

FCC Test Report

Equipment : Wireless-AC VPN Router
Brand Name : CISCO
Model No. : RV260W
FCC ID : PD5-RV260W
Standard : 47 CFR FCC Part 15.247
Operating Band : 2400 MHz – 2483.5 MHz
Function : ☒ Point-to-multipoint; ☐ Point-to-point
Applicant / Manufacturer : Delta Networks, Inc.
No.252, Shang Ying Rd., Kuei San District, Taoyuan
City 33341, Taiwan R.O.C.

The product sample received on May 09, 2017 and completely tested on Aug. 02, 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.


Phoenix Chen
SPORTON INTERNATIONAL INC.





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APPENDIX A. TEST PHOTOS

PHOTOGRAPHS OF EUT v01

Summary of Test Result

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



SPORTON INTERNATIONAL INC.
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FCC ID: PD5-RV260W

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]

<Non-Beamforming>

Frequency Range (MHz)	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	3TX
2.4-2.4835GHz	802.11g	20	3TX
2.4-2.4835GHz	802.11ac VHT20	20	3TX
2.4-2.4835GHz	802.11ac VHT40	40	3TX

<Beamforming>

Frequency Range (MHz)	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11ac VHT20-BF	20	3TX
2.4-2.4835GHz	802.11ac VHT40-BF	40	3TX

Note:

- ♦ 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- ♦ 11g 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.

1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	BF Gain (dBi)
1	1	MASTER WAVE	98619PIPF037	Dipole	I-PEX	3.24	4.77
2	2	MASTER WAVE	98619PIPF038	Dipole	I-PEX	2.87	
3	3	MASTER WAVE	98619PIPF039	Dipole	I-PEX	3.57	

1.1.3 EUT Information

Operational Condition	
EUT Power Type	From AC Adapter
Beamforming Function	☒ With beamforming ☐ Without beamforming
Type of EUT	
☒	Stand-alone
☐	Combined (EUT where the radio part is fully integrated within another device)
	Combined Equipment - Brand Name / Model No.: ...
☐	Plug-in radio (EUT intended for a variety of host systems)
	Host System - Brand Name / Model No.: ...
☐	Other:

1.1.4 Mode Test Duty Cycle
<Non-Beamforming>

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.999	0.004	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11g	0.981	0.083	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ac VHT20	0.984	0.07	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ac VHT40	0.945	0.246	945.937u	3k

<Beamforming>

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ac VHT20-BF	0.937	0.283	3.845m	300
802.11ac VHT40-BF	0.963	0.164	4.618m	300

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
- ♦ ANSI C63.4-2014
- ♦ KDB 558074 D01 v04
- ♦ KDB 662911 D01 v02r01
- ♦ KDB 644545 D03 v01

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		
Test site Designation No. TW1190 with FCC.					
☒	LIN KOU	ADD : No. 30-2, Dingfu Vil., Linkou Dist., New Taipei City, Taiwan (R.O.C.)			
		TEL : 886-2-2601-1640	FAX : 886-2-2601-1695		
Test site Designation No. TW1095 with FCC.					
Test Condition		Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction		CO01-LK	Alex	25°C / 61%	16/May/2017
RF Conducted		TH01-HY	Ryan	21.4°C / 65%	02/Aug/2017
Radiated		03CH02-HY	Terry	22.1°C / 58%	28/Jun/2017

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)	3.6 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	2.1 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	2.6 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	2.9 dB	Confidence levels of 95%
Conducted Emission (CO01-LK)	2.4 dB	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Condition

RF Conducted	Abbreviation	Remark
TnomVnom	Tnom	20°C
-	Vnom	120V

2.2 Test Channel Mode

<Non-Beamforming>

Test Software Version	MTool_2.0.3.2
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Mode	Power Setting
802.11b_(1Mbps)_3TX	-
2412MHz	74
2437MHz	90
2462MHz	74
802.11g_(6Mbps)_3TX	-
2412MHz	66
2437MHz	76
2462MHz	57
802.11ac VHT20_Nss1,(MCS0)_3TX	-
2412MHz	60
2437MHz	76
2462MHz	60
802.11ac VHT40_Nss1,(MCS0)_3TX	-
2422MHz	53
2437MHz	56
2452MHz	43

<Beamforming>

Test Software	Putty
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Mode	Power Setting
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-
2412MHz	56
2437MHz	98
2462MHz	53
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-
2422MHz	51
2437MHz	54
2452MHz	44

2.3 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	WiFi 2.4G&5G, SFP 1Gbps, LAN 1Gbps (Max Traffic), USB R/W, desktop
2	WiFi 2.4G&5G, WAN 1Gbps, LAN 1Gbps (Max Traffic) , USB R/W, desktop
3	WiFi 2.4G&5G, SFP 1Gbps, LAN 100Mbps (Max Traffic), USB R/W, desktop
4	WiFi 2.4G&5G, SFP 1Gbps, LAN 10Mbps (Max Traffic), USB R/W, desktop
5	WiFi 2.4G&5G, SFP 1Gbps, LAN 10Mbps (Min Traffic 0%), USB R/W, desktop
Mode 4 configuration was tested and found to be the worst case and measured during the test.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in Non-restricted Frequency Bands
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests		
Tests Item	Emissions in Restricted Frequency Bands	
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.	
Operating Mode < 1GHz	CTX	
1	Adapter mode	
Operating Mode > 1GHz	CTX	
Orthogonal Planes of EUT	Y Plane	Z Plane
		
Worst Planes of EUT		V

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	WLAN 2.4GHz+WLAN 5GHz
Refer to Sporton Test Report No.: FA750813 for Co-location RF Exposure Evaluation and clause 3.6.7 for Radiated Emission Co-location.	

2.4 Accessories

Accessories				
AC Adapter	Brand Name	DVE	Model Name	DSA-30PFG-12 FCA 120250
	Power Rating	I/P: 100 - 240Vac, 0.8 A, O/P: 12 Vdc, 2.5 A		
	Power Cord	1.2 meter, non-shielded cable, w/o ferrite core		
RJ45 to RS232 console cable	Power Cord	1.8 meter, non-shielded cable		
RJ45 Cable	Power Cord	1.42 meter, non-shielded cable		

Reminder: Regarding to more detail and other information, please refer to user manual.

2.5 Support Equipment

Support Equipment – AC Conduction				
No.	Equipment	Brand Name	Model Name	FCC ID
A	USB Flash Drive	Transcend	TS8GJFV85	DoC
B	Transceiver (Fiber)	Finisar	FTLF8519P2BNL	-
Z1	Switch Hub	DELL	N3024	-
Z2	Transceiver (Fiber)	Finisar	FTLF8519P2BNL	-
Z3	Notebook	DELL	PP13S	DoC
Z4	Notebook	DELL	PP13S	DoC
Z5	Notebook	DELL	PP13S	DoC
Z6	Notebook	DELL	PP13S	DoC
Z7	Notebook	DELL	PP13S	DoC
Z8	Notebook	DELL	PP13S	DoC
Z9	Notebook	DELL	PP13S	DoC
Z10	Notebook	DELL	PP13S	DoC
Z11	Notebook	DELL	PP13S	DoC
Z12	Notebook (WiFi 2.4G)	DELL	Latitude E5540	DoC
Z13	Notebook (WiFi 5G)	DELL	Latitude E5540	DoC

Support Equipment – RF Conducted				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5410	DoC
2	Adapter for NB	DELL	HA65NM130	DoC
3	Notebook	DELL	E5410	DoC
4	Adapter for NB	DELL	HA65NM130	DoC
5	Client	-	-	-

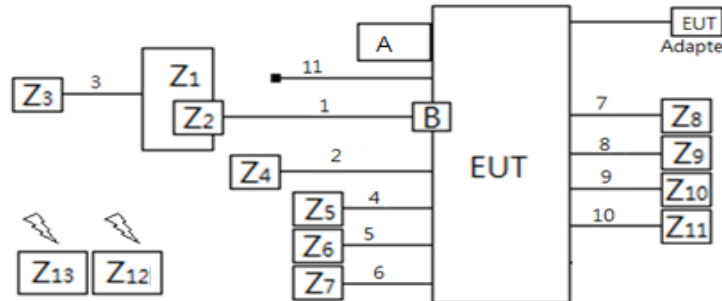
Note: Support equipment No.5 was provided by customer.

Support Equipment – Radiated Emission				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Client	-	-	-
2	Notebook	DELL	E5530	DoC
3	Notebook	DELL	E5530	DoC

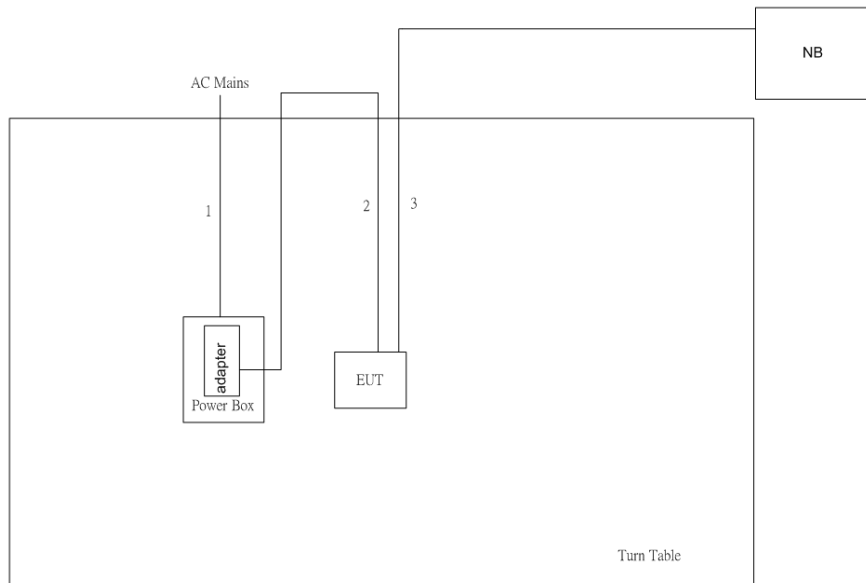
Note: Support equipment No.1 was provided by customer.

2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length
1	Fiber	Non-Shielded	10 m
2	RJ45	Non-Shielded	3 m
3	RJ45	Non-Shielded	10 m
4	RJ45	Non-Shielded	10 m
5	RJ45	Non-Shielded	10 m
6	RJ45	Non-Shielded	10 m
7	RJ45	Non-Shielded	10 m
8	RJ45	Non-Shielded	10 m
9	RJ45	Non-Shielded	10 m
10	RJ45	Non-Shielded	10 m
11	Console (Floating)	Non-Shielded	1.8 m

Test Setup Diagram - Radiated Test < 1GHz


Item	Connection	Shielded	Length
1	AC Power Line	Non-Shielded	1.8m
2	DC power Line	Non-Shielded	1.2m
3	RJ-45 cable	Non-Shielded	10.0m

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.

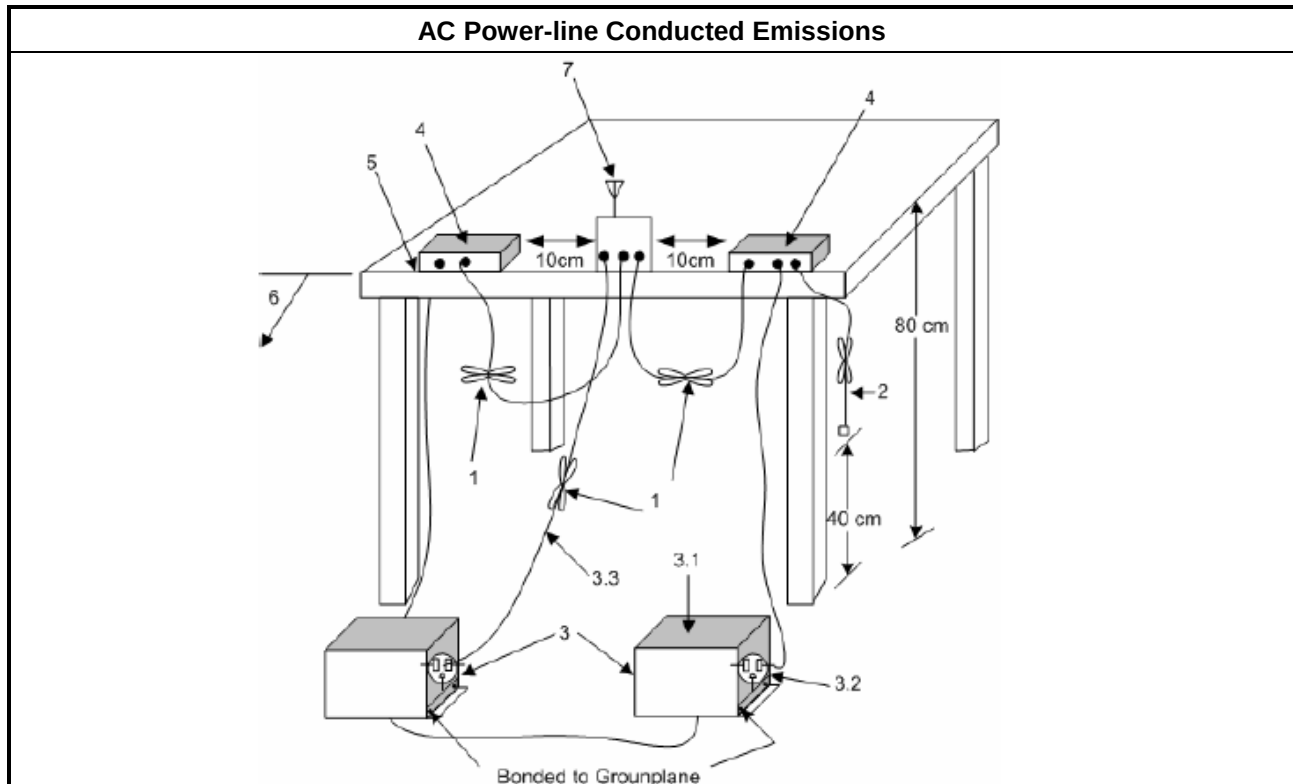
3.1.2 Measuring Instruments

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

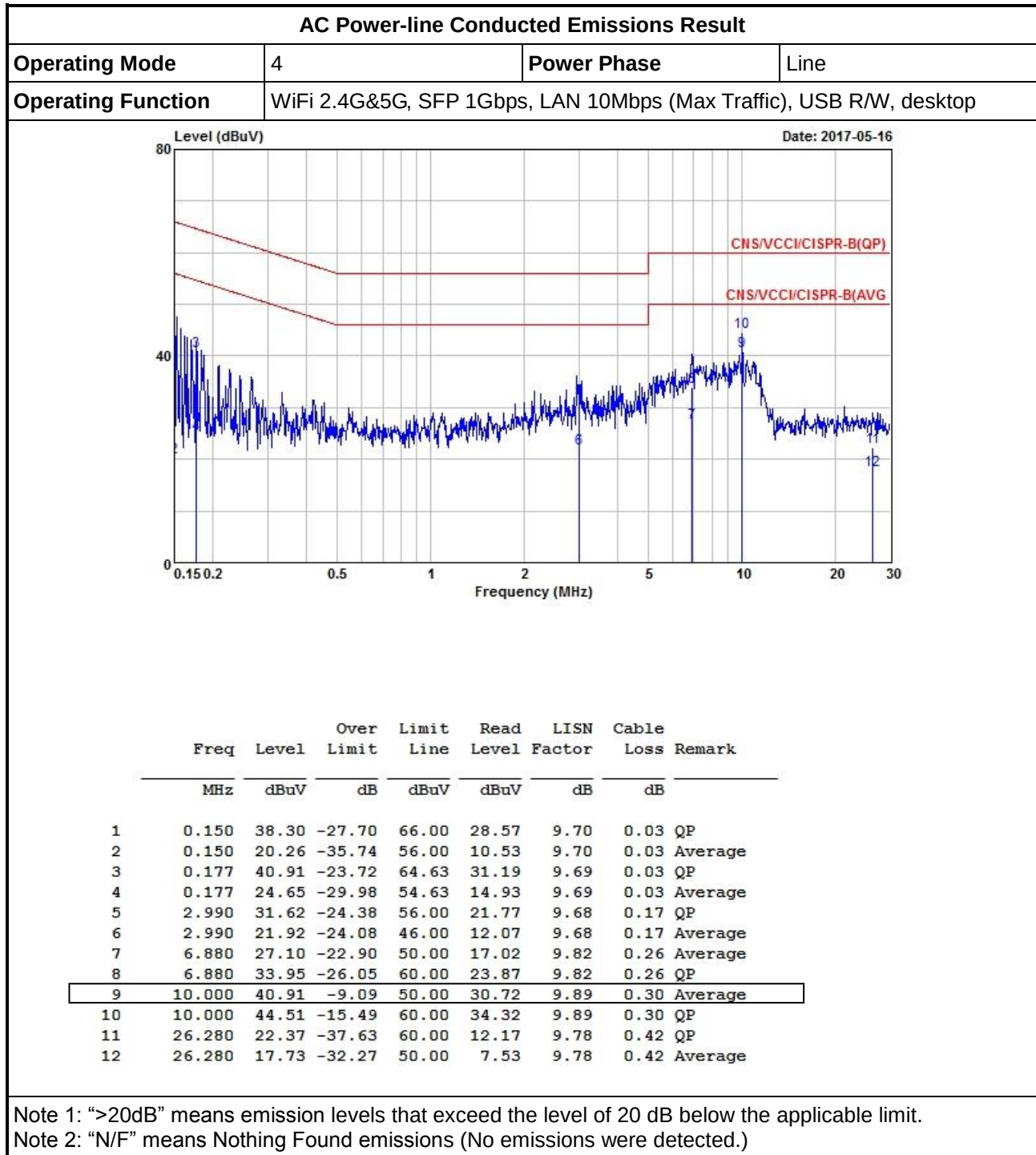
3.1.3 Test Procedures

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

3.1.4 Test Setup

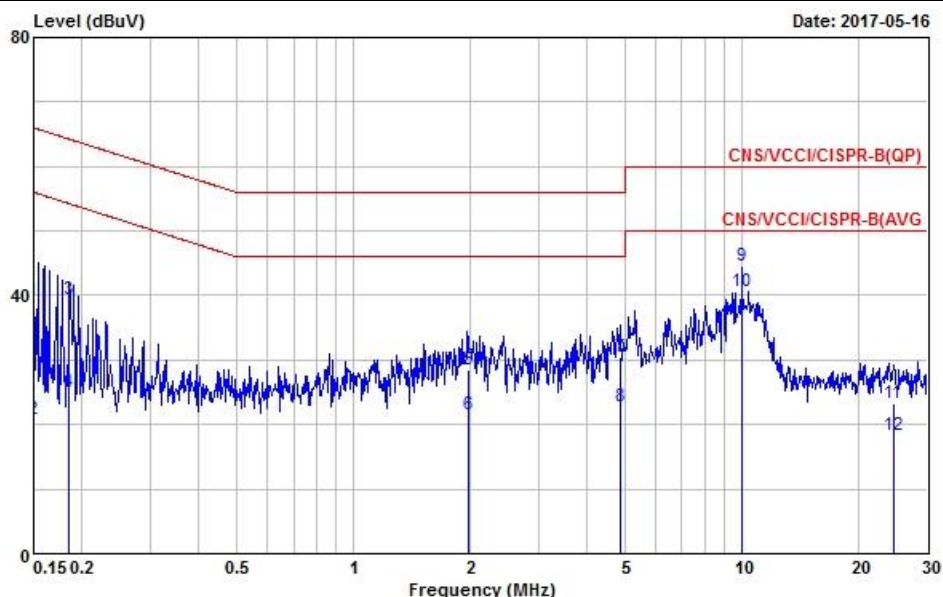


3.1.5 Test Result of AC Power-line Conducted Emissions



AC Power-line Conducted Emissions Result

Operating Mode	4	Power Phase	Neutral
Operating Function	WiFi 2.4G&5G, SFP 1Gbps, LAN 10Mbps (Max Traffic), USB R/W, desktop		



	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	39.06	-26.94	66.00	29.36	9.67	0.03	QP
2	0.150	20.79	-35.21	56.00	11.09	9.67	0.03	Average
3	0.184	39.43	-24.87	64.30	29.75	9.65	0.03	QP
4	0.184	24.97	-29.33	54.30	15.29	9.65	0.03	Average
5	1.980	28.58	-27.42	56.00	18.79	9.66	0.13	QP
6	1.980	21.63	-24.37	46.00	11.84	9.66	0.13	Average
7	4.870	30.44	-25.56	56.00	20.45	9.76	0.23	QP
8	4.870	22.88	-23.12	46.00	12.89	9.76	0.23	Average
9	10.000	44.53	-15.47	60.00	34.38	9.85	0.30	QP
10	10.000	40.74	-9.26	50.00	30.59	9.85	0.30	Average
11	24.530	23.25	-36.75	60.00	12.83	10.03	0.39	QP
12	24.530	18.43	-31.57	50.00	8.01	10.03	0.39	Average

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.)

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit	
Systems using digital modulation techniques:	
▪	6 dB bandwidth $\geq$ 500 kHz.

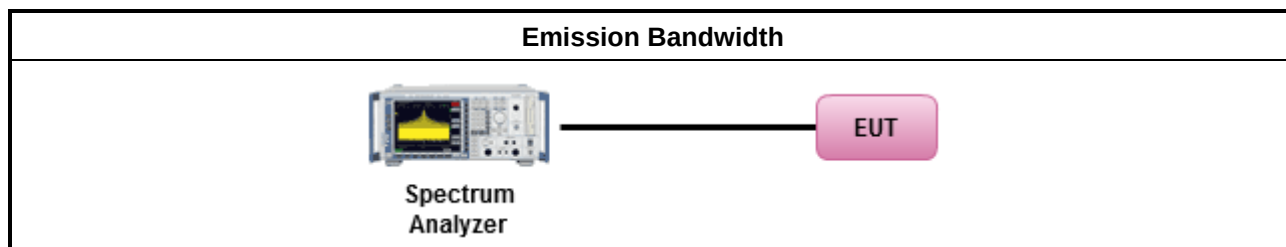
3.2.2 Measuring Instruments

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 KDB 558074, clause 8.1 Option 1 for 6 dB bandwidth measurement.
☐	Refer as KDB 558074, clause 8.2 Option 2 for 6 dB bandwidth measurement.
☐	Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

<Non-Beamforming>

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
802.11b_(1Mbps)_3TX	-	-	-	-	-
2.4-2.4835GHz	9.5M	13.093M	13M1G1D	7.525M	11.769M
802.11g_(6Mbps)_3TX	-	-	-	-	-
2.4-2.4835GHz	16.35M	16.692M	16M7D1D	16.3M	16.467M
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-
2.4-2.4835GHz	17.6M	17.866M	17M9D1D	16.9M	17.616M
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-
2.4-2.4835GHz	36.35M	36.432M	36M4D1D	35.4M	36.082M

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

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

Result

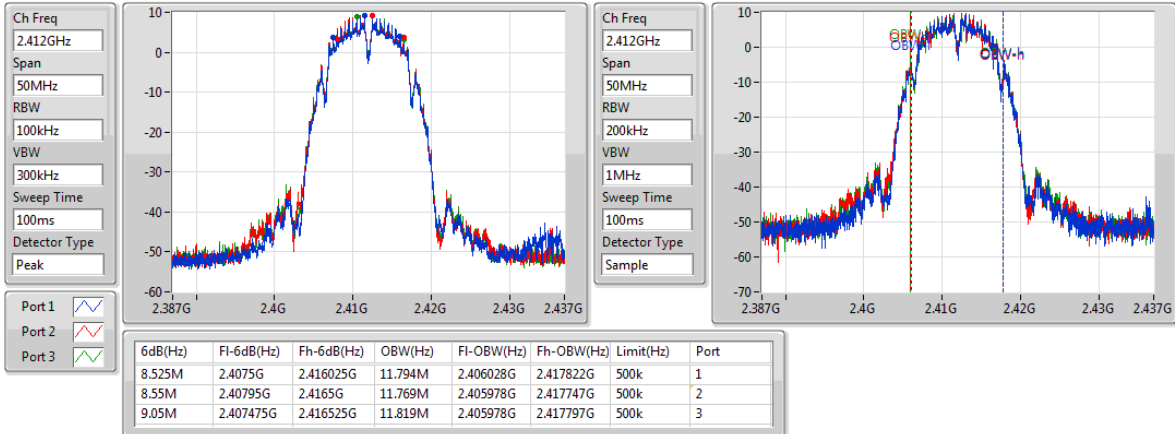
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)
802.11b_(1Mbps)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	8.525M	11.794M	8.55M	11.769M	9.05M	11.819M
2437MHz	Pass	500k	9M	12.794M	9.05M	12.894M	9.5M	13.093M
2462MHz	Pass	500k	8.05M	11.769M	7.525M	11.869M	8.025M	11.819M
802.11g_(6Mbps)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	16.325M	16.517M	16.325M	16.492M	16.35M	16.542M
2437MHz	Pass	500k	16.35M	16.692M	16.3M	16.642M	16.325M	16.692M
2462MHz	Pass	500k	16.3M	16.467M	16.3M	16.492M	16.325M	16.492M
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	17.5M	17.691M	17.575M	17.691M	17.575M	17.691M
2437MHz	Pass	500k	17.175M	17.791M	17.6M	17.766M	17.55M	17.866M
2462MHz	Pass	500k	16.9M	17.641M	17.55M	17.616M	17.525M	17.641M
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	36.35M	36.282M	36.35M	36.282M	36.35M	36.332M
2437MHz	Pass	500k	36M	36.332M	36.3M	36.332M	35.7M	36.432M
2452MHz	Pass	500k	35.4M	36.082M	35.7M	36.082M	35.7M	36.132M

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

802.11b_(1Mbps)_3TX

EBW

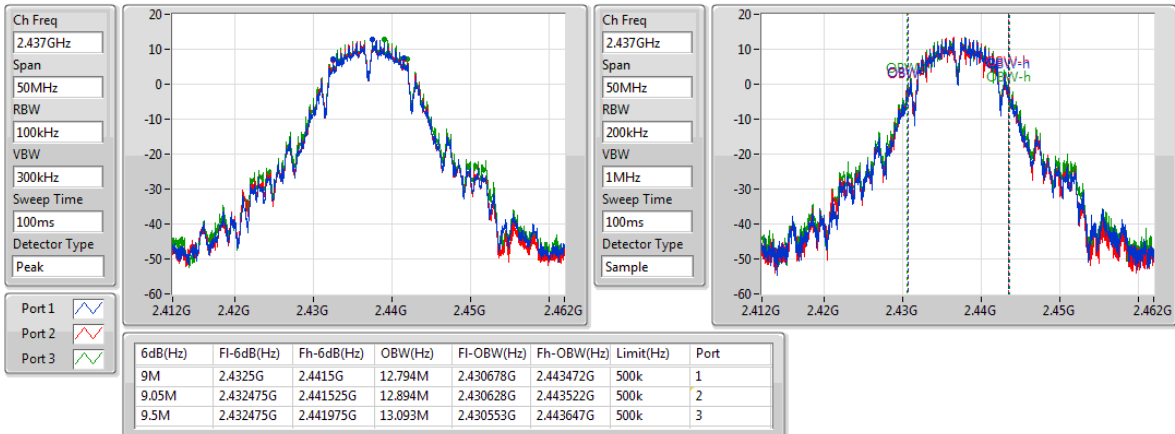
2412MHz



802.11b_(1Mbps)_3TX

EBW

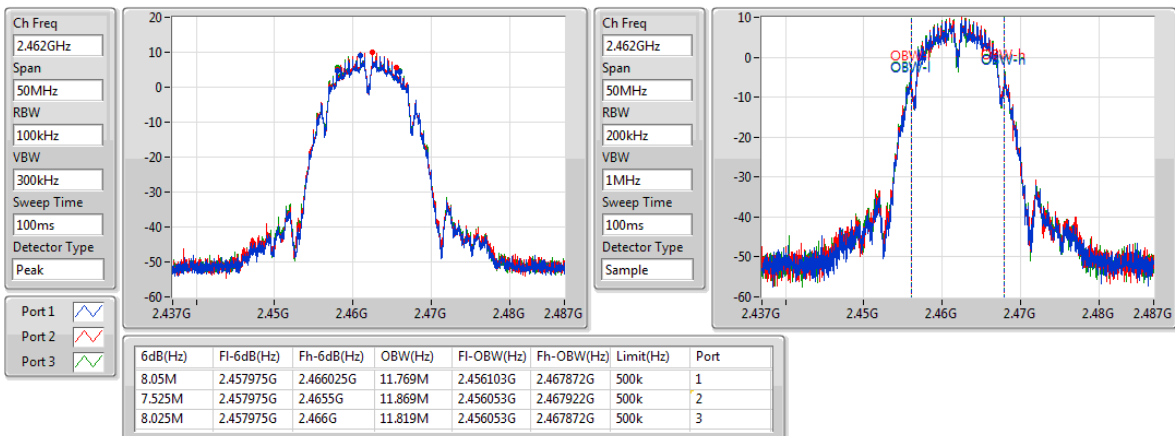
2437MHz



802.11b_(1Mbps)_3TX

EBW

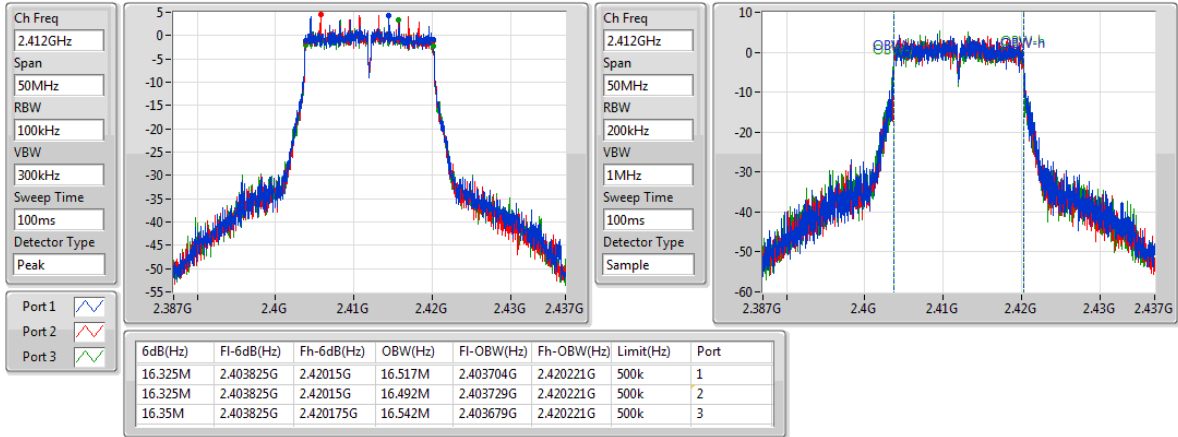
2462MHz



802.11g_(6Mbps)_3TX

EBW

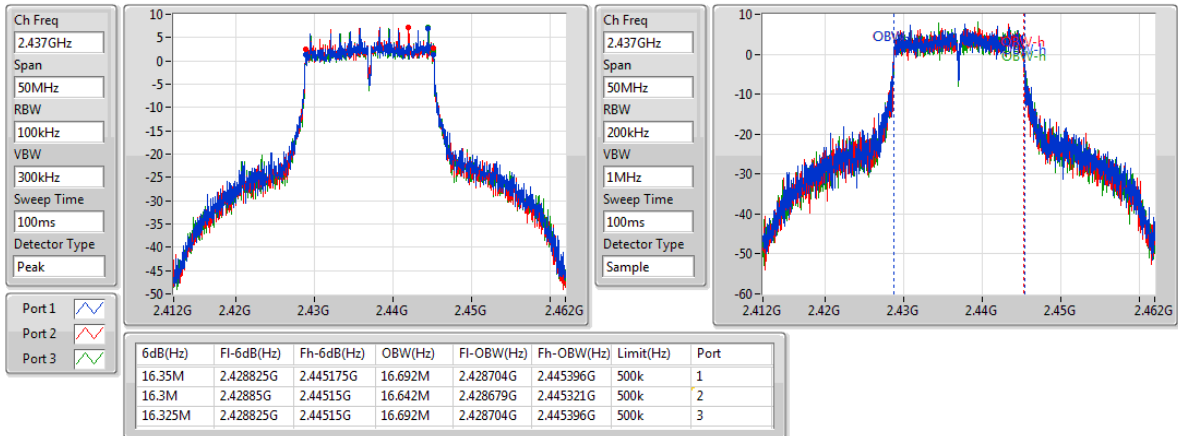
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802.11g_(6Mbps)_3TX

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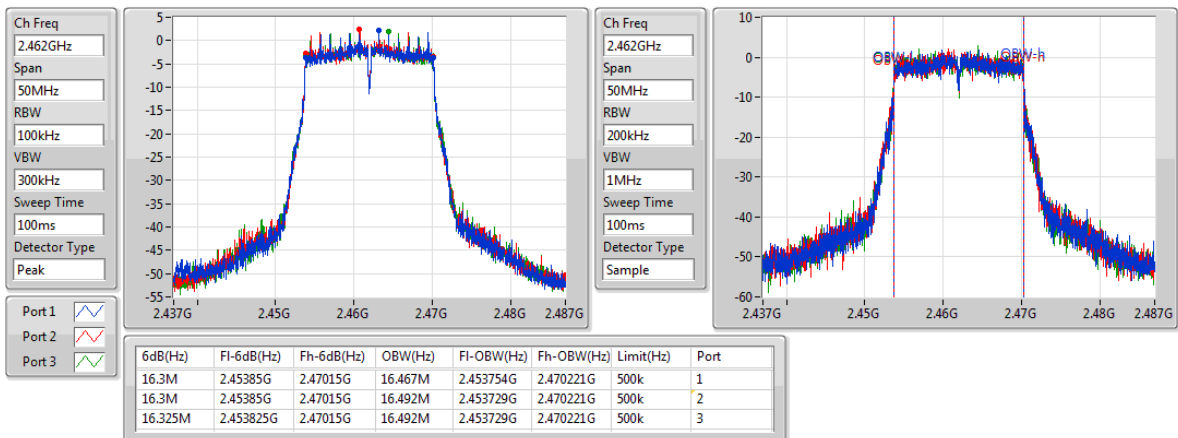
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802.11g_(6Mbps)_3TX

EBW

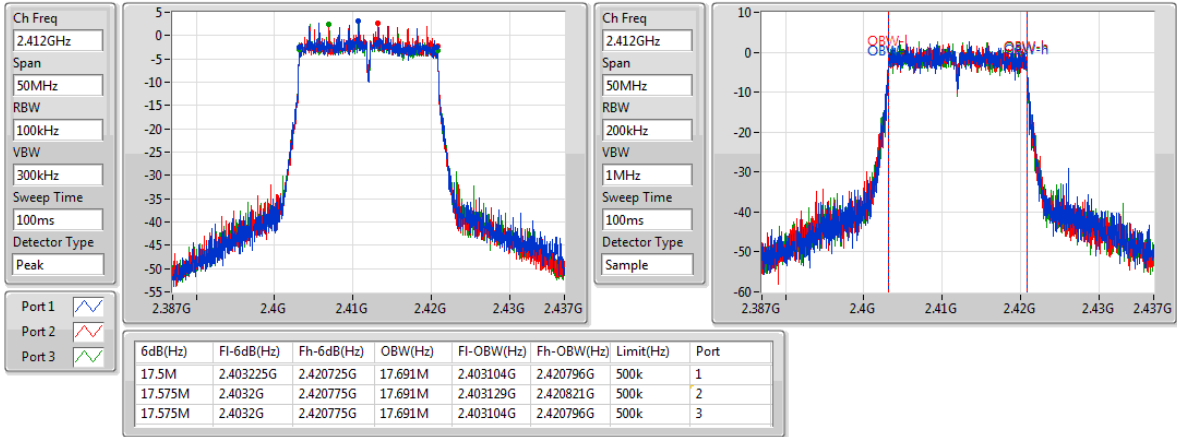
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802.11ac VHT20_Nss1,(MCS0)_3TX

EBW

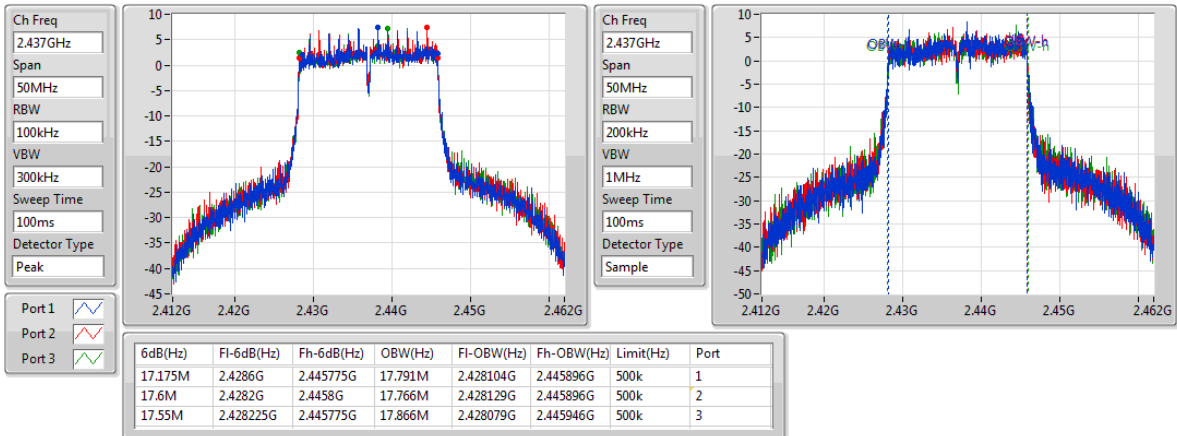
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802.11ac VHT20_Nss1,(MCS0)_3TX

EBW

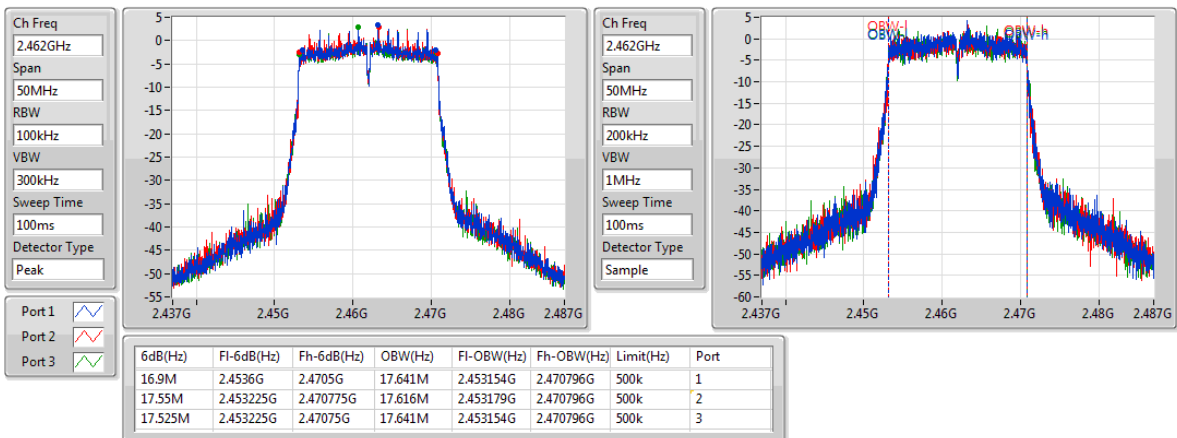
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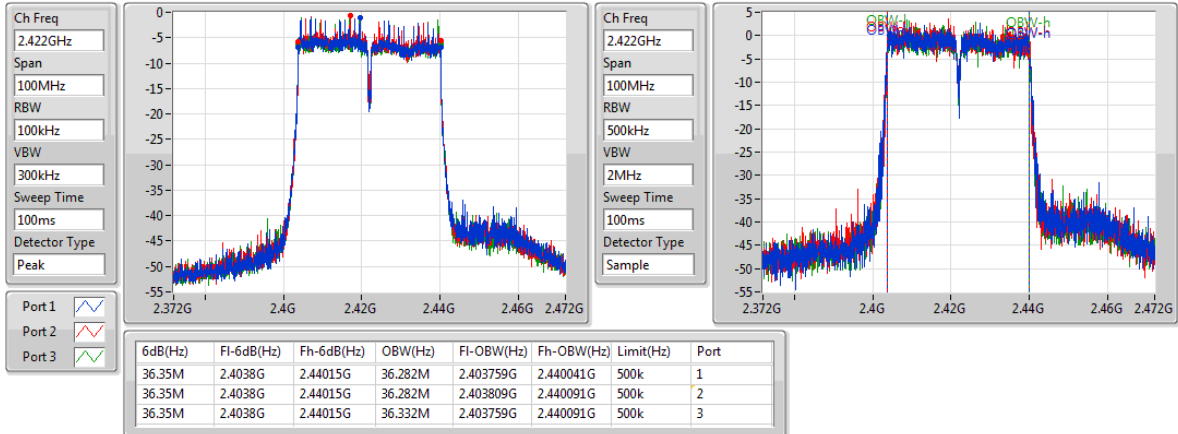
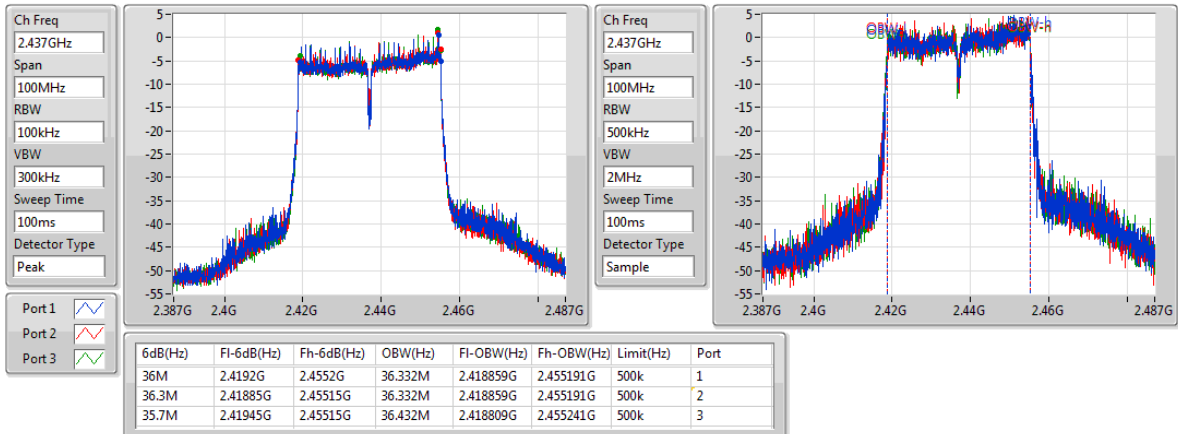
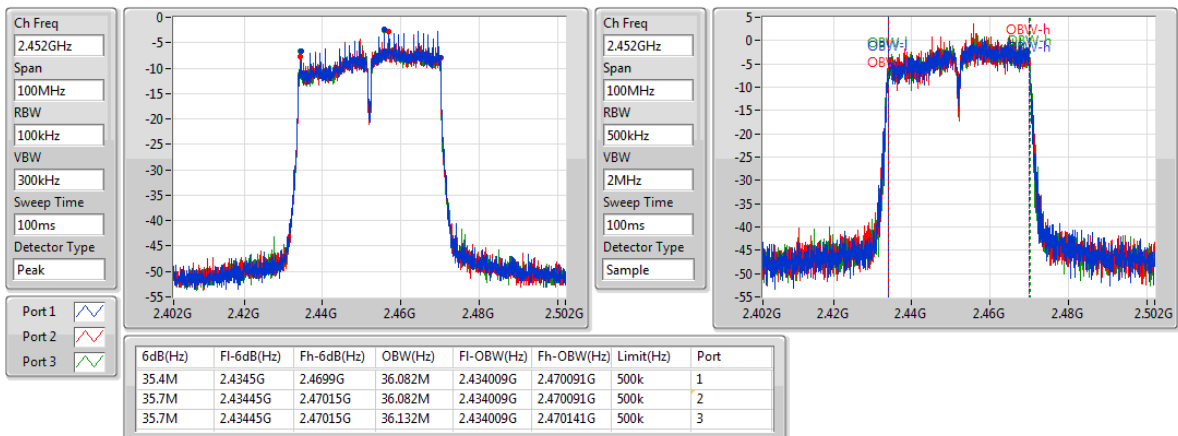


802.11ac VHT20_Nss1,(MCS0)_3TX

EBW

2462MHz



802.11ac VHT40_Nss1,(MCS0)_3TX
EBW
2422MHz

802.11ac VHT40_Nss1,(MCS0)_3TX
EBW
2437MHz

802.11ac VHT40_Nss1,(MCS0)_3TX
EBW
2452MHz


<Beamforming>
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-
2.4-2.4835GHz	17.575M	22.364M	22M4D1D	15.525M	17.616M
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-
2.4-2.4835GHz	36.25M	36.332M	36M3D1D	22.6M	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

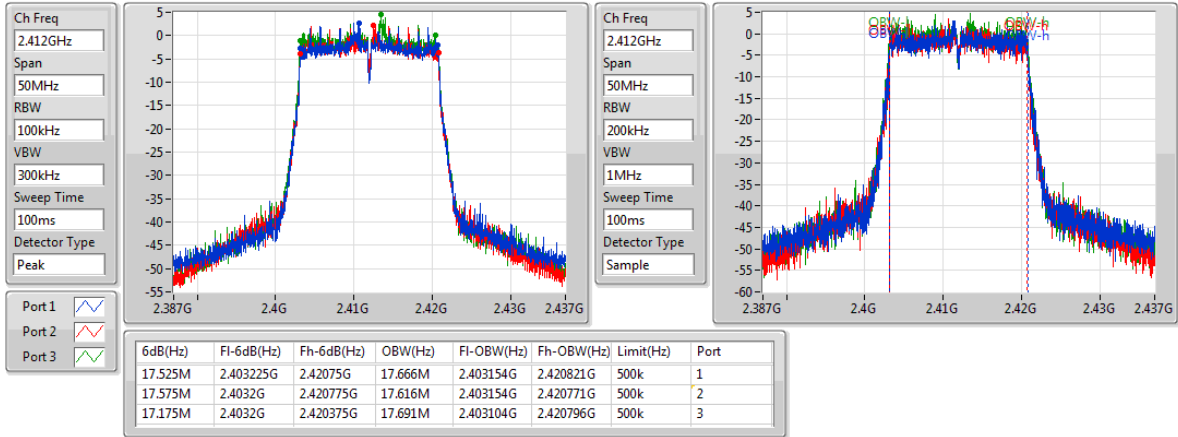
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	17.525M	17.666M	17.575M	17.616M	17.175M	17.691M
2437MHz	Pass	500k	17.55M	19.015M	16.85M	19.665M	17.275M	22.364M
2462MHz	Pass	500k	16.3M	17.616M	16.8M	17.616M	15.525M	17.616M
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	36.25M	36.232M	32.45M	36.132M	27.6M	36.282M
2437MHz	Pass	500k	35.95M	36.282M	34.45M	36.332M	24.4M	36.332M
2452MHz	Pass	500k	35.7M	36.082M	22.6M	36.182M	29.45M	35.882M

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

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

EBW

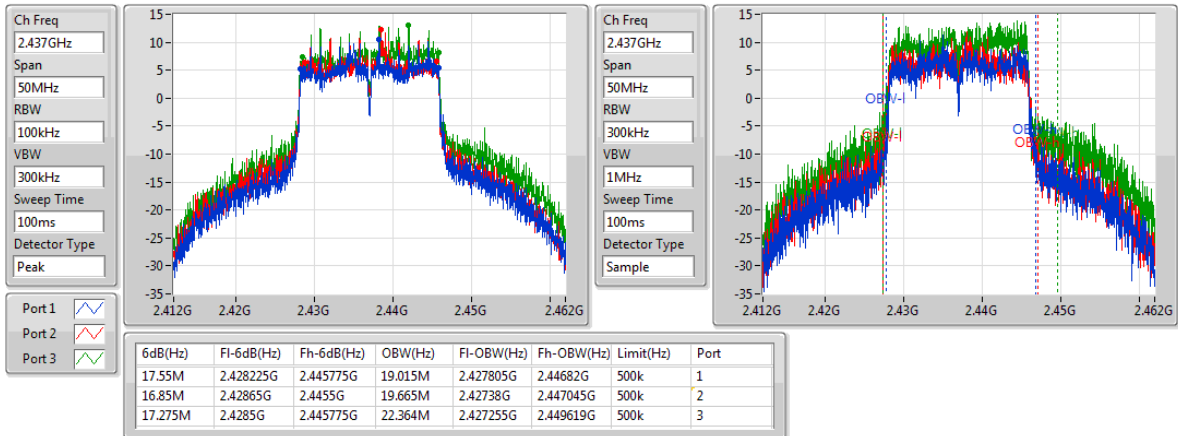
2412MHz



802.11ac VHT20-BF_Nss1,(MCS0)_3TX

EBW

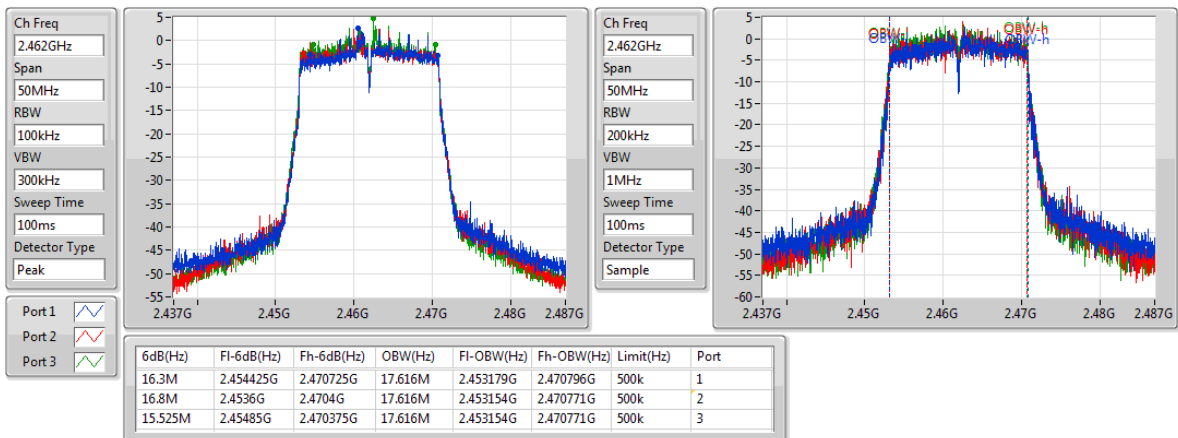
2437MHz

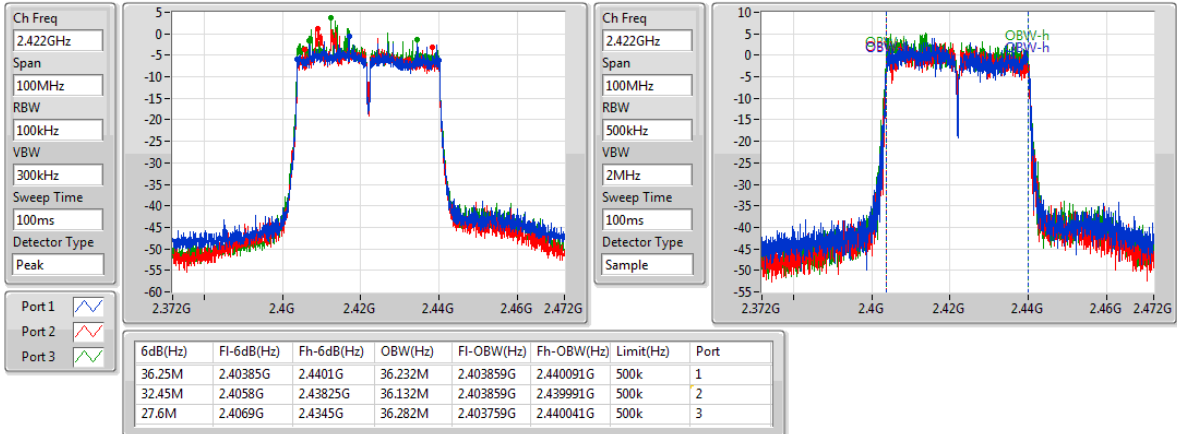
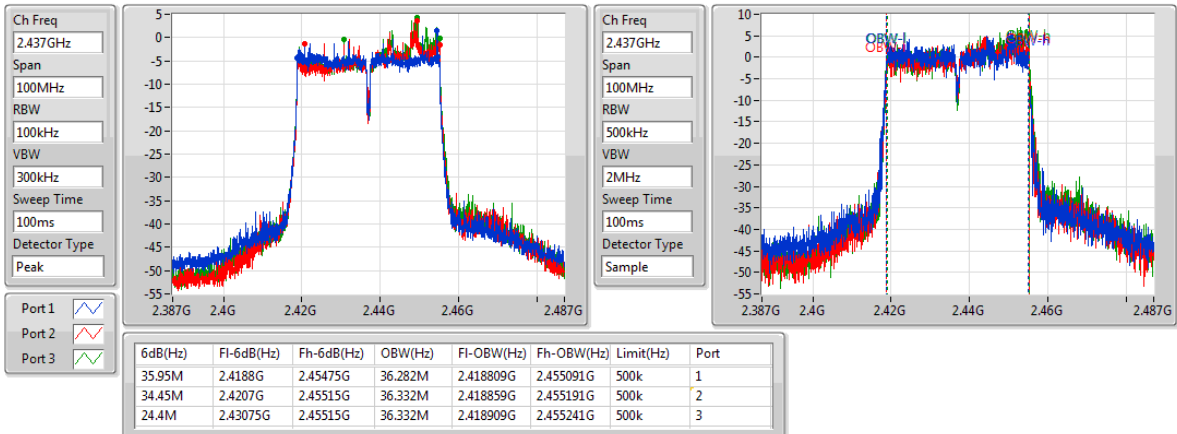
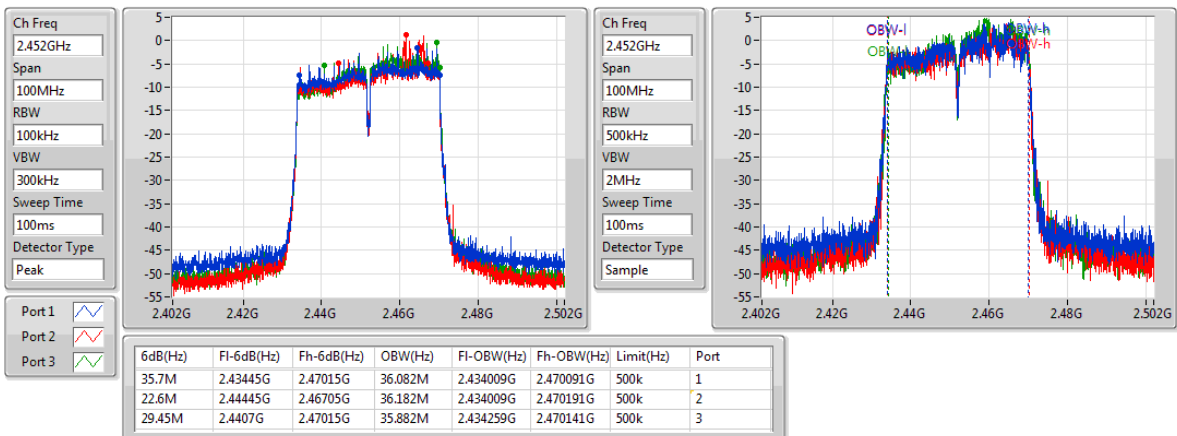


802.11ac VHT20-BF_Nss1,(MCS0)_3TX

EBW

2462MHz



802.11ac VHT40-BF_Nss1,(MCS0)_3TX
EBW
2422MHz

802.11ac VHT40-BF_Nss1,(MCS0)_3TX
EBW
2437MHz

802.11ac VHT40-BF_Nss1,(MCS0)_3TX
EBW
2452MHz


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
e.i.r.p. Power Limit:		
	▪	2400-2483.5 MHz Band
	▪	Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)
	▪	Point-to-point systems (P2P): $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}])$ dBm
	▪	Smart antenna system (SAS)
	-	Single beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	-	Overlap beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	-	Aggregate power on all beams: $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX} + 8])$ 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.		

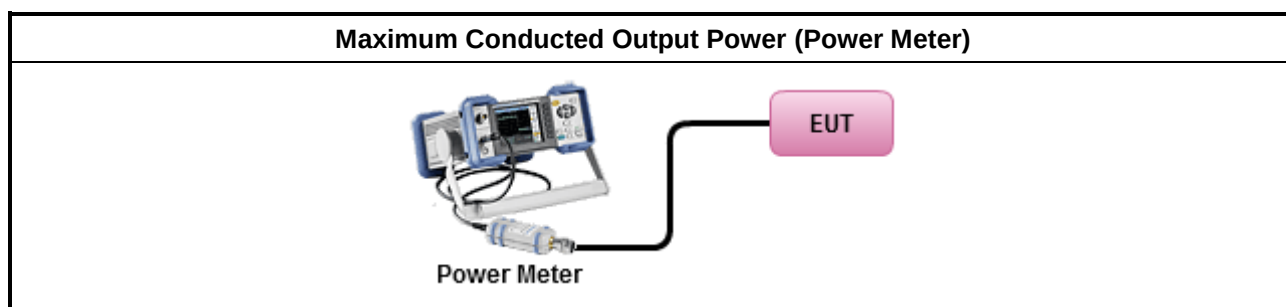
3.3.2 Measuring Instruments

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 KDB 558074, clause 9.1.1 Option 1 (RBW ≥ EBW method).
☐	Refer as KDB 558074, clause 9.1.2 Option 2 (integrated band power method)
☐	Refer as KDB 558074, clause 9.1.3 Option 3 (peak power meter for VBW ≥ DTS BW)
Maximum Average Conducted Output Power	
Duty cycle ≥ 98%	
☐	Refer as KDB 558074, clause 9.2.2.4 Method AVGSA-2 (spectral trace averaging).
Duty cycle < 98%	
☐	Refer as 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 KDB 558074, clause 9.2.3.1 Method AVGPM (using an RF average power meter).
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below: Refer as 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

<Non-Beamforming>

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
802.11b_(1Mbps)_3TX	-	-	-	-
2.4-2.4835GHz	26.46	0.44259	30.03	1.00693
802.11g_(6Mbps)_3TX	-	-	-	-
2.4-2.4835GHz	23.30	0.21380	26.87	0.48641
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-
2.4-2.4835GHz	22.70	0.18621	26.27	0.42364
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-
2.4-2.4835GHz	18.95	0.07852	22.52	0.17865

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11b_(1Mbps)_3TX	-	-	-	-	-	-	-	-	-
2412MHz	Pass	3.57	18.26	18.40	18.36	23.11	30.00	26.68	36.00
2437MHz	Pass	3.57	21.53	22.37	21.07	26.46	30.00	30.03	36.00
2462MHz	Pass	3.57	18.30	18.37	18.56	23.18	30.00	26.75	36.00
802.11g_(6Mbps)_3TX	-	-	-	-	-	-	-	-	-
2412MHz	Pass	3.57	16.04	15.66	15.78	20.60	30.00	24.17	36.00
2437MHz	Pass	3.57	18.68	18.44	18.45	23.30	30.00	26.87	36.00
2462MHz	Pass	3.57	14.21	13.87	13.97	18.79	30.00	22.36	36.00
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-
2412MHz	Pass	3.57	14.58	14.38	14.31	19.20	30.00	22.77	36.00
2437MHz	Pass	3.57	18.08	18.06	17.63	22.70	30.00	26.27	36.00
2462MHz	Pass	3.57	14.91	14.78	14.64	19.55	30.00	23.12	36.00
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-
2422MHz	Pass	3.57	13.29	13.21	13.28	18.03	30.00	21.60	36.00
2437MHz	Pass	3.57	14.38	14.04	14.12	18.95	30.00	22.52	36.00
2452MHz	Pass	3.57	11.18	10.89	10.93	15.77	30.00	19.34	36.00

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

**<Beamforming>****Summary**

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-	-	-	-
2.4-2.4835GHz	24.54	0.28445	32.54	1.79473
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-	-	-	-
2.4-2.4835GHz	18.66	0.07345	26.66	0.46345

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	13.08	12.39	13.60	17.82	28.00	25.82	36.00
2437MHz	Pass	8.00	18.85	19.21	20.96	24.54	28.00	32.54	36.00
2462MHz	Pass	8.00	12.32	12.28	12.88	17.27	28.00	25.27	36.00
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-
2422MHz	Pass	8.00	12.97	13.05	13.67	18.01	28.00	26.01	36.00
2437MHz	Pass	8.00	13.68	13.56	14.39	18.66	28.00	26.66	36.00
2452MHz	Pass	8.00	11.75	11.20	12.47	16.61	28.00	24.61	36.00

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

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit	
▪	Power Spectral Density (PSD) $\leq$ 8 dBm/3kHz

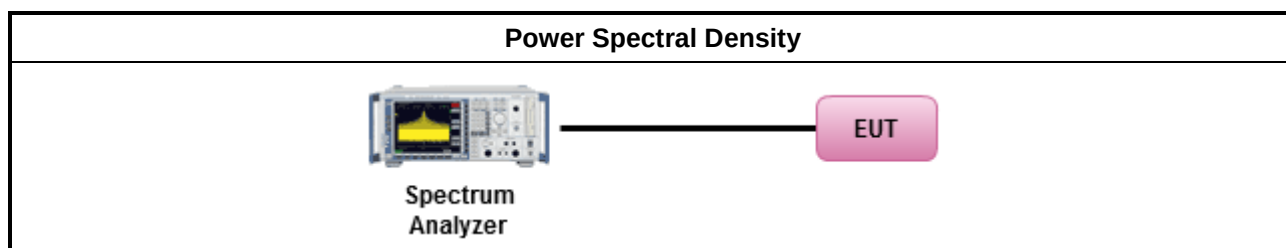
3.4.2 Measuring Instruments

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 KDB 558074, clause 10.2 Method PKPSD (RBW=3-100kHz; Detector=peak).
▪	For conducted measurement.
▪	If The EUT supports multiple transmit chains using options given below:
☒	Measure and sum the spectra across the outputs. Refer as 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.

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

<Non-Beamforming>

Summary

Mode	PD (dBm/RBW)
802.11b_(1Mbps)_3TX	-
2.4-2.4835GHz	0.56
802.11g_(6Mbps)_3TX	-
2.4-2.4835GHz	-4.02
802.11ac VHT20_Nss1,(MCS0)_3TX	-
2.4-2.4835GHz	1.19
802.11ac VHT40_Nss1,(MCS0)_3TX	-
2.4-2.4835GHz	-11.37

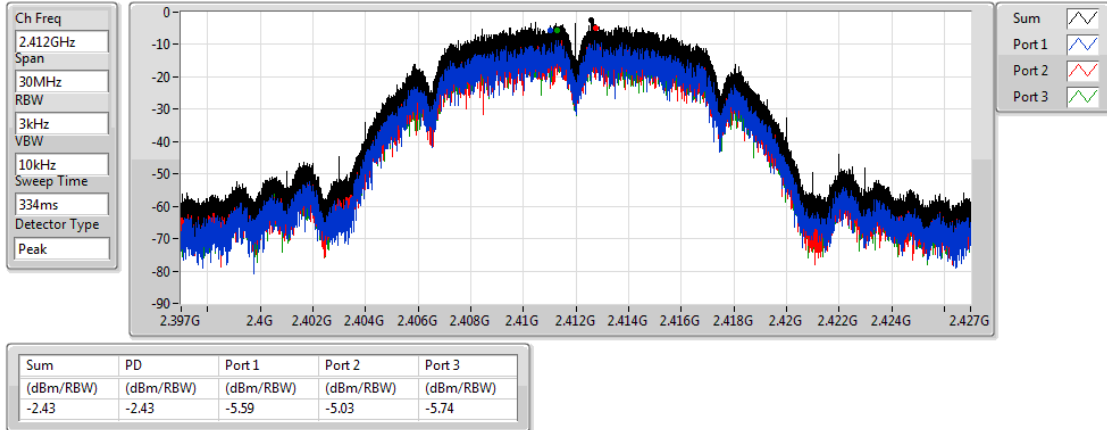
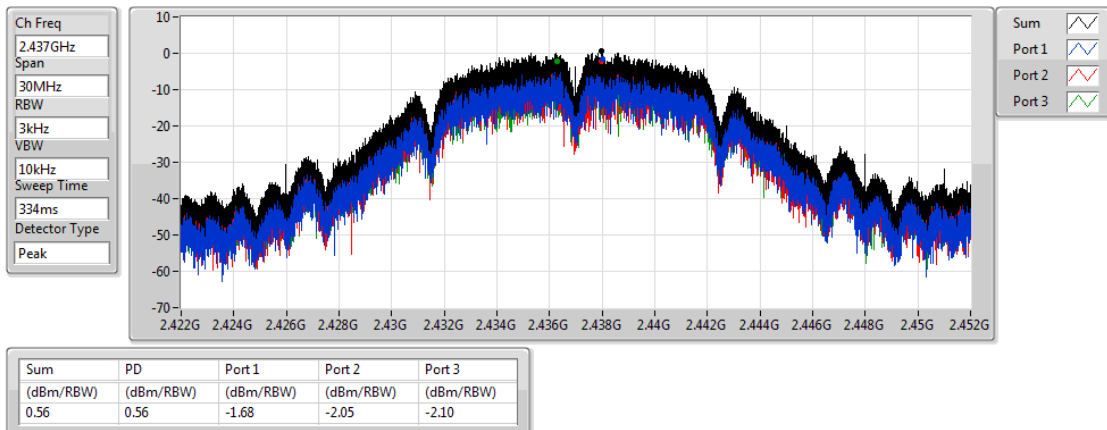
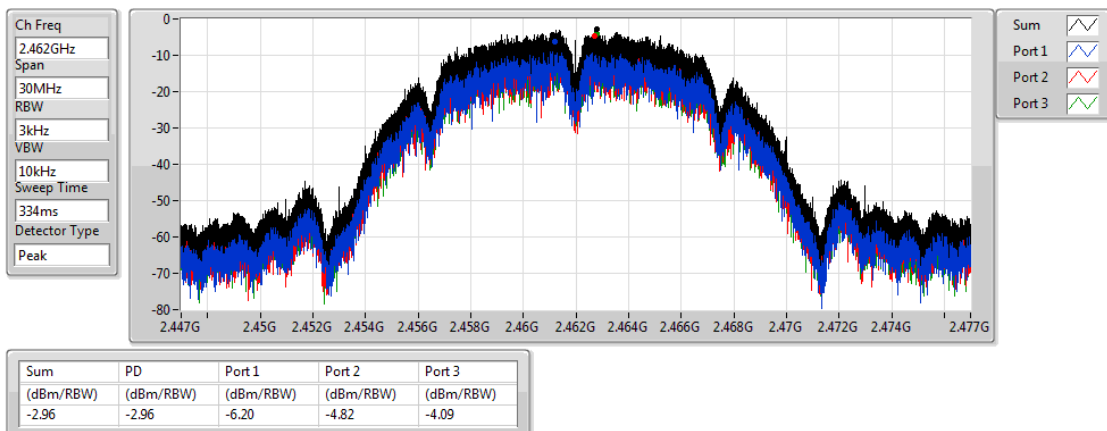
RBW=3kHz.

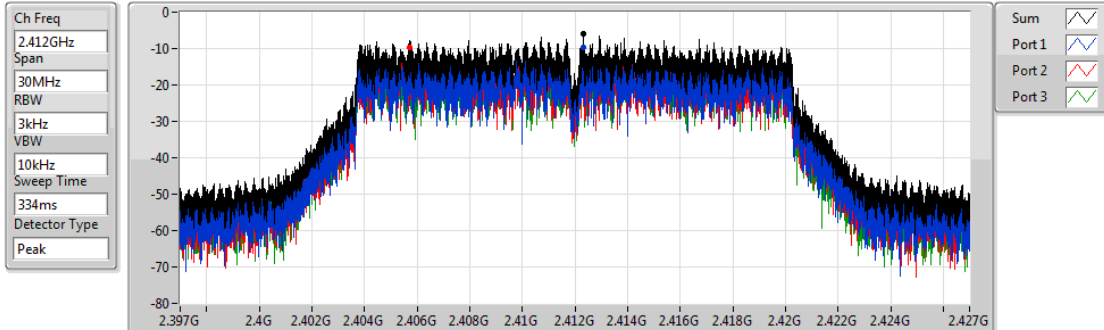
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_(1Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	8.00	-5.59	-5.03	-5.74	-2.43	6.00
2437MHz	Pass	8.00	-1.68	-2.05	-2.10	0.56	6.00
2462MHz	Pass	8.00	-6.20	-4.82	-4.09	-2.96	6.00
802.11g_(6Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	8.00	-9.72	-9.83	-9.72	-5.92	6.00
2437MHz	Pass	8.00	-6.29	-7.16	-7.71	-4.02	6.00
2462MHz	Pass	8.00	-12.28	-12.01	-13.08	-9.06	6.00
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	8.00	-11.52	-11.30	-12.20	-9.20	6.00
2437MHz	Pass	8.00	-2.22	-1.42	-1.02	1.19	6.00
2462MHz	Pass	8.00	-12.20	-11.46	-12.74	-8.19	6.00
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	8.00	-15.56	-15.86	-15.78	-13.21	6.00
2437MHz	Pass	8.00	-13.63	-14.91	-14.67	-11.37	6.00
2452MHz	Pass	8.00	-17.04	-16.55	-17.50	-14.40	6.00

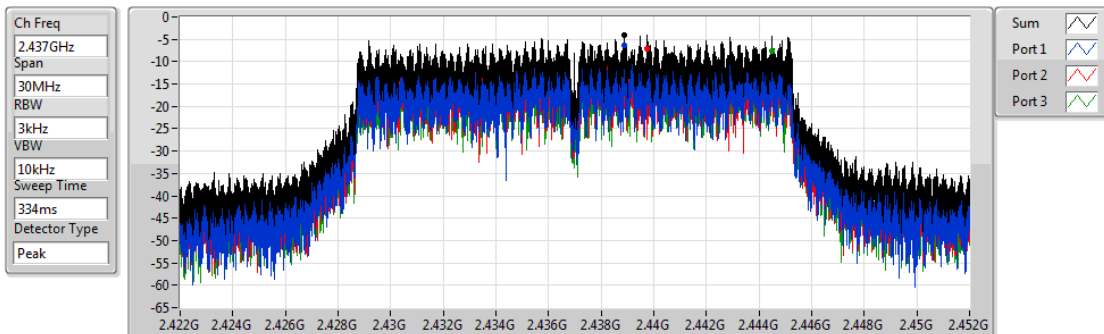
DG = Directional Gain; RBW=3kHz;

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

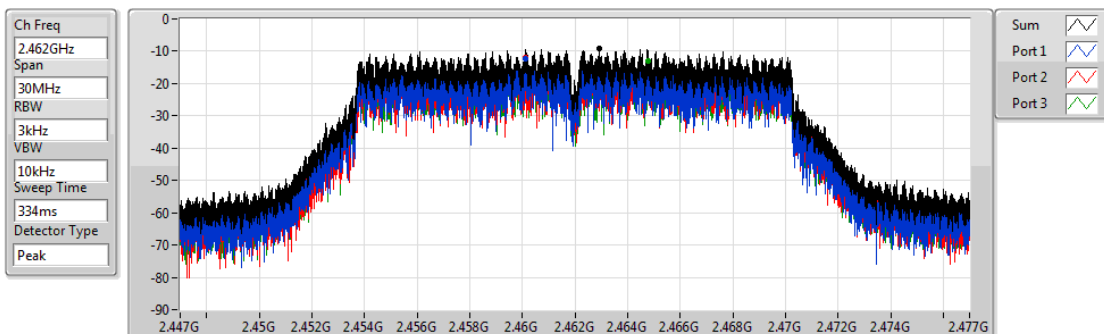
802.11b_(1Mbps)_3TX
PSD
2412MHz

802.11b_(1Mbps)_3TX
PSD
2437MHz

802.11b_(1Mbps)_3TX
PSD
2462MHz


802.11g_(6Mbps)_3TX
PSD
2412MHz


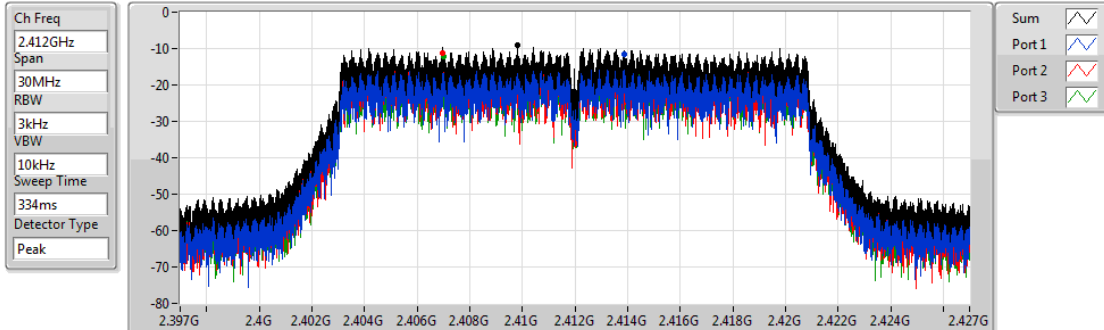
Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.92	-5.92	-9.72	-9.83	-9.72

802.11g_(6Mbps)_3TX
PSD
2437MHz


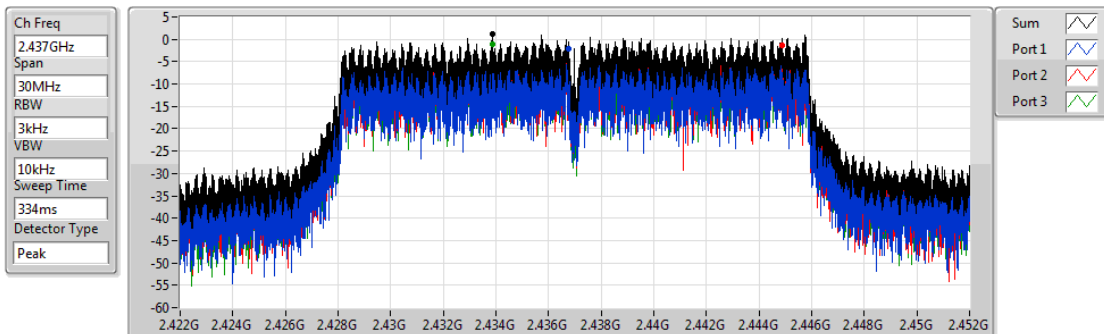
Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.02	-4.02	-6.29	-7.16	-7.71

802.11g_(6Mbps)_3TX
PSD
2462MHz


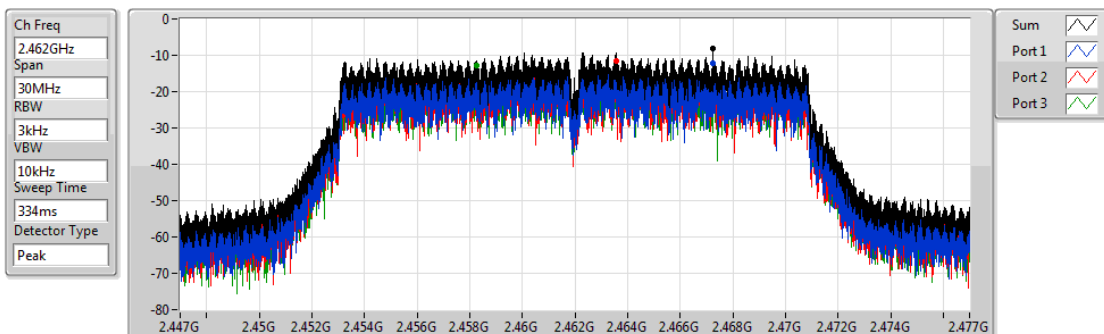
Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.06	-9.06	-12.28	-12.01	-13.08

802.11ac VHT20_Nss1,(MCS0)_3TX
PSD
2412MHz


Sum	PD	Port 1	Port 2	Port 3
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-9.20	-9.20	-11.52	-11.30	-12.20

802.11ac VHT20_Nss1,(MCS0)_3TX
PSD
2437MHz


Sum	PD	Port 1	Port 2	Port 3
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
1.19	1.19	-2.22	-1.42	-1.02

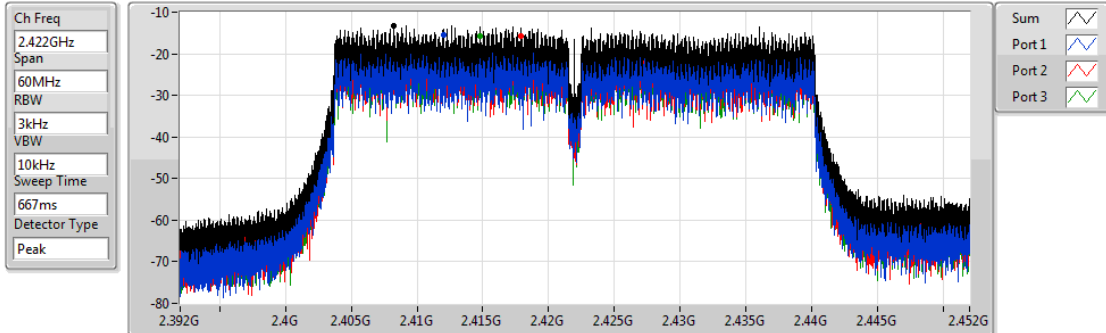
802.11ac VHT20_Nss1,(MCS0)_3TX
PSD
2462MHz


Sum	PD	Port 1	Port 2	Port 3
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-8.19	-8.19	-12.20	-11.46	-12.74

802.11ac VHT40_Nss1,(MCS0)_3TX

PSD

2422MHz

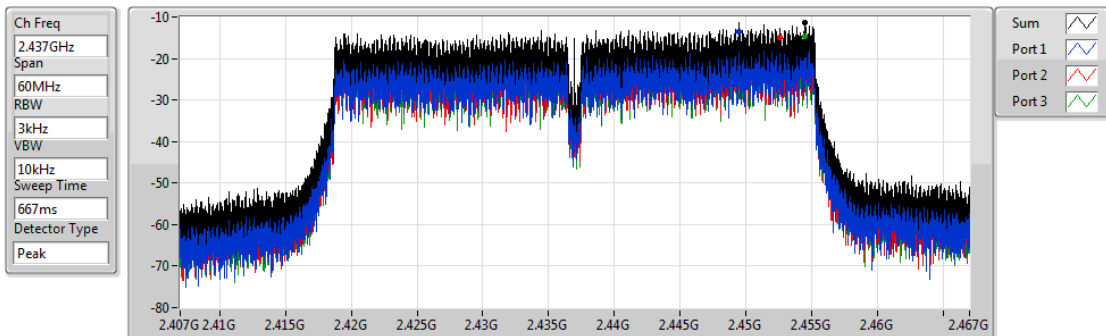


Sum	PD	Port 1	Port 2	Port 3
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-13.21	-13.21	-15.56	-15.86	-15.78

802.11ac VHT40_Nss1,(MCS0)_3TX

PSD

2437MHz

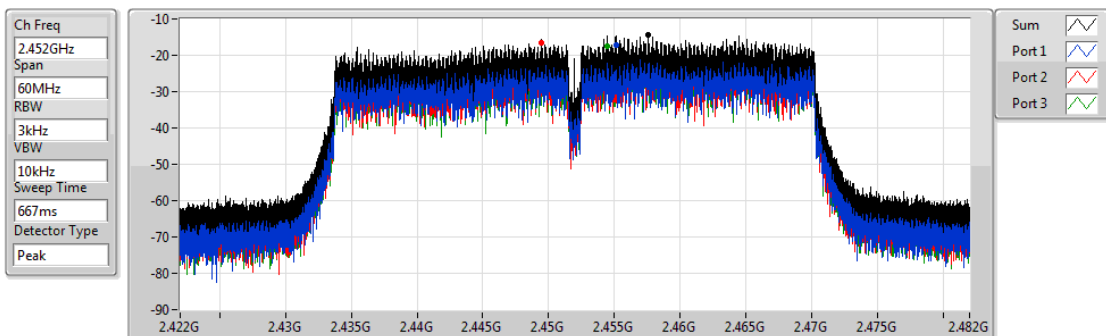


Sum	PD	Port 1	Port 2	Port 3
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-11.37	-11.37	-13.63	-14.91	-14.67

802.11ac VHT40_Nss1,(MCS0)_3TX

PSD

2452MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-14.40	-14.40	-17.04	-16.55	-17.50

**<Beamforming>****Summary**

Mode	PD (dBm/RBW)
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-
2.4-2.4835GHz	-0.98
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-
2.4-2.4835GHz	-9.88

RBW=3kHz.

Result

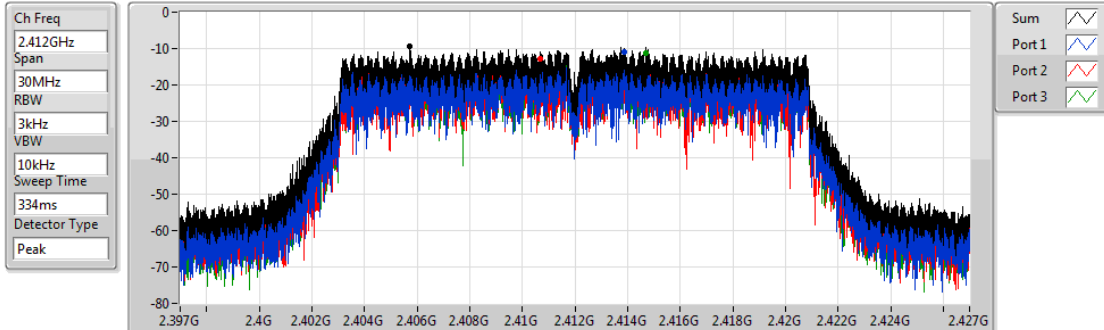
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	8.00	-11.04	-12.91	-11.11	-9.49	6.00
2437MHz	Pass	8.00	-4.53	-4.16	-2.65	-0.98	6.00
2462MHz	Pass	8.00	-13.63	-10.88	-12.19	-10.00	6.00
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	8.00	-14.38	-14.06	-10.92	-10.60	6.00
2437MHz	Pass	8.00	-10.36	-13.35	-10.89	-9.88	6.00
2452MHz	Pass	8.00	-12.83	-15.09	-12.36	-11.41	6.00

DG = Directional Gain; RBW=3kHz;**PD** = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

PSD

2412MHz

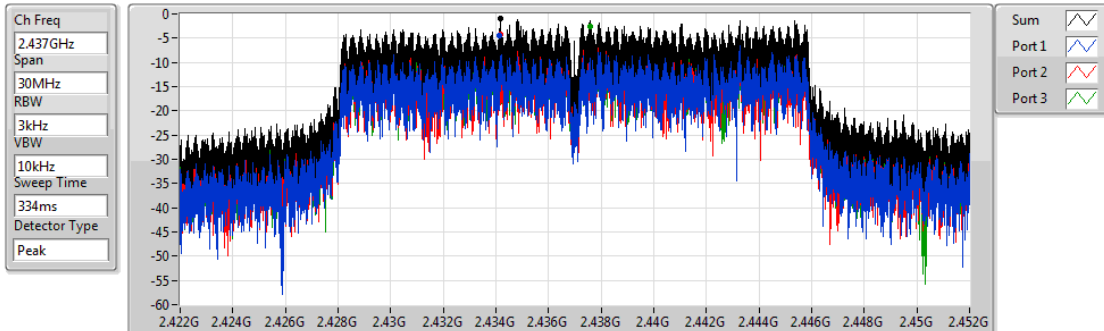


Sum	PD	Port 1	Port 2	Port 3
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-9.49	-9.49	-11.04	-12.91	-11.11

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

PSD

2437MHz

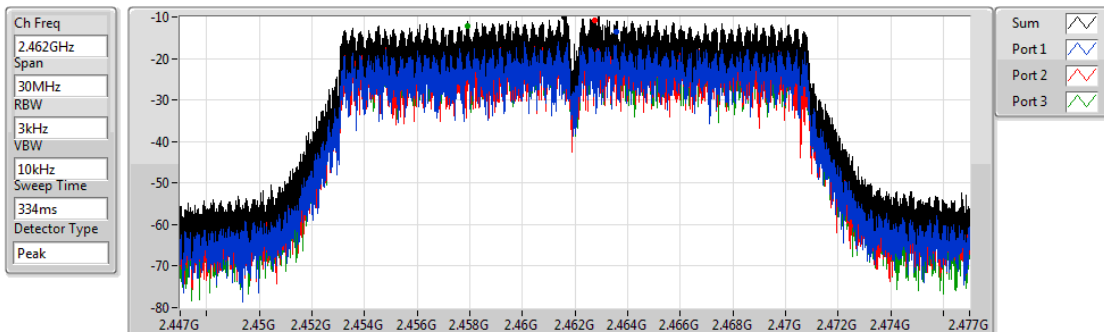


Sum	PD	Port 1	Port 2	Port 3
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-0.98	-0.98	-4.53	-4.16	-2.65

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

PSD

2462MHz

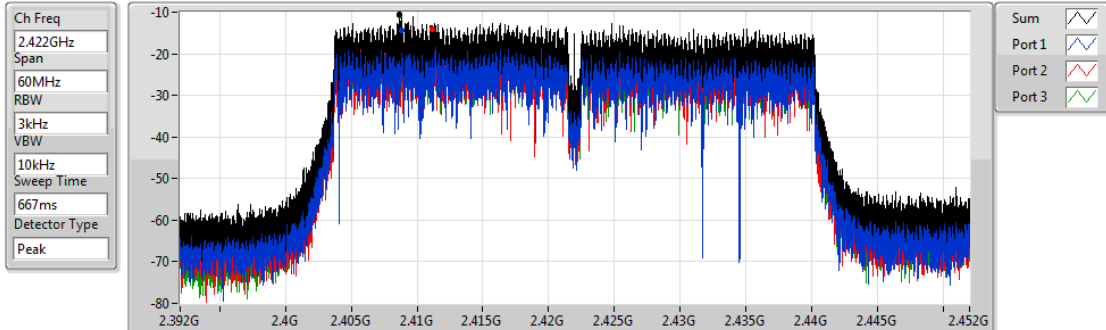


Sum	PD	Port 1	Port 2	Port 3
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-10.00	-10.00	-13.63	-10.88	-12.19

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

PSD

2422MHz

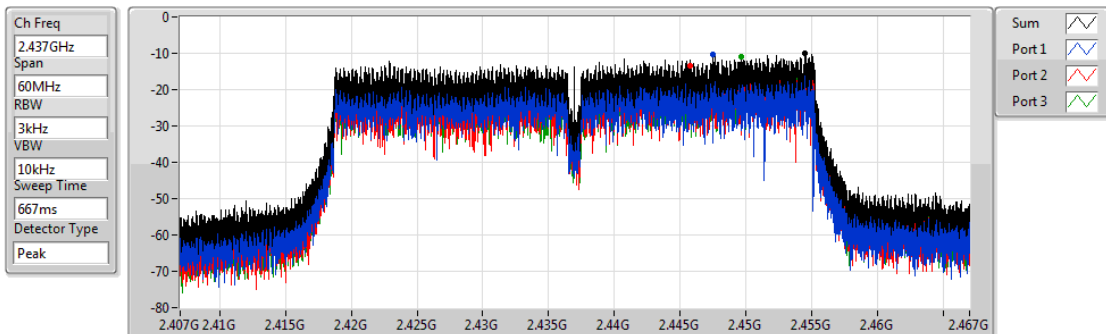


Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.60	-10.60	-14.38	-14.06	-10.92

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

PSD

2437MHz

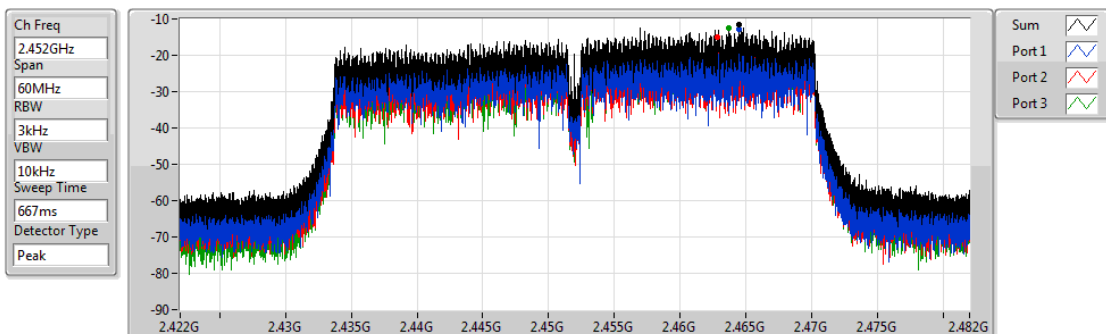


Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.88	-9.88	-10.36	-13.35	-10.89

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

PSD

2452MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-11.41	-11.41	-12.83	-15.09	-12.36

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.	

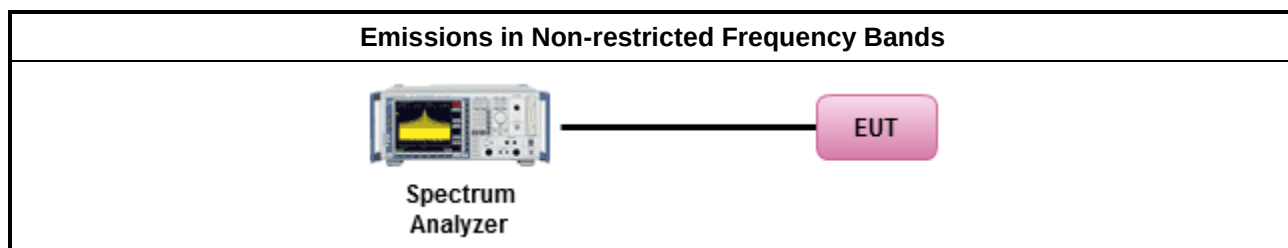
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
Refer as 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

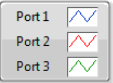
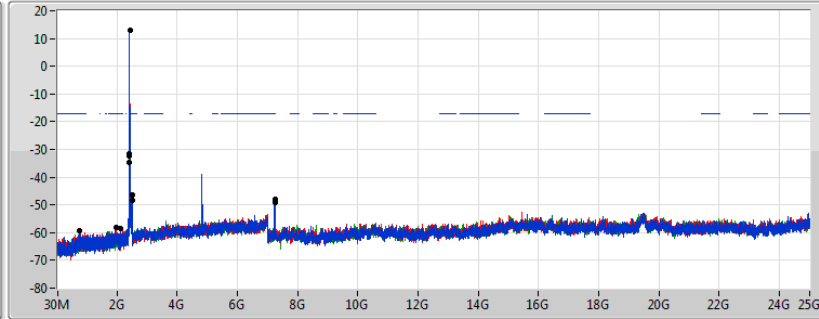
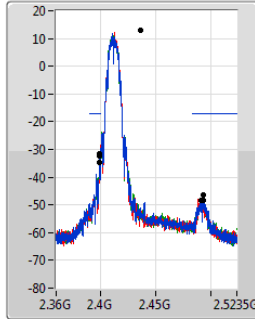
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Summary

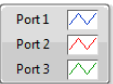
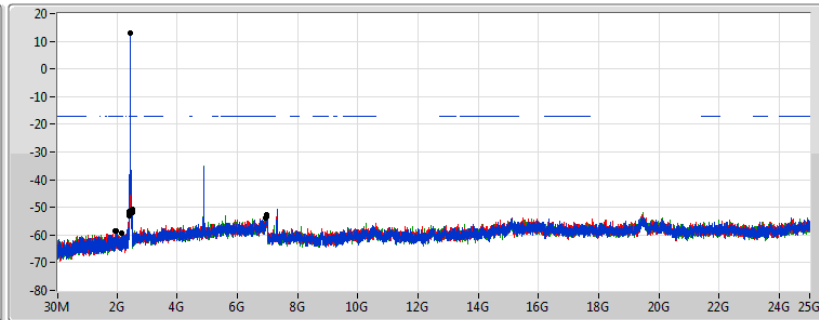
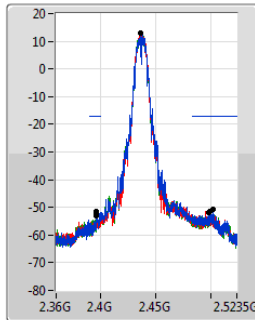
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	2.454442G	0.82	-29.18	146.79M	-38.82	2.39968G	-42.02	2.49854G	-53.11	24.562488G	-44.96	1

**Result**

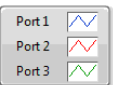
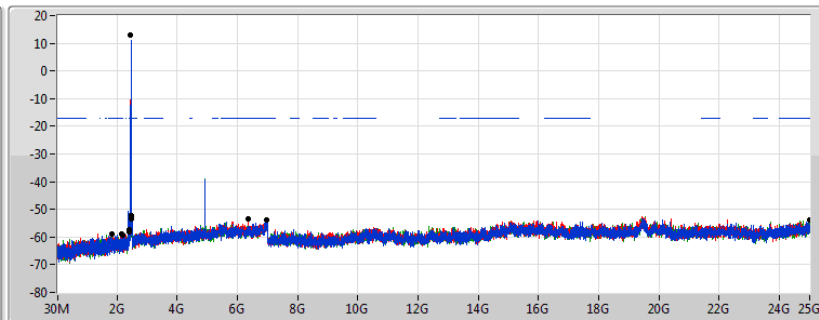
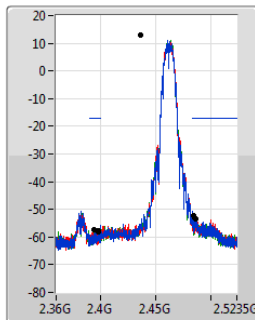
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_(1Mbps)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.435905G	12.00	-18.00	147.665M	-39.15	2.39904G	-32.35	2.49302G	-47.81	16.841031G	-44.05	1
2412MHz	Pass	2.435905G	12.00	-18.00	147.665M	-39.19	2.39904G	-33.45	2.4935G	-46.92	15.315438G	-44.33	2
2412MHz	Pass	2.435905G	12.00	-18.00	147.665M	-39.25	2.39904G	-33.42	2.49246G	-47.60	24.648805G	-44.74	3
2437MHz	Pass	2.435905G	12.00	-18.00	147.665M	-39.12	2.39992G	-50.46	2.50134G	-51.32	24.572947G	-43.91	1
2437MHz	Pass	2.435905G	12.00	-18.00	147.665M	-39.05	2.39752G	-51.94	2.4875G	-51.31	24.09813G	-44.83	2
2437MHz	Pass	2.435905G	12.00	-18.00	147.665M	-39.17	2.3968G	-52.63	2.49574G	-50.86	15.337915G	-44.49	3
2462MHz	Pass	2.435905G	12.00	-18.00	147.665M	-39.01	2.39984G	-54.63	2.48398G	-51.21	24.690948G	-44.78	1
2462MHz	Pass	2.435905G	12.00	-18.00	147.665M	-39.20	2.39968G	-53.94	2.48758G	-52.41	24.505517G	-45.40	2
2462MHz	Pass	2.435905G	12.00	-18.00	147.665M	-39.24	2.3964G	-53.44	2.4871G	-52.45	15.096292G	-44.93	3
802.11g_(6Mbps)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.441917G	10.64	-19.36	147.665M	-39.16	2.3992G	-31.53	2.49574G	-51.20	24.460564G	-44.53	1
2412MHz	Pass	2.441917G	10.64	-19.36	147.665M	-39.21	2.39824G	-30.97	2.48734G	-50.54	24.129036G	-44.36	2
2412MHz	Pass	2.441917G	10.64	-19.36	147.665M	-39.23	2.396G	-30.73	2.48822G	-51.26	24.688139G	-44.85	3
2437MHz	Pass	2.441917G	10.64	-19.36	147.665M	-39.16	2.39704G	-40.83	2.4907G	-47.31	16.228546G	-44.15	1
2437MHz	Pass	2.441917G	10.64	-19.36	147.665M	-38.94	2.39952G	-42.62	2.48454G	-48.23	15.335105G	-45.02	2
2437MHz	Pass	2.441917G	10.64	-19.36	147.665M	-38.92	2.39952G	-41.18	2.48598G	-48.81	24.202084G	-44.78	3
2462MHz	Pass	2.441917G	10.64	-19.36	147.665M	-39.40	2.39992G	-53.77	2.48382G	-51.63	24.452135G	-44.18	1
2462MHz	Pass	2.441917G	10.64	-19.36	147.665M	-39.38	2.39088G	-54.37	2.48382G	-52.28	24.48585G	-44.69	2
2462MHz	Pass	2.441917G	10.64	-19.36	147.665M	-39.19	2.39176G	-55.53	2.48358G	-48.78	24.435278G	-44.71	3
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.438243G	10.51	-19.49	147.665M	-39.30	2.39984G	-32.37	2.49358G	-51.17	24.54766G	-45.22	1
2412MHz	Pass	2.438243G	10.51	-19.49	147.665M	-39.30	2.39832G	-35.97	2.48734G	-51.75	24.539232G	-45.25	2
2412MHz	Pass	2.438243G	10.51	-19.49	147.665M	-39.24	2.39704G	-35.38	2.4939G	-52.24	24.435278G	-44.99	3
2437MHz	Pass	2.438243G	10.51	-19.49	147.665M	-39.35	2.39728G	-40.21	2.48406G	-45.11	24.002605G	-44.85	1
2437MHz	Pass	2.438243G	10.51	-19.49	147.665M	-39.06	2.39824G	-37.59	2.48406G	-46.06	15.312629G	-45.08	2
2437MHz	Pass	2.438243G	10.51	-19.49	147.665M	-39.06	2.39768G	-39.82	2.48454G	-45.46	15.349153G	-43.95	3
2462MHz	Pass	2.438243G	10.51	-19.49	147.665M	-39.27	2.39784G	-54.60	2.48358G	-46.30	24.443707G	-43.44	1
2462MHz	Pass	2.438243G	10.51	-19.49	147.665M	-39.29	2.39768G	-54.82	2.48414G	-47.16	24.643186G	-44.55	2
2462MHz	Pass	2.438243G	10.51	-19.49	147.665M	-38.88	2.39064G	-55.02	2.48358G	-43.54	24.123417G	-44.53	3
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.454442G	0.82	-29.18	146.79M	-38.82	2.39968G	-42.02	2.49854G	-53.11	24.562488G	-44.96	1
2422MHz	Pass	2.454442G	0.82	-29.18	146.79M	-39.15	2.39952G	-45.16	2.49726G	-51.97	15.31865G	-45.08	2
2422MHz	Pass	2.454442G	0.82	-29.18	146.79M	-39.16	2.396G	-45.01	2.49966G	-52.50	24.624189G	-44.49	3
2437MHz	Pass	2.454442G	0.82	-29.18	146.79M	-39.39	2.39984G	-47.92	2.48398G	-49.80	15.335478G	-45.07	1
2437MHz	Pass	2.454442G	0.82	-29.18	146.79M	-39.16	2.39952G	-46.70	2.48382G	-49.14	15.310237G	-45.12	2
2437MHz	Pass	2.454442G	0.82	-29.18	146.79M	-39.28	2.39904G	-49.54	2.48414G	-45.47	24.48957G	-44.89	3
2452MHz	Pass	2.454442G	0.82	-29.18	146.79M	-39.10	2.39616G	-55.14	2.48942G	-49.00	15.341087G	-44.08	1
2452MHz	Pass	2.454442G	0.82	-29.18	146.79M	-39.41	2.39168G	-55.36	2.48382G	-49.27	24.512006G	-44.66	2
2452MHz	Pass	2.454442G	0.82	-29.18	146.79M	-39.44	2.39632G	-55.95	2.48366G	-49.87	24.10254G	-44.58	3

802.11b_(1Mbps)_3TX
CSE NdB
2412MHz


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.436406G	13.03	-16.97	2.097875G	-58.42	2.39904G	-32.53	2.4915G	-48.48	7.235136G	-48.08	1
2.436406G	13.03	-16.97	1.986035G	-58.23	2.39904G	-34.51	2.49294G	-46.50	7.235136G	-48.71	2
2.436406G	13.03	-16.97	740.65M	-59.21	2.39904G	-31.64	2.4935G	-48.54	7.235136G	-48.98	3

802.11b_(1Mbps)_3TX
CSE NdB
2437MHz


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.436406G	13.03	-16.97	1.95691G	-58.41	2.39656G	-51.60	2.5019G	-50.88	6.940132G	-53.81	1
2.436406G	13.03	-16.97	1.930115G	-58.37	2.39616G	-52.95	2.4995G	-51.43	6.968228G	-53.45	2
2.436406G	13.03	-16.97	2.15962G	-59.15	2.39656G	-52.58	2.49822G	-51.81	6.973847G	-52.77	3

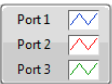
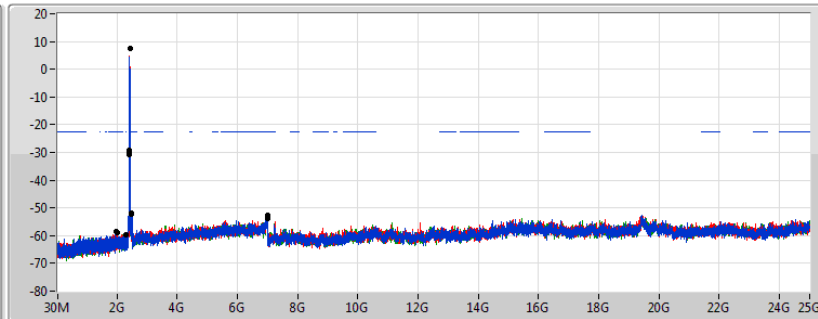
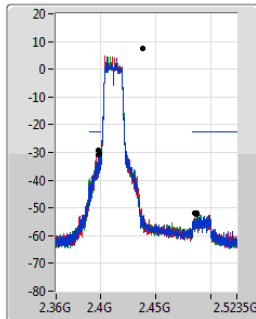
802.11b_(1Mbps)_3TX
CSE NdB
2462MHz


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.436406G	13.03	-16.97	2.18991G	-59.34	2.39856G	-57.61	2.48574G	-53.11	6.959799G	-53.84	1
2.436406G	13.03	-16.97	2.15496G	-59.10	2.39856G	-57.93	2.48646G	-53.27	6.369791G	-53.51	2
2.436406G	13.03	-16.97	1.832255G	-59.00	2.39392G	-57.49	2.48398G	-52.43	24.983143G	-53.65	3

802.11g_(6Mbps)_3TX

CSE NdB

2412MHz

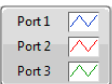
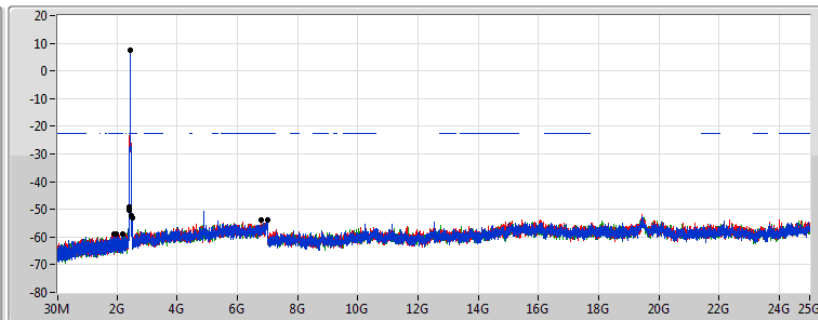
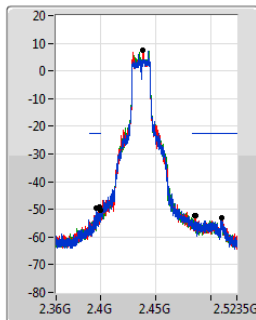


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.438243G	7.48	-22.52	2.30874G	-59.77	2.39952G	-30.20	2.48734G	-51.68	6.987895G	-53.64	1
2.438243G	7.48	-22.52	1.988365G	-58.76	2.39832G	-30.82	2.48734G	-52.31	6.993514G	-53.75	2
2.438243G	7.48	-22.52	1.979045G	-58.60	2.39824G	-29.08	2.48574G	-51.76	6.996324G	-52.83	3

802.11g_(6Mbps)_3TX

CSE NdB

2437MHz

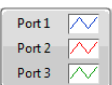
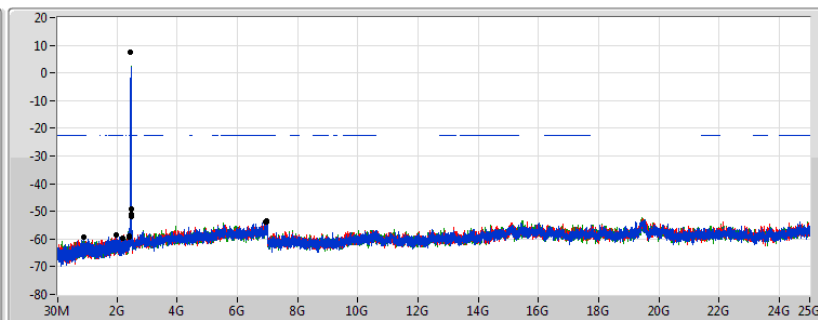
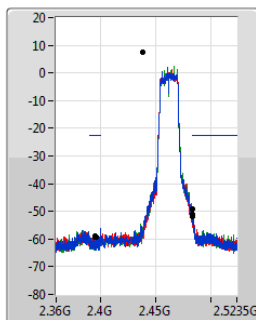


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.438243G	7.48	-22.52	1.904485G	-58.88	2.39896G	-49.22	2.5095G	-53.04	6.985085G	-53.84	1
2.438243G	7.48	-22.52	2.198065G	-58.98	2.39608G	-49.42	2.4851G	-52.30	6.990704G	-53.93	2
2.438243G	7.48	-22.52	1.96157G	-59.03	2.39984G	-50.32	2.4867G	-52.20	6.774368G	-54.02	3

802.11g_(6Mbps)_3TX

CSE NdB

2462MHz

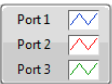
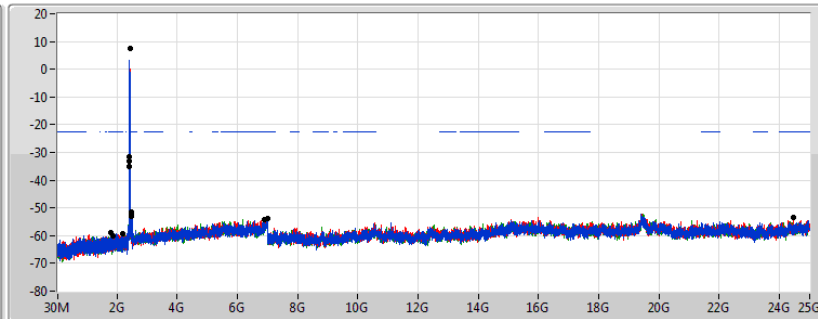
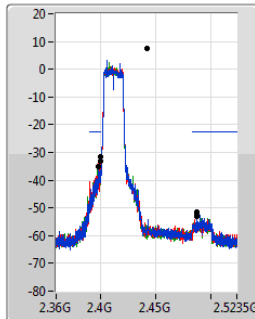


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.438243G	7.48	-22.52	901.42M	-59.31	2.39648G	-59.19	2.48374G	-51.26	6.962609G	-53.49	1
2.438243G	7.48	-22.52	1.98021G	-58.56	2.3948G	-59.06	2.48382G	-51.73	6.942942G	-53.64	2
2.438243G	7.48	-22.52	2.18525G	-59.71	2.39528G	-59.18	2.48358G	-49.18	6.968228G	-53.72	3

802.11ac VHT20_Nss1,(MCS0)_3TX

CSE NdB

2412MHz

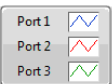
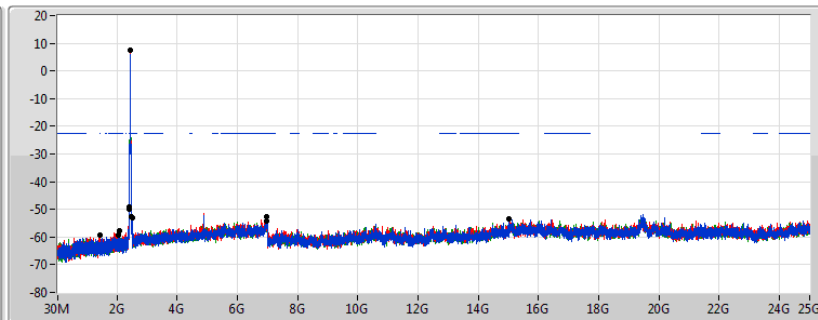
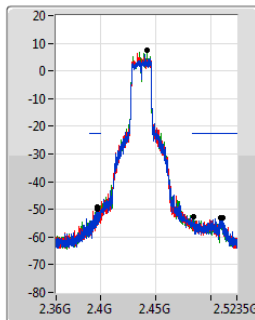


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.441917G	7.61	-22.39	2.170105G	-59.31	2.39856G	-35.02	2.48734G	-52.33	6.897989G	-54.31	1
2.441917G	7.61	-22.39	1.797305G	-58.73	2.39984G	-32.95	2.48734G	-51.40	24.466183G	-53.33	2
2.441917G	7.61	-22.39	1.87769G	-60.04	2.39984G	-31.72	2.48734G	-53.17	6.985085G	-54.02	3

802.11ac VHT20_Nss1,(MCS0)_3TX

CSE NdB

2437MHz

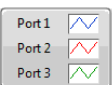
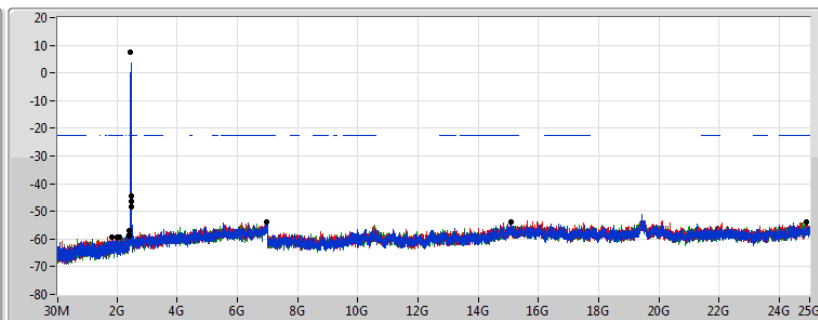
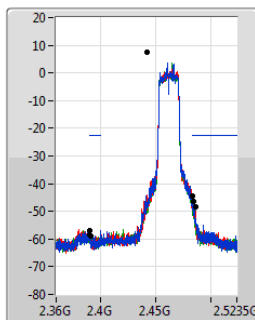


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.441917G	7.61	-22.39	2.05943G	-59.36	2.39728G	-49.12	2.5087G	-52.87	15.014815G	-53.51	1
2.441917G	7.61	-22.39	2.081565G	-57.82	2.39704G	-49.76	2.51078G	-53.17	6.973847G	-52.84	2
2.441917G	7.61	-22.39	1.43033G	-59.48	2.39704G	-49.39	2.48438G	-52.71	6.951371G	-54.29	3

802.11ac VHT20_Nss1,(MCS0)_3TX

CSE NdB

2462MHz

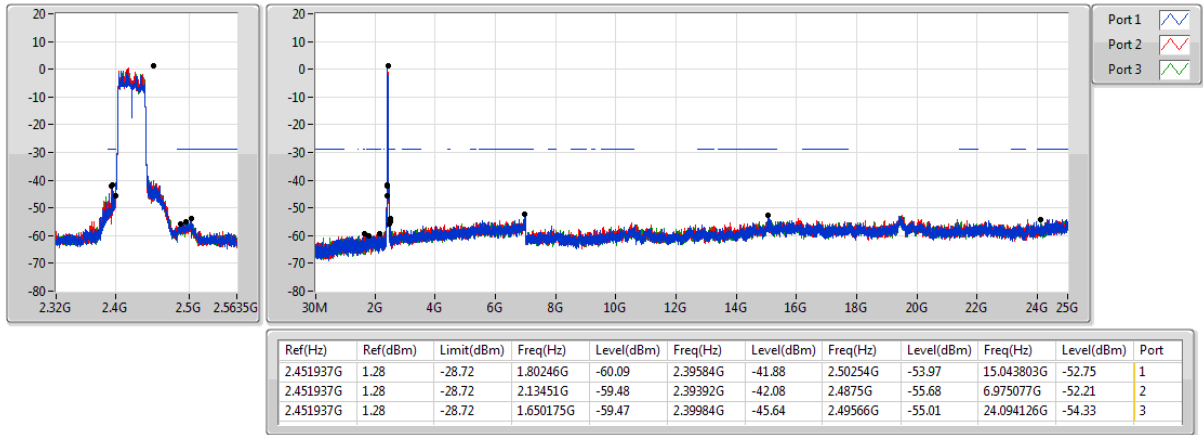


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.441917G	7.61	-22.39	1.995355G	-59.31	2.3904G	-58.56	2.4839G	-46.47	15.073816G	-53.95	1
2.441917G	7.61	-22.39	1.81012G	-59.17	2.39008G	-56.78	2.48382G	-44.45	24.898856G	-53.65	2
2.441917G	7.61	-22.39	2.06875G	-59.39	2.39088G	-58.81	2.48606G	-48.32	6.965418G	-53.73	3

802.11ac VHT40_Nss1,(MCS0)_3TX

CSE NdB

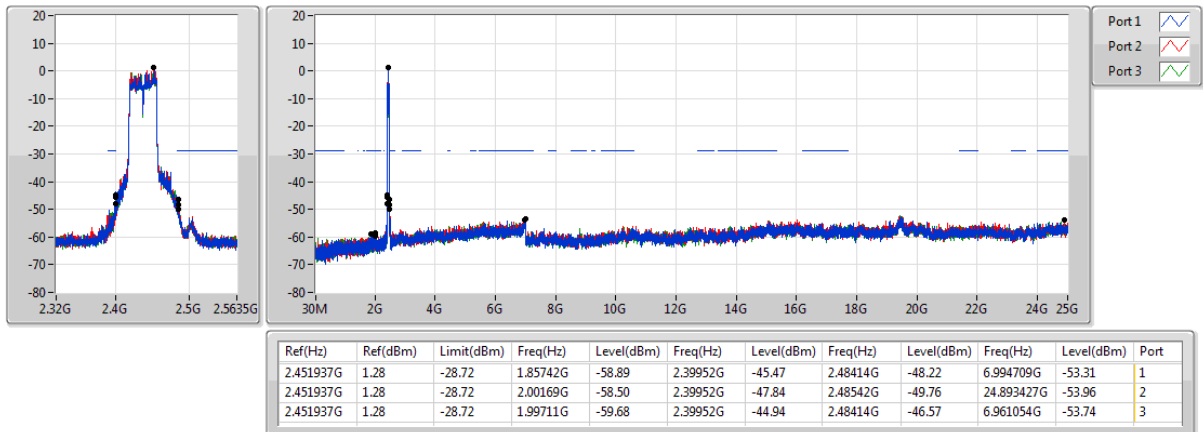
2422MHz



802.11ac VHT40_Nss1,(MCS0)_3TX

CSE NdB

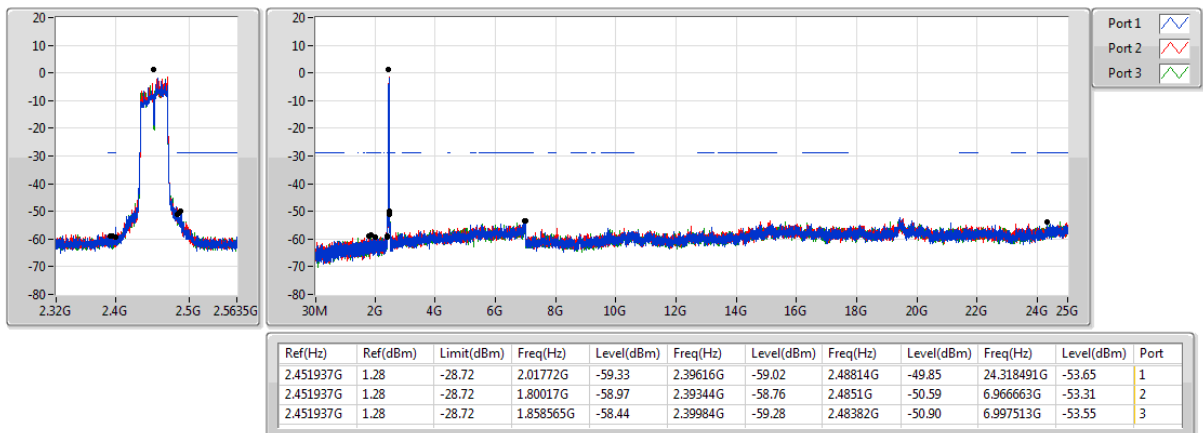
2437MHz



802.11ac VHT40_Nss1,(MCS0)_3TX

CSE NdB

2452MHz



**<Beamforming>
Summary**

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	2.446426G	3.69	-26.31	2.170005G	-54.97	2.39728G	-39.86	2.49006G	-52.63	15.09709G	-50.24	1

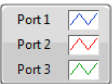
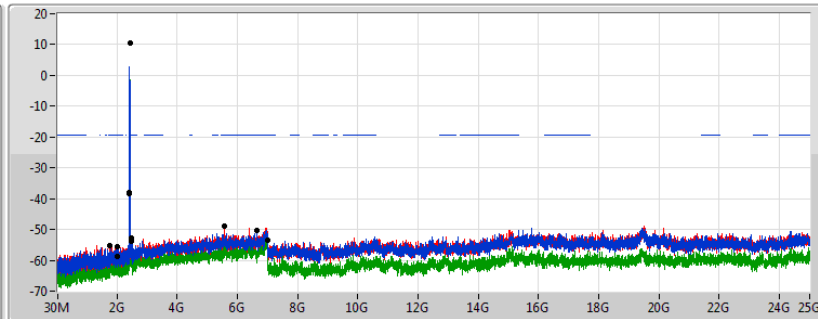
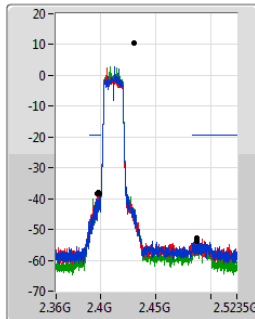
Result

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
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.430728G	10.47	-19.53	2.013995G	-55.72	2.39944G	-38.43	2.48726G	-53.02	6.63389G	-50.32	1
2412MHz	Pass	2.430728G	10.47	-19.53	1.739055G	-55.36	2.39864G	-37.92	2.48734G	-52.66	5.574685G	-48.95	2
2412MHz	Pass	2.430728G	10.47	-19.53	2.01982G	-58.91	2.3976G	-38.31	2.48734G	-53.87	6.985085G	-53.38	3
2437MHz	Pass	2.430728G	10.47	-19.53	2.160785G	-55.81	2.3996G	-44.05	2.48478G	-48.43	6.987895G	-49.41	1
2437MHz	Pass	2.430728G	10.47	-19.53	1.972055G	-54.41	2.39928G	-40.86	2.48686G	-48.43	6.982276G	-49.53	2
2437MHz	Pass	2.430728G	10.47	-19.53	1.969725G	-58.61	2.39984G	-38.16	2.48542G	-45.28	6.979466G	-52.51	3
2462MHz	Pass	2.430728G	10.47	-19.53	2.007005G	-55.54	2.39848G	-56.39	2.48422G	-50.51	24.876379G	-50.17	1
2462MHz	Pass	2.430728G	10.47	-19.53	1.755365G	-55.19	2.3968G	-55.82	2.48406G	-50.55	24.797712G	-49.62	2
2462MHz	Pass	2.430728G	10.47	-19.53	932.875M	-59.62	2.39072G	-57.28	2.48382G	-53.17	6.95418G	-53.24	3
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.446426G	3.69	-26.31	2.170005G	-54.97	2.39728G	-39.86	2.49006G	-52.63	15.09709G	-50.24	1
2422MHz	Pass	2.446426G	3.69	-26.31	2.13222G	-55.01	2.39696G	-42.42	2.4931G	-53.21	24.747589G	-49.85	2
2422MHz	Pass	2.446426G	3.69	-26.31	2.18031G	-59.37	2.39552G	-40.65	2.49022G	-54.00	6.467451G	-53.47	3
2437MHz	Pass	2.446426G	3.69	-26.31	1.96505G	-55.79	2.39968G	-42.35	2.48478G	-47.37	6.977881G	-49.98	1
2437MHz	Pass	2.446426G	3.69	-26.31	2.190615G	-55.13	2.39712G	-47.39	2.48382G	-49.71	6.963859G	-49.40	2
2437MHz	Pass	2.446426G	3.69	-26.31	1.76124G	-58.50	2.39984G	-52.87	2.48398G	-47.39	6.927399G	-52.86	3
2452MHz	Pass	2.446426G	3.69	-26.31	1.96963G	-55.92	2.39808G	-56.20	2.48526G	-47.61	5.171743G	-50.31	1
2452MHz	Pass	2.446426G	3.69	-26.31	2.30397G	-55.02	2.39712G	-55.88	2.48414G	-49.23	6.95264G	-49.78	2
2452MHz	Pass	2.446426G	3.69	-26.31	2.17802G	-59.02	2.39424G	-58.70	2.4867G	-49.95	6.972272G	-53.49	3

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

CSE NdB

2412MHz

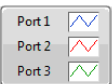
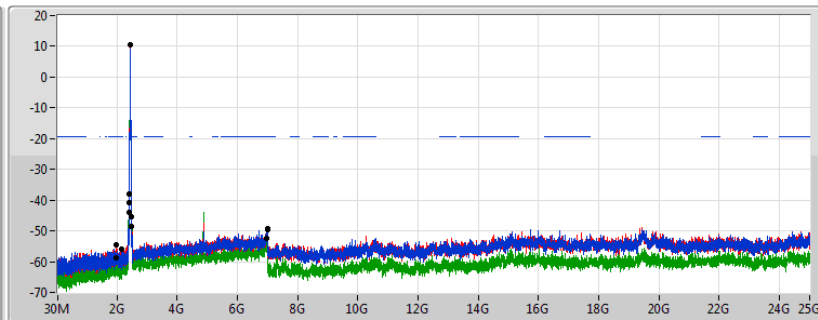
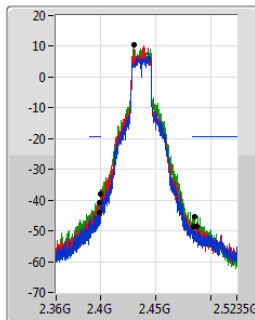


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.430728G	10.47	-19.53	2.013995G	-55.72	2.39944G	-38.43	2.48726G	-53.02	6.63389G	-50.32	1
2.430728G	10.47	-19.53	1.739055G	-55.36	2.39864G	-37.92	2.48734G	-52.66	5.574685G	-48.95	2
2.430728G	10.47	-19.53	2.01982G	-58.91	2.3976G	-38.31	2.48734G	-53.87	6.985085G	-53.38	3

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

CSE NdB

2437MHz

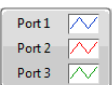
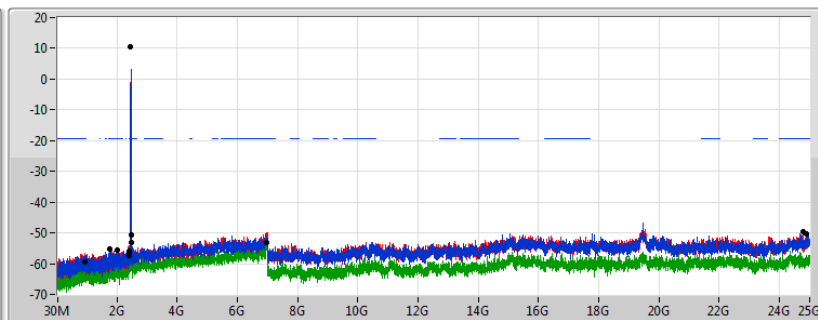
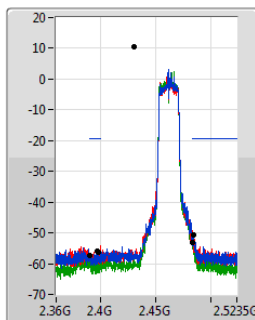


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.430728G	10.47	-19.53	2.160785G	-55.81	2.3996G	-44.05	2.48478G	-48.43	6.987895G	-49.41	1
2.430728G	10.47	-19.53	1.972055G	-54.41	2.39928G	-40.86	2.48686G	-48.43	6.982276G	-49.53	2
2.430728G	10.47	-19.53	1.969725G	-58.61	2.39984G	-38.16	2.48542G	-45.28	6.979466G	-52.51	3

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

CSE NdB

2462MHz

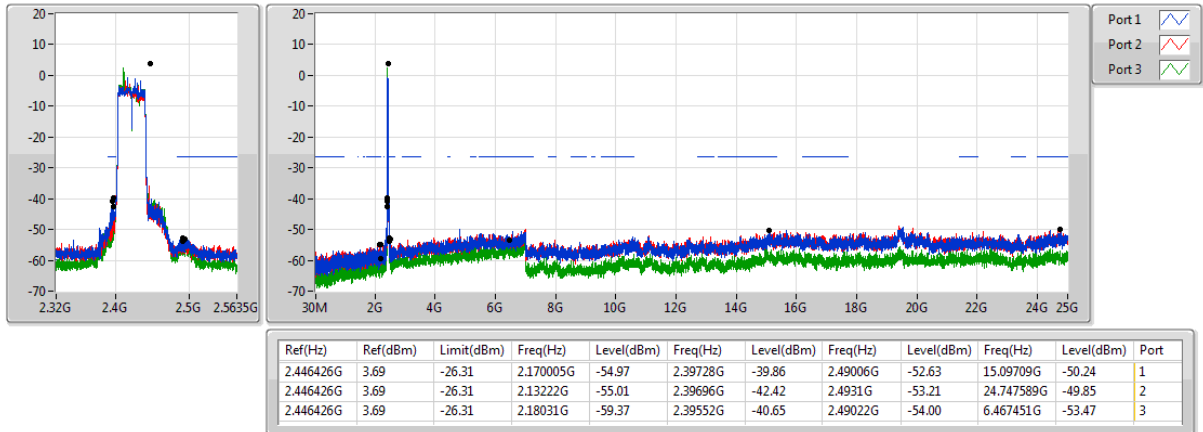


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.430728G	10.47	-19.53	2.007005G	-55.54	2.39848G	-56.39	2.48422G	-50.51	24.876379G	-50.17	1
2.430728G	10.47	-19.53	1.755365G	-55.19	2.3968G	-55.82	2.48406G	-50.55	24.797712G	-49.62	2
2.430728G	10.47	-19.53	932.875M	-59.62	2.39072G	-57.28	2.48382G	-53.17	6.95418G	-53.24	3

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

CSE NdB

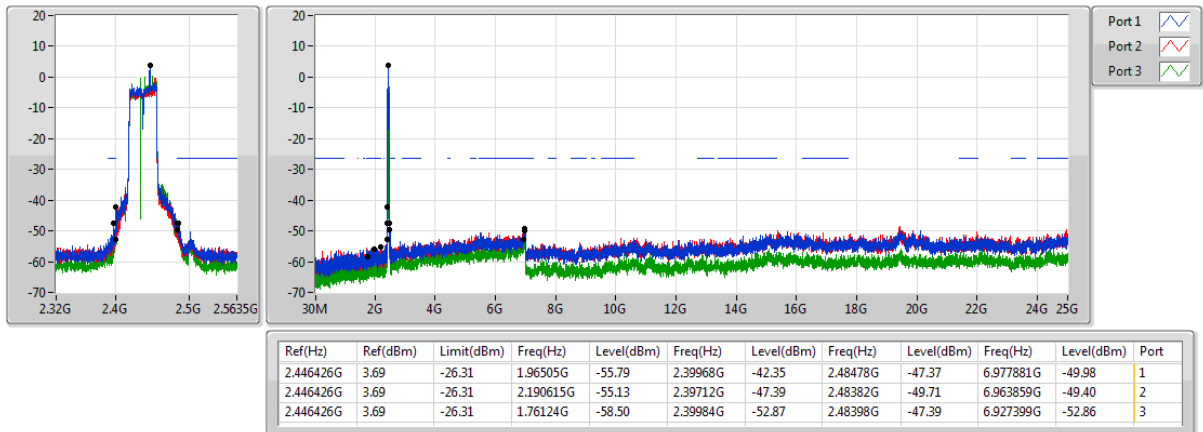
2422MHz



802.11ac VHT40-BF_Nss1,(MCS0)_3TX

CSE NdB

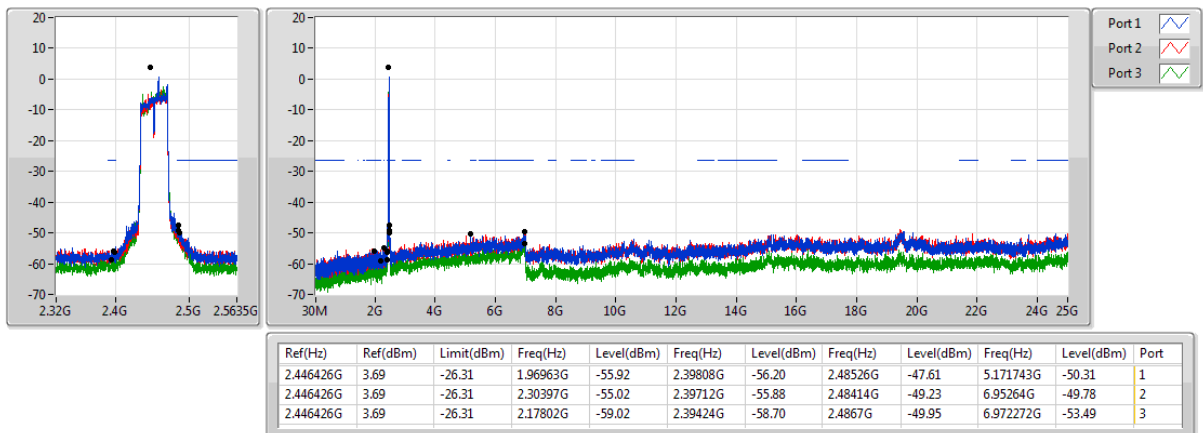
2437MHz



802.11ac VHT40-BF_Nss1,(MCS0)_3TX

CSE NdB

2452MHz



3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

Restricted Band Emissions Limit			
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

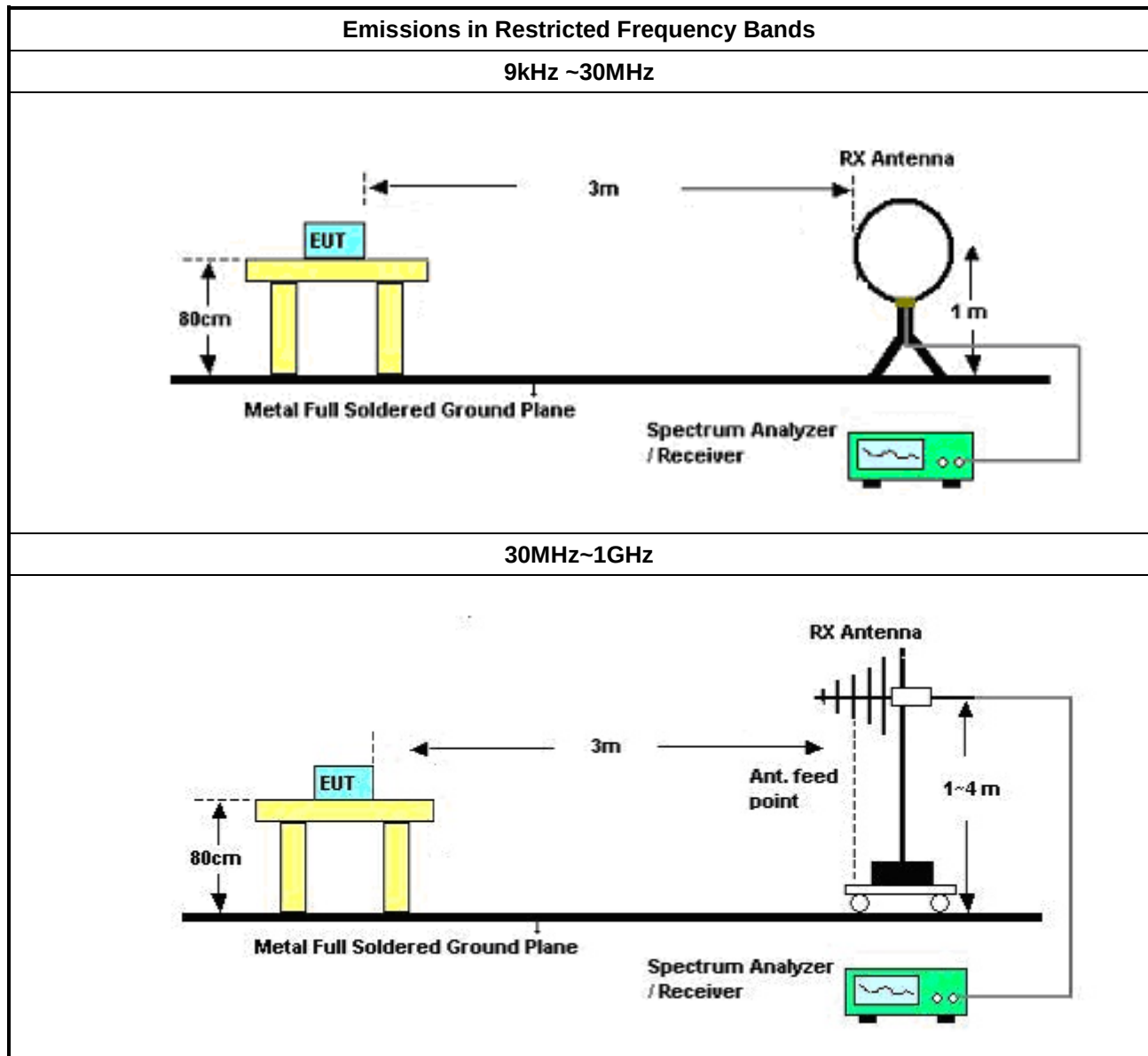
3.6.2 Measuring Instruments

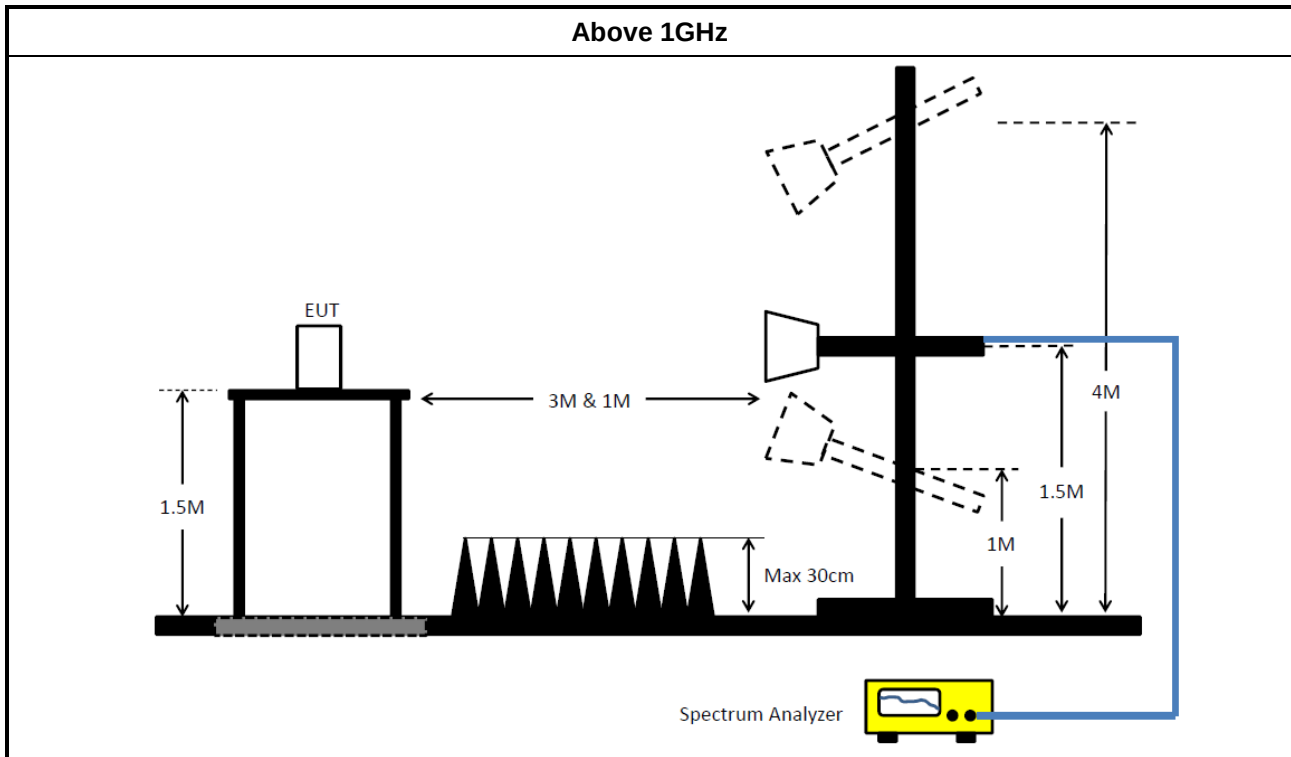
Refer a test equipment and calibration data table in this test report.

3.6.3 Test Procedures

Test Method	
The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].	
Refer as ANSI C63.10, clause 6.10.3 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 KDB 558074, clause 12 for unwanted emissions into restricted bands.
	☒ Refer as KDB 558074, clause 12.2.5.3 (ANSI C63.10, clause 4.1.4.2.3), Reduced VBW $\geq 1/T$.
	☒ Refer as 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 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 KDB 558074, clause 13.2 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.
	Refer as 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 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 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 Test Result of Emissions in Restricted Frequency Bands (Below 30MHz)

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported. 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 Emissions in Restricted Frequency Bands

<Non-Beamforming - Below 1GHz>

Summary

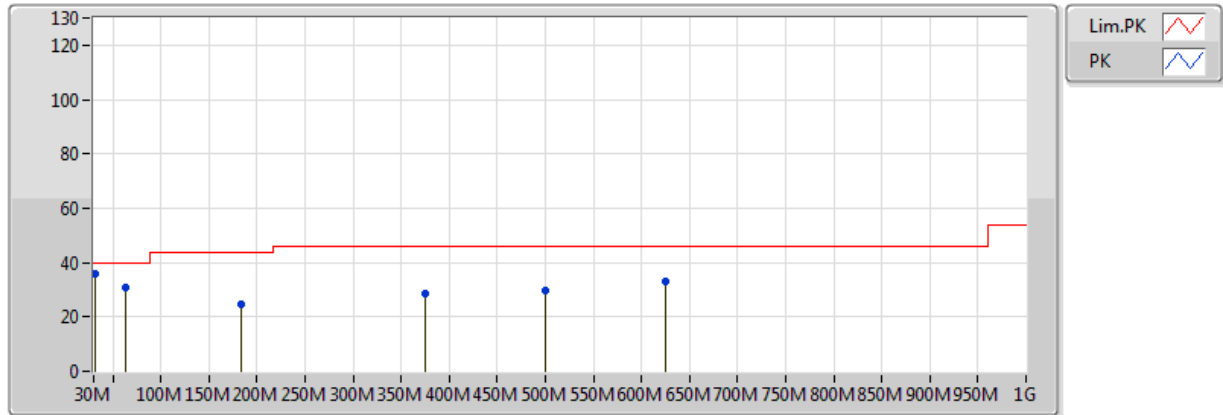
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	PK	31.94M	35.89	40.00	-4.11	-5.20	3	V	360	1.00	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-
2437MHz	Pass	PK	31.94M	32.36	40.00	-7.64	-5.20	3	H	0	1.00	-
2437MHz	Pass	PK	62.98M	22.77	40.00	-17.23	-15.22	3	H	0	1.00	-
2437MHz	Pass	PK	243.4M	26.30	46.00	-19.70	-8.18	3	H	0	1.00	-
2437MHz	Pass	PK	375.32M	34.04	46.00	-11.96	-4.67	3	H	0	1.00	-
2437MHz	Pass	PK	499.48M	31.45	46.00	-14.55	-2.52	3	H	0	1.00	-
2437MHz	Pass	PK	625.58M	34.01	46.00	-11.99	-0.91	3	H	0	1.00	-
2437MHz	Pass	PK	31.94M	35.89	40.00	-4.11	-5.20	3	V	360	1.00	-
2437MHz	Pass	PK	62.98M	30.61	40.00	-9.39	-15.22	3	V	360	1.00	-
2437MHz	Pass	PK	183.26M	24.85	43.50	-18.65	-11.25	3	V	360	1.00	-
2437MHz	Pass	PK	375.32M	28.82	46.00	-17.18	-4.67	3	V	360	1.00	-
2437MHz	Pass	PK	499.48M	29.58	46.00	-16.42	-2.52	3	V	360	1.00	-
2437MHz	Pass	PK	625.58M	32.79	46.00	-13.21	-0.91	3	V	360	1.00	-

802.11ac VHT40_Nss1,(MCS0)_3TX

2437MHz_Adapter

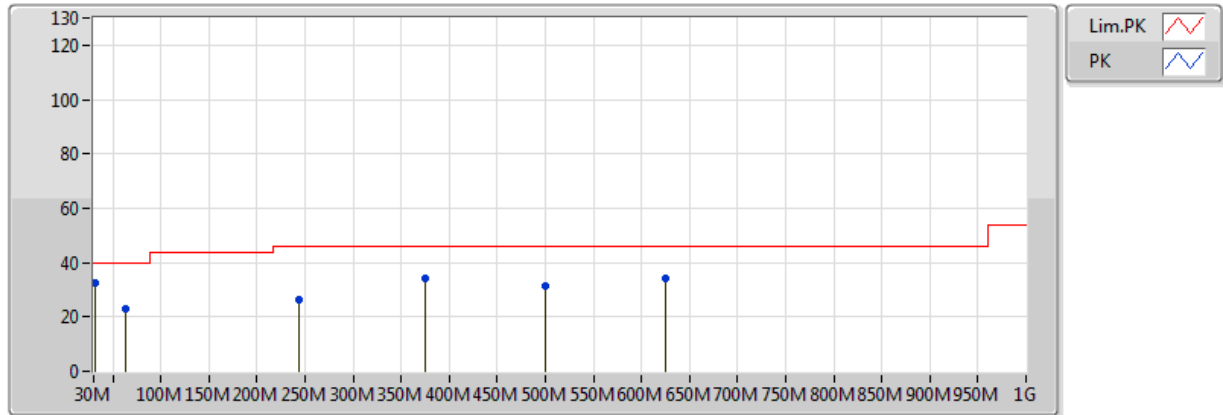


EUT = Z axis + Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
PK	31.94M	35.89	40.00	-4.11	-5.20	3	V	360	1.00	-
PK	62.98M	30.61	40.00	-9.39	-15.22	3	V	360	1.00	-
PK	183.26M	24.85	43.50	-18.65	-11.25	3	V	360	1.00	-
PK	375.32M	28.82	46.00	-17.18	-4.67	3	V	360	1.00	-
PK	499.48M	29.58	46.00	-16.42	-2.52	3	V	360	1.00	-
PK	625.58M	32.79	46.00	-13.21	-0.91	3	V	360	1.00	-

802.11ac VHT40_Nss1,(MCS0)_3TX

2437MHz_Adapter



EUT = Z axis , Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
PK	31.94M	32.36	40.00	-7.64	-5.20	3	H	0	1.00	-
PK	62.98M	22.77	40.00	-17.23	-15.22	3	H	0	1.00	-
PK	243.4M	26.30	46.00	-19.70	-8.18	3	H	0	1.00	-
PK	375.32M	34.04	46.00	-11.96	-4.67	3	H	0	1.00	-
PK	499.48M	31.45	46.00	-14.55	-2.52	3	H	0	1.00	-
PK	625.58M	34.01	46.00	-11.99	-0.91	3	H	0	1.00	-

**<Non-Beamforming - Above 1GHz>
Summary**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	AV	2.485G	53.85	54.00	-0.15	31.53	3	V	17	2.14	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
802.11b_(1Mbps)_3TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	4.824G	34.94	54.00	-19.06	2.48	3	H	0	1.50	-
2412MHz	Pass	PK	4.824G	45.72	74.00	-28.28	2.48	3	H	0	1.50	-
2412MHz	Pass	AV	2.3898G	53.32	54.00	-0.68	31.17	3	V	349	2.34	-
2412MHz	Pass	AV	2.411G	114.03	Inf	-Inf	31.25	3	V	349	2.34	-
2412MHz	Pass	AV	4.824G	38.15	54.00	-15.85	2.48	3	V	201	2.20	-
2412MHz	Pass	PK	2.3896G	61.31	74.00	-12.69	31.17	3	V	349	2.34	-
2412MHz	Pass	PK	2.412G	118.22	Inf	-Inf	31.26	3	V	349	2.34	-
2412MHz	Pass	PK	4.824G	47.42	74.00	-26.58	2.48	3	V	201	2.20	-
2437MHz	Pass	AV	7.311G	41.95	54.00	-12.05	8.42	3	H	178	1.50	-
2437MHz	Pass	PK	7.311G	52.58	74.00	-21.42	8.42	3	H	178	1.50	-
2437MHz	Pass	AV	2.389G	47.27	54.00	-6.73	31.17	3	V	59	2.38	-
2437MHz	Pass	AV	2.4362G	114.05	Inf	-Inf	31.35	3	V	59	2.38	-
2437MHz	Pass	AV	2.4966G	49.40	54.00	-4.60	31.58	3	V	59	2.38	-
2437MHz	Pass	AV	7.311G	47.90	54.00	-6.10	8.42	3	V	216	1.01	-
2437MHz	Pass	PK	2.3882G	58.26	74.00	-15.74	31.16	3	V	59	2.38	-
2437MHz	Pass	PK	2.437G	118.20	Inf	-Inf	31.35	3	V	59	2.38	-
2437MHz	Pass	PK	2.497G	60.10	74.00	-13.90	31.58	3	V	59	2.38	-
2437MHz	Pass	PK	7.311G	54.89	74.00	-19.11	8.42	3	V	216	1.01	-
2462MHz	Pass	AV	7.386G	42.92	54.00	-11.08	8.51	3	H	169	1.16	-
2462MHz	Pass	PK	7.386G	47.88	74.00	-26.12	8.51	3	H	169	1.16	-
2462MHz	Pass	AV	2.463G	114.42	Inf	-Inf	31.45	3	V	49	2.60	-
2462MHz	Pass	AV	2.483502G	53.37	54.00	-0.63	31.53	3	V	49	2.60	-
2462MHz	Pass	AV	7.386G	45.20	54.00	-8.80	8.51	3	V	149	1.04	-
2462MHz	Pass	PK	2.462G	118.63	Inf	-Inf	31.45	3	V	49	2.60	-
2462MHz	Pass	PK	2.4838G	61.47	74.00	-12.53	31.53	3	V	49	2.60	-
2462MHz	Pass	PK	7.386G	53.94	74.00	-20.06	8.51	3	V	149	1.04	-
802.11g_(6Mbps)_3TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	4.824G	33.41	54.00	-20.59	2.48	3	H	0	1.50	-
2412MHz	Pass	PK	4.824G	45.72	74.00	-28.28	2.48	3	H	0	1.50	-
2412MHz	Pass	AV	2.3898G	53.72	54.00	-0.28	31.17	3	V	333	2.16	-
2412MHz	Pass	AV	2.4142G	108.88	Inf	-Inf	31.26	3	V	333	2.16	-
2412MHz	Pass	AV	4.824G	33.50	54.00	-20.50	2.48	3	V	360	1.50	-
2412MHz	Pass	PK	2.3894G	71.08	74.00	-2.92	31.17	3	V	333	2.16	-
2412MHz	Pass	PK	2.4142G	116.84	Inf	-Inf	31.26	3	V	333	2.16	-
2412MHz	Pass	PK	4.824G	44.99	74.00	-29.01	2.48	3	V	360	1.50	-
2437MHz	Pass	AV	7.311G	41.31	54.00	-12.69	8.42	3	H	209	1.05	-
2437MHz	Pass	PK	7.311G	54.55	74.00	-19.45	8.42	3	H	209	1.05	-
2437MHz	Pass	AV	2.389998G	51.11	54.00	-2.89	31.17	3	V	22	2.59	-
2437MHz	Pass	AV	2.4418G	112.95	Inf	-Inf	31.37	3	V	22	2.59	-
2437MHz	Pass	AV	2.483502G	52.45	54.00	-1.55	31.53	3	V	22	2.59	-



FCC Test Report

Report No. : FR750813AC

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
2437MHz	Pass	AV	7.311G	44.49	54.00	-9.51	8.42	3	V	214	1.00	-
2437MHz	Pass	PK	2.381G	64.44	74.00	-9.56	31.14	3	V	22	2.59	-
2437MHz	Pass	PK	2.4418G	120.98	Inf	-Inf	31.37	3	V	22	2.59	-
2437MHz	Pass	PK	2.4914G	65.60	74.00	-8.40	31.56	3	V	22	2.59	-
2437MHz	Pass	PK	7.311G	56.84	74.00	-17.16	8.42	3	V	214	1.00	-
2462MHz	Pass	AV	4.924G	33.27	54.00	-20.73	2.63	3	H	0	1.50	-
2462MHz	Pass	PK	4.924G	44.95	74.00	-29.05	2.63	3	H	0	1.50	-
2462MHz	Pass	AV	2.4628G	107.47	Inf	-Inf	31.45	3	V	343	2.59	-
2462MHz	Pass	AV	2.483502G	53.72	54.00	-0.28	31.53	3	V	343	2.59	-
2462MHz	Pass	AV	4.924G	33.39	54.00	-20.61	2.63	3	V	360	1.50	-
2462MHz	Pass	PK	2.4622G	114.18	Inf	-Inf	31.45	3	V	343	2.59	-
2462MHz	Pass	PK	2.483502G	69.57	74.00	-4.43	31.53	3	V	343	2.59	-
2462MHz	Pass	PK	4.924G	44.85	74.00	-29.15	2.63	3	V	360	1.50	-
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	4.824G	33.82	54.00	-20.18	2.48	3	H	0	1.50	-
2412MHz	Pass	PK	4.824G	45.40	74.00	-28.60	2.48	3	H	0	1.50	-
2412MHz	Pass	AV	2.39G	53.84	54.00	-0.16	31.17	3	V	28	2.16	-
2412MHz	Pass	AV	2.4104G	105.58	Inf	-Inf	31.25	3	V	28	2.16	-
2412MHz	Pass	AV	4.824G	33.83	54.00	-20.17	2.48	3	V	360	1.50	-
2412MHz	Pass	PK	2.39G	71.87	74.00	-2.13	31.17	3	V	28	2.16	-
2412MHz	Pass	PK	2.41G	113.64	Inf	-Inf	31.25	3	V	28	2.16	-
2412MHz	Pass	PK	4.824G	46.00	74.00	-28.00	2.48	3	V	360	1.50	-
2437MHz	Pass	AV	7.311G	40.89	54.00	-13.11	8.42	3	H	178	2.78	-
2437MHz	Pass	PK	7.311G	52.62	74.00	-21.38	8.42	3	H	178	2.78	-
2437MHz	Pass	AV	2.389G	53.65	54.00	-0.35	31.17	3	V	22	2.54	-
2437MHz	Pass	AV	2.4454G	112.02	Inf	-Inf	31.38	3	V	22	2.54	-
2437MHz	Pass	AV	2.483502G	53.68	54.00	-0.32	31.53	3	V	22	2.54	-
2437MHz	Pass	AV	7.311G	44.87	54.00	-9.13	8.42	3	V	214	1.00	-
2437MHz	Pass	PK	2.3886G	66.89	74.00	-7.11	31.17	3	V	22	2.54	-
2437MHz	Pass	PK	2.441G	119.67	Inf	-Inf	31.37	3	V	22	2.54	-
2437MHz	Pass	PK	2.485G	70.79	74.00	-3.21	31.53	3	V	22	2.54	-
2437MHz	Pass	PK	7.311G	56.25	74.00	-17.75	8.42	3	V	214	1.00	-
2462MHz	Pass	AV	4.924G	33.58	54.00	-20.42	2.63	3	H	360	1.50	-
2462MHz	Pass	PK	4.924G	45.54	74.00	-28.46	2.63	3	H	360	1.50	-
2462MHz	Pass	AV	2.4606G	105.64	Inf	-Inf	31.44	3	V	22	2.33	-
2462MHz	Pass	AV	2.485G	53.67	54.00	-0.33	31.53	3	V	22	2.33	-
2462MHz	Pass	AV	4.924G	33.50	54.00	-20.50	2.63	3	V	0	1.50	-
2462MHz	Pass	PK	2.4606G	113.36	Inf	-Inf	31.44	3	V	22	2.33	-
2462MHz	Pass	PK	2.4836G	70.39	74.00	-3.61	31.53	3	V	22	2.33	-
2462MHz	Pass	PK	4.924G	45.40	74.00	-28.60	2.63	3	V	0	1.50	-
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	AV	4.844G	33.55	54.00	-20.45	2.51	3	H	360	1.50	-
2422MHz	Pass	PK	4.844G	45.55	74.00	-28.45	2.51	3	H	360	1.50	-
2422MHz	Pass	AV	2.39G	53.81	54.00	-0.19	31.17	3	V	27	2.16	-
2422MHz	Pass	AV	2.4156G	102.80	Inf	-Inf	31.27	3	V	27	2.16	-
2422MHz	Pass	AV	2.4956G	49.41	54.00	-4.59	31.57	3	V	27	2.16	-
2422MHz	Pass	AV	4.844G	33.59	54.00	-20.41	2.51	3	V	0	1.50	-
2422MHz	Pass	PK	2.3852G	69.35	74.00	-4.65	31.15	3	V	27	2.16	-



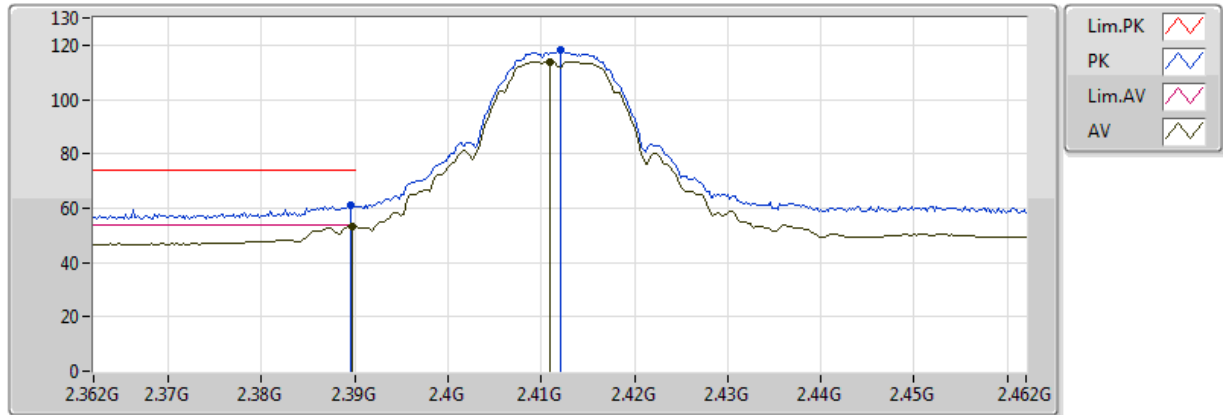
FCC Test Report

Report No. : FR750813AC

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
2422MHz	Pass	PK	2.4256G	109.34	Inf	-Inf	31.31	3	V	27	2.16	-
2422MHz	Pass	PK	2.496G	58.97	74.00	-15.03	31.57	3	V	27	2.16	-
2422MHz	Pass	PK	4.844G	44.88	74.00	-29.12	2.51	3	V	0	1.50	-
2437MHz	Pass	AV	4.874G	33.27	54.00	-20.73	2.55	3	H	0	1.50	-
2437MHz	Pass	PK	4.874G	45.66	74.00	-28.34	2.55	3	H	0	1.50	-
2437MHz	Pass	AV	2.389998G	47.49	54.00	-6.51	31.17	3	V	17	2.14	-
2437MHz	Pass	AV	2.4506G	103.17	Inf	-Inf	31.40	3	V	17	2.14	-
2437MHz	Pass	AV	2.485G	53.85	54.00	-0.15	31.53	3	V	17	2.14	-
2437MHz	Pass	AV	4.874G	33.27	54.00	-20.73	2.55	3	V	360	1.50	-
2437MHz	Pass	PK	2.3882G	63.12	74.00	-10.88	31.16	3	V	17	2.14	-
2437MHz	Pass	PK	2.4502G	110.92	Inf	-Inf	31.40	3	V	17	2.14	-
2437MHz	Pass	PK	2.4854G	71.58	74.00	-2.42	31.53	3	V	17	2.14	-
2437MHz	Pass	PK	4.874G	45.17	74.00	-28.83	2.55	3	V	360	1.50	-
2452MHz	Pass	AV	4.904G	33.24	54.00	-20.76	2.60	3	H	360	1.50	-
2452MHz	Pass	PK	4.904G	46.23	74.00	-27.77	2.60	3	H	360	1.50	-
2452MHz	Pass	AV	2.386G	46.62	54.00	-7.38	31.16	3	V	17	1.81	-
2452MHz	Pass	AV	2.4656G	100.73	Inf	-Inf	31.46	3	V	17	1.81	-
2452MHz	Pass	AV	2.4852G	53.68	54.00	-0.32	31.53	3	V	17	1.81	-
2452MHz	Pass	AV	4.904G	33.21	54.00	-20.79	2.60	3	V	0	1.50	-
2452MHz	Pass	PK	2.3884G	58.37	74.00	-15.63	31.16	3	V	17	1.81	-
2452MHz	Pass	PK	2.4656G	109.46	Inf	-Inf	31.46	3	V	17	1.81	-
2452MHz	Pass	PK	2.4848G	67.55	74.00	-6.45	31.53	3	V	17	1.81	-
2452MHz	Pass	PK	4.904G	45.35	74.00	-28.65	2.60	3	V	0	1.50	-

802.11b_(1Mbps)_3TX

2412MHz_TX

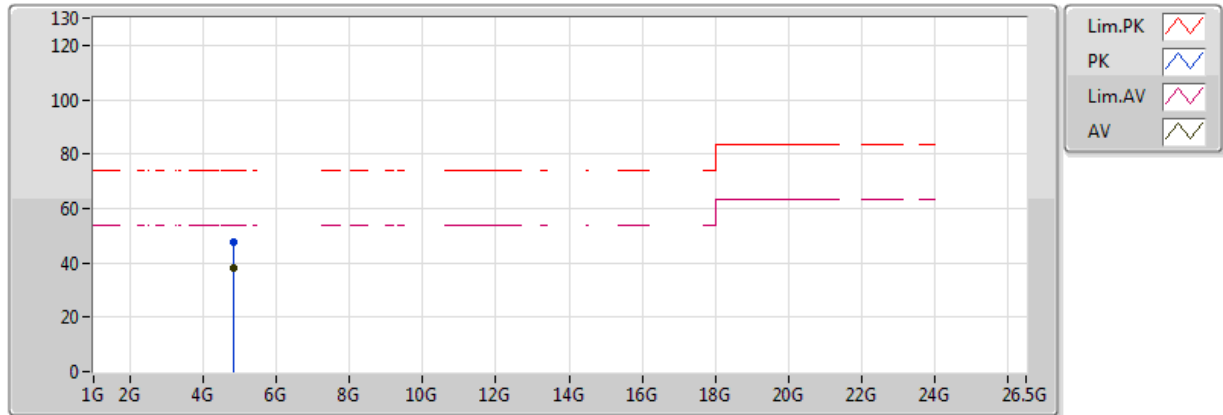


EUT = Z axis + Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.411G	114.03	Inf	-Inf	31.25	3	V	349	2.34	-
AV	2.3898G	53.32	54.00	-0.68	31.17	3	V	349	2.34	-
PK	2.412G	118.22	Inf	-Inf	31.26	3	V	349	2.34	-
PK	2.3896G	61.31	74.00	-12.69	31.17	3	V	349	2.34	-

802.11b_(1Mbps)_3TX

2412MHz_TX

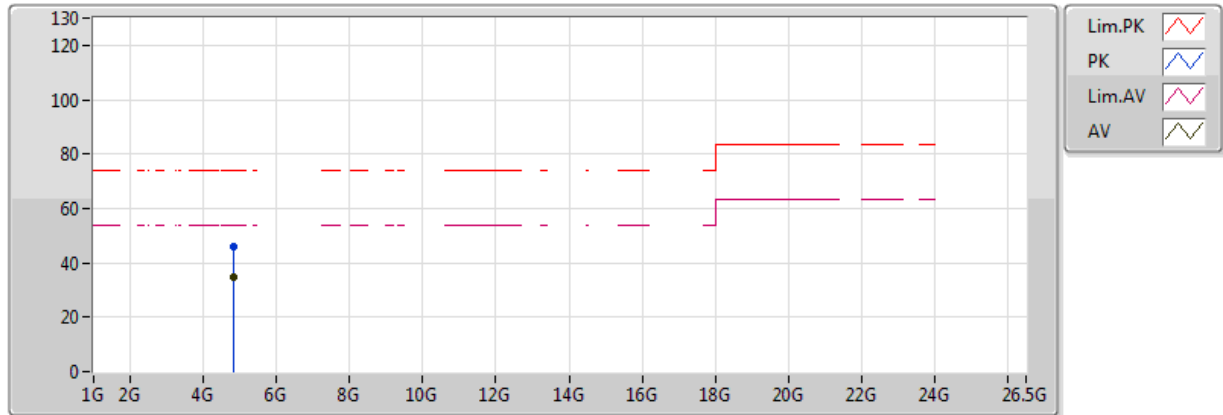


EUT = Z axis · Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.824G	38.15	54.00	-15.85	2.48	3	V	201	2.20	-
PK	4.824G	47.42	74.00	-26.58	2.48	3	V	201	2.20	-

802.11b_(1Mbps)_3TX

2412MHz_TX

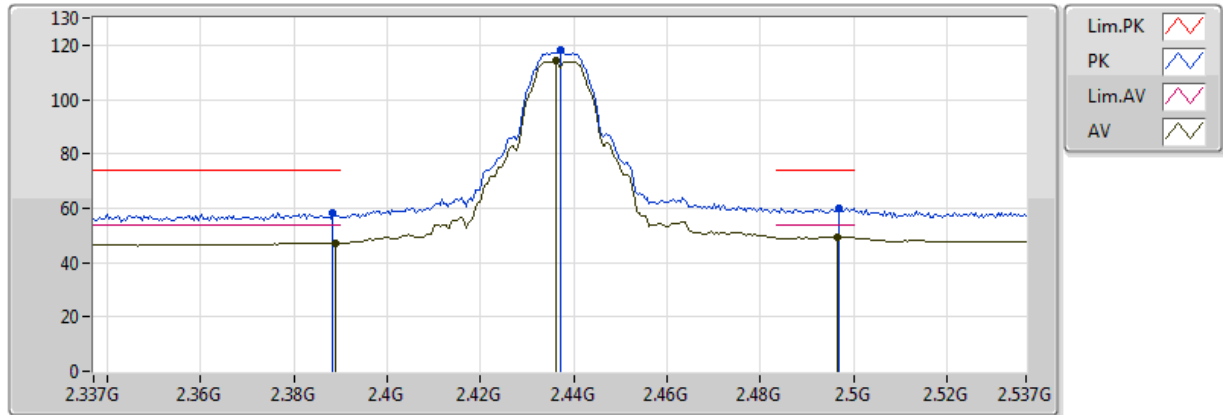


EUT = Z axis · Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.824G	34.94	54.00	-19.06	2.48	3	H	0	1.50	-
PK	4.824G	45.72	74.00	-28.28	2.48	3	H	0	1.50	-

802.11b_(1Mbps)_3TX

2437MHz_TX

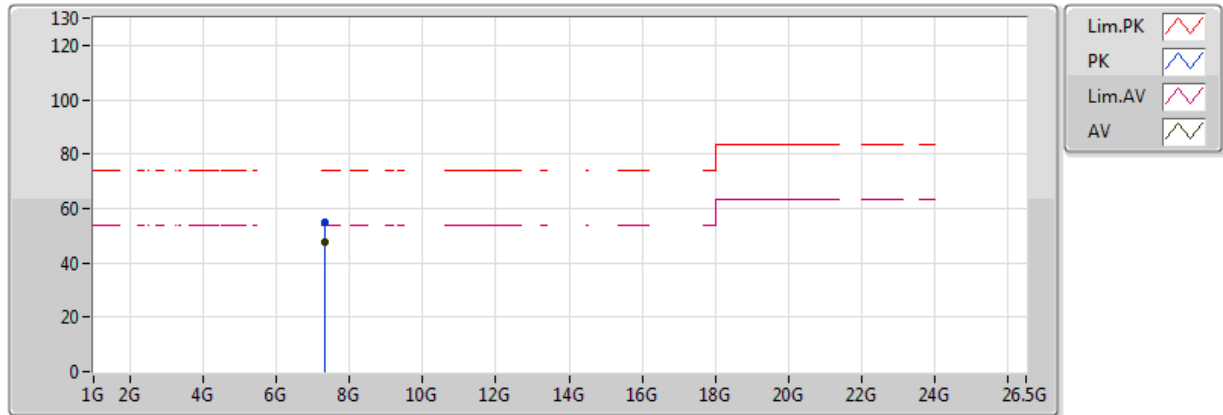


EUT = Z axis + Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.389G	47.27	54.00	-6.73	31.17	3	V	59	2.38	-
AV	2.4362G	114.05	Inf	-Inf	31.35	3	V	59	2.38	-
AV	2.4966G	49.40	54.00	-4.60	31.58	3	V	59	2.38	-
PK	2.3882G	58.26	74.00	-15.74	31.16	3	V	59	2.38	-
PK	2.437G	118.20	Inf	-Inf	31.35	3	V	59	2.38	-
PK	2.497G	60.10	74.00	-13.90	31.58	3	V	59	2.38	-

802.11b_(1Mbps)_3TX

2437MHz_TX

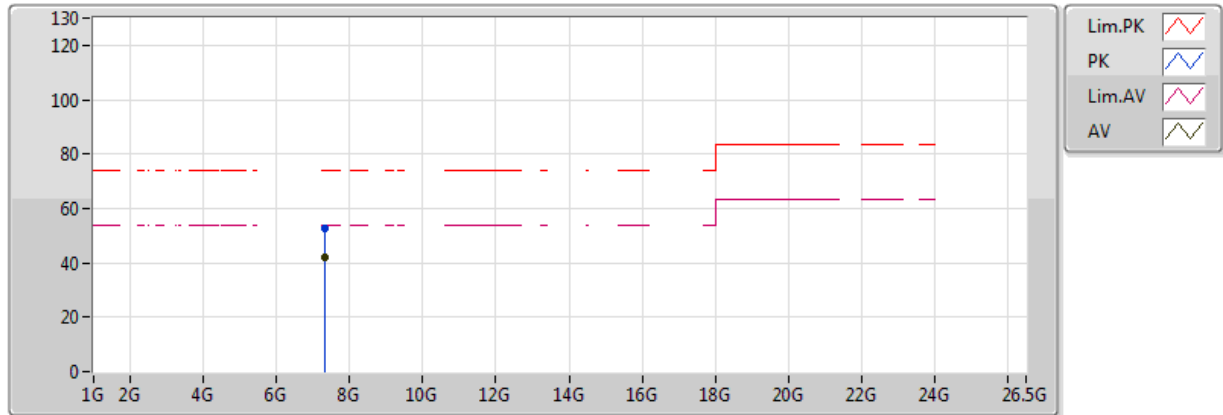


EUT = Z axis · Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.311G	47.90	54.00	-6.10	8.42	3	V	216	1.01	-
PK	7.311G	54.89	74.00	-19.11	8.42	3	V	216	1.01	-

802.11b_(1Mbps)_3TX

2437MHz_TX

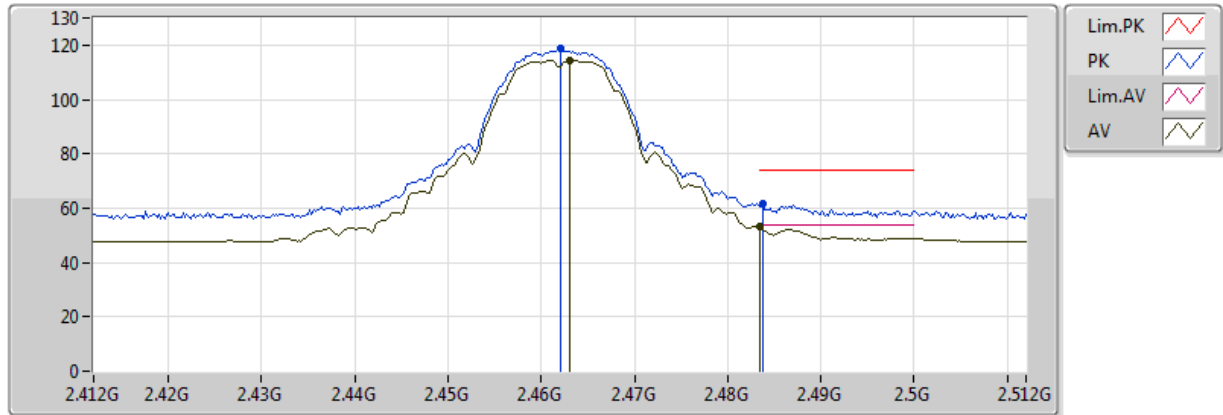


EUT = Z axis · Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.311G	41.95	54.00	-12.05	8.42	3	H	178	1.50	-
PK	7.311G	52.58	74.00	-21.42	8.42	3	H	178	1.50	-

802.11b_(1Mbps)_3TX

2462MHz_TX

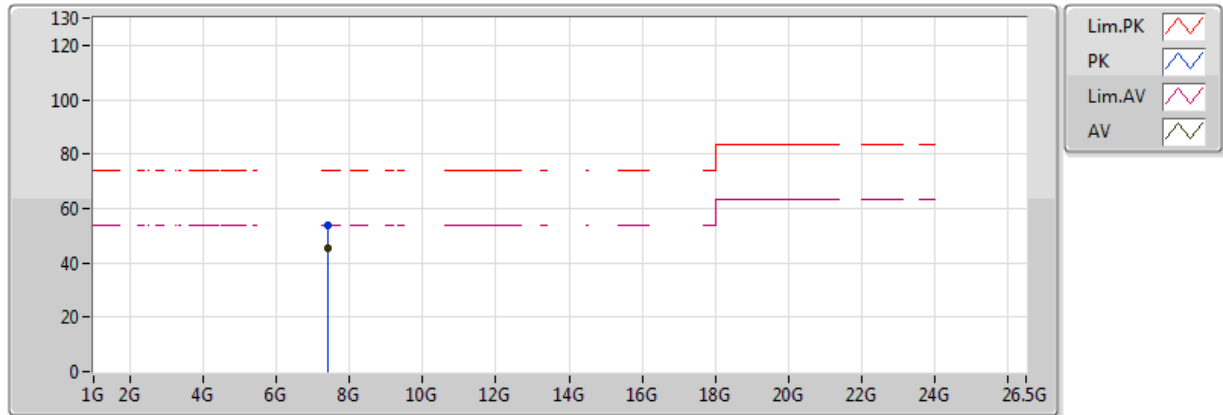


EUT = Z axis + Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.463G	114.42	Inf	-Inf	31.45	3	V	49	2.60	-
AV	2.483502G	53.37	54.00	-0.63	31.53	3	V	49	2.60	-
PK	2.462G	118.63	Inf	-Inf	31.45	3	V	49	2.60	-
PK	2.4838G	61.47	74.00	-12.53	31.53	3	V	49	2.60	-

802.11b_(1Mbps)_3TX

2462MHz_TX

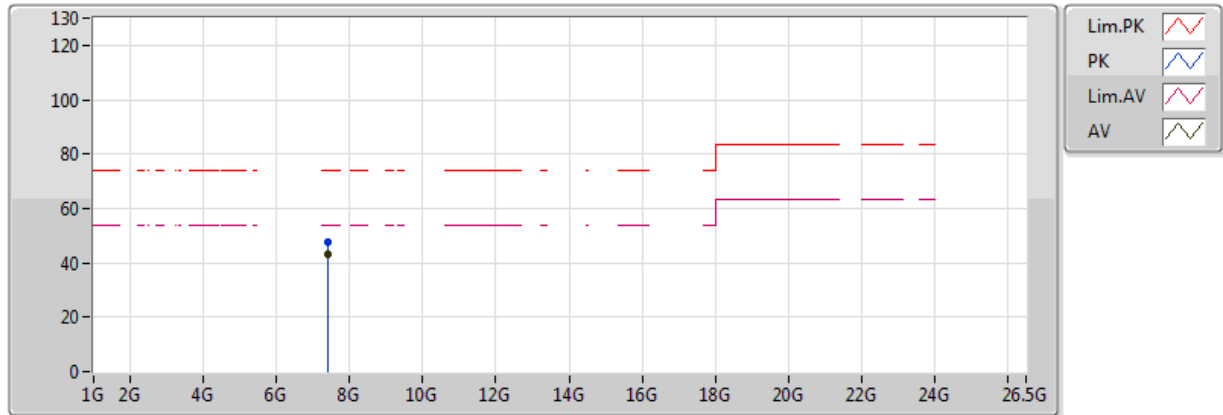


EUT = Z axis · Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.386G	45.20	54.00	-8.80	8.51	3	V	149	1.04	-
PK	7.386G	53.94	74.00	-20.06	8.51	3	V	149	1.04	-

802.11b_(1Mbps)_3TX

2462MHz_TX

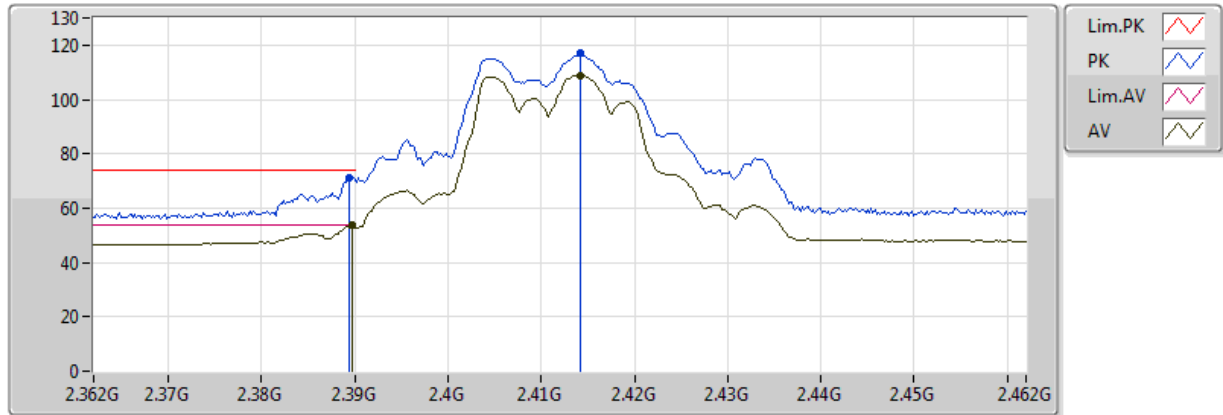


EUT = Z axis · Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.386G	42.92	54.00	-11.08	8.51	3	H	169	1.16	-
PK	7.386G	47.88	74.00	-26.12	8.51	3	H	169	1.16	-

802.11g_(6Mbps)_3TX

2412MHz_TX

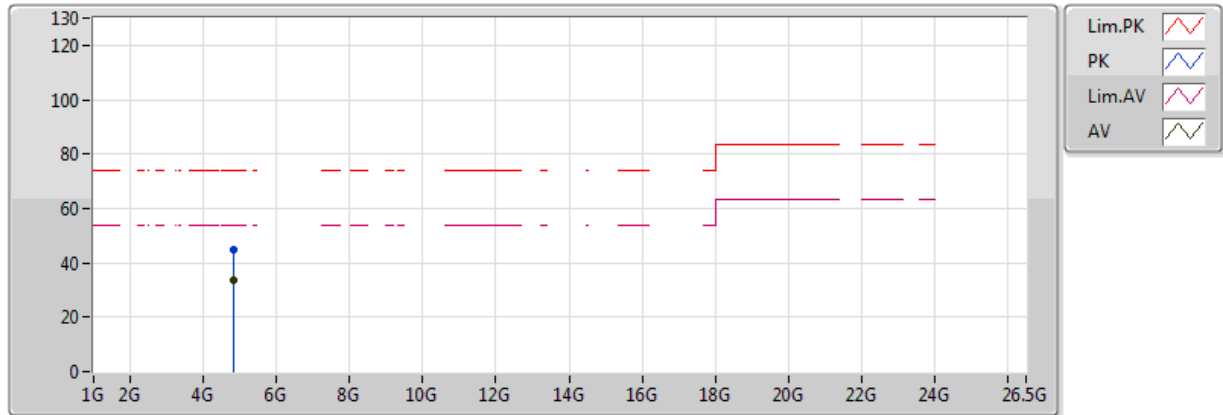


EUT = Z axis + Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4142G	108.88	Inf	-Inf	31.26	3	V	333	2.16	-
AV	2.3898G	53.72	54.00	-0.28	31.17	3	V	333	2.16	-
PK	2.4142G	116.84	Inf	-Inf	31.26	3	V	333	2.16	-
PK	2.3894G	71.08	74.00	-2.92	31.17	3	V	333	2.16	-

802.11g_(6Mbps)_3TX

2412MHz_TX

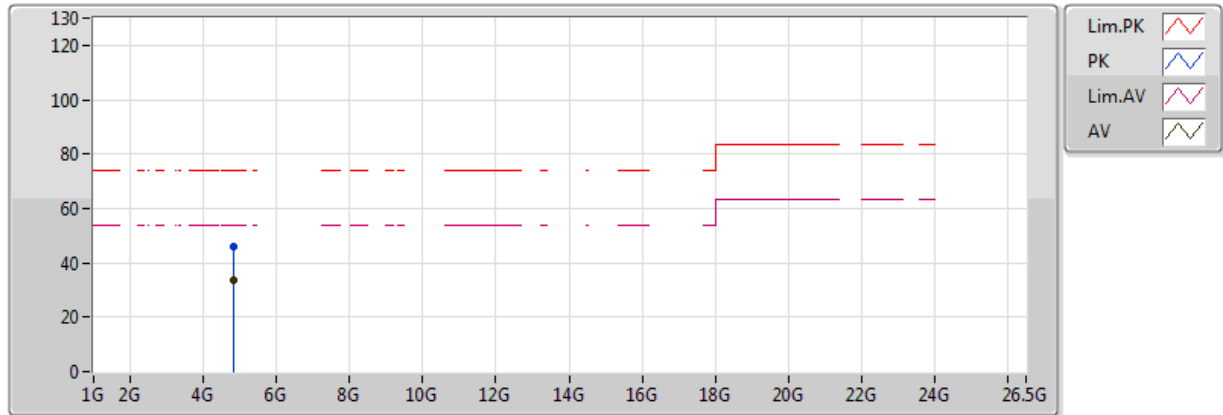


EUT = Z axis · Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.824G	33.50	54.00	-20.50	2.48	3	V	360	1.50	-
PK	4.824G	44.99	74.00	-29.01	2.48	3	V	360	1.50	-

802.11g_(6Mbps)_3TX

2412MHz_TX

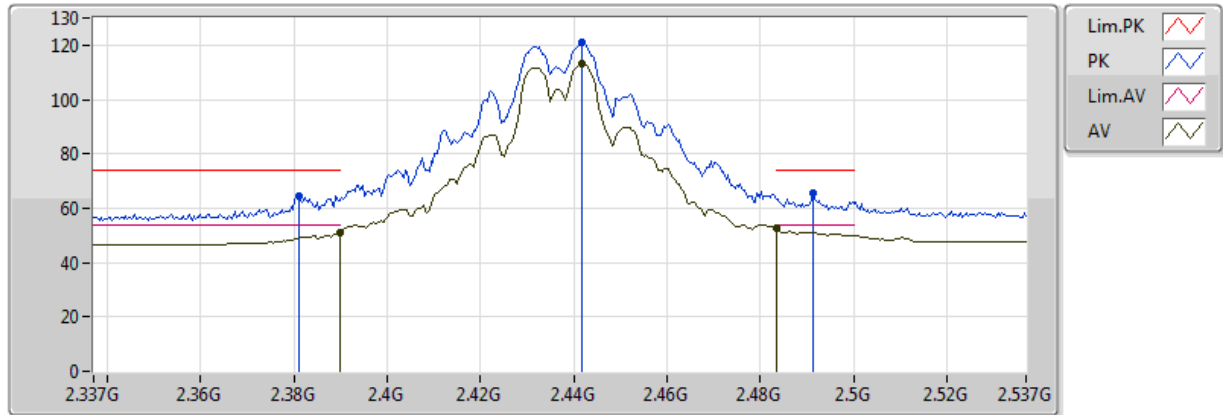


EUT = Z axis · Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.824G	33.41	54.00	-20.59	2.48	3	H	0	1.50	-
PK	4.824G	45.72	74.00	-28.28	2.48	3	H	0	1.50	-

802.11g_(6Mbps)_3TX

2437MHz_TX

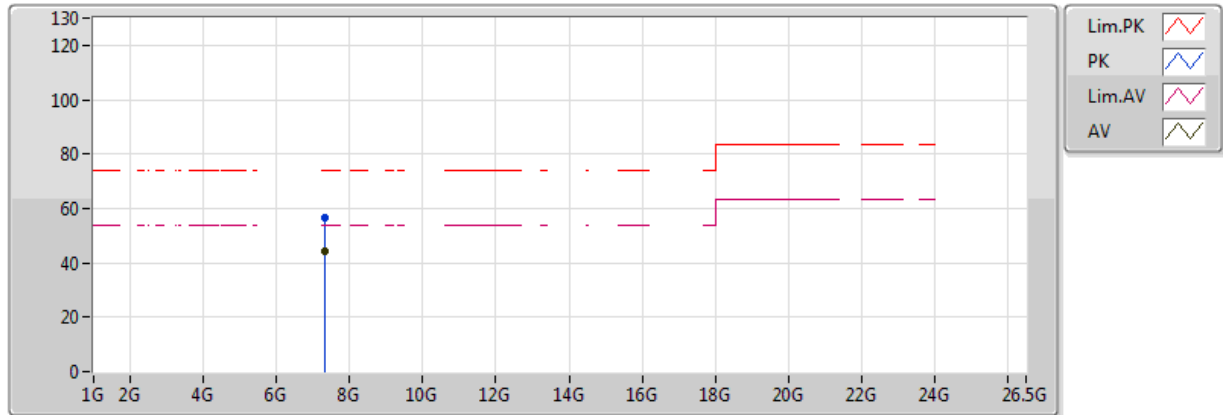


EUT = Z axis + Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.389998G	51.11	54.00	-2.89	31.17	3	V	22	2.59	-
AV	2.4418G	112.95	Inf	-Inf	31.37	3	V	22	2.59	-
AV	2.483502G	52.45	54.00	-1.55	31.53	3	V	22	2.59	-
PK	2.381G	64.44	74.00	-9.56	31.14	3	V	22	2.59	-
PK	2.4418G	120.98	Inf	-Inf	31.37	3	V	22	2.59	-
PK	2.4914G	65.60	74.00	-8.40	31.56	3	V	22	2.59	-

802.11g_(6Mbps)_3TX

2437MHz_TX

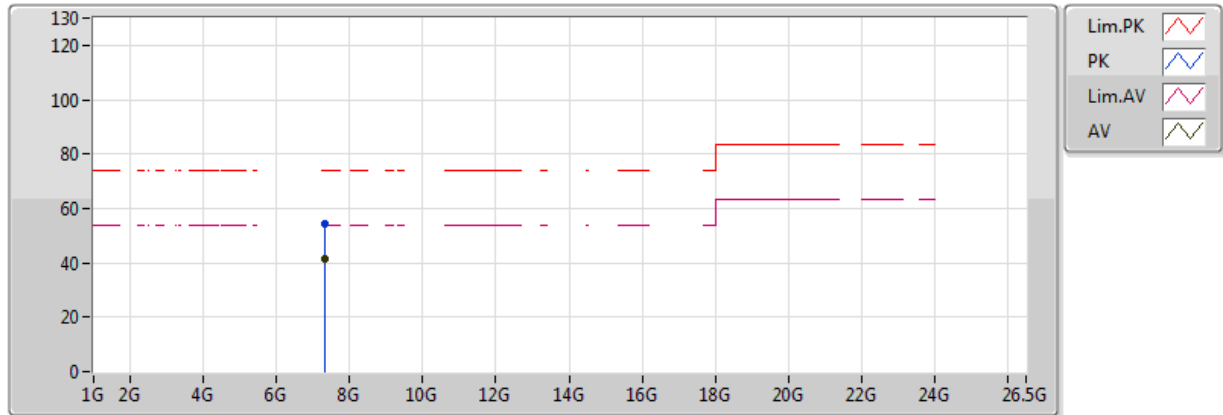


EUT = Z axis · Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.311G	44.49	54.00	-9.51	8.42	3	V	214	1.00	-
PK	7.311G	56.84	74.00	-17.16	8.42	3	V	214	1.00	-

802.11g_(6Mbps)_3TX

2437MHz_TX

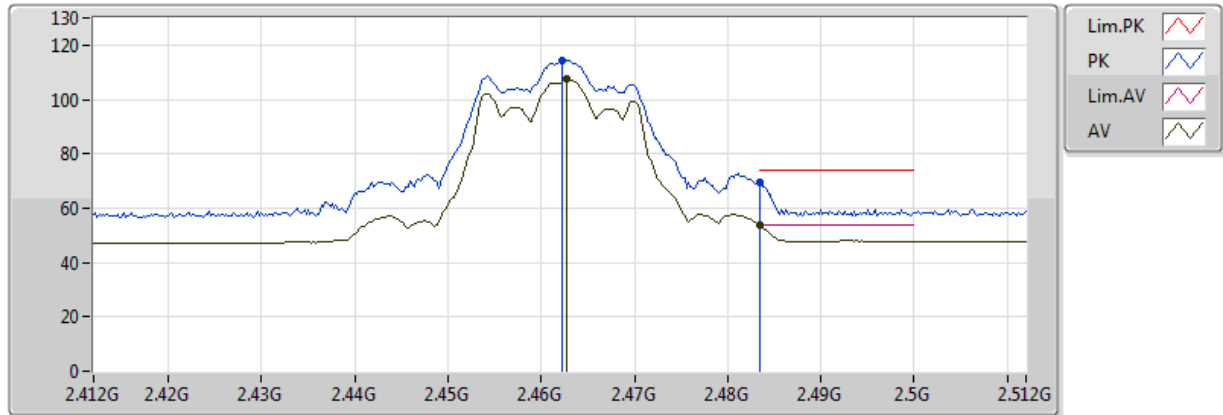


EUT = Z axis · Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.311G	41.31	54.00	-12.69	8.42	3	H	209	1.05	-
PK	7.311G	54.55	74.00	-19.45	8.42	3	H	209	1.05	-

802.11g_(6Mbps)_3TX

2462MHz_TX

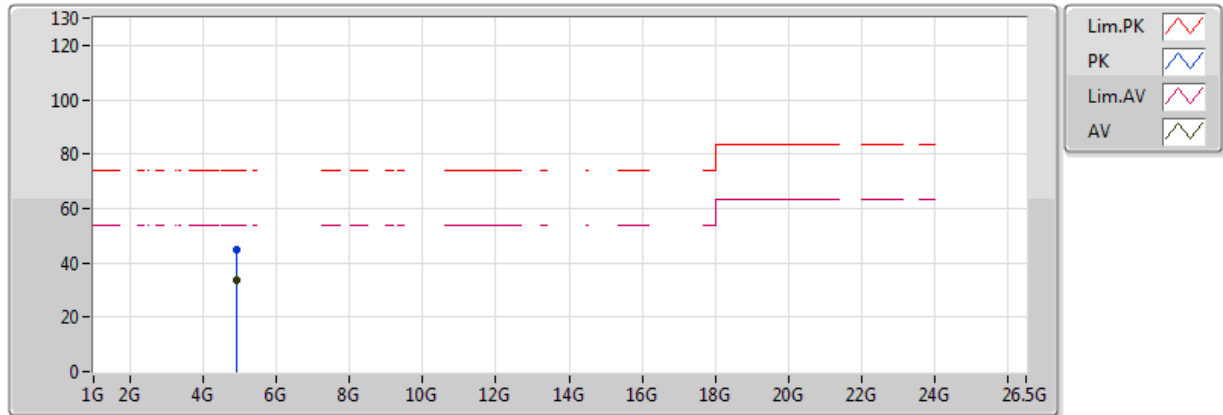


EUT = Z axis + Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4628G	107.47	Inf	-Inf	31.45	3	V	343	2.59	-
AV	2.483502G	53.72	54.00	-0.28	31.53	3	V	343	2.59	-
PK	2.4622G	114.18	Inf	-Inf	31.45	3	V	343	2.59	-
PK	2.483502G	69.57	74.00	-4.43	31.53	3	V	343	2.59	-

802.11g_(6Mbps)_3TX

2462MHz_TX

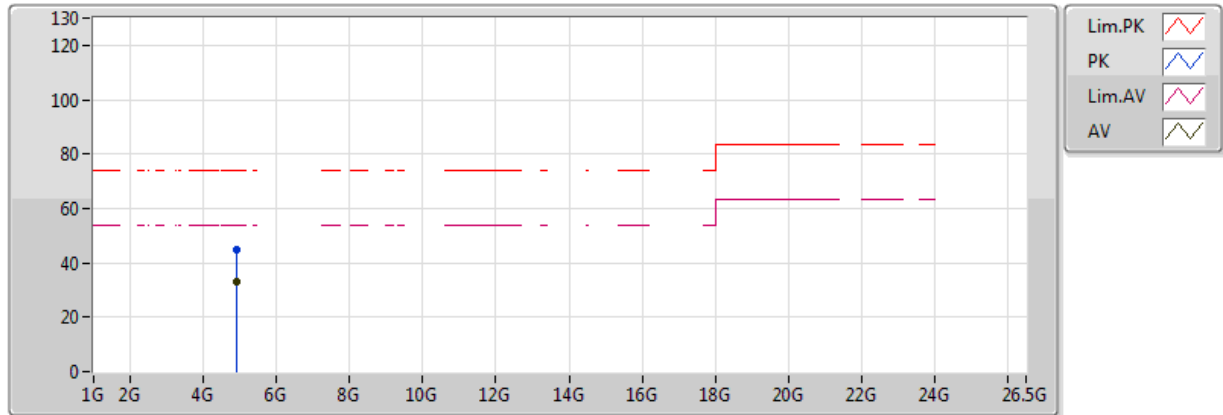


EUT = Z axis · Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.924G	33.39	54.00	-20.61	2.63	3	V	360	1.50	-
PK	4.924G	44.85	74.00	-29.15	2.63	3	V	360	1.50	-

802.11g_(6Mbps)_3TX

2462MHz_TX

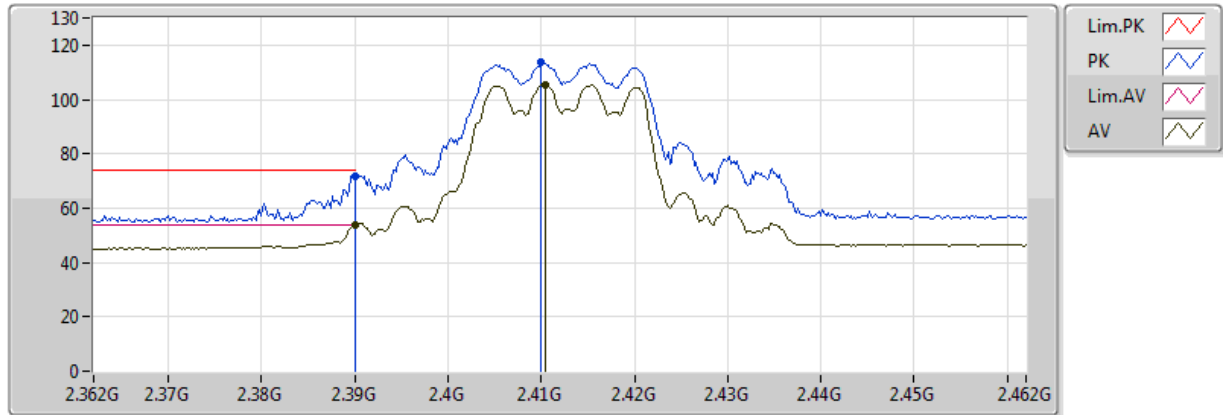


EUT = Z axis • Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.924G	33.27	54.00	-20.73	2.63	3	H	0	1.50	-
PK	4.924G	44.95	74.00	-29.05	2.63	3	H	0	1.50	-

802.11ac VHT20_Nss1,(MCS0)_3TX

2412MHz_TX

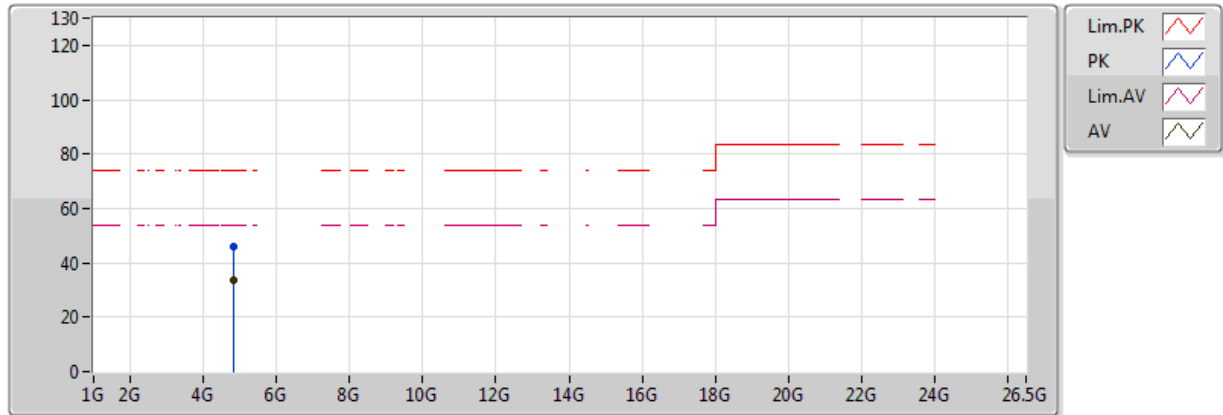


EUT = Z axis + Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4104G	105.58	Inf	-Inf	31.25	3	V	28	2.16	-
AV	2.39G	53.84	54.00	-0.16	31.17	3	V	28	2.16	-
PK	2.41G	113.64	Inf	-Inf	31.25	3	V	28	2.16	-
PK	2.39G	71.87	74.00	-2.13	31.17	3	V	28	2.16	-

802.11ac VHT20_Nss1,(MCS0)_3TX

2412MHz_TX

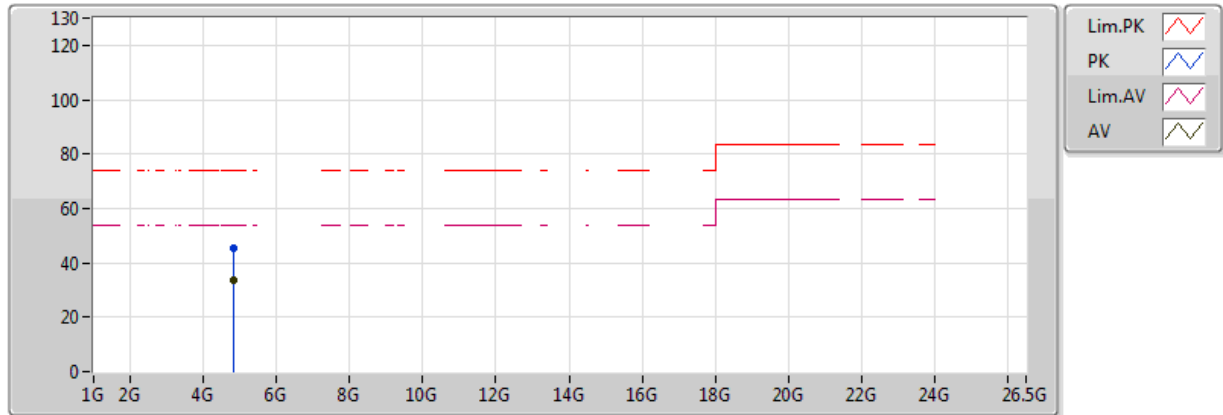


EUT = Z axis · Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.824G	33.83	54.00	-20.17	2.48	3	V	360	1.50	-
PK	4.824G	46.00	74.00	-28.00	2.48	3	V	360	1.50	-

802.11ac VHT20_Nss1,(MCS0)_3TX

2412MHz_TX

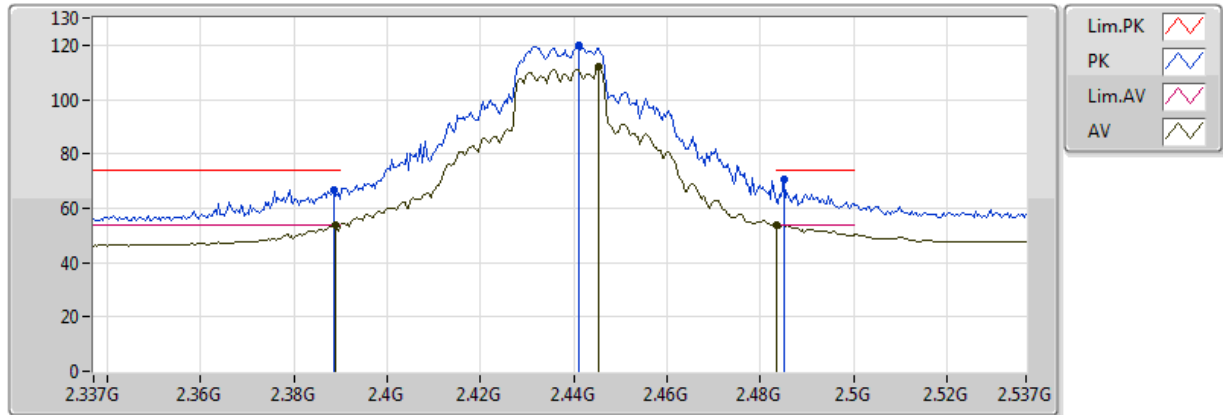


EUT = Z axis · Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.824G	33.82	54.00	-20.18	2.48	3	H	0	1.50	-
PK	4.824G	45.40	74.00	-28.60	2.48	3	H	0	1.50	-

802.11ac VHT20_Nss1,(MCS0)_3TX

2437MHz_TX

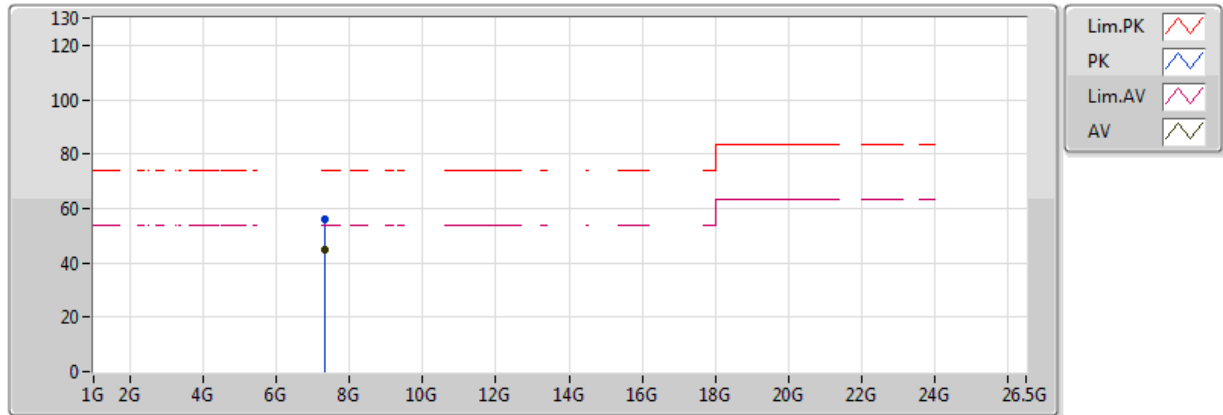


EUT = Z axis + Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.389G	53.65	54.00	-0.35	31.17	3	V	22	2.54	-
AV	2.4454G	112.02	Inf	-Inf	31.38	3	V	22	2.54	-
AV	2.483502G	53.68	54.00	-0.32	31.53	3	V	22	2.54	-
PK	2.3886G	66.89	74.00	-7.11	31.17	3	V	22	2.54	-
PK	2.441G	119.67	Inf	-Inf	31.37	3	V	22	2.54	-
PK	2.485G	70.79	74.00	-3.21	31.53	3	V	22	2.54	-

802.11ac VHT20_Nss1,(MCS0)_3TX

2437MHz_TX

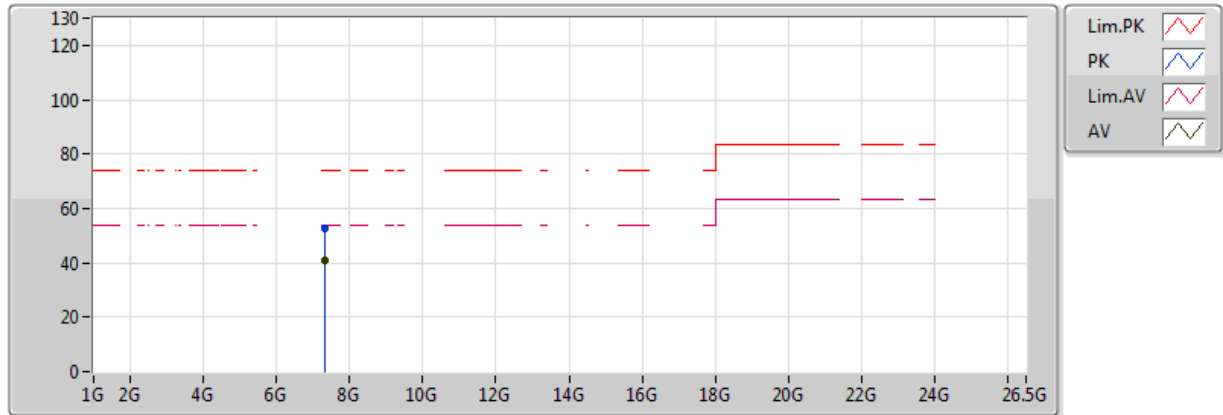


EUT = Z axis · Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.311G	44.87	54.00	-9.13	8.42	3	V	214	1.00	-
PK	7.311G	56.25	74.00	-17.75	8.42	3	V	214	1.00	-

802.11ac VHT20_Nss1,(MCS0)_3TX

2437MHz_TX

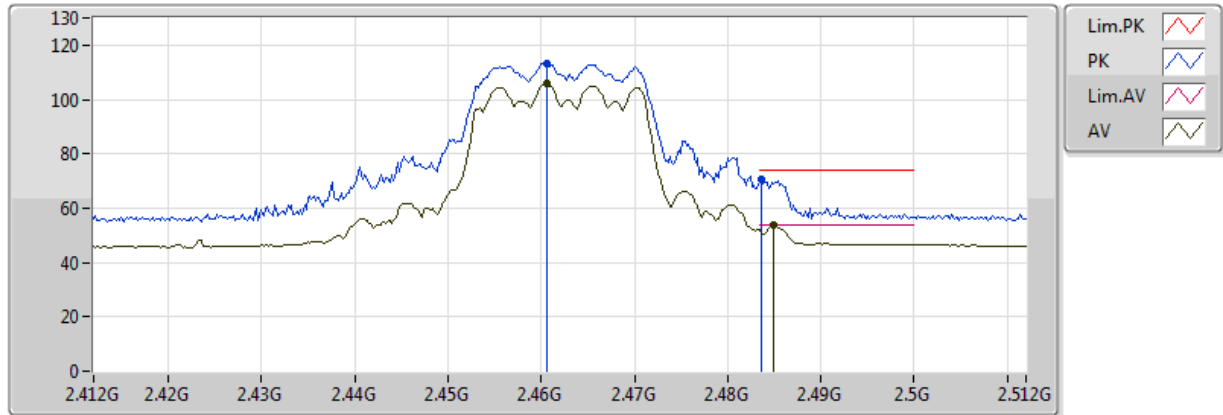


EUT = Z axis · Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.311G	40.89	54.00	-13.11	8.42	3	H	178	2.78	-
PK	7.311G	52.62	74.00	-21.38	8.42	3	H	178	2.78	-

802.11ac VHT20_Nss1,(MCS0)_3TX

2462MHz_TX

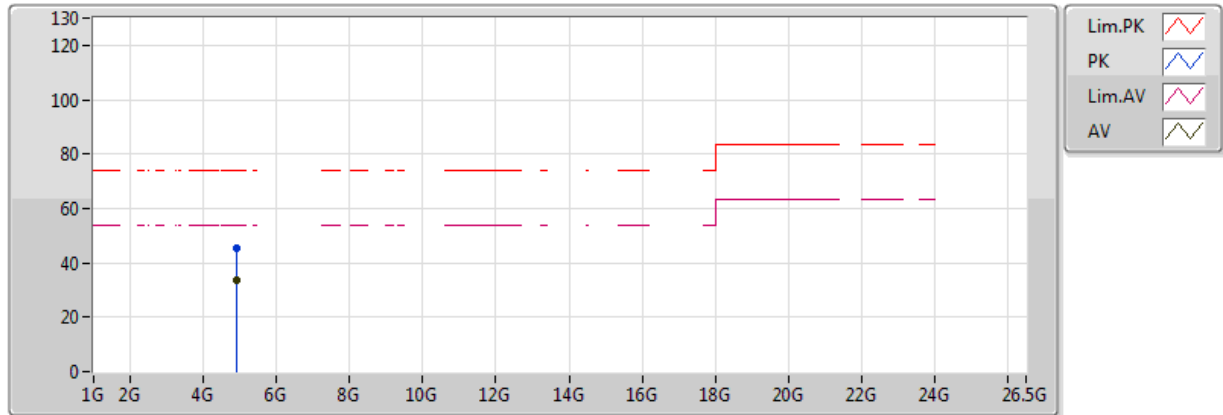


EUT = Z axis + Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4606G	105.64	Inf	-Inf	31.44	3	V	22	2.33	-
AV	2.485G	53.67	54.00	-0.33	31.53	3	V	22	2.33	-
PK	2.4606G	113.36	Inf	-Inf	31.44	3	V	22	2.33	-
PK	2.4836G	70.39	74.00	-3.61	31.53	3	V	22	2.33	-

802.11ac VHT20_Nss1,(MCS0)_3TX

2462MHz_TX

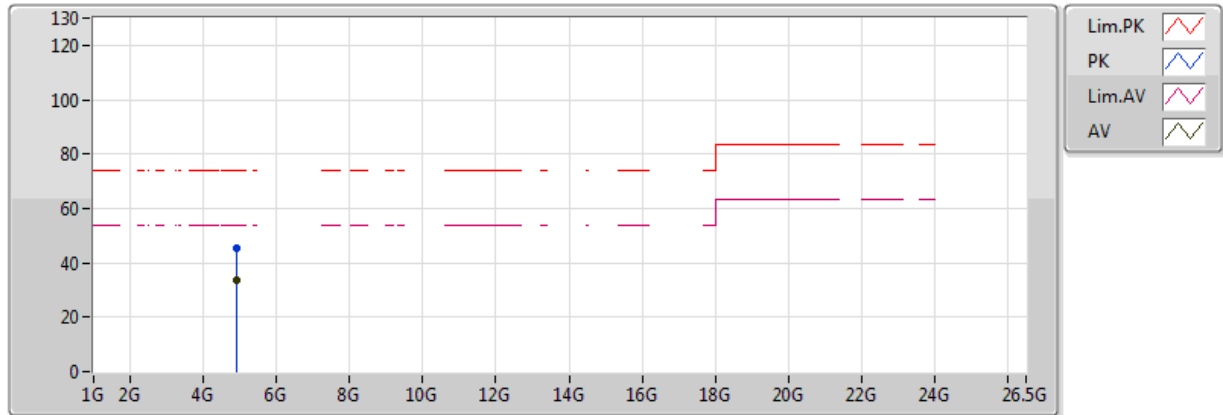


EUT = Z axis · Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.924G	33.50	54.00	-20.50	2.63	3	V	0	1.50	-
PK	4.924G	45.40	74.00	-28.60	2.63	3	V	0	1.50	-

802.11ac VHT20_Nss1,(MCS0)_3TX

2462MHz_TX

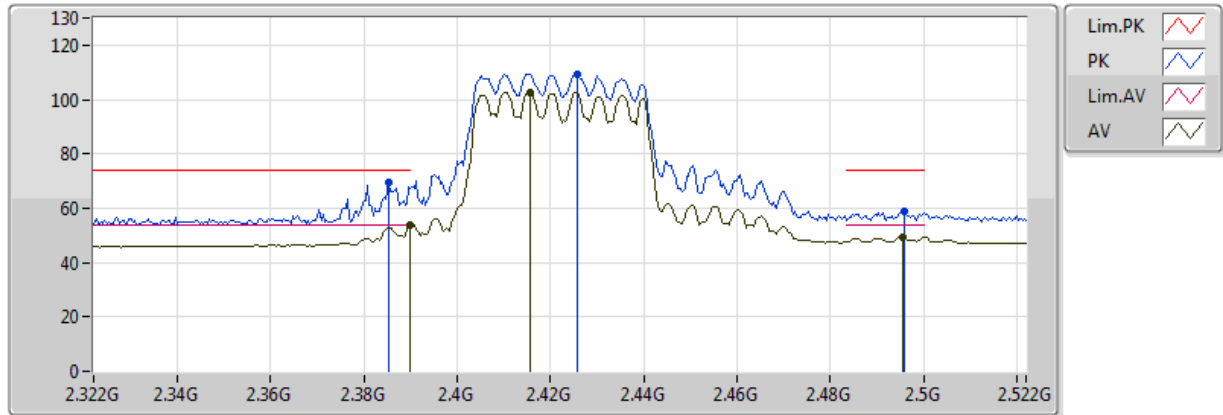


EUT = Z axis · Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.924G	33.58	54.00	-20.42	2.63	3	H	360	1.50	-
PK	4.924G	45.54	74.00	-28.46	2.63	3	H	360	1.50	-

802.11ac VHT40_Nss1,(MCS0)_3TX

2422MHz_TX

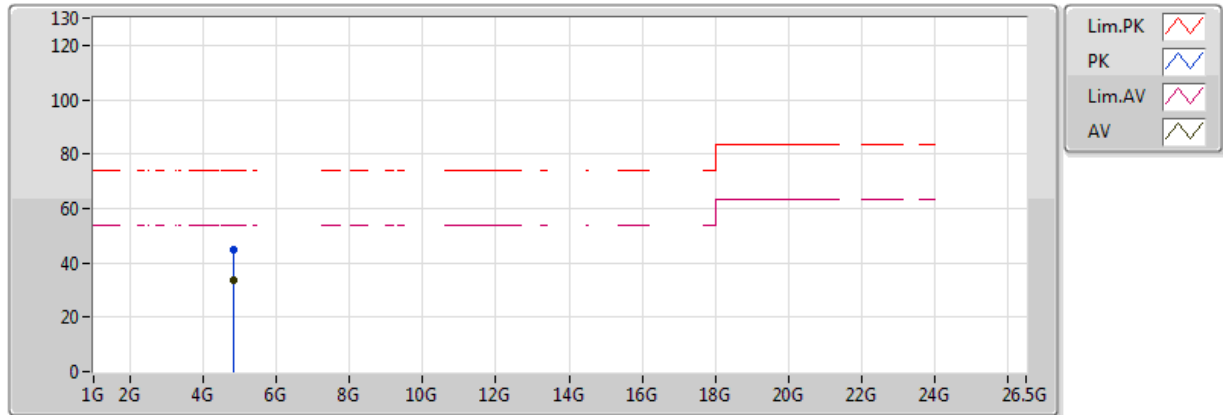


EUT = Z axis + Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4156G	102.80	Inf	-Inf	31.27	3	V	27	2.16	-
AV	2.39G	53.81	54.00	-0.19	31.17	3	V	27	2.16	-
AV	2.4956G	49.41	54.00	-4.59	31.57	3	V	27	2.16	-
PK	2.4256G	109.34	Inf	-Inf	31.31	3	V	27	2.16	-
PK	2.3852G	69.35	74.00	-4.65	31.15	3	V	27	2.16	-
PK	2.496G	58.97	74.00	-15.03	31.57	3	V	27	2.16	-

802.11ac VHT40_Nss1,(MCS0)_3TX

2422MHz_TX

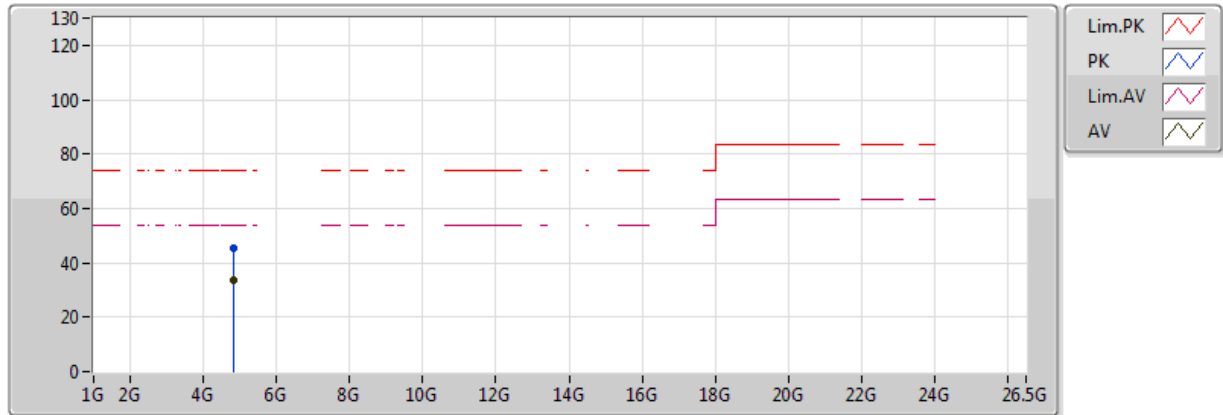


EUT = Z axis + Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.844G	33.59	54.00	-20.41	2.51	3	V	0	1.50	-
PK	4.844G	44.88	74.00	-29.12	2.51	3	V	0	1.50	-

802.11ac VHT40_Nss1,(MCS0)_3TX

2422MHz_TX

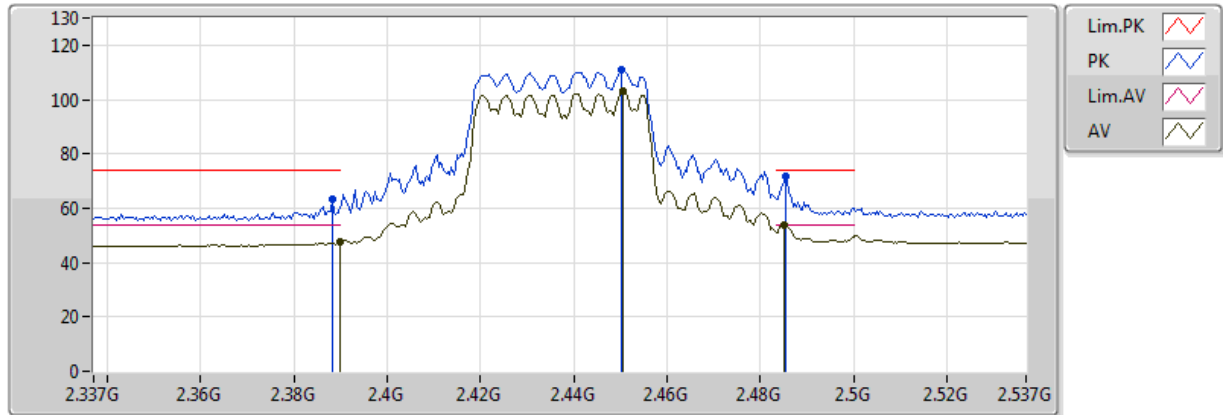


EUT = Z axis · Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.844G	33.55	54.00	-20.45	2.51	3	H	360	1.50	-
PK	4.844G	45.55	74.00	-28.45	2.51	3	H	360	1.50	-

802.11ac VHT40_Nss1,(MCS0)_3TX

2437MHz_TX

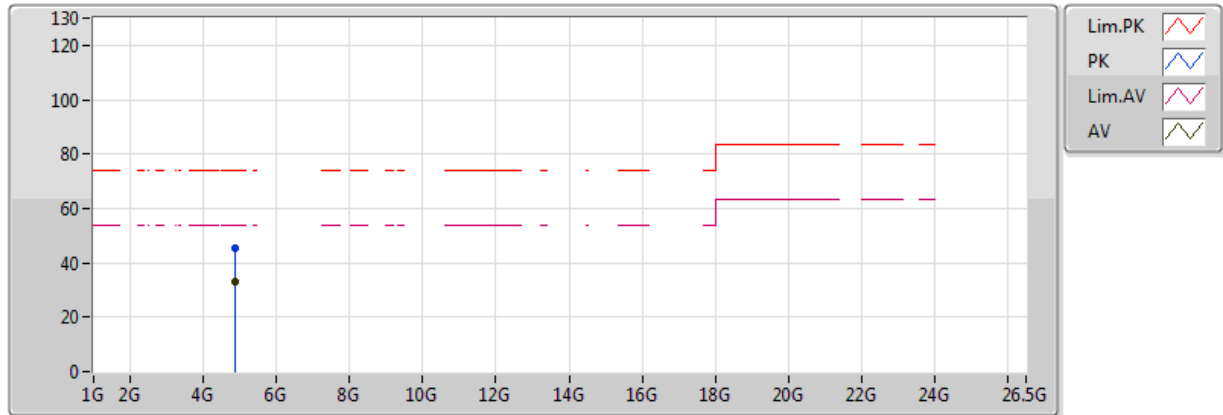


EUT = Z axis + Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.389998G	47.49	54.00	-6.51	31.17	3	V	17	2.14	-
AV	2.4506G	103.17	Inf	-Inf	31.40	3	V	17	2.14	-
AV	2.485G	53.85	54.00	-0.15	31.53	3	V	17	2.14	-
PK	2.3882G	63.12	74.00	-10.88	31.16	3	V	17	2.14	-
PK	2.4502G	110.92	Inf	-Inf	31.40	3	V	17	2.14	-
PK	2.4854G	71.58	74.00	-2.42	31.53	3	V	17	2.14	-

802.11ac VHT40_Nss1,(MCS0)_3TX

2437MHz_TX

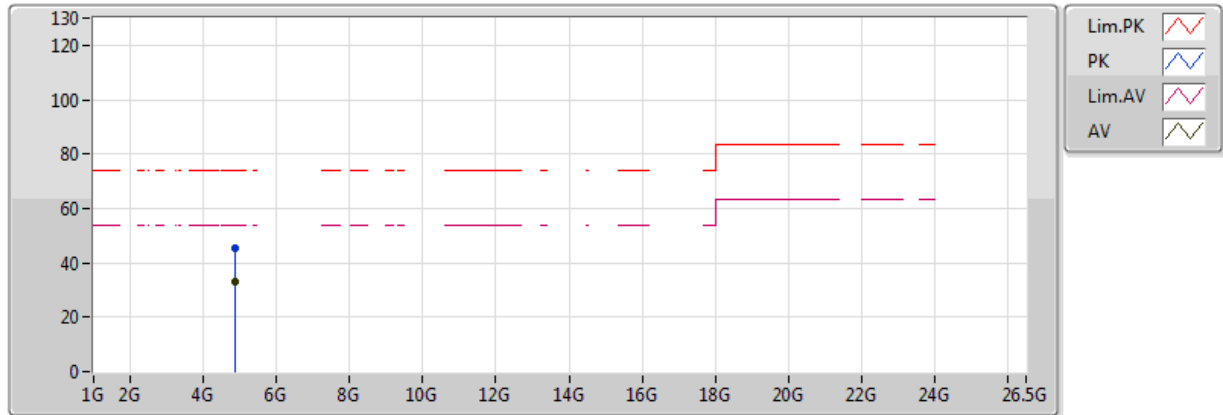


EUT = Z axis · Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.874G	33.27	54.00	-20.73	2.55	3	V	360	1.50	-
PK	4.874G	45.17	74.00	-28.83	2.55	3	V	360	1.50	-

802.11ac VHT40_Nss1,(MCS0)_3TX

2437MHz_TX

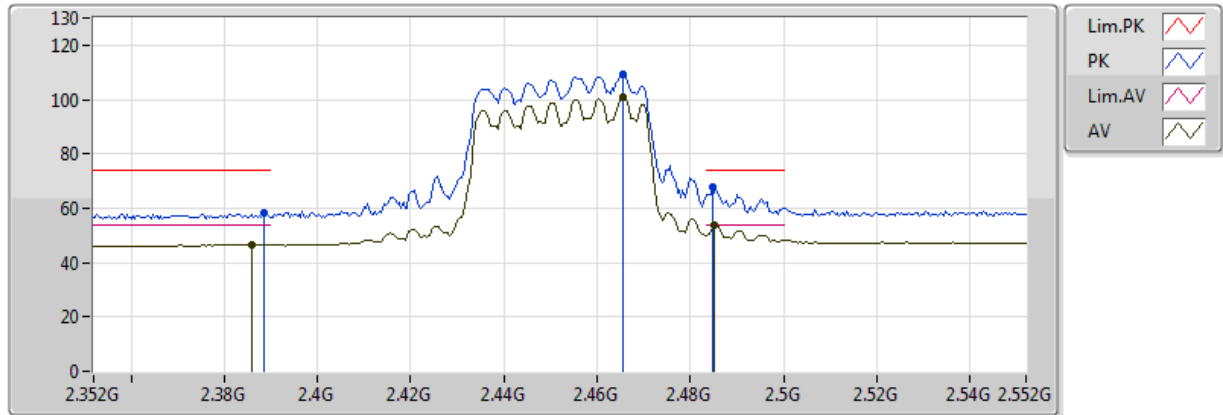


EUT = Z axis · Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.874G	33.27	54.00	-20.73	2.55	3	H	0	1.50	-
PK	4.874G	45.66	74.00	-28.34	2.55	3	H	0	1.50	-

802.11ac VHT40_Nss1,(MCS0)_3TX

2452MHz_TX

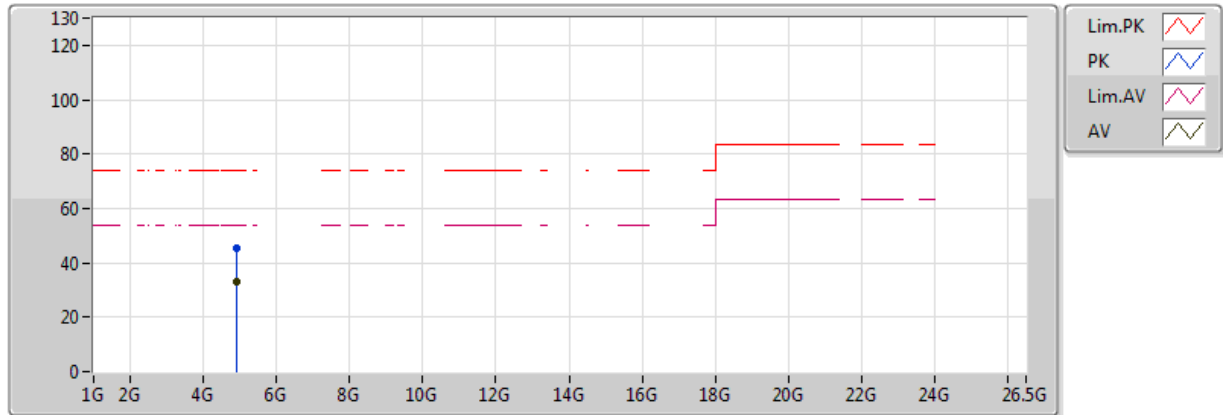


EUT = Z axis - Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.386G	46.62	54.00	-7.38	31.16	3	V	17	1.81	-
AV	2.4656G	100.73	Inf	-Inf	31.46	3	V	17	1.81	-
AV	2.4852G	53.68	54.00	-0.32	31.53	3	V	17	1.81	-
PK	2.3884G	58.37	74.00	-15.63	31.16	3	V	17	1.81	-
PK	2.4656G	109.46	Inf	-Inf	31.46	3	V	17	1.81	-
PK	2.4848G	67.55	74.00	-6.45	31.53	3	V	17	1.81	-

802.11ac VHT40_Nss1,(MCS0)_3TX

2452MHz_TX

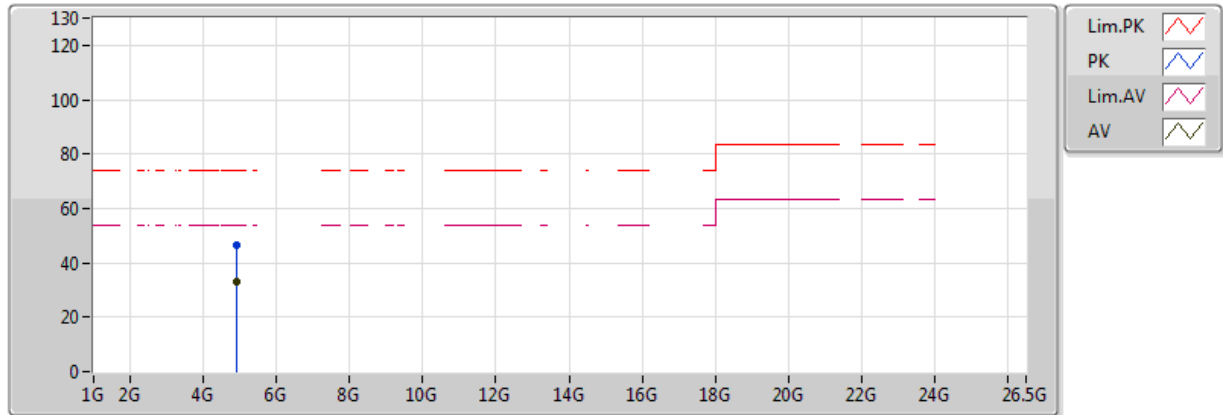


EUT = Z axis · Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.904G	33.21	54.00	-20.79	2.60	3	V	0	1.50	-
PK	4.904G	45.35	74.00	-28.65	2.60	3	V	0	1.50	-

802.11ac VHT40_Nss1,(MCS0)_3TX

2452MHz_TX



EUT = Z axis · Ant = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.904G	33.24	54.00	-20.76	2.60	3	H	360	1.50	-
PK	4.904G	46.23	74.00	-27.77	2.60	3	H	360	1.50	-

<Beamforming - Above 1GHz>
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	AV	2.483502G	53.75	54.00	-0.25	2.28	3	Vertical	327	2.53	-

Result

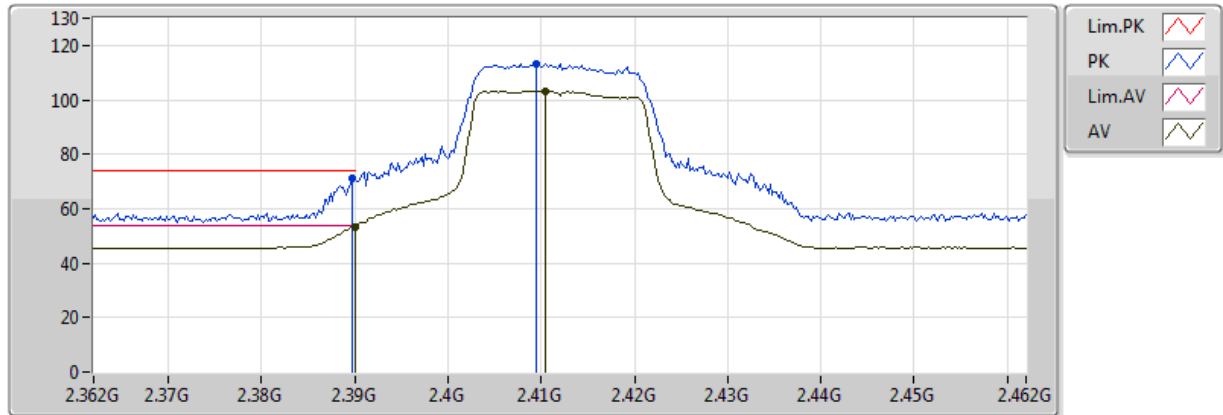
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.39G	53.46	54.00	-0.54	2.09	3	Vertical	86	1.92	-
2412MHz	Pass	AV	2.4104G	103.37	Inf	-Inf	2.14	3	Vertical	86	1.92	-
2412MHz	Pass	PK	2.3898G	71.24	74.00	-2.76	2.09	3	Vertical	86	1.92	-
2412MHz	Pass	PK	2.4094G	113.33	Inf	-Inf	2.14	3	Vertical	86	1.92	-
2412MHz	Pass	AV	4.824G	36.06	54.00	-17.94	6.73	3	Horizontal	360	1.50	-
2412MHz	Pass	PK	4.824G	49.14	74.00	-24.86	6.73	3	Horizontal	360	1.50	-
2412MHz	Pass	AV	4.824G	36.09	54.00	-17.91	6.73	3	Vertical	0	1.50	-
2412MHz	Pass	PK	4.824G	49.20	74.00	-24.80	6.73	3	Vertical	0	1.50	-
2437MHz	Pass	AV	4.874G	36.38	54.00	-17.62	6.82	3	Horizontal	354	1.50	-
2437MHz	Pass	PK	4.874G	49.81	74.00	-24.19	6.82	3	Horizontal	354	1.50	-
2437MHz	Pass	AV	2.389998G	47.88	54.00	-6.12	2.09	3	Vertical	332	2.65	-
2437MHz	Pass	AV	2.4378G	113.32	Inf	-Inf	2.19	3	Vertical	332	2.65	-
2437MHz	Pass	AV	2.4838G	50.50	54.00	-3.50	2.28	3	Vertical	332	2.65	-
2437MHz	Pass	AV	4.874G	38.40	54.00	-15.60	6.82	3	Vertical	0	1.50	-
2437MHz	Pass	PK	2.4358G	119.43	Inf	-Inf	2.19	3	Vertical	332	2.65	-
2437MHz	Pass	PK	4.874G	51.37	74.00	-22.63	6.82	3	Vertical	0	1.50	-
2462MHz	Pass	AV	4.924G	35.96	54.00	-18.04	6.92	3	Horizontal	360	1.50	-
2462MHz	Pass	PK	4.924G	48.60	74.00	-25.40	6.92	3	Horizontal	360	1.50	-
2462MHz	Pass	AV	2.4628G	108.71	Inf	-Inf	2.24	3	Vertical	327	2.53	-
2462MHz	Pass	AV	2.483502G	53.75	54.00	-0.25	2.28	3	Vertical	327	2.53	-
2462MHz	Pass	AV	4.924G	36.00	54.00	-18.00	6.92	3	Vertical	0	1.50	-
2462MHz	Pass	PK	2.464G	115.05	Inf	-Inf	2.24	3	Vertical	327	2.53	-
2462MHz	Pass	PK	2.4844G	73.49	74.00	-0.51	2.28	3	Vertical	327	2.53	-
2462MHz	Pass	PK	4.924G	49.10	74.00	-24.90	6.92	3	Vertical	0	1.50	-
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	AV	2.3888G	53.47	54.00	-0.53	2.09	3	Vertical	82	2.24	-
2422MHz	Pass	AV	2.4092G	99.87	Inf	-Inf	2.14	3	Vertical	82	2.24	-
2422MHz	Pass	AV	2.4888G	46.10	54.00	-7.90	2.29	3	Vertical	82	2.24	-
2422MHz	Pass	PK	2.3892G	67.87	74.00	-6.13	2.09	3	Vertical	82	2.24	-
2422MHz	Pass	PK	2.4044G	108.83	Inf	-Inf	2.13	3	Vertical	82	2.24	-
2422MHz	Pass	PK	2.4976G	59.51	74.00	-14.49	2.31	3	Vertical	82	2.24	-
2422MHz	Pass	AV	4.844G	36.20	54.00	-17.80	6.76	3	Horizontal	0	1.50	-
2422MHz	Pass	PK	4.844G	49.39	74.00	-24.61	6.76	3	Horizontal	0	1.50	-
2422MHz	Pass	AV	4.844G	36.33	54.00	-17.67	6.76	3	Vertical	360	1.50	-
2422MHz	Pass	PK	4.844G	50.39	74.00	-23.61	6.76	3	Vertical	360	1.50	-
2437MHz	Pass	AV	2.3886G	46.70	54.00	-7.30	2.09	3	Vertical	17	2.61	-
2437MHz	Pass	AV	2.449G	100.19	Inf	-Inf	2.21	3	Vertical	17	2.61	-
2437MHz	Pass	AV	2.483502G	53.59	54.00	-0.41	2.28	3	Vertical	17	2.61	-
2437MHz	Pass	PK	2.389G	58.31	74.00	-15.69	2.09	3	Vertical	17	2.61	-
2437MHz	Pass	PK	2.4438G	109.93	Inf	-Inf	2.20	3	Vertical	17	2.61	-



Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2437MHz	Pass	PK	2.4838G	68.81	74.00	-5.19	2.28	3	Vertical	17	2.61	-
2437MHz	Pass	AV	4.874G	35.87	54.00	-18.13	6.82	3	Horizontal	0	1.50	-
2437MHz	Pass	PK	4.874G	49.31	74.00	-24.69	6.82	3	Horizontal	0	1.50	-
2437MHz	Pass	AV	4.874G	36.19	54.00	-17.81	6.82	3	Vertical	360	1.50	-
2437MHz	Pass	PK	4.874G	50.72	74.00	-23.28	6.82	3	Vertical	360	1.50	-
2452MHz	Pass	AV	2.38G	45.51	54.00	-8.49	2.07	3	Vertical	1	2.40	-
2452MHz	Pass	AV	2.4556G	98.70	Inf	-Inf	2.23	3	Vertical	1	2.40	-
2452MHz	Pass	AV	2.4856G	53.35	54.00	-0.65	2.28	3	Vertical	1	2.40	-
2452MHz	Pass	PK	2.3788G	58.04	74.00	-15.96	2.06	3	Vertical	1	2.40	-
2452MHz	Pass	PK	2.4552G	108.50	Inf	-Inf	2.22	3	Vertical	1	2.40	-
2452MHz	Pass	PK	2.4856G	66.14	74.00	-7.86	2.28	3	Vertical	1	2.40	-
2452MHz	Pass	AV	4.904G	36.04	54.00	-17.96	6.88	3	Horizontal	360	1.50	-
2452MHz	Pass	PK	4.904G	49.19	74.00	-24.81	6.88	3	Horizontal	360	1.50	-
2452MHz	Pass	AV	4.904G	36.03	54.00	-17.97	6.88	3	Vertical	0	1.50	-
2452MHz	Pass	PK	4.904G	47.87	74.00	-26.13	6.88	3	Vertical	0	1.50	-

802.11ac VHT20_Nss1,(MCS0)_3TX

2412MHz_BF TX

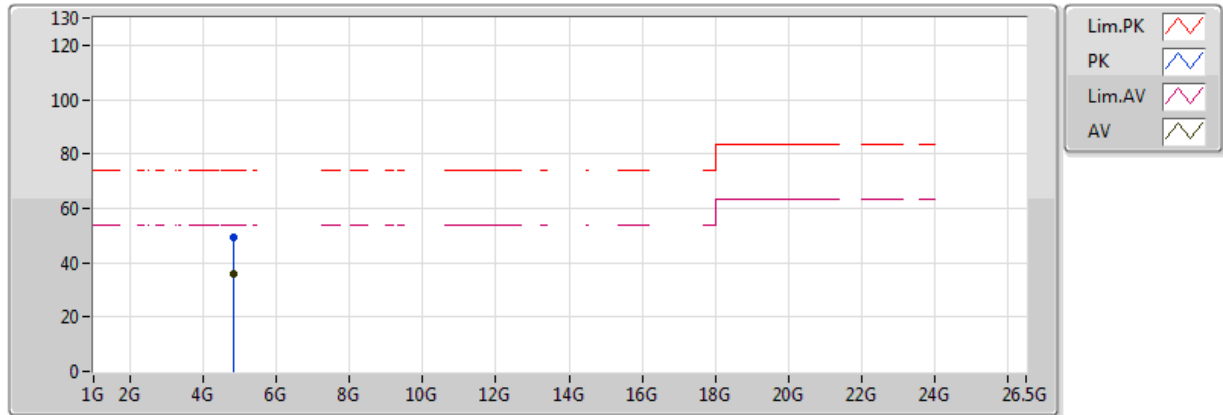


Eut=Z axis
Ant=Y axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.39G	53.46	54.00	-0.54	2.09	3	Vertical	86	1.92	-	51.36	32.17	5.18	35.26
AV	2.4104G	103.37	Inf	-Inf	2.14	3	Vertical	86	1.92	-	101.23	32.19	5.21	35.26
PK	2.3898G	71.24	74.00	-2.76	2.09	3	Vertical	86	1.92	-	69.15	32.17	5.18	35.26
PK	2.4094G	113.33	Inf	-Inf	2.14	3	Vertical	86	1.92	-	111.19	32.19	5.21	35.26

802.11ac VHT20_Nss1,(MCS0)_3TX

2412MHz_BF TX

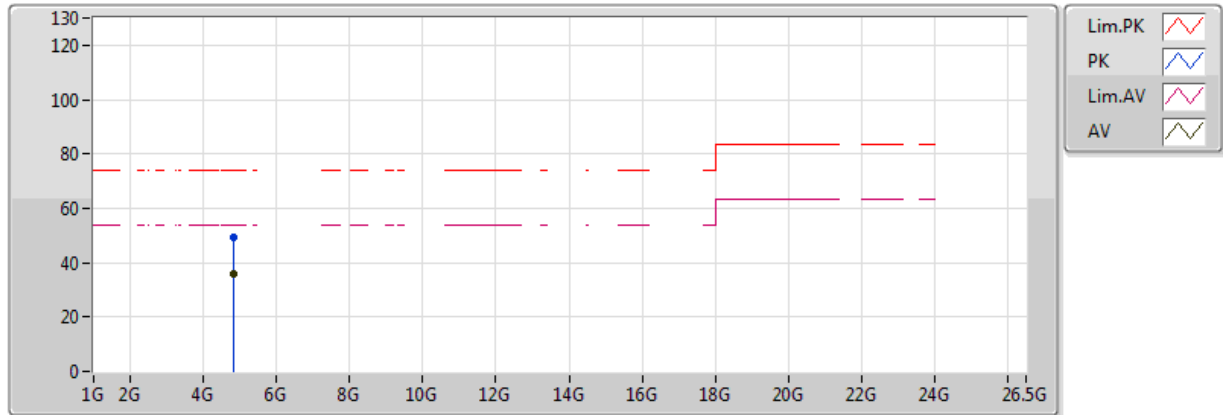


Eut=Z axis
Ant=Y axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.824G	36.09	54.00	-17.91	6.73	3	Vertical	0	1.50	-	29.36	34.23	7.37	34.87
PK	4.824G	49.20	74.00	-24.80	6.73	3	Vertical	0	1.50	-	42.47	34.23	7.37	34.87

802.11ac VHT20_Nss1,(MCS0)_3TX

2412MHz_BF TX

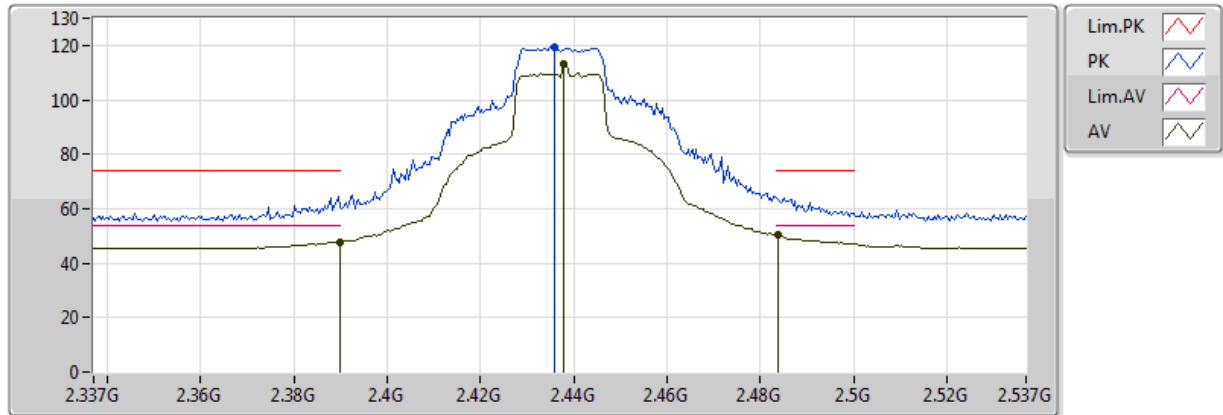


Eut=Z axis
Ant=Y axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.824G	36.06	54.00	-17.94	6.73	3	Horizontal	360	1.50	-	29.33	34.23	7.37	34.87
PK	4.824G	49.14	74.00	-24.86	6.73	3	Horizontal	360	1.50	-	42.41	34.23	7.37	34.87

802.11ac VHT20_Nss1,(MCS0)_3TX

2437MHz_BF TX

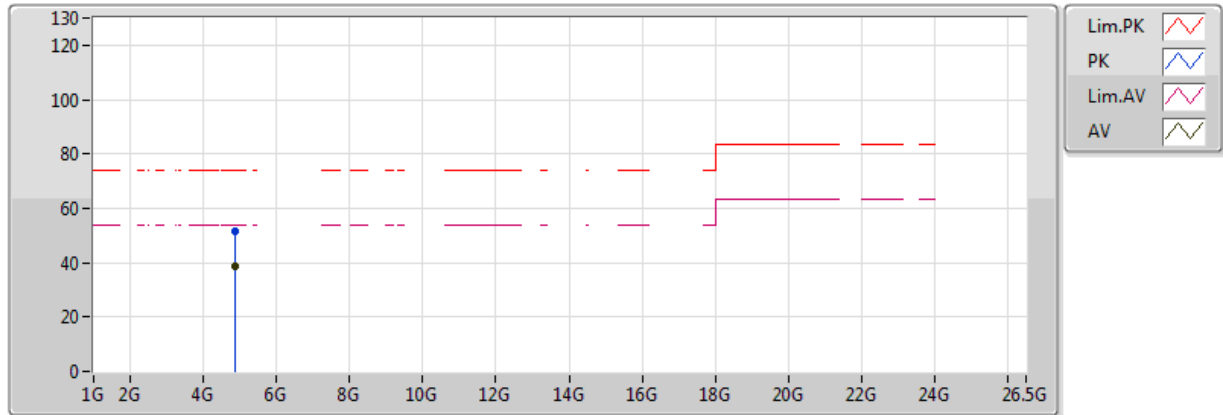


Eut=Z axis
Ant=Y axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.4378G	113.32	Inf	-Inf	2.19	3	Vertical	332	2.65	-	111.13	32.23	5.23	35.27
AV	2.389998G	47.88	54.00	-6.12	2.09	3	Vertical	332	2.65	-	45.79	32.17	5.18	35.26
AV	2.4838G	50.50	54.00	-3.50	2.28	3	Vertical	332	2.65	-	48.22	32.28	5.28	35.28
PK	2.4358G	119.43	Inf	-Inf	2.19	3	Vertical	332	2.65	-	117.25	32.22	5.23	35.27

802.11ac VHT20_Nss1,(MCS0)_3TX

2437MHz_BF TX

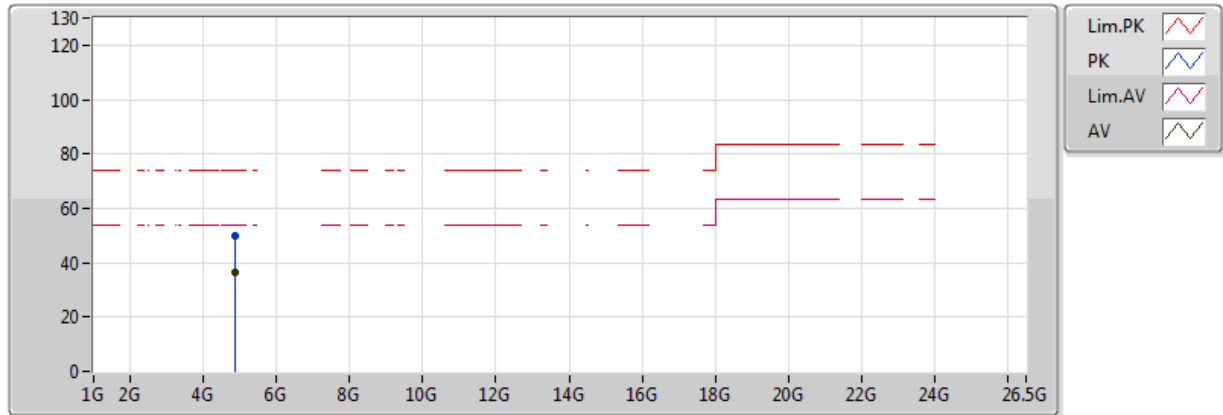


Eut=Z axis
Ant=Y axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.874G	38.40	54.00	-15.60	6.82	3	Vertical	0	1.50	-	31.58	34.25	7.43	34.86
PK	4.874G	51.37	74.00	-22.63	6.82	3	Vertical	0	1.50	-	44.55	34.25	7.43	34.86

802.11ac VHT20_Nss1,(MCS0)_3TX

2437MHz_BF TX

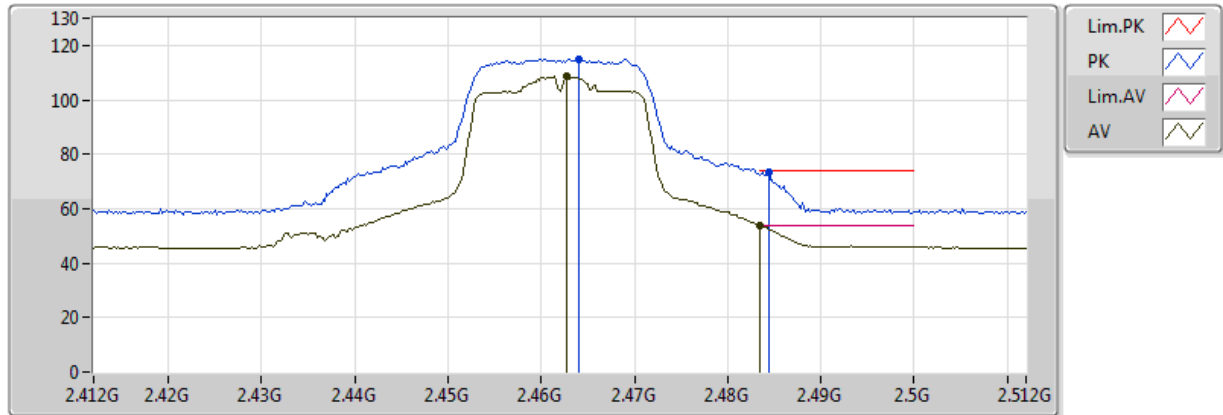


Eut=Z axis
Ant=Y axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.874G	36.38	54.00	-17.62	6.82	3	Horizontal	354	1.50	-	29.56	34.25	7.43	34.86
PK	4.874G	49.81	74.00	-24.19	6.82	3	Horizontal	354	1.50	-	42.99	34.25	7.43	34.86

802.11ac VHT20_Nss1,(MCS0)_3TX

2462MHz_BF TX

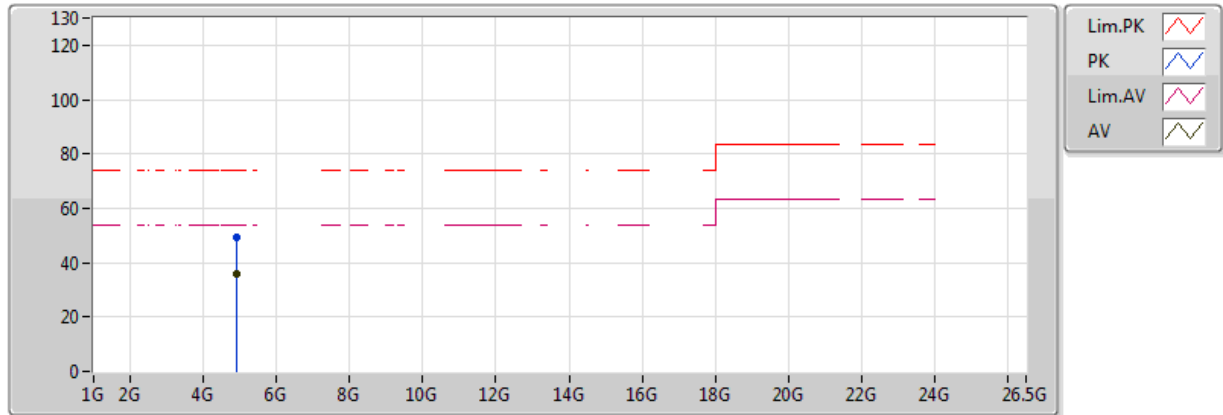


Eut=Z axis
Ant=Y axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.4628G	108.71	Inf	-Inf	2.24	3	Vertical	327	2.53	-	106.48	32.26	5.26	35.27
AV	2.483502G	53.75	54.00	-0.25	2.28	3	Vertical	327	2.53	-	51.47	32.28	5.28	35.28
PK	2.464G	115.05	Inf	-Inf	2.24	3	Vertical	327	2.53	-	112.81	32.26	5.26	35.27
PK	2.4844G	73.49	74.00	-0.51	2.28	3	Vertical	327	2.53	-	71.21	32.28	5.28	35.28

802.11ac VHT20_Nss1,(MCS0)_3TX

2462MHz_BF TX

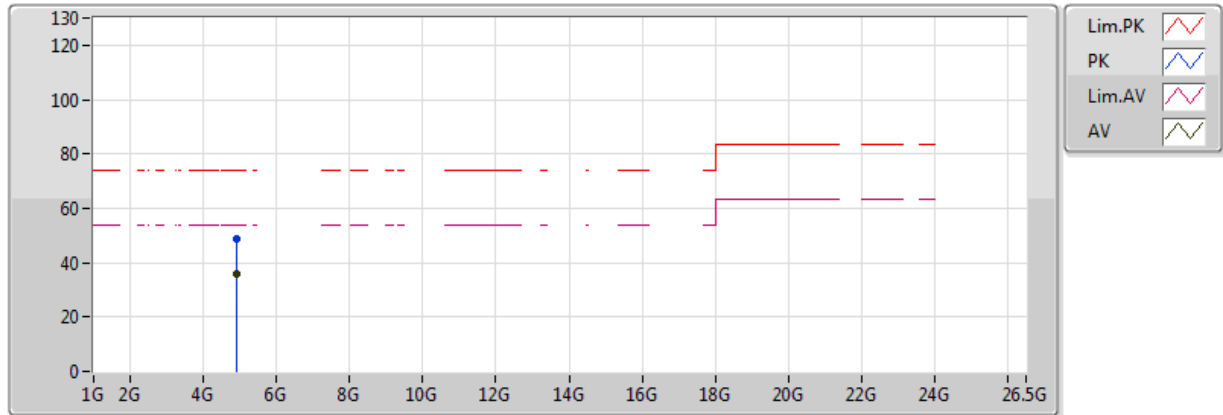


Eut=Z axis
Ant=Y axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.924G	36.00	54.00	-18.00	6.92	3	Vertical	0	1.50	-	29.08	34.27	7.49	34.84
PK	4.924G	49.10	74.00	-24.90	6.92	3	Vertical	0	1.50	-	42.18	34.27	7.49	34.84

802.11ac VHT20_Nss1,(MCS0)_3TX

2462MHz_BF TX

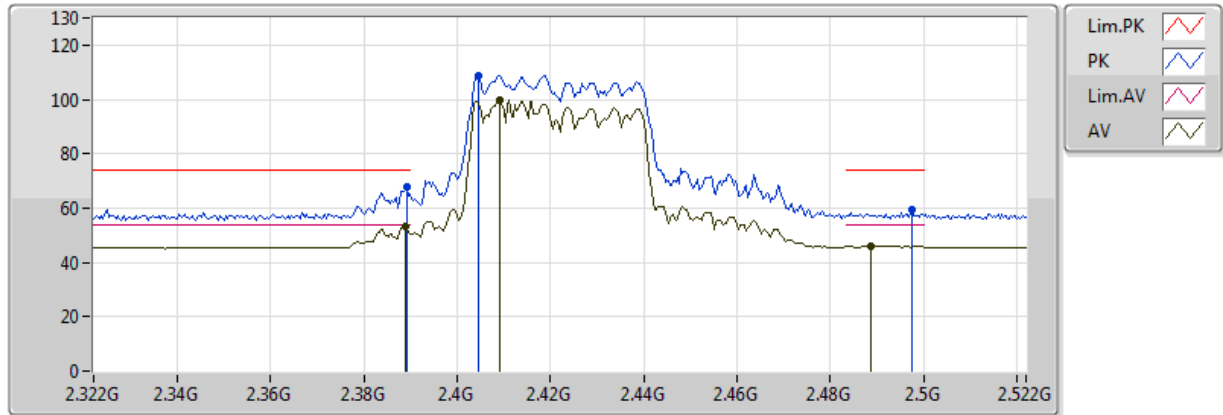


Eut=Z axis
Ant=Y axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.924G	35.96	54.00	-18.04	6.92	3	Horizontal	360	1.50	-	29.04	34.27	7.49	34.84
PK	4.924G	48.60	74.00	-25.40	6.92	3	Horizontal	360	1.50	-	41.68	34.27	7.49	34.84

802.11ac VHT40_Nss1,(MCS0)_3TX

2422MHz_BF TX

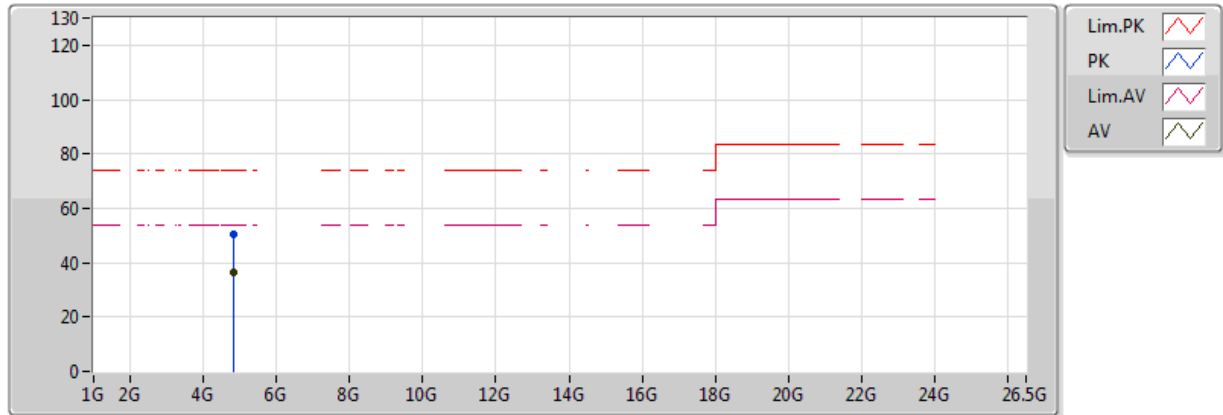


Eut=Z axis
Ant=Y axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3888G	53.47	54.00	-0.53	2.09	3	Vertical	82	2.24	-	51.38	32.17	5.18	35.26
AV	2.4092G	99.87	Inf	-Inf	2.14	3	Vertical	82	2.24	-	97.73	32.19	5.21	35.26
AV	2.4888G	46.10	54.00	-7.90	2.29	3	Vertical	82	2.24	-	43.82	32.29	5.28	35.28
PK	2.3892G	67.87	74.00	-6.13	2.09	3	Vertical	82	2.24	-	65.78	32.17	5.18	35.26
PK	2.4044G	108.83	Inf	-Inf	2.13	3	Vertical	82	2.24	-	106.70	32.19	5.20	35.26
PK	2.4976G	59.51	74.00	-14.49	2.31	3	Vertical	82	2.24	-	57.20	32.30	5.29	35.28

802.11ac VHT40_Nss1,(MCS0)_3TX

2422MHz_BF TX

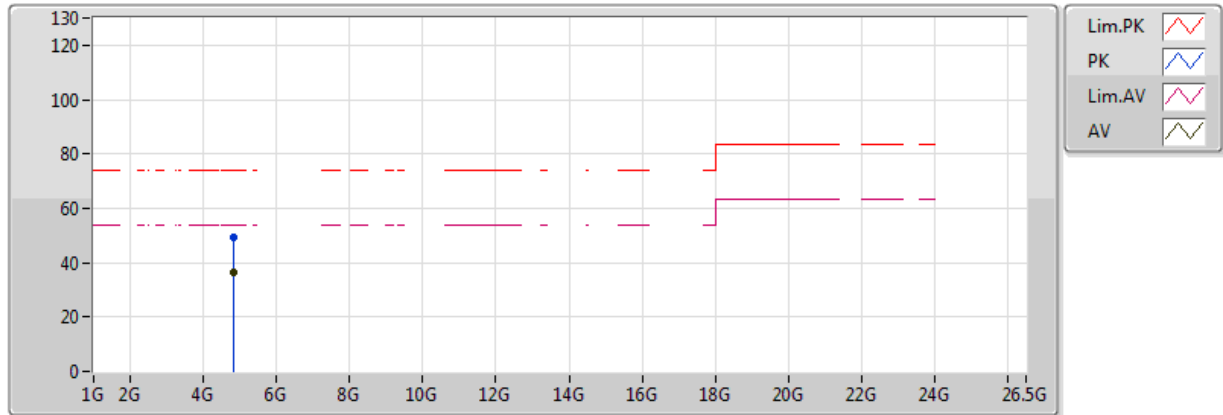


Eut=Z axis
Ant=Y axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.844G	36.33	54.00	-17.67	6.76	3	Vertical	360	1.50	-	29.57	34.24	7.39	34.87
PK	4.844G	50.39	74.00	-23.61	6.76	3	Vertical	360	1.50	-	43.63	34.24	7.39	34.87

802.11ac VHT40_Nss1,(MCS0)_3TX

2422MHz_BF TX

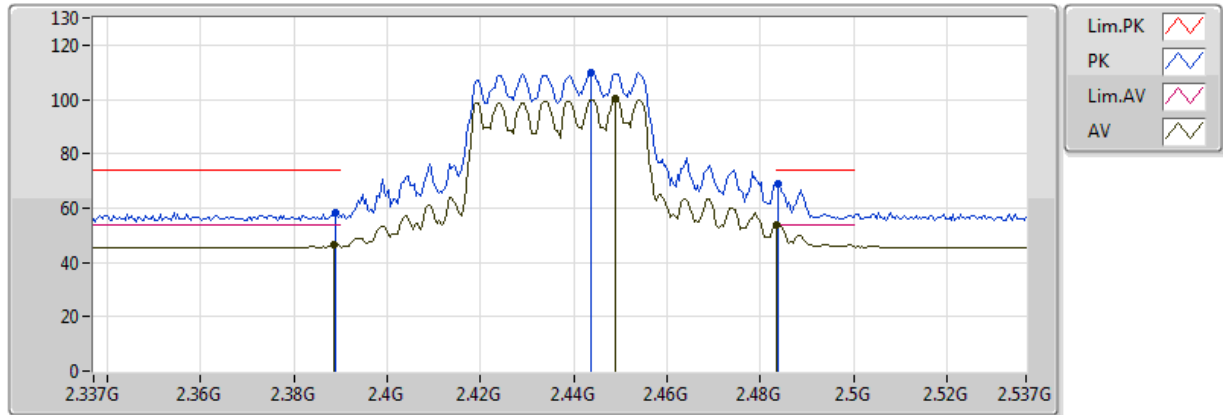


Eut=Z axis
Ant=Y axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.844G	36.20	54.00	-17.80	6.76	3	Horizontal	0	1.50	-	29.44	34.24	7.39	34.87
PK	4.844G	49.39	74.00	-24.61	6.76	3	Horizontal	0	1.50	-	42.63	34.24	7.39	34.87

802.11ac VHT40_Nss1,(MCS0)_3TX

2437MHz_BF TX

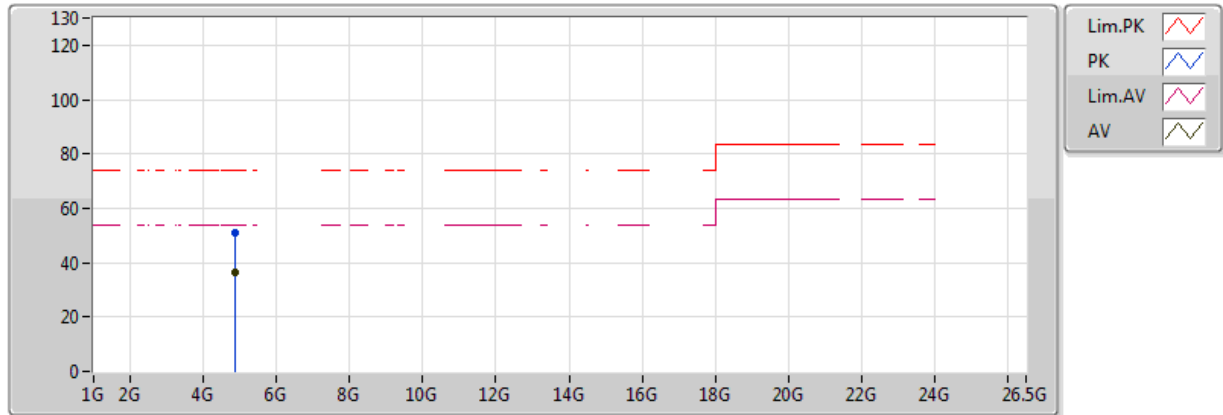


Eut=Z axis
Ant=Y axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3886G	46.70	54.00	-7.30	2.09	3	Vertical	17	2.61	-	44.61	32.17	5.18	35.26
AV	2.449G	100.19	Inf	-Inf	2.21	3	Vertical	17	2.61	-	97.97	32.24	5.24	35.27
AV	2.483502G	53.59	54.00	-0.41	2.28	3	Vertical	17	2.61	-	51.31	32.28	5.28	35.28
PK	2.389G	58.31	74.00	-15.69	2.09	3	Vertical	17	2.61	-	56.22	32.17	5.18	35.26
PK	2.4438G	109.93	Inf	-Inf	2.20	3	Vertical	17	2.61	-	107.73	32.23	5.24	35.27
PK	2.4838G	68.81	74.00	-5.19	2.28	3	Vertical	17	2.61	-	66.53	32.28	5.28	35.28

802.11ac VHT40_Nss1,(MCS0)_3TX

2437MHz_BF TX

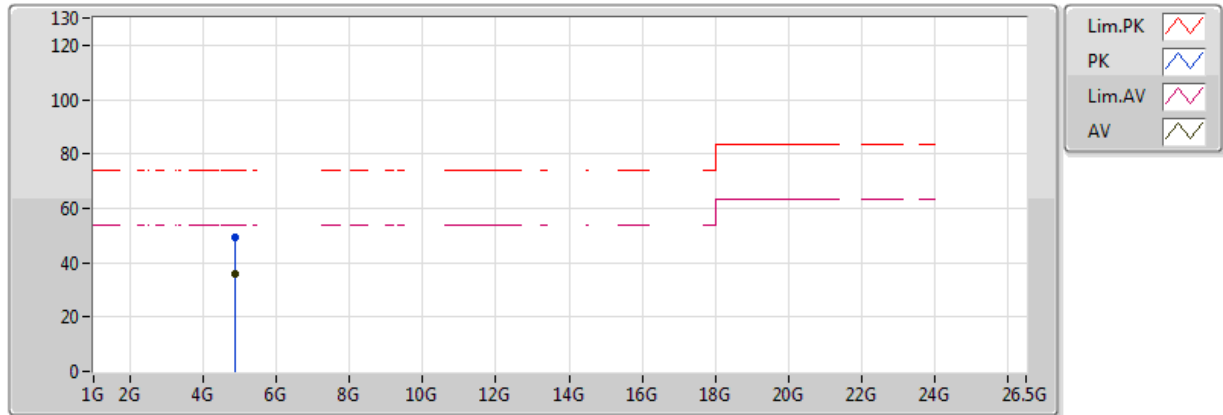


Eut=Z axis
Ant=Y axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.874G	36.19	54.00	-17.81	6.82	3	Vertical	360	1.50	-	29.37	34.25	7.43	34.86
PK	4.874G	50.72	74.00	-23.28	6.82	3	Vertical	360	1.50	-	43.90	34.25	7.43	34.86

802.11ac VHT40_Nss1,(MCS0)_3TX

2437MHz_BF TX

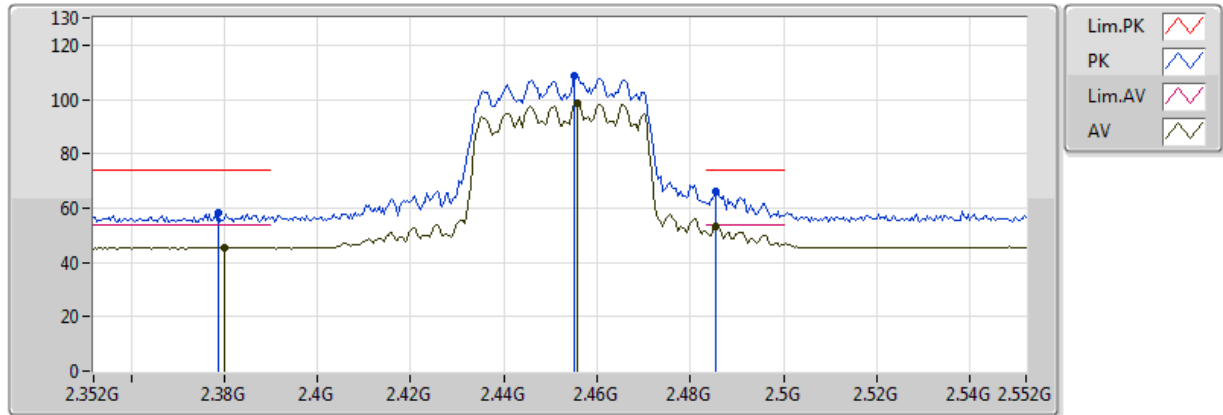


Eut=Z axis
Ant=Y axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.874G	35.87	54.00	-18.13	6.82	3	Horizontal	0	1.50	-	29.05	34.25	7.43	34.86
PK	4.874G	49.31	74.00	-24.69	6.82	3	Horizontal	0	1.50	-	42.49	34.25	7.43	34.86

802.11ac VHT40_Nss1,(MCS0)_3TX

2452MHz_BF TX

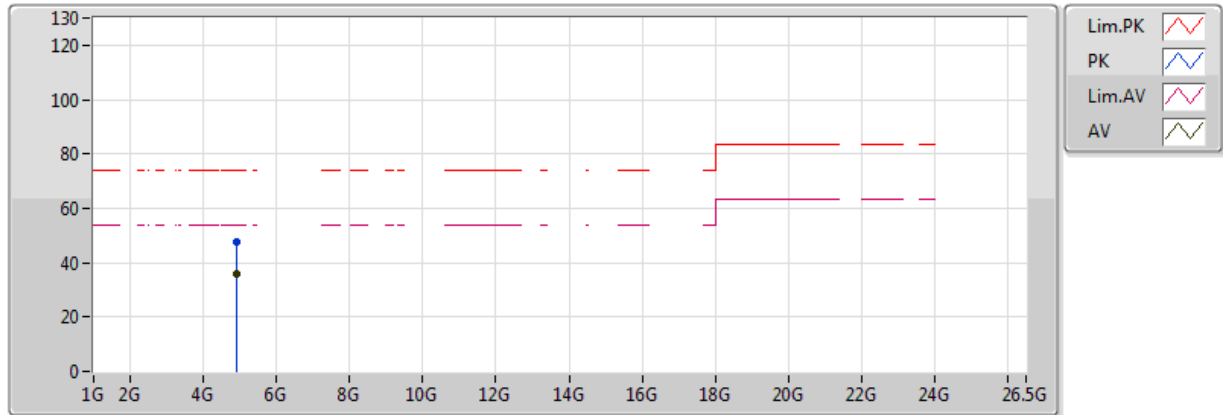


Eut=Z axis
Ant=Y axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.38G	45.51	54.00	-8.49	2.07	3	Vertical	1	2.40	-	43.45	32.15	5.17	35.26
AV	2.4556G	98.70	Inf	-Inf	2.23	3	Vertical	1	2.40	-	96.47	32.25	5.25	35.27
AV	2.4856G	53.35	54.00	-0.65	2.28	3	Vertical	1	2.40	-	51.06	32.28	5.28	35.28
PK	2.3788G	58.04	74.00	-15.96	2.06	3	Vertical	1	2.40	-	55.97	32.15	5.17	35.26
PK	2.4552G	108.50	Inf	-Inf	2.22	3	Vertical	1	2.40	-	106.27	32.25	5.25	35.27
PK	2.4856G	66.14	74.00	-7.86	2.28	3	Vertical	1	2.40	-	63.86	32.28	5.28	35.28

802.11ac VHT40_Nss1,(MCS0)_3TX

2452MHz_BF TX

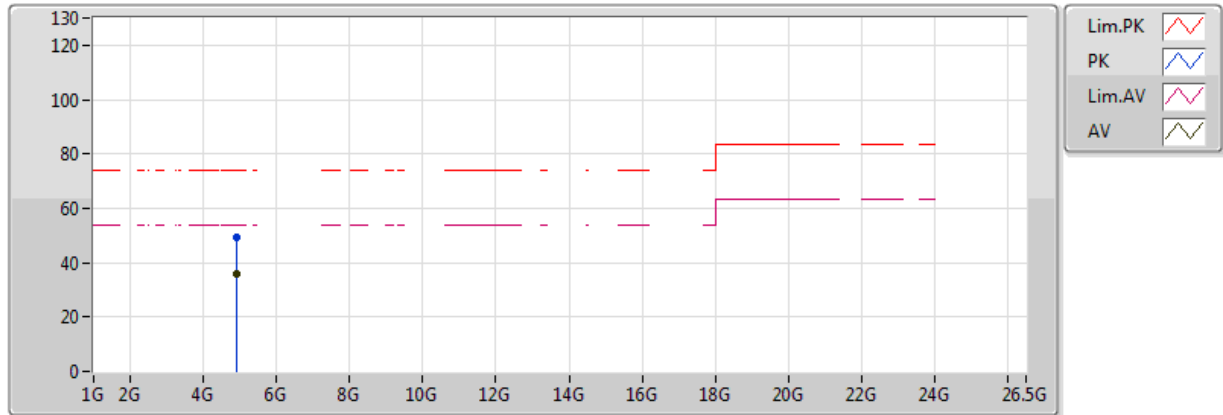


Eut=Z axis
Ant=Y axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.904G	36.03	54.00	-17.97	6.88	3	Vertical	0	1.50	-	29.15	34.26	7.47	34.85
PK	4.904G	47.87	74.00	-26.13	6.88	3	Vertical	0	1.50	-	40.99	34.26	7.47	34.85

802.11ac VHT40_Nss1,(MCS0)_3TX

2452MHz_BF TX



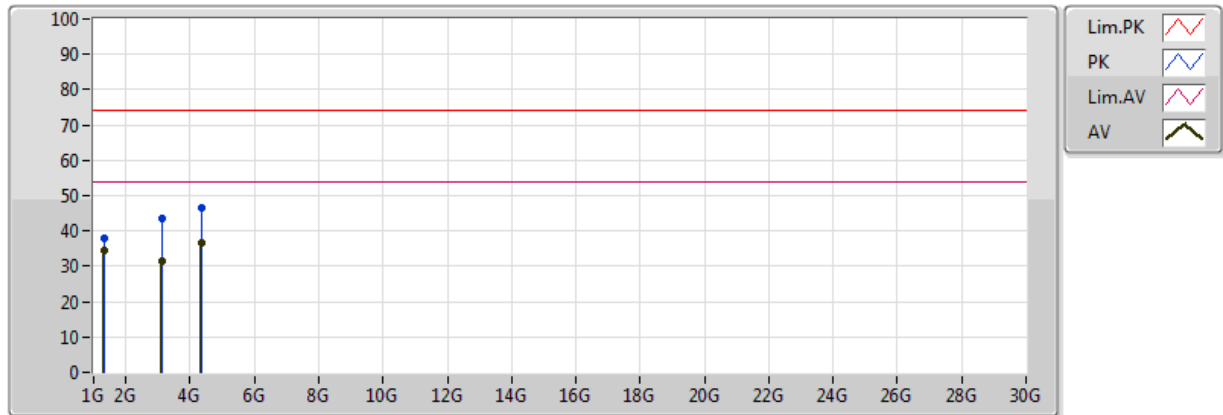
Eut=Z axis
Ant=Y axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.904G	36.04	54.00	-17.96	6.88	3	Horizontal	360	1.50	-	29.16	34.26	7.47	34.85
PK	4.904G	49.19	74.00	-24.81	6.88	3	Horizontal	360	1.50	-	42.31	34.26	7.47	34.85

**3.6.7 Test Result of Radiated Emission Co-location****Summary**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
mode1	Pass	0.00	AV	4.374G	36.85	54.00	-17.15	5.35	3	Vertical	287	1.36

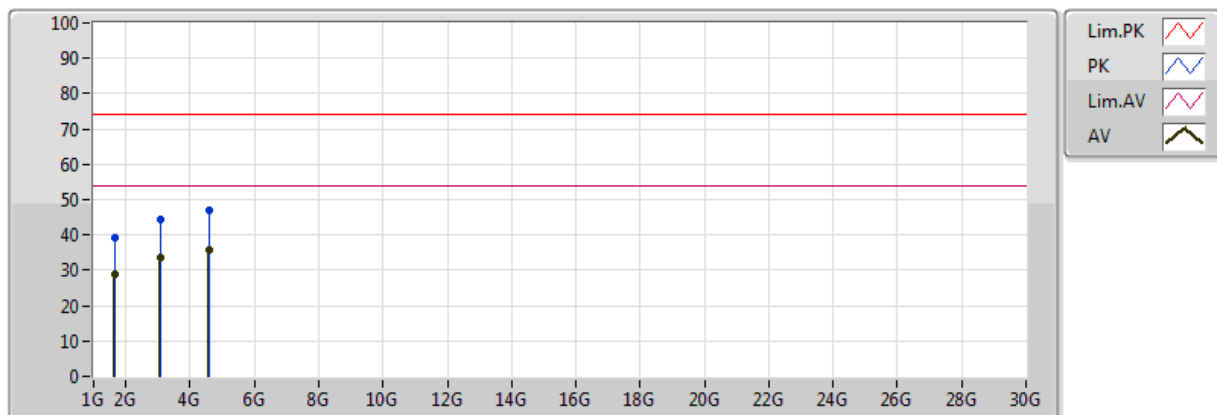
Radiated-above 1GHz_model1



EUT = Z axis , Ant = Y axis

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	1.324G	34.37	54.00	-19.63	-4.19	3	Vertical	254	1.50	-	38.56	25.24	3.02	32.46
AV	3.132G	31.59	54.00	-22.41	2.68	3	Vertical	360	1.50	-	28.91	28.43	4.85	30.60
AV	4.374G	36.85	54.00	-17.15	5.35	3	Vertical	287	1.36	-	31.50	30.42	5.15	30.22
PK	1.324G	37.96	74.00	-36.04	-4.19	3	Vertical	254	1.50	-	42.15	25.24	3.02	32.46
PK	3.132G	43.60	74.00	-30.40	2.68	3	Vertical	360	1.50	-	40.92	28.43	4.85	30.60
PK	4.374G	46.68	74.00	-27.32	5.35	3	Vertical	287	1.36	-	41.33	30.42	5.15	30.22

Radiated-above 1GHz_model1



EUT = Z axis , Ant = Y axis

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	1.644G	28.86	54.00	-25.14	-2.24	3	Horizontal	177	1.76	-	31.10	25.84	3.42	31.51
AV	3.09G	33.83	54.00	-20.17	2.63	3	Horizontal	246	1.50	-	31.20	28.42	4.82	30.61
AV	4.596G	35.58	54.00	-18.42	5.89	3	Horizontal	360	1.50	-	29.69	30.85	5.20	30.16
PK	1.644G	39.35	74.00	-34.65	-2.24	3	Horizontal	177	1.76	-	41.59	25.84	3.42	31.51
PK	3.09G	44.51	74.00	-29.49	2.63	3	Horizontal	246	1.50	-	41.88	28.42	4.82	30.61
PK	4.596G	47.00	74.00	-27.00	5.89	3	Horizontal	360	1.50	-	41.11	30.85	5.20	30.16

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Test Receiver	R&S	ESR3	102052	9 kHz ~ 3.6 GHz	05/Apr/2017	04/Apr/2018
Two-Line V-Network	R&S	ENV 216	100003	9 kHz ~ 30 MHz	30/Aug/2016	29/Aug/2017
RF Cable-CON	Weiyang	WY200	CB018	9 kHz ~ 30 MHz	07/Feb/2017	06/Feb/2018
Impul Sbegrenzer Pulse Limiter	R&S	ESH3-Z2	100921	10 kHz ~ 30 MHz	20/Oct/2016	19/Oct/2017
Impedance Stabilization Network	TESEQ	ISN T800	24558	150 kHz ~ 30 MHz	07/Feb/2017	06/Feb/2018

NCR : Non-Calibration Require

Instrument for Conducted Test (Non-Beamforming)

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	9kHz~40GHz	30/Dec/2016	29/Dec/2017
Power Sensor	Anritsu	MA2411B	1027452	300MHz ~ 40GHz	24/Feb/2017	23/Feb/2018
Power Meter	Anritsu	ML2495A	1124009	300MHz ~ 40GHz	24/Feb/2017	23/Feb/2018
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	27/Jul/2017	26/Jul/2018
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY677/3	30MHz~26.5GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY678/3	30MHz~26.5GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.5m	HUBER+SUHNER	SUCOFLEX_104	MY10717/4	30MHz~26.5GHz	02/Oct/2016	01/Oct/2017

Instrument for Conducted Test (Beamforming)

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	9kHz~40GHz	30/Dec/2016	29/Dec/2017
Power Sensor	Anritsu	MA2411B	0917017	300MHz ~ 40GHz	10/Feb/2017	09/Feb/2018
Power Meter	Anritsu	ML2495A	0949003	300MHz ~ 40GHz	10/Feb/2017	09/Feb/2018
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	27/Jul/2017	26/Jul/2018
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10710/4	30MHz~26.5GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10709/4	30MHz~26.5GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.5m	HUBER+SUHNER	SUCOFLEX_104	MY10713/4	30MHz~26.5GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10720/4	30MHz~26.5GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10721/4	30MHz~26.5GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10722/4	30MHz~26.5GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.5m	HUBER+SUHNER	SUCOFLEX_104	MY10714/4	30MHz~26.5GHz	02/Oct/2016	01/Oct/2017

**Instrument for Radiated Test (Non-Beamforming)**

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSP40	100593	9kHz - 40GHz	26/Oct/2016	25/Oct/2017
3m Semi Anechoic	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz-1GHz	21/Oct/2016	20/Oct/2017
3m Semi Anechoic	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz ~ 18GHz	12/Dec/2016	11/Dec/2017
Amplifier	Agilent	8447D	2944A11149	100kHz-1.3GHz	01/Jul/2016	30/Jun/2017
Amplifier	Agilent	8449B	3008A02373	1GHz-26.5GHz	02/Sep/2016	01/Sep/2017
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA9120D 01531	1GHz-18GHz	25/Apr/2017	24/Apr/2018
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	15GHz-40GHz	06/Feb/2017	05/Feb/2018
MicrowavePreamplifier with6dB Attenuator	EMC INSTRUMENTS	EMC184045B & PE7005-	1840917	18GHz-40GHz	24/Aug/2016	23/Aug/2017
Loop Antenna	TESEQ	HLA 6120	31244	9kHz-30MHz	02/Mar/2017	01/Mar/2018
RF Cable-high	SUHNER	SUCOFLEX104	MY34918/4	1GHz ~ 40GHz	26/Jan/2017	25/Jan/2018
RF Cable-R03m	Jye Bao	RG142	CB017	9kHz ~ 1GHz	26/Jan/2017	25/Jan/2018
Bilog Antenna	SCHAFFNER	CBL 6112B	2723	30MHz ~ 1GHz	01/Oct/2016	30/Sep/2017
Receiver	R&S	ESU-26	100422/026	20Hz ~ 26.5GHz	21/Sep/2016	20/Sep/2017

Instrument for Radiated Test (Beamforming)

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSP40	100593	9kHz - 40GHz	26/Oct/2016	25/Oct/2017
3m Semi Anechoic	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz-1GHz	21/Oct/2016	20/Oct/2017
3m Semi Anechoic	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz ~ 18GHz	12/Dec/2016	11/Dec/2017
Amplifier	Agilent	8447D	2944A11149	100KHz-1.3GHz	01/Jul/2016	30/Jun/2017
Amplifier	Agilent	8449B	3008A02373	1GHz-26.5GHz	02/Sep/2016	01/Sep/2017
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA9120D 01531	1GHz-18GHz	25/Apr/2017	24/Apr/2018
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	15GHz-40GHz	06/Feb/2017	05/Feb/2018
MicrowavePreamplifier with6dB Attenuator	EMC INSTRUMENTS	EMC184045B & PE7005-	1840917	18GHz-40GHz	24/Jun/2016	23/Aug/2017
Loop Antenna	TESEQ	HLA 6120	31244	9KHz-30MHz	02/Mar/2017	01/Mar/2018
RF Cable-high	SUHNER	SUCOFLEX104	MY34918/4	1GHz ~ 40GHz	26/Jan/2017	25/Jan/2018
RF Cable-R03m	Jye Bao	RG142	CB017	9kHz ~ 1GHz	26/Jan/2017	25/Jan/2018
Bilog Antenna	SCHAFFNER	CBL 6112B	2723	30MHz ~ 1GHz	01/Oct/2016	30/Sep/2017
Receiver	R&S	ESU-26	100422/026	20Hz ~ 26.5GHz	21/Sep/2016	20/Sep/2017