

TEST REPORT

EUT Description	WLAN and BT, 2x2 PCIe M.2 1216 SD adapter card, LTE Coexistence
Brand Name	Intel® Wireless-AC 9560
Model Name	9560D2WL
FCC ID	PD99560D2L
ISED ID	1000M-9560D2L
Date of Test Start/End	2018-02-20 / 2018-03-19
Features	802.11ac, Dual Band, 2x2 Wi-Fi + Bluetooth® 5 (see section 5)

Applicant	Intel Mobile Communications
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Reference Standards	FCC CFR Title 47 Part 15 E RSS-247 issue 2, RSS-Gen issue 4 (see section 1)
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Test Report identification	180201-02.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 4 - General Requirements for Compliance of Radio Apparatus.

2. General conditions, competences and guarantees

- ✓ Intel Mobile Communications France 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 Mobile Communications France 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	23 °C ±2 °C
Humidity	35 % ± 15 %

4. Test samples

Sample	Control #	Description	Model	Serial #	Date of receipt	Note
#01	180201-02.S01	Module	9560D2WL	WFM: 3413E87ED82B	2018-02-14	Used for conducted tests
	170524-02.S15	Extender Board	PCB00609_01	6092416-442	2017-05-30	
	170000-01.S01	Laptop	Latitude E5470	DPBLMC2	2017-03-28	
	170220-04.S04	Adapter 1216SD to M.2	JfP Adapter M2	N/A	2017-04-10	
#02	180201-02.S03	Module	9560D2WL	WFM:3413E87ED853	2018-02-14	Used for Spurious Emission tests from 30 MHz to 1 GHz and AC power-line conducted emission measurements
	170220-02.S03	Extender Board	PCB00609_01	6092416-446	2017-02-20	
	170000-01.S13	Laptop	Latitude E5470	FT6LMC2	2017-05-30	
	170727-02.S16	Adapter 1216SD to M.2	JfP Adapter M2	N/A	2017-07-27	
#03	180201-02.S04	Module	9560D2WL	WFM:3413E87ED803	2018-02-14	Used for Spurious Emission tests from 1GHz to 40 GHz
	170220-02.S04	Extender Board	PCB00609_01	6092416-493	2017-02-20	
	170000-01.S16	Laptop	Latitude E5470	C2HTPF2	2017-06-13	
	170727-02.S13	Adapter 1216SD to M.2	JfP Adapter M2	N/A	2017-08-09	

5. EUT Features

Brand Name	Intel® Wireless-AC 9560		
Model Name	9560D2WL		
FCC ID	PD99560D2L		
ISED ID	1000M-9560D2L		
Software Version	11.1807.0-07027		
Driver Version	99.0.28.6		
Prototype / Production	Production		
Supported Radios	802.11b/g/n 2.4GHz (2400.0 – 2483.5 MHz) 802.11a/n/ac 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 – 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
15.407 (6) 15.207	RSS-GEN Clause 8.8	AC power-line conducted emission measurements	P

8. Document Revision History

Revision #	Date	Modified by	Revision Details
Rev.00	2018-03-19	F. Nsengiyumva I.Kharat	First Issue

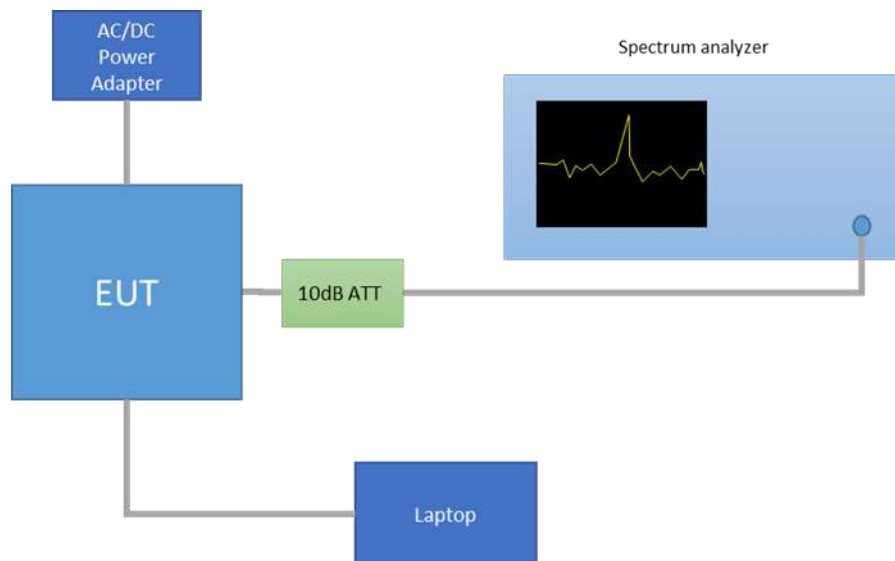
Annex A. Test & System Description

A.1 Measurement System

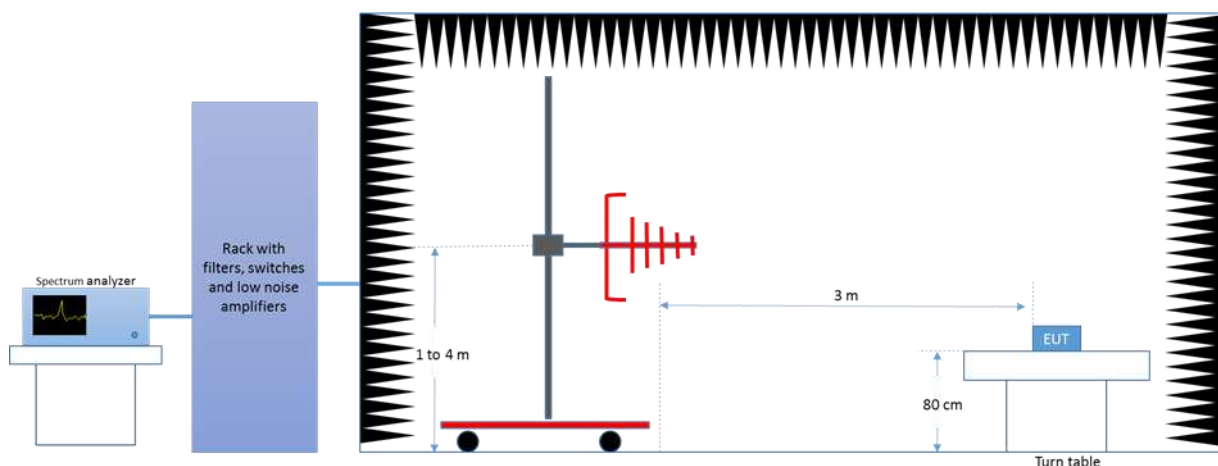
Measurements were performed using the following setups, made in accordance to the general provisions of FCC KDB 789033 D02 General UNII Test Procedures.

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.

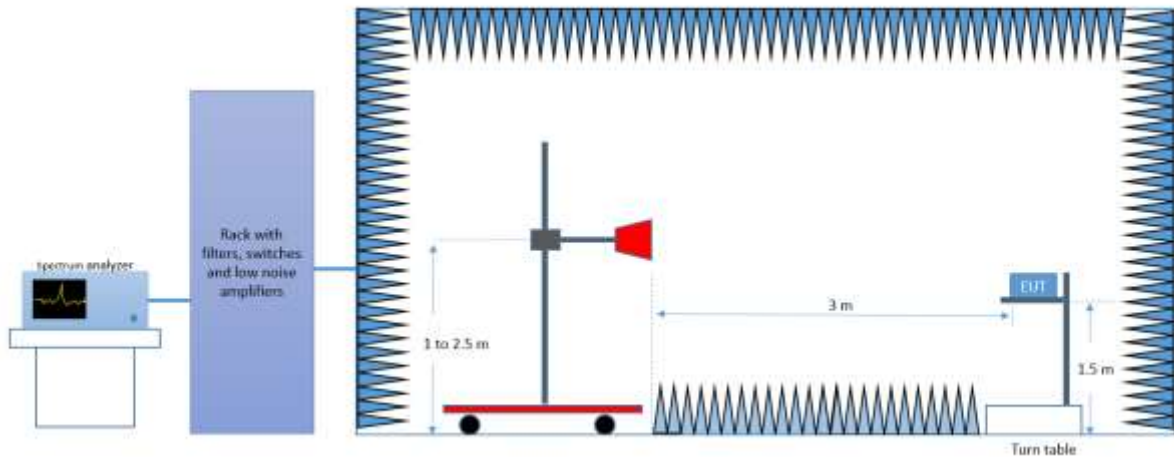
Conducted Setup



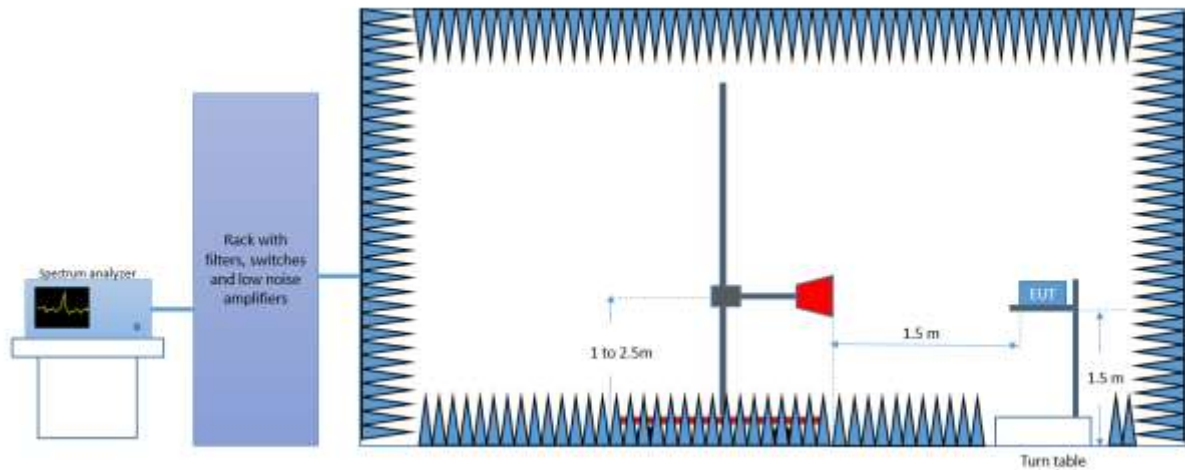
Radiated Setup 30 MHz - 1GHz



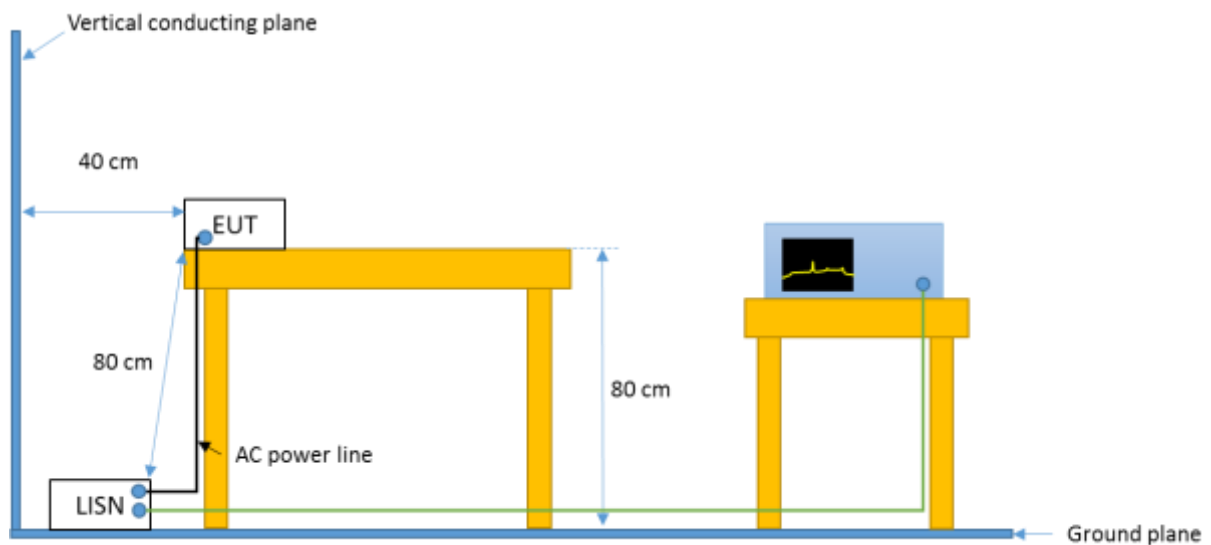
Radiated Setup 1 GHz – 18 GHz



Radiated Setup 18 GHz – 40 GHz



AC power-line conducted emission Setup 150 kHz – 30 MHz



A.2 Test Equipment List

Conducted Setup

ID#	Device	Type/Model	Serial #	Manufacturer	Cal. Date	Cal. Due Date
0316	Spectrum analyzer	FSV30	103309	Rohde & Schwarz	2017-09-22	2019-09-22

Radiated Setup-1

ID#	Device	Type/Model	Serial #	Manufacturer	Cal. Date	Cal. Due Date
0133	Spectrum analyzer	FSV40	101358	Rohde & Schwarz	2016-04-15	2018-04-15
0137	Log antenna 30 MHz – 1 GHz	3142E	00156946	ETS Lindgren	2017-12-19	2019-12-19
0135	Semi Anechoic chamber	FACT 3	5720	ETS Lindgren	2016-04-28	2018-04-28
0530	Measurement Software	EMC32	100623	Rohde & Schwarz	N/A	N/A

N/A: Not Applicable

Radiated Setup-2

ID#	Device	Type/Model	Serial #	Manufacturer	Cal. Date	Cal. Due Date
0420	Spectrum analyzer	FSV40	101556	Rohde & Schwarz	2016-04-14	2018-04-14
0138	Horn antenna 1 GHz – 6.4 GHz	3117	00152266	ETS Lindgren	2016-03-14	2018-03-14
0141	Double Ridged Horn Antenna 1 GHz – 18 GHz	3117	00157736	ETS Lindgren	2016-04-13	2018-04-13
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	2016-04-28	2018-04-28
0329	Measurement Software	EMC32	100401	Rohde & Schwarz	N/A	N/A

N/A: Not Applicable

Radiated Setup - shared equipments

ID#	Device	Type/Model	Serial #	Manufacturer	Cal. Date	Cal. Due Date
0617	Power Sensor 50MHz-18GHz	NRP-Z81	104386	Rohde & Schwarz	2017-05-24	2019-05-24
0618	Power Sensor 50MHz-18GHz	NRP-Z81	104382	Rohde & Schwarz	2017-05-24	2019-05-24

AC power-line conducted emission Setup

ID#	Device	Type/Model	Serial #	Manufacturer	Cal. Date	Cal. Due Date
0027	Measurement software	EMC32	1300.7010.02	Rohde & Schwarz	NA	NA
0317	Spectrum Analyzer	FSV30	103308	Rohde & Schwarz	2017-08-05	2019-08-05
0532	LISN	ENV216	101321	Rohde & Schwarz	2016-09-13	2018-09-13
0607	LISN	ENV216	101342	Rohde & Schwarz	2017-09-06	2018-09-06
0538	Transformer	Monophase	TIMM3.15	Montelem	NA	NA
0095	Millivoltmeter	2000	4009301	KEITHLEY	2017-11-13	2019-11-13
0624	AC power source	61604	SM135546	CHROMA	NA	NA
0299	Multimeter	34401A	US36065790	HP	2017-11-14	2019-11-14

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
AC power-line conducted emission	±1.45

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 (20 MHz channel bandwidth), 802.11n40 (40MHz channel bandwidth), 802.11ac80 (80MHz channel bandwidth) and 802.11ac160 (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 point II) E) 2) e) (Method SA-2 Alternative) of Guidance 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	17.50	17.50	-
			120	5600	21.00	21.00	-
			140	5700	18.00	18.50	-
802.11n	20	HT0 HT8*	100	5500	17.00	17.00	20.00
			120	5600	21.00	21.00	23.00
			140	5700	18.00	18.50	20.50
	40	HT0 HT8*	102F	5510	17.50	17.50	20.00
			118F	5590	21.50	21.50	23.50
			134F	5670	18.50	18.50	21.50
802.11ac	80	VHT0	106ac80	5530	18.00	18.00	19.50
			122ac80	5610	20.00	19.50	22.00
802.11ac	160	VHT0	114ac160	5570	15.00	14.50	16.00

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	21	23
	40	HT0 HT8*	142F	5710	21	21	23.5
802.11ac	80	VHT0	138ac80	5690	21	21	24

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:

802.11a → 6Mbps
802.11n20 and 802.11n40 (SISO) → HT0
802.11n20 and 802.11n40 (MIMO) → HT8
802.11ac80 (SISO) → VHT0
802.11ac80 (MIMO) → VHT0
802.11ac160 (SISO) → VHT0
802.11ac160 (MIMO) → VHT0

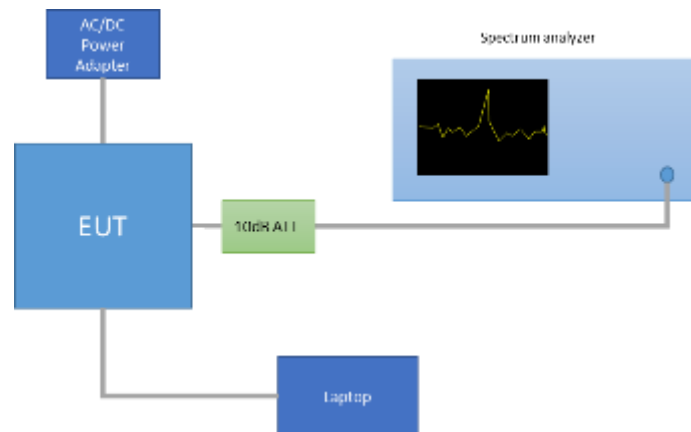
Alternative channels to the lowest and highest channels per band have been also tested for Band Edge compliance.

B.2 Test Results Tables

B.2.1 26dB & 99% Bandwidth

Test procedure

The setup below 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 v02r01, 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 CHAIN A	100	5500	23.92	16.80
			120	5600	25.83	16.96
			140	5700	23.82	16.80
		SISO CHAIN B	100	5500	24.12	16.88
			120	5600	24.92	17.04
			140	5700	23.87	16.76
802.11n20	HT0	SISO CHAIN A	100	5500	24.42	17.92
			120	5600	25.88	18.00
			140	5700	24.67	17.88
		SISO CHAIN B	100	5500	24.92	17.92
			120	5600	25.93	18.08
			140	5700	24.22	17.88
	HT8	MIMO CHAIN A	100	5500	25.28	17.92
			120	5600	25.63	18.00
			140	5700	24.27	17.88
		MIMO CHAIN B	100	5500	24.17	17.88
			120	5600	24.67	17.88
			140	5700	24.17	17.88
802.11n40	HT0	SISO CHAIN A	102F	36.40	45.41	36.64
			118F	36.88	45.68	36.72
			134F	36.32	44.41	36.56
		SISO CHAIN B	102F	5510	44.86	36.64
			118F	5590	45.77	36.80
			134F	5670	44.05	36.56
	HT8	MIMO CHAIN A	102F	5510	45.95	36.64
			118F	5590	45.14	36.64
			134F	5670	45.23	36.72
		MIMO CHAIN B	102F	5510	43.87	36.40
			118F	5590	44.59	36.48
			134F	5670	43.78	36.40
802.11ac80	VHT0	SISO CHAIN A	106ac80	5530	85.97	75.12
			122ac80	5610	86.16	75.24
		SISO CHAIN B	106ac80	5530	86.54	75.12
			122ac80	5610	85.78	75.12
		MIMO CHAIN A	106ac80	5530	87.30	75.12
			122ac80	5610	86.73	75.24
		MIMO CHAIN B	106ac80	5530	86.35	75.00
			122ac80	5610	84.25	75.00
802.11ac160	VHT0	SISO CHAIN A	114ac160	5570	164.84	152.80
		SISO CHAIN B	114ac160	5570	164.84	152.80
		MIMO CHAIN A	114ac160	5570	164.17	152.80
		MIMO CHAIN B	114ac160	5570	163.84	152.80

Max Value

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

Mode	Rate	Antenna	Channel	Freq. [MHz]	26dB BW UNII-2C [MHz]
802.11n20	HT0	SISO CHAIN A	144	5720	17.17
		SISO CHAIN B			17.17
	HT8	MIMO CHAIN A			16.92
		MIMO CHAIN B			16.97
802.11n40	HT0	SISO CHAIN A	142F	5710	37.19
		SISO CHAIN B			37.27
	HT8	MIMO CHAIN A			37.09
		MIMO CHAIN B			37.19
802.11ac80	VHT0	SISO CHAIN A	138ac80	5690	77.08
		SISO CHAIN B			77.27
		MIMO CHAIN A			77.46
		MIMO CHAIN B			77.84

Max Value

See Section B.3.1 and Section B.3.2 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 point E) 2) e) (Method SA-2 Alternative) of KDB 789033 D02.

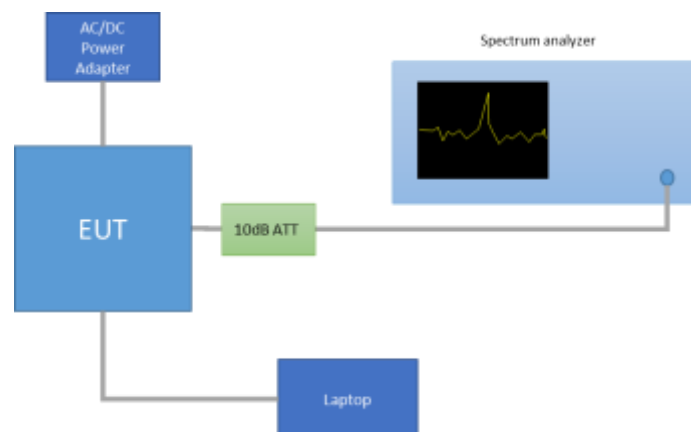
The maximum power spectral density (PSD) was measured using the method according to point F) (Method SA-2 Alternative) of KDB 789033 D02.

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 setup below was used to measure the maximum conducted output power and power spectral density. 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.

The declared maximum antenna gain is 5dBi.



For the overlapped channels between U-NII-2C and U-NII-3, and according to FCC KDB 789033 D02 v02r01, 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	2.03	2.07	98.30%
		SISO-B	2.03	2.07	98.30%
802.11n20	HT0	SISO-A	1.89	1.93	98.12%
		SISO-B	1.89	1.93	98.12%
	HT8	MIMO-A	0.97	1.01	95.99%
		MIMO-B	0.97	1.01	95.99%
802.11n40	HT0	SISO-A	0.93	0.96	96.40%
		SISO-B	0.93	0.96	96.40%
	HT8	MIMO-A	0.49	0.53	92.32%
		MIMO-B	0.49	0.53	92.32%
802.11ac80	VHT0	SISO-A	0.46	0.49	93.22%
		SISO-B	0.46	0.49	93.22%
		MIMO-A	0.26	0.30	86.31%
		MIMO-B	0.26	0.30	86.31%
802.11ac160	VHT0	SISO-A	0.25	0.28	87.83%
		SISO-B	0.25	0.28	87.83%
		MIMO-A	0.15	0.19	78.50%
		MIMO-B	0.15	0.19	78.50%

Maximum output power – U-NII-2C Channels

Mode	Rate	Channel	Freq. [MHz]	Antenna	Average Cond. Output Power [dBm]	Max.* Cond. Output Power [dBm]	Max.* Cond. Output Power [mW]	Max. EIRP [dBm]
802.11a	6Mbps	100	5500	SISO CHAIN A	17.48	17.48	55.98	22.48
				SISO CHAIN B	17.49	17.49	56.10	22.49
		120	5600	SISO CHAIN A	21.20	21.20	131.83	26.20
				SISO CHAIN B	21.11	21.11	129.12	26.11
		140	5700	SISO CHAIN A	17.95	17.95	62.37	22.95
				SISO CHAIN B	18.25	18.25	66.83	23.25
802.11n20	HT0	100	5500	SISO CHAIN A	17.21	17.21	52.60	22.21
				SISO CHAIN B	17.08	17.08	51.05	22.08
		120	5600	SISO CHAIN A	21.18	21.18	131.22	26.18
				SISO CHAIN B	21.13	21.13	129.72	26.13
		140	5700	SISO CHAIN A	18.08	18.08	64.27	23.08
				SISO CHAIN B	18.30	18.30	67.61	23.30
	HT8	100	5500	MIMO CHAIN A	16.81	16.99	49.98	21.99
				MIMO CHAIN B	16.52	16.70	46.75	21.70
				Combined A+B	19.68	19.86	96.72	24.86
		120	5600	MIMO CHAIN A	19.83	20.01	100.18	25.01
				MIMO CHAIN B	19.70	19.88	97.22	24.88
				Combined A+B	22.78	22.95	197.40	27.95
		140	5700	MIMO CHAIN A	17.03	17.21	52.57	22.21
				MIMO CHAIN B	17.16	17.34	54.17	22.34
				Combined A+B	20.11	20.28	106.74	25.28
802.11n40	HT0	102F	5510	SISO CHAIN A	17.37	17.53	56.62	22.53
				SISO CHAIN B	17.10	17.26	53.20	22.26
		118F	5590	SISO CHAIN A	21.22	21.38	137.39	26.38
				SISO CHAIN B	21.20	21.36	136.75	26.36
		134F	5670	SISO CHAIN A	18.52	18.68	73.78	23.68
				SISO CHAIN B	18.37	18.53	71.28	23.53
	HT8	102F	5510	MIMO CHAIN A	16.76	17.11	51.37	22.11
				MIMO CHAIN B	16.39	16.74	47.17	21.74
				Combined A+B	19.59	19.94	98.54	24.94
		118F	5590	MIMO CHAIN A	20.28	20.63	115.53	25.63
				MIMO CHAIN B	20.28	20.63	115.53	25.63
				Combined A+B	23.29	23.64	231.05	28.64
		134F	5670	MIMO CHAIN A	17.99	18.34	68.18	23.34
				MIMO CHAIN B	18.04	18.39	68.97	23.39
				Combined A+B	21.03	21.37	137.16	26.37

Mode	Rate	Channel	Freq. [MHz]	Antenna	Average Cond. Output Power [dBm]	Max.* Cond. Output Power [dBm]	Max.* Cond. Output Power [mW]	Max.* EIRP [dBm]
802.11ac80	VHT0	106ac80	5530	SISO CHAIN A	17.76	18.06	64.04	23.06
				SISO CHAIN B	17.87	18.17	65.69	23.17
				MIMO CHAIN A	16.00	16.64	46.13	21.64
				MIMO CHAIN B	15.79	16.43	43.95	21.43
				Combined A+B	18.91	19.55	90.08	24.55
		122ac80	5610	SISO CHAIN A	19.52	19.82	96.05	24.82
				SISO CHAIN B	19.20	19.50	89.22	24.50
				MIMO CHAIN A	18.62	19.26	84.33	24.26
				MIMO CHAIN B	18.22	18.86	76.91	23.86
				Combined A+B	21.43	22.07	161.23	27.07
802.11ac160	VHT0	114ac160	5570	SISO CHAIN A	14.56	15.12	32.54	20.12
				SISO CHAIN B	14.13	14.69	29.47	19.69
				MIMO CHAIN A	11.97	13.02	20.05	18.02
				MIMO CHAIN B	11.71	12.76	18.89	17.76
				Combined A+B	14.85	15.90	38.94	20.90

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

Max Value

Min Value

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

Mode	Rate	Channel	Freq. [MHz]	Antenna	Average Cond. Output Power - UNII- 2C [dBm]	Max.* Cond. Output Power - UNII-2C [dBm]	Max.* Cond. Output Power - UNII-2C [mW]	Max.* EIRP UNII2C [dBm]
802.11n20	HT0	144	5720	SISO CHAIN A	19.63	19.71	93.60	24.71
				SISO CHAIN B	19.82	19.90	97.78	24.90
	HT8			MIMO CHAIN A	18.51	18.69	73.92	23.69
				MIMO CHAIN B	18.53	18.71	74.26	23.71
				Combined A+B	21.53	21.71	148.18	26.71
802.11n40	HT0	142F	5710	SISO CHAIN A	20.31	20.47	111.41	25.47
				SISO CHAIN B	20.36	20.52	112.70	25.52
	HT8			MIMO CHAIN A	19.60	19.95	98.78	24.95
				MIMO CHAIN B	19.75	20.10	102.25	25.10
				Combined A+B	22.69	23.03	201.04	28.03
802.11ac80	VHT0	138ac80	5690	SISO CHAIN A	20.83	21.13	129.86	26.13
				SISO CHAIN B	20.70	21.00	126.03	26.00
				MIMO CHAIN A	20.18	20.82	120.77	25.82
				MIMO CHAIN B	20.23	20.87	122.17	25.87
				Combined A+B	23.22	23.85	242.94	28.85

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

Max Value

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 CHAIN A	5.90	5.90
				SISO CHAIN B	5.97	5.97
		120	5600	SISO CHAIN A	9.51	9.51
				SISO CHAIN B	9.43	9.43
		140	5700	SISO CHAIN A	6.26	6.26
				SISO CHAIN B	6.57	6.57
802.11n20	HT0	100	5500	SISO CHAIN A	5.40	5.40
				SISO CHAIN B	5.28	5.28
		120	5600	SISO CHAIN A	9.21	9.21
				SISO CHAIN B	9.15	9.15
		140	5700	SISO CHAIN A	6.14	6.14
				SISO CHAIN B	6.33	6.33
	HT8	100	5500	MIMO CHAIN A	4.91	5.09
				MIMO CHAIN B	4.73	4.91
				Combined A+B	7.83	8.01
		120	5600	MIMO CHAIN A	7.84	8.02
				MIMO CHAIN B	7.73	7.91
				Combined A+B	10.80	10.97
		140	5700	MIMO CHAIN A	5.09	5.27
				MIMO CHAIN B	5.26	5.44
				Combined A+B	8.19	8.36

Mode	Rate	Channel	Freq. [MHz]	Antenna	Average Conducted. PSD [dBm/MHz]	Max.* Conducted. PSD [dBm/MHz]
802.11n40	HT0	102F	5510	SISO CHAIN A	2.37	2.53
				SISO CHAIN B	2.10	2.26
		118F	5590	SISO CHAIN A	6.12	6.28
				SISO CHAIN B	6.11	6.27
		134F	5670	SISO CHAIN A	3.47	3.63
				SISO CHAIN B	3.28	3.44
	HT8	102F	5510	MIMO CHAIN A	1.78	2.13
				MIMO CHAIN B	1.41	1.76
				Combined A+B	4.61	4.96
		118F	5590	MIMO CHAIN A	5.26	5.61
				MIMO CHAIN B	5.25	5.60
				Combined A+B	8.27	8.61
		134F	5670	MIMO CHAIN A	3.01	3.36
				MIMO CHAIN B	3.01	3.36
				Combined A+B	6.02	6.37
802.11ac80	VHT0	106ac80	5530	SISO CHAIN A	0.37	0.67
				SISO CHAIN B	0.48	0.78
				MIMO CHAIN A	-1.24	-0.60
				MIMO CHAIN B	-1.50	-0.86
				Combined A+B	1.64	2.28
		122ac80	5610	SISO CHAIN A	2.16	2.46
				SISO CHAIN B	1.84	2.14
				MIMO CHAIN A	1.43	2.07
				MIMO CHAIN B	1.07	1.71
				Combined A+B	4.26	5.12
802.11ac160	VHT0	114ac160	5570	SISO CHAIN A	-5.48	-4.92
				SISO CHAIN B	-5.92	-5.36
				MIMO CHAIN A	-7.92	-6.87
				MIMO CHAIN B	-8.12	-7.07
				Combined A+B	-5.01	-3.96

* 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	Freq. [MHz]	Antenna	Average conducted PSD UNII-2C [dBm/MHz]	Maximum* conducted PSD UNII-2C [dBm/MHz]
802.11n20	HT0	144	5720	SISO CHAIN A	8.65	8.73
				SISO CHAIN B	8.86	8.94
	HT8			MIMO CHAIN A	7.52	7.74
				MIMO CHAIN B	7.60	7.78
				Combined A+B	10.57	10.77
802.11n40	HT0	142F	5710	SISO CHAIN A	5.59	5.75
				SISO CHAIN B	5.64	5.80
	HT8			MIMO CHAIN A	4.94	5.29
				MIMO CHAIN B	5.07	5.42
				Combined A+B	8.02	8.36
802.11ac80	VHT0	138ac80	5690	SISO CHAIN A	3.51	3.81
				SISO CHAIN B	3.36	3.66
				MIMO CHAIN A	2.99	3.63
				MIMO CHAIN B	3.02	3.66
				Combined A+B	6.02	6.65

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

See Section B.3.3 for the screenshot results.

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

Test limits

FCC part	RSS part	Limits																				
15.407 (b) (3)	RSS-247 Clause 6.2.3 (2)	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.																				
15.209	RSS-GEN, Clause 8.9	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>	Freq Range (MHz)	Field Strength (μV/m)	Field Strength (dBμV/m)	Meas. Distance (m)	30-88	100	40	3	88-216	150	43.5	3	216-960	200	46	3	Above 960	500	54	3
		Freq Range (MHz)	Field Strength (μV/m)	Field Strength (dBμV/m)	Meas. Distance (m)																	
		30-88	100	40	3																	
		88-216	150	43.5	3																	
		216-960	200	46	3																	
Above 960	500	54	3																			
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.																						

Test procedure

The setup below 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.

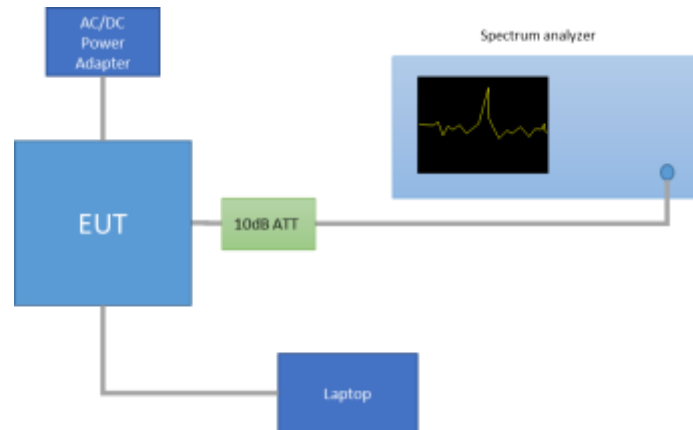
For Band Edge measurements in average mode on the low frequency section, one of the two methods is used according to section G) 6) (KDB 789033 D02):

- 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.3.5 for the screenshot results.

B.2.4 Radiated spurious emission

Standard references

FCC part	RSS part	Limits																				
15.407 (b) (3)	RSS-247 Clause 6.2.3 (2)	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.																				
15.209	RSS-GEN, Clause 8.9	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 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.	Freq Range (MHz)	Field Strength (μV/m)	Field Strength (dBμV/m)	Meas. Distance (m)	30-88	100	40	3	88-216	150	43.5	3	216-960	200	46	3	Above 960	500	54	3
Freq Range (MHz)	Field Strength (μV/m)	Field Strength (dBμV/m)	Meas. Distance (m)																			
30-88	100	40	3																			
88-216	150	43.5	3																			
216-960	200	46	3																			
Above 960	500	54	3																			

Test procedure

The setup below was used to measure the radiated spurious emissions.

Depending of the frequency range and bands being tested, different antennas and filters were used.

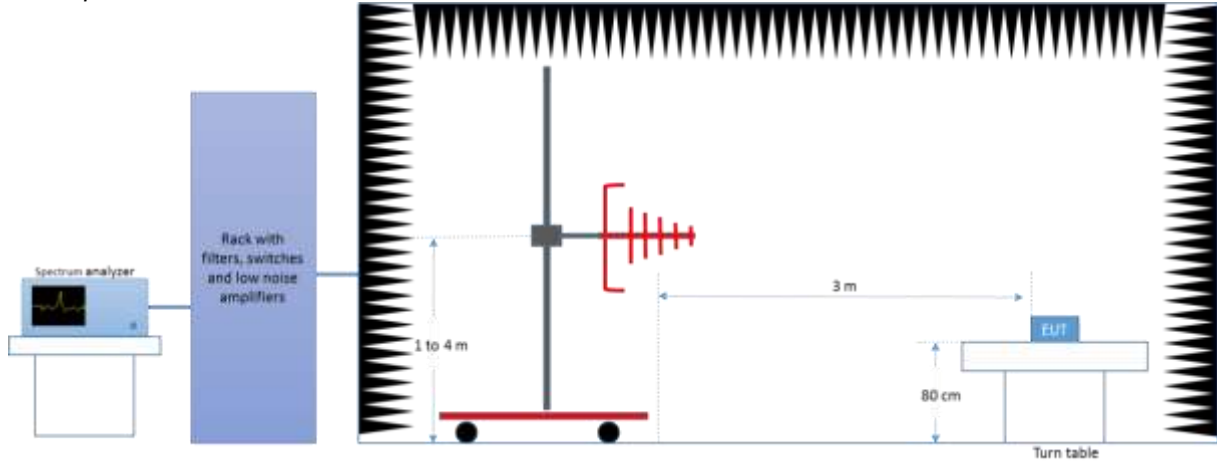
The final measurement is done by varying the antenna height, the EUT azimuth over 360° and for both Vertical and Horizontal polarizations.

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.

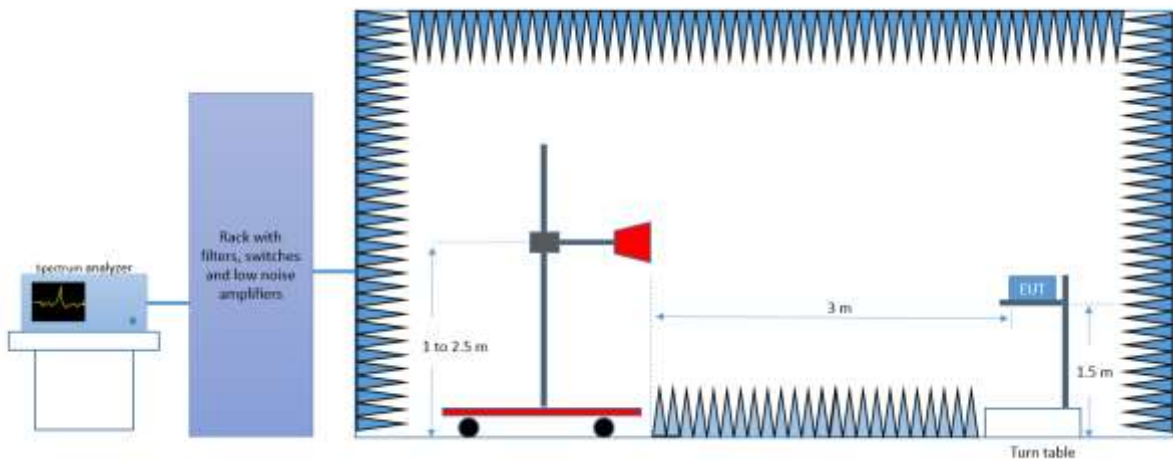
For technologies 802.n20, 802.n40, 802.ac80 and 802.ac160 the worst case in terms of spurious emissions found among the low, mid and high channels when tested on chain A and B separately is used to perform the test in MIMO mode (Chain A+B).

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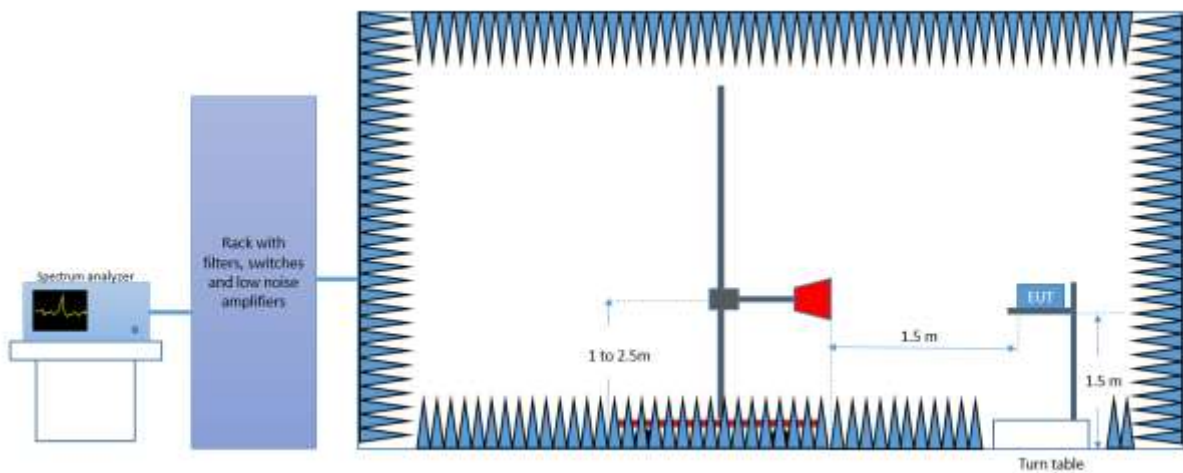
Radiated Setup 30 MHz - 1GHz



Radiated Setup 1 GHz - 18 GHz



Radiated Setup 18 GHz - 40 GHz



Test Results

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

Radiated Spurious – CH100

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	30.4	---	43.6	13.2
216.0	35.7	---	43.6	7.9
576.0	36.9	---	46.0	9.1
640.0	35.3	---	46.0	10.7
1190.0	45.3	---	74.0	28.7
1190.2	---	39.4	54.0	14.6
1267.3	44.6	---	74.0	29.4
1267.3	---	34.9	54.0	19.1
16673.1	---	44.4	54.0	9.6
16740.1	54.9	---	74.0	19.1
21992.3	---	39.6	54.0	14.4
22006.2	49.2	---	74.0	24.8

Radiated Spurious – CH120

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	30.5	---	43.6	13.1
215.9	35.8	---	43.6	7.8
264.0	42.9	---	46.0	3.1
576.0	36.5	---	46.0	9.5
1190.2	---	38.9	54.0	15.1
1190.2	44.9	---	74.0	29.1
1267.5	44.5	---	74.0	29.5
1764.1	---	44.2	54.0	9.8
16640.1	---	44.8	54.0	9.2
16652.6	56.5	---	74.0	17.5
22395.8	52.4	---	74.0	21.6
22397.7	---	42.3	54.0	11.7

Radiated Spurious – CH140

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	30.9	---	43.6	12.7
264.0	42.5	---	46.0	3.5
576.0	37.6	---	46.0	8.4
640.0	35.5	---	46.0	10.5
1113.2	43.7	---	74.0	30.3
1113.4	---	35.5	54.0	18.5
1190.2	---	39.2	54.0	14.8
1190.5	45.3	---	74.0	28.7
11398.7	---	43.9	54.0	10.1
11405.0	54.7	---	74.0	19.3
22795.1	---	38.0	54.0	16.0
22795.1	48.7	---	74.0	25.3

30 MHz – 40 GHz, 802.11a, 6Mbps, Chain B
Radiated Spurious – CH100

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	30.9	---	43.6	12.6
215.9	37.3	---	43.6	6.2
576.0	37.3	---	46.0	8.7
640.0	35.6	---	46.0	10.4
1113.4	42.6	---	74.0	31.4
1113.6	---	36.2	54.0	17.8
1190.5	---	39.0	54.0	15.0
1190.5	44.9	---	74.0	29.1
16633.9	---	44.8	54.0	9.2
16697.7	55.5	---	74.0	18.5
34201.3	50.8	---	74.0	23.2
34203.9	---	39.3	54.0	14.7

Radiated Spurious – CH120

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	31.7	---	43.6	11.9
216.0	34.2	---	43.6	9.4
249.0	40.0	---	46.0	6.0
576.0	36.9	---	46.0	9.1
1187.8	46.0	---	74.0	28.0
1190.2	---	39.3	54.0	14.7
16636.1	54.2	---	74.0	19.8
16663.3	---	44.6	54.0	9.4
20622.5	---	36.6	54.0	17.4
20652.3	47.7	---	74.0	26.3

Radiated Spurious – CH140

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	30.8	---	43.6	12.8
179.5	34.8	---	43.6	8.8
576.0	36.8	---	46.0	9.2
640.0	36.1	---	46.0	9.9
1187.3	44.8	---	74.0	29.2
1190.2	---	39.0	54.0	15.0
16663.8	---	44.7	54.0	9.3
16673.1	55.5	---	74.0	18.5
37828.2	50.6	---	74.0	23.4
37837.9	---	38.5	54.0	15.5

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

Radiated Spurious – CH100

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	30.9	---	43.6	12.7
215.9	36.5	---	43.6	7.1
576.0	36.3	---	46.0	9.7
640.0	35.7	---	46.0	10.3
1113.6	42.8	---	74.0	31.2
1113.6	---	35.6	54.0	18.4
1187.0	45.4	---	74.0	28.6
1190.2	---	38.8	54.0	15.2
10999.4	---	39.2	54.0	14.8
11004.8	49.2	---	74.0	24.8
21988.6	50.4	---	74.0	23.6
22000.0	---	40.9	54.0	13.1

Radiated Spurious – CH120

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	31.6	---	43.6	12.0
215.9	32.2	---	43.6	11.4
576.0	36.8	---	46.0	9.2
640.0	35.1	---	46.0	10.9
1113.4	---	36.4	54.0	17.6
1113.6	43.7	---	74.0	30.3
1190.2	44.9	---	74.0	29.1
1190.5	---	39.0	54.0	15.0
11198.4	---	40.1	54.0	13.9
11198.8	49.9	---	74.0	24.1
22405.7	---	40.8	54.0	13.2
22405.9	51.1	---	74.0	22.9

Radiated Spurious – CH140

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	30.9	---	43.6	12.7
216.0	32.3	---	43.6	11.3
576.0	37.1	---	46.0	8.9
640.0	36.0	---	46.0	10.0
1111.2	42.7	---	74.0	31.3
1113.6	---	35.6	54.0	18.4
1187.8	44.8	---	74.0	29.2
1190.5	---	38.1	54.0	15.9
11395.6	55.6	---	74.0	18.4
11399.6	---	44.0	54.0	10.0
22781.0	47.0	---	74.0	27.0
22795.3	---	36.7	54.0	17.3

30 MHz – 40 GHz, 802.11n20, HT0, Chain B
Radiated Spurious – CH100

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	31.0	---	43.6	12.6
215.9	37.1	---	43.6	6.5
576.0	37.2	---	46.0	8.8
640.0	36.5	---	46.0	9.5
1113.4	43.2	---	74.0	30.8
1113.4	---	36.7	54.0	17.3
1187.5	45.6	---	74.0	28.4
1190.2	---	39.1	54.0	14.9
16620.5	---	44.6	54.0	9.4
16753.9	56.0	---	74.0	18.0
27451.3	48.9	---	74.0	25.1
27452.6	---	37.0	54.0	17.0

Radiated Spurious – CH120

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	30.6	---	43.6	13.0
215.9	32.7	---	43.6	10.9
576.0	36.3	---	46.0	9.7
640.0	35.6	---	46.0	10.4
1113.4	43.7	---	74.0	30.3
1113.4	---	36.8	54.0	17.2
1187.5	45.5	---	74.0	28.5
1190.2	---	39.3	54.0	14.7
16672.7	---	44.0	54.0	10.0
16770.8	54.7	---	74.0	19.3
34892.4	---	39.9	54.0	14.1
34897.8	50.4	---	74.0	23.6

Radiated Spurious – CH140

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	30.6	---	43.6	13.0
216.0	29.0	---	43.6	14.6
576.0	36.8	---	46.0	9.2
640.0	35.2	---	46.0	10.8
1113.4	---	36.1	54.0	17.9
1113.9	43.0	---	74.0	31.0
1190.2	44.8	---	74.0	29.2
1190.2	---	39.2	54.0	14.8
16673.1	54.3	---	74.0	19.7
16723.6	---	44.6	54.0	9.4
22887.5	---	36.0	54.0	18.0
22892.5	47.7	---	74.0	26.3

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

Radiated Spurious – CH100

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
182.5	35.1	---	43.6	8.5
576.0	35.9	---	46.0	10.1
640.0	41.9	---	46.0	4.1
1190.2	44.3	---	74.0	29.7
1190.2	---	37.4	54.0	16.6
10998.5	---	40.5	54.0	13.5
11001.2	52.2	---	74.0	21.8
21980.4	49.0	---	74.0	25.0
21995.8	---	40.0	54.0	14.0

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

Radiated Spurious – CH102F

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	30.6	---	43.6	13.0
216.0	28.6	---	43.6	15.0
576.0	37.3	---	46.0	8.7
640.0	34.7	---	46.0	11.3
1112.9	42.8	---	74.0	31.2
1113.6	---	35.4	54.0	18.6
1187.5	45.1	---	74.0	28.9
1187.8	---	39.5	54.0	14.5
16692.8	---	44.3	54.0	9.7
16696.3	55.1	---	74.0	18.9
29035.5	---	36.8	54.0	17.2
29038.8	48.0	---	74.0	26.0

Radiated Spurious – CH118F

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	30.9	---	43.6	12.7
216.0	33.5	---	43.6	9.9
576.0	37.4	---	46.0	8.6
640.0	35.8	---	46.0	10.2
1113.4	---	36.0	54.0	18.0
1114.1	42.1	---	74.0	31.9
1190.2	45.3	---	74.0	28.7
1190.2	---	39.2	54.0	14.8
13402.4	---	40.5	54.0	13.5
13409.1	53.3	---	74.0	20.7
22356.8	48.1	---	74.0	25.9
22360.2	---	38.1	54.0	15.9

Radiated Spurious – CH134F

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	30.7	---	43.6	12.9
215.9	31.2	---	43.6	12.4
576.0	36.8	---	46.0	9.2
640.0	34.4	---	46.0	11.6
1112.7	42.9	---	74.0	31.1
1113.4	---	35.4	54.0	18.6
1187.0	45.3	---	74.0	28.7
1187.5	---	39.6	54.0	14.4
17021.1	56.7	---	74.0	17.3
17022.0	---	45.7	54.0	8.3
22670.5	---	41.1	54.0	12.9
22672.9	50.0	---	74.0	24.0

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

Radiated Spurious – CH102F

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	31.0	---	43.6	12.6
216.0	29.1	---	43.6	14.5
576.0	36.5	---	46.0	9.5
639.8	35.5	---	46.0	10.5
1113.4	43.3	---	74.0	30.7
1113.6	---	36.0	54.0	18.0
1187.5	45.9	---	74.0	28.1
1187.5	---	39.3	54.0	14.7
16645.0	55.4	---	74.0	18.6
16654.0	---	44.2	54.0	9.8
34864.5	50.9	---	74.0	23.1
34873.4	---	39.5	54.0	14.5

Radiated Spurious – CH118F

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	30.9	---	43.6	12.7
216.0	34.4	---	43.6	9.2
576.0	37.5	---	46.0	8.5
640.0	35.5	---	46.0	10.5
1113.4	42.5	---	74.0	31.5
1113.4	---	36.7	54.0	17.3
1187.5	45.1	---	74.0	28.9
1187.8	---	38.9	54.0	15.1
16278.7	57.0	---	74.0	17.0
16287.2	---	44.3	54.0	9.7
26021.6	48.3	---	74.0	25.7
26022.9	---	36.8	54.0	17.2

Radiated Spurious – CH134F

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	31.1	---	43.6	12.5
216.0	31.6	---	43.6	12.0
576.0	36.6	---	46.0	9.4
640.0	35.3	---	46.0	10.7
1113.4	---	36.0	54.0	18.0
1113.6	43.3	---	74.0	30.7
1187.5	46.2	---	74.0	27.8
1190.2	---	38.9	54.0	15.1
13101.2	53.0	---	74.0	21.0
13105.2	---	39.9	54.0	14.1
39794.1	53.4	---	74.0	20.6
39819.0	---	42.6	54.0	11.4

30 MHz – 26.5 GHz, 802.11n40, HT0, Chain A+B

Radiated Spurious – CH118F

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
181.8	36.1	---	43.6	7.5
576.0	36.5	---	46.0	9.5
640.0	42.7	---	46.0	3.3
1190.2	---	37.7	54.0	16.3
1190.5	43.7	---	74.0	30.3
11174.7	51.0	---	74.0	23.0
11174.7	---	40.6	54.0	13.4
39674.3	---	42.3	54.0	11.7
39719.0	53.3	---	74.0	20.7

30 MHz – 40 GHz, 802.11ac80, HT0, Chain A

Radiated Spurious – CH106ac80

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	31.3	---	43.6	12.3
216.0	31.0	---	43.6	12.6
576.0	36.7	---	46.0	9.3
640.0	34.5	---	46.0	11.5
1113.4	---	35.0	54.0	19.0
1113.6	42.1	---	74.0	31.9
1187.3	44.9	---	74.0	29.1
1187.5	---	38.6	54.0	15.4
11068.1	50.5	---	74.0	23.5
11087.7	---	40.2	54.0	13.8
39657.4	51.1	---	74.0	22.9
39683.2	---	41.0	54.0	13.0

Radiated Spurious – CH122ac80

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	31.2	---	43.6	12.4
216.0	30.7	---	43.6	12.9
576.0	36.9	---	46.0	9.1
640.0	34.9	---	46.0	11.1
1113.6	---	35.6	54.0	18.4
1113.9	43.9	---	74.0	30.1
1187.5	45.9	---	74.0	28.1
1190.2	---	38.9	54.0	15.1
12420.8	52.0	---	74.0	22.0
12424.9	---	39.2	54.0	14.8
22500.0	47.7	---	74.0	26.3
22500.2	---	39.2	54.0	14.8

Radiated Spurious – CH138ac80

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	31.1	---	43.6	12.5
216.0	30.4	---	43.6	13.2
264.0	32.7	---	46.0	13.3
576.0	36.5	---	46.0	9.5
640.1	34.7	---	46.0	11.3
1113.4	43.9	---	74.0	30.1
1113.6	---	35.6	54.0	18.4
1187.5	---	38.0	54.0	16.0
1187.8	45.0	---	74.0	29.0
15948.1	55.6	---	74.0	18.4
15949.0	---	43.8	54.0	10.2
39685.3	---	42.6	54.0	11.4
39771.8	53.5	---	74.0	20.5

30 MHz – 40 GHz, 802.11ac80, HT0, Chain B
Radiated Spurious – CH106ac80

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	31.3	---	43.6	12.3
216.0	29.9	---	43.6	13.7
576.0	36.5	---	46.0	9.5
640.0	34.9	---	46.0	11.1
1113.4	43.6	---	74.0	30.4
1113.6	---	35.8	54.0	18.2
1187.5	---	39.8	54.0	14.2
1187.8	45.3	---	74.0	28.7
15960.2	55.4	---	74.0	18.6
15979.8	---	44.2	54.0	9.8
39668.4	---	42.6	54.0	11.4
39805.1	53.5	---	74.0	20.5

Radiated Spurious – CH122ac80

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	30.6	---	43.6	13.0
216.0	31.3	---	43.6	12.3
576.0	36.7	---	46.0	9.3
1113.4	---	36.2	54.0	17.8
1113.4	43.6	---	74.0	30.4
1187.3	45.8	---	74.0	28.2
1187.8	---	38.7	54.0	15.3
1190.5	---	38.8	54.0	15.2
16000.3	54.3	---	74.0	19.7
16003.5	---	43.9	54.0	10.1
39695.4	53.2	---	74.0	20.8
39997.0	---	42.7	54.0	11.3

Radiated Spurious – CH138ac80

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	31.3	---	43.6	12.3
215.9	30.7	---	43.6	12.9
576.0	38.3	---	46.0	7.7
640.0	35.9	---	46.0	10.1
1113.4	---	35.8	54.0	18.2
1113.9	43.0	---	74.0	31.0
1187.5	---	38.8	54.0	15.2
1187.8	45.1	---	74.0	28.9
15937.9	---	43.8	54.0	10.2
15941.9	55.7	---	74.0	18.3
39788.2	53.1	---	74.0	20.9
39841.0	---	43.4	54.0	10.6

30 MHz – 26.5 GHz, 802.11ac80, HT8, Chain A+B

Radiated Spurious – CH138ac80

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	25.4	---	43.6	18.2
170.5	30.1	---	43.6	13.4
640.0	38.7	---	46.0	7.3
1190.2	43.7	---	74.0	30.3
1190.2	---	37.3	54.0	16.7
1267.1	---	34.7	54.0	19.3
1267.3	43.5	---	74.0	30.5
11409.9	51.2	---	74.0	22.8
11409.9	---	40.5	54.0	13.5
39813.5	53.7	---	74.0	20.3
39827.9	---	43.1	54.0	10.9

30 MHz – 40 GHz, 802.11ac160, HT0, Chain A

Radiated Spurious – CH114ac160

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	31.0	---	43.6	12.6
216.0	30.9	---	43.6	12.7
264.0	33.4	---	46.0	12.6
576.0	37.8	---	46.0	8.2
640.0	35.6	---	46.0	10.4
1113.2	42.6	---	74.0	31.4
1113.4	---	35.7	54.0	18.3
1187.3	45.2	---	74.0	28.8
1187.8	---	38.8	54.0	15.2
15938.3	---	43.7	54.0	10.3
15940.6	55.6	---	74.0	18.4
39821.1	---	42.7	54.0	11.3
39997.9	53.6	---	74.0	20.4

30 MHz – 40 GHz, 802.11ac160, HT0, Chain B

Radiated Spurious – CH114ac160

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
115.2	30.3	---	43.6	13.3
216.0	30.4	---	43.6	13.2
264.0	34.6	---	46.0	11.4
576.0	36.3	---	46.0	9.7
640.0	36.5	---	46.0	9.5
1113.4	42.9	---	74.0	31.1
1113.4	---	36.3	54.0	17.7
1187.5	45.1	---	74.0	28.9
1187.5	---	38.2	54.0	15.8
16660.2	56.3	---	74.0	17.7
16661.1	---	45.4	54.0	8.6
39670.9	---	42.5	54.0	11.5
39886.5	53.6	---	74.0	20.4

30 MHz – 40 GHz, 802.11ac160, HT0, Chain A+B

Radiated Spurious – CH114ac160

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
180.0	32.3	---	43.6	11.3
320.0	32.7	---	46.0	13.3
640.0	39.6	---	46.0	6.4
1113.4	---	34.8	54.0	19.2
1113.9	42.3	---	74.0	31.7
1190.5	44.7	---	74.0	29.3
1190.5	---	38.0	54.0	16.0
11154.2	51.5	---	74.0	22.5
11158.7	---	39.9	54.0	14.1
22320.1	48.1	---	74.0	25.9
22325.4	---	38.5	54.0	15.5

B.2.5 AC power-line conducted emission

Standard references:

FCC part	Limits														
15.407 (6) 15.207	Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.														
	<table><tr><th rowspan="2">Frequency of emission (MHz)</th><th colspan="2">Conducted limit (dBμV)</th></tr><tr><th>Quasi-peak</th><th>Average</th></tr><tr><td>0.15-0.5</td><td>66 to 56*</td><td>56 to 46*</td></tr><tr><td>0.5-5</td><td>56</td><td>46</td></tr><tr><td>5-30</td><td>60</td><td>50</td></tr></table>	Frequency of emission (MHz)	Conducted limit (dBμV)		Quasi-peak	Average	0.15-0.5	66 to 56*	56 to 46*	0.5-5	56	46	5-30	60	50
	Frequency of emission (MHz)		Conducted limit (dBμV)												
		Quasi-peak	Average												
	0.15-0.5	66 to 56*	56 to 46*												
	0.5-5	56	46												
	5-30	60	50												
	*Decreases with the logarithm of the frequency.														

Test procedure:

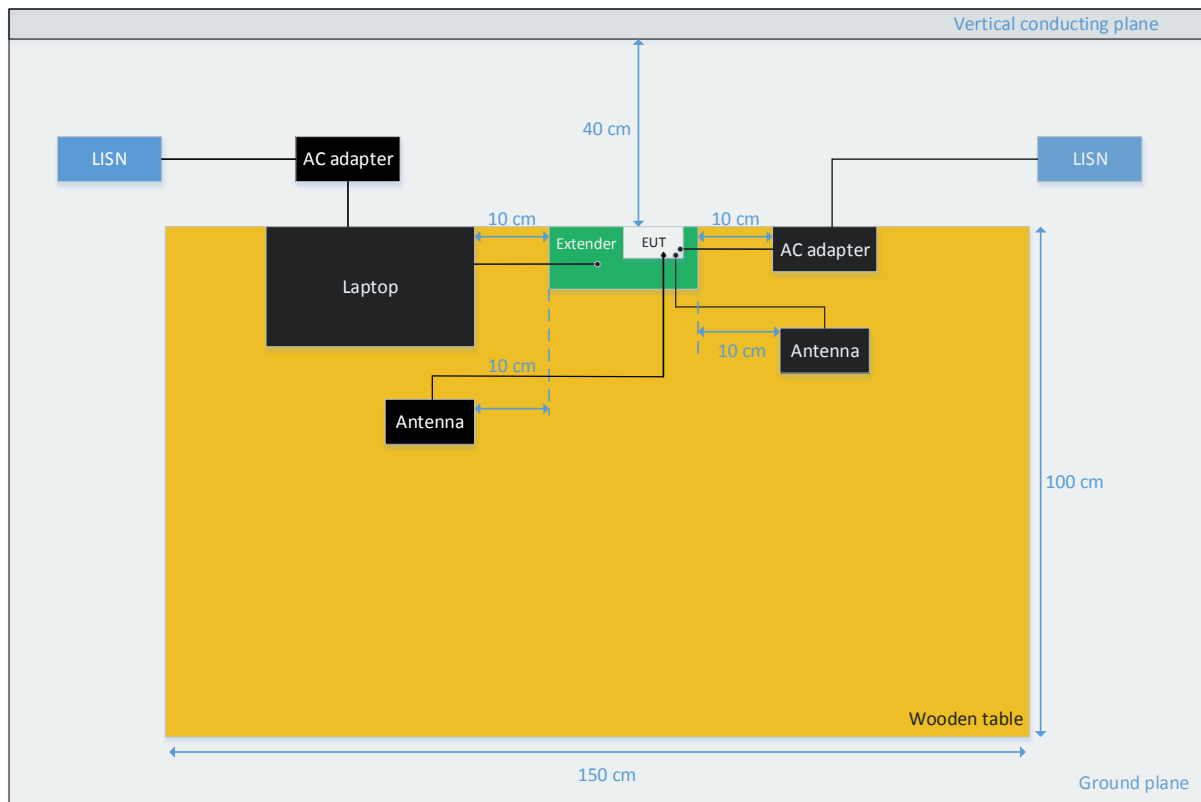
The EUT and peripherals are placed on a wooden table with a nominal size of 1.0 m by 1.5 m, raised 80 cm above the reference ground plane. The EUT is connected to AC-Power line through a Line Impedance Stabilization Network (LISN) to accommodate a 50 Ω /50 μ H coupling impedance for the measurement system. The EUT control PC is considered as a peripheric and therefore is connected to a second LISN which has the measurement port connected to a 50 ohms impedance.

Each measurement is done for each current-carrying conductor (Line and Neutral) at the end plug of the EUT power cord. The EUT is tested for several transmission modes (frequency channel, modulation, etc.) and the result providing the maximum measured emission is reported.

The exploratory measurement is done over the frequency range from 150 kHz to 30 MHz, while the measurement receiver is recording the Peak and Average signal at 10 kHz steps in Max Hold mode. The cables manipulation is performed within the range of likely configurations to determine the maximum emission. Once the EUT cable configuration, arrangement and mode of operation that produced the emission with the highest amplitude relative to the limit is found the six highest AC power-line conducted emissions relative to 20 dB of the limit are reported as the final measurement. If fewer than six emission frequencies are within 20 dB of the limit, the noise level is reported. For the final measurement, the measurement receiver records the Quasi Peak values with 9 kHz resolution bandwidth and the average values with 10 kHz resolution bandwidth.

The reported results correspond to the configuration of the worst case spurious level detected among all modes.

EUT arrangement for AC power-line conducted emission tests



Sample Calculation:

The measured level at the spectrum analyzer in dBuV is corrected by a transducer factor taking into account the losses of the RF cable and the LISN as follows:

$$\text{Conducted Emission level (dBuV)} = \text{SA}_{\text{Level}} + \text{RFCable}_{\text{Losses}} + \text{LISN}_{\text{Losses}}$$

Where:

SA_{Level} is the voltage level displayed on the measurement receiver, in dBuV.

$\text{RFCable}_{\text{Losses}}$ is the value of the cable losses between the LISN and the measurement receiver, in dB.

$\text{LISN}_{\text{Losses}}$ is the value of the insertion losses of the LISN, in dB.

Test Results:
150kHz – 30MHz, all modes
AC power-line conducted – Phase L1

Frequency	Max Peak	Avg	Limit	Margin
MHz	dBμV	dBμV	dBμV	dB
0.16	53.4	---	65.7	12.3
0.16	---	27.6	55.7	28.1
0.37	44.2	---	59.6	15.4
0.37	---	26.5	49.8	23.3
3.76	40.6	---	56.0	15.4
3.77	---	29.7	46.0	16.3
8.20	45.6	---	60.0	14.4
8.24	---	31.1	50.0	18.9
13.56	53.1	---	60.0	6.9
13.57	---	34.0	50.0	16.0
19.74	35.8	---	60.0	24.2
19.63	---	21.6	50.0	28.4

Note: The emissions found do not change with the modulation and/or frequency.

AC power-line conducted – Neutral N

Frequency	Max Peak	Avg	Limit	Margin
MHz	dBμV	dBμV	dBμV	dB
0.16	53.5	---	65.7	12.2
0.15	---	27.0	55.9	28.9
0.37	42.0	---	59.6	17.6
0.37	---	28.4	49.6	21.2
3.17	35.9	---	56.0	20.1
3.16	---	23.6	46.0	22.4
4.01	41.2	---	56.0	14.8
4.04	---	28.0	46.0	18.0
6.96	43.2	---	60.0	16.8
6.94	---	32.3	50.0	17.7
13.55	51.4	---	60.0	8.6
13.57	---	32.5	50.0	17.5

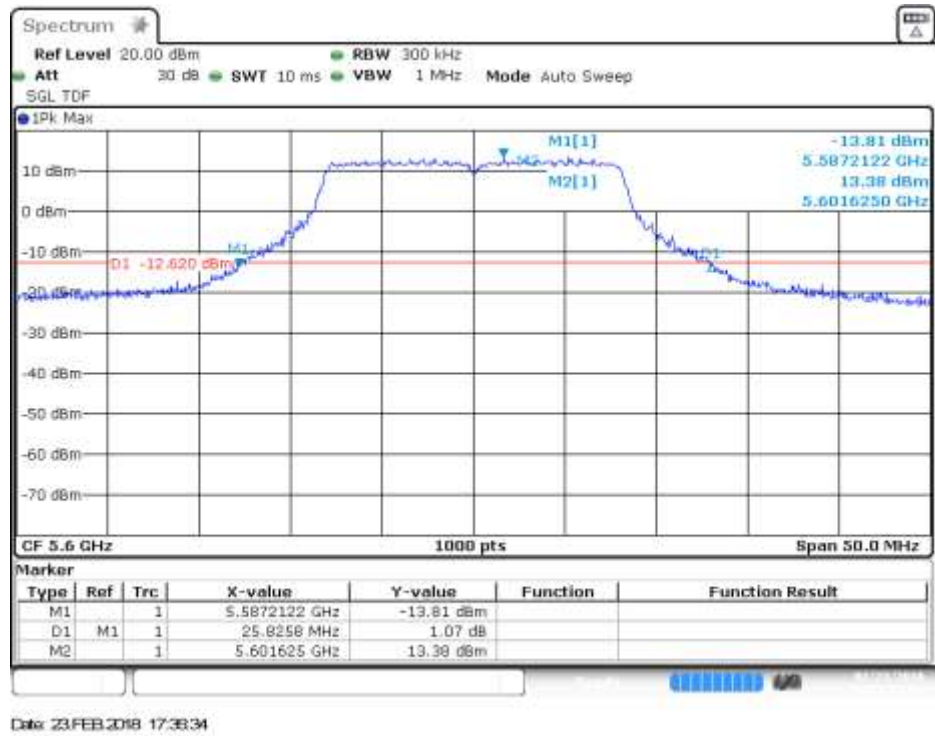
Note: The emissions found do not change with the modulation and/or frequency.

B.3 Test Results Screenshots

B.3.1 26dB Bandwidth

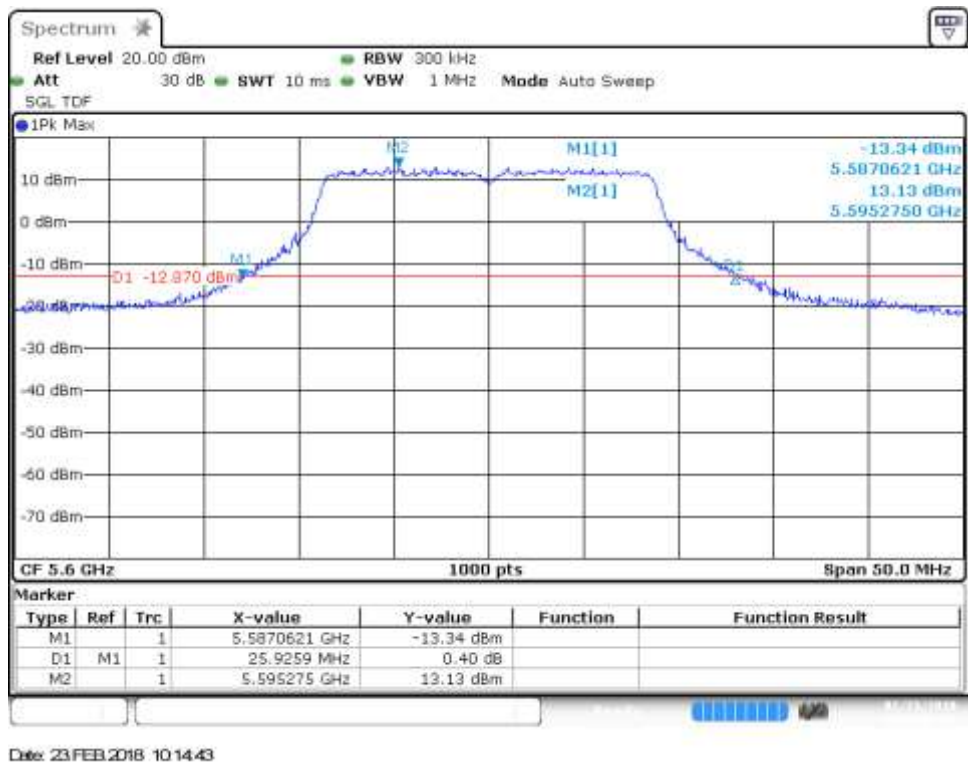
SISO-A, 802.11a, 6Mbps

Channel 120



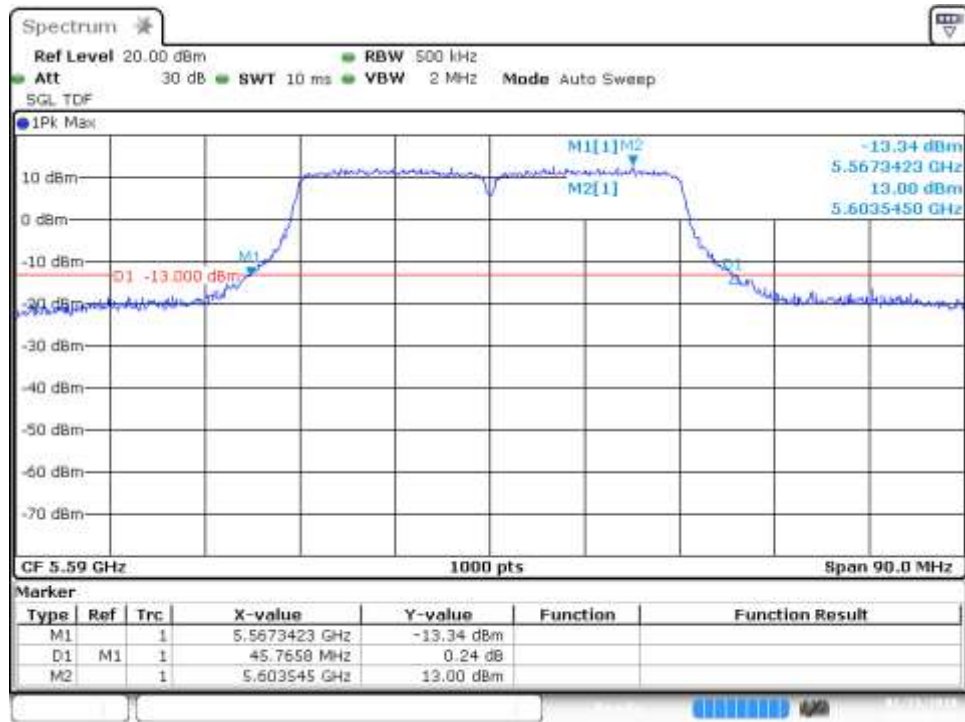
SISO-B, 802.11n20, HT0

Channel 120



SISO-A, 802.11n40, HT0

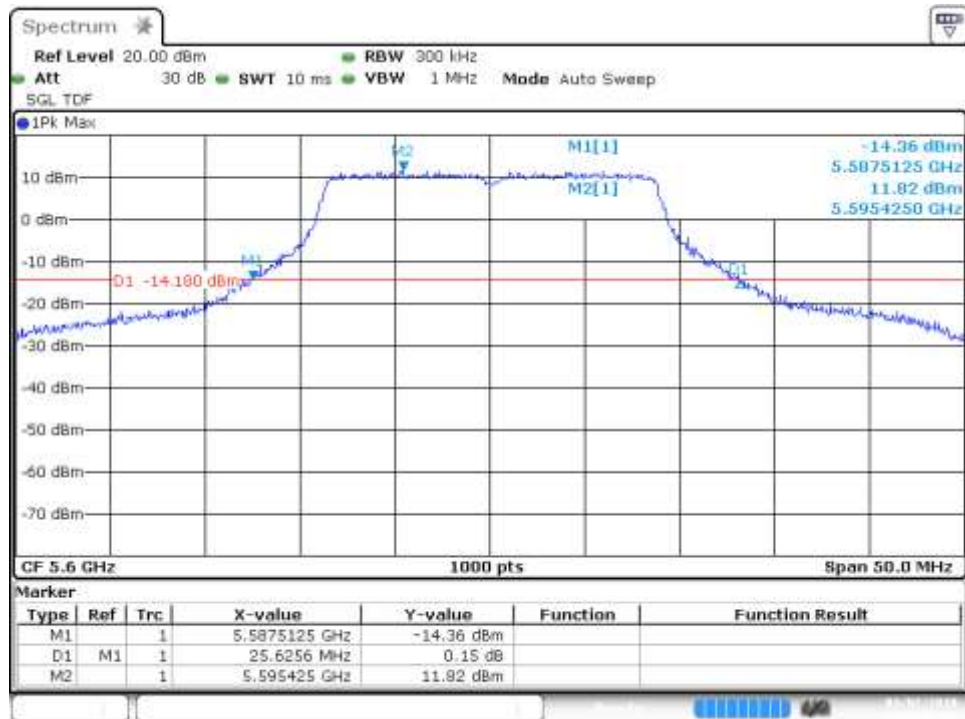
Channel 118F



Date: 23 FEB 2018 10:23:46

MIMO-A, 802.11n20, HT8

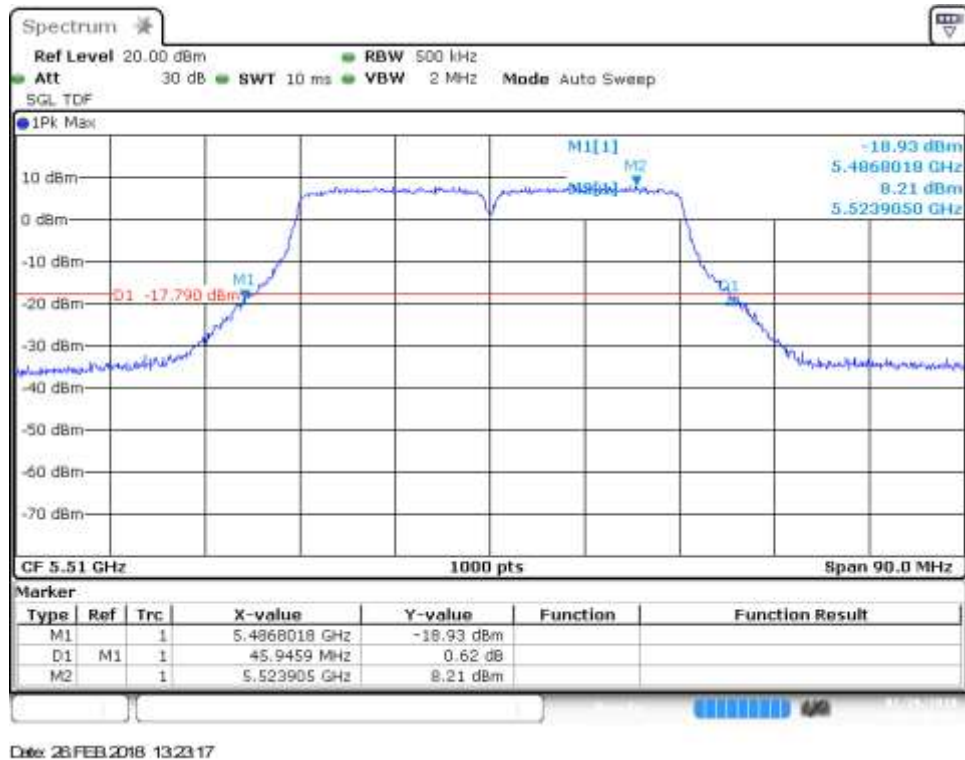
Channel 120



Date: 2 MAR 2018 14:55:18

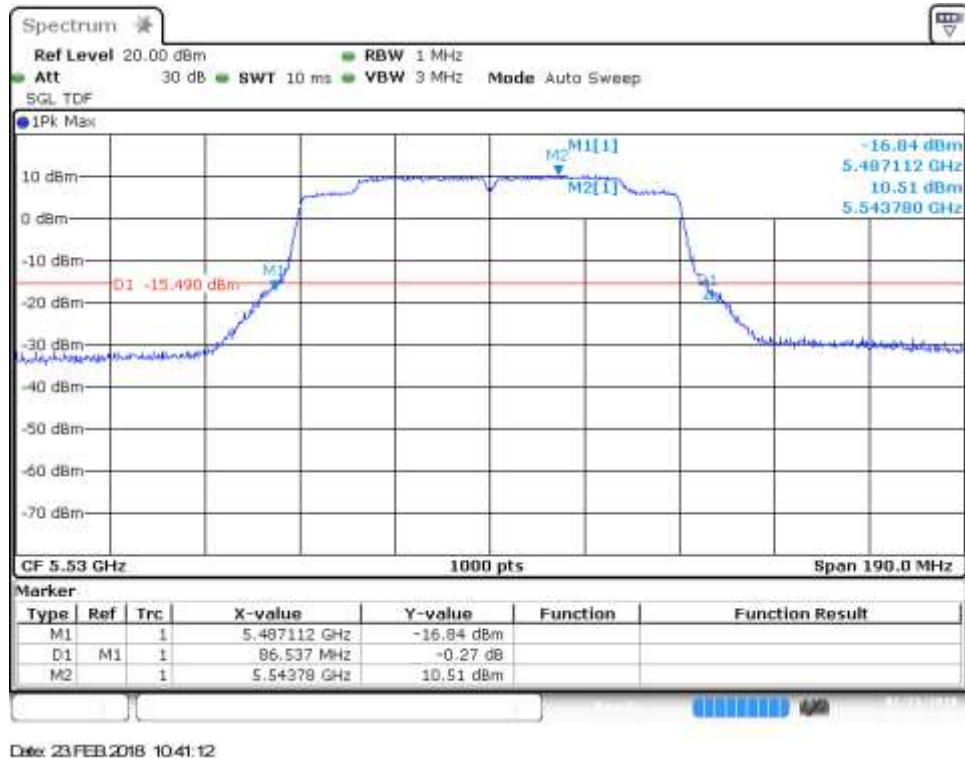
MIMO-A, 802.11n40, HT8

Channel 102F



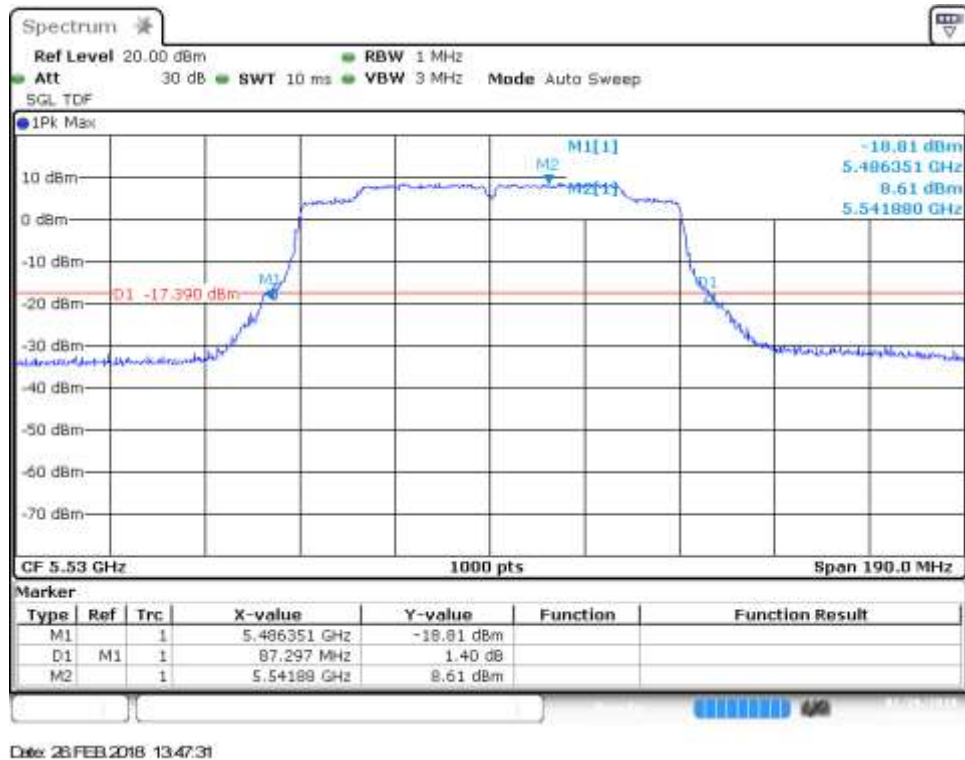
SISO-B, 802.11ac80, VHT0

Channel 106ac80



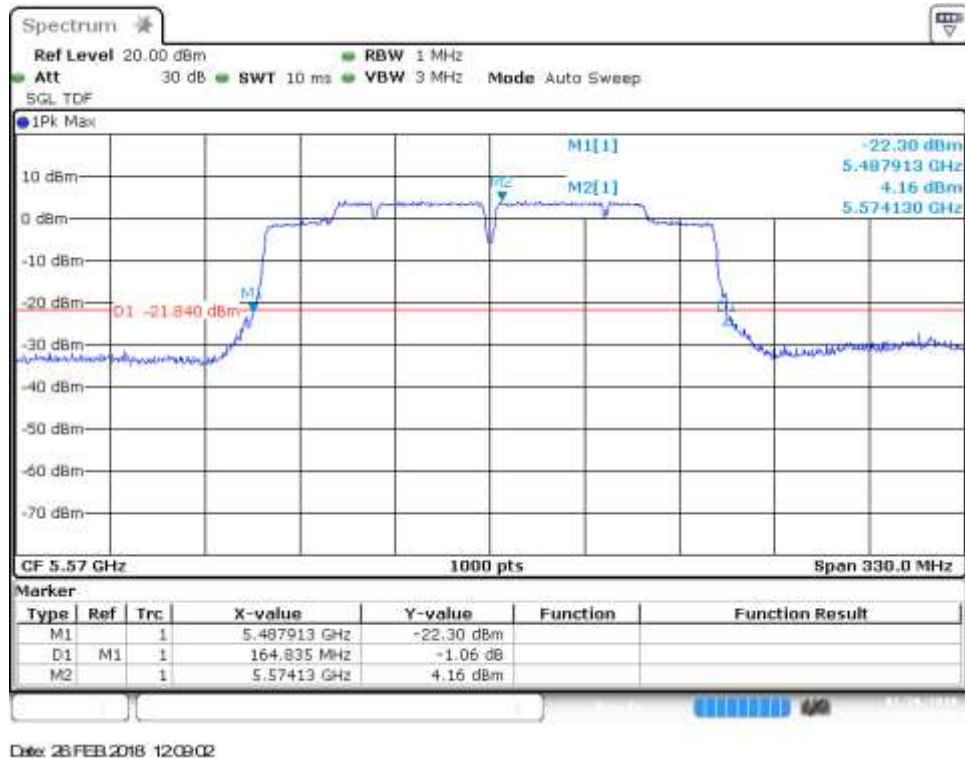
MIMO-A, 802.11ac80, VHT0

Channel 106ac80



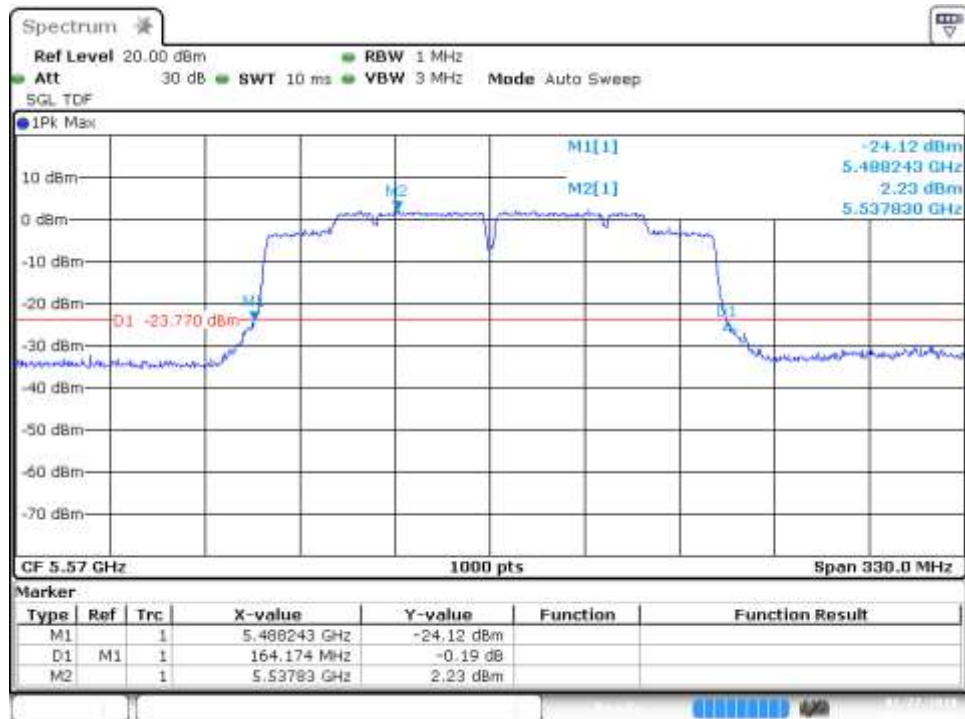
SISO-A, 802.11ac160, VHT0

Channel 114ac160



MIMO-A, 802.11ac160, VHT0

Channel 114ac160

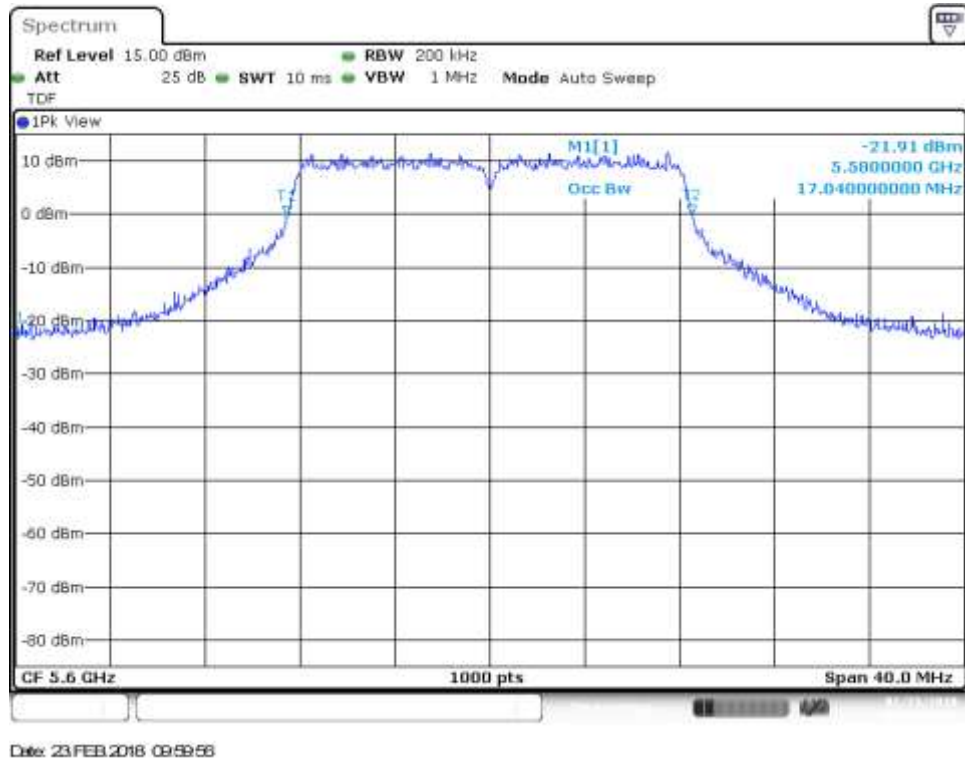


Date: 27.FEB.2016 09:16:38

B.3.2 99% Bandwidth

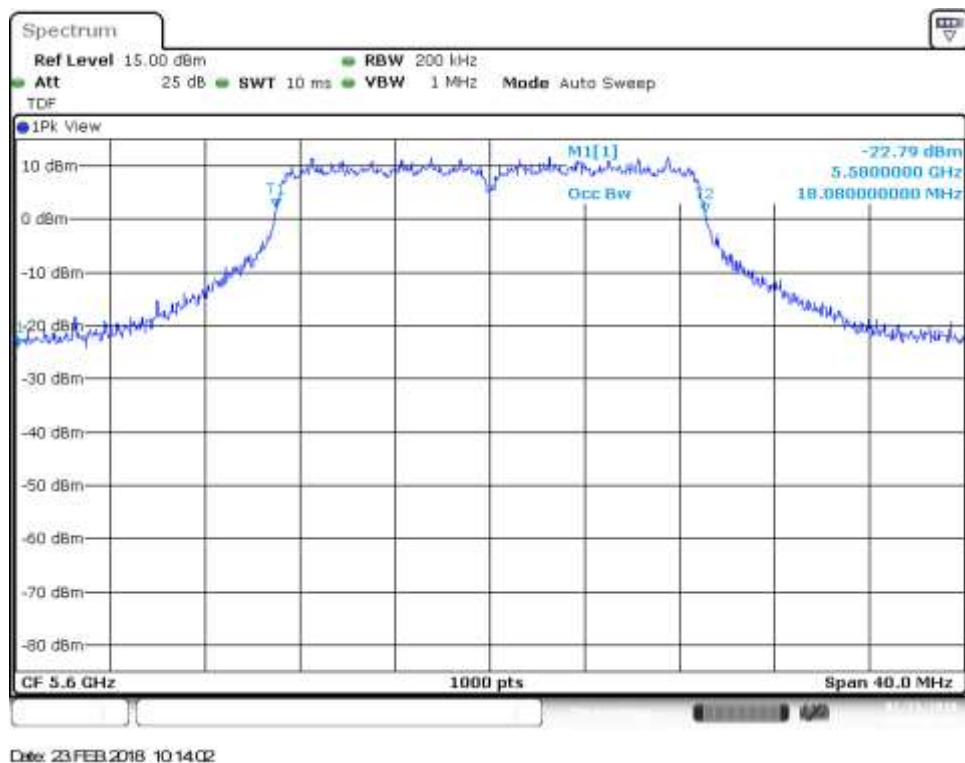
SISO-B, 802.11a, 6Mbps

Channel 120



SISO-B, 802.11n20, HT0

Channel 120



SISO-B, 802.11n40, HT0

Channel 118F



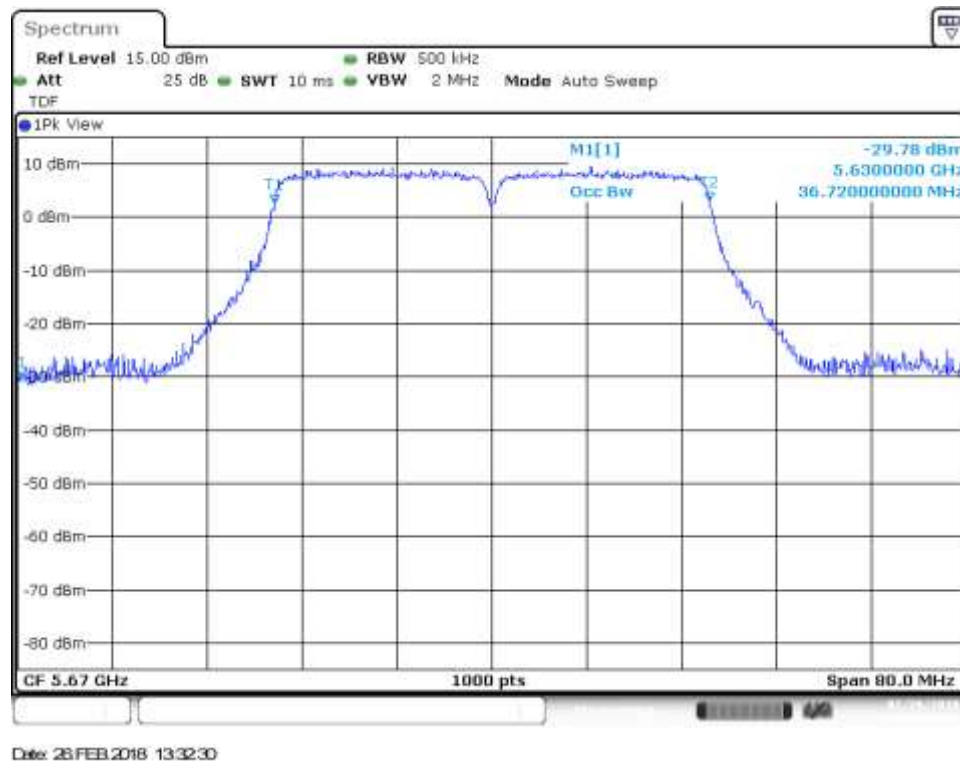
MIMO-A, 802.11n20, HT8

Channel 120



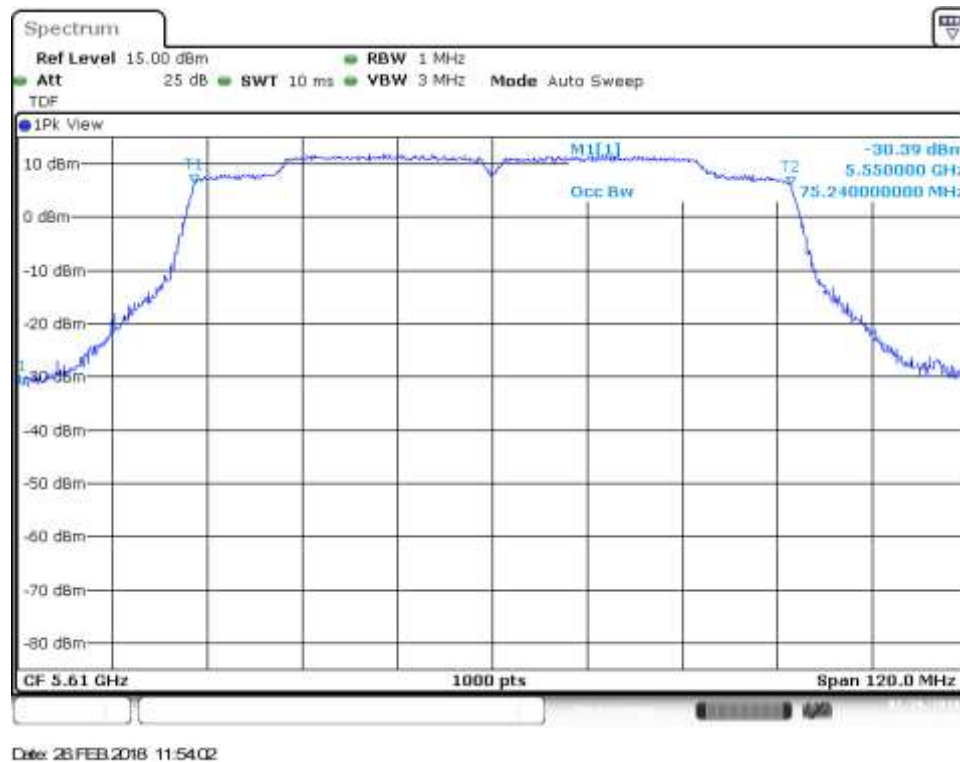
MIMO-B, 802.11n40, HT8

Channel 118F



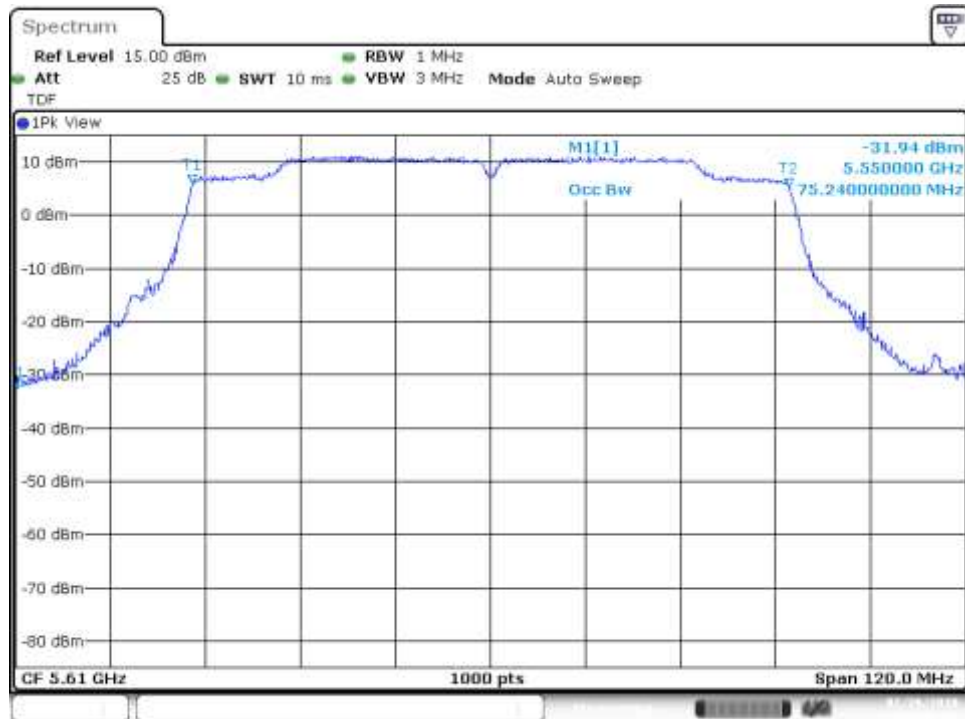
SISO-B, 802.11ac80, VHT0

Channel 122ac80



MIMO-A, 802.11ac80, VHT0

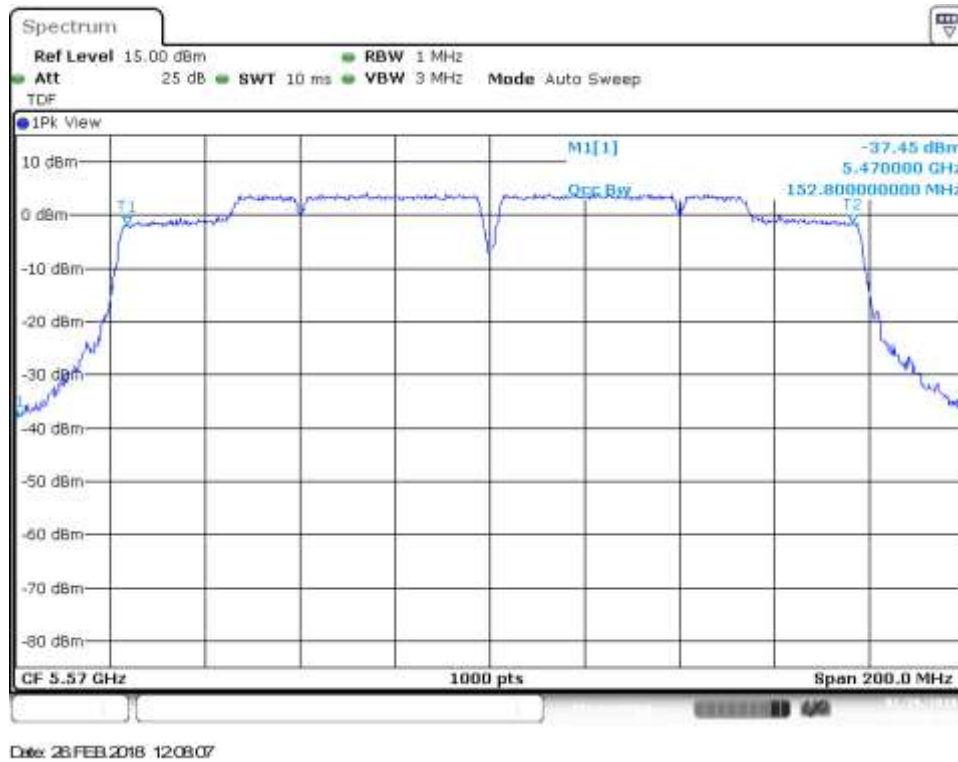
Channel 122ac80



Date: 28 FEB 2018 13:51:45

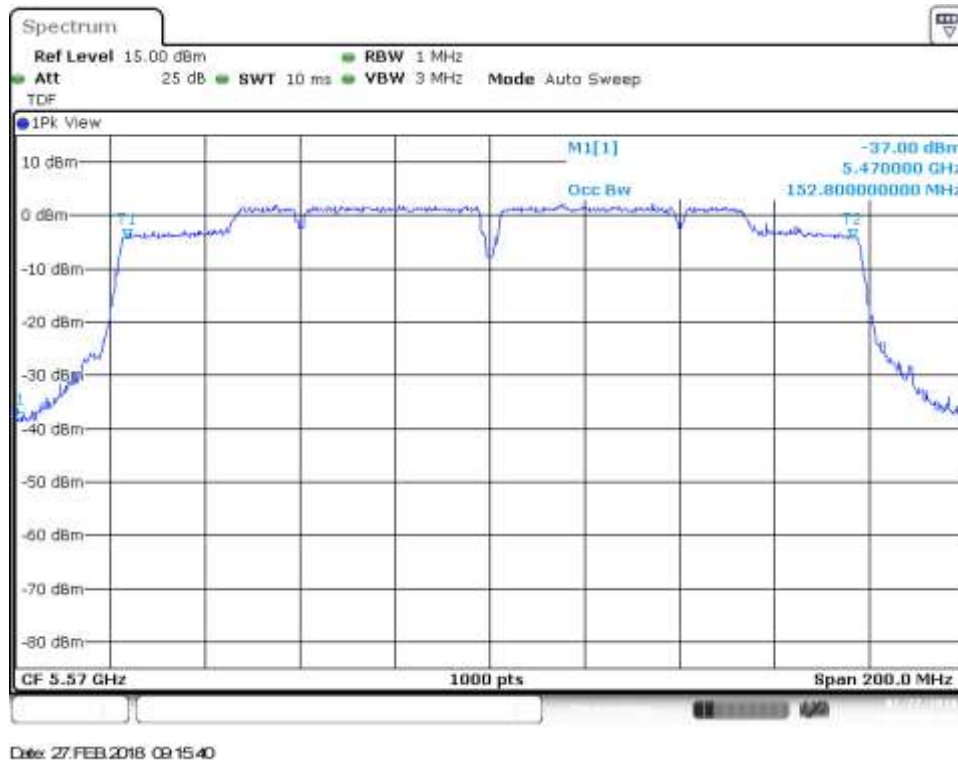
SISO-A, 802.11ac160, VHT0

Channel 114ac160



MIMO-A, 802.11ac160, VHT0

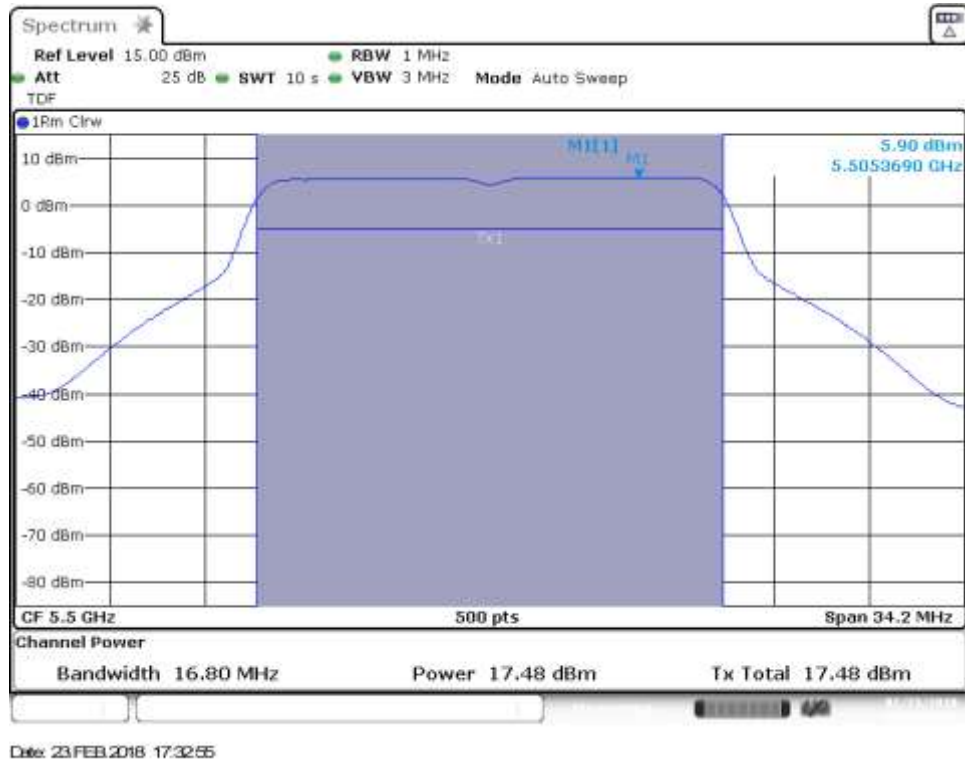
Channel 114ac160



B.3.3 Maximum Output Power & Maximum power spectral Density

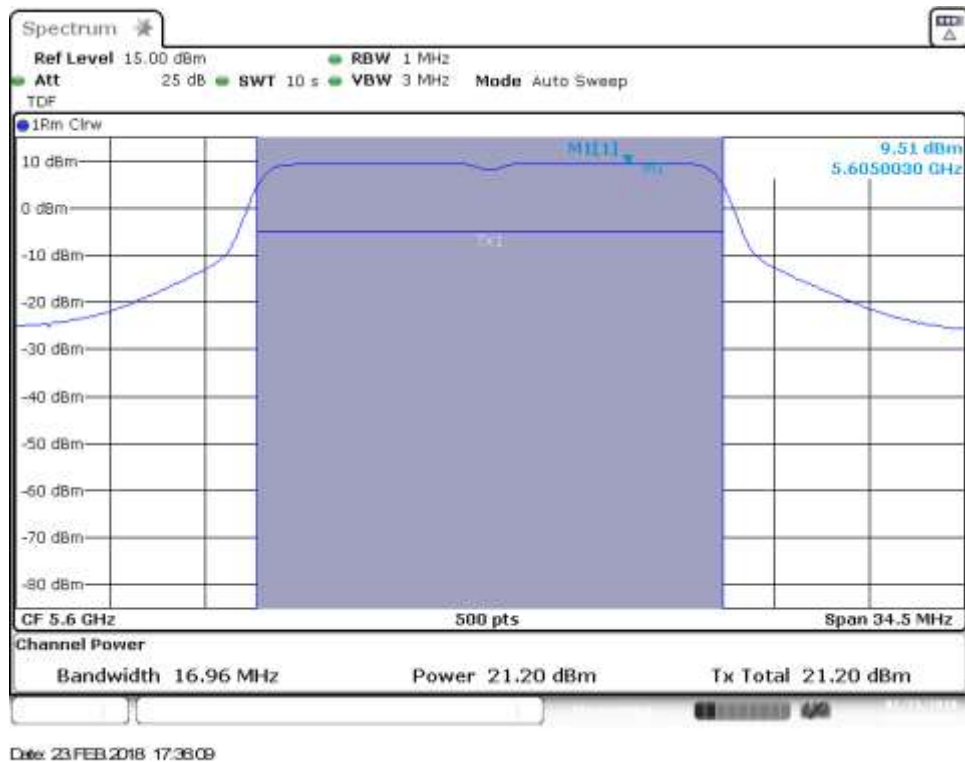
SISO-A, 802.11a, 6Mbps

Channel 100



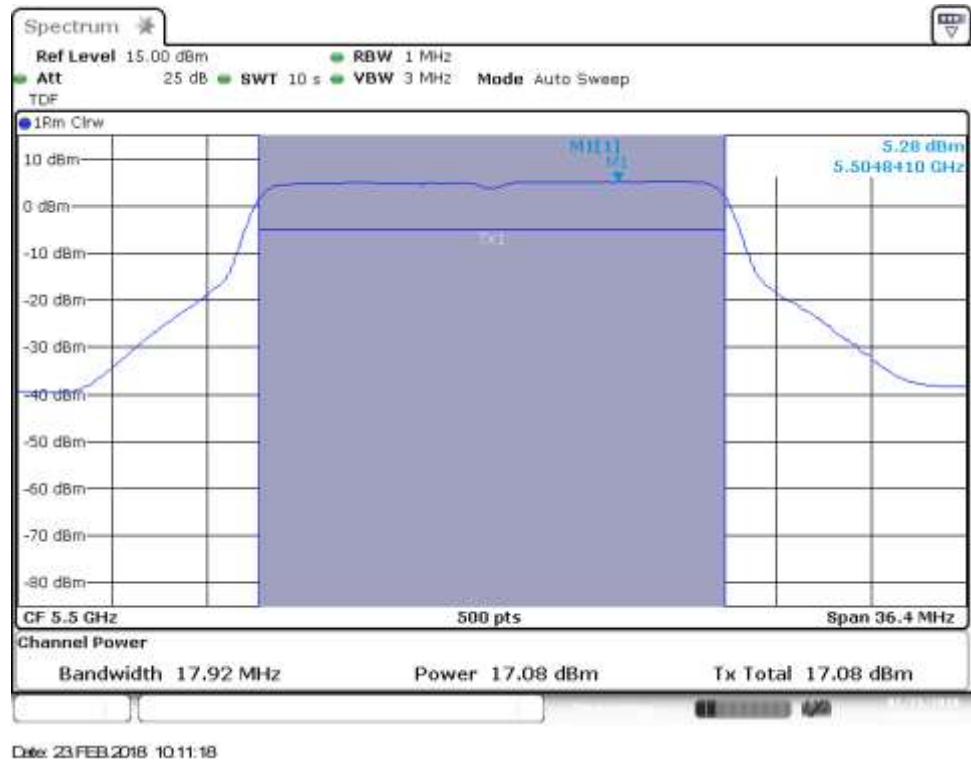
SISO-A, 802.11a, 6Mbps

Channel 120



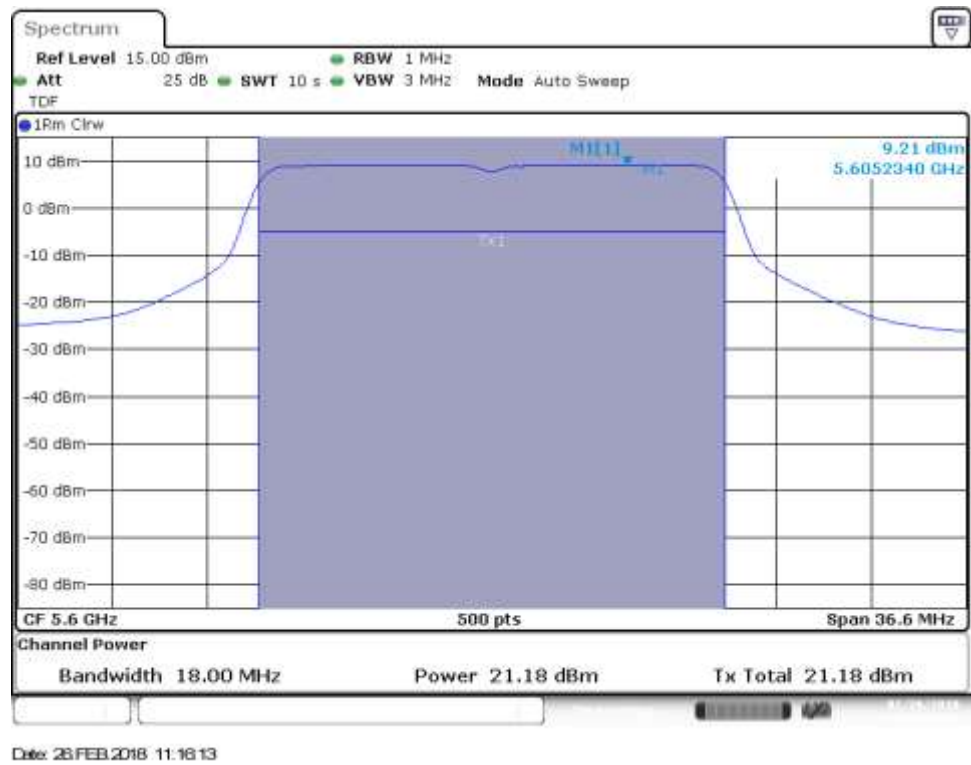
SISO-B, 802.11n20, HT0

Channel 100



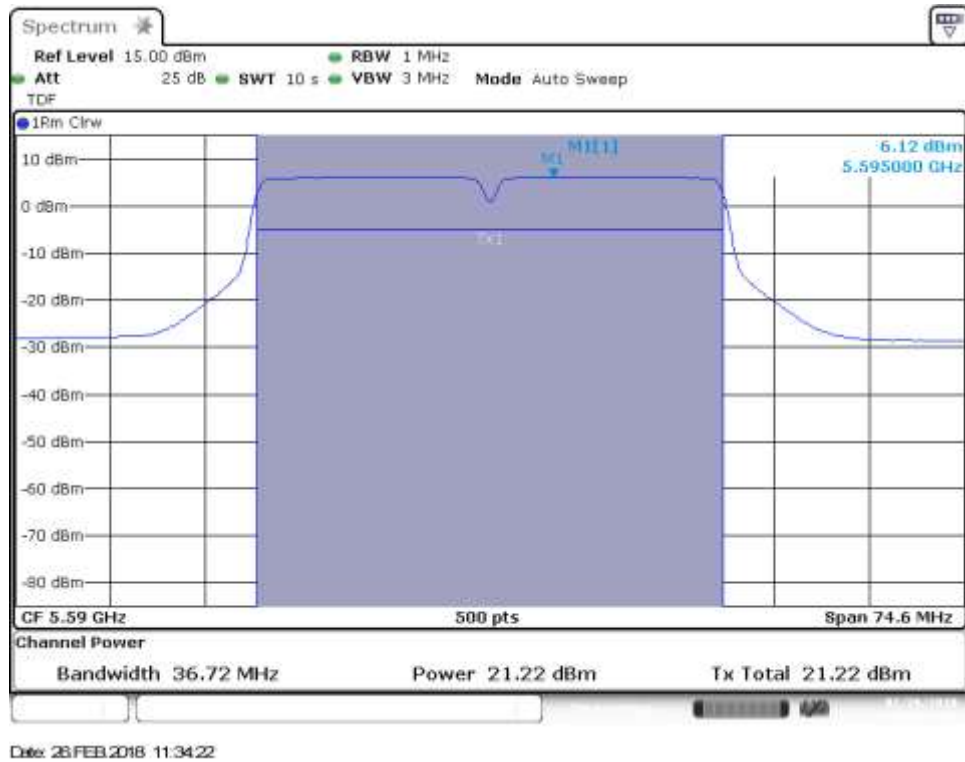
SISO-A, 802.11n20, HT0

Channel 120



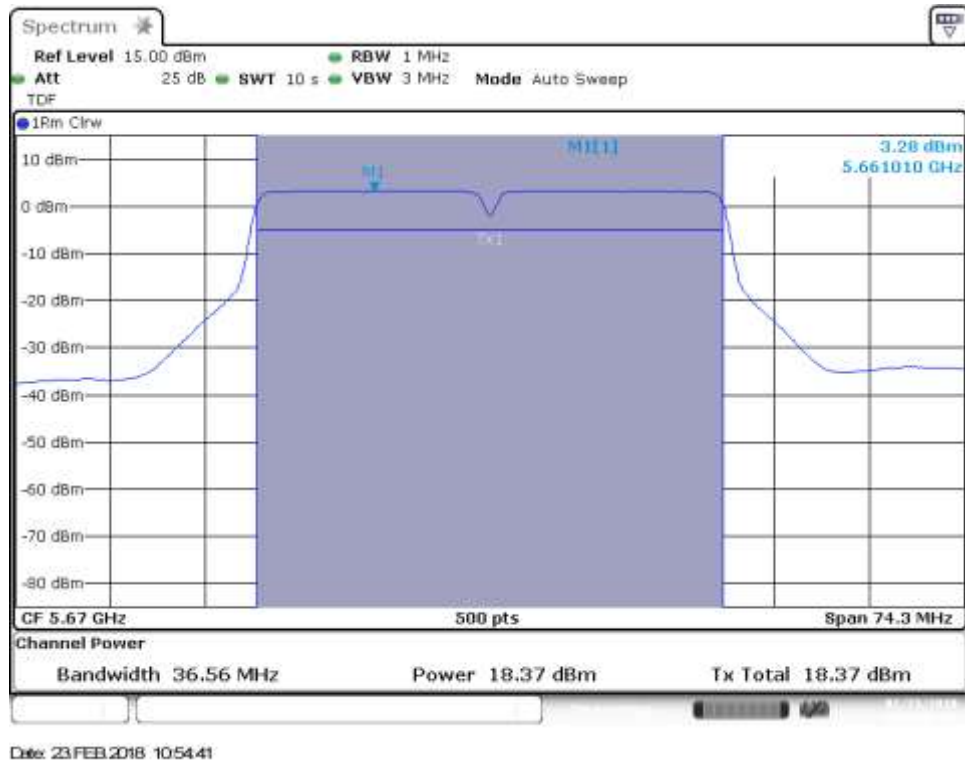
SISO-A, 802.11n40, HT0

Channel 118F



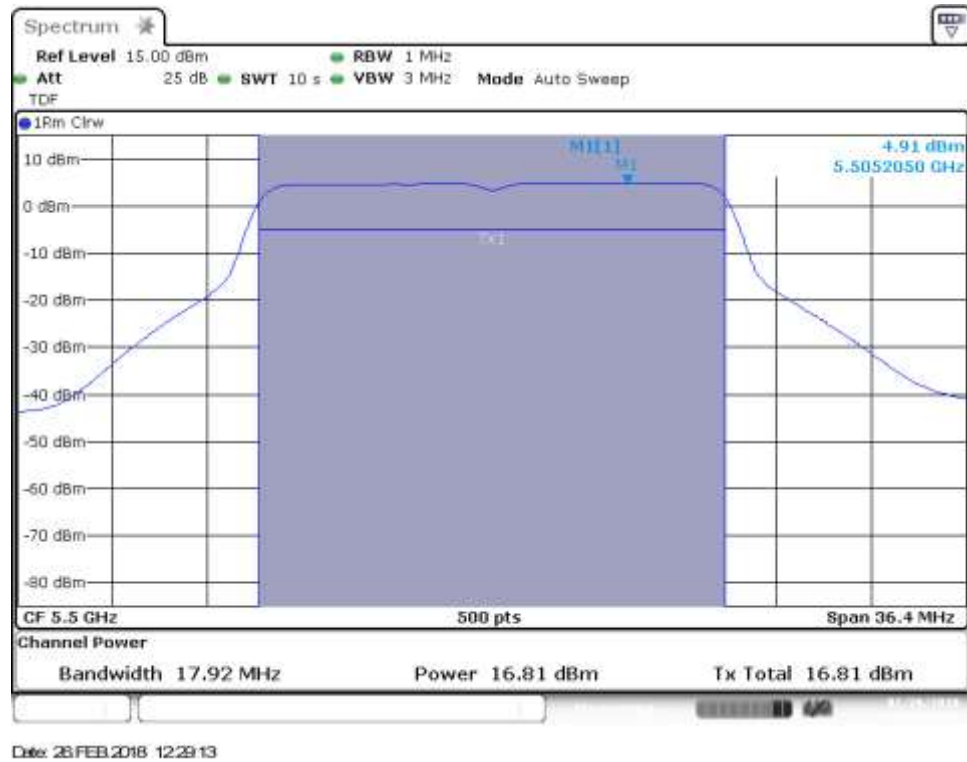
SISO-B, 802.11n40, HT0

Channel 134F



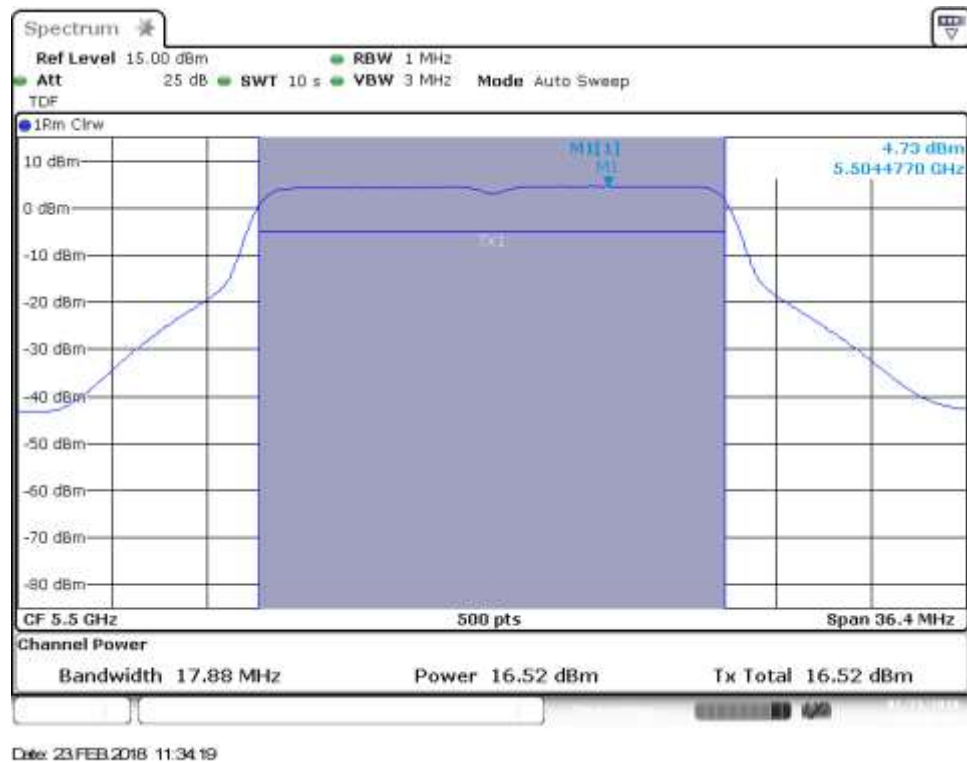
MIMO-A, 802.11n20, HT8

Channel 100



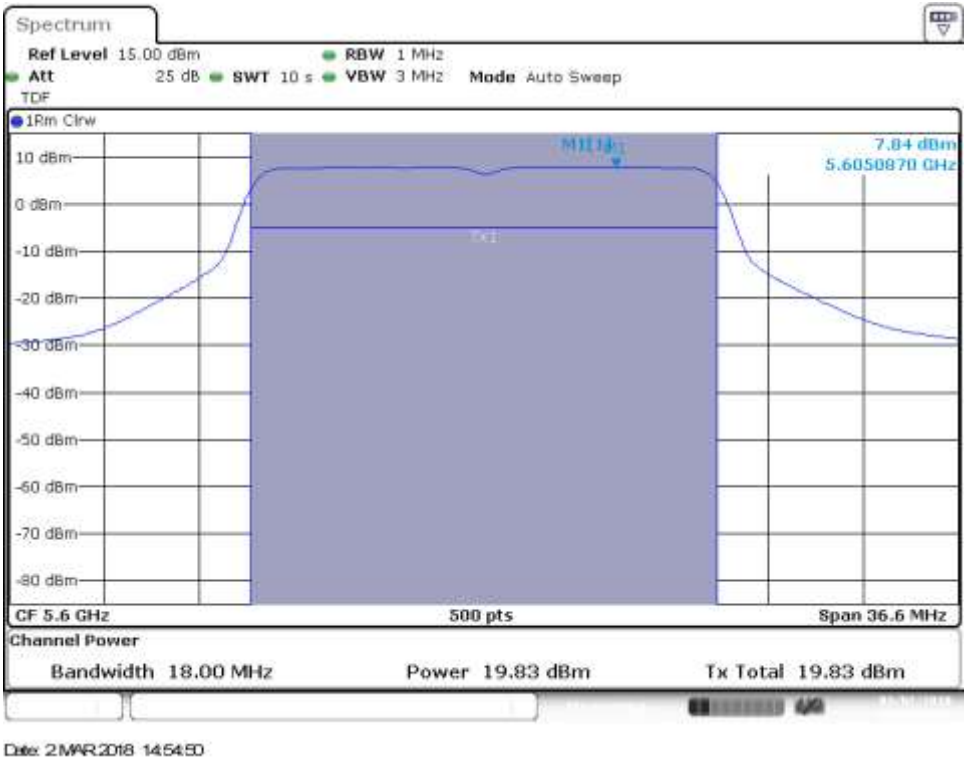
MIMO-B, 802.11n20, HT8

Channel 100



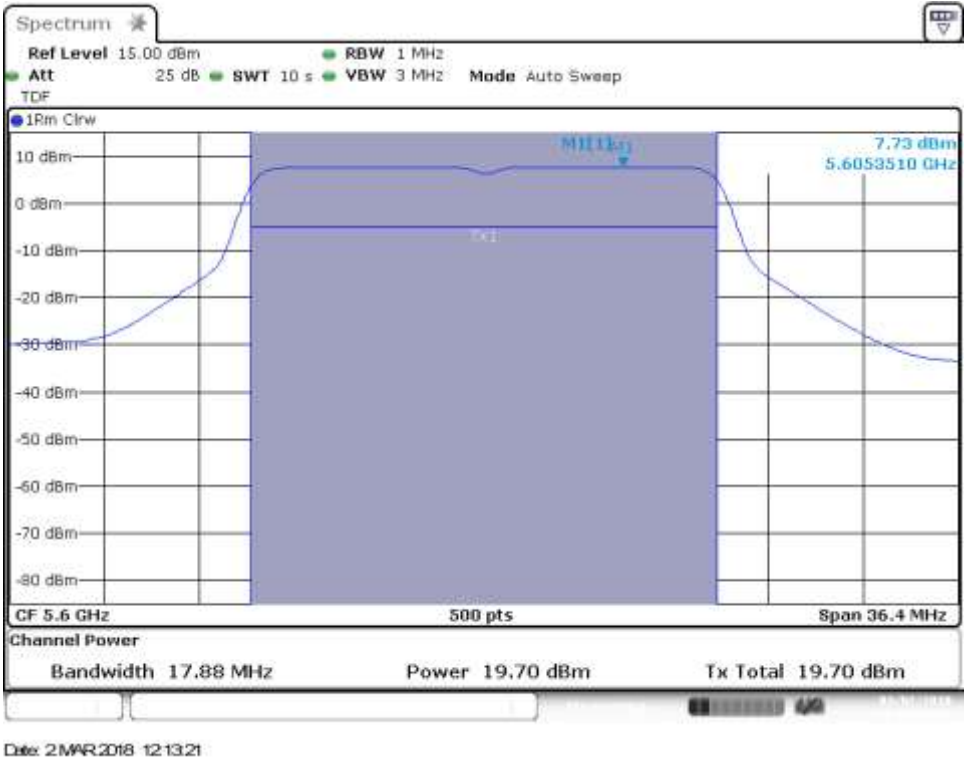
MIMO-A, 802.11n20, HT8

Channel 120



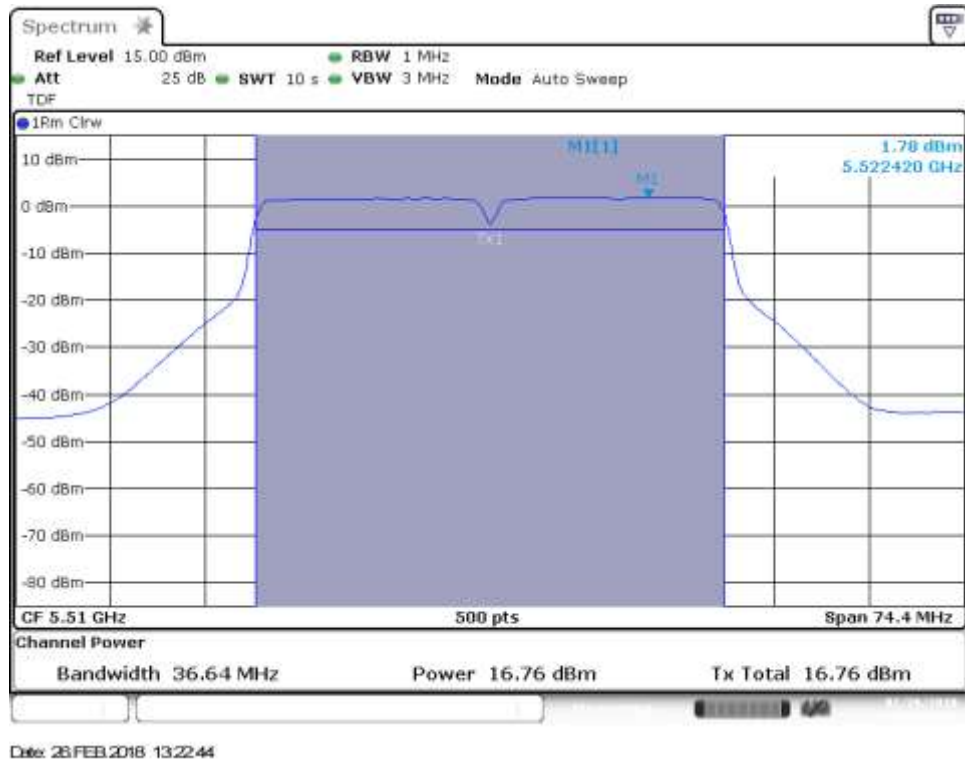
MIMO-B, 802.11n20, HT8

Channel 120



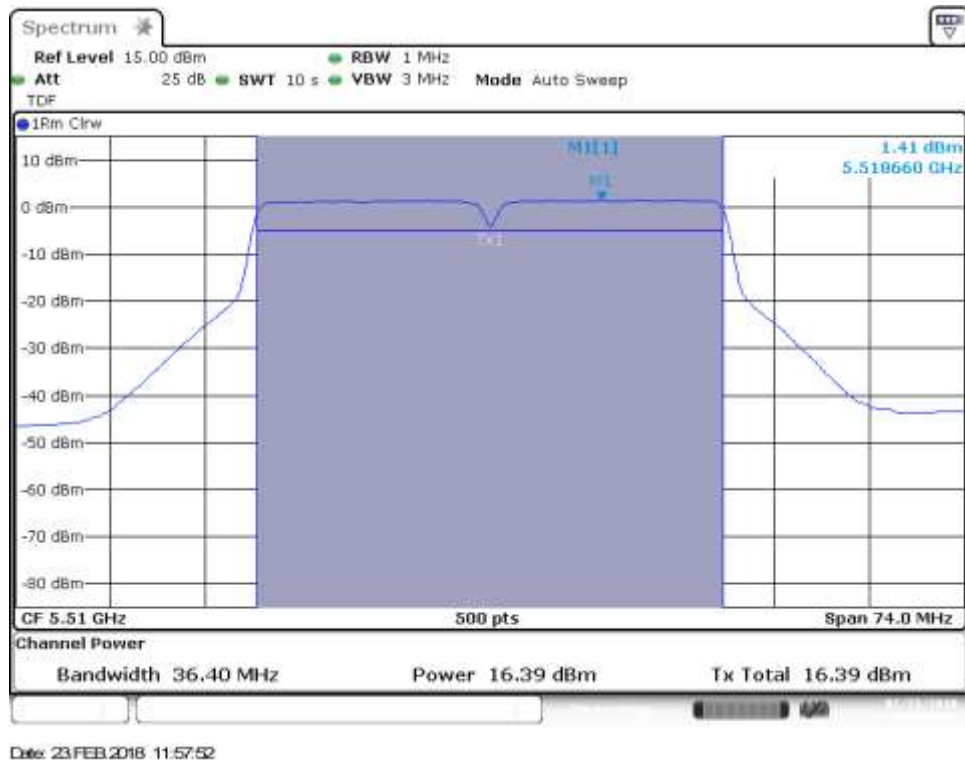
MIMO-A, 802.11n40, HT8

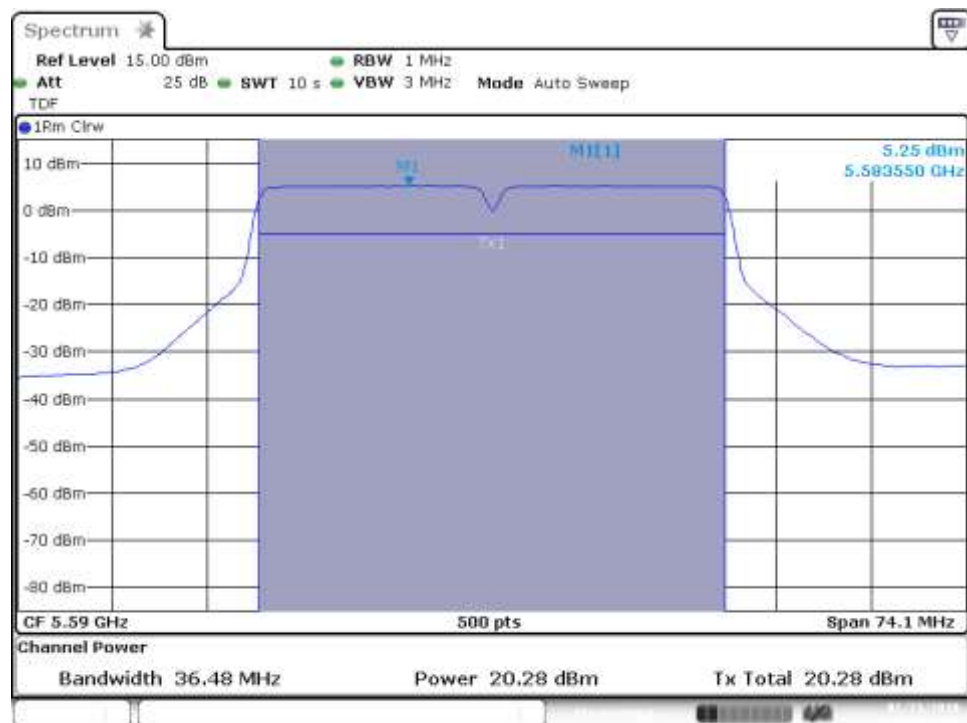
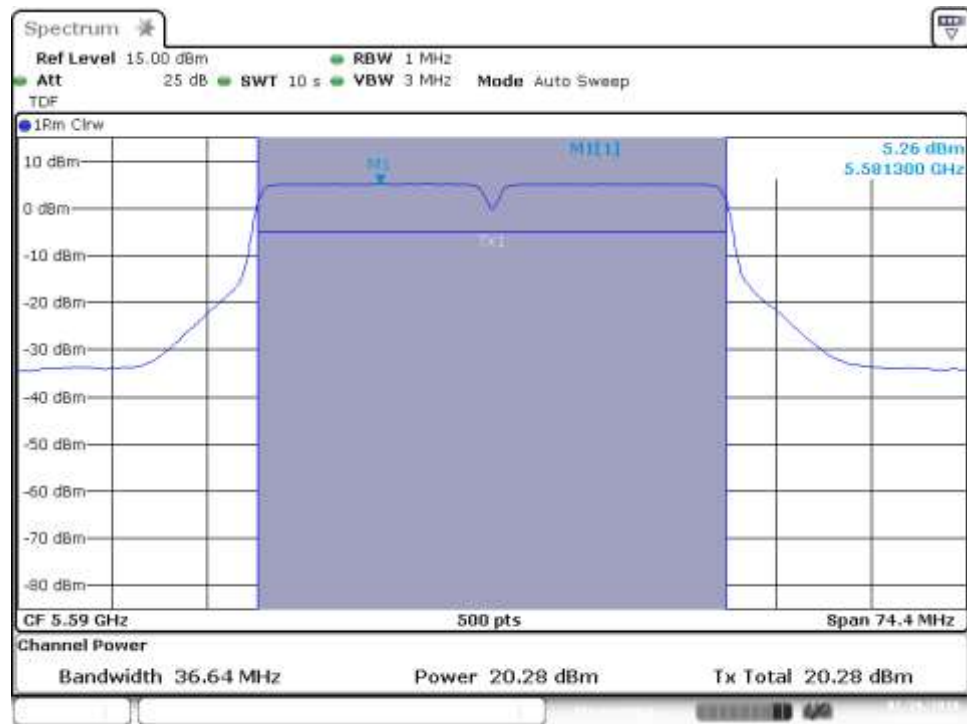
Channel 102F



MIMO-B, 802.11n40, HT8

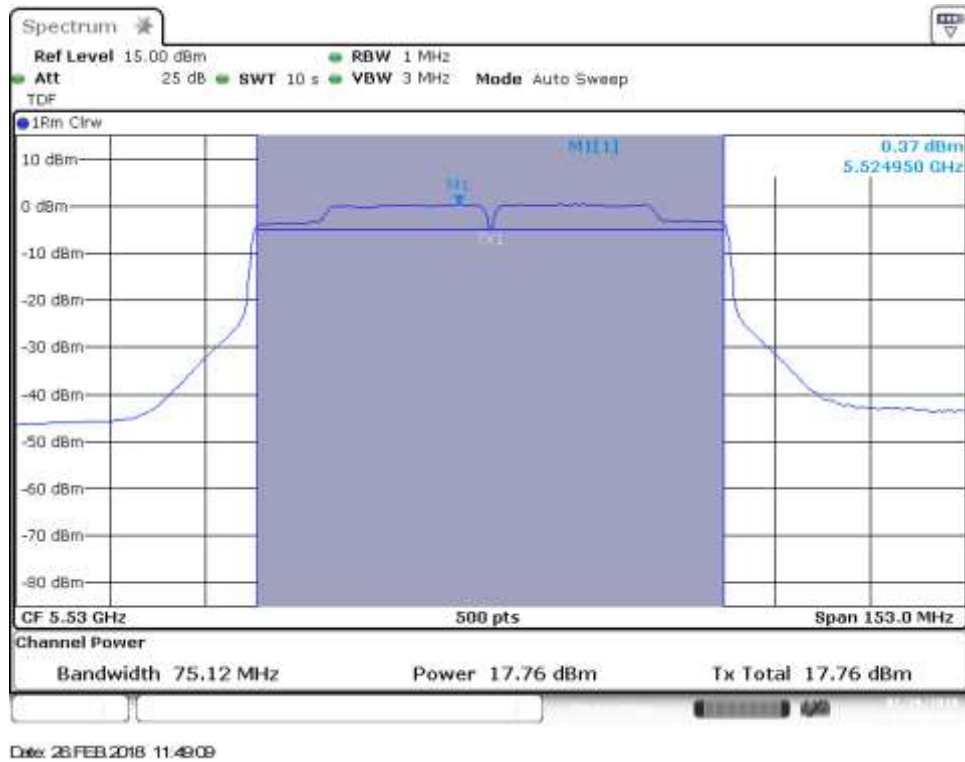
Channel 102F





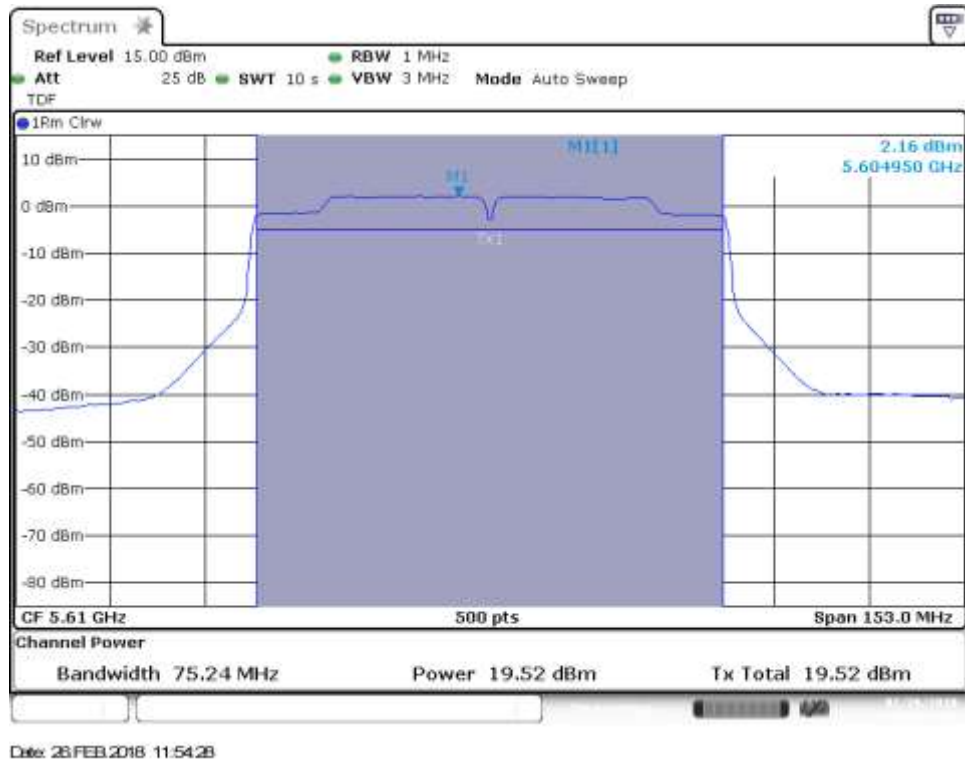
SISO-A, 802.11ac80, VHT0

Channel 106ac80



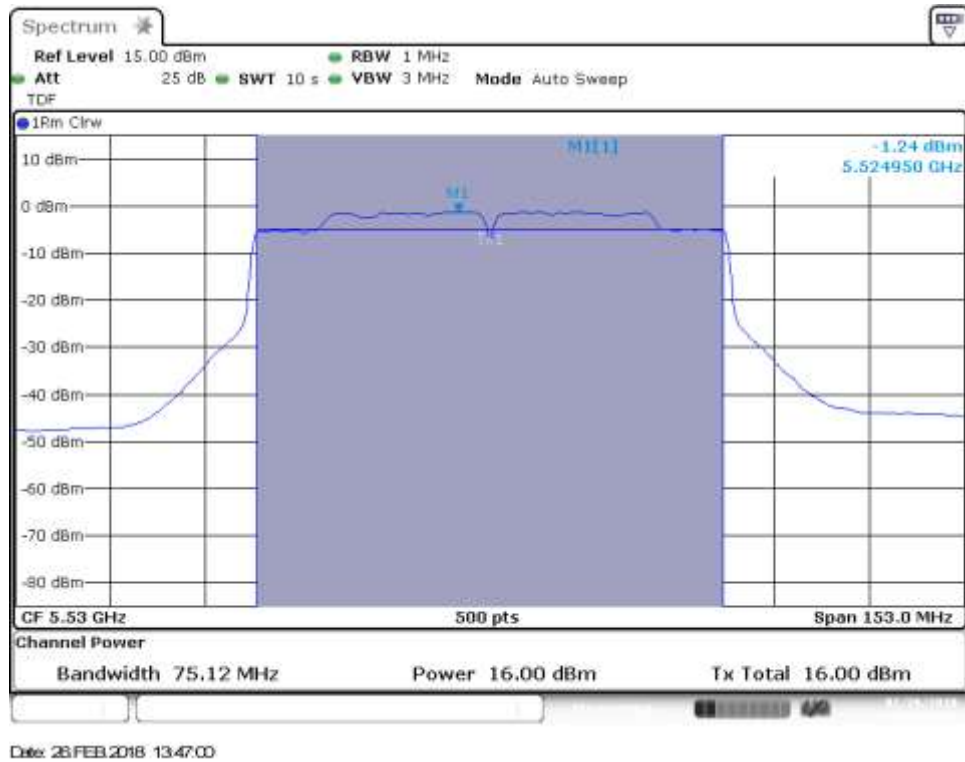
SISO-A, 802.11ac80, VHT0

Channel 122ac80



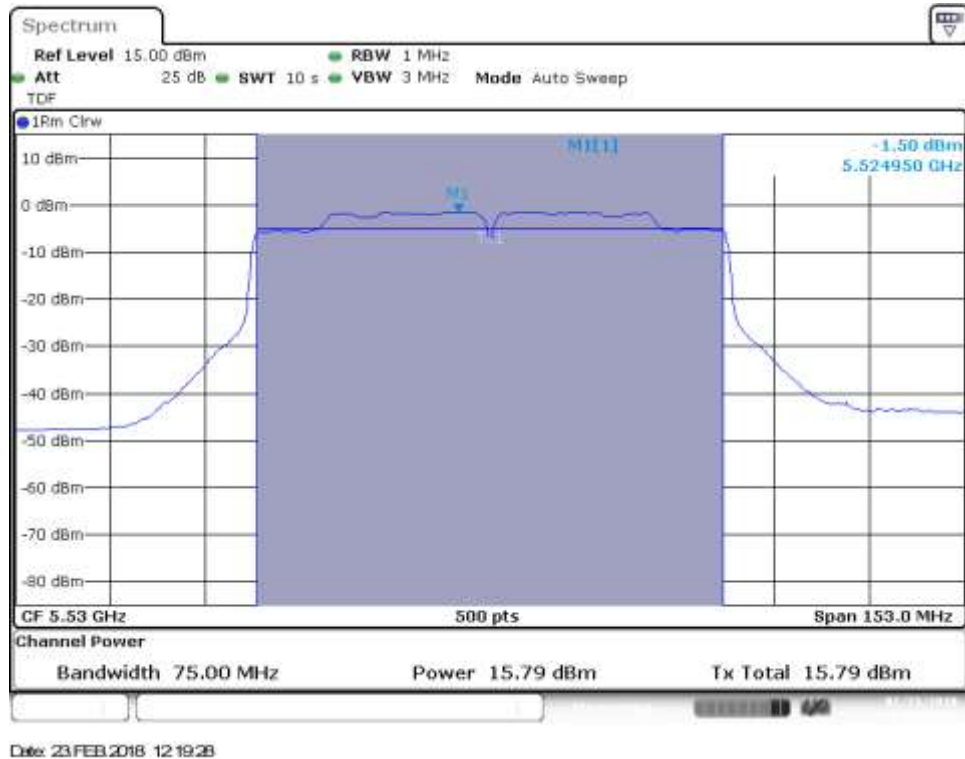
MIMO-A, 802.11ac80, VHT0

Channel 106ac80



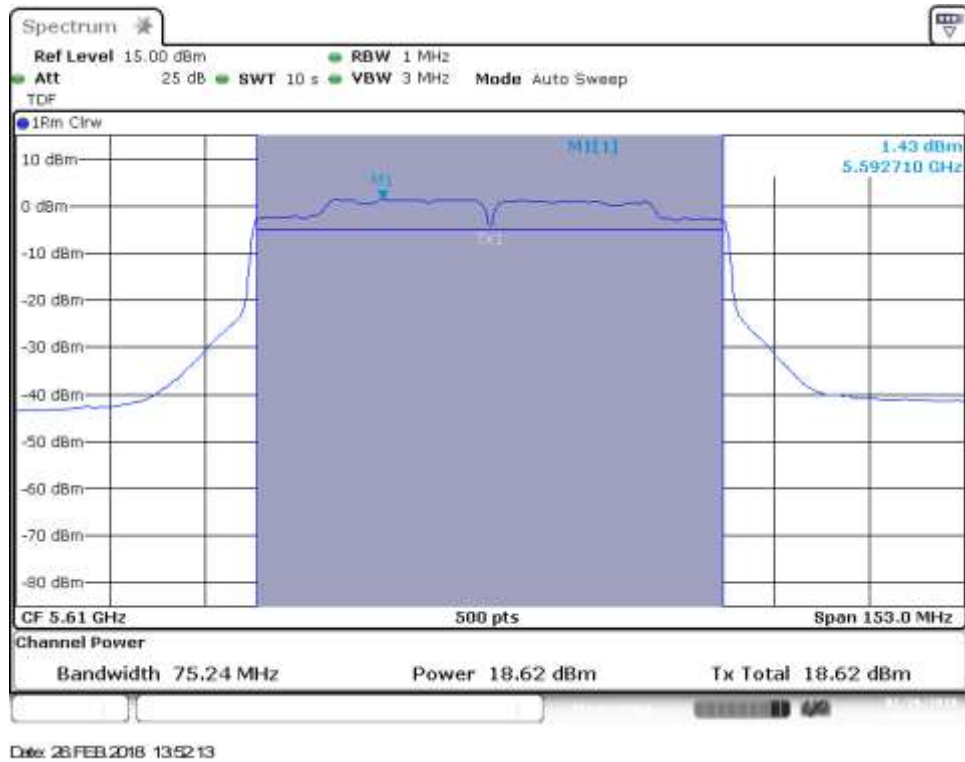
MIMO-B, 802.11ac80, VHT0

Channel 106ac80



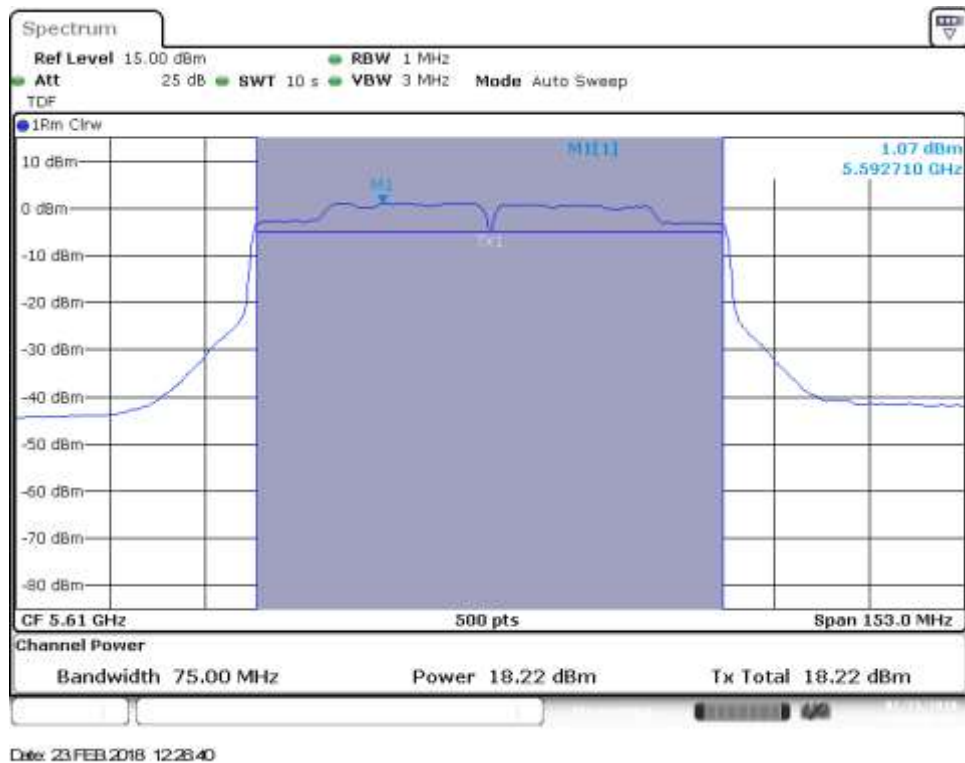
MIMO-A, 802.11ac80, VHT0

Channel 122ac80



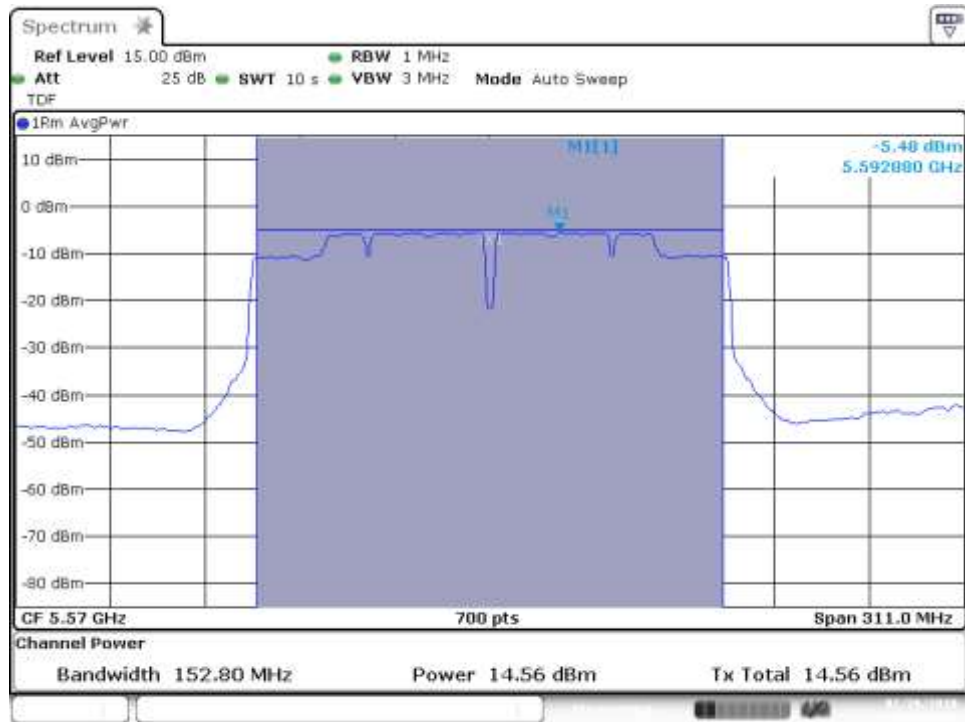
MIMO-B, 802.11ac80, VHT0

Channel 122ac80



SISO-A, 802.11ac160,VHT0

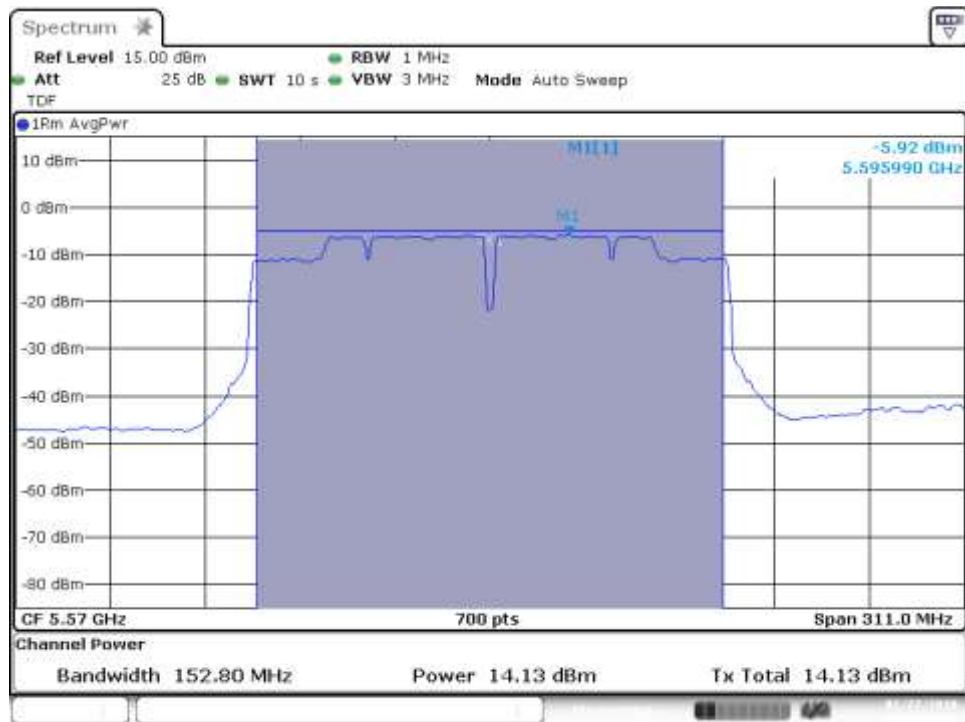
Channel 114ac160



Date: 26 FEB 2018 12:03:34

SISO-B, 802.11ac160,VHT0

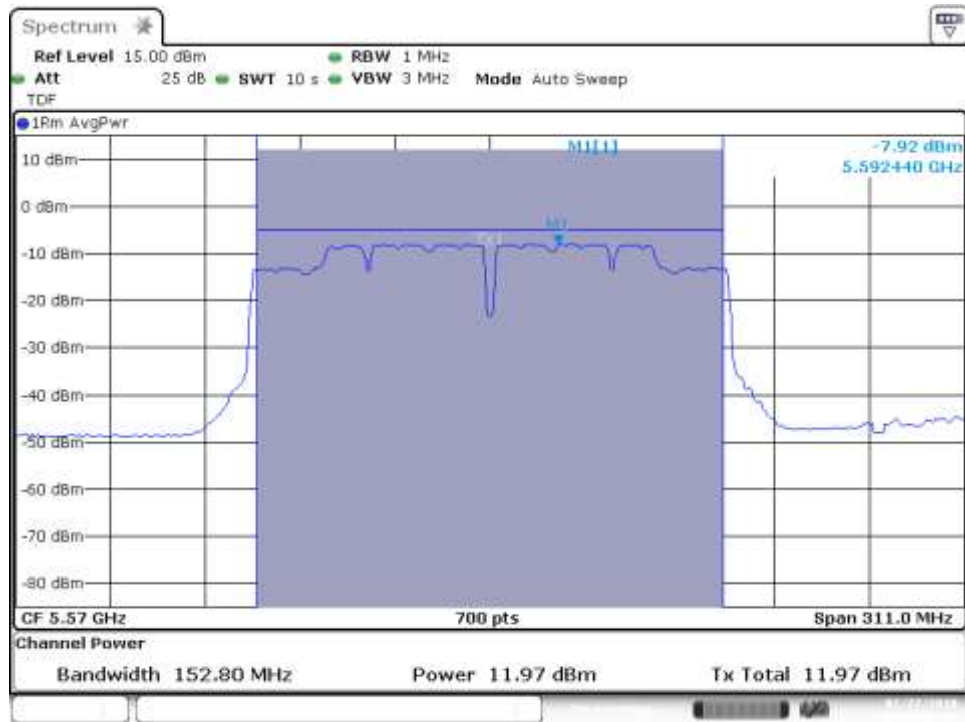
Channel 114ac160



Date: 27 FEB 2018 15:38:28

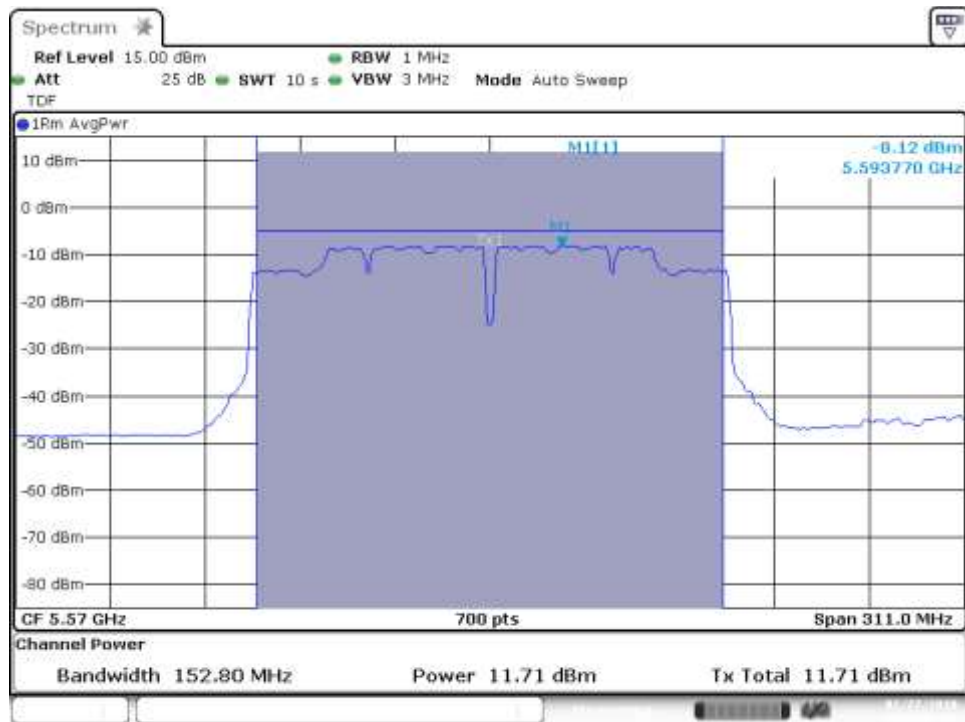
MIMO-A, 802.11ac160,VHT0

Channel 114ac160



MIMO-B, 802.11ac160,VHT0

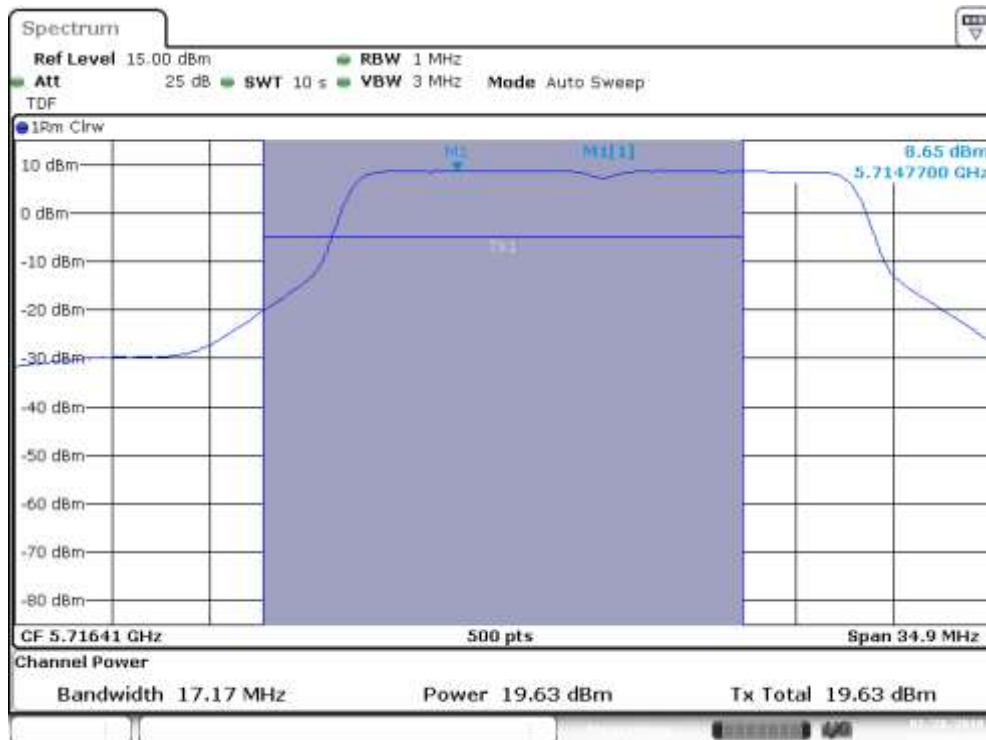
Channel 114ac160



B.3.4 Maximum output power & Maximum power spectral Density (Overlapped Channel)

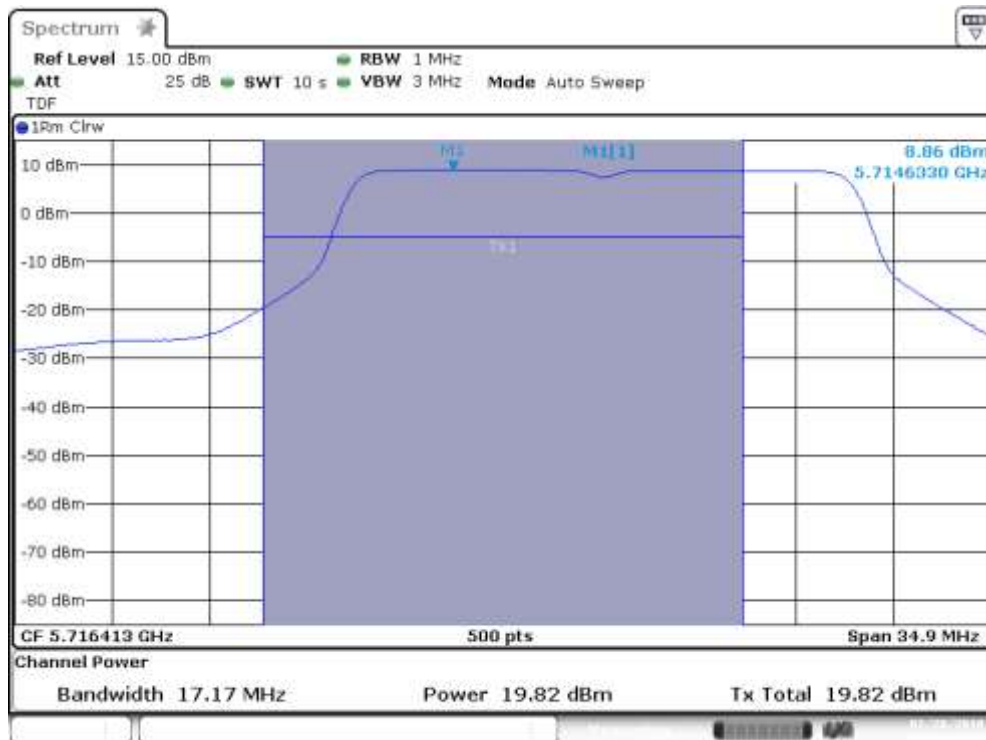
SISO-A, 802.11n20, HT0

Channel 144 (Overlapped Channel)



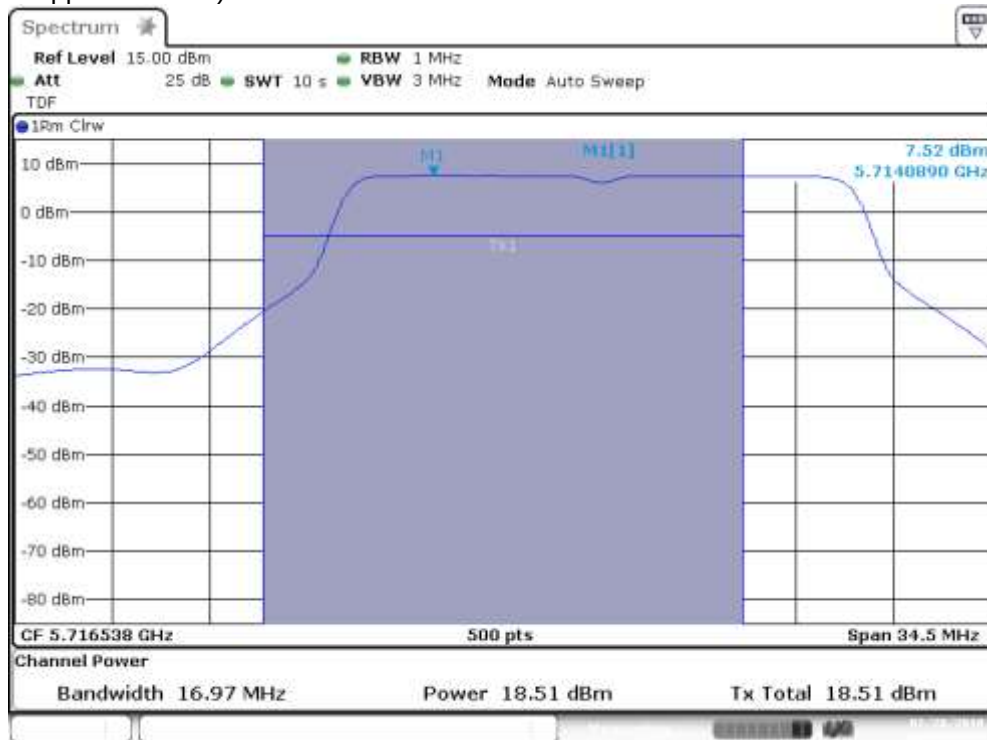
SISO-B, 802.11n20, HT0

Channel 144 (Overlapped Channel)



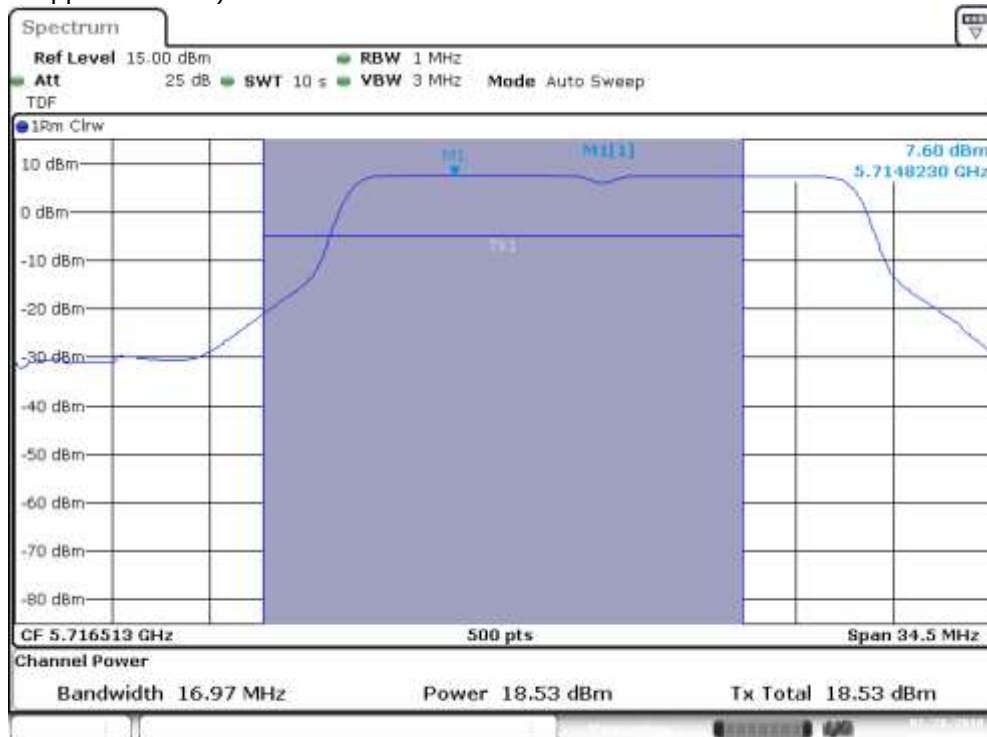
MIMO-A, 802.11n20, HT8

Channel 144 (Overlapped Channel)



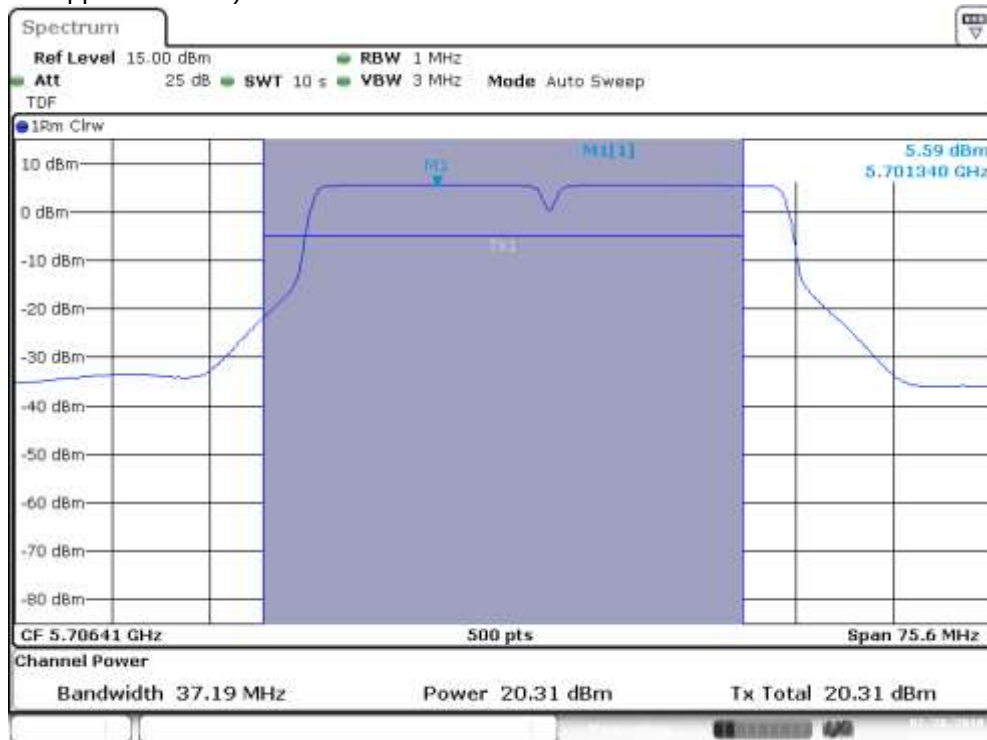
MIMO-B, 802.11n20, HT8

Channel 144 (Overlapped Channel)



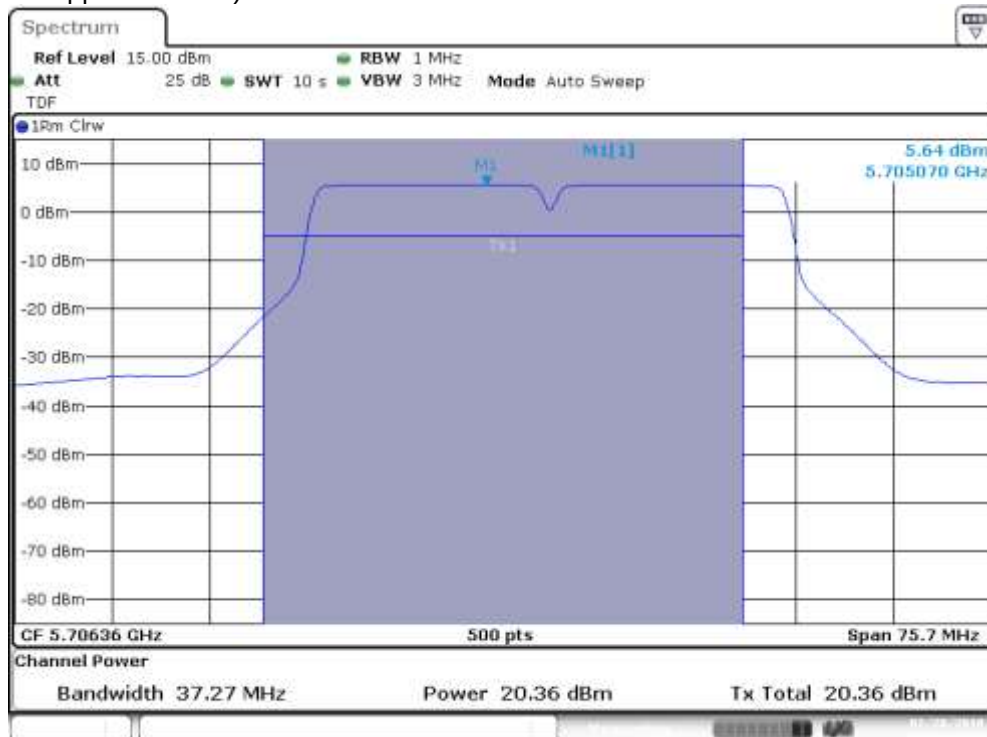
SISO-A, 802.11n40, HT0

Channel 142F (Overlapped Channel)



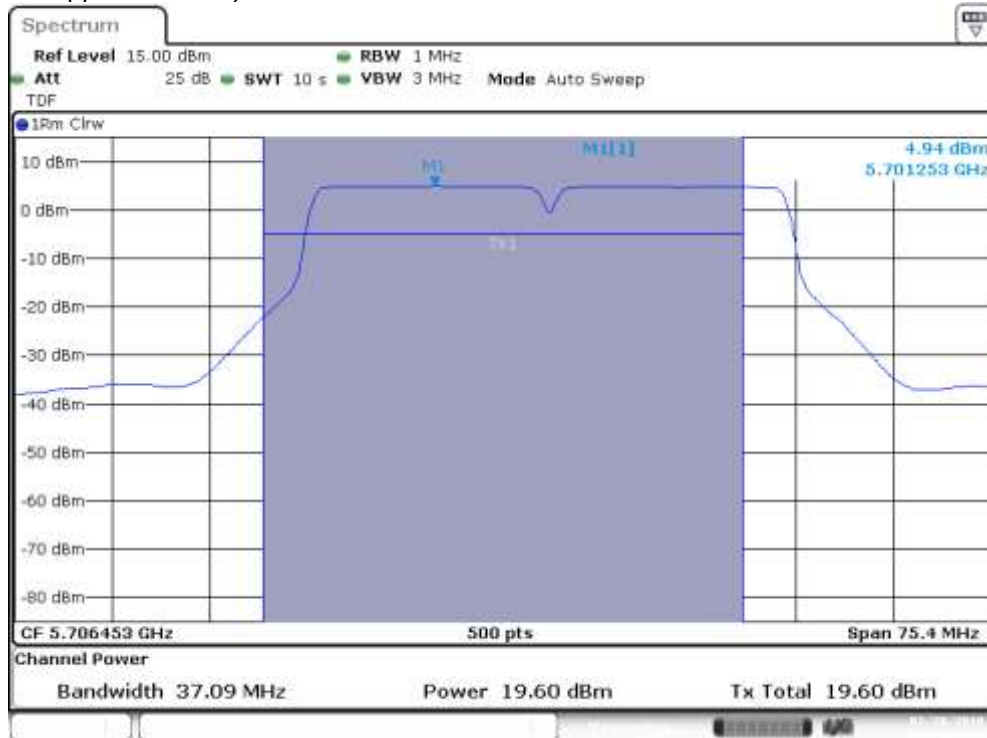
SISO-B, 802.11n40, HT0

Channel 142F (Overlapped Channel)



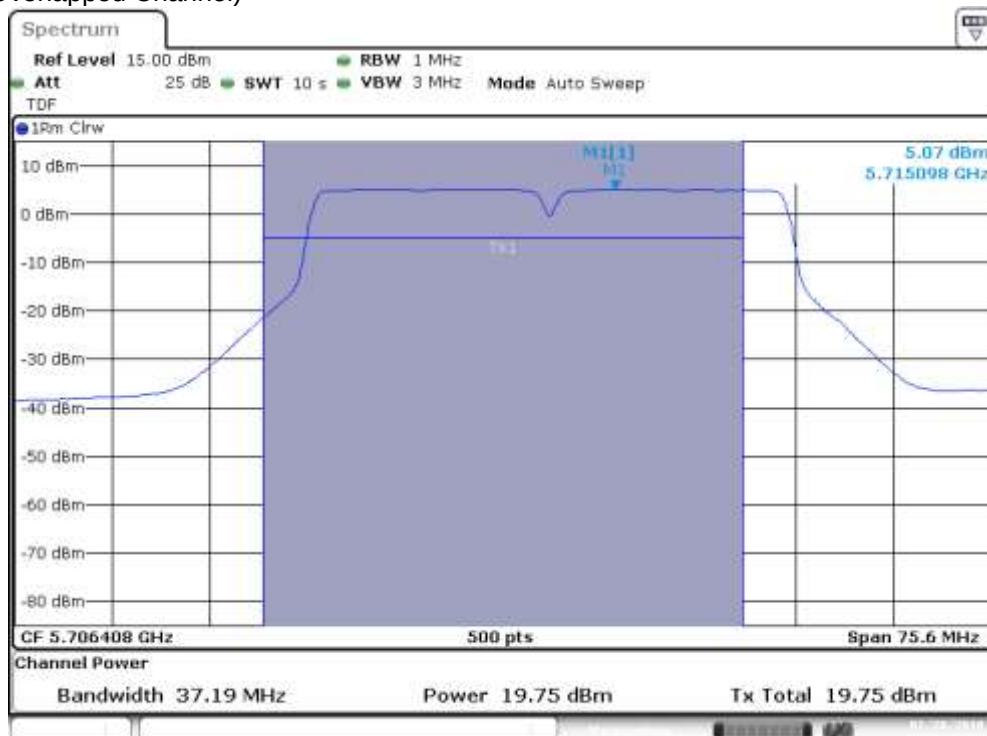
MIMO-A, 802.11n40, HT8

Channel 142F (Overlapped Channel)



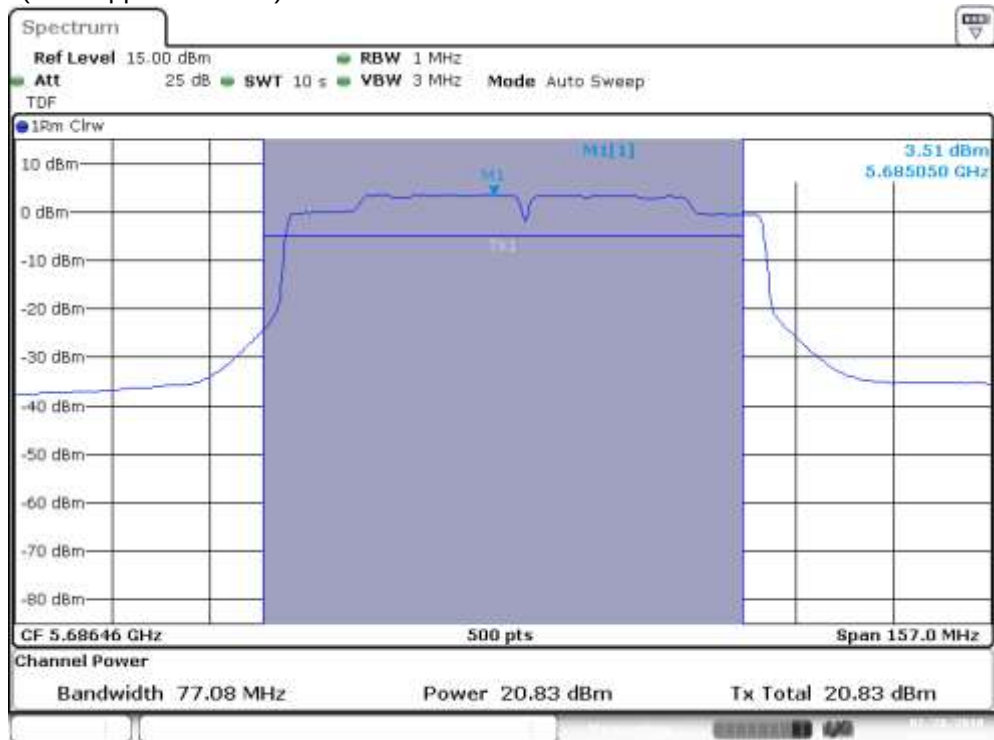
MIMO-B, 802.11n40, HT8

Channel 142F (Overlapped Channel)



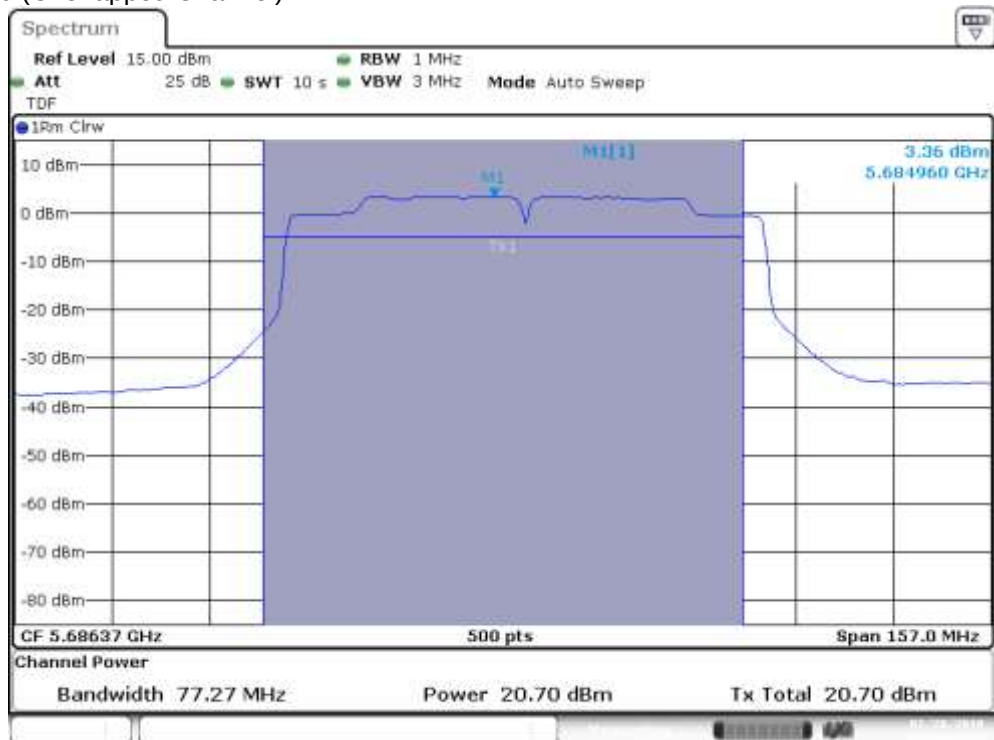
SISO-A, 802.11ac80, VHT0

Channel 138ac80 (Overlapped Channel)



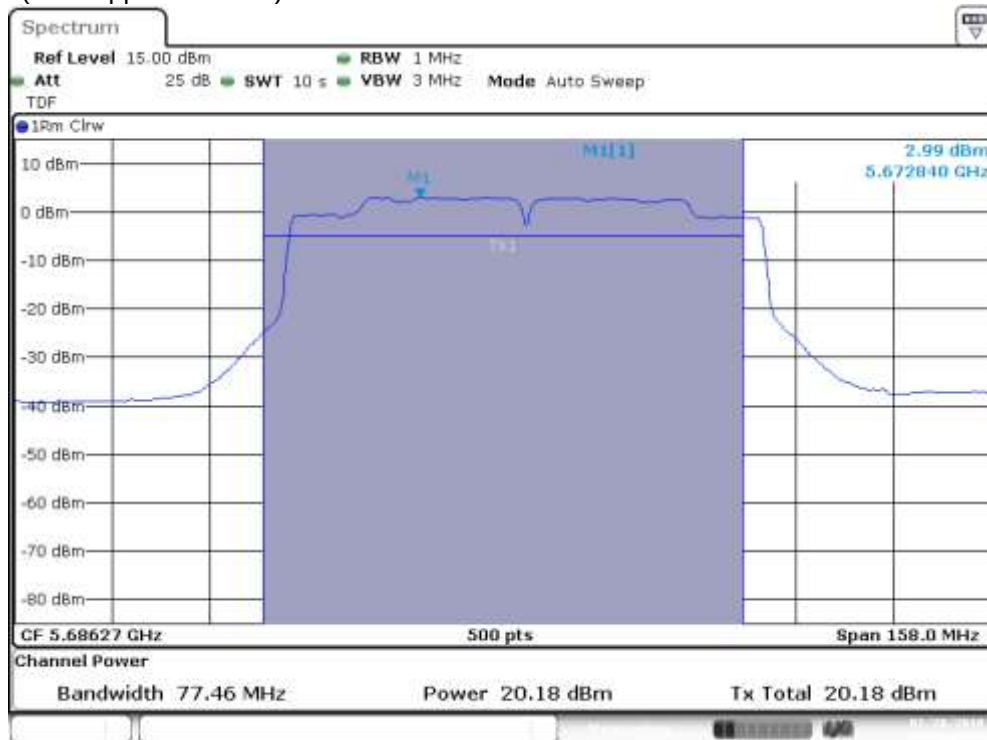
SISO-B, 802.11ac80, VHT0

Channel 138ac80 (Overlapped Channel)



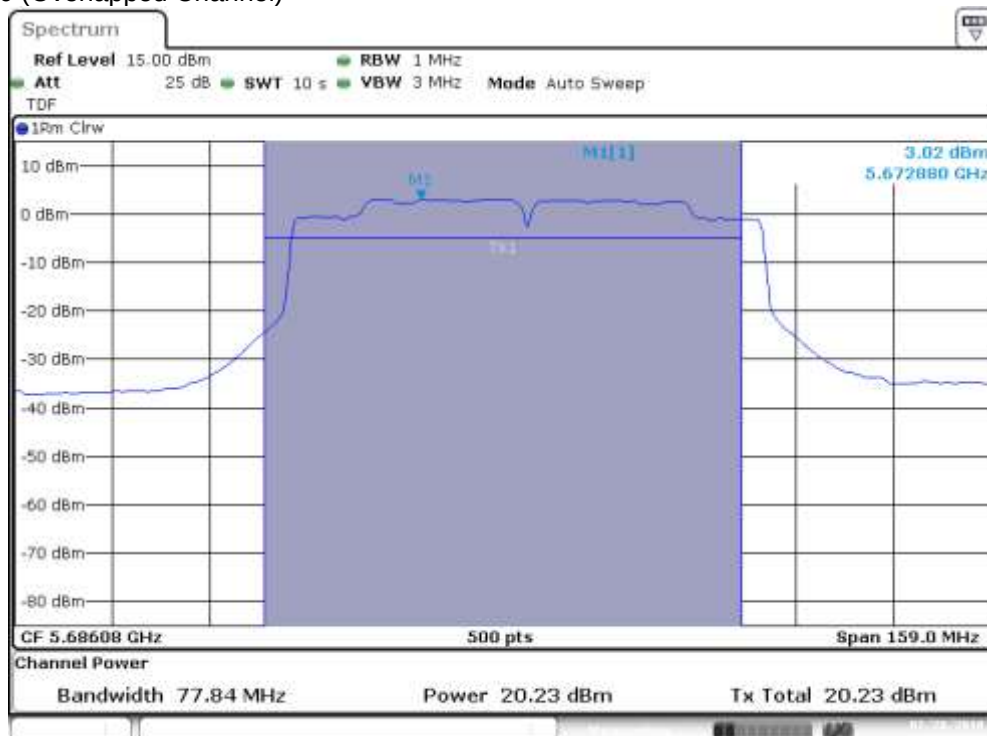
MIMO-A, 802.11ac80, VHT0

Channel 138ac80 (Overlapped Channel)



MIMO-B, 802.11ac80, VHT0

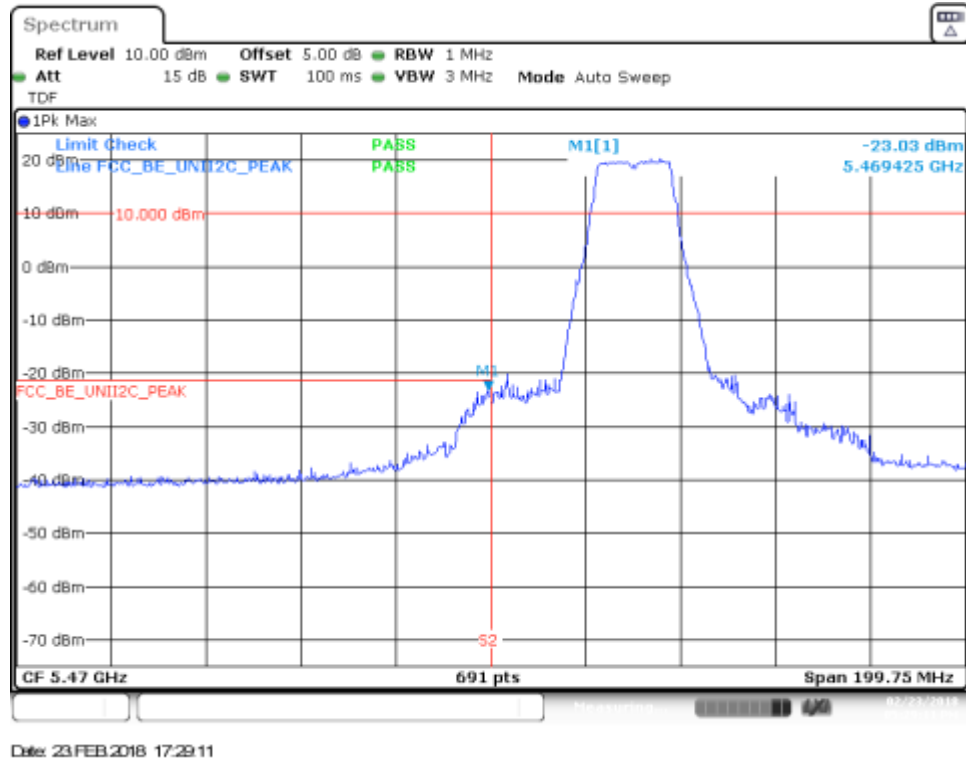
Channel 138ac80 (Overlapped Channel)



B.3.5 Undesirable emission limits : Band Edge (Conducted)

802.11a, 6Mbps – Chain A

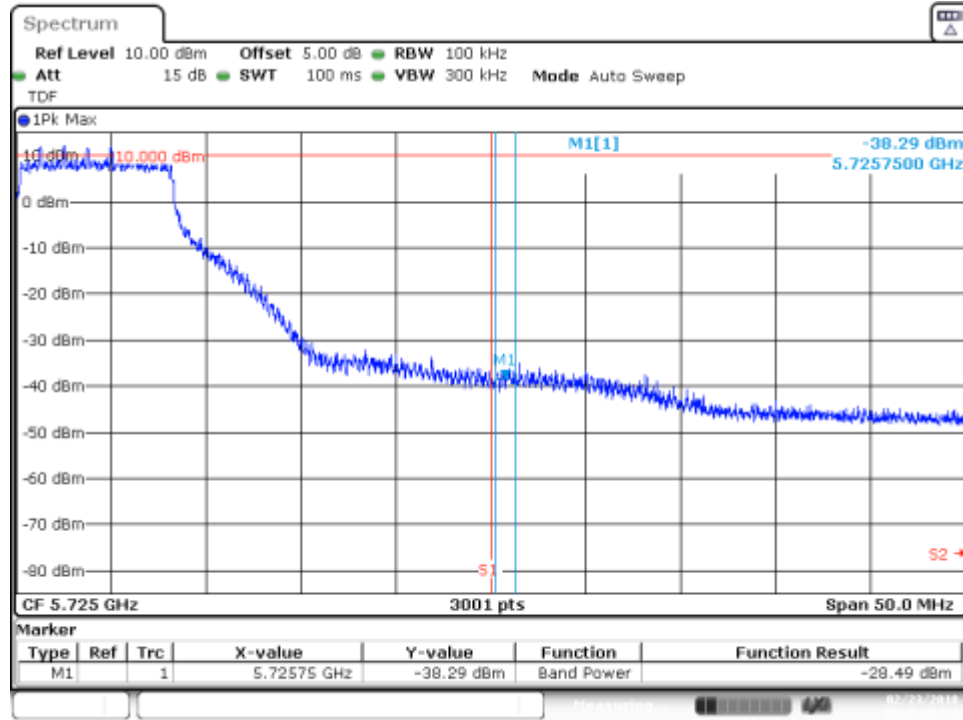
BE Low Freq Section, Peak – CH100



BE Low Freq Section, RMS – CH100



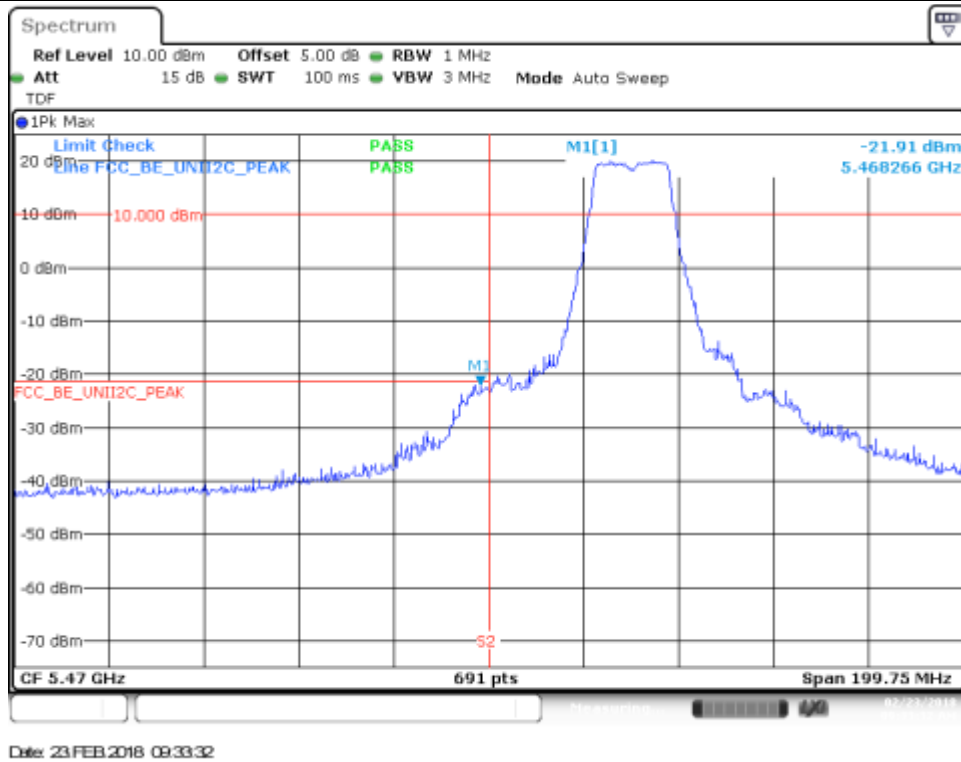
BE High Freq Section, Peak – CH140



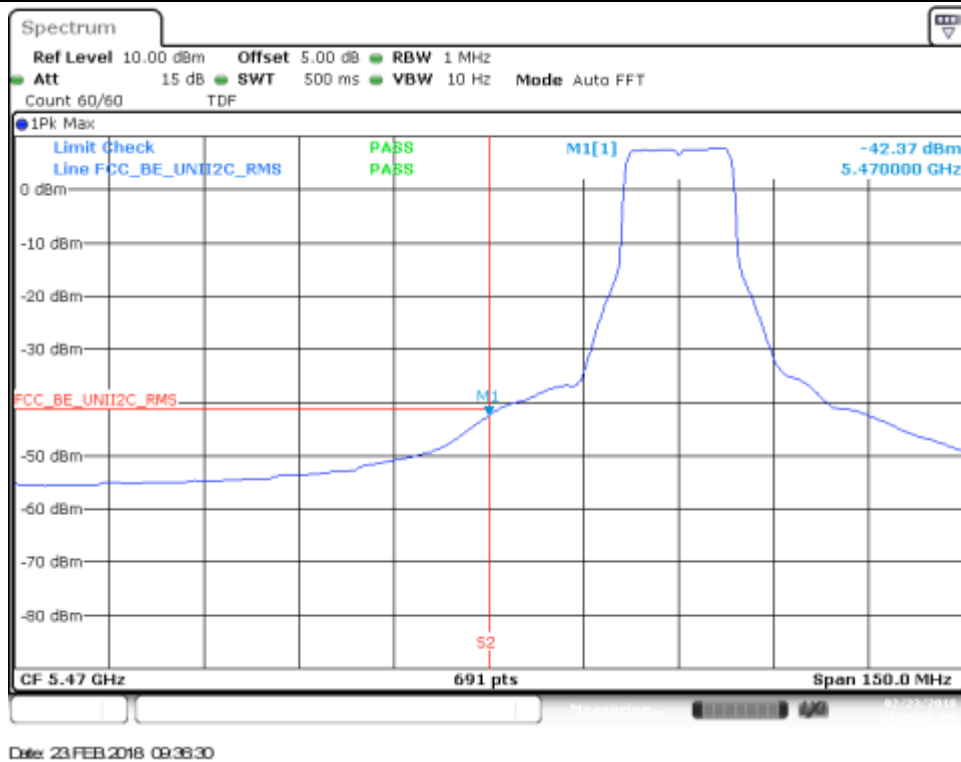
Date: 23 FEB 2018 17:45:30

802.11a, 6Mbps – Chain B

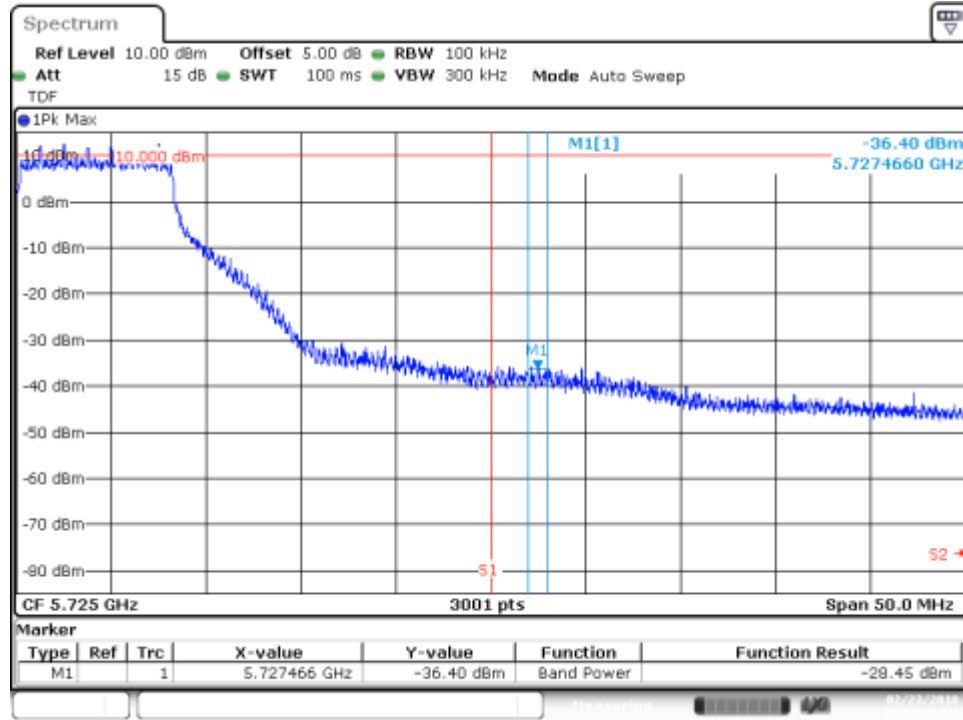
BE Low Freq Section, Peak – CH100



BE Low Freq Section, RMS – CH100



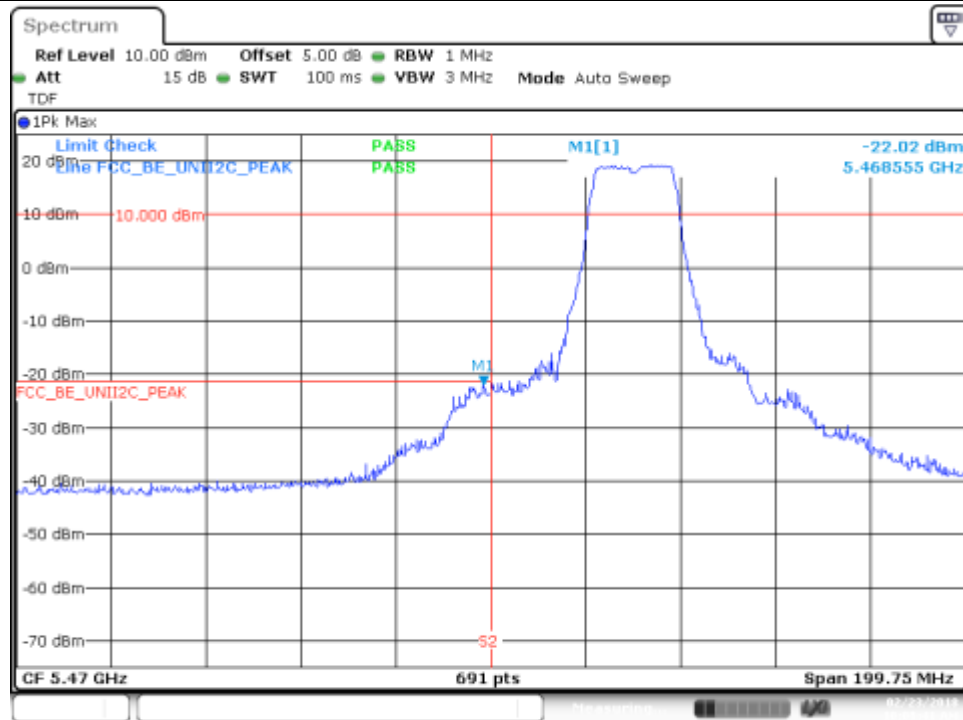
BE High Freq Section, Peak – CH140



Date: 23 FEB 2018 11:02:12

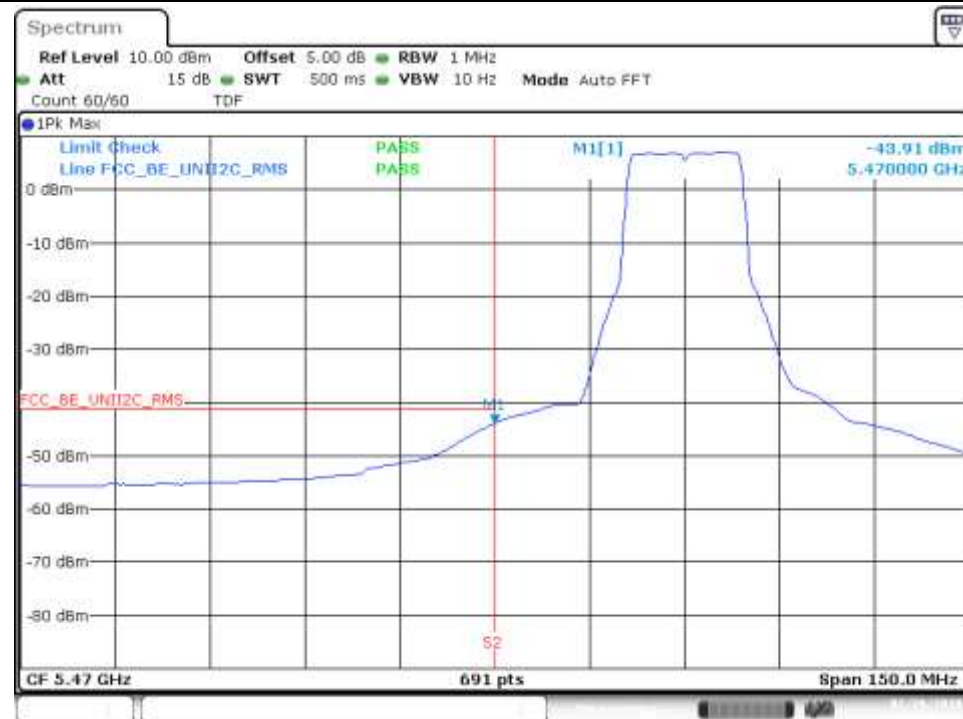
802.11n20, HT0 (SISO) – Chain A

BE Low Freq Section, Peak – CH100



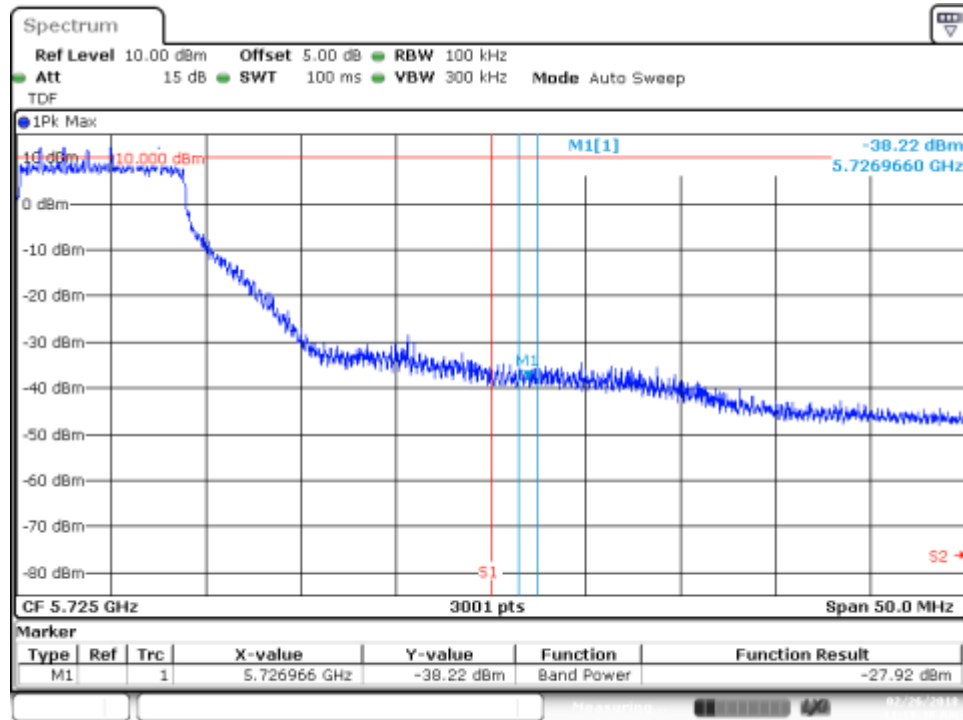
Date: 23.FEB.2018 10:03:41

BE Low Freq Section, RMS – CH100



Date: 26.FEB.2018 11:09:10

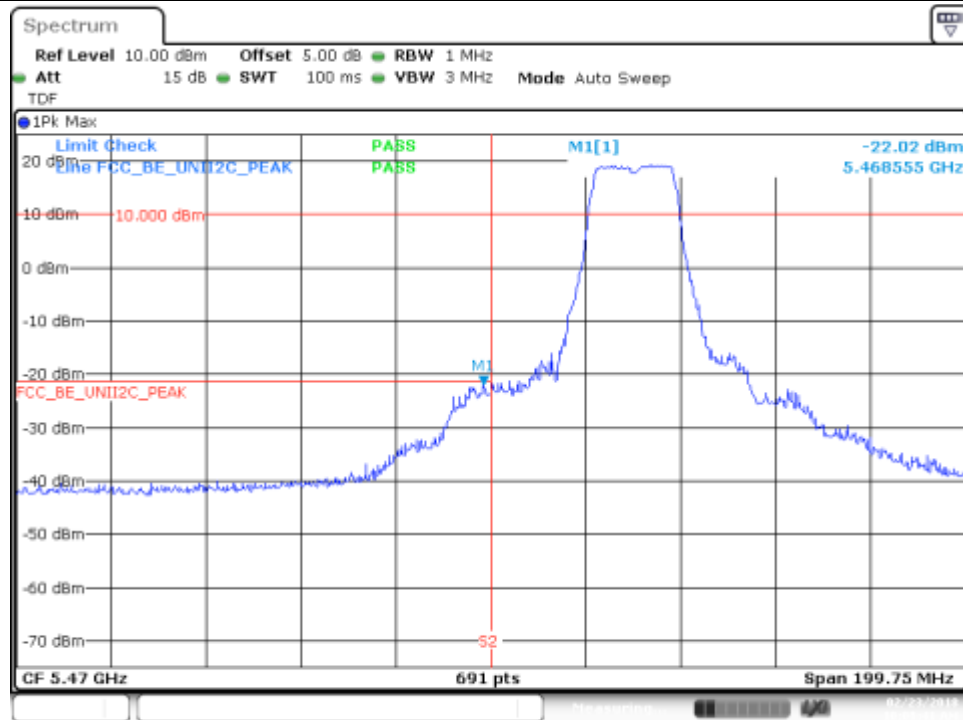
BE High Freq Section, Peak – CH140



Date: 26 FEB 2018 11:19:38

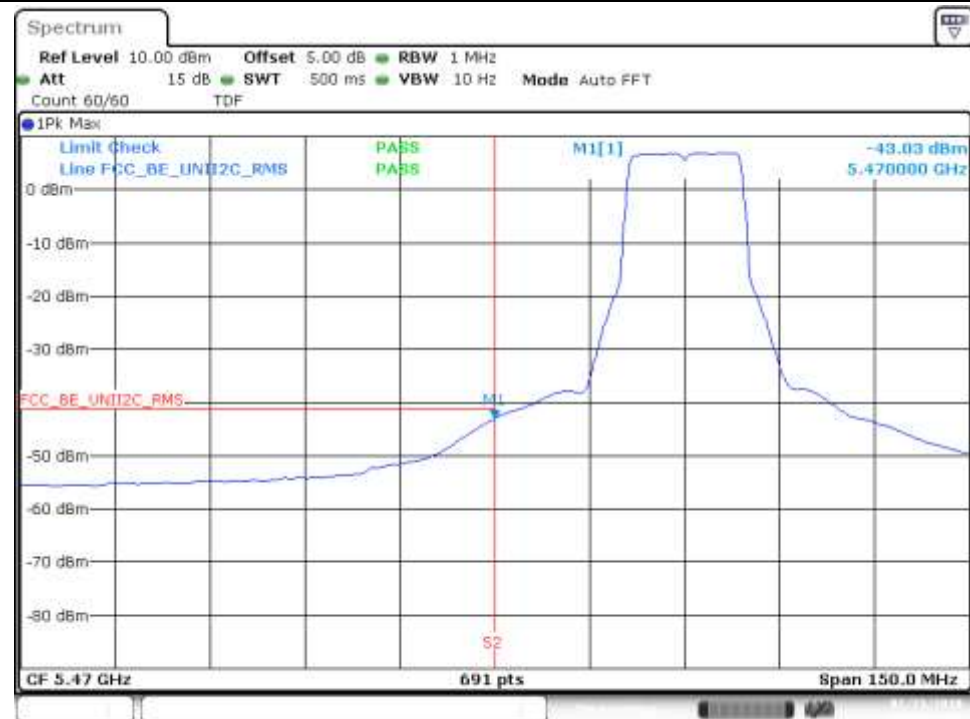
802.11n20, HT0 (SISO) – Chain B

BE Low Freq Section, Peak – CH100



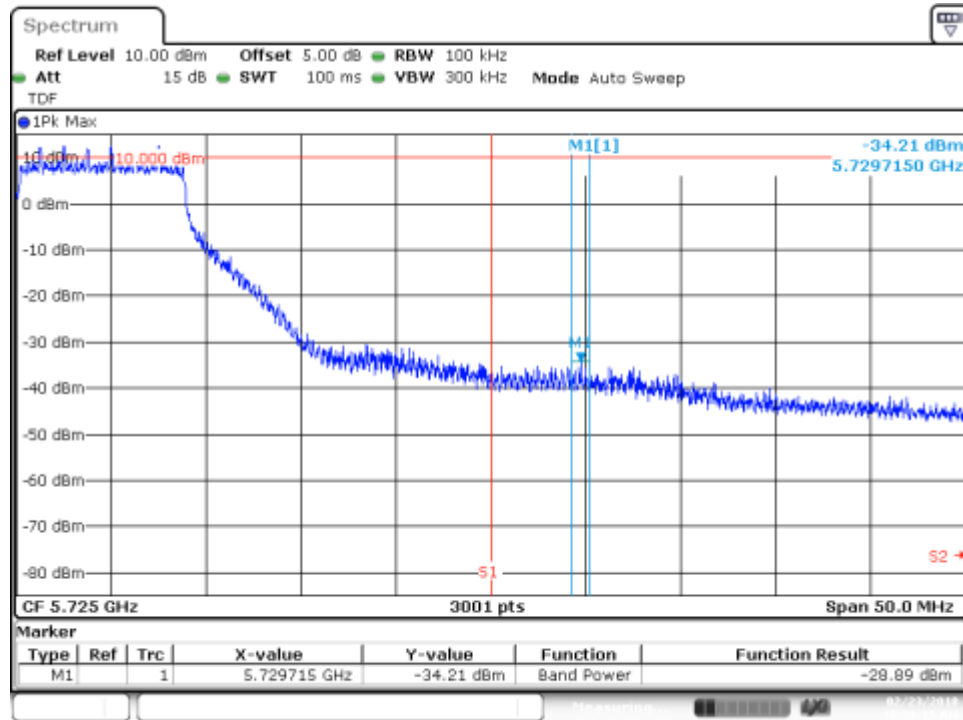
Date: 23.FEB.2018 10:03:41

BE Low Freq Section, RMS – CH100



Date: 23.FEB.2018 10:10:27

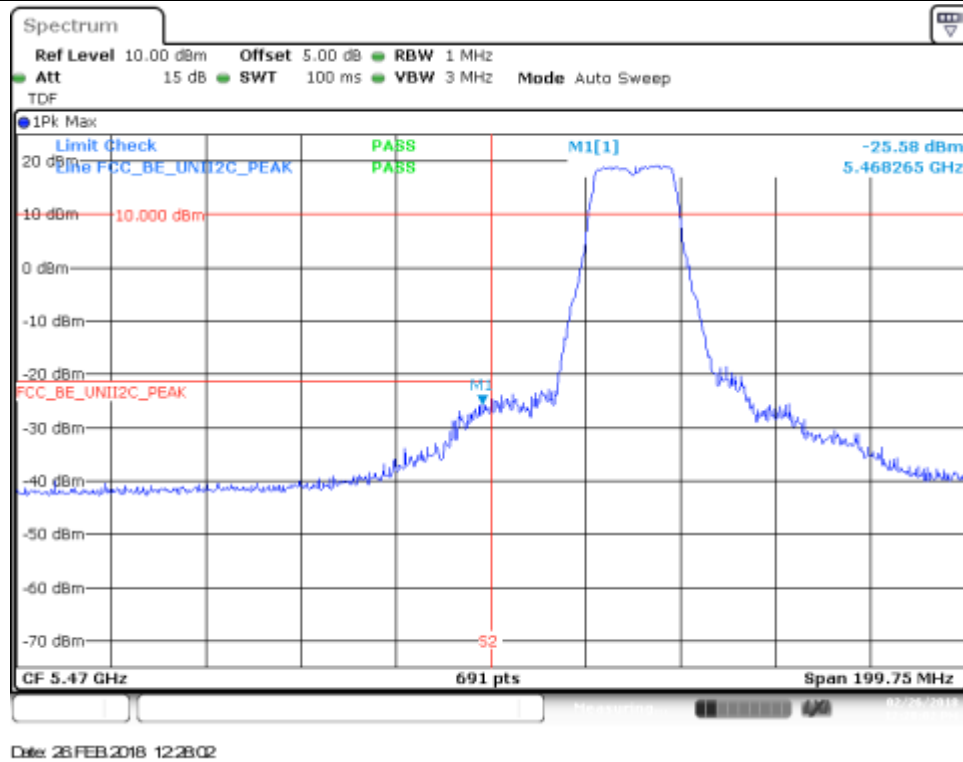
BE High Freq Section, Peak – CH140



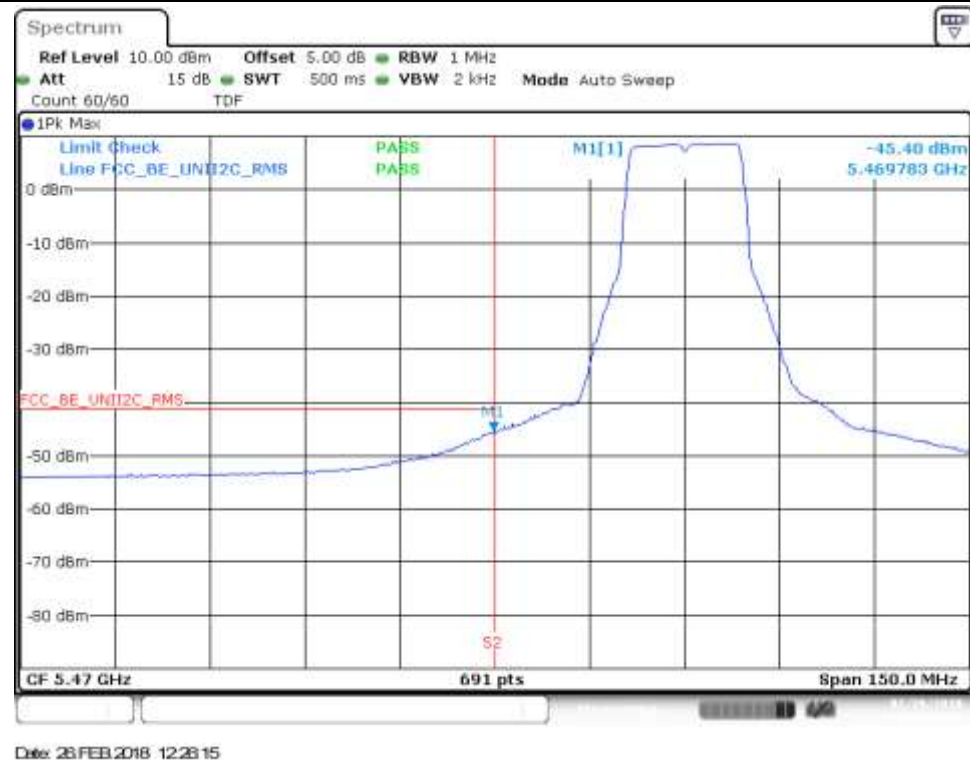
Date: 23 FEB 2018 10:58:15

802.11n20, HT8 (MIMO) – Chain A

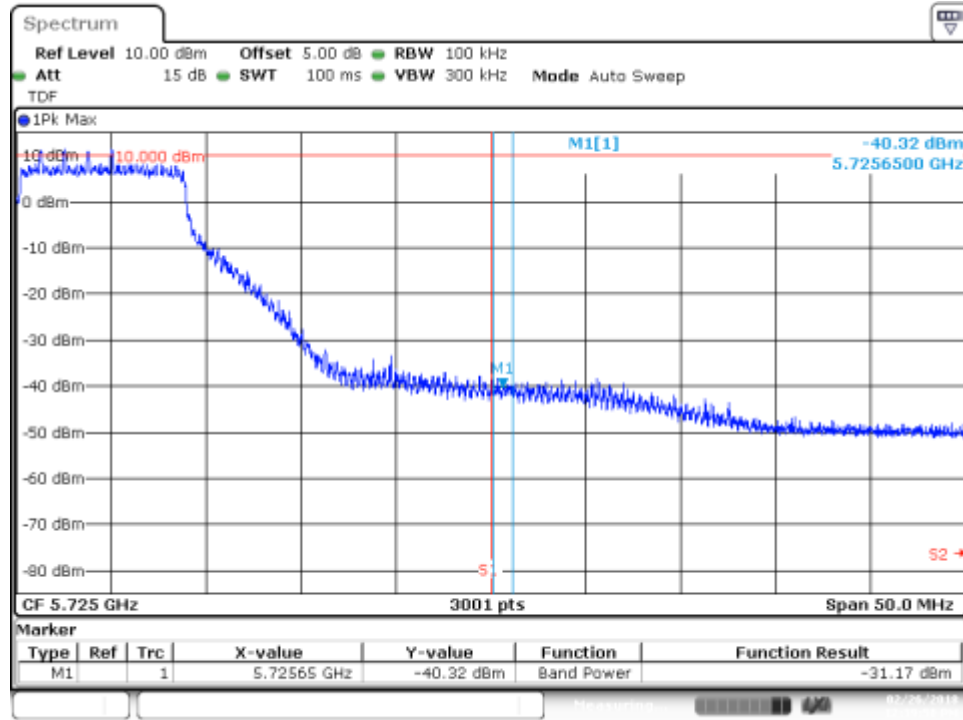
BE Low Freq Section, Peak – CH100



BE Low Freq Section, RMS – CH100



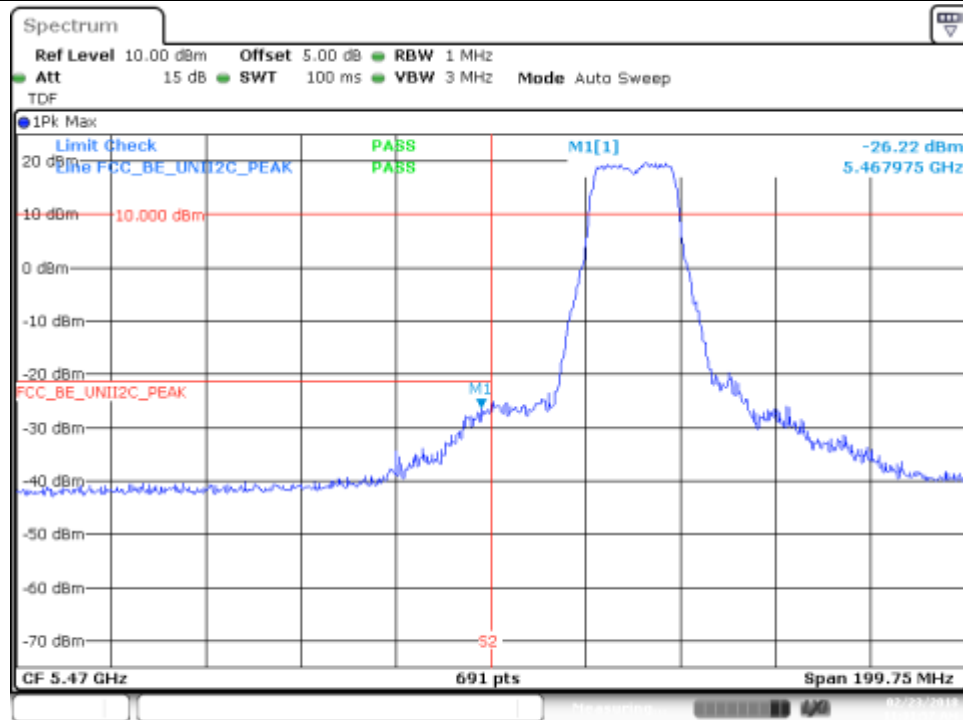
BE High Freq Section, Peak – CH140



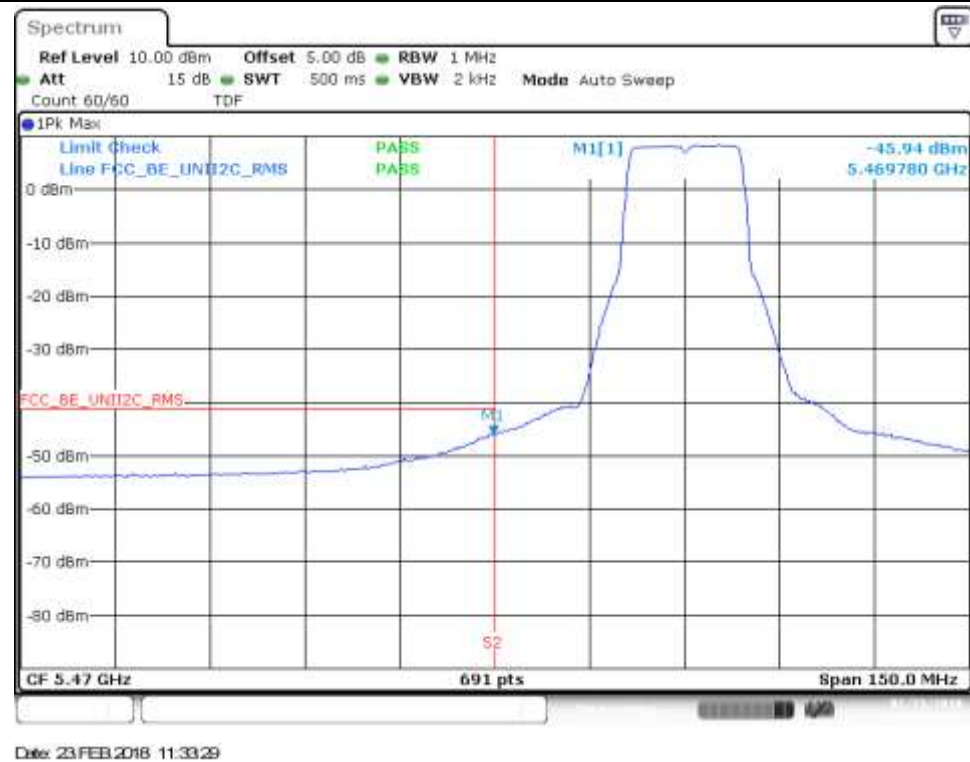
Date: 26 FEB 2018 12:39:58

802.11n20, HT8 (MIMO) – Chain B

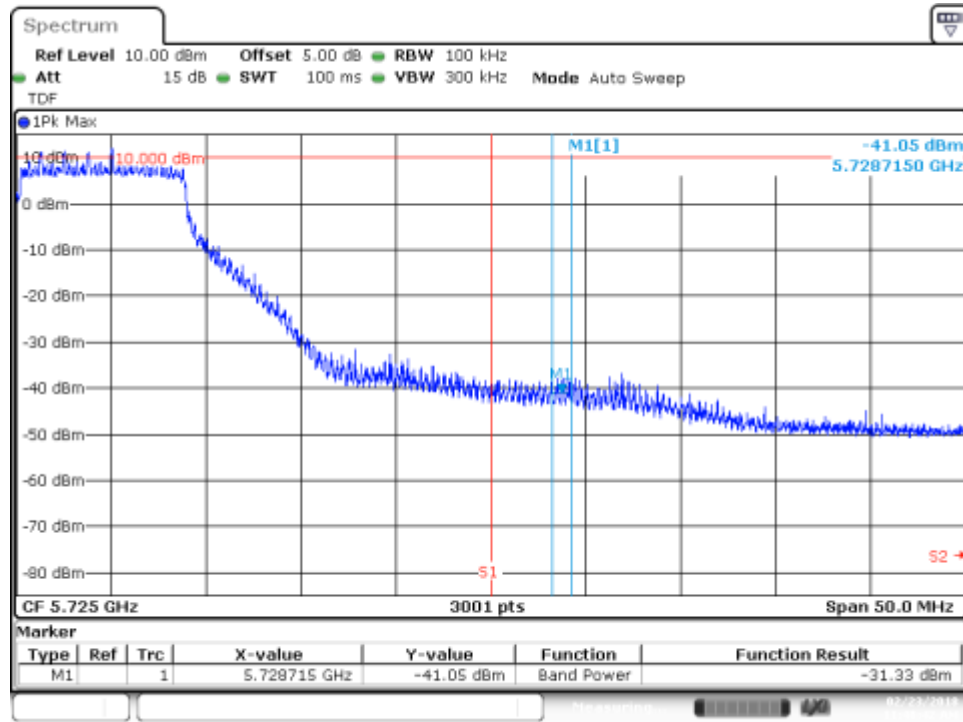
BE Low Freq Section, Peak – CH100



BE Low Freq Section, RMS – CH100

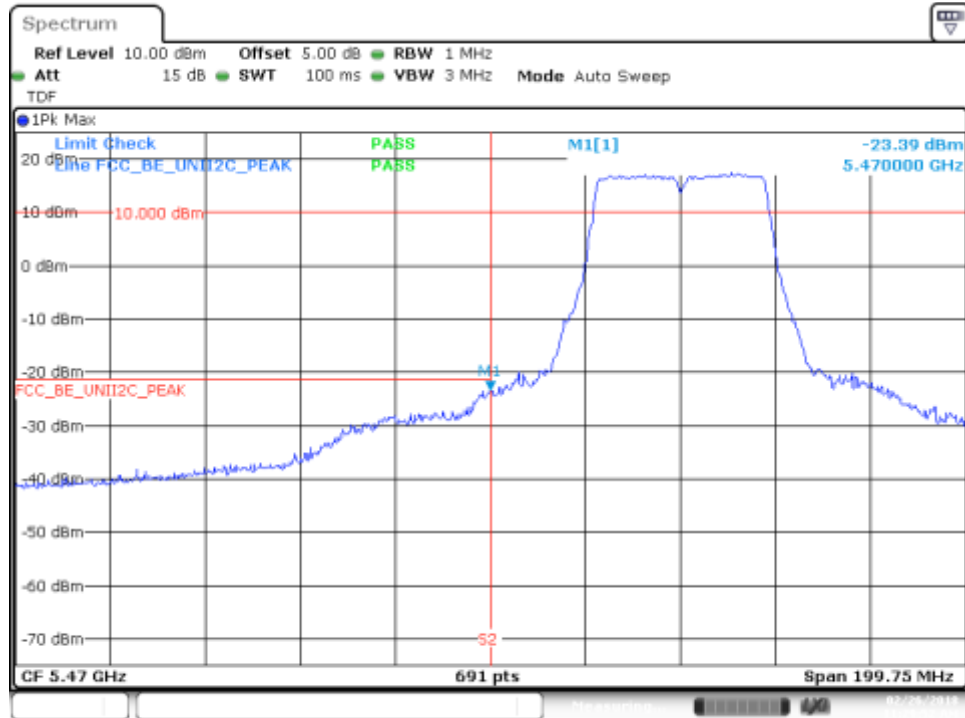


BE High Freq Section, Peak – CH140



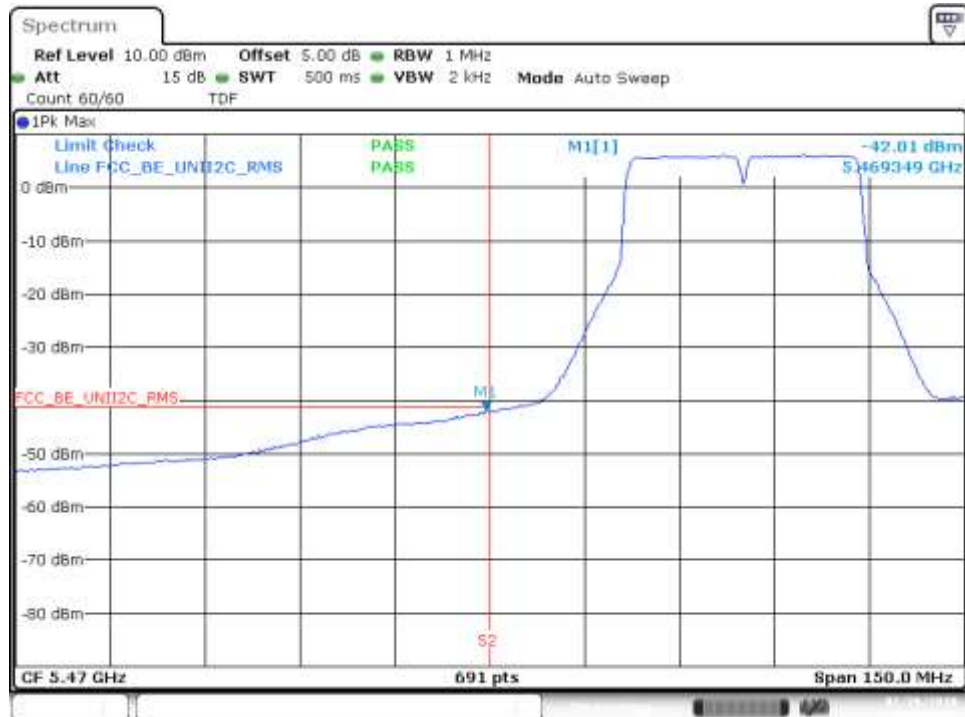
802.11n40, HT0 (SISO) – Chain A

BE Low Freq Section, Peak – CH102F



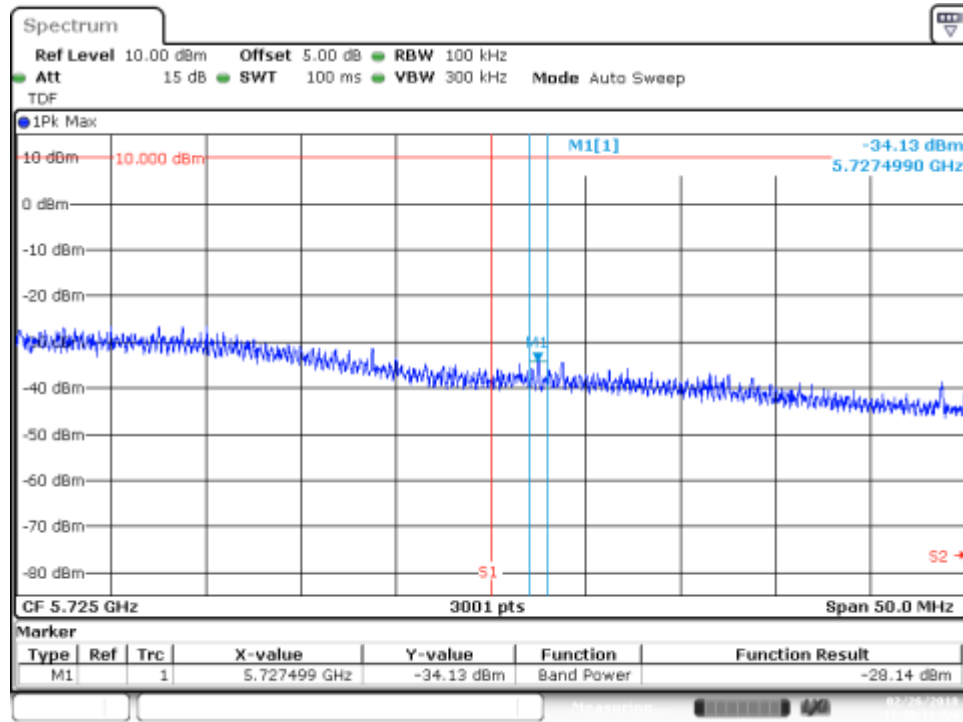
Date: 26 FEB 2018 11:29:52

BE Low Freq Section, RMS – CH102F



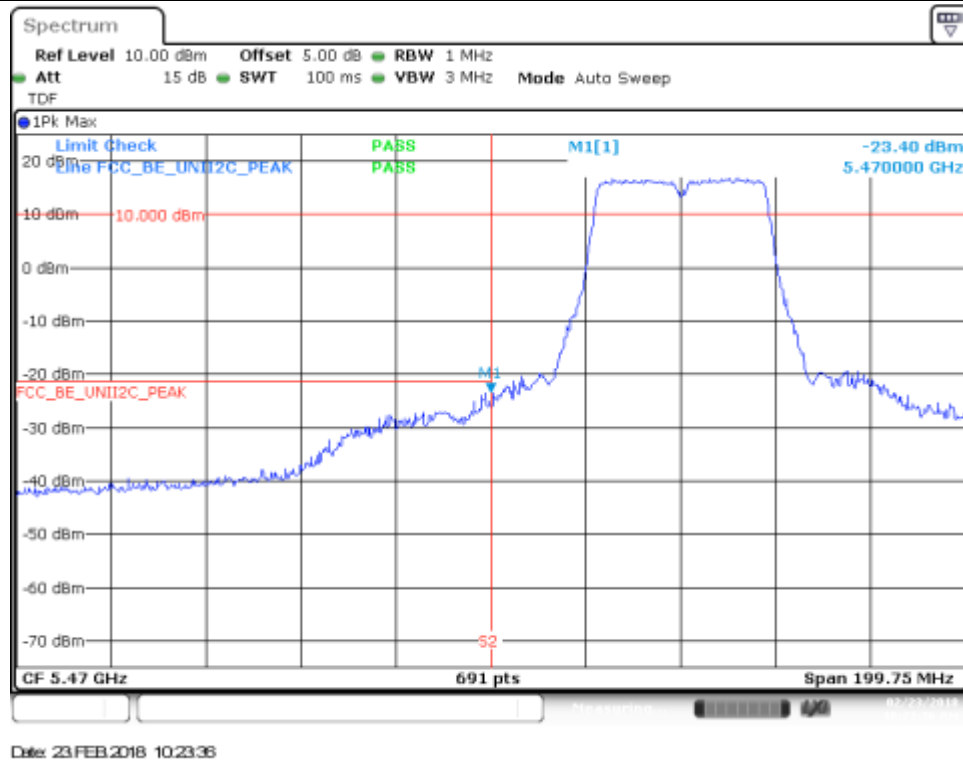
Date: 26 FEB 2018 11:29:29

BE High Freq Section, Peak – CH134F



802.11n40, HT0 (SISO) – Chain B

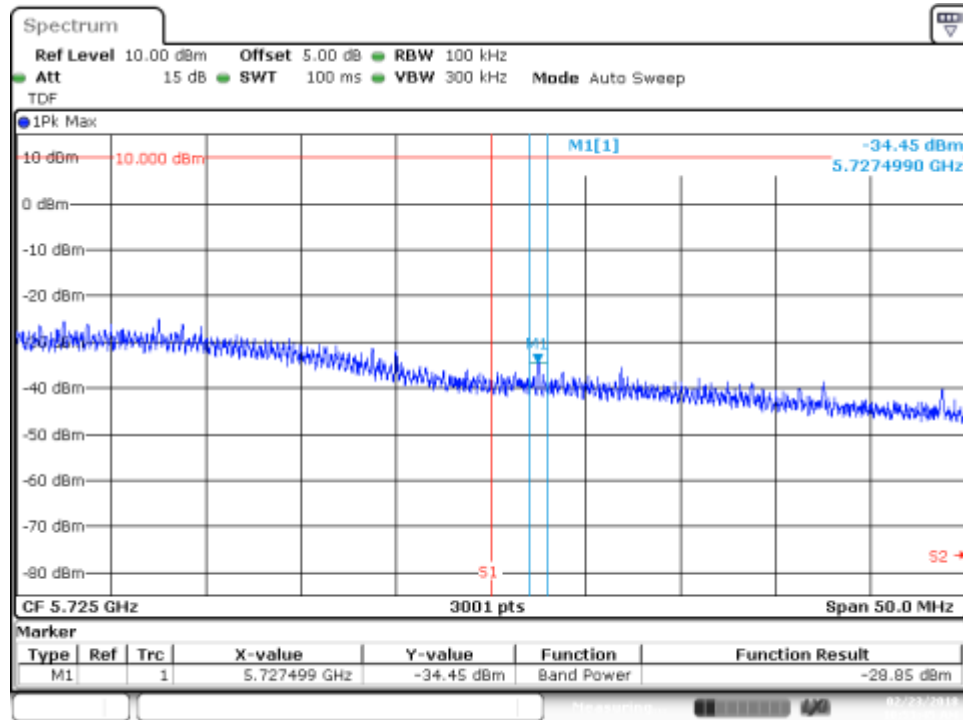
BE Low Freq Section, Peak – CH102F



BE Low Freq Section, RMS – CH102F



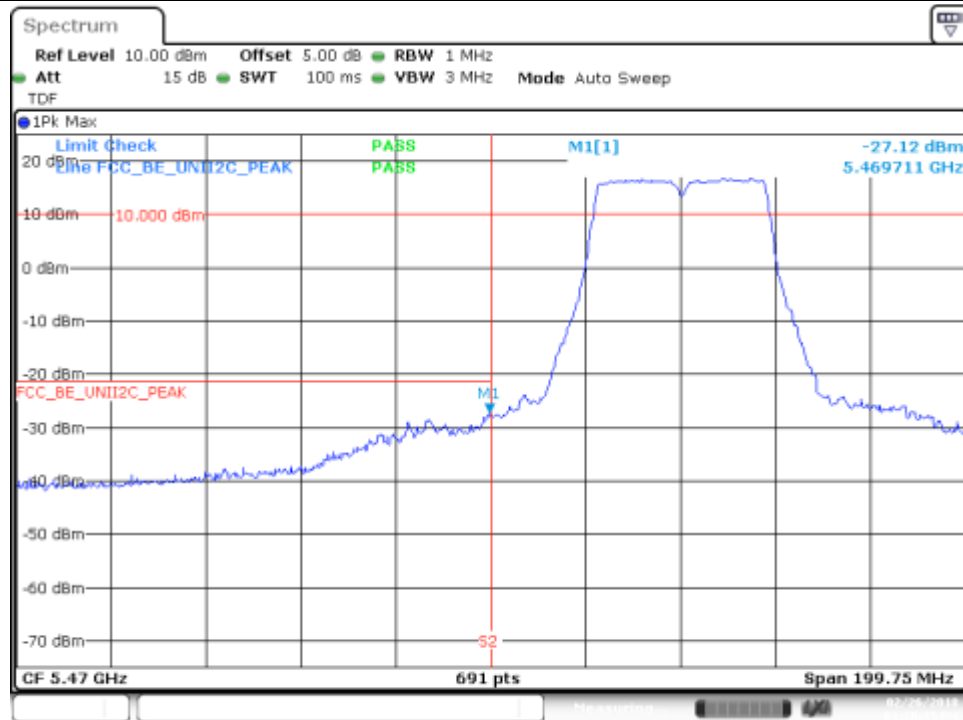
BE High Freq Section, Peak – CH134F



Date: 23 FEB 2018 10:53:45

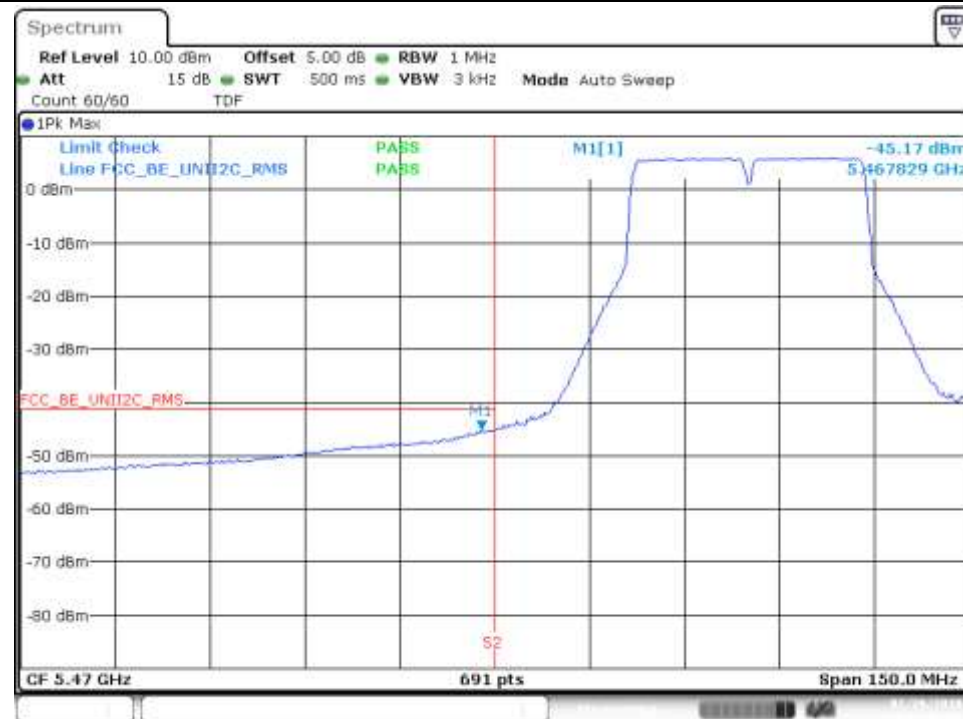
802.11n40, HT8 (MIMO) – Chain A

BE Low Freq Section, Peak – CH102F



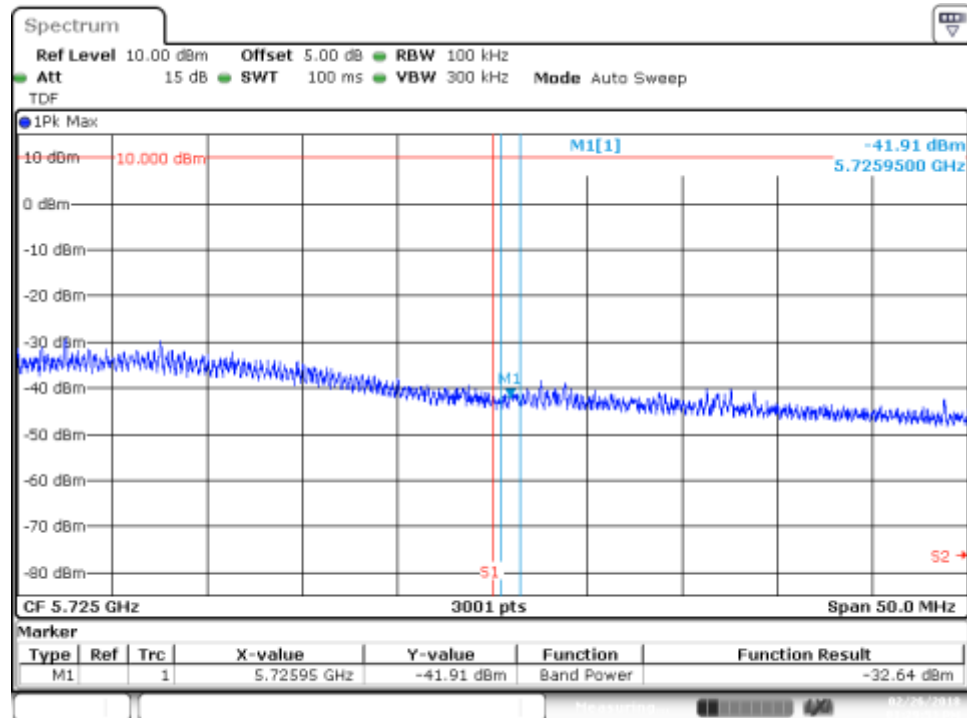
Date: 26.FEB.2018 13:20:36

BE Low Freq Section, RMS – CH102F



Date: 26.FEB.2018 13:17:47

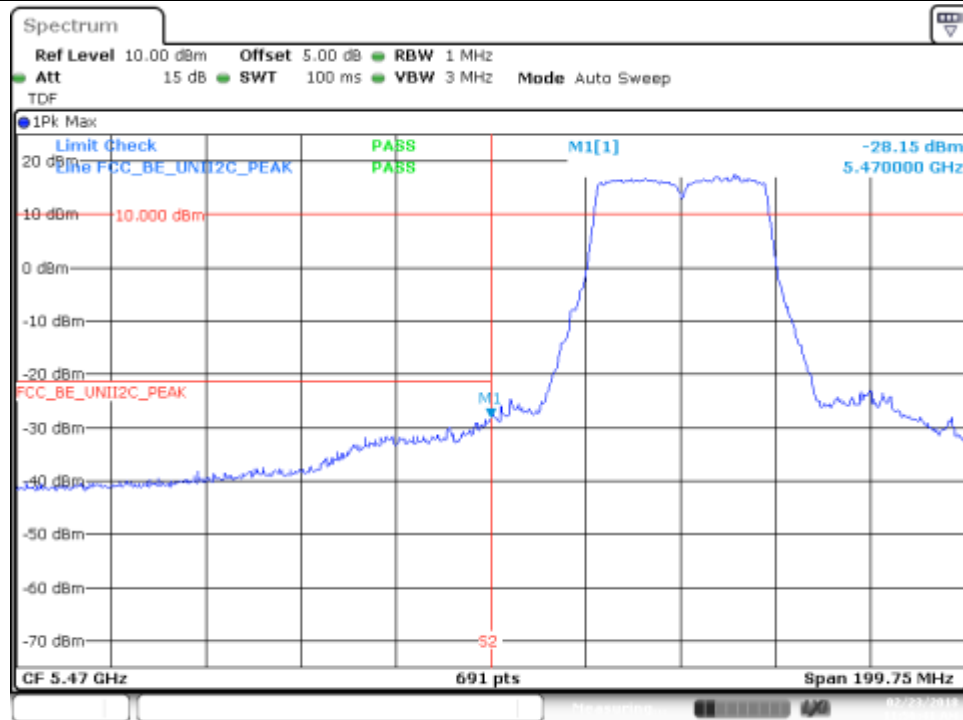
BE High Freq Section, Peak – CH134F



Date: 26 FEB 2018 13:29:53

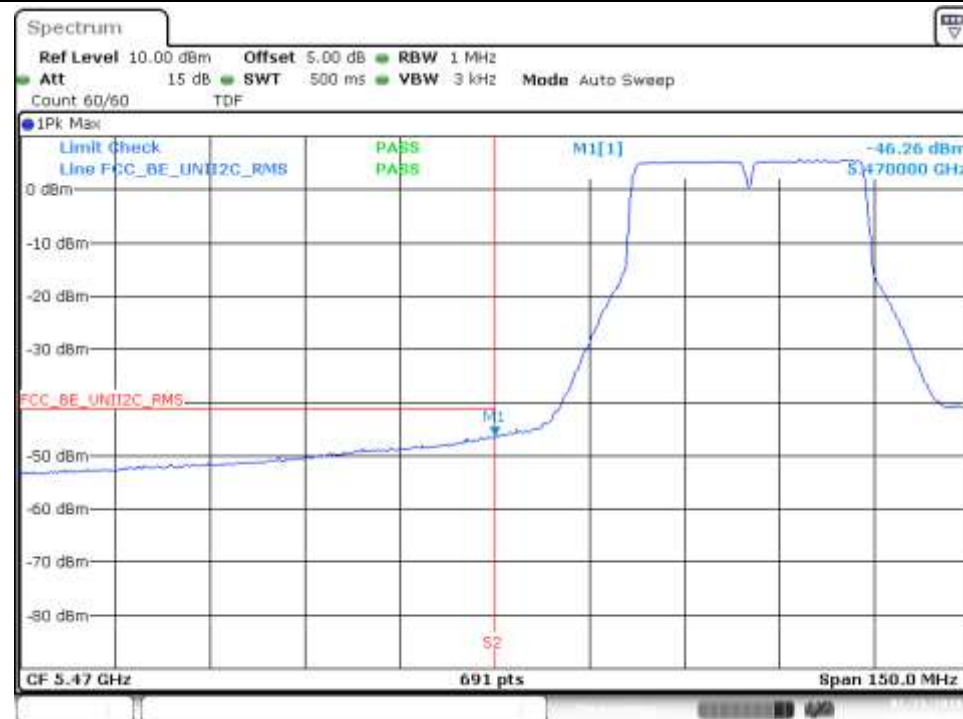
802.11n40, HT8 (MIMO) – Chain B

BE Low Freq Section, Peak – CH102F



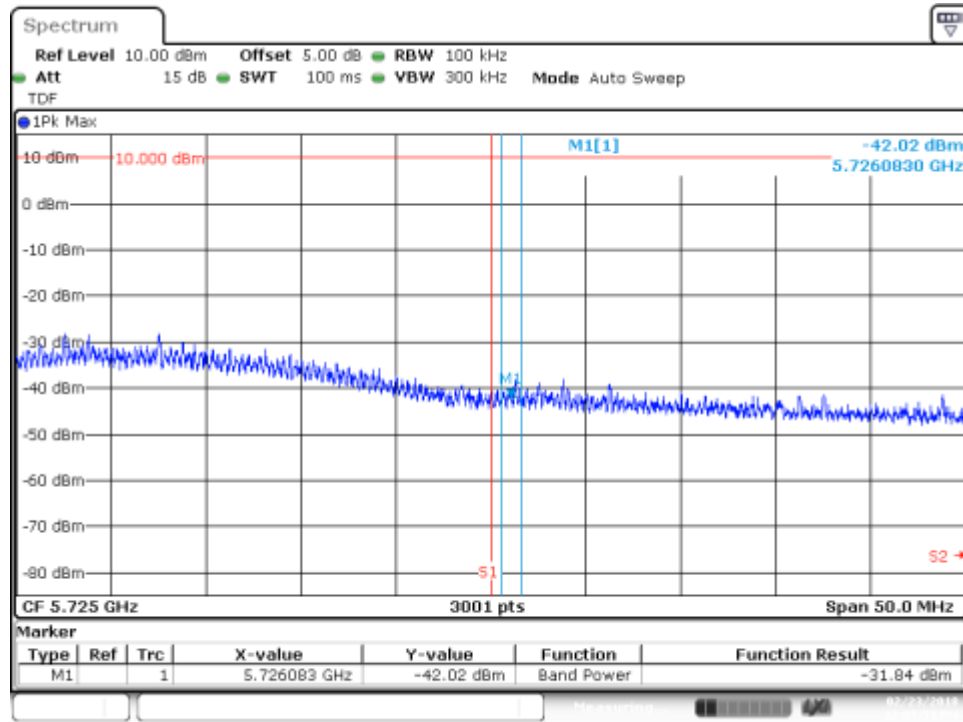
Date: 23.FEB.2018 11:58:42

BE Low Freq Section, RMS – CH102F



Date: 23.FEB.2018 11:58:08

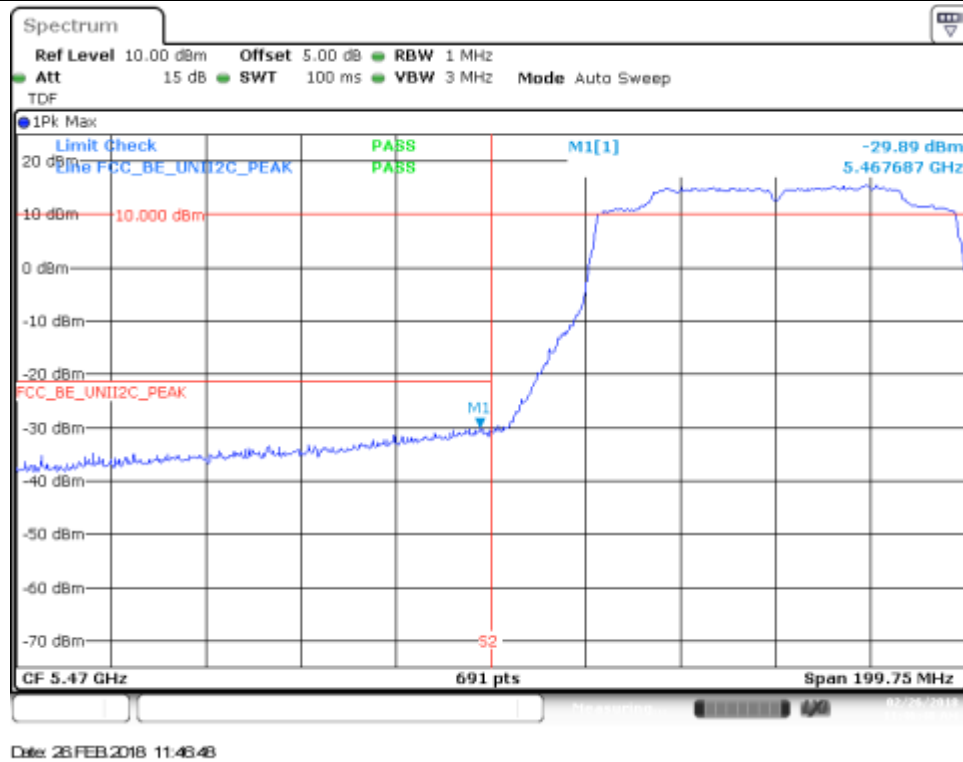
BE High Freq Section, Peak – CH134F



Date: 23 FEB 2018 12:05:51

802.11ac80, VHT0 (SISO) – Chain A

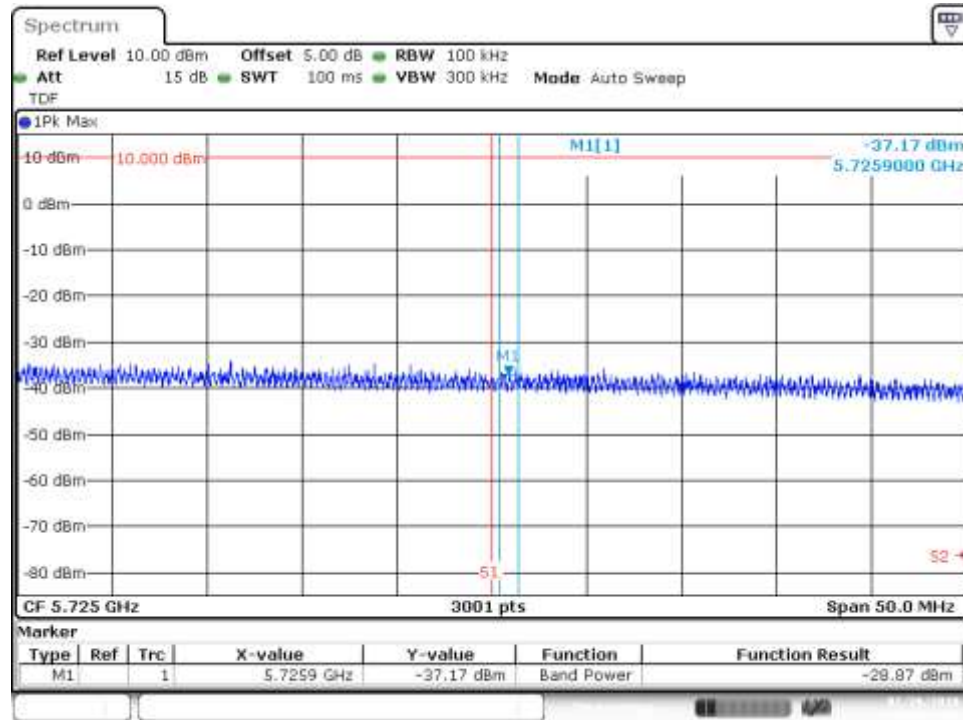
BE Low Freq Section, Peak – CH106ac80



BE Low Freq Section, RMS – CH106ac80



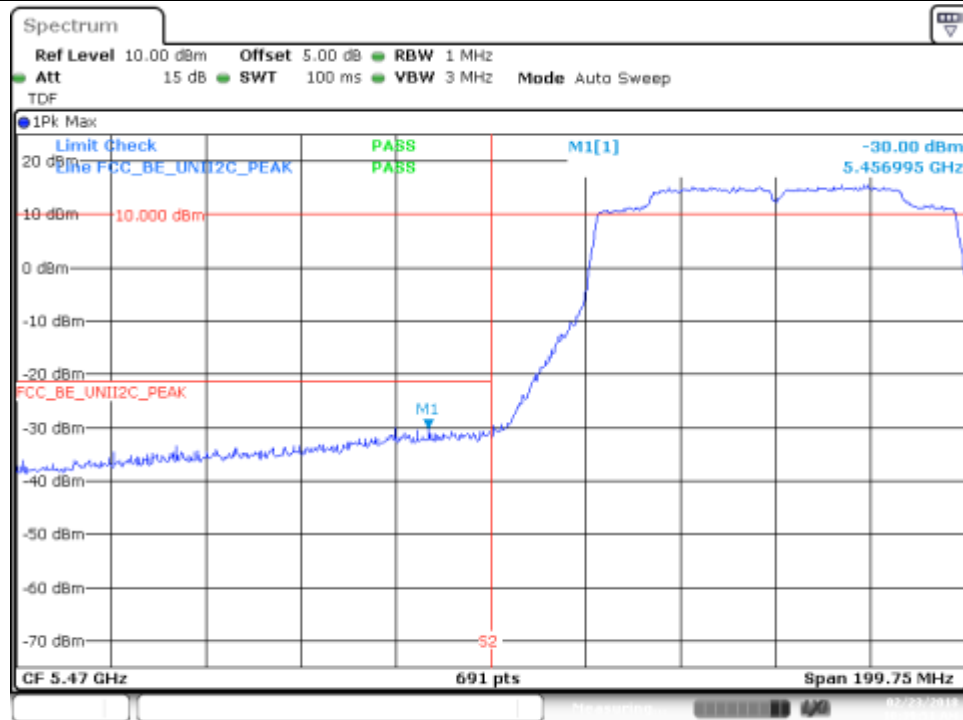
BE High Freq Section, Peak – CH122ac80



Date: 26.FEB.2018 11:52:24

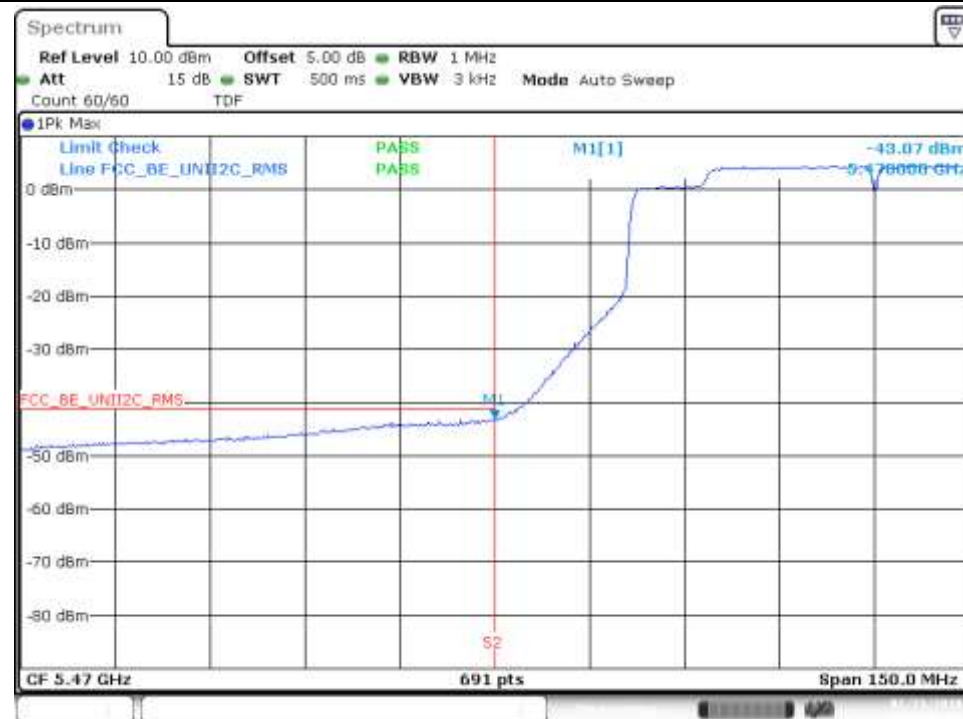
802.11ac80, VHT0 (SISO) – Chain B

BE Low Freq Section, Peak – CH106ac80



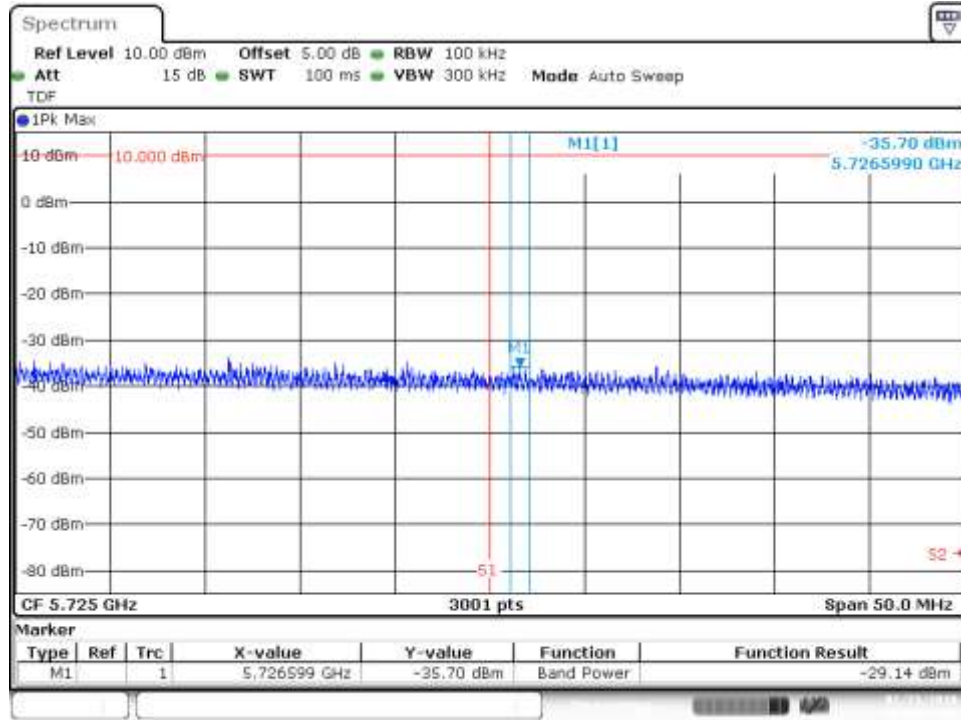
Date: 23.FEB.2018 10:39:52

BE Low Freq Section, RMS – CH106ac80



Date: 23.FEB.2018 10:39:31

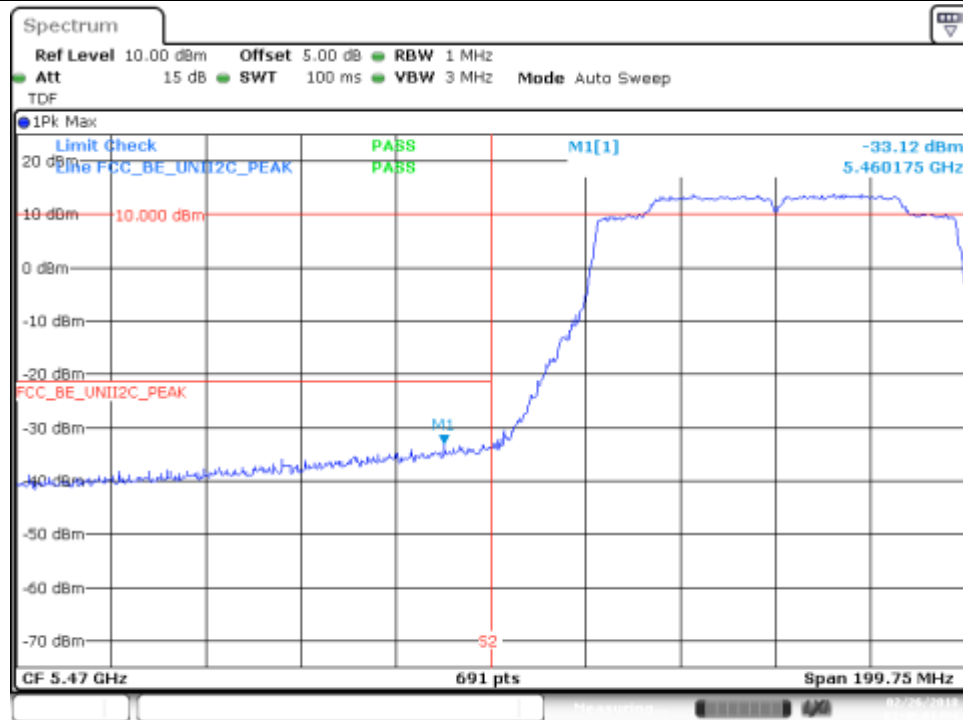
BE High Freq Section, Peak – CH122ac80



Date: 23.FEB.2018 10:49:28

802.11ac80, VHT0 (MIMO) – Chain A

BE Low Freq Section, Peak – CH106ac80



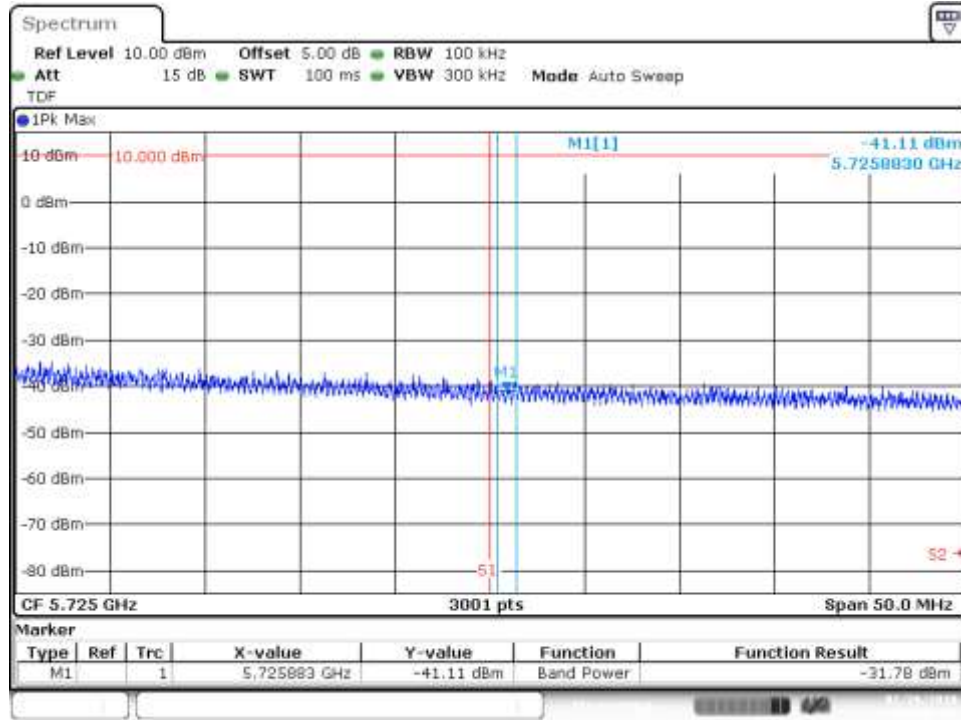
Date: 26 FEB 2018 13:46:02

BE Low Freq Section, RMS – CH106ac80



Date: 26 FEB 2018 13:46:32

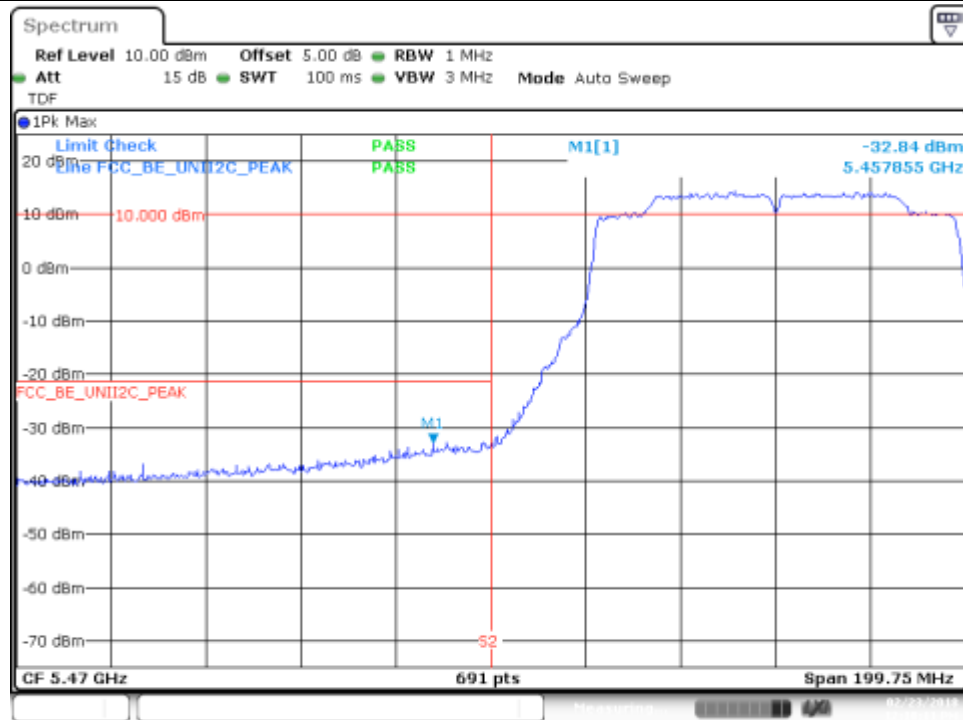
BE High Freq Section, Peak – CH122ac80



Date: 28.FEB.2018 13:51:07

802.11ac80, VHT0 (MIMO) – Chain B

BE Low Freq Section, Peak – CH106ac80



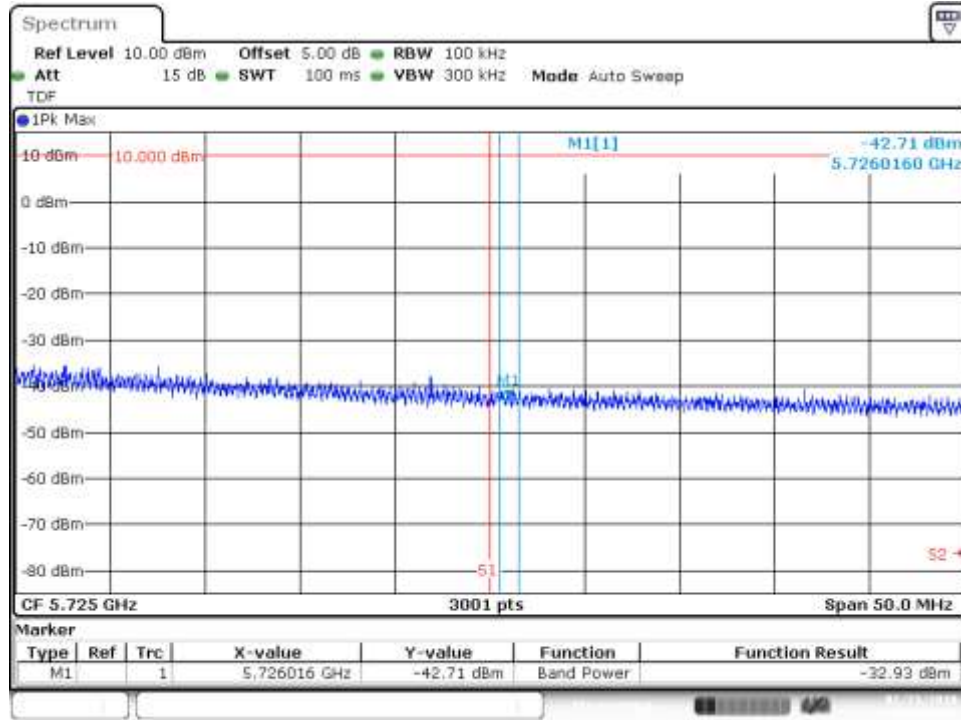
Date: 23.FEB.2018 12:18:12

BE Low Freq Section, RMS – CH106ac80



Date: 23.FEB.2018 12:17:24

BE High Freq Section, Peak – CH122ac80



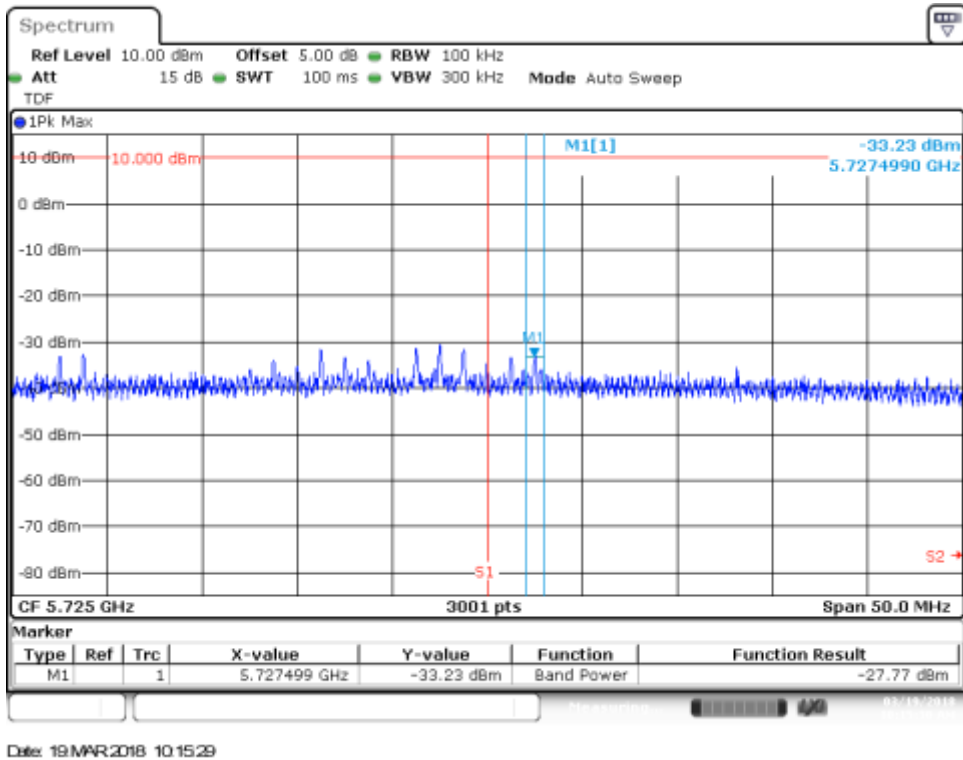
Date: 23.FEB.2018 12:25:34

802.11ac160, VHT0 (SISO) – Chain B

BE Low Freq Section, RMS & Peak – CH114ac160

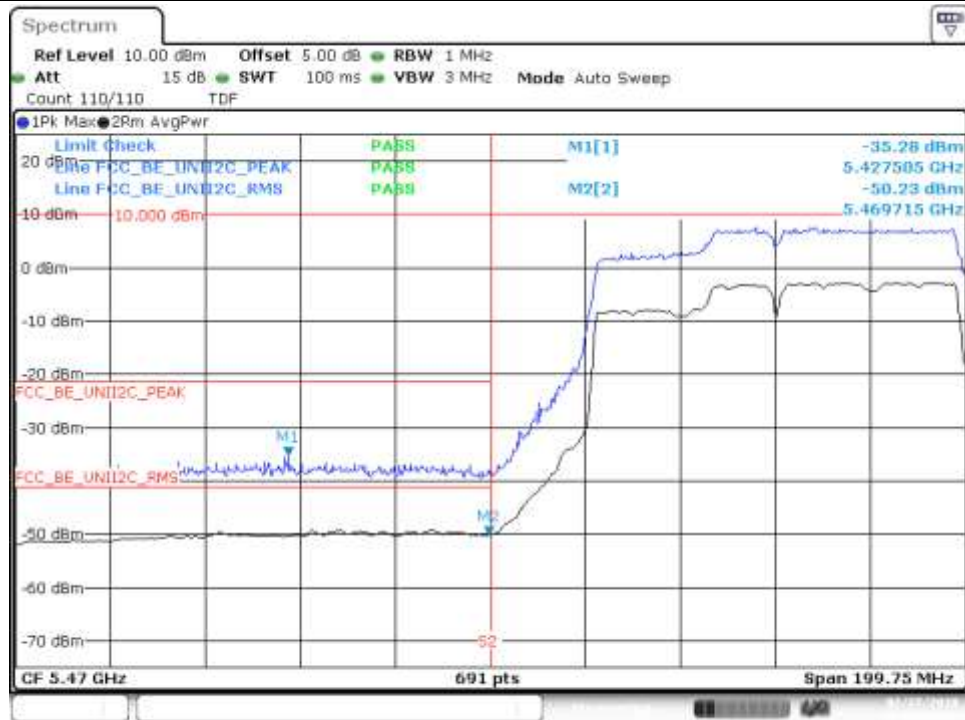


BE High Freq Section, Peak – CH114ac160



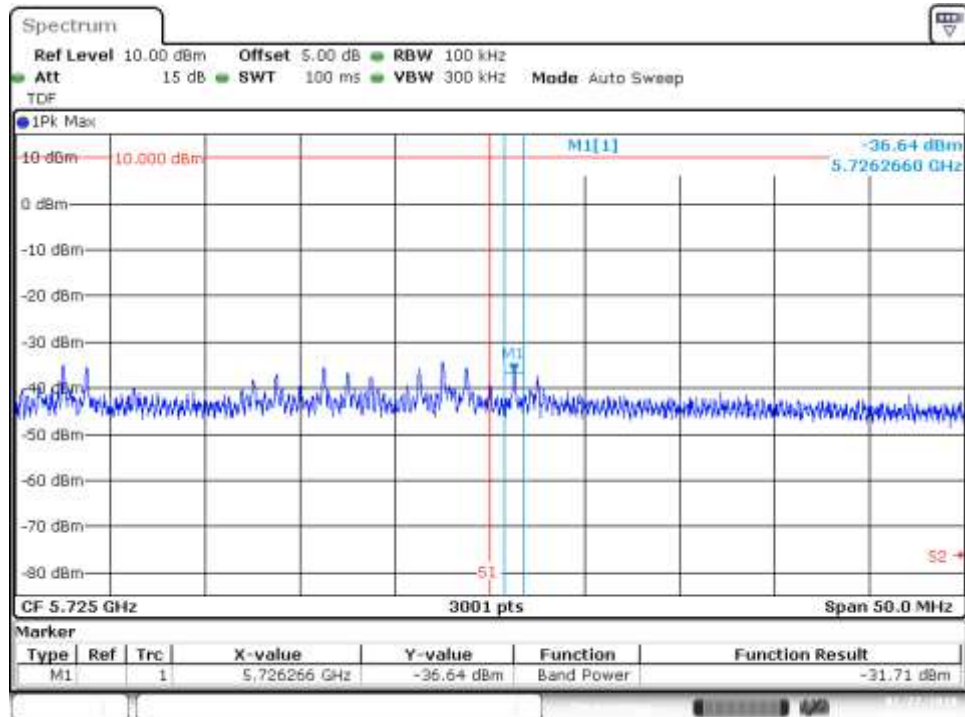
802.11ac160, VHT0 (MIMO) – Chain A

BE Low Freq Section, RMS & Peak – CH114ac160



Date: 27.FEB.2018 09:14:53

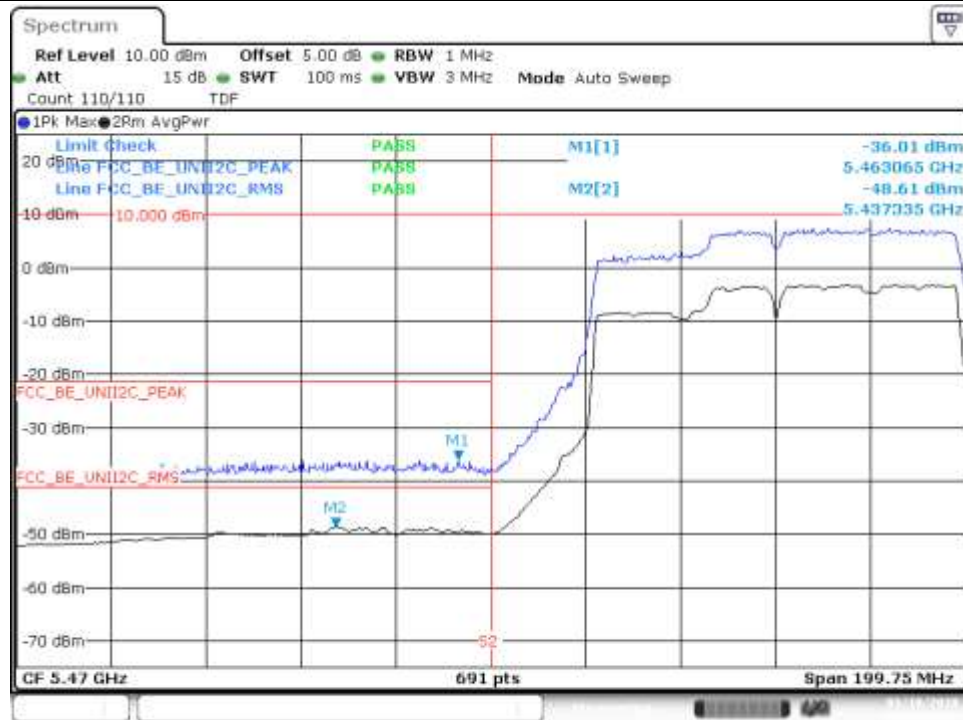
BE High Freq Section, Peak – CH114ac160



Date: 27.FEB.2018 09:13:53

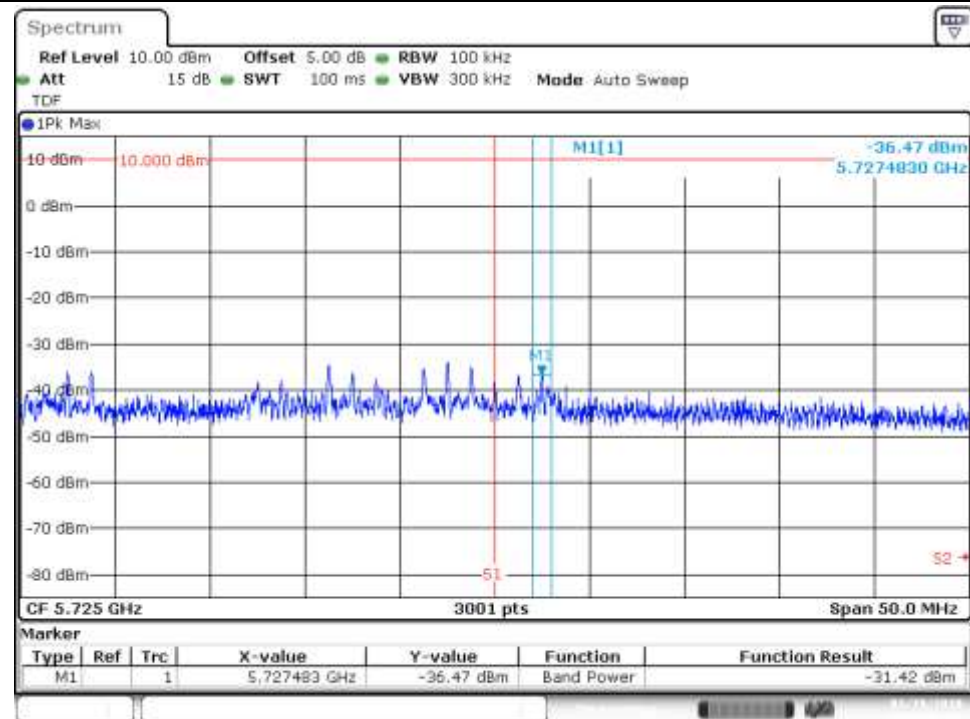
802.11ac160, VHT0 (MIMO) – Chain B

BE Low Freq Section, RMS & Peak – CH114ac160



Date: 19/MAR/2018 10:28:23

BE High Freq Section, Peak – CH114ac160



Date: 19/MAR/2018 10:27:09