FCC Test Report

Equipment	:	MetroLinq 10G Tri-band Omni
Brand Name	:	IgniteNet
Model No.	:	ML-60-10G-360
FCC ID	:	HEDML10G360
Standard	:	47 CFR FCC Part 15.407
Operating Band	:	5150 MHz – 5250 MHz 5725 MHz – 5850 MHz
Applicant	:	Accton Technology Corp No. 1, Creation Rd. III, Science-based Industrial Park Hsin Chu 30077, Taiwan R.O.C.
Manufacturer (1)	:	Joy Technology (Shen Zhen) Co. Ltd HengKeng Ind., Shangpai, Shangwu, Aiqun Rd., Shiyan Town, Shenzhen 518108 China
Manufacturer (2)	:	Accton Technology Corporation No. 1, Creation Rd. III, Science-based Industrial Park Hsin Chu 30077, Taiwan R.O.C.
Function	:	☒ Outdoor; ☐ Indoor; ☐ Fixed P2P ☐ Client

The product sample received on Jan. 15, 2018 and completely tested on Feb. 14, 2018. 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.

Sam Chen
SPORTON INTERNATIONAL INC.

Testing Laboratory
1190

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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

Revision History

Report No.	Version	Description	Issued Date
FR7D2701-01AB	Rev. 01	Initial issue of report	Mar. 12, 2018

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	4TX
5.15-5.25GHz	802.11n HT20	20	4TX
5.15-5.25GHz	802.11ac VHT20	20	4TX
5.15-5.25GHz	802.11n HT40	40	4TX
5.15-5.25GHz	802.11ac VHT40	40	4TX
5.15-5.25GHz	802.11ac VHT80	80	4TX
5.725-5.85GHz	802.11a	20	4TX
5.725-5.85GHz	802.11n HT20	20	4TX
5.725-5.85GHz	802.11ac VHT20	20	4TX
5.725-5.85GHz	802.11n HT40	40	4TX
5.725-5.85GHz	802.11ac VHT40	40	4TX
5.725-5.85GHz	802.11ac VHT80	80	4TX

Note:
- 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- VHT20, VHT40 and 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.	Chain	Brand	Model Name	Antenna Type	Connector	2.4GHz Gain (dBi)
1	1	Accton	OAP9432FA-3AD-0617-ACN	PCB Patch	MMCX	8.5
	2					8.9
2	3	Accton	OAP9432FA-3AD-0617-ACN	PCB Patch	MMCX	8.9
	4					8.5
3	5	Accton	OAP9432FA-3AD-0617-ACN	PCB Patch	MMCX	8.5
	6					8.9
4	7	Accton	OAP9432FA-3AD-0617-ACN	PCB Patch	MMCX	8.9
	8					8.5

Ant.	Chain	Brand	Model Name	Antenna Type	Connector	5GHz Gain (dBi)	
						Band 1	Band 4
5	1	Accton	OAP9432FA-3AD-0617-ACN	PCB Patch	MMCX	0.7	5.6
	2					11.3	6.7
6	3	Accton	OAP9432FA-3AD-0617-ACN	PCB Patch	MMCX	11.3	6.7
	4					0.7	5.6
7	5	Accton	OAP9432FA-3AD-0617-ACN	PCB Patch	MMCX	0.7	5.6
	6					11.3	6.7
8	7	Accton	OAP9432FA-3AD-0617-ACN	PCB Patch	MMCX	11.3	6.7
	8					0.7	5.6

Ant.	Brand	Model Name	Antenna Type	Connector	60GHz Gain (dBi)
9	Accton	120300000225X	Chip Ant.	N/A	17.2

Note: The EUT has eight antennas for WLAN.

The device contains three 60GHz approval module. (FCC ID: HEDML60PRS4601)

For 2.4GHz function:

Chain 1 ~ Chain 8 can be used as transmitting/receiving functions, but only four antennas can be used as transmitting/receiving functions at one time.

Chain 2 (Port 1), Chain 3 (Port 2), Chain 6 (Port 3) and Chain 7 (Port 4) generated the worst case, so it is tested and recorded in the report.

For 5GHz function:

Chain 1 ~ Chain 8 can be used as transmitting/receiving functions, but only four antennas can be used as transmitting/receiving functions at one time.

Chain 2 (Port 1), Chain 3 (Port 2), Chain 6 (Port 3) and Chain 7 (Port 4) generated the worst case, so it is tested and recorded in the report.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.966	0.15	2.068m	1k
802.11ac VHT20	0.99	0.044	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ac VHT40	0.973	0.119	2.44m	1k
802.11ac VHT80	0.945	0.246	1.153m	1k

1.1.4 EUT Operational Condition

EUT Power Type	From PoE or DC 48V			
Beamforming Function	☐	With beamforming	☒	Without beamforming
Test Software Version	QCARCT Version3.0.264.0			

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 v02r01
- 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, Owen Hsu	25.1°C / 54%	Jan. 17, 2018~Feb. 14, 2018
Radiated	03CH01-CB	Ron Huang, Benson Su	23.5°C / 64%	Jan. 15, 2018~Feb. 14, 2018
AC Conduction	CO01-CB	Howard Liu	24°C / 62%	Jan. 22, 2018

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	9.74×10^{-8}	Confidence levels of 95%
Frequency Stability	6.06×10^{-8}	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	Power Setting
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	18.5
5200MHz	18.5
5240MHz	18.5
5745MHz	22.5
5785MHz	22.5
5825MHz	22.5
802.11ac VHT20_Nss1,(MCS0)_4TX	-
5180MHz	18.5
5200MHz	18.5
5240MHz	18.5
5745MHz	22.5
5785MHz	22.5
5825MHz	22.5
802.11ac VHT40_Nss1,(MCS0)_4TX	-
5190MHz	17.5
5230MHz	17.5
5755MHz	21.5
5795MHz	21.5
802.11ac VHT80_Nss1,(MCS0)_4TX	-
5210MHz	18
5775MHz	21.5

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

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	CTX
1	WLAN 2.4GHz - AC mode
2	WLAN 5GHz - AC mode
3	WLAN 2.4GHz - DC mode (DC 48V)
4	WLAN 5GHz - DC mode (DC 48V)
For operating mode 2 is the worst case and it was record in this test report.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	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	WLAN 2.4GHz - AC mode
2	WLAN 5GHz - AC mode
3	WLAN 2.4GHz - DC mode (DC 48V)
4	WLAN 5GHz - DC mode (DC 48V)
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 - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz+WLAN 5GHz+60GHz module 1+60GHz module 2+60GHz module 3
Refer to Sporton Test Report No.: FA7D2701-01 for Co-location RF Exposure Evaluation.	

Note: 1. The EUT can only be used at Y axis position.
2. The PoE are for measurement only, would not be marketed, and its information as below:

Equipment	Brand Name	Model Name	FCC ID
PoE	GME	GME241DA-240100G	DoC
PoE	GME	GME40B-4801135FDA	DoC

2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

Accessories	
No.	**Description**
1	Wall-mounted rack*1

2.5 Support Equipment

For Test Site No: CO01-CB

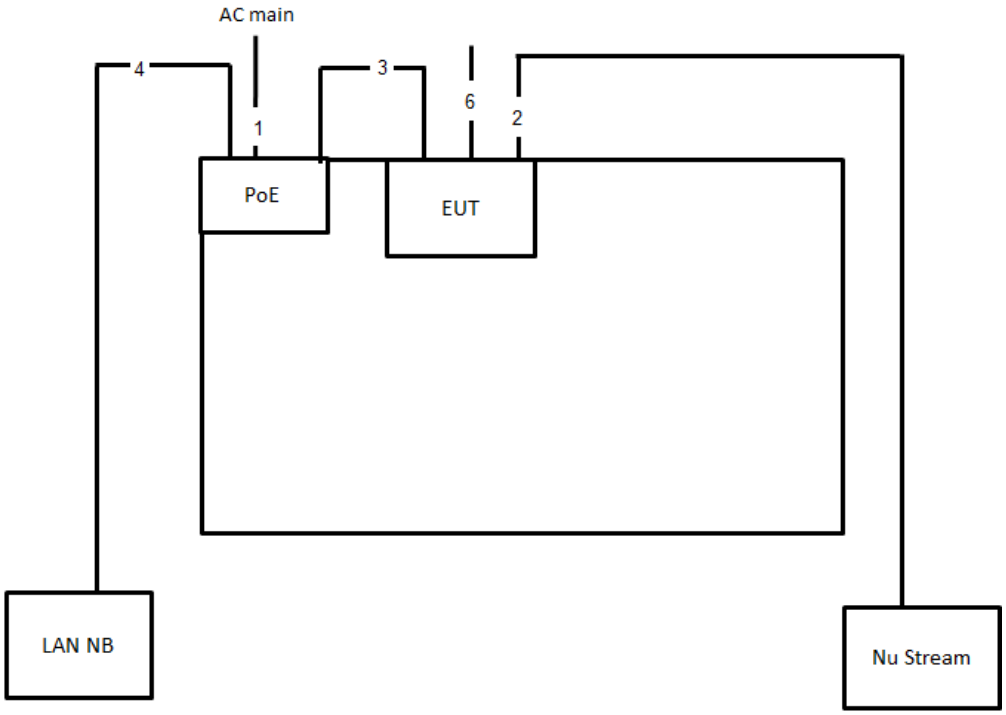
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	Notebook	DELL	E6430	DoC
2	Nu Stream	X TRAMUS	NuStreams-600	DoC
3	PoE	GME	GME241DA-240100G	DoC

For Test Site No: 03CH01-CB and TH01-CB

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	Notebook	DELL	E4300	DoC
2	PoE	GME	GME40B-4801135FDA	DoC

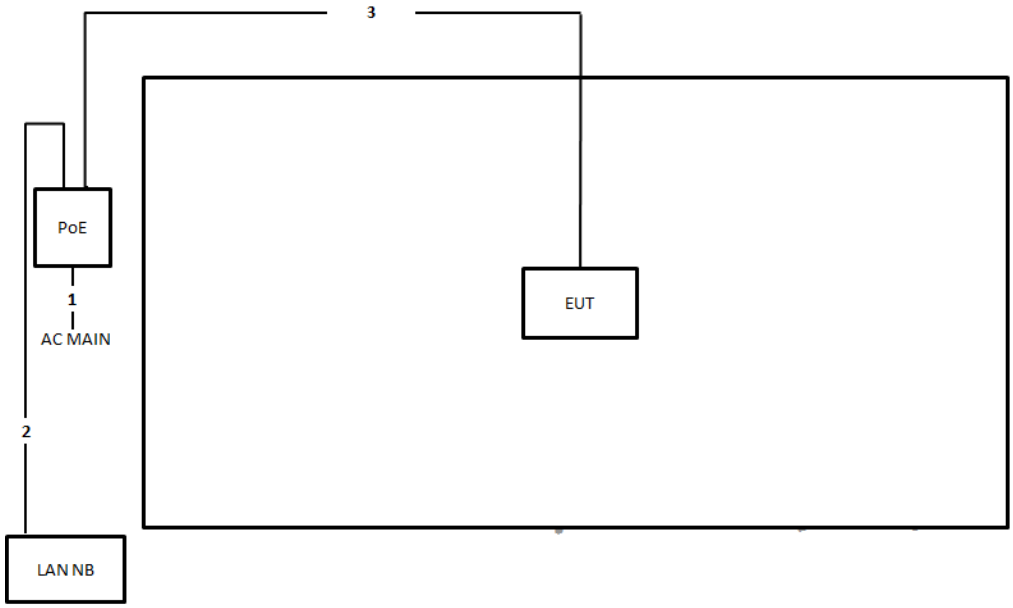
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length
1	Power cable	No	0.9m
2	Fiber cable	No	10m
3	RJ-45 cable	No	1.5m
4	RJ-45 cable	No	10m
5	RJ-45 cable	No	1.5m
6	Ground cable	No	1.5m

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	RJ-45 cable	No	1.5m
3	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

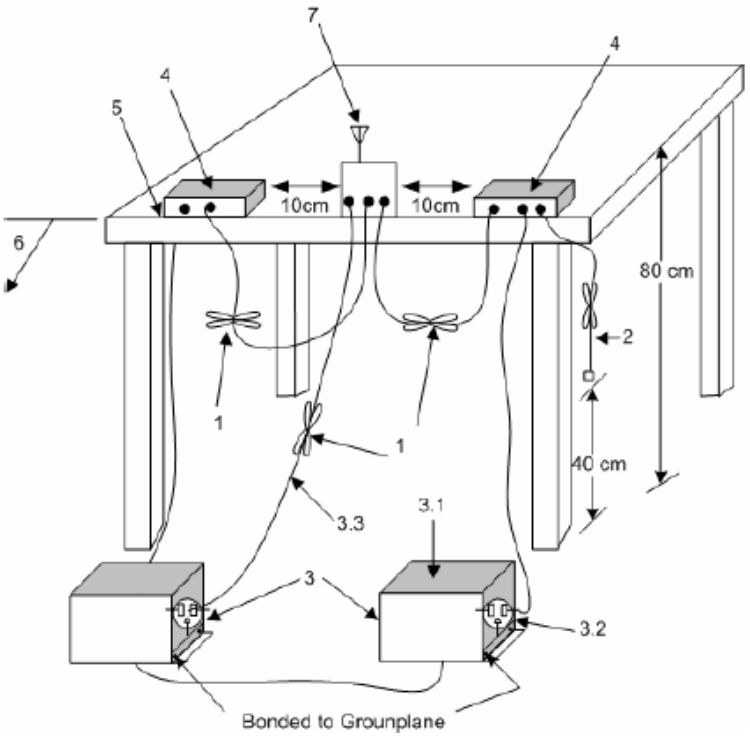
Refer a test equipment and calibration data table in this test report.

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

AC Power-line Conducted Emissions



1—Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long.
2—The I/O cables that are not connected to an accessory shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
3—EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50 Ω loads. LISN may be placed on top of, or immediately beneath, reference ground plane.
3.1—All other equipment powered from additional LISN(s).
3.2—A multiple-outlet strip may be used for multiple power cords of non-EUT equipment.
3.3—LISN at least 80 cm from nearest part of EUT chassis.
4—Non-EUT components of EUT system being tested.
5—Rear of EUT, including peripherals, shall all be aligned and flush with edge of tabletop.
6—Edge of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.
7—Antenna can be integral or detachable. If detachable, then the antenna shall be attached for this test.

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 ≥ 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 ≥ 500kHz.

3.2.2 Measuring Instruments

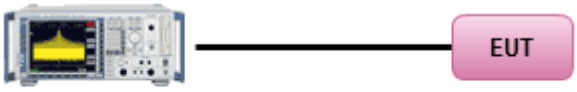
Refer a test equipment and calibration data table in this test report.

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

Emission Bandwidth



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.	

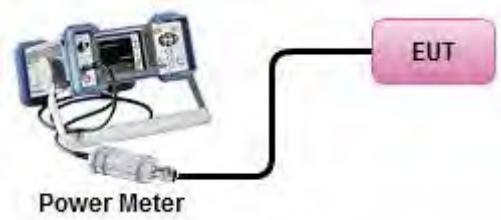
3.3.2 Measuring Instruments

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: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup

RF Output Power (Power Meter)


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° ≤ θ < 8° ; -13 − 0.716 (θ-8) dBW/MHz for 8° ≤ θ < 40° -35.9 − 1.22 (θ-40) dBW/MHz for 40° ≤ θ ≤ 45° ; -42 dBW/MHz for θ > 45°
☐	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.	

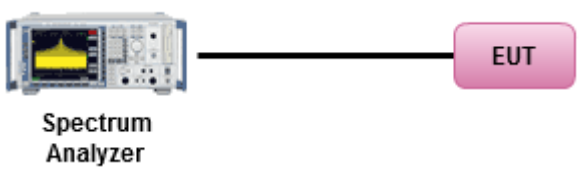
3.4.2 Measuring Instruments

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, F)5) 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: $PPSD_{total} = PPSD_1 + PPSD_2 + \ldots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$

3.4.4 Test Setup

Power Spectral Density


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.

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

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.

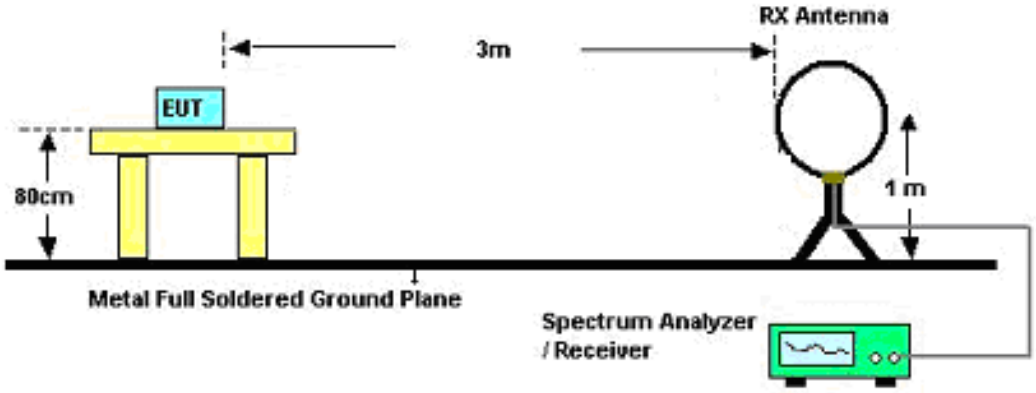
3.5.3 Test Procedures

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 ≥ 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 ≥ 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.		

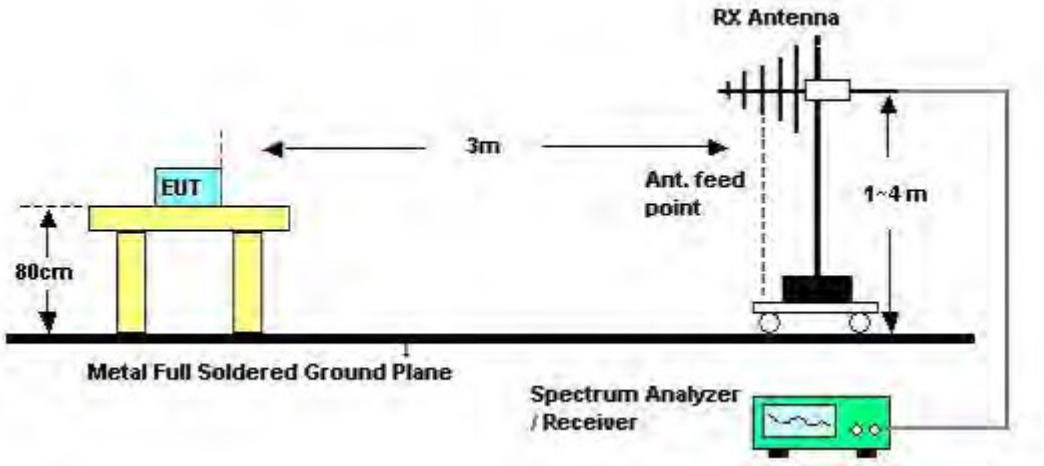
3.5.4 Test Setup

Transmitter Radiated Unwanted Emissions

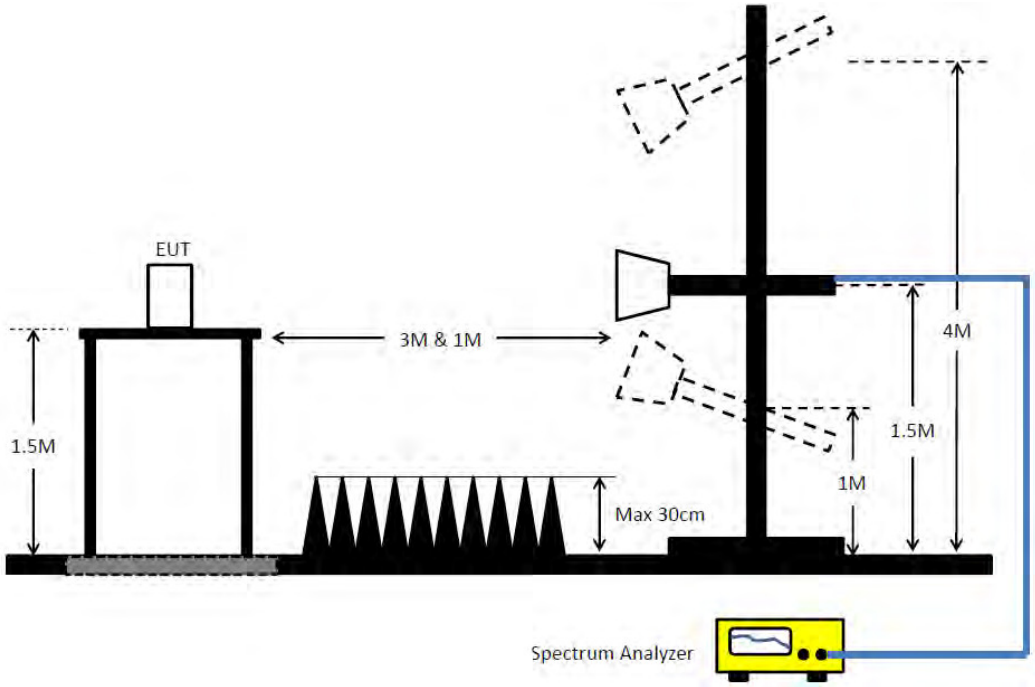
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



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

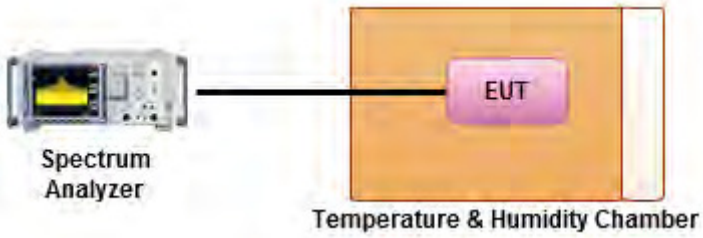
Refer a test equipment and calibration data table in this test report.

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℃~50℃.

3.6.4 Test Setup

Frequency Stability



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	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 23, 2017	Jan. 22, 2018	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 20, 2017	Dec. 19, 2018	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Dec. 29, 2017	Dec. 28, 2018	Conduction (CO01-CB)
COND Cable	Woken	Cable	01	150kHz ~ 30MHz	May 23, 2017	May 22, 2018	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Aug. 30, 2017	Aug. 29, 2018	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 20, 2017	Nov. 19, 2018	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 05, 2017	Jul. 04, 2018	Radiation (03CH01-CB)
Pre-Amplifier	EMCI	EMC330N	980332	20MHz ~ 3GHz	May 02, 2017	May 01, 2018	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 09, 2018	Jan. 08, 2019	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 10, 2017	Jul. 09, 2018	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Nov. 23, 2017	Nov. 22, 2018	Radiation (03CH01-CB)
EMI Test	R&S	ESCS	100355	9kHz ~ 2.75GHz	May 06, 2017	May 05, 2018	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-16+17	N/A	30 MHz ~ 1 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16+17	N/A	1 GHz ~ 18 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#1	N/A	18GHz ~ 40 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
Loop Antenna	R&S	HFH2-Z2	100330	9kHz - 30 MHz	Nov. 13, 2017	Nov. 12, 2018	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 21, 2017	Dec. 20, 2018	Conducted (TH01-CB)
Temp. and Humidity Chamber	Ten Billion	TTH-D3SP	TBN-931011	-30~100 degree	Jun. 02, 2017	Jun. 01, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz –26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz –26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)

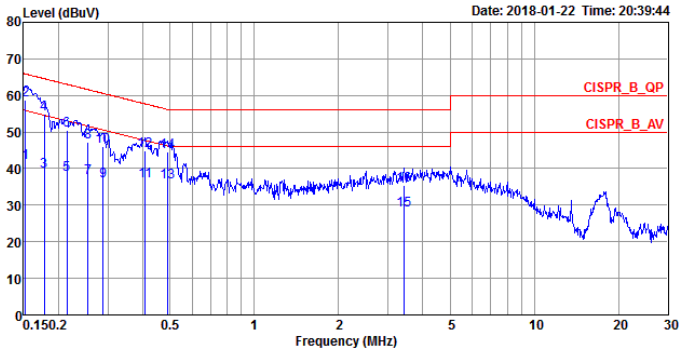
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-09	1 GHz –26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 20, 2017	Nov. 19, 2018	Conducted (TH01-CB)

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

"*" Calibration Interval of instruments listed above is two years.

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

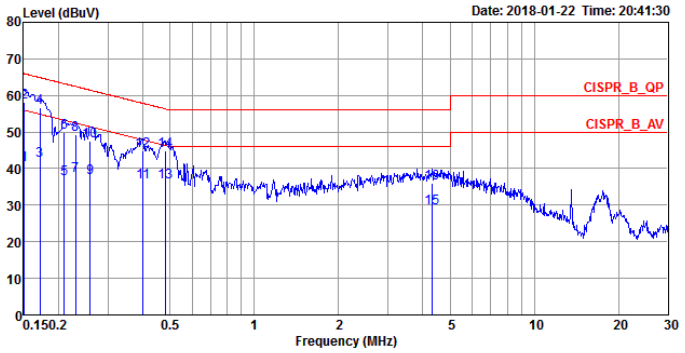
AC Power-line Conducted Emissions Result			
Operating Mode	2	**Power Phase**	Neutral
Operating Function	CTX		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1524	41.50	-14.37	55.87	31.24	10.10	0.16	Average	NEUTRAL
2	0.1524	58.68	-7.19	65.87	48.42	10.10	0.16	QP	NEUTRAL
3	0.1777	39.35	-15.24	54.59	29.20	10.01	0.14	Average	NEUTRAL
4	0.1777	54.77	-9.82	64.59	44.62	10.01	0.14	QP	NEUTRAL
5	0.2139	38.23	-14.82	53.05	28.06	10.05	0.12	Average	NEUTRAL
6	0.2139	50.36	-12.69	63.05	40.19	10.05	0.12	QP	NEUTRAL
7	0.2548	37.35	-14.25	51.60	27.18	10.08	0.09	Average	NEUTRAL
8	0.2548	47.21	-14.39	61.60	37.04	10.08	0.09	QP	NEUTRAL
9	0.2878	36.56	-14.03	50.59	26.37	10.12	0.07	Average	NEUTRAL
10	0.2878	45.92	-14.67	60.59	35.73	10.12	0.07	QP	NEUTRAL
11	0.4083	36.55	-11.13	47.68	26.28	10.26	0.01	Average	NEUTRAL
12	0.4083	44.98	-12.70	57.68	34.71	10.26	0.01	QP	NEUTRAL
13	0.4889	36.43	-9.76	46.19	26.15	10.23	0.05	Average	NEUTRAL
14	0.4889	44.63	-11.56	56.19	34.35	10.23	0.05	QP	NEUTRAL
15	3.4174	28.71	-17.29	46.00	18.62	9.96	0.13	Average	NEUTRAL
16	3.4174	35.35	-20.65	56.00	25.26	9.96	0.13	QP	NEUTRAL

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

AC Power-line Conducted Emissions Result			
Operating Mode	2	**Power Phase**	Line
Operating Function	CTX		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1508	41.00	-14.96	55.96	30.84	10.00	0.16	Average	LINE
2	0.1508	58.27	-7.69	65.96	48.11	10.00	0.16	QP	LINE
3	0.1712	42.27	-12.63	54.90	32.12	10.00	0.15	Average	LINE
4	0.1712	56.66	-8.24	64.90	46.51	10.00	0.15	QP	LINE
5	0.2094	37.26	-15.97	53.23	27.22	9.92	0.12	Average	LINE
6	0.2094	49.78	-13.45	63.23	39.74	9.92	0.12	QP	LINE
7	0.2304	37.99	-14.45	52.44	27.97	9.92	0.10	Average	LINE
8	0.2304	49.42	-13.02	62.44	39.40	9.92	0.10	QP	LINE
9	0.2589	37.60	-13.87	51.47	27.60	9.92	0.08	Average	LINE
10	0.2589	47.52	-13.95	61.47	37.52	9.92	0.08	QP	LINE
11	0.3997	36.35	-11.51	47.86	26.39	9.95	0.01	Average	LINE
12	0.3997	44.77	-13.09	57.86	34.81	9.95	0.01	QP	LINE
13	0.4812	36.37	-9.95	46.32	26.37	9.95	0.05	Average	LINE
14	0.4812	44.80	-11.52	56.32	34.80	9.95	0.05	QP	LINE
15	4.3146	29.37	-16.63	46.00	19.29	9.98	0.10	Average	LINE
16	4.3146	36.08	-19.92	56.00	26.00	9.98	0.10	QP	LINE

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	19.75M	16.417M	16M4D1D	19.175M	16.342M
802.11ac VHT20_Nss1,(MCS0)_4TX	20.55M	17.616M	17M6D1D	20.2M	17.566M
802.11ac VHT40_Nss1,(MCS0)_4TX	39.75M	35.982M	36M0D1D	39.15M	35.832M
802.11ac VHT80_Nss1,(MCS0)_4TX	85.6M	75.862M	75M9D1D	84.4M	75.762M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	16.35M	16.442M	16M4D1D	15.925M	16.367M
802.11ac VHT20_Nss1,(MCS0)_4TX	17.575M	17.641M	17M6D1D	16.25M	17.541M
802.11ac VHT40_Nss1,(MCS0)_4TX	36.3M	36.032M	36M0D1D	32.45M	35.832M
802.11ac VHT80_Nss1,(MCS0)_4TX	75.9M	76.062M	76M1D1D	75M	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

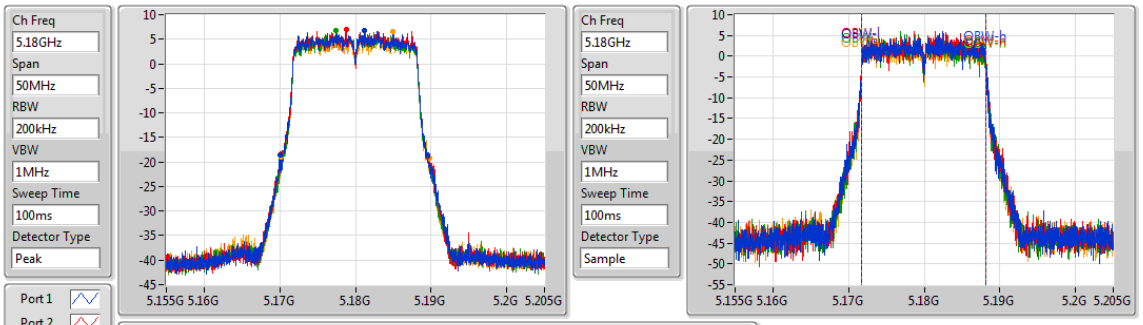
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	19.575M	16.392M	19.425M	16.417M	19.175M	16.392M	19.7M	16.417M
5200MHz	Pass	Inf	19.675M	16.417M	19.475M	16.392M	19.45M	16.342M	19.45M	16.367M
5240MHz	Pass	Inf	19.75M	16.417M	19.2M	16.392M	19.475M	16.367M	19.425M	16.392M
5745MHz	Pass	500k	16.3M	16.417M	15.925M	16.392M	16.05M	16.367M	16.3M	16.417M
5785MHz	Pass	500k	16.35M	16.417M	16.275M	16.367M	16.05M	16.367M	16.325M	16.442M
5825MHz	Pass	500k	16.35M	16.417M	16.275M	16.392M	16.325M	16.392M	16.35M	16.417M
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	20.45M	17.591M	20.5M	17.616M	20.225M	17.566M	20.45M	17.616M
5200MHz	Pass	Inf	20.45M	17.616M	20.4M	17.616M	20.4M	17.591M	20.325M	17.591M
5240MHz	Pass	Inf	20.25M	17.616M	20.425M	17.566M	20.55M	17.591M	20.2M	17.616M
5745MHz	Pass	500k	17.55M	17.616M	17.55M	17.591M	16.25M	17.541M	17.55M	17.591M
5785MHz	Pass	500k	17.575M	17.566M	16.475M	17.566M	16.525M	17.541M	17.575M	17.641M
5825MHz	Pass	500k	17.525M	17.616M	17.525M	17.566M	16.525M	17.616M	17.55M	17.641M
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	39.65M	35.932M	39.7M	35.932M	39.6M	35.982M	39.15M	35.832M
5230MHz	Pass	Inf	39.75M	35.882M	39.75M	35.882M	39.45M	35.982M	39.35M	35.982M
5755MHz	Pass	500k	34.65M	35.832M	33.8M	36.032M	36.3M	36.032M	33.75M	35.832M
5795MHz	Pass	500k	35.05M	35.882M	33.2M	36.032M	35.3M	35.982M	32.45M	35.832M
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	84.4M	75.862M	84.7M	75.862M	85M	75.862M	85.6M	75.762M
5775MHz	Pass	500k	75M	75.762M	75.9M	76.062M	75.9M	76.062M	75.1M	75.662M

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_Nss1,(6Mbps)_4TX **EBW**

5180MHz

17/01/2018

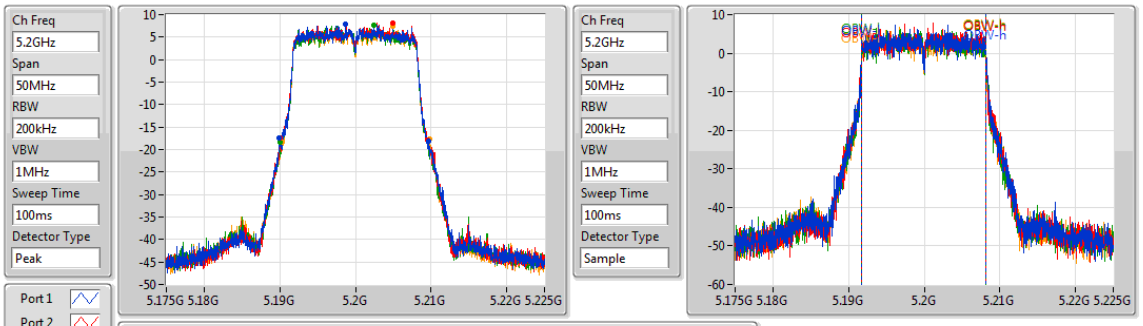


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.575M	5.17G	5.189575G	16.392M	5.171779G	5.188171G	Inf	1
19.425M	5.17015G	5.189575G	16.417M	5.171779G	5.188196G	Inf	2
19.175M	5.170375G	5.18955G	16.392M	5.171779G	5.188171G	Inf	3
19.7M	5.170175G	5.189875G	16.417M	5.171754G	5.188171G	Inf	4

802.11a_Nss1,(6Mbps)_4TX **EBW**

5200MHz

25/01/2018

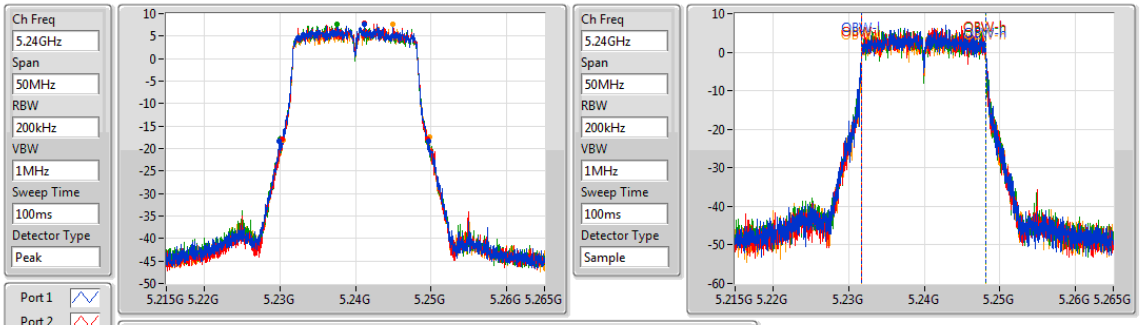


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.675M	5.18995G	5.209625G	16.417M	5.191754G	5.208171G	Inf	1
19.475M	5.190075G	5.20955G	16.392M	5.191754G	5.208146G	Inf	2
19.45M	5.1901G	5.20955G	16.342M	5.191779G	5.208121G	Inf	3
19.45M	5.19035G	5.2098G	16.367M	5.191779G	5.208146G	Inf	4

802.11a_Nss1,(6Mbps)_4TX **EBW**

5240MHz

25/01/2018

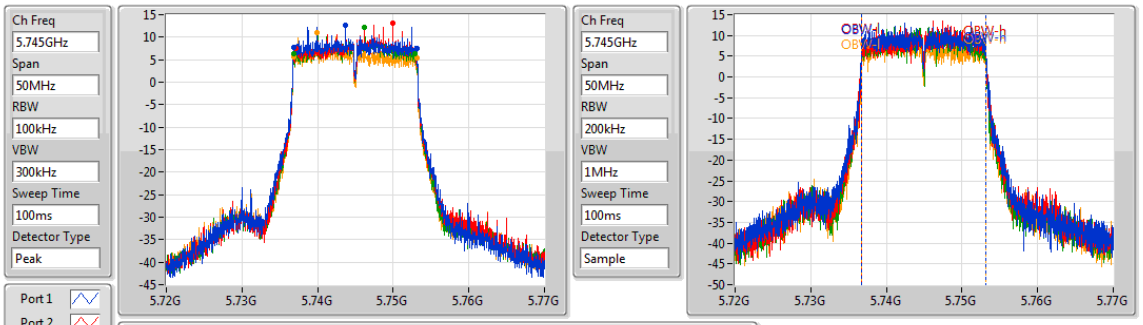


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.75M	5.2299G	5.24965G	16.417M	5.231754G	5.248171G	Inf	1
19.2M	5.230325G	5.249525G	16.392M	5.231754G	5.248146G	Inf	2
19.475M	5.2301G	5.249575G	16.367M	5.231779G	5.248146G	Inf	3
19.425M	5.230425G	5.24985G	16.392M	5.231779G	5.248171G	Inf	4

802.11a_Nss1,(6Mbps)_4TX **EBW**

5745MHz

17/01/2018

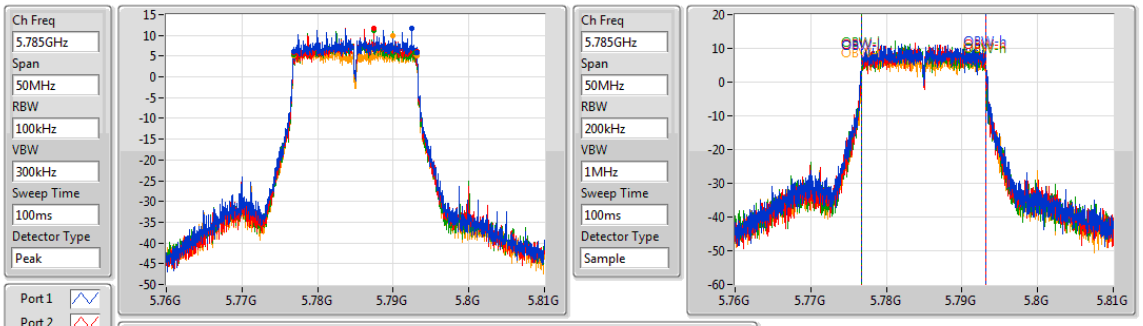


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	5.736825G	5.753125G	16.417M	5.736754G	5.753171G	500k	1
15.925M	5.7372G	5.753125G	16.392M	5.736779G	5.753171G	500k	2
16.05M	5.736825G	5.752875G	16.367M	5.736779G	5.753146G	500k	3
16.3M	5.736825G	5.753125G	16.417M	5.736754G	5.753171G	500k	4

802.11a_Nss1,(6Mbps)_4TX **EBW**

5785MHz

25/01/2018

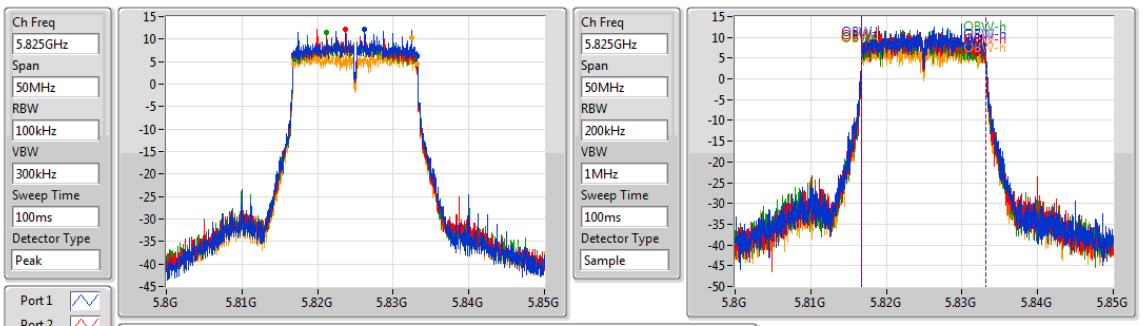


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.35M	5.7768G	5.79315G	16.417M	5.776754G	5.793171G	500k	1
16.275M	5.776825G	5.7931G	16.367M	5.776779G	5.793146G	500k	2
16.05M	5.7768G	5.79285G	16.367M	5.776754G	5.793121G	500k	3
16.325M	5.7768G	5.793125G	16.442M	5.776729G	5.793171G	500k	4

802.11a_Nss1,(6Mbps)_4TX **EBW**

5825MHz

17/01/2018

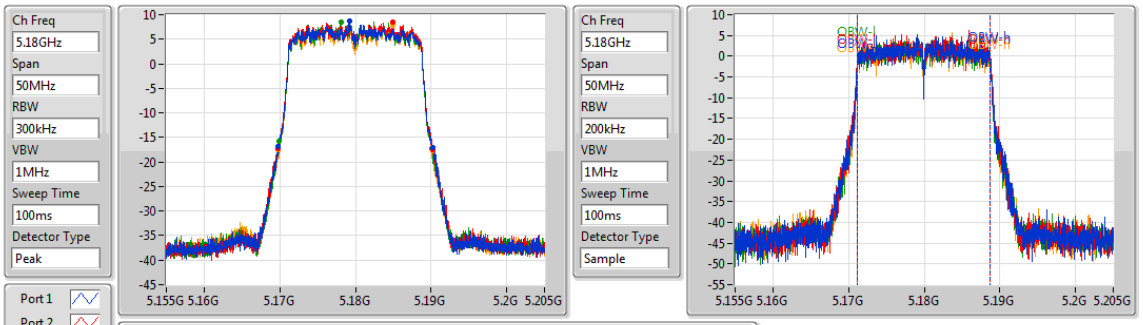


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.35M	5.8168G	5.83315G	16.417M	5.816754G	5.833171G	500k	1
16.275M	5.816825G	5.8331G	16.392M	5.816754G	5.833146G	500k	2
16.325M	5.8168G	5.833125G	16.392M	5.816754G	5.833146G	500k	3
16.35M	5.8168G	5.83315G	16.417M	5.816754G	5.833171G	500k	4

802.11ac VHT20_Nss1,(MCS0)_4TX **EBW**

5180MHz

17/01/2018

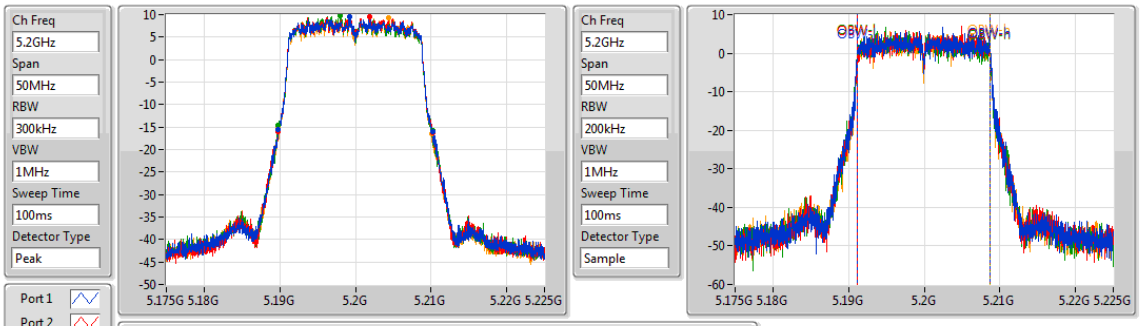


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.45M	5.169825G	5.190275G	17.591M	5.171179G	5.188771G	Inf	1
20.5M	5.169775G	5.190275G	17.616M	5.171154G	5.188771G	Inf	2
20.225M	5.169875G	5.1901G	17.566M	5.171179G	5.188746G	Inf	3
20.45M	5.16975G	5.1902G	17.616M	5.171154G	5.188771G	Inf	4

802.11ac VHT20_Nss1,(MCS0)_4TX **EBW**

5200MHz

25/01/2018

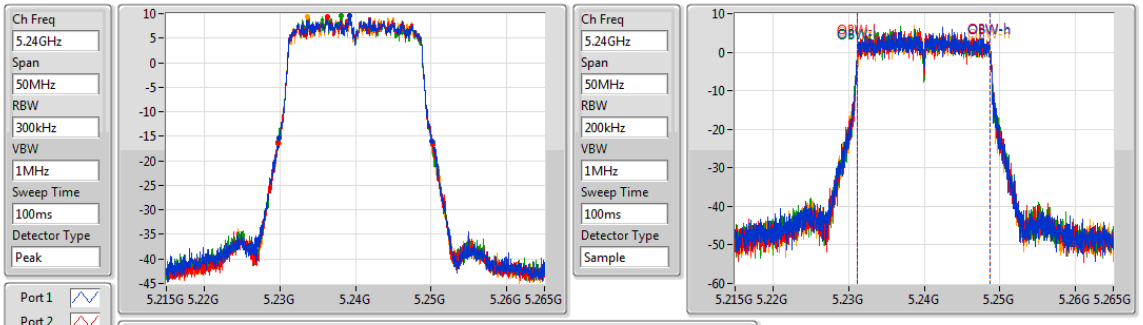


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.45M	5.1898G	5.21025G	17.616M	5.191154G	5.208771G	Inf	1
20.4M	5.1898G	5.2102G	17.616M	5.191154G	5.208771G	Inf	2
20.4M	5.189825G	5.210225G	17.591M	5.191154G	5.208746G	Inf	3
20.325M	5.1898G	5.210125G	17.591M	5.191154G	5.208746G	Inf	4

802.11ac VHT20_Nss1,(MCS0)_4TX **EBW**

5240MHz

25/01/2018

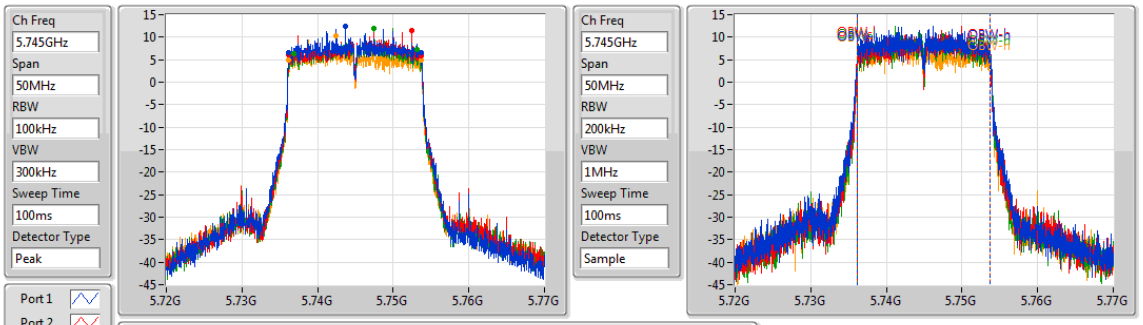


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.25M	5.2299G	5.25015G	17.616M	5.231154G	5.248771G	Inf	1
20.425M	5.229775G	5.2502G	17.566M	5.231179G	5.248746G	Inf	2
20.55M	5.22975G	5.2503G	17.591M	5.231154G	5.248746G	Inf	3
20.2M	5.22985G	5.25005G	17.616M	5.231154G	5.248771G	Inf	4

802.11ac VHT20_Nss1,(MCS0)_4TX EBW

5745MHz

17/01/2018

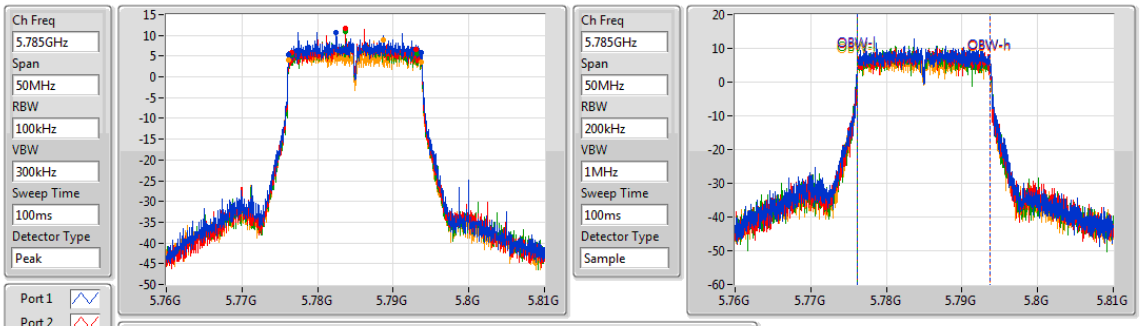


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.55M	5.7362G	5.75375G	17.616M	5.736154G	5.753771G	500k	1
17.55M	5.7362G	5.75375G	17.591M	5.736154G	5.753746G	500k	2
16.25M	5.73685G	5.7531G	17.541M	5.736204G	5.753746G	500k	3
17.55M	5.7362G	5.75375G	17.591M	5.736154G	5.753746G	500k	4

802.11ac VHT20_Nss1,(MCS0)_4TX EBW

5785MHz

25/01/2018

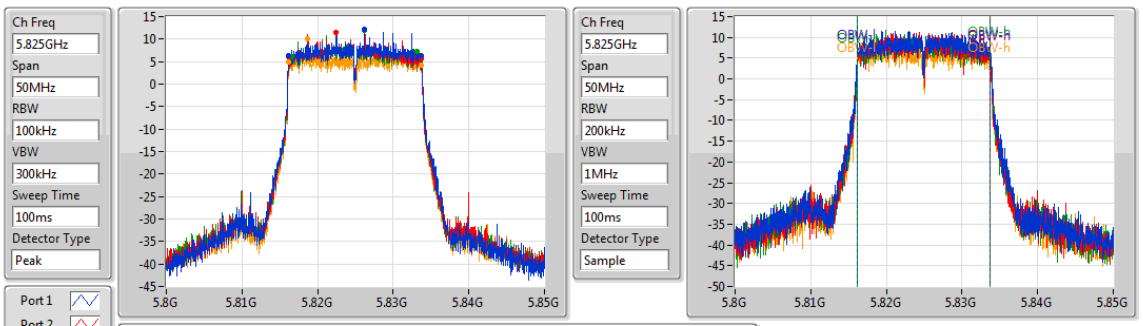


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.575M	5.776175G	5.79375G	17.566M	5.776179G	5.793746G	500k	1
16.475M	5.7766G	5.793075G	17.566M	5.776179G	5.793746G	500k	2
16.525M	5.7766G	5.793125G	17.541M	5.776179G	5.793721G	500k	3
17.575M	5.776175G	5.79375G	17.641M	5.776129G	5.793771G	500k	4

802.11ac VHT20_Nss1,(MCS0)_4TX EBW

5825MHz

17/01/2018



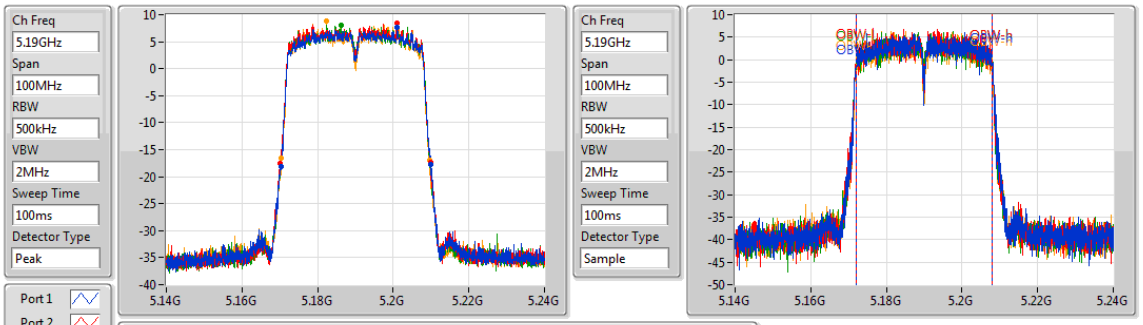
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.525M	5.816225G	5.83375G	17.616M	5.816154G	5.833771G	500k	1
17.525M	5.8162G	5.833725G	17.566M	5.816154G	5.833721G	500k	2
16.525M	5.816575G	5.8331G	17.616M	5.816154G	5.833771G	500k	3
17.55M	5.8162G	5.83375G	17.641M	5.816129G	5.833771G	500k	4

802.11ac VHT40_Nss1,(MCS0)_4TX

EBW

5190MHz

17/01/2018



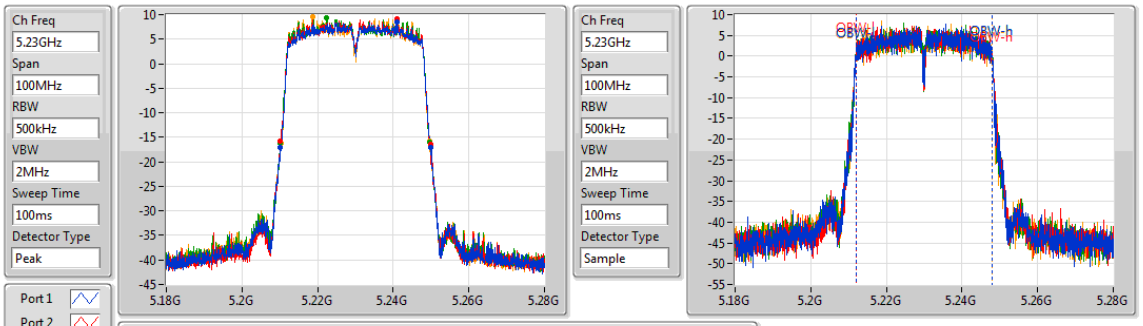
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.65M	5.17025G	5.2099G	35.932M	5.172009G	5.207941G	Inf	1
39.7M	5.1702G	5.2099G	35.932M	5.172009G	5.207941G	Inf	2
39.6M	5.1702G	5.2098G	35.982M	5.172009G	5.207991G	Inf	3
39.15M	5.17045G	5.2096G	35.832M	5.172009G	5.207841G	Inf	4

802.11ac VHT40_Nss1,(MCS0)_4TX

EBW

5230MHz

25/01/2018



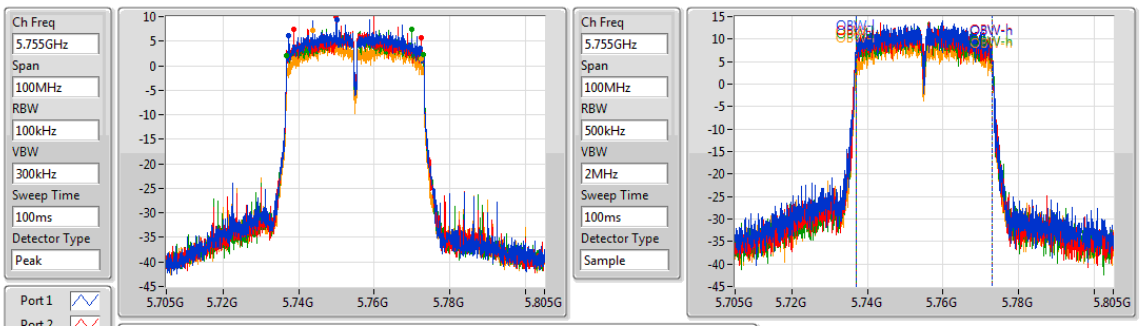
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.75M	5.2102G	5.24995G	35.882M	5.212009G	5.247891G	Inf	1
39.75M	5.21015G	5.2499G	35.882M	5.212009G	5.247891G	Inf	2
39.45M	5.2102G	5.24965G	35.982M	5.211959G	5.247941G	Inf	3
39.35M	5.21025G	5.2496G	35.982M	5.211959G	5.247941G	Inf	4

802.11ac VHT40_Nss1,(MCS0)_4TX

EBW

5755MHz

17/01/2018



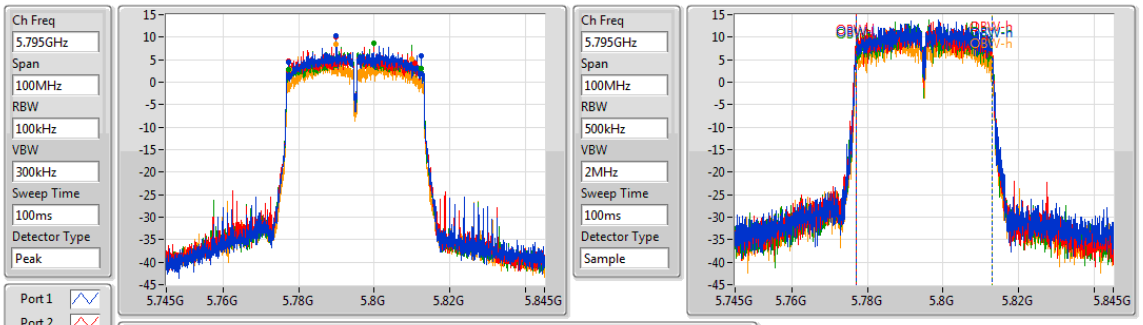
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
34.65M	5.73745G	5.7721G	35.832M	5.737059G	5.772891G	500k	1
33.8M	5.7387G	5.7725G	36.032M	5.736909G	5.772941G	500k	2
36.3M	5.7368G	5.7731G	36.032M	5.736909G	5.772941G	500k	3
33.75M	5.7387G	5.77245G	35.832M	5.737059G	5.772891G	500k	4

802.11ac VHT40_Nss1,(MCS0)_4TX

EBW

5795MHz

17/01/2018



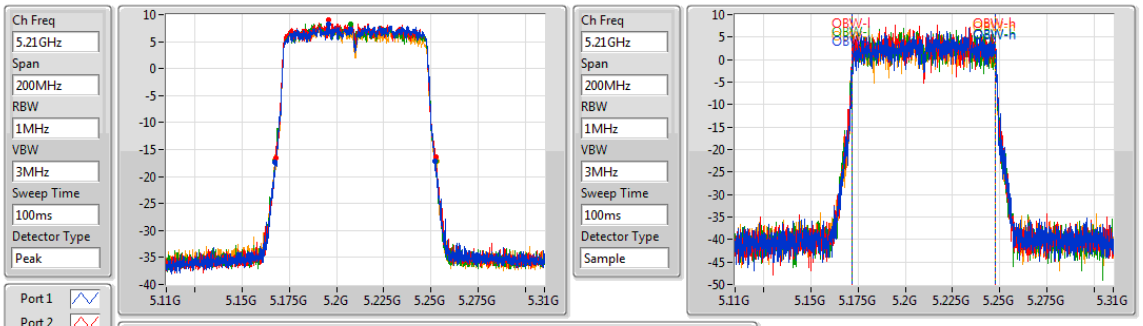
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.05M	5.7774G	5.81245G	35.882M	5.777009G	5.812891G	500k	1
33.2M	5.77745G	5.81065G	36.032M	5.776909G	5.812941G	500k	2
35.3M	5.7772G	5.8125G	35.982M	5.776959G	5.812941G	500k	3
32.45M	5.7775G	5.80995G	35.832M	5.777059G	5.812891G	500k	4

802.11ac VHT80_Nss1,(MCS0)_4TX

EBW

5210MHz

17/01/2018



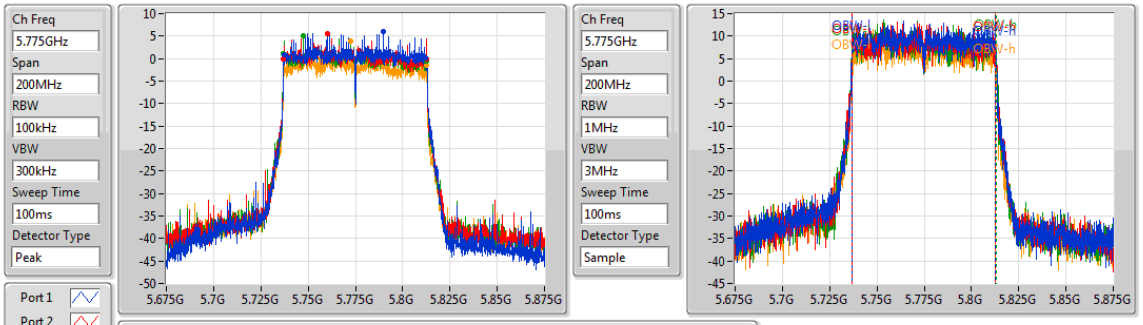
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
84.4M	5.1676G	5.252G	75.862M	5.172019G	5.247881G	Inf	1
84.7M	5.1677G	5.2524G	75.862M	5.171919G	5.247781G	Inf	2
85M	5.1675G	5.2525G	75.862M	5.171819G	5.247681G	Inf	3
85.6M	5.1673G	5.2529G	75.762M	5.171919G	5.247681G	Inf	4

802.11ac VHT80_Nss1,(MCS0)_4TX

EBW

5775MHz

17/01/2018



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
75M	5.7372G	5.8122G	75.762M	5.737019G	5.812781G	500k	1
75.9M	5.7368G	5.8127G	76.062M	5.736819G	5.812881G	500k	2
75.9M	5.7368G	5.8127G	76.062M	5.736919G	5.812981G	500k	3
75.1M	5.7374G	5.8125G	75.662M	5.737019G	5.812681G	500k	4

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP / EIRPElevation 30° (dBm)	EIRP / EIRPElevation 30° (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	24.50	0.28184	35.80/18.53	3.80189/0.07128
802.11ac VHT20_Nss1,(MCS0)_4TX	24.41	0.27606	35.71/18.44	3.72392/0.06982
802.11ac VHT40_Nss1,(MCS0)_4TX	24.47	0.27990	35.77/18.50	3.77572/0.07079
802.11ac VHT80_Nss1,(MCS0)_4TX	24.32	0.27040	35.62/18.35	3.64754/0.06839
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	29.20	0.83176	35.90	3.89045
802.11ac VHT20_Nss1,(MCS0)_4TX	29.12	0.81658	35.82	3.81944
802.11ac VHT40_Nss1,(MCS0)_4TX	29.19	0.82985	35.89	3.88150
802.11ac VHT80_Nss1,(MCS0)_4TX	28.31	0.67764	35.01	3.16957

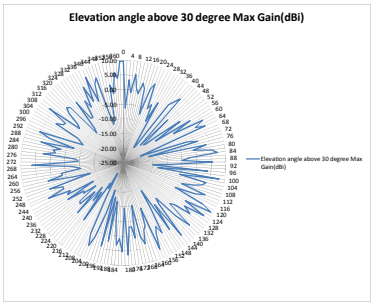
Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP / EIRPElevation 30° (dBm)	EIRP Limit / EIRP Limit-Elevation 30° (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	11.30	18.45	18.82	18.48	17.93	24.45	24.70	35.75/18.48	36.00/21.00
5200MHz	Pass	11.30	18.51	18.71	18.52	18.07	24.48	24.70	35.78/18.51	36.00/21.00
5240MHz	Pass	11.30	18.57	18.53	18.57	18.22	24.50	24.70	35.80/18.53	36.00/21.00
5745MHz	Pass	6.70	23.78	23.26	23.04	21.76	29.04	29.30	35.74	36.00
5785MHz	Pass	6.70	23.86	23.46	23.20	21.67	29.14	29.30	35.84	36.00
5825MHz	Pass	6.70	23.89	23.42	23.32	21.83	29.20	29.30	35.90	36.00
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	11.30	18.34	18.76	18.49	17.91	24.41	24.70	35.71/18.44	36.00/21.00
5200MHz	Pass	11.30	18.32	18.52	18.35	17.95	24.31	24.70	35.61/18.34	36.00/21.00
5240MHz	Pass	11.30	18.30	18.30	18.32	18.00	24.25	24.70	35.55/18.28	36.00/21.00
5745MHz	Pass	6.70	23.85	23.38	22.84	21.67	29.03	29.30	35.73	36.00
5785MHz	Pass	6.70	23.57	23.12	22.63	21.78	28.85	29.30	35.55	36.00
5825MHz	Pass	6.70	23.96	23.35	23.06	21.75	29.12	29.30	35.82	36.00
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	11.30	18.42	18.68	18.53	18.14	24.47	24.70	35.77/18.50	36.00/21.00
5230MHz	Pass	11.30	18.33	18.55	18.51	18.08	24.39	24.70	35.69/18.42	36.00/21.00
5755MHz	Pass	6.70	23.98	23.39	23.13	21.71	29.15	29.30	35.85	36.00
5795MHz	Pass	6.70	23.95	23.54	23.21	21.65	29.19	29.30	35.89	36.00
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	11.30	18.24	18.69	18.37	17.85	24.32	24.70	35.62/18.35	36.00/21.00
5775MHz	Pass	6.70	23.06	22.58	22.25	21.03	28.31	29.30	35.01	36.00

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

SPORTON International Inc.
No.ii, Lane 724, Bo-ai St., Jhubei City, Hsinchu County 302, Taiwan, R.O.C.
Ph: 886-3-656-9065 / FAX: 886-3-656-9085 / www.sporton.com.tw

Elevation angle above 30 degree Max Gain(dBi)		9.181	SG Power	10.00	EUT Power(Total 4Tx)	25.16	30 Gain	-5.979
Freq. (MHz)	5180	Elevation Angle Define						
H-Plan angle(Degree)	Gain(dBm)							
0	9.71	0° reference angle						
2	-6.27							
4	3.43							
6	-0.90							
8	5.54							
10	0.74							
12	-0.84							
14	2.95							
16	1.26	0° ~ 30°						
18	-7.52							
20	1.69							
22	3.98							
24	-4.76							
26	-3.01							
28	-8.80							
30	-1.43							
32	-16.00							
34	-18.65							
36	-17.76							
38	0.08							
40	2.24							
42	4.19							
44	-16.57							
46	-3.91							
48	-15.77							
50	-15.31							
52	-9.24							
54	-1.10							
56	-11.77							
58	1.80							
60	-5.15							
62	5.73							
64	2.30							
66	5.51							
68	-18.75							
70	-15.01							
72	-2.10							
74	1.33							
76	-16.18							
78	3.74							
80	-0.89							
82	5.46							
84	7.26							
86	-2.20							
88	-4.89							
90	5.39							
92	-6.91							
94	-15.07							
96	3.74							
98	-13.12							
100	8.10							
102	-5.47							
104	3.87							
106	2.93							
108	0.10							
110	-3.98							
112	4.86							
114	1.54							
116	-5.50							
118	5.47							
120	9.18							
122	-0.28							
124	7.70							
126	0.44							
128	3.48							
130	-2.46							
132	-3.95							
134	5.94							
136	0.43							
138	-8.61							
140	-6.57							
142	6.56							
144	-7.23							
146	2.51							
148	-13.75							
150	-6.51							
152	2.22							
154	-0.76							
156	1.66							
158	6.91							
160	-8.54							
162	-2.36							
164	-1.12							
166	3.54							
168	0.71							
170	-10.31							
172	0.86							
174	-3.10							
176	-3.07							
178	6.37							
180	-9.58	0° ~ 30°						
182	5.28							
184	0.81							
186	3.05							
188	-4.29							
190	-11.70							
192	2.14							
194	-12.94							
196	4.25							
198	-15.29							
200	-7.10							
202	1.91							
204	5.50							
206	1.52							
208	-11.78							
210	-20.94							
212	-14.94							
214	-16.72							
216	-1.49							
218	-12.51							
220	-6.63							
222	-13.97							
224	-1.90							
226	-11.16							
228	-4.75							
230	-5.20							
232	-12.60							
234	-7.99							
236	-8.51							
238	-2.32							
240	-12.92							
242	-3.15							
244	-4.57							
246	3.16							
248	-2.89							
250	-2.75							
252	1.69							
254	-13.19							
256	-7.32							
258	1.44							
260	-3.64							
262	-3.66							
264	-10.36							
266	-9.24							
268	-7.16							
270	6.22							
272	-5.49							
274	-9.56							
276	-8.85							
278	2.51							
280	-1.52							
282	-0.67							
284	-3.21							
286	3.98							
288	-7.46							
290	1.47							
292	5.48							
294	-5.67							
296	-9.66							
298	-8.78							
300	-7.34							
302	1.58							
304	-0.61							
306	-1.10							
308	6.32							
310	-5.96							
312	-4.46							
314	0.00							
316	2.08							
318	1.16							
320	-11.27							
322	-9.61							
324	1.21							
326	-6.16							
328	-6.28							
330	-0.10							
332	-3.01							
334	4.24							
336	-1.63							
338	7.01							
340	-2.31							
342	3.61							
344	5.47	0° ~ 30°						
346	-7.09							
348	-11.38							
350	-9.79							
352	1.96							
354	-1.06							
356	5.95							
358	4.00							
360	9.71	0° reference angle						



Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11a_Nss1,(6Mbps)_4TX	11.45
802.11ac VHT20_Nss1,(MCS0)_4TX	11.29
802.11ac VHT40_Nss1,(MCS0)_4TX	8.43
802.11ac VHT80_Nss1,(MCS0)_4TX	5.28
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_4TX	15.17
802.11ac VHT20_Nss1,(MCS0)_4TX	14.61
802.11ac VHT40_Nss1,(MCS0)_4TX	11.99
802.11ac VHT80_Nss1,(MCS0)_4TX	8.21

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

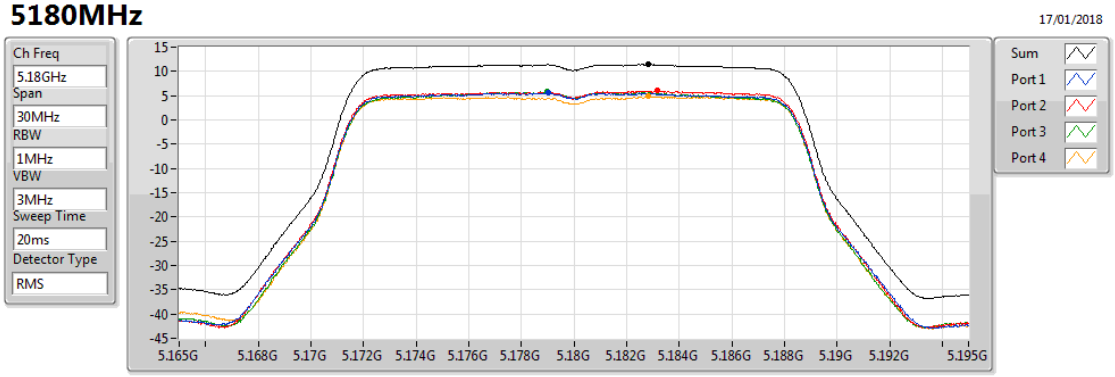
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	11.30	5.58	5.99	5.80	4.81	11.45	11.70
5200MHz	Pass	11.30	5.23	5.51	5.50	4.83	11.09	11.70
5240MHz	Pass	11.30	5.11	5.29	5.31	4.84	10.99	11.70
5745MHz	Pass	6.70	10.02	9.98	9.49	8.14	15.17	29.30
5785MHz	Pass	6.70	8.95	8.89	8.61	6.99	14.31	29.30
5825MHz	Pass	6.70	9.71	9.72	9.62	7.37	15.08	29.30
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5180MHz	Pass	11.30	5.40	5.83	5.70	4.86	11.29	11.70
5200MHz	Pass	11.30	4.64	4.94	4.93	4.26	10.57	11.70
5240MHz	Pass	11.30	4.55	4.76	4.88	4.26	10.50	11.70
5745MHz	Pass	6.70	9.32	9.27	9.03	7.61	14.61	29.30
5785MHz	Pass	6.70	8.25	8.25	8.00	6.65	13.59	29.30
5825MHz	Pass	6.70	9.03	9.02	8.99	6.82	14.43	29.30
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5190MHz	Pass	11.30	2.39	3.01	2.91	2.04	8.43	11.70
5230MHz	Pass	11.30	2.06	2.26	2.33	1.74	7.99	11.70
5755MHz	Pass	6.70	6.88	6.68	6.42	4.80	11.99	29.30
5795MHz	Pass	6.70	6.58	6.41	6.50	4.53	11.81	29.30
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5210MHz	Pass	11.30	-0.64	-0.35	-0.25	-1.24	5.28	11.70
5775MHz	Pass	6.70	2.79	2.73	2.89	0.40	8.21	29.30

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 Xpower density;

802.11a_Nss1,(6Mbps)_4TX PSD

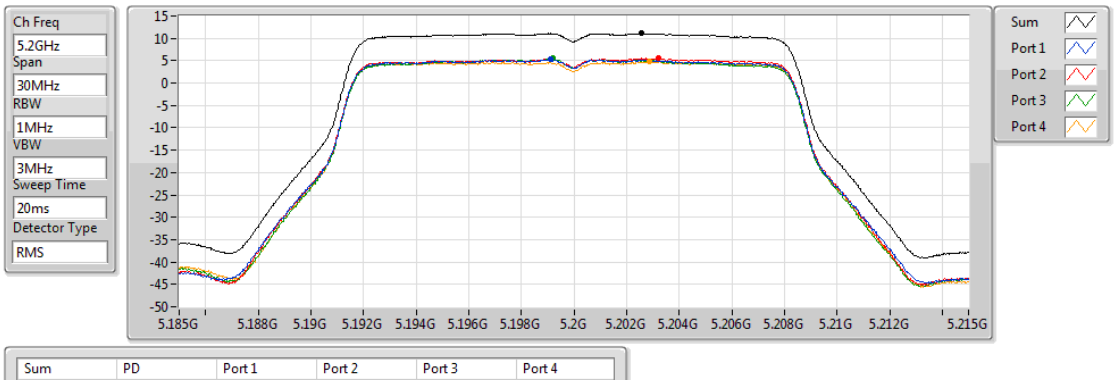
5180MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.45	11.45	5.58	5.99	5.80	4.81

802.11a_Nss1,(6Mbps)_4TX PSD

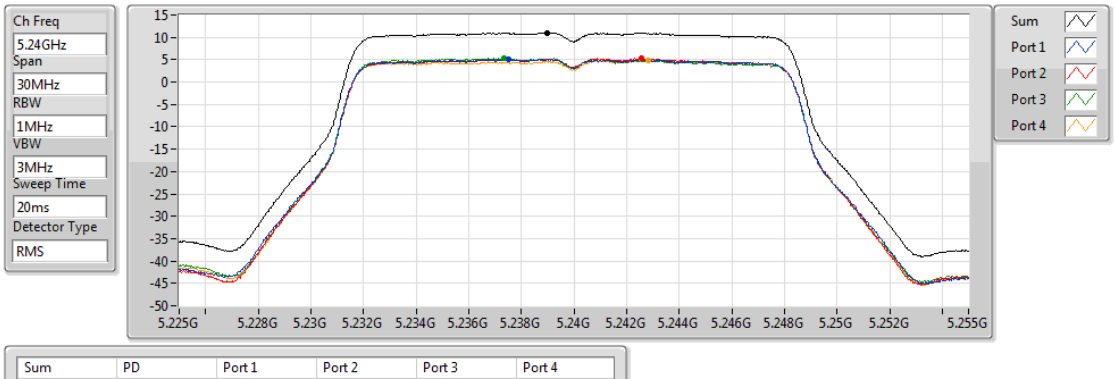
5200MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.09	11.09	5.23	5.51	5.50	4.83

802.11a_Nss1,(6Mbps)_4TX PSD

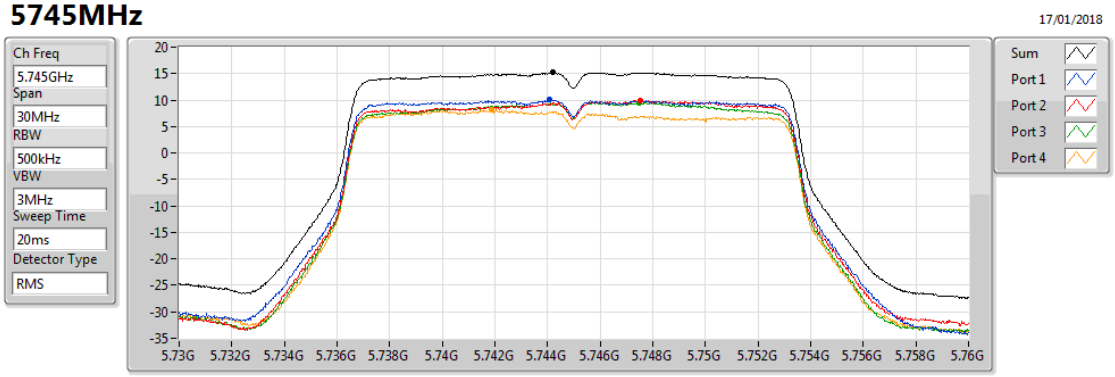
5240MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.99	10.99	5.11	5.29	5.31	4.84

802.11a_Nss1,(6Mbps)_4TX PSD

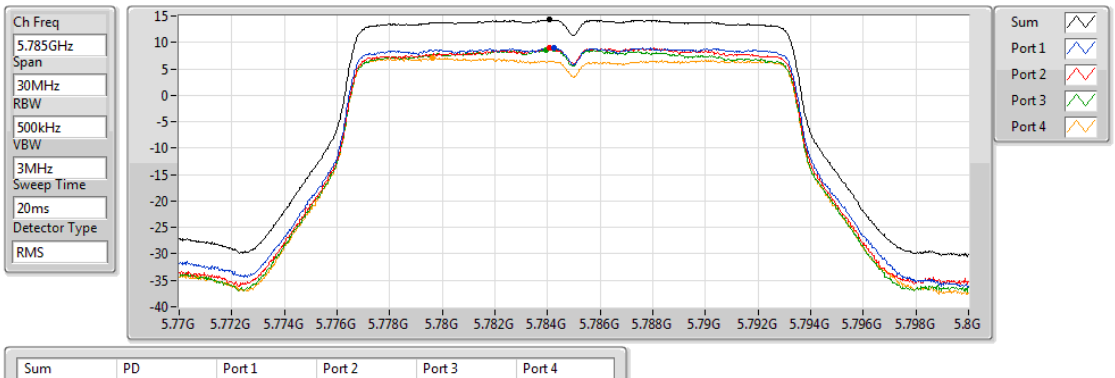
5745MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.17	15.17	10.02	9.98	9.49	8.14

802.11a_Nss1,(6Mbps)_4TX PSD

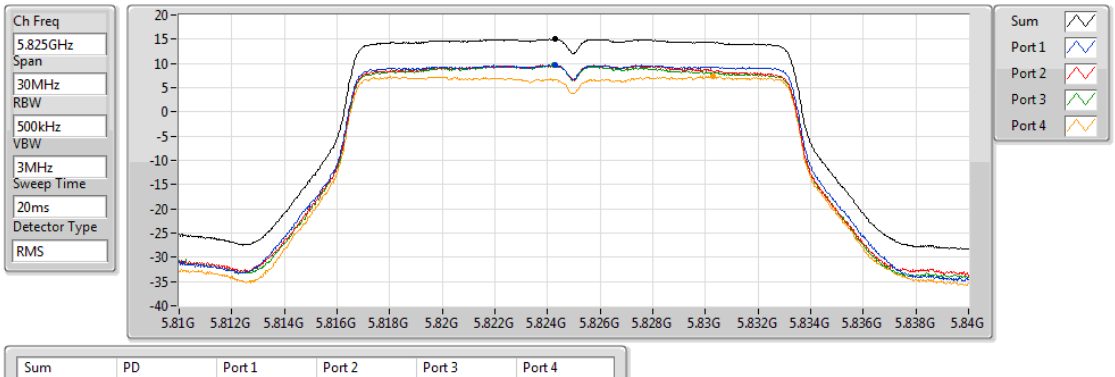
5785MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.31	14.31	8.95	8.89	8.61	6.99

802.11a_Nss1,(6Mbps)_4TX PSD

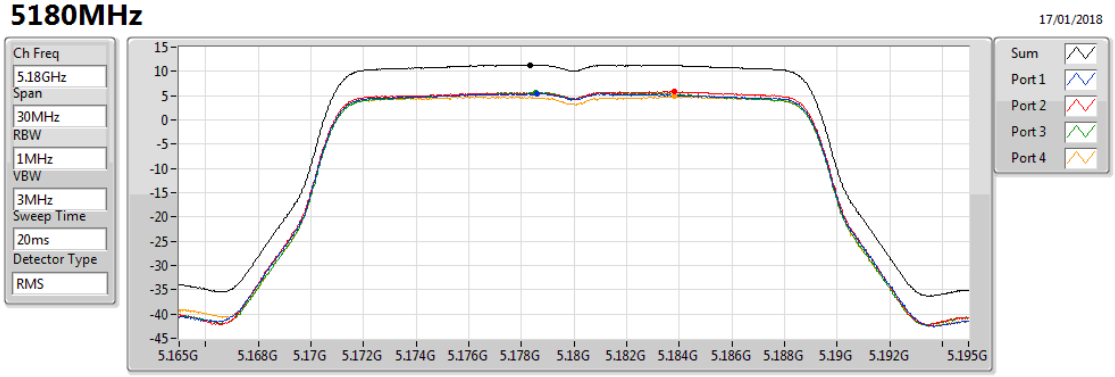
5825MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.08	15.08	9.71	9.72	9.62	7.37

802.11ac VHT20_Nss1,(MCS0)_4TX PSD

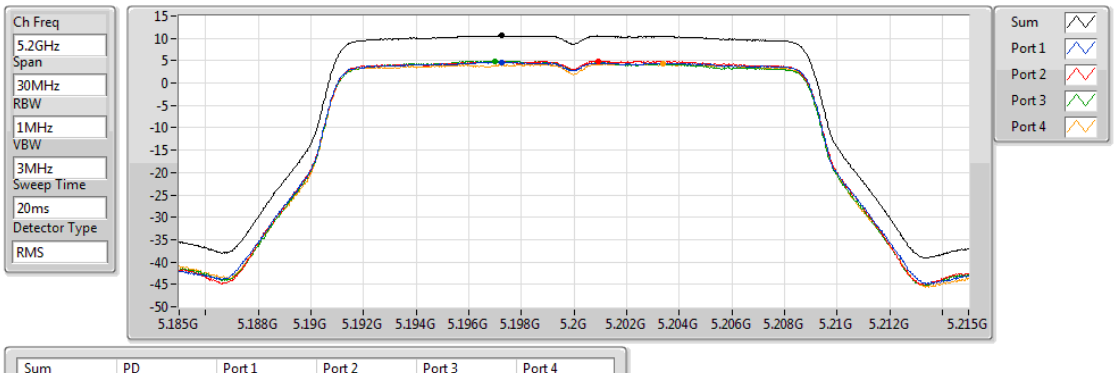
5180MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.29	11.29	5.40	5.83	5.70	4.86

802.11ac VHT20_Nss1,(MCS0)_4TX PSD

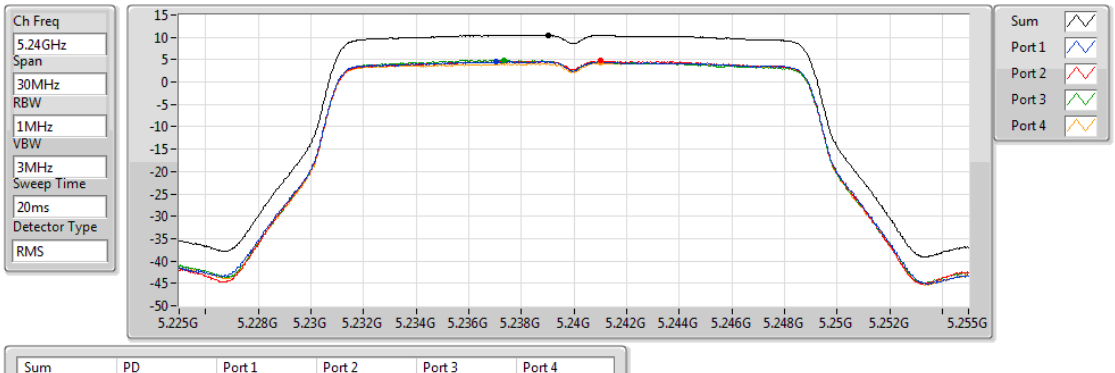
5200MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.57	10.57	4.64	4.94	4.93	4.26

802.11ac VHT20_Nss1,(MCS0)_4TX PSD

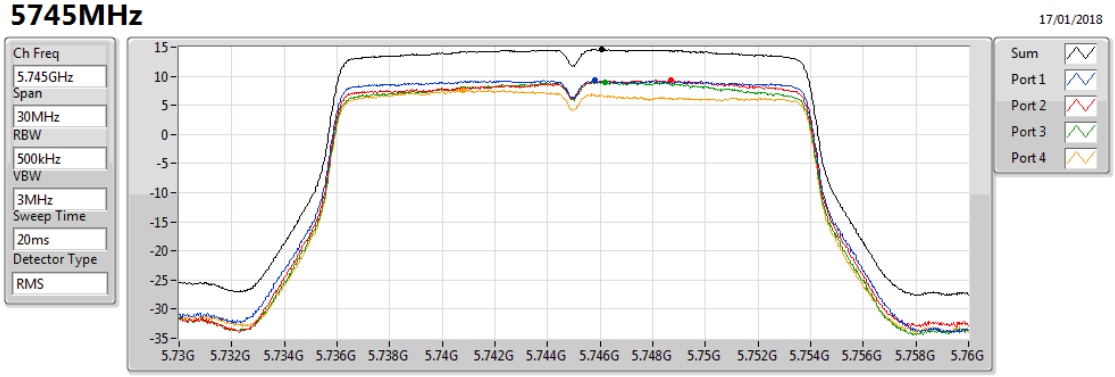
5240MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.50	10.50	4.55	4.76	4.88	4.26

802.11ac VHT20_Nss1,(MCS0)_4TX PSD

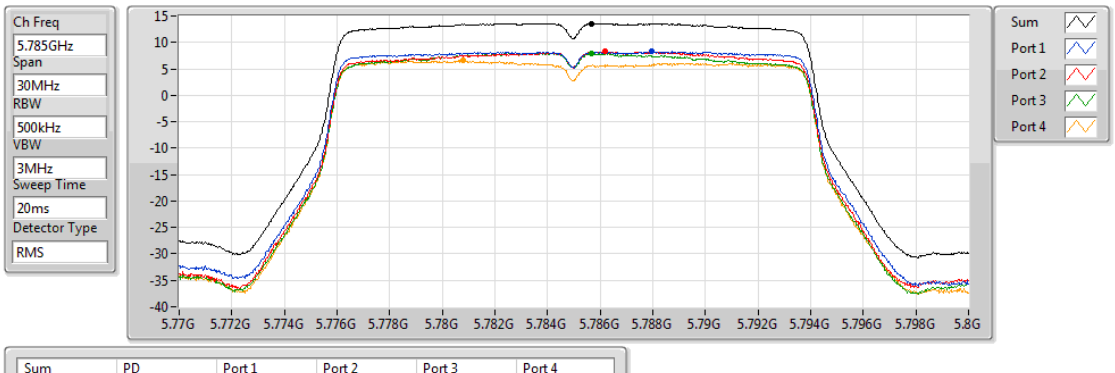
5745MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.61	14.61	9.32	9.27	9.03	7.61

802.11ac VHT20_Nss1,(MCS0)_4TX PSD

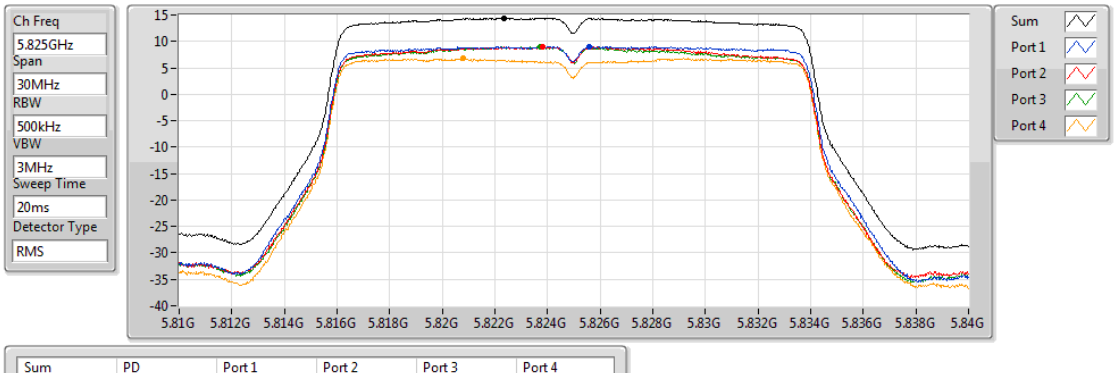
5785MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.59	13.59	8.25	8.25	8.00	6.65

802.11ac VHT20_Nss1,(MCS0)_4TX PSD

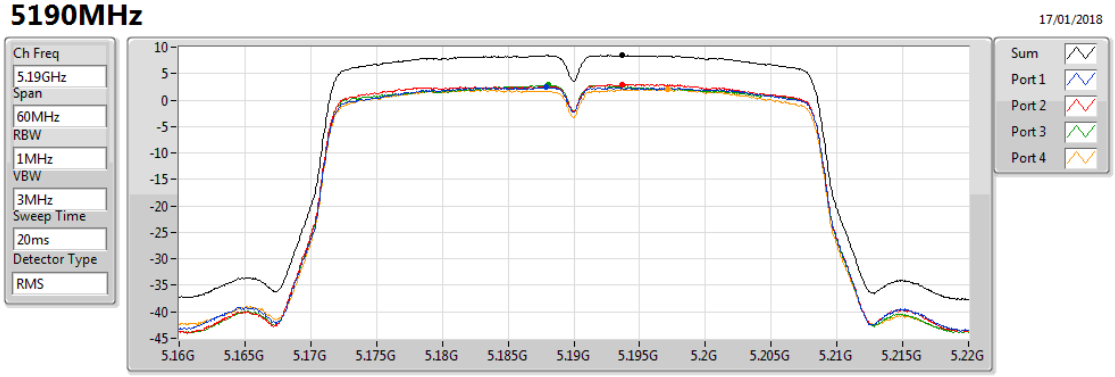
5825MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.43	14.43	9.03	9.02	8.99	6.82

802.11ac VHT40_Nss1,(MCS0)_4TX PSD

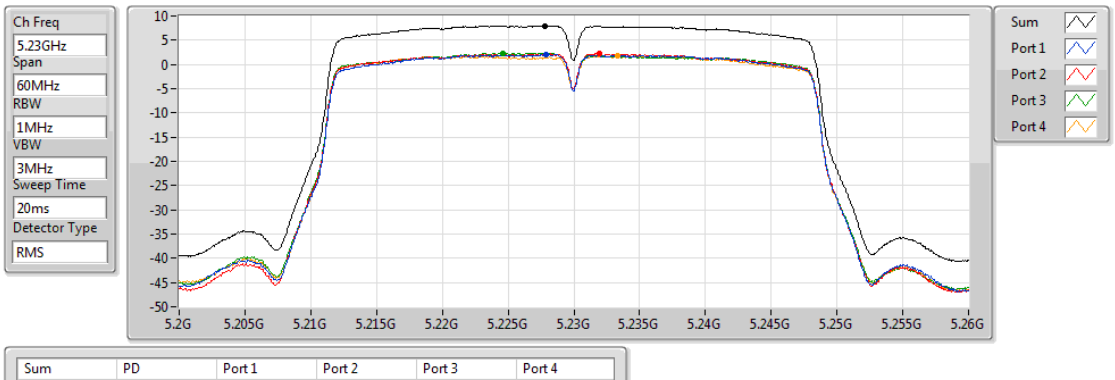
5190MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.43	8.43	2.39	3.01	2.91	2.04

802.11ac VHT40_Nss1,(MCS0)_4TX PSD

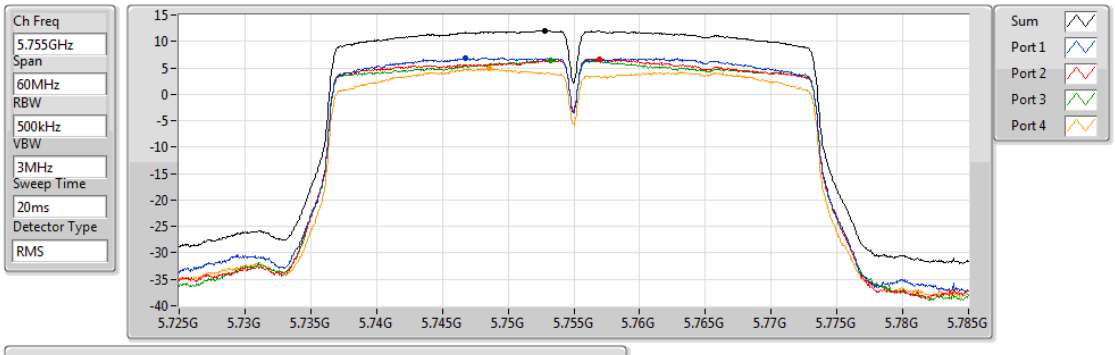
5230MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.99	7.99	2.06	2.26	2.33	1.74

802.11ac VHT40_Nss1,(MCS0)_4TX PSD

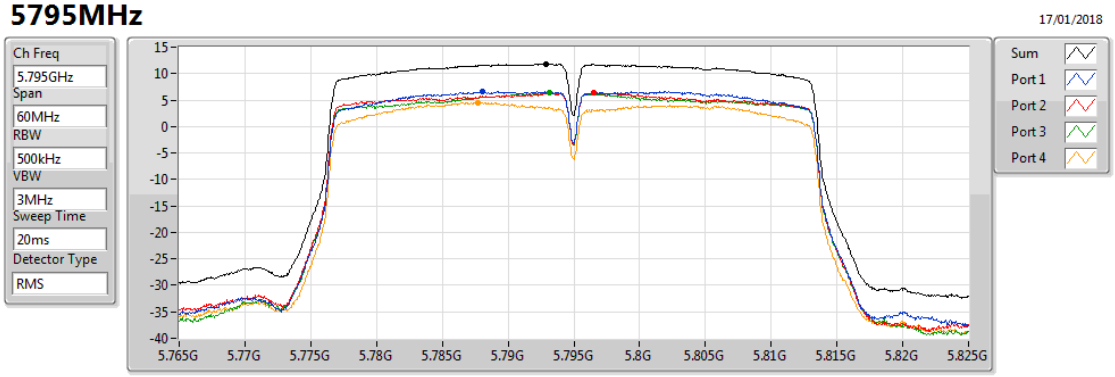
5755MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.99	11.99	6.88	6.68	6.42	4.80

802.11ac VHT40_Nss1,(MCS0)_4TX PSD

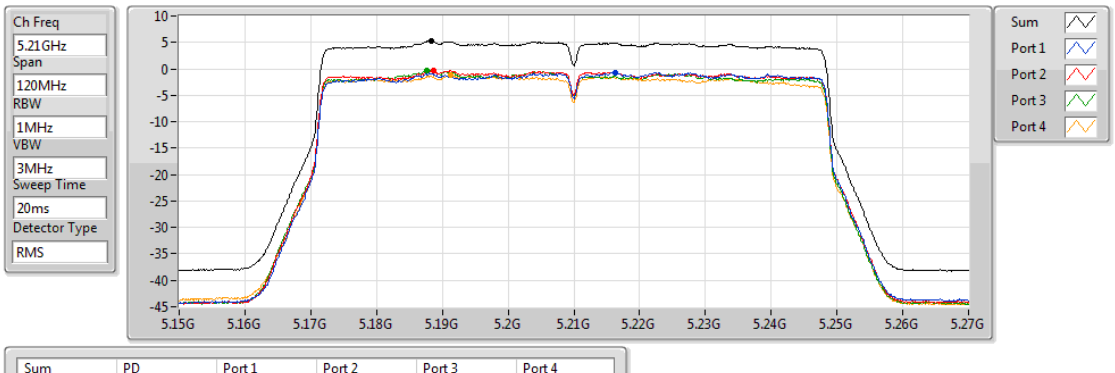
5795MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.81	11.81	6.58	6.41	6.50	4.53

802.11ac VHT80_Nss1,(MCS0)_4TX PSD

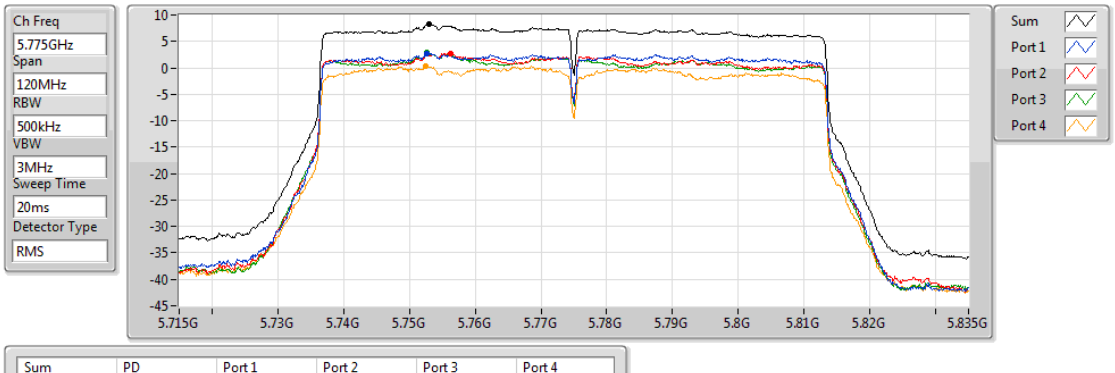
5210MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.28	5.28	-0.64	-0.35	-0.25	-1.24

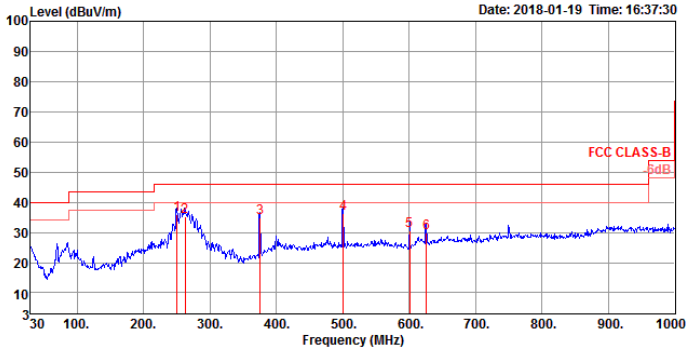
802.11ac VHT80_Nss1,(MCS0)_4TX PSD

5775MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.21	8.21	2.79	2.73	2.89	0.40

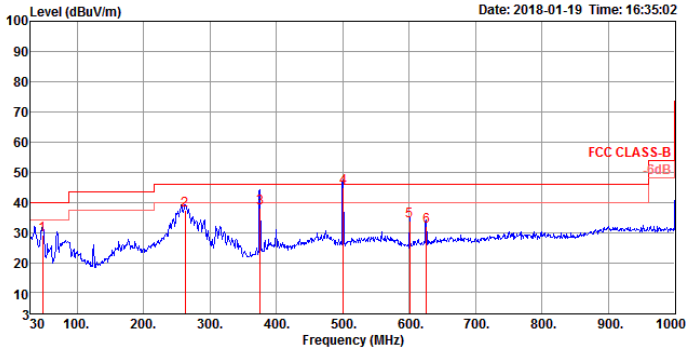
RSE below 1GHz Result			
Operating Mode	1	**Polarization**	Horizontal
Operating Function	CTX		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	250.19	36.01	46.00	-9.99	47.12	2.38	18.80	32.29	100	257	QP	HORIZONTAL
2	262.80	35.15	46.00	-10.85	45.39	2.45	19.59	32.28	125	112	QP	HORIZONTAL
3	375.32	34.74	46.00	-11.26	43.03	2.22	21.78	32.29	125	82	QP	HORIZONTAL
4	500.45	36.36	46.00	-9.64	41.93	2.94	23.82	32.33	200	141	QP	HORIZONTAL
5	600.36	30.71	46.00	-15.29	36.35	1.85	24.90	32.39	300	103	QP	HORIZONTAL
6	625.58	29.96	46.00	-16.04	34.42	2.76	25.16	32.38	100	84	QP	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 below 1GHz Result			
Operating Mode	1	**Polarization**	Vertical
Operating Function	CTX		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	48.43	29.04	40.00	-10.96	44.58	1.42	15.46	32.42	100	289	QP	VERTICAL
2	262.80	37.24	46.00	-8.76	47.48	2.45	19.59	32.28	200	0	QP	VERTICAL
3	375.32	38.02	46.00	-7.98	46.31	2.22	21.78	32.29	100	190	QP	VERTICAL
4	500.45	44.96	46.00	-1.04	50.53	2.94	23.82	32.33	100	240	QP	VERTICAL
5	600.36	33.95	46.00	-12.05	39.59	1.85	24.90	32.39	100	1	QP	VERTICAL
6	625.58	32.03	46.00	-13.97	36.49	2.76	25.16	32.38	125	4	QP	VERTICAL

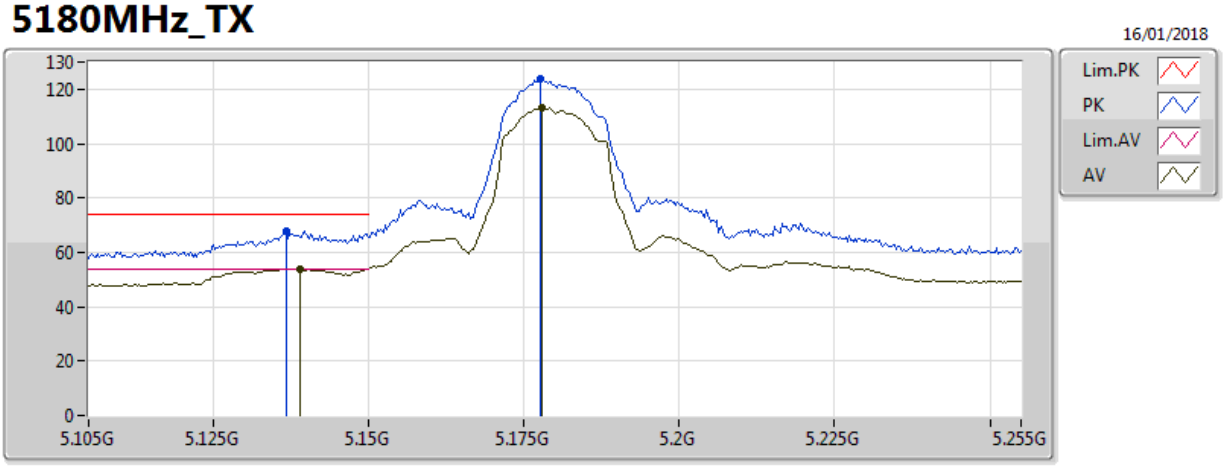
Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.725-5.85GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	Pass	PK	17.3489G	68.19	68.20	-0.01	22.62	3	Horizontal	268	1.25	-

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TX

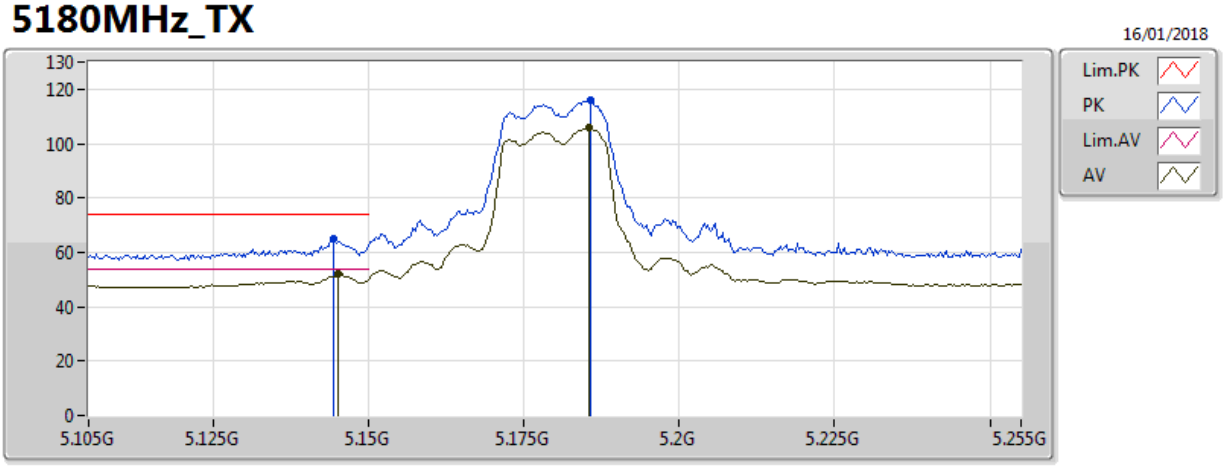


20180115
4TX_EUT Y
Setting 24.5
03-R-2-13

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.1389G	53.95	54.00	-0.05	5.65	3	Vertical	284	1.01	-
AV	5.1779G	113.23	Inf	-Inf	5.80	3	Vertical	284	1.01	-
PK	5.1368G	68.06	74.00	-5.94	5.64	3	Vertical	284	1.01	-
PK	5.1776G	123.56	Inf	-Inf	5.79	3	Vertical	284	1.01	-

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TX

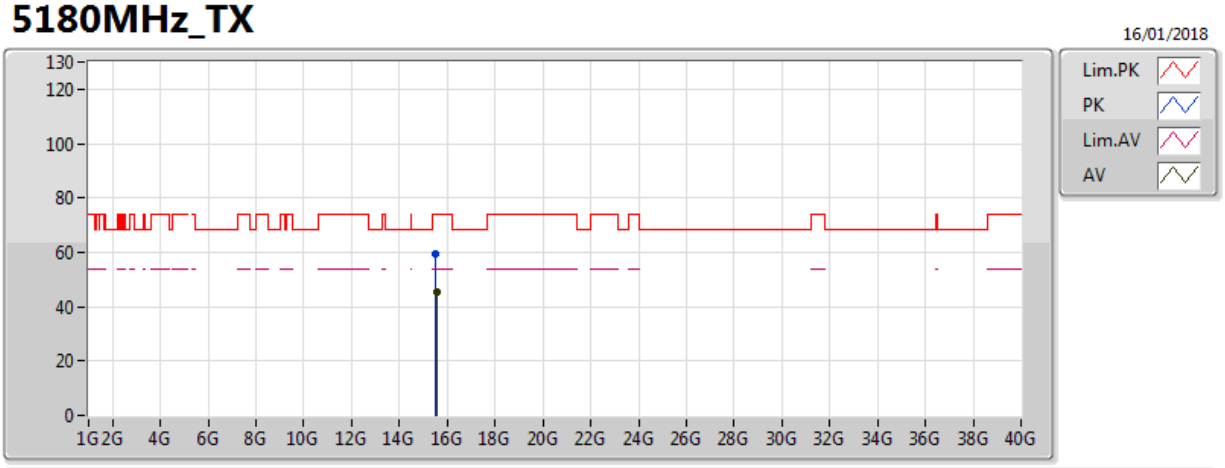


20180115
4TX_EUT Y
Setting 24.5
03-R-2-13

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.1452G	51.91	54.00	-2.09	5.67	3	Horizontal	219	2.91	-
AV	5.1854G	105.88	Inf	-Inf	5.82	3	Horizontal	219	2.91	-
PK	5.1443G	65.08	74.00	-8.92	5.67	3	Horizontal	219	2.91	-
PK	5.1857G	115.77	Inf	-Inf	5.82	3	Horizontal	219	2.91	-

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TX

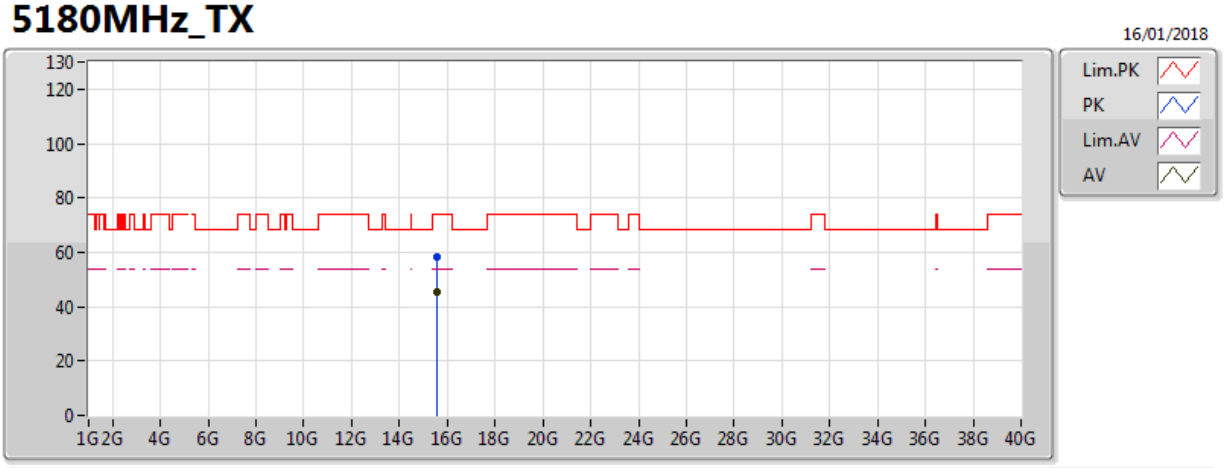


20180115
4TX_EUT Y
Setting 24.5
03-R-2

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	15.53832G	45.62	54.00	-8.38	15.92	3	Vertical	352	1.46	-
PK	15.53648G	59.13	74.00	-14.87	15.93	3	Vertical	352	1.46	-

802.11a_Nss1,(6Mbps)_4TX

5180MHz_TX

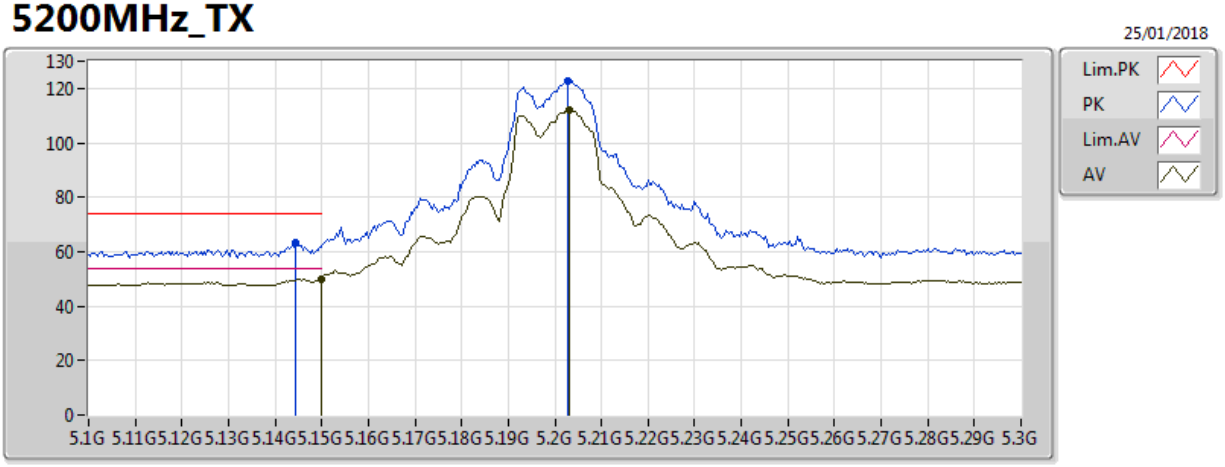


20180115
4TX_EUT Y
Setting 24.5
03-R-2

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	15.55064G	45.60	54.00	-8.40	15.88	3	Horizontal	120	1.49	-
PK	15.5416G	58.52	74.00	-15.48	15.91	3	Horizontal	120	1.49	-

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TX

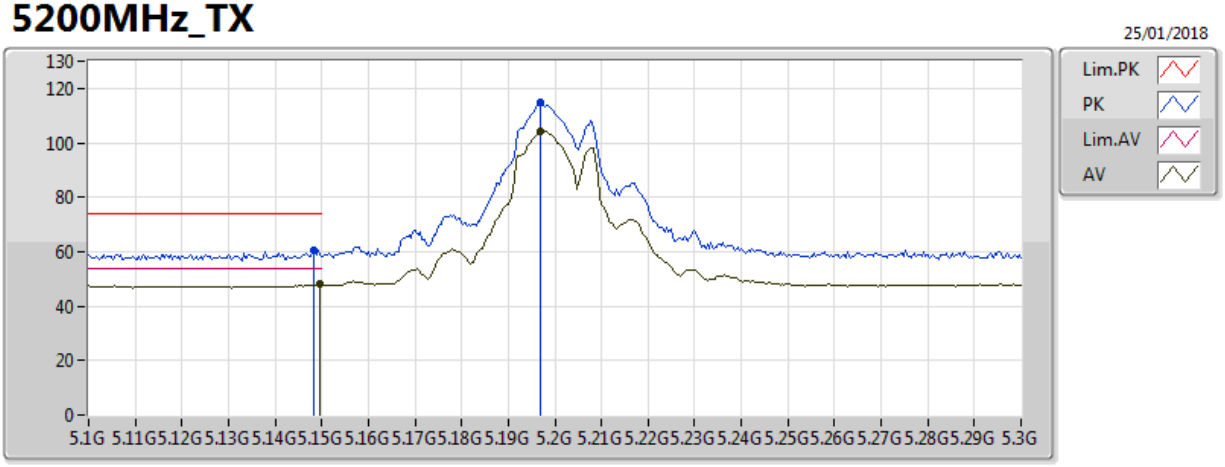


20180124
EUT Y 4TX
Setting 25.5
02-J-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.149995G	50.09	54.00	-3.91	9.90	3	Vertical	67	1.11	-
AV	5.2032G	112.14	Inf	-Inf	10.04	3	Vertical	67	1.11	-
PK	5.1444G	63.46	74.00	-10.54	9.89	3	Vertical	67	1.11	-
PK	5.2028G	122.77	Inf	-Inf	10.04	3	Vertical	67	1.11	-

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TX

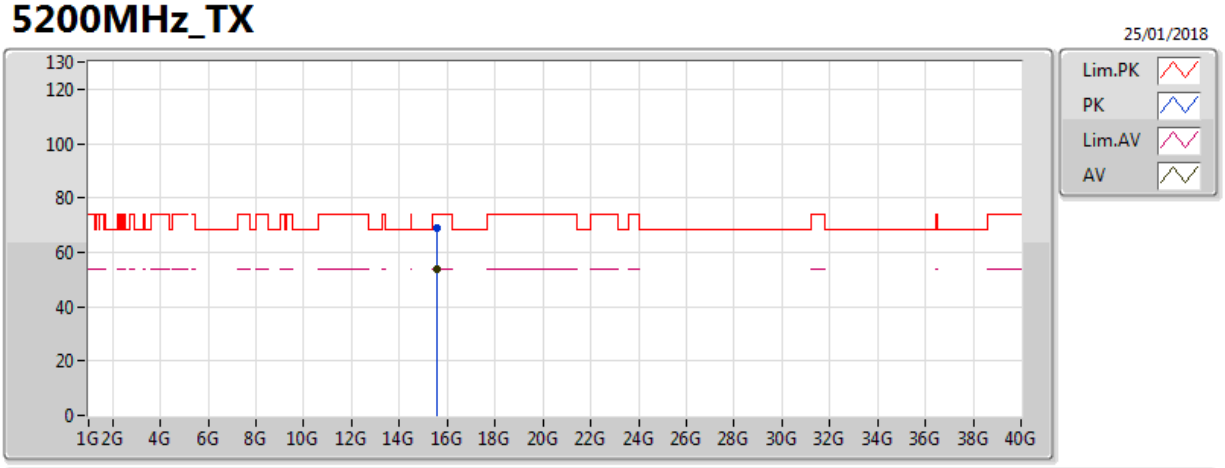


20180124
EUT Y 4TX
Setting 25.5
02-J-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.1496G	48.14	54.00	-5.86	9.90	3	Horizontal	241	1.50	-
AV	5.1968G	103.97	Inf	-Inf	10.01	3	Horizontal	241	1.50	-
PK	5.1484G	60.69	74.00	-13.31	9.90	3	Horizontal	241	1.50	-
PK	5.1968G	114.73	Inf	-Inf	10.01	3	Horizontal	241	1.50	-

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TX

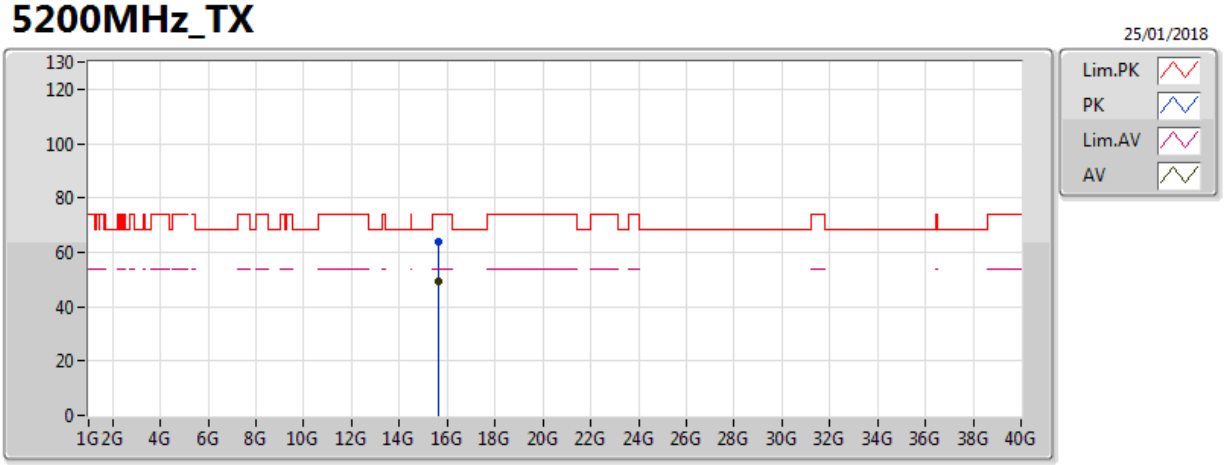


20180124
EUT Y 4TX
Setting 25.5
02-J-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	15.5984G	53.94	54.00	-0.06	18.58	3	Vertical	105	2.40	-
PK	15.5967G	68.90	74.00	-5.10	18.58	3	Vertical	105	2.40	-

802.11a_Nss1,(6Mbps)_4TX

5200MHz_TX

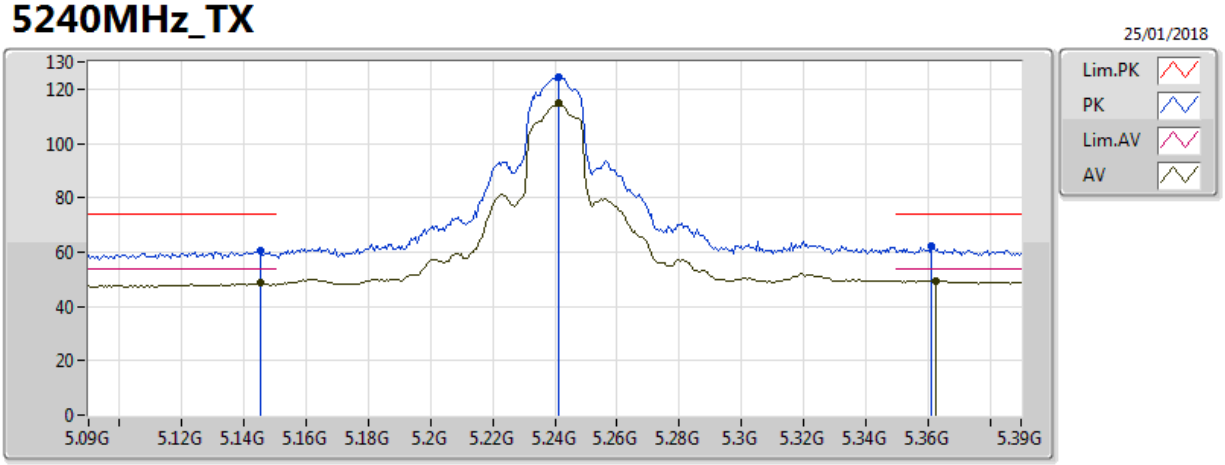


20180124
EUT Y 4TX
Setting 25.5
02-J-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	15.6048G	49.41	54.00	-4.59	18.57	3	Horizontal	13	1.50	-
PK	15.6048G	63.85	74.00	-10.15	18.57	3	Horizontal	13	1.50	-

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

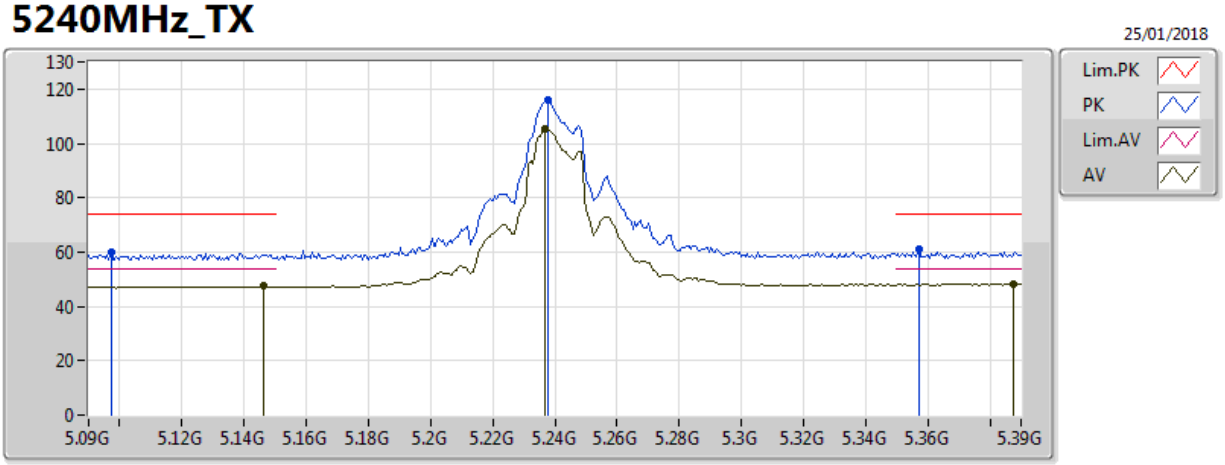


20180124
EUT Y 4TX
Setting 26
02-J-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.1452G	48.49	54.00	-5.51	9.89	3	Vertical	158	1.00	-
AV	5.2412G	114.79	Inf	-Inf	10.28	3	Vertical	158	1.00	-
AV	5.3624G	49.59	54.00	-4.41	11.03	3	Vertical	158	1.00	-
PK	5.1452G	60.49	74.00	-13.51	9.89	3	Vertical	158	1.00	-
PK	5.2412G	124.32	Inf	-Inf	10.28	3	Vertical	158	1.00	-
PK	5.3612G	62.41	74.00	-11.59	11.02	3	Vertical	158	1.00	-

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

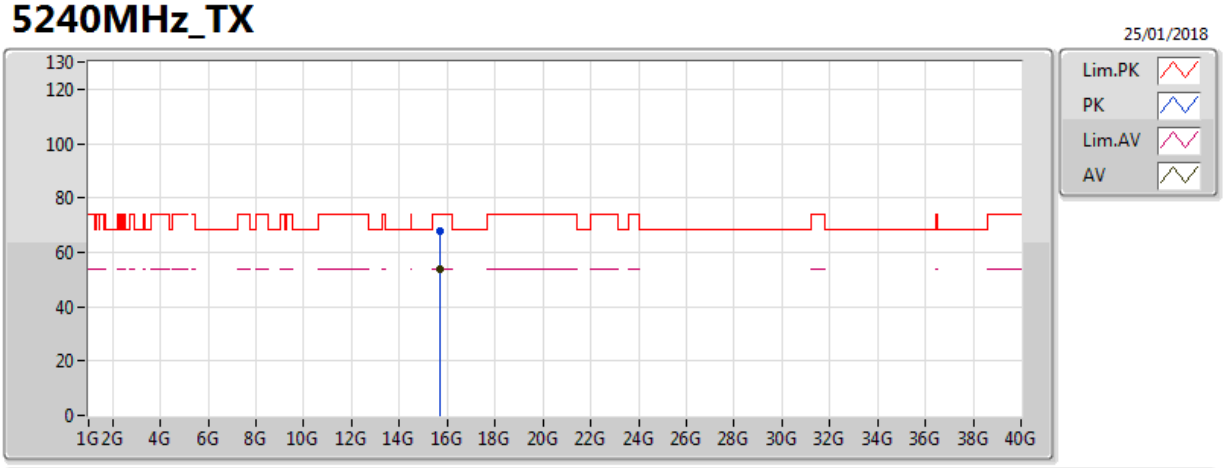


20180124
EUT Y 4TX
Setting 26
02-J-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.1464G	47.68	54.00	-6.32	9.89	3	Horizontal	237	1.37	-
AV	5.237G	105.47	Inf	-Inf	10.25	3	Horizontal	237	1.37	-
AV	5.3876G	48.25	54.00	-5.75	11.18	3	Horizontal	237	1.37	-
PK	5.0972G	59.91	74.00	-14.09	9.77	3	Horizontal	237	1.37	-
PK	5.2376G	115.76	Inf	-Inf	10.25	3	Horizontal	237	1.37	-
PK	5.357G	61.33	74.00	-12.67	10.99	3	Horizontal	237	1.37	-

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

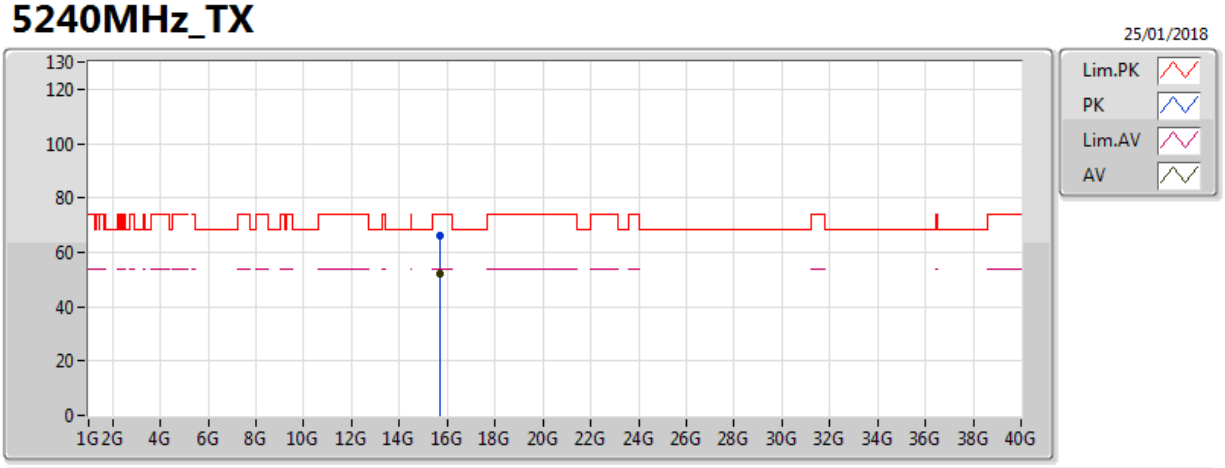


20180124
EUT Y 4TX
Setting 26
02-J-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	15.7201G	53.94	54.00	-0.06	18.38	3	Vertical	156	1.50	-
PK	15.7202G	67.99	74.00	-6.01	18.38	3	Vertical	156	1.50	-

802.11a_Nss1,(6Mbps)_4TX

5240MHz_TX

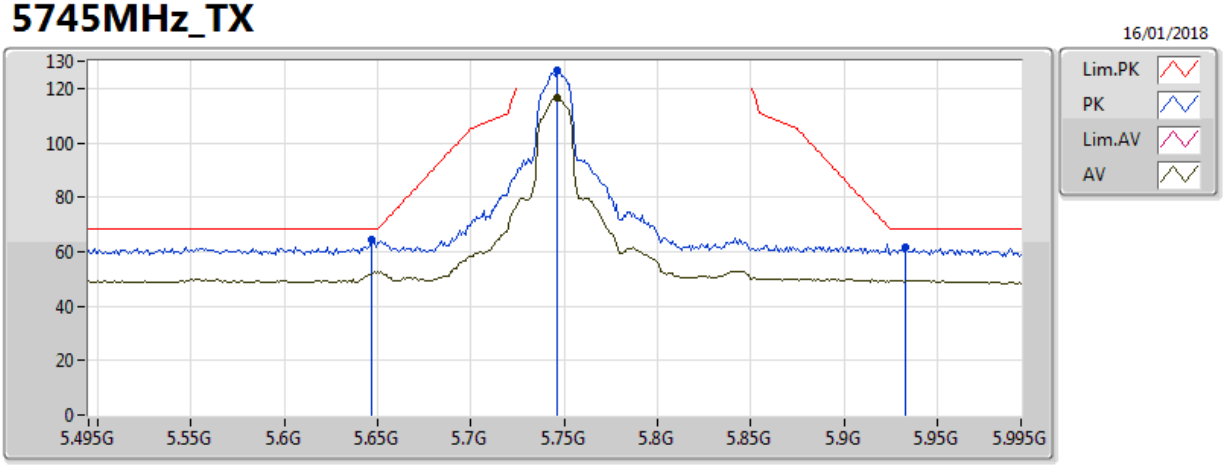


20180124
EUT Y 4TX
Setting 26
02-J-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	15.719G	51.88	54.00	-2.12	18.38	3	Horizontal	7	1.50	-
PK	15.7201G	65.94	74.00	-8.06	18.38	3	Horizontal	7	1.50	-

802.11a_Nss1,(6Mbps)_4TX

5745MHz_TX

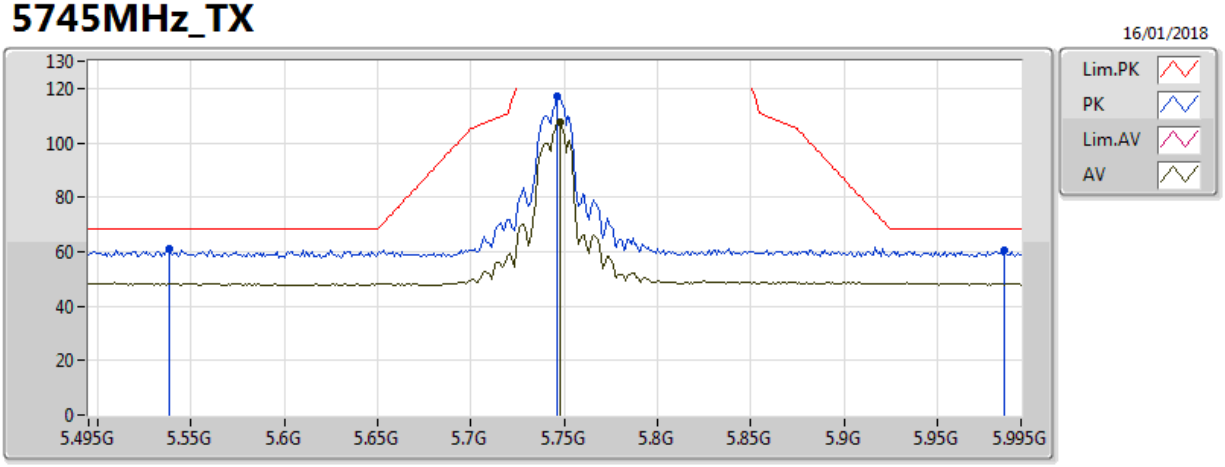


20180115
4TX_EUT Y
Setting 25
03-R-2-13

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.746G	116.57	Inf	-Inf	6.56	3	Vertical	280	1.01	-
PK	5.647G	64.66	68.20	-3.54	6.32	3	Vertical	280	1.01	-
PK	5.746G	126.47	Inf	-Inf	6.56	3	Vertical	280	1.01	-
PK	5.933G	61.51	68.20	-6.69	6.60	3	Vertical	280	1.01	-

802.11a_Nss1,(6Mbps)_4TX

5745MHz_TX

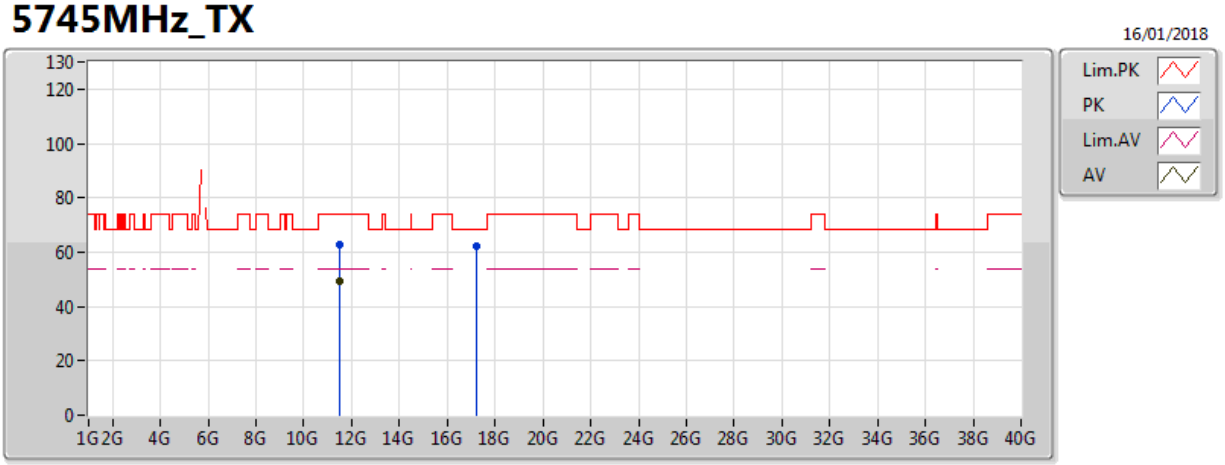


20180115
4TX_EUT Y
Setting 25
03-R-2-13

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.748G	107.77	Inf	-Inf	6.56	3	Horizontal	16	1.25	-
PK	5.538G	61.02	68.20	-7.18	6.22	3	Horizontal	16	1.25	-
PK	5.746G	117.28	Inf	-Inf	6.56	3	Horizontal	16	1.25	-
PK	5.986G	60.27	68.20	-7.93	6.56	3	Horizontal	16	1.25	-

802.11a_Nss1,(6Mbps)_4TX

5745MHz_TX

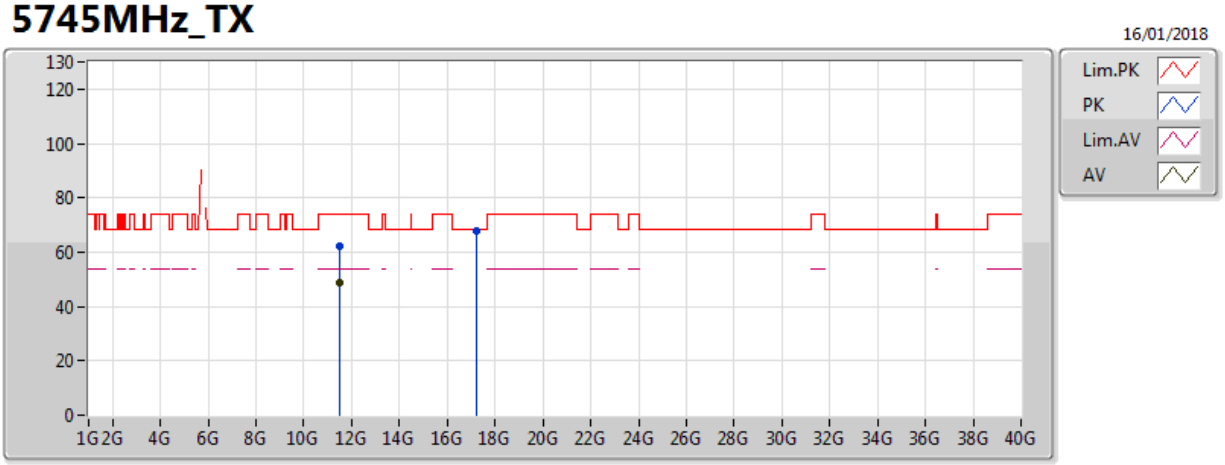


20180115
4TX_EUT Y
Setting 25
03-R-2

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.48584G	49.20	54.00	-4.80	14.41	3	Vertical	293	1.86	-
PK	11.48416G	62.72	74.00	-11.28	14.40	3	Vertical	293	1.86	-
PK	17.23292G	62.34	68.20	-5.86	19.36	3	Vertical	360	2.18	-

802.11a_Nss1,(6Mbps)_4TX

5745MHz_TX

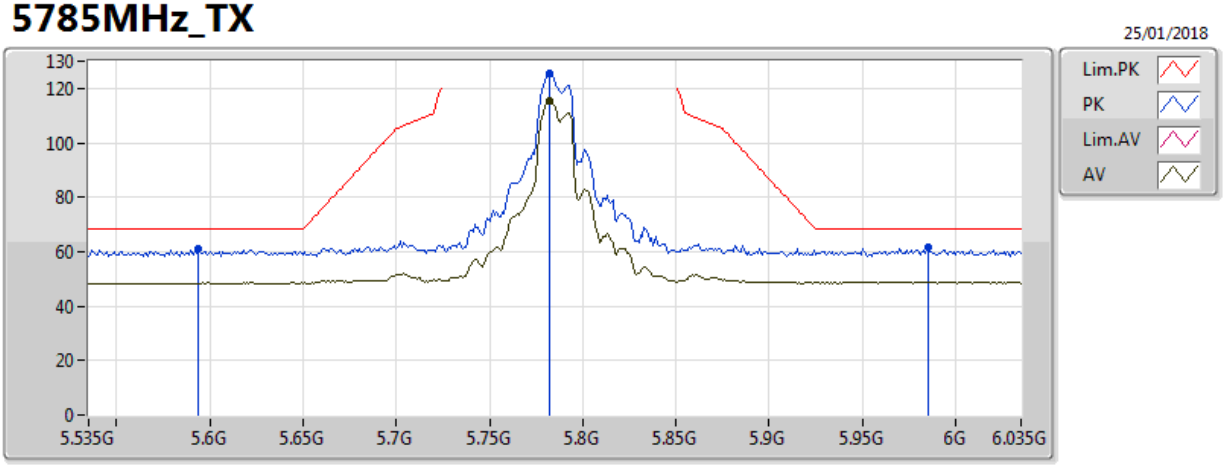


20180115
4TX_EUT Y
Setting 25
03-R-2

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.49184G	48.79	54.00	-5.21	14.41	3	Horizontal	10	1.57	-
PK	11.49136G	62.03	74.00	-11.97	14.41	3	Horizontal	10	1.57	-
PK	17.23316G	67.76	68.20	-0.44	19.36	3	Horizontal	4	2.50	-

802.11a_Nss1,(6Mbps)_4TX

5785MHz_TX

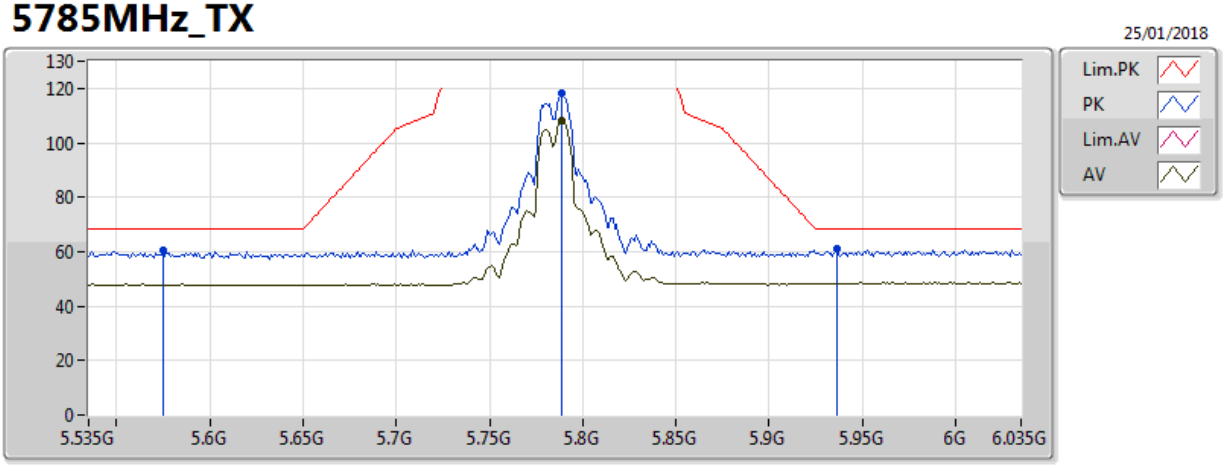


20180124
EUT Y 4TX
Setting 25
02-J-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.782G	115.21	Inf	-Inf	10.71	3	Vertical	179	1.02	-
PK	5.594G	60.96	68.20	-7.24	10.53	3	Vertical	179	1.02	-
PK	5.782G	125.39	Inf	-Inf	10.71	3	Vertical	179	1.02	-
PK	5.985G	61.47	68.20	-6.73	11.23	3	Vertical	179	1.02	-

802.11a_Nss1,(6Mbps)_4TX

5785MHz_TX

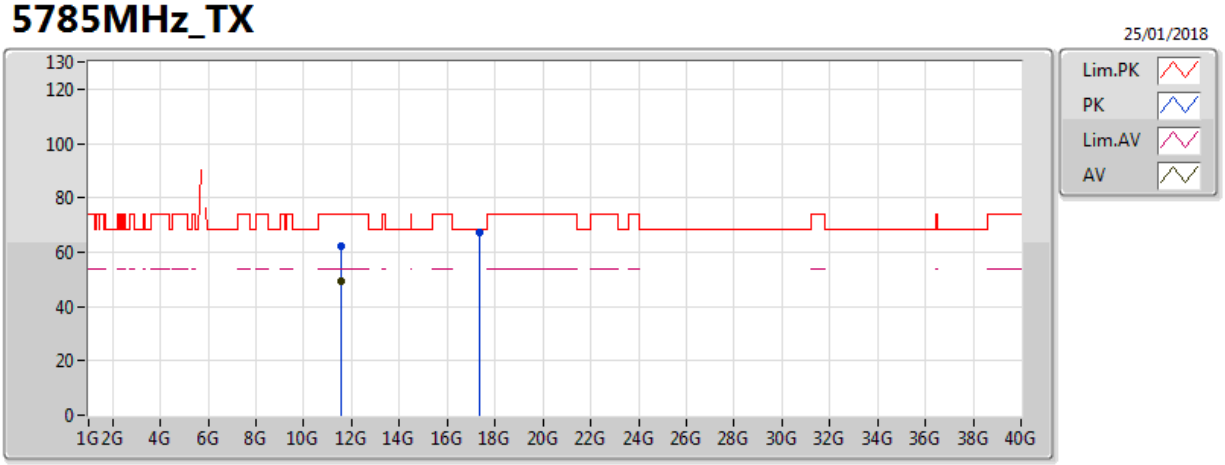


20180124
EUT Y 4TX
Setting 25
02-J-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.789G	108.20	Inf	-Inf	10.72	3	Horizontal	14	1.50	-
PK	5.575G	60.39	68.20	-7.81	10.62	3	Horizontal	14	1.50	-
PK	5.789G	118.31	Inf	-Inf	10.72	3	Horizontal	14	1.50	-
PK	5.936G	60.98	68.20	-7.22	11.10	3	Horizontal	14	1.50	-

802.11a_Nss1,(6Mbps)_4TX

5785MHz_TX

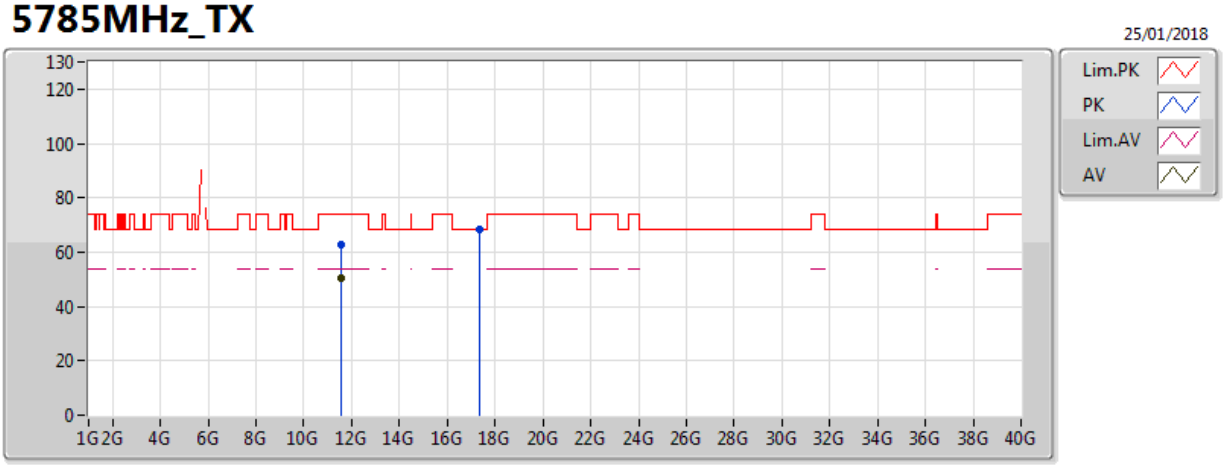


20180124
EUT Y 4TX
Setting 25
02-J-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.5706G	49.04	54.00	-4.96	15.55	3	Vertical	67	2.79	-
PK	11.5708G	62.13	74.00	-11.87	15.55	3	Vertical	67	2.79	-
PK	17.3547G	67.30	68.20	-0.90	22.64	3	Vertical	327	2.76	-

802.11a_Nss1,(6Mbps)_4TX

5785MHz_TX

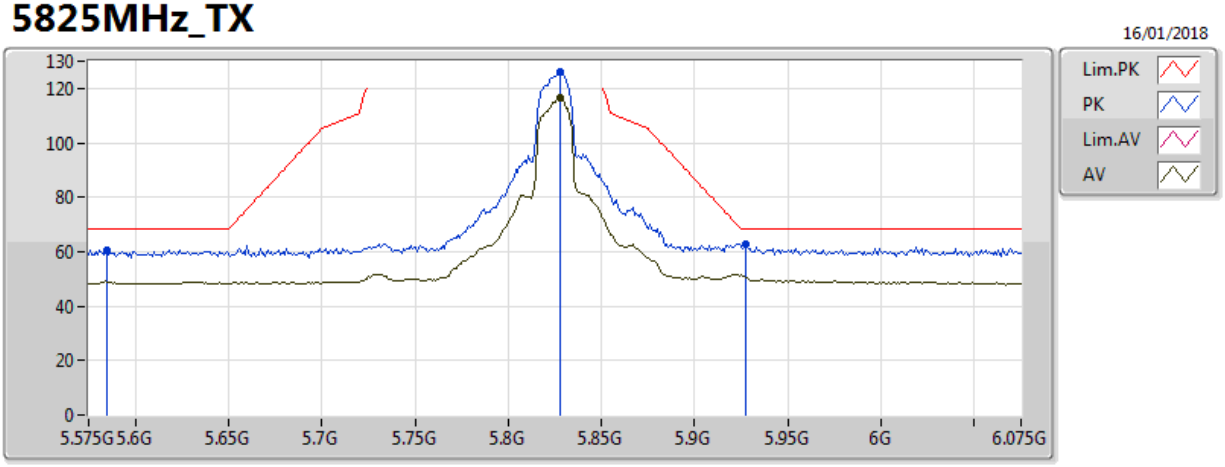


20180124
EUT Y 4TX
Setting 25
02-J-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.5764G	50.20	54.00	-3.80	15.56	3	Horizontal	35	1.50	-
PK	11.5753G	63.02	74.00	-10.98	15.56	3	Horizontal	35	1.50	-
PK	17.3489G	68.19	68.20	-0.01	22.62	3	Horizontal	268	1.25	-

802.11a_Nss1,(6Mbps)_4TX

5825MHz_TX

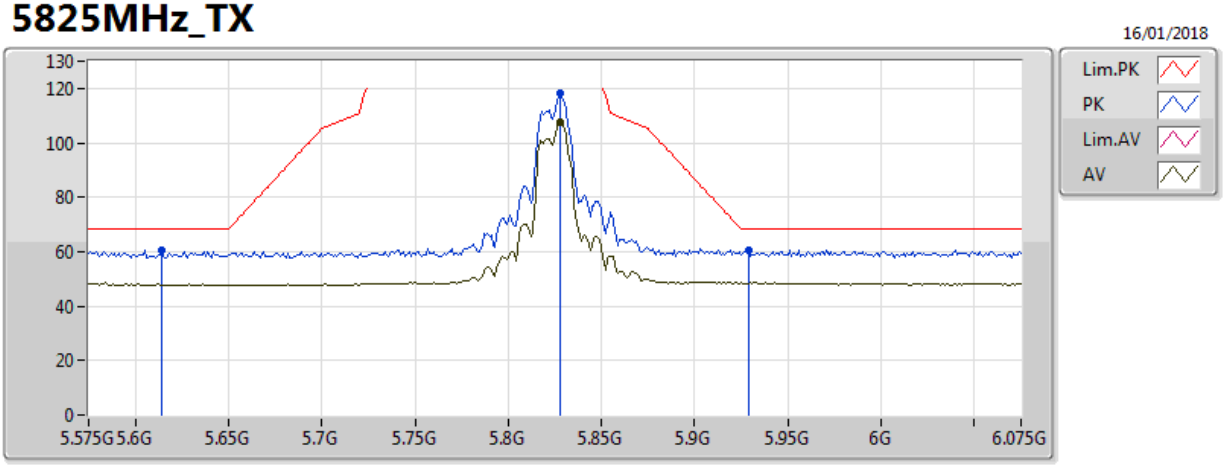


20180115
4TX_EUT Y
Setting 24.5
03-R-2-13

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.828G	116.29	Inf	-Inf	6.67	3	Vertical	282	1.01	-
PK	5.585G	60.74	68.20	-7.46	6.21	3	Vertical	282	1.01	-
PK	5.828G	126.09	Inf	-Inf	6.67	3	Vertical	282	1.01	-
PK	5.927G	62.97	68.20	-5.23	6.60	3	Vertical	282	1.01	-

802.11a_Nss1,(6Mbps)_4TX

5825MHz_TX

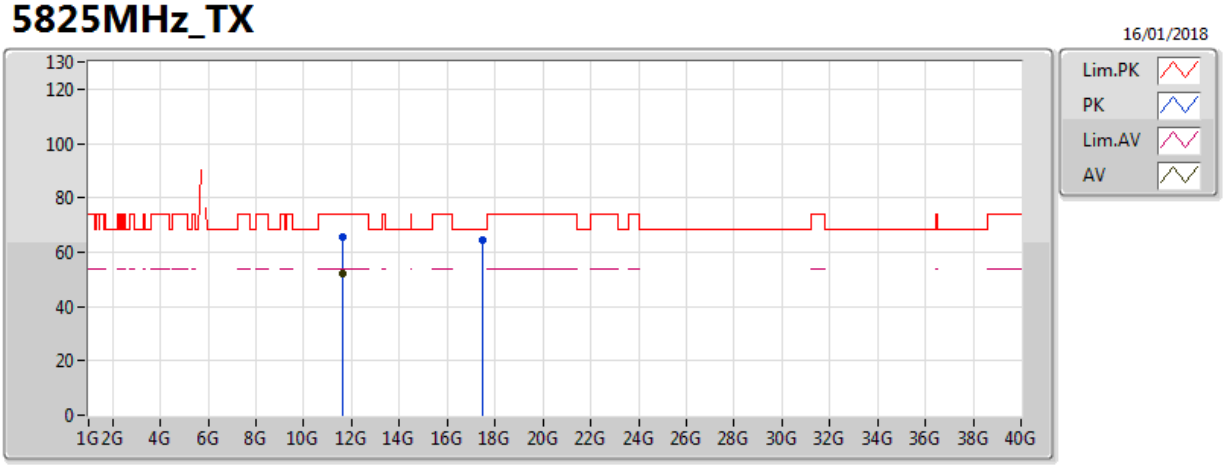


20180115
4TX_EUT Y
Setting 24.5
03-R-2-13

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.828G	107.50	Inf	-Inf	6.67	3	Horizontal	14	1.46	-
PK	5.614G	60.31	68.20	-7.89	6.24	3	Horizontal	14	1.46	-
PK	5.828G	118.18	Inf	-Inf	6.67	3	Horizontal	14	1.46	-
PK	5.929G	60.67	68.20	-7.53	6.60	3	Horizontal	14	1.46	-

802.11a_Nss1,(6Mbps)_4TX

5825MHz_TX

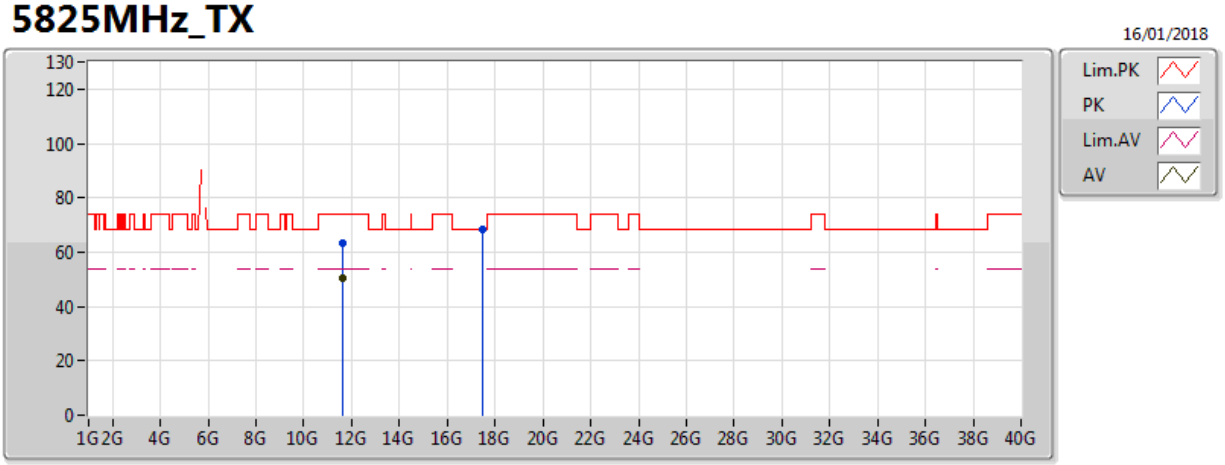


20180115
4TX_EUT Y
Setting 24.5
03-R-2

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.65352G	51.90	54.00	-2.10	14.60	3	Vertical	34	2.99	-
PK	11.65408G	65.42	74.00	-8.58	14.60	3	Vertical	34	2.99	-
PK	17.4746G	64.33	68.20	-3.87	20.71	3	Vertical	352	2.89	-

802.11a_Nss1,(6Mbps)_4TX

5825MHz_TX

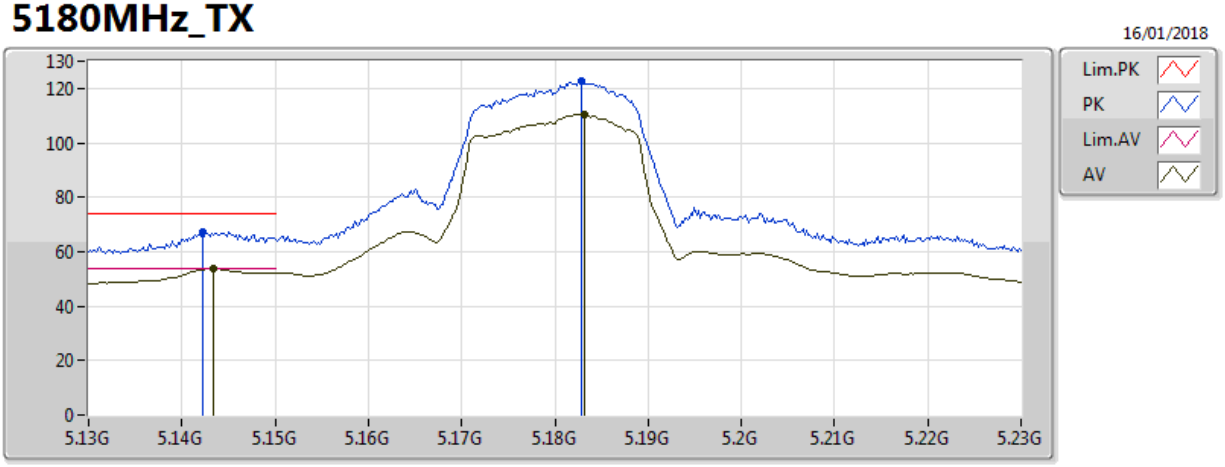


20180115
4TX_EUT Y
Setting 24.5
03-R-2

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.6436G	50.50	54.00	-3.50	14.58	3	Horizontal	8	1.67	-
PK	11.6428G	63.41	74.00	-10.59	14.58	3	Horizontal	8	1.67	-
PK	17.47404G	68.16	68.20	-0.04	20.71	3	Horizontal	350	1.77	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5180MHz_TX

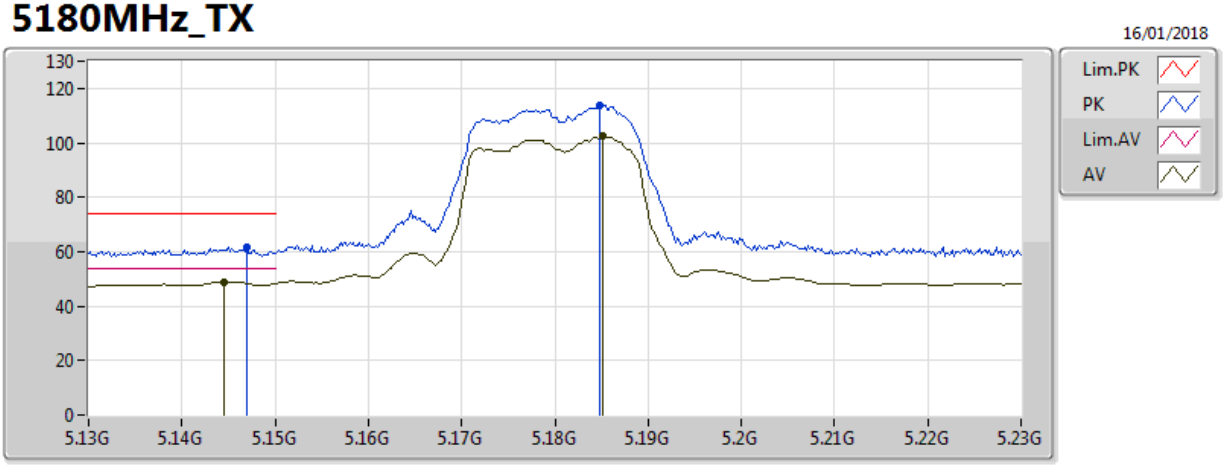


20180115
4TX_EUT Y
Setting 22.5
03-R-2-13

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.1434G	53.78	54.00	-0.22	5.66	3	Vertical	160	1.01	-
AV	5.1832G	110.51	Inf	-Inf	5.82	3	Vertical	160	1.01	-
PK	5.1422G	67.35	74.00	-6.65	5.66	3	Vertical	160	1.01	-
PK	5.1828G	122.71	Inf	-Inf	5.81	3	Vertical	160	1.01	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5180MHz_TX

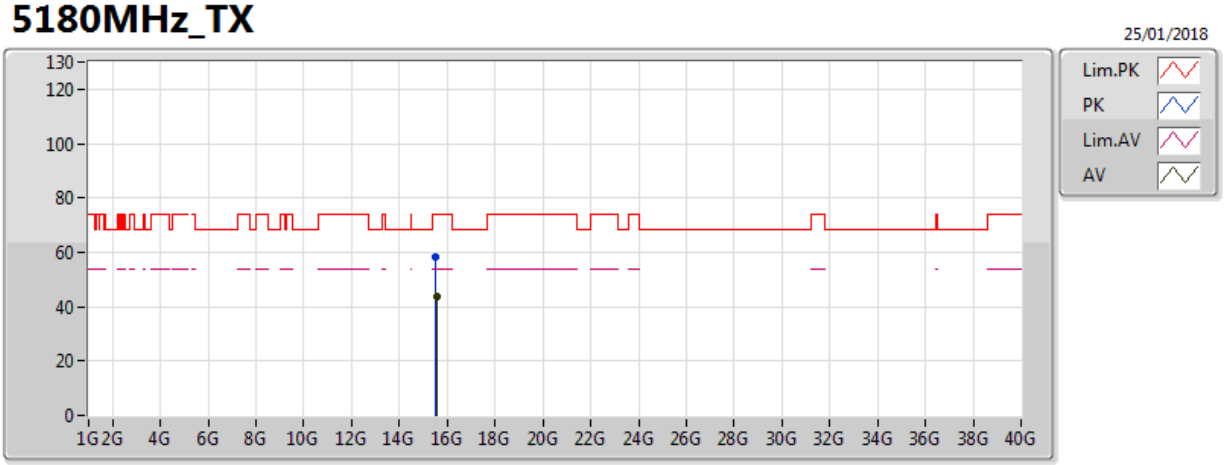


20180115
4TX_EUT Y
Setting 22.5
03-R-2-13

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.1446G	48.96	54.00	-5.04	5.67	3	Horizontal	219	2.93	-
AV	5.1852G	102.31	Inf	-Inf	5.82	3	Horizontal	219	2.93	-
PK	5.147G	61.54	74.00	-12.46	5.68	3	Horizontal	219	2.93	-
PK	5.1848G	113.66	Inf	-Inf	5.82	3	Horizontal	219	2.93	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5180MHz_TX

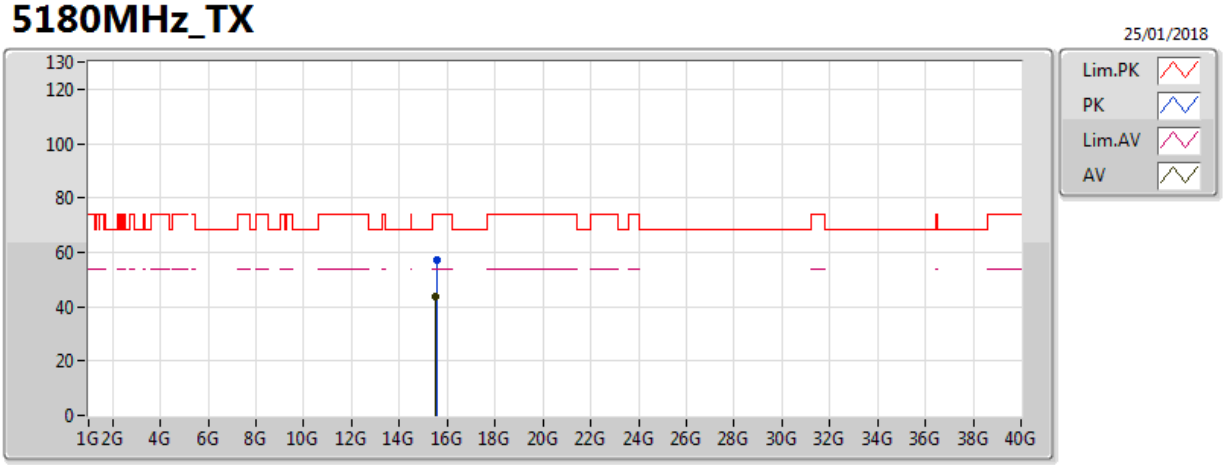


20180124
EUT Y 4TX
Setting 22.5
02-J-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	15.5386G	43.69	54.00	-10.31	18.68	3	Vertical	41	1.61	-
PK	15.5293G	58.21	74.00	-15.79	18.70	3	Vertical	41	1.61	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5180MHz_TX

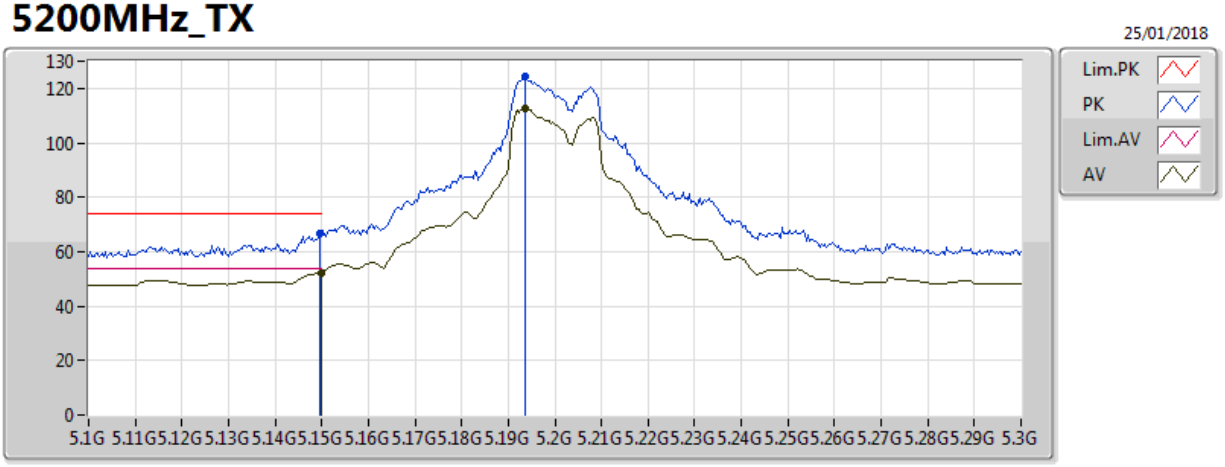


20180124
EUT Y 4TX
Setting 22.5
02-J-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	15.5293G	43.72	54.00	-10.28	18.70	3	Horizontal	142	2.35	-
PK	15.5512G	57.35	74.00	-16.65	18.66	3	Horizontal	142	2.35	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5200MHz_TX

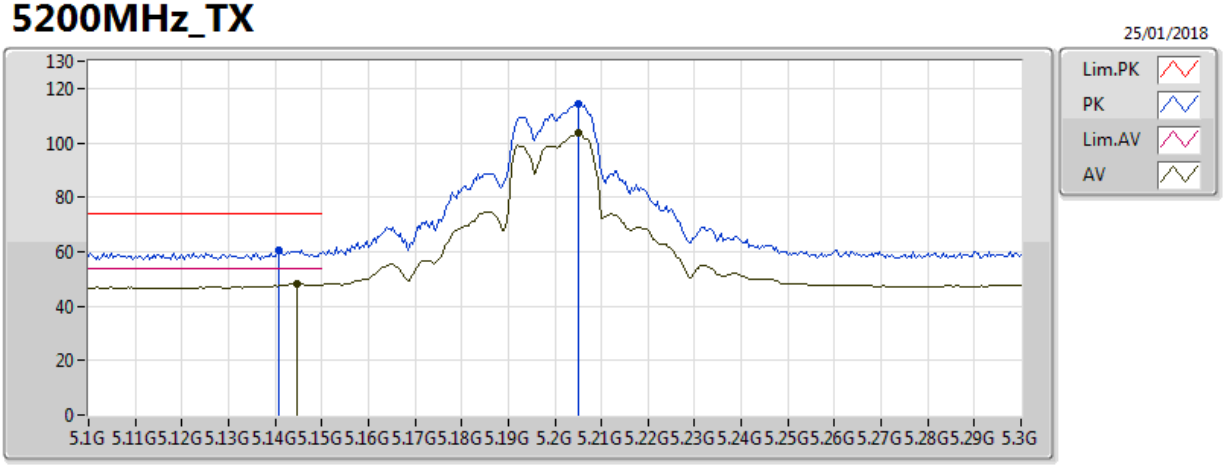


20180124
EUT Y 4TX
Setting 27
02-J-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.149995G	52.32	54.00	-1.68	9.90	3	Vertical	116	1.00	-
AV	5.1936G	112.37	Inf	-Inf	10.00	3	Vertical	116	1.00	-
PK	5.1496G	66.62	74.00	-7.38	9.90	3	Vertical	116	1.00	-
PK	5.1936G	124.51	Inf	-Inf	10.00	3	Vertical	116	1.00	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5200MHz_TX

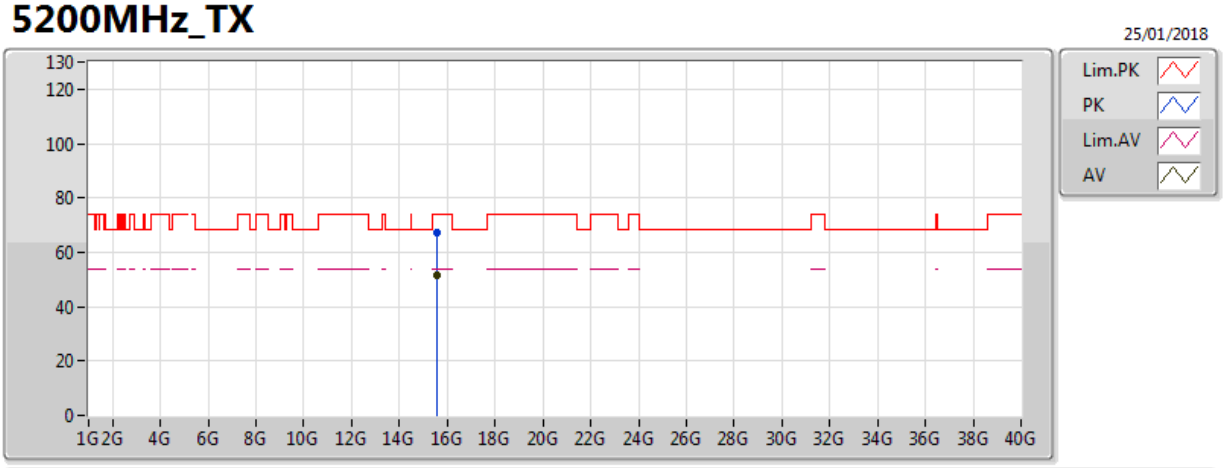


20180124
EUT Y 4TX
Setting 27
02-J-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.1448G	48.28	54.00	-5.72	9.89	3	Horizontal	220	1.44	-
AV	5.2052G	103.55	Inf	-Inf	10.05	3	Horizontal	220	1.44	-
PK	5.1408G	60.77	74.00	-13.23	9.88	3	Horizontal	220	1.44	-
PK	5.2052G	114.35	Inf	-Inf	10.05	3	Horizontal	220	1.44	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5200MHz_TX

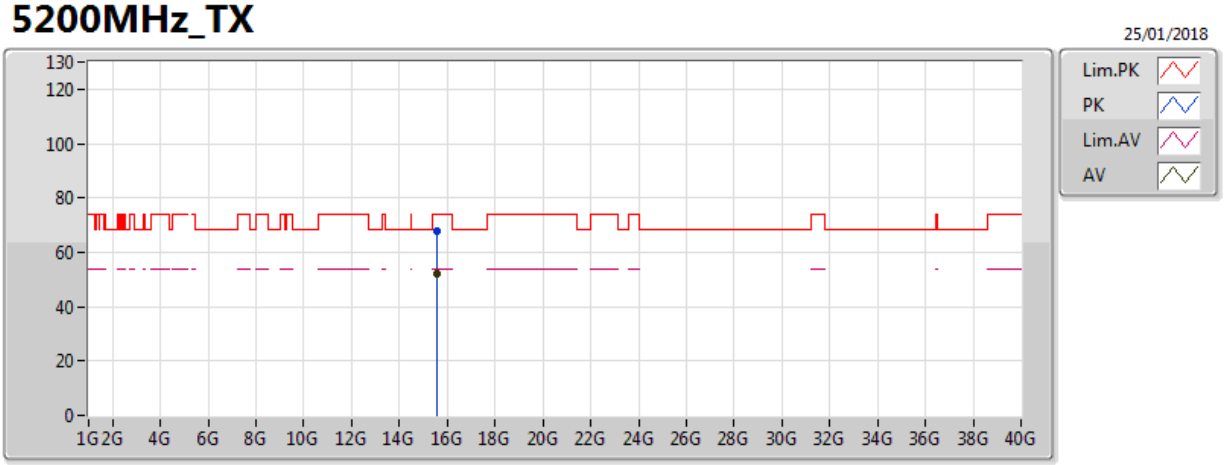


20180124
EUT Y 4TX
Setting 27
02-J-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	15.5989G	51.80	54.00	-2.20	18.58	3	Vertical	8	1.50	-
PK	15.5997G	67.44	74.00	-6.56	18.58	3	Vertical	8	1.50	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5200MHz_TX

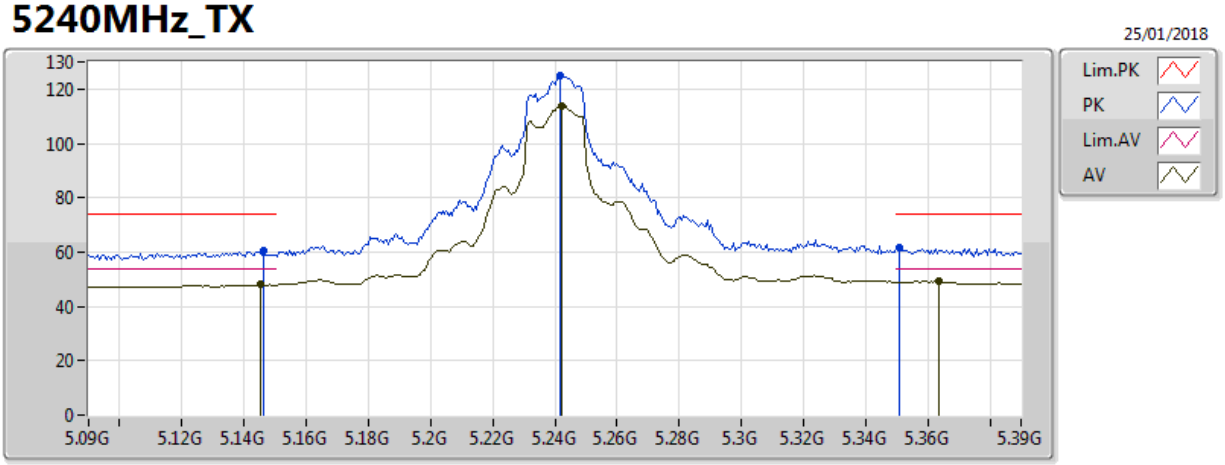


20180124
EUT Y 4TX
Setting 27
02-J-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	15.5931G	52.03	54.00	-1.97	18.59	3	Horizontal	297	2.38	-
PK	15.5953G	67.81	74.00	-6.19	18.59	3	Horizontal	297	2.38	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5240MHz_TX

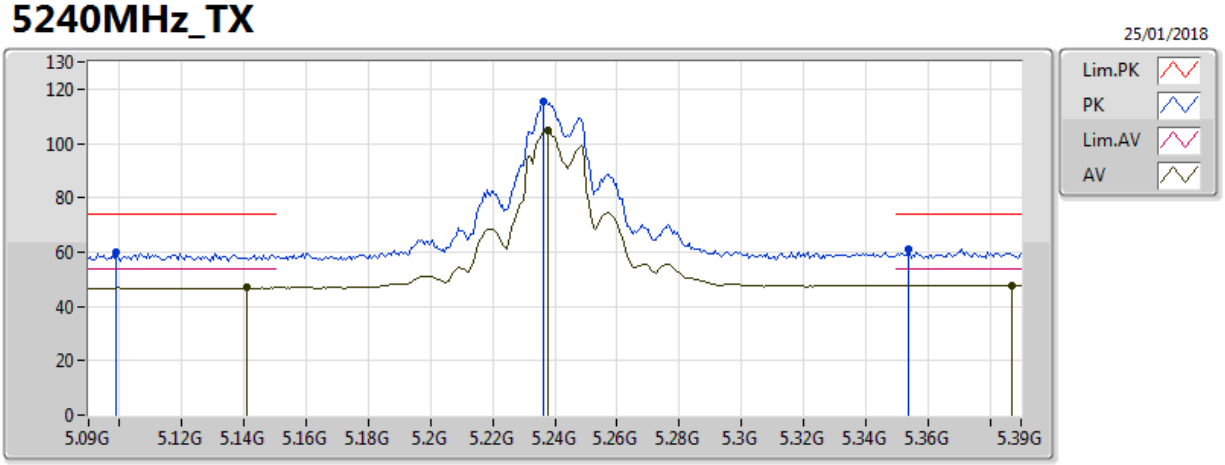


20180124
EUT Y 4TX
Setting 27
02-J-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.1452G	48.05	54.00	-5.95	9.89	3	Vertical	163	1.01	-
AV	5.2424G	113.95	Inf	-Inf	10.28	3	Vertical	163	1.01	-
AV	5.3636G	49.18	54.00	-4.82	11.03	3	Vertical	163	1.01	-
PK	5.1464G	60.41	74.00	-13.59	9.89	3	Vertical	163	1.01	-
PK	5.2418G	125.03	Inf	-Inf	10.28	3	Vertical	163	1.01	-
PK	5.351G	61.44	74.00	-12.56	10.96	3	Vertical	163	1.01	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5240MHz_TX

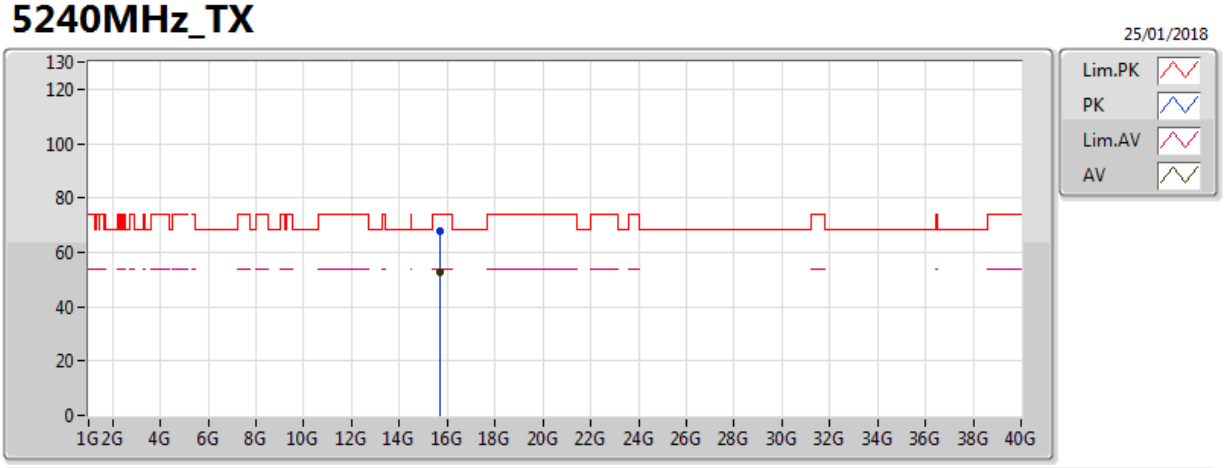


20180124
EUT Y 4TX
Setting 27
02-J-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.141G	46.86	54.00	-7.14	9.88	3	Horizontal	232	1.50	-
AV	5.2376G	104.84	Inf	-Inf	10.25	3	Horizontal	232	1.50	-
AV	5.387G	47.79	54.00	-6.21	11.18	3	Horizontal	232	1.50	-
PK	5.099G	59.82	74.00	-14.18	9.78	3	Horizontal	232	1.50	-
PK	5.2364G	115.21	Inf	-Inf	10.25	3	Horizontal	232	1.50	-
PK	5.354G	61.17	74.00	-12.83	10.97	3	Horizontal	232	1.50	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5240MHz_TX

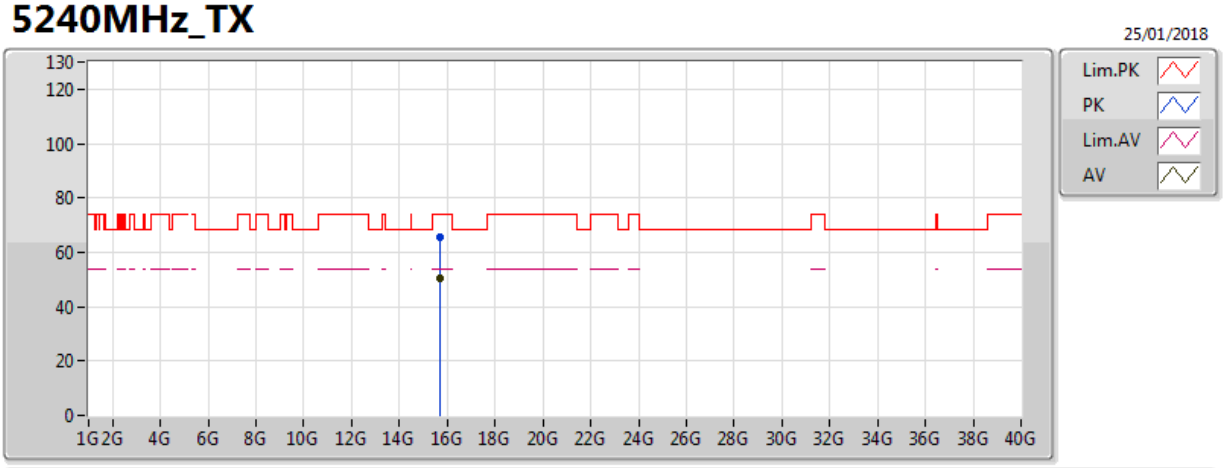


20180124
EUT Y 4TX
Setting 27
02-J-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	15.7208G	52.74	54.00	-1.26	18.38	3	Vertical	152	1.59	-
PK	15.7199G	67.92	74.00	-6.08	18.38	3	Vertical	152	1.59	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5240MHz_TX

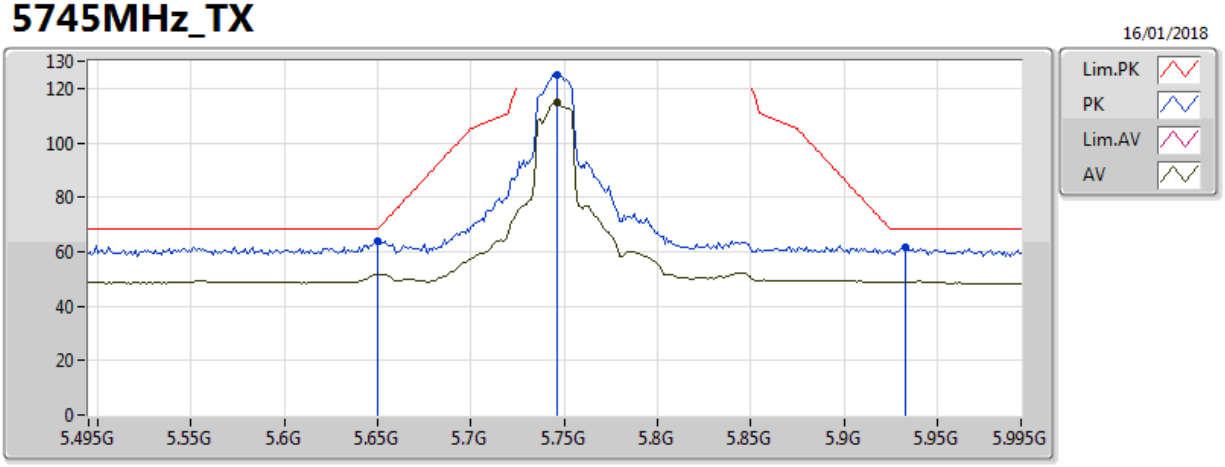


20180124
EUT Y 4TX
Setting 27
02-J-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	15.7191G	50.44	54.00	-3.56	18.38	3	Horizontal	262	1.48	-
PK	15.7198G	65.73	74.00	-8.27	18.38	3	Horizontal	262	1.48	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5745MHz_TX

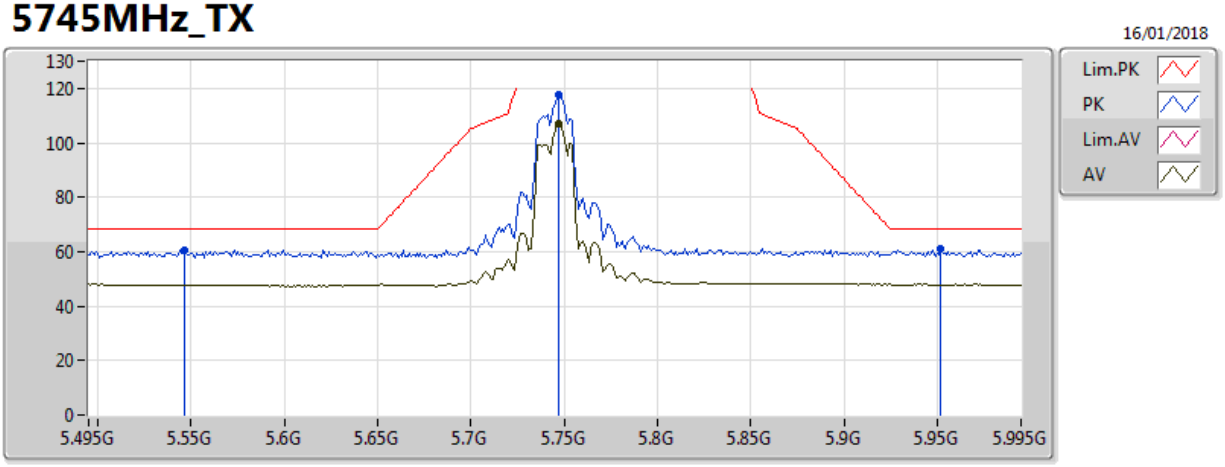


20180115
4TX_EUT Y
Setting 25
03-R-2-13

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.746G	114.68	Inf	-Inf	6.56	3	Vertical	279	1.00	-
PK	5.65G	63.91	68.20	-4.29	6.32	3	Vertical	279	1.00	-
PK	5.746G	125.18	Inf	-Inf	6.56	3	Vertical	279	1.00	-
PK	5.933G	61.58	68.20	-6.62	6.60	3	Vertical	279	1.00	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5745MHz_TX

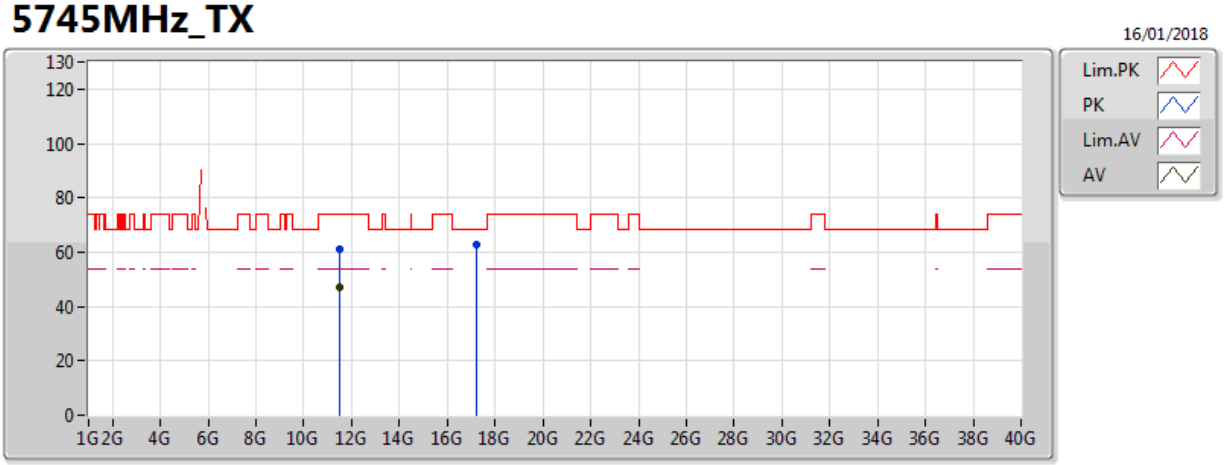


20180115
4TX_EUT Y
Setting 25
03-R-2-13

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.747G	107.12	Inf	-Inf	6.56	3	Horizontal	15	1.39	-
PK	5.546G	60.44	68.20	-7.76	6.22	3	Horizontal	15	1.39	-
PK	5.747G	117.86	Inf	-Inf	6.56	3	Horizontal	15	1.39	-
PK	5.952G	60.93	68.20	-7.27	6.58	3	Horizontal	15	1.39	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5745MHz_TX

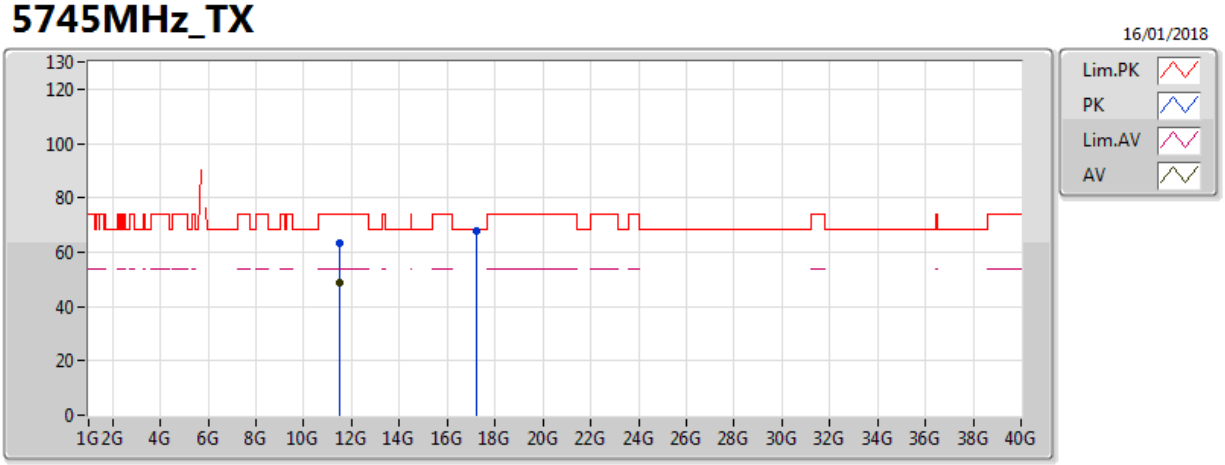


20180115
4TX_EUT Y
Setting 25
03-R-2

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.48628G	47.29	54.00	-6.71	14.41	3	Vertical	295	1.46	-
PK	11.48628G	60.96	74.00	-13.04	14.41	3	Vertical	295	1.46	-
PK	17.22684G	62.96	68.20	-5.24	19.32	3	Vertical	303	2.25	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5745MHz_TX

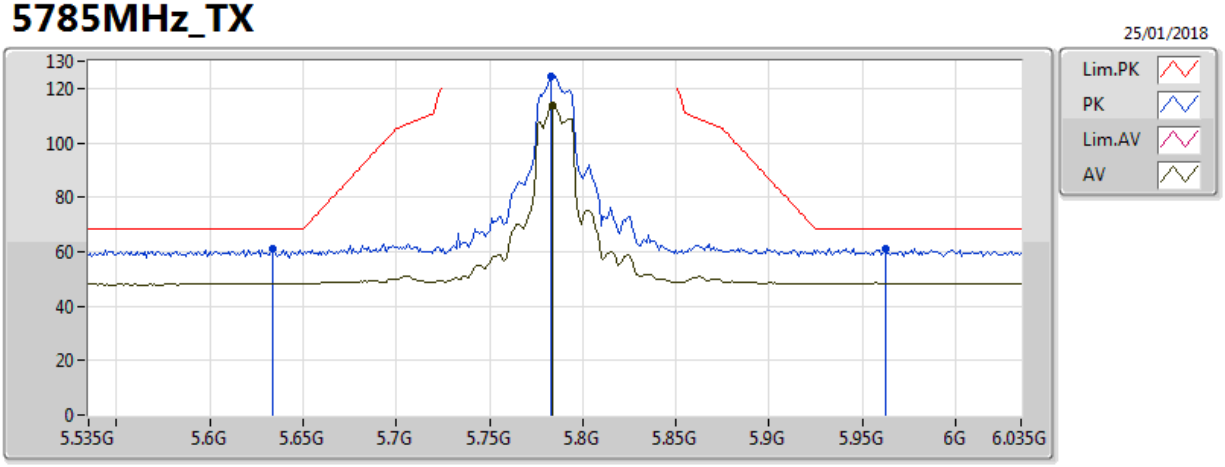


20180115
4TX_EUT Y
Setting 25
03-R-2

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.49372G	48.83	54.00	-5.17	14.41	3	Horizontal	271	2.96	-
PK	11.49288G	63.37	74.00	-10.63	14.41	3	Horizontal	271	2.96	-
PK	17.23392G	67.72	68.20	-0.48	19.36	3	Horizontal	3	2.49	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5785MHz_TX

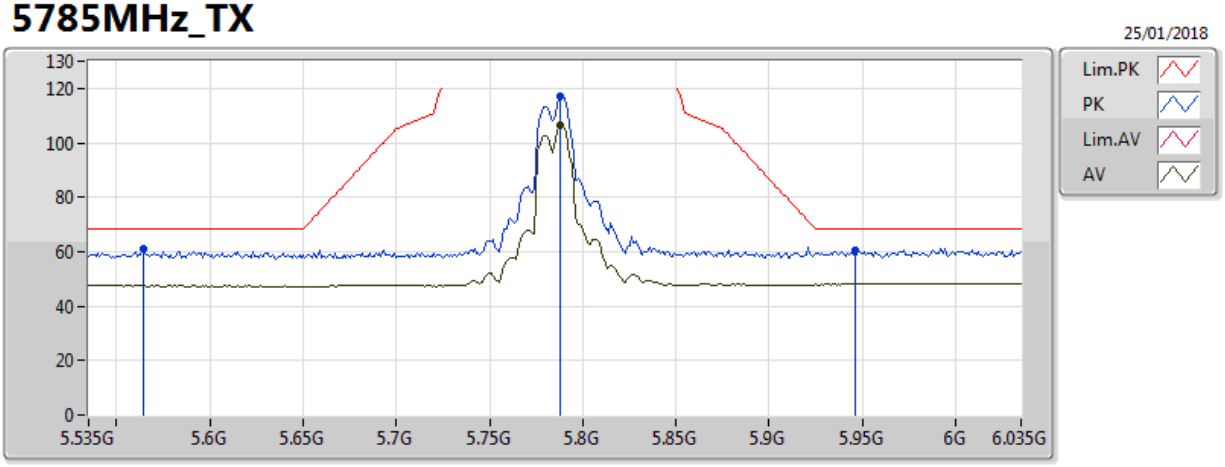


20180124
EUT Y 4TX
Setting 24.5
02-J-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.784G	113.95	Inf	-Inf	10.72	3	Vertical	192	1.01	-
PK	5.634G	61.27	68.20	-6.93	10.53	3	Vertical	192	1.01	-
PK	5.783G	124.37	Inf	-Inf	10.72	3	Vertical	192	1.01	-
PK	5.962G	61.30	68.20	-6.90	11.17	3	Vertical	192	1.01	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5785MHz_TX

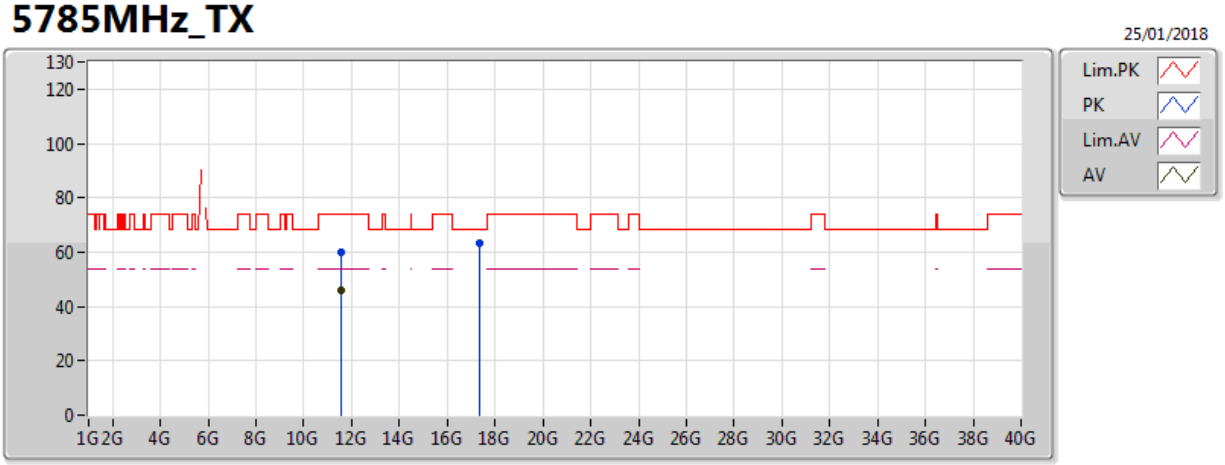


20180124
EUT Y 4TX
Setting 24.5
02-J-5-10
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.788G	106.58	Inf	-Inf	10.72	3	Horizontal	13	1.50	-
PK	5.564G	61.12	68.20	-7.08	10.67	3	Horizontal	13	1.50	-
PK	5.788G	117.06	Inf	-Inf	10.72	3	Horizontal	13	1.50	-
PK	5.946G	60.72	68.20	-7.48	11.13	3	Horizontal	13	1.50	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5785MHz_TX

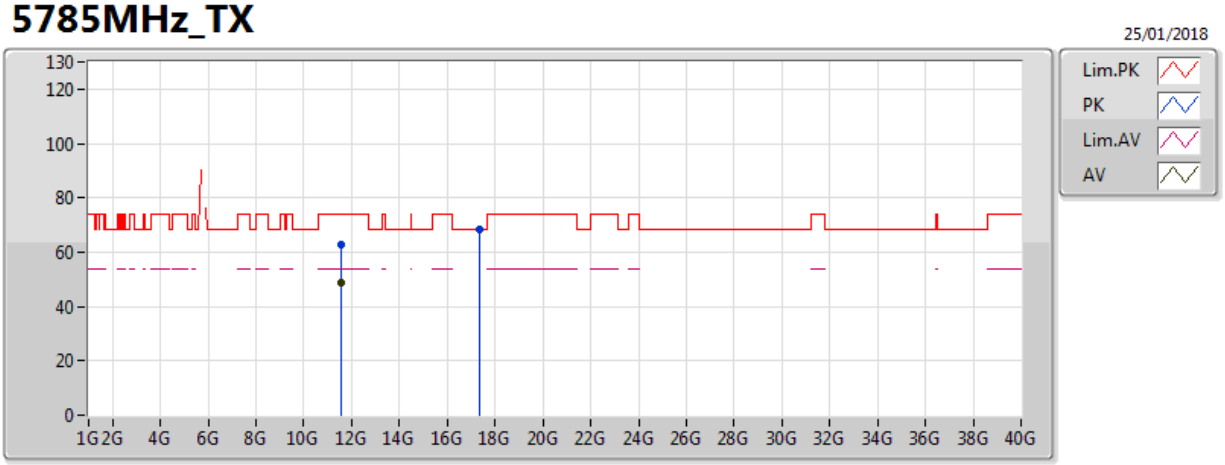


20180124
EUT Y 4TX
Setting 24.5
02-J-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.5694G	46.04	54.00	-7.96	15.55	3	Vertical	69	1.73	-
PK	11.5701G	60.08	74.00	-13.92	15.55	3	Vertical	69	1.73	-
PK	17.3551G	63.48	68.20	-4.72	22.65	3	Vertical	359	1.21	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5785MHz_TX

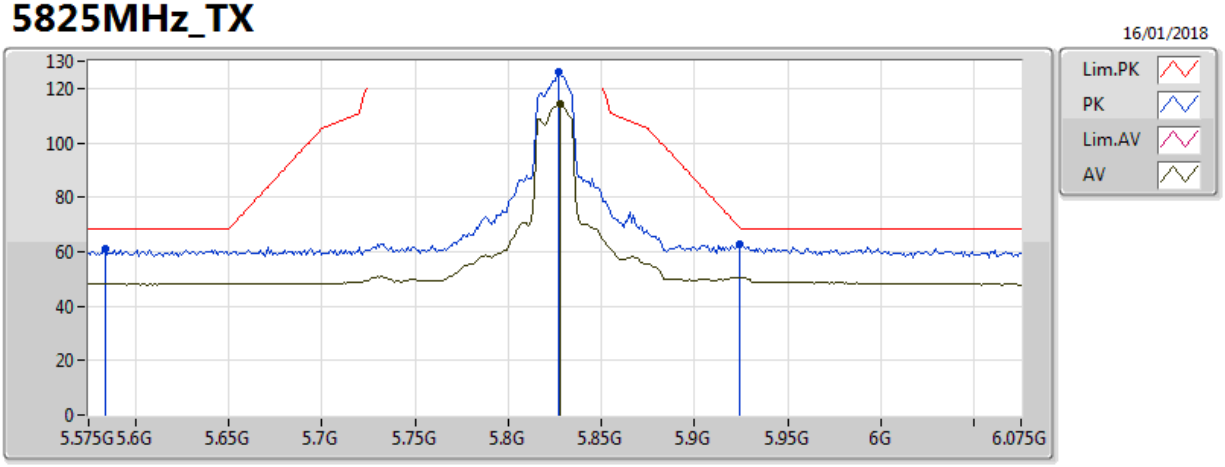


20180124
EUT Y 4TX
Setting 24.5
02-J-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.5755G	48.94	54.00	-5.06	15.56	3	Horizontal	53	2.03	-
PK	11.5755G	62.48	74.00	-11.52	15.56	3	Horizontal	53	2.03	-
PK	17.3535G	68.15	68.20	-0.05	22.64	3	Horizontal	68	2.42	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5825MHz_TX

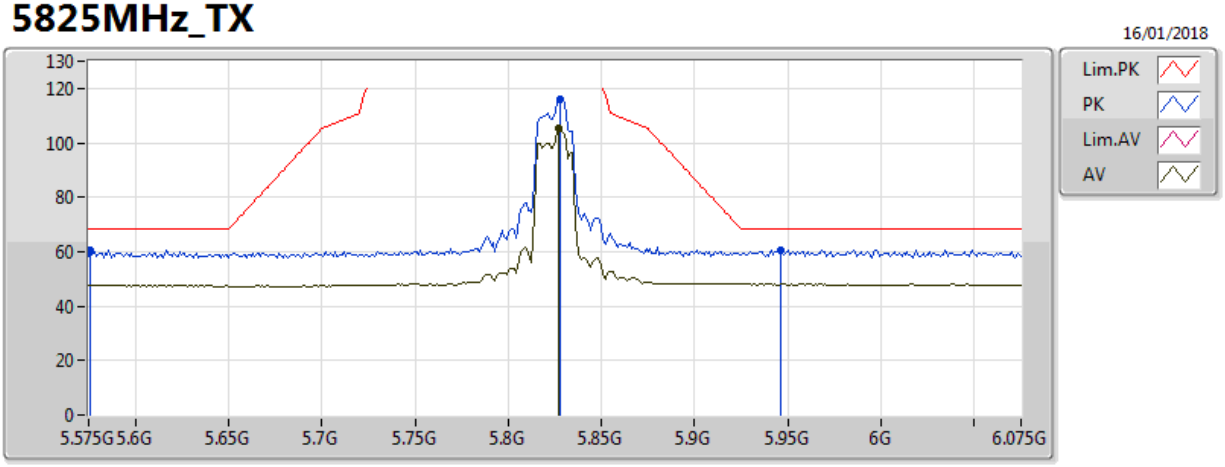


20180115
4TX_EUT Y
Setting 23.5
03-R-2-13

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.828G	114.28	Inf	-Inf	6.67	3	Vertical	280	1.02	-
PK	5.584G	60.85	68.20	-7.35	6.21	3	Vertical	280	1.02	-
PK	5.827G	125.96	Inf	-Inf	6.67	3	Vertical	280	1.02	-
PK	5.924G	62.95	68.94	-5.99	6.60	3	Vertical	280	1.02	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5825MHz_TX

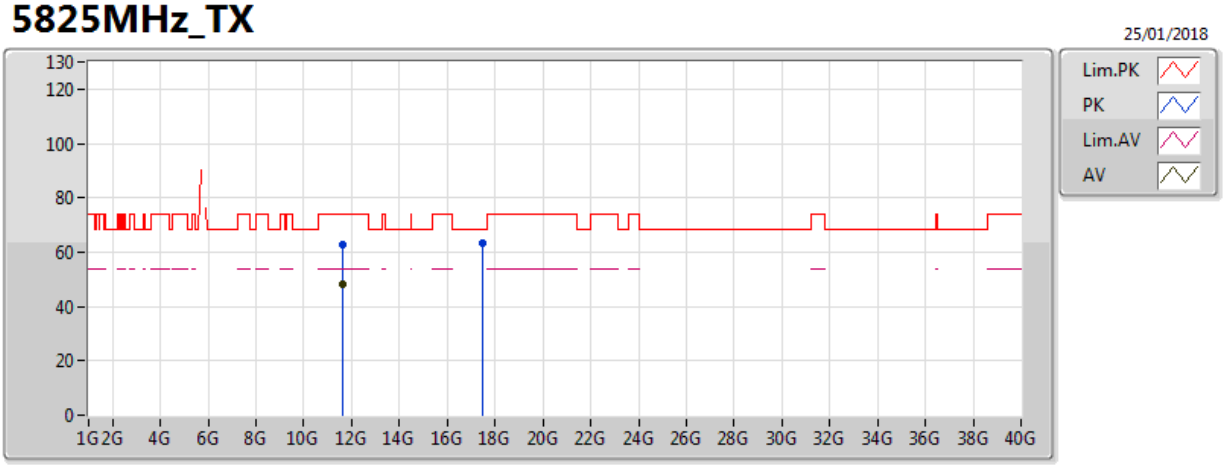


20180115
4TX_EUT Y
Setting 23.5
03-R-2-13

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.827G	105.58	Inf	-Inf	6.67	3	Horizontal	14	1.46	-
PK	5.576G	60.75	68.20	-7.45	6.21	3	Horizontal	14	1.46	-
PK	5.828G	115.99	Inf	-Inf	6.67	3	Horizontal	14	1.46	-
PK	5.946G	60.54	68.20	-7.66	6.59	3	Horizontal	14	1.46	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5825MHz_TX

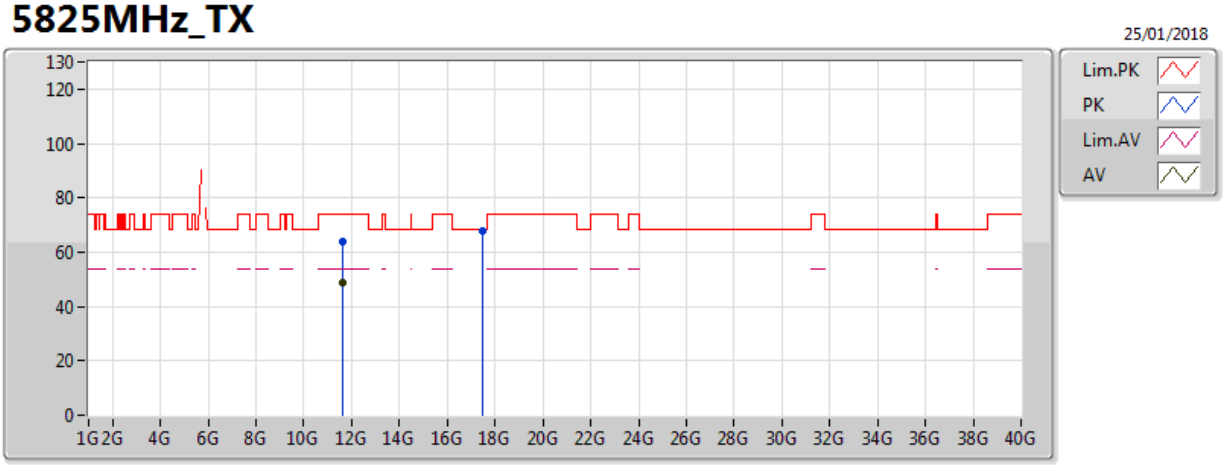


20180115
4TX_EUT Y
Setting 23.5
03-R-2

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.6536G	48.05	54.00	-5.95	14.60	3	Vertical	358	1.47	-
PK	11.6524G	62.51	74.00	-11.49	14.59	3	Vertical	358	1.47	-
PK	17.4576G	63.07	68.20	-5.13	20.61	3	Vertical	0	1.50	-

802.11ac VHT20_Nss1,(MCS0)_4TX

5825MHz_TX

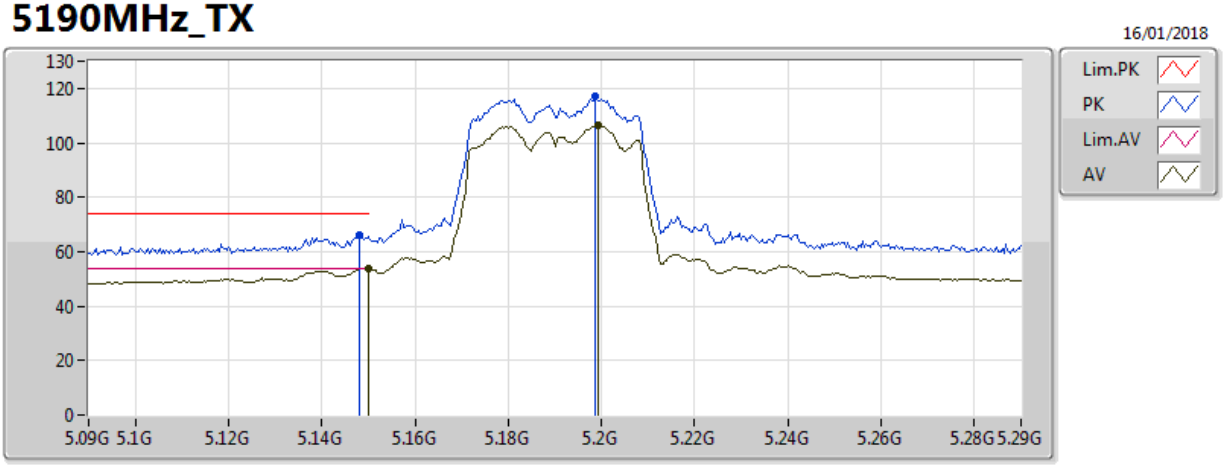


20180115
4TX_EUT Y
Setting 23.5
03-R-2

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.64412G	48.83	54.00	-5.17	14.59	3	Horizontal	7	1.69	-
PK	11.644G	63.87	74.00	-10.13	14.59	3	Horizontal	7	1.69	-
PK	17.46696G	67.99	68.20	-0.21	20.67	3	Horizontal	23	1.42	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5190MHz_TX

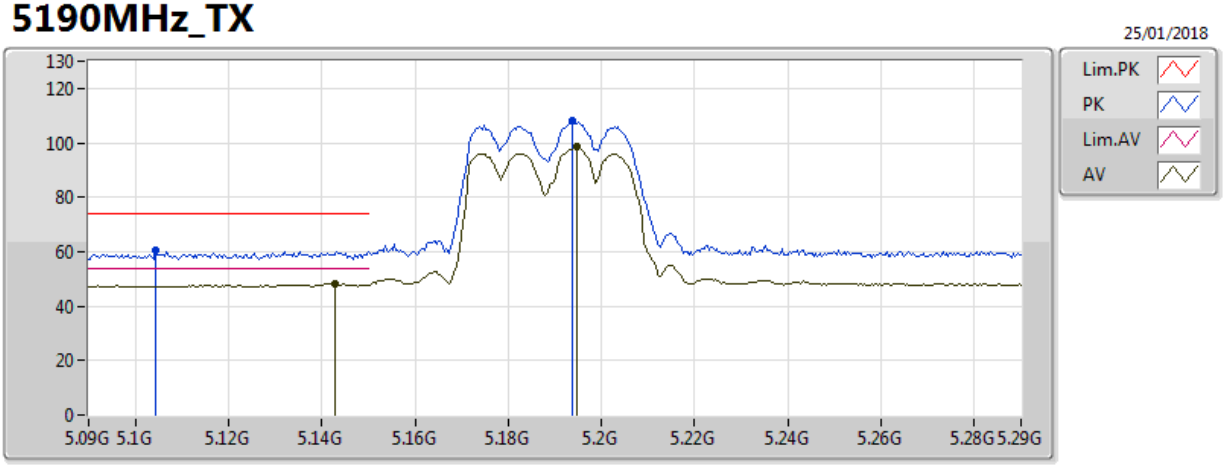


20180115
4TX_EUT Y
Setting 18
03-R-2-13

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.149995G	53.92	54.00	-0.08	5.69	3	Vertical	76	1.00	-
AV	5.1992G	106.29	Inf	-Inf	5.88	3	Vertical	76	1.00	-
PK	5.148G	66.28	74.00	-7.72	5.68	3	Vertical	76	1.00	-
PK	5.1988G	116.99	Inf	-Inf	5.87	3	Vertical	76	1.00	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5190MHz_TX

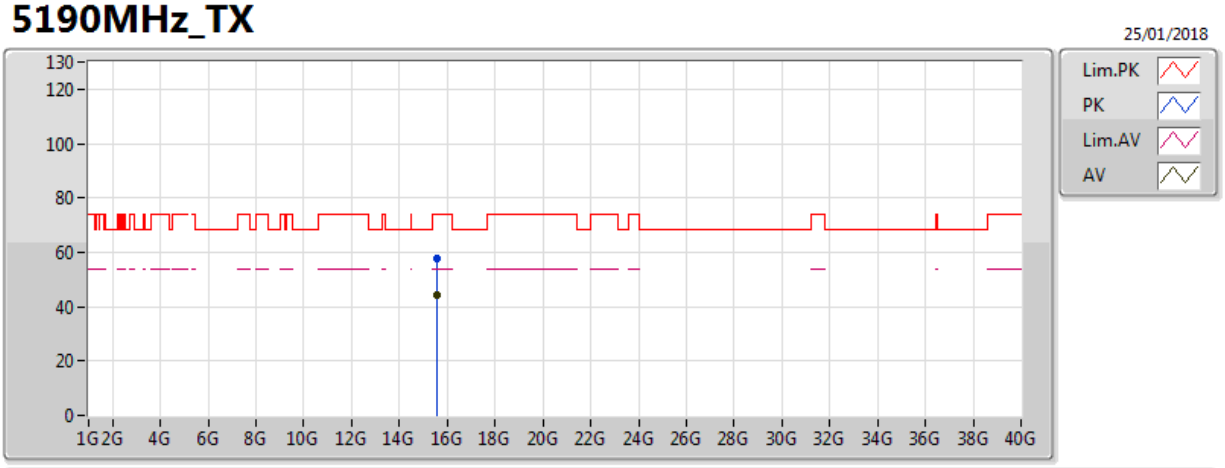


20180115
4TX_EUT Y
Setting 18
03-R-2-13

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.1428G	48.38	54.00	-5.62	5.66	3	Horizontal	223	1.39	-
AV	5.1948G	98.39	Inf	-Inf	5.86	3	Horizontal	223	1.39	-
PK	5.1044G	60.57	74.00	-13.43	5.52	3	Horizontal	223	1.39	-
PK	5.1936G	108.07	Inf	-Inf	5.85	3	Horizontal	223	1.39	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5190MHz_TX

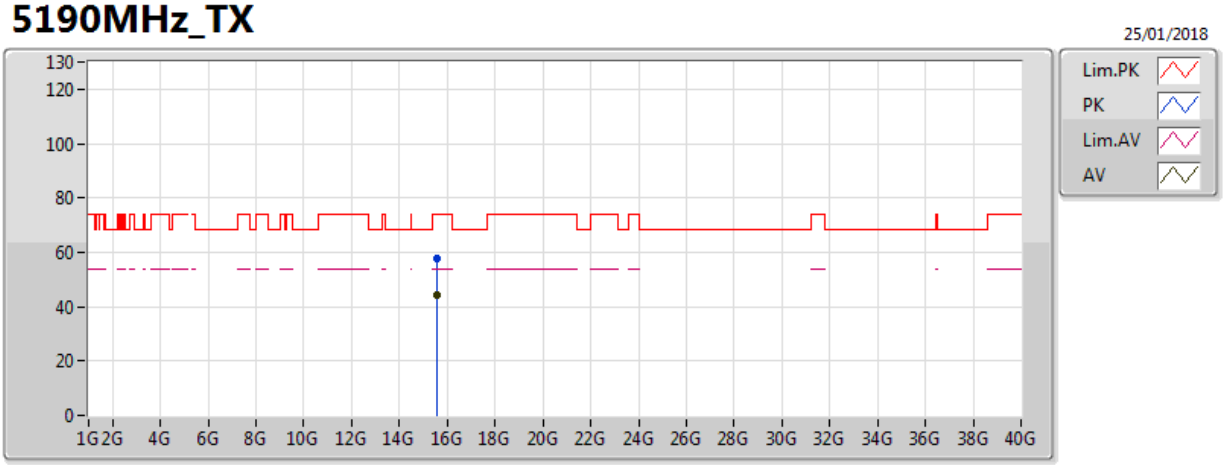


20180124
EUT Y 4TX
Setting 18
02-J-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	15.5808G	44.23	54.00	-9.77	18.61	3	Vertical	353	1.81	-
PK	15.5589G	57.53	74.00	-16.47	18.65	3	Vertical	353	1.81	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5190MHz_TX

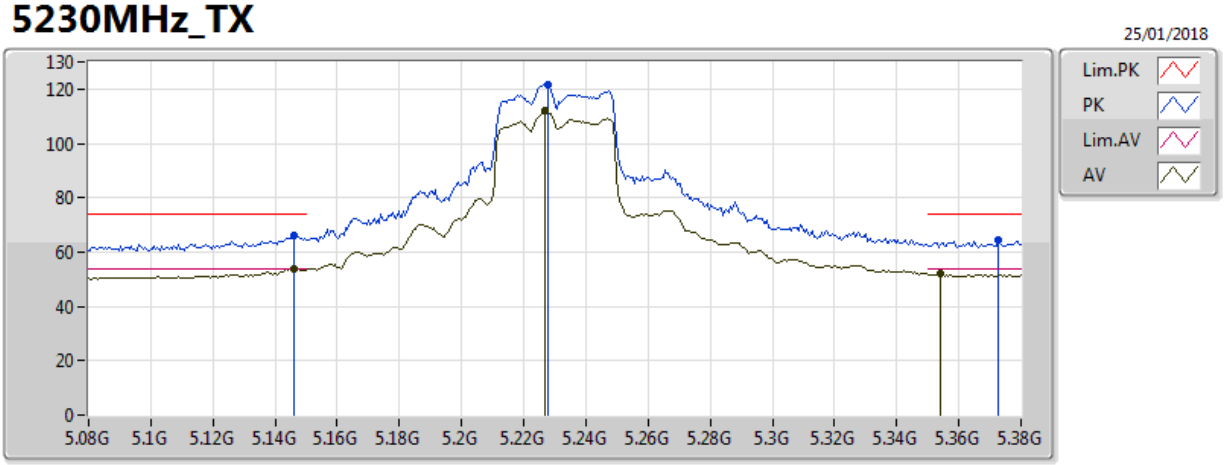


20180124
EUT Y 4TX
Setting 18
02-J-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	15.5621G	44.21	54.00	-9.79	18.64	3	Horizontal	307	1.84	-
PK	15.5753G	57.67	74.00	-16.33	18.62	3	Horizontal	307	1.84	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5230MHz_TX

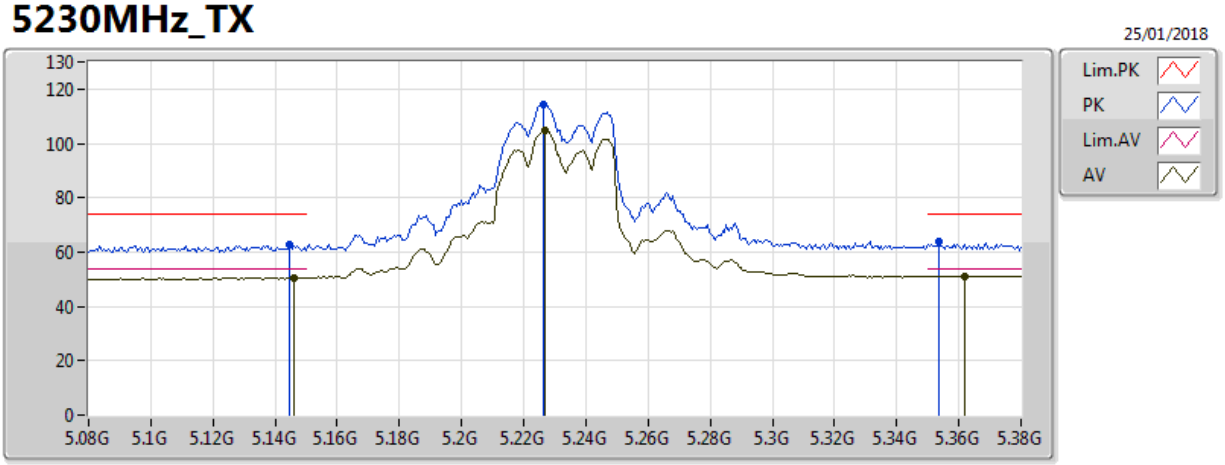


20180124
EUT Y 4TX
Setting 23.5
02-J-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.146G	53.96	54.00	-0.04	9.89	3	Vertical	282	1.01	-
AV	5.227G	111.89	Inf	-Inf	10.19	3	Vertical	282	1.01	-
AV	5.3542G	51.84	54.00	-2.16	10.98	3	Vertical	282	1.01	-
PK	5.146G	66.06	74.00	-7.94	9.89	3	Vertical	282	1.01	-
PK	5.2276G	121.58	Inf	-Inf	10.19	3	Vertical	282	1.01	-
PK	5.3728G	64.38	74.00	-9.62	11.09	3	Vertical	282	1.01	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5230MHz_TX

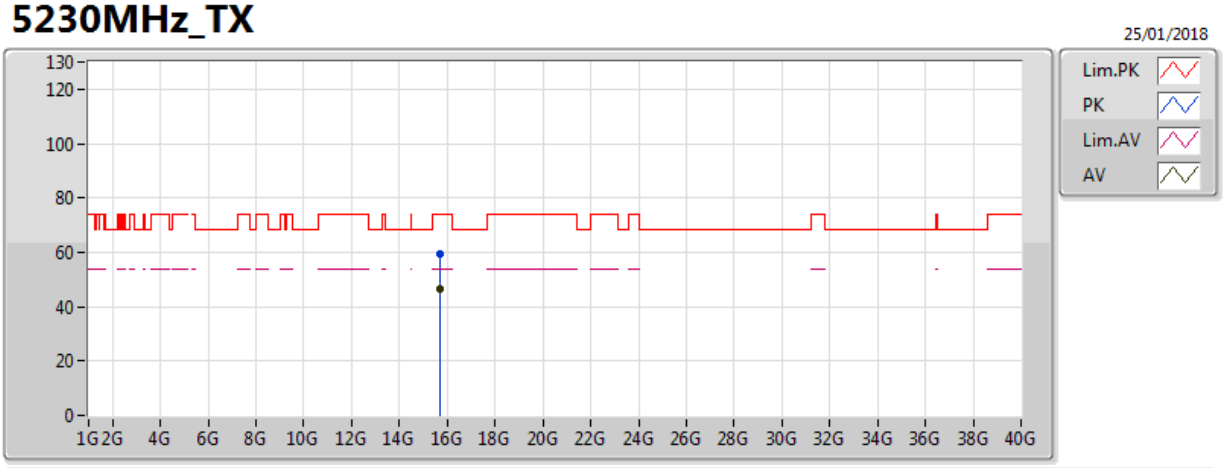


20180124
EUT Y 4TX
Setting 23.5
02-J-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.146G	50.64	54.00	-3.36	9.89	3	Horizontal	234	1.55	-
AV	5.227G	104.67	Inf	-Inf	10.19	3	Horizontal	234	1.55	-
AV	5.362G	51.23	54.00	-2.77	11.02	3	Horizontal	234	1.55	-
PK	5.1448G	62.57	74.00	-11.43	9.89	3	Horizontal	234	1.55	-
PK	5.2264G	114.28	Inf	-Inf	10.18	3	Horizontal	234	1.55	-
PK	5.3536G	63.60	74.00	-10.40	10.97	3	Horizontal	234	1.55	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5230MHz_TX

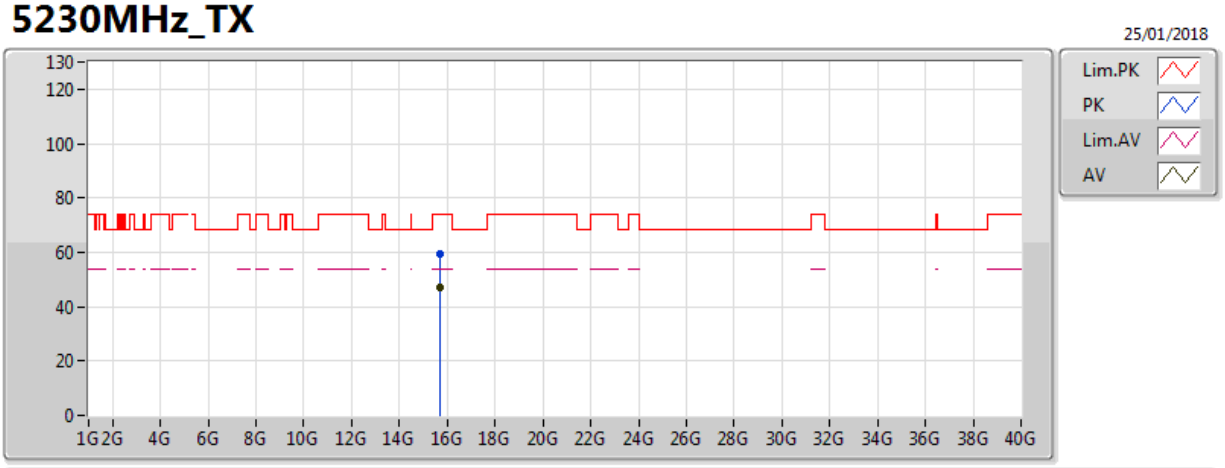


20180124
EUT Y 4TX
Setting 23.5
02-J-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	15.7082G	46.75	54.00	-7.25	18.40	3	Vertical	162	1.50	-
PK	15.7087G	59.60	74.00	-14.40	18.40	3	Vertical	162	1.50	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5230MHz_TX

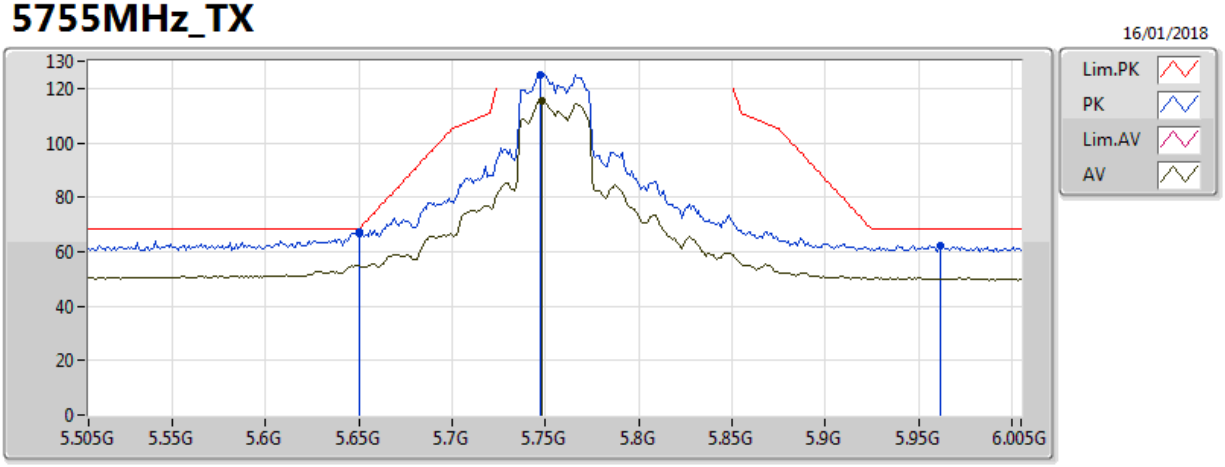


20180124
EUT Y 4TX
Setting 23.5
02-J-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	15.6854G	46.96	54.00	-7.04	18.44	3	Horizontal	320	2.59	-
PK	15.6865G	59.53	74.00	-14.47	18.43	3	Horizontal	320	2.59	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5755MHz_TX

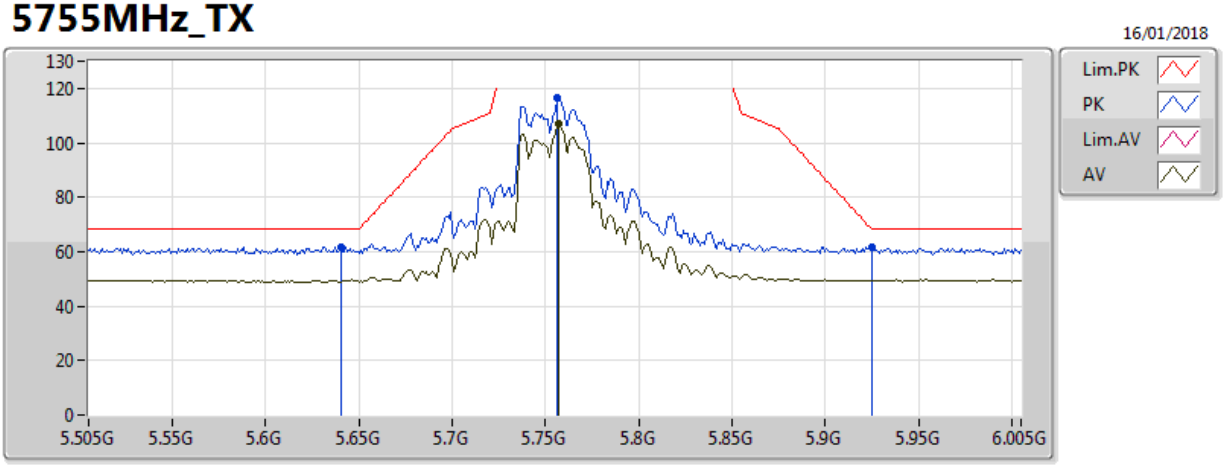


20180115
4TX_EUT Y
Setting 24.5
03-R-2-13

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.748G	115.54	Inf	-Inf	6.56	3	Vertical	95	1.01	-
PK	5.65G	67.21	68.20	-0.99	6.32	3	Vertical	95	1.01	-
PK	5.747G	125.21	Inf	-Inf	6.56	3	Vertical	95	1.01	-
PK	5.962G	62.40	68.20	-5.80	6.58	3	Vertical	95	1.01	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5755MHz_TX

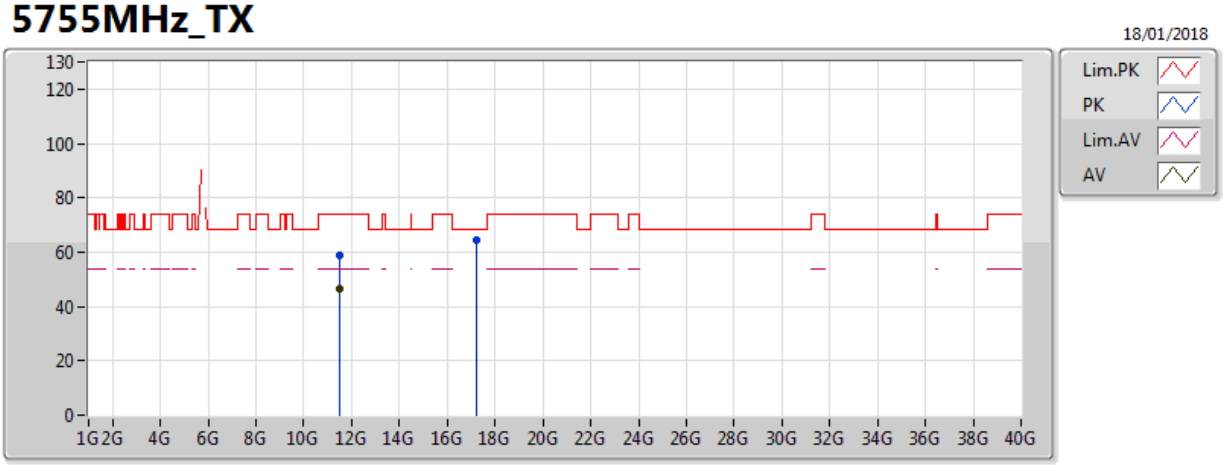


20180115
4TX_EUT Y
Setting 24.5
03-R-2-13

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.757G	106.83	Inf	-Inf	6.59	3	Horizontal	14	1.39	-
PK	5.64G	61.81	68.20	-6.39	6.30	3	Horizontal	14	1.39	-
PK	5.756G	116.51	Inf	-Inf	6.58	3	Horizontal	14	1.39	-
PK	5.925G	61.73	68.20	-6.47	6.60	3	Horizontal	14	1.39	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5755MHz_TX

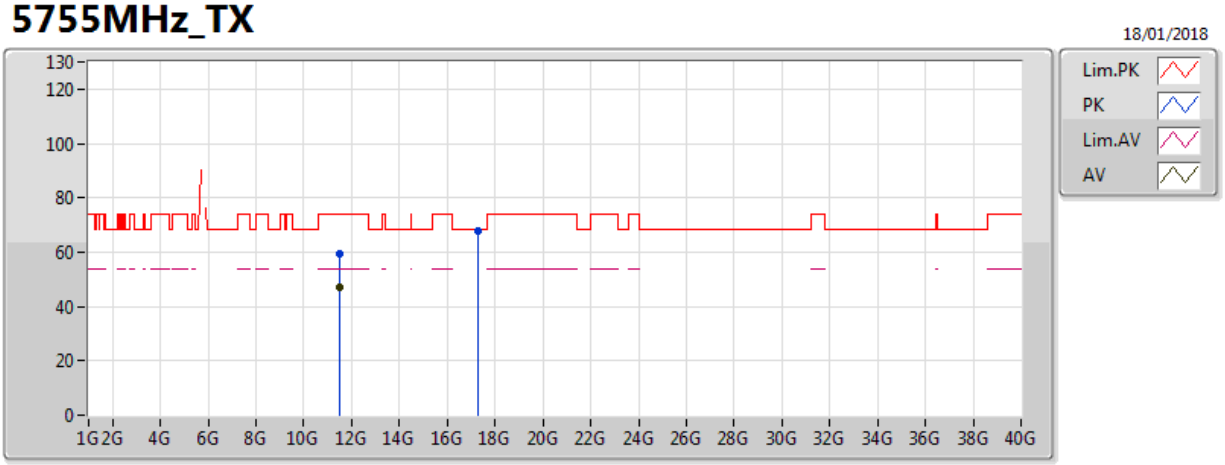


20180116
4TX_EUT Y
Setting 24.5
03-R-2

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.50392G	46.30	54.00	-7.70	14.43	3	Vertical	103	1.50	-
PK	11.506G	58.71	74.00	-15.29	14.43	3	Vertical	103	1.50	-
PK	17.24148G	64.36	68.20	-3.84	19.40	3	Vertical	99	2.96	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5755MHz_TX

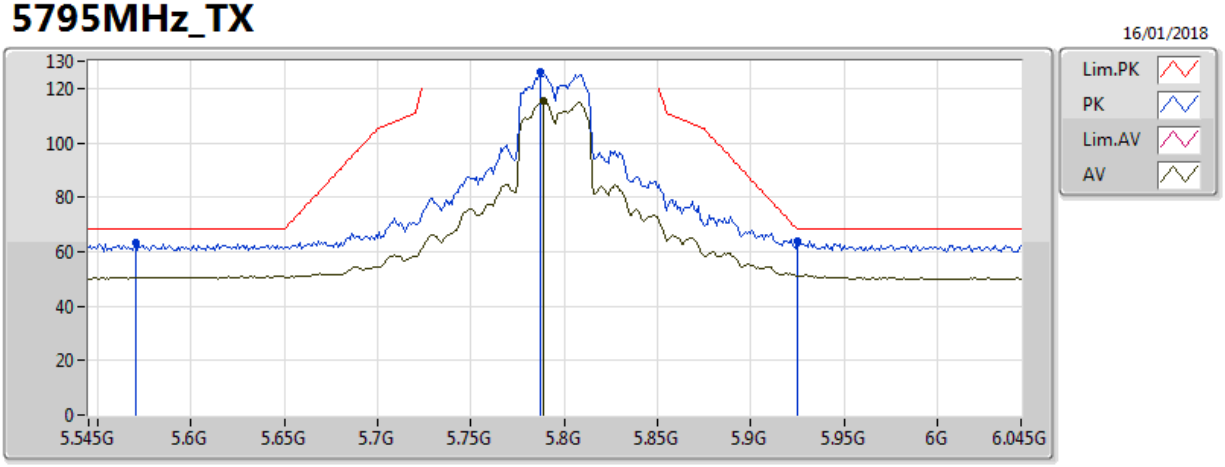


20180116
4TX_EUT Y
Setting 24.5
03-R-2

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.50584G	47.24	54.00	-6.76	14.43	3	Horizontal	154	1.49	-
PK	11.50664G	59.60	74.00	-14.40	14.43	3	Horizontal	154	1.49	-
PK	17.27188G	67.75	68.20	-0.45	19.57	3	Horizontal	55	1.22	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5795MHz_TX

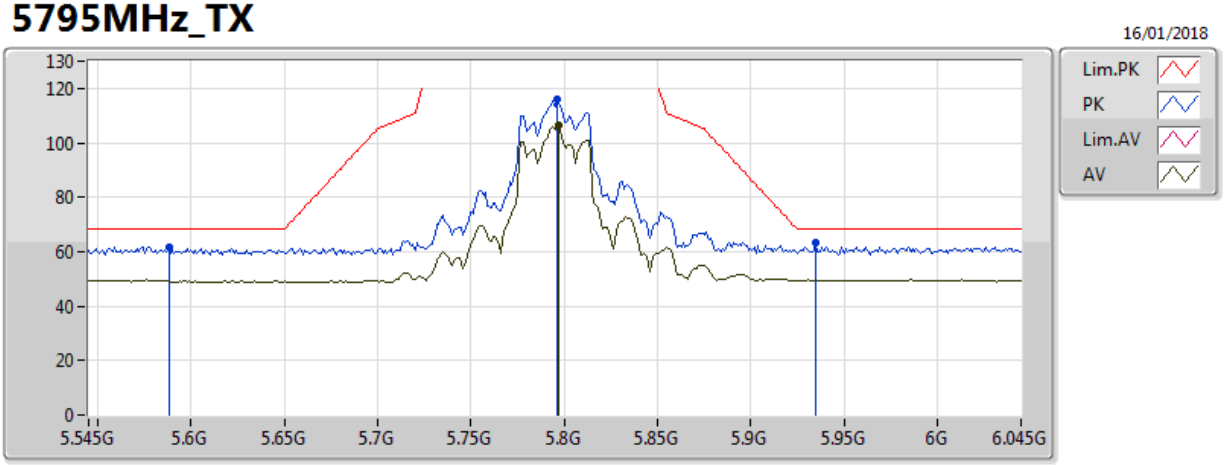


20180115
4TX_EUT Y
Setting 24
03-R-2-13

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.789G	115.21	Inf	-Inf	6.66	3	Vertical	93	1.02	-
PK	5.57G	63.18	68.20	-5.02	6.21	3	Vertical	93	1.02	-
PK	5.787G	125.88	Inf	-Inf	6.66	3	Vertical	93	1.02	-
PK	5.925G	63.91	68.20	-4.29	6.60	3	Vertical	93	1.02	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5795MHz_TX

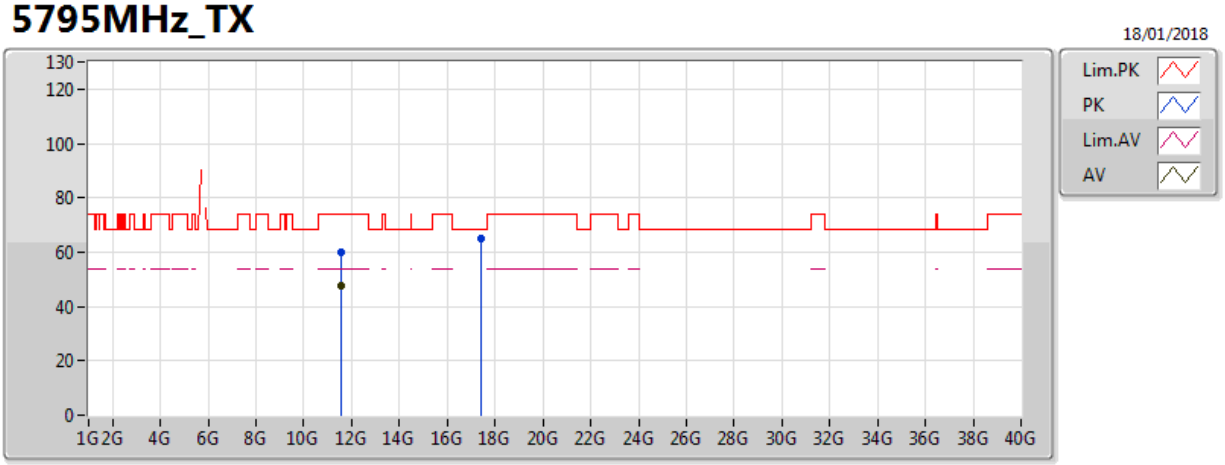


20180115
4TX_EUT Y
Setting 24
03-R-2-13

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.797G	106.40	Inf	-Inf	6.68	3	Horizontal	283	1.49	-
PK	5.588G	61.73	68.20	-6.47	6.20	3	Horizontal	283	1.49	-
PK	5.796G	115.85	Inf	-Inf	6.68	3	Horizontal	283	1.49	-
PK	5.935G	63.09	68.20	-5.11	6.60	3	Horizontal	283	1.49	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5795MHz_TX

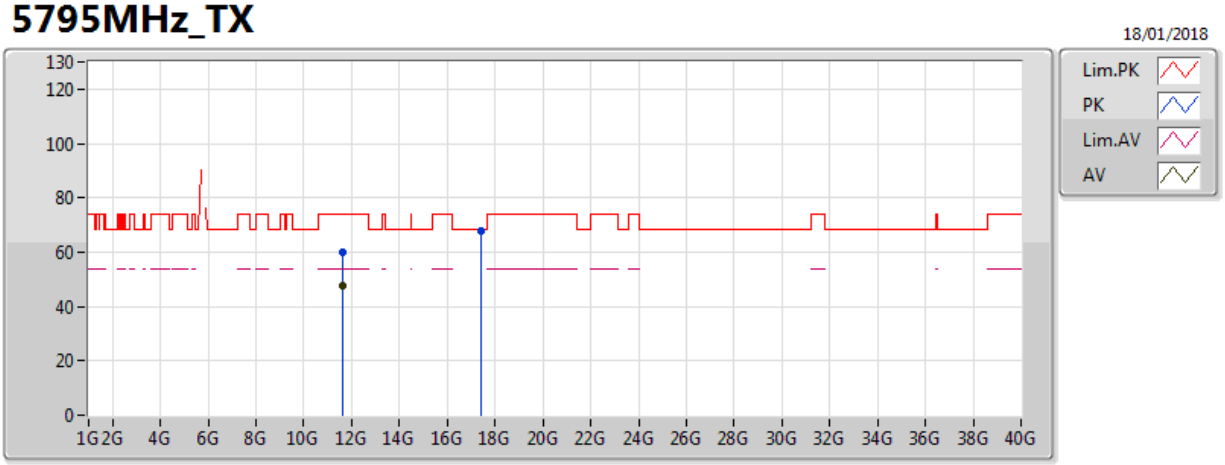


20180116
4TX_EUT Y
Setting 24
03-R-2

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.586G	47.64	54.00	-6.36	14.52	3	Vertical	63	1.50	-
PK	11.58664G	59.84	74.00	-14.16	14.52	3	Vertical	63	1.50	-
PK	17.39956G	65.11	68.20	-3.09	20.29	3	Vertical	211	2.90	-

802.11ac VHT40_Nss1,(MCS0)_4TX

5795MHz_TX

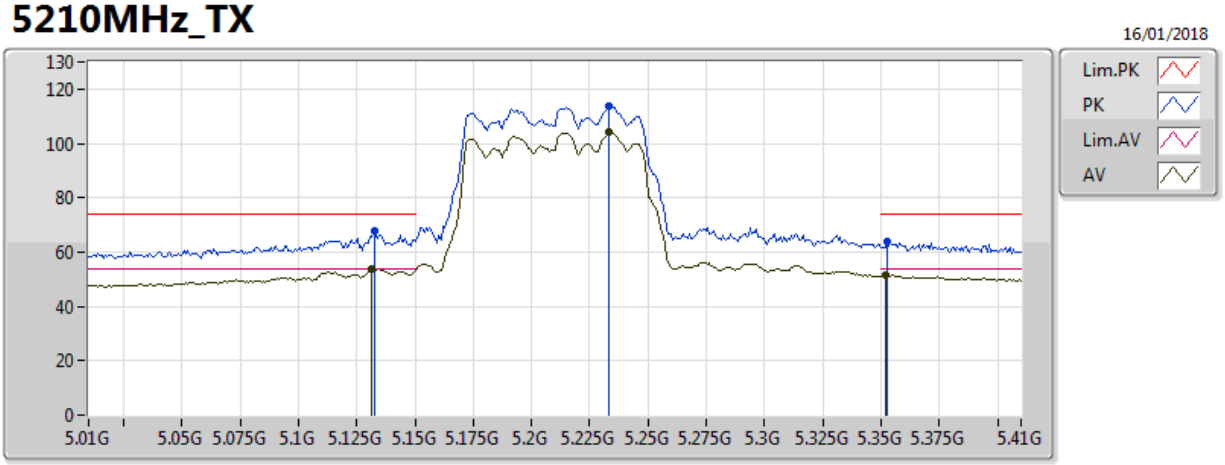


20180116
4TX_EUT Y
Setting 24
03-R-2

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.59752G	47.69	54.00	-6.31	14.53	3	Horizontal	62	1.50	-
PK	11.59768G	60.01	74.00	-13.99	14.53	3	Horizontal	62	1.50	-
PK	17.38612G	67.97	68.20	-0.23	20.21	3	Horizontal	253	1.54	-

802.11ac VHT80_Nss1,(MCS0)_4TX

5210MHz_TX

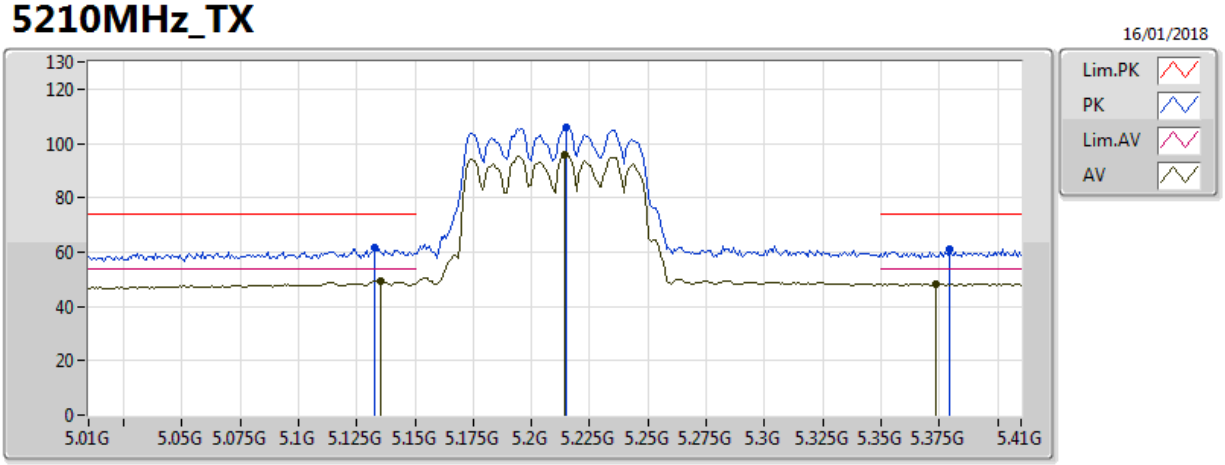


20180115
4TX_EUT Y
Setting 20
03-R-2-13

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.1316G	53.76	54.00	-0.24	5.62	3	Vertical	270	1.01	-
AV	5.2332G	104.05	Inf	-Inf	5.92	3	Vertical	270	1.01	-
AV	5.3516G	51.42	54.00	-2.58	6.07	3	Vertical	270	1.01	-
PK	5.1324G	67.90	74.00	-6.10	5.62	3	Vertical	270	1.01	-
PK	5.2332G	113.55	Inf	-Inf	5.92	3	Vertical	270	1.01	-
PK	5.3524G	64.12	74.00	-9.88	6.07	3	Vertical	270	1.01	-

802.11ac VHT80_Nss1,(MCS0)_4TX

5210MHz_TX

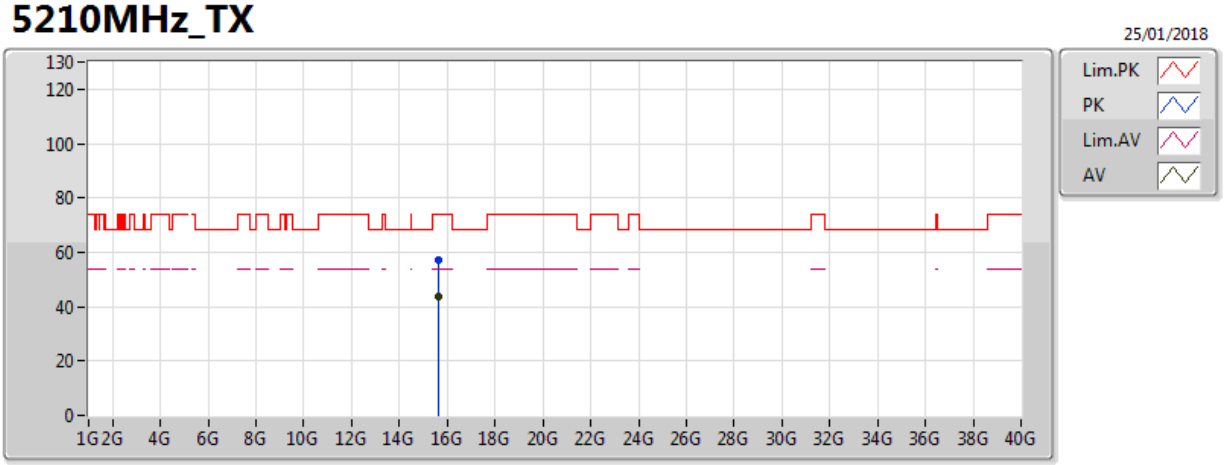


20180115
4TX_EUT Y
Setting 20
03-R-2-13

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.1356G	49.58	54.00	-4.42	5.63	3	Horizontal	224	1.49	-
AV	5.214G	95.82	Inf	-Inf	5.90	3	Horizontal	224	1.49	-
AV	5.3732G	48.43	54.00	-5.57	6.09	3	Horizontal	224	1.49	-
PK	5.1324G	61.38	74.00	-12.62	5.62	3	Horizontal	224	1.49	-
PK	5.2148G	105.79	Inf	-Inf	5.90	3	Horizontal	224	1.49	-
PK	5.3796G	61.28	74.00	-12.72	6.10	3	Horizontal	224	1.49	-

802.11ac VHT80_Nss1,(MCS0)_4TX

5210MHz_TX

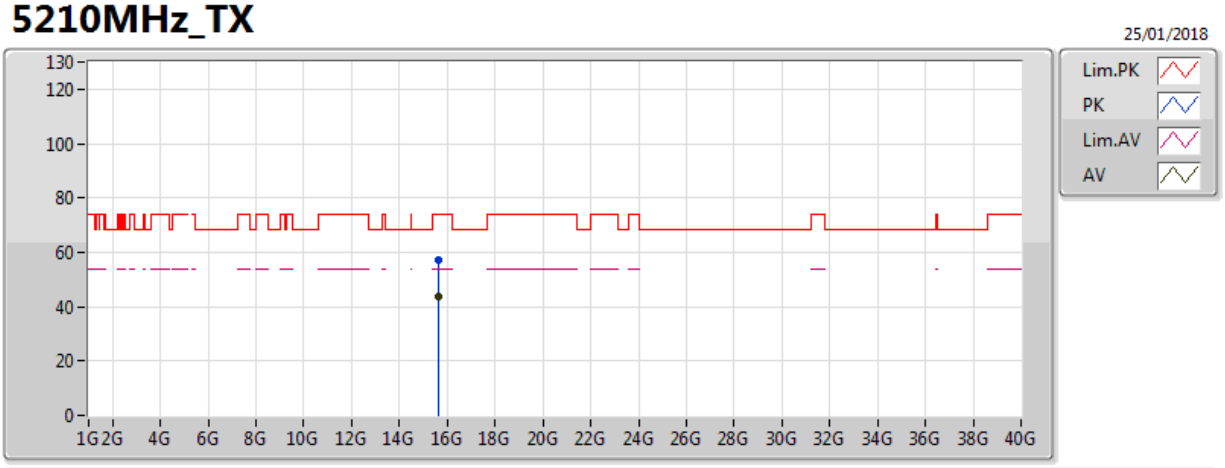


20180124
EUT Y 4TX
Setting 20
02-J-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	15.655G	43.83	54.00	-10.17	18.49	3	Vertical	138	2.01	-
PK	15.6403G	57.40	74.00	-16.60	18.51	3	Vertical	138	2.01	-

802.11ac VHT80_Nss1,(MCS0)_4TX

5210MHz_TX

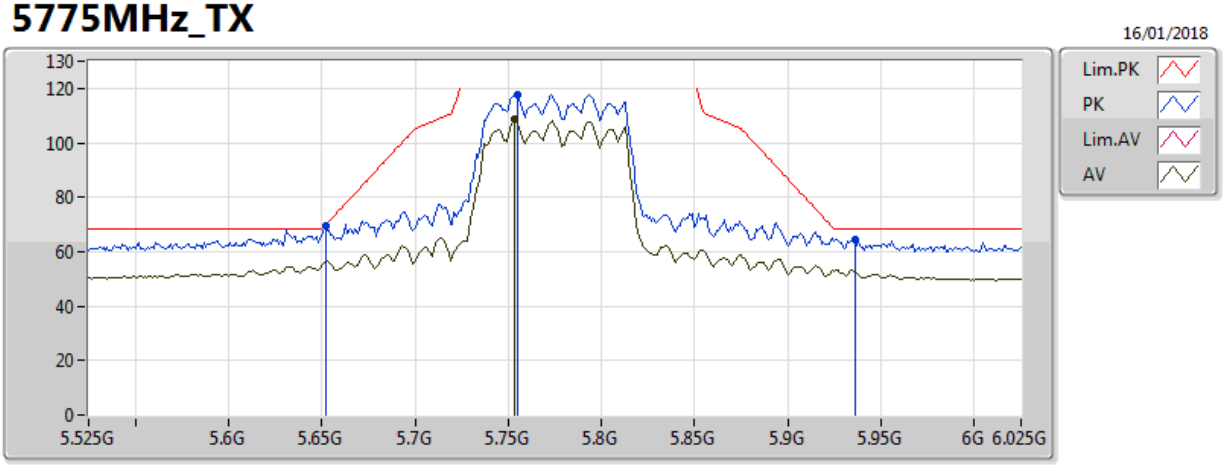


20180124
EUT Y 4TX
Setting 20
02-J-5
FSU

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	15.6165G	43.76	54.00	-10.24	18.55	3	Horizontal	235	1.45	-
PK	15.6294G	56.93	74.00	-17.07	18.53	3	Horizontal	235	1.45	-

802.11ac VHT80_Nss1,(MCS0)_4TX

5775MHz_TX

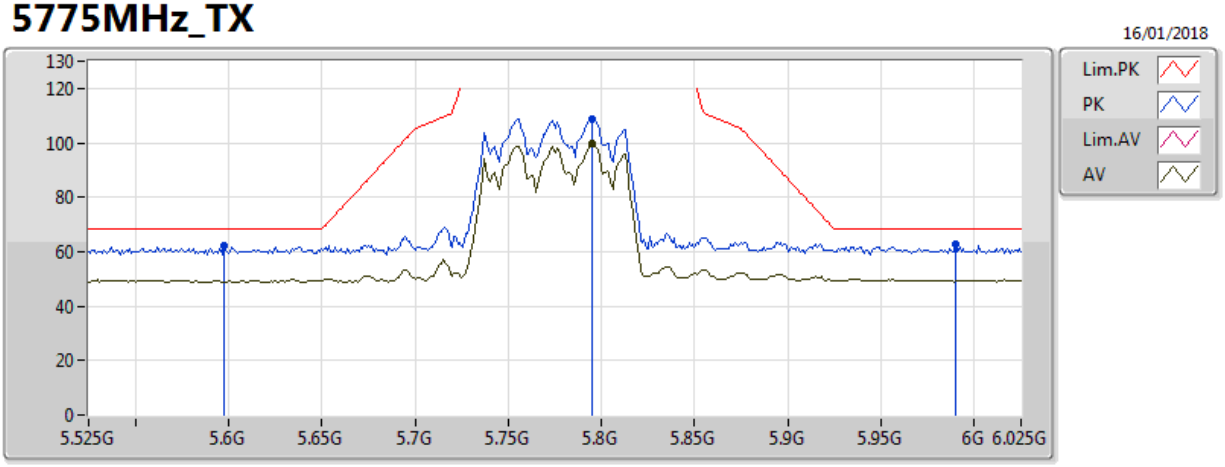


20180116
4TX_EUT Y
Setting 21.5
03-R-2-13

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.753G	108.43	Inf	-Inf	6.58	3	Vertical	187	1.01	-
PK	5.652G	69.62	69.68	-0.06	6.33	3	Vertical	187	1.01	-
PK	5.755G	117.86	Inf	-Inf	6.58	3	Vertical	187	1.01	-
PK	5.936G	64.55	68.20	-3.65	6.60	3	Vertical	187	1.01	-

802.11ac VHT80_Nss1,(MCS0)_4TX

5775MHz_TX

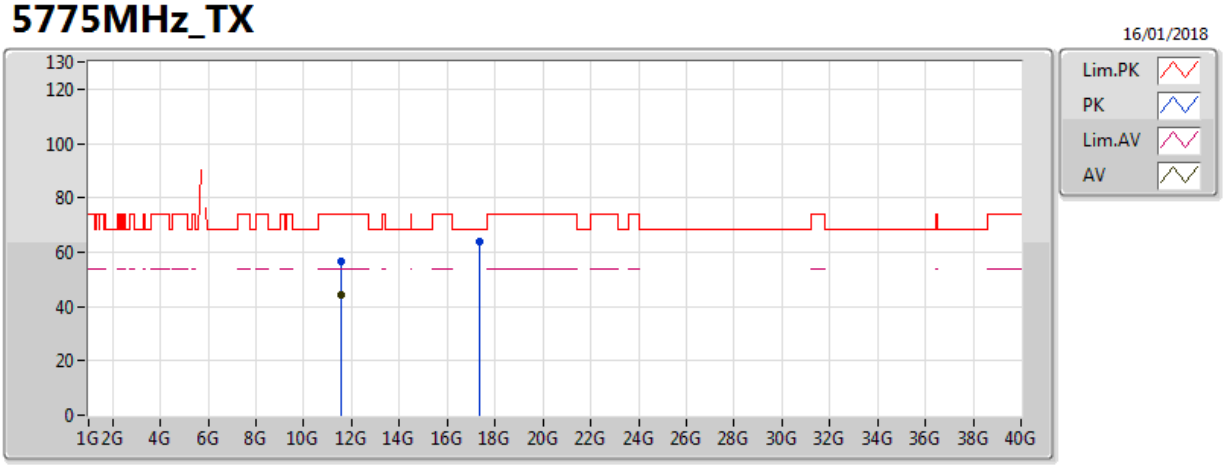


20180116
4TX_EUT Y
Setting 21.5
03-R-2-13

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	5.795G	99.68	Inf	-Inf	6.68	3	Horizontal	284	1.50	-
PK	5.598G	62.46	68.20	-5.74	6.20	3	Horizontal	284	1.50	-
PK	5.795G	108.85	Inf	-Inf	6.68	3	Horizontal	284	1.50	-
PK	5.99G	62.53	68.20	-5.67	6.56	3	Horizontal	284	1.50	-

802.11ac VHT80_Nss1,(MCS0)_4TX

5775MHz_TX

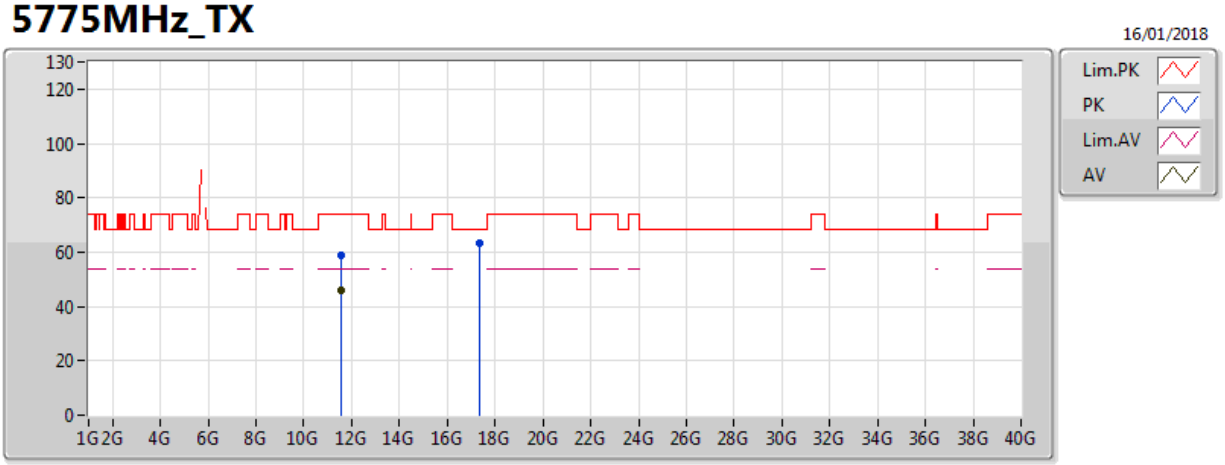


20180116
4TX_EUT Y
Setting 21.5
03-R-2

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.5436G	44.49	54.00	-9.51	14.47	3	Vertical	259	2.18	-
PK	11.544G	56.63	74.00	-17.37	14.47	3	Vertical	259	2.18	-
PK	17.3572G	63.88	68.20	-4.32	20.05	3	Vertical	306	2.41	-

802.11ac VHT80_Nss1,(MCS0)_4TX

5775MHz_TX



20180116
4TX_EUT Y
Setting 21.5
03-R-2

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	11.5842G	45.87	54.00	-8.13	14.52	3	Horizontal	7	1.59	-
PK	11.585G	59.10	74.00	-14.90	20.00	3	Horizontal	7	1.59	-
PK	17.3334G	63.15	68.20	-5.05	19.92	3	Horizontal	255	1.49	-

Mode: 20 MHz / Port 2
Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5199.9649	5199.9639	5199.9630	5199.9627
110.00	5199.9645	5199.9638	5199.9633	5199.9627
93.50	5199.9639	5199.9631	5199.9630	5199.9623
Max. Deviation (MHz)	0.0361	0.0369	0.0370	0.0377
Max. Deviation (ppm)	6.94	7.10	7.12	7.25
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5199.9614	5199.9613	5199.9603	5199.9601
10	5199.9629	5199.9628	5199.9620	5199.9613
20	5199.9645	5199.9638	5199.9636	5199.9629
30	5199.9934	5199.9929	5199.9919	5199.9914
40	5199.9950	5199.9947	5199.9943	5199.9942
50	5199.9964	5199.9957	5199.9950	5199.9941
Max. Deviation (MHz)	0.0394	0.0400	0.0401	0.0408
Max. Deviation (ppm)	7.58	7.69	7.71	7.85
Result	Pass			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5785 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5784.9647	5784.9644	5784.9641	5784.9631
110.00	5784.9645	5784.9637	5784.9633	5784.9624
93.50	5784.9643	5784.9636	5784.9631	5784.9628
Max. Deviation (MHz)	0.0357	0.0364	0.0369	0.0376
Max. Deviation (ppm)	6.17	6.29	6.38	6.50
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5785 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5784.9632	5784.9630	5784.9626	5784.9616
10	5784.9644	5784.9635	5784.9633	5784.9631
20	5784.9645	5784.9636	5784.9633	5784.9628
30	5784.9934	5784.9925	5784.9921	5784.9919
40	5784.9954	5784.9951	5784.9942	5784.9933
50	5784.9948	5784.9942	5784.9939	5784.9933
Max. Deviation (MHz)	0.0392	0.0395	0.0396	0.0400
Max. Deviation (ppm)	6.78	6.83	6.85	6.91
Result	Pass			

Mode: 40 MHz / Port 2

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5189.9655	5189.9648	5189.9641	5189.9632
110.00	5189.9645	5189.9637	5189.9631	5189.9625
93.50	5189.9643	5189.9635	5189.9625	5189.9620
Max. Deviation (MHz)	0.0357	0.0365	0.0375	0.0380
Max. Deviation (ppm)	6.88	7.03	7.23	7.32
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5189.9623	5189.9622	5189.9615	5189.9606
10	5189.9630	5189.9620	5189.9616	5189.9614
20	5189.9645	5189.9642	5189.9638	5189.9633
30	5189.9934	5189.9933	5189.9923	5189.9915
40	5189.9947	5189.9940	5189.9936	5189.9926
50	5189.9662	5189.9654	5189.9652	5189.9651
Max. Deviation (MHz)	0.0434	0.0439	0.0445	0.0447
Max. Deviation (ppm)	8.36	8.46	8.57	8.61
Result	Pass			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5755 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5754.9655	5754.9654	5754.9647	5754.9637
110.00	5754.9645	5754.9635	5754.9626	5754.9622
93.50	5754.9636	5754.9634	5754.9626	5754.9624
Max. Deviation (MHz)	0.0364	0.0366	0.0374	0.0378
Max. Deviation (ppm)	6.32	6.36	6.50	6.57
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5755 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5754.9627	5754.9621	5754.9617	5754.9608
10	5754.9631	5754.9629	5754.9627	5754.9620
20	5754.9645	5754.9643	5754.9641	5754.9639
30	5754.9934	5754.9931	5754.9928	5754.9918
40	5754.9952	5754.9943	5754.9936	5754.9933
50	5754.9651	5754.9642	5754.9633	5754.9625
Max. Deviation (MHz)	0.0399	0.0407	0.0416	0.0419
Max. Deviation (ppm)	6.93	7.07	7.23	7.28
Result	Pass			

Mode: 80 MHz / Port 2

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5209.9654	5209.9652	5209.9646	5209.9645
110.00	5209.9645	5209.9636	5209.9626	5209.9616
93.50	5209.9644	5209.9641	5209.9639	5209.9629
Max. Deviation (MHz)	0.0356	0.0364	0.0374	0.0384
Max. Deviation (ppm)	6.83	6.99	7.18	7.37
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5209.9629	5209.9624	5209.9619	5209.9617
10	5209.9644	5209.9642	5209.9632	5209.9625
20	5209.9645	5209.9638	5209.9635	5209.9630
30	5209.9934	5209.9933	5209.9930	5209.9927
40	5209.9944	5209.9934	5209.9932	5209.9927
50	5209.9665	5209.9658	5209.9656	5209.9649
Max. Deviation (MHz)	0.0399	0.0406	0.0409	0.0412
Max. Deviation (ppm)	7.66	7.79	7.85	7.91
Result	Pass			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5775 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5774.9652	5774.9651	5774.9648	5774.9641
110.00	5774.9645	5774.9643	5774.9641	5774.9635
93.50	5774.9635	5774.9632	5774.9627	5774.9624
Max. Deviation (MHz)	0.0365	0.0368	0.0373	0.0376
Max. Deviation (ppm)	6.32	6.37	6.46	6.51
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5775 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5774.9621	5774.9620	5774.9612	5774.9611
10	5774.9639	5774.9634	5774.9624	5774.9615
20	5774.9645	5774.9642	5774.9632	5774.9627
30	5774.9934	5774.9925	5774.9923	5774.9915
40	5774.9942	5774.9941	5774.9936	5774.9930
50	5774.9659	5774.9658	5774.9649	5774.9639
Max. Deviation (MHz)	0.0409	0.0416	0.0422	0.0429
Max. Deviation (ppm)	7.08	7.20	7.31	7.43
Result	Pass			