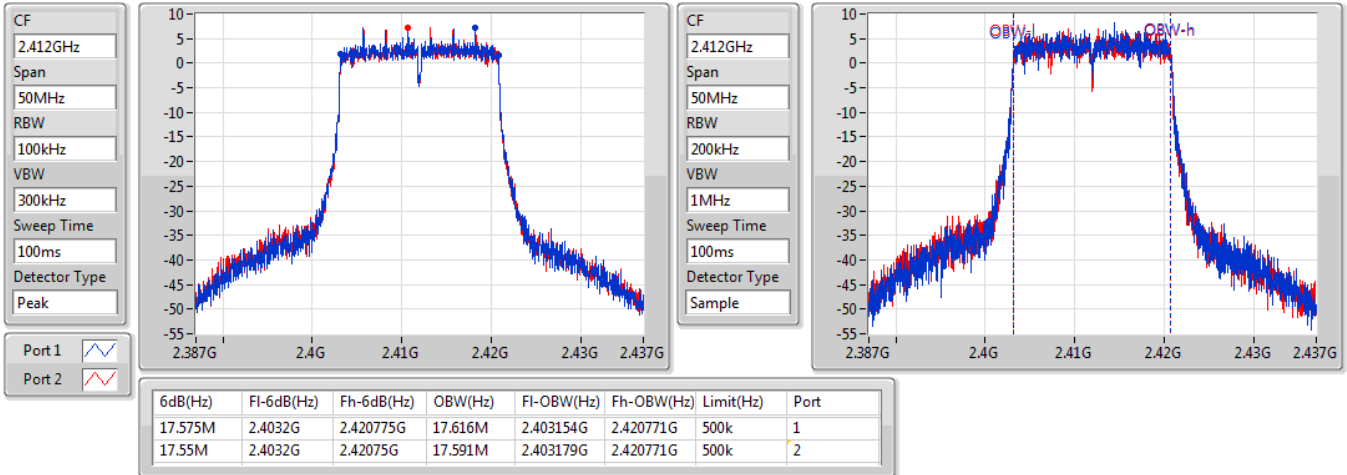

802.11g_Nss1,(6Mbps)_2TX
EBW
2462MHz

26/11/2019

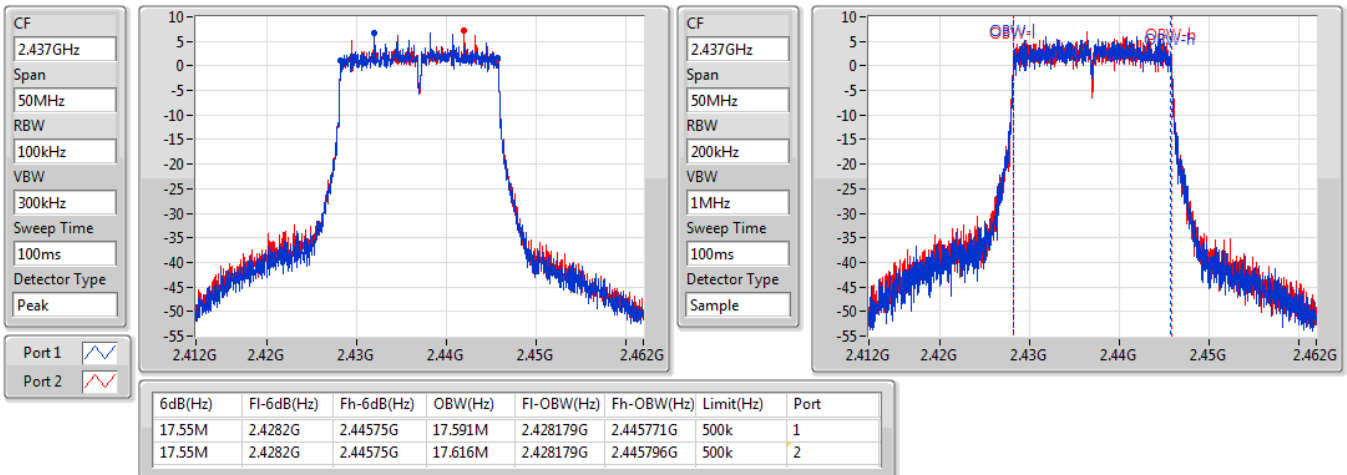


VHT20_Nss1,(MCS0)_2TX
EBW
2412MHz

26/11/2019

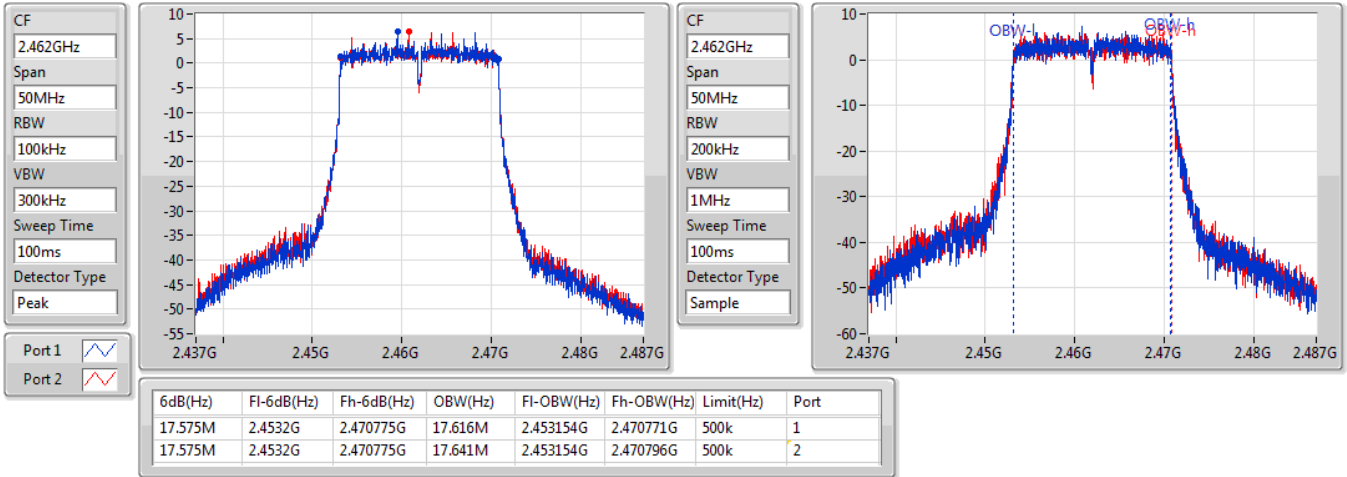

VHT20_Nss1,(MCS0)_2TX
EBW
2437MHz

26/11/2019

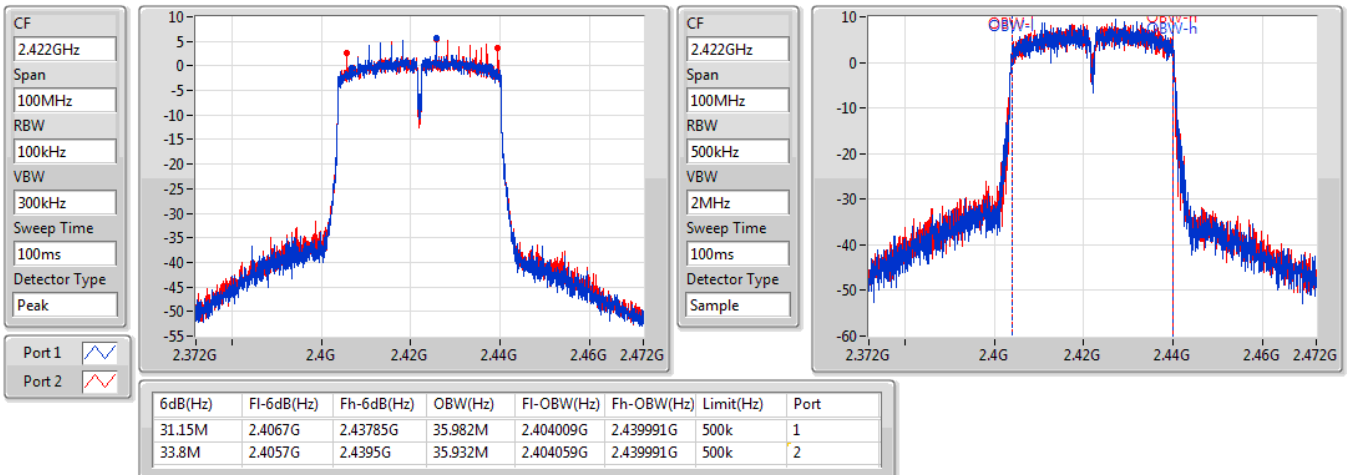


VHT20_Nss1,(MCS0)_2TX
EBW
2462MHz

26/11/2019


VHT40_Nss1,(MCS0)_2TX
EBW
2422MHz

26/11/2019

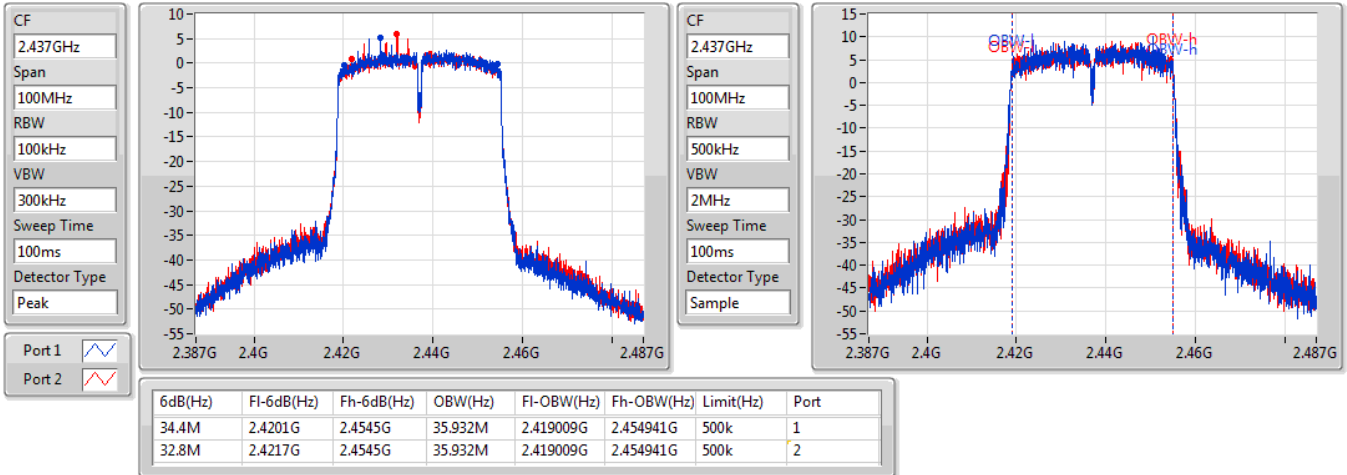


VHT40_Nss1,(MCS0)_2TX

EBW

2437MHz

26/11/2019

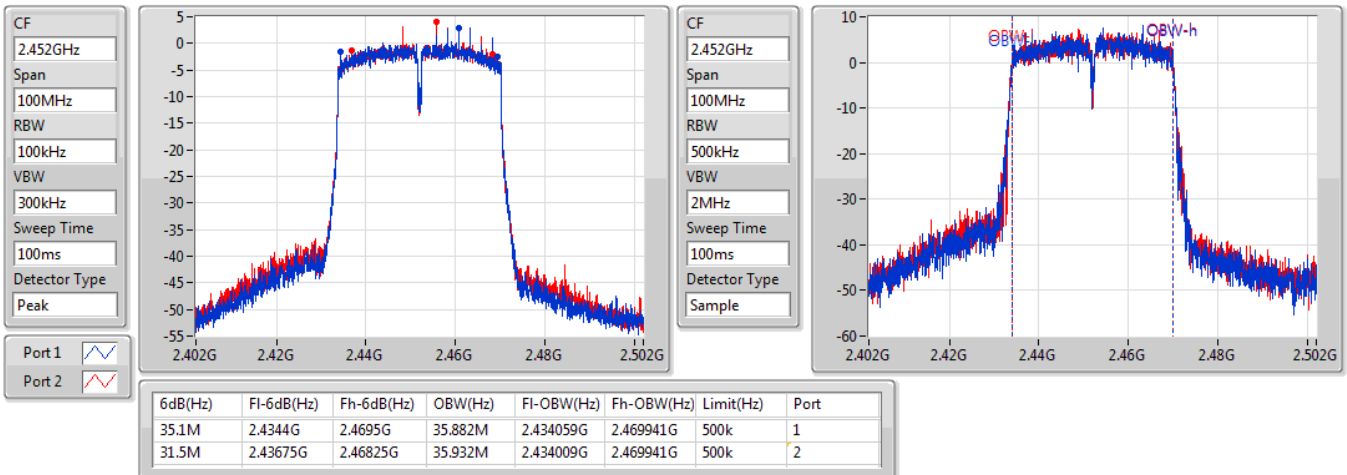


VHT40_Nss1,(MCS0)_2TX

EBW

2452MHz

26/11/2019





Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	23.74	0.23659
802.11g_Nss1,(6Mbps)_2TX	24.12	0.25823
VHT20_Nss1,(MCS0)_2TX	23.24	0.21086
VHT40_Nss1,(MCS0)_2TX	23.37	0.21727

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.50	20.81	20.64	23.74	29.50
2437MHz	Pass	6.50	20.67	20.64	23.67	29.50
2462MHz	Pass	6.50	20.76	20.68	23.73	29.50
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.50	21.19	21.03	24.12	29.50
2437MHz	Pass	6.50	19.67	19.81	22.75	29.50
2462MHz	Pass	6.50	19.76	19.61	22.70	29.50
VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.50	20.35	20.10	23.24	29.50
2437MHz	Pass	6.50	19.25	19.25	22.26	29.50
2462MHz	Pass	6.50	19.30	19.13	22.23	29.50
VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	6.50	20.05	19.95	23.01	29.50
2437MHz	Pass	6.50	20.43	20.28	23.37	29.50
2452MHz	Pass	6.50	17.69	17.97	20.84	29.50

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

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_2TX	-4.84
802.11g_Nss1,(6Mbps)_2TX	-5.10
VHT20_Nss1,(MCS0)_2TX	-6.05
VHT40_Nss1,(MCS0)_2TX	-6.94

RBW=3 kHz.

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	9.41	-7.73	-7.87	-4.84	4.59
2437MHz	Pass	9.41	-8.29	-7.82	-5.18	4.59
2462MHz	Pass	9.41	-7.62	-7.69	-4.99	4.59
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	9.41	-6.82	-6.91	-5.10	4.59
2437MHz	Pass	9.41	-7.46	-8.39	-5.93	4.59
2462MHz	Pass	9.41	-8.06	-8.37	-6.12	4.59
VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	9.41	-8.46	-8.70	-6.05	4.59
2437MHz	Pass	9.41	-9.19	-8.69	-6.98	4.59
2462MHz	Pass	9.41	-8.95	-8.26	-7.12	4.59
VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	9.41	-9.97	-10.69	-7.97	4.59
2437MHz	Pass	9.41	-9.96	-8.77	-6.94	4.59
2452MHz	Pass	9.41	-12.32	-11.28	-9.41	4.59

DG = Directional Gain; RBW=3 kHz;

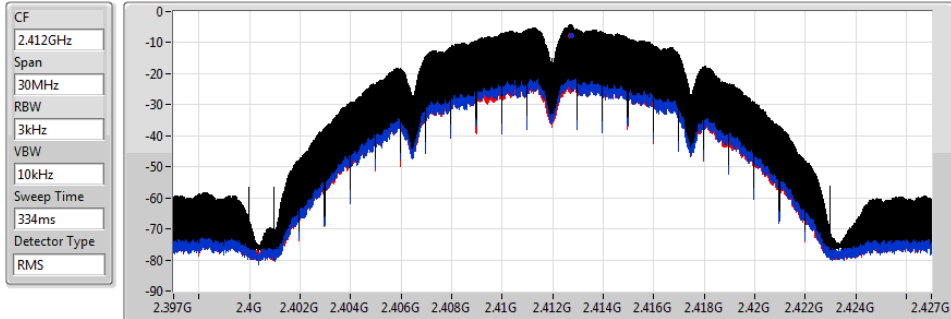
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11b_Nss1,(1Mbps)_2TX

PSD

2412MHz

26/11/2019



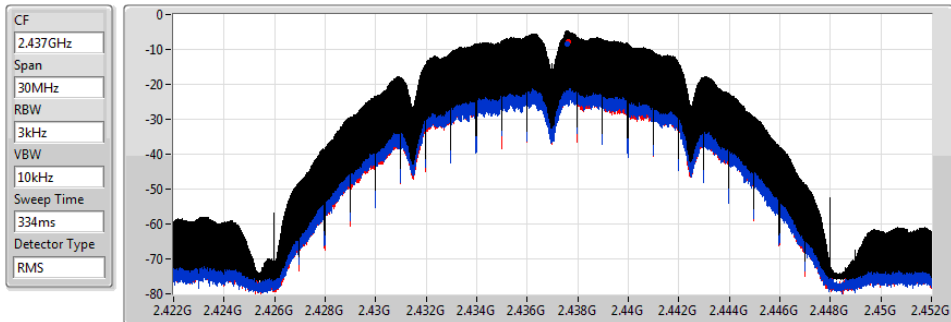
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-4.84	-4.84	-7.73	-7.87

802.11b_Nss1,(1Mbps)_2TX

PSD

2437MHz

26/11/2019



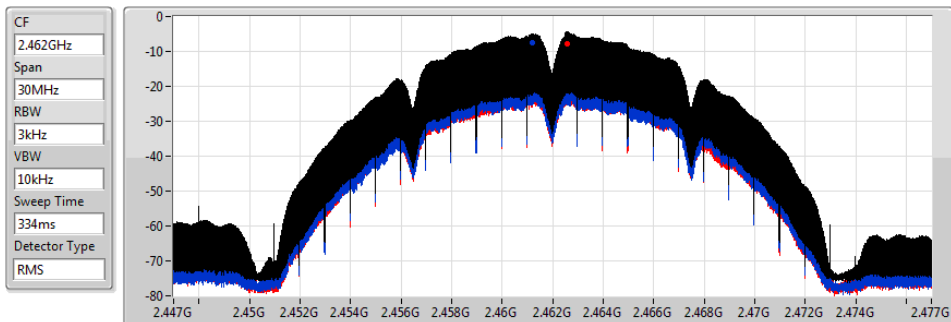
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-5.18	-5.18	-8.29	-7.82

802.11b_Nss1,(1Mbps)_2TX

PSD

2462MHz

26/11/2019



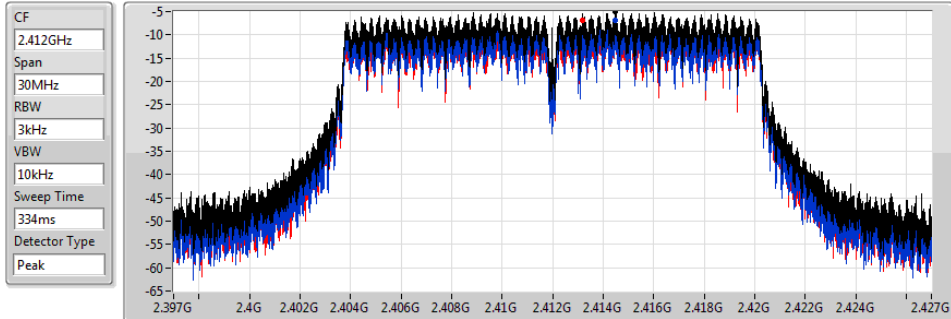
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-4.99	-4.99	-7.62	-7.69

802.11g_Nss1,(6Mbps)_2TX

PSD

2412MHz

26/11/2019



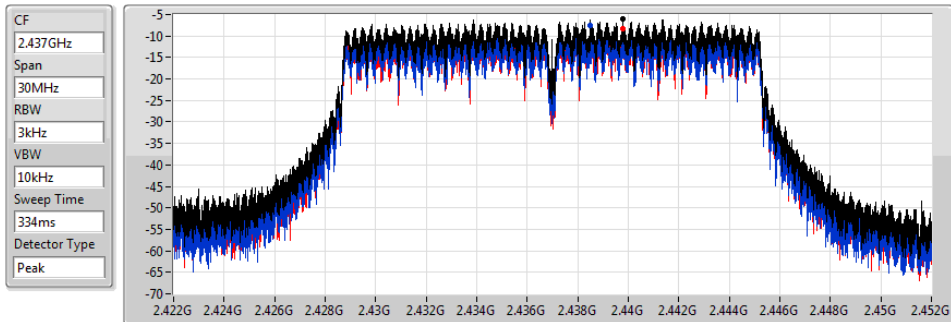
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-5.10	-5.10	-6.82	-6.91

802.11g_Nss1,(6Mbps)_2TX

PSD

2437MHz

26/11/2019



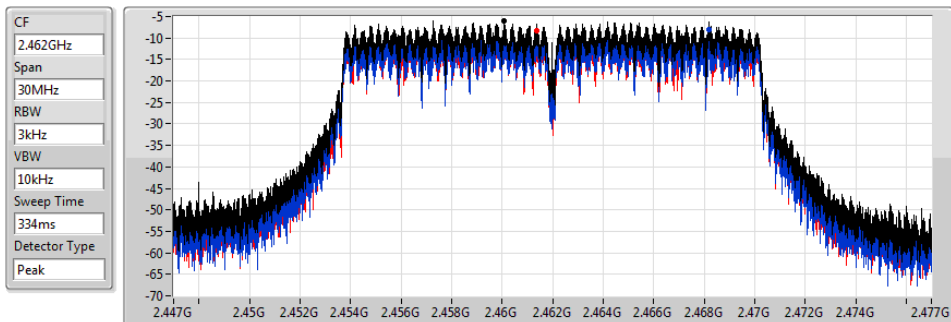
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-5.93	-5.93	-7.46	-8.39

802.11g_Nss1,(6Mbps)_2TX

PSD

2462MHz

26/11/2019



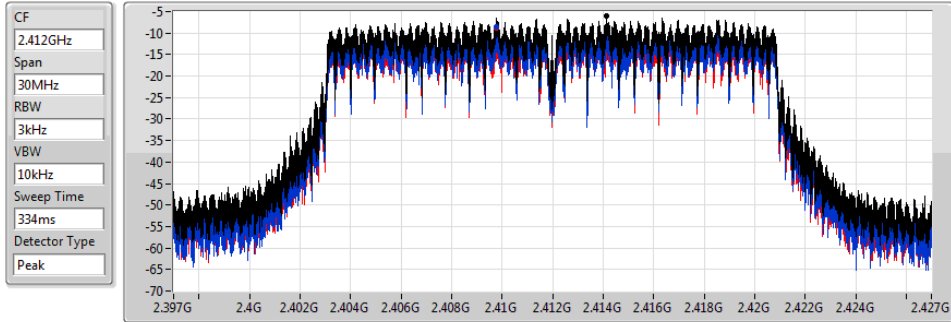
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-6.12	-6.12	-8.06	-8.37

VHT20_Nss1,(MCS0)_2TX

PSD

2412MHz

26/11/2019

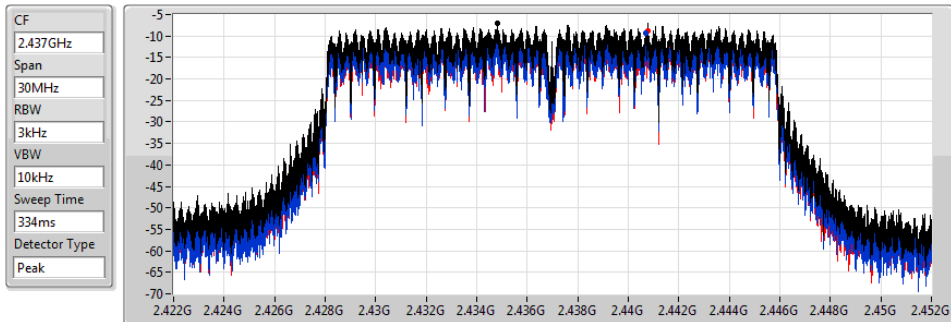


VHT20_Nss1,(MCS0)_2TX

PSD

2437MHz

26/11/2019

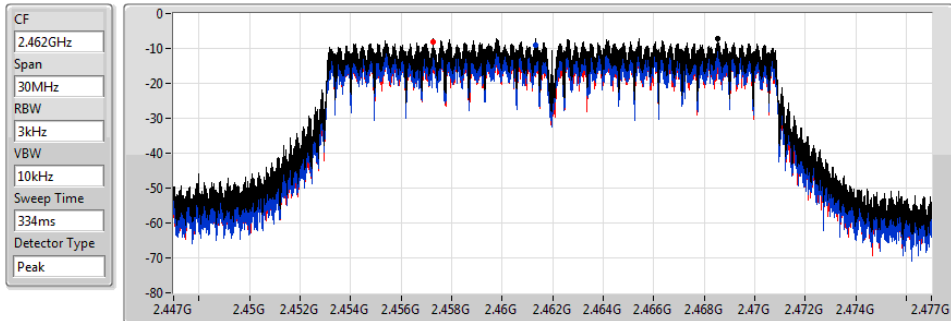


VHT20_Nss1,(MCS0)_2TX

PSD

2462MHz

26/11/2019

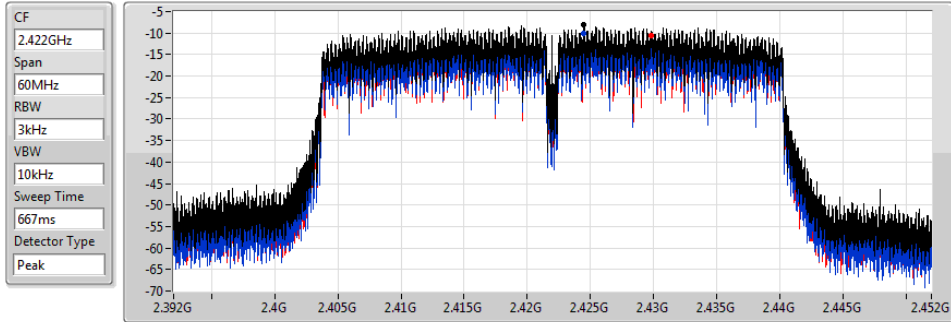


VHT40_Nss1,(MCS0)_2TX

PSD

2422MHz

26/11/2019



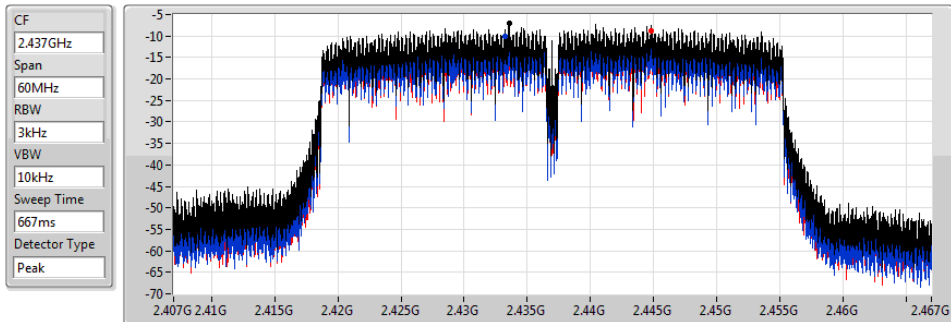
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-7.97	-7.97	-9.97	-10.69

VHT40_Nss1,(MCS0)_2TX

PSD

2437MHz

26/11/2019



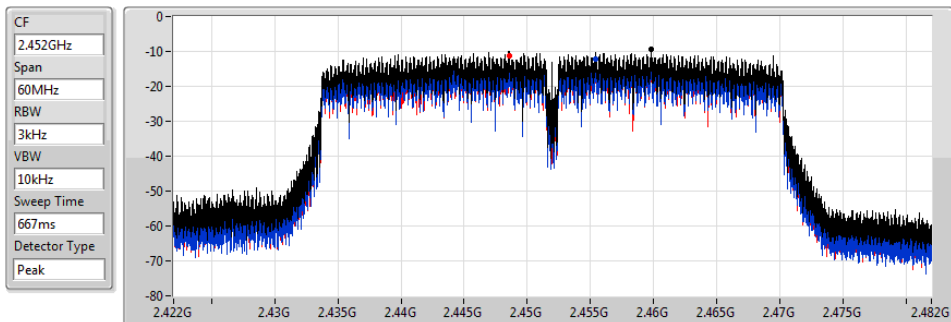
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-6.94	-6.94	-9.96	-8.77

VHT40_Nss1,(MCS0)_2TX

PSD

2452MHz

26/11/2019



Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-9.41	-9.41	-12.32	-11.28

**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	2.41248G	10.88	-19.12	892.1M	-52.43	2.3975G	-41.69	2.50002G	-51.33	24.85109G	-44.62	2
802.11g_Nss1,(6Mbps)_2TX	Pass	2.41695G	9.81	-20.19	2.30408G	-53.27	2.3991G	-29.11	2.49596G	-48.17	7.23795G	-41.49	1
VHT20_Nss1,(MCS0)_2TX	Pass	2.41069G	7.77	-22.23	1.85556G	-52.79	2.39984G	-30.11	2.49996G	-49.68	16.98151G	-44.98	2
VHT40_Nss1,(MCS0)_2TX	Pass	2.44071G	6.25	-23.75	1.84168G	-52.54	2.3988G	-32.62	2.55998G	-46.15	21.8056G	-45.20	2

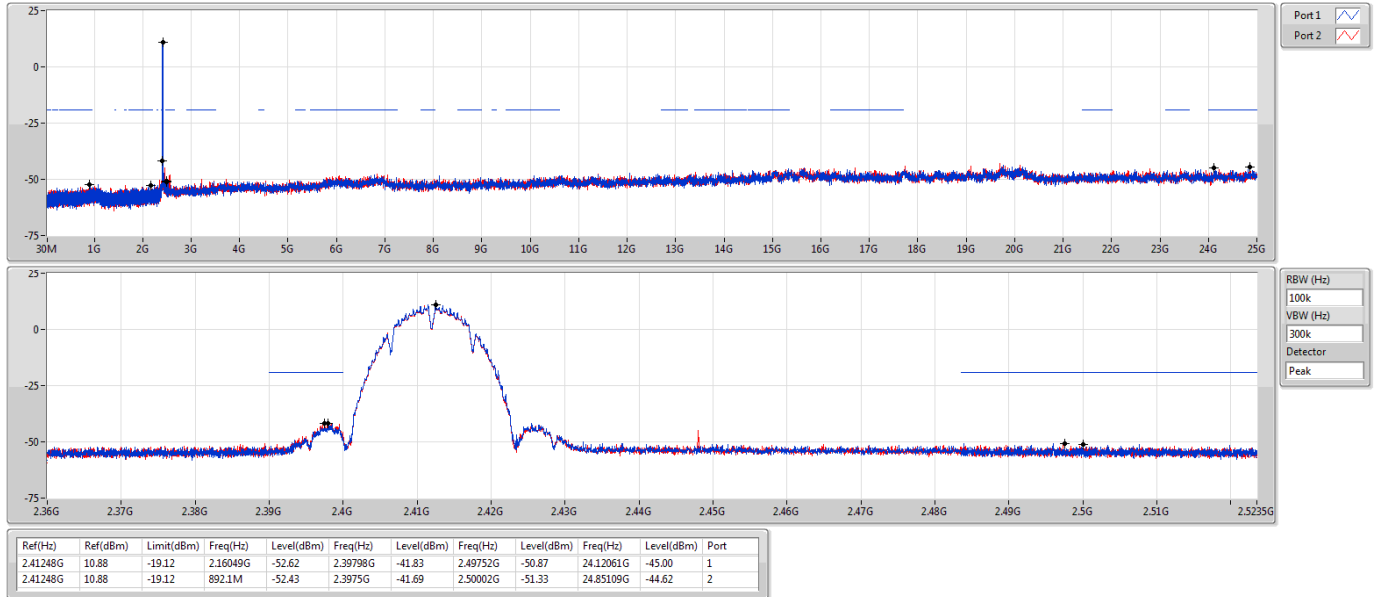
Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.41248G	10.88	-19.12	2.16049G	-52.62	2.39798G	-41.83	2.49752G	-50.87	24.12061G	-45.00	1
2412MHz	Pass	2.41248G	10.88	-19.12	892.1M	-52.43	2.3975G	-41.69	2.50002G	-51.33	24.85109G	-44.62	2
2437MHz	Pass	2.41248G	10.88	-19.12	877.54M	-53.82	2.39994G	-51.37	2.49452G	-51.11	15.04853G	-44.63	1
2437MHz	Pass	2.41248G	10.88	-19.12	1.99244G	-52.46	2.39996G	-49.24	2.49838G	-51.21	15.0682G	-44.45	2
2462MHz	Pass	2.41248G	10.88	-19.12	1.93215G	-51.36	2.39692G	-51.72	2.49598G	-48.16	15.07101G	-44.76	1
2462MHz	Pass	2.41248G	10.88	-19.12	2.15176G	-53.00	2.39996G	-50.89	2.49594G	-49.86	24.57014G	-45.44	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.41695G	9.81	-20.19	2.30408G	-53.27	2.3991G	-29.11	2.49596G	-48.17	7.23795G	-41.49	1
2412MHz	Pass	2.41695G	9.81	-20.19	2.15875G	-52.47	2.39912G	-29.62	2.51288G	-49.49	7.23233G	-39.47	2
2437MHz	Pass	2.41695G	9.81	-20.19	2.30408G	-51.42	2.39836G	-50.27	2.49598G	-48.38	24.94943G	-44.73	1
2437MHz	Pass	2.41695G	9.81	-20.19	949.48M	-52.66	2.39998G	-46.49	2.49596G	-49.65	24.48866G	-44.39	2
2462MHz	Pass	2.41695G	9.81	-20.19	889.48M	-53.20	2.39998G	-50.44	2.48442G	-45.42	15.03729G	-44.87	1
2462MHz	Pass	2.41695G	9.81	-20.19	545.51M	-53.32	2.39998G	-46.00	2.48352G	-44.07	24.83143G	-44.70	2
VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.41069G	7.77	-22.23	2.12321G	-52.93	2.39884G	-30.14	2.49602G	-48.54	14.69452G	-45.44	1
2412MHz	Pass	2.41069G	7.77	-22.23	1.85556G	-52.79	2.39984G	-30.11	2.49996G	-49.68	16.98151G	-44.98	2
2437MHz	Pass	2.41069G	7.77	-22.23	364.06M	-53.71	2.39998G	-49.86	2.49598G	-48.91	15.07943G	-44.42	1
2437MHz	Pass	2.41069G	7.77	-22.23	958.8M	-52.49	2.39998G	-45.44	2.4851G	-49.80	16.2735G	-43.87	2
2462MHz	Pass	2.41069G	7.77	-22.23	2.14302G	-53.14	2.39994G	-49.65	2.48386G	-45.86	15.32387G	-45.18	1
2462MHz	Pass	2.41069G	7.77	-22.23	2.1602G	-52.42	2.39998G	-46.49	2.48454G	-45.15	24.92976G	-45.18	2
VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.44071G	6.25	-23.75	2.30397G	-52.13	2.39888G	-33.40	2.4959G	-48.67	24.86258G	-44.04	1
2422MHz	Pass	2.44071G	6.25	-23.75	1.84168G	-52.54	2.3988G	-32.62	2.55998G	-46.15	21.8056G	-45.20	2
2437MHz	Pass	2.44071G	6.25	-23.75	2.18375G	-52.74	2.39956G	-37.33	2.48378G	-46.91	24.99439G	-44.82	1
2437MHz	Pass	2.44071G	6.25	-23.75	2.30426G	-52.19	2.39952G	-35.86	2.55998G	-45.95	23.50797G	-44.65	2
2452MHz	Pass	2.44071G	6.25	-23.75	1.80504G	-53.38	2.39928G	-49.85	2.4857G	-44.14	15.31865G	-44.70	1
2452MHz	Pass	2.44071G	6.25	-23.75	2.12392G	-50.90	2.39996G	-44.79	2.48454G	-42.68	17.6829G	-44.82	2

802.11b_Nss1,(1Mbps)_2TX

2412MHz

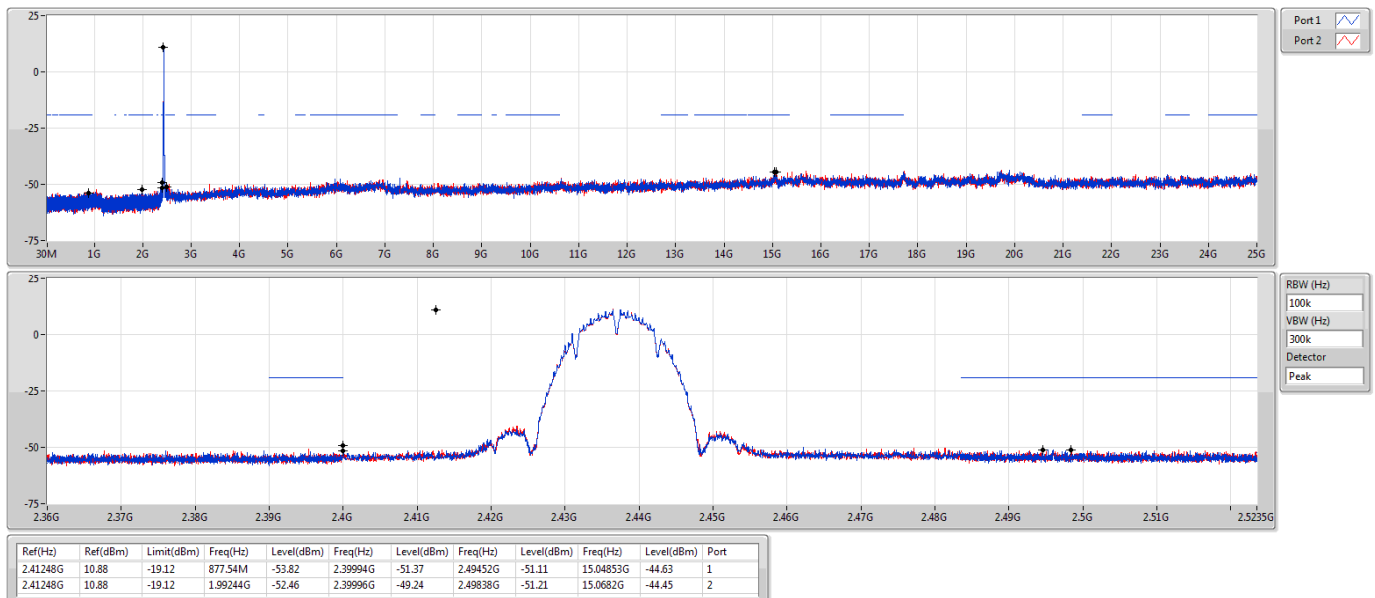
CSE NdB



802.11b_Nss1,(1Mbps)_2TX

2437MHz

CSE NdB

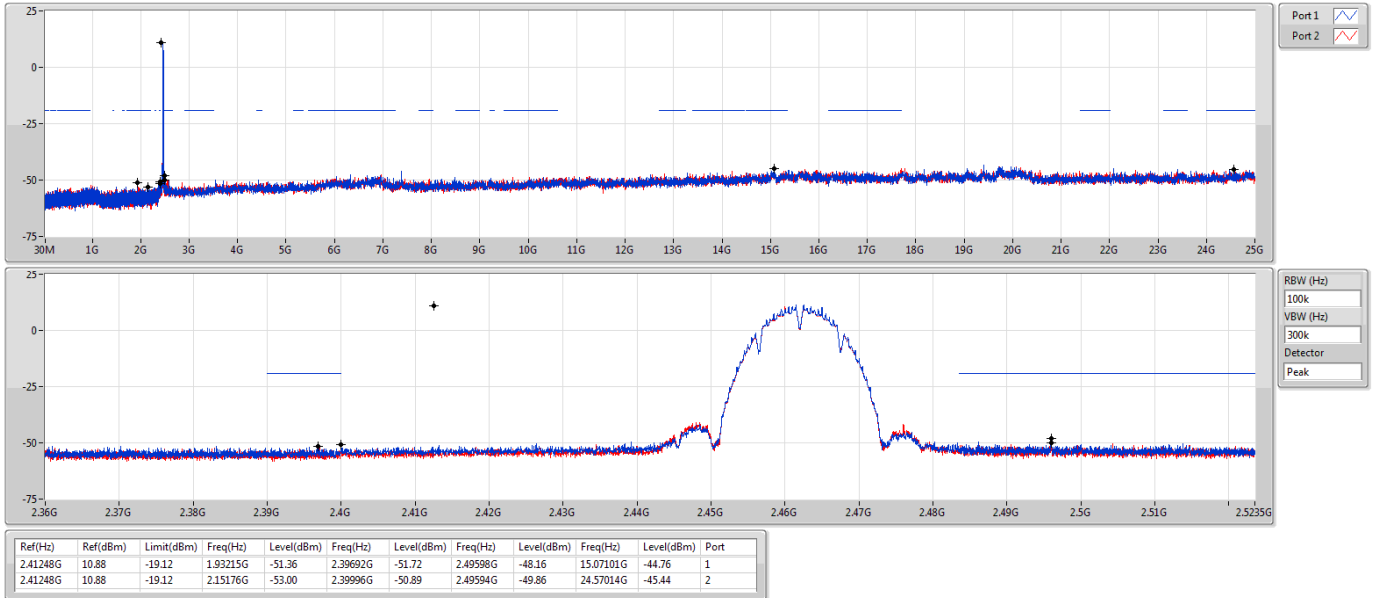


802.11b_Nss1,(1Mbps)_2TX

2462MHz

CSE NdB

26/11/2019

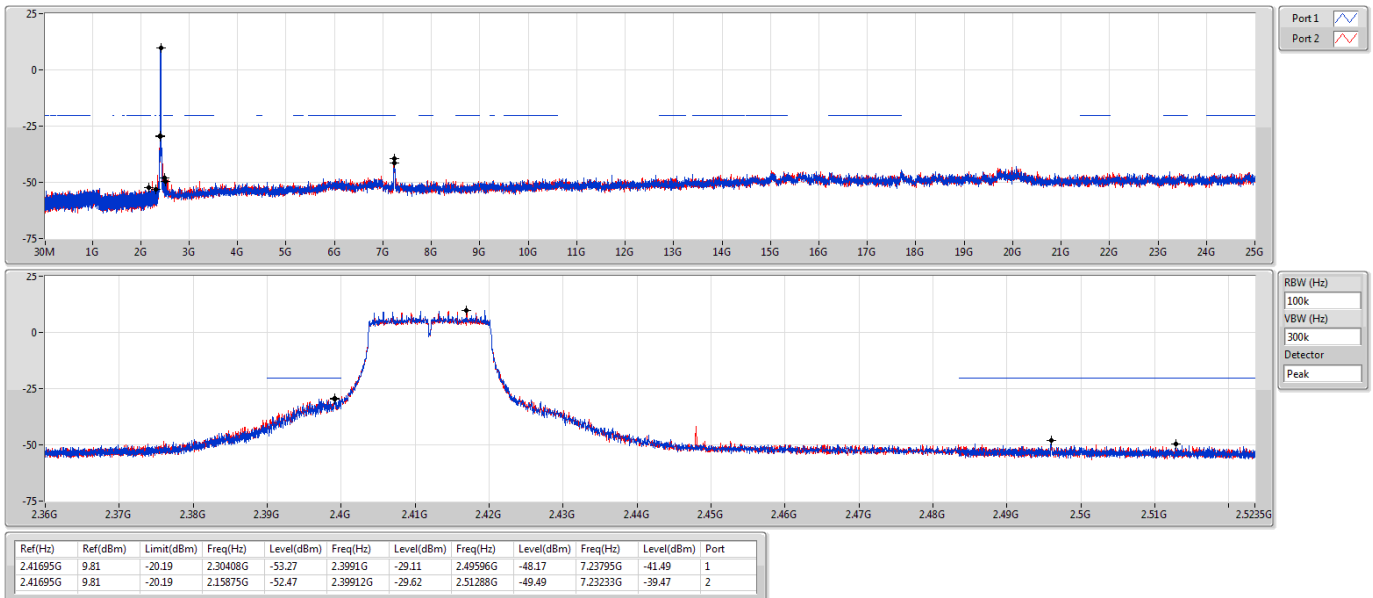


802.11g_Nss1,(6Mbps)_2TX

2412MHz

CSE NdB

26/11/2019

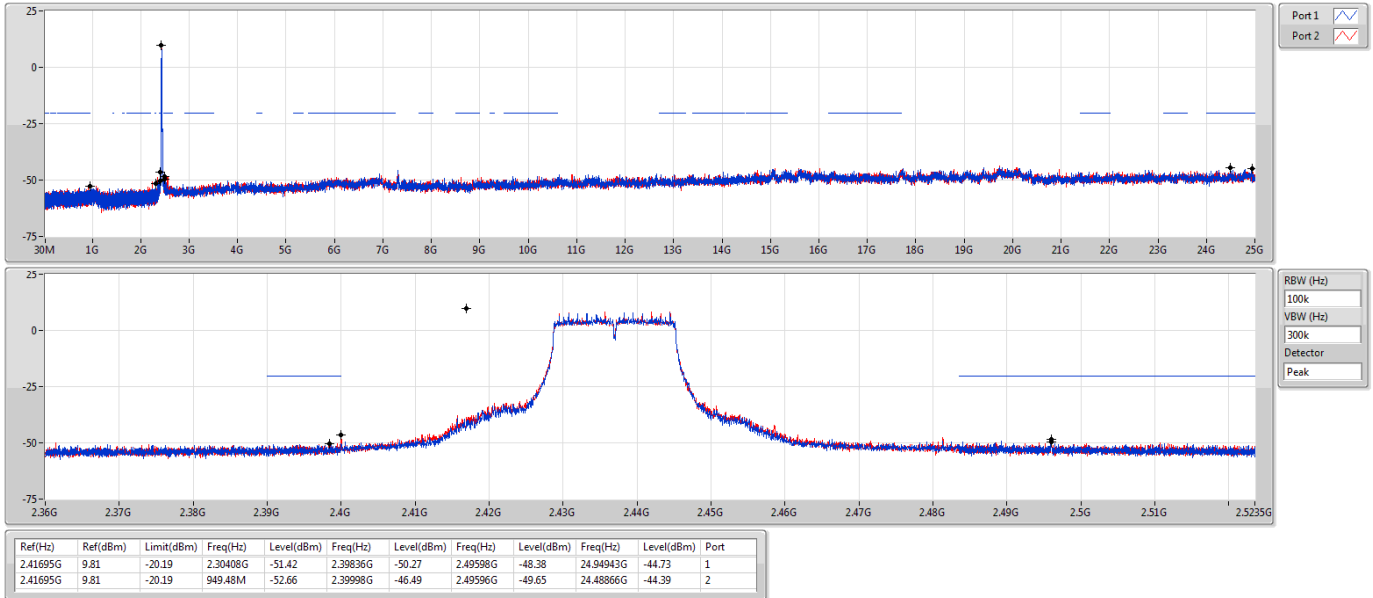


802.11g_Nss1,(6Mbps)_2TX

2437MHz

CSE NdB

26/11/2019

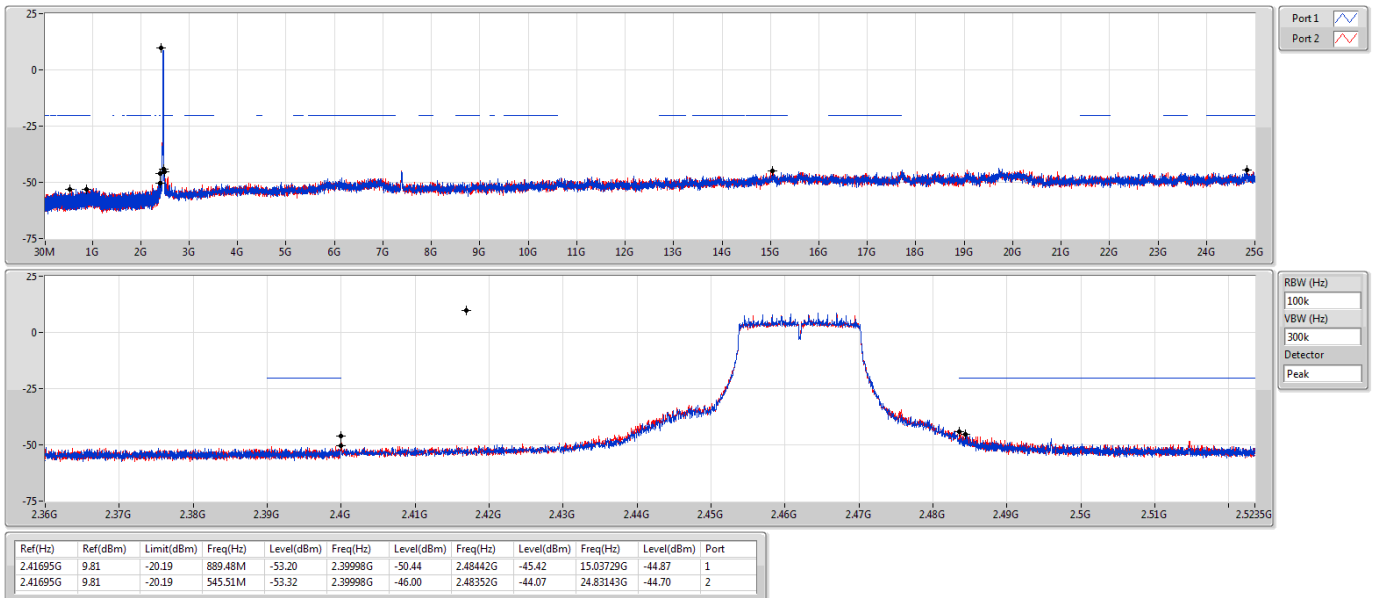


802.11g_Nss1,(6Mbps)_2TX

2462MHz

CSE NdB

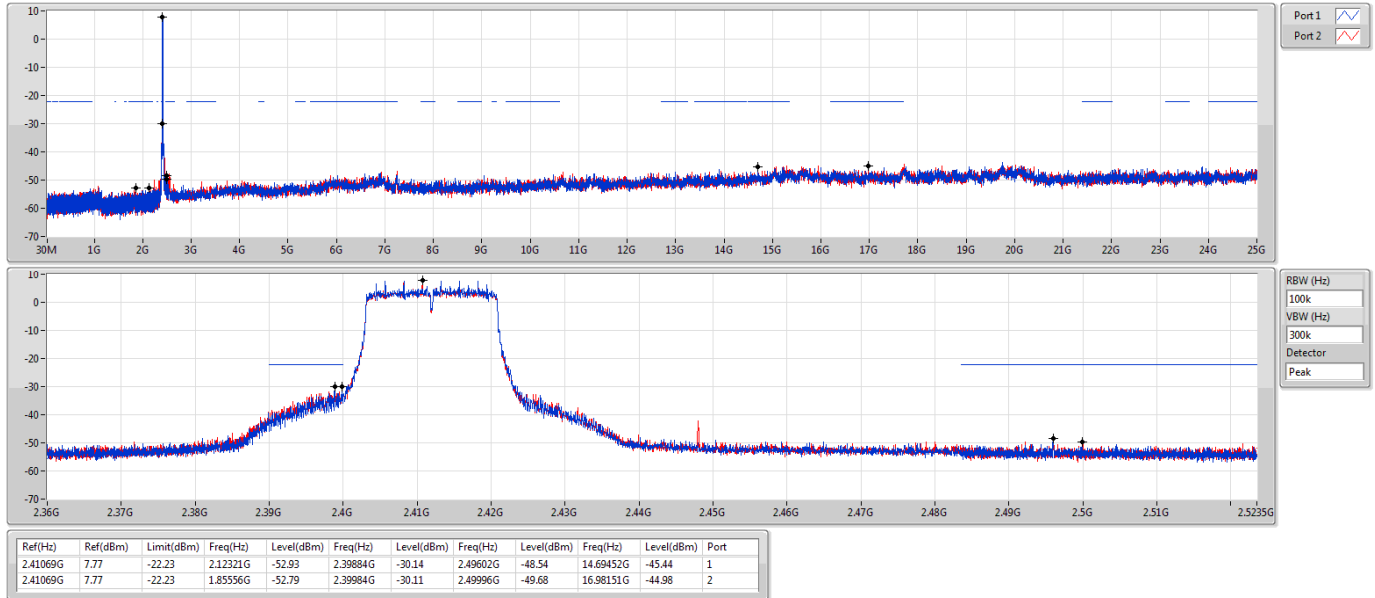
26/11/2019



VHT20_Nss1,(MCS0)_2TX

CSE NdB

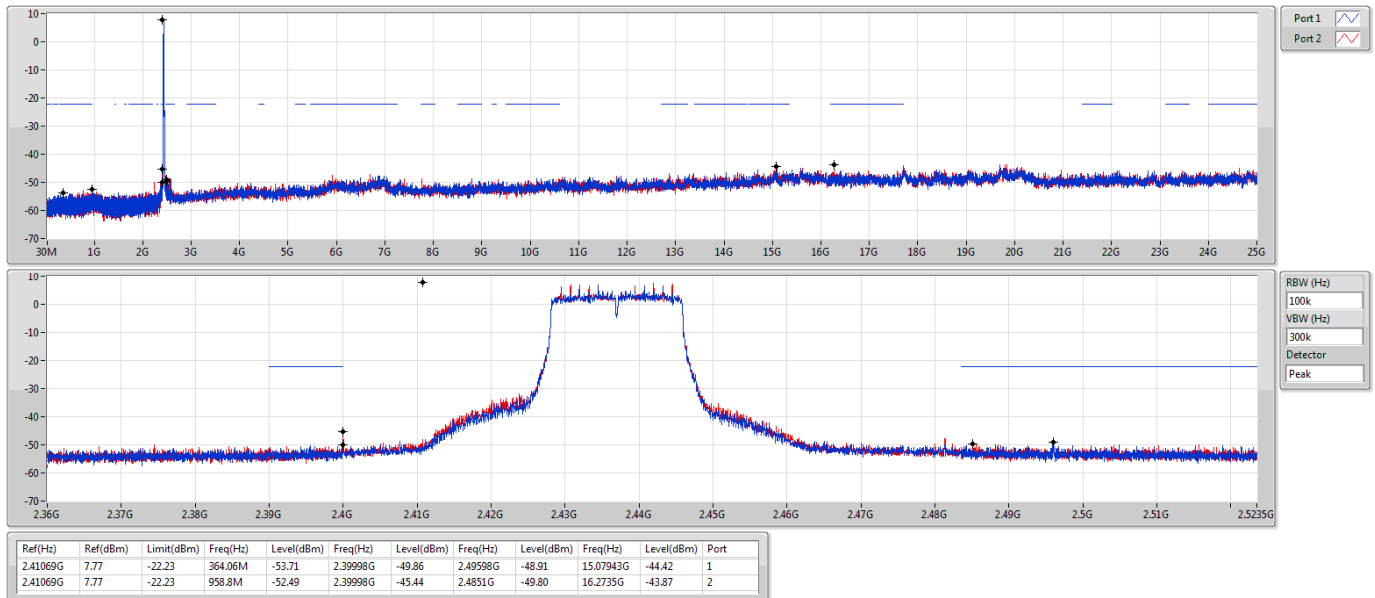
2412MHz



VHT20_Nss1,(MCS0)_2TX

CSE NdB

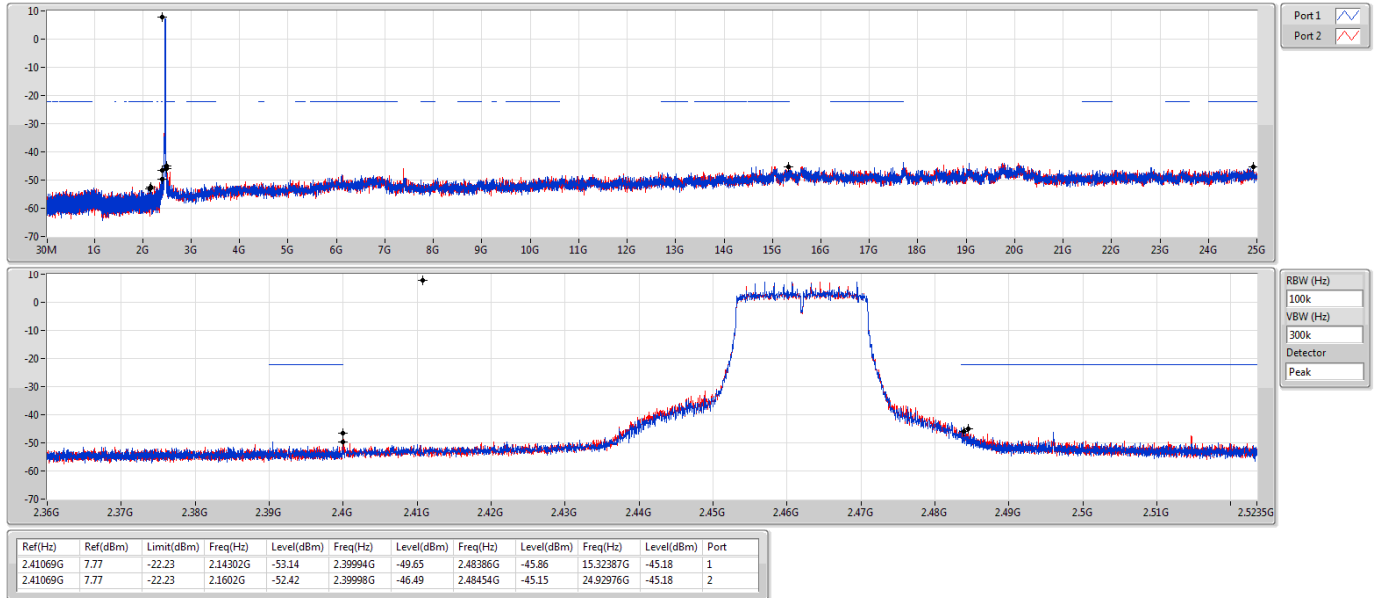
2437MHz



VHT20_Nss1,(MCS0)_2TX

CSE NdB

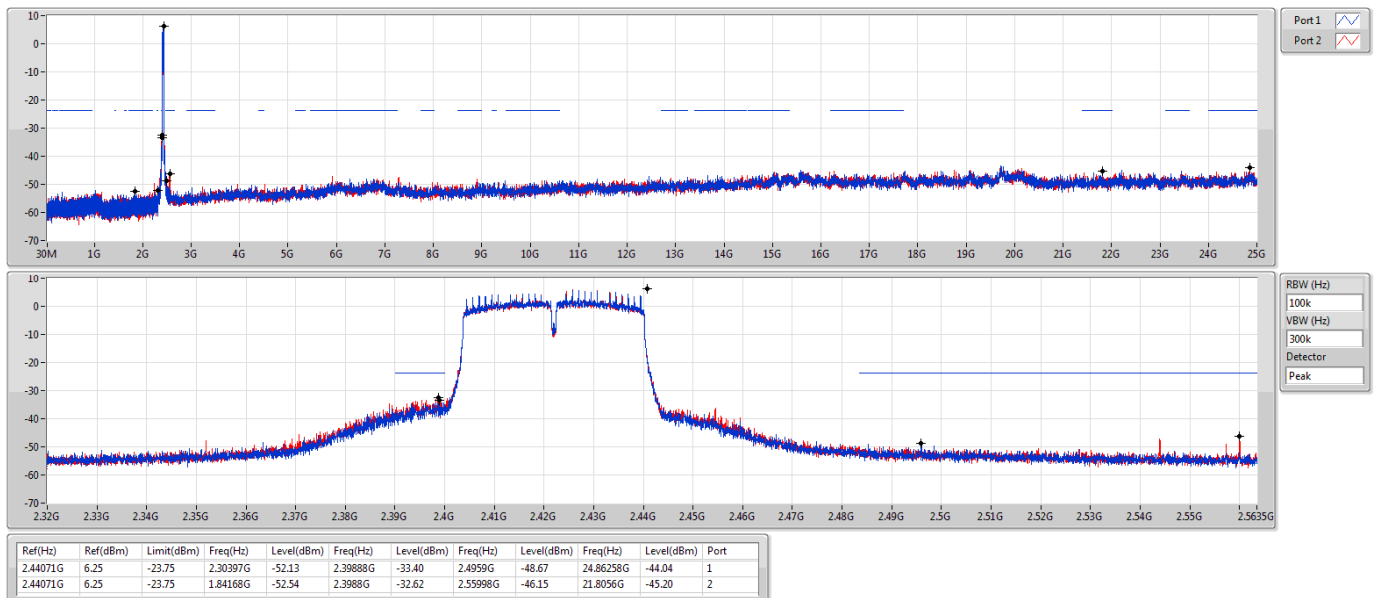
2462MHz



VHT40_Nss1,(MCS0)_2TX

CSE NdB

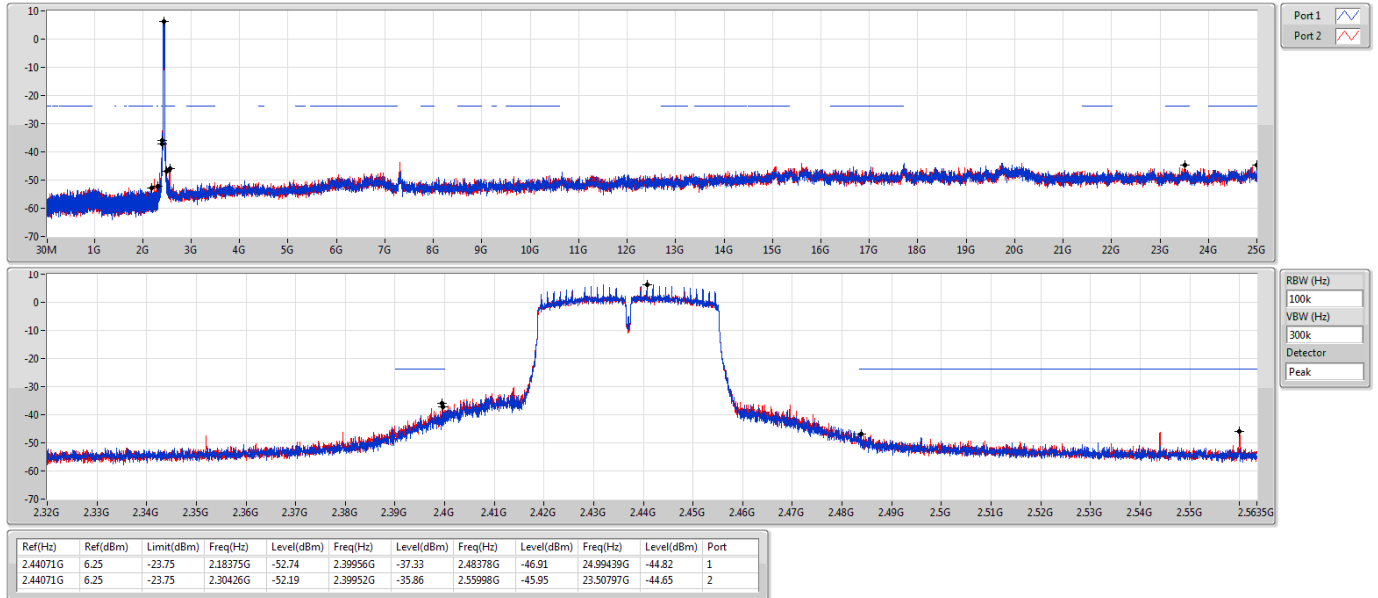
2422MHz



VHT40_Nss1,(MCS0)_2TX

CSE NdB

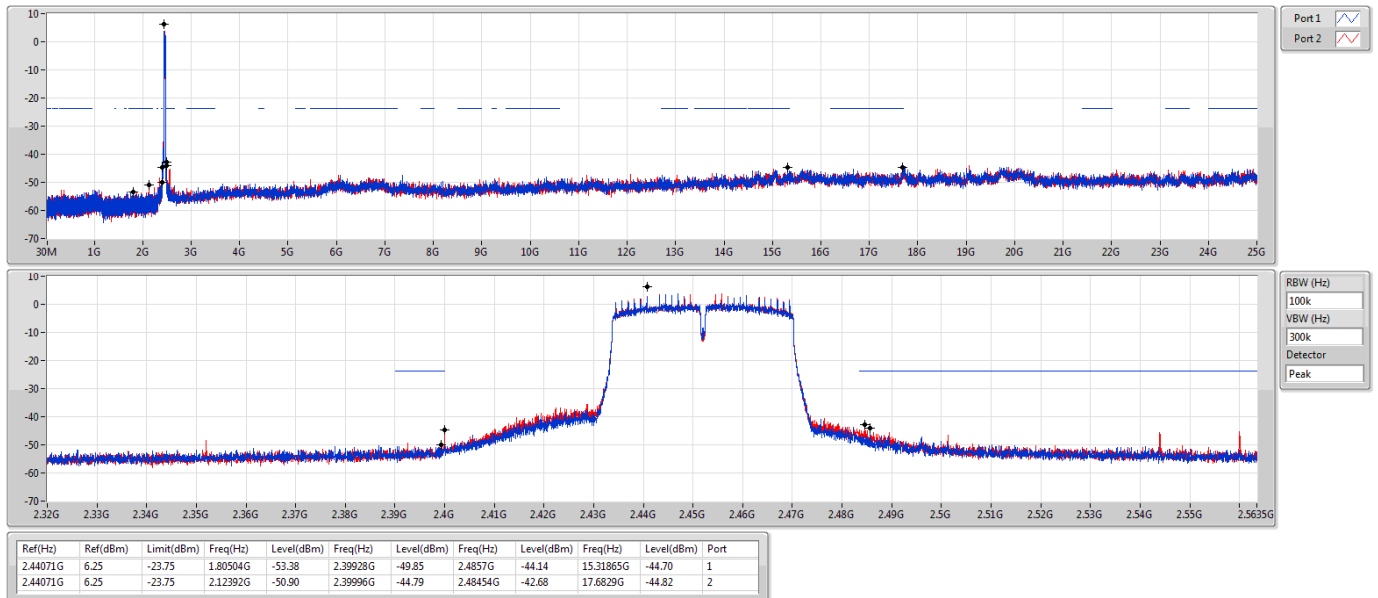
2437MHz



VHT40_Nss1,(MCS0)_2TX

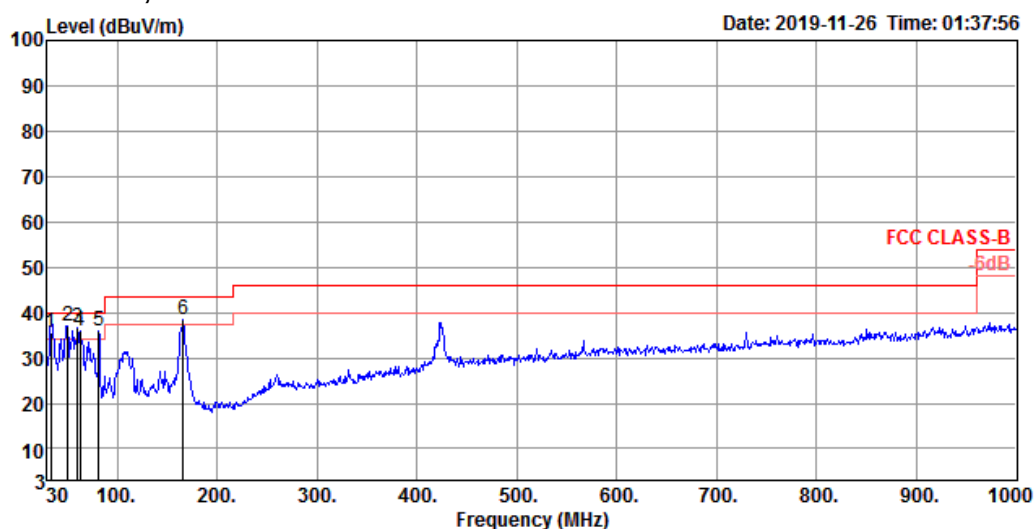
CSE NdB

2452MHz



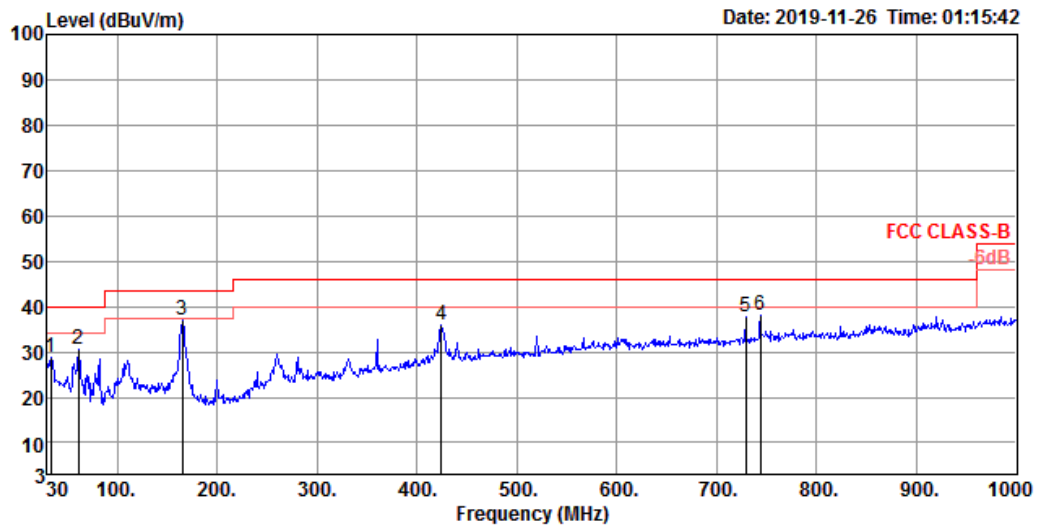
Test Mode	Mode 4	Frequency Range	30 MHz to 1,000 MHz
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Vertical 30 MHz to 1,000 MHz



	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	33.88	35.68	40.00	-4.32	45.10	1.08	21.94	32.44	110	108 QP	VERTICAL
2	50.37	36.96	40.00	-3.04	54.53	1.32	13.83	32.72	300	304 Peak	VERTICAL
3	60.07	36.66	40.00	-3.34	55.58	1.44	12.16	32.52	100	11 Peak	VERTICAL
4	62.98	35.76	40.00	-4.24	54.75	1.48	12.00	32.47	100	174 Peak	VERTICAL
5	81.41	36.04	40.00	-3.96	53.98	1.68	12.87	32.49	100	91 Peak	VERTICAL
6	165.80	38.32	43.50	-5.18	52.69	2.38	15.70	32.45	100	36 Peak	VERTICAL

Horizontal 30 MHz to 1,000 MHz



	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	33.88	28.85	40.00	-11.15	38.27	1.08	21.94	32.44	100	360	Peak
2	61.04	30.65	40.00	-9.35	49.59	1.45	12.11	32.50	200	93	Peak
3	164.83	37.06	43.50	-6.44	51.40	2.38	15.74	32.46	200	93	Peak
4	424.79	36.10	46.00	-9.90	41.92	4.03	22.41	32.26	100	106	Peak
5	729.37	37.75	46.00	-8.25	39.47	5.39	25.09	32.20	150	255	Peak
6	743.92	38.14	46.00	-7.86	39.48	5.45	25.31	32.10	150	224	Peak



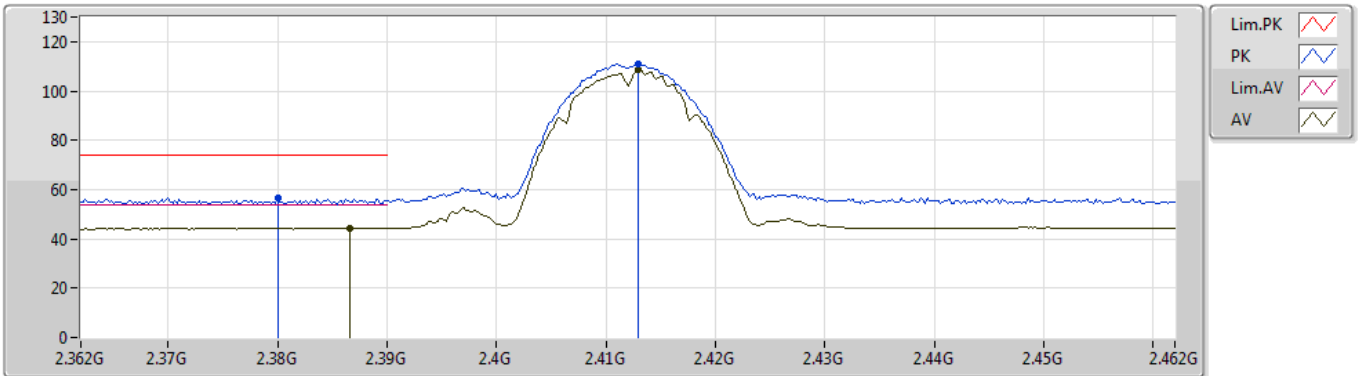
Summary

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	-	-	-	-	-	-	-	-	-	-	-	-
VHT20_Nss1,(MCS0)_2TX	Pass	PK	7.3151G	73.84	74.00	-0.16	9.01	3	Horizontal	341	1.88	-

802.11b_Nss1,(1Mbps)_2TX

26/12/2019

2412MHz_TX



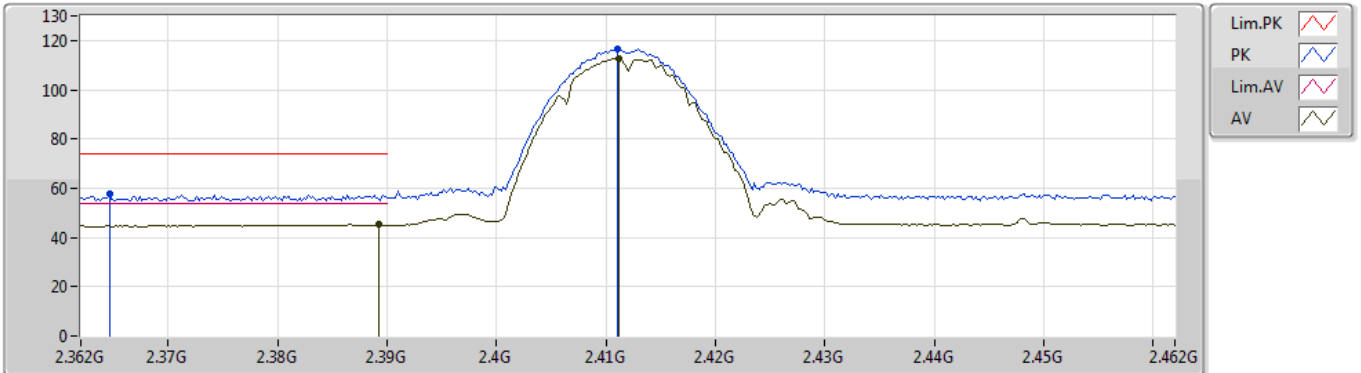
EUT Y_2TX
Setting 20.5
03-C-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.38G	56.40	74.00	-17.60	31.90	3	Vertical	319	1.20	-	24.50			
AV	2.3866G	44.38	54.00	-9.62	31.92	3	Vertical	319	1.20	-	12.46			
PK	2.413G	111.00	Inf	-Inf	32.01	3	Vertical	319	1.20	-	78.99			
AV	2.413G	108.75	Inf	-Inf	32.01	3	Vertical	319	1.20	-	76.74			

802.11b_Nss1,(1Mbps)_2TX

26/12/2019

2412MHz_TX



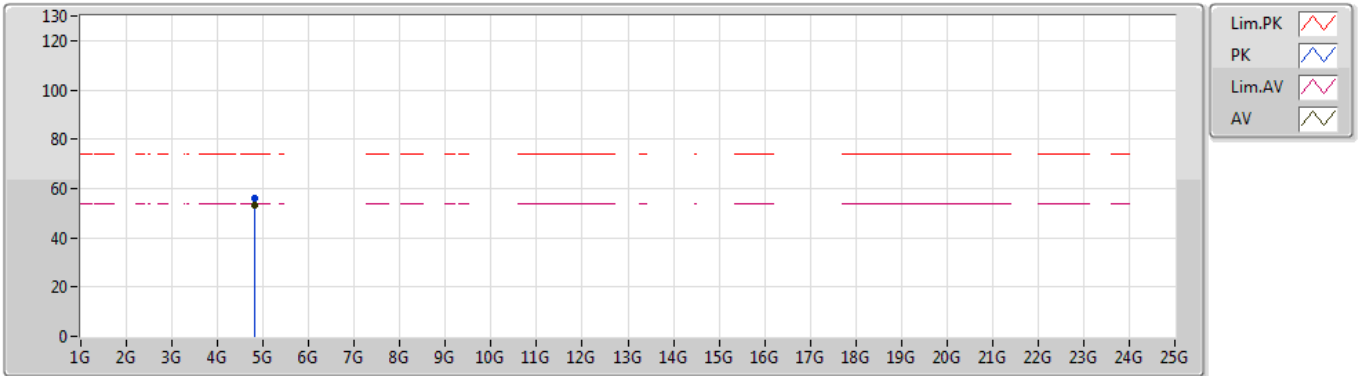
EUT Y_2TX
Setting 20.5
03-C-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.3646G	57.51	74.00	-16.49	31.86	3	Horizontal	311	2.30	-	25.65			
AV	2.3892G	45.21	54.00	-8.79	31.93	3	Horizontal	311	2.30	-	13.28			
PK	2.411G	116.55	Inf	-Inf	32.00	3	Horizontal	311	2.30	-	84.55			
AV	2.4112G	112.85	Inf	-Inf	32.00	3	Horizontal	311	2.30	-	80.85			

802.11b_Nss1,(1Mbps)_2TX

26/12/2019

2412MHz_TX



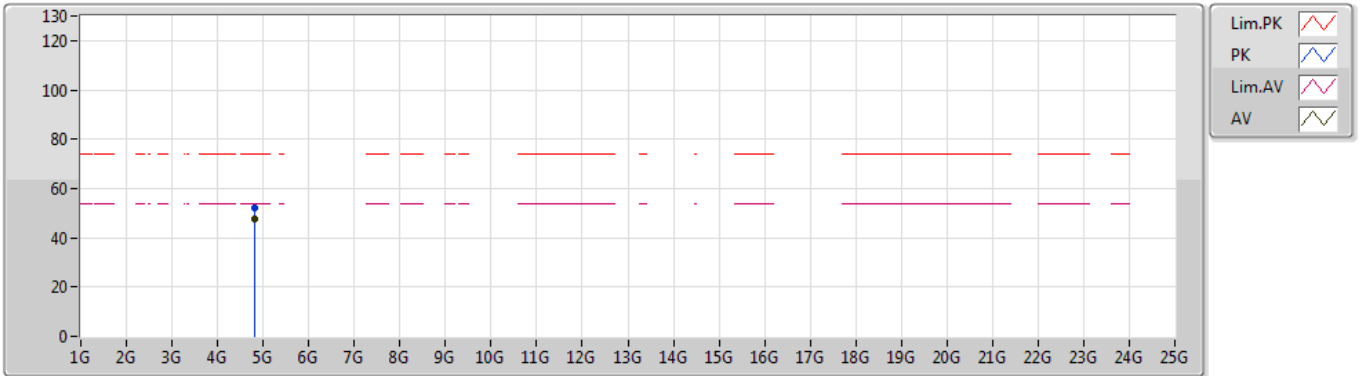
EUT X_2TX
Setting 20.5
03-C-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.82396G	55.80	74.00	-18.20	4.71	3	Vertical	306	2.30	-	51.09			
AV	4.82396G	52.99	54.00	-1.01	4.71	3	Vertical	306	2.30	-	48.28			

802.11b_Nss1,(1Mbps)_2TX

26/12/2019

2412MHz_TX



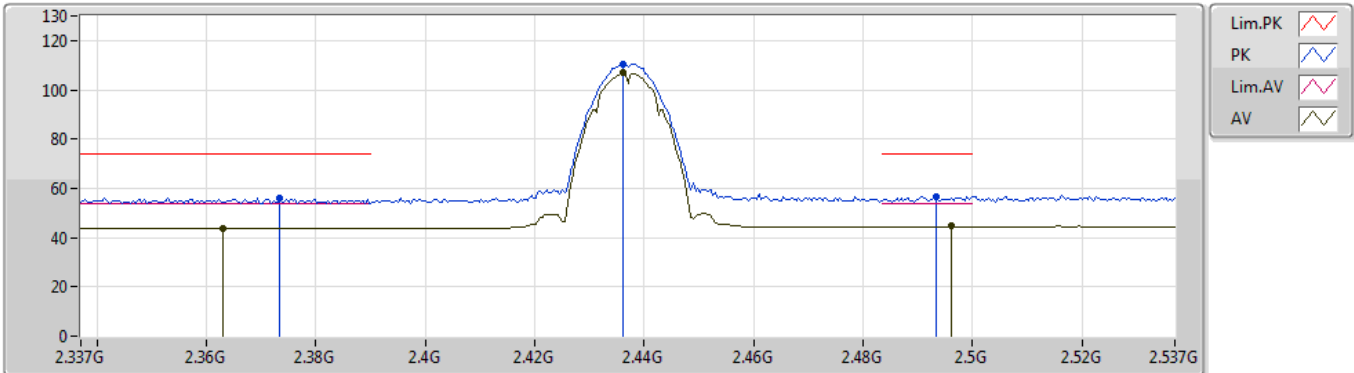
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Setting 20.5
03-C-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.8241G	52.17	74.00	-21.83	4.71	3	Horizontal	24	1.09	-	47.46			
AV	4.82393G	47.71	54.00	-6.29	4.71	3	Horizontal	24	1.09	-	43.00			

802.11b_Nss1,(1Mbps)_2TX

26/12/2019

2437MHz_TX



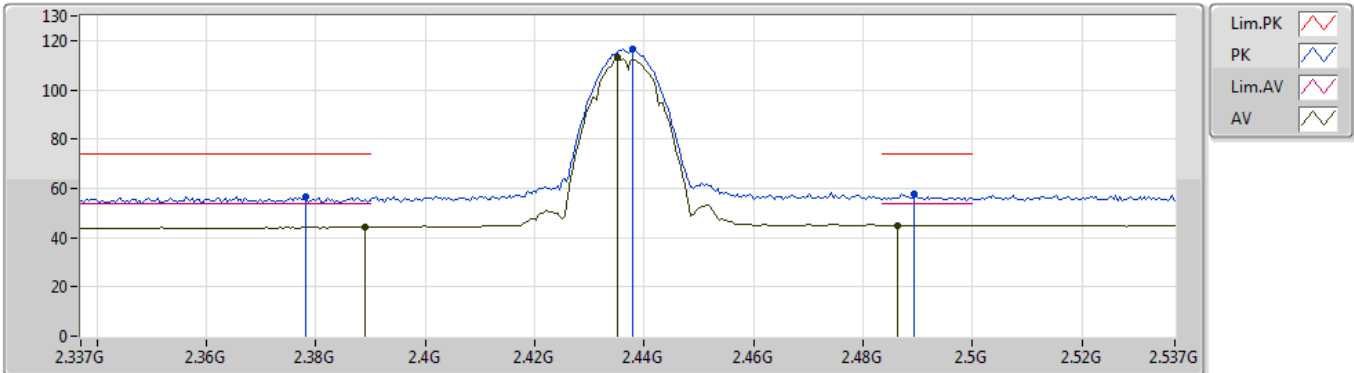
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Setting 20.5
03-C-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.3734G	56.09	74.00	-17.91	31.84	3	Vertical	358	1.98	-	24.25
AV	2.363G	43.76	54.00	-10.24	31.81	3	Vertical	358	1.98	-	11.95
PK	2.4362G	110.58	Inf	-Inf	32.05	3	Vertical	358	1.98	-	78.53
AV	2.4362G	106.79	Inf	-Inf	32.05	3	Vertical	358	1.98	-	74.74
PK	2.4934G	56.79	74.00	-17.21	32.27	3	Vertical	358	1.98	-	24.52
AV	2.4962G	44.63	54.00	-9.37	32.29	3	Vertical	358	1.98	-	12.34

802.11b_Nss1,(1Mbps)_2TX

26/12/2019

2437MHz_TX



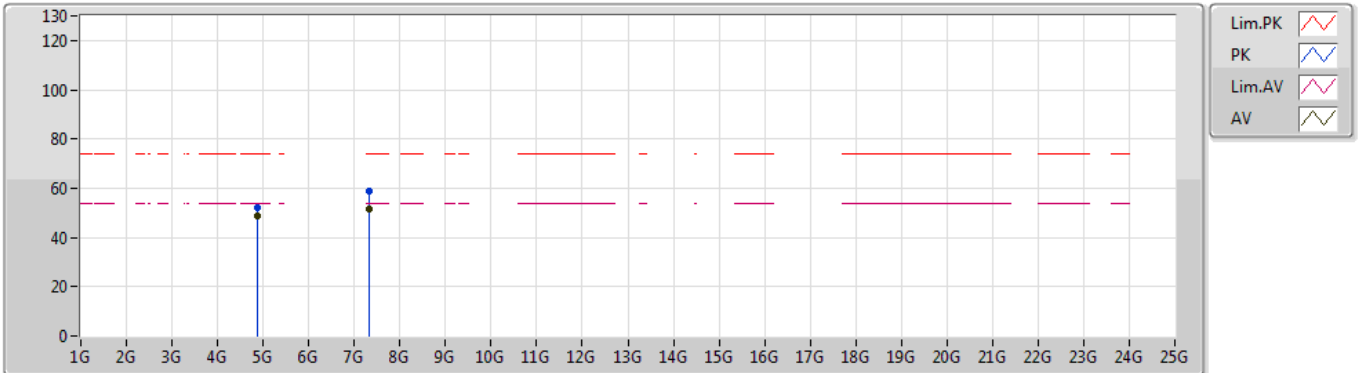
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Setting 20.5
03-C-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.3782G	56.37	74.00	-17.63	31.85	3	Horizontal	310	2.50	-	24.52
AV	2.389G	44.13	54.00	-9.87	31.87	3	Horizontal	310	2.50	-	12.26
PK	2.4378G	116.44	Inf	-Inf	32.05	3	Horizontal	310	2.50	-	84.39
AV	2.435G	113.12	Inf	-Inf	32.05	3	Horizontal	310	2.50	-	81.07
PK	2.4894G	57.63	74.00	-16.37	32.26	3	Horizontal	310	2.50	-	25.37
AV	2.4862G	44.93	54.00	-9.07	32.25	3	Horizontal	310	2.50	-	12.68

802.11b_Nss1,(1Mbps)_2TX

26/12/2019

2437MHz_TX



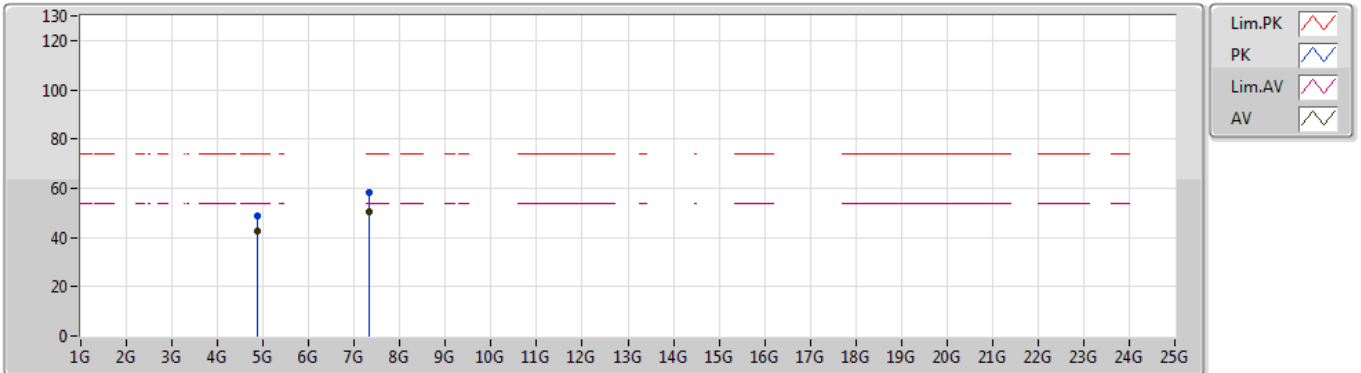
EUT X_2TX
Setting 20.5
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.87396G	52.34	74.00	-21.66	4.80	3	Vertical	7	2.13	-	47.54			
AV	4.87394G	48.53	54.00	-5.47	4.80	3	Vertical	7	2.13	-	43.73			
PK	7.31154G	58.91	74.00	-15.09	8.99	3	Vertical	32	1.01	-	49.92			
AV	7.31268G	51.33	54.00	-2.67	8.99	3	Vertical	32	1.01	-	42.34			

802.11b_Nss1,(1Mbps)_2TX

26/12/2019

2437MHz_TX



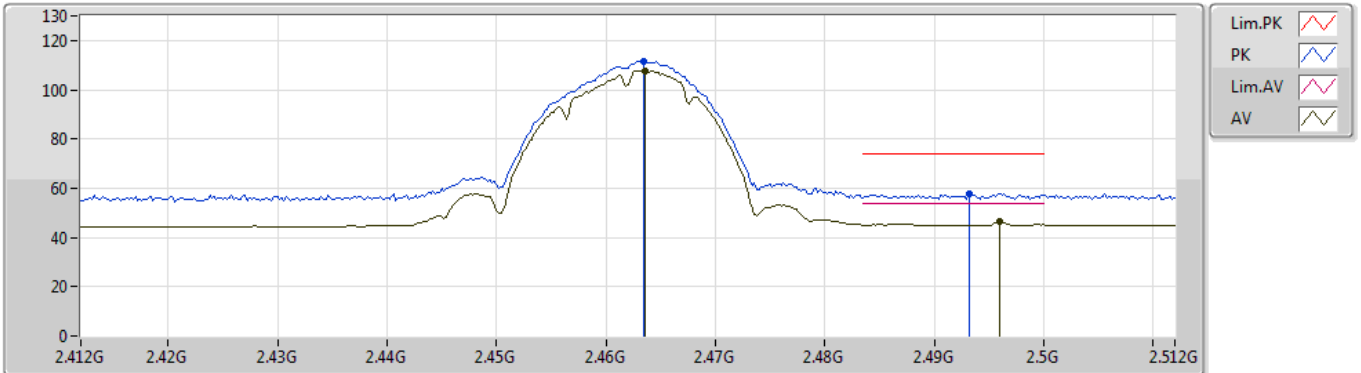
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Setting 20.5
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.87392G	48.98	74.00	-25.02	4.80	3	Horizontal	23	1.42	-	44.18			
AV	4.87396G	42.81	54.00	-11.19	4.80	3	Horizontal	23	1.42	-	38.01			
PK	7.31142G	58.00	74.00	-16.00	8.99	3	Horizontal	341	1.95	-	49.01			
AV	7.31262G	50.39	54.00	-3.61	8.99	3	Horizontal	341	1.95	-	41.40			

802.11b_Nss1,(1Mbps)_2TX

26/12/2019

2462MHz_TX



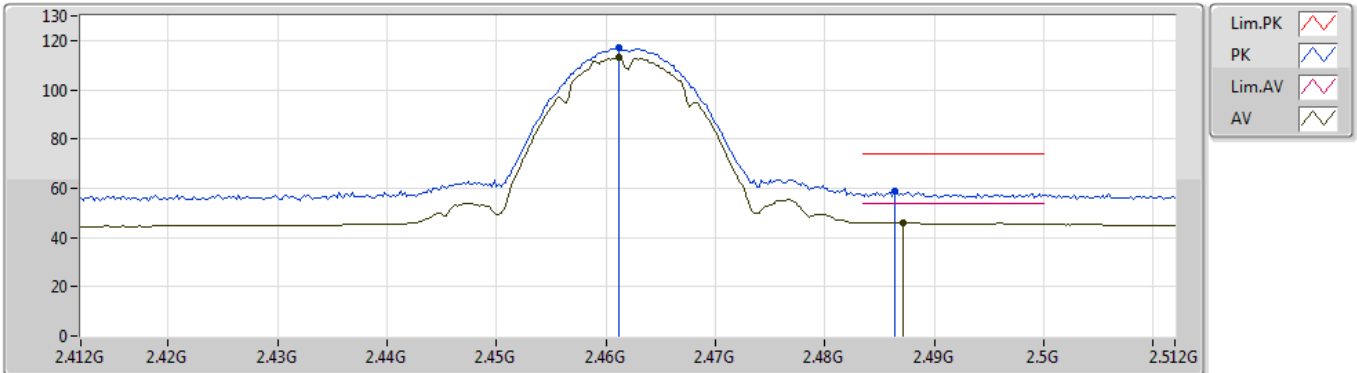
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Setting 20.5
03-C-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.4634G	111.60	Inf	-Inf	32.15	3	Vertical	360	2.95	-	79.45
AV	2.4636G	107.83	Inf	-Inf	32.15	3	Vertical	360	2.95	-	75.68
PK	2.4932G	57.61	74.00	-16.39	32.27	3	Vertical	360	2.95	-	25.34
AV	2.496G	46.40	54.00	-7.60	32.29	3	Vertical	360	2.95	-	14.11

802.11b_Nss1,(1Mbps)_2TX

26/12/2019

2462MHz_TX



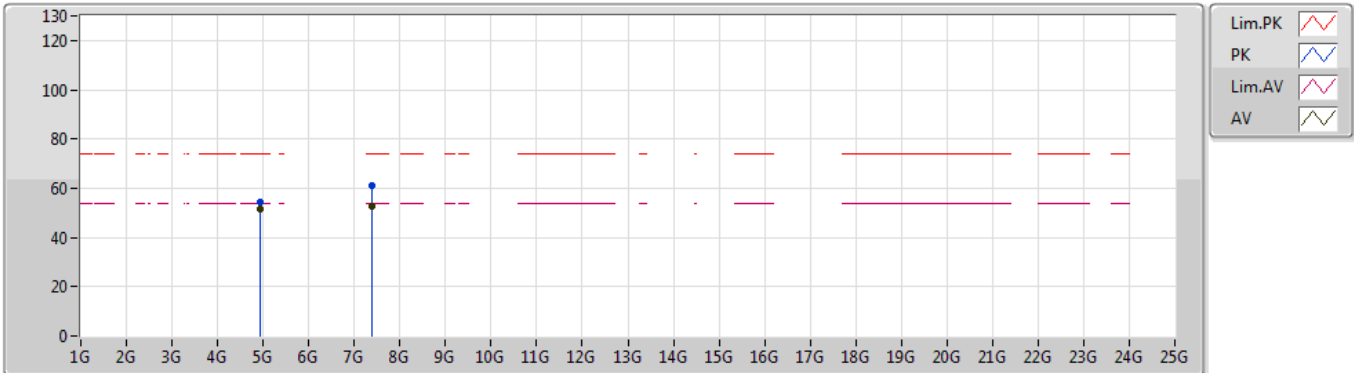
EUT Y_2TX
Setting 20.5
03-C-E-2

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw			
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)			
PK	2.4612G	117.01	Inf	-Inf	32.14	3	Horizontal	311	2.20	-	84.87			
AV	2.4612G	113.17	Inf	-Inf	32.14	3	Horizontal	311	2.20	-	81.03			
PK	2.4864G	58.74	74.00	-15.26	32.25	3	Horizontal	311	2.20	-	26.49			
AV	2.4872G	46.10	54.00	-7.90	32.25	3	Horizontal	311	2.20	-	13.85			

802.11b_Nss1,(1Mbps)_2TX

26/12/2019

2462MHz_TX



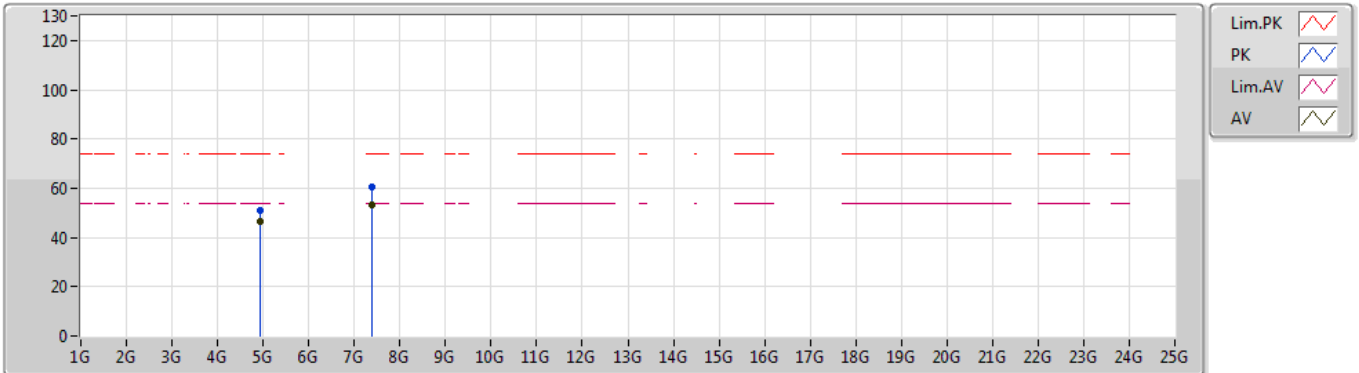
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Setting 20.5
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.924G	54.22	74.00	-19.78	4.90	3	Vertical	302	1.50	-	49.32			
AV	4.92392G	51.51	54.00	-2.49	4.90	3	Vertical	302	1.50	-	46.61			
PK	7.38456G	61.28	74.00	-12.72	9.13	3	Vertical	48	1.68	-	52.15			
AV	7.38464G	52.67	54.00	-1.33	9.13	3	Vertical	48	1.68	-	43.54			

802.11b_Nss1,(1Mbps)_2TX

26/12/2019

2462MHz_TX



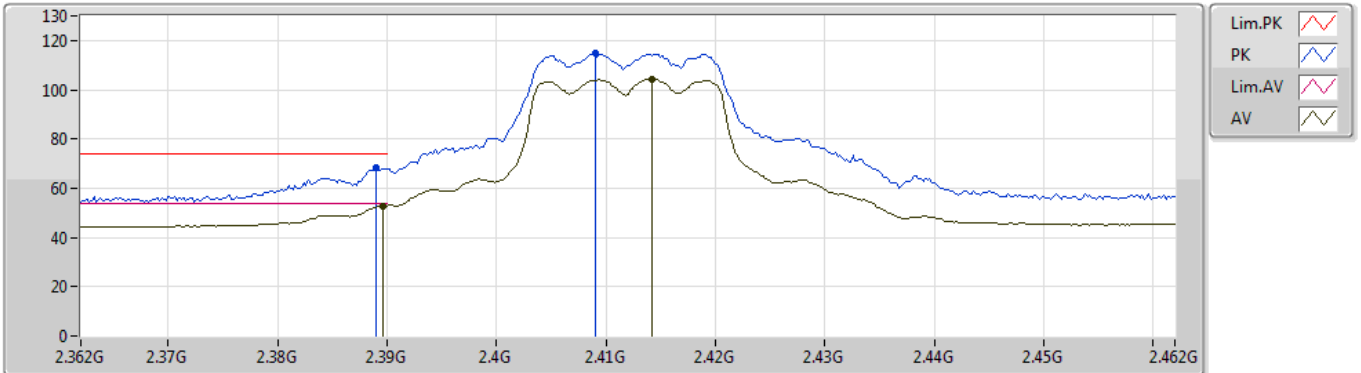
EUT X_2TX
Setting 20.5
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.92404G	50.85	74.00	-23.15	4.90	3	Horizontal	327	2.02	-	45.95			
AV	4.92392G	46.27	54.00	-7.73	4.90	3	Horizontal	327	2.02	-	41.37			
PK	7.38676G	60.70	74.00	-13.30	9.15	3	Horizontal	340	1.88	-	51.55			
AV	7.38416G	53.22	54.00	-0.78	9.13	3	Horizontal	340	1.88	-	44.09			

802.11g_Nss1,(6Mbps)_2TX

26/12/2019

2412MHz_TX



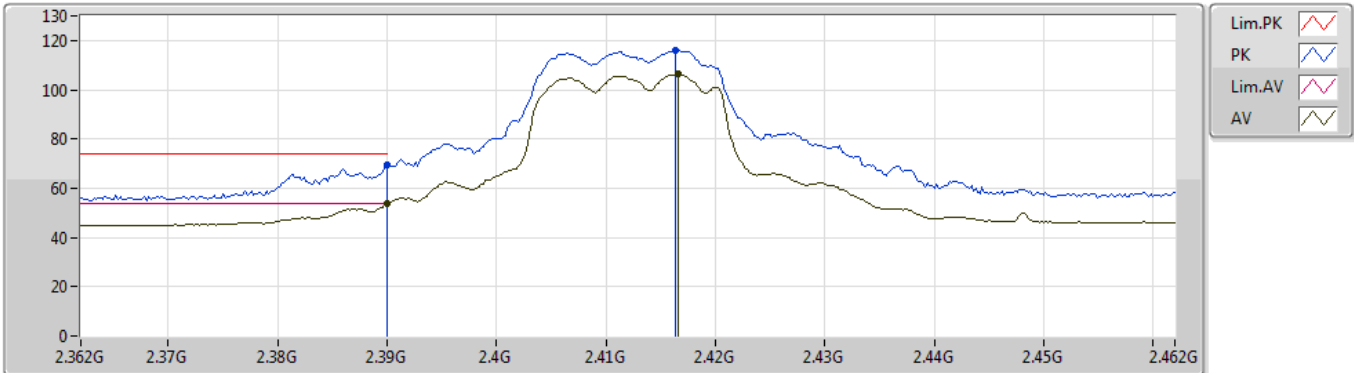
EUT Y_2TX
Setting 21
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.389G	68.16	74.00	-5.84	31.93	3	Vertical	13	2.91	-	36.23			
AV	2.3896G	52.93	54.00	-1.07	31.93	3	Vertical	13	2.91	-	21.00			
PK	2.409G	114.65	Inf	-Inf	31.99	3	Vertical	13	2.91	-	82.66			
AV	2.4142G	104.43	Inf	-Inf	32.01	3	Vertical	13	2.91	-	72.42			

802.11g_Nss1,(6Mbps)_2TX

26/12/2019

2412MHz_TX



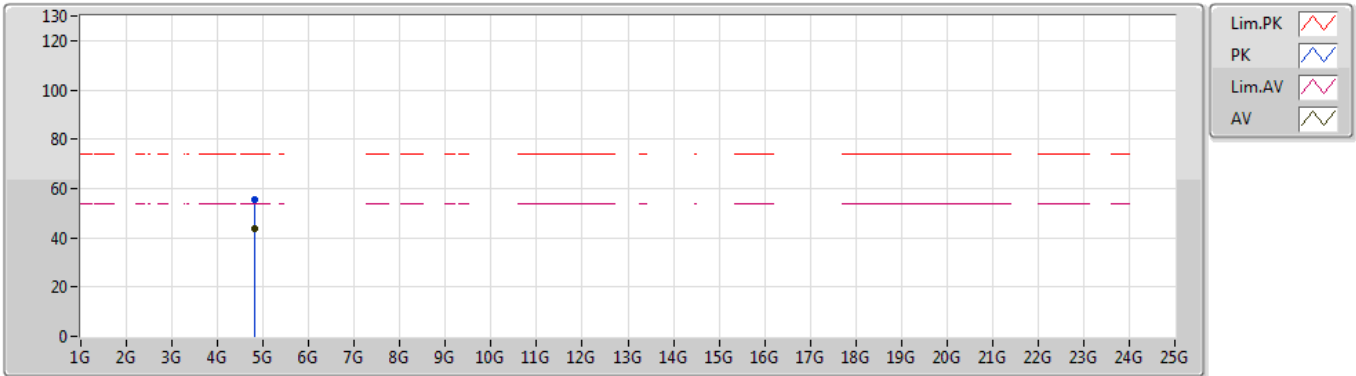
EUT Y_2TX
Setting 21
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.39G	69.32	74.00	-4.68	31.93	3	Horizontal	311	2.24	-	37.39
AV	2.39G	53.62	54.00	-0.38	31.93	3	Horizontal	311	2.24	-	21.69
PK	2.4164G	115.87	Inf	-Inf	32.02	3	Horizontal	311	2.24	-	83.85
AV	2.4166G	106.31	Inf	-Inf	32.02	3	Horizontal	311	2.24	-	74.29

802.11g_Nss1,(6Mbps)_2TX

26/12/2019

2412MHz_TX



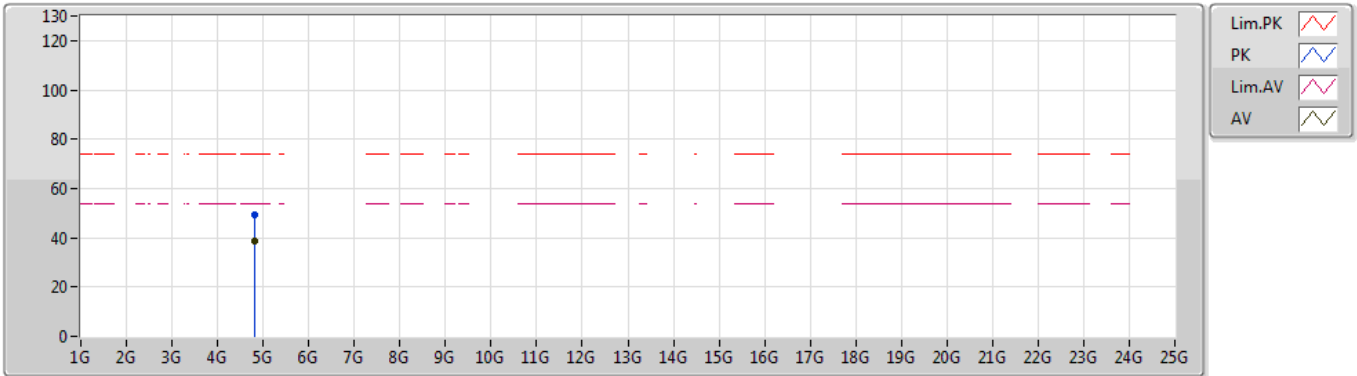
EUT X_2TX
Setting 21
03-C-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.82508G	55.60	74.00	-18.40	4.97	3	Vertical	8	1.67	-	50.63			
AV	4.82392G	43.70	54.00	-10.30	4.97	3	Vertical	8	1.67	-	38.73			

802.11g_Nss1,(6Mbps)_2TX

26/12/2019

2412MHz_TX



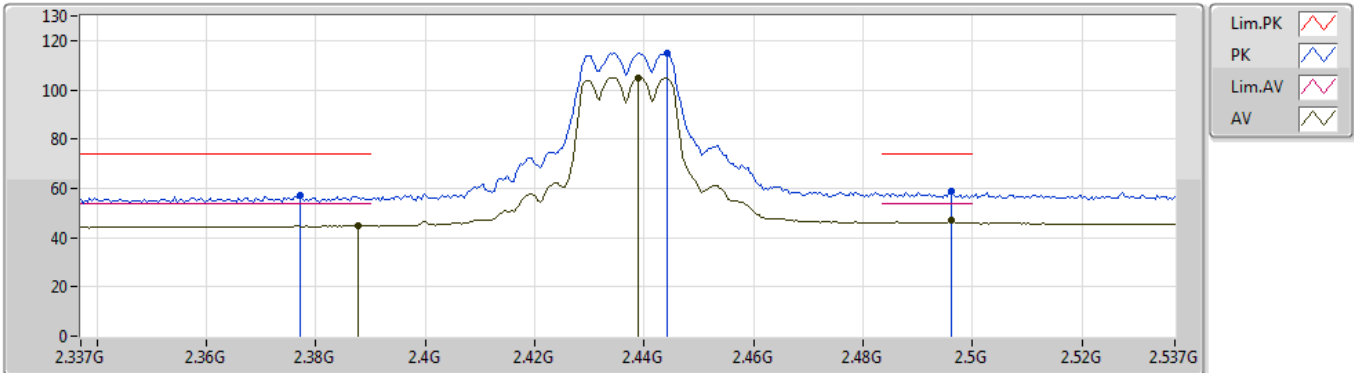
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Setting 21
03-C-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.82401G	49.52	74.00	-24.48	4.97	3	Horizontal	21	1.16	-	44.55			
AV	4.82397G	38.47	54.00	-15.53	4.97	3	Horizontal	21	1.16	-	33.50			

802.11g_Nss1,(6Mbps)_2TX

26/12/2019

2437MHz_TX



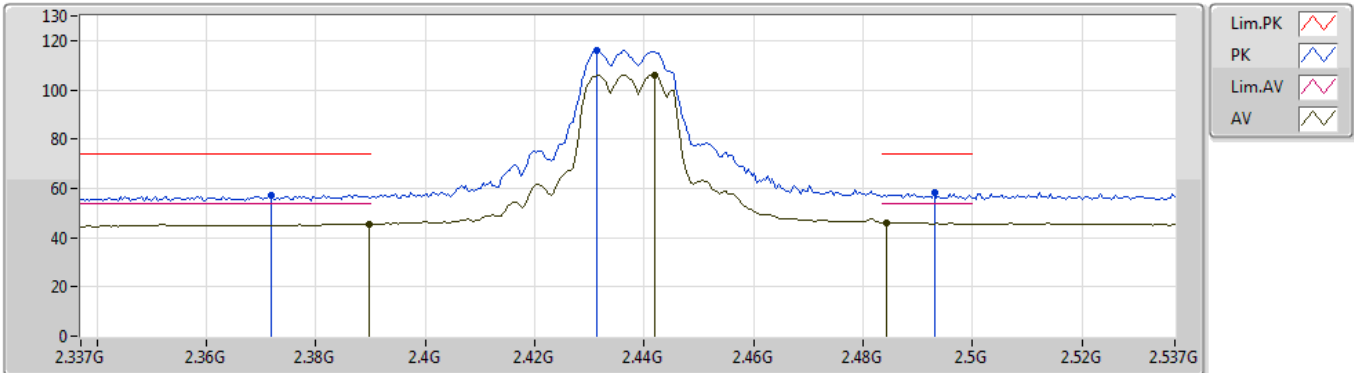
EUT Y_2TX
Setting 19.5
03-C-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.377G	57.36	74.00	-16.64	31.89	3	Vertical	360	2.90	-	25.47
AV	2.3878G	44.76	54.00	-9.24	31.93	3	Vertical	360	2.90	-	12.83
PK	2.4442G	115.14	Inf	-Inf	32.11	3	Vertical	360	2.90	-	83.03
AV	2.439G	104.88	Inf	-Inf	32.10	3	Vertical	360	2.90	-	72.78
PK	2.4962G	58.91	74.00	-15.09	32.30	3	Vertical	360	2.90	-	26.61
AV	2.4962G	47.18	54.00	-6.82	32.30	3	Vertical	360	2.90	-	14.88

802.11g_Nss1,(6Mbps)_2TX

26/12/2019

2437MHz_TX



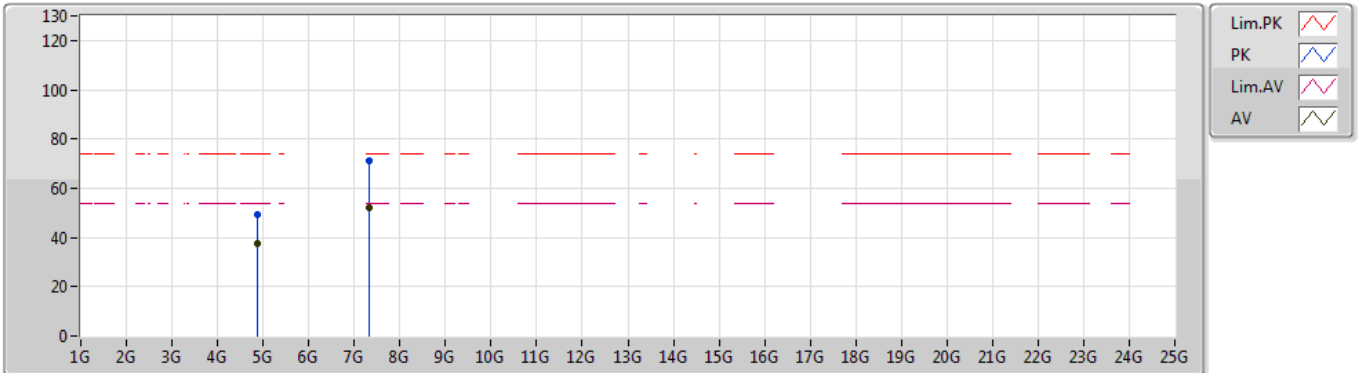
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Setting 19.5
03-C-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.3718G	57.12	74.00	-16.88	31.88	3	Horizontal	309	2.03	-	25.24
AV	2.3898G	45.59	54.00	-8.41	31.93	3	Horizontal	309	2.03	-	13.66
PK	2.4314G	115.91	Inf	-Inf	32.07	3	Horizontal	309	2.03	-	83.84
AV	2.4418G	105.95	Inf	-Inf	32.11	3	Horizontal	309	2.03	-	73.84
PK	2.493G	58.02	74.00	-15.98	32.29	3	Horizontal	309	2.03	-	25.73
AV	2.4842G	46.13	54.00	-7.87	32.25	3	Horizontal	309	2.03	-	13.88

802.11g_Nss1,(6Mbps)_2TX

26/12/2019

2437MHz_TX



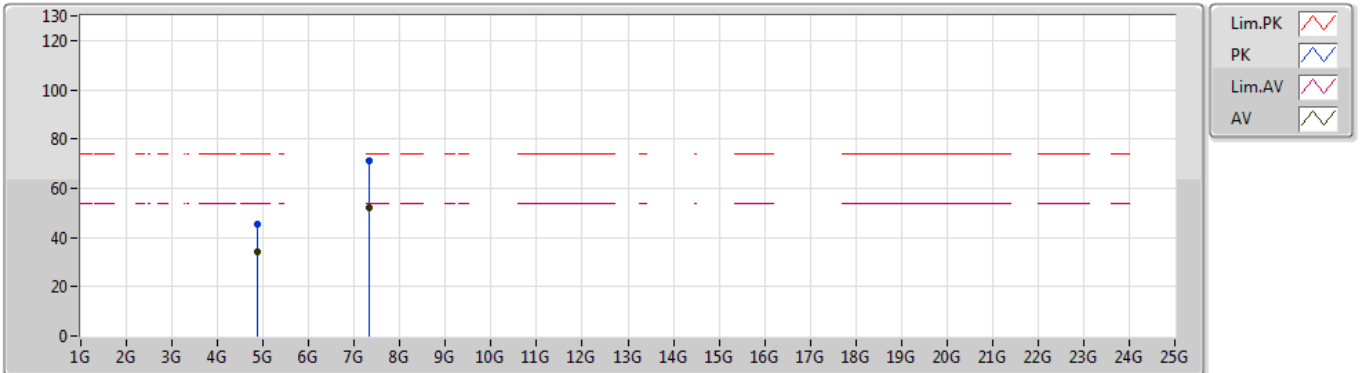
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Setting 19.5
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.8763G	49.24	74.00	-24.76	4.80	3	Vertical	10	1.72	-	44.44			
AV	4.874G	37.60	54.00	-16.40	4.80	3	Vertical	10	1.72	-	32.80			
PK	7.3173G	70.99	74.00	-3.01	9.01	3	Vertical	33	1.01	-	61.98			
AV	7.3124G	52.13	54.00	-1.87	8.99	3	Vertical	33	1.01	-	43.14			

802.11g_Nss1,(6Mbps)_2TX

26/12/2019

2437MHz_TX



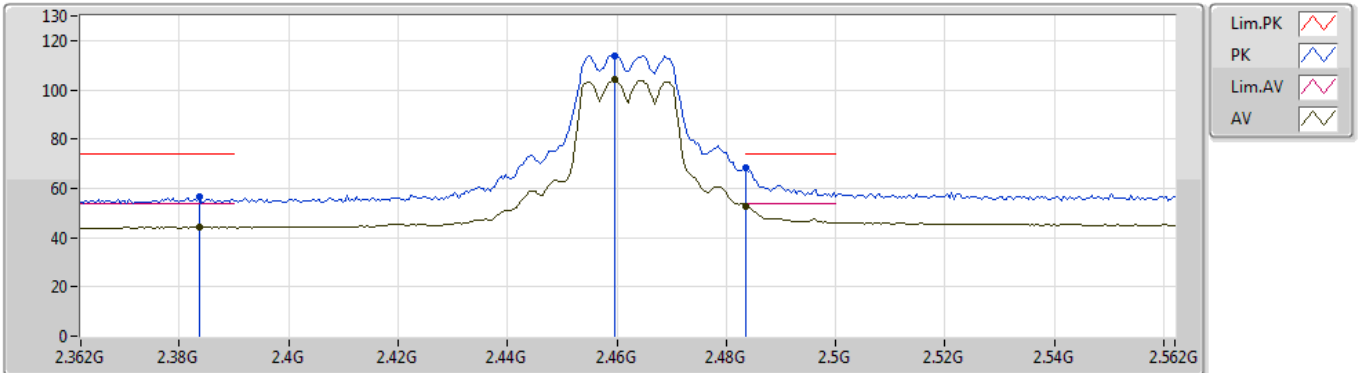
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Setting 19.5
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.8738G	45.47	74.00	-28.53	4.80	3	Horizontal	22	1.50	-	40.67			
AV	4.874G	34.12	54.00	-19.88	4.80	3	Horizontal	22	1.50	-	29.32			
PK	7.3172G	71.02	74.00	-2.98	9.01	3	Horizontal	338	1.87	-	62.01			
AV	7.3128G	52.30	54.00	-1.70	8.99	3	Horizontal	338	1.87	-	43.31			

802.11g_Nss1,(6Mbps)_2TX

26/12/2019

2462MHz_TX



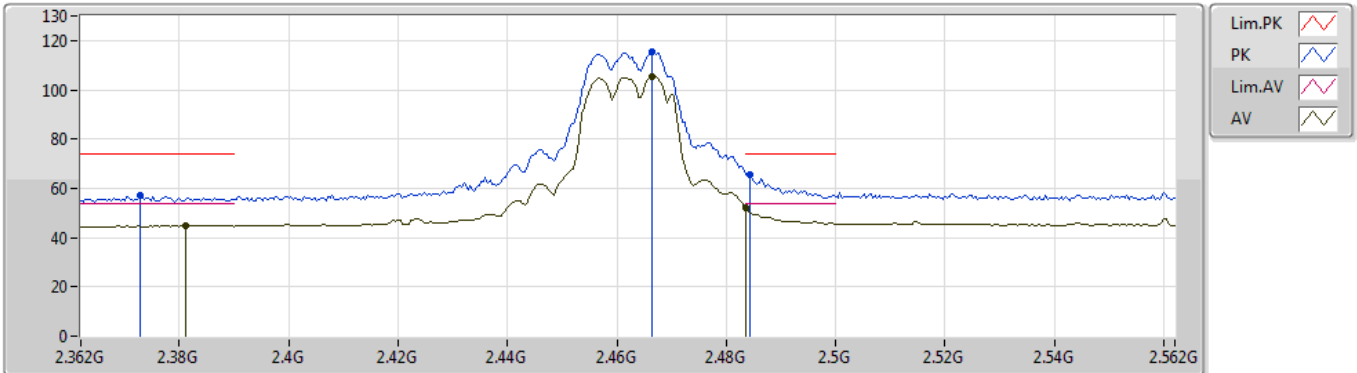
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Setting 19.5
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.3836G	56.36	74.00	-17.64	31.92	3	Vertical	358	2.78	-	24.44
AV	2.3836G	44.24	54.00	-9.76	31.92	3	Vertical	358	2.78	-	12.32
PK	2.4596G	113.90	Inf	-Inf	32.17	3	Vertical	358	2.78	-	81.73
AV	2.4596G	104.00	Inf	-Inf	32.17	3	Vertical	358	2.78	-	71.83
PK	2.4835G	68.13	74.00	-5.87	32.25	3	Vertical	358	2.78	-	35.88
AV	2.4835G	52.91	54.00	-1.09	32.25	3	Vertical	358	2.78	-	20.66

802.11g_Nss1,(6Mbps)_2TX

26/12/2019

2462MHz_TX



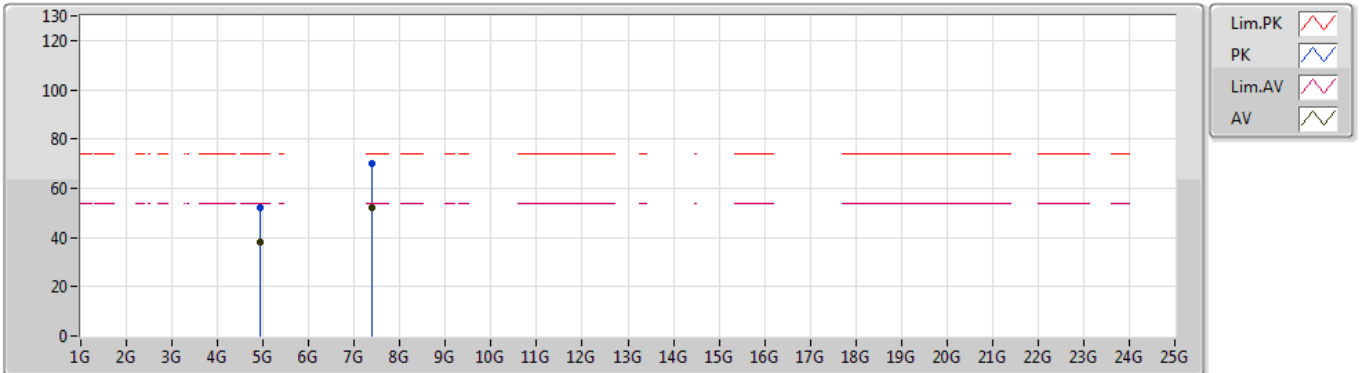
EUT Y_2TX
Setting 19.5
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.3728G	57.12	74.00	-16.88	31.89	3	Horizontal	315	2.27	-	25.23
AV	2.3812G	44.88	54.00	-9.12	31.90	3	Horizontal	315	2.27	-	12.98
PK	2.4664G	115.69	Inf	-Inf	32.19	3	Horizontal	315	2.27	-	83.50
AV	2.4664G	105.54	Inf	-Inf	32.19	3	Horizontal	315	2.27	-	73.35
PK	2.4844G	65.77	74.00	-8.23	32.25	3	Horizontal	315	2.27	-	33.52
AV	2.4835G	51.96	54.00	-2.04	32.25	3	Horizontal	315	2.27	-	19.71

802.11g_Nss1,(6Mbps)_2TX

26/12/2019

2462MHz_TX



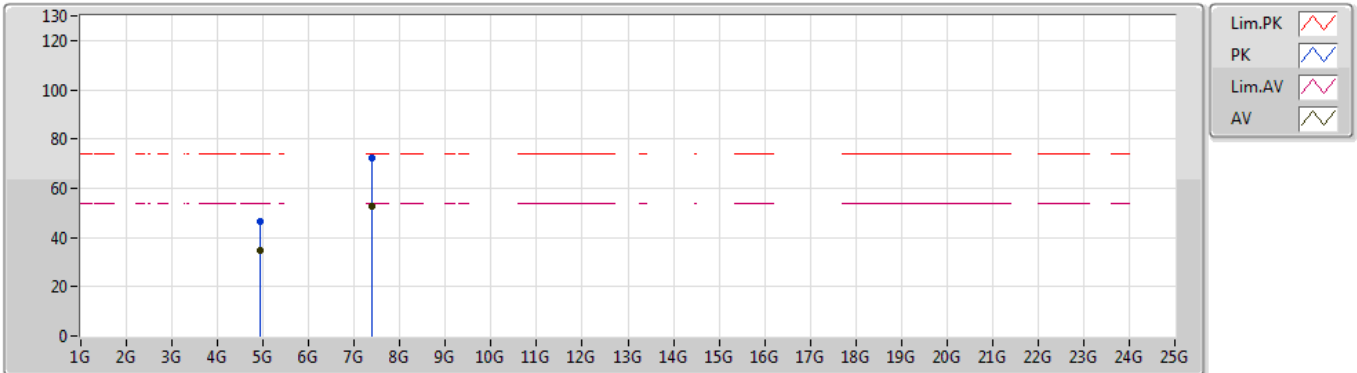
EUT X_2TX
Setting 19.5
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	4.9276G	51.94	74.00	-22.06	4.90	3	Vertical	0	1.81	-	47.04
AV	4.9238G	38.02	54.00	-15.98	4.90	3	Vertical	0	1.81	-	33.12
PK	7.3921G	69.97	74.00	-4.03	9.15	3	Vertical	45	1.67	-	60.82
AV	7.3844G	52.36	54.00	-1.64	9.13	3	Vertical	45	1.67	-	43.23

802.11g_Nss1,(6Mbps)_2TX

26/12/2019

2462MHz_TX



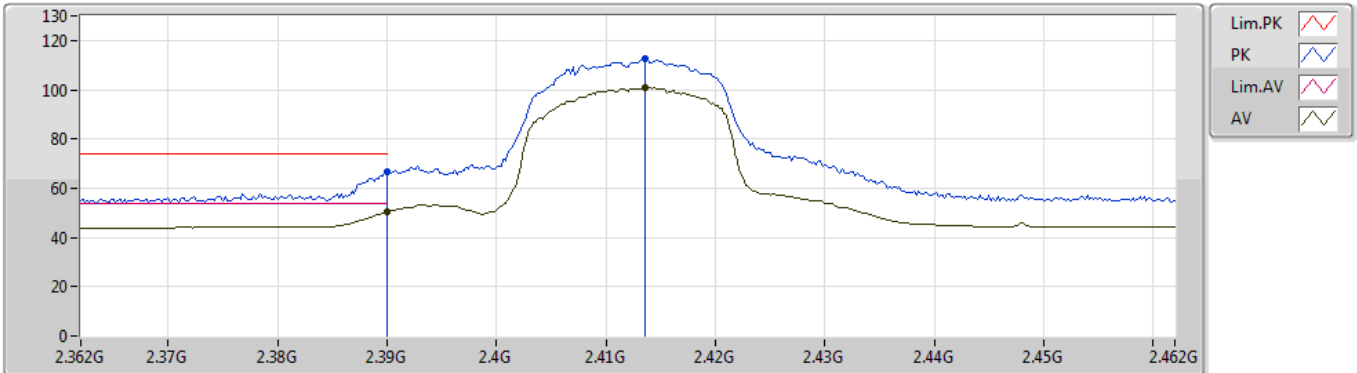
EUT X_2TX
Setting 19.5
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.9241G	46.28	74.00	-27.72	4.90	3	Horizontal	19	1.52	-	41.38			
AV	4.924G	34.68	54.00	-19.32	4.90	3	Horizontal	19	1.52	-	29.78			
PK	7.393G	72.43	74.00	-1.57	9.15	3	Horizontal	337	1.76	-	63.28			
AV	7.3837G	52.85	54.00	-1.15	9.13	3	Horizontal	337	1.76	-	43.72			

VHT20_Nss1,(MCS0)_2TX

26/12/2019

2412MHz_TX

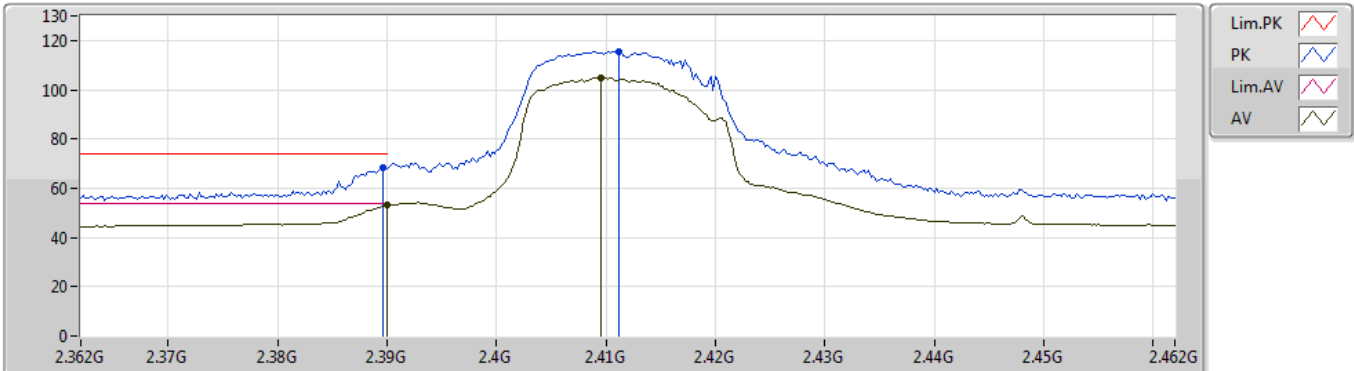

EUT Y_2TX
Setting 20
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.39G	66.74	74.00	-7.26	31.93	3	Vertical	317	1.18	-	34.81			
AV	2.39G	50.60	54.00	-3.40	31.93	3	Vertical	317	1.18	-	18.67			
PK	2.4136G	112.65	Inf	-Inf	32.01	3	Vertical	317	1.18	-	80.64			
AV	2.4136G	100.80	Inf	-Inf	32.01	3	Vertical	317	1.18	-	68.79			

VHT20_Nss1,(MCS0)_2TX

26/12/2019

2412MHz_TX



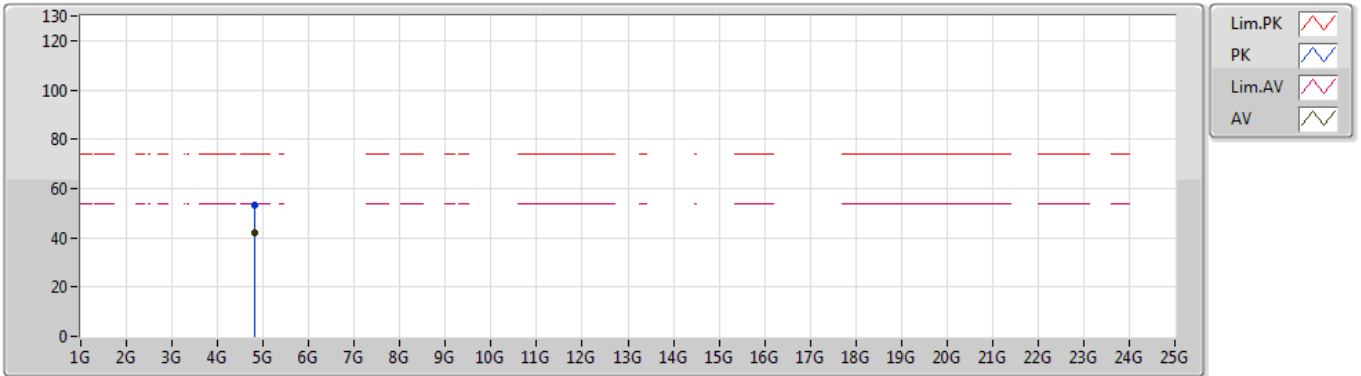
EUT Y_2TX
Setting 20
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.3896G	68.54	74.00	-5.46	31.93	3	Horizontal	307	2.07	-	36.61			
AV	2.39G	53.23	54.00	-0.77	31.93	3	Horizontal	307	2.07	-	21.30			
PK	2.4112G	115.52	Inf	-Inf	32.00	3	Horizontal	307	2.07	-	83.52			
AV	2.4096G	104.86	Inf	-Inf	31.99	3	Horizontal	307	2.07	-	72.87			

VHT20_Nss1,(MCS0)_2TX

26/12/2019

2412MHz_TX

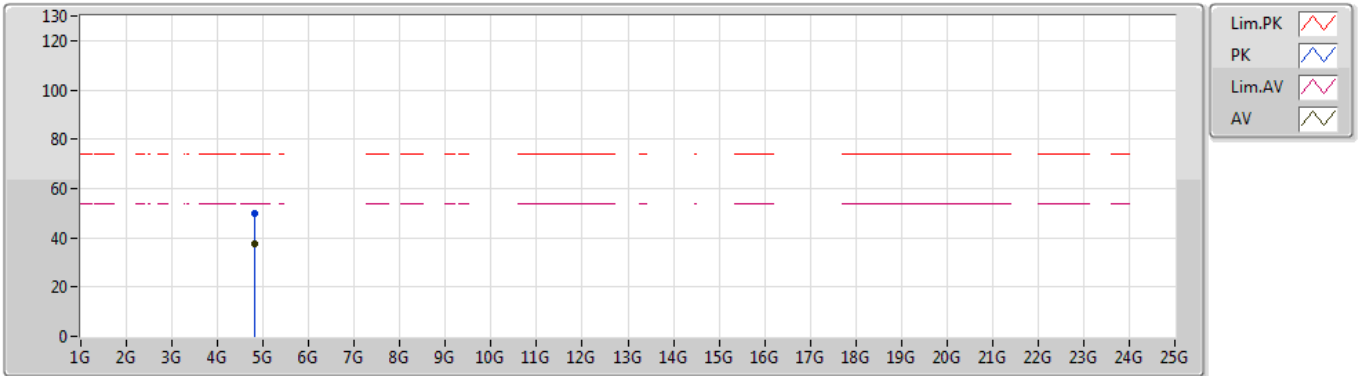

EUT X_2TX
Setting 20
03-C-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.82389G	53.41	74.00	-20.59	4.71	3	Vertical	7	1.56	-	48.70			
AV	4.82391G	41.94	54.00	-12.06	4.71	3	Vertical	7	1.56	-	37.23			

VHT20_Nss1,(MCS0)_2TX

26/12/2019

2412MHz_TX



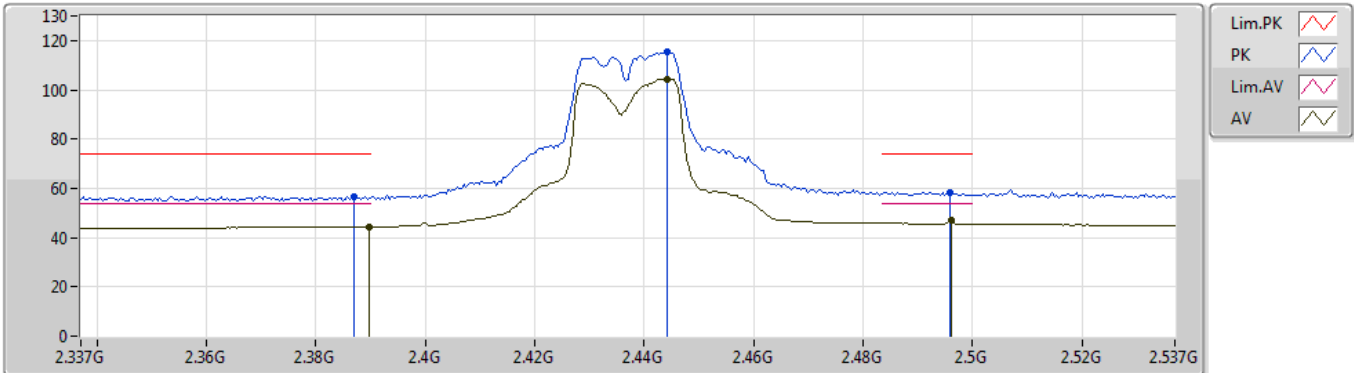
EUT X_2TX
Setting 20
03-C-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	4.82374G	49.75	74.00	-24.25	4.71	3	Horizontal	17	1.15	-	45.04
AV	4.82389G	37.61	54.00	-16.39	4.71	3	Horizontal	17	1.15	-	32.90

VHT20_Nss1,(MCS0)_2TX

26/12/2019

2437MHz_TX



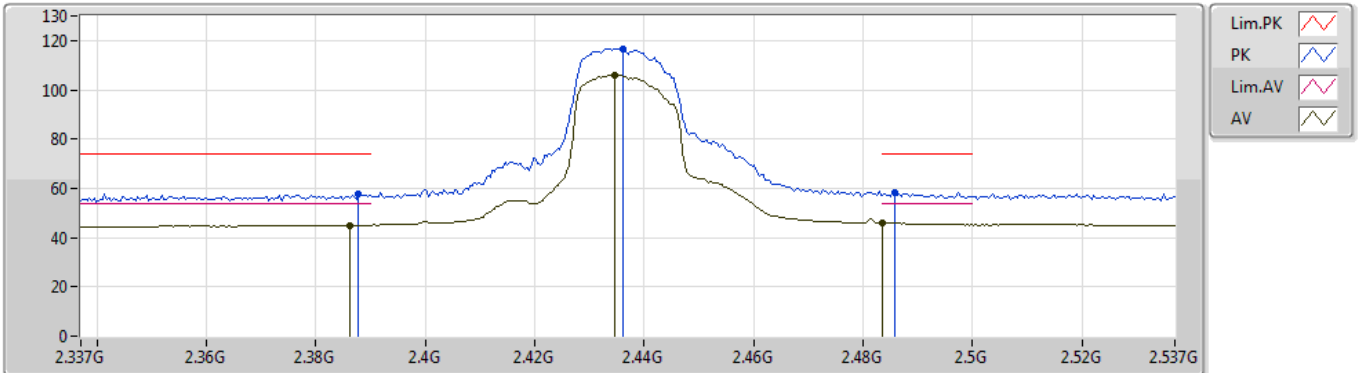
EUT Y_2TX
Setting 20
03-C-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.387G	56.70	74.00	-17.30	31.92	3	Vertical	357	2.89	-	24.78
AV	2.3898G	44.35	54.00	-9.65	31.93	3	Vertical	357	2.89	-	12.42
PK	2.4442G	115.48	Inf	-Inf	32.11	3	Vertical	357	2.89	-	83.37
AV	2.4442G	104.43	Inf	-Inf	32.11	3	Vertical	357	2.89	-	72.32
PK	2.4958G	58.46	74.00	-15.54	32.30	3	Vertical	357	2.89	-	26.16
AV	2.4962G	46.92	54.00	-7.08	32.30	3	Vertical	357	2.89	-	14.62

VHT20_Nss1,(MCS0)_2TX

26/12/2019

2437MHz_TX



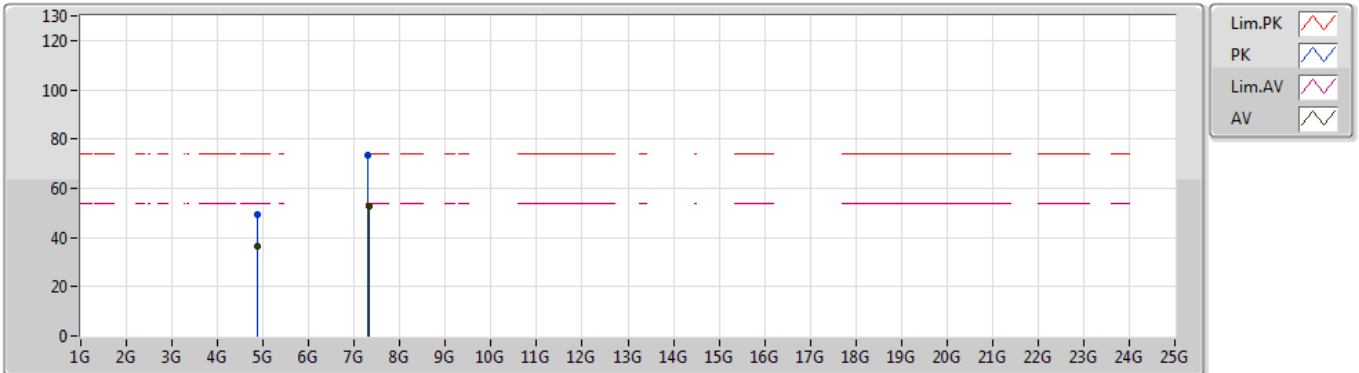
EUT Y_2TX
Setting 20
03-C-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.3878G	57.86	74.00	-16.14	31.93	3	Horizontal	309	2.03	-	25.93
AV	2.3862G	45.07	54.00	-8.93	31.92	3	Horizontal	309	2.03	-	13.15
PK	2.4362G	116.62	Inf	-Inf	32.09	3	Horizontal	309	2.03	-	84.53
AV	2.4346G	106.13	Inf	-Inf	32.08	3	Horizontal	309	2.03	-	74.05
PK	2.4858G	58.26	74.00	-15.74	32.26	3	Horizontal	309	2.03	-	26.00
AV	2.4835G	45.81	54.00	-8.19	32.25	3	Horizontal	309	2.03	-	13.56

VHT20_Nss1,(MCS0)_2TX

26/12/2019

2437MHz_TX



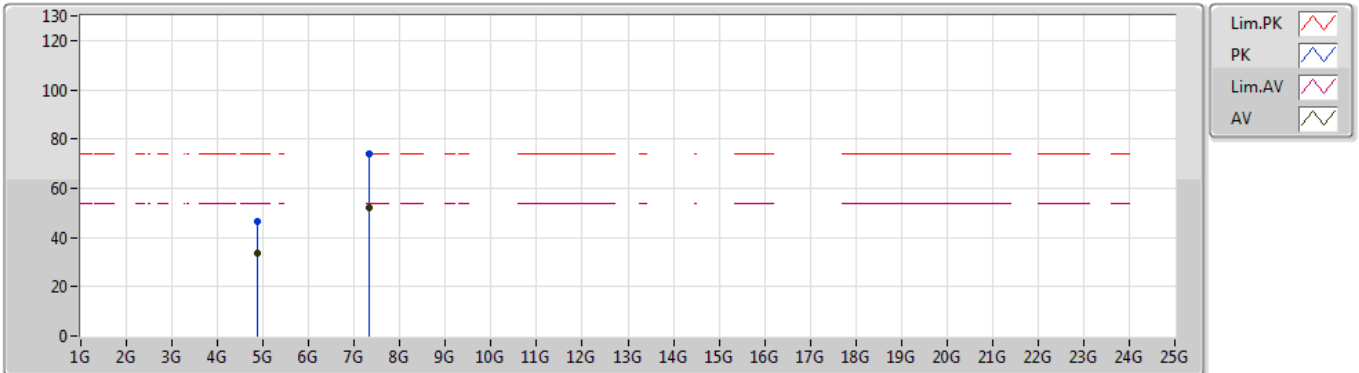
EUT X_2TX
Setting 20
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	4.8739G	49.35	74.00	-24.65	4.80	3	Vertical	9	1.82	-	44.55
AV	4.8739G	36.57	54.00	-17.43	4.80	3	Vertical	9	1.82	-	31.77
PK	7.3092G	73.38	74.00	-0.62	8.99	3	Vertical	31	1.01	-	64.39
AV	7.3133G	52.67	54.00	-1.33	8.99	3	Vertical	31	1.01	-	43.68

VHT20_Nss1,(MCS0)_2TX

26/12/2019

2437MHz_TX



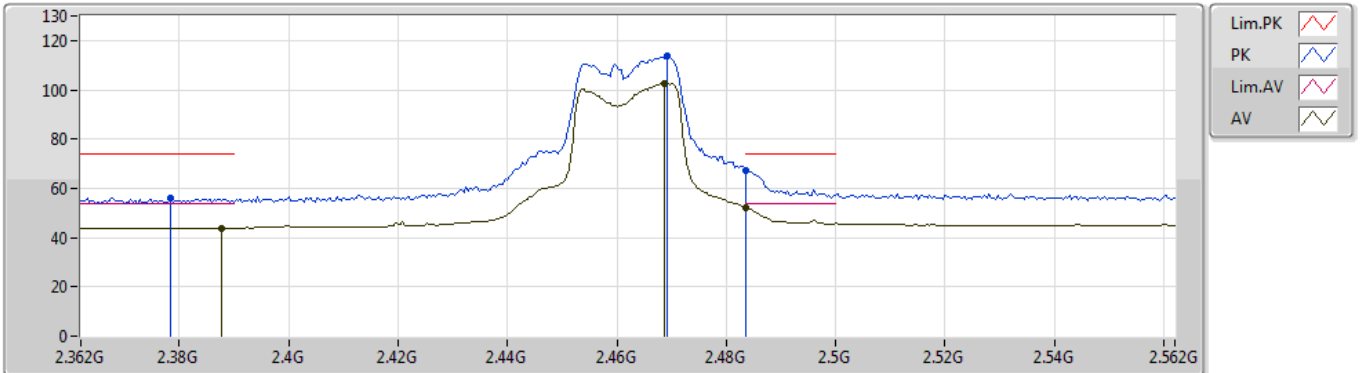
EUT X_2TX
Setting 20
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.8742G	46.30	74.00	-27.70	4.80	3	Horizontal	19	1.42	-	41.50			
AV	4.8739G	33.39	54.00	-20.61	4.80	3	Horizontal	19	1.42	-	28.59			
PK	7.3151G	73.84	74.00	-0.16	9.01	3	Horizontal	341	1.88	-	64.83			
AV	7.3149G	52.16	54.00	-1.84	8.99	3	Horizontal	341	1.88	-	43.17			

VHT20_Nss1,(MCS0)_2TX

26/12/2019

2462MHz_TX



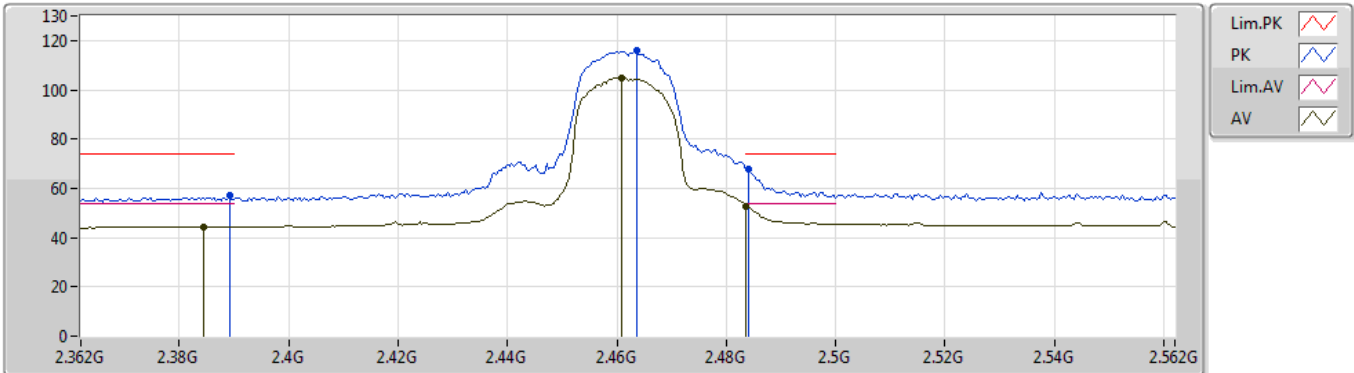
EUT Y_2TX
Setting 19
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.3784G	55.85	74.00	-18.15	31.90	3	Vertical	5	2.85	-	23.95
AV	2.3876G	43.96	54.00	-10.04	31.93	3	Vertical	5	2.85	-	12.03
PK	2.4692G	113.65	Inf	-Inf	32.20	3	Vertical	5	2.85	-	81.45
AV	2.4688G	102.67	Inf	-Inf	32.20	3	Vertical	5	2.85	-	70.47
PK	2.4835G	67.29	74.00	-6.71	32.25	3	Vertical	5	2.85	-	35.04
AV	2.4835G	52.20	54.00	-1.80	32.25	3	Vertical	5	2.85	-	19.95

VHT20_Nss1,(MCS0)_2TX

26/12/2019

2462MHz_TX



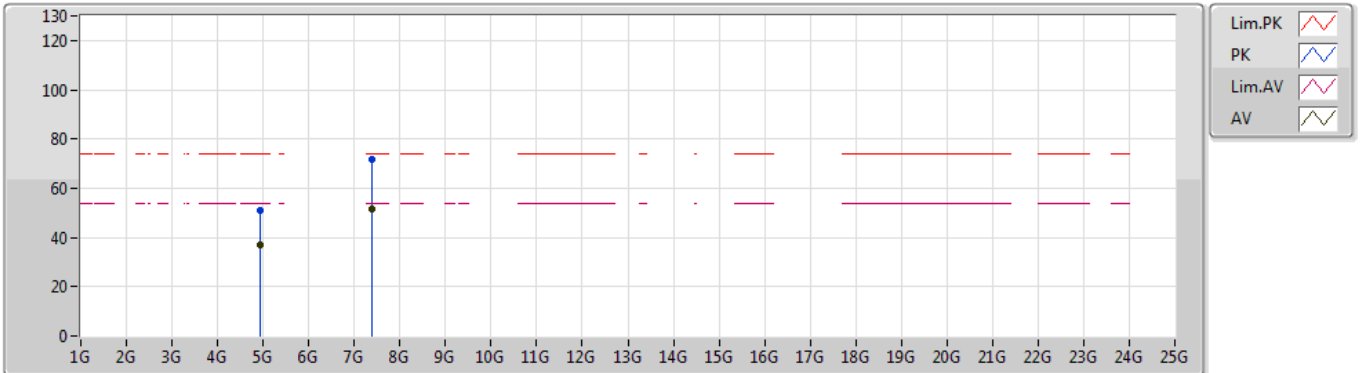
EUT Y_2TX
Setting 19
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.3892G	56.94	74.00	-17.06	31.93	3	Horizontal	309	2.25	-	25.01
AV	2.3844G	44.44	54.00	-9.56	31.92	3	Horizontal	309	2.25	-	12.52
PK	2.4636G	115.99	Inf	-Inf	32.18	3	Horizontal	309	2.25	-	83.81
AV	2.4608G	104.76	Inf	-Inf	32.17	3	Horizontal	309	2.25	-	72.59
PK	2.484G	67.53	74.00	-6.47	32.25	3	Horizontal	309	2.25	-	35.28
AV	2.4835G	52.94	54.00	-1.06	32.25	3	Horizontal	309	2.25	-	20.69

VHT20_Nss1,(MCS0)_2TX

26/12/2019

2462MHz_TX



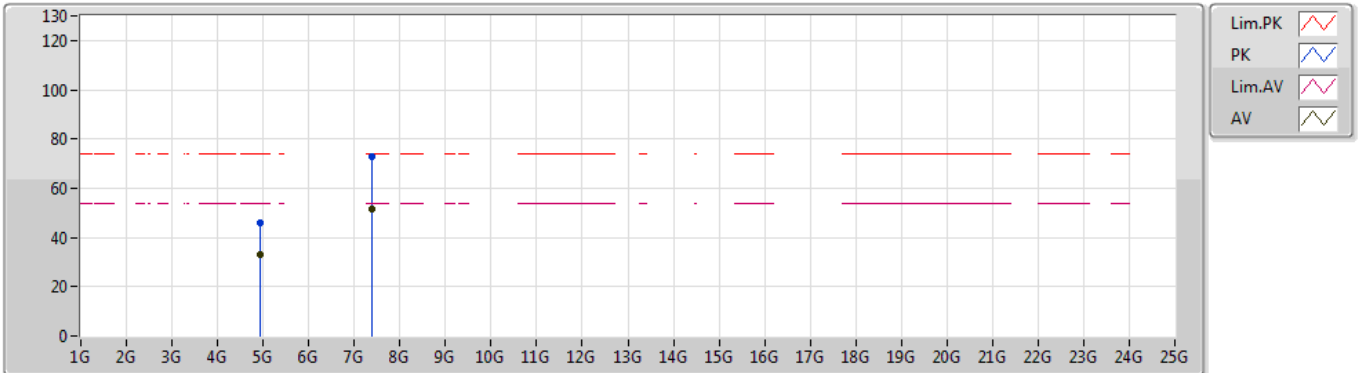
EUT X_2TX
Setting 19
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	4.9235G	51.07	74.00	-22.93	4.90	3	Vertical	10	1.73	-	46.17
AV	4.9238G	37.25	54.00	-16.75	4.90	3	Vertical	10	1.73	-	32.35
PK	7.3847G	71.91	74.00	-2.09	9.13	3	Vertical	44	1.74	-	62.78
AV	7.3844G	51.72	54.00	-2.28	9.13	3	Vertical	44	1.74	-	42.59

VHT20_Nss1,(MCS0)_2TX

26/12/2019

2462MHz_TX



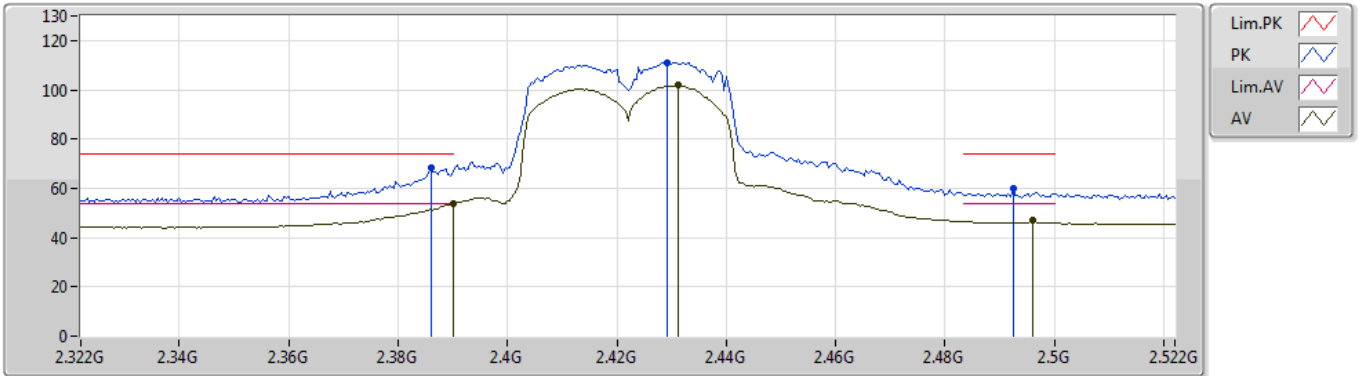
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Setting 19
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.9237G	45.89	74.00	-28.11	4.90	3	Horizontal	19	1.50	-	40.99			
AV	4.9239G	33.32	54.00	-20.68	4.90	3	Horizontal	19	1.50	-	28.42			
PK	7.3899G	72.73	74.00	-1.27	9.15	3	Horizontal	340	2.14	-	63.58			
AV	7.39G	51.76	54.00	-2.24	9.15	3	Horizontal	340	2.14	-	42.61			

VHT40_Nss1,(MCS0)_2TX

26/12/2019

2422MHz_TX



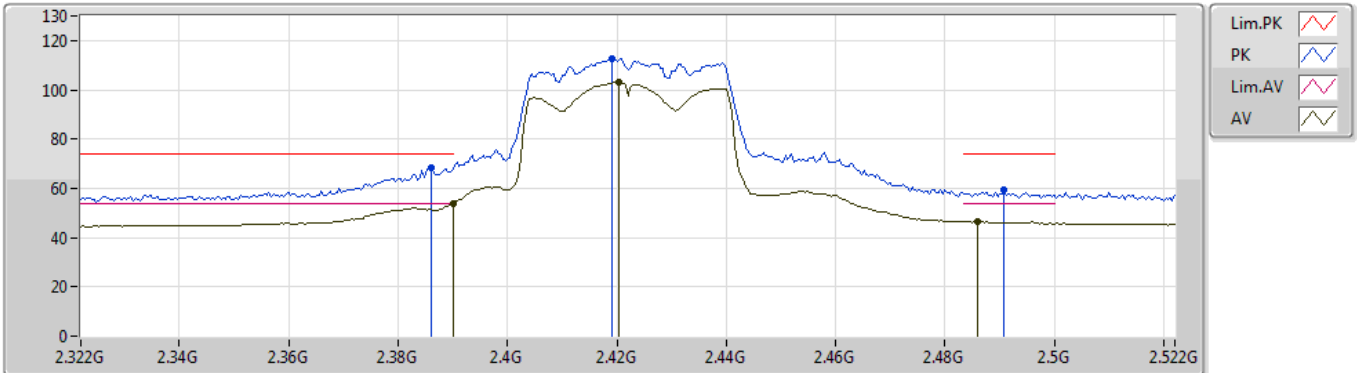
EUT Y_2TX
Setting 19.5
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.386G	68.24	74.00	-5.76	31.92	3	Vertical	8	2.84	-	36.32
AV	2.39G	53.77	54.00	-0.23	31.93	3	Vertical	8	2.84	-	21.84
PK	2.4292G	111.09	Inf	-Inf	32.06	3	Vertical	8	2.84	-	79.03
AV	2.4312G	101.84	Inf	-Inf	32.07	3	Vertical	8	2.84	-	69.77
PK	2.4924G	59.70	74.00	-14.30	32.29	3	Vertical	8	2.84	-	27.41
AV	2.496G	46.89	54.00	-7.11	32.30	3	Vertical	8	2.84	-	14.59

VHT40_Nss1,(MCS0)_2TX

26/12/2019

2422MHz_TX



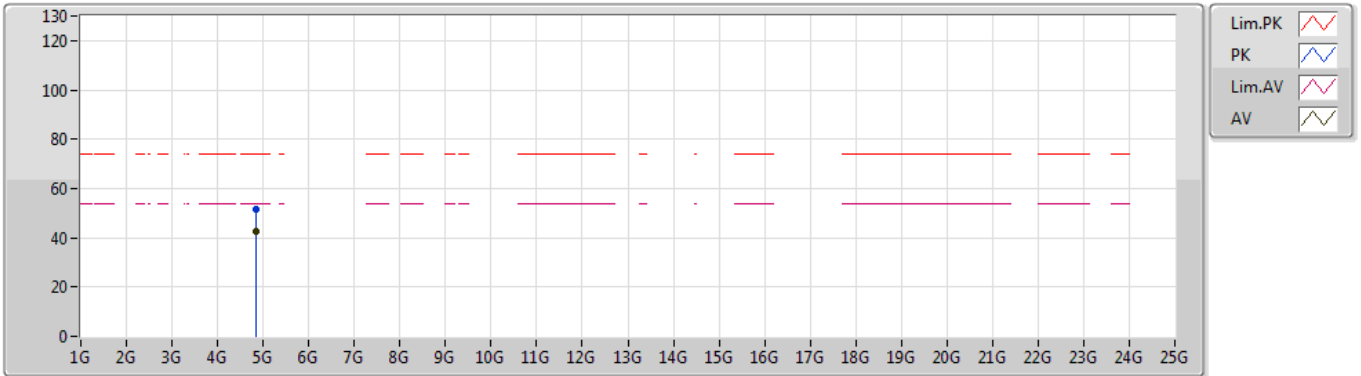
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Setting 19.5
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.386G	68.12	74.00	-5.88	31.92	3	Horizontal	311	2.26	-	36.20
AV	2.39G	53.67	54.00	-0.33	31.93	3	Horizontal	311	2.26	-	21.74
PK	2.4192G	112.53	Inf	-Inf	32.03	3	Horizontal	311	2.26	-	80.50
AV	2.4204G	103.02	Inf	-Inf	32.03	3	Horizontal	311	2.26	-	70.99
PK	2.4908G	59.36	74.00	-14.64	32.28	3	Horizontal	311	2.26	-	27.08
AV	2.486G	46.48	54.00	-7.52	32.26	3	Horizontal	311	2.26	-	14.22

VHT40_Nss1,(MCS0)_2TX

26/12/2019

2422MHz_TX



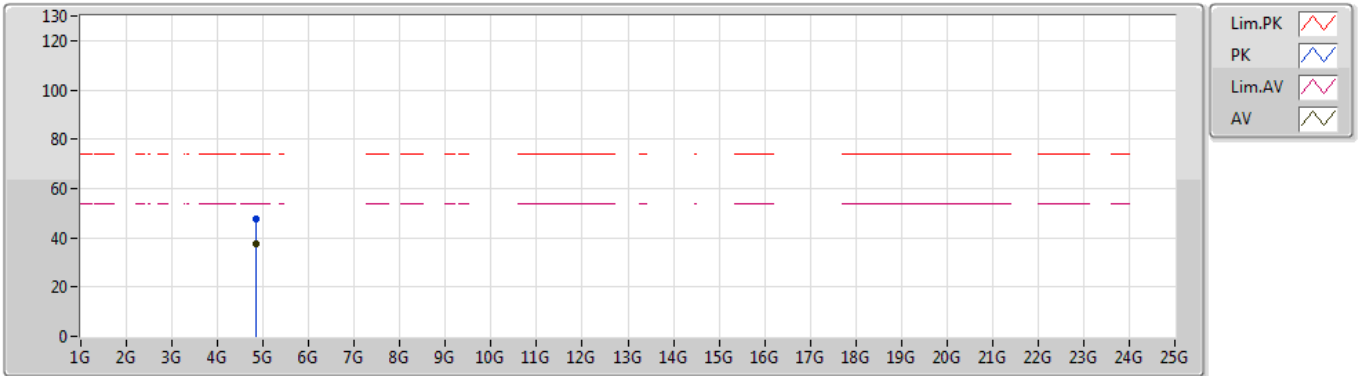
EUT X_2TX
Setting 19.5
03-C-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.84448G	51.47	74.00	-22.53	4.75	3	Vertical	7	1.53	-	46.72			
AV	4.84397G	42.41	54.00	-11.59	4.75	3	Vertical	7	1.53	-	37.66			

VHT40_Nss1,(MCS0)_2TX

26/12/2019

2422MHz_TX

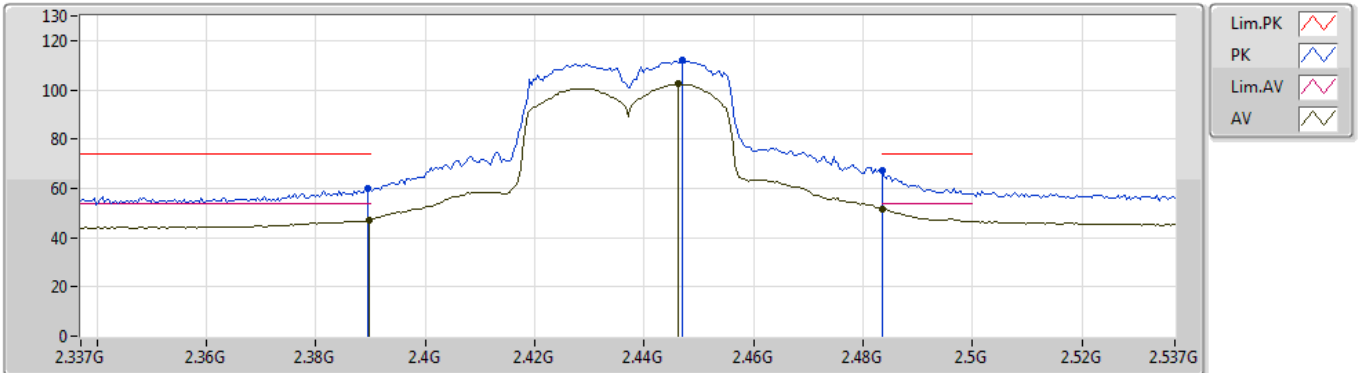

EUT X_2TX
Setting 19.5
03-C-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.84394G	47.66	74.00	-26.34	4.75	3	Horizontal	16	1.49	-	42.91			
AV	4.84397G	37.30	54.00	-16.70	4.75	3	Horizontal	16	1.49	-	32.55			

VHT40_Nss1,(MCS0)_2TX

26/12/2019

2437MHz_TX



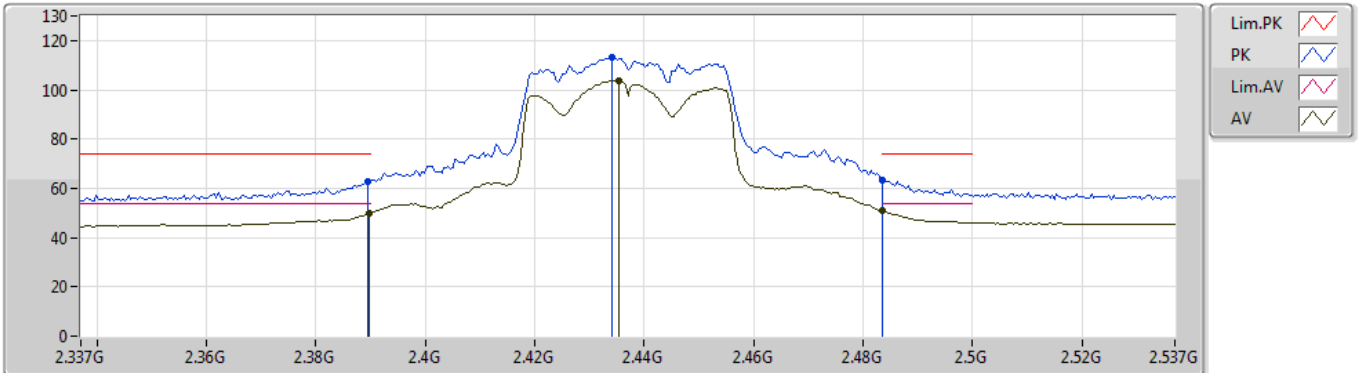
EUT Y_2TX
Setting 20
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.3894G	60.10	74.00	-13.90	31.93	3	Vertical	6	2.78	-	28.17
AV	2.3898G	47.21	54.00	-6.79	31.93	3	Vertical	6	2.78	-	15.28
PK	2.447G	112.20	Inf	-Inf	32.12	3	Vertical	6	2.78	-	80.08
AV	2.4462G	102.34	Inf	-Inf	32.12	3	Vertical	6	2.78	-	70.22
PK	2.4835G	67.21	74.00	-6.79	32.25	3	Vertical	6	2.78	-	34.96
AV	2.4835G	51.73	54.00	-2.27	32.25	3	Vertical	6	2.78	-	19.48

VHT40_Nss1,(MCS0)_2TX

26/12/2019

2437MHz_TX



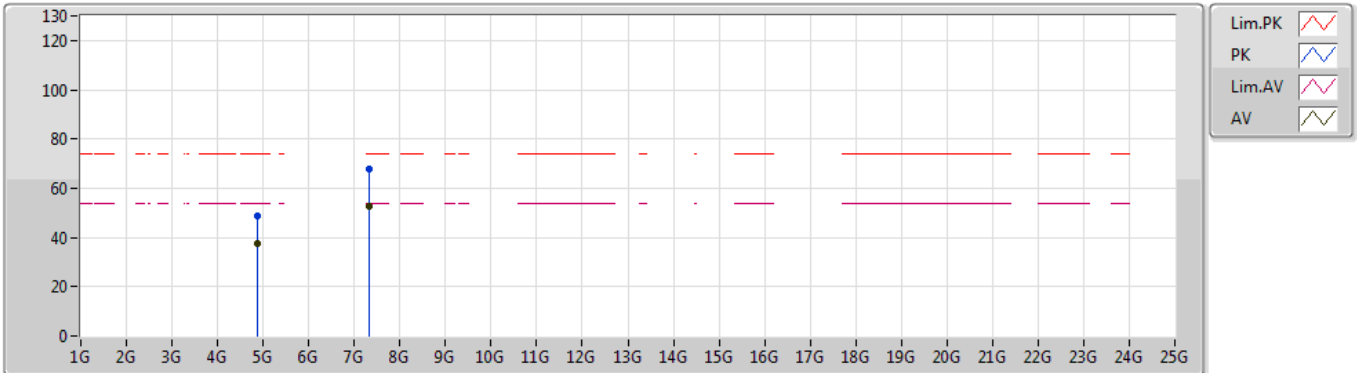
EUT Y_2TX
Setting 20
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.3894G	62.81	74.00	-11.19	31.93	3	Horizontal	315	2.30	-	30.88			
AV	2.3898G	50.01	54.00	-3.99	31.93	3	Horizontal	315	2.30	-	18.08			
PK	2.4342G	113.02	Inf	-Inf	32.08	3	Horizontal	315	2.30	-	80.94			
AV	2.4354G	103.62	Inf	-Inf	32.09	3	Horizontal	315	2.30	-	71.53			
PK	2.4835G	63.47	74.00	-10.53	32.25	3	Horizontal	315	2.30	-	31.22			
AV	2.4835G	50.77	54.00	-3.23	32.25	3	Horizontal	315	2.30	-	18.52			

VHT40_Nss1,(MCS0)_2TX

26/12/2019

2437MHz_TX



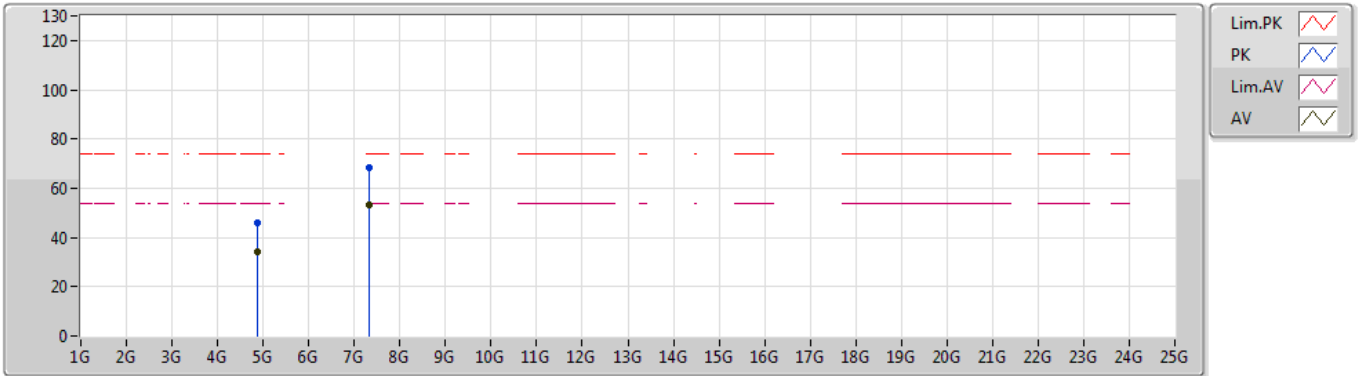
EUT X_2TX
Setting 20
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.87406G	48.49	74.00	-25.51	4.80	3	Vertical	10	1.73	-	43.69			
AV	4.87393G	37.39	54.00	-16.61	4.80	3	Vertical	10	1.73	-	32.59			
PK	7.312G	68.00	74.00	-6.00	8.99	3	Vertical	30	1.14	-	59.01			
AV	7.314G	52.95	54.00	-1.05	8.99	3	Vertical	30	1.14	-	43.96			

VHT40_Nss1,(MCS0)_2TX

26/12/2019

2437MHz_TX



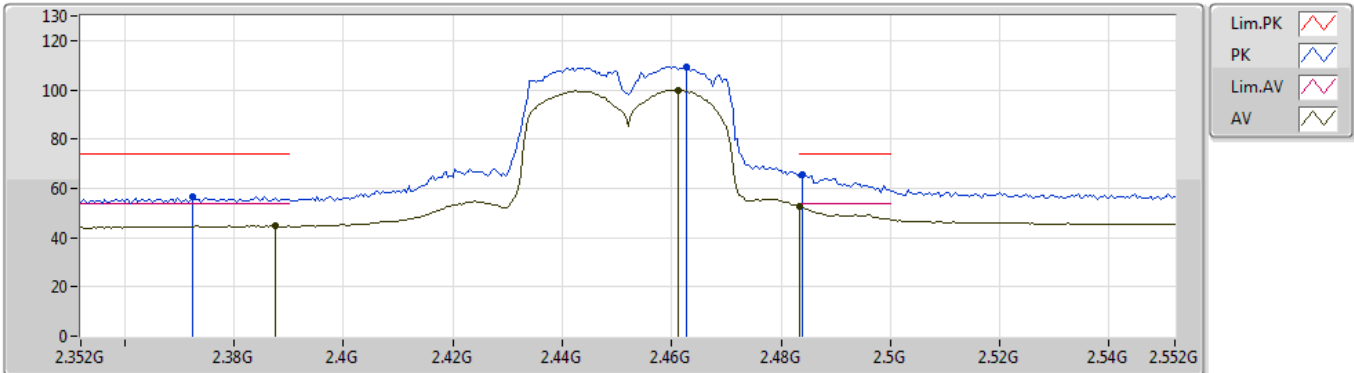
EUT X_2TX
Setting 20
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	4.874G	45.73	74.00	-28.27	4.80	3	Horizontal	19	1.82	-	40.93
AV	4.87396G	34.22	54.00	-19.78	4.80	3	Horizontal	19	1.82	-	29.42
PK	7.312G	68.46	74.00	-5.54	8.99	3	Horizontal	340	1.88	-	59.47
AV	7.313G	53.32	54.00	-0.68	8.99	3	Horizontal	340	1.88	-	44.33

VHT40_Nss1,(MCS0)_2TX

26/12/2019

2452MHz_TX



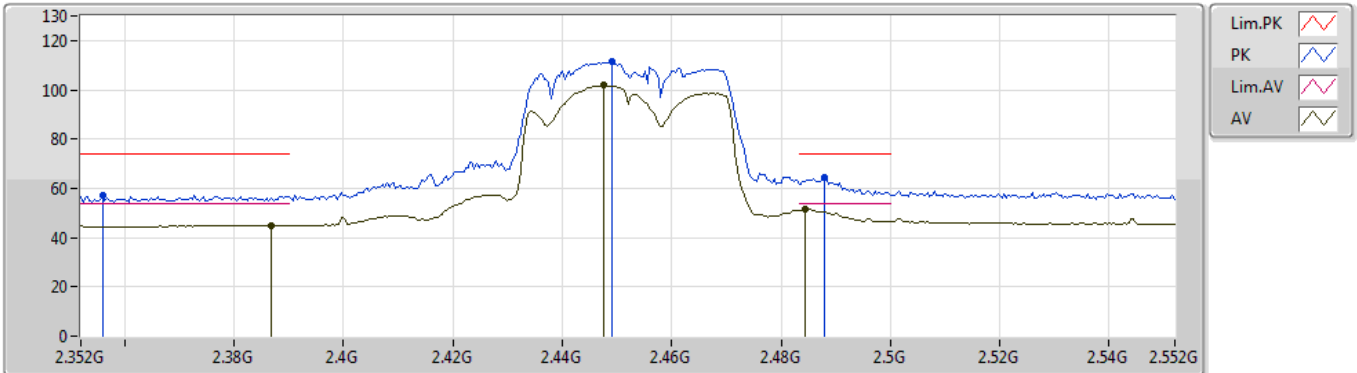
EUT Y_2TX
Setting 17.5
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.3724G	56.81	74.00	-17.19	31.88	3	Vertical	5	2.78	-	24.93
AV	2.3876G	44.65	54.00	-9.35	31.93	3	Vertical	5	2.78	-	12.72
PK	2.4628G	109.31	Inf	-Inf	32.18	3	Vertical	5	2.78	-	77.13
AV	2.4612G	99.97	Inf	-Inf	32.17	3	Vertical	5	2.78	-	67.80
PK	2.484G	65.67	74.00	-8.33	32.25	3	Vertical	5	2.78	-	33.42
AV	2.4835G	52.60	54.00	-1.40	32.25	3	Vertical	5	2.78	-	20.35

VHT40_Nss1,(MCS0)_2TX

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2452MHz_TX



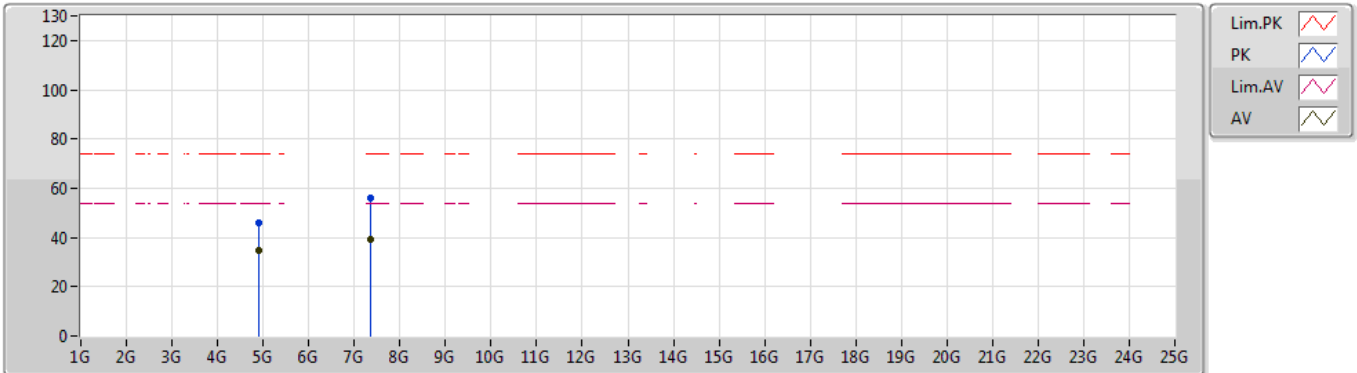
EUT Y_2TX
Setting 17.5
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.356G	57.42	74.00	-16.58	31.83	3	Horizontal	36	2.10	-	25.59
AV	2.3868G	45.06	54.00	-8.94	31.92	3	Horizontal	36	2.10	-	13.14
PK	2.4492G	111.32	Inf	-Inf	32.13	3	Horizontal	36	2.10	-	79.19
AV	2.4476G	101.75	Inf	-Inf	32.12	3	Horizontal	36	2.10	-	69.63
PK	2.488G	64.46	74.00	-9.54	32.26	3	Horizontal	36	2.10	-	32.20
AV	2.4844G	51.41	54.00	-2.59	32.25	3	Horizontal	36	2.10	-	19.16

VHT40_Nss1,(MCS0)_2TX

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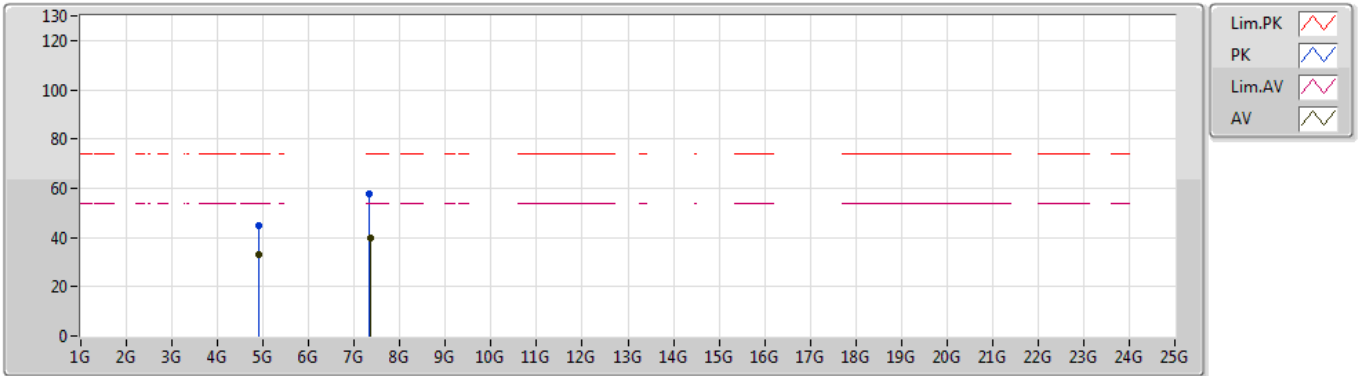
EUT X_2TX
Setting 17.5
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.90412G	46.07	74.00	-27.93	4.86	3	Vertical	10	1.76	-	41.21			
AV	4.90392G	34.94	54.00	-19.06	4.86	3	Vertical	10	1.76	-	30.08			
PK	7.34638G	55.92	74.00	-18.08	9.07	3	Vertical	47	1.43	-	46.85			
AV	7.35054G	39.19	54.00	-14.81	9.07	3	Vertical	47	1.43	-	30.12			

VHT40_Nss1,(MCS0)_2TX

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EUT X_2TX
Setting 17.5
03-C-A-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	4.90374G	44.78	74.00	-29.22	4.86	3	Horizontal	18	1.91	-	39.92
AV	4.90393G	33.06	54.00	-20.94	4.86	3	Horizontal	18	1.91	-	28.20
PK	7.33728G	57.58	74.00	-16.42	9.05	3	Horizontal	341	1.82	-	48.53
AV	7.34716G	39.76	54.00	-14.24	9.07	3	Horizontal	341	1.82	-	30.69