

FCC Part 15 Subpart E §15.407

Test Report

Equipment Under Test	Car Infotainment
Model Name	DGU-8745-Y400SA
Variant Model Name	DGU-8745-Y400SA-1, DGU-8745-Q200SA, DGU-8745-Q200SA-1
FCC ID	2AE77DGU8745Y400SA
Applicant	DIGEN CO., LTD.
Manufacturer	DIGEN CO., LTD.
Date of Test(s)	2017. 01. 23 ~ 2017. 02. 17
Date of Issue	2017. 02. 20

In the configuration tested, the EUT complied with the standards specified above.

Issue to	Issue by
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Revision history

Revision	Date of issue	Description	Revised by
--	Feb 15, 2017	Initial	--
1	Feb 20,2017	Antenna Requirement added	

Table of contents

1. ATTESTATION OF TEST RESULT	4
2. EUT DESCRIPTION.....	6
3. MEASUREMENT EQUIPMENT.....	8
4. TRANSMITTER RADIATED SPURIOUS EMISSIONS AND CONDUCTED SPURIOUS EMISSIONS	9
5. 26 dB AND 99% BANDWIDTH	73
6. MAXIMUM CONDUCTED OUTPUT POWER.....	114
7. POWER SPECTRAL DENSITY	138
8. 6 dB BANDWIDTH	162
9. FREQUENCY STABILITY	168
10. RF EXPOSURE EVALUATION.....	171
11. ANTENNA REQUIREMENT	174

1. Attestation of test result

1.1. Details of applicant and manufacturer

Applicant : DIGEN CO., LTD.
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1.2. Summary of test results

The EUT has been tested according to the following specifications;

Section in FCC part 15	Description	Result
§15.205(a) §15.209(a)	Transmitter radiated spurious emissions	C
§15.407(a)(1)	26 dB and 99% Occupied Bandwidth	C
§15.407(a)(1)	Maximum conducted Output power	C
§15.407(a)(1)	Power spectral density	C
§15.407(g)	frequency stability	C
§15.407(e)	6 dB bandwidth	C
1.1307(b)(1)	RF exposure evaluation	C

The sample was tested according to the following specification:

ANSI C63.10:2013, FCC Public Notice KDB789033 D02 v01r03

TEST SITE REGISTRATION NUMBER: **FCC(KR0151)**

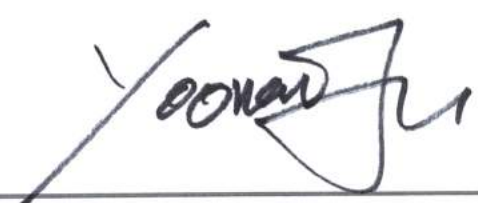
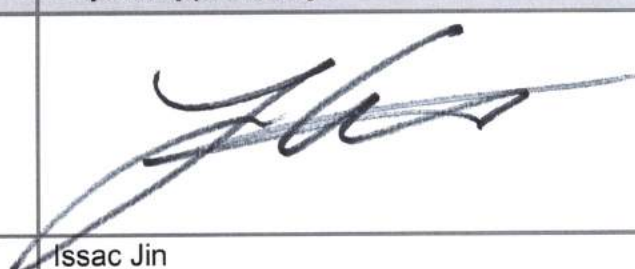
※ Abbreviation

C Complied

N/A Not applicable

F Fail

Approval Signatories

Test and Report Completed by :	Report Approval by :
	
Nanju Yoo Test Engineer MOVON CORPORATION	Issac Jin Technical Manager MOVON CORPORATION

2. EUT Description

Kind of product	Car Infotainment
Model Name	DGU-8745-Y400SA
Variant Model Name	DGU-8745-Y400SA-1, DGU-8745-Q200SA, DGU-8745-Q200SA-1
FCC ID	2AE77DGU8745Y400SA
Serial Number	N/A
Power supply	DC 13.5V
Frequency range	UNII-1 5 180 MHz ~ 5 240 MHz (802.11a/n_HT20) 5 190 MHz ~ 5 230 MHz (802.11an_HT40) 5 210 MHz (802.11ac_VHT80) UNII-2A 5 260 MHz ~ 5 320 MHz (802.11a/n_HT20) 5 270 MHz ~ 5 310 MHz (802.11an_HT40) 5 290 MHz (802.11ac_VHT80) UNII-2C 5 500 MHz ~ 5 620 MHz (802.11a/n_HT20) 5 510 MHz ~ 5 590 MHz (802.11an_HT40) 5 530 MHz ~ 5 610 MHz (802.11ac_VHT80) UNII-3 5 745 MHz ~ 5 805 MHz (802.11a/n_HT20) 5 755 MHz ~ 5 795 MHz (802.11an_HT40) 5 775 MHz (802.11ac_VHT80)
Modulation technique	OFDM
Number of channels	UNII-1 5 180 MHz ~ 5 240 MHz (4ch) 5 190 MHz ~ 5 230 MHz (2ch) 5 210 MHz (1ch) UNII-2A 5 260 MHz ~ 5 320 MHz (4ch) 5 270 MHz ~ 5 310 MHz (2ch) 5 290 MHz (1ch) UNII-2C 5 500 MHz ~ 5 620 MHz (7ch) 5 510 MHz ~ 5 590 MHz (3ch) 5 530 MHz ~ 5 610 MHz (2ch) UNII-3 5 745 MHz ~ 5 805 MHz (4ch) 5 755 MHz ~ 5 795 MHz (2ch) 5 775 MHz (1ch)
Antenna gain	0.00 dB i (Max.)
Test Site Registration Number	FCC(KR0151)

2.1. Declarations by the manufacturer

None

2.2. Details of modification

None

2.3 Test Mode

UNII-1		UNII-2A		UNII-2C		UNII-3	
CH.	Frequency(MHz)	CH.	Frequency(MHz)	CH.	Frequency(MHz)	CH.	Frequency(MHz)
36	5 180	52	5 260	100	5 500	149	5 745
44	5 220	60	5 300	112	5 560	157	5 785
48	5 240	64	5 320	124	5 620	161	5 805

(802.11a/n_HT20)

UNII-1		UNII-2A		UNII-2C		UNII-3	
CH.	Frequency(MHz)	CH.	Frequency(MHz)	CH.	Frequency(MHz)	CH.	Frequency(MHz)
38	5 190	54	5 270	102	5 510	151	5 755
46	5 230	62	5 310	110	5 550	159	5 795
				118	5 590		

(802.11an_HT40)

UNII-1		UNII-2A		UNII-2C		UNII-3	
CH.	Frequency(MHz)	CH.	Frequency(MHz)	CH.	Frequency(MHz)	CH.	Frequency(MHz)
42	5 210	58	5 290	106	5 530	155	5 775
				122	5 610		

(802.11an_VHT80)

2.4. Table for Test Modes

Preliminary tests were performed in different data rate to find the worst radiated emission.

The data rate shown in the table below is the worst-case rate with respect to the specific test item.

Investigation has been done on all the possible configurations for searching the worst cases.

The following table is a list of the test modes shown in this test report.

Test Mode	Data rate (Worst case)
802.11a	6 Mbps
802.11an_HT20 802.11an_HT40 802.11ac_VHT80	MCS0

3. Measurement Equipment

Equipment	Manufacturer	Model	Serial number	Calibration Interval	Calibration due.
Test Receiver	R&S	ESVS30	829673/015	1 year	2017-12-09
Signal Generator	R&S	SMA100A	102188	1 year	2017-12-09
Spectrum Analyzer	R&S	FSV-40	100832	1 year	2017-11-09
Power Meter	Agilent	E4416A	GB41290645	1 year	2017-06-28
Power Sensor	Agilent	9327A	US40441490	1 year	2017-06-28
Horn Antenna	R&S	HF906	100236	2 year	2017-07-24
Horn Antenna	R&S	HF906	100235	2 year	2017-04-23
Horn Antenna	AH Systems	SAS-573	164	2 year	2018-05-03
TRILOG Supper Broadband test Antenna	SCHWARZBECK	SAS-521-7	9161-4159	2 year	2018-06-14
Power Amplifier	MITEQ	AM-1431	1497315	1 year	2017-06-28
Power Amplifier	MITEQ	AFS43-01002600	1374382	1 year	2017-11-03
High Pass Filter	Wainwright	WHK3.0/18G-10SS	508	1 year	2017-06-29
Controller	INNCO	CO2000	co200/064/6961003/L	N/A	N/A
Antenna Master	INNCO	MA4000	MA4000/038/6961003/L	N/A	N/A
Loop Antenna	ETS LINDGREN	6502	00118166	2 year	2018-02-23
TWO LINE-V-NETWORK	R&S	ESH3-Z5	100296	1 year	2017-12-09
Power Amplifier	MITEQ	AFS43-01002600	1374382	1 year	2017-11-03

※Remark;

Support equipment

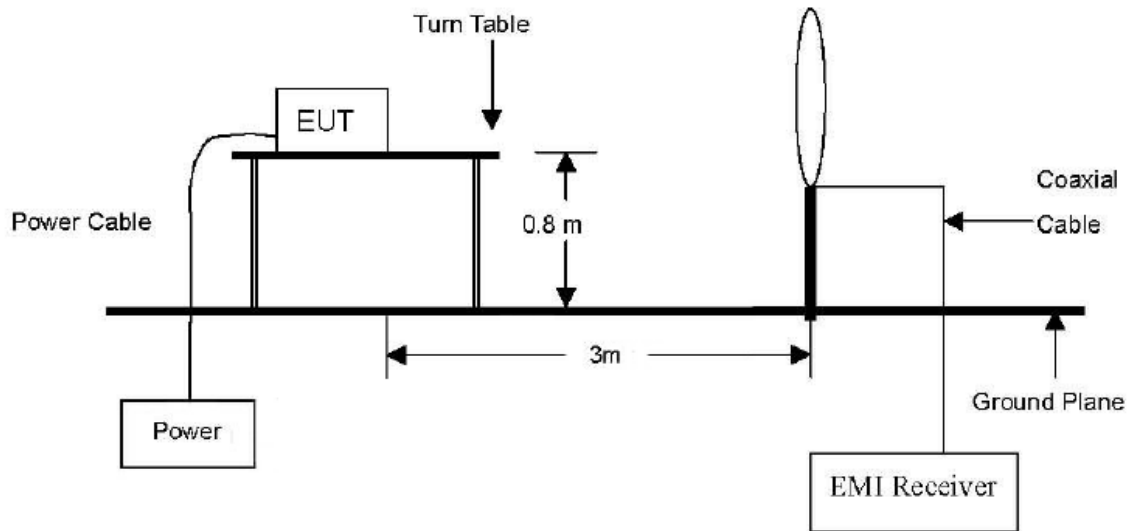
Description	Manufacturer	Model	Serial number
-	-	-	-

4. Transmitter radiated spurious emissions and conducted spurious emissions

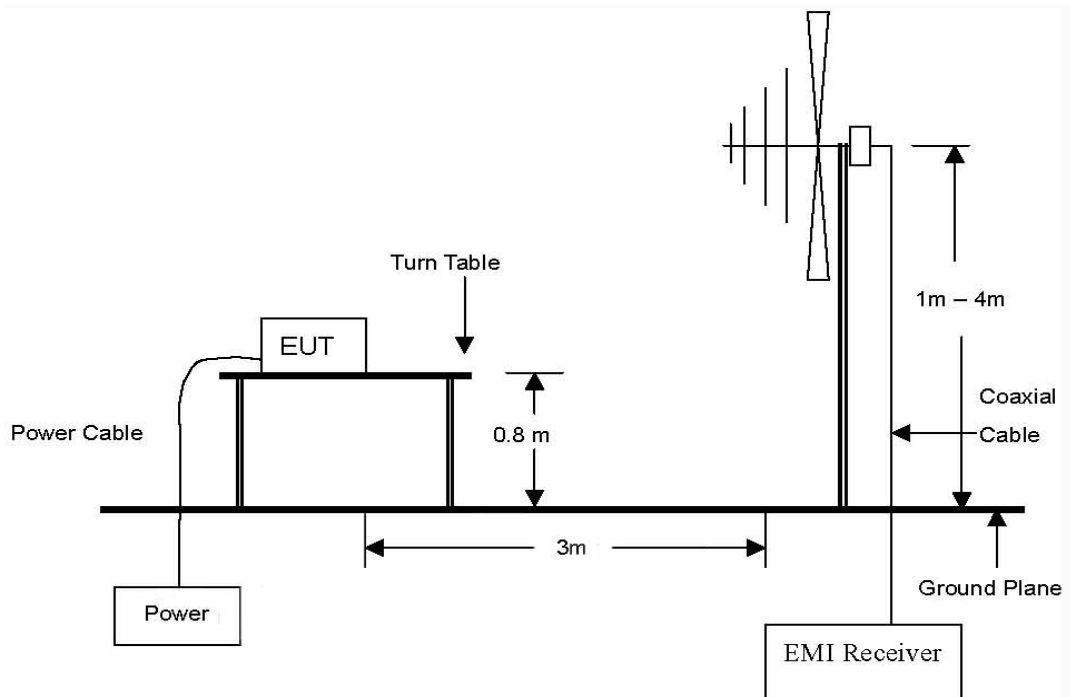
4.1. Test setup

4.1.1. Transmitter radiated spurious emissions

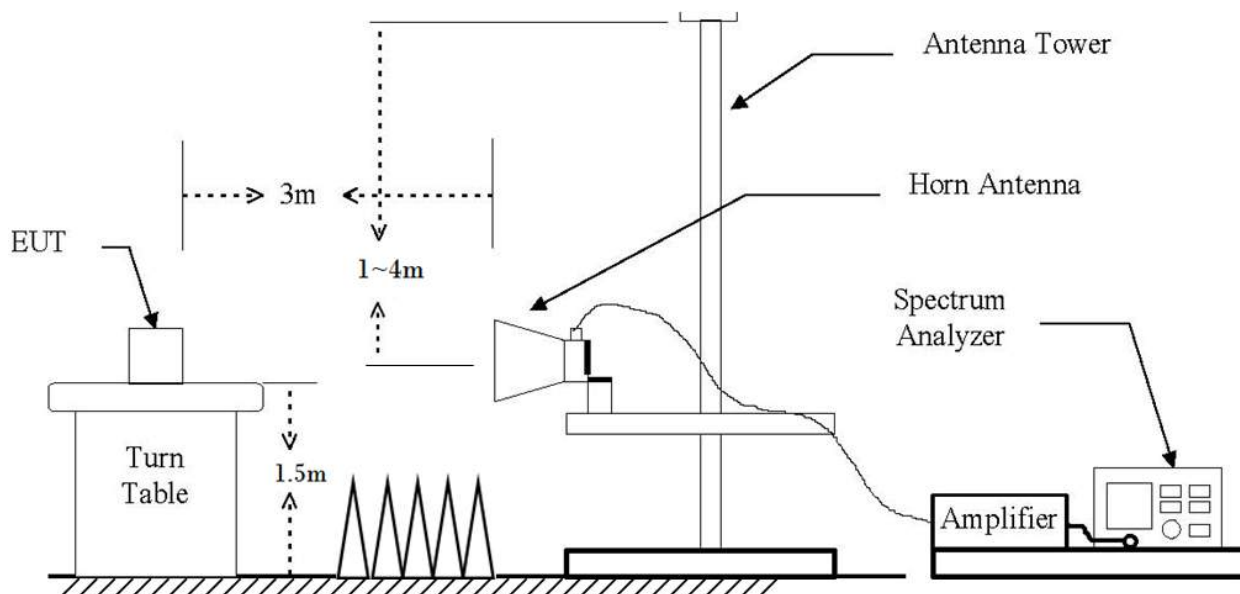
The diagram below shows the test setup that is utilized to make the measurements for emission from 9kHz to 30MHz Emissions.



The diagram below shows the test setup that is utilized to make the measurements for emission from 30 MHz to 1 GHz emissions.



The diagram below shows the test setup that is utilized to make the measurements for emission from 1 GHz to 40 GHz emissions.



4.2. Limit

According to 15.209(a), for an intentional radiator devices, the general required of field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values :

Frequency (MHz)	Distance (Meters)	Radiated ($\mu\text{V/m}$)
0.009 ~ 0.490	300	$2\,400 / F(\text{kHz})$
0.490 ~ 1.705	30	$24\,000 / F(\text{kHz})$
1.705 ~ 30.0	30	30
30 ~ 88	3	100**
88 ~ 216	3	150**
216 ~ 960	3	200**
Above 960	3	500

**Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54 ~ 72 MHz, 76 ~ 88 MHz, 174 ~ 216 MHz or 470 ~ 806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

According to 15.407(b), (b) Undesirable emission limits: Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the 5.15–5.25 GHz band: all emissions outside of the 5.15–5.35 GHz band shall not exceed an e.i.r.p. of –27 dB m/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of –27dBm/MHz.
- (3) 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 e.i.r.p. of –27dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHzband:
 - i) All emissions shall be limited to a level of –27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the bandedge.
 - ii) Devices certified before March 2, 2017 with antenna gain greater than 10 dBi may demonstrate compliance with the emission limits in §15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease by March 2, 2018. Devices certified before March 2, 2018 with antenna gain of 10 dBi or less may demonstrate compliance with the emission limits in §15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease before March 2,2020.
- (5) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz.

A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.

- (6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in§

15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in § 15.207.

- (7) The provisions of §15.205 apply to intentional radiators operating under thissection.
- (8) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipmentpermits.

4.3. Test procedures

Radiated emissions from the EUT were measured according to the dictates of ANSI C63.10:2013. In case of the air temperature of the test site is out of the range is 10 to 40°C before the testing proceeds the warm-up time of EUT maintain adequately.

4.3.1. Test procedures for radiated spurious emissions

1. The EUT is placed on a turntable, which is 0.8 m (Below 1 GHz)/ 1.5 m (Above 1 GHz) above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3 m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Repeat above procedures until the measurements for all frequencies are complete.

※ **Remark;**

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 10 kHz for Peak detection (PK) at frequency below 30 MHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Peak detection (PK) or Quasi-peak detection (QP) at frequency below 1 GHz.
3. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection and frequency above 1 GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1 GHz.

4.4. Test result

Ambient temperature: 20°C

Relative humidity: 45% R.H.

4.4.1. Spurious radiated emission

The frequency spectrum from 9kHz to 30MHz was investigated. Emission levels are not reported much lower than the limits by over 20 dB. All reading values are peak values.

To get a maximum emission levels from the EUT, the EUT was moved throughout the XY, XZ, and YZ planes.

Operation mode: UNII-1

A. Low channel (5 180 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBμV/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

B. Middle channel (5 220 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBμV/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

C. High channel (5 240 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBμV/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

※ Remark

1. Actual = Reading + Ant. factor + CL (Cable loss)
2. Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
3. Limit line = specific Limits (dBuV) + Distance extrapolation factor
4. 15.31 Measurement standards.

The amplitude of spurious emissions from intentional radiators and emissions from unintentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this part.

Operation mode: UNII-1(n_HT20)

A. Low channel (5 180 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

B. Middle channel (5 220 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

C. High channel (5 240 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

※ Remark

1. Actual = Reading + Ant. factor + CL (Cable loss)
2. Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
3. Limit line = specific Limits (dB μ V) + Distance extrapolation factor
4. 15.31 Measurement standards.

The amplitude of spurious emissions from intentional radiators and emissions from unintentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this part.

Operation mode: UNII-1(n_HT40)
A. Low channel (5 190 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

B. High channel (5 230 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-1(ac_VHT80)
A. Low channel (5 210 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

※ Remark

1. Actual = Reading + Ant. factor + CL (Cable loss)
2. Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
3. Limit line = specific Limits (dB μ V) + Distance extrapolation factor
4. 15.31 Measurement standards.

The amplitude of spurious emissions from intentional radiators and emissions from unintentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this part.

Operation mode: UNII-2A
A. Low channel (5 260 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

B. Middle channel (5 300 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

C. High channel (5 320 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-2A(n_HT20)
A. Low channel (5 260 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

B. Middle channel (5 300 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

C. High channel (5 320 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-2A(n_HT40)
A. Low channel (5 270 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

B. High channel (5 310 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-2A(ac_VHT80)
A. Low channel (5 290 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

※ Remark

1. Actual = Reading + Ant. factor + CL (Cable loss)
2. Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
3. Limit line = specific Limits (dB μ V) + Distance extrapolation factor
4. 15.31 Measurement standards.

The amplitude of spurious emissions from intentional radiators and emissions from unintentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this part.

Operation mode: UNII-2C
A. Low channel (5 500 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

B. Middle channel (5 560 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

C. High channel (5 620 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-2C(n_HT20)
A. Low channel (5 500 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

B. Middle channel (5 560 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

C. High channel (5 620 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-2C(n_HT40)

A. Low channel (5 510 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

B. Middle channel (5 550 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

C. High channel (5 590 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-2C(ac_VHT80)
A. Low channel (5 530 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

C. High channel (5 610 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

※ Remark

- Actual = Reading + Ant. factor + CL (Cable loss)
- Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
- Limit line = specific Limits (dB μ V) + Distance extrapolation factor
- 15.31 Measurement standards.

The amplitude of spurious emissions from intentional radiators and emissions from unintentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this part.

Operation mode: UNII-3
A. Low channel (5 745 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

B. Middle channel (5 785 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

C. High channel (5 805 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-3(n_HT20)
A. Low channel (5 745 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

B. Middle channel (5 785 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

C. High channel (5 805 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-3(n_HT40)
A. Low channel (5 745 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

B. High channel (5 795 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-3(n_VHT80)
A. Low channel (5 775 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

※ Remark

1. Actual = Reading + Ant. factor + CL (Cable loss)
2. Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
3. Limit line = specific Limits (dB μ V) + Distance extrapolation factor
4. 15.31 Measurement standards.

The amplitude of spurious emissions from intentional radiators and emissions from unintentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this part.

4.4.2. Spurious radiated emission

The frequency spectrum from 30 MHz to 1 000 MHz was investigated. Emission levels are not reported much lower than the limits by over 20 dB. All reading values are peak values.

To get a maximum emission levels from the EUT, the EUT was moved throughout the XY, XZ, and YZ planes.

Operation mode: UNII-1

A. Low channel (5 180 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBμV/m)	Margin (dB)
166.27	10.76	PK	V	19.5	2.7	32.2	43.5	7.80
433.94	18.68	PK	H	13.3	3.7	35.7	46.0	7.82
500.73	14.55	PK	H	15.7	4.2	35.5	46.0	10.52
600.57	18.74	PK	V	16.6	4.5	41.5	46.0	4.52
Above 700.00	Not detected	-	-	-	-	-	-	-

B. Middle channel (5 220 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBμV/m)	Margin (dB)
165.82	10.46	PK	V	19.5	2.7	31.9	43.5	8.10
432.62	17.48	PK	H	13.3	3.7	34.5	46.0	9.02
501.61	15.25	PK	H	15.7	4.2	36.2	46.0	9.82
602.84	18.04	PK	V	16.6	4.5	40.8	46.0	5.22
Above 700.00	Not detected	-	-	-	-	-	-	-

C. High channel (5 240 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
165.98	9.36	PK	V	19.5	2.7	30.8	43.5	9.20
432.87	18.58	PK	H	13.3	3.7	35.6	46.0	7.92
501.45	15.85	PK	H	15.7	4.2	36.8	46.0	9.22
602.31	18.94	PK	V	16.6	4.5	41.7	46.0	4.32
Above 700.00	Not detected	-	-	-	-	-	-	-

※ Remark

1. Actual = Reading + Ant. factor + CL (Cable loss)
2. Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
3. Limit line = specific Limits (dB μ V) + Distance extrapolation factor
4. 15.31 Measurement standards.

The amplitude of spurious emissions from intentional radiators and emissions from unintentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this part.

Operation mode: UNII-1(n_HT20)

A. Low channel (5 180 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
165.82	10.46	PK	V	19.5	2.7	31.9	43.5	8.10
432.65	18.68	PK	H	13.3	3.7	35.7	46.0	7.82
501.34	14.65	PK	H	15.7	4.2	35.6	46.0	10.42
603.18	19.34	PK	V	16.6	4.5	42.1	46.0	3.92
Above 700.00	Not detected	-	-	-	-	-	-	-

B. Middle channel (5 220 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
165.89	11.06	PK	V	19.5	2.7	32.5	43.5	7.50
432.75	14.58	PK	H	13.3	3.7	31.6	46.0	11.92
501.22	16.65	PK	H	15.7	4.2	37.6	46.0	8.42
603.36	18.64	PK	V	16.6	4.5	41.4	46.0	4.62
Above 700.00	Not detected	-	-	-	-	-	-	-

C. High channel (5 240 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
165.71	11.46	PK	V	19.5	2.7	32.9	43.5	7.10
432.62	15.78	PK	H	13.3	3.7	32.8	46.0	10.72
501.14	17.15	PK	H	15.7	4.2	38.1	46.0	7.92
603.20	19.14	PK	V	16.6	4.5	41.9	46.0	4.12
Above 700.00	Not detected	-	-	-	-	-	-	-

※ Remark

- Actual = Reading + Ant. factor + CL (Cable loss)
- Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
- Limit line = specific Limits (dB μ V) + Distance extrapolation factor
- 15.31 Measurement standards.

The amplitude of spurious emissions from intentional radiators and emissions from unintentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this part.

Operation mode: UNII-1(n_HT40)

A. Low channel (5 190 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
164.18	10.76	PK	V	19.5	2.7	32.2	43.5	7.80
432.31	14.48	PK	H	13.3	3.7	31.5	46.0	12.02
500.25	17.65	PK	H	15.7	4.2	38.6	46.0	7.42
603.11	16.74	PK	V	16.6	4.5	39.5	46.0	6.52
Above 700.00	Not detected	-	-	-	-	-	-	-

B. High channel (5 230 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
165.84	10.16	PK	V	19.5	2.7	31.6	43.5	8.40
431.52	16.78	PK	H	13.3	3.7	33.8	46.0	9.72
499.89	16.65	PK	H	15.7	4.2	37.6	46.0	8.42
601.25	17.44	PK	V	16.6	4.5	40.2	46.0	5.82
Above 700.00	Not detected	-	-	-	-	-	-	-

Operation mode: UNII-1(ac_VHT80)
A. Low channel (5 210 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
165.96	10.26	PK	V	19.5	2.7	31.7	43.5	8.30
431.46	15.48	PK	H	13.3	3.7	32.5	46.0	11.02
500.94	15.35	PK	H	15.7	4.2	36.3	46.0	9.72
600.16	16.34	PK	V	16.6	4.5	39.1	46.0	6.92
Above 700.00	Not detected	-	-	-	-	-	-	-

Operation mode: UNII-2A
A. Low channel (5 260 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
165.84	10.46	PK	V	19.5	2.7	31.9	43.5	8.10
431.34	14.18	PK	H	13.3	3.7	31.2	46.0	12.32
500.85	14.25	PK	H	15.7	4.2	35.2	46.0	10.82
600.62	16.54	PK	V	16.6	4.5	39.3	46.0	6.72
Above 700.00	Not detected	-	-	-	-	-	-	-

B. Middle channel (5 300 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
165.71	9.66	PK	V	19.5	2.7	31.1	43.5	8.90
431.26	13.18	PK	H	13.3	3.7	30.2	46.0	13.32
500.71	13.35	PK	H	15.7	4.2	34.3	46.0	11.72
600.52	15.24	PK	V	16.6	4.5	38.0	46.0	8.02
Above 700.00	Not detected	-	-	-	-	-	-	-

C. High channel (5 320 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
165.51	9.06	PK	V	19.5	2.7	30.5	43.5	9.50
431.17	12.38	PK	H	13.3	3.7	29.4	46.0	14.12
502.26	10.55	PK	H	15.7	4.2	31.5	46.0	14.52
603.26	12.94	PK	V	16.6	4.5	35.7	46.0	10.32
Above 700.00	Not detected	-	-	-	-	-	-	-

Operation mode: UNII-2A(n_HT20)

A. Low channel (5 260 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
165.42	8.66	PK	V	19.5	2.7	30.1	43.5	9.90
433.62	12.18	PK	H	13.3	3.7	29.2	46.0	14.32
503.11	9.85	PK	H	15.7	4.2	30.8	46.0	15.22
602.82	11.84	PK	V	16.6	4.5	34.6	46.0	11.42
Above 700.00	Not detected	-	-	-	-	-	-	-

B. Middle channel (5 300 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
164.12	8.76	PK	V	19.5	2.7	30.2	43.5	9.80
432.82	12.48	PK	H	13.3	3.7	29.5	46.0	14.02
501.71	9.65	PK	H	15.7	4.2	30.6	46.0	15.42
601.76	10.94	PK	V	16.6	4.5	33.7	46.0	12.32
Above 700.00	Not detected	-	-	-	-	-	-	-

C. High channel (5 320 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
163.52	11.16	PK	V	19.5	2.7	32.6	43.5	7.40
432.49	12.78	PK	H	13.3	3.7	29.8	46.0	13.72
600.26	14.15	PK	V	16.6	4.5	35.1	46.0	10.92
Above 700.00	Not detected	-	-	-	-	-	-	-

Operation mode: UNII-2(n_HT40)

A. Low channel (5 270 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
163.85	9.76	PK	V	19.5	2.7	31.2	43.5	8.80
432.16	15.48	PK	H	13.3	3.7	32.5	46.0	11.02
500.25	13.65	PK	H	15.7	4.2	34.6	46.0	11.42
603.93	9.04	PK	V	16.6	4.5	31.8	46.0	14.22
Above 700.00	Not detected	-	-	-	-	-	-	-

B. High channel (5 310 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
165.98	9.46	PK	V	19.5	2.7	30.9	43.5	9.10
432.13	13.08	PK	H	13.3	3.7	30.1	46.0	13.42
502.66	11.45	PK	H	15.7	4.2	32.4	46.0	13.62
603.45	11.14	PK	V	16.6	4.5	33.9	46.0	12.12
Above 700.00	Not detected	-	-	-	-	-	-	-

Operation mode: UNII-2A(ac_VHT80)

A. Low channel (5 290 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
166.12	11.16	PK	V	19.5	2.7	32.6	43.5	7.40
431.82	14.08	PK	H	13.3	3.7	31.1	46.0	12.42
500.52	11.85	PK	H	15.7	4.2	32.8	46.0	13.22
601.46	10.14	PK	V	16.6	4.5	32.9	46.0	13.12
Above 700.00	Not detected	-	-	-	-	-	-	-

Operation mode: UNII-2C

A. Low channel (5 500 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
165.89	11.46	PK	V	19.5	2.7	32.9	43.5	7.10
434.79	17.18	PK	H	13.3	3.7	34.2	46.0	9.32
600.52	15.85	PK	V	16.6	4.5	36.8	46.0	9.22
Above 700.00	Not detected	-	-	-	-	-	-	-

B. Middle channel (5 560 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
166.45	11.66	PK	V	19.5	2.7	33.1	43.5	6.90
433.52	19.78	PK	H	13.3	3.7	36.8	46.0	6.72
601.96	16.45	PK	V	16.6	4.5	37.4	46.0	8.62
Above 700.00	Not detected	-	-	-	-	-	-	-

C. High channel (5 620 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
166.67	11.36	PK	V	19.5	2.7	32.8	43.5	7.20
434.63	18.68	PK	H	13.3	3.7	35.7	46.0	7.82
600.84	15.25	PK	V	16.6	4.5	36.2	46.0	9.82
Above 700.00	Not detected	-	-	-	-	-	-	-

Operation mode: UNII-2C(n_HT20)

A. Low channel (5 500 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
165.49	11.96	PK	V	19.5	2.7	33.4	43.5	6.60
432.28	19.78	PK	H	13.3	3.7	36.8	46.0	6.72
603.74	16.15	PK	V	16.6	4.5	37.1	46.0	8.92
Above 700.00	Not detected	-	-	-	-	-	-	-

B. Middle channel (5 560 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
163.78	10.26	PK	V	19.5	2.7	31.7	43.5	8.30
432.62	16.58	PK	H	13.3	3.7	33.6	46.0	9.92
603.74	14.85	PK	V	16.6	4.5	35.8	46.0	10.22
Above 700.00	Not detected	-	-	-	-	-	-	-

C. High channel (5 620 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
163.64	11.26	PK	V	19.5	2.7	32.7	43.5	7.30
433.85	17.48	PK	H	13.3	3.7	34.5	46.0	9.02
601.55	15.15	PK	V	16.6	4.5	36.1	46.0	9.92
Above 700.00	Not detected	-	-	-	-	-	-	-

Operation mode: UNII-2C(n_HT40)

A. Low channel (5 510 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
163.82	10.36	PK	V	19.5	2.7	31.8	43.5	8.20
431.61	16.18	PK	H	13.3	3.7	33.2	46.0	10.32
600.85	14.75	PK	V	16.6	4.5	35.7	46.0	10.32
Above 700.00	Not detected	-	-	-	-	-	-	-

B. Middle channel (5 550 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
163.17	11.06	PK	V	19.5	2.7	32.5	43.5	7.50
431.21	16.38	PK	H	13.3	3.7	33.4	46.0	10.12
601.85	14.85	PK	V	16.6	4.5	35.8	46.0	10.22
Above 700.00	Not detected	-	-	-	-	-	-	-

C. High channel (5 590 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
162.82	10.36	PK	V	19.5	2.7	31.8	43.5	8.20
435.91	17.58	PK	H	13.3	3.7	34.6	46.0	8.92
600.14	14.05	PK	V	16.6	4.5	35.0	46.0	11.02
Above 700.00	Not detected	-	-	-	-	-	-	-

Operation mode: UNII-2C(ac_VHT80)

A. Low channel (5 530 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
164.25	10.36	PK	V	19.5	2.7	31.8	43.5	8.20
435.11	15.98	PK	H	13.3	3.7	33.0	46.0	10.52
600.74	13.15	PK	V	16.6	4.5	34.1	46.0	11.92
Above 700.00	Not detected	-	-	-	-	-	-	-

B. Low channel (5 610 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
164.18	10.36	PK	V	19.5	2.7	31.8	43.5	8.20
432.52	19.48	PK	H	13.3	3.7	36.5	46.0	7.02
599.42	16.45	PK	V	16.6	4.5	37.4	46.0	8.62
Above 700.00	Not detected	-	-	-	-	-	-	-

Operation mode: UNII-3
A. Low channel (5 745 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
164.18	10.36	PK	V	19.5	2.7	31.8	43.5	8.20
432.52	19.48	PK	H	13.3	3.7	36.5	46.0	7.02
599.42	16.45	PK	V	16.6	4.5	37.4	46.0	8.62
Above 700.00	Not detected	-	-	-	-	-	-	-

B. Middle channel (5 785 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
164.82	9.36	PK	V	19.5	2.7	30.8	43.5	9.20
432.41	18.38	PK	H	13.3	3.7	35.4	46.0	8.12
600.16	16.25	PK	V	16.6	4.5	37.2	46.0	8.82
Above 700.00	Not detected	-	-	-	-	-	-	-

C. High channel (5 805 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
163.71	9.96	PK	V	19.5	2.7	31.4	43.5	8.60
430.85	19.88	PK	H	13.3	3.7	36.9	46.0	6.62
598.46	17.15	PK	V	16.6	4.5	38.1	46.0	7.92
Above 700.00	Not detected	-	-	-	-	-	-	-

Operation mode: UNII-3(n_HT20)

A. Low channel (5 745 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
163.68	9.66	PK	V	19.5	2.7	31.1	43.5	8.90
431.84	18.18	PK	H	13.3	3.7	35.2	46.0	8.32
600.13	16.45	PK	V	16.6	4.5	37.4	46.0	8.62
Above 700.00	Not detected	-	-	-	-	-	-	-

B. Middle channel (5 785 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
164.15	9.56	PK	V	19.5	2.7	31.0	43.5	9.00
433.12	19.78	PK	H	13.3	3.7	36.8	46.0	6.72
601.82	15.45	PK	V	16.6	4.5	36.4	46.0	9.62
Above 700.00	Not detected	-	-	-	-	-	-	-

C. High channel (5 805 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
164.35	10.66	PK	V	19.5	2.7	32.1	43.5	7.90
434.25	18.78	PK	H	13.3	3.7	35.8	46.0	7.72
602.94	15.95	PK	V	16.6	4.5	36.9	46.0	9.12
Above 700.00	Not detected	-	-	-	-	-	-	-

Operation mode: UNII-3(n_HT40)
A. Low channel (5 755 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
164.48	9.96	PK	V	19.5	2.7	31.4	43.5	8.60
435.26	19.88	PK	H	13.3	3.7	36.9	46.0	6.62
600.84	14.75	PK	V	16.6	4.5	35.7	46.0	10.32
Above 700.00	Not detected	-	-	-	-	-	-	-

B. Middle channel (5 795 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
163.11	9.46	PK	V	19.5	2.7	30.9	43.5	9.10
433.85	20.38	PK	H	13.3	3.7	37.4	46.0	6.12
603.13	15.15	PK	V	16.6	4.5	36.1	46.0	9.92
Above 700.00	Not detected	-	-	-	-	-	-	-

Operation mode: UNII-3(ac_VHT80)

A. Low channel (5 775 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
164.23	8.96	PK	V	19.5	2.7	30.4	43.5	9.60
431.81	18.98	PK	H	13.3	3.7	36.0	46.0	7.52
601.44	14.65	PK	V	16.6	4.5	35.6	46.0	10.42
Above 700.00	Not detected	-	-	-	-	-	-	-

4.4.3. Spurious radiated emission

The frequency spectrum above 1 000 MHz was investigated. Emission levels are not reported much lower than the limits by over 20 dB.

To get a maximum emission levels from the EUT, the EUT was moved throughout the XY, XZ, and YZ planes.

Operation mode: UNII-1

A. Low channel (5 180 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

B. Middle channel (5 220 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

C. High channel (5 240 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-1_(n_HT20)

A. Low channel (5 180 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

B. Middle channel (5 220 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

C. High channel (5 240 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-1_(n_HT40)
A. Low channel (5 190 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

B. High channel (5 230 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-1_(VHT80)
A. Low channel (5 210 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-2A
A. Low channel (5 260 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

B. Middle channel (5 300 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

C. High channel (5 320 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-2A (n_HT20)
A. Low channel (5 260 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

B. Middle channel (5 300 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

C. High channel (5 320 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-2A_(n_HT40)
A. Low channel (5 270 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

B. High channel (5 310 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-2A_(VHT80)
A. Low channel (5 290 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-2C
A. Low channel (5 500 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

B. Middle channel (5 560 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

C. High channel (5 620 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-2C_(n_HT20)

A. Low channel (5 500 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

B. Middle channel (5 560 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

C. High channel (5 620 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-2C_(n_HT40)

A. Low channel (5 510 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

B. Middle channel (5 550 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

C. High channel (5 590 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-2C_(VHT80)

A. Low channel (5 530 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

A. Low channel (5 610 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-3

A. Low channel (5 745 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

B. Middle channel (5 785 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

C. High channel (5 805 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-3(n_HT20)
A. Low channel (5 745 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

B. Middle channel (5 785 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

C. High channel (5 805 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-3_(n_HT40)
A. Low channel (5 755 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

B. High channel (5 795 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-3_(VHT80)
A. Low channel (5 775 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

※ Remark

1. Actual = Reading + Ant. factor + CL (Cable loss)
2. Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
3. Limit line = specific Limits (dB μ V) + Distance extrapolation factor
4. 15.31 Measurement standards.

The amplitude of spurious emissions from intentional radiators and emissions from unintentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this part.

4.4.4. Restricted Band

Operation mode: UNII-1

* channel(5 180 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
5 125.60	44.80	Peak	H	32.89	33.72	43.97	74.00	30.03
5 086.60	45.36	Peak	V	32.89	33.72	44.53	74.00	29.47

Operation mode: UNII-1(n_HT20)

* channel(5 180 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
5 358.08	39.14	Peak	H	33.86	32.90	40.10	74.00	33.90
5 389.12	40.20	Peak	V	33.86	32.90	41.16	74.00	32.84

Operation mode: UNII-1(n_HT40)

* channel(5 190 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
4 822.00	39.61	Peak	H	32.89	33.72	38.78	74.00	35.22
4 799.10	40.45	Peak	V	32.89	33.72	39.62	74.00	34.38

Operation mode: UNII-1(VHT80)

* channel(5 210 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
5 013.60	40.80	Peak	H	32.89	33.72	39.97	74.00	34.03
4 848.60	42.06	Peak	V	32.89	33.72	41.23	74.00	32.77

Operation mode: UNII-2A
*** channel(5 320 MHz)**

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dBμV/m)	Margin (dB)
5 443.18	40.10	Peak	H	33.86	32.90	41.06	74.00	32.94
5 416.26	39.71	Peak	V	33.86	32.90	40.67	74.00	33.33

Operation mode: UNII-2A(n_HT20)
*** channel(5 320 MHz)**

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dBμV/m)	Margin (dB)
5 388.09	40.43	Peak	H	33.86	32.90	41.39	74.00	32.61
5 372.58	39.23	Peak	V	33.86	32.90	40.19	74.00	33.81

Operation mode: UNII-2A(n_HT40)
*** channel(5 310 MHz)**

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dBμV/m)	Margin (dB)
5 363.79	40.26	Peak	H	33.86	32.90	41.22	74.00	32.78
5 382.08	40.09	Peak	V	33.86	32.90	41.05	74.00	32.95

Operation mode: UNII-2A(VHT80)
*** channel(5 290 MHz)**

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dBμV/m)	Margin (dB)
5 366.61	39.90	Peak	H	33.86	32.90	40.86	74.00	33.14
5 403.60	39.96	Peak	V	33.86	32.90	40.92	74.00	33.08

Operation mode: UNII-2C
*** channel(5 500 MHz)**

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
5 414.12	41.77	Peak	H	33.86	32.90	42.73	74.00	31.27
5 385.41	40.45	Peak	V	33.86	32.90	41.41	74.00	32.59

Operation mode: UNII-2C(n_HT20)
*** channel(5 500 MHz)**

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
5 464.03	40.59	Peak	H	33.86	32.90	41.55	74.00	32.45
5 539.86	38.23	Peak	V	33.86	32.90	39.19	74.00	34.81

Operation mode: UNII-2C(n_HT40)
*** channel(5 510 MHz)**

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
5 448.29	39.46	Peak	H	33.86	32.90	40.42	74.00	33.58
5 389.98	39.99	Peak	V	33.86	32.90	40.95	74.00	33.05

Operation mode: UNII-2C(VHT80)
*** channel(5 530 MHz)**

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dB μ V)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
5 421.35	39.88	Peak	H	33.86	32.90	40.84	74.00	33.16
5 409.80	40.18	Peak	V	33.86	32.90	41.14	74.00	32.86

Operation mode: UNII-3
*** Low channel(5 745 MHz)**

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dBμV/m)	Margin (dB)
5 462.83	38.98	Peak	H	33.86	32.90	39.94	74.00	34.06
5 418.87	40.18	Peak	V	33.86	32.90	41.14	74.00	32.86

*** High channel(5 805 MHz)**

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dBμV/m)	Margin (dB)
5 863.74	38.88	Peak	H	34.53	32.11	41.30	74.00	32.70
5 858.10	39.06	Peak	V	34.53	32.11	41.48	74.00	32.52

Operation mode: UNII-3(n_HT20)
*** Low channel(5 745 MHz)**

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dBμV/m)	Margin (dB)
5 464.03	40.59	Peak	H	33.86	32.90	41.55	74.00	32.45
5 539.86	38.23	Peak	V	33.86	32.90	39.19	74.00	34.81

*** High channel(5 805 MHz)**

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dBμV/m)	Margin (dB)
5 879.08	40.30	Peak	H	34.53	32.11	42.72	74.00	31.28
5 886.41	39.56	Peak	V	34.53	32.11	41.98	74.00	32.02

Operation mode: UNII-3(n_HT40)

* Low channel(5 755 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dBμV/m)	Margin (dB)
5 561.87	39.13	Peak	H	33.86	32.90	40.09	74.00	33.91
5 623.99	38.34	Peak	V	33.86	32.90	39.30	74.00	34.70

* High channel(5 795 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dBμV/m)	Margin (dB)
5 866.30	39.30	Peak	H	34.53	32.11	41.72	74.00	32.28
5 933.50	38.69	Peak	V	34.53	32.11	41.11	74.00	32.89

Operation mode: UNII-3(VHT80)

* channel(5 775 MHz)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dBμV/m)	Margin (dB)
5 667.20	39.88	Peak	H	33.86	32.90	40.84	74.00	33.16
5 465.40	40.35	Peak	V	33.86	32.90	41.31	74.00	32.69

* channel(5 775 MHz)

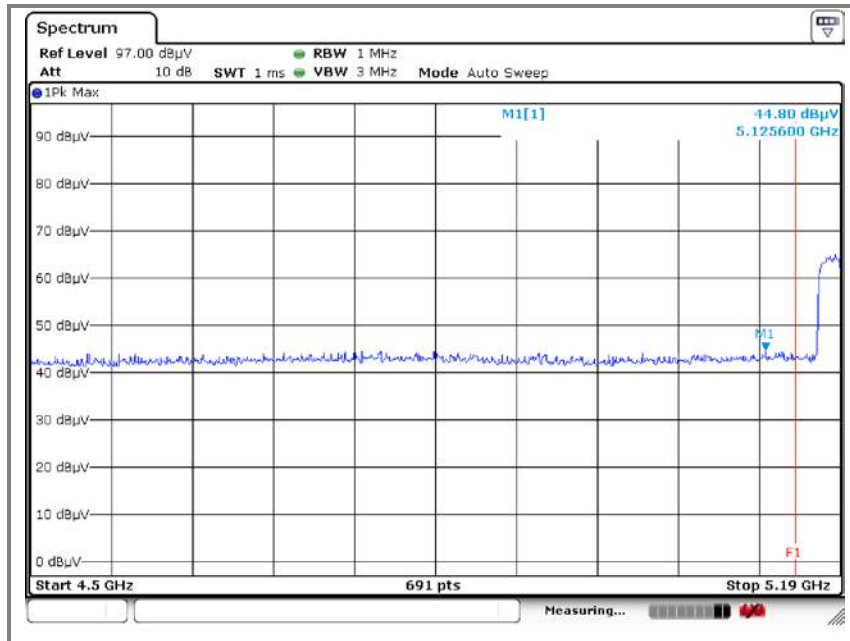
Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dBμV/m)	Margin (dB)
5 867.85	40.19	Peak	H	34.53	32.11	42.61	74.00	31.39
5 863.81	39.95	Peak	V	34.53	32.11	42.37	74.00	31.63

4.4.5. Spurious RF emissions: Plot of spurious RF emission

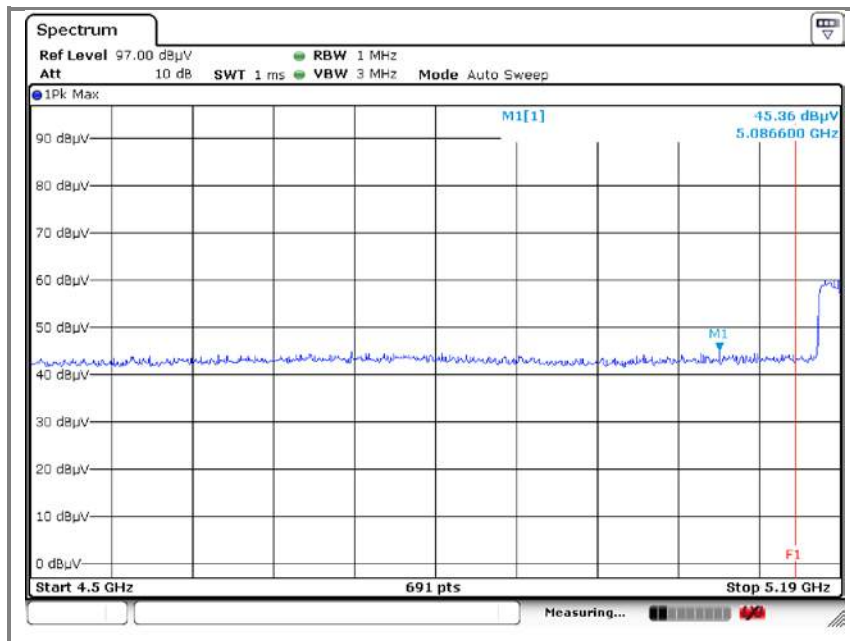
Band-edge data

802.11a

Operation mode:	U-NII-1	Frequency(MHz):	5 180	ANT:	H	Detector:	Peak
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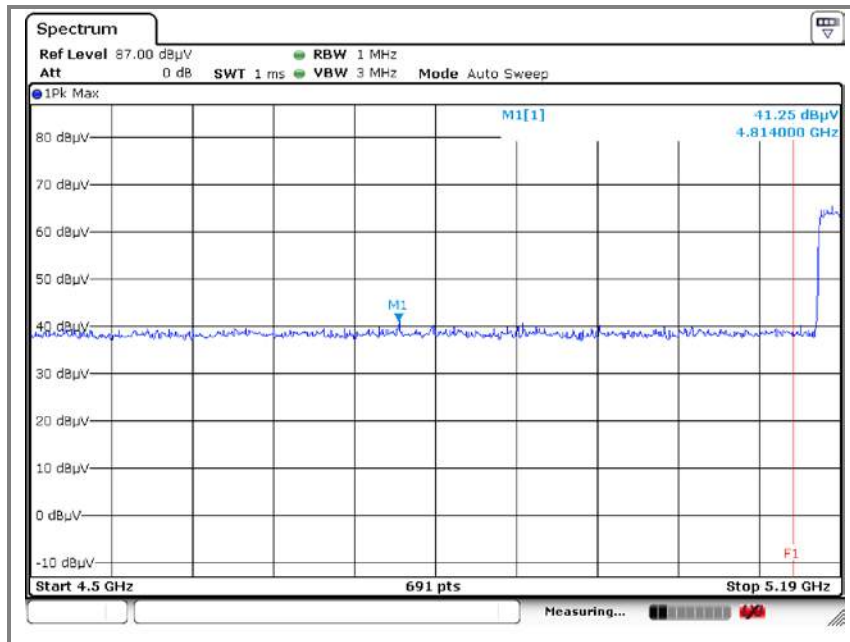


Operation mode:	U-NII-1	Frequency(MHz):	5 180	ANT:	V	Detector:	Peak
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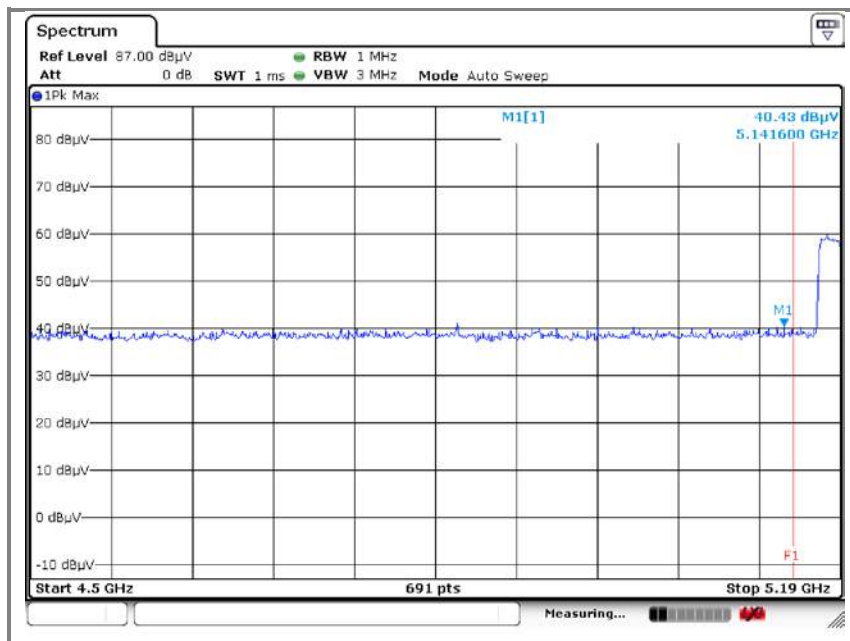


802.11an20

Operation mode:	U-NII-1_nHT20	Frequency(MHz):	5 180	ANT:	H	Detector:	Peak
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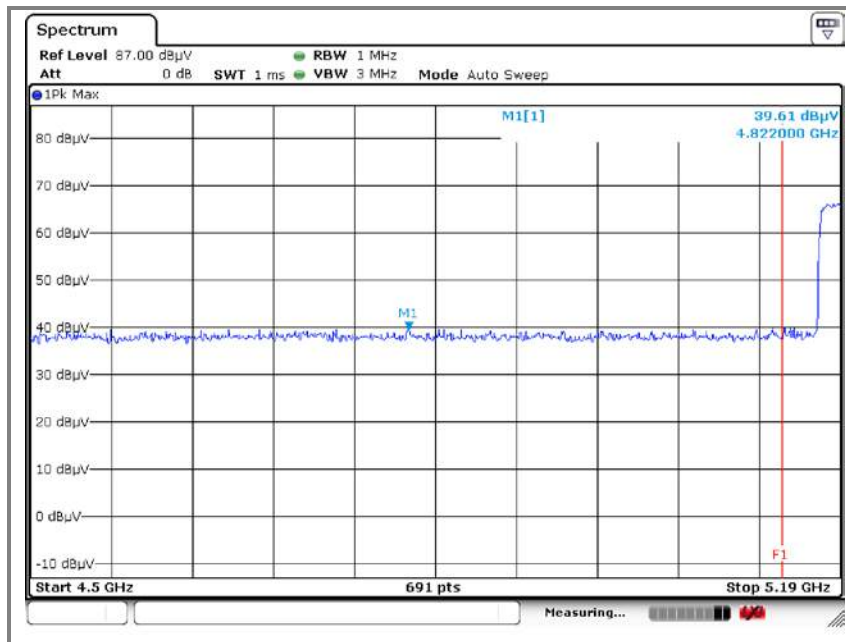


Operation mode:	U-NII-1_nHT20	Frequency(MHz):	5 180	ANT:	V	Detector:	Peak
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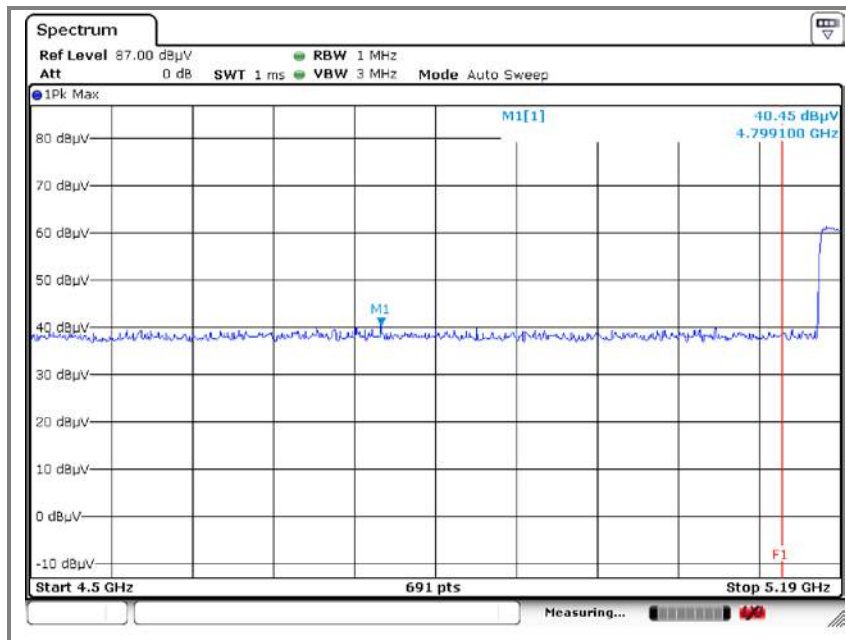


802.11an40

Operation mode:	U-NII-1_nHT40	Frequency(MHz):	5 190	ANT:	H	Detector:	Peak
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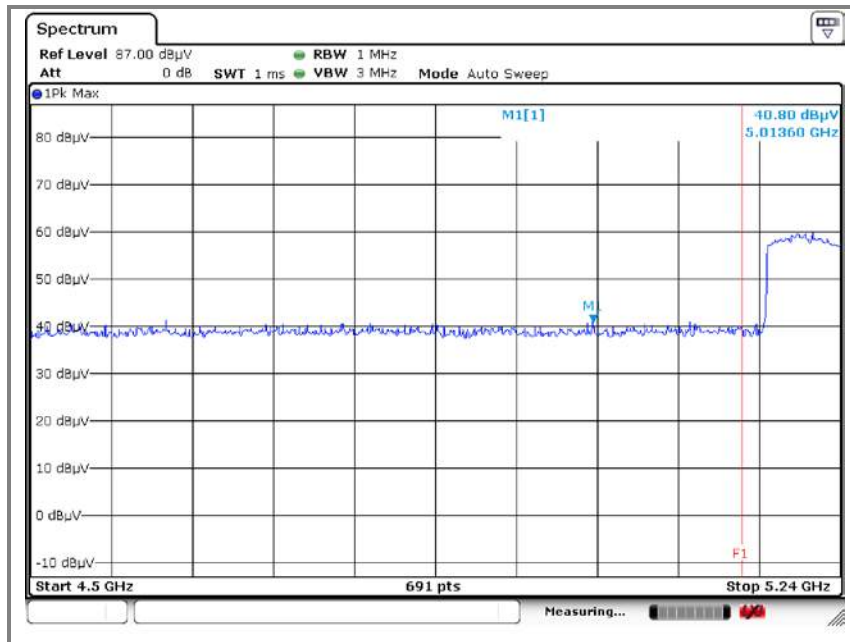


Operation mode:	U-NII-1_nHT40	Frequency(MHz):	5 190	ANT:	V	Detector:	Peak
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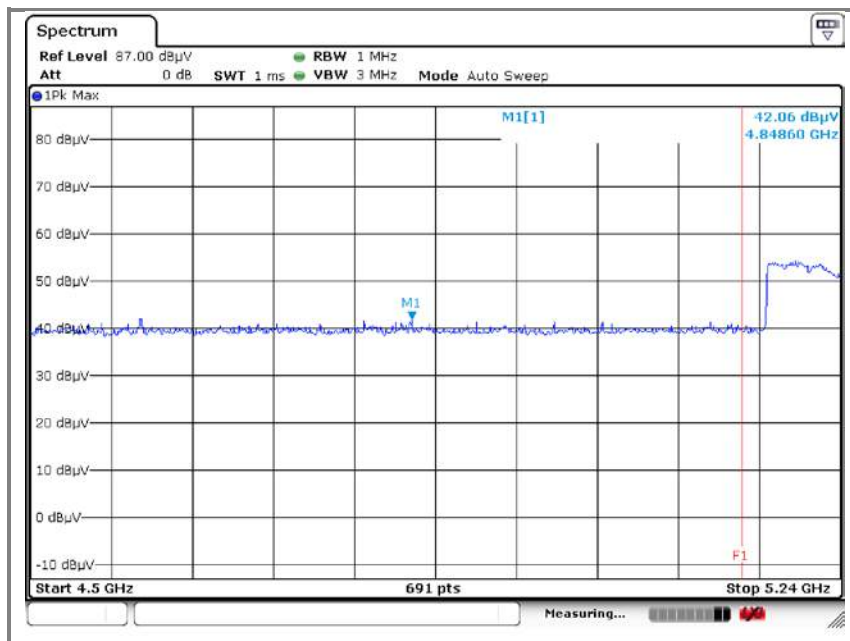


802.11ac80

Operation mode:	U-NII-1_VHT80	Frequency(MHz):	5 210	ANT:	H	Detector:	Peak
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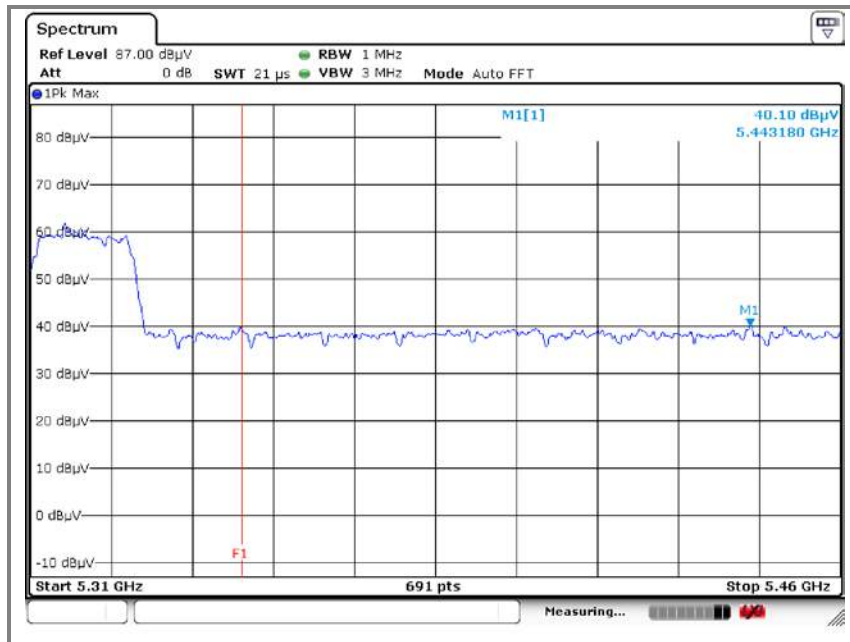


Operation mode:	U-NII-1_VHT80	Frequency(MHz):	5 210	ANT:	V	Detector:	Peak
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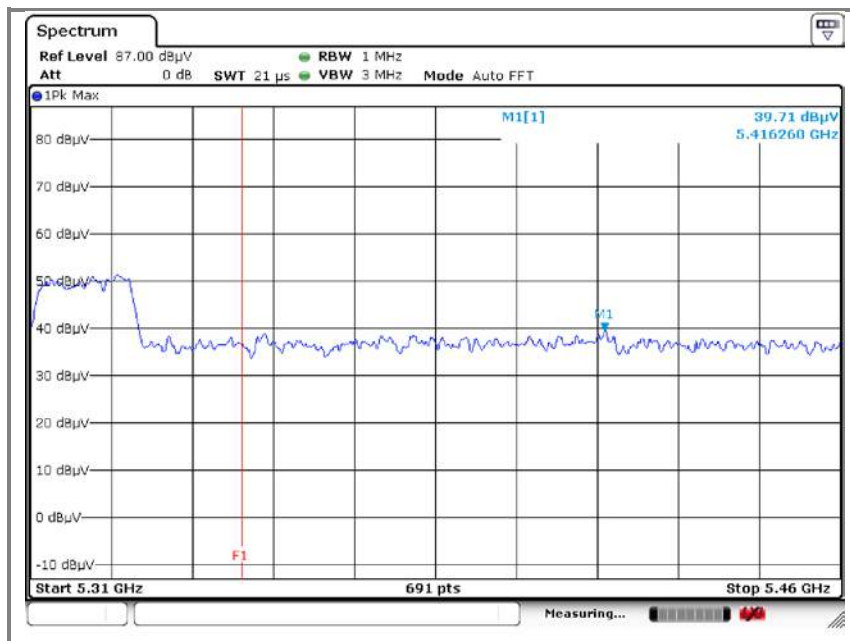


802.11a

Operation mode:	U-NII-2A	Frequency(MHz):	5 320	ANT:	H	Detector:	Peak
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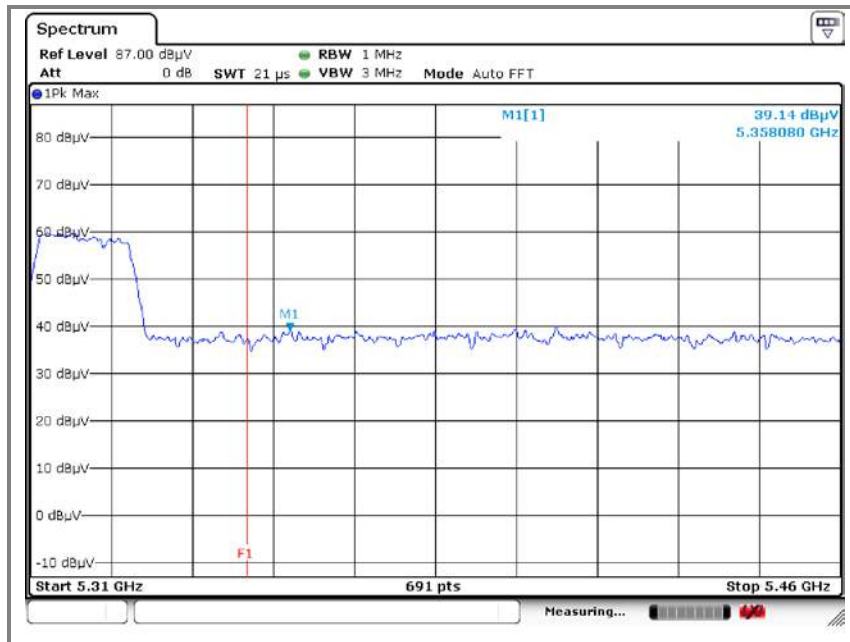


Operation mode:	U-NII-2A	Frequency(MHz):	5 320	ANT:	V	Detector:	Peak
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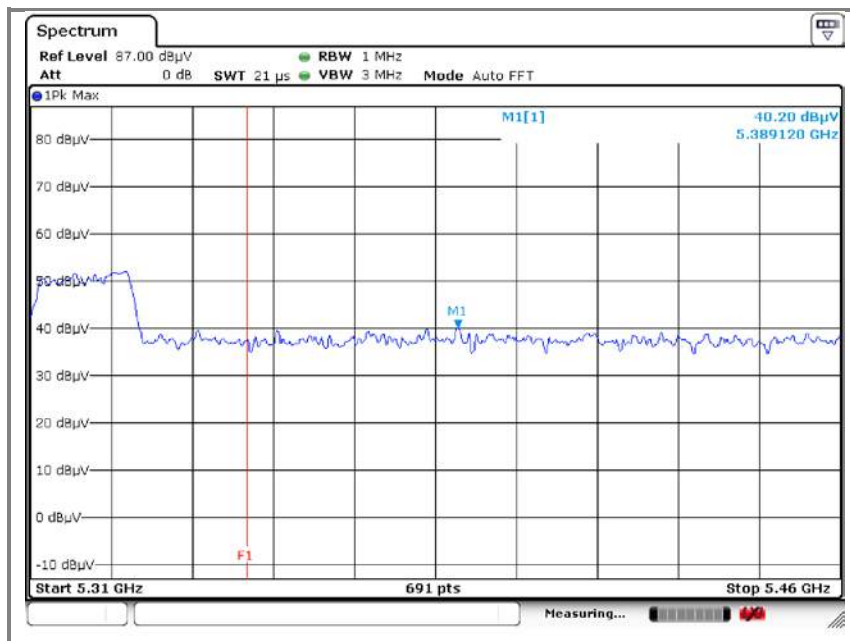


802.11an20

Operation mode:	U-NII-2A_nHT20	Frequency(MHz):	5 320	ANT:	H	Detector:	Peak
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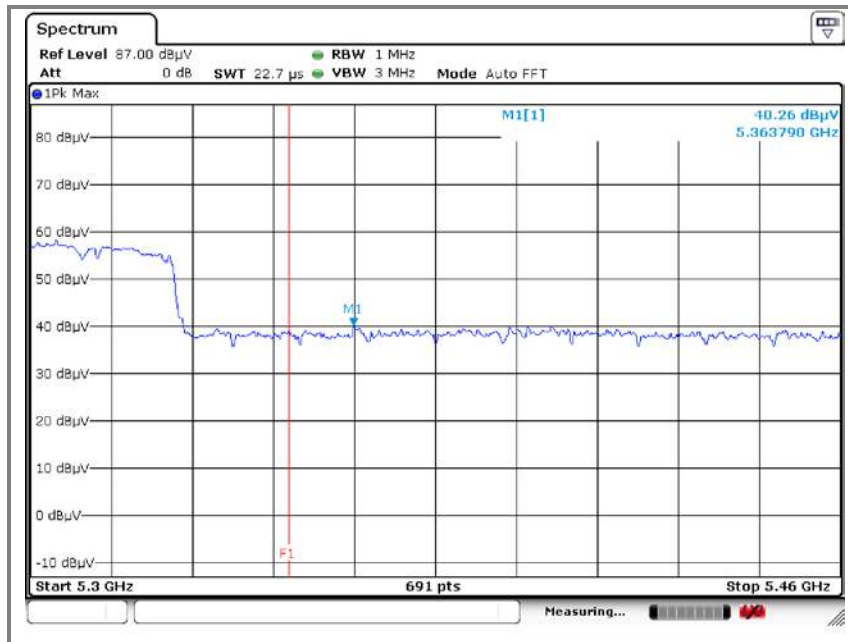


Operation mode:	U-NII-2A_nHT20	Frequency(MHz):	5 320	ANT:	V	Detector:	Peak
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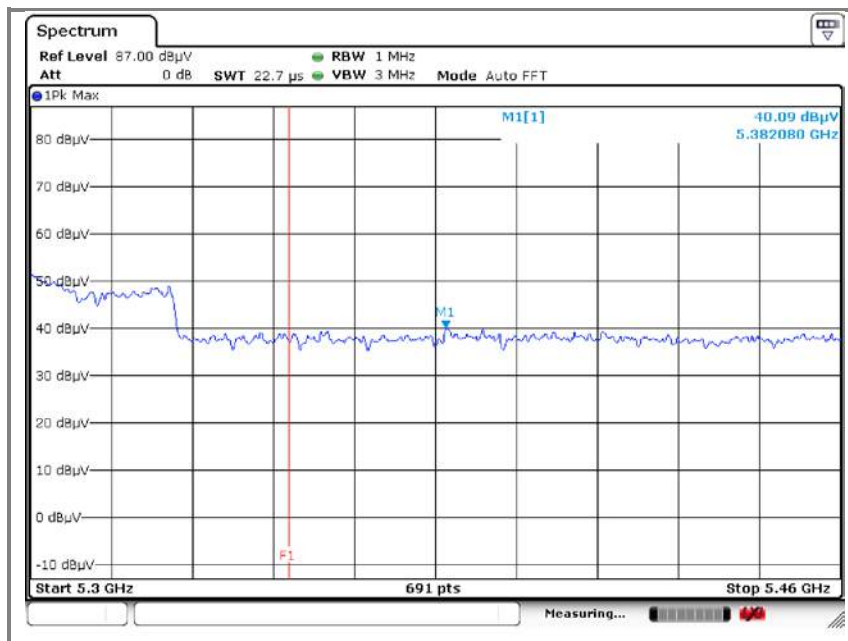


802.11an40

Operation mode:	U-NII-2A_nHT40	Frequency(MHz):	5 310	ANT:	H	Detector:	Peak
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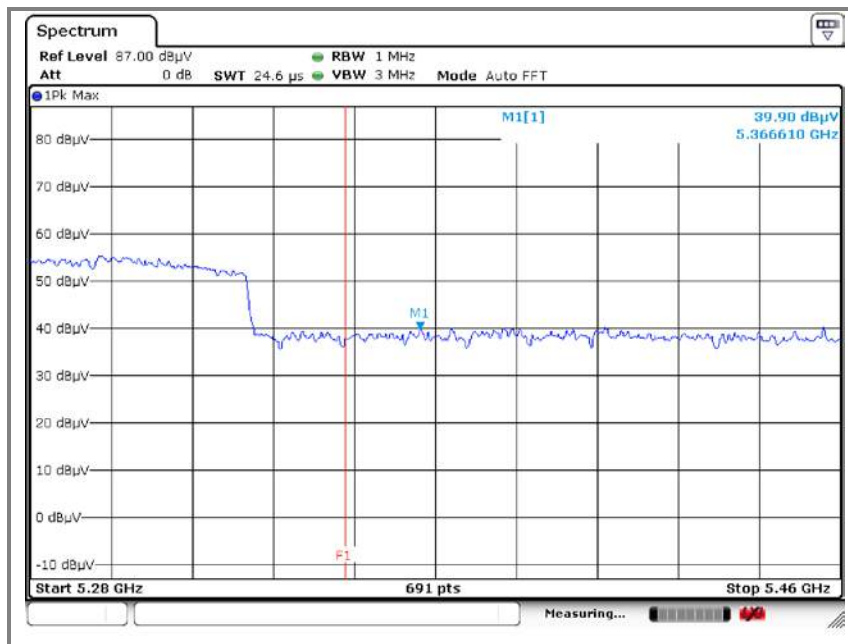


Operation mode:	U-NII-2A_nHT40	Frequency(MHz):	5 310	ANT:	V	Detector:	Peak
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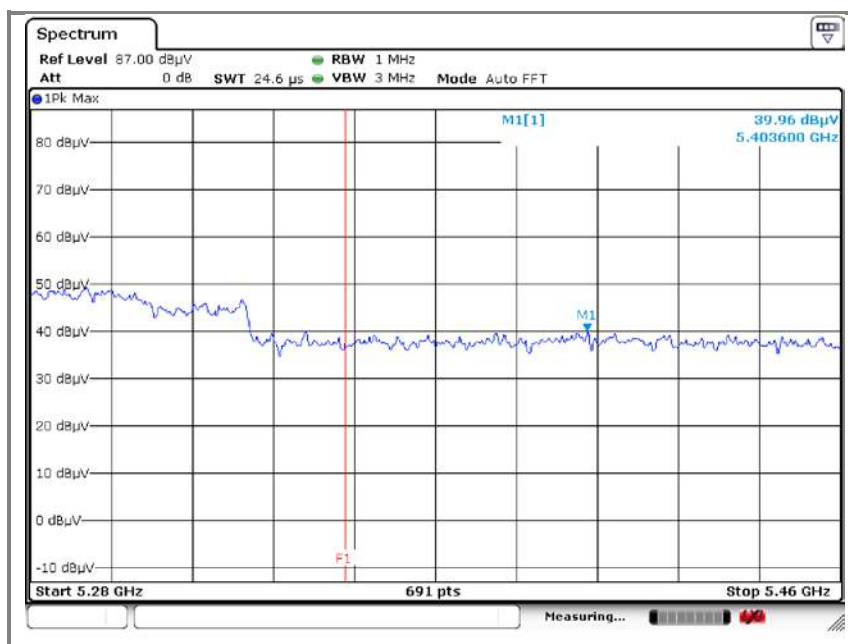


802.11ac80

Operation mode:	U-NII-2A_VHT80	Frequency(MHz):	5 290	ANT:	H	Detector:	Peak
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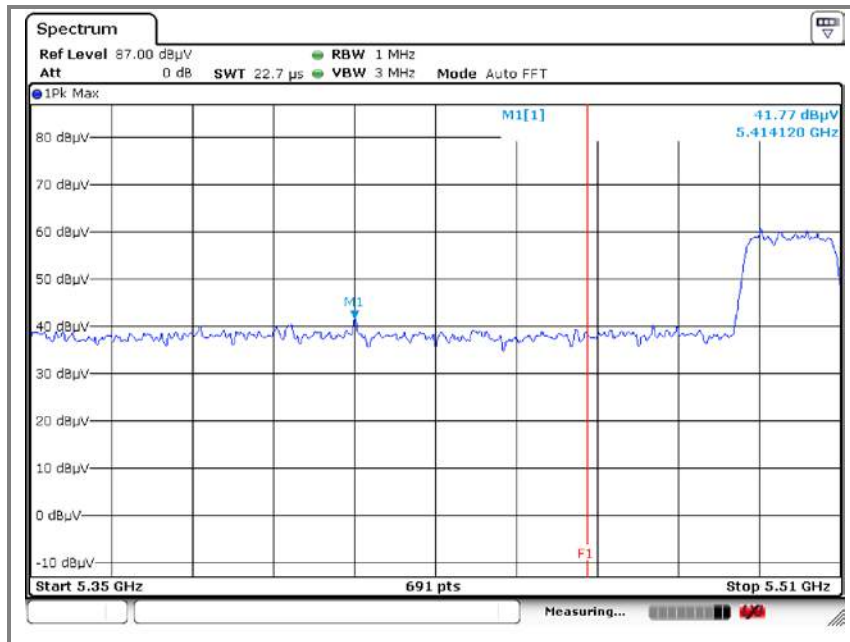


Operation mode:	U-NII-2A_VHT80	Frequency(MHz):	5 290	ANT:	V	Detector:	Peak
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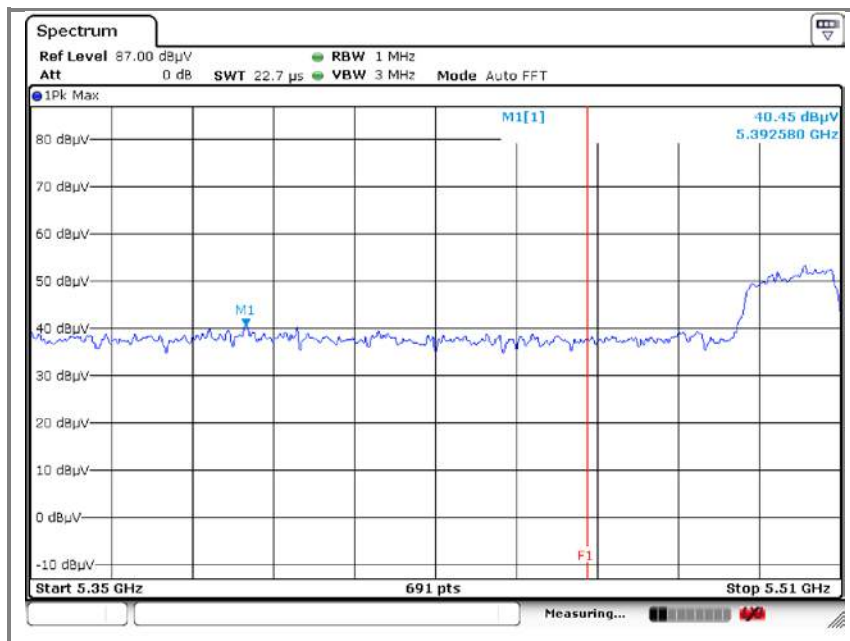


802.11a

Operation mode:	U-NII-2C	Frequency(MHz):	5 500	ANT:	H	Detector:	Peak
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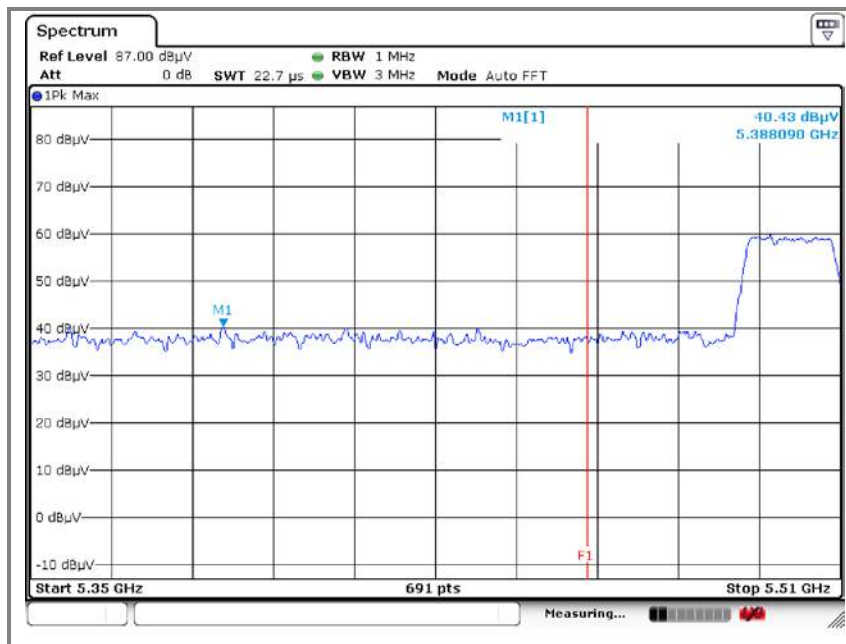


Operation mode:	U-NII-2C	Frequency(MHz):	5 500	ANT:	V	Detector:	Peak
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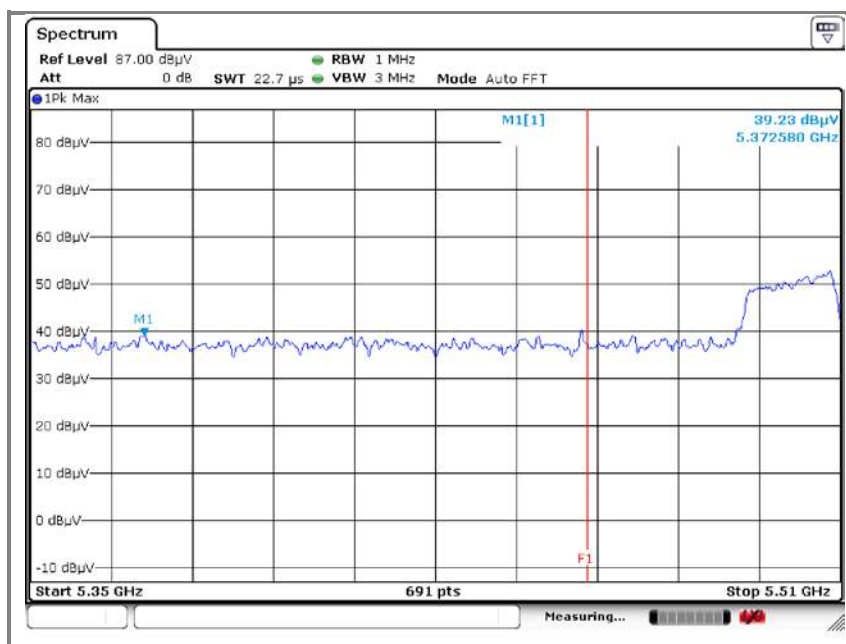


802.11an20

Operation mode:	U-NII-2C_nHT20	Frequency(MHz):	5 500	ANT:	H	Detector:	Peak
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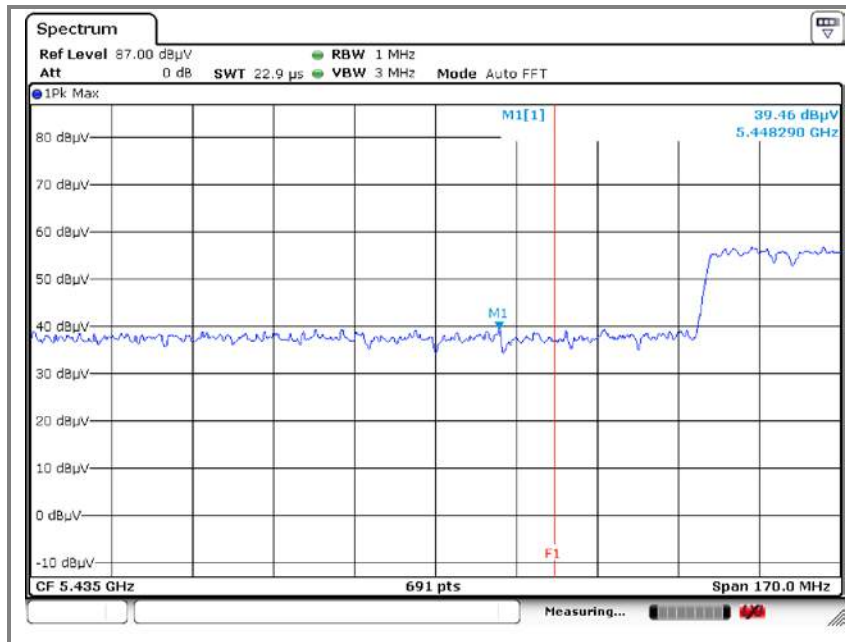


Operation mode:	U-NII-2C_nHT20	Frequency(MHz):	5 500	ANT:	V	Detector:	Peak
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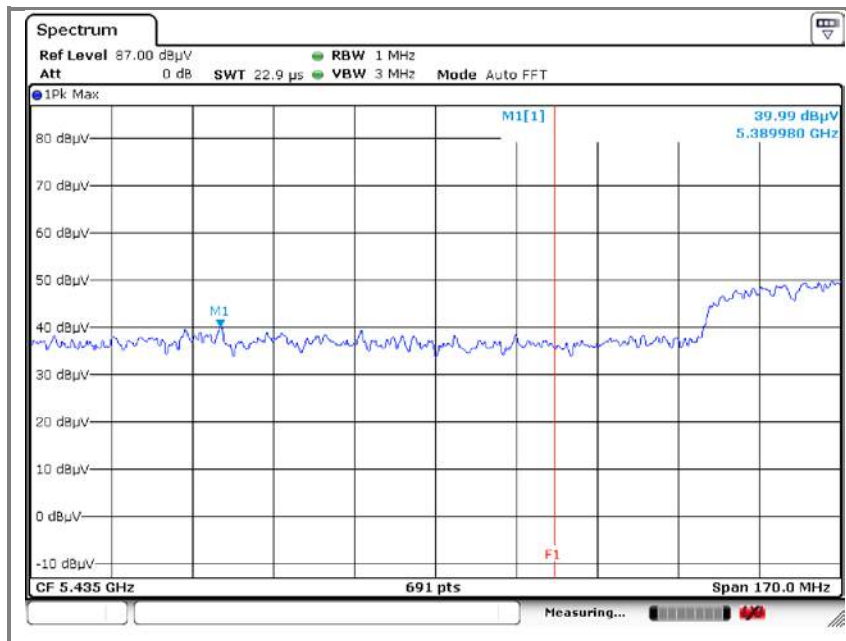


802.11an40

Operation mode:	U-NII-2C_nHT40	Frequency(MHz):	5 510	ANT:	H	Detector:	Peak
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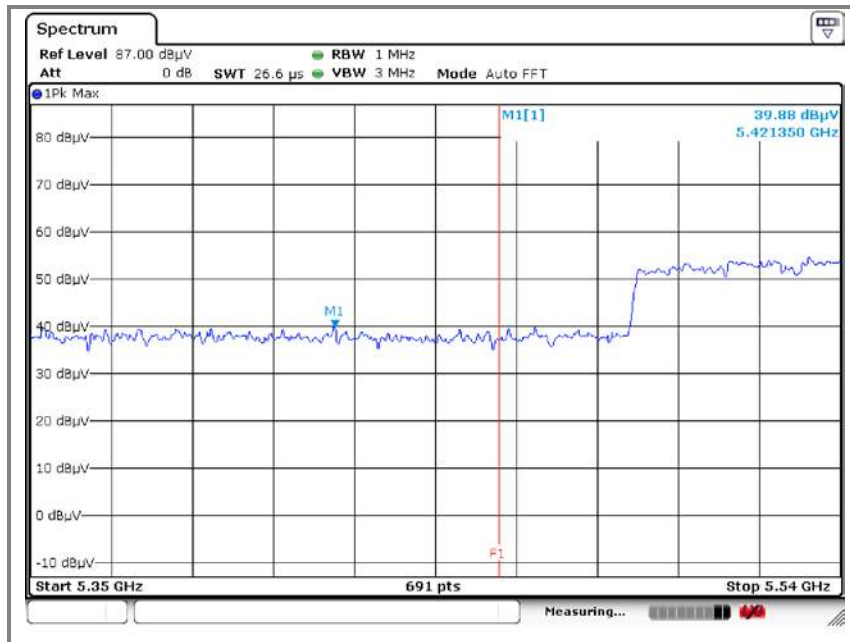


Operation mode:	U-NII-2C, which is not consistent with the corresponding test plot	Frequency(MHz):	5 510	ANT:	V	Detector:	Peak
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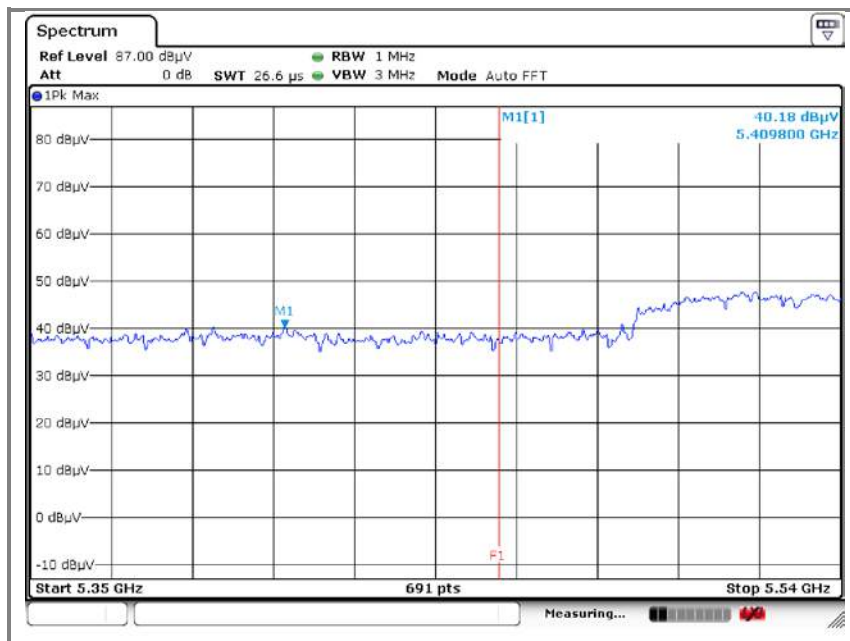


802.11ac80

Operation mode:	U-NII-2C_VHT80	Frequency(MHz):	5 530	ANT:	H	Detector:	Peak
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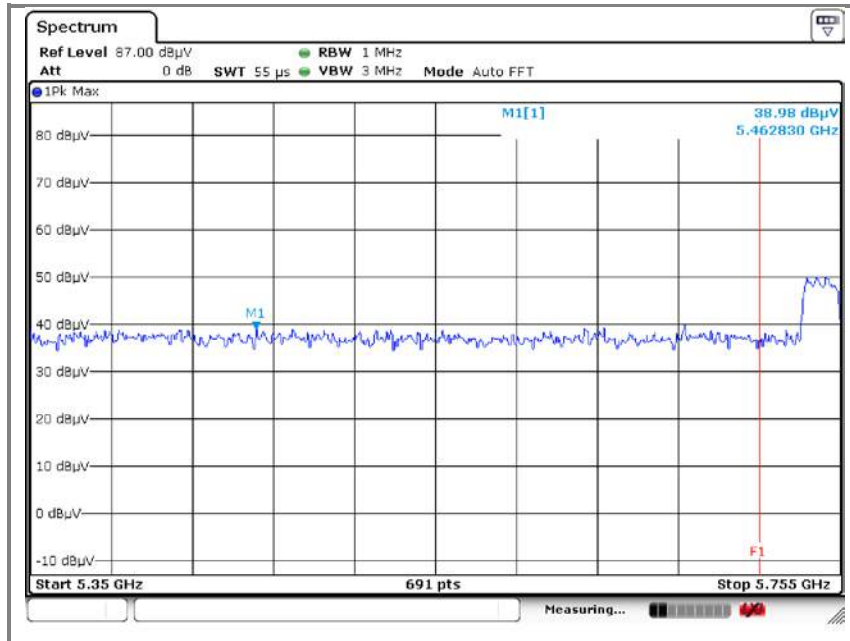


Operation mode:	U-NII-2C_VHT80	Frequency(MHz):	5 530	ANT:	V	Detector:	Peak
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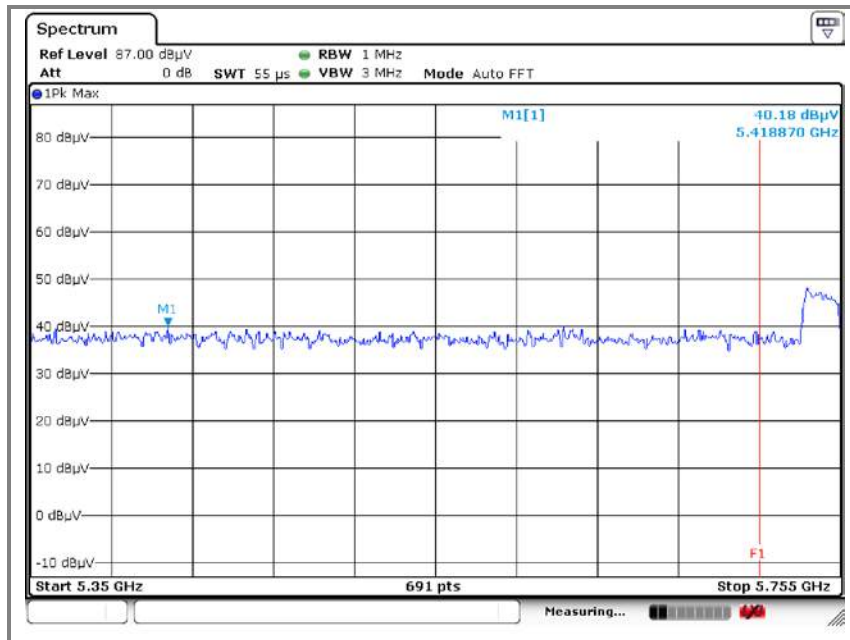


802.11a

Operation mode:	U-NII-3	Frequency(MHz):	5 745	ANT:	H	Detector:	Peak
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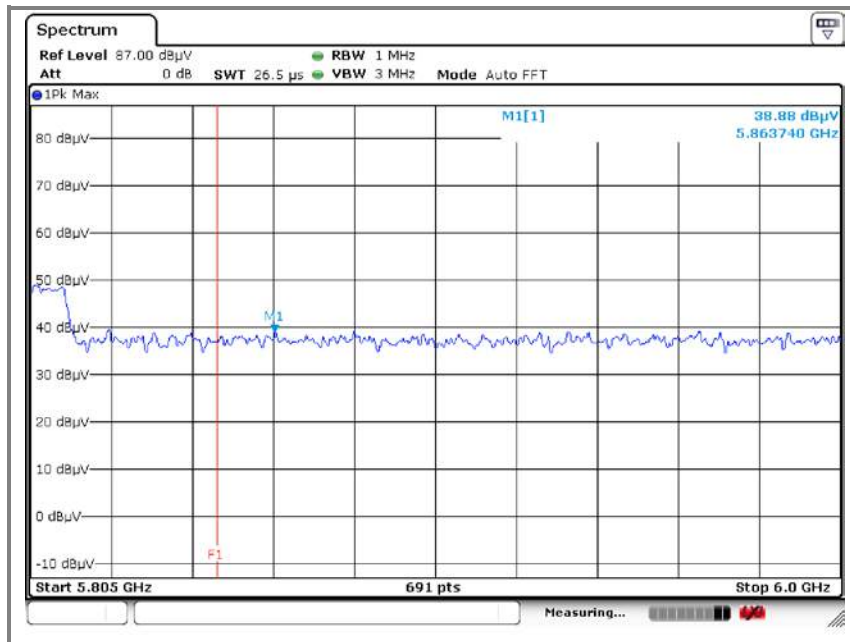


Operation mode:	U-NII-3	Frequency(MHz):	5 745	ANT:	V	Detector:	Peak
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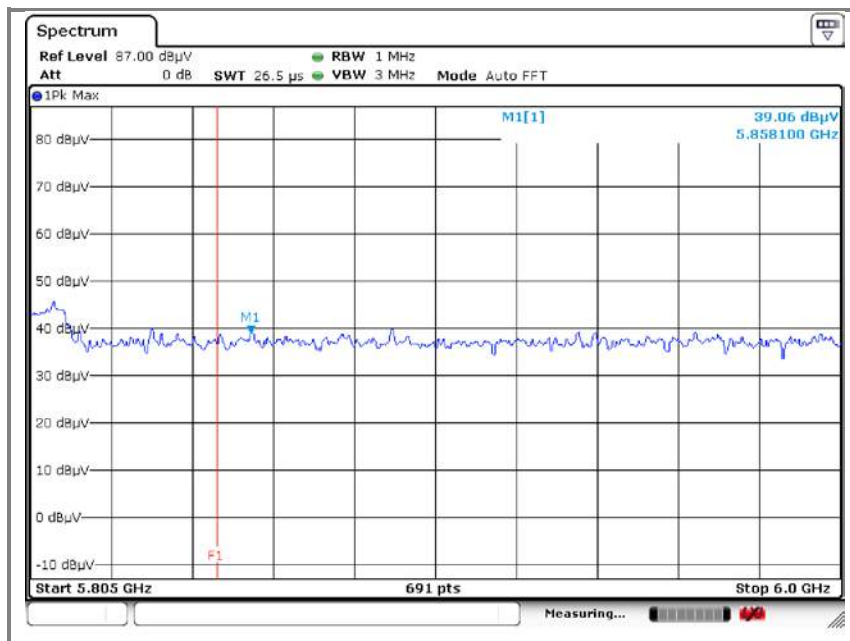


802.11a

Operation mode:	U-NII-3	Frequency(MHz):	5 805	ANT:	H	Detector:	Peak
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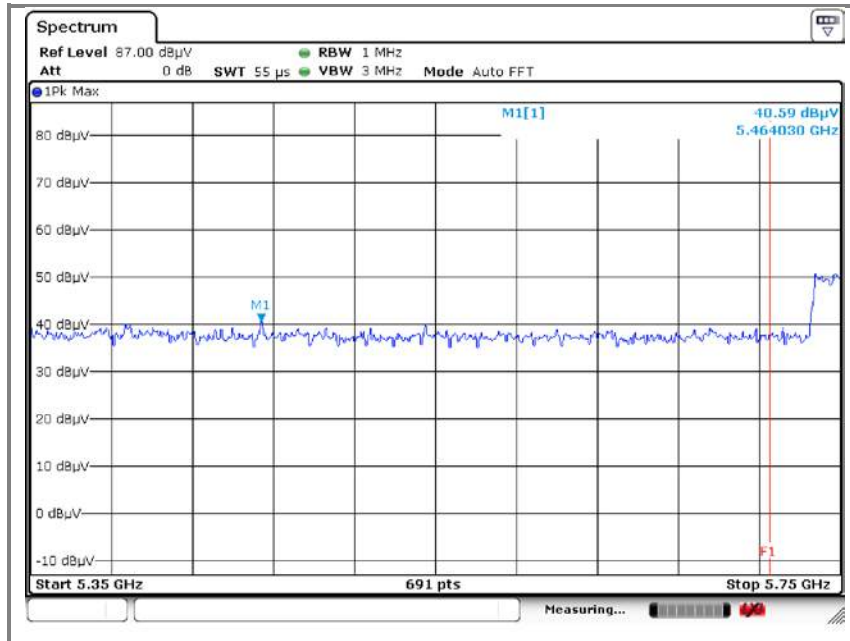


Operation mode:	U-NII-3	Frequency(MHz):	5 805	ANT:	V	Detector:	Peak
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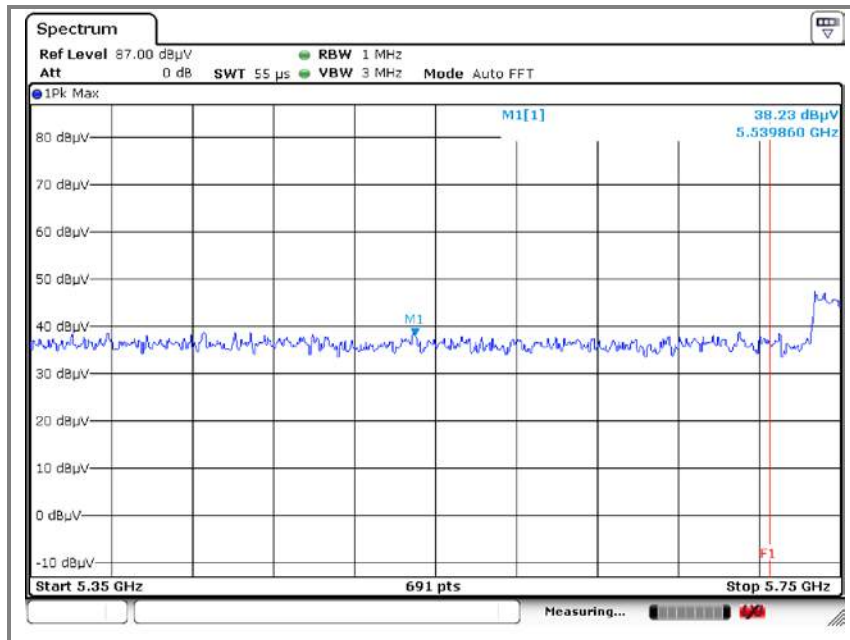


802.11an20

Operation mode:	U-NII-3_nHT20	Frequency(MHz):	5 745	ANT:	H	Detector:	Peak
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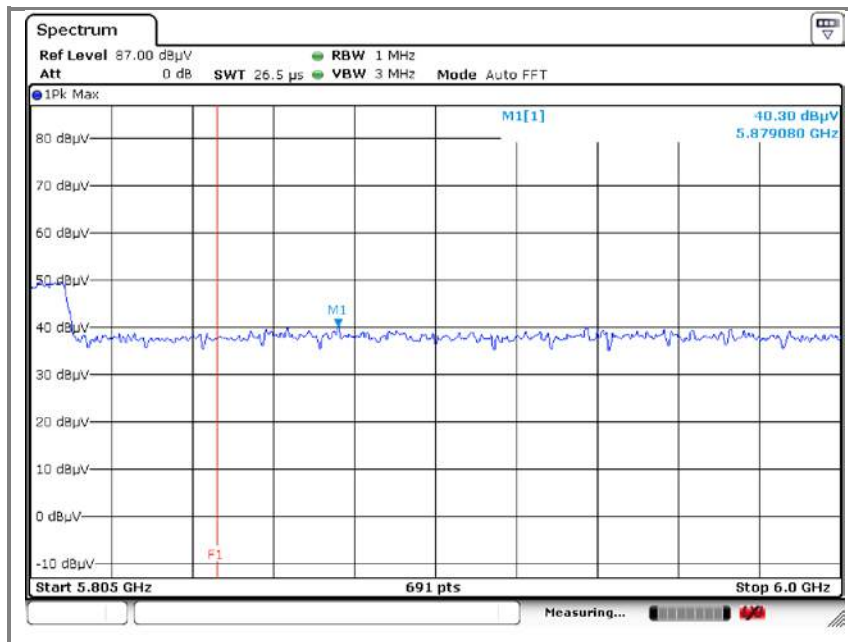


Operation mode:	U-NII-3_nHT20	Frequency(MHz):	5 745	ANT:	V	Detector:	Peak
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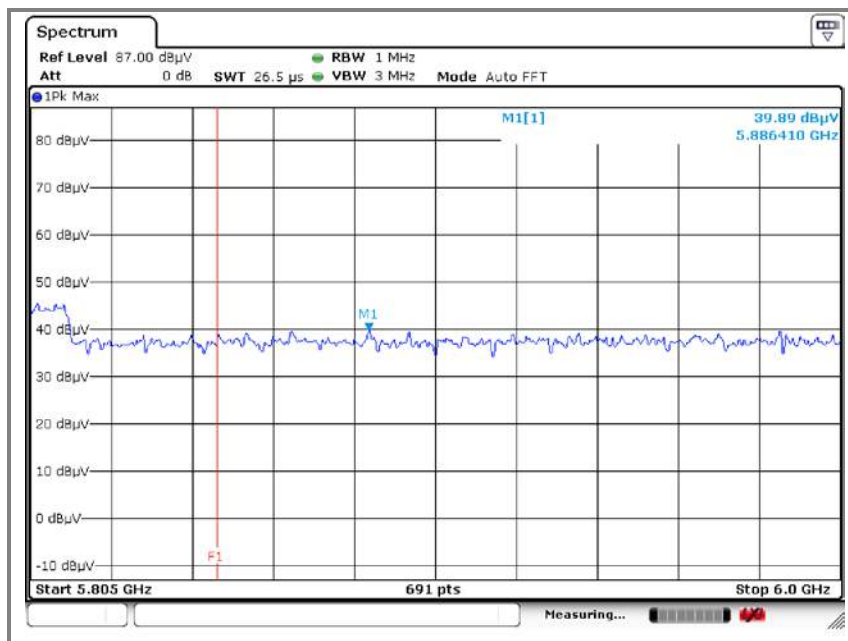


802.11an20

Operation mode:	U-NII-3_nHT20	Frequency(MHz):	5 805	ANT:	H	Detector:	Peak
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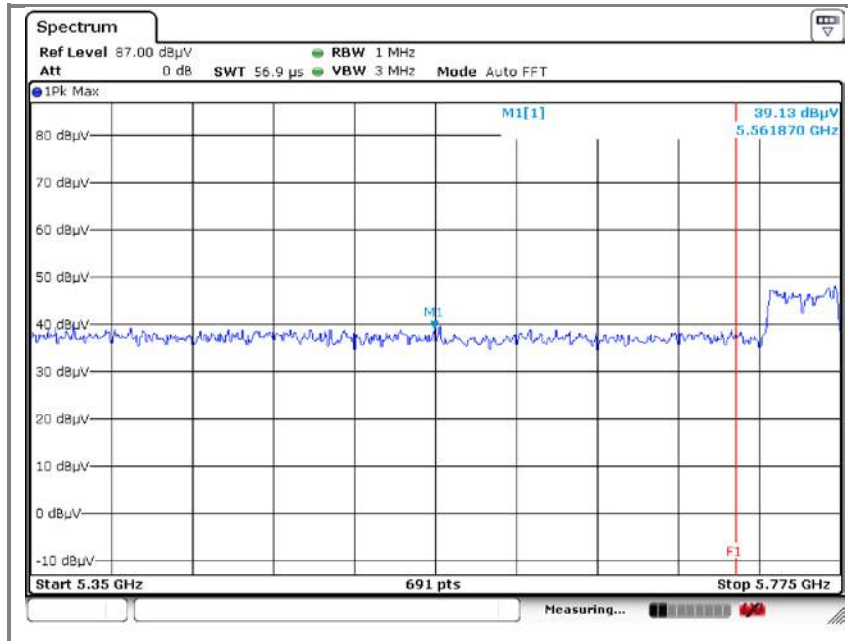


Operation mode:	U-NII-3_nHT20	Frequency(MHz):	5 805	ANT:	V	Detector:	Peak
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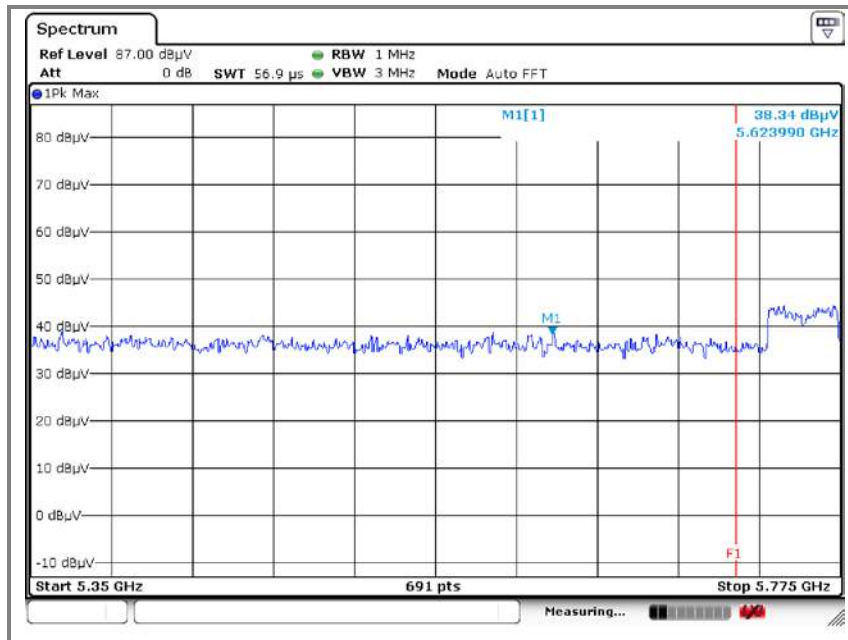


802.11an40

Operation mode:	U-NII-3_nHT40	Frequency(MHz):	5 795	ANT:	H	Detector:	Peak
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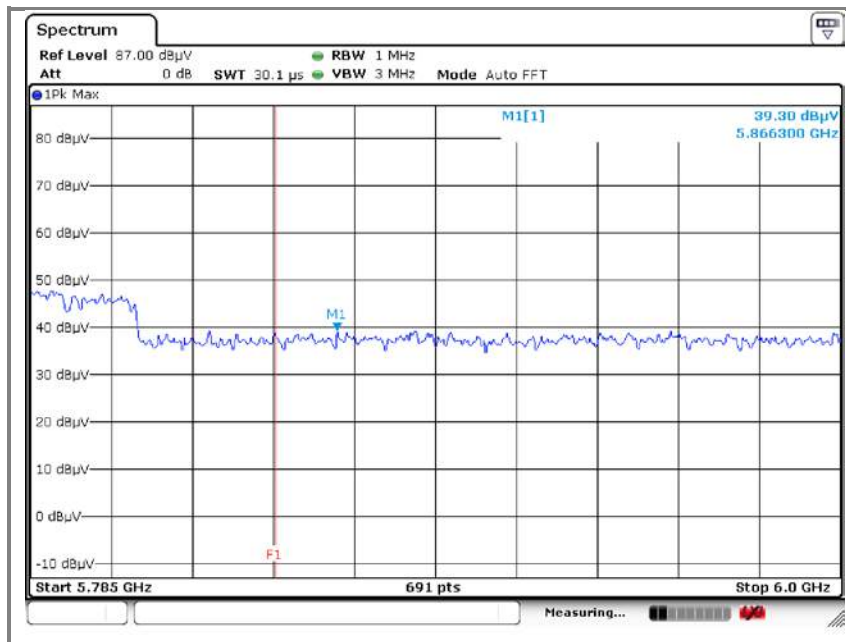


Operation mode:	U-NII-3_nHT40	Frequency(MHz):	5 795	ANT:	V	Detector:	Peak
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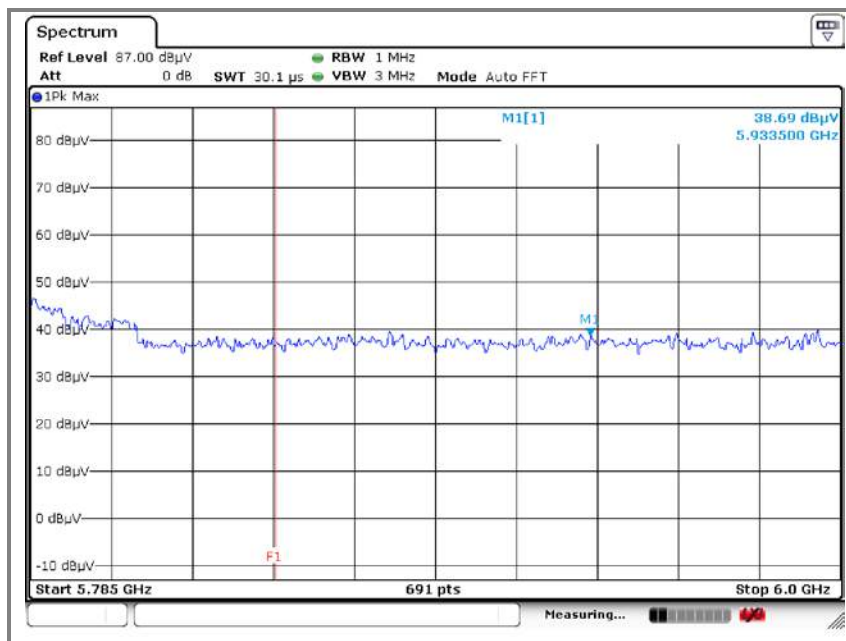


802.11an40

Operation mode:	U-NII-3_nHT40	Frequency(MHz):	5 795	ANT:	H	Detector:	Peak
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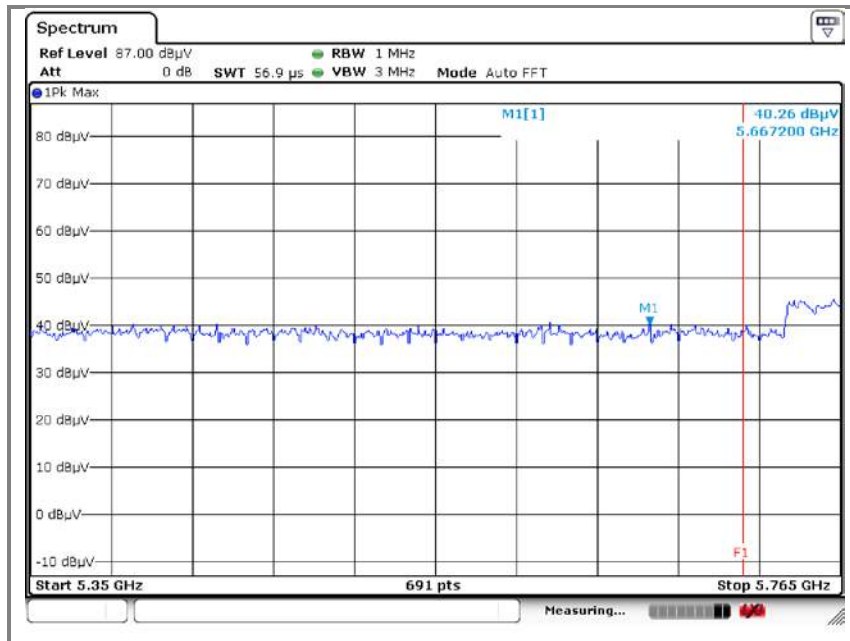


Operation mode:	U-NII-3_nHT40	Frequency(MHz):	5 795	ANT:	V	Detector:	Peak
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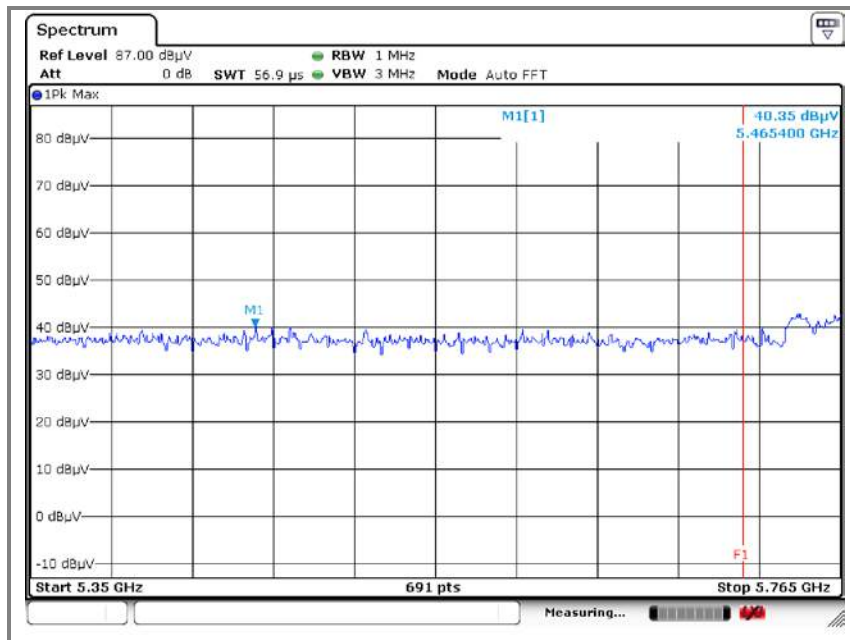


802.11ac80

Operation mode:	U-NII-3_VHT80	Frequency(MHz):	5 775	ANT:	H	Detector:	Peak
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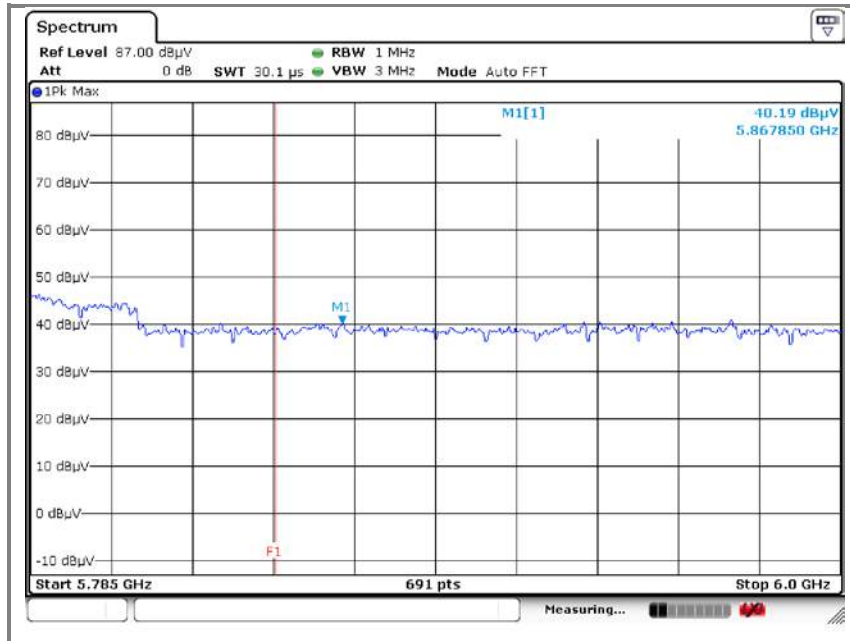


Operation mode:	U-NII-3_VHT80	Frequency(MHz):	5 775	ANT:	V	Detector:	Peak
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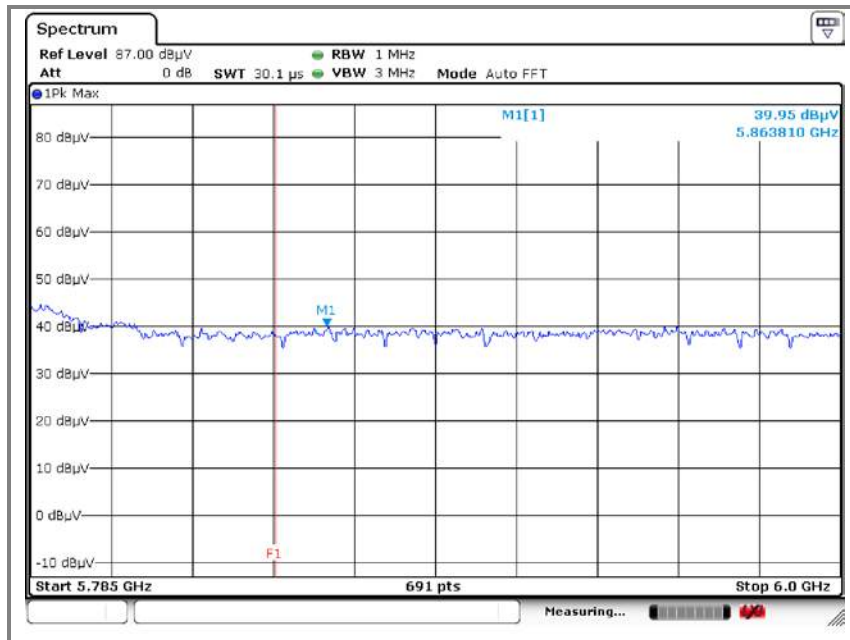


802.11ac80

Operation mode:	U-NII-3_VHT80	Frequency(MHz):	5 775	ANT:	H	Detector:	Peak
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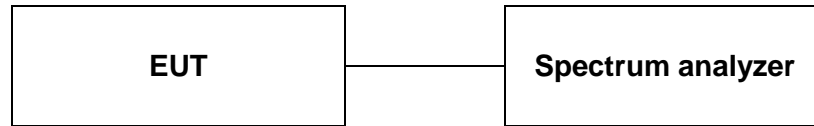


Operation mode:	U-NII-3_VHT80	Frequency(MHz):	5 775	ANT:	V	Detector:	Peak
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5. 26 dB and 99% bandwidth

5.1. Test setup



5.2. Limit

Not applicable

5.3. Test procedure (KDB 789033)

1. The signal analyzer's automatic bandwidth measurement capability was used to perform the 26dB bandwidth measurement. The "X" dB bandwidth parameter was set to $X = 26$. The automatic bandwidth measurement function also has the capability of simultaneously measuring the 99% occupied bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.

2. Set the spectrum analyzer as,

RBW = approximately 1% of the emission bandwidth

VBW > RBW

Detector = Peak

Trace mode = max hold

3. Repeat until all the rest channels are investigated.

5.4. Test results

Ambient temperature: 22°C

Relative humidity: 45% R.H.

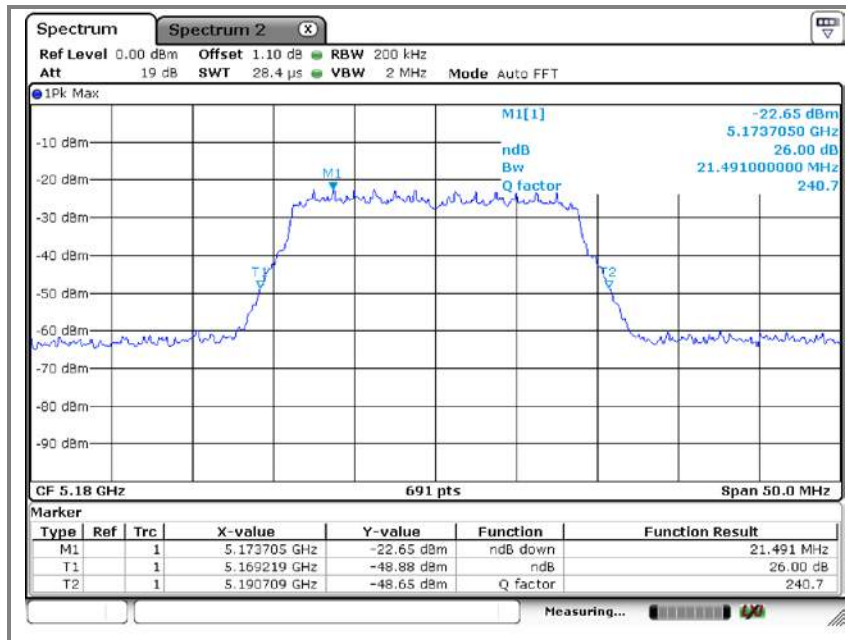
-Next Page

Mode	Frequency(MHz)	26 dB bandwidth(MHz)	99% bandwidth(MHz)
U-NII-1	5 180	21.49	17.87
	5 220	21.85	17.95
	5 240	21.64	17.87
U-NII-1(n_HT20)	5 180	21.85	17.87
	5 220	21.49	17.95
	5 240	21.78	18.02
U-NII-1(n_HT40)	5 190	39.59	36.12
	5 230	39.59	36.24
U-NII-1(VHT80)	5 210	82.89	75.95
U-NII-2A	5 260	21.64	17.95
	5 300	21.56	17.95
	5 320	21.64	18.02
U-NII-2A(n_HT20)	5 260	21.78	17.87
	5 300	21.56	17.73
	5 320	21.78	17.95
U-NII-2A(n_HT40)	5 270	39.83	36.12
	5 310	39.59	36.12
U-NII-2A(VHT80)	5 290	81.74	75.72
U-NII-2C	5 500	21.85	17.95
	5 560	21.78	17.87
	5 620	21.49	18.02
U-NII-2C(n_HT20)	5 500	21.71	17.80
	5 560	21.42	18.02
	5 620	21.71	17.95
U-NII-2C(n_HT40)	5 510	39.59	36.24
	5 550	39.71	36.24
	5 590	39.36	36.12
U-NII-2C(VHT80)	5 530	81.27	75.72
	5 610	82.66	75.95

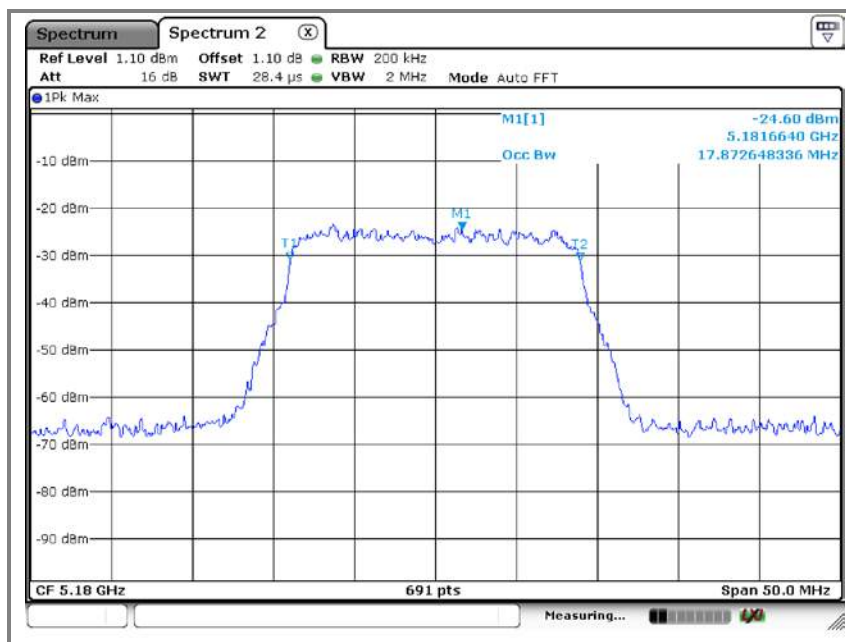
Mode	Frequency(MHz)	26 dB bandwidth(MHz)	99% bandwidth(MHz)
U-NII-3	5 745	21.42	17.87
	5 785	21.71	17.73
	5 805	22.07	18.02
U-NII-3(n_HT20)	5 745	21.56	18.02
	5 785	21.35	17.80
	5 805	21.56	18.02
U-NII-3(n_HT40)	5 755	39.71	36.24
	5 795	39.71	36.24
U-NII-3(VHT80)	5 775	82.43	75.95

Operation mode: U-NII-1

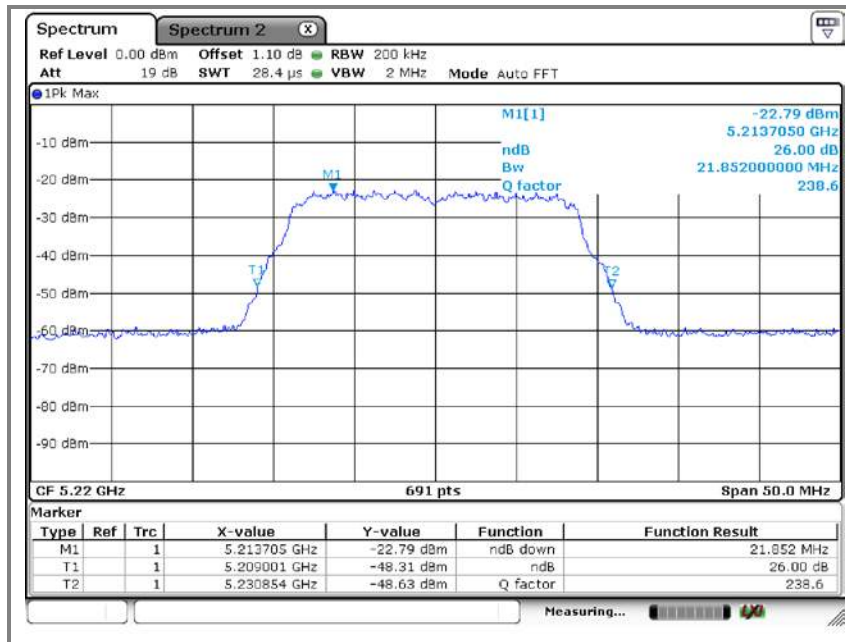
A. Low channel(5180 MHz)- 26 dB bandwidth



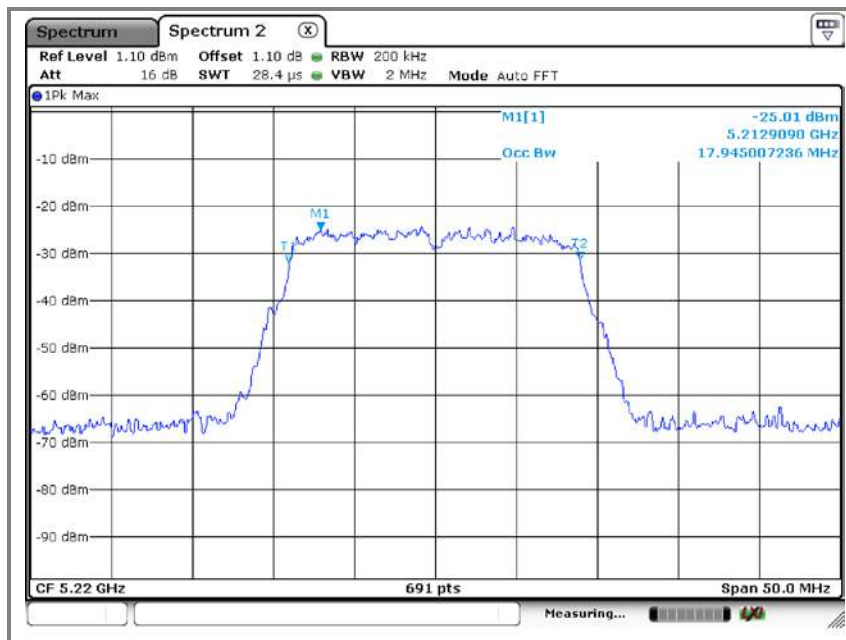
A. Low channel(5180 MHz)- 99% bandwidth



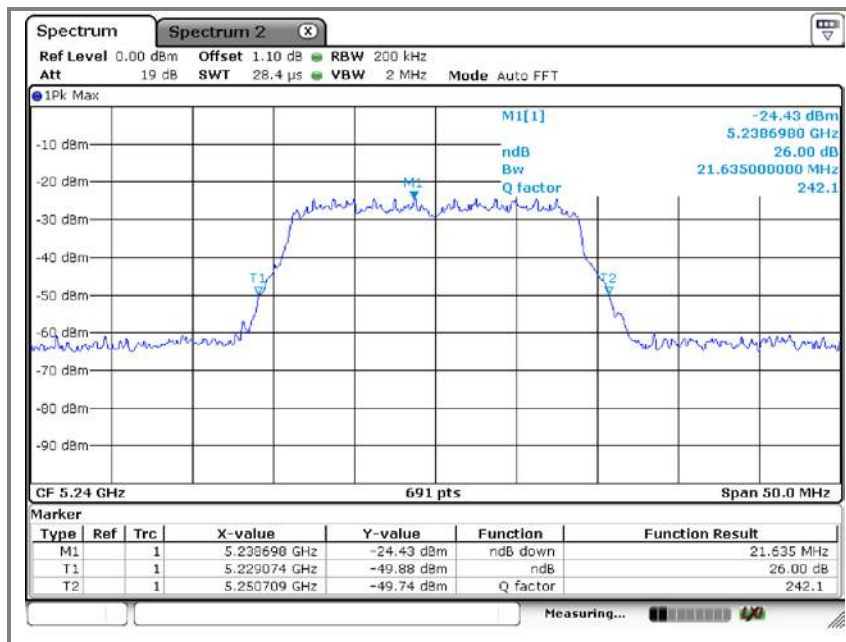
B. Middle channel(5220 MHz)- 26 dB bandwidth



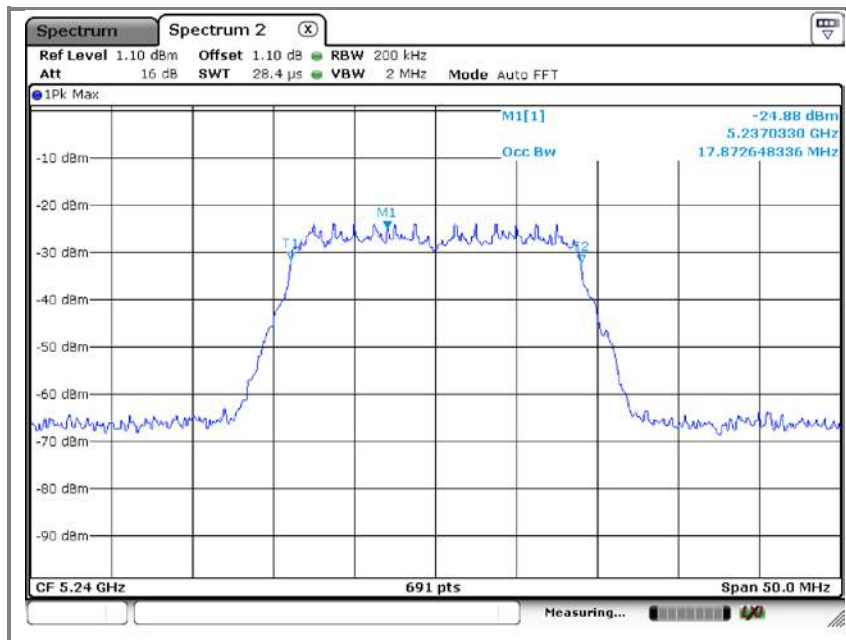
B. Middle channel(5220 MHz)- 99% bandwidth



C. High channel(5240 MHz)- 26 dB bandwidth

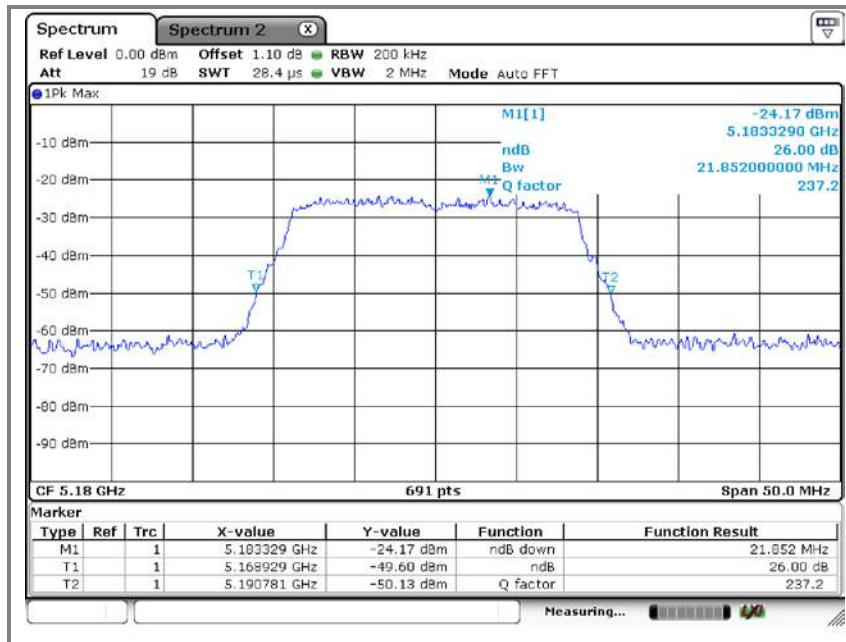


C. High channel(5240 MHz)- 99% bandwidth

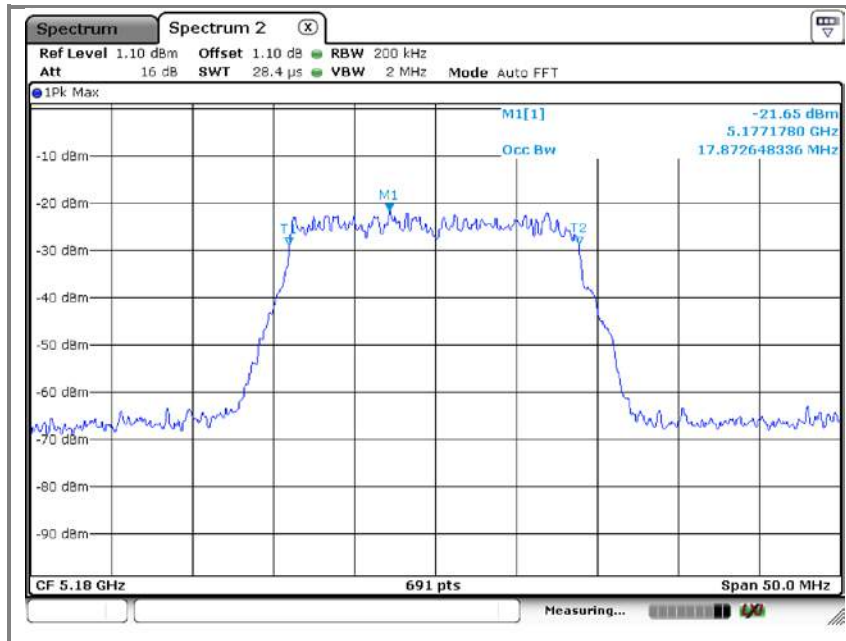


Operation mode: U-NII-1(n_HT20)

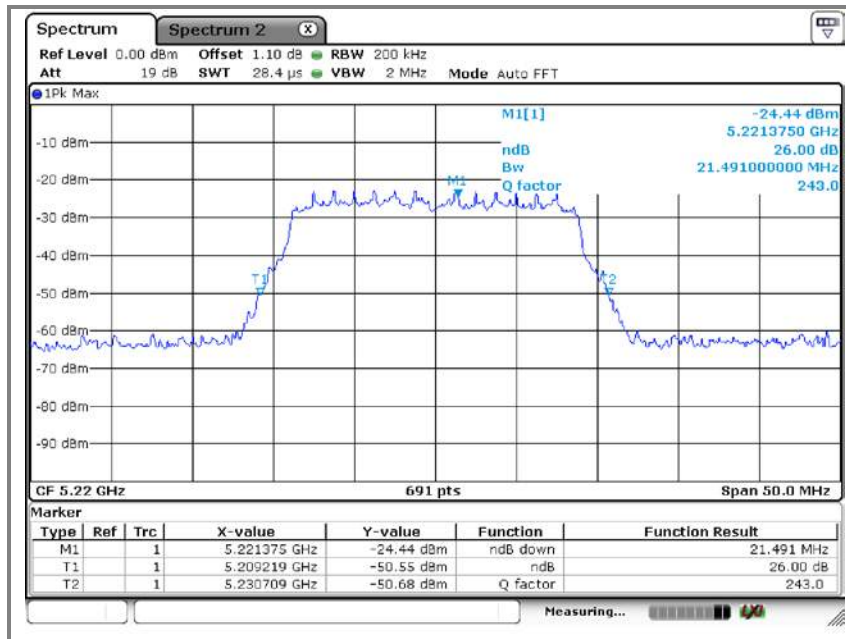
A. Low channel(5180 MHz)- 26 dB bandwidth



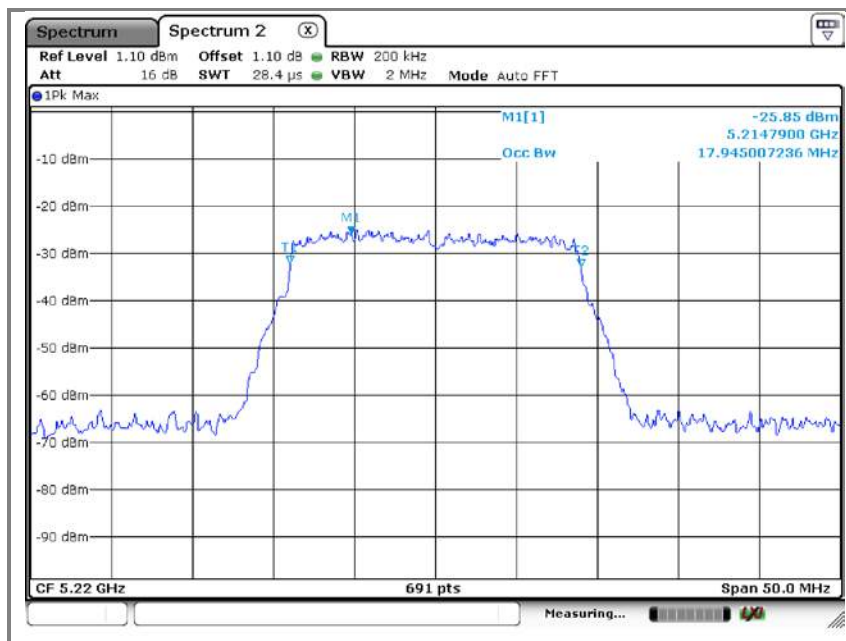
A. Low channel(5180 MHz)- 99% bandwidth



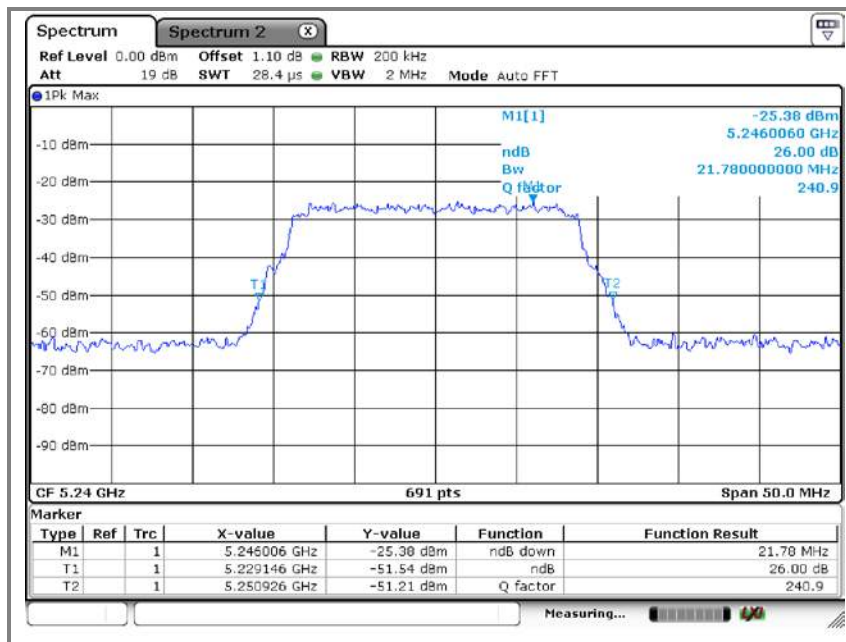
B. Middle channel(5220 MHz)- 26 dB bandwidth



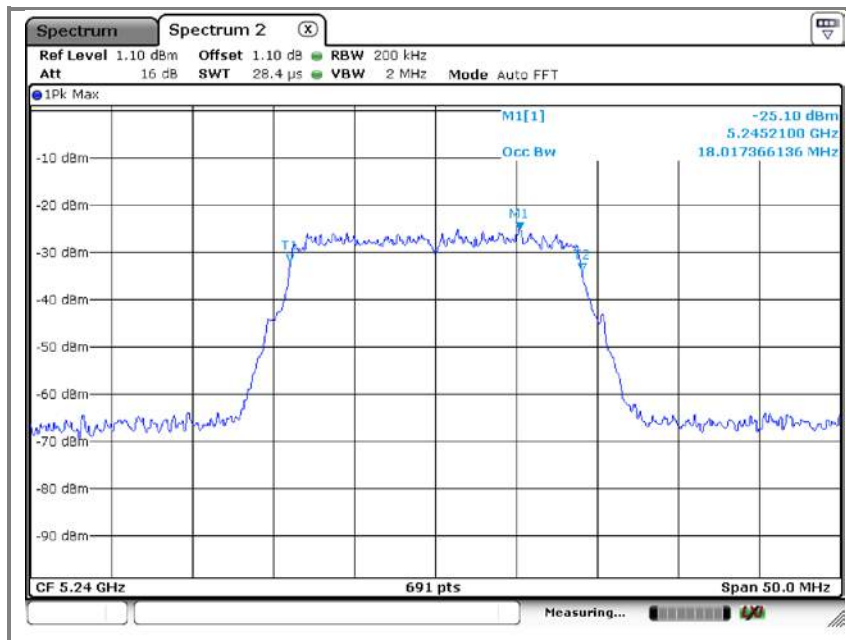
B. Middle channel(5220 MHz)- 99% bandwidth



C. High channel(5240 MHz)- 26 dB bandwidth

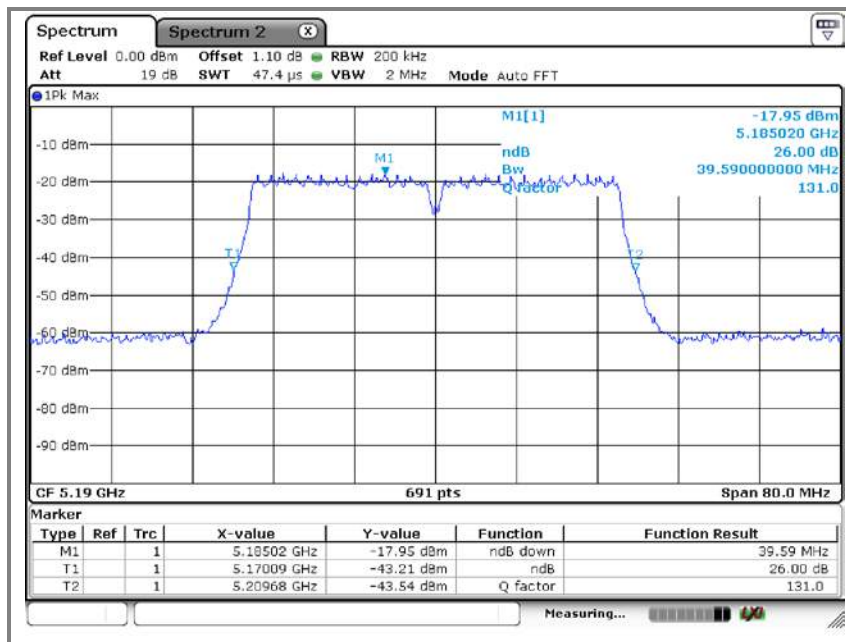


C. High channel(5240 MHz)- 99% bandwidth

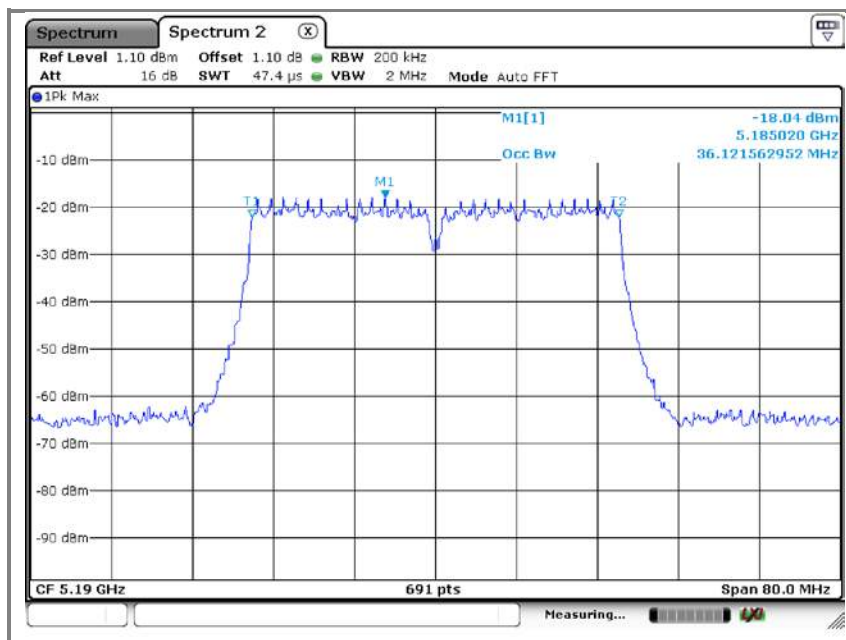


Operation mode: U-NII-1(n_HT40)

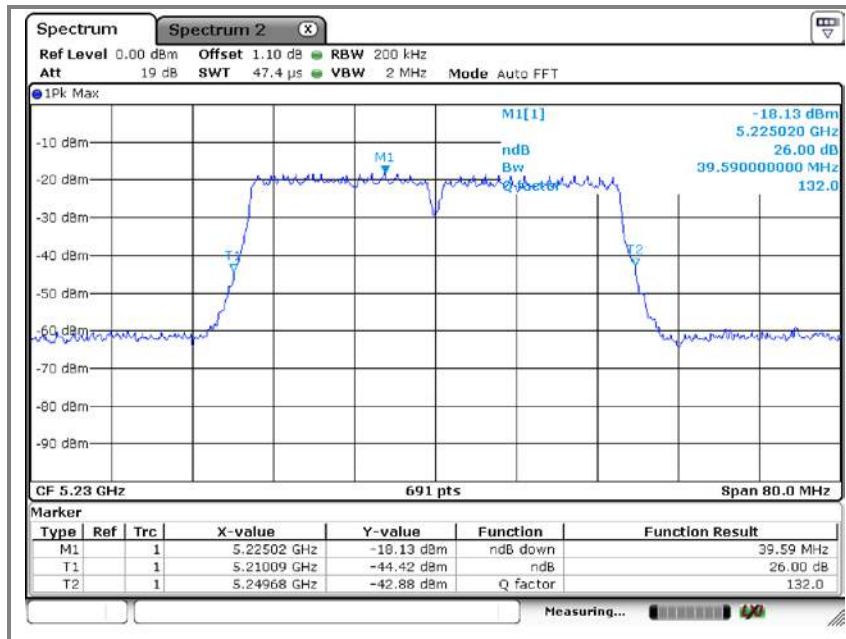
A. Low channel(5190 MHz)- 26 dB bandwidth



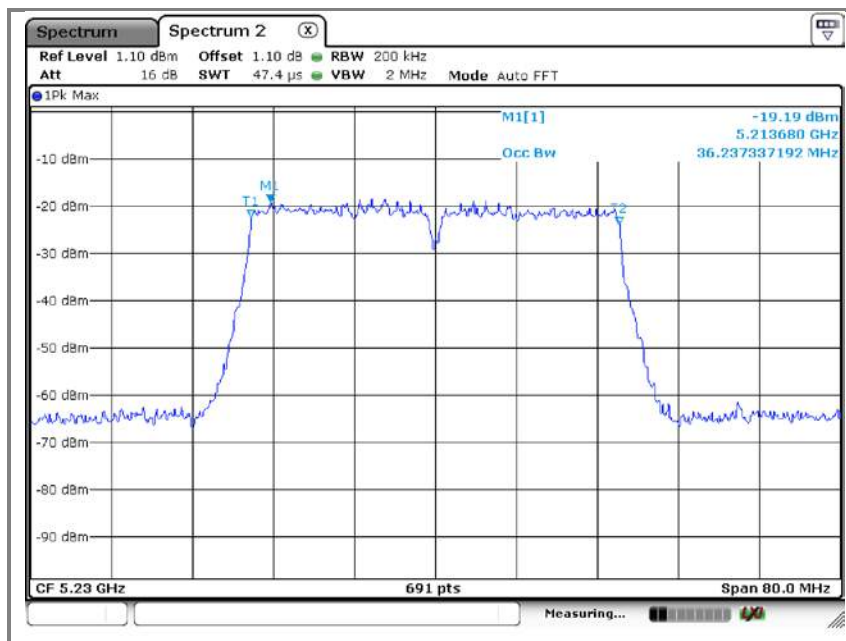
A. Low channel(5190 MHz)- 99% bandwidth



B. High channel(5230 MHz)- 26 dB bandwidth

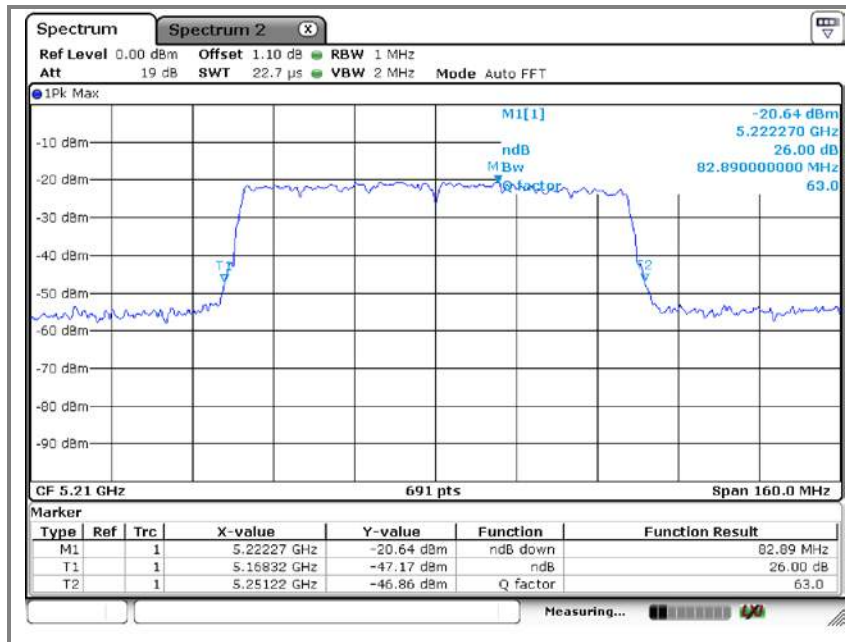


B. High channel(5230 MHz)- 99% bandwidth



Operation mode: U-NII-1(VHT80)

A. Low channel(5210 MHz)- 26 dB bandwidth



A. Low channel(5210 MHz)- 99% bandwidth

