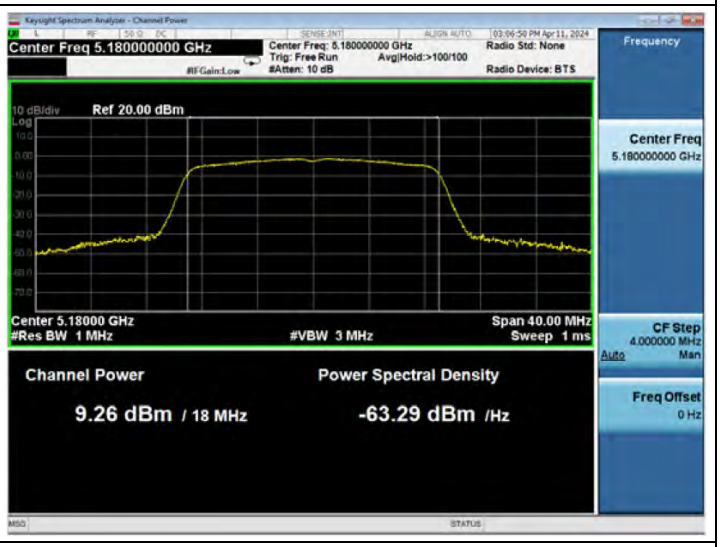
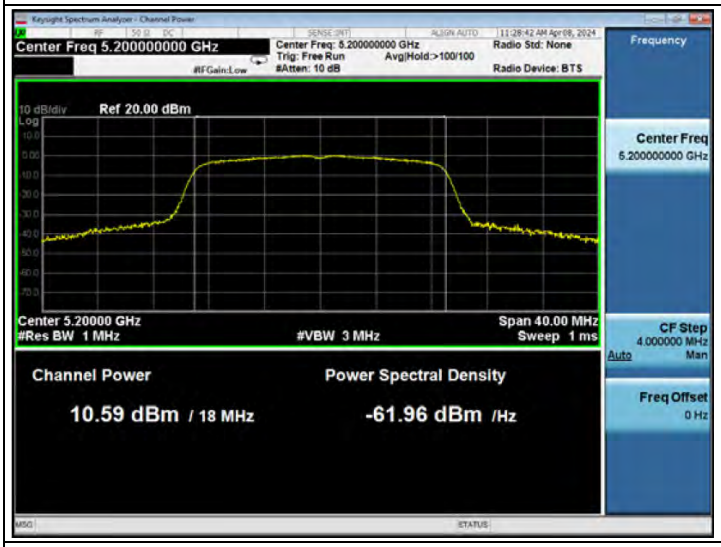
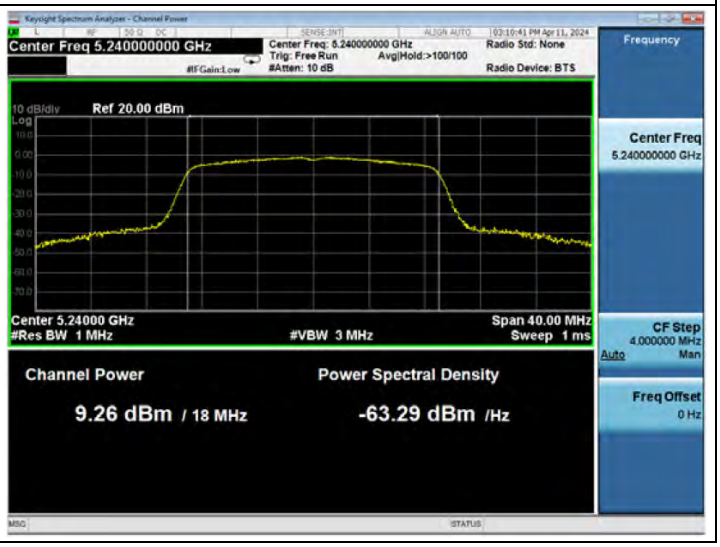
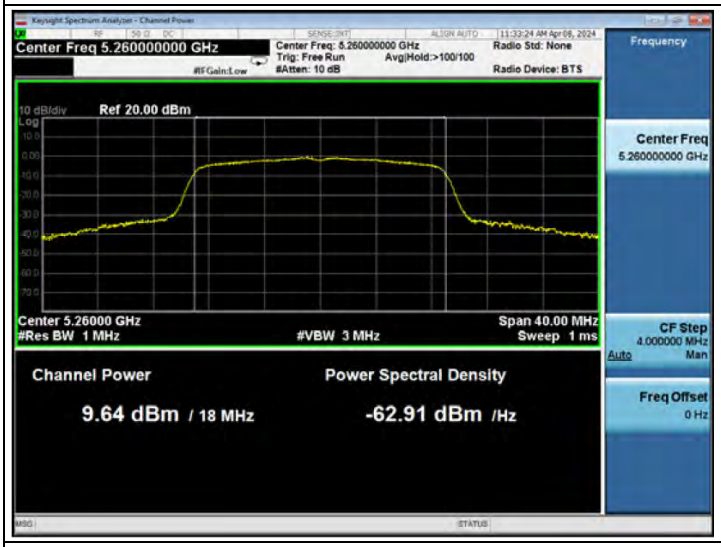
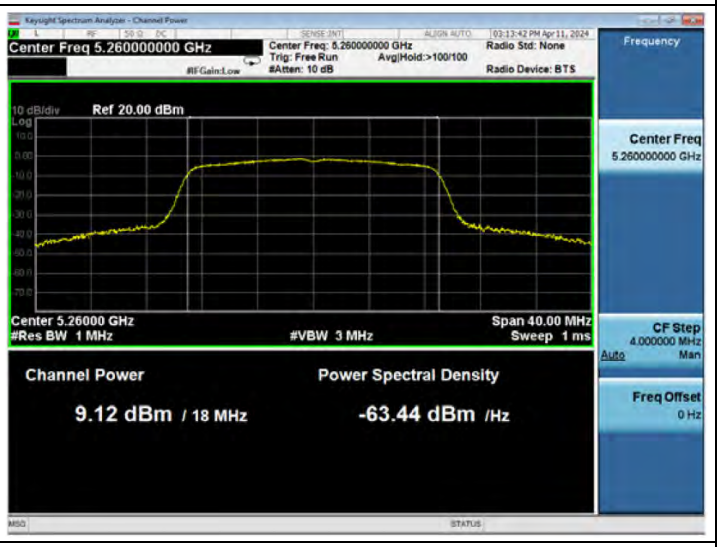
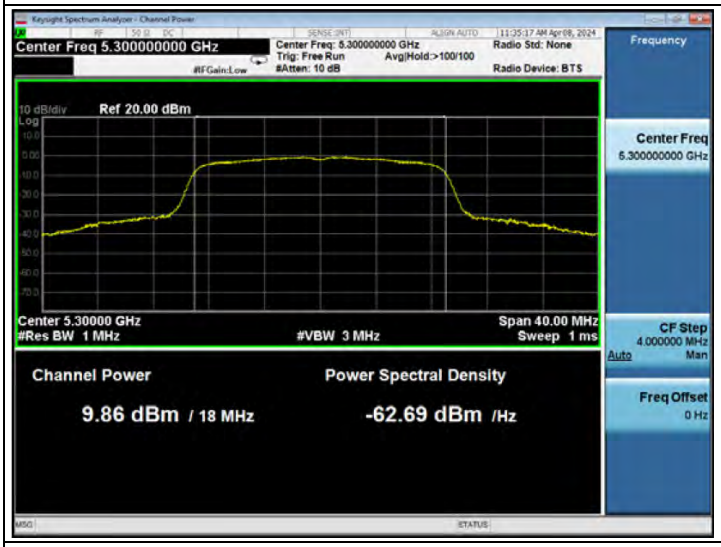
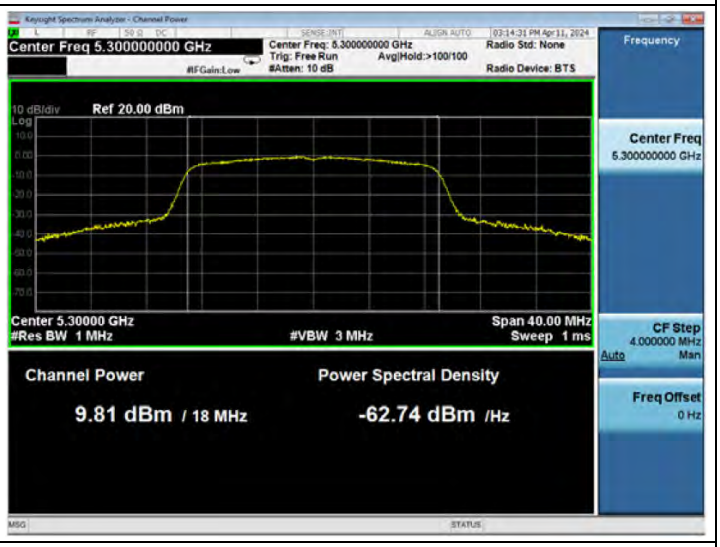
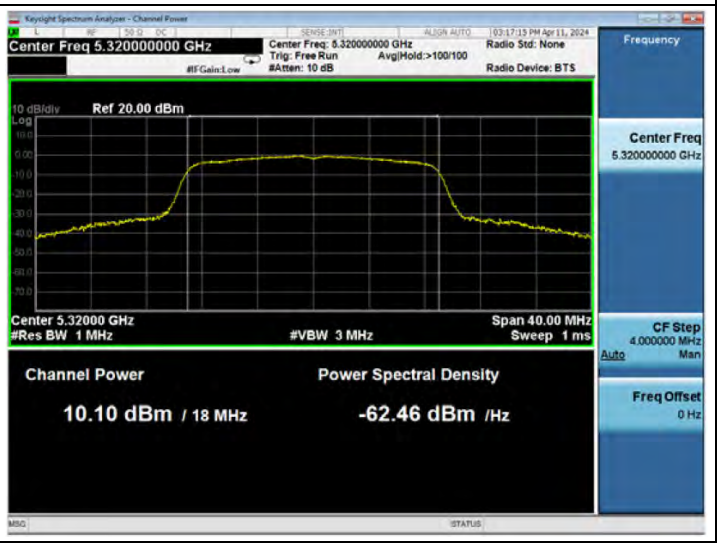
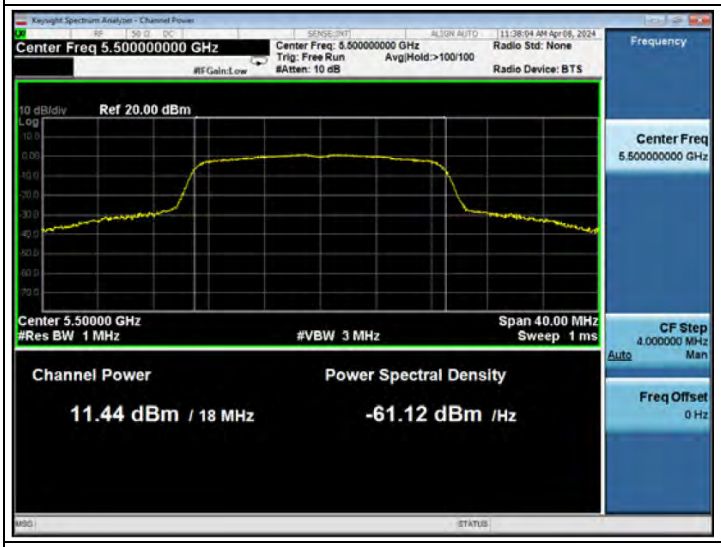
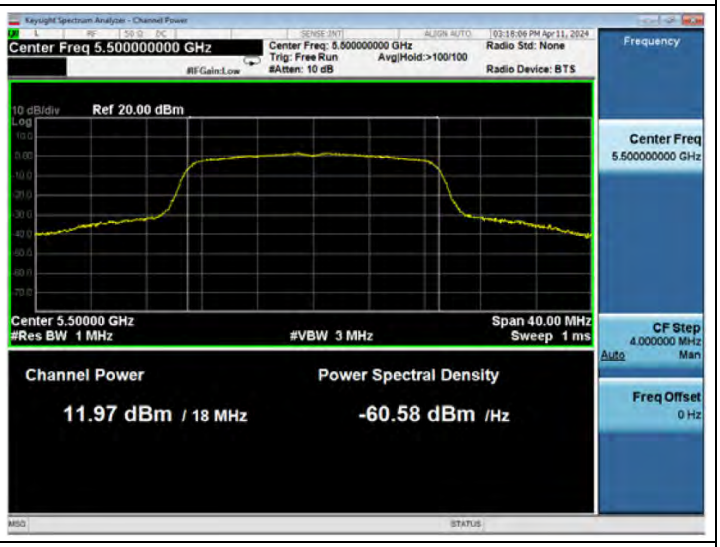
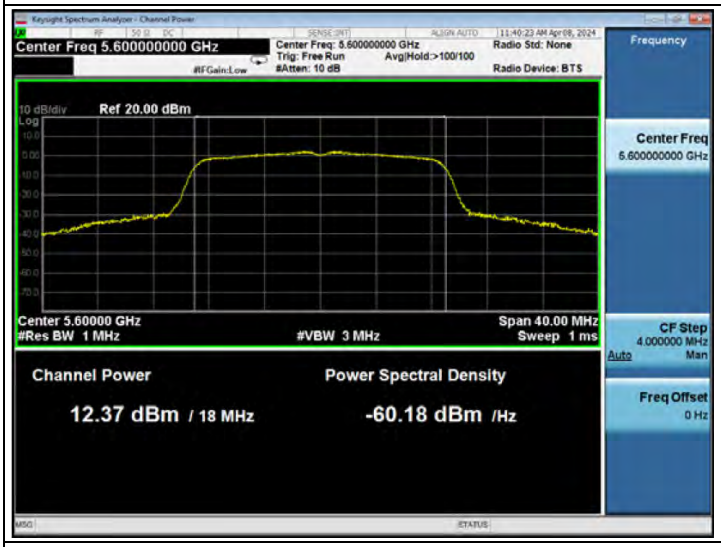
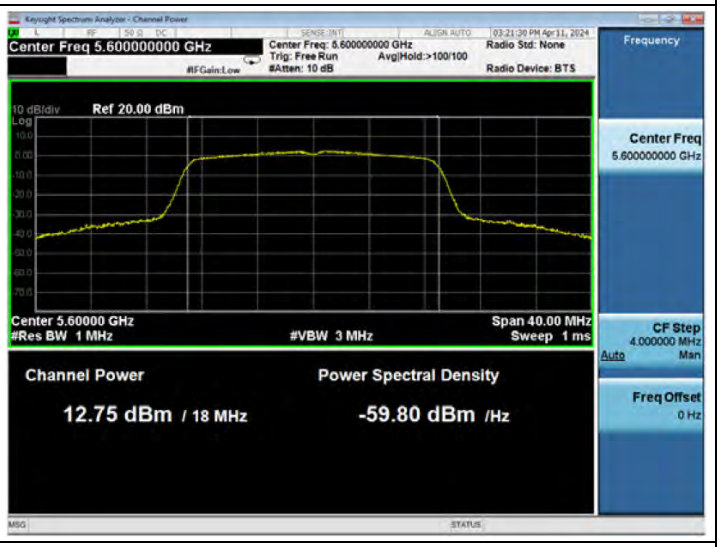
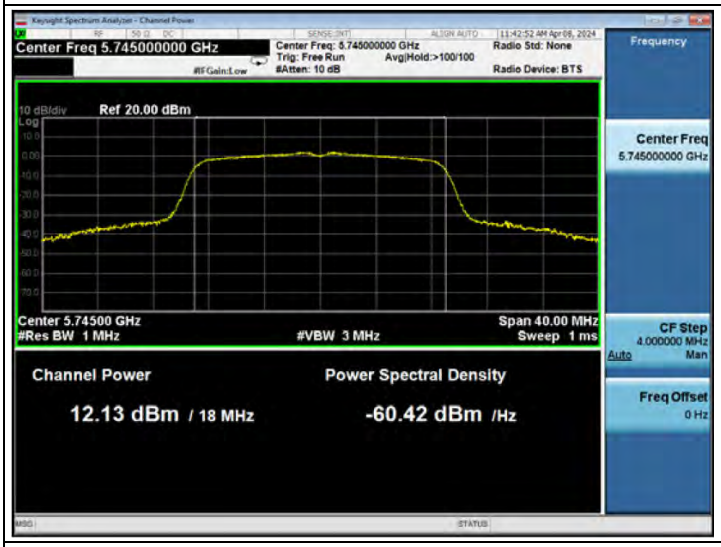
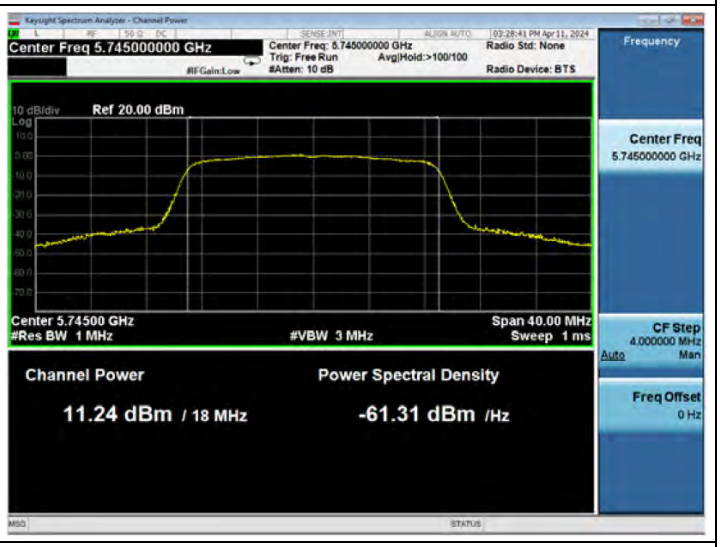
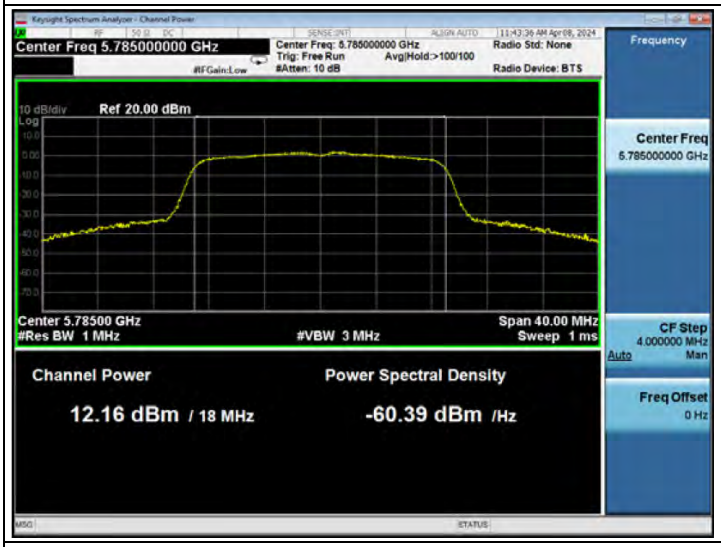
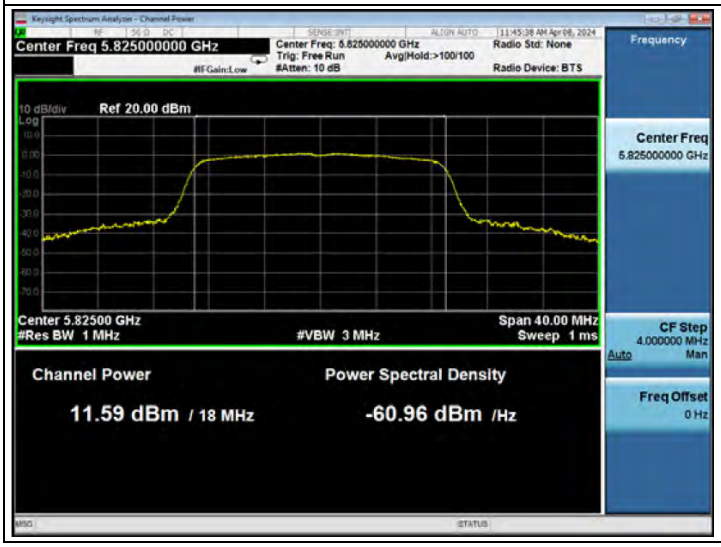
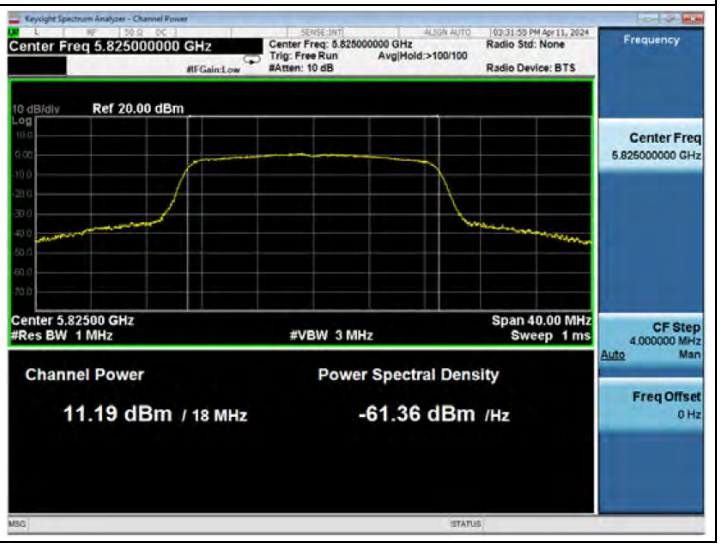
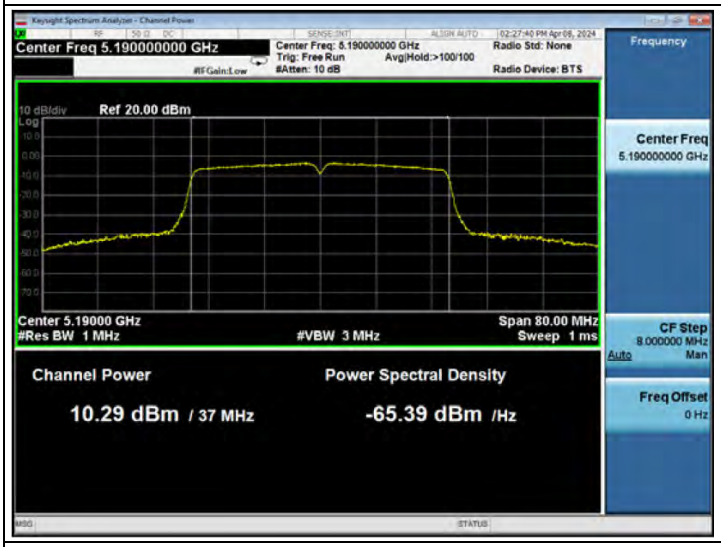
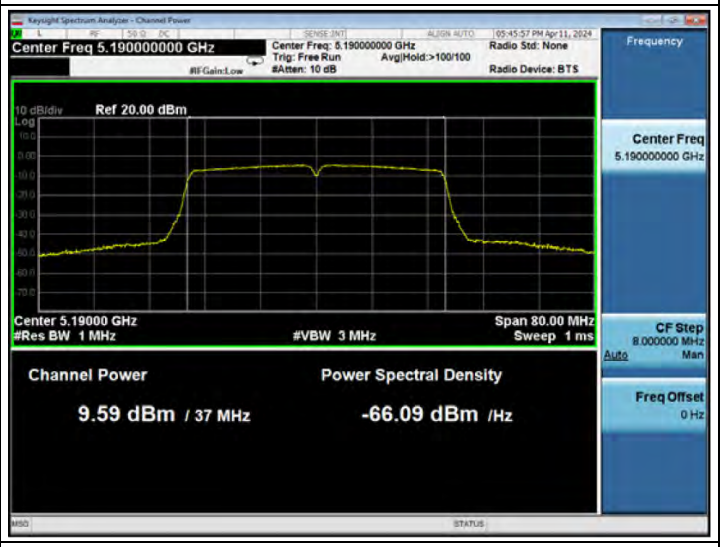
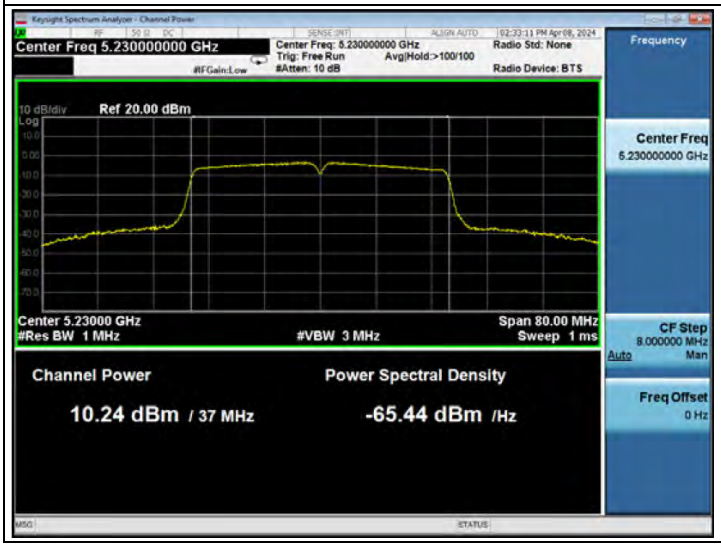
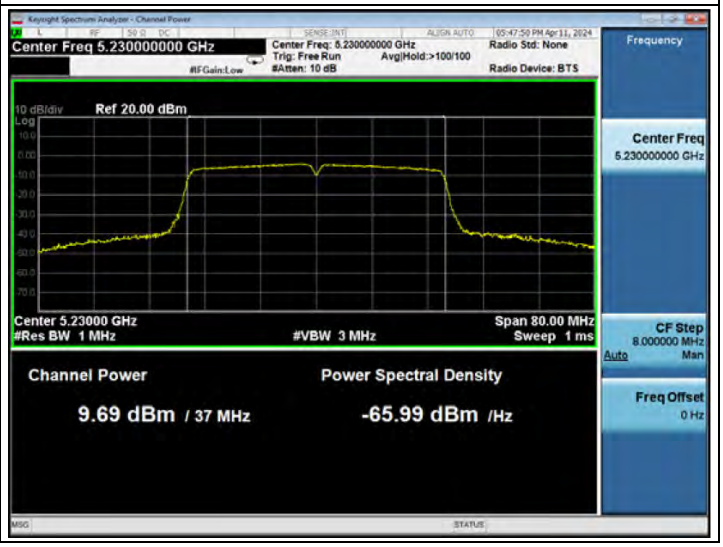
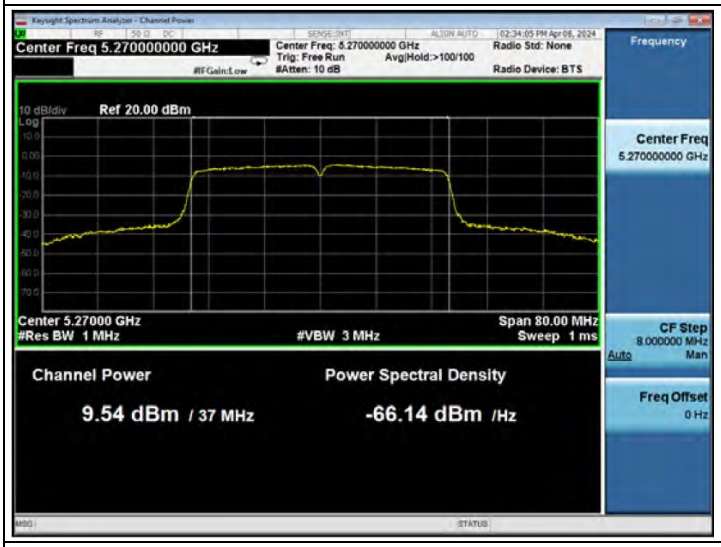
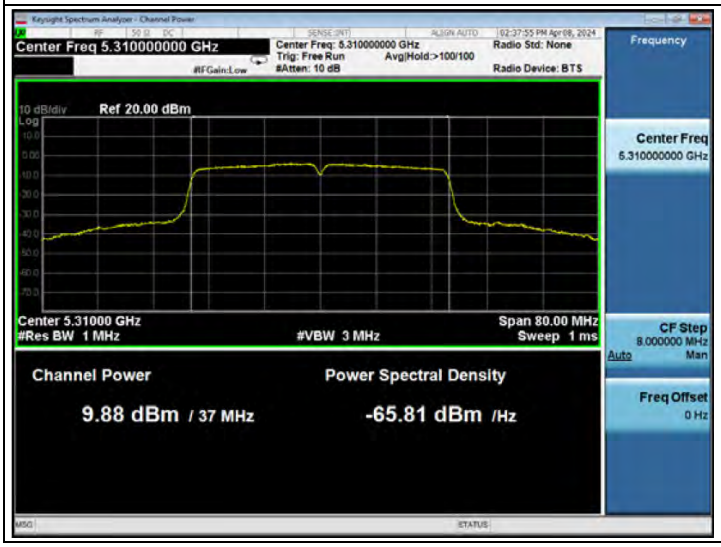
802.11ac20	
Band-UNII-1	
CNF2	**CNF3**
CH5180	CH5180
	
CH5200	CH5200
	
CH5240	CH5240
	

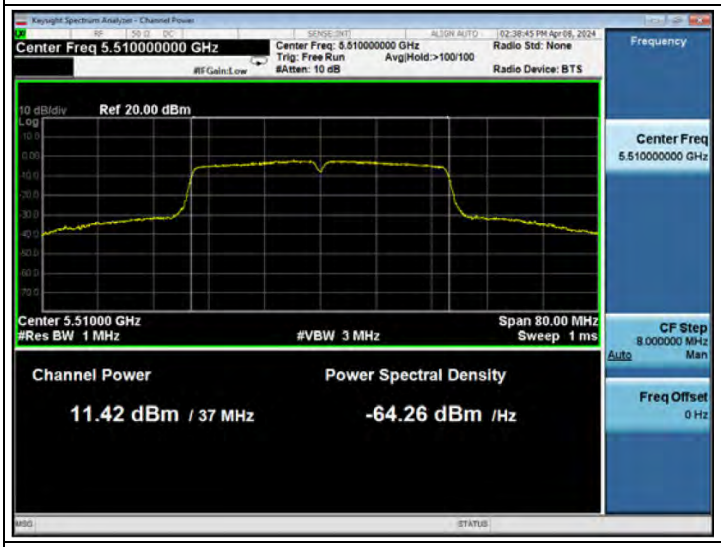
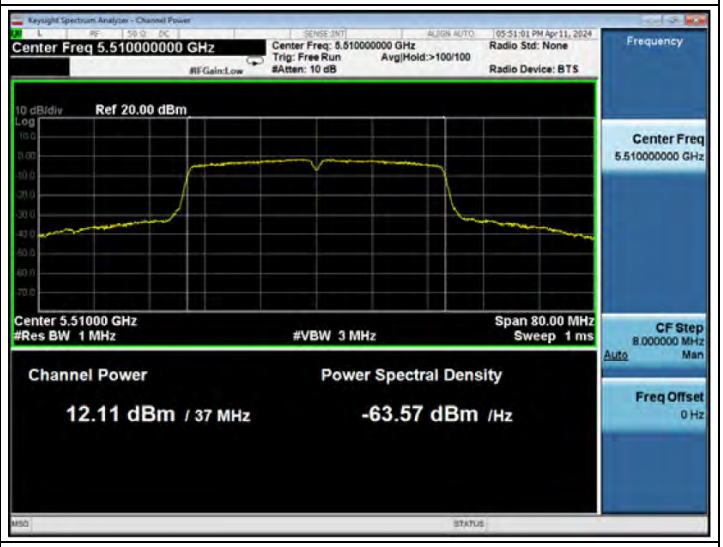
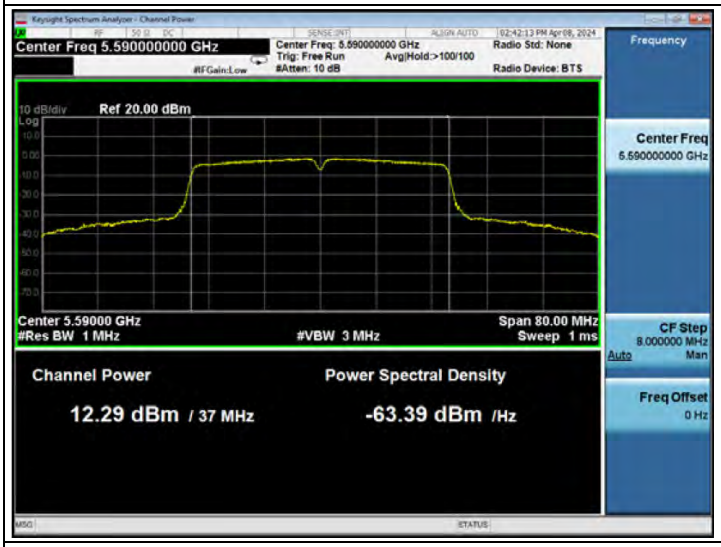
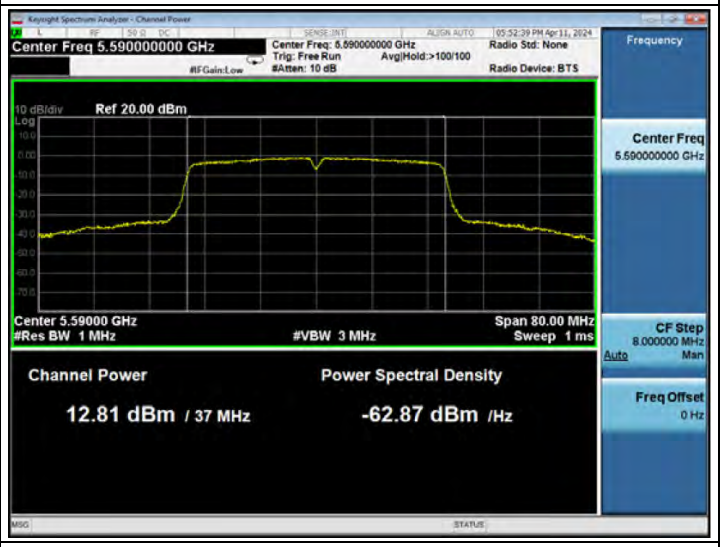
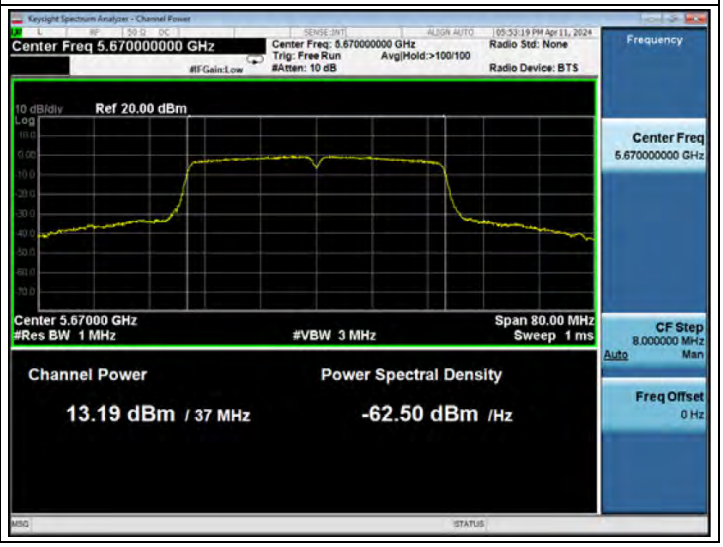
802.11ac20	
Band-UNII-2A	
CNF2	**CNF3**
CH5260	CH5260
	
CH5300	CH5300
	
CH5320	CH5320
	

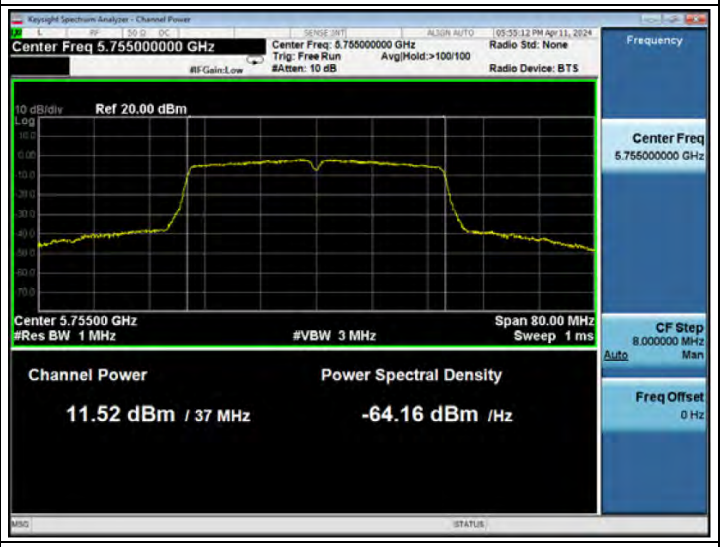
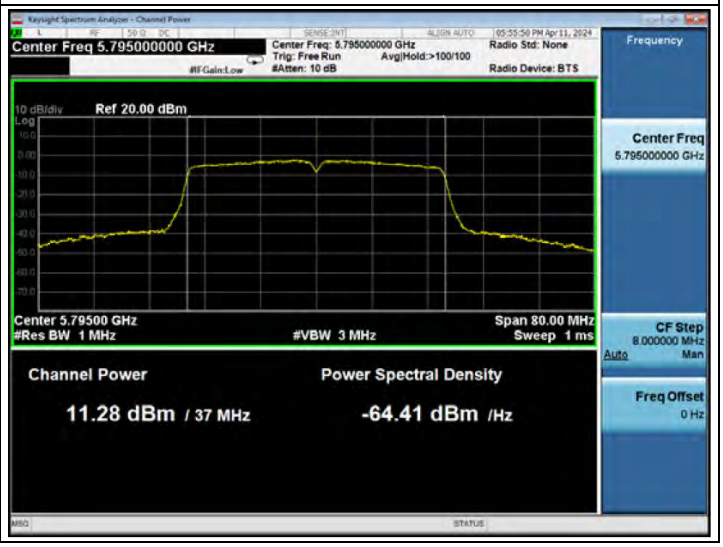
802.11ac20	
Band-UNII-2C	
CNF2	**CNF3**
CH5500	CH5500
	
CH5600	CH5600
	
CH5700	CH5700
	

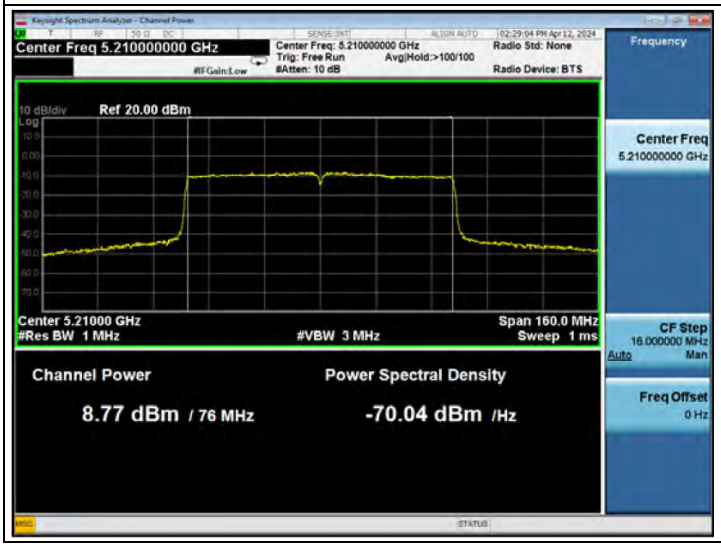
802.11ac20	
Band-UNII-3	
CNF2	**CNF3**
CH5745	CH5745
	
CH5785	CH5785
	
CH5825	CH5825
	

802.11ac40	
Band-UNII-1	
CNF2	**CNF3**
CH5190	CH5190
	
CH5230	CH5230
	

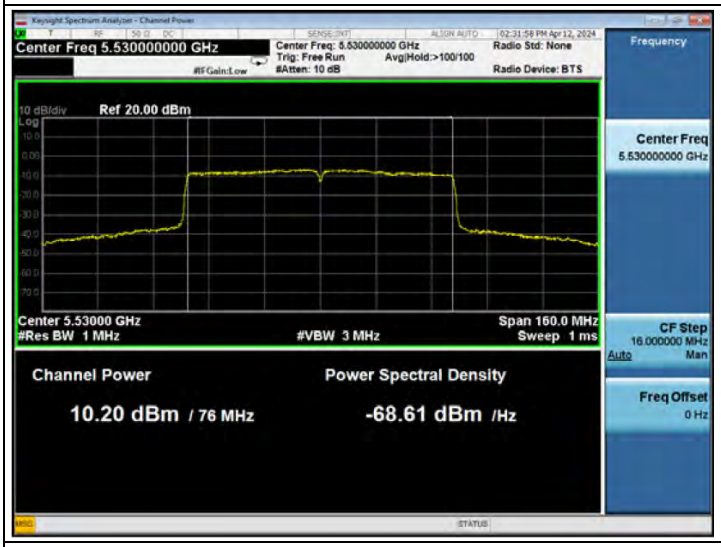
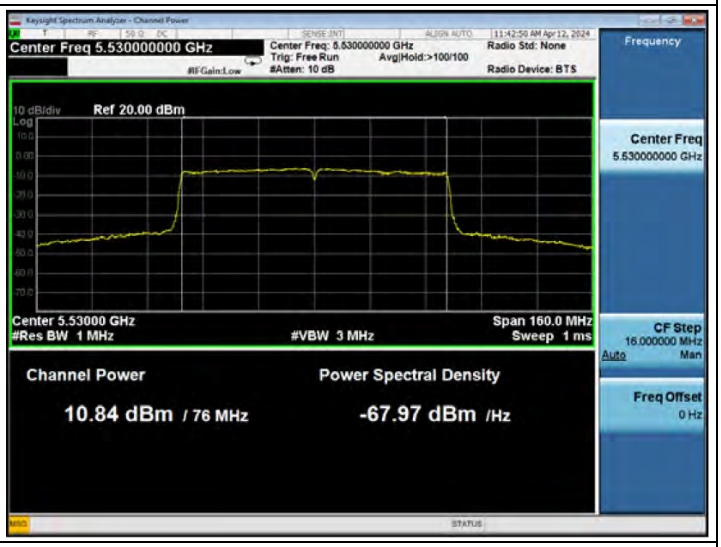
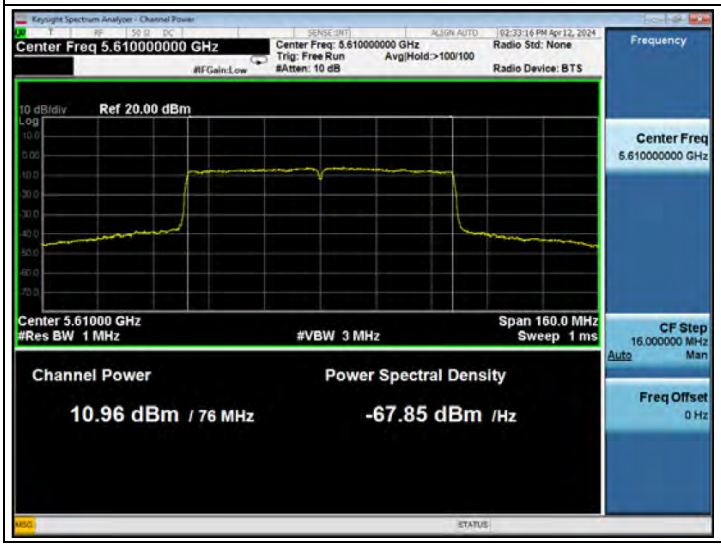
802.11ac40	
Band-UNII-2A	
CNF2	**CNF3**
CH5270	CH5270
	
CH5310	CH5310
	

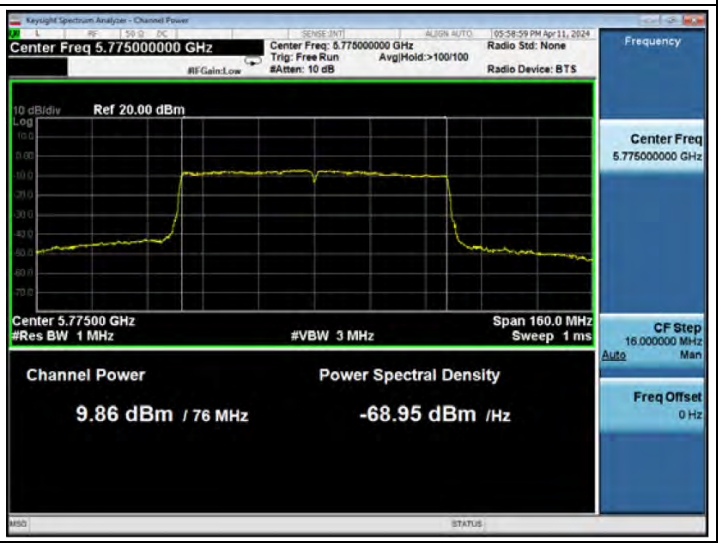
802.11ac40	
Band-UNII-2C	
CNF2	**CNF3**
CH5510	CH5510
	
CH5590	CH5590
	
CH5670	CH5670
	

802.11ac40	
Band-UNII-3	
CH5755	CH5755
	
CH5795	CH5795
	

802.11ac80	
Band-UNII-1	
CNF2	**CNF3**
CH5210	CH5210
	

802.11ac80	
Band-UNII-2A	
CNF2	**CNF3**
CH5290	CH5290
	

802.11ac80	
Band-UNII-2C	
CNF2	**CNF3**
CH5530	CH5530
	
CH5610	CH5610
	

802.11ac80	
Band-UNII-3	
CNF2	**CNF3**
CH5775	CH5775
	

9 MAXIMUM POWER SPECTRAL DENSITY MEASUREMENT

9.1 Test Equipment

The following test equipment was used during the power spectral density measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Interval
1.	Spectrum Analyzer	Agilent	N9010A	MY52221182	2023.08.09	1 Year
2.	RF Cable	Mini-Circuits	FLC-3FT-SM SM+	22022838	2023.08.09	1 Year
3.	20 dB Attenuator	Mini-Circuits	BW-S20W2+	001	2023.09.21	1 Year

9.2 Block Diagram of Test Setup

The Same as section 6.2.

9.3 Specification Limits (§15.407(a))

(1) For the band 5.15-5.25 GHz.
(iv) For client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.
(2) For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.
(3) For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band.

9.4 Operating Condition of EUT

The switch ON/OFF was used to enable the EUT to change the channel one by one.

9.5 Test Procedure

The transmitter output was connected to the spectrum analyzer.

(i) Measure the duty cycle, x, of the transmitter output signal.
(ii) For the 5.15-5.25 GHz, 5.25-5.35 GHz and 5.47-5.725 GHz bands. set RBW = 1 MHz . For the band 5.725-5.85 GHz set RBW = 300 kHz.
(iii) Set VBW ≥ 3 × RBW.
(iv) Number of points in sweep ≥ 2 × span / RBW. (This ensures that bin-to-bin spacing is ≤ RBW/2, so that narrowband signals are not lost between frequency bins.)
(v) Sweep time = auto.
(vi) Detector = power averaging (rms).
(vii) Allow the sweep to “free run.”
(viii) Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed to ensure that the average accurately represents the true average over the on and off periods of the transmitter.

(ix) Use the peak search function on the instrument to find the peak of the spectrum.
(x) As the Method SA-2 was used, add 10 log (1/x), where x is the duty cycle, to the peak of the spectrum. The result is the Peak Power Spectral Density.
(xi) For the band 5.725-5.85 GHz, additional add 10 log (500 kHz/300 kHz) = 2.22 dB to the measured result, whereas RBW is set to 300 kHz (<500 kHz) during measurement.

The test procedure is defined in KDB789033 D02 (the clause II.F Measurement Procedure " Maximum Power Spectral Density (PSD)" was used).

For Emissions Testing of Transmitters with Multiple Outputs in the Same Band: Per KDB 662911 D01 Multiple Transmitter Output v02r01, section E).2), When performing measurements for compliance with PSD limits within the band of operation of a transmitter, any of the three techniques below may be used to combine the emission measurements from multiple outputs prior to comparing to the emission limit:
a) *Measure and sum the spectra across the outputs*.
b) *Measure and sum spectral maxima across the outputs*.
c) *Measure and add 10 log(N_{ANT}) dB*, where N_{ANT} is the number of outputs.
We selected the method b). *Measure and sum spectral maxima across the outputs*. for measure Power Spectral Density.

9.6 Test Results

PASSED.

Note1: [Power Spectral Density] = Maximum of [Average Power Spectral Density] + [DCCF]
Note2: The [DCCF(Duty Cycle Correct Factor)] shows on section 2.4.

All the test results are listed below.

(Test Date: 2024.04.08-14 Temperature: 23℃ Humidity: 51 %)

Mode	Channel	Frequency (MHz)	Average Power Spectral Density (dBm/MHz)			Power Spectral Density (dBm/MHz)	Limit (dBm/MHz)
			SISO CNF2	SISO CNF3	MIMO (CNF2 + CNF3)		
802.11a	36	5180	**1.144**	**0.33**	**-**	**1.344**	11
	40	5200	**1.533**	**0.605**	**-**	**1.733**	11
	48	5240	**1.078**	**0.425**	**-**	**1.278**	11
	52	5260	**0.572**	**0.515**	**-**	**0.772**	11
	60	5300	**0.961**	**0.911**	**-**	**1.161**	11
	64	5320	**1.145**	**1.232**	**-**	**1.432**	11
	100	5500	**1.922**	**3.036**	**-**	**3.236**	11
	120	5600	**3.623**	**3.859**	**-**	**4.059**	11
	140	5700	**3.381**	**2.693**	**-**	**3.581**	11

Mode	Channel	Frequency (MHz)	Average Power Spectral Density (dBm/MHz)			Power Spectral Density (dBm/MHz)	Limit (dBm/MHz)
			SISO CNF2	SISO CNF3	MIMO (CNF2 + CNF3)		
802.11n20	36	5180	**0.144**	**-0.729**	**2.740**	**5.550**	11
	40	5200	**0.24**	**-0.463**	**2.913**	**5.723**	11
	48	5240	**0.194**	**-0.93**	**2.679**	**5.489**	11
	52	5260	**-0.682**	**-0.621**	**2.359**	**5.169**	11
	60	5300	**-0.156**	**-0.259**	**2.803**	**5.613**	11
	64	5320	**0.437**	**0.07**	**3.268**	**6.078**	11
	100	5500	**1.57**	**1.692**	**4.642**	**7.452**	11
	120	5600	**2.263**	**2.511**	**5.399**	**8.209**	11
	140	5700	**2.034**	**1.568**	**4.818**	**7.628**	11

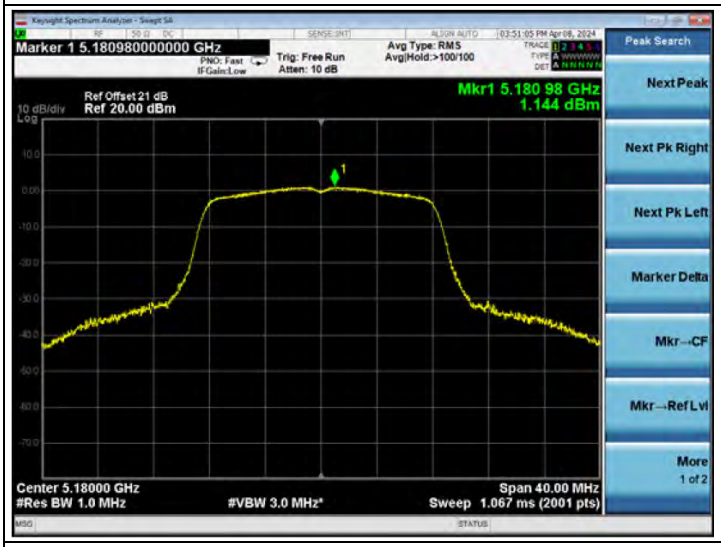
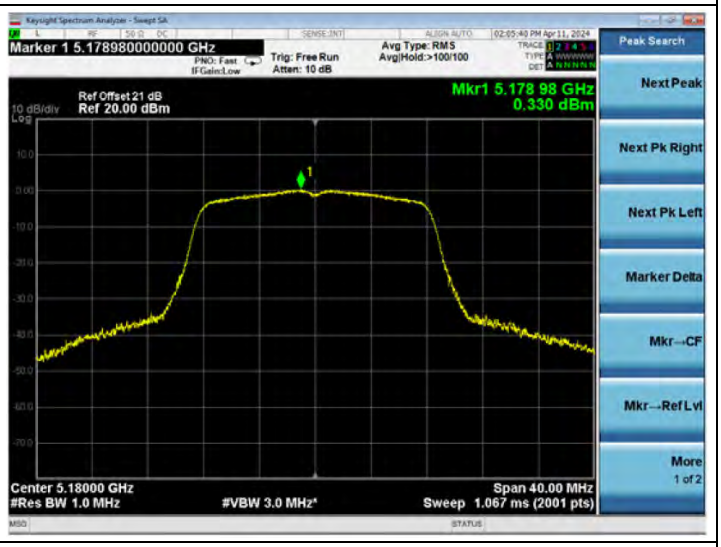
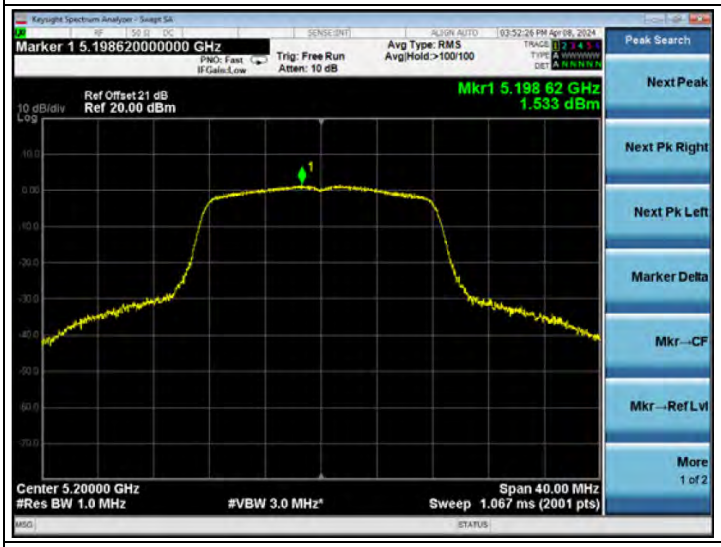
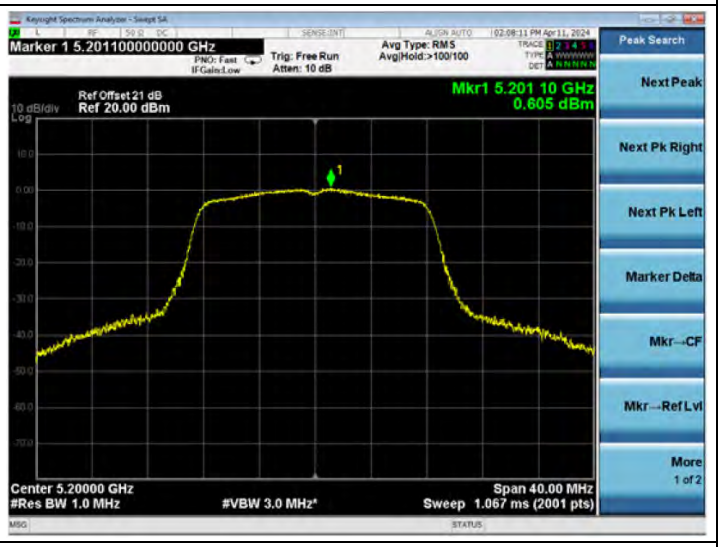
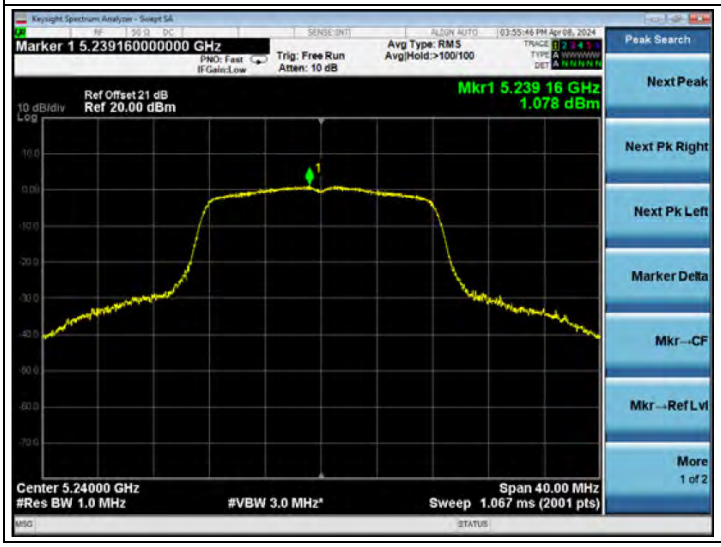
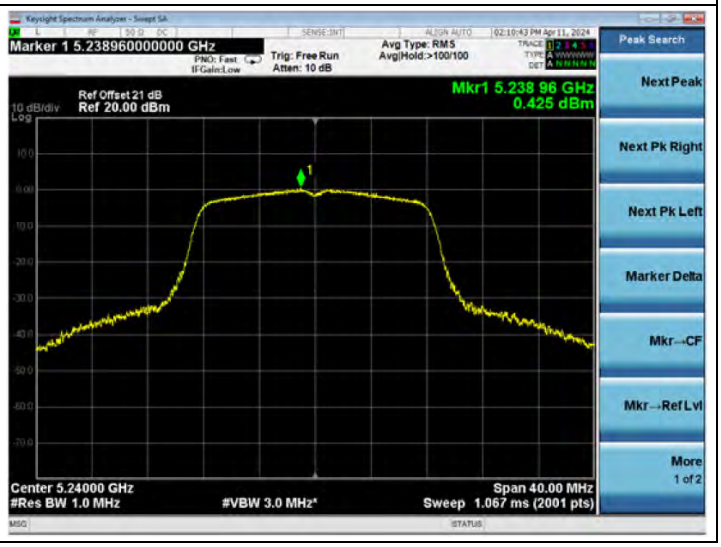
Mode	Channel	Frequency (MHz)	Average Power Spectral Density (dBm/MHz)			Power Spectral Density (dBm/MHz)	Limit (dBm/MHz)
			SISO CNF2	SISO CNF3	MIMO (CNF2 + CNF3)		
802.11n40	38	5190	**-3.061**	**-3.708**	**-0.362**	**3.848**	11
	46	5230	**-3.244**	**-3.969**	**-0.581**	**3.629**	11
	54	5270	**-3.825**	**-4.034**	**-0.918**	**3.292**	11
	62	5310	**-3.246**	**-3.573**	**-0.396**	**3.814**	11
	102	5510	**-1.665**	**-1.593**	**1.381**	**5.591**	11
	118	5590	**-1.525**	**-0.805**	**1.860**	**6.070**	11
	134	5670	**-1.194**	**-0.498**	**2.178**	**6.388**	11

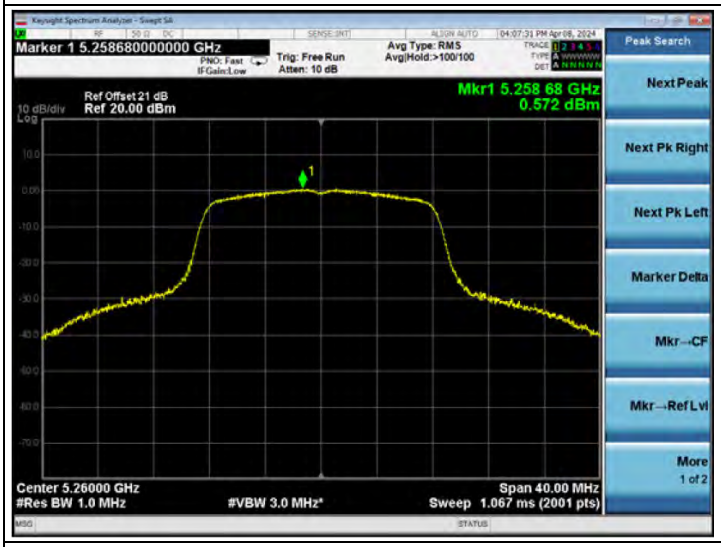
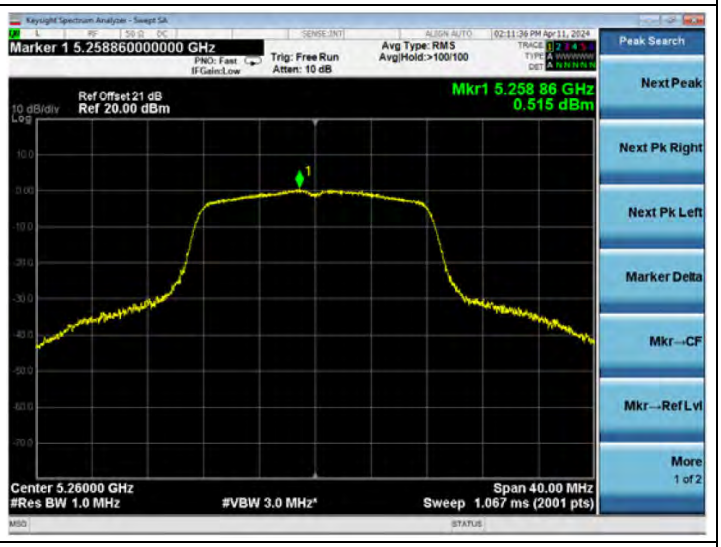
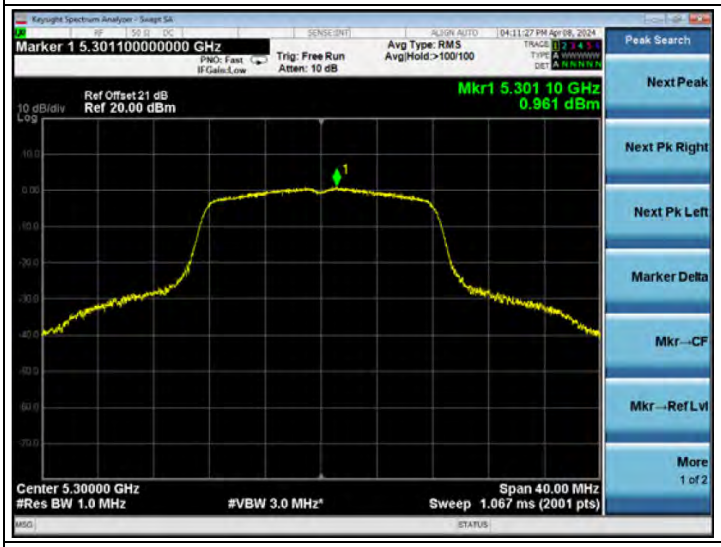
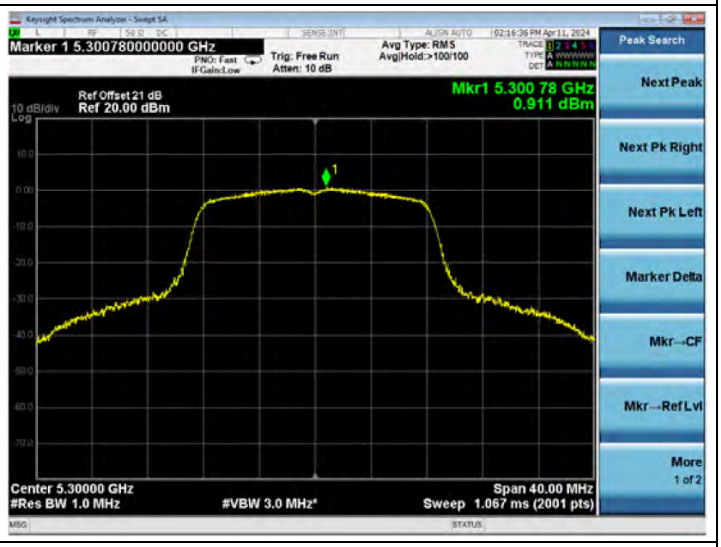
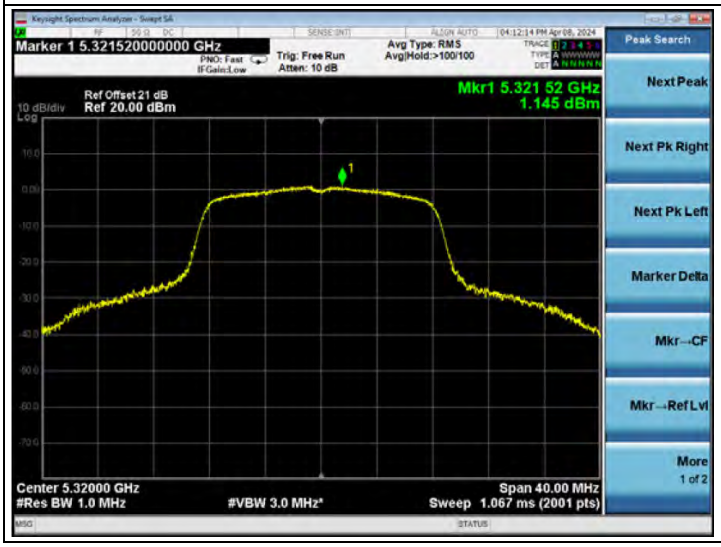
Mode	Channel	Frequency (MHz)	Average Power Spectral Density (dBm/MHz)			Power Spectral Density (dBm/MHz)	Limit (dBm/MHz)
			SISO CNF2	SISO CNF3	MIMO (CNF2 + CNF3)		
802.11ac20	36	5180	**0.168**	**-1.079**	**2.599**	**2.809**	11
	40	5200	**0.218**	**-0.675**	**2.805**	**3.015**	11
	48	5240	**-0.397**	**-0.986**	**2.329**	**2.539**	11
	52	5260	**-0.542**	**-0.985**	**2.252**	**2.462**	11
	60	5300	**-0.3**	**-0.224**	**2.748**	**2.958**	11
	64	5320	**-0.077**	**0.044**	**2.994**	**3.204**	11
	100	5500	**1.015**	**1.365**	**4.204**	**4.414**	11
	120	5600	**2.057**	**2.735**	**5.420**	**5.630**	11
	140	5700	**1.956**	**1.622**	**4.803**	**5.013**	11

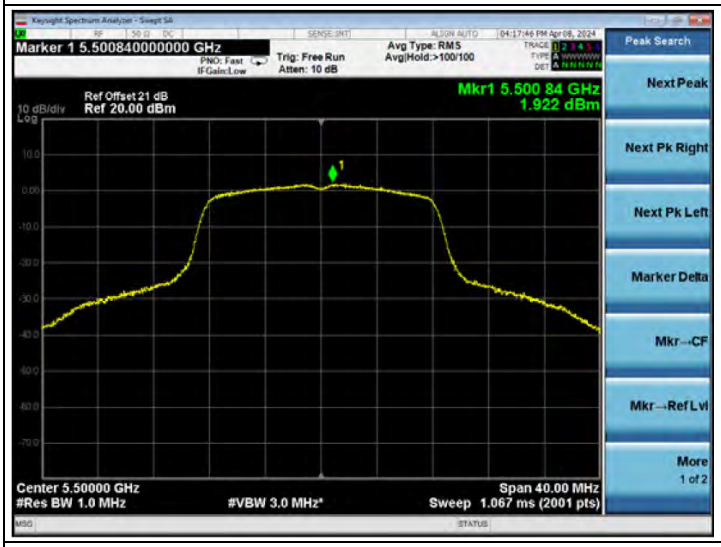
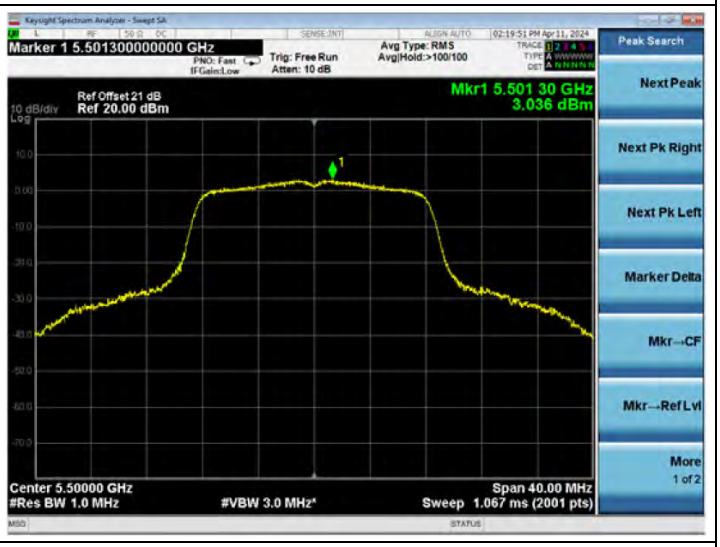
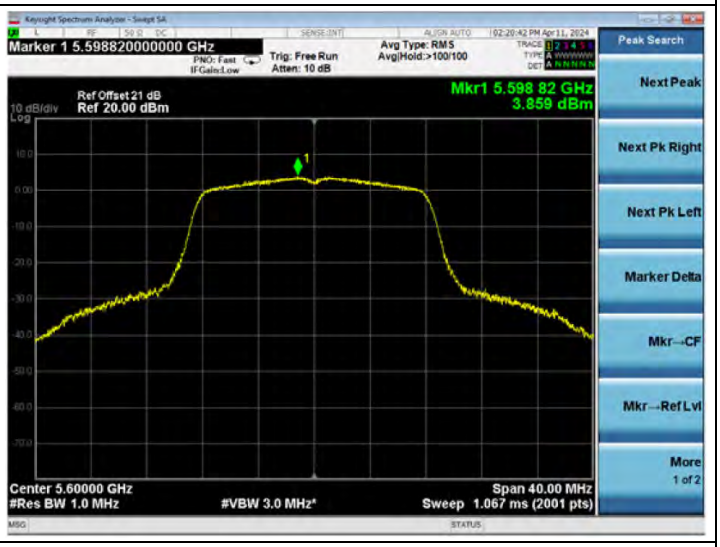
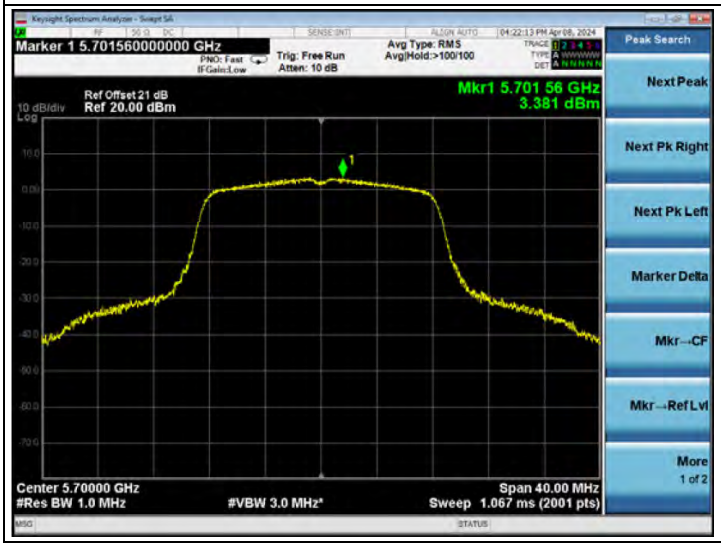
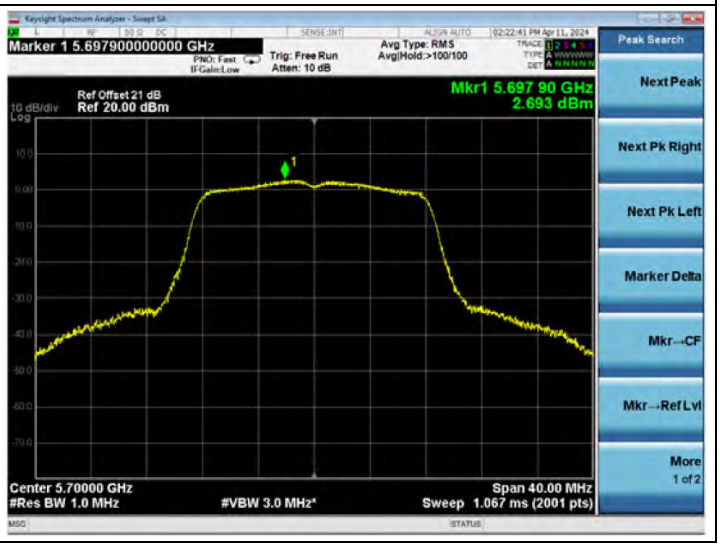
Mode	Channel	Frequency (MHz)	Average Power Spectral Density (dBm/MHz)			Power Spectral Density (dBm/MHz)	Limit (dBm/MHz)
			SISO CNF2	SISO CNF3	MIMO (CNF2 + CNF3)		
802.11ac40	38	5190	**-3.623**	**-3.823**	**-0.712**	**-0.312**	11
	46	5230	**-3.358**	**-3.842**	**-0.583**	**-0.183**	11
	54	5270	**-4.306**	**-4.211**	**-1.248**	**-0.848**	11
	62	5310	**-3.924**	**-3.587**	**-0.742**	**-0.342**	11
	102	5510	**-2.224**	**-1.524**	**1.150**	**1.550**	11
	118	5590	**-1.378**	**-0.664**	**2.004**	**2.404**	11
	134	5670	**-1.071**	**-0.335**	**2.323**	**2.723**	11

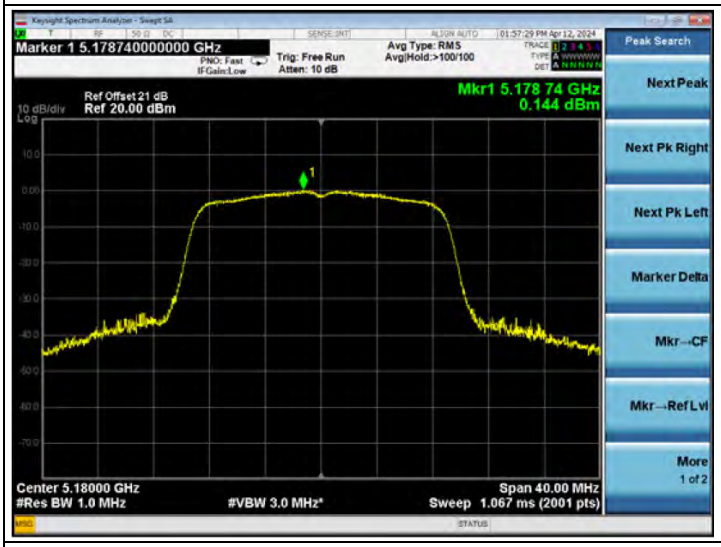
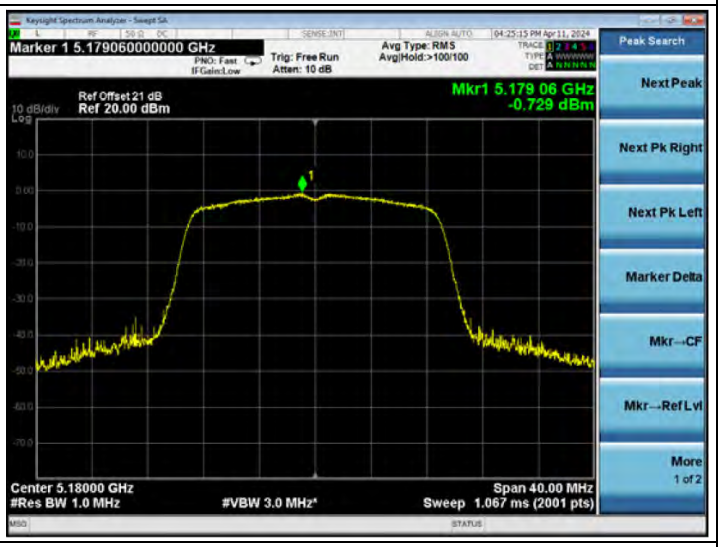
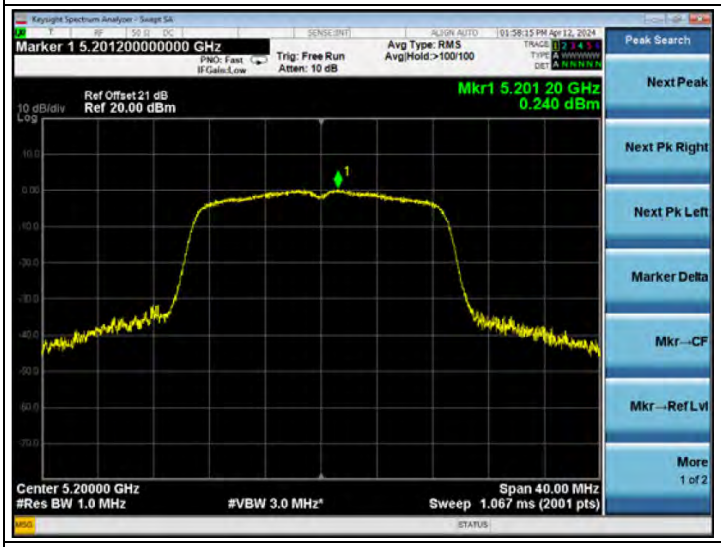
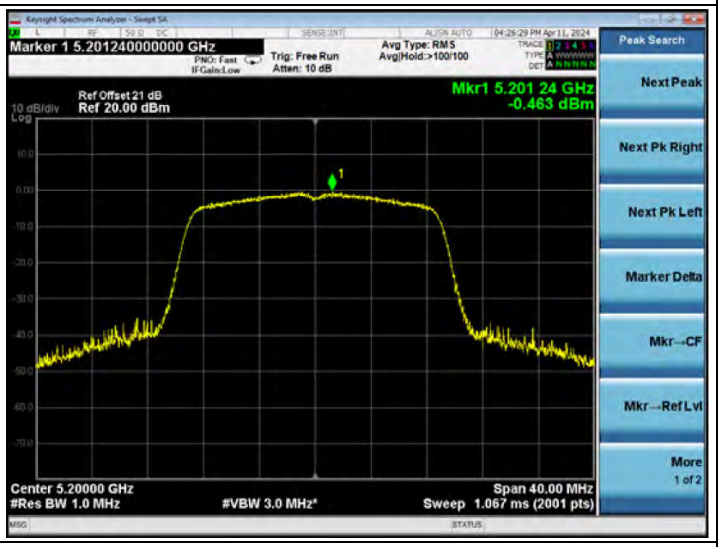
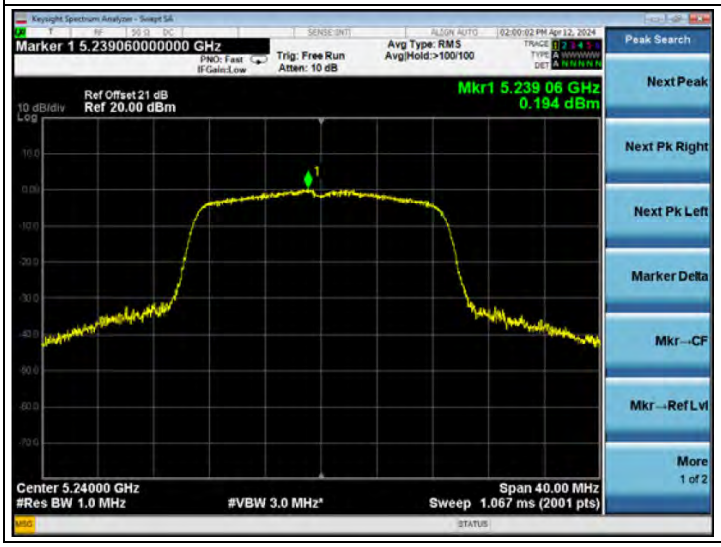
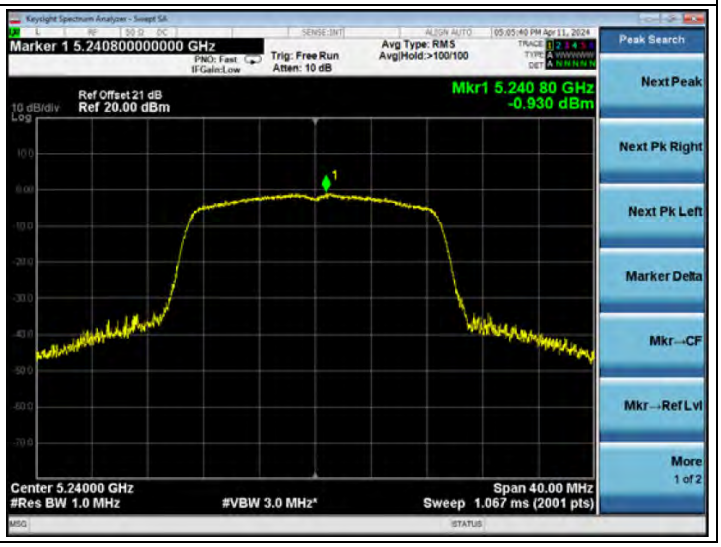
Mode	Channel	Frequency (MHz)	Average Power Spectral Density (dBm/MHz)			Power Spectral Density (dBm/MHz)	Limit (dBm/MHz)
			SISO CNF2	SISO CNF3	MIMO (CNF2 + CNF3)		
802.11ac80	42	5210	**-7.953**	**-9.059**	**-5.461**	**-0.351**	11
	58	5290	**-8.269**	**-8.881**	**-5.554**	**-0.444**	11
	106	5530	**-6.512**	**-6.249**	**-3.368**	**1.742**	11
	122	5610	**-5.805**	**-5.299**	**-2.534**	**2.576**	11

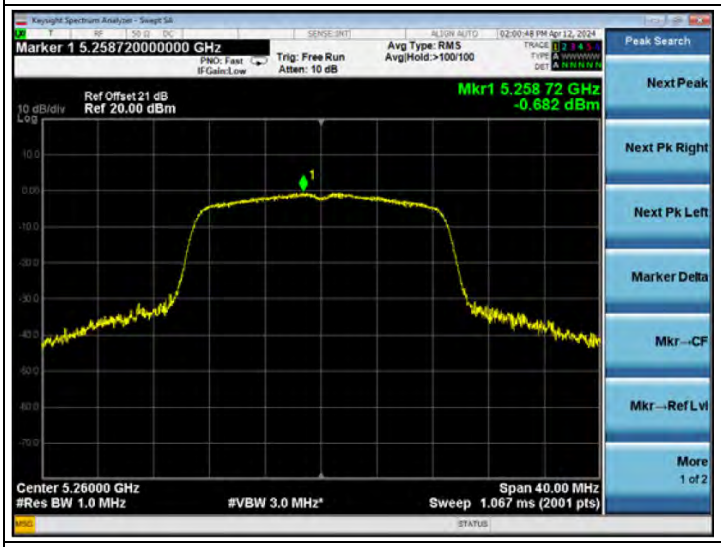
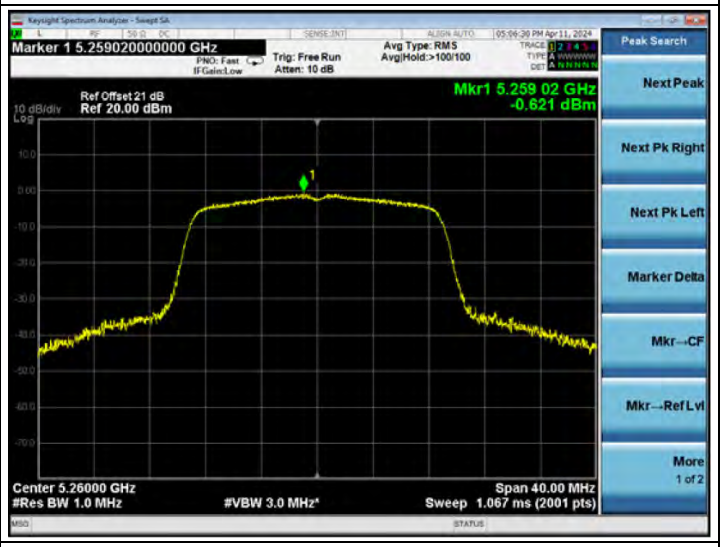
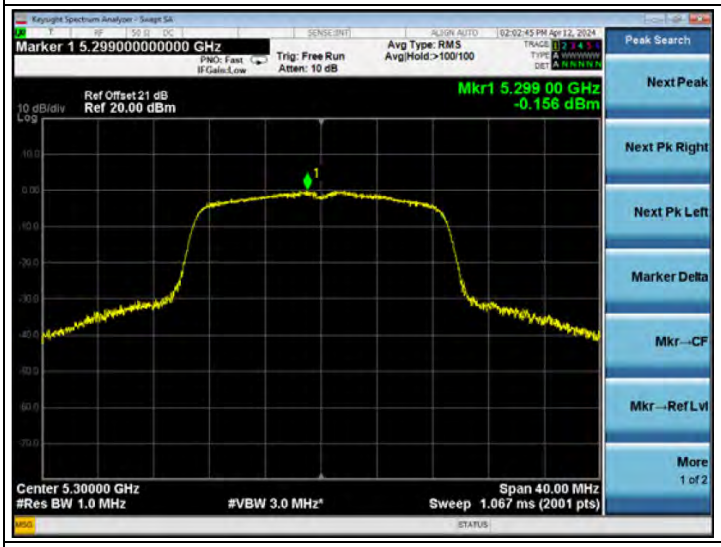
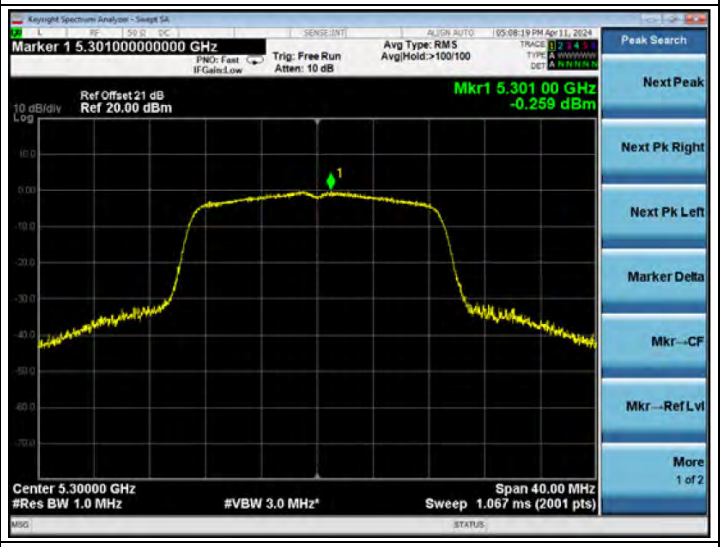
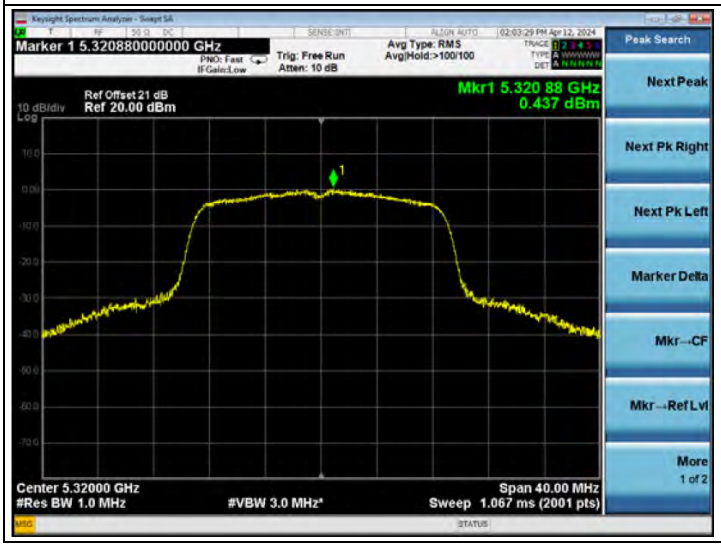
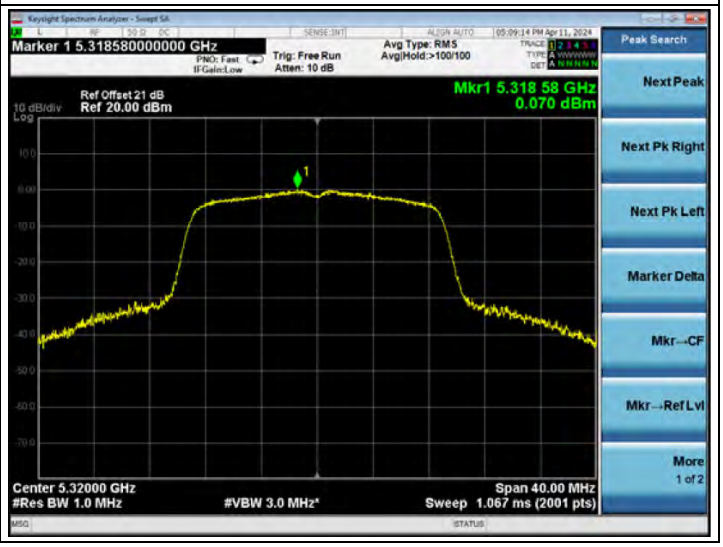
Mode	Channel	Frequency (MHz)	Average Power Spectral Density (dBm/300kHz)			Maximum Power Spectral Density (dBm/ 500kHz)	Limit (dBm/ 500kHz)
			SISO CNF2	SISO CNF3	MIMO (CNF2 + CNF3)		
802.11a	149	5745	**-2.084**	**-2.449**	**0.748**	**3.168**	30
	157	5785	**-1.904**	**-2.508**	**0.815**	**3.235**	30
	165	5825	**-2.353**	**-2.508**	**0.580**	**3.000**	30
802.11n20	149	5745	**-2.866**	**-3.945**	**-0.362**	**4.668**	30
	157	5785	**-2.921**	**-3.695**	**-0.280**	**4.750**	30
	165	5825	**-3.341**	**-3.823**	**-0.565**	**4.465**	30
802.11n40	151	5755	**-6.6**	**-7.169**	**-3.865**	**2.565**	30
	159	5795	**-6.775**	**-6.962**	**-3.857**	**2.573**	30
802.11ac20	149	5745	**-3.055**	**-3.993**	**-0.488**	**1.942**	30
	157	5785	**-3.207**	**-3.754**	**-0.462**	**1.968**	30
	165	5825	**-3.728**	**-4.275**	**-0.983**	**1.447**	30
802.11ac40	151	5755	**-7.046**	**-7.202**	**-4.113**	**-1.493**	30
	159	5795	**-6.863**	**-7.642**	**-4.225**	**-1.605**	30
802.11ac80	155	5775	**-11.29**	**-11.642**	**-8.452**	**-1.122**	30

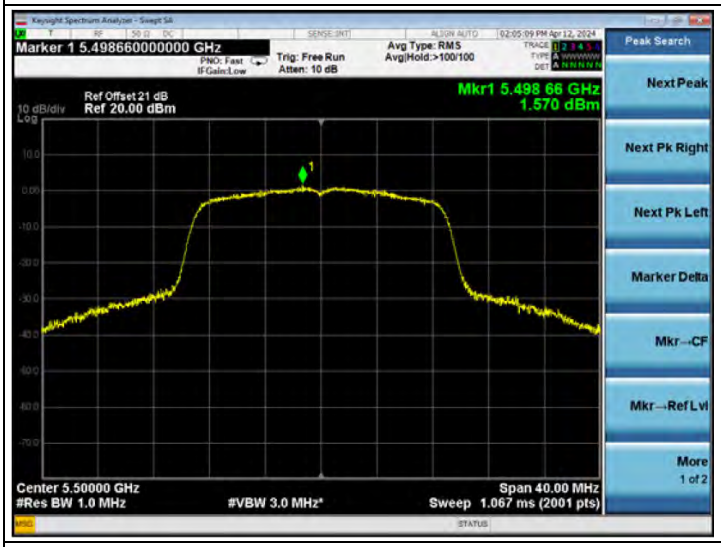
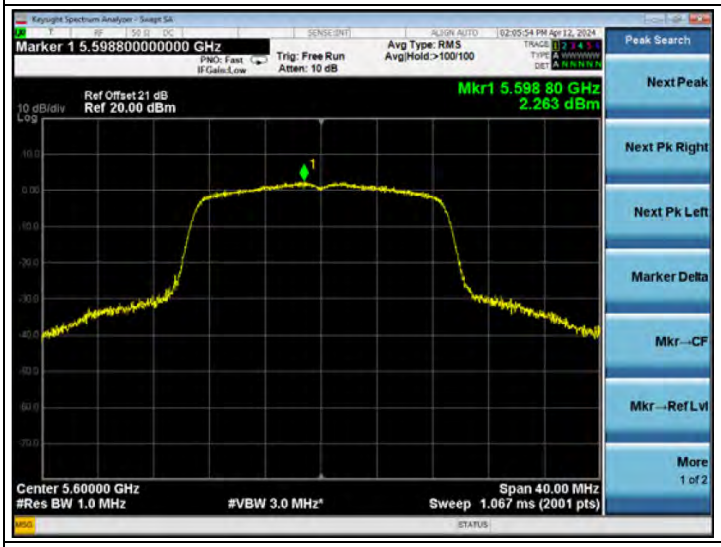
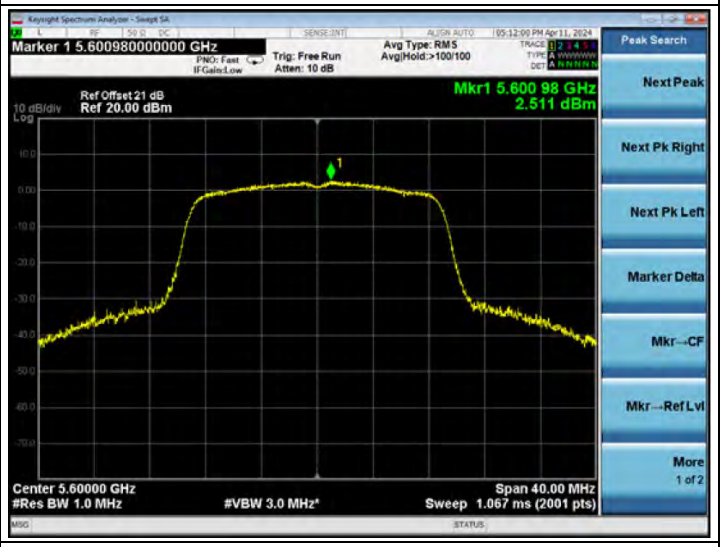
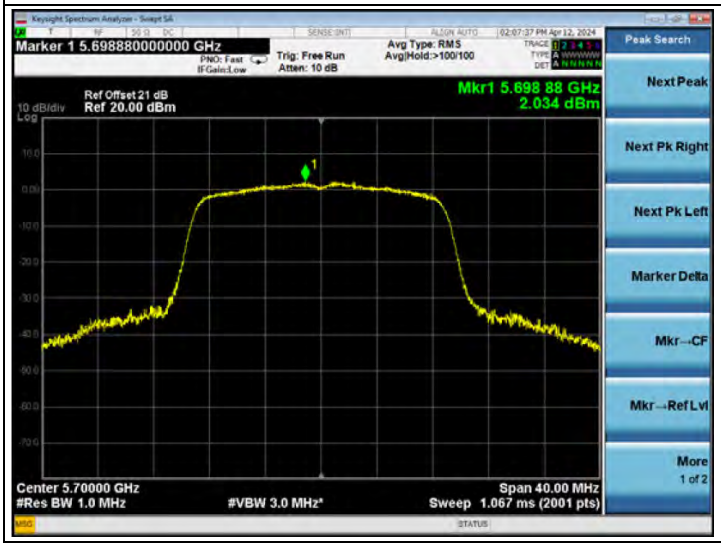
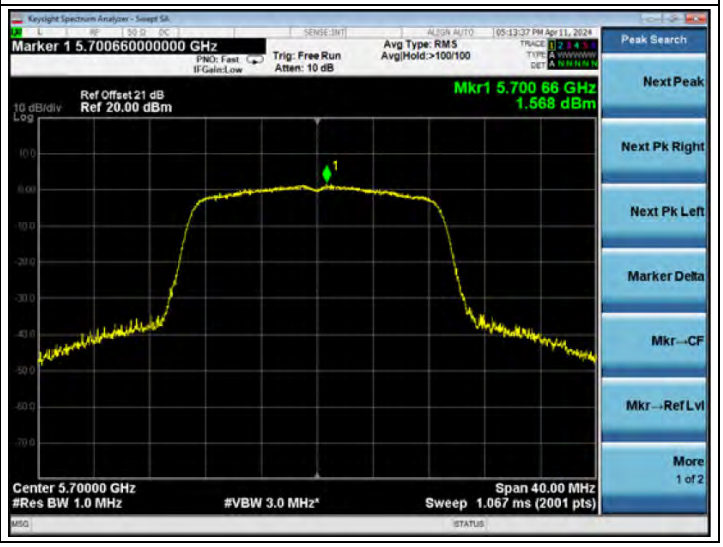
802.11a	
Band-UNII-1	
CNF2	**CNF3**
CH5180	CH5180
	
CH5200	CH5200
	
CH5240	CH5240
	

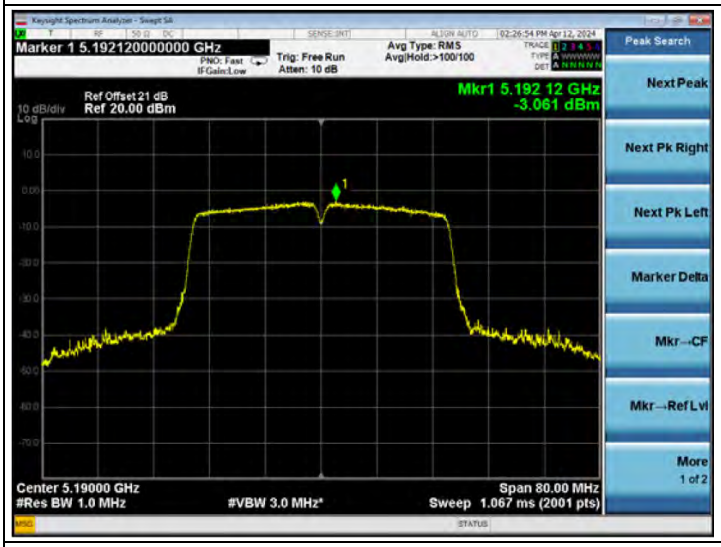
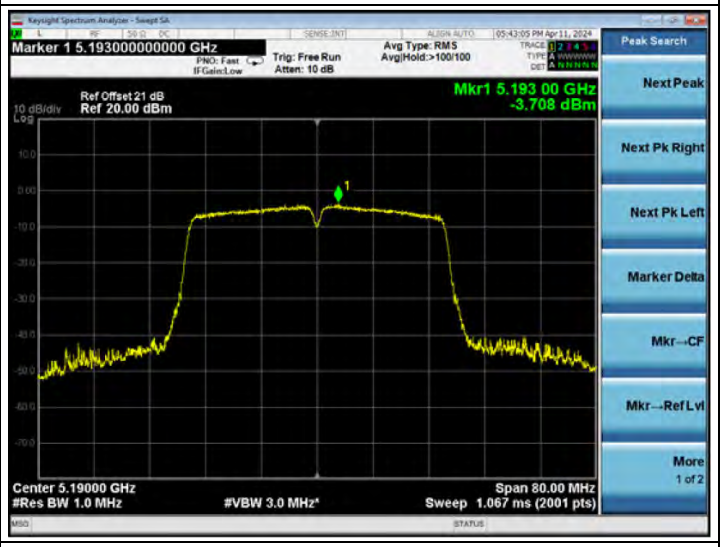
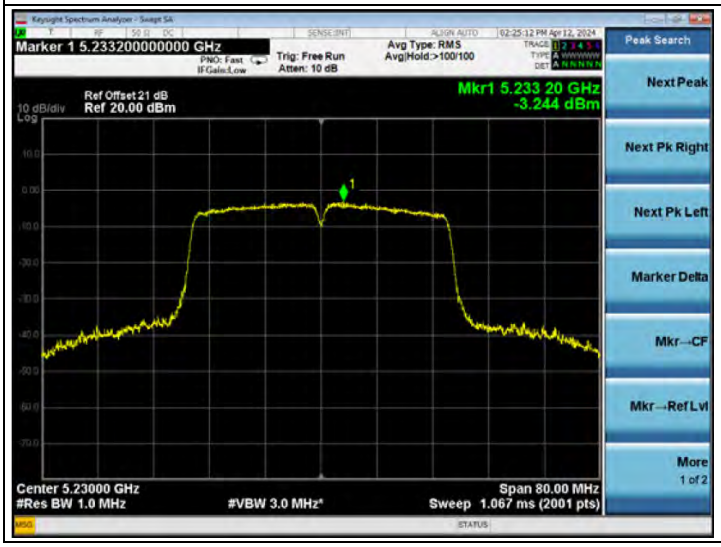
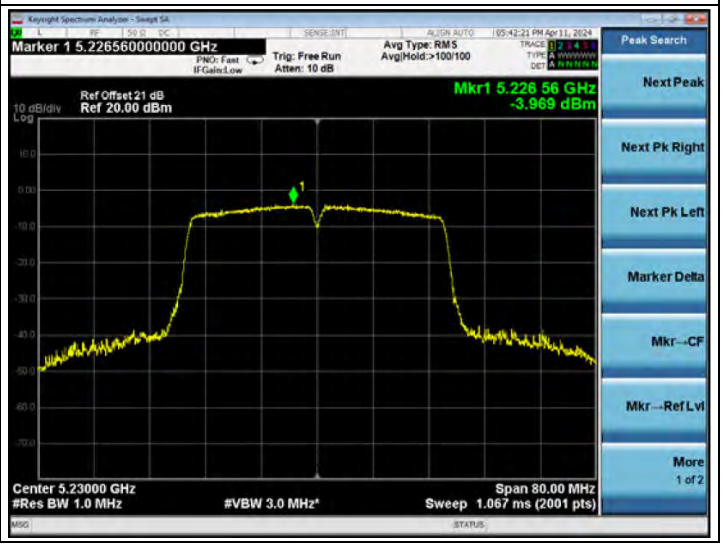
802.11a	
Band-UNII-2A	
CNF2	**CNF3**
CH5260	CH5260
	
CH5300	CH5300
	
CH5320	CH5320
	

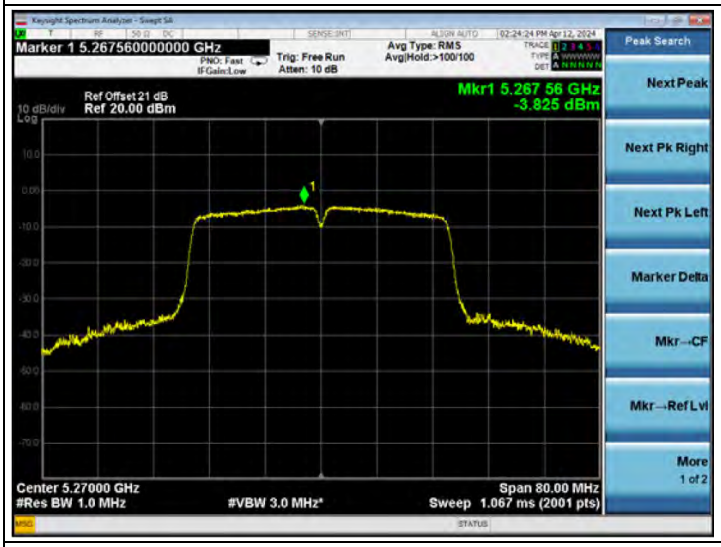
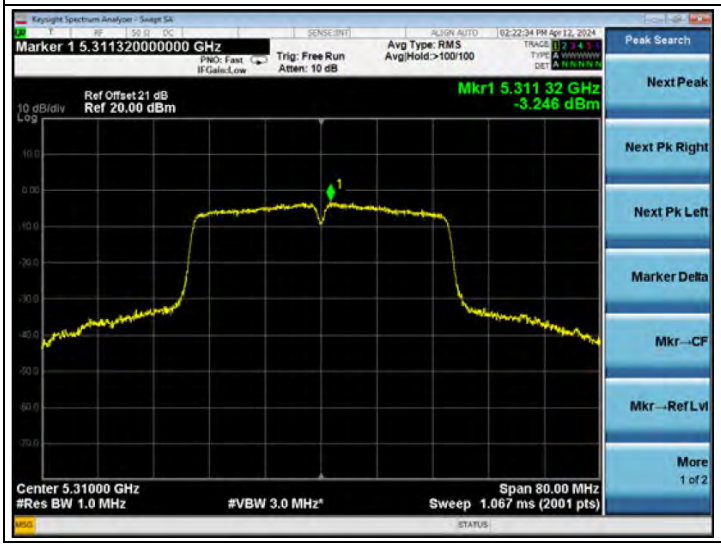
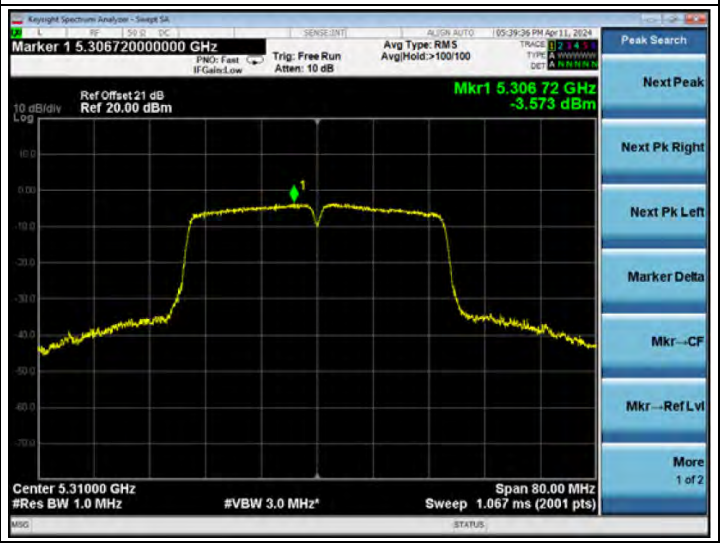
802.11a	
Band-UNII-2C	
CNF2	**CNF3**
CH5500	CH5500
	
CH5600	CH5600
	
CH5700	CH5700
	

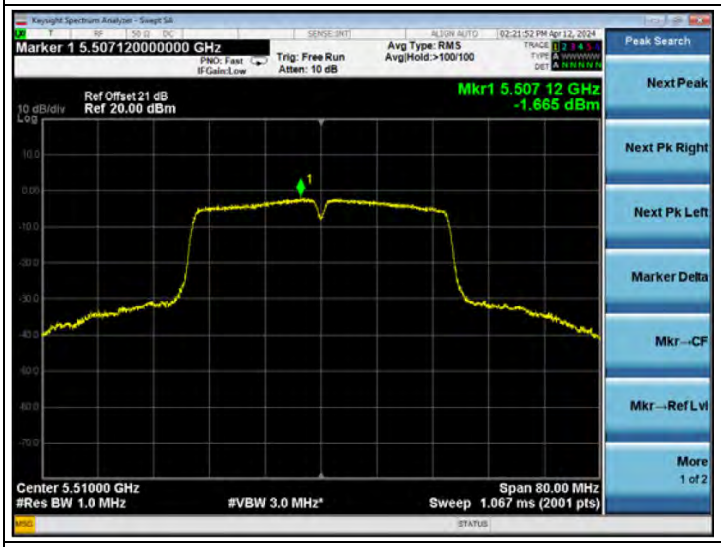
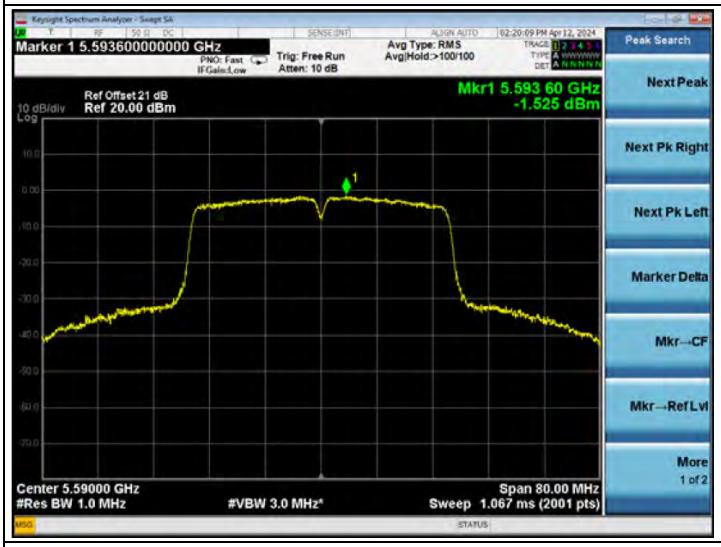
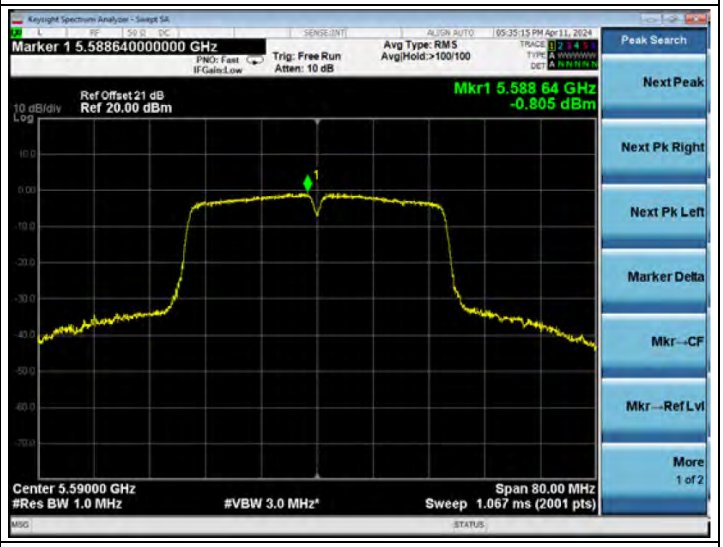
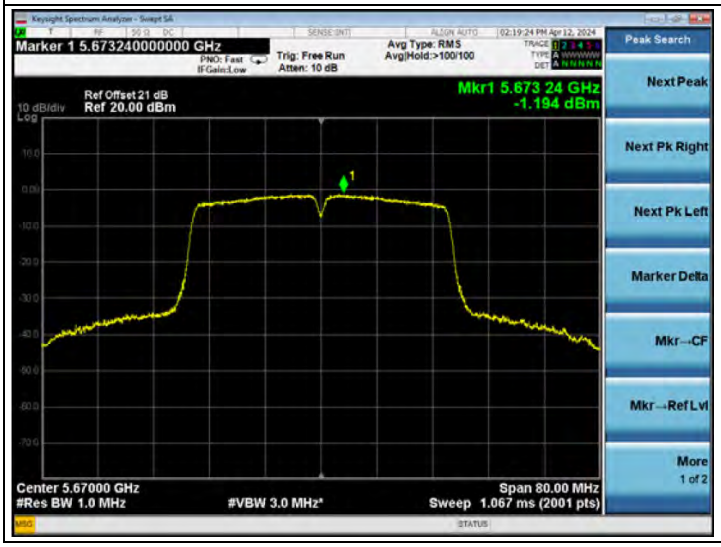
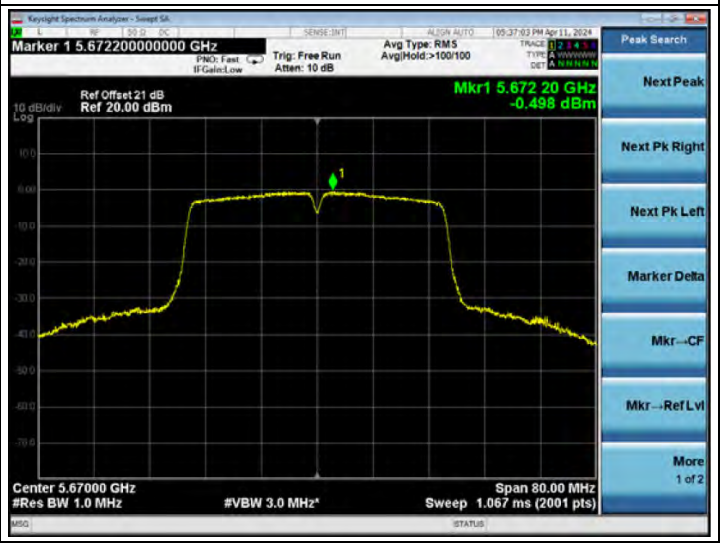
802.11n20	
Band-UNII-1	
CNF2	**CNF3**
CH5180	CH5180
	
CH5200	CH5200
	
CH5240	CH5240
	

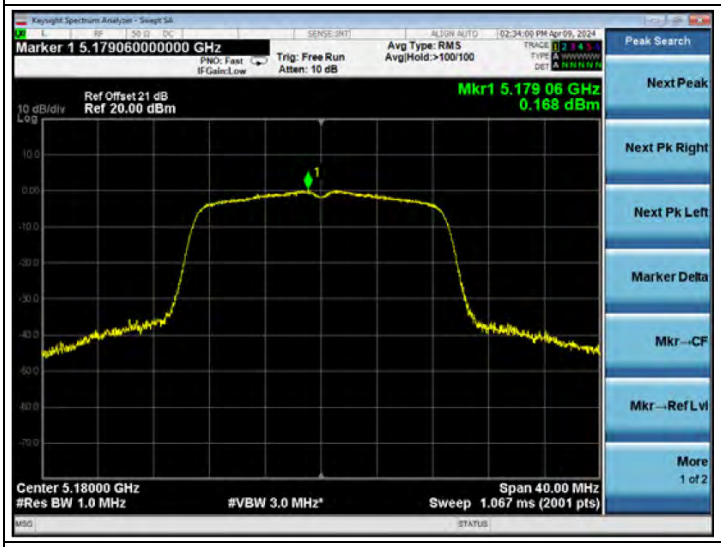
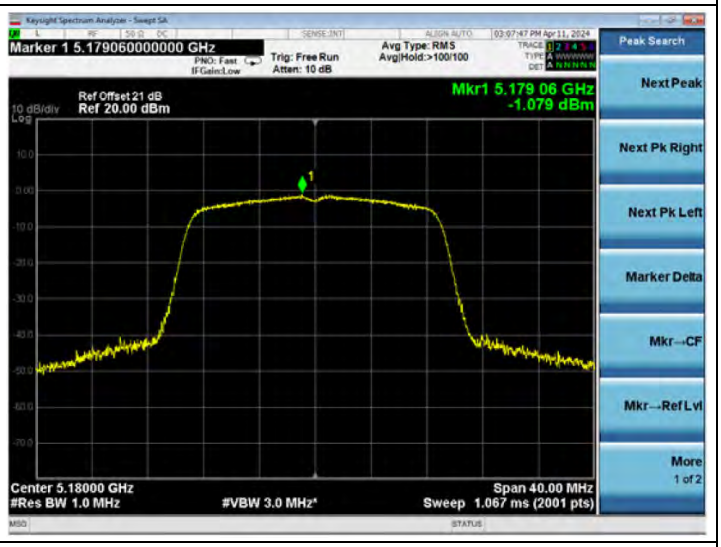
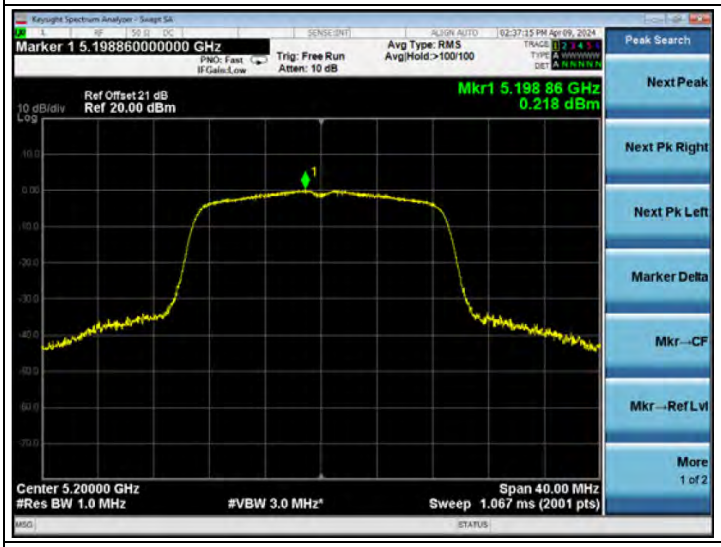
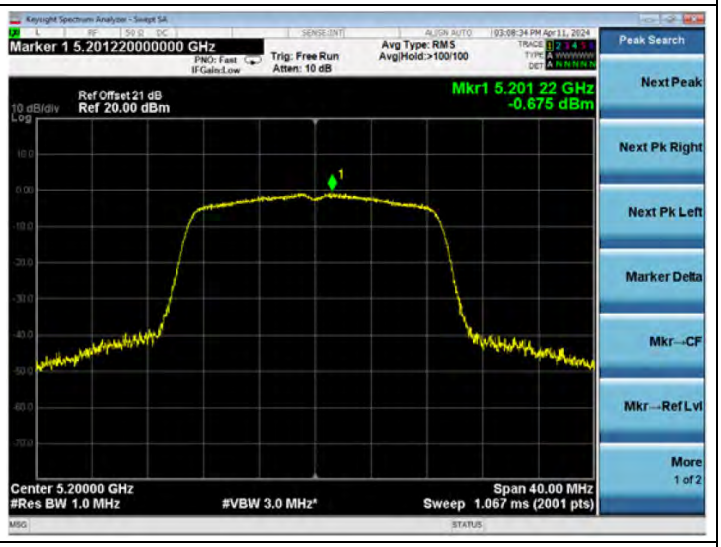
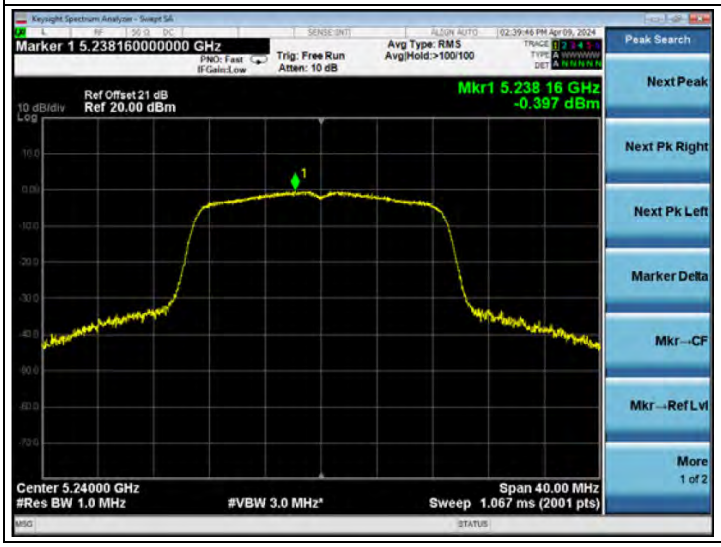
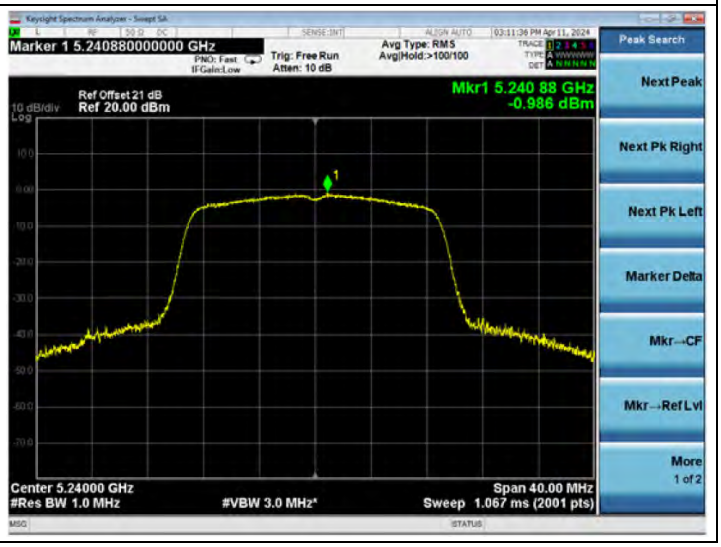
802.11n20	
Band-UNII-2A	
CNF2	**CNF3**
CH5260	CH5260
	
CH5300	CH5300
	
CH5320	CH5320
	

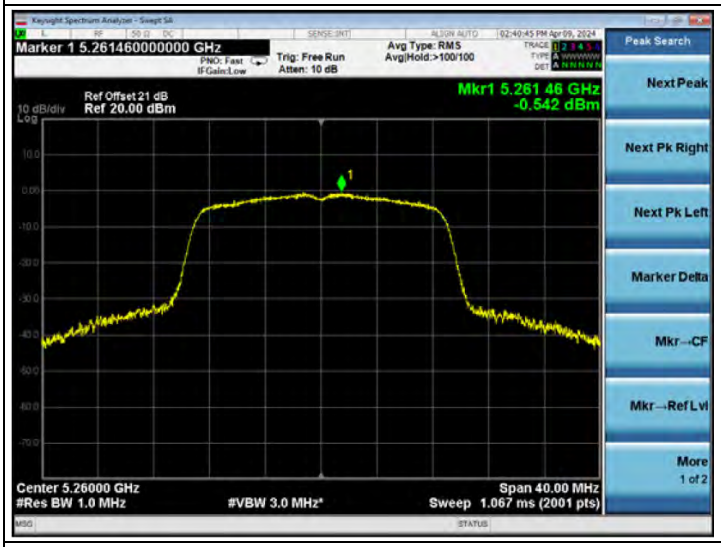
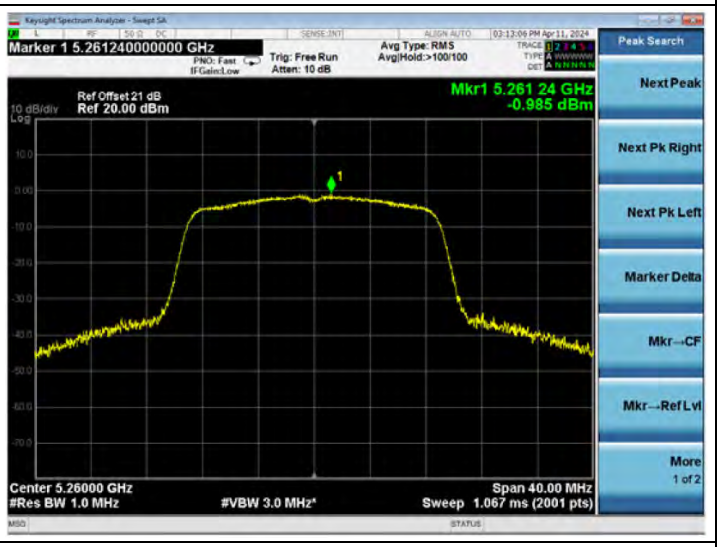
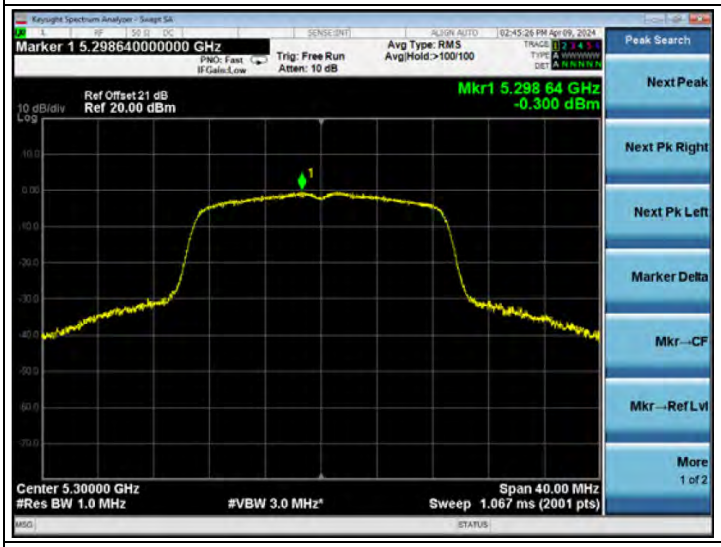
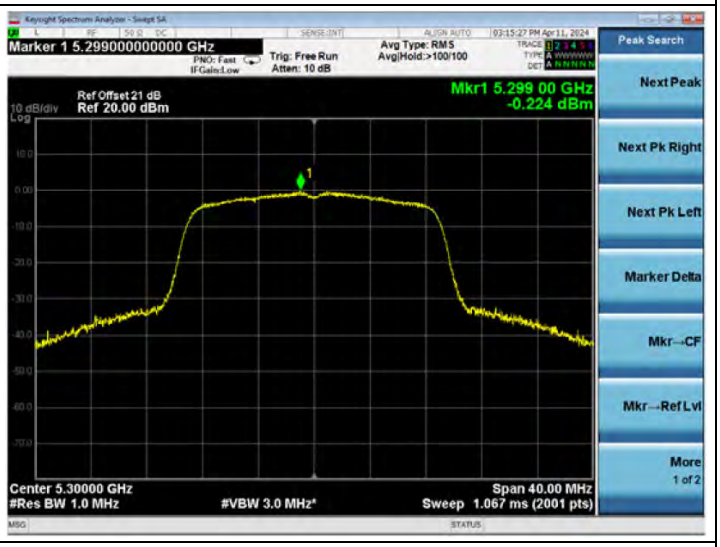
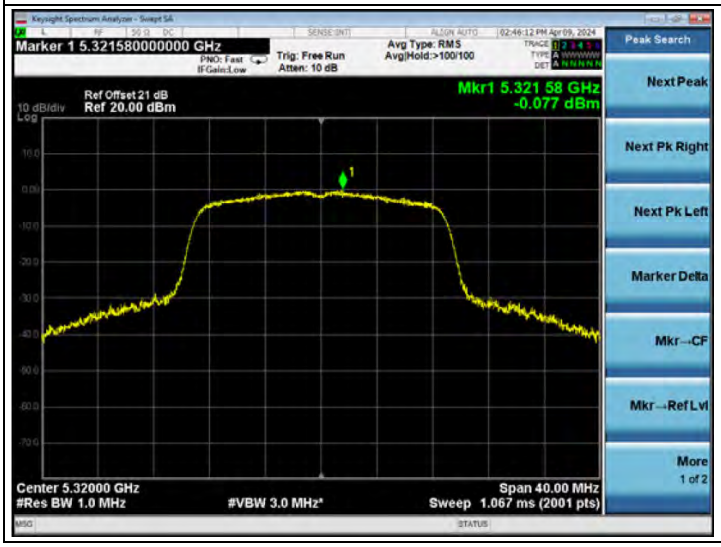
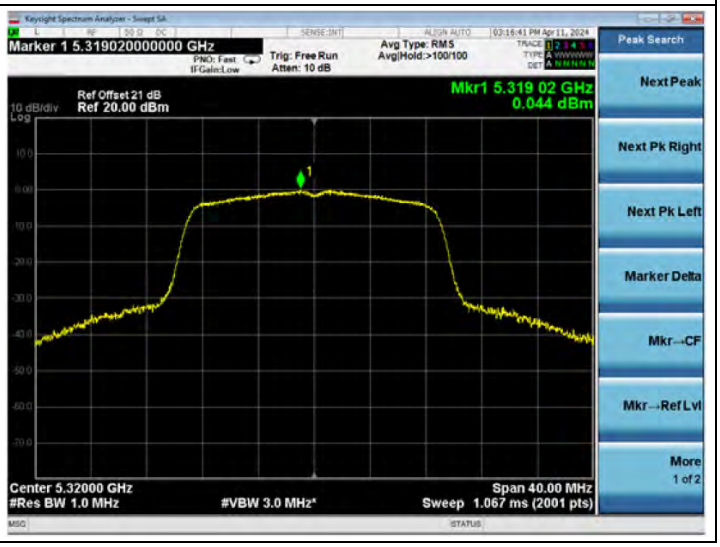
802.11n20	
Band-UNII-2C	
CNF2	**CNF3**
CH5500	CH5500
	
CH5600	CH5600
	
CH5700	CH5700
	

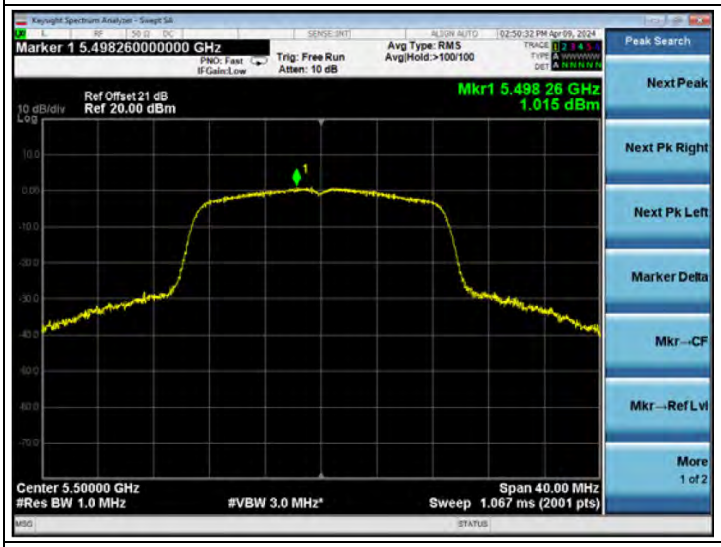
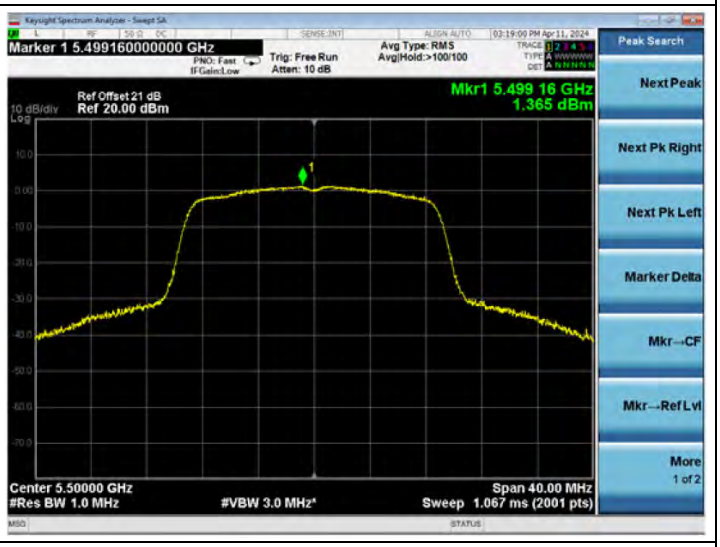
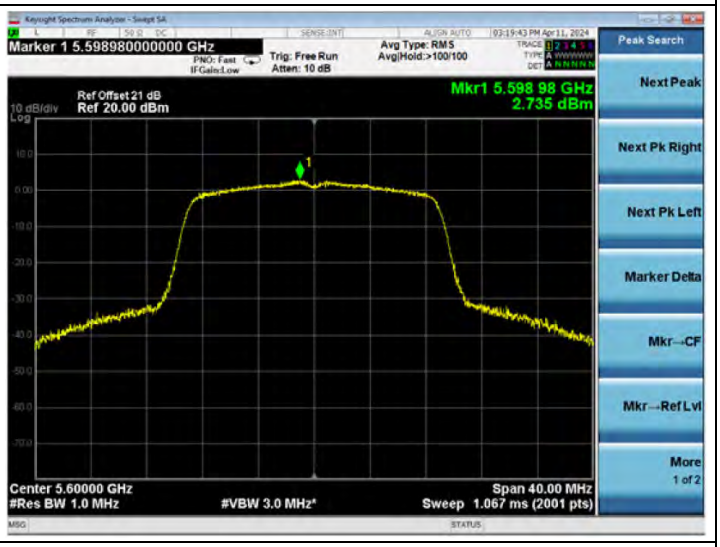
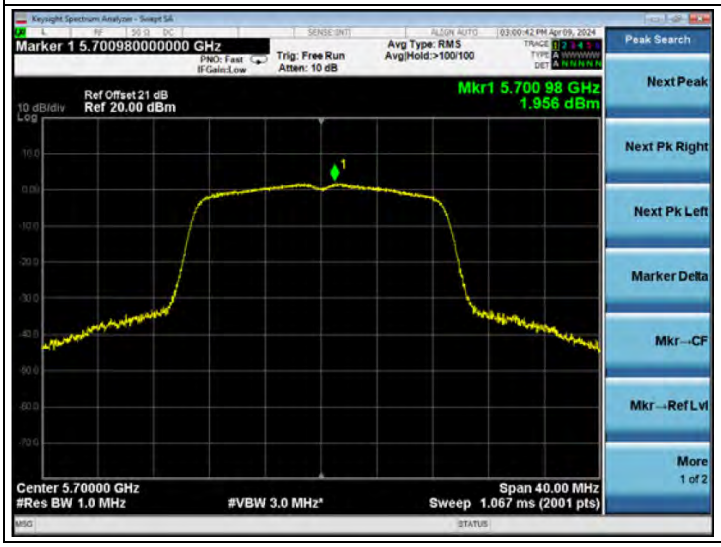
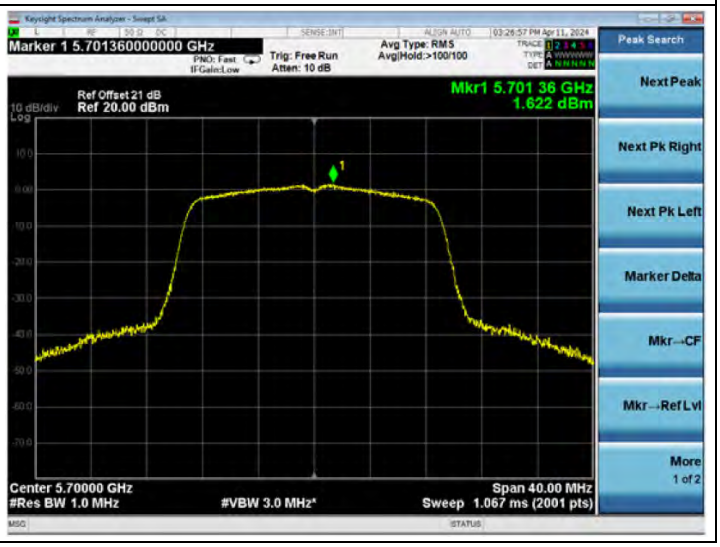
802.11n40	
Band-UNII-1	
CNF2	**CNF3**
CH5190	CH5190
	
CH5230	CH5230
	

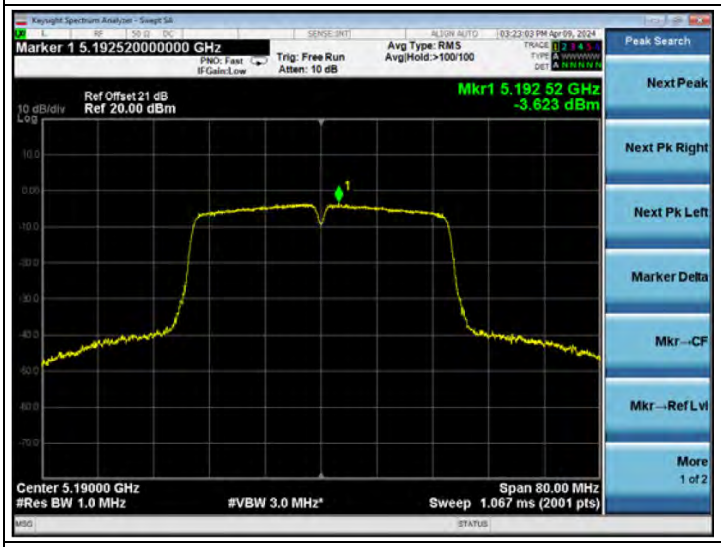
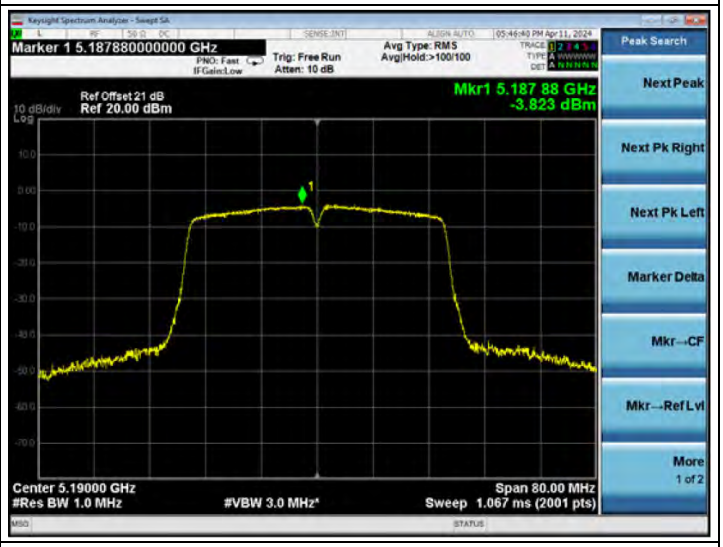
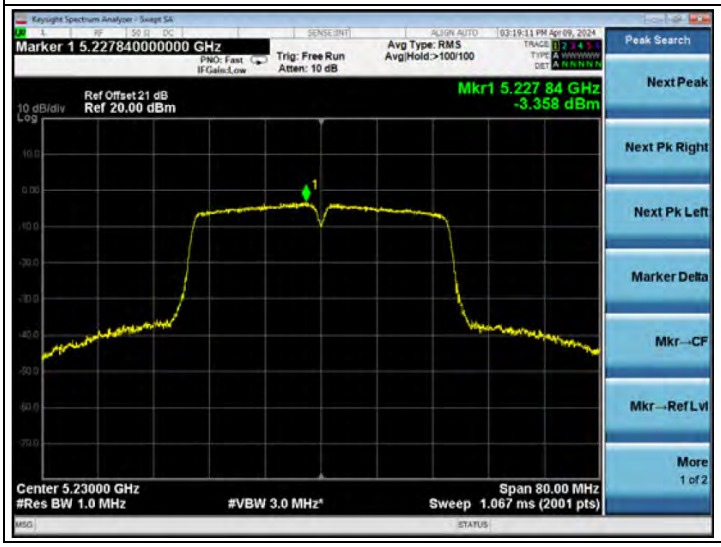
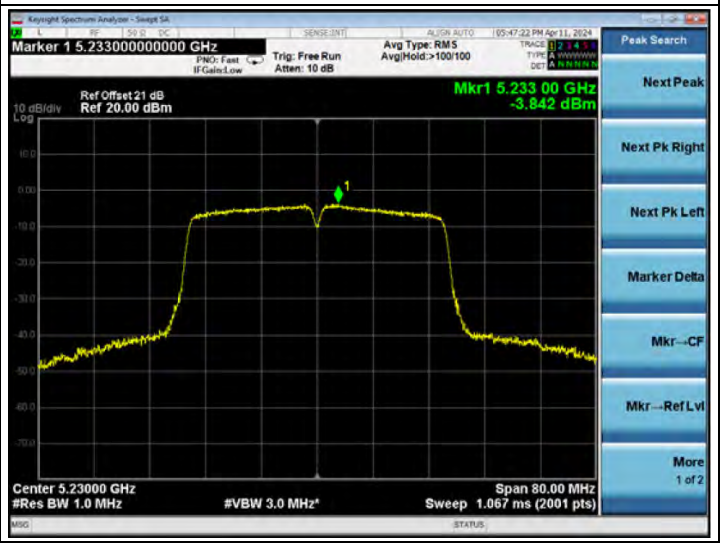
802.11n40	
Band-UNII-2A	
CNF2	**CNF3**
CH5270	CH5270
	
CH5310	CH5310
	

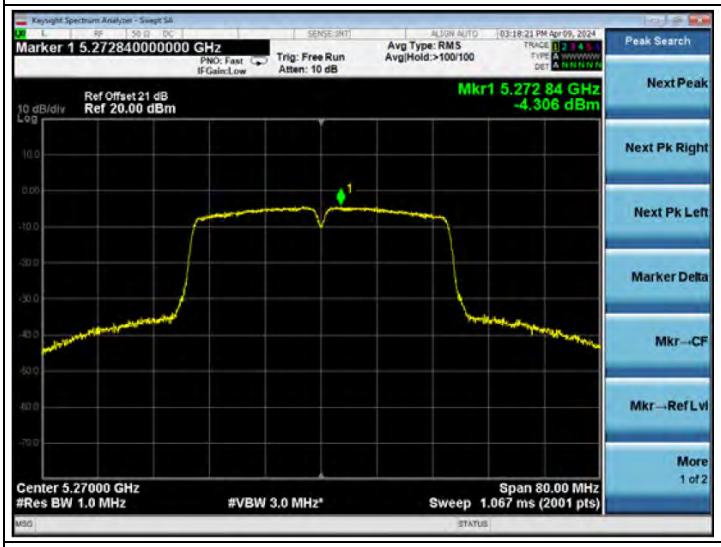
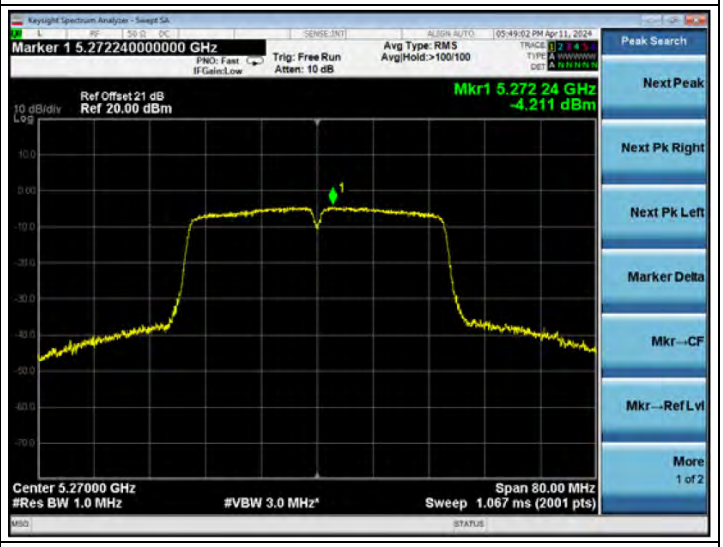
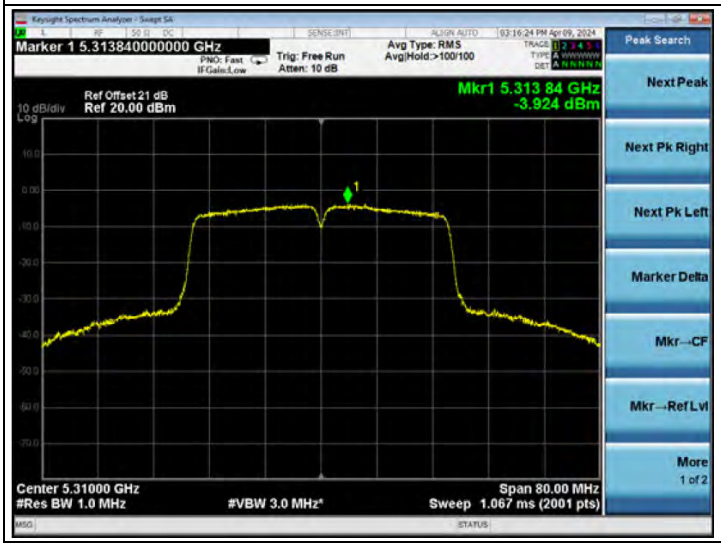
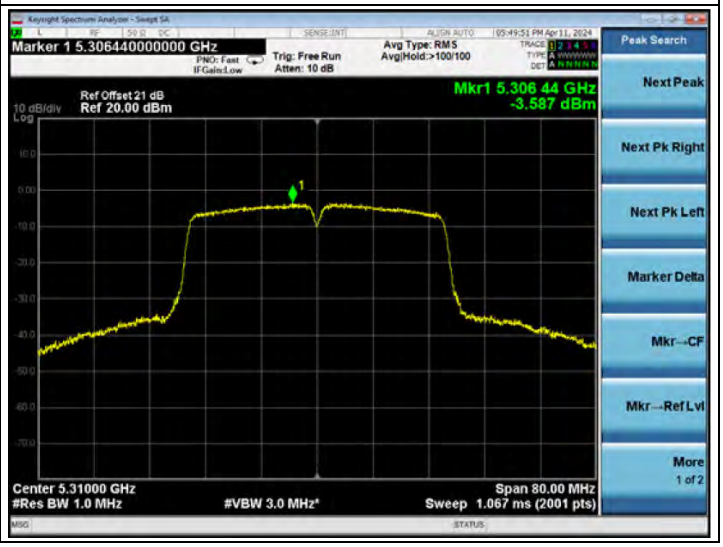
802.11n40	
Band-UNII-2C	
CNF2	**CNF3**
CH5510	CH5510
	
CH5590	CH5590
	
CH5670	CH5670
	

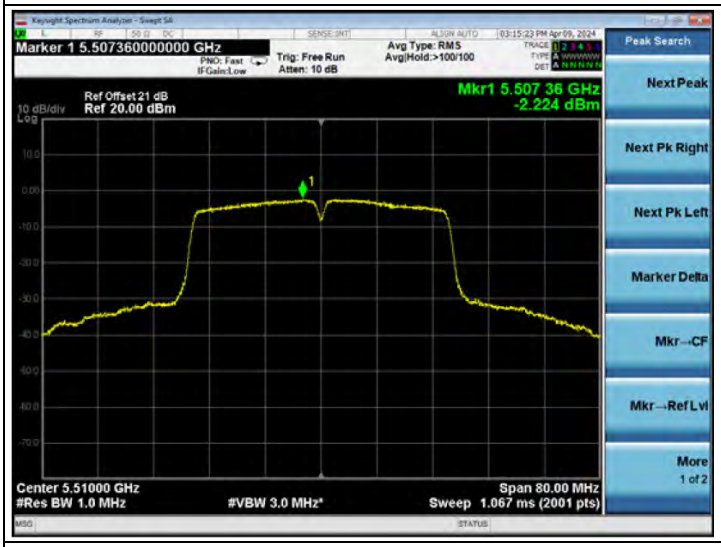
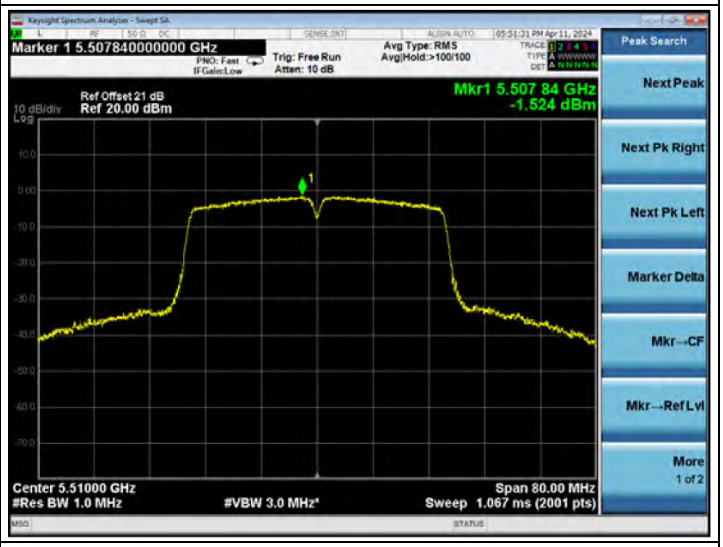
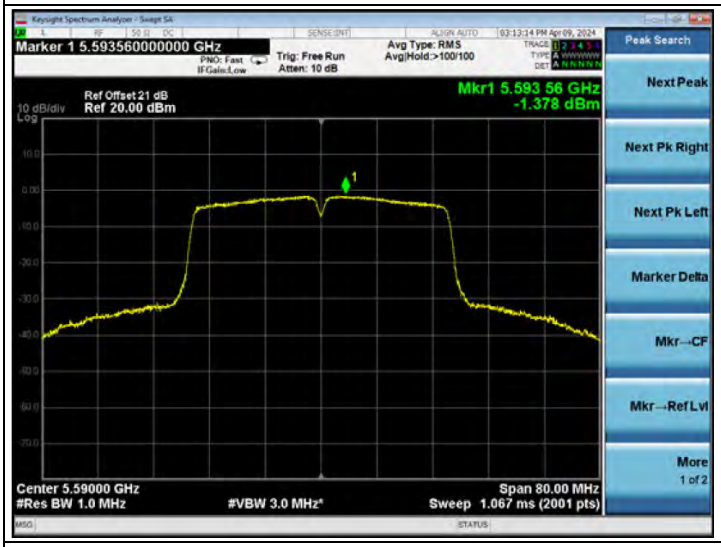
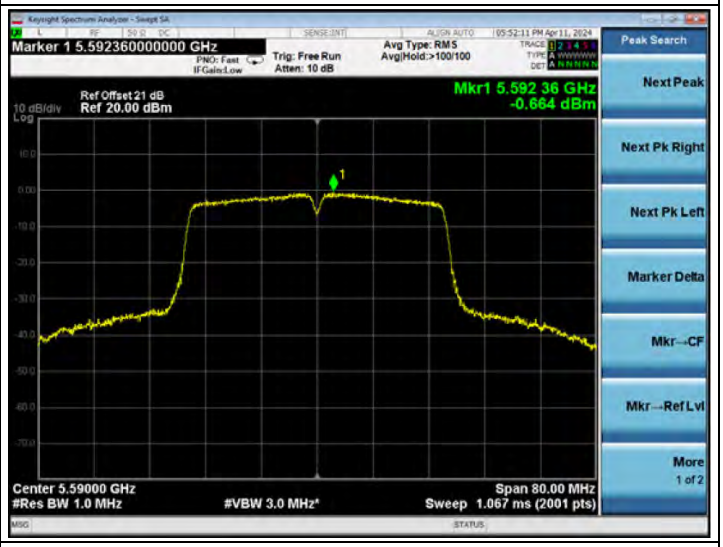
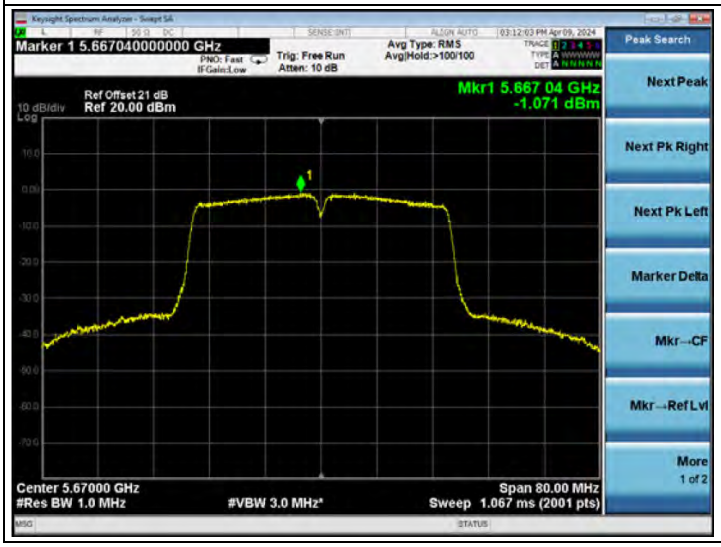
802.11ac20	
Band-UNII-1	
CNF2	**CNF3**
CH5180	CH5180
	
CH5200	CH5200
	
CH5240	CH5240
	

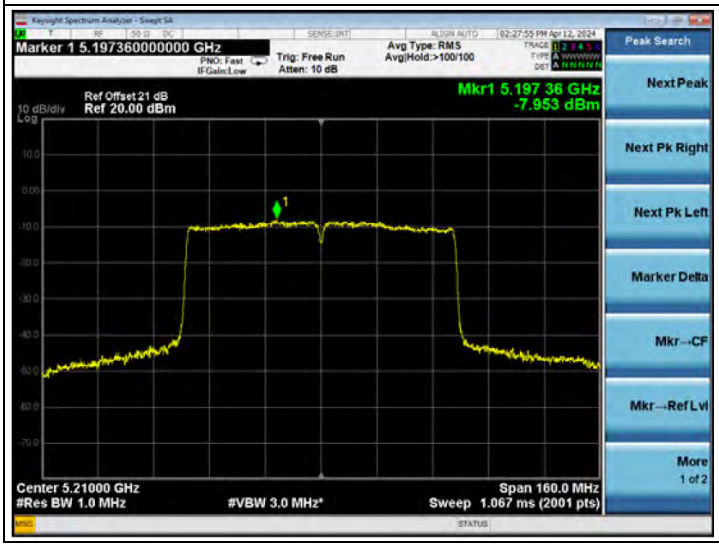
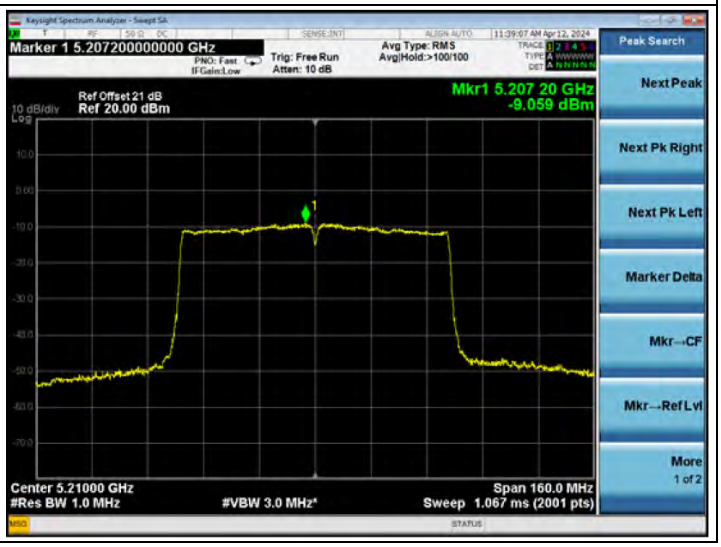
802.11ac20	
Band-UNII-2A	
CNF2	**CNF3**
CH5260	CH5260
	
CH5300	CH5300
	
CH5320	CH5320
	

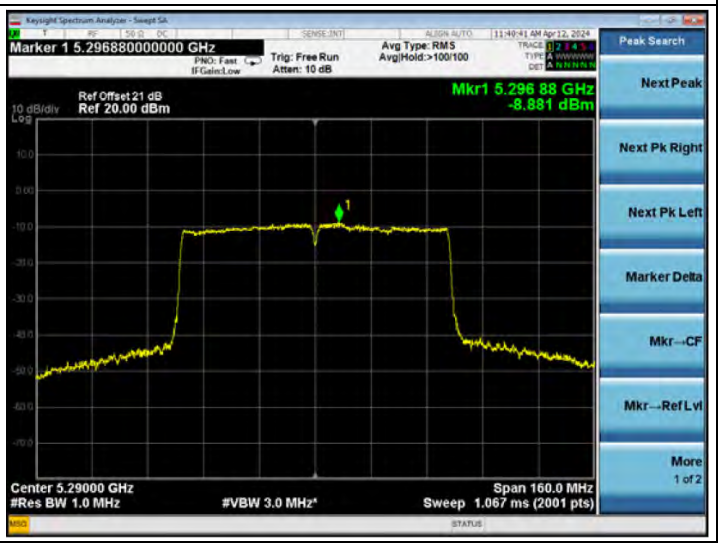
802.11ac20	
Band-UNII-2C	
CNF2	**CNF3**
CH5500	CH5500
	
CH5600	CH5600
	
CH5700	CH5700
	

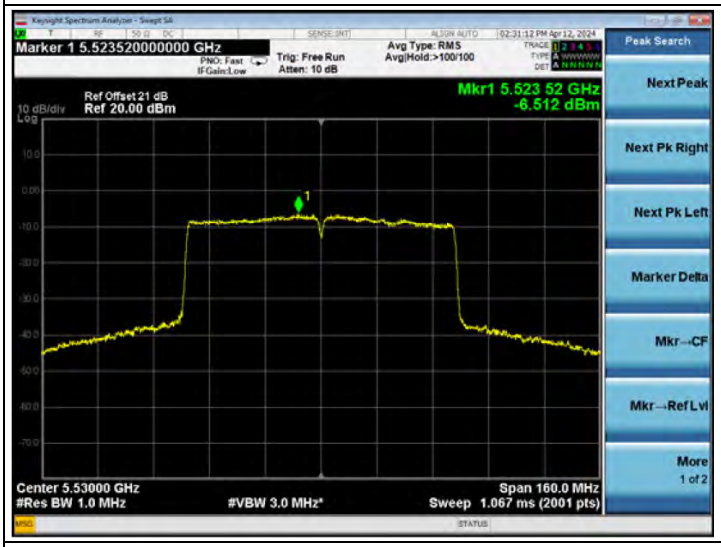
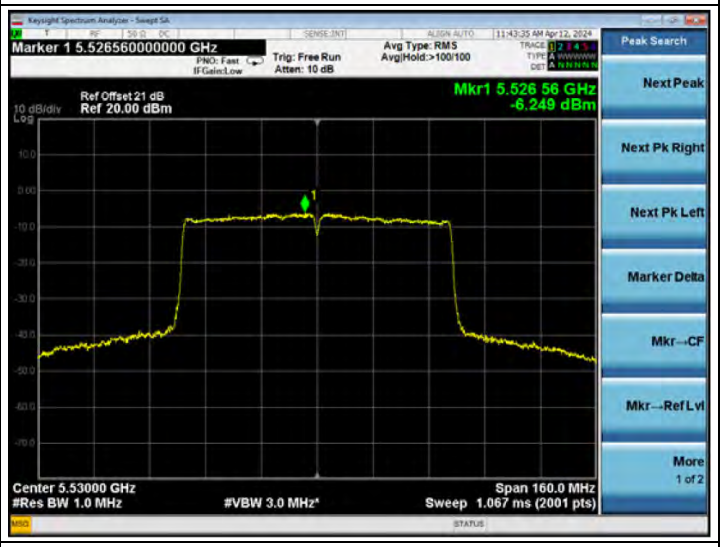
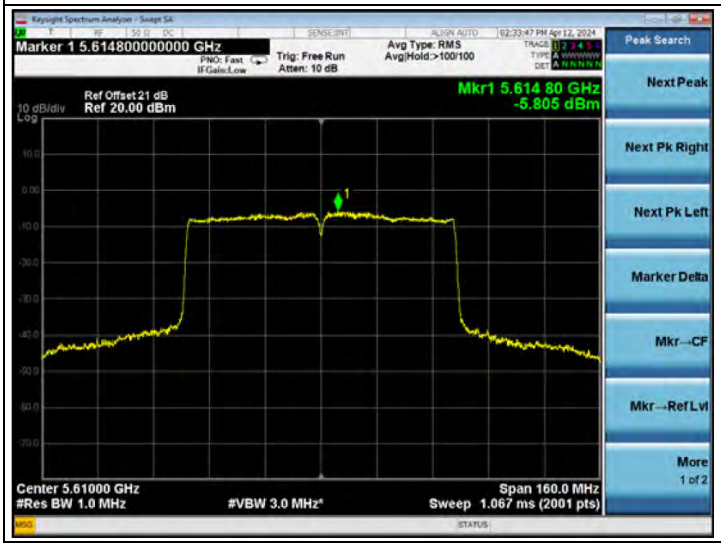
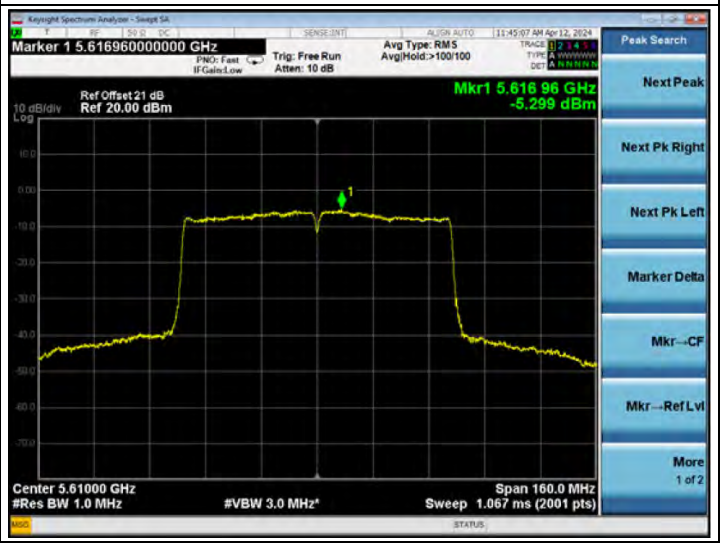
802.11ac40	
Band-UNII-1	
CNF2	**CNF3**
CH5190	CH5190
	
CH5230	CH5230
	

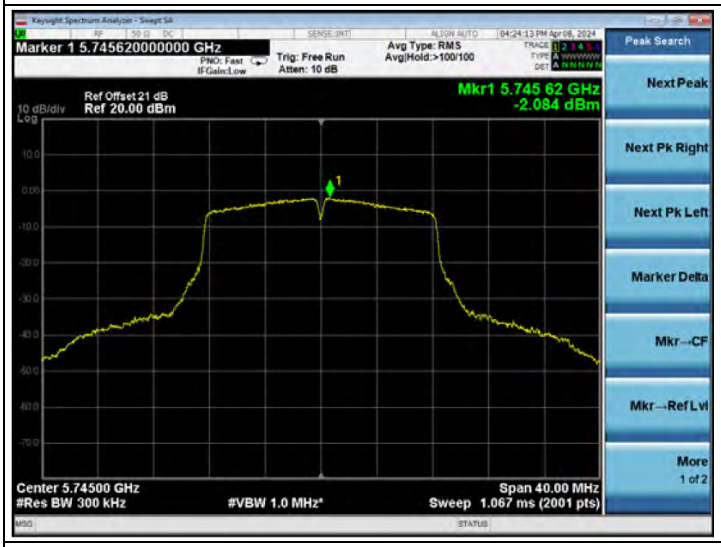
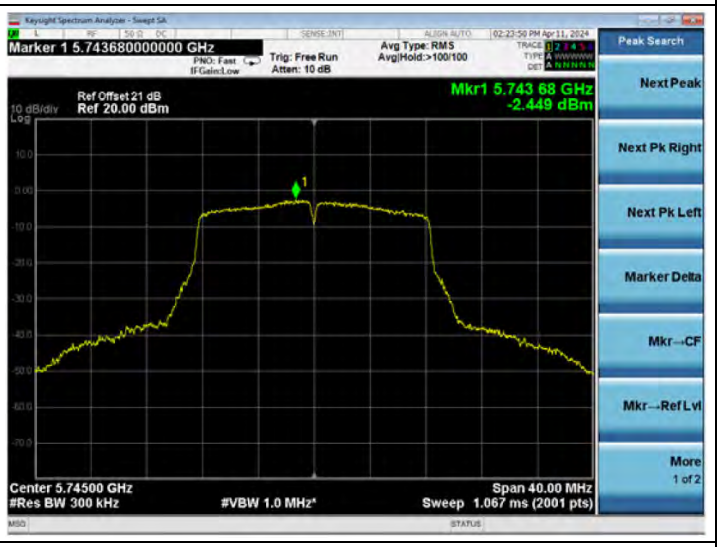
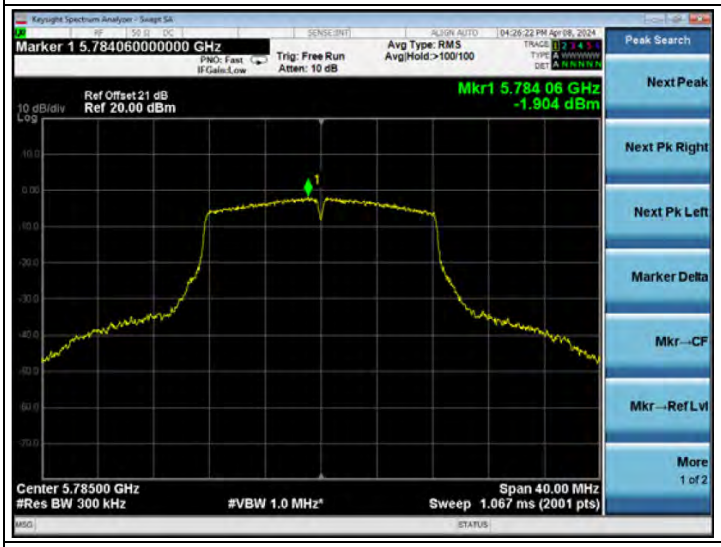
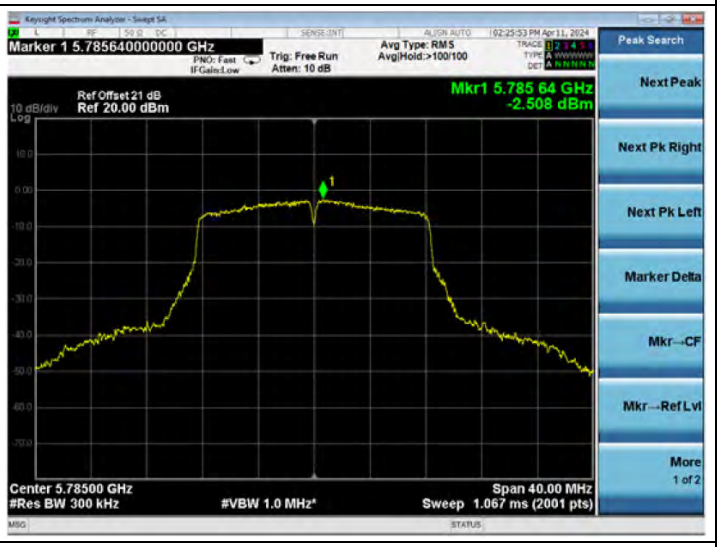
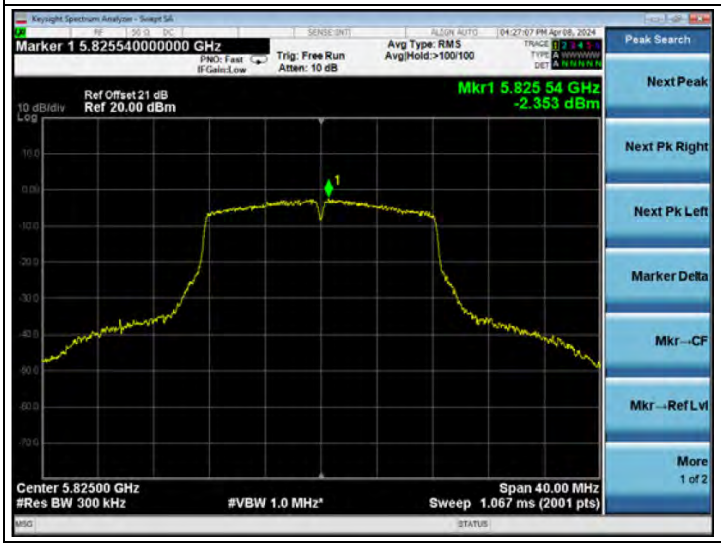
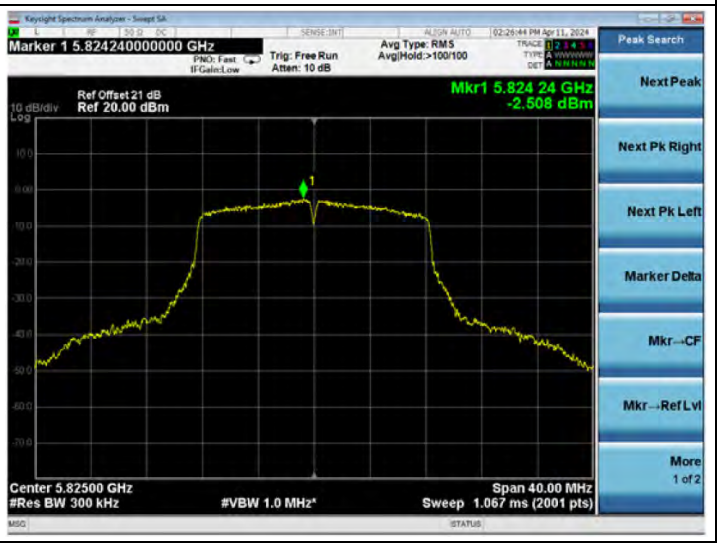
802.11ac40	
Band-UNII-2A	
CNF2	**CNF3**
CH5270	CH5270
	
CH5310	CH5310
	

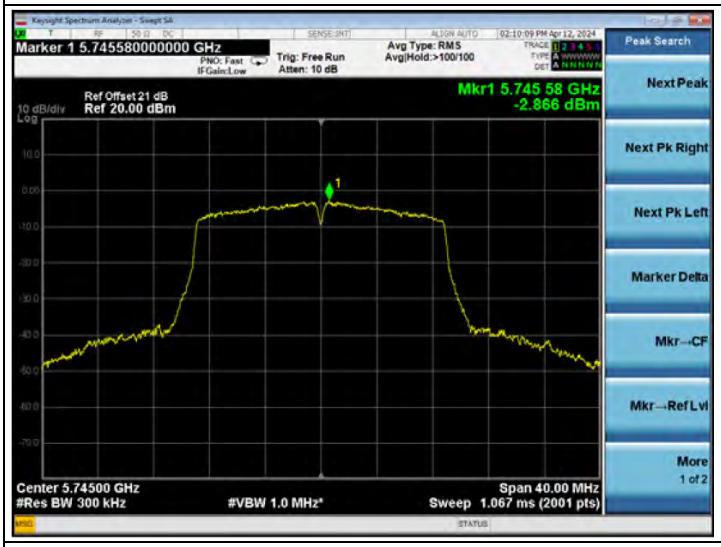
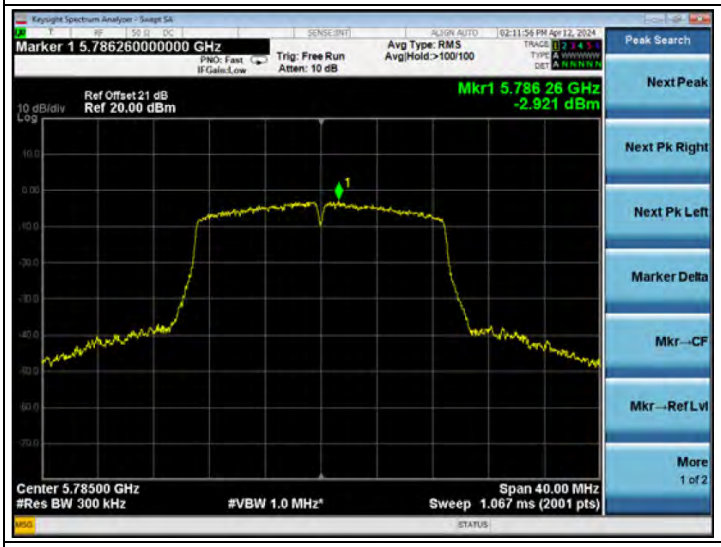
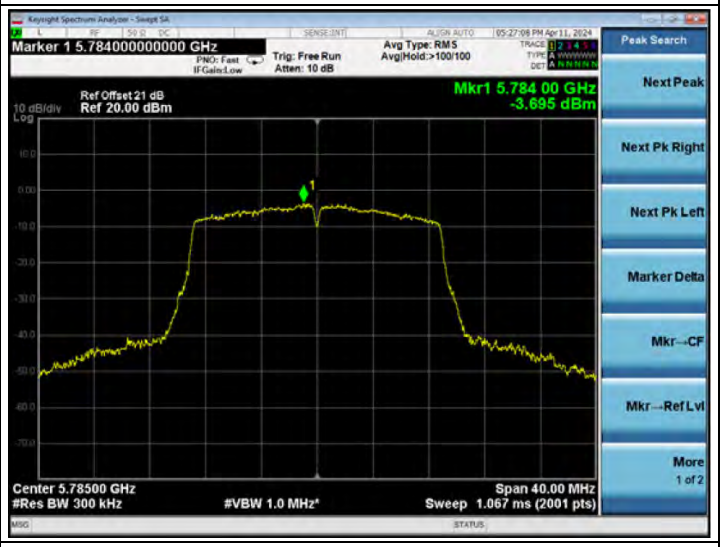
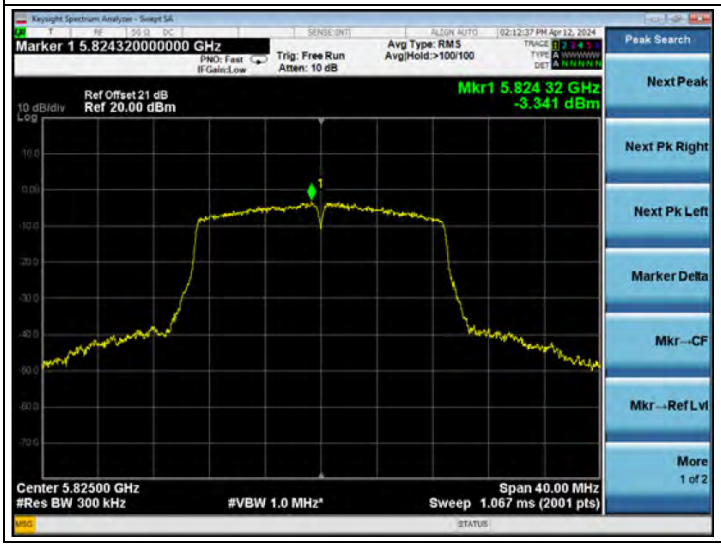
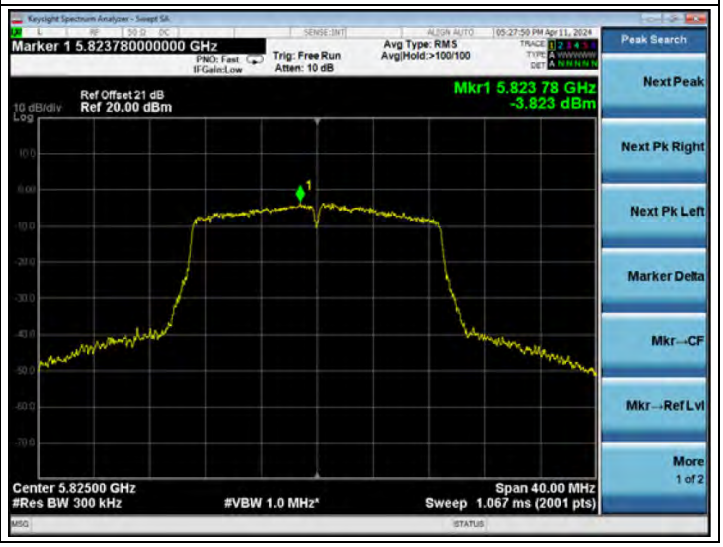
802.11ac40	
Band-UNII-2C	
CNF2	**CNF3**
CH5510	CH5510
	
CH5590	CH5590
	
CH5670	CH5670
	

802.11ac80	
Band-UNII-1	
CNF2	**CNF3**
CH5210	CH5210
	

802.11ac80	
Band-UNII-2A	
CNF2	**CNF3**
CH5290	CH5290
	

802.11ac80	
Band-UNII-2C	
CNF2	**CNF3**
CH5530	CH5530
	
CH5610	CH5610
	

802.11a	
Band-UNII-3	
CNF2	**CNF3**
CH5745	CH5745
	
CH5785	CH5785
	
CH5825	CH5825
	

802.11n20	
Band-UNII-3	
CNF2	**CNF3**
CH5745	CH5745
	
CH5785	CH5785
	
CH5825	CH5825
	

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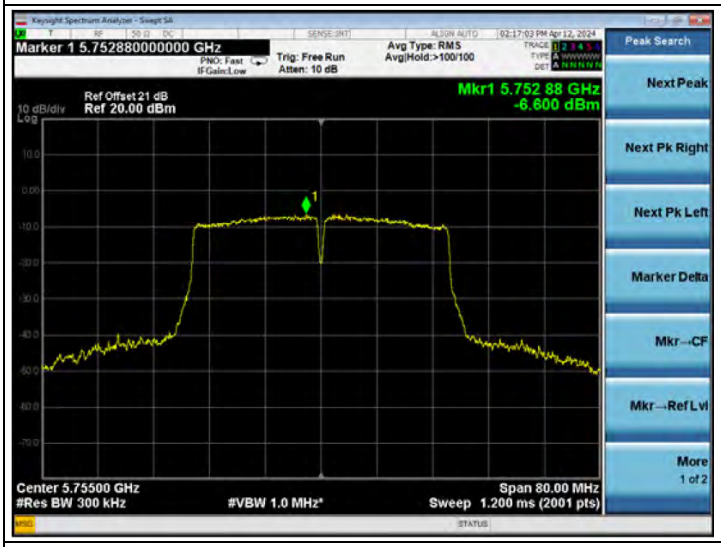
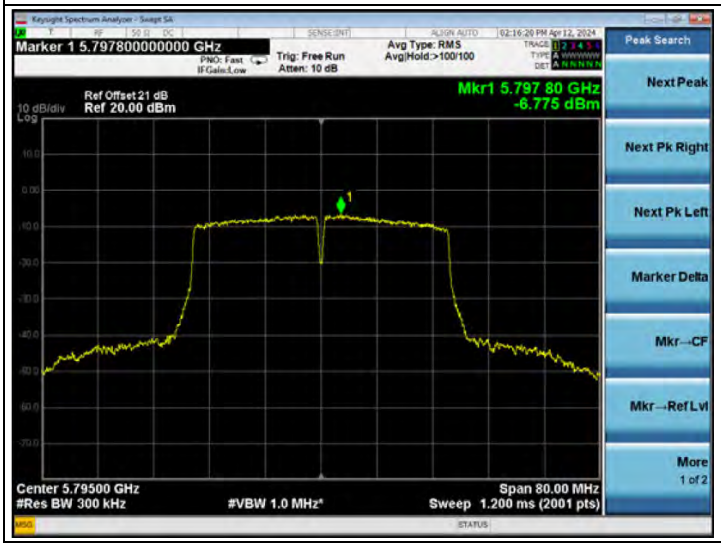
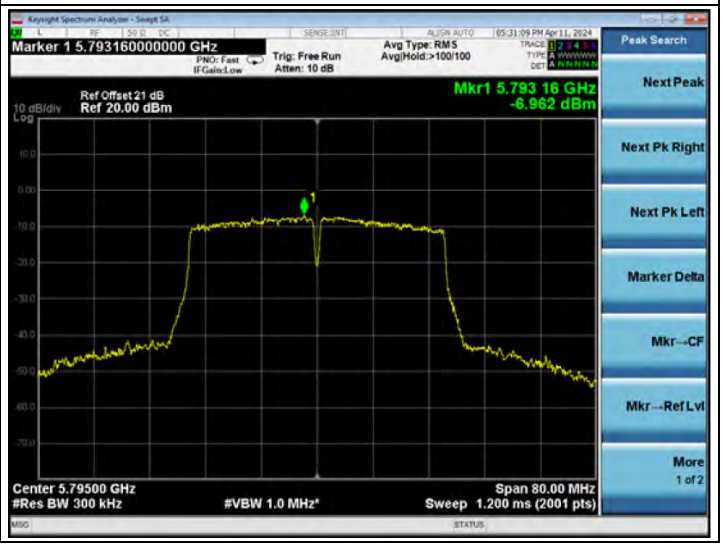
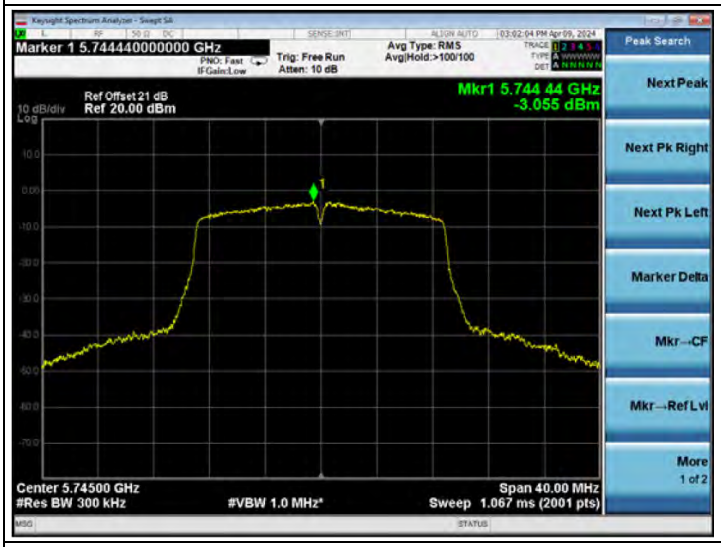
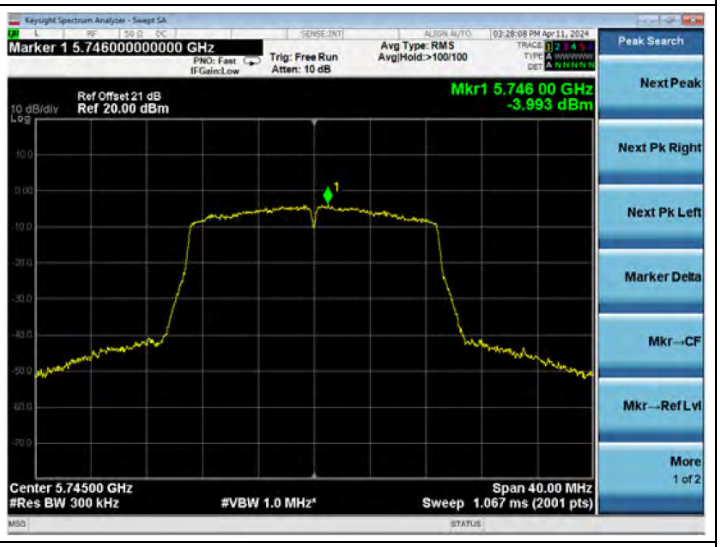
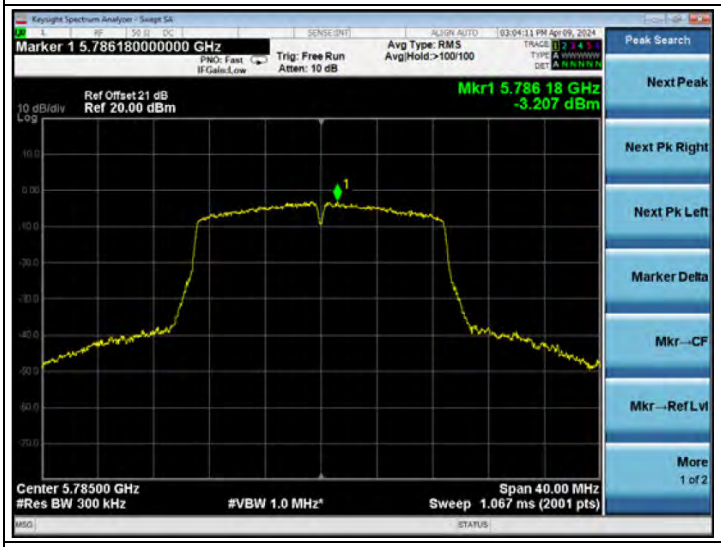
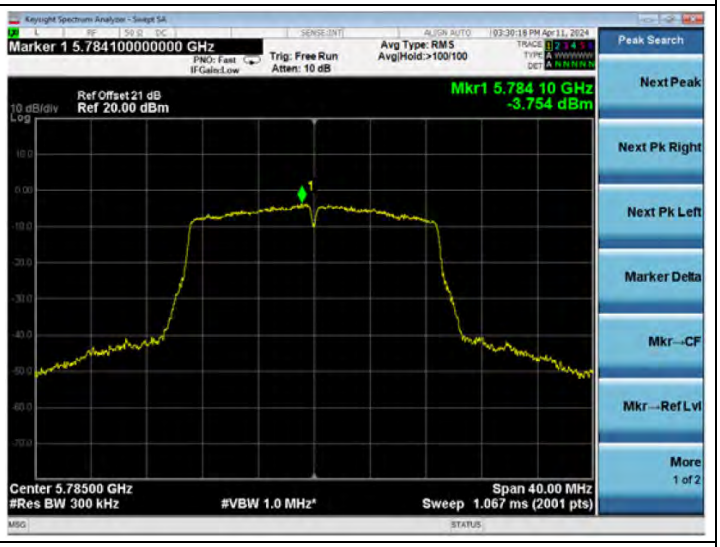
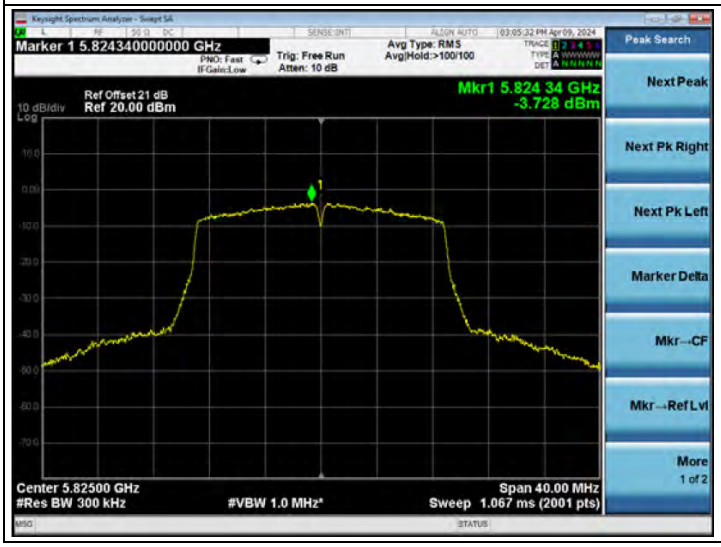
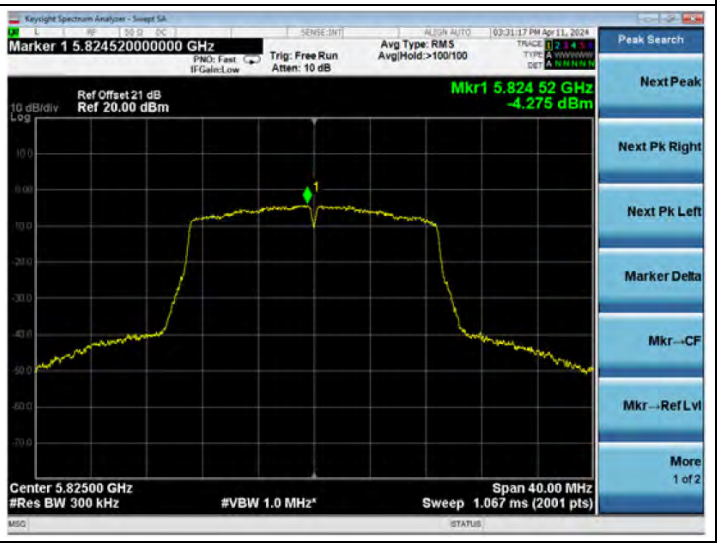
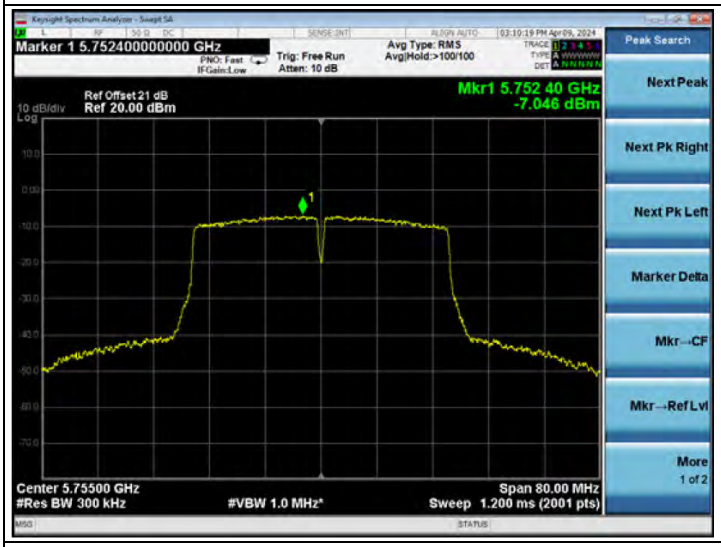
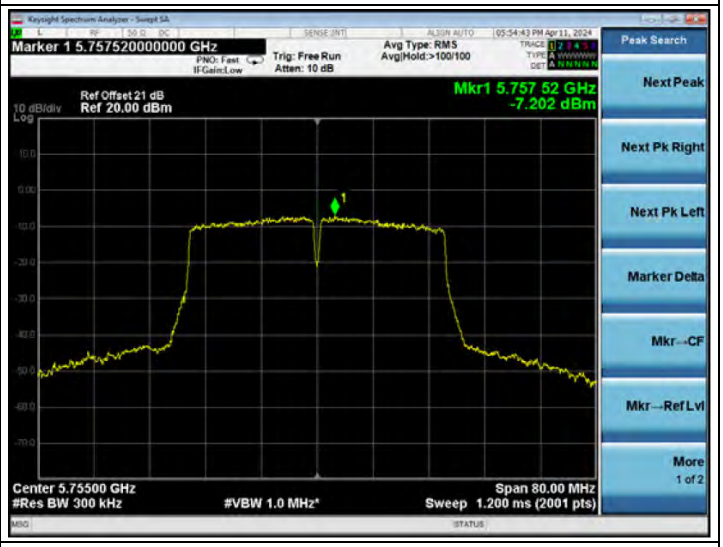
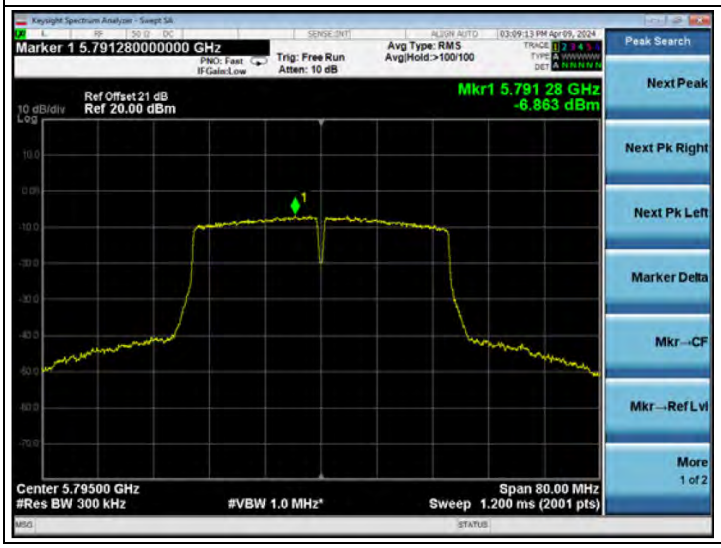
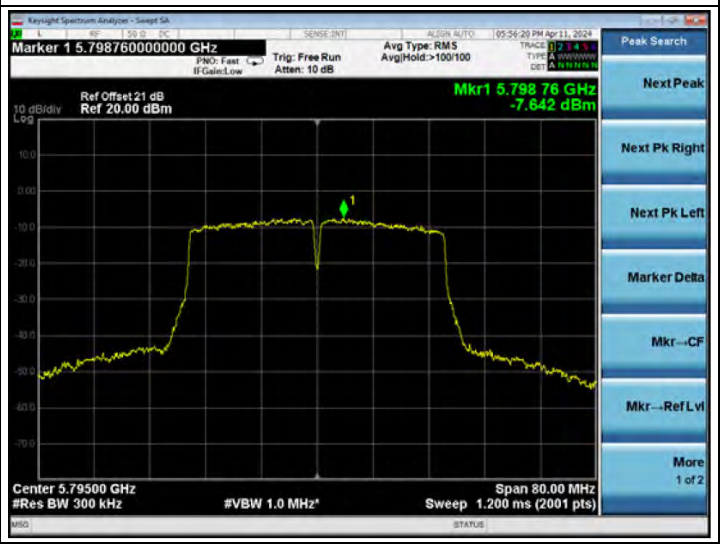
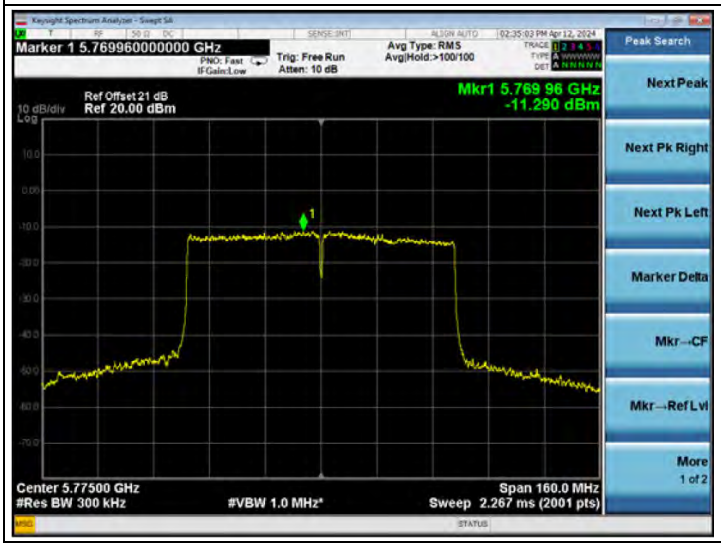
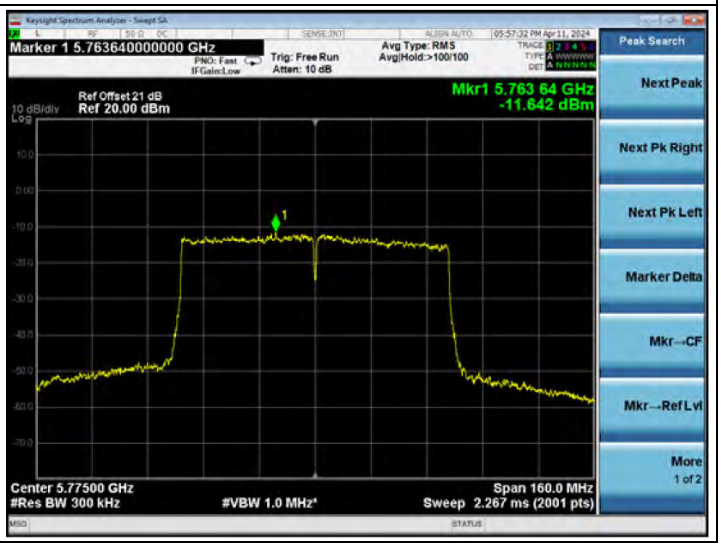
Band-UNII-3	
CNF2	**CNF3**
CH5755	CH5755
	
CH5795	CH5795
	

802.11ac20	
Band-UNII-3	
CNF2	**CNF3**
CH5745	CH5745
	
CH5785	CH5785
	
CH5825	CH5825
	

802.11ac40	
Band-UNII-3	
CH5755	CH5755
	
CH5795	CH5795
	

802.11ac80	
Band-UNII-3	
CNF2	**CNF3**
CH5775	CH5775
	

10 FREQUENCY STABILITY MEASUREMENT

10.1 Test Equipment

The following test equipment was used during the power spectral density measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Interval
1.	Spectrum Analyzer	Agilent	N9010A	MY52221182	2023.08.09	1 Year
2.	RF Cable	Mini-Circuits	FLC-3FT-SM SM+	22022838	2023.08.09	1 Year
3.	20 dB Attenuator	Mini-Circuits	BW-S20W2+	001	2023.09.21	1 Year

10.2 Block Diagram of Test Setup

The Same as section 6.2.

10.3 Specification Limits (§15.407(g))

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 user's manual or ±20ppm.

10.4 Operating Condition of EUT

The switch ON/OFF was used to enable the EUT to change the channel one by one.

10.5 Test Procedure

The transmitter output was connected to the spectrum analyzer.

(i) Set RBW = 10 kHz
(ii) Set VBW = 10 kHz.
(iii) Detector = Positive Peak.
(iv) Trace = Max Hold.
(v) Use the peak search function of the spectrum analyzer to mark the max peak value. The frequency as f_c.
(vi) The frequency error is $(f_c\text{-}f)/f \times 10^6$ ppm and must less than ±20ppm.
(vii) All condition of normal operation as specified in the user's manual should be considered.

10.6 Test Results

PASSED.

All the test results are listed below.

(Test Date: 2024.04.09 Temperature: 23℃ Humidity: 51 %)

Test Voltage (V)	Temperature (℃)	Channel	Frequency (MHz)	**Measured Frequency (f_c) (MHz)**	**Frequency Error (ppm)**	Limit (ppm)
AC 120V	25	36	5180	**5179.967**	**-6.4**	±20
		40	5200	**5199.9655**	**-6.6**	±20
		44	5220	**5219.9661**	**-6.5**	±20
		48	5240	**5239.9665**	**-6.4**	±20
		52	5260	**5259.9671**	**-6.3**	±20
		56	5280	**5279.9675**	**-6.2**	±20
		60	5300	**5299.9676**	**-6.1**	±20
		64	5320	**5319.9631**	**-6.9**	±20
		100	5500	**5499.9664**	**-6.1**	±20
		104	5520	**5519.9678**	**-5.8**	±20
		108	5540	**5539.9682**	**-5.7**	±20
		112	5560	**5559.9693**	**-5.5**	±20
		116	5580	**5579.9694**	**-5.5**	±20
		120	5600	**5599.9673**	**-5.8**	±20
		124	5620	**5619.9678**	**-5.7**	±20
		128	5640	**5639.9688**	**-5.5**	±20
		132	5660	**5659.9688**	**-5.5**	±20
		136	5680	**5679.9703**	**-5.2**	±20
		140	5700	**5699.9763**	**-4.2**	±20
		149	5745	**5744.972**	**-4.9**	±20
		153	5765	**5764.9739**	**-4.5**	±20
		157	5785	**5784.9746**	**-4.4**	±20
		161	5805	**5804.9744**	**-4.4**	±20
		165	5825	**5824.9762**	**-4.1**	±20

Test Voltage (V)	Temperature (°C)	Channel	Frequency (MHz)	**Measured Frequency (f_c) (MHz)**	**Frequency Error (ppm)**	Limit (ppm)
AC 108V	25	36	5180	**5179.9672**	**-6.3**	±20
		40	5200	**5199.9657**	**-6.6**	±20
		44	5220	**5219.9663**	**-6.5**	±20
		48	5240	**5239.9667**	**-6.4**	±20
		52	5260	**5259.9672**	**-6.2**	±20
		56	5280	**5279.9677**	**-6.1**	±20
		60	5300	**5299.9679**	**-6.1**	±20
		64	5320	**5319.9634**	**-6.9**	±20
		100	5500	**5499.9667**	**-6.1**	±20
		104	5520	**5519.968**	**-5.8**	±20
		108	5540	**5539.9685**	**-5.7**	±20
		112	5560	**5559.9695**	**-5.5**	±20
		116	5580	**5579.9696**	**-5.4**	±20
		120	5600	**5599.9677**	**-5.8**	±20
		124	5620	**5619.9681**	**-5.7**	±20
		128	5640	**5639.9691**	**-5.5**	±20
		132	5660	**5659.9691**	**-5.5**	±20
		136	5680	**5679.9706**	**-5.2**	±20
		140	5700	**5699.9766**	**-4.1**	±20
		149	5745	**5744.9723**	**-4.8**	±20
		153	5765	**5764.9742**	**-4.5**	±20
		157	5785	**5784.9749**	**-4.3**	±20
		161	5805	**5804.9746**	**-4.4**	±20
		165	5825	**5824.9765**	**-4**	±20

Test Voltage (V)	Temperature (°C)	Channel	Frequency (MHz)	**Measured Frequency (f_c) (MHz)**	**Frequency Error (ppm)**	Limit (ppm)
AC 132V	25	36	5180	**5179.9672**	**-6.3**	±20
		40	5200	**5199.9658**	**-6.6**	±20
		44	5220	**5219.9665**	**-6.4**	±20
		48	5240	**5239.9667**	**-6.4**	±20
		52	5260	**5259.9674**	**-6.2**	±20
		56	5280	**5279.9679**	**-6.1**	±20
		60	5300	**5299.9679**	**-6.1**	±20
		64	5320	**5319.9635**	**-6.9**	±20
		100	5500	**5499.9668**	**-6**	±20
		104	5520	**5519.9683**	**-5.7**	±20
		108	5540	**5539.9686**	**-5.7**	±20
		112	5560	**5559.9698**	**-5.4**	±20
		116	5580	**5579.9699**	**-5.4**	±20
		120	5600	**5599.9677**	**-5.8**	±20
		124	5620	**5619.9681**	**-5.7**	±20
		128	5640	**5639.9692**	**-5.5**	±20
		132	5660	**5659.9692**	**-5.4**	±20
		136	5680	**5679.9706**	**-5.2**	±20
		140	5700	**5699.9767**	**-4.1**	±20
		149	5745	**5744.9725**	**-4.8**	±20
		153	5765	**5764.9742**	**-4.5**	±20
		157	5785	**5784.9749**	**-4.3**	±20
		161	5805	**5804.9746**	**-4.4**	±20
		165	5825	**5824.9763**	**-4.1**	±20

Test Voltage (V)	Temperature (℃)	Channel	Frequency (MHz)	**Measured Frequency (f_c) (MHz)**	**Frequency Error (ppm)**	Limit (ppm)
AC 120V	0	36	5180	**5179.9671**	**-6.4**	±20
		40	5200	**5199.9652**	**-6.7**	±20
		44	5220	**5219.9663**	**-6.5**	±20
		48	5240	**5239.9662**	**-6.5**	±20
		52	5260	**5259.967**	**-6.3**	±20
		56	5280	**5279.9674**	**-6.2**	±20
		60	5300	**5299.9672**	**-6.2**	±20
		64	5320	**5319.9629**	**-7**	±20
		100	5500	**5499.9661**	**-6.2**	±20
		104	5520	**5519.9676**	**-5.9**	±20
		108	5540	**5539.9681**	**-5.8**	±20
		112	5560	**5559.9691**	**-5.6**	±20
		116	5580	**5579.9691**	**-5.5**	±20
		120	5600	**5599.967**	**-5.9**	±20
		124	5620	**5619.9677**	**-5.7**	±20
		128	5640	**5639.9686**	**-5.6**	±20
		132	5660	**5659.9686**	**-5.5**	±20
		136	5680	**5679.9701**	**-5.3**	±20
		140	5700	**5699.9761**	**-4.2**	±20
		149	5745	**5744.9718**	**-4.9**	±20
		153	5765	**5764.9737**	**-4.6**	±20
		157	5785	**5784.9745**	**-4.4**	±20
		161	5805	**5804.9741**	**-4.5**	±20
		165	5825	**5824.9758**	**-4.2**	±20

Test Voltage (V)	Temperature (°C)	Channel	Frequency (MHz)	**Measured Frequency (f_c) (MHz)**	**Frequency Error (ppm)**	Limit (ppm)
AC 120V	50	36	5180	**5179.967**	**-6.4**	±20
		40	5200	**5199.9653**	**-6.7**	±20
		44	5220	**5219.9662**	**-6.5**	±20
		48	5240	**5239.9664**	**-6.4**	±20
		52	5260	**5259.967**	**-6.3**	±20
		56	5280	**5279.9676**	**-6.1**	±20
		60	5300	**5299.9677**	**-6.1**	±20
		64	5320	**5319.9633**	**-6.9**	±20
		100	5500	**5499.9666**	**-6.1**	±20
		104	5520	**5519.9677**	**-5.9**	±20
		108	5540	**5539.9681**	**-5.8**	±20
		112	5560	**5559.9692**	**-5.5**	±20
		116	5580	**5579.9691**	**-5.5**	±20
		120	5600	**5599.9675**	**-5.8**	±20
		124	5620	**5619.9677**	**-5.7**	±20
		128	5640	**5639.9686**	**-5.6**	±20
		132	5660	**5659.9686**	**-5.5**	±20
		136	5680	**5679.9705**	**-5.2**	±20
		140	5700	**5699.9764**	**-4.1**	±20
		149	5745	**5744.9723**	**-4.8**	±20
		153	5765	**5764.9737**	**-4.6**	±20
		157	5785	**5784.9744**	**-4.4**	±20
		161	5805	**5804.9742**	**-4.4**	±20
		165	5825	**5824.9763**	**-4.1**	±20

11 ANTENNA REQUIREMENT

11.1 Specification Limits (§15.203)

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

11.2 Result

According to KDB 353028 D1, the following describes the three ways that can be used to demonstrate compliance to Section 15.203: a) Antenna permanently attached. b) Unique (non-standard) antenna connector. c) Professional installation.
For this product, the antenna is: ☐ Antenna permanently attached ☑ Unique (non-standard) antenna connector ☐ Professional installation ☐ not meet any of ways list above that ☑ compliant ☐ not compliant with the requirement of Section 15.203.

12 DEVIATION TO TEST SPECIFICATIONS

None.

13 MEASUREMENT UNCERTAINTY LIST

The measurement uncertainty was estimated for test on the EUT according to CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage of K=2.
The uncertainties value is not used in determining the PASS/FAIL results.

Test Items/Facilities	Frequency/Equipment/Unit	Uncertainty
Conducted Emission No.1 Shielded Room	9kHz~150kHz	±3.1 dB
	150kHz~30MHz	±2.6 dB
Conducted Emission No.3 Shielded Room	9kHz~150kHz	±3.1 dB
	150kHz~30MHz	±2.6 dB
Radiated Emission	30MHz~200MHz, Horizontal	±3.8 dB
	30MHz~200MHz, Vertical	±4.1 dB
	200MHz~1000MHz, Horizontal	±3.6 dB
	200MHz~1000MHz, Vertical	±5.1 dB
	1GHz~6GHz	±5.3 dB
	6GHz~18GHz	±5.3 dB
	18GHz~40GHz	±3.5 dB
Output Power Test	50MHz~18GHz	0.77 dB
Power Density Test	9kHz~6GHz	1.08 dB
RF Frequency Test	9kHz~40GHz	$6*10^{-4}$
Bandwidth Test	9kHz~6GHz	$1.5*10^{-3}$
RF Radiated Power Test	30MHz~1000MHz	3.06 dB
Conducted Output Power Test	50MHz~18GHz	0.83 dB
AC Voltage(<10kHz) Test	120V~230V	0.04 %
DC Power Test	0V~30V	0.4 %
Temperature	-40℃~+100℃	0.52 ℃
Humidity	30%~95%	2.6 %