

# TEST REPORT



**DT&C Co., Ltd.**

42, Yurim-ro, 154Beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea, 17042  
Tel : 031-321-2664, Fax : 031-321-1664

1. Report No : DRTFCC2403-0035(1)

2. Customer

- Name (FCC) : Pittasoft Co., Ltd. / Name (IC) : PITTASOFT CO., LTD.
- Address (FCC) : A 4th floor, ABN Tower, 331, Pangyo-ro, Bundang-gu Seongnam-si, Gyeonggi-do South Korea 13488
- Address (IC) : A 4th floor, ABN Tower, 331, Pangyo-ro, Bundang-gu, Seongnam-si Gyeonggi-do 08506 Korea (Republic Of)

3. Use of Report : FCC & IC Certification

4. Product Name / Model Name : Car DashCam / DR970X Box-2CH Plus

FCC ID : YCK-DR970XBOXP

IC : 23402-DR970XBOXP

5. FCC Regulation(s): Part 15.407

IC Standard(s): RSS-247 Issue 3, RSS-Gen Issue 5

Test Method used: KDB789033 D02v02r01, ANSI C63.10-2013

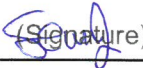

6. Date of Test : 2024.01.30 ~ 2024.04.03

7. Location of Test :  Permanent Testing Lab  On Site Testing

8. Testing Environment : See appended test report.

9. Test Result : Refer to the attached test result.

The results shown in this test report refer only to the sample(s) tested unless otherwise stated.  
This test report is not related to KOLAS accreditation.

Affirmation	Tested by	Reviewed by
	Name : SeungMin Gil  (Signature)	Name : JaeJin Lee  (Signature)

2024 . 04 . 03 .

**DT&C Co., Ltd.**

If this report is required to confirmation of authenticity, please contact to [report@dtnc.net](mailto:report@dtnc.net)

## Test Report Version

Test Report No.	Date	Description	Revised by	Reviewed by
DRTFCC2403-0035	Mar. 29, 2024	Initial issue	SeungMin Gil	JaeJin Lee
DRTFCC2403-0035(1)	Apr. 03, 2024	Retest the Power Spectral Density	SeungMin Gil	JaeJin Lee

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# 1. General Information

## 1.1. Description of EUT

<b>Equipment Class</b>	Unlicensed National Information Infrastructure Tx (NII)
<b>Product Name</b>	Car DashCam
<b>Model Name</b>	DR970X Box-2CH Plus
<b>Add Model Name</b>	DR970X Box-2CH IR Plus, DR970X Box-2CH Truck Plus, DR970X Box-2CH DMS Plus
<b>Firmware Version Identification Number</b>	V1.000
<b>EUT Serial Number</b>	Radiated: 97XBK3MAE00043, Conducted: 97XBK3MAE00039
<b>Power Supply</b>	DC 12 V, DC 24 V
<b>Modulation Technique</b>	OFDM
<b>Antenna Specification</b>	<b>Antenna type:</b> Dielectric Chip Antenna <b>Antenna gain(dBi)</b> U-NII 1: 3.60 dBi U-NII 3: 3.60 dBi

Band	Mode	Tx. frequency(MHz)	Max. conducted power(dBm)	Antenna gain(dBi)	Max. e.i.r.p (dBm)
U-NII 1	802.11a	5 180 ~ 5 240	9.79	3.60	13.39
	802.11n(HT20)	5 180 ~ 5 240	9.89	3.60	13.49
	802.11ac(VHT20)	5 180 ~ 5 240	9.64	3.60	13.24
	802.11n(HT40)	5 190 ~ 5 230	9.89	3.60	13.49
	802.11ac(VHT40)	5 190 ~ 5 230	9.87	3.60	13.47
	802.11ac(VHT80)	5 210	9.39	3.60	12.99
U-NII 3	802.11a	5 745 ~ 5 825	10.86	3.60	14.46
	802.11n(HT20)	5 745 ~ 5 825	10.89	3.60	14.49
	802.11ac(VHT20)	5 745 ~ 5 825	10.77	3.60	14.37
	802.11n(HT40)	5 755 ~ 5 795	13.16	3.60	16.76
	802.11ac(VHT40)	5 755 ~ 5 795	13.09	3.60	16.69
	802.11ac(VHT80)	5 775	13.77	3.60	17.37

## 1.2. Declaration by the applicant / manufacturer

N/A

## 1.3. Testing Laboratory

<b>DT&amp;C Co., Ltd.</b>		
The 3 m test site and conducted measurement facility used to collect the radiated data are located at the 42, Yurim-ro, 154beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea 17042.		
The test site complies with the requirements of Part 2.948 according to ANSI C63.4-2014.		
- FCC & IC MRA Designation No. : KR0034		
- ISED#: 5740A		
<a href="http://www.dtnet.net">www.dtnet.net</a>		
Telephone	:	+ 82-31-321-2664
FAX	:	+ 82-31-321-1664

## 1.4. Testing Environment

Ambient Condition	
▪ Temperature	+20 °C ~ +23 °C
▪ Relative Humidity	+35 % ~ +39 %

## 1.5. Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with requirements of ANSI C63.4-2014 and ANSI C63.10-2013. All measurement uncertainty values are shown with a coverage factor of  $k = 2$  to indicate a 95 % level of confidence.

Parameter	Measurement uncertainty
Antenna-port conducted emission	0.9 dB (The confidence level is about 95 %, $k = 2$ )
Radiated emission (1 GHz Below)	5.0 dB (The confidence level is about 95 %, $k = 2$ )
Radiated emission (1 GHz ~ 18 GHz)	4.8 dB (The confidence level is about 95 %, $k = 2$ )
Radiated emission (18 GHz Above)	5.7 dB (The confidence level is about 95 %, $k = 2$ )

## 1.6. Test Equipment List

Type	Manufacturer	Model	Cal.Date (yy/mm/dd)	Next.Cal.Date (yy/mm/dd)	S/N
Spectrum Analyzer	Agilent Technologies	N9020A	23/12/15	24/12/15	MY50410399
Spectrum Analyzer	Agilent Technologies	N9020A	23/06/23	24/06/23	US47360812
Spectrum Analyzer	Agilent Technologies	N9020A	23/12/15	24/12/15	MY48010133
Spectrum Analyzer	KEYSIGHT	N9030B	23/12/15	24/12/15	MY55480168
Receiver	Rohde Schwarz	ESCI3	23/06/23	24/06/23	100798
DC Power Supply	H.P	6622A	23/12/15	24/12/15	3448A03760
DC Power Supply	SM techno	SDP30-5D	23/06/23	24/06/23	305DMG291
DC Power Supply	SM techno	SDP30-5D	23/06/23	24/06/23	305DMG304
Multimeter	FLUKE	17B+	23/12/15	24/12/15	36390701WS
Signal Generator	Rohde Schwarz	SMBV100A	23/12/15	24/12/15	255571
Signal Generator	ANRITSU	MG3695C	23/12/15	24/12/15	173501
Thermohygrometer	BODYCOM	BJ5478	23/12/15	24/12/15	120612-1
Thermohygrometer	BODYCOM	BJ5478	23/12/15	24/12/15	120612-2
Thermohygrometer	BODYCOM	BJ5478	23/06/23	24/06/23	N/A
Loop Antenna	ETS-Lindgren	6502	23/11/09	24/11/09	00060496
Hybrid Antenna	Schwarzbeck	VULB 9160	23/12/15	24/12/15	3362
Horn Antenna	ETS-Lindgren	3117	23/06/23	24/06/23	00143278
Horn Antenna	A.H.Systems Inc.	SAS-574	23/06/23	24/06/23	155
PreAmplifier	tsj	MLA-0118-B01-40	23/12/15	24/12/15	1852267
PreAmplifier	tsj	MLA-1840-J02-45	23/06/23	24/06/23	16966-10728
PreAmplifier	H.P	8447D	23/12/15	24/12/15	2944A07774
High Pass Filter	Wainwright Instruments	WHKX12-935-1000-15000-40SS	23/06/23	24/06/23	8
High Pass Filter	Wainwright Instruments	WHKX10-2838-3300-18000-60SS	23/06/23	24/06/23	1
High Pass Filter	Wainwright Instruments	WHNX8.0/26.5-6SS	23/06/23	24/06/23	3
Attenuator	Hefei Shunze	SS5T.2.92-10-40	23/06/23	24/06/23	16012202
Attenuator	Aeroflex/Weinschel	56-3	23/06/23	24/06/23	Y2370
Attenuator	SMAJK	SMAJK-2-3	23/06/23	24/06/23	3
Attenuator	SMAJK	SMAJK-2-3	23/06/23	24/06/23	2
Attenuator	Aeroflex/Weinschel	86-10-11	23/06/23	24/06/23	408
Power Meter & Wide Bandwidth Sensor	Anritsu	ML2496A MA2411B	23/12/15	24/12/15	1338004 1911481
Cable	DT&C	Cable	24/01/03	25/01/03	G-2
Cable	HUBER+SUHNER	SUCOFLEX 100	24/01/03	25/01/03	G-3
Cable	DT&C	Cable	24/01/03	25/01/03	G-4
Cable	OMT	YSS21S	24/01/03	25/01/03	G-5
Cable	Junkosha	MWX241	24/01/03	25/01/03	mmW-1
Cable	Junkosha	MWX241	24/01/03	25/01/03	mmW-4
Cable	HUBER+SUHNER	SUCOFLEX100	24/01/03	25/01/03	M-1
Cable	HUBER+SUHNER	SUCOFLEX100	24/01/03	25/01/03	M-2
Cable	JUNKOSHA	MWX241/B	24/01/03	25/01/03	M-3
Cable	JUNKOSHA	J12J101757-00	24/01/03	25/01/03	M-7
Cable	HUBER+SUHNER	SUCOFLEX106	24/01/03	25/01/03	M-9
Cable	DT&C	Cable	24/01/03	25/01/03	RFC-46
Test Software	tsj	Radiated Emission Measurement	NA	NA	Version 2.00.0185

Note1: The measurement antennas were calibrated in accordance to the requirements of ANSI C63.5-2017.

Note2: The cable is not a regular calibration item, so it has been calibrated by DT & C itself.

## 2. Test Methodology

The measurement procedures described in the ANSI C63.10-2013 and the guidance provided in KDB 789033 D02v02r01 were used in measurement of the EUT.

The EUT was tested per the guidance of KDB789033 D02v02r01. And ANSI C63.10-2013 was used to reference appropriate EUT setup and maximizing procedures of radiated spurious emission and AC line conducted emission testing.

### 2.1. EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

### 2.2. EUT Exercise

The EUT was operated in the test mode to fix the Tx frequency that was for the purpose of the measurements. According to its specifications, the EUT must comply with the requirements of the Section 15.207, 15.209 and 15.407 under the FCC Rules Part 15 Subpart E.

### 2.3. General Test Procedures

#### Conducted Emissions

The power-line conducted emission test procedure is not described on the KDB558074 D01v05r02.

So this test was fulfilled with the requirements in Section 6.2 of ANSI C63.10-2013.

The EUT is placed on the wooden table, which is 0.8 m above ground plane and the conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-peak and Average detector.

#### Radiated Emissions

Basically the radiated tests were performed with KDB789033 D02v02r01. But some requirements and procedures like test site requirements, EUT setup and maximizing procedure were fulfilled with the requirements in Section 5 and 6 of the ANSI C63.10-2013 as stated on KDB789033 D02v02r01.

The EUT is placed on a non-conductive table, which is 0.8 m above ground plane. For emission measurements above 1 GHz, the table height is 1.5 m. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 1 m or 3 m away from the receiving antenna, which varied from 1 m to 4 m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the highest emission, the relative positions of the EUT were rotated through three orthogonal axis.

### 2.4. Instrument Calibration

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

## 2.5. Description of Test Modes

The EUT has been tested with the operating condition for maximizing the emission characteristics. A test program is used to control the EUT for staying in continuous transmitting.

### Transmitting Configuration of EUT

Mode	Data rate
802.11a	6 Mbps
802.11n(HT20)	MCS 0
802.11ac(VHT20)	MCS 0
802.11n(HT40)	MCS 0
802.11ac(VHT40)	MCS 0
802.11ac(VHT80)	MCS 0

### EUT Operation test setup

- **Test Software:** Realtek 11ac 8821C USB WLAN 0.0003.07.20190211
- **Power setting:** Refer to the table below.

### Tested frequency and power setting

5GHz Band	802.11a/n(HT20)/ac(VHT20)			802.11n(HT40)/ac(VHT40)			802.11ac(VHT80)		
	Channel	Frequency [MHz]	Power setting	Channel	Frequency [MHz]	Power setting	Channel	Frequency [MHz]	Power setting
U-NII 1	36	5 180	37	38	5 190	37	42	5 210	35
	40	5 200	37	-	-	-	-	-	-
	48	5 240	37	46	5 230	37	-	-	-
U-NII 3	149	5 745	40	151	5 755	44	155	5 775	46
	157	5 785	40	-	-	-	-	-	-
	165	5 825	40	159	5 795	44	-	-	-

### Tested Mode

Test mode	Mode	Worst case data rate
TM 1	802.11a	6 Mbps
TM 2	802.11n(HT20)	MCS 0
TM 3	802.11n(HT40)	MCS 0
TM 4	802.11ac(VHT80)	MCS 0

Note1: The worst case data rate was determined according to the power measurements.



### 3. Antenna Requirements

■ **According to Part 15.203**

“An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can 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 shall be considered sufficient to comply with the provisions of this section.”

**The antenna is permanently attached on the device.**

**Therefore this E.U.T complies with the requirement of Part 15.203**

## 4. Summary of Test Result

FCC Part Section(s)	RSS Section(s)	Test Description	Limit	Test Condition	Status Note 1
15.407(a)	RSS-247[6.2]	Emission Bandwidth (26 dB Bandwidth)	N/A	Conducted	<b>C</b>
15.407(e)	RSS-247[6.2]	Minimum Emission Bandwidth (6 dB Bandwidth)	> 500 kHz in 5 725 ~ 5 850 MHz		<b>C</b>
15.407(a)	RSS-247[6.2]	Maximum Conducted Output Power	Part 15.407(a) (Refer to section 5.2)		<b>C</b>
15.407(a)	RSS-247[6.2]	Peak Power Spectral Density	Part 15.407(a) (Refer to section 5.3)		<b>C</b>
-	RSS-Gen[6.7]	Occupied Bandwidth (99 %)	N/A		<b>C</b>
15.407(h)	RSS-247[6.3]	Dynamic Frequency Selection	Part 15.407(h)		<b>N/A</b> Note 5
15.205 15.209 15.407(b)	RSS-Gen[8.9] RSS-Gen[8.10] RSS-247[6.2]	Unwanted Emissions	Part 15.209, 15.407(b) (Refer to section 5.4)	Radiated	<b>C</b> Note 2, 3
15.207	RSS-Gen[8.8]	AC Conducted Emissions	FCC 15.207 (Refer to section 5.5)	AC Line Conducted	<b>NA</b> Note 4
15.203	-	Antenna Requirements	FCC 15.203 (Refer to section 3)	-	<b>C</b>

Note 1: **C** = Comply    **NC** = Not Comply    **NT** = Not Tested    **NA** = Not Applicable  
 Note 2: This test item was performed in three orthogonal EUT positions and the worst case data was reported.  
 Note 3: The radiated test items were performed at DC 12 V and DC 24 V. And the worst case data are reported.  
 Note 4: This device is installed in a car. Therefore the power source is a battery of car.  
 Note 5: This device supports U-NII-1, U-NII 3 band only.

## 5. TEST RESULT

### 5.1. Emission Bandwidth (26 dB Bandwidth) & Occupied BW (99 %)

#### ■ Test Requirements

- Emission Bandwidth (26 dB Bandwidth)

The bandwidth at 26 dB down from the highest in-band spectral density is measured with a spectrum analyzer connected to the antenna terminal while the EUT is operating in transmission mode at the appropriate frequencies.

The 26 dB bandwidth is used to determine the conducted output power limit.

#### ■ Test Configuration

Refer to the APPENDIX I.

#### ■ Test Procedure

- Emission Bandwidth (26 dB Bandwidth)

The transmitter output is connected to the Spectrum Analyzer and used following test procedure of **KDB789033 D02v02r01**.

1. Set resolution bandwidth (RBW) = approximately 1 % of the EBW.
2. Set the video bandwidth (VBW) > RBW.
3. Detector = **Peak**.
4. Trace mode = **max hold**.

Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1 %.

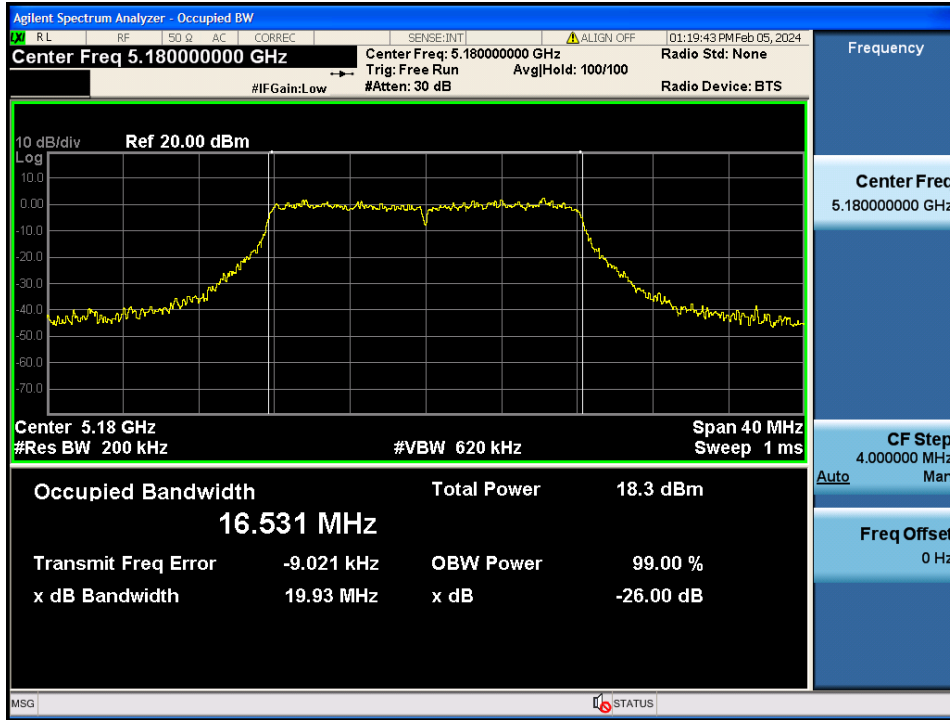
#### ■ Test Results: **Comply**

Test Mode	Band	Channel	Frequency(MHz)	26 dB BW(MHz)		Occupied BW (MHz)	
				DC 12 V	DC 24 V	DC 12 V	DC 24 V
TM 1	U-NII 1	36	5 180	19.93	20.16	16.53	16.54
		40	5 200	19.72	20.11	16.50	16.51
		48	5 240	19.91	19.91	16.53	16.51
TM 2	U-NII 1	36	5 180	20.13	20.21	17.62	17.62
		40	5 200	20.13	20.36	17.61	17.63
		48	5 240	20.28	20.44	17.61	17.62
TM 3	U-NII 1	38	5 190	40.94	40.85	36.12	36.11
		46	5 230	42.17	41.23	36.08	36.09
TM 4	U-NII 1	42	5 210	80.75	80.56	75.25	75.21

- Power Supply: 12 V

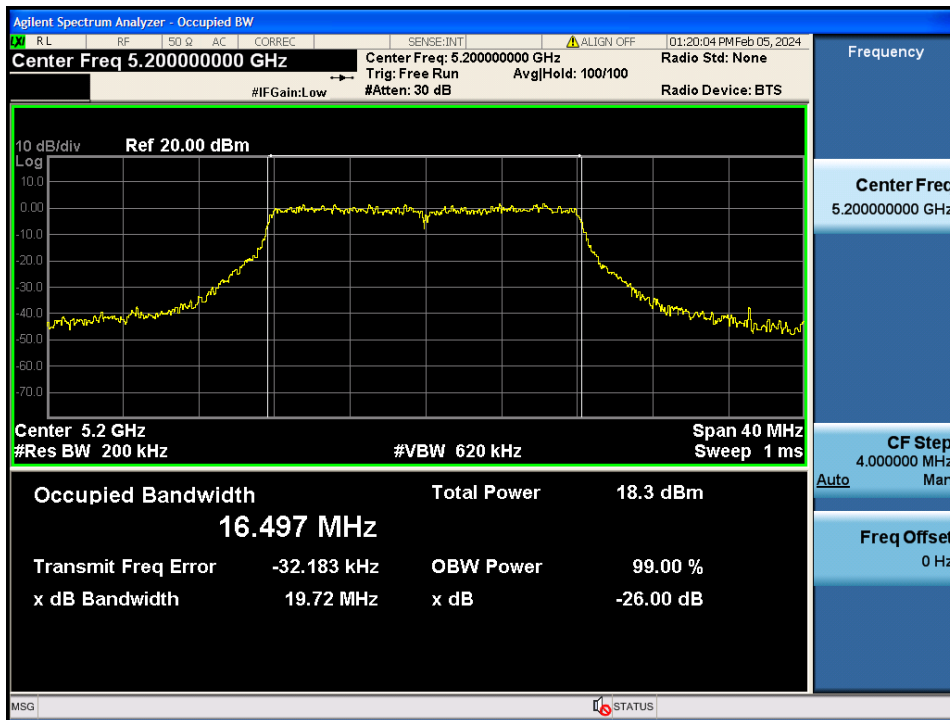
26 dB Bandwidth & Occupied BW(99 %)

Test Mode: TM 1 & Ch.36



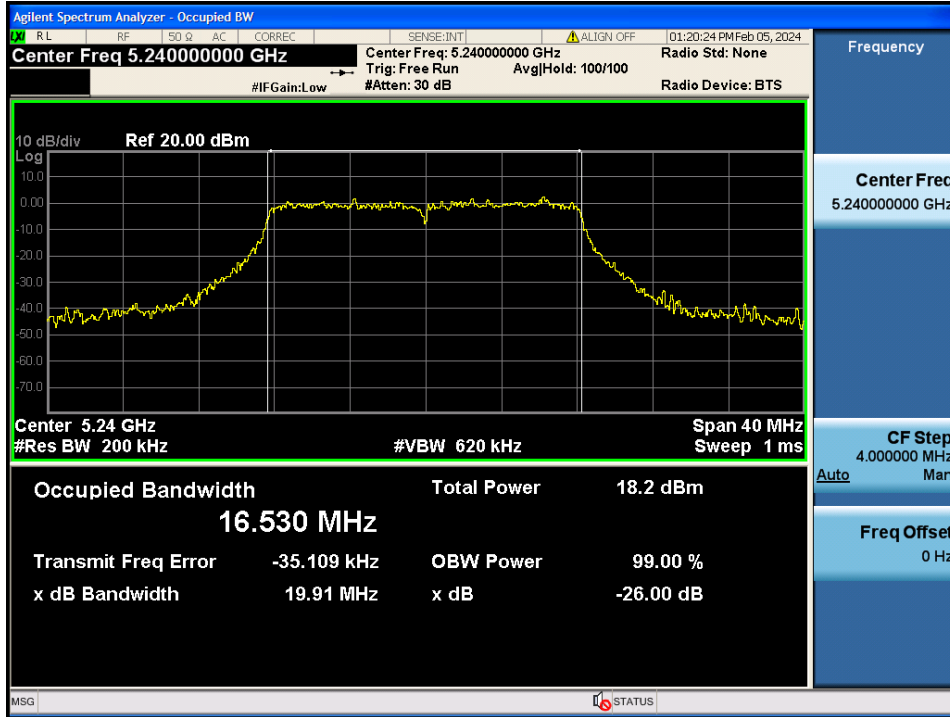
26 dB Bandwidth & Occupied BW(99 %)

Test Mode: TM 1 & Ch.40



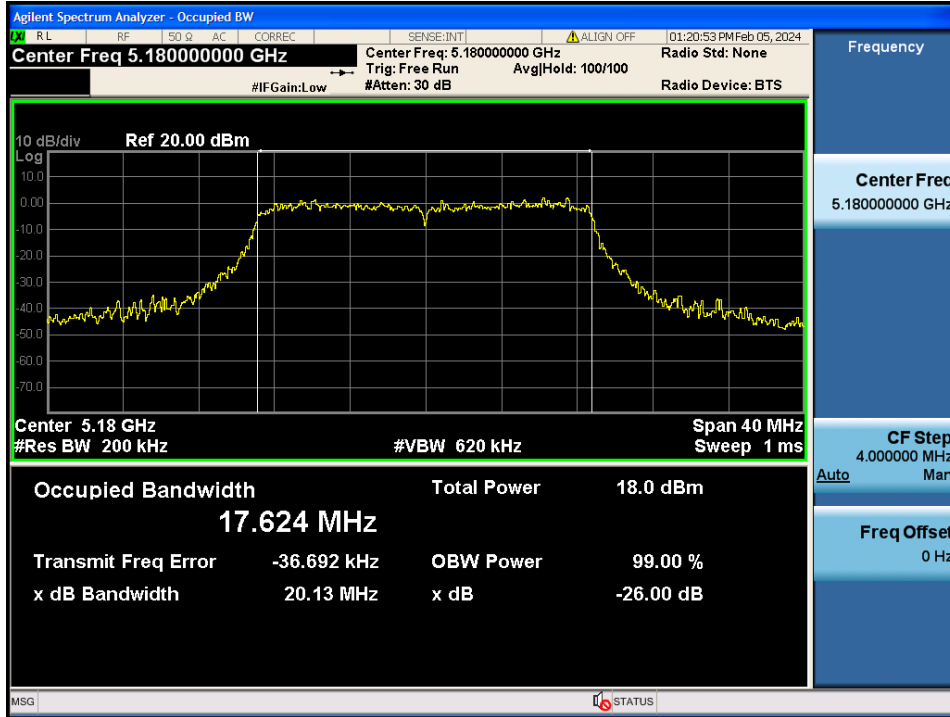
26 dB Bandwidth & Occupied BW(99 %)

Test Mode: TM 1 & Ch.48



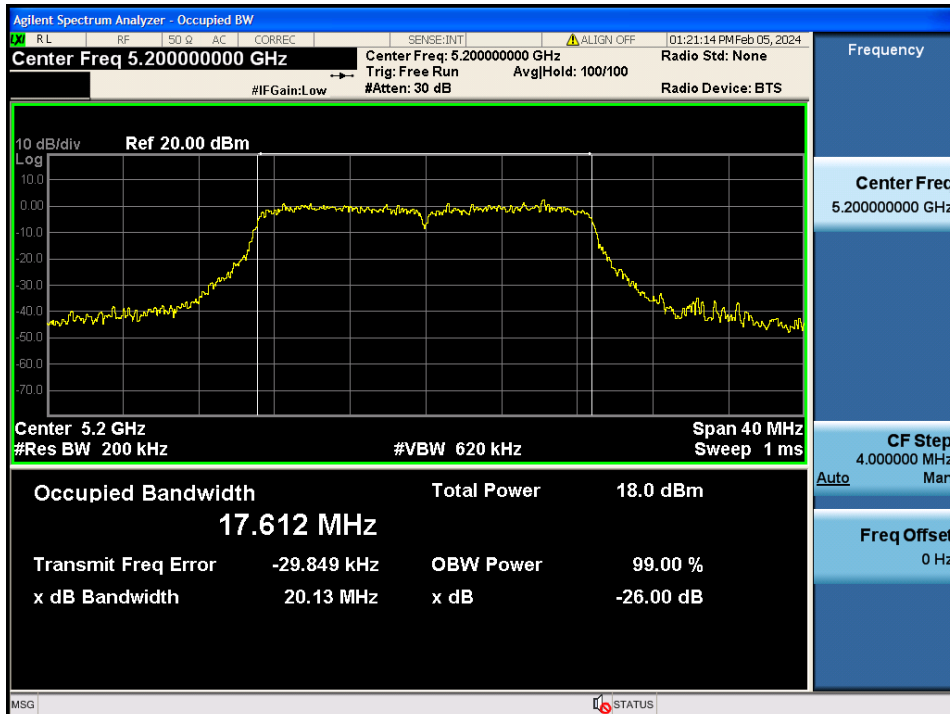
26 dB Bandwidth & Occupied BW(99 %)

Test Mode: TM 2 & Ch.36



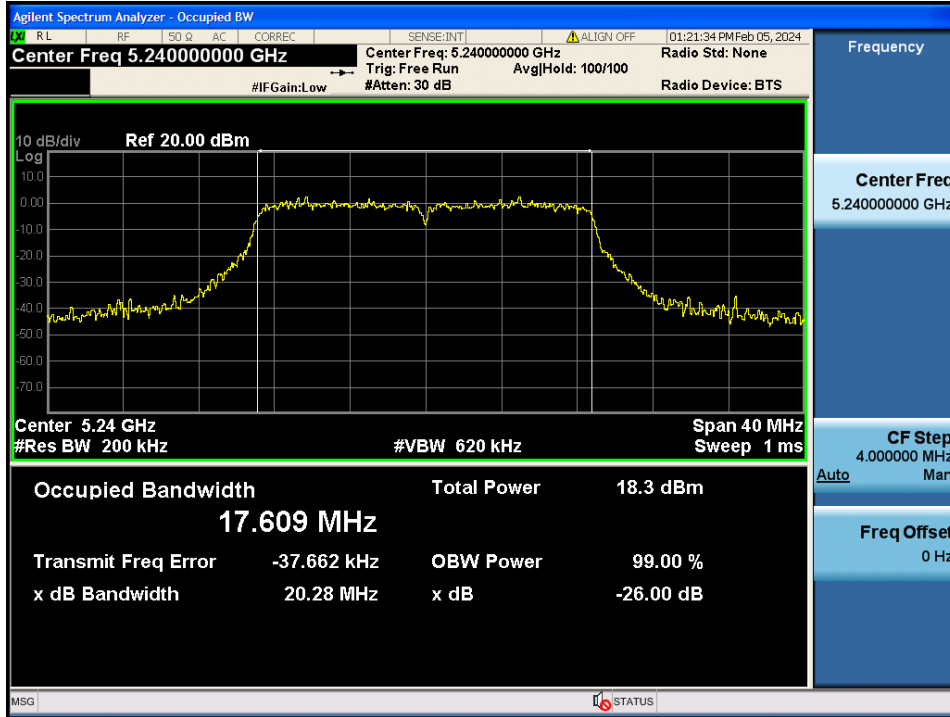
26 dB Bandwidth & Occupied BW(99 %)

Test Mode: TM 2 & Ch.40



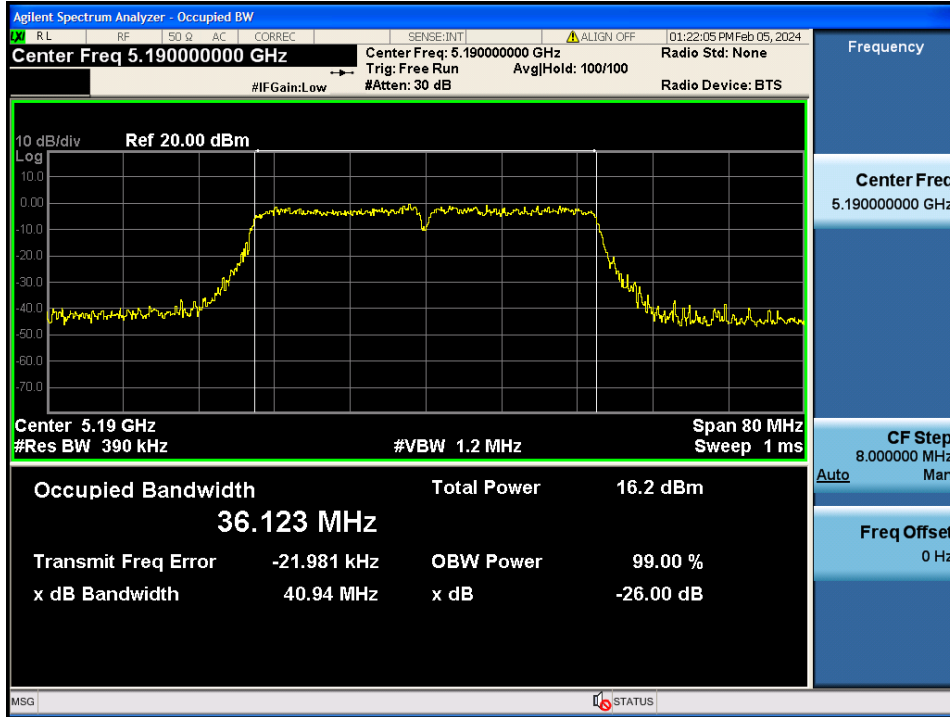
26 dB Bandwidth & Occupied BW(99 %)

Test Mode: TM 2 & Ch.48



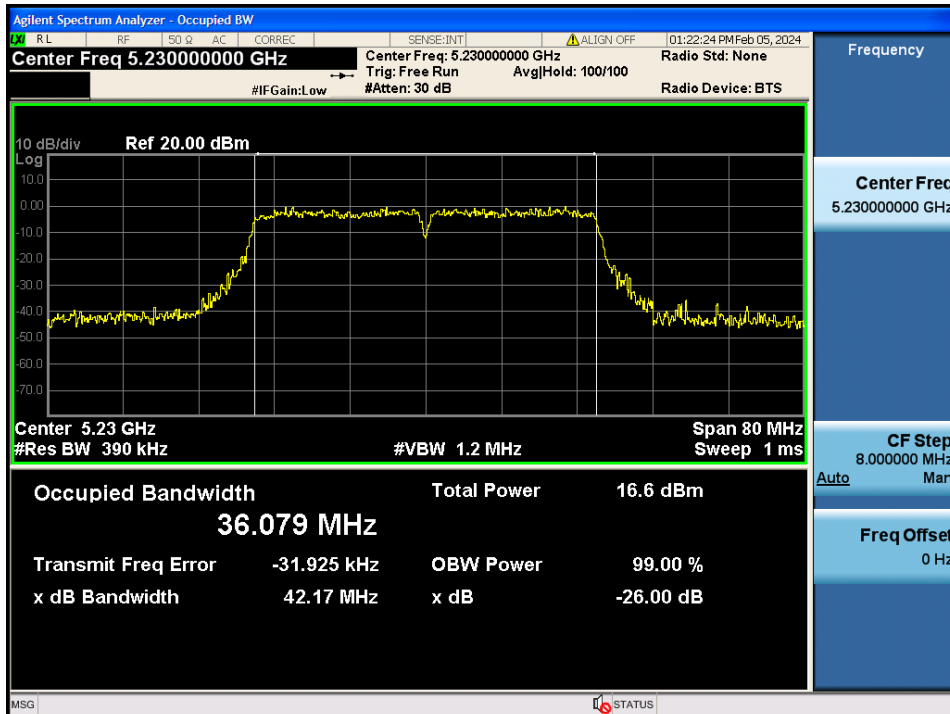
26 dB Bandwidth & Occupied BW(99 %)

Test Mode: TM 3 & Ch.38



26 dB Bandwidth & Occupied BW(99 %)

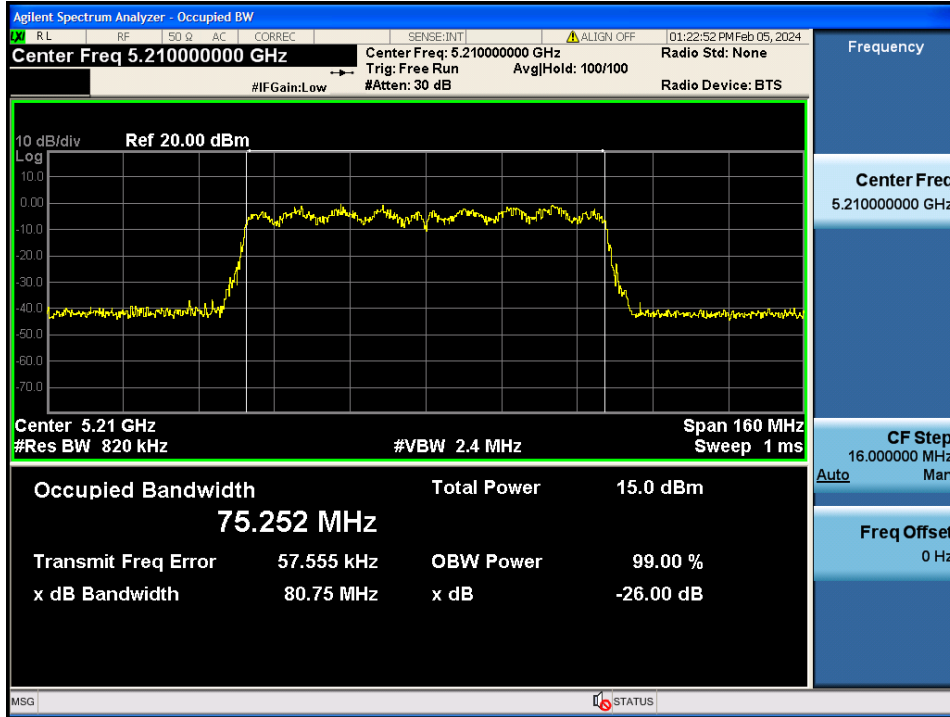
Test Mode: TM 3 & Ch.46





26 dB Bandwidth & Occupied BW(99 %)

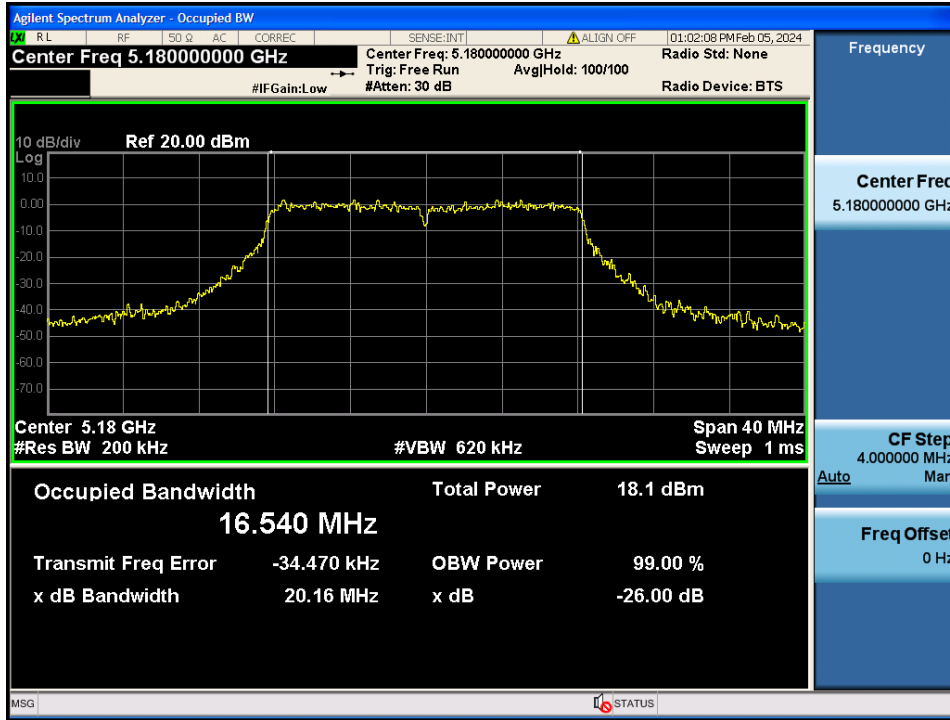
Test Mode: TM 4 & Ch.42



- Power Supply: 24 V

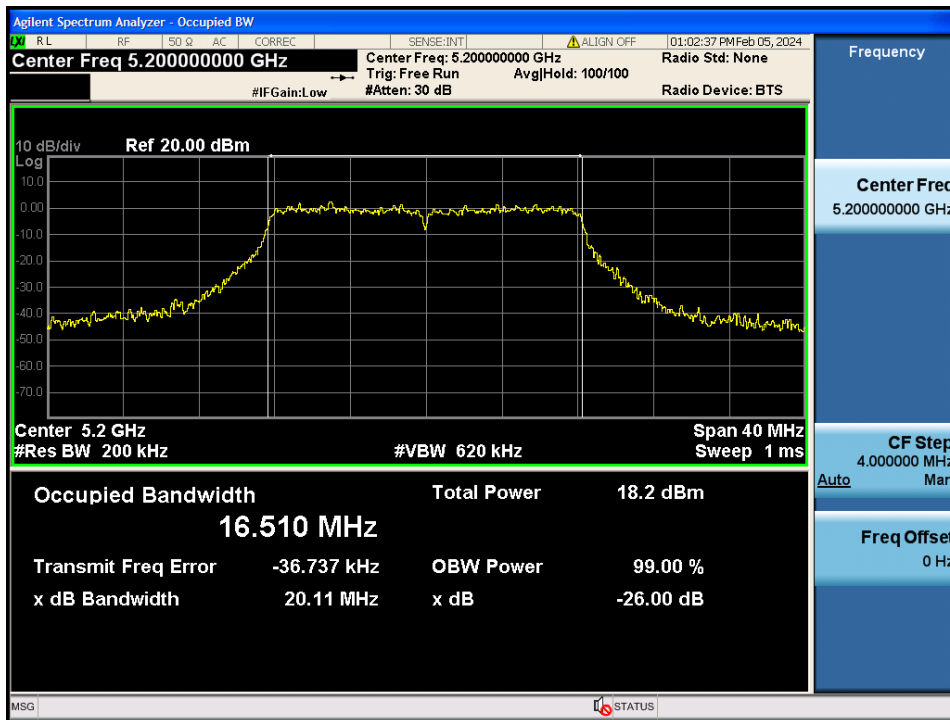
26 dB Bandwidth & Occupied BW(99 %)

Test Mode: TM 1 & Ch.36



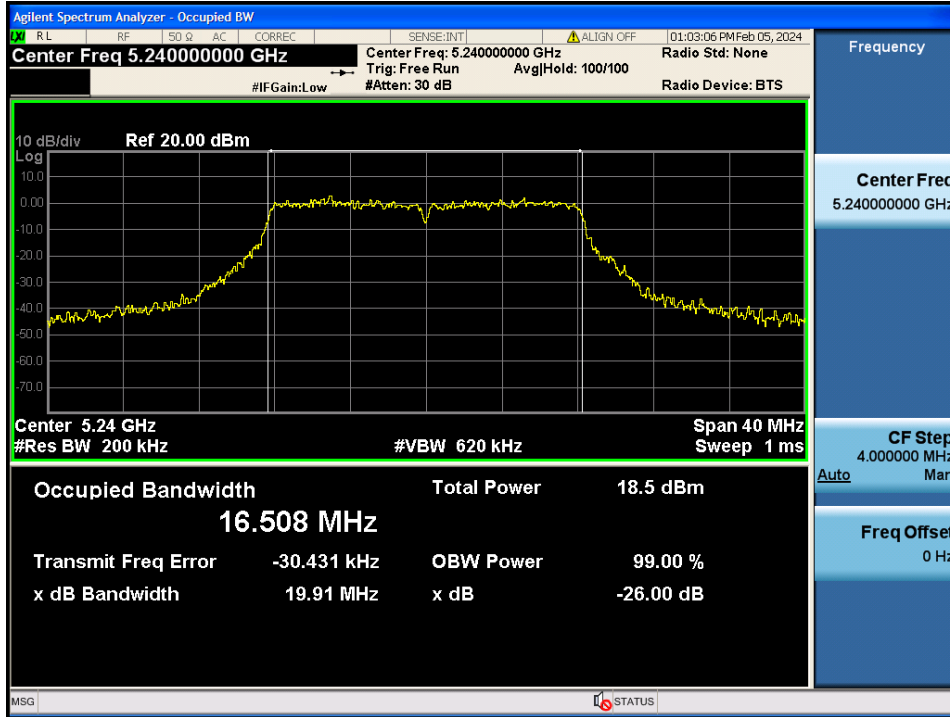
26 dB Bandwidth & Occupied BW(99 %)

Test Mode: TM 1 & Ch.40



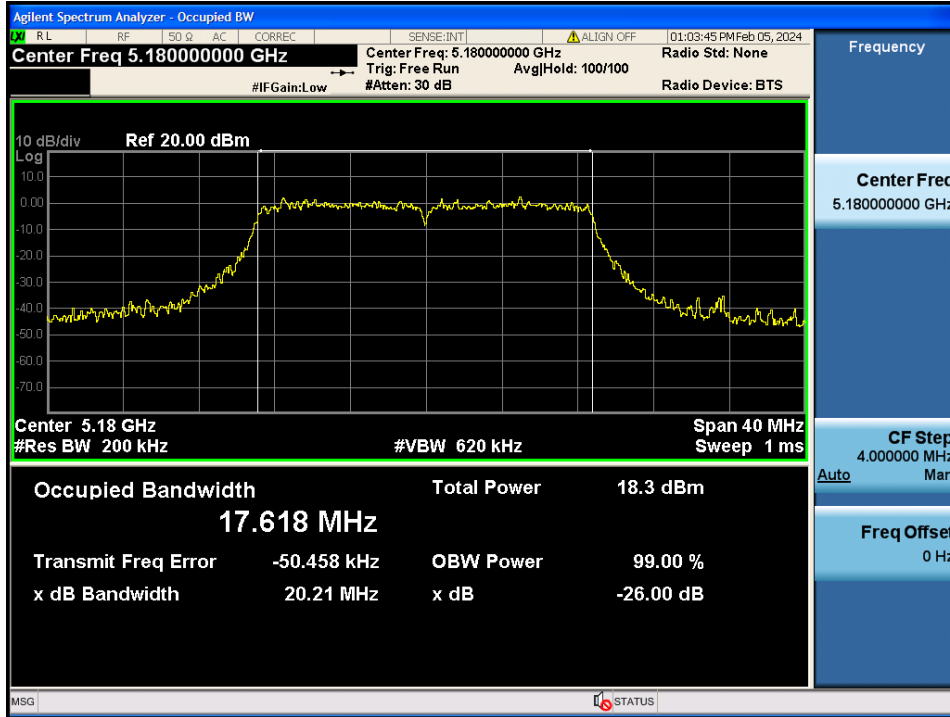
26 dB Bandwidth & Occupied BW(99 %)

Test Mode: TM 1 & Ch.48



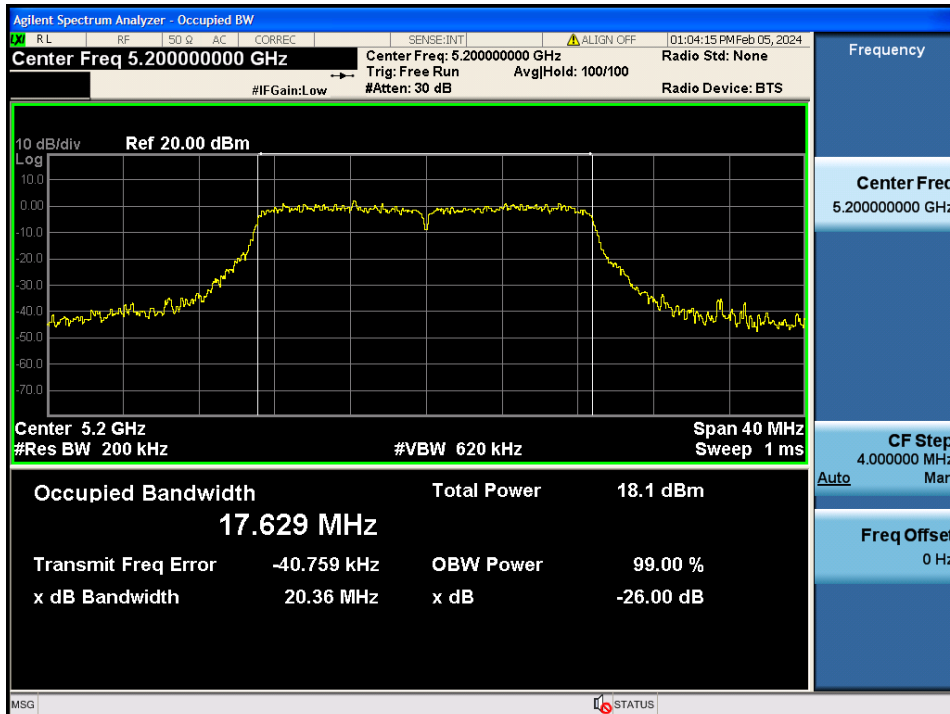
26 dB Bandwidth & Occupied BW(99 %)

Test Mode: TM 2 & Ch.36



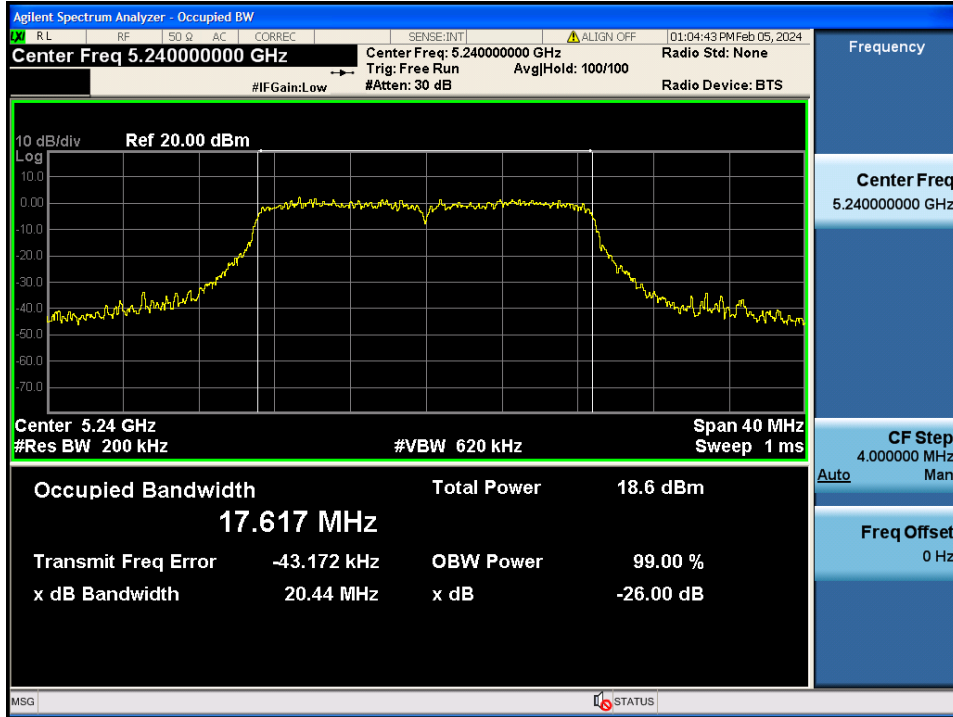
26 dB Bandwidth & Occupied BW(99 %)

Test Mode: TM 2 & Ch.40



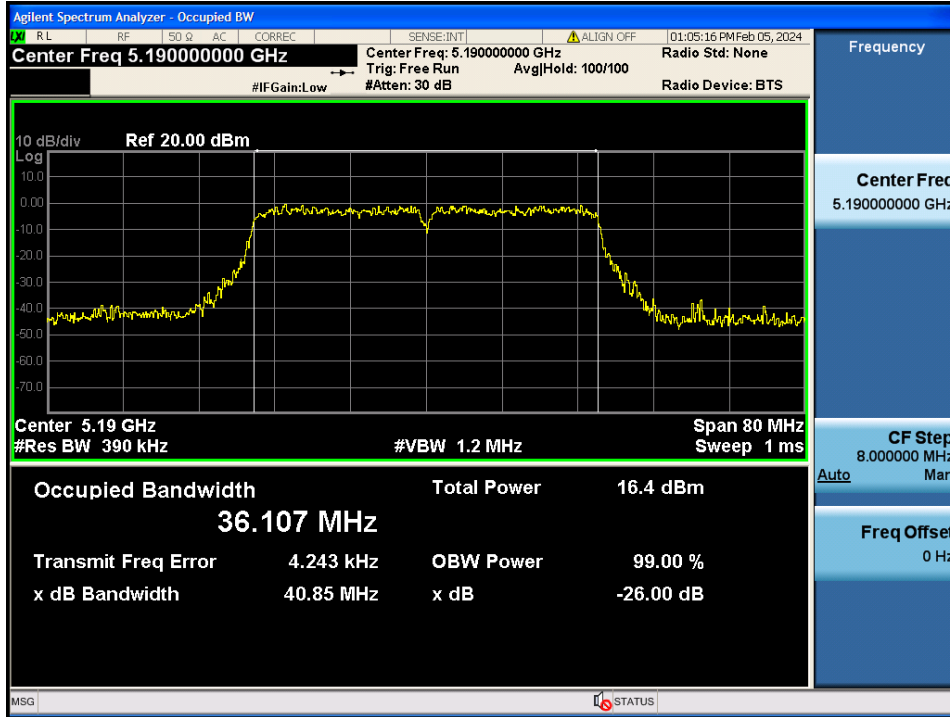
26 dB Bandwidth & Occupied BW(99 %)

Test Mode: TM 2 & Ch.48



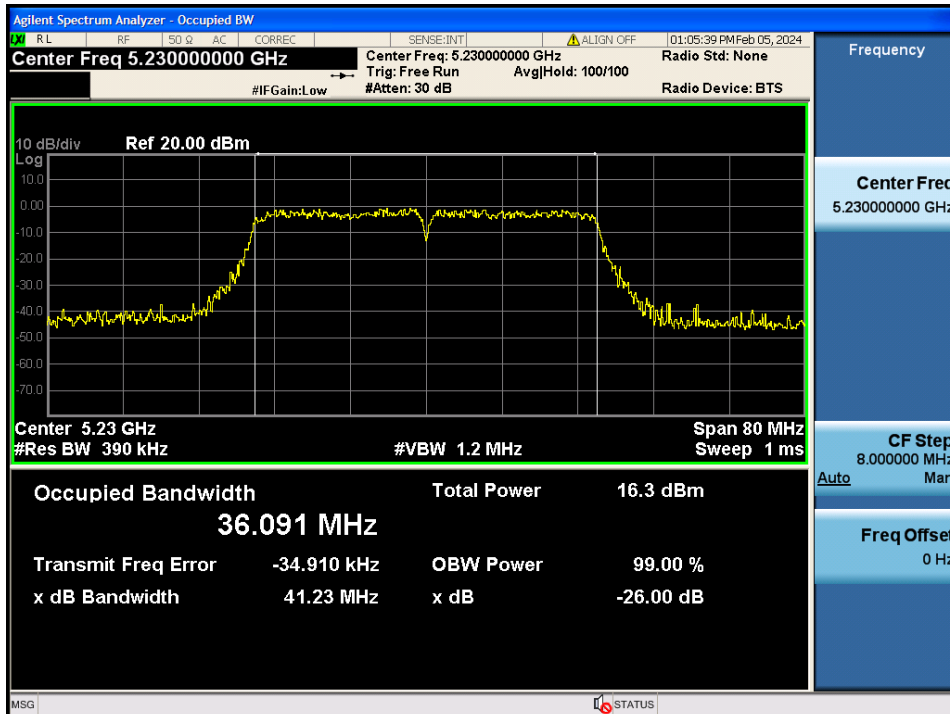
26 dB Bandwidth & Occupied BW(99 %)

Test Mode: TM 3 & Ch.38



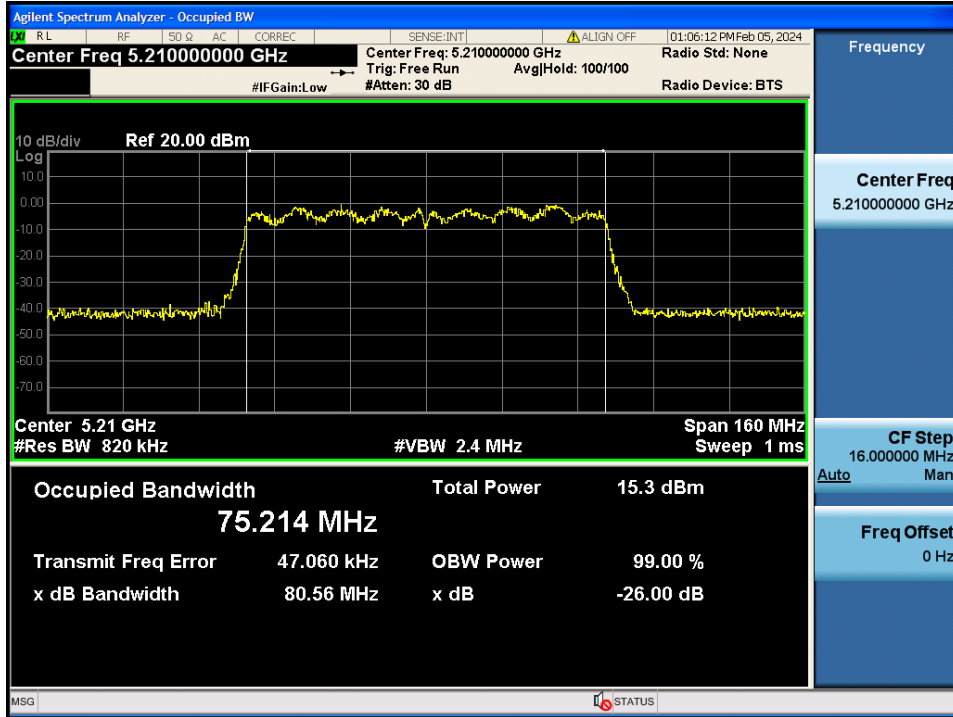
26 dB Bandwidth & Occupied BW(99 %)

Test Mode: TM 3 & Ch.46



26 dB Bandwidth & Occupied BW(99 %)

Test Mode: TM 4 & Ch.42



## 5.2. Minimum Emission Bandwidth (6 dB Bandwidth) & Occupied BW (99 %)

### ■ Test Requirements

#### - Emission Bandwidth (6 dB Bandwidth)

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

#### - Occupied BW (99 %)

When an occupied bandwidth value is not specified in the applicable RSS, the transmitted signal bandwidth to be reported is to be its 99 % emission bandwidth, as calculated or measured.

### ■ Test Configuration

Refer to the APPENDIX I.

### ■ Test Procedure

#### - Emission Bandwidth (6 dB Bandwidth)

The transmitter output is connected to the Spectrum Analyzer and used following test procedure of **KDB789033 D02v02r01**.

1. Set resolution bandwidth (RBW) = 100 kHz
2. Set the video bandwidth  $\geq 3 \times \text{RBW}$ .
3. Detector = **Peak**.
4. Trace mode = **max hold**.

Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

#### - Occupied BW (99 %) : RSS-Gen[6.7]

1. The transmitter shall be operated at its maximum carrier power measured under normal test conditions.
2. The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts.
3. The resolution bandwidth (RBW) shall be in the range of 1 % to 5 % of the occupied bandwidth (OBW) and video bandwidth (VBW) shall be approximately  $3 \times \text{RBW}$ .



■ Test Results: **Comply**

**- Power Supply: 12 V**

Test Mode	Band	Channel	Frequency(MHz)	6 dB BW(MHz)	99 % BW(MHz)
TM 1	U-NII 3	149	5 745	16.36	16.57
		157	5 785	16.37	16.53
		165	5 825	16.30	16.56
TM 2	U-NII 3	149	5 745	16.77	17.62
		157	5 785	16.92	17.65
		165	5 825	16.91	17.63
TM 3	U-NII 3	151	5 755	35.22	36.28
		159	5 795	34.16	36.28
TM 4	U-NII 3	155	5 775	75.23	75.59

**Power Supply: 24 V**

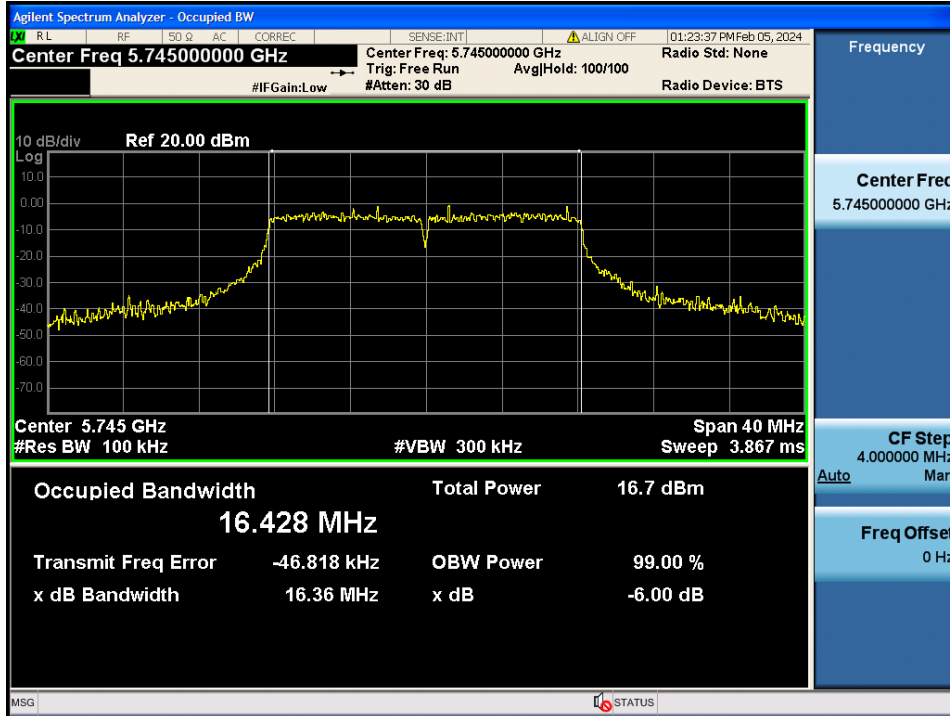
Test Mode	Band	Channel	Frequency(MHz)	6 dB BW(MHz)	99 % BW(MHz)
TM 1	U-NII 3	149	5 745	16.32	16.54
		157	5 785	16.27	16.56
		165	5 825	16.33	16.52
TM 2	U-NII 3	149	5 745	16.79	17.68
		157	5 785	16.87	17.66
		165	5 825	16.53	17.67
TM 3	U-NII 3	151	5 755	35.18	36.33
		159	5 795	35.06	36.33
TM 4	U-NII 3	155	5 775	75.24	75.69

Result Plots

- Power Supply: 12 V

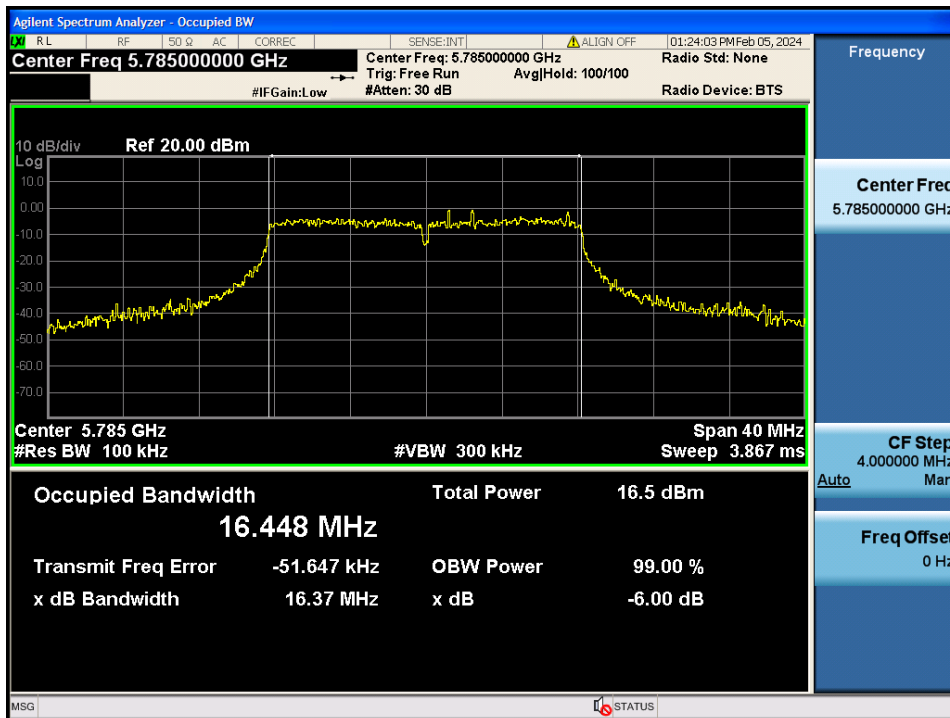
6 dB Bandwidth

Test Mode: TM 1 & Ch.149



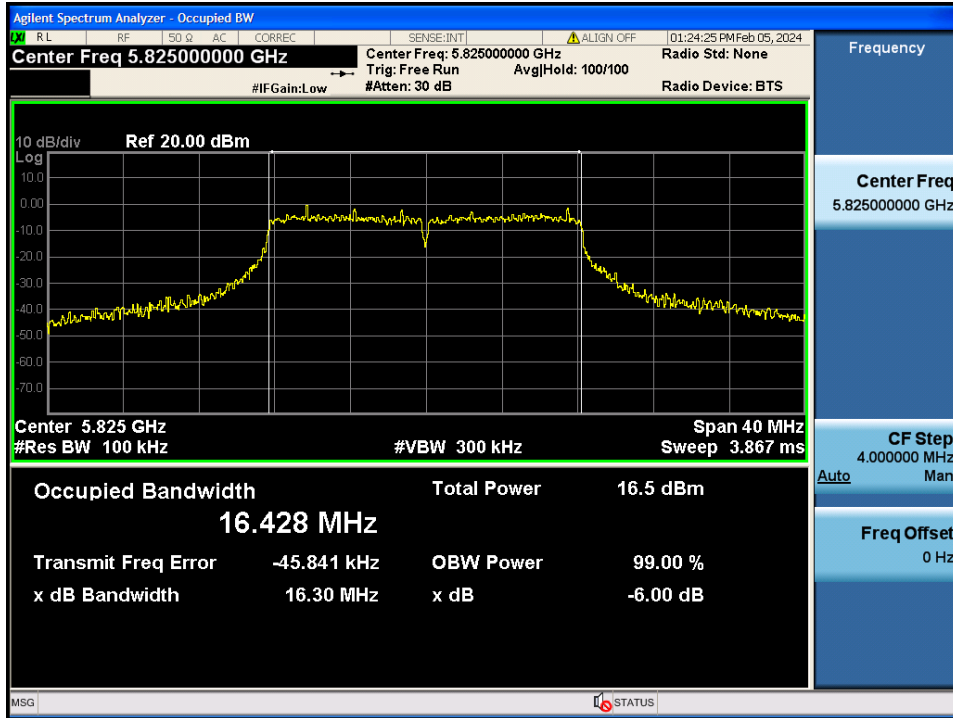
6 dB Bandwidth

Test Mode: TM 1 & Ch.157



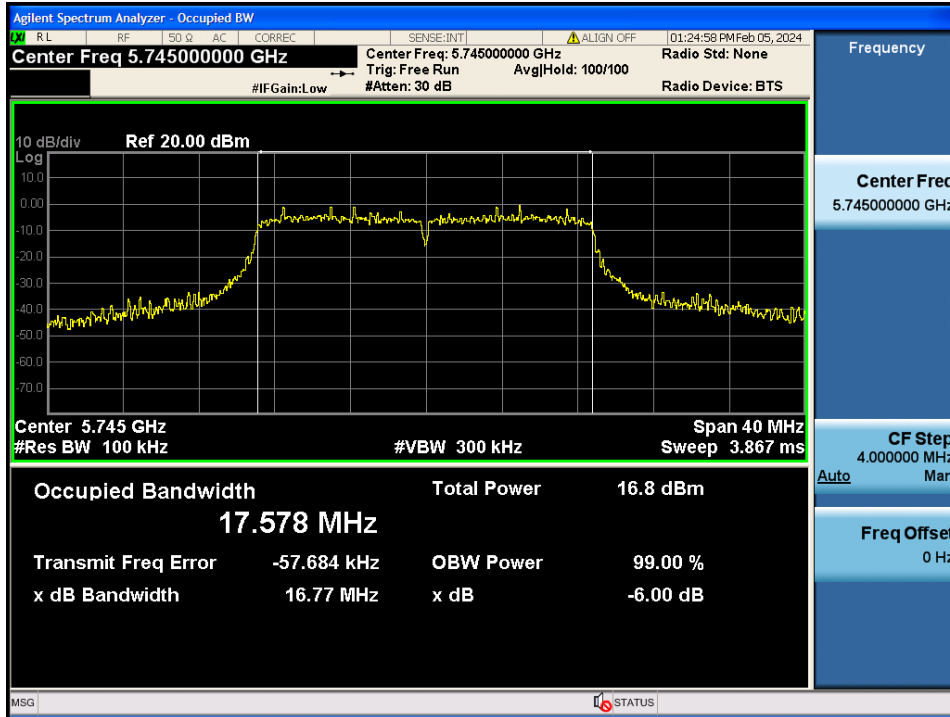
6 dB Bandwidth

Test Mode: TM 1 & Ch.165



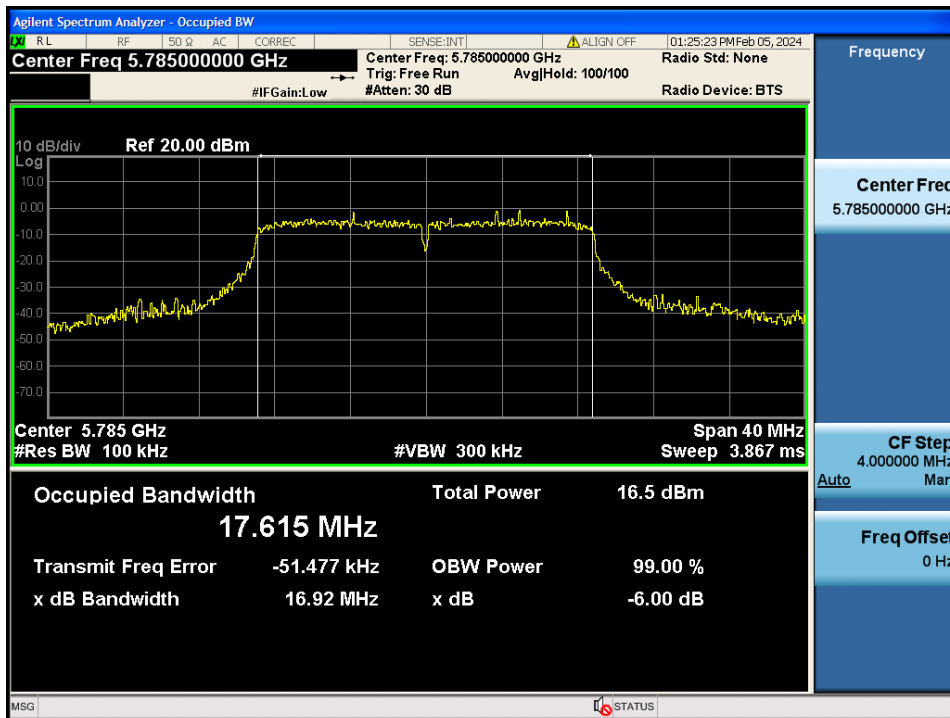
6 dB Bandwidth

Test Mode: TM 2 & Ch.149



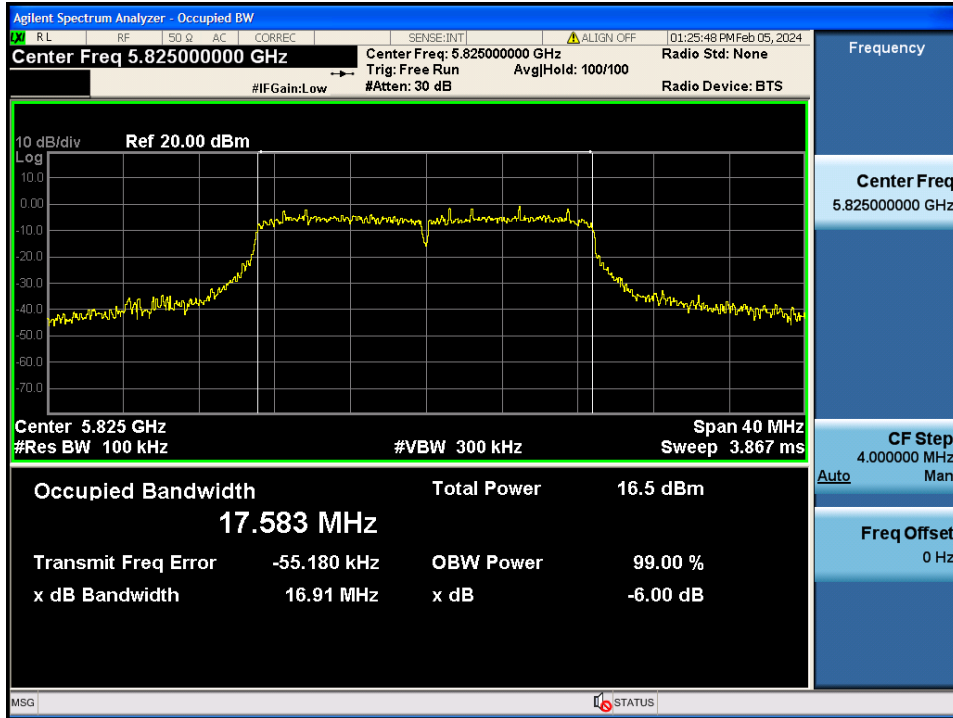
6 dB Bandwidth

Test Mode: TM 2 & Ch.157



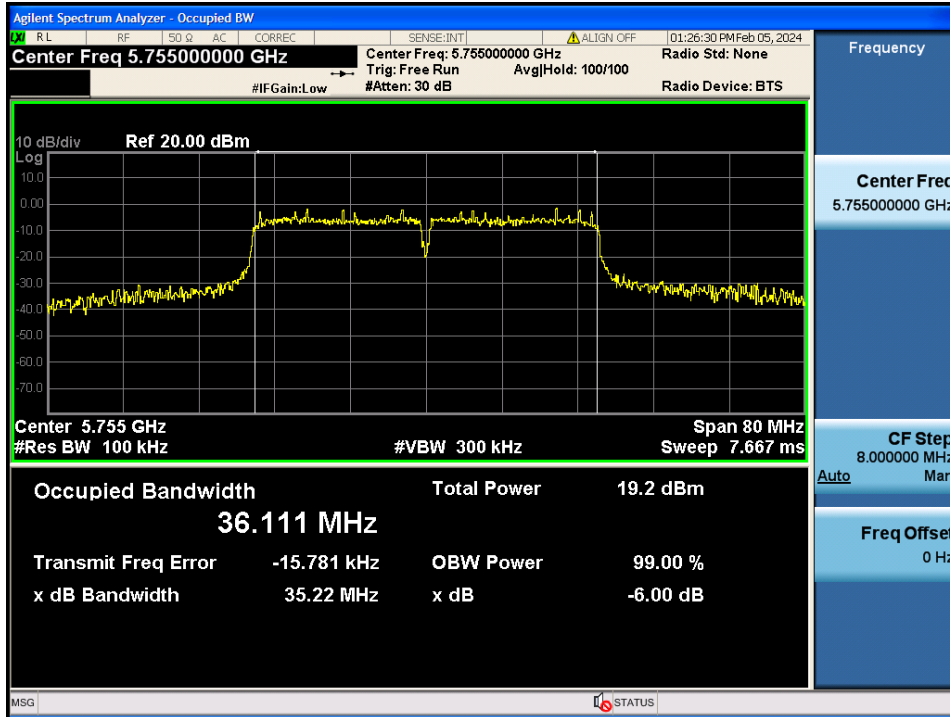
6 dB Bandwidth

Test Mode: TM 2 & Ch.165



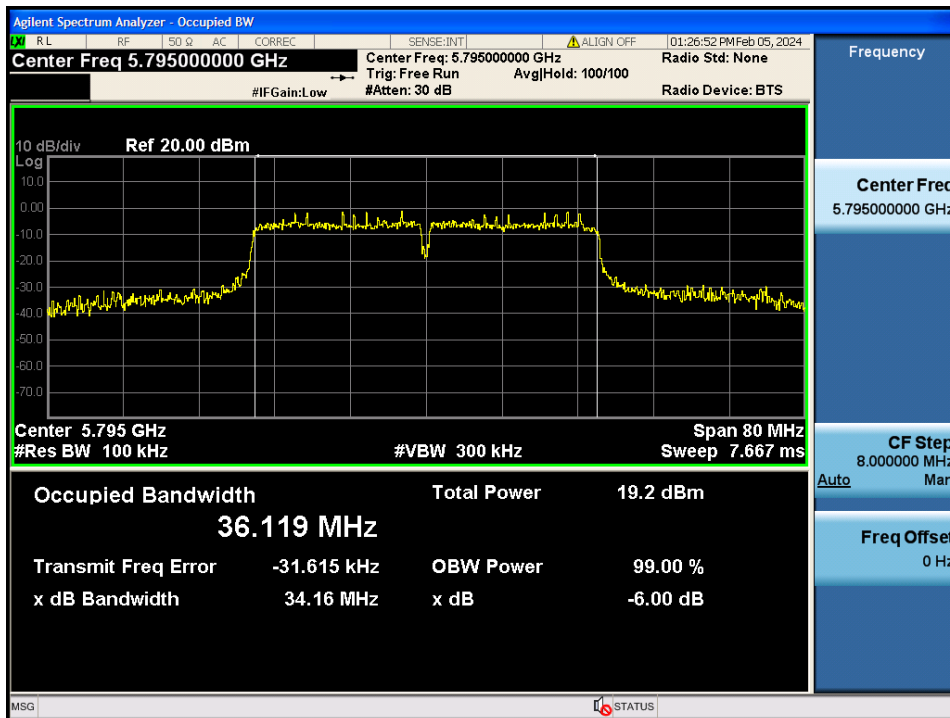
6 dB Bandwidth

Test Mode: TM 3 & Ch.151



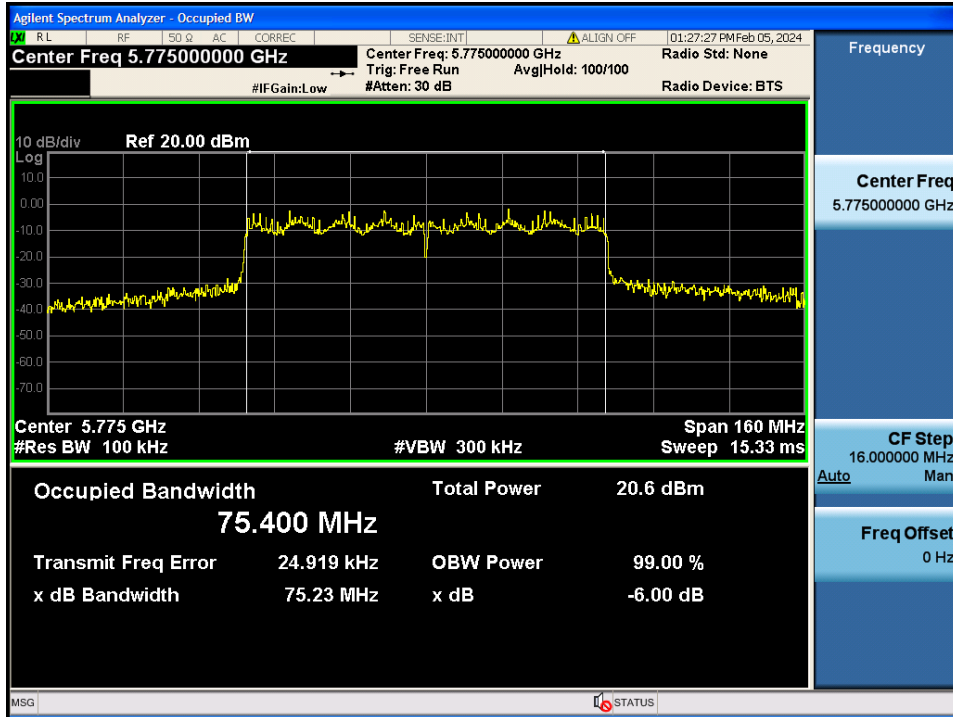
6 dB Bandwidth

Test Mode: TM 3 & Ch.159



6 dB Bandwidth

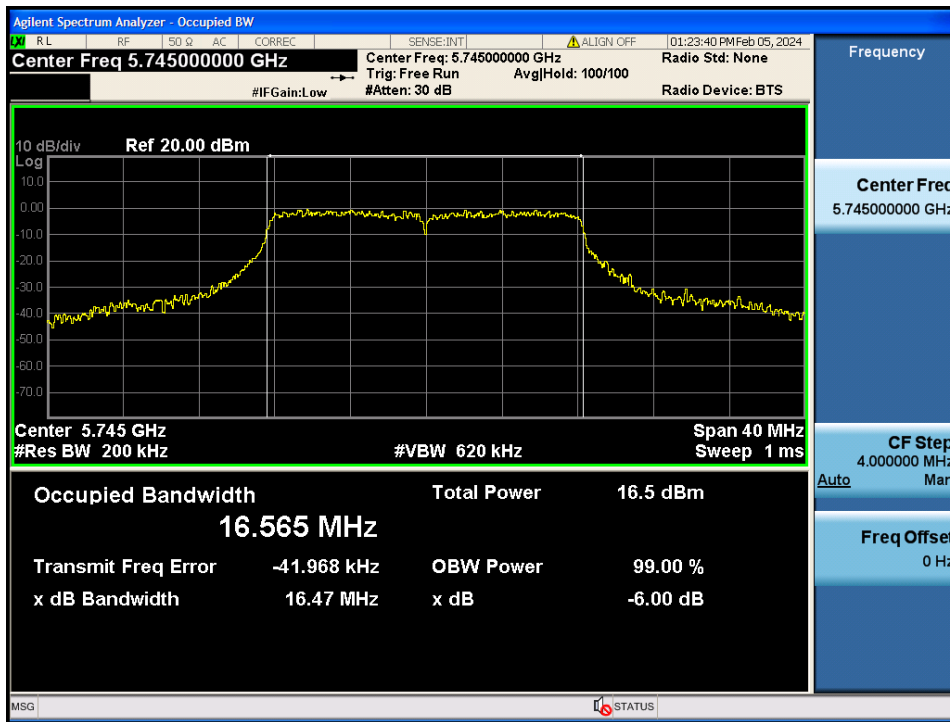
Test Mode: TM 4 & Ch.155



Result Plots

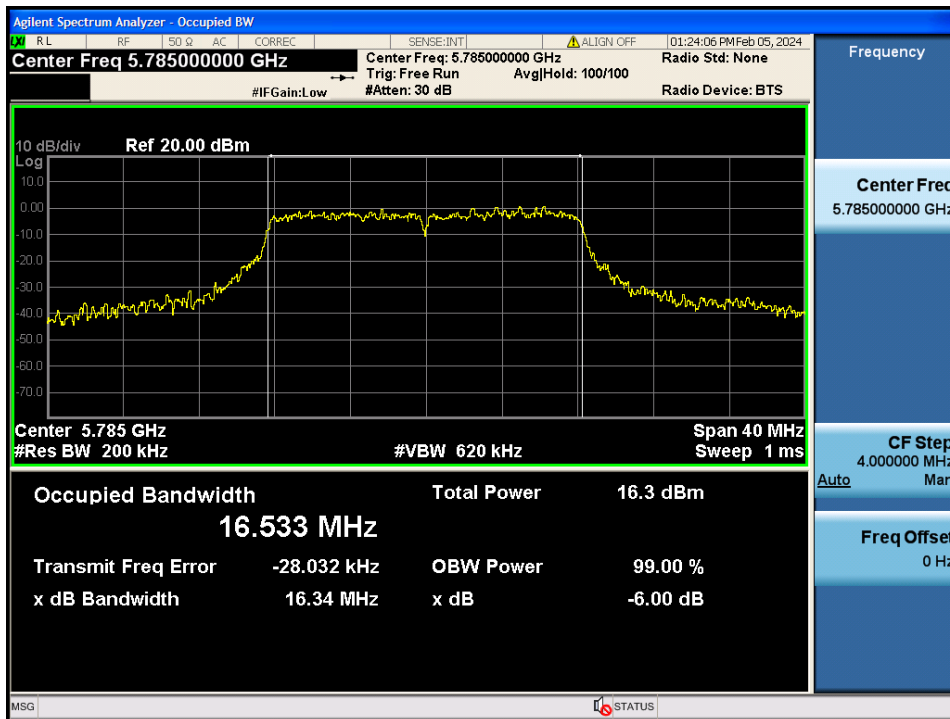
Occupied Bandwidth

Test Mode: TM 1 & Ch.149



Occupied Bandwidth

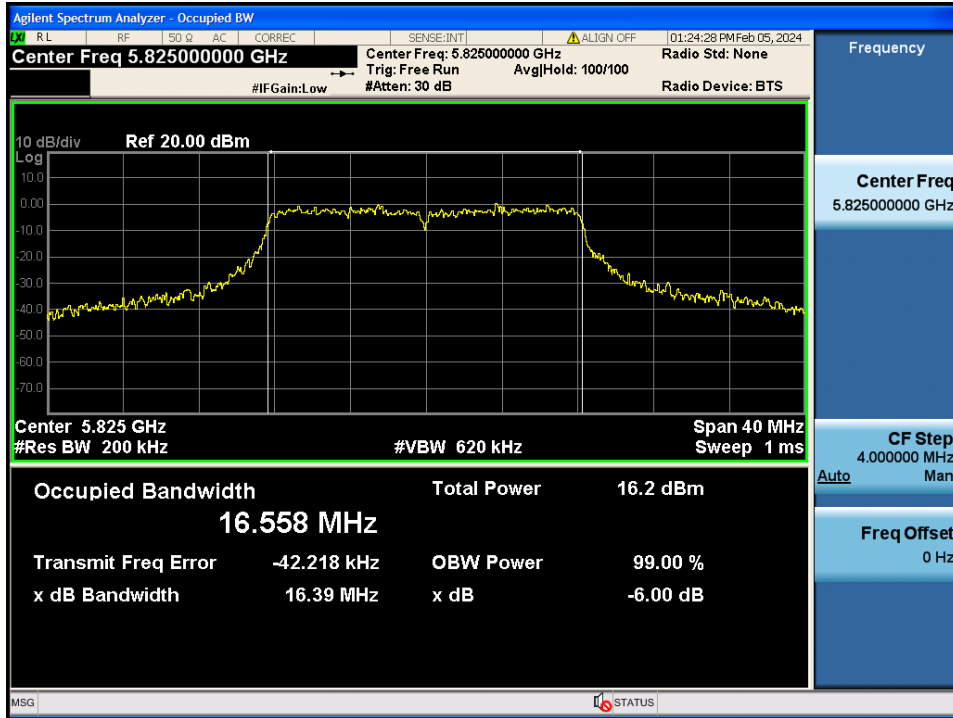
Test Mode: TM 1 & Ch.157





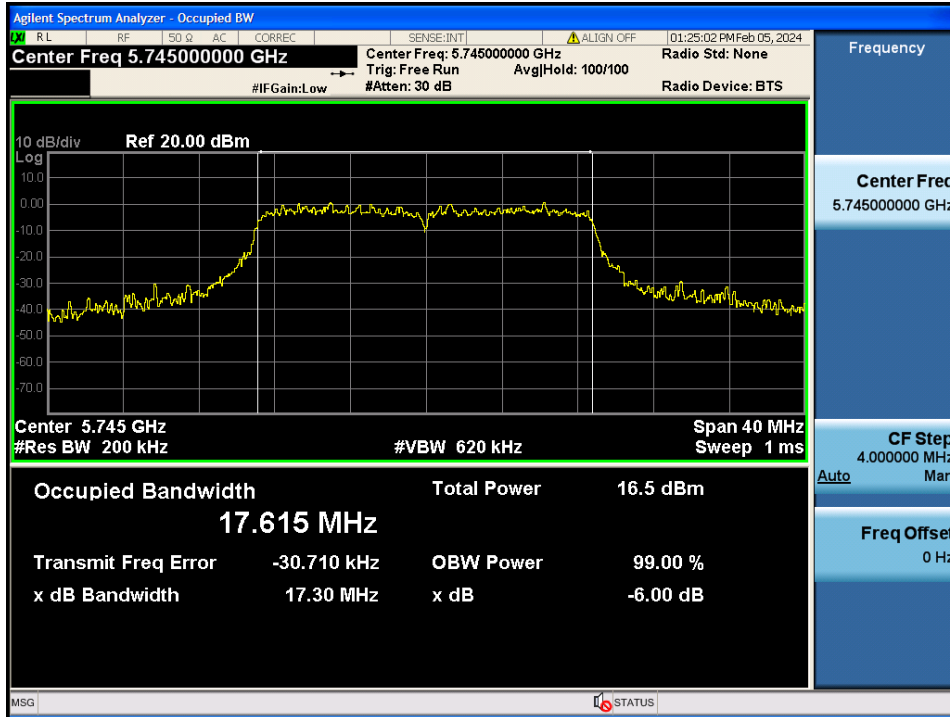
Occupied Bandwidth

Test Mode: TM 1 & Ch.165

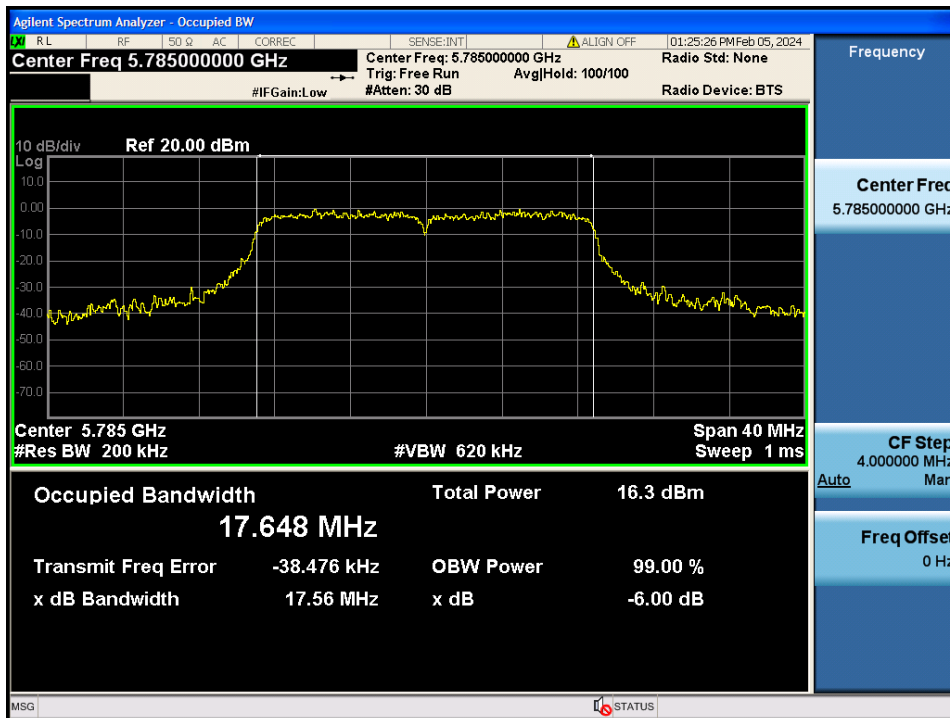


**Occupied Bandwidth**

Test Mode: TM 2 &amp; Ch.149

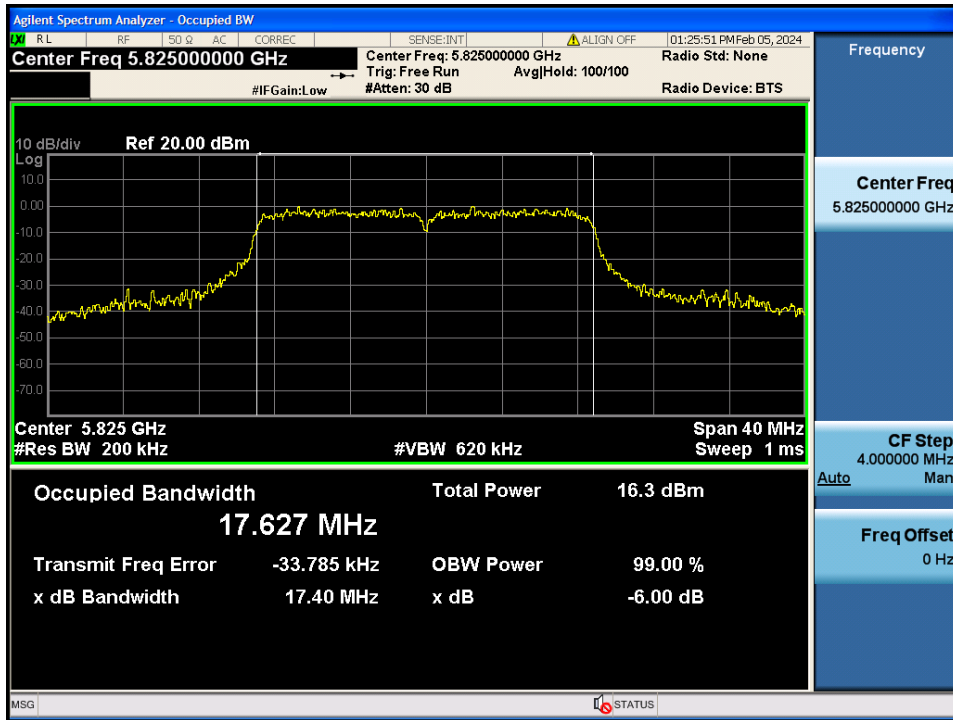

**Occupied Bandwidth**

Test Mode: TM 2 &amp; Ch.157



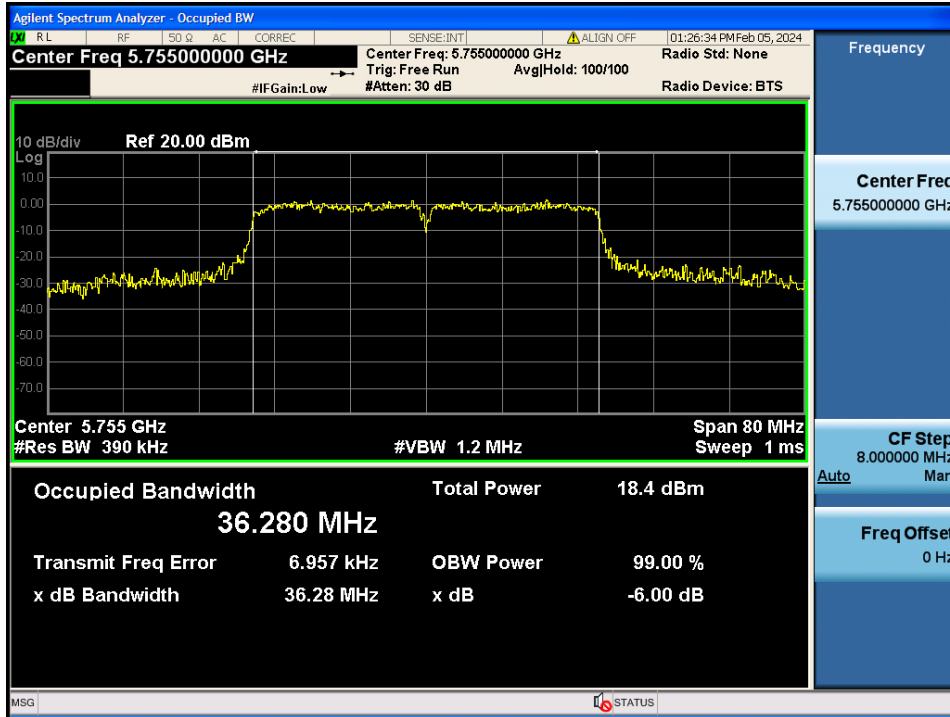
Occupied Bandwidth

Test Mode: TM 2 & Ch.165

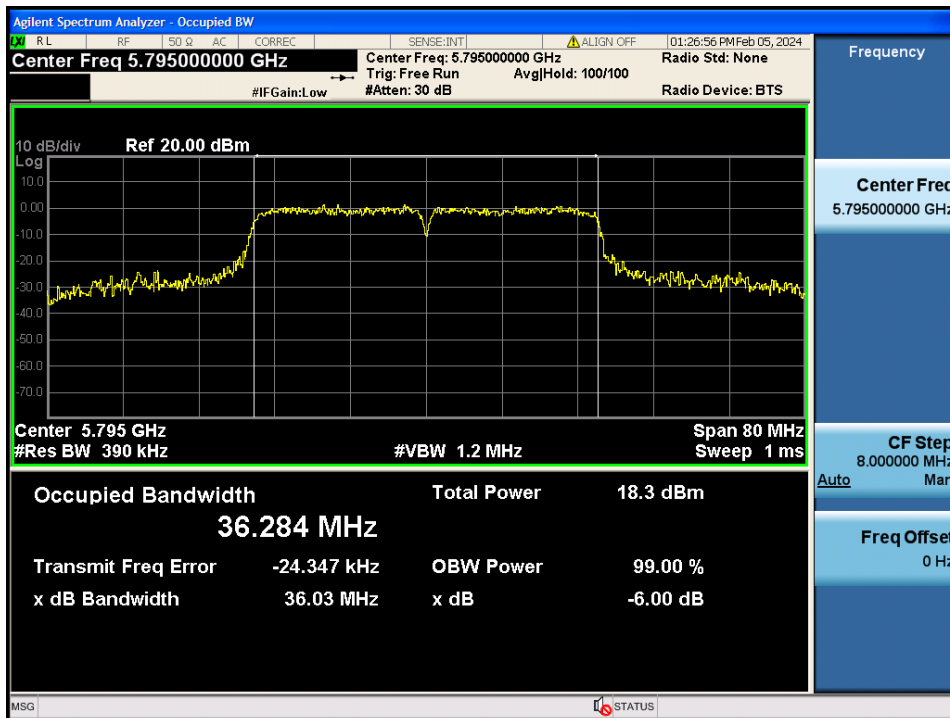


**Occupied Bandwidth**

Test Mode: TM 3 &amp; Ch.151

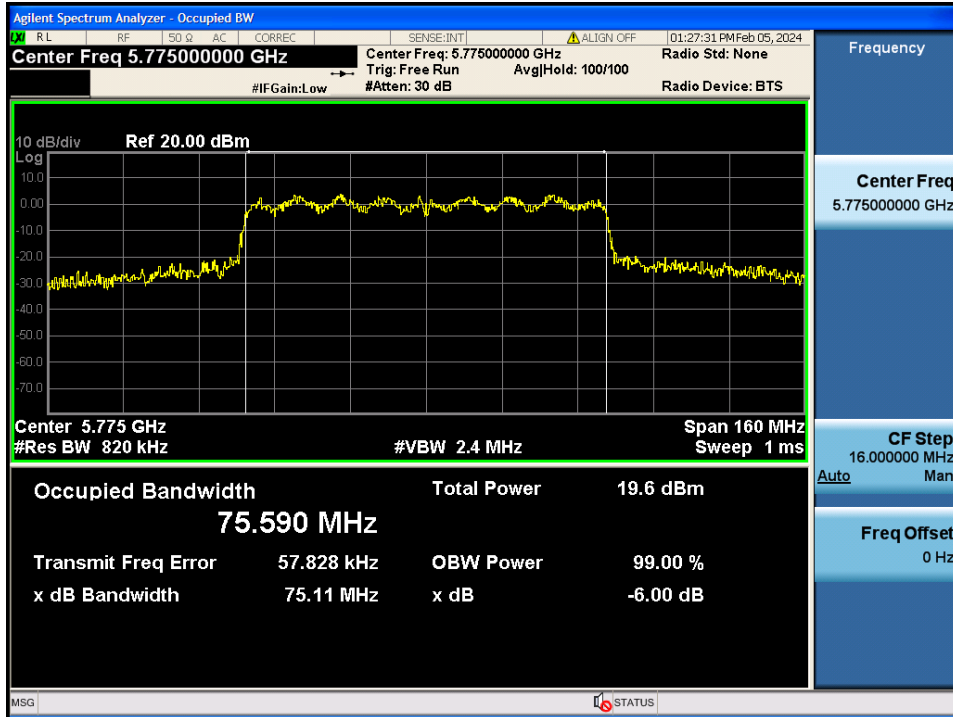

**Occupied Bandwidth**

Test Mode: TM 3 &amp; Ch.159



Occupied Bandwidth

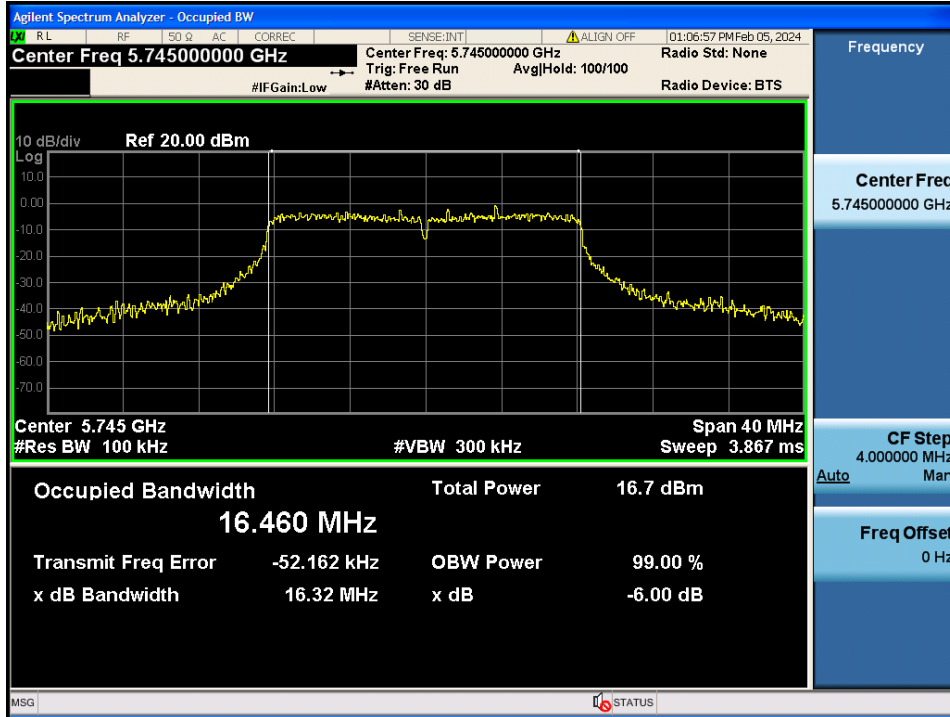
Test Mode: TM 4 & Ch.155



- Power Supply: 24 V

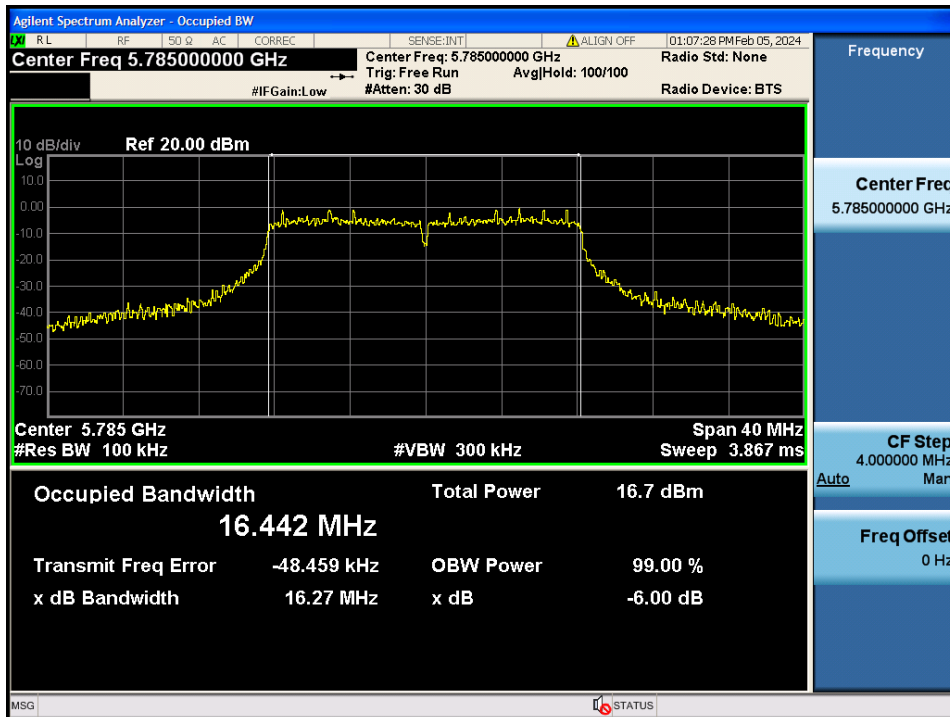
6 dB Bandwidth

Test Mode: TM 1 & Ch.149



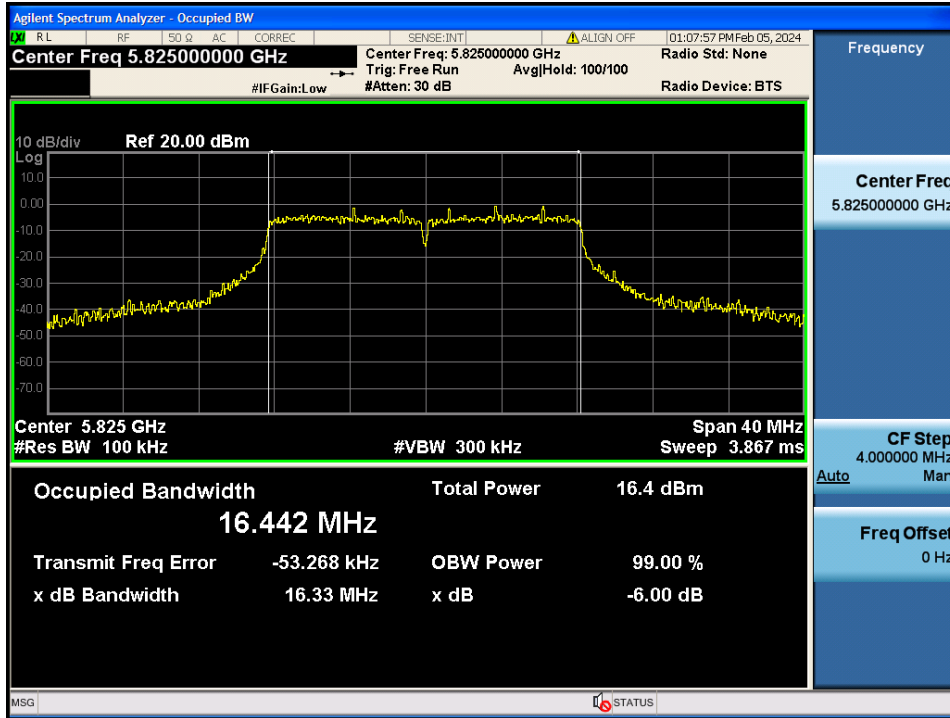
6 dB Bandwidth

Test Mode: TM 1 & Ch.157



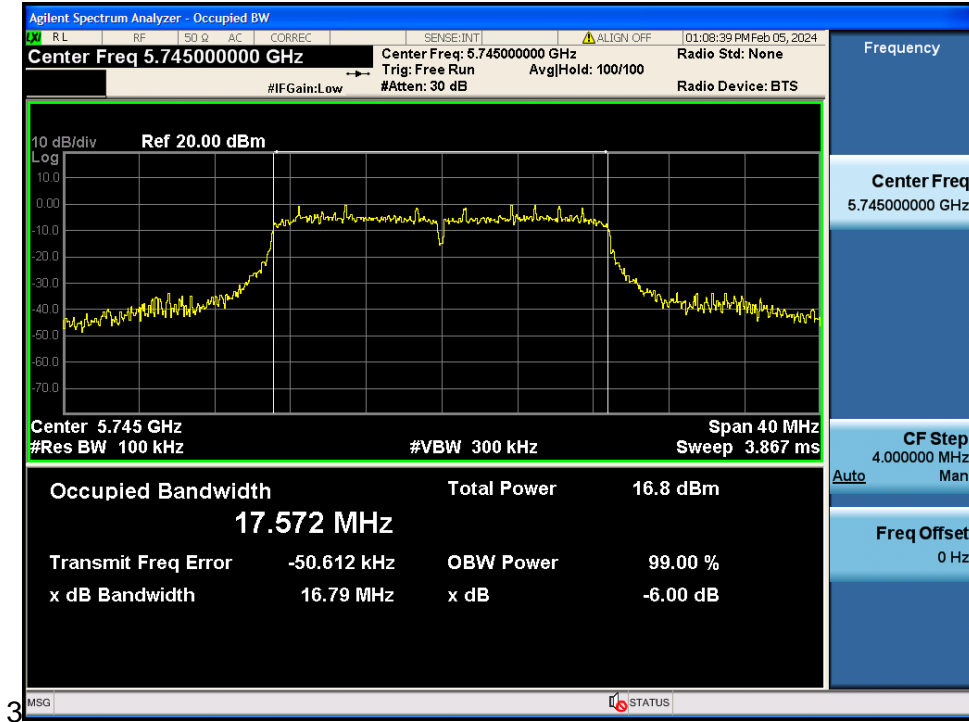
6 dB Bandwidth

Test Mode: TM 1 & Ch.165



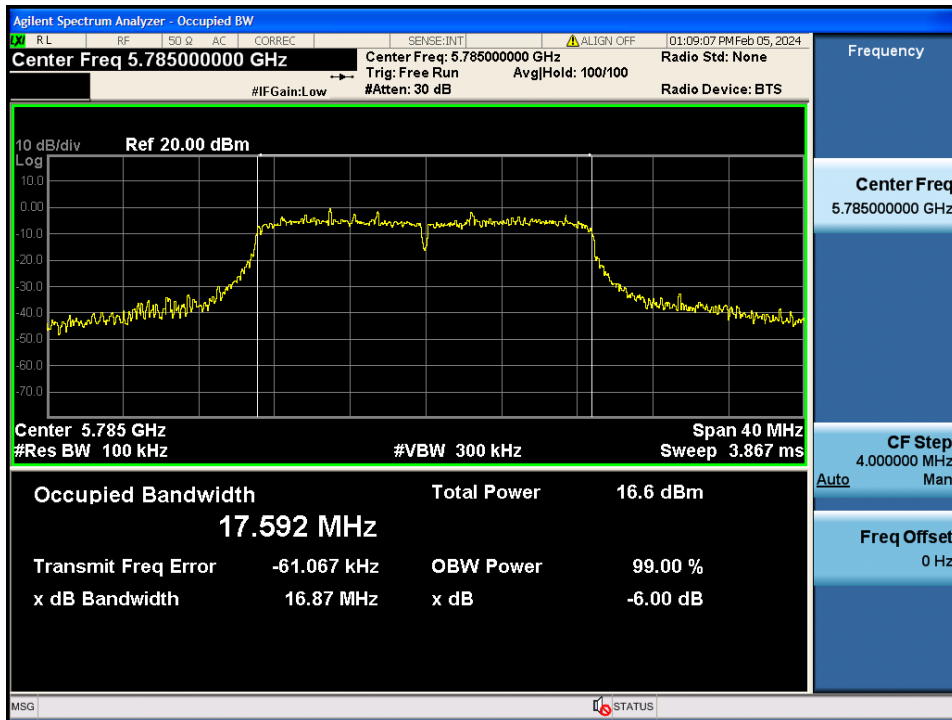
6 dB Bandwidth

Test Mode: TM 2 & Ch.149



6 dB Bandwidth

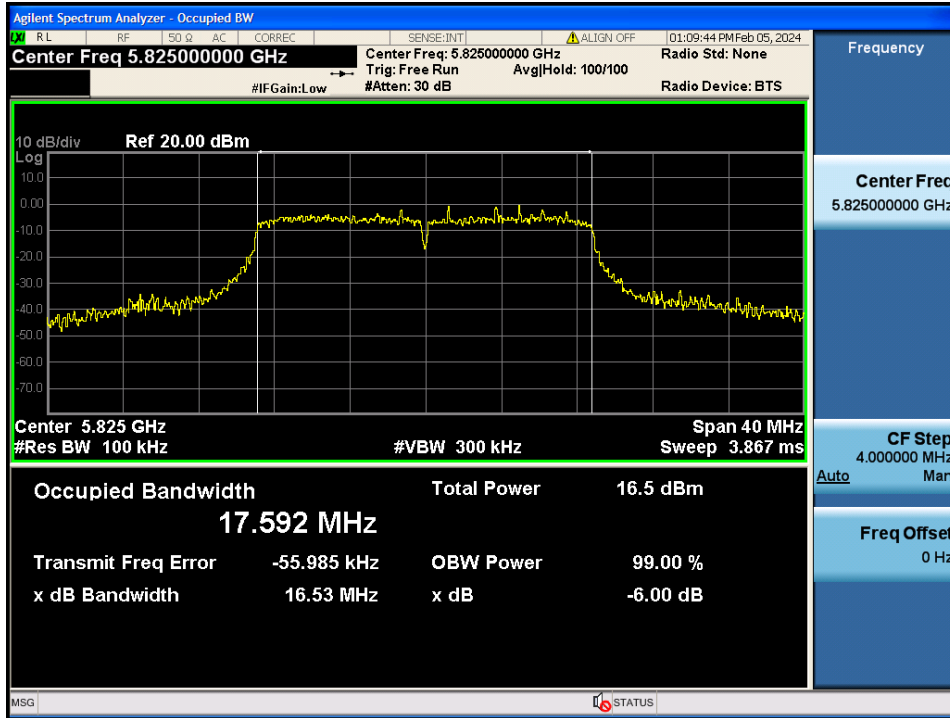
Test Mode: TM 2 & Ch.157





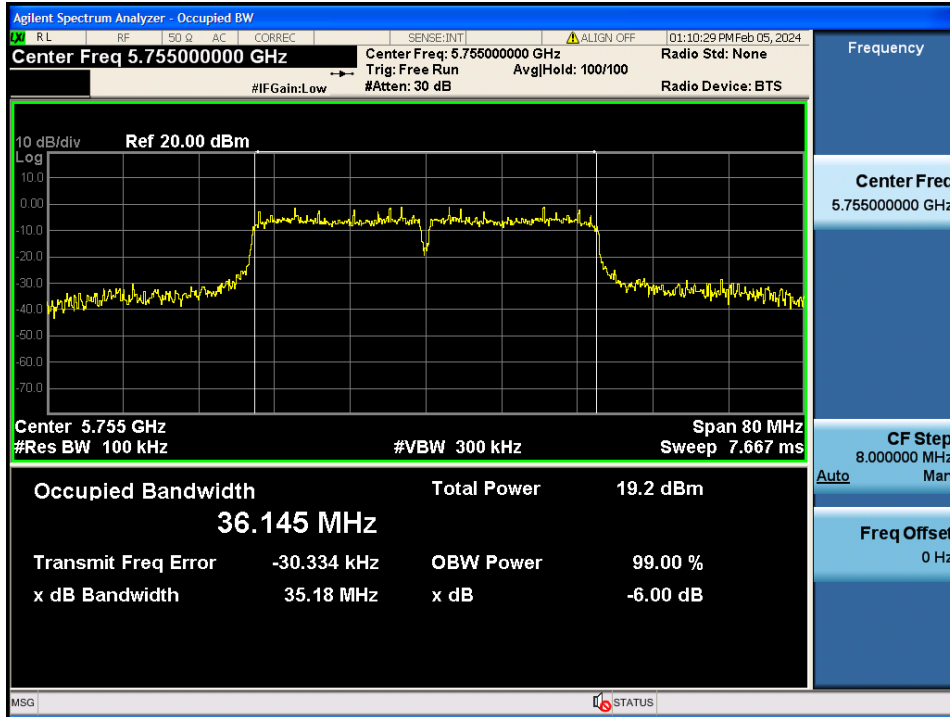
6 dB Bandwidth

Test Mode: TM 2 & Ch.165



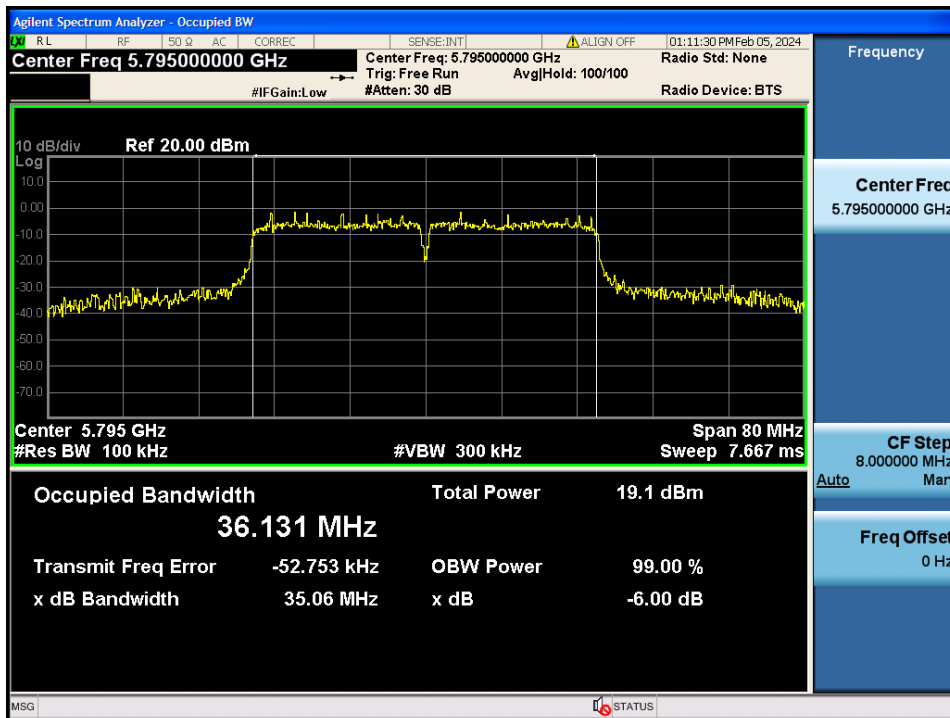
6 dB Bandwidth

Test Mode: TM 3 & Ch.151



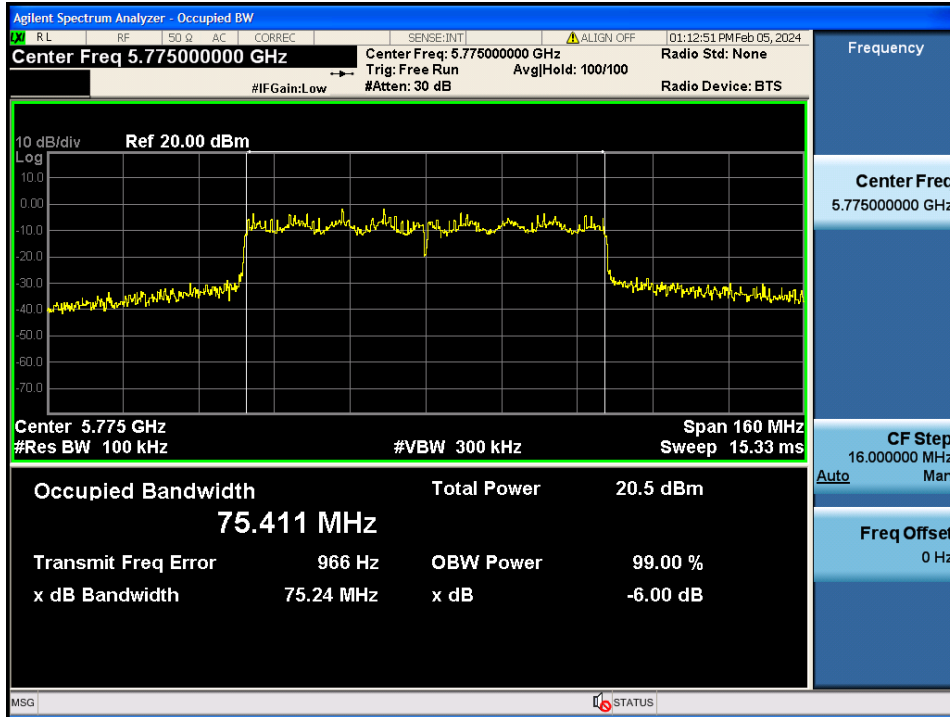
6 dB Bandwidth

Test Mode: TM 3 & Ch.159



6 dB Bandwidth

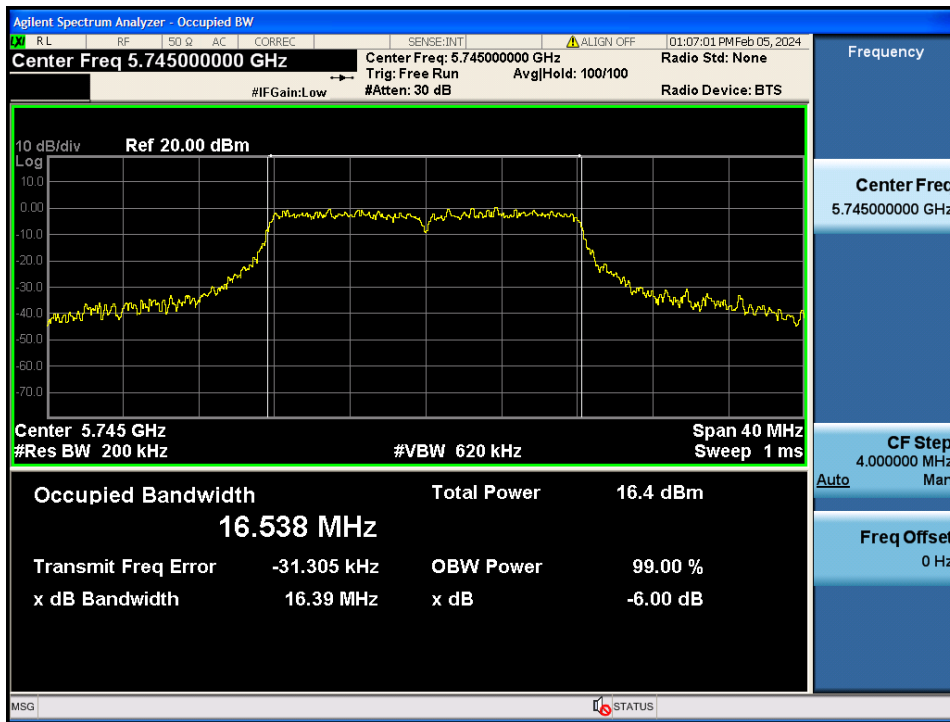
Test Mode: TM 4 & Ch.155



Result Plots

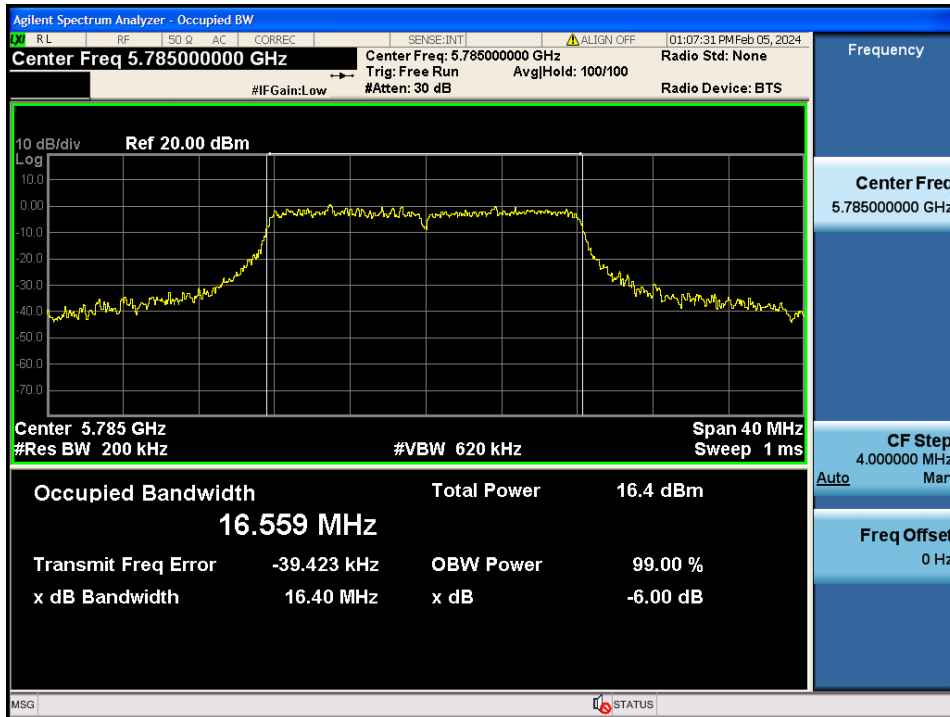
Occupied Bandwidth

Test Mode: TM 1 & Ch.149



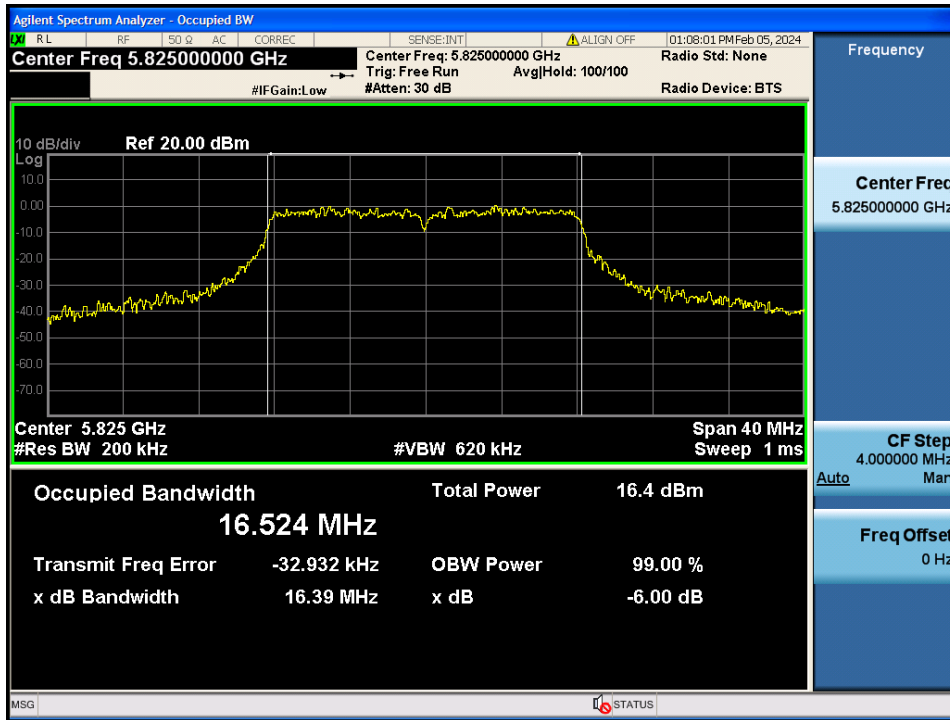
Occupied Bandwidth

Test Mode: TM 1 & Ch.157



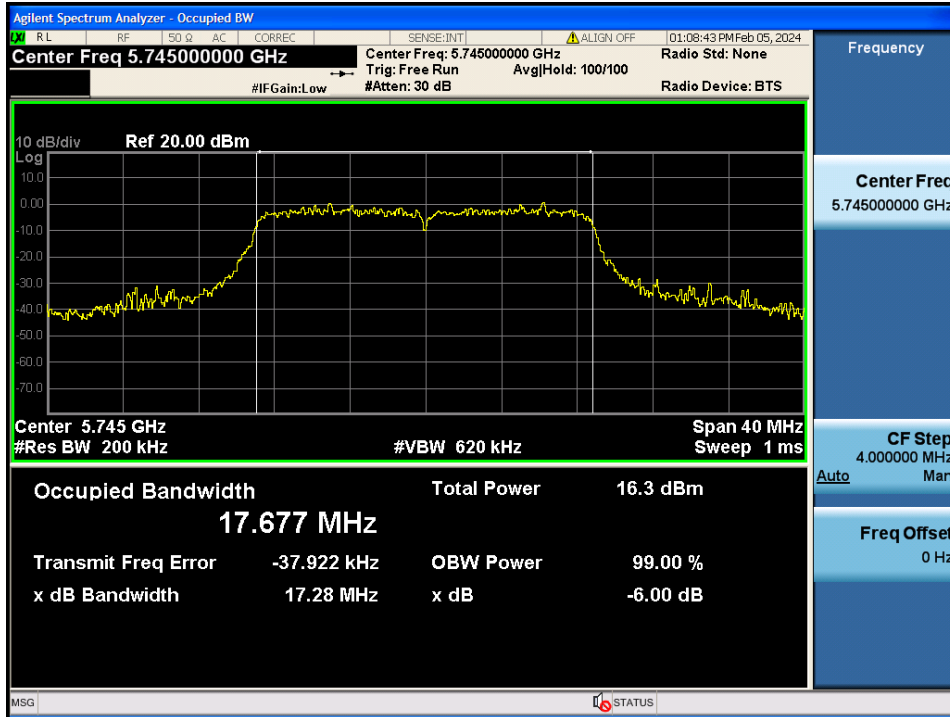
Occupied Bandwidth

Test Mode: TM 1 & Ch.165

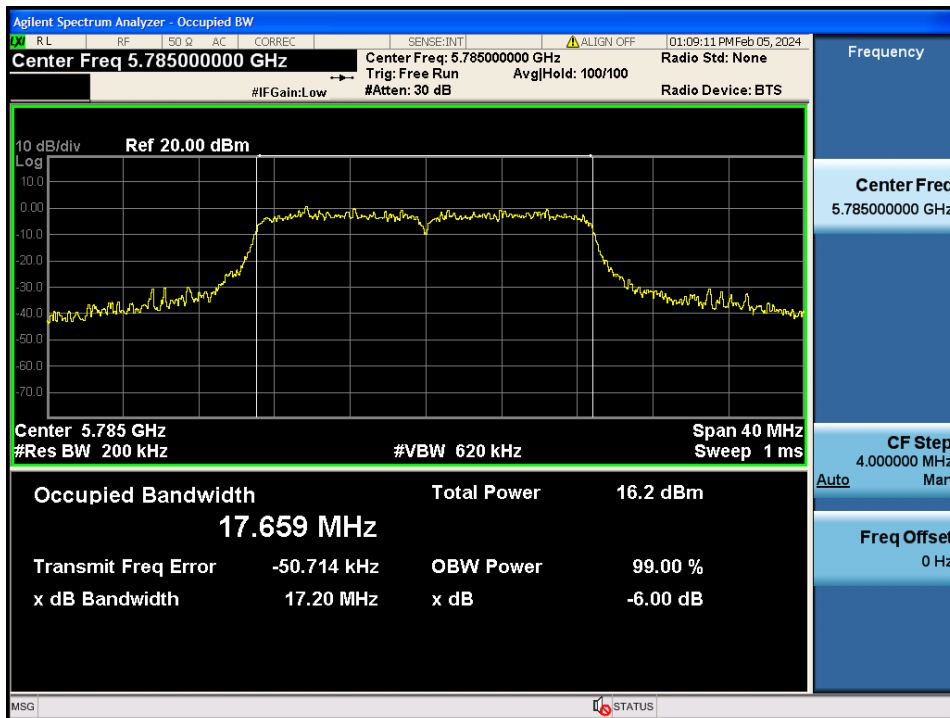


**Occupied Bandwidth**

Test Mode: TM 2 &amp; Ch.149

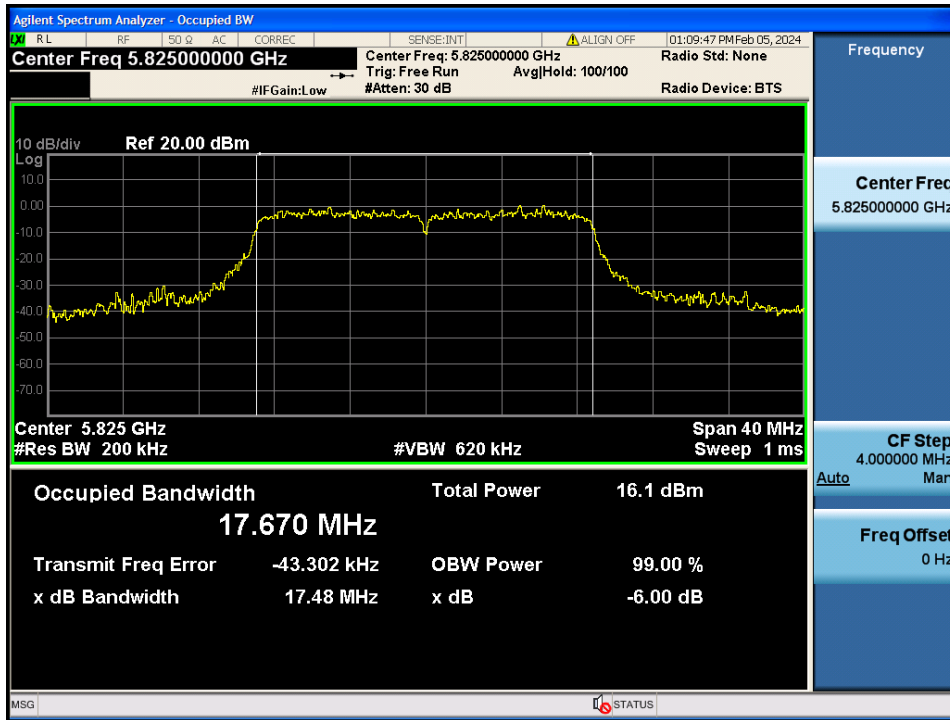

**Occupied Bandwidth**

Test Mode: TM 2 &amp; Ch.157



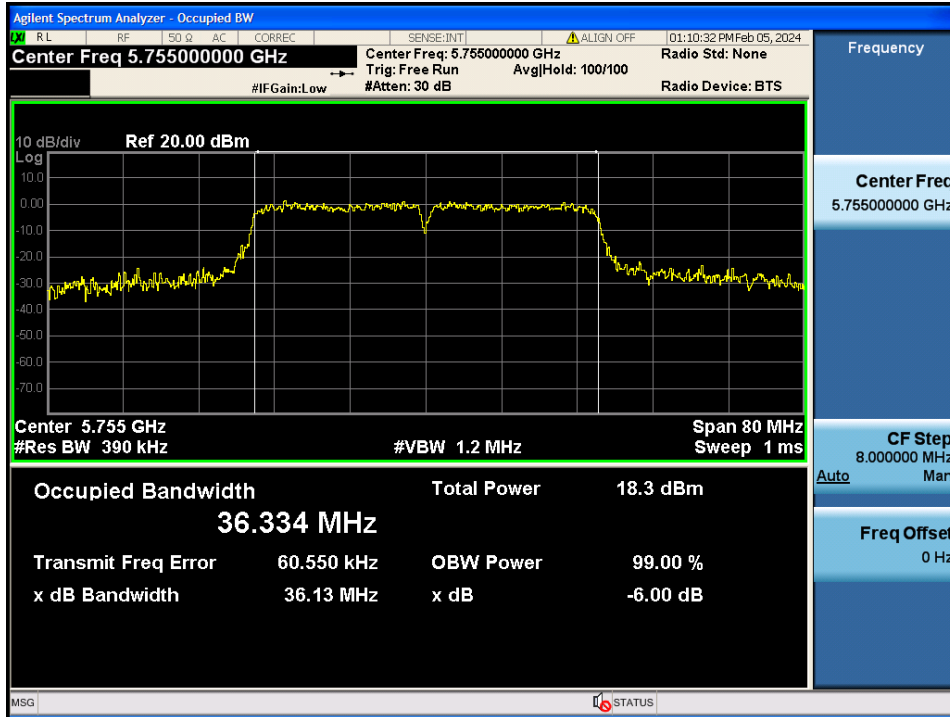
Occupied Bandwidth

Test Mode: TM 2 & Ch.165

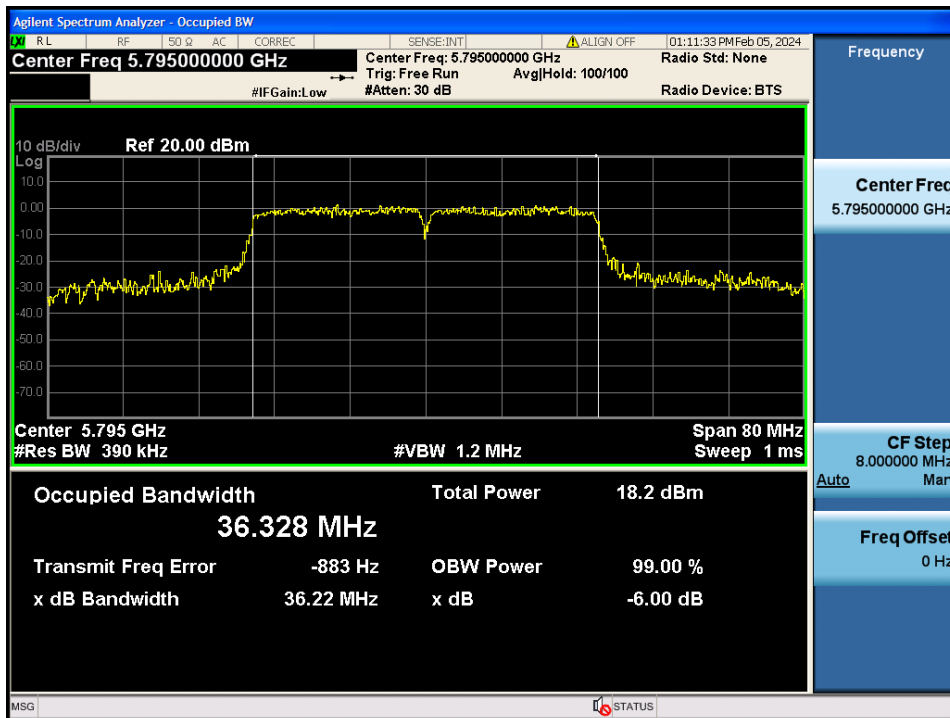


**Occupied Bandwidth**

Test Mode: TM 3 &amp; Ch.151


**Occupied Bandwidth**

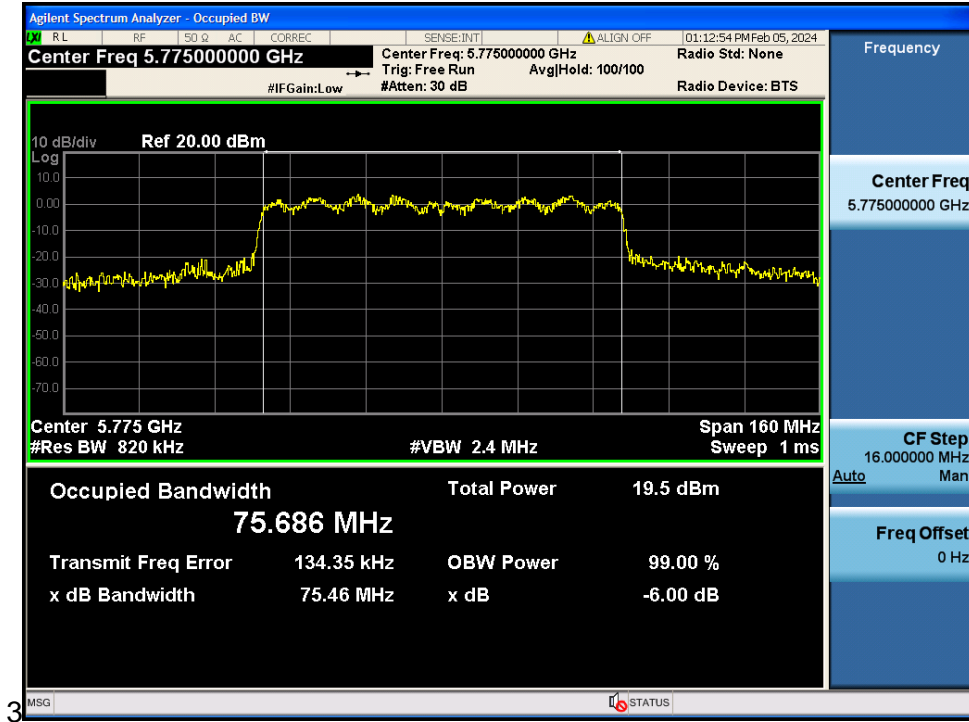
Test Mode: TM 3 &amp; Ch.159





Occupied Bandwidth

Test Mode: TM 4 & Ch.155



3

### 5.3. Maximum Conducted Output Power

#### ■ Test Requirements

##### Part. 15.407(a)

##### (1) For the band 5.15 GHz - 5.25 GHz.

(i) For an outdoor access point operating in the band 5.15 GHz - 5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(ii) For an indoor access point operating in the band 5.15 GHz - 5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15 GHz - 5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For mobile and portable client devices in the 5.15 GHz - 5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(2) For the 5.25 GHz - 5.35 GHz and 5.47 GHz - 5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in megahertz. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(3) **For the band 5.725 GHz - 5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.** If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

**RSS-247[6.2]**
**(1) For band 5 150 MHz – 5 250 MHz**

For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or  $1.76 + 10 \log_{10} B$ , dBm, whichever is less. Devices shall implement transmitter power control (TPC) in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

For other devices, the maximum e.i.r.p. shall not exceed 200 mW or  $10 + 10 \log_{10} B$ , dBm, whichever power is less. B is the 99 % emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

**(2) For band 5 250 MHz – 5 350 MHz**

For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or  $1.76 + 10 \log_{10} B$ , dBm, whichever is less. Devices shall implement TPC in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

Devices, other than devices installed in vehicles, shall comply with the following:

a) The maximum conducted output power shall not exceed 250 mW or  $11 + 10 \log_{10} B$ , dBm, whichever is less.

The power spectral density shall not exceed 11 dBm in any 1.0 MHz band;

b) The maximum e.i.r.p. shall not exceed 1.0 W or  $17 + 10 \log_{10} B$ , dBm, whichever is less. B is the 99 % emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

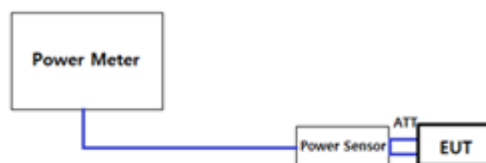
**(3) For band 5 470 MHz – 5 600 MHz and 5 650 MHz – 5 725 MHz**

The maximum conducted output power shall not exceed 250 mW or  $11 + 10 \log_{10} B$ , dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or  $17 + 10 \log_{10} B$ , dBm, whichever is less. B is the 99 % emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

**(4) For band 5 725 MHz – 5 850 MHz**

The maximum conducted output power shall not exceed 1 W. The output power spectral density shall not exceed 30 dBm in any 500 kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the output power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

**■ Test Configuration**


Method PM-G

**■ Test Procedure**
**Method PM-G of KDB789033 D02v02r01**

Measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

■ Test Results: **Comply**

**- Power Supply: 12 V**

Mode	Band	Channel	Frequency (MHz)	Conducted Output Power(dBm)	Antenna Gain(dBi)	e.i.r.p <sup>Note1</sup> (dBm)
802.11a	U-NII 1	36	5 180	9.25	3.60	12.85
		40	5 200	9.39	3.60	12.99
		48	5 240	9.79	3.60	13.39
	U-NII 3	149	5 745	10.86	3.60	14.46
		157	5 785	10.83	3.60	14.43
		165	5 825	10.76	3.60	14.36
802.11n (HT20)	U-NII 1	36	5 180	9.21	3.60	12.81
		40	5 200	9.37	3.60	12.97
		48	5 240	9.89	3.60	13.49
	U-NII 3	149	5 745	10.89	3.60	14.49
		157	5 785	10.86	3.60	14.46
		165	5 825	10.77	3.60	14.37
802.11ac (VHT20)	U-NII 1	36	5 180	9.08	3.60	12.68
		40	5 200	9.18	3.60	12.78
		48	5 240	9.64	3.60	13.24
	U-NII 3	149	5 745	10.77	3.60	14.37
		157	5 785	10.75	3.60	14.35
		165	5 825	10.70	3.60	14.30
802.11n (HT40)	U-NII 1	38	5 190	9.44	3.60	13.04
		46	5 230	9.89	3.60	13.49
	U-NII 3	151	5 755	13.16	3.60	16.76
		159	5 795	12.90	3.60	16.50
802.11ac (VHT40)	U-NII 1	38	5 190	9.44	3.60	13.04
		46	5 230	9.87	3.60	13.47
	U-NII 3	151	5 755	13.09	3.60	16.69
		159	5 795	12.93	3.60	16.53
802.11ac (VHT80)	U-NII 1	42	5 210	9.39	3.60	12.99
	U-NII 3	155	5 775	13.77	3.60	17.37

Note 1: e.i.r.p= Conducted Output Power + Antenna Gain

**- Power Supply: 24 V**

Mode	Band	Channel	Frequency (MHz)	Conducted Output Power(dBm)	Antenna Gain(dBi)	e.i.r.p <sup>Note1</sup> (dBm)
802.11a	U-NII 1	36	5 180	9.18	3.60	12.78
		40	5 200	9.24	3.60	12.84
		48	5 240	9.66	3.60	13.26
	U-NII 3	149	5 745	10.75	3.60	14.35
		157	5 785	10.67	3.60	14.27
		165	5 825	10.64	3.60	14.24
802.11n (HT20)	U-NII 1	36	5 180	9.03	3.60	12.63
		40	5 200	9.07	3.60	12.67
		48	5 240	9.31	3.60	12.91
	U-NII 3	149	5 745	10.75	3.60	14.35
		157	5 785	10.73	3.60	14.33
		165	5 825	10.65	3.60	14.25
802.11ac (VHT20)	U-NII 1	36	5 180	9.04	3.60	12.64
		40	5 200	9.07	3.60	12.67
		48	5 240	9.29	3.60	12.89
	U-NII 3	149	5 745	10.69	3.60	14.29
		157	5 785	10.72	3.60	14.32
		165	5 825	10.65	3.60	14.25
802.11n (HT40)	U-NII 1	38	5 190	9.27	3.60	12.87
		46	5 230	9.65	3.60	13.25
	U-NII 3	151	5 755	13.04	3.60	16.64
		159	5 795	12.78	3.60	16.38
802.11ac (VHT40)	U-NII 1	38	5 190	9.24	3.60	12.84
		46	5 230	9.65	3.60	13.25
	U-NII 3	151	5 755	13.01	3.60	16.61
		159	5 795	12.87	3.60	16.47
802.11ac (VHT80)	U-NII 1	42	5 210	9.33	3.60	12.93
	U-NII 3	155	5 775	13.70	3.60	17.30

Note 1: e.i.r.p= Conducted Output Power + Antenna Gain

## 5.4. Maximum Power Spectral Density

### ■ Test requirements

#### Part. 15.407(a)

##### (1) For the band 5.15 GHz - 5.25 GHz.

(i) For an outdoor access point operating in the band 5.15 GHz - 5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 MHz band. <sup>note1</sup>

(ii) For an indoor access point operating in the band 5.15 GHz - 5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 MHz band. <sup>note1</sup>

(iii) For fixed point-to-point access points operating in the band 5.15 GHz - 5.25 GHz, transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi.

(iv) For mobile and portable client devices in the 5.15 GHz - 5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 MHz band. <sup>note1</sup>

(2) For the 5.25 GHz - 5.35 GHz and 5.47 GHz - 5.725 GHz bands, the peak power spectral density shall not exceed 11 dBm in any 1 MHz band. <sup>note1</sup>

(3) For the band 5.725 GHz - 5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500 kHz band. <sup>note1,note2</sup>

**Note1:** If transmitting antennas of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

**Note2:** Fixed point - to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information.

#### RSS-247[6.2]

##### (1) For band 5 150 MHz – 5 250 MHz

For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or  $1.76 + 10 \log_{10} B$ , dBm, whichever is less. Devices shall implement transmitter power control (TPC) in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

For other devices, the maximum e.i.r.p. shall not exceed 200 mW or  $10 + 10 \log_{10} B$ , dBm, whichever power is less. B is the 99 % emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

##### (2) For band 5 250 MHz – 5 350 MHz

For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or  $1.76 + 10 \log_{10} B$ , dBm, whichever is less. Devices shall implement TPC in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

Devices, other than devices installed in vehicles, shall comply with the following:

a) The maximum conducted output power shall not exceed 250 mW or  $11 + 10 \log_{10} B$ , dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band;

b) The maximum e.i.r.p. shall not exceed 1.0 W or  $17 + 10 \log_{10} B$ , dBm, whichever is less. B is the 99 % emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

##### (3) For band 5 470 MHz – 5 600 MHz and 5 650 MHz – 5 725 MHz

The maximum conducted output power shall not exceed 250 mW or  $11 + 10 \log_{10} B$ , dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or  $17 + 10 \log_{10} B$ , dBm, whichever is less. B is the 99 % emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

##### (4) For band 5 725 MHz – 5 850 MHz

The maximum conducted output power shall not exceed 1 W. The output power spectral density shall not exceed 30 dBm in any 500 kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the output power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

## ■ Test Configuration

Refer to the APPENDIX I.

## ■ Test Procedure

Maximum Power Spectral Density is measured using Measurement Procedure of **KDB789033 D02v02r01**

- 1) Create an average power spectrum for the EUT operating mode being tested by following the instructions in section II.E.2. for measuring maximum conducted output power using a spectrum analyzer or EMI receiver: select the appropriate test method (SA - 1, SA - 2, SA - 3, or alternatives to each) and apply it up to, but not including, the step labeled, "Compute power...". (This procedure is required even if the maximum conducted output power measurement was performed using a power meter, method PM.)
- 2) Use the peak search function on the instrument to find the peak of the spectrum and record its value.
- 3) Make the following adjustments to the peak value of the spectrum, if applicable:
  - a) If Method SA - 2 or SA - 2 Alternative was used, add  $10 \log(1 / x)$ , where  $x$  is the duty cycle, to the peak of the spectrum.**
  - b) If Method SA - 3 Alternative was used and the linear mode was used in step II.E.2.g (viii), add 1 dB to the final result to compensate for the difference between linear averaging and power averaging.
- 4) The result is the Maximum PSD over 1 MHz reference bandwidth.
- 5) For devices operating in the bands 5.15 GHz - 5.25 GHz, 5.25 GHz - 5.35 GHz, and 5.47 GHz - 5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in §15.407(a). For devices operating in the band 5.725 GHz - 5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, "provided that the measured power is integrated over the full reference bandwidth" to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 kHz bandwidth, the following adjustments to the procedures apply:
  - a) Set  $RBW \geq 1 / T$ , where T is defined in section II.B.1.a). (Refer to Appendix II)
  - b) Set  $VBW \geq 3 RBW$ .
  - c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add  $10 \log(500 \text{ kHz} / RBW)$  to the measured result, whereas RBW (< 500 kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
  - d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add  $10 \log(1 \text{ MHz} / RBW)$  to the measured result, whereas RBW (< 1 MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.
  - e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

**Note: As a practical matter, it is recommended to use reduced RBW of 100 kHz for the sections 5.c) and 5.d) above, since RBW = 100 kHz is available on nearly all spectrum analyzers.**

■ Test Results: **Comply**

**- Power Supply: 12 V**

Test Mode	Band	Channel	Frequency (MHz)	Reading (dBm/Specified BW) <sup>Note1</sup>	DCCF (dB) <sup>Note2</sup>	Power Spectral Density(dBm/Specified BW)	EUT Antenna Gain(dBi)	e.i.r.p Spectral Density (dBm/Specified BW)
TM 1	U-NII 1	36	5 180	-4.41	2.40	-2.01	3.60	1.59
		40	5 200	-4.52	2.40	-2.12	3.60	1.48
		48	5 240	-3.81	2.40	-1.41	3.60	2.19
	U-NII 3	149	5 745	-4.88	2.40	-2.48	3.60	1.12
		157	5 785	-5.17	2.40	-2.77	3.60	0.83
		165	5 825	-5.41	2.40	-3.01	3.60	0.59
TM 2	U-NII 1	36	5 180	-4.39	2.53	-1.86	3.60	1.74
		40	5 200	-4.60	2.53	-2.07	3.60	1.53
		48	5 240	-3.92	2.53	-1.39	3.60	2.21
	U-NII 3	149	5 745	-5.38	2.53	-2.85	3.60	0.75
		157	5 785	-4.96	2.53	-2.43	3.60	1.17
		165	5 825	-5.25	2.53	-2.72	3.60	0.88
TM 3	U-NII 1	38	5 190	-8.25	4.13	-4.12	3.60	-0.52
		46	5 230	-8.22	4.13	-4.09	3.60	-0.49
	U-NII 3	151	5 755	-7.25	4.13	-3.12	3.60	0.48
		159	5 795	-7.49	4.13	-3.36	3.60	0.24
TM 4	U-NII 1	42	5 210	-12.21	6.22	-5.99	3.60	-2.39
	U-NII 3	155	5 775	-9.93	6.22	-3.71	3.60	-0.11

**- Power Supply: 24 V**

Test Mode	Band	Channel	Frequency (MHz)	Reading (dBm/Specified BW) <sup>Note1</sup>	DCCF (dB) <sup>Note2</sup>	Power Spectral Density(dBm/Specified BW)	EUT Antenna Gain(dBi)	e.i.r.p Spectral Density (dBm/Specified BW)
TM 1	U-NII 1	36	5 180	-4.59	2.40	-2.19	3.60	1.41
		40	5 200	-4.01	2.40	-1.61	3.60	1.99
		48	5 240	-3.15	2.40	-0.75	3.60	2.85
	U-NII 3	149	5 745	-5.13	2.40	-2.73	3.60	0.87
		157	5 785	-5.28	2.40	-2.88	3.60	0.72
		165	5 825	-5.28	2.40	-2.88	3.60	0.72
TM 2	U-NII 1	36	5 180	-4.79	2.53	-2.26	3.60	1.34
		40	5 200	-4.60	2.53	-2.07	3.60	1.53
		48	5 240	-4.54	2.53	-2.01	3.60	1.59
	U-NII 3	149	5 745	-5.13	2.53	-2.60	3.60	1.00
		157	5 785	-5.30	2.53	-2.77	3.60	0.83
		165	5 825	-5.69	2.53	-3.16	3.60	0.44
TM 3	U-NII 1	38	5 190	-8.50	4.13	-4.37	3.60	-0.77
		46	5 230	-8.19	4.13	-4.06	3.60	-0.46
	U-NII 3	151	5 755	-7.46	4.13	-3.33	3.60	0.27
		159	5 795	-7.41	4.13	-3.28	3.60	0.32
TM 4	U-NII 1	42	5 210	-11.72	6.22	-5.50	3.60	-1.90
	U-NII 3	155	5 775	-10.33	6.22	-4.11	3.60	-0.51

Note 1: Specified Bandwidth: U-NII 1 = 1 MHz, U-NII 3 = 500 kHz

Note 2: Power Spectral Density = Reading(Measurement Data) + DCCF(Duty Cycle Correction Factor)

For DCCF(Duty Cycle Correction Factor) please refer to appendix II.

Note 3: e.i.r.p Spectral Density= Power spectral density + EUT Antenna Gain

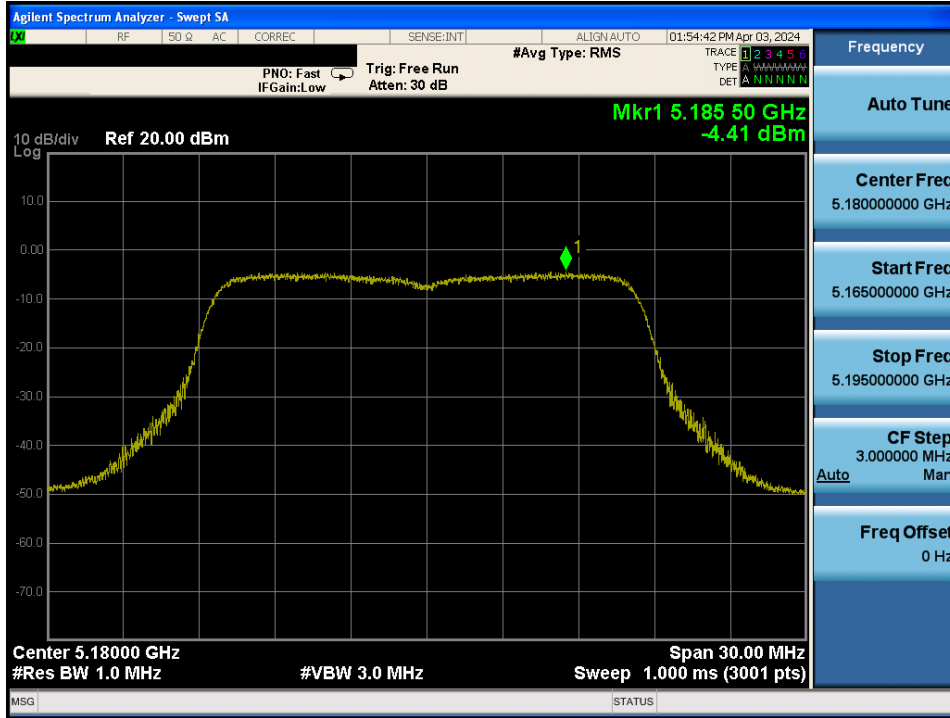


RESULT PLOTS

- Power Supply: 12 V

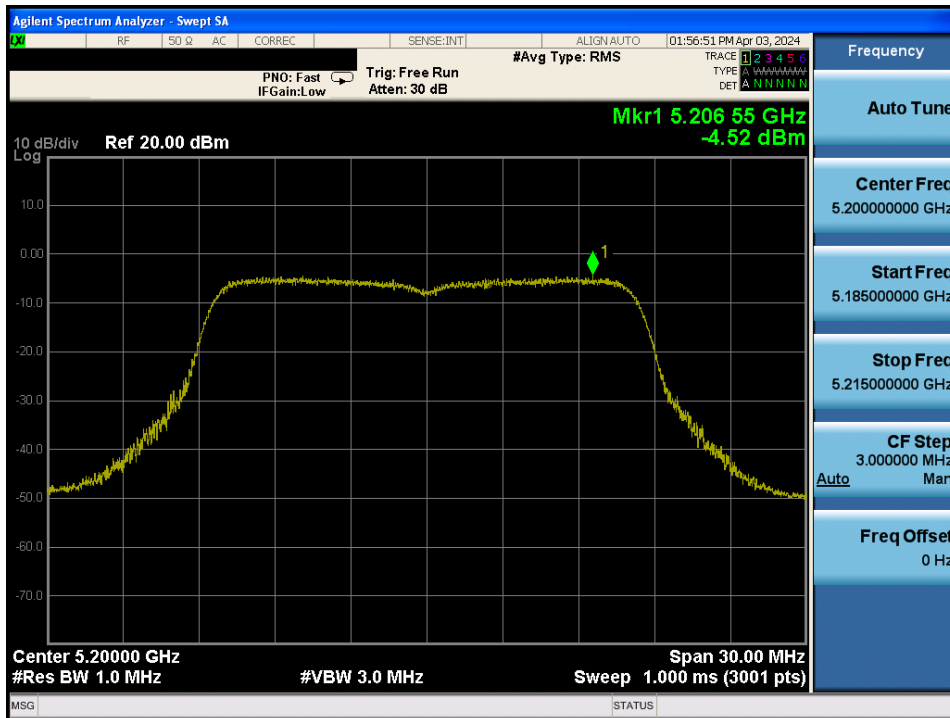
Maximum Power Spectral Density

Test Mode: TM 1 & Ch.36



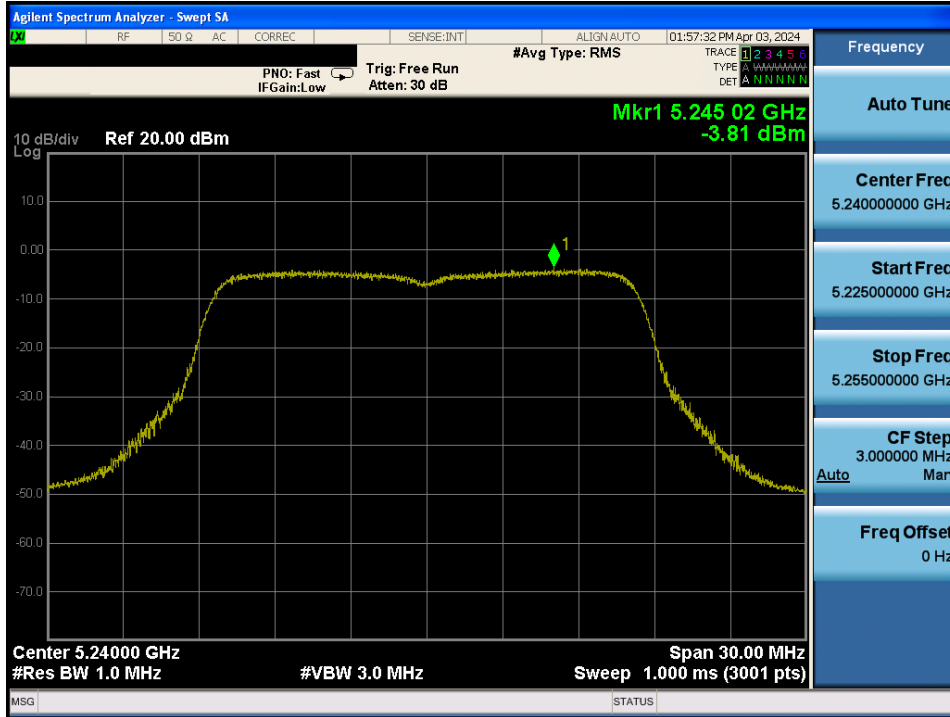
Maximum Power Spectral Density

Test Mode: TM 1 & Ch.40



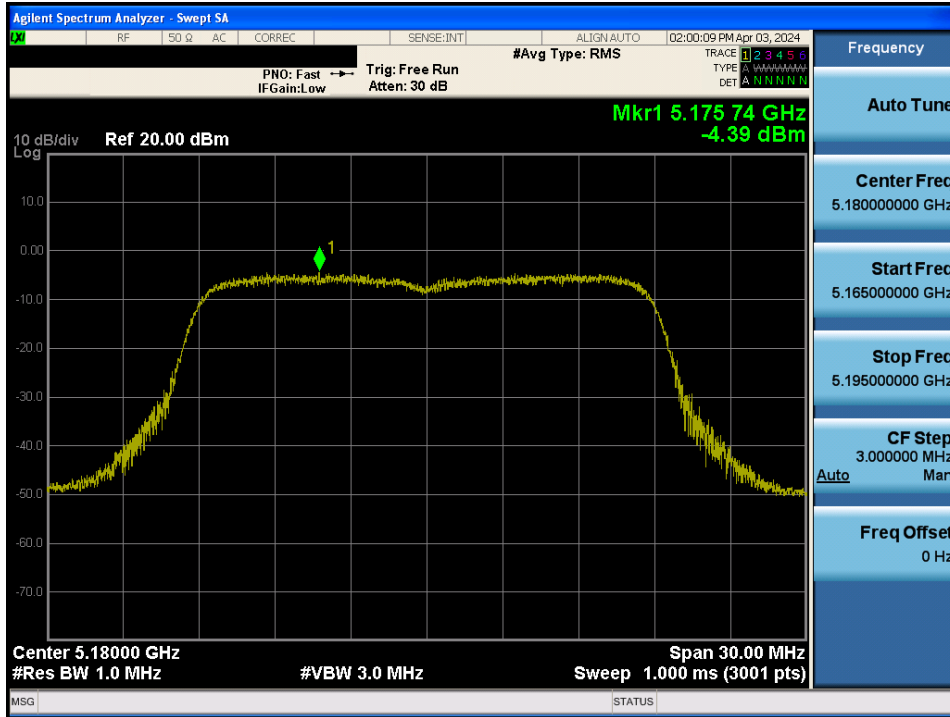
Maximum Power Spectral Density

Test Mode: TM 1 & Ch.48



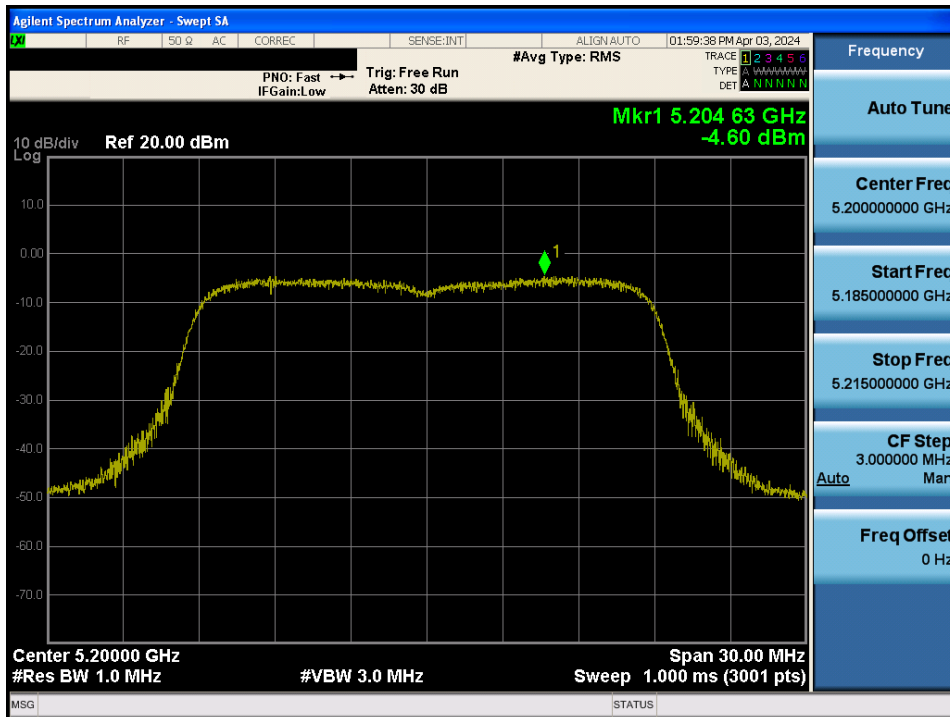
Maximum Power Spectral Density

Test Mode: TM 2 & Ch.36



Maximum Power Spectral Density

Test Mode: TM 2 & Ch.40



Maximum Power Spectral Density

Test Mode: TM 2 & Ch.48

