



# TEST REPORT

**Report Number. :** 13757234-E10V1

**Applicant :** Magic Leap Inc.  
7500 West Sunrise Blvd  
Plantation, FL, 33322, US

**Model :** M1003000, M1004000, M1005000  
M1103000, M1104000, M1105000

**Brand :** Magic Leap Inc.

**FCC ID :** 2AM5N-ML2M1

**IC :** 23045-ML2M1

**EUT Description :** Magic Leap 2 Compute Pack and Headset

**Test Standard(s) :** FCC 47 CFR PART 15 SUBPART E  
ISED RSS-247 ISSUE 2  
ISED RSS-GEN ISSUE 5 + A1 + A2

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## REPORT REVISION HISTORY

Rev.	Issue Date	Revisions	Revised By
V1	5/18/2022	Initial Issue	---

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# 1. ATTESTATION OF TEST RESULTS

**COMPANY NAME:** Magic Leap Inc  
7500 West Sunrise Blvd  
Plantation, FL, 33322, US

**EUT DESCRIPTION:** Magic Leap 2 Compute Pack and Headset

**MODEL:** M1003000, M1004000, M1005000  
M1103000, M1104000, M1105000

**MODEL TESTED:** M1003000

**BRAND:** Magic Leap Inc.

**SERIAL NUMBER:** P552X8E001Q (Radiated)  
P552X8E0001W (Conducted)  
P552X8E0001R (Conducted)

**SAMPLE RECEIPT DATE:** AUGUST 10, 2021

**DATE TESTED:** AUGUST 10 – SEPTEMBER 30, 2021 & APRIL 13 - 14, 2022


APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart E	Complies
ISED RSS-247 Issue 2	Complies
ISED RSS-GEN Issue 5 + A1 +A2	Complies

UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise.

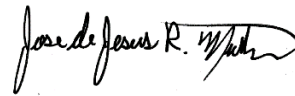
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## 2. TEST RESULT SUMMARY

This report contains data provided by the customer which can impact the validity of results. UL Verification Services Inc. is only responsible for the validity of results after the integration of the data provided by the customer.

FCC Clause	ISED Clause	Requirement	Result	Comment
See Comment		Duty Cycle	Reporting purposes only	Per ANSI C63.10, Section 12.2.
See Comment	RSS-GEN 6.7	26dB BW/99% OBW	Reporting purposes only	Per ANSI C63.10 Sections 6.9.2 and 6.9.3
15.407 (e)	RSS-247 6.2.4.1	6 dB BW	Compliant	None.
15.407 (a) (1-3), (h) (1)	RSS-247 6.2	Output Power	Compliant	None.
15.407 (a) (1-3)	RSS-247 6.2	PSD	Compliant	None.
15.209, 15.205, 15.407 (b) (1-4)	RSS-GEN 8.9, 8.10, RSS-247 6.2	Radiated Emissions	Compliant	None.
15.207	RSS-Gen 8.8	AC Mains Conducted Emissions	Compliant	None.

For Colocation Test results, please refer to UL Verification Services Inc report number 13757234-E13V1.

### 3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with;

- FCC CFR 47 Part 2
- FCC CFR 47 Part 15,
- FCC KDB 662911 D01 v02r01,
- FCC KDB 905462 D02 v02/D03 v01r02/D06 v02
- FCC KDB 789033 D02 v02r01,
- FCC KDB 414788 D01 Radiated Test Site v01r01
- ANSI C63.10-2013,
- RSS-GEN Issue 5 + A1 + A2
- RSS-247 Issue 2

The scope of this report covers the 802.11 a/n/ac modes in the 5.2, 5.3, 5.6, & 5.8 GHz band.

### 4. FACILITIES AND ACCREDITATION

UL Verification Services Inc. is accredited by A2LA, Certificate Number #0751.05, for all testing performed within the scope of this report. Testing was performed at the locations noted below.

	Address	ISED CABID	ISED Company Number	FCC Registration
<input checked="" type="checkbox"/>	Building 1: 47173 Benicia Street Fremont, CA 94538, U.S.A	US0104	2324A	550739
<input checked="" type="checkbox"/>	Building 2: 47266 Benicia Street Fremont, CA 94538, U.S.A	US0104	22541	550739
<input checked="" type="checkbox"/>	Building 4: 47658 Kato Rd Fremont, CA 94538, U.S.A	US0104	2324B	550739



## 5. DECISION RULES AND MEASUREMENT UNCERTAINTY

### 5.1. METROLOGICAL TRACEABILITY

All test and measuring equipment utilized to perform the tests documented in this report are calibrated on a regular basis, with a maximum time between calibrations of one year or the manufacturers' recommendation, whichever is less, and where applicable is traceable to recognized national standards.

### 5.2. DECISION RULES

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4:2012 Clause 8.2. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

### 5.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	U <sub>Lab</sub>
Worst Case Conducted Disturbance, 9KHz to 0.15 MHz	3.78 dB
Worst Case Conducted Disturbance, 0.15 to 30 MHz	3.40 dB
Worst Case Radiated Disturbance, 9KHz to 30 MHz	2.84 dB
Worst Case Radiated Disturbance, 30 to 1000 MHz	6.01 dB
Worst Case Radiated Disturbance, 1000 to 18000 MHz	4.73 dB
Worst Case Radiated Disturbance, 18000 to 26000 MHz	4.51 dB
Worst Case Radiated Disturbance, 26000 to 40000 MHz	5.29 dB

Uncertainty figures are valid to a confidence level of 95%.

### 5.4. SAMPLE CALCULATION

#### **RADIATED EMISSIONS**

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)

$$36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} = 28.9 \text{ dBuV/m}$$

#### **MAINS CONDUCTED EMISSIONS**

Where relevant, the following sample calculation is provided:

Final Voltage (dBuV) = Measured Voltage (dBuV) + Cable Loss (dB) + Limiter Factor (dB) + LISN Insertion Loss.

$$36.5 \text{ dBuV} + 0 \text{ dB} + 10.1 \text{ dB} + 0 \text{ dB} = 46.6 \text{ dBuV}$$

## 6. EQUIPMENT UNDER TEST

### 6.1. EUT DESCRIPTION

EUT is a spatial AR computing device consists of compute pack and headset. The compute pack includes BT, BLE, 802.11 a/b/g/n/ac/ax radio transceivers.

### 6.2. MODEL DIFFERENCES

Models M1003000, M1004000, M1005000, M1103000, M1104000, and M1105000 are electronically identical. The model numbers are to differentiate the markets and regions of sale.

### 6.3. MAXIMUM OUTPUT POWER

The transmitter has a maximum conducted output power as follows:

#### 5.2 GHz BAND (FCC)

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
<b>5.2 GHz band, 1TX</b>			
5180-5240	802.11a	14.45	27.86
5180-5240	802.11n HT20	14.32	27.04
5190-5230	802.11n HT40	14.86	30.62
5180-5240	802.11ac VHT20	Covered by 802.11n HT20 1Tx	
5190-5230	802.11ac VHT40	Covered by 802.11n HT40 1Tx	
5210	802.11ac VHT80	14.76	29.92
5250	802.11ac VHT160	13.64	23.12
<b>5.2 GHz band, 2TX</b>			
5180-5240	802.11a CDD	16.95	49.55
5180-5240	802.11a SDM/STBC	Covered by 802.11a 2Tx CDD	
5180-5240	802.11n HT20 CDD	16.66	46.34
5180-5240	802.11n HT20 SDM/STBC	Covered by 802.11n HT20 2Tx CDD	
5190-5230	802.11n HT40 CDD	16.78	47.64
5190-5230	802.11n HT40 SDM/STBC	Covered by 802.11n HT40 2Tx CDD	
5180-5240	802.11ac VHT20 CDD/SDM/STBC	Covered by 802.11n HT20 2Tx CDD	
5190-5230	802.11ac VHT40 CDD/SDM/STBC	Covered by 802.11n HT40 2Tx CDD	
5210	802.11ac VHT80 CDD	16.10	40.74
5210	802.11ac VHT80 SDM/STBC	Covered by 802.11ac VHT80 2Tx CDD	
5250	802.11ac VHT160 CDD	15.85	38.46
5250	802.11ac VHT160 SDM/STBC	Covered by 802.11ac VHT160 2Tx CDD	

**5.2 GHz BAND (IC)**

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
<b>5.2 GHz band, 1TX</b>			
5180-5240	802.11a	14.45	27.86
5180-5240	802.11n HT20	14.32	27.04
5190-5230	802.11n HT40	14.86	30.62
5180-5240	802.11ac VHT20	Covered by 802.11n HT20 1Tx	
5190-5230	802.11ac VHT40	Covered by 802.11n HT40 1Tx	
5210	802.11ac VHT80	14.76	29.92
5250	802.11ac VHT160	13.64	23.12
<b>5.2 GHz band, 2TX</b>			
5180-5240	802.11a CDD	12.87	19.36
5180-5240	802.11a SDM/STBC	Covered by 802.11a 2Tx CDD	
5180-5240	802.11n HT20 CDD	13.03	20.09
5180-5240	802.11n HT20 SDM/STBC	Covered by 802.11n HT20 2Tx CDD	
5190-5230	802.11n HT40 CDD	16.15	41.21
5190-5230	802.11n HT40 SDM/STBC	Covered by 802.11n HT40 2Tx CDD	
5180-5240	802.11ac VHT20 CDD/SDM/STBC	Covered by 802.11n HT20 2Tx CDD	
5190-5230	802.11ac VHT40 CDD/SDM/STBC	Covered by 802.11n HT40 2Tx CDD	
5210	802.11ac VHT80 CDD	16.10	40.74
5210	802.11ac VHT80 SDM/STBC	Covered by 802.11ac VHT80 2Tx CDD	
5250	802.11ac VHT160 CDD	15.85	38.46
5250	802.11ac VHT160 SDM/STBC	Covered by 802.11ac VHT160 2Tx CDD	

**5.3 GHz BAND (FCC+IC)**

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
<b>5.3 GHz band, 1TX</b>			
5260 - 5320	802.11a	14.72	29.65
5260 - 5320	802.11n HT20	14.75	29.85
5270 - 5310	802.11n HT40	14.93	31.12
5260 - 5320	802.11ac VHT20	Covered by 802.11n HT20 1Tx	
5270 - 5310	802.11ac VHT40	Covered by 802.11n HT40 1Tx	
5290	802.11ac VHT80	14.74	29.79
<b>5.3 GHz band, 2TX</b>			
5260 - 5320	802.11a CDD	16.65	46.24
5260 - 5320	802.11a SDM/STBC	Covered by 802.11a 2Tx CDD	
5260 - 5320	802.11n HT20 CDD	16.65	46.24
5260 - 5320	802.11n HT20 SDM/STBC	Covered by 802.11n HT20 2Tx CDD	
5270 - 5310	802.11n HT40 CDD	16.27	42.36
5270 - 5310	802.11n HT40 SDM/STBC	Covered by 802.11n HT40 2Tx CDD	
5260 - 5320	802.11ac VHT20 CDD/SDM/STBC	Covered by 802.11n HT20 2Tx CDD	
5270 - 5310	802.11ac VHT40 CDD/SDM/STBC	Covered by 802.11n HT40 2Tx CDD	
5290	802.11ac VHT80 CDD	16.16	41.30
5290	802.11ac VHT80 SDM/STBC	Covered by 802.11ac VHT80 2Tx CDD	

**5.6 GHz BAND (FCC+IC)**

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
<b>5.6 GHz band, 1TX</b>			
5500-5720	802.11a	14.72	29.65
5500-5720	802.11n HT20	14.02	25.23
5510-5710	802.11n HT40	14.73	29.72
5500-5720	802.11ac VHT20	Covered by 802.11n HT20 1Tx	
5510-5710	802.11ac VHT40	Covered by 802.11n HT40 1Tx	
5530-5690	802.11ac VHT80	14.68	29.38
5570	802.11ac VHT160	14.36	27.29
<b>5.6 GHz band, 2TX</b>			
5500-5720	802.11a CDD	16.39	43.55
5500-5720	802.11a SDM/STBC	Covered by 802.11a 2Tx CDD	
5500-5720	802.11n HT20 CDD	16.46	44.26
5500-5720	802.11n HT20 SDM/STBC	Covered by 802.11n HT20 2Tx CDD	
5510-5710	802.11n HT40 CDD	16.43	43.95
5510-5710	802.11n HT40 SDM/STBC	Covered by 802.11n HT40 2Tx CDD	
5500-5720	802.11ac VHT20 CDD/SDM/STBC	Covered by 802.11n HT20 2Tx CDD	
5510-5710	802.11ac VHT40 CDD/SDM/STBC	Covered by 802.11n HT40 2Tx CDD	
5530-5690	802.11ac VHT80 CDD	16.04	40.18
5530-5690	802.11ac VHT80 SDM/STBC	Covered by 802.11ac VHT80 2Tx CDD	
5570	802.11ac VHT160 CDD	15.71	37.24
5250	802.11ac VHT160 SDM/STBC	Covered by 802.11ac VHT160 2Tx CDD	

**5.8 GHz BAND (FCC+IC)**

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
<b>5.8 GHz band, 1TX</b>			
5745-5825	802.11a	14.26	26.67
5745-5825	802.11n HT20	14.33	27.10
5755-5795	802.11n HT40	14.61	28.91
5745-5825	802.11ac VHT20	Covered by 802.11n HT20 1Tx	
5755-5795	802.11ac VHT40	Covered by 802.11n HT40 1Tx	
5775	802.11ac VHT80	14.62	28.97
<b>5.8 GHz band, 2TX</b>			
5745-5825	802.11a CDD	16.33	42.95
5745-5825	802.11a SDM/STBC	Covered by 802.11a 2Tx CDD	
5745-5825	802.11n HT20 CDD	16.17	41.40
5745-5825	802.11n HT20 SDM/STBC	Covered by 802.11n HT20 2Tx CDD	
5755-5795	802.11n HT40 CDD	16.21	41.78
5755-5795	802.11n HT40 SDM/STBC	Covered by 802.11n HT40 2Tx CDD	
5745-5825	802.11ac VHT20 CDD/SDM/STBC	Covered by 802.11n HT20 2Tx CDD	
5755-5795	802.11ac VHT40 CDD/SDM/STBC	Covered by 802.11n HT40 2Tx CDD	
5775	802.11ac VHT80 CDD	16.53	44.98
5775	802.11ac VHT80 SDM/STBC	Covered by 802.11ac VHT80 2Tx CDD	

#### 6.4. DESCRIPTION OF AVAILABLE ANTENNAS

The antenna(s) gain and type, as provided by the manufacturer' are as follows:

The radio utilizes two Dual Band PCB Printed antenna, with a maximum gain of:

Frequency (GHz)	Peak Antenna Gain (dBi)	
	Antenna 1	Antenna 2
5150-5250	3.3	2.5
5250-5350	3.3	2.9
5500-5700	3.5	4.5
5725-5850	3.9	4.5

#### 6.5. SOFTWARE AND FIRMWARE

The EUT firmware installed during testing was PEQ3B.

The test utility software used during testing was ML Connectivity Test Tool v012 & v005.

## 6.6. WORST-CASE CONFIGURATION AND MODE

Radiated emissions below 1GHz, above 18GHz, and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

Band edge and radiated emissions between 1GHz and 18GHz were performed with the EUT set to transmit at the highest power on low, middle and high channels.

The fundamental of the EUT was investigated in three orthogonal orientations X, Y, Z, it was determined that SISO ANT1 Y, SISO ANT2 X, MIMO Y orientation was worst-case orientation; therefore, all final radiated testing was performed with the EUT in its corresponding worst-case orientation.

11n HT20 & 11ac VHT20 and 11n HT40 & 11ac VHT40 are the same conducted output power therefore 11n HT20 & 11n HT40 are representative of 11ac VHT20 & 11ac VHT40 respectively.

The worst-case data rates were determined to be as follows, based on input from the manufacturer of the radio.

802.11a mode: 6 Mbps  
802.11n HT20mode: MCS0  
802.11n HT40mode: MCS0  
802.11ac VHT80 mode: MCS0  
802.11ac VHT160 mode: MCS0

## 6.7. DESCRIPTION OF TEST SETUP

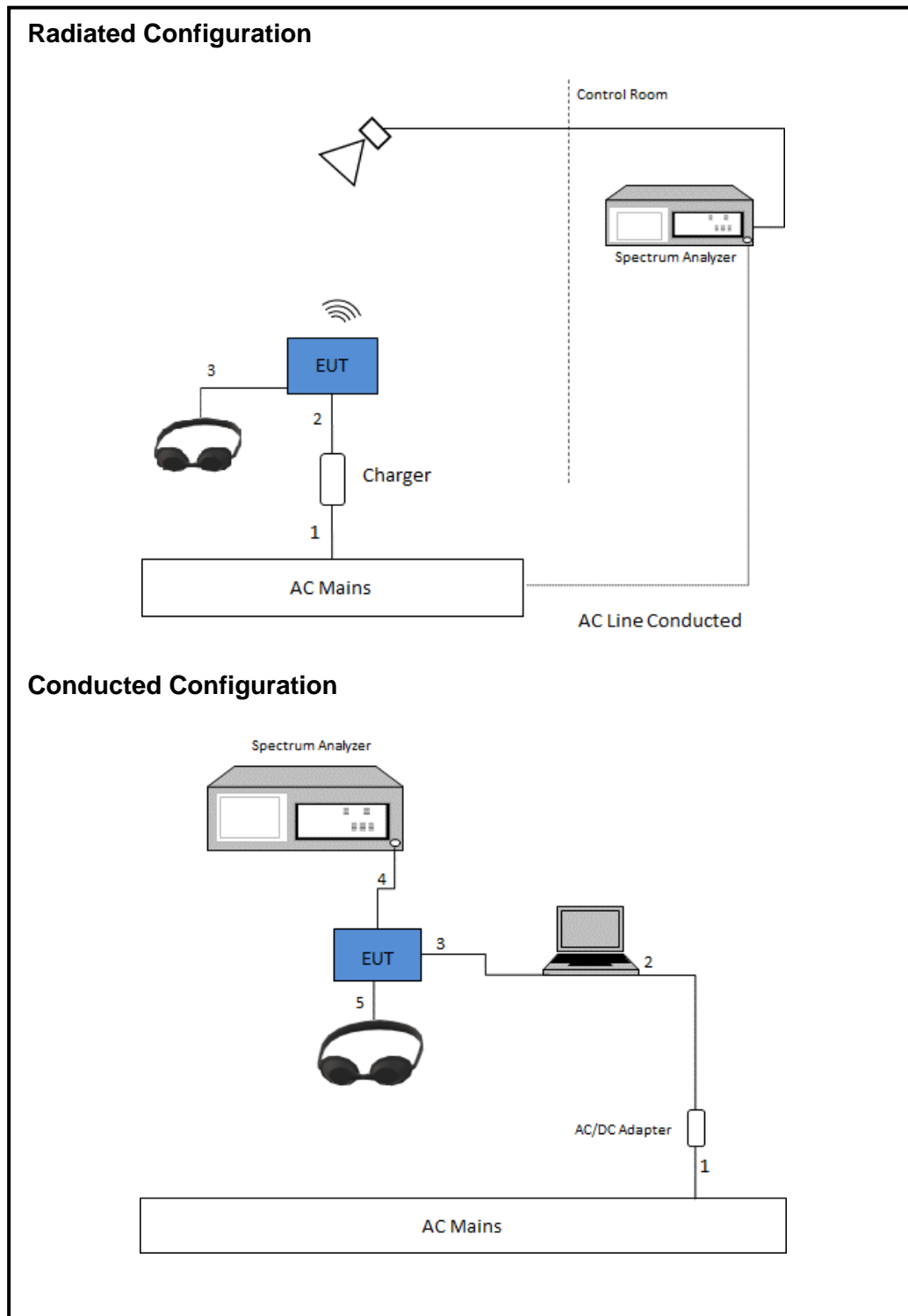
SUPPORT TEST EQUIPMENT						
Description	Manufacturer	Model	Serial Number	FCC ID/ DoC		
Laptop (Radiated)	HP	EliteBook 840 G3	5CG6253DNC	DoC		
Laptop AC Adapter (Radiated)	HP	709986-003	WDHKR0AAR8U467	DoC		
Charger	Magic Leap	M3013	E135498	DoC		
Laptop (Conducted)	HP	EliteBook 840 G3	5CG65235OJ	DoC		
Laptop AC Adapter (Conducted)	HP	854055-002	CTWFTKVOEGC95379	DoC		
I/O CABLES (CONDUCTED TEST)						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	AC Power	1	AC (3-prong)	Un-shielded	1.25	AC Mains to DC Power Adapter
2	DC	1	3-pin	Un-shielded	1	Power adapter to laptop
3	USB-C	1	USB Type C	Shielded	0.9	USB-C to EUT USB-C
4	Antenna	1	SMA	Un-shielded	.5	EUT to Coupler
5	A/V, Data	1	Permanent	Shielded	1.25	EUT to headset
I/O CABLES (RADIATED TEST)						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	AC Power	1	AC (2-prong)	Un-shielded	1.25	AC Mains to Power Adapter
2	USB-C	1	USB Type C	Shielded	0.9	Power Adapter to EUT
3	A/V Data	1	Permanent	Shielded	1.25	EUT to headset

### TEST SETUP

A test laptop is used to program the EUTs and then removed during radiated tests. Test software exercised the radio card. For radiated emissions, EUT was powered by AC/DC adapter and for conducted tests the EUT was connected to laptop via USB.

The computer pack and headset are permanently connected.

**SETUP DIAGRAMS**





## 7. MEASUREMENT METHOD

On Time and Duty Cycle: KDB 789033 D02 v02r01, Section B.

6 dB Emission BW: KDB 789033 D02 v02r01, Section C.2

26 dB Emission BW: KDB 789033 D02 v02r01, Section C.1

99% Occupied BW: KDB 789033 D02 v02r01, Section D.

Conducted Output Power: KDB 789033 D02 v02r01, Section E.3.b (Method PM-G) and KDB 789033 D02 v02r01, Section E.2.b (Method SA-1)

Power Spectral Density: KDB 789033 D02 v02r01, Section F

Unwanted emissions in restricted bands: KDB 789033 D02 v02r01, Sections G.3, G.4, G.5, and G.6.

Unwanted emissions in non-restricted bands: KDB 789033 D02 v02r01, Sections G.3, G.4, and G.5.

AC Power Line Conducted Emissions: ANSI C63.10-2013, Section 6.2.

Radiated Spurious Emissions Below 30MHz: ANSI C63.10-2013 Section 6.4

## 8. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

TEST EQUIPMENT LIST (8/10/2021 – 9/30/2021)					
Description	Manufacturer	Model	ID Num	Cal Due	Last Cal
Antenna, Horn 1-18GHz	ETS-Lindgren (Cedar Park, Texas)	3117	T119	05/07/2022	05/07/2021
Amplifier, 1 - 18GHz	MITEQ	AFS42-00101800-25-S-42	T1568	04/09/2022*	04/09/2021
EMI TEST RECEIVER, with B8 option	Rohde & Schwarz	ESW44	PRE0179377	02/23/2022	02/23/2021
EMI TEST RECEIVER, with B8 option	Rohde & Schwarz	ESW44	PRE0179377	02/20/2023	02/20/2022
Spectrum Analyzer, PSA, 3Hz to 44GHz	Keysight Technologies Inc	E4446A	T123	01/22/2022	01/22/2021
Power Meter, P-series single channel	Keysight Technologies Inc	N1911A	90715	01/27/2022	01/27/2021
Power Meter, P-series single channel	Keysight Technologies Inc	N1911A	90715	01/25/2023	01/25/2022
Power Sensor, P - series, 50MHz to 18GHz, Wideband	Keysight Technologies Inc	N1921A	90391	06/17/2022	06/17/2021
AC Line Conducted					
LISN	Fischer Custom Communications, Inc	FCC-LISN-50/250-25-2-01-480V	PRE0186446	01/20/2022	01/20/2021
EMI TEST RECEIVER	Rohde & Schwarz	ESR	T1436	02/19/2022	02/19/2021
Transient Limiter	TE	TBFL1	207996	06/01/2022	06/01/2021
UL TEST SOFTWARE LIST					
Radiated Software	UL	UL EMC	Rev 9.5, Apr 30, 2020/		
Antenna Port Software	UL	UL RF	Ver 2021.08.11		
AC Line Conducted Software	UL	UL EMC	Rev 9.5, 07 Jul 2020		

TEST EQUIPMENT LIST (4/13/2022 – 4/14/2022)					
Description	Manufacturer	Model	ID Num	Cal Due	Last Cal
Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences Corp.	JB1	T1683	07/22/2022	07/22/2021
Amplifier, 10KHz to 1GHz, 32dB	SONOMA INSTRUMENT	310N	89831	07/21/2022	07/21/2021
EMI TEST RECEIVER, with B8 option	Rohde & Schwarz	ESW44	191428	02/20/2023	02/20/2022
Antenna, Horn 18 to 26.5GHz	ARA	MWH-1826/B	T449	04/22/2022	04/22/2021
Amplifier 18-26.5GHz, +5Vdc, 60dB min	AMPLICAL	AMP18G26.5-60	215705	02/26/2023	02/26/2022
Antenna, Horn 26.5 to 40GHz	ARA	MWH-2640/B	81104	10/14/2022	10/14/2021
Amplifier, 26GHz to 40GHz	AMPLICAL	AMP26G40-65	172345	02/26/2023	02/26/2022
EMI TEST RECEIVER, with B8 option	Rohde & Schwarz	ESW44	191429	02/20/2023	02/20/2022
Antenna, Active Loop 9KHz to 30MHz	ETS-Lindgren (Cedar Park, Texas)	6502	T1683	05/24/2022	05/24/2021
UL TEST SOFTWARE LIST					
Radiated Software	UL	UL EMC	Rev 9.5, Apr 30, 2020/		

## 9. ANTENNA PORT TEST RESULTS

### 9.1. ON TIME AND DUTY CYCLE

#### LIMITS

None; for reporting purposes only.

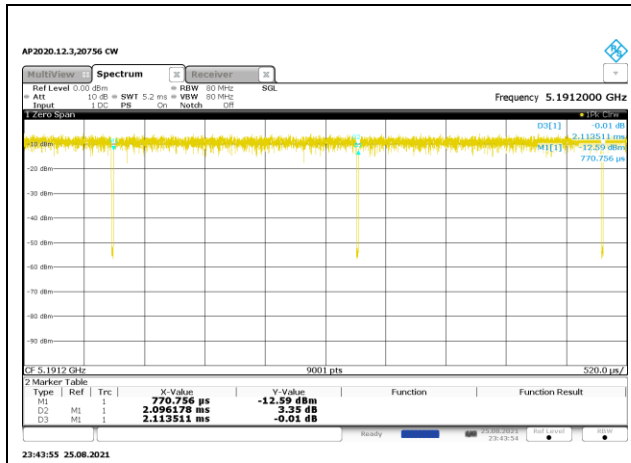
#### PROCEDURE

KDB 558074 Zero-Span Spectrum Analyzer Method.

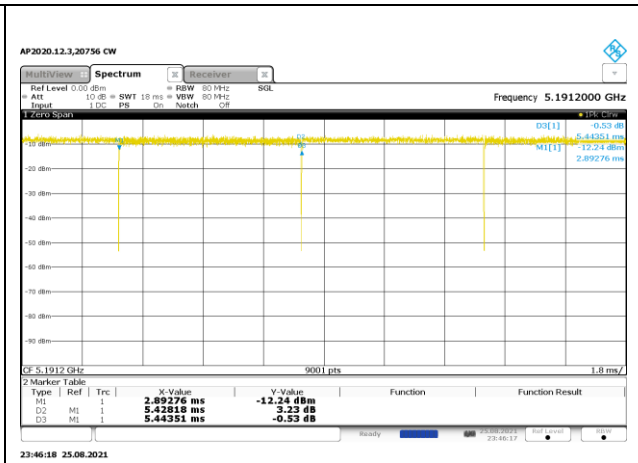
#### ON TIME AND DUTY CYCLE RESULTS

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
802.11a	2.096	2.114	0.992	99.18%	0.00	0.010
802.11n HT20	5.428	5.444	0.997	99.72%	0.00	0.010
802.11n HT40	5.430	5.444	0.998	99.76%	0.00	0.010
802.11ac VHT80	5.430	5.444	0.998	99.76%	0.00	0.010
802.11ac VHT160	5.428	5.444	0.997	99.72%	0.00	0.010

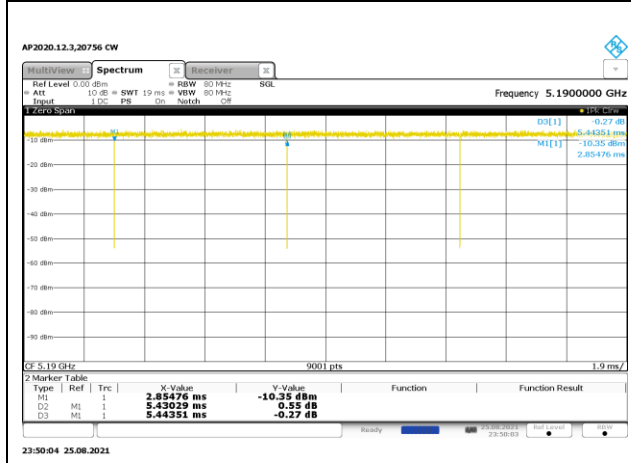
**DUTY CYCLE PLOTS**



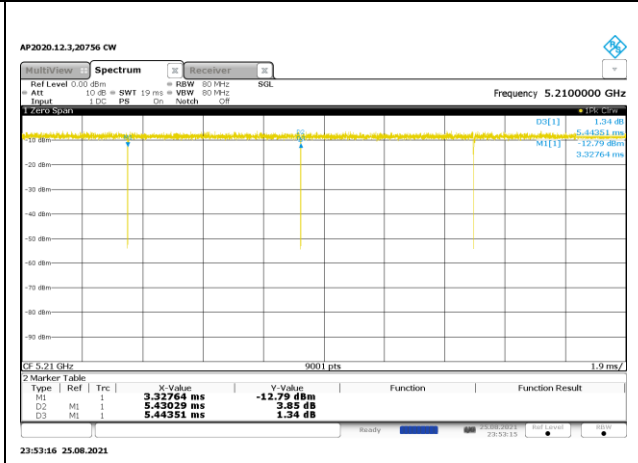
**DUTY CYCLE 802.11a MODE**



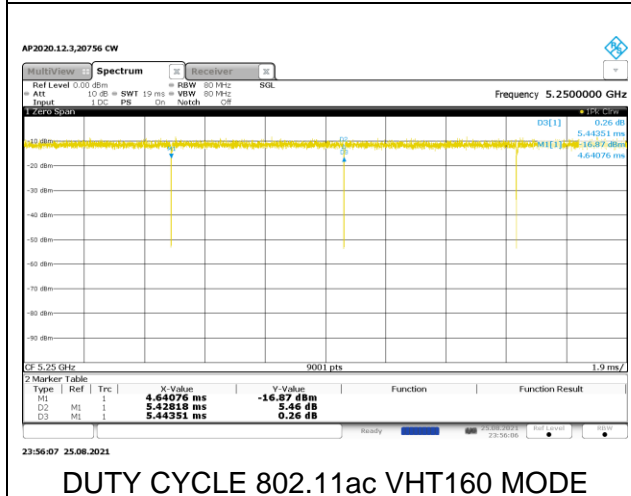
**DUTY CYCLE 802.11n HT20 MODE**



**DUTY CYCLE 802.11n HT40 MODE**



**DUTY CYCLE 802.11ac VHT80 MODE**



**DUTY CYCLE 802.11ac VHT160 MODE**

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## 9.2. 26 dB BANDWIDTH

### LIMITS

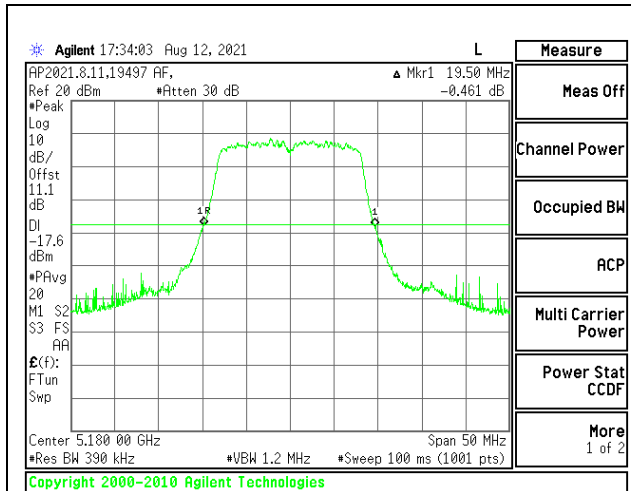
None; for reporting purposes only.

### RESULTS

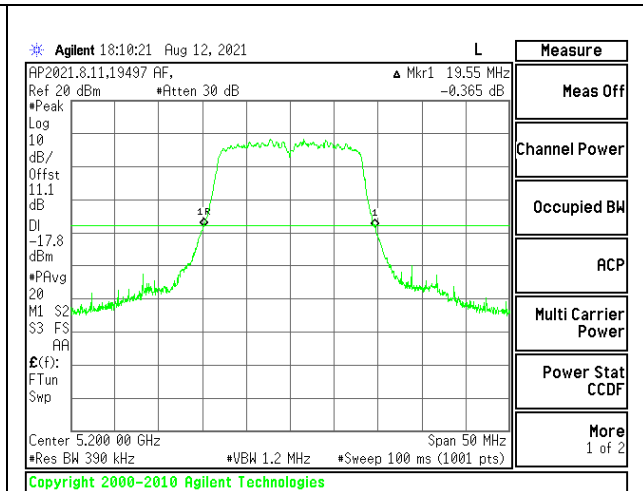
### 9.2.1. 802.11a MODE IN THE 5.2 GHz BAND

#### 1TX Antenna 1 MODE

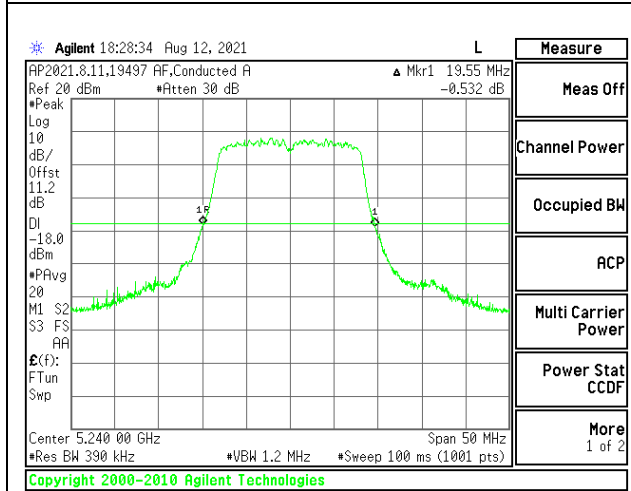
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5180	19.50
Mid	5200	19.55
High	5240	19.55



**LOW CHANNEL**



**MID CHANNEL**

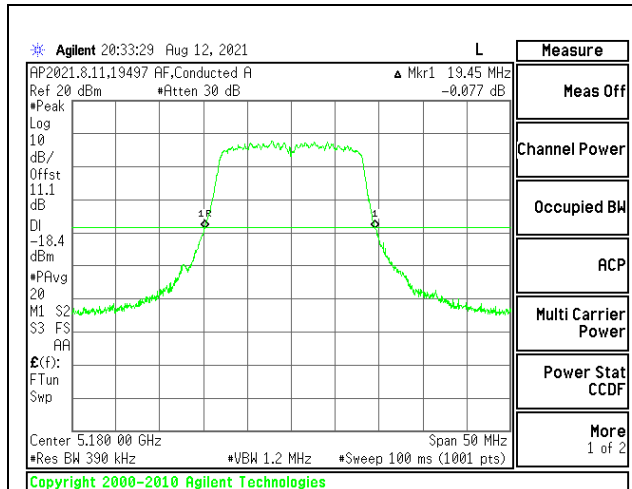


**HIGH CHANNEL**

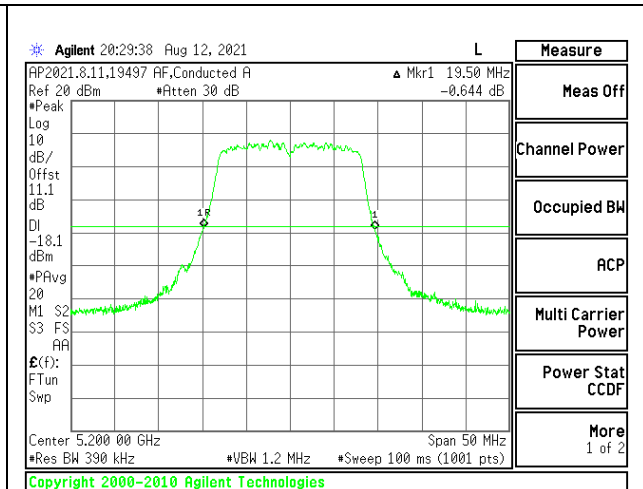
**Intentionally left blank**

**1TX Antenna 2 MODE**

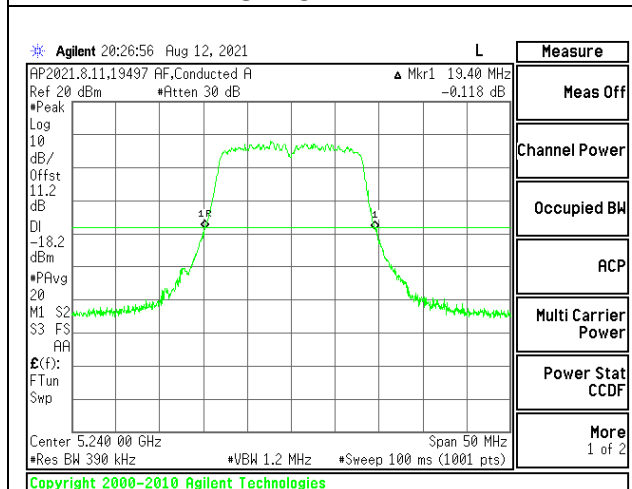
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5180	19.45
Mid	5200	19.50
High	5240	19.40



**LOW CHANNEL**



**MID CHANNEL**



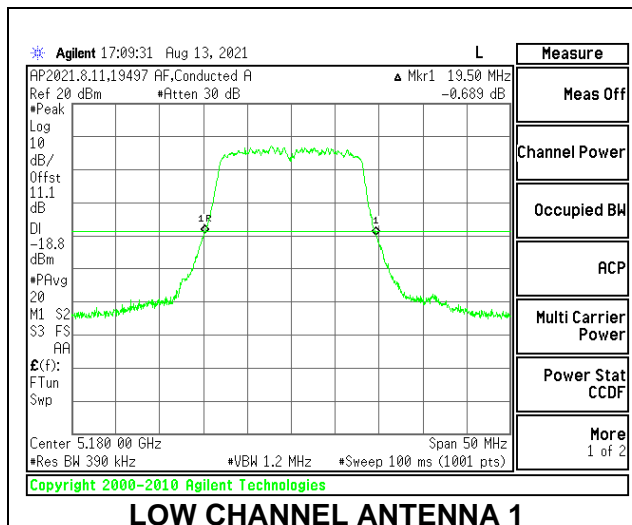
**HIGH CHANNEL**

**Intentionally left blank**

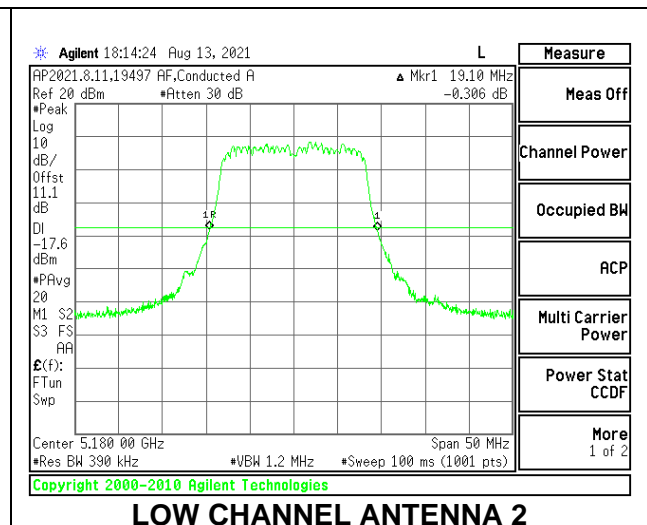
**2TX Antenna 1 + Antenna 2 CDD MODE**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 1 (MHz)	26 dB Bandwidth Antenna 2 (MHz)
Low	5180	19.50	19.10
Mid	5200	19.40	19.05
High	5240	19.75	19.05

**LOW CHANNEL**

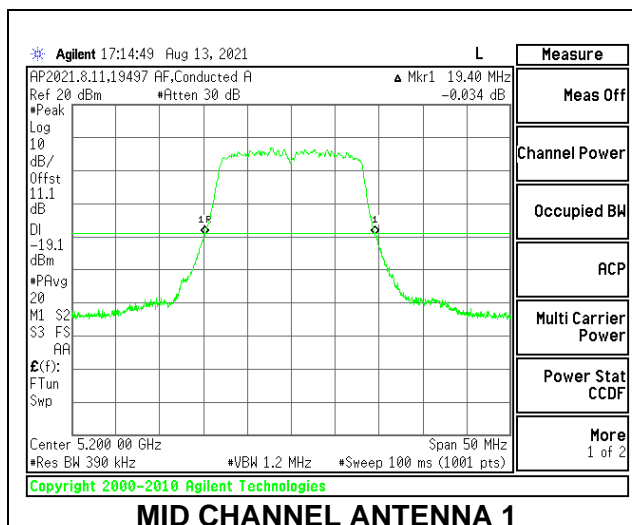


**LOW CHANNEL ANTENNA 1**

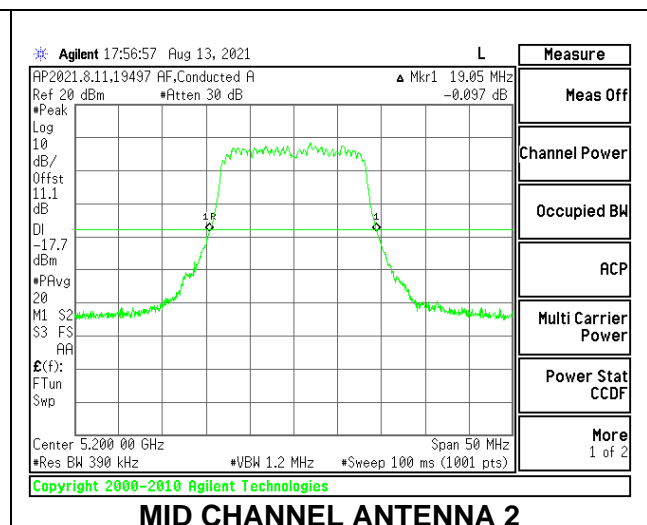


**LOW CHANNEL ANTENNA 2**

**MID CHANNEL**



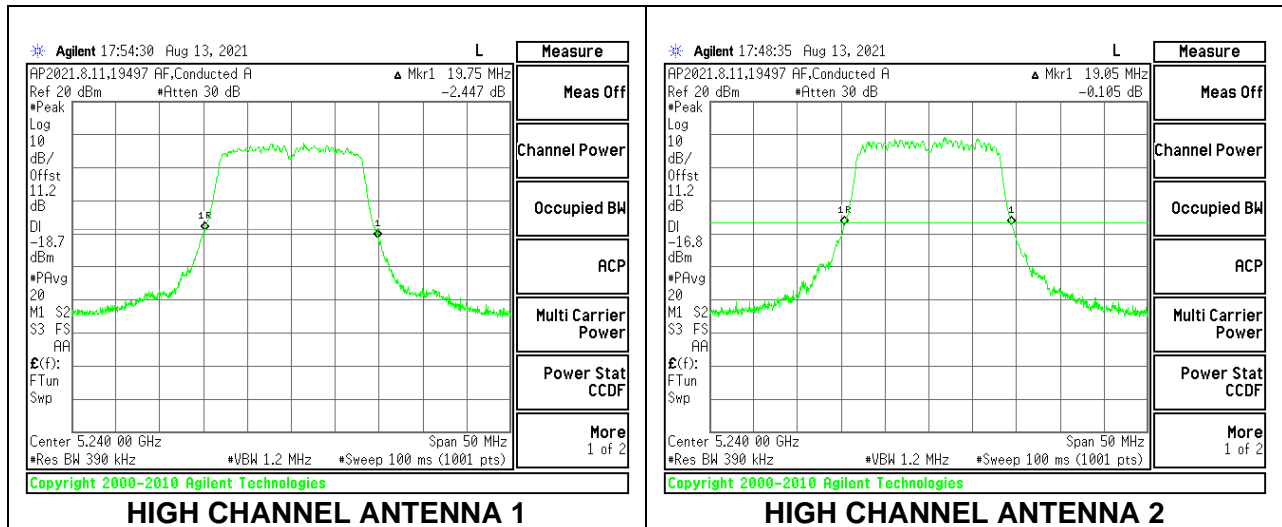
**MID CHANNEL ANTENNA 1**



**MID CHANNEL ANTENNA 2**



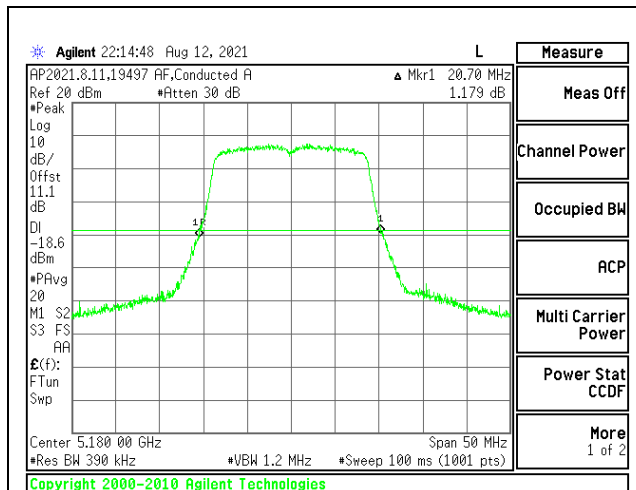
### HIGH CHANNEL



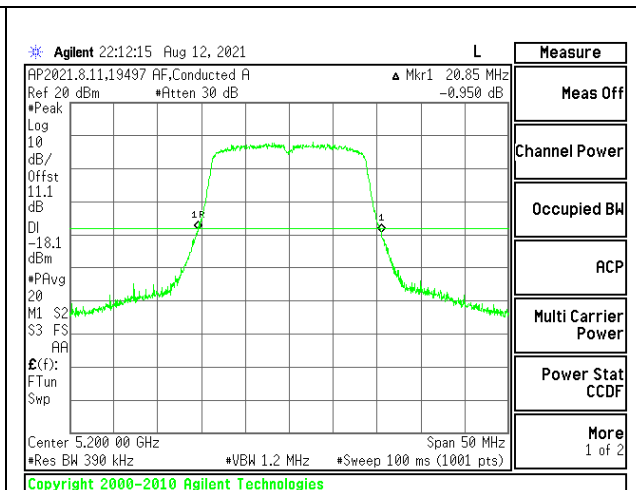
### 9.2.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

#### 1TX Antenna 1 MODE

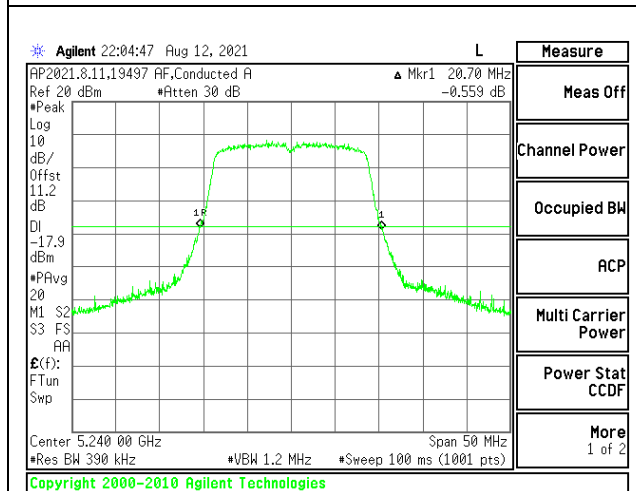
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5180	20.70
Mid	5200	20.85
High	5240	20.70



**LOW CHANNEL**



**MID CHANNEL**

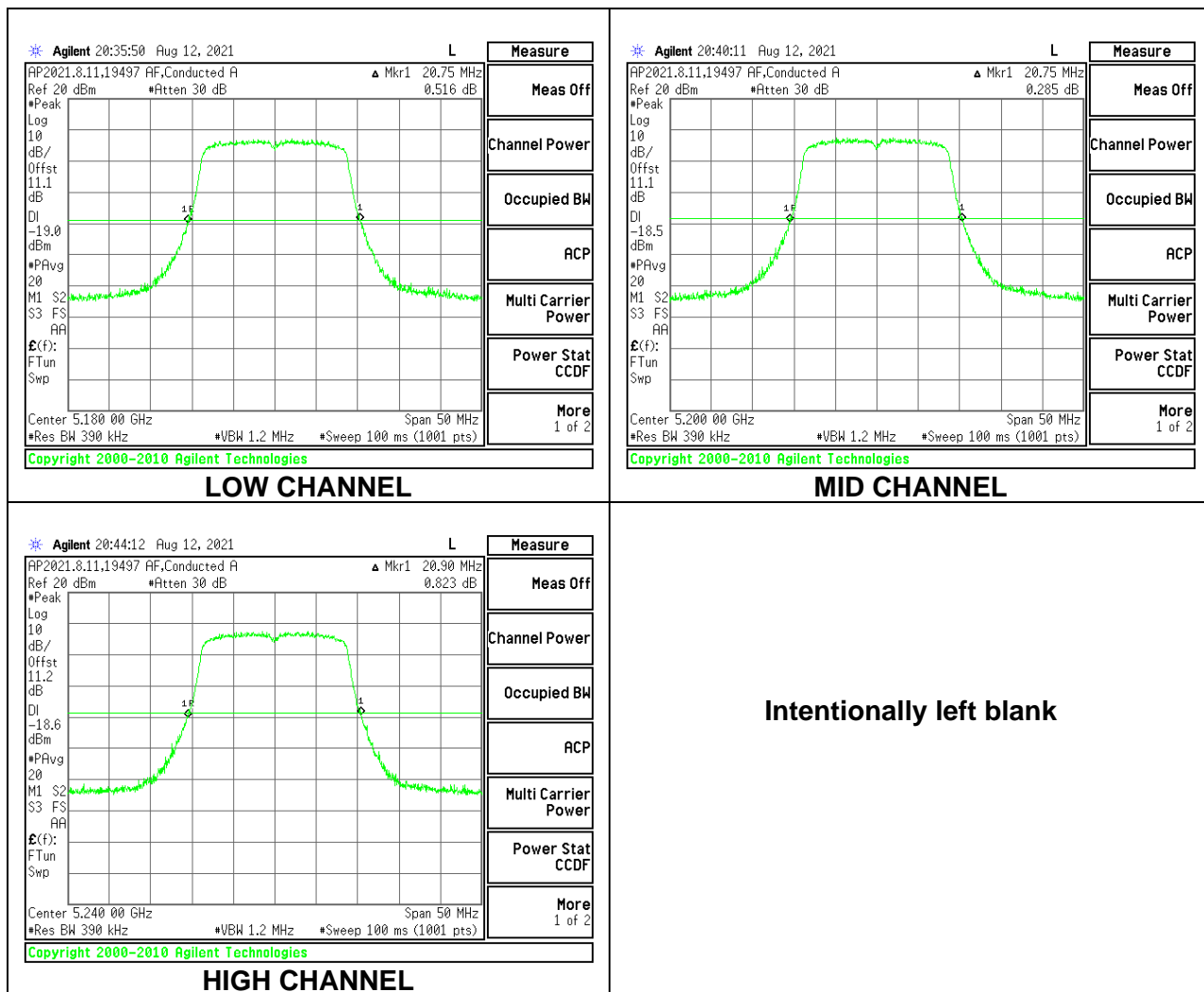


**HIGH CHANNEL**

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**1TX Antenna 2 MODE**

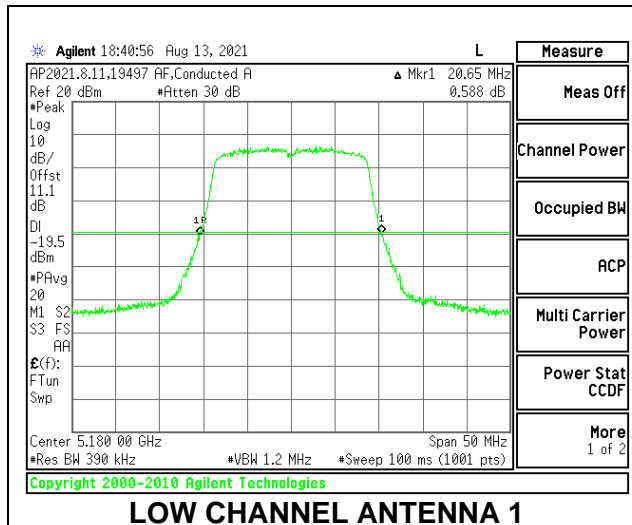
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5180	20.75
Mid	5200	20.75
High	5240	20.90



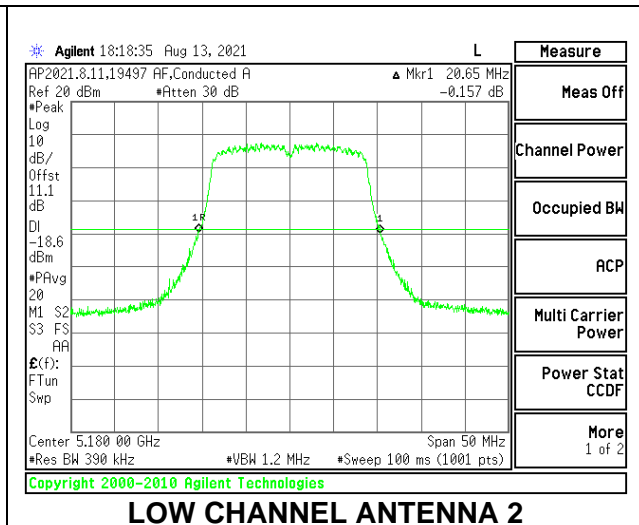
**2TX Antenna 1 + Antenna 2 CDD MODE**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 1 (MHz)	26 dB Bandwidth Antenna 2 (MHz)
Low	5180	20.65	20.65
Mid	5200	20.60	20.40
High	5240	20.60	20.50

**LOW CHANNEL**

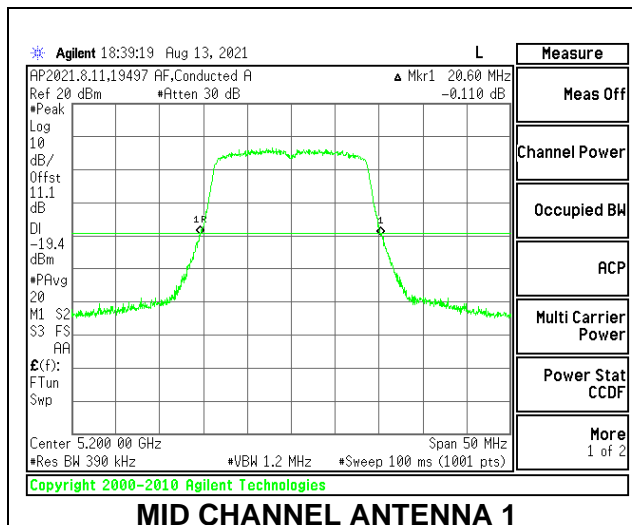


**LOW CHANNEL ANTENNA 1**

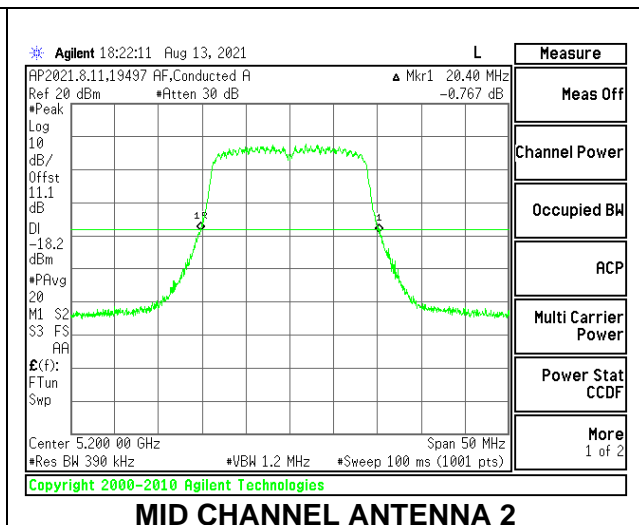


**LOW CHANNEL ANTENNA 2**

**MID CHANNEL**

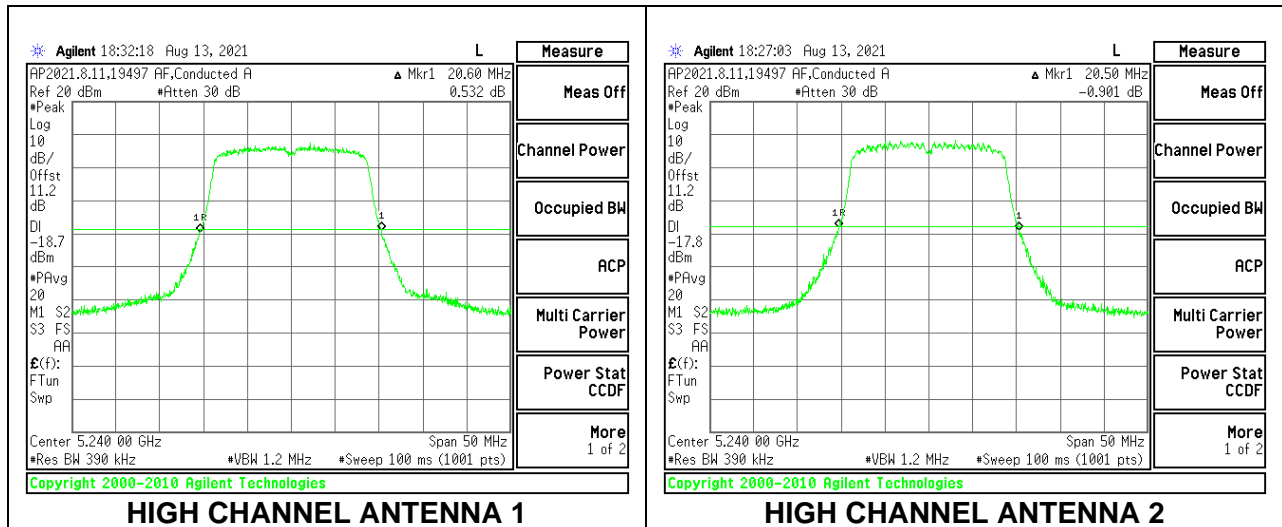


**MID CHANNEL ANTENNA 1**



**MID CHANNEL ANTENNA 2**

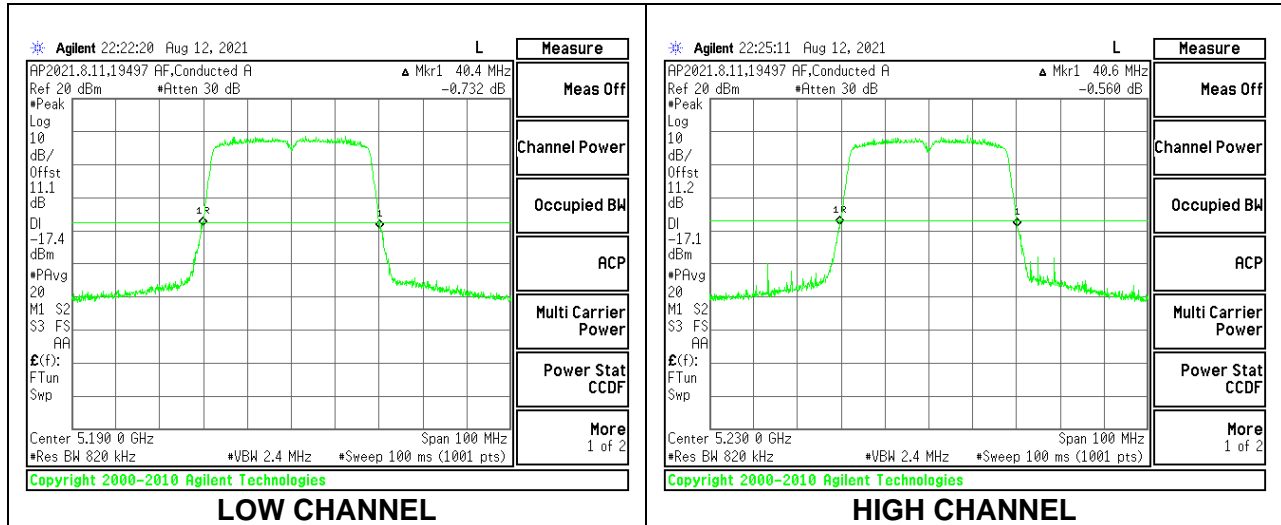
### HIGH CHANNEL



### 9.2.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND

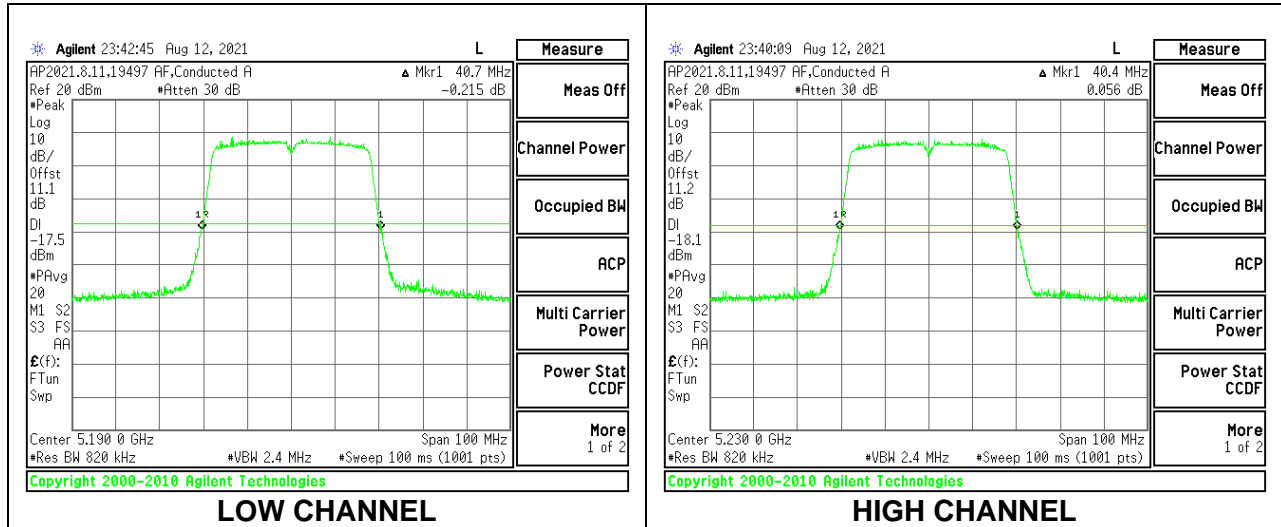
#### 1TX Antenna 1 MODE

Channel	Frequency (MHz)	26dB Bandwidth (MHz)
Low	5190	40.40
High	5230	40.60



**1TX Antenna 2 MODE**

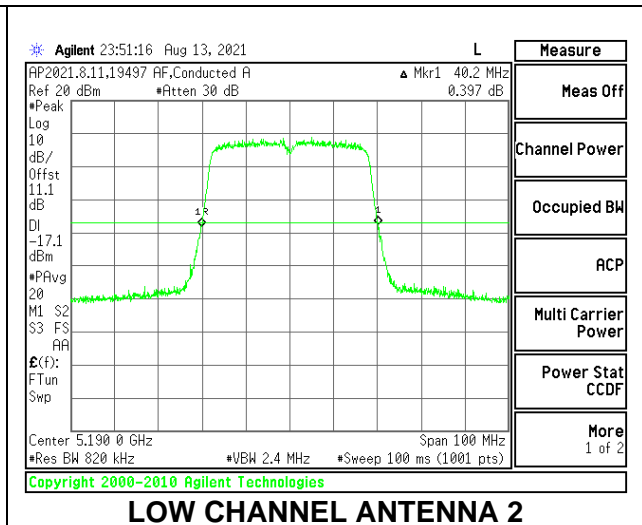
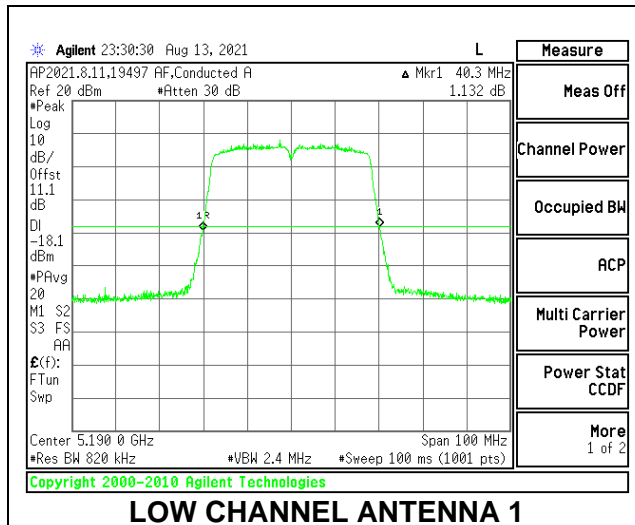
Channel	Frequency (MHz)	26dB Bandwidth (MHz)
Low	5190	40.70
High	5230	40.40



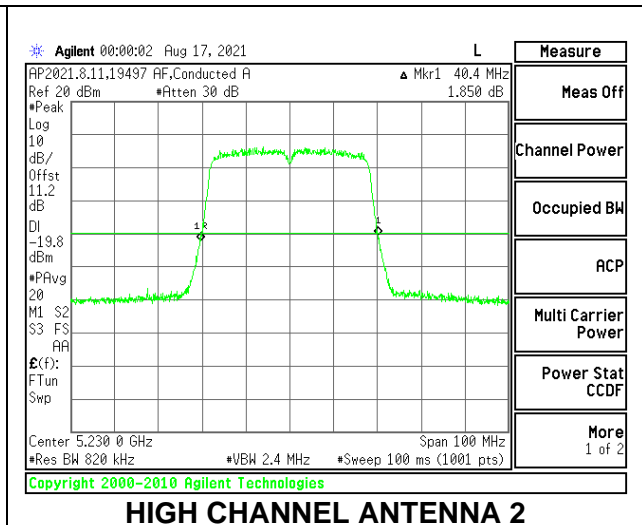
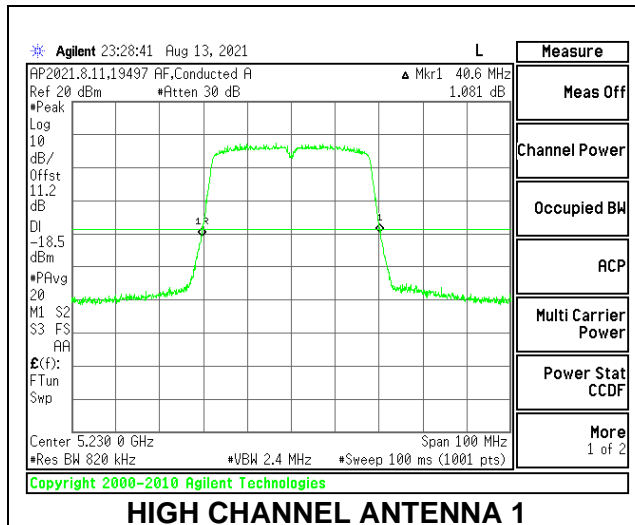
**2TX Antenna 1 + Antenna 2 CDD MODE**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 1 (MHz)	26 dB Bandwidth Antenna 2 (MHz)
Low	5190	40.30	40.20
High	5230	40.60	40.40

**LOW CHANNEL**



**HIGH CHANNEL**

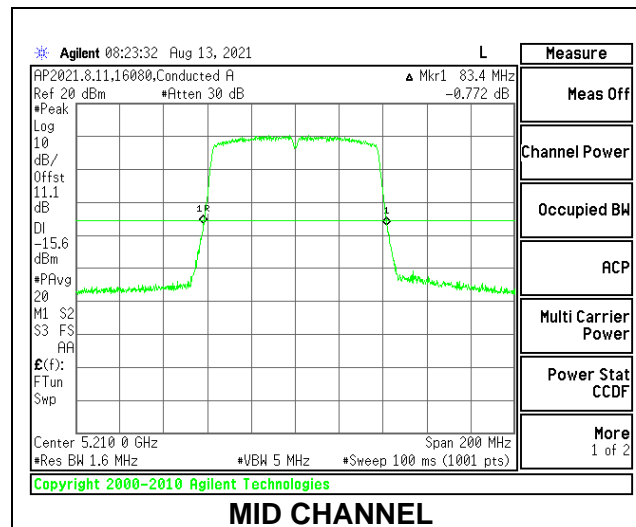




### 9.2.4. 802.11ac VHT80 MODE IN THE 5.2 GHz BAND

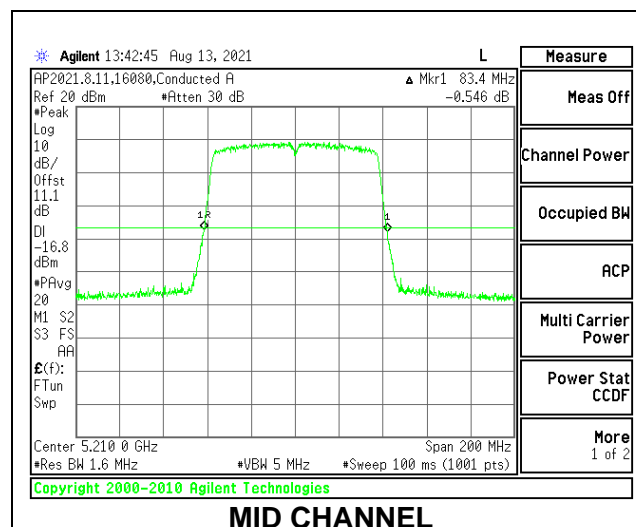
#### 1TX Antenna 1 MODE

Channel	Frequency	26 dB Bandwidth
	(MHz)	(MHz)
Mid	5210	83.40



#### 1TX Antenna 2 MODE

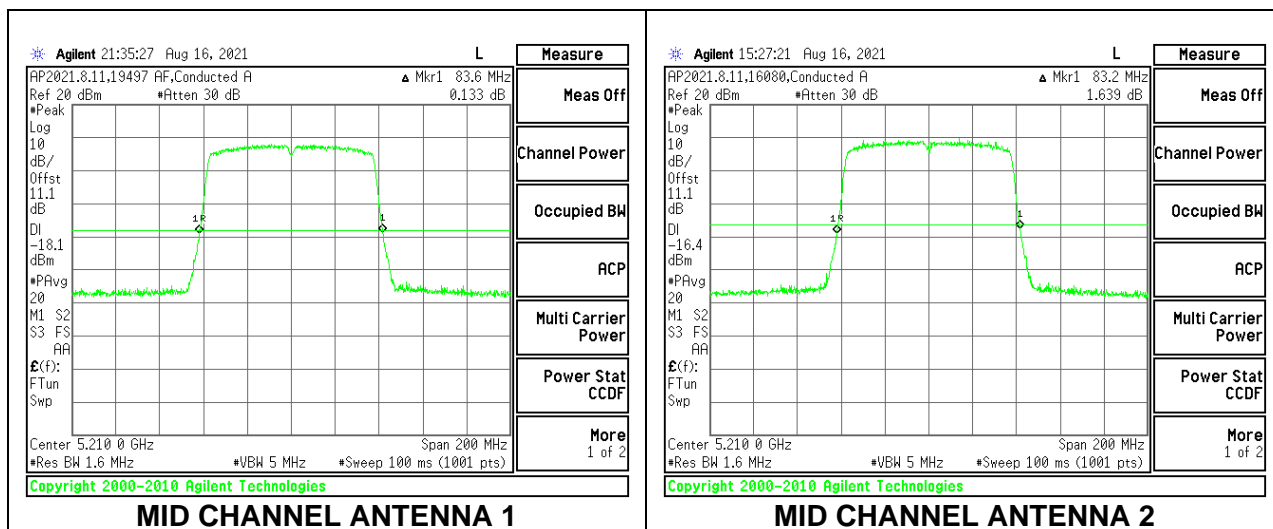
Channel	Frequency	26 dB Bandwidth
	(MHz)	(MHz)
Mid	5210	83.40



**2TX Antenna 1 + Antenna 2 CDD MODE**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 1 (MHz)	26 dB Bandwidth Antenna 2 (MHz)
Mid	5210	83.60	83.20

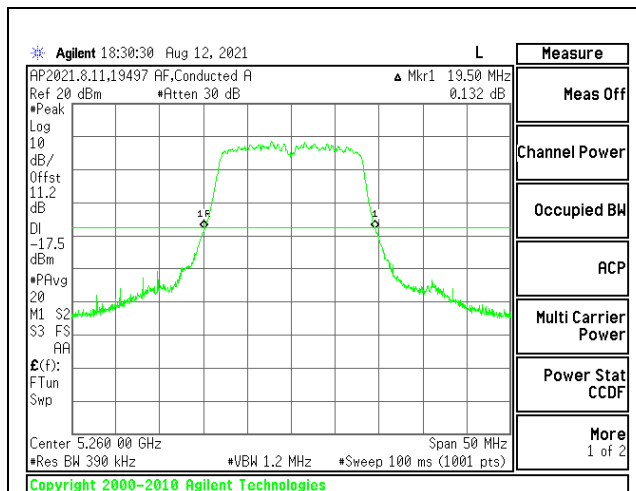
**MID CHANNEL**



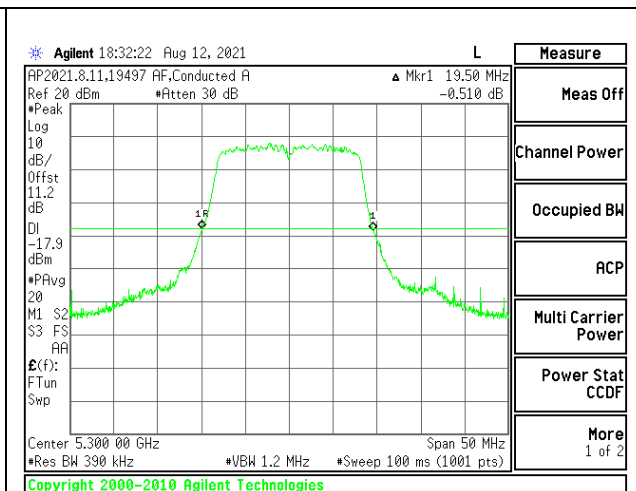
### 9.2.5. 802.11a MODE IN THE 5.3 GHz BAND

#### 1TX Antenna 1 MODE

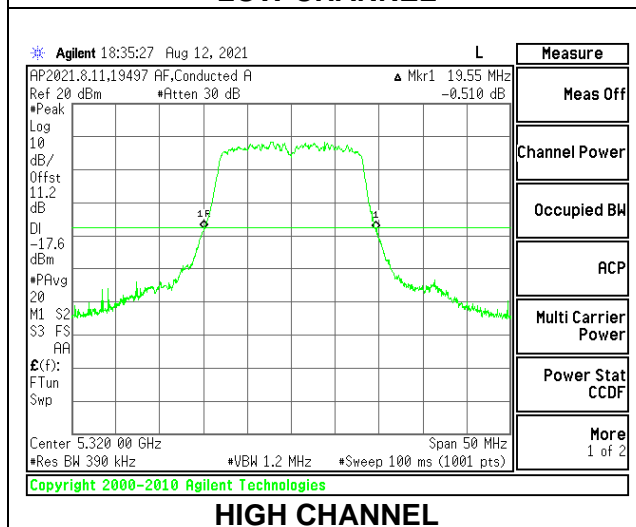
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5260	19.50
Mid	5300	19.50
High	5320	19.55



**LOW CHANNEL**



**MID CHANNEL**

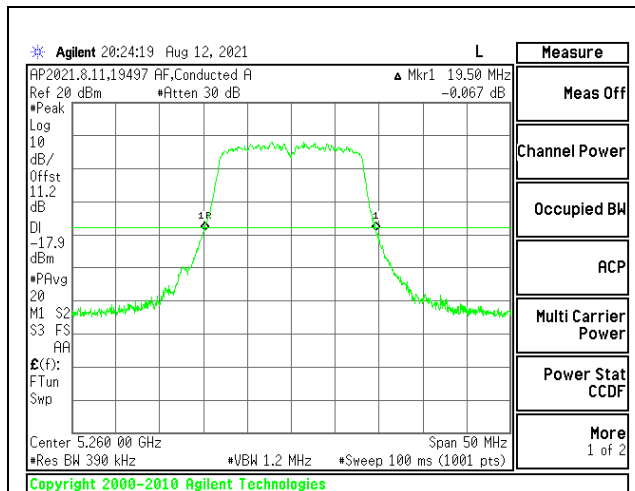


**HIGH CHANNEL**

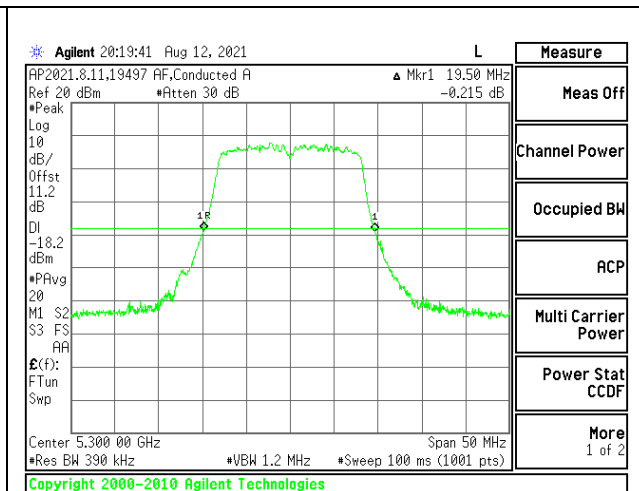
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**1TX Antenna 2 MODE**

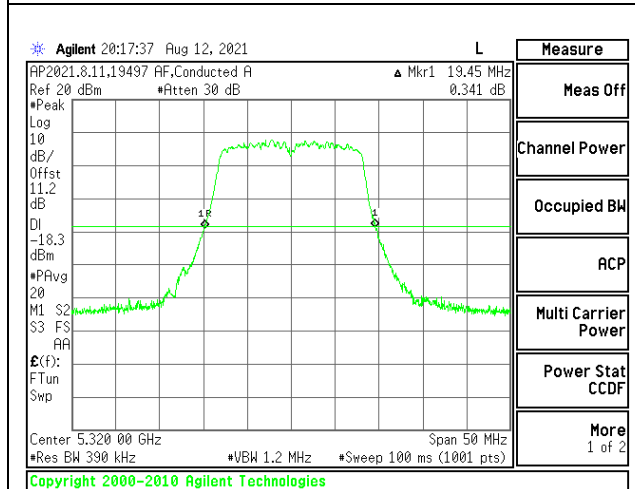
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5260	19.50
Mid	5300	19.50
High	5320	19.45



**LOW CHANNEL**



**MID CHANNEL**



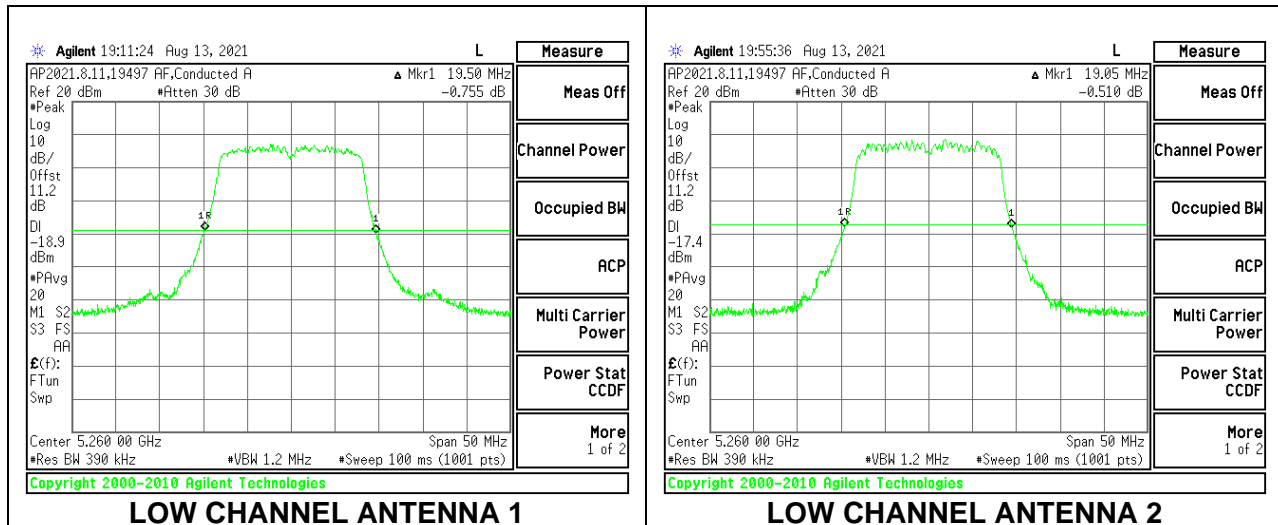
**HIGH CHANNEL**

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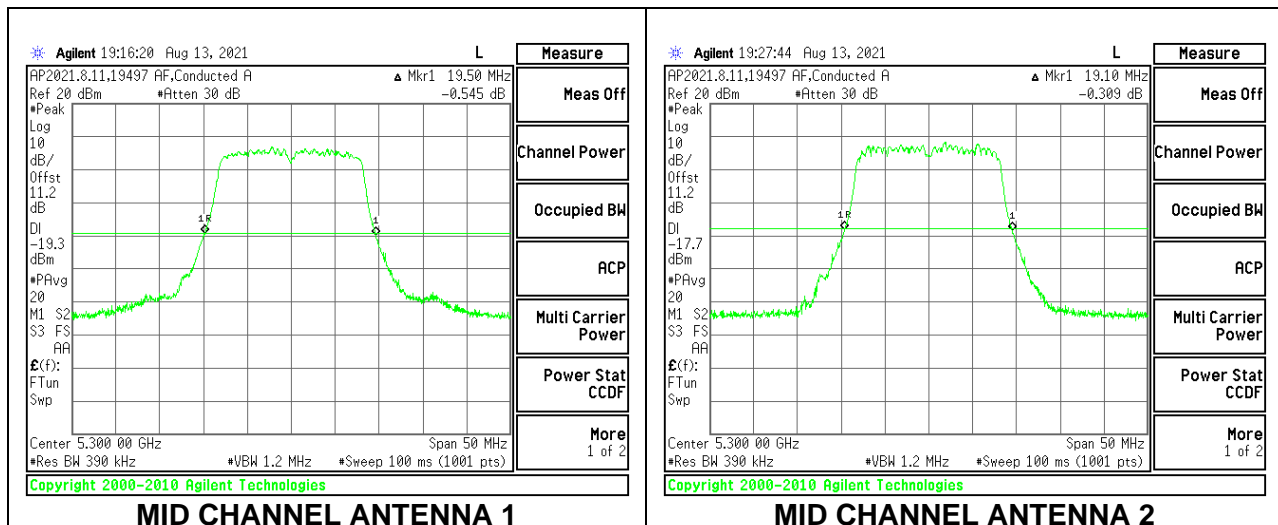
**2TX Antenna 1 + Antenna 2 CDD MODE**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 1 (MHz)	26 dB Bandwidth Antenna 2 (MHz)
Low	5260	19.50	19.05
Mid	5300	19.50	19.10
High	5320	19.55	19.05

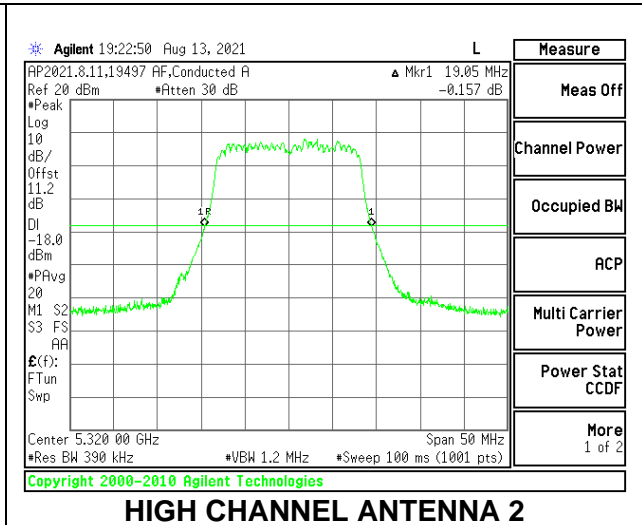
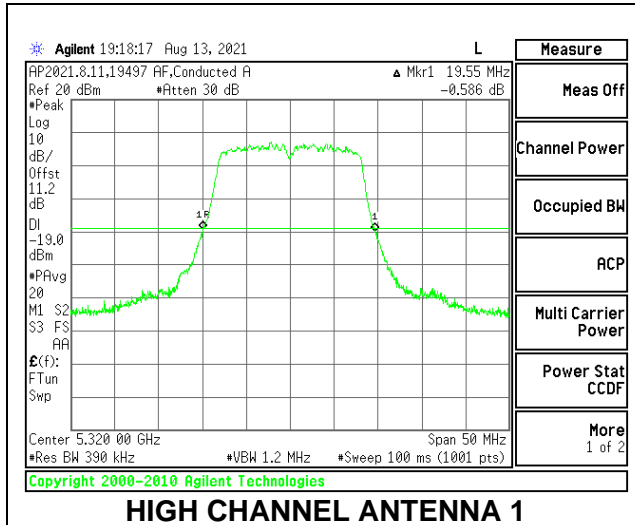
**LOW CHANNEL**



**MID CHANNEL**



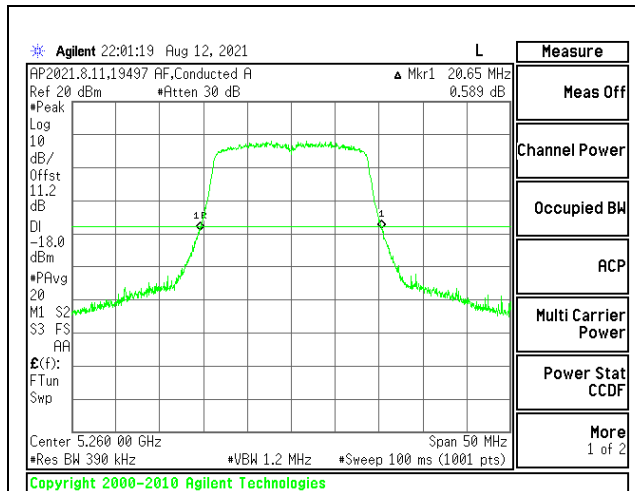
### HIGH CHANNEL



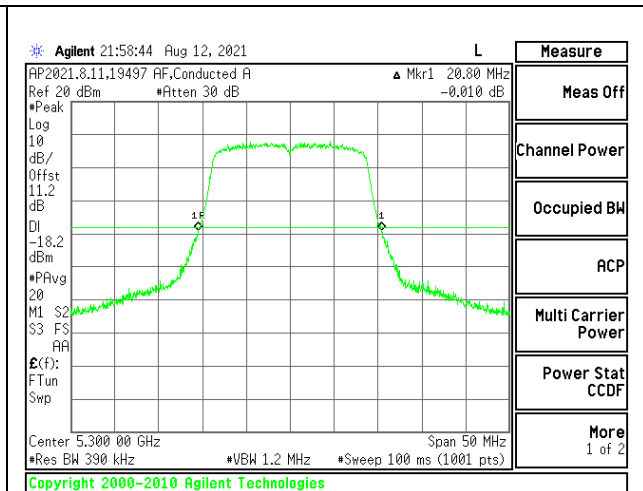
### 9.2.6. 802.11n HT20 MODE IN THE 5.3 GHz BAND

#### 1TX Antenna 1 MODE

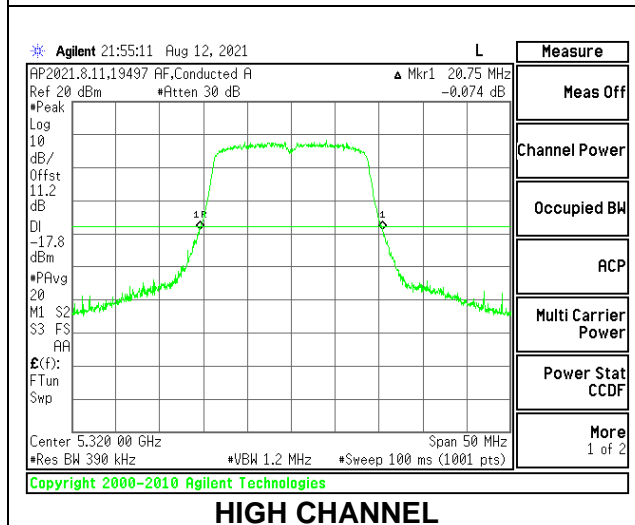
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5260	20.65
Mid	5300	20.80
High	5320	20.75



**LOW CHANNEL**



**MID CHANNEL**

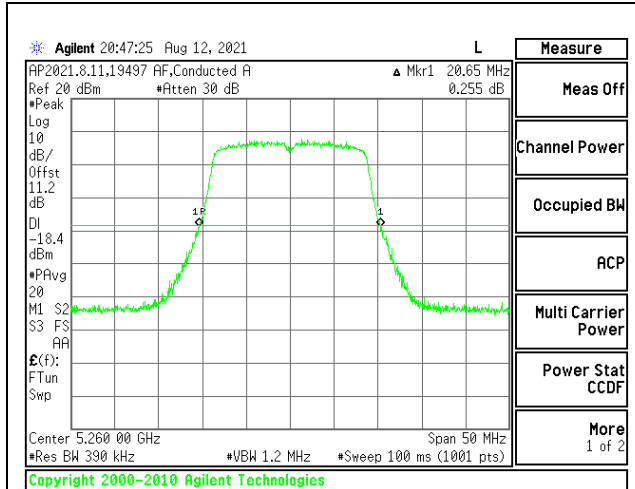


**HIGH CHANNEL**

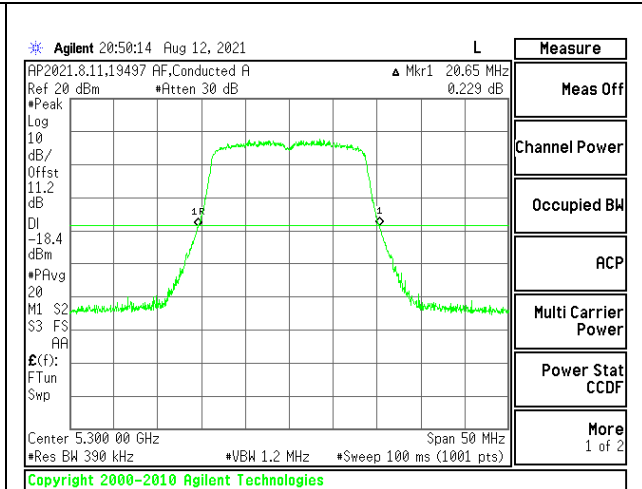
**Intentionally left blank**

**1TX Antenna 2 MODE**

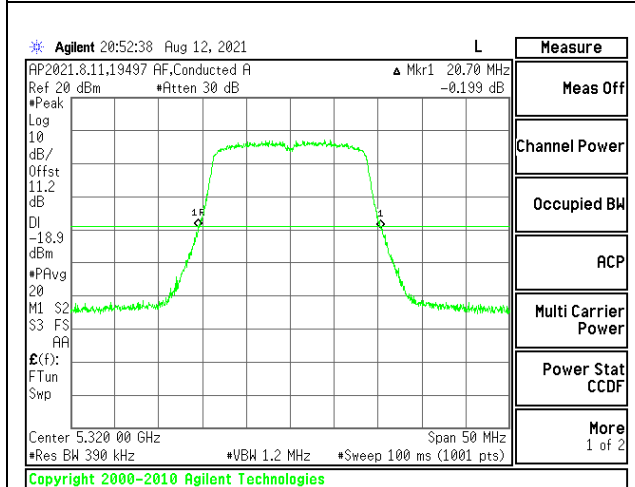
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5260	20.65
Mid	5300	20.65
High	5320	20.70



**LOW CHANNEL**



**MID CHANNEL**



**HIGH CHANNEL**

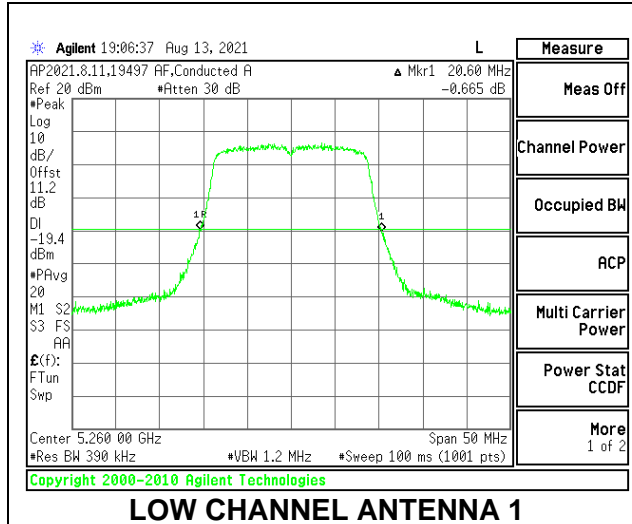
**Intentionally left blank**



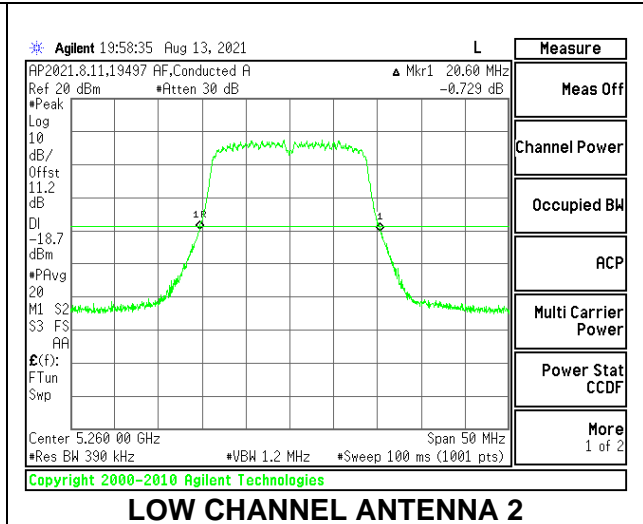
**2TX Antenna 1 + Antenna 2 CDD MODE**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 1 (MHz)	26 dB Bandwidth Antenna 2 (MHz)
Low	5260	20.60	20.60
Mid	5300	20.75	20.55
High	5320	20.75	20.55

**LOW CHANNEL**

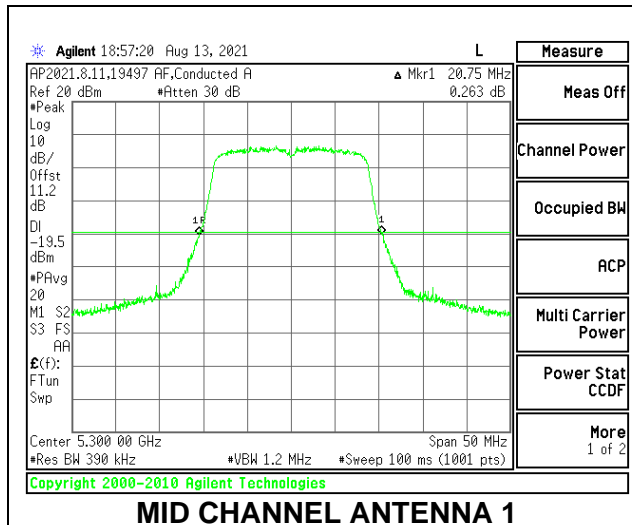


**LOW CHANNEL ANTENNA 1**

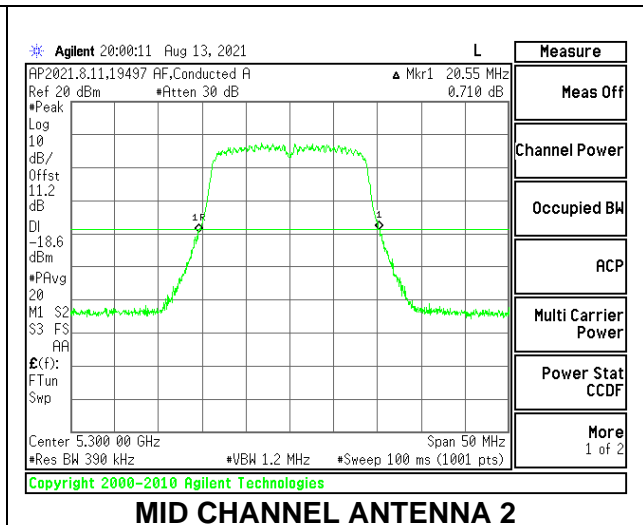


**LOW CHANNEL ANTENNA 2**

**MID CHANNEL**

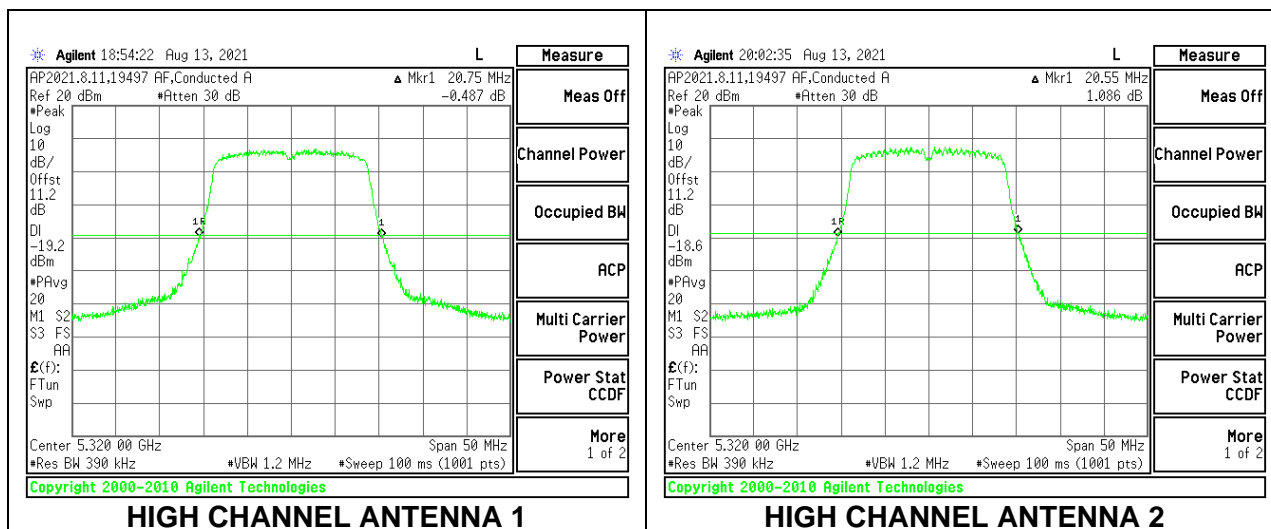


**MID CHANNEL ANTENNA 1**



**MID CHANNEL ANTENNA 2**

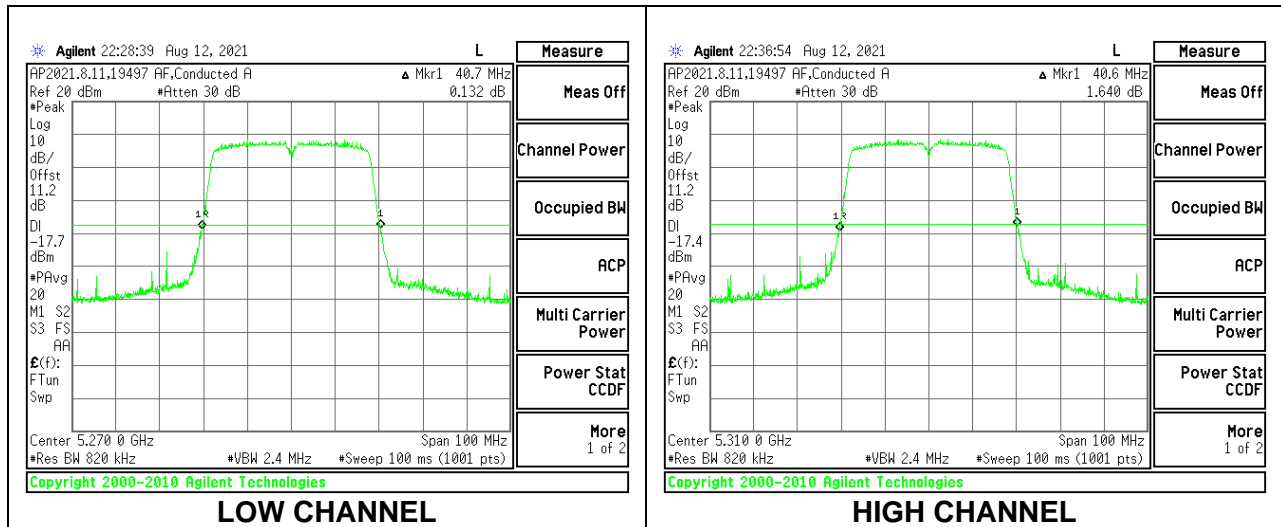
### HIGH CHANNEL



### 9.2.7. 802.11n HT40 MODE IN THE 5.3 GHz BAND

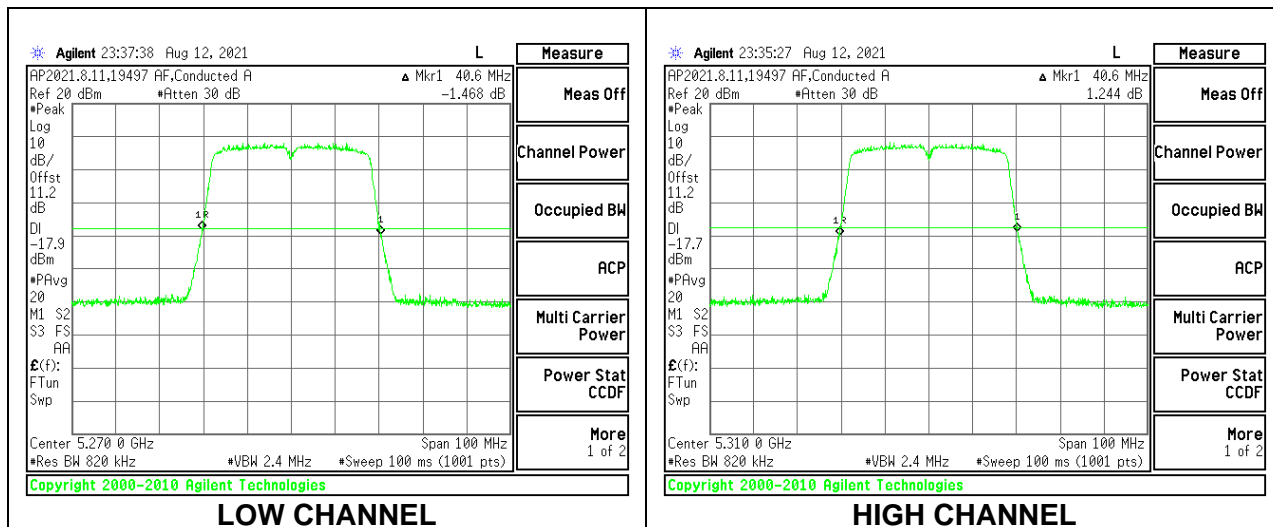
#### 1TX Antenna 1 MODE

Channel	Frequency (MHz)	26dB Bandwidth (MHz)
Low	5270	40.70
High	5310	40.60



**1TX Antenna 2 MODE**

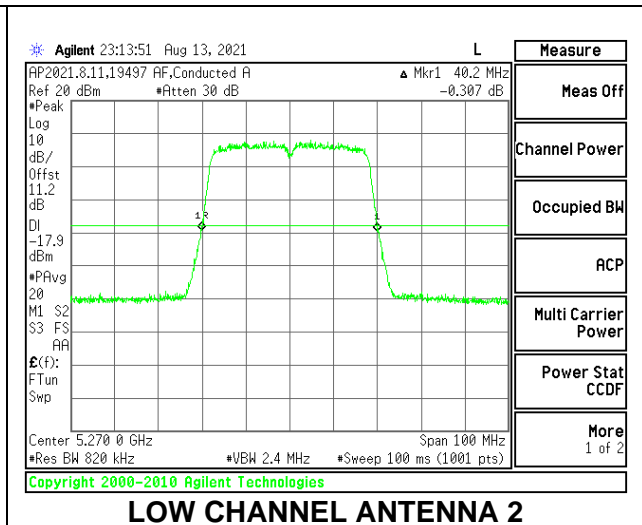
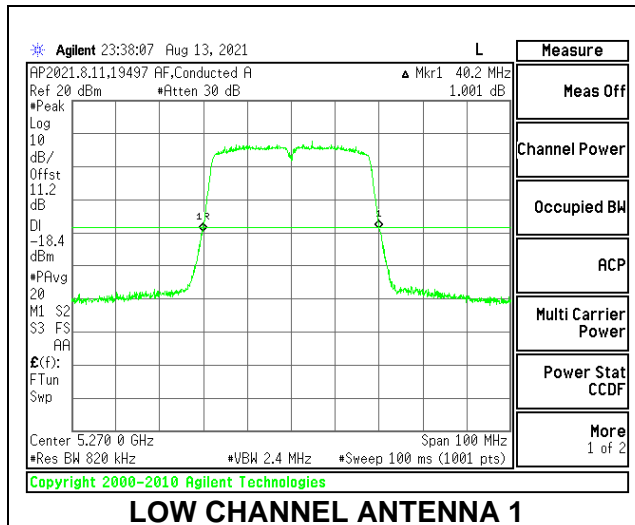
Channel	Frequency	26dB Bandwidth
	(MHz)	(MHz)
Low	5270	40.60
High	5310	40.60



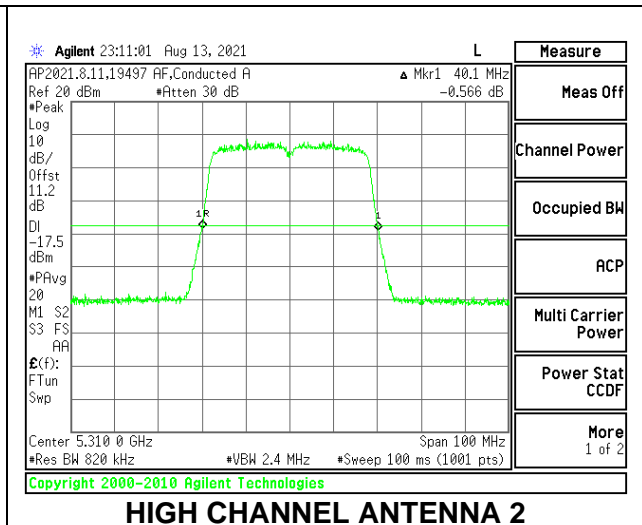
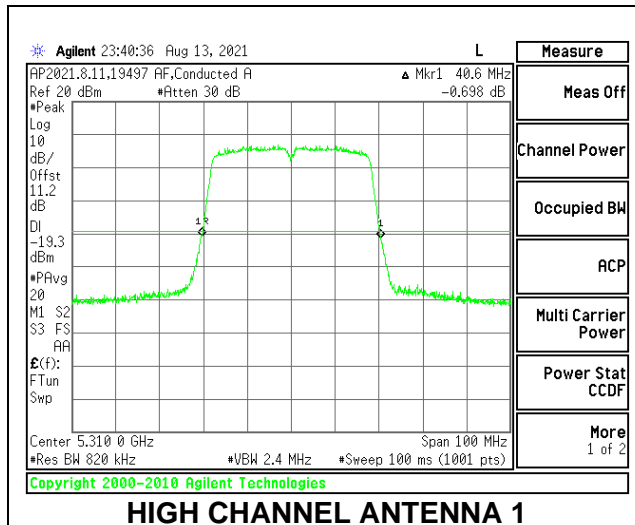
**2TX Antenna 1 + Antenna 2 CDD MODE**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 1 (MHz)	26 dB Bandwidth Antenna 2 (MHz)
Low	5270	40.20	40.20
High	5310	40.60	40.10

**LOW CHANNEL**



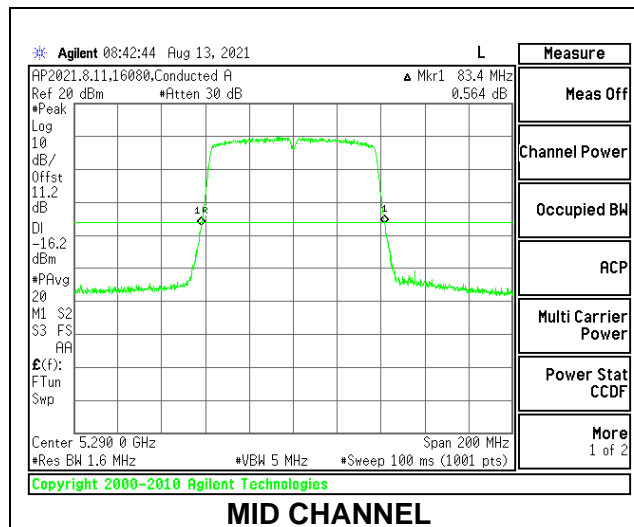
**HIGH CHANNEL**



### 9.2.8. 802.11ac VHT80 MODE IN THE 5.3 GHz BAND

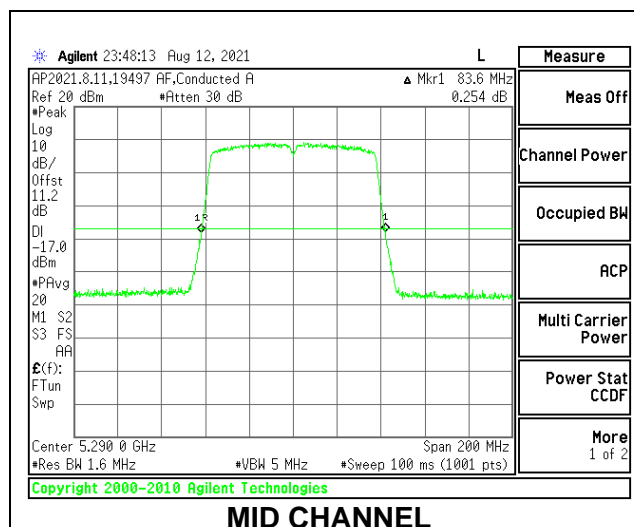
#### 1TX Antenna 1 MODE

Channel	Frequency	26 dB Bandwidth
	(MHz)	(MHz)
Mid	5290	83.40



#### 1TX Antenna 2 MODE

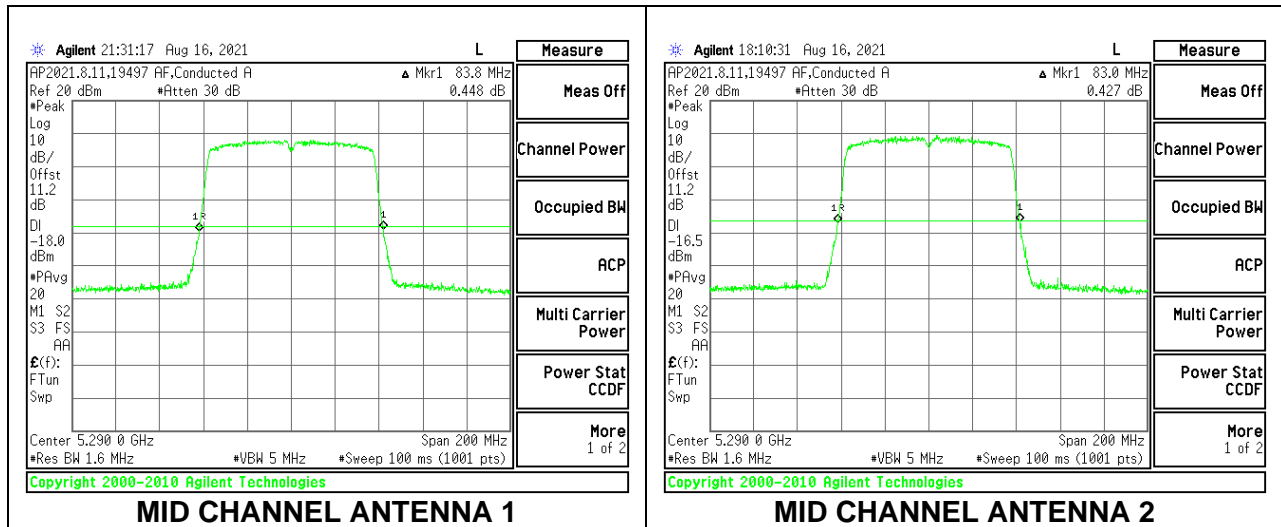
Channel	Frequency	26 dB Bandwidth
	(MHz)	(MHz)
Mid	5290	83.60



**2TX Antenna 1 + Antenna 2 CDD MODE**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 1 (MHz)	26 dB Bandwidth Antenna 2 (MHz)
Mid	5290	83.80	83.00

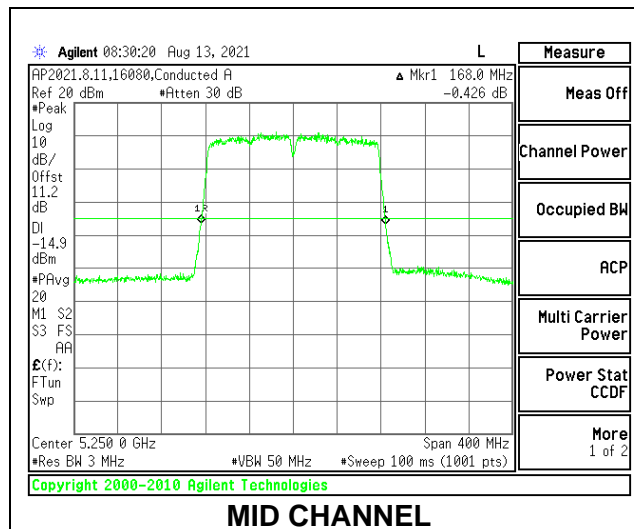
**MID CHANNEL**



### 9.2.9. 802.11ac VHT160 MODE IN THE 5.2 & 5.3 GHz BAND

#### 1TX Antenna 1 MODE

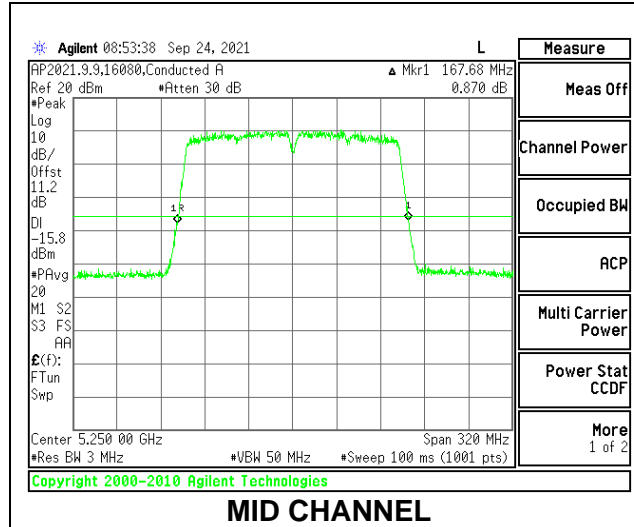
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Mid	5250	168.00





**1TX Antenna 2 MODE**

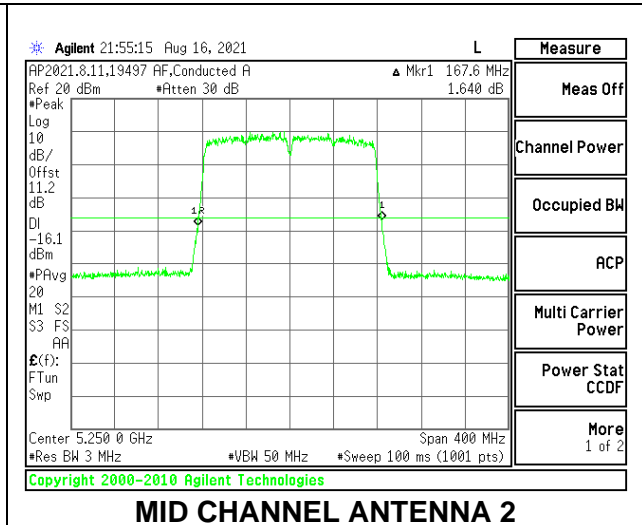
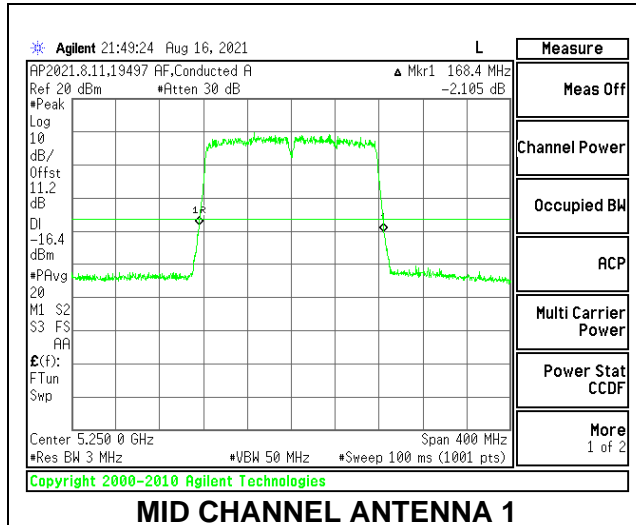
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Mid	5250	167.68



**2TX Antenna 1 + Antenna 2 CDD MODE**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 1 (MHz)	26 dB Bandwidth Antenna 2 (MHz)
Mid	5250	168.40	167.60

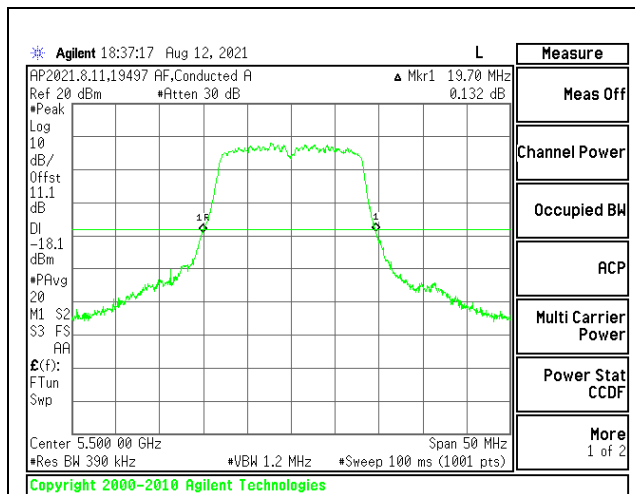
**MID CHANNEL**



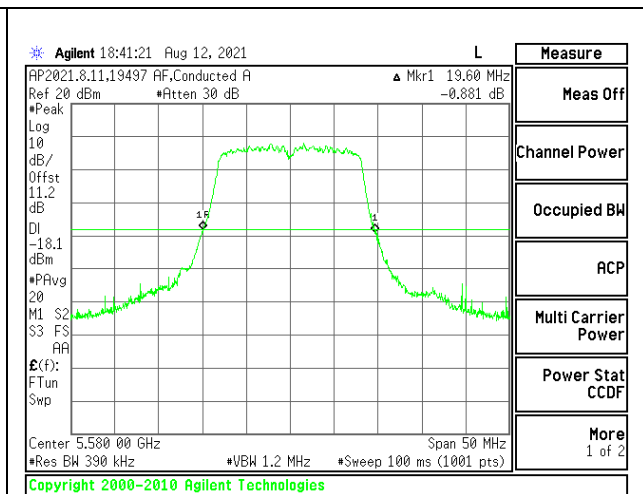
### 9.2.10. 802.11a MODE IN THE 5.6 GHz BAND

#### 1TX Antenna 1 MODE

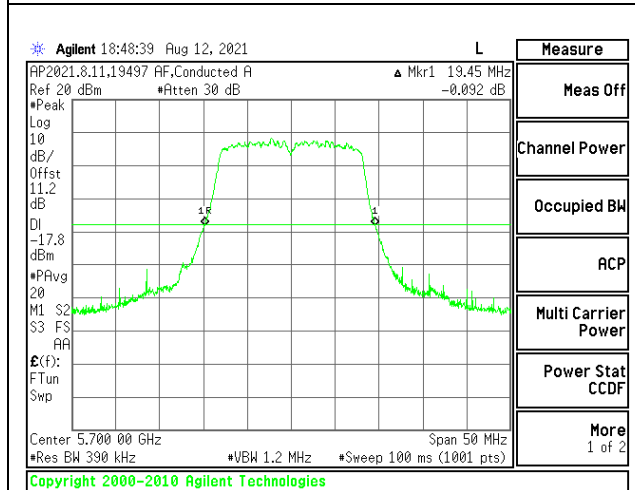
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5500	19.70
Mid	5580	19.60
High	5700	19.45
144	5720	19.40



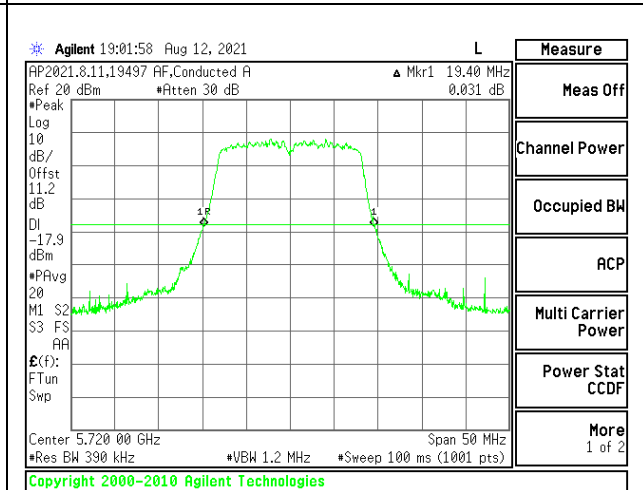
**LOW CHANNEL**



**MID CHANNEL**



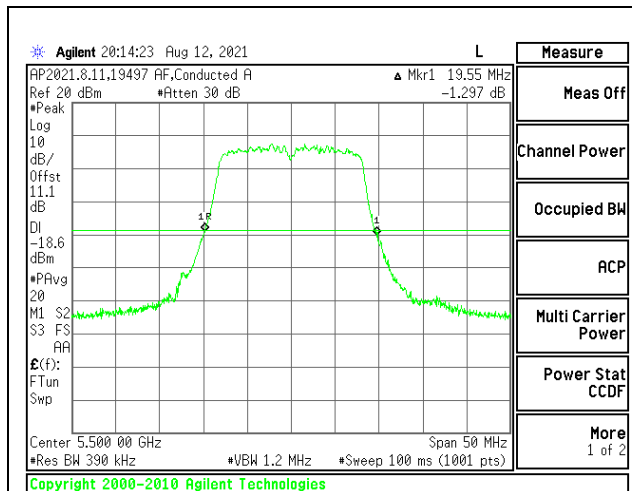
**HIGH CHANNEL**



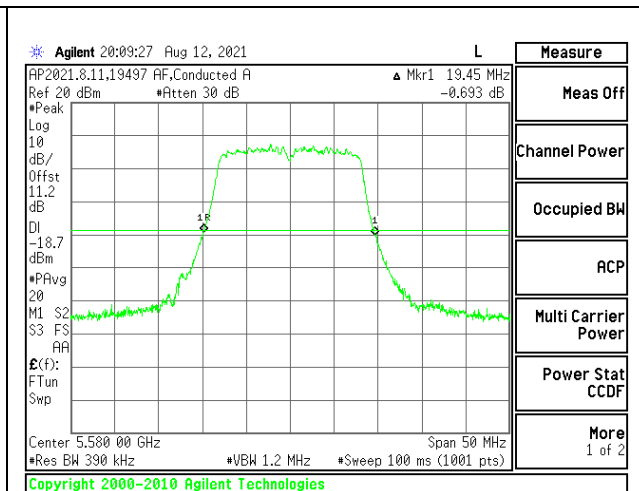
**CHANNEL 144**

**1TX Antenna 2 MODE**

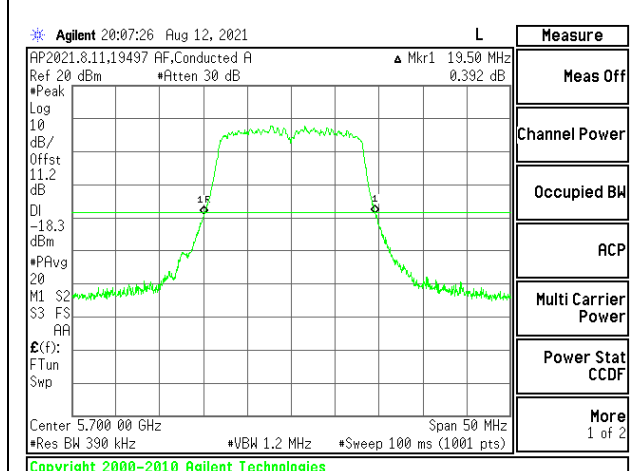
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5500	19.55
Mid	5580	19.45
High	5700	19.50
144	5720	19.50



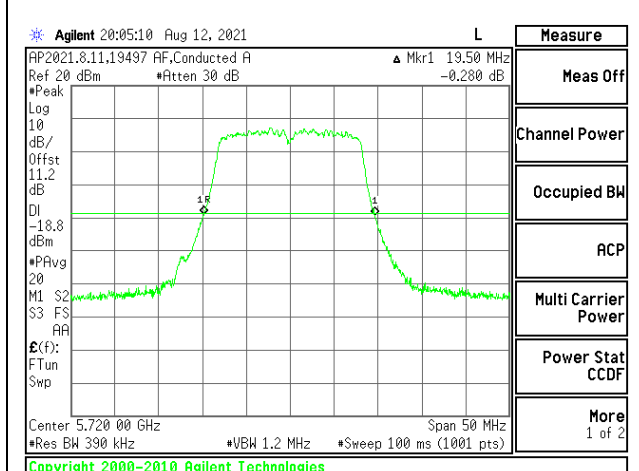
**LOW CHANNEL**



**MID CHANNEL**



**HIGH CHANNEL**

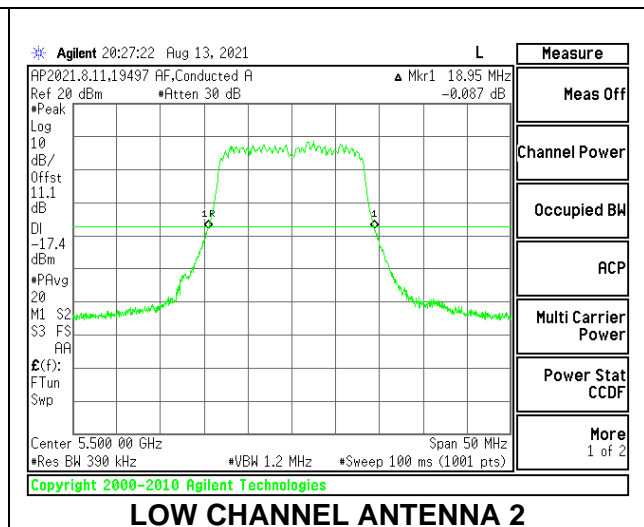
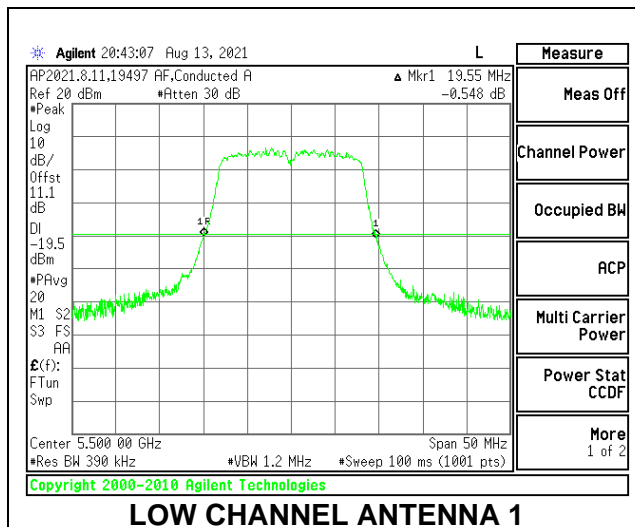


**CHANNEL 144**

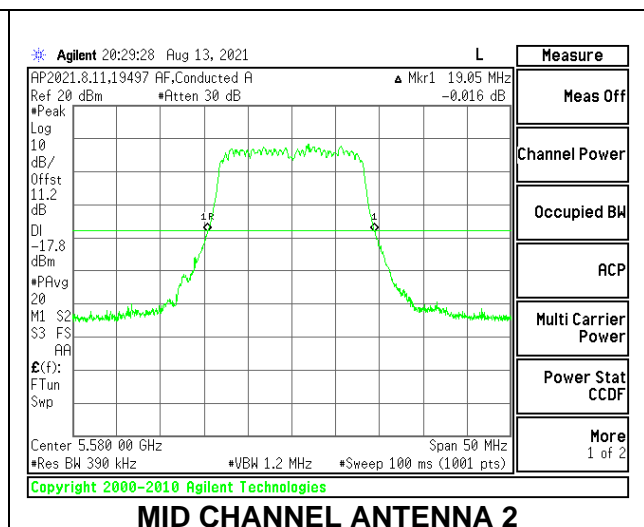
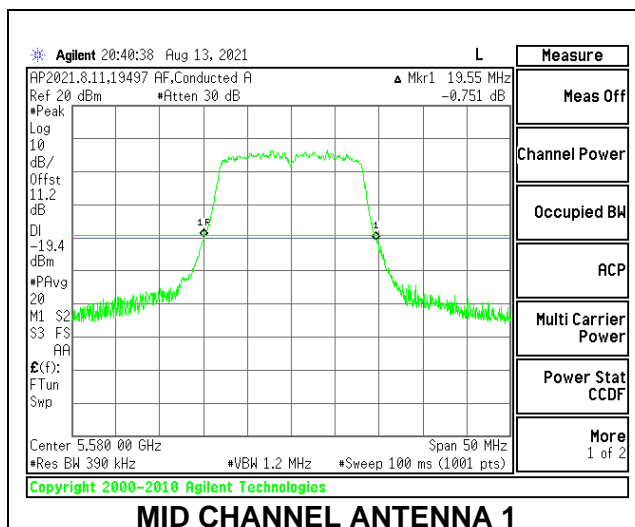
**2TX Antenna 1 + Antenna 2 CDD MODE**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 1 (MHz)	26 dB Bandwidth Antenna 2 (MHz)
Low	5500	19.55	18.95
Mid	5580	19.55	19.05
High	5700	19.55	19.10
144	5720	19.45	19.05

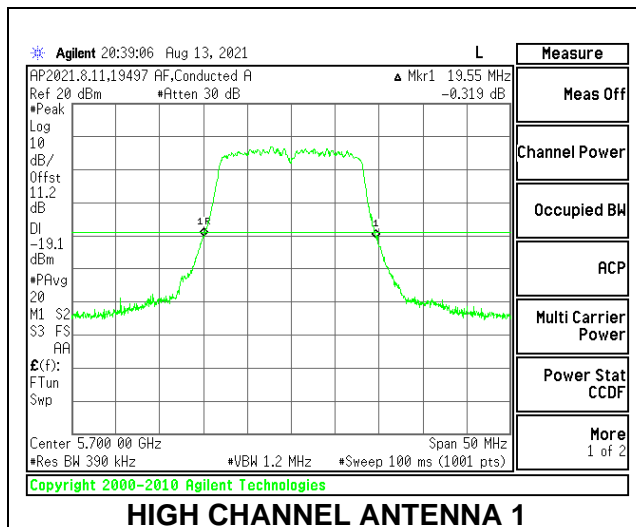
**LOW CHANNEL**



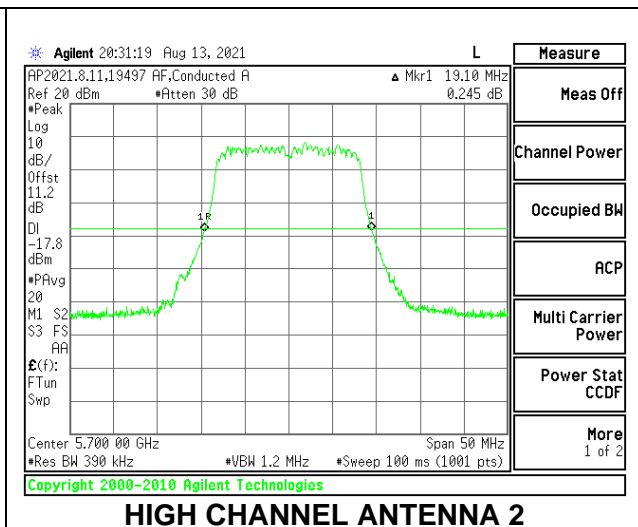
**MID CHANNEL**



### HIGH CHANNEL

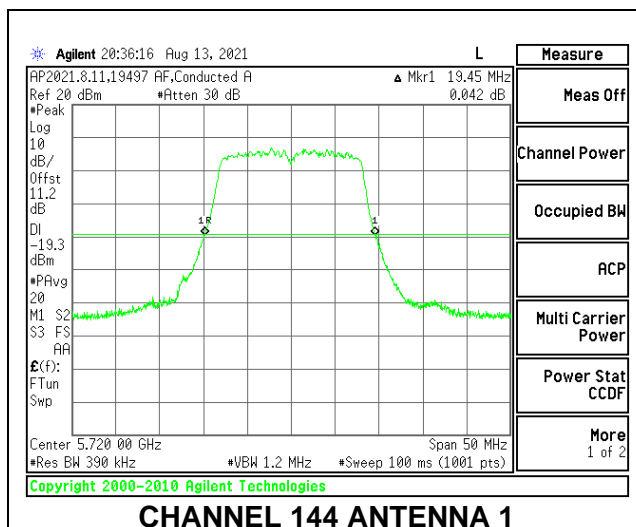


**HIGH CHANNEL ANTENNA 1**

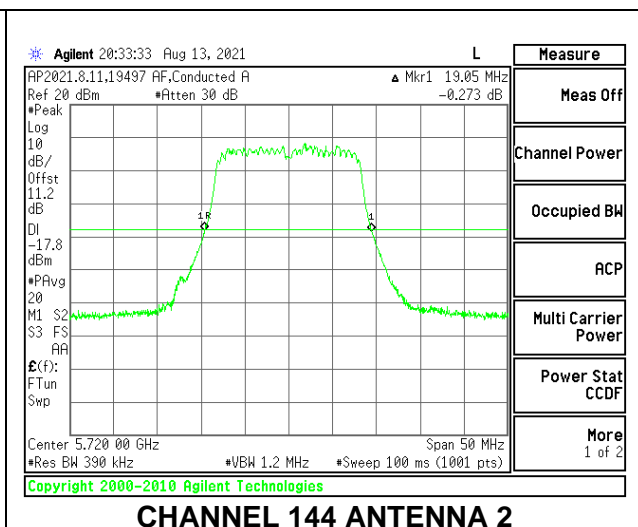


**HIGH CHANNEL ANTENNA 2**

### CHANNEL 144



**CHANNEL 144 ANTENNA 1**

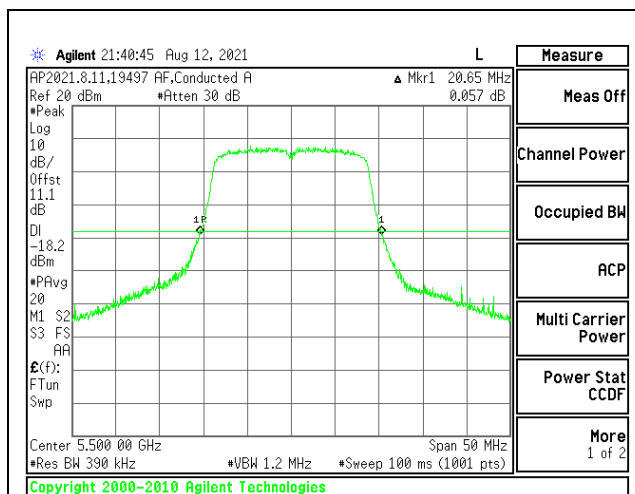


**CHANNEL 144 ANTENNA 2**

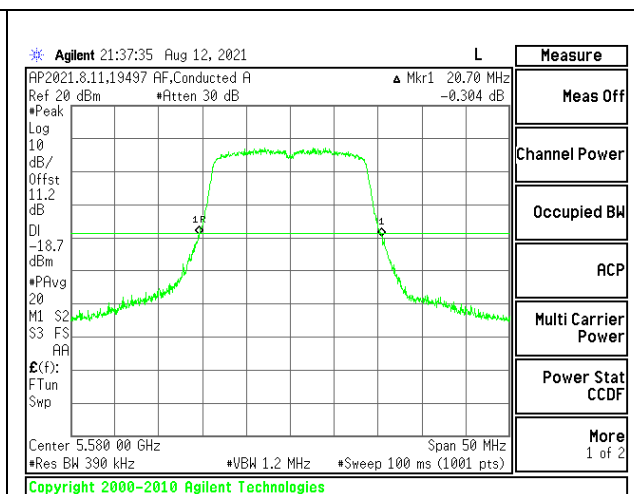
### 9.2.11. 802.11n HT20 MODE IN THE 5.6 GHz BAND

#### 1TX Antenna 1 MODE

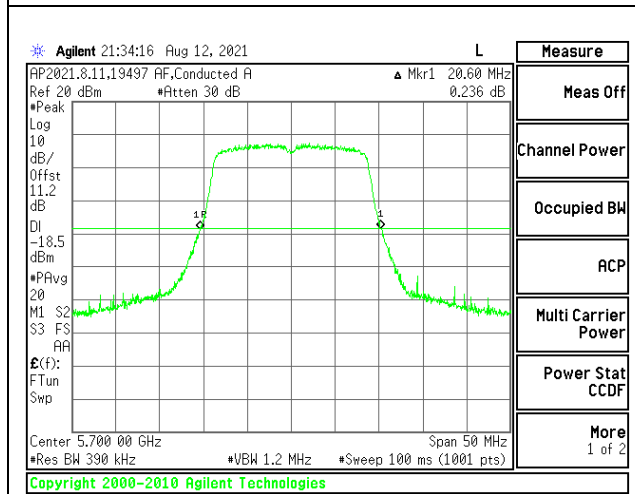
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5500	20.65
Mid	5580	20.70
High	5700	20.60
144	5720	20.70



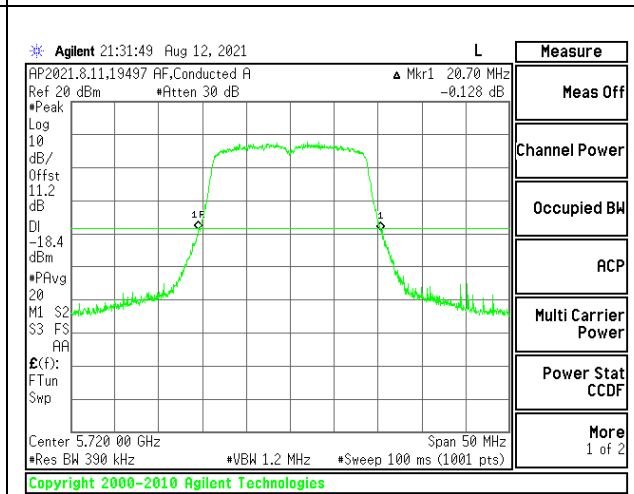
**LOW CHANNEL**



**MID CHANNEL**



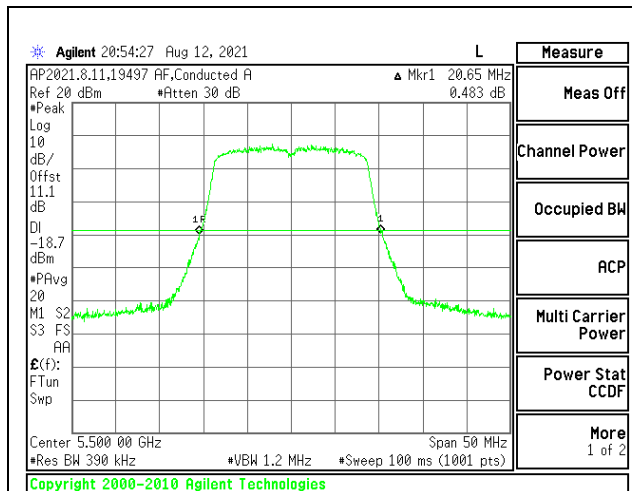
**HIGH CHANNEL**



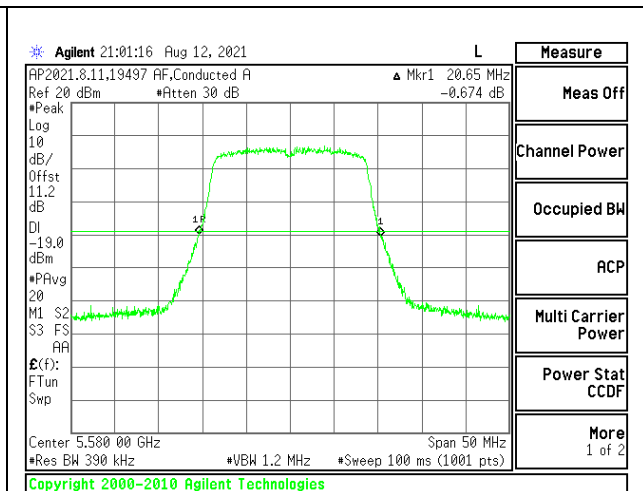
**CHANNEL 144**

**1TX Antenna 2 MODE**

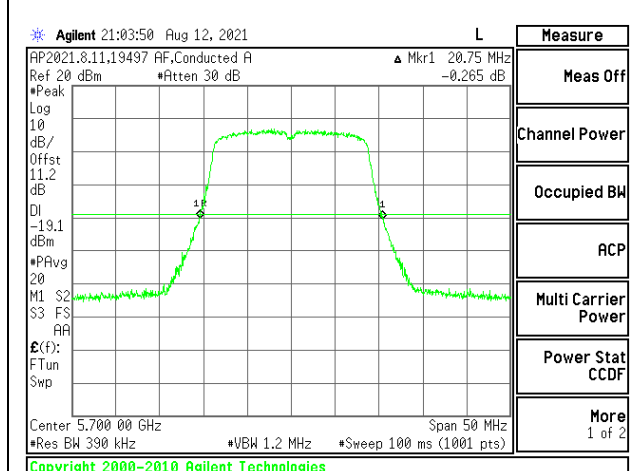
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5500	20.65
Mid	5580	20.65
High	5700	20.75
144	5720	20.80



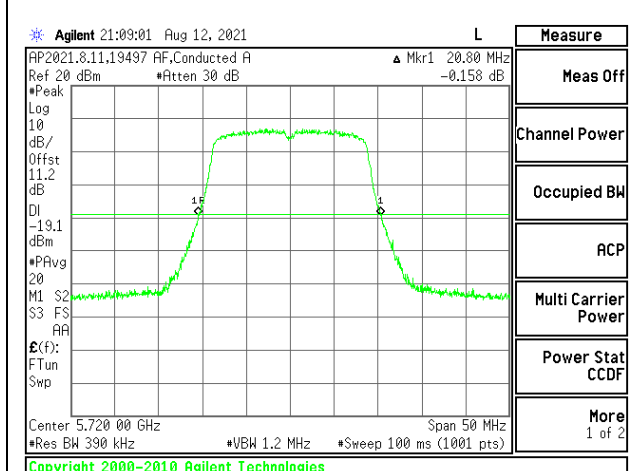
**LOW CHANNEL**



**MID CHANNEL**



**HIGH CHANNEL**



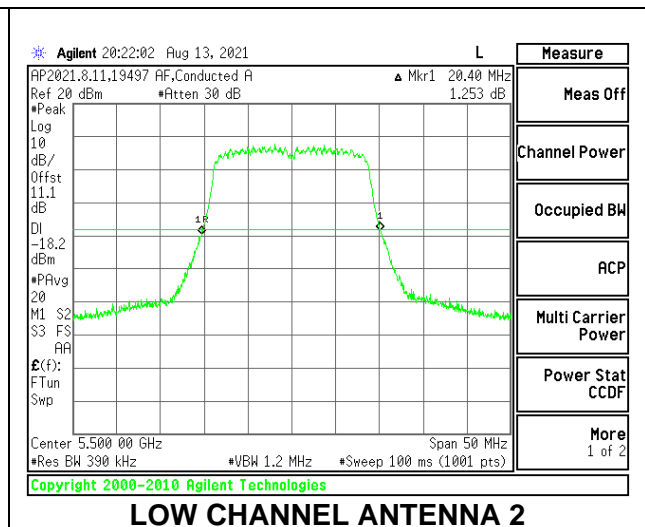
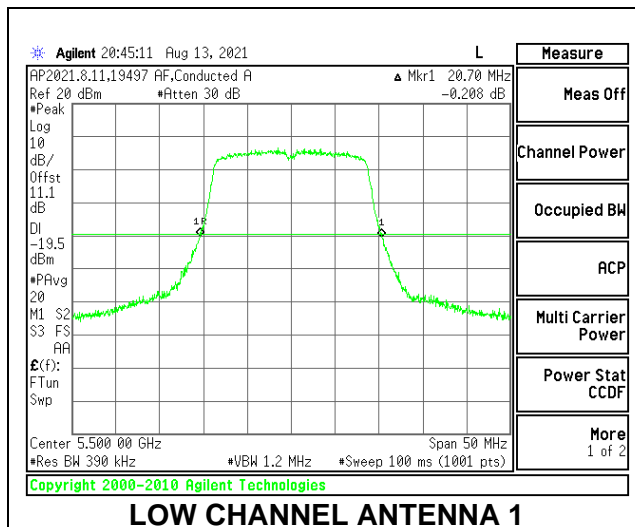
**CHANNEL 144**



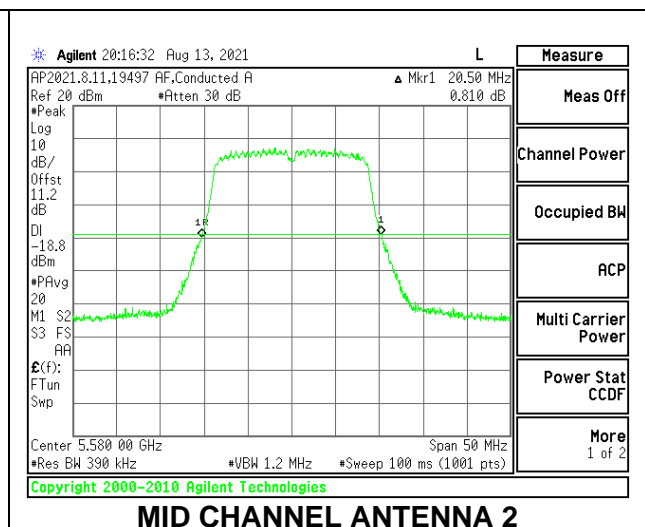
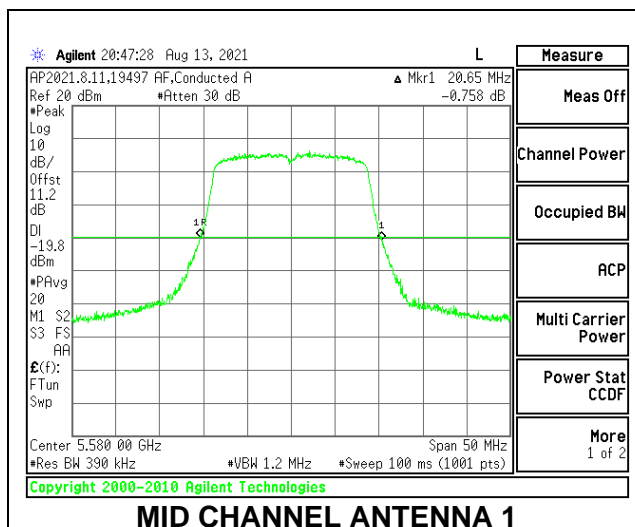
**2TX Antenna 1 + Antenna 2 CDD MODE**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 1 (MHz)	26 dB Bandwidth Antenna 2 (MHz)
Low	5500	20.70	20.40
Mid	5580	20.65	20.50
High	5700	20.85	20.60
144	5720	20.55	20.55

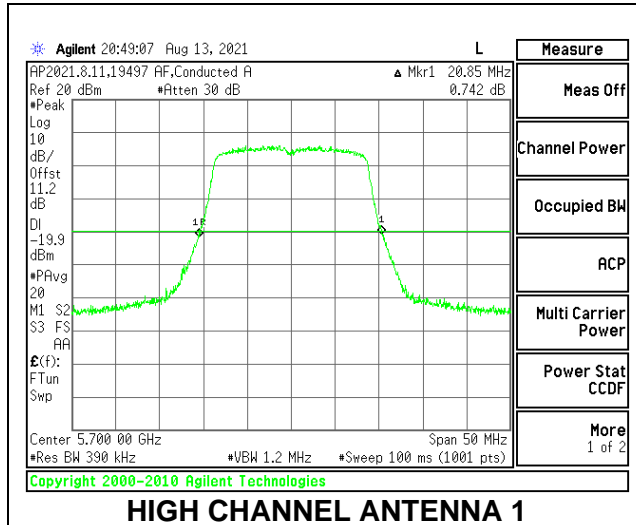
**LOW CHANNEL**



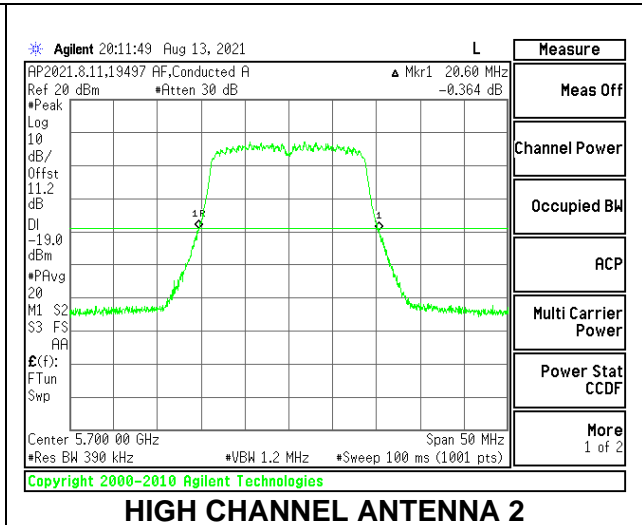
**MID CHANNEL**



### HIGH CHANNEL

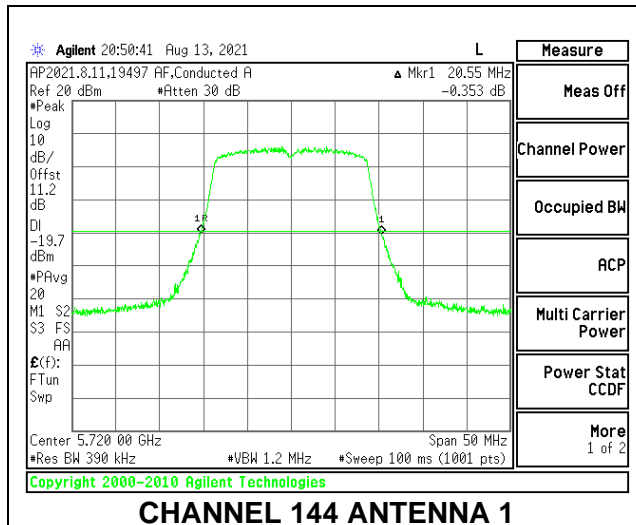


**HIGH CHANNEL ANTENNA 1**

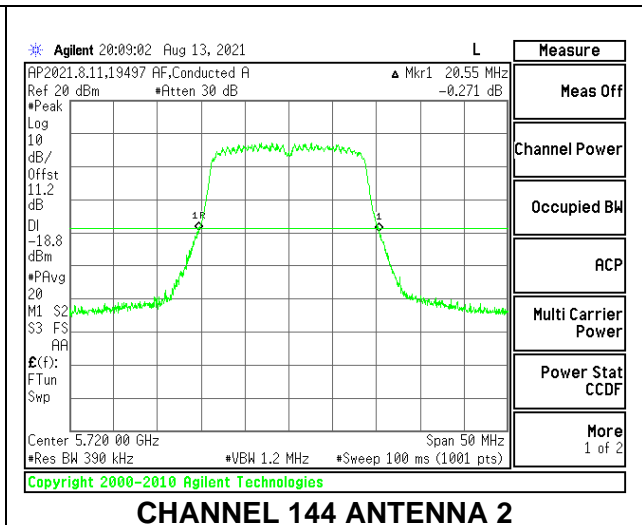


**HIGH CHANNEL ANTENNA 2**

### CHANNEL 144



**CHANNEL 144 ANTENNA 1**

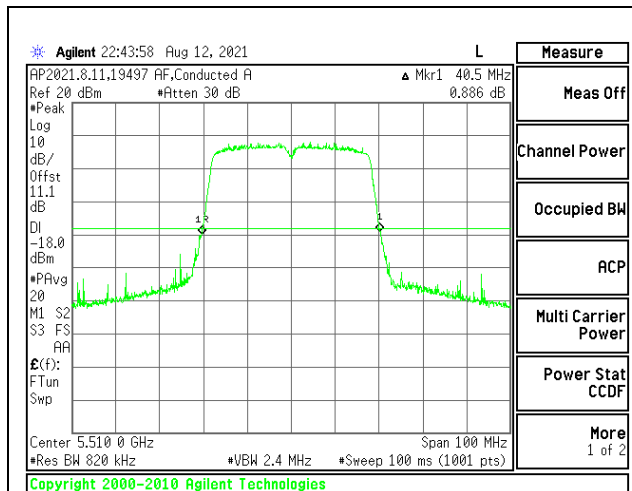


**CHANNEL 144 ANTENNA 2**

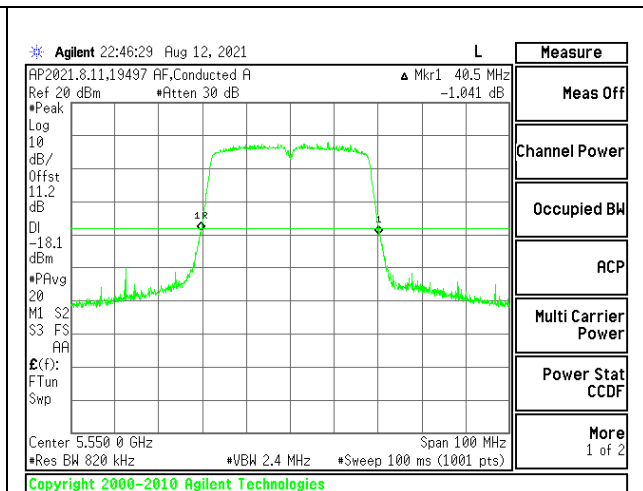
### 9.2.12. 802.11n HT40 MODE IN THE 5.6 GHz BAND

#### 1TX Antenna 1 MODE

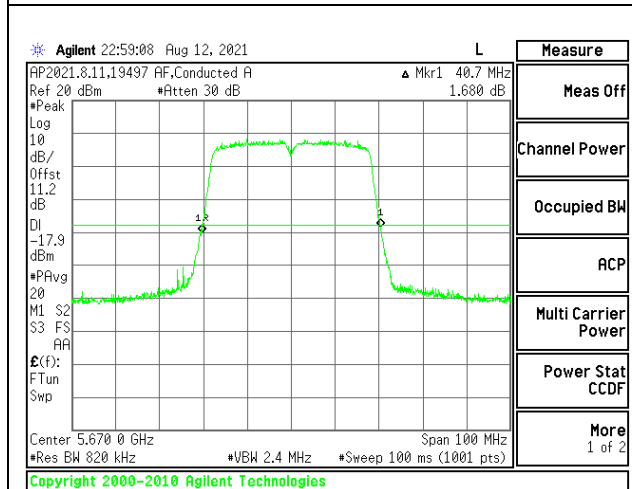
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5510	40.50
Mid	5550	40.50
High	5670	40.70
142	5710	40.70



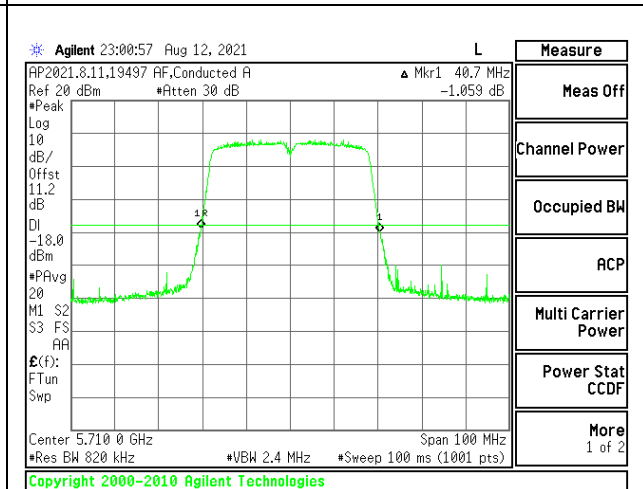
**LOW CHANNEL**



**MID CHANNEL**



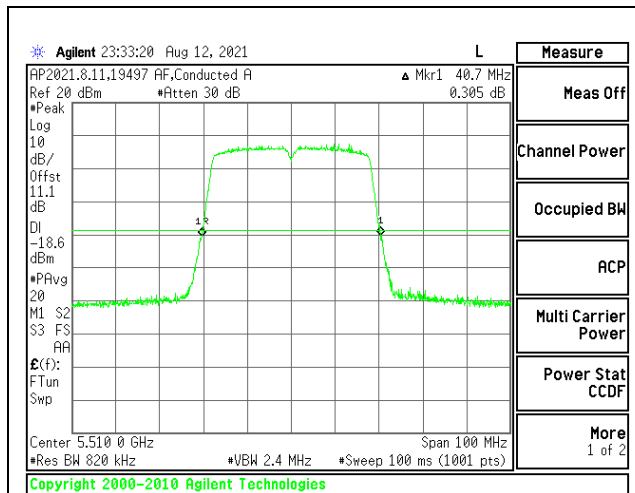
**HIGH CHANNEL**



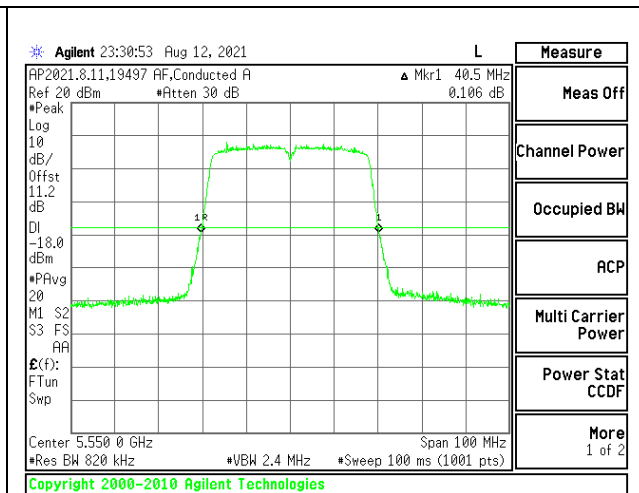
**CHANNEL 142**

**1TX Antenna 2 MODE**

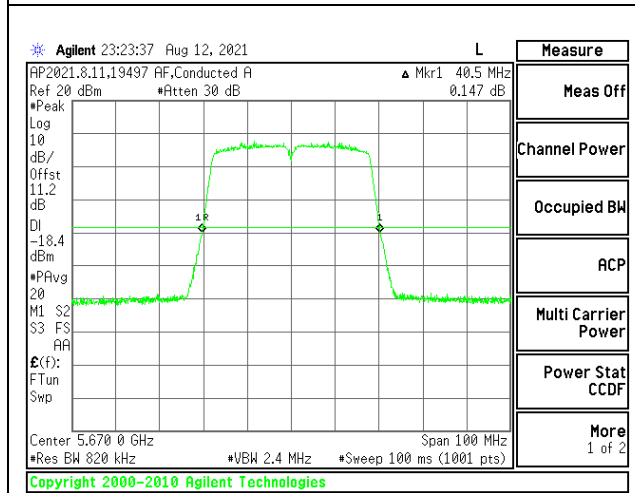
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5510	40.70
Mid	5550	40.50
High	5670	40.50
142	5710	40.60



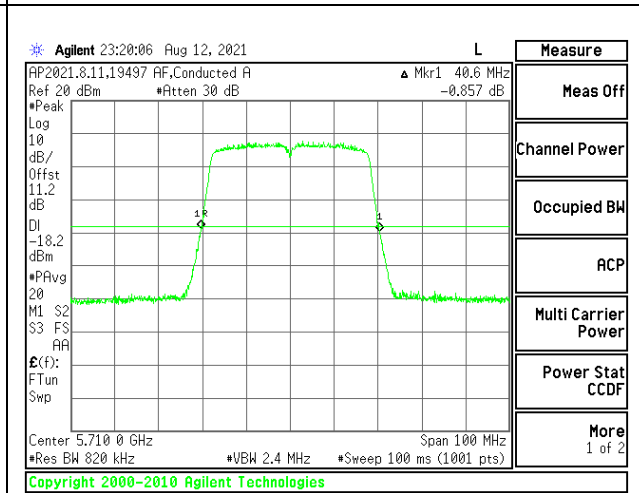
**LOW CHANNEL**



**MID CHANNEL**



**HIGH CHANNEL**

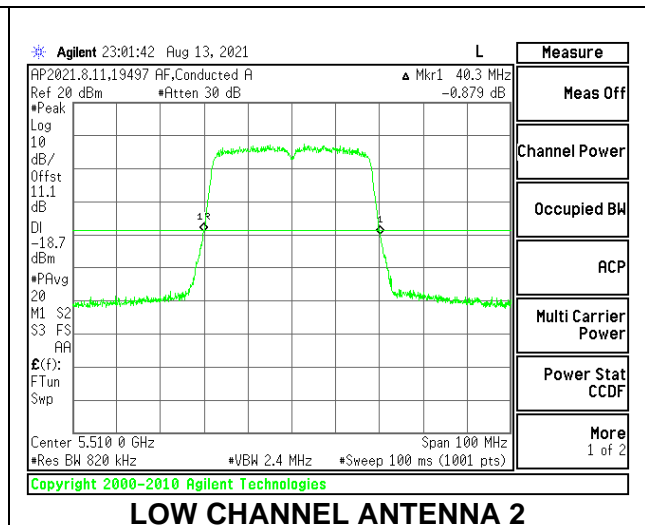
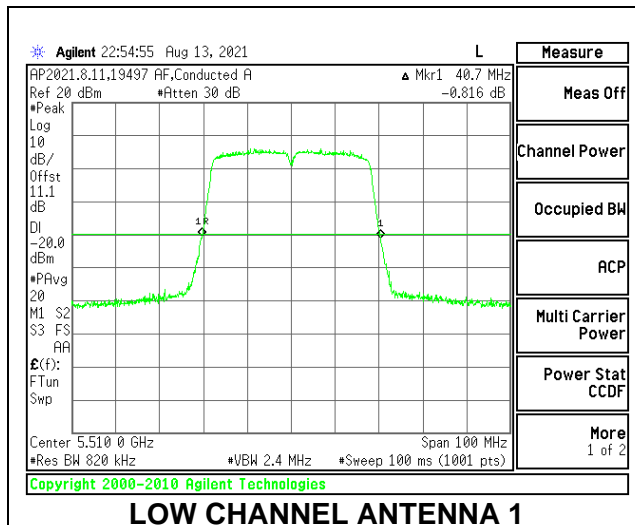


**CHANNEL 142**

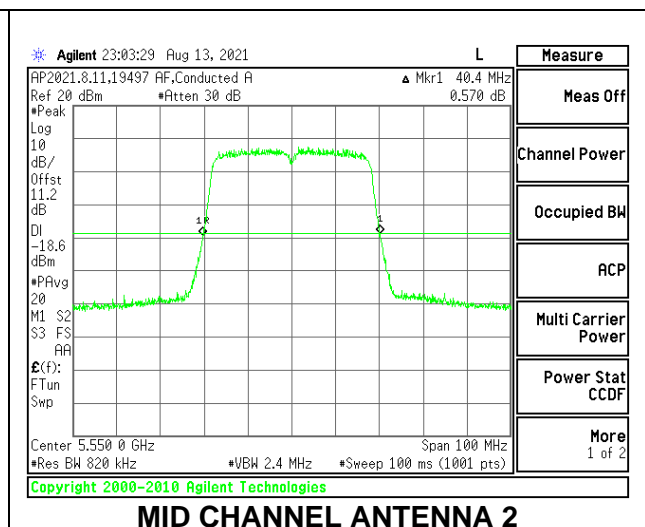
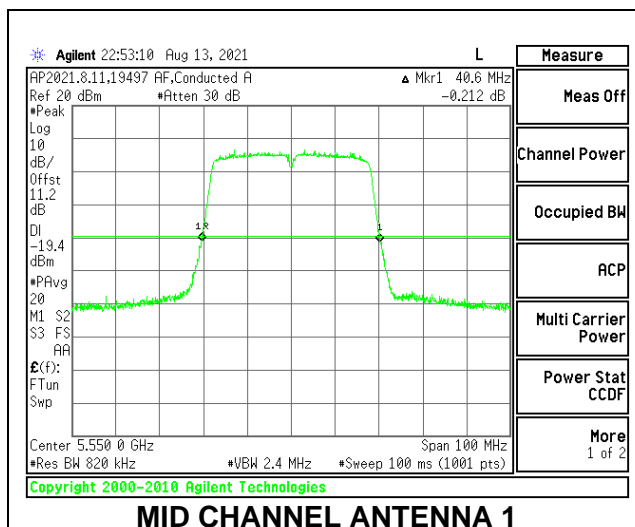
**2TX Antenna 1 + Antenna 2 CDD MODE**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 1 (MHz)	26 dB Bandwidth Antenna 2 (MHz)
Low	5510	40.70	40.30
Mid	5550	40.60	40.40
High	5670	40.60	40.20
142	5710	40.60	40.20

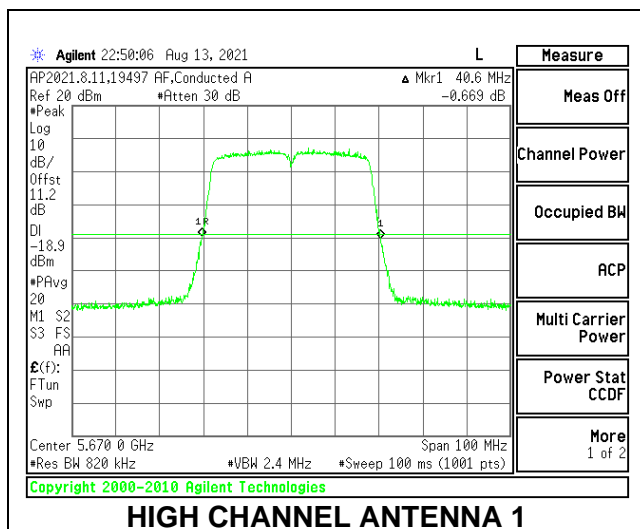
**LOW CHANNEL**



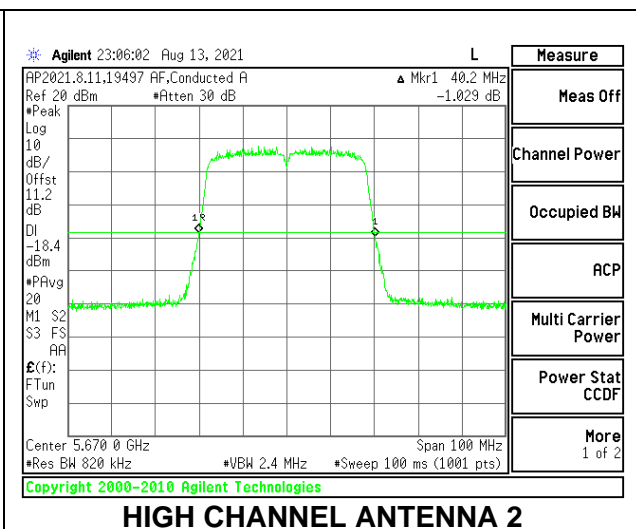
**MID CHANNEL**



### HIGH CHANNEL

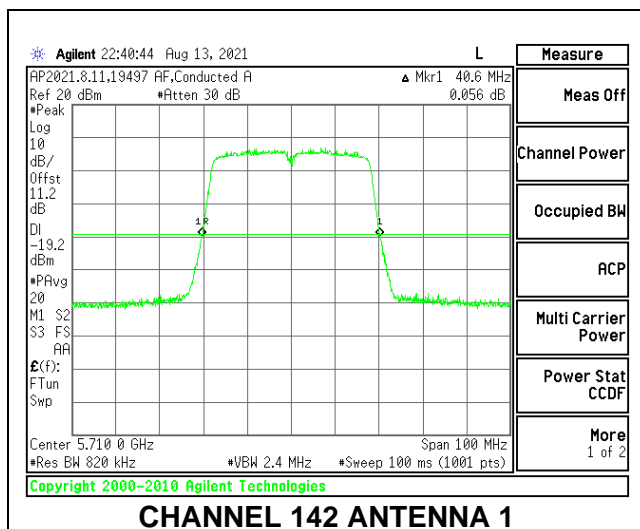


**HIGH CHANNEL ANTENNA 1**

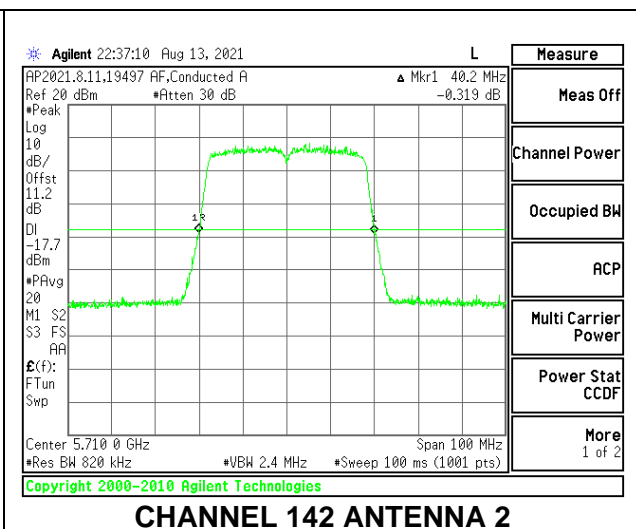


**HIGH CHANNEL ANTENNA 2**

### CHANNEL 142



**CHANNEL 142 ANTENNA 1**

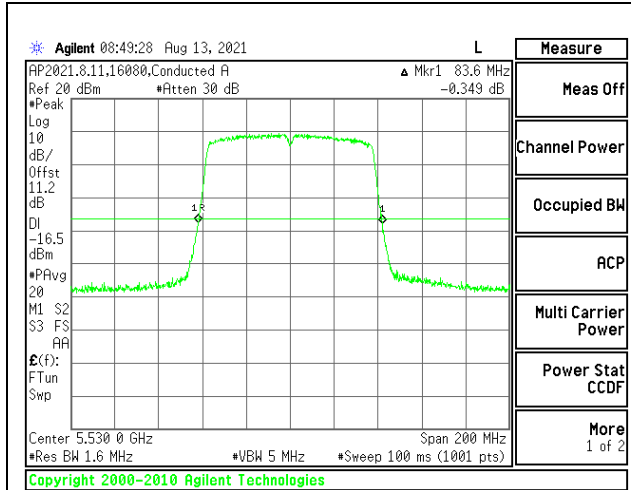


**CHANNEL 142 ANTENNA 2**

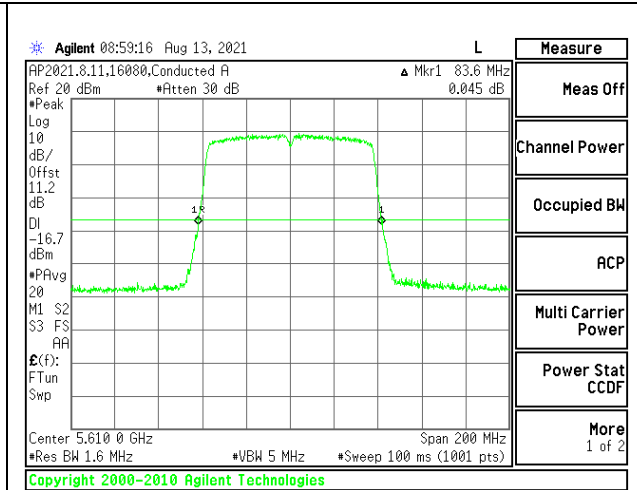
### 9.2.13. 802.11ac VHT80 MODE IN THE 5.6 GHz BAND

#### 1TX Antenna 1 MODE

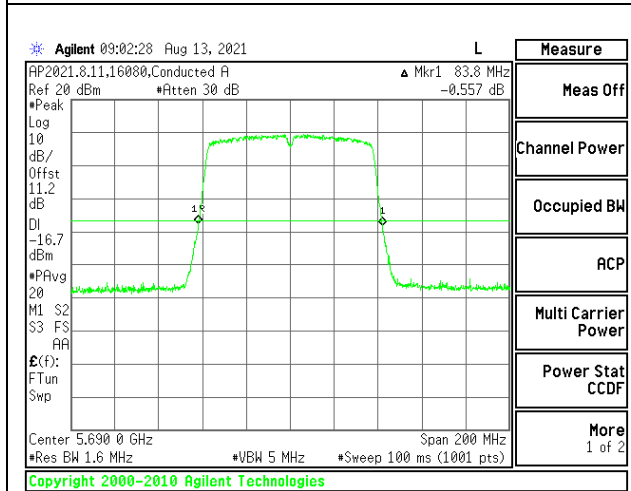
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5530	83.60
High	5610	83.60
138	5690	83.80



**LOW CHANNEL**



**HIGH CHANNEL**

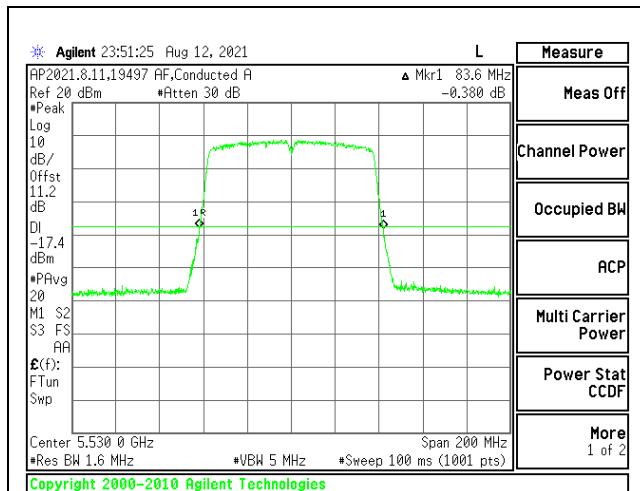


**CHANNEL 138**

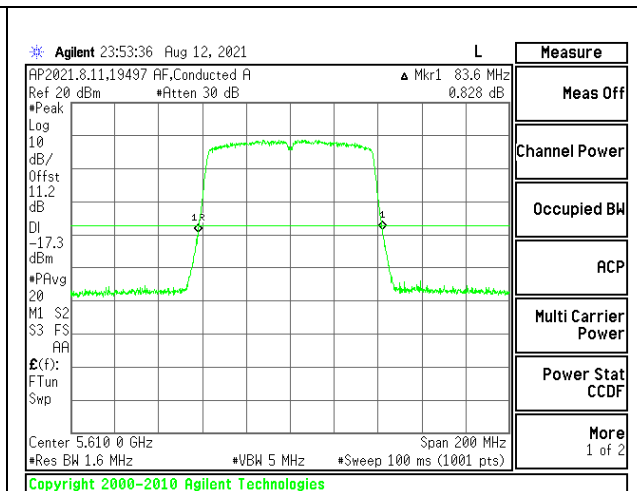
**Intentionally left blank**

**1TX Antenna 2 MODE**

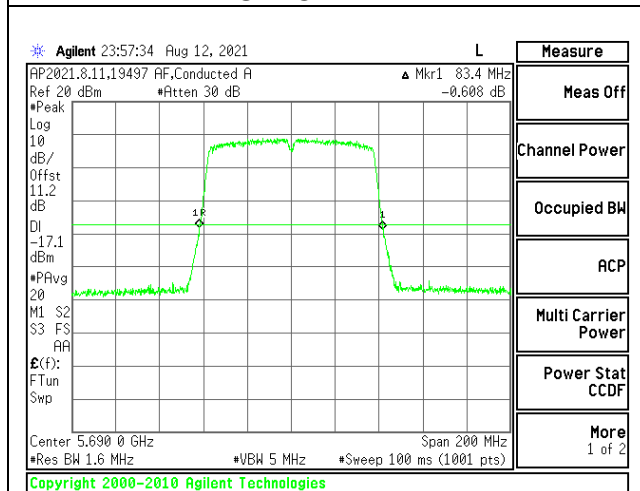
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5530	83.60
High	5610	83.60
138	5690	83.40



**LOW CHANNEL**



**HIGH CHANNEL**



**CHANNEL 138**

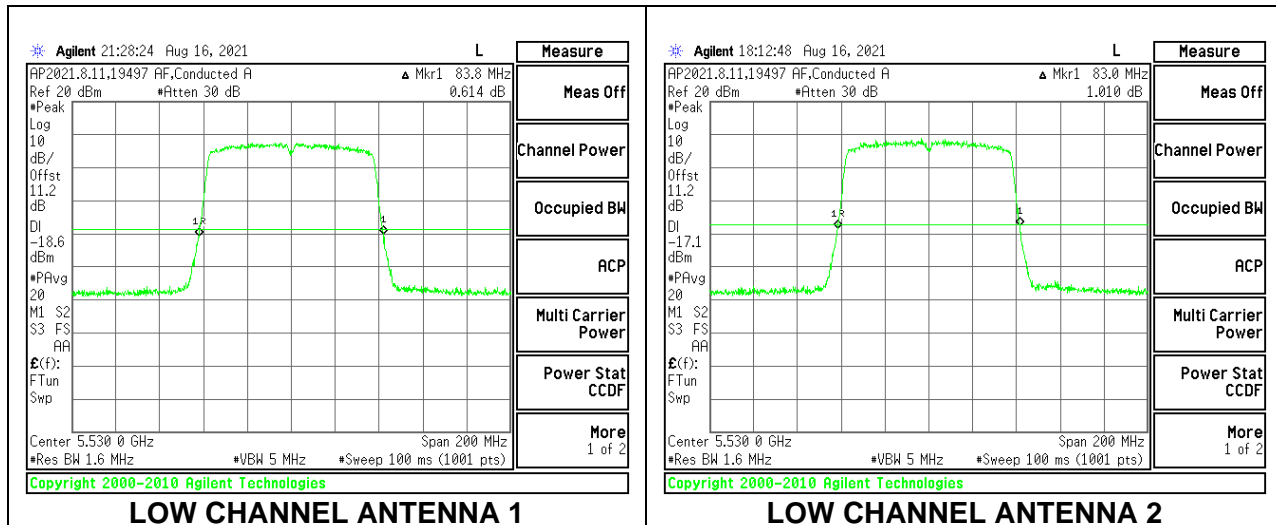
**Intentionally left blank**



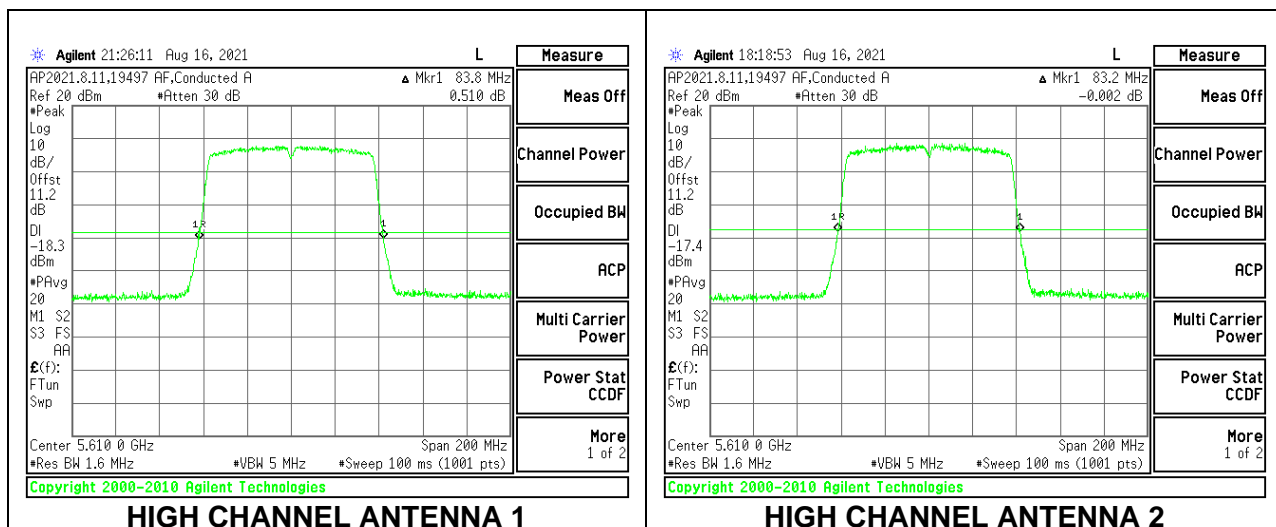
**2TX Antenna 1 + Antenna 2 CDD MODE**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 1 (MHz)	26 dB Bandwidth Antenna 2 (MHz)
Low	5530	83.80	83.00
High	5610	83.80	83.20
138	5690	83.60	83.20

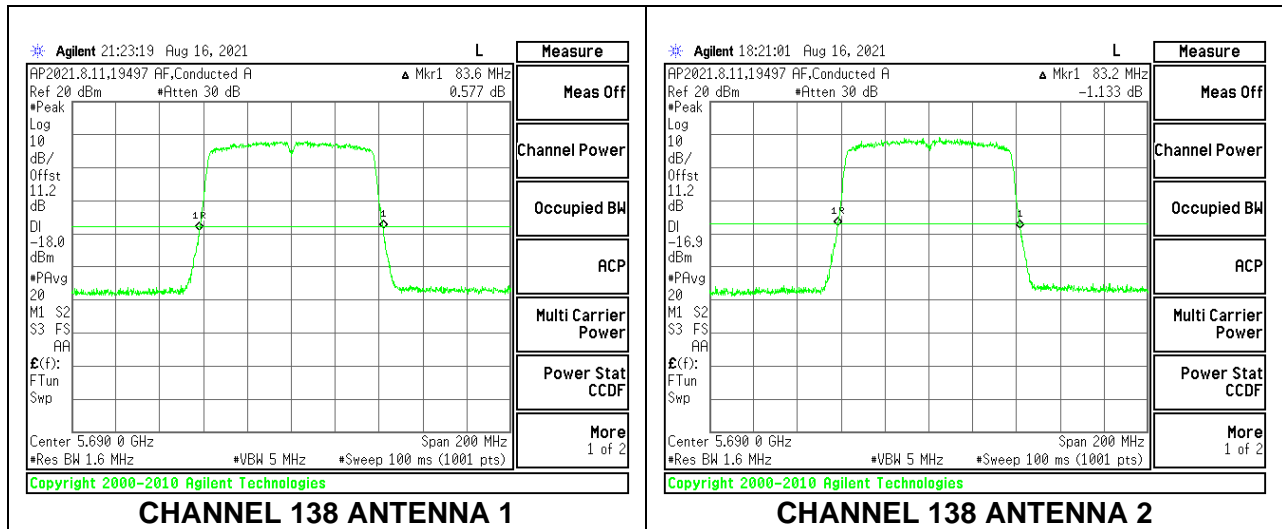
**LOW CHANNEL**



**HIGH CHANNEL**



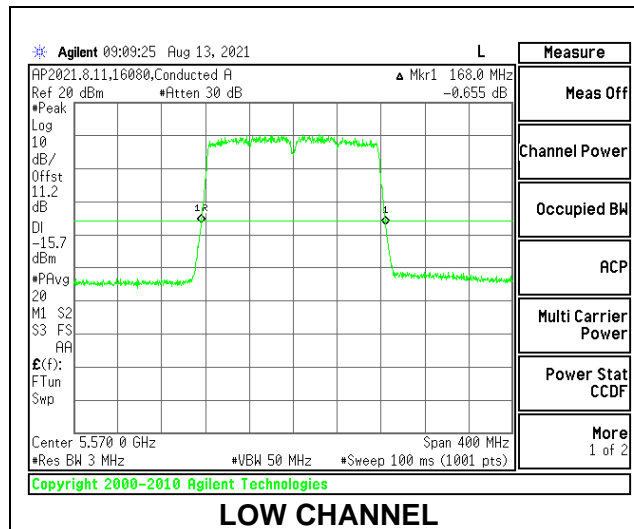
### CHANNEL 138



### 9.2.14. 802.11ac VHT160 MODE IN THE 5.6 GHz BAND

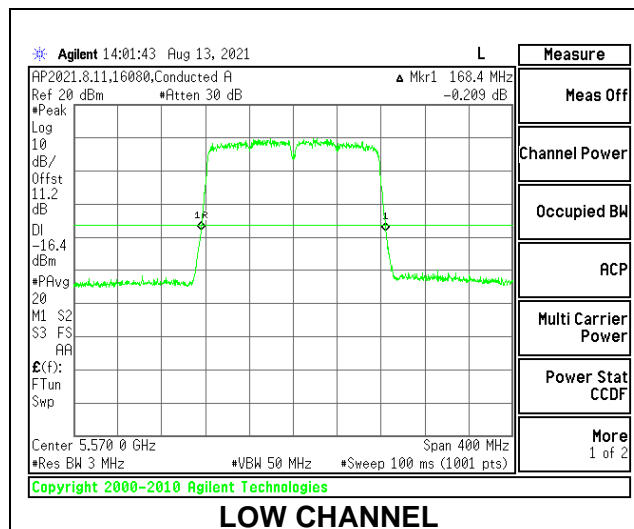
#### 1TX Antenna 1 MODE

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5570	168.00



#### 1TX Antenna 2 MODE

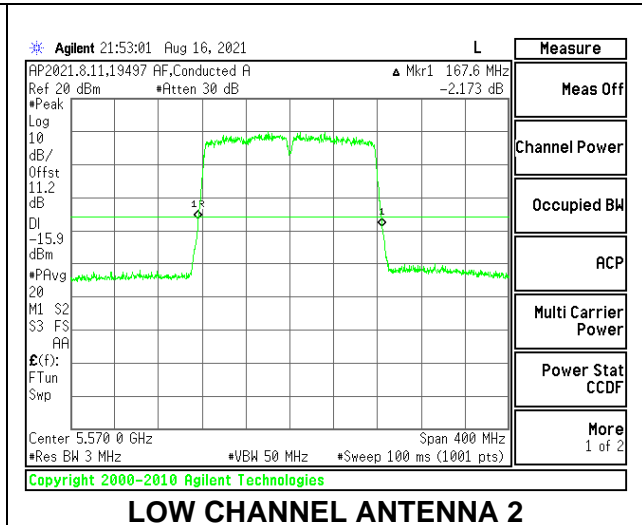
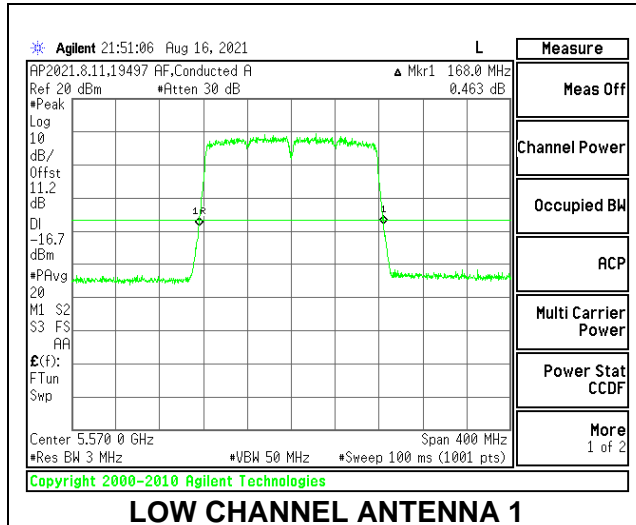
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5570	168.40



**2TX Antenna 1 + Antenna 2 CDD MODE**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 1 (MHz)	26 dB Bandwidth Antenna 2 (MHz)
Low	5570	168.00	167.60

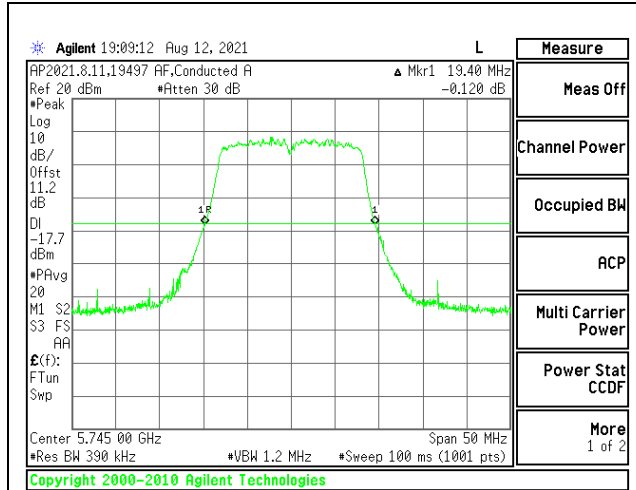
**LOW CHANNEL**



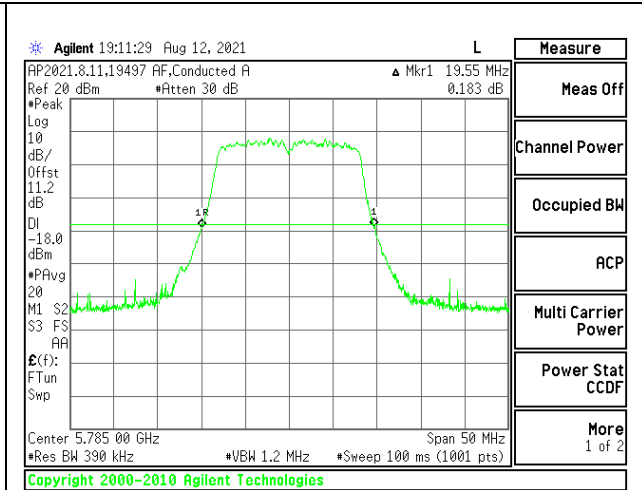
### 9.2.15. 802.11a MODE IN THE 5.8 GHz BAND

#### 1TX Antenna 1 MODE

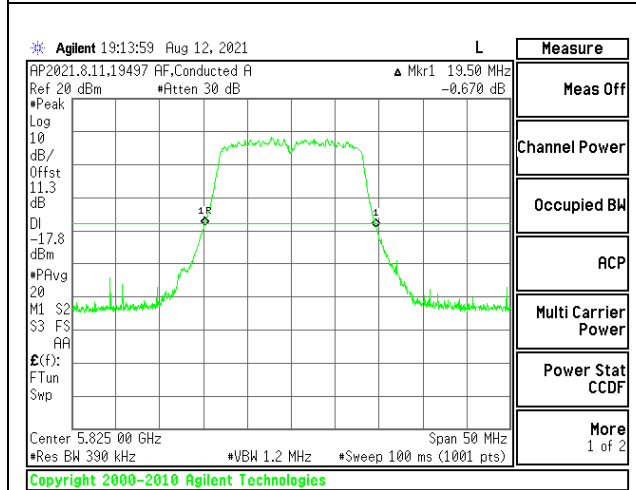
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5745	19.40
Mid	5785	19.55
High	5825	19.50



**LOW CHANNEL**



**MID CHANNEL**

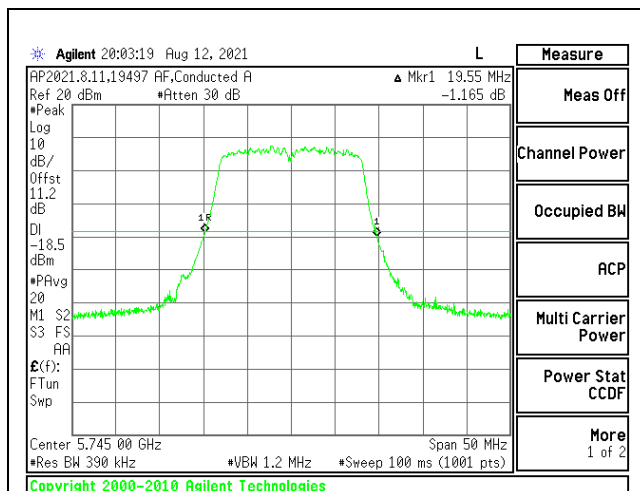


**HIGH CHANNEL**

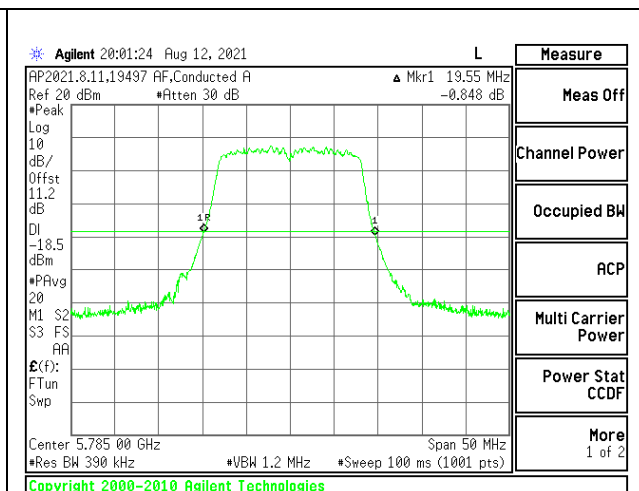
**Intentionally left blank**

**1TX Antenna 2 MODE**

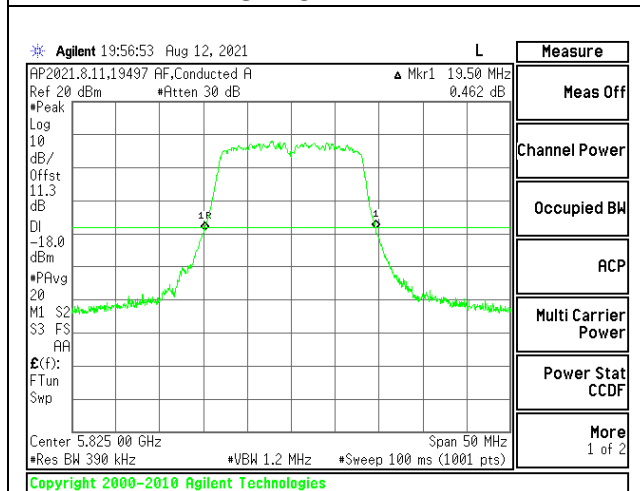
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5745	19.55
Mid	5785	19.55
High	5825	19.50



**LOW CHANNEL**



**MID CHANNEL**

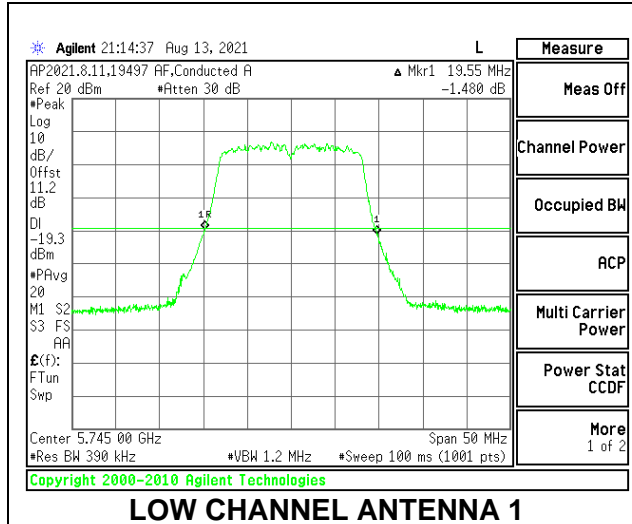


**HIGH CHANNEL**

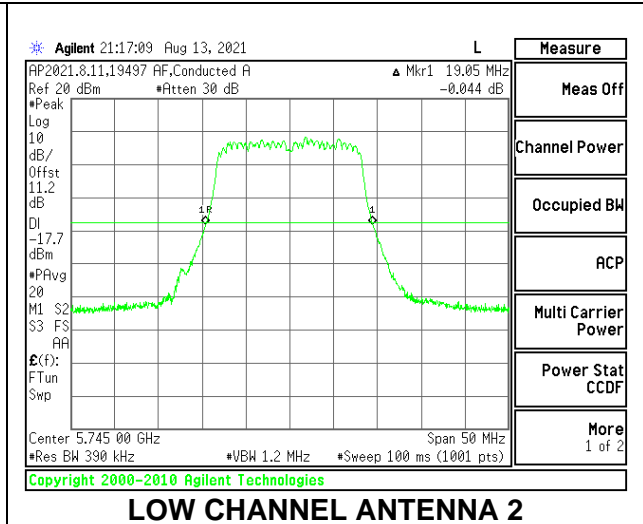
**2TX Antenna 1 + Antenna 2 CDD MODE**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 1 (MHz)	26 dB Bandwidth Antenna 2 (MHz)
Low	5745	19.55	19.05
Mid	5785	19.50	19.10
High	5825	19.50	19.05

**LOW CHANNEL**

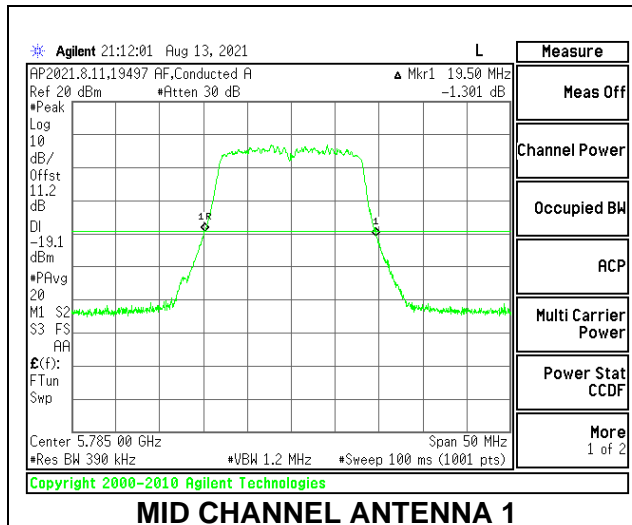


**LOW CHANNEL ANTENNA 1**

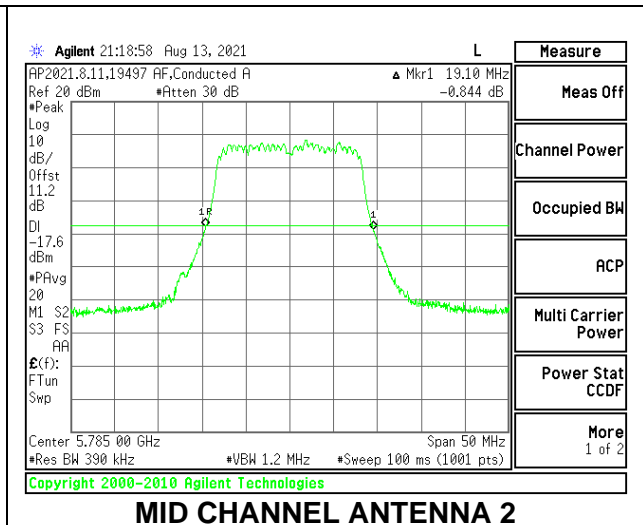


**LOW CHANNEL ANTENNA 2**

**MID CHANNEL**

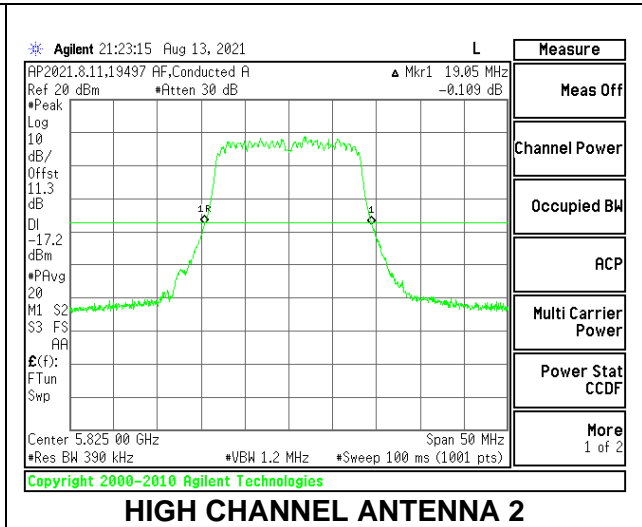
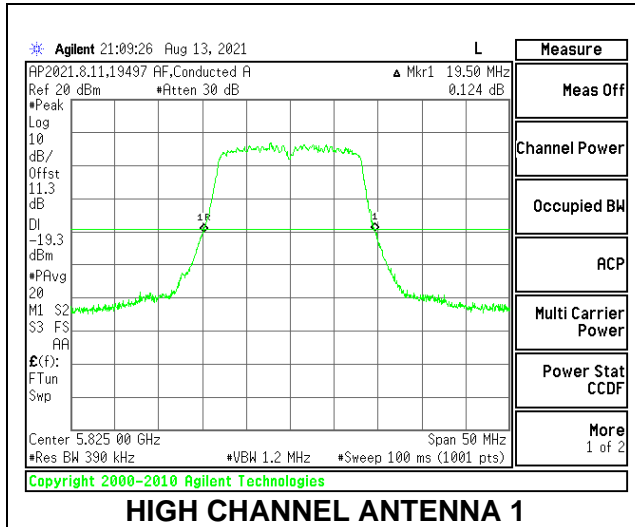


**MID CHANNEL ANTENNA 1**



**MID CHANNEL ANTENNA 2**

### HIGH CHANNEL

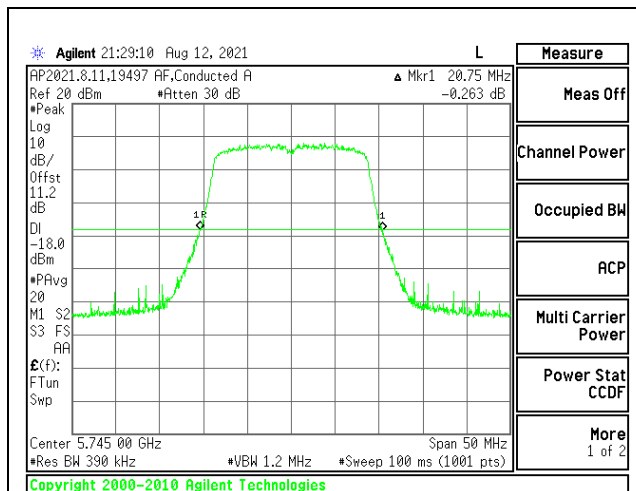




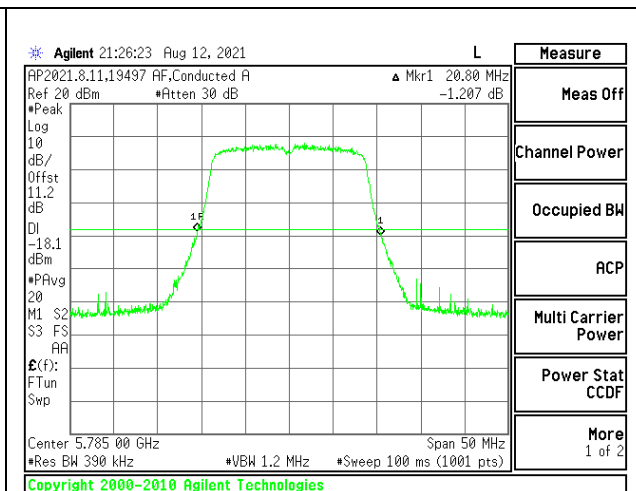
### 9.2.16. 802.11n HT20 MODE IN THE 5.8 GHz BAND

#### 1TX Antenna 1 MODE

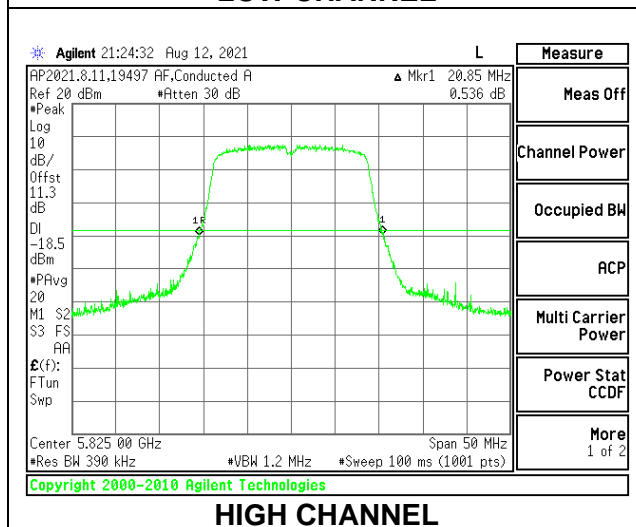
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5745	20.75
Mid	5785	20.80
High	5825	20.85



**LOW CHANNEL**



**MID CHANNEL**

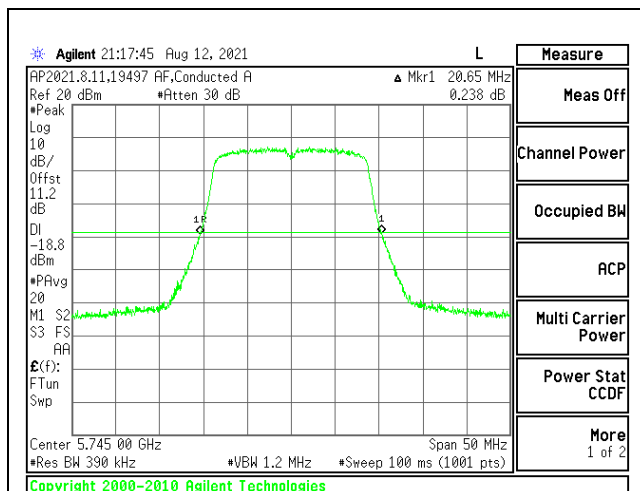


**HIGH CHANNEL**

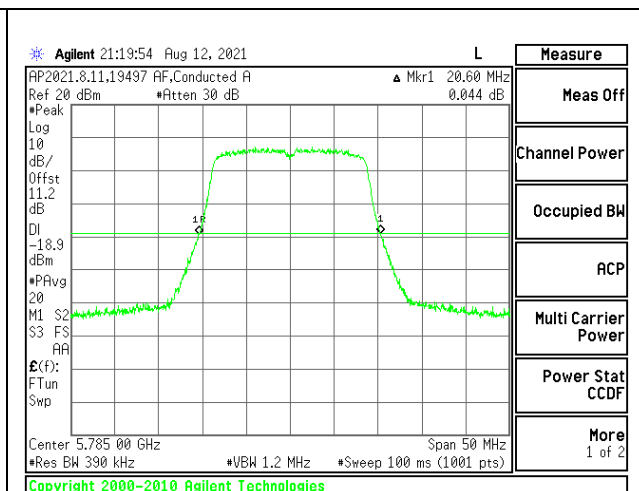
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**1TX Antenna 2 MODE**

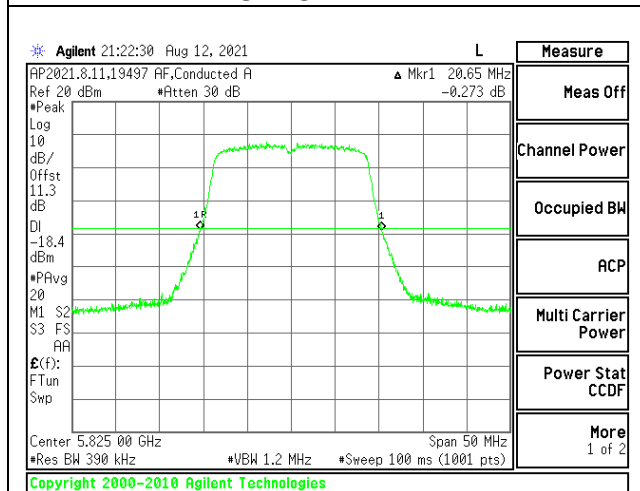
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5745	20.65
Mid	5785	20.60
High	5825	20.65



**LOW CHANNEL**



**MID CHANNEL**



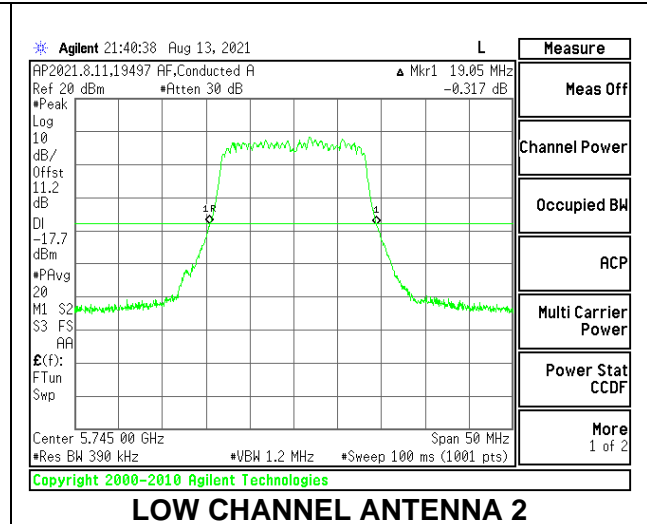
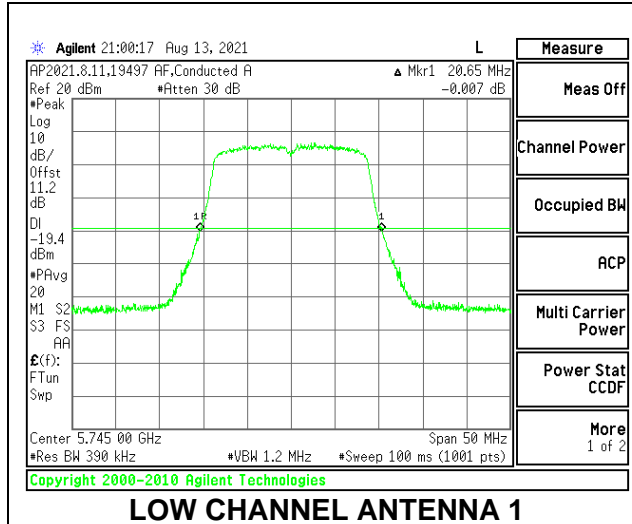
**HIGH CHANNEL**

**Intentionally left blank**

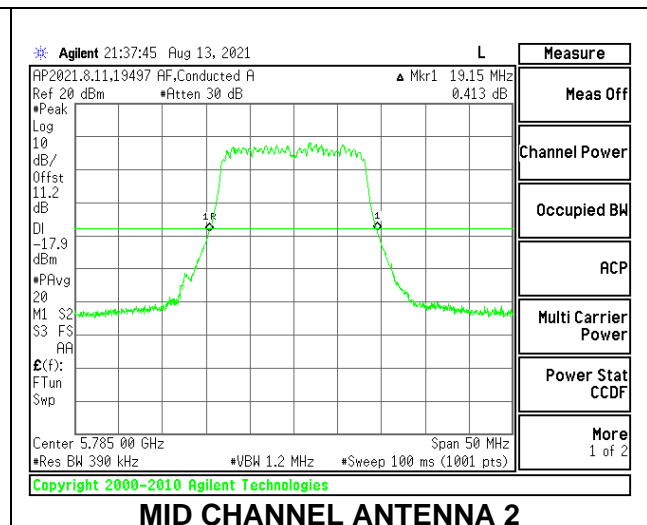
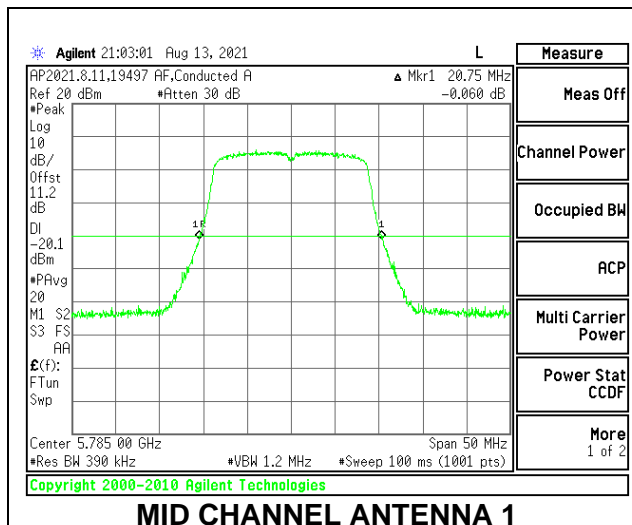
**2TX Antenna 1 + Antenna 2 CDD MODE**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 1 (MHz)	26 dB Bandwidth Antenna 2 (MHz)
Low	5745	20.65	19.05
Mid	5785	20.75	19.15
High	5825	19.50	19.05

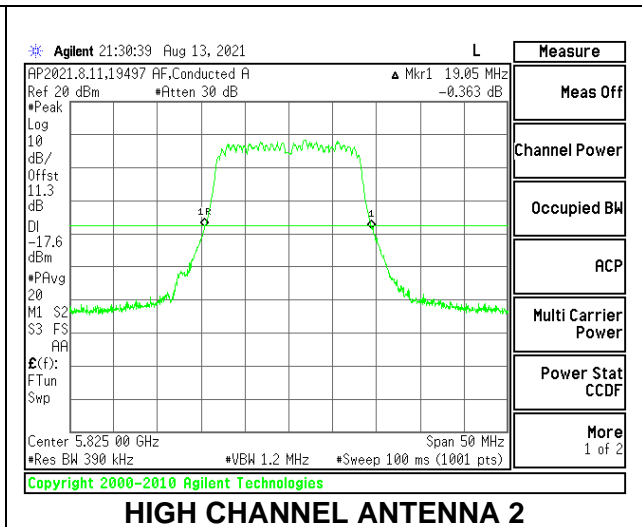
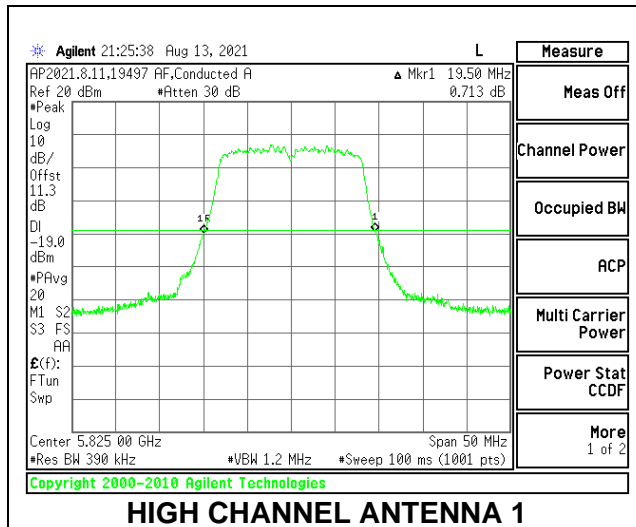
**LOW CHANNEL**



**MID CHANNEL**



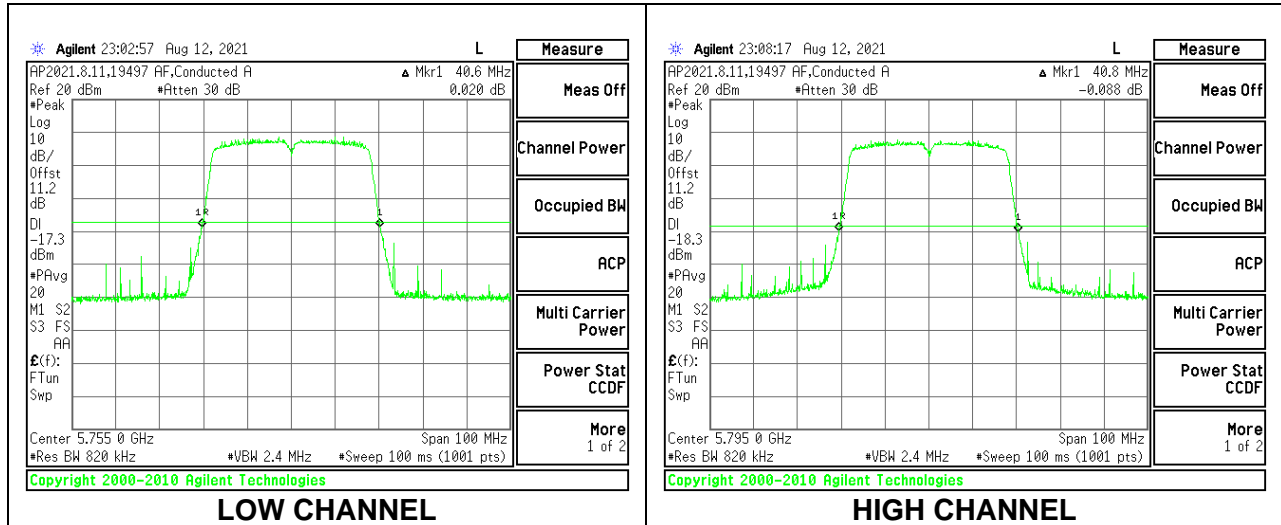
### HIGH CHANNEL



### 9.2.17. 802.11n HT40 MODE IN THE 5.8 GHz BAND

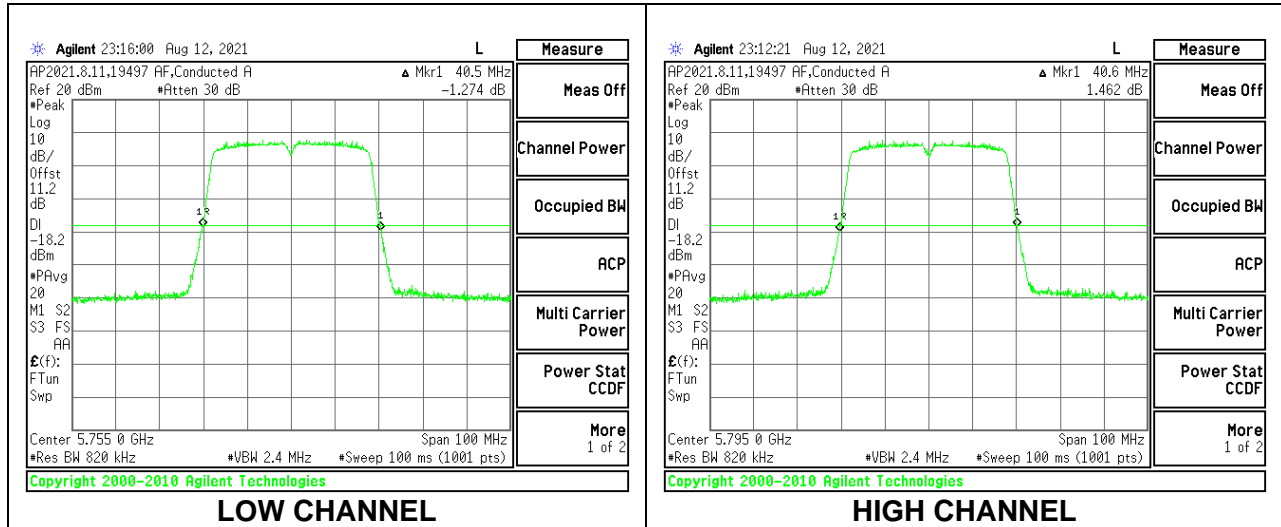
#### 1TX Antenna 1 MODE

Channel	Frequency (MHz)	26dB Bandwidth (MHz)
Low	5755	40.60
High	5795	40.80



**1TX Antenna 2 MODE**

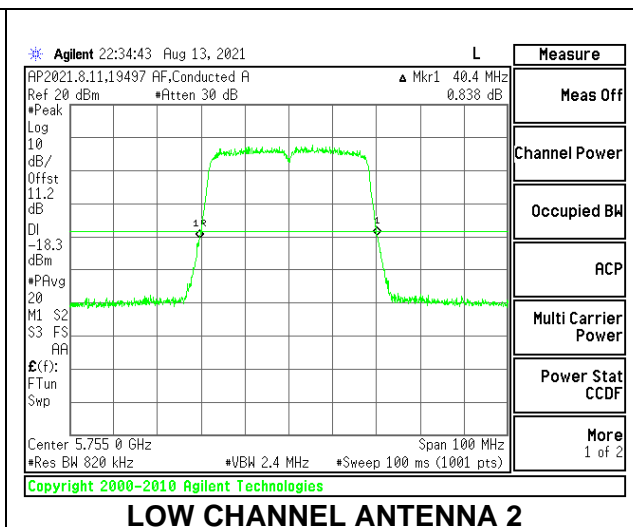
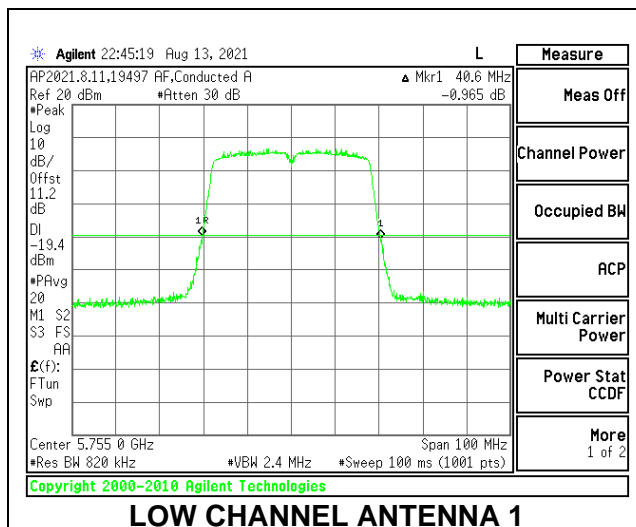
Channel	Frequency (MHz)	26dB Bandwidth (MHz)
Low	5755	40.50
High	5795	40.60



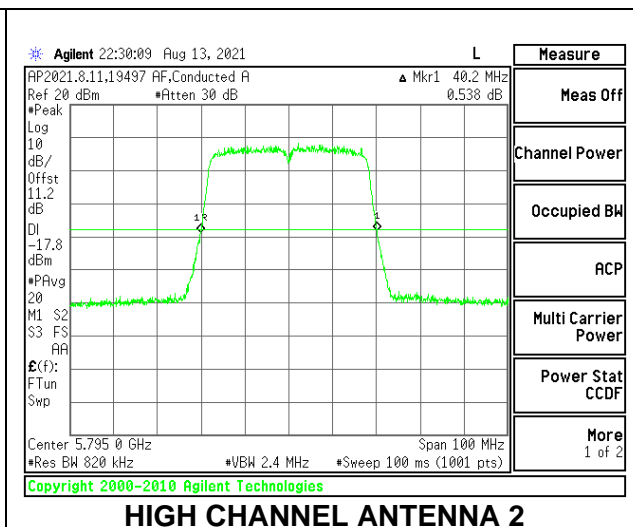
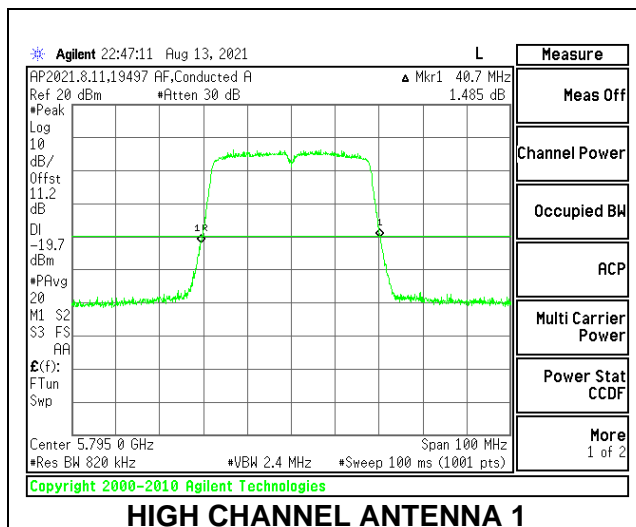
**2TX Antenna 1 + Antenna 2 CDD MODE**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 1 (MHz)	26 dB Bandwidth Antenna 2 (MHz)
Low	5755	40.60	40.40
High	5795	40.70	40.20

**LOW CHANNEL**



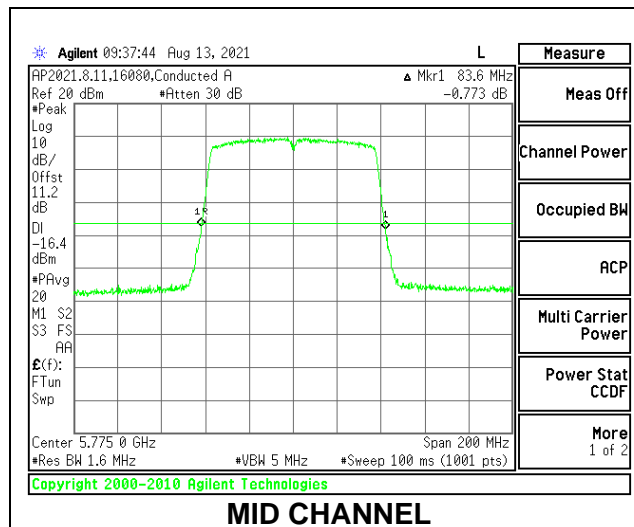
**HIGH CHANNEL**



**9.2.18. 802.11ac VHT80 MODE IN THE 5.8 GHz BAND**

**1TX Antenna 1 MODE**

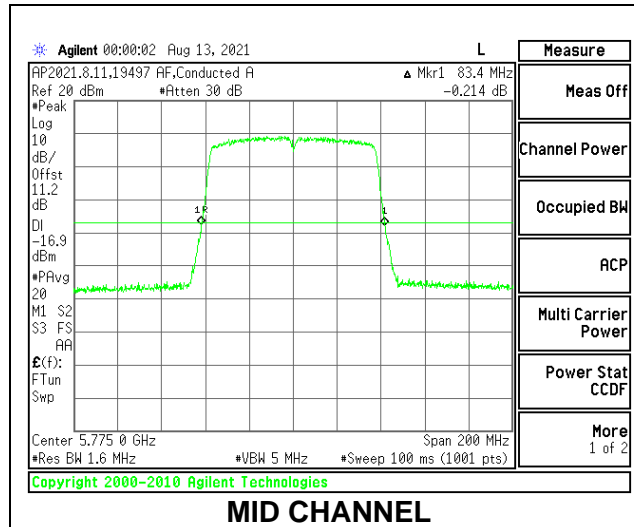
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Mid	5775	83.60





**1TX Antenna 2 MODE**

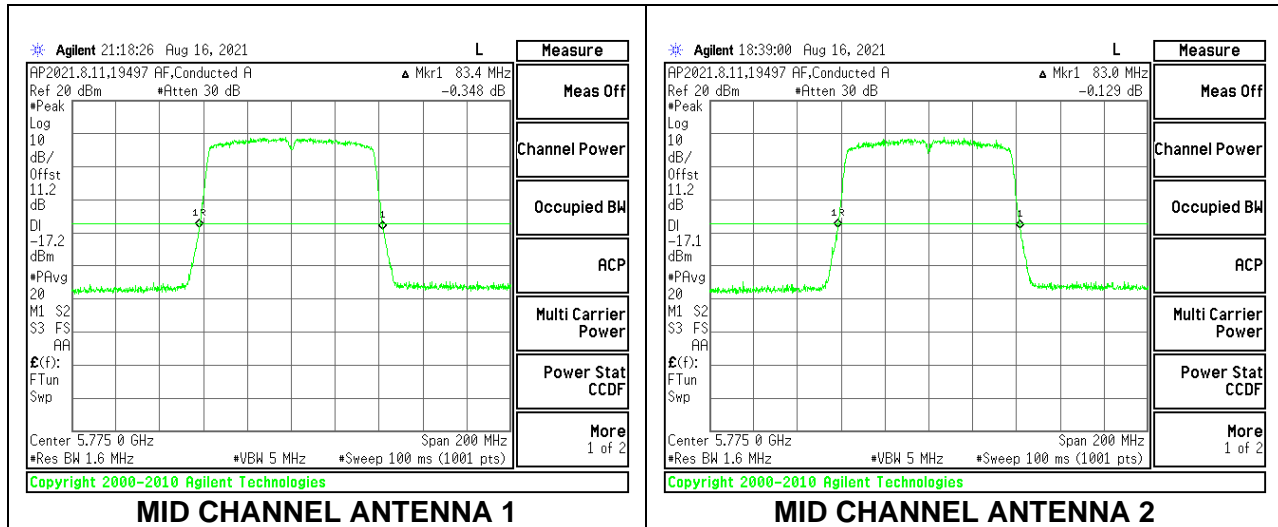
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Mid	5775	83.40



**2TX Antenna 1 + Antenna 2 CDD MODE**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 1 (MHz)	26 dB Bandwidth Antenna 2 (MHz)
Mid	5775	83.40	83.00

**MID CHANNEL**



### 9.3. 99% BANDWIDTH

#### **LIMITS**

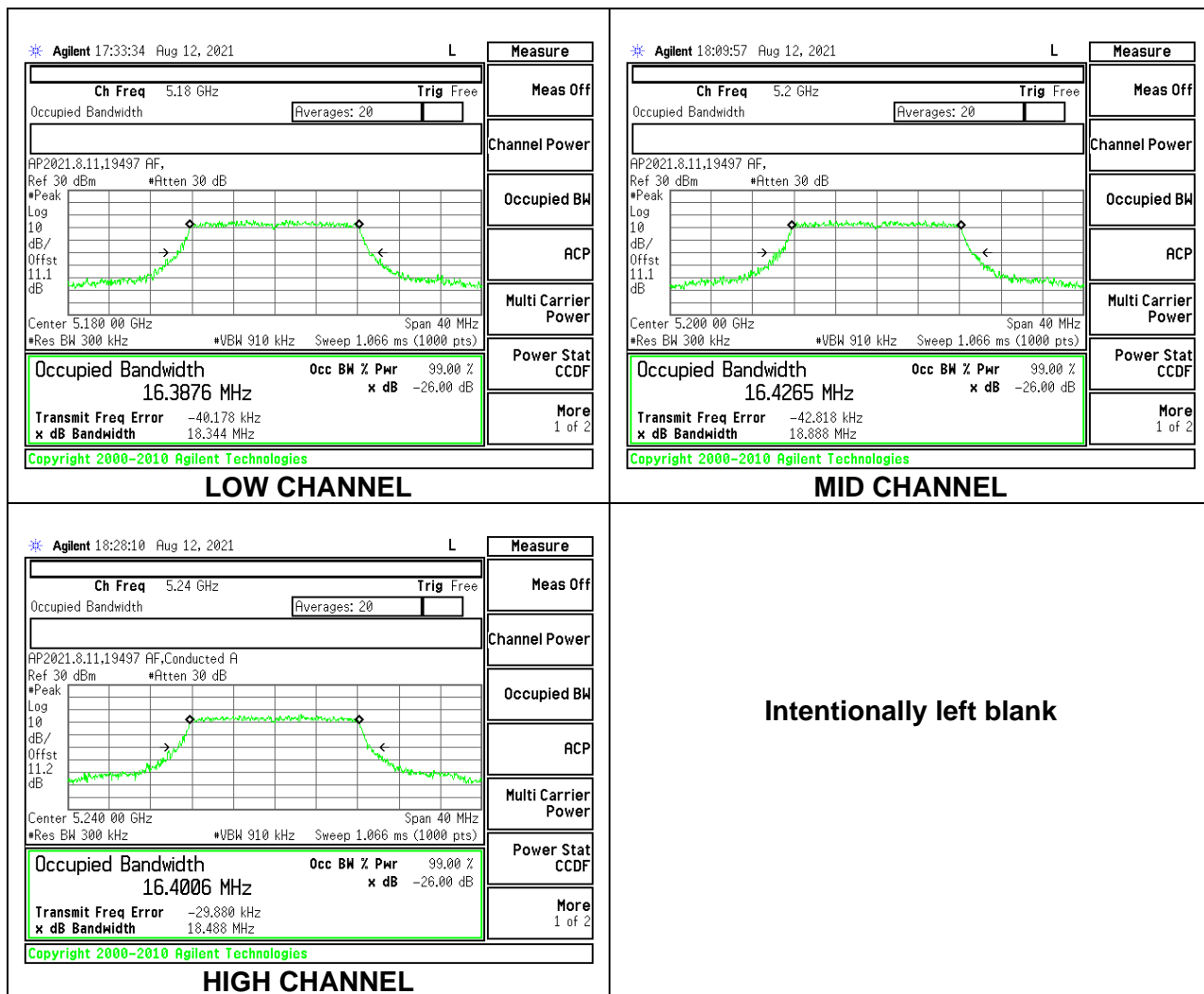
None; for reporting purposes only.

#### **RESULTS**

### 9.3.1. 802.11a MODE IN THE 5.2 GHz BAND

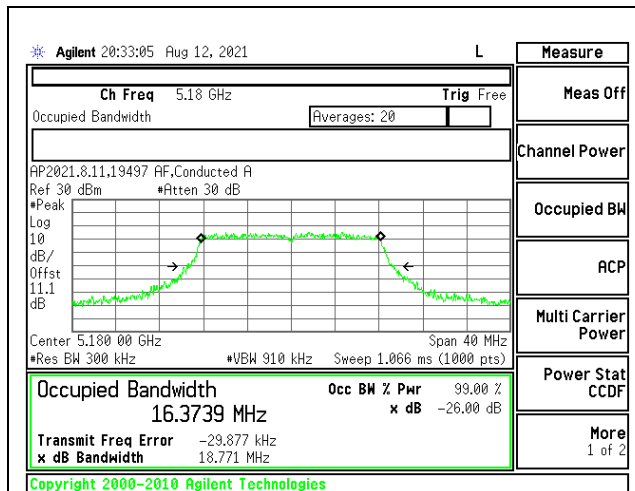
#### 1TX Antenna 1 MODE

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5180	16.388
Mid	5200	16.427
High	5240	16.401

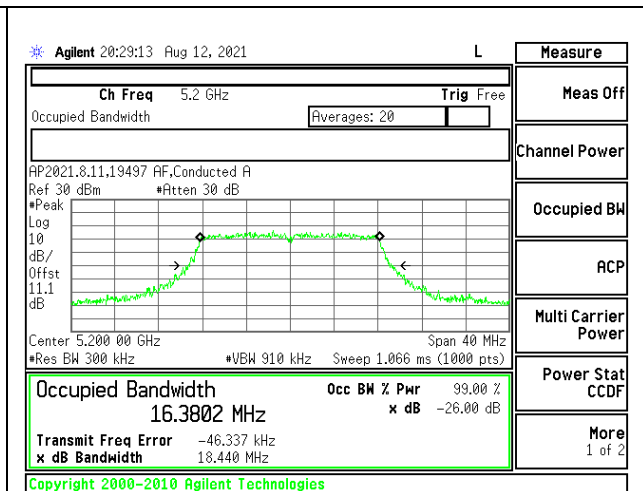


**1TX Antenna 2 MODE**

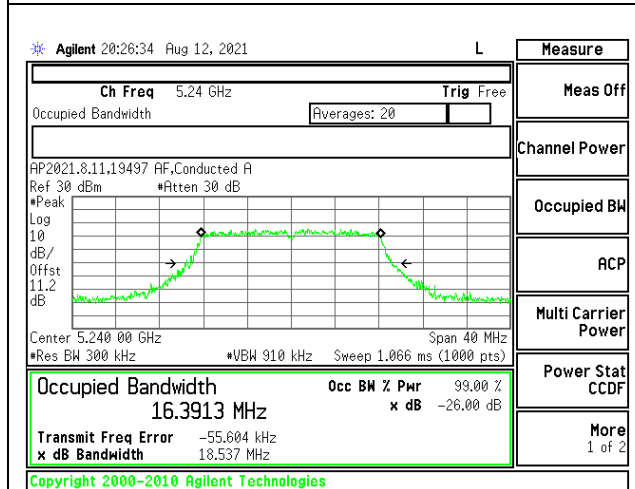
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5180	16.374
Mid	5200	16.380
High	5240	16.391



**LOW CHANNEL**



**MID CHANNEL**



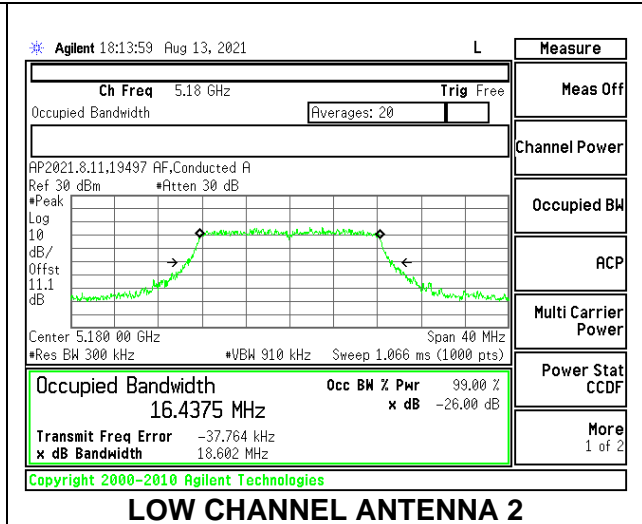
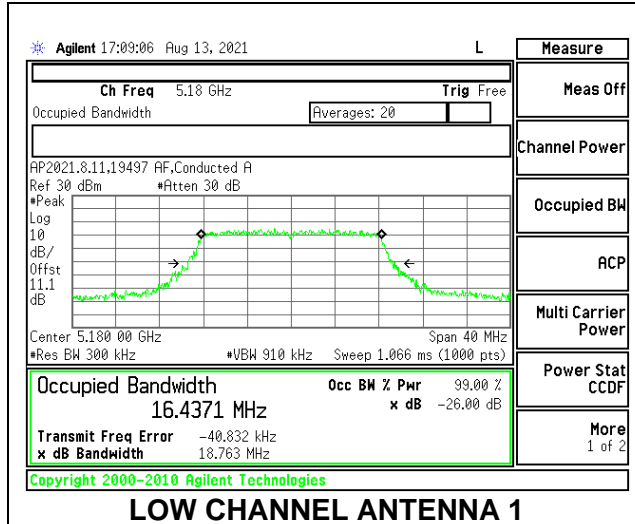
**HIGH CHANNEL**

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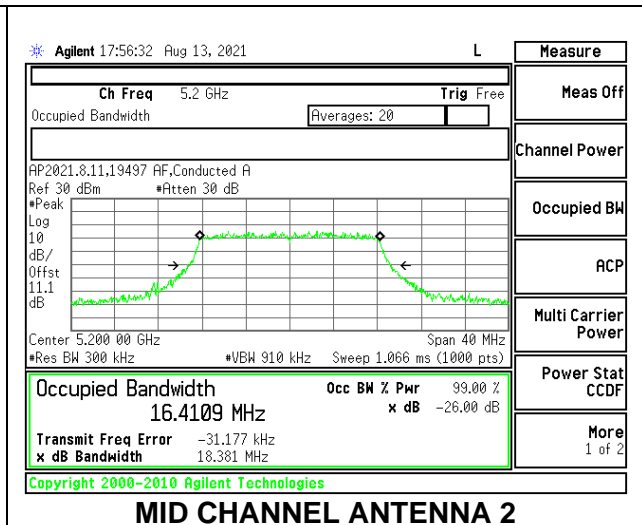
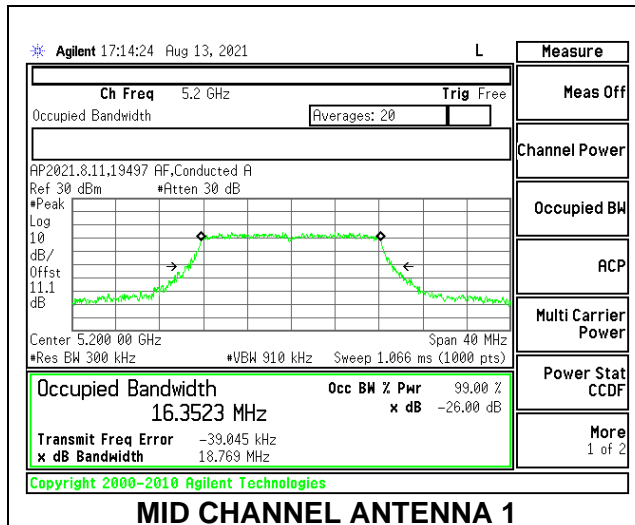
**2TX Antenna 1 + Antenna 2 CDD MODE**

Channel	Frequency (MHz)	99% Bandwidth Antenna 1 (MHz)	99% Bandwidth Antenna 2 (MHz)
Low	5180	16.437	16.438
Mid	5200	16.352	16.411
High	5240	16.377	16.383

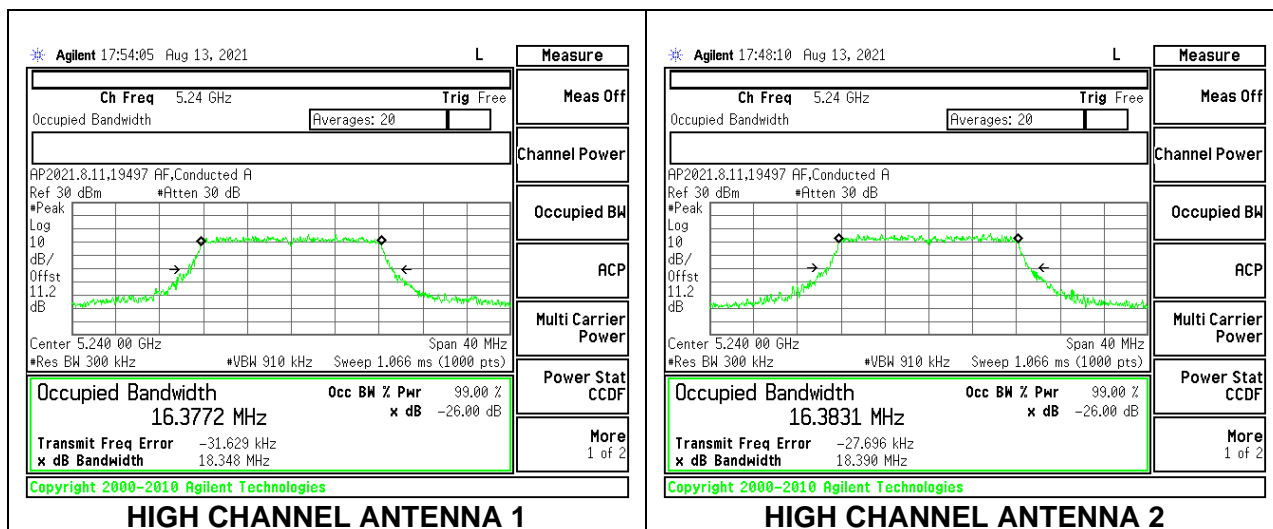
**LOW CHANNEL**



**MID CHANNEL**



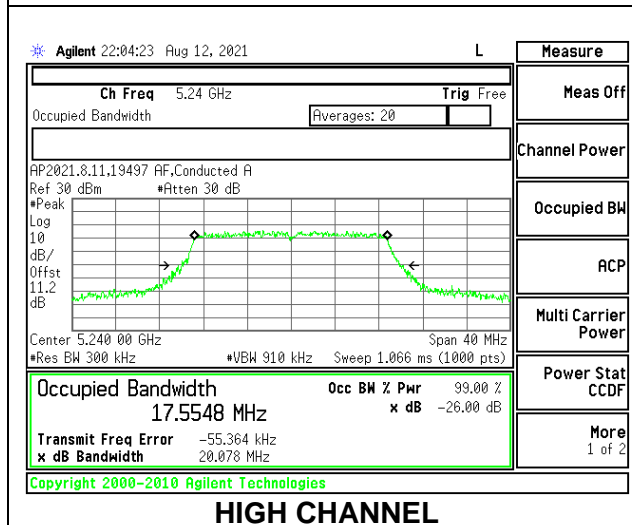
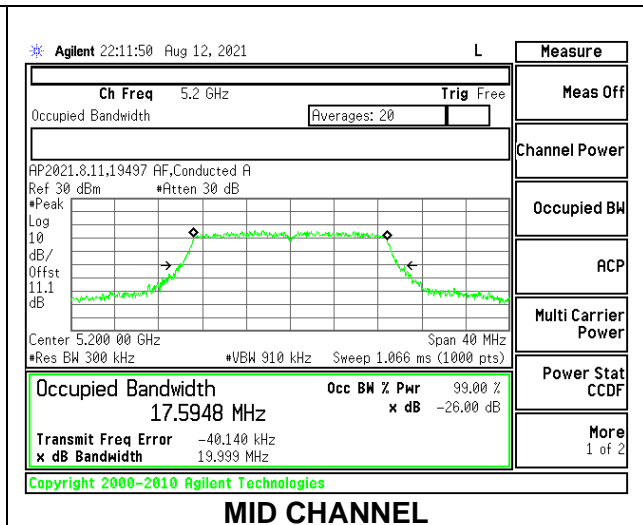
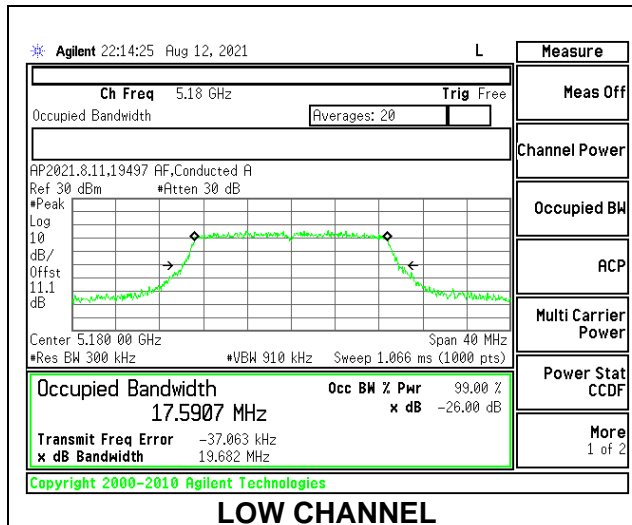
### HIGH CHANNEL



### 9.3.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

#### 1TX Antenna 1 MODE

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5180	17.591
Mid	5200	17.595
High	5240	17.555

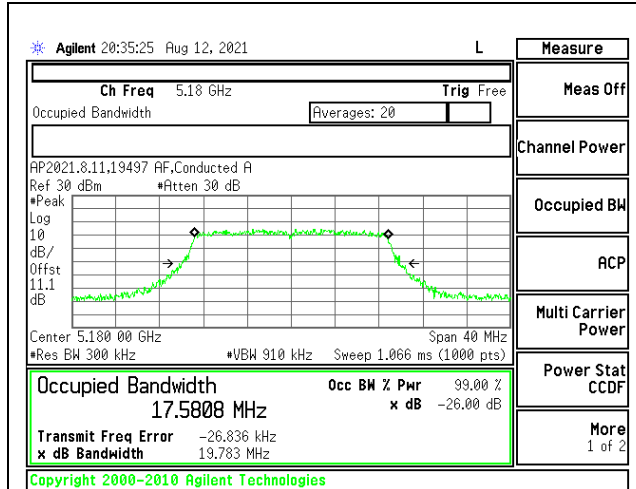


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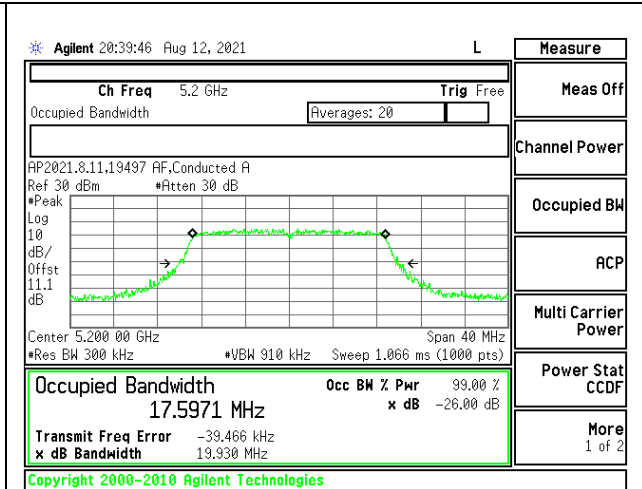


**1TX Antenna 2 MODE**

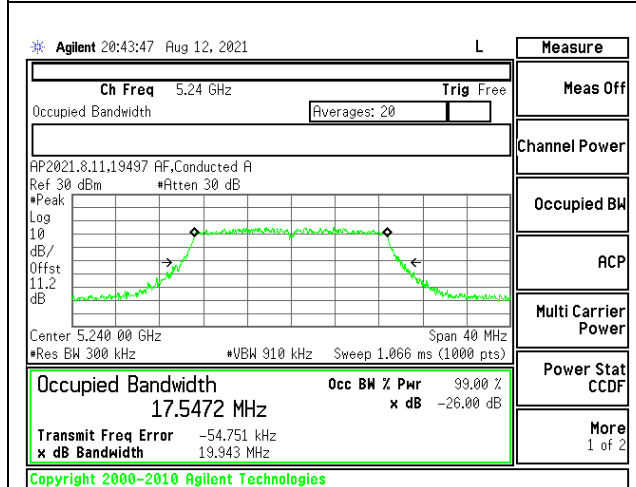
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5180	17.581
Mid	5200	17.597
High	5240	17.547



**LOW CHANNEL**



**MID CHANNEL**



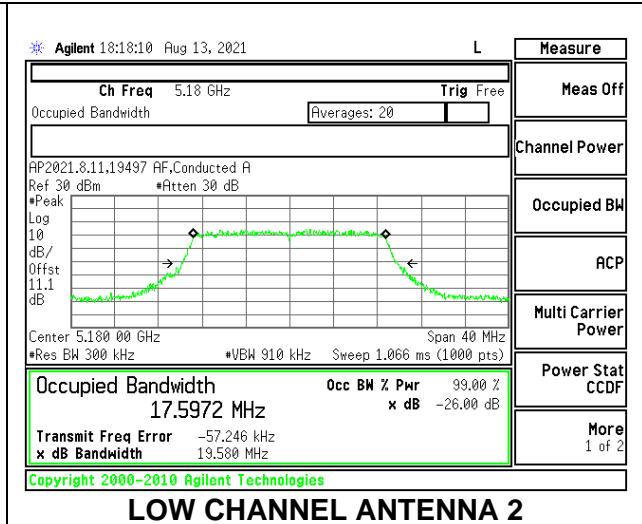
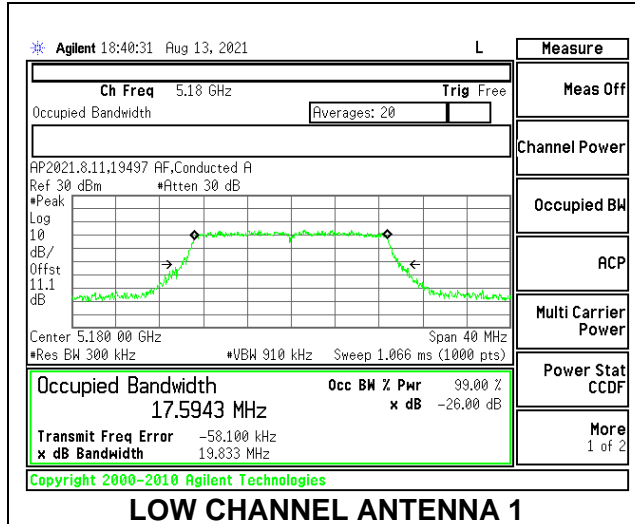
**HIGH CHANNEL**

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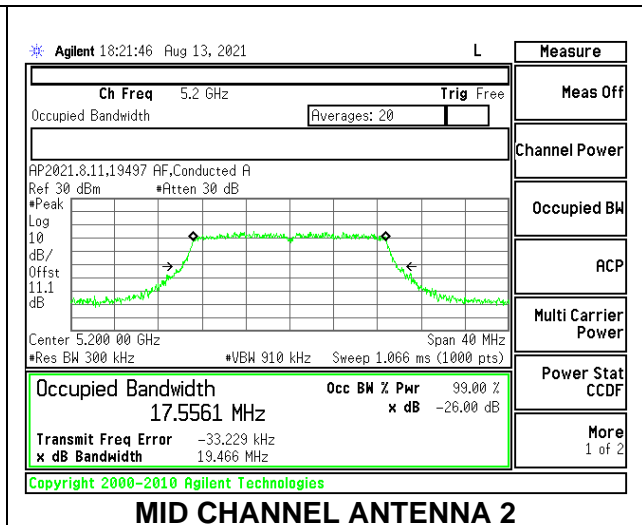
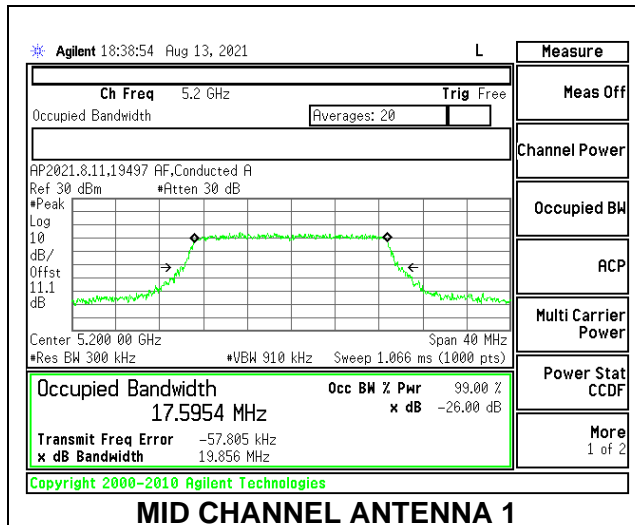
**2TX Antenna 1 + Antenna 2 CDD MODE**

Channel	Frequency (MHz)	99% Bandwidth Antenna 1 (MHz)	99% Bandwidth Antenna 2 (MHz)
Low	5180	17.594	17.597
Mid	5200	17.595	17.556
High	5240	17.599	17.556

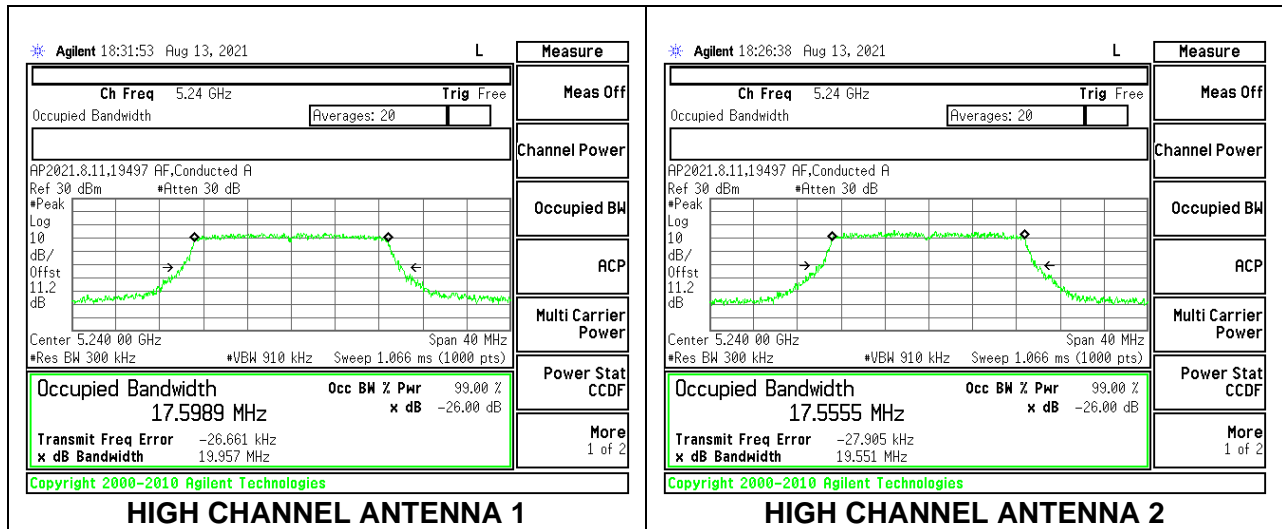
**LOW CHANNEL**



**MID CHANNEL**



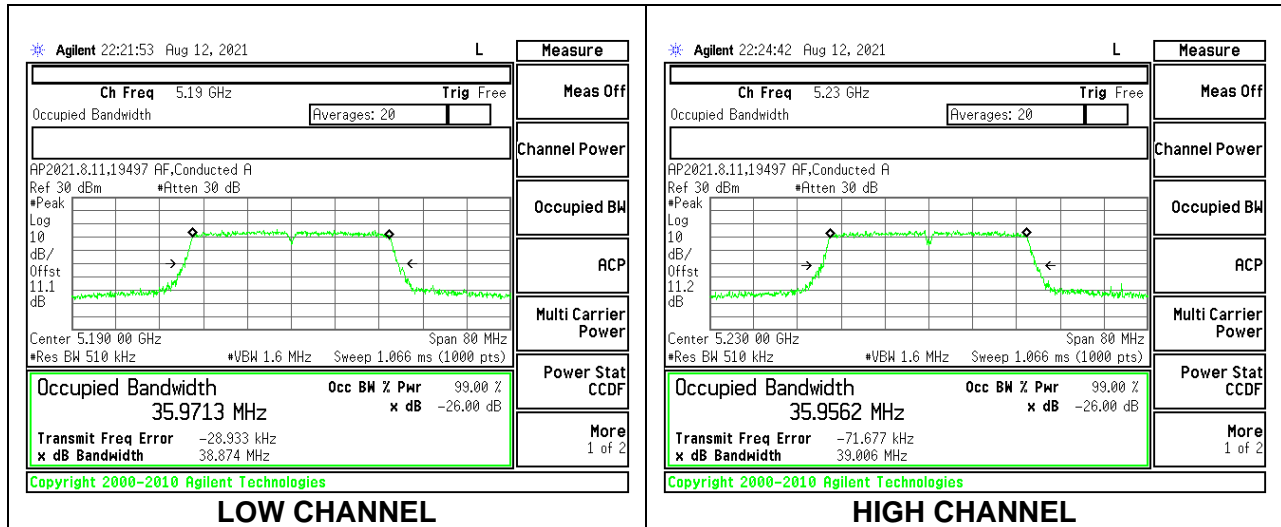
### HIGH CHANNEL



### 9.3.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND

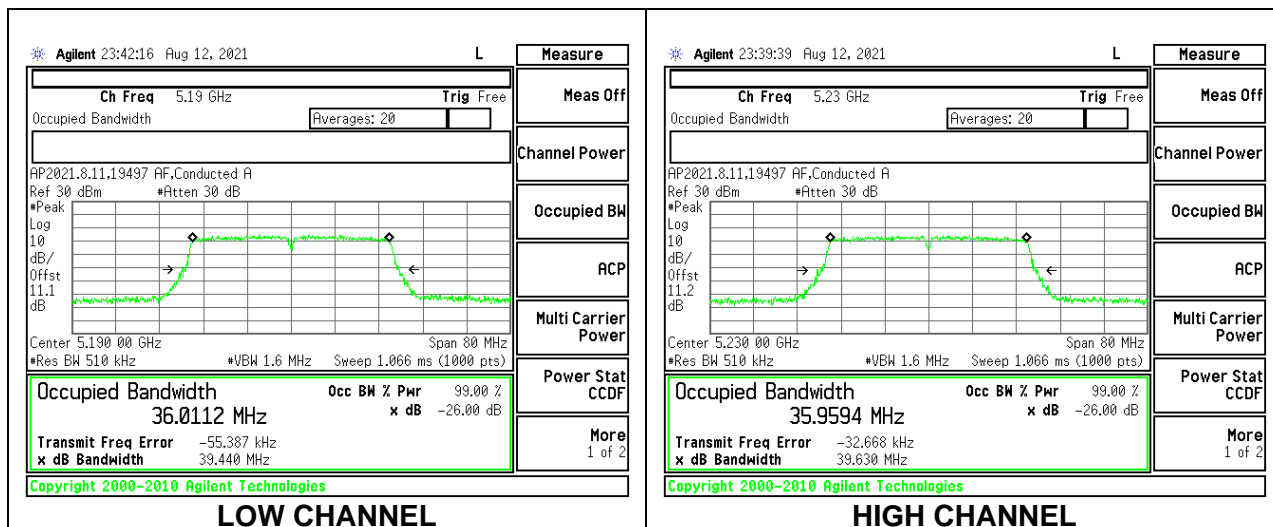
#### 1TX Antenna 1 MODE

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5190	35.971
High	5230	35.956



**1TX Antenna 2 MODE**

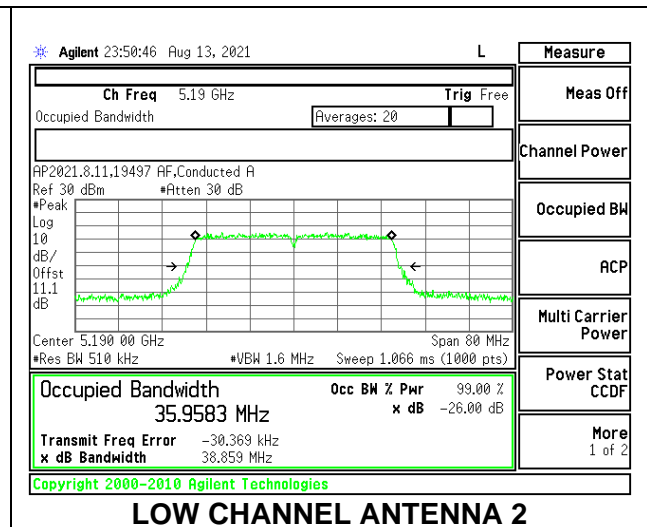
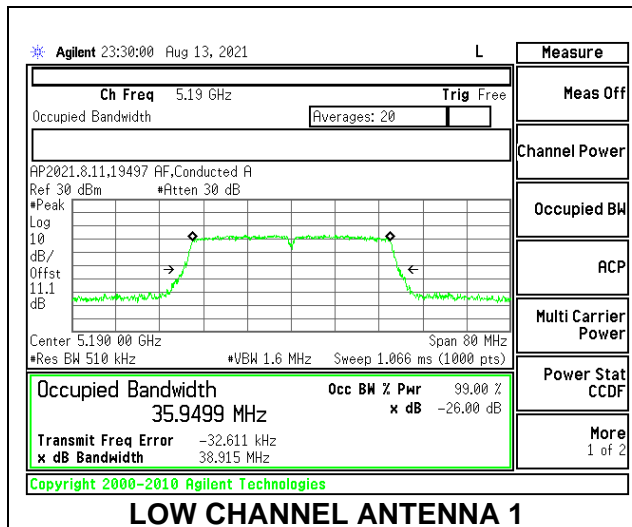
Channel	Frequency	99% Bandwidth
	(MHz)	(MHz)
Low	5190	36.011
High	5230	35.959



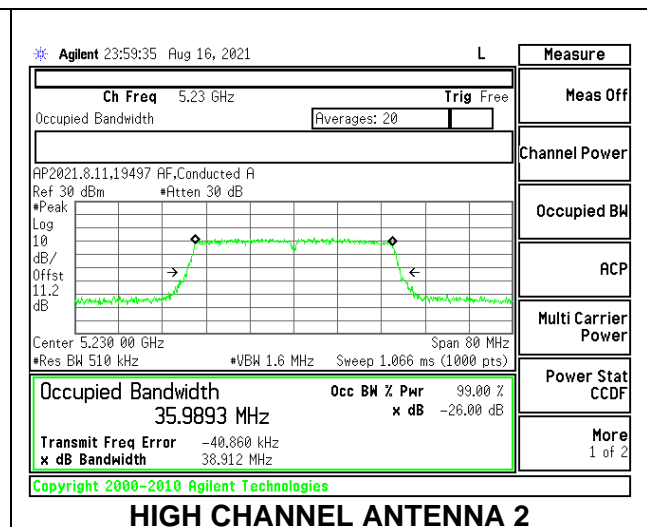
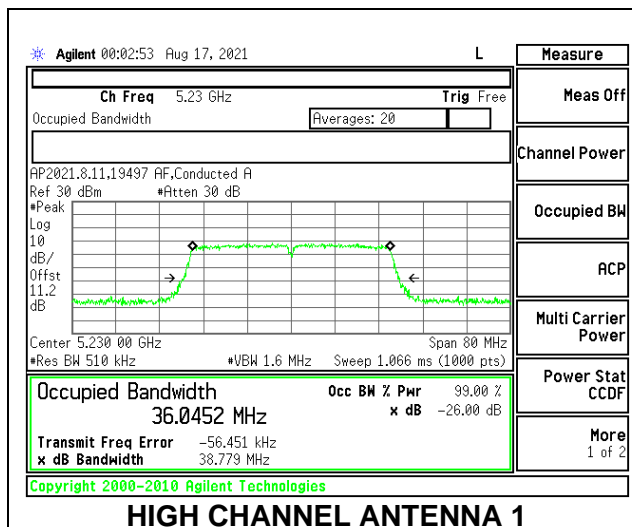
**2TX Antenna 1 + Antenna 2 CDD MODE**

Channel	Frequency (MHz)	99% Bandwidth Antenna 1 (MHz)	99% Bandwidth Antenna 2 (MHz)
Low	5190	35.950	35.958
High	5230	36.045	35.989

**LOW CHANNEL**



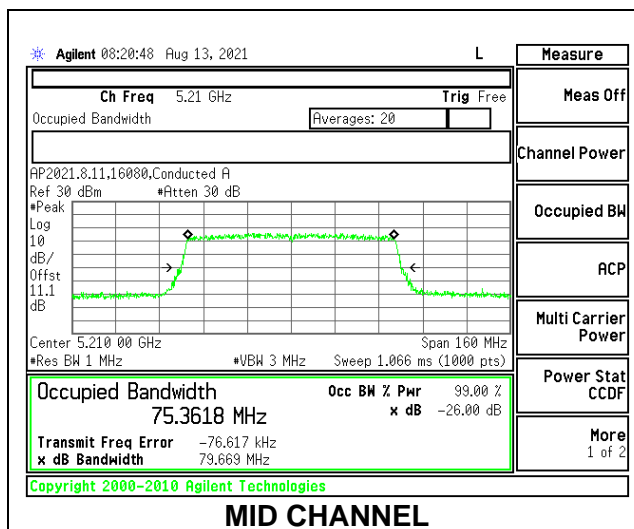
**HIGH CHANNEL**



### 9.3.4. 802.11ac VHT80 MODE IN THE 5.2 GHz BAND

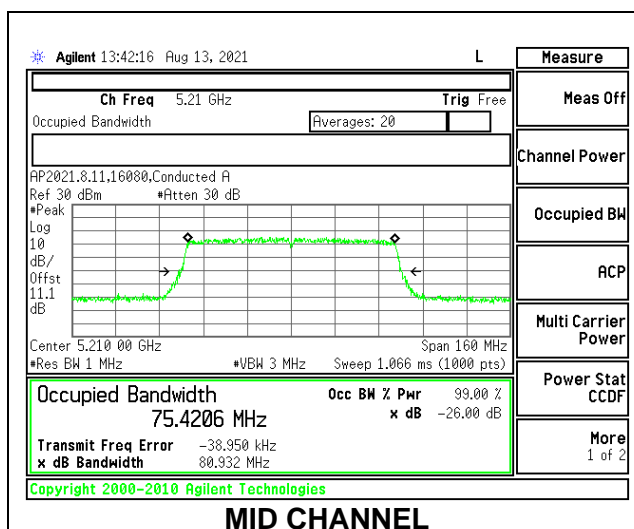
#### 1TX Antenna 1 MODE

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Mid	5210	75.362



#### 1TX Antenna 2 MODE

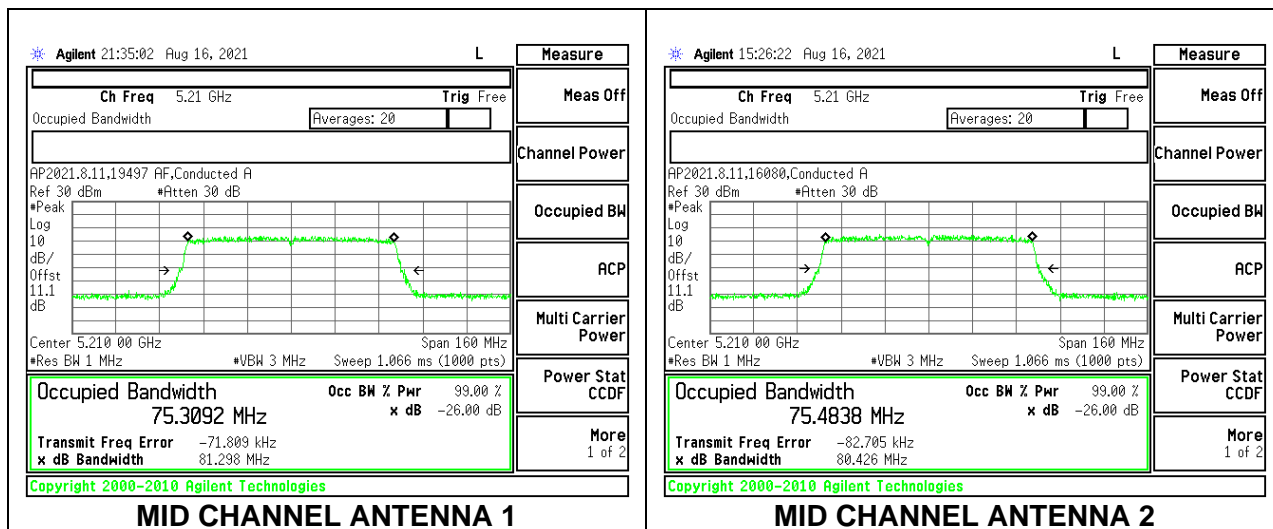
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Mid	5210	75.421



**2TX Antenna 1 + Antenna 2 CDD MODE**

Channel	Frequency (MHz)	99% Bandwidth Antenna 1 (MHz)	99% Bandwidth Antenna 2 (MHz)
Mid	5210	75.309	75.484

**MID CHANNEL**

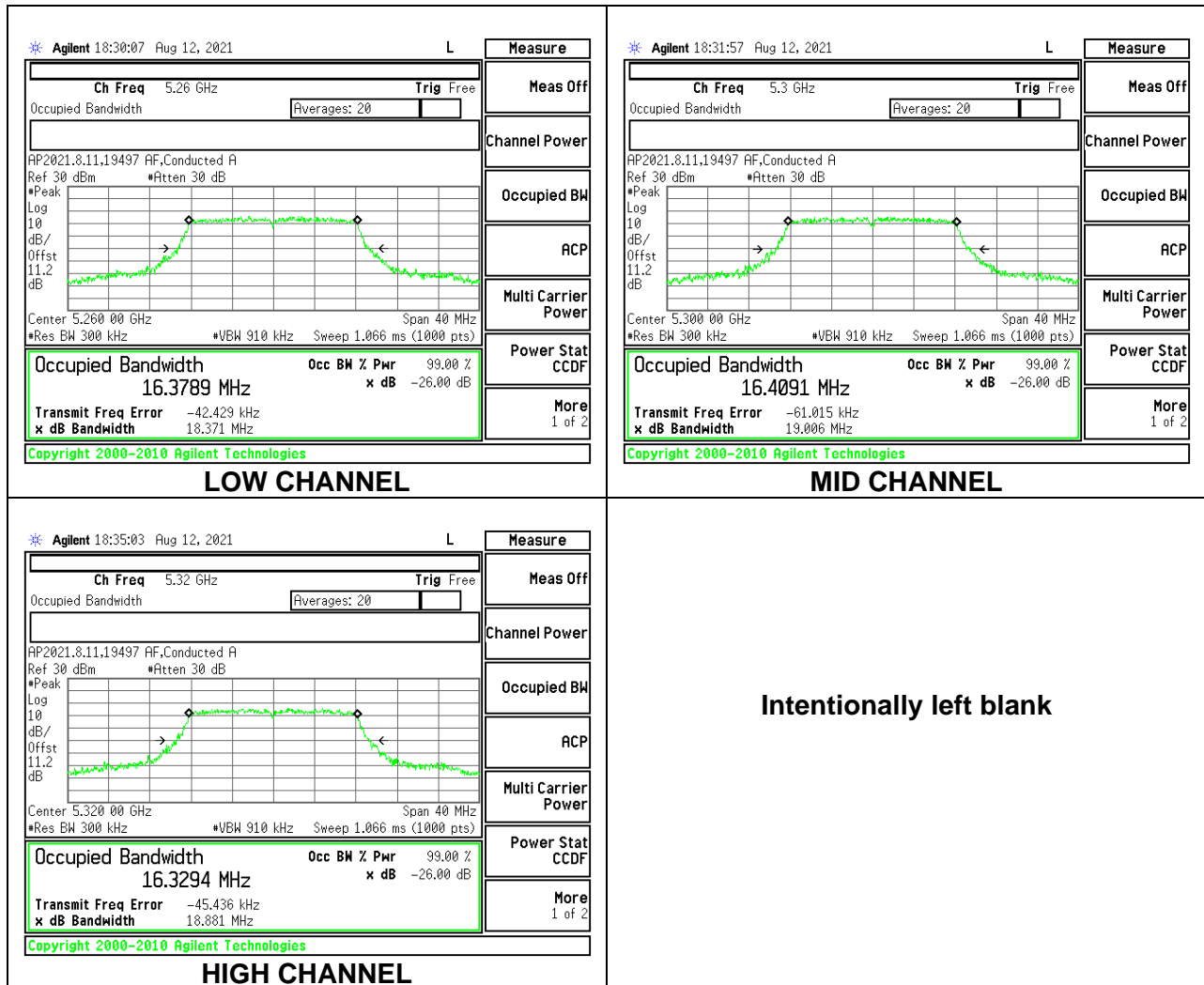




### 9.3.5. 802.11a MODE IN THE 5.3 GHz BAND

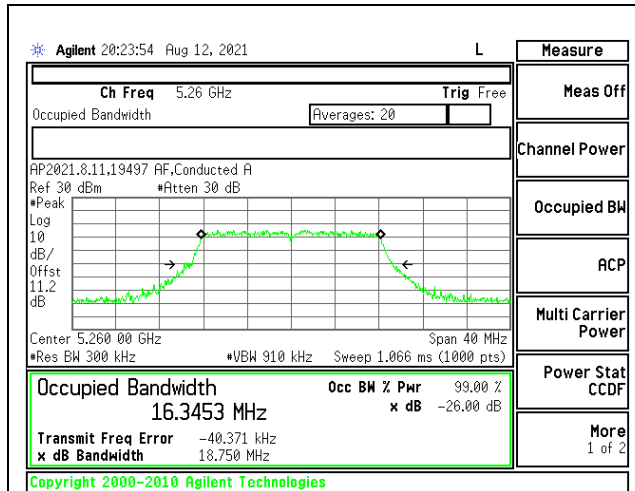
#### 1TX Antenna 1 MODE

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5260	16.379
Mid	5300	16.409
High	5320	16.329

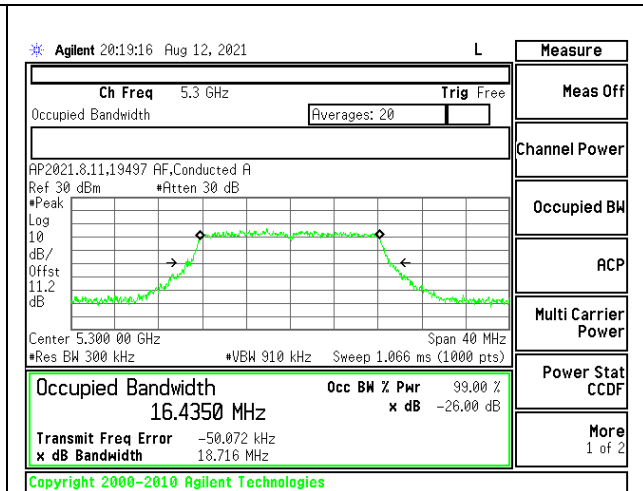


**1TX Antenna 2 MODE**

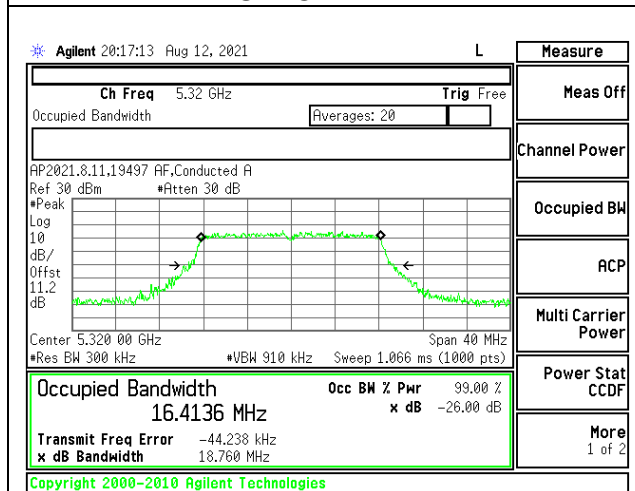
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5260	16.345
Mid	5300	16.435
High	5320	16.414



**LOW CHANNEL**



**MID CHANNEL**



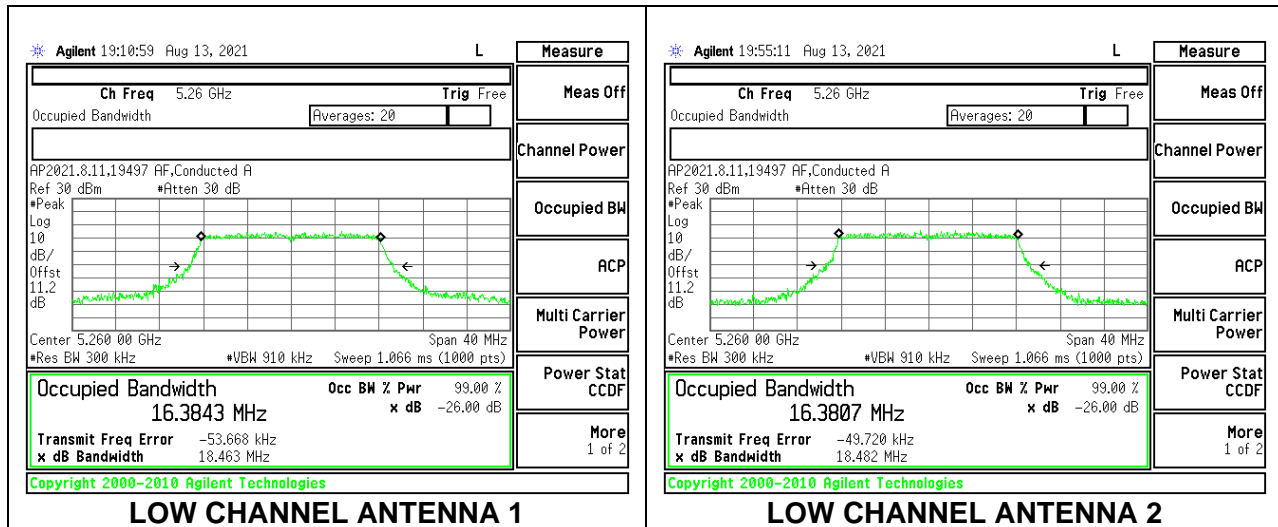
**HIGH CHANNEL**

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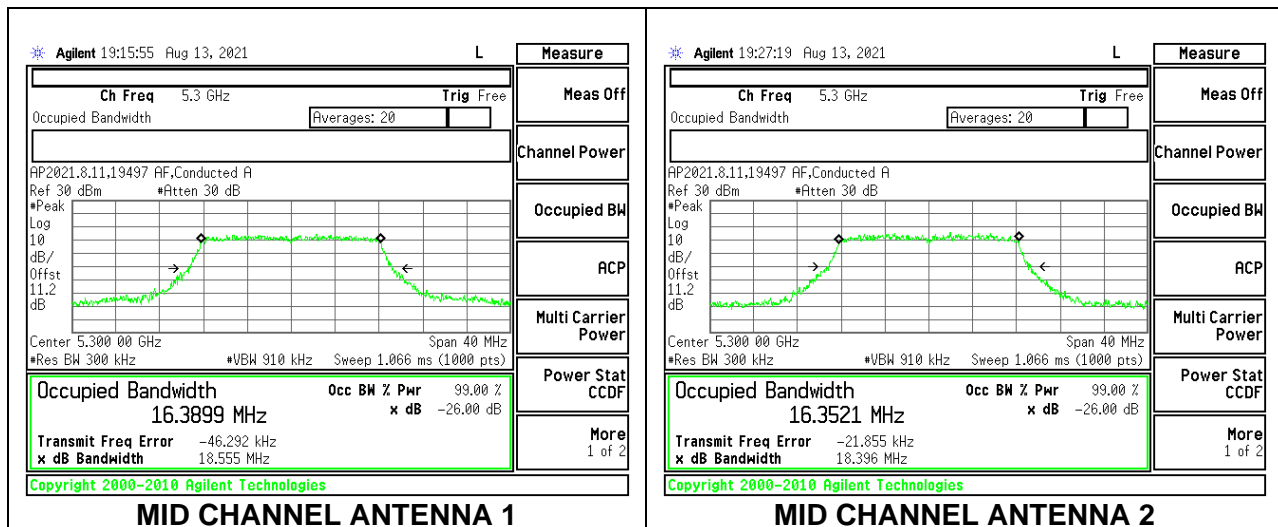
**2TX Antenna 1 + Antenna 2 CDD MODE**

Channel	Frequency (MHz)	99% Bandwidth Antenna 1 (MHz)	99% Bandwidth Antenna 2 (MHz)
Low	5260	16.384	16.381
Mid	5300	16.390	16.352
High	5320	16.402	16.395

**LOW CHANNEL**



**MID CHANNEL**



### HIGH CHANNEL

