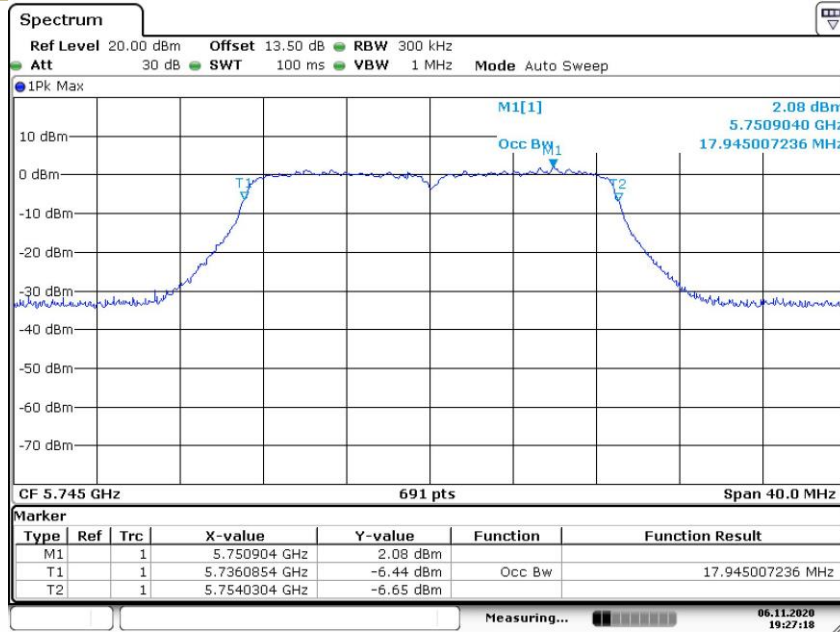


99% Occupied Bandwidth
Test Model 802.11ac(HT20)

U-NII - 3
Frequency(MHz)

5745



Date: 6.NOV.2020 19:27:17

99% Occupied Bandwidth
Test Model 802.11ac(HT20)

U-NII - 3
Frequency(MHz)

5785

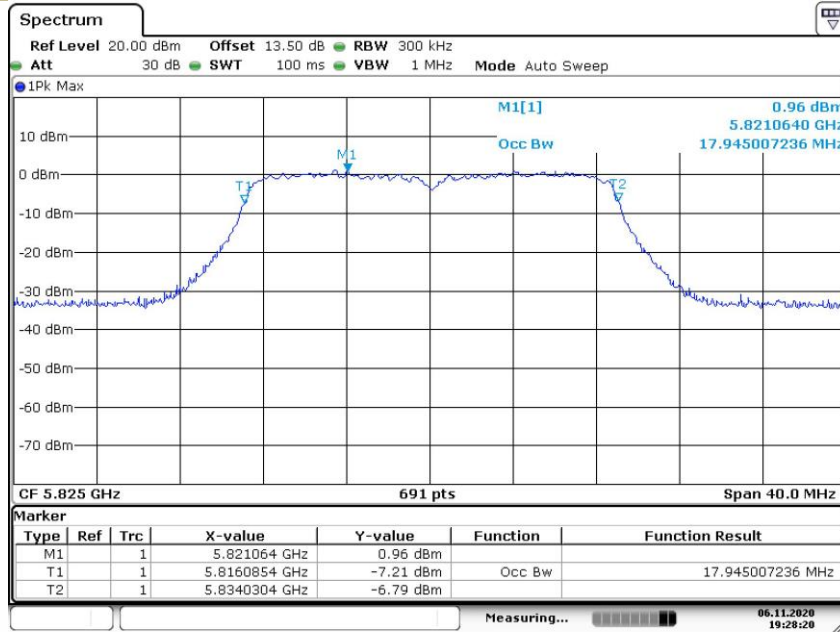


Date: 6.NOV.2020 19:27:50

99% Occupied Bandwidth
Test Model 802.11ac(HT20)

U-NII - 3
Frequency(MHz)

5825

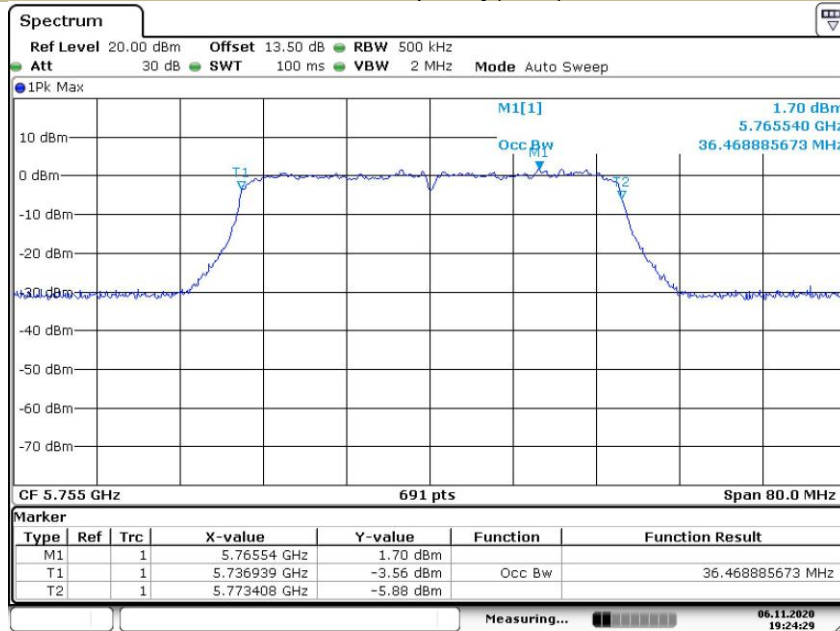


Date: 6.NOV.2020 19:28:20

99% Occupied Bandwidth
Test Model 802.11n-HT40

U-NII - 3
Frequency(MHz)

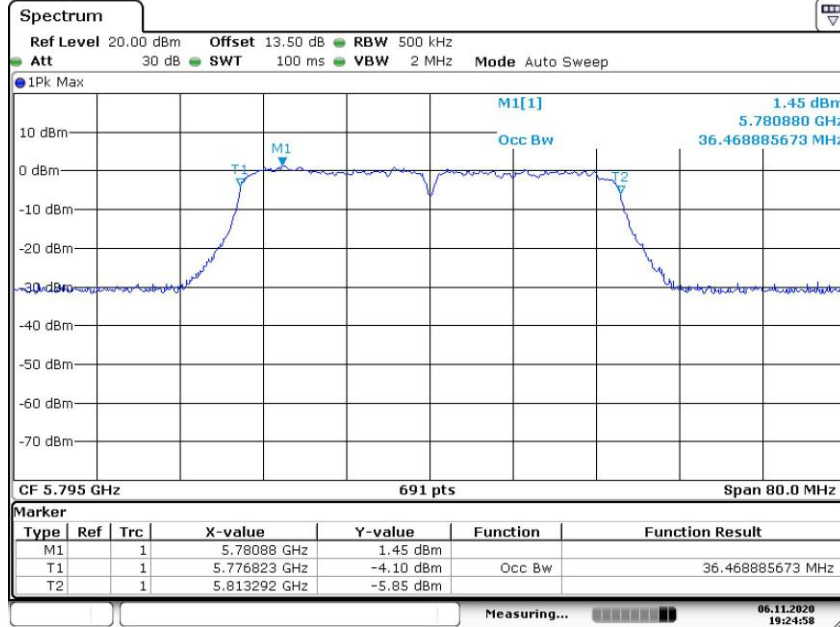
5755



Date: 6.NOV.2020 19:24:29

99% Occupied Bandwidth
Test Model 802.11n-HT40

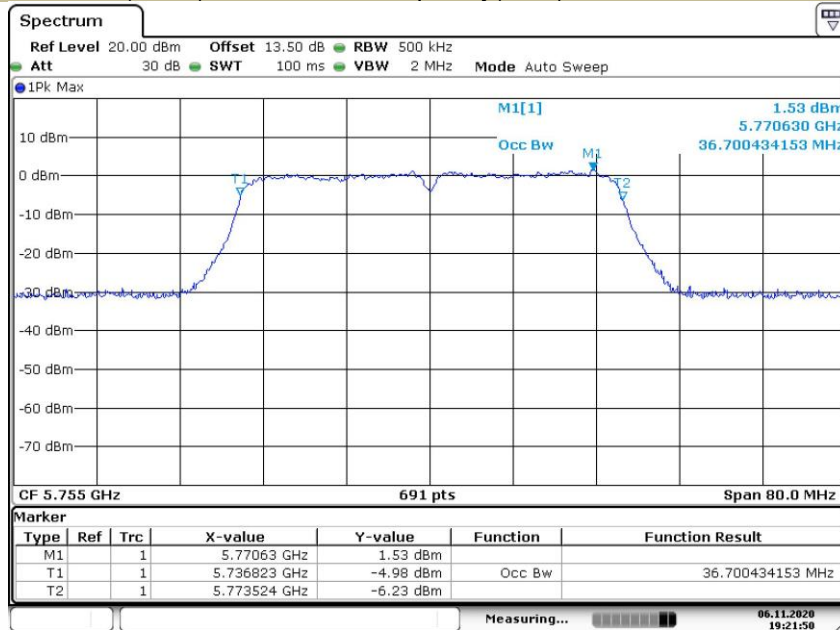
U-NII - 3
Frequency(MHz) 5795



Date: 6.NOV.2020 19:24:58

99% Occupied Bandwidth
Test Model 802.11ac(HT40)

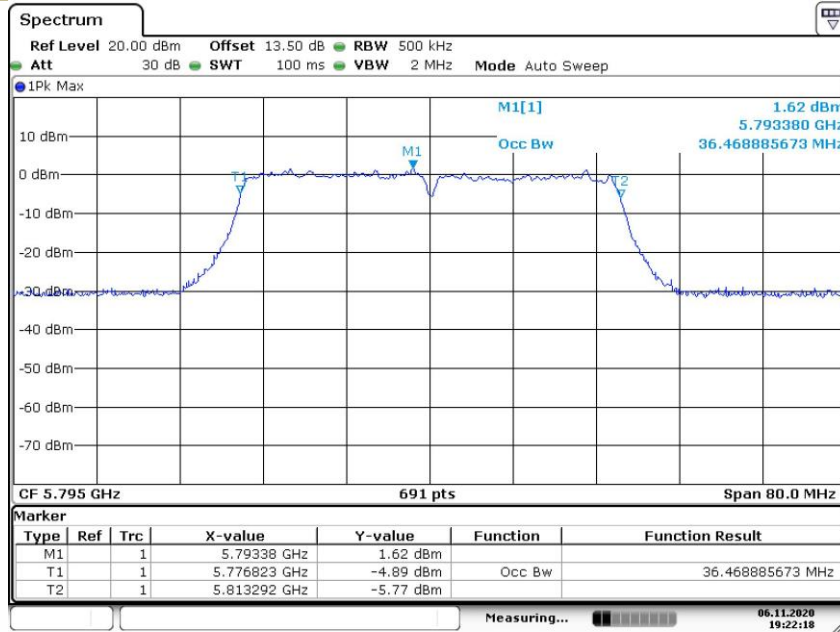
U-NII - 3
Frequency(MHz) 5755



Date: 6.NOV.2020 19:21:50

99% Occupied Bandwidth
Test Model 802.11ac(HT40)

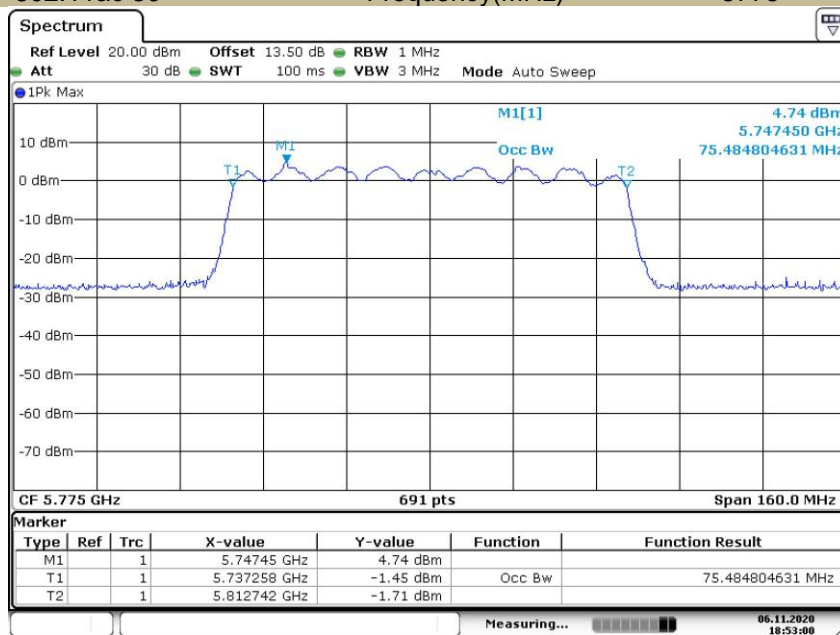
U-NII - 3
Frequency(MHz) 5795



Date: 6.NOV.2020 19:22:19

99% Occupied Bandwidth
Test Model 802.11ac 80

U-NII - 3
Frequency(MHz) 5775

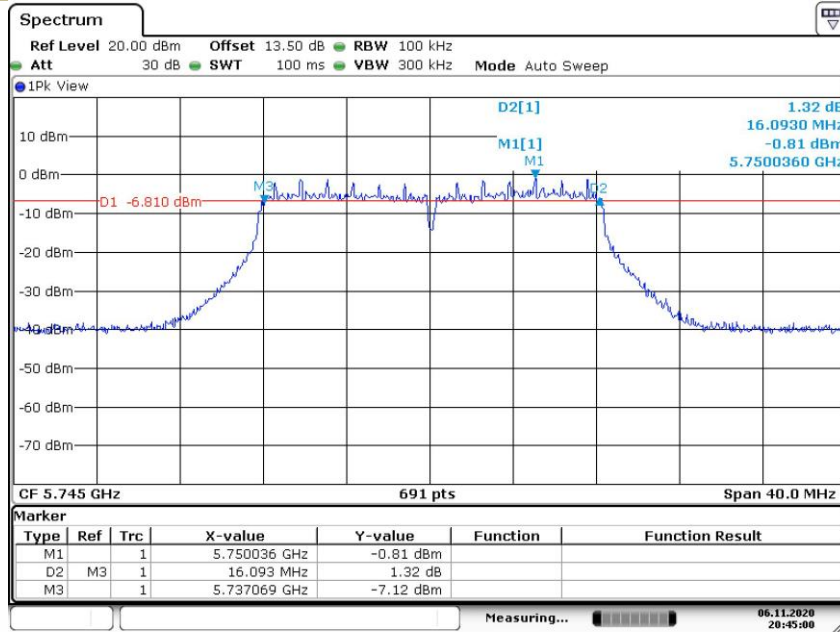


Date: 6.NOV.2020 18:53:00

6db Emission Bandwidth
Test Model 802.11a

U-NII - 3
Frequency(MHz)

5745

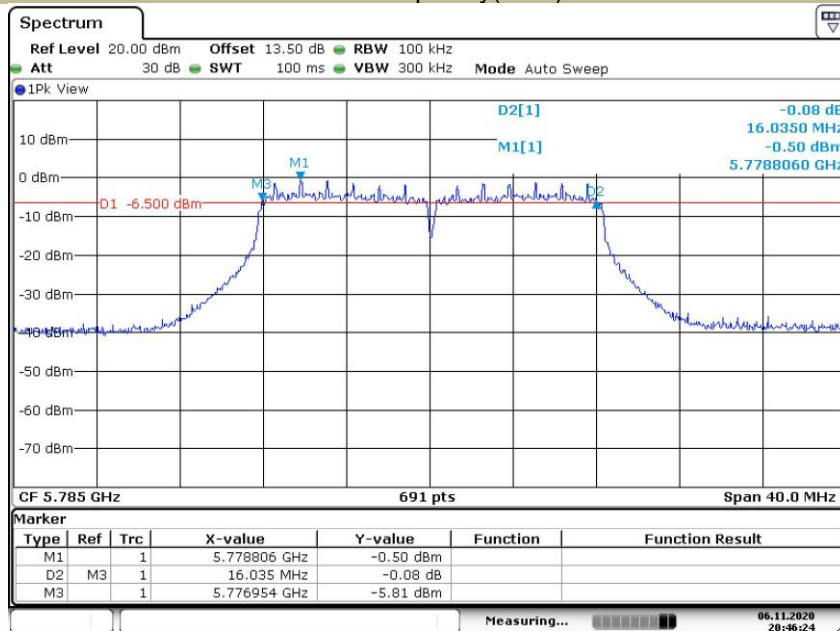


Date: 6.NOV.2020 20:45:00

6db Emission Bandwidth
Test Model 802.11a

U-NII - 3
Frequency(MHz)

5785

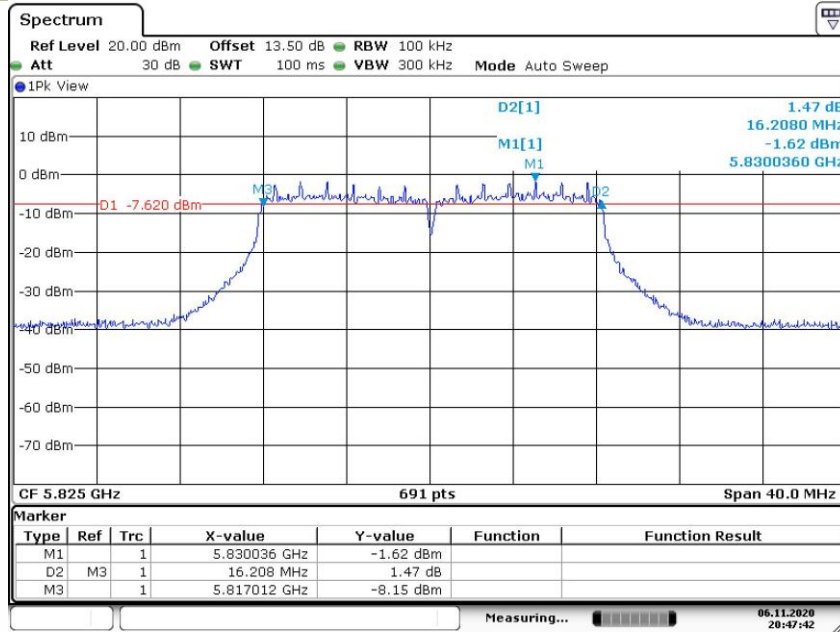


Date: 6.NOV.2020 20:46:24

6db Emission Bandwidth
Test Model 802.11a

U-NII - 3
Frequency(MHz)

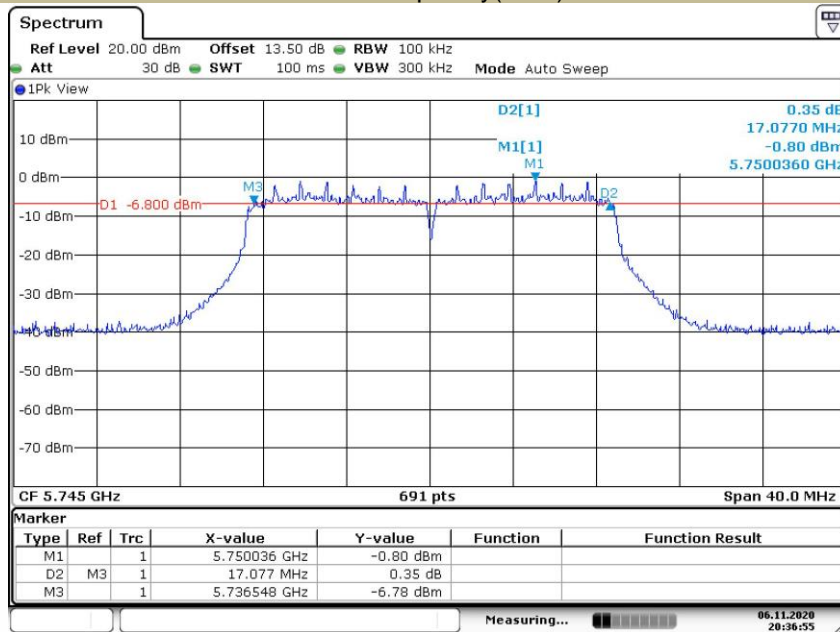
5825



6db Emission Bandwidth
Test Model 802.11n-HT20

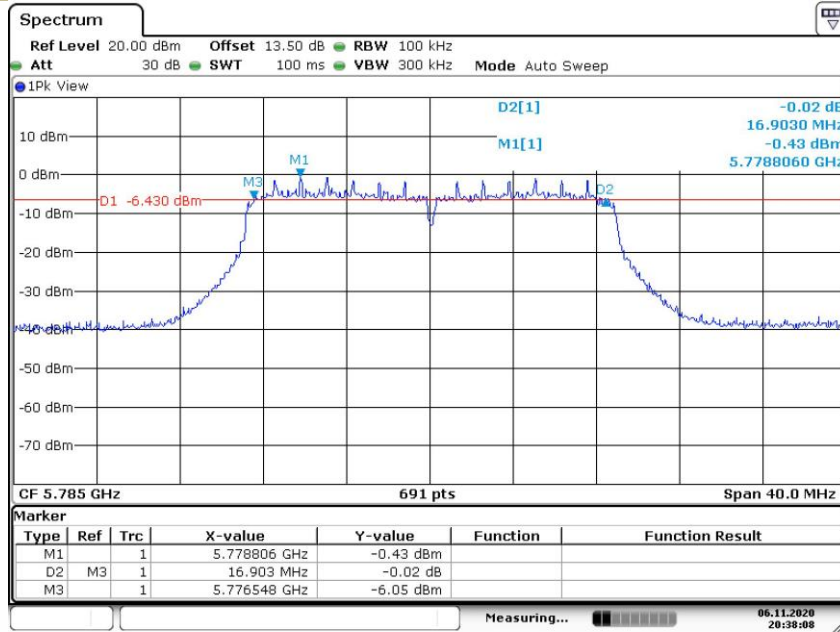
U-NII - 3
Frequency(MHz)

5745



6db Emission Bandwidth
Test Model 802.11n-HT20

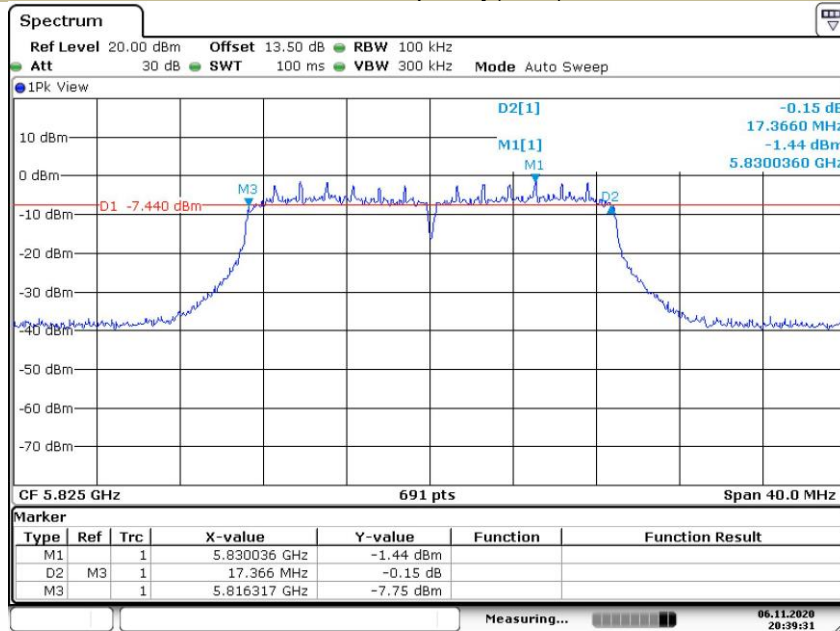
U-NII - 3
Frequency(MHz) 5785



Date: 6.NOV.2020 20:38:08

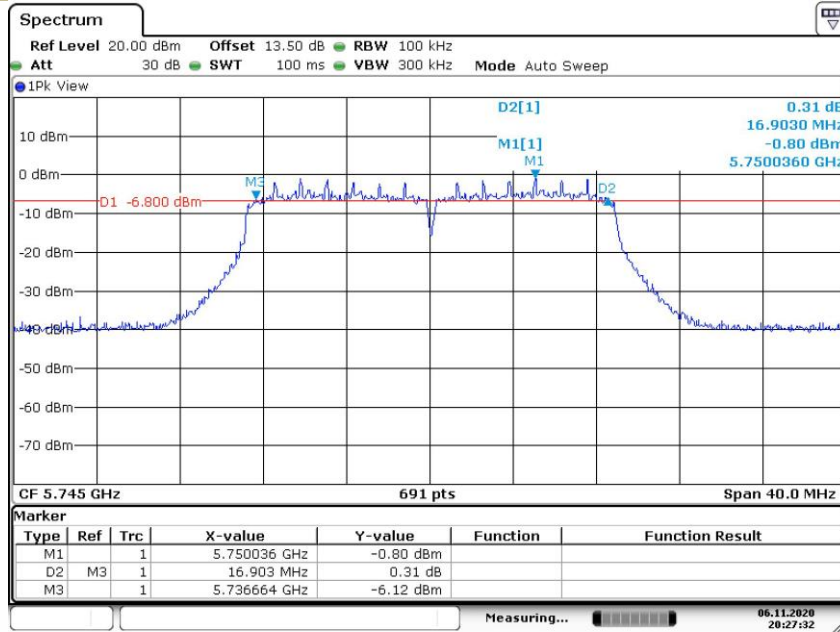
6db Emission Bandwidth
Test Model 802.11n-HT20

U-NII - 3
Frequency(MHz) 5825



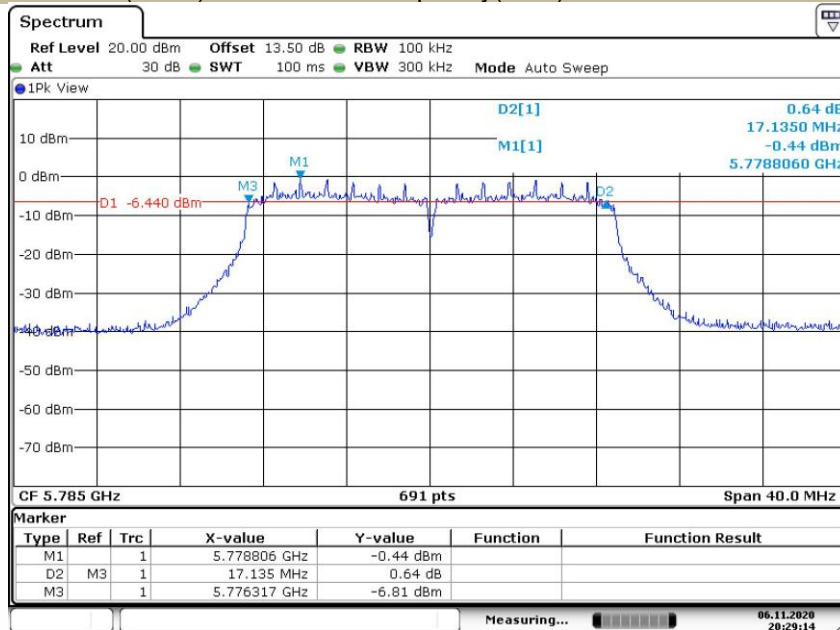
Date: 6.NOV.2020 20:39:31

6db Emission Bandwidth U-NII - 3
 Test Model 802.11ac(HT20) Frequency(MHz) 5745



Date: 6.NOV.2020 20:27:32

6db Emission Bandwidth U-NII - 3
 Test Model 802.11ac(HT20) Frequency(MHz) 5785



Date: 6.NOV.2020 20:29:14

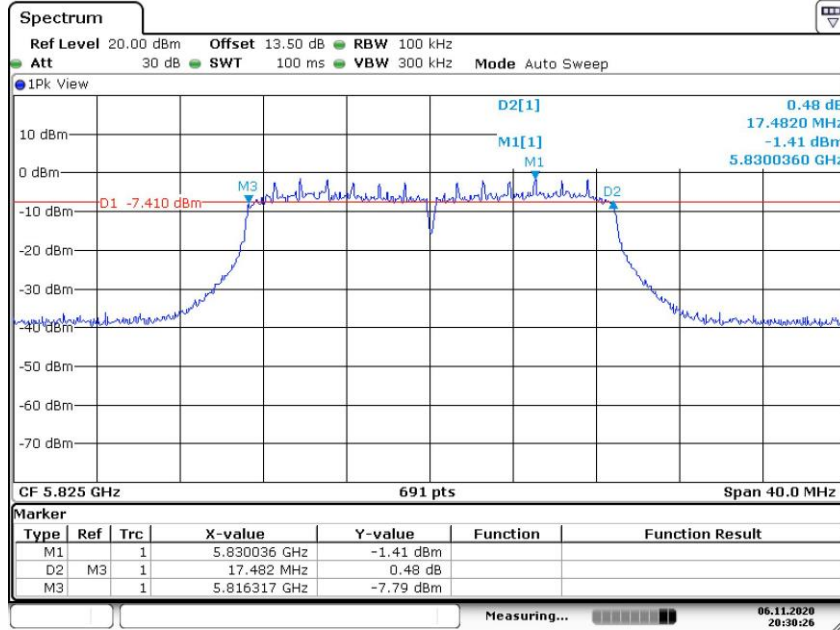
6db Emission Bandwidth

U-NII - 3

Test Model 802.11ac(HT20)

Frequency(MHz)

5825



Date: 6.NOV.2020 20:30:25

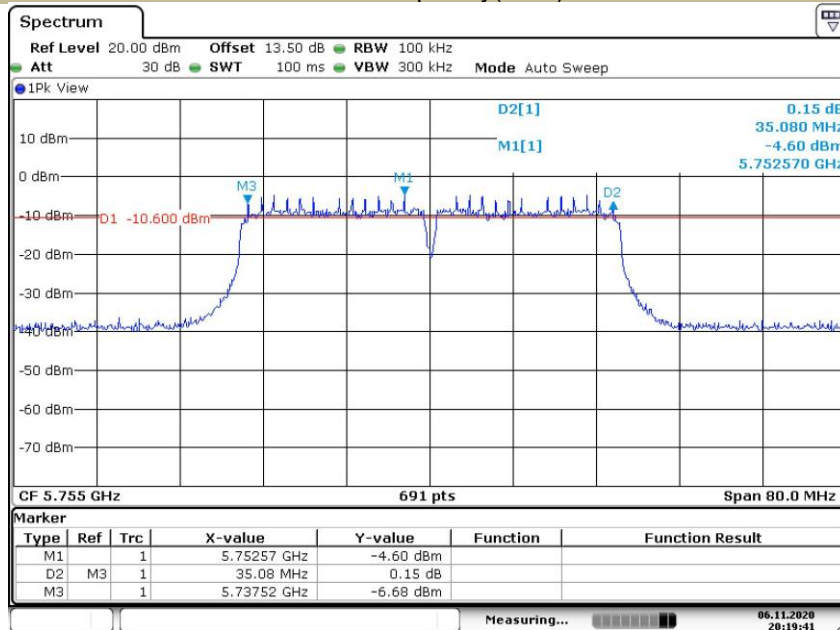
6db Emission Bandwidth

U-NII - 3

Test Model 802.11n-HT40

Frequency(MHz)

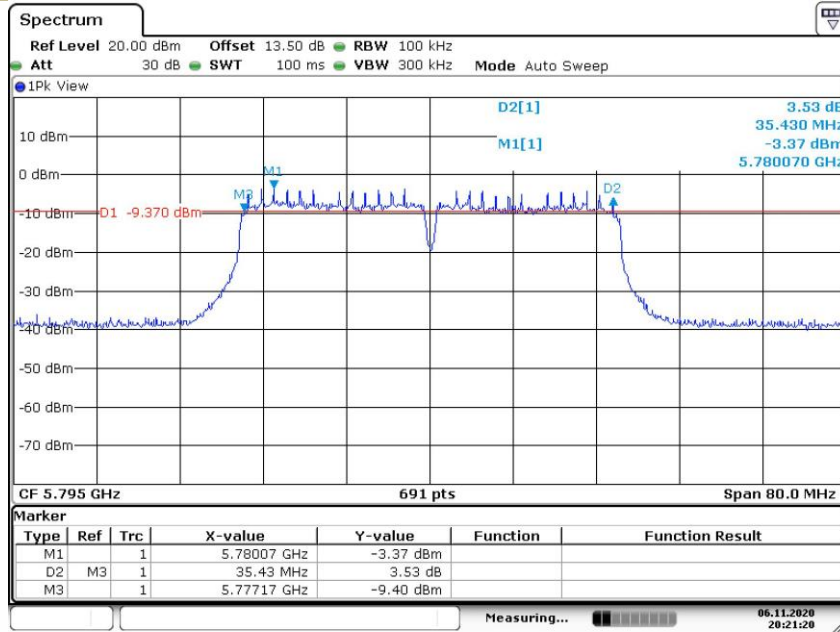
5755



Date: 6.NOV.2020 20:19:41

6db Emission Bandwidth
Test Model 802.11n-HT40

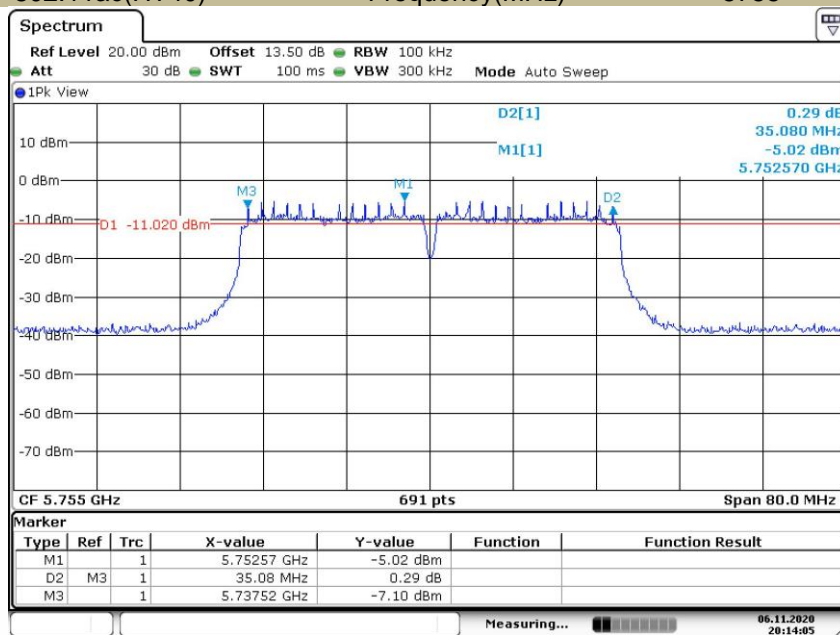
U-NII - 3
Frequency(MHz) 5795



Date: 6.NOV.2020 20:21:21

6db Emission Bandwidth
Test Model 802.11ac(HT40)

U-NII - 3
Frequency(MHz) 5755

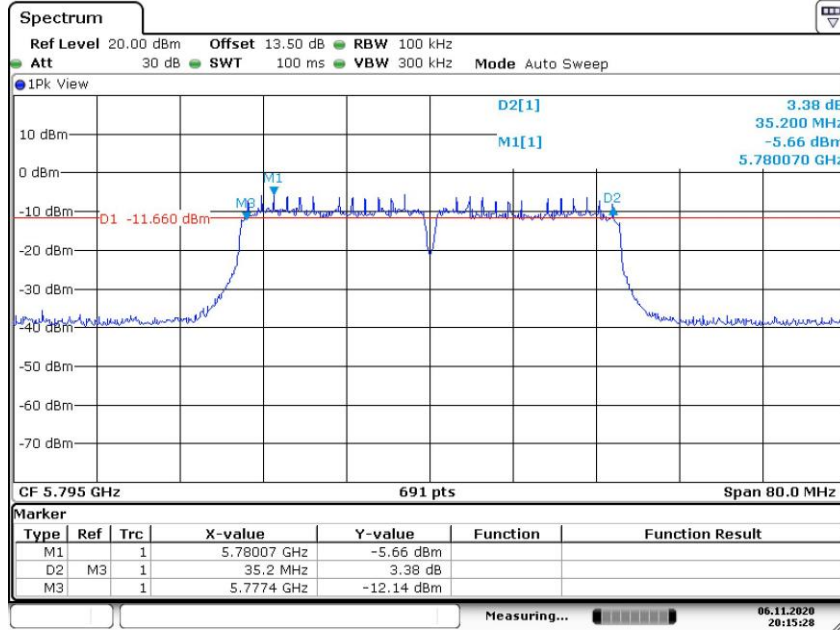


Date: 6.NOV.2020 20:14:06

6db Emission Bandwidth
Test Model 802.11ac(HT40)

U-NII - 3
Frequency(MHz)

5795

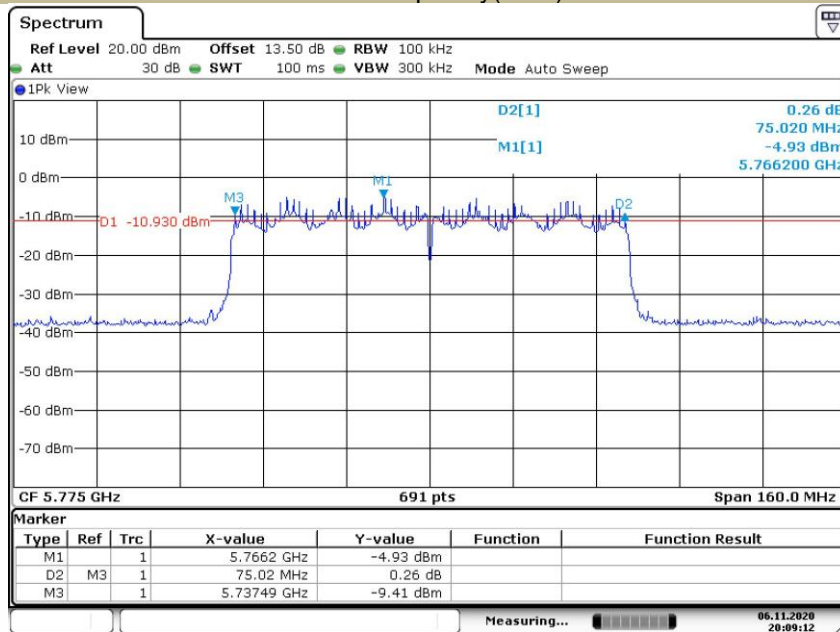


Date: 6.NOV.2020 20:15:29

6db Emission Bandwidth
Test Model 802.11ac 80

U-NII - 3
Frequency(MHz)

5775



Date: 6.NOV.2020 20:09:12

8.2 MAXIMUM CONDUCTED OUTPUT POWER

8.2.1 Applicable Standard

According to FCC Part 15.407(a)(1) for UNII Band I
According to FCC Part 15.407(a)(2) for UNII Band II-A and UNII Band II-C
According to FCC Part 15.407(a)(3) for UNII Band III
According to 789033 D02 Section II(E)

8.2.2 Conformance Limit

■ For the band 5.15-5.25 GHz,

(a) (1) (i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(a) (1) (ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(a) (1) (iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(a) (1) (iv) For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

■ For the 5.25-5.35 GHz and 5.47-5.725 GHz bands

(a) (2) The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

■ For the band 5.725-5.85 GHz

(a) (3) for the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30

dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations

8.2.3 Test Configuration

Test according to clause 6.1 radio frequency test setup

8.2.4 Test Procedure

The maximum average conducted output power can be measured using Method PM-G (Measurement using a gated RF average power meter):

Measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

- a. The Transmitter output (antenna port) was connected to the power meter.
- b. Turn on the EUT and power meter and then record the power value.
- c. Repeat above procedures on all channels needed to be tested.

8.2.5 Test Results

5150-5250MHz:
 802.11a mode

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)	Limit (dBm)	Verdict
U-NII - 1	CH36	5180	11.81	24	Pass
	CH40	5200	12.29	24	Pass
	CH48	5240	12.39	24	Pass

 802.11n-HT20

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)	Limit (dBm)	Verdict
U-NII - 1	CH36	5180	11.77	24	Pass
	CH40	5200	12.25	24	Pass
	CH48	5240	12.33	24	Pass

 802.11 ac (HT20)

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)	Limit (dBm)	Verdict
U-NII - 1	CH36	5180	11.75	24	Pass
	CH40	5200	12.22	24	Pass
	CH48	5240	12.42	24	Pass

 802.11n-HT40

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)	Limit (dBm)	Verdict
U-NII - 1	CH38	5190	12.04	24	Pass
	CH46	5230	12.37	24	Pass

 802.11 ac (HT40)

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)	Limit (dBm)	Verdict
U-NII - 1	CH38	5190	12.06	24	Pass
	CH46	5230	12.37	24	Pass

 802.11 ac (HT80)

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)	Limit (dBm)	Verdict
U-NII - 1	CH42	5210	10.05	24	Pass

5725-5850MHz:
 802.11a mode

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)	Limit (dBm)	Verdict
U-NII – 3	CH149	5745	10.35	30	Pass
	CH157	5785	10.58	30	Pass
	CH165	5825	10.05	30	Pass

 802.11n-HT20

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)	Limit (dBm)	Verdict
U-NII – 3	CH149	5745	10.28	30	Pass
	CH157	5785	10.51	30	Pass
	CH165	5825	10.07	30	Pass

 802.11 ac (HT20)

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)	Limit (dBm)	Verdict
U-NII – 3	CH149	5745	10.06	30	Pass
	CH157	5785	10.13	30	Pass
	CH165	5825	10.04	30	Pass

 802.11n-HT40

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)	Limit (dBm)	Verdict
U-NII – 3	CH151	5755	10.70	30	Pass
	CH159	5795	10.09	30	Pass

 802.11 ac (HT40)

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)	Limit (dBm)	Verdict
U-NII – 3	CH151	5755	10.64	30	Pass
	CH159	5795	10.23	30	Pass

 802.11 ac (HT80)

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)	Limit (dBm)	Verdict
U-NII – 3	CH155	5775	11.74	30	Pass

8.3 MAXIMUM PEAK POWER DENSITY

8.3.1 Applicable Standard

According to FCC Part 15.407(a)(1) for UNII Band I

According to FCC Part 15.407(a)(2) for UNII Band II-A and UNII Band II-C

According to FCC Part 15.407(a)(3) for UNII Band III

According to 789033 D02 Section II(F)

8.3.2 Conformance Limit

■ For the band 5.15-5.25 GHz,

(a) (1) (i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(a) (1) (ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(a) (1) (iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(a) (1) (iv) For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

■ For the 5.25-5.35 GHz and 5.47-5.725 GHz bands

(b) (2) The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

■ For the band 5.725-5.85 GHz

(a) (3) for the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30

dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations

8.3.3 Test Configuration

Test according to clause 6.1 radio frequency test setup

8.3.4 Test Procedure

Methods refer to FCC KDB 789033

For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 KHz bandwidth, the following adjustments to the procedures apply:

- a) Set $RBW \geq 1/T$, where T is defined in section II.B.I.a).
- b) Set $VBW \geq 3 RBW$.
- c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10\log(500\text{kHz}/RBW)$ to the measured result, whereas $RBW (< 500 \text{ KHz})$ is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10\log(1\text{MHz}/RBW)$ to the measured result, whereas $RBW (< 1 \text{ MHz})$ is the reduced resolution bandwidth of spectrum analyzer set during measurement.
- e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

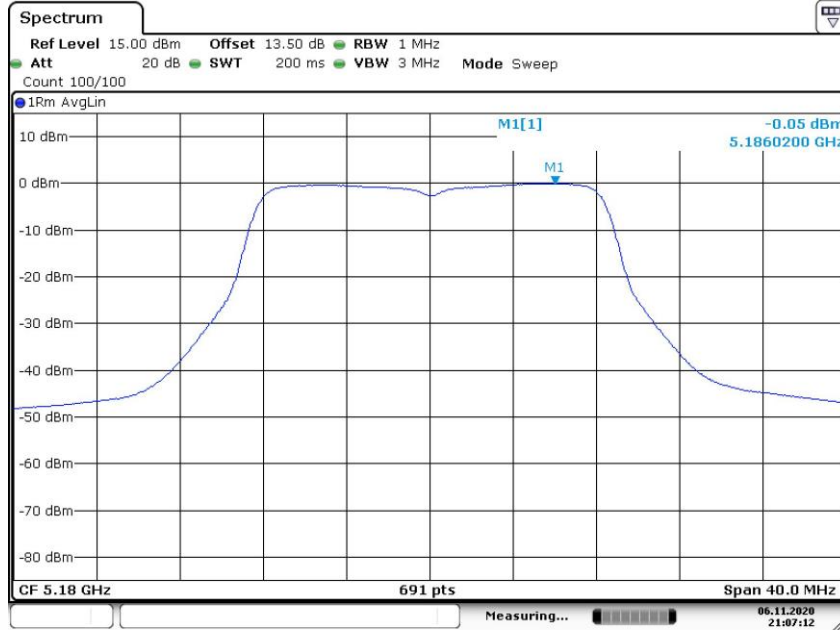
Note: As a practical matter, it is recommended to use reduced RBW of 100 KHz for the sections 5.c) and 5.d) above, since $RBW=100 \text{ KHz}$ is available on nearly all spectrum analyzers.

8.3.5 Test Results

5150-5250MHz

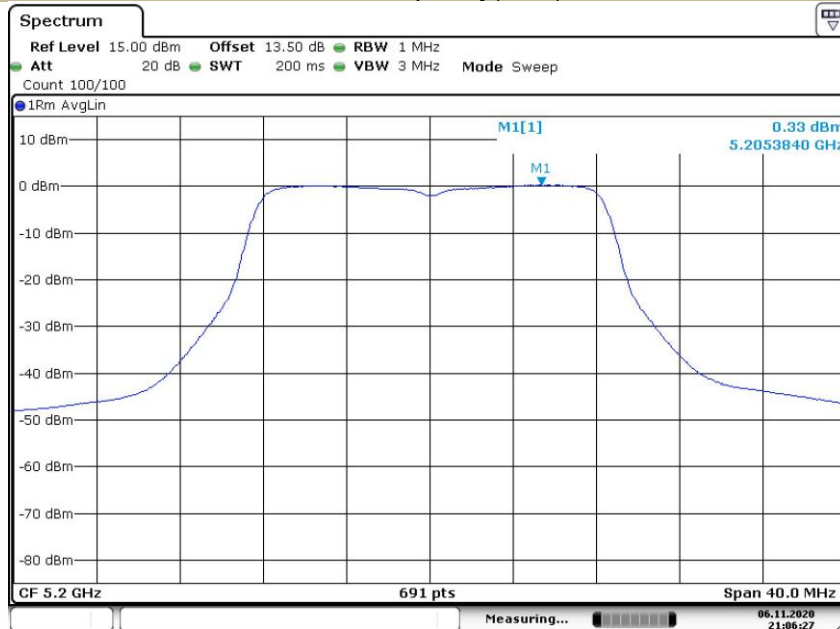
Operating mode	Test Channel	Power Spectral Density dBm/MHz	Limit (dBm/MHz)
802.11a	5180	-0.05	11
	5200	0.33	11
	5240	0.43	11
802.11n-HT20	5180	-0.29	11
	5200	0.09	11
	5240	0.25	11
802.11ac(HT20)	5180	-0.23	11
	5200	0.15	11
	5240	0.16	11
802.11n-HT40	5190	-3.00	11
	5230	-2.93	11
802.11ac(HT40)	5190	-3.08	11
	5230	-2.96	11
802.11ac(HT80)	5210	-5.12	11

Power Spectral Density **U-NII - 1**
Test Model 802.11a **Frequency(MHz)** 5180



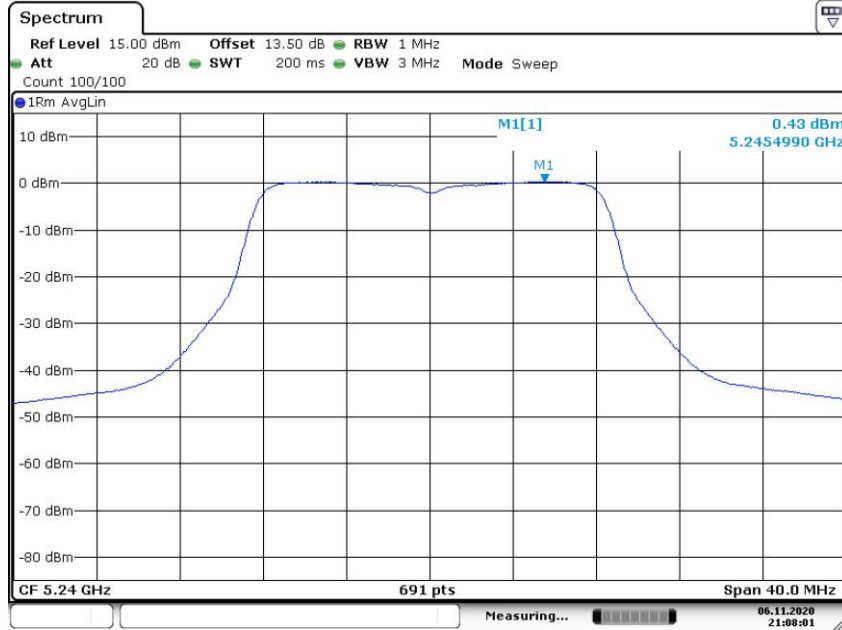
Date: 6.NOV.2020 21:07:12

Power Spectral Density **U-NII - 1**
Test Model 802.11a **Frequency(MHz)** 5200



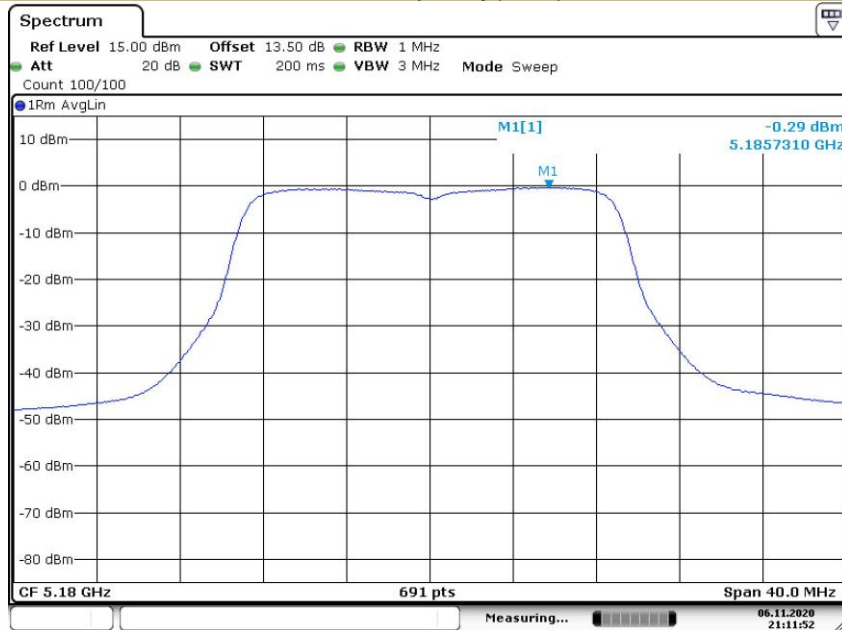
Date: 6.NOV.2020 21:06:27

Power Spectral Density **U-NII - 1**
Test Model 802.11a **Frequency(MHz)** 5240



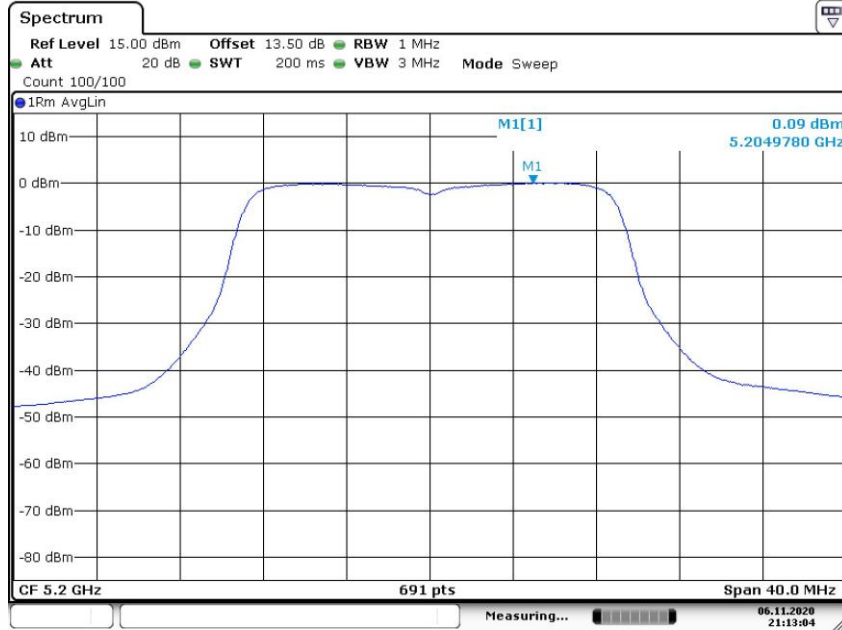
Date: 6.NOV.2020 21:08:01

Power Spectral Density **U-NII - 1**
Test Model 802.11n-HT20 **Frequency(MHz)** 5180



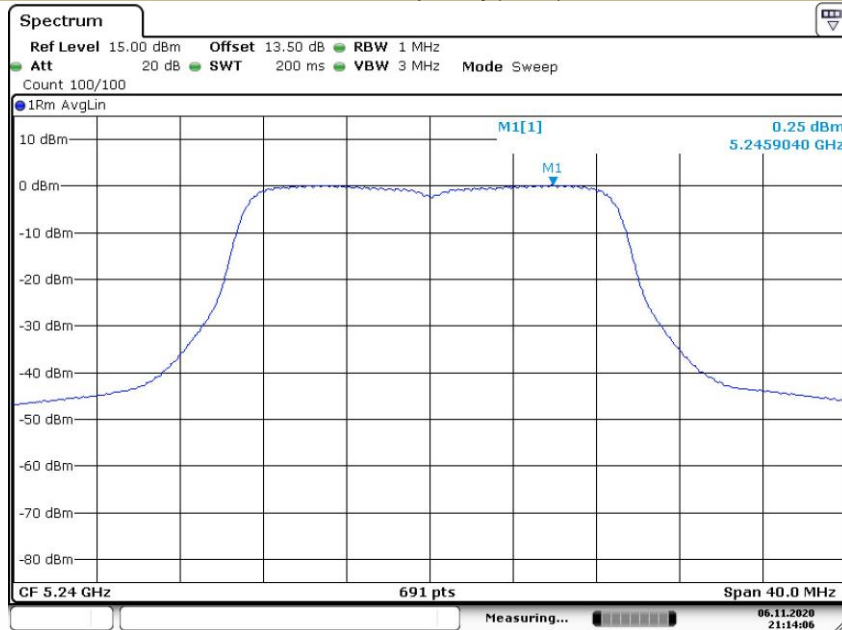
Date: 6.NOV.2020 21:11:53

Power Spectral Density U-NII - 1
 Test Model 802.11n-HT20 Frequency(MHz) 5200



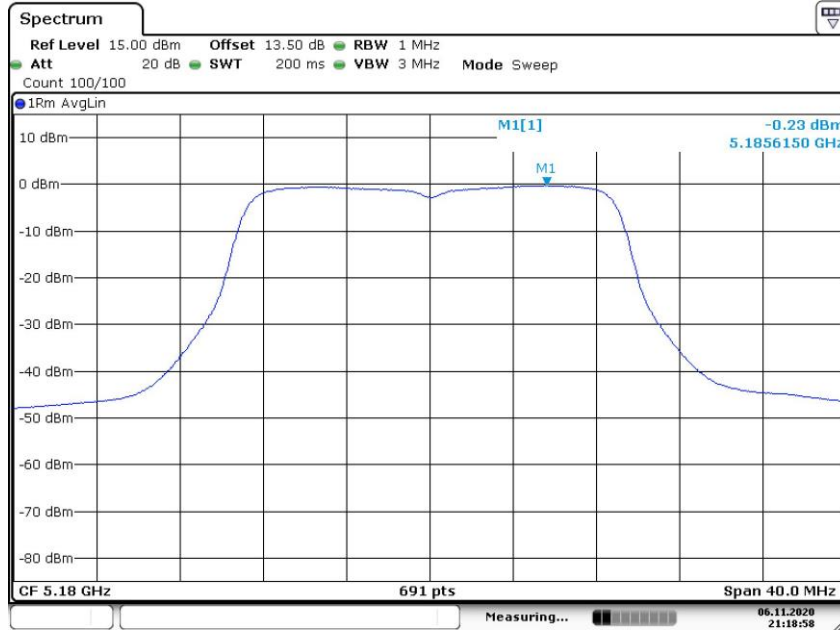
Date: 6.NOV.2020 21:13:04

Power Spectral Density U-NII - 1
 Test Model 802.11n-HT20 Frequency(MHz) 5240



Date: 6.NOV.2020 21:14:06

Power Spectral Density **U-NII - 1**
Test Model 802.11ac(HT20) **Frequency(MHz)** 5180



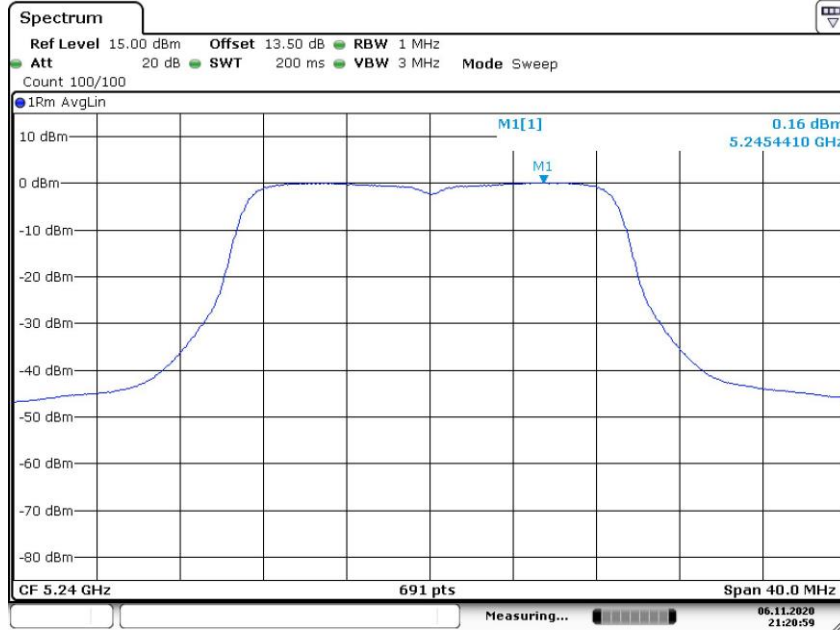
Date: 6.NOV.2020 21:18:58

Power Spectral Density **U-NII - 1**
Test Model 802.11ac(HT20) **Frequency(MHz)** 5200



Date: 6.NOV.2020 21:20:03

Power Spectral Density **U-NII - 1**
Test Model 802.11ac(HT20) **Frequency(MHz)** 5240



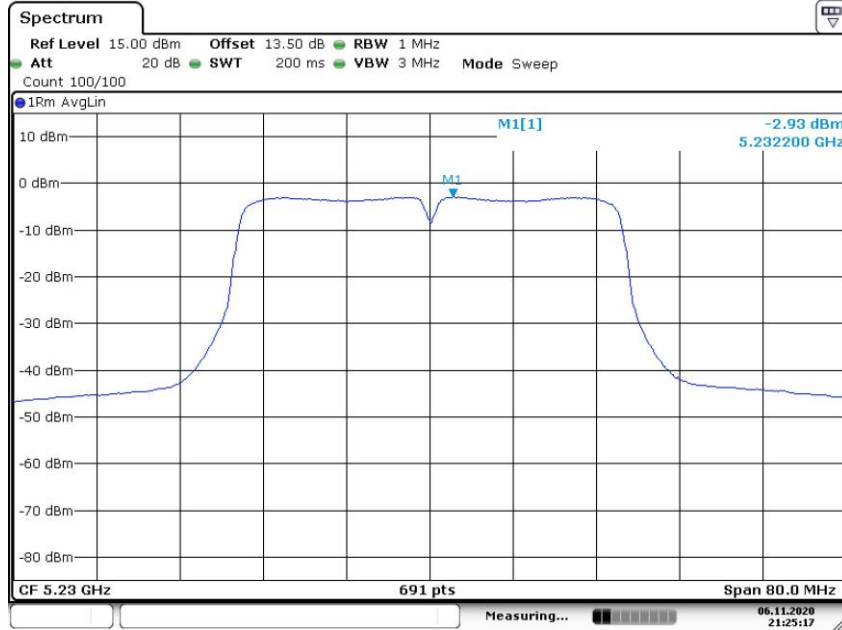
Date: 6.NOV.2020 21:20:59

Power Spectral Density **U-NII - 1**
Test Model 802.11n-HT40 **Frequency(MHz)** 5190



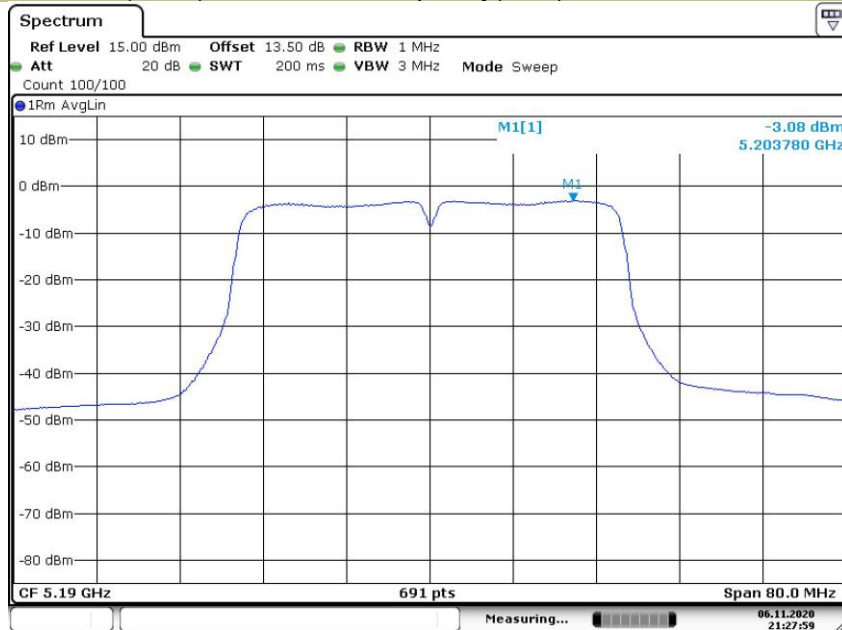
Date: 6.NOV.2020 21:24:15

Power Spectral Density **U-NII - 1**
Test Model 802.11n-HT40 **Frequency(MHz)** 5230



Date: 6.NOV.2020 21:25:18

Power Spectral Density **U-NII - 1**
Test Model 802.11ac(HT40) **Frequency(MHz)** 5190



Date: 6.NOV.2020 21:27:58

Power Spectral Density U-NII - 1
 Test Model 802.11ac(HT40) Frequency(MHz) 5230



Date: 6.NOV.2020 21:29:09

Power Spectral Density U-NII - 1
 Test Model 802.11ac 80 Frequency(MHz) 5210

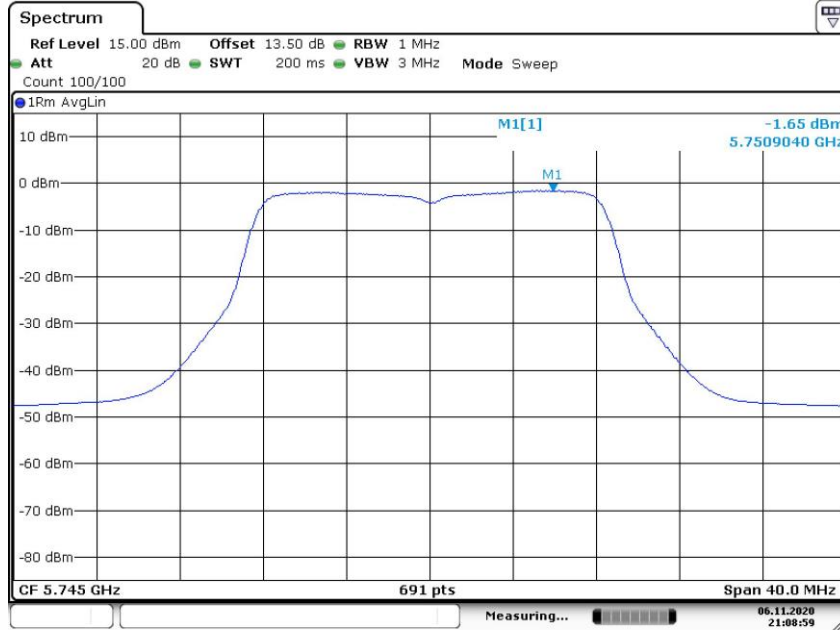


Date: 6.NOV.2020 21:32:34

5725-5850MHz

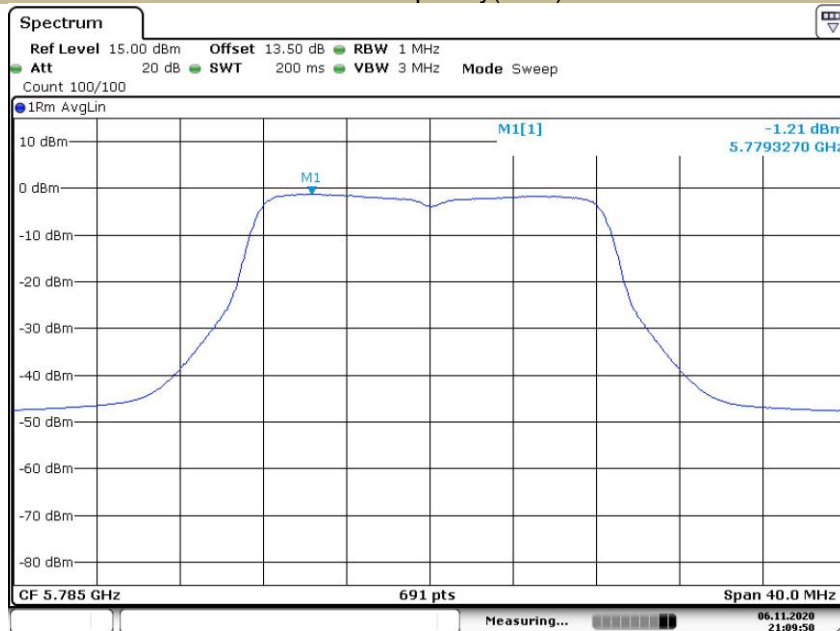
Operating mode	Test Channel	Power Spectral Density dBm/500kHz	Limit (dBm/500kHz)
802.11a	5745	-1.65	30
	5785	-1.21	30
	5825	-2.14	30
802.11n-HT20	5745	-1.76	30
	5785	-1.47	30
	5825	-2.46	30
802.11ac(HT20)	5745	-1.76	30
	5785	-1.52	30
	5825	-2.43	30
802.11n-HT40	5755	-4.41	30
	5795	-4.72	30
802.11ac(HT40)	5755	-4.62	30
	5795	-4.43	30
802.11ac(HT80)	5775	-6.90	30

Power Spectral Density **U-NII - 3**
Test Model 802.11a **Frequency(MHz)** 5745



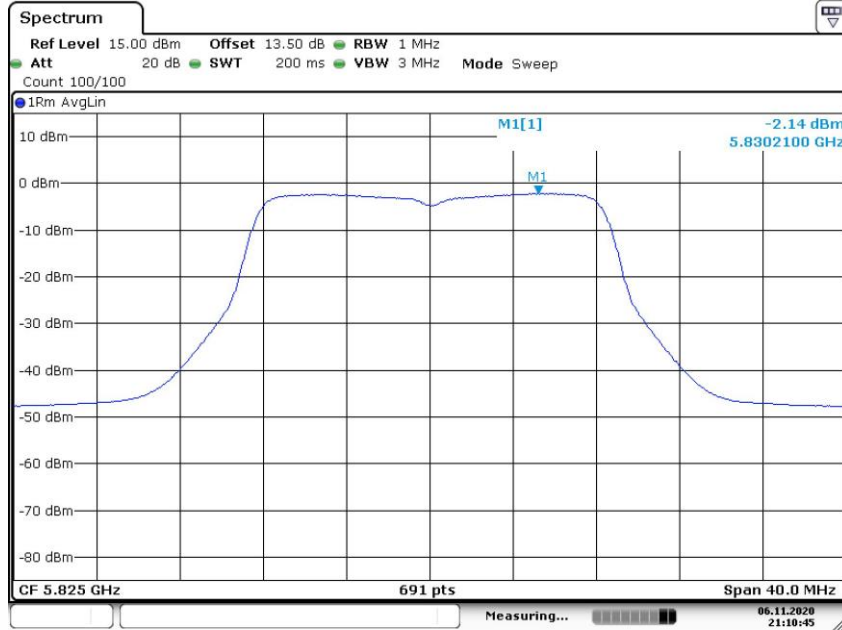
Date: 6.NOV.2020 21:08:59

Power Spectral Density **U-NII - 3**
Test Model 802.11a **Frequency(MHz)** 5785



Date: 6.NOV.2020 21:09:51

Power Spectral Density **U-NII - 3**
Test Model 802.11a **Frequency(MHz)** 5825



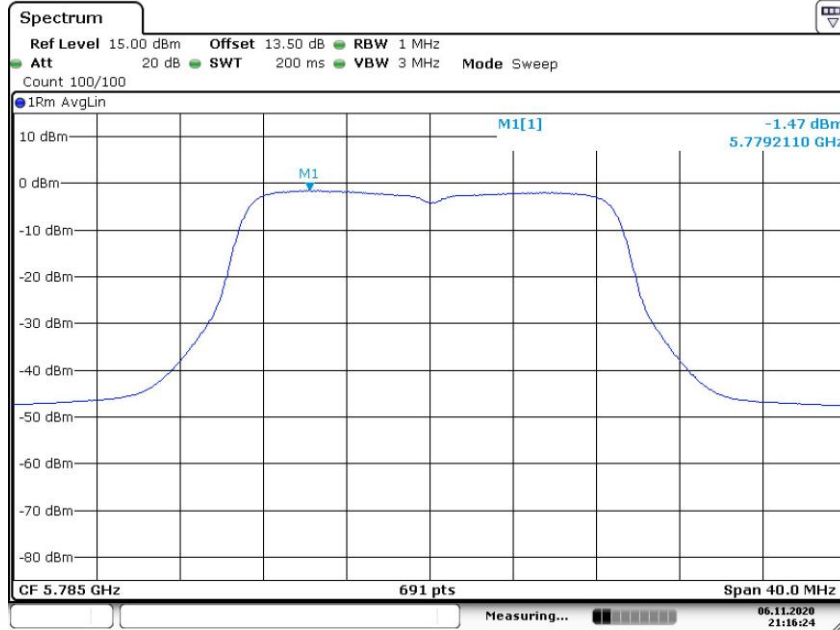
Date: 6.NOV.2020 21:10:45

Power Spectral Density **U-NII - 3**
Test Model 802.11n-HT20 **Frequency(MHz)** 5745



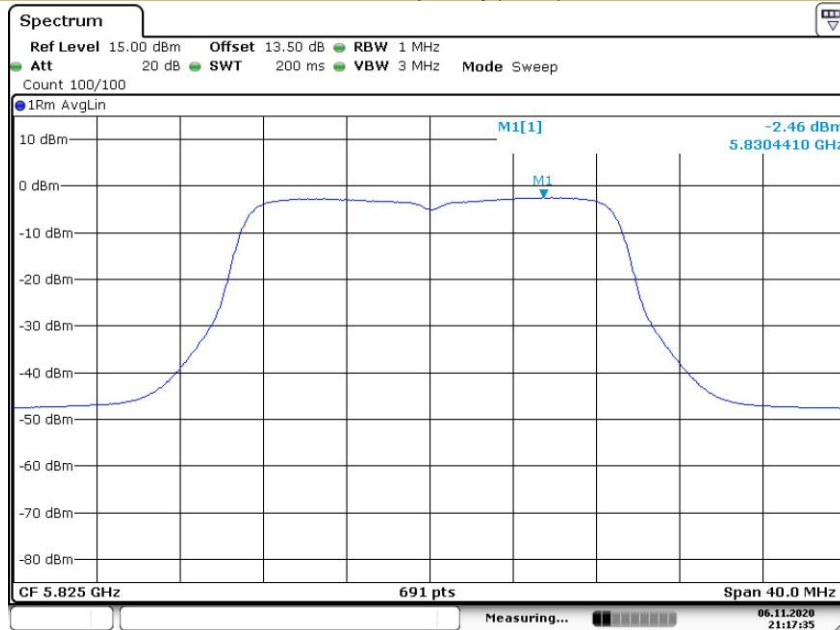
Date: 6.NOV.2020 21:15:20

Power Spectral Density U-NII - 3
 Test Model 802.11n-HT20 Frequency(MHz) 5785



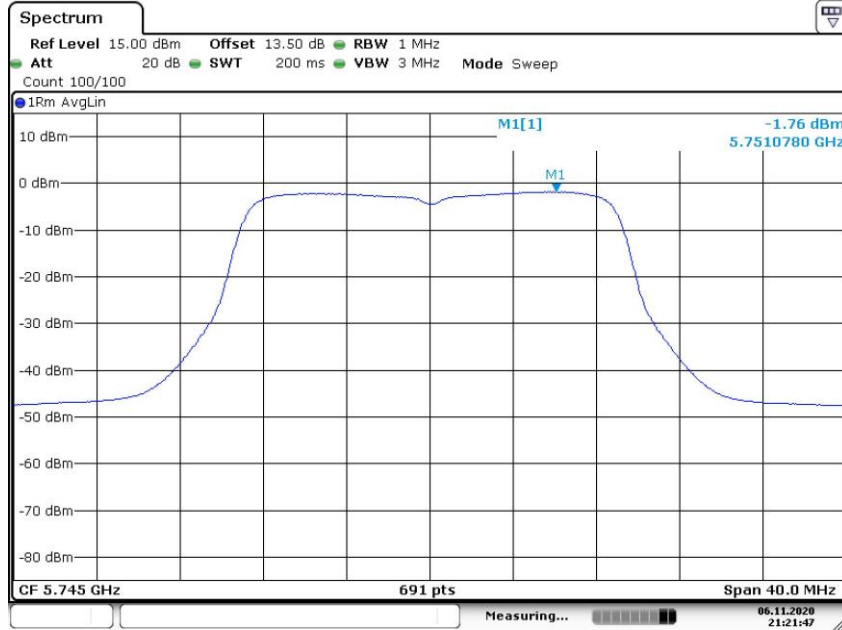
Date: 6.NOV.2020 21:16:24

Power Spectral Density U-NII - 3
 Test Model 802.11n-HT20 Frequency(MHz) 5825



Date: 6.NOV.2020 21:17:34

Power Spectral Density **U-NII - 3**
Test Model 802.11ac(HT20) **Frequency(MHz)** 5745



Date: 6.NOV.2020 21:21:47

Power Spectral Density **U-NII - 3**
Test Model 802.11ac(HT20) **Frequency(MHz)** 5785



Date: 6.NOV.2020 21:22:33

Power Spectral Density **U-NII - 3**
Test Model 802.11n-HT40 **Frequency(MHz)** 5795



Date: 6.NOV.2020 21:27:13

Power Spectral Density **U-NII - 3**
Test Model 802.11ac(HT40) **Frequency(MHz)** 5755



Date: 6.NOV.2020 21:29:54

Power Spectral Density **U-NII - 3**
Test Model 802.11ac(HT40) **Frequency(MHz)** 5795



Date: 6.NOV.2020 21:30:37

Power Spectral Density **U-NII - 3**
Test Model 802.11ac 80 **Frequency(MHz)** 5775



Date: 6.NOV.2020 21:31:27

8.4 FREQUENCY STABILITY

8.4.1 Applicable Standard

According to FCC Part 15.407(g)
ANSI C63.10 Section 6.8

8.4.2 Conformance Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

8.4.3 Test Configuration

Test according to clause 6.1 radio frequency test setup

8.4.4 Test Procedure

The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.

Set to the maximum power setting and enable the EUT transmit continuously

Set RBW = 10 kHz.

Set Span= Entire absence of modulation emissions band

Set the video bandwidth (VBW) =30 kHz. width

Set Detector = Peak.

Set Trace mode = max hold.

Set Sweep = auto couple.

Allow the trace to stabilize.

The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.

Beginning at each temperature level specified in user manual , the frequency shall be measured within one minute after application of primary power to the transmitter and at intervals of no more than one minute thereafter until ten minutes have elapsed or until sufficient measurements are obtained to indicate clearly that the frequency has stabilized within the applicable tolerance, whichever time period is greater. During each test, the ambient temperature shall not be allowed to rise more than 10° centigrade above the respective beginning ambient temperature level

Measure and record the results in the test report.

8.4.5 Test Results

5180

Voltage(V)	Temp(°C)	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5180.0049	4.9	Pass
	-10	5180.0016	1.6	Pass
	0	5180.0013	1.3	Pass
	10	5180.0046	4.6	Pass
	20	5180.0017	1.7	Pass
	30	5180.0019	1.9	Pass
	40	5180.0048	4.8	Pass
	55	5180.0032	3.2	Pass
85% Vnom	25	5180.0036	3.6	Pass
115% Vnom	25	5180.0023	2.3	Pass

5200

Voltage(V)	Temp(°C)	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5200.0019	1.9	Pass
	-10	5200.0041	4.1	Pass
	0	5200.0042	4.2	Pass
	10	5200.0013	1.3	Pass
	20	5200.0009	0.9	Pass
	30	5200.0035	3.5	Pass
	40	5200.0028	2.8	Pass
	55	5200.0007	0.7	Pass
85% Vnom	25	5200.0025	2.5	Pass
115% Vnom	25	5200.0032	3.2	Pass

5240

Voltage(V)	Temp(°C)	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5240.0044	4.4	Pass
	-10	5240.0033	3.3	Pass
	0	5240.0049	4.9	Pass
	10	5240.0023	2.3	Pass
	20	5240.0048	4.8	Pass
	30	5240.0042	4.2	Pass
	40	5240.0047	4.7	Pass
	55	5240.0001	0.1	Pass
85% Vnom	25	5240.0026	2.6	Pass
115% Vnom	25	5240.0008	0.8	Pass