



FCC Test Report

Equipment : D3 WiFi Gateway
Brand Name : Linksys
Model No. : CG7500
FCC ID : Q87-CG7500
Standard : 47 CFR FCC Part 15.407
Operating Band : 5150 MHz – 5250 MHz
5725 MHz – 5850 MHz
Applicant : Linksys LLC
121 Theory Drive, Irvine, CA 92617, USA
Manufacturer : Hitron Technologies
No.1-8, Lising 1st Rd. Hsinchu Science Park, Hsinchu
300, Taiwan
Function : ☐ Outdoor; ☒ Indoor; ☐ Fixed P2P
☐ Client

The product sample received on Oct. 12, 2016 and completely tested on Mar. 07, 2017. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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

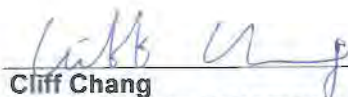

Cliff Chang
SPORTON INTERNATIONAL INC.





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Summary of Test Result

Conformance Test Specifications			
Report Clause	Ref. Std. Clause	Description	Result
1.1.2	15.203	Antenna Requirement	Complied
3.1	15.207	AC Power-line Conducted Emissions	Complied
3.2	15.407(a)	Emission Bandwidth	Complied
3.3	15.407(a)	Maximum Conducted Output Power	Complied
3.4	15.407(a)	Peak Power Spectral Density	Complied
3.5	15.407(b)	Unwanted Emissions	Complied
3.6	15.407(g)	Frequency Stability	Complied



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FCC ID: Q87-CG7500

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	a, n (HT20), ac (VHT20)	5180-5240	36-48 [4]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40)	5190-5230	38-46 [2]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80)	5210	42 [1]
5725-5850		5775	155 [1]

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	3TX
5.15-5.25GHz	802.11ac VHT20	20	3TX
5.15-5.25GHz	802.11ac VHT40	40	3TX
5.15-5.25GHz	802.11ac VHT80	80	3TX
5.725-5.85GHz	802.11a	20	3TX
5.725-5.85GHz	802.11ac VHT20	20	3TX
5.725-5.85GHz	802.11ac VHT40	40	3TX
5.725-5.85GHz	802.11ac VHT80	80	3TX

Note:

- ♦ 5.2G/5.2G-I(IC) is the 5.2GHz Band (5.15-5.25GHz).
- ♦ 5.8G/5.8G-I(IC) is the 5.8GHz Band (5.725-5.850GHz).
- ♦ 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ VHT20, VHT40, VHT80 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ♦ BWch is the nominal channel bandwidth.
- ♦ Nss-Min is the minimum number of spatial streams.
- ♦ Nant is the number of outputs. e.g., 2(2,3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.

1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	
						2.4GHz	5GHz
1	1	Airgain	N2420GS-T6-PK1-B1XST65BU	PCB Antenna	I-PEX	1.6	-
2	2	Airgain	N2420SLOL-T6-PK1-B1XST280BU	PCB Antenna	I-PEX	3.2	-
3	3	Airgain	N2420GS-T6-PK1-B1XST190BU	PCB Antenna	I-PEX	1.6	-
4	4	Airgain	N5X20SD-PK1-G1X100BU	PCB Antenna	I-PEX	-	3.48
5	5	Airgain	N5X20SD-PK1-G1XST65BU	PCB Antenna	I-PEX	-	3.48
6	6	Airgain	N5X20SD-T6-PK1-G1XST60BU	PCB Antenna	I-PEX	-	3.48

Note: The EUT has six antennas.

<For 2.4GHz Band>
For IEEE 802.11b/g/n/ac mode (3TX/3RX)

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

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

<For 5GHz Band>
For IEEE 802.11a/n/ac mode (3TX/3RX)

Port 4, Port 5 and Port 6 can be used as transmitting/receiving antenna.

Port 4, Port 5 and Port 6 could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)
802.11a	0.962	0.168
802.11ac VHT20	0.95	0.223
802.11ac VHT40	0.914	0.391
802.11ac VHT80	0.837	0.773

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter		
Beamforming Function	☐ With beamforming	☒ Without beamforming	

1.2 Testing Applied Standards

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

- ♦ 47 CFR FCC Part 15
- ♦ ANSI C63.10-2013
- ♦ FCC KDB 789033 D02 v01r03
- ♦ FCC KDB 644545 D03 v01
- ♦ FCC KDB 662911 D01 v02r01

1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-CB	Serway Li	20°C / 60%	Feb. 03, 2017
Radiated	03CH01-CB	Nyle Chang / Mars Lin	22°C / 54%	Jan. 25, 2017~ Feb. 09, 2017
AC Conduction	CO01-CB	Hank Yang	25°C / 59%	Feb. 10, 2017~ Mar. 07, 2017

Test site Designation No. TW0006 with FCC.

Test site registered number IC 4086D with Industry Canada.

1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.7 dB	Confidence levels of 95%
Output Power Measurement	1.33 dB	Confidence levels of 95%
Power Density Measurement	1.27 dB	Confidence levels of 95%
Bandwidth Measurement	9.74 x10 ⁻⁸	Confidence levels of 95%
Frequency Stability	6.06 x10 ⁻⁸	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	Power Setting
802.11a_(6Mbps)_3TX	-
5180MHz	18.5
5200MHz	21.5
5240MHz	22
5745MHz	23
5785MHz	22.5
5825MHz	23.5
802.11ac VHT20_Nss1,(MCS0)_3TX	-
5180MHz	18.5
5200MHz	21.5
5240MHz	21.5
5745MHz	23
5785MHz	23
5825MHz	23
802.11ac VHT40_Nss1,(MCS0)_3TX	-
5190MHz	16
5230MHz	21
5755MHz	22
5795MHz	23
802.11ac VHT80_Nss1,(MCS0)_3TX	-
5210MHz	12
5775MHz	19

Note:

- ♦ Test range channel consist of L (Low Ch.), M (Middle Ch.), H (High Ch.), S (Single Ch.) and C (Straddle Band Ch.).
- ♦ VHT20/VHT40 covers HT20/HT40, due to same modulation. The power setting for 802.11n HT20 and HT40 are the same or lower than 802.11ac VHT20 and VHT40.

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	CTX
1	2.4GHz
2	5GHz
For operating mode 1 is the worst case and it was record in this test report.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Maximum Conducted Output Power Peak Power Spectral Density Frequency Stability
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests	
Tests Item	Unwanted Emissions
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	2.4GHz
2	5GHz
For operating mode 1 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Operating Mode	CTX
Refer to Sporton Test Report No.: FA6O1236 for Co-location RF Exposure Evaluation.	

Note 1: The EUT can only be used at Y axis position

2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

Accessories				
No.	Equipment Name	Brand Name	Model Name	Rating
1	AC Adapter	AtechOEM	ADS036T-W120300	Input: 100-240V~50-60Hz 1.0A Output: 12V, 3.0A
Other				
RJ-45 Cable*1: Non-Shielded 1.5m				

2.5 Support Equipment

For Test Site No: CO01-CB

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Flash disk3.0	Transcend	JetFlash-700	DoC

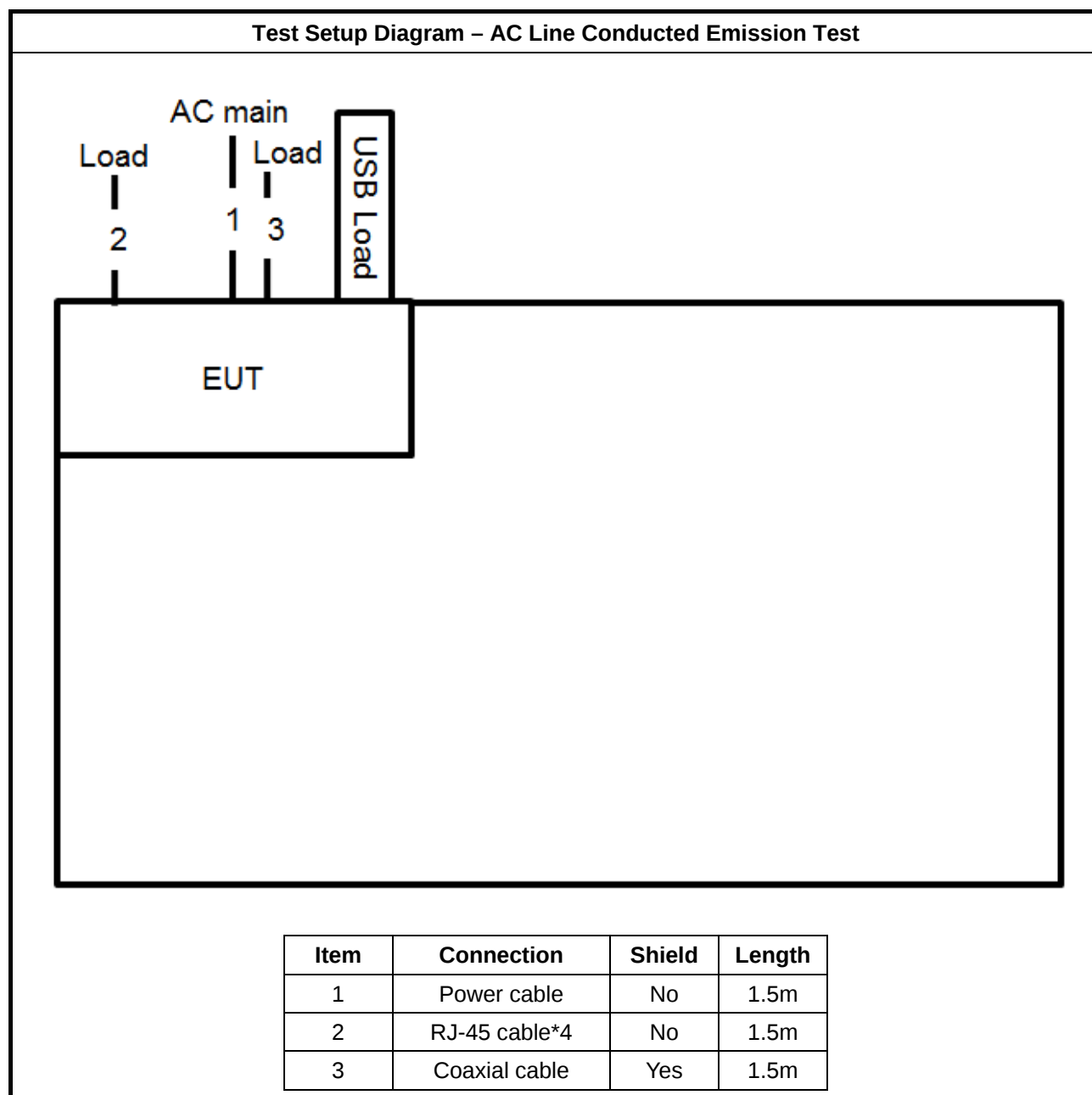
For Test Site No: 03CH01-CB

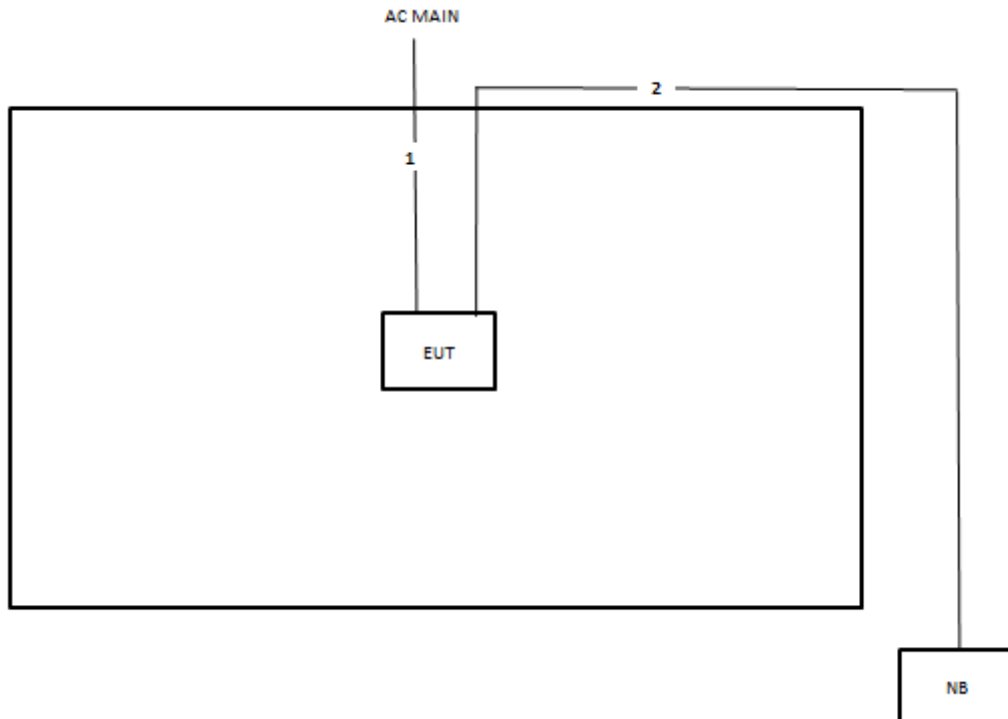
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E4300	DoC

For Test Site No: TH01-CB

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

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test


Item	Connection	Shielded	Length
1	Power cable	No	1.65m
2	RJ-45 cable	No	10m

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

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

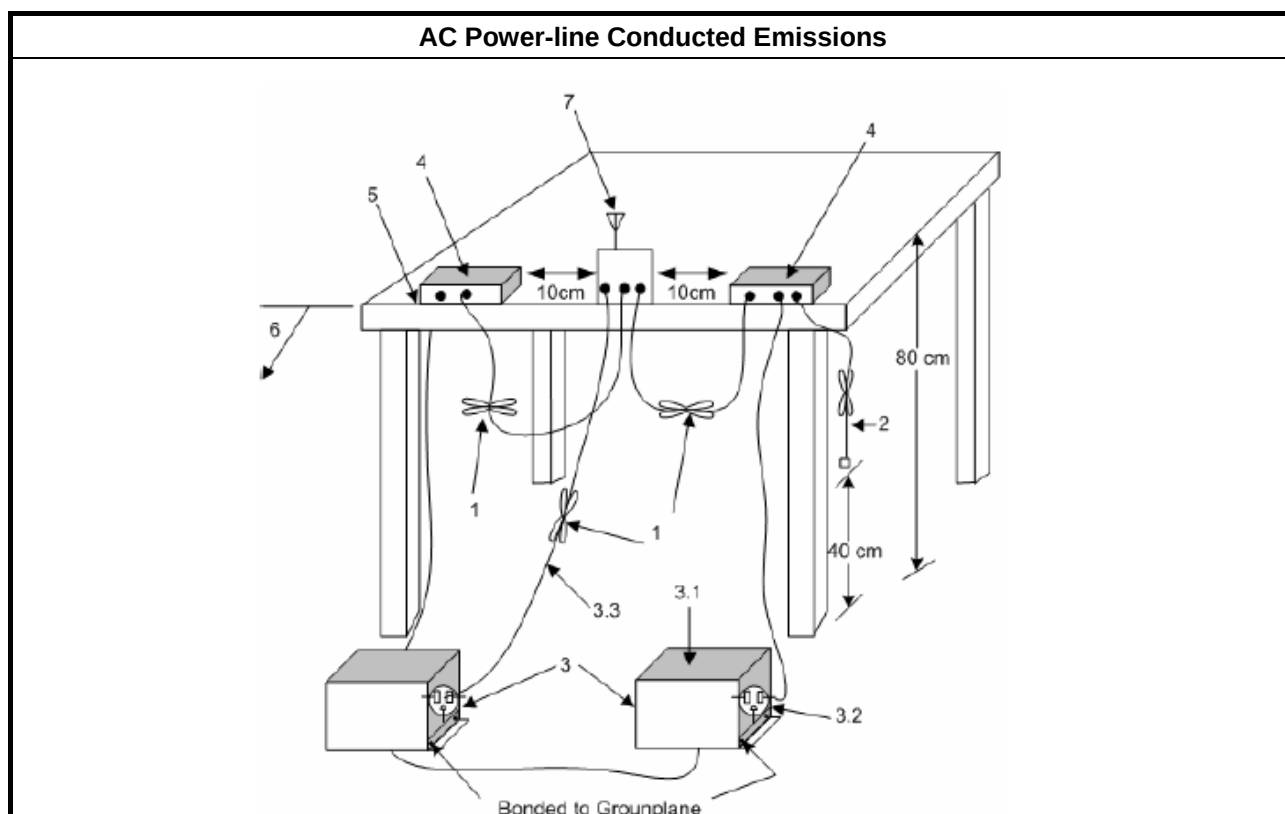
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

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

3.1.4 Test Setup





3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

Emission Bandwidth Limit	
UNII Devices	
☒	For the 5.15-5.25 GHz band, N/A
☐	For the 5.25-5.35 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
☐	For the 5.47-5.725 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
☒	For the 5.725-5.85 GHz band, 6 dB emission bandwidth $\geq$ 500kHz.
LE-LAN Devices	
☐	For the band 5.15-5.25 GHz, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
☐	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.725-5.85 GHz band, 6 dB emission bandwidth $\geq$ 500kHz.

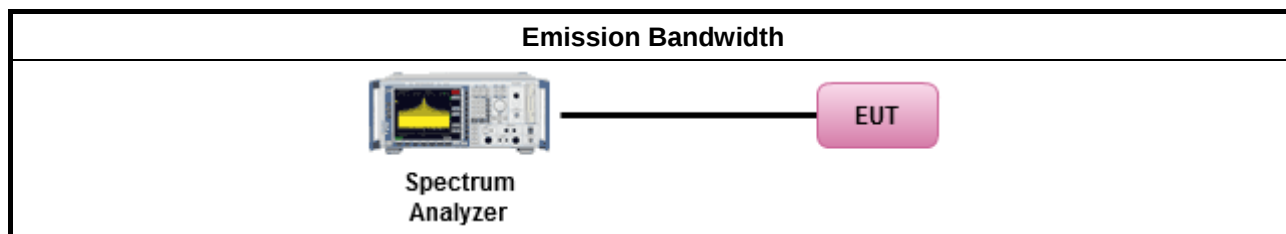
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
For the emission bandwidth shall be measured using one of the options below:	
☒	Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement.
☐	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.
☒	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
UNII Devices	
☒ For the 5.15-5.25 GHz band:	
☐	- Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. e.i.r.p. at any elevation angle above 30 degrees ≤ 125mW [21dBm] - Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ - Point-to-point AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 23$ dBi, then $P_{Out} = 30 - (G_{TX} - 23)$. - Mobile or Portable Client: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
☐	For the 5.25-5.35 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
☐	For the 5.47-5.725 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
☒ For the 5.725-5.85 GHz band:	
☐	- Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. - Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
LE-LAN Devices	
☐	For the 5.15-5.25 GHz band, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
☐	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐ For the 5.725-5.85 GHz band:	
☐	- Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. - Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
P_{Out} = maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

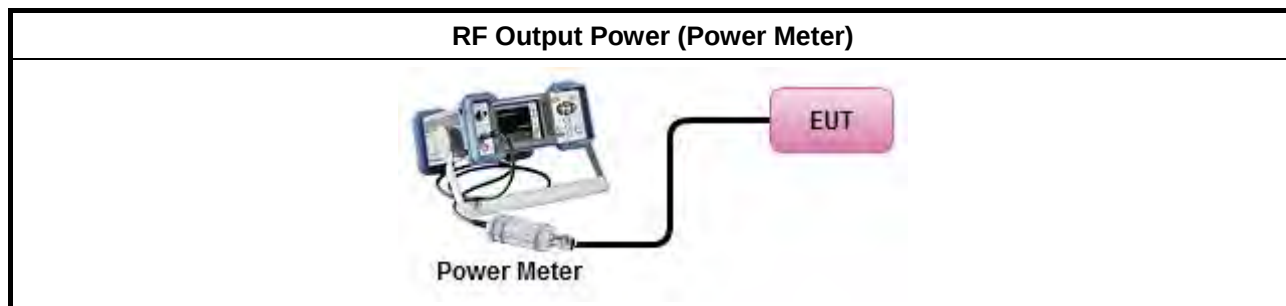
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
Maximum Conducted Output Power	
Average over on/off periods with duty factor	
☐	Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
☐	Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
Wideband RF power meter and average over on/off periods with duty factor	
☒	Refer as FCC KDB 789033, clause E Method PM-G (using an RF average power meter).
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.	
If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$	

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Peak Power Spectral Density

3.4.1 Peak Power Spectral Density Limit

Peak Power Spectral Density Limit	
UNII Devices	
☒ For the 5.15-5.25 GHz band:	
	- Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$. - Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$. - Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 23$ dBi, then $P_{Out} = 17 - (G_{TX} - 23)$. - Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.
☐ For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
☐ For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
☒ For the 5.725-5.85 GHz band:	
	- Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then $PPSD = 30 - (G_{TX} - 6)$. - Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
LE-LAN Devices	
☐ For the 5.15-5.25 GHz band, the peak power spectral density (PPSD) ≤ 4 dBm/MHz and the e.i.r.p. peak power spectral density (PPSD) ≤ 10 dBm/MHz.	
☐ For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz and the e.i.r.p. peak power spectral density (PPSD) ≤ 17 dBm/MHz.	
	e.i.r.p. greater than 200 mW shall comply with the following e.i.r.p. at different elevations, where θ is the angle above the local horizontal plane (of the Earth) as shown below: -13 dBW/MHz for $0^\circ \leq \theta < 8^\circ$; -13 - 0.716 (θ-8) dBW/MHz for $8^\circ \leq \theta < 40^\circ$ -35.9 - 1.22 (θ-40) dBW/MHz for $40^\circ \leq \theta \leq 45^\circ$; -42 dBW/MHz for $\theta > 45^\circ$
☐ For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz and the e.i.r.p. peak power spectral density (PPSD) ≤ 17 dBm/MHz.	
☐ For the 5.725-5.85 GHz band:	
	- Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then $PPSD = 30 - (G_{TX} - 6)$. - Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
PPSD = peak power spectral density that he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz G_{TX} = the maximum transmitting antenna directional gain in dBi.	

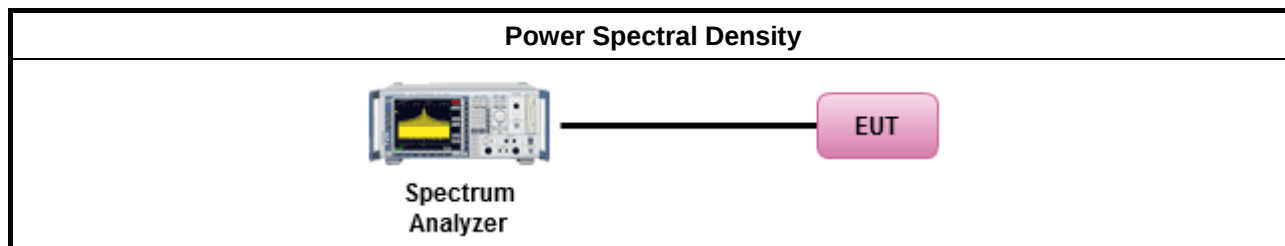
3.4.2 Measuring Instruments

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 shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:	
☐ Refer as FCC KDB 789033, F5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth	
[duty cycle ≥ 98% or external video / power trigger]	
☒ Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging).	
☐ Refer as FCC KDB 789033, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)	
duty cycle < 98% and average over on/off periods with duty factor	
☒ Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).	
☐ Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)	
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below:	
☒ Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.	
☐ Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,	
☐ Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.	
If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$	

3.4.4 Test Setup





3.4.5 Test Result of Peak Power Spectral Density

Refer as Appendix D

3.5 Unwanted Emissions

3.5.1 Transmitter Radiated Unwanted Emissions Limit

Unwanted emissions below 1 GHz and restricted band emissions above 1GHz 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.

Un-restricted band emissions above 1GHz Limit	
Operating Band	Limit
5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.725 - 5.85 GHz	all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Note 1: 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).

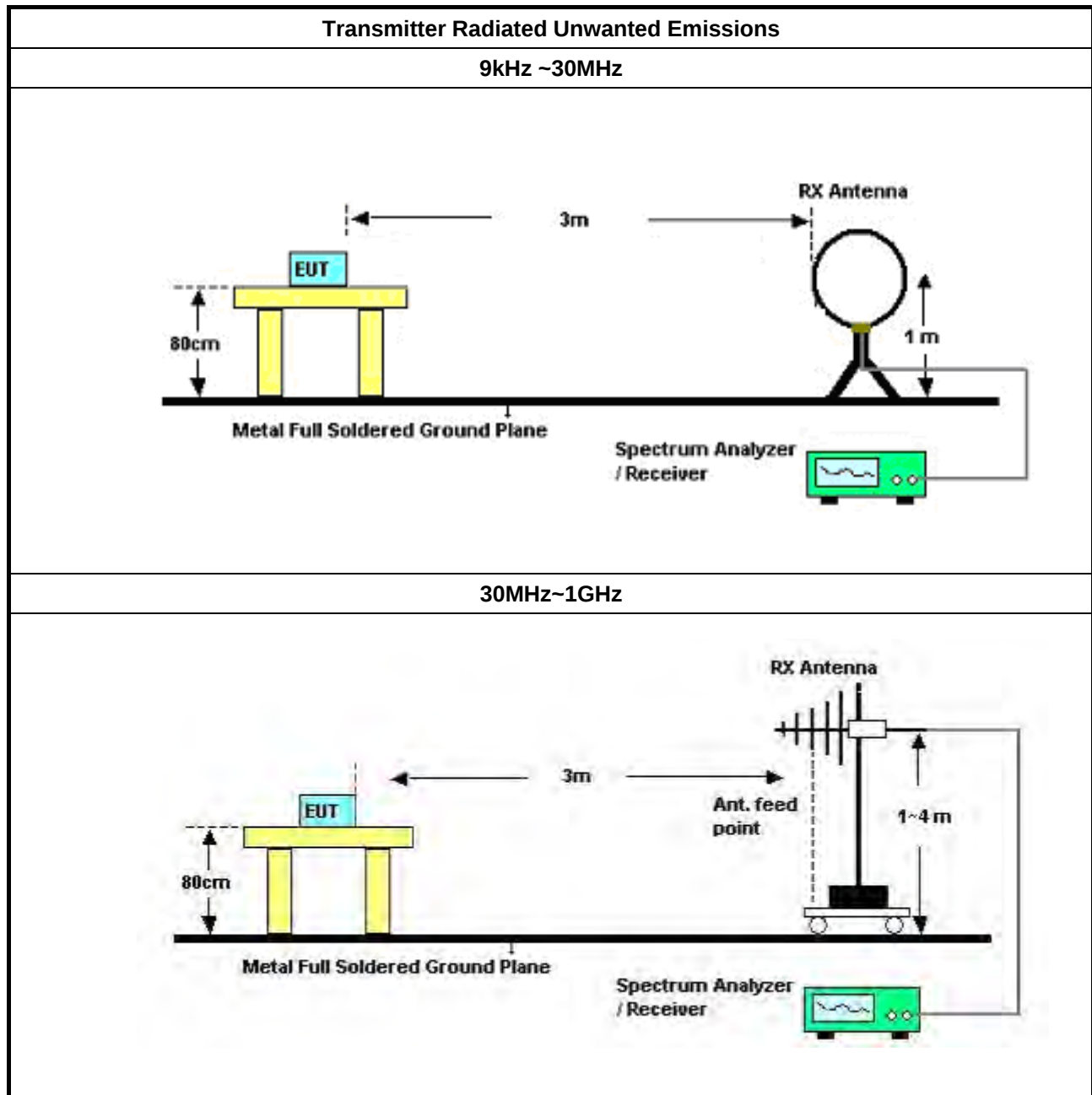
3.5.2 Measuring Instruments

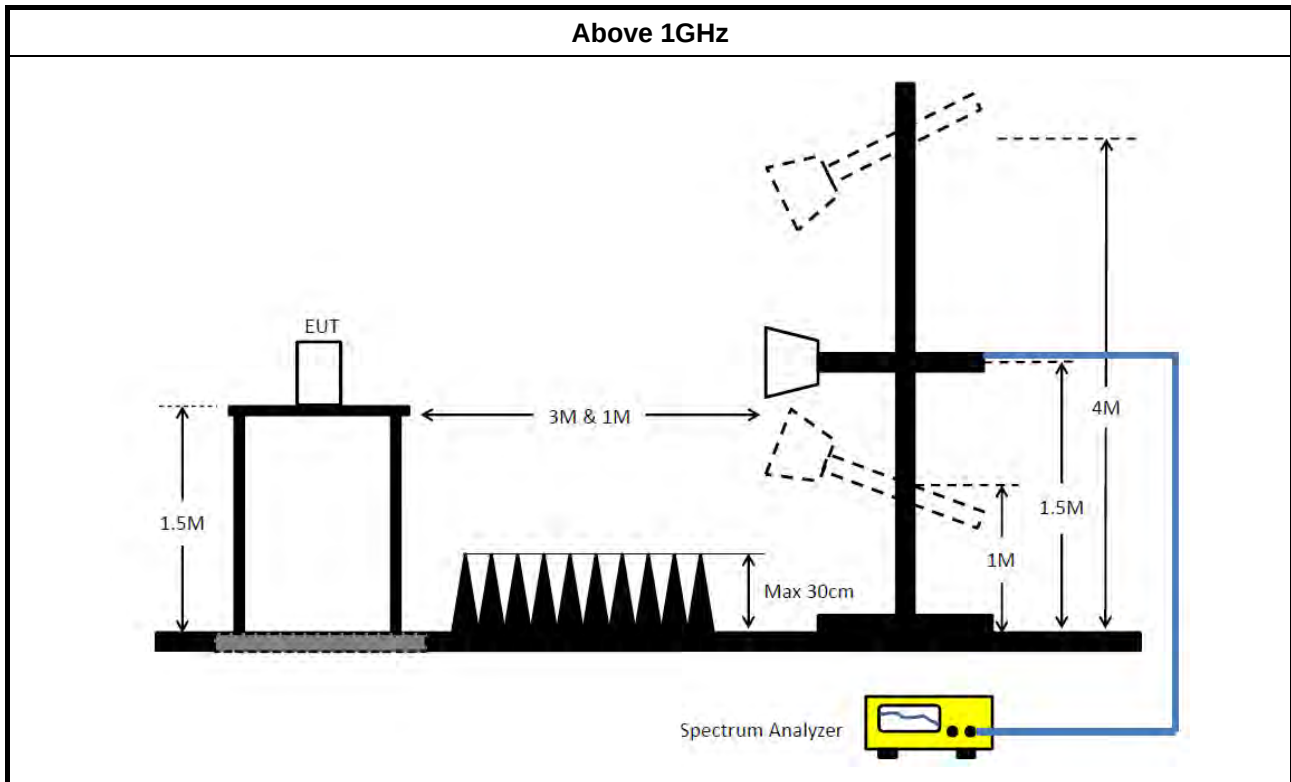
Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method	
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. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. 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).	
The average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor].	
For the transmitter unwanted emissions shall be measured using following options below:	
	Refer as FCC KDB 789033, clause H)2) for unwanted emissions into non-restricted bands.
	Refer as FCC KDB 789033, clause H)1) for unwanted emissions into restricted bands.
	☐ Refer as FCC KDB 789033, H)6) Method AD (Trace Averaging).
	☒ Refer as FCC KDB 789033, H)6) Method VB (Reduced VBW).
	☐ Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW $\geq$ 1/T, where T is pulse time.
	☐ Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.
	☒ Refer as FCC KDB 789033, clause H)5) measurement procedure peak limit.
	☐ Refer as ANSI C63.10, clause 4.2.3.2.2 measurement procedure peak limit.
	For radiated measurement.
	Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
	Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
	The any unwanted emissions level shall not exceed the fundamental emission level.
All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.	

3.5.4 Test Setup





3.5.5 Transmitter Unwanted Emissions (Below 30MHz)

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

3.5.6 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E

3.6 Frequency Stability

3.6.1 Frequency Stability Limit

Frequency Stability Limit	
UNII Devices	
In-band emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.	
LE-LAN Devices	
N/A	
IEEE Std. 802.11	
The transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5 GHz band and ± 25 ppm maximum for the 2.4 GHz band.	

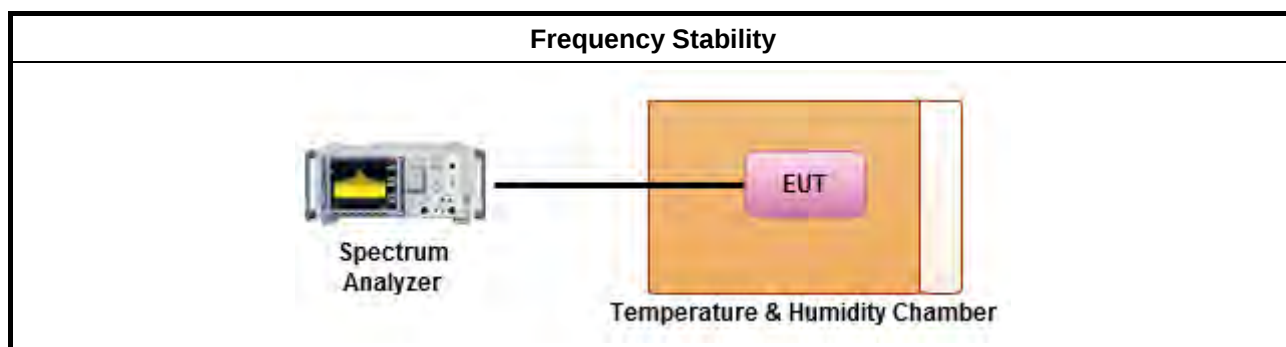
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

Test Method	
Refer as ANSI C63.10, clause 6.8 for frequency stability tests	
	Frequency stability with respect to ambient temperature
	Frequency stability when varying supply voltage
	Extreme temperature is 0°C~40°C.

3.6.4 Test Setup





3.6.5 Test Result of Frequency Stability

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 23, 2017	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 14, 2016	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Dec. 21, 2016	Conduction (CO01-CB)
COND Cable	Woken	Cable	01	150kHz ~ 30MHz	May 24, 2016	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	Conduction (CO01-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Aug. 30, 2016	Radiation (03CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2016*	Radiation (10CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 10, 2016	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 25, 2016	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10991	0.1MHz ~ 1.3GHz	Mar. 15, 2016	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 16, 2017	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jun. 28, 2016	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Nov. 21, 2016	Radiation (03CH01-CB)
EMI Test	R&S	ESCS	100355	9kHz ~ 2.75GHz	May 16, 2016	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-16+17	N/A	30 MHz ~ 1 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16+17	N/A	1 GHz ~ 18 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#1	N/A	18GHz ~ 40 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
Test Software	Audix	E3	6.2009-I0-7	N/A	N/A	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 26, 2016	Conducted (TH01-CB)
Temp. and Humidity Chamber	Ten Billion	TTH-D3SP	TBN-931011	-30~100 degree	Jun. 03, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-6	1 GHz ~ 26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-7	1 GHz ~ 26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)



FCC Test Report

Report No. : FR6O1236AB

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
RF Cable-high	Woken	RG402	High Cable-8	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-9	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 22, 2016	Conducted (TH01-CB)

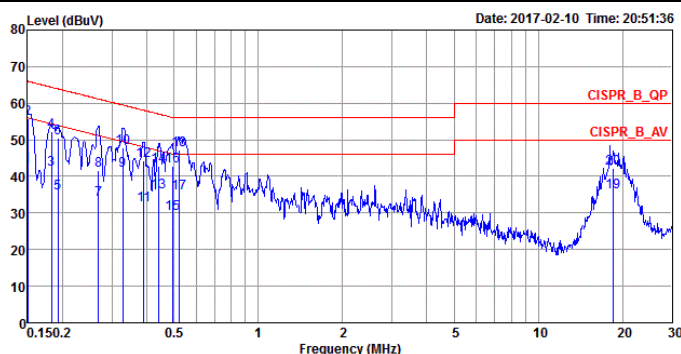
Note: Calibration Interval of instruments listed above is one year.

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

NCR means Non-Calibration required.

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Neutral
Operating Function	CTX		



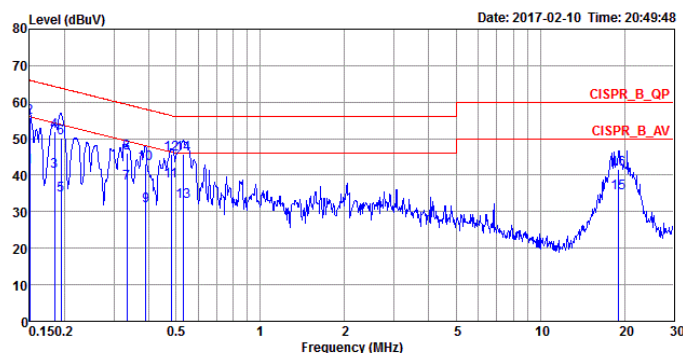
	Freq	Level	Over	Limit	Read	LISN	Cable		
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Pol/Phase	Remark
			dB	dBuV	dBuV	dB	dB		
1	0.1500	42.90	-13.10	56.00	32.72	10.02	0.16	NEUTRAL	Average
2	0.1500	55.67	-10.33	66.00	45.49	10.02	0.16	NEUTRAL	QP
3	0.1825	41.79	-12.58	54.37	31.69	9.92	0.18	NEUTRAL	Average
4	0.1825	52.16	-12.21	64.37	42.06	9.92	0.18	NEUTRAL	QP
5	0.1924	35.32	-18.61	53.93	25.21	9.92	0.19	NEUTRAL	Average
6	0.1924	50.56	-13.37	63.93	40.45	9.92	0.19	NEUTRAL	QP
7	0.2687	33.78	-17.38	51.16	23.75	9.92	0.11	NEUTRAL	Average
8	0.2687	41.67	-19.49	61.16	31.64	9.92	0.11	NEUTRAL	QP
9	0.3286	41.57	-7.92	49.49	31.59	9.92	0.06	NEUTRAL	Average
10	0.3286	47.69	-11.80	59.49	37.71	9.92	0.06	NEUTRAL	QP
11	0.3893	32.15	-15.93	48.08	22.21	9.92	0.02	NEUTRAL	Average
12	0.3893	44.19	-13.89	58.08	34.25	9.92	0.02	NEUTRAL	QP
13	0.4421	35.69	-11.33	47.02	25.68	9.92	0.09	NEUTRAL	Average
14	0.4421	42.83	-14.19	57.02	32.82	9.92	0.09	NEUTRAL	QP
15	0.4967	29.88	-16.17	46.05	19.78	9.92	0.18	NEUTRAL	Average
16	0.4967	42.84	-13.21	56.05	32.74	9.92	0.18	NEUTRAL	QP
17	0.5238	35.38	-10.62	46.00	25.24	9.92	0.22	NEUTRAL	Average
18	0.5238	47.31	-8.69	56.00	37.17	9.92	0.22	NEUTRAL	QP
19	18.5237	35.74	-14.26	50.00	25.22	10.29	0.23	NEUTRAL	Average
20	18.5237	42.24	-17.76	60.00	31.72	10.29	0.23	NEUTRAL	QP

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

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

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	CTX		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Pol/Phase	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1500	42.35	-13.65	56.00	32.17	10.02	0.16	LINE	Average
2	0.1500	55.93	-10.07	66.00	45.75	10.02	0.16	LINE	QP
3	0.1844	41.04	-13.24	54.28	30.94	9.92	0.18	LINE	Average
4	0.1844	51.94	-12.34	64.28	41.84	9.92	0.18	LINE	QP
5	0.1945	34.57	-19.27	53.84	24.46	9.92	0.19	LINE	Average
6	0.1945	50.17	-13.67	63.84	40.06	9.92	0.19	LINE	QP
7	0.3338	37.75	-11.60	49.35	27.77	9.92	0.06	LINE	Average
8	0.3338	46.06	-13.29	59.35	36.08	9.92	0.06	LINE	QP
9	0.3893	31.71	-16.37	48.08	21.77	9.92	0.02	LINE	Average
10	0.3893	42.99	-15.09	58.08	33.05	9.92	0.02	LINE	QP
11	0.4812	38.33	-7.99	46.32	28.25	9.92	0.16	LINE	Average
12	0.4812	45.64	-10.68	56.32	35.56	9.92	0.16	LINE	QP
13	0.5293	32.90	-13.10	46.00	22.75	9.92	0.23	LINE	Average
14	0.5293	45.86	-10.14	56.00	35.71	9.92	0.23	LINE	QP
15	19.0210	35.26	-14.74	50.00	24.73	10.29	0.24	LINE	Average
16	19.0210	41.72	-18.28	60.00	31.19	10.29	0.24	LINE	QP

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

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

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
802.11a_(6Mbps)_3TX	-	-	-	-	-
5.15-5.25GHz	39.7M	18.591M	18M6D1D	21.9M	16.517M
5.725-5.85GHz	16.35M	31.009M	31M0D1D	16.3M	18.391M
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-
5.15-5.25GHz	41.65M	18.841M	18M8D1D	23.9M	17.691M
5.725-5.85GHz	17.575M	31.634M	31M6D1D	17.15M	22.114M
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-
5.15-5.25GHz	76.95M	36.632M	36M6D1D	44.4M	36.182M
5.725-5.85GHz	36.3M	48.026M	48M0D1D	35.7M	36.632M
802.11ac VHT80_Nss1,(MCS0)_3TX	-	-	-	-	-
5.15-5.25GHz	87.7M	75.762M	75M8D1D	85.7M	75.662M
5.725-5.85GHz	76M	75.862M	75M9D1D	75.3M	75.662M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

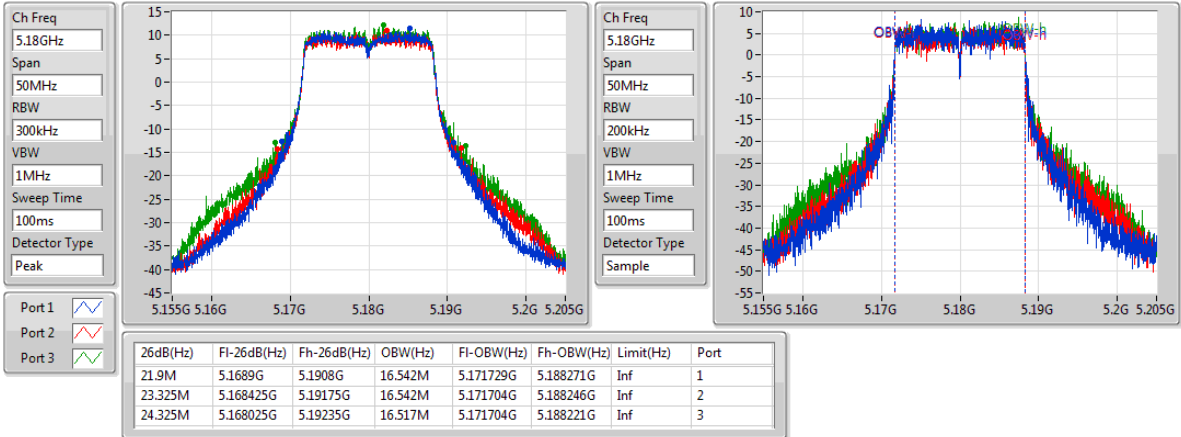
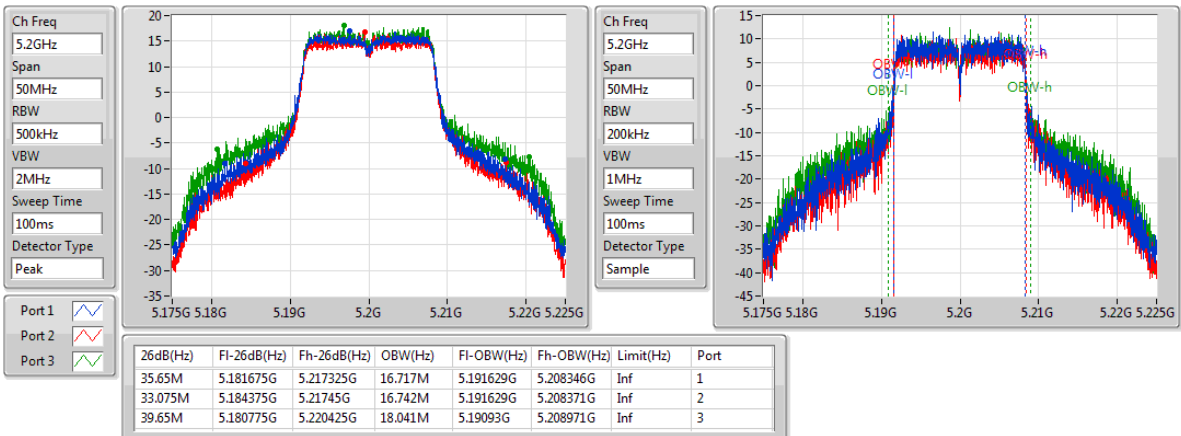
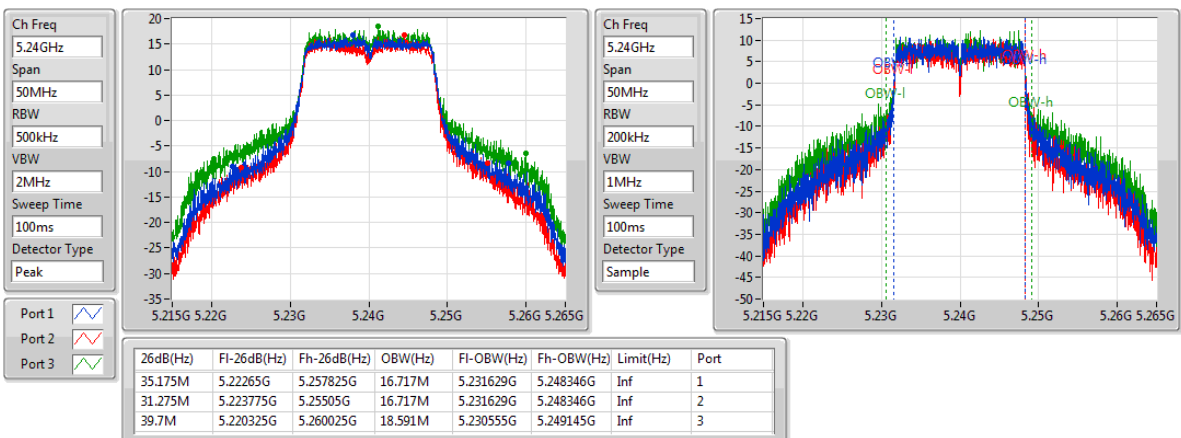
Min-OBW = Minimum 99% occupied bandwidth;

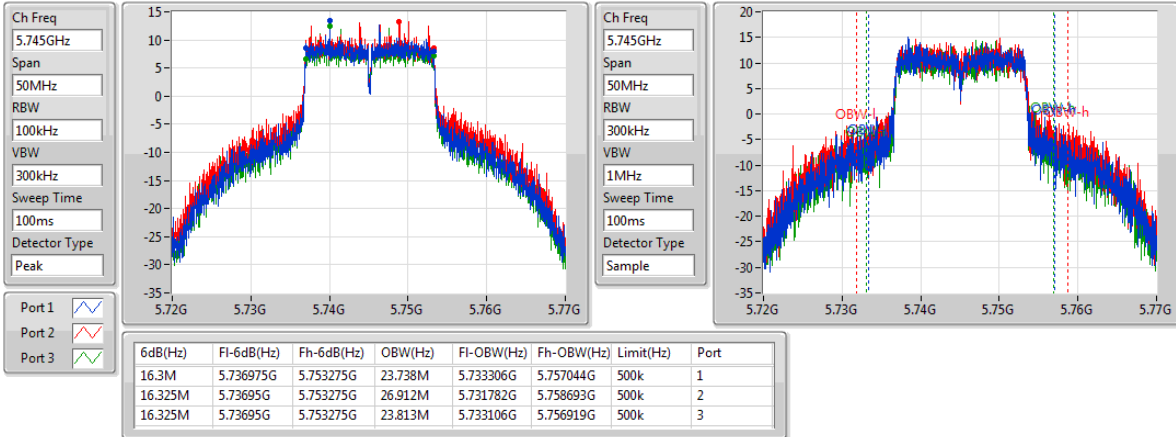
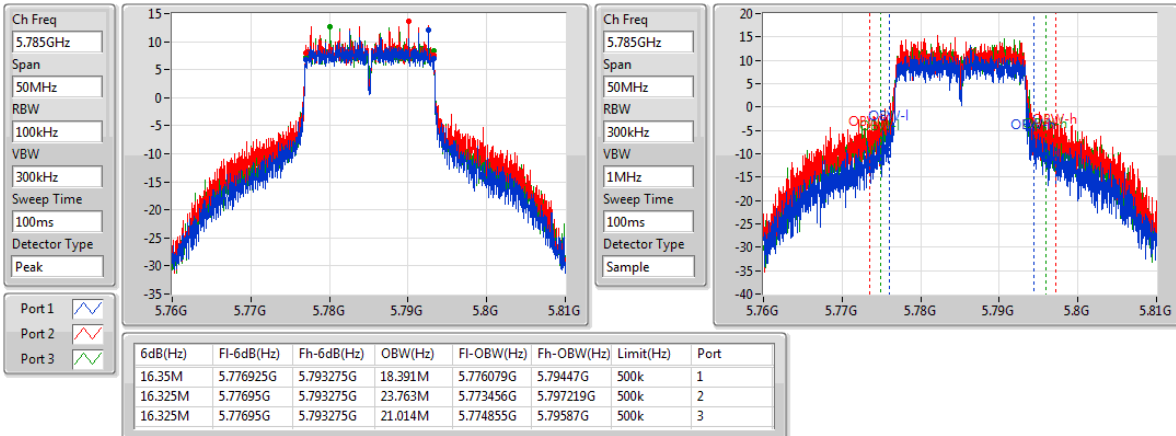
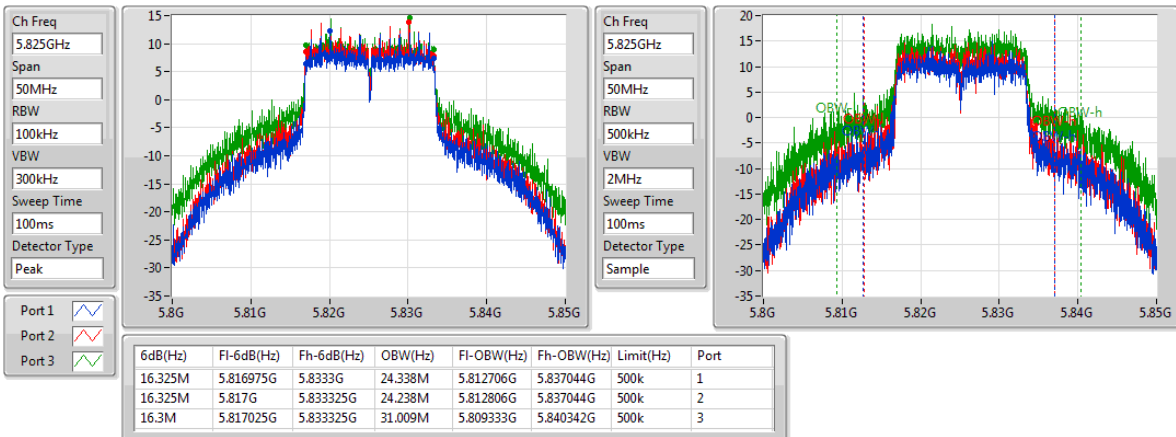
Result

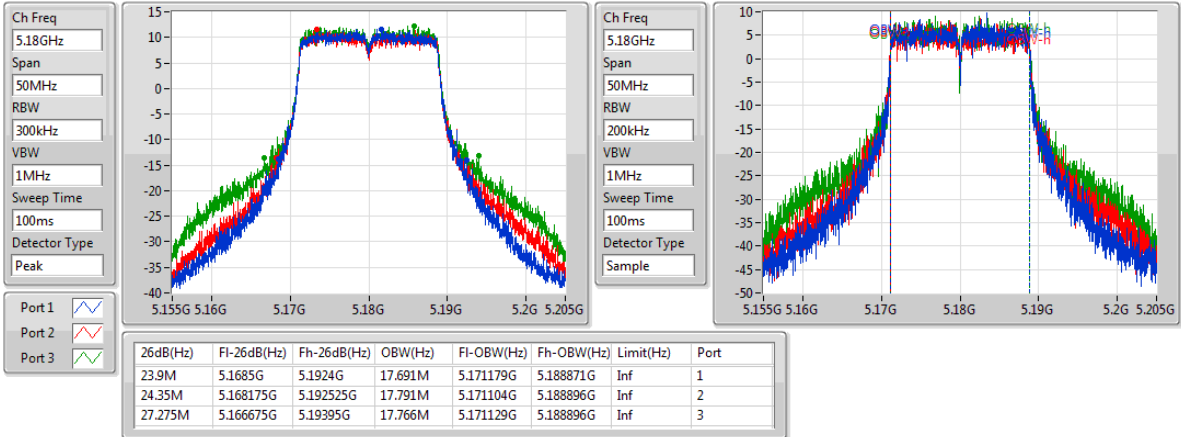
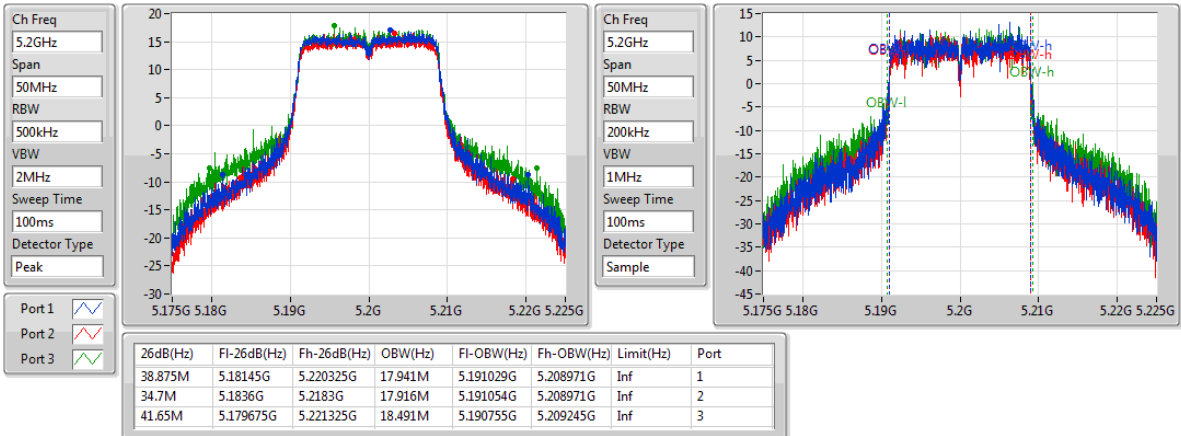
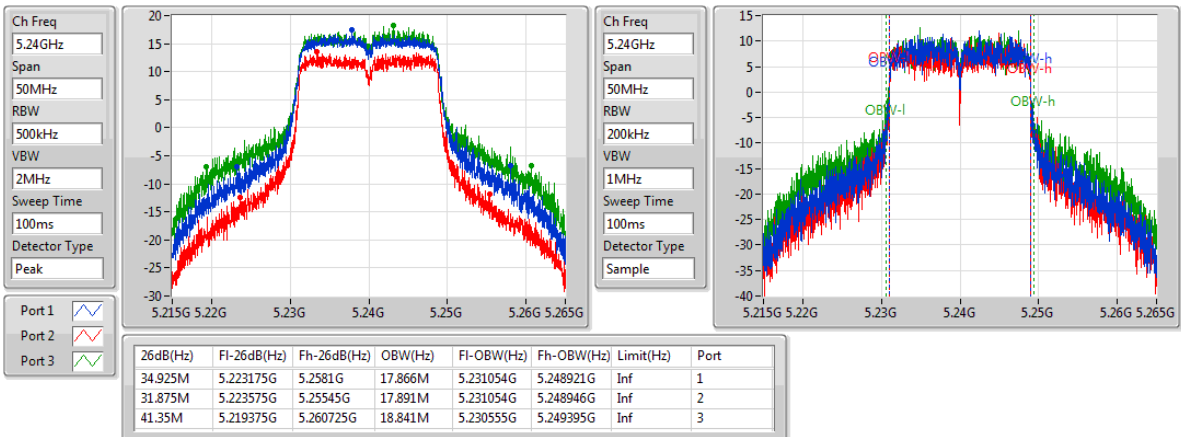
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)
802.11a_(6Mbps)_3TX	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.9M	16.542M	23.325M	16.542M	24.325M	16.517M
5200MHz	Pass	Inf	35.65M	16.717M	33.075M	16.742M	39.65M	18.041M
5240MHz	Pass	Inf	35.175M	16.717M	31.275M	16.717M	39.7M	18.591M
5745MHz	Pass	500k	16.3M	23.738M	16.325M	26.912M	16.325M	23.813M
5785MHz	Pass	500k	16.35M	18.391M	16.325M	23.763M	16.325M	21.014M
5825MHz	Pass	500k	16.325M	24.338M	16.325M	24.238M	16.3M	31.009M
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	23.9M	17.691M	24.35M	17.791M	27.275M	17.766M
5200MHz	Pass	Inf	38.875M	17.941M	34.7M	17.916M	41.65M	18.491M
5240MHz	Pass	Inf	34.925M	17.866M	31.875M	17.891M	41.35M	18.841M
5745MHz	Pass	500k	17.575M	22.114M	17.55M	27.461M	17.55M	25.187M
5785MHz	Pass	500k	17.55M	22.364M	17.275M	25.287M	17.3M	24.638M
5825MHz	Pass	500k	17.525M	22.639M	17.525M	22.864M	17.15M	31.634M
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	44.4M	36.182M	44.8M	36.232M	44.85M	36.182M
5230MHz	Pass	Inf	55.75M	36.332M	52.8M	36.432M	76.95M	36.632M
5755MHz	Pass	500k	36.3M	36.632M	36.3M	37.481M	36.25M	37.031M
5795MHz	Pass	500k	35.7M	37.931M	35.95M	48.026M	36.3M	42.229M
802.11ac VHT80_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	85.7M	75.762M	87.7M	75.662M	87.7M	75.662M
5775MHz	Pass	500k	76M	75.662M	76M	75.762M	75.3M	75.862M

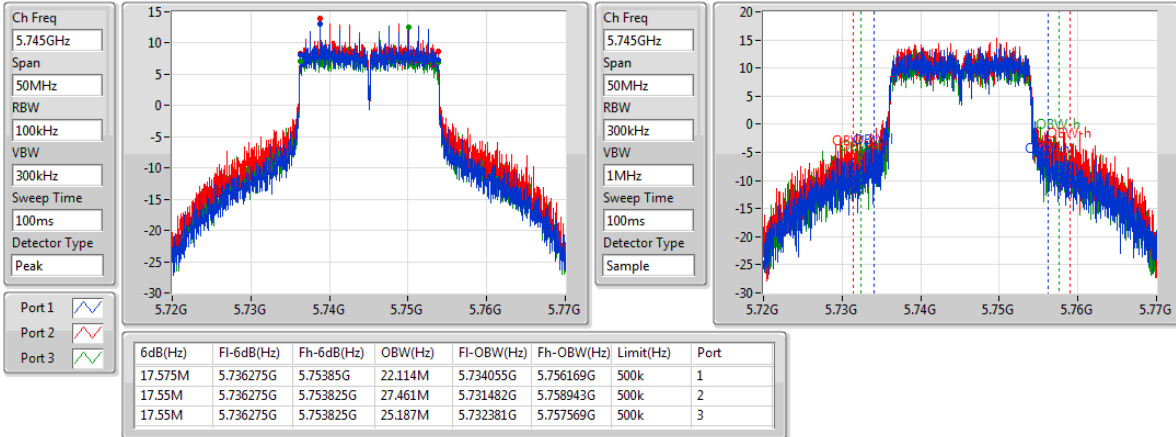
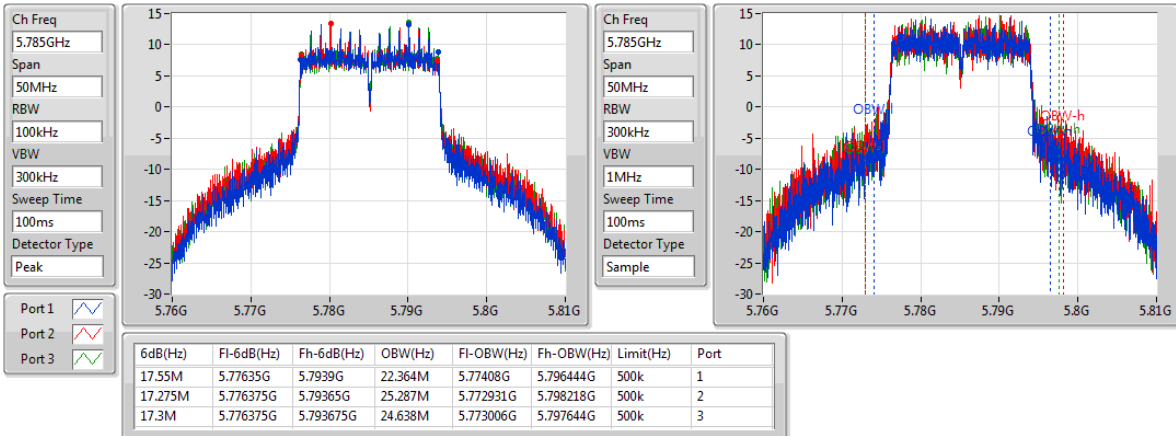
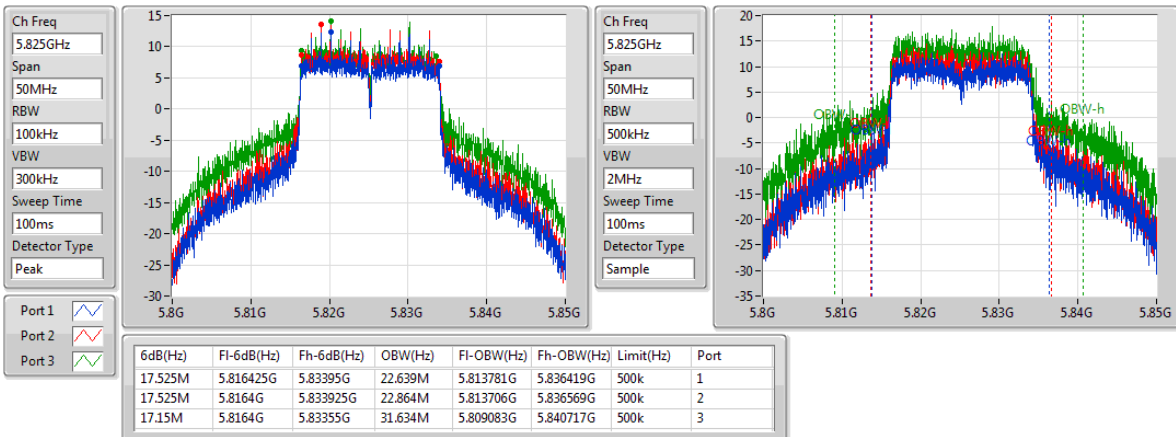
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

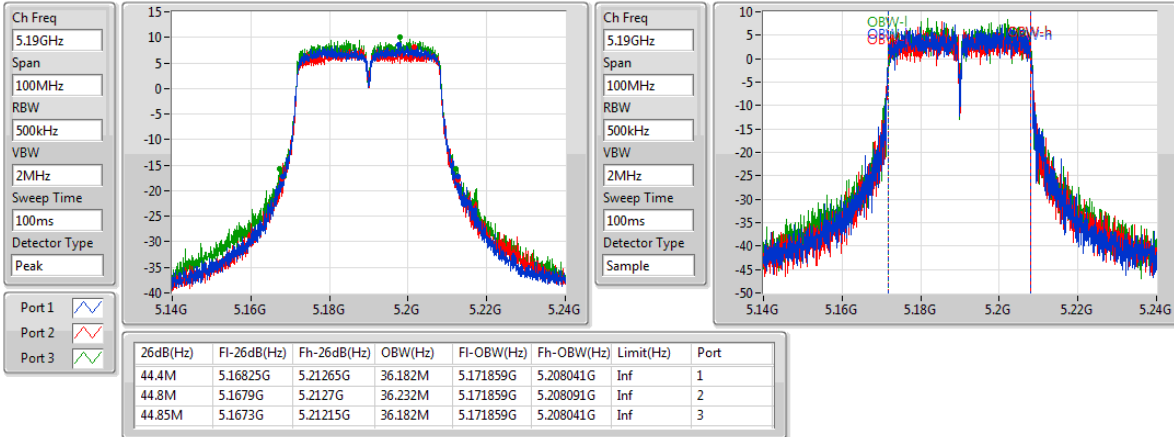
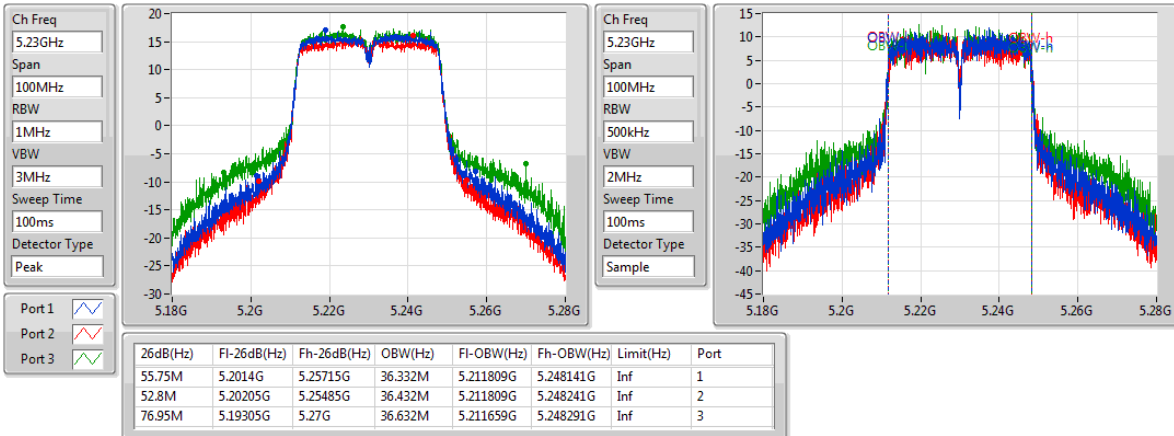
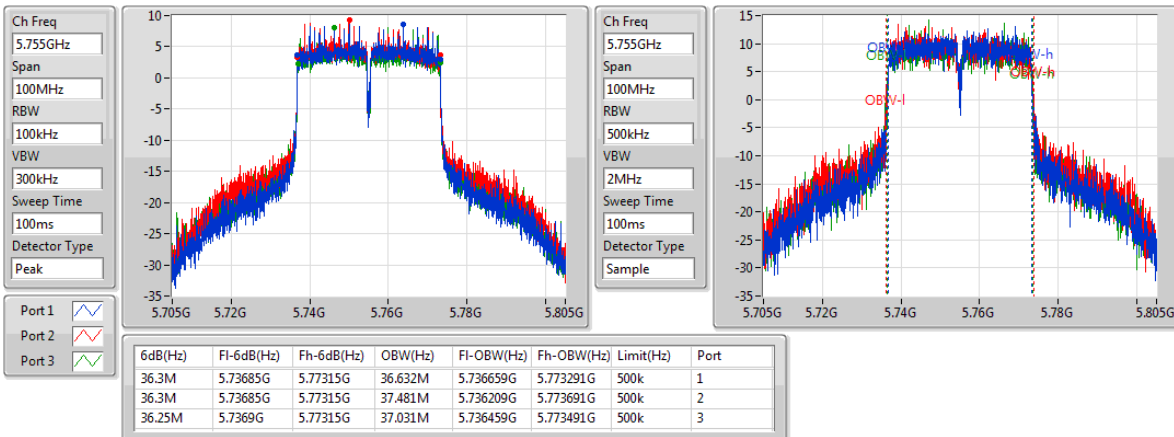
Port X-OBW = Port X 99% occupied bandwidth;

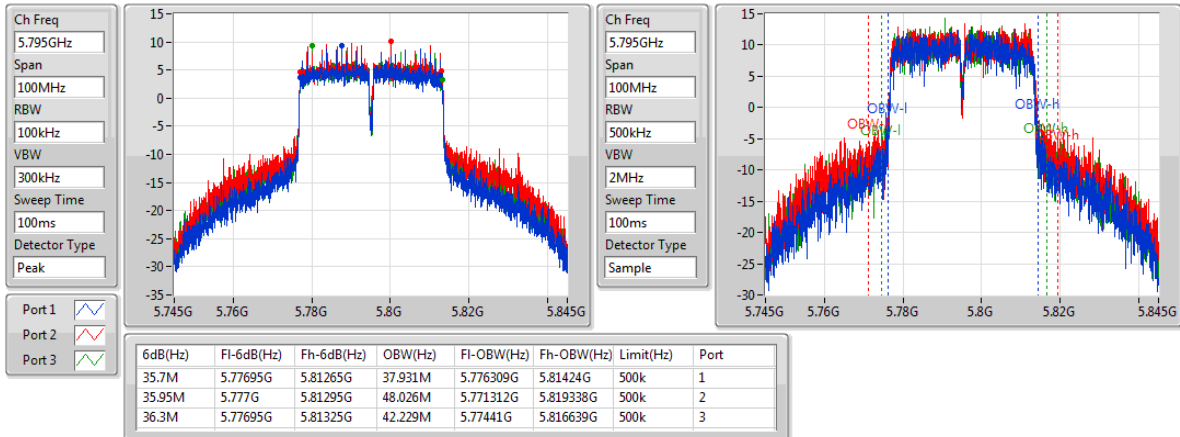
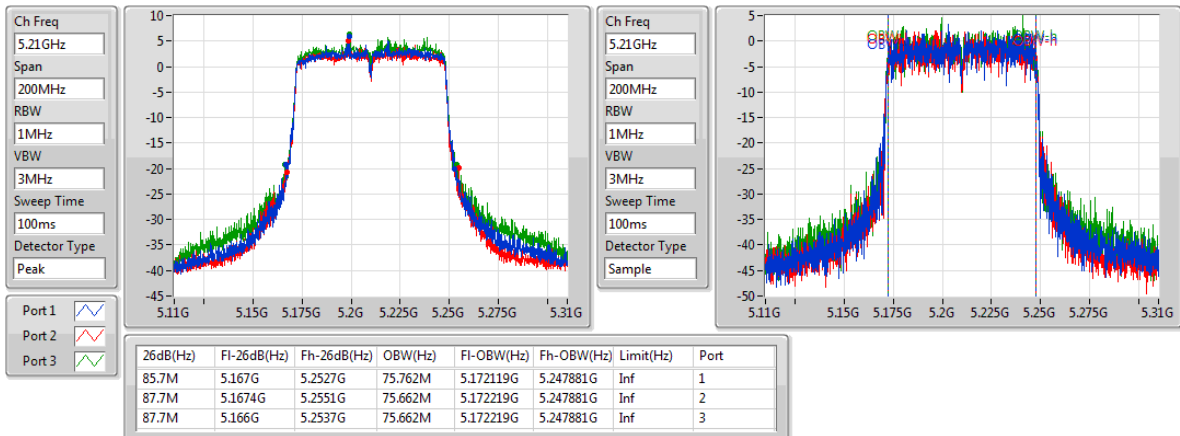
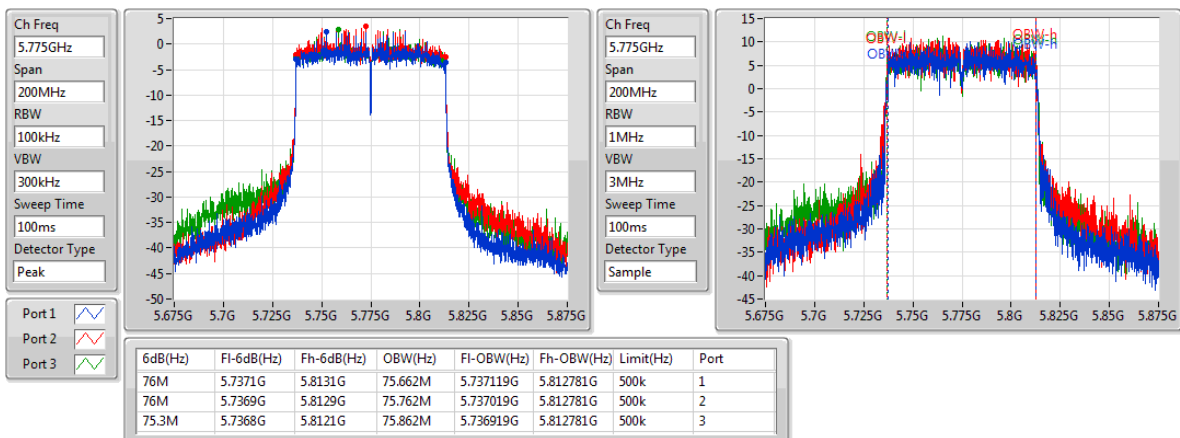
802.11a_(6Mbps)_3TX
EBW
5180MHz

802.11a_(6Mbps)_3TX
EBW
5200MHz

802.11a_(6Mbps)_3TX
EBW
5240MHz


802.11a_(6Mbps)_3TX
EBW
5745MHz

802.11a_(6Mbps)_3TX
EBW
5785MHz

802.11a_(6Mbps)_3TX
EBW
5825MHz


802.11ac VHT20_Nss1,(MCS0)_3TX
EBW
5180MHz

802.11ac VHT20_Nss1,(MCS0)_3TX
EBW
5200MHz

802.11ac VHT20_Nss1,(MCS0)_3TX
EBW
5240MHz


802.11ac VHT20_Nss1,(MCS0)_3TX
EBW
5745MHz

802.11ac VHT20_Nss1,(MCS0)_3TX
EBW
5785MHz

802.11ac VHT20_Nss1,(MCS0)_3TX
EBW
5825MHz


802.11ac VHT40_Nss1,(MCS0)_3TX
EBW
5190MHz

802.11ac VHT40_Nss1,(MCS0)_3TX
EBW
5230MHz

802.11ac VHT40_Nss1,(MCS0)_3TX
EBW
5755MHz


802.11ac VHT40_Nss1,(MCS0)_3TX
EBW
5795MHz

802.11ac VHT80_Nss1,(MCS0)_3TX
EBW
5210MHz

802.11ac VHT80_Nss1,(MCS0)_3TX
EBW
5775MHz


Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
802.11a_(6Mbps)_3TX	-	-	-	-
5.15-5.25GHz	28.51	0.70958	31.99	1.58125
5.725-5.85GHz	29.96	0.99083	33.44	2.20800
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-
5.15-5.25GHz	28.19	0.65917	31.67	1.46893
5.725-5.85GHz	29.96	0.99083	33.44	2.20800
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-
5.15-5.25GHz	27.10	0.51286	30.58	1.14288
5.725-5.85GHz	29.52	0.89536	33.00	1.99526
802.11ac VHT80_Nss1,(MCS0)_3TX	-	-	-	-
5.15-5.25GHz	17.57	0.05715	21.05	0.12735
5.725-5.85GHz	26.17	0.41400	29.65	0.92257



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)
802.11a_(6Mbps)_3TX	-	-	-	-	-	-	-	-	-
5180MHz	Pass	3.48	20.08	19.87	20.09	24.79	30.00	28.27	36.00
5200MHz	Pass	3.48	23.58	22.92	22.98	27.94	30.00	31.42	36.00
5240MHz	Pass	3.48	24.02	23.04	24.09	28.51	30.00	31.99	36.00
5745MHz	Pass	3.48	24.85	25.42	25.11	29.90	30.00	33.38	36.00
5785MHz	Pass	3.48	24.69	25.05	24.97	29.68	30.00	33.16	36.00
5825MHz	Pass	3.48	24.33	25.23	25.88	29.96	30.00	33.44	36.00
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-
5180MHz	Pass	3.48	20.83	20.62	21.31	25.70	30.00	29.18	36.00
5200MHz	Pass	3.48	23.65	22.93	23.65	28.19	30.00	31.67	36.00
5240MHz	Pass	3.48	23.55	22.68	23.71	28.11	30.00	31.59	36.00
5745MHz	Pass	3.48	25.02	25.41	25.14	29.96	30.00	33.44	36.00
5785MHz	Pass	3.48	24.51	25.47	25.09	29.81	30.00	33.29	36.00
5825MHz	Pass	3.48	24.12	25.25	25.13	29.63	30.00	33.11	36.00
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-
5190MHz	Pass	3.48	17.22	16.76	17.81	22.06	30.00	25.54	36.00
5230MHz	Pass	3.48	22.52	21.42	22.90	27.10	30.00	30.58	36.00
5755MHz	Pass	3.48	23.89	24.47	24.19	28.96	30.00	32.44	36.00
5795MHz	Pass	3.48	24.21	25.17	24.82	29.52	30.00	33.00	36.00
802.11ac VHT80_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-
5210MHz	Pass	3.48	12.81	12.26	13.26	17.57	30.00	21.05	36.00
5775MHz	Pass	3.48	20.77	21.84	21.51	26.17	30.00	29.65	36.00

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

Summary

Mode	PD (dBm/RBW)
802.11a_(6Mbps)_3TX	-
5.15-5.25GHz	14.74
5.725-5.85GHz	14.40
802.11ac VHT20_Nss1,(MCS0)_3TX	-
5.15-5.25GHz	14.64
5.725-5.85GHz	14.09
802.11ac VHT40_Nss1,(MCS0)_3TX	-
5.15-5.25GHz	10.73
5.725-5.85GHz	10.87
802.11ac VHT80_Nss1,(MCS0)_3TX	-
5.15-5.25GHz	-1.68
5.725-5.85GHz	4.69

RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_(6Mbps)_3TX	-	-	-	-	-	-	-
5180MHz	Pass	8.25	6.90	6.19	6.95	11.30	14.75
5200MHz	Pass	8.25	10.17	9.10	10.25	14.49	14.75
5240MHz	Pass	8.25	10.48	9.32	10.72	14.74	14.75
5745MHz	Pass	8.25	9.51	10.06	9.02	14.27	27.75
5785MHz	Pass	8.25	9.34	9.66	9.46	14.16	27.75
5825MHz	Pass	8.25	8.99	10.12	10.08	14.40	27.75
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5180MHz	Pass	8.25	7.46	7.35	7.87	12.22	14.75
5200MHz	Pass	8.25	10.25	9.38	10.23	14.64	14.75
5240MHz	Pass	8.25	10.27	9.29	10.47	14.60	14.75
5745MHz	Pass	8.25	9.43	9.98	8.90	14.09	27.75
5785MHz	Pass	8.25	9.46	9.57	9.25	14.05	27.75
5825MHz	Pass	8.25	8.46	9.49	9.77	13.91	27.75
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5190MHz	Pass	8.25	1.17	0.76	1.73	5.86	14.75
5230MHz	Pass	8.25	6.21	5.54	6.85	10.73	14.75
5755MHz	Pass	8.25	5.58	5.98	5.45	10.28	27.75
5795MHz	Pass	8.25	5.96	6.71	6.21	10.87	27.75
802.11ac VHT80_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5210MHz	Pass	8.25	-6.40	-6.87	-5.67	-1.68	14.75
5775MHz	Pass	8.25	-0.37	0.93	-0.04	4.69	27.75

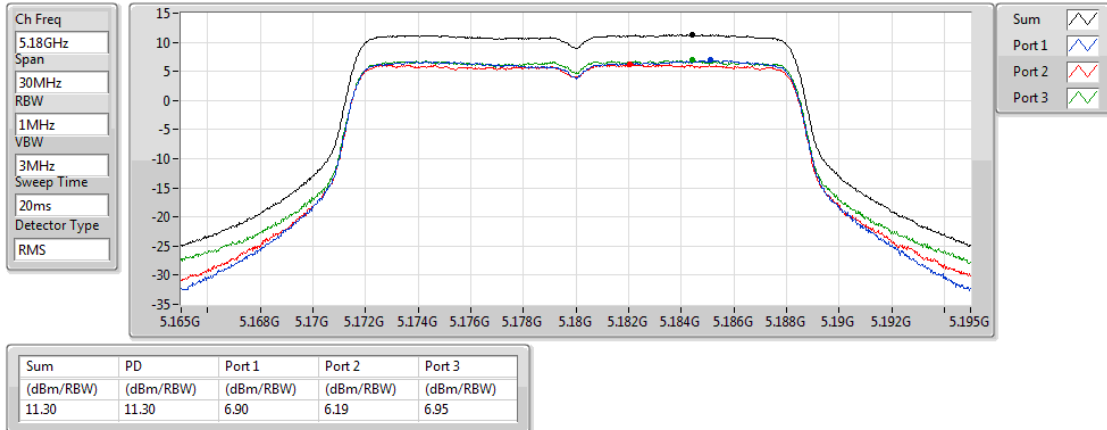
DG = Directional Gain; **RBW** = 500kHz for 5.725-5.85GHz band / 1MHz for other band;

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

802.11a_(6Mbps)_3TX

PSD

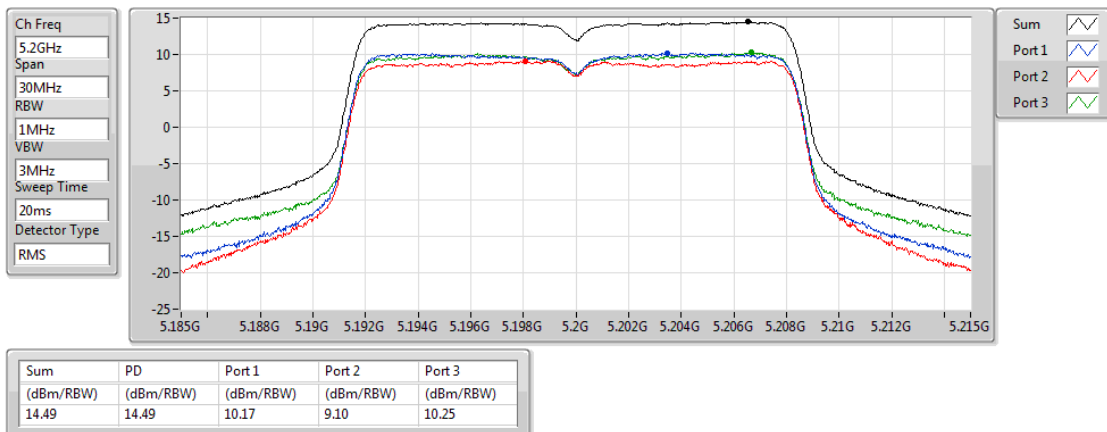
5180MHz



802.11a_(6Mbps)_3TX

PSD

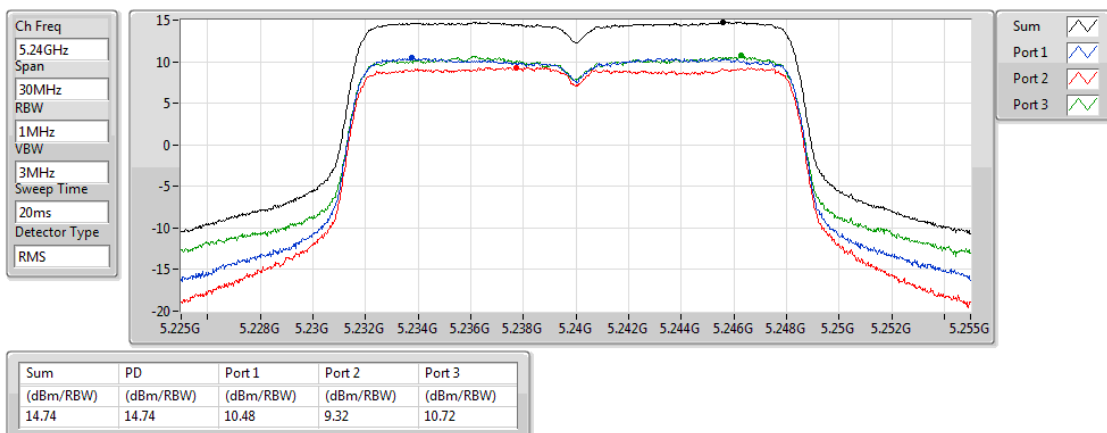
5200MHz



802.11a_(6Mbps)_3TX

PSD

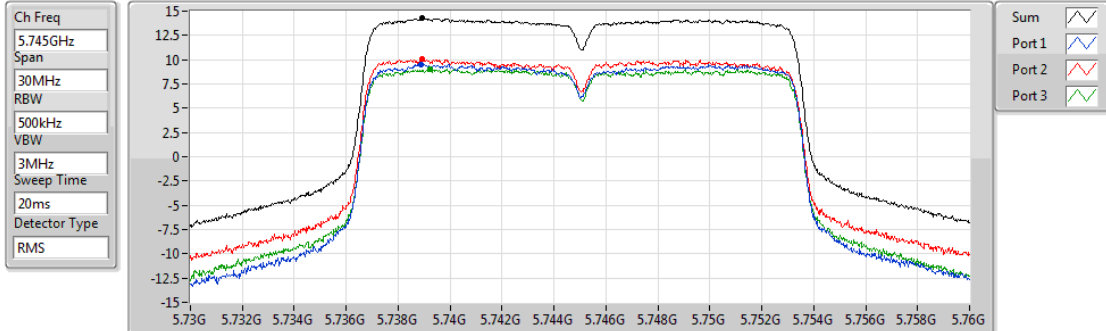
5240MHz



802.11a_(6Mbps)_3TX

PSD

5745MHz

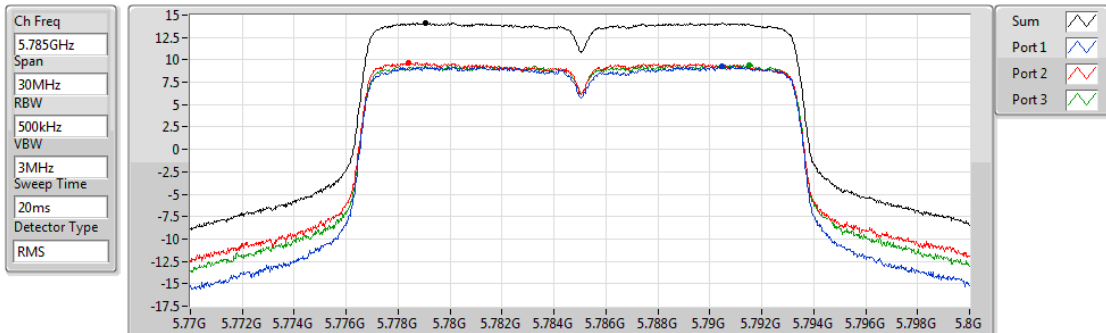


Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.27	14.27	9.51	10.06	9.02

802.11a_(6Mbps)_3TX

PSD

5785MHz

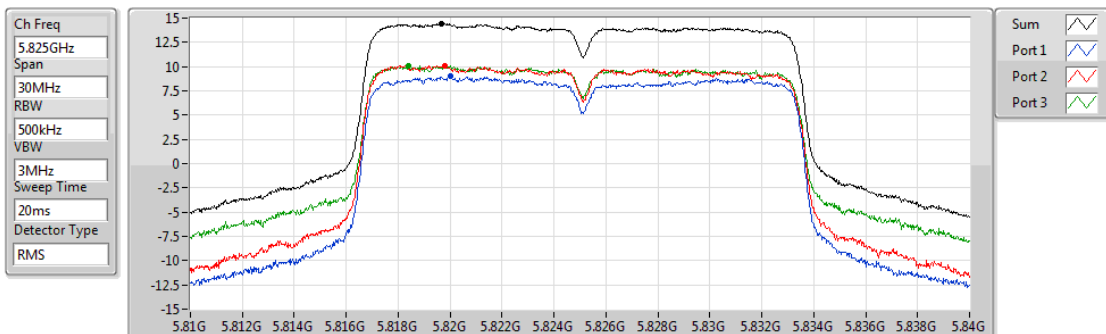


Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.16	14.16	9.34	9.66	9.46

802.11a_(6Mbps)_3TX

PSD

5825MHz

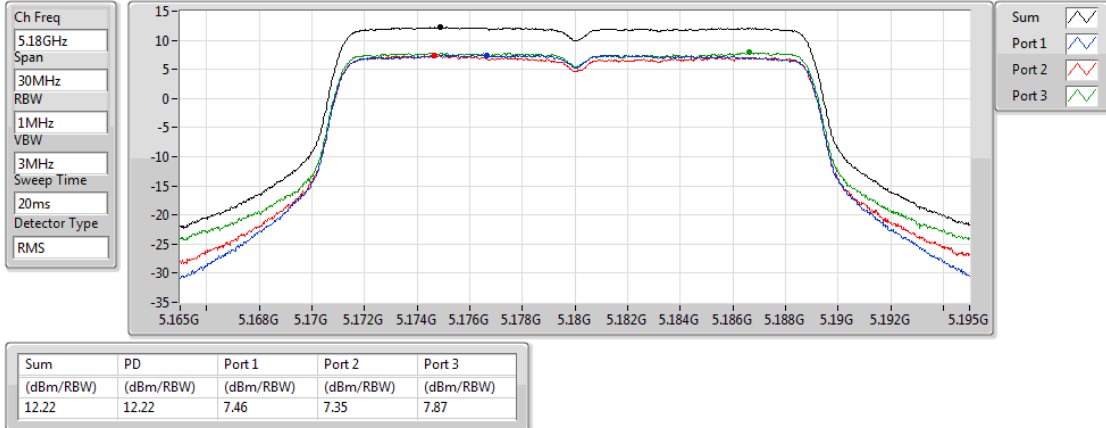


Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.40	14.40	8.99	10.12	10.08

802.11ac VHT20_Nss1,(MCS0)_3TX

PSD

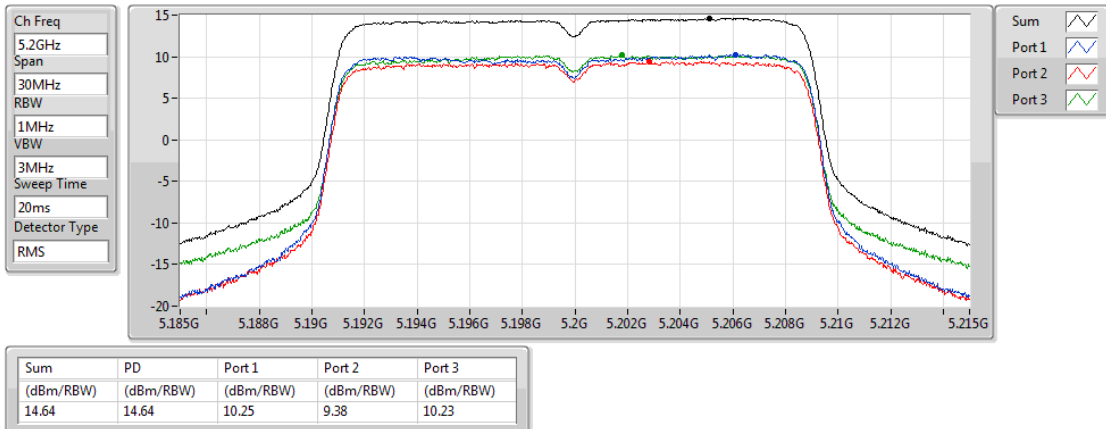
5180MHz



802.11ac VHT20_Nss1,(MCS0)_3TX

PSD

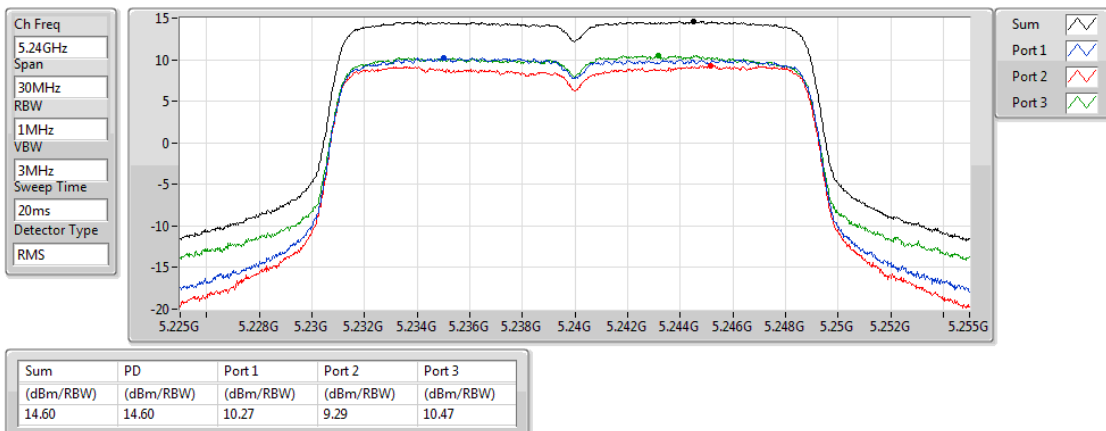
5200MHz



802.11ac VHT20_Nss1,(MCS0)_3TX

PSD

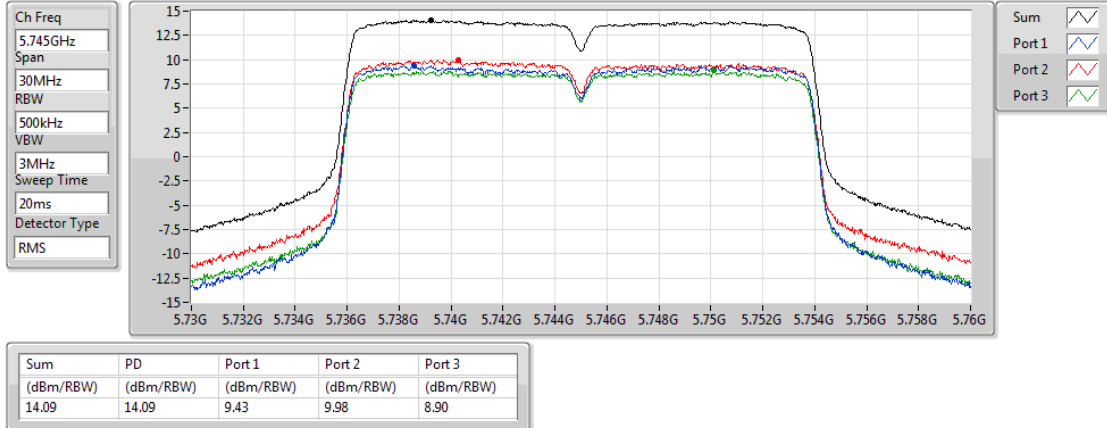
5240MHz



802.11ac VHT20_Nss1,(MCS0)_3TX

PSD

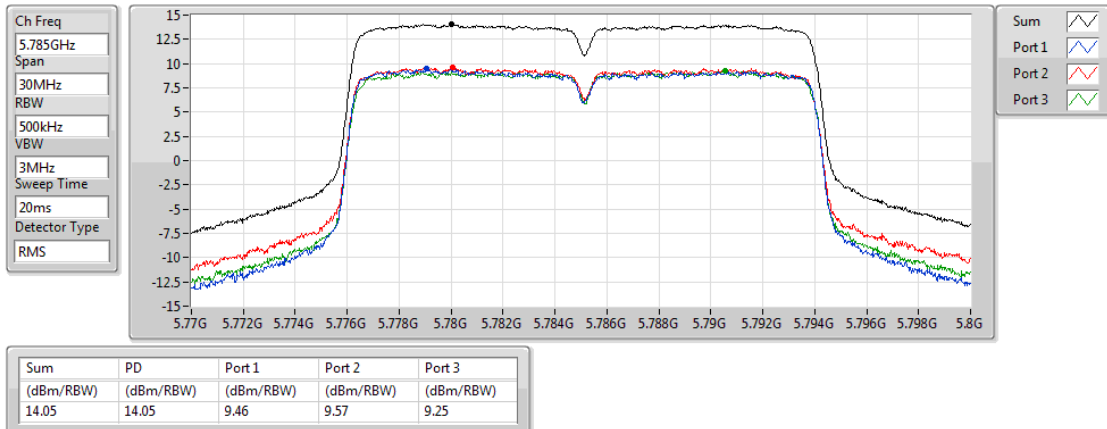
5745MHz



802.11ac VHT20_Nss1,(MCS0)_3TX

PSD

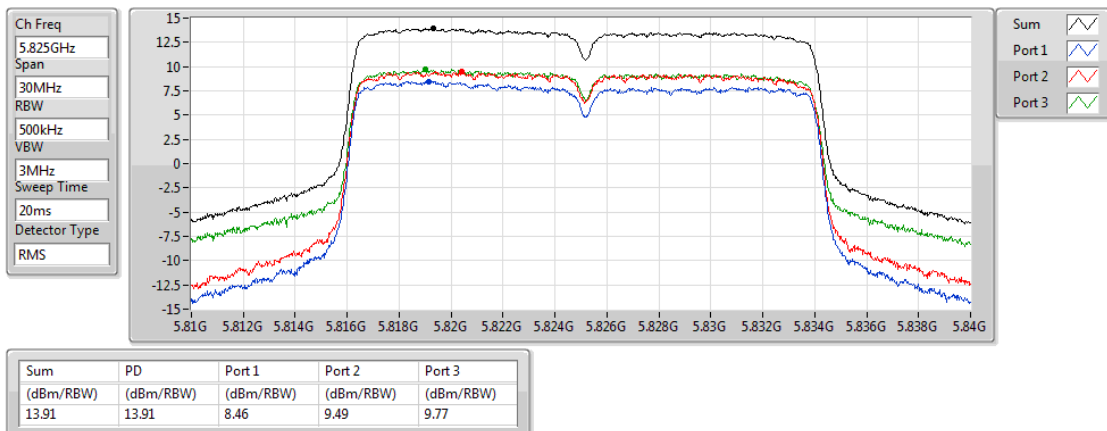
5785MHz



802.11ac VHT20_Nss1,(MCS0)_3TX

PSD

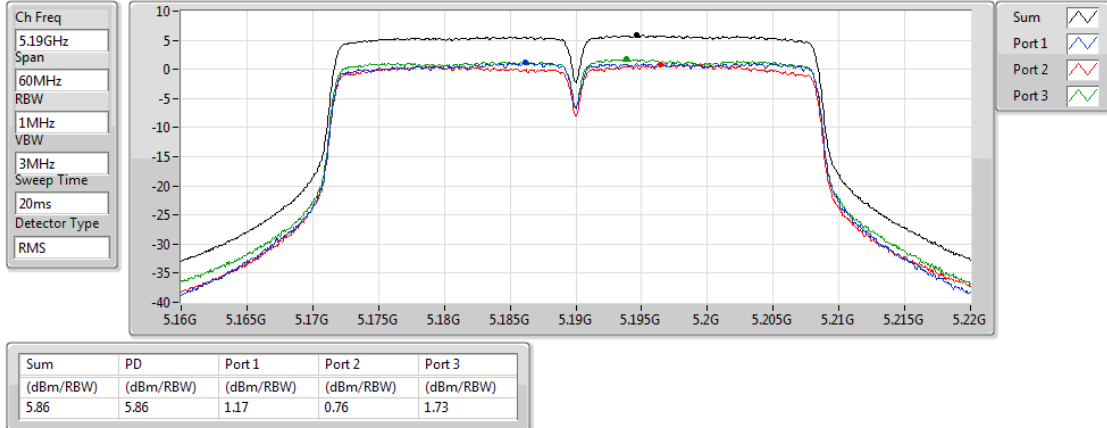
5825MHz



802.11ac VHT40_Nss1,(MCS0)_3TX

PSD

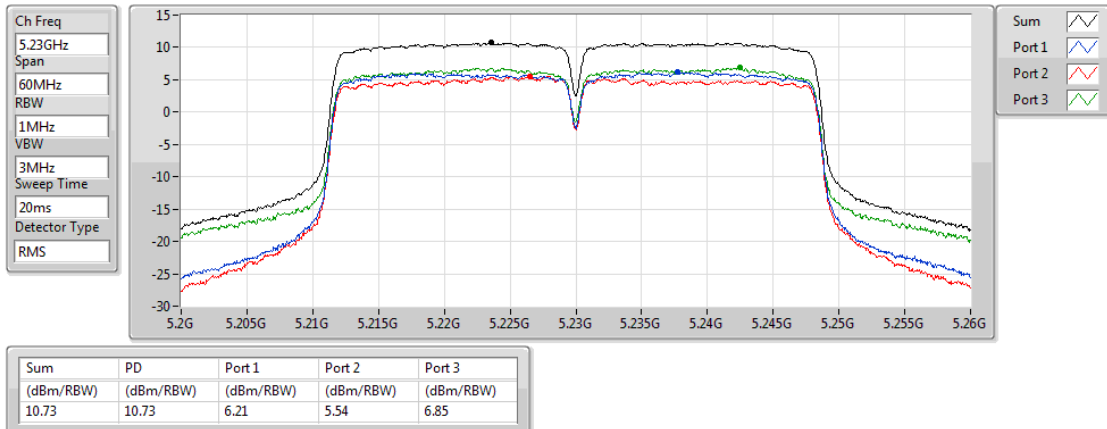
5190MHz



802.11ac VHT40_Nss1,(MCS0)_3TX

PSD

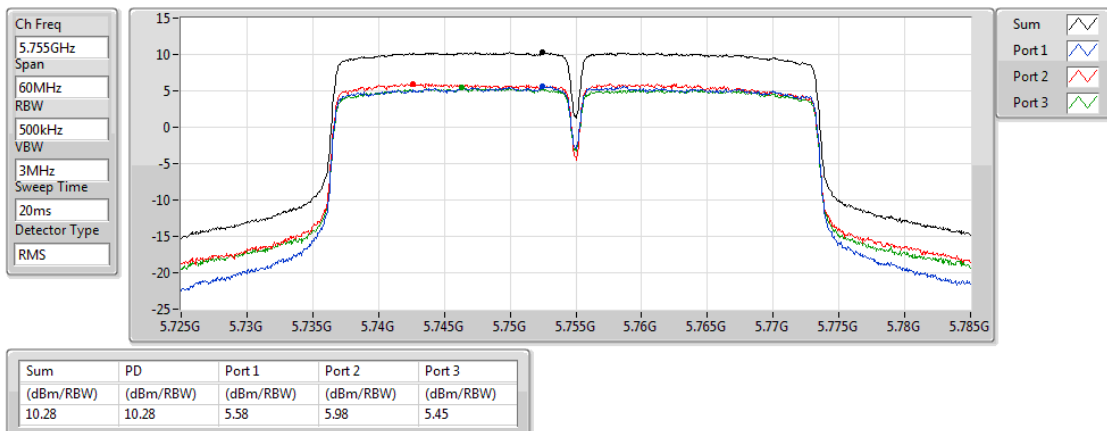
5230MHz



802.11ac VHT40_Nss1,(MCS0)_3TX

PSD

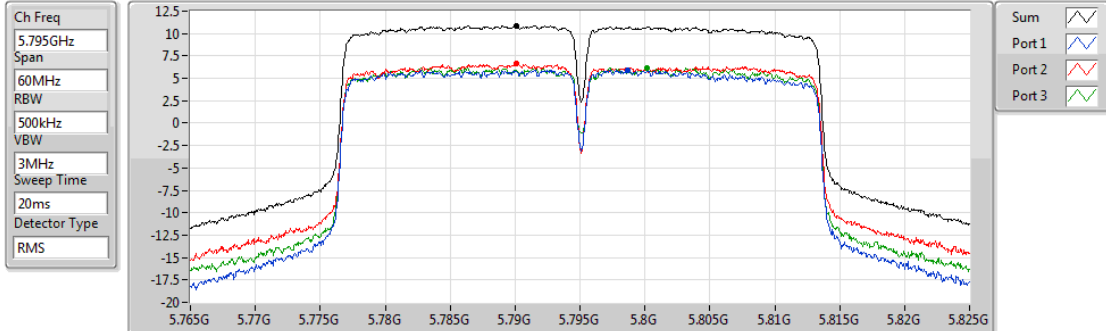
5755MHz



802.11ac VHT40_Nss1,(MCS0)_3TX

PSD

5795MHz

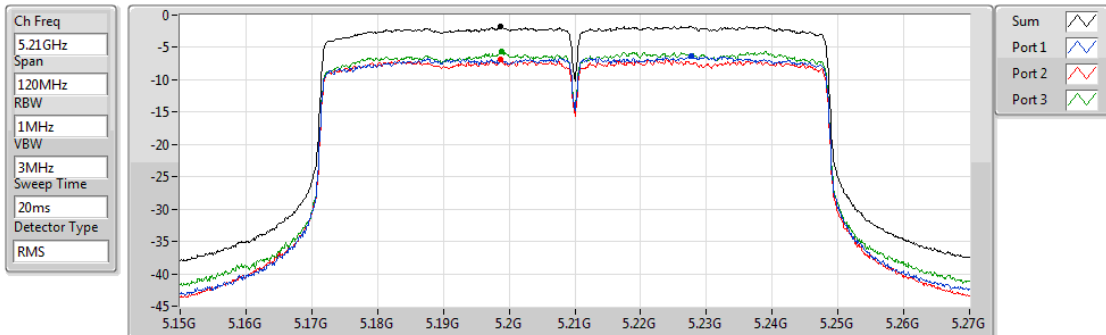


Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.87	10.87	5.96	6.71	6.21

802.11ac VHT80_Nss1,(MCS0)_3TX

PSD

5210MHz

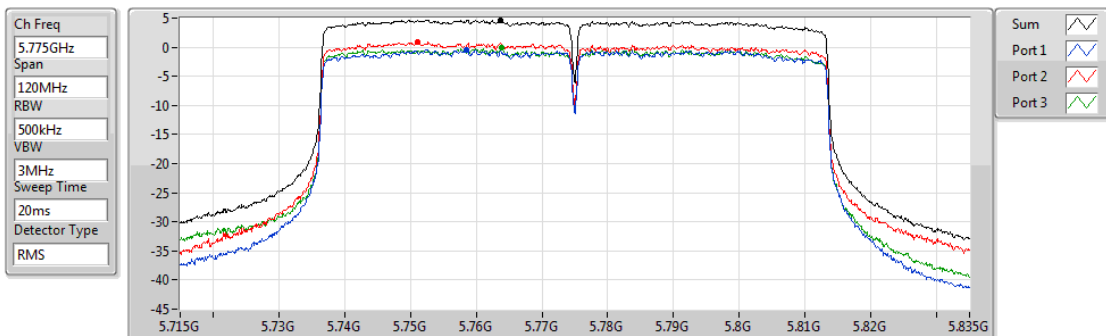


Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.68	-1.68	-6.40	-6.87	-5.67

802.11ac VHT80_Nss1,(MCS0)_3TX

PSD

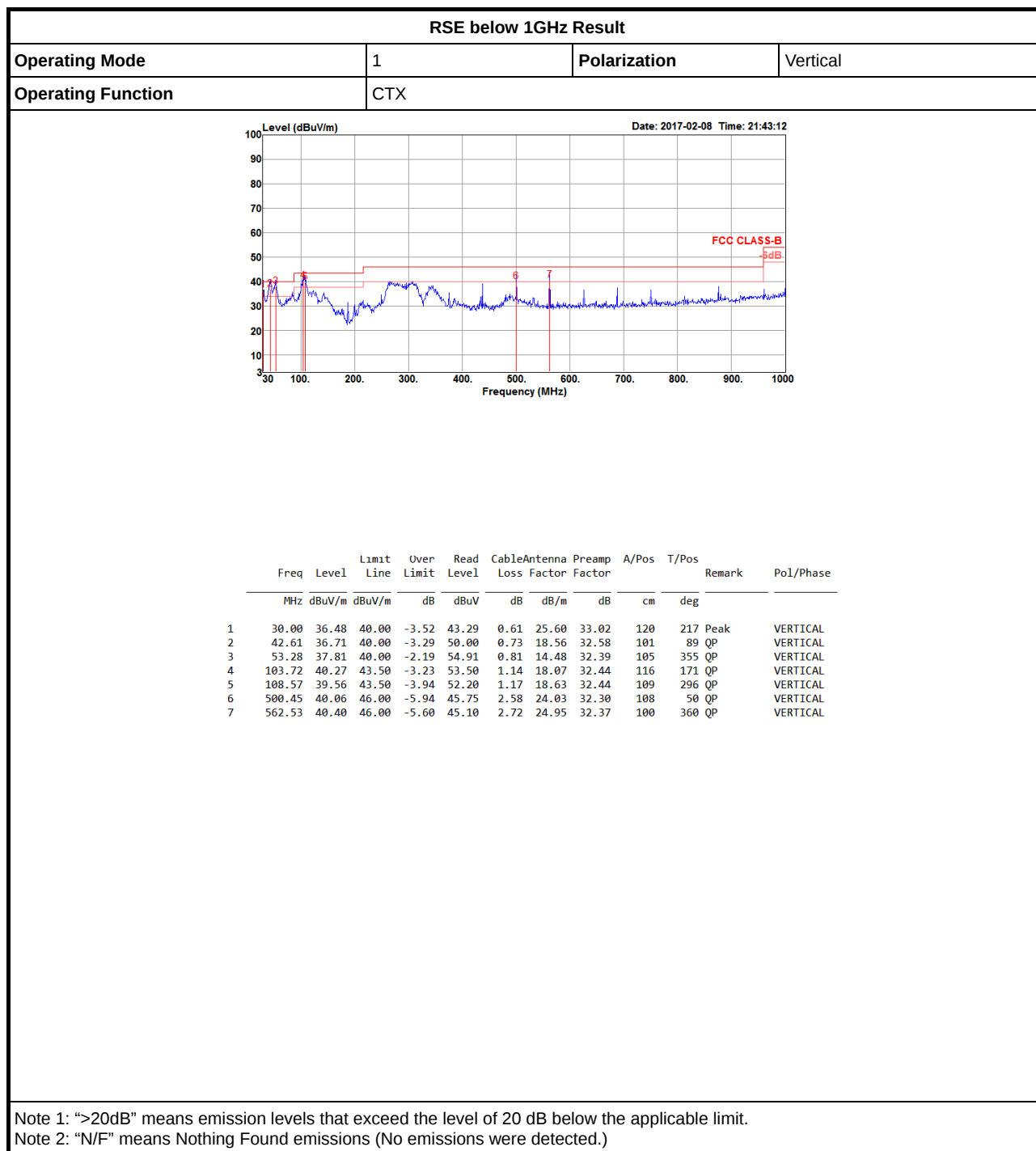
5775MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.69	4.69	-0.37	0.93	-0.04

RSE below 1GHz Result											
Operating Mode	1			Polarization			Horizontal				
Operating Function	CTX										
Level (dBuV/m) 100 90 80 70 60 50 40 30 20 10 0 301002003004005006007008009001000 Frequency (MHz) Date: 2017-02-09 Time: 19:45:27 FCC CLASS-B 5dB 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15											
	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	76.56	35.27	40.00	-4.73	53.36	0.97	13.36	32.42	102	141 Peak	HORIZONTAL
2	111.48	38.74	43.50	-4.76	51.14	1.19	18.84	32.43	100	231 Peak	HORIZONTAL
3	141.55	40.04	43.50	-3.46	53.02	1.34	18.07	32.39	108	122 Peak	HORIZONTAL
4	144.46	38.32	43.50	-5.18	51.56	1.35	17.80	32.39	102	321 Peak	HORIZONTAL
5	250.19	38.56	46.00	-7.44	50.00	1.79	19.10	32.33	100	162 QP	HORIZONTAL
6	256.98	41.17	46.00	-4.83	52.00	1.82	19.68	32.33	100	125 QP	HORIZONTAL
7	264.74	44.28	46.00	-1.72	55.00	1.85	19.76	32.33	100	105 QP	HORIZONTAL
8	268.62	43.99	46.00	-2.01	54.81	1.86	19.65	32.33	100	112 QP	HORIZONTAL
9	281.23	40.49	46.00	-5.51	51.21	1.90	19.71	32.33	100	125 QP	HORIZONTAL
10	284.14	40.51	46.00	-5.49	51.19	1.91	19.74	32.33	100	112 QP	HORIZONTAL
11	294.81	40.71	46.00	-5.29	51.19	1.95	19.90	32.33	100	136 QP	HORIZONTAL
12	297.72	41.34	46.00	-4.66	51.77	1.96	19.94	32.33	150	215 QP	HORIZONTAL
13	305.48	41.63	46.00	-4.37	51.81	1.99	20.16	32.33	200	124 QP	HORIZONTAL
14	312.27	41.80	46.00	-4.20	51.77	2.01	20.35	32.33	125	124 QP	HORIZONTAL
15	750.71	38.97	46.00	-7.03	41.68	3.17	26.40	32.28	102	296 Peak	HORIZONTAL

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.)





RSE TX above 1GHz Result

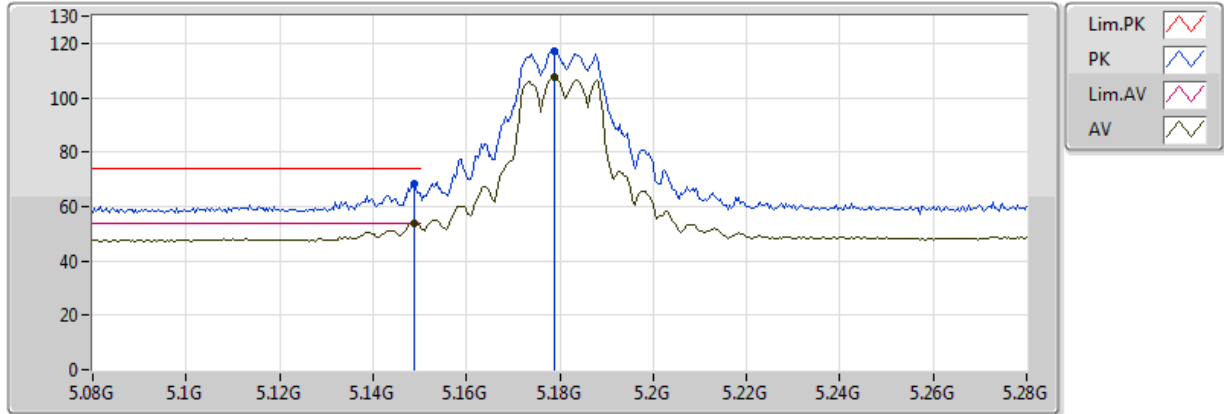
Appendix E.2

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-
5.755GHz	Pass	PK	5.639G	68.19	68.20	-0.01	7.98	3	V	329	1.48	-

802.11a_(6Mbps)_3TX

5180MHz_TX

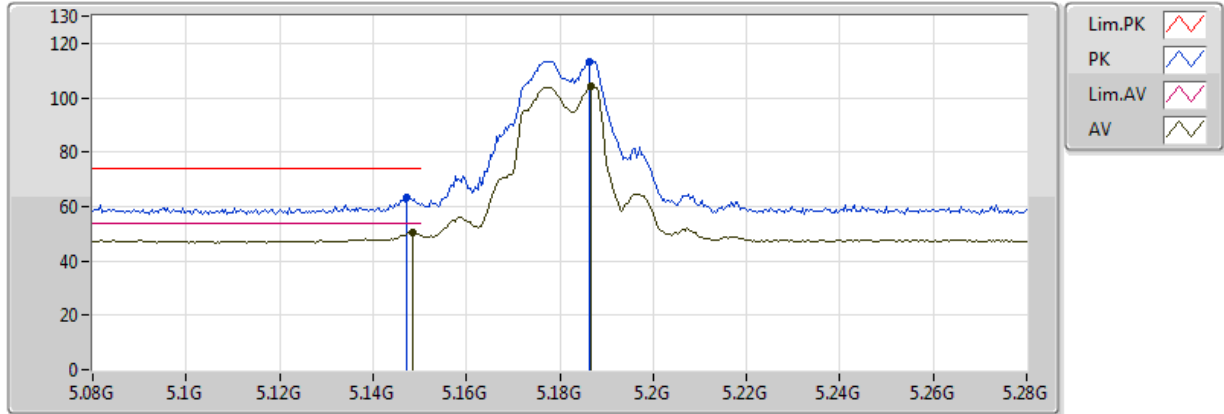


20170125
EUT Y_3TX
Setting 18.5
02-J-4-10
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1488G	53.83	54.00	-0.17	7.04	3	V	336	1.51	-
AV	5.1788G	107.39	Inf	-Inf	7.12	3	V	336	1.51	-
PK	5.1488G	68.56	74.00	-5.44	7.04	3	V	336	1.51	-
PK	5.1788G	116.85	Inf	-Inf	7.12	3	V	336	1.51	-

802.11a_(6Mbps)_3TX

5180MHz_TX

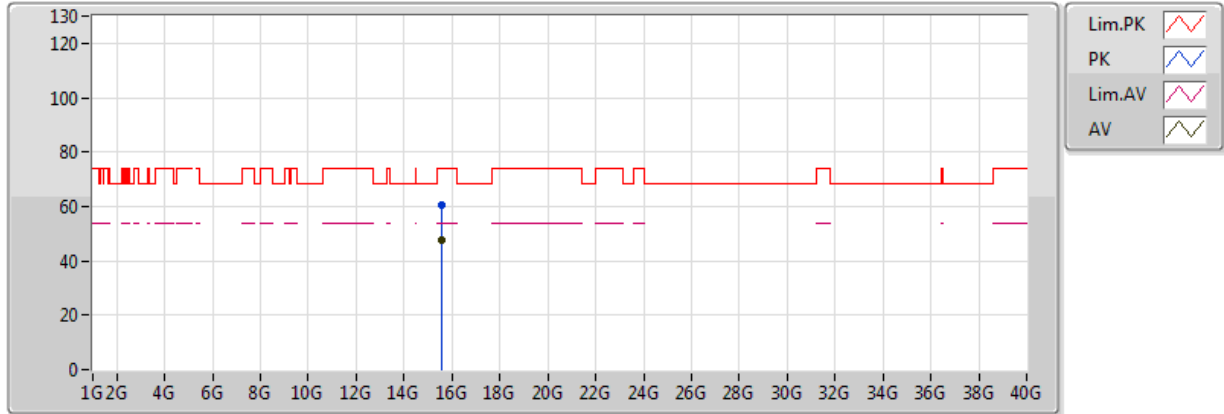


20170125
EUT_Y_3TX
Setting 18.5
02-J-4-10
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1484G	50.49	54.00	-3.51	7.04	3	H	96	1.50	-
AV	5.1868G	104.07	Inf	-Inf	7.14	3	H	96	1.50	-
PK	5.1472G	63.08	74.00	-10.92	7.04	3	H	96	1.50	-
PK	5.1864G	113.43	Inf	-Inf	7.14	3	H	96	1.50	-

802.11a_(6Mbps)_3TX

5180MHz_TX

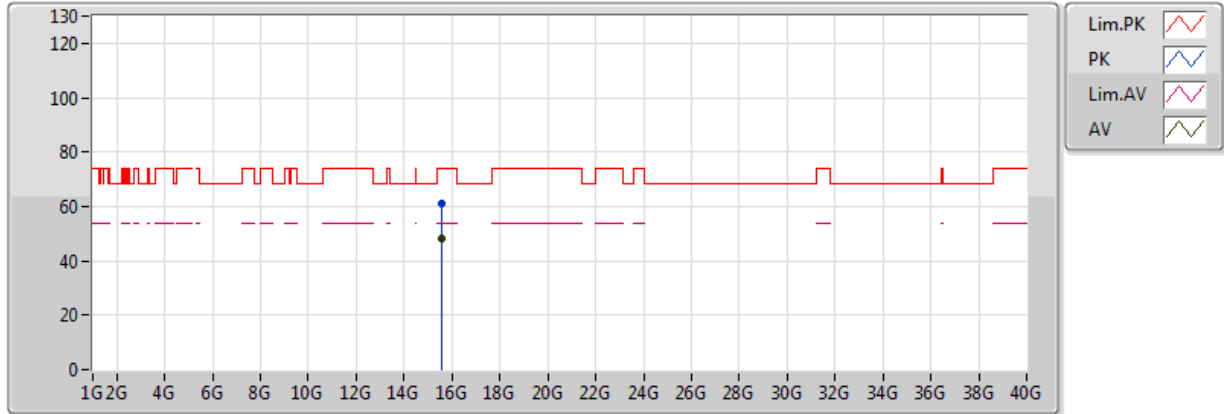


20170125
EUT Y_3TX
Setting 18.5
02-J-4
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.53946G	47.56	54.00	-6.44	15.99	3	V	249	1.60	-
PK	15.54054G	60.65	74.00	-13.35	15.99	3	V	249	1.60	-

802.11a_(6Mbps)_3TX

5180MHz_TX

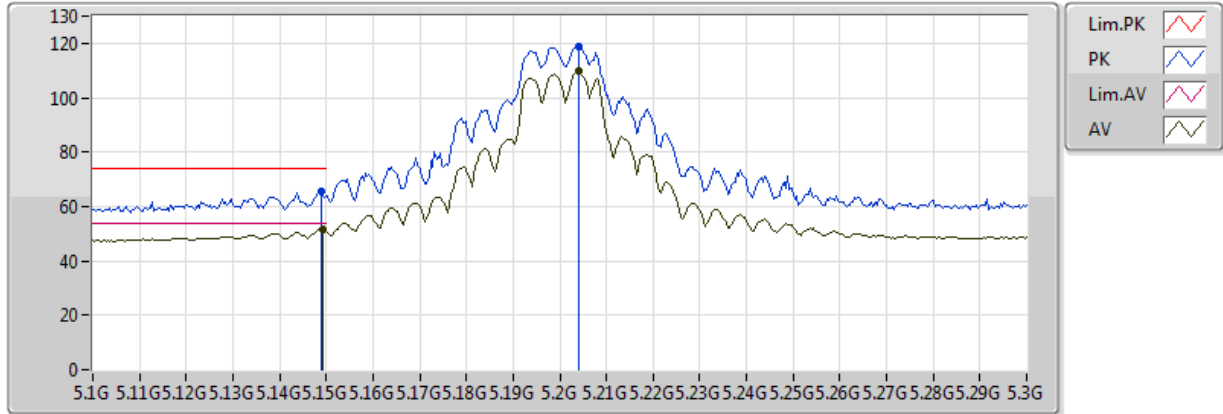


20170125
EUT Y_3TX
Setting 18.5
02-J-4
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.53946G	48.18	54.00	-5.82	15.99	3	H	257	1.17	-
PK	15.53982G	61.33	74.00	-12.67	15.99	3	H	257	1.17	-

802.11a_(6Mbps)_3TX

5200MHz_TX

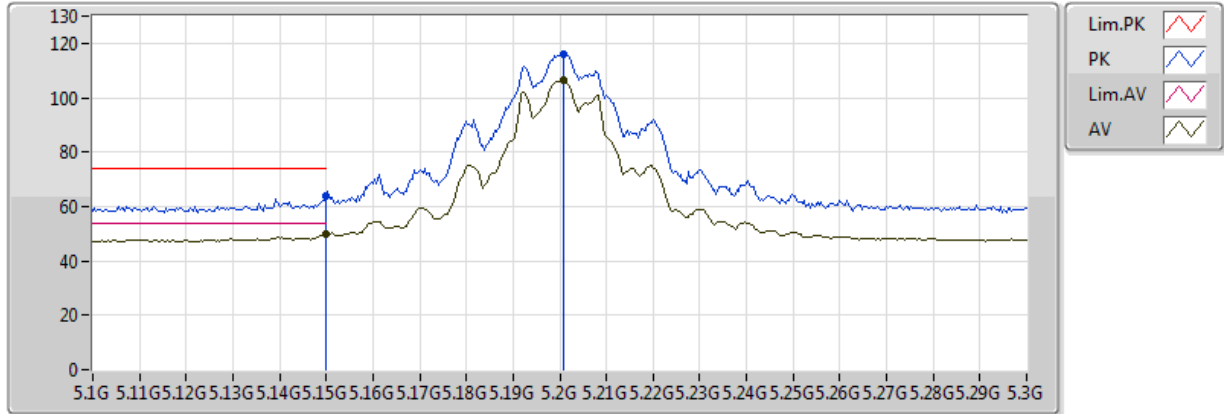


20170125
EUT Y_3TX
Setting 21.5
02-J-4-10
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1492G	51.75	54.00	-2.25	7.04	3	V	76	1.49	-
AV	5.204G	109.62	Inf	-Inf	7.19	3	V	76	1.49	-
PK	5.1488G	65.82	74.00	-8.18	7.04	3	V	76	1.49	-
PK	5.204G	119.01	Inf	-Inf	7.19	3	V	76	1.49	-

802.11a_(6Mbps)_3TX

5200MHz_TX

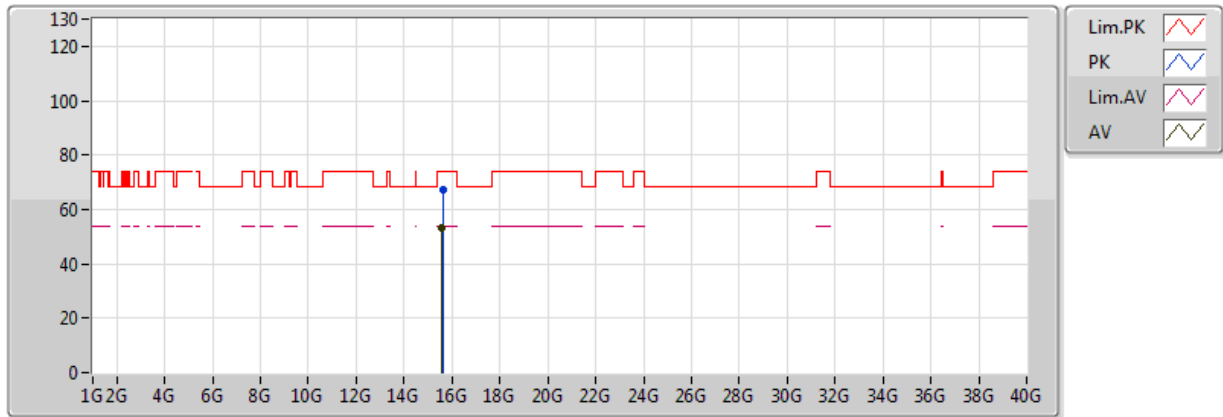


20170125
EUT Y_3TX
Setting 21.5
02-J-4-10
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.149995G	50.02	54.00	-3.98	7.04	3	H	52	1.67	-
AV	5.2008G	106.34	Inf	-Inf	7.18	3	H	52	1.67	-
PK	5.149995G	63.69	74.00	-10.31	7.04	3	H	52	1.67	-
PK	5.2008G	116.02	Inf	-Inf	7.18	3	H	52	1.67	-

802.11a_(6Mbps)_3TX

5200MHz_TX

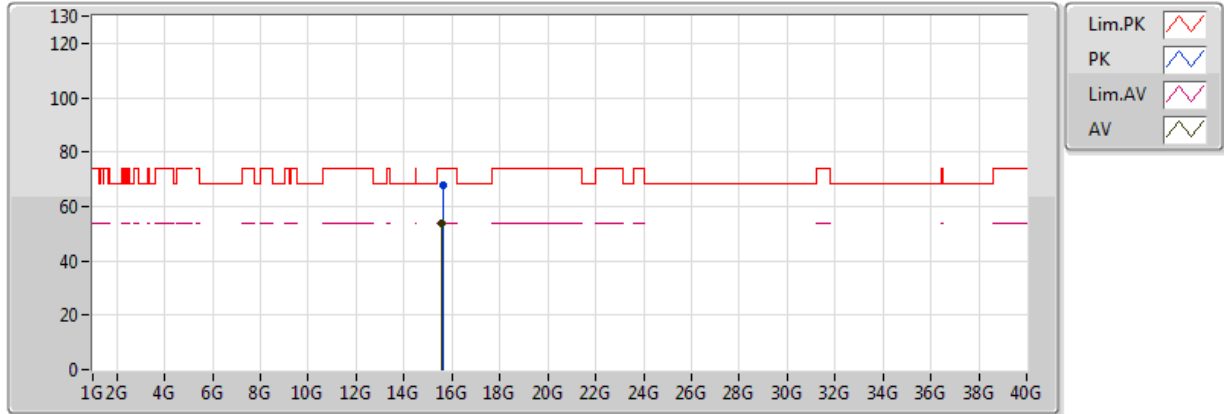


20170125
EUT Y_3TX
Setting 21.5
02-J-4
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.59988G	53.17	54.00	-0.83	15.83	3	V	249	1.45	-
PK	15.60432G	67.16	74.00	-6.84	15.82	3	V	249	1.45	-

802.11a_(6Mbps)_3TX

5200MHz_TX

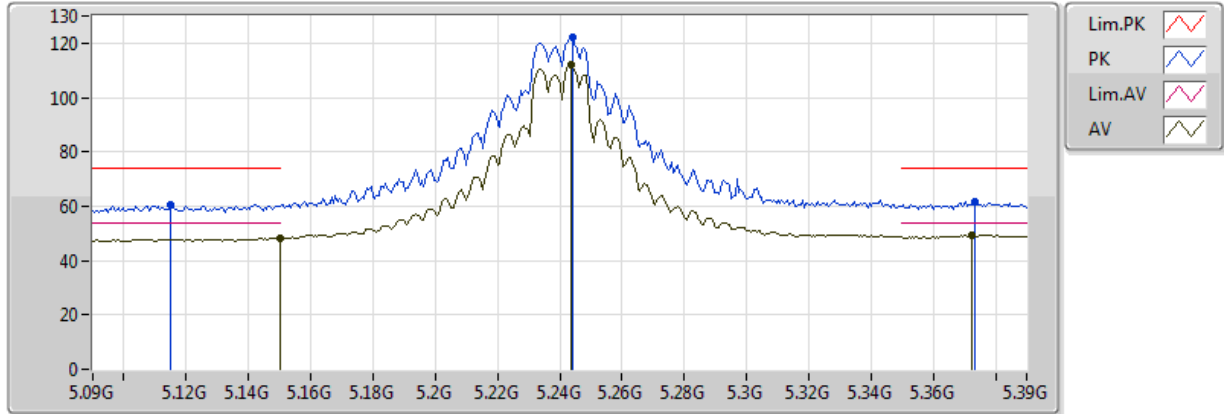


20170125
EUT Y_3TX
Setting 21.5
02-J-4
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.60042G	53.87	54.00	-0.13	15.83	3	H	251	1.18	-
PK	15.6102G	67.70	74.00	-6.30	15.80	3	H	251	1.18	-

802.11a_(6Mbps)_3TX

5240MHz_TX

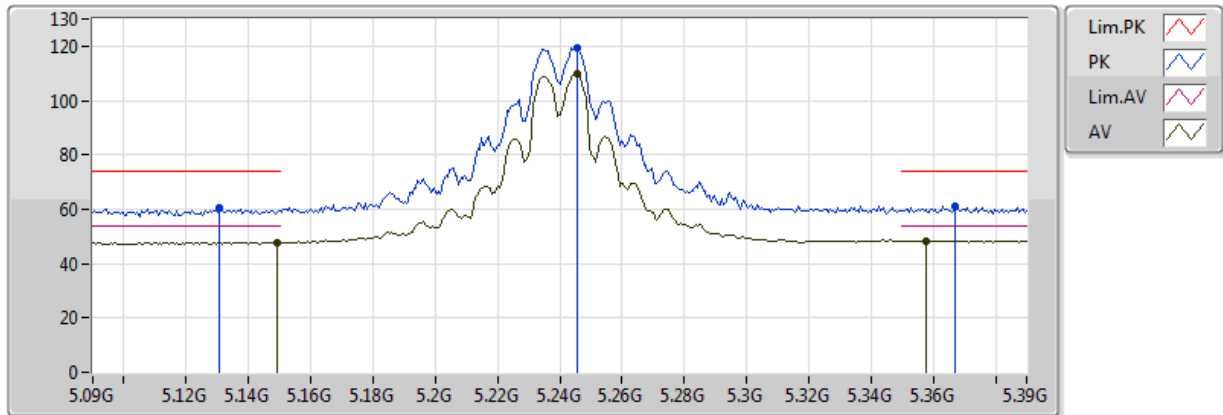


20170125
EUT Y_3TX
Setting 22
02-J-4-10
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.149995G	48.42	54.00	-5.58	7.04	3	V	333	1.30	-
AV	5.2436G	111.96	Inf	-Inf	7.27	3	V	333	1.30	-
AV	5.3726G	49.18	54.00	-4.82	7.52	3	V	333	1.30	-
PK	5.1152G	60.38	74.00	-13.62	6.95	3	V	333	1.30	-
PK	5.2442G	121.95	Inf	-Inf	7.27	3	V	333	1.30	-
PK	5.3732G	61.80	74.00	-12.20	7.52	3	V	333	1.30	-

802.11a_(6Mbps)_3TX

5240MHz_TX

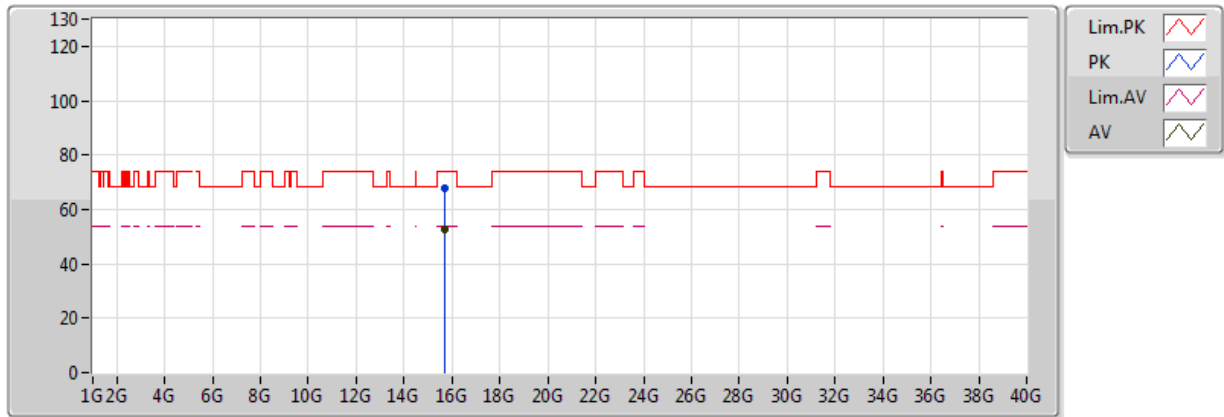


20170125
EUT Y_3TX
Setting 22
02-J-4-10
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1494G	47.84	54.00	-6.16	7.04	3	H	53	1.50	-
AV	5.2454G	109.84	Inf	-Inf	7.27	3	H	53	1.50	-
AV	5.3576G	48.39	54.00	-5.61	7.49	3	H	53	1.50	-
PK	5.1308G	60.54	74.00	-13.46	6.99	3	H	53	1.50	-
PK	5.2454G	119.40	Inf	-Inf	7.27	3	H	53	1.50	-
PK	5.3672G	61.04	74.00	-12.96	7.51	3	H	53	1.50	-

802.11a_(6Mbps)_3TX

5240MHz_TX

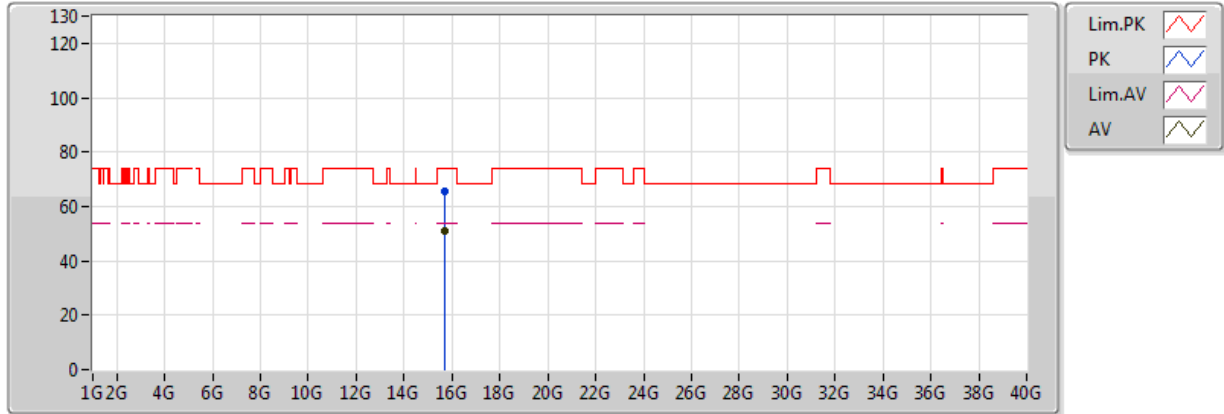


20170125
EUT Y_3TX
Setting 22
02-J-4
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.71466G	52.94	54.00	-1.06	15.52	3	V	282	1.42	-
PK	15.71472G	67.70	74.00	-6.30	15.52	3	V	282	1.42	-

802.11a_(6Mbps)_3TX

5240MHz_TX

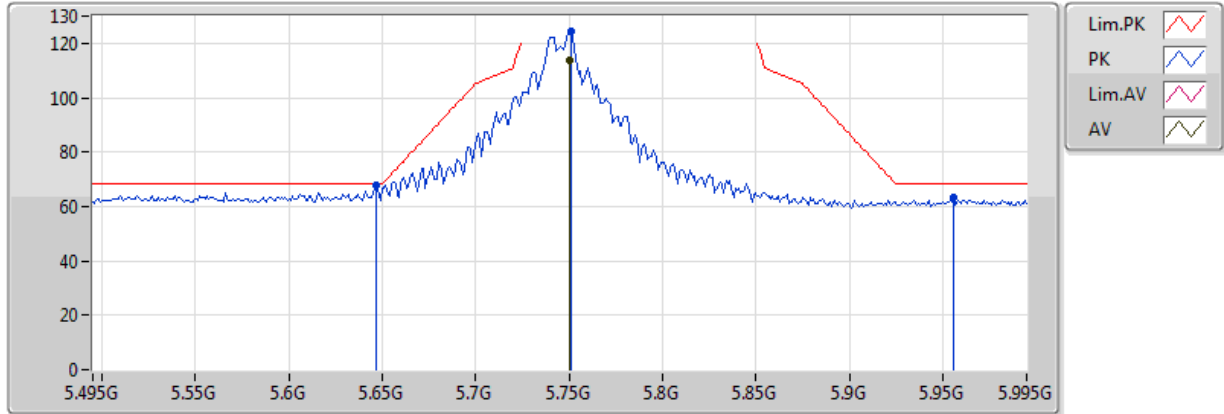


20170125
EUT Y_3TX
Setting 22
02-J-4
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.71544G	51.09	54.00	-2.91	15.51	3	H	231	1.47	-
PK	15.72486G	65.54	74.00	-8.46	15.49	3	H	231	1.47	-

802.11a_(6Mbps)_3TX

5745MHz_TX

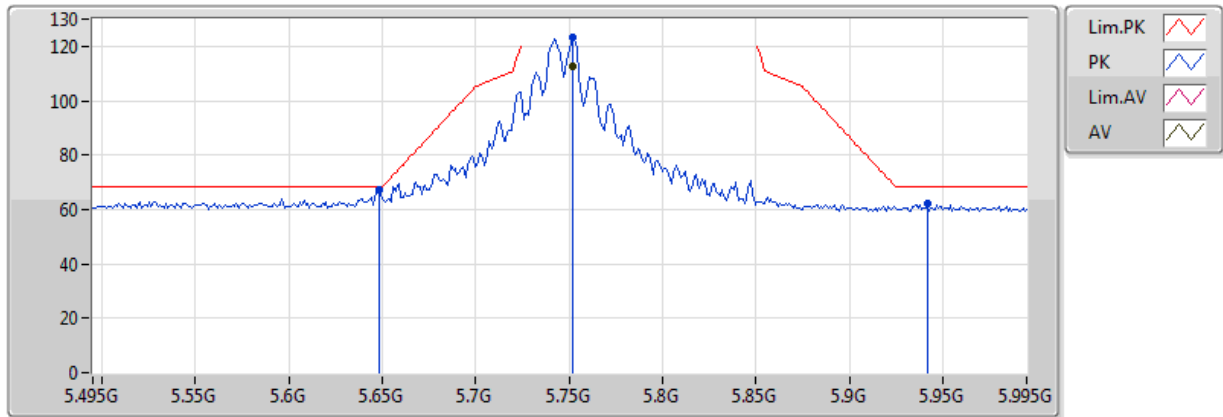


20170126
EUT Y_3TX
Setting 25.5
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.75G	113.56	Inf	-Inf	8.03	3	V	13	1.57	-
PK	5.647G	67.79	68.20	-0.41	7.98	3	V	13	1.57	-
PK	5.751G	124.26	Inf	-Inf	8.04	3	V	13	1.57	-
PK	5.956G	63.04	68.20	-5.16	8.33	3	V	13	1.57	-

802.11a_(6Mbps)_3TX

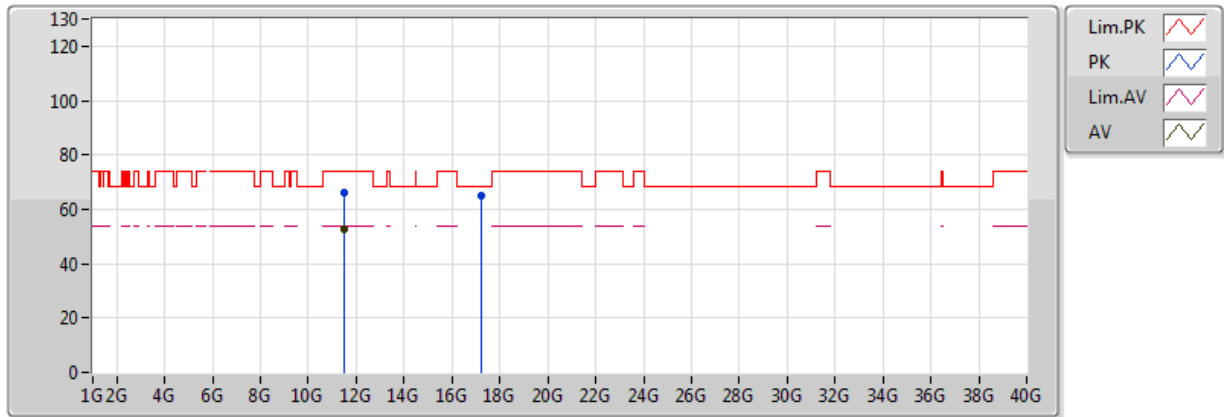
5745MHz_TX



Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.752G	112.46	Inf	-Inf	8.04	3	H	63	1.59	-
PK	5.648G	67.01	68.20	-1.19	7.98	3	H	63	1.59	-
PK	5.752G	123.41	Inf	-Inf	8.04	3	H	63	1.59	-
PK	5.942G	61.92	68.20	-6.28	8.30	3	H	63	1.59	-

802.11a_(6Mbps)_3TX

5745MHz_TX

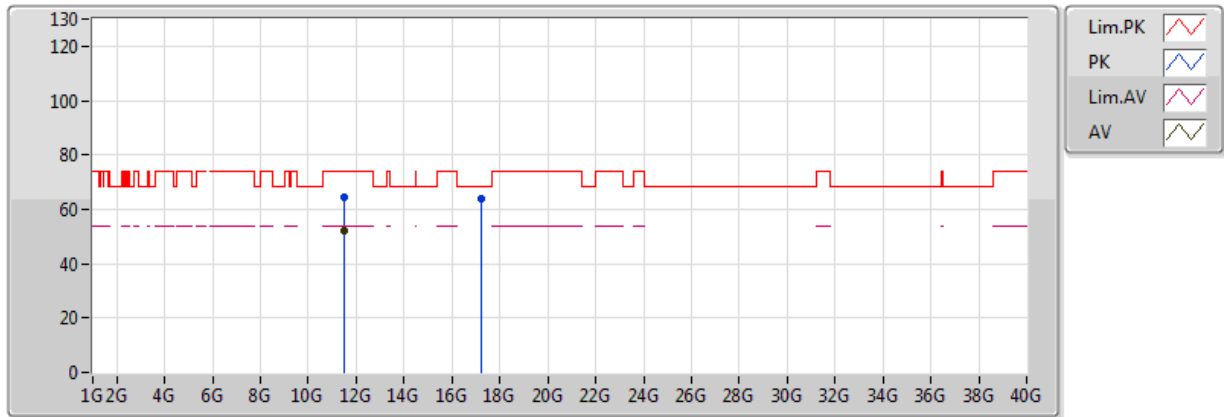


20170126
EUT Y_3TX
Setting 25.5
02-P-2
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.49282G	52.90	54.00	-1.10	14.48	3	V	139	2.59	-
PK	11.4927G	65.86	74.00	-8.14	14.48	3	V	139	2.59	-
PK	17.24058G	65.28	68.20	-2.92	20.25	3	V	316	2.16	-

802.11a_(6Mbps)_3TX

5745MHz_TX

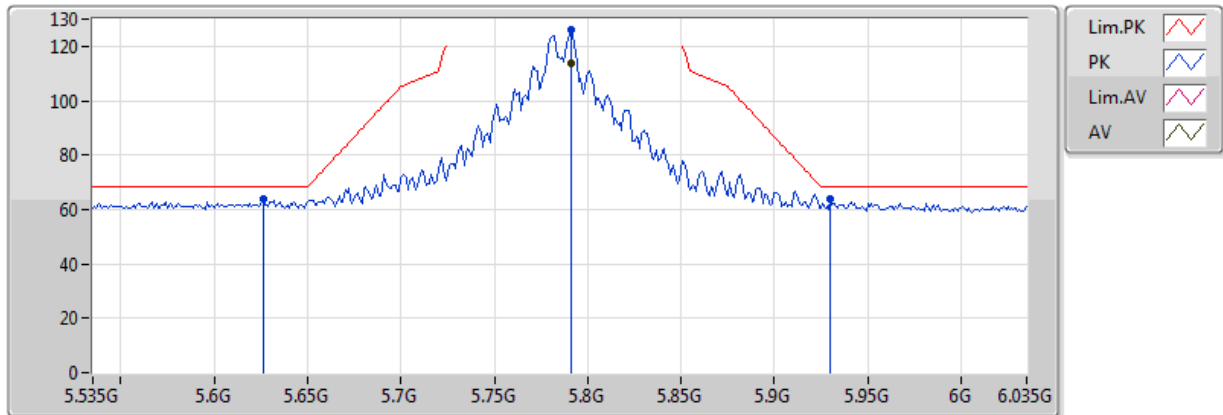


20170126
EUT Y_3TX
Setting 25.5
02-P-2
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
PK	17.229G	63.99	68.20	-4.21	20.18	3	H	228	1.50	-
AV	11.49336G	52.23	54.00	-1.77	14.48	3	H	327	1.84	-
PK	11.4942G	64.31	74.00	-9.69	14.48	3	H	327	1.84	-

802.11a_(6Mbps)_3TX

5785MHz_TX

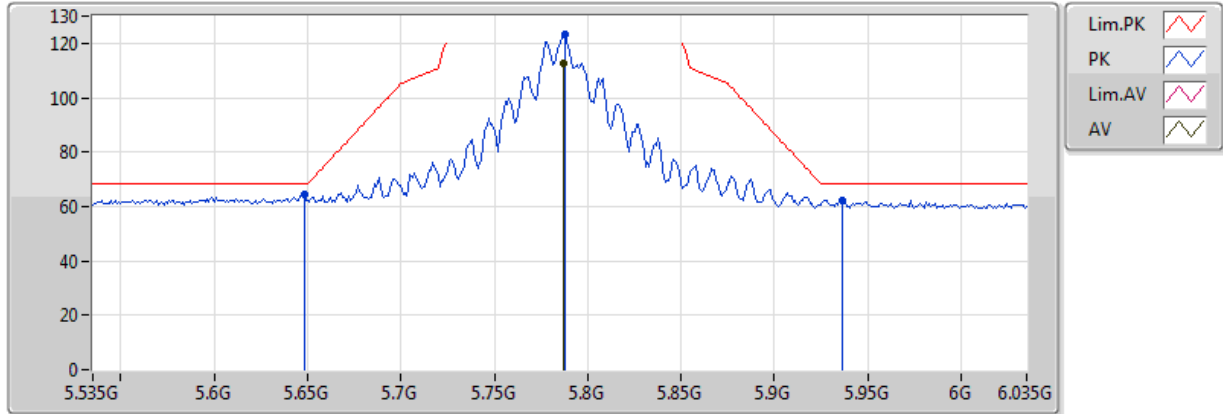


20170126
EUT Y_3TX
Setting 27
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.791G	113.92	Inf	-Inf	8.06	3	V	342	1.94	-
PK	5.626G	63.73	68.20	-4.47	7.97	3	V	342	1.94	-
PK	5.791G	126.07	Inf	-Inf	8.06	3	V	342	1.94	-
PK	5.93G	63.84	68.20	-4.36	8.28	3	V	342	1.94	-

802.11a_(6Mbps)_3TX

5785MHz_TX

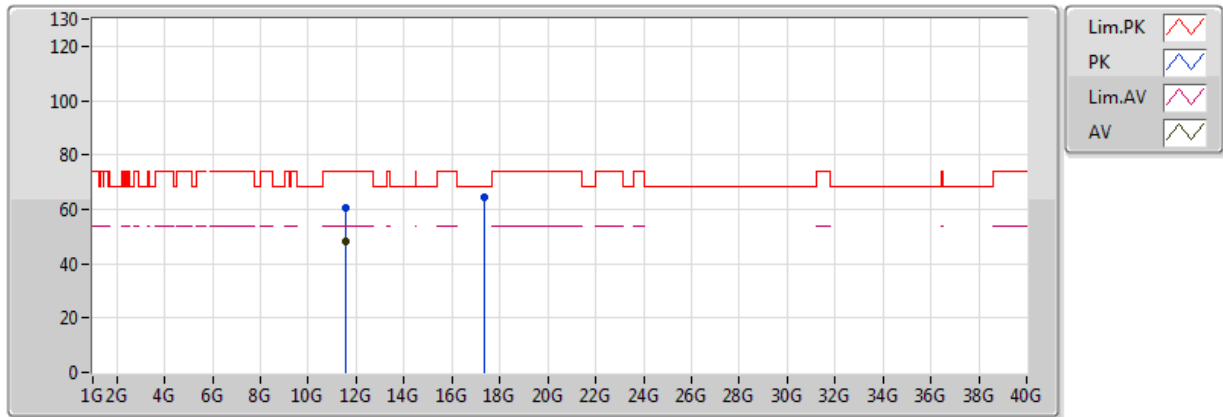


20170126
EUT Y_3TX
Setting 27
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.787G	112.62	Inf	-Inf	8.05	3	H	66	2.50	-
PK	5.648G	64.68	68.20	-3.52	7.98	3	H	66	2.50	-
PK	5.788G	123.00	Inf	-Inf	8.05	3	H	66	2.50	-
PK	5.936G	62.21	68.20	-5.99	8.29	3	H	66	2.50	-

802.11a_(6Mbps)_3TX

5785MHz_TX

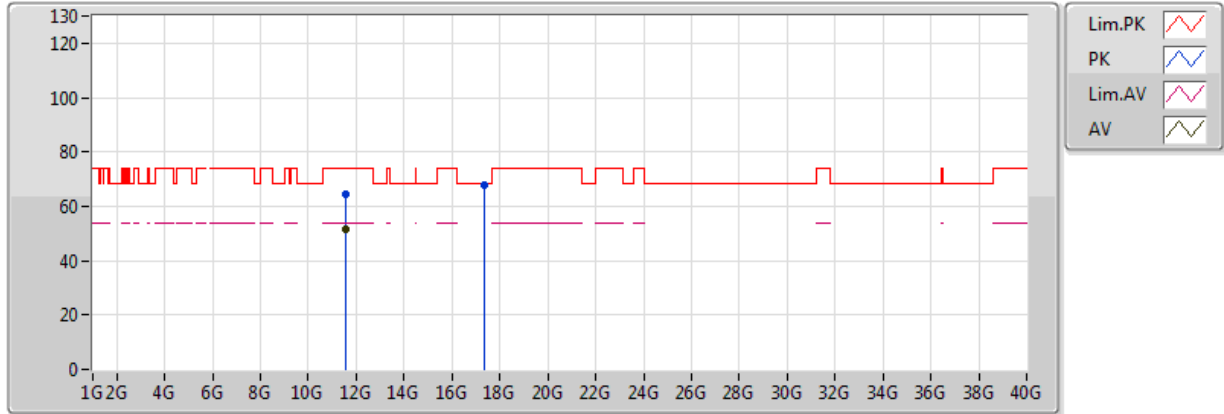


20170126
EUT Y_3TX
Setting 27
02-P-2
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.57162G	47.97	54.00	-6.03	14.53	3	V	223	1.46	-
PK	11.57162G	60.77	74.00	-13.23	14.53	3	V	223	1.46	-
PK	17.34372G	64.41	68.20	-3.79	20.87	3	V	242	1.97	-

802.11a_(6Mbps)_3TX

5785MHz_TX

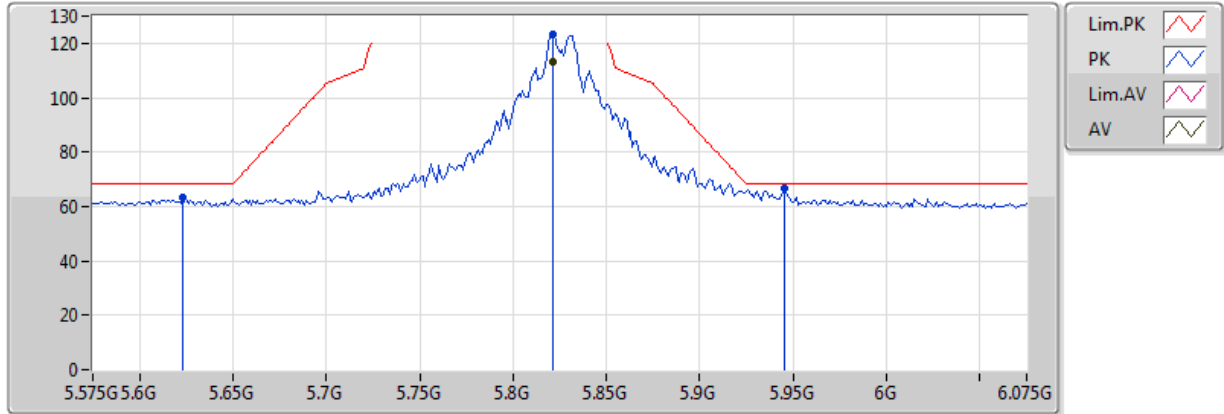


20170126
EUT Y_3TX
Setting 27
02-P-2
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
PK	17.3532G	67.83	68.20	-0.37	20.93	3	H	247	1.70	-
AV	11.5736G	51.65	54.00	-2.35	14.53	3	H	325	1.85	-
PK	11.57324G	64.31	74.00	-9.69	14.53	3	H	325	1.85	-

802.11a_(6Mbps)_3TX

5825MHz_TX

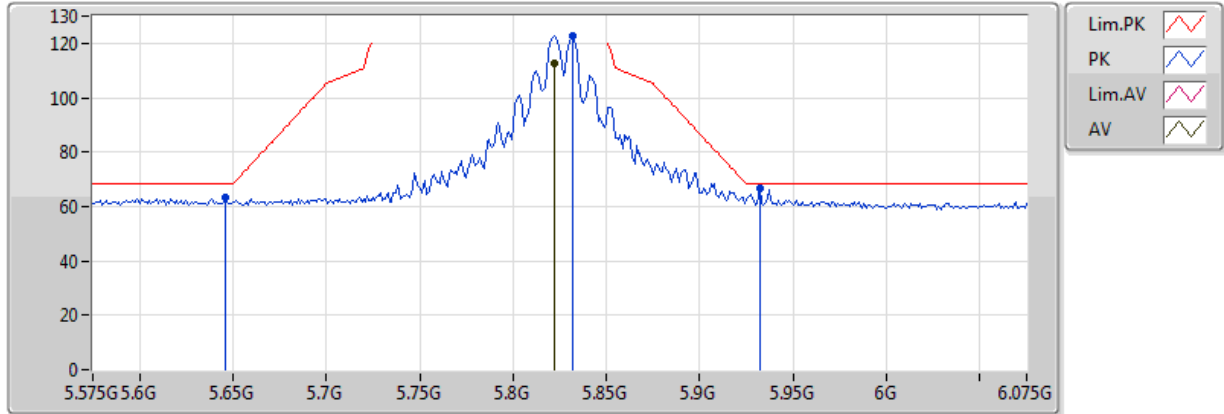


20170126
EUT Y_3TX
Setting 25
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.821G	112.97	Inf	-Inf	8.10	3	V	14	1.99	-
PK	5.623G	63.18	68.20	-5.02	7.97	3	V	14	1.99	-
PK	5.821G	123.37	Inf	-Inf	8.10	3	V	14	1.99	-
PK	5.945G	66.58	68.20	-1.62	8.31	3	V	14	1.99	-

802.11a_(6Mbps)_3TX

5825MHz_TX

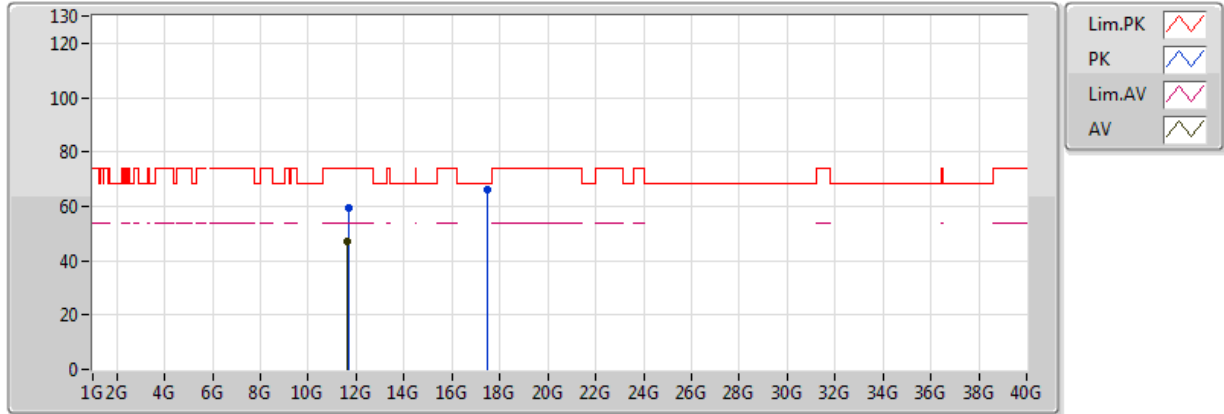


20170126
EUT Y_3TX
Setting 25
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.822G	112.47	Inf	-Inf	8.10	3	H	64	1.56	-
PK	5.646G	63.28	68.20	-4.92	7.98	3	H	64	1.56	-
PK	5.832G	122.85	Inf	-Inf	8.11	3	H	64	1.56	-
PK	5.932G	66.42	68.20	-1.78	8.28	3	H	64	1.56	-

802.11a_(6Mbps)_3TX

5825MHz_TX

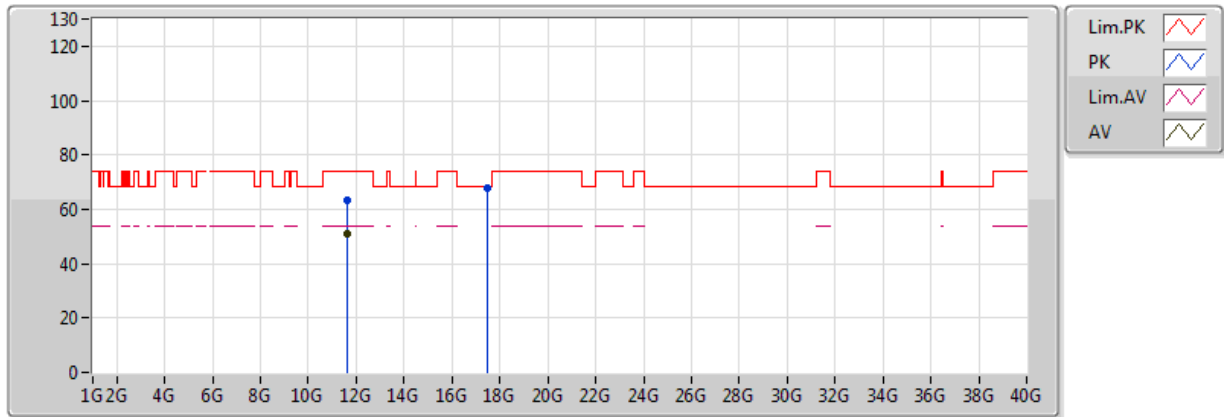


20170126
EUT Y_3TX
Setting 25
02-P-2
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.6524G	47.26	54.00	-6.74	14.58	3	V	220	1.46	-
PK	11.66176G	59.18	74.00	-14.82	14.58	3	V	220	1.46	-
PK	17.48382G	65.92	68.20	-2.28	21.71	3	V	38	1.54	-

802.11a_(6Mbps)_3TX

5825MHz_TX

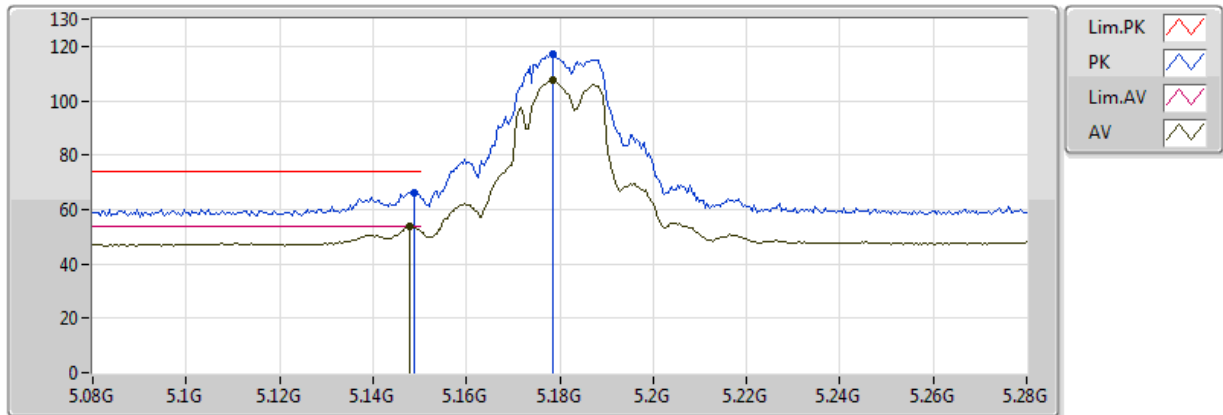


20170126
EUT Y_3TX
Setting 25
02-P-2
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
PK	17.47284G	68.06	68.20	-0.14	21.65	3	H	248	1.67	-
AV	11.65324G	50.74	54.00	-3.26	14.58	3	H	330	1.83	-
PK	11.65264G	63.48	74.00	-10.52	14.58	3	H	330	1.83	-

802.11ac VHT20_Nss1,(MCS0)_3TX

5180MHz_TX

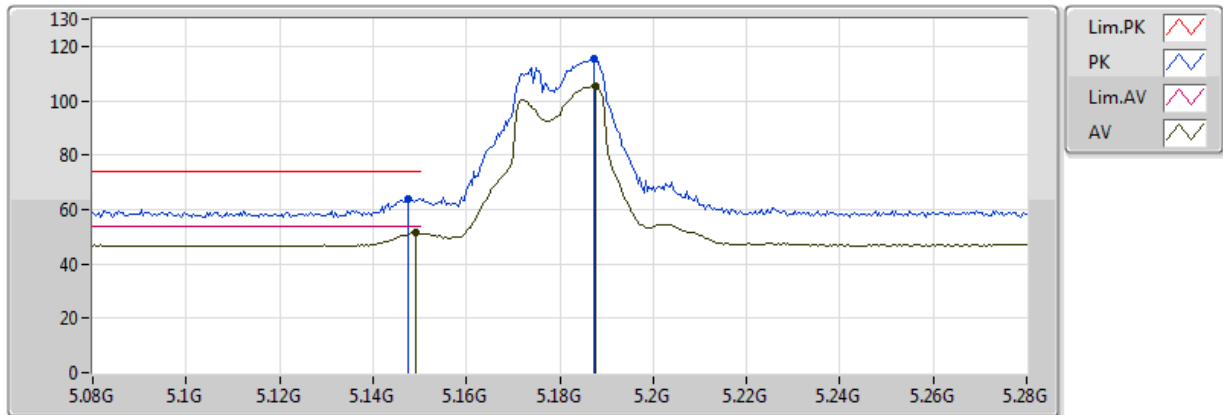


20170126
EUT Y_3TX
Setting 18.5
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.148G	53.59	54.00	-0.41	7.04	3	V	332	1.51	-
AV	5.1784G	107.33	Inf	-Inf	7.12	3	V	332	1.51	-
PK	5.1488G	66.35	74.00	-7.65	7.04	3	V	332	1.51	-
PK	5.1784G	116.98	Inf	-Inf	7.12	3	V	332	1.51	-

802.11ac VHT20_Nss1,(MCS0)_3TX

5180MHz_TX

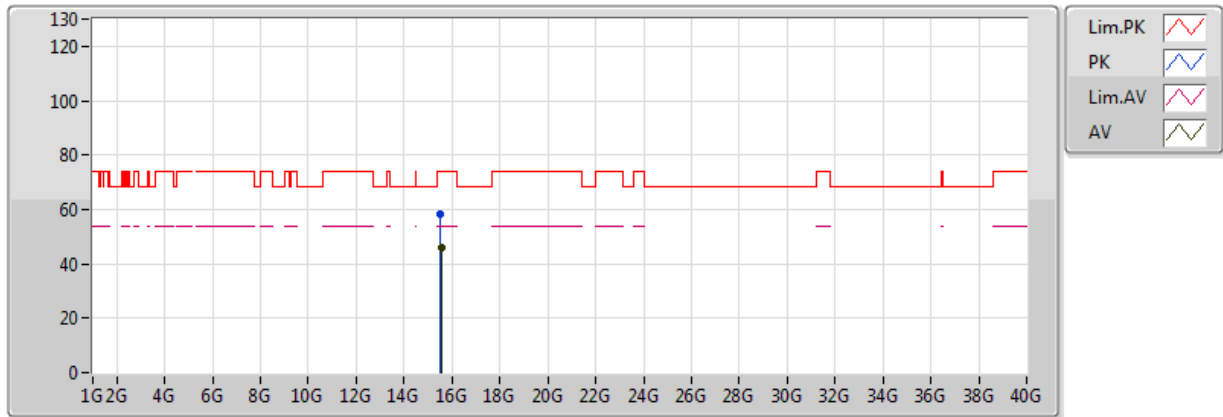


20170126
EUT Y_3TX
Setting 18.5
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1492G	51.47	54.00	-2.53	7.04	3	H	78	1.53	-
AV	5.1876G	105.36	Inf	-Inf	7.15	3	H	78	1.53	-
PK	5.1476G	64.12	74.00	-9.88	7.04	3	H	78	1.53	-
PK	5.1872G	115.35	Inf	-Inf	7.15	3	H	78	1.53	-

802.11ac VHT20_Nss1,(MCS0)_3TX

5180MHz_TX

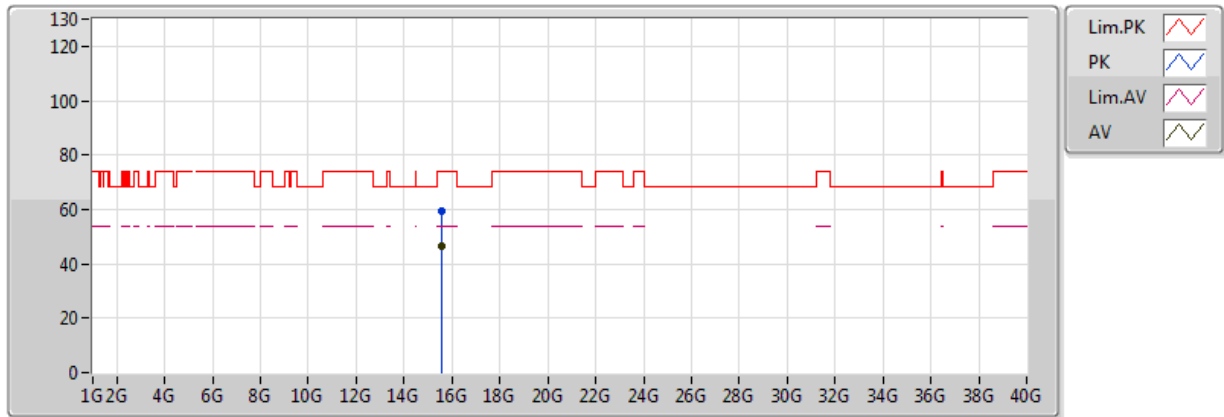


20170126
EUT Y_3TX
Setting 18.5
02-P-2
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.53982G	46.14	54.00	-7.86	15.99	3	V	245	1.47	-
PK	15.53028G	58.23	74.00	-15.77	16.02	3	V	245	1.47	-

802.11ac VHT20_Nss1,(MCS0)_3TX

5180MHz_TX

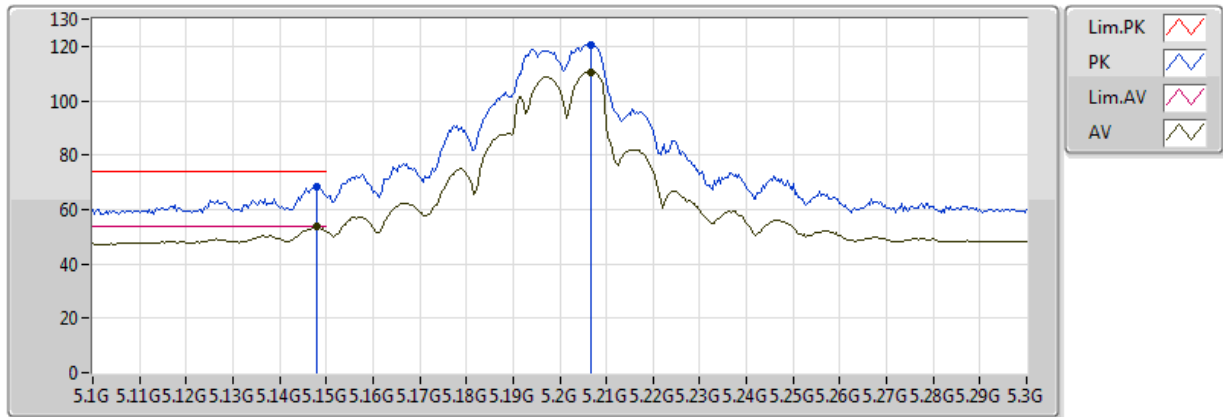


20170126
EUT Y_3TX
Setting 18.5
02-P-2
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.53892G	46.43	54.00	-7.57	15.99	3	H	229	2.80	-
PK	15.53958G	59.30	74.00	-14.70	15.99	3	H	229	2.80	-

802.11ac VHT20_Nss1,(MCS0)_3TX

5200MHz_TX

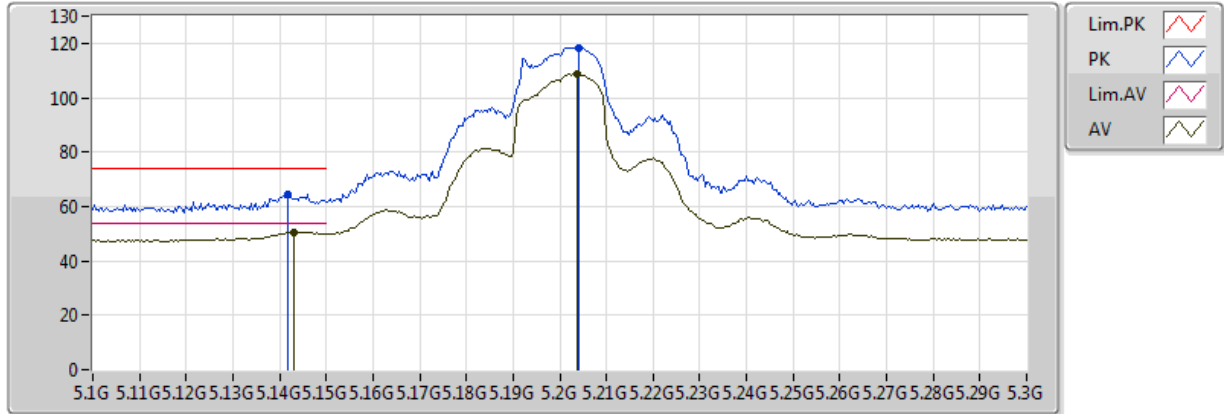


20170126
EUT Y_3TX
Setting 21.5
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.148G	53.76	54.00	-0.24	7.04	3	V	332	1.36	-
AV	5.2068G	110.58	Inf	-Inf	7.19	3	V	332	1.36	-
PK	5.148G	68.18	74.00	-5.82	7.04	3	V	332	1.36	-
PK	5.2068G	120.68	Inf	-Inf	7.19	3	V	332	1.36	-

802.11ac VHT20_Nss1,(MCS0)_3TX

5200MHz_TX

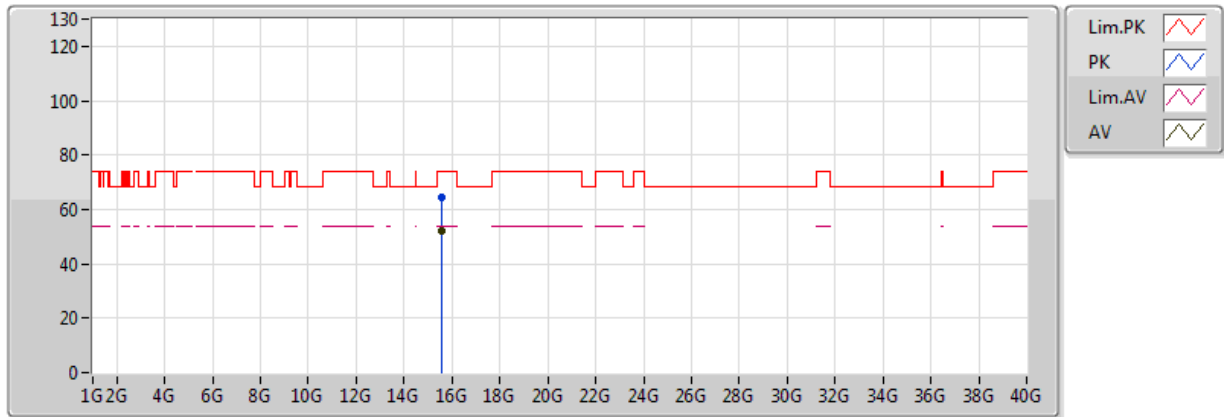


20170126
EUT_Y_3TX
Setting 21.5
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1432G	50.52	54.00	-3.48	7.03	3	H	90	1.44	-
AV	5.2036G	108.59	Inf	-Inf	7.19	3	H	90	1.44	-
PK	5.1416G	64.45	74.00	-9.55	7.02	3	H	90	1.44	-
PK	5.204G	118.51	Inf	-Inf	7.19	3	H	90	1.44	-

802.11ac VHT20_Nss1,(MCS0)_3TX

5200MHz_TX

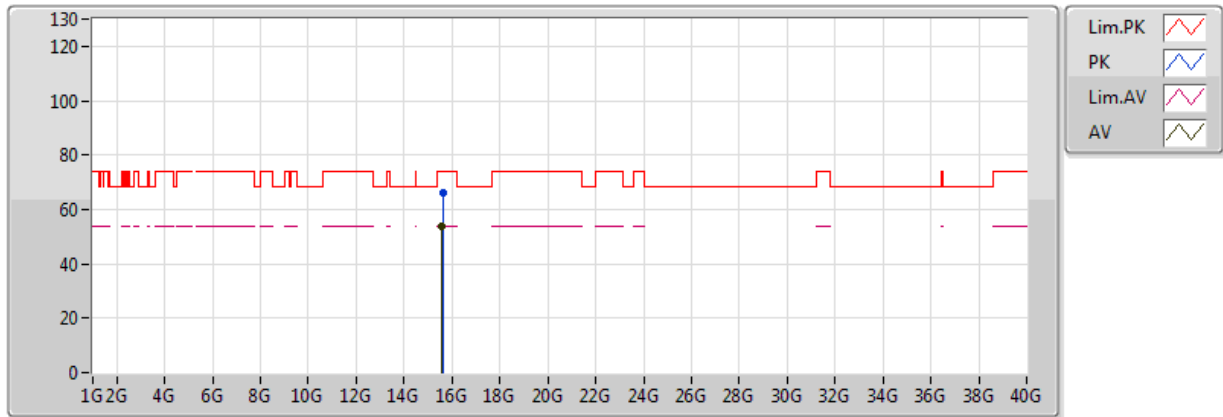


20170126
EUT Y_3TX
Setting 21.5
02-P-2
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.59976G	51.93	54.00	-2.07	15.83	3	V	246	1.46	-
PK	15.59958G	64.28	74.00	-9.72	15.83	3	V	246	1.46	-

802.11ac VHT20_Nss1,(MCS0)_3TX

5200MHz_TX

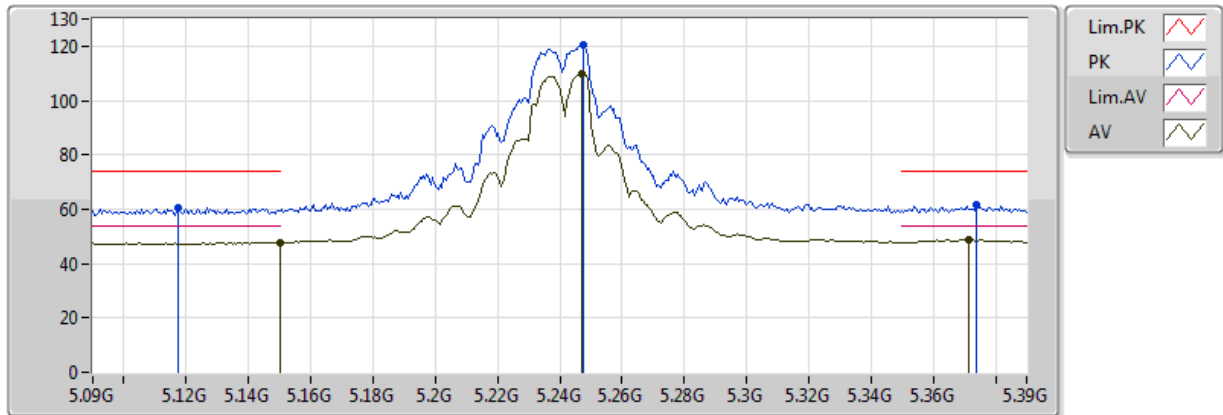


20170126
EUT Y_3TX
Setting 21.5
02-P-2
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.59988G	53.70	54.00	-0.30	15.83	3	H	255	2.19	-
PK	15.6012G	66.04	74.00	-7.96	15.82	3	H	255	2.19	-

802.11ac VHT20_Nss1,(MCS0)_3TX

5240MHz_TX

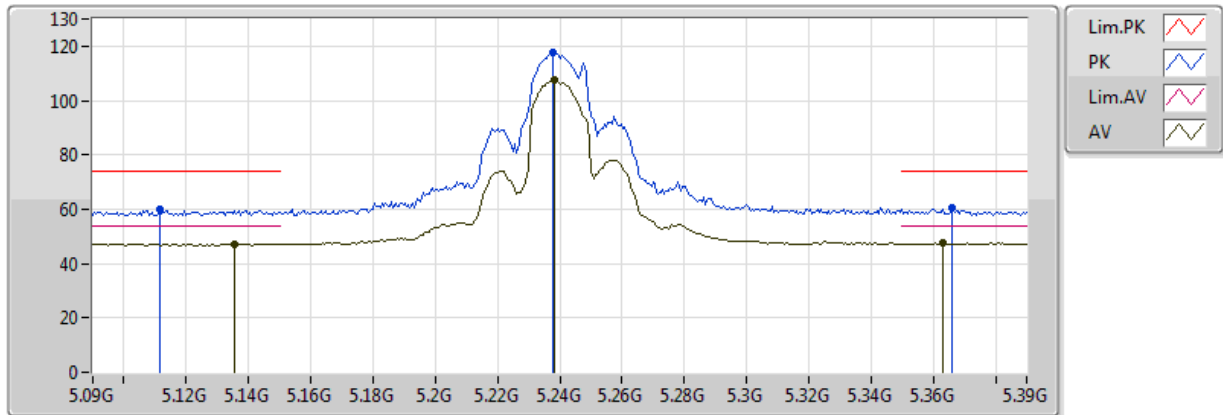


20170126
EUT Y_3TX
Setting 21.5
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.149995G	47.84	54.00	-6.16	7.04	3	V	333	1.47	-
AV	5.2472G	109.91	Inf	-Inf	7.27	3	V	333	1.47	-
AV	5.3714G	48.89	54.00	-5.11	7.52	3	V	333	1.47	-
PK	5.1176G	60.47	74.00	-13.53	6.96	3	V	333	1.47	-
PK	5.2478G	120.23	Inf	-Inf	7.28	3	V	333	1.47	-
PK	5.3738G	61.38	74.00	-12.62	7.52	3	V	333	1.47	-

802.11ac VHT20_Nss1,(MCS0)_3TX

5240MHz_TX

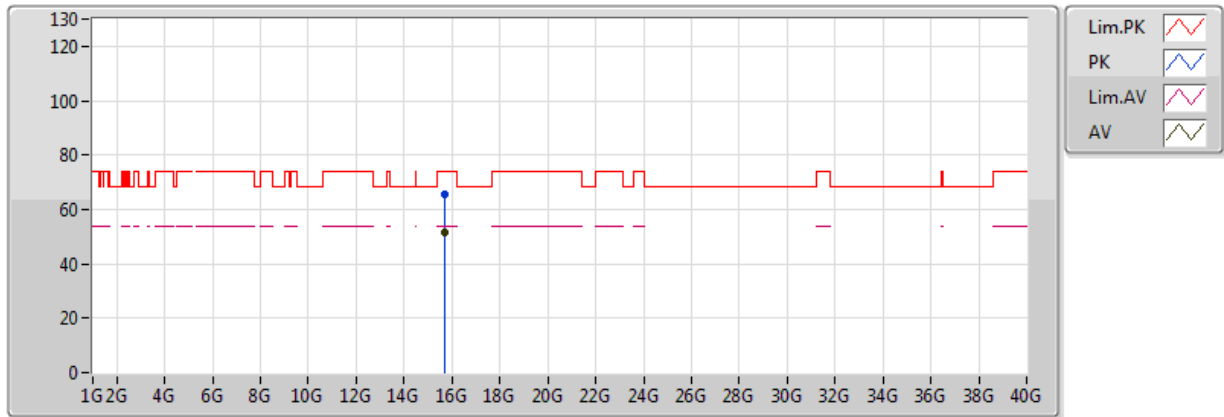


20170126
EUT Y_3TX
Setting 21.5
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1356G	47.34	54.00	-6.66	7.01	3	H	81	1.49	-
AV	5.2382G	107.35	Inf	-Inf	7.26	3	H	81	1.49	-
AV	5.363G	47.41	54.00	-6.59	7.50	3	H	81	1.49	-
PK	5.1116G	60.01	74.00	-13.99	6.94	3	H	81	1.49	-
PK	5.2376G	117.40	Inf	-Inf	7.26	3	H	81	1.49	-
PK	5.366G	60.41	74.00	-13.59	7.51	3	H	81	1.49	-

802.11ac VHT20_Nss1,(MCS0)_3TX

5240MHz_TX

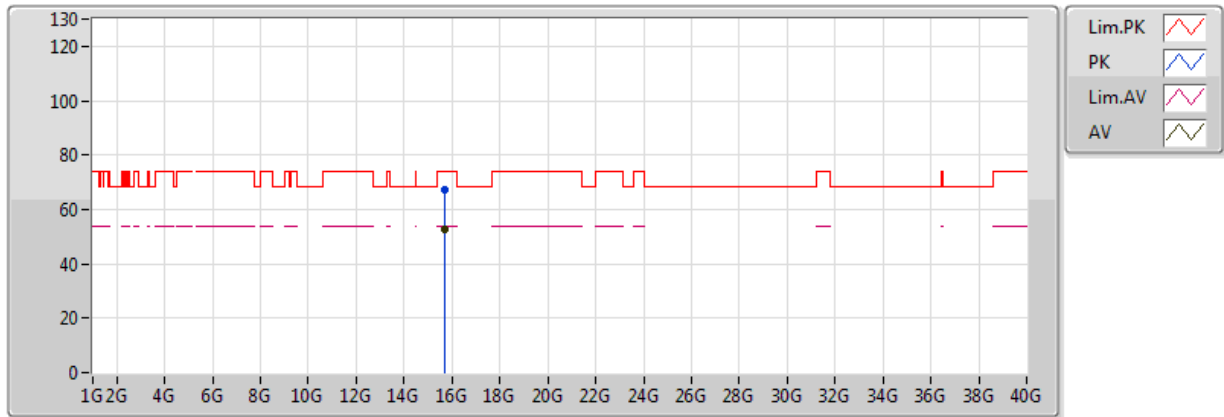


20170126
EUT Y_3TX
Setting 21.5
02-P-2
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.71892G	51.33	54.00	-2.67	15.50	3	V	293	1.51	-
PK	15.7182G	65.82	74.00	-8.18	15.51	3	V	293	1.51	-

802.11ac VHT20_Nss1,(MCS0)_3TX

5240MHz_TX

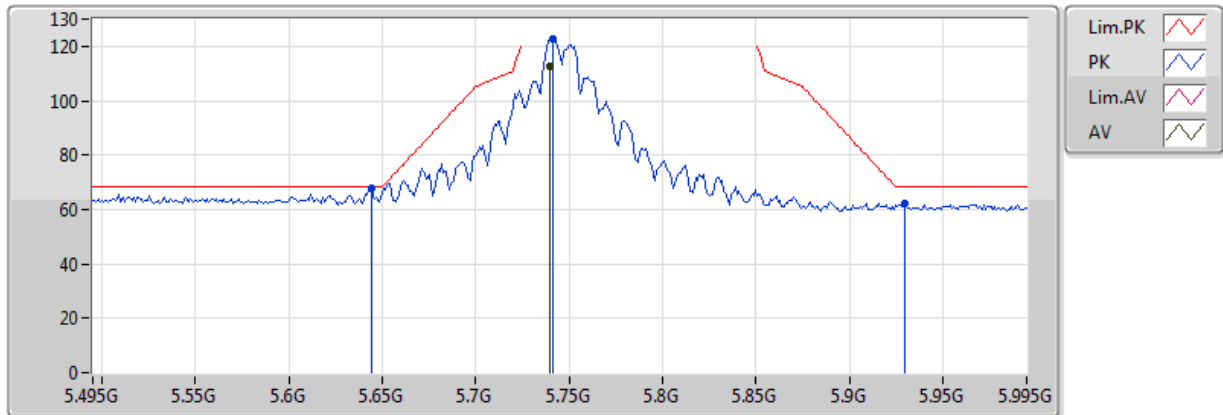


20170126
EUT Y_3TX
Setting 21.5
02-P-2
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.7194G	52.59	54.00	-1.41	15.50	3	H	255	2.62	-
PK	15.7188G	67.39	74.00	-6.61	15.50	3	H	255	2.62	-

802.11ac VHT20_Nss1,(MCS0)_3TX

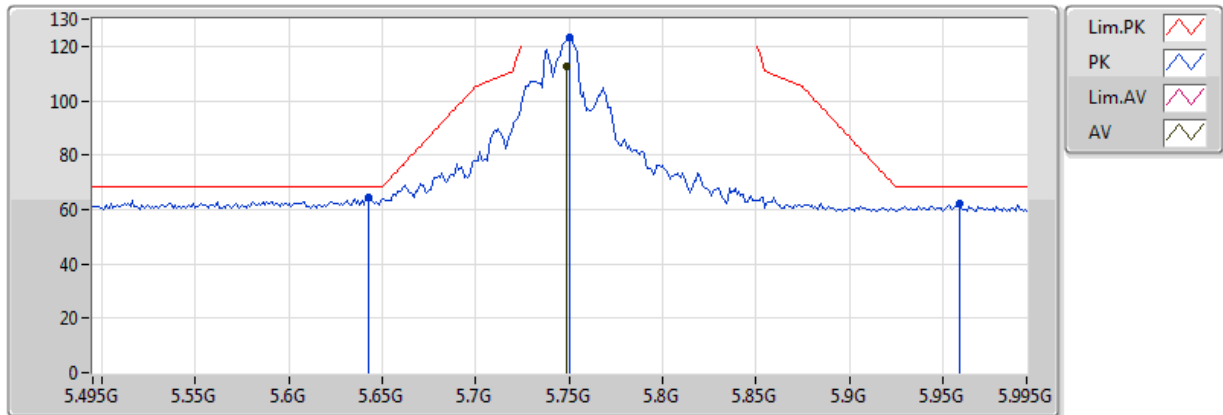
5745MHz_TX



Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.74G	112.68	Inf	-Inf	8.03	3	V	339	1.56	-
PK	5.644G	67.73	68.20	-0.47	7.98	3	V	339	1.56	-
PK	5.741G	122.87	Inf	-Inf	8.03	3	V	339	1.56	-
PK	5.93G	62.38	68.20	-5.82	8.28	3	V	339	1.56	-

802.11ac VHT20_Nss1,(MCS0)_3TX

5745MHz_TX

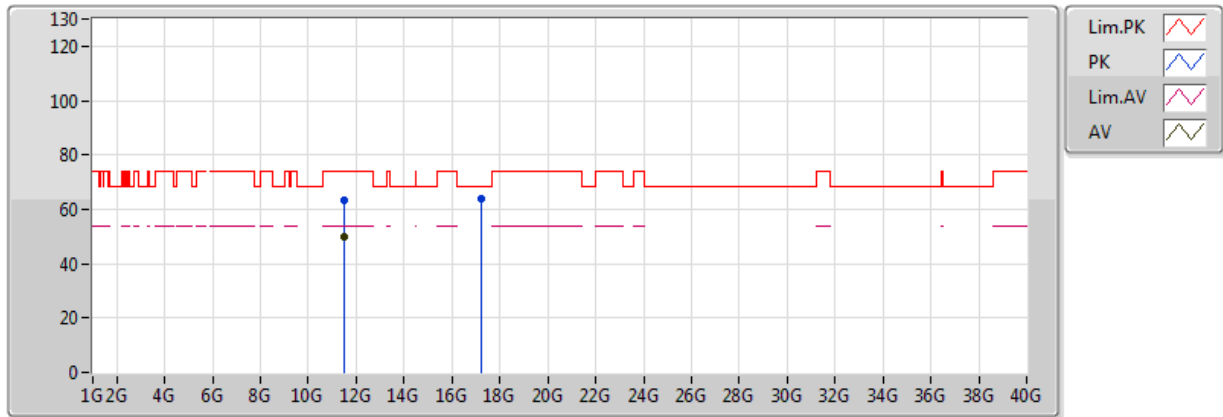


20170126
EUT Y_3TX
Setting 24.5
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.749G	112.40	Inf	-Inf	8.03	3	H	63	1.67	-
PK	5.643G	64.57	68.20	-3.63	7.98	3	H	63	1.67	-
PK	5.75G	123.14	Inf	-Inf	8.03	3	H	63	1.67	-
PK	5.959G	61.94	68.20	-6.26	8.33	3	H	63	1.67	-

802.11ac VHT20_Nss1,(MCS0)_3TX

5745MHz_TX

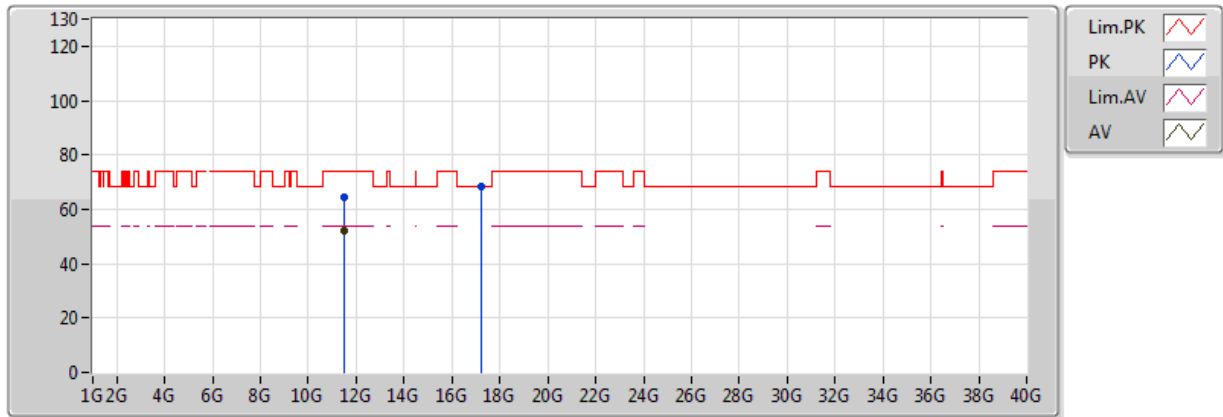


20170126
EUT Y_3TX
Setting 24.5
02-P-2
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.49144G	50.04	54.00	-3.96	14.47	3	V	109	1.22	-
PK	11.49144G	63.31	74.00	-10.69	14.47	3	V	109	1.22	-
PK	17.23842G	63.63	68.20	-4.57	20.24	3	V	313	2.33	-

802.11ac VHT20_Nss1,(MCS0)_3TX

5745MHz_TX

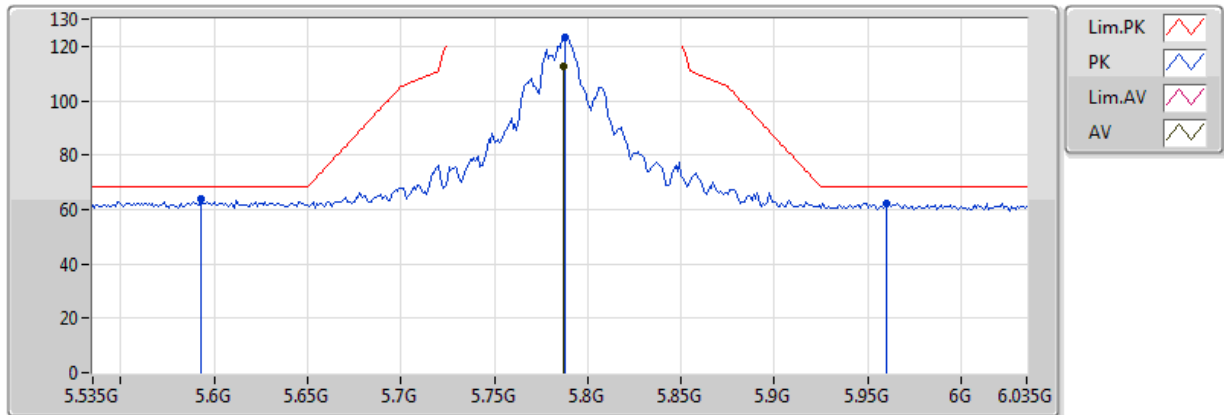


20170126
EUT Y_3TX
Setting 24.5
02-P-2
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
PK	17.23674G	68.16	68.20	-0.04	20.23	3	H	245	1.70	-
AV	11.4957G	52.22	54.00	-1.78	14.48	3	H	327	1.86	-
PK	11.49624G	64.25	74.00	-9.75	14.48	3	H	327	1.86	-

802.11ac VHT20_Nss1,(MCS0)_3TX

5785MHz_TX

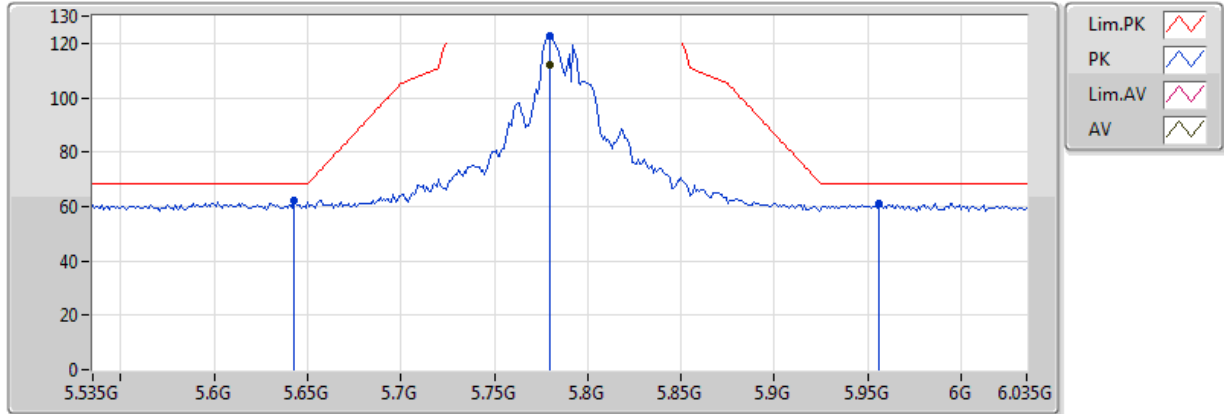


20170126
EUT Y_3TX
Setting 24
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.787G	112.80	Inf	-Inf	8.05	3	V	343	2.27	-
PK	5.593G	63.62	68.20	-4.58	7.95	3	V	343	2.27	-
PK	5.788G	123.20	Inf	-Inf	8.05	3	V	343	2.27	-
PK	5.96G	62.17	68.20	-6.03	8.33	3	V	343	2.27	-

802.11ac VHT20_Nss1,(MCS0)_3TX

5785MHz_TX

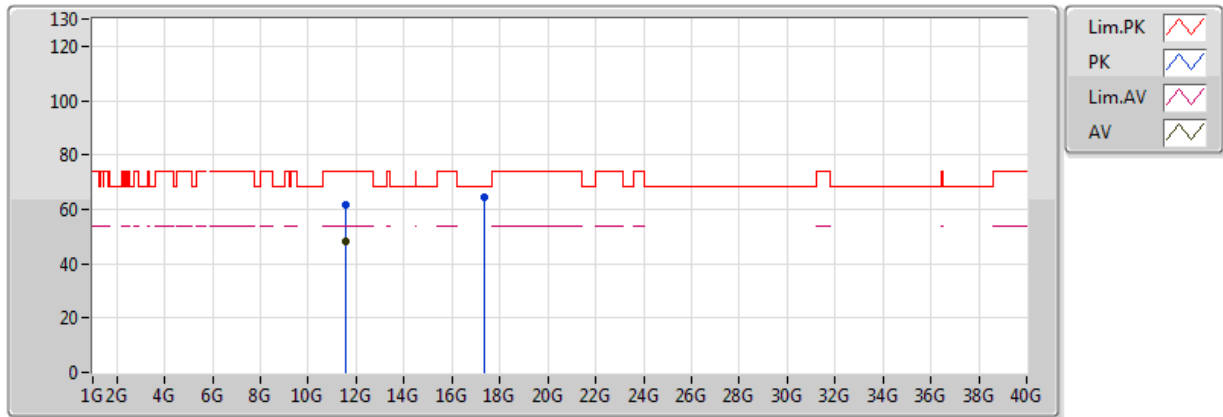


20170126
EUT Y_3TX
Setting 24
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.78G	111.80	Inf	-Inf	8.05	3	H	104	1.51	-
PK	5.643G	61.92	68.20	-6.28	7.98	3	H	104	1.51	-
PK	5.78G	122.49	Inf	-Inf	8.05	3	H	104	1.51	-
PK	5.956G	61.25	68.20	-6.95	8.33	3	H	104	1.51	-

802.11ac VHT20_Nss1,(MCS0)_3TX

5785MHz_TX

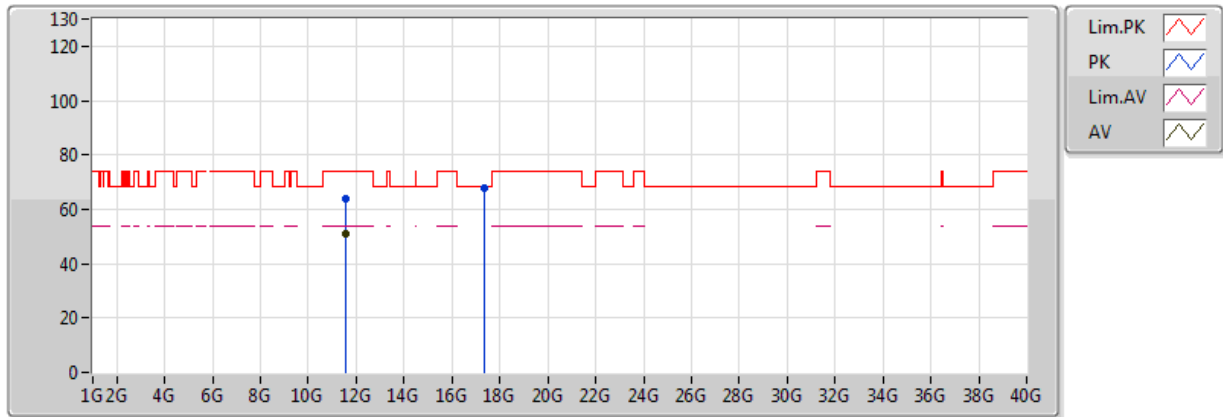


20170126
EUT Y_3TX
Setting 24
02-P-2
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.56838G	47.97	54.00	-6.03	14.52	3	V	240	1.49	-
PK	11.56952G	61.59	74.00	-12.41	14.52	3	V	240	1.49	-
PK	17.34522G	64.34	68.20	-3.86	20.88	3	V	32	1.92	-

802.11ac VHT20_Nss1,(MCS0)_3TX

5785MHz_TX

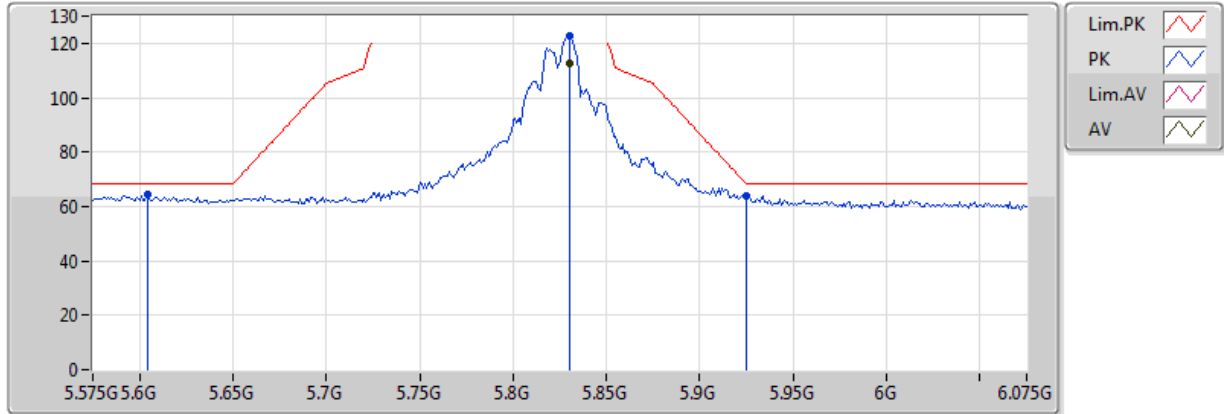


20170126
EUT Y_3TX
Setting 24
02-P-2
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
PK	17.36058G	67.88	68.20	-0.32	20.97	3	H	254	2.91	-
AV	11.57456G	51.05	54.00	-2.95	14.53	3	H	327	1.86	-
PK	11.5739G	64.13	74.00	-9.87	14.53	3	H	327	1.86	-

802.11ac VHT20_Nss1,(MCS0)_3TX

5825MHz_TX

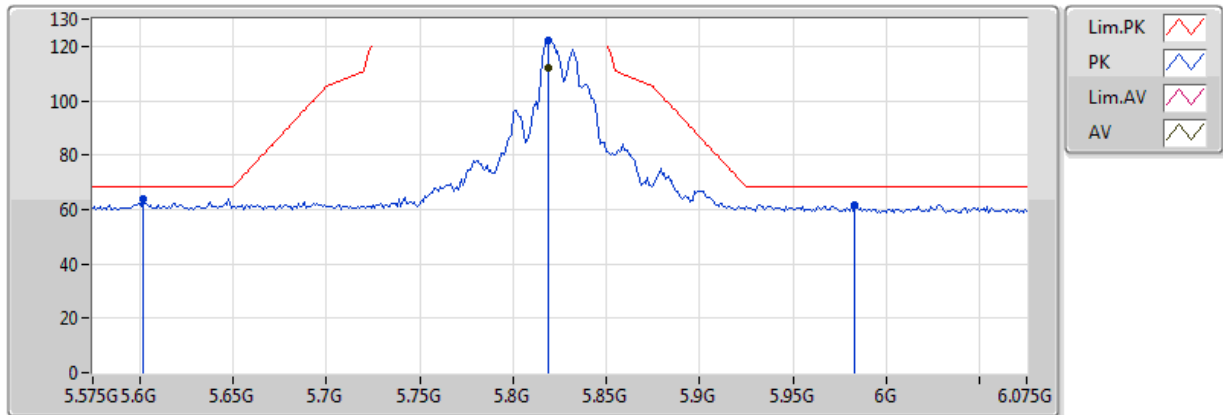


20170126
EUT Y_3TX
Setting 23
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.83G	112.75	Inf	-Inf	8.11	3	V	338	1.43	-
PK	5.604G	64.42	68.20	-3.78	7.96	3	V	338	1.43	-
PK	5.83G	122.65	Inf	-Inf	8.11	3	V	338	1.43	-
PK	5.925G	64.03	68.20	-4.17	8.27	3	V	338	1.43	-

802.11ac VHT20_Nss1,(MCS0)_3TX

5825MHz_TX

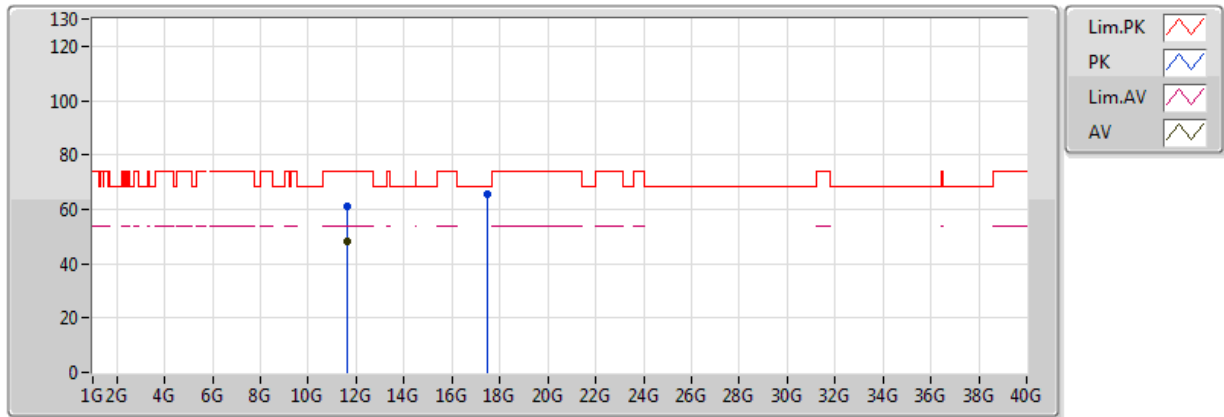


20170126
EUT_Y_3TX
Setting 23
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.819G	112.13	Inf	-Inf	8.09	3	H	64	1.58	-
PK	5.602G	63.62	68.20	-4.58	7.96	3	H	64	1.58	-
PK	5.819G	121.92	Inf	-Inf	8.09	3	H	64	1.58	-
PK	5.983G	61.71	68.20	-6.49	8.37	3	H	64	1.58	-

802.11ac VHT20_Nss1,(MCS0)_3TX

5825MHz_TX

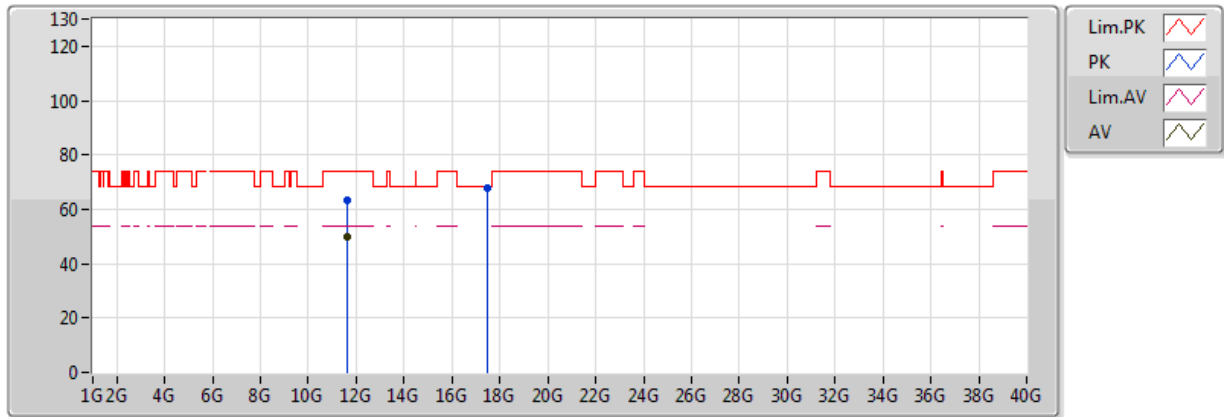


20170126
EUT Y_3TX
Setting 23
02-P-2
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.65234G	48.09	54.00	-5.91	14.58	3	V	217	1.50	-
PK	11.6518G	61.01	74.00	-12.99	14.58	3	V	217	1.50	-
PK	17.46906G	65.64	68.20	-2.56	21.62	3	V	34	1.57	-

802.11ac VHT20_Nss1,(MCS0)_3TX

5825MHz_TX

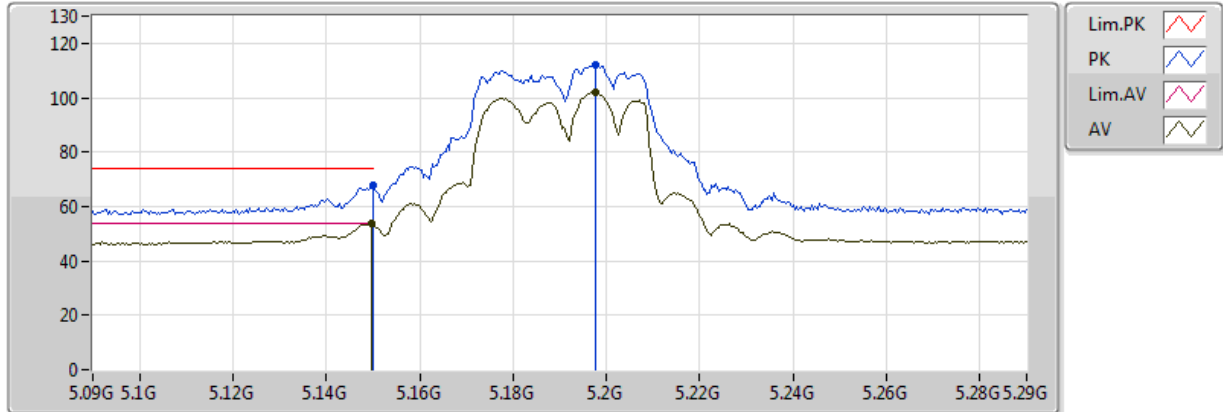


20170126
EUT Y_3TX
Setting 23
02-P-2
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
PK	17.46876G	67.88	68.20	-0.32	21.62	3	H	320	2.80	-
AV	11.65468G	49.82	54.00	-4.18	14.58	3	H	327	1.85	-
PK	11.6539G	63.04	74.00	-10.96	14.58	3	H	327	1.85	-

802.11ac VHT40_Nss1,(MCS0)_3TX

5190MHz_TX

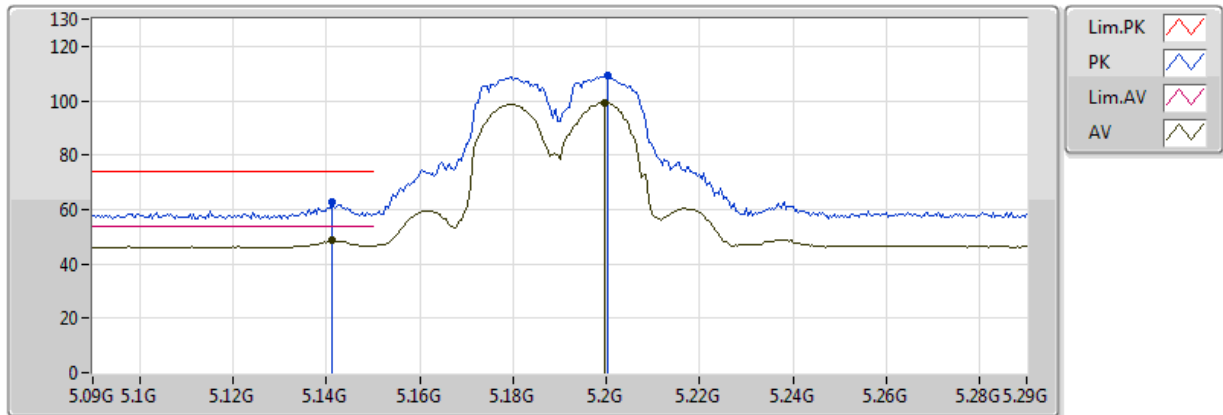


20170126
EUT Y_3TX
Setting 16
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1496G	53.64	54.00	-0.36	7.04	3	V	331	1.35	-
AV	5.1976G	101.99	Inf	-Inf	7.17	3	V	331	1.35	-
PK	5.149995G	67.66	74.00	-6.34	7.04	3	V	331	1.35	-
PK	5.1976G	111.91	Inf	-Inf	7.17	3	V	331	1.35	-

802.11ac VHT40_Nss1,(MCS0)_3TX

5190MHz_TX

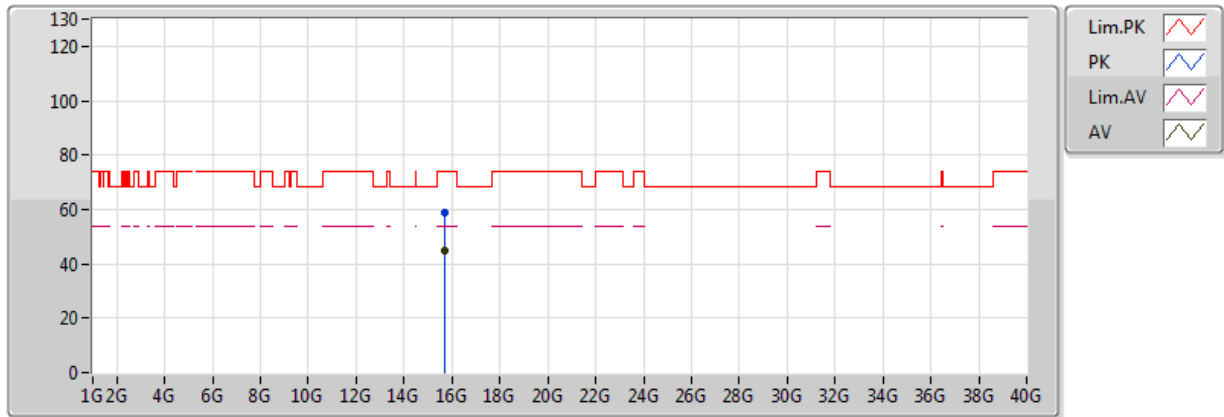


20170126
EUT Y_3TX
Setting 16
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1412G	48.66	54.00	-5.34	7.02	3	H	49	1.46	-
AV	5.1996G	99.31	Inf	-Inf	7.18	3	H	49	1.46	-
PK	5.1412G	63.02	74.00	-10.98	7.02	3	H	49	1.46	-
PK	5.2004G	109.08	Inf	-Inf	7.18	3	H	49	1.46	-

802.11ac VHT40_Nss1,(MCS0)_3TX

5190MHz_TX

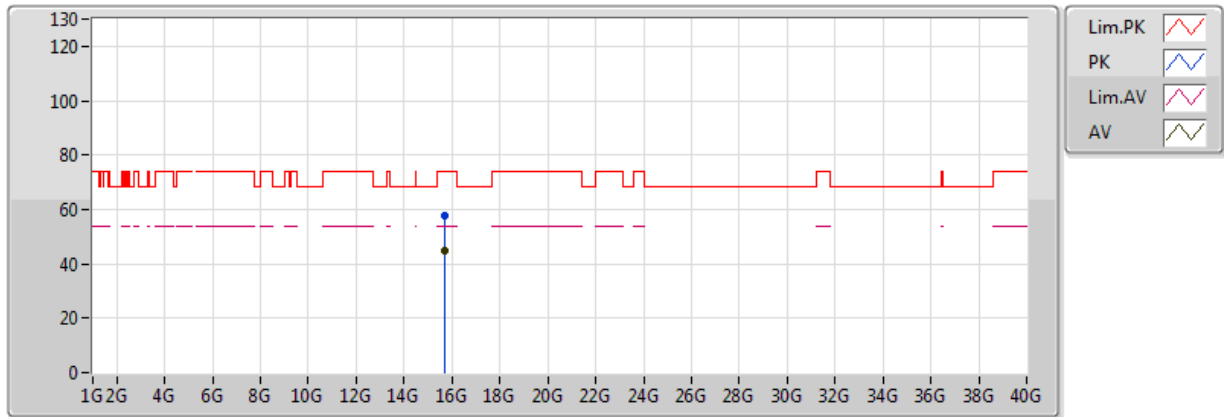


20170126
EUT Y_3TX
Setting 16
02-P-2
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.69366G	44.79	54.00	-9.21	15.57	3	V	41	2.33	-
PK	15.68448G	58.93	74.00	-15.07	15.60	3	V	41	2.33	-

802.11ac VHT40_Nss1,(MCS0)_3TX

5190MHz_TX

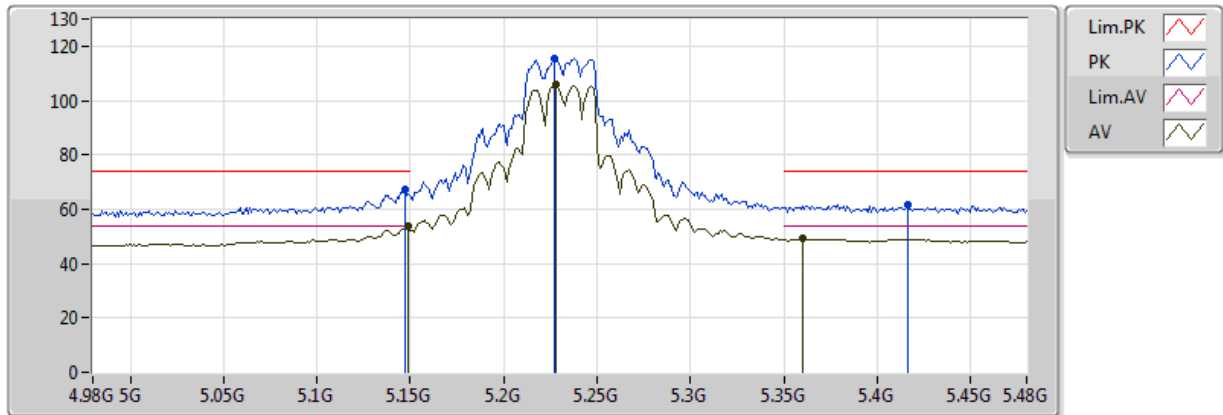


20170126
EUT Y_3TX
Setting 16
02-P-2
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.68804G	44.66	54.00	-9.34	15.59	3	H	326	2.70	-
PK	15.69326G	57.96	74.00	-16.04	15.57	3	H	326	2.70	-

802.11ac VHT40_Nss1,(MCS0)_3TX

5230MHz_TX

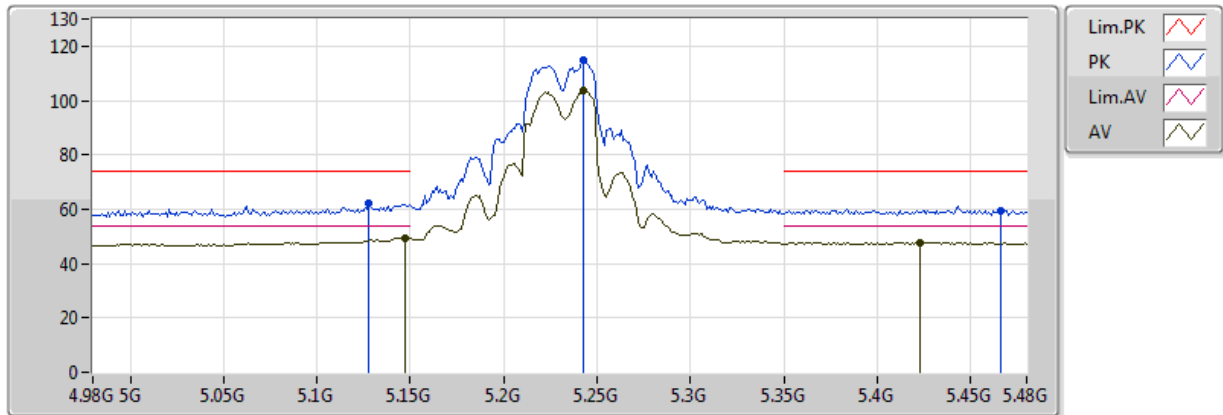


20170126
EUT Y_3TX
Setting 21
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.149G	53.66	54.00	-0.34	7.04	3	V	333	1.59	-
AV	5.228G	105.74	Inf	-Inf	7.24	3	V	333	1.59	-
AV	5.36G	49.32	54.00	-4.68	7.49	3	V	333	1.59	-
PK	5.147G	67.52	74.00	-6.48	7.04	3	V	333	1.59	-
PK	5.227G	115.40	Inf	-Inf	7.23	3	V	333	1.59	-
PK	5.416G	61.47	74.00	-12.53	7.61	3	V	333	1.59	-

802.11ac VHT40_Nss1,(MCS0)_3TX

5230MHz_TX

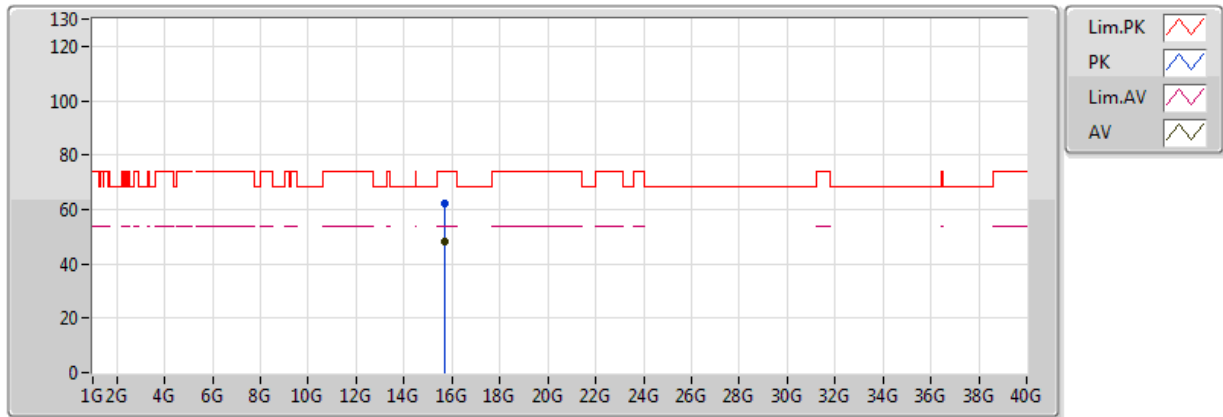


20170126
EUT Y_3TX
Setting 21
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.147G	49.53	54.00	-4.47	7.04	3	H	92	1.58	-
AV	5.243G	103.68	Inf	-Inf	7.27	3	H	92	1.58	-
AV	5.423G	47.76	54.00	-6.24	7.63	3	H	92	1.58	-
PK	5.128G	62.10	74.00	-11.90	6.99	3	H	92	1.58	-
PK	5.243G	114.67	Inf	-Inf	7.27	3	H	92	1.58	-
PK	5.466G	59.53	68.20	-8.67	7.75	3	H	92	1.58	-

802.11ac VHT40_Nss1,(MCS0)_3TX

5230MHz_TX

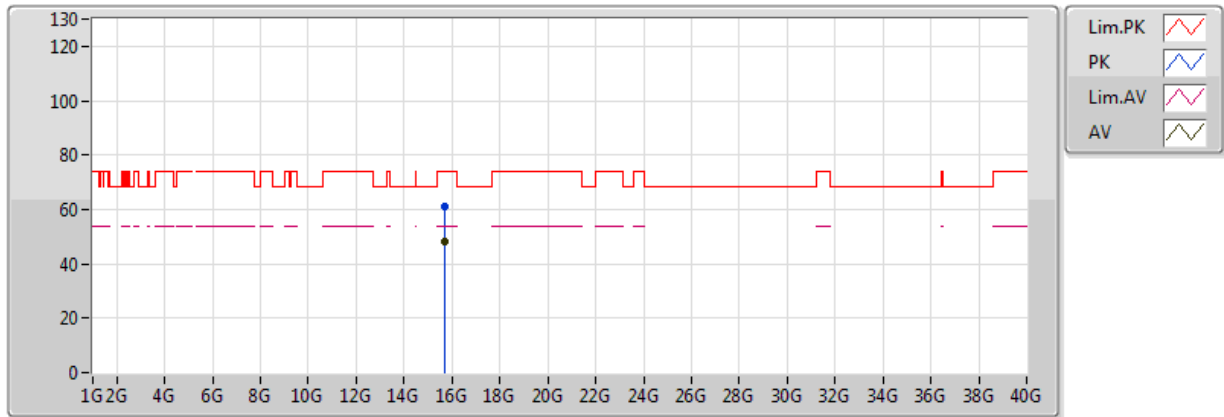


20170126
EUT Y_3TX
Setting 21
02-P-2
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.68886G	48.28	54.00	-5.72	15.59	3	V	279	1.43	-
PK	15.69936G	62.24	74.00	-11.76	15.56	3	V	279	1.43	-

802.11ac VHT40_Nss1,(MCS0)_3TX

5230MHz_TX

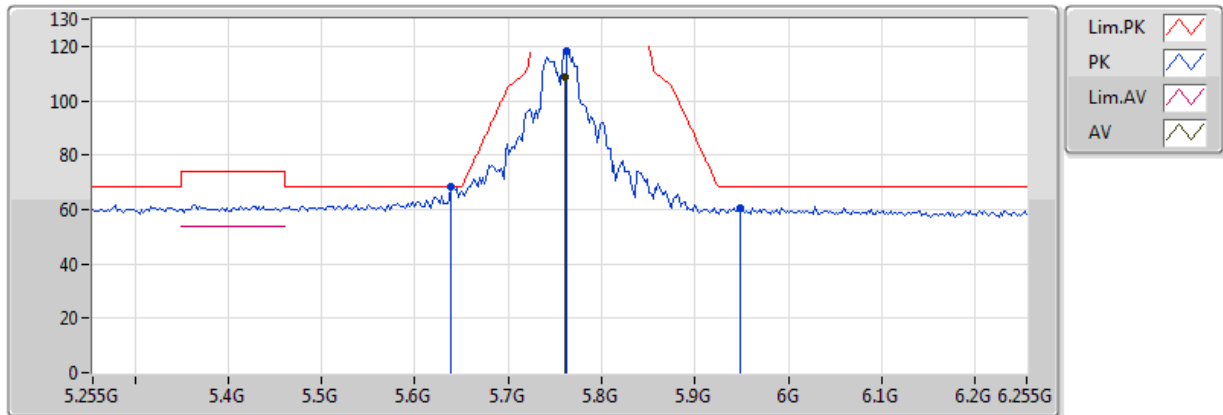


20170126
EUT Y_3TX
Setting 21
02-P-2
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
PK	15.70032G	61.05	74.00	-12.95	15.56	3	H	254	1.17	-
AV	15.68994G	48.19	54.00	-5.81	15.58	3	H	254	1.17	-

802.11ac VHT40_Nss1,(MCS0)_3TX

5755MHz_TX

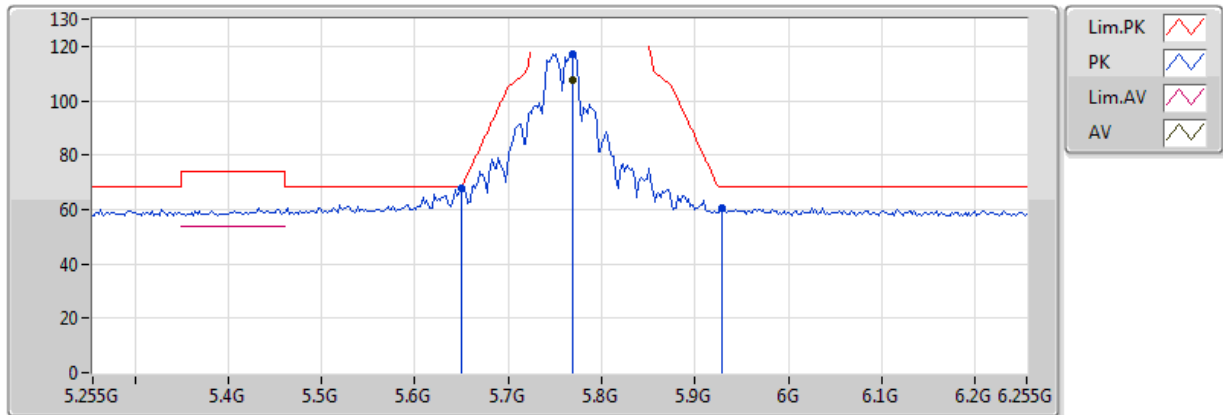


20170126
EUT Y_3TX
Setting 22
02-W-3-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.761G	108.59	Inf	-Inf	8.04	3	V	329	1.48	-
PK	5.639G	68.19	68.20	-0.01	7.98	3	V	329	1.48	-
PK	5.763G	118.16	Inf	-Inf	8.04	3	V	329	1.48	-
PK	5.949G	60.65	68.20	-7.55	8.31	3	V	329	1.48	-

802.11ac VHT40_Nss1,(MCS0)_3TX

5755MHz_TX

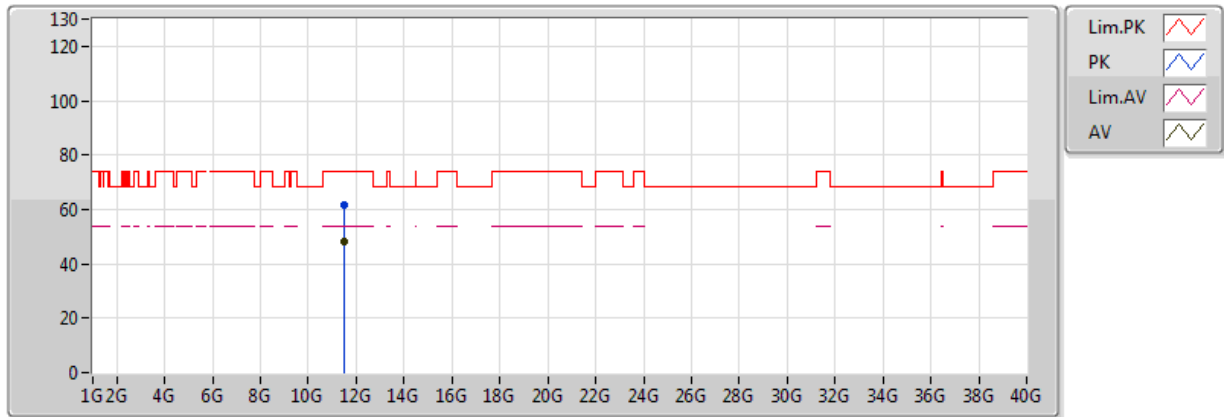


20170126
EUT Y_3TX
Setting 22
02-W-3-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.769G	107.58	Inf	-Inf	8.04	3	H	60	1.58	-
PK	5.649G	67.72	68.20	-0.48	7.98	3	H	60	1.58	-
PK	5.769G	117.15	Inf	-Inf	8.04	3	H	60	1.58	-
PK	5.929G	60.30	68.20	-7.90	8.28	3	H	60	1.58	-

802.11ac VHT40_Nss1,(MCS0)_3TX

5755MHz_TX

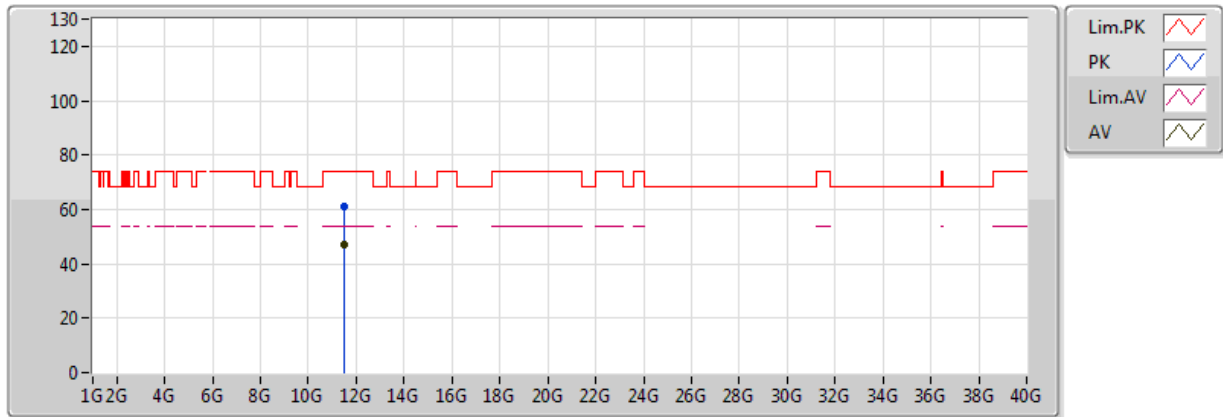


20170126
EUT Y_3TX
Setting 22
02-W-3
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.5146G	47.91	54.00	-6.09	14.49	3	V	137	2.60	-
PK	11.51536G	61.37	74.00	-12.63	14.49	3	V	137	2.60	-

802.11ac VHT40_Nss1,(MCS0)_3TX

5755MHz_TX

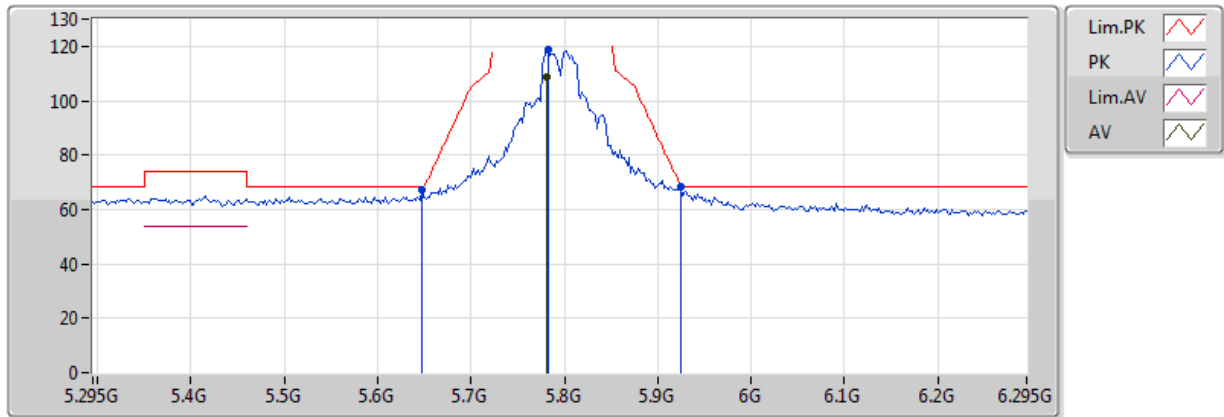


20170126
EUT Y_3TX
Setting 22
02-W-3
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.5158G	46.91	54.00	-7.09	14.49	3	H	325	1.85	-
PK	11.51472G	61.22	74.00	-12.78	14.49	3	H	325	1.85	-

802.11ac VHT40_Nss1,(MCS0)_3TX

5795MHz_TX

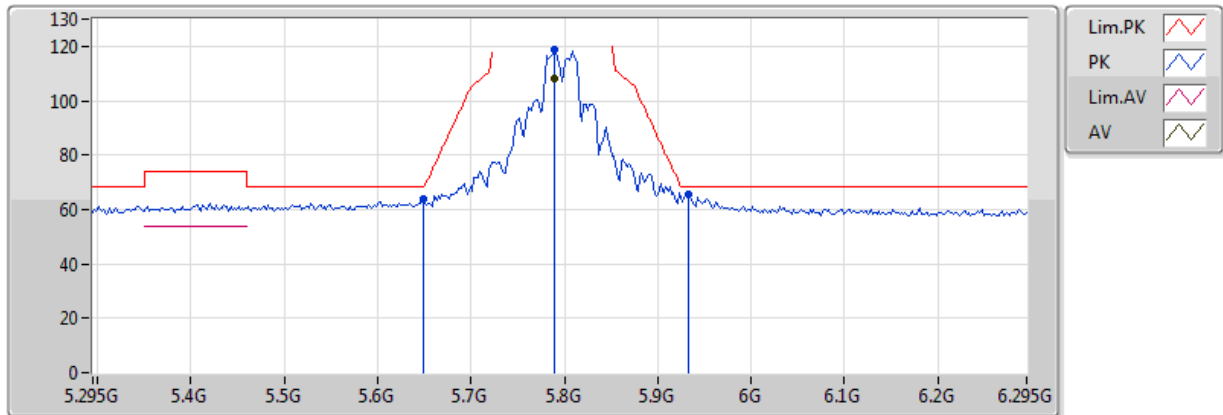


20170126
EUT Y_3TX
Setting 23
02-P-2-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.781G	108.56	Inf	-Inf	8.05	3	V	335	1.59	-
PK	5.647G	67.04	68.20	-1.16	7.98	3	V	335	1.59	-
PK	5.783G	118.72	Inf	-Inf	8.05	3	V	335	1.59	-
PK	5.925G	68.14	68.20	-0.06	8.27	3	V	335	1.59	-

802.11ac VHT40_Nss1,(MCS0)_3TX

5795MHz_TX

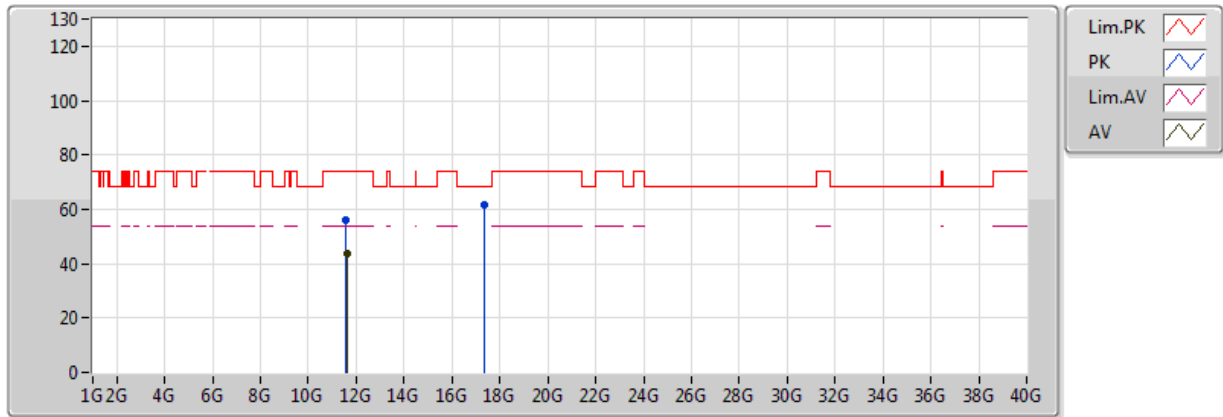


20170126
EUT_Y_3TX
Setting 23
02-W-3-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.789G	108.24	Inf	-Inf	8.05	3	H	60	1.68	-
PK	5.649G	63.72	68.20	-4.48	7.98	3	H	60	1.68	-
PK	5.789G	118.59	Inf	-Inf	8.05	3	H	60	1.68	-
PK	5.933G	65.57	68.20	-2.63	8.29	3	H	60	1.68	-

802.11ac VHT40_Nss1,(MCS0)_3TX

5795MHz_TX

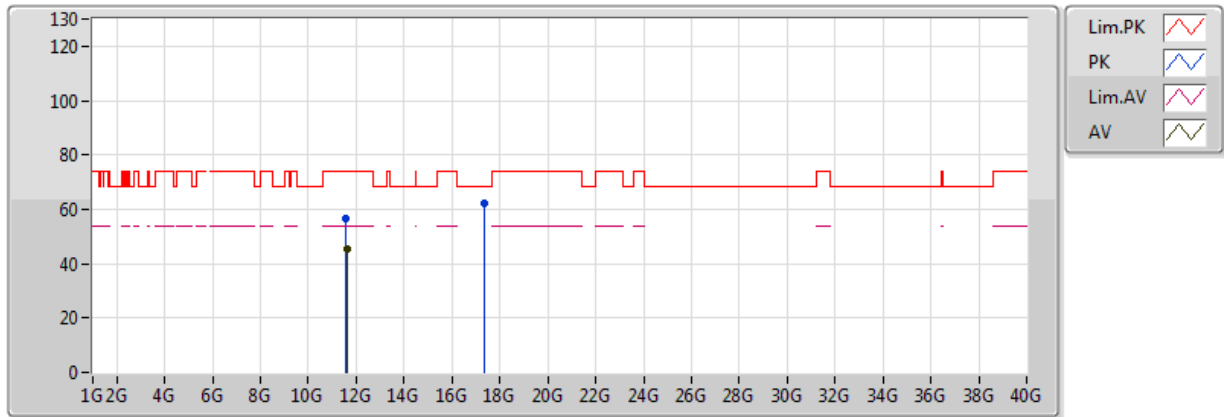


20170126
EUT Y_3TX
Setting 23
02-P-2
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
PK	11.57644G	56.06	74.00	-17.94	14.53	3	V	111	2.27	-
AV	11.5951G	43.71	54.00	-10.29	14.54	3	V	111	2.27	-
PK	17.37072G	61.53	68.20	-6.67	21.03	3	V	318	1.20	-

802.11ac VHT40_Nss1,(MCS0)_3TX

5795MHz_TX

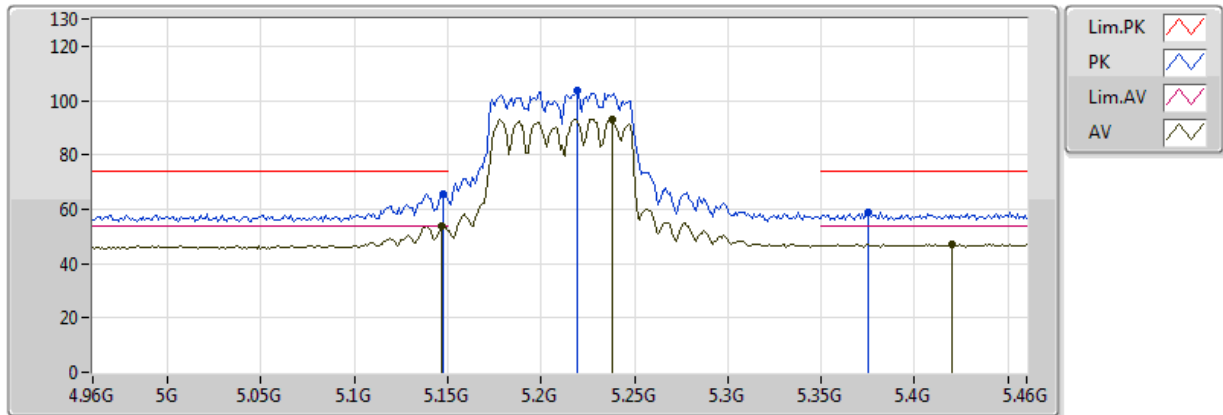


20170126
EUT Y_3TX
Setting 23
02-P-2
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.59606G	45.33	54.00	-8.67	14.54	3	H	329	1.86	-
PK	11.59222G	56.78	74.00	-17.22	14.54	3	H	329	1.86	-
PK	17.38206G	61.94	68.20	-6.26	21.10	3	H	244	1.69	-

802.11ac VHT80_Nss1,(MCS0)_3TX

5210MHz_TX

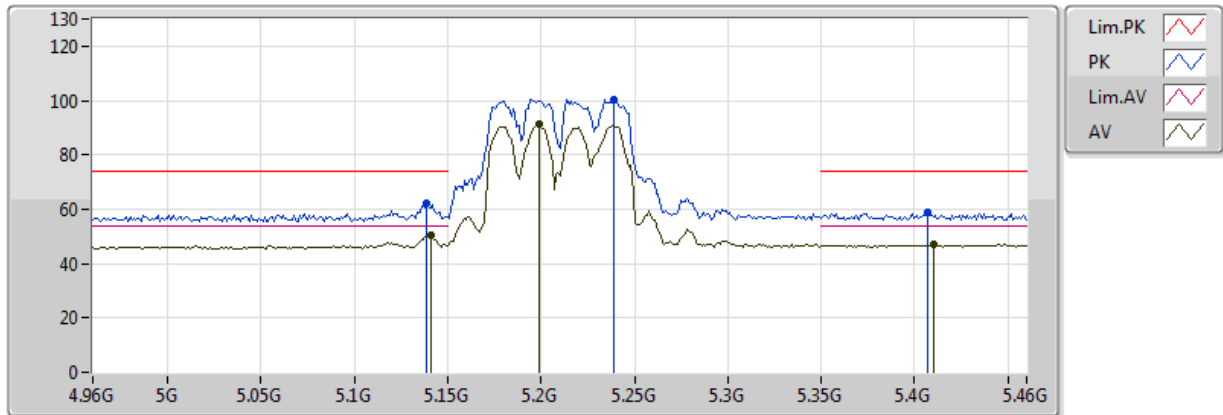


20170126
EUT Y_3TX
Setting 12
02-W-3-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.147G	53.67	54.00	-0.33	7.04	3	V	324	1.57	-
AV	5.238G	93.22	Inf	-Inf	7.26	3	V	324	1.57	-
AV	5.42G	47.04	54.00	-6.96	7.62	3	V	324	1.57	-
PK	5.148G	65.82	74.00	-8.18	7.04	3	V	324	1.57	-
PK	5.219G	103.42	Inf	-Inf	7.22	3	V	324	1.57	-
PK	5.375G	59.10	74.00	-14.90	7.52	3	V	324	1.57	-

802.11ac VHT80_Nss1,(MCS0)_3TX

5210MHz_TX

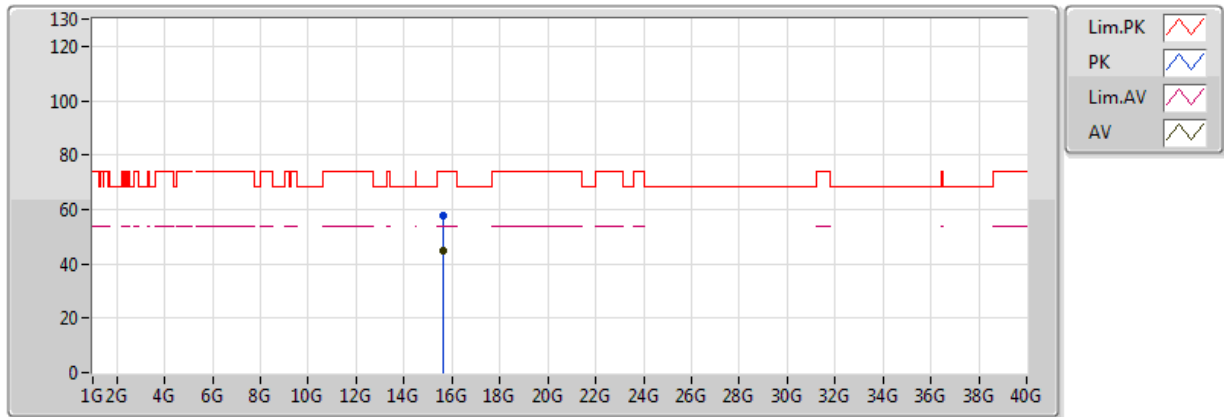


20170126
EUT Y_3TX
Setting 12
02-W-3-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.141G	50.25	54.00	-3.75	7.02	3	H	39	1.50	-
AV	5.199G	91.31	Inf	-Inf	7.18	3	H	39	1.50	-
AV	5.41G	46.96	54.00	-7.04	7.60	3	H	39	1.50	-
PK	5.139G	62.06	74.00	-11.94	7.02	3	H	39	1.50	-
PK	5.239G	100.45	Inf	-Inf	7.26	3	H	39	1.50	-
PK	5.407G	59.00	74.00	-15.00	7.59	3	H	39	1.50	-

802.11ac VHT80_Nss1,(MCS0)_3TX

5210MHz_TX

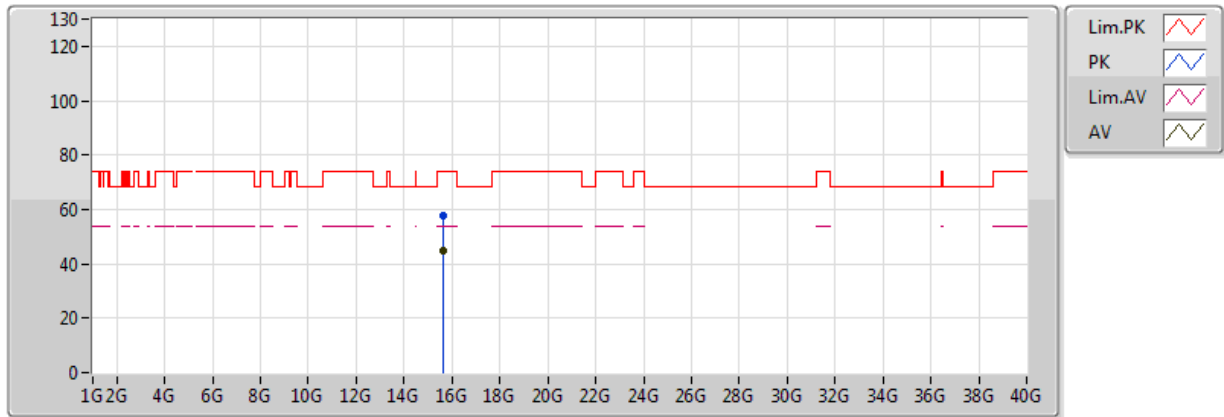


20170126
EUT Y_3TX
Setting 12
02-W-3
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.6352G	45.00	54.00	-9.00	15.73	3	V	58	1.23	-
PK	15.6286G	57.58	74.00	-16.42	15.75	3	V	58	1.23	-

802.11ac VHT80_Nss1,(MCS0)_3TX

5210MHz_TX

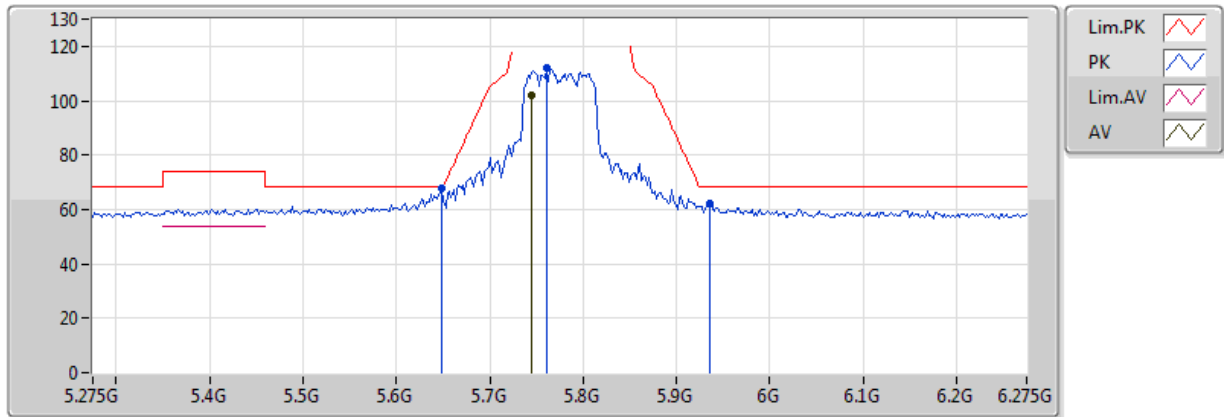


20170126
EUT Y_3TX
Setting 12
02-W-3
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.63034G	44.85	54.00	-9.15	15.75	3	H	125	2.08	-
PK	15.62996G	57.64	74.00	-16.36	15.75	3	H	125	2.08	-

802.11ac VHT80_Nss1,(MCS0)_3TX

5775MHz_TX

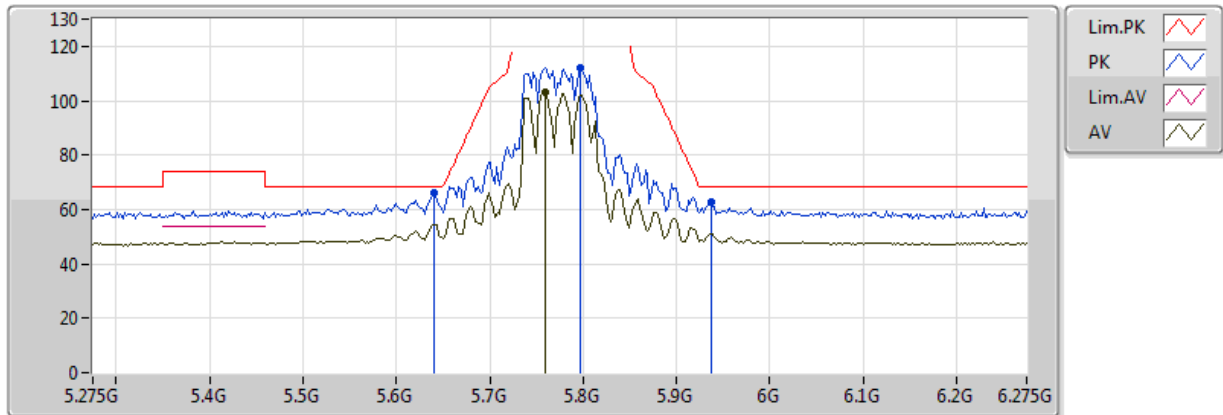


20170126
EUT_Y_3TX
Setting 19
02-W-3-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.745G	101.84	Inf	-Inf	8.03	3	V	326	1.49	-
PK	5.649G	67.83	68.20	-0.37	7.98	3	V	326	1.49	-
PK	5.761G	111.84	Inf	-Inf	8.04	3	V	326	1.49	-
PK	5.935G	62.26	68.20	-5.94	8.29	3	V	326	1.49	-

802.11ac VHT80_Nss1,(MCS0)_3TX

5775MHz_TX

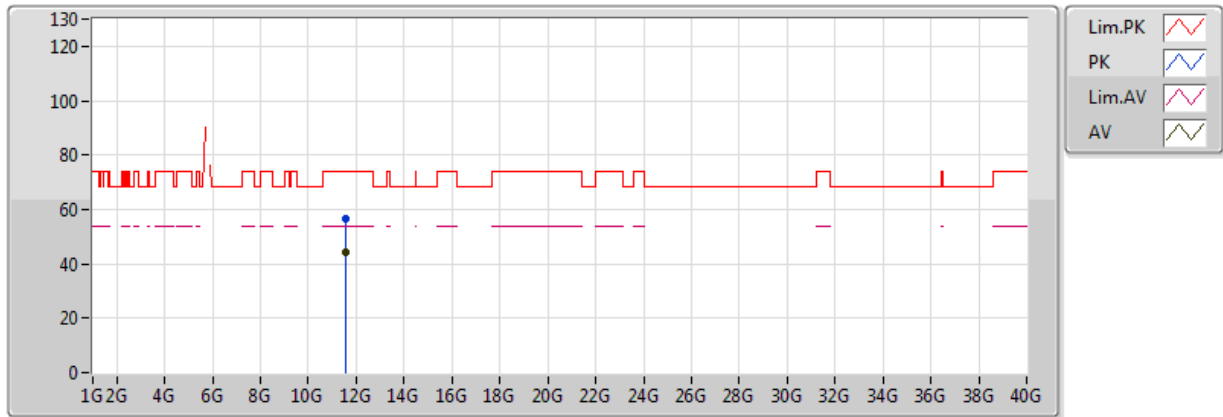


20170126
EUT Y_3TX
Setting 19
02-W-3-10
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.759G	102.91	Inf	-Inf	8.04	3	H	54	1.51	-
PK	5.641G	66.33	68.20	-1.87	7.98	3	H	54	1.51	-
PK	5.797G	111.88	Inf	-Inf	8.06	3	H	54	1.51	-
PK	5.937G	62.60	68.20	-5.60	8.29	3	H	54	1.51	-

802.11ac VHT80_Nss1,(MCS0)_3TX

5775MHz_TX

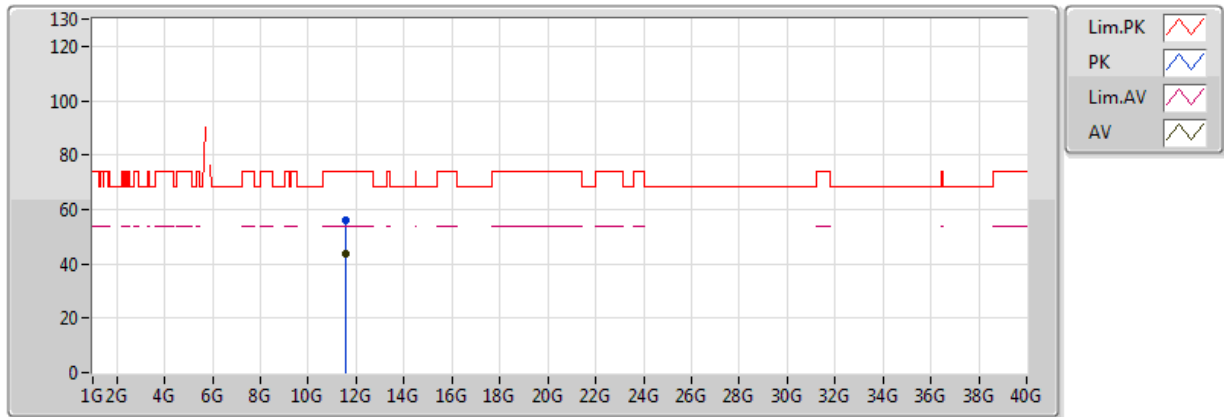


20170126
EUT Y_3TX
Setting 19
02-W-3
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.55207G	44.05	54.00	-9.95	14.51	3	V	273	2.22	-
PK	11.54829G	56.68	74.00	-17.32	14.51	3	V	273	2.22	-

802.11ac VHT80_Nss1,(MCS0)_3TX

5775MHz_TX



20170126
EUT Y_3TX
Setting 19
02-W-3
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.54938G	43.87	54.00	-10.13	14.51	3	H	240	1.21	-
PK	11.55188G	56.00	74.00	-18.00	14.51	3	H	240	1.21	-

Mode: 20 MHz / Chain 5

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5199.9609	5199.9608	5199.9607	5199.9598
110.00	5199.9602	5199.9596	5199.9595	5199.9586
93.50	5199.9599	5199.9597	5199.9595	5199.9587
Max. Deviation (MHz)	0.0401	0.0404	0.0405	0.0414
Max. Deviation (ppm)	7.71	7.77	7.79	7.96
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5199.9618	5199.9614	5199.9604	5199.9603
10	5199.9611	5199.9609	5199.9603	5199.9599
20	5199.9602	5199.9596	5199.9590	5199.9588
30	5199.9587	5199.9583	5199.9577	5199.9576
40	5199.9574	5199.9564	5199.9561	5199.9556
Max. Deviation (MHz)	0.0426	0.0436	0.0439	0.0444
Max. Deviation (ppm)	8.19	8.38	8.44	8.54

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5785 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5784.9603	5784.9601	5784.9592	5784.9585
110.00	5784.9602	5784.9601	5784.9595	5784.9594
93.50	5784.9597	5784.9594	5784.9584	5784.9577
Max. Deviation (MHz)	0.0403	0.0406	0.0416	0.0423
Max. Deviation (ppm)	6.97	7.02	7.19	7.31
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5785 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5784.9617	5784.9608	5784.9602	5784.9600
10	5784.9612	5784.9605	5784.9604	5784.9597
20	5784.9602	5784.9596	5784.9592	5784.9591
30	5784.9587	5784.9580	5784.9576	5784.9569
40	5784.9569	5784.9560	5784.9555	5784.9548
Max. Deviation (MHz)	0.0431	0.0440	0.0445	0.0452
Max. Deviation (ppm)	7.45	7.61	7.69	7.81
Result	Pass			

Mode: 40 MHz / Chain 5

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5189.9611	5189.9608	5189.9598	5189.9588
110.00	5189.9602	5189.9593	5189.9586	5189.9585
93.50	5189.9596	5189.9588	5189.9585	5189.9579
Max. Deviation (MHz)	0.0404	0.0412	0.0415	0.0421
Max. Deviation (ppm)	7.78	7.94	8.00	8.11
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5189.9637	5189.9628	5189.9619	5189.9613
10	5189.9620	5189.9617	5189.9608	5189.9601
20	5189.9602	5189.9592	5189.9584	5189.9577
30	5189.9587	5189.9586	5189.9584	5189.9577
40	5189.9577	5189.9570	5189.9568	5189.9565
Max. Deviation (MHz)	0.0423	0.0430	0.0432	0.0435
Max. Deviation (ppm)	8.15	8.29	8.32	8.38
Result	Pass			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5755 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5754.9603	5754.9599	5754.9598	5754.9589
110.00	5754.9602	5754.9593	5754.9591	5754.9584
93.50	5754.9594	5754.9592	5754.9583	5754.9577
Max. Deviation (MHz)	0.0406	0.0408	0.0417	0.0423
Max. Deviation (ppm)	7.05	7.09	7.25	7.35
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5755 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5754.9613	5754.9605	5754.9603	5754.9594
10	5754.9608	5754.9598	5754.9594	5754.9591
20	5754.9602	5754.9600	5754.9590	5754.9589
30	5754.9587	5754.9585	5754.9582	5754.9581
40	5754.9581	5754.9572	5754.9571	5754.9561
Max. Deviation (MHz)	0.0419	0.0428	0.0429	0.0439
Max. Deviation (ppm)	7.28	7.44	7.45	7.63
Result	Pass			

Mode: 80 MHz / Chain 5

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5209.9606	5209.9604	5209.9603	5209.9593
110.00	5209.9602	5209.9598	5209.9597	5209.9593
93.50	5209.9596	5209.9591	5209.9582	5209.9573
Max. Deviation (MHz)	0.0404	0.0409	0.0418	0.0427
Max. Deviation (ppm)	7.75	7.85	8.02	8.20
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5209.9626	5209.9620	5209.9611	5209.9608
10	5209.9622	5209.9618	5209.9616	5209.9610
20	5209.9602	5209.9597	5209.9591	5209.9587
30	5209.9587	5209.9581	5209.9580	5209.9573
40	5209.9578	5209.9568	5209.9560	5209.9557
Max. Deviation (MHz)	0.0422	0.0432	0.0440	0.0443
Max. Deviation (ppm)	8.10	8.29	8.45	8.50
Result	Pass			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5775 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5774.9603	5774.9602	5774.9593	5774.9586
110.00	5774.9602	5774.9593	5774.9584	5774.9583
93.50	5774.9600	5774.9595	5774.9591	5774.9584
Max. Deviation (MHz)	0.0400	0.0407	0.0416	0.0417
Max. Deviation (ppm)	6.93	7.05	7.20	7.22
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5775 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5774.9628	5774.9625	5774.9619	5774.9609
10	5774.9620	5774.9618	5774.9612	5774.9605
20	5774.9602	5774.9592	5774.9584	5774.9579
30	5774.9587	5774.9577	5774.9574	5774.9564
40	5774.9574	5774.9564	5774.9563	5774.9557
Max. Deviation (MHz)	0.0426	0.0436	0.0437	0.0443
Max. Deviation (ppm)	7.38	7.55	7.57	7.67
Result	Pass			