CERTIFICATE #3478.01

TEST REPORT

EUT Description	**WLAN and BT, 2x2 PCIe M.2 1216 SD adapter card, LTE Coexistence**
Brand Name	**Intel® Wi-Fi 6 AX200**
Model Name	**AX200D2WL**
FCC ID ISED ID	**PD9AX200D2L** **1000M-AX200D2L**
Date of Test Start/End	**2019-01-02 / 2019-01-18**
Features	**802.11ax, Dual Band, 2x2 Wi-Fi + Bluetooth® 5** (see section 5)

Applicant	**Intel Mobile Communications**
Address	**100 Center Point Circle, Suite 200** **Columbia, South Carolina 29210** **USA**
Contact Person	**Steven Hackett**
Telephone/Fax/ Email	**steven.c.hackett@intel.com**

Reference Standards	**FCC CFR Title 47 Part 15 E** **RSS-247 issue 2, RSS-Gen issue 5** (see section 1)

Test Report identification	**181210-02.TR02**
Revision Control	**Rev. 00** **This test report revision replaces any previous test report revision** (see section 8)

The test results relate only to the samples tested.
The test report shall not be reproduced in full, without written approval of the laboratory.

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1. Standards, reference documents and applicable test methods

1. FCC 47 CFR part 15 – Subpart E – Unlicensed National Information Infrastructure Devices.
2. FCC 47 CFR part 15 - Subpart C – §15.209 Radiated emission limits; general requirements.
3. FCC OET KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 – Guidelines for compliance testing of Unlicensed National Information Infrastructure (U-NII) Devices (Part 15, Subpart E)
4. ANSI C63.10-2013 American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.
5. RSS-247 Issue 2 - Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices.
6. RSS-Gen Issue 5 - General Requirements for Compliance of Radio Apparatus.

2. General conditions, competences and guarantees

- ✓ Intel Corporation SAS Wireless RF Lab (Intel WRF Lab) is an ISO/IEC 17025:2005 testing laboratory accredited by the American Association for Laboratory Accreditation (A2LA) with the certificate number 3478.01.
- ✓ Intel Intel Corporation SAS Wireless RF Lab (Intel WRF Lab) is an Accredited Test Firm recognized by the FCC, with Designation Number FR0011.
- ✓ Intel Mobile Communications France SAS Wireless RF Lab (Intel WRF Lab) is a Registered Test Site listed by ISED, with ISED Assigned Code 1000Y.
- ✓ Intel WRF Lab only provides testing services and is committed to providing reliable, unbiased test results and interpretations.
- ✓ Intel WRF Lab is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.
- ✓ Intel WRF Lab has developed calibration and proficiency programs for its measurement equipment to ensure correlated and reliable results to its customers.
- ✓ This report is only referred to the item that has undergone the test.
- ✓ This report does not imply an approval of the product by the Certification Bodies or competent Authorities.

3. Environmental Conditions

- ✓ At the site where the measurements were performed the following limits were not exceeded during the tests:

Temperature	22 ºC ±3 ºC
Humidity	38 % ± 7 %

4. Test samples

Sample	Control #	Description	Model	Serial #	Date of receipt	Note
#01	181210-02.S03	RF MODULE	AX200D2WL	WFM : 3413E8B10C42	2018-12-13	Used for conducted tests
	180001-01.S18	Adapter	Socket	8882-031	2017-11-22	
	170524-01.S12	EXTENDER	PCB00495	4955013-375	2017-05-29	
	170000-01.S01	LAPTOP	LATITUDE E5470	DBLMC2	2017-03-28	
#02	181210-02.S04	RF Module	AX200D2WL	WFM:3413E8B10B66	2018-12-13	Radiated Spurious emission from 30 MHz to 6.4 GHz
	180001-01.S17	Adapter	Socket	8882-043	2018-11-22	
	180000-01.S15	Extender	PCB00495/PCB0 0496	4950414-064	2018-11-22	
	181210-02.S16	Antenna	WIMAX/WLAN	-	2019-01-04	
	181210-02.S17	Antenna	WIMAX/WLAN	-	2019-01-04	
	170209-01.S16	PC Dell	Latitude E5470	C1HTPF2	2017-02-09	
#03	181210-02.S05	RF Module	AX200D2WL	WFM:3413E8B10BA7	2018-12-13	Radiated Spurious emission from 6.4 GHz to 40 GHz
	180001-01.S16	Adapter	Socket	8882-017	2018-12-19	
	180000-01.S12	Extender	PCB00495/PCB0 0496	ASS00495-001 4950414-028	2018-11-22	
	181210-02.S18	Antenna	WIMAX/WLAN	-	2019-01-04	
	181210-02.S19	Antenna	WIMAX/WLAN	-	2019-01-04	
	170801-01.S10	PC Dell	Latitude E5470	7KNOXF2	2017-09-08	

5. EUT Features

Brand Name	Intel® Wi-Fi 6 AX200
Model Name	AX200D2WL
FCC ID	PD9AX200D2L
ISED ID	1000M-AX200D2L
Software Version	OEM_DRTU_08900_11_1850_0G
Driver Version	99.0.41.5
Prototype / Production	Production
Supported Radios	802.11b/g/n/ax 2.4GHz (2400.0 – 2483.5 MHz) 802.11a/n/ac/ax 5.2GHz (5150.0 – 5350.0 MHz) 5.6GHz (5470.0 – 5725.0 MHz) 5.8GHz (5725.0 – 5850.0 MHz) Bluetooth 5 2.4GHz (2400.0 – 2483.5 MHz)
Antenna Information	CHAIN A: PIFA antenna. WiFi 2.4GHz & 5GHz and BT CHAIN B: PIFA antenna. WiFi 2.4GHz & 5GHz
Additional Information	

6. Remarks and comments

N/A

7. Test Verdicts summary

7.1. 802.11 a/n/ac/ax – U-NII-2C

FCC part	RSS part	Test name	Verdict
15.407 (a) (2)	RSS-247 Clause 6.2.3.1	Power Limits. Maximum output power	P
15.407 (a) (2)	RSS-247 Clause 6.2.3.1	Peak power spectral density	P
15.407 (b) (3) 15.209 (a)	RSS-247 Clause 6.2.3.2 RSS-GEN Clause 8.9	Undesirable emissions limits: Band Edge (conducted)	P
15.407 (b) (3) 15.209 (a)	RSS-247 Clause 6.2.3.2 RSS-GEN Clause 8.9	Undesirable emissions limits (radiated)	P

8. Document Revision History

Revision #	Date	Modified by	Revision Details
Rev. 00	2019-01-28	T. Andriamiharivolamena	First Issue

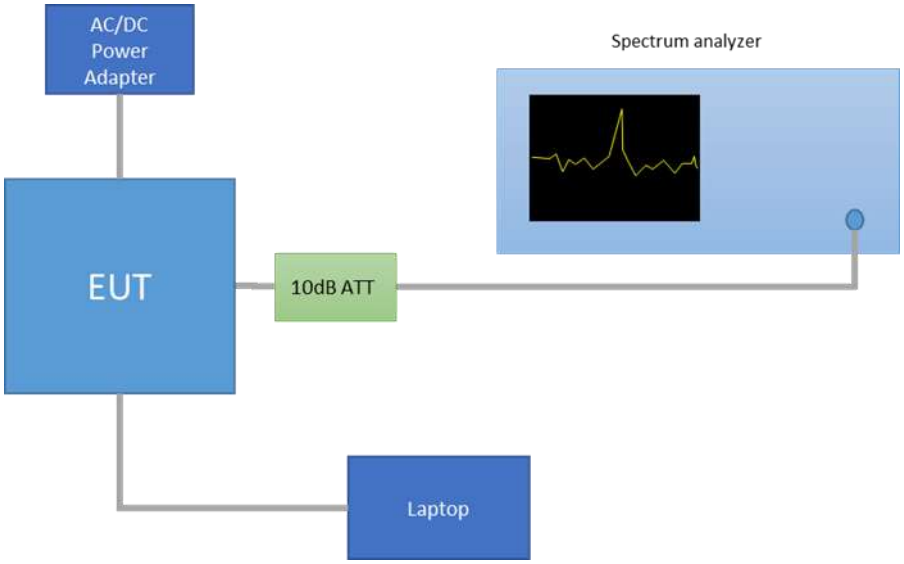
Annex A. Test & System Description

A.1 Measurement System

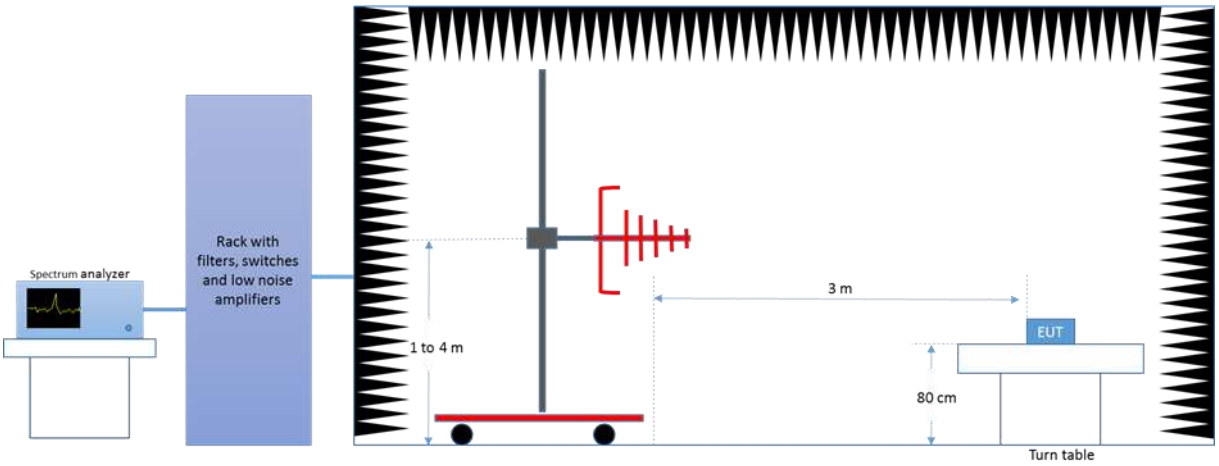
Measurements were performed using the following setups, made in accordance to the general provisions of FCC KDB 789033 D02 General UNII Test Procedures.

The DUT was installed in a test fixture and this test fixture is connected to a laptop computer and AC/DC power adapter. The laptop computer was used to configure the EUT to continuously transmit at a specified output power using all different modes and modulation schemes, using the Intel proprietary tool DRTU.

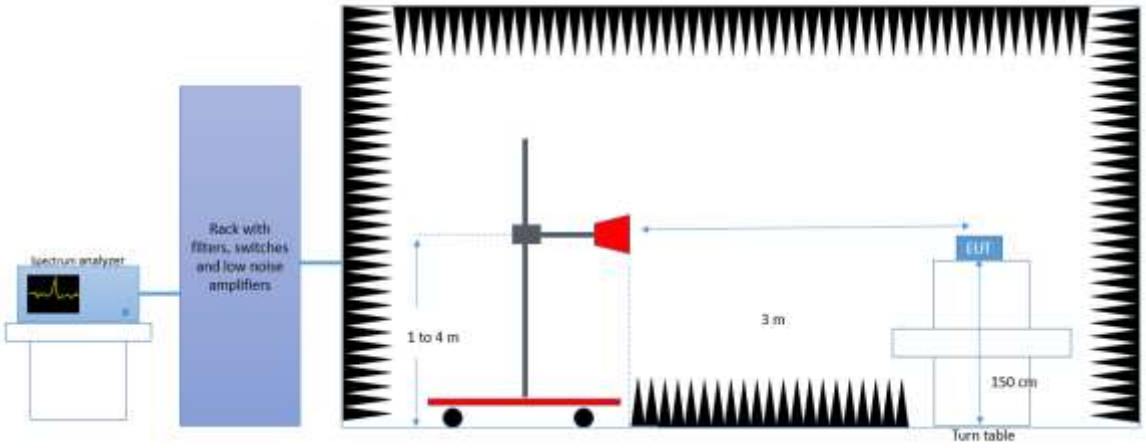
Conducted Setup



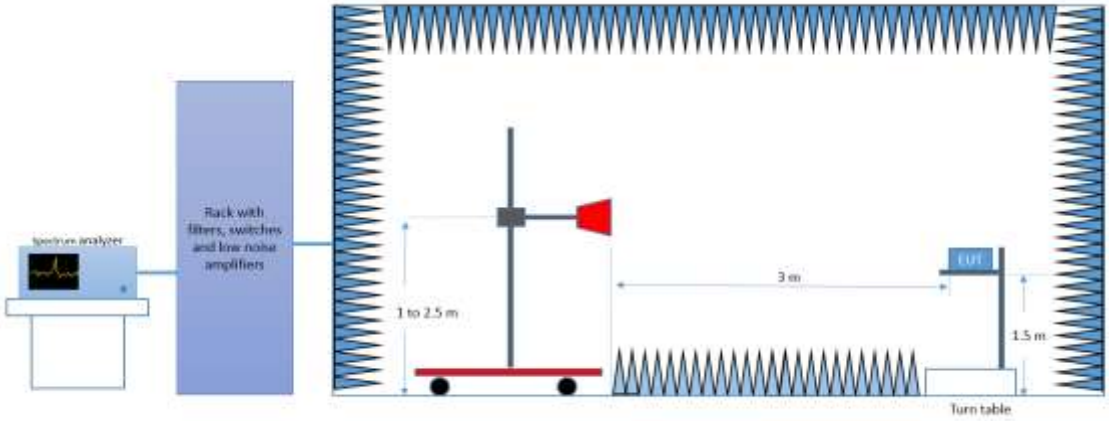
Radiated Setup 30 MHz - 1GHz



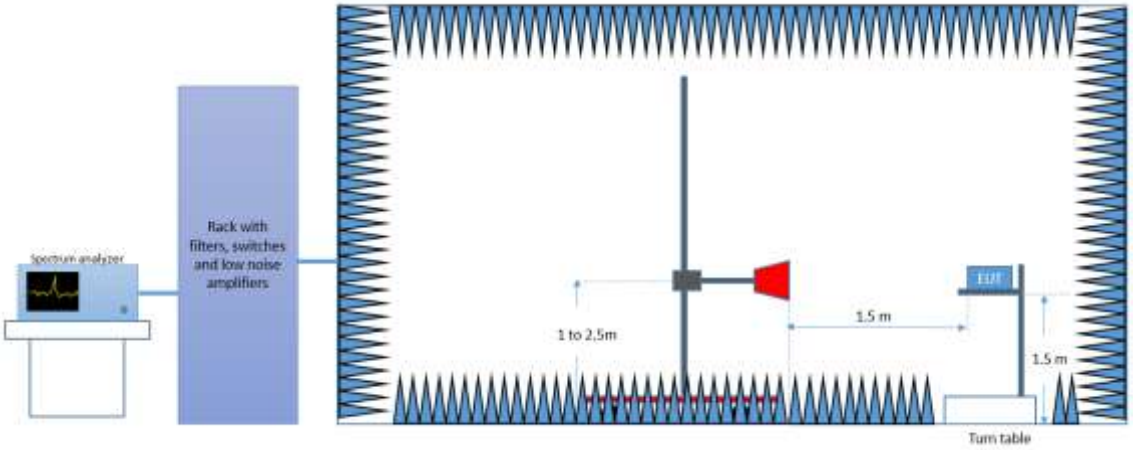
Radiated Setup 1 GHz – 6.4 GHz



Radiated Setup 6.4 GHz – 18 GHz



Radiated Setup 18 GHz – 40 GHz



Sample Calculation

The field strength is deduced from the radiated measurement using the following equation:

$$E = 126.8 – 20*\log(\lambda) + P − G$$

where
E is the field strength of the emission at the measurement distance, in dBµV/m
P is the power measured at the output of the test antenna, in dBm
λ is the wavelength of the emission under investigation [300/f_{MHz}], in m
G is the gain of the test antenna, in dBi

NOTE – The measured power P includes all applicable instrument correction factors up to the connection to the test

Antenna e.g. cable losses, amplifier gains.

For field strength measurements made at other than the distance at which the applicable limit is specified, the field strength of the emission at the distance specified by the limit is deduced as follows:

$$E_{SpecLimit} = E_{Meas} + 20*\log(D_{Meas}/D_{SpecLimit})$$

where

$E_{SpecLimit}$ is the field strength of the emission at the distance specified by the limit, in dBµV/m
E_{Meas} is the field strength of the emission at the measurement distance, in dBµV/m
D_{Meas} is the measurement distance, in m
$D_{SpecLimit}$ is the distance specified by the limit, in m

A.2 Test Equipment List

Conducted Setup

ID#	Device	Type/Model	Serial #	Manufacturer	Cal. Date	Cal. Due Date
0315	Spectrum analyzer	FSV30	103307	Rohde & Schwarz	2018-04-10	2020-04-10

Radiated Setup-1

ID#	Device	Type/Model	Serial #	Manufacturer	Cal. Date	Cal. Due Date
0420	Spectrum analyzer	FSV40	101556	Rohde & Schwarz	2018-04-11	2020-04-11
0137	Log antenna 30 MHz – 1 GHz	3142E	00156946	ETS Lindgren	2017-12-19	2019-12-19
0325	Double Ridged Horn Antenna 1 GHz – 18 GHz	3117	00157734	ETS Lindgren	2017-08-22	2019-08-22
0135	Semi Anechoic chamber	FACT 3	5720	ETS Lindgren	2018-04-18	2020-04-18
0530	Measurement Software	EMC32	100623	Rohde & Schwarz	N/A	N/A
0616	Power Sensor 50MHz-18GHz	NRP-Z81	104385	Rohde & Schwarz	2018-04-16	2020-04-16
0013	Power Sensor 50MHz-18GHz	NRP-Z81	101152	Rohde & Schwarz	2018-04-16	2020-04-16

N/A: Not Applicable

Radiated Setup-2

ID#	Device	Type/Model	Serial #	Manufacturer	Cal. Date	Cal. Due Date
0133	Spectrum analyzer	FSV40	101358	Rohde & Schwarz	2018-05-17	2020-05-17
0141	Double Ridged Horn Antenna 1 GHz – 18 GHz	3117	00157736	ETS Lindgren	2018-05-11	2020-05-11
0334	Double Ridged Horn Antenna 18 GHz – 40 GHz	3116C-PA	00196308	ETS Lindgren	2017-08-22	2019-08-22
0337	Full Anechoic chamber	RFD_FA_100	5996	ETS Lindgren	2018-04-17	2020-04-17
0329	Measurement Software	EMC32	100401	Rohde & Schwarz	N/A	N/A
0617	Power Sensor 50MHz-18GHz	NRP-Z81	104386	Rohde & Schwarz	2018-04-16	2020-04-16
0618	Power Sensor 50MHz-18GHz	NRP-Z81	104382	Rohde & Schwarz	2018-04-16	2020-04-16

N/A: Not Applicable

A.3 Measurement Uncertainty Evaluation

The system uncertainty evaluation is shown in the below table:

Measurement type	Uncertainty [±dB]
Conducted Power	±1.0
Conducted Spurious Emission	±2.9
Radiated tests <1GHz	±3.8
Radiated tests 1GHz - 40 GHz	±4.7

Annex B. Test Results U-NII-2C

B.1 Test Conditions

For 802.11a mode the EUT can transmit at both CHAIN A and CHAIN B RF outputs individually, but not simultaneously.

For 802.11n20 & 802.11ax20 (20 MHz channel bandwidth), 802.11n40 & 802.11ax40 (40MHz channel bandwidth), 802.11ac80 & 802.11ax80 (80MHz channel bandwidth) and 802.11ac160 &802.11ax160 (160MHz channel bandwidth) modes the EUT can transmit at both CHAIN A and CHAIN B RF outputs individually, and also simultaneously.

The conducted RF output power for each chain was adjusted according to the client's supplied target values (see following table) using the Intel DRTU tool and measuring the power by using a spectrum analyser with the channel integration method according to section II) E) 2) e) (Method SA-2 Alternative) of Guidance KDB 789033 D02
Measured values for adjustment were within +/- 0.25 dB from the declared target values.

U-NII-2C					Conducted Power, Target Value (dBm)		
Mode	BW (MHz)	Data Rate	CH #	Freq. (MHz)	SISO Chain A	SISO Chain B	MIMO at both ports A and B
802.11a	20	6Mbps	100	5500	20.00	20.00	-
			120	5600	21.00	21.00	-
			140	5700	20.00	19.50	-
802.11n	20	HT0 HT8*	100	5500	20.00	19.50	22.50
			120	5600	21.00	21.00	23.00
			140	5700	19.50	19.50	20.50
802.11n	40	HT0 HT8*	102	5510	19.00	19.00	21.00
			118	5590	21.00	21.00	23.50
			134	5670	20.00	20.00	22.00
802.11ac	80	VHT0	106	5530	18.50	18.50	20.50
			122	5610	20.00	20.00	22.00
802.11ac	160	VHT0	114	5570	15.50	15.00	16.50
802.11ax	20	HE0	100	5500	19.50	19.50	22.00
			120	5600	21.00	21.00	23.00
			140	5700	19.50	19.50	20.50
802.11ax	40	HE0	102	5510	19.00	19.00	21.00
			118	5590	21.00	21.00	23.50
			134	5670	19.50	20.00	22.00
802.11ax	80	HE0	106	5530	18.50	18.50	20.50
			122	5610	20.00	19.50	22.50
802.11ax	160	HE0	114	5570	15.50	15.00	16.50

Overlapped channels between UNII-2C and UNII-3					Conducted Power, Target Value (dBm)		
Mode	BW (MHz)	Data Rate	CH #	Freq. (MHz)	SISO Chain A	SISO Chain B	MIMO at both ports A and B
802.11n	20	HT0 HT8*	144	5720	21.00	21.00	23.00
802.11n	40	HT0 HT8*	142	5710	21.00	21.00	23.00
802.11ac	80	VHT0	138	5690	21.00	21.00	23.00
802.11ax	20	HE0	144	5720	21.00	20.50	23.00
802.11ax	40	HE0	142	5710	21.00	21.00	23.00
802.11ax	80	HE0	138	5690	21.00	21.00	23.00

* Note: HT8 for MIMO modes only

The following data rates were selected based on preliminary testing that identified those rates as the worst cases for output power and spurious levels at the band edges:

Transmission	Mode	Bandwidth (MHz)	Worst Case Data Rate
SISO	802.11a	20	6Mbps
	802.11n	20	HT0
		40	HT0
	802.11ac	80	VHT0
		160	VHT0
	802.11ax	20	HE0
		40	HE0
		80	HE0
		160	HE0
MIMO	802.11n	20/40	HT8
	802.11ac	80/160	VHT0
	802.11ax	20/40/80/160	HE0

Alternative channels to the lowest and highest channels per band have been also tested for Band Edge compliance.

B.2 Test Results Tables

B.2.1 26dB & 99% Bandwidth

Test procedure

The conducted setup shown in section *Test & System Description* was used to measure the 26dB & 99% bandwidth. The antenna terminal of the EUT is connected to the spectrum analyzer through an attenuator, and the spectrum analyzer reading is compensated to include the RF path loss.

For the overlapped channels between U-NII-2C and U-NII-3 bands, and according to FCC KDB 789033 D02 , the boundary frequency between the bands is used as one edge for defining the portion of the 26dB bandwidth that falls within a particular U-NII band. This rule is only applicable for the 26dB bandwidth and for those channels marked as overlapped.

Results tables

U-NII-2C channels

Mode	Rate	Antenna	Channel	Freq [MHz]	26dB BW [MHz]	99% BW [MHz]
802.11a	6Mbps	SISO A	100	5500	24.72	16.84
			120	5600	26.38	17.28
			140	5700	24.62	16.88
		SISO B	100	5500	25.13	16.92
			120	5600	**28.73**	**17.68**
			140	5700	25.38	16.92
802.11n20	HT0	SISO A	100	5500	25.48	18.00
			120	5600	26.98	18.24
			140	5700	24.87	17.96
		SISO B	100	5500	25.33	18.00
			120	5600	**29.28**	**18.36**
			140	5700	25.23	18.00
	HT8	MIMO A	100	5500	25.93	18.00
			120	5600	26.28	18.04
			140	5700	25.33	17.96
		MIMO B	100	5500	25.63	18.08
			120	5600	25.83	18.04
			140	5700	25.03	17.96
802.11n40	HT0	SISO A	102	5510	45.23	36.64
			118	5590	48.20	36.80
			134	5670	45.41	36.64
		SISO B	102	5510	45.41	36.64
			118	5590	**50.27**	**37.04**
			134	5670	46.31	36.64
	HT8	MIMO A	102	5510	45.32	36.64
			118	5590	48.92	36.88
			134	5670	46.31	36.72
		MIMO B	102	5510	43.96	36.40
			118	5590	47.57	36.56
			134	5670	44.68	36.40
802.11ac80	VHT0	SISO A	106	5530	85.89	75.12
			122	5610	86.91	75.24
		SISO B	106	5530	86.73	75.12
			122	5610	**88.06**	**75.24**
		MIMO A	106	5530	87.29	75.12
			122	5610	87.11	75.24
		MIMO B	106	5530	87.11	75.12
			122	5610	87.11	75.12
802.11ac160	VHT0	SISO A	114	5570	164.51	153.20
		SISO B			164.84	153.20
		MIMO A			165.50	153.20
		MIMO B			**165.83**	**153.00**

Max Value

Mode	Rate	Antenna	Channel	Freq [MHz]	RU config.	26dB BW [MHz]	99% BW [MHz]
802.11ax20	HE0	SISO A	100	5500	Full	24.87	19.08
					26/0	20.52	18.48
					52/37	21.52	18.32
					106/53	22.22	18.28
			120	5600	Full	26.73	19.20
			140	5500	26/8	20.92	18.56
					52/40	22.12	18.32
					106/54	22.92	18.24
				5700	Full	25.13	19.32
		SISO B	100	5500	Full	24.92	19.08
					26/0	20.62	18.52
					52/37	21.47	18.36
					106/53	22.42	18.28
			120	5600	Full	**27.23**	**19.28**
			140	5500	26/8	20.62	18.52
					52/40	21.97	18.36
					106/54	23.62	18.24
				5700	Full	24.07	19.12
		MIMO A	100	5500	Full	25.08	19.12
					26/0	20.47	18.40
					52/37	20.92	18.28
					106/53	22.22	18.24
			120	5600	Full	24.82	19.12
			140	5500	26/8	20.47	18.40
					52/40	21.12	18.20
					106/54	23.07	18.20
				5700	Full	23.87	19.12
		MIMO B	100	5500	Full	24.47	19.16
					26/0	20.12	18.32
					52/37	21.12	18.20
					106/53	22.47	18.24
			120	5600	Full	25.08	19.12
			140	5500	26/8	20.22	18.32
					52/40	20.47	18.16
					106/54	23.52	18.32
				5700	Full	24.42	19.08
802.11ax40	HE0	SISO A	102	5510	Full	44.86	37.92
					242/61	25.05	19.20
			118	5590	Full	46.89	37.92
			134	5670	Full	43.42	37.92
		SISO B	102	5510	Full	25.05	19.20
					242/62	43.96	37.92
			118	5590	Full	25.41	19.12
			134	5670	Full	47.75	**38.00**
		MIMO A	102	5510	Full	45.32	37.92
					242/61	25.50	19.12
			118	5590	Full	44.41	37.92
			134	5670	Full	25.95	19.20
		MIMO B	102	5510	Full	**48.56**	37.92
					242/62	44.59	37.84
			118	5590	Full	24.96	19.12
			134	5670	Full	44.68	37.92
802.11ax80	HE0	SISO A	106	5530	Full	83.68	76.80
					484/65	44.12	37.92
			122	5610	Full	84.06	76.80
		SISO B	106	5530	Full	84.44	76.80
					484/65	44.89	37.92
			122	5610	Full	84.06	76.68
		MIMO A	106	5530	Full	83.11	76.80
					484/65	44.89	38.04
			122	5610	Full	83.68	76.80
		MIMO B	106	5530	Full	**84.64**	**76.80**
					484/65	46.03	37.92
			122	5610	Full	84.25	76.56

Max Value

Mode	Rate	Antenna	Channel	Freq [MHz]	RU config.	26dB BW [MHz]	99% BW [MHz]
802.11ax160	HE0	SISO A	114ac160	5570	Full	163.51	154.80
					996/67	85.56	76.80
		SISO B			Full	**163.84**	**155.00**
					996/67	85.56	76.80
		MIMO A			Full	163.51	155.00
					996/67	85.89	76.80
		MIMO B			Full	163.51	154.60
					996/67	85.56	77.00

Max Value

Overlapped channels between U-NII-2C and U-NII-3

Mode	Rate	Channel	Frequency (MHz)	Antenna	Chain	26dB BW [MHz] UNII2C
802.11n20	HT0	144	5720	SISO	A	17.93
					B	17.97
	HT8			MIMO	A	17.93
					B	17.32
802.11n40	HT0	142	5710	SISO	A	38.35
					B	38.53
	HT8			MIMO	A	37.81
					B	37.19
802.11ac80	VHT0	138	5690	SISO	A	78.03
					B	78.22
				MIMO	A	77.65
					B	77.84
802.11ax20	HE0	144	5720	SISO	A	17.47
					B	17.57
				MIMO	A	17.27
					B	17.47
802.11ax40	HE0	142	5710	SISO	A	37.27
					B	37.63
				MIMO	A	37.00
					B	36.82
802.11ax80	HE0	138	5690	SISO	A	76.89
					B	76.51
				MIMO	A	76.51
					B	76.89

Max Value

See Section B.3.1 for the screenshot results.

B.2.2 Power Limits. Maximum Output power & Maximum power spectral Density

Test limits

Part	Limits
FCC 15.407 (a) (2)	For the 5.25–5.35 GHz and 5.47–5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the peak power spectral density shall not exceed 11 dBm in any 1 megahertz band.
RSS-247 Clause 6.2.3 (1)	The maximum conducted output power shall not exceed 250 mW or 11 + 10 log10B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band. The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log10B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

Test procedure

The Maximum Conducted Output Power was measured using the channel integration method according to section E) 2) e) (Method SA-2 Alternative) of KDB 789033 D02 .
The maximum power spectral density (PSD) was measured using the method according to section F) (Method SA-2 Alternative) of KDB 789033 D02 .

In the measure-and-sum approach for MIMO mode, the conducted emission level (e.g., transmit power or power in specified bandwidth) is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically in linear power units to determine the total emission level from the device.

The EIRP power (dBm) is calculated by adding the declared maximum antenna gain to the measured conducted power. The declared maximum antenna gain is +5dBi.

The conducted setup shown in section *Test & System Description* was used to measure the maximum conducted output power and power spectral density. The antenna terminal of the EUT is connected to the spectrum analyser through an attenuator, and the spectrum analyzer reading is compensated to include the RF path loss.

For the overlapped channels between U-NII-2C and U-NII-3, and according to FCC KDB 789033 D02 , the power is computed based on the portion of the emission bandwidth contained within that band. This rule is only applicable for those channels marked as overlapped

Results tables

Duty cycle

Mode	Rate	Antenna	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
802.11a	6Mbps	SISO A	2.07	2.13	97.51%
		SISO B	2.07	2.13	97.51%
802.11n20	HT0	SISO A	3.96	4.01	98.67%
		SISO B	3.96	4.01	98.67%
	HT8	MIMO A	3.97	4.02	98.67%
		MIMO B	3.97	4.02	98.67%
802.11ax20	HE0	SISO A	3.93	3.98	98.60%
		SISO B	3.93	3.98	98.60%
		MIMO A	3.97	4.02	98.61%
		MIMO B	3.97	4.02	98.61%
802.11n40	HT0	SISO A	3.96	4.01	98.70%
		SISO B	3.96	4.01	98.70%
	HT8	MIMO A	3.97	4.02	98.58%
		MIMO B	3.97	4.02	98.58%
802.11ax40	HE0	SISO A	3.96	4.01	98.77%
		SISO B	3.96	4.01	98.77%
		MIMO A	3.95	4.00	98.70%
		MIMO B	3.95	4.00	98.70%
802.11ac80	VHT0	SISO A	3.95	4.00	98.73%
		SISO B	3.95	4.00	98.73%
		MIMO A	3.95	4.00	98.55%
		MIMO B	3.95	4.00	98.55%
802.11ax80	HE0	SISO A	3.95	4.00	98.68%
		SISO B	3.95	4.00	98.68%
		MIMO A	3.97	4.02	98.64%
		MIMO B	3.97	4.02	98.64%
802.11ac160	VTH0	SISO A	3.94	3.99	98.74%
		SISO B	3.94	3.99	98.74%
		MIMO A	2.77	2.82	98.29%
		MIMO B	2.77	2.82	98.29%
802.11ax160	HE0	SISO A	3.96	4.01	98.66%
		SISO B	3.96	4.01	98.66%
		MIMO A	2.39	2.45	97.50%
		MIMO B	2.39	2.45	97.50%

Maximum output power – U-NII-2C Channels

Mode	Rate	#Ch	Freq [MHz]	Antenna	Average Conducted Ouput Power [dBm]	Avg Max* Conducted Ouput Power [dBm]	Avg Max*. EIRP [dBm]	Avg Max* Conducted Power [mW]
802.11a	6Mbps	100	5500	SISO A	19.68	19.79	24.79	95.27
				SISO B	19.72	19.83	24.83	96.15
		120	5600	SISO A	21.07	21.18	26.18	**131.20**
				SISO B	21.05	21.16	26.16	130.60
		140	5700	SISO A	19.77	19.88	24.88	97.26
				SISO B	19.63	19.74	24.74	**94.18**
802.11n20	HT0	100	5500	SISO A	19.82	19.82	24.82	95.94
				SISO B	19.62	19.62	24.62	91.62
		120	5600	SISO A	21.14	21.14	26.14	130.02
				SISO B	21.15	21.15	26.15	130.32
		140	5700	SISO A	19.64	19.64	24.64	92.04
				SISO B	19.55	19.55	24.55	**90.16**
	HT8	100	5500	MIMO A	19.33	19.33	24.33	85.70
				MIMO B	19.28	19.28	24.28	84.72
				Combined A+B	22.32	22.32	27.32	170.43
		120	5600	MIMO A	19.84	19.84	24.84	96.38
				MIMO B	19.72	19.72	24.72	93.76
				Combined A+B	22.79	22.79	27.79	**190.14**
		140	5700	MIMO A	17.77	17.77	22.77	59.84
				MIMO B	17.65	17.65	22.65	58.21
				Combined A+B	20.72	20.72	25.72	118.05
802.11n40	HT0	102	5510	SISO A	19.17	19.17	24.17	**82.60**
				SISO B	19.20	19.20	24.20	83.18
		118	5590	SISO A	21.10	21.10	26.10	128.82
				SISO B	21.05	21.05	26.05	127.35
		134	5670	SISO A	19.75	19.75	24.75	94.41
				SISO B	19.89	19.89	24.89	97.50
	HT8	102	5510	MIMO A	18.29	18.29	23.29	67.45
				MIMO B	18.03	18.03	23.03	63.53
				Combined A+B	21.17	21.17	26.17	130.99
		118	5590	MIMO A	20.41	20.41	25.41	109.90
				MIMO B	20.38	20.38	25.38	109.14
				Combined A+B	23.41	23.41	28.41	**219.04**
		134	5670	MIMO A	19.00	19.00	24.00	79.43
				MIMO B	18.76	18.76	23.76	75.16
				Combined A+B	21.89	21.89	26.89	154.60
802.11ac80	VHT0	106	5530	SISO A	18.51	18.51	23.51	**70.96**
				SISO B	18.61	18.61	23.61	72.61
				MIMO A	17.60	17.60	22.60	57.54
				MIMO B	17.49	17.49	22.49	56.10
				Combined A+B	20.56	20.56	25.56	113.65
		122	5610	SISO A	19.96	19.96	24.96	99.08
				SISO B	19.98	19.98	24.98	99.54
				MIMO A	19.37	19.37	24.37	86.50
				MIMO B	19.33	19.33	24.33	85.70
				Combined A+B	22.24	22.24	27.24	**167.55**
802.11ac160	VHT0	114	5570	SISO A	15.54	15.54	20.54	35.81
				SISO B	14.81	14.81	19.81	**30.27**
				MIMO A	13.57	13.57	18.57	22.75
				MIMO B	13.07	13.07	18.07	20.28
				Combined A+B	16.34	16.34	21.34	**43.03**

* Maximum values are the duty cycle compensated values calculated from the average (measured) values

Max/Min Value

Mode	Rate	#Ch	Freq [MHz]	Antenna	RU config.	Average Conducted Ouput Power [dBm]	Avg Max* Conducted Ouput Power [dBm]	Avg Max*. EIRP [dBm]	Avg Max* Conducted Power [mW]
802.11ax20	HE0	100	5500	SISO A	Full	19.68	19.68	24.68	92.90
					26/0	13.72	13.72	18.72	23.55
					52/37	16.61	16.61	21.61	45.81
					106/53	19.62	19.62	24.62	91.62
				SISO B	Full	19.61	19.61	24.61	91.41
					26/0	13.73	13.73	18.73	23.60
					52/37	16.61	16.61	21.61	45.81
					106/53	19.62	19.62	24.62	91.62
				MIMO A	Full	19.22	19.22	24.22	83.56
					26/0	10.59	10.59	15.59	11.46
					52/37	13.52	13.52	18.52	22.49
					106/53	16.68	16.68	21.68	46.56
				MIMO B	Full	19.18	19.18	24.18	82.79
					26/0	10.53	10.53	15.53	11.30
					52/37	13.47	13.47	18.47	22.23
					106/53	16.69	16.69	21.69	46.67
				Combined A+B	Full	22.21	22.21	27.21	166.35
					26/0	13.57	13.57	18.57	**22.75**
					52/37	16.51	16.51	21.51	44.72
					106/53	19.70	19.70	24.70	93.22
		120	5600	SISO A	Full	21.06	21.06	26.06	127.64
				SISO B	Full	21.09	21.09	26.09	128.53
				MIMO A	Full	19.80	19.80	24.80	95.50
				MIMO B	Full	19.81	19.81	24.81	95.72
				Combined A+B	Full	22.82	22.82	27.82	**191.22**
		140	5500	SISO A	26/8	13.62	13.62	18.62	23.01
					52/40	16.68	16.68	21.68	46.56
					106/54	19.63	19.63	24.63	91.83
				SISO B	26/8	13.64	13.64	18.64	23.12
					52/40	16.63	16.63	21.63	46.03
					106/54	19.69	19.69	24.69	93.11
				MIMO A	26/8	10.63	10.63	15.63	11.56
					52/40	13.65	13.65	18.65	23.17
					106/54	16.63	16.63	21.63	46.03
				MIMO B	26/8	10.66	10.66	15.66	11.64
					52/40	13.56	13.56	18.56	22.70
					106/54	16.65	16.65	21.65	46.24
				Combined A+B	26/8	13.66	13.66	18.66	23.20
					52/40	16.62	16.62	21.62	45.87
					106/54	19.65	19.65	24.65	92.26
			5700	SISO A	Full	19.32	19.32	24.32	85.51
				SISO B	Full	19.49	19.49	24.49	88.92
				MIMO A	Full	17.23	17.23	22.23	52.84
				MIMO B	Full	17.32	17.32	22.32	53.95
				Combined A+B	Full	20.29	20.29	25.29	106.80
802.11ax40	HE0	102F	5510	SISO A	Full	19.14	19.14	24.14	**82.04**
					242/61	19.58	19.58	24.58	90.78
				SISO B	Full	19.18	19.18	24.18	82.79
					242/61	19.57	19.57	24.57	90.57
				MIMO A	Full	18.30	18.30	23.30	67.61
					242/61	18.71	18.71	23.71	74.30
				MIMO B	Full	18.11	18.11	23.11	64.71
					242/61	18.69	18.69	23.69	73.96
				Combined A+B	Full	21.22	21.22	26.22	132.32
					242/61	21.71	21.71	26.71	148.26
		118	5590	SISO A	Full	21.03	21.03	26.03	126.77
				SISO B	Full	21.01	21.01	26.01	126.18
				MIMO A	Full	20.25	20.25	25.25	105.93
				MIMO B	Full	20.33	20.33	25.33	107.89
				Combined A+B	Full	23.30	23.30	28.30	**213.82**
		134	5670	SISO A	Full	19.73	19.73	24.73	93.97
					242/62	19.82	19.82	24.82	95.94
				SISO B	Full	19.83	19.83	24.83	96.16
					242/62	19.72	19.72	24.72	93.76
				MIMO A	Full	18.84	18.84	23.84	76.56
					242/62	18.67	18.67	23.67	73.62
				MIMO B	Full	18.94	18.94	23.94	78.34
					242/62	18.64	18.64	23.64	73.11
				Combined A+B	Full	21.90	21.90	26.90	154.90
					242/62	21.67	21.67	26.67	146.73

Max/Min Value * Maximum values are the duty cycle compensated values calculated from the average (measured) values

Mode	Rate	#Ch	Freq [MHz]	Antenna	RU config.	Average Conducted Ouput Power [dBm]	Avg Max* Conducted Ouput Power [dBm]	Avg Max*. EIRP [dBm]	Avg Max* Conducted Power [mW]
802.11ax80	HE0	106	5530	SISO A	Full	18.53	18.53	23.53	**71.29**
					484/65	18.69	18.69	23.69	73.96
				SISO B	Full	18.68	18.68	23.68	73.79
					484/65	18.53	18.53	23.53	71.29
				MIMO A	Full	17.60	17.60	22.60	57.54
					484/65	17.56	17.56	22.56	57.02
				MIMO B	Full	17.64	17.64	22.64	58.08
					484/65	17.66	17.66	22.66	58.34
				Combined A+B	Full	20.63	20.63	25.63	115.62
					484/65	20.62	20.62	25.62	115.36
		122	5610	SISO A	Full	19.83	19.83	24.83	96.16
				SISO B	Full	19.73	19.73	24.73	93.97
				MIMO A	Full	19.33	19.33	24.33	85.70
				MIMO B	Full	19.34	19.34	24.34	85.90
				Combined A+B	Full	22.35	22.35	27.35	**171.61**
802.11ax160	HE0	114	5570	SISO A	Full	15.48	15.48	20.48	35.32
					996/67	17.99	17.99	22.99	62.95
					996/S67	19.64	19.64	24.64	92.04
				SISO B	Full	14.84	14.84	19.84	**30.48**
					996/67	18.12	18.12	23.12	64.86
					996/S67	19.46	19.46	24.46	88.31
				MIMO A	Full	13.87	13.98	18.98	25.00
					996/67	16.85	16.96	21.96	49.66
					996/S67	18.87	18.98	23.98	79.06
				MIMO B	Full	13.35	13.46	18.46	22.18
					996/67	16.04	16.15	21.15	41.21
					996/S67	18.86	18.97	23.97	78.88
				Combined A+B	Full	16.63	16.74	21.74	47.18
					996/67	19.47	19.58	24.58	90.86
					996/S67	21.88	21.99	26.99	**157.94**

* Maximum values are the duty cycle compensated values calculated from the average (measured) values
Max/Min Value

Maximum output power – Overlapped channels between U-NII-2C and U-NII-3

Mode	Rate	Antenna	Chain	Channel	Frequency (MHz)	Average Cond. Output Power - UNII-2C [dBm]	Max.* Cond. Output Power - UNII-2C [dBm]	Max.* EIRP UNII2C [dBm]	Max.* Cond. Output Power - UNII-2C [mW]
802.11n20	HT0	SISO	A	144	5720	19.92	19.98	24.98	99.53
			B		5720	19.79	19.85	24.85	**96.60**
	HT8	MIMO	A		5720	18.99	19.05	24.05	80.41
			B		5720	18.68	18.74	23.74	74.87
		Combined	A+B		5720	21.85	21.91	26.91	**155.28**
802.11n40	HT0	SISO	A	142	5710	20.51	20.57	25.57	113.98
			B		5710	20.45	20.51	25.51	**112.42**
	HT8	MIMO	A		5710	19.73	19.79	24.79	95.25
			B		5710	19.63	19.69	24.69	93.08
		Combined	A+B		5710	22.69	22.75	27.75	**188.34**
802.11ac80	VHT0	SISO	A	138	5690	20.92	20.98	25.98	125.26
			B		5690	20.69	20.75	25.75	**118.80**
		MIMO	A		5690	20.00	20.06	25.06	101.41
			B		5690	19.93	19.99	24.99	99.79
		Combined	A+B		5690	22.98	23.04	28.04	**201.20**
802.11ax20	HE0	SISO	A	144	5720	19.77	19.83	24.83	96.13
			B		5720	19.45	19.51	24.51	**89.29**
		MIMO	A		5720	18.81	18.87	23.87	77.05
			B		5720	18.56	18.62	23.62	72.75
		Combined	A+B		5720	21.70	21.76	26.76	**149.80**
802.11ax40	HE0	SISO	A	142	5710	20.52	20.58	25.58	**114.24**
			B		5710	20.60	20.66	25.66	116.40
		MIMO	A		5710	19.58	19.64	24.64	92.03
			B		5710	19.32	19.38	24.38	86.66
		Combined	A+B		5710	22.46	22.52	27.52	**178.69**
802.11ax80	HE0	SISO	A	138	5690	20.91	20.97	25.97	**124.99**
			B		5690	20.94	21.00	26.00	125.84
		MIMO	A		5690	19.76	19.82	24.82	95.90
			B		5690	19.80	19.86	24.86	96.82
		Combined	A+B		5690	22.79	22.85	27.85	**192.72**

* Maximum values are the duty cycle compensated values calculated from the average (measured) values

Max/Min Value

Maximum Power Spectral Density (PSD) – U-NII-2C channels

Mode	Rate	Channel	Freq [MHz]	Antenna	Average conducted PSD [dBm/MHz]	Maximum* conducted PSD [dBm/MHz]
802.11a	6Mbps	100	5500	SISO A	8.02	8.13
				SISO B	8.05	8.16
		120	5600	SISO A	9.34	9.45
				SISO B	9.30	9.41
		140	5700	SISO A	8.09	8.20
				SISO B	7.95	8.06
802.11n20	HT0	100	5500	SISO A	7.84	7.84
				SISO B	7.62	7.62
		120	5600	SISO A	9.10	9.10
				SISO B	9.11	9.11
		140	5700	SISO A	7.64	7.64
				SISO B	7.54	7.54
	HT8	100	5500	MIMO A	7.34	7.34
				MIMO B	7.29	7.29
				Combined A+B	10.33	10.33
		120	5600	MIMO A	7.82	7.82
				MIMO B	7.70	7.70
				Combined A+B	10.77	10.77
		140	5700	MIMO A	5.78	5.78
				MIMO B	5.67	5.67
				Combined A+B	8.74	8.74
802.11n40	HT0	102	5510	SISO A	4.05	4.05
				SISO B	4.09	4.09
		118	5590	SISO A	5.99	5.99
				SISO B	5.94	5.94
		134	5670	SISO A	4.65	4.65
				SISO B	4.79	4.79
	HT8	102	5510	MIMO A	3.17	3.17
				MIMO B	2.93	2.93
				Combined A+B	6.06	6.06
		118	5590	MIMO A	5.32	5.32
				MIMO B	5.31	5.31
				Combined A+B	8.33	8.33
		134	5670	MIMO A	3.88	3.88
				MIMO B	3.66	3.66
				Combined A+B	6.78	6.78
802.11ac80	VHT0	106	5530	SISO A	0.97	0.97
				SISO B	1.09	1.09
				MIMO A	0.11	0.11
				MIMO B	-0.05	-0.05
				Combined A+B	3.04	3.04
		122	5610	SISO A	2.40	2.40
				SISO B	2.42	2.42
				MIMO A	1.80	1.80
				MIMO B	1.78	1.78
				Combined A+B	4.80	5.13
802.11ac160	VHT0	114	5570	SISO A	-4.84	-4.84
				SISO B	-5.62	-5.62
				MIMO A	-6.75	-6.75
				MIMO B	-7.29	-7.29
				Combined A+B	-4.00	-4.00

* Maximum values are the duty cycle compensated values calculated from the average (measured) values

Mode	Rate	Channel	Freq [MHz]	Antenna	RU config.	Average conducted PSD [dBm/MHz]	Maximum* conducted PSD [dBm/MHz]
802.11ax20	HE0	100	5500	SISO A	Full	7.40	7.40
					26/0	10.90	10.90
					52/37	10.87	10.87
					106/53	10.86	10.86
				SISO B	Full	7.31	7.31
					26/0	10.90	10.90
					52/37	10.87	10.87
					106/53	10.86	10.86
				MIMO A	Full	6.92	6.92
					26/0	7.87	7.87
					52/37	7.86	7.86
					106/53	7.87	7.87
				MIMO B	Full	6.92	6.92
					26/0	7.72	7.72
					52/37	7.82	7.82
					106/53	7.88	7.88
				Combined A+B	Full	9.93	9.93
					26/0	10.81	10.81
					52/37	10.85	10.85
					106/53	10.89	10.89
		120	5600	SISO A	Full	8.75	8.75
				SISO B	Full	8.77	8.77
				MIMO A	Full	7.47	7.47
				MIMO B	Full	7.50	7.50
				Combined A+B	Full	10.50	10.50
		140	5500	SISO A	26/8	10.84	10.84
					52/40	10.94	10.94
					106/54	10.83	10.83
				SISO B	26/8	10.88	10.88
					52/40	10.87	10.87
					106/54	10.91	10.91
				MIMO A	26/8	7.84	7.84
					52/40	7.87	7.87
					106/54	7.81	7.81
				MIMO B	26/8	7.88	7.88
					52/40	7.86	7.86
					106/54	7.79	7.79
				Combined A+B	26/8	10.87	10.87
					52/40	10.88	10.88
					106/54	10.81	10.81
			5700	SISO A	Full	7.02	7.02
				SISO B	Full	7.18	7.18
				MIMO A	Full	4.99	4.99
				MIMO B	Full	5.00	5.00
				Combined A+B	Full	8.01	8.01
802.11ax40	HE0	102	5510	SISO A	Full	3.81	3.81
					242/61	7.31	7.31
				SISO B	Full	3.84	3.84
					242/61	7.24	7.24
				MIMO A	Full	2.96	2.96
					242/61	6.35	6.35
				MIMO B	Full	2.78	2.78
					242/61	6.36	6.36
				Combined A+B	Full	5.88	5.88
					242/61	9.37	9.37
		118	5590	SISO A	Full	5.72	5.72
				SISO B	Full	5.70	5.70
				MIMO A	Full	4.94	4.94
				MIMO B	Full	5.03	5.03
				Combined A+B	Full	8.00	8.00
		134	5670	SISO A	Full	4.42	4.42
					242/62	7.41	7.41
				SISO B	Full	4.52	4.52
					242/62	7.34	7.34
				MIMO A	Full	3.49	3.49
					242/62	6.29	6.29

				MIMO B	Full	3.62	3.62
					242/62	6.25	6.25
				Combined A+B	Full	6.57	6.57
					242/62	9.28	9.28

* Maximum values are the duty cycle compensated values calculated from the average (measured) values

Mode	Rate	Channel	Freq [MHz]	Antenna	RU config.	Average conducted PSD [dBm/MHz]	Maximum* conducted PSD [dBm/MHz]
802.11ax80	HE0	106	5530	SISO A	Full	0.91	0.91
					484/65	3.42	3.42
				SISO B	Full	1.06	1.06
					484/65	3.26	3.26
				MIMO A	Full	-0.60	-0.60
					484/65	2.27	2.27
				MIMO B	Full	0.00	0.00
					484/65	2.38	2.38
				Combined A+B	Full	2.72	2.72
					484/65	5.34	5.34
		122	5610	SISO A	Full	2.19	2.19
				SISO B	Full	2.07	2.07
				MIMO A	Full	1.66	1.66
				MIMO B	Full	1.69	1.69
				Combined A+B	Full	4.69	4.88
802.11ax160	HE0	114	5570	SISO A	Full	-5.00	-5.00
					996/67	0.43	0.43
					996/S67	2.00	2.00
				SISO B	Full	-5.69	-5.69
					996/67	0.61	0.61
					996/S67	1.87	1.87
				MIMO A	Full	-6.56	-6.45
					996/67	-0.71	-0.60
					996/S67	1.25	1.36
				MIMO B	Full	-7.13	-7.02
					996/67	-1.74	-1.63
					996/S67	1.31	1.42
				Combined A+B	Full	-3.83	-3.72
					996/67	1.82	1.93
					996/S67	4.29	4.40

* Maximum values are the duty cycle compensated values calculated from the average (measured) values

Maximum Power Spectral Density (PSD) – Overlapped channels between U-NII-2C and U-NII-3

Mode	Rate	Channel	Frequency (MHz)	Antenna	Chain	Average conducted PSD UNII-2C [dBm/MHz]	Maximum* conducted PSD UNII-2C [dBm/MHz]
802.11n20	HT0	144	5720	SISO	A	8.90	8.96
					B	8.76	8.82
	HT8			MIMO	A	7.99	8.05
					B	7.66	7.72
				Combined	A+B	10.84	10.90
802.11n40	HT0	142	5710	SISO	A	5.77	5.83
					B	5.72	5.78
	HT8			MIMO	A	7.96	8.01
					B	5.01	5.07
				Combined	A+B	4.88	4.94
802.11ac80	VHT0	138	5690	SISO	A	3.45	3.51
					B	3.22	3.28
				MIMO	A	2.51	2.57
					B	2.43	2.49
				Combined	A+B	5.48	5.54
802.11ax20	HE0	144	5720	SISO	A	8.58	8.64
					B	8.25	8.31
				MIMO	A	7.61	7.67
					B	7.34	7.40
				Combined	A+B	10.49	10.55
802.11ax40	HE0	142	5710	SISO	A	5.62	5.68
					B	5.71	5.77
				MIMO	A	7.59	7.65
					B	4.72	4.78
				Combined	A+B	4.43	4.49
802.11ax80	HE0	138	5690	SISO	A	3.36	3.42
					B	3.38	3.44
				MIMO	A	2.16	2.22
					B	2.22	2.28
				Combined	A+B	5.20	5.26

* Maximum values are the duty cycle compensated values calculated from the average (measured) values

See Section B.3.2 for the screenshot results.

B.2.3 Undesirable emission limits : Band Edge (Conducted)

Test limits

<table>
<tr><th>FCC part</th><th>RSS part</th><th>Limits</th></tr>
<tr><td>15.407 (b) (3)</td><td>RSS-247 Clause 6.2.3 (2)</td><td>For transmitters operating in the 5.47–5.725 GHz band: all emissions outside of the 5.47–5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz.</td></tr>
<tr><td>15.209</td><td>RSS-GEN, Clause 8.9</td><td>Radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a):
<table>
<tr><th>Freq Range (MHz)</th><th>Field Strength (µV/m)</th><th>Field Strength (dBµV/m)</th><th>Meas. Distance (m)</th></tr>
<tr><td>30-88</td><td>100</td><td>40</td><td>3</td></tr>
<tr><td>88-216</td><td>150</td><td>43.5</td><td>3</td></tr>
<tr><td>216-960</td><td>200</td><td>46</td><td>3</td></tr>
<tr><td>Above 960</td><td>500</td><td>54</td><td>3</td></tr>
</table>
The emission limits shown in the table above are based on measurements employing CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.
For average radiated emission measurements above 1000 MHz, there is also a limit specified when measuring with peak detector function, corresponding to 20 dB above the indicated values in the table.</td></tr>
</table>

Test procedure

The conducted setup shown in section *Test & System Description* was used to measure undesirable emissions on the Band Edge domain. The antenna terminal of the EUT is connected to the spectrum analyzer through an attenuator, and the spectrum analyzer reading is compensated to include the RF path loss and the declared Antenna Gain.

For Band Edge measurements in average mode on the low frequency section, one of the two methods is used according to section G) 6) (KDB 789033 D02):

1) Method AD (Average Detection) as per paragraph II.G.6.c.
2) Method VB (Averaging using reduced video bandwidth) as per paragraph II.G.6.d.

For the BE High, we use the integration method as defined in the band edge measurements section (paragraph II.G.3.d) of KDB 789033 D02 .

In case of Band Edge measurements falling in restricted bands, the declared Antenna Gain is also compensated in the graph.The declared maximum antenna gain is 5dBi.

The following limits in dBm were applied for the average detector after the conversion from the limits detailed above in dBµV/m, according to FCC 47 CFR part 15 - Subpart C – §15.209(a). The limits in dBm for peak detector are 20dB above the indicated values in the table.

§15.209(a)			Converted values	
Freq Range (MHz)	Distance (m)	Field strength (microvolts/meter)	Field strength (dB microvolts/meter)	Power (dBm)
Above 960	3	500	53.98	-41.25

See Section B.3.3 for the screenshot results.

B.2.4 Radiated spurious emission

Standard references

<table>
<tr><th>FCC part</th><th>RSS part</th><th>Limits</th></tr>
<tr><td>15.407 (b) (3)</td><td>RSS-247 Clause 6.2.3 (2)</td><td>For transmitters operating in the 5.47–5.725 GHz band: all emissions outside of the 5.47–5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz.</td></tr>
<tr><td>15.209</td><td>RSS-GEN, Clause 8.9</td><td>Radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a):
<table>
<tr><th>Freq Range (MHz)</th><th>Field Strength (µV/m)</th><th>Field Strength (dBµV/m)</th><th>Meas. Distance (m)</th></tr>
<tr><td>30-88</td><td>100</td><td>40</td><td>3</td></tr>
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<tr><td>216-960</td><td>200</td><td>46</td><td>3</td></tr>
<tr><td>Above 960</td><td>500</td><td>54</td><td>3</td></tr>
</table>
The emission limits shown in the above table are based on measurements employing CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.
For average radiated emission measurements above 1000 MHz, there is also a limit specified when measuring with peak detector function, corresponding to 20 dB above the indicated values in the table.</td></tr>
</table>

Test procedure

The radiated setups shown in section *Test & System Description* were used to measure the radiated spurious emissions. Depending of the frequency range and bands being tested, different antennas and filters were used.
The final measurement is done by varying the antenna height, the EUT azimuth over 360º and for both Vertical and Horizontal polarizations.

The radiated spurious emission was measured on the worst case configuration selected from the chapter B.2.2 and using the low, middle and high channel.

For technologies 802.11ax20, 802.11ax40, 802.11ax80 and 802.11ax160, the worst case spurious emission result among the low, mid and high channels tested separately on Chain A and B is used to perform the test on MIMO mode (Chain A+B).

For 802.11n20, 802.11n40, 802.11ac80 and 802.11ac160 the worst channel found among all 802.11ax modes mentioned above is chosen to perform the test in Chain A, B , and MIMO (Chain A+B).

Test Results

802.11a

30 MHz – 40 GHz, 802.11a, 6Mbps, Chain A

Radiated Spurious – CH100

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
407.6	29.3	---	46.0	16.7
576.0	34.2	---	68.2	34.0
1194.5	47.2	---	74.0	26.8
1195.5	---	35.8	54.0	18.2
1395.5	---	31.3	54.0	22.7
1397.0	43.6	---	74.0	30.4
11000.9	---	37.6	54.0	16.4
11007.6	49.3	---	74.0	24.7
16493.9	57.0	---	68.2	11.2
21999.8	48.4	---	68.2	19.8
22399.8	---	40.3	54.0	13.7
22410.2	47.6	---	74.0	26.4

Radiated Spurious – CH120

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	29.0	---	46.0	17.0
576.0	32.7	---	68.2	35.5
6224.0	56.6	---	68.2	11.6
7010.0	47.9	---	68.2	20.3
16736.6	52.4	---	68.2	15.8
22399.5	47.8	---	74.0	26.2
22400.1	---	40.9	54.0	13.1

Radiated Spurious – CH140

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	29.2	---	46.0	16.8
576.0	32.9	---	68.2	35.3
1195.5	47.4	---	74.0	26.6
1196.5	---	35.8	54.0	18.2
1394.5	42.7	---	74.0	31.3
1394.5	---	31.5	54.0	22.5
11400.6	---	43.7	54.0	10.3
11403.0	54.8	---	74.0	19.2
17095.7	**59.1**	---	68.2	9.1
22800.1	---	42.2	54.0	11.8
22800.4	49.4	---	74.0	24.6
29014.0	48.0	---	68.2	20.2

30 MHz – 40 GHz, 802.11a, 6Mbps, Chain B

Radiated Spurious – CH100

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	28.4	---	46.0	17.6
576.0	32.3	---	68.2	35.9
1197.5	---	35.7	54.0	18.3
1198.0	46.9	---	74.0	27.1
1295.0	44.1	---	68.2	24.2
11000.9	---	37.6	54.0	16.4
11007.6	49.3	---	74.0	24.7
16493.9	57.0	---	68.2	11.2
21999.5	47.6	---	68.2	20.6
22399.8	48.1	---	74.0	25.9
22399.8	---	41.0	54.0	13.0

Radiated Spurious – CH120

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	29.6	---	46.0	16.4
576.0	33.1	---	68.2	35.1
6285.0	55.8	---	68.2	12.4
7022.1	47.1	---	68.2	21.1
16722.6	52.3	---	68.2	15.9
22299.9	47.4	---	74.0	26.6
22399.8	---	40.5	54.0	13.5

Radiated Spurious – CH140

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	29.7	---	46.0	16.3
576.0	34.0	---	68.2	34.2
1196.0	---	35.6	54.0	18.4
1196.5	47.2	---	74.0	26.8
1396.0	---	31.2	54.0	22.8
1399.0	43.3	---	74.0	30.7
11402.0	---	43.4	54.0	10.6
11406.9	53.7	---	74.0	20.3
17096.2	57.4	---	68.2	10.8
22799.8	48.6	---	74.0	25.4
22800.1	---	42.8	54.0	11.2

802.11n

30 MHz – 40 GHz, 802.11n20, HT0, Chain A

Radiated Spurious – CH120

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	28.5	---	46.0	17.5
624.0	34.8	---	68.2	33.4
6229.0	55.8	---	68.2	12.4
7005.1	48.0	---	68.2	20.2
16733.2	52.0	---	68.2	16.2
22399.5	47.8	---	74.0	26.2
22400.1	---	40.9	54.0	13.1

30 MHz – 40 GHz, 802.11n20, HT0, Chain B

Radiated Spurious – CH120

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	30.1	---	46.0	15.9
624.1	33.5	---	68.2	34.7
6186.0	56.6	---	68.2	11.6
7001.3	47.6	---	68.2	20.6
11197.6	50.3	---	74.0	23.7
11201.9	---	38.9	54.0	15.1
16733.7	52.4	---	68.2	15.8
22299.9	47.5	---	74.0	26.6
22399.8	---	40.5	54.0	13.5

30 MHz – 40 GHz, 802.11n20, HT8, Chain A+B

Radiated Spurious – CH120

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	28.5	---	46.0	17.5
624.0	35.0	---	68.2	33.2
6251.0	**58.0**	---	68.2	10.2
7006.6	48.9	---	68.2	19.3
11198.5	53.6	---	74.0	20.4
11200.5	---	43.4	54.0	10.6
16797.5	53.4	---	68.2	14.8
22353.6	47.5	---	74.0	26.5
22400.1	---	40.9	54.0	13.1

30 MHz – 40 GHz, 802.11n40, HT0, Chain A

Radiated Spurious – CH134

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	28.4	---	46.0	17.6
576.0	34.4	---	68.2	33.8
6314.5	56.1	---	68.2	12.1
7025.4	48.1	---	68.2	20.1
17018.4	53.2	---	68.2	15.0
22679.5	47.4	---	74.0	26.6
22679.8	---	41.1	54.0	12.9

30 MHz – 40 GHz, 802.11n40, HT0, Chain B

Radiated Spurious – CH134

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.1	28.5	---	46.0	17.5
624.0	33.2	---	68.2	35.0
6267.0	56.4	---	68.2	11.8
7008.5	48.2	---	68.2	20.0
11303.4	---	41.6	54.0	12.4
11304.4	51.2	---	74.0	22.8
16956.5	**57.3**	---	68.2	10.9
22624.3	47.8	---	74.0	26.2
22680.0	---	40.5	54.0	13.5

30 MHz – 40 GHz, 802.11n40, HT8, Chain A+B

Radiated Spurious – CH134

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	28.3	---	46.0	17.7
576.0	32.7	---	68.2	35.5
6161.0	56.4	---	68.2	11.8
17843.4	---	40.0	54.0	14.0
17843.4	52.2	---	74.0	21.8
22620.5	47.7	---	74.0	26.3
22681.9	---	40.4	54.0	13.6

802.11ac

30 MHz – 40 GHz, 802.11ac80, VHT0, Chain A

Radiated Spurious – CH106

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	28.4	---	46.0	17.6
576.1	32.4	---	68.2	35.8
1396.0	---	31.3	54.0	22.8
1396.5	41.9	---	74.0	32.1
6173.0	**56.9**	---	68.2	11.3
10696.4	49.1	---	74.0	24.9
10718.1	---	37.9	54.0	16.1
16719.2	52.1	---	68.2	16.1
21976.4	46.7	---	68.2	21.5
22056.4	46.7	---	74.0	27.3
22119.8	---	39.1	54.0	14.9

30 MHz – 40 GHz, 802.11ac80, VHT0, Chain B

Radiated Spurious – CH106

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	27.9	---	46.0	18.1
576.1	32.5	---	68.2	35.7
1396.5	---	30.9	54.0	23.1
1397.0	42.1	---	74.0	31.9
6192.0	56.6	---	68.2	11.6
10302.0	49.2	---	68.2	19.0
16736.6	52.0	---	68.2	16.2
22120.1	---	40.6	54.0	13.4
22147.7	46.9	---	74.0	27.1

30 MHz – 40 GHz, 802.11ac80, VHT0, Chain A+B

Radiated Spurious – CH106

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	28.4	---	46.0	17.6
576.0	32.8	---	68.2	35.4
1336.0	43.4	---	74.0	30.6
1336.5	---	31.8	54.0	22.2
6190.5	56.1	---	68.2	12.1
11066.1	---	38.5	54.0	15.5
11110.6	50.1	---	74.0	23.9
16694.0	52.0	---	68.2	16.2
22120.9	---	39.4	54.0	14.6
22121.2	46.2	---	74.0	27.8

30 MHz – 40 GHz, 802.11ac160, VHT0, Chain A

Radiated Spurious – CH114

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	30.0	---	46.0	16.1
576.0	32.1	---	68.2	36.1
6326.0	55.4	---	68.2	12.9
17827.5	---	40.4	54.0	13.6
17853.1	51.9	---	74.0	22.1
22280.0	---	41.1	54.0	12.9
22280.3	47.0	---	74.0	27.0

30 MHz – 40 GHz, 802.11ac160, VHT0, Chain B

Radiated Spurious – CH114

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	29.9	---	46.0	16.1
576.0	32.1	---	68.2	36.1
6320.0	56.2	---	68.2	12.0
17845.8	51.0	---	74.0	23.0
17989.9	---	39.9	54.0	14.2
22279.8	47.4	---	74.0	26.6
22280.0	---	41.5	54.0	12.5

30 MHz – 40 GHz, 802.11ac160, VHT0, Chain A+B

Radiated Spurious – CH114

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	31.3	---	46.0	14.7
576.0	33.4	---	68.2	34.8
6314.5	**57.2**	---	68.2	11.0
16736.6	53.5	---	68.2	14.7
22280.8	---	41.2	54.0	12.8
22281.3	48.0	---	74.0	26.0

802.11ax

30 MHz – 40 GHz, 802.11ax20, HE0, Chain A

Radiated Spurious – CH100

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	29.2	---	46.0	16.8
576.0	33.3	---	68.2	34.9
1196.0	46.8	---	74.0	27.2
1196.5	---	35.3	54.0	18.7
1286.5	46.7	---	68.2	21.6
7008.5	47.8	---	68.2	20.4
16732.2	52.6	---	68.2	15.6
21967.1	55.5	---	68.2	12.7

Radiated Spurious – CH120

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	28.1	---	46.0	17.9
624.0	34.5	---	68.2	33.8
6223.0	56.1	---	68.2	12.1
7005.1	47.6	---	68.2	20.6
16668.4	52.3	---	68.2	15.9
22355.5	46.8	---	74.0	27.2
22399.5	---	39.3	54.0	14.7

Radiated Spurious – CH140

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	28.6	---	46.0	17.4
624.0	33.6	---	68.2	34.6
1196.5	---	35.2	54.0	18.8
1196.5	46.9	---	74.0	27.1
1394.0	42.8	---	74.0	31.2
1394.5	---	31.5	54.0	22.5
7004.2	47.9	---	68.2	20.3
11382.7	---	39.2	54.0	14.8
11383.2	49.7	---	74.0	24.3
17075.9	54.1	---	68.2	14.1
22765.3	---	40.5	54.0	13.5
22767.7	51.7	---	74.0	22.3
22800.1	47.9	---	74.0	26.1
22800.1	---	43.0	54.0	11.0

30 MHz – 40 GHz, 802.11ax20, HE0, Chain B

Radiated Spurious – CH100

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	28.9	---	46.0	17.1
624.0	35.9	---	68.2	32.3
1197.0	---	35.5	54.0	18.5
1199.0	47.4	---	74.0	26.7
1287.0	47.5	---	68.2	20.7
7002.7	47.9	---	68.2	20.3
16476.1	54.7	---	68.2	13.5
22000.0	49.4	---	68.2	18.8

Radiated Spurious – CH120

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	29.1	---	46.0	16.9
576.0	34.2	---	68.2	34.0
6255.5	56.1	---	68.2	12.1
7006.1	48.8	---	68.2	19.4
11182.6	---	41.2	54.0	12.8
11183.6	51.6	---	74.0	22.4
16775.2	53.6	---	68.2	14.6
22336.9	47.7	---	74.0	26.3
22400.1	---	40.4	54.0	13.6

Radiated Spurious – CH140

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	28.2	---	46.0	17.8
624.0	35.2	---	68.2	33.0
1197.0	---	36.0	54.0	18.0
1197.0	47.7	---	74.0	26.3
1397.5	---	31.4	54.0	22.6
1398.0	43.0	---	74.0	31.0
7025.0	48.4	---	68.2	19.8
11383.2	---	41.8	54.0	12.2
11383.7	50.5	---	74.0	23.5
17073.9	52.3	---	68.2	15.9
22765.3	48.1	---	74.0	26.0
22765.6	---	37.9	54.0	16.1
22799.6	49.2	---	74.0	24.8
22799.8	---	**45.0**	54.0	9.0
28456.7	51.2	---	68.2	17.0

30 MHz – 40 GHz, 802.11ax20, HE0, Chain A+B

Radiated Spurious – CH120

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	29.0	---	46.0	17.0
576.0	33.7	---	68.2	34.5
1386.5	46.9	---	74.0	27.1
1386.5	---	35.8	54.0	18.2
6253.0	58.0	---	68.2	10.2
7001.8	48.1	---	68.2	20.1
11183.1	---	43.2	54.0	10.8
11183.6	53.2	---	74.0	20.8
16775.2	54.5	---	68.2	13.7
22399.5	47.7	---	74.0	26.3
22400.1	---	40.8	54.0	13.2

30 MHz – 40 GHz, 802.11ax40, HE0, Chain A

Radiated Spurious – CH102

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	29.0	---	46.0	17.0
624.0	34.4	---	68.2	33.8
1287.5	45.9	---	68.2	22.3
6188.0	56.4	---	68.2	11.8
6868.4	46.7	---	68.2	21.5
6911.4	46.6	---	68.2	21.6
16476.5	57.0	---	68.2	11.2
22039.6	47.1	---	74.0	26.9
22039.9	---	39.8	54.0	14.2

Radiated Spurious – CH118

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	28.8	---	46.0	17.2
576.0	32.7	---	68.2	35.5
1367.0	43.1	---	74.0	30.9
1367.0	---	34.0	54.0	20.0
6310.5	57.4	---	68.2	10.8
11143.9	---	45.8	54.0	8.2
11143.9	53.8	---	74.0	20.2
16716.8	59.2	---	68.2	9.0
22359.7	47.4	---	74.0	26.6
22360.0	---	40.1	54.0	13.9

Radiated Spurious – CH134

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	28.9	---	46.0	17.1
624.0	34.4	---	68.2	33.8
1447.0	---	33.7	54.0	20.4
1447.0	42.7	---	74.0	31.3
6249.0	56.5	---	68.2	11.7
7090.7	47.9	---	68.2	20.3
11302.9	49.2	---	74.0	24.8
11303.9	---	39.4	54.0	14.6
16956.5	57.8	---	68.2	10.4
22607.5	50.3	---	74.0	23.7
22608.1	---	40.4	54.0	13.6

30 MHz – 40 GHz, 802.11ax40, HE0, Chain B

Radiated Spurious – CH102

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	29.5	---	46.0	16.5
576.0	32.8	---	68.2	35.4
1287.0	48.1	---	68.2	20.1
6261.0	57.8	---	68.2	10.4
10983.9	---	38.8	54.0	15.2
10999.9	48.7	---	74.0	25.3
16475.6	56.6	---	68.2	11.6
22039.9	46.3	---	74.0	27.7
22039.9	---	39.6	54.0	14.4

Radiated Spurious – CH118

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
407.9	28.7	---	46.0	17.3
624.0	33.9	---	68.2	34.3
1367.0	---	33.3	54.0	20.7
1367.0	43.1	---	74.0	30.9
6259.0	55.9	---	68.2	12.3
11143.4	---	45.6	54.0	8.5
11144.9	53.6	---	74.0	20.4
16716.3	54.5	---	68.2	13.7
22288.0	47.9	---	74.0	26.1
22359.7	---	41.1	54.0	12.9

Radiated Spurious – CH134

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	28.1	---	46.0	17.9
576.0	33.1	---	68.2	35.1
1446.5	41.2	---	74.0	32.8
1447.0	---	31.3	54.0	22.7
6326.5	56.4	---	68.2	11.8
7004.7	47.4	---	68.2	20.8
11303.9	---	43.8	54.0	10.2
11304.4	53.4	---	74.0	20.6
16957.5	**63.1**	---	68.2	5.1
22679.8	48.2	---	74.0	25.8
22680.0	---	41.9	54.0	12.1

30 MHz – 40 GHz, 802.11ax40, HE0, Chain A+B

Radiated Spurious – CH134

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	29.0	---	46.0	17.0
576.0	32.8	---	68.2	35.4
1447.0	---	33.0	54.0	21.0
1447.5	44.6	---	74.0	29.4
6321.0	57.3	---	68.2	10.9
16750.1	52.0	---	68.2	16.2
22607.5	51.6	---	74.0	22.4
22608.9	---	44.2	54.0	9.8

30 MHz – 40 GHz, 802.11ax80, HE0, Chain A

Radiated Spurious – CH106

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
407.9	28.0	---	46.0	18.0
576.0	32.5	---	68.2	35.7
5343.5	**67.0**	---	68.2	1.2
6868.4	46.7	---	68.2	21.5
10983.5	48.3	---	74.0	25.7
10983.9	---	38.4	54.0	15.6
16478.5	61.1	---	68.2	7.1
22439.9	---	40.1	54.0	13.9
22482.2	47.2	---	74.0	26.8

Radiated Spurious – CH122

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	29.6	---	46.0	16.4
576.0	32.5	---	68.2	35.7
1366.5	45.4	---	74.0	28.6
1367.0	---	35.6	54.0	18.4
6224.5	56.1	---	68.2	12.1
10374.9	49.1	---	68.2	19.1
16696.0	51.8	---	68.2	16.5
22348.3	47.0	---	74.0	27.0
22439.9	---	39.6	54.0	14.4

Radiated Spurious – CH138

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	29.7	---	46.0	16.3
576.0	32.5	---	68.2	35.7
1446.5	---	34.7	54.0	19.3
1447.0	44.5	---	74.0	29.5
16957.0	58.3	---	68.2	9.9
22606.7	51.6	---	74.0	22.4
22608.1	---	40.5	54.0	13.5
22759.7	---	40.5	54.0	13.5
22760.0	46.8	---	74.0	27.2

30 MHz – 40 GHz, 802.11ax80, HE0, Chain B

Radiated Spurious – CH106

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.1	28.5	---	46.0	17.5
624.0	33.8	---	68.2	34.4
5340.0	58.9	---	68.2	9.3
10983.5	---	41.5	54.0	12.5
10983.9	50.5	---	74.0	23.5
16475.6	61.1	---	68.2	7.1
22439.9	---	40.5	54.0	13.5
22440.2	47.5	---	74.0	26.5

Radiated Spurious – CH122

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	29.6	---	46.0	16.4
576.0	32.2	---	68.2	36.0
1367.0	---	32.8	54.0	21.2
1367.0	42.0	---	74.0	32.0
6219.0	56.8	---	68.2	11.4
16730.3	52.2	---	68.2	16.0
22439.7	46.8	---	74.0	27.2
22440.2	---	39.5	54.0	14.5

Radiated Spurious – CH138

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	29.1	---	46.0	16.9
576.0	32.4	---	68.2	35.8
6385.5	55.1	---	68.2	13.1
16739.5	52.5	---	68.2	15.7
22607.5	---	40.7	54.0	13.3
22608.1	50.8	---	74.0	23.2
22760.0	---	41.2	54.0	12.8
22760.3	47.7	---	74.0	26.3
33911.1	55.5	---	68.2	12.7

30 MHz – 26.5 GHz, 802.11ax80, HE0, Chain A+B

Radiated Spurious – CH106

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	28.2	---	46.0	17.8
576.0	32.3	---	68.2	35.9
6319.0	56.2	---	68.2	12.0
10353.2	49.5	---	68.2	18.7
16747.2	52.2	---	68.2	16.0
21968.2	47.8	---	68.2	20.4
22120.9	---	39.0	54.0	15.0
22121.4	46.7	---	74.0	27.3

Radiated Spurious – CH122

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	30.0	---	46.0	16.1
576.0	32.8	---	68.2	35.4
1366.5	---	36.1	54.0	17.9
1367.0	47.6	---	74.0	26.4
6218.0	57.3	---	68.2	10.9
11144.4	---	41.9	54.0	12.1
11144.4	52.1	---	74.0	21.9
16716.8	57.7	---	68.2	10.5
22403.0	47.6	---	74.0	26.4
22439.9	---	38.9	54.0	15.1

30 MHz – 40 GHz, 802.11ax160, HE0, Chain A

Radiated Spurious – CH114

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	29.8	---	46.0	16.2
576.0	32.2	---	68.2	36.0
1286.5	45.0	---	68.2	23.2
5181.0	63.5	---	68.2	4.7
16736.1	51.9	---	68.2	16.3
22279.8	47.7	---	74.0	26.3
22280.0	---	39.9	54.0	14.1

30 MHz – 40 GHz, 802.11ax160, HE0, Chain B

Radiated Spurious – CH114

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	29.8	---	46.0	16.2
576.0	32.9	---	68.2	35.3
1286.5	47.1	---	68.2	21.1
5182.5	65.6	---	68.2	2.6
16475.6	58.1	---	68.2	10.1
21968.4	47.1	---	68.2	21.1
22280.0	48.4	---	74.0	25.6
22280.0	---	40.8	54.0	13.2

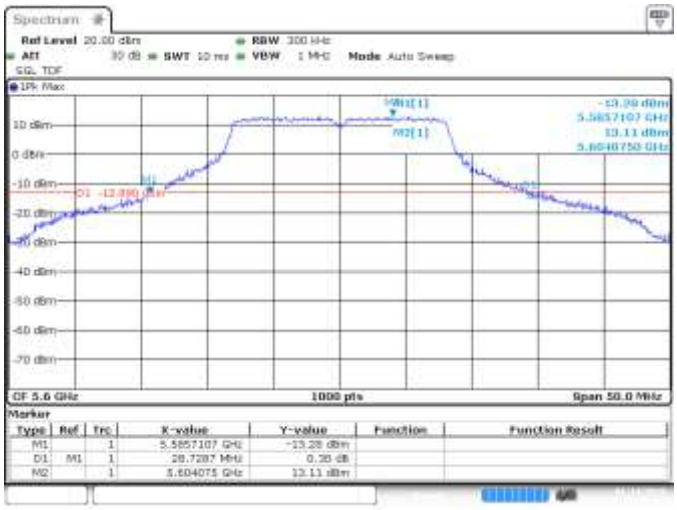
30 MHz – 40 GHz, 802.11ax160, HE0, Chain A+B

Radiated Spurious – CH114

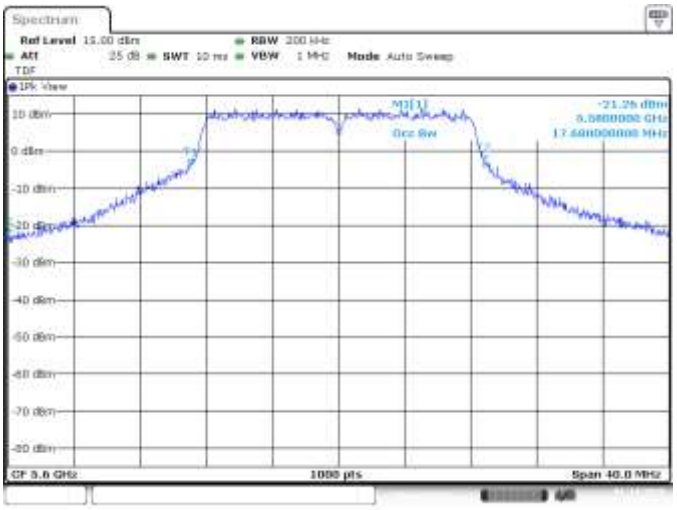
Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
408.0	29.4	---	46.0	16.6
576.0	33.0	---	68.2	35.2
1287.0	48.5	---	68.2	19.7
5182.0	**65.7**	---	68.2	2.5
16710.5	52.6	---	68.2	15.6
22280.3	46.9	---	74.0	27.1
22280.8	---	41.2	54.0	12.8

B.3 Test Results Screenshots

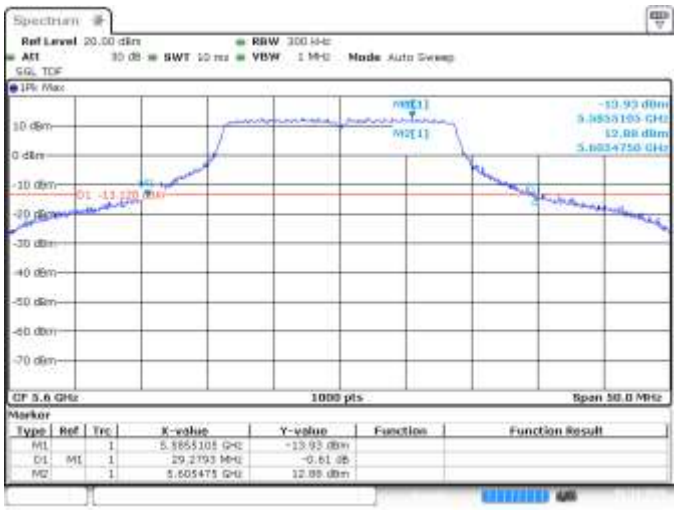
B.3.1 26dB & 99% Bandwidth



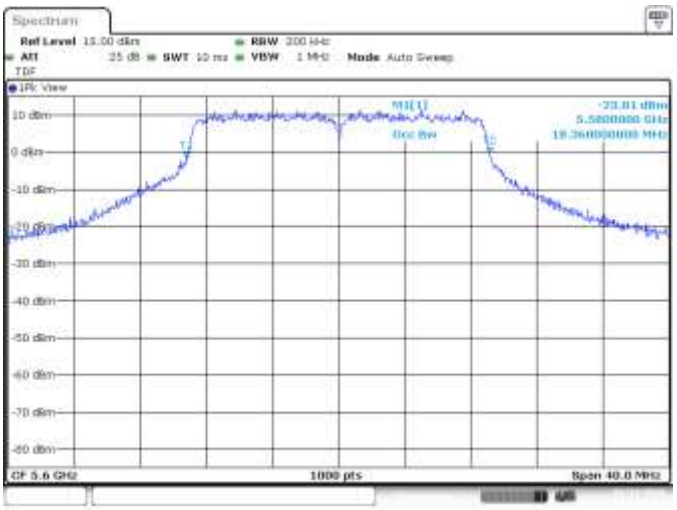
SISO B, CH120, 802.11a, 6Mbps, 26dB BW



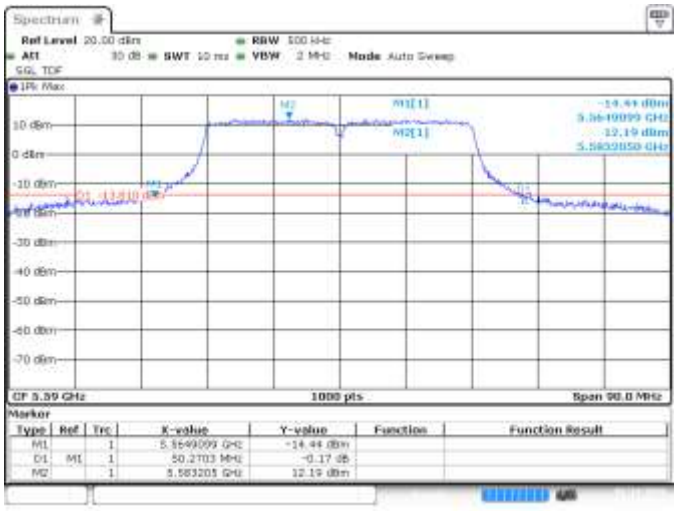
SISO B, CH120, 802.11a, 6Mbps, 99% BW



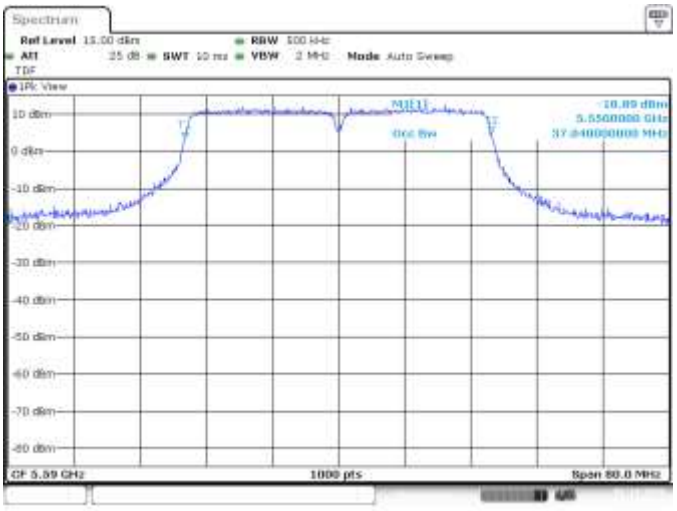
SISO B, CH120, 802.11n20, HT0, 26dB BW



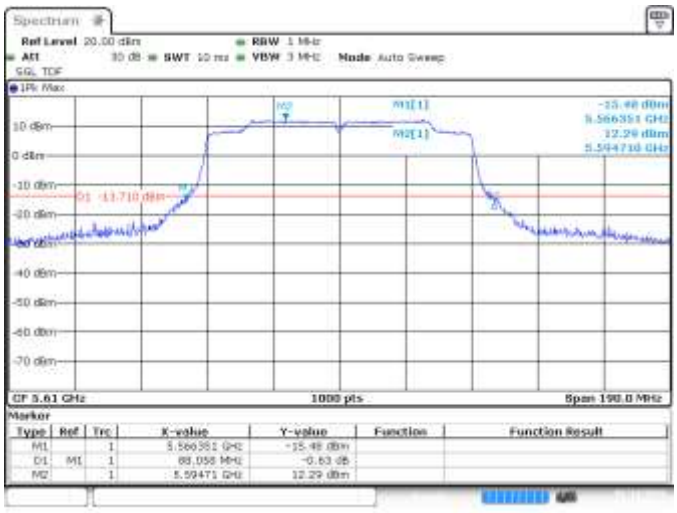
SISO B, CH120, 802.11n20, HT0, 99% BW



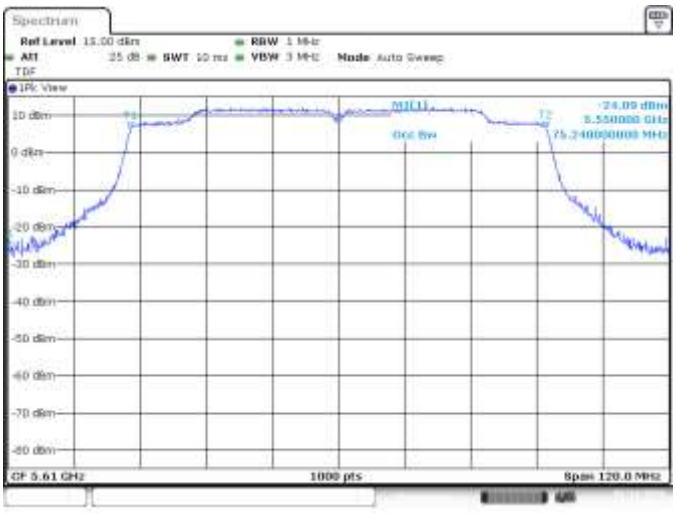
SISO B, CH118, 802.11n40, HT0, 26dB BW



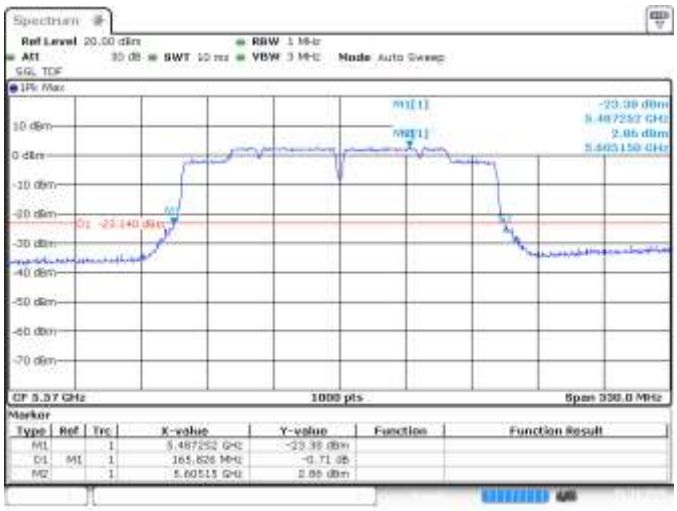
SISO B, CH118, 802.11n40, HT0, 99% BW



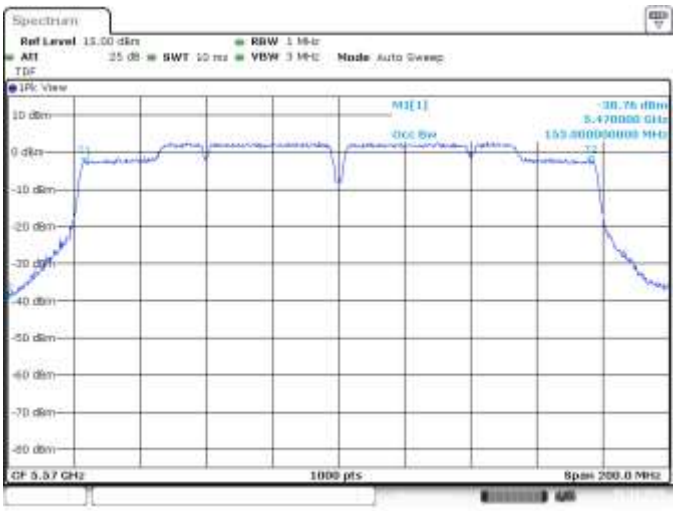
SISO B, CH122, 802.11ac80, VHT0, 26dB BW



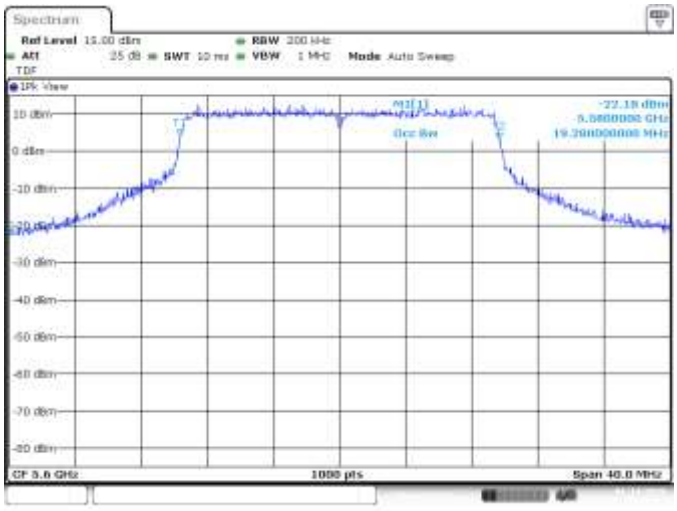
SISO B, CH122, 802.11ac80, VHT0, 99% BW



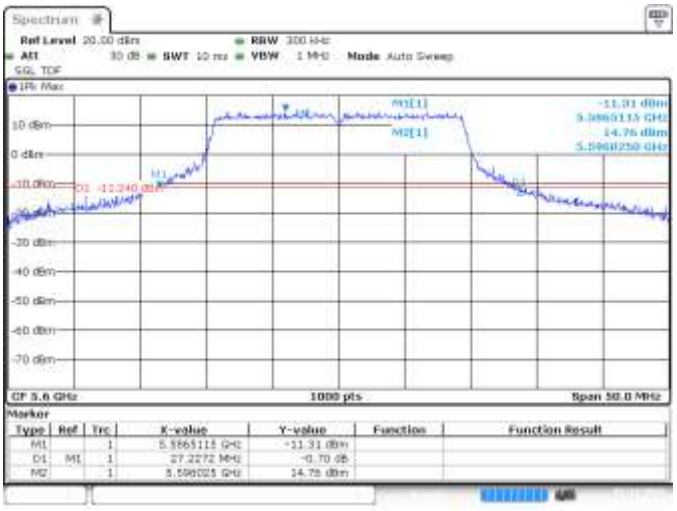
MIMO B, CH114, 802.11ac160, VHT0, 26dB BW



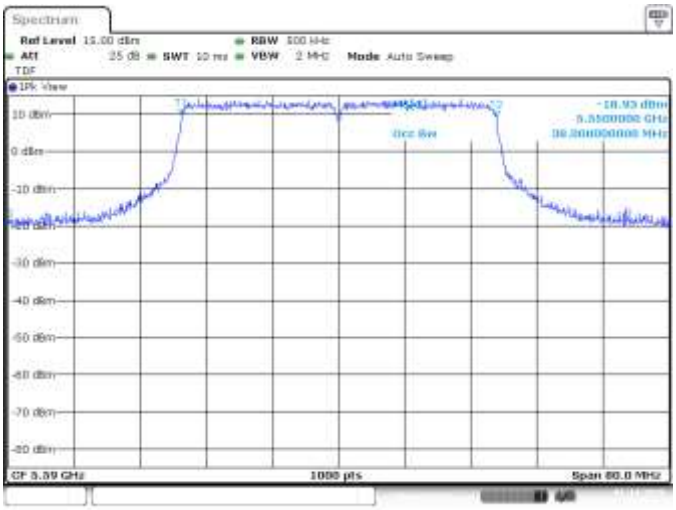
MIMO B, CH114, 802.11ac160, VHT0, 99% BW



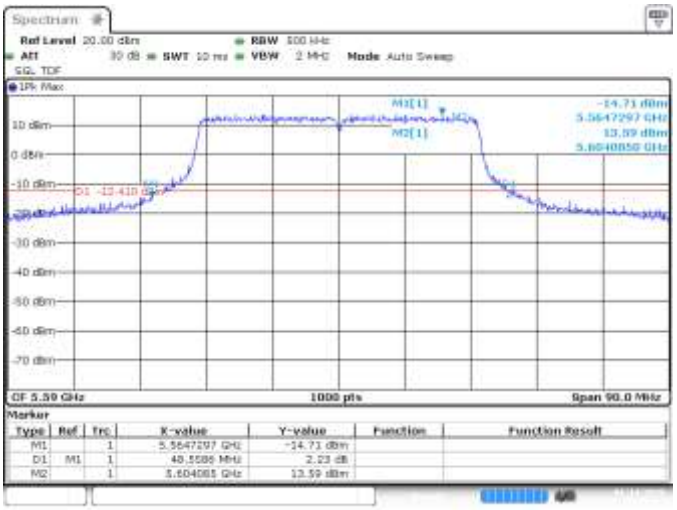
SISO B, CH120, 802.11ax20, HE0, 99% BW



SISO B, CH120, 802.11ax20, HE0, 26dB BW

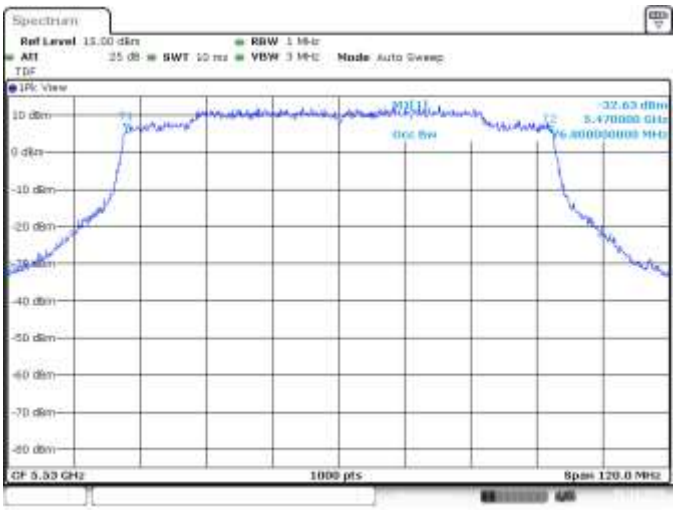


SISO B, CH134, 802.11ax40, HE0, 99% BW

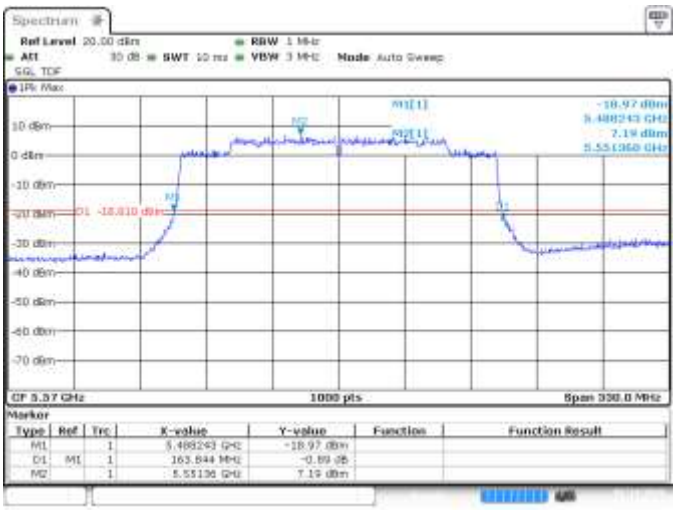


MIMO B, CH102, 802.11ax40, HE0, 26dB BW

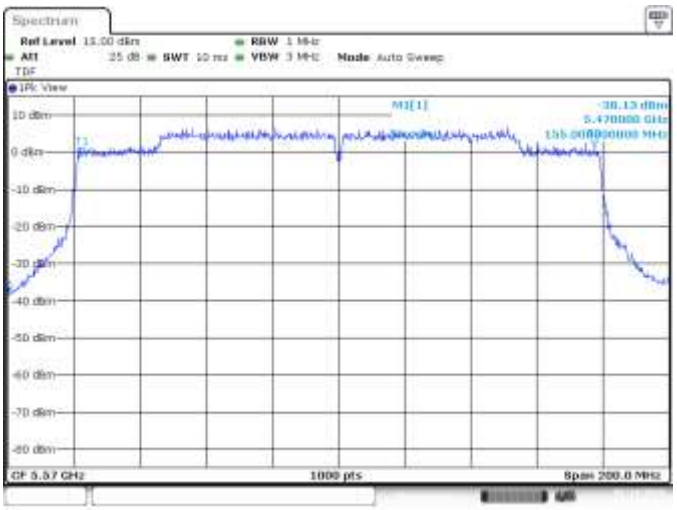
MIMO B, CH106, 802.11ax80, HE0, 26dB BW



MIMO B, CH106, 802.11ax80, HE0, 99% BW

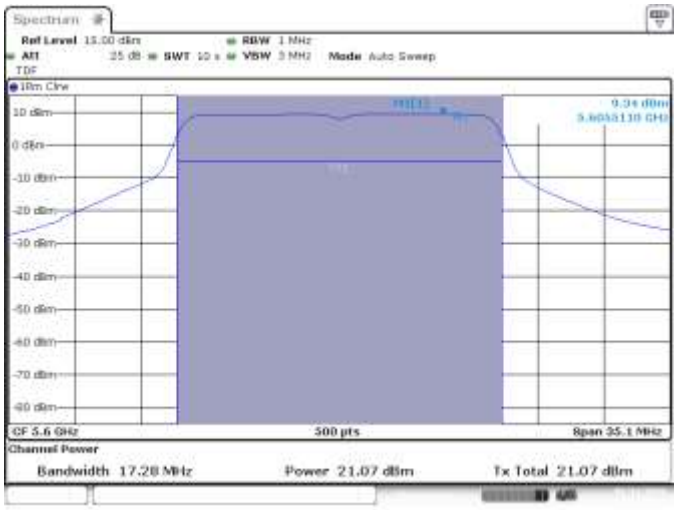


SISO B, CH114, 802.11ax160, HE0, 26dB BW

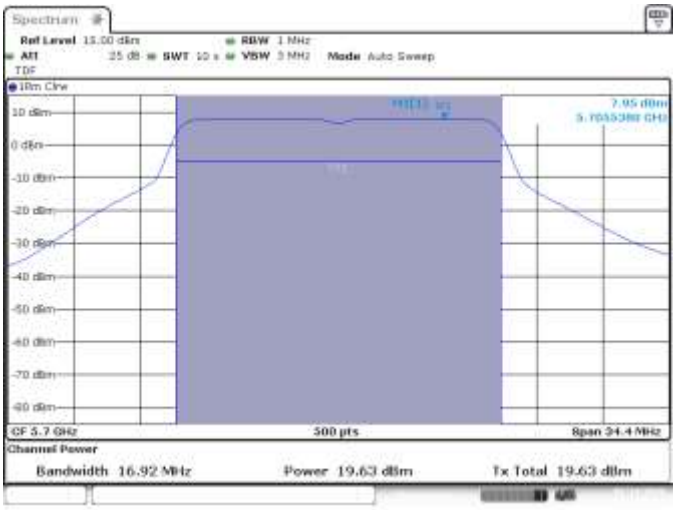


SISO B, CH114, 802.11ax160, HE0, 99% BW

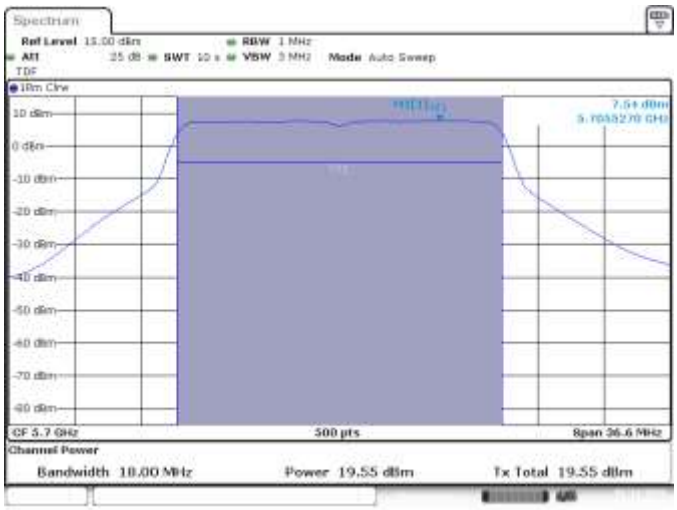
B.3.2 Maximum Output Power & Maximum power spectral Density



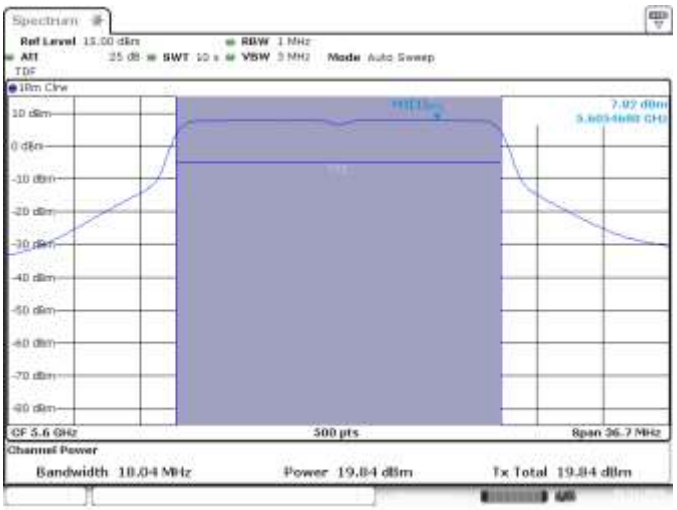
SISO A, CH120, 802.11a, 6Mbps



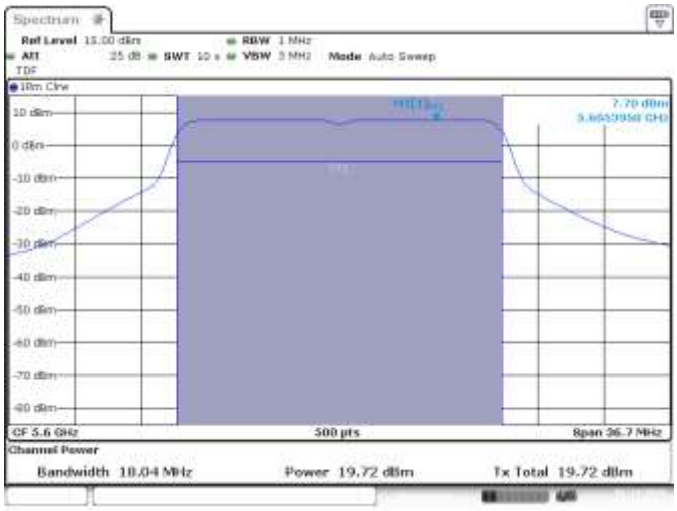
SISO B, CH140, 802.11a, 6Mbps



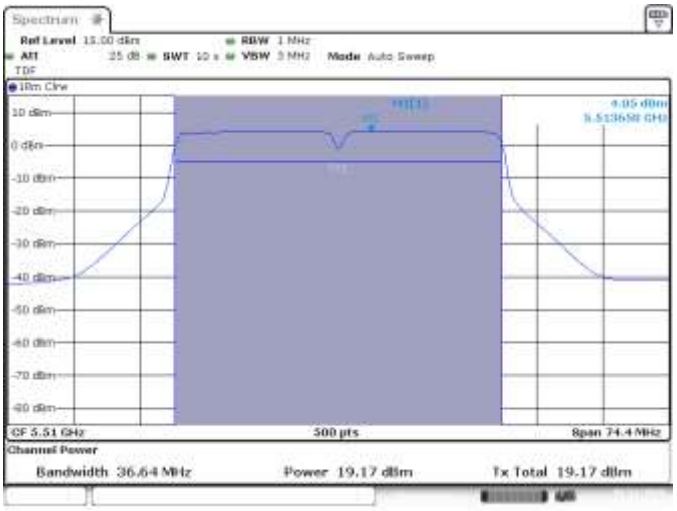
SISO B, CH140, 802.11n20, HT0



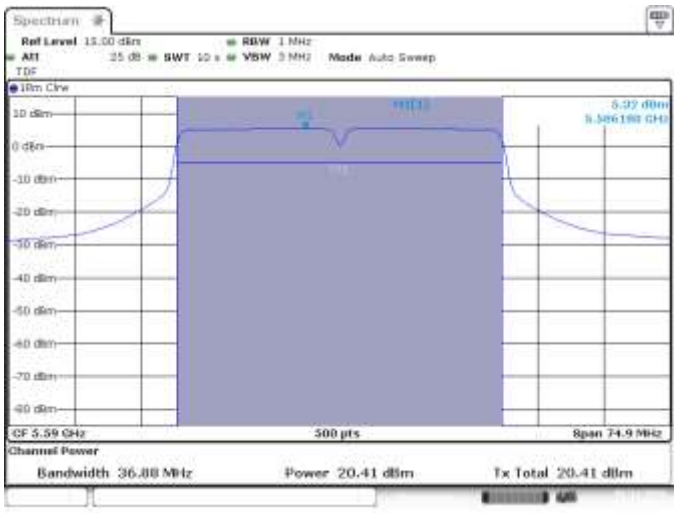
MIMO A, CH120, 802.11n20, HT8



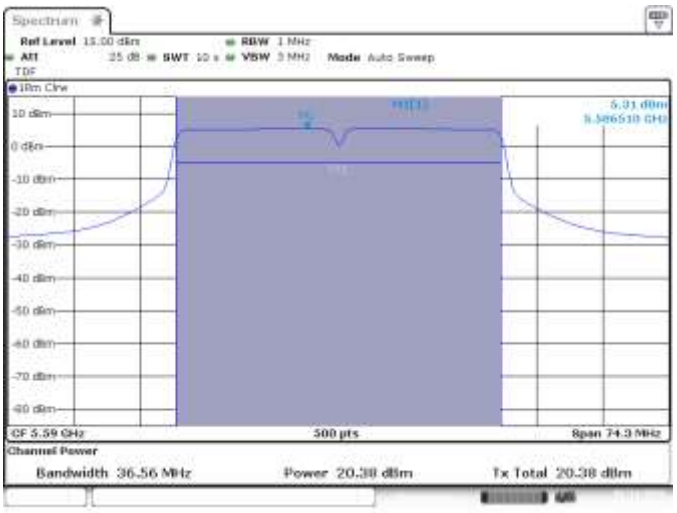
MIMO B, CH120, 802.11n20, HT8



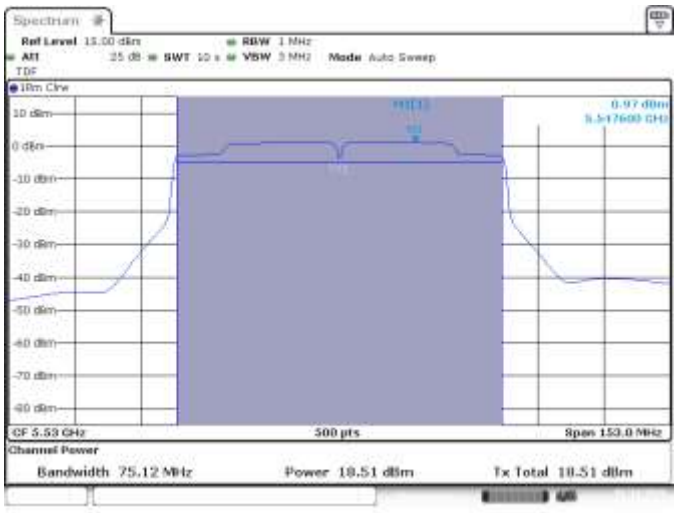
SISO A, CH102, 802.11n40, HT0



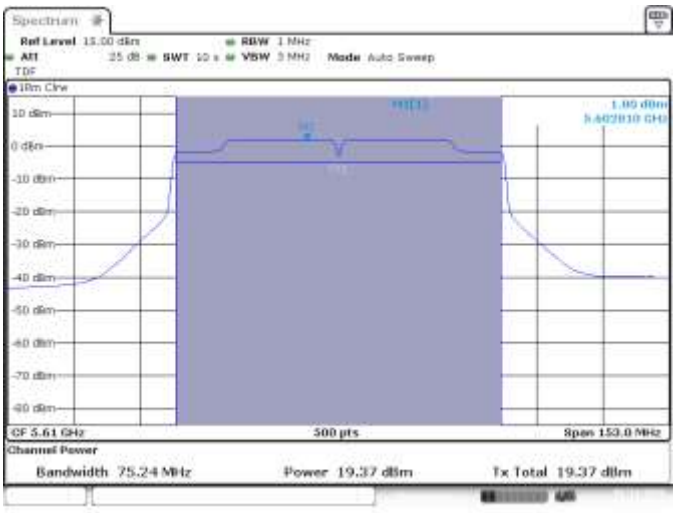
MIMO A, CH118, 802.11n40, HT8



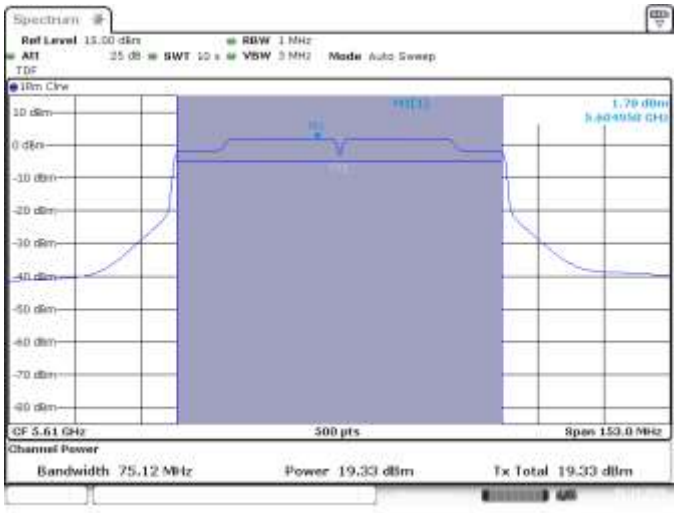
MIMO B, CH118, 802.11n40, HT8



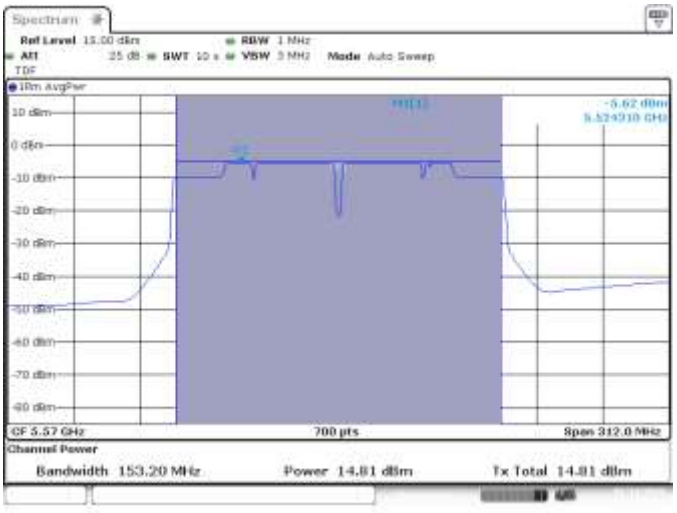
SISO A, CH106, 802.11ac80, VHT0



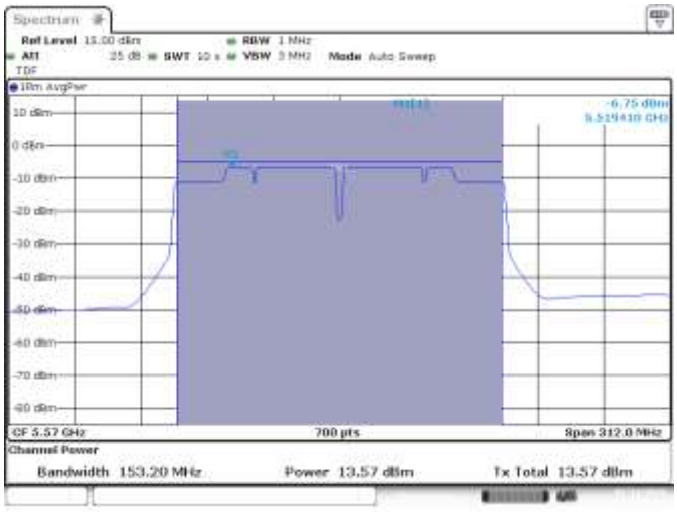
MIMO A, CH122, 802.11ac80, VHT0



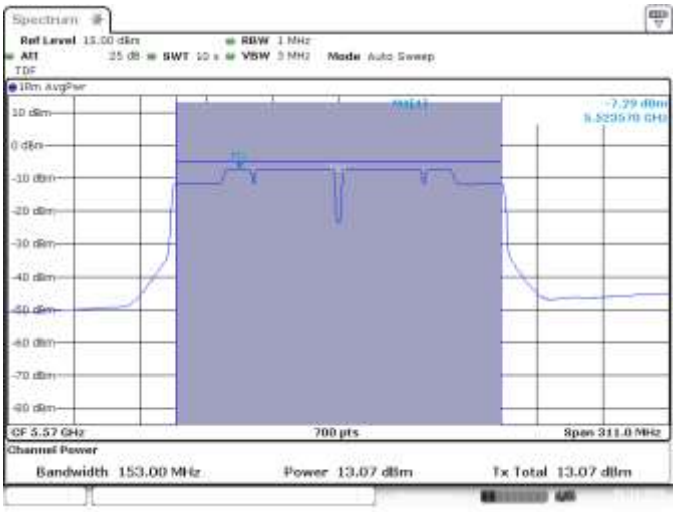
MIMO B, CH122, 802.11ac80, VHT0



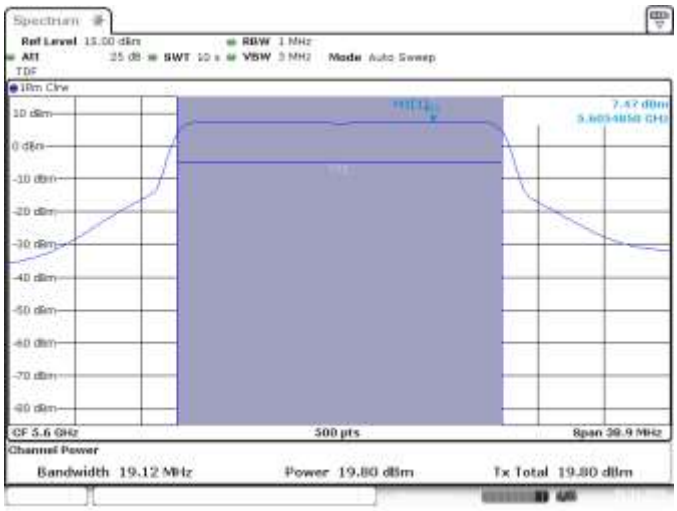
SISO B, CH114, 802.11ac160, VHT0



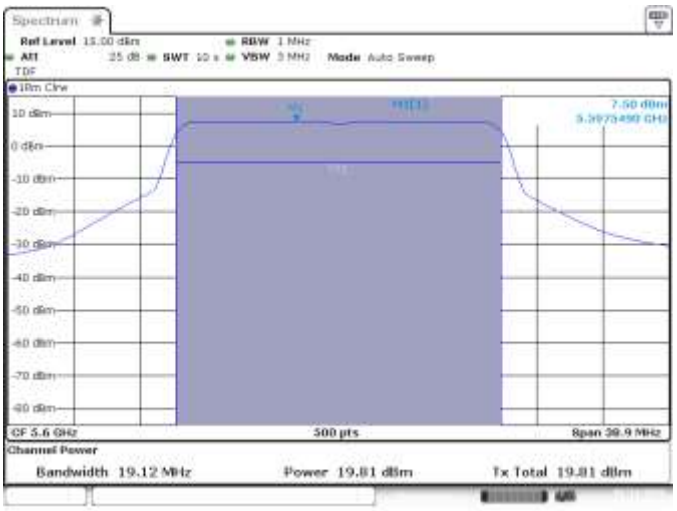
MIMO A, CH114, 802.11ac160, VHT0



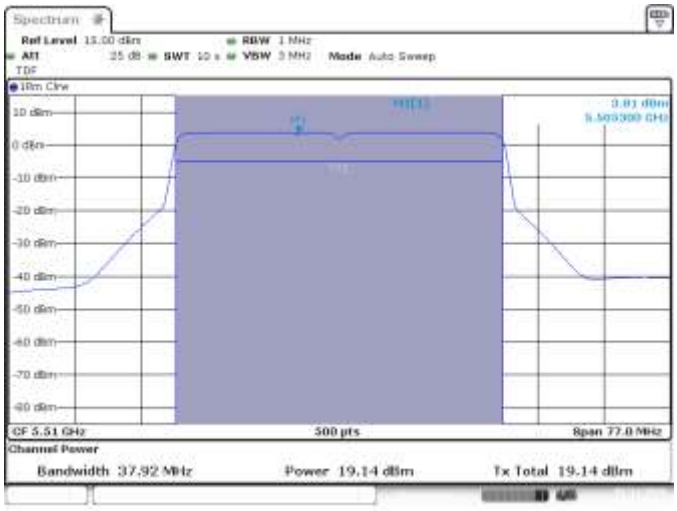
MIMO B, CH114, 802.11ac160, VHT0



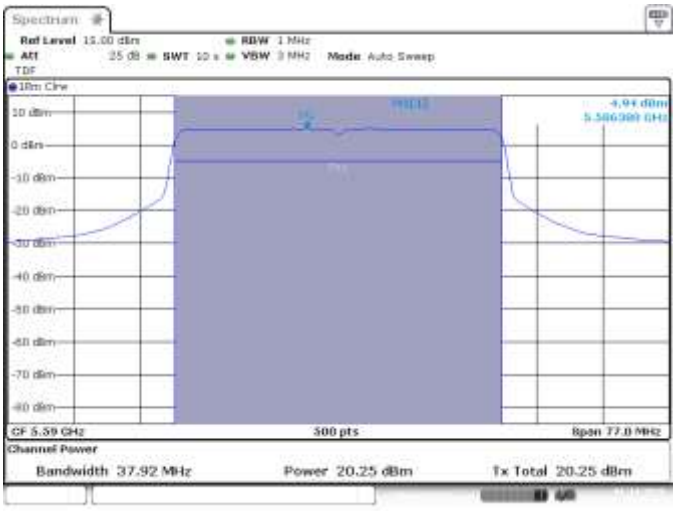
MIMO A, CH120, 802.11ax20, HE0



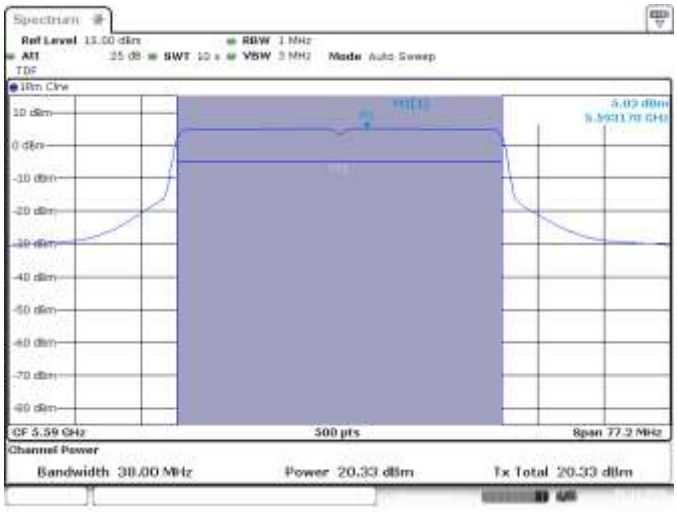
MIMO B, CH120, 802.11ax20, HE0



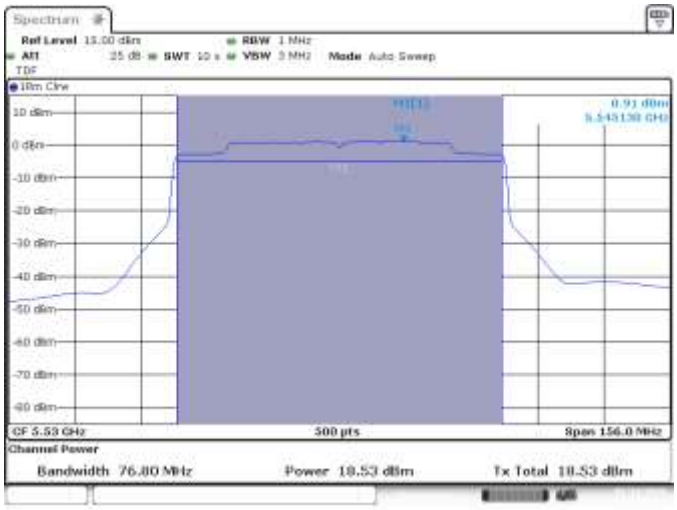
SISO A, CH102, 802.11ax40, HE0



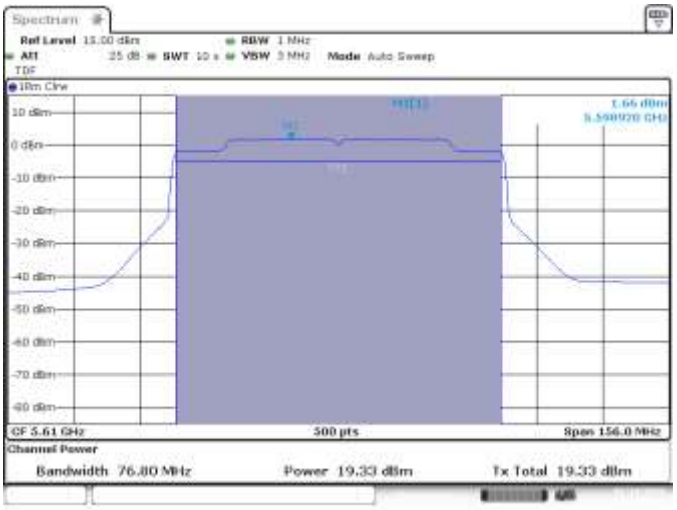
MIMO A, CH118, 802.11ax40, HE0



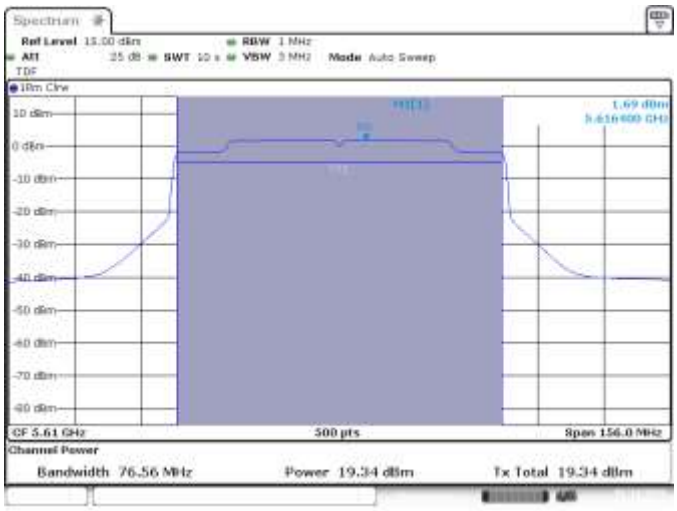
MIMO A, CH118, 802.11ax40, HE0



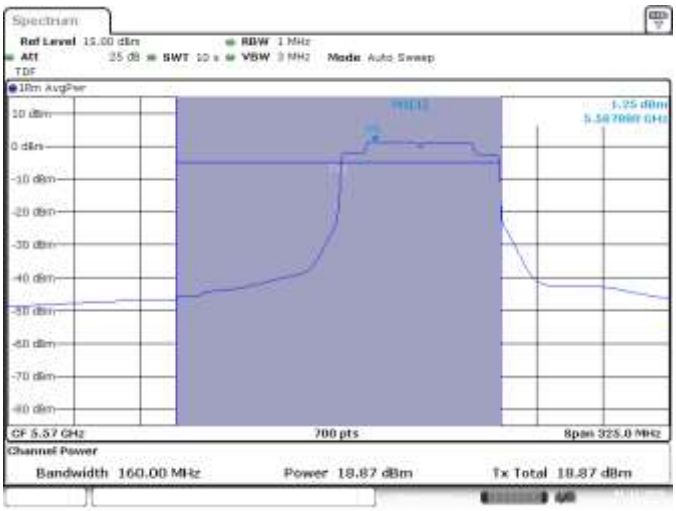
SISO A, CH106, 802.11ax80, HE0



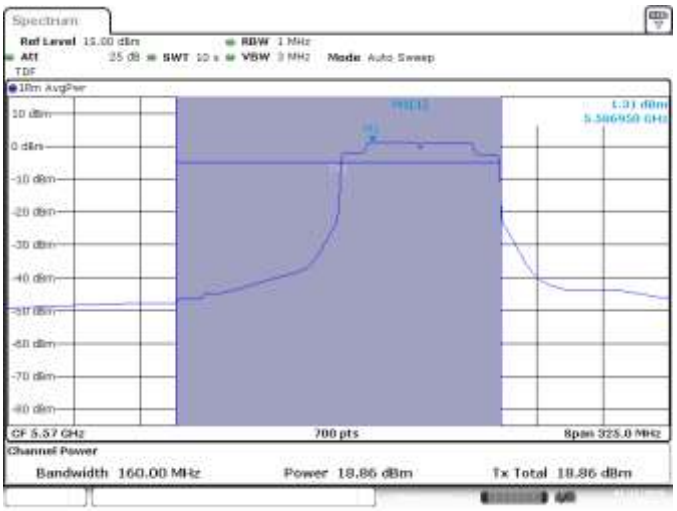
MIMO A, CH122, 802.11ax80, HE0



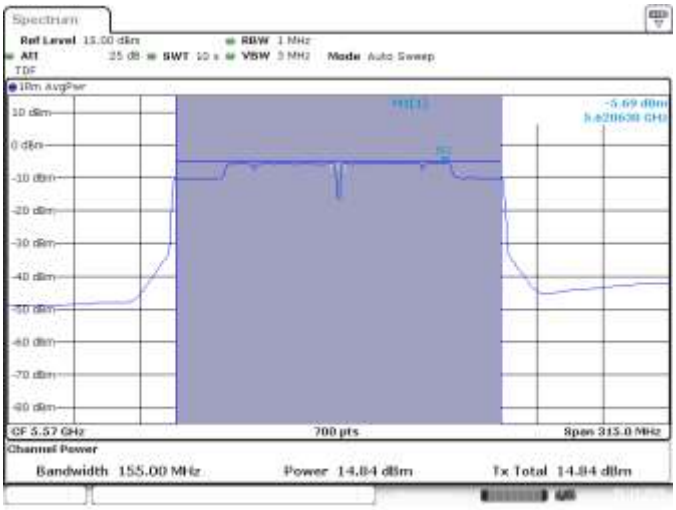
MIMO B, CH122, 802.11ax80, HE0



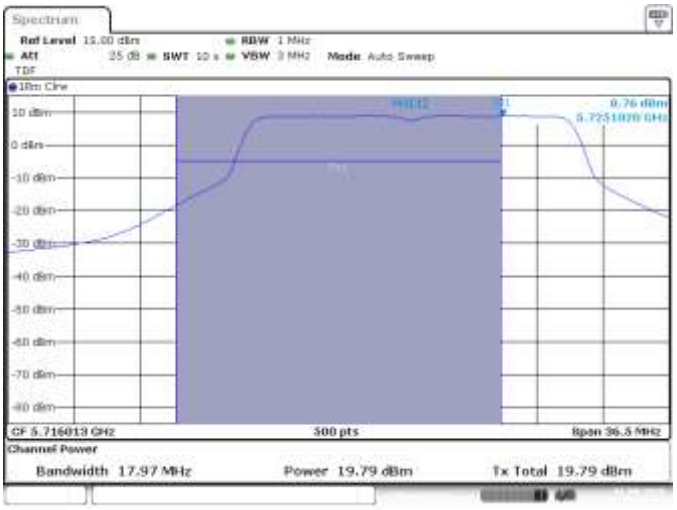
MIMO A, CH114, 802.11ax160, HE0



MIMO B, CH114, 802.11ax160, HE0

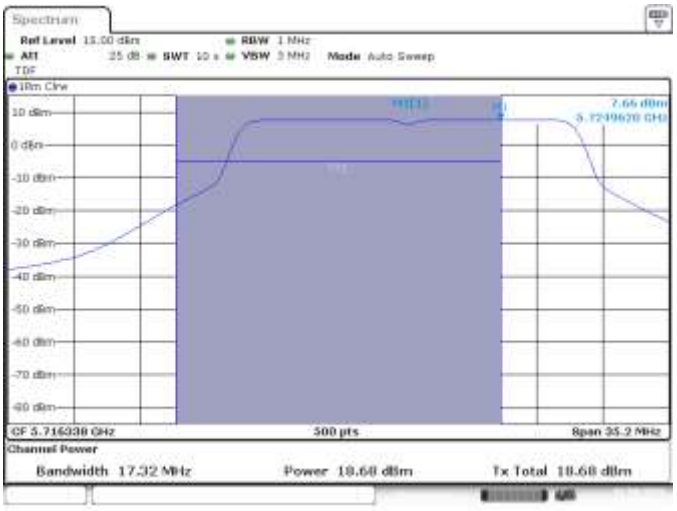


SISO B, CH114, 802.11ax160, HE0

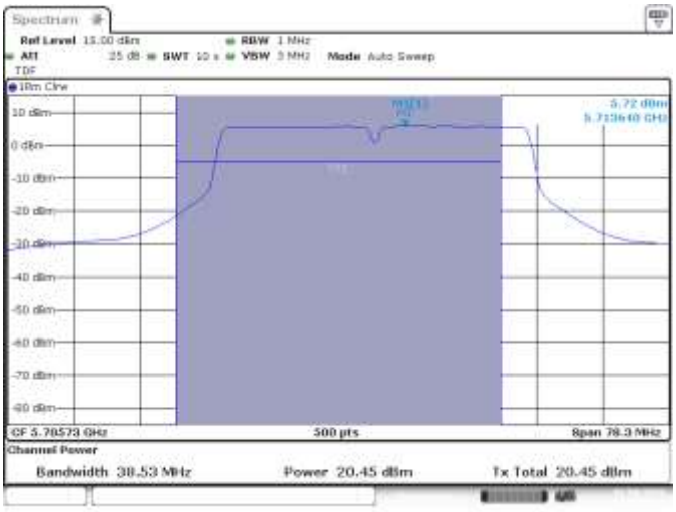


SISO B, CH144, 802.11n20, HT0 - Overlapped

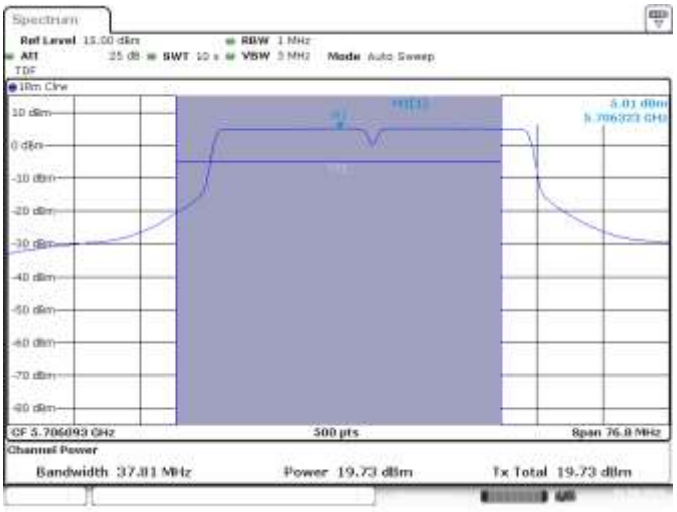
MIMO A, 802.11n20, Overlapped CH144



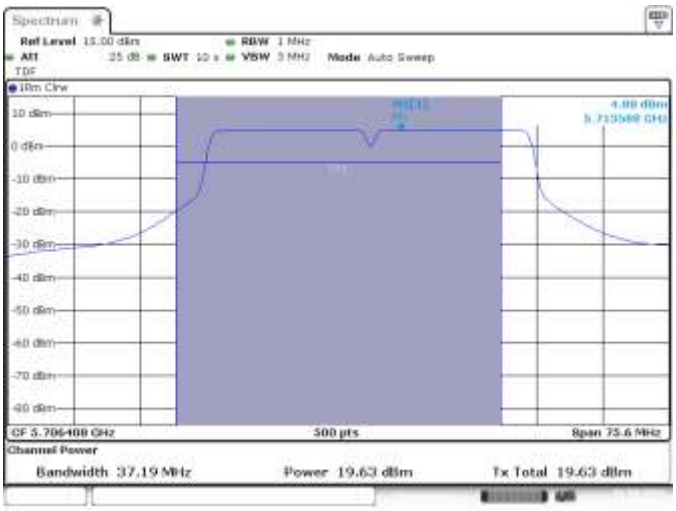
MIMO B, 802.11n20, Overlapped CH144



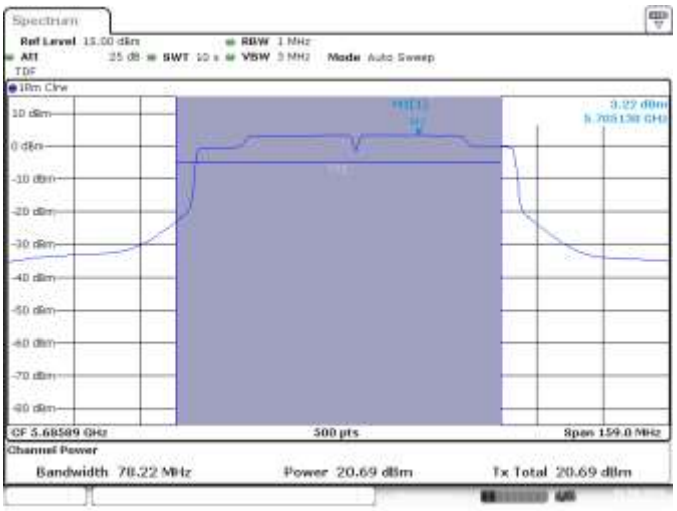
SISO B, 802.11n40, Overlapped CH142



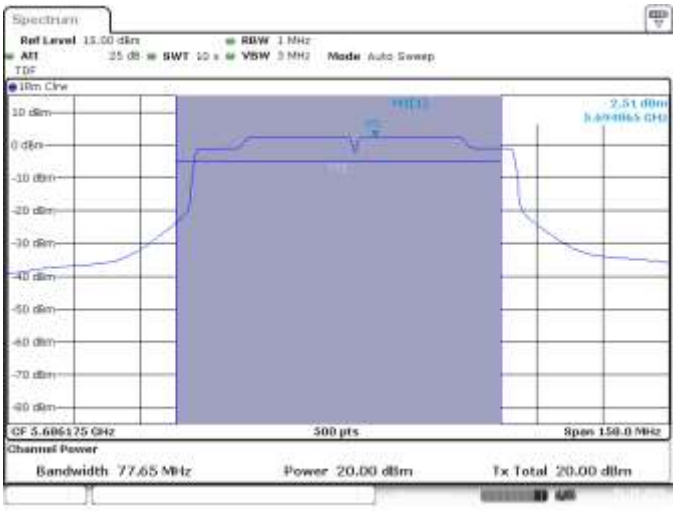
MIMO A, 802.11n40, Overlapped CH142



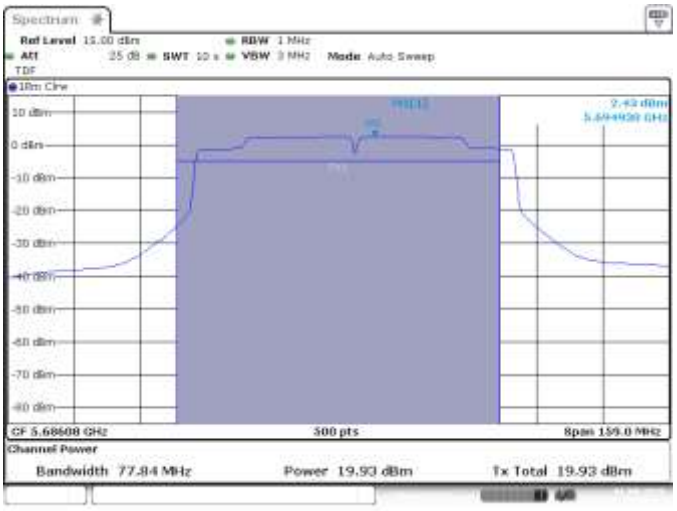
MIMO B, 802.11n40, Overlapped CH142



SISO B, 802.11ac80, Overlapped CH138

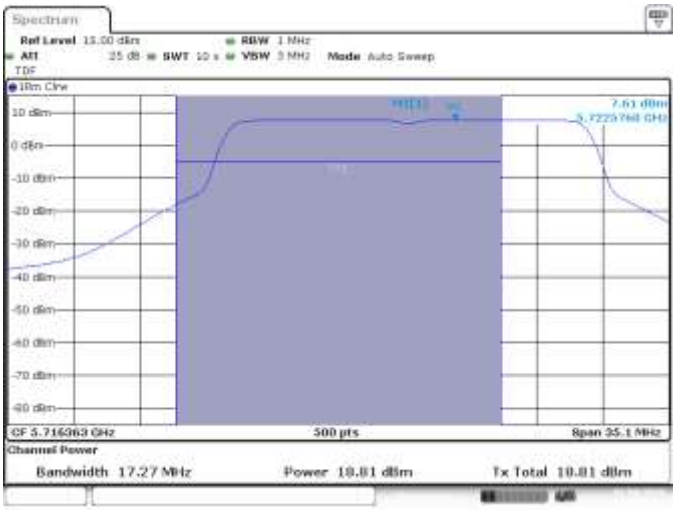


MIMO A, 802.11ac80, Overlapped CH138

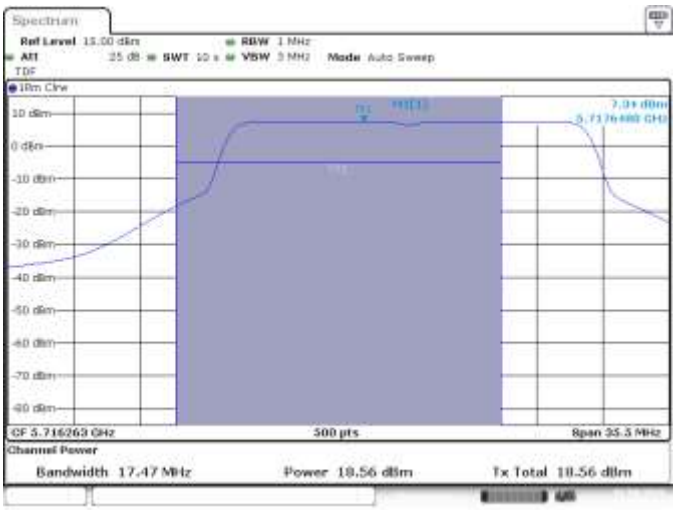


MIMO B, 802.11ac80, Overlapped CH138

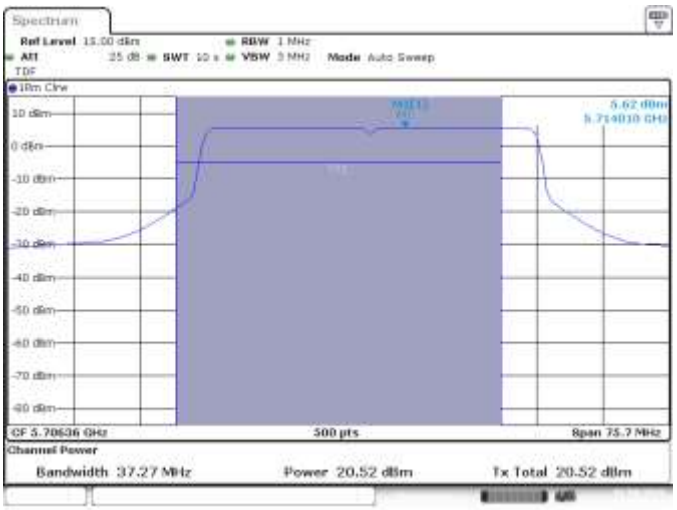
SISO B, HE0, 802.11ax20, Overlapped CH144



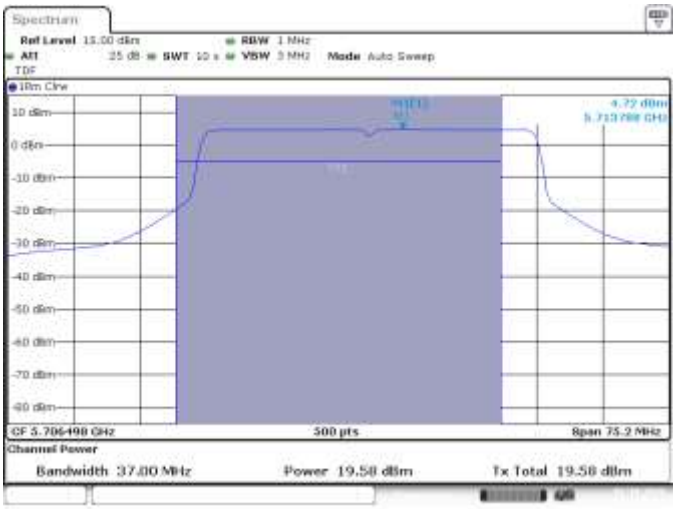
MIMO A, HE0, 802.11ax20, Overlapped CH144



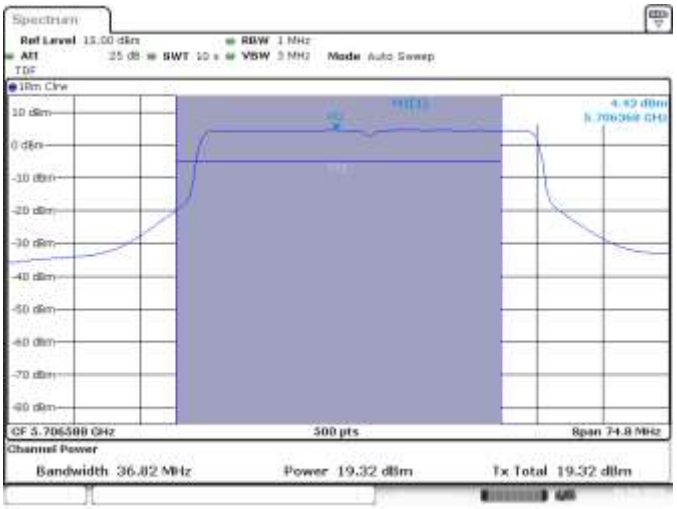
MIMO B, HE0, 802.11ax20, Overlapped CH144



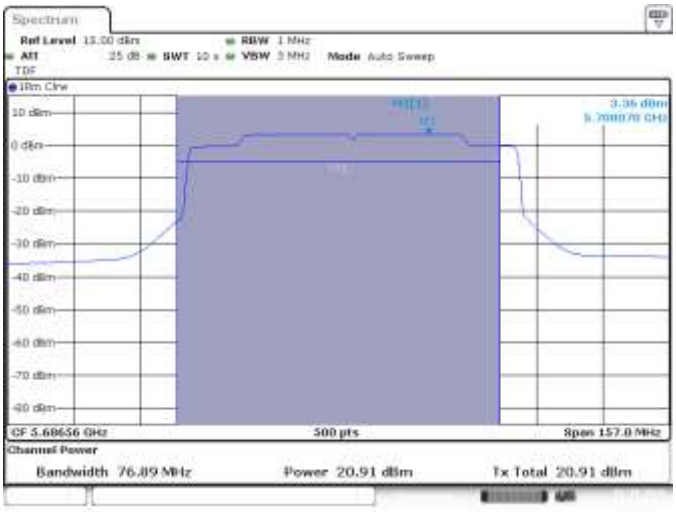
SISO A, HE0, 802.11ax40, Overlapped CH142



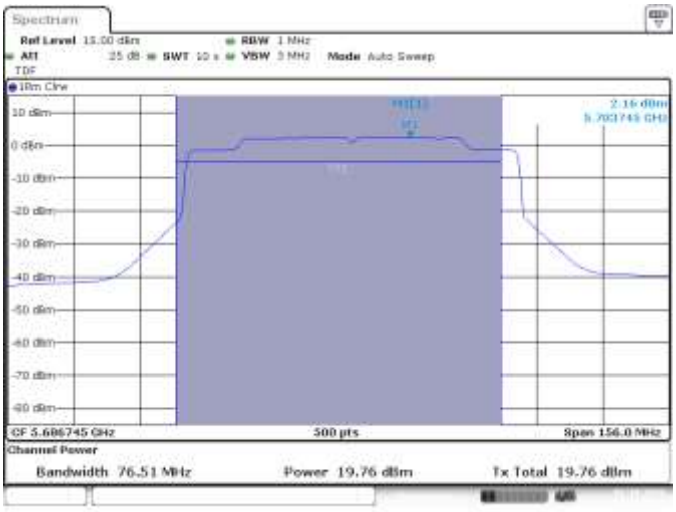
MIMO A, HE0, 802.11ax40, Overlapped CH142



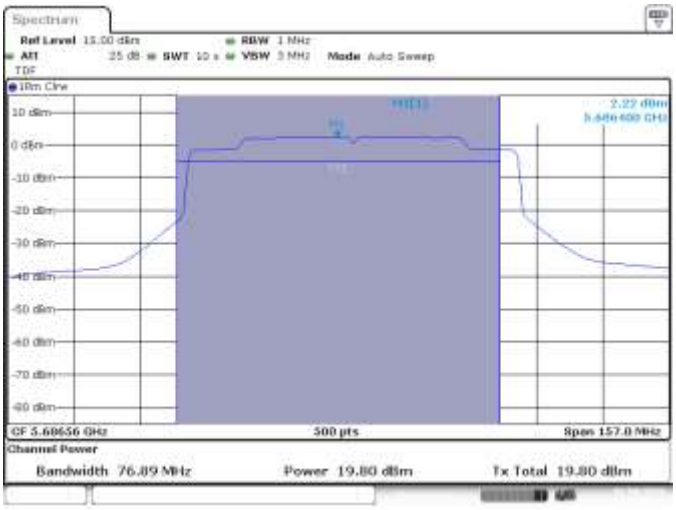
MIMO B, HE0, 802.11ax40, Overlapped CH142



SISO A, HE0, 802.11ax80, Overlapped CH138

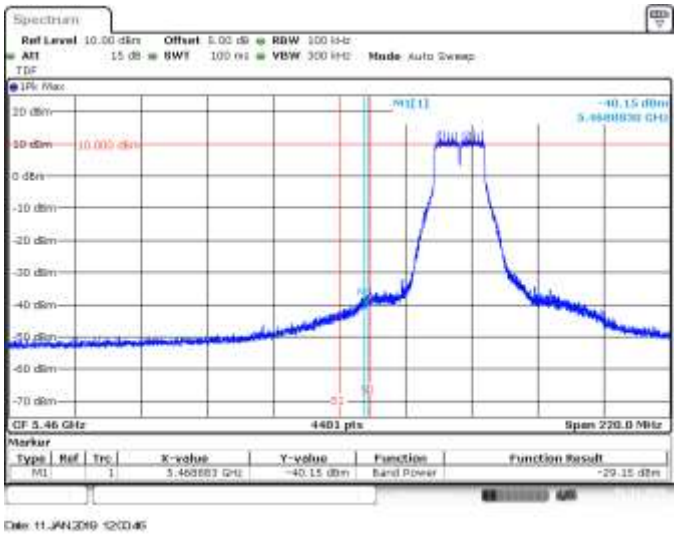


MIMO A, HE0, 802.11ax80, Overlapped CH138

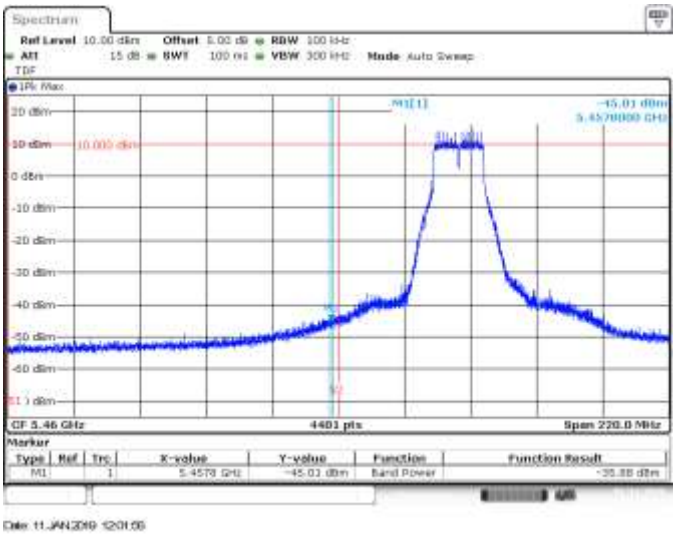


MIMO B, HE0, 802.11ax80, Overlapped CH138

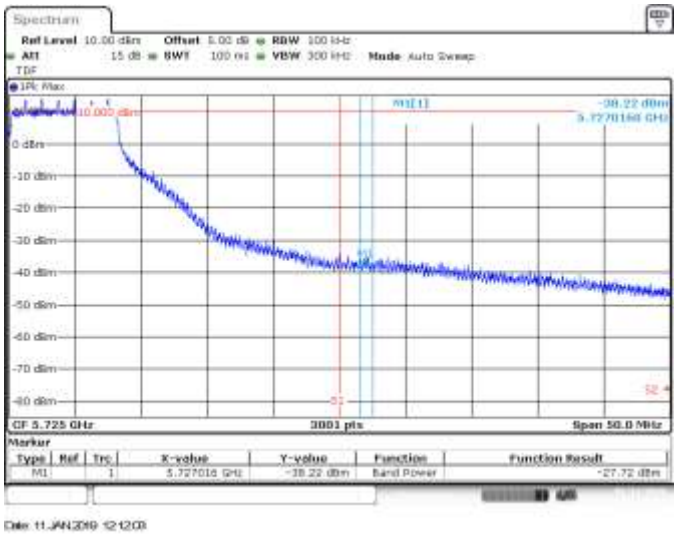
B.3.3 Undesirable emission limits : Band Edge (Conducted)



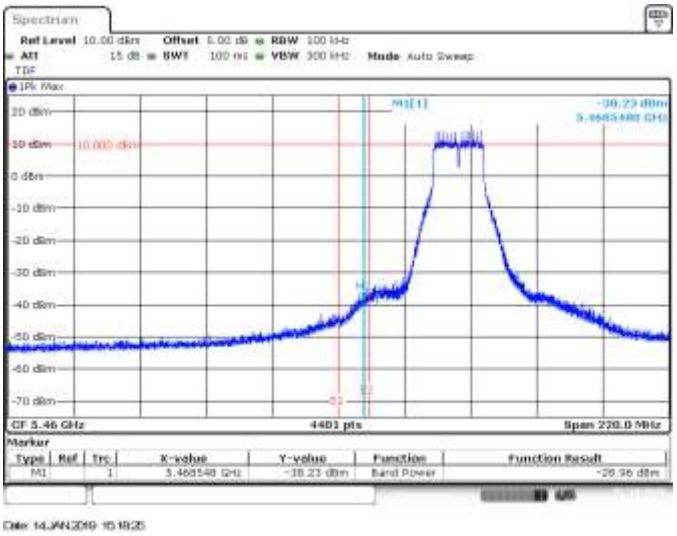
SISO A, 802.11a, 6Mbps, CH100, BE Low Peak (Non Restricted)



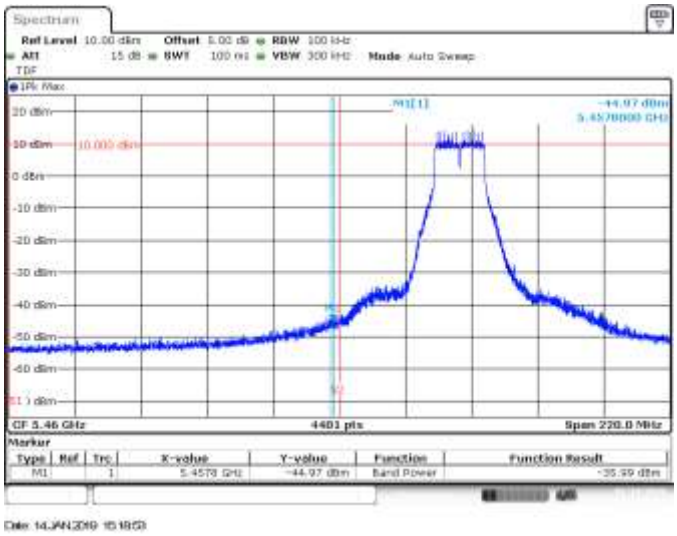
SISO A, 802.11a, 6Mbps, CH100, BE Low Peak (Restricted)



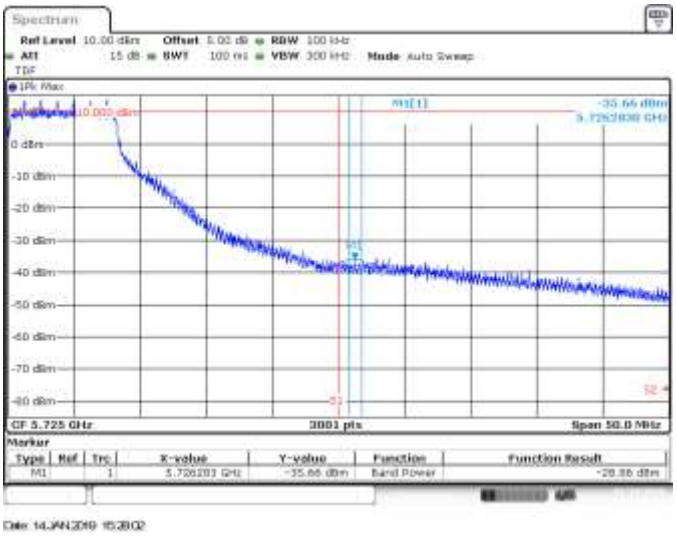
SISO A, 802.11a, 6Mbps, CH140, BE High Peak



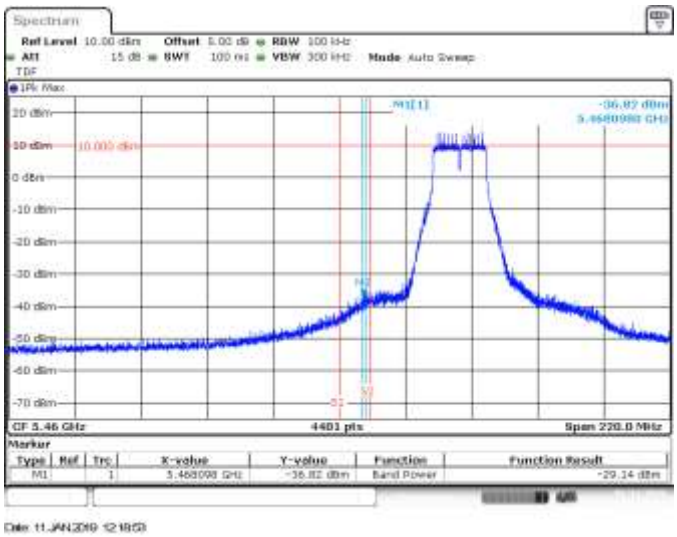
SISO B, 802.11a, 6Mbps, CH100, BE Low Peak (Non Restricted)



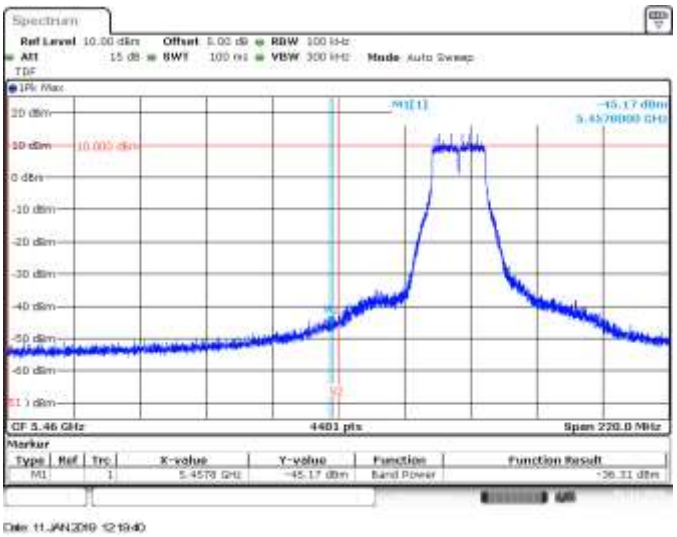
SISO B, 802.11a, 6Mbps, CH100, BE Low Peak (Restricted)



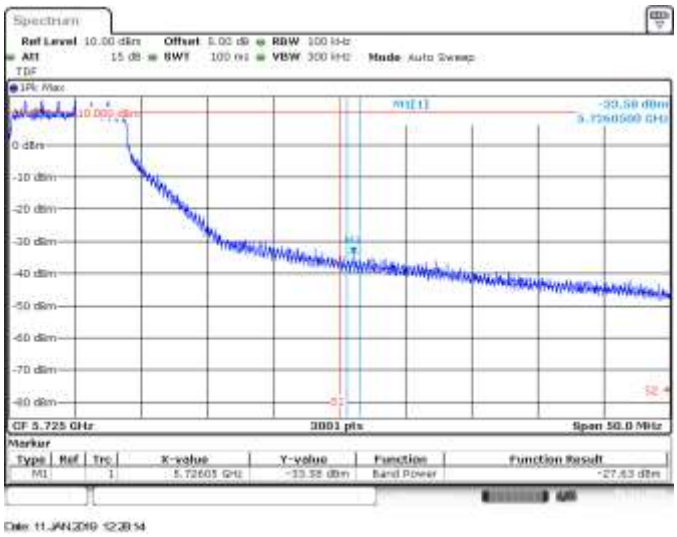
SISO B, 802.11a, 6Mbps, CH140, BE High Peak



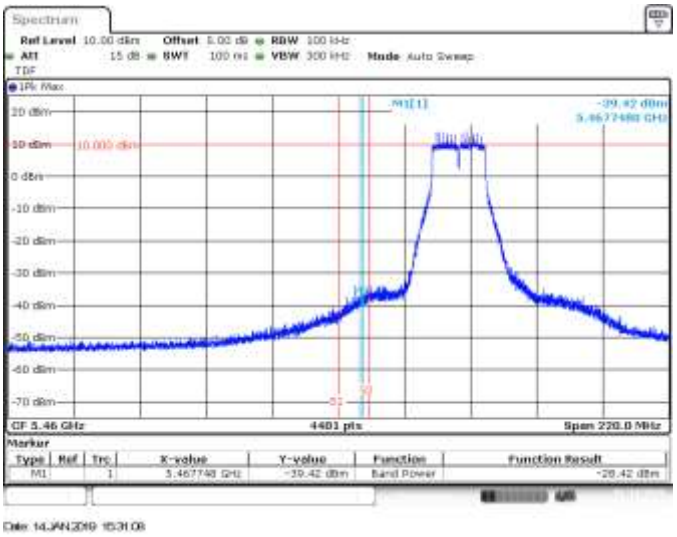
SISO A, 802.11n20, HT0, CH100, BE Low Peak (Non Restricted)



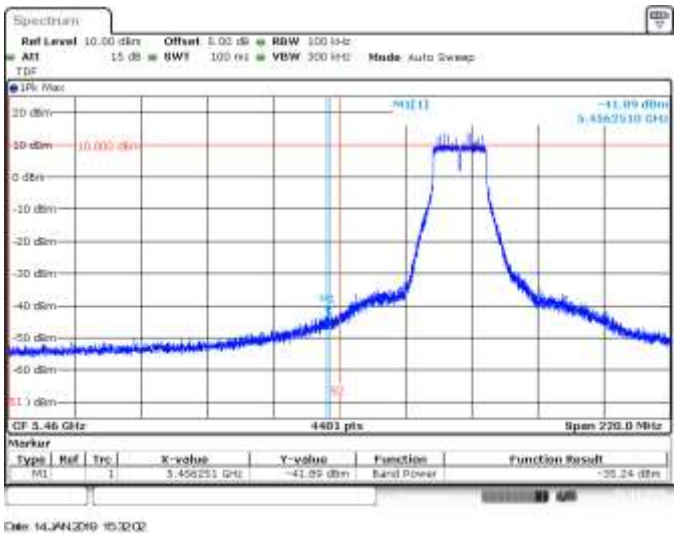
SISO A, 802.11n20, HT0, CH100, BE Low Peak (Restricted)



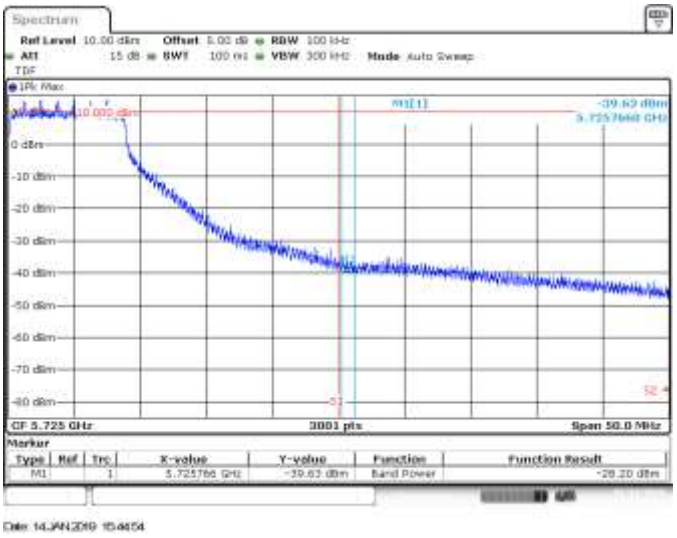
SISO A, 802.11n20, HT0, CH140, BE High Peak



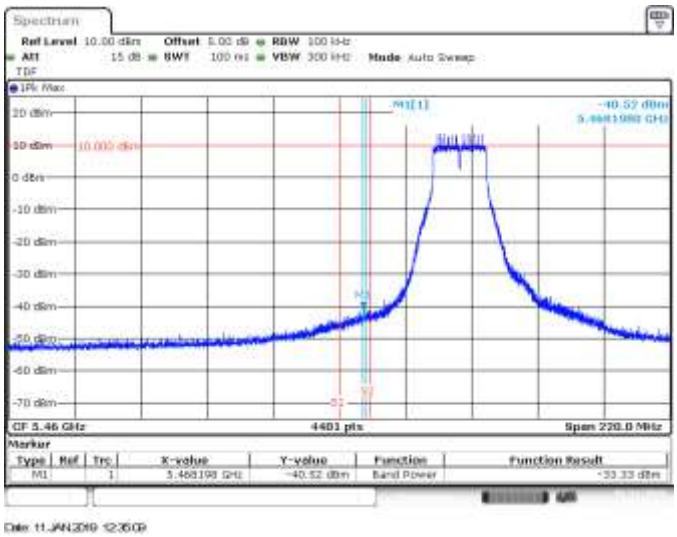
SISO B, 802.11n20, HT0, CH100, BE Low Peak (Non Restricted)



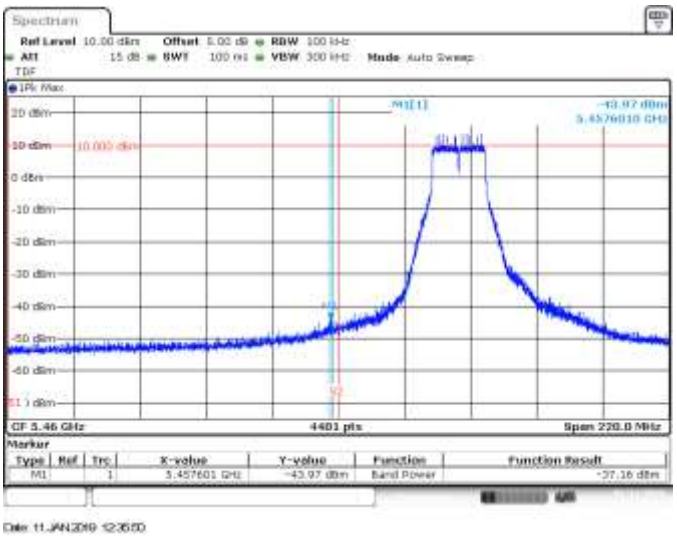
SISO B, 802.11n20, HT0, CH100, BE Low Peak (Restricted)



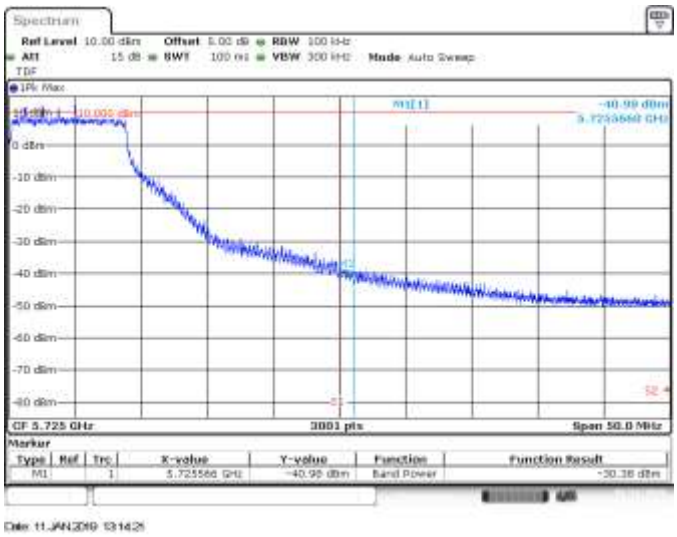
SISO B, 802.11n20, HT0, CH140, BE High Peak



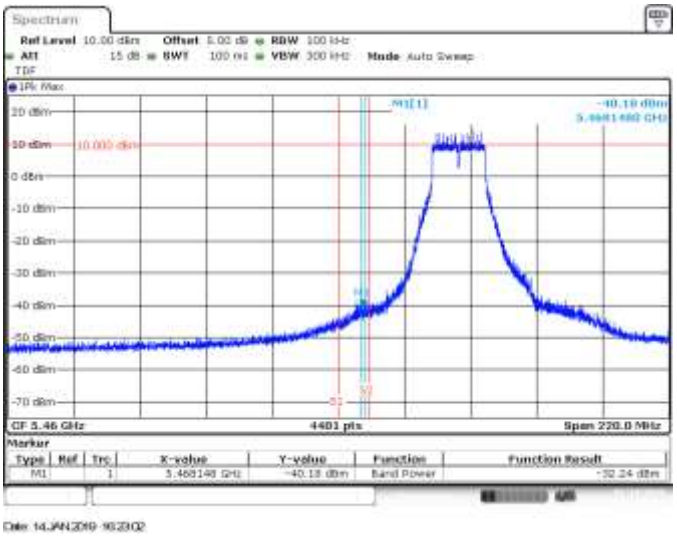
MIMO A, 802.11n20, HT8, CH100, BE Low Peak (Non Restricted)



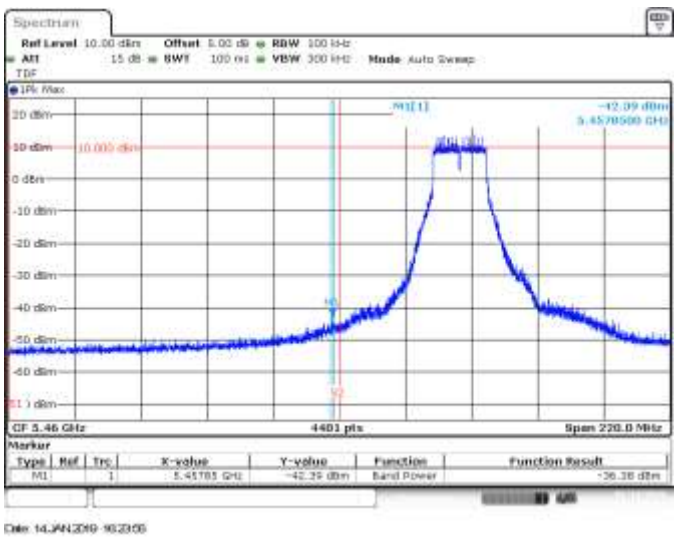
MIMO A, 802.11n20, HT8, CH100, BE Low Peak (Restricted)



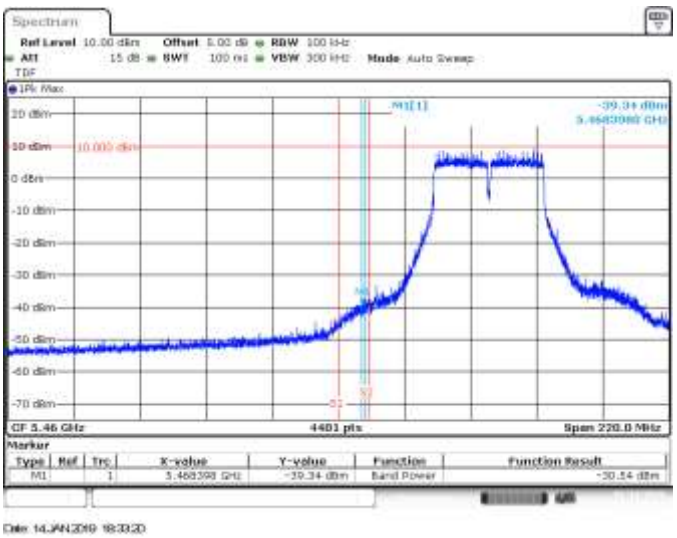
MIMO A, 802.11n20, HT8, CH140, BE High Peak



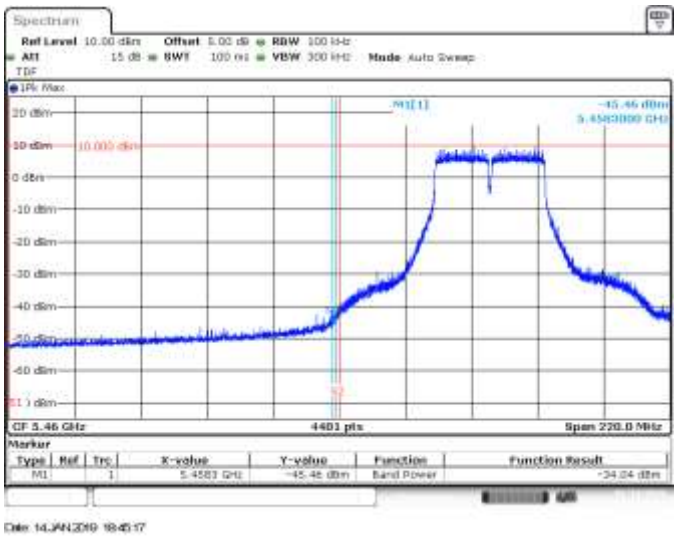
MIMO B, 802.11n20, HT8, CH100, BE Low Peak (Non Restricted)



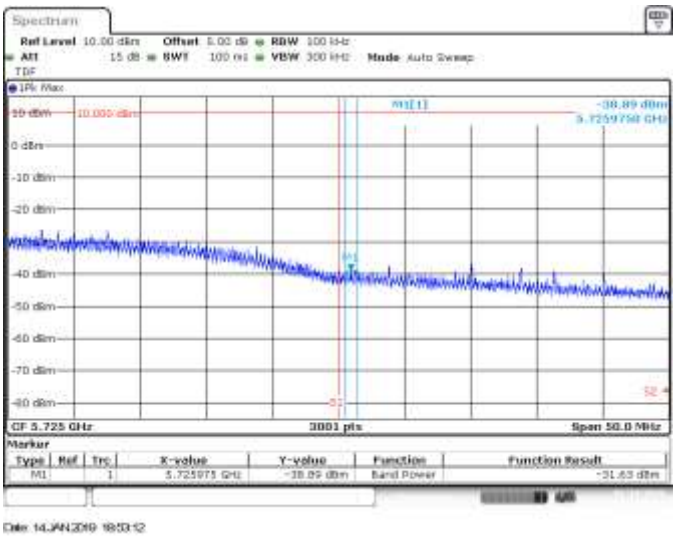
MIMO B, 802.11n20, HT8, CH100, BE Low Peak (Restricted)



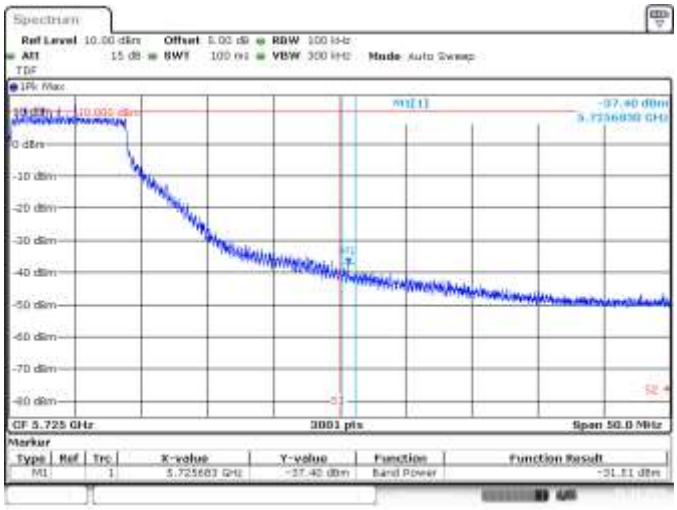
MIMO B, 802.11n20, HT8, CH102, BE Low Peak (Non Restricted)



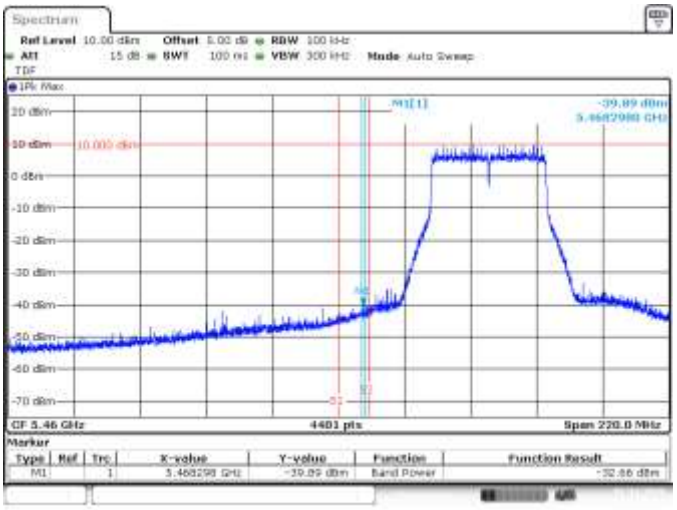
MIMO B, 802.11n20, HT8, CH102, BE Low Peak (Restricted)



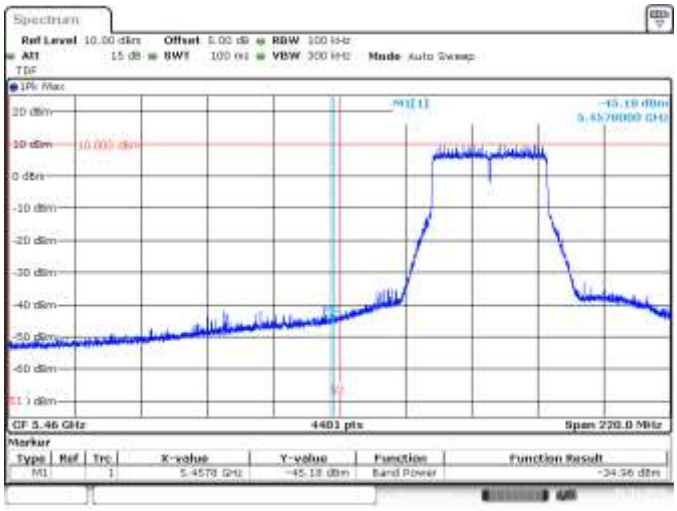
MIMO B, 802.11n20, HT8, CH134, BE High Peak



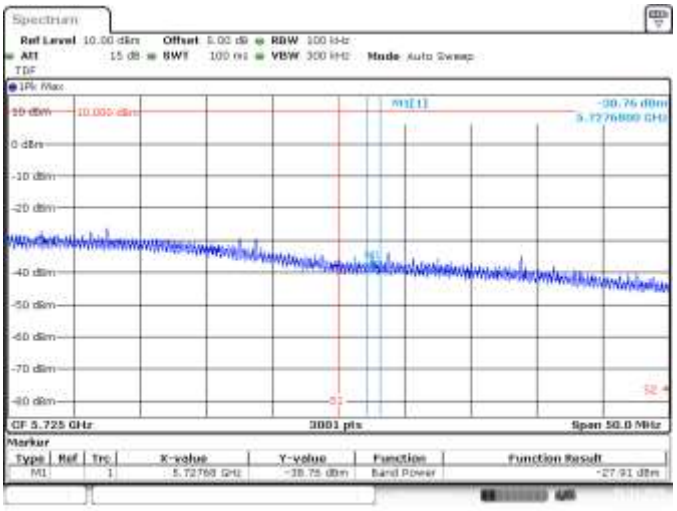
MIMO B, 802.11n20, HT8, CH140, BE High Peak



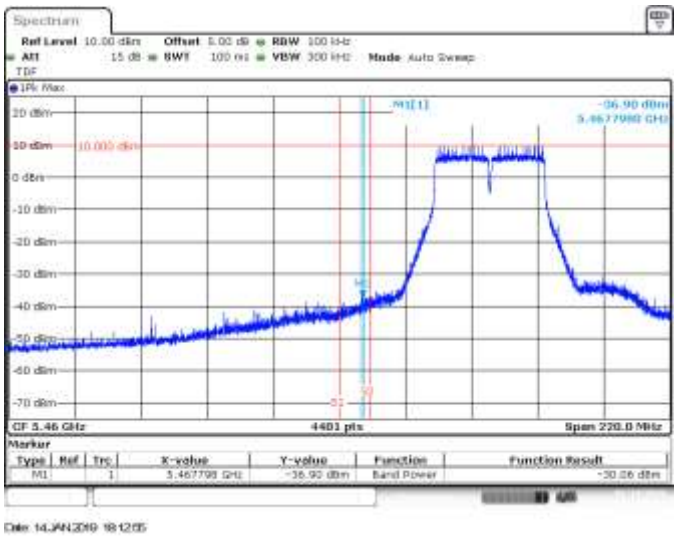
SISO A, 802.11n40, HT0, CH102, BE Low Peak (Non Restricted)



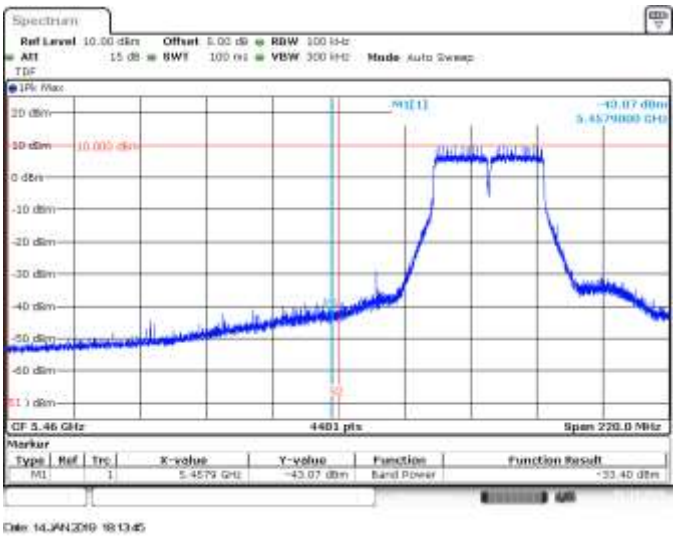
SISO A, 802.11n40, HT0, CH102, BE Low Peak (Restricted)



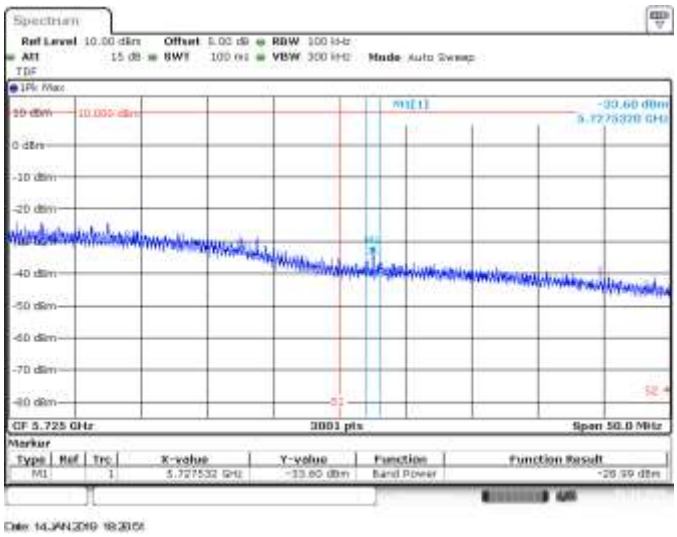
SISO A, 802.11n40, HT0, CH134, BE High Peak



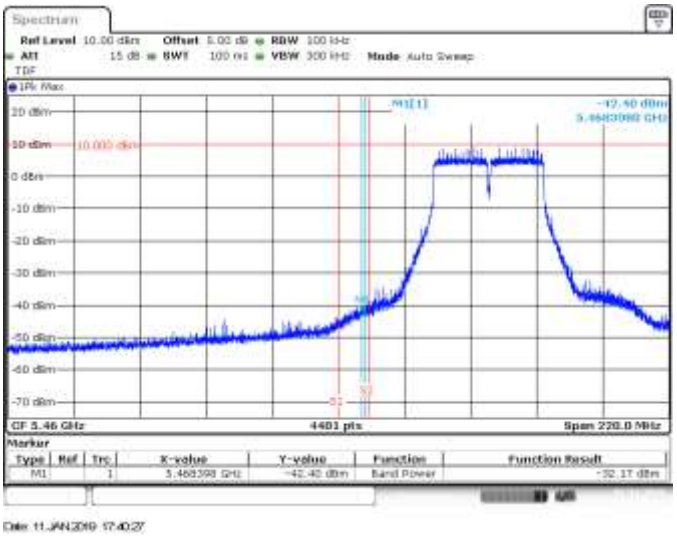
SISO B, 802.11n40, HT0, CH102, BE Low Peak (Non Restricted)



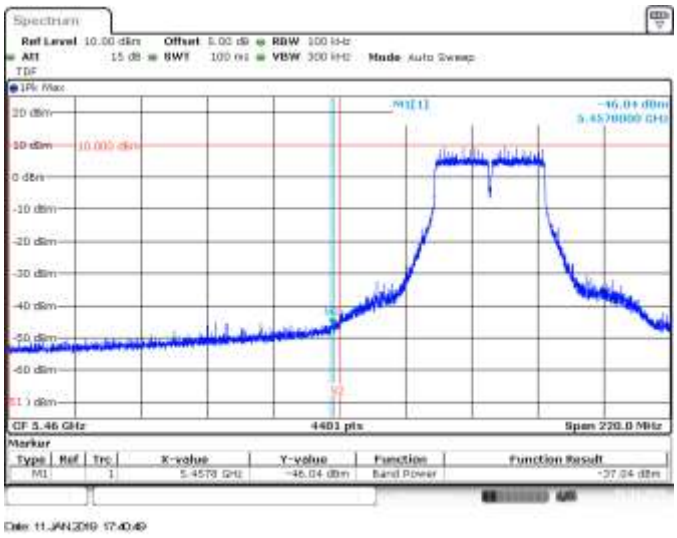
SISO B, 802.11n40, HT0, CH102, BE Low Peak (Restricted)



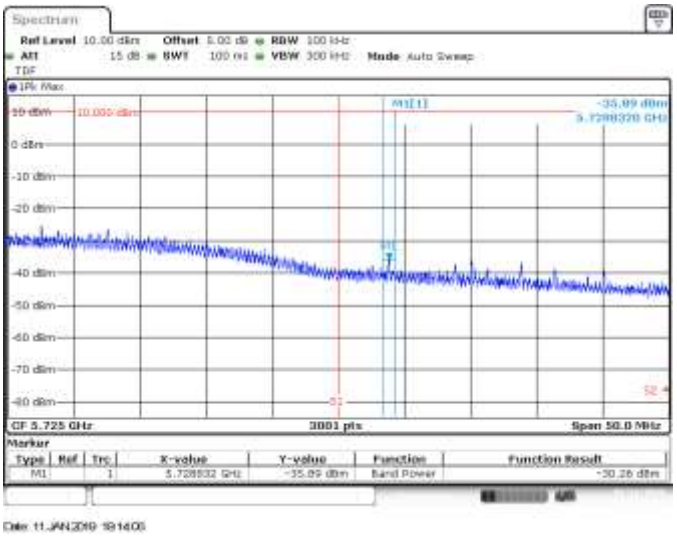
SISO B, 802.11n40, HT0, CH134, BE High Peak



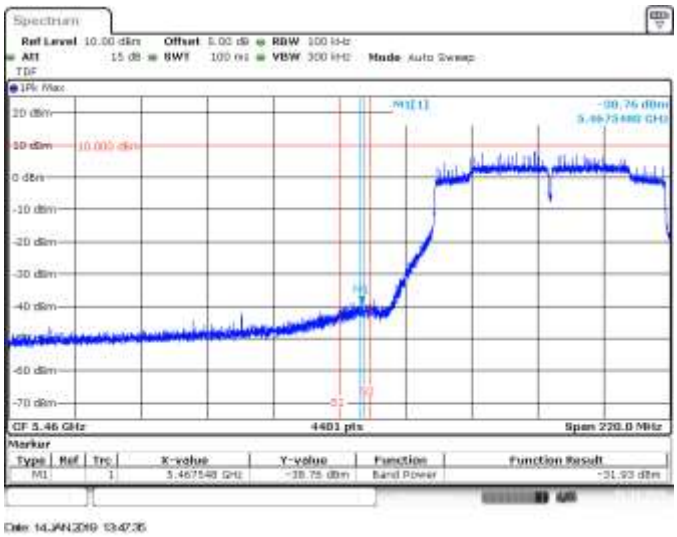
MIMO A, 802.11n40, HT8, CH102, BE Low Peak (Non Restricted)



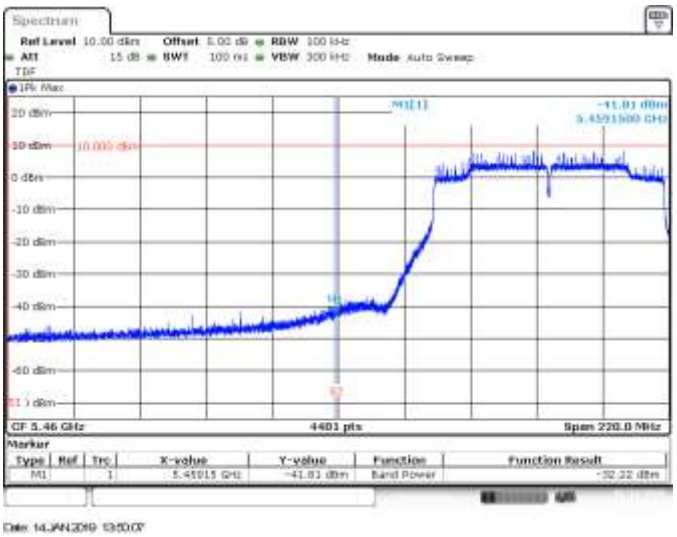
MIMO A, 802.11n40, HT8, CH102, BE Low Peak (Restricted)



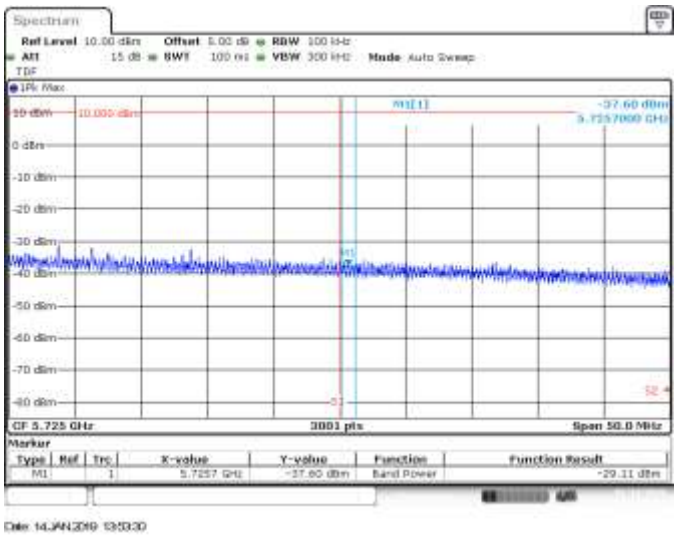
MIMO A, 802.11n40, HT8, CH134, BE High Peak



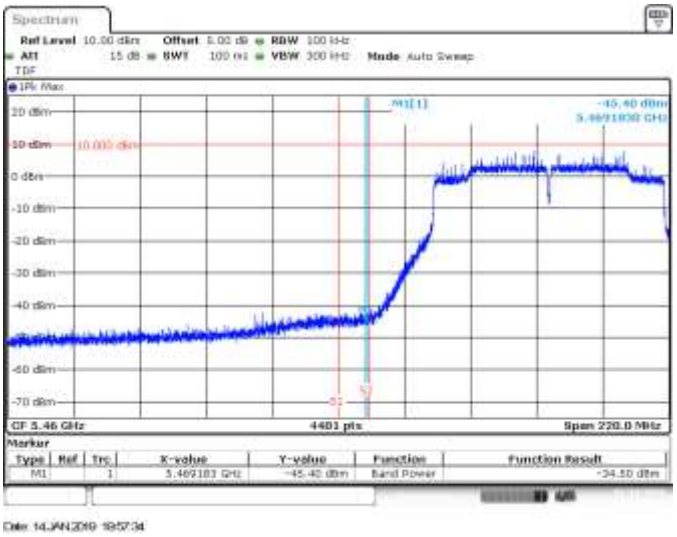
SISO A, 802.11ac80, VHT0, CH106, BE Low Peak (Non Restricted)



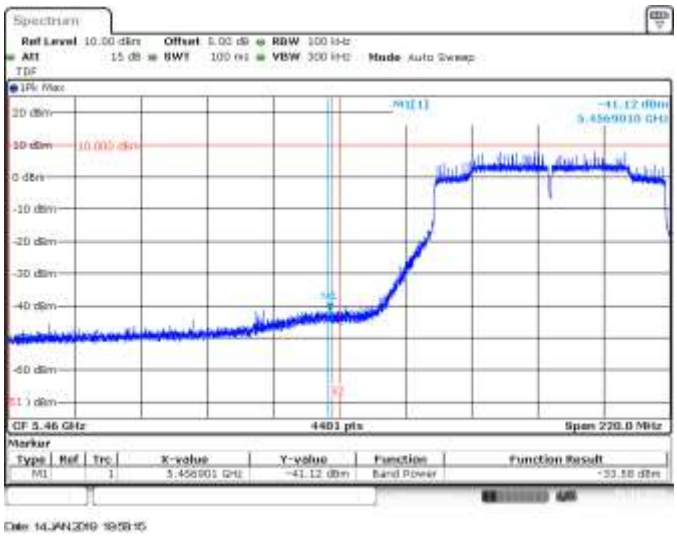
SISO A, 802.11ac80, VHT0, CH106, BE Low Peak (Restricted)



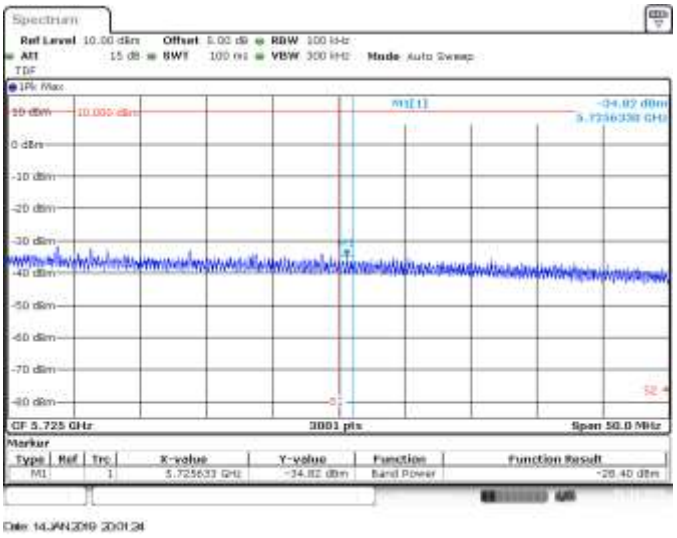
SISO A, 802.11ac80, VHT0, CH122, BE High Peak



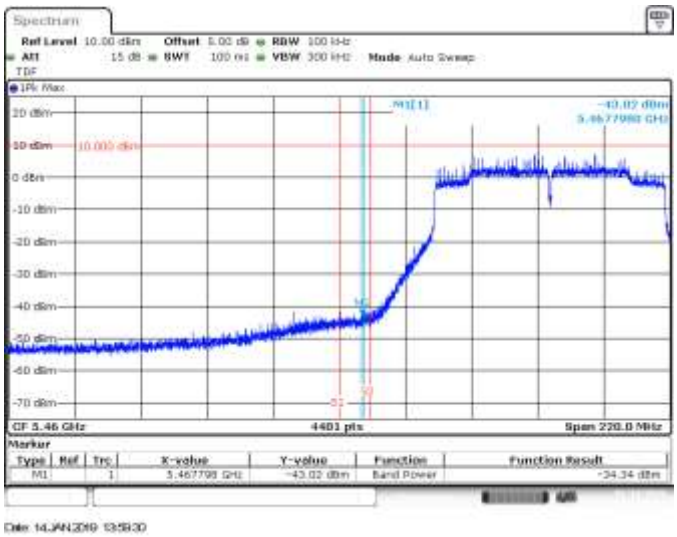
SISO B, 802.11ac80, VHT0, CH106, BE Low Peak (Non Restricted)



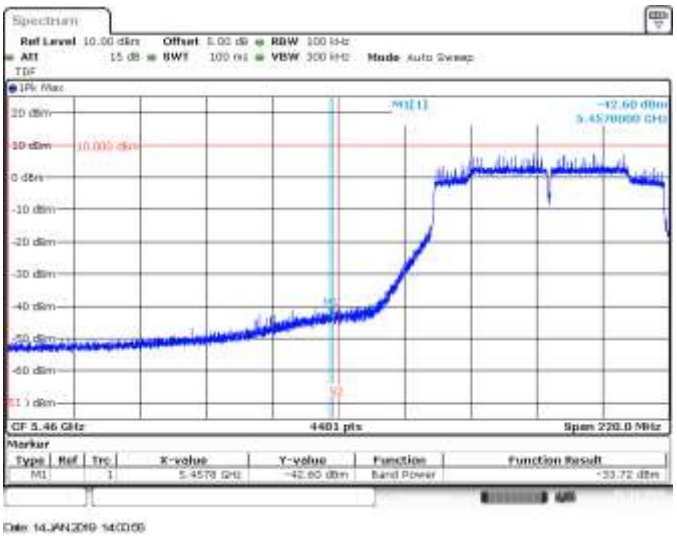
SISO B, 802.11ac80, VHT0, CH106, BE Low Peak (Restricted)



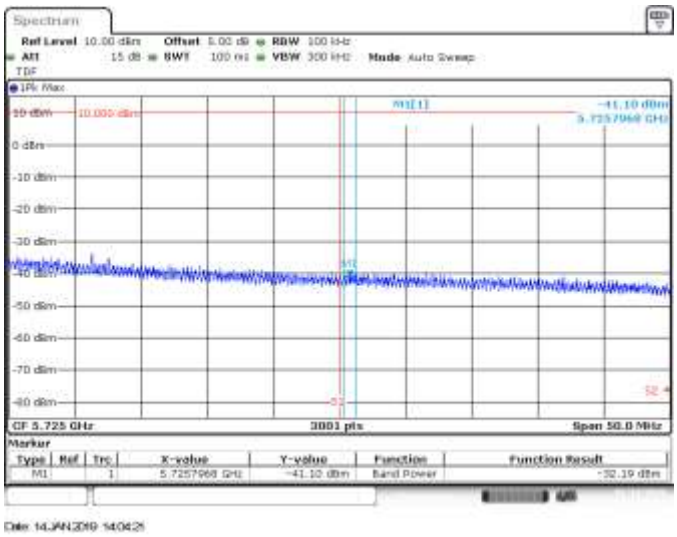
SISO B, 802.11ac80, VHT0, CH122, BE High Peak



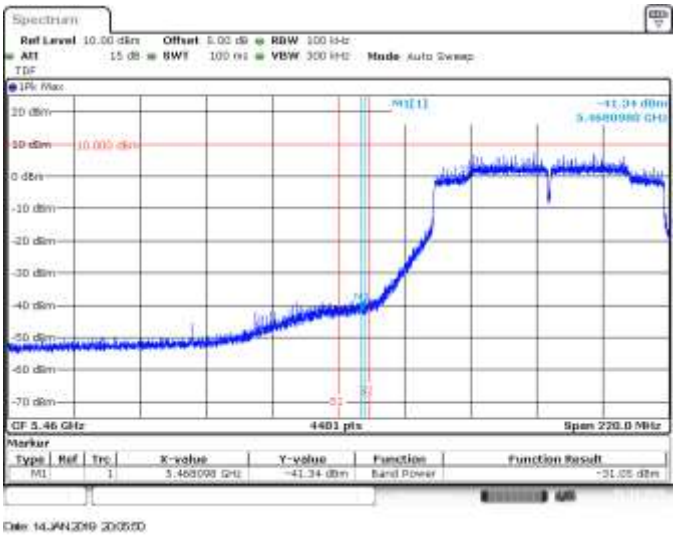
MIMO A, 802.11ac80, VHT0, CH106, BE Low Peak (Non Restricted)



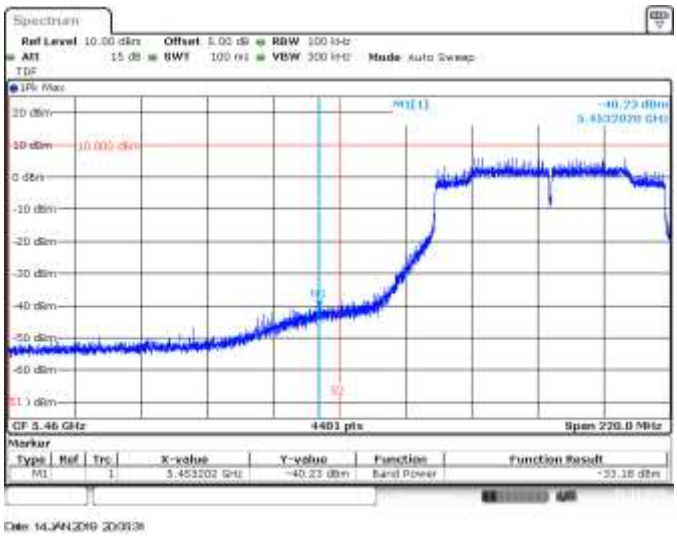
MIMO A, 802.11ac80, VHT0, CH106, BE Low Peak (Restricted)



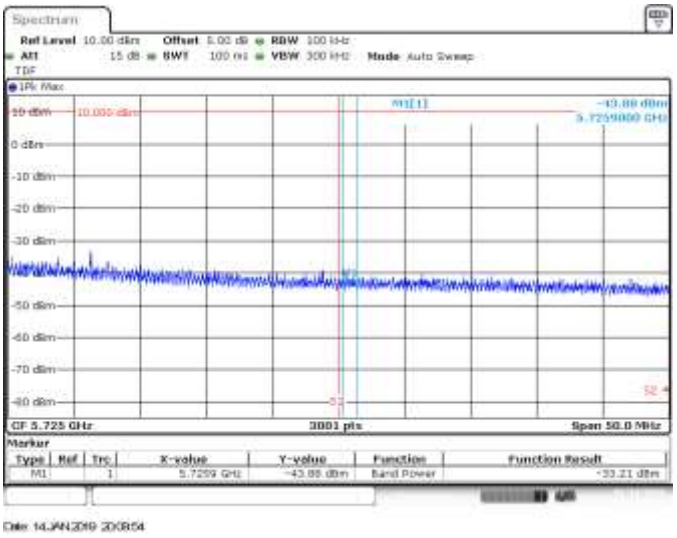
MIMO A, 802.11ac80, VHT0, CH122, BE High Peak



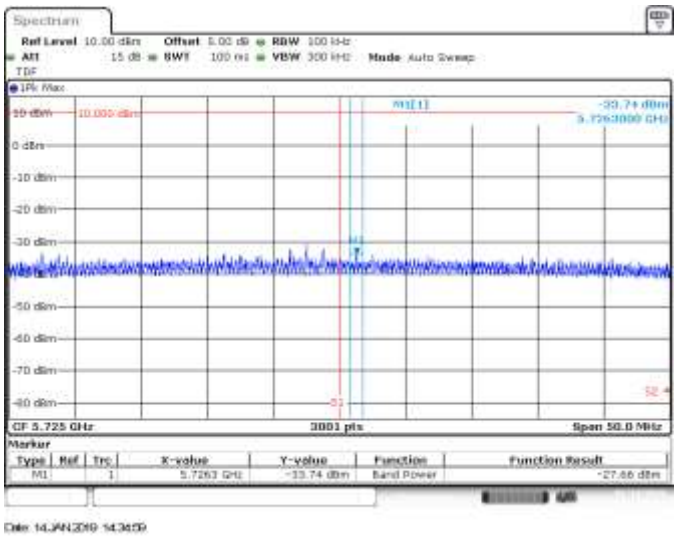
MIMO B, 802.11ac80, VHT0, CH106, BE Low Peak (Non Restricted)



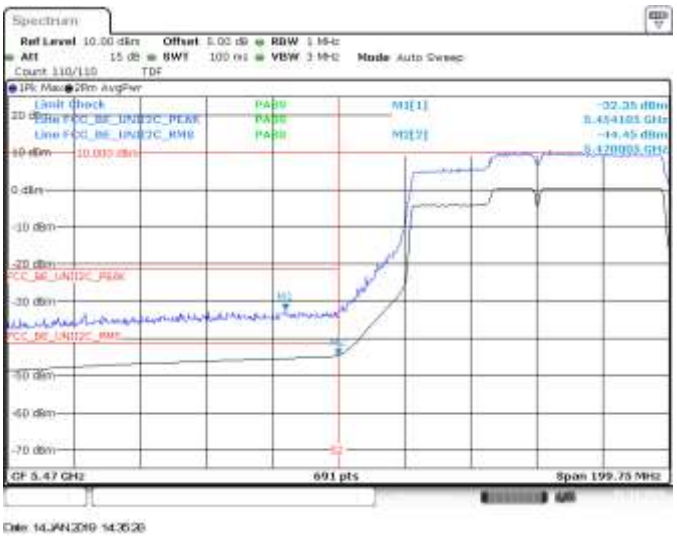
MIMO B, 802.11ac80, VHT0, CH106, BE Low Peak (Restricted)



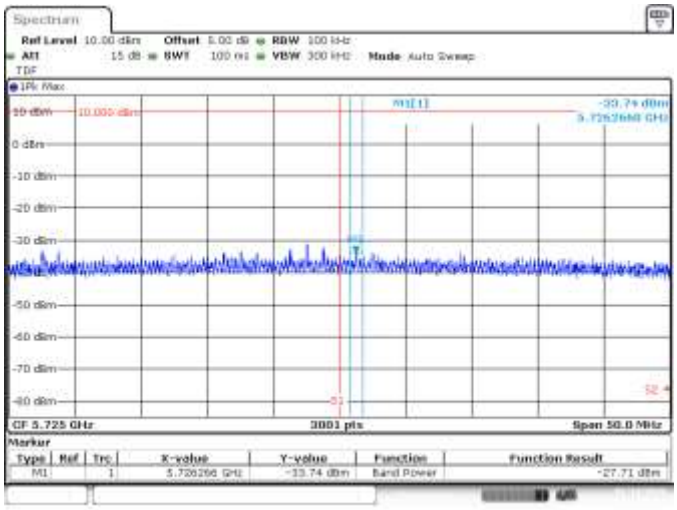
MIMO B, 802.11ac80, VHT0, CH122, BE High Peak



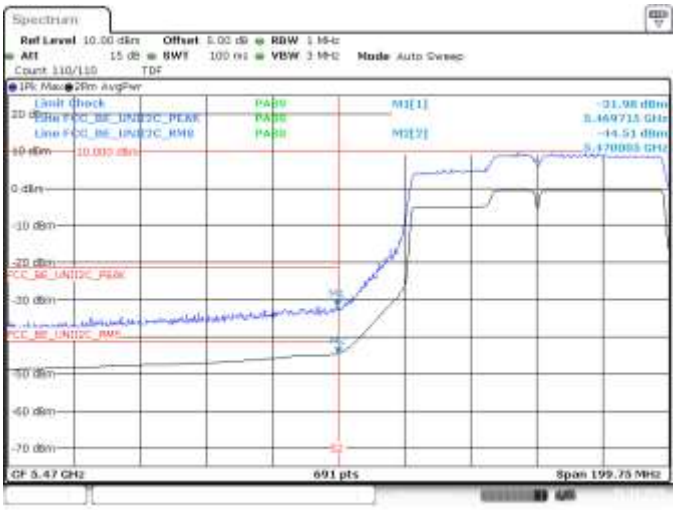
SISO A, 802.11ac160, VHT0, CH114, BE High Peak



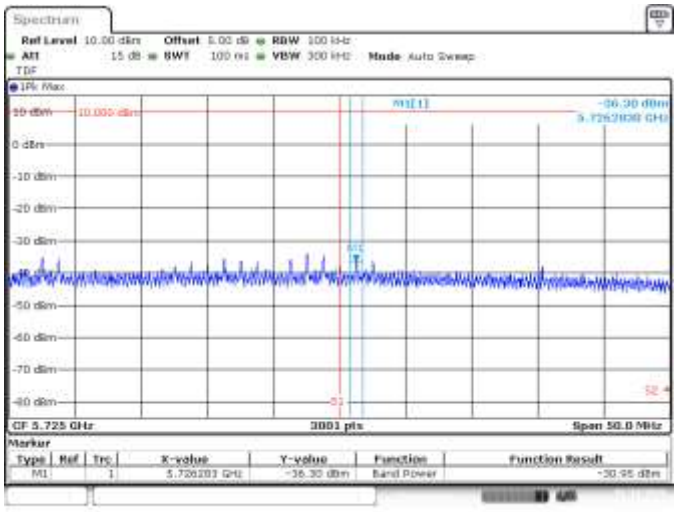
SISO A, 802.11ac160, VHT0, CH114, BE Low RMS, Peak



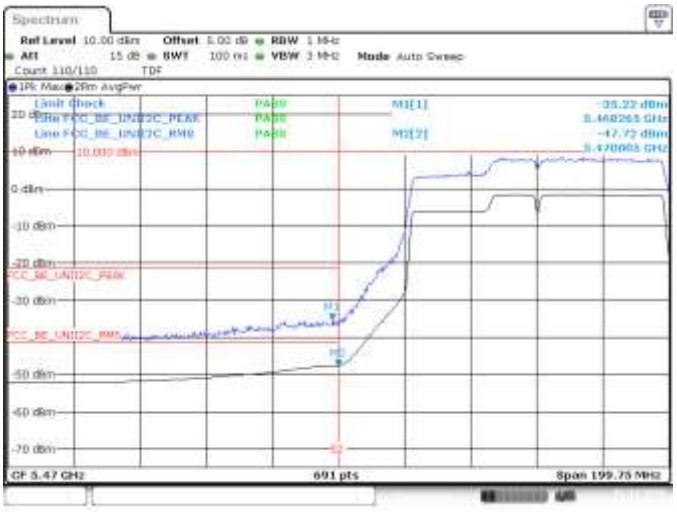
SISO B, 802.11ac160, VHT0, CH114, BE High Peak



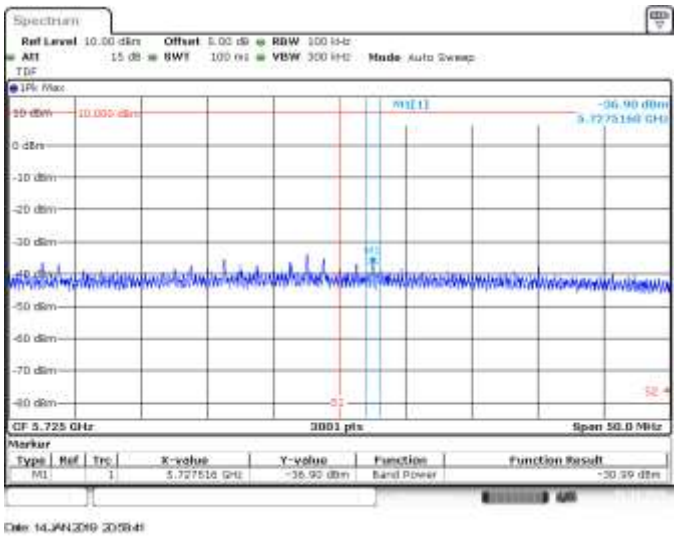
SISO B, 802.11ac160, VHT0, CH114, BE Low RMS, Peak



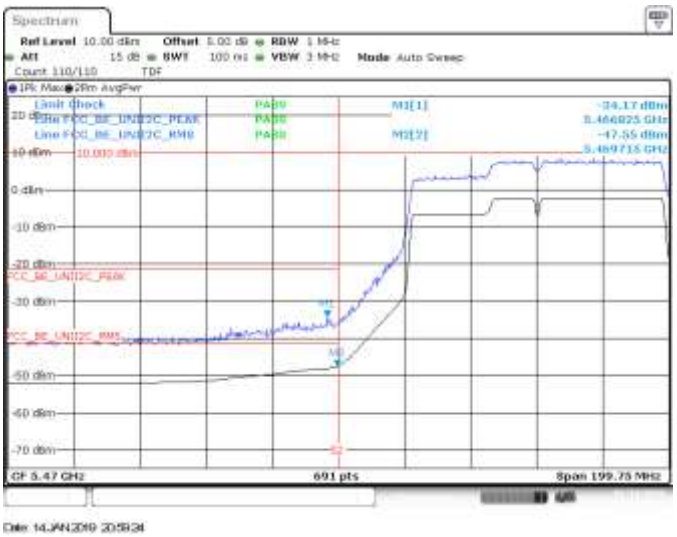
MIMO A, 802.11ac160, VHT0, CH114, BE High Peak



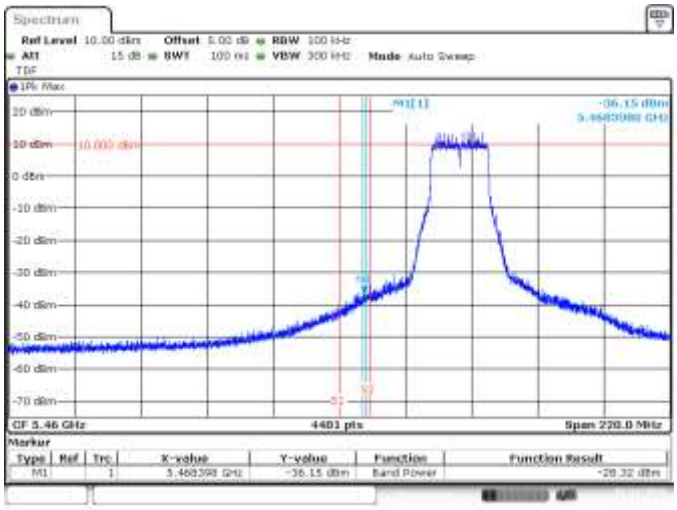
MIMO A, 802.11ac160, VHT0, CH114, BE Low RMS, Peak



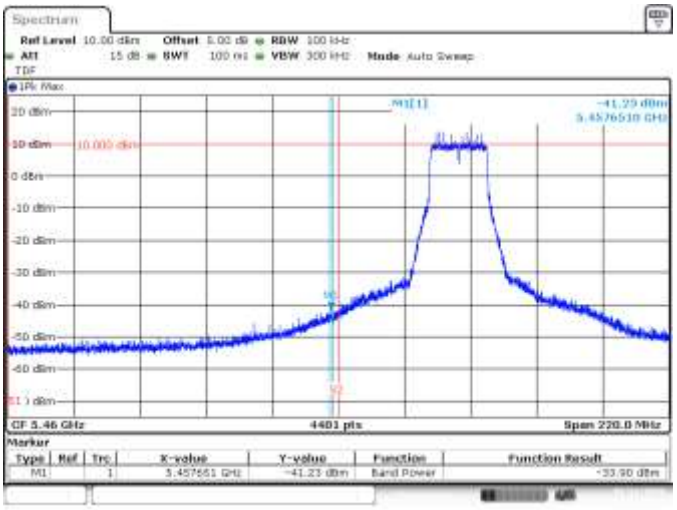
MIMO B, 802.11ac160, VHT0, CH114, BE High Peak



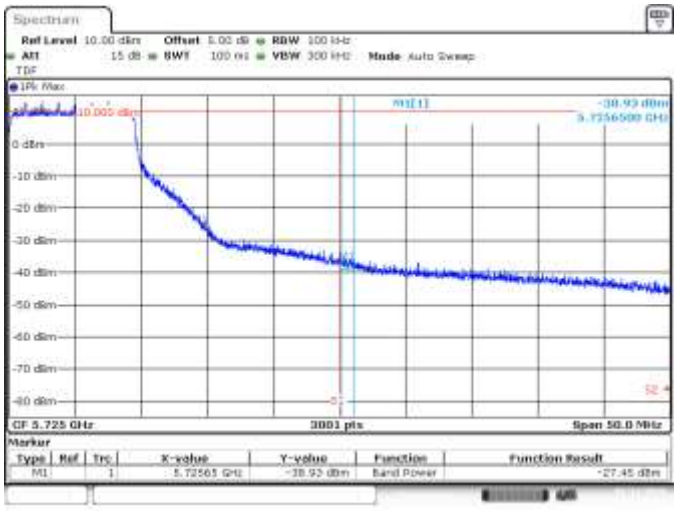
MIMO B, 802.11ac160, VHT0, CH114, BE Low RMS, Peak



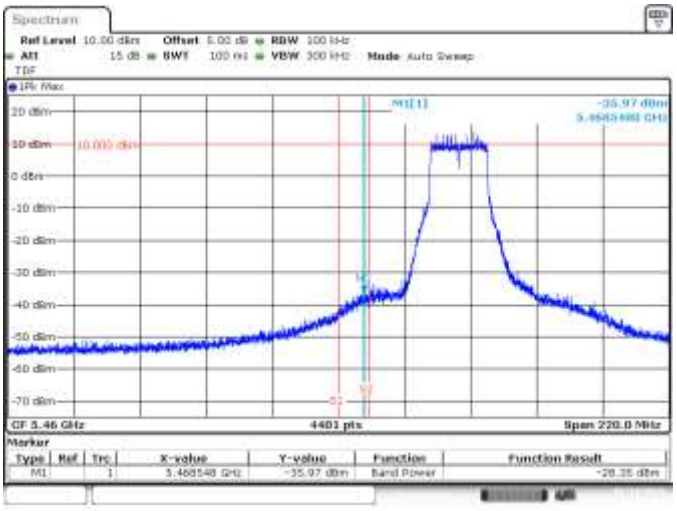
SISO A, 802.11ax20, HE0, CH100, BE Low Peak (Non Restricted)



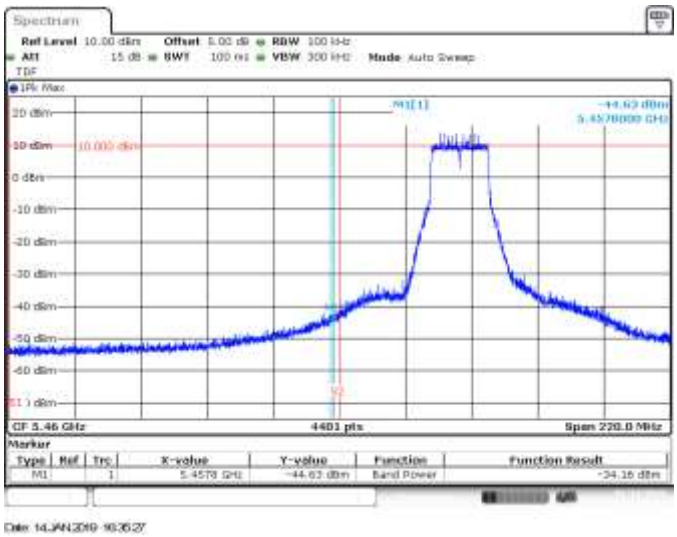
SISO A, 802.11ax20, HE0, CH100, BE Low Peak (Restricted)



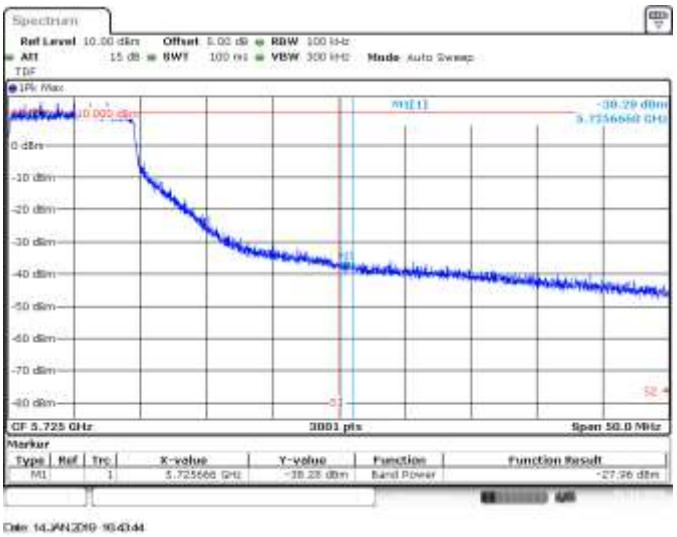
SISO A, 802.11ax20, HE0, CH140, BE High Peak



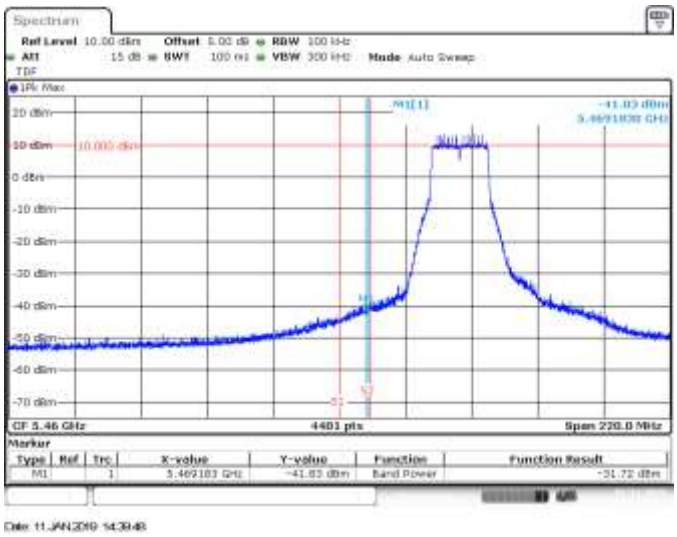
SISO B, 802.11ax20, HE0, CH100, BE Low Peak (Non Restricted)



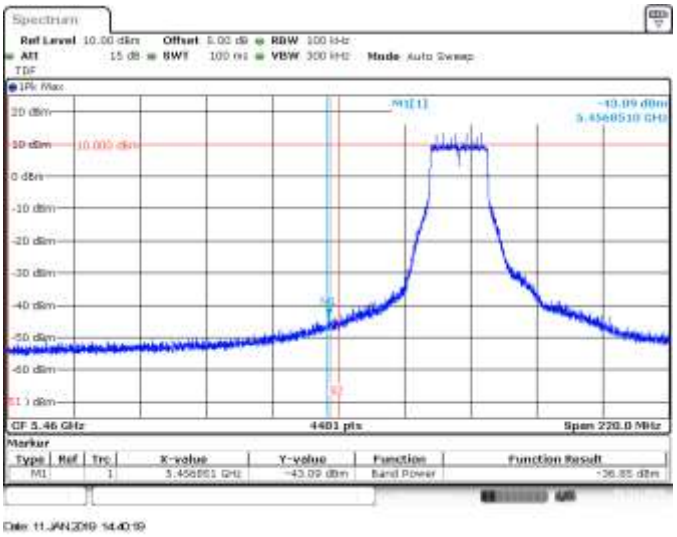
SISO B, 802.11ax20, HE0, CH100, BE Low Peak (Restricted)



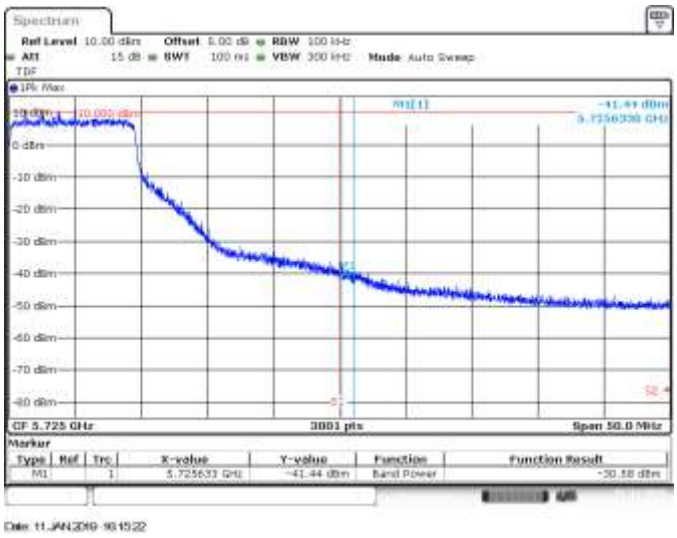
SISO B, 802.11ax20, HE0, CH140, BE High Peak



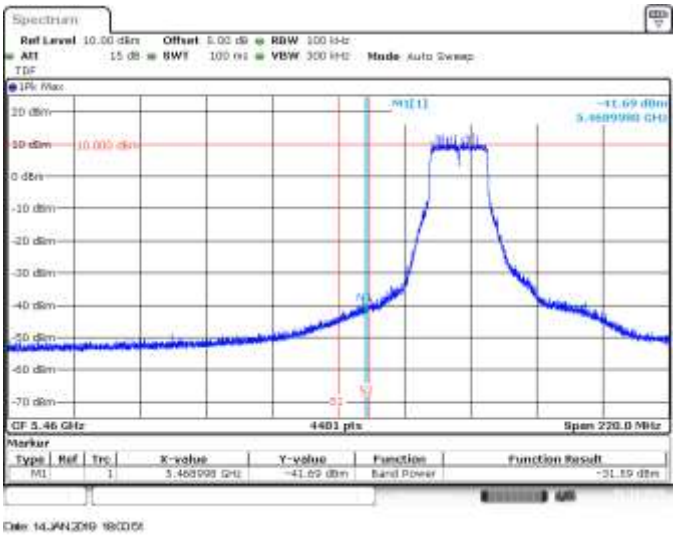
MIMO A, 802.11ax20, HE0, CH100, BE Low Peak (Non Restricted)



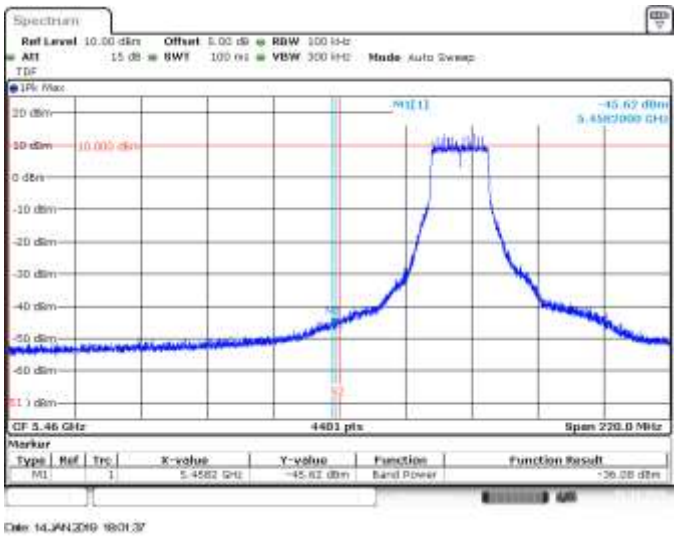
MIMO A, 802.11ax20, HE0, CH100, BE Low Peak (Restricted)



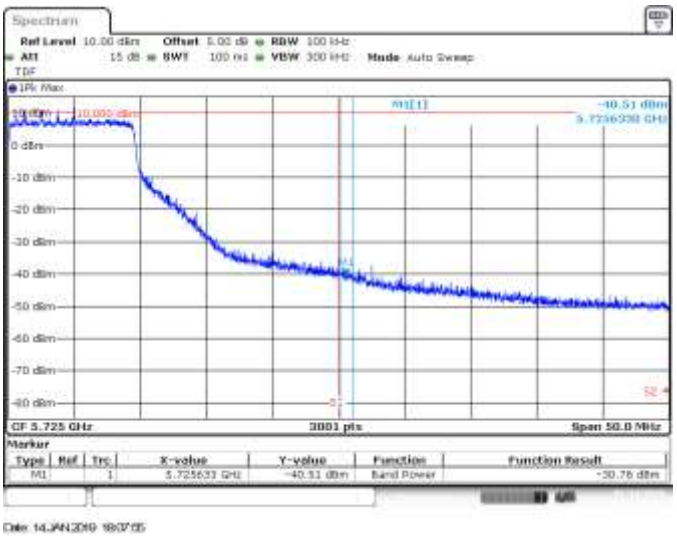
MIMO A, 802.11ax20, HE0, CH140, BE High Peak



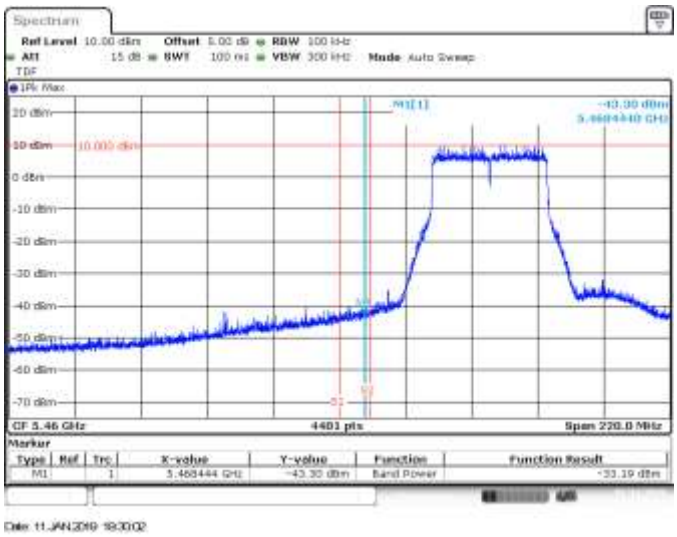
MIMO B, 802.11ax20, HE0, CH100, BE Low Peak (Non Restricted)



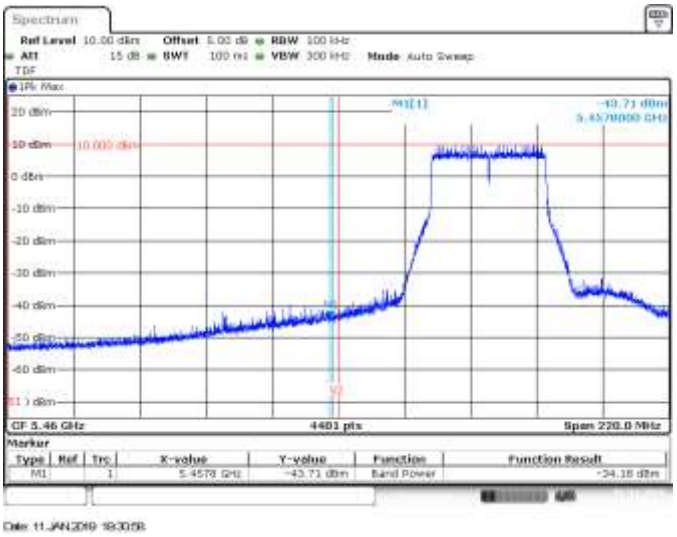
MIMO B, 802.11ax20, HE0, CH100, BE Low Peak (Restricted)



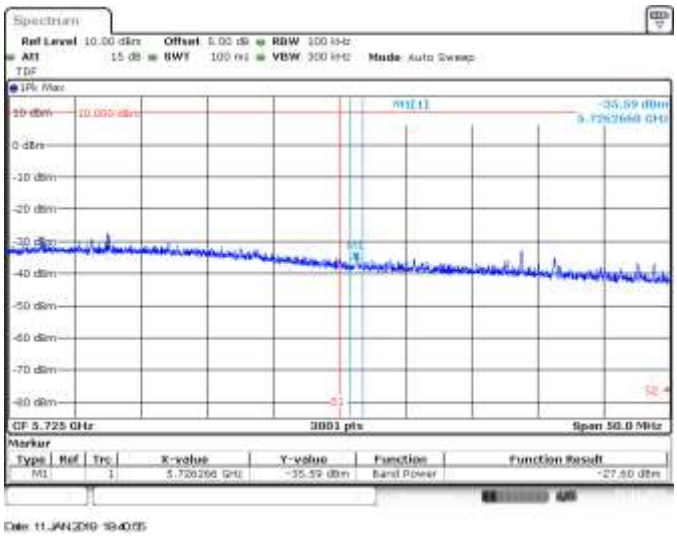
MIMO B, 802.11ax20, HE0, CH140, BE High Peak



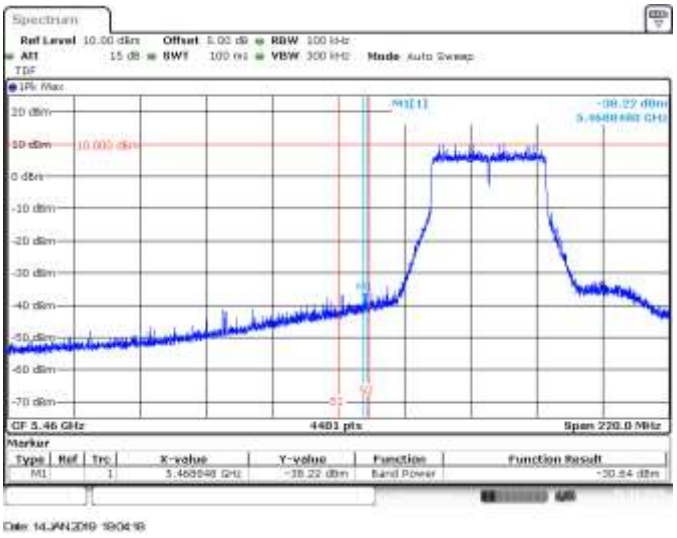
SISO A, 802.11ax40, HE0, CH102, BE Low Peak (Non Restricted)



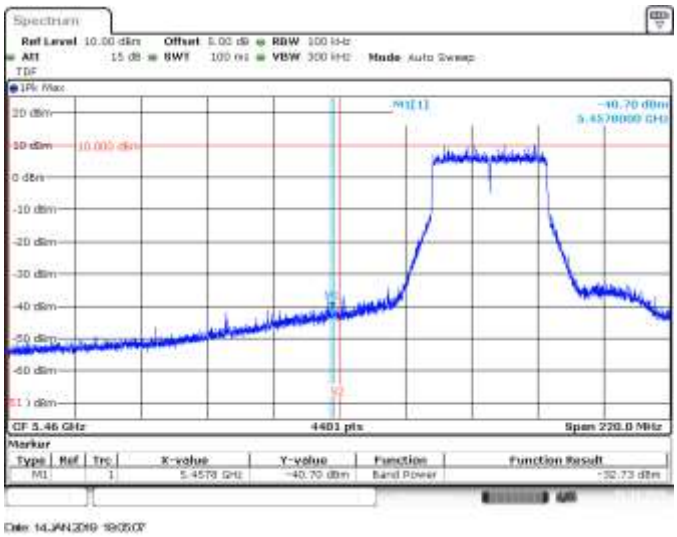
SISO A, 802.11ax40, HE0, CH102, BE Low Peak (Restricted)



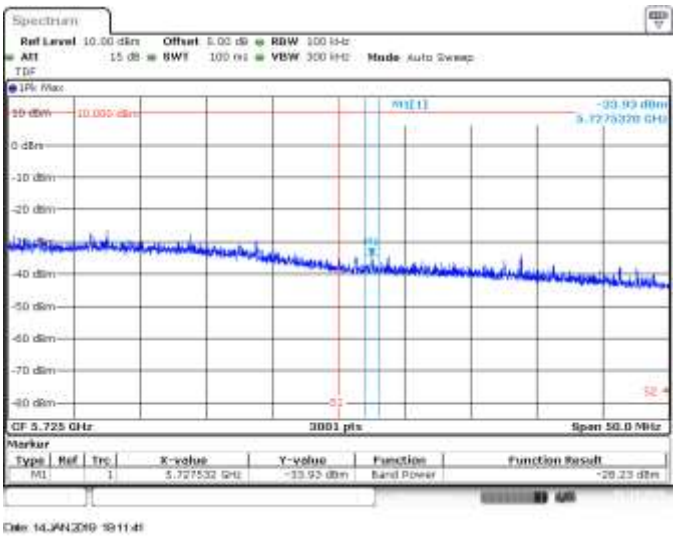
SISO A, 802.11ax40, HE0, CH134, BE High Peak



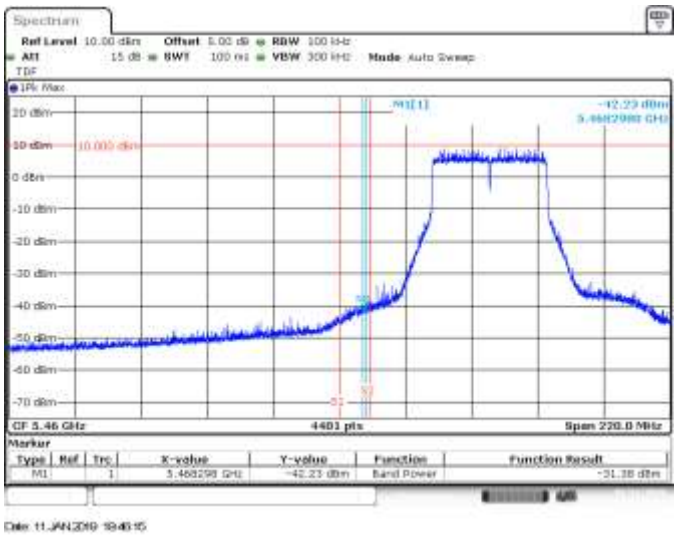
SISO B, 802.11ax40, HE0, CH102, BE Low Peak (Non Restricted)



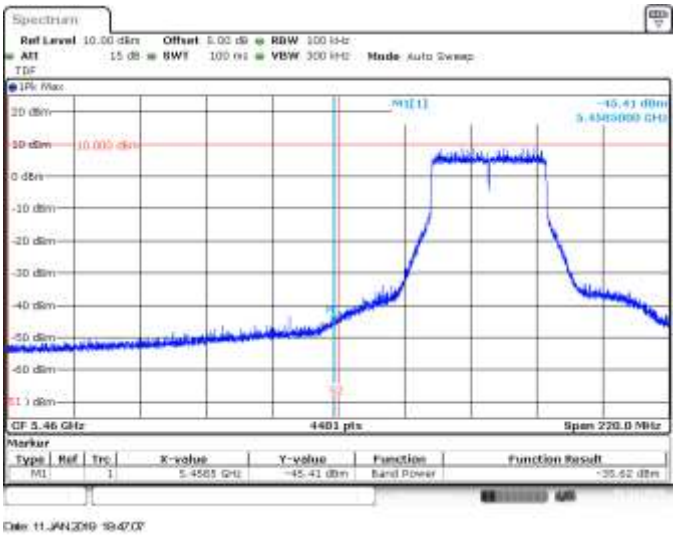
SISO B, 802.11ax40, HE0, CH102, BE Low Peak (Restricted)



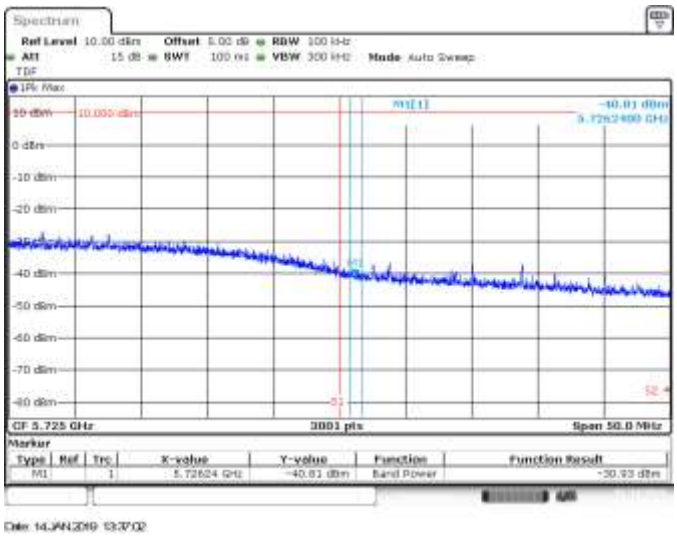
SISO B, 802.11ax40, HE0, CH134, BE High Peak



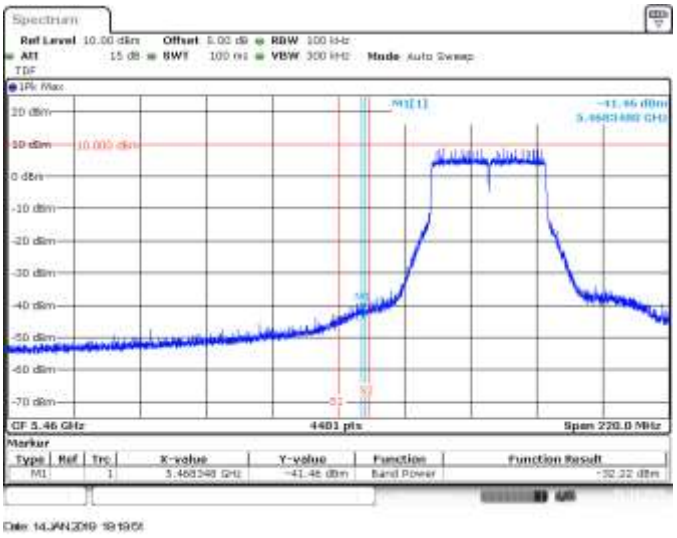
MIMO A, 802.11ax40, HE0, CH102, BE Low Peak (Non Restricted)



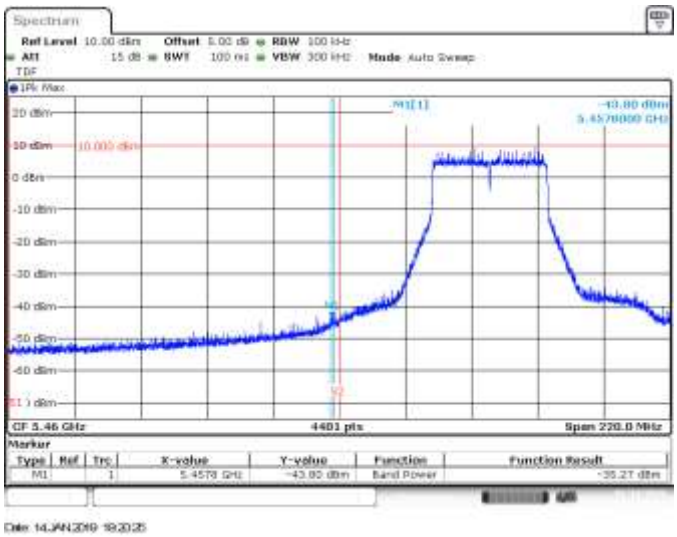
MIMO A, 802.11ax40, HE0, CH102, BE Low Peak (Restricted)



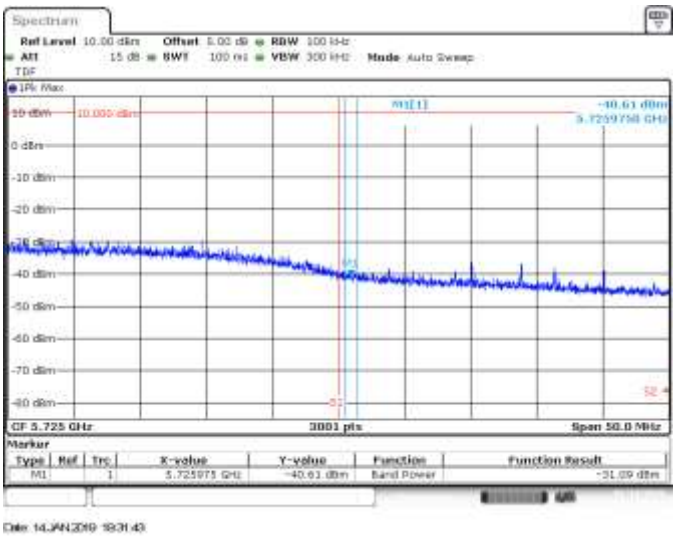
MIMO A, 802.11ax40, HE0, CH134, BE High Peak



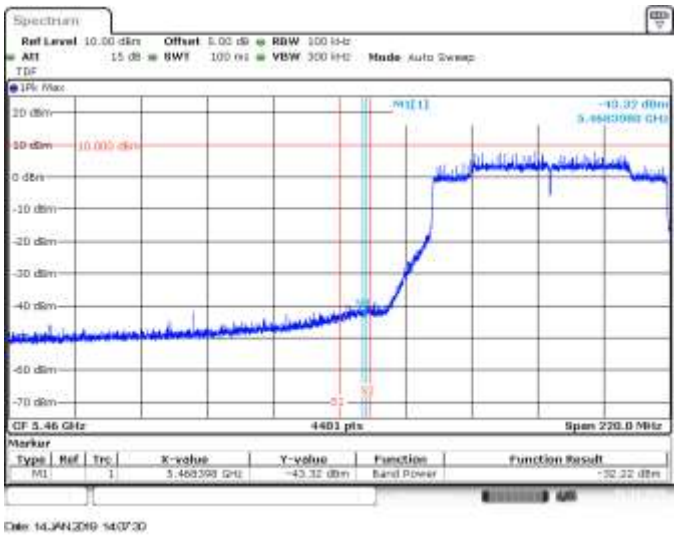
MIMO B, 802.11ax40, HE0, CH102, BE Low Peak (Non Restricted)



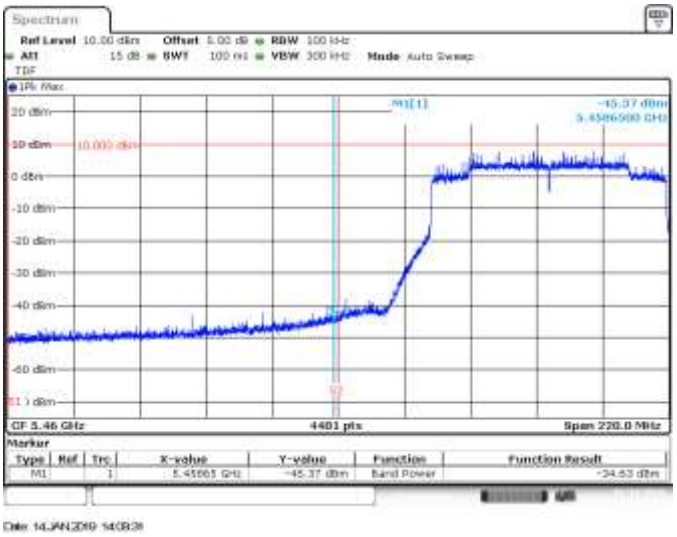
MIMO B, 802.11ax40, HE0, CH102, BE Low Peak (Restricted)



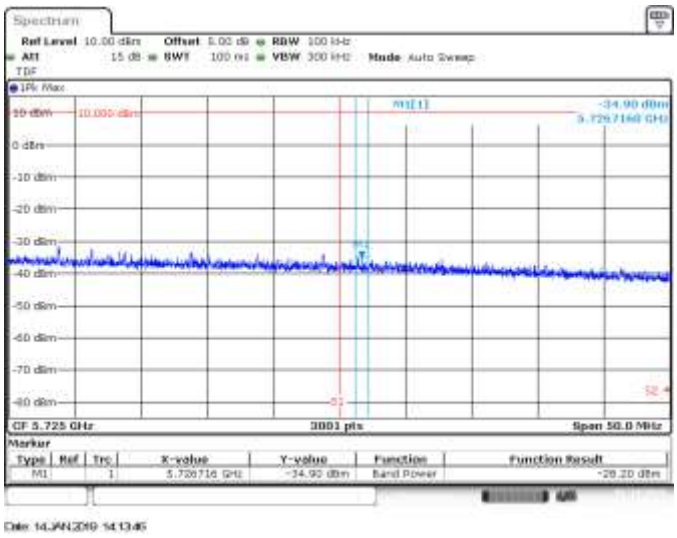
MIMO B, 802.11ax40, HE0, CH134, BE High Peak



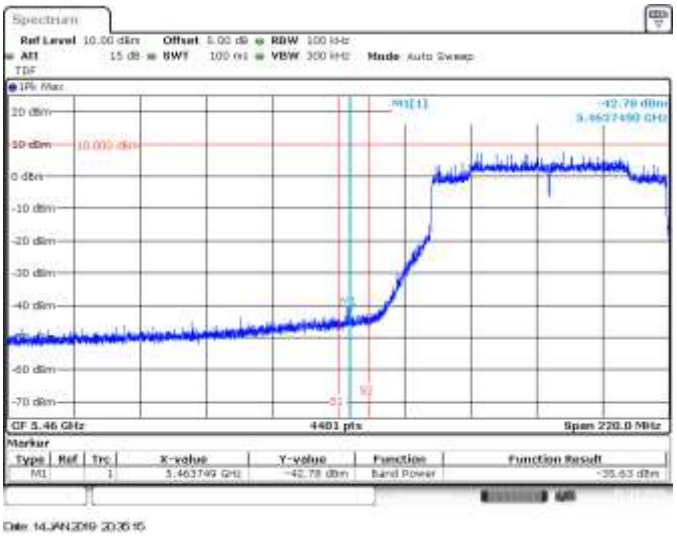
SISO A, 802.11ax80, HE0, CH106, BE Low Peak (Non Restricted)



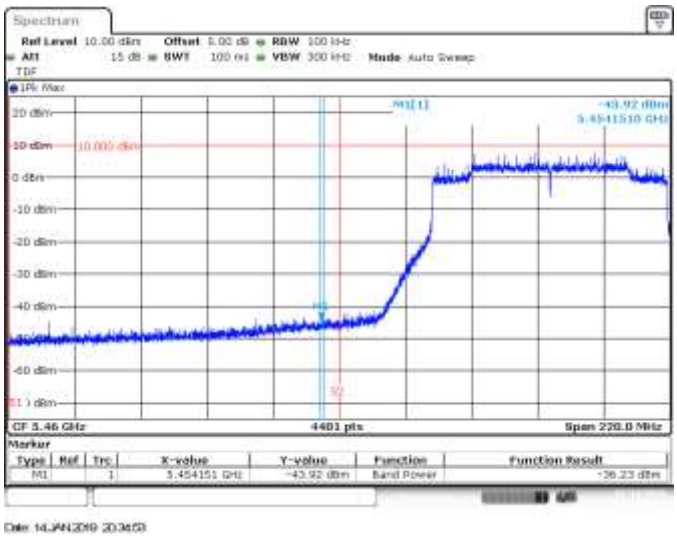
SISO A, 802.11ax80, HE0, CH106, BE Low Peak (Restricted)



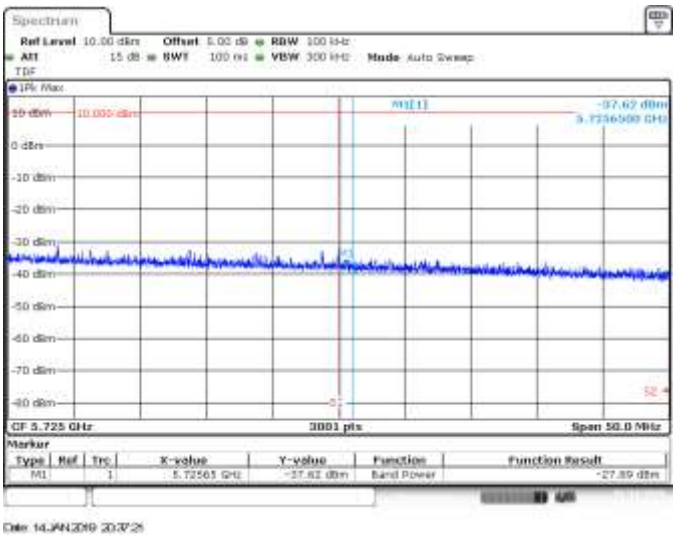
SISO A, 802.11ax80, HE0, CH122, BE High Peak



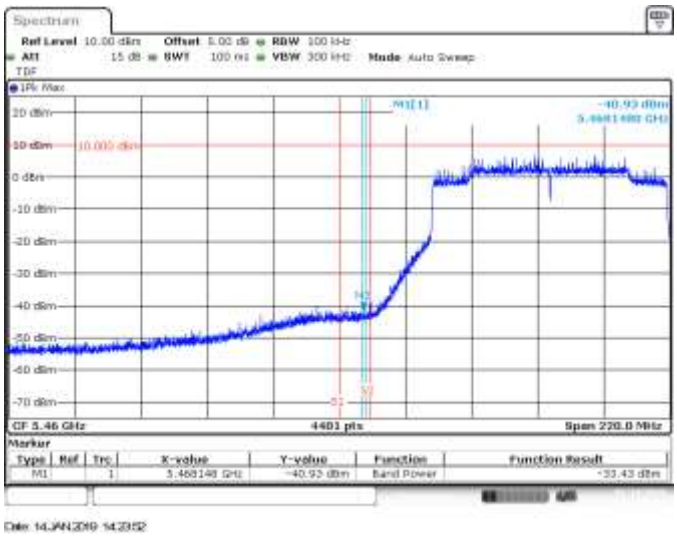
SISO B, 802.11ax80, HE0, CH106, BE Low Peak (Non Restricted)



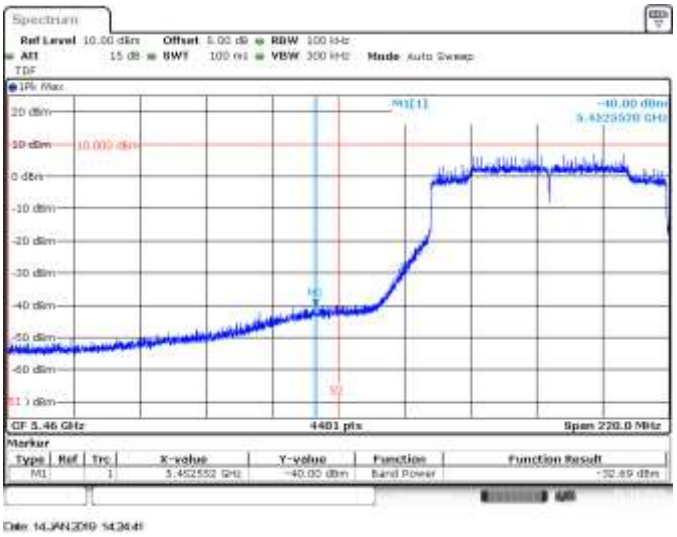
SISO B, 802.11ax80, HE0, CH106, BE Low Peak (Restricted)



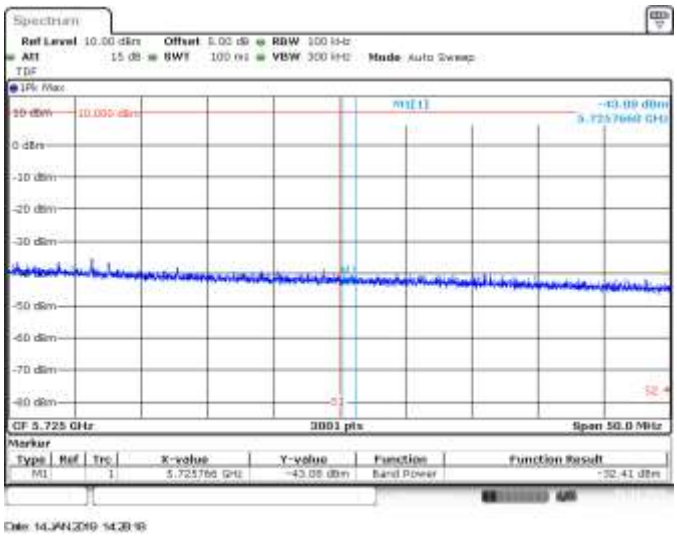
SISO B, 802.11ax80, HE0, CH122, BE High Peak



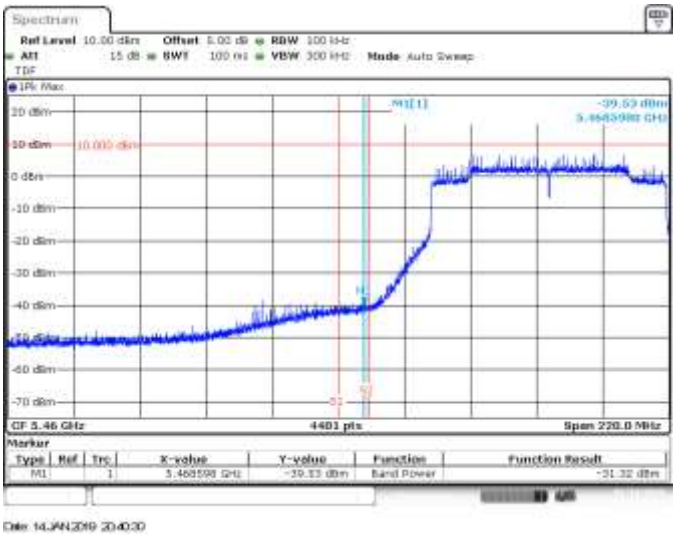
MIMO A, 802.11ax80, HE0, CH106, BE Low Peak (Non Restricted)



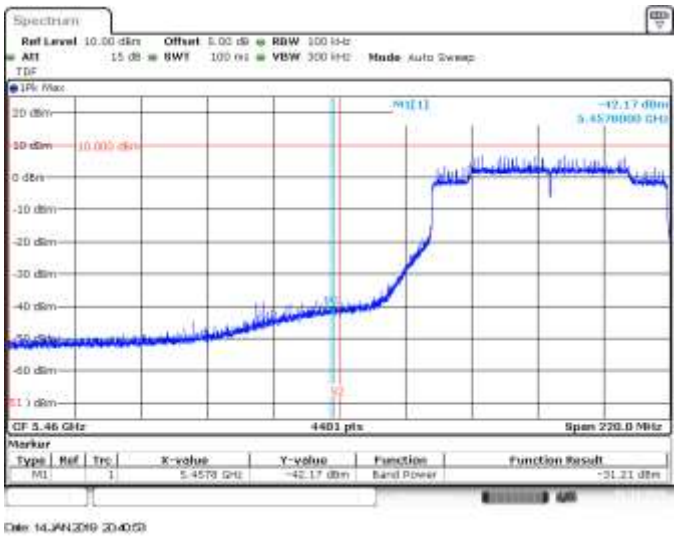
MIMO A, 802.11ax80, HE0, CH106, BE Low Peak (Restricted)



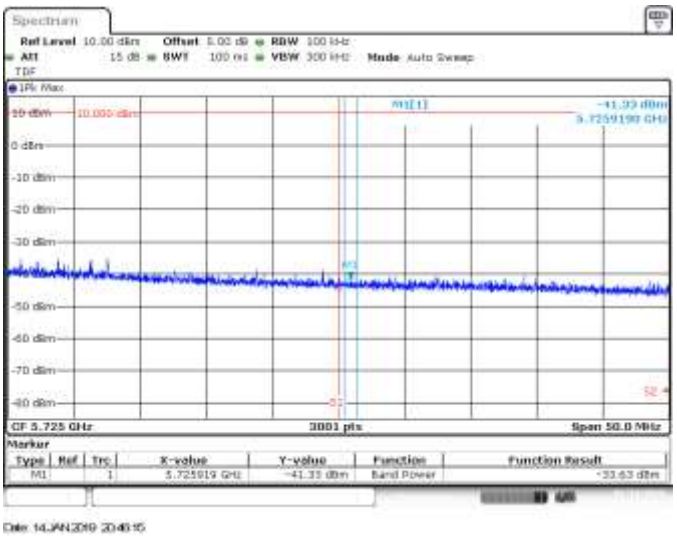
MIMO A, 802.11ax80, HE0, CH122, BE High Peak



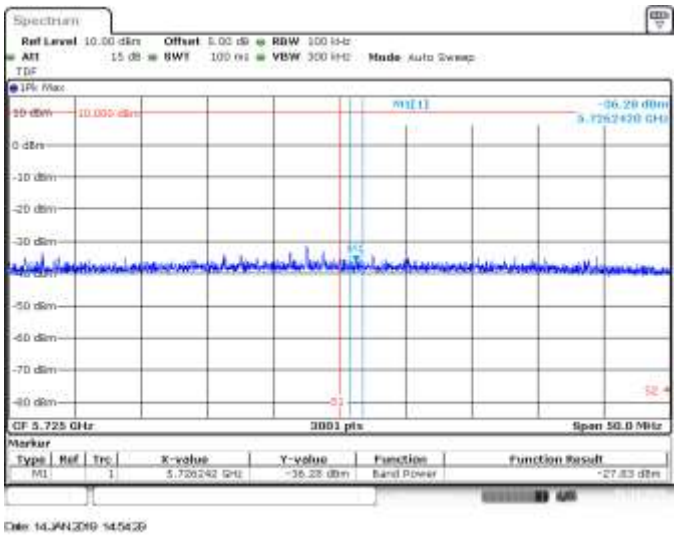
MIMO B, 802.11ax80, HE0, CH106, BE Low Peak (Non Restricted)



MIMO B, 802.11ax80, HE0, CH106, BE Low Peak (Restricted)

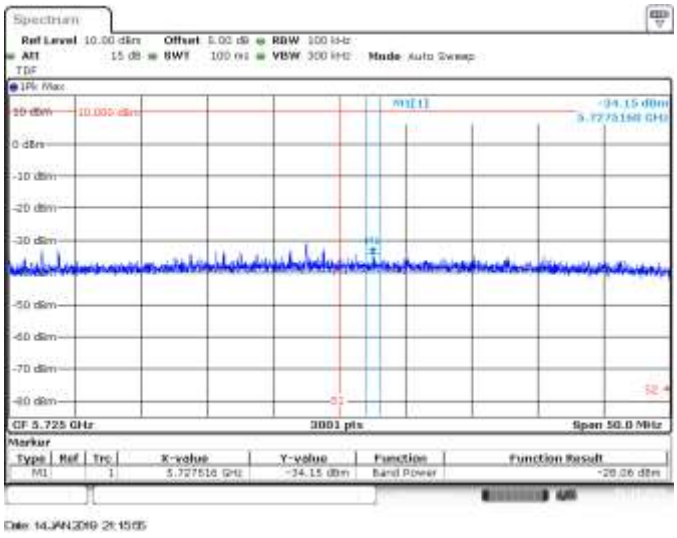


MIMO B, 802.11ax80, HE0, CH122, BE High Peak

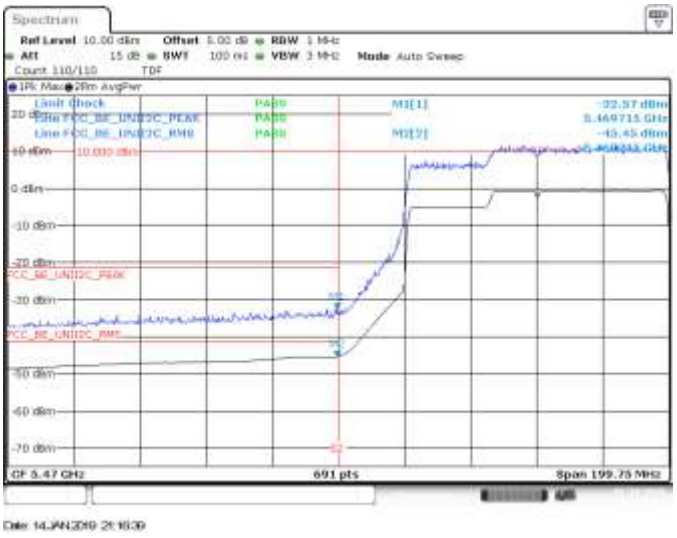


SISO A, 802.11ax160, HE0, CH114, BE High Peak

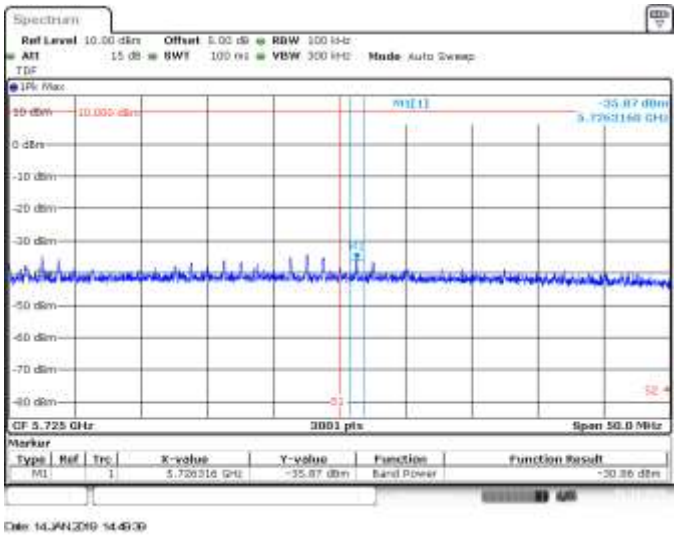
SISO A, 802.11ax160, HE0, CH114, BE Low RMS, Peak



SISO B, 802.11ax160, HE0, CH114, BE High Peak

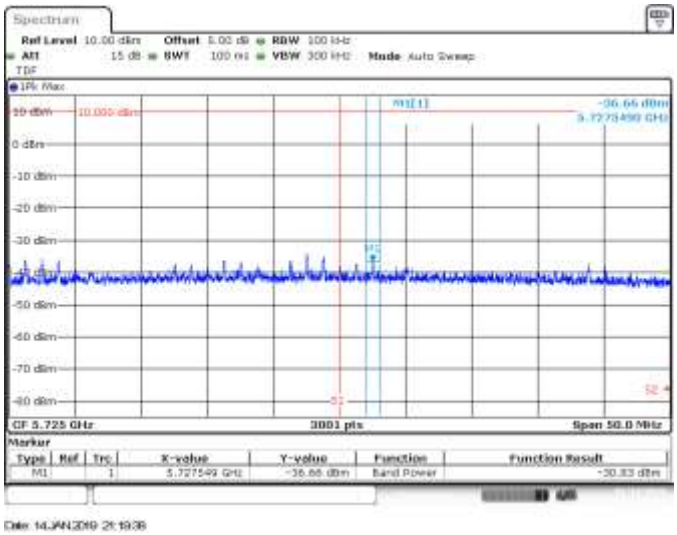


SISO B, 802.11ax160, HE0, CH114, BE Low RMS, Peak

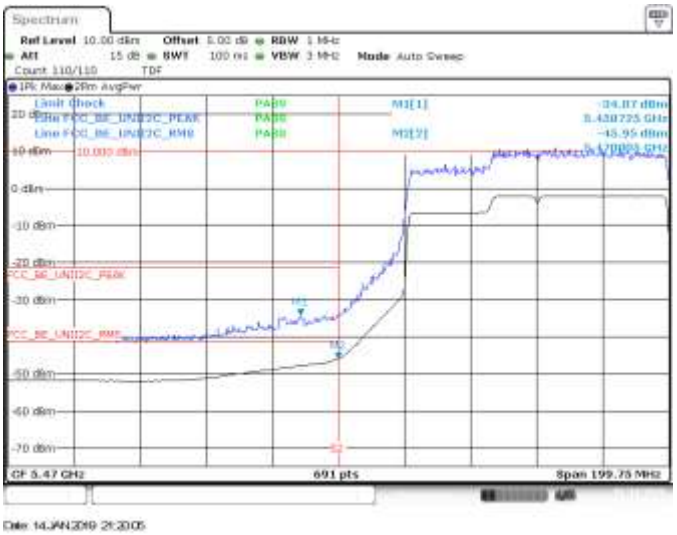


MIMO A, 802.11ax160, HE0, CH114, BE High Peak

MIMO A, 802.11ax160, HE0, CH114, BE Low RMS, Peak



MIMO B, 802.11ax160, HE0, CH114, BE High Peak



MIMO B, 802.11ax160, HE0, CH114, BE Low RMS, Peak