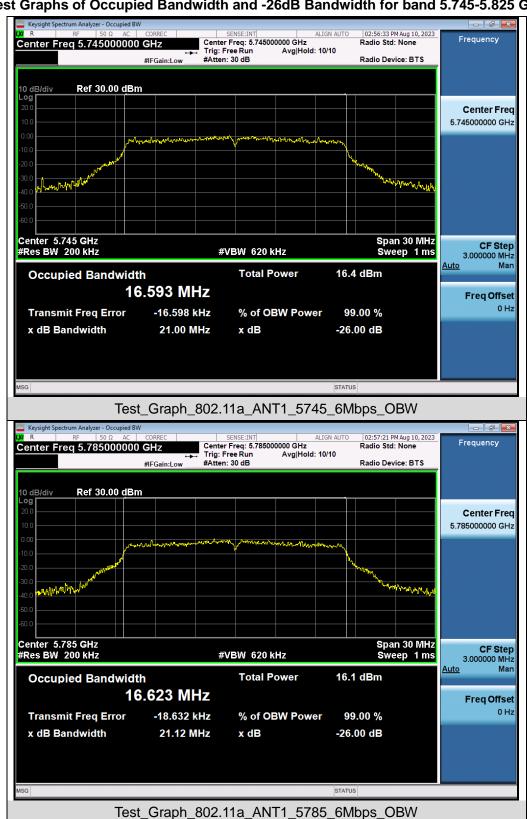
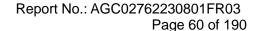


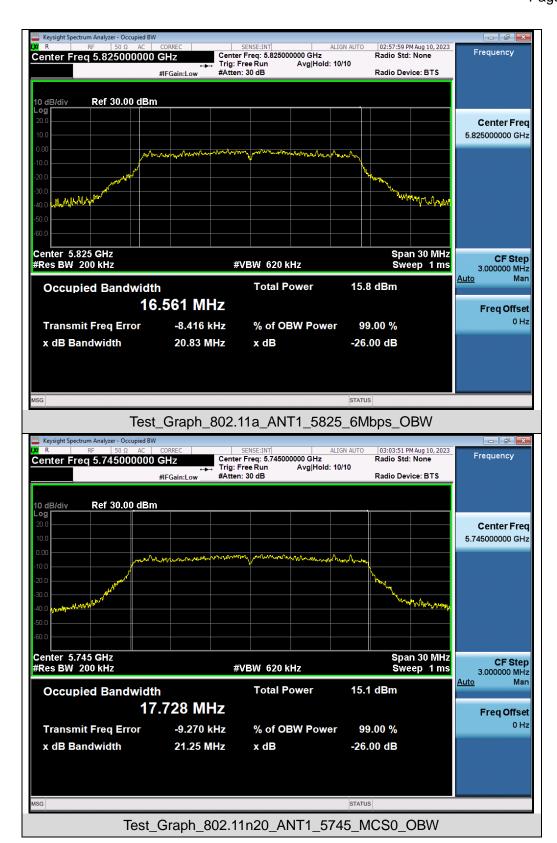


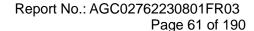
Test Graphs of Occupied Bandwidth and -26dB Bandwidth for band 5.745-5.825 GHz



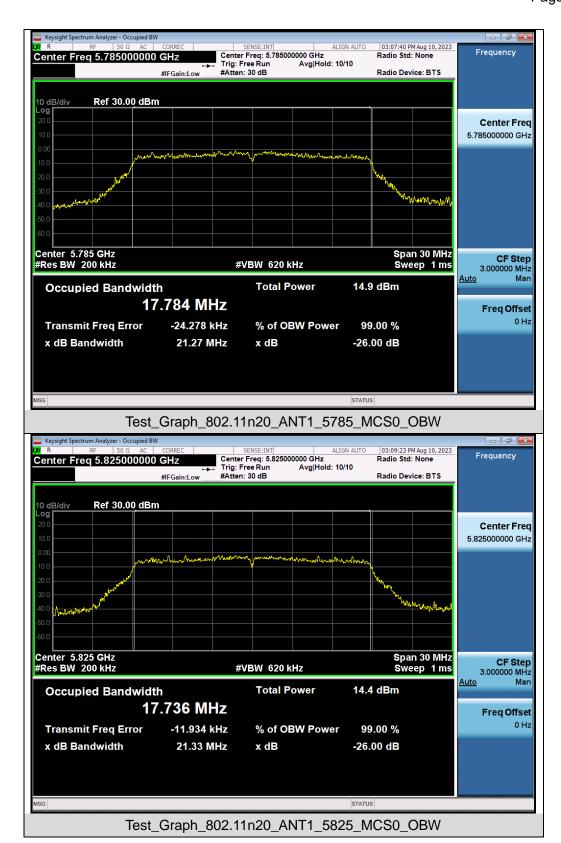


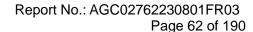




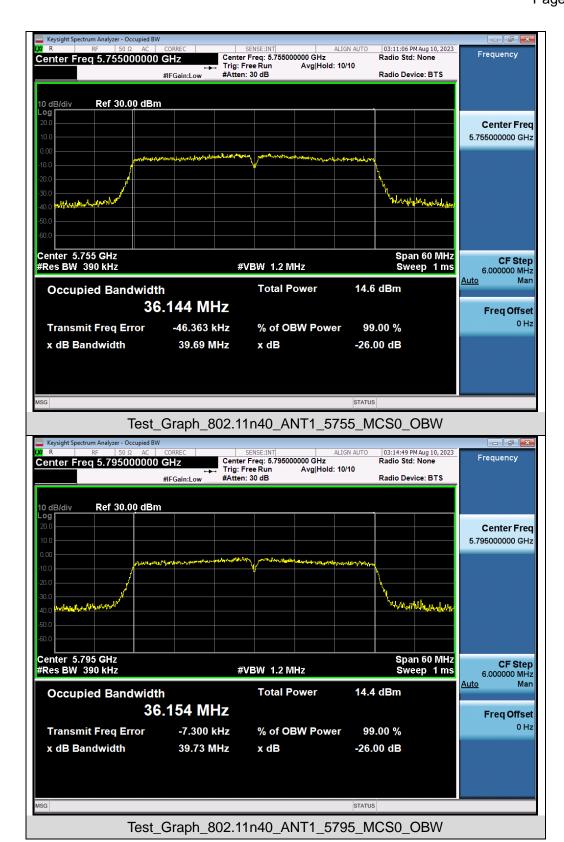


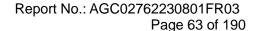




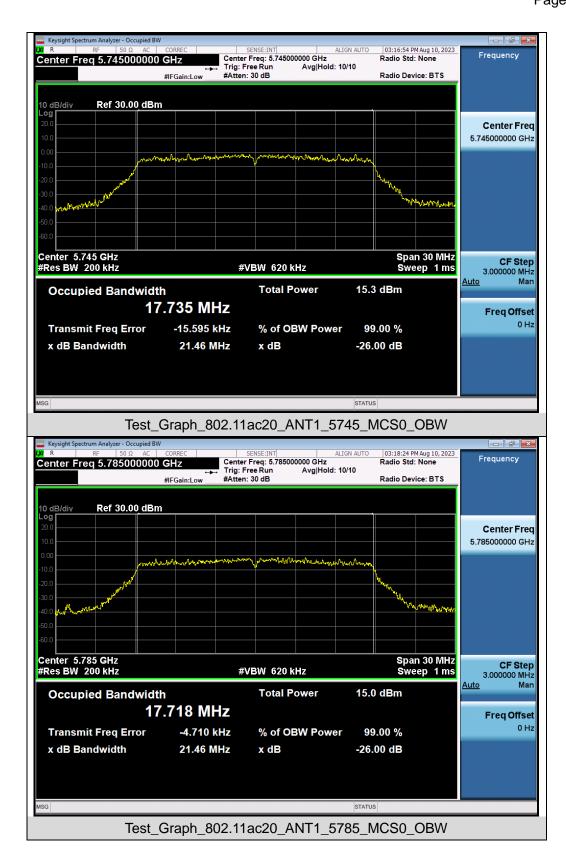


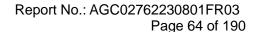




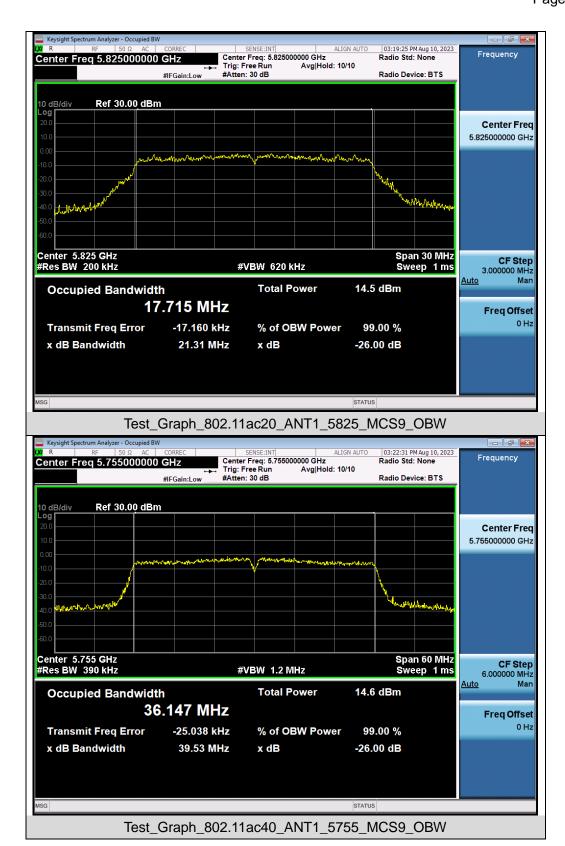


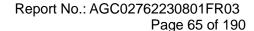




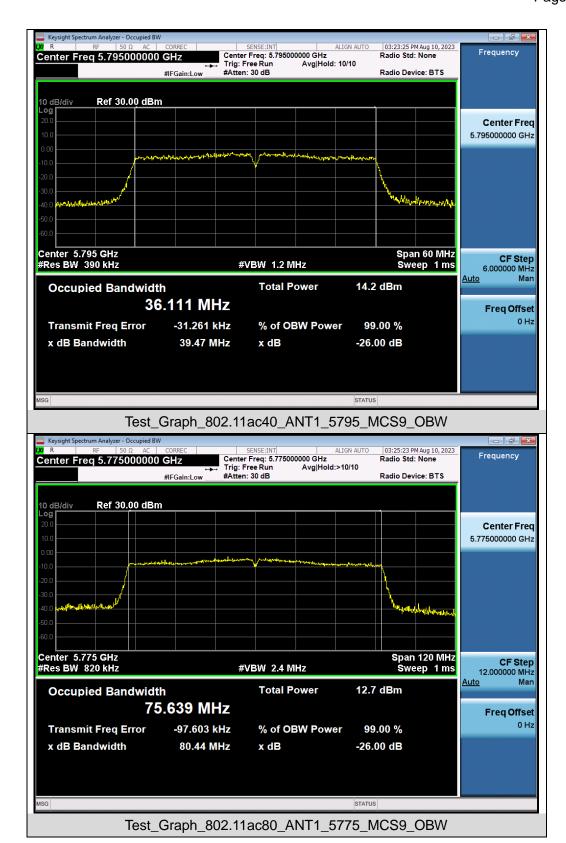


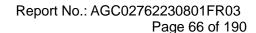






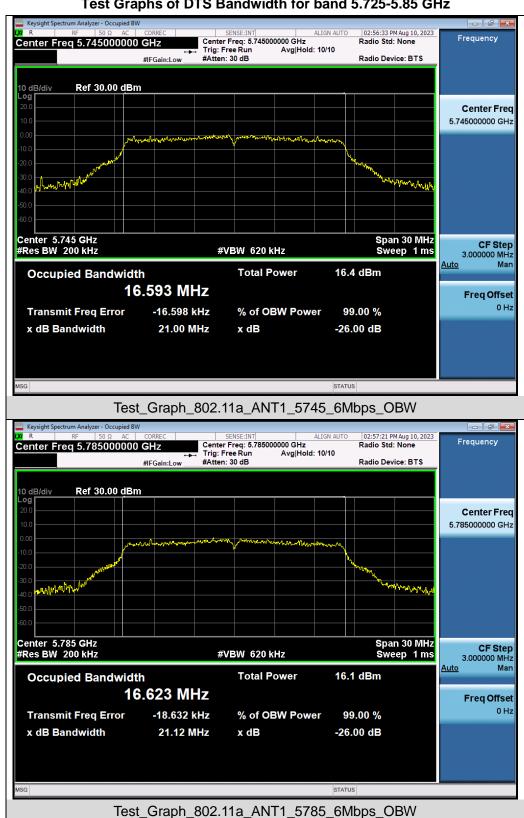






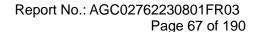


Test Graphs of DTS Bandwidth for band 5.725-5.85 GHz

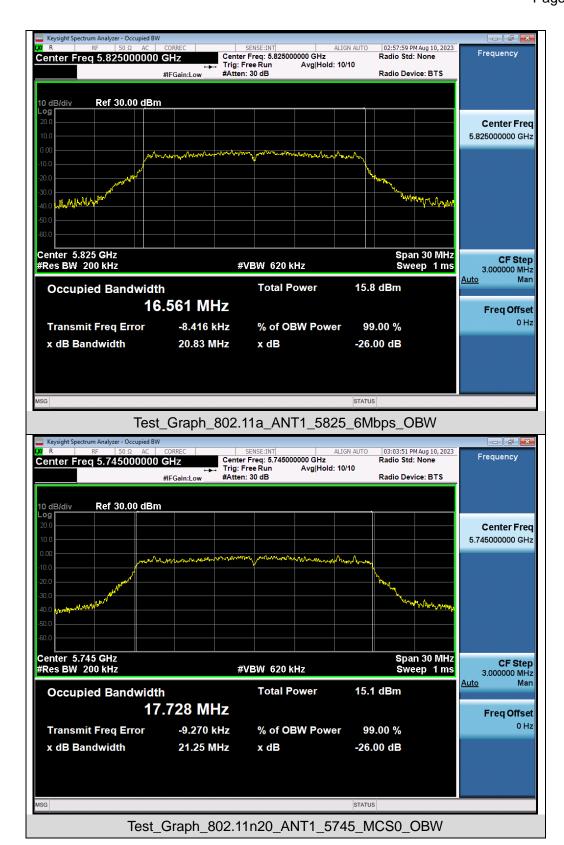


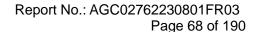
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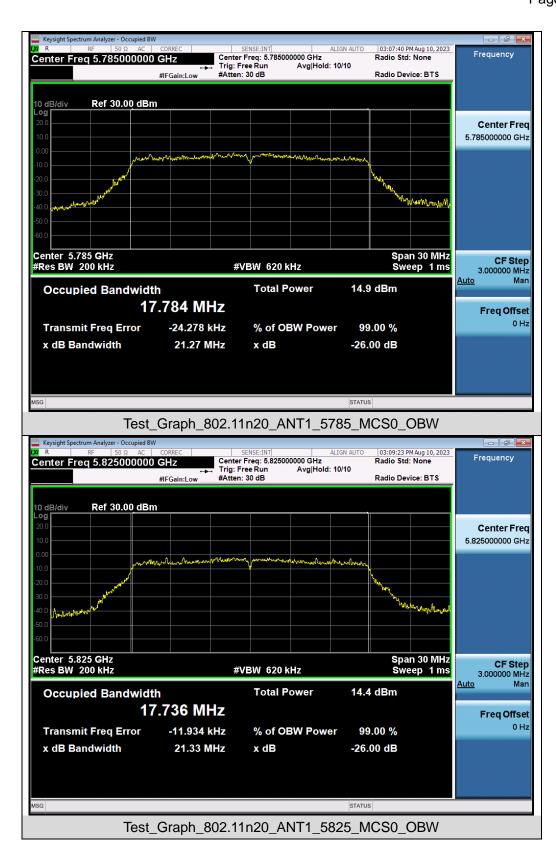


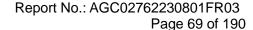




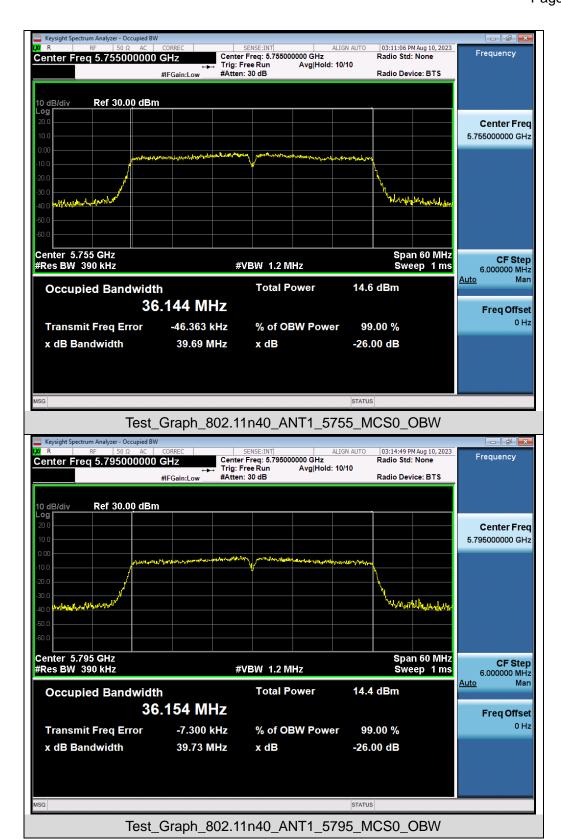


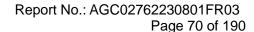




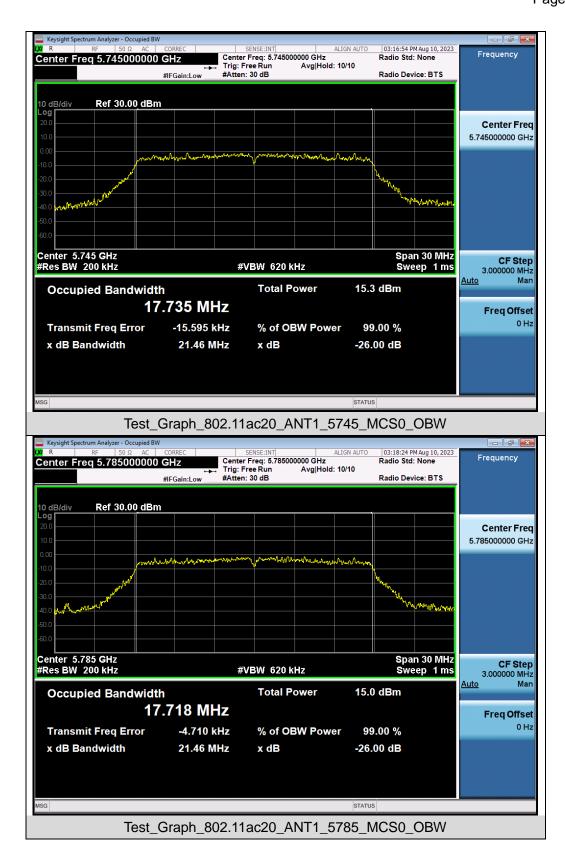


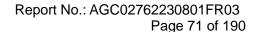




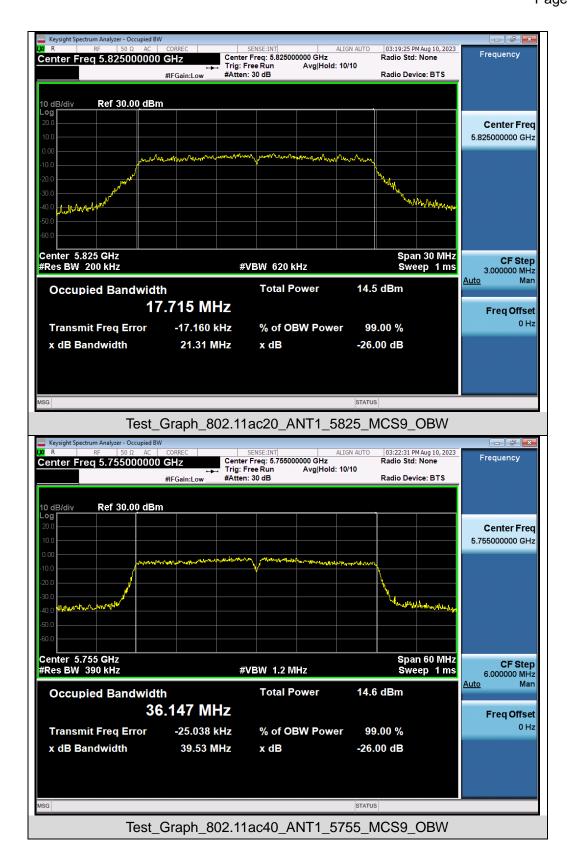


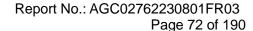




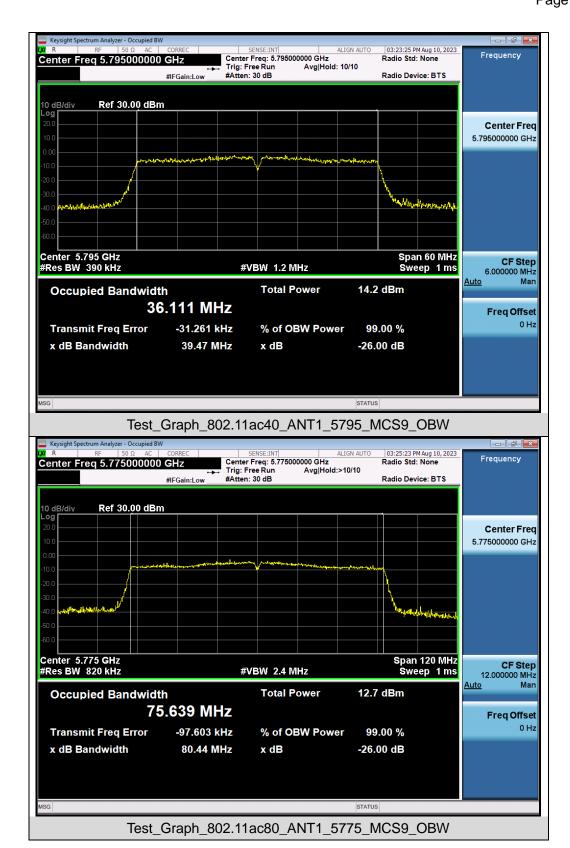














9. Power Spectral Density Measurement

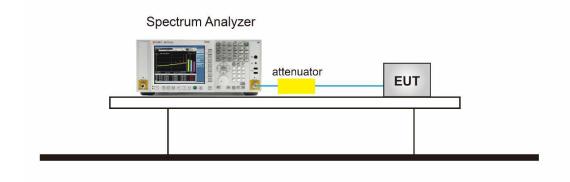
9.1 Provisions Applicable

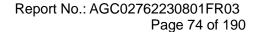
Operation Band	EUT Category		LIMIT	
		Outdoor Access Point	17dBm/ MHz	
U-NII-1		Fixed point-to-point Access Point	17dBm/ MHz	
O-INII- I		Indoor Access Point	17dBm/ MHz	
	\boxtimes	Client devices	11dBm/ MHz	
U-NII-2A	/		11dBm/ MHz	
U-NII-2C	/		11dBm/ MHz	
U-NII-3	/		30 dBm/500kHz	

9.2 Measurement Procedure

- Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator.
- 2. Span was set to encompass the entire 26dB EBW of the signal.
- 3. RBW = 1MHz.
- 4. If measurement bandwidth of Maximum PSD is specified in 500 kHz, RBW = 100KHz
- 5. Set VBW≥[3×RBW].
- 6. Sweep Time=Auto couple.
- 7. Detector function=RMS (i.e., power averaging).
- 8. Trace average at least 100 traces in power averaging (rms) mode.
- 9. When the measurement bandwidth of Maximum PSD is specified in 100 kHz, add a constant factor 10*log(500kHz/100kHz) = 6.99 dB to the measured result.
- 10. Determine according to the duty cycle of the equipment: when it is less than 98%, follow the steps below.
- 11. Add [10 log (1/D)], where D is the duty cycle, to the measured power to compute the average power during the actual transmission times (because the measurement represents an average over both the ON and OFF times of the transmission). For example, add [10 log (1/0.25)] = 6 dB if the duty cycle is 25%.
- 12. Record the test results in the report.

9.3 Measurement Setup (Block Diagram of Configuration)



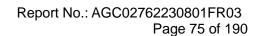




9.4 Measurement Result

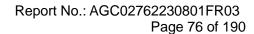
Test Data of Conducted Output Power Density for band 5.15-5.25 GHz					
Test Mode	Test Channel (MHz)	Average Power Density (dBm/MHz)	Limits (dBm/MHz)	Pass or Fail	
	5180	2.493	11	Pass	
802.11a	5200	2.396	11	Pass	
	5240	2.310	11	Pass	
802.11n20	5180	0.802	11	Pass	
	5200	0.657	11	Pass	
	5240	0.668	11	Pass	
802.11n40	5190	-2.346	11	Pass	
	5230	-2.335	11	Pass	
802.11ac20	5180	1.134	11	Pass	
	5200	0.876	11	Pass	
	5240	0.629	11	Pass	
802.11ac40	5190	-1.989	11	Pass	
	5230	-2.351	11	Pass	
802.11ac80	5210	-5.552	11	Pass	

Test Data of Conducted Output Power Density for band 5.25-5.35 GHz				
Test Mode	Test Channel (MHz)	Average Power Density (dBm/MHz)	Limits (dBm/MHz)	Pass or Fail
	5260	1.696	11	Pass
802.11a	5300	1.229	11	Pass
	5320	0.955	11	Pass
	5260	0.067	11	Pass
802.11n20	5300	-0.120	11	Pass
	5320	-0.385	11	Pass
802.11n40	5270	-3.077	11	Pass
	5310	-3.408	11	Pass
802.11ac20	5260	0.486	11	Pass
	5300	0.044	11	Pass
	5320	-0.393	11	Pass
802.11ac40	5270	-2.851	11	Pass
	5310	-3.305	11	Pass
802.11ac80	5290	-6.243	11	Pass





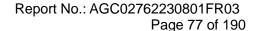
Test Data of Conducted Output Power Density for band 5.470-5.725 GHz					
Test Mode	Test Channel (MHz)	Average Power Density (dBm/MHz)	Limits (dBm/MHz)	Pass or Fail	
	5500	0.452	11	Pass	
802.11a	5600	0.162	11	Pass	
	5700	0.720	11	Pass	
	5500	-1.178	11	Pass	
802.11n20	5600	-1.935	11	Pass	
	5700	-1.001	11	Pass	
	5510	-4.330	11	Pass	
802.11n40	5590	-4.613	11	Pass	
	5670	-4.503	11	Pass	
	5500	-1.191	11	Pass	
802.11ac20	5600	-1.518	11	Pass	
	5700	-0.991	11	Pass	
	5510	-4.040	11	Pass	
802.11ac40	5590	-4.607	11	Pass	
	5670	-4.666	11	Pass	
802.11ac80	5530	-7.790	11	Pass	
	5610	-8.250	11	Pass	





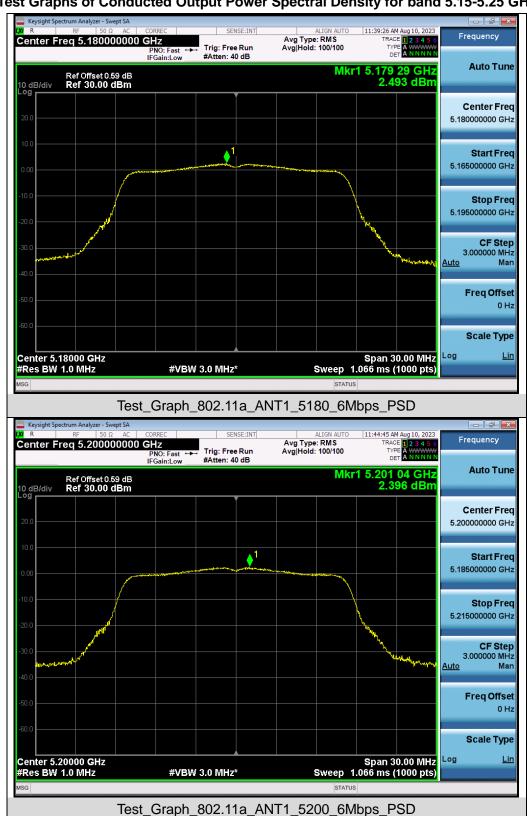
Test Data of Conducted Output Power Density for band 5.725-5.85 GHz					
Test Mode	Test Channel (MHz)	Average Power Density (dBm/100kHz)	Average Power Density (dBm/500kHz)	Limits (dBm/500kHz)	Pass or Fail
802.11a	5745	-7.72	-0.730	30	Pass
	5785	-8.028	-1.038	30	Pass
	5825	-8.518	-1.528	30	Pass
802.11n20	5745	-9.726	-2.736	30	Pass
	5785	-9.808	-2.818	30	Pass
	5825	-10.293	-3.303	30	Pass
802.11n40	5755	-13.067	-6.077	30	Pass
802.11n40	5795	-13.242	-6.252	30	Pass
802.11ac20	5745	-9.375	-2.385	30	Pass
	5785	-9.908	-2.918	30	Pass
	5825	-10.34	-3.350	30	Pass
802.11ac40	5755	-12.916	-5.926	30	Pass
	5795	-13.189	-6.199	30	Pass
802.11ac80	5775	-16.003	-9.013	30	Pass

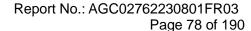
Note:1.Power density(dBm/500kHz) = Power density(dBm/100kHz)+10*log(500/100).



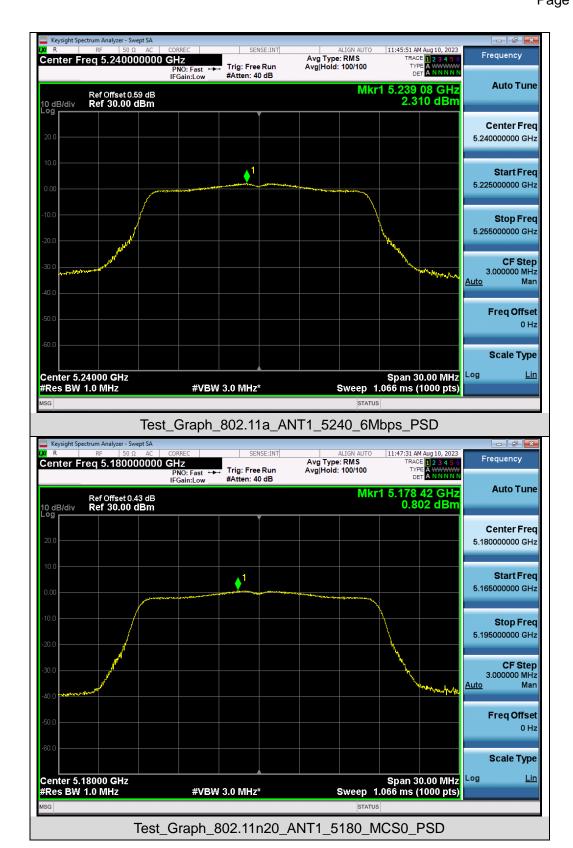


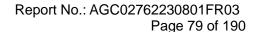
Test Graphs of Conducted Output Power Spectral Density for band 5.15-5.25 GHz



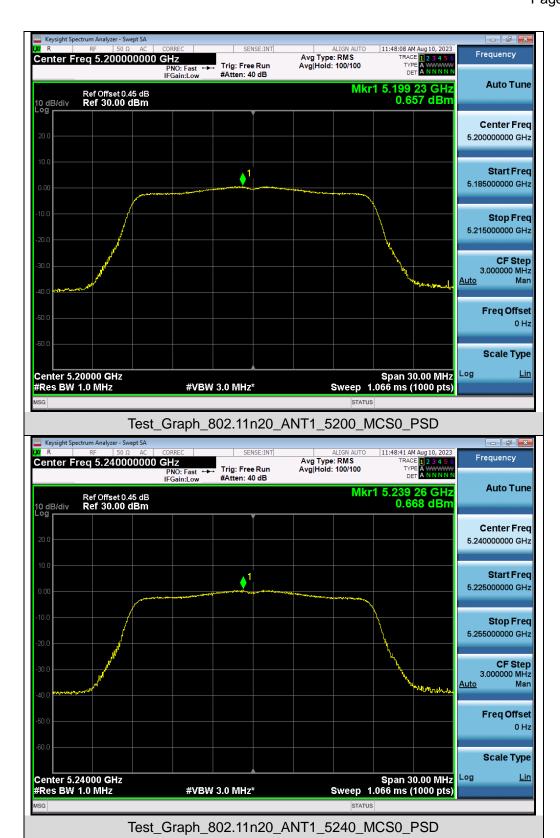


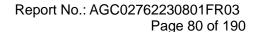






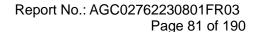




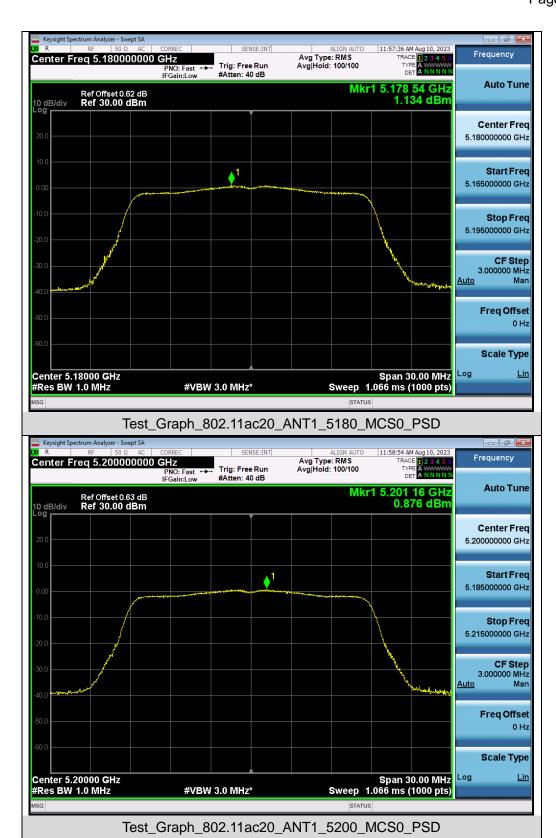


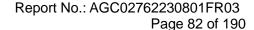




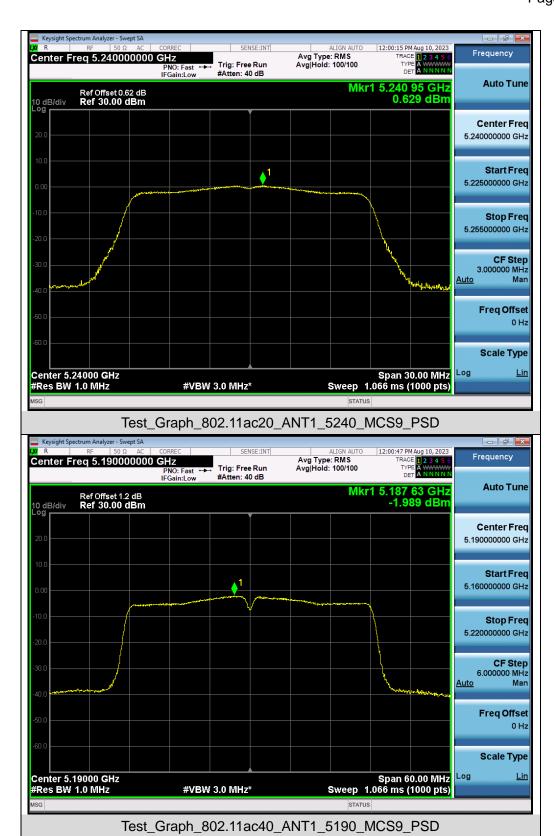


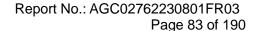






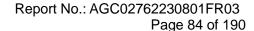






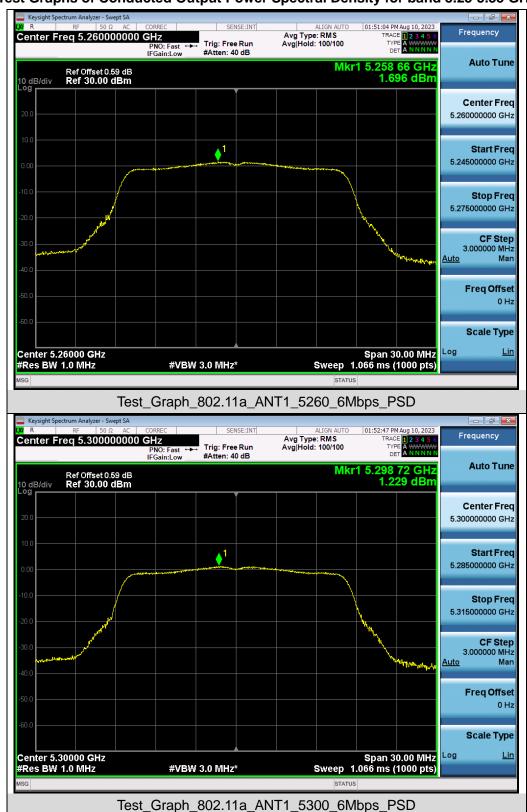


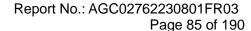




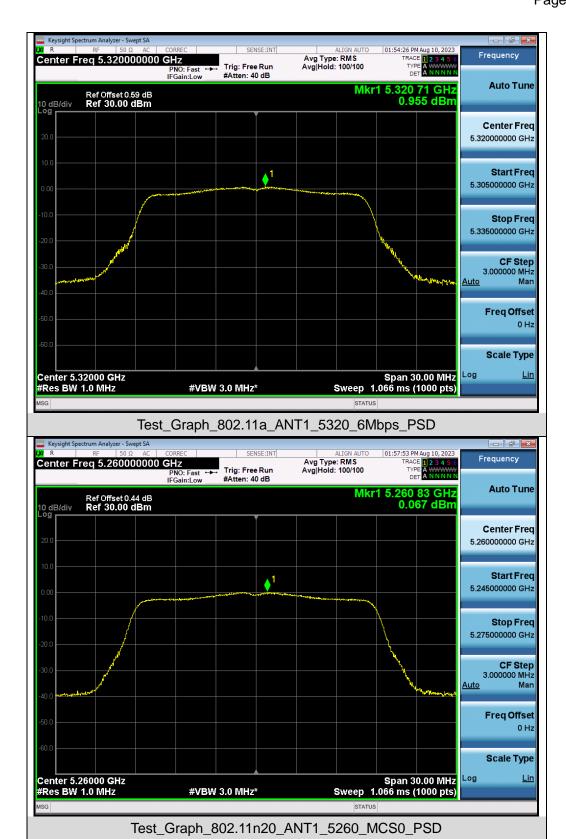


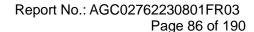
Test Graphs of Conducted Output Power Spectral Density for band 5.25-5.35 GHz



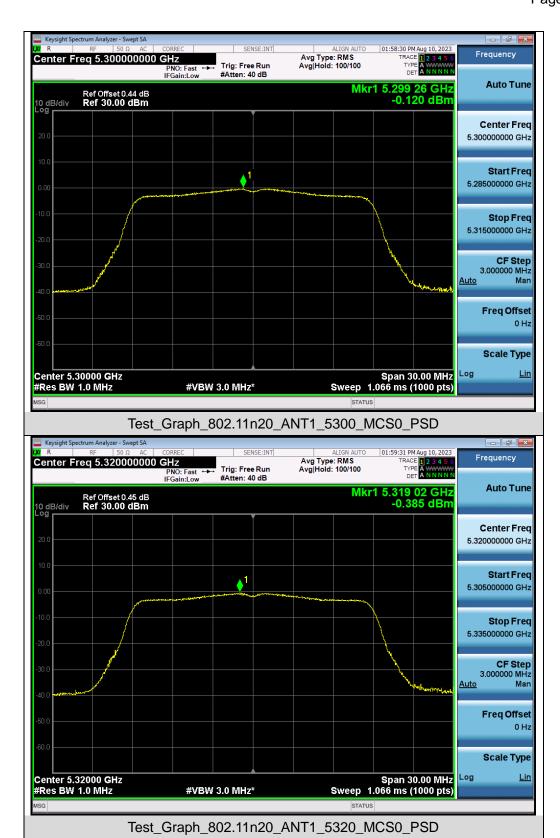


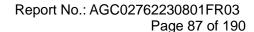






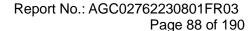




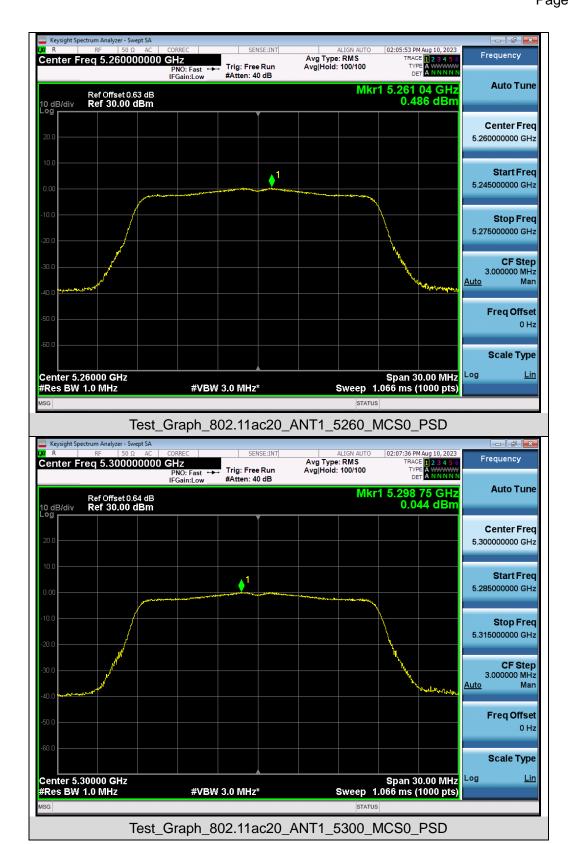


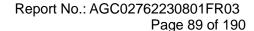




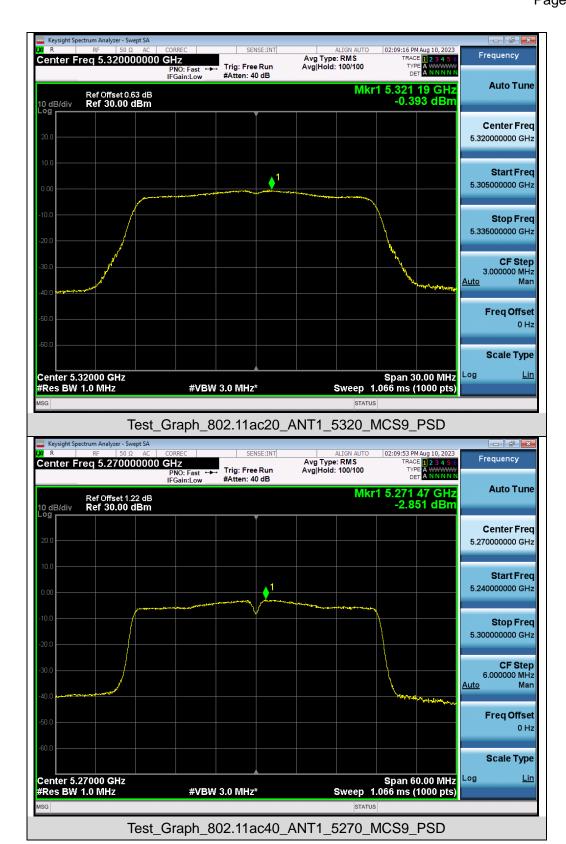


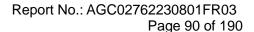




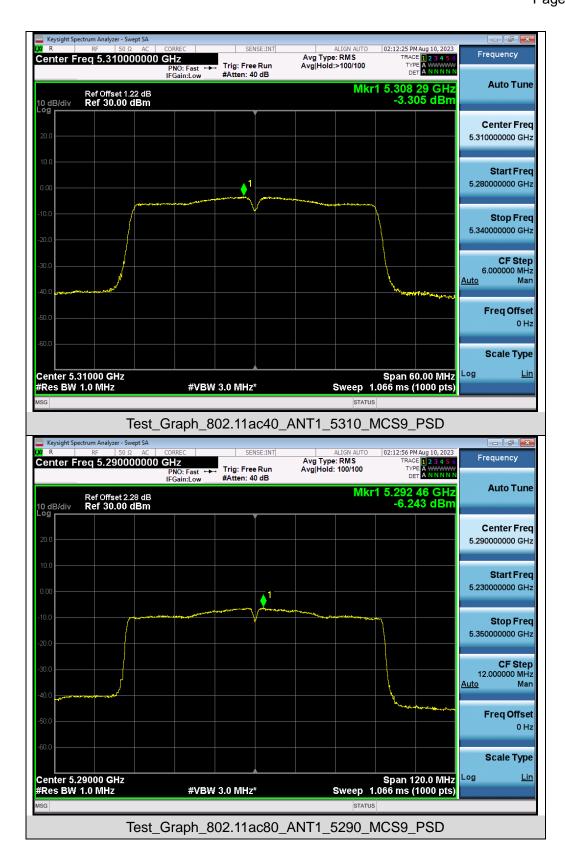


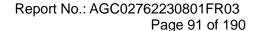






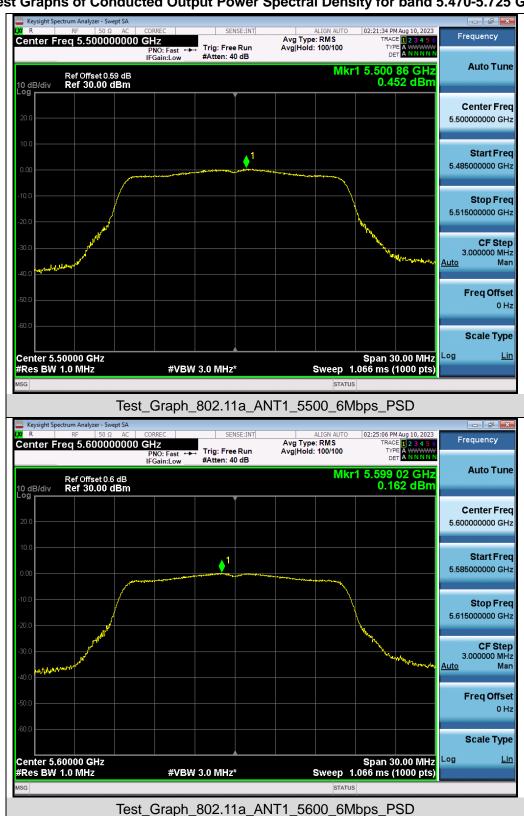


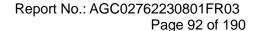




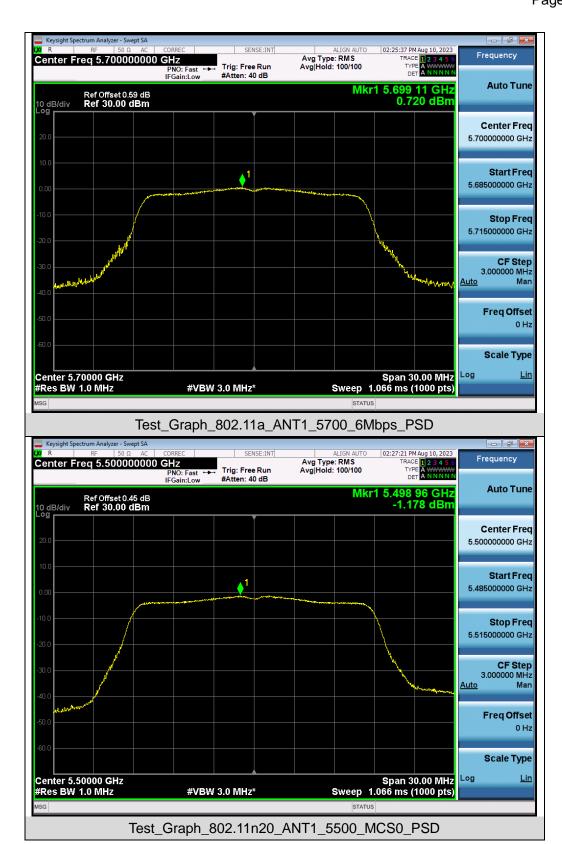


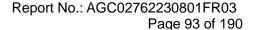
Test Graphs of Conducted Output Power Spectral Density for band 5.470-5.725 GHz



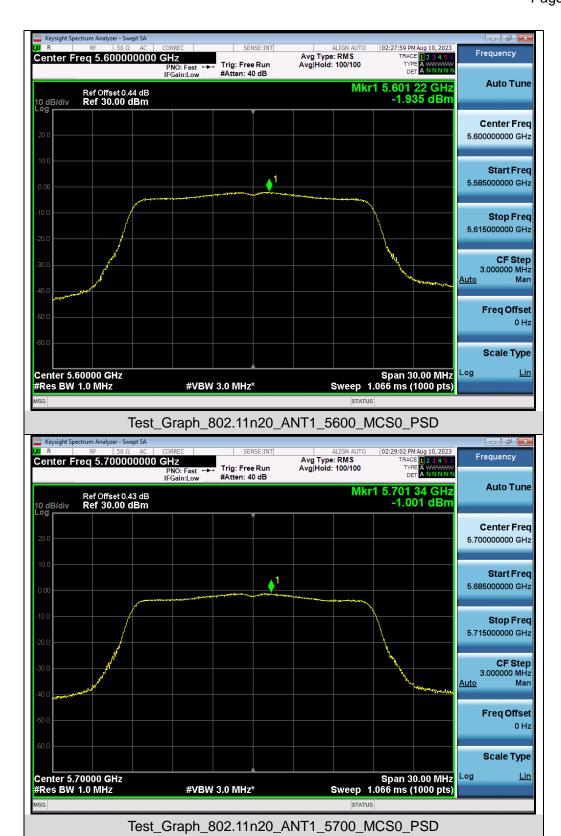


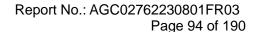




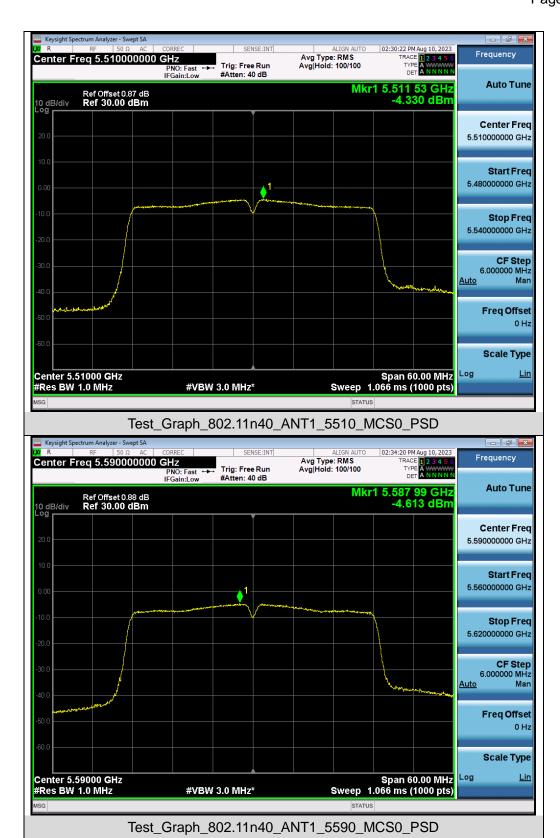


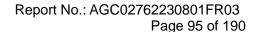




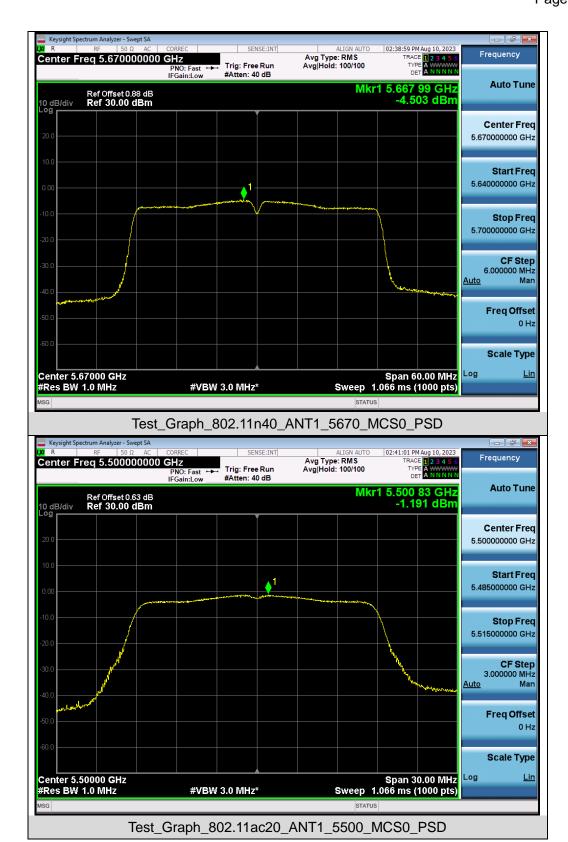


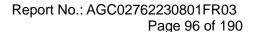




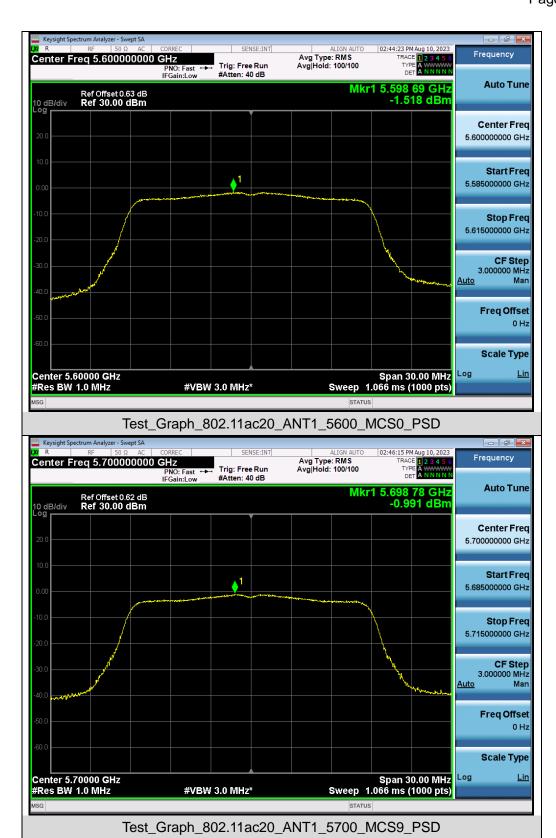


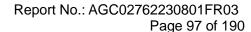






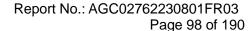




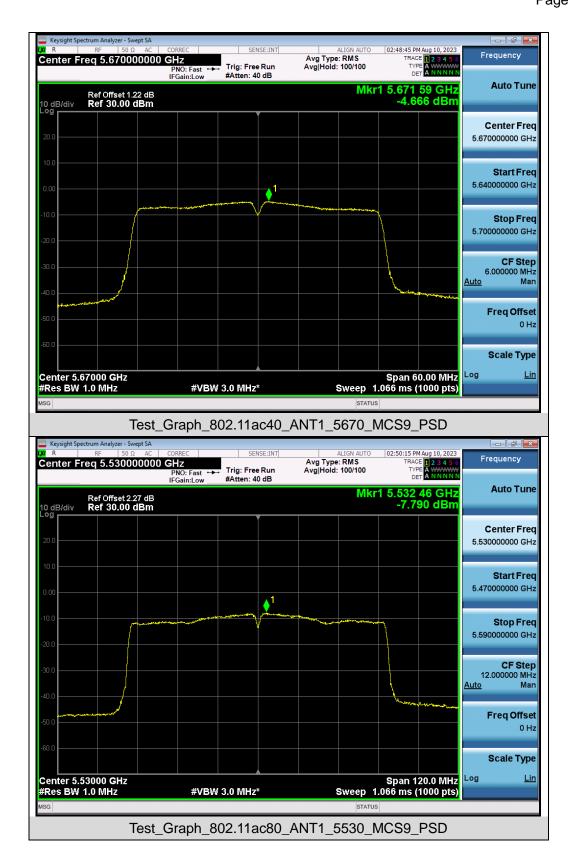


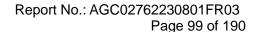














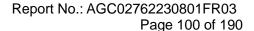


Test Graphs of Conducted Output Power Spectral Density for band 5.725-5.85 GHz



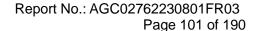
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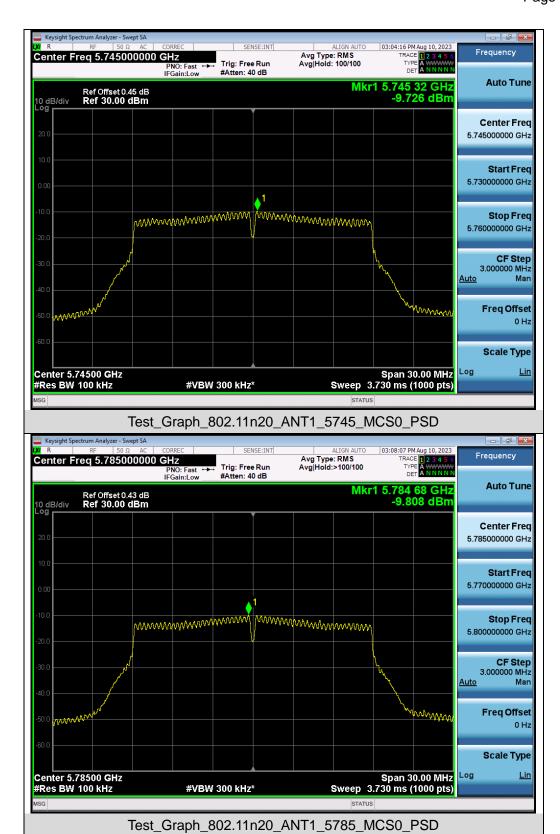


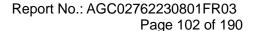




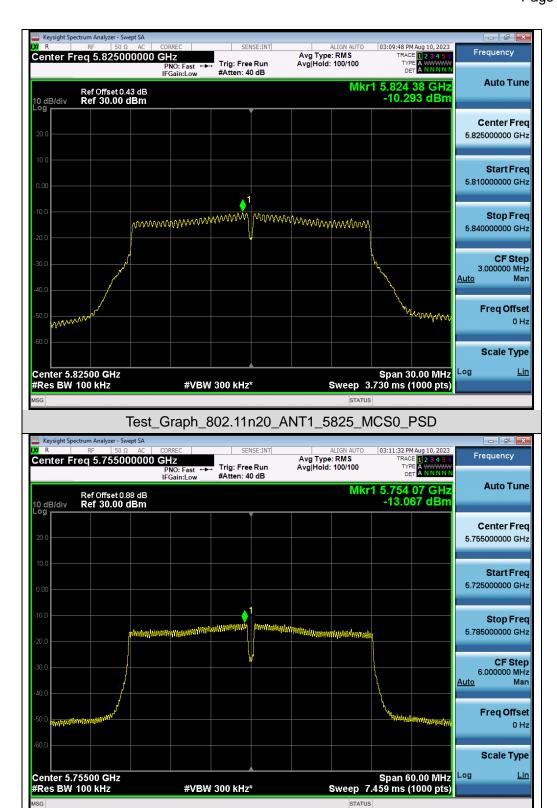




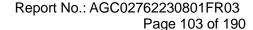




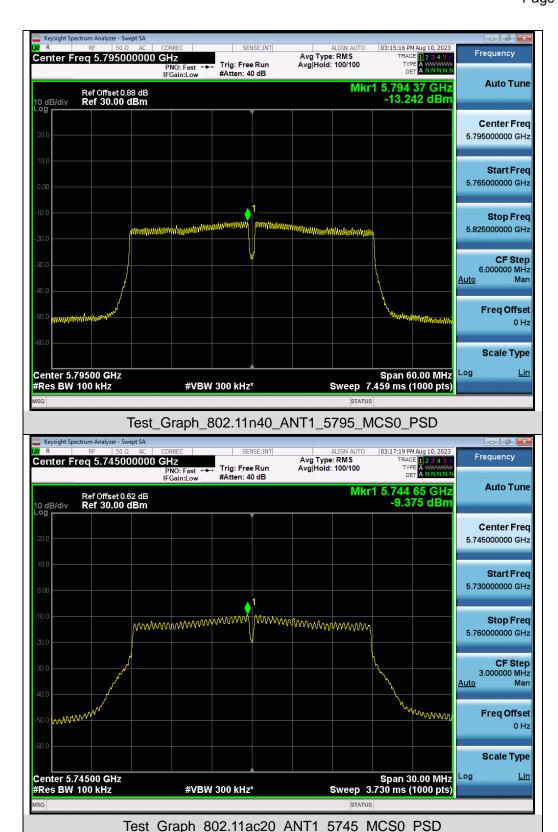


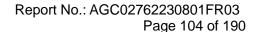


Test Graph 802.11n40 ANT1 5755 MCS0 PSD

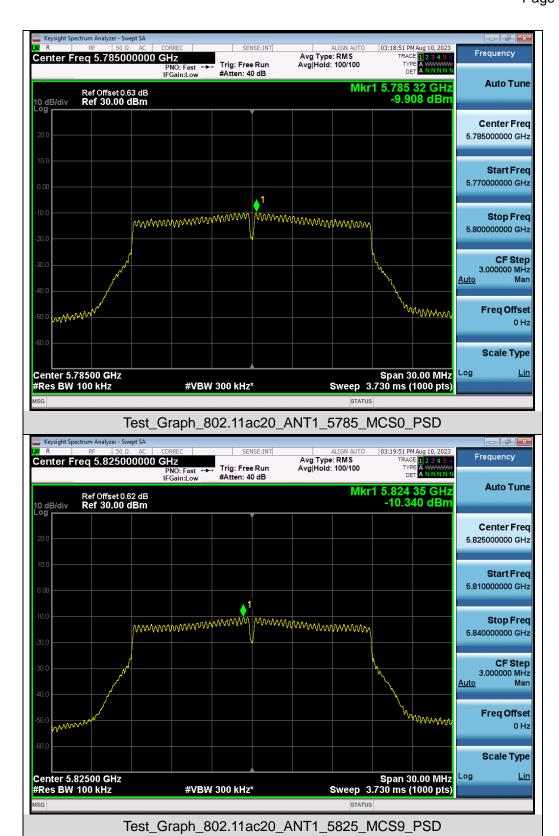


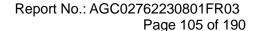




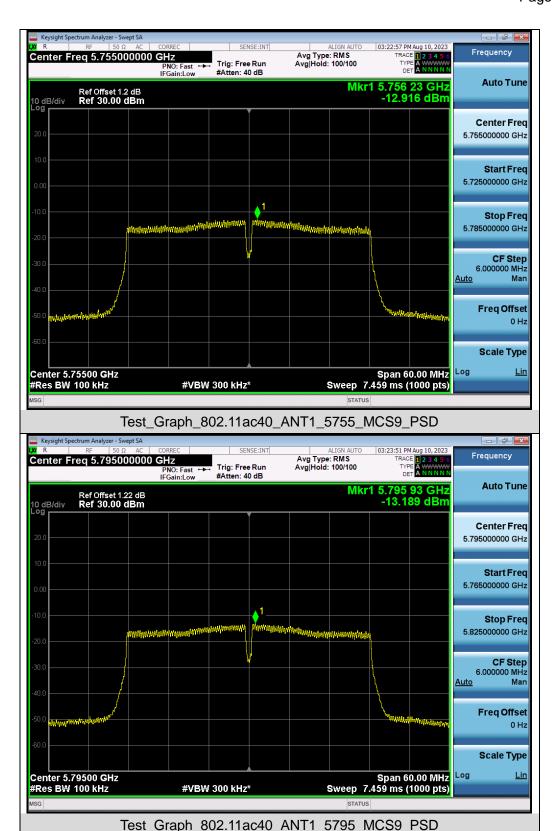


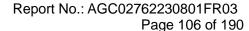




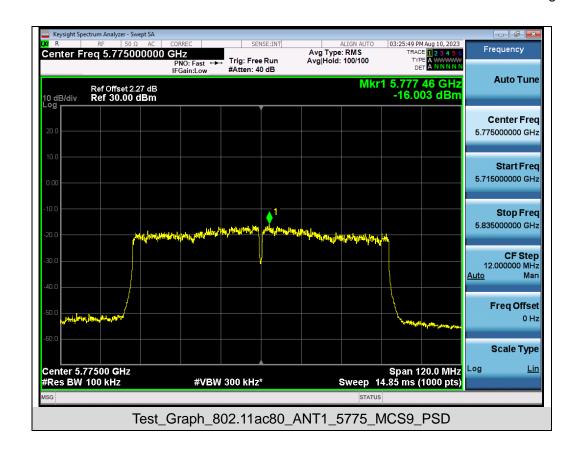














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10. Conducted Band Edge and Out-of-Band Emissions

10.1 Provisions Applicable

	Applicable to	Limit	
Restricted bands	789033 D02 General UNII Test Procedures New Rules v02r01	Field strength at 3m (dBuV/m)	
		PK: 74	AV: 54
Out of the restricted bands	Applicable to	EIRP Limit (dBm/MHz)	Equivalent field Strength at 3m (dBuV/m)
	FCC 15.407(b)(1)	PK: -27	PK: 68.2
	15.407(b)(2)		
	15.407(b)(3)		
	15.407(b)(4)	See Note 2	

Note 1: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

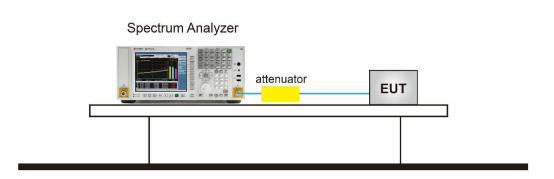
E =
$$\frac{1000000 \sqrt{30 P}}{2}$$
 µV/m, where P is the eirp (Watts).

Note 2: 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.

10.2 Measurement Procedure

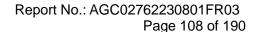
- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2. Set the EUT Work on the top, the Middle and the bottom operation frequency individually.
- 3. Set the Span = wide enough to capture the peak level of the in-band emission and all spurious emissions from the lowest frequency generated in the EUT up through the 10th harmonic.
- 4. RBW = 100 kHz; VBW= 300 kHz; Sweep = auto; Detector function = peak.(Test frequency below 1GHz)
- 5. RBW = 1 MHz; VBW= 3 MHz; Sweep = auto; Detector function = peak.(Test frequency Above 1GHz)
- 6. Set SPA Trace 1 Max hold, then View.
- 7. Mark the maximum useless stray point and compare it with the limit value to record the result.

10.3 Measurement Setup (Block Diagram of Configuration)



Any report havi a/Inspection

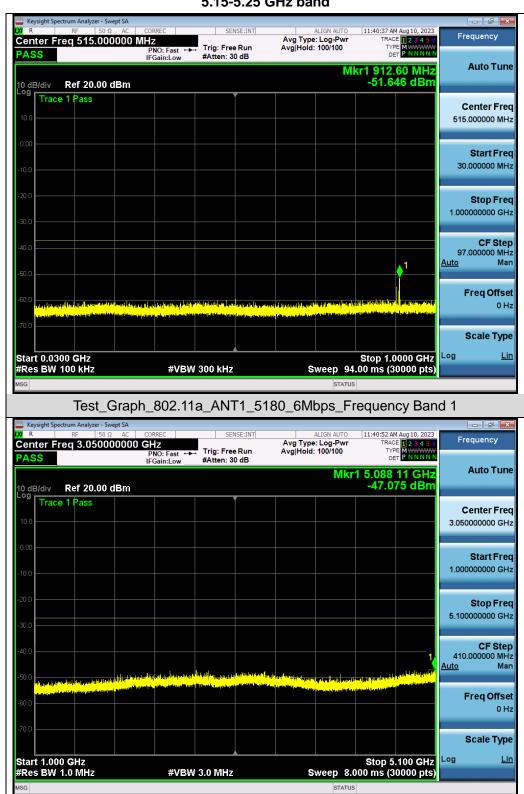
Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

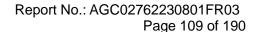




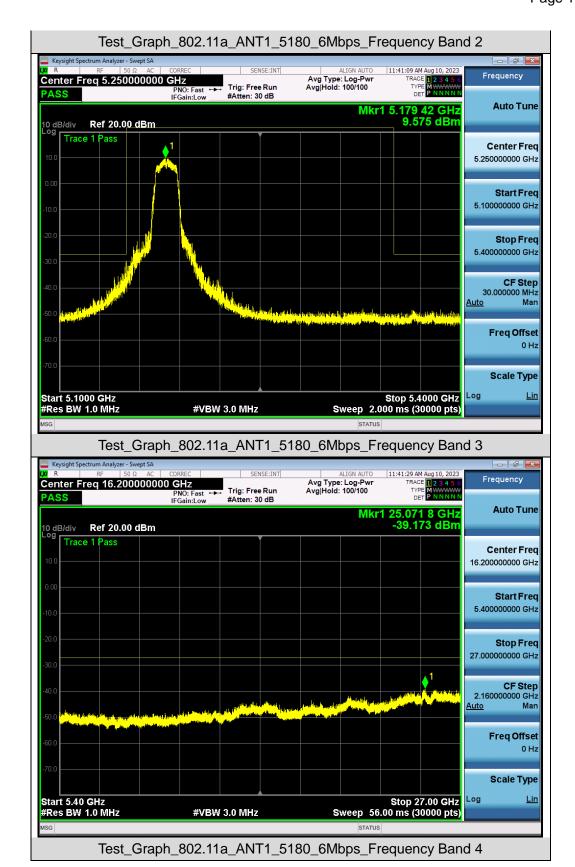
10.4 Measurement Results

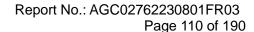
Test Graphs of Spurious Emissions outside of the 5.15-5.25 GHz band for transmitters operating in the 5.15-5.25 GHz band









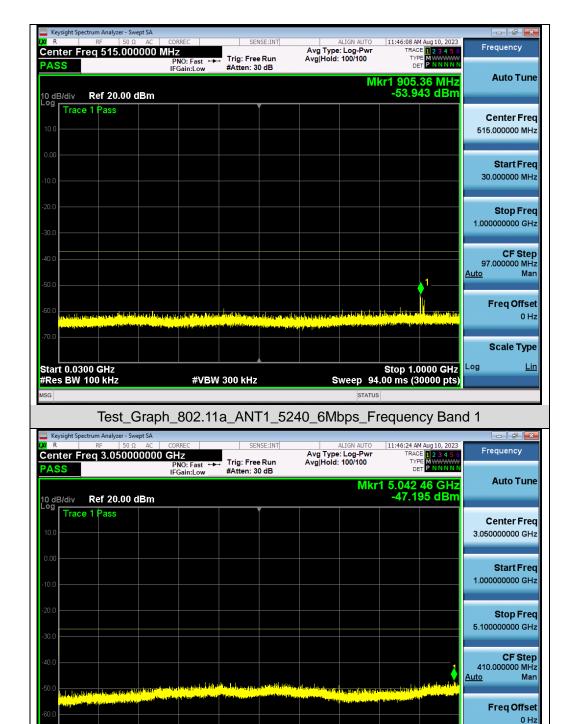


Scale Type

Log

Stop 5.100 GHz Sweep 8.000 ms (30000 pts)



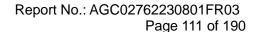


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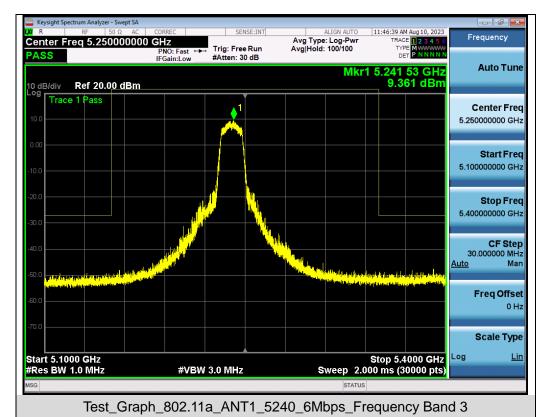
Test Graph 802.11a ANT1 5240 6Mbps Frequency Band 2

#VBW 3.0 MHz

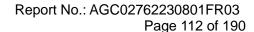
Start 1.000 GHz #Res BW 1.0 MHz







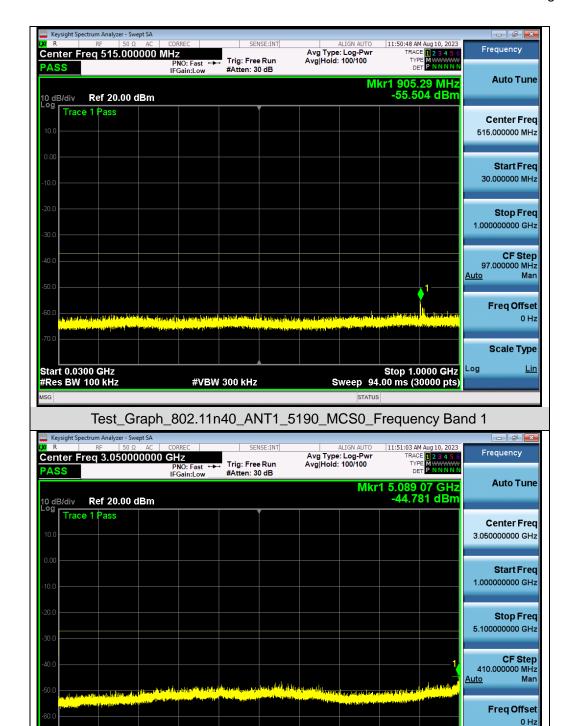




Scale Type

Stop 5.100 GHz Sweep 8.000 ms (30000 pts)



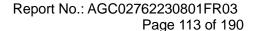


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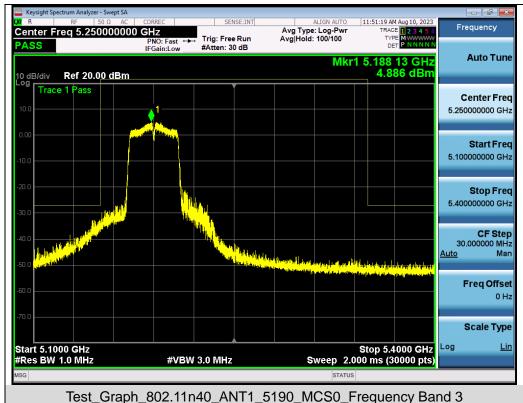
Test Graph 802.11n40 ANT1 5190 MCS0 Frequency Band 2

#VBW 3.0 MHz

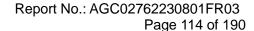
Start 1.000 GHz #Res BW 1.0 MHz



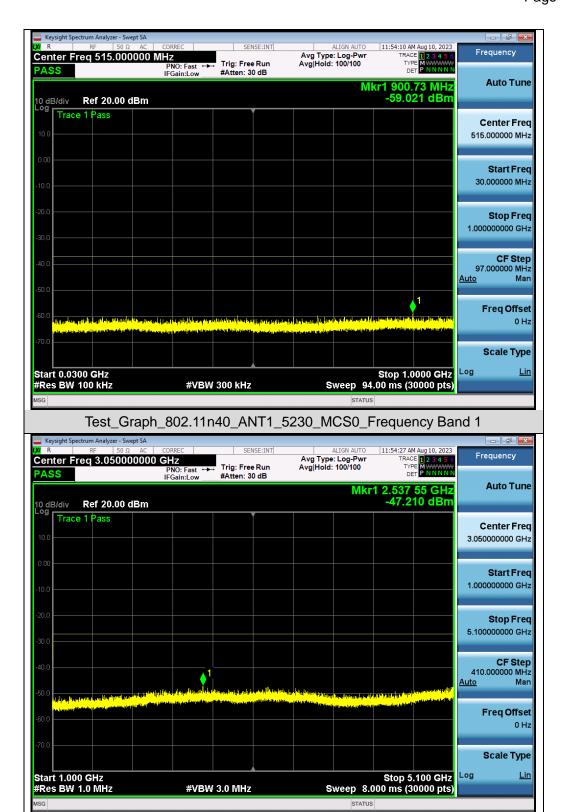




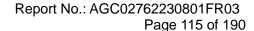




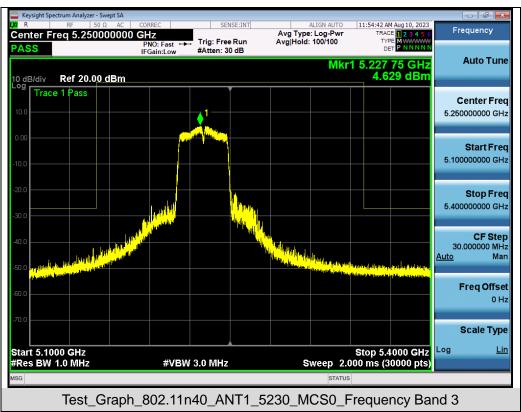




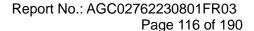
Test Graph 802.11n40 ANT1 5230 MCS0 Frequency Band 2











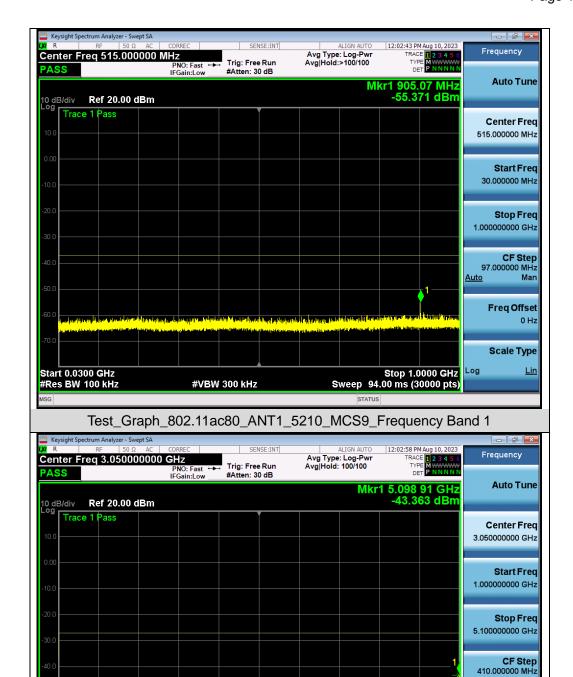
<u>Auto</u>

Stop 5.100 GHz Sweep 8.000 ms (30000 pts) Man

Freq Offset 0 Hz

Scale Type



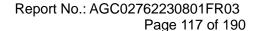


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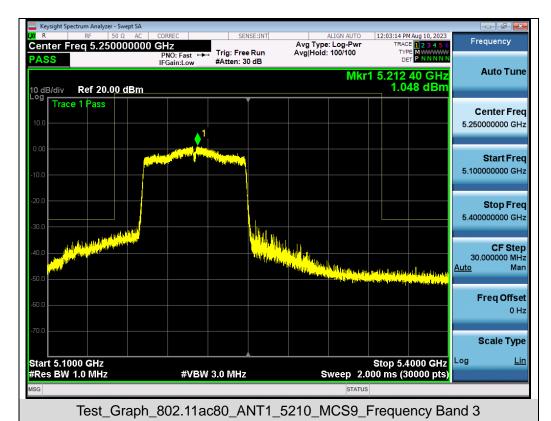
Test_Graph_802.11ac80_ANT1_5210_MCS9_Frequency Band 2

#VBW 3.0 MHz

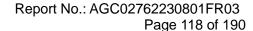
Start 1.000 GHz #Res BW 1.0 MHz





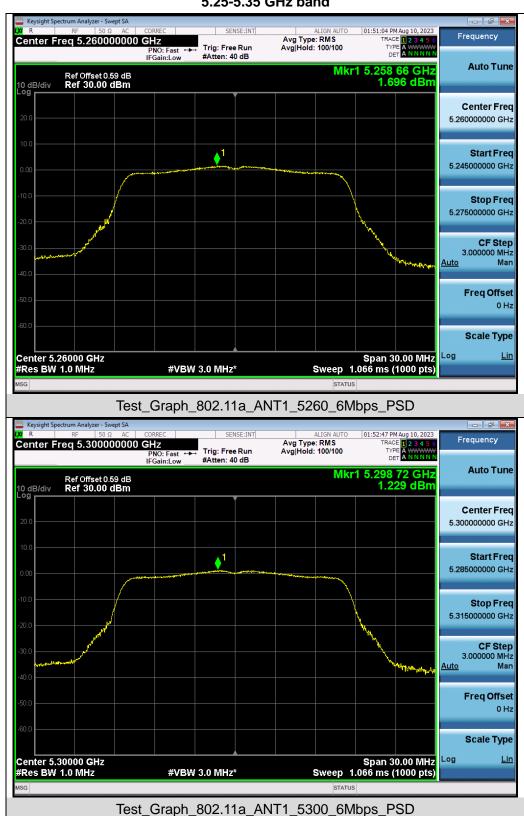


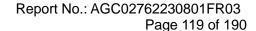




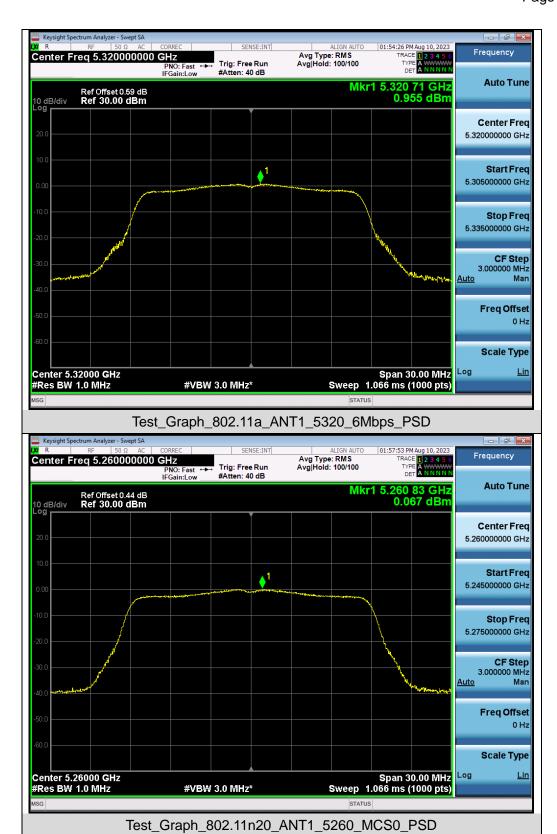


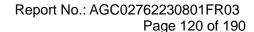
Test Graphs of Spurious Emissions outside of the 5.25-5.35 GHz band for transmitters operating in the 5.25-5.35 GHz band















Test Graph 802.11n20 ANT1 5320 MCS0 PSD

