



Test Model 802.11n-HT20 Frequency(MHz) 5825 Image: Agient Spectrum Analyzer - Occupied BW SENSE: INT ALIGN OFF 03:44:42 PM Oct 27, 2021 Image: Agient Spectrum Analyzer - Occupied BW Center Freq: 5.825000000 GHz Frequent Radio OFF 03:44:42 PM Oct 27, 2021 Image: Center Freq: 5.825000000 GHz Center Freq: 5.825000000 GHz Frequent Radio Device: BTS Image: Center Freq: 5.825000000 GHz Trig: Free Run Avg Hold:>10/10 Radio Device: BTS Image: Center Freq: 5.825000000 GHz Center Freq: 5.82500000 Center 5.8250000 Center 5.82500000 Image: Center Freq: 5.825000000 GHz Center freq: 5.825000000 Center 5.82500000 Center 5.825000000 Image: Center 5.825000000 Center freq: 5.8250000000 Span 40 MHz Span 40 MHz Image: Center 5.825000000 Span 40 MHz Span 40 MHz Span 40 MHz	r Freq 0 GHz
Agilent Spectrum Analyzer - Occupied BW Image: Center Freq 5.825000000 GHz Center Freq 5.825000000 GHz Crefter Freq 5.825000000 GHz Trig: Free Run Avg Hold:>10/10 Radio Device: BTS Ref Offset 14 dB 10 B/div Ref 15.00 dBm 600 1500 250	cy r Freq 0 GHz
Ind BBM Center	r Freq 10 GHz
250 450 450 550 550 550 550 550 5	
Center 5.825 GHz Span 40 MHz CF	
**************************************	Step 00 MHz
Occupied Bandwidth Total Power 14.5 dBm Auto	Man Offset
Transmit Freq Error20.226 kHzOBW Power99.00 %x dB Bandwidth15.08 MHzx dB-6.00 dB	0 Hz
MSG STATUS	

















Emission I	Bandwidth		U-N	I - 3		
st Model	802.11ac(HT40)		Frequency	(MHz)	5	755
	Agilent Spectrum Analyzer - Occupied BW L RF 50 Ω AC enter Freq 5.755000000	GHz Cente #IFGain:Low #Atter	SENSE:INT r Freq: 5.755000000 GH; Free Run Avg Ho n: 20 dB	ALIGN OFF	03:48:39 PM Oct 27, 2021 Radio Std: None Radio Device: BTS	Frequency
10 Lo -5.t -1.t	dB/div Ref 15.00 dBm 9 00 00 00	p. J. John halo for ful all social	hog overledeelleftellenerendeel	-h-n-l		Center Freq 5.755000000 GHz
-25 -35 -46 -55				- Ly way way way way way way way way way wa	avellandressandressallingentulas.pr	
-75 Ce #F	enter 5.755 GHz Res BW 100 kHz	#	VBW 300 kHz		Span 80 MHz Sweep 7.667 ms	CF Step 8.000000 MHz Auto Man
	Occupied Bandwidth 35	792 MHz	Total Power	14.9	dBm	Freq Offset
	Transmit Freq Error	-80.164 kHz	OBW Power	99.	00 %	0 Hz
	x dB Bandwidth	35.13 MHz	x dB	-6.0	0 dB	
MSC	à			STATUS		









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 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

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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



⊠ 802.11a mode							
Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)	Limit (dBm)	Verdict		
	CH36	5180	13.69	24	Pass		
U-NII - 1	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		
	CH36	5180	13.22	24	Pass		
U-NII - 1	CH40	5200	13.01	24	Pass		
	CH48	5240	13.11	24	Pass		

🛛 802.11 ac (HT	20)
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Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)	Limit (dBm)	Verdict
	CH36	5180	13.32	24	Pass
U-NII - 1	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		



⊠ 802.11a mode							
Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)	Limit (dBm)	Verdict		
	CH149	5745	8.64	29.12	Pass		
U-NII – 3	CH157	5785	6.32	29.12	Pass		
	CH165	5825	7.73	29.12	Pass		

5725-5850MHz:

802.11n-HT20 Channel Channel Freq. Band Conducted Output Limit Verdict (MHz) Number Power(dBm) (dBm) CH149 5745 8.00 29.12 Pass U-NII – 3 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		
	CH149	5745	8.05	29.12	Pass		
U-NII – 3	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		
	CH151	5755	7.60	29.12	Pass		
0-INII – 3	CH159	5795	6.44	29.12	Pass		

⊠ 802.11 ac (HT40)							
Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)	Limit (dBm)	Verdict		
	CH151	5755	7.53	29.12	Pass		
U-NII – 3 –	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,

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(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 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

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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 10log(500kHz/RBW) to the measured result, whereas RBW (< 500 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 10log(1MHz/RBW) to the measured result, whereas RBW (< 1 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 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)
	5180	3.919	11
802.11a	5200	3.618	11
	5240	3.602	11
	5180	3.589	11
802.11n-HT20	5200	3.568	11
	5240	3.318	11
	5180	3.713	11
802.11ac(HT20)	5200	3.544	11
	5240	2.765	11
902 11p UT40	5190	-0.111	11
оо <u>2.111-</u> п140	5230	-0.807	11
	5190	-0.276	11
ουz.πac(Π140)	5230	-0.855	11
802.11ac(HT80)	5210	-4.101	11











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Power Spectral Density U-NII - 1 802.11ac(HT40) 5190 Test Model Frequency(MHz) nt Spec Aug Type: RMS Avg Hold:>100/100 05:45:09 PM Oct 27, 2021 SENSE:INT Peak Search Marker 1 5.188080000000 GHz Trig: Free Run #Atten: 20 dB PNO: Fast Next Peak Mkr1 5.188 08 GHz -0.276 dBm Ref Offset 14 dB Ref 15.00 dBm 10 dB/div Next Pk Right Next Pk Left Marker Delta Mkr→CF Mkr→RefLvl More 1 of 2 Center 5.19000 GHz #Res BW 1.0 MHz Span 80.00 MHz Sweep 1.000 ms (1001 pts) #VBW 3.0 MHz* STATUS

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10	52	U-NII - 1	Frequ	nsity	ver Spectral Den
	02		Tioqe	pectrum Analyzer - Swept SA	Agilent Spec
Peak Search	05:46:18 PM Oct 27, 2021 TRACE 1 2 3 4 5 6 TYPE A WWWWW	Avg Type: RMS AvgHold:>100/100		RF 50 Ω AC 1 5.207280000000 GH2	Marker 1
Next Peak			ain:Low #Atten: 20 dB	IFGa	
	-4.101 dBm	MKF		Ref Offset 14 dB Ref 15.00 dBm	10 dB/div
Next Pk Right					5.00
-			♦ ¹		5.00
Next Pk Left		the second second second		for the second sec	-5,00
					-15.0
Marker Delta					-25.0
					-35.0
Mkr→CF	hand and and service and had service			wanterstand	-45.0
					-55.0
Mkr→RefLvl					-65.0
More					-75.0
1 of 2	Span 160.0 MHz			5.21000 GHz	Center 5.2
5:46 PM	.000 ms (1001 pts)	Sweep 1.	#VBW 3.0 MHz*	V 1.0 MHz	#Res BW

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5725-5850MHz

Operating mode	Test Channel	Power Spectral Density dBm/500kHz	Limit (dBm/500kHz)
	5745	-3.820	29.12
802.11a	5785	-5.987	29.12
	5825	-4.450	29.12
	5745	-4.298	29.12
802.11n-HT20	5785	-6.232	29.12
	5825	-5.393	29.12
	5745	-4.574	29.12
802.11ac(HT20)	5785	-6.980	29.12
	5825	-5.906	29.12
902 11p HT40	5755	-9.013	29.12
002.111-H140	5795	-10.413	29.12
902 11cc/UT40)	5755	-8.990	29.12
ου <u>2.11ac(</u> Π140)	5795	-10.136	29.12
802.11ac(HT80)	5775	-13.485	29.12

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Power Spectral Density U-NII - 3 802.11ac(HT40) Test Model Frequency(MHz) 5755 nt Spec Aug Type: RMS Avg Hold:>100/100 05:45:43 PM Oct 27, 2021 SENSE:INT Peak Search Marker 1 5.751240000000 GHz Trig: Free Run #Atten: 20 dB TYPE PNO: Fast G Next Peak Mkr1 5.751 24 GHz -8.990 dBm Ref Offset 14 dB Ref 15.00 dBm 10 dB/div Next Pk Right 1 Next Pk Left Marker Delta Mkr→CF Mkr→RefLvl More Center 5.75500 GHz #Res BW 510 kHz 1 of 2 Span 80.00 MHz Sweep 1.000 ms (1001 pts) #VBW 2.0 MHz* 👍 📆 间 o 😼 🙀

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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(℃)	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
	0	5180.0001	0.1	Pass
	10	5180.0003	0.3	Pass
Vnom	20	5180.0002	0.2	Pass
VIIOIII	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

Voltage(V)	Temp(℃)	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
	0	5200.0003	0.3	Pass
	10	5200.0004	0.4	Pass
Vnom	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(℃)	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
	0	5240.0002	0.2	Pass
	10	5240.0003	0.3	Pass
Vnom	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

Voltage(V)	Temp(℃)	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
	0	5190.0001	0.1	Pass
	10	5190.0002	0.2	Pass
Vnom	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(℃)	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
	0	5230.0004	0.4	Pass
	10	5230.0003	0.3	Pass
Vnom	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(℃)	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
	0	5210.0002	0.2	Pass
	10	5210.0001	0.1	Pass
Vnom	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

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Voltage(V)	Temp(℃)	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(℃)	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
			1	

5825

Temp(℃)	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
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
25	5825.0001	0.1	Pass
25	5825.0002	0.2	Pass
	Temp(℃) 0 10 20 30 40 50 25 25 25	Temp(°C)Test Frequency (MHz)05825.0002105825.0003205825.0004305825.0001405825.0002505825.0001255825.0001255825.0002	Temp(°C)Test Frequency (MHz)Max. Deviation (KHz)05825.00020.2105825.00030.3205825.00040.4305825.00010.1405825.00020.2505825.00010.1255825.00010.1255825.00020.2

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Voltage(V)	Temp(℃)		IVIAX. Deviation	Verdict
	0	5755.0001	0.1	Pass
Vnom	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(℃)	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(℃)	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

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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	Field Strength (µV/m)	Field Strength	Measurement
Frequency(MHz)		(dBµV/m)	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

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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)