

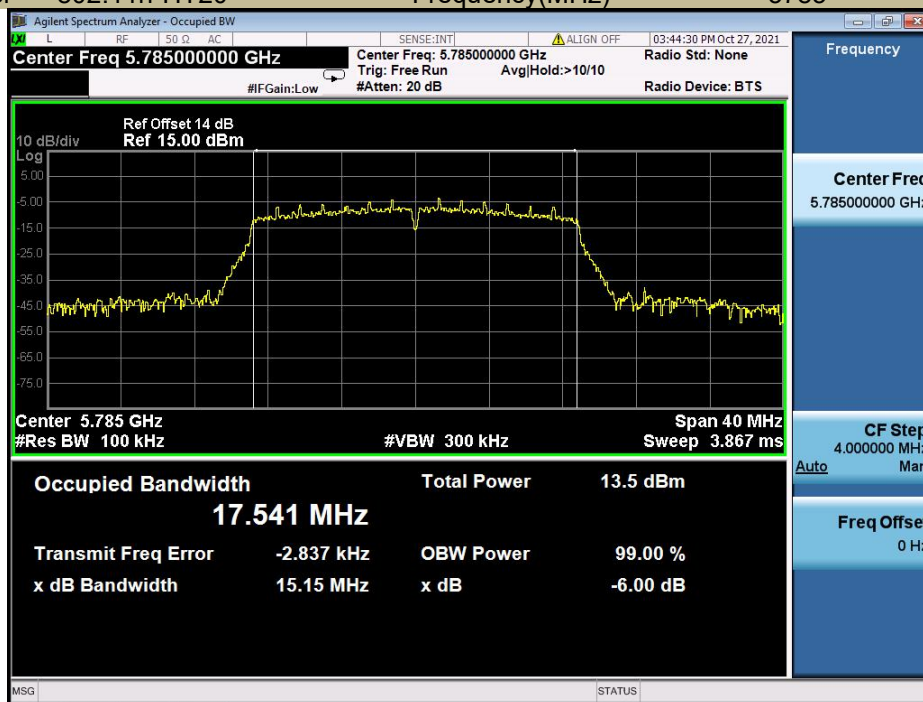
6db Emission Bandwidth

U-NII - 3

Test Model 802.11n-HT20

Frequency(MHz)

5785



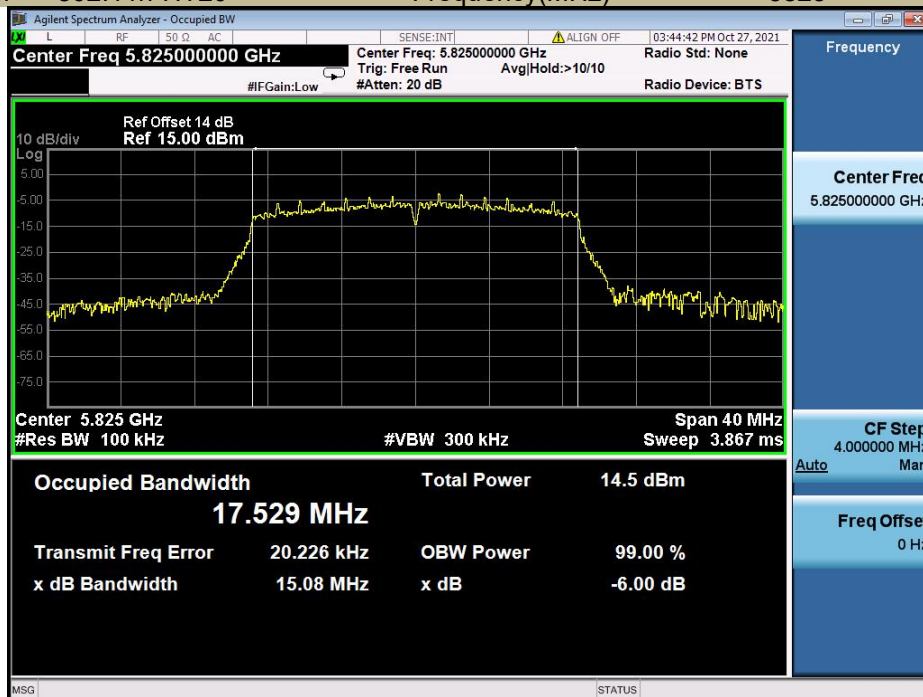
6db Emission Bandwidth

U-NII - 3

Test Model 802.11n-HT20

Frequency(MHz)

5825



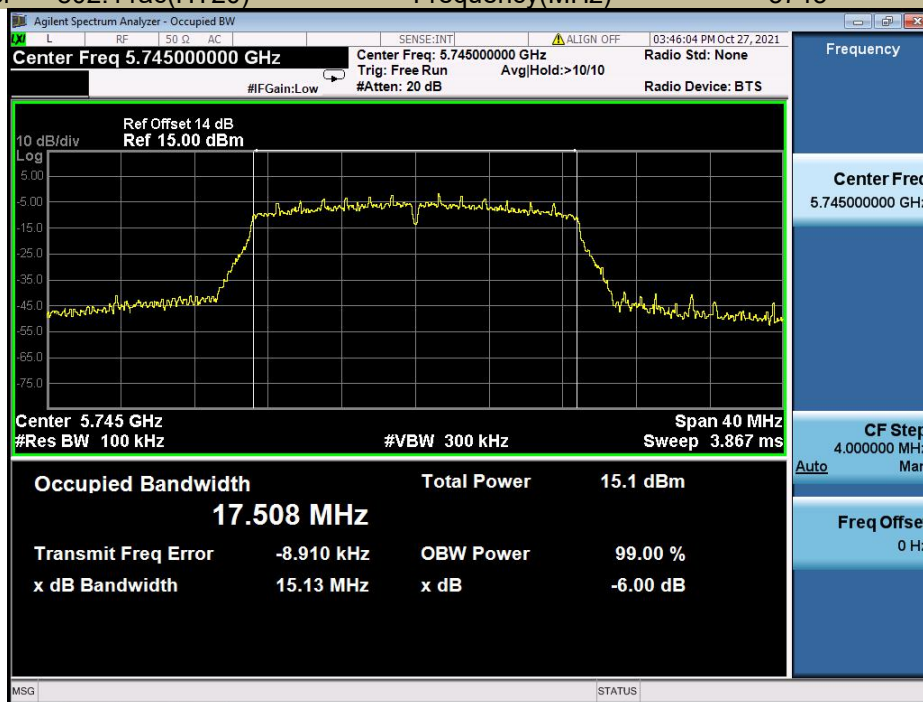
6db Emission Bandwidth

U-NII - 3

Test Model 802.11ac(HT20)

Frequency(MHz)

5745



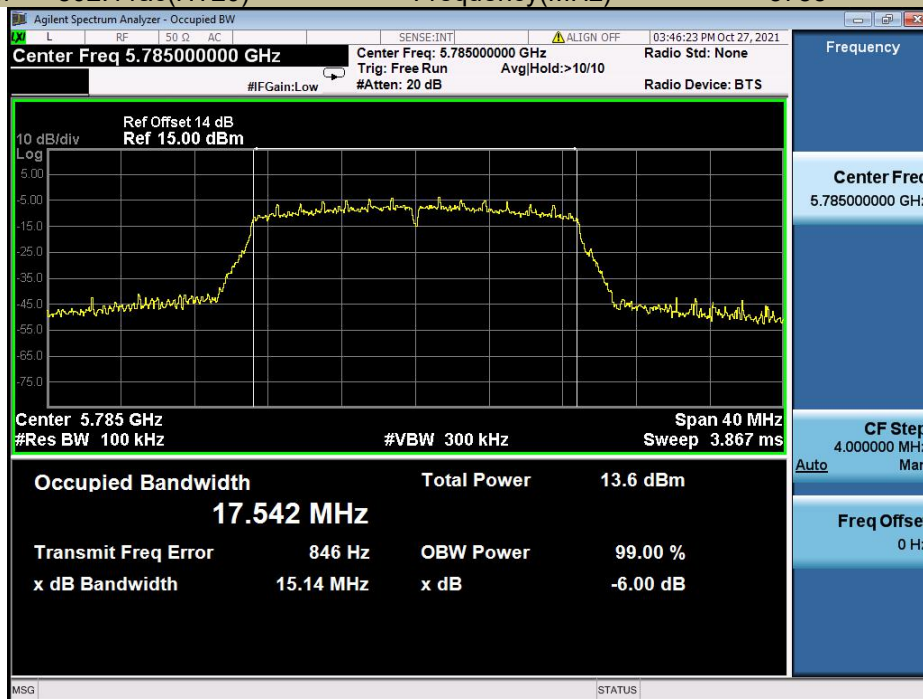
6db Emission Bandwidth

U-NII - 3

Test Model 802.11ac(HT20)

Frequency(MHz)

5785



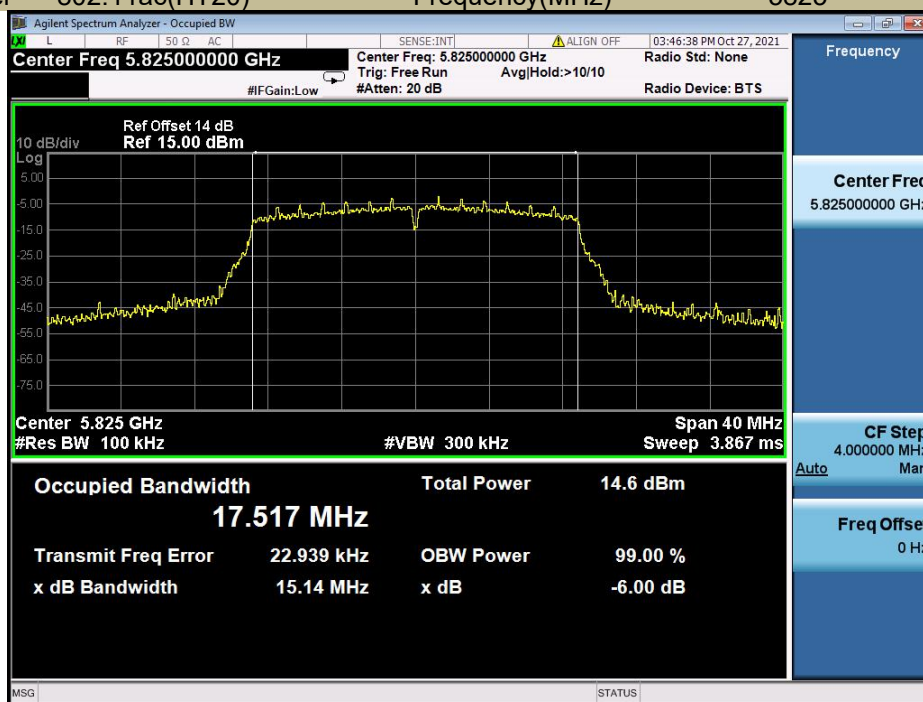
6db Emission Bandwidth

U-NII - 3

Test Model 802.11ac(HT20)

Frequency(MHz)

5825



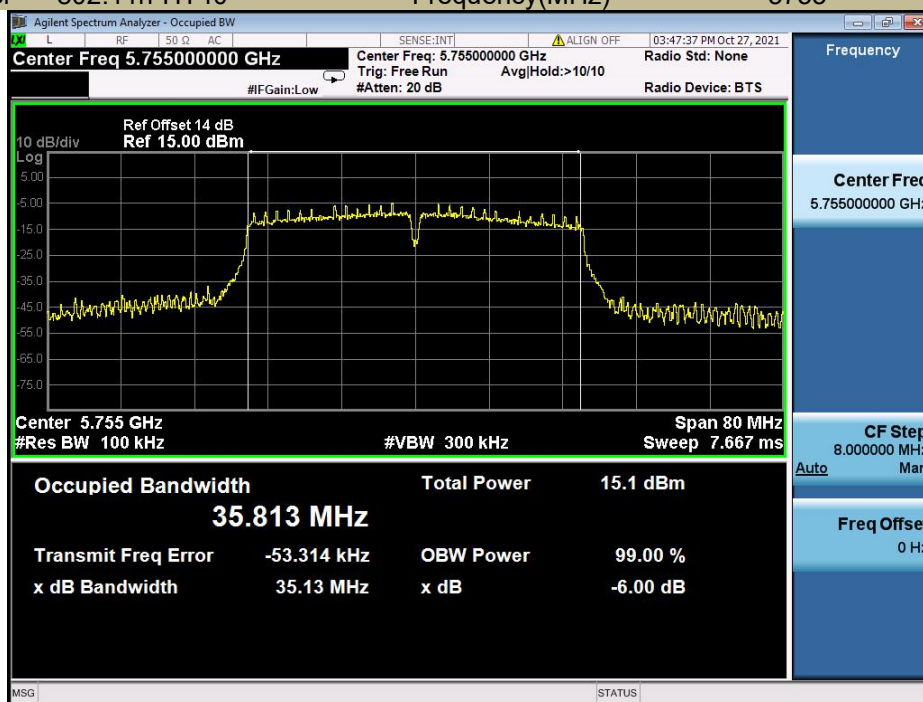
6db Emission Bandwidth

U-NII - 3

Test Model 802.11n-HT40

Frequency(MHz)

5755



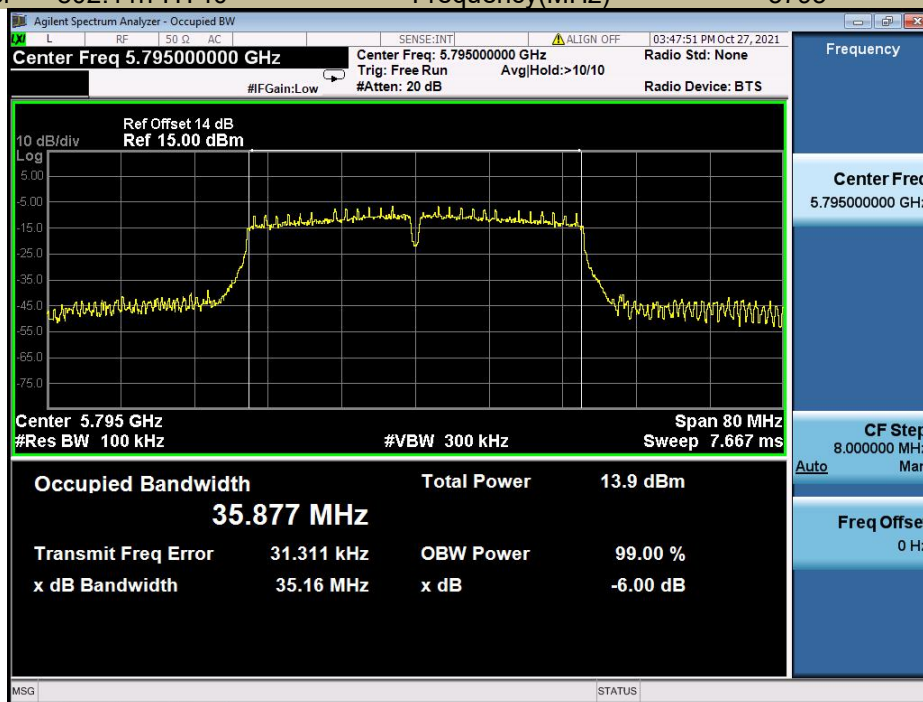
6db Emission Bandwidth

U-NII - 3

Test Model 802.11n-HT40

Frequency(MHz)

5795



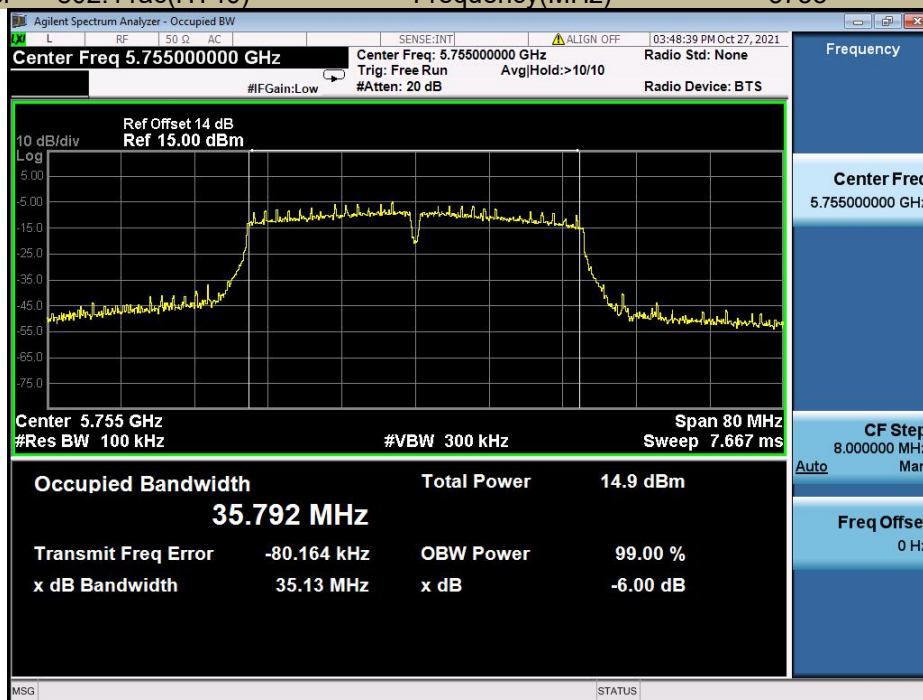
6db Emission Bandwidth

U-NII - 3

Test Model 802.11ac(HT40)

Frequency(MHz)

5755



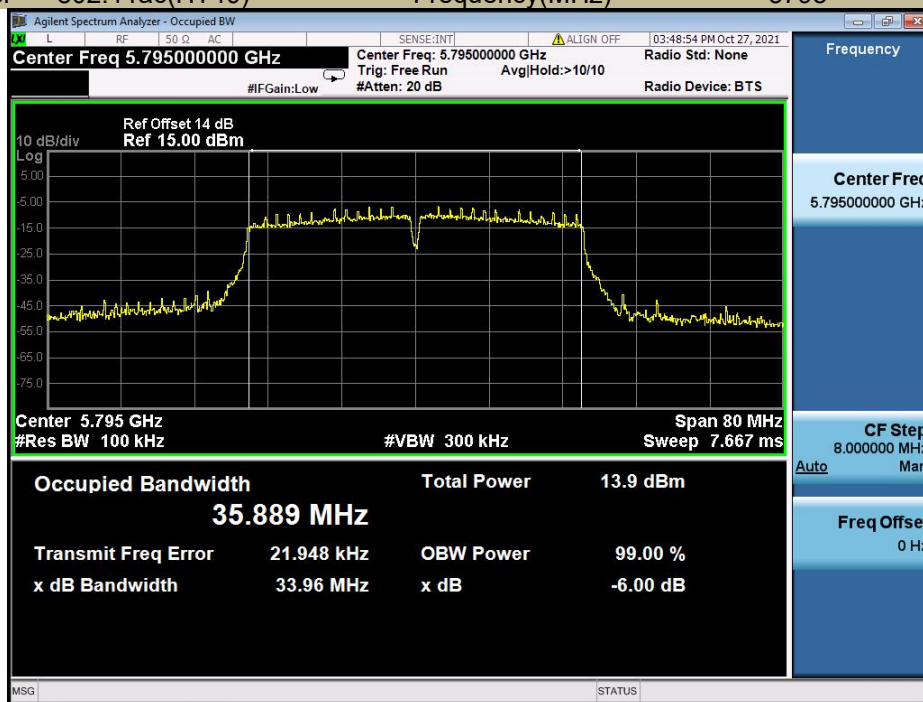
6db Emission Bandwidth

U-NII - 3

Test Model 802.11ac(HT40)

Frequency(MHz)

5795



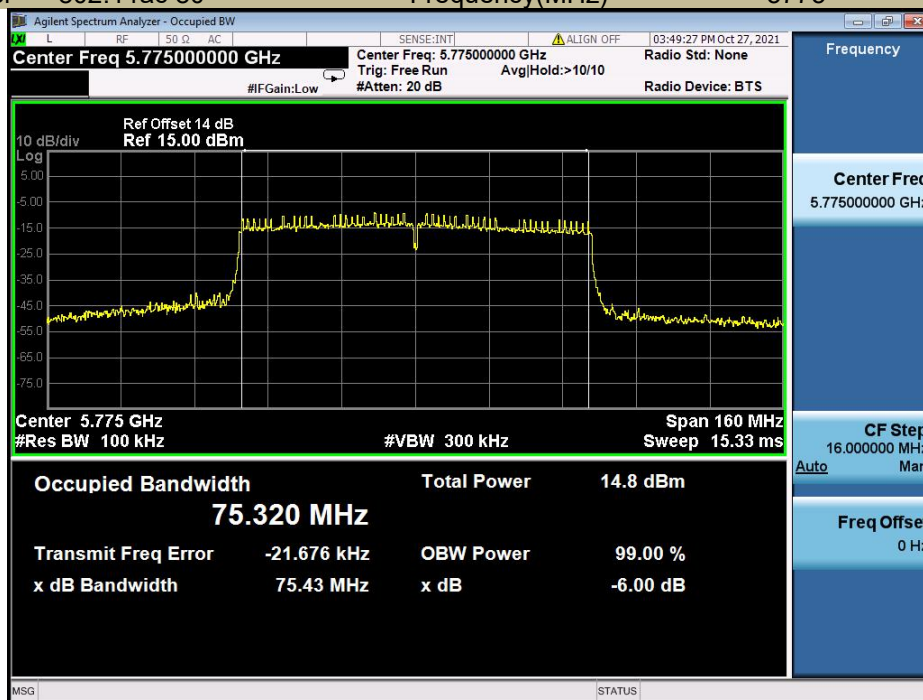
6db Emission Bandwidth

U-NII - 3

Test Model 802.11ac 80

Frequency(MHz)

5775



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	13.69	24	Pass
	CH40	5200	13.53	24	Pass
	CH48	5240	13.72	24	Pass

☒ 802.11n-HT20

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)	Limit (dBm)	Verdict
U-NII - 1	CH36	5180	13.22	24	Pass
	CH40	5200	13.01	24	Pass
	CH48	5240	13.11	24	Pass

☒ 802.11 ac (HT20)

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)	Limit (dBm)	Verdict
U-NII - 1	CH36	5180	13.32	24	Pass
	CH40	5200	12.89	24	Pass
	CH48	5240	13.02	24	Pass

☒ 802.11n-HT40

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)	Limit (dBm)	Verdict
U-NII - 1	CH38	5190	12.94	24	Pass
	CH46	5230	12.74	24	Pass

☒ 802.11 ac (HT40)

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)	Limit (dBm)	Verdict
U-NII - 1	CH38	5190	12.79	24	Pass
	CH46	5230	12.67	24	Pass

☒ 802.11 ac (HT80)

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)	Limit (dBm)	Verdict
U-NII - 1	CH42	5210	12.79	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	8.64	29.12	Pass
	CH157	5785	6.32	29.12	Pass
	CH165	5825	7.73	29.12	Pass

☒ 802.11n-HT20

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)	Limit (dBm)	Verdict
U-NII – 3	CH149	5745	8.00	29.12	Pass
	CH157	5785	6.23	29.12	Pass
	CH165	5825	7.65	29.12	Pass

☒ 802.11 ac (HT20)

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)	Limit (dBm)	Verdict
U-NII – 3	CH149	5745	8.05	29.12	Pass
	CH157	5785	6.22	29.12	Pass
	CH165	5825	7.53	29.12	Pass

☒ 802.11n-HT40

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)	Limit (dBm)	Verdict
U-NII – 3	CH151	5755	7.60	29.12	Pass
	CH159	5795	6.44	29.12	Pass

☒ 802.11 ac (HT40)

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)	Limit (dBm)	Verdict
U-NII – 3	CH151	5755	7.53	29.12	Pass
	CH159	5795	6.39	29.12	Pass

☒ 802.11 ac (HT80)

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)	Limit (dBm)	Verdict
U-NII – 3	CH155	5775	6.62	29.12	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	3.919	11
	5200	3.618	11
	5240	3.602	11
802.11n-HT20	5180	3.589	11
	5200	3.568	11
	5240	3.318	11
802.11ac(HT20)	5180	3.713	11
	5200	3.544	11
	5240	2.765	11
802.11n-HT40	5190	-0.111	11
	5230	-0.807	11
802.11ac(HT40)	5190	-0.276	11
	5230	-0.855	11
802.11ac(HT80)	5210	-4.101	11

Power Spectral Density
Test Model 802.11a

U-NII - 1
Frequency(MHz)

5180



Power Spectral Density
Test Model 802.11a

U-NII - 1
Frequency(MHz)

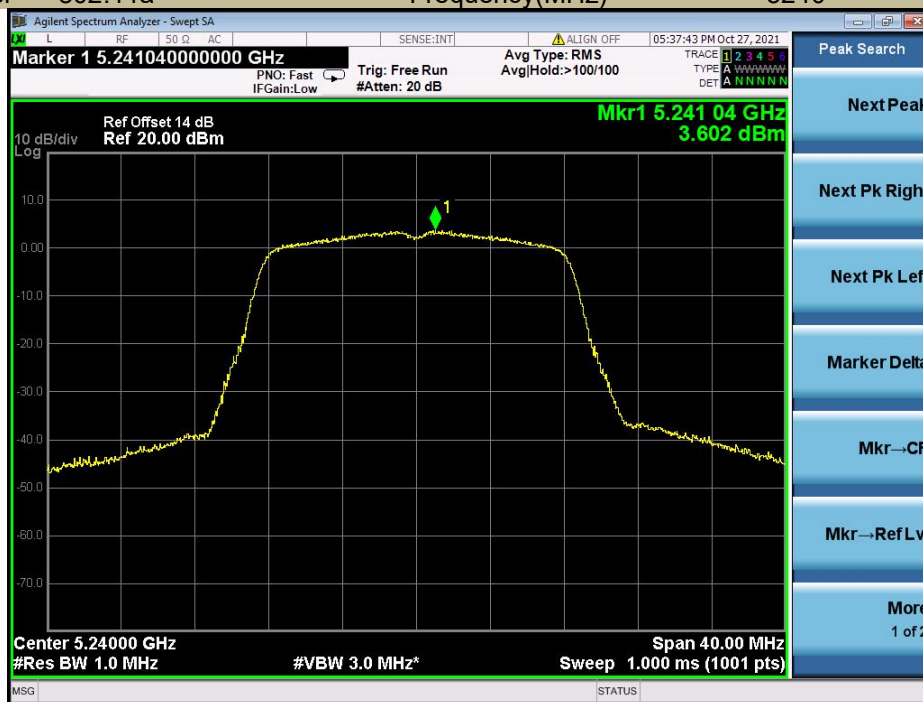
5200



Power Spectral Density
Test Model 802.11a

U-NII - 1
Frequency(MHz)

5240



Power Spectral Density
Test Model 802.11n-HT20

U-NII - 1
Frequency(MHz)

5180



Power Spectral Density
Test Model 802.11n-HT20

U-NII - 1
Frequency(MHz)

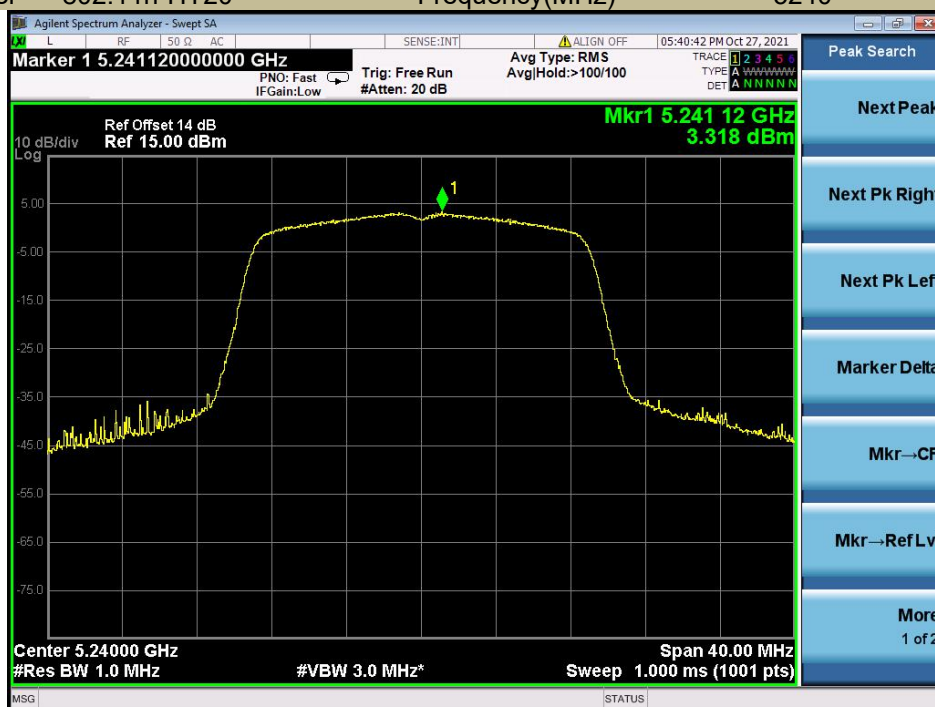
5200



Power Spectral Density
Test Model 802.11n-HT20

U-NII - 1
Frequency(MHz)

5240



Power Spectral Density
Test Model 802.11ac(HT20)

U-NII - 1
Frequency(MHz) 5180



Power Spectral Density
Test Model 802.11ac(HT20)

U-NII - 1
Frequency(MHz) 5200



Power Spectral Density

U-NII - 1

Test Model 802.11ac(HT20)

Frequency(MHz)

5240



Power Spectral Density

U-NII - 1

Test Model 802.11n-HT40

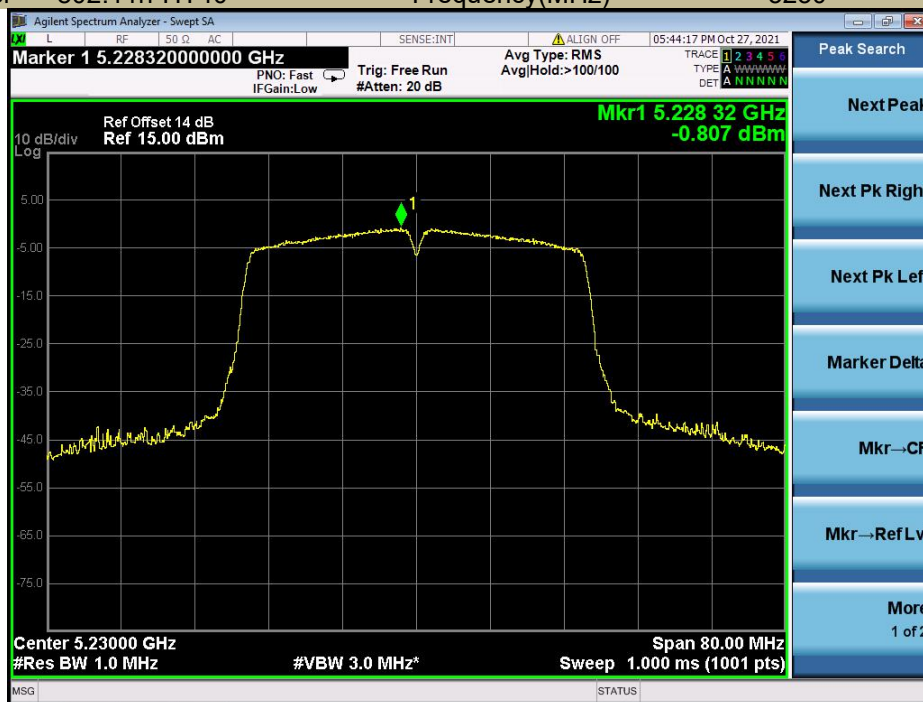
Frequency(MHz)

5190



Power Spectral Density
Test Model 802.11n-HT40

U-NII - 1
Frequency(MHz) 5230



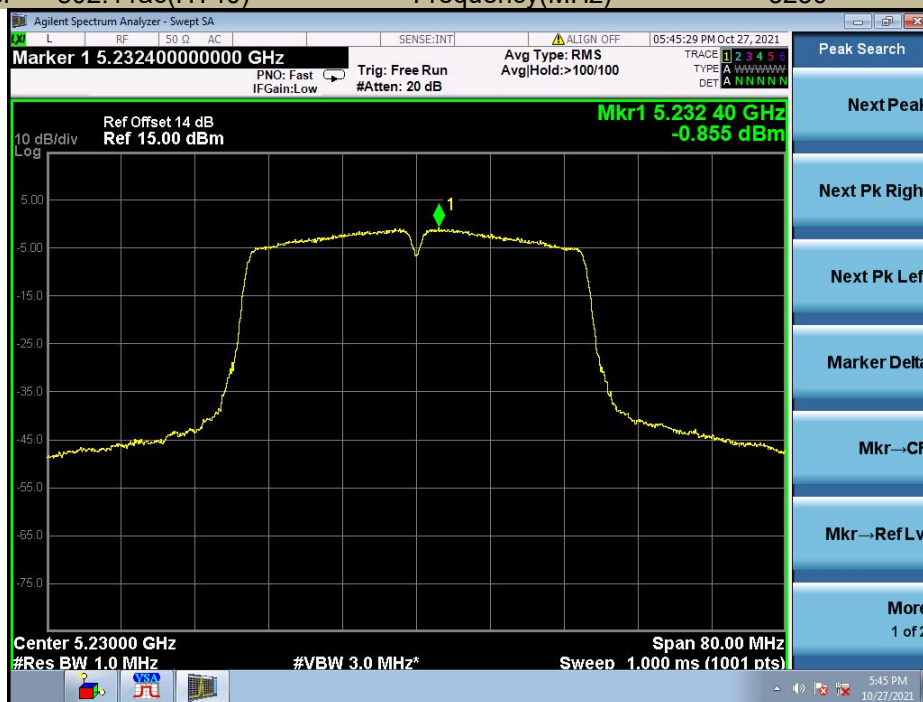
Power Spectral Density
Test Model 802.11ac(HT40)

U-NII - 1
Frequency(MHz) 5190



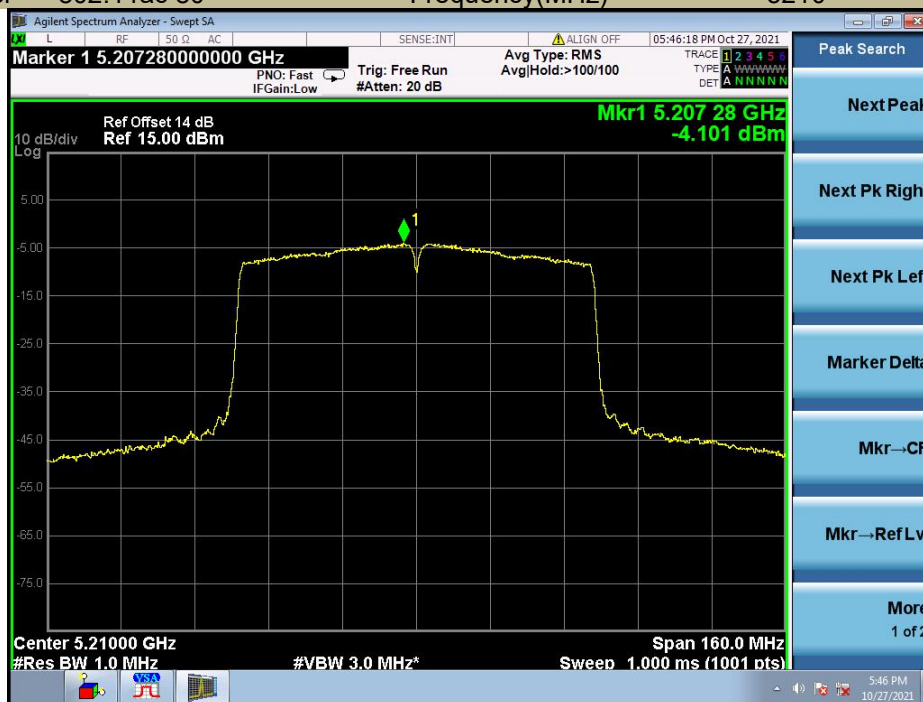
Power Spectral Density
Test Model 802.11ac(HT40)

U-NII - 1
Frequency(MHz) 5230



Power Spectral Density
Test Model 802.11ac 80

U-NII - 1
Frequency(MHz) 5210



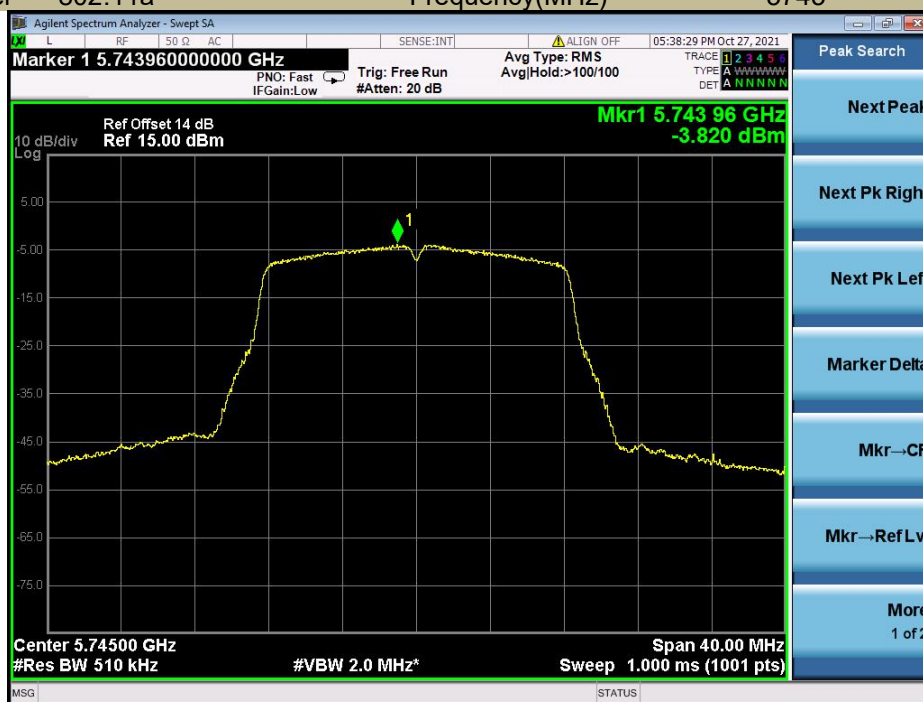
5725-5850MHz

Operating mode	Test Channel	Power Spectral Density dBm/500kHz	Limit (dBm/500kHz)
802.11a	5745	-3.820	29.12
	5785	-5.987	29.12
	5825	-4.450	29.12
802.11n-HT20	5745	-4.298	29.12
	5785	-6.232	29.12
	5825	-5.393	29.12
802.11ac(HT20)	5745	-4.574	29.12
	5785	-6.980	29.12
	5825	-5.906	29.12
802.11n-HT40	5755	-9.013	29.12
	5795	-10.413	29.12
802.11ac(HT40)	5755	-8.990	29.12
	5795	-10.136	29.12
802.11ac(HT80)	5775	-13.485	29.12

Power Spectral Density
Test Model 802.11a

U-NII - 3
Frequency(MHz)

5745



Power Spectral Density
Test Model 802.11a

U-NII - 3
Frequency(MHz)

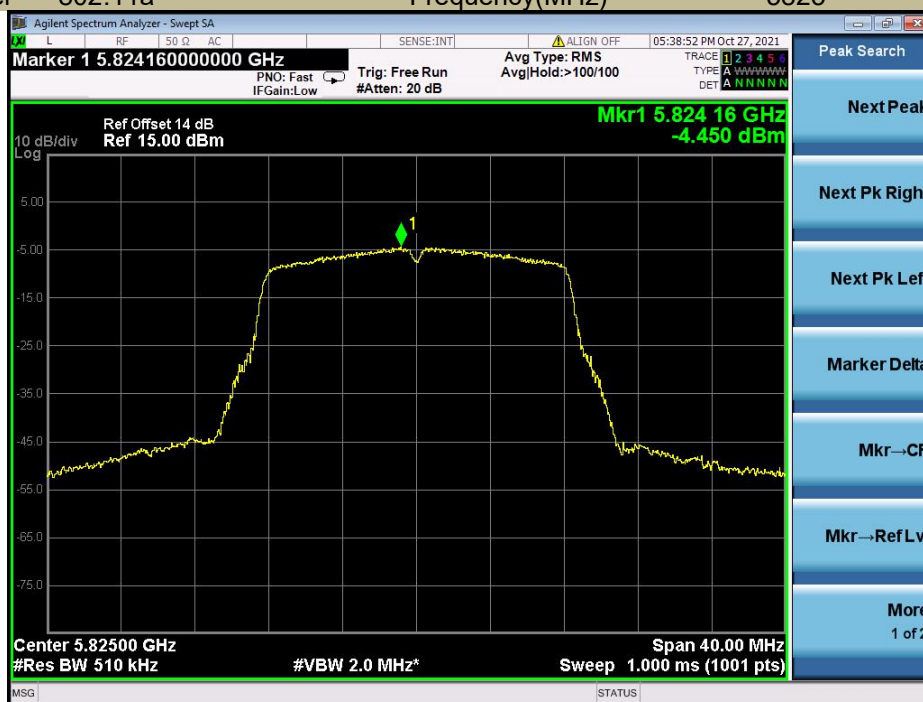
5785



Power Spectral Density
Test Model 802.11a

U-NII - 3
Frequency(MHz)

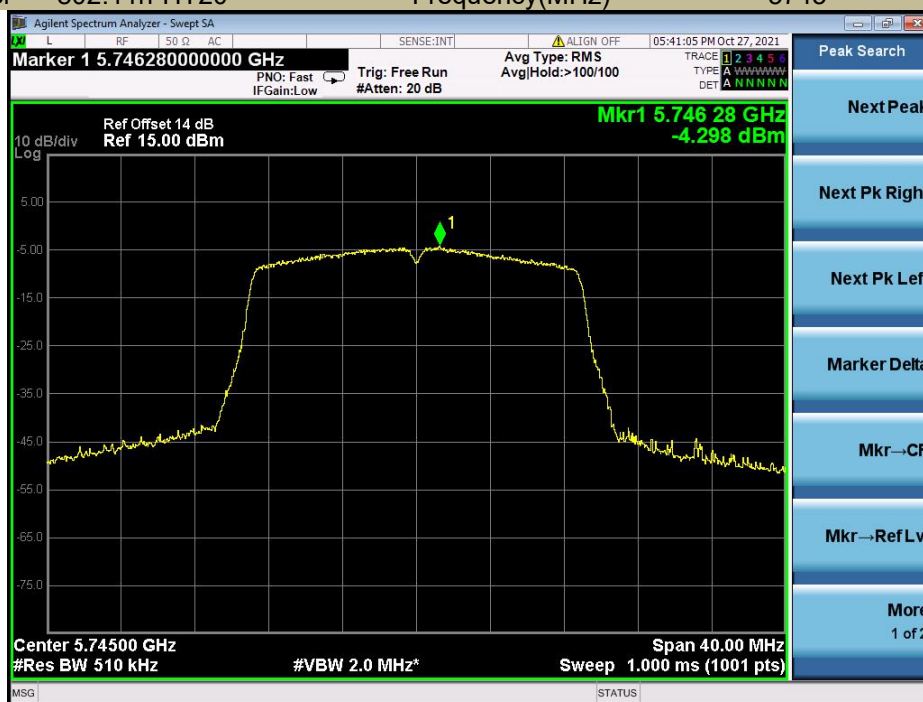
5825



Power Spectral Density
Test Model 802.11n-HT20

U-NII - 3
Frequency(MHz)

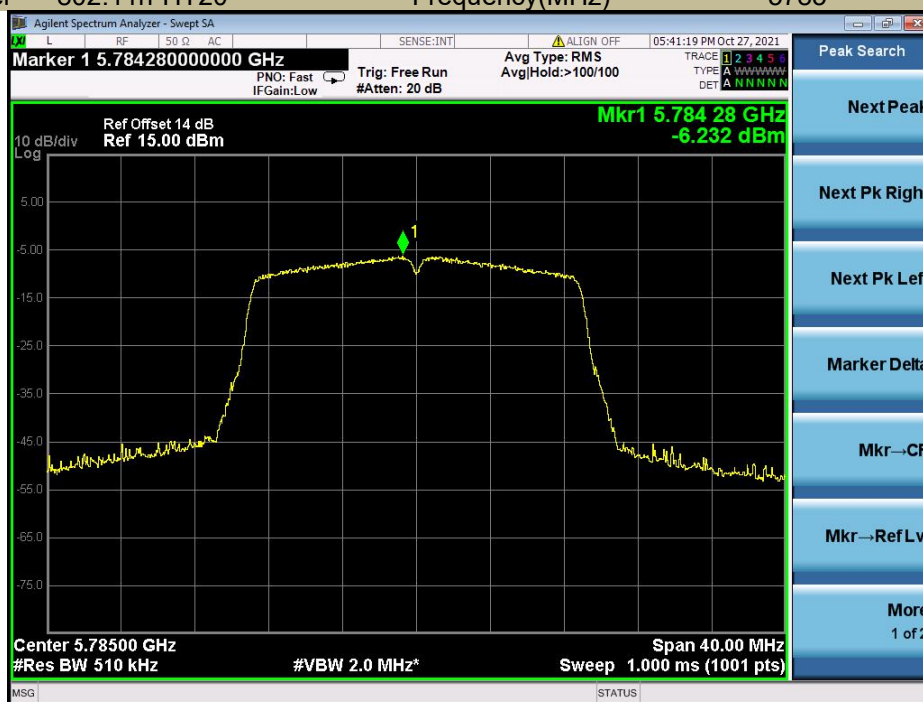
5745



Power Spectral Density
Test Model 802.11n-HT20

U-NII - 3
Frequency(MHz)

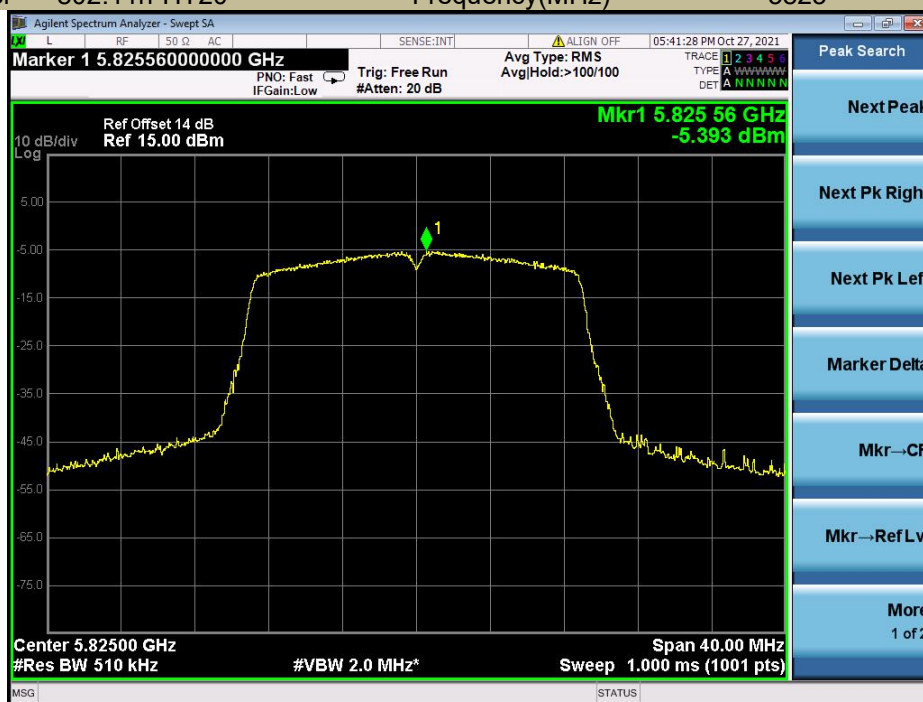
5785



Power Spectral Density
Test Model 802.11n-HT20

U-NII - 3
Frequency(MHz)

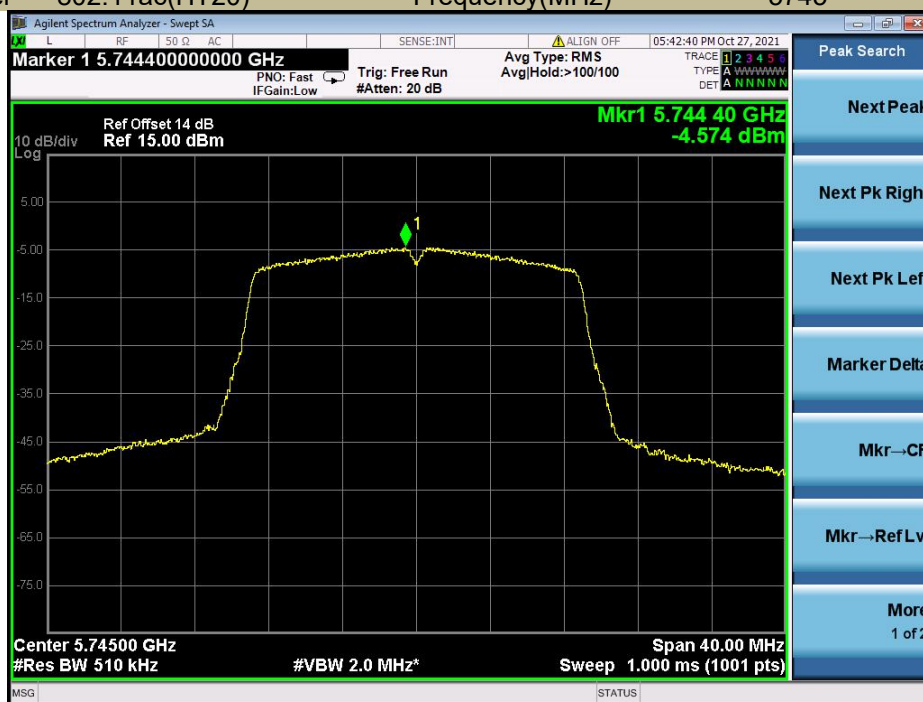
5825



Power Spectral Density
Test Model 802.11ac(HT20)

U-NII - 3
Frequency(MHz)

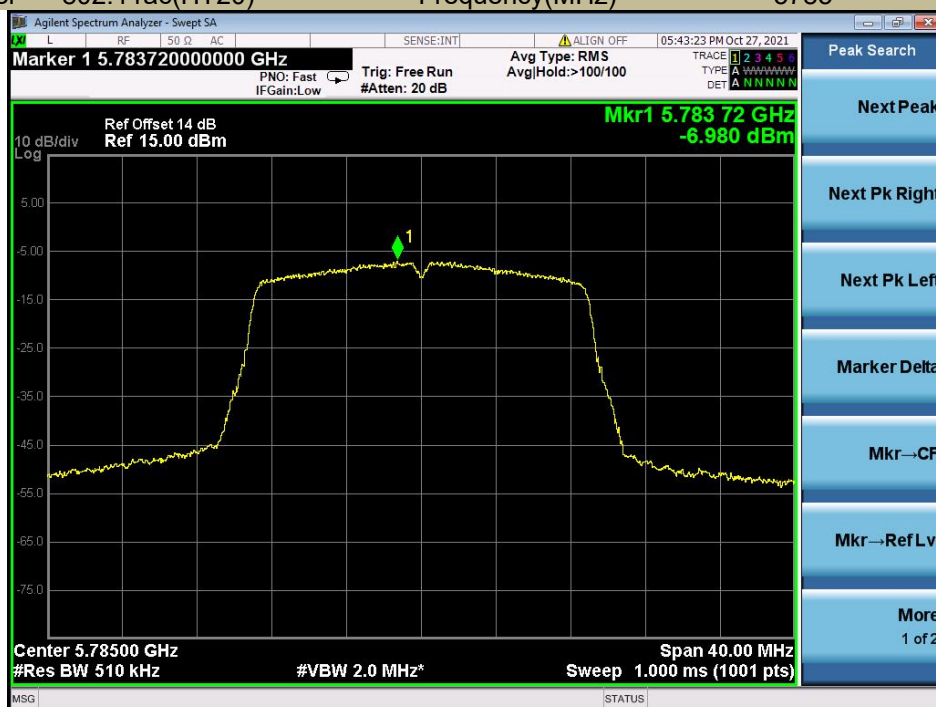
5745



Power Spectral Density
Test Model 802.11ac(HT20)

U-NII - 3
Frequency(MHz)

5785



Power Spectral Density

U-NII - 3

Test Model 802.11ac(HT20)

Frequency(MHz)

5825



Power Spectral Density

U-NII - 3

Test Model 802.11n-HT40

Frequency(MHz)

5755



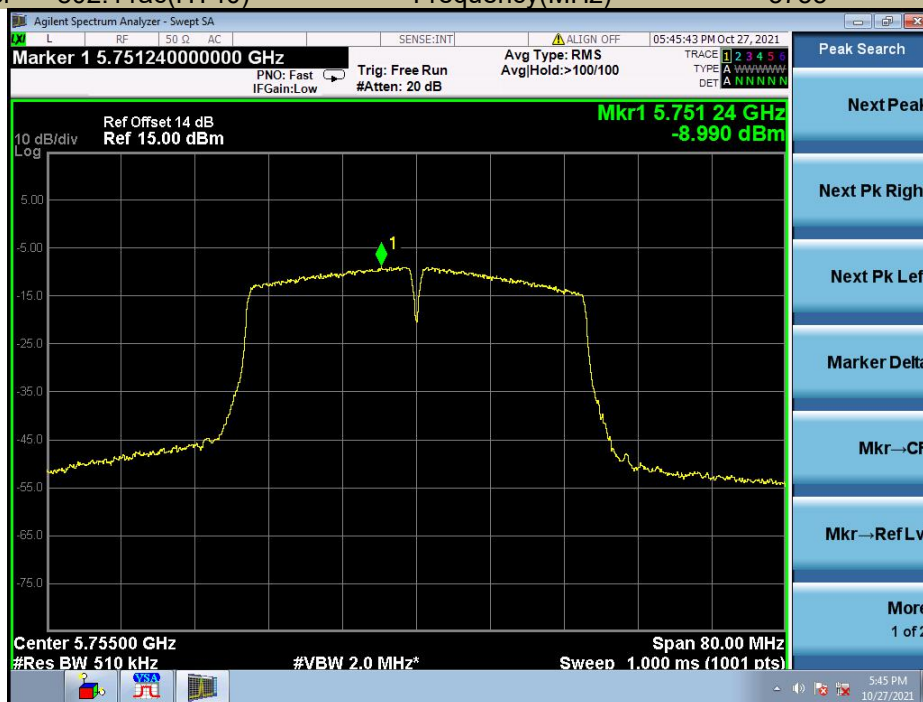
Power Spectral Density
Test Model 802.11n-HT40

U-NII - 3
Frequency(MHz) 5795



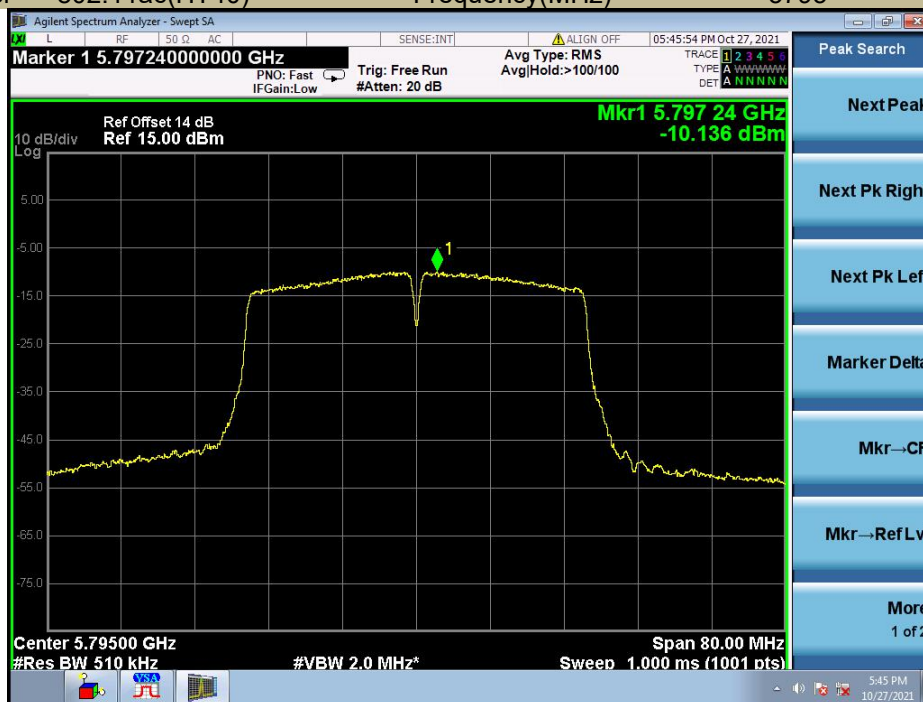
Power Spectral Density
Test Model 802.11ac(HT40)

U-NII - 3
Frequency(MHz) 5755



Power Spectral Density
Test Model 802.11ac(HT40)

U-NII - 3
Frequency(MHz) 5795



Power Spectral Density
Test Model 802.11ac 80

U-NII - 3
Frequency(MHz) 5775



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	0	5180.0001	0.1	Pass
	10	5180.0003	0.3	Pass
	20	5180.0002	0.2	Pass
	30	5180.0004	0.4	Pass
	40	5180.0002	0.2	Pass
	50	5180.0001	0.1	Pass
85% Vnom	25	5180.0001	0.1	Pass
115% Vnom	25	5180.0003	0.3	Pass

5200

Voltage(V)	Temp(°C)	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	0	5200.0003	0.3	Pass
	10	5200.0004	0.4	Pass
	20	5200.0002	0.2	Pass
	30	5200.0004	0.4	Pass
	40	5200.0001	0.1	Pass
	50	5200.0003	0.3	Pass
85% Vnom	25	5200.0001	0.4	Pass
115% Vnom	25	5200.0003	0.3	Pass

5240

Voltage(V)	Temp(°C)	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	0	5240.0002	0.2	Pass
	10	5240.0003	0.3	Pass
	20	5240.0002	0.2	Pass
	30	5240.0003	0.3	Pass
	40	5240.0002	0.2	Pass
	50	5240.0003	0.3	Pass
85% Vnom	25	5240.0001	0.1	Pass
115% Vnom	25	5240.0001	0.1	Pass

5190

Voltage(V)	Temp(°C)	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	0	5190.0001	0.1	Pass
	10	5190.0002	0.2	Pass
	20	5190.0001	0.1	Pass
	30	5190.0003	0.3	Pass
	40	5190.0002	0.2	Pass
	50	5190.0002	0.2	Pass
85% Vnom	25	5190.0001	0.1	Pass
115% Vnom	25	5190.0002	0.2	Pass

5230

Voltage(V)	Temp(°C)	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	0	5230.0004	0.4	Pass
	10	5230.0003	0.3	Pass
	20	5230.0004	0.4	Pass
	30	5230.0002	0.2	Pass
	40	5230.0002	0.2	Pass
	50	5230.0001	0.1	Pass
85% Vnom	25	5230.0001	0.1	Pass
115% Vnom	25	5230.0002	0.2	Pass

5210

Voltage(V)	Temp(°C)	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	0	5210.0002	0.2	Pass
	10	5210.0001	0.1	Pass
	20	5210.0003	0.3	Pass
	30	5210.0004	0.4	Pass
	40	5210.0002	0.2	Pass
	50	5210.0003	0.3	Pass
85% Vnom	25	5210.0001	0.1	Pass
115% Vnom	25	5210.0002	0.2	Pass

5745

Voltage(V)	Temp(°C)	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	0	5745.0001	0.1	Pass
	10	5745.0003	0.3	Pass
	20	5745.0003	0.3	Pass
	30	5745.0005	0.5	Pass
	40	5745.0004	0.4	Pass
	50	5745.0002	0.2	Pass
85% Vnom	25	5745.0001	0.1	Pass
115% Vnom	25	5745.0001	0.1	Pass

5785

Voltage(V)	Temp(°C)	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	0	5785.0003	0.3	Pass
	10	5785.0002	0.2	Pass
	20	5785.0002	0.2	Pass
	30	5785.0003	0.3	Pass
	40	5785.0004	0.4	Pass
	50	5785.0001	0.1	Pass
85% Vnom	25	5785.0001	0.1	Pass
115% Vnom	25	5785.0002	0.2	Pass

5825

Voltage(V)	Temp(°C)	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	0	5825.0002	0.2	Pass
	10	5825.0003	0.3	Pass
	20	5825.0004	0.4	Pass
	30	5825.0001	0.1	Pass
	40	5825.0002	0.2	Pass
	50	5825.0001	0.1	Pass
85% Vnom	25	5825.0001	0.1	Pass
115% Vnom	25	5825.0002	0.2	Pass

5755

Voltage(V)	Temp(°C)	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	0	5755.0001	0.1	Pass
	10	5755.0002	0.2	Pass
	20	5755.0004	0.4	Pass
	30	5755.0003	0.3	Pass
	40	5755.0001	0.1	Pass
	50	5755.0005	0.5	Pass
85% Vnom	25	5755.0001	0.1	Pass
115% Vnom	25	5755.0001	0.1	Pass

5795

Voltage(V)	Temp(°C)	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	0	5795.0003	0.3	Pass
	10	5795.0001	0.1	Pass
	20	5795.0004	0.4	Pass
	30	5795.0001	0.1	Pass
	40	5795.0002	0.2	Pass
	50	5795.0003	0.3	Pass
85% Vnom	25	5795.0001	0.1	Pass
115% Vnom	25	5795.0001	0.1	Pass

5775

Voltage(V)	Temp(°C)	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	0	5775.0003	0.3	Pass
	10	5775.0001	0.1	Pass
	20	5775.0003	0.3	Pass
	30	5775.0001	0.1	Pass
	40	5775.0002	0.2	Pass
	50	5775.0005	0.5	Pass
85% Vnom	25	5775.0001	0.1	Pass
115% Vnom	25	5775.0004	0.4	Pass

8.5 UNDESIRABLE RADIATED SPURIOUS EMISSION

8.5.1 Applicable Standard

According to FCC Part 15.407 (b)
According to 789033 D02 Section II(G)

8.5.2 Conformance Limit

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 dBm/MHz.

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 -27 dBm/MHz.

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 -27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band: 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 band edge.

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.

Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209 The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table 15.209(a):

Restricted Frequency(MHz)	Field Strength (μV/m)	Field Strength (dBμV/m)	Measurement Distance
0.009-0.490	2400/F(KHz)	20 log (uV/m)	300
0.490-1.705	24000/F(KHz)	20 log (uV/m)	30
1.705-30	30	29.5	30
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

The provisions of §15.205 apply to intentional radiators operating under this section, 15.205 Restricted bands of operation

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
10.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(2)
13.36-13.41			

Remark: 1. Emission level in dBuV/m=20 log (uV/m)