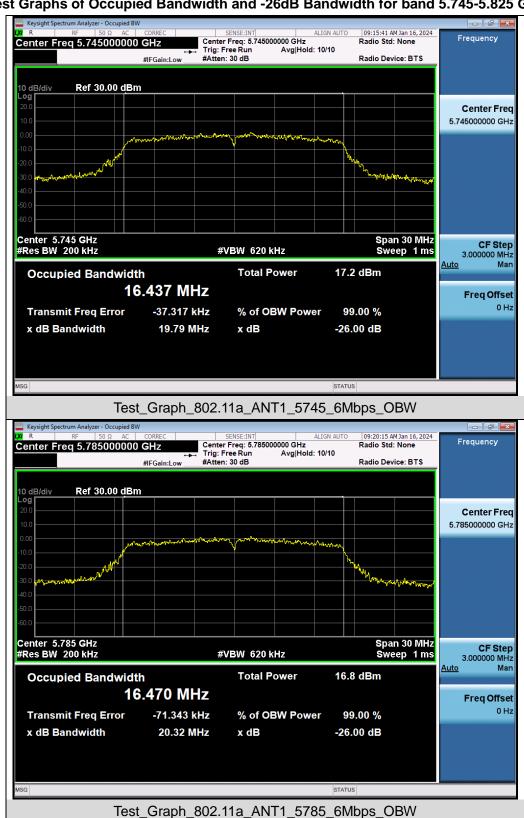


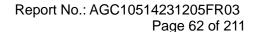


## Test Graphs of Occupied Bandwidth and -26dB Bandwidth for band 5.745-5.825 GHz

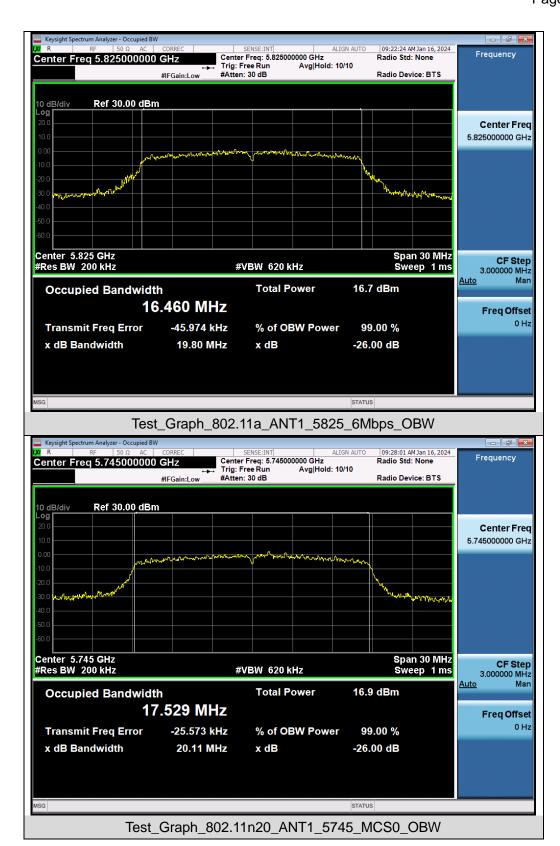


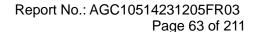
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the 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.

Web: http://www.agccert.com/

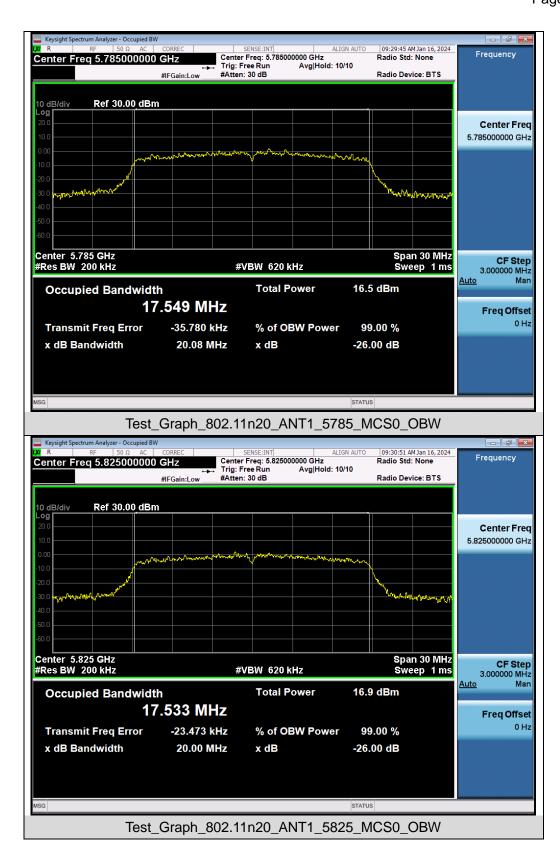


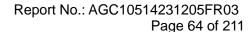




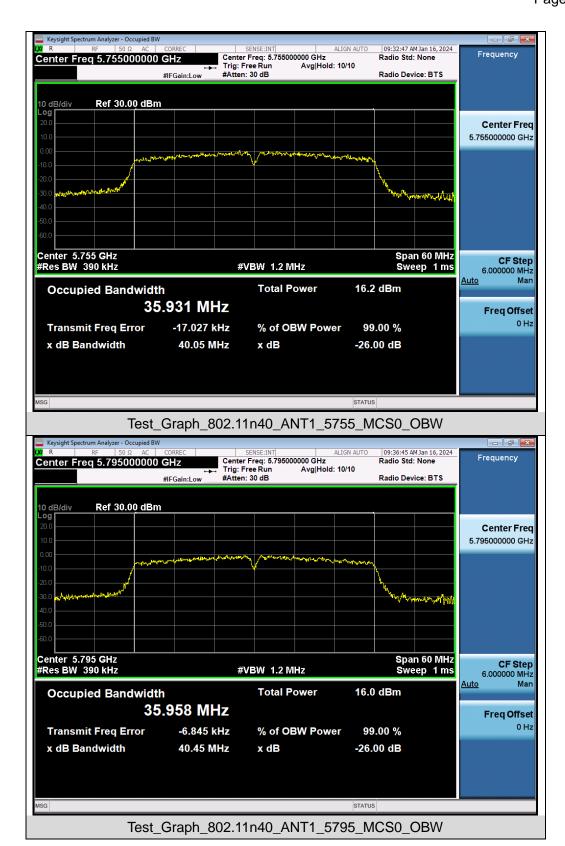


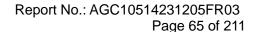




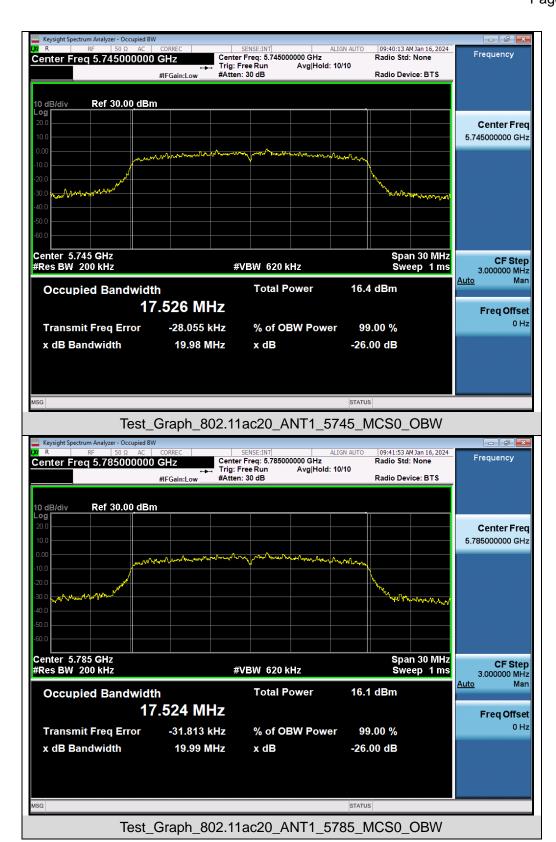


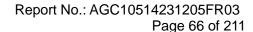




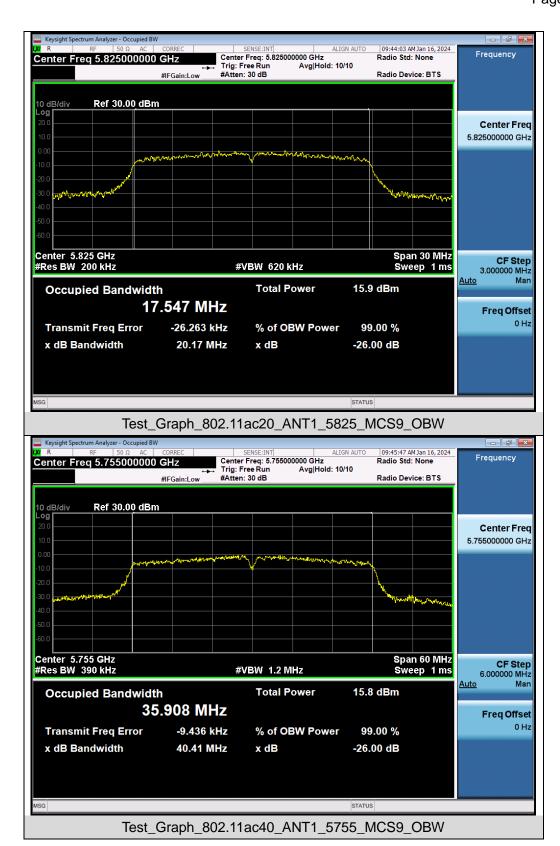


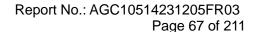




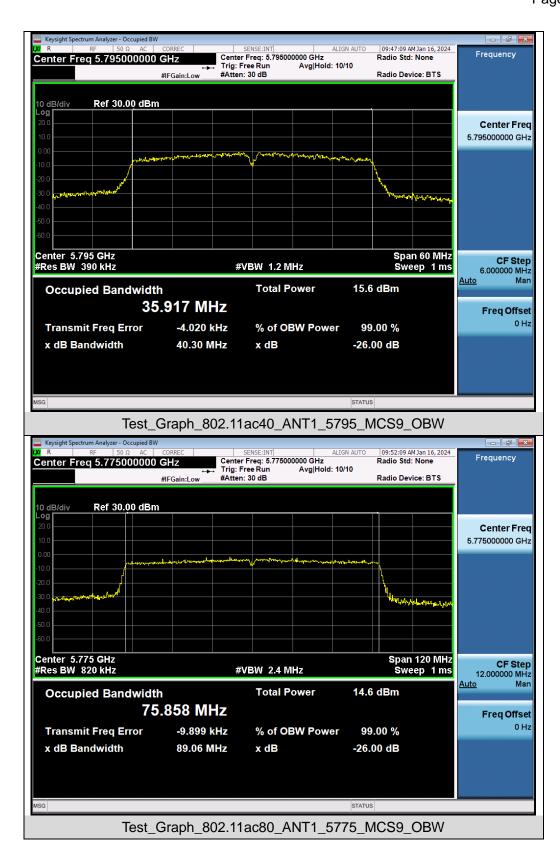


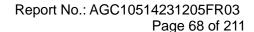






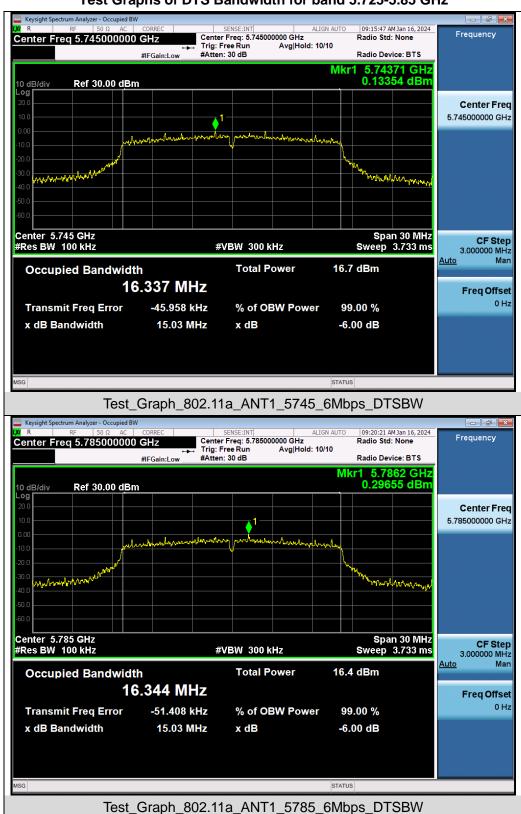






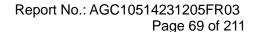


# Test Graphs of DTS Bandwidth for band 5.725-5.85 GHz

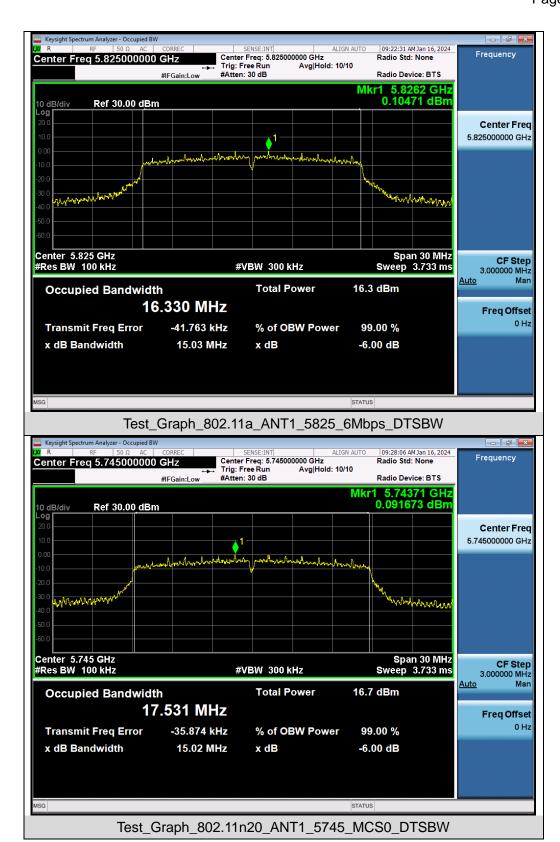


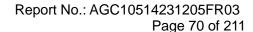
Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the 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.

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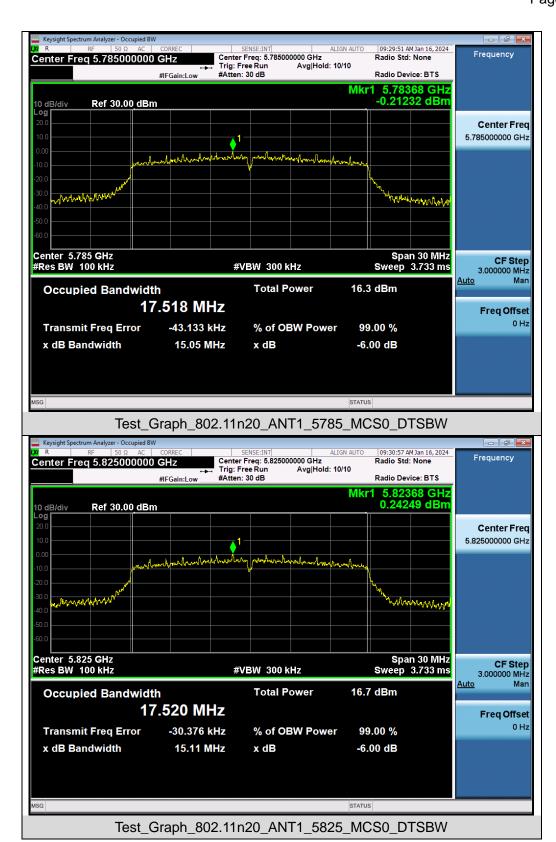


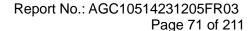




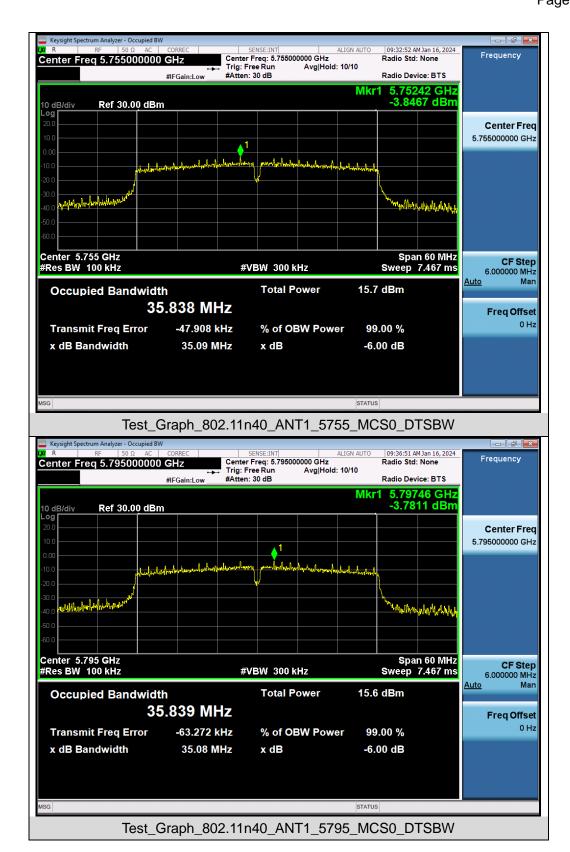


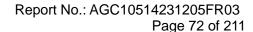




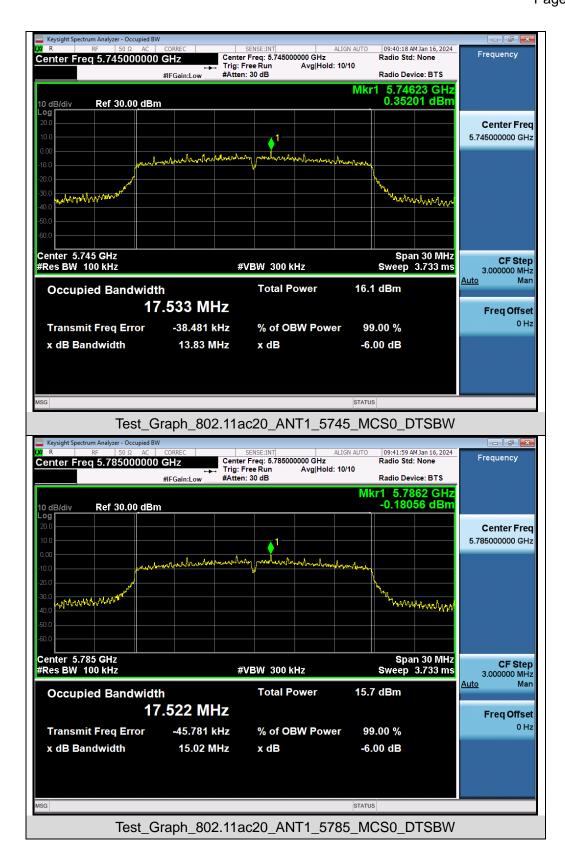


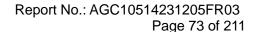




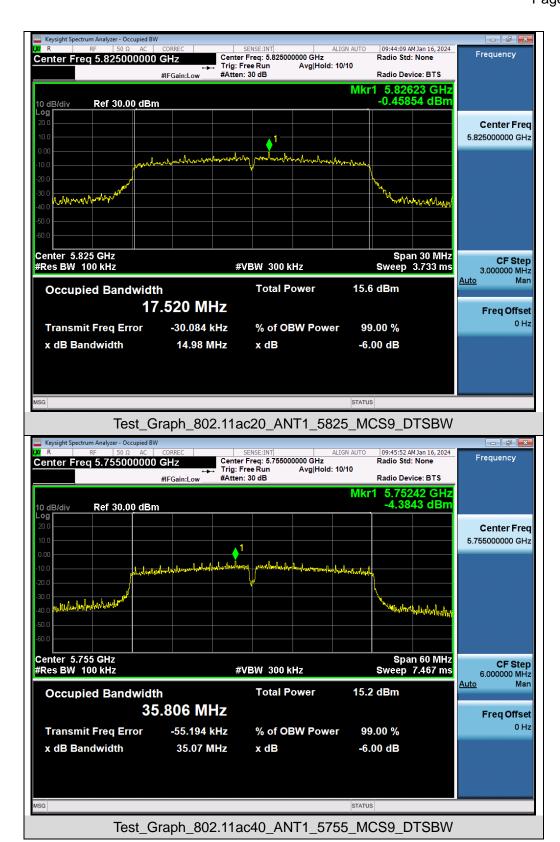


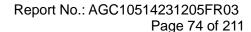




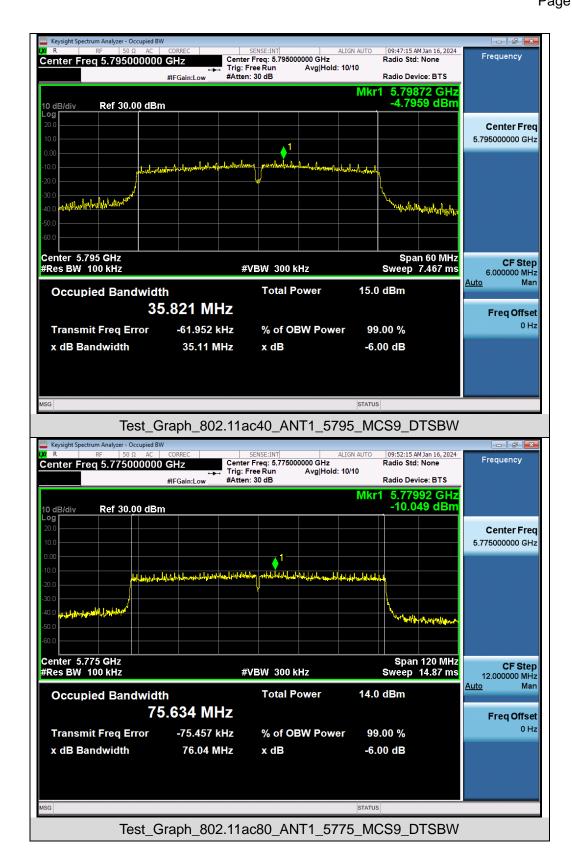














9. Power Spectral Density Measurement

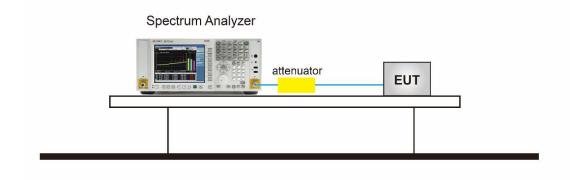
## 9.1 Provisions Applicable

Operation Band	EUT Category		LIMIT	
U-NII-1		Outdoor Access Point	17dBm/ MHz	
		Fixed point-to-point Access Point	17dBm/ MHz	
		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)





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#### 9.4 Measurement Result

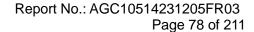
Test Data of Conducted Output Power Density for band 5.15-5.25 GHz					
Test Mode	Test Channel (MHz)	Average Power Density (dBm/MHz)	Limits (dBm/MHz)	Pass or Fail	
	5180	2.858	11	Pass	
802.11a	5200	1.656	11	Pass	
	5240	1.464	11	Pass	
802.11n20	5180	2.191	11	Pass	
	5200	2.061	11	Pass	
	5240	0.585	11	Pass	
000 11 0 10	5190	-0.450	11	Pass	
802.11n40	5230	-1.938	11	Pass	
	5180	2.296	11	Pass	
802.11ac20	5200	1.512	11	Pass	
	5240	0.634	11	Pass	
802.11ac40	5190	-1.115	11	Pass	
	5230	-1.687	11	Pass	
802.11ac80	5210	-5.491	11	Pass	



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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	2.893	11	Pass	
802.11a	5300	3.583	11	Pass	
	5320	2.918	11	Pass	
802.11n20	5260	2.551	11	Pass	
	5300	2.709	11	Pass	
	5320	3.105	11	Pass	
802.11n40	5270	-1.306	11	Pass	
	5310	-0.674	11	Pass	
	5260	1.685	11	Pass	
802.11ac20	5300	1.925	11	Pass	
	5320	2.235	11	Pass	
802.11ac40	5270	-0.851	11	Pass	
	5310	-1.043	11	Pass	
802.11ac80	5290	-4.933	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	2.817	11	Pass	
802.11a	5600	2.188	11	Pass	
	5700	2.298	11	Pass	
	5500	1.905	11	Pass	
802.11n20	5600	1.241	11	Pass	
	5700	1.129	11	Pass	
	5510	-0.850	11	Pass	
802.11n40	5590	-1.700	11	Pass	
	5670	-2.065	11	Pass	
	5500	1.631	11	Pass	
802.11ac20	5600	0.997	11	Pass	
	5700	1.134	11	Pass	
	5510	-1.472	11	Pass	
802.11ac40	5590	-2.095	11	Pass	
	5670	-2.337	11	Pass	
802.11ac80	5530	-5.941	11	Pass	
	5610	-6.269	11	Pass	



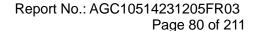
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Test Data of Conducted Output Power Density for band 5.725-5.85 GHz					
Test Mode	Test Channel (MHz)	Average Power Density (dBm/100kHz)	Average Power Density (dBm/500kHz)	Limits (dBm/500kHz)	Pass or Fail
802.11a	5745	-7.472	-0.482	30	Pass
	5785	-7.908	-0.918	30	Pass
	5825	-7.538	-0.548	30	Pass
	5745	-7.602	-0.612	30	Pass
802.11n20	5785	-7.682	-0.692	30	Pass
	5825	-8.227	-1.237	30	Pass
802.11n40	5755	-11.383	-4.393	30	Pass
	5795	-11.270	-4.280	30	Pass
802.11ac20	5745	-8.302	-1.312	30	Pass
	5785	-8.518	-1.528	30	Pass
	5825	-8.472	-1.482	30	Pass
802.11ac40	5755	-11.362	-4.372	30	Pass
	5795	-11.754	-4.764	30	Pass
802.11ac80	5775	-15.547	-8.557	30	Pass

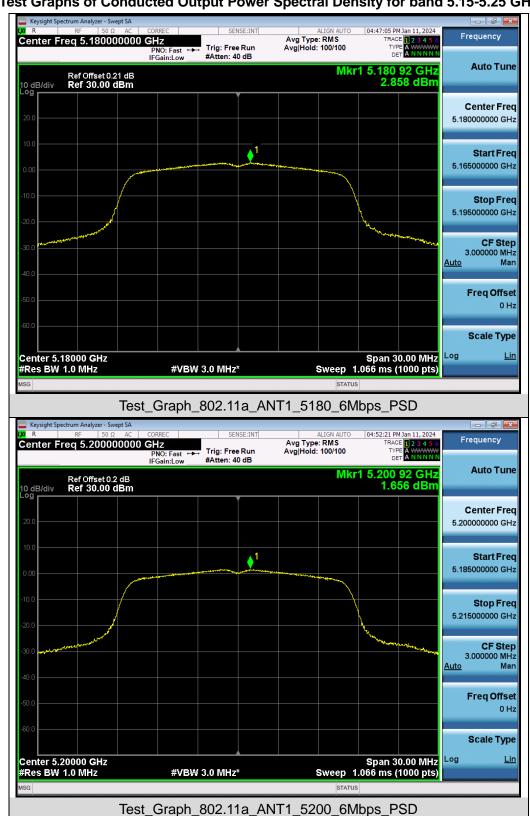
Note: 1.Power density(dBm/500kHz) = Power density(dBm/100kHz)+10\*log(500/100).

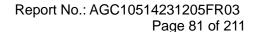
<sup>2.</sup> Duty cycle factor has been added to the reading value of the spectrum Analyzer.





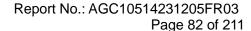
## Test Graphs of Conducted Output Power Spectral Density for band 5.15-5.25 GHz



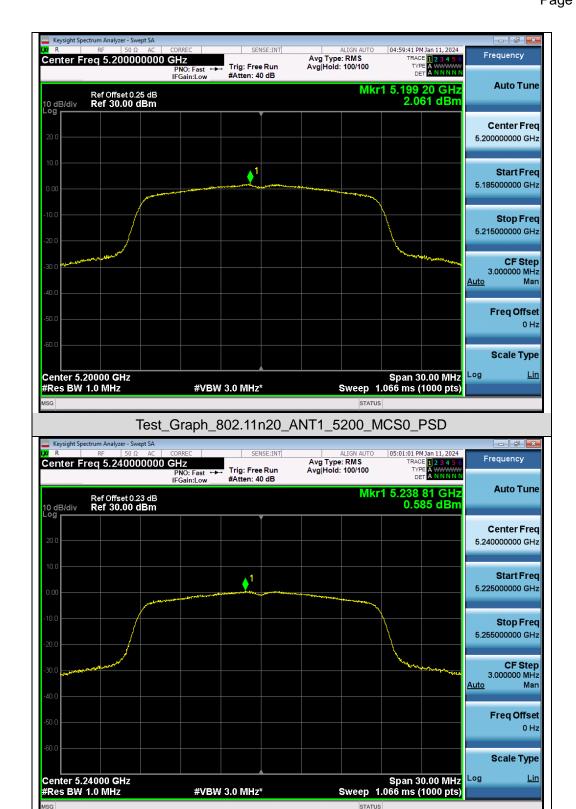




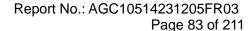








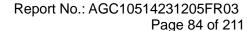
Test Graph 802.11n20 ANT1 5240 MCS0 PSD





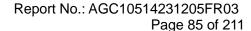


Test Graph 802.11n40 ANT1 5230 MCS0 PSD

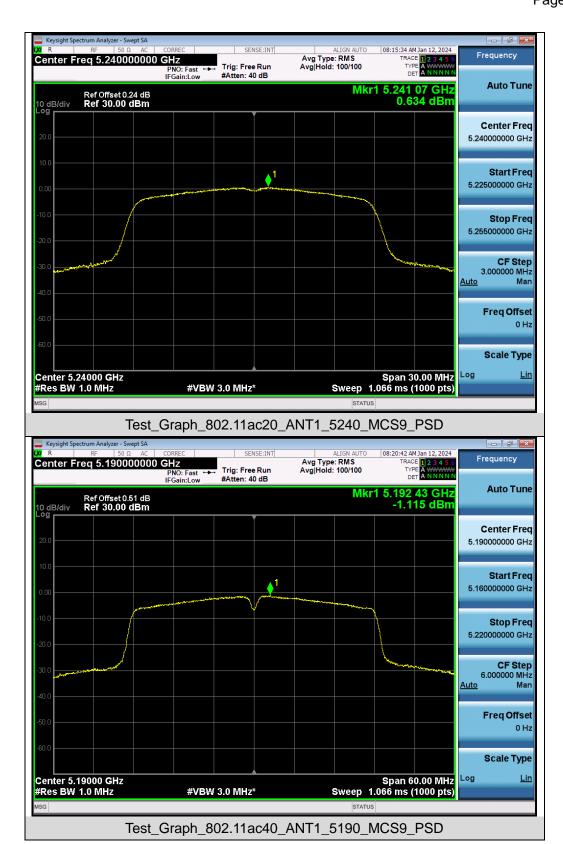


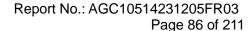




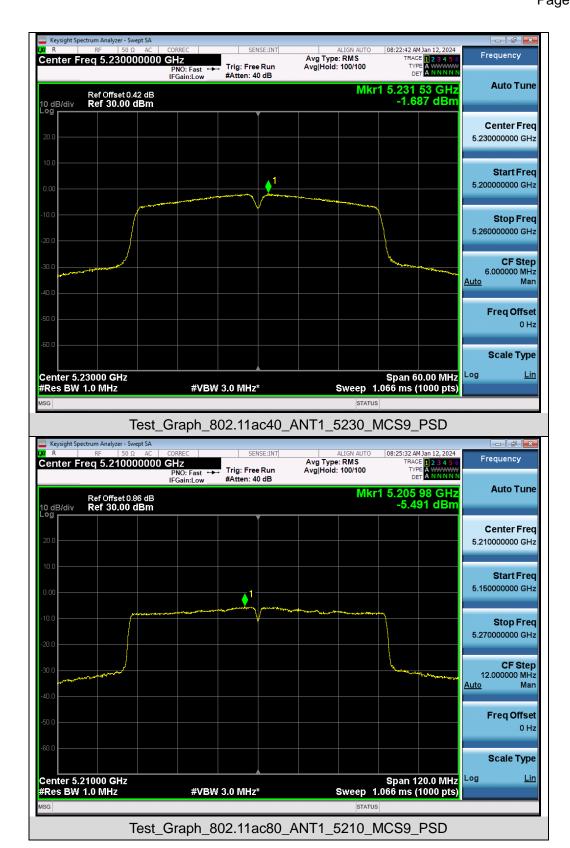


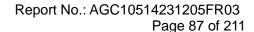






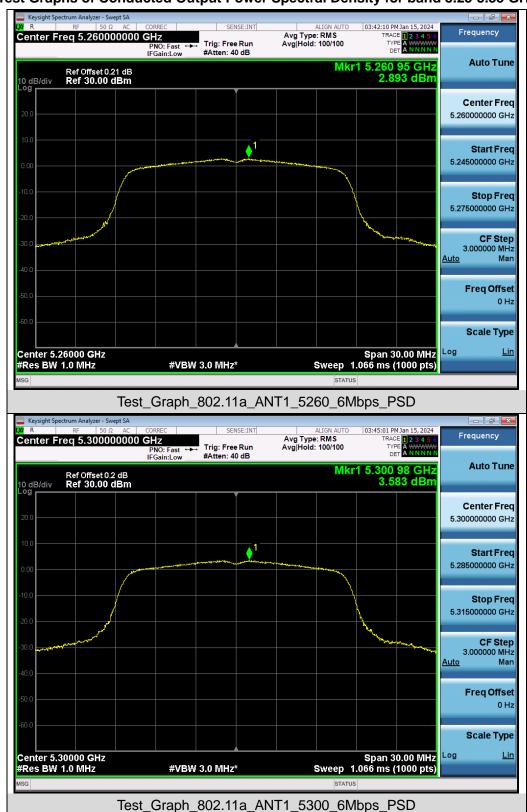


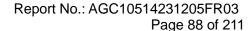




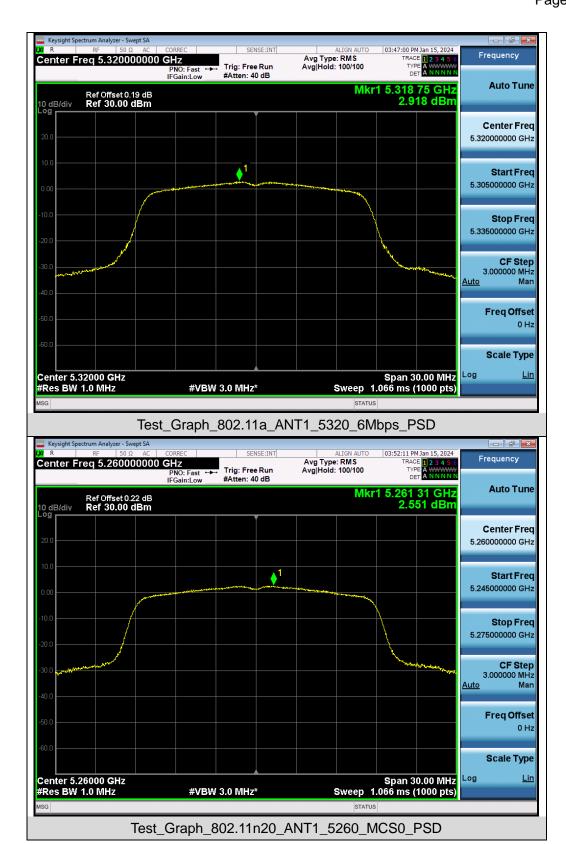


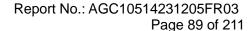
## Test Graphs of Conducted Output Power Spectral Density for band 5.25-5.35 GHz



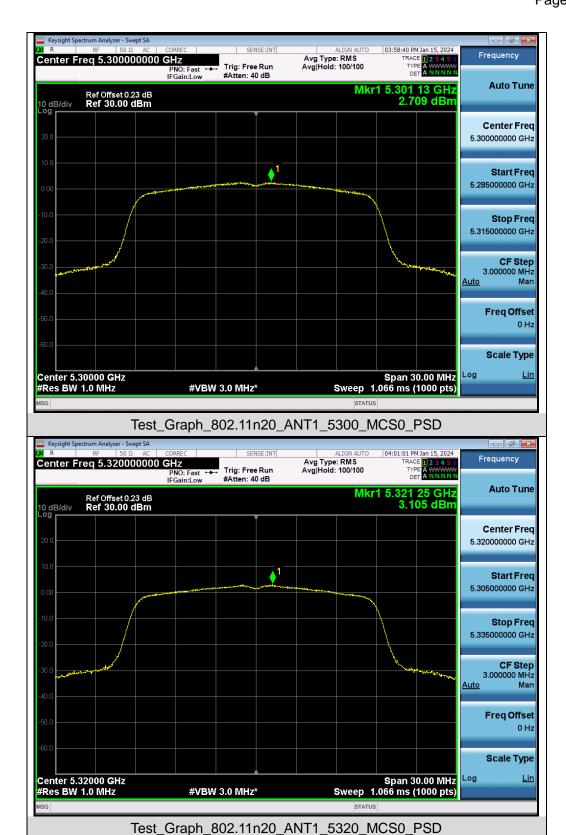


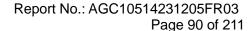




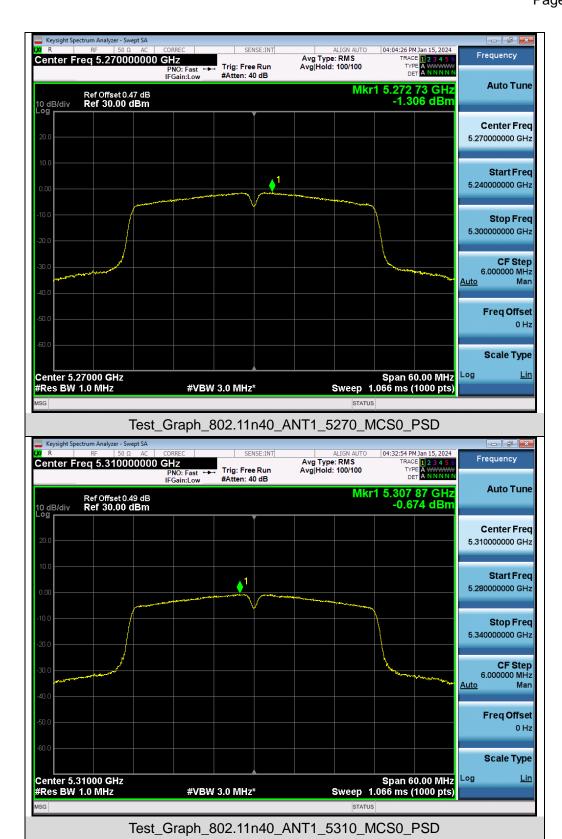


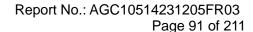






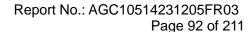






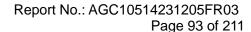






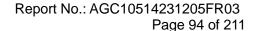






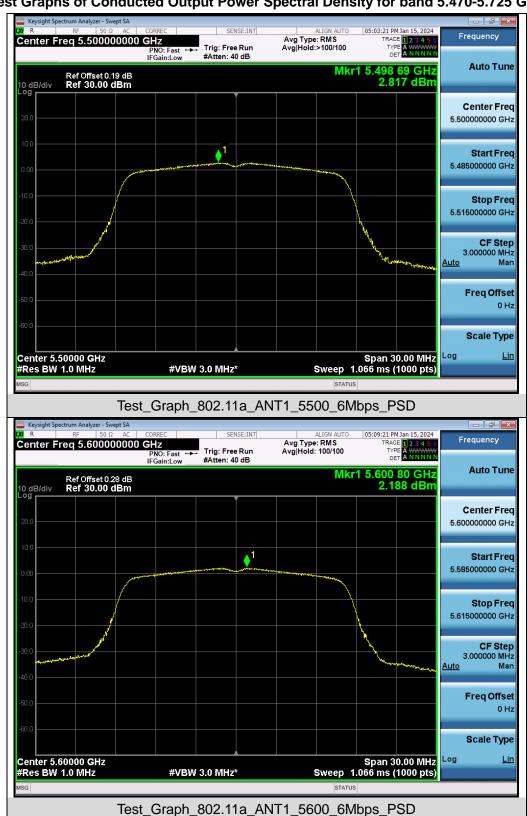


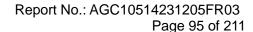






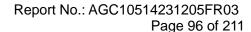
## Test Graphs of Conducted Output Power Spectral Density for band 5.470-5.725 GHz



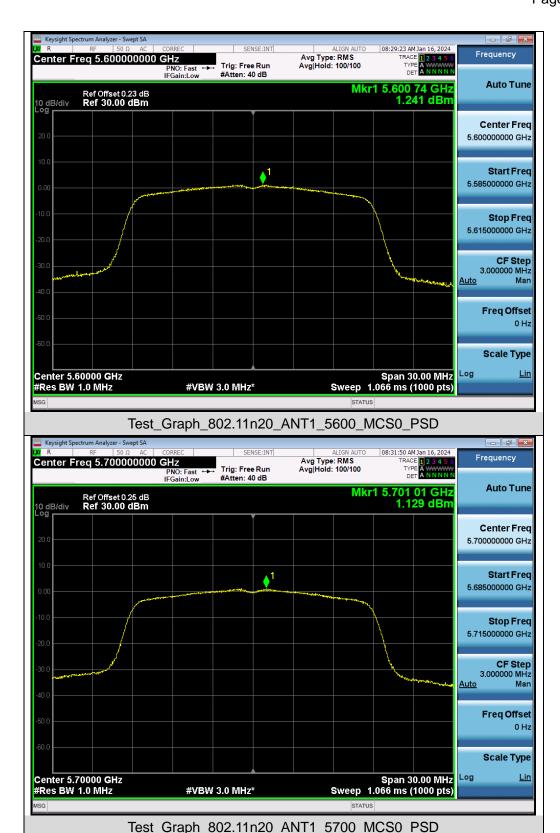


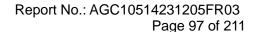




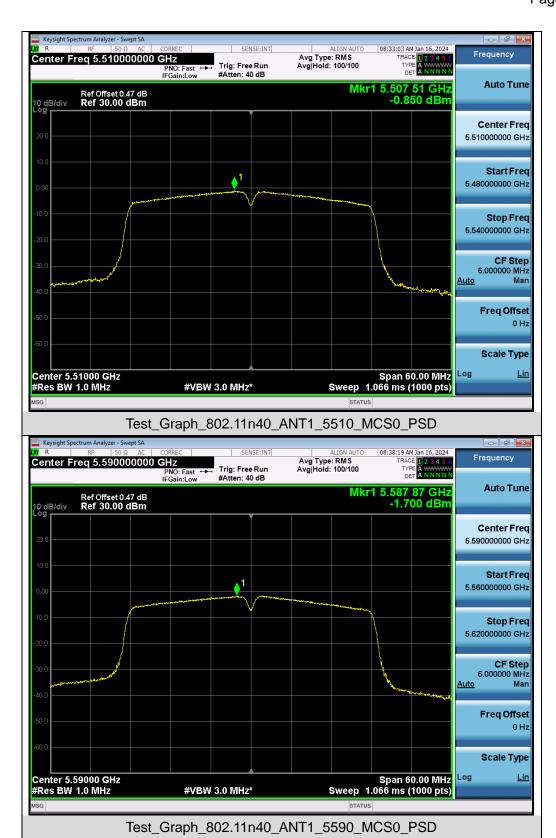


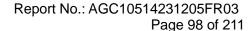






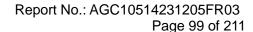






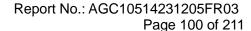




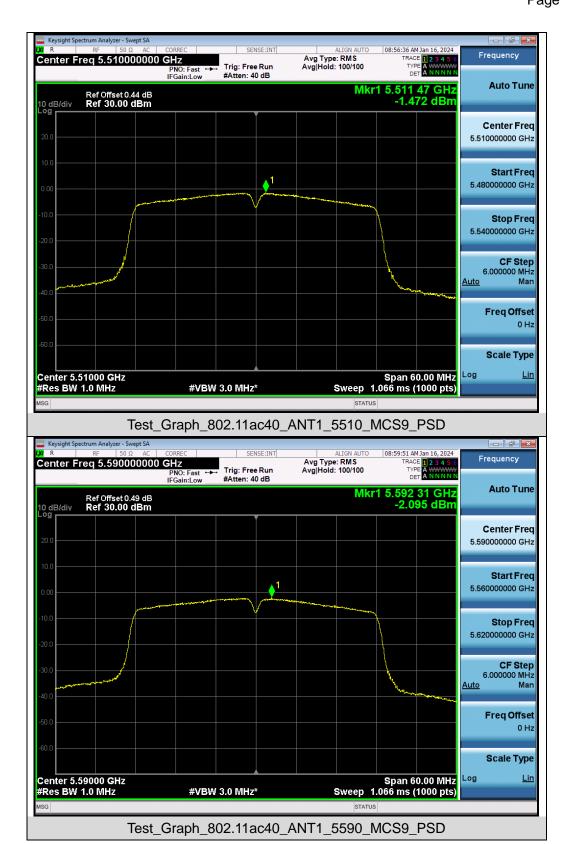


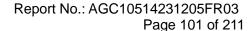






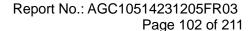






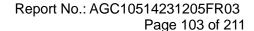






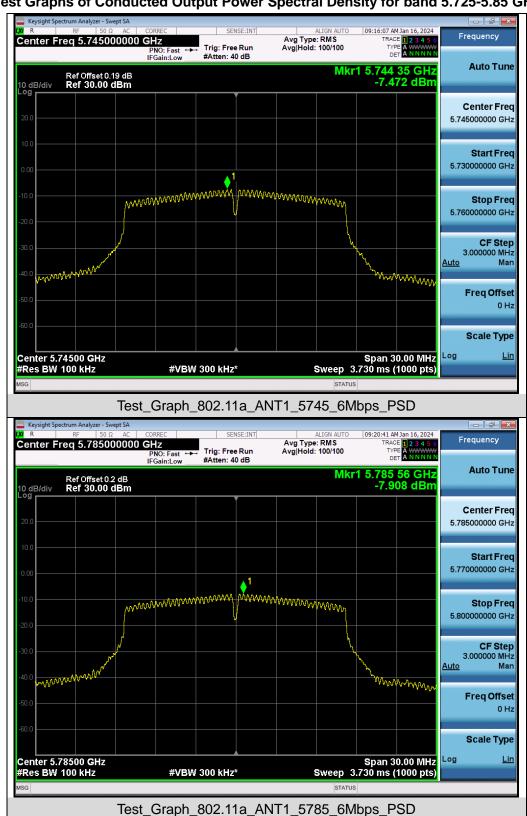


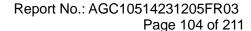




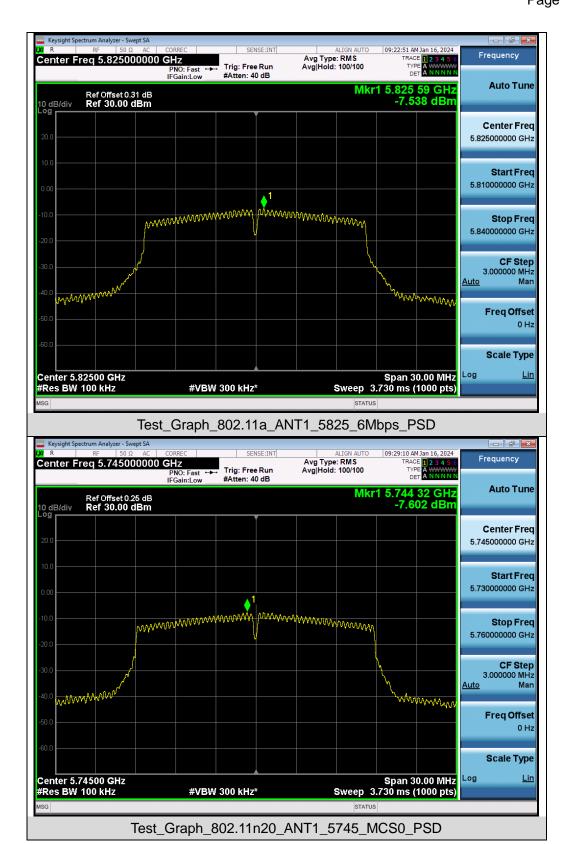


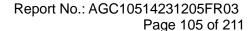
## Test Graphs of Conducted Output Power Spectral Density for band 5.725-5.85 GHz













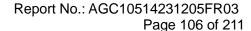


Test Graph 802.11n20 ANT1 5825 MCS0 PSD

#VBW 300 kHz\*

Span 30.00 MHz Sweep 3.730 ms (1000 pts)

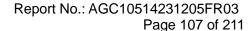
Center 5.82500 GHz #Res BW 100 kHz



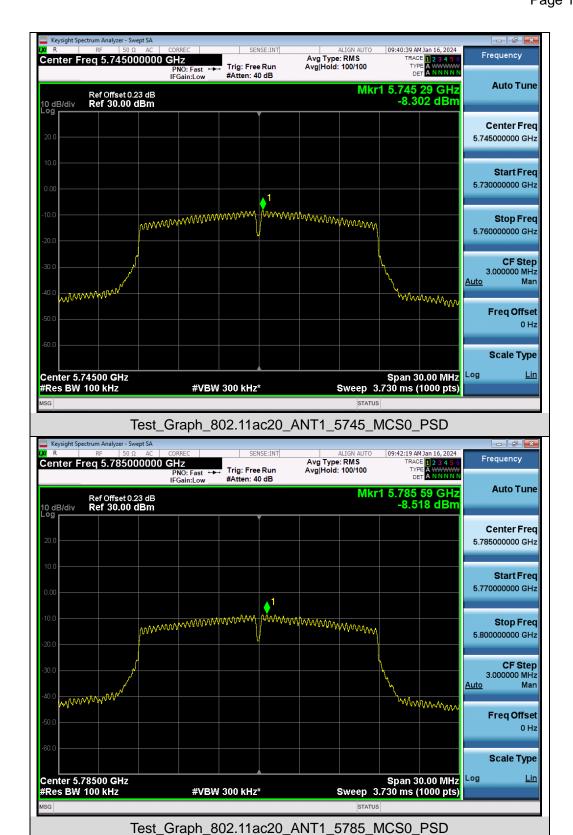


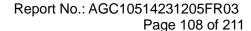


Test Graph 802.11n40 ANT1 5795 MCS0 PSD

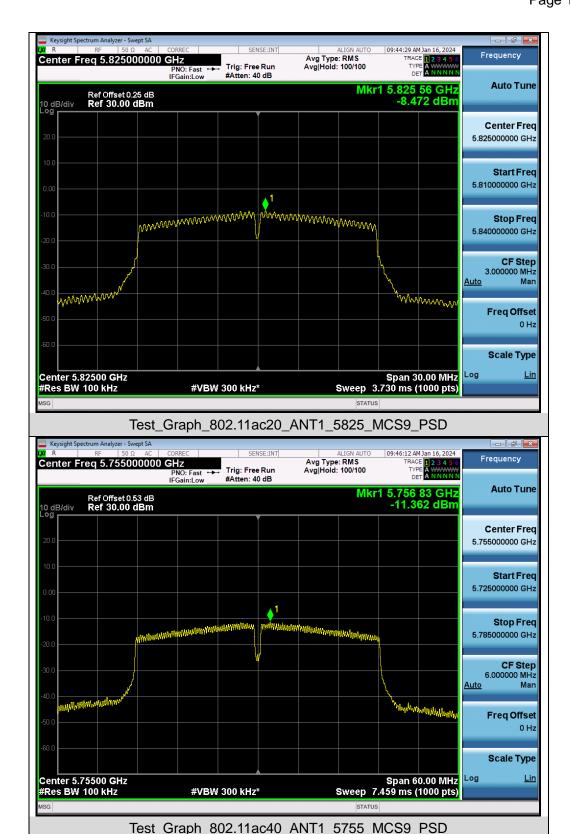


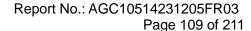




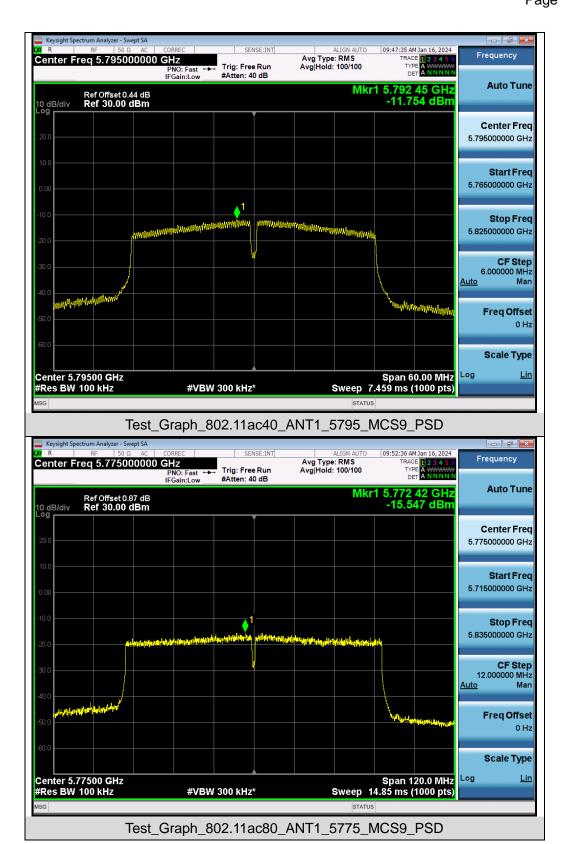














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## 10. Conducted Band Edge and Out-of-Band Emissions

## 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:

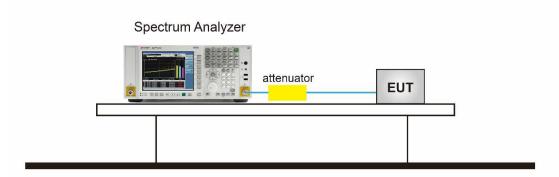
E = 
$$\frac{1000000 \sqrt{30 P}}{2}$$
 µV/m, where P is the eirp (Watts).

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)



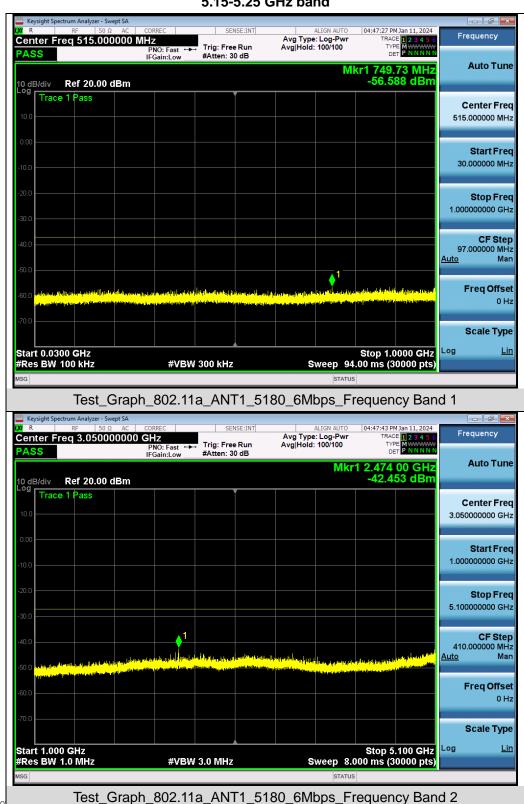
Any report havi g/Inspection

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#### 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



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