FCC RADIO TEST REPORT

FCC ID	:	QDS-BRCM1095
Equipment	:	802.11ax WLAN PCI-E Custom Combination Card
Brand Name	:	Broadcom
Model Name	:	BCM94389FCPAGBE
Applicant	:	Broadcom Corporation 270 Innovation Drive San Jose California USA
Manufacturer	:	Broadcom Corporation 270 Innovation Drive San Jose California USA
Standard	:	47 CFR FCC Part 15.407

The product was received on Jul. 22, 2020, and testing was started from Jul. 22, 2020 and completed on Nov. 13, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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

Approved by: Sam Chen

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

Table of Contents

History of this test report

Report No.	Version	Description	Issued Date
FR072230	01	Initial issue of report	Aug. 26, 2020
FR072230	02	Revise gain of Test Results of Contention-Based Protocol	Aug. 27, 2020
FR072230	03	Adding the Contention Based Protocol Threshold Level Verify Result.	Nov. 13, 2020

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.407(a)	Emission Bandwidth	PASS	-
3.3	15.407(a)	Maximum Conducted Output Power	PASS	-
3.4	15.407(a)	Peak Power Spectral Density	PASS	-
3.5	15.407(b)	Unwanted Emissions	PASS	-
3.6	15.407(d)	Contention-Based Protocol	PASS	-
-	KDB987594 D01 Clause D[6]	Indoor AP identification broadcast beacon	N/A	Indoor Client w/o test
-	KDB987594 D01 Clause D[8]	No direct connection to the internet	N/A	Indoor Client w/o test
3.7	KDB987594 D01 Clause D[9]	Demonstrate under control of low power indoor access point	N/A	Declared by manufacturer

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen

Report Producer: Vicky Huang

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5925 ~ 7125	ax (HEW160)	6025 ~ 6985	15 ~ 207 [7]

Band	Mode	BWch (MHz)	Nant
UNII 5 - UNII 8	802.11ax HEW160	160	2

Note:
- HEW160 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- BWch is the nominal channel bandwidth.
- The channel defined in the IEEE Standard P802.11ax™/D6.1.

1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	1	Airgain	N60AGAUA	PCB Antenna	I-PEX	3.4
2	2	Airgain	N60AGAUA	PCB Antenna	I-PEX	3.4

Note: The above information was declared by manufacturer.

For IEEE 802.11ax mode (2TX/2RX):

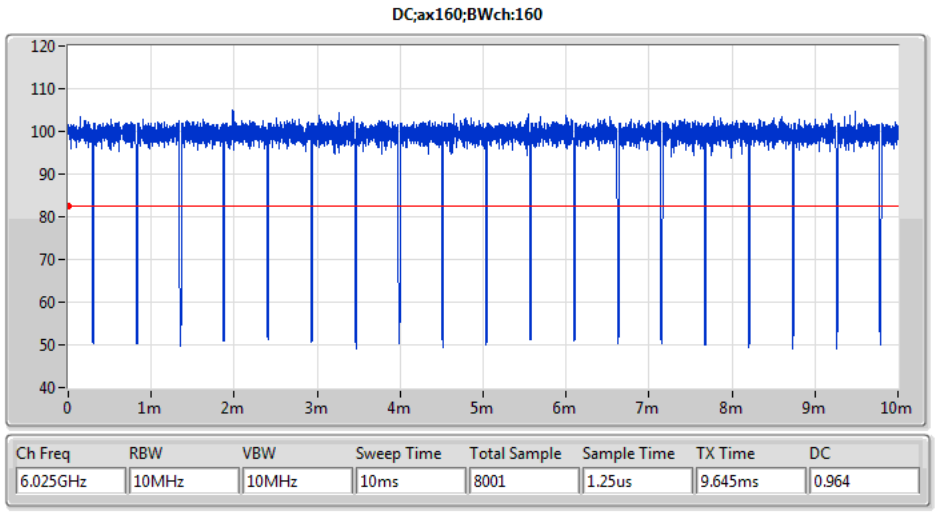
Ant. 1(Port 1) and Ant. 2(Port 2) can be used as transmitting/receiving antenna.

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

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)
802.11ax HEW160	0.964	0.16

Duty Cycle



Note:
- DC is Duty Cycle.
- DCF is Duty Cycle Factor.

1.1.4 EUT Operational Condition

EUT Power Type	From host system			
Beamforming Function	☐	With beamforming	☒	Without beamforming
Device Type	☐	Indoor Access Point	☐	Subordinate
	☒	Indoor Client	☐	Standard Power Access Point
	☐	Dual Client	☐	Standard Client
	☐	Fixed Client		
Test Software Version	Putty.exe			

Note: The above information was declared by manufacturer.

1.2 Applicable Standards

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

- 47 CFR FCC Part 15
- ANSI C63.10-2013
- FCC KDB 789033 D02 v02r01

The following reference test guidance is not within the scope of accreditation of TAF.

- Draft KDB 987594 D01 (Aug.14, 2020)
- Draft KDB 987594 D02 (Aug.14, 2020)
- FCC KDB 662911 D01 v02r01
- FCC KDB 412172 D01 v01r01
- FCC KDB 414788 D01 v01r01

1.3 Testing Location Information

Testing Location			
☐	HWA YA	ADD :	No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)
		TEL :	886-3-327-3456 FAX : 886-3-327-0973
☒	JHUBEI	ADD :	No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.
		TEL :	886-3-656-9065 FAX : 886-3-656-9085

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted (For other tests)	TH03-CB	Jay Luo	25.8-26.2°C / 56-62%	Jul. 23, 2020~ Aug. 24, 2020
RF Conducted (For Contention Based Protocol test)	DF02-CB	Kevin Huang	23.5-25.3°C / 53-57%	Aug. 04, 2020~ Aug. 19, 2020
RF Conducted (For Contention Based Protocol Threshold Level Verify)	DF02-CB	Jeff Wu	24.5-25.2°C / 52-56%	Nov. 13, 2020
Radiated	03CH03-CB	Eason Chen	26-26.3°C / 57-61%	Jul. 22, 2020~ Jul. 24, 2020
AC Conduction	CO02-CB	GN Hou	20~22°C / 61~63%	Jul. 24, 2020

Test site Designation No. TW0006 with FCC
Test site registered number IC 4086D with Industry Canada.

1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	2.0 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.6 dB	Confidence levels of 95%
Conducted Emission	2.8 dB	Confidence levels of 95%
Output Power Measurement	1.4 dB	Confidence levels of 95%
Power Density Measurement	2.8 dB	Confidence levels of 95%
Bandwidth Measurement	0.39%	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Mode
802.11ax HEW160_Nss1,(MCS0)_2TX
6025MHz
6185MHz
6345MHz
6505MHz
6665MHz
6825MHz
6985MHz

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	CTX-EUT

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Maximum Conducted Output Power Peak Power Spectral Density Contention Based Protocol
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
The EUT was performed at X axis, Y axis and Z axis position for Radiated emission above 1GHz test, and the worst case was found at X axis. So the measurement will follow this same test configuration.	
1	EUT at X-axis
Operating Mode > 1GHz	CTX
The EUT was performed at X axis, Y axis and Z axis position. The worst case was found at X axis, so it was selected to perform test and its test result was written in the report.	
1	EUT at X-axis

2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

N/A

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	Test Fixture	GIGABYTE	GB-BXi7-4770R	N/A
B	LAN NB	DELL	E6430	N/A
C	Adapter	FSP	FSP135-RSEBN2	N/A

For Radiated and RF Conducted (For other tests):

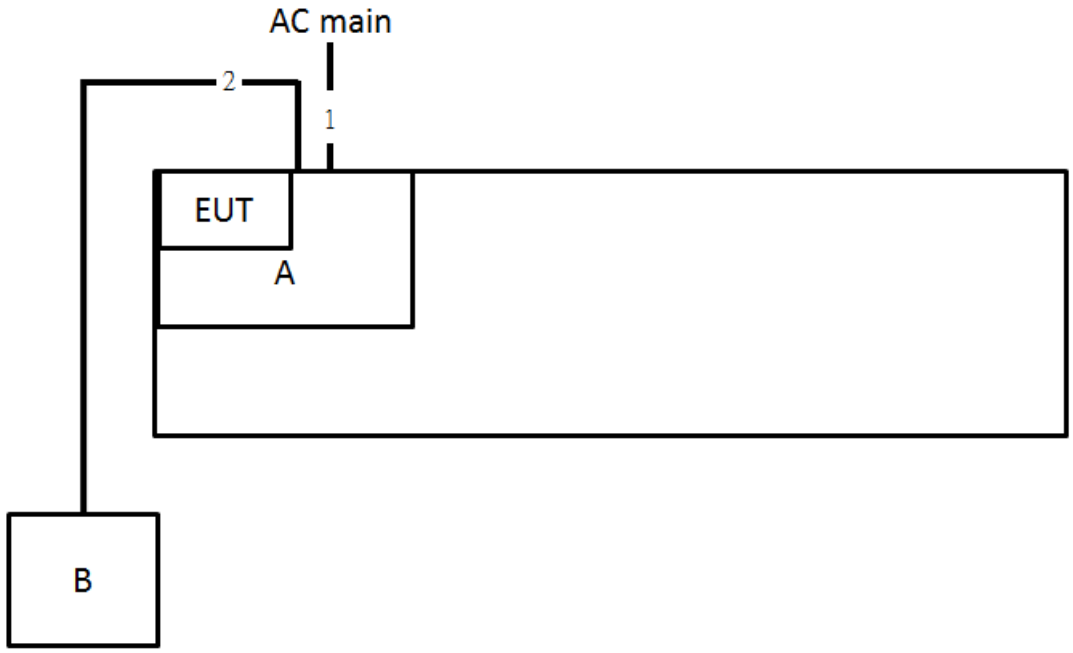
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	LAN NB	DELL	E4300	N/A
B	Test Fixture	GIGABYTE	GB-BXi7-4770R	N/A
C	Adapter	FSP	FSP135-RSEBN2	N/A

For RF Conducted (For Contention Based Protocol test):

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	NB	DELL	E4300	N/A
B	NB	DELL	E4300	N/A
C	Test Fixture	GIGABYTE	GB-BXi7-4770R	N/A
D	Rx device	Broadcom	BCM43684 6E	N/A
E	Adapter	FSP	FSP135-RSEBN2	N/A

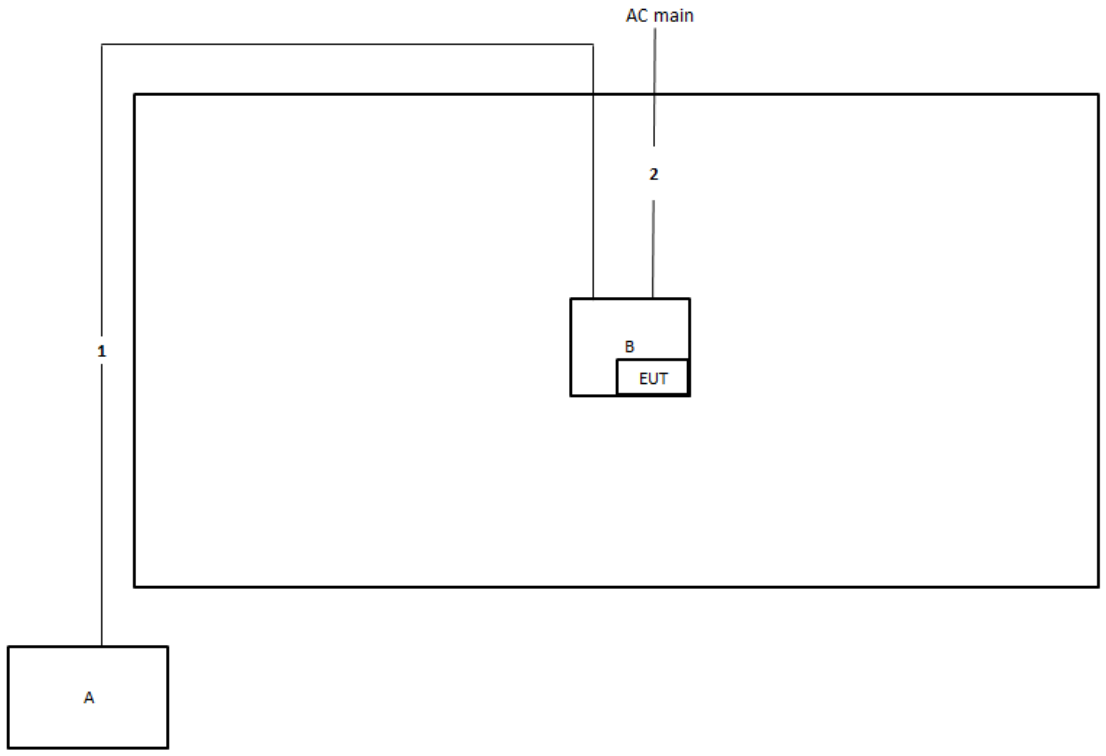
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length
1	Power cable	No	2.3m
2	RJ-45 cable	No	10m

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	2.3m

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

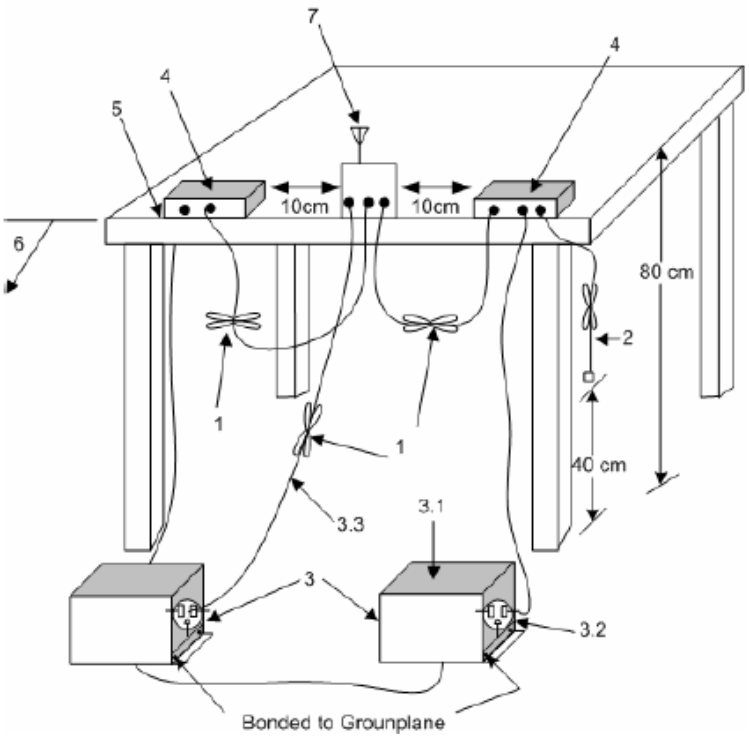
Refer a test equipment and calibration data table in this test report.

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 Measurement Results Calculation

The measured Level is calculated using:

a. Corrected Reading (dBuV) = LISN Factor + Cable Loss + Read Level = Level

b. Margin = - Limit + (Read Level + LISN Factor + Cable Loss)

3.1.6 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 5.925-7.125 GHz band, N/A

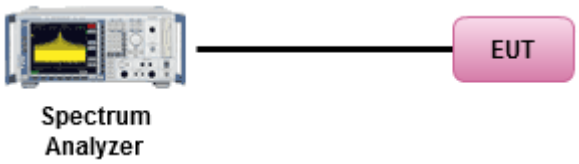
3.2.2 Measuring Instruments

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.

3.2.4 Test Setup

Emission Bandwidth


3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum equivalent isotopically radiated power (e.i.r.p)

3.3.1 Maximum e.i.r.p Limit

Maximum e.i.r.p Limit	
UNII Devices	
☒	For the 5.925 ~ 6.425 GHz band:
	▪ For standard power access point and fixed client device : e.i.r.p < 36 dBm , For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees not exceed 125 mW (21 dBm).
	▪ For indoor access point : e.i.r.p < 30 dBm.
	▪ For subordinate device control of an indoor access point : e.i.r.p < 30 dBm.
	▪ For client device control of a standard power access point : e.i.r.p < 30 dBm.
	▪ For client device control of an indoor access point : e.i.r.p < 24 dBm.
☒	For the 6.425 ~ 6.525 GHz band:
	▪ For indoor access point : e.i.r.p < 30 dBm.
	▪ For client device control of an indoor access point : e.i.r.p < 24 dBm.
☒	For the 6.525 ~ 6.875 GHz band:
	▪ For standard power access point and fixed client device : e.i.r.p < 36 dBm , For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees not exceed 125 mW (21 dBm).
	▪ For indoor access point : e.i.r.p < 30 dBm.
	▪ For subordinate device control of an indoor access point : e.i.r.p < 30 dBm.
	▪ For client device control of a standard power access point : e.i.r.p < 30 dBm.
	▪ For client device control of an indoor access point : e.i.r.p < 24 dBm.
☒	For the 6.875 ~ 7.125 GHz band:
	▪ For indoor access point : e.i.r.p < 30 dBm.
	▪ For client device control of an indoor access point : e.i.r.p < 24 dBm.

3.3.2 Measuring Instruments

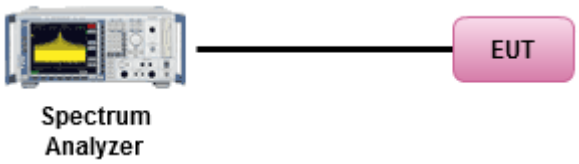
Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

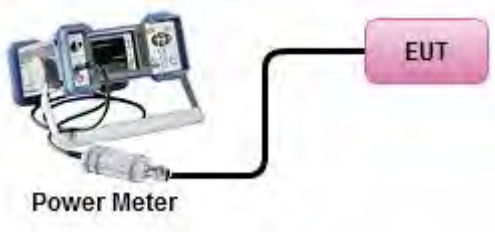
Test Method	
▪ Maximum Conducted Output Power	
	Average over on/off periods with duty factor
	☒ Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
	☐ Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over 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

For Straddle channel:

RF Output Power (Spectrum Analyzer)


For others channel:

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 (e.i.r.p)

3.4.1 Peak Power Spectral Density (e.i.r.p) Limit

Peak Power Spectral Density (e.i.r.p) Limit	
UNII Devices	
☒	For the 5.925 ~ 6.425 GHz band:
	▪ For standard power access point and fixed client device : e.i.r.p PSD < 23 dBm/MHz.
	▪ For indoor access point : e.i.r.p PSD < 5 dBm/MHz.
	▪ For subordinate device control of an indoor access point : e.i.r.p PSD < 5 dBm/MHz.
	▪ For client device control of a standard power access point : e.i.r.p PSD < 17 dBm/MHz.
	▪ For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.
☒	For the 6.425 ~ 6.525 GHz band:
	▪ For indoor access point : e.i.r.p PSD < 5 dBm/MHz.
	▪ For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.
☒	For the 6.525 ~ 6.875 GHz band:
	▪ For standard power access point and fixed client device : e.i.r.p PSD < 23 dBm/MHz.
	▪ For indoor access point : e.i.r.p PSD < 5 dBm/MHz.
	▪ For subordinate device control of an indoor access point : e.i.r.p PSD < 5 dBm/MHz.
	▪ For client device control of a standard power access point : e.i.r.p PSD < 17 dBm/MHz.
	▪ For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.
☒	For the 6.875 ~ 7.125 GHz band:
	▪ For indoor access point : e.i.r.p PSD < 5 dBm/MHz.
	▪ For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.

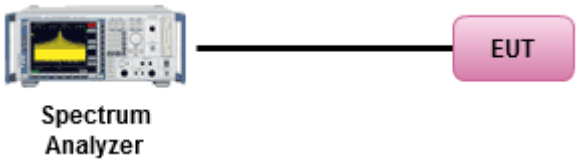
3.4.2 Measuring Instruments

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 Unwanted Emissions Limit

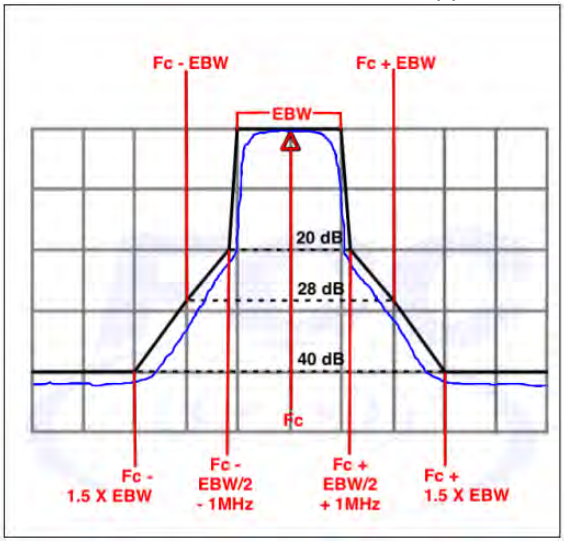
Unwanted emissions below 1 GHz and restricted band emissions above 1GHz limit			
Frequency Range (MHz)	**Field Strength (uV/m)**	**Field Strength (dBuV/m)**	**Measure Distance (m)**
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	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(20 x log (standard distance/ test distance) = 20log(3/1) = 9.54dB.
EX. Above 18GHz emission limit calculation (3m to 1m) = 54dBuV/m at 3m + 9.54dB = 63.54 dBuV/m at 1m.

Un-restricted band emissions above 1GHz Limit	
Frequency	**Limit**
Any outside the 5.945 – 7.125 GHz emission	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
	Note 1: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m(20 x log (standard distance/ test distance) = 20log(3/1) = 9.54dB. EX. Above 18GHz emission limit calculation (3m to 1m) = 68.2dBuV/m at 3m + 9.54dB = 77.74 dBuV/m at 1m.
Frequency	**Emission MASK Limit**
5.945 – 7.125 GHz	Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's

	channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB. 

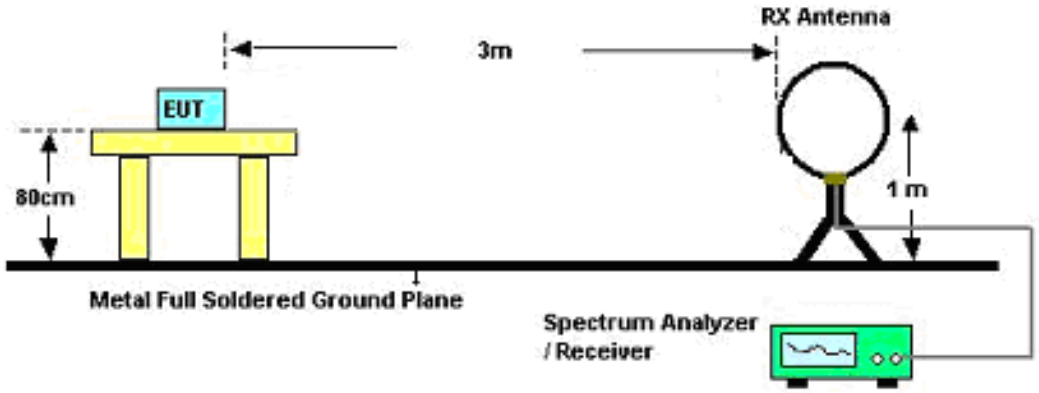
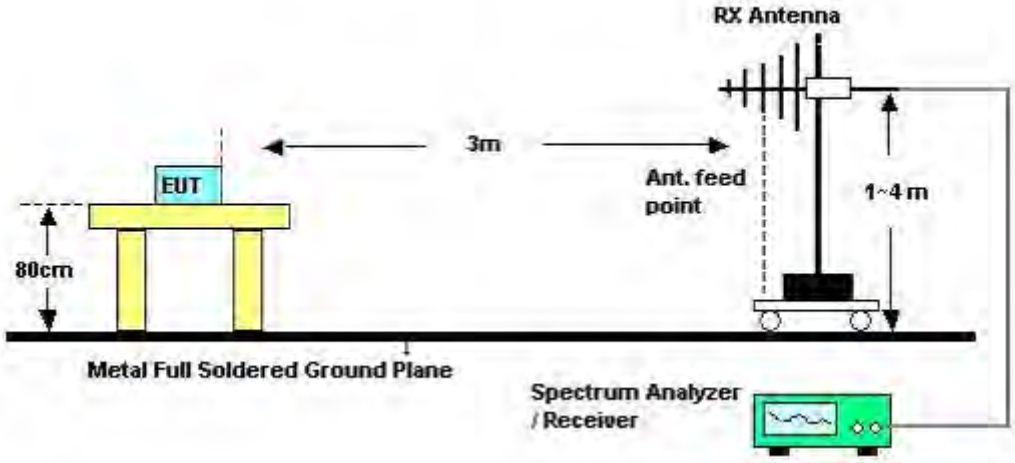
3.5.2 Measuring Instruments

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

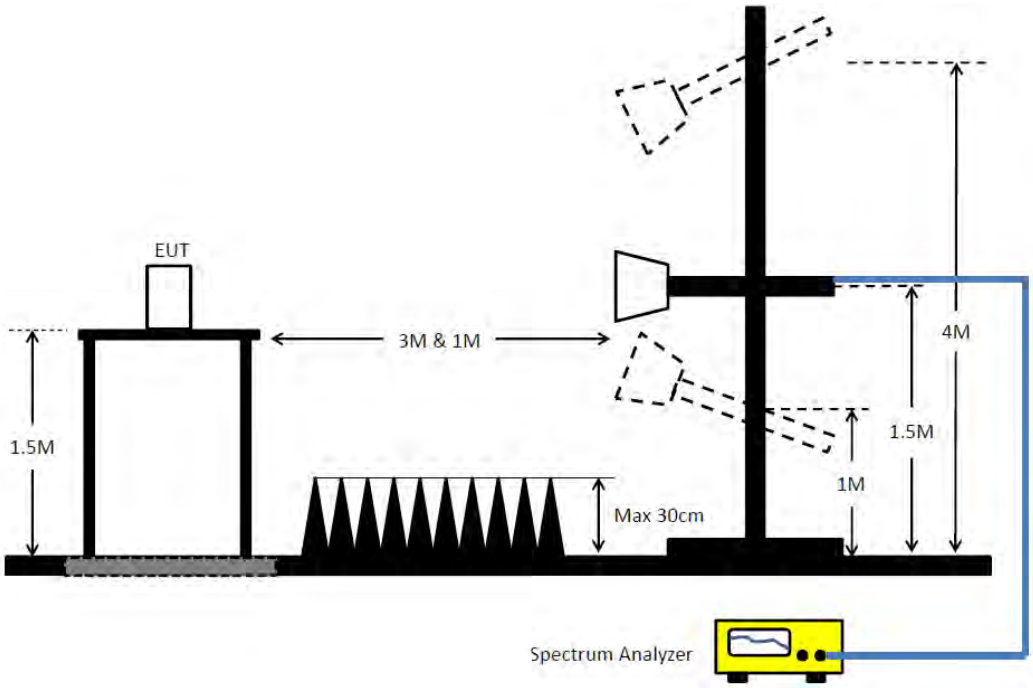
3.5.3 Test Procedures

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 G)2) for unwanted emissions into non-restricted bands.		
	▪ Refer as FCC KDB 789033, clause G)1) for unwanted emissions into restricted bands.		
		☒	Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging). (For unrestricted band measurement)
		☐	Refer as FCC KDB 789033, G)6) Method VB (Reduced VBW).
		☒	Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.(For restricted band average measurement)
		☐	Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
		☒	Refer as FCC KDB 789033, clause G)5) measurement procedure peak limit.
		☐	Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.
▪ For emission MASK shall be measured using following options below:			
		☒	Refer as FCC draft KDB 987594 D02, J) In-Band Emissions
▪ 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 Measurement Results Calculation

The measured Level is calculated using:
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor (if applicable) = Level.

3.5.6 Transmitter Unwanted Emissions (Below 30MHz)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.
All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.
The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10 harmonic or 40 GHz, whichever is appropriate.

3.5.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E
Note: The Emission MASK result is used nominal bandwidth (160MHz) to set mask limits, there is more strict than used EBW to set mask limits.

3.6 Contention Based Protocol

3.6.1 Contention Based Protocol Limit

EUT can detect an AWGN signal with 90% (or better) level of certainty.

3.6.2 Measuring Instruments

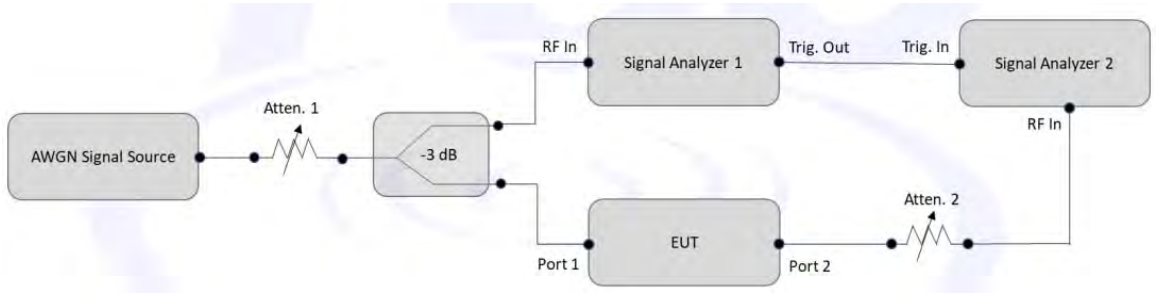
Refer a test equipment and calibration data table in this test report.

3.6.3 Test Procedures

Test Method	
▪	For Contention Based Protocol shall be measured using following options below:
☒	Refer as FCC draft KDB 987594 D02, I) In-Band Emissions

3.6.4 Test Setup

Contention Based Protocol



3.6.5 Test Result of Contention Based Protocol

Refer as Appendix F

3.7 Demonstrate under control of low power indoor access point

3.7.1 Statement of Demonstrate under control of low power indoor access point

This EUT operates as LPI STA, and the operation power will not exceed the regulatory limit. Thus, this EUT meets the requirement of "Demonstrate under control of lower power AP".

4 Test Equipment and Calibration Data

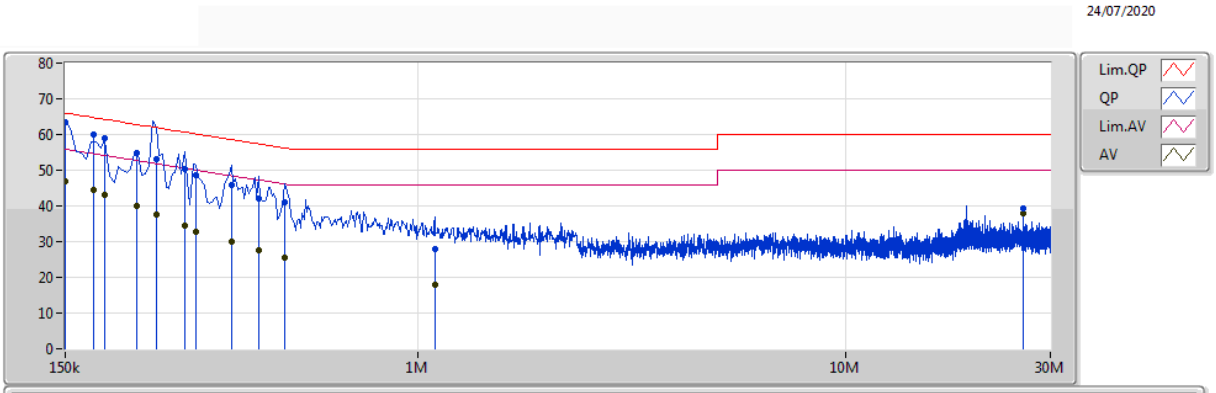
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
LISN	Schwarzbeck	NSLK 8127	8127650	9kHz ~ 30MHz	Nov. 21, 2019	Nov. 20, 2020	Conduction (CO02-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Oct. 30, 2019	Oct. 29, 2020	Conduction (CO02-CB)
EMI Receiver	Agilent	N9038A	MY52260140	9kHz ~ 8.4GHz	Mar. 10, 2020	Mar. 09, 2021	Conduction (CO02-CB)
COND Cable	Woken	Cable	2	0.15MHz ~ 30MHz	Oct. 21, 2019	Oct. 20, 2020	Conduction (CO02-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO02-CB)
Pulse Limiter	Schwarzbeck	VTSD 9561F-N	00378	9kHz ~ 30MHz	Mar. 19, 2020	Mar. 18, 2021	Conduction (CO02-CB)
Bilog Antenna with 6 dB attenuator	Schaffner	CBL6112B & N-6-06	2928 & AT-N0607	20MHz ~ 2GHz	Feb. 28, 2020	Feb. 27, 2021	Radiation (03CH03-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 13, 2020	Apr. 12, 2021	Radiation (03CH03-CB)
Horn Antenna	ETS・Lindgren	3115	6821	750MHz~ 18GHz	Jan. 20, 2020	Jan. 19, 2021	Radiation (03CH03-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 11, 2020	Jun. 10, 2021	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8447D	2944A10259	9kHz ~ 1.3GHz	Jan. 15, 2020	Jan. 14, 2021	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8449B	3008A02097	1GHz ~ 26.5GHz	Jul. 03, 2020	Jun. 02, 2021	Radiation (03CH03-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 08, 2020	Jul. 07, 2021	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 09, 2020	Jun. 08, 2021	Radiation (03CH03-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	May 13, 2020	May 12, 2021	Radiation (03CH03-CB)
RF Cable-low	Woken	RG402	Low Cable-02+27 (spare)	25MHz ~ 1GHz	Jul. 03, 2020	Jun. 02, 2021	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-20+27 (spare)	1GHz ~ 18GHz	Jul. 03, 2020	Jun. 02, 2021	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-27 (spare)	1GHz ~ 18GHz	Jul. 03, 2020	Jun. 02, 2021	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH03-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Nov. 01, 2019	Oct. 31, 2020	Conducted (TH03-CB)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Power Sensor	Anritsu	MA2411B	1726195	300MHz~ 40GHz	Aug. 13, 2019	Aug. 12, 2020	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1531343	300MHz~ 40GHz	Aug. 04, 2020	Aug. 03, 2021	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1035008	300MHz~ 40GHz	Aug. 13, 2019	Aug. 12, 2020	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1728001	300MHz~ 40GHz	Aug. 04, 2020	Aug. 03, 2021	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-11	1 GHz– 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-12	1 GHz– 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-13	1 GHz– 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz– 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz– 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH03-CB)
Signal Analyzer	R&S	FSV40	101903	9kHz ~ 40GHz	May 14, 2020	May 13, 2021	Conducted (DF02-CB)
Vector Signal generator	R&S	SMU200A	105352	25MHz-6GHz	Nov. 22, 2019	Nov. 21, 2020	Conducted (DF02-CB)
Signal generator	R&S	SMB100A	181239	1MHz-40GHz	Dec. 20, 2019	Dec. 19, 2020	Conducted (DF02-CB)
RF Cable-high	Woken	RG402	High Cable-61	1 GHz – 18 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (DF02-CB)
RF Cable-high	Woken	RG402	High Cable-61	1 GHz – 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (DF02-CB)
RF Cable-high	Woken	RG402	High Cable-62	1 GHz – 18 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (DF02-CB)
RF Cable-high	Woken	RG402	High Cable-62	1 GHz – 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (DF02-CB)
RF Cable-high	Woken	RG402	High Cable-63	1 GHz – 18 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (DF02-CB)
RF Cable-high	Woken	RG402	High Cable-63	1 GHz – 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (DF02-CB)
RF Cable-high	Woken	RG402	High Cable-66	1 GHz – 18 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (DF02-CB)
RF Cable-high	Woken	RG402	High Cable-66	1 GHz – 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (DF02-CB)
100MS/s Digitizer	N.I	USB-5133	F65206	N/A	Nov. 06, 2019	Nov. 05, 2020	Conducted (DF02-CB)
100MS/s Digitizer	N.I	USB-5133	01BFB476	N/A	Mar. 19, 2020	Mar. 18, 2021	Conducted (DF02-CB)

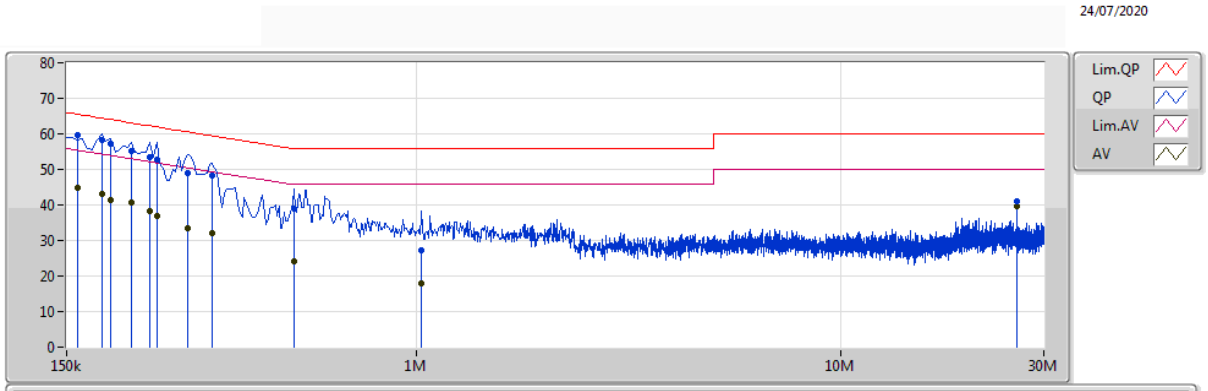
Note: Calibration Interval of instruments listed above is one year.
NCR means Non-Calibration required.

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	150k	63.38	66.00	-2.62	Line



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	150k	63.38	66.00	-2.62	10.25	Line	"Worst"	53.13	0.05	0.05	10.15
AV	150k	46.84	56.00	-9.16	10.25	Line	-	36.59	0.05	0.05	10.15
QP	174.9k	60.13	64.72	-4.59	10.27	Line	-	49.86	0.05	0.06	10.16
AV	174.9k	44.32	54.72	-10.40	10.27	Line	-	34.05	0.05	0.06	10.16
QP	185.7k	59.02	64.22	-5.20	10.28	Line	-	48.74	0.05	0.07	10.16
AV	185.7k	42.99	54.22	-11.23	10.28	Line	-	32.71	0.05	0.07	10.16
QP	220.4k	54.94	62.81	-7.87	10.28	Line	-	44.66	0.05	0.07	10.16
AV	220.4k	40.11	52.81	-12.70	10.28	Line	-	29.83	0.05	0.07	10.16
QP	244.5k	52.98	61.95	-8.97	10.27	Line	-	42.71	0.05	0.07	10.15
AV	244.5k	37.63	51.95	-14.32	10.27	Line	-	27.36	0.05	0.07	10.15
QP	285k	50.18	60.67	-10.49	10.26	Line	-	39.92	0.05	0.08	10.13
AV	285k	34.34	50.67	-16.33	10.26	Line	-	24.08	0.05	0.08	10.13
QP	302.6k	48.51	60.17	-11.66	10.26	Line	-	38.25	0.05	0.08	10.13
AV	302.6k	32.92	50.17	-17.25	10.26	Line	-	22.66	0.05	0.08	10.13
QP	366k	45.78	58.60	-12.82	10.24	Line	-	35.54	0.05	0.08	10.11
AV	366k	29.97	48.60	-18.63	10.24	Line	-	19.73	0.05	0.08	10.11
QP	424.5k	42.17	57.36	-15.19	10.23	Line	-	31.94	0.05	0.08	10.10
AV	424.5k	27.46	47.36	-19.90	10.23	Line	-	17.23	0.05	0.08	10.10
QP	487.5k	41.07	56.21	-15.14	10.24	Line	-	30.83	0.05	0.09	10.10
AV	487.5k	25.48	46.21	-20.73	10.24	Line	-	15.24	0.05	0.09	10.10
QP	1.095M	28.01	56.00	-27.99	10.30	Line	-	17.71	0.06	0.13	10.11
AV	1.095M	17.82	46.00	-28.18	10.30	Line	-	7.52	0.06	0.13	10.11
QP	25.872M	39.42	60.00	-20.58	10.97	Line	-	28.45	0.55	0.23	10.19
AV	25.872M	37.85	50.00	-12.15	10.97	Line	-	26.88	0.55	0.23	10.19



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	159.45k	59.62	65.48	-5.86	10.26	Neutral	"Worst"	49.36	0.05	0.06	10.15
AV	159.45k	44.72	55.48	-10.76	10.26	Neutral	-	34.46	0.05	0.06	10.15
QP	181.5k	58.39	64.41	-6.02	10.27	Neutral	-	48.12	0.05	0.06	10.16
AV	181.5k	43.06	54.41	-11.35	10.27	Neutral	-	32.79	0.05	0.06	10.16
QP	190.5k	57.25	64.01	-6.76	10.29	Neutral	-	46.96	0.05	0.07	10.17
AV	190.5k	41.54	54.01	-12.47	10.29	Neutral	-	31.25	0.05	0.07	10.17
QP	213k	55.06	63.09	-8.03	10.28	Neutral	-	44.78	0.05	0.07	10.16
AV	213k	40.59	53.09	-12.50	10.28	Neutral	-	30.31	0.05	0.07	10.16
QP	235.5k	53.33	62.25	-8.92	10.27	Neutral	-	43.06	0.05	0.07	10.15
AV	235.5k	38.21	52.25	-14.04	10.27	Neutral	-	27.94	0.05	0.07	10.15
QP	244.5k	52.73	61.95	-9.22	10.27	Neutral	-	42.46	0.05	0.07	10.15
AV	244.5k	37.00	51.95	-14.95	10.27	Neutral	-	26.73	0.05	0.07	10.15
QP	289.5k	49.01	60.53	-11.52	10.26	Neutral	-	38.75	0.05	0.08	10.13
AV	289.5k	33.32	50.53	-17.21	10.26	Neutral	-	23.06	0.05	0.08	10.13
QP	330k	48.11	59.44	-11.33	10.25	Neutral	-	37.86	0.05	0.08	10.12
AV	330k	32.08	49.44	-17.36	10.25	Neutral	-	21.83	0.05	0.08	10.12
QP	514.5k	38.88	56.00	-17.12	10.24	Neutral	-	28.64	0.05	0.09	10.10
AV	514.5k	24.27	46.00	-21.73	10.24	Neutral	-	14.03	0.05	0.09	10.10
QP	1.028M	27.29	56.00	-28.71	10.29	Neutral	-	17.00	0.06	0.12	10.11
AV	1.028M	18.09	46.00	-27.91	10.29	Neutral	-	7.80	0.06	0.12	10.11
QP	25.872M	41.00	60.00	-19.00	10.75	Neutral	-	30.25	0.33	0.23	10.19
AV	25.872M	39.77	50.00	-10.23	10.75	Neutral	-	29.02	0.33	0.23	10.19

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.925-6.425GHz	-	-	-	-	-
802.11ax HEW160_Nss1,(MCS0)_2TX	164.88M	156.018M	156MD1D	163.92M	155.25M
6.425-6.525GHz	-	-	-	-	-
802.11ax HEW160_Nss1,(MCS0)_2TX	165.12M	155.442M	155MD1D	163.68M	155.442M
6.525-6.875GHz	-	-	-	-	-
802.11ax HEW160_Nss1,(MCS0)_2TX	167.28M	156.594M	157MD1D	163.92M	155.634M
6.875-7.125GHz	-	-	-	-	-
802.11ax HEW160_Nss1,(MCS0)_2TX	165.36M	155.25M	155MD1D	164.88M	155.25M

Max-N dB = Maximum 26dB down bandwidth for other band;
Max-OBW = Maximum99% occupied bandwidth;
Min-N dB = Minimum 26dB down bandwidth for other band;
Min-OBW = Minimum 99% occupied bandwidth;

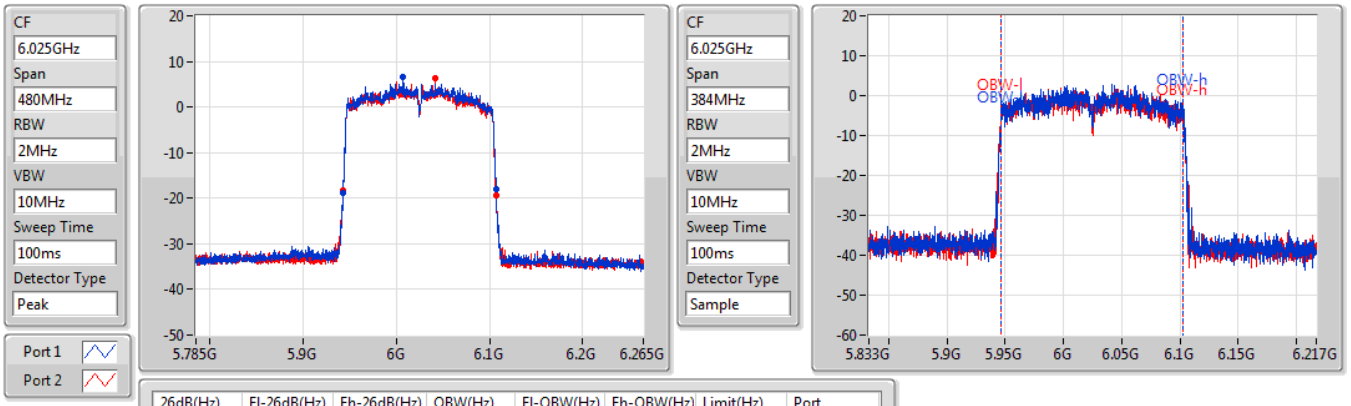
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW160_Nss1,(MCS0)_2TX	-	-	-	-	-	-
6025MHz	Pass	Inf	163.92M	155.826M	163.92M	155.25M
6185MHz	Pass	Inf	164.88M	155.634M	164.64M	156.018M
6345MHz	Pass	Inf	164.64M	155.826M	164.16M	155.634M
6505MHz Straddle 6.425-6.525GHz	Pass	Inf	165.12M	155.442M	163.68M	155.442M
6505MHz Straddle 6.525-6.875GHz	Pass	Inf	164.4M	155.826M	163.92M	155.634M
6665MHz	Pass	Inf	167.28M	156.594M	164.88M	156.402M
6825MHz Straddle 6.525-6.875GHz	Pass	Inf	164.64M	155.634M	165.36M	155.826M
6825MHz Straddle 6.875-7.125GHz	Pass	Inf	165.36M	155.25M	164.16M	155.442M
6985MHz	Pass	Inf	164.88M	155.25M	164.16M	155.826M

Port X-N dB = 26dB down bandwidth for other band
Port X-OBW = Port **X** 99% occupied bandwidth;

802.11ax HEW160_Nss1,(MCS0)_2TX EBW

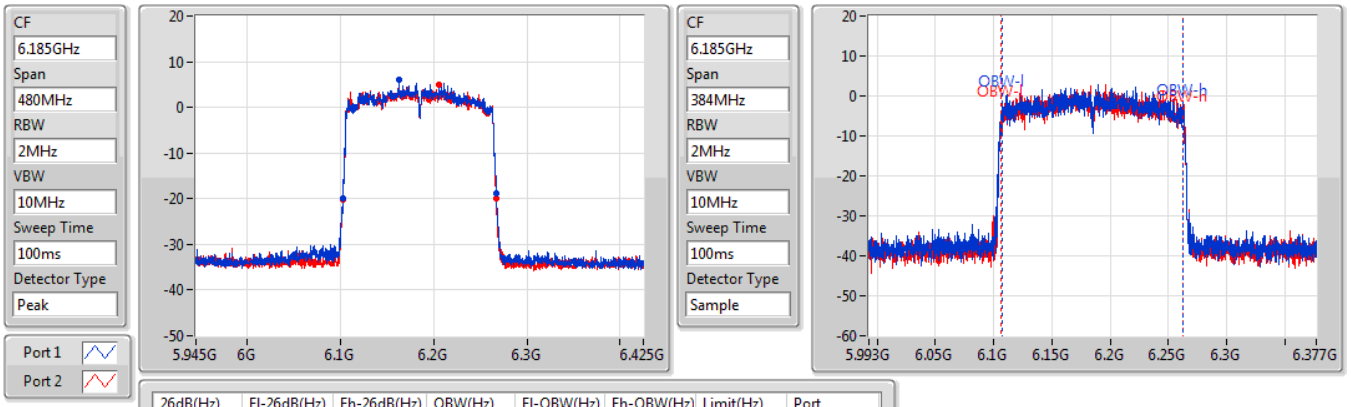
6025MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
163.92M	5.94316G	6.10708G	155.826M	5.946895G	6.102721G	Inf	1
163.92M	5.94292G	6.10684G	155.25M	5.946895G	6.102145G	Inf	2

802.11ax HEW160_Nss1,(MCS0)_2TX EBW

6185MHz

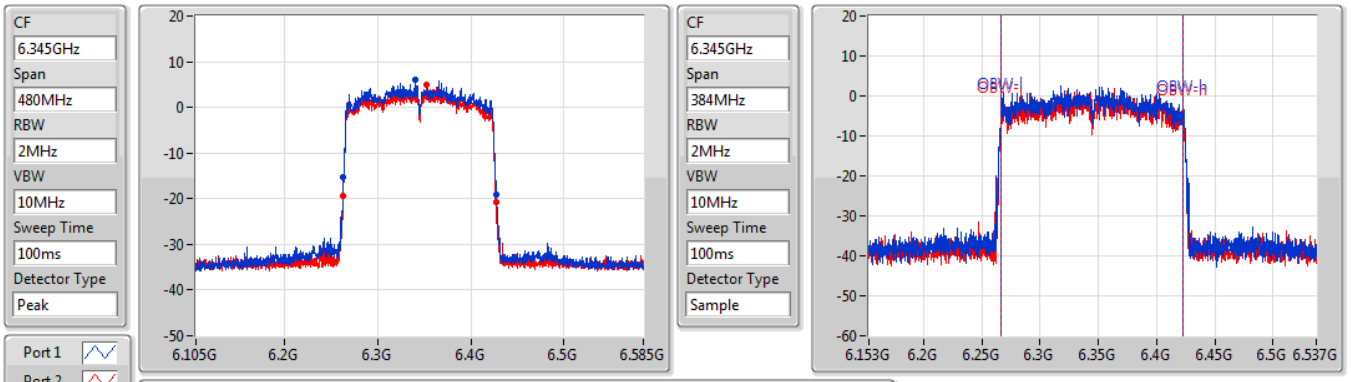


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
164.88M	6.10244G	6.26732G	155.634M	6.107087G	6.262721G	Inf	1
164.64M	6.10268G	6.26732G	156.018M	6.106895G	6.262913G	Inf	2

802.11ax HEW160_Nss1,(MCS0)_2TX EBW

6345MHz

23/07/2020

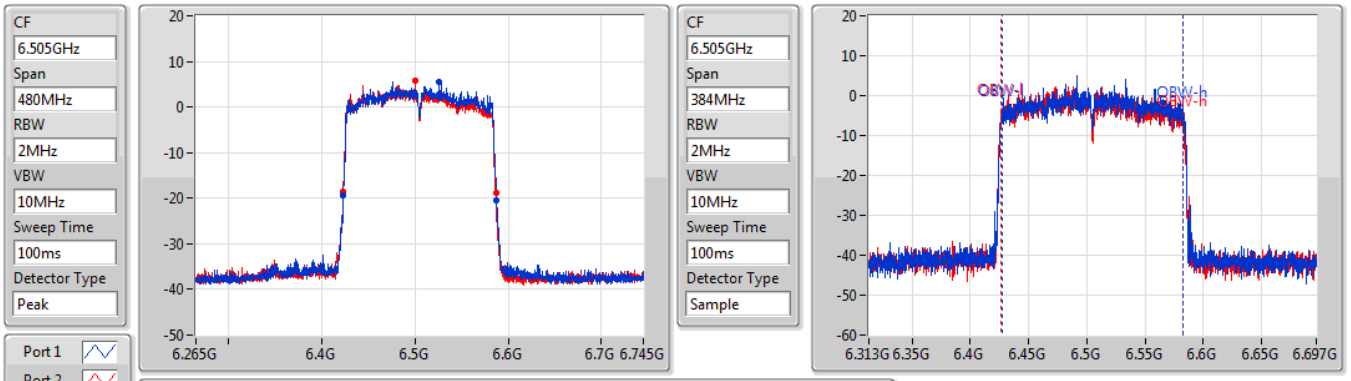


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
164.64M	6.26268G	6.42732G	155.826M	6.266895G	6.422721G	Inf	1
164.16M	6.26292G	6.42708G	155.634M	6.266895G	6.422529G	Inf	2

802.11ax HEW160_Nss1,(MCS0)_2TX EBW

6505MHz Straddle 6.425-6.525GHz

23/07/2020

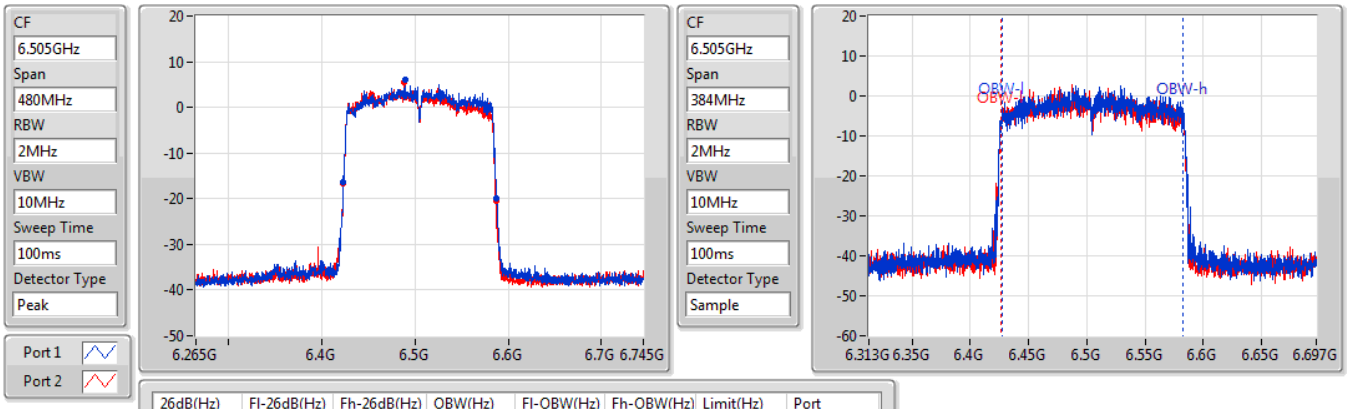


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
165.12M	6.42244G	6.58756G	155.442M	6.427279G	6.582721G	Inf	1
163.68M	6.42292G	6.5866G	155.442M	6.426895G	6.582337G	Inf	2

802.11ax HEW160_Nss1,(MCS0)_2TX EBW

6505MHz Straddle 6.525-6.875GHz

23/07/2020

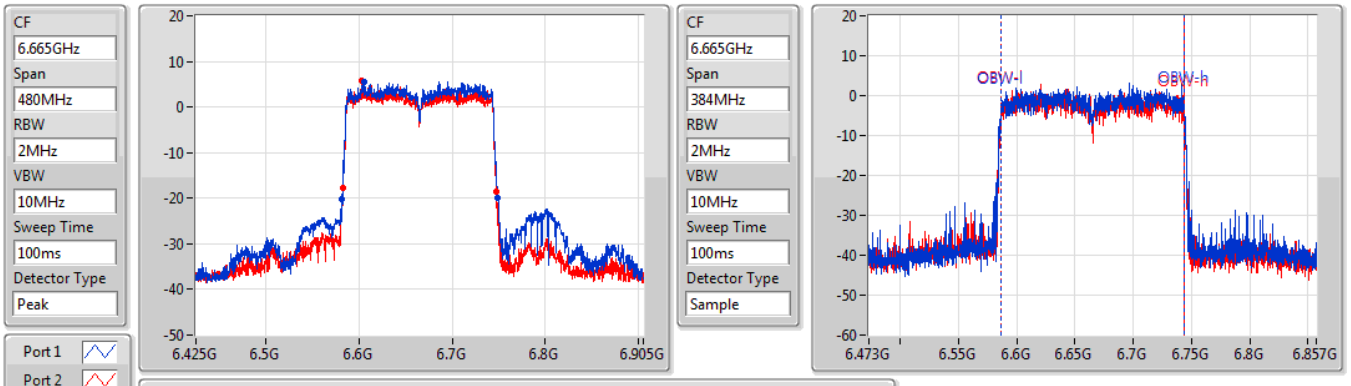


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
164.4M	6.42292G	6.58732G	155.826M	6.427087G	6.582913G	Inf	1
163.92M	6.42316G	6.58708G	155.634M	6.426895G	6.582529G	Inf	2

802.11ax HEW160_Nss1,(MCS0)_2TX EBW

6665MHz

23/07/2020

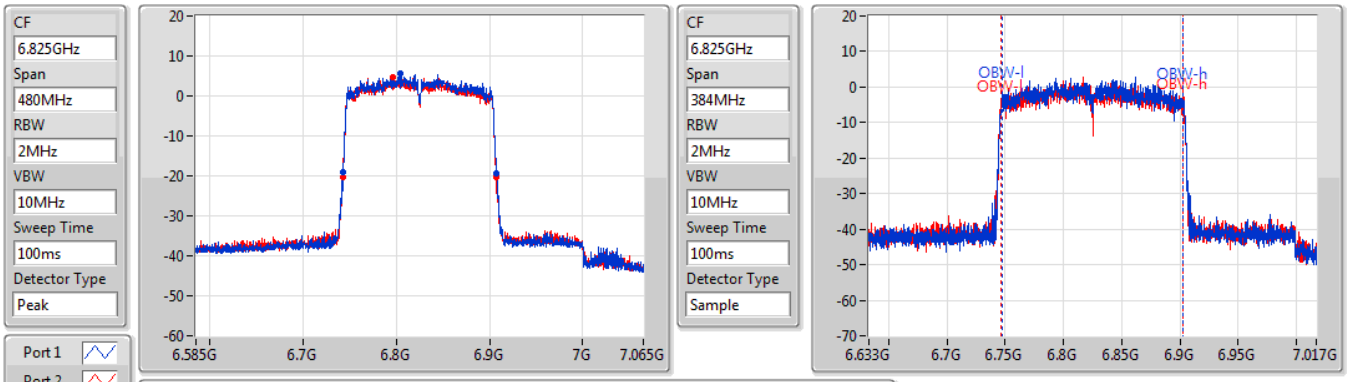


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
167.28M	6.58172G	6.749G	156.594M	6.586703G	6.743297G	Inf	1
164.88M	6.58244G	6.74732G	156.402M	6.586703G	6.743105G	Inf	2

802.11ax HEW160_Nss1,(MCS0)_2TX EBW

6825MHz Straddle 6.525-6.875GHz

23/07/2020

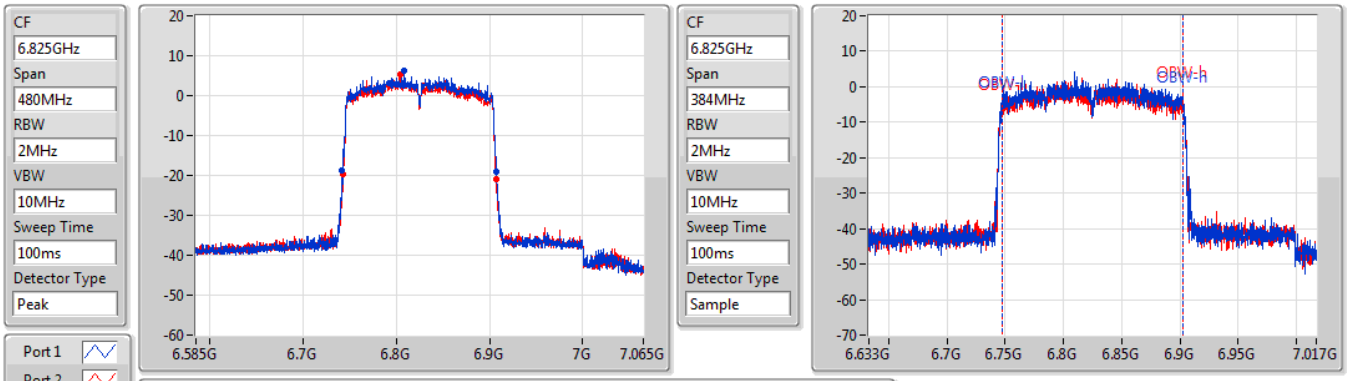


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
164.64M	6.74268G	6.90732G	155.634M	6.747279G	6.902913G	Inf	1
165.36M	6.7422G	6.90756G	155.826M	6.746895G	6.902721G	Inf	2

802.11ax HEW160_Nss1,(MCS0)_2TX EBW

6825MHz Straddle 6.875-7.125GHz

23/07/2020

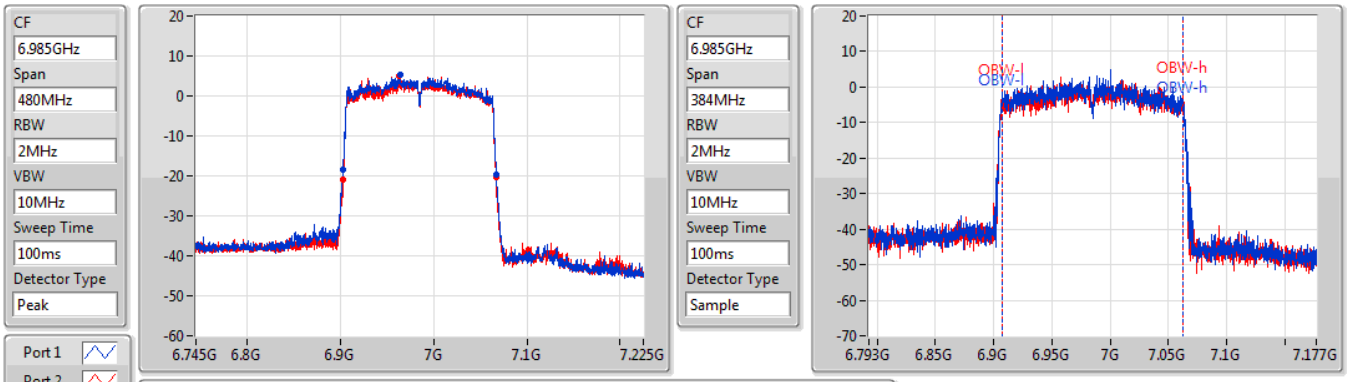


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
165.36M	6.74196G	6.90732G	155.25M	6.747279G	6.902529G	Inf	1
164.16M	6.74292G	6.90708G	155.442M	6.747087G	6.902529G	Inf	2

802.11ax HEW160_Nss1,(MCS0)_2TX EBW

6985MHz

23/07/2020



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
164.88M	6.90268G	7.06756G	155.25M	6.907087G	7.062337G	Inf	1
164.16M	6.90268G	7.06684G	155.826M	6.907087G	7.062913G	Inf	2

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ax HEW160_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
6025MHz	Pass	3.4	11.19	10.95	14.08	17.48	24.00
6185MHz	Pass	3.4	10.94	10.67	13.82	17.22	24.00
6345MHz	Pass	3.4	11.18	10.24	13.75	17.15	24.00
6505MHz	Pass	3.4	10.75	10.19	13.49	16.89	24.00
6665MHz	Pass	3.4	11.83	11.04	14.46	17.86	24.00
6825MHz	Pass	3.4	11.5	10.95	14.24	17.64	24.00
6985MHz	Pass	3.4	11.87	11.19	14.55	17.95	24.00

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

Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.925-6.425GHz	-	-
802.11ax HEW160_Nss1,(MCS0)_2TX	-7.62	-1.21
6.425-6.525GHz	-	-
802.11ax HEW160_Nss1,(MCS0)_2TX	-7.69	-1.28
6.525-6.875GHz	-	-
802.11ax HEW160_Nss1,(MCS0)_2TX	-7.54	-1.13
6.875-7.125GHz	-	-
802.11ax HEW160_Nss1,(MCS0)_2TX	-7.54	-1.13

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

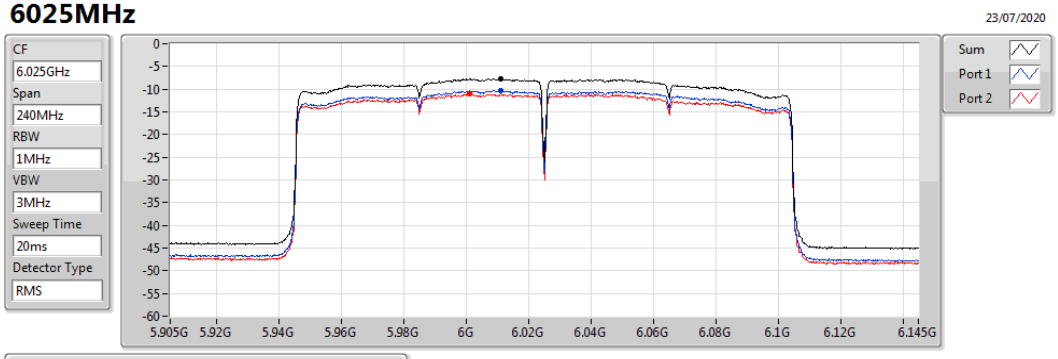
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11ax HEW160_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
6025MHz	Pass	6.41	-10.3	-11.09	-7.68	-1.27	-1.00
6185MHz	Pass	6.41	-10.21	-10.99	-7.62	-1.21	-1.00
6345MHz	Pass	6.41	-10.1	-11.03	-7.62	-1.21	-1.00
6505MHz	Pass	6.41	-10.67	-10.53	-7.69	-1.28	-1.00
6665MHz	Pass	6.41	-10.07	-10.84	-7.54	-1.13	-1.00
6825MHz	Pass	6.41	-10.5	-10.42	-7.58	-1.17	-1.00
6985MHz	Pass	6.41	-10.5	-10.98	-7.8	-1.39	-1.00

DG = Directional Gain; **RBW** = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11ax HEW160_Nss1,(MCS0)_2TX PSD

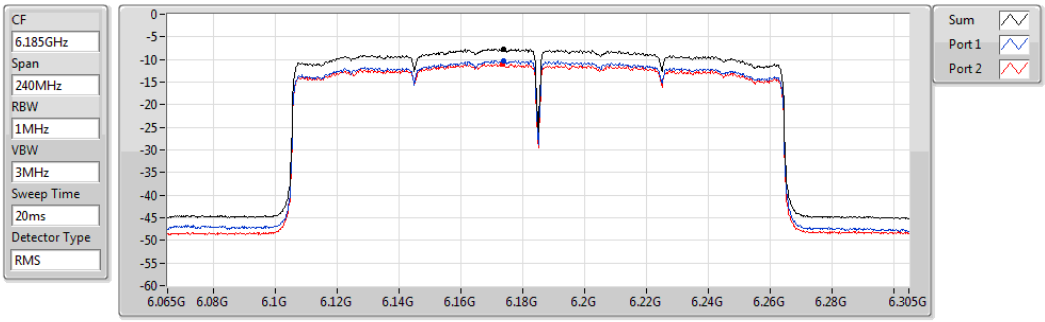
6025MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.68	-7.68	-10.30	-11.09

802.11ax HEW160_Nss1,(MCS0)_2TX PSD

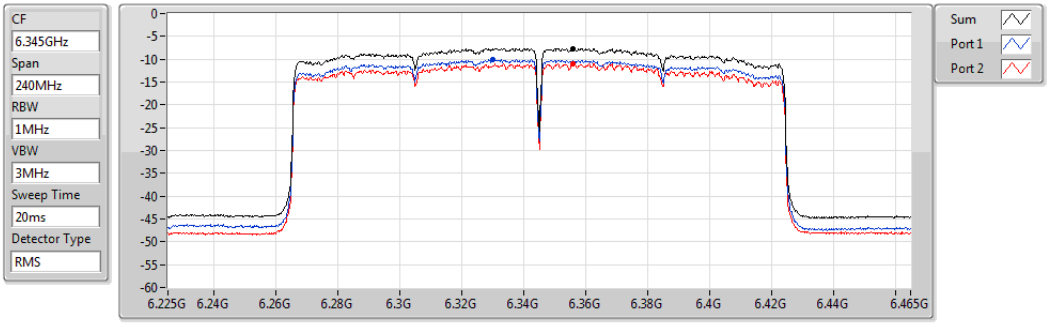
6185MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.62	-7.62	-10.21	-10.99

802.11ax HEW160_Nss1,(MCS0)_2TX PSD

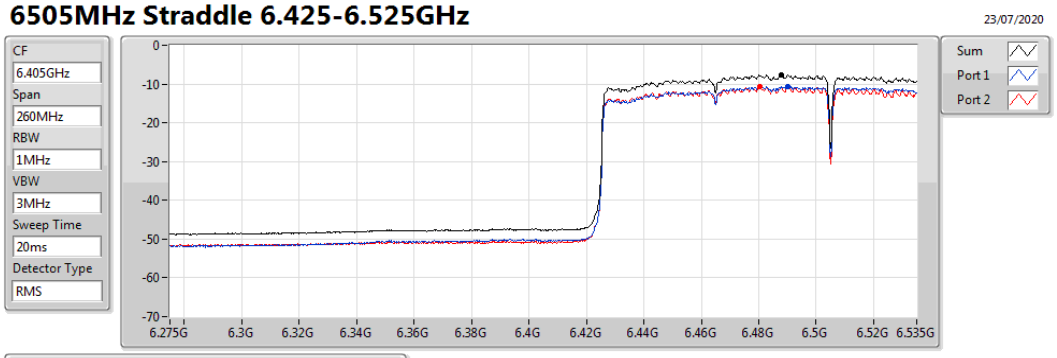
6345MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.62	-7.62	-10.10	-11.03

802.11ax HEW160_Nss1,(MCS0)_2TX PSD

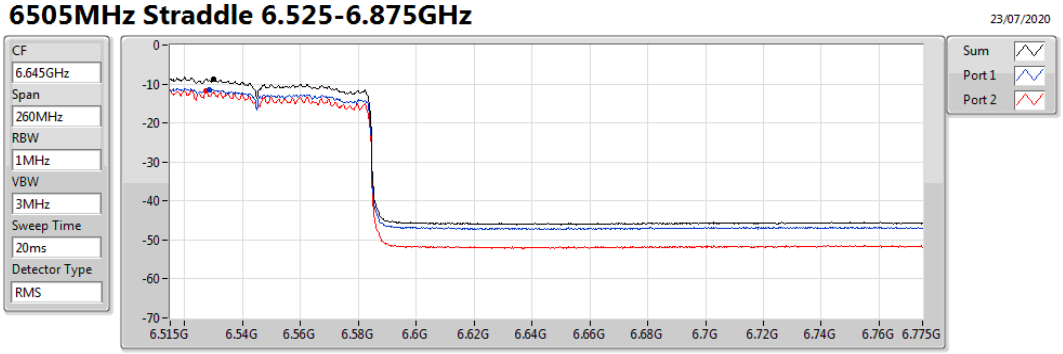
6505MHz Straddle 6.425-6.525GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.69	-7.69	-10.67	-10.53

802.11ax HEW160_Nss1,(MCS0)_2TX PSD

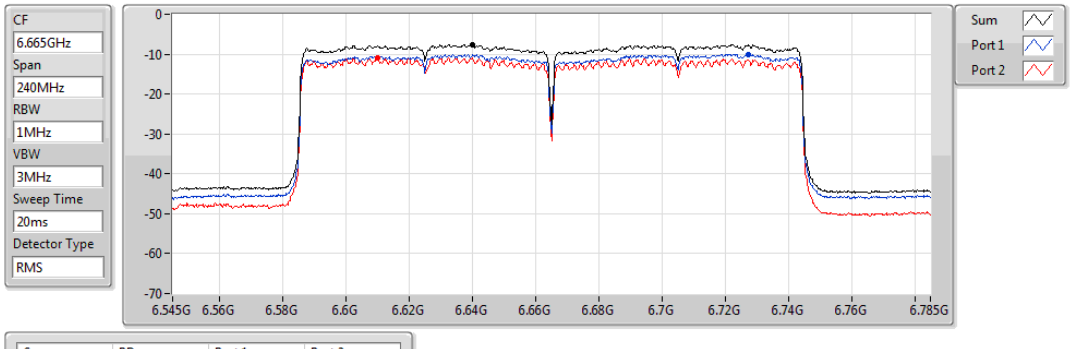
6505MHz Straddle 6.525-6.875GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.70	-8.70	-11.43	-11.81

802.11ax HEW160_Nss1,(MCS0)_2TX PSD

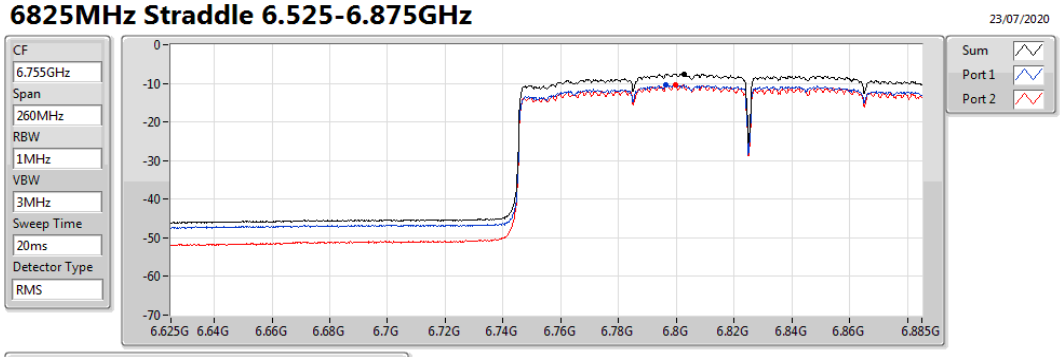
6665MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.54	-7.54	-10.07	-10.84

802.11ax HEW160_Nss1,(MCS0)_2TX PSD

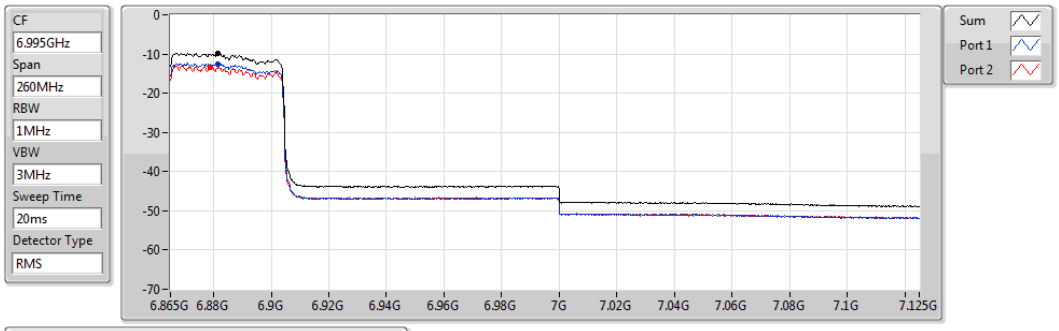
6825MHz Straddle 6.525-6.875GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.58	-7.58	-10.50	-10.42

802.11ax HEW160_Nss1,(MCS0)_2TX PSD

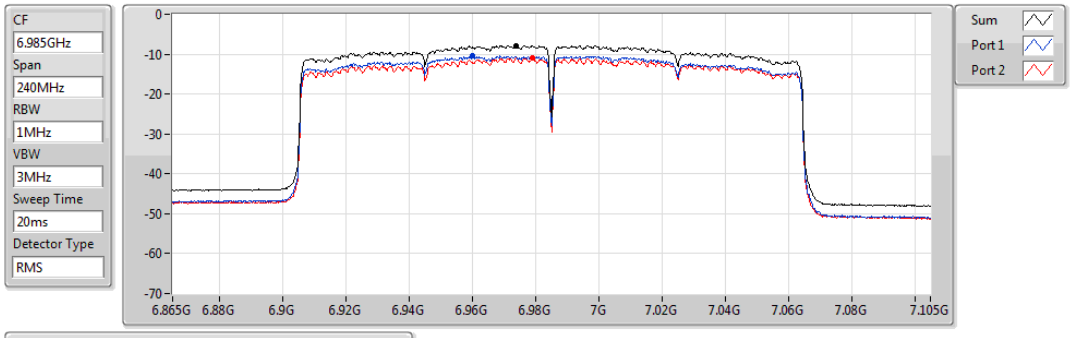
6825MHz Straddle 6.875-7.125GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.96	-9.96	-12.52	-13.33

802.11ax HEW160_Nss1,(MCS0)_2TX PSD

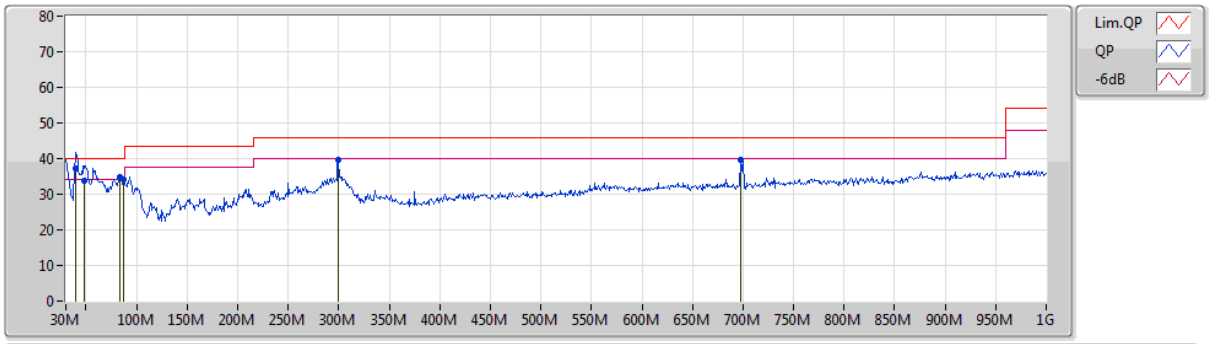
6985MHz



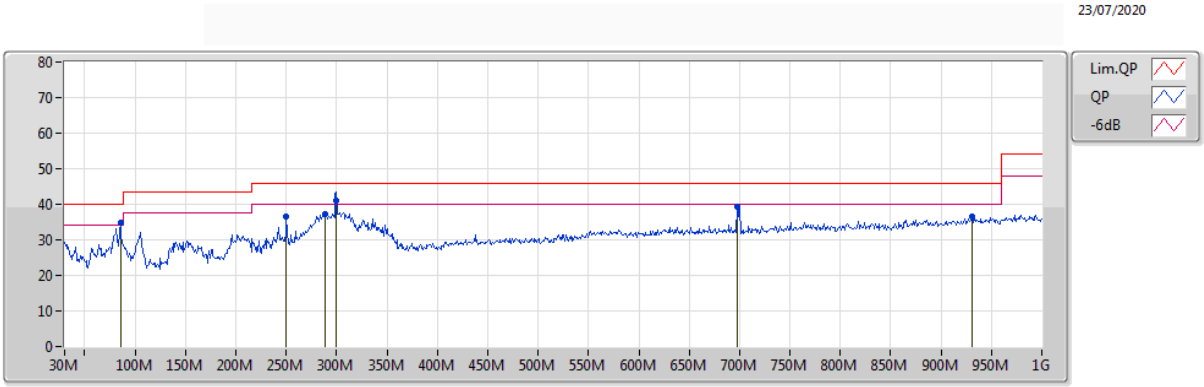
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.80	-7.80	-10.50	-10.98

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	QP	39.7M	37.27	40.00	-2.73	Vertical



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
QP	39.7M	37.27	40.00	-2.73	-10.73	3	Vertical	315	1.00	"Worst"	48.00	19.12	1.60	31.45
QP	48.43M	33.63	40.00	-6.37	-15.37	3	Vertical	11	1.00	-	49.00	14.69	1.45	31.51
PK	83.35M	34.69	40.00	-5.31	-16.47	3	Vertical	180	1.25	-	51.16	13.37	1.90	31.74
PK	87.23M	34.02	40.00	-5.98	-15.63	3	Vertical	210	1.50	-	49.65	14.15	1.94	31.72
PK	299.66M	39.69	46.00	-6.31	-9.06	3	Vertical	0	1.50	-	48.75	19.17	3.60	31.83
PK	697.36M	39.73	46.00	-6.27	-2.03	3	Vertical	185	1.00	-	41.76	24.92	5.49	32.44



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	85.29M	34.76	40.00	-5.24	-16.13	3	Horizontal	76	2.00	-	50.89	13.71	1.91	31.75
PK	250.19M	36.42	46.00	-9.58	-10.15	3	Horizontal	101	1.00	-	46.57	18.43	3.20	31.78
PK	288.02M	37.22	46.00	-8.78	-9.36	3	Horizontal	112	1.25	-	46.58	18.96	3.50	31.82
QP	299.66M	40.94	46.00	-5.06	-9.06	3	Horizontal	112	1.25	"Worst"	50.00	19.17	3.60	31.83
PK	697.36M	39.43	46.00	-6.57	-2.03	3	Horizontal	191	1.25	-	41.46	24.92	5.49	32.44
PK	931.13M	36.47	46.00	-9.53	0.65	3	Horizontal	360	1.25	-	35.82	26.57	6.60	32.52

Summary

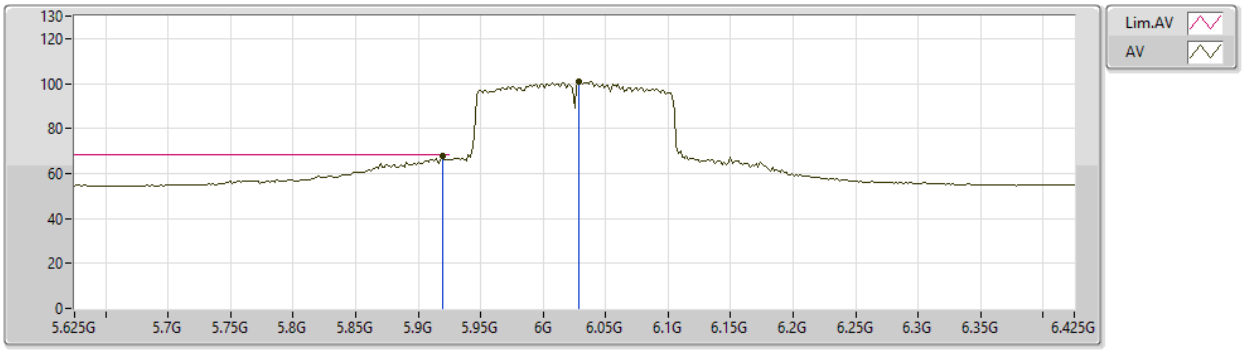
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.925-6.425GHz	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW160_Nss1,(MCS0)_2TX	Pass	AV	12.38344G	53.88	54.00	-0.12	3	Horizontal	179	1.79	-

Note: The test result has contained the Duty Cycle Factor.

802.11ax HEW160_Nss1,(MCS0)_2TX

6025MHz_TX

23/07/2020



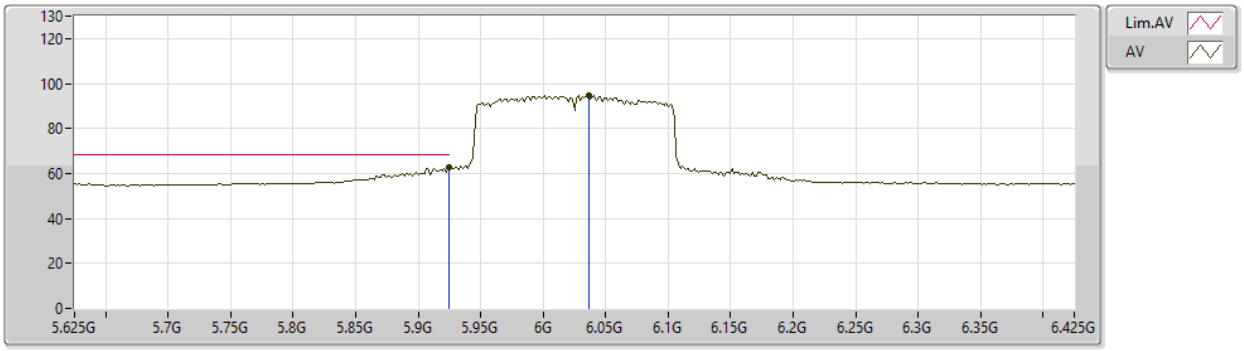
EUT X_2TX
Setting 65
03-A-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
RMS	5.9194G	67.73	68.20	-0.47	61.74	3	Vertical	100	1.80	-	34.56	6.36	34.93
RMS	6.0282G	100.80	Inf	-Inf	94.45	3	Vertical	100	1.80	-	34.86	6.41	34.92

802.11ax HEW160_Nss1,(MCS0)_2TX

6025MHz_TX

23/07/2020



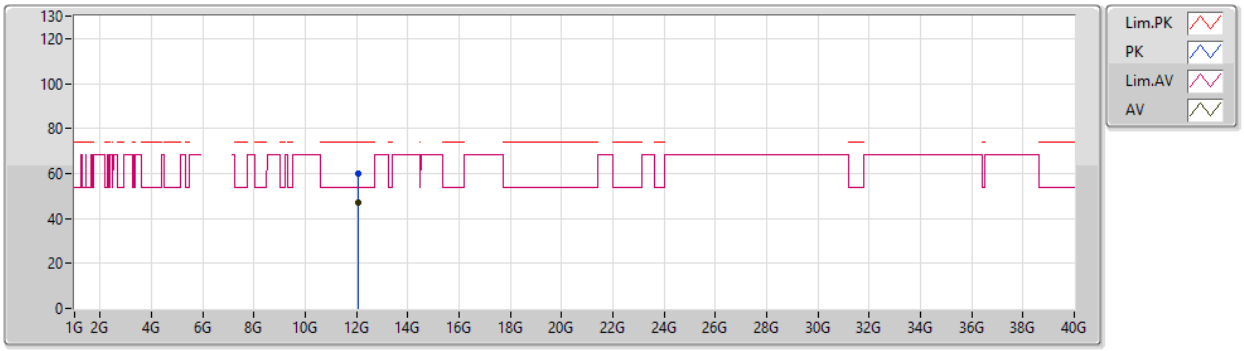
EUT X_2TX
Setting 65
03-A-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
RMS	5.9242G	62.65	68.20	-5.55	56.15	3	Horizontal	186	1.80	-	34.57	6.86	34.93
RMS	6.0362G	94.97	Inf	-Inf	88.10	3	Horizontal	186	1.80	-	34.87	6.92	34.92

802.11ax HEW160_Nss1,(MCS0)_2TX

6025MHz_TX

23/07/2020



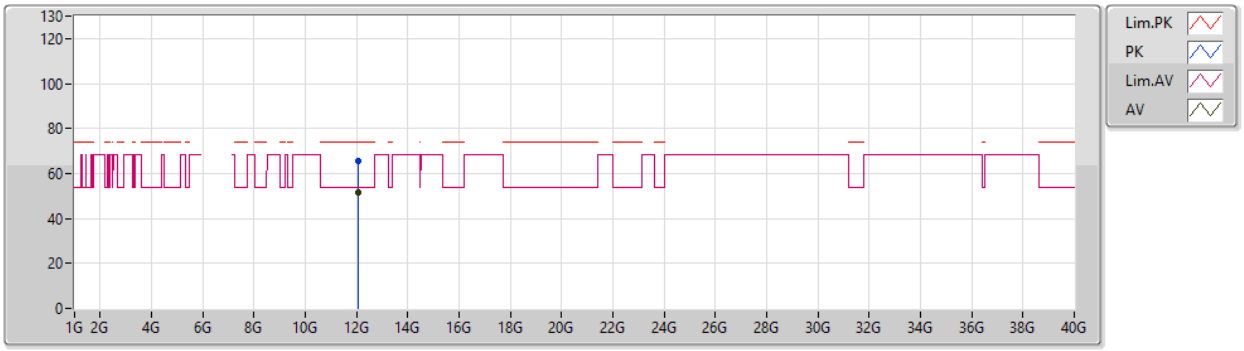
EUT X_2TX
Setting 65
03-A-E-2
Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	12.06254G	59.94	74.00	-14.06	44.21	3	Vertical	217	1.83	-	39.21	11.21	34.69
AV	12.0635G	46.94	54.00	-7.06	31.21	3	Vertical	217	1.83	-	39.21	11.21	34.69

802.11ax HEW160_Nss1,(MCS0)_2TX

6025MHz_TX

23/07/2020



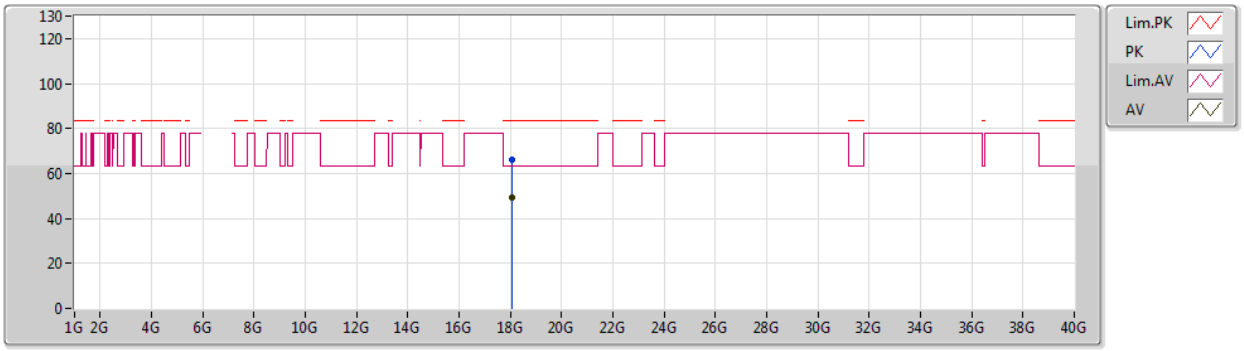
EUT X_2TX
Setting 65
03-A-E-2
Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	12.06398G	65.55	74.00	-8.45	51.20	3	Horizontal	174	1.80	-	39.21	9.83	34.69
AV	12.06404G	51.63	54.00	-2.37	37.28	3	Horizontal	174	1.80	-	39.21	9.83	34.69

802.11ax HEW160_Nss1,(MCS0)_2TX

6025MHz_TX

24/07/2020



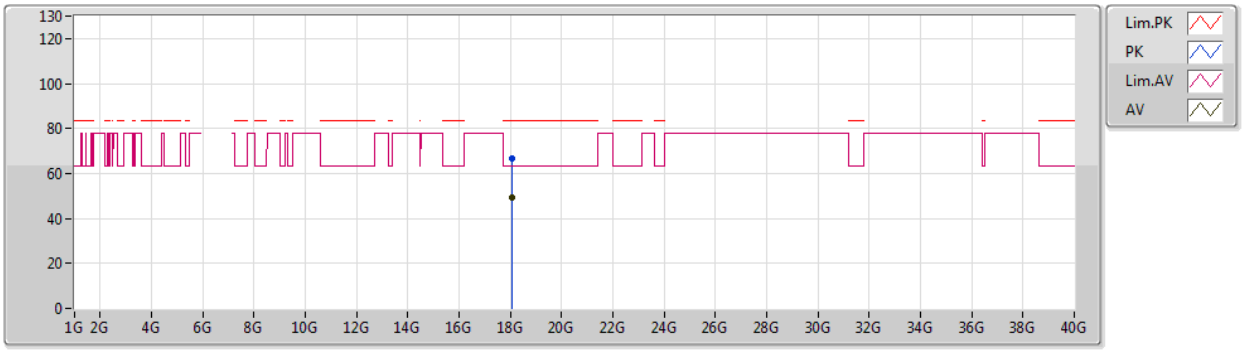
EUT X_2TX
Setting 65
03-A-E-2
Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	18.0846G	66.29	83.54	-17.25	65.04	1	Vertical	215	1.50	-	37.53	13.64	49.92
AV	18.0796G	49.57	63.54	-13.97	48.33	1	Vertical	215	1.50	-	37.52	13.64	49.92

802.11ax HEW160_Nss1,(MCS0)_2TX

6025MHz_TX

24/07/2020



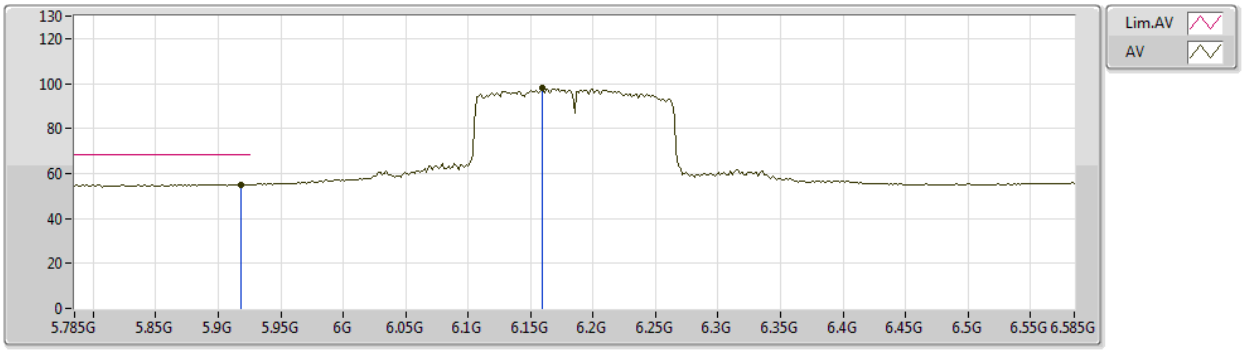
EUT X_2TX
Setting 65
03-A-E-2
Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	18.0786G	66.65	83.54	-16.89	65.41	1	Horizontal	213	1.50	-	37.52	13.64	49.92
AV	18.0748G	49.45	63.54	-14.09	48.21	1	Horizontal	213	1.50	-	37.52	13.63	49.91

802.11ax HEW160_Nss1,(MCS0)_2TX

6185MHz_TX

23/07/2020



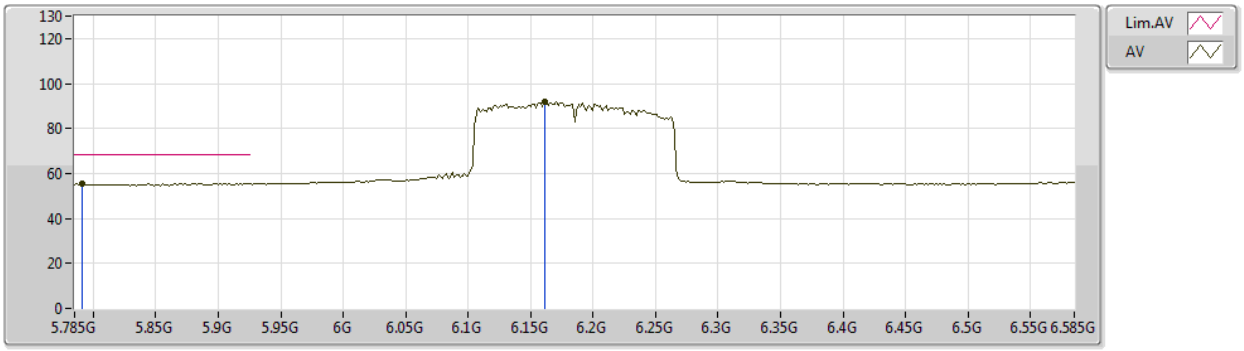
EUT X_2TX
Setting 65
03-A-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
RMS	5.9178G	55.08	68.20	-13.12	49.10	3	Vertical	96	1.57	-	34.55	6.36	34.93
RMS	6.1594G	97.85	Inf	-Inf	91.18	3	Vertical	96	1.57	-	35.12	6.48	34.93

802.11ax HEW160_Nss1,(MCS0)_2TX

6185MHz_TX

23/07/2020



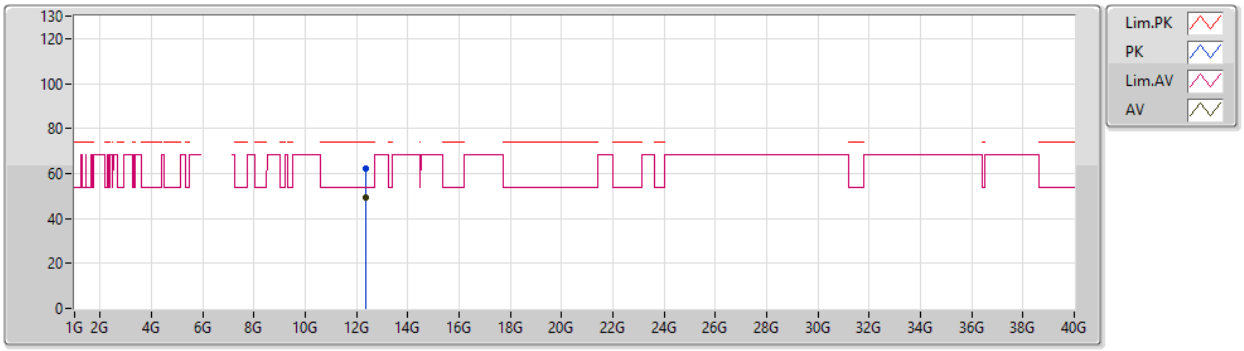
EUT X_2TX
Setting 65
03-A-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
RMS	5.7914G	55.45	68.20	-12.75	49.28	3	Horizontal	184	1.80	-	34.30	6.80	34.93
RMS	6.161G	91.99	Inf	-Inf	84.82	3	Horizontal	184	1.80	-	35.12	6.98	34.93

802.11ax HEW160_Nss1,(MCS0)_2TX

6185MHz_TX

23/07/2020



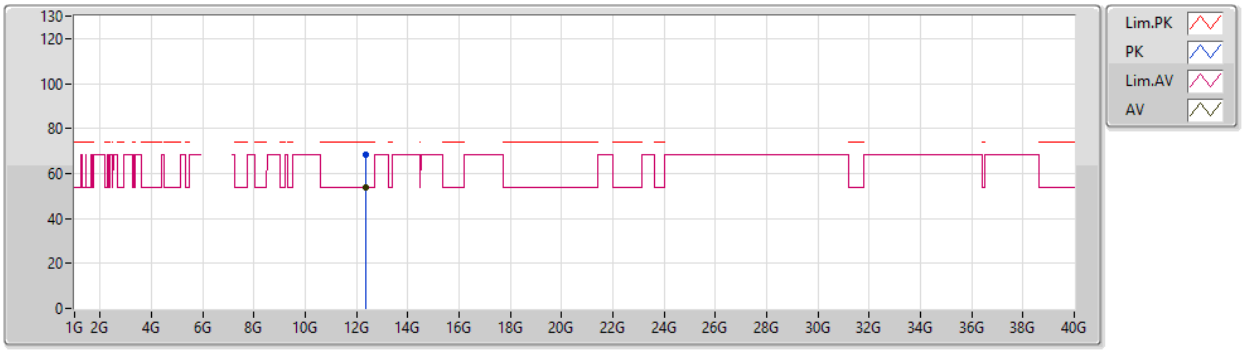
EUT X_2TX
Setting 65
03-A-E-2
Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	12.38422G	62.07	74.00	-11.93	45.86	3	Vertical	209	1.76	-	39.28	11.24	34.31
AV	12.38362G	49.07	54.00	-4.93	32.86	3	Vertical	209	1.76	-	39.28	11.24	34.31

802.11ax HEW160_Nss1,(MCS0)_2TX

6185MHz_TX

23/07/2020



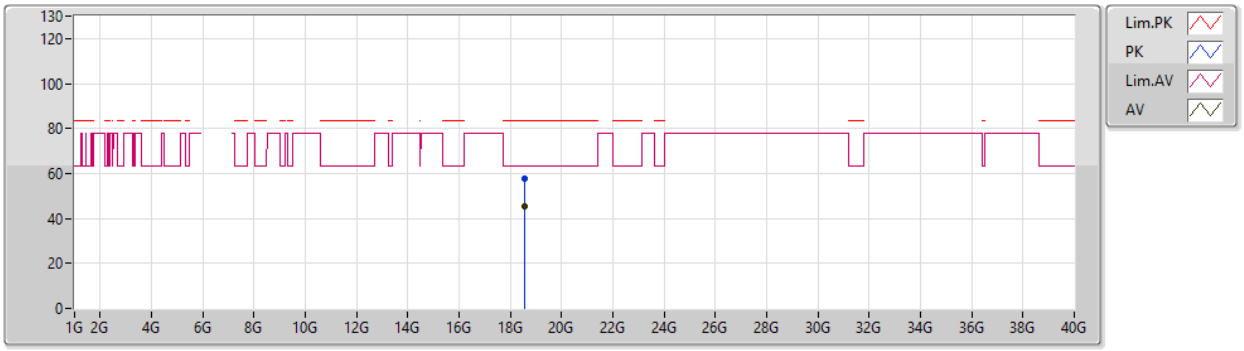
EUT X_2TX
Setting 65
03-A-E-2
Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	12.38368G	68.11	74.00	-5.89	53.18	3	Horizontal	179	1.79	-	39.28	9.96	34.31
AV	12.38344G	53.88	54.00	-0.12	38.95	3	Horizontal	179	1.79	-	39.28	9.96	34.31

802.11ax HEW160_Nss1,(MCS0)_2TX

6185MHz_TX

23/07/2020



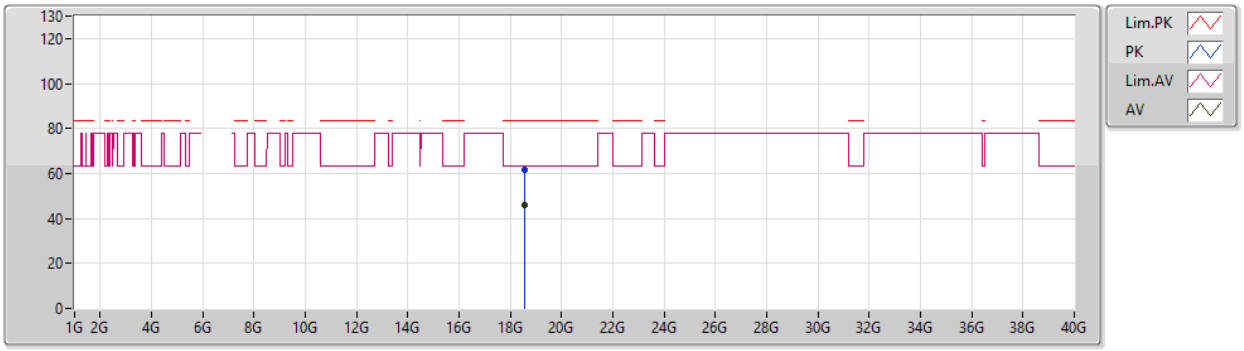
EUT X_2TX
Setting 65
03-A-E-2
Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	18.55644G	57.44	83.54	-26.10	55.92	1	Vertical	143	1.50	-	37.67	13.86	50.01
AV	18.54642G	45.20	63.54	-18.34	43.70	1	Vertical	143	1.50	-	37.66	13.85	50.01

802.11ax HEW160_Nss1,(MCS0)_2TX

6185MHz_TX

23/07/2020



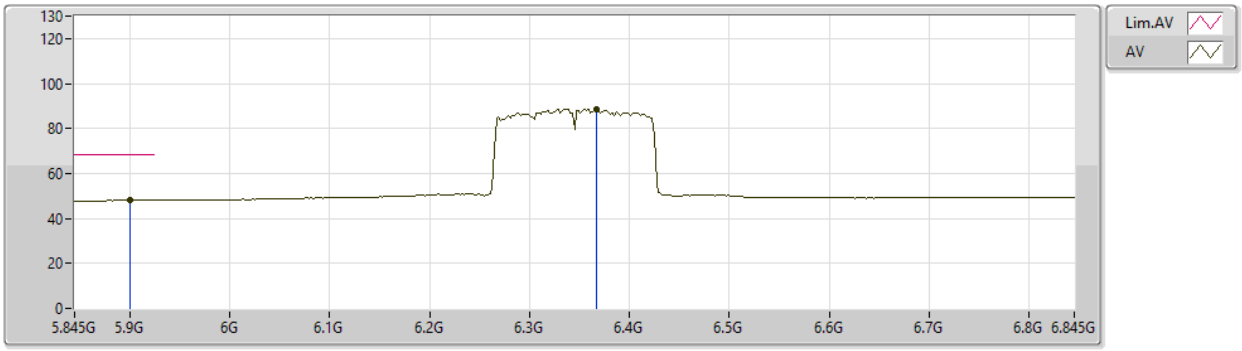
EUT X_2TX
Setting 65
03-A-E-2
Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	18.5553G	61.66	83.54	-21.88	60.14	1	Horizontal	217	1.50	-	37.67	13.86	50.01
AV	18.55056G	45.80	63.54	-17.74	44.29	1	Horizontal	217	1.50	-	37.67	13.85	50.01

802.11ax HEW160_Nss1,(MCS0)_2TX

23/07/2020

6345MHz_TX



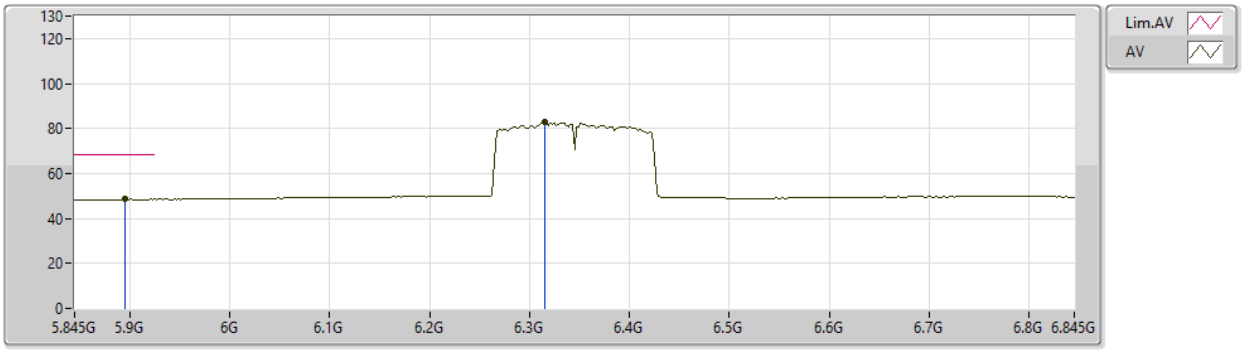
EUT X_2TX
Setting 56
03-A-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
RMS	5.901G	48.05	68.20	-20.15	42.13	3	Vertical	96	1.53	-	34.50	6.35	34.93
RMS	6.367G	88.69	Inf	-Inf	82.18	3	Vertical	96	1.53	-	34.87	6.58	34.94

802.11ax HEW160_Nss1,(MCS0)_2TX

6345MHz_TX

23/07/2020



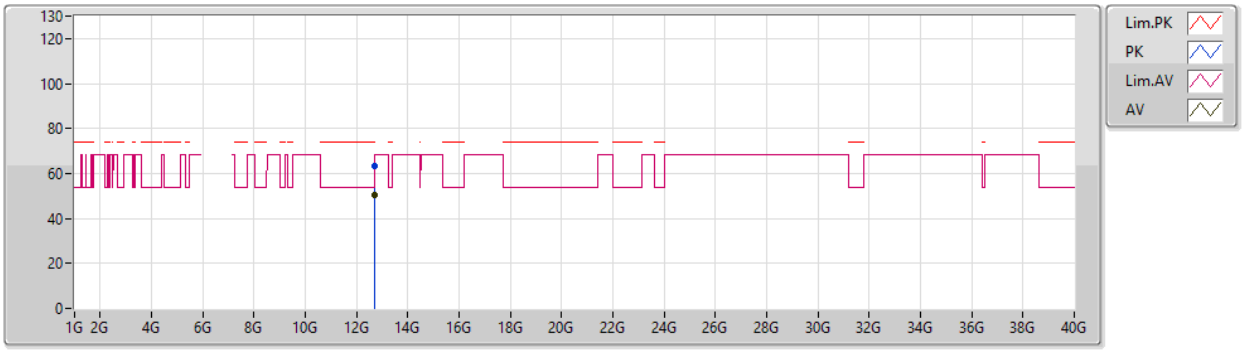
EUT X_2TX
Setting 56
03-A-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
RMS	5.895G	48.50	68.20	-19.70	42.09	3	Horizontal	198	2.62	-	34.49	6.85	34.93
RMS	6.315G	83.00	Inf	-Inf	75.91	3	Horizontal	198	2.62	-	34.97	7.06	34.94

802.11ax HEW160_Nss1,(MCS0)_2TX

6345MHz_TX

23/07/2020



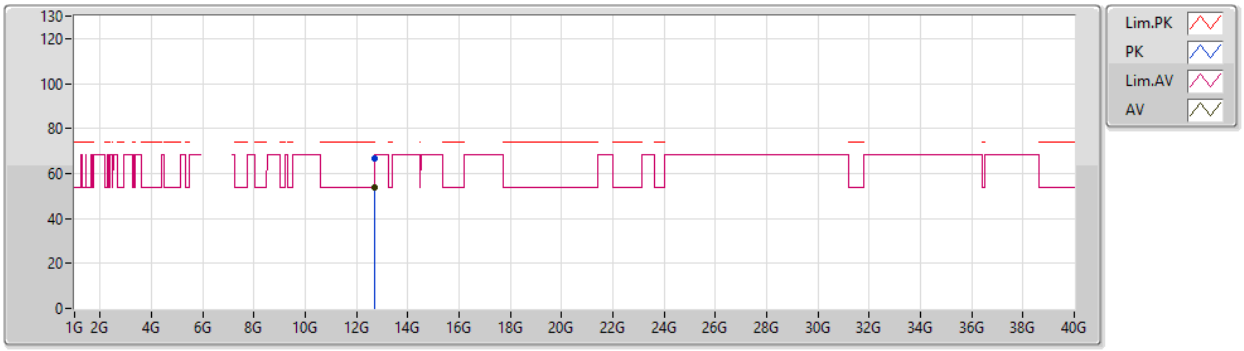
EUT X_2TX
Setting 56
03-A-E-2
Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	12.69955G	50.25	54.00	-3.75	33.56	3	Vertical	212	1.93	-	39.34	11.27	33.92
PK	12.68815G	63.15	74.00	-10.85	46.48	3	Vertical	212	1.93	-	39.34	11.27	33.94

802.11ax HEW160_Nss1,(MCS0)_2TX

6345MHz_TX

23/07/2020



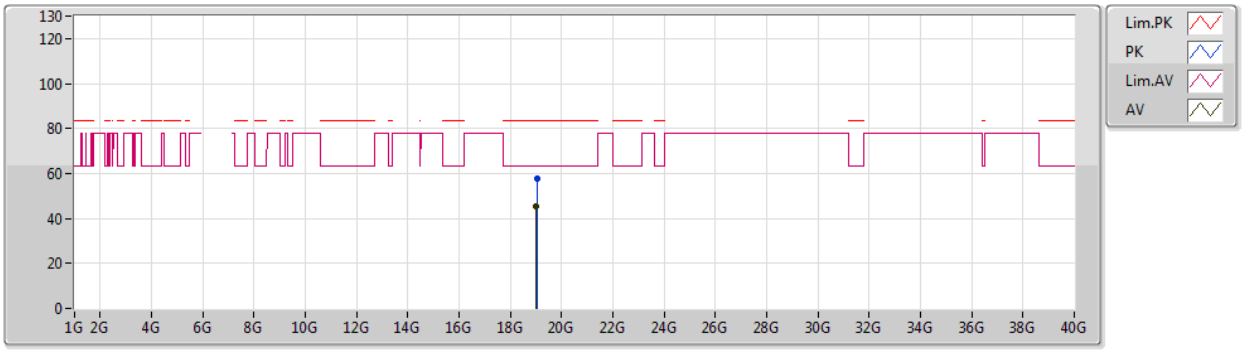
EUT X_2TX
Setting 56
03-A-E-2
Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	12.68815G	66.59	74.00	-7.41	51.11	3	Horizontal	179	1.80	-	39.34	10.08	33.94
AV	12.68765G	53.60	54.00	-0.40	38.12	3	Horizontal	179	1.80	-	39.34	10.08	33.94

802.11ax HEW160_Nss1,(MCS0)_2TX

6345MHz_TX

24/07/2020



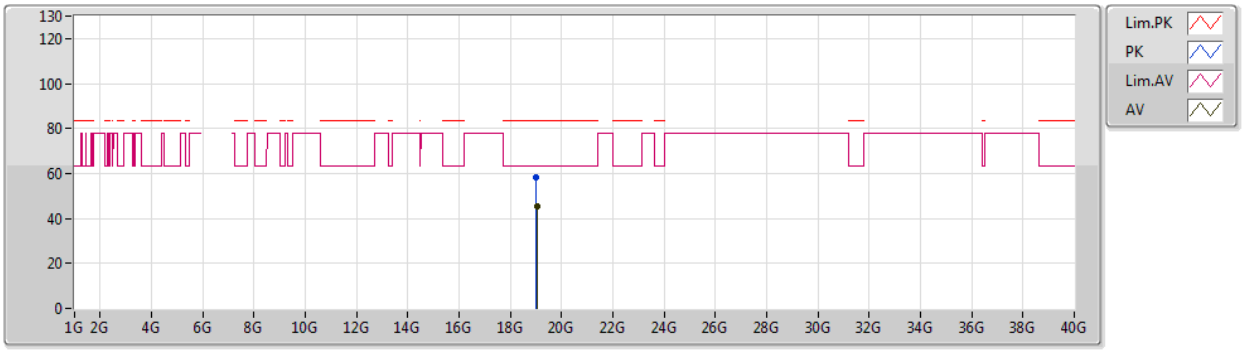
EUT X_2TX
Setting 56
03-A-E-2
Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	19.04814G	57.82	83.54	-25.72	56.03	1	Vertical	234	1.50	-	37.80	14.08	50.09
AV	19.02408G	45.35	63.54	-18.19	43.57	1	Vertical	234	1.50	-	37.80	14.07	50.09

802.11ax HEW160_Nss1,(MCS0)_2TX

6345MHz_TX

23/07/2020



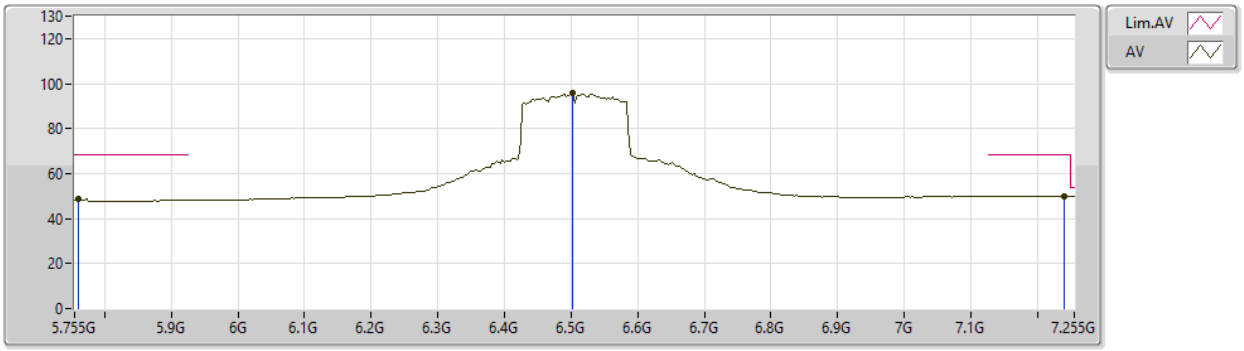
EUT X_2TX
Setting 56
03-A-E-2
Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	19.02132G	58.54	83.54	-25.00	56.76	1	Horizontal	226	1.50	-	37.80	14.07	50.09
AV	19.0338G	45.60	63.54	-17.94	43.82	1	Horizontal	226	1.50	-	37.80	14.07	50.09

802.11ax HEW160_Nss1,(MCS0)_2TX

6505MHz Straddle 6.425-6.525GHz_TX

23/07/2020



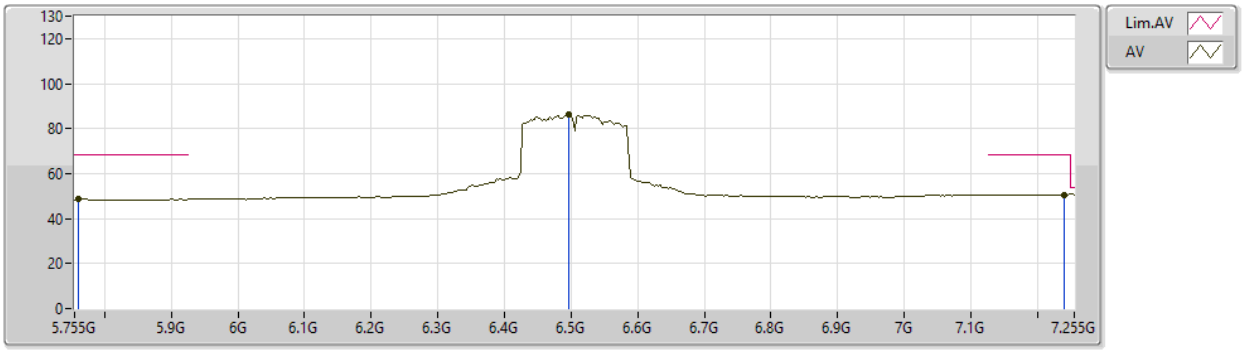
EUT X_2TX
Setting 80
03-A-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
RMS	5.761G	48.63	68.20	-19.57	42.96	3	Vertical	126	1.58	-	34.30	6.30	34.93
RMS	6.502G	95.72	Inf	-Inf	89.21	3	Vertical	126	1.58	-	34.81	6.65	34.95
RMS	7.24G	50.06	68.20	-18.14	41.92	3	Vertical	126	1.58	-	36.50	7.02	35.38

802.11ax HEW160_Nss1,(MCS0)_2TX

6505MHz Straddle 6.425-6.525GHz_TX

23/07/2020



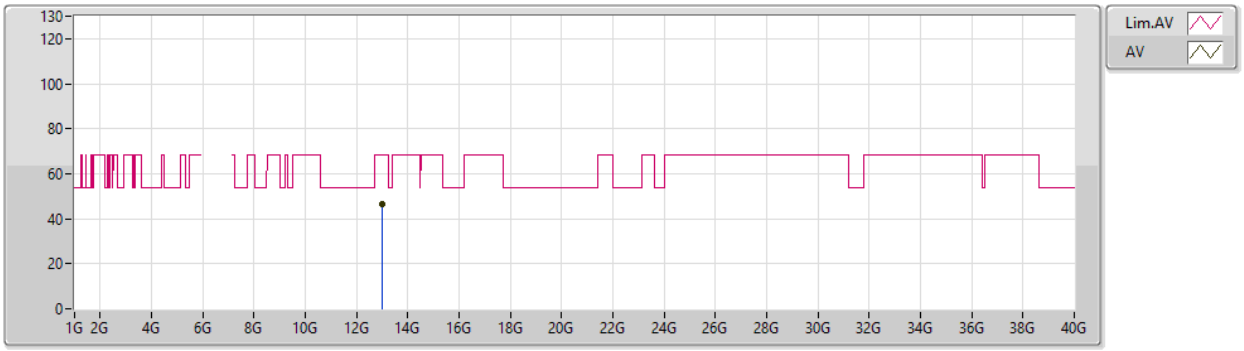
EUT X_2TX
Setting 80
03-A-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
RMS	5.761G	48.76	68.20	-19.44	42.57	3	Horizontal	194	1.80	-	34.30	6.82	34.93
RMS	6.496G	86.15	Inf	-Inf	79.15	3	Horizontal	194	1.80	-	34.80	7.15	34.95
RMS	7.24G	50.69	68.20	-17.51	41.93	3	Horizontal	194	1.80	-	36.50	7.64	35.38

802.11ax HEW160_Nss1,(MCS0)_2TX

6505MHz Straddle 6.425-6.525GHz_TX

23/07/2020



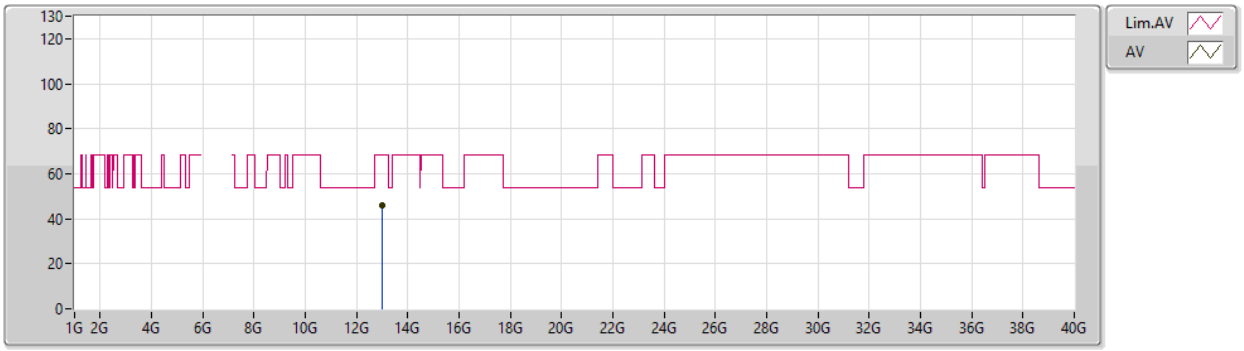
EUT X_2TX
Setting 80
03-A-E-2
Non-Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
RMS	13.01408G	46.69	68.20	-21.51	29.53	3	Vertical	131	2.99	-	39.42	11.30	33.56

802.11ax HEW160_Nss1,(MCS0)_2TX

6505MHz Straddle 6.425-6.525GHz_TX

23/07/2020



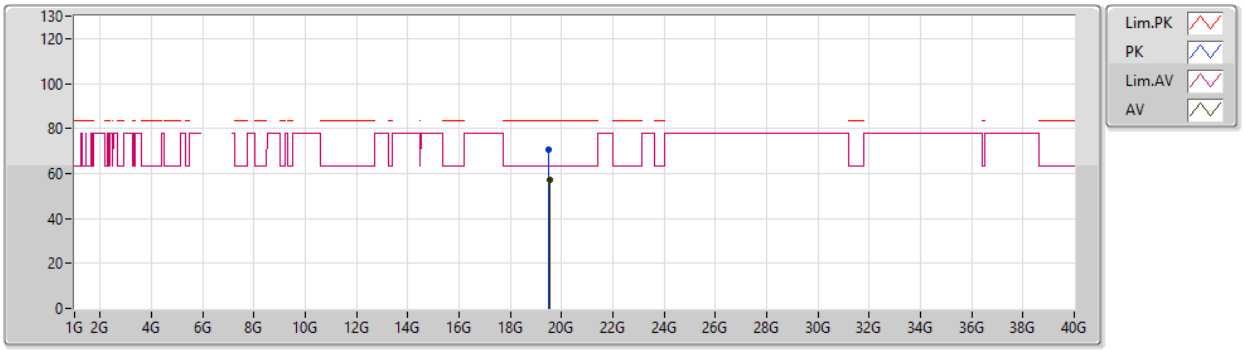
EUT X_2TX
Setting 80
03-A-E-2
Non-Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
RMS	13.01438G	45.85	68.20	-22.35	29.77	3	Horizontal	178	1.80	-	39.42	10.22	33.56

802.11ax HEW160_Nss1,(MCS0)_2TX

6505MHz Straddle 6.425-6.525GHz_TX

23/07/2020



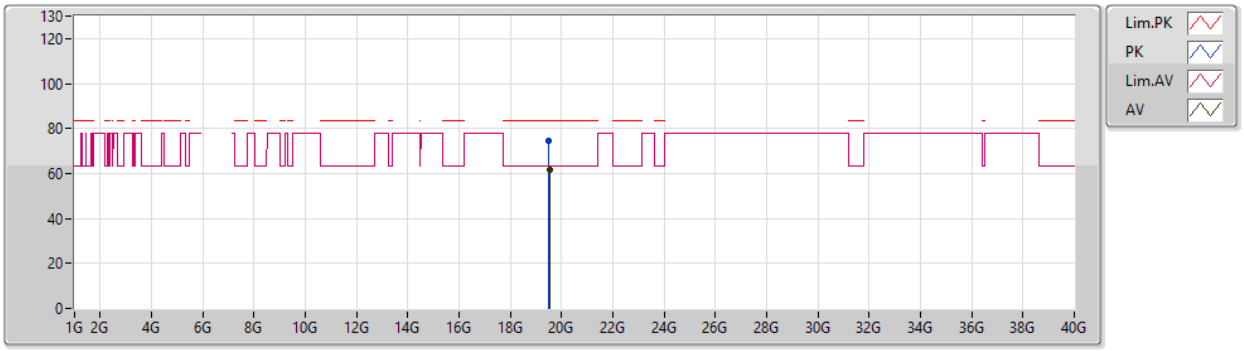
EUT X_2TX
Setting 80
03-A-E-2
Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	19.50072G	70.55	83.54	-12.99	68.37	1	Vertical	153	1.50	-	37.85	14.28	49.95
AV	19.52574G	56.91	63.54	-6.63	54.71	1	Vertical	153	1.50	-	37.85	14.29	49.94

802.11ax HEW160_Nss1,(MCS0)_2TX

6505MHz Straddle 6.425-6.525GHz_TX

23/07/2020



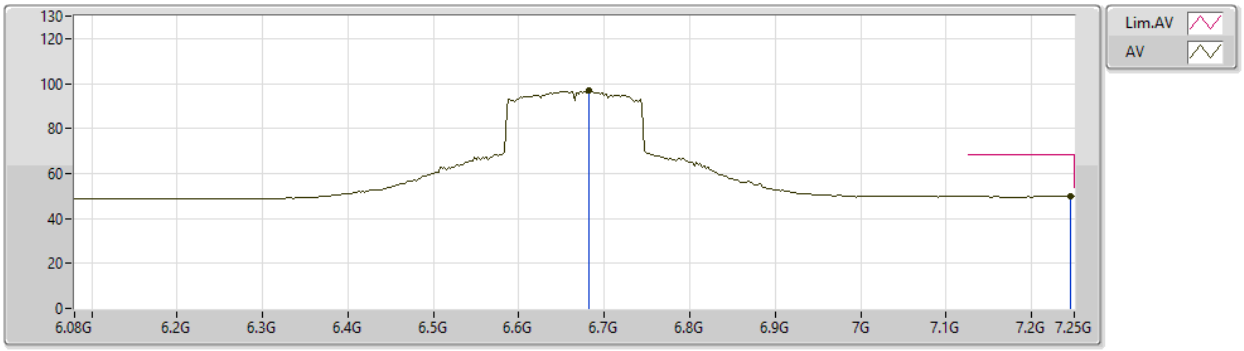
EUT X_2TX
Setting 80
03-A-E-2
Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	19.50468G	74.51	83.54	-9.03	72.33	1	Horizontal	137	1.50	-	37.85	14.28	49.95
AV	19.51944G	61.44	63.54	-2.10	59.24	1	Horizontal	137	1.50	-	37.85	14.29	49.94

802.11ax HEW160_Nss1,(MCS0)_2TX

6665MHz_TX

23/07/2020



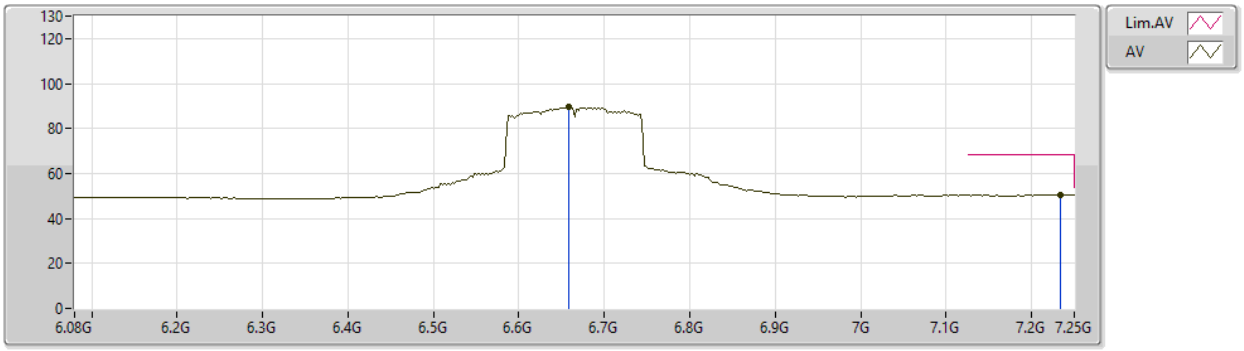
EUT X_2TX
Setting 80
03-A-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
RMS	6.68138G	96.69	Inf	-Inf	89.65	3	Vertical	135	1.70	-	35.34	6.78	35.08
RMS	7.24532G	49.96	68.20	-18.24	41.78	3	Vertical	135	1.70	-	36.53	7.03	35.38

802.11ax HEW160_Nss1,(MCS0)_2TX

6665MHz_TX

23/07/2020



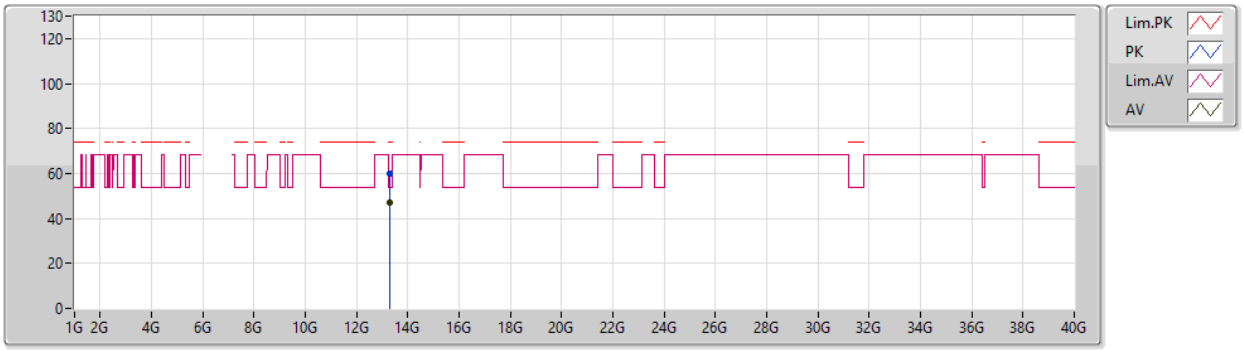
EUT X_2TX
Setting 80
03-A-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
RMS	6.65798G	89.58	Inf	-Inf	82.14	3	Horizontal	162	1.25	-	35.27	7.23	35.06
RMS	7.23362G	50.54	68.20	-17.66	41.81	3	Horizontal	162	1.25	-	36.47	7.64	35.38

802.11ax HEW160_Nss1,(MCS0)_2TX

6665MHz_TX

23/07/2020



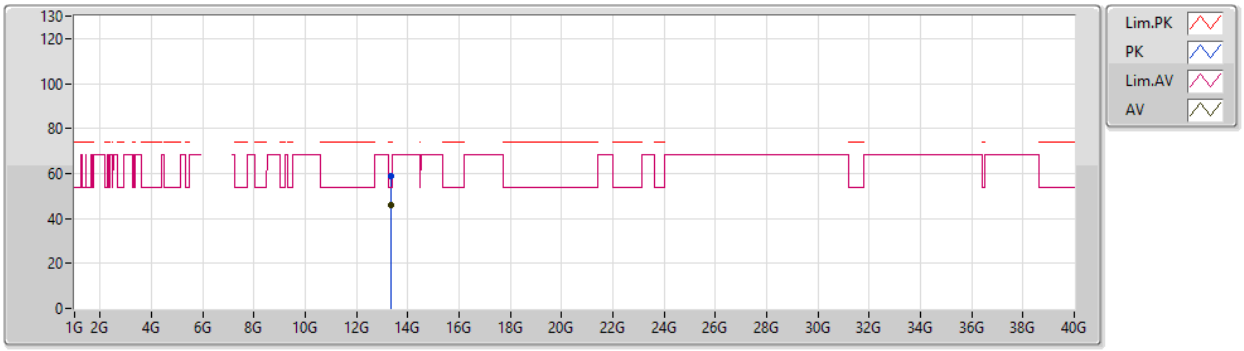
EUT X_2TX
Setting 80
03-A-E-2
Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	13.3183G	59.76	74.00	-14.24	42.01	3	Vertical	19	2.36	-	39.91	11.33	33.49
AV	13.31518G	46.94	54.00	-7.06	29.20	3	Vertical	19	2.36	-	39.90	11.33	33.49

802.11ax HEW160_Nss1,(MCS0)_2TX

6665MHz_TX

23/07/2020



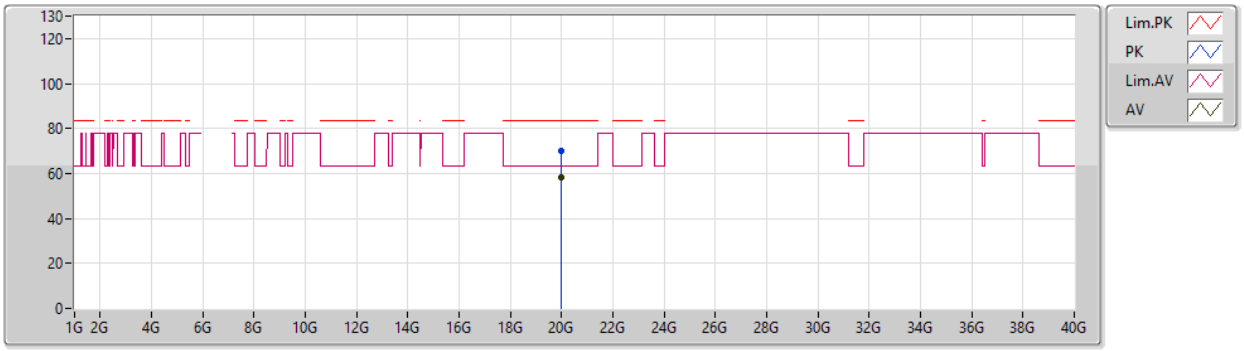
EUT X_2TX
Setting 80
03-A-E-2
Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	13.3411G	58.71	74.00	-15.29	41.90	3	Horizontal	209	2.03	-	39.95	10.34	33.48
AV	13.32322G	46.13	54.00	-7.87	29.36	3	Horizontal	209	2.03	-	39.92	10.34	33.49

802.11ax HEW160_Nss1,(MCS0)_2TX

6665MHz_TX

23/07/2020



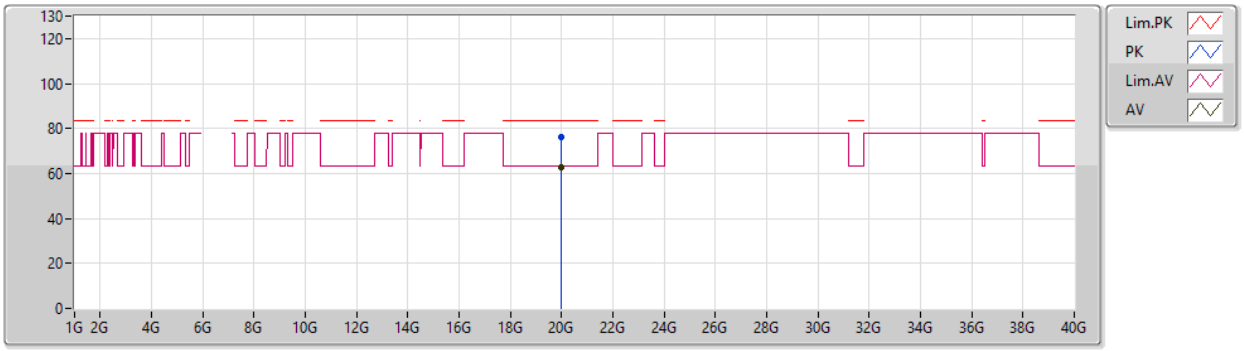
EUT X_2TX
Setting 80
03-A-E-2
Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	19.98204G	70.11	83.54	-13.43	67.53	1	Vertical	240	1.50	-	37.90	14.49	49.81
AV	19.98198G	58.01	63.54	-5.53	55.43	1	Vertical	240	1.50	-	37.90	14.49	49.81

802.11ax HEW160_Nss1,(MCS0)_2TX

6665MHz_TX

23/07/2020



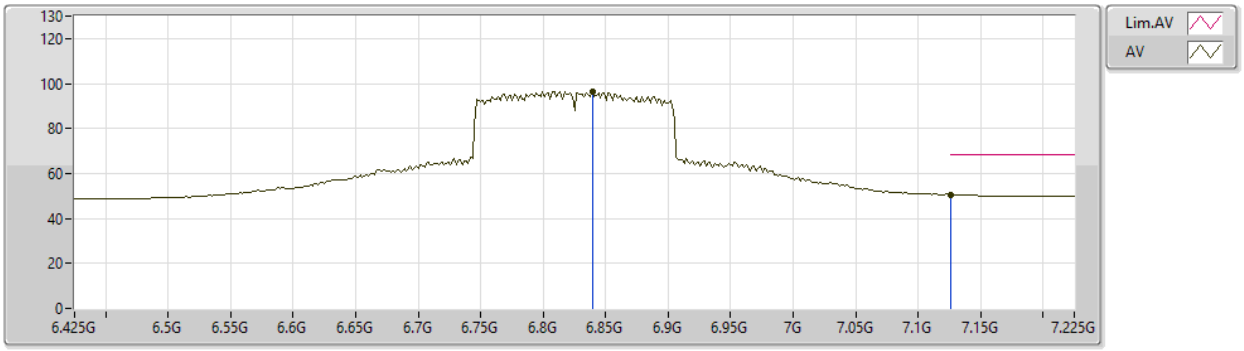
EUT X_2TX
Setting 80
03-A-E-2
Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	19.98444G	76.06	83.54	-7.48	73.47	1	Horizontal	142	1.50	-	37.90	14.49	49.80
AV	19.98168G	62.87	63.54	-0.67	60.29	1	Horizontal	142	1.50	-	37.90	14.49	49.81

802.11ax HEW160_Nss1,(MCS0)_2TX

6825MHz Straddle 6.525-6.875GHz_TX

23/07/2020



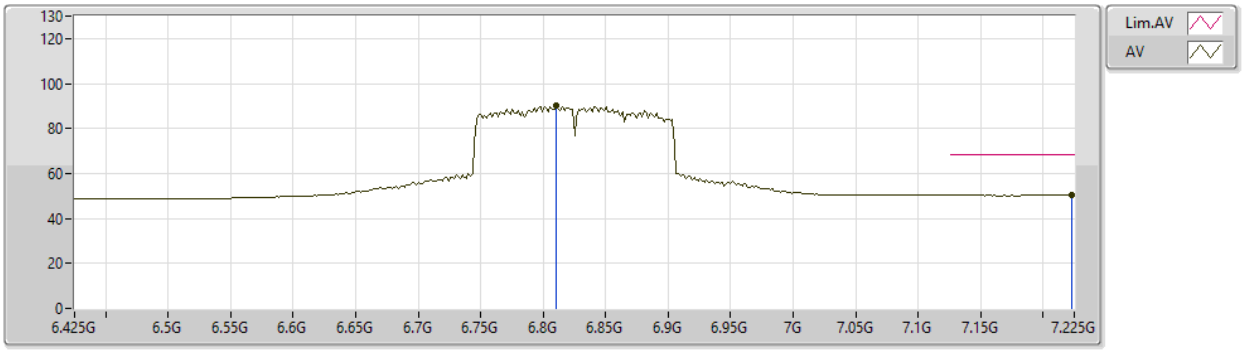
EUT X_2TX
Setting 77
03-A-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
RMS	6.8394G	96.45	Inf	-Inf	89.07	3	Vertical	97	1.50	-	35.66	6.92	35.20
RMS	7.1258G	50.63	68.20	-17.57	43.05	3	Vertical	97	1.50	-	35.93	7.00	35.35

802.11ax HEW160_Nss1,(MCS0)_2TX

6825MHz Straddle 6.525-6.875GHz_TX

23/07/2020



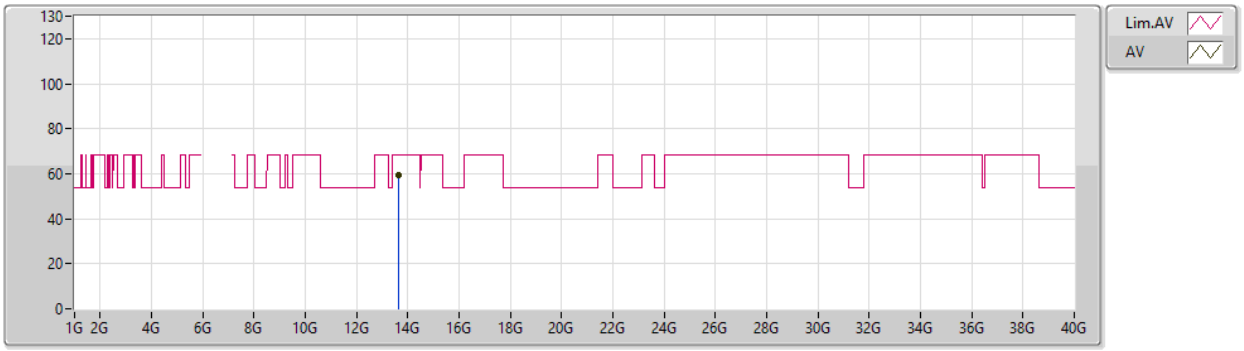
EUT X_2TX
Setting 77
03-A-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
RMS	6.8106G	89.97	Inf	-Inf	82.16	3	Horizontal	180	1.19	-	35.69	7.31	35.19
RMS	7.2234G	50.55	68.20	-17.65	41.87	3	Horizontal	180	1.19	-	36.42	7.63	35.37

802.11ax HEW160_Nss1,(MCS0)_2TX

6825MHz Straddle 6.525-6.875GHz_TX

23/07/2020



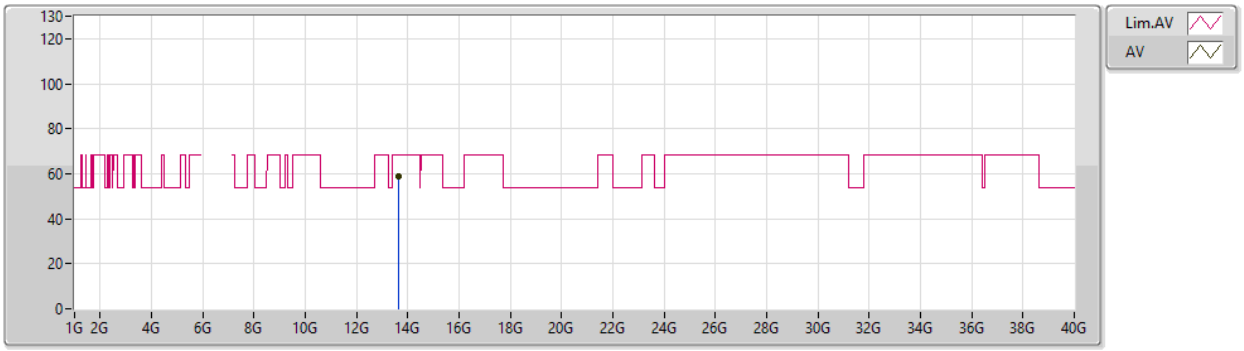
EUT X_2TX
Setting 77
03-A-E-2
Non-Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
RMS	13.6473G	59.58	68.20	-8.62	41.20	3	Vertical	98	1.28	-	40.44	11.36	33.42

802.11ax HEW160_Nss1,(MCS0)_2TX

6825MHz Straddle 6.525-6.875GHz_TX

23/07/2020



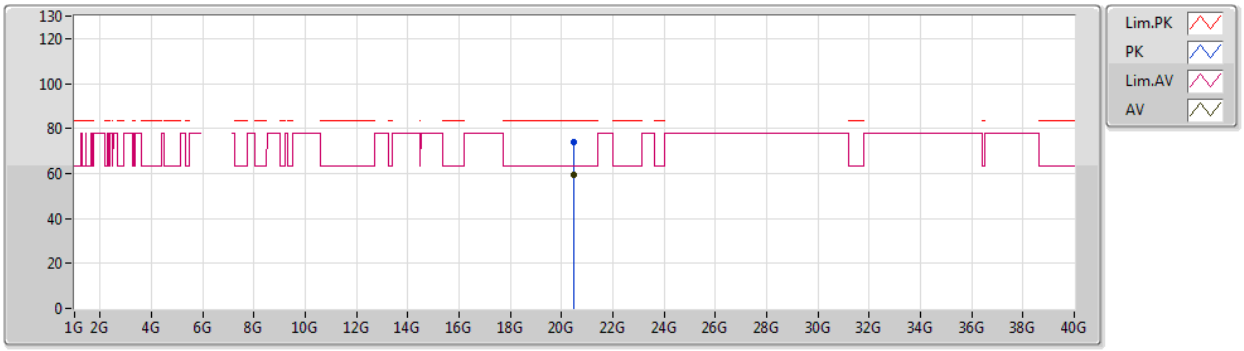
EUT X_2TX
Setting 77
03-A-E-2
Non-Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
RMS	13.64448G	58.64	68.20	-9.56	41.17	3	Horizontal	61	2.45	-	40.43	10.46	33.42

802.11ax HEW160_Nss1,(MCS0)_2TX

6825MHz Straddle 6.525-6.875GHz_TX

24/07/2020



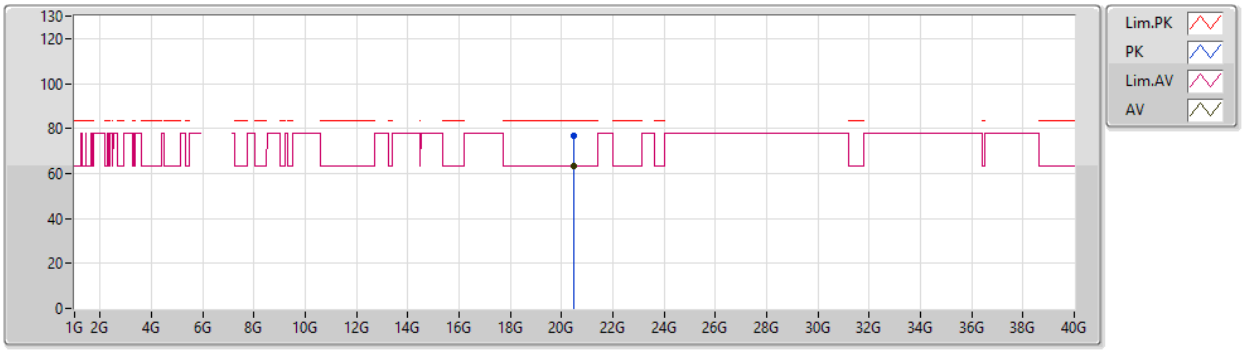
EUT X_2TX
Setting 77
03-A-E-2
Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	20.48088G	73.88	83.54	-9.66	71.18	1	Vertical	217	1.50	-	37.80	14.70	49.80
AV	20.48328G	59.53	63.54	-4.01	56.83	1	Vertical	217	1.50	-	37.80	14.70	49.80

802.11ax HEW160_Nss1,(MCS0)_2TX

6825MHz Straddle 6.525-6.875GHz_TX

23/07/2020



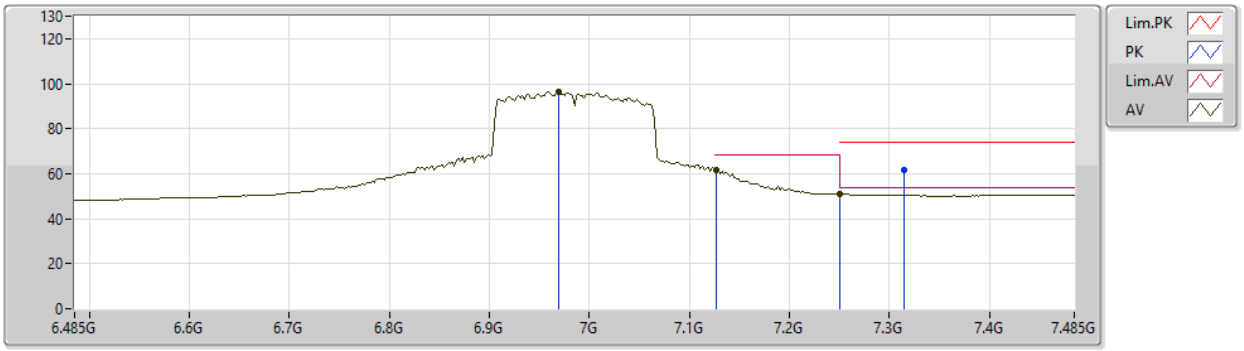
EUT X_2TX
Setting 77
03-A-E-2
Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	20.481G	76.93	83.54	-6.61	74.23	1	Horizontal	134	1.50	-	37.80	14.70	49.80
AV	20.48088G	63.05	63.54	-0.49	60.35	1	Horizontal	134	1.50	-	37.80	14.70	49.80

802.11ax HEW160_Nss1,(MCS0)_2TX

6985MHz_TX

23/07/2020



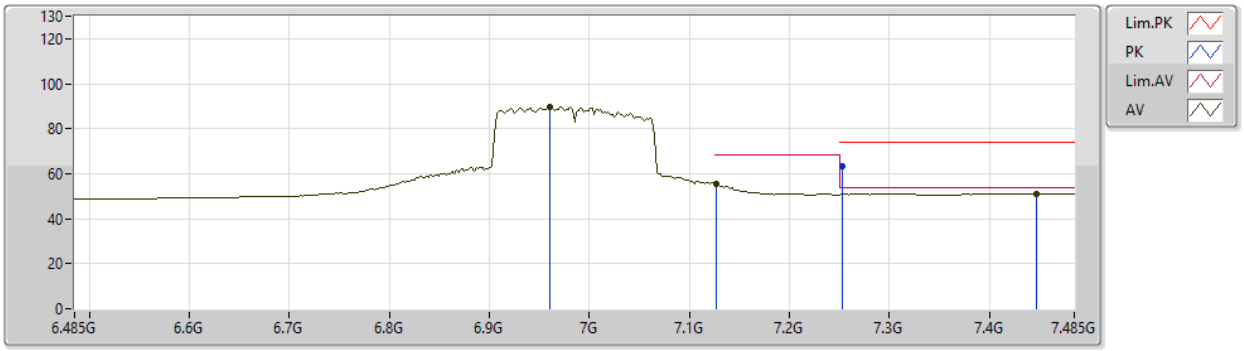
EUT X_2TX
Setting 78
03-A-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
RMS	6.969G	96.36	Inf	-Inf	89.01	3	Vertical	94	1.66	-	35.67	6.98	35.30
RMS	7.127G	61.60	68.20	-6.60	54.02	3	Vertical	94	1.66	-	35.93	7.00	35.35
RMS	7.251G	50.86	54.00	-3.14	42.66	3	Vertical	94	1.66	-	36.55	7.03	35.38
PK	7.315G	61.64	74.00	-12.36	53.15	3	Vertical	94	1.66	-	36.81	7.07	35.39

802.11ax HEW160_Nss1,(MCS0)_2TX

6985MHz_TX

23/07/2020



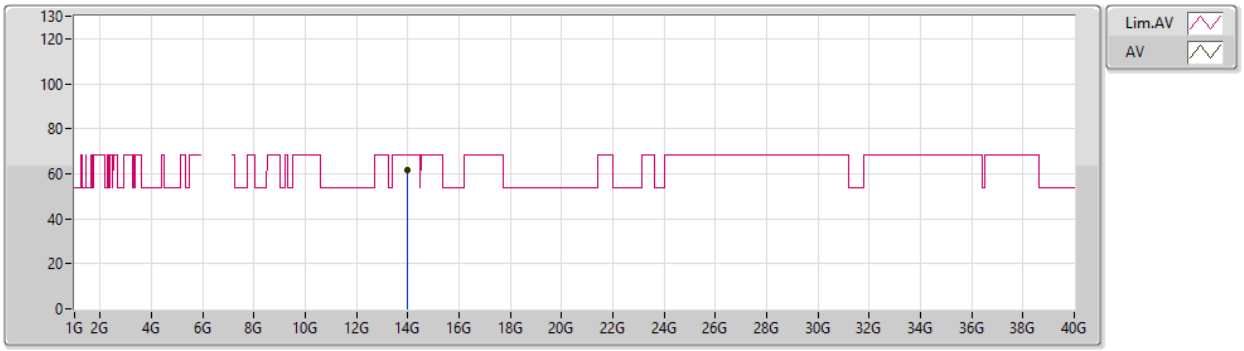
EUT X_2TX
Setting 78
03-A-E-2-10

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
RMS	6.961G	89.76	Inf	-Inf	82.01	3	Horizontal	188	1.00	-	35.66	7.38	35.29
RMS	7.127G	55.28	68.20	-12.92	47.17	3	Horizontal	188	1.00	-	35.93	7.53	35.35
PK	7.253G	63.05	74.00	-10.95	54.21	3	Horizontal	188	1.00	-	36.56	7.66	35.38
RMS	7.447G	51.14	54.00	-2.86	41.92	3	Horizontal	188	1.00	-	36.85	7.80	35.43

802.11ax HEW160_Nss1,(MCS0)_2TX

23/07/2020

6985MHz_TX



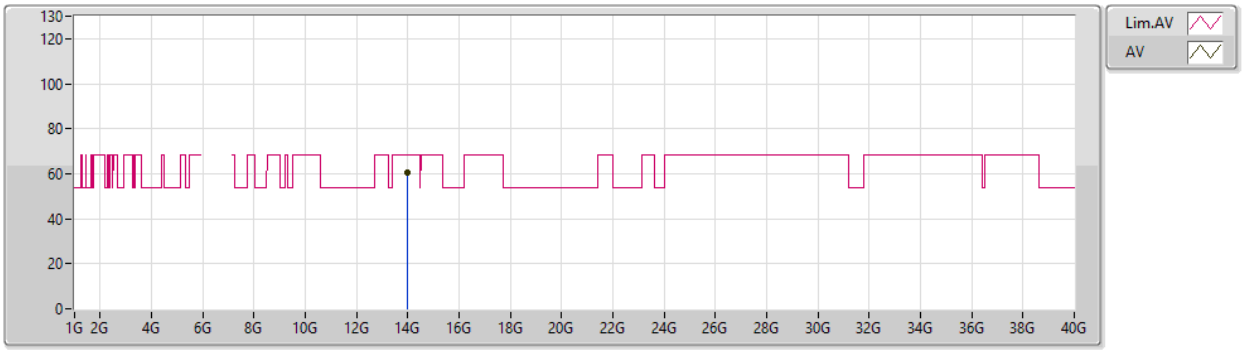
EUT X_2TX
Setting 78
03-A-E-2
Non-Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
RMS	13.9682G	61.43	68.20	-6.77	42.43	3	Vertical	360	1.41	-	40.95	11.40	33.35

802.11ax HEW160_Nss1,(MCS0)_2TX

6985MHz_TX

23/07/2020



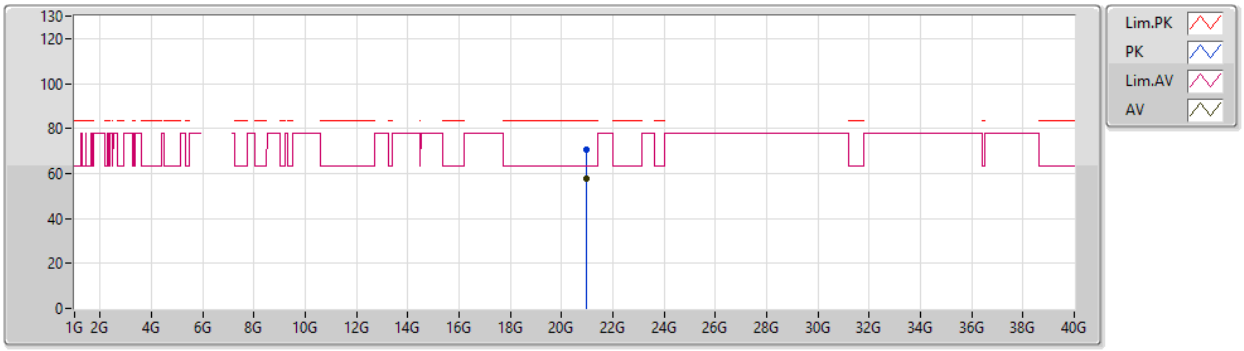
EUT X_2TX
Setting 78
03-A-E-2
Non-Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
RMS	13.96898G	60.34	68.20	-7.86	42.15	3	Horizontal	200	2.04	-	40.95	10.59	33.35

802.11ax HEW160_Nss1,(MCS0)_2TX

23/07/2020

6985MHz_TX



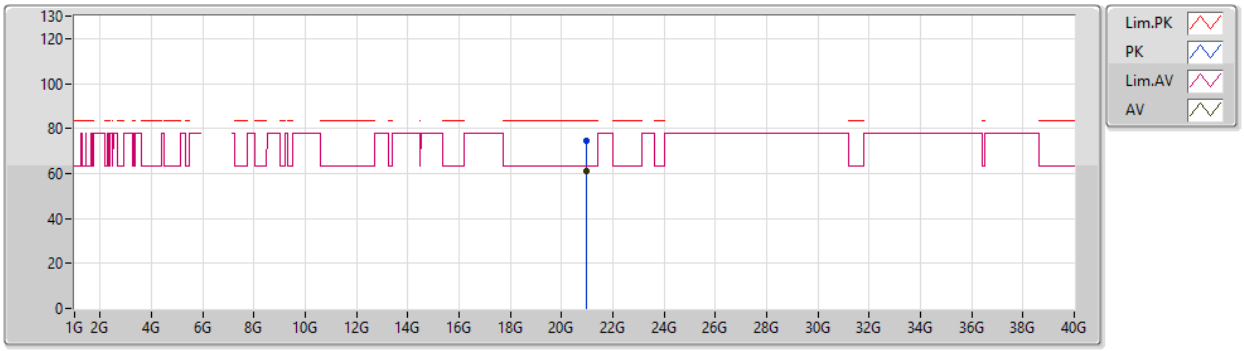
EUT X_2TX
Setting 78
03-A-E-2-10
Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	20.95002G	70.86	83.54	-12.68	68.06	1	Vertical	219	1.50	-	37.71	14.89	49.80
AV	20.96526G	57.79	63.54	-5.75	54.98	1	Vertical	219	1.50	-	37.71	14.90	49.80

802.11ax HEW160_Nss1,(MCS0)_2TX

6985MHz_TX

23/07/2020

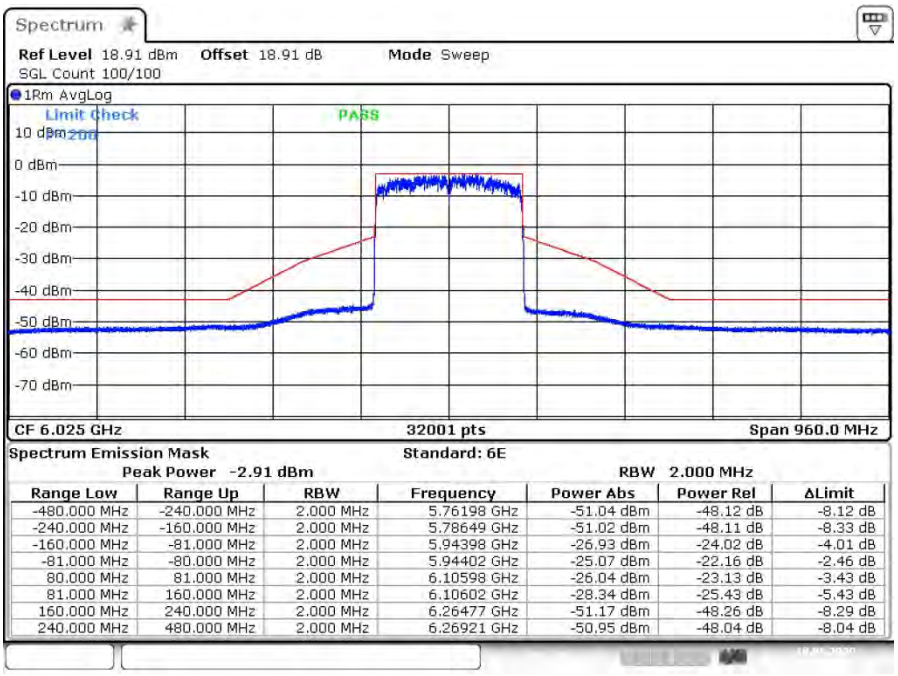


EUT X_2TX
Setting 78
03-A-E-2-10
Restricted band

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	20.96856G	74.53	83.54	-9.01	71.72	1	Horizontal	167	1.50	-	37.71	14.90	49.80
AV	20.94822G	61.24	63.54	-2.30	58.44	1	Horizontal	167	1.50	-	37.71	14.89	49.80

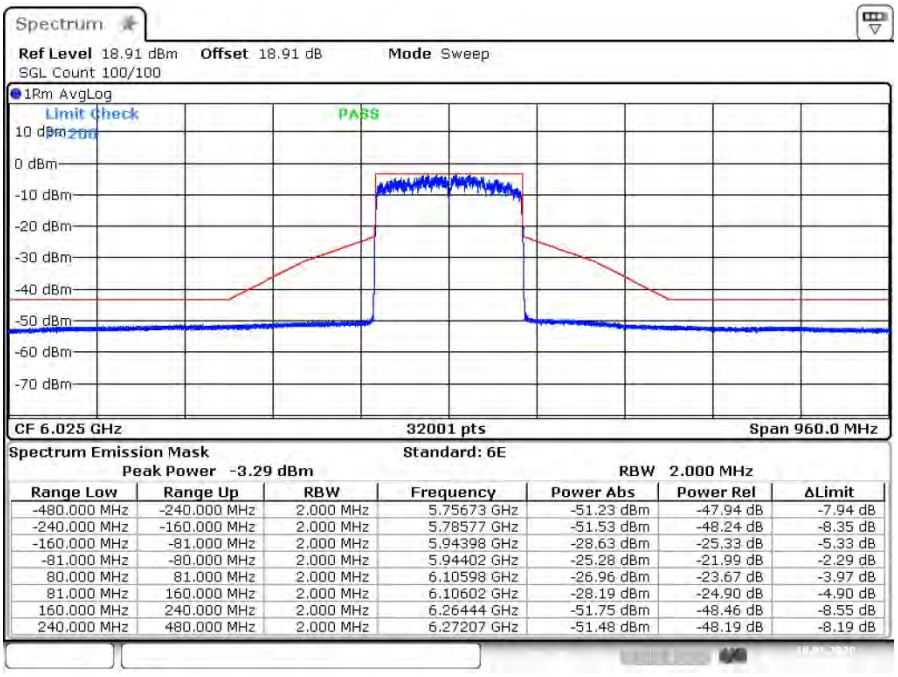
802.11ax HEW160_Nss1, (MCS0)

Frequency (MHz): 6025MHz / Port 1



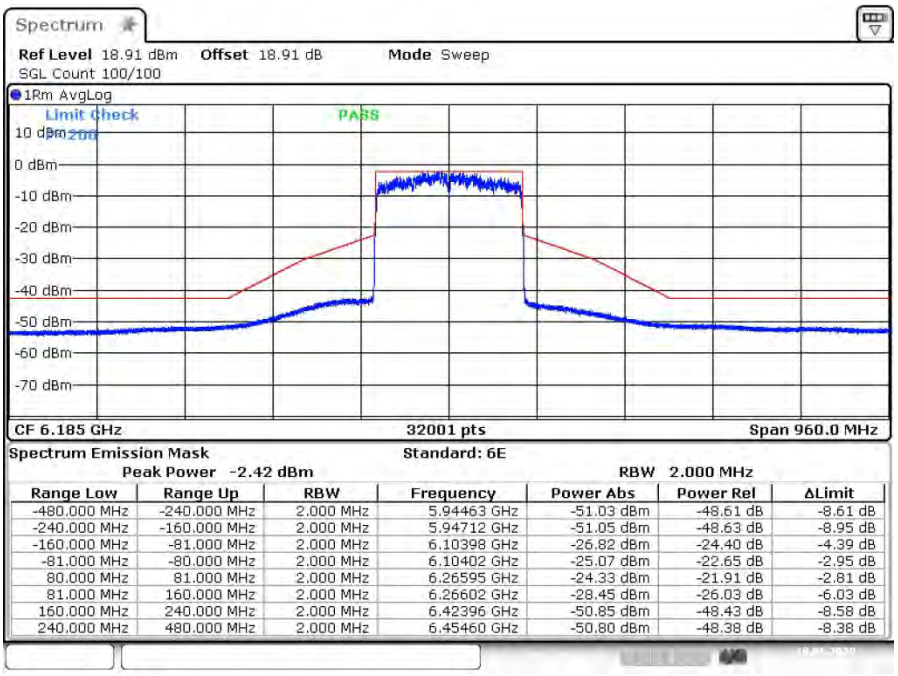
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-480.000 MHz	-240.000 MHz	2.000 MHz	5.76198 GHz	-51.04 dBm	-48.12 dB	-8.12 dB
-240.000 MHz	-160.000 MHz	2.000 MHz	5.78649 GHz	-51.02 dBm	-48.11 dB	-8.33 dB
-160.000 MHz	-81.000 MHz	2.000 MHz	5.94398 GHz	-26.93 dBm	-24.02 dB	-4.01 dB
-81.000 MHz	-80.000 MHz	2.000 MHz	5.94402 GHz	-25.07 dBm	-22.16 dB	-2.46 dB
80.000 MHz	81.000 MHz	2.000 MHz	6.10598 GHz	-26.04 dBm	-23.13 dB	-3.43 dB
81.000 MHz	160.000 MHz	2.000 MHz	6.10602 GHz	-28.34 dBm	-25.43 dB	-5.43 dB
160.000 MHz	240.000 MHz	2.000 MHz	6.26477 GHz	-51.17 dBm	-48.26 dB	-8.29 dB
240.000 MHz	480.000 MHz	2.000 MHz	6.26921 GHz	-50.95 dBm	-48.04 dB	-8.04 dB

Frequency (MHz): 6025MHz / Port 2



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-480.000 MHz	-240.000 MHz	2.000 MHz	5.75673 GHz	-51.23 dBm	-47.94 dB	-7.94 dB
-240.000 MHz	-160.000 MHz	2.000 MHz	5.78577 GHz	-51.53 dBm	-48.24 dB	-8.35 dB
-160.000 MHz	-81.000 MHz	2.000 MHz	5.94398 GHz	-28.63 dBm	-25.33 dB	-5.33 dB
-81.000 MHz	-80.000 MHz	2.000 MHz	5.94402 GHz	-25.28 dBm	-21.99 dB	-2.29 dB
80.000 MHz	81.000 MHz	2.000 MHz	6.10598 GHz	-26.96 dBm	-23.67 dB	-3.97 dB
81.000 MHz	160.000 MHz	2.000 MHz	6.10602 GHz	-28.19 dBm	-24.90 dB	-4.90 dB
160.000 MHz	240.000 MHz	2.000 MHz	6.26444 GHz	-51.75 dBm	-48.46 dB	-8.55 dB
240.000 MHz	480.000 MHz	2.000 MHz	6.27207 GHz	-51.48 dBm	-48.19 dB	-8.19 dB

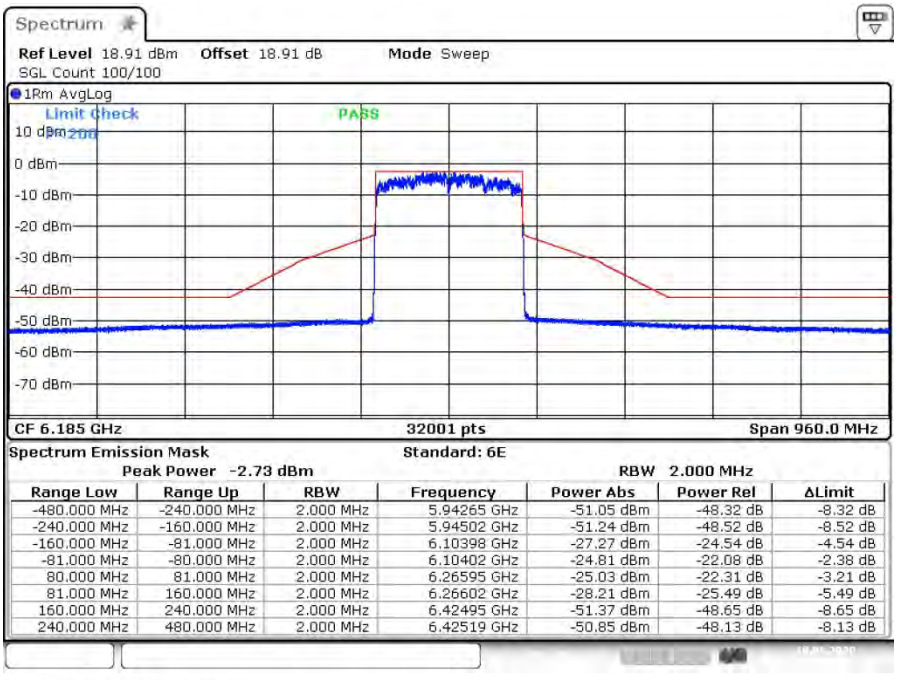
Frequency (MHz): 6185MHz / Port 1



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-480.000 MHz	-240.000 MHz	2.000 MHz	5.94463 GHz	-51.03 dBm	-48.61 dB	-8.61 dB
-240.000 MHz	-160.000 MHz	2.000 MHz	5.94712 GHz	-51.05 dBm	-48.63 dB	-8.95 dB
-160.000 MHz	-81.000 MHz	2.000 MHz	6.10398 GHz	-26.82 dBm	-24.40 dB	-4.39 dB
-81.000 MHz	-80.000 MHz	2.000 MHz	6.10402 GHz	-25.07 dBm	-22.65 dB	-2.95 dB
80.000 MHz	81.000 MHz	2.000 MHz	6.26595 GHz	-24.33 dBm	-21.91 dB	-2.81 dB
81.000 MHz	160.000 MHz	2.000 MHz	6.26602 GHz	-28.45 dBm	-26.03 dB	-6.03 dB
160.000 MHz	240.000 MHz	2.000 MHz	6.42396 GHz	-50.85 dBm	-48.43 dB	-8.58 dB
240.000 MHz	480.000 MHz	2.000 MHz	6.45460 GHz	-50.80 dBm	-48.38 dB	-8.38 dB

Date: 18.AUG.2020 12:58:32

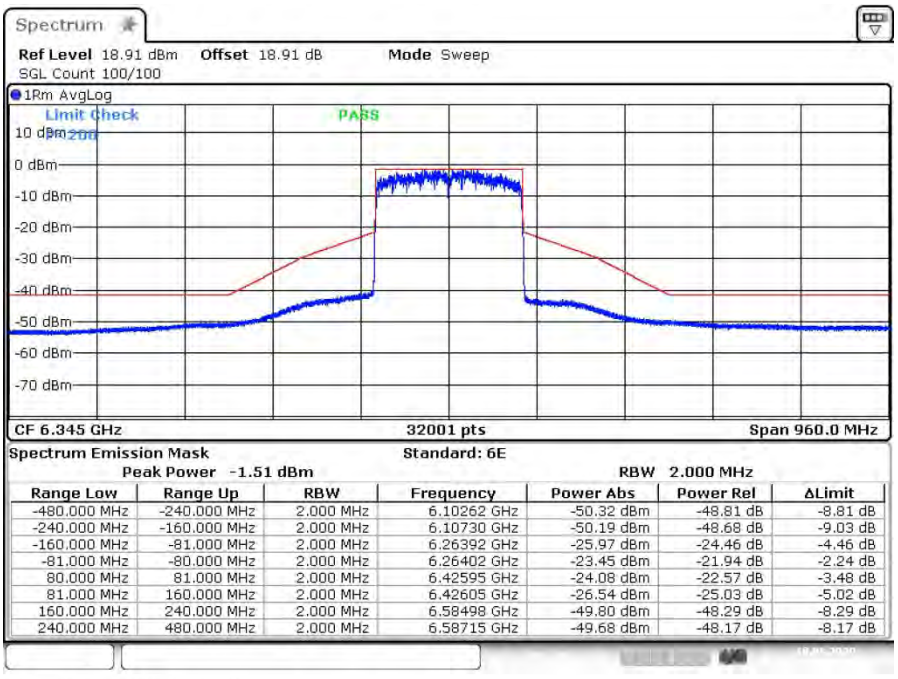
Frequency (MHz): 6185MHz / Port 2



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-480.000 MHz	-240.000 MHz	2.000 MHz	5.94265 GHz	-51.05 dBm	-48.32 dB	-8.32 dB
-240.000 MHz	-160.000 MHz	2.000 MHz	5.94502 GHz	-51.24 dBm	-48.52 dB	-8.52 dB
-160.000 MHz	-81.000 MHz	2.000 MHz	6.10398 GHz	-27.27 dBm	-24.54 dB	-4.54 dB
-81.000 MHz	-80.000 MHz	2.000 MHz	6.10402 GHz	-24.81 dBm	-22.08 dB	-2.38 dB
80.000 MHz	81.000 MHz	2.000 MHz	6.26595 GHz	-25.03 dBm	-22.31 dB	-3.21 dB
81.000 MHz	160.000 MHz	2.000 MHz	6.26602 GHz	-28.21 dBm	-25.49 dB	-5.49 dB
160.000 MHz	240.000 MHz	2.000 MHz	6.42495 GHz	-51.37 dBm	-48.65 dB	-8.65 dB
240.000 MHz	480.000 MHz	2.000 MHz	6.42519 GHz	-50.85 dBm	-48.13 dB	-8.13 dB

Date: 18.AUG.2020 12:58:00

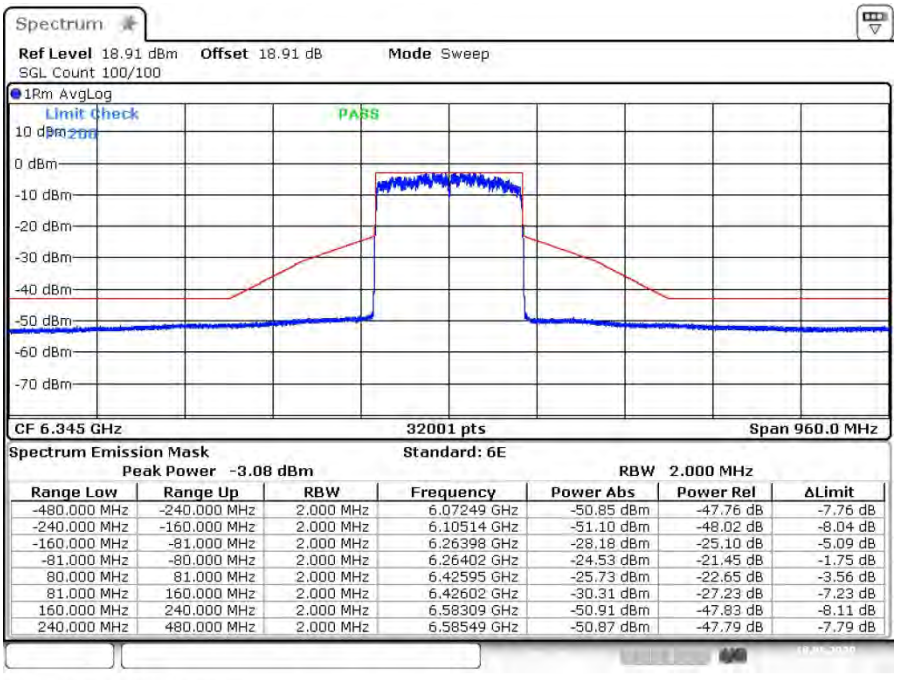
Frequency (MHz): 6345MHz / Port 1



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-480.000 MHz	-240.000 MHz	2.000 MHz	6.10262 GHz	-50.32 dBm	-48.81 dB	-8.81 dB
-240.000 MHz	-160.000 MHz	2.000 MHz	6.10730 GHz	-50.19 dBm	-48.68 dB	-9.03 dB
-160.000 MHz	-81.000 MHz	2.000 MHz	6.26392 GHz	-25.97 dBm	-24.46 dB	-4.46 dB
-81.000 MHz	-80.000 MHz	2.000 MHz	6.26402 GHz	-23.45 dBm	-21.94 dB	-2.24 dB
80.000 MHz	81.000 MHz	2.000 MHz	6.42595 GHz	-24.08 dBm	-22.57 dB	-3.48 dB
81.000 MHz	160.000 MHz	2.000 MHz	6.42605 GHz	-26.54 dBm	-25.03 dB	-5.02 dB
160.000 MHz	240.000 MHz	2.000 MHz	6.58498 GHz	-49.80 dBm	-48.29 dB	-8.29 dB
240.000 MHz	480.000 MHz	2.000 MHz	6.58715 GHz	-49.68 dBm	-48.17 dB	-8.17 dB

Date: 18.AUG.2020 12:54:03

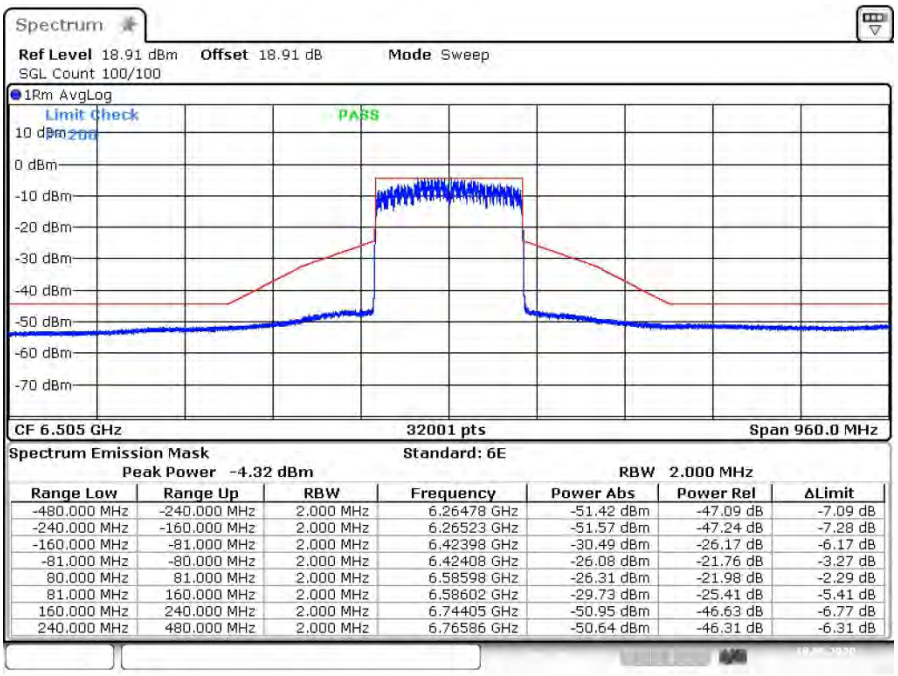
Frequency (MHz): 6345MHz / Port 2



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-480.000 MHz	-240.000 MHz	2.000 MHz	6.07249 GHz	-50.85 dBm	-47.76 dB	-7.76 dB
-240.000 MHz	-160.000 MHz	2.000 MHz	6.10514 GHz	-51.10 dBm	-48.02 dB	-8.04 dB
-160.000 MHz	-81.000 MHz	2.000 MHz	6.26398 GHz	-28.18 dBm	-25.10 dB	-5.09 dB
-81.000 MHz	-80.000 MHz	2.000 MHz	6.26402 GHz	-24.53 dBm	-21.45 dB	-1.75 dB
80.000 MHz	81.000 MHz	2.000 MHz	6.42595 GHz	-25.73 dBm	-22.65 dB	-3.56 dB
81.000 MHz	160.000 MHz	2.000 MHz	6.42602 GHz	-30.31 dBm	-27.23 dB	-7.23 dB
160.000 MHz	240.000 MHz	2.000 MHz	6.58309 GHz	-50.91 dBm	-47.83 dB	-8.11 dB
240.000 MHz	480.000 MHz	2.000 MHz	6.58549 GHz	-50.87 dBm	-47.79 dB	-7.79 dB

Date: 18.AUG.2020 12:53:26

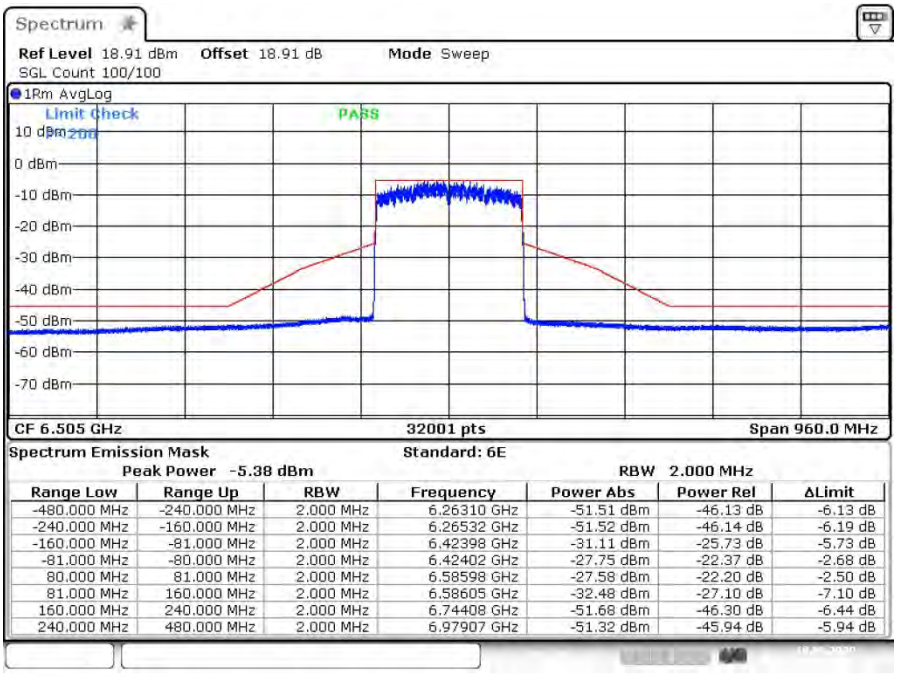
Frequency (MHz): 6505MHz / Port 1



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-480.000 MHz	-240.000 MHz	2.000 MHz	6.26478 GHz	-51.42 dBm	-47.09 dB	-7.09 dB
-240.000 MHz	-160.000 MHz	2.000 MHz	6.26523 GHz	-51.57 dBm	-47.24 dB	-7.28 dB
-160.000 MHz	-81.000 MHz	2.000 MHz	6.42398 GHz	-30.49 dBm	-26.17 dB	-6.17 dB
-81.000 MHz	-80.000 MHz	2.000 MHz	6.42408 GHz	-26.08 dBm	-21.76 dB	-3.27 dB
80.000 MHz	81.000 MHz	2.000 MHz	6.58598 GHz	-26.31 dBm	-21.98 dB	-2.29 dB
81.000 MHz	160.000 MHz	2.000 MHz	6.58602 GHz	-29.73 dBm	-25.41 dB	-5.41 dB
160.000 MHz	240.000 MHz	2.000 MHz	6.74405 GHz	-50.95 dBm	-46.63 dB	-6.77 dB
240.000 MHz	480.000 MHz	2.000 MHz	6.76586 GHz	-50.64 dBm	-46.31 dB	-6.31 dB

Date: 18.AUG.2020 15:17:42

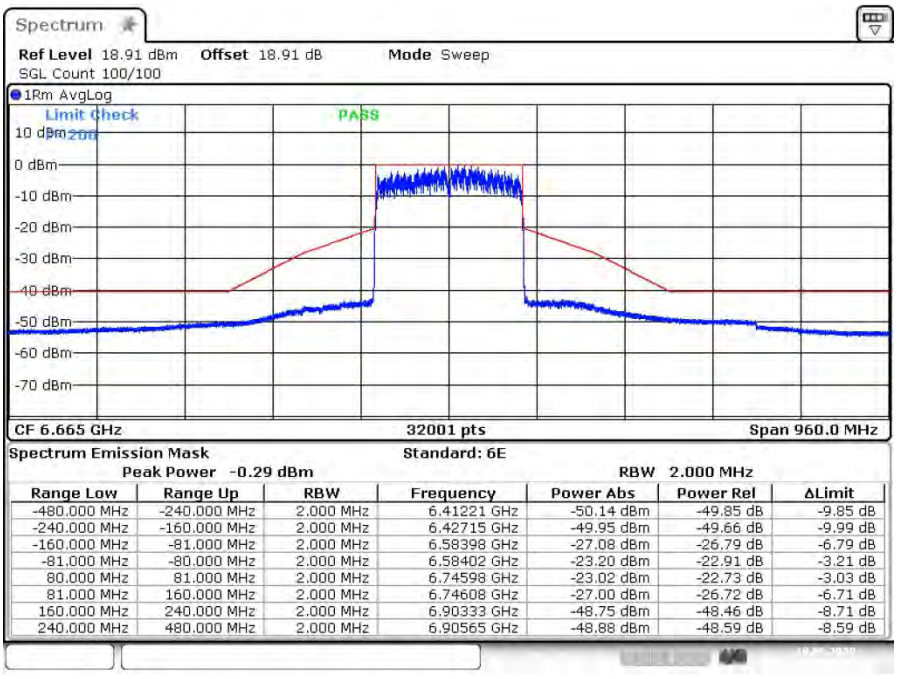
Frequency (MHz): 6505MHz / Port 2



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-480.000 MHz	-240.000 MHz	2.000 MHz	6.26310 GHz	-51.51 dBm	-46.13 dB	-6.13 dB
-240.000 MHz	-160.000 MHz	2.000 MHz	6.26532 GHz	-51.52 dBm	-46.14 dB	-6.19 dB
-160.000 MHz	-81.000 MHz	2.000 MHz	6.42398 GHz	-31.11 dBm	-25.73 dB	-5.73 dB
-81.000 MHz	-80.000 MHz	2.000 MHz	6.42402 GHz	-27.75 dBm	-22.37 dB	-2.68 dB
80.000 MHz	81.000 MHz	2.000 MHz	6.58598 GHz	-27.58 dBm	-22.20 dB	-2.50 dB
81.000 MHz	160.000 MHz	2.000 MHz	6.58605 GHz	-32.48 dBm	-27.10 dB	-7.10 dB
160.000 MHz	240.000 MHz	2.000 MHz	6.74408 GHz	-51.68 dBm	-46.30 dB	-6.44 dB
240.000 MHz	480.000 MHz	2.000 MHz	6.97907 GHz	-51.32 dBm	-45.94 dB	-5.94 dB

Date: 18.AUG.2020 15:17:03

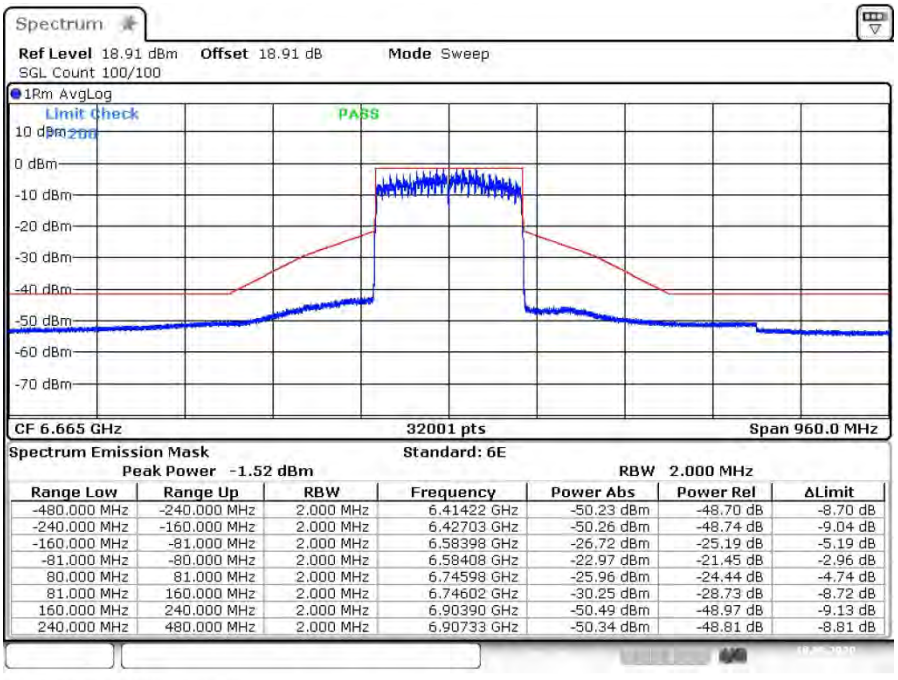
Frequency (MHz): 6665MHz / Port 1



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-480.000 MHz	-240.000 MHz	2.000 MHz	6.41221 GHz	-50.14 dBm	-49.85 dB	-9.85 dB
-240.000 MHz	-160.000 MHz	2.000 MHz	6.42715 GHz	-49.95 dBm	-49.66 dB	-9.99 dB
-160.000 MHz	-81.000 MHz	2.000 MHz	6.58398 GHz	-27.08 dBm	-26.79 dB	-6.79 dB
-81.000 MHz	-80.000 MHz	2.000 MHz	6.58402 GHz	-23.20 dBm	-22.91 dB	-3.21 dB
80.000 MHz	81.000 MHz	2.000 MHz	6.74598 GHz	-23.02 dBm	-22.73 dB	-3.03 dB
81.000 MHz	160.000 MHz	2.000 MHz	6.74608 GHz	-27.00 dBm	-26.72 dB	-6.71 dB
160.000 MHz	240.000 MHz	2.000 MHz	6.90333 GHz	-48.75 dBm	-48.46 dB	-8.71 dB
240.000 MHz	480.000 MHz	2.000 MHz	6.90565 GHz	-48.88 dBm	-48.59 dB	-8.59 dB

Date: 18.AUG.2020 15:19:03

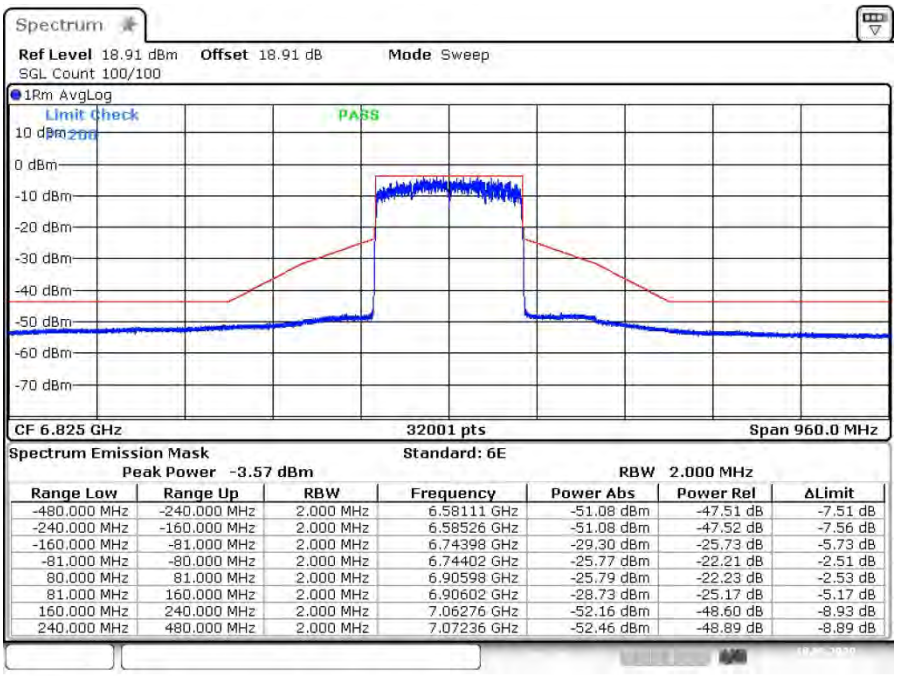
Frequency (MHz): 6665MHz / Port 2



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-480.000 MHz	-240.000 MHz	2.000 MHz	6.41422 GHz	-50.23 dBm	-48.70 dB	-8.70 dB
-240.000 MHz	-160.000 MHz	2.000 MHz	6.42703 GHz	-50.26 dBm	-48.74 dB	-9.04 dB
-160.000 MHz	-81.000 MHz	2.000 MHz	6.58398 GHz	-26.72 dBm	-25.19 dB	-5.19 dB
-81.000 MHz	-80.000 MHz	2.000 MHz	6.58408 GHz	-22.97 dBm	-21.45 dB	-2.96 dB
80.000 MHz	81.000 MHz	2.000 MHz	6.74598 GHz	-25.96 dBm	-24.44 dB	-4.74 dB
81.000 MHz	160.000 MHz	2.000 MHz	6.74602 GHz	-30.25 dBm	-28.73 dB	-8.72 dB
160.000 MHz	240.000 MHz	2.000 MHz	6.90390 GHz	-50.49 dBm	-48.97 dB	-9.13 dB
240.000 MHz	480.000 MHz	2.000 MHz	6.90733 GHz	-50.34 dBm	-48.81 dB	-8.81 dB

Date: 18.AUG.2020 15:19:35

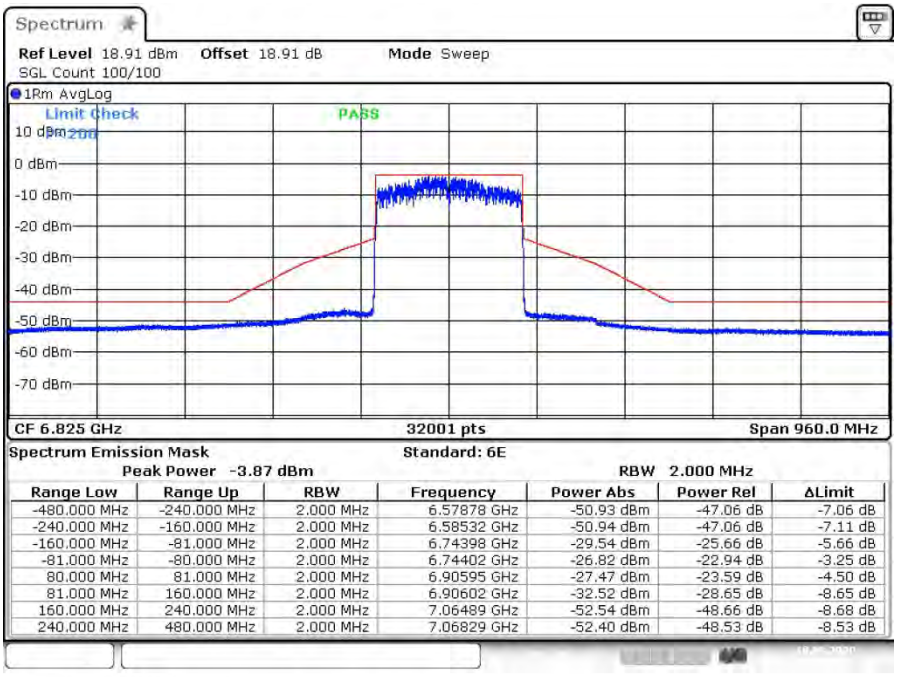
Frequency (MHz): 6825MHz / Port 1



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-480.000 MHz	-240.000 MHz	2.000 MHz	6.58111 GHz	-51.08 dBm	-47.51 dB	-7.51 dB
-240.000 MHz	-160.000 MHz	2.000 MHz	6.58526 GHz	-51.08 dBm	-47.52 dB	-7.56 dB
-160.000 MHz	-81.000 MHz	2.000 MHz	6.74398 GHz	-29.30 dBm	-25.73 dB	-5.73 dB
-81.000 MHz	-80.000 MHz	2.000 MHz	6.74402 GHz	-25.77 dBm	-22.21 dB	-2.51 dB
80.000 MHz	81.000 MHz	2.000 MHz	6.90598 GHz	-25.79 dBm	-22.23 dB	-2.53 dB
81.000 MHz	160.000 MHz	2.000 MHz	6.90602 GHz	-28.73 dBm	-25.17 dB	-5.17 dB
160.000 MHz	240.000 MHz	2.000 MHz	7.06276 GHz	-52.16 dBm	-48.60 dB	-8.93 dB
240.000 MHz	480.000 MHz	2.000 MHz	7.07236 GHz	-52.46 dBm	-48.89 dB	-8.89 dB

Date: 18.AUG.2020 15:25:02

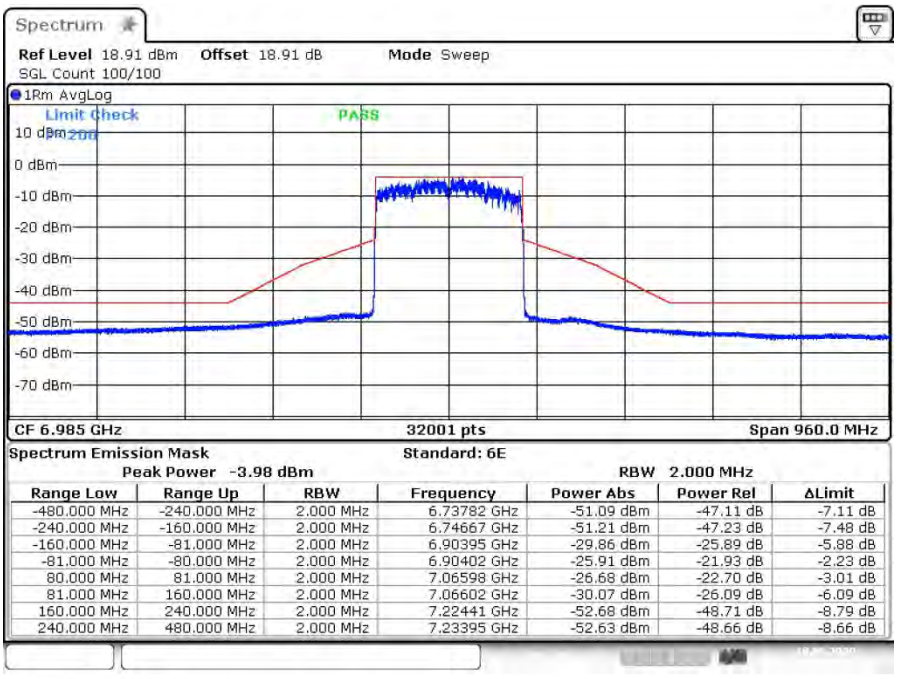
Frequency (MHz): 6825MHz / Port 2



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-480.000 MHz	-240.000 MHz	2.000 MHz	6.57878 GHz	-50.93 dBm	-47.06 dB	-7.06 dB
-240.000 MHz	-160.000 MHz	2.000 MHz	6.58532 GHz	-50.94 dBm	-47.06 dB	-7.11 dB
-160.000 MHz	-81.000 MHz	2.000 MHz	6.74398 GHz	-29.54 dBm	-25.66 dB	-5.66 dB
-81.000 MHz	-80.000 MHz	2.000 MHz	6.74402 GHz	-26.82 dBm	-22.94 dB	-3.25 dB
80.000 MHz	81.000 MHz	2.000 MHz	6.90595 GHz	-27.47 dBm	-23.59 dB	-4.50 dB
81.000 MHz	160.000 MHz	2.000 MHz	6.90602 GHz	-32.52 dBm	-28.65 dB	-8.65 dB
160.000 MHz	240.000 MHz	2.000 MHz	7.06489 GHz	-52.54 dBm	-48.66 dB	-8.68 dB
240.000 MHz	480.000 MHz	2.000 MHz	7.06829 GHz	-52.40 dBm	-48.53 dB	-8.53 dB

Date: 18.AUG.2020 15:24:19

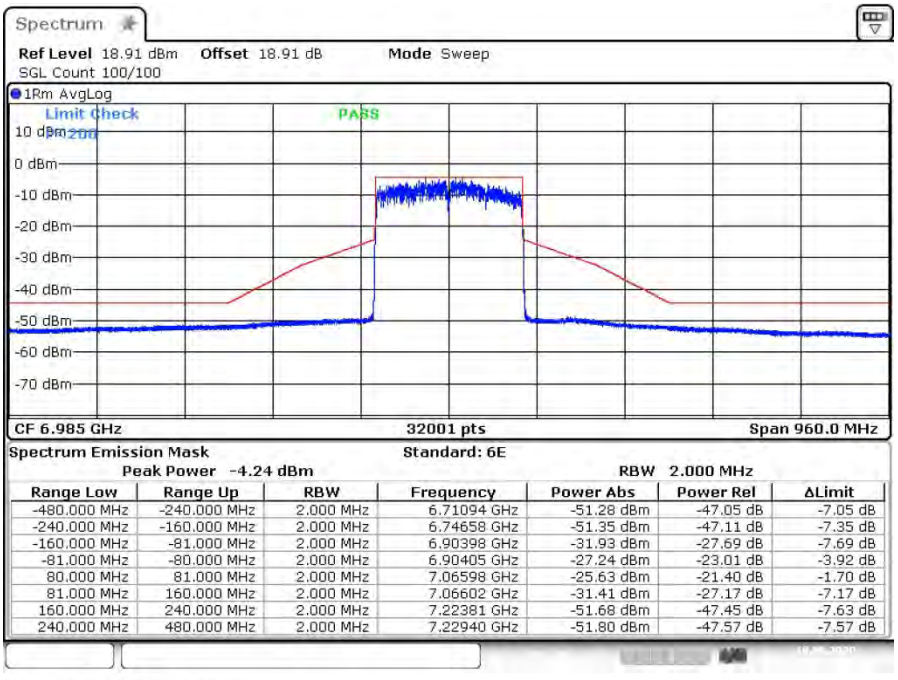
Frequency (MHz): 6985MHz / Port 1



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-480.000 MHz	-240.000 MHz	2.000 MHz	6.73782 GHz	-51.09 dBm	-47.11 dB	-7.11 dB
-240.000 MHz	-160.000 MHz	2.000 MHz	6.74667 GHz	-51.21 dBm	-47.23 dB	-7.48 dB
-160.000 MHz	-81.000 MHz	2.000 MHz	6.90395 GHz	-29.86 dBm	-25.89 dB	-5.88 dB
-81.000 MHz	-80.000 MHz	2.000 MHz	6.90402 GHz	-25.91 dBm	-21.93 dB	-2.23 dB
80.000 MHz	81.000 MHz	2.000 MHz	7.06598 GHz	-26.68 dBm	-22.70 dB	-3.01 dB
81.000 MHz	160.000 MHz	2.000 MHz	7.06602 GHz	-30.07 dBm	-26.09 dB	-6.09 dB
160.000 MHz	240.000 MHz	2.000 MHz	7.22441 GHz	-52.68 dBm	-48.71 dB	-8.79 dB
240.000 MHz	480.000 MHz	2.000 MHz	7.23395 GHz	-52.63 dBm	-48.66 dB	-8.66 dB

Date: 18.AUG.2020 15:26:36

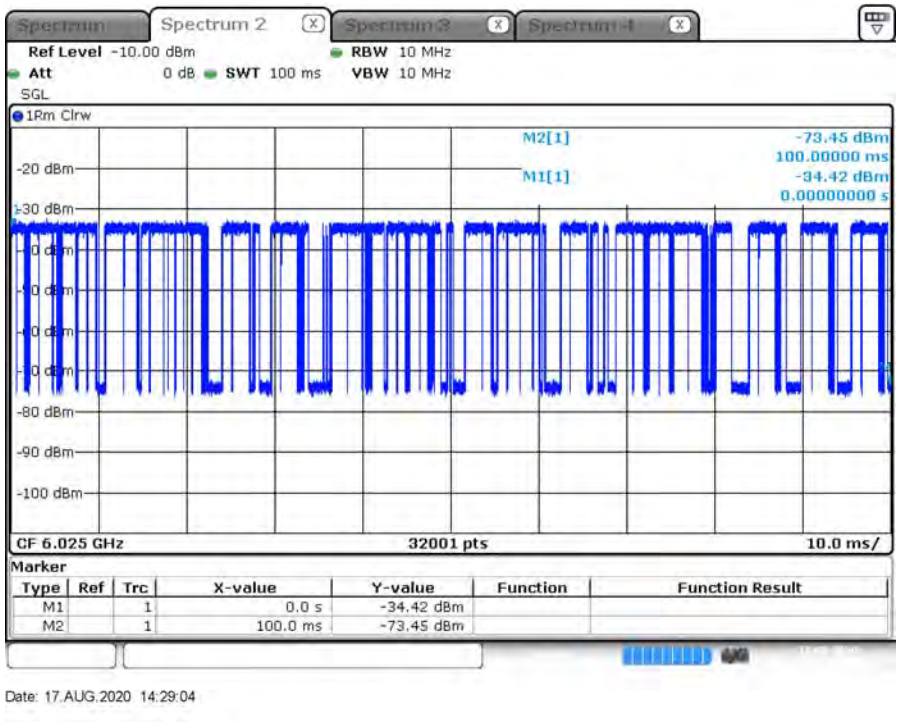
Frequency (MHz): 6985MHz / Port 2



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-480.000 MHz	-240.000 MHz	2.000 MHz	6.71094 GHz	-51.28 dBm	-47.05 dB	-7.05 dB
-240.000 MHz	-160.000 MHz	2.000 MHz	6.74658 GHz	-51.35 dBm	-47.11 dB	-7.35 dB
-160.000 MHz	-81.000 MHz	2.000 MHz	6.90398 GHz	-31.93 dBm	-27.69 dB	-7.69 dB
-81.000 MHz	-80.000 MHz	2.000 MHz	6.90405 GHz	-27.24 dBm	-23.01 dB	-3.92 dB
80.000 MHz	81.000 MHz	2.000 MHz	7.06598 GHz	-25.63 dBm	-21.40 dB	-1.70 dB
81.000 MHz	160.000 MHz	2.000 MHz	7.06602 GHz	-31.41 dBm	-27.17 dB	-7.17 dB
160.000 MHz	240.000 MHz	2.000 MHz	7.22381 GHz	-51.68 dBm	-47.45 dB	-7.63 dB
240.000 MHz	480.000 MHz	2.000 MHz	7.22940 GHz	-51.80 dBm	-47.57 dB	-7.57 dB

Date: 18.AUG.2020 15:27:47

Traffic Loading Plot

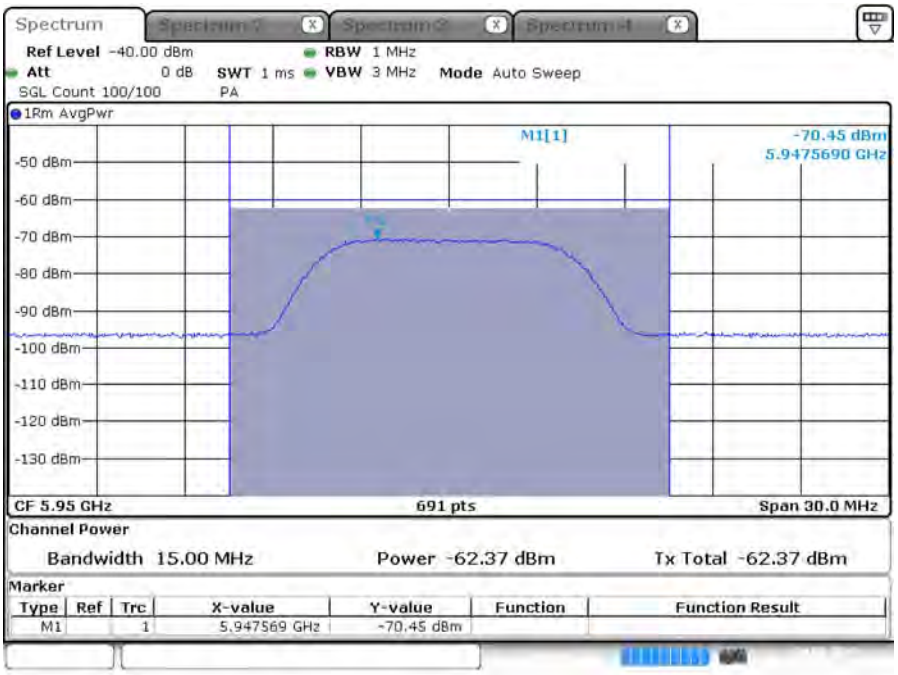


Traffic Loading Calculation

R&S | Agilent

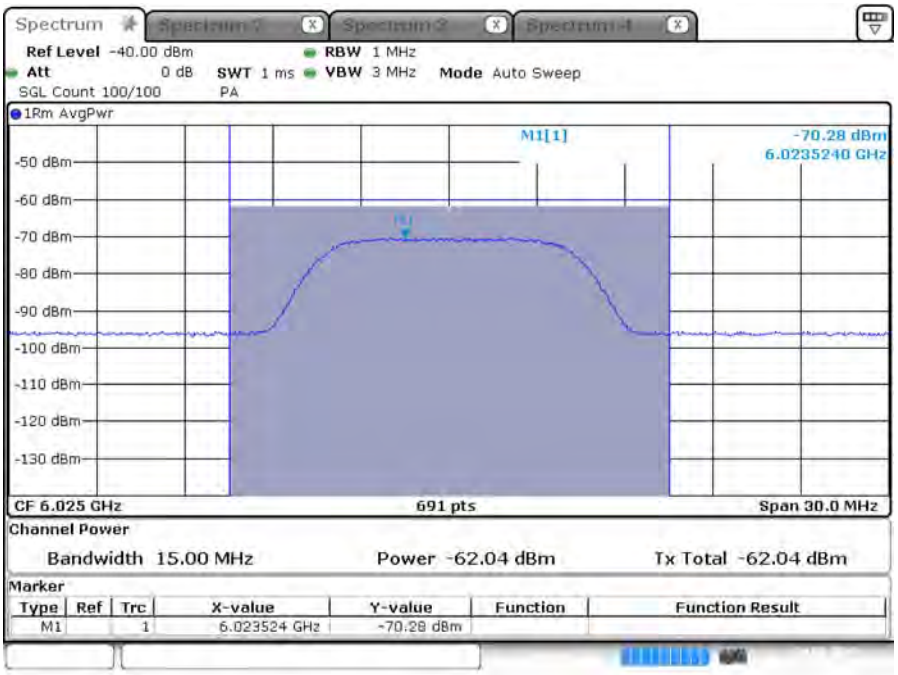
VISA session	Threshold (dBm)	Marker 1 (sec)	Space Time of Point	No. of Pulse
GPIB0::20:	-60	0	0.000003	23469
	Mean Level (dBm)	Marker 2 (sec)	Mark 1 Point	Close TX Time(sec)
	-34.71	0.1	1	73.340625m
	RMS Level (dBm)	Total Trace of Points	Mark 2 Point	Duty (%)
	-34.66	32001	32001	73.34

Incumbent signal (AWGN) Plot
Frequency (MHz): 5950 MHz



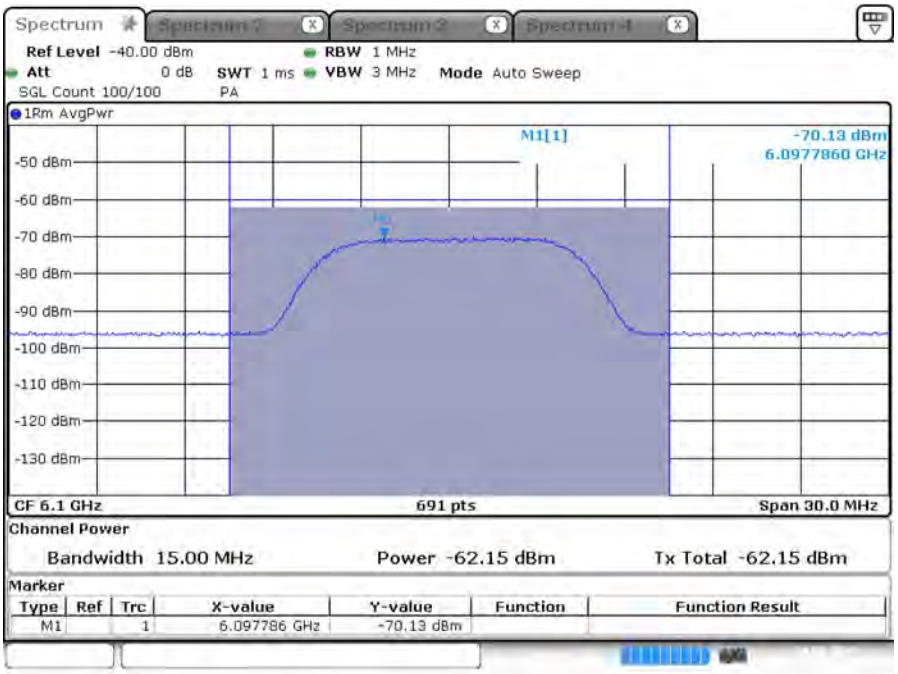
Date: 18.AUG.2020 15:42:56

Frequency (MHz): 6025 MHz



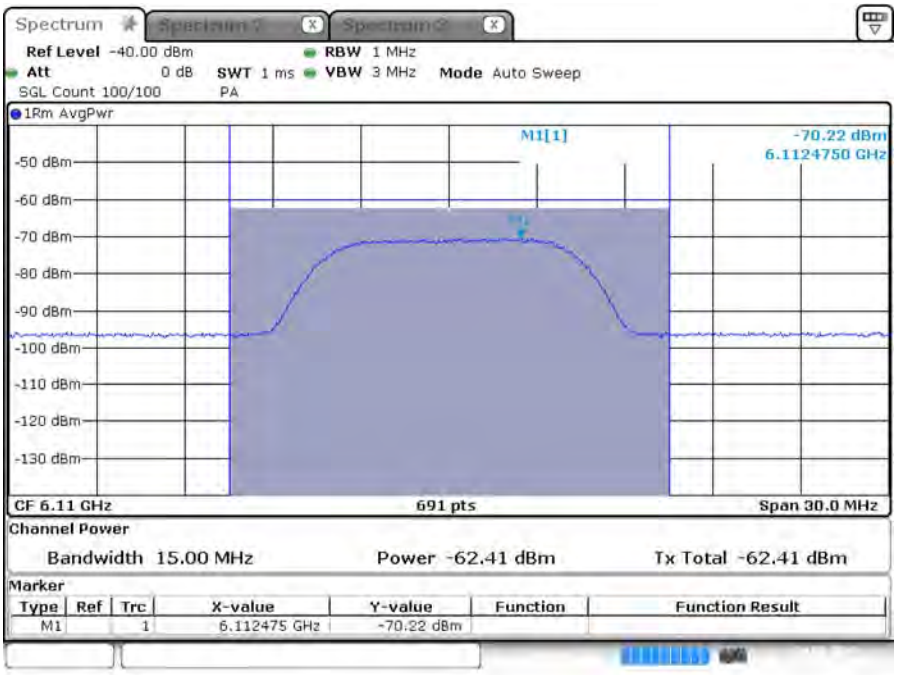
Date: 18.AUG.2020 15:44:26

Frequency (MHz): 6100 MHz



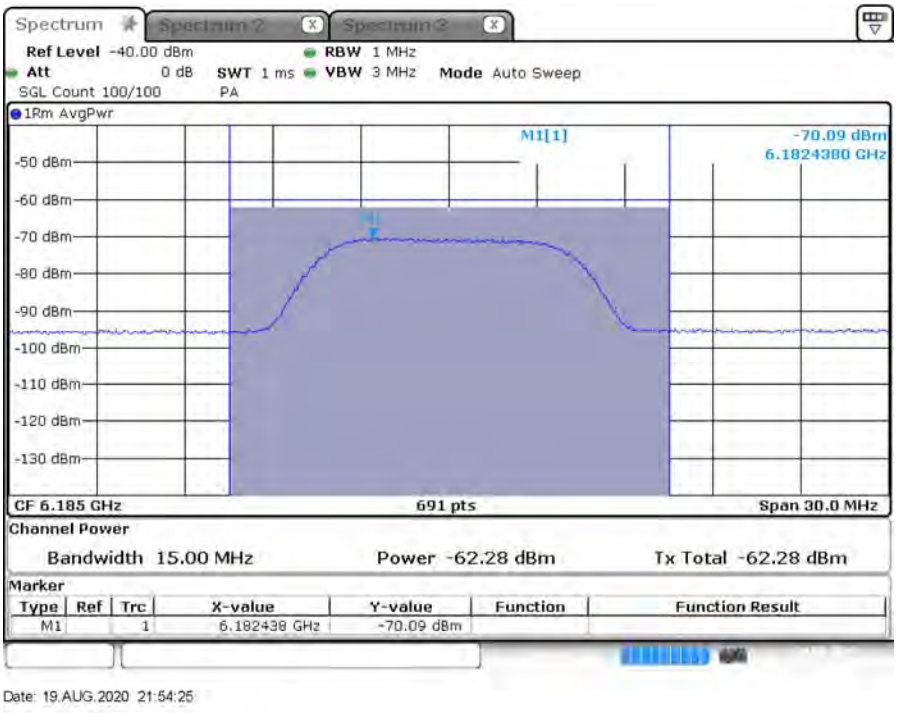
Date: 18.AUG.2020 15:45:20

Frequency (MHz): 6110 MHz

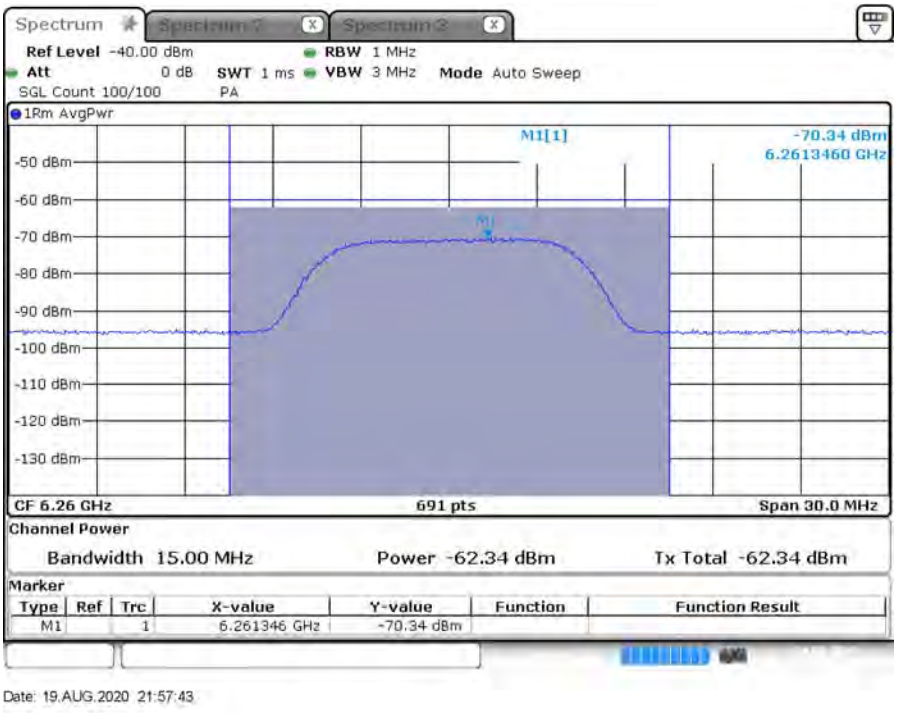


Date: 19.AUG.2020 21:51:16

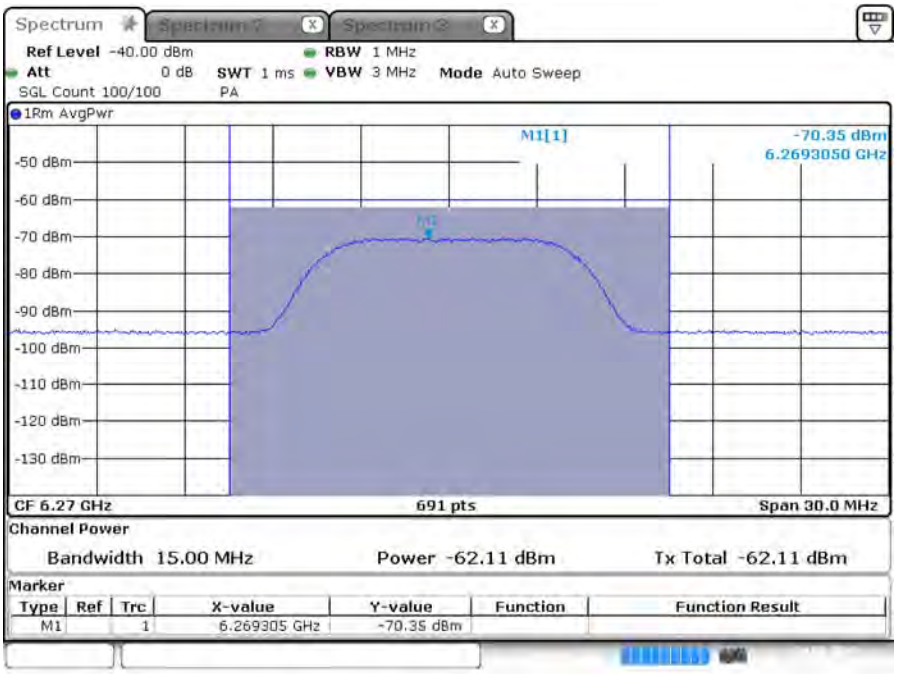
Frequency (MHz): 6185 MHz



Frequency (MHz): 6260 MHz

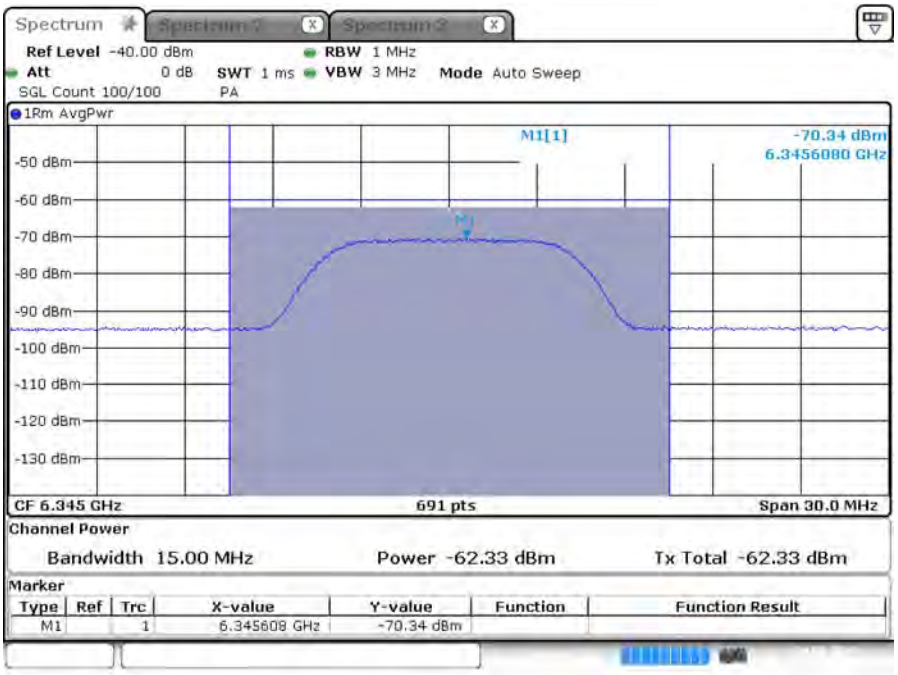


Frequency (MHz): 6270 MHz



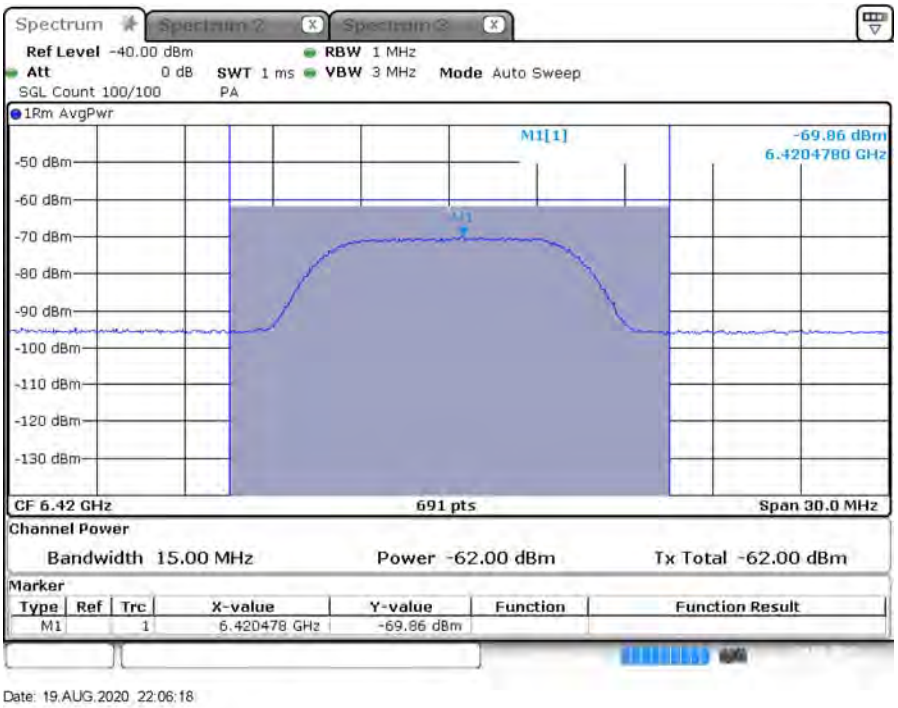
Date: 19.AUG.2020 22:01:19

Frequency (MHz): 6345 MHz



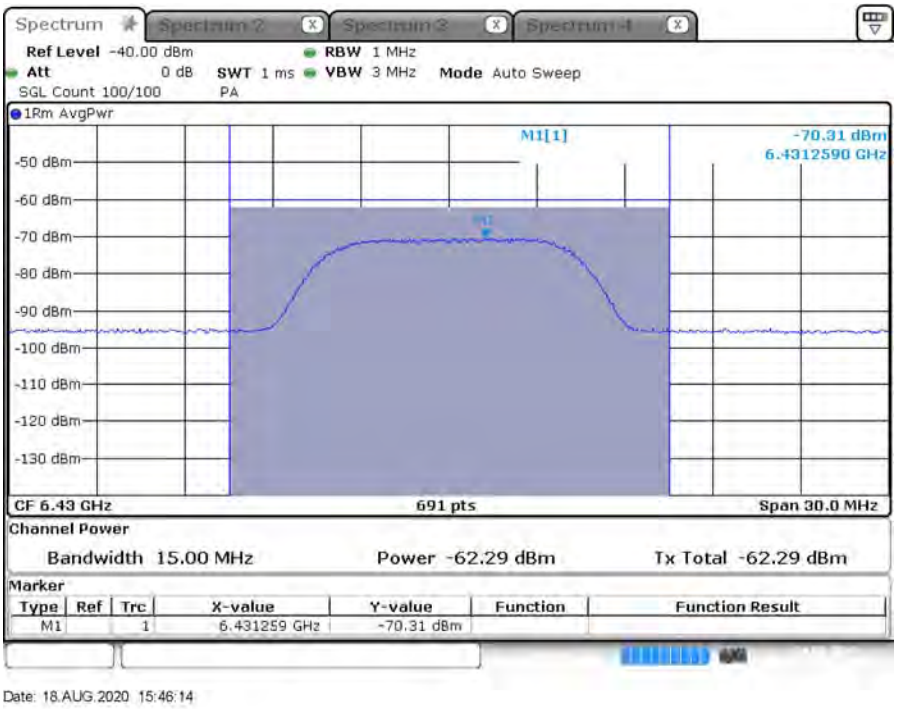
Date: 19.AUG.2020 22:03:39

Frequency (MHz): 6420 MHz



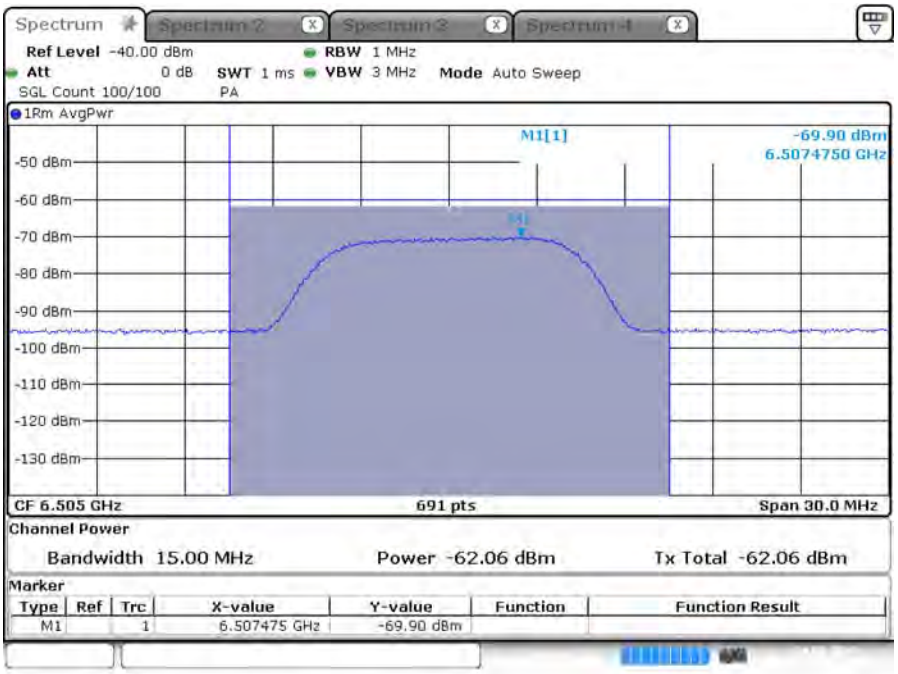
Date: 19.AUG.2020 22:06:18

Frequency (MHz): 6430 MHz



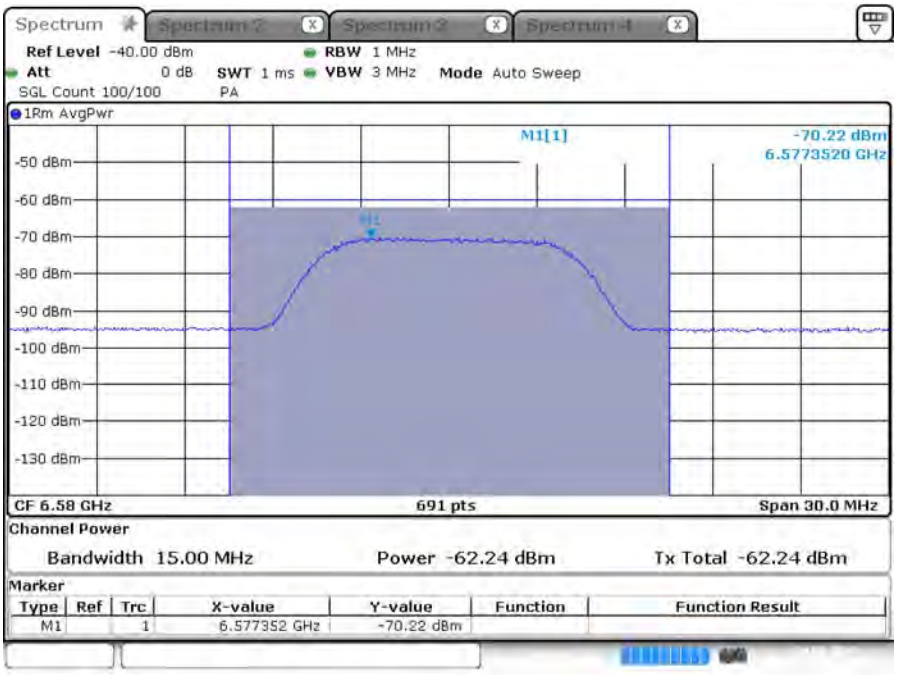
Date: 18.AUG.2020 15:46:14

Frequency (MHz): 6505 MHz



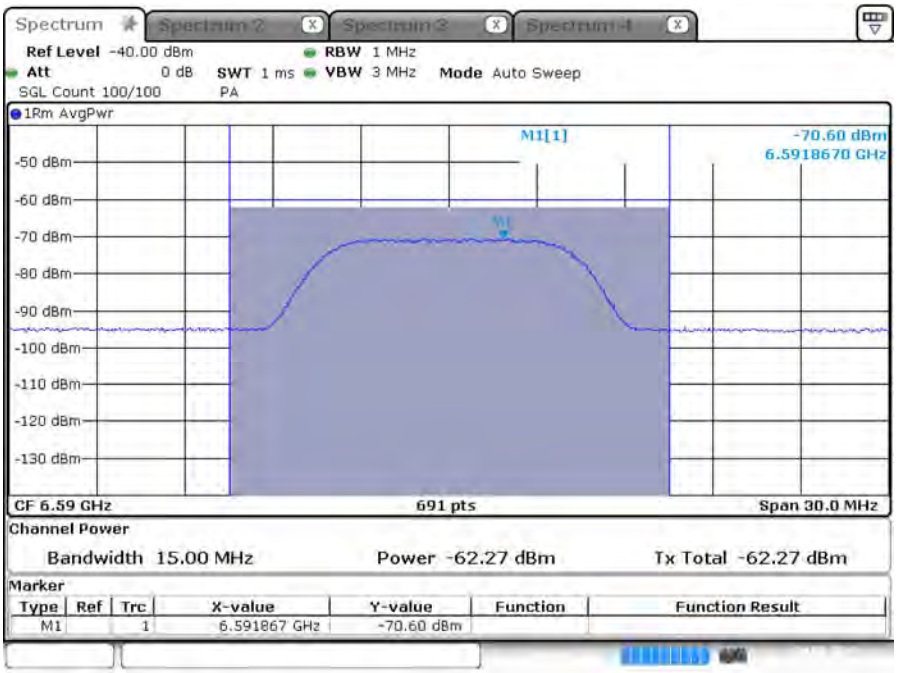
Date: 18.AUG.2020 15:47:07

Frequency (MHz): 6580 MHz



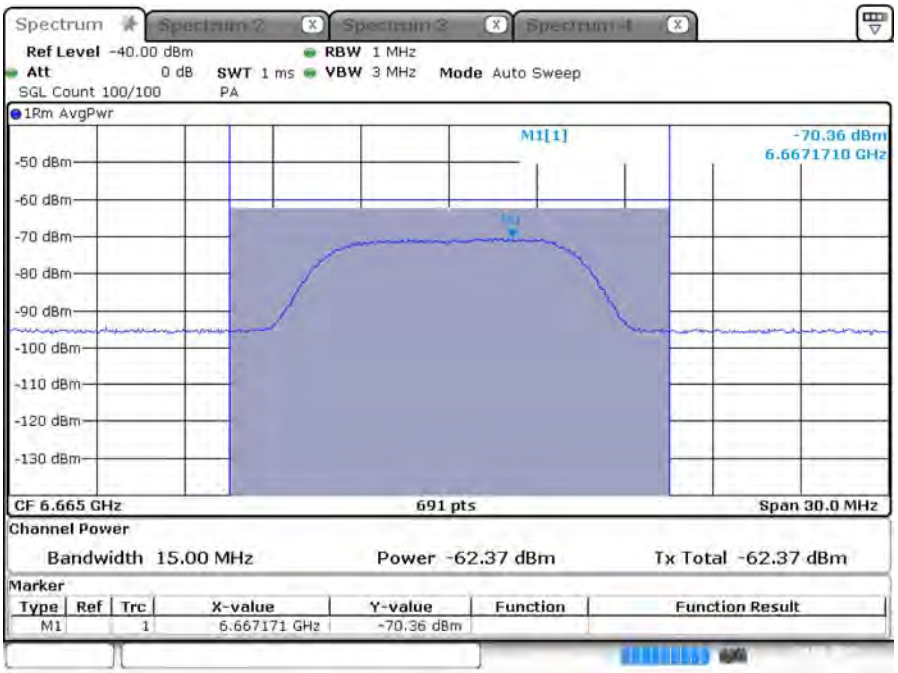
Date: 18.AUG.2020 15:47:54

Frequency (MHz): 6590 MHz



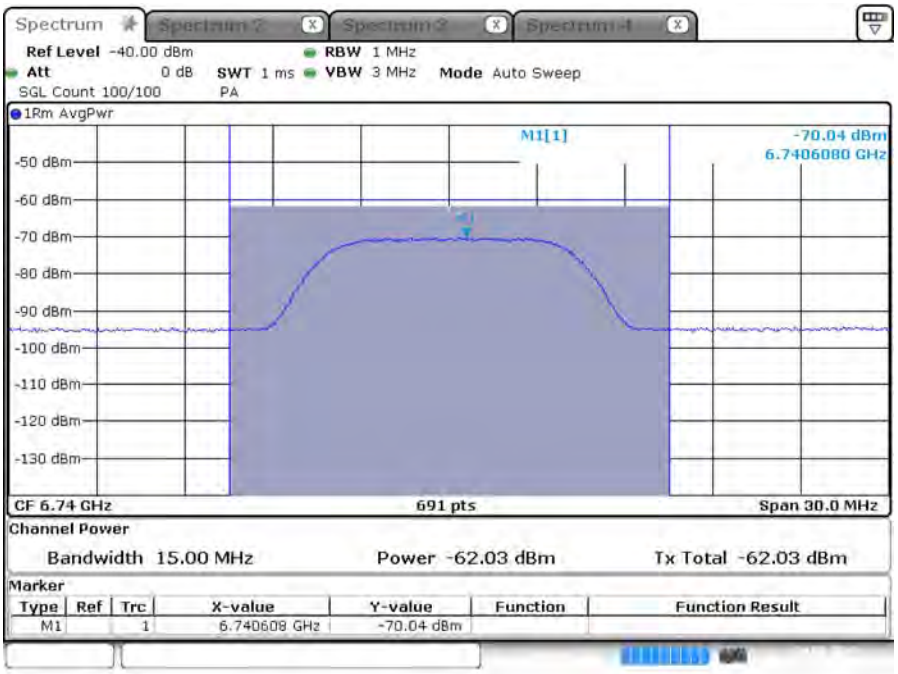
Date: 18.AUG.2020 15:48:47

Frequency (MHz): 6665 MHz



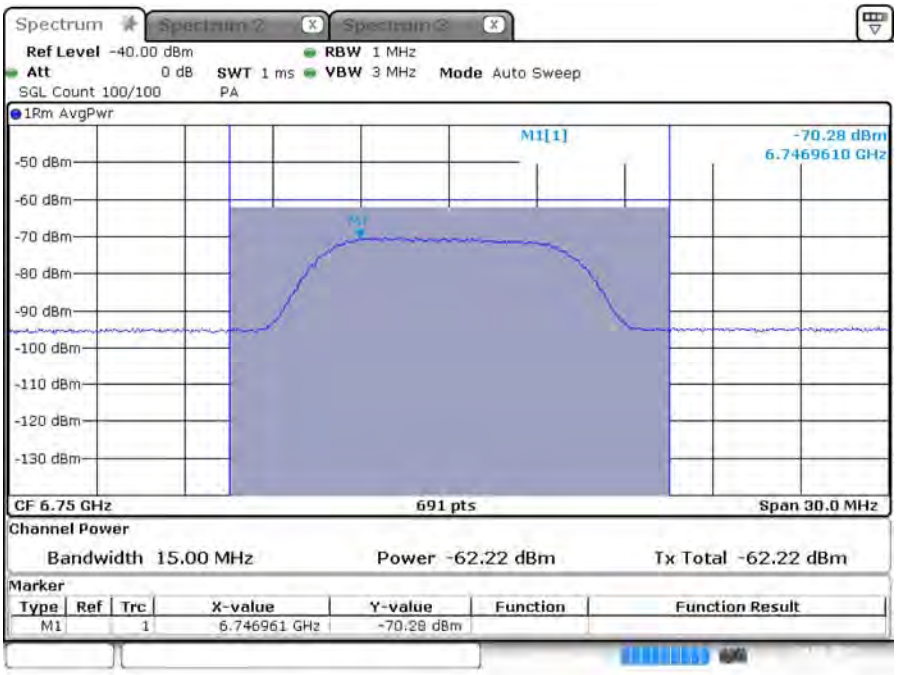
Date: 18.AUG.2020 15:49:22

Frequency (MHz): 6740 MHz



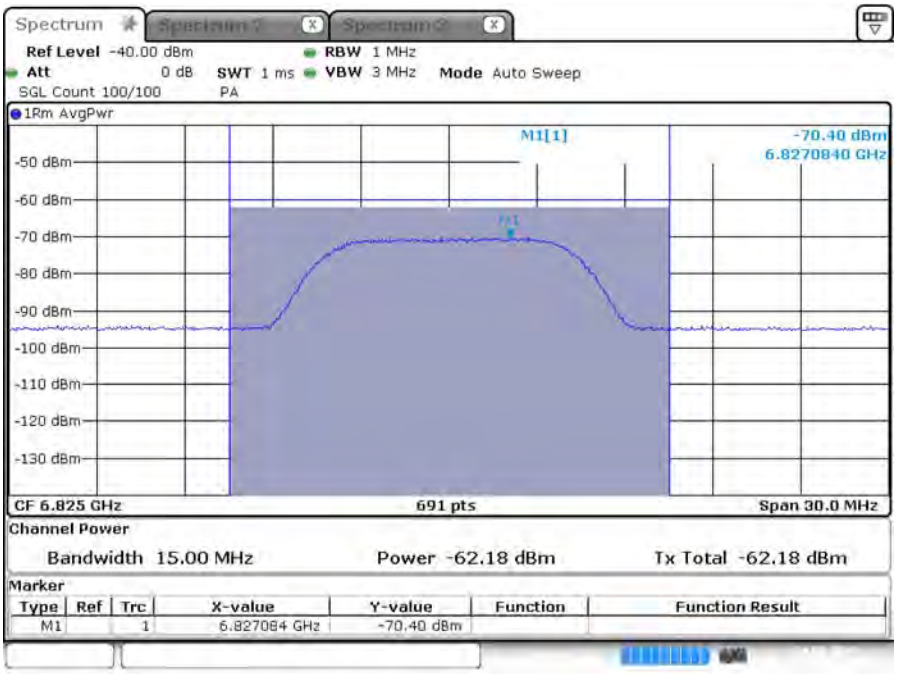
Date: 18.AUG.2020 15:50:38

Frequency (MHz): 6750 MHz



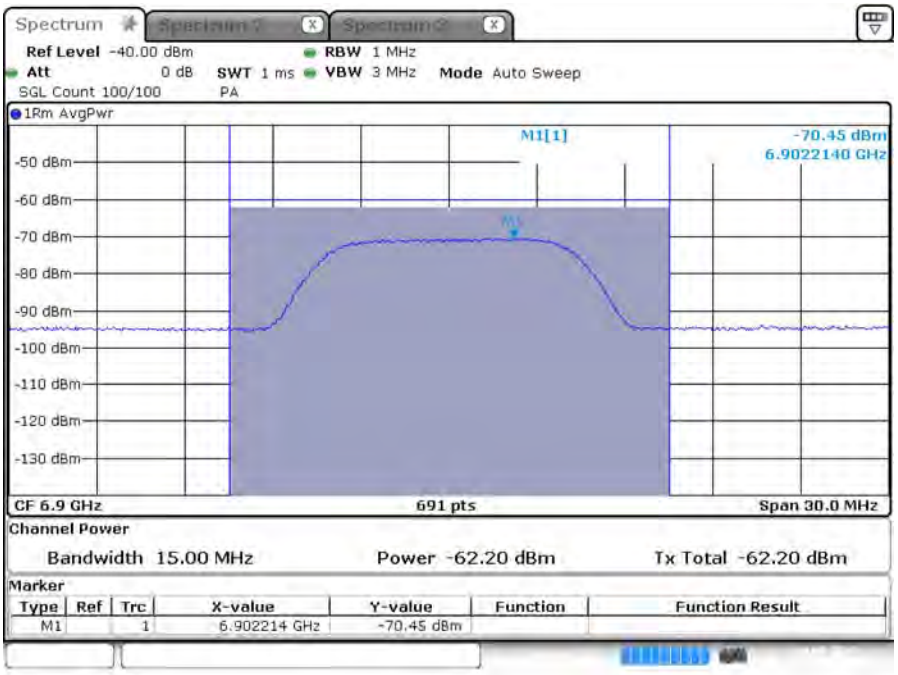
Date: 19.AUG.2020 22:07:26

Frequency (MHz): 6825 MHz

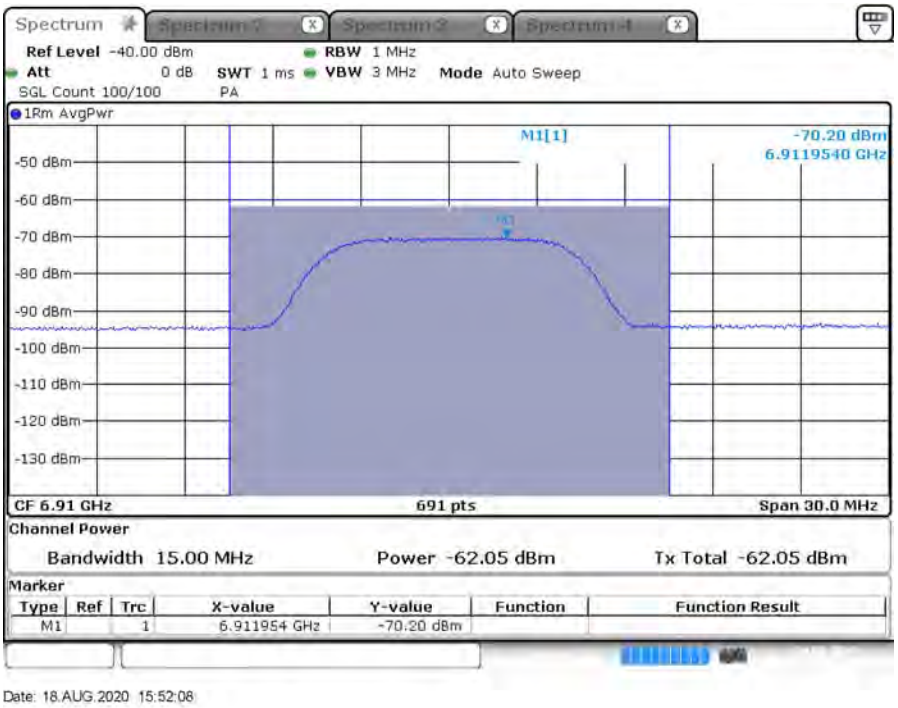


Date: 19.AUG.2020 22:08:16

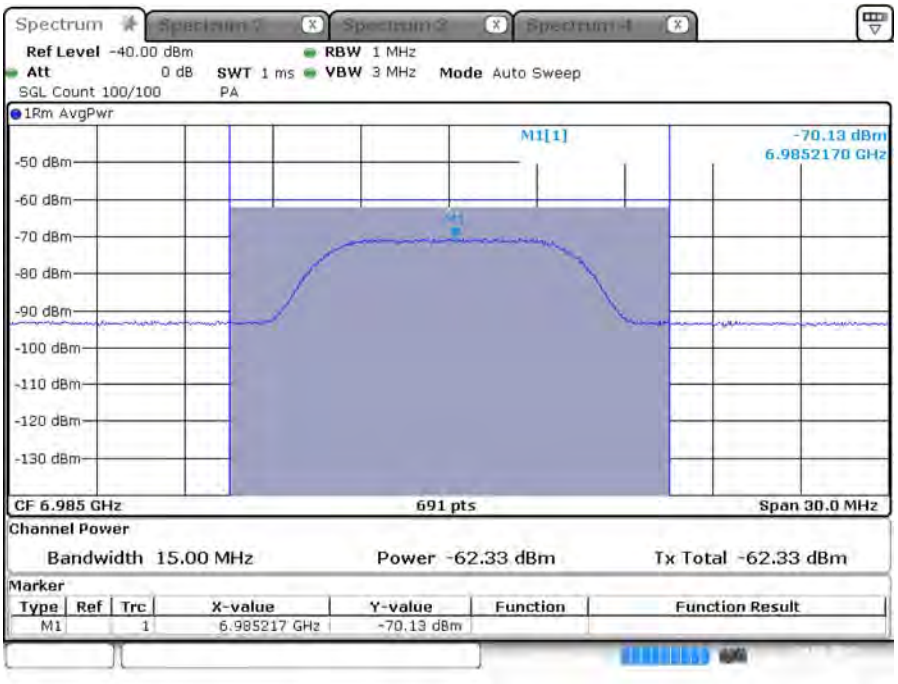
Frequency (MHz): 6900 MHz



Date: 19.AUG.2020 22:09:07

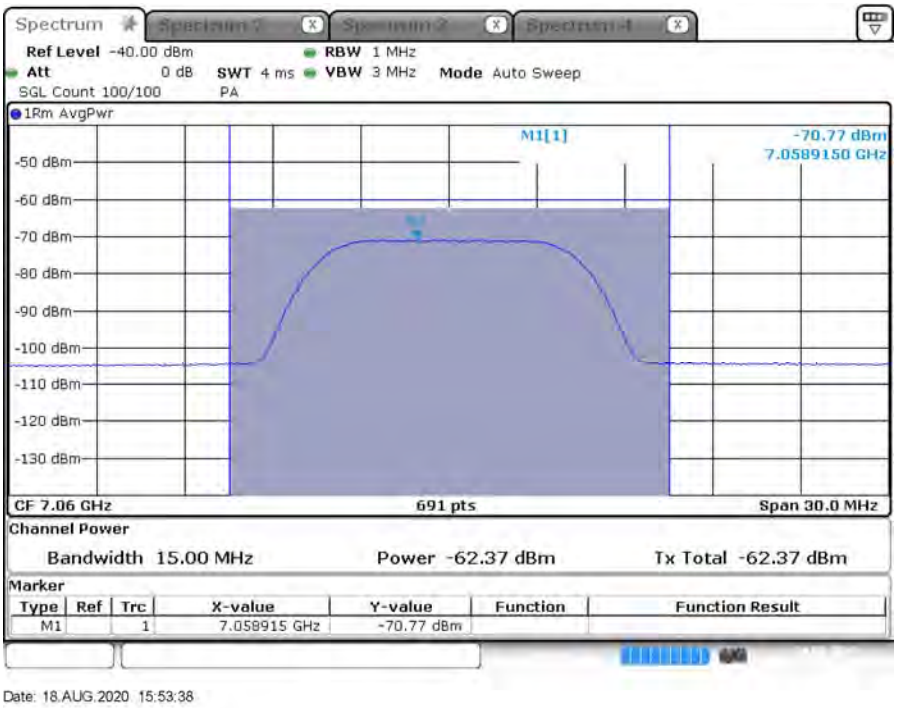
Frequency (MHz): 6910 MHz


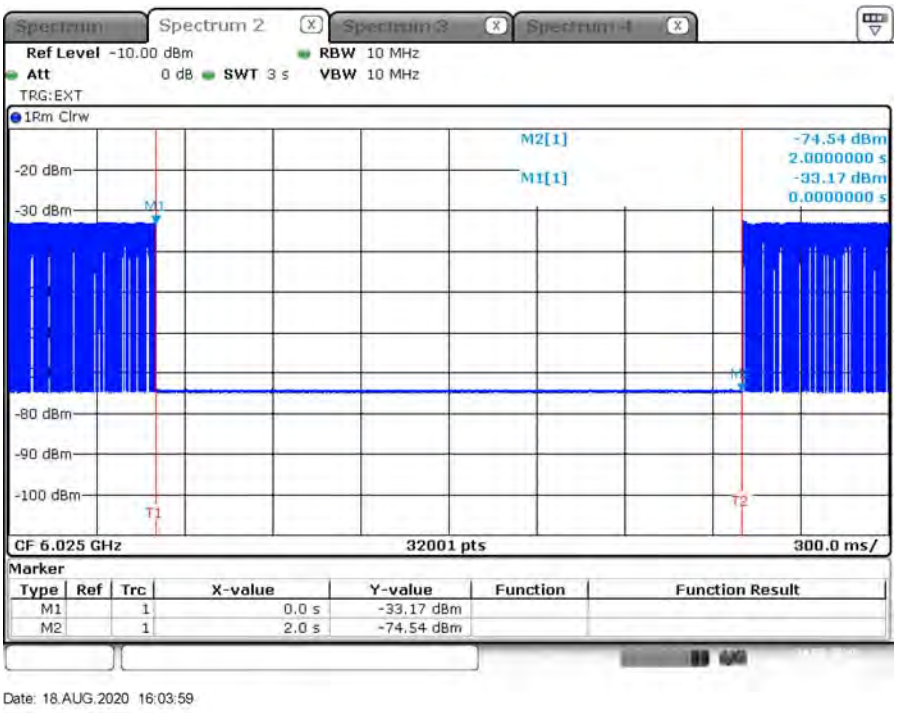
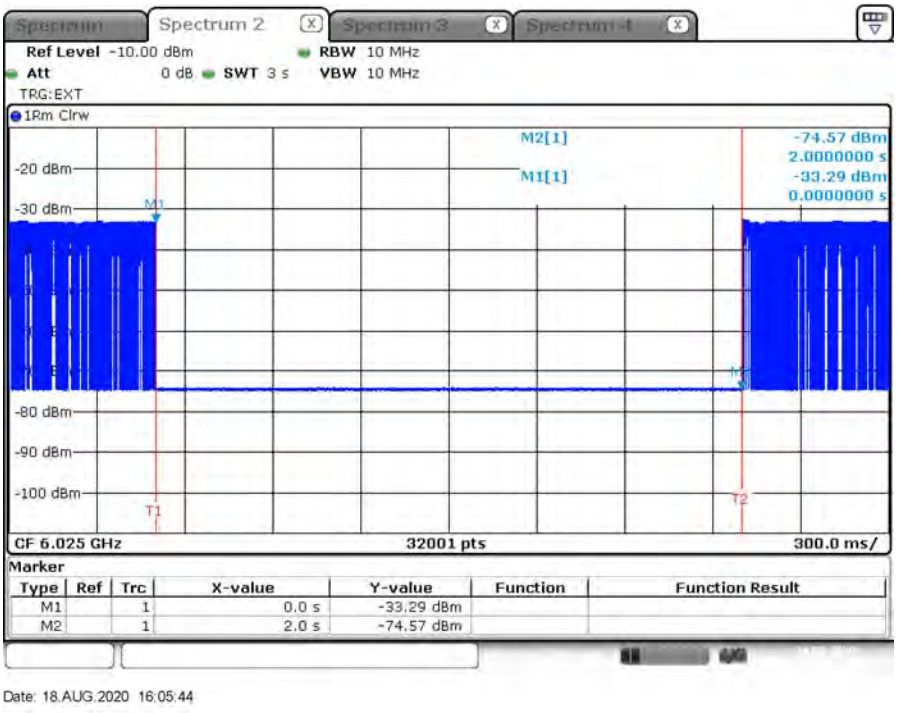
Date: 18.AUG.2020 15:52:08

Frequency (MHz): 6985 MHz


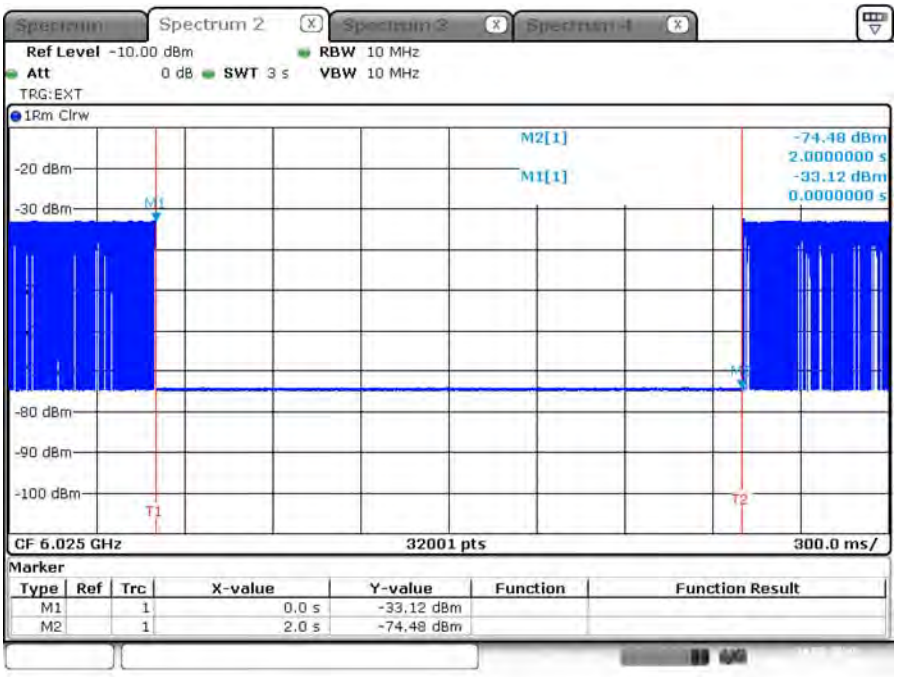
Date: 18.AUG.2020 15:52:50

Frequency (MHz): 7060 MHz



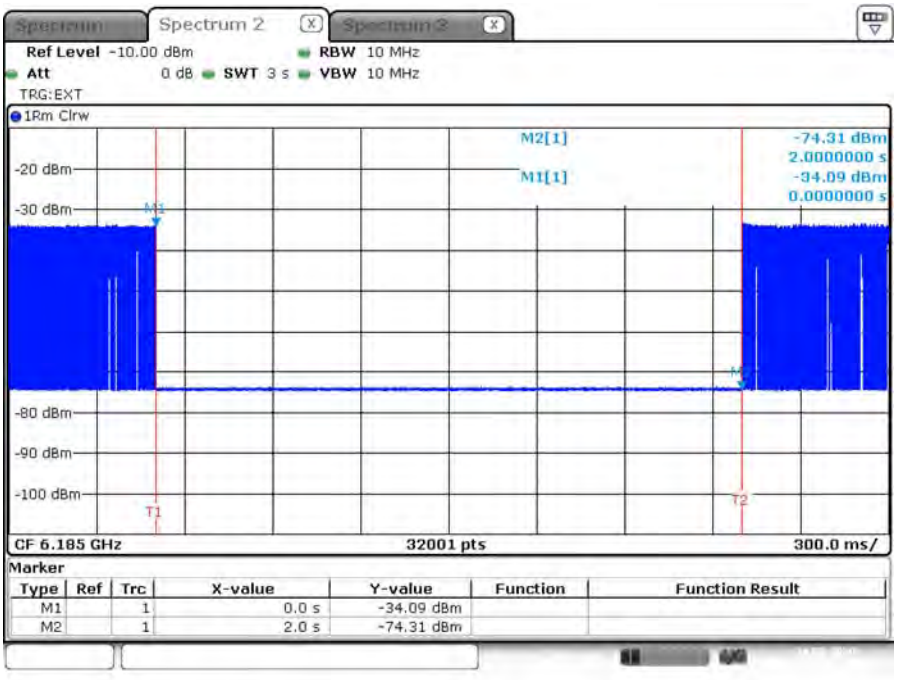
Contention-Based Protocol Plot
Test CH 15 ; Incumbent signal 5950 MHz

Note : M1 : Inject AWGN signal ; M2 : Remove AWGN signal.
Test CH 15 ; Incumbent signal 6025 MHz

Note : M1 : Inject AWGN signal ; M2 : Remove AWGN signal.

Test CH 15 ; Incumbent signal 6100 MHz



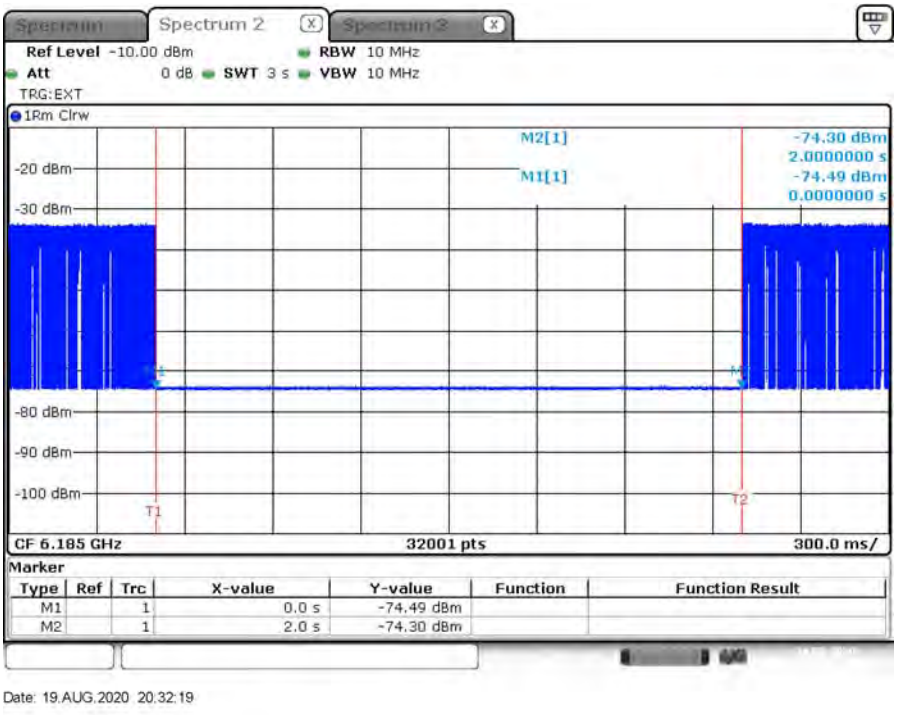
Note : M1 : Inject AWGN signal ; M2 : Remove AWGN signal.

Test CH 47 ; Incumbent signal 6110 MHz



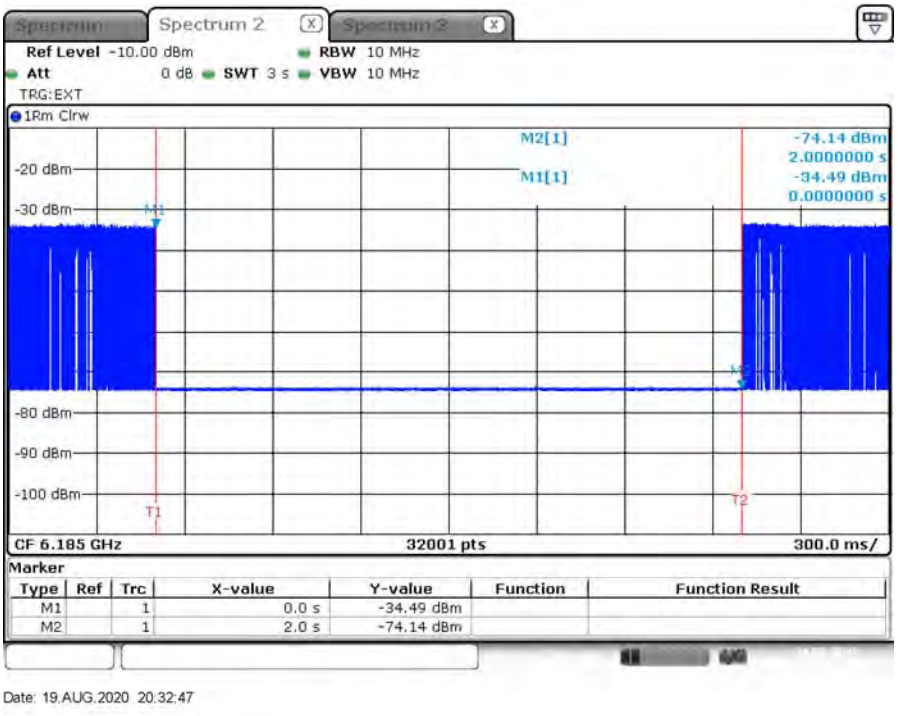
Note : M1 : Inject AWGN signal ; M2 : Remove AWGN signal.

Test CH 47 ; Incumbent signal 6185 MHz



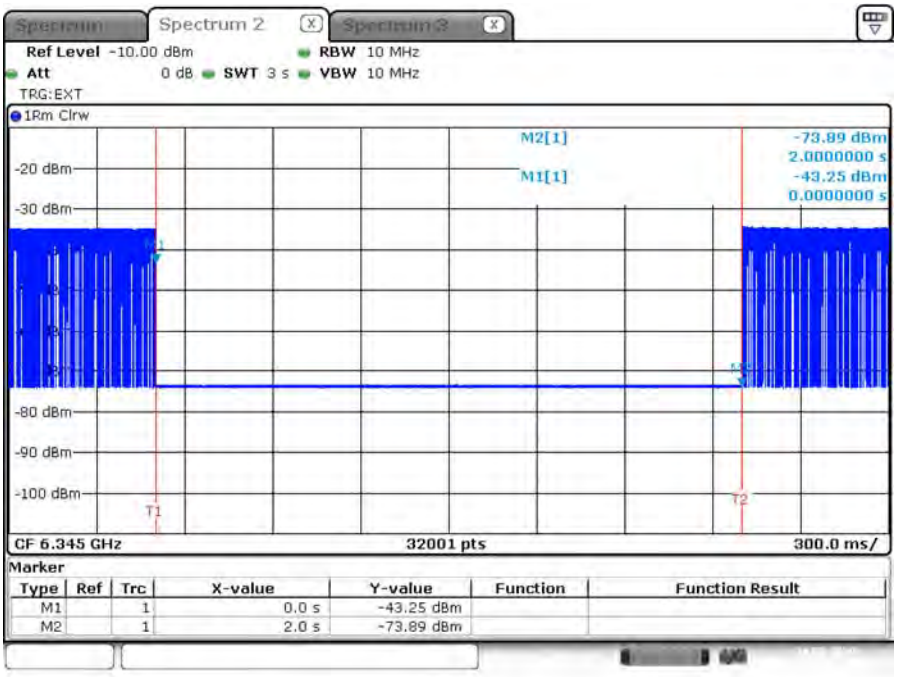
Note : M1 : Inject AWGN signal ; M2 : Remove AWGN signal.

Test CH 47 ; Incumbent signal 6260 MHz



Note : M1 : Inject AWGN signal ; M2 : Remove AWGN signal.

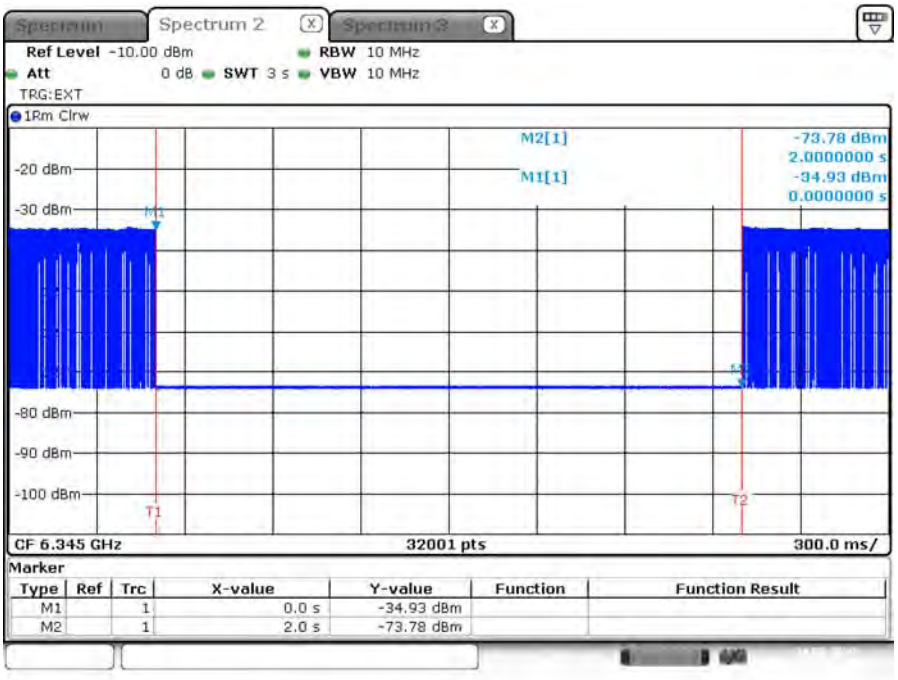
Test CH 79 ; Incumbent signal 6270 MHz



Date: 19.AUG.2020 21:01:01

Note : M1 : Inject AWGN signal ; M2 : Remove AWGN signal.

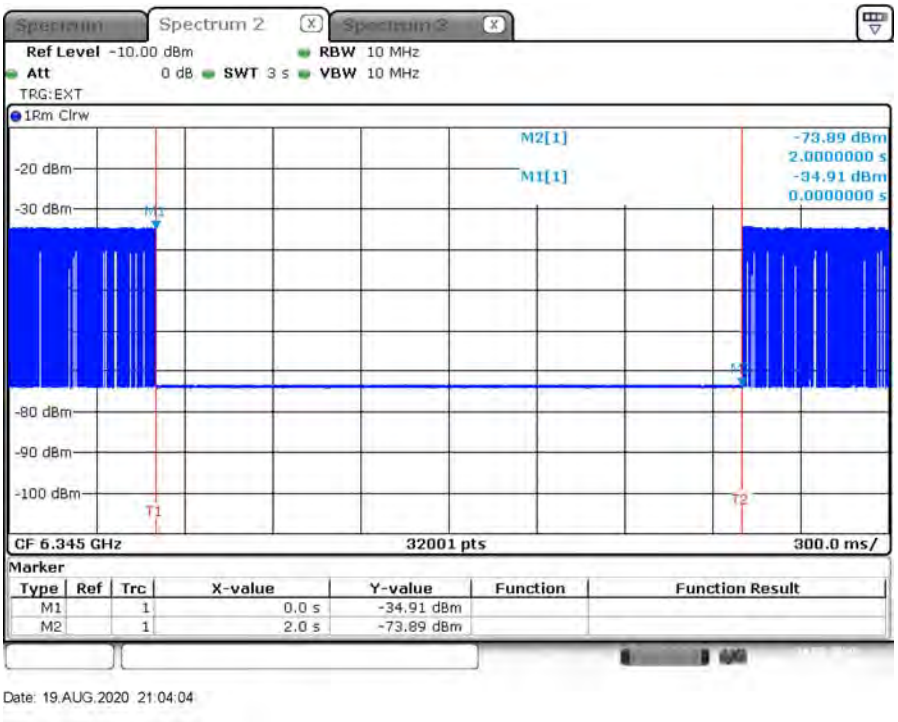
Test CH 79 ; Incumbent signal 6345 MHz



Date: 19.AUG.2020 21:02:27

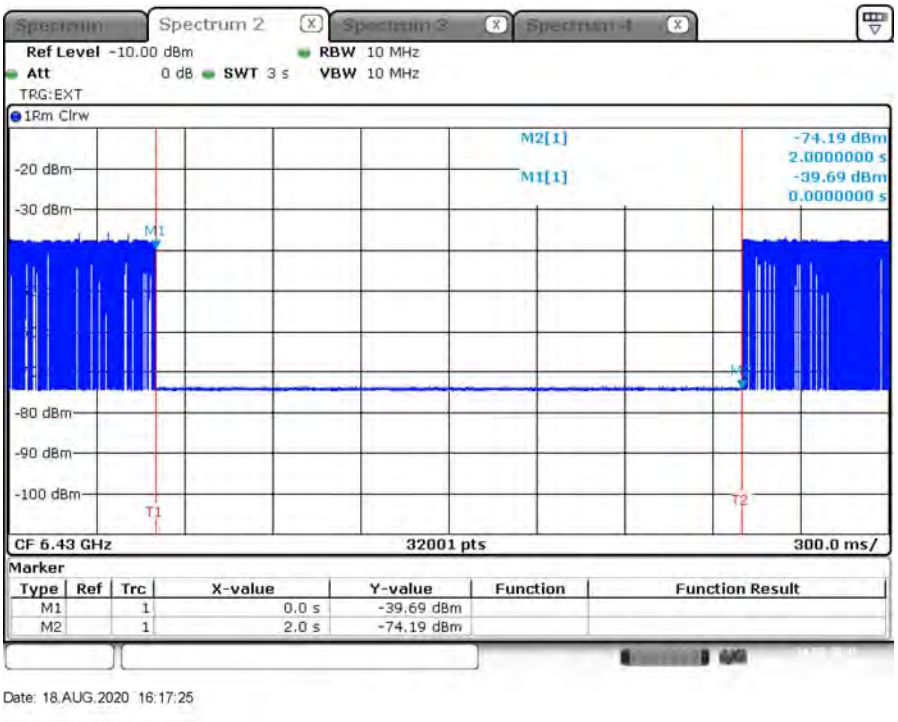
Note : M1 : Inject AWGN signal ; M2 : Remove AWGN signal.

Test CH 79 ; Incumbent signal 6420 MHz



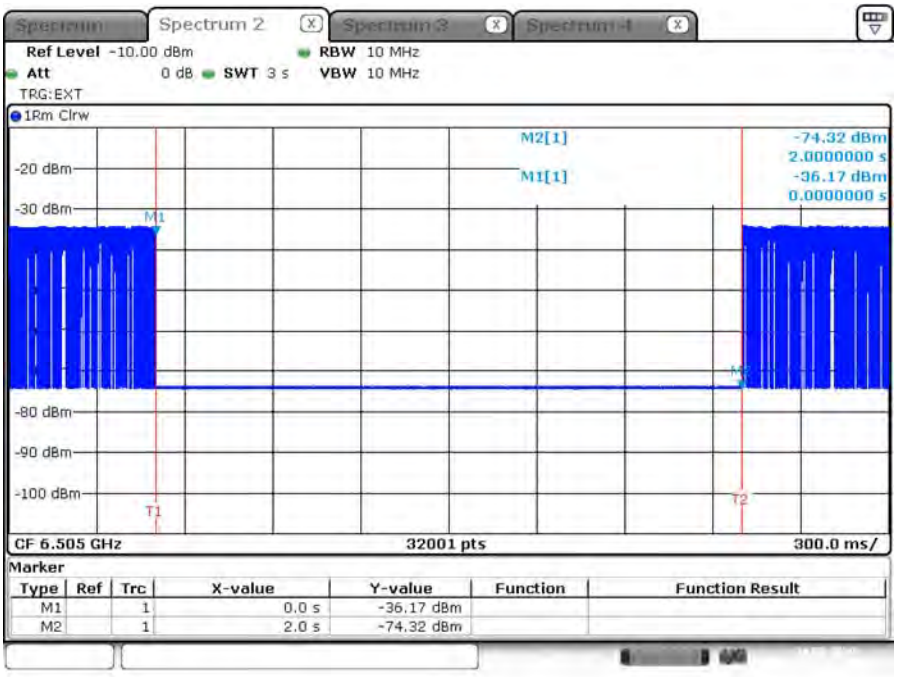
Note : M1 : Inject AWGN signal ; M2 : Remove AWGN signal.

Test CH 111 ; Incumbent signal 6430 MHz



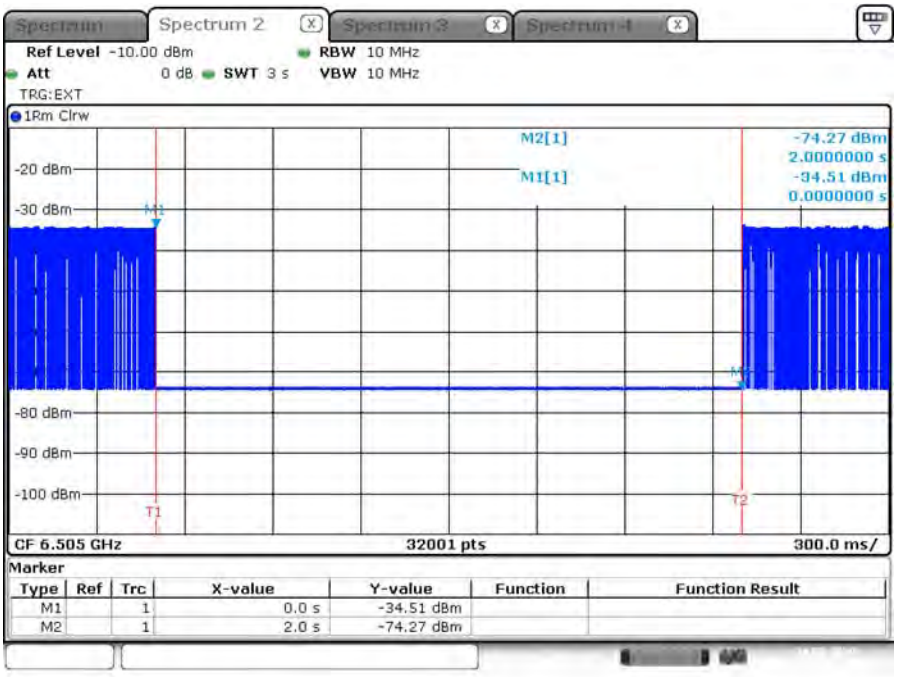
Note : M1 : Inject AWGN signal ; M2 : Remove AWGN signal.

Test CH 111 ; Incumbent signal 6505 MHz



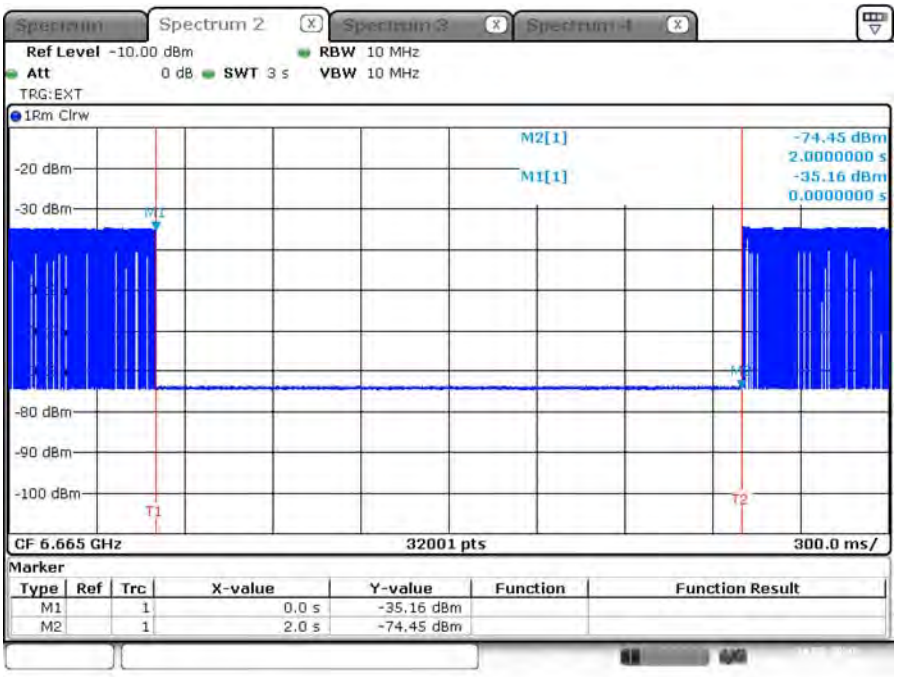
Note : M1 : Inject AWGN signal ; M2 : Remove AWGN signal.

Test CH 111 ; Incumbent signal 6580 MHz



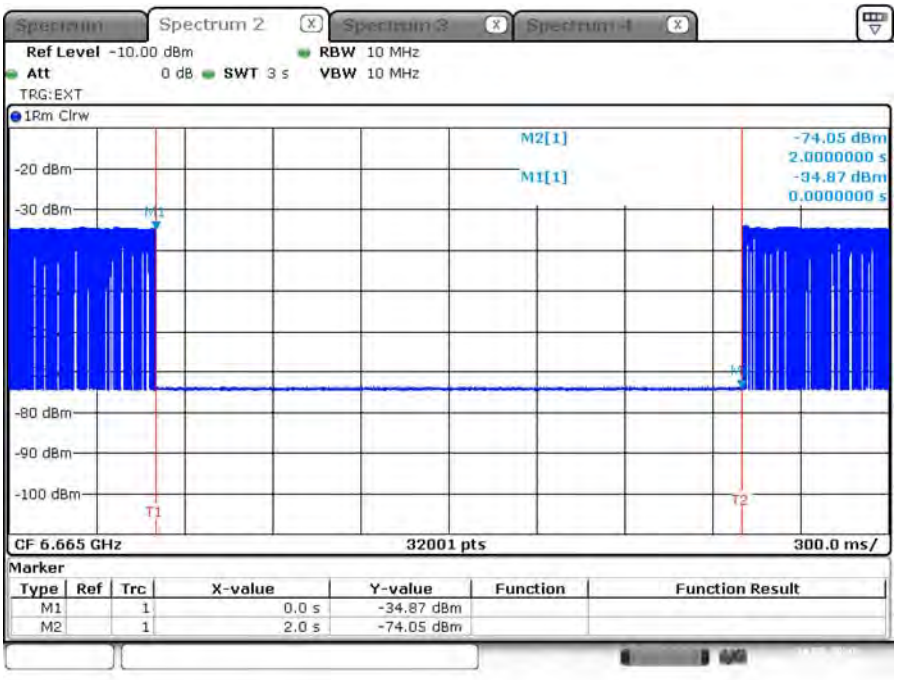
Note : M1 : Inject AWGN signal ; M2 : Remove AWGN signal.

Test CH 143 ; Incumbent signal 6590 MHz



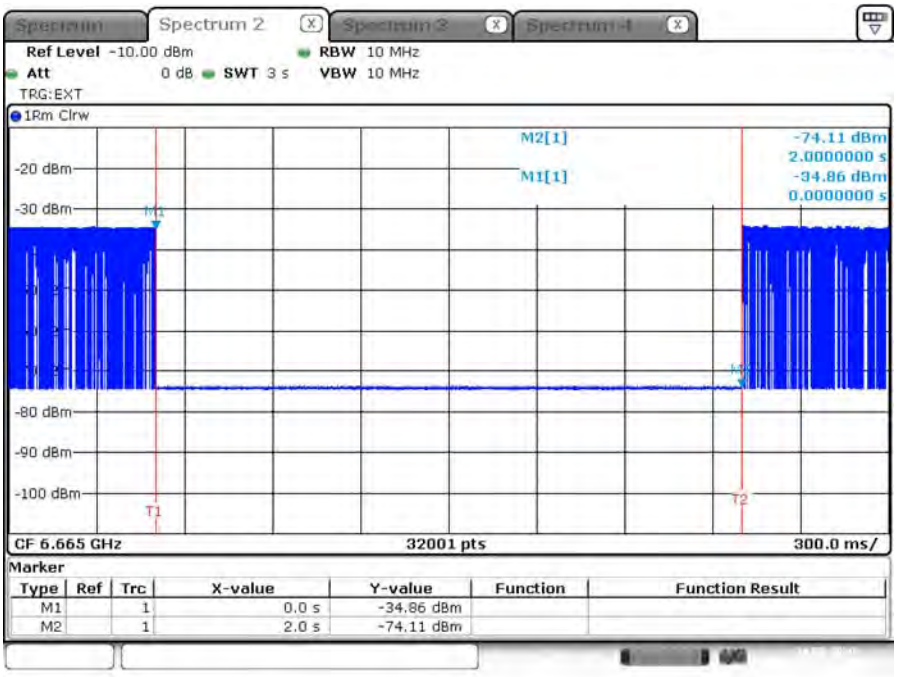
Note : M1 : Inject AWGN signal ; M2 : Remove AWGN signal.

Test CH 143 ; Incumbent signal 6665 MHz



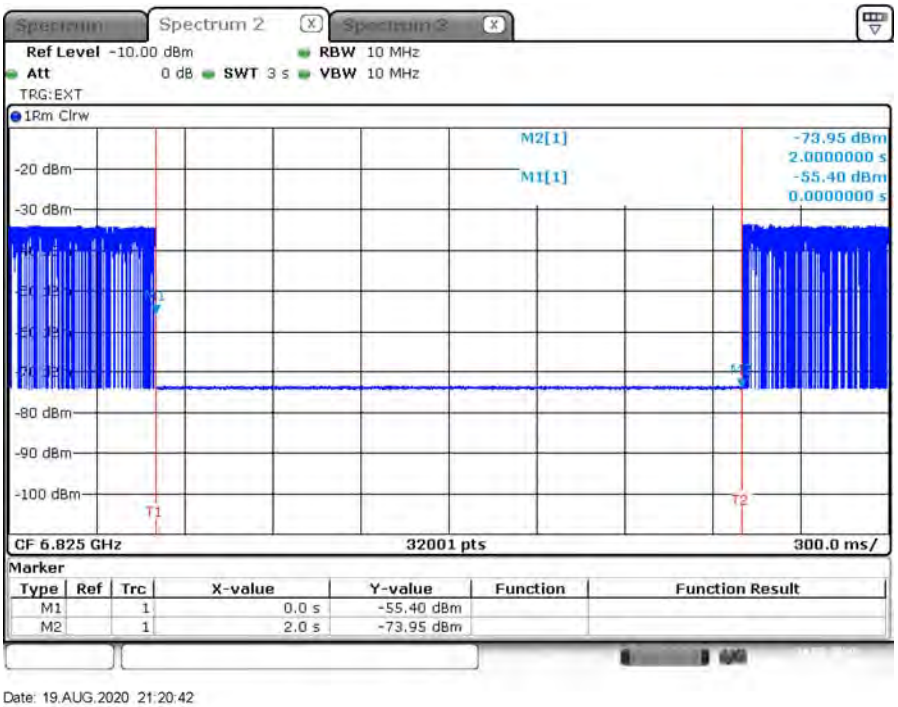
Note : M1 : Inject AWGN signal ; M2 : Remove AWGN signal.

Test CH 143 ; Incumbent signal 6740 MHz



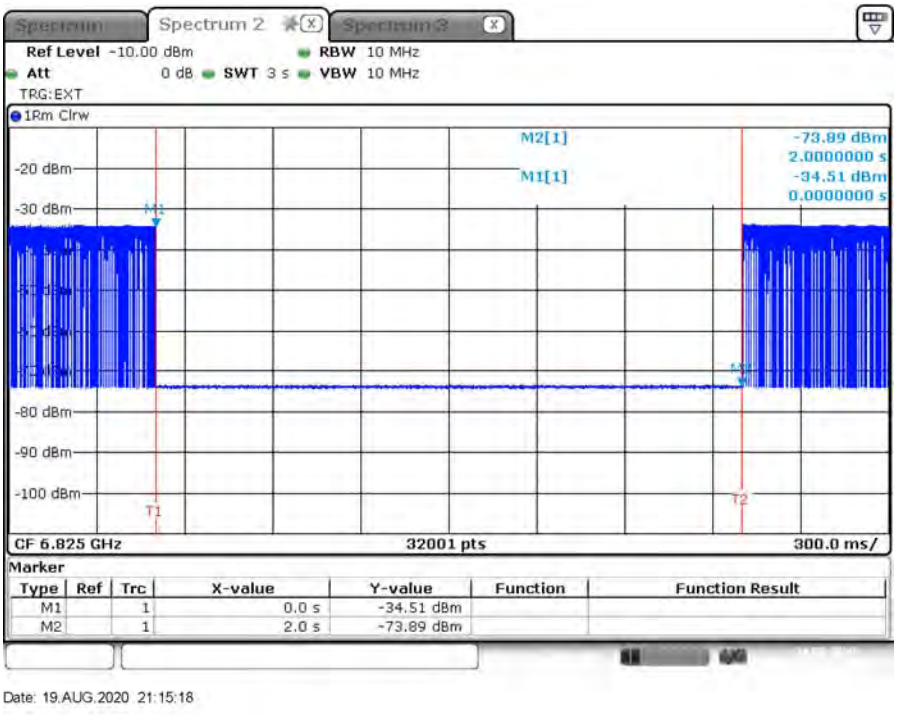
Note : M1 : Inject AWGN signal ; M2 : Remove AWGN signal.

Test CH 175 ; Incumbent signal 6750 MHz



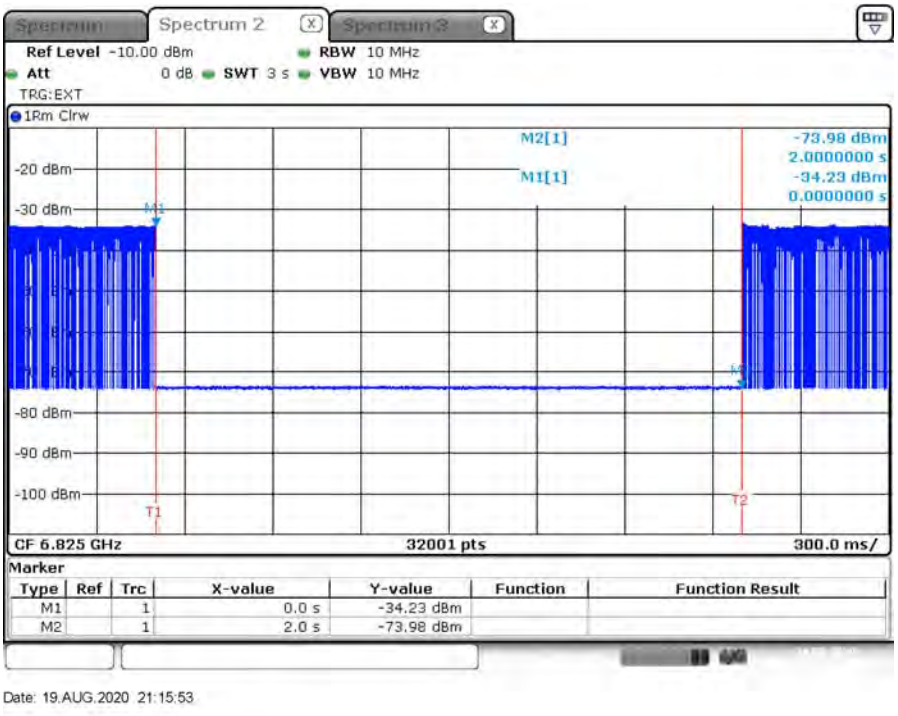
Note : M1 : Inject AWGN signal ; M2 : Remove AWGN signal.

Test CH 175 ; Incumbent signal 6825 MHz



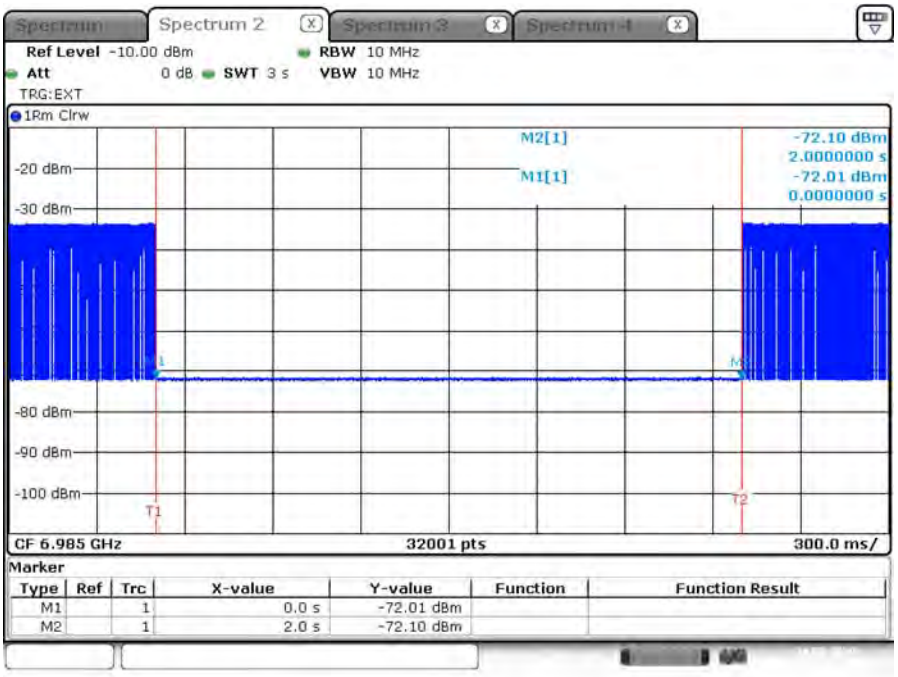
Note : M1 : Inject AWGN signal ; M2 : Remove AWGN signal.

Test CH 175 ; Incumbent signal 6900 MHz



Note : M1 : Inject AWGN signal ; M2 : Remove AWGN signal.

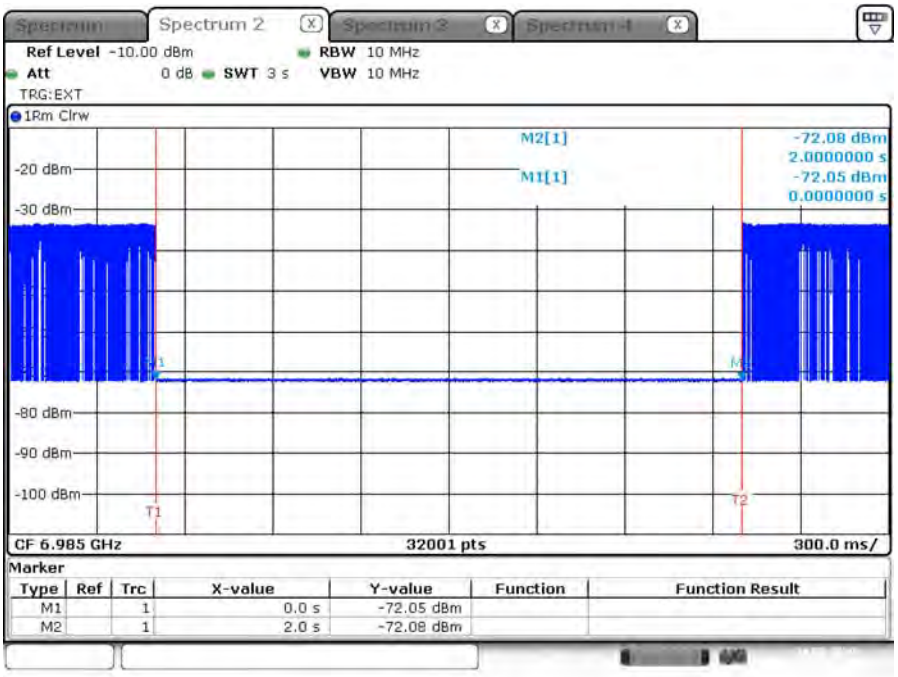
Test CH 207 ; Incumbent signal 6910 MHz



Date: 18.AUG.2020 16:54:45

Note : M1 : Inject AWGN signal ; M2 : Remove AWGN signal.

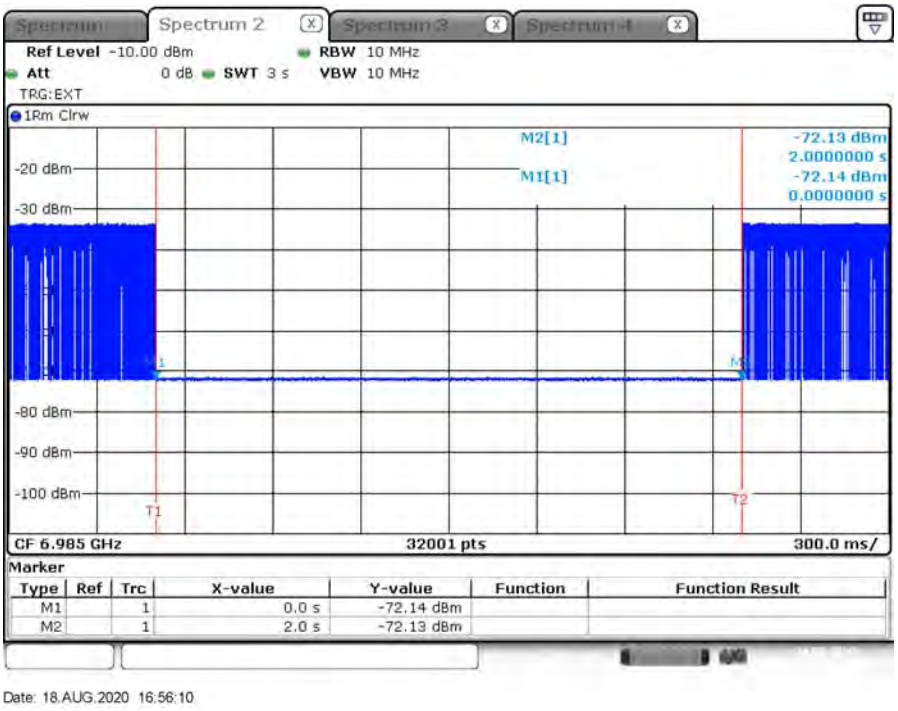
Test CH 207 ; Incumbent signal 6985 MHz



Date: 18.AUG.2020 16:55:20

Note : M1 : Inject AWGN signal ; M2 : Remove AWGN signal.

Test CH 207 ; Incumbent signal 7060 MHz



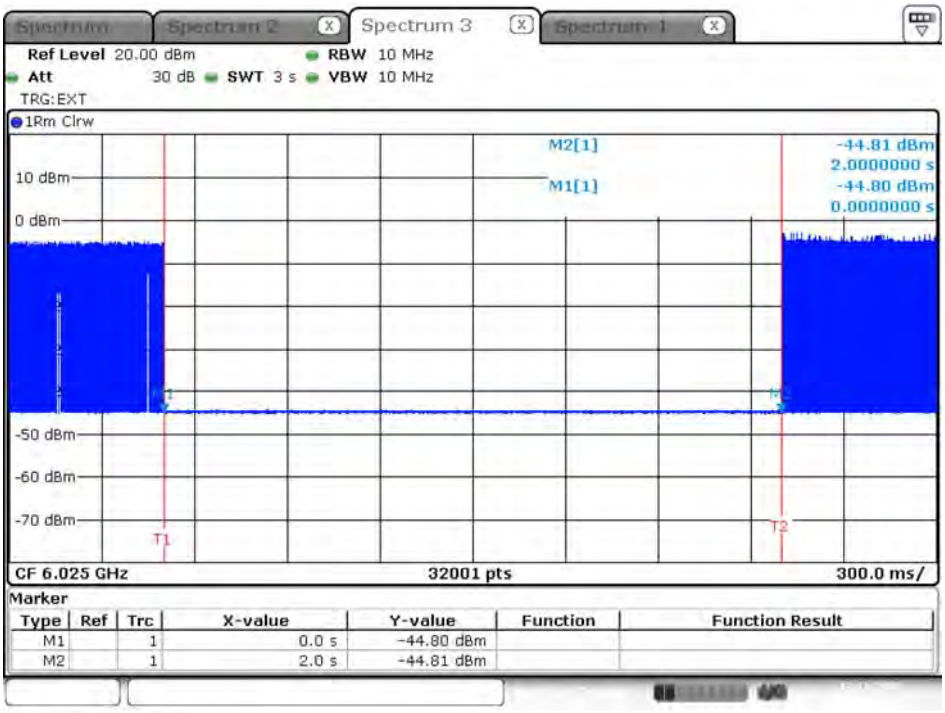
Note : M1 : Inject AWGN signal ; M2 : Remove AWGN signal.

Contention Based protocol 802.11ax HEW160										
UNII Band	**Test Channel**	**Bandwidth (MHz)**	**Freq. (MHz)**	**Interference Frequency (MHz)**		**Threshold level of AWGN interference (dBm)**	**Number of AWGN Detected (out of 10 times)**	**AWGN Detection Probability (%)**	**Limit Probability (%)**	**Test Result**
5	15	160	6025	Low edge	5950	-62	10	100	90	PASS
				Center	6025	-62	10	100	90	PASS
				High edge	6100	-62	10	100	90	PASS
5	47	160	6185	Low edge	6110	-62	10	100	90	PASS
				Center	6185	-62	10	100	90	PASS
				High edge	6260	-62	10	100	90	PASS
5	79	160	6345	Low edge	6270	-62	10	100	90	PASS
				Center	6345	-62	10	100	90	PASS
				High edge	6420	-62	10	100	90	PASS
6 ~ 7	111	160	6505	Low edge	6430	-62	10	100	90	PASS
				Center	6505	-62	10	100	90	PASS
				High edge	6580	-62	10	100	90	PASS
7	143	160	6665	Low edge	6590	-62	10	100	90	PASS
				Center	6665	-62	10	100	90	PASS
				High edge	6740	-62	10	100	90	PASS
7 ~ 8	175	160	6825	Low edge	6750	-62	10	100	90	PASS
				Center	6825	-62	10	100	90	PASS
				High edge	6900	-62	10	100	90	PASS
8	207	160	6985	Low edge	6910	-62	10	100	90	PASS
				Center	6985	-62	10	100	90	PASS
				High edge	7060	-62	10	100	90	PASS

Note: AWGN signal level used gain 0dBi(-62 dBm) will be more strict than EUT gain 3.4 dBi(-58.6 dBm).

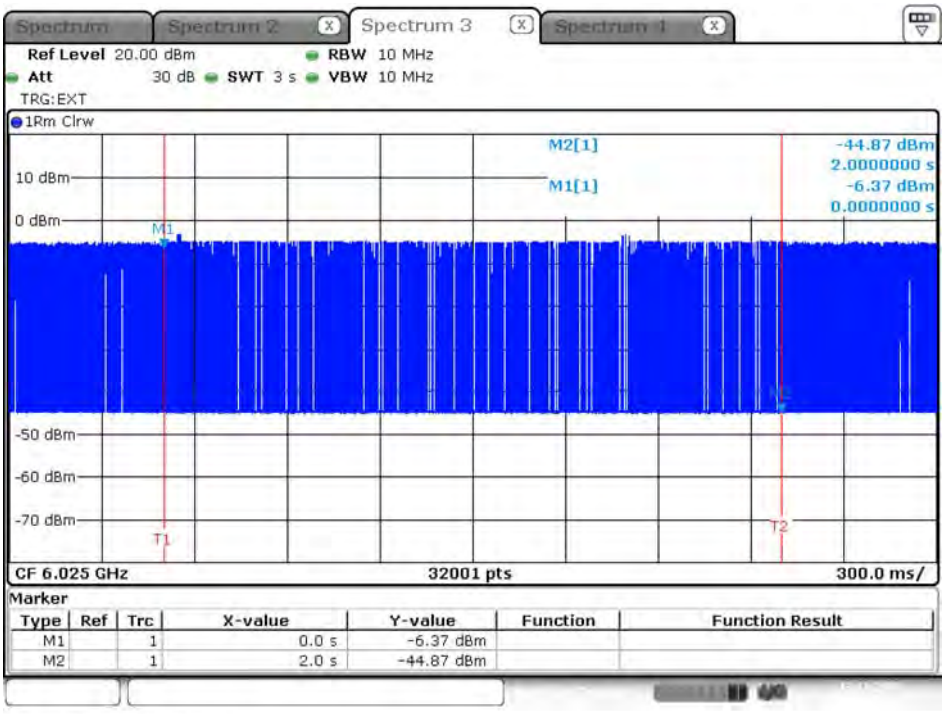
Contention Based Protocol Threshold Level Verify							
UNII Band	**Test Channel**	**Bandwidth (MHz)**	**Freq. (MHz)**	**Intetference Frequency (MHz)**		**Threshold Level of AWGN Interference (dBm)**	**Situation of EUT**
5	15	160	6025	Low edge	5950	-62	Stop transmission.
						-63	Start transmission.
				Center	6025	-62	Stop transmission.
						-63	Start transmission.
				High edge	6100	-62	Stop transmission.
						-63	Stop transmission.
						-64	Minority beacon transmission.
						-65	Start transmission.

Contention Based Protocol Threshold Level Verify Plot
Frequency (MHz): 5950 MHz (Threshold Level: -62 dBm)



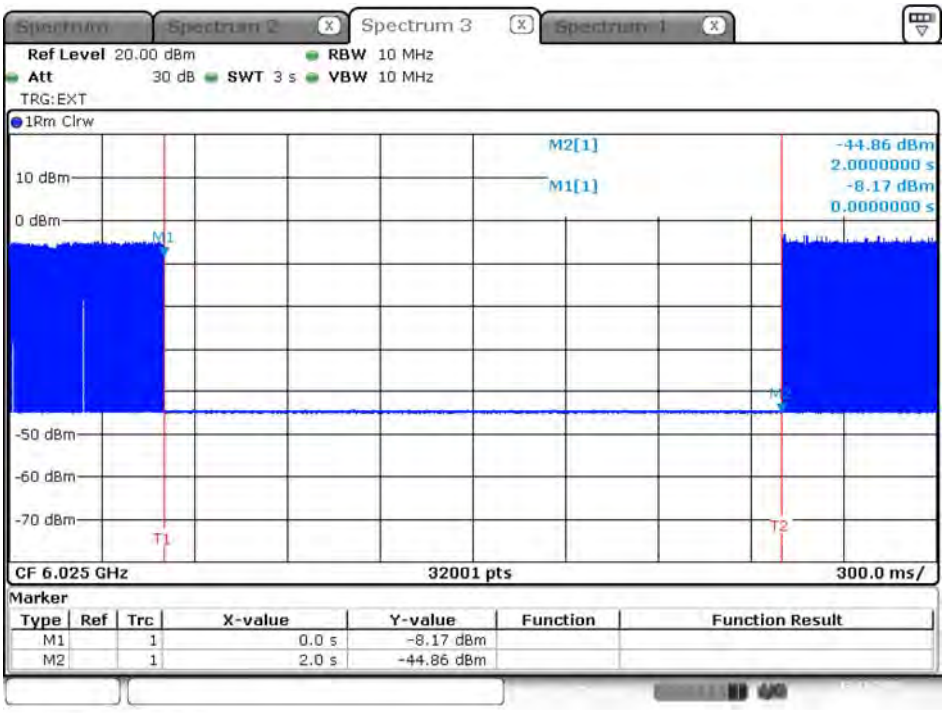
Date: 13.NOV.2020 11:04:40

Frequency (MHz): 5950 MHz (Threshold Level: -63 dBm)



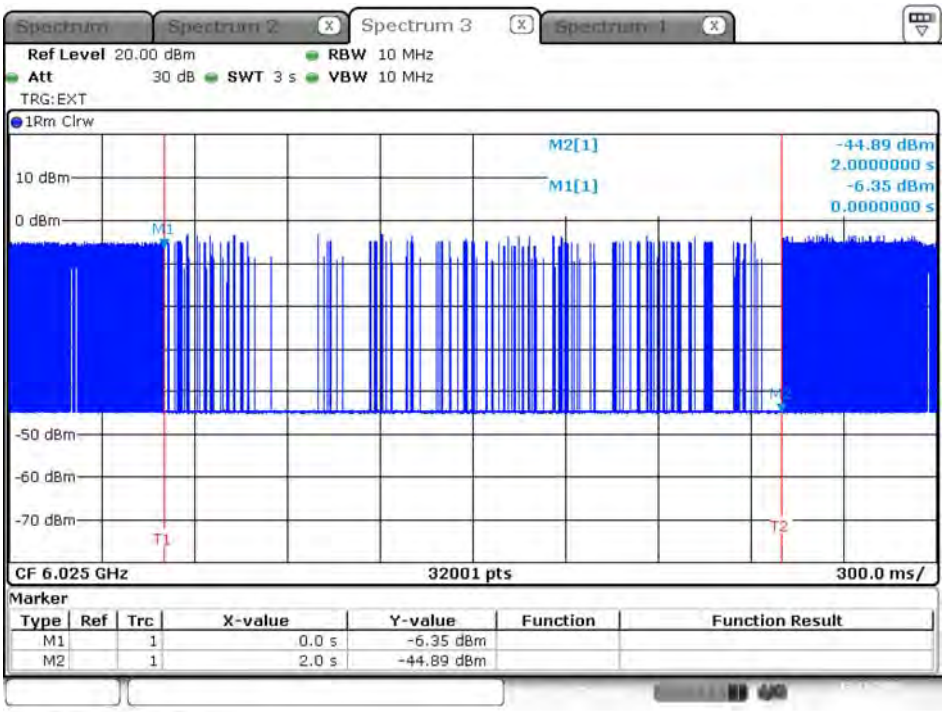
Date: 13.NOV.2020 11:05:18

Frequency (MHz): 6025 MHz (Threshold Level: -62 dBm)



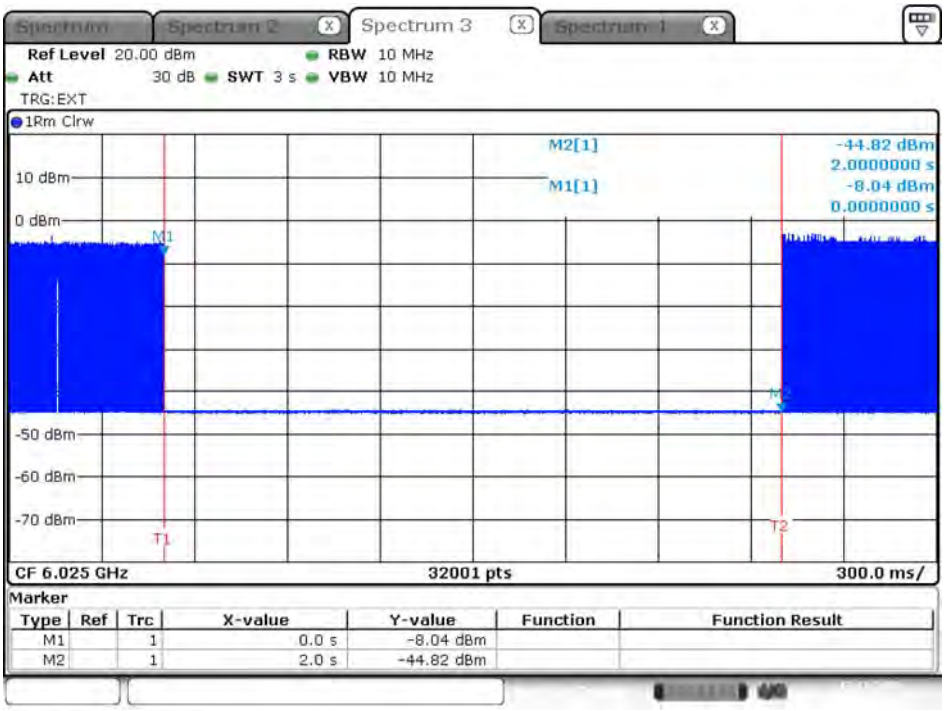
Date: 13.NOV.2020 10:45:00

Frequency (MHz): 6025 MHz (Threshold Level: -63 dBm)



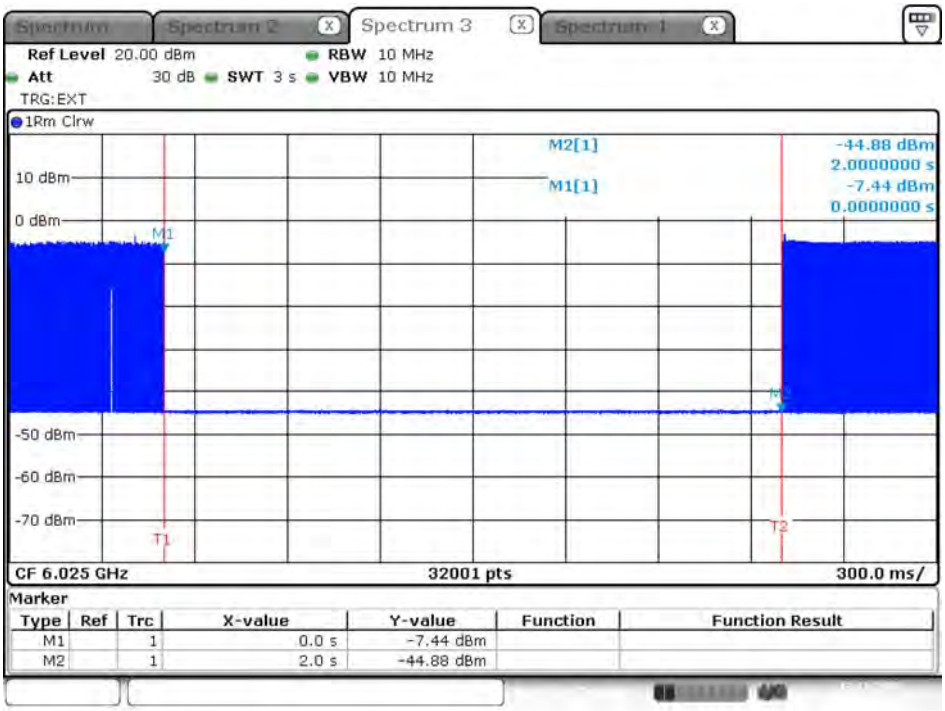
Date: 13.NOV.2020 10:45:43

Frequency (MHz): 6100 MHz (Threshold Level: -62 dBm)



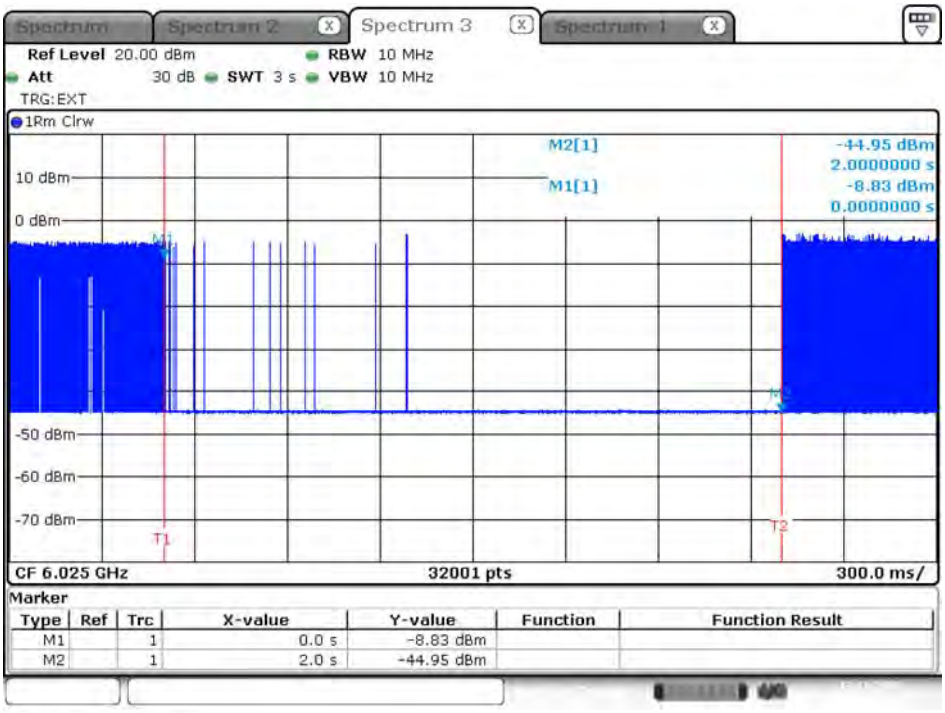
Date: 13.NOV.2020 11:05:56

Frequency (MHz): 6100 MHz (Threshold Level: -63 dBm)



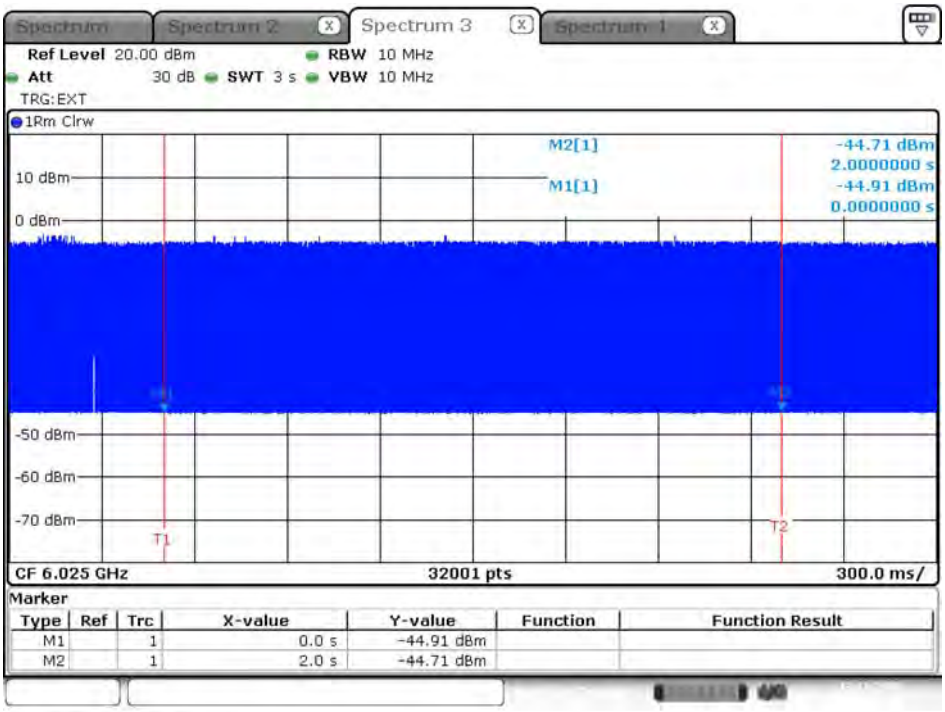
Date: 13.NOV.2020 11:06:17

Frequency (MHz): 6100 MHz (Threshold Level: -64 dBm)



Date: 13.NOV.2020 11:06:54

Frequency (MHz): 6100 MHz (Threshold Level: -65 dBm)



Date: 13.NOV.2020 11:20:44