



# TEST REPORT

Applicant: Hangzhou Ingscreen Technology Co., Ltd  
Address of Applicant: Room 1006,building 6, 1324 Wenyi West Road, Yuhang District Hangzhou, China  
Manufacturer/Factory: Hangzhou Ingscreen Technology Co., Ltd  
Address of Manufacturer: Room 1006,building 6, 1324 Wenyi West Road, Yuhang District Hangzhou, China  
Product Name: OPS-PC  
Model No.: IS-I5D,IS-I3D, IS-I7D,IS-I9D,IS-I3L,IS-I5L,IS-I7L,IS-I9L,IS-OPSD, IS-OPSL  
Trade Mark:   
FCC ID: 2A9WM-ISI5D  
Applicable standards: FCC CFR Title 47 Part 15 Subpart E Section 15.407  
Date of Test: Dec.28,2022- Jan.11, 2023  
Date of report issued: Feb.01, 2023  
Test Result : PASS \*

Remark:

\* In the configuration tested, the EUT complied with the standards specified above.

The results shown in this test report refer only to the sample(s) tested , this test report cannot be reproduced, except in full without prior written permission of the company.

The report would be invalid without specific stamp of test institute and the signatures of compiler and approver

## Prepared By

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### Report Revision History

Report No.	Description	Issue Date
ET-22120981E02	Original	Feb.01, 2023



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## 1 Test Summary

Test Item	Section in CFR 47	Result	Test by
Antenna requirement	15.203	Pass	/
AC Power Line Conducted Emission	15.207	Pass	Carr Kang
Conducted Output Power	15.407 (a)(1)/(a)(3)	Pass	Yvan Fan
26dB Bandwidth and 99% Occupied Bandwidth	15.407 (a)(12)	Pass	Yvan Fan
6dB Bandwidth	15.407 (e)	Pass	Yvan Fan
Power Spectral Density	15.407(a)(1)/(a)(3)	Pass	Yvan Fan
Band Edge	15.407(b)(1)/(b)(4)	Pass	Yvan Fan
Spurious Emission	15.205/15.209 15.407(b)(1)/(b)(4)/(b)(8)	Pass	Qiao Li
Frequency Stability	15.407(g)	Pass	Yvan Fan

*Remarks:*

1. Pass: The EUT complies with the essential requirements in the standard.
2. Test according to ANSI C63.10:2013.

### 1.1 Measurement Uncertainty

Test Item	Measurement Uncertainty	Notes
Occupied Channel Bandwidth	±0.55%	(1)
RF output power, conducted	±0.99dB	(1)
Power Spectral Density, conducted	±0.61dB	(1)
Unwanted Emissions, conducted	±0.64dB	(1)
AC Power Line Conducted Emission	± 3.02dB	(1)
Radiated emissions 9K-30MHz	±3.98dB	(1)
Radiated emissions 30M- 1GHz	±4.30dB	(1)
Radiated emissions 1GHz-18GHz	±4.35dB	(1)
Radiated emissions 18GHz-40GHz	±4.59 dB	(1)

Note (1): The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.

## 2 General Information

### 2.1 General Description of EUT

Product Name:	OPS-PC
Model No.:	IS-I5D, IS-I3D, IS-I7D, IS-I9D, IS-I3L, IS-I5L, IS-I7L, IS-I9L, IS-OPSD, IS-OPSL
Difference of model(s)	IS-I5D
Test Model:	All the model are the same circuit and RF module, except the product names.
Hardware Version:	N/A
Software Version:	N/A
Sample(s) Status:	Engineer sample
Operation Frequency:	<input checked="" type="checkbox"/> 5180-5240MHz for 802.11a/n(HT20)/ac20; 5190-5230MHz for 802.11n(HT40)/ac40; 5210MHz for 802.11 ac80; <input checked="" type="checkbox"/> 5745-5825 MHz for 802.11a/n(HT20)/ac20; 5755-5795 MHz for 802.11n(HT40)/ac40; 5775MHz for 802.11 ac80;
Channel numbers:	<input checked="" type="checkbox"/> 4 channels for 802.11a/n20/ac20 in the 5180-5240MHz band; 2 channels for 802.11 n40/ac40 in the 5190-5230MHz band ; 1 channels for 802.11 ac80 in the 5210MHz band ; <input checked="" type="checkbox"/> 5 channels for 802.11a/n20/ac20 in the 5745-5825MHz band ; 2 channels for 802.11 n40/ac40 in the 5755-5795MHz band ; 1 channels for 802.11 ac80 in the 5775MHz band
Channel bandwidth:	802.11a/802.11n(HT20)/ 802.11ac(HT20): 20MHz 802.11n(HT40)/ 802.11ac(HT40) : 40MHz 802.11ac(HT80) : 80MHz
Data Rate	802.11a: 6,9,12,18,24,36,48,54Mbps; 802.11n(HT20/HT40):MCS0-MCS15; 802.11ac(VHT/20/40/80):NSS1, MCS0-MCS9
Modulation technology:	Orthogonal Frequency Division Multiplexing (OFDM) with BPSK/QPSK/16QAM/64QAM/256QAM
Antenna Type:	External antenna
Antenna gain:	2.61dBi
Power supply:	DC 19V

Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180MHz	38	5190MHz	40	5200MHz	42	5210MHz
44	5220MHz	46	5230MHz	48	5240MHz	/	/
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
149	5745MHz	151	5755MHz	153	5765MHz	155	5775MHz
157	5785MHz	159	5795MHz	161	5805MHz	/	/
165	5825MHz	/					

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Test channel	Frequency (MHz)		
	802.11 a /n(HT20)/ac(HT20)	802.11 n(HT40)/ac(HT40)	802.11ac(HT80)
Lowest channel	5180	5190	5210
Middle channel	5200	<del>5230</del>	<del>5240</del>
Highest channel	5240	5230	<del>5210</del>

Test channel	Frequency (MHz)		
	802.11 a /n(HT20)/ac(HT20)	802.11 n(HT40)/ac(HT40)	802.11ac(HT80)
Lowest channel	5745	5755	5775
Middle channel	5785	<del>5795</del>	<del>5805</del>
Highest channel	5825	5795	<del>5775</del>

## 2.2 Test mode

Transmitting mode	Keep the EUT in continuously transmitting mode(or with a duty cycle $\geq 98\%$ )
<p><i>Remark: During the test, the test voltage was tuned from 85% to 115% of the nominal rated supply voltage, and found that the worst case was under the nominal rated supply condition. So the report just shows that condition's data.</i></p>	

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

Pretest Mode	Description
Mode 1	802.11a / n 20 CH36/ CH40/ CH 48 802.11a /n 20 CH149/ CH157/ CH 165
Mode 2	802.11n 40 CH38/ CH 46 802.11n 40 CH 151 / CH 159
Mode 3	802.11 ac80 CH 42/CH 155
Mode 4	802.11a / n 20 CH36/ CH40/ CH 48 802.11a /n 20 CH149/ CH157/ CH 165
Mode 5	Link Mode

Conducted Emission	
Final Test Mode	Description
Mode 5	Link Mode

For Radiated Emission	
Final Test Mode	Description
Mode 1	802.11a / n 20 CH36/ CH40/ CH 48 802.11a /n 20 CH149/ CH157/ CH 165
Mode 2	802.11n 40 CH38/ CH 46 802.11n 40 CH 151 / CH 159
Mode 3	802.11 ac80 CH 42/CH 155
Mode 4	802.11a / n 20 CH36/ CH40/ CH 48 802.11a /n 20 CH149/ CH157/ CH 165

Note:

(1) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported.

### 2.3 Description of Support Units

Equipment	Model	S/N	Manufacturer
Adapter	/	/	/
mouse	/	/	DELL
keyboard	/	/	DELL
monitor	/	/	DELL

### 2.4 Deviation from Standards

None.

### 2.5 Abnormalities from Standard Conditions

None.

### 2.6 Test Facility

Test laboratory: Shenzhen ETR Standard Technology Co., Ltd.  
CNAS Registration Number: L11864  
A2LA Certificate Number: 6640.01  
FCC Designation Number: CN1326  
FCC Test Firm Registration: 183064

### 2.7 Test Location

All tests were performed at:

Laboratory location: No.103, No.10, Phase I, Zone 3, Xinxing Industrial Park, Xinhe, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China  
Telephone: +86 755 85259392

### 2.8 Additional Instructions

Test Software	Serial port command control
Power level setup	Default



### 3 Test Instruments list

Conducted Emission

Item	Equipment name	Manufacturer	Model	Serial No.	Calibration date	Due date
1	EMI Test Receiver	Rohde&schwarz	ESCI3	100605	2022.3.09	2023.3.08
2	amplifier	EMtrace	RP01A	50117	2022.3.09	2023.3.08
3	Artificial power network	schwarabeck	NSLK8127	8127483	2022.3.09	2023.3.08
4	Artificial power network	ETS	3186/2NM	1132	2022.3.09	2023.3.08
5	10dB attenuator	HUBER+SUNNER	10dB	/	2022.3.09	2023.3.08
6	Cable 4	HUBER SUNNER	3M	/	2022.3.09	2022.3.08
7	Absorbing Clamp	schwarabeck	MDS21	D69250	2022.3.11	2023.3.10

Radiated Emission & RF Conducted test:

Item	Equipment name	Manufacturer	Model	Serial No.	Calibration date	Due date
1	EMI Test Receiver	Rohde&schwarz	ESPI7	100605	2022.3.09	2023.3.08
2	Broadband antenna	schwarabeck	VULB9168	1064	2022.3.11	2024.3.10
3	Horn antenna	schwarabeck	BBHA9120D	9120D-1145	2022.3.11	2024.3.10
4	amplifier	EMtrace	RP01A	50117	2022.3.09	2023.3.08
5	amplifier	Space-Dtronic	EWLAN0118G-P40	19113001	2022.3.09	2023.3.08
6	Spectrum analyzer	KEYSIGHT	N9020A	MY55370280	2022.3.09	2023.3.08
7	Power detector box	MWRFTest	MW100-PSB	MW201020JYT	2022.11.09	2023.11.08
8	Signal generator	Agilent	N5182A	MY49060455	2022.11.09	2023.11.08
9	Spectrum analyzer	Rohde&schwarz	FSV40	100363	2022.3.09	2023.3.08
10	amplifier	Aeroflex	DLE-161	097	2022.3.09	2023.3.08
11	Horn antenna	Com-Power	SAS-574	588	2022.3.11	2024.3.10
12	Loop antenna	schwarabeck	FMZB 1519 B	1519	2022.3.11	2024.3.10
13	Cable 6	HUBER SUNNER	0.5M	/	2022.3.09	2023.3.08
14	Cable7	HUBER SUNNER	2.0M	/	2022.3.09	2023.3.08
15	Cable8	HUBER SUNNER	6.0M	/	2022.3.09	2023.3.08

Note: the calibration interval of the above test instruments is 12 or 24 months and the calibrations are traceable to international system unit (SI).

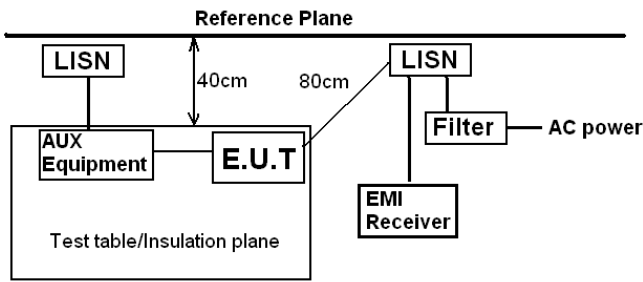
Software Name	Manufacturer	Model	Version
RF test software	MWRFTest	MTS 8310	V2.0.0.0
Conducted test software	EZ-EMC	Farad	Ver.EMC-CON 3A1.1
Radiated test software	EZ-EMC	Farad	Ver.FA-03A2 RE

## 4 Test results and Measurement Data

### 4.1 Antenna requirement

<b>Standard requirement:</b>	FCC Part15 C Section 15.203
<i>15.203 requirement: 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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.</i>	
<b>E.U.T Antenna:</b>	
<i>The antennas are External antenna, the best case gain of the antennas are 2.61dBi, reference to the appendix II for details</i>	

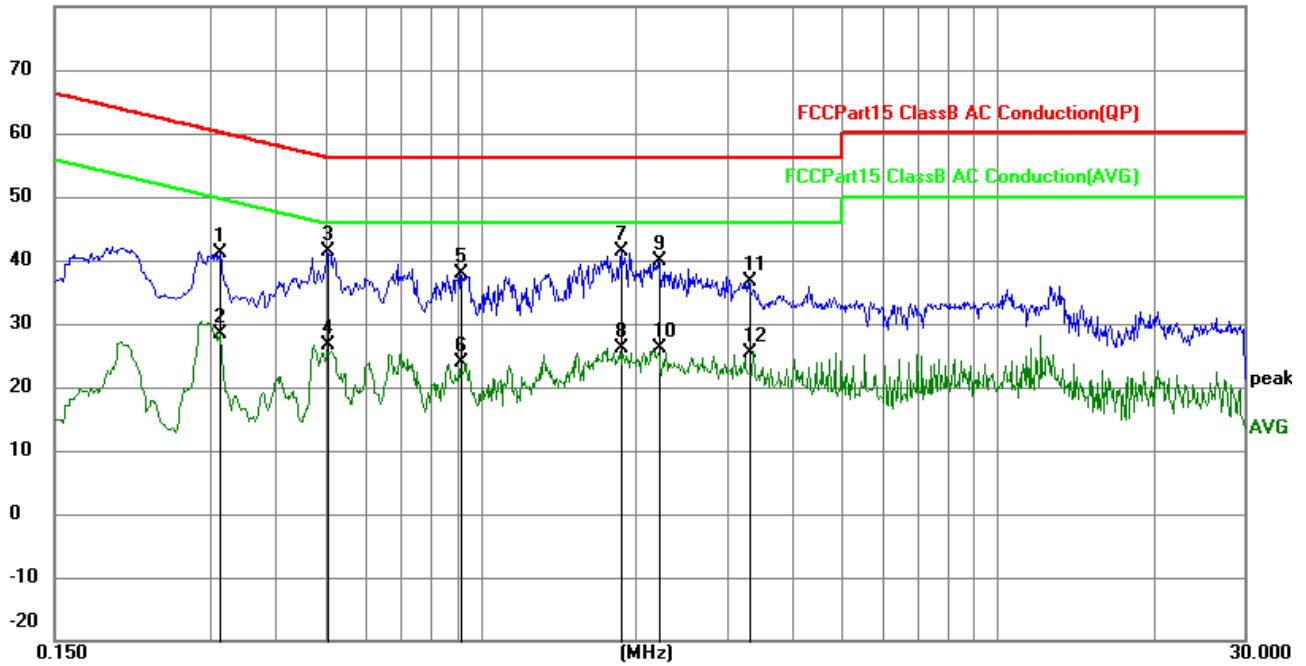
## 4.2 Conducted Emissions

Test Requirement:	FCC Part15 C Section 15.207					
Test Method:	ANSI C63.10:2013					
Test Frequency Range:	150KHz to 30MHz					
Class / Severity:	Class B					
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep time=auto					
Limit:	Frequency range (MHz)		Limit (dBuV)			
			Quasi-peak		Average	
	0.15-0.5		66 to 56*		56 to 46*	
	0.5-5		56		46	
	5-30		60		50	
* Decreases with the logarithm of the frequency.						
Test setup:						
	<p><i>Remark:</i>  E.U.T: Equipment Under Test  LISN: Line Impedance Stabilization Network  Test table height=0.8m</p>					
Test procedure:	<ol style="list-style-type: none"> <li>1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment.</li> <li>2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs).</li> <li>3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10:2013 on conducted measurement.</li> </ol>					
Test Instruments:	Refer to section 3.0 for details					
Test mode:	Refer to section 2.2 for details					
Test environment:	Temp.:	23.6°C	Humid.:	57%	Press.:	1012mbar
Test voltage:	AC 120V, 60Hz					
Test results:	Pass					

Measurement data

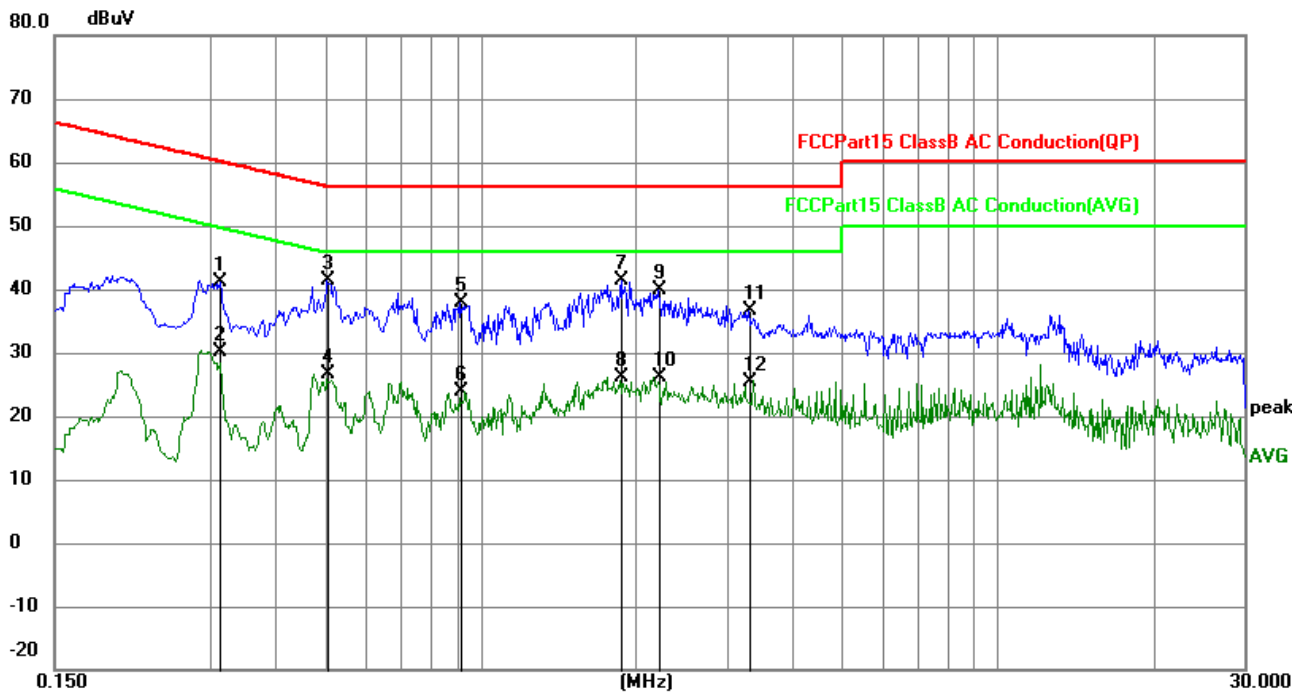
Line:

80.0 dBuV



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.3130	30.64	10.39	41.03	59.89	-18.86	QP
2	0.3130	17.93	10.39	28.32	49.89	-21.57	AVG
3	0.5050	30.98	10.36	41.34	56.00	-14.66	QP
4	0.5050	16.39	10.36	26.75	46.00	-19.25	AVG
5	0.9149	27.51	10.30	37.81	56.00	-18.19	QP
6	0.9149	13.57	10.30	23.87	46.00	-22.13	AVG
7	1.8689	31.06	10.30	41.36	56.00	-14.64	QP
8	1.8689	15.89	10.30	26.19	46.00	-19.81	AVG
9	2.2019	29.60	10.30	39.90	56.00	-16.10	QP
10	2.2019	15.88	10.30	26.18	46.00	-19.82	AVG
11	3.2955	26.21	10.32	36.53	56.00	-19.47	QP
12	3.2955	15.18	10.32	25.50	46.00	-20.50	AVG

Neutral:

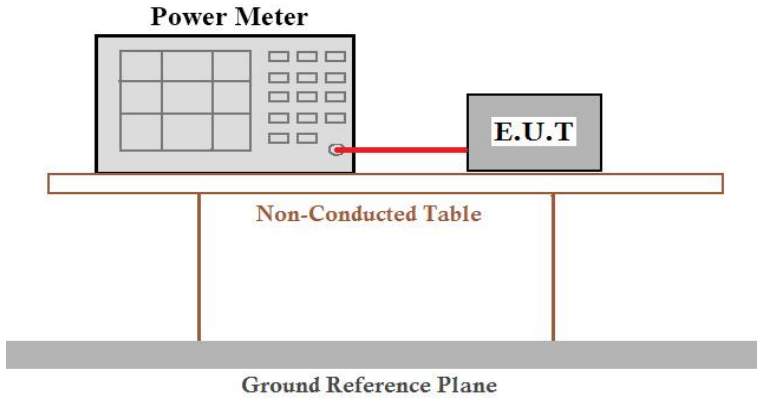


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.3130	30.64	10.39	41.03	59.89	-18.86	QP
2	0.3130	19.71	10.39	30.10	49.89	-19.79	AVG
3	0.5050	30.98	10.36	41.34	56.00	-14.66	QP
4	0.5050	16.39	10.36	26.75	46.00	-19.25	AVG
5	0.9149	27.51	10.30	37.81	56.00	-18.19	QP
6	0.9149	13.57	10.30	23.87	46.00	-22.13	AVG
7	1.8689	31.06	10.30	41.36	56.00	-14.64	QP
8	1.8689	15.89	10.30	26.19	46.00	-19.81	AVG
9	2.2019	29.60	10.30	39.90	56.00	-16.10	QP
10	2.2019	15.88	10.30	26.18	46.00	-19.82	AVG
11	3.2955	26.21	10.32	36.53	56.00	-19.47	QP
12	3.2955	15.18	10.32	25.50	46.00	-20.50	AVG

Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level =Receiver Read level + LISN Factor + Cable Loss
4. If the average limit is met when using a quasi-peak detector receiver, the EUT shall be deemed to meet both *limits and measurement with the average detector receiver is unnecessary.*

### 4.3 Conducted Peak Output Power

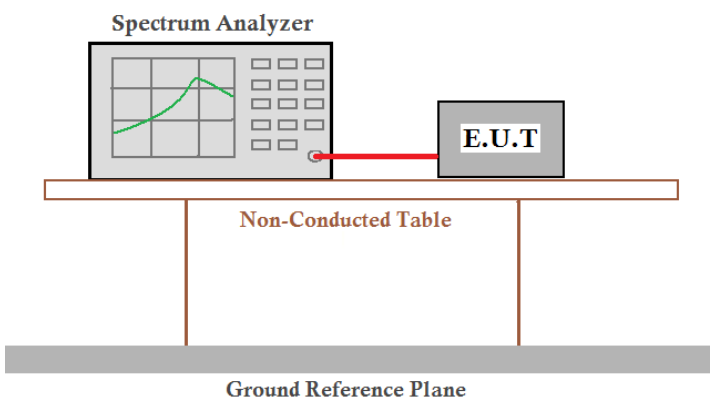
Test Requirement:	FCC Part15 E Section 15.407 (a)(1)/(a)(3)
Test Method:	ANSI C63.10:2013 and KDB 789033 D02 General U-NII Test Procedures New Rules v02r01
Limit:	5150-5250MHz : 250mW 5725~5850MHz : 1W
Test setup:	
Test Instruments:	Refer to section 3.0 for details
Test mode:	Refer to section 2.2 for details
Test results:	Pass

#### Measurement Data

Test Channel	Frequency	Maximum output power	LIMIT	Result
	(MHz)	(dBm)	dBm	
TX 802.11a Mode				
CH36	5180	12.06	23.98	Pass
CH40	5200	11.74	23.98	Pass
CH48	5240	11.32	23.98	Pass
TX 802.11 n20 Mode				
CH36	5180	12.05	23.98	Pass
CH40	5200	11.71	23.98	Pass
CH48	5240	11.45	23.98	Pass
TX 802.11 ac20 Mode				
CH36	5180	11.94	23.98	Pass
CH40	5200	11.72	23.98	Pass
CH48	5240	11.39	23.98	Pass
TX 802.11 n40 Mode				
CH38	5190	10.43	23.98	Pass
CH46	5230	9.92	23.98	Pass
TX 802.11 ac40 Mode				
CH38	5190	10.41	23.98	Pass
CH46	5230	9.89	23.98	Pass
TX 802.11 ac80 Mode				
CH42	5210	8.81	23.98	Pass

Test Channel	Frequency	Maximum output power.	LIMIT	Result
	(MHz)	(dBm)	dBm	
TX 802.11a Mode				
CH149	5745	10.64	30	Pass
CH157	5785	10.13	30	Pass
CH165	5825	10.25	30	Pass
TX 802.11 n20 Mode				
CH149	5745	10.63	30	Pass
CH157	5785	10.23	30	Pass
CH165	5825	10.14	30	Pass
TX 802.11 ac20 Mode				
CH149	5745	10.60	30	Pass
CH157	5785	10.17	30	Pass
CH165	5825	10.15	30	Pass
TX 802.11 n40 Mode				
CH151	5755	9.18	30	Pass
CH159	5795	8.23	30	Pass
TX 802.11 ac40 Mode				
CH151	5755	9.05	30	Pass
CH159	5795	8.86	30	Pass
TX 802.11 ac80 Mode				
CH155	5775	7.84	30	Pass

#### 4.4 Channel Bandwidth

Test Requirement:	FCC Part15 E Section 15.407(a)(12)&15.407(e)
Test Method:	ANSI C63.10:2013 and KDB 789033 D02 General U-NII Test Procedures New Rules v02r01
Limit:	Measurements in the 5.725-5.85 GHz band, the minimum bandwidth 6 dB bandwidth of U-NII devices shall be at least 500KHz. Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.
Test setup:	 <p>The diagram illustrates the test setup. A Spectrum Analyzer is connected via a red cable to an E.U.T. (Equipment Under Test). Both are placed on a Non-Conducted Table. Below the table is a Ground Reference Plane.</p>
Test Instruments:	Refer to section 3.0 for details
Test mode:	Refer to section 2.2 for details
Test results:	Pass

#### Measurement Data

5180-5240MHz

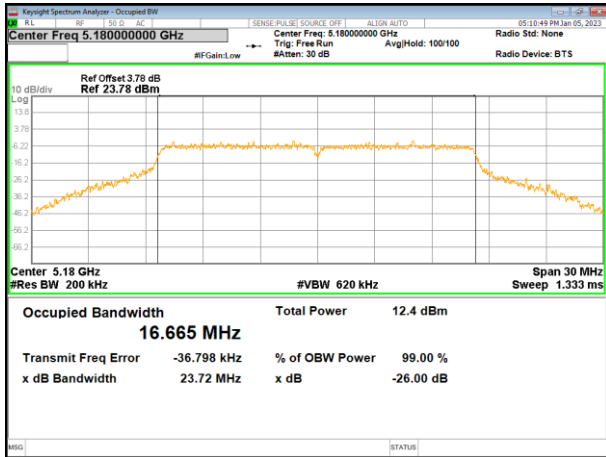
Test CH	-26dB Channel Bandwidth (MHz)						Result
	802.11a	802.11n (HT20)	802.11ac (HT20)	802.11n (HT40)	802.11ac (HT40)	802.11ac (HT80)	
Lowest	23.23	24.53	24.09	44.63	43.00	--	Pass
Middle	23.95	24.02	24.27	--	--	82.25	
Highest	23.90	24.33	24.56	44.23	44.62	--	

Test CH	99% Occupy Bandwidth (MHz)						Result
	802.11a	802.11n (HT20)	802.11ac (HT20)	802.11n (HT40)	802.11ac (HT40)	802.11ac (HT80)	
Lowest	16.665	17.838	17.820	36.338	36.359	--	Pass
Middle	16.687	17.821	17.841	--	--	75.224	
Highest	16.695	17.865	17.817	36.406	36.354	--	

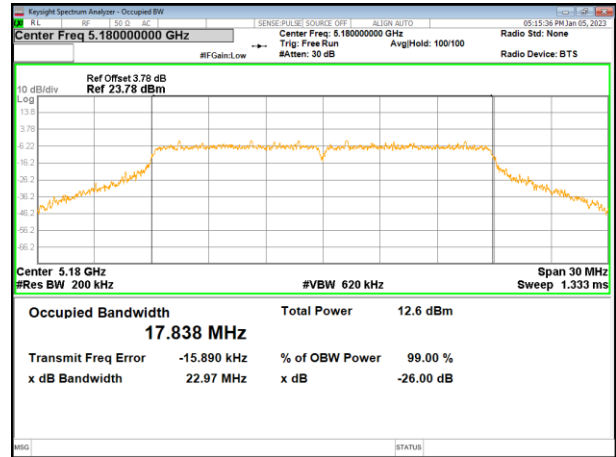


Test plot

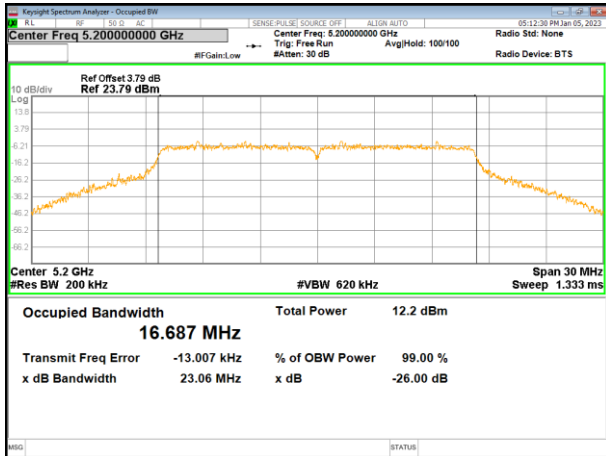
(802.11a) plot on channel 36



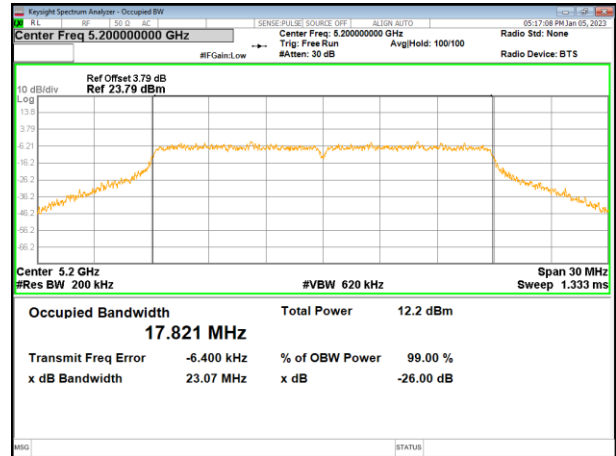
(802.11 n20) plot on channel 36



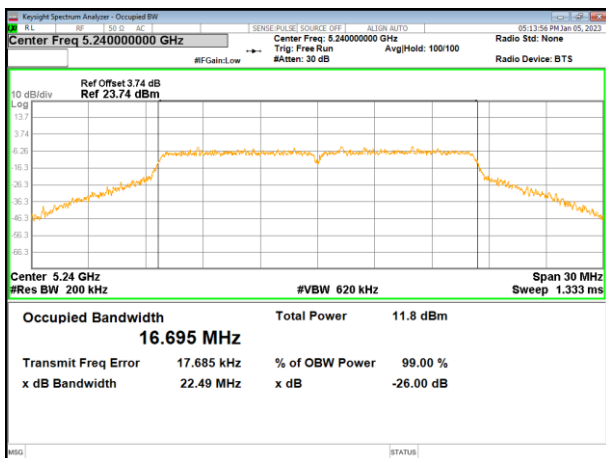
(802.11a) plot on channel 40



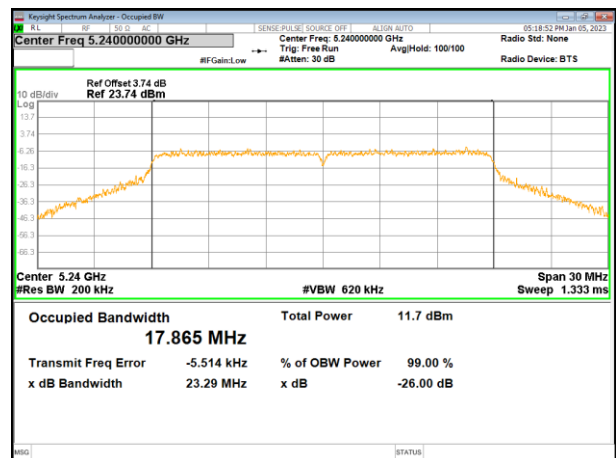
(802.11 n20) plot on channel 40



(802.11a) plot on channel 48

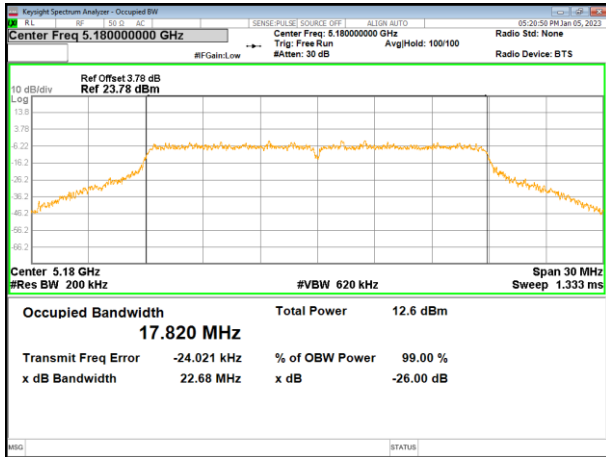


(802.11 n20) plot on channel 48

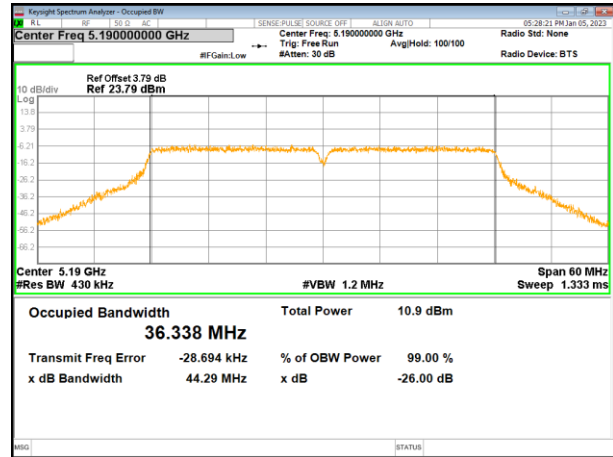


Test plot

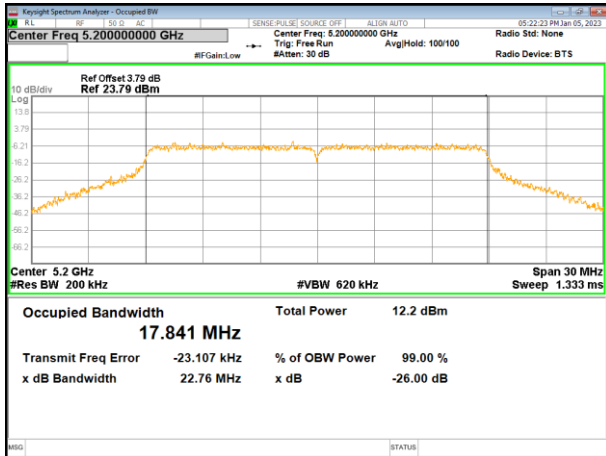
(802.11ac20) plot on channel 36



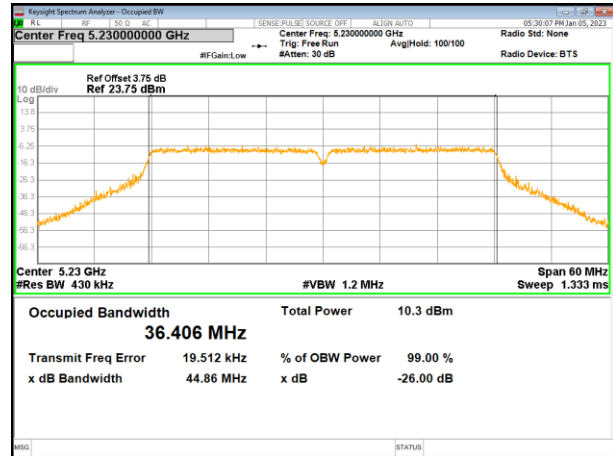
(802.11 n40) plot on channel 38



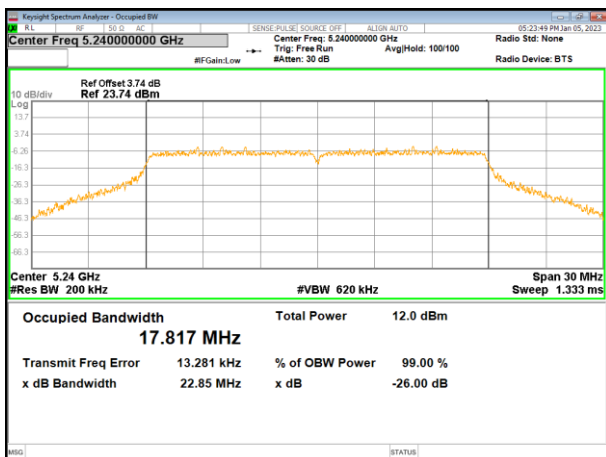
(802.11ac20) plot on channel 40



(802.11 n40) plot on channel 46

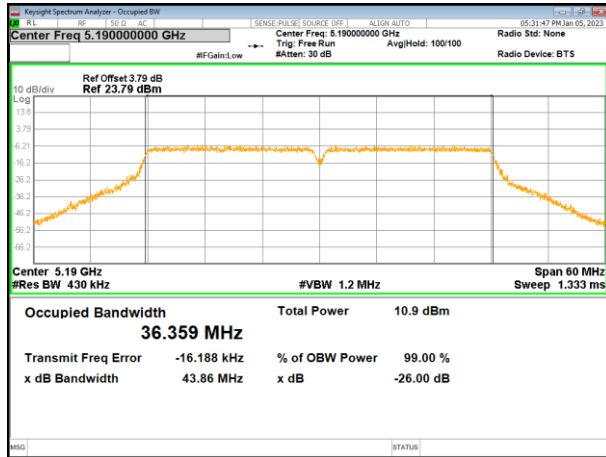


(802.11ac20) plot on channel 48

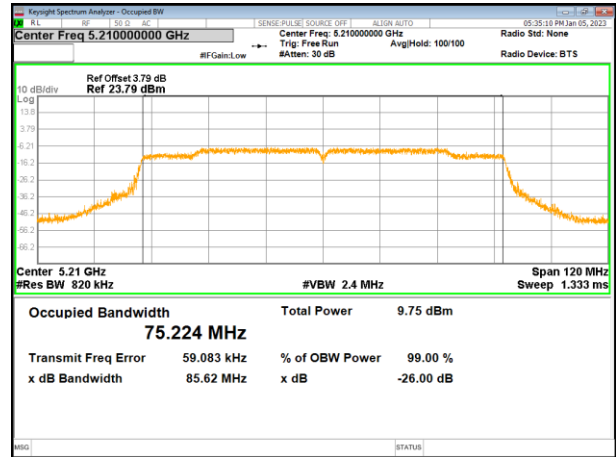


Test plot

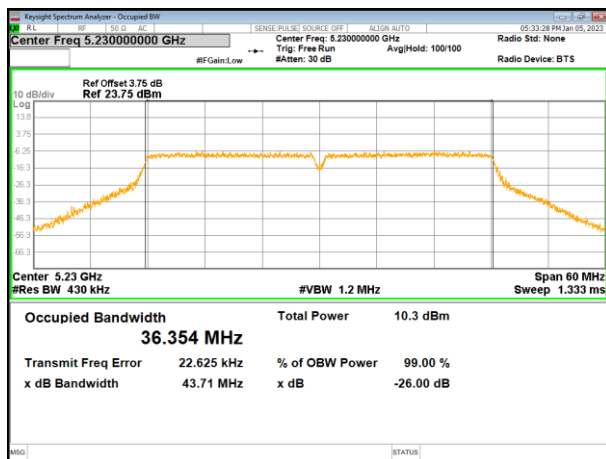
(802.11ac40) plot on channel 38



(802.11ac80) plot on channel 42



(802.11ac40) plot on channel 46





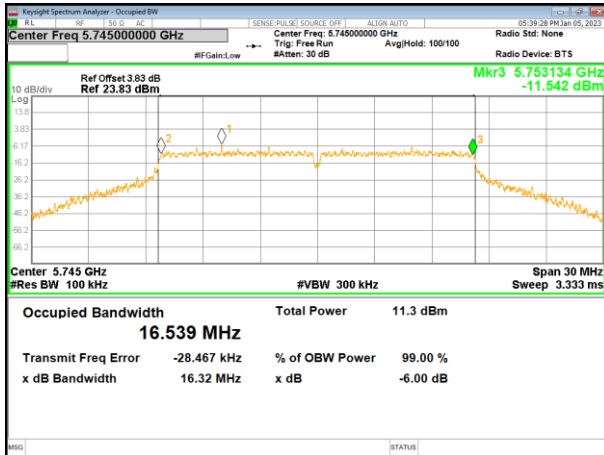
5745-5825MHz

Test CH	-6dB Channel Bandwidth (MHz)						Limit (KHz)	Result
	802.11a	802.11n (HT20)	802.11ac (HT20)	802.11n (HT40)	802.11ac (HT40)	802.11ac (HT80)		
Lowest	16.32	17.55	17.55	36.33	36.31	--	>500	Pass
Middle	16.31	17.55	17.57	--	--	75.07		
Highest	16.35	17.59	17.53	36.06	36.33	--		

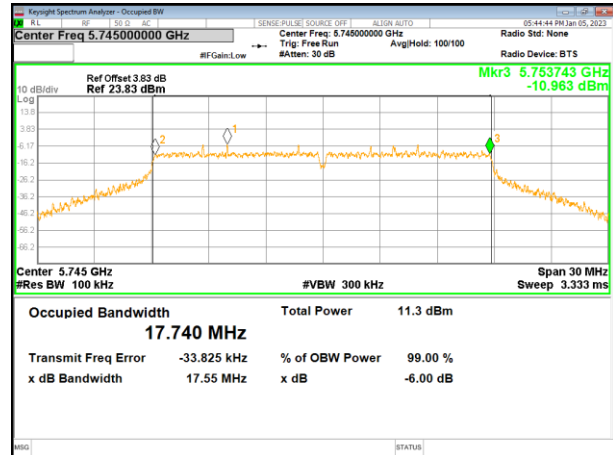
Remark: "--" is not applicable

Test plot

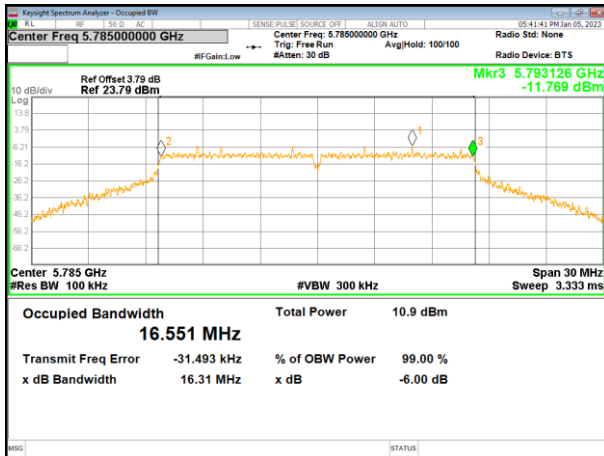
(802.11a) plot on channel 149



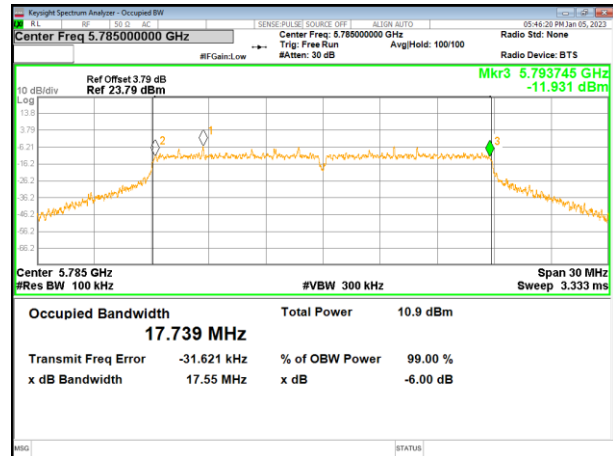
(802.11 n20) plot on channel 149



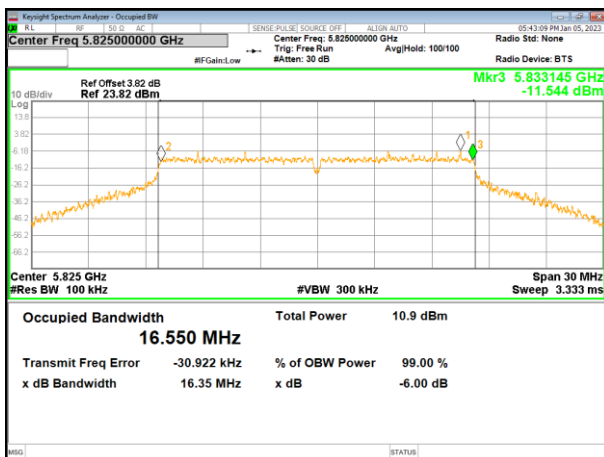
(802.11a) plot on channel 157



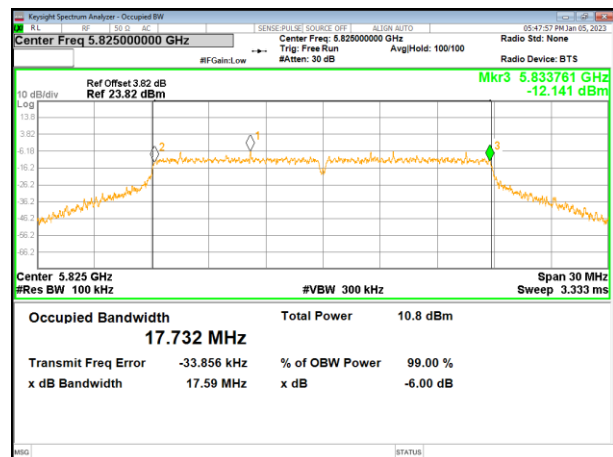
(802.11 n20) plot on channel 157



(802.11a) plot on channel 165

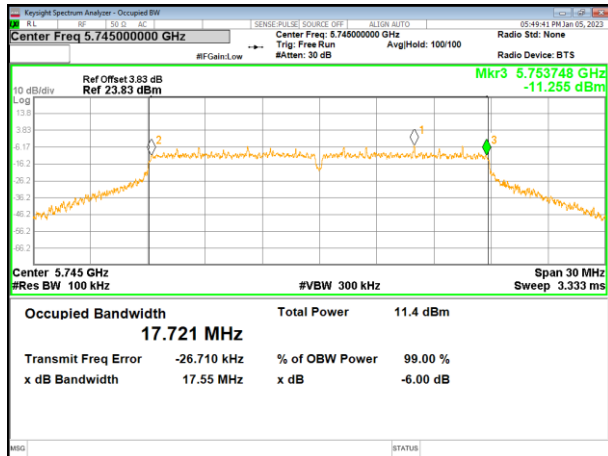


(802.11 n20) plot on channel 165

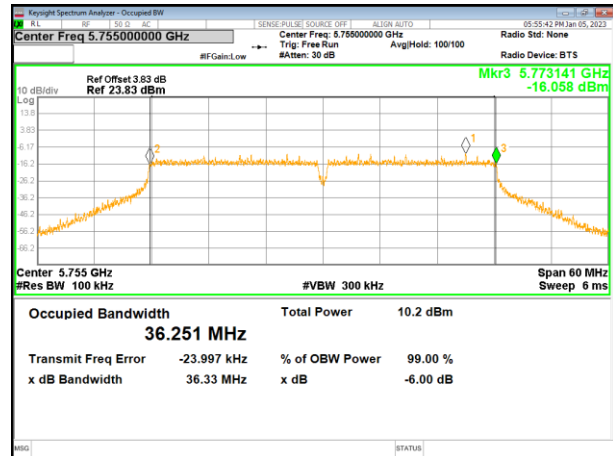


Test plot

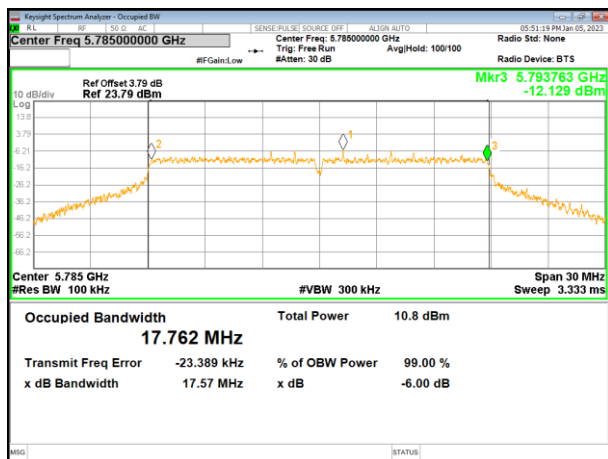
(802.11ac20) plot on channel 149



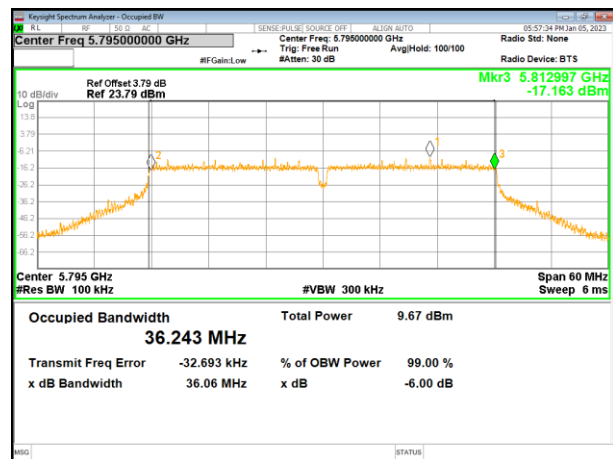
(802.11 n40) plot on channel 151



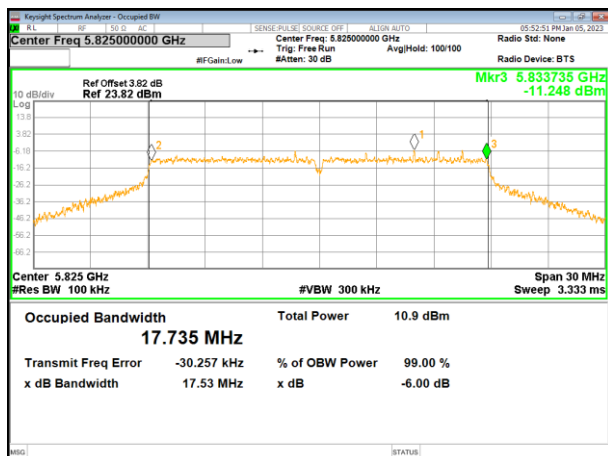
(802.11ac20) plot on channel 157



(802.11 n40) plot on channel 159

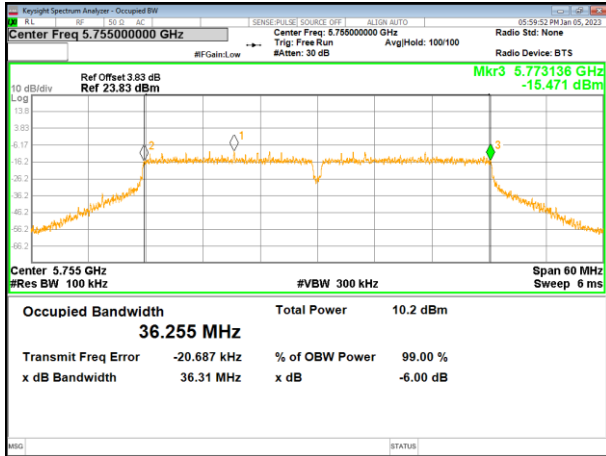


(802.11ac20) plot on channel 165

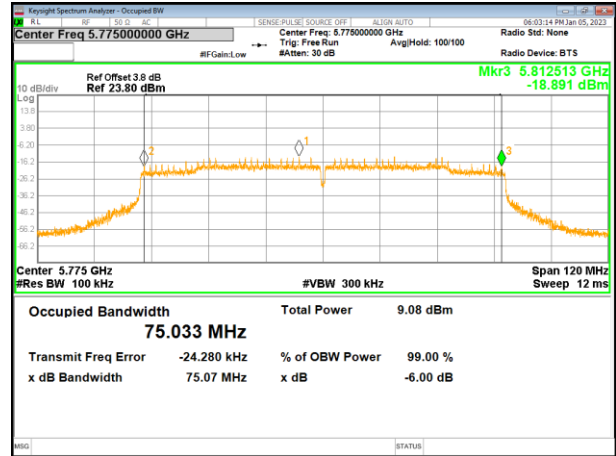


Test plot

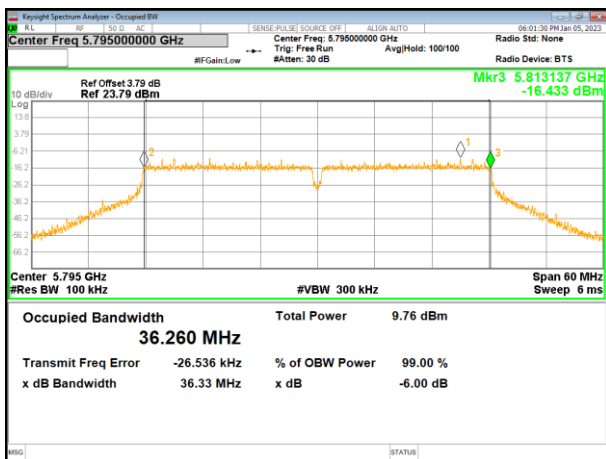
(802.11 ac40) plot on channel 151



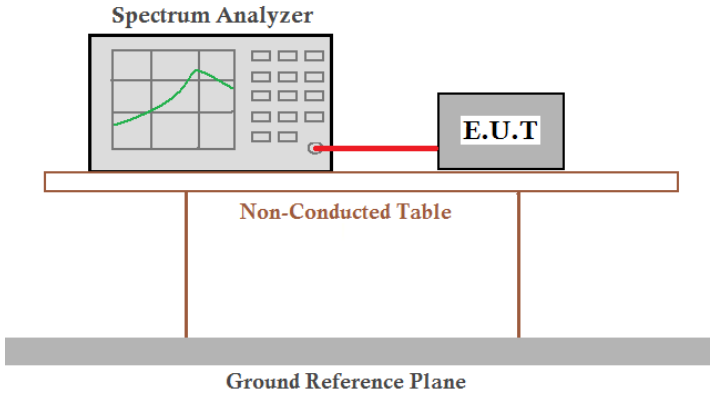
(802.11 ac80) plot on channel 155



(802.11 ac40) plot on channel 159



### 4.5 Power Spectral Density

Test Requirement:	FCC Part15 E Section 15.407(a)(1)/ (a)(3)	
Test Method:	ANSI C63.10:2013 and KDB 789033 D02 General U-NII Test Procedures New Rules v02r01	
Limit:	Frequency band (MHz)	Limit
	5150-5250	≤17dBm/1MHz for master device
		≤11dBm/1MHz for client device
	5250-5350	≤11dBm/1MHz for client device
	5470-5725	≤11dBm/1MHz for client device
5725-5850	≤30dBm/500kHz	
Test setup:		
Test Instruments:	Refer to section 3.0 for details	
Test mode:	Refer to section 2.2 for details	
Test results:	Pass	

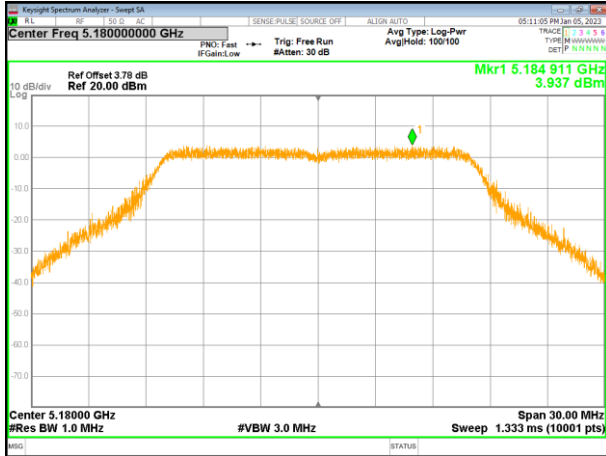
#### Measurement Data

##### 5180-5240MHz

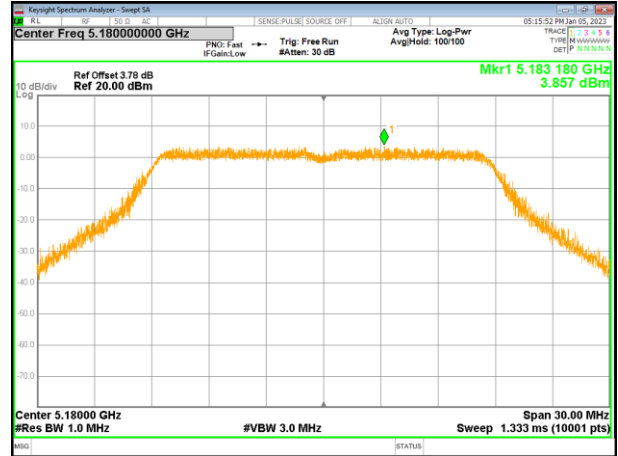
Mode	Frequency	Measured Power Density (dBm/MHz)	Limit (dBm/MHz)
802.11 a	5180 MHz	3.937	11
	5200 MHz	3.470	11
	5240 MHz	3.286	11
802.11 n20	5180 MHz	3.857	11
	5200 MHz	3.125	11
	5240 MHz	3.008	11
802.11 ac20	5180 MHz	3.427	11
	5200 MHz	3.272	11
	5240 MHz	2.909	11
802.11 n40	5190 MHz	-0.816	11
	5230 MHz	-1.045	11
802.11 ac40	5190 MHz	-0.634	11
	5230 MHz	-1.057	11
802.11 ac80	5210 MHz	-5.219	11



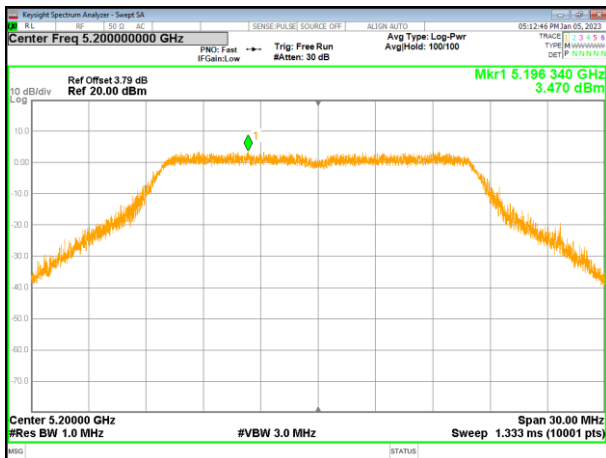
(802.11a) PSD plot on channel 36



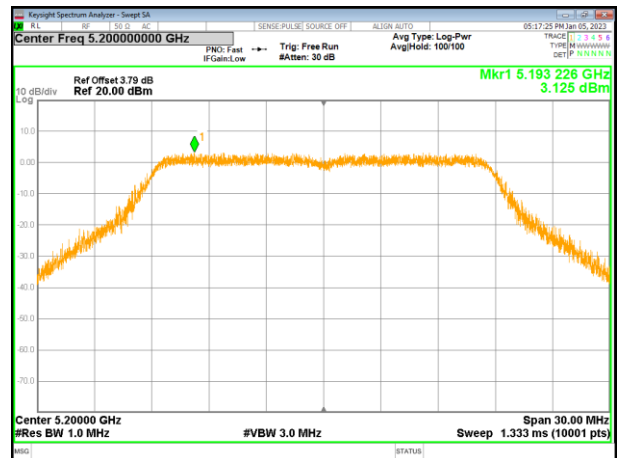
(802.11n20) PSD plot on channel 36



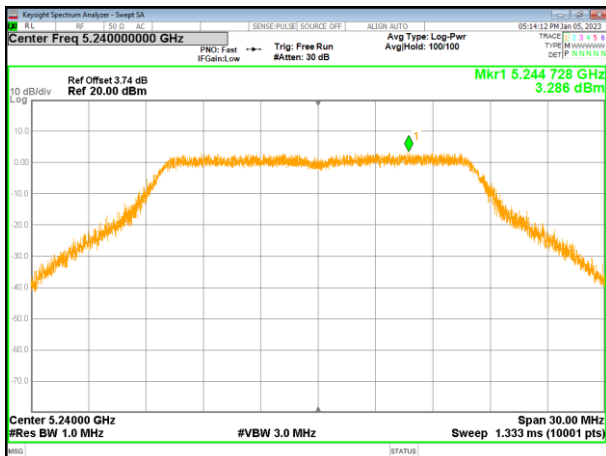
(802.11a) PSD plot on channel 40



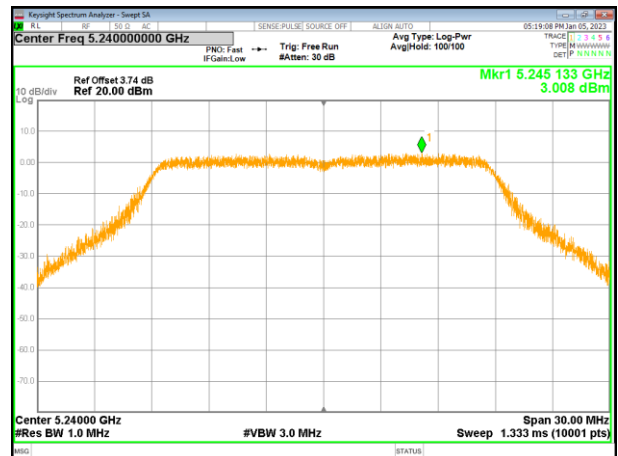
(802.11n20) PSD plot on channel 40



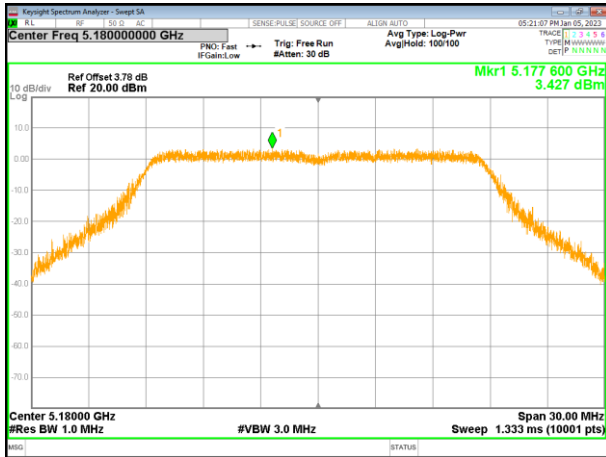
(802.11a) PSD plot on channel 48



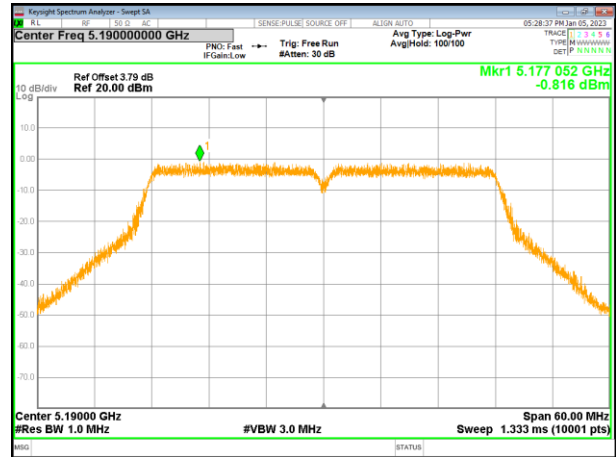
(802.11n20) PSD plot on channel 48



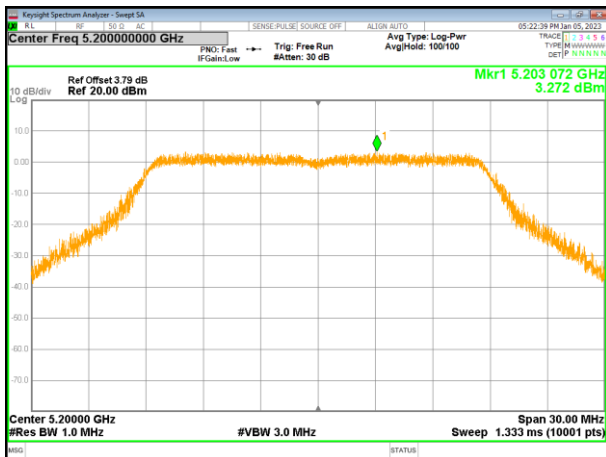
(802.11ac20) PSD plot on channel 36



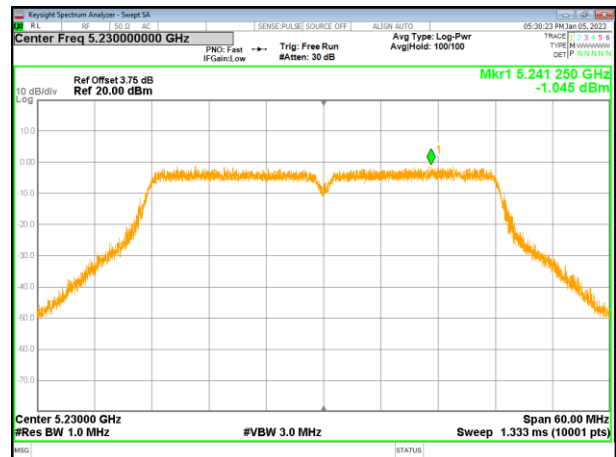
(802.11n40) PSD plot on channel 38



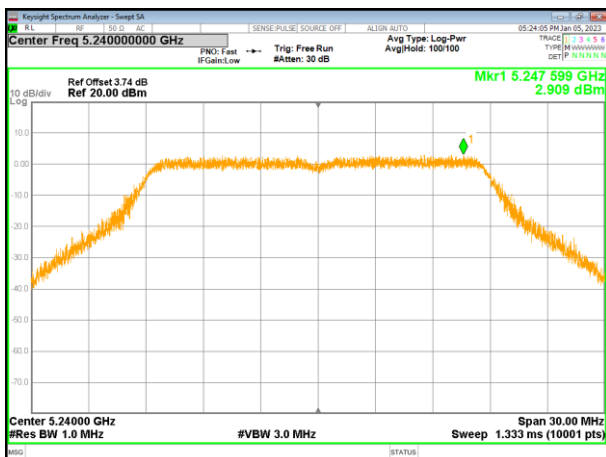
(802.11ac20) PSD plot on channel 40



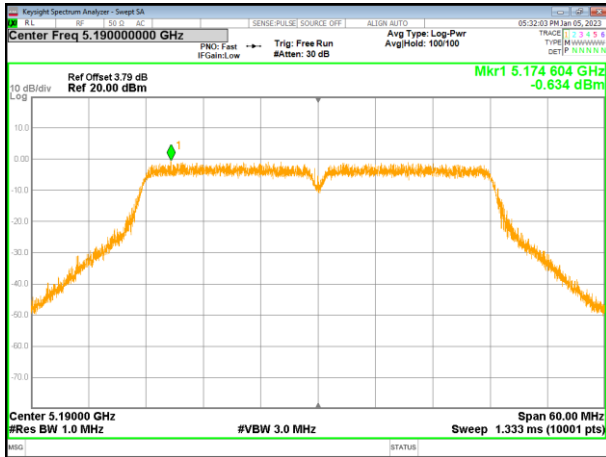
(802.11n40) PSD plot on channel 46



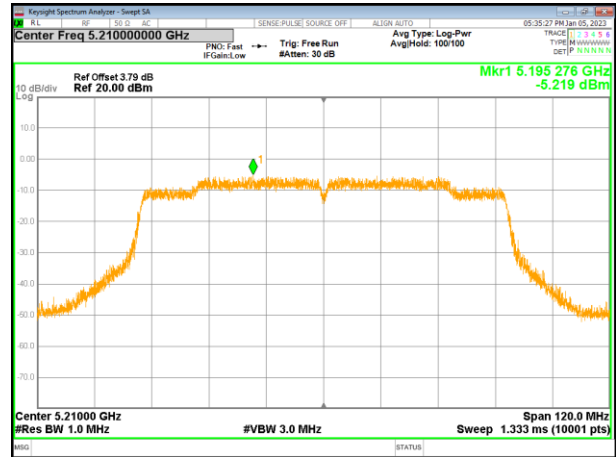
(802.11ac20) PSD plot on channel 48



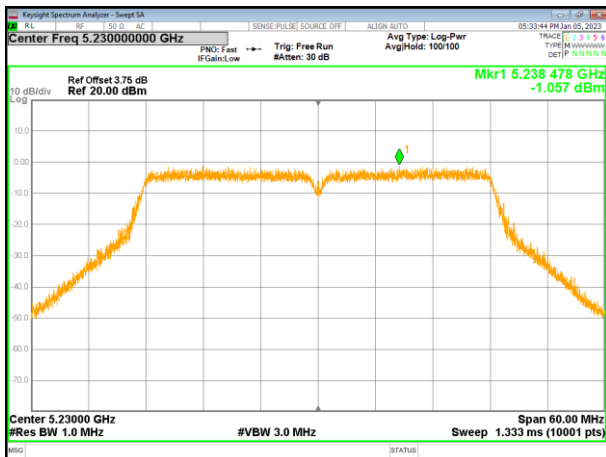
(802.11ac40) PSD plot on channel 38



(802.11ac80) PSD plot on channel 42



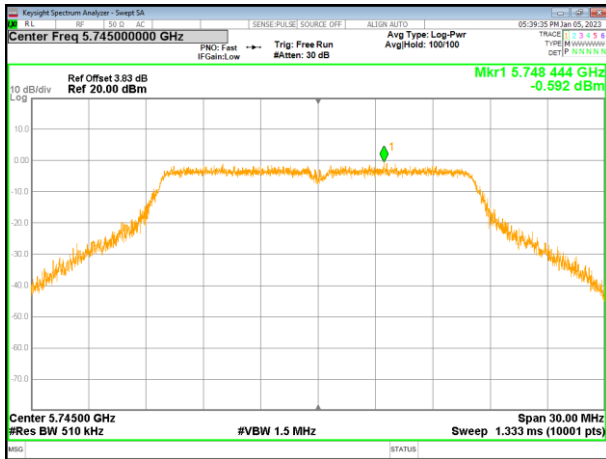
(802.11ac40) PSD plot on channel 46



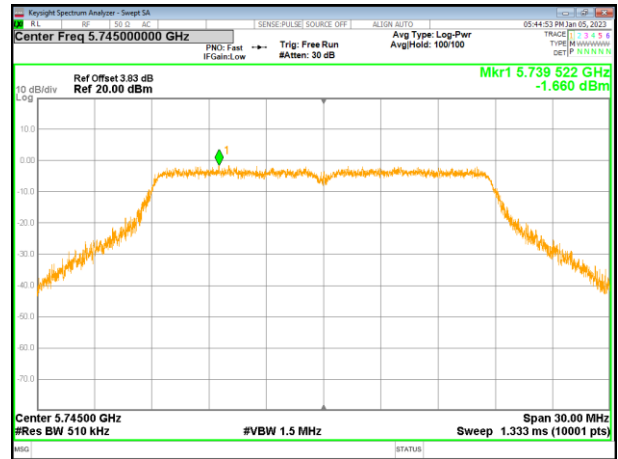
Mode	Frequency	Measured Power Density (dBm/510KHz)	Measured Power Density (dBm/500KHz)	Limit (dBm/MHz)
802.11 a	5745 MHz	-0.592	-0.678	30
	5785 MHz	-1.846	-1.932	30
	5825 MHz	-1.478	-1.564	30
802.11 n20	5745 MHz	-1.660	-1.746	30
	5785 MHz	-1.668	-1.754	30
	5825 MHz	-2.210	-2.296	30
802.11 ac20	5745 MHz	-1.379	-1.465	30
	5785 MHz	-1.648	-1.734	30
	5825 MHz	-1.943	-2.029	30
802.11 n40	5755 MHz	-5.607	-5.693	30
	5795 MHz	-6.000	-6.086	30
802.11 ac40	5755 MHz	-5.829	-5.915	30
	5795 MHz	-5.471	-5.557	30
802.11 AC80	5775 MHz	-10.025	-10.111	30

Note: If the measurement is X dBm/510kHz, thus  $X \text{ dBm/510kHz} = (10^{X/10}) * (500 / 510) \text{ dBm/500kHz}$

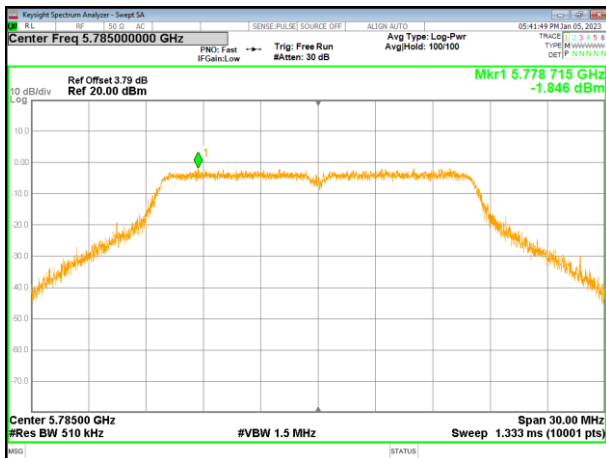
(802.11a) PSD plot on channel 149



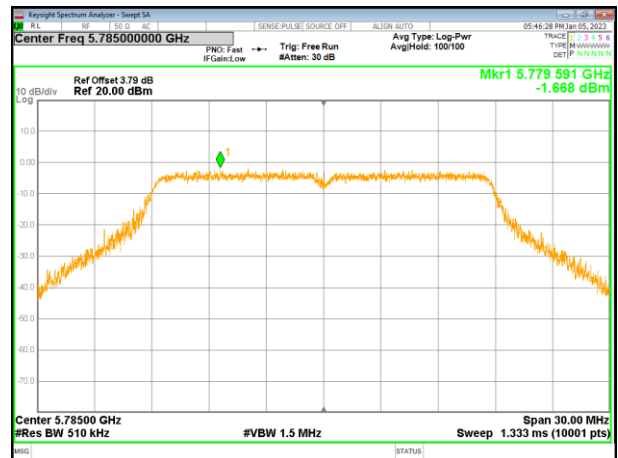
(802.11n20) PSD plot on channel 149



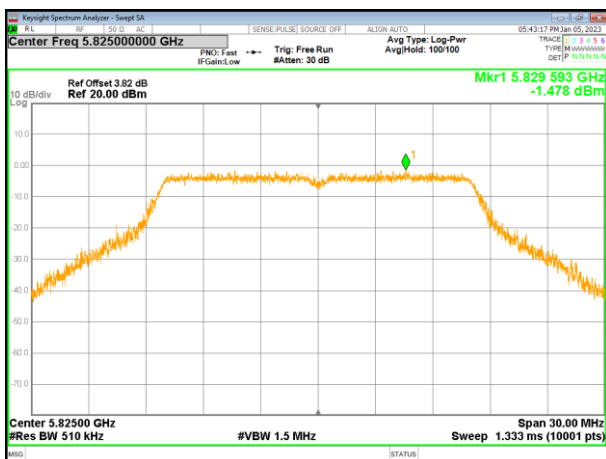
(802.11a) PSD plot on channel 157



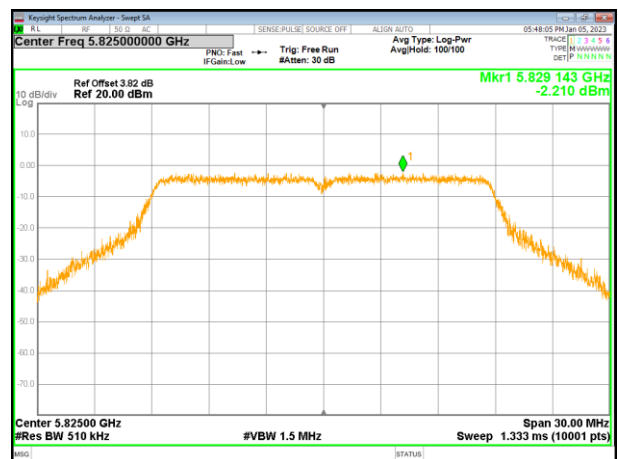
(802.11n20) PSD plot on channel 157



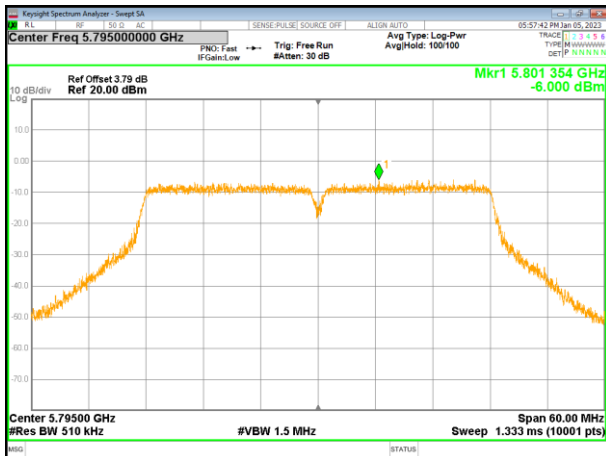
(802.11a) PSD plot on channel 165



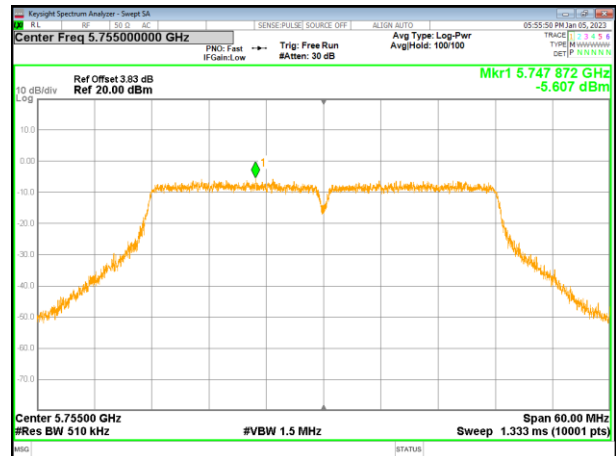
(802.11n20) PSD plot on channel 165



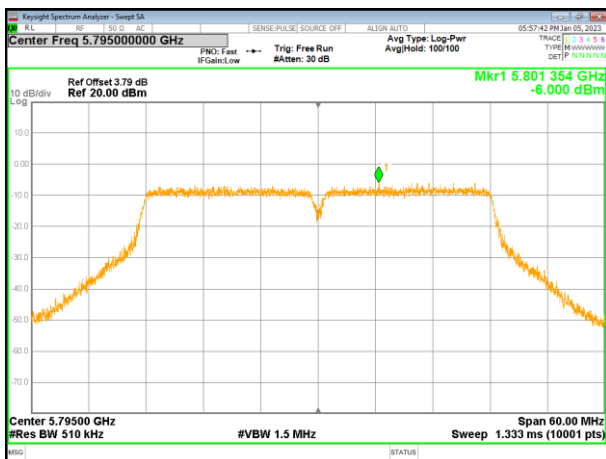
(802.11ac20) PSD plot on channel 149



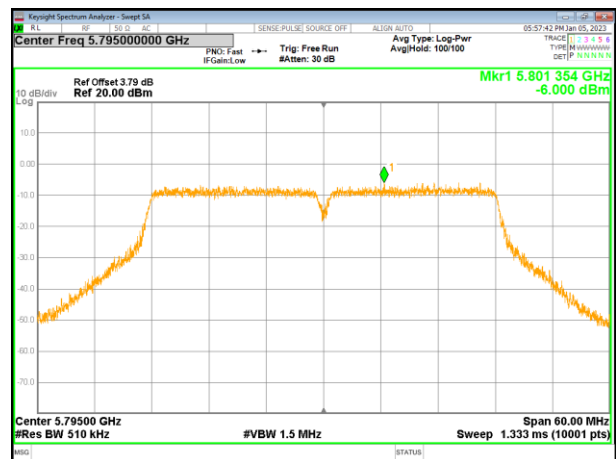
(802.11n40) PSD plot on channel 151



(802.11ac20) PSD plot on channel 157



(802.11n40) PSD plot on channel 159



(802.11ac20) PSD plot on channel 165

