TEST REPORT

APPLICANT	:	Shenzhen Creality 3D Technology Co., Ltd.
PRODUCT NAME	:	Scan Bridge, Creality RaptorX & Scan Bridge Kit
MODEL NAME	:	CRP05SB, CRP04SB, CRS08RXSB
BRAND NAME	:	CREALITY
FCC ID	:	2AXH6-CRS08RXSB
STANDARD(S)	:	47 CFR Part 15 Subpart E
RECEIPT DATE	:	2024-09-11
TEST DATE	:	2024-09-24 to 2024-11-06
ISSUE DATE	:	2024-11-26

Edited by: Su Xiaoxian

Su Xiaoxian (Rapporteur)

Approved by: Shen Junsheng

Shen Junsheng (Supervisor)

MORLAB

Shenzhen Morlab Communications Technology Co., Ltd.
FL.1-3, Building A, FeiYang Science Park, No.8 LongChang Road,
Block67, BaoAn District, ShenZhen, GuangDong Province, P. R. China

Tel: 86-755-36698555 Fax: 86-755-36698525
Http://www.morlab.cn E-mail: service@morlab.cn

DIRECTORY

Change History		
Version	**Date**	**Reason for change**
1.0	2024-11-26	First edition

1. Summary of Test Result

No.	Section	Description	Test Date	Test Engineer	Result	Method Determination /Remark
1	15.203	Antenna Requirement	N/A	N/A	PASS	No deviation
2	ANSI C63.10	Duty Cycle of the Test Signal	Oct. 12, 2024	Li Xinpeng	PASS	No deviation
3	15.407(a)	Maximum Conducted Output Power	Oct. 12, 2024	Li Xinpeng	PASS	No deviation
4	15.407(a)(e)	Emission Bandwidth	Oct. 12, 2024	Li Xinpeng	PASS	No deviation
5	15.407(a)	Peak Power Spectral Density	Oct. 12-Nov. 01, 2024	Li Xinpeng	PASS	No deviation
6	15.407(g)	Frequency Stability	Nov. 06, 2024	Li Xinpeng	PASS	No deviation
7	15.207	Conducted Emission	Sep. 24, 2024	Fan Shengquan	PASS	No deviation
8	15.407(b)	Restricted Frequency Bands	Oct. 31, 2024	Yang Lian	PASS	No deviation
9	15.407(b)	Radiated Emission	Oct. 23, 2024	Yang Lian	PASS	No deviation

Note 1: The tests of Conducted Emission and Radiated Emission were performed according to the method of measurements prescribed in ANSI C63.10 2013.

Note 2: These RF tests were performed according to the method of measurements prescribed in KDB 789033 D02 v02r01.

Note 3: Additions to, deviation, or exclusions from the method shall be judged in the "method determination" column of add, deviate or exclude from the specific method shall be explained in the "Remark" of the above table.

Note 4: When the test result is a critical value, we will use the measurement uncertainty give the judgment result based on the 95% confidence intervals.

1.1. Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

• 47 CFR Part 15 Subpart E Radio Frequency Devices

1.2. Test Equipment List

1.2.1 Conducted Test Equipment

Equipment	Serial No.	Type	Manufacturer	Cal. Date	Due Date
EXA Signal Analzyer	MY53470836	N9010A	Agilent	2024.02.19	2025.02.18
Power Sensor	MY54180008	U2021XA	Agilent	2024.09.11	2025.09.10
Temperature Chamber	12108015	DTL-003S101	YOMA	2024.09.11	2025.09.10
RF Cable (30MHz-26GHz)	CB01	RF01	Morlab	N/A	N/A
SMA Connector	CN01	RF03	HUBER-SUHNER	N/A	N/A
Attenuator	MTJ6004-10	10dB	MTJ cooperation	N/A	N/A

1.2.2 Conducted Emission Test Equipment

Equipment	Serial No.	Type	Manufacturer	Cal. Date	Due Date
Receiver	MY56400093	N9038A	KEYSIGHT	2024.01.25	2025.01.24
LISN	8127449	NSLK 8127	Schwarzbeck	2024.02.02	2025.02.01
Pulse Limiter (10dB)	VTSD 9561 F-B #206	VTSD 9561-F	Schwarzbeck	2024.05.30	2025.05.29
RF Coaxial Cable (DC-100MHz)	BNC	MRE04	Qualwave	2024.07.02	2025.07.01

1.2.3 List of Software Used

Description	Manufacturer	Software Version
Test System	MaiWei	2.0.0.0
Morlab EMCR	Morlab	V1.2
TS+ -[JS32-CE]	Tonscend	V2.5.0.0

1.2.4 Radiated Test Equipment

Equipment	Serial No.	Type	Manufacturer	Cal. Date	Due Date
Signal Analyzer	MY56060145	N9020A	Agilent	2024.05.30	2025.05.29
Test Antenna - Bi-Log	9163-519	VULB 9163	Schwarzbeck	2024.06.22	2025.06.21
Test Antenna - Loop	1519-022	FMZB1519	Schwarzbeck	2024.06.03	2025.06.02
Test Antenna – Horn	01774	BBHA 9120D	Schwarzbeck	2024.06.22	2025.06.21
Test Antenna – Horn	BBHA9170 #773	BBHA9170	Schwarzbeck	2024.06.22	2025.06.21
Preamplifier (10MHz-6GHz)	46732	S10M100L3802	LUCIX CORP.	2024.05.30	2025.05.29
Preamplifier (2GHz-18GHz)	61171/61172	S020180L3203	LUCIX CORP.	2024.05.30	2025.05.29
Preamplifier (18GHz-40GHz)	DS77209	DCLNA0118-40C-S	Decentest	2024.05.30	2025.05.29
RF Coaxial Cable (DC-18GHz)	MRE001	PE330	Pasternack	2024.05.30	2025.05.29
RF Coaxial Cable (DC-18GHz)	MRE002	CLU18	Pasternack	2024.05.30	2025.05.29
RF Coaxial Cable (DC-18GHz)	MRE003	CLU18	Pasternack	2024.05.30	2025.05.29
RF Coaxial Cable (DC-40GHz)	22290045	QA360-40-KK-0.5	Qualwave	2024.07.03	2025.07.02
RF Coaxial Cable (DC-40GHz)	22290046	QA360-40-KKF-2	Qualwave	2024.07.03	2025.07.02
RF Coaxial Cable (DC-18GHz)	22120181	QA500-18-NN-5	Qualwave	2024.07.03	2025.07.02
Notch Filter	N/A	WRCG-2400-2483.5-60SS	Wainwright	N/A	N/A
Anechoic Chamber	N/A	9m*6m*6m	CRT	2022.05.10	2025.05.09

1.3. Measurement Uncertainty

Test Items	Uncertainty	Remark
Peak Output Power	±2.22dB	Confidence levels of 95%
Power Spectral Density	±2.22dB	Confidence levels of 95%
Bandwidth	±5%	Confidence levels of 95%
Restricted Frequency Bands	±5%	Confidence levels of 95%
Radiated Emission	±2.95dB	Confidence levels of 95%
Conducted Emission	±2.44dB	Confidence levels of 95%

1.4. Testing Laboratory

Laboratory Name	Shenzhen Morlab Communications Technology Co., Ltd.
Laboratory Address	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Telephone	+86 755 36698555
Facsimile	+86 755 36698525
FCC Designation Number	CN1192
FCC Test Firm Registration Number	226174

2. General Description

2.1. Information of Applicant and Manufacturer

Applicant	Shenzhen Creality 3D Technology Co., Ltd.
Applicant Address	18th Floor, JinXiuHongDu Building.Meilong Blvd, Longhua Dist,Shenzhen, China
Manufacturer	Shenzhen Creality 3D Technology Co., Ltd.
Manufacturer Address	18th Floor, JinXiuHongDu Building.Meilong Blvd, Longhua Dist,Shenzhen, China

2.2. Information of EUT

Product Name:	Scan Bridge, Creality RaptorX & Scan Bridge Kit	
Sample No.:	1#,2#,6#,17#,33#	
Hardware Version:	[PCB]TB2302_Main_Board _V1.2 FR4	
Software Version:	v1.3.2	
Modulation Technology:	OFDM, OFDMA	
Modulation Mode:	802.11a, 802.11n (HT20), 802.11n (HT40) 802.11ac (VHT20), 802.11ac (VHT40), 802.11ac (VHT80) 802.11ax (HEW20), 802.11ax (HEW40), 802.11ax (HEW80)	
Operating Frequency Range:	5180MHz-5240MHz; 5745MHz-5825MHz	
Antenna Type:	PCB Antenna	
Antenna Gain:	ANT1: 2.97dBi; ANT2: 2.92dBi	
Directional gain:	5.96dBi [5]	
Accessory Information:	AC Adapter	
	Brand Name:	SIMSUKIAN
	Model No.:	SK03T-1200200Z
	Serial No.:	N/A
	Rated Input:	100-240V~50/60Hz, 0.6A
	Rated Output:	12V⎓2A
	Manufacturer:	Shenzhen Simsukian Electronics Technology Co., Ltd.
	Battery	
	Brand Name:	N/A
	Model No.:	CRP04SB
	Serial No.:	N/A

	Capacity:	5000mAh
	Rated Voltage:	7.2V
	Charge Limit:	8.4V
	Manufacturer:	Shenzhen Creality 3D Technology Co., Ltd.
	USB Cable 1(for Creality RaptorX)	
	Model No.:	TB2302 External Cable
	Manufacturer:	Shenzhen Baishengbai Electronic Technology Co., Ltd
	USB Cable 2(for Scan Bridge)	
	Model No.:	TB2302 Controller Data Cable; for Type A Micro USB TB2401 Controller Fast Charging Cable; Type C Micro USB
	Manufacturer:	Shenzhen Baishengbai Electronic Technology Co., Ltd

Note 1: According to the certificate holder, they declared product name: Scan Bridge and Creality RaptorX & Scanning Bridge Kit. Product name Creality RaptorX + Scanning bridge includes Model CRS08RXSB, Only the scan bridge has wireless capability. Product name Scan Bridge includes Model CRP05SB, CRP04SB; CRP05SB and CRP04SB are the same products. These two models only differ in model name. No other changes. The main measuring product name is Scan Bridge, model name is CRP04SB, only the results for CRP04SB were recorded in this report.

Note 2: The EUT has two antennas that cannot transmit simultaneously. Both of the two antennas were evaluated separately, only the worst test result (ANT1) were recorded in the test report.

Note 3: We use the dedicated software to control the EUT continuous transmission.

Note 4: For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

Note 5: Directional gain is calculated based on KDB 662911 D01

KDB 662911 D01 Directional Gain Calculation			
Clause	Type	Correlation	Calculation formula
F.2.a	Equal G_{ANT} & Power	☐(i). Correlated	$G_{ANT} + 10\log(N_{ANT})$
		☐(ii). Uncorrelated	G_{ANT}
F.2.d	Unequal G_{ANT} & Equal Power	☒(i). Correlated	$10\log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2/N_{ANT}]$
		☐(ii). Uncorrelated	$10\log[(10^{G1/10} + 10^{G2/10} + \ldots + 10^{GN/10})/N_{ANT}]$

Where G_{ANT} is the antenna gain in dBi, N_{ANT} is the number of outputs.

2.3. Channel List of EUT

(U-NII-1) 5180MHz-5240MHz				
Bandwidth	Channel	Frequency (MHz)	Channel	Frequency (MHz)
20MHz	**36**	**5180**	40	5200
	44	**5220**	**48**	**5240**
40MHz	**38**	**5190**	**46**	**5230**
80MHz	**42**	**5210**		
(U-NII-3) 5745MHz-5825MHz				
Bandwidth	Channel	Frequency (MHz)	Channel	Frequency (MHz)
20MHz	**149**	**5745**	153	5765
	157	**5785**	161	5805
	165	**5825**		
40MHz	**151**	**5755**	**159**	**5795**
80MHz	**155**	**5775**		

Note 1: The black bold channels were selected for test.

2.4. Test Configuration of EUT

2.4.1.Modulation Type and Data Rate of EUT

Mode	Bandwidth (MHz)	Modulation Technology	Modulation Type	Data Rate
802.11a	20	OFDM	**BPSK**	**6**/9/12/18/24/36/48/54Mbps
			QPSK	
			16QAM	
			64QAM	
802.11n	20/40 (HT20/40)	OFDM	**BPSK**	**MCS0**~MCS7
			QPSK	
			16QAM	
			64QAM	
802.11ac	20/40/80 (VHT20/40/80)	OFDM	**BPSK**	**MSC0**~MCS9
			QPSK	
			16QAM	
			64QAM	
			256QAM	
802.11ax	20/40/80 (HEW20/40/80)	OFDM/ OFDMA	**BPSK**	**MSC0**~MCS11
			QPSK	
			16QAM	
			64QAM	
			256QAM	
			1024QAM	

Note1: The RU allocation of 802.11ax mode, only full ru is supported.

Note2: The worst-case mode (bold face) in all data rates has been determined during the pre-scan, only the test data of the worst-case were recorded in this report.

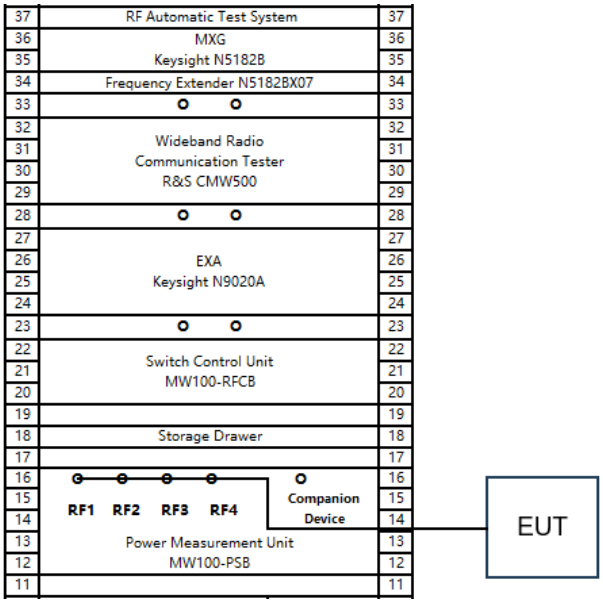
Note3: The RF signal transmission of EUT is controlled by the build-in engineering mode which is provided by the manufacturer. The recorded power setting value is the maximum that the engineering mode has configuration during testing.

2.5. Test Conditions

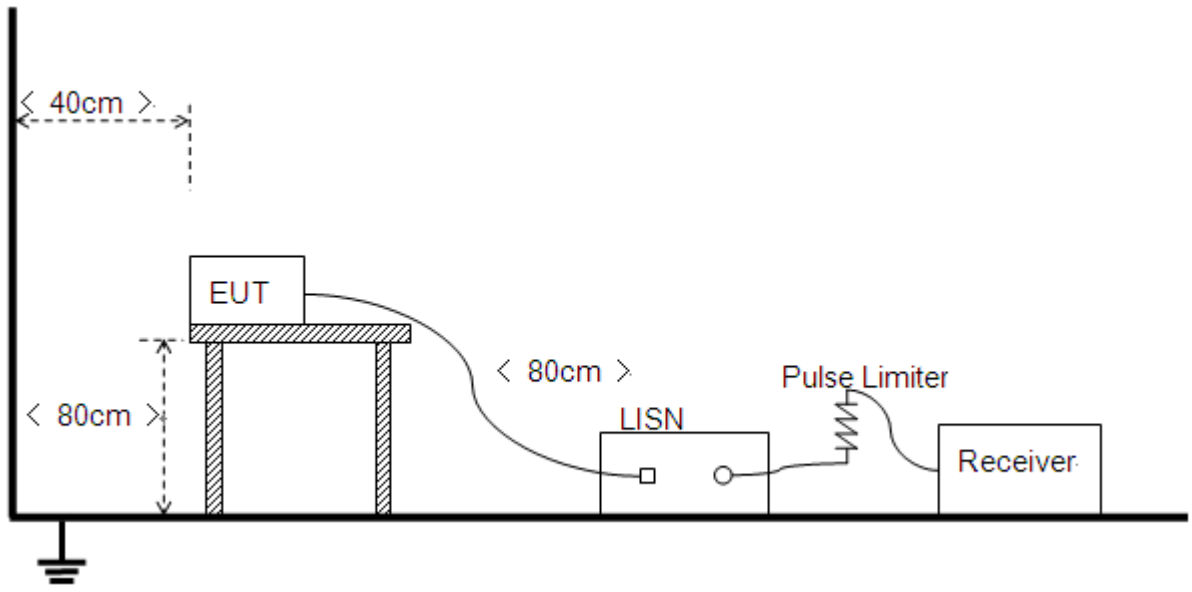
Temperature (°C)	15–35
Relative Humidity (%)	30–60
Atmospheric Pressure (kPa)	86–106

2.6. Test Setup Layout Diagram

2.6.1.Conducted Measurement

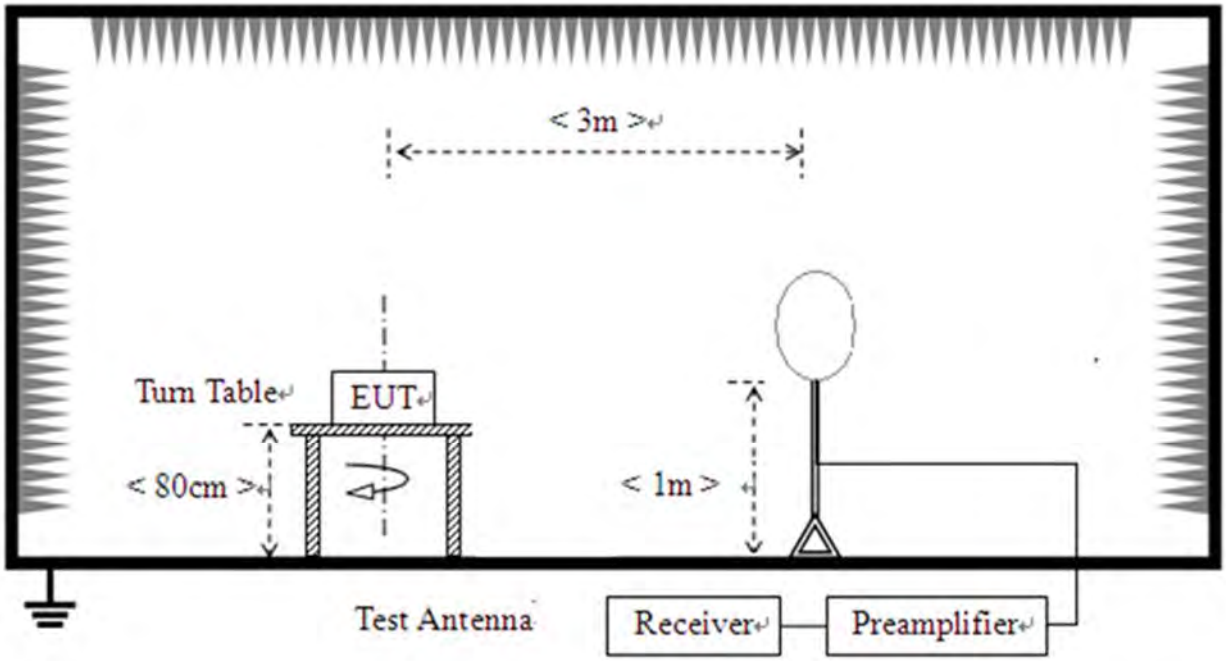


2.6.2.Conducted Emission Measurement

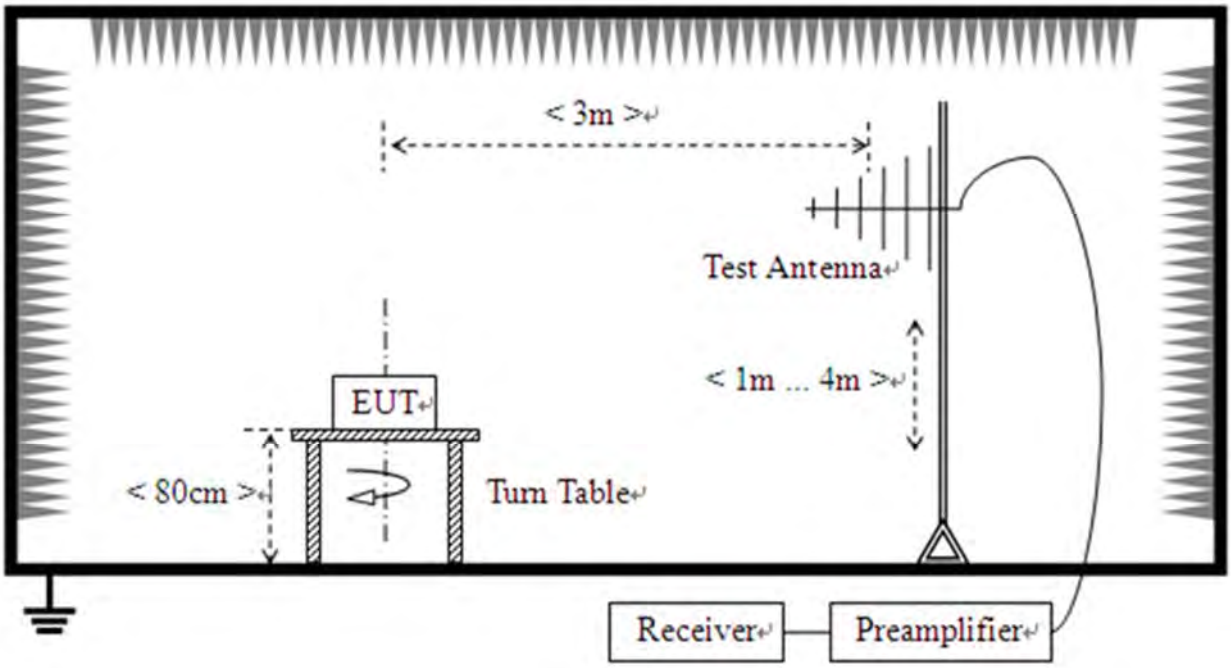


2.6.3.Radiation Measurement

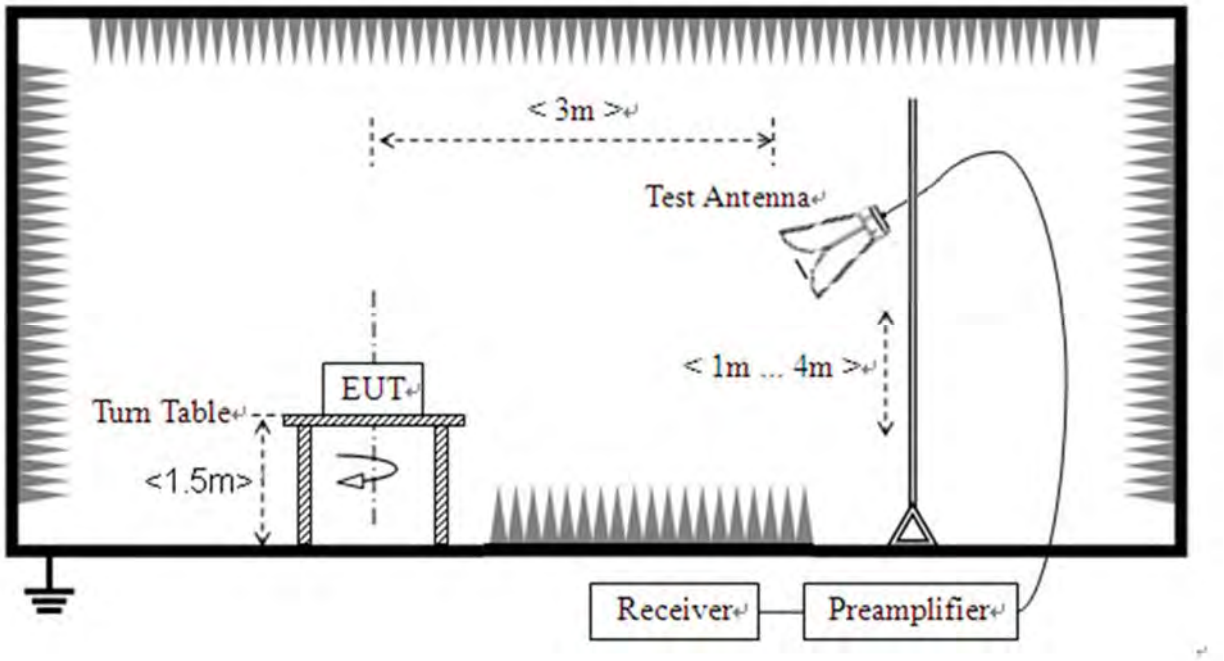
1) For radiated emissions from 9kHz to 30MHz



2) For radiated emissions from 30MHz to1GHz



3) For radiated emissions above 1GHz



3. Test Results

3.1. Antenna Requirement

3.1.1.Requirement

According to FCC 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

3.1.2.Test Result

Antenna location	Antenna Type	Coupling Method
☒Internal ☐External	☐FPC Antenna ☐Spring Antenna ☐Ceramic Antenna ☐Integrated Antenna ☐Dipole Antenna ☒PCB Antenna ☐PIFA Antenna	☒I-PEX Connector ☐SMA Connector ☐RP-SMA Connector ☐Metal Shrapnel ☐Layout

3.2. Duty Cycle of Test Signal

3.2.1.Requirement

Preferably, all measurements of maximum conducted (average) output power will be performed with the EUT transmitting continuously (i.e., with a duty cycle of greater than or equal to 98%).When continuous operation cannot be realized, then the use of sweep triggering/signal gating techniques can be used to ensure that measurements are made only during transmissions at the maximum power control level. Such sweep triggering/signal gating techniques will require knowledge of the minimum transmission duration(T) over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation. Sweep triggering/signal gating techniques can then be used if the measurement/sweep time of the analyzer can be set such that it does not exceed T at any time that data are being acquired (i.e.,no transmitter OFF-time is to be considered).
When continuous transmission cannot be achieved and sweep triggering/signal gating cannot be implemented, alternative procedures are provided that can be used to measure the average power; however, they will require an additional measurement of the transmitter duty cycle (D). Within this sub clause, the duty cycle refers to the fraction of time over which the transmitter is ON and is transmitting at its maximum power control level. The duty cycle is considered to be constant if variations are less than ±2%; otherwise, the duty cycle is considered to be non constant.

3.2.2.Test Result

Refer to Annex A.1 in this report.

3.3. Maximum Conducted Output Power

3.3.1.Requirement

(1) For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250mW provided the maximum antenna gain does not exceed 6dBi.
(2)For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250mW or 11dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz.
(3) For the band 5.725-5.85 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 6dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.
(4) According to KDB662911 D01Measure-and-sum technique, the conducted emission level (e.g., transmit power or power in specified bandwidth) is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically to determine the total emission level from the device. Summing is performed in units that are directly proportional to power.

3.3.2.Test Procedures

Based on method PM-G in Section Ⅱ.E.3.b) of KDB 789033 D02.

3.3.3.Test Setup Layout

Refer to chapter 2.6.1 in this report.

3.3.4.Test Result

Refer to Annex A.2 in this report.

3.4. Emission Bandwidth

3.4.1.Requirement

For purposes of this subpart the emission bandwidth shall be determined by measuring the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, that are 26 dB down relative to the maximum level of the modulated carrier. Determination of the emissions bandwidth is based on the use of measurement instrumentation employing a peak detector function with an instrument resolution bandwidth approximately equal to 1.0 percent of the emission bandwidth of the device under measurement. Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

3.4.1.Test Procedures

1. KDB 789033 Section C) 1) Emission Bandwidth was used in order to prove compliance
a) Set RBW = approximately 1% of the emission bandwidth.
b) Set VBW > RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) 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%.
2. KDB 789033 Section C) 2) minimum emission bandwidth for the band 5.725-5.85GHz was used in order to prove compliance.
Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for theband5.715-5.85 GHz. The following procedure shall be used for measuring this bandwidth:
a) Set RBW = 100 kHz.
b) Set video bandwidth (VBW) ≥ 3 × RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Sweep = auto couple.
f) Allow the trace to stabilize.
g) 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.

3.4.2.Test Setup Layout

Refer to chapter 2.6.1 in this report.

3.4.3.Test Result

Refer to Annex A.3 in this report.

3.5. Peak Power Spectral Density

3.5.1.Requirement

(1) For client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band.
(2) For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band.
(3) For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30dBm in any 500kHz band.
If transmitting antennas of directional gain greater than 6dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.
(4) According to KDB662911D01Measure-and-sum technique, the conducted emission level (e.g., transmit power or power in specified bandwidth) is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically to determine the total emission level from the device. Summing is performed in units that are directly proportional to power.

3.5.2.Test Procedures

KDB 789033 Section F) Maximum Power Spectral Density (PSD) Method SA-3 was used in order to prove compliance

1) Set span to encompass the entire 26-dB emission bandwidth
2) Set RBW = 1MHz. Set VBW ≥ 3MHz
3) Number of points in sweep ≥ 2 Span / RBW. Sweep time = auto
4) Detector = Average
5) Trace mode=Max hold

Record the max value

3.5.3.Test Setup Layout

Refer to chapter 2.6.1 in this report.

3.5.4.Test Result

Refer to Annex A.4 in this report.

3.6. Frequency Stability

3.6.1.Requirement

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

3.6.2.Test Procedures

The EUT was placed inside of an environmental chamber as the temperature in the chamber was varied between 5°Cto 40°C. The temperature was incremented by 10º intervals and the unit was allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded. Data for the worst case channel is shown below.

3.6.3.Test Result

Refer to Annex A.5 in this report.

3.7. Conducted Emission

3.7.1.Requirement

According to FCC section 15.207, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150kHz to 30MHz shall not exceed the limits in the following table, as measured using a 50μH/50Ω line impedance stabilization network (LISN).

Frequency Range (MHz)	Conducted Limit (dBμV)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
5 - 30	60	50

Note:

(a) The lower limit shall apply at the band edges.

(b) The limit decreases linearly with the logarithm of the frequency in the range 0.15 - 0.50MHz.

3.7.2.Test Procedures

The Table-top EUT was placed upon a non-metallic table 0.8m above the horizontal metal reference ground plane. EUT was connected to LISN and LISN was connected to reference Ground Plane. EUT was 80cm from LISN. The set-up and test methods were according to ANSI C63.10: 2013.

3.7.3.Test Setup Layout

Refer to chapter 2.6.2 in this report.

3.7.4.Test Result

Refer to Annex A.6 in this report.

3.8. Restricted Frequency Bands

3.8.1.Requirement

The peak emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:
(1) For transmitters operating in the 5.15–5.25 GHz band: all emissions outside of the 5.15–5.35 GHz band shall not exceed an EIRP of -27dBm/MHz.
(2) For transmitters operating in the 5.25–5.35 GHz band: all emissions outside of the 5.15–5.35 GHz band shall not exceed an EIRP of -27dBm/MHz.
(3) For transmitters operating in the 5.47–5.725 GHz band: all emissions outside of the 5.47–5.725 GHz band shall not exceed an EIRP of -27dBm/MHz.
(4) For transmitters operating in the 5.725-5.85 GHz band:
(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
The following formula is used to convert the equipment isotropic radiated power(e.i.r.p.) to field strength (dBμV/m);

$$E = 1000000 \times \sqrt{30P} / 3 \ \mu V/m$$

where P is the EIRP in Watts

Therefore: -27 dBm/MHz = 68.23 dBuV/m

Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209. According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

For Above 1000MHz, the emission limit in this paragraph is based on measurement instrumentation employing an average detector, measurement using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit.
In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), also should comply with the radiated emission limits specified in Section 15.209(a)(above table).

3.8.2.Test Procedures

The EUT is located in a 3m Semi-Anechoic Chamber; the antenna factors, cable loss and so on of the site as factors are calculated to correct the reading.
KDB 789033 Section H) 3)5)6(d)) was used in order to prove compliance
For the Test Antenna:
Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground to determine the maximum value of the field strength.

3.8.3.Test Setup Layout

Refer to chapter 2.6.3 in this report.

3.8.4.Test Result

Refer to Annex A7 in this report.

3.9. Radiated Emission

3.9.1.Requirement

The peak emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:
(1) For transmitters operating in the 5.15–5.25 GHz band: all emissions outside of the 5.15–5.35 GHz band shall not exceed an EIRP of -27dBm/MHz.
(2) For transmitters operating in the 5.25–5.35 GHz band: all emissions outside of the 5.15–5.35 GHz band shall not exceed an EIRP of -27dBm/MHz.
(3) For transmitters operating in the 5.47–5.725 GHz band: all emissions outside of the 5.47–5.725 GHz band shall not exceed an EIRP of -27dBm/MHz.
(4) For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz.
The following formula is used to convert the equipment isotropic radiated power(e.i.r.p.) to field strength (dBμV/m);

$$E = 1000000 \times \sqrt{30P} / 3 \ \mu V/m$$

where P is the EIRP in Watts

Therefore: -27 dBm/MHz = 68.23 dBuV/m

Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209. According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

For Above 1000MHz, the emission limit in this paragraph is based on measurement instrumentation employing an average detector, measurement using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit.
In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), also should comply with the radiated emission limits specified in Section 15.209(a)(above table).

3.9.2.Test Procedures

The EUT is placed on a non-conducting table 80 cm above the ground plane for measurement below 1GHz; 1.5 m above the ground plane for measurement above 1GHz.The antenna to EUT distance is 3meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 30MHz, the emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9kHz-90 kHz, 110kHz-490 kHz. Radiated emission limits in these two bands are based on measurements employing an average detector.

For measurements below 1GHz the resolution bandwidth is set to 100kHz for peak detection measurements or 120kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1GHz the resolution bandwidth is set to 1MHz, the video band width is set to 3MHz for peak measurements and as applicable for average measurements.

The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions. For measurements above 1 GHz, keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response.

3.9.3.Test Setup Layout

Refer to chapter 2.6.3 in this report.

3.9.4.Test Result

Refer to Annex A.8 in this report.

Annex A Test Data and Result

A.1. Duty Cycle of Test Signal

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a SISO	5180	Ant1	95.86	0.18	0.72
NVNT	a SISO	5220	Ant1	96.55	0.15	0.71
NVNT	a SISO	5240	Ant1	95.89	0.18	0.71
NVNT	a SISO	5745	Ant1	95.86	0.18	0.72
NVNT	a SISO	5785	Ant1	95.89	0.18	0.71
NVNT	a SISO	5825	Ant1	95.86	0.18	0.72
NVNT	a SISO	5180	Ant2	96.55	0.15	0.71
NVNT	a SISO	5220	Ant2	95.89	0.18	0.71
NVNT	a SISO	5240	Ant2	95.89	0.18	0.71
NVNT	a SISO	5745	Ant2	95.86	0.18	0.72
NVNT	a SISO	5785	Ant2	95.89	0.18	0.71
NVNT	a SISO	5825	Ant2	96.55	0.15	0.71
NVNT	n20 SISO	5180	Ant1	95.62	0.19	0.76
NVNT	n20 SISO	5220	Ant1	95.62	0.19	0.76
NVNT	n20 SISO	5240	Ant1	95.59	0.2	0.77
NVNT	n20 SISO	5745	Ant1	95.62	0.19	0.76
NVNT	n20 SISO	5785	Ant1	95.62	0.19	0.76
NVNT	n20 SISO	5825	Ant1	96.32	0.16	0.76
NVNT	n20 SISO	5180	Ant2	95.62	0.19	0.76
NVNT	n20 SISO	5220	Ant2	95.62	0.19	0.76
NVNT	n20 SISO	5240	Ant2	95.62	0.19	0.76
NVNT	n20 SISO	5745	Ant2	95.59	0.2	0.77
NVNT	n20 SISO	5785	Ant2	95.62	0.19	0.76
NVNT	n20 SISO	5825	Ant2	96.32	0.16	0.76
NVNT	n20 MIMO	5180	Sum	95.62	0.19	0.76
NVNT	n20 MIMO	5220	Sum	95.59	0.2	0.77
NVNT	n20 MIMO	5240	Sum	95.62	0.19	0.76
NVNT	n20 MIMO	5745	Sum	95.62	0.19	0.76

NVNT	n20 MIMO	5785	Sum	95.62	0.19	0.76
NVNT	n20 MIMO	5825	Sum	95.62	0.19	0.76
NVNT	n40 SISO	5190	Ant1	92.86	0.32	1.54
NVNT	n40 SISO	5230	Ant1	91.55	0.38	1.54
NVNT	n40 SISO	5755	Ant1	92.86	0.32	1.54
NVNT	n40 SISO	5795	Ant1	91.55	0.38	1.54
NVNT	n40 SISO	5190	Ant2	92.86	0.32	1.54
NVNT	n40 SISO	5230	Ant2	91.55	0.38	1.54
NVNT	n40 SISO	5755	Ant2	92.86	0.32	1.54
NVNT	n40 SISO	5795	Ant2	92.86	0.32	1.54
NVNT	n40 MIMO	5190	Sum	91.55	0.38	1.54
NVNT	n40 MIMO	5230	Sum	91.43	0.39	1.56
NVNT	n40 MIMO	5755	Sum	91.55	0.38	1.54
NVNT	n40 MIMO	5795	Sum	91.55	0.38	1.54
NVNT	ac20 SISO	5180	Ant1	88.1	0.55	2.7
NVNT	ac20 SISO	5220	Ant1	86.05	0.65	2.7
NVNT	ac20 SISO	5240	Ant1	88.1	0.55	2.7
NVNT	ac20 SISO	5745	Ant1	88.1	0.55	2.7
NVNT	ac20 SISO	5785	Ant1	86.05	0.65	2.7
NVNT	ac20 SISO	5825	Ant1	88.37	0.54	2.63
NVNT	ac20 SISO	5180	Ant2	86.05	0.65	2.7
NVNT	ac20 SISO	5220	Ant2	86.05	0.65	2.7
NVNT	ac20 SISO	5240	Ant2	86.05	0.65	2.7
NVNT	ac20	5745	Ant2	86.05	0.65	2.7

	SISO					
NVNT	ac20 SISO	5785	Ant2	86.05	0.65	2.7
NVNT	ac20 SISO	5825	Ant2	86.05	0.65	2.7
NVNT	ac20 MIMO	5180	Sum	86.05	0.65	2.7
NVNT	ac20 MIMO	5220	Sum	86.05	0.65	2.7
NVNT	ac20 MIMO	5240	Sum	86.05	0.65	2.7
NVNT	ac20 MIMO	5745	Sum	88.1	0.55	2.7
NVNT	ac20 MIMO	5785	Sum	86.05	0.65	2.7
NVNT	ac20 MIMO	5825	Sum	88.37	0.54	2.63
NVNT	ac40 SISO	5190	Ant1	77.78	1.09	4.76
NVNT	ac40 SISO	5230	Ant1	77.78	1.09	4.76
NVNT	ac40 SISO	5755	Ant1	76.92	1.14	5
NVNT	ac40 SISO	5795	Ant1	80.77	0.93	4.76
NVNT	ac40 SISO	5190	Ant2	80.77	0.93	4.76
NVNT	ac40 SISO	5230	Ant2	76.92	1.14	5
NVNT	ac40 SISO	5755	Ant2	77.78	1.09	4.76
NVNT	ac40 SISO	5795	Ant2	76.92	1.14	5
NVNT	ac40 MIMO	5190	Sum	77.78	1.09	4.76
NVNT	ac40 MIMO	5230	Sum	76.92	1.14	5
NVNT	ac40 MIMO	5755	Sum	77.78	1.09	4.76

NVNT	ac40 MIMO	5795	Sum	76.92	1.14	5
NVNT	ac80 SISO	5210	Ant1	66.67	1.76	8.33
NVNT	ac80 SISO	5775	Ant1	66.67	1.76	8.33
NVNT	ac80 SISO	5210	Ant2	68.42	1.65	7.69
NVNT	ac80 SISO	5775	Ant2	66.67	1.76	8.33
NVNT	ac80 MIMO	5210	Sum	66.67	1.76	8.33
NVNT	ac80 MIMO	5775	Sum	68.42	1.65	7.69
NVNT	ax20 SISO	5180	Ant1	85	0.71	2.94
NVNT	ax20 SISO	5220	Ant1	85.37	0.69	2.86
NVNT	ax20 SISO	5240	Ant1	87.5	0.58	2.86
NVNT	ax20 SISO	5745	Ant1	85.37	0.69	2.86
NVNT	ax20 SISO	5785	Ant1	85.37	0.69	2.86
NVNT	ax20 SISO	5825	Ant1	85	0.71	2.94
NVNT	ax20 SISO	5180	Ant2	85	0.71	2.94
NVNT	ax20 SISO	5220	Ant2	88.37	0.54	2.63
NVNT	ax20 SISO	5240	Ant2	86.05	0.65	2.7
NVNT	ax20 SISO	5745	Ant2	88.37	0.54	2.63
NVNT	ax20 SISO	5785	Ant2	88.37	0.54	2.63
NVNT	ax20 SISO	5825	Ant2	86.05	0.65	2.7
NVNT	ax20	5180	Sum	87.5	0.58	2.86

	MIMO					
NVNT	ax20 MIMO	5220	Sum	85.37	0.69	2.86
NVNT	ax20 MIMO	5240	Sum	87.5	0.58	2.86
NVNT	ax20 MIMO	5745	Sum	85	0.71	2.94
NVNT	ax20 MIMO	5785	Sum	85.37	0.69	2.86
NVNT	ax20 MIMO	5825	Sum	85	0.71	2.94
NVNT	ax40 SISO	5190	Ant1	85	0.71	2.94
NVNT	ax40 SISO	5230	Ant1	85.37	0.69	2.86
NVNT	ax40 SISO	5755	Ant1	87.5	0.58	2.86
NVNT	ax40 SISO	5795	Ant1	85.37	0.69	2.86
NVNT	ax40 SISO	5190	Ant2	80.77	0.93	4.76
NVNT	ax40 SISO	5230	Ant2	76.92	1.14	5
NVNT	ax40 SISO	5755	Ant2	77.78	1.09	4.76
NVNT	ax40 SISO	5795	Ant2	80.77	0.93	4.76
NVNT	ax40 MIMO	5190	Sum	78.57	1.05	4.55
NVNT	ax40 MIMO	5230	Sum	79.31	1.01	4.35
NVNT	ax40 MIMO	5755	Sum	78.57	1.05	4.55
NVNT	ax40 MIMO	5795	Sum	79.31	1.01	4.35
NVNT	ax80 SISO	5210	Ant1	85	0.71	2.94
NVNT	ax80 SISO	5775	Ant1	87.18	0.6	2.94

NVNT	ax80 SISO	5210	Ant2	87.18	0.6	2.94
NVNT	ax80 SISO	5775	Ant2	87.18	0.6	2.94
NVNT	ax80 MIMO	5210	Sum	85	0.71	2.94
NVNT	ax80 MIMO	5775	Sum	84.62	0.73	3.03

A.2. Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Total Conducted Power (dBm)	Total Conducted Power (W)	Limit Conducted (dBm)	Verdict
NVNT	a SISO	5180	Ant1	16.65	0.04624	24	Pass
NVNT	a SISO	5220	Ant1	16.56	0.04529	24	Pass
NVNT	a SISO	5240	Ant1	16.54	0.04508	24	Pass
NVNT	a SISO	5745	Ant1	16.22	0.04188	30	Pass
NVNT	a SISO	5785	Ant1	16.13	0.04102	30	Pass
NVNT	a SISO	5825	Ant1	16.11	0.04083	30	Pass
NVNT	a SISO	5180	Ant2	15.09	0.03228	24	Pass
NVNT	a SISO	5220	Ant2	15.14	0.03266	24	Pass
NVNT	a SISO	5240	Ant2	15.07	0.03214	24	Pass
NVNT	a SISO	5745	Ant2	15.29	0.03381	30	Pass
NVNT	a SISO	5785	Ant2	15.43	0.03491	30	Pass
NVNT	a SISO	5825	Ant2	15.51	0.03556	30	Pass
NVNT	n20 SISO	5180	Ant1	16.56	0.04529	24	Pass
NVNT	n20 SISO	5220	Ant1	16.3	0.04266	24	Pass
NVNT	n20 SISO	5240	Ant1	16.19	0.04159	24	Pass
NVNT	n20 SISO	5745	Ant1	15.87	0.03864	30	Pass
NVNT	n20 SISO	5785	Ant1	15.8	0.03802	30	Pass
NVNT	n20 SISO	5825	Ant1	15.74	0.0375	30	Pass
NVNT	n20 SISO	5180	Ant2	14.55	0.02851	24	Pass
NVNT	n20 SISO	5220	Ant2	14.7	0.02951	24	Pass
NVNT	n20 SISO	5240	Ant2	14.55	0.02851	24	Pass
NVNT	n20 SISO	5745	Ant2	14.92	0.03105	30	Pass
NVNT	n20 SISO	5785	Ant2	15.1	0.03236	30	Pass
NVNT	n20 SISO	5825	Ant2	15.15	0.03273	30	Pass
NVNT	n20 MIMO	5180	Ant1	14.8	0.0302	24	Pass
NVNT	n20 MIMO	5180	Ant2	13.01	0.02	24	Pass
NVNT	n20 MIMO	5180	Sum	17.01	0.0502	24	Pass
NVNT	n20 MIMO	5220	Ant1	14.49	0.02812	24	Pass
NVNT	n20 MIMO	5220	Ant2	13.28	0.02128	24	Pass
NVNT	n20 MIMO	5220	Sum	16.94	0.0494	24	Pass
NVNT	n20 MIMO	5240	Ant1	14.59	0.02877	24	Pass
NVNT	n20 MIMO	5240	Ant2	13.27	0.02123	24	Pass
NVNT	n20 MIMO	5240	Sum	16.99	0.05001	24	Pass

NVNT	n20 MIMO	5745	Ant1	14.33	0.0271	30	Pass
NVNT	n20 MIMO	5745	Ant2	13.66	0.02323	30	Pass
NVNT	n20 MIMO	5745	Sum	17.02	0.05033	30	Pass
NVNT	n20 MIMO	5785	Ant1	14.26	0.02667	30	Pass
NVNT	n20 MIMO	5785	Ant2	13.93	0.02472	30	Pass
NVNT	n20 MIMO	5785	Sum	17.11	0.05139	30	Pass
NVNT	n20 MIMO	5825	Ant1	14.18	0.02618	30	Pass
NVNT	n20 MIMO	5825	Ant2	14.02	0.02523	30	Pass
NVNT	n20 MIMO	5825	Sum	17.11	0.05142	30	Pass
NVNT	n40 SISO	5190	Ant1	16.04	0.04018	24	Pass
NVNT	n40 SISO	5230	Ant1	15.69	0.03707	24	Pass
NVNT	n40 SISO	5755	Ant1	15.5	0.03548	30	Pass
NVNT	n40 SISO	5795	Ant1	15.18	0.03296	30	Pass
NVNT	n40 SISO	5190	Ant2	14.84	0.03048	24	Pass
NVNT	n40 SISO	5230	Ant2	14.62	0.02897	24	Pass
NVNT	n40 SISO	5755	Ant2	15.21	0.03319	30	Pass
NVNT	n40 SISO	5795	Ant2	15.08	0.03221	30	Pass
NVNT	n40 MIMO	5190	Ant1	14.3	0.02692	24	Pass
NVNT	n40 MIMO	5190	Ant2	12.97	0.01982	24	Pass
NVNT	n40 MIMO	5190	Sum	16.7	0.04673	24	Pass
NVNT	n40 MIMO	5230	Ant1	14.08	0.02559	24	Pass
NVNT	n40 MIMO	5230	Ant2	12.92	0.01959	24	Pass
NVNT	n40 MIMO	5230	Sum	16.55	0.04517	24	Pass
NVNT	n40 MIMO	5755	Ant1	14.09	0.02564	30	Pass
NVNT	n40 MIMO	5755	Ant2	13.5	0.02239	30	Pass
NVNT	n40 MIMO	5755	Sum	16.82	0.04803	30	Pass
NVNT	n40 MIMO	5795	Ant1	13.81	0.02404	30	Pass
NVNT	n40 MIMO	5795	Ant2	13.39	0.02183	30	Pass
NVNT	n40 MIMO	5795	Sum	16.62	0.04587	30	Pass
NVNT	ac20 SISO	5180	Ant1	16.42	0.04385	24	Pass
NVNT	ac20 SISO	5220	Ant1	16.23	0.04198	24	Pass
NVNT	ac20 SISO	5240	Ant1	16.18	0.0415	24	Pass
NVNT	ac20 SISO	5745	Ant1	15.86	0.03855	30	Pass
NVNT	ac20 SISO	5785	Ant1	15.71	0.03724	30	Pass
NVNT	ac20 SISO	5825	Ant1	15.77	0.03776	30	Pass
NVNT	ac20 SISO	5180	Ant2	14.71	0.02958	24	Pass
NVNT	ac20 SISO	5220	Ant2	14.86	0.03062	24	Pass
NVNT	ac20 SISO	5240	Ant2	14.72	0.02965	24	Pass

NVNT	ac20 SISO	5745	Ant2	15.03	0.03184	30	Pass
NVNT	ac20 SISO	5785	Ant2	15.15	0.03273	30	Pass
NVNT	ac20 SISO	5825	Ant2	15.21	0.03319	30	Pass
NVNT	ac20 MIMO	5180	Ant1	14.69	0.02944	24	Pass
NVNT	ac20 MIMO	5180	Ant2	13.14	0.02061	24	Pass
NVNT	ac20 MIMO	5180	Sum	16.99	0.05005	24	Pass
NVNT	ac20 MIMO	5220	Ant1	14.48	0.02805	24	Pass
NVNT	ac20 MIMO	5220	Ant2	13.25	0.02113	24	Pass
NVNT	ac20 MIMO	5220	Sum	16.92	0.04919	24	Pass
NVNT	ac20 MIMO	5240	Ant1	14.36	0.02729	24	Pass
NVNT	ac20 MIMO	5240	Ant2	13.28	0.02128	24	Pass
NVNT	ac20 MIMO	5240	Sum	16.86	0.04857	24	Pass
NVNT	ac20 MIMO	5745	Ant1	13.66	0.02323	30	Pass
NVNT	ac20 MIMO	5745	Ant2	13.6	0.02291	30	Pass
NVNT	ac20 MIMO	5745	Sum	16.64	0.04614	30	Pass
NVNT	ac20 MIMO	5785	Ant1	13.76	0.02377	30	Pass
NVNT	ac20 MIMO	5785	Ant2	13.92	0.02466	30	Pass
NVNT	ac20 MIMO	5785	Sum	16.85	0.04843	30	Pass
NVNT	ac20 MIMO	5825	Ant1	13.79	0.02393	30	Pass
NVNT	ac20 MIMO	5825	Ant2	14.03	0.02529	30	Pass
NVNT	ac20 MIMO	5825	Sum	16.92	0.04923	30	Pass
NVNT	ac40 SISO	5190	Ant1	15.99	0.03972	24	Pass
NVNT	ac40 SISO	5230	Ant1	15.68	0.03698	24	Pass
NVNT	ac40 SISO	5755	Ant1	15.41	0.03475	30	Pass
NVNT	ac40 SISO	5795	Ant1	15.13	0.03258	30	Pass
NVNT	ac40 SISO	5190	Ant2	14.76	0.02992	24	Pass
NVNT	ac40 SISO	5230	Ant2	14.61	0.02891	24	Pass
NVNT	ac40 SISO	5755	Ant2	15.2	0.03311	30	Pass
NVNT	ac40 SISO	5795	Ant2	15.07	0.03214	30	Pass
NVNT	ac40 MIMO	5190	Ant1	14.45	0.02786	24	Pass
NVNT	ac40 MIMO	5190	Ant2	13.05	0.02018	24	Pass
NVNT	ac40 MIMO	5190	Sum	16.82	0.04804	24	Pass
NVNT	ac40 MIMO	5230	Ant1	13.92	0.02466	24	Pass
NVNT	ac40 MIMO	5230	Ant2	12.85	0.01928	24	Pass
NVNT	ac40 MIMO	5230	Sum	16.43	0.04394	24	Pass
NVNT	ac40 MIMO	5755	Ant1	13.62	0.02301	30	Pass
NVNT	ac40 MIMO	5755	Ant2	13.06	0.02023	30	Pass
NVNT	ac40 MIMO	5755	Sum	16.36	0.04324	30	Pass

NVNT	ac40 MIMO	5795	Ant1	13.42	0.02198	30	Pass
NVNT	ac40 MIMO	5795	Ant2	13	0.01995	30	Pass
NVNT	ac40 MIMO	5795	Sum	16.23	0.04193	30	Pass
NVNT	ac80 SISO	5210	Ant1	15.59	0.03622	24	Pass
NVNT	ac80 SISO	5775	Ant1	15.04	0.03192	30	Pass
NVNT	ac80 SISO	5210	Ant2	13.91	0.0246	24	Pass
NVNT	ac80 SISO	5775	Ant2	14	0.02512	30	Pass
NVNT	ac80 MIMO	5210	Ant1	13.69	0.02339	24	Pass
NVNT	ac80 MIMO	5210	Ant2	11.96	0.0157	24	Pass
NVNT	ac80 MIMO	5210	Sum	15.92	0.03909	24	Pass
NVNT	ac80 MIMO	5775	Ant1	13.12	0.02051	30	Pass
NVNT	ac80 MIMO	5775	Ant2	12.38	0.0173	30	Pass
NVNT	ac80 MIMO	5775	Sum	15.78	0.03781	30	Pass
NVNT	ax20 SISO	5180	Ant1	16.71	0.04688	24	Pass
NVNT	ax20 SISO	5220	Ant1	16.51	0.04477	24	Pass
NVNT	ax20 SISO	5240	Ant1	16.43	0.04395	24	Pass
NVNT	ax20 SISO	5745	Ant1	16.1	0.04074	30	Pass
NVNT	ax20 SISO	5785	Ant1	16.05	0.04027	30	Pass
NVNT	ax20 SISO	5825	Ant1	16.02	0.03999	30	Pass
NVNT	ax20 SISO	5180	Ant2	15.22	0.03327	24	Pass
NVNT	ax20 SISO	5220	Ant2	15	0.03162	24	Pass
NVNT	ax20 SISO	5240	Ant2	14.91	0.03097	24	Pass
NVNT	ax20 SISO	5745	Ant2	15.35	0.03428	30	Pass
NVNT	ax20 SISO	5785	Ant2	15.39	0.03459	30	Pass
NVNT	ax20 SISO	5825	Ant2	15.5	0.03548	30	Pass
NVNT	ax20 MIMO	5180	Ant1	14.87	0.03069	24	Pass
NVNT	ax20 MIMO	5180	Ant2	13.53	0.02254	24	Pass
NVNT	ax20 MIMO	5180	Sum	17.26	0.05323	24	Pass
NVNT	ax20 MIMO	5220	Ant1	14.8	0.0302	24	Pass
NVNT	ax20 MIMO	5220	Ant2	13.75	0.02371	24	Pass
NVNT	ax20 MIMO	5220	Sum	17.32	0.05391	24	Pass
NVNT	ax20 MIMO	5240	Ant1	14.7	0.02951	24	Pass
NVNT	ax20 MIMO	5240	Ant2	13.66	0.02323	24	Pass
NVNT	ax20 MIMO	5240	Sum	17.22	0.05274	24	Pass
NVNT	ax20 MIMO	5745	Ant1	14.16	0.02606	30	Pass
NVNT	ax20 MIMO	5745	Ant2	14.12	0.02582	30	Pass
NVNT	ax20 MIMO	5745	Sum	17.15	0.05188	30	Pass
NVNT	ax20 MIMO	5785	Ant1	14.14	0.02594	30	Pass

NVNT	ax20 MIMO	5785	Ant2	14.14	0.02594	30	Pass
NVNT	ax20 MIMO	5785	Sum	17.15	0.05188	30	Pass
NVNT	ax20 MIMO	5825	Ant1	14.04	0.02535	30	Pass
NVNT	ax20 MIMO	5825	Ant2	14.25	0.02661	30	Pass
NVNT	ax20 MIMO	5825	Sum	17.16	0.05196	30	Pass
NVNT	ax40 SISO	5190	Ant1	16.16	0.0413	24	Pass
NVNT	ax40 SISO	5230	Ant1	15.91	0.03899	24	Pass
NVNT	ax40 SISO	5755	Ant1	15.65	0.03673	30	Pass
NVNT	ax40 SISO	5795	Ant1	15.39	0.03459	30	Pass
NVNT	ax40 SISO	5190	Ant2	14.84	0.03048	24	Pass
NVNT	ax40 SISO	5230	Ant2	14.55	0.02851	24	Pass
NVNT	ax40 SISO	5755	Ant2	15.18	0.03296	30	Pass
NVNT	ax40 SISO	5795	Ant2	15.06	0.03206	30	Pass
NVNT	ax40 MIMO	5190	Ant1	14.61	0.02891	24	Pass
NVNT	ax40 MIMO	5190	Ant2	13.07	0.02028	24	Pass
NVNT	ax40 MIMO	5190	Sum	16.92	0.04918	24	Pass
NVNT	ax40 MIMO	5230	Ant1	14.17	0.02612	24	Pass
NVNT	ax40 MIMO	5230	Ant2	12.91	0.01954	24	Pass
NVNT	ax40 MIMO	5230	Sum	16.6	0.04567	24	Pass
NVNT	ax40 MIMO	5755	Ant1	14	0.02512	30	Pass
NVNT	ax40 MIMO	5755	Ant2	13.37	0.02173	30	Pass
NVNT	ax40 MIMO	5755	Sum	16.71	0.04685	30	Pass
NVNT	ax40 MIMO	5795	Ant1	13.81	0.02404	30	Pass
NVNT	ax40 MIMO	5795	Ant2	13.2	0.02089	30	Pass
NVNT	ax40 MIMO	5795	Sum	16.53	0.04494	30	Pass
NVNT	ax80 SISO	5210	Ant1	15.85	0.03846	24	Pass
NVNT	ax80 SISO	5775	Ant1	15.42	0.03483	30	Pass
NVNT	ax80 SISO	5210	Ant2	14.38	0.02742	24	Pass
NVNT	ax80 SISO	5775	Ant2	14.57	0.02864	30	Pass
NVNT	ax80 MIMO	5210	Ant1	14.09	0.02564	24	Pass
NVNT	ax80 MIMO	5210	Ant2	12.21	0.01663	24	Pass
NVNT	ax80 MIMO	5210	Sum	16.26	0.04228	24	Pass
NVNT	ax80 MIMO	5775	Ant1	13.46	0.02218	30	Pass
NVNT	ax80 MIMO	5775	Ant2	12.79	0.01901	30	Pass
NVNT	ax80 MIMO	5775	Sum	16.15	0.04119	30	Pass

A.3. Emission Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Verdict
NVNT	a SISO	5180	Ant1	28.682	Pass
NVNT	a SISO	5220	Ant1	22.474	Pass
NVNT	a SISO	5240	Ant1	20.443	Pass
NVNT	a SISO	5180	Ant2	28.594	Pass
NVNT	a SISO	5220	Ant2	21.237	Pass
NVNT	a SISO	5240	Ant2	20.439	Pass
NVNT	n20 SISO	5180	Ant1	27.947	Pass
NVNT	n20 SISO	5220	Ant1	22.814	Pass
NVNT	n20 SISO	5240	Ant1	20.781	Pass
NVNT	n20 SISO	5180	Ant2	27.71	Pass
NVNT	n20 SISO	5220	Ant2	22.529	Pass
NVNT	n20 SISO	5240	Ant2	20.744	Pass
NVNT	n20 MIMO	5180	Ant1	29.401	Pass
NVNT	n20 MIMO	5180	Ant2	27.001	Pass
NVNT	n20 MIMO	5220	Ant1	22.185	Pass
NVNT	n20 MIMO	5220	Ant2	21.984	Pass
NVNT	n20 MIMO	5240	Ant1	20.644	Pass
NVNT	n20 MIMO	5240	Ant2	20.626	Pass
NVNT	n40 SISO	5190	Ant1	51.621	Pass
NVNT	n40 SISO	5230	Ant1	41.15	Pass
NVNT	n40 SISO	5190	Ant2	50.633	Pass
NVNT	n40 SISO	5230	Ant2	40.819	Pass
NVNT	n40 MIMO	5190	Ant1	48.883	Pass
NVNT	n40 MIMO	5190	Ant2	43.095	Pass
NVNT	n40 MIMO	5230	Ant1	40.586	Pass
NVNT	n40 MIMO	5230	Ant2	40.332	Pass
NVNT	ac20 SISO	5180	Ant1	28.56	Pass
NVNT	ac20 SISO	5220	Ant1	23.017	Pass
NVNT	ac20 SISO	5240	Ant1	20.743	Pass
NVNT	ac20 SISO	5180	Ant2	29.265	Pass
NVNT	ac20 SISO	5220	Ant2	22.126	Pass
NVNT	ac20 SISO	5240	Ant2	20.683	Pass
NVNT	ac20 MIMO	5180	Ant1	27.317	Pass
NVNT	ac20 MIMO	5180	Ant2	27.088	Pass
NVNT	ac20 MIMO	5220	Ant1	22.424	Pass

NVNT	ac20 MIMO	5220	Ant2	22.055	Pass
NVNT	ac20 MIMO	5240	Ant1	20.772	Pass
NVNT	ac20 MIMO	5240	Ant2	20.623	Pass
NVNT	ac40 SISO	5190	Ant1	51.77	Pass
NVNT	ac40 SISO	5230	Ant1	41.095	Pass
NVNT	ac40 SISO	5190	Ant2	46.029	Pass
NVNT	ac40 SISO	5230	Ant2	40.522	Pass
NVNT	ac40 MIMO	5190	Ant1	52.46	Pass
NVNT	ac40 MIMO	5190	Ant2	46.434	Pass
NVNT	ac40 MIMO	5230	Ant1	41.07	Pass
NVNT	ac40 MIMO	5230	Ant2	40.276	Pass
NVNT	ac80 SISO	5210	Ant1	93.898	Pass
NVNT	ac80 SISO	5210	Ant2	99.771	Pass
NVNT	ac80 MIMO	5210	Ant1	104.199	Pass
NVNT	ac80 MIMO	5210	Ant2	100.984	Pass
NVNT	ax20 SISO	5180	Ant1	25.87	Pass
NVNT	ax20 SISO	5220	Ant1	22.343	Pass
NVNT	ax20 SISO	5240	Ant1	20.013	Pass
NVNT	ax20 SISO	5180	Ant2	26.419	Pass
NVNT	ax20 SISO	5220	Ant2	21.992	Pass
NVNT	ax20 SISO	5240	Ant2	20.64	Pass
NVNT	ax20 MIMO	5180	Ant1	27.461	Pass
NVNT	ax20 MIMO	5180	Ant2	28.484	Pass
NVNT	ax20 MIMO	5220	Ant1	22.863	Pass
NVNT	ax20 MIMO	5220	Ant2	22.759	Pass
NVNT	ax20 MIMO	5240	Ant1	20.056	Pass
NVNT	ax20 MIMO	5240	Ant2	20.044	Pass
NVNT	ax40 SISO	5190	Ant1	43.511	Pass
NVNT	ax40 SISO	5230	Ant1	39.675	Pass
NVNT	ax40 SISO	5190	Ant2	41.938	Pass
NVNT	ax40 SISO	5230	Ant2	39.7	Pass
NVNT	ax40 MIMO	5190	Ant1	42.27	Pass
NVNT	ax40 MIMO	5190	Ant2	45.672	Pass
NVNT	ax40 MIMO	5230	Ant1	39.744	Pass
NVNT	ax40 MIMO	5230	Ant2	39.572	Pass
NVNT	ax80 SISO	5210	Ant1	101.888	Pass
NVNT	ax80 SISO	5210	Ant2	91.962	Pass
NVNT	ax80 MIMO	5210	Ant1	90.473	Pass

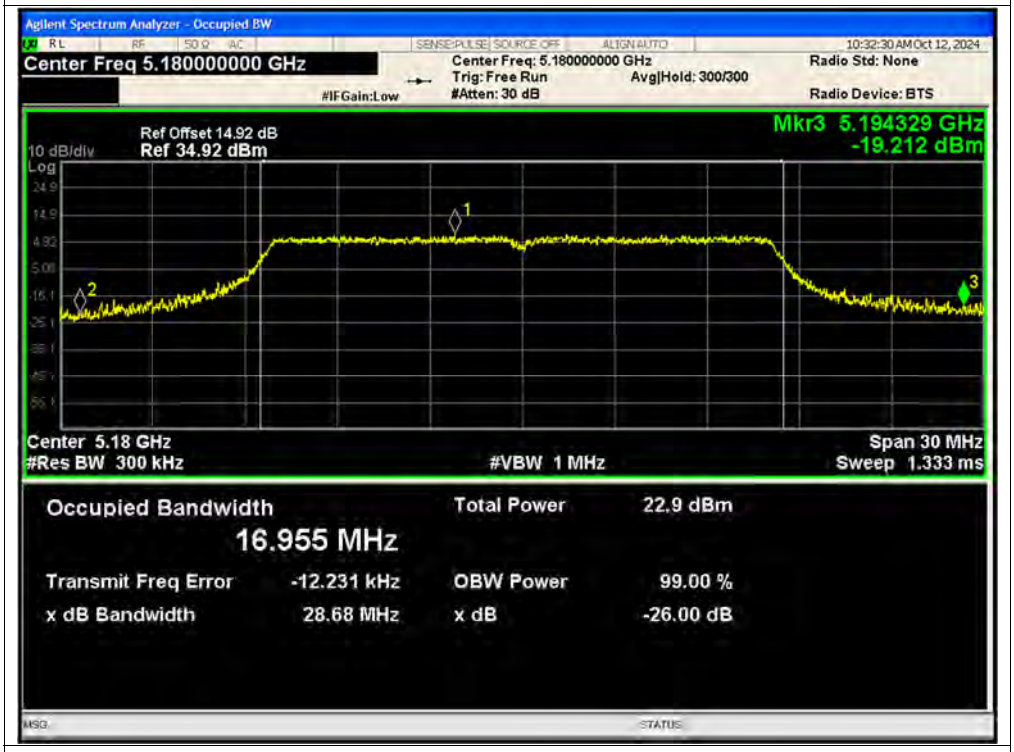
NVNT	ax80 MIMO	5210	Ant2	94.595	Pass

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	a SISO	5745	Ant1	16.354	0.5	Pass
NVNT	a SISO	5785	Ant1	16.341	0.5	Pass
NVNT	a SISO	5825	Ant1	16.35	0.5	Pass
NVNT	a SISO	5745	Ant2	16.365	0.5	Pass
NVNT	a SISO	5785	Ant2	16.369	0.5	Pass
NVNT	a SISO	5825	Ant2	16.352	0.5	Pass
NVNT	n20 SISO	5745	Ant1	17.581	0.5	Pass
NVNT	n20 SISO	5785	Ant1	17.601	0.5	Pass
NVNT	n20 SISO	5825	Ant1	17.595	0.5	Pass
NVNT	n20 SISO	5745	Ant2	17.614	0.5	Pass
NVNT	n20 SISO	5785	Ant2	17.587	0.5	Pass
NVNT	n20 SISO	5825	Ant2	17.587	0.5	Pass
NVNT	n20 MIMO	5745	Ant1	17.6	0.5	Pass
NVNT	n20 MIMO	5745	Ant2	17.618	0.5	Pass
NVNT	n20 MIMO	5785	Ant1	17.6	0.5	Pass
NVNT	n20 MIMO	5785	Ant2	17.624	0.5	Pass
NVNT	n20 MIMO	5825	Ant1	17.586	0.5	Pass
NVNT	n20 MIMO	5825	Ant2	17.603	0.5	Pass
NVNT	n40 SISO	5755	Ant1	35.129	0.5	Pass
NVNT	n40 SISO	5795	Ant1	35.12	0.5	Pass
NVNT	n40 SISO	5755	Ant2	35.129	0.5	Pass
NVNT	n40 SISO	5795	Ant2	35.127	0.5	Pass
NVNT	n40 MIMO	5755	Ant1	35.117	0.5	Pass
NVNT	n40 MIMO	5755	Ant2	35.123	0.5	Pass
NVNT	n40 MIMO	5795	Ant1	35.12	0.5	Pass
NVNT	n40 MIMO	5795	Ant2	35.117	0.5	Pass
NVNT	ac20 SISO	5745	Ant1	17.574	0.5	Pass
NVNT	ac20 SISO	5785	Ant1	17.597	0.5	Pass
NVNT	ac20 SISO	5825	Ant1	17.599	0.5	Pass
NVNT	ac20 SISO	5745	Ant2	17.617	0.5	Pass
NVNT	ac20 SISO	5785	Ant2	17.618	0.5	Pass
NVNT	ac20 SISO	5825	Ant2	17.621	0.5	Pass
NVNT	ac20 MIMO	5745	Ant1	17.588	0.5	Pass

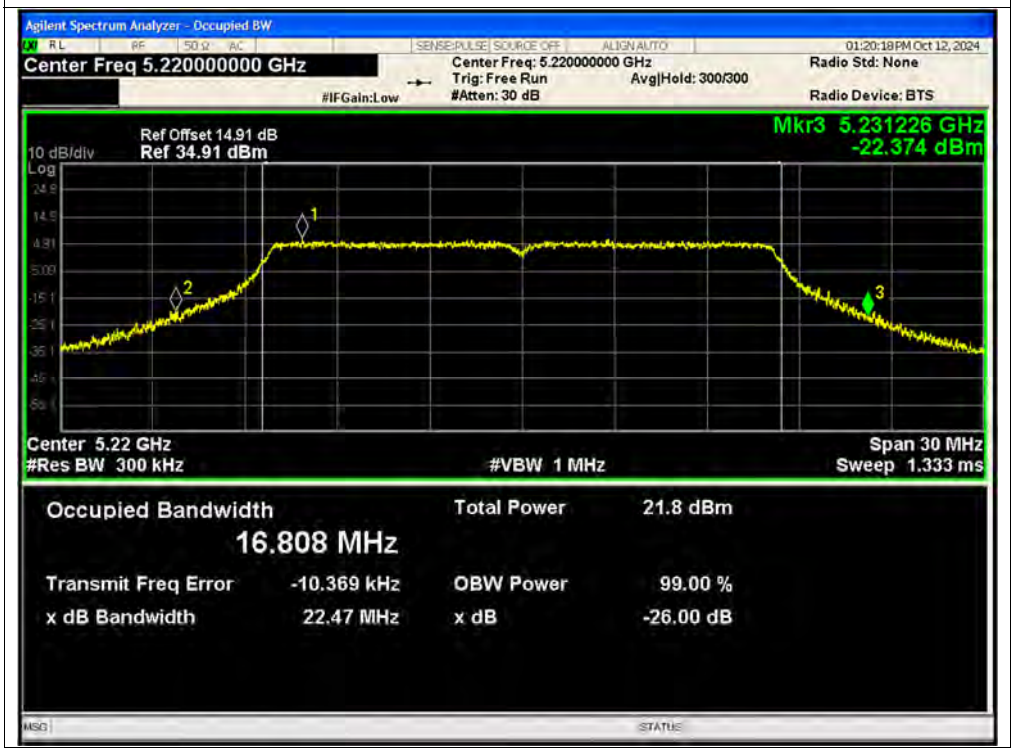
NVNT	ac20 MIMO	5745	Ant2	17.625	0.5	Pass
NVNT	ac20 MIMO	5785	Ant1	17.591	0.5	Pass
NVNT	ac20 MIMO	5785	Ant2	17.622	0.5	Pass
NVNT	ac20 MIMO	5825	Ant1	17.591	0.5	Pass
NVNT	ac20 MIMO	5825	Ant2	17.627	0.5	Pass
NVNT	ac40 SISO	5755	Ant1	35.126	0.5	Pass
NVNT	ac40 SISO	5795	Ant1	35.117	0.5	Pass
NVNT	ac40 SISO	5755	Ant2	35.123	0.5	Pass
NVNT	ac40 SISO	5795	Ant2	35.119	0.5	Pass
NVNT	ac40 MIMO	5755	Ant1	35.124	0.5	Pass
NVNT	ac40 MIMO	5755	Ant2	35.119	0.5	Pass
NVNT	ac40 MIMO	5795	Ant1	35.11	0.5	Pass
NVNT	ac40 MIMO	5795	Ant2	35.11	0.5	Pass
NVNT	ac80 SISO	5775	Ant1	75.118	0.5	Pass
NVNT	ac80 SISO	5775	Ant2	75.116	0.5	Pass
NVNT	ac80 MIMO	5775	Ant1	75.118	0.5	Pass
NVNT	ac80 MIMO	5775	Ant2	75.108	0.5	Pass
NVNT	ax20 SISO	5745	Ant1	19.053	0.5	Pass
NVNT	ax20 SISO	5785	Ant1	18.973	0.5	Pass
NVNT	ax20 SISO	5825	Ant1	19.045	0.5	Pass
NVNT	ax20 SISO	5745	Ant2	17.616	0.5	Pass
NVNT	ax20 SISO	5785	Ant2	17.61	0.5	Pass
NVNT	ax20 SISO	5825	Ant2	17.612	0.5	Pass
NVNT	ax20 MIMO	5745	Ant1	19.051	0.5	Pass
NVNT	ax20 MIMO	5745	Ant2	19.065	0.5	Pass
NVNT	ax20 MIMO	5785	Ant1	19.049	0.5	Pass
NVNT	ax20 MIMO	5785	Ant2	19.066	0.5	Pass
NVNT	ax20 MIMO	5825	Ant1	18.965	0.5	Pass
NVNT	ax20 MIMO	5825	Ant2	19.053	0.5	Pass
NVNT	ax40 SISO	5755	Ant1	35.77	0.5	Pass
NVNT	ax40 SISO	5795	Ant1	37.041	0.5	Pass
NVNT	ax40 SISO	5755	Ant2	35.86	0.5	Pass
NVNT	ax40 SISO	5795	Ant2	35.649	0.5	Pass
NVNT	ax40 MIMO	5755	Ant1	36.284	0.5	Pass
NVNT	ax40 MIMO	5755	Ant2	36.799	0.5	Pass
NVNT	ax40 MIMO	5795	Ant1	35.568	0.5	Pass
NVNT	ax40 MIMO	5795	Ant2	35.321	0.5	Pass
NVNT	ax80 SISO	5775	Ant1	75.111	0.5	Pass

NVNT	ax80 SISO	5775	Ant2	75.122	0.5	Pass
NVNT	ax80 MIMO	5775	Ant1	75.121	0.5	Pass
NVNT	ax80 MIMO	5775	Ant2	75.11	0.5	Pass

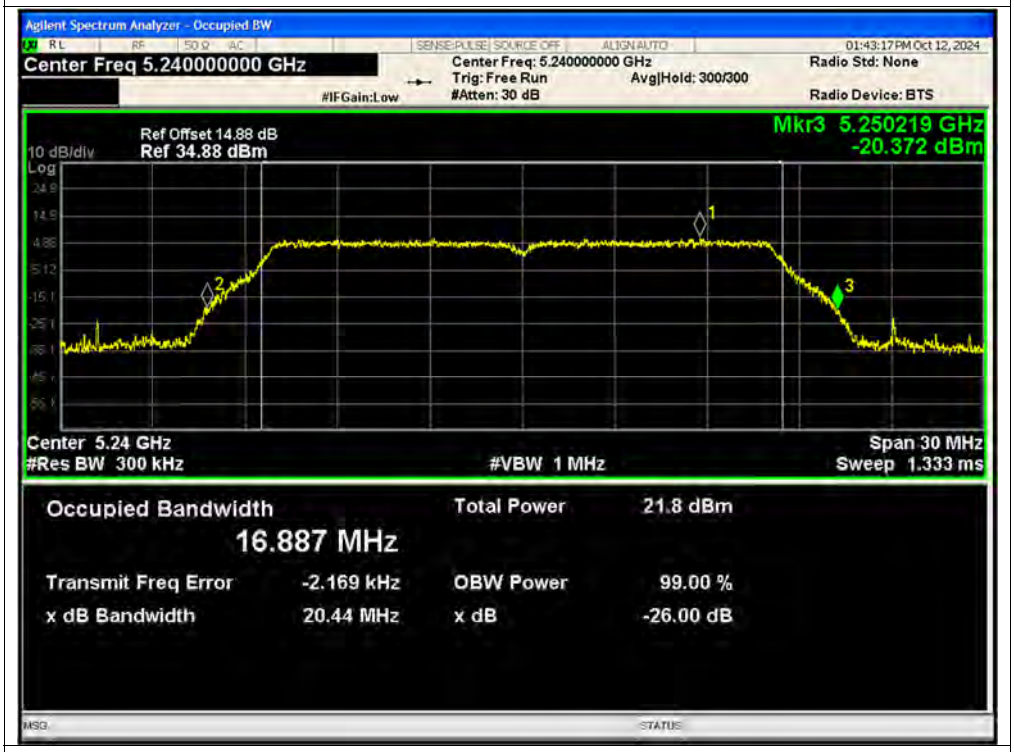
Test Graphs
-26dB Bandwidth NVNT a 5180MHz Ant1 SISO



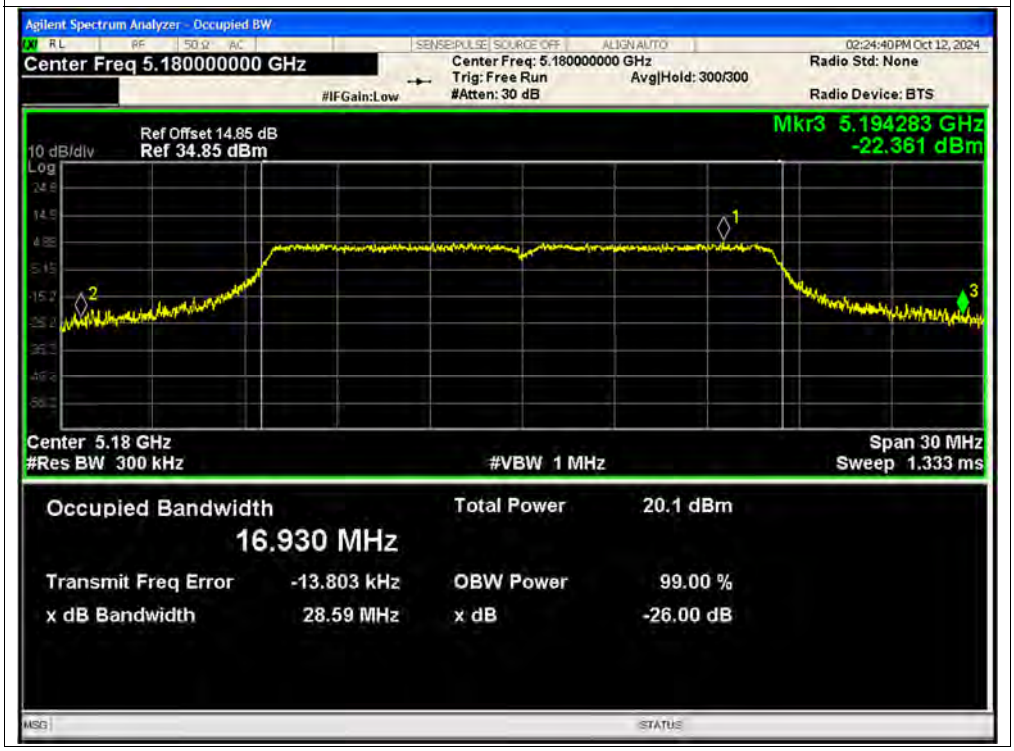
-26dB Bandwidth NVNT a 5220MHz Ant1 SISO



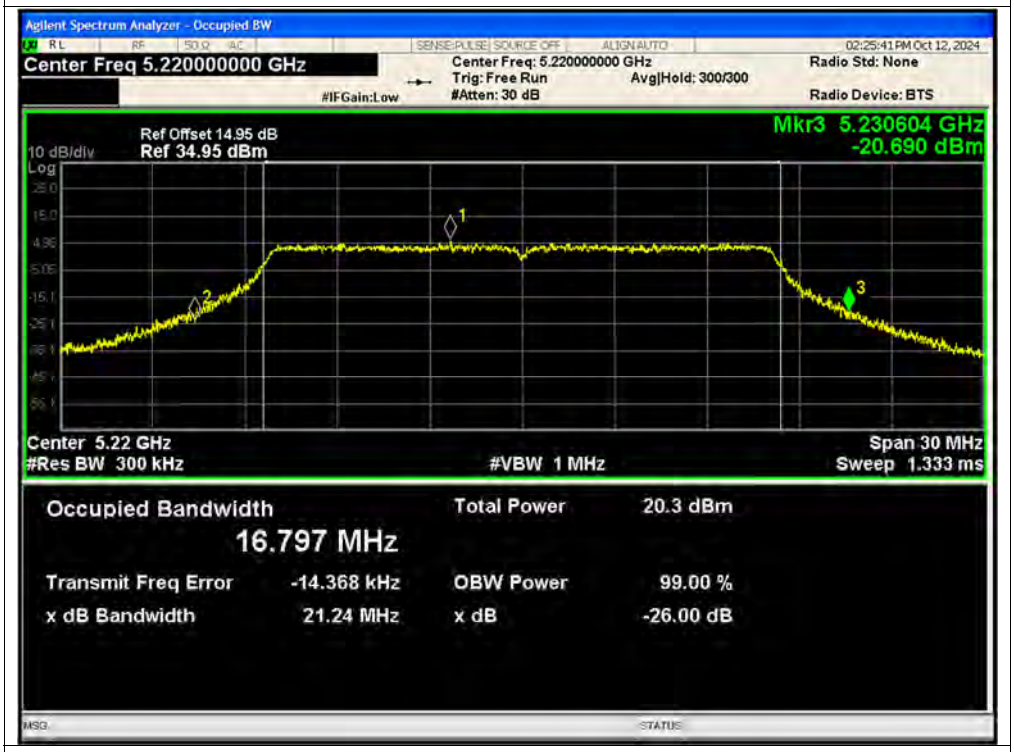
-26dB Bandwidth NVNT a 5240MHz Ant1 SISO



-26dB Bandwidth NVNT a 5180MHz Ant2 SISO

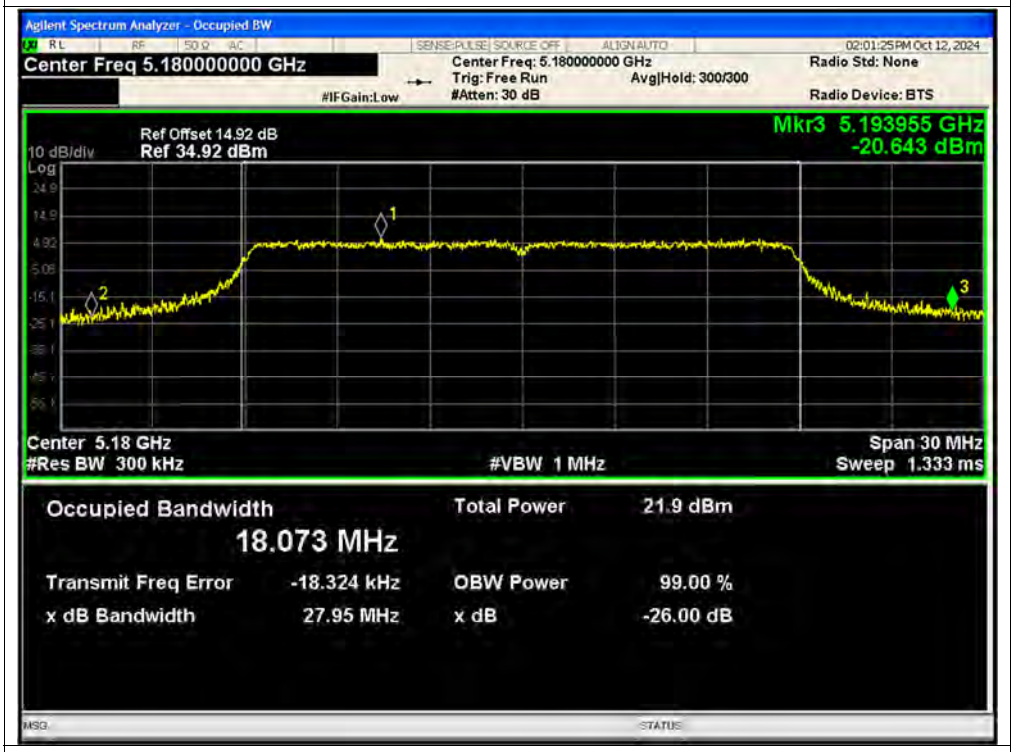


-26dB Bandwidth NVNT a 5220MHz Ant2 SISO



-26dB Bandwidth NVNT a 5240MHz Ant2 SISO

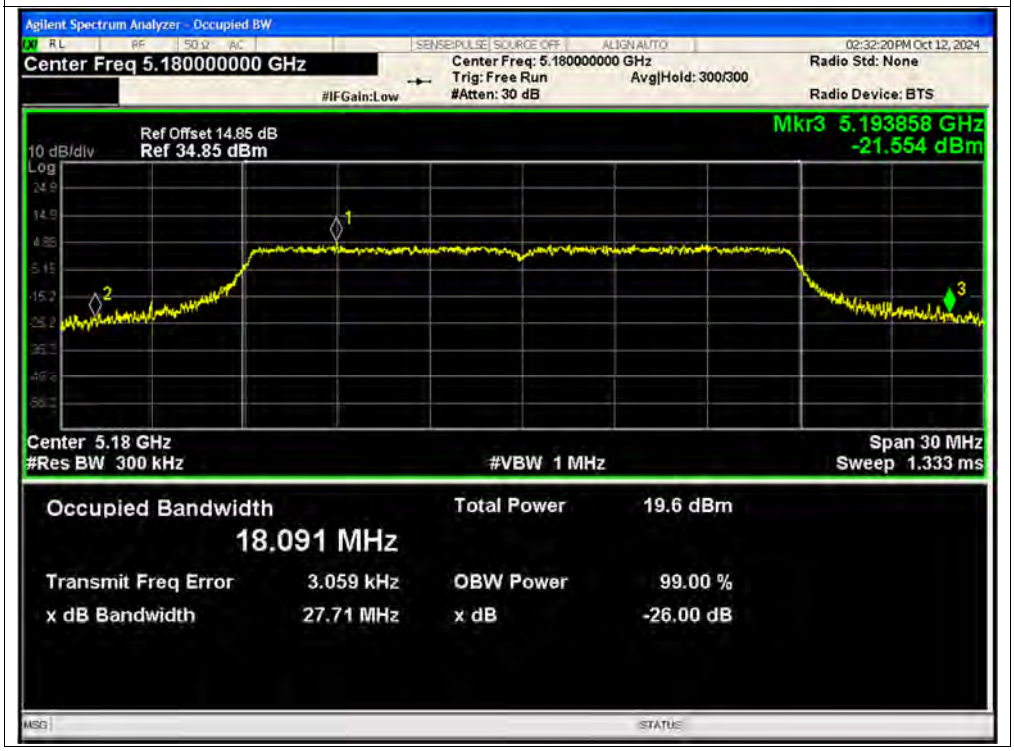
-26dB Bandwidth NVNT n20 5180MHz Ant1 SISO



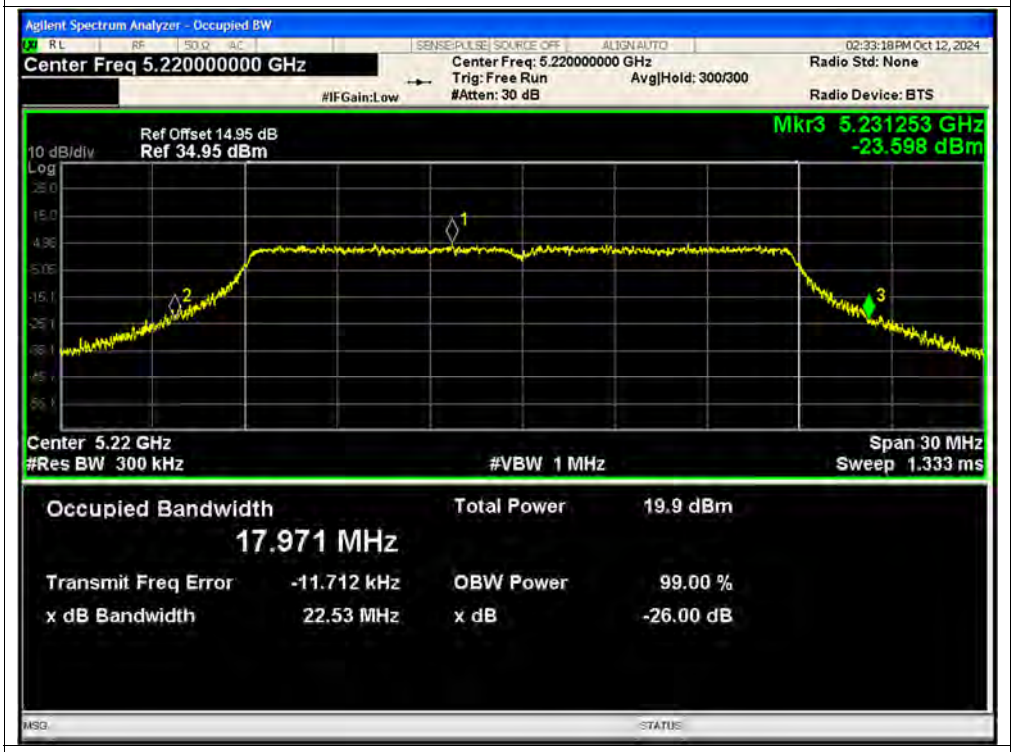
-26dB Bandwidth NVNT n20 5220MHz Ant1 SISO

-26dB Bandwidth NVNT n20 5240MHz Ant1 SISO

-26dB Bandwidth NVNT n20 5180MHz Ant2 SISO

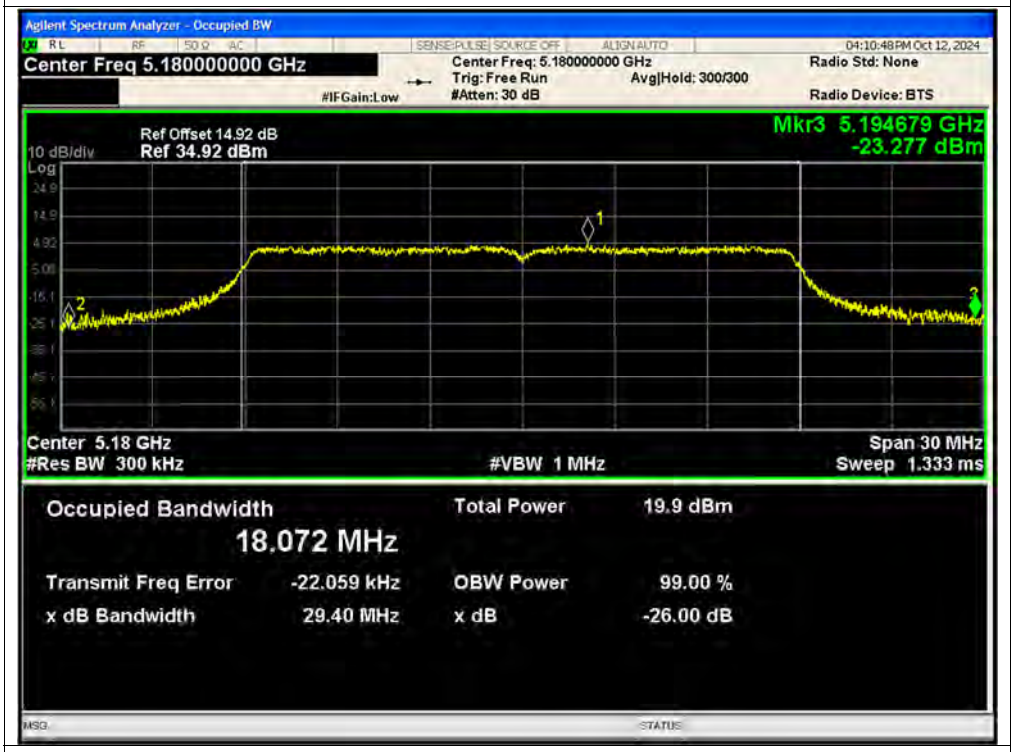


-26dB Bandwidth NVNT n20 5220MHz Ant2 SISO



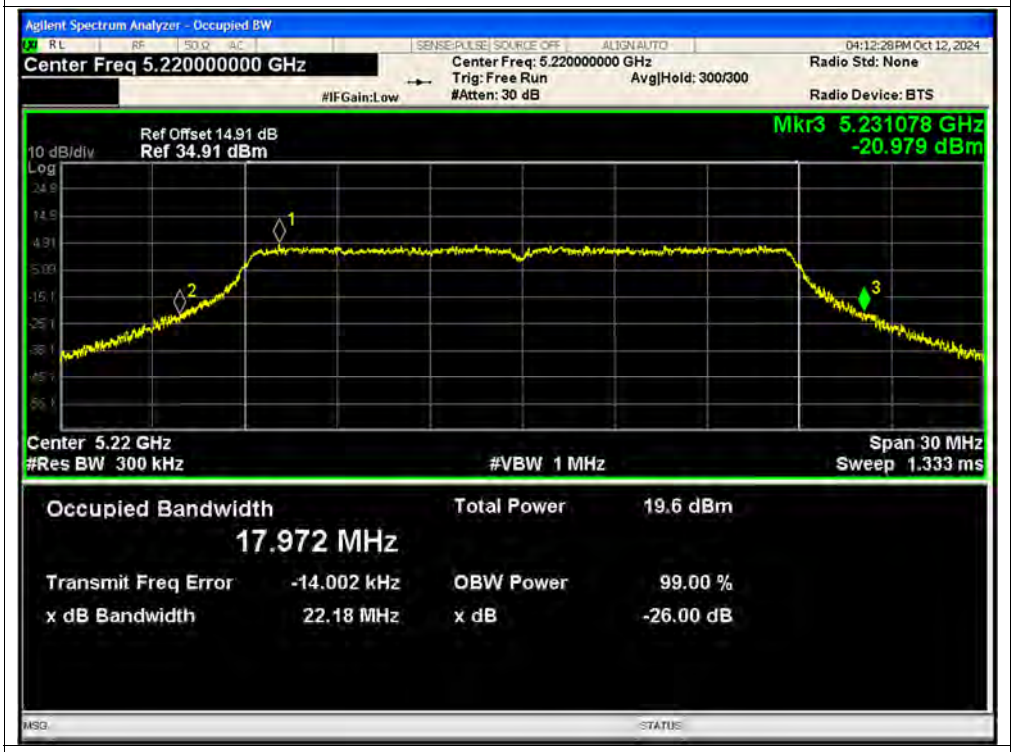
-26dB Bandwidth NVNT n20 5240MHz Ant2 SISO

-26dB Bandwidth NVNT n20 5180MHz Ant1 MIMO

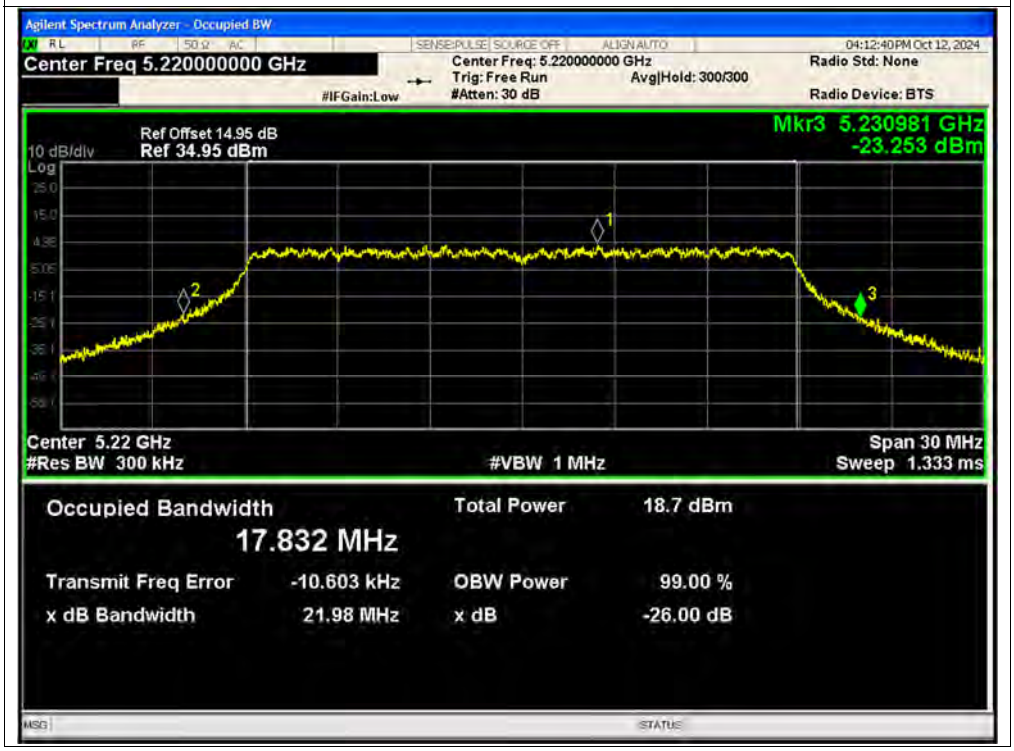


-26dB Bandwidth NVNT n20 5180MHz Ant2 MIMO

-26dB Bandwidth NVNT n20 5220MHz Ant1 MIMO



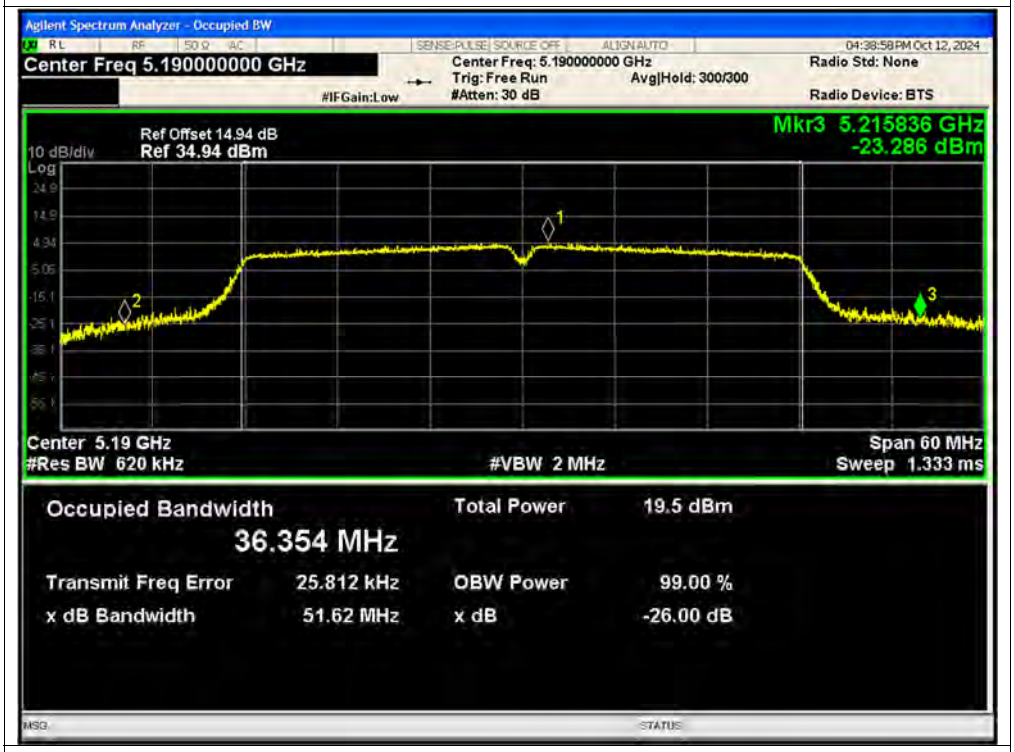
-26dB Bandwidth NVNT n20 5220MHz Ant2 MIMO



-26dB Bandwidth NVNT n20 5240MHz Ant1 MIMO

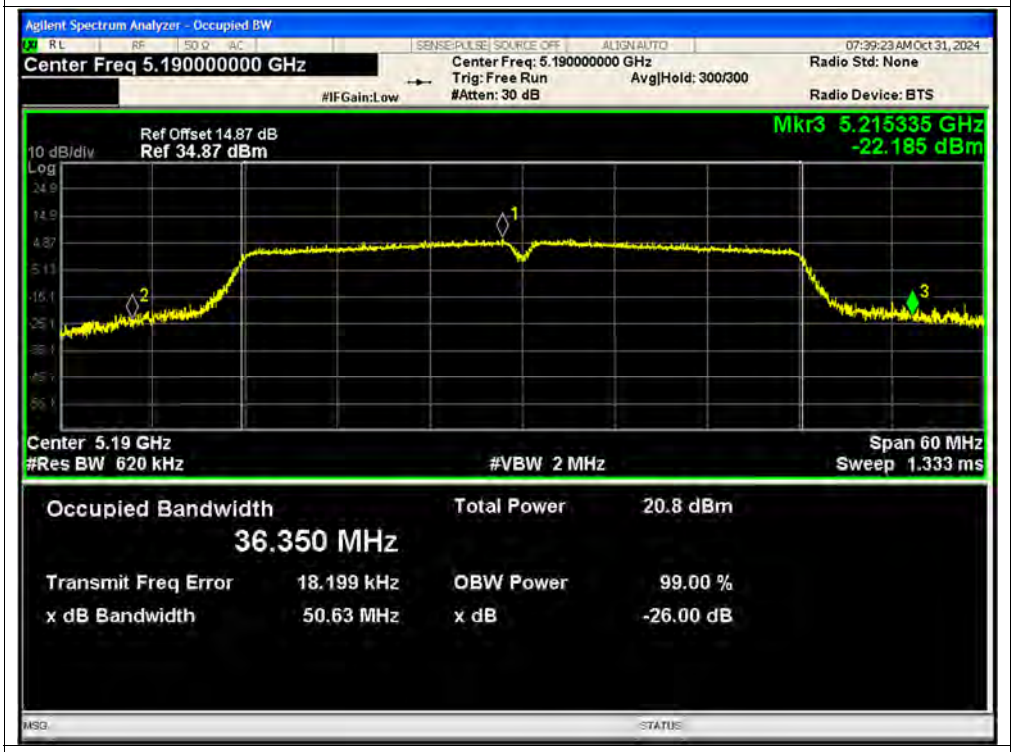
-26dB Bandwidth NVNT n20 5240MHz Ant2 MIMO

-26dB Bandwidth NVNT n40 5190MHz Ant1 SISO



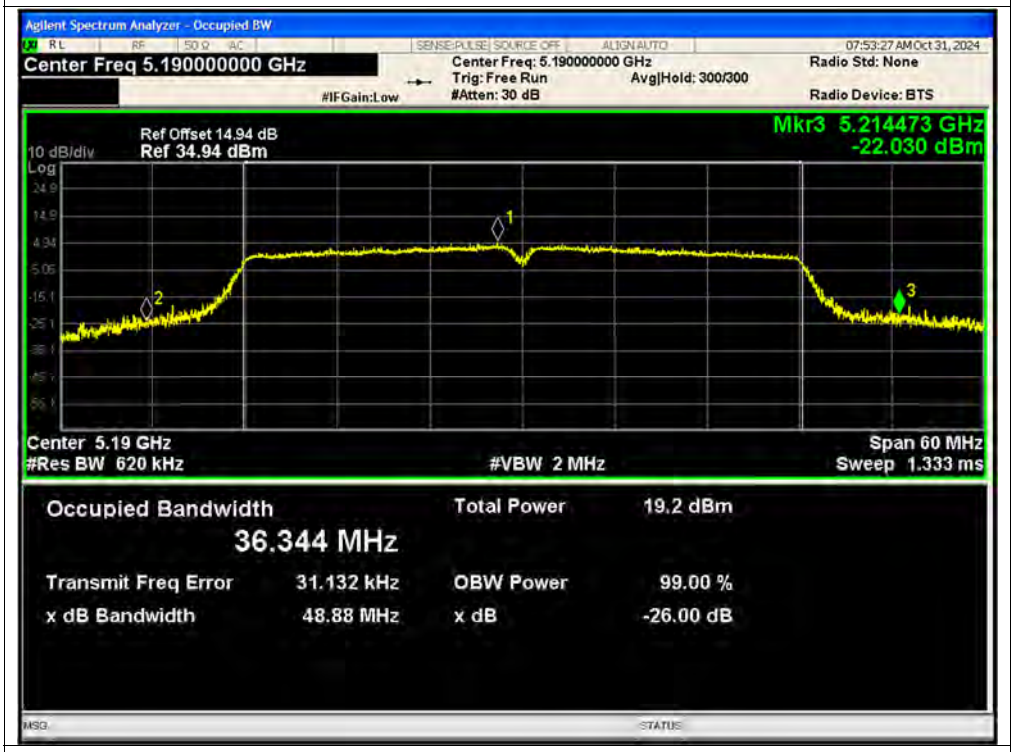
-26dB Bandwidth NVNT n40 5230MHz Ant1 SISO

-26dB Bandwidth NVNT n40 5190MHz Ant2 SISO



-26dB Bandwidth NVNT n40 5230MHz Ant2 SISO

-26dB Bandwidth NVNT n40 5190MHz Ant1 MIMO

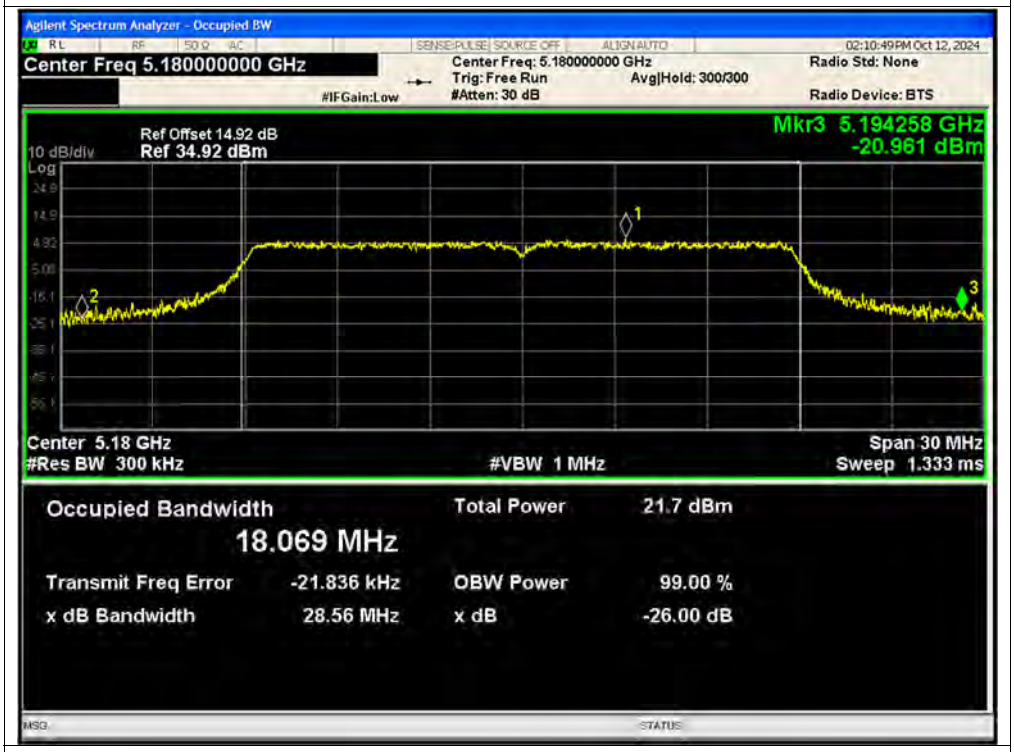


-26dB Bandwidth NVNT n40 5190MHz Ant2 MIMO

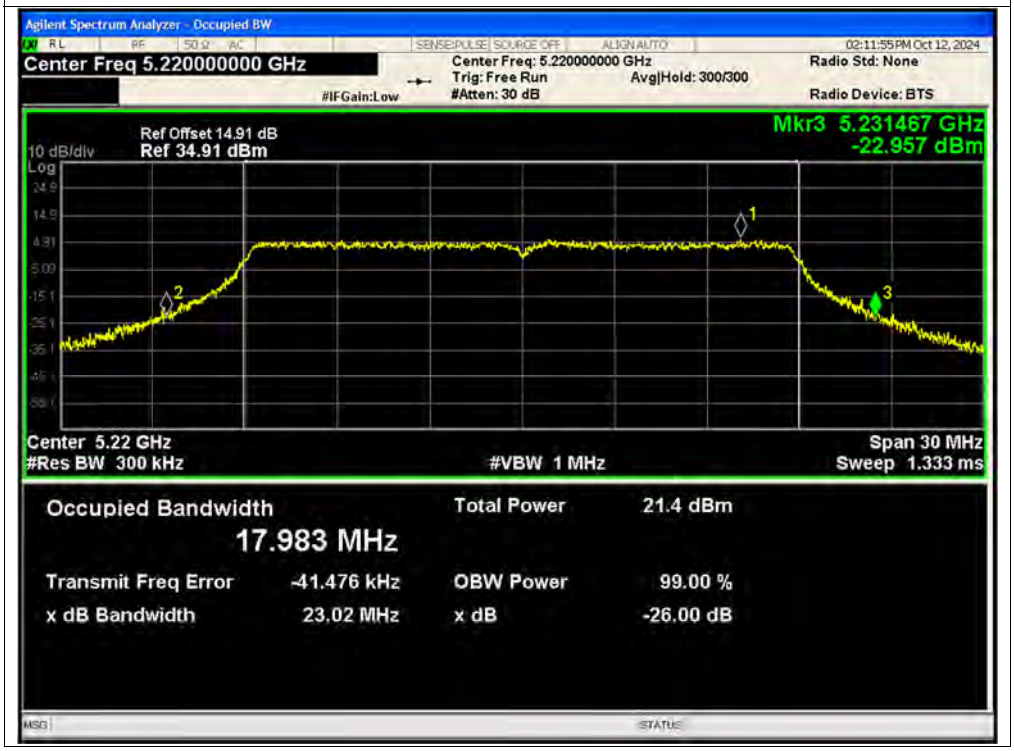
-26dB Bandwidth NVNT n40 5230MHz Ant1 MIMO

-26dB Bandwidth NVNT n40 5230MHz Ant2 MIMO

-26dB Bandwidth NVNT ac20 5180MHz Ant1 SISO

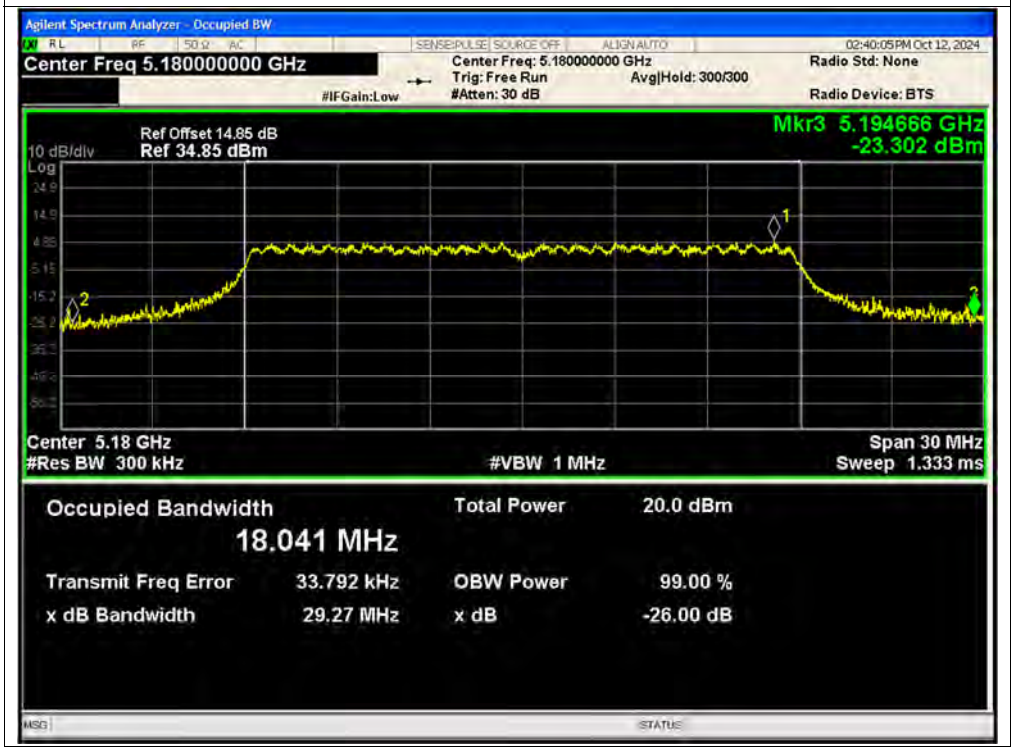


-26dB Bandwidth NVNT ac20 5220MHz Ant1 SISO



-26dB Bandwidth NVNT ac20 5240MHz Ant1 SISO

-26dB Bandwidth NVNT ac20 5180MHz Ant2 SISO

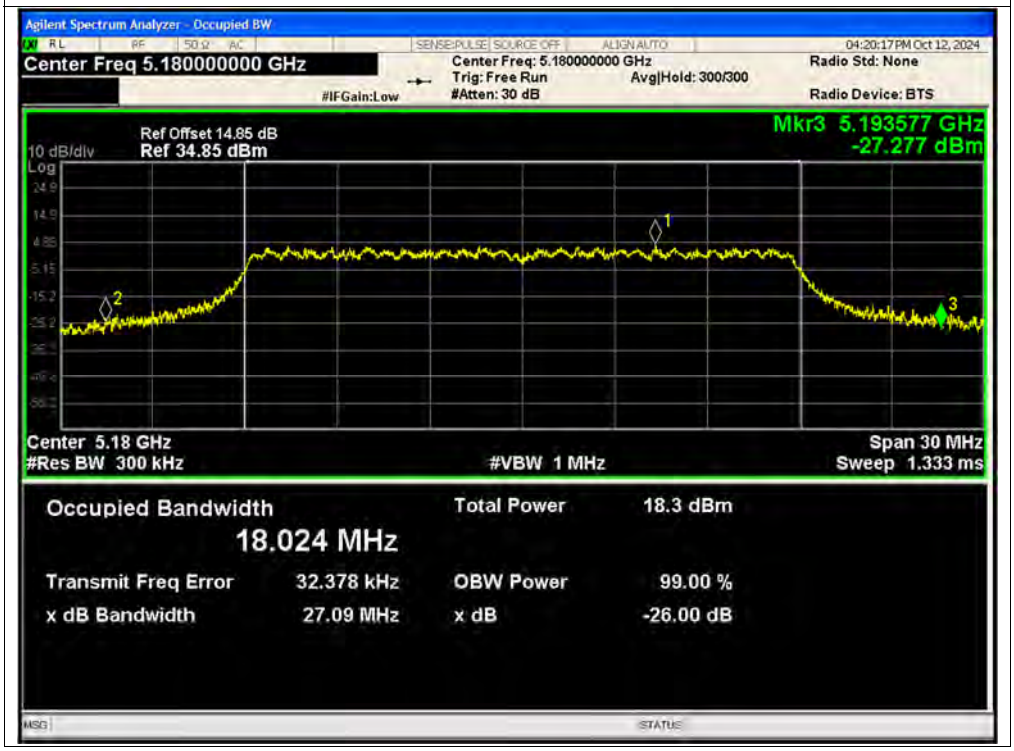


-26dB Bandwidth NVNT ac20 5220MHz Ant2 SISO

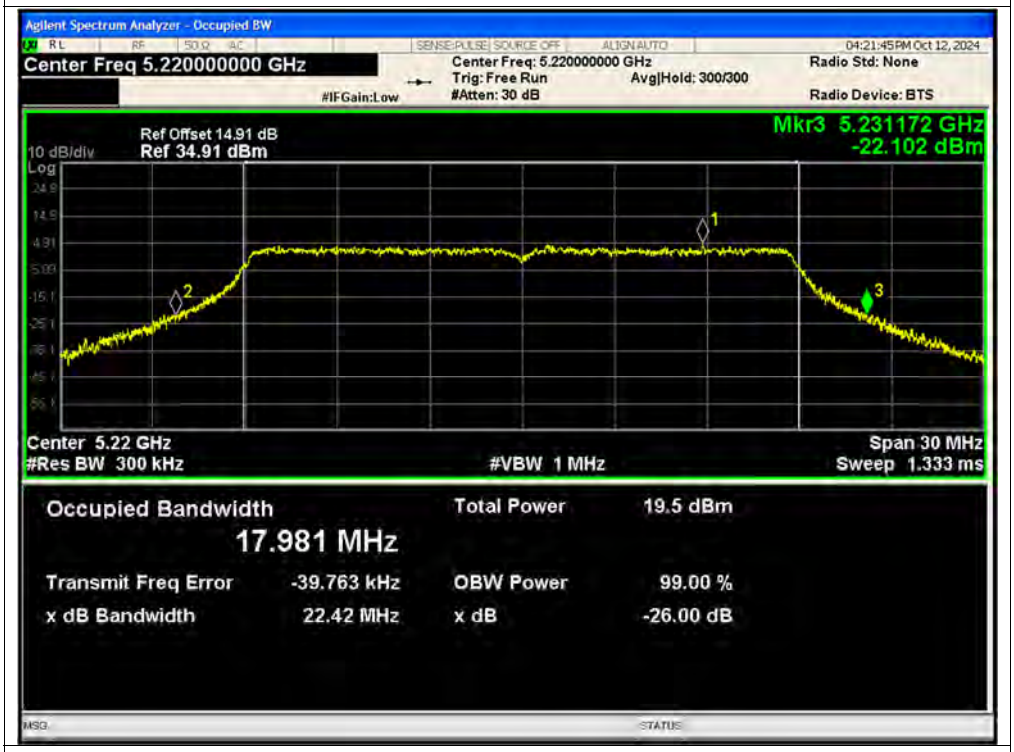
-26dB Bandwidth NVNT ac20 5240MHz Ant2 SISO

-26dB Bandwidth NVNT ac20 5180MHz Ant1 MIMO

-26dB Bandwidth NVNT ac20 5180MHz Ant2 MIMO



-26dB Bandwidth NVNT ac20 5220MHz Ant1 MIMO



-26dB Bandwidth NVNT ac20 5220MHz Ant2 MIMO

-26dB Bandwidth NVNT ac20 5240MHz Ant1 MIMO

-26dB Bandwidth NVNT ac20 5240MHz Ant2 MIMO

-26dB Bandwidth NVNT ac40 5190MHz Ant1 SISO

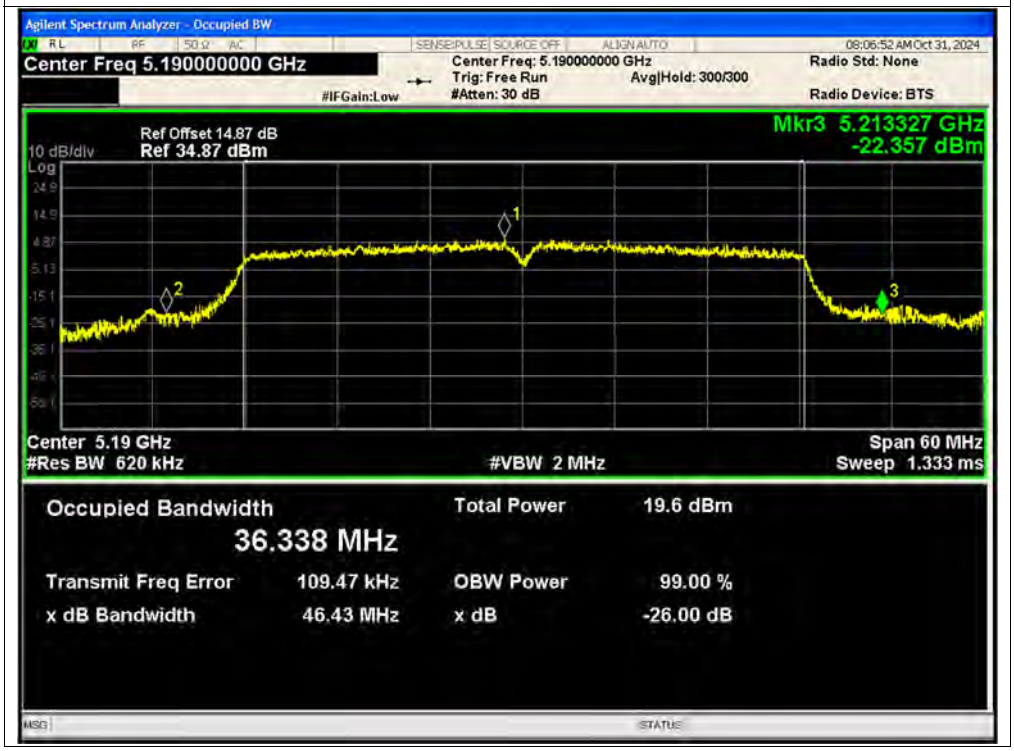
-26dB Bandwidth NVNT ac40 5230MHz Ant1 SISO

-26dB Bandwidth NVNT ac40 5190MHz Ant2 SISO

-26dB Bandwidth NVNT ac40 5230MHz Ant2 SISO

-26dB Bandwidth NVNT ac40 5190MHz Ant1 MIMO

-26dB Bandwidth NVNT ac40 5190MHz Ant2 MIMO



-26dB Bandwidth NVNT ac40 5230MHz Ant1 MIMO

-26dB Bandwidth NVNT ac40 5230MHz Ant2 MIMO

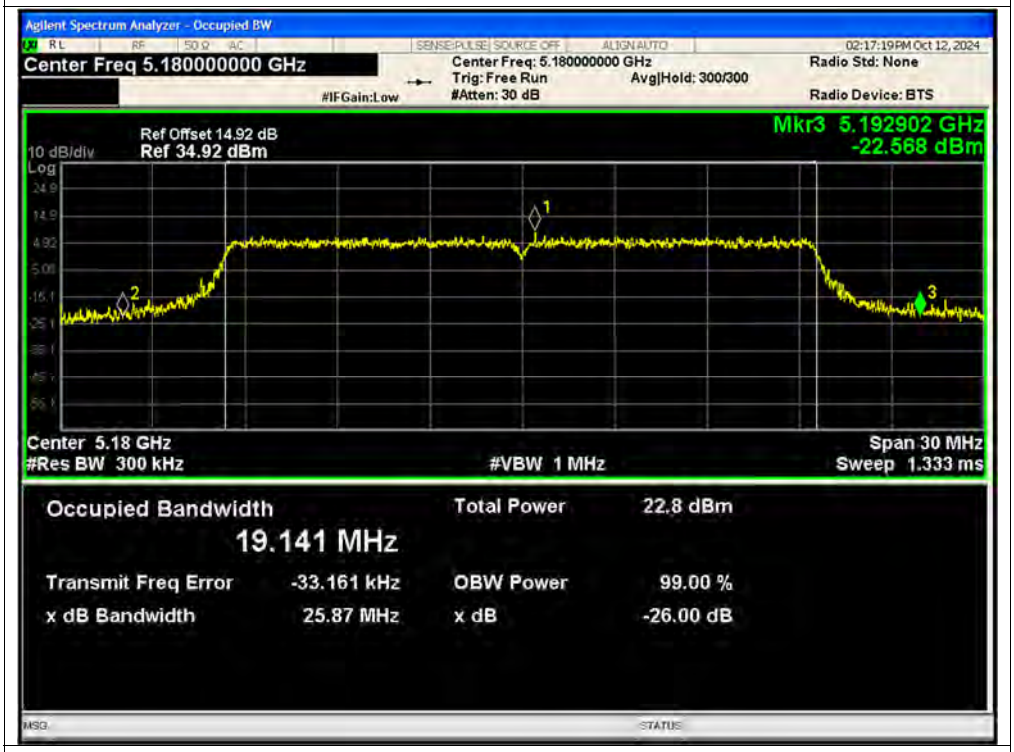
-26dB Bandwidth NVNT ac80 5210MHz Ant1 SISO

-26dB Bandwidth NVNT ac80 5210MHz Ant2 SISO

-26dB Bandwidth NVNT ac80 5210MHz Ant1 MIMO

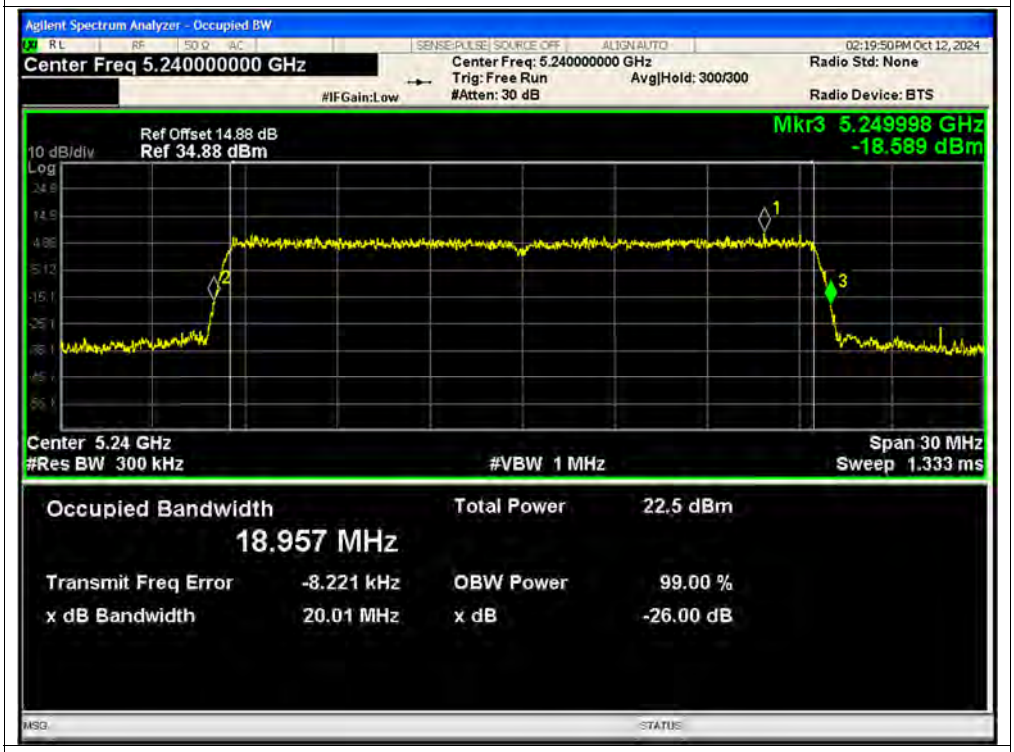
-26dB Bandwidth NVNT ac80 5210MHz Ant2 MIMO

-26dB Bandwidth NVNT ax20 5180MHz Ant1 SISO

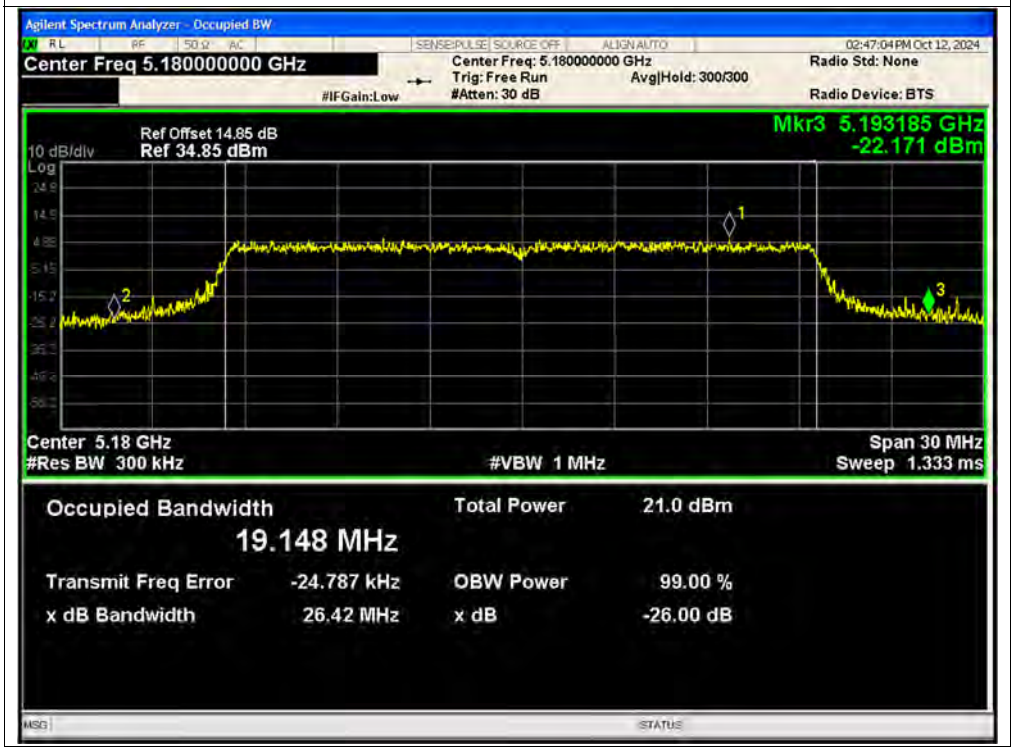


-26dB Bandwidth NVNT ax20 5220MHz Ant1 SISO

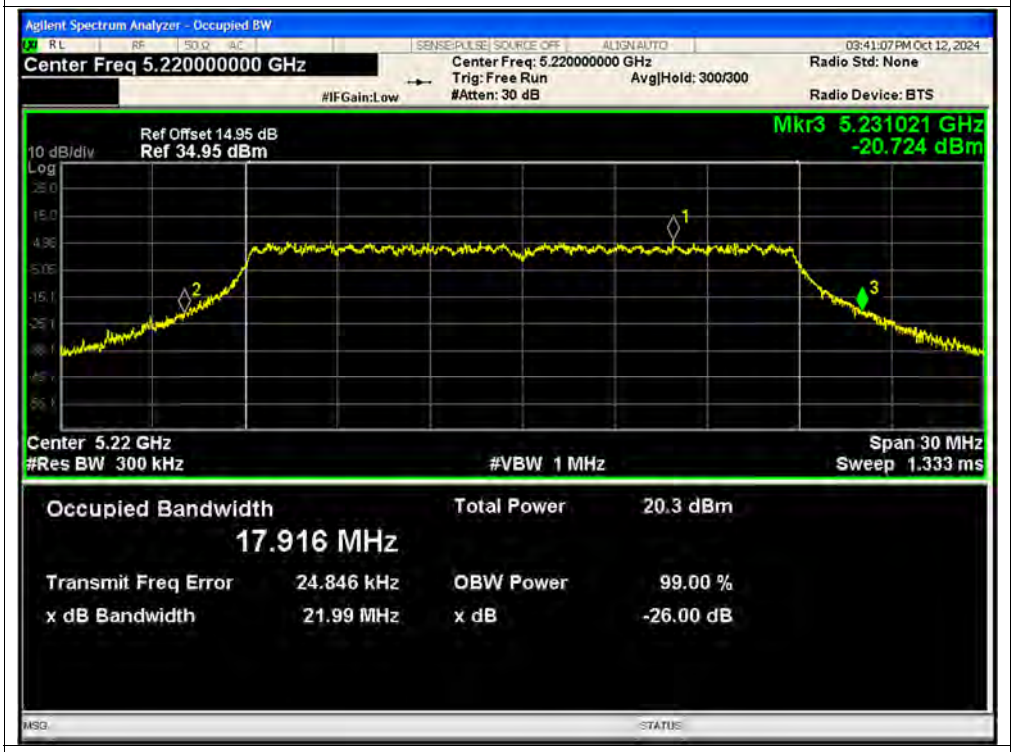
-26dB Bandwidth NVNT ax20 5240MHz Ant1 SISO



-26dB Bandwidth NVNT ax20 5180MHz Ant2 SISO

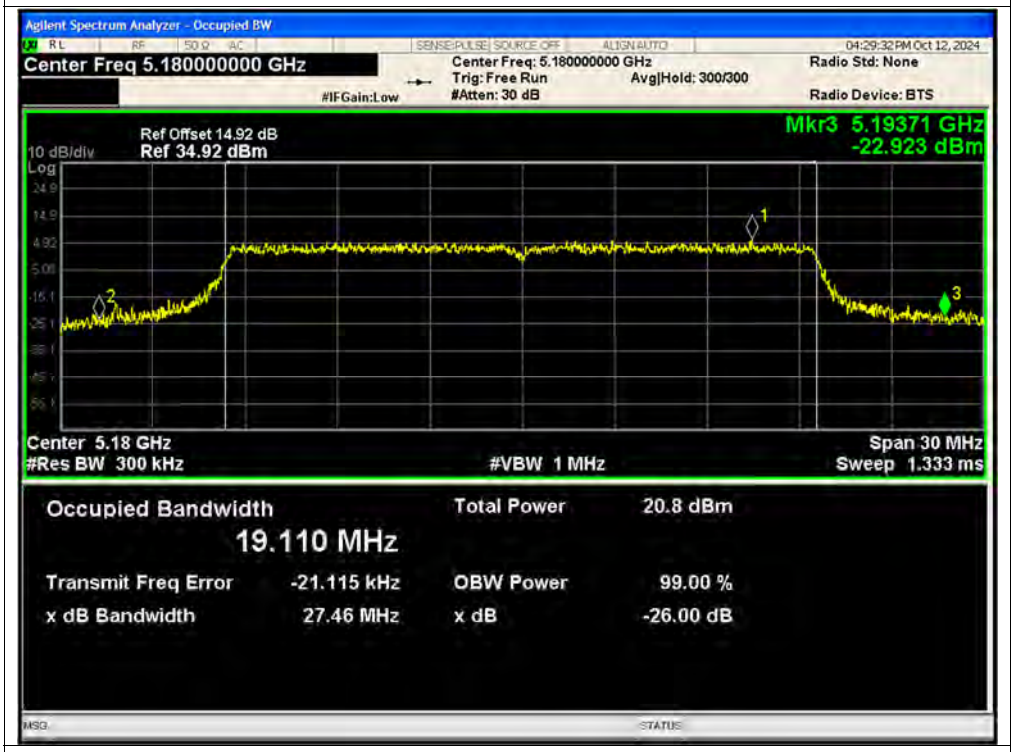


-26dB Bandwidth NVNT ax20 5220MHz Ant2 SISO



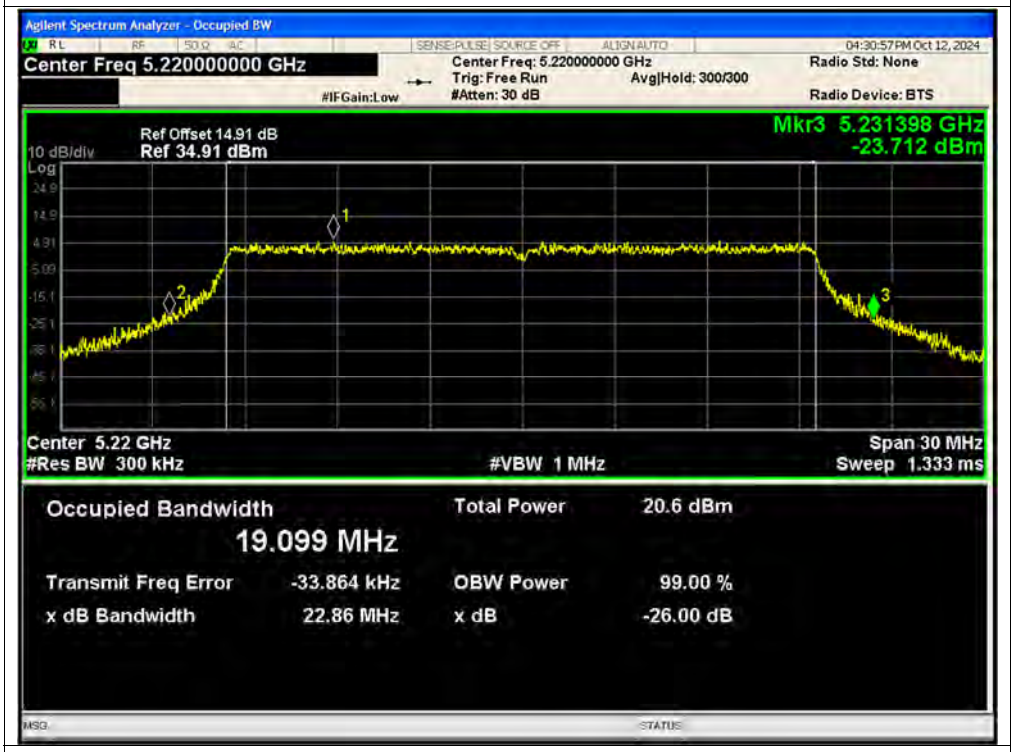
-26dB Bandwidth NVNT ax20 5240MHz Ant2 SISO

-26dB Bandwidth NVNT ax20 5180MHz Ant1 MIMO

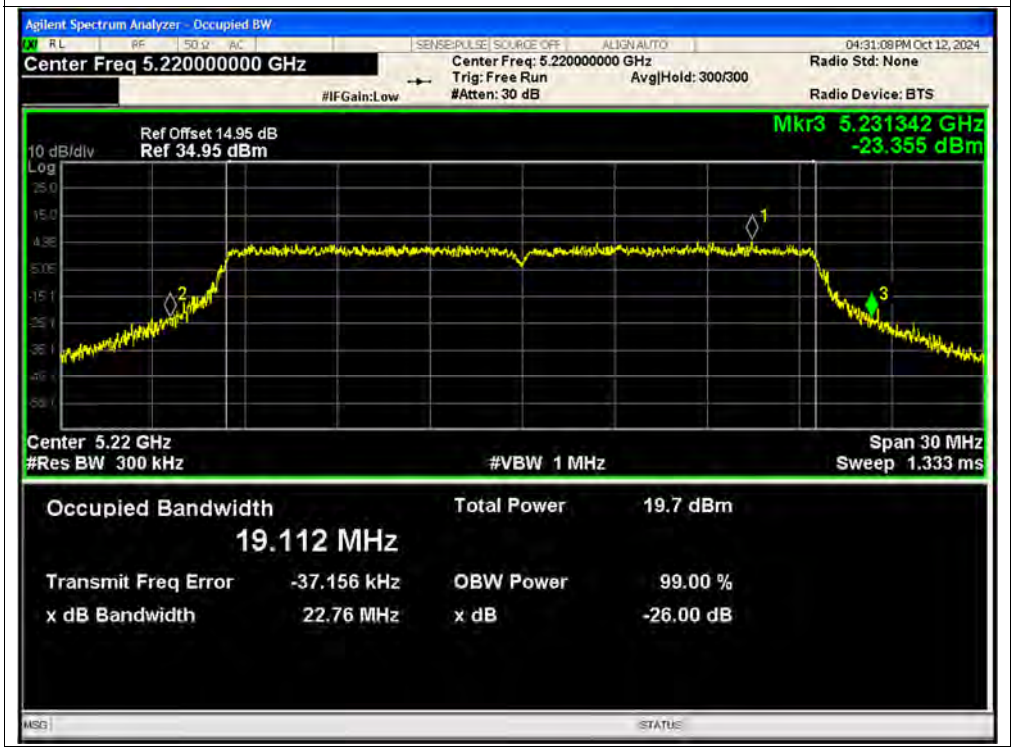


-26dB Bandwidth NVNT ax20 5180MHz Ant2 MIMO

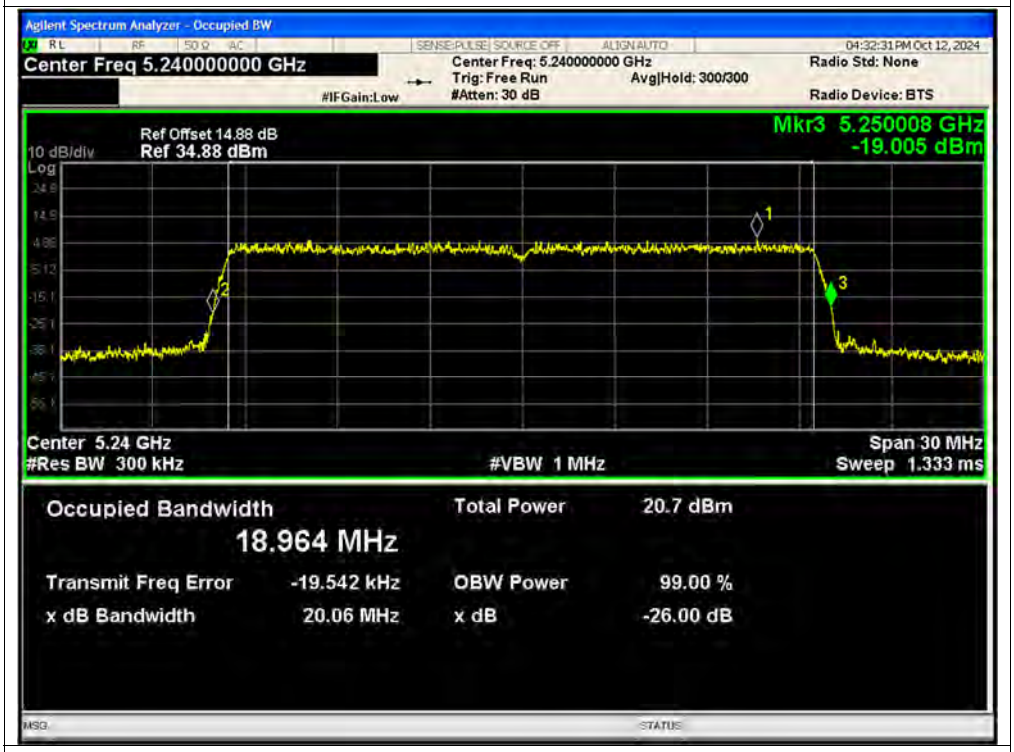
-26dB Bandwidth NVNT ax20 5220MHz Ant1 MIMO



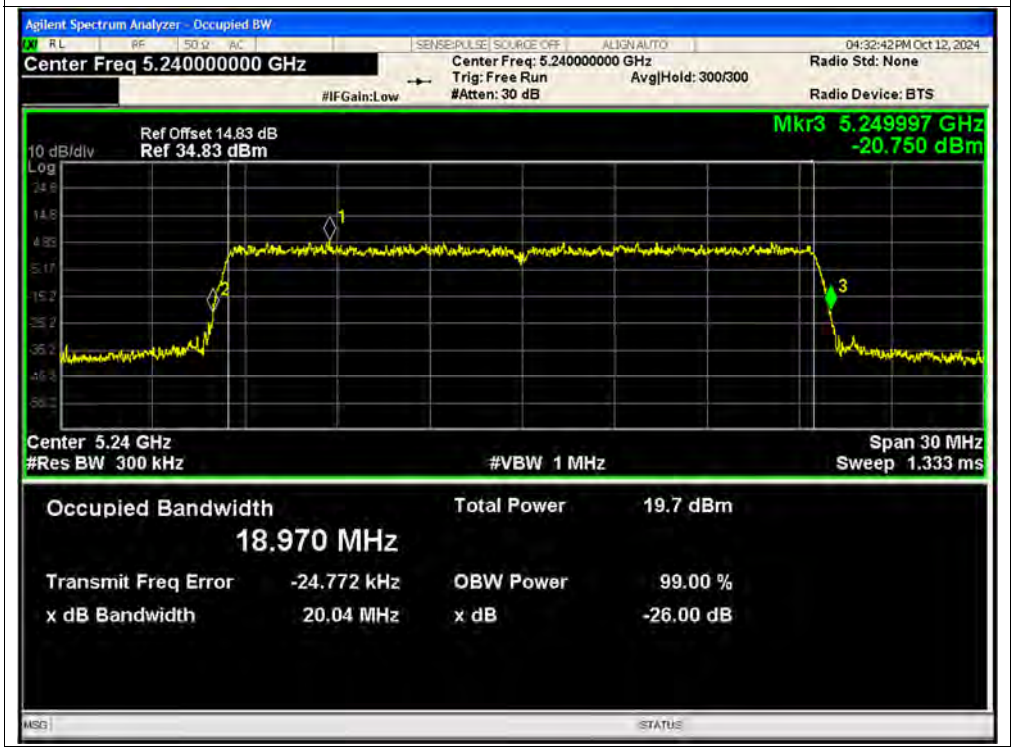
-26dB Bandwidth NVNT ax20 5220MHz Ant2 MIMO



-26dB Bandwidth NVNT ax20 5240MHz Ant1 MIMO



-26dB Bandwidth NVNT ax20 5240MHz Ant2 MIMO



-26dB Bandwidth NVNT ax40 5190MHz Ant1 SISO

-26dB Bandwidth NVNT ax40 5230MHz Ant1 SISO

-26dB Bandwidth NVNT ax40 5190MHz Ant2 SISO

-26dB Bandwidth NVNT ax40 5230MHz Ant2 SISO

-26dB Bandwidth NVNT ax40 5190MHz Ant1 MIMO

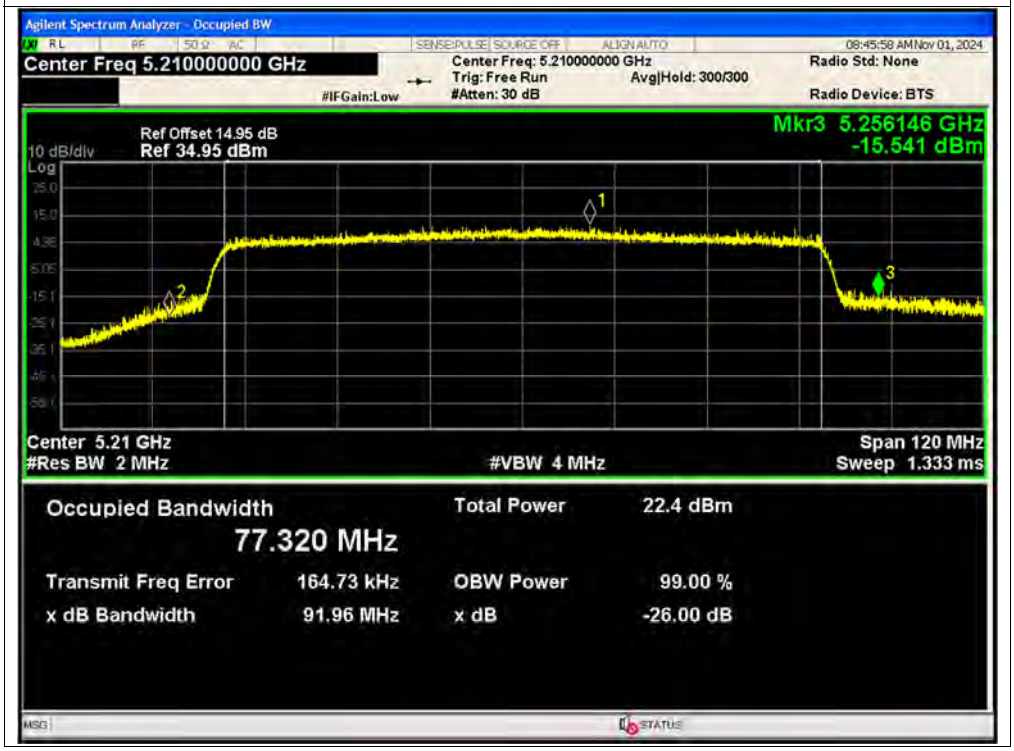
-26dB Bandwidth NVNT ax40 5190MHz Ant2 MIMO

-26dB Bandwidth NVNT ax40 5230MHz Ant1 MIMO

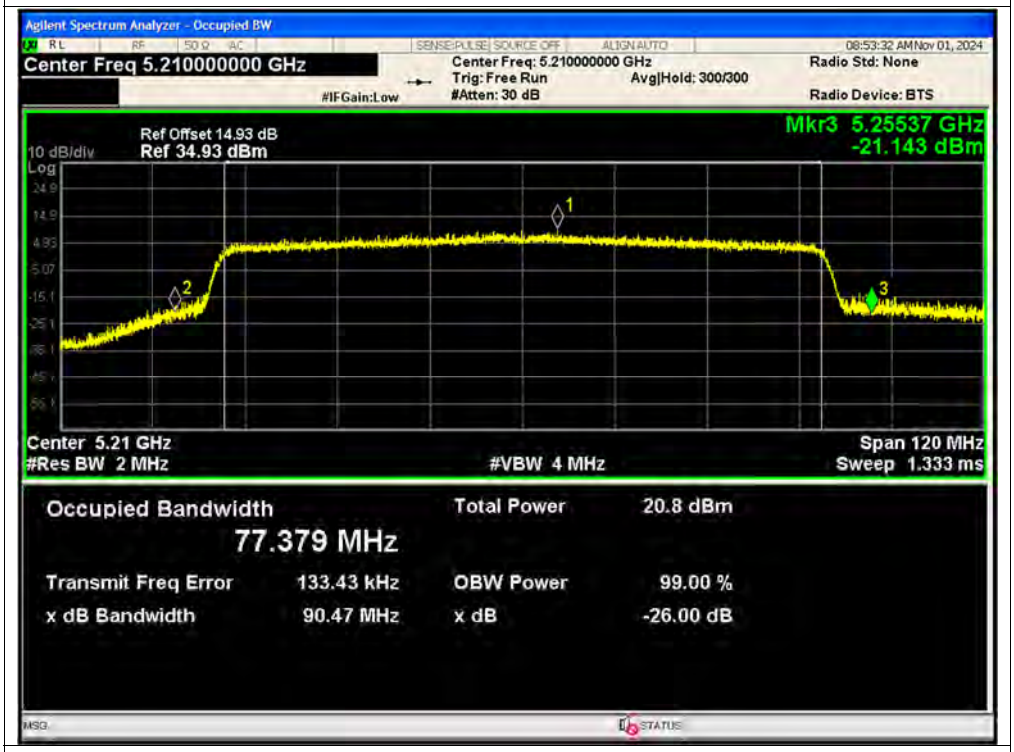
-26dB Bandwidth NVNT ax40 5230MHz Ant2 MIMO

-26dB Bandwidth NVNT ax80 5210MHz Ant1 SISO

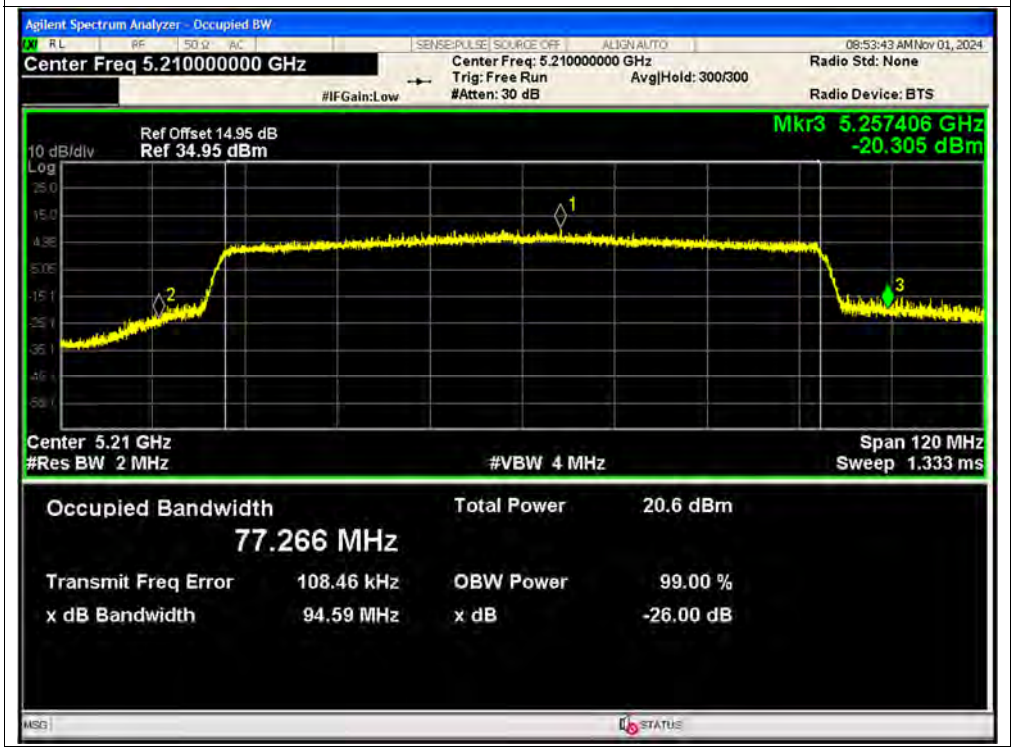
-26dB Bandwidth NVNT ax80 5210MHz Ant2 SISO



-26dB Bandwidth NVNT ax80 5210MHz Ant1 MIMO

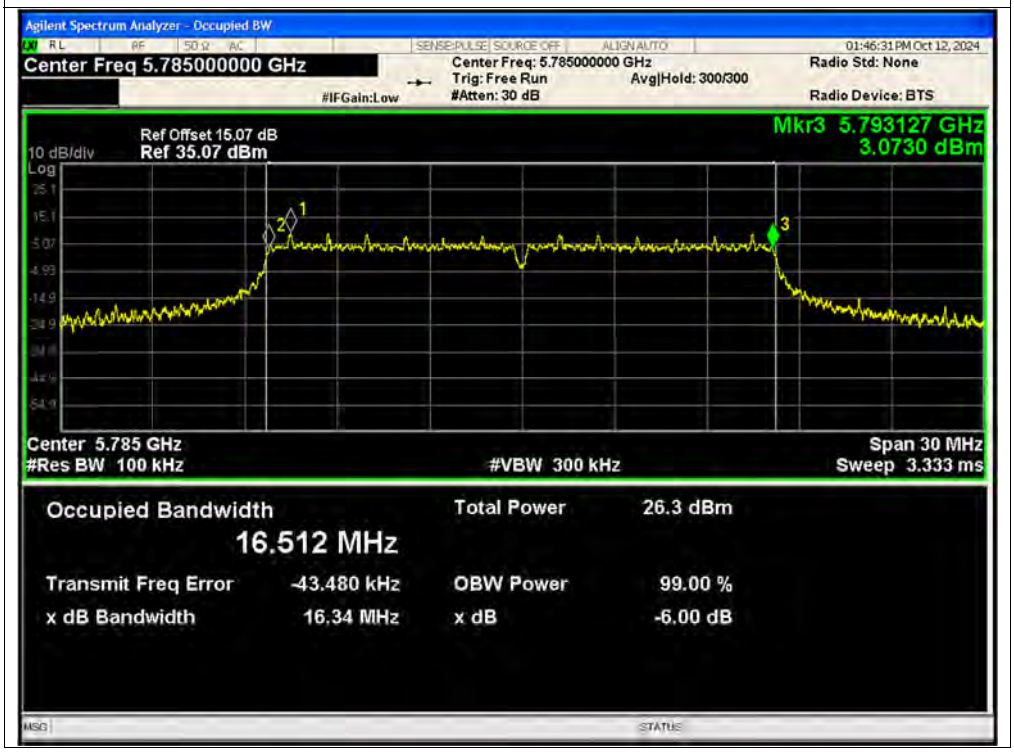


-26dB Bandwidth NVNT ax80 5210MHz Ant2 MIMO

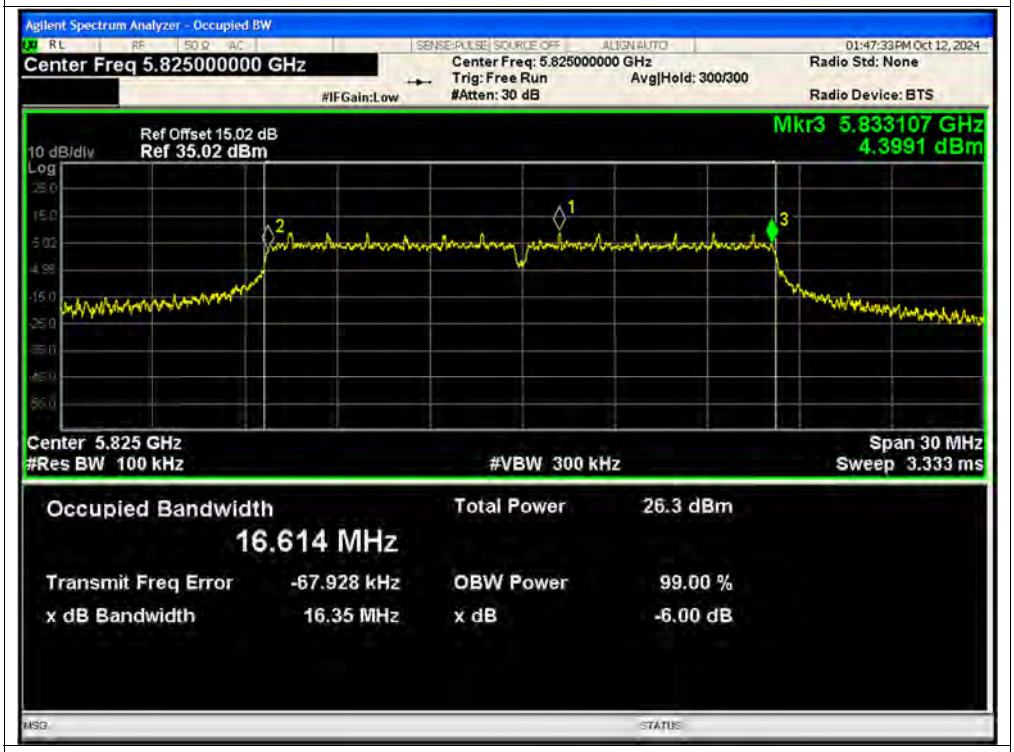


Test Graphs
-6dB Bandwidth NVNT a 5745MHz Ant1 SISO

-6dB Bandwidth NVNT a 5785MHz Ant1 SISO

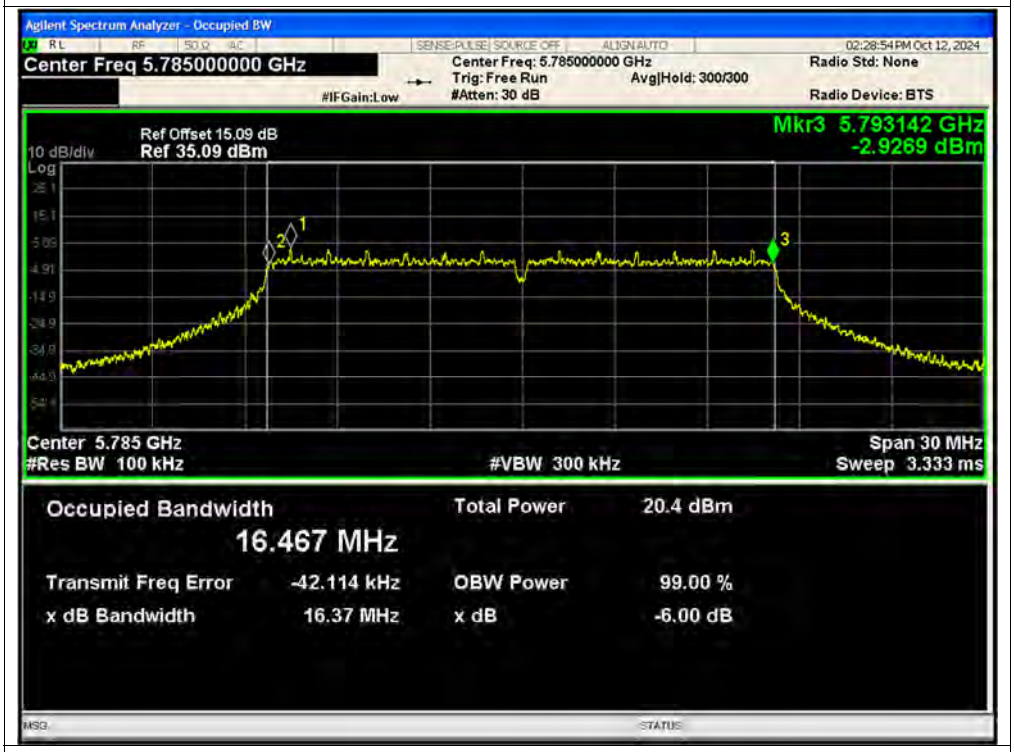


-6dB Bandwidth NVNT a 5825MHz Ant1 SISO



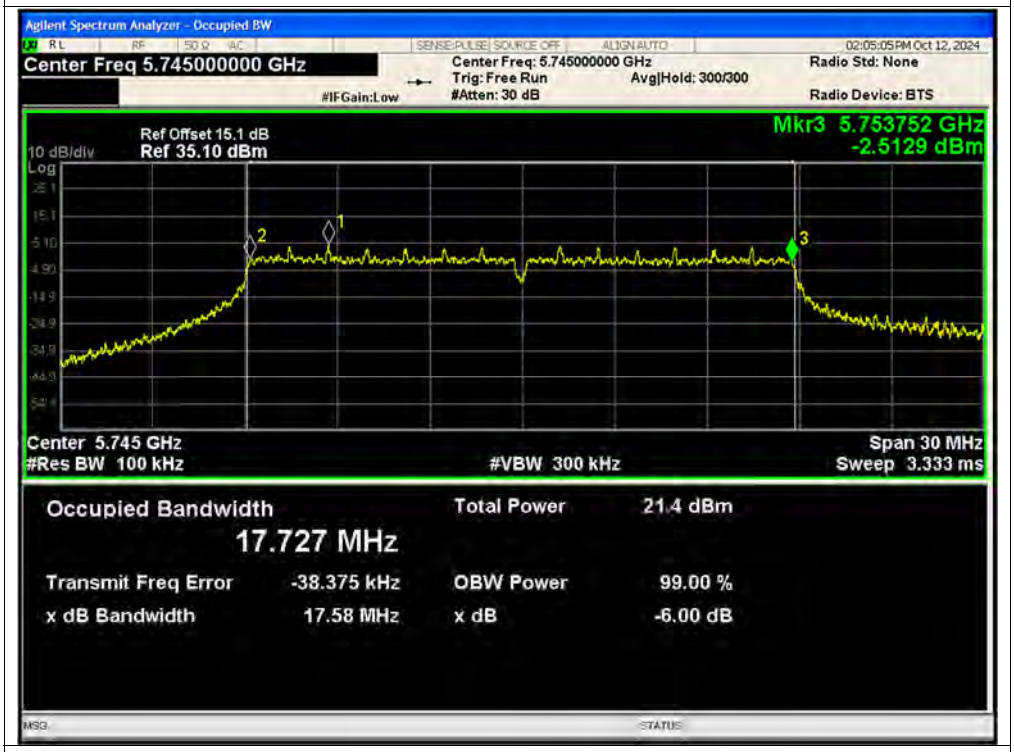
-6dB Bandwidth NVNT a 5745MHz Ant2 SISO

-6dB Bandwidth NVNT a 5785MHz Ant2 SISO

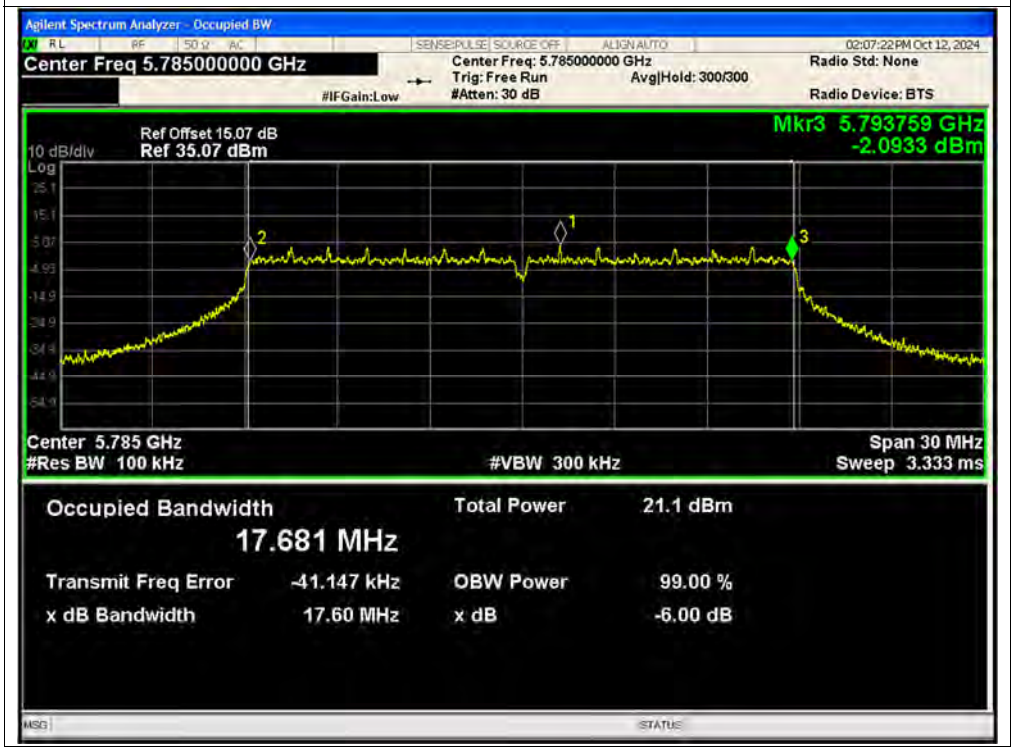


-6dB Bandwidth NVNT a 5825MHz Ant2 SISO

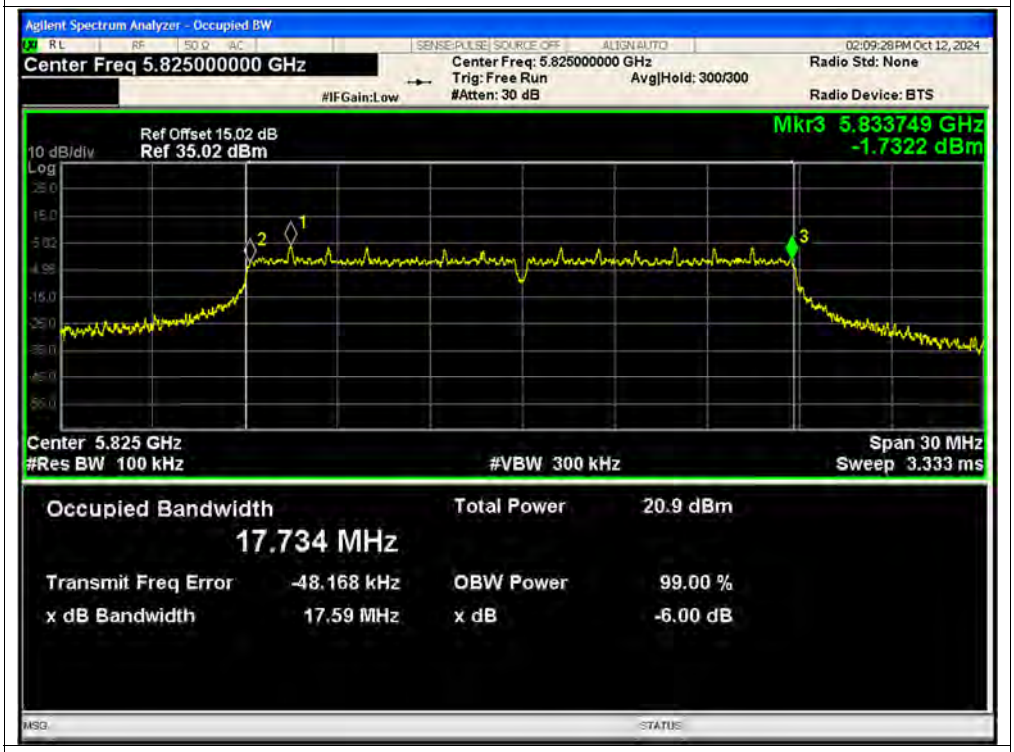
-6dB Bandwidth NVNT n20 5745MHz Ant1 SISO



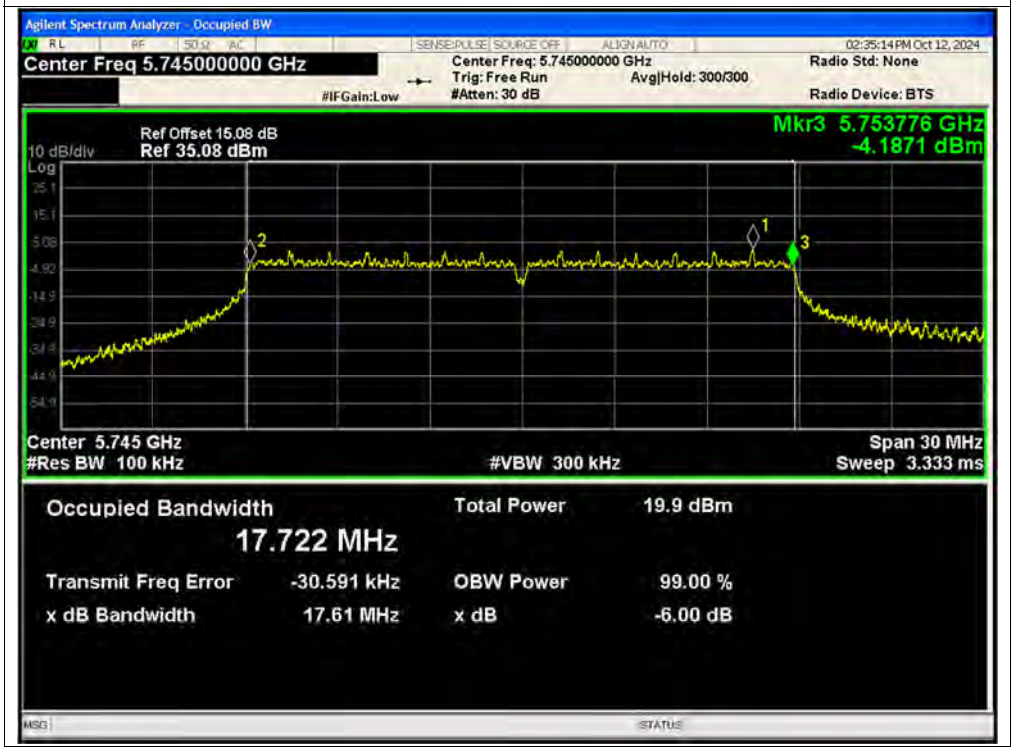
-6dB Bandwidth NVNT n20 5785MHz Ant1 SISO



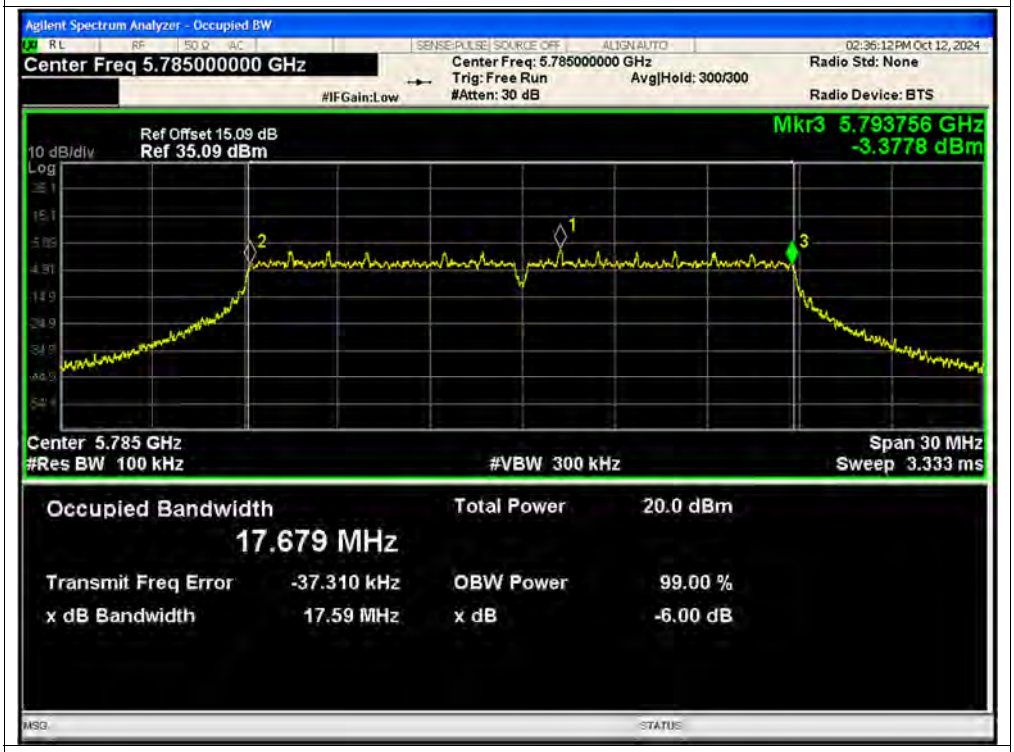
-6dB Bandwidth NVNT n20 5825MHz Ant1 SISO



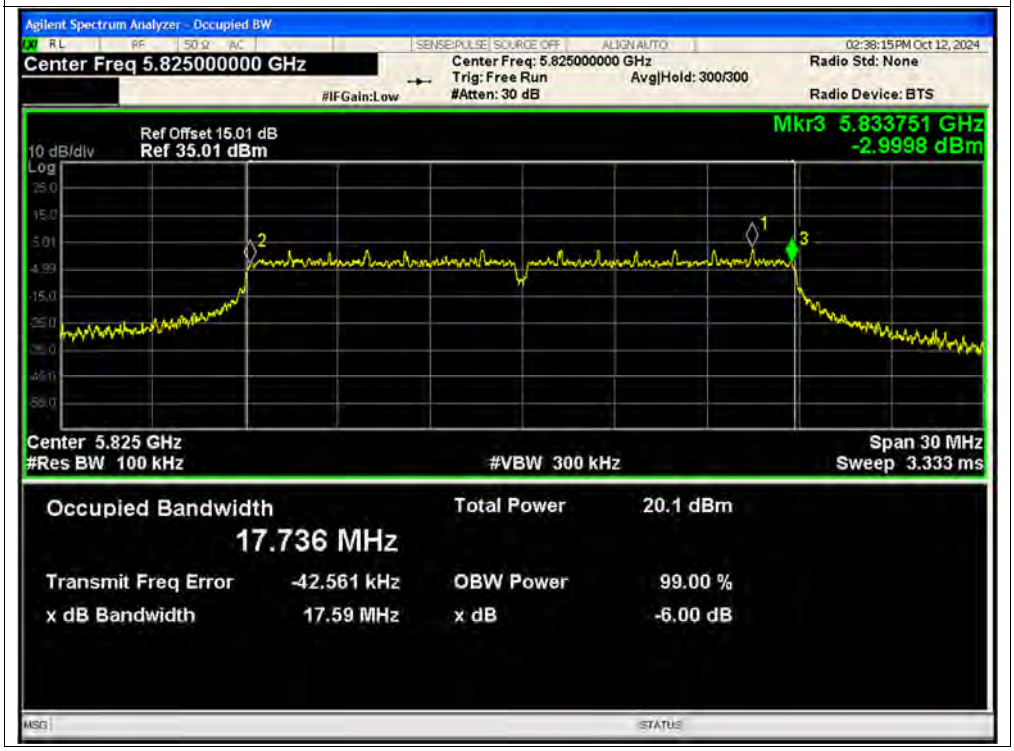
-6dB Bandwidth NVNT n20 5745MHz Ant2 SISO



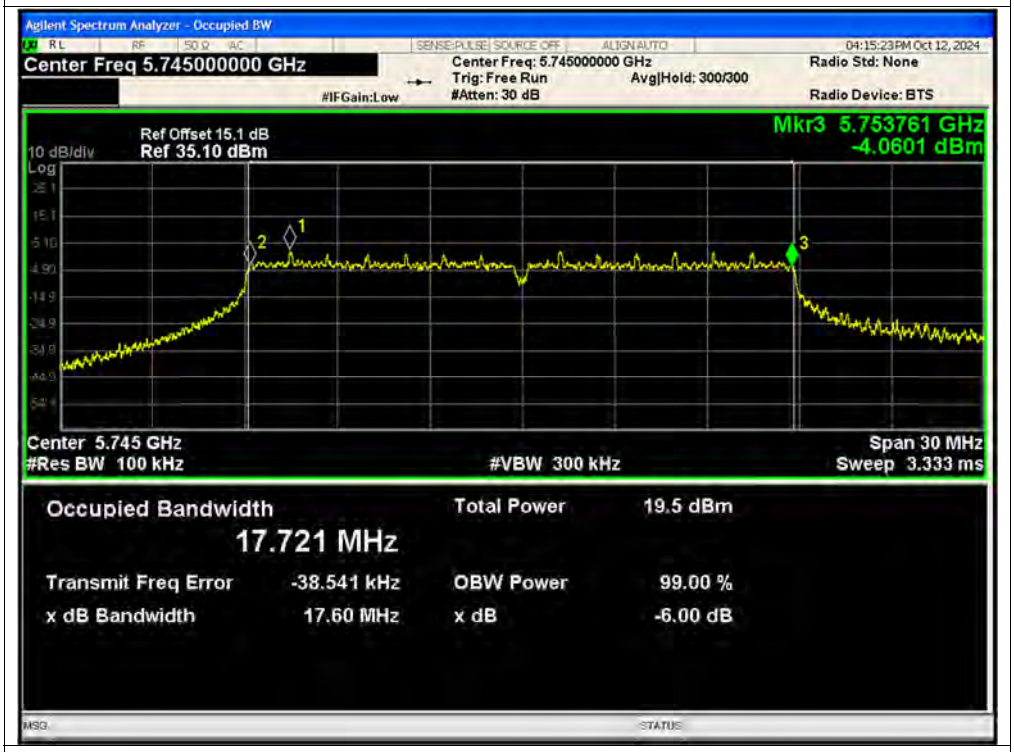
-6dB Bandwidth NVNT n20 5785MHz Ant2 SISO



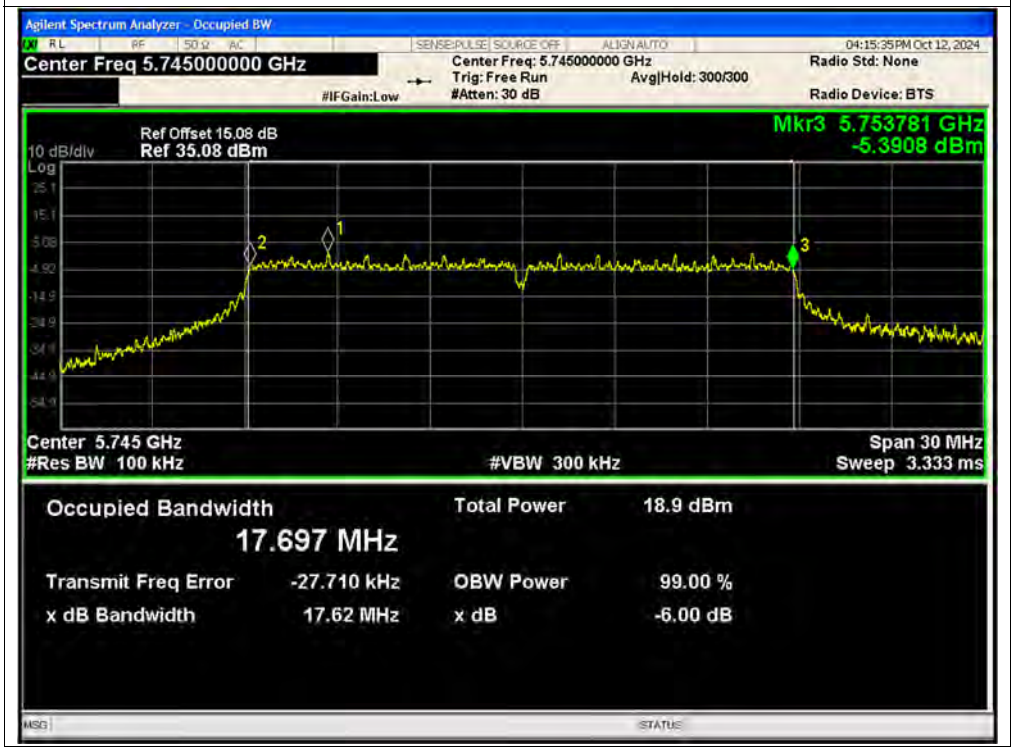
-6dB Bandwidth NVNT n20 5825MHz Ant2 SISO



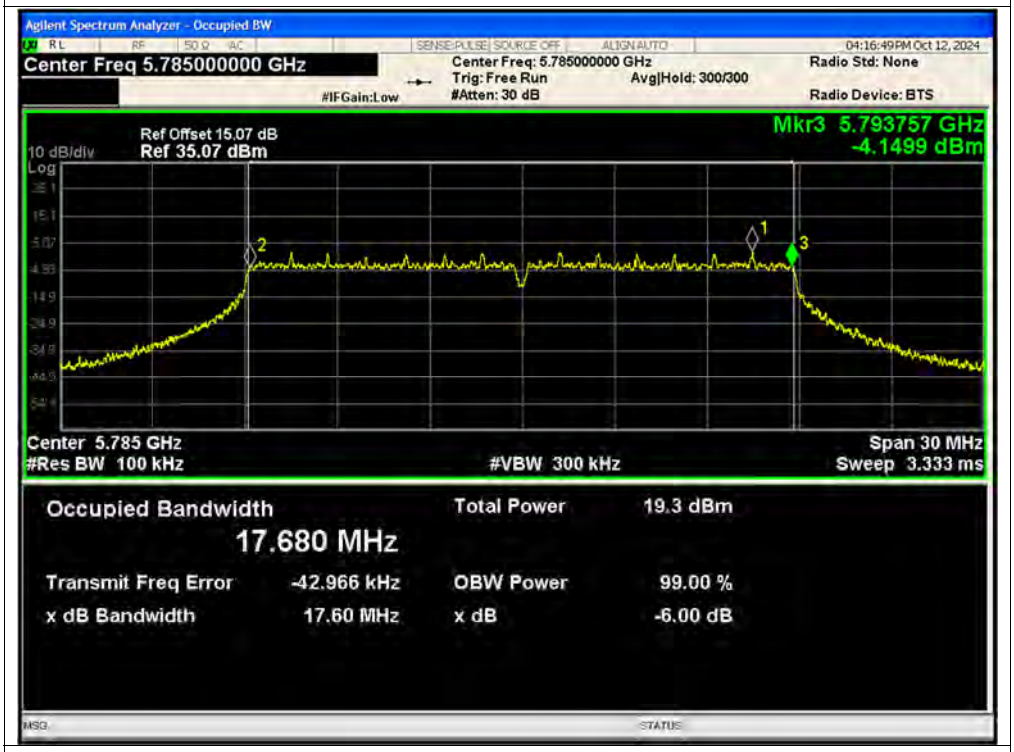
-6dB Bandwidth NVNT n20 5745MHz Ant1 MIMO



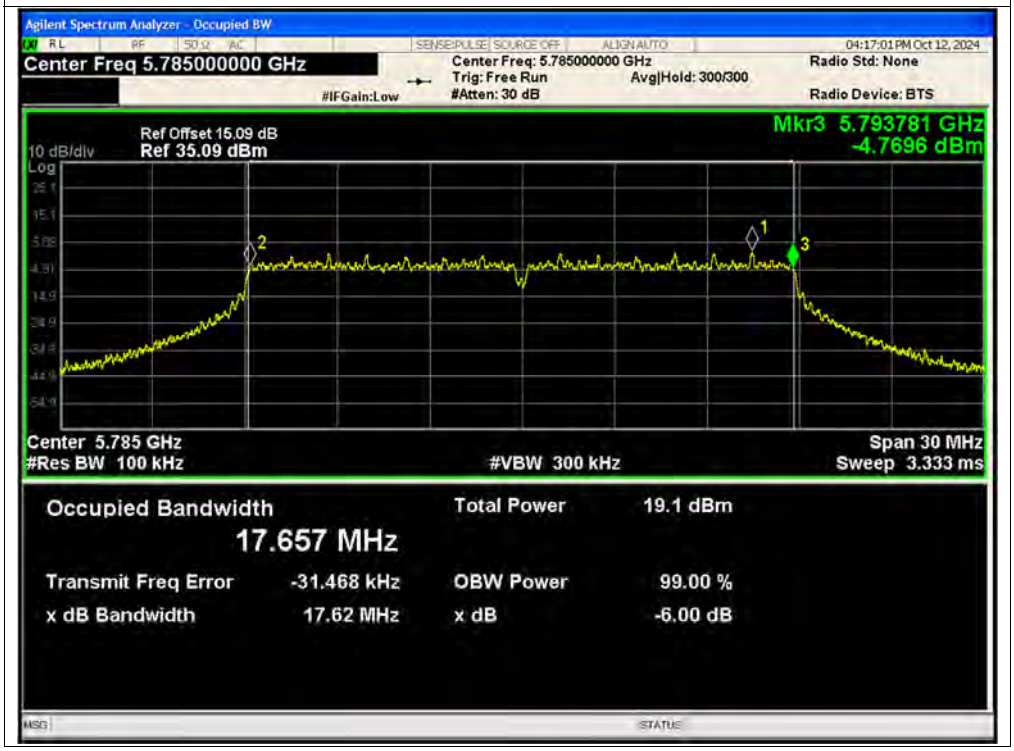
-6dB Bandwidth NVNT n20 5745MHz Ant2 MIMO



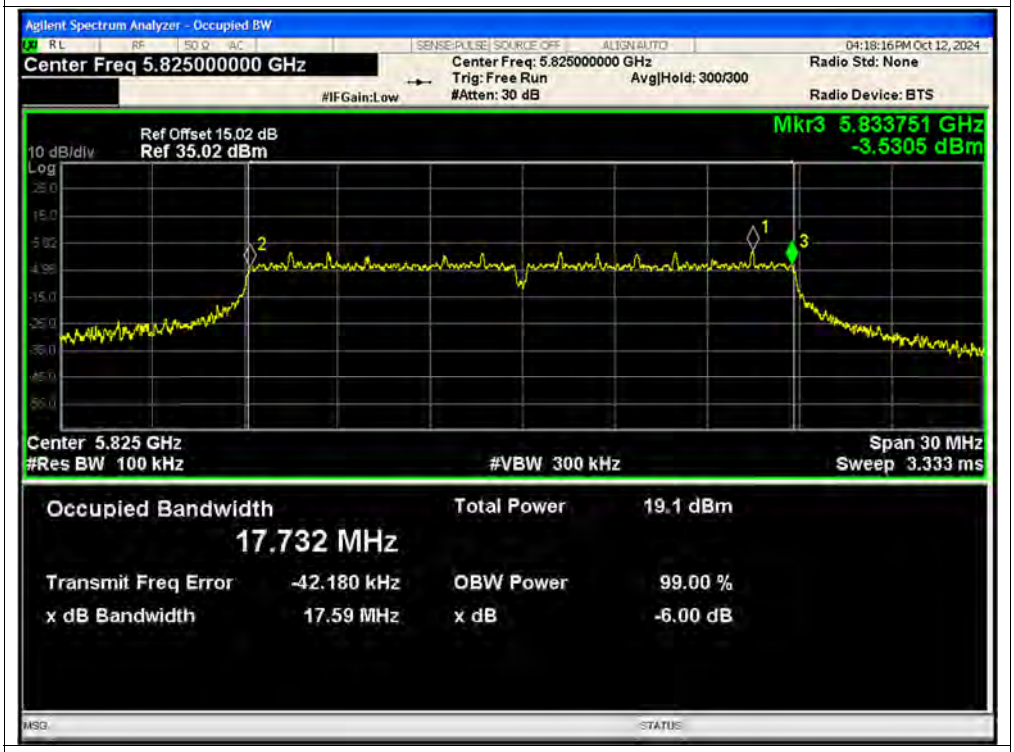
-6dB Bandwidth NVNT n20 5785MHz Ant1 MIMO



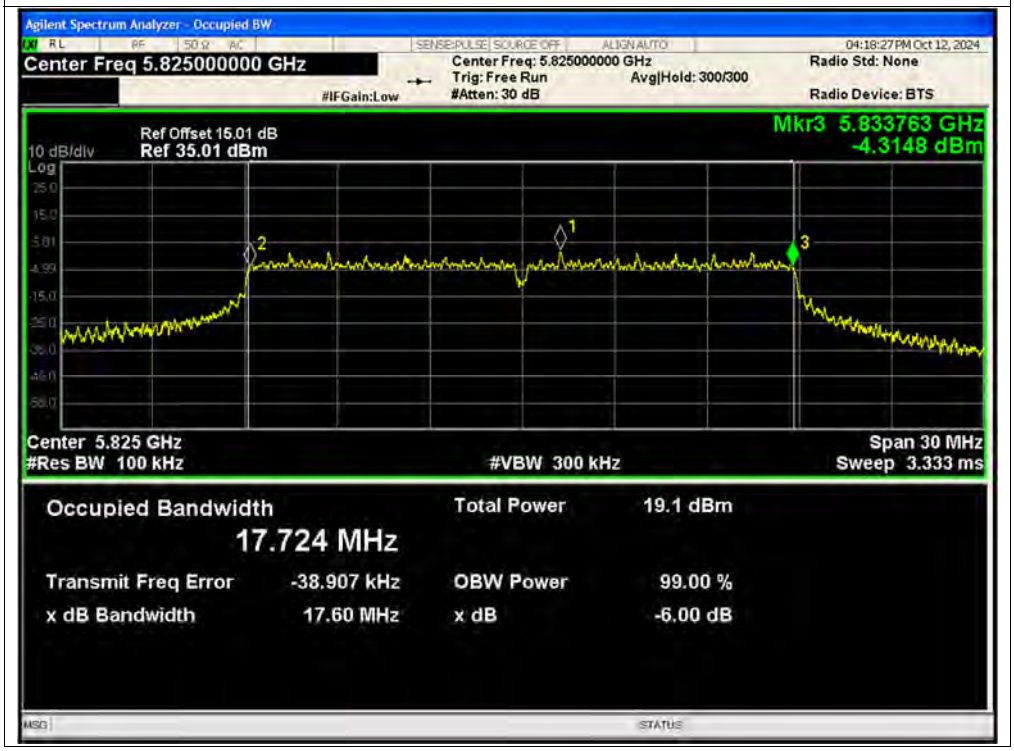
-6dB Bandwidth NVNT n20 5785MHz Ant2 MIMO



-6dB Bandwidth NVNT n20 5825MHz Ant1 MIMO



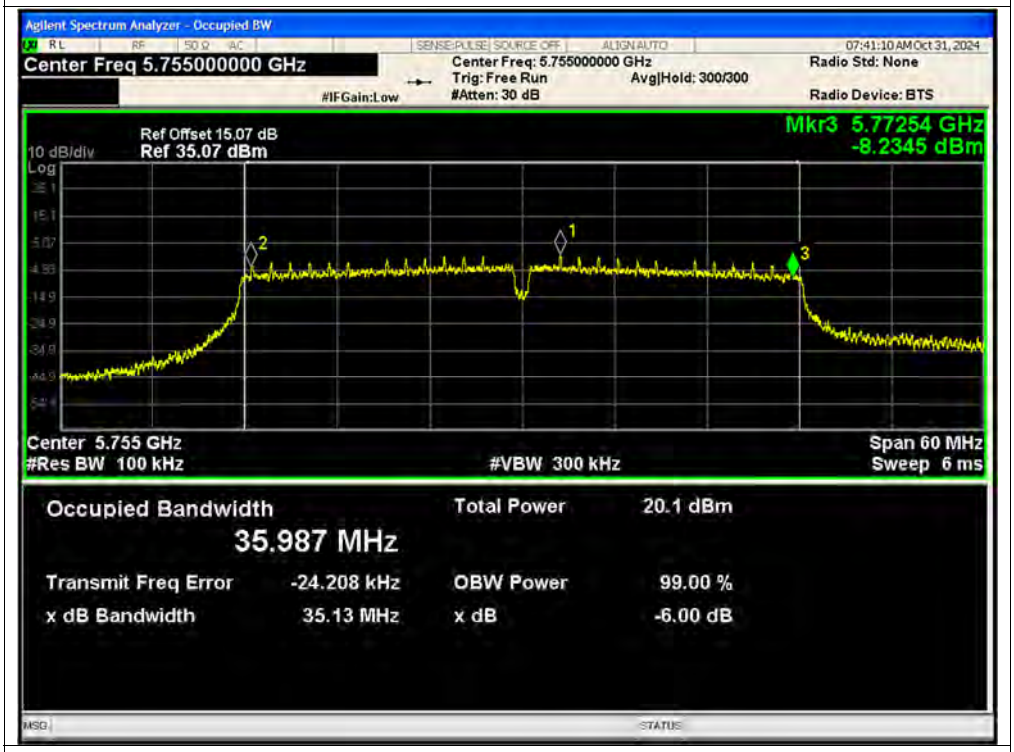
-6dB Bandwidth NVNT n20 5825MHz Ant2 MIMO



-6dB Bandwidth NVNT n40 5755MHz Ant1 SISO

-6dB Bandwidth NVNT n40 5795MHz Ant1 SISO

-6dB Bandwidth NVNT n40 5755MHz Ant2 SISO

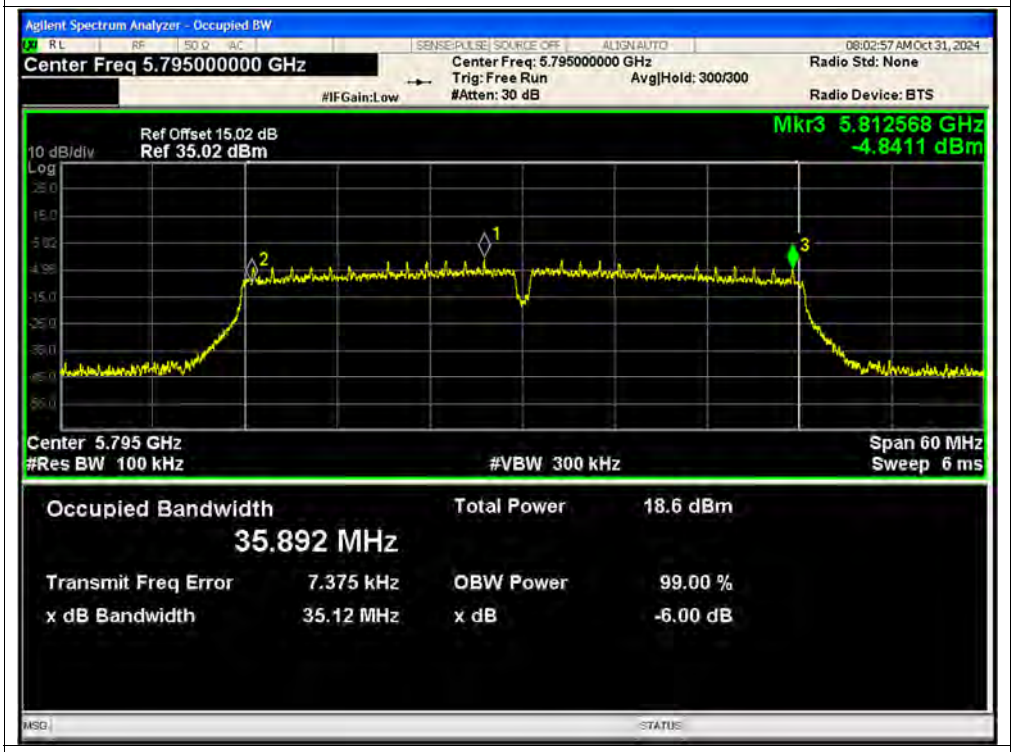


-6dB Bandwidth NVNT n40 5795MHz Ant2 SISO

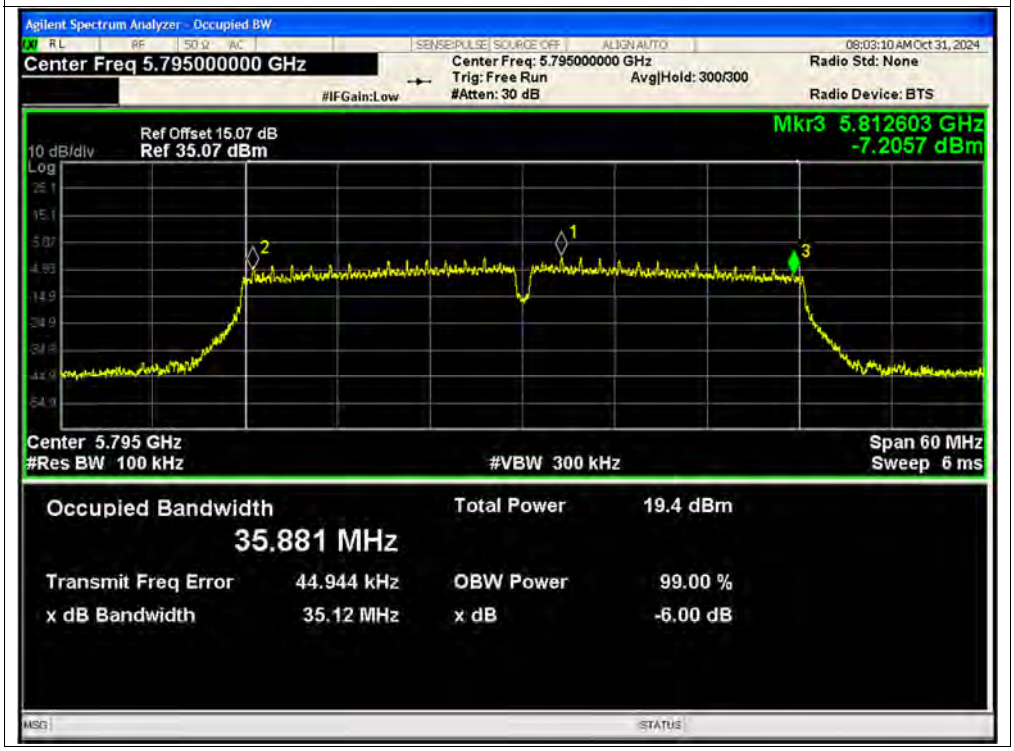
-6dB Bandwidth NVNT n40 5755MHz Ant1 MIMO

-6dB Bandwidth NVNT n40 5755MHz Ant2 MIMO

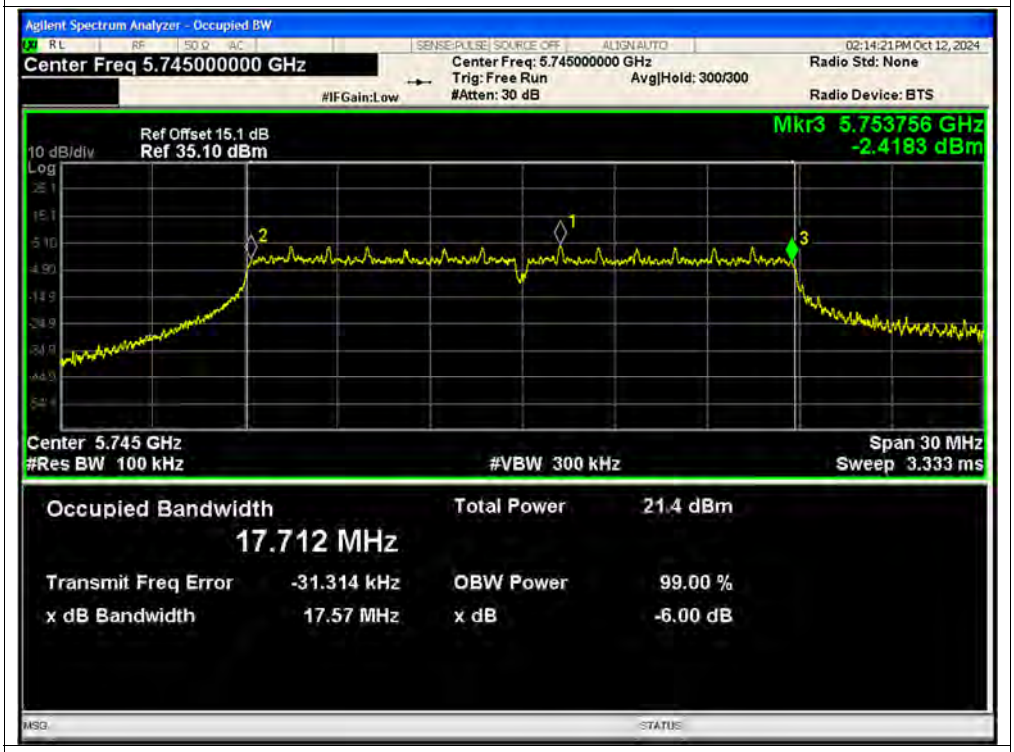
-6dB Bandwidth NVNT n40 5795MHz Ant1 MIMO



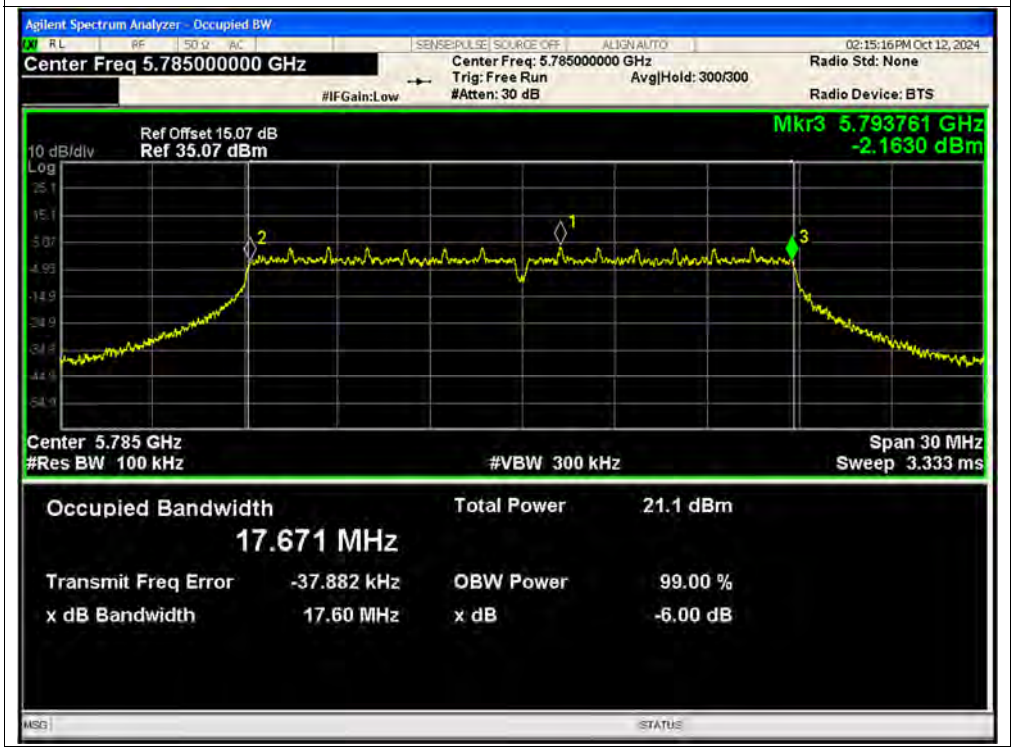
-6dB Bandwidth NVNT n40 5795MHz Ant2 MIMO



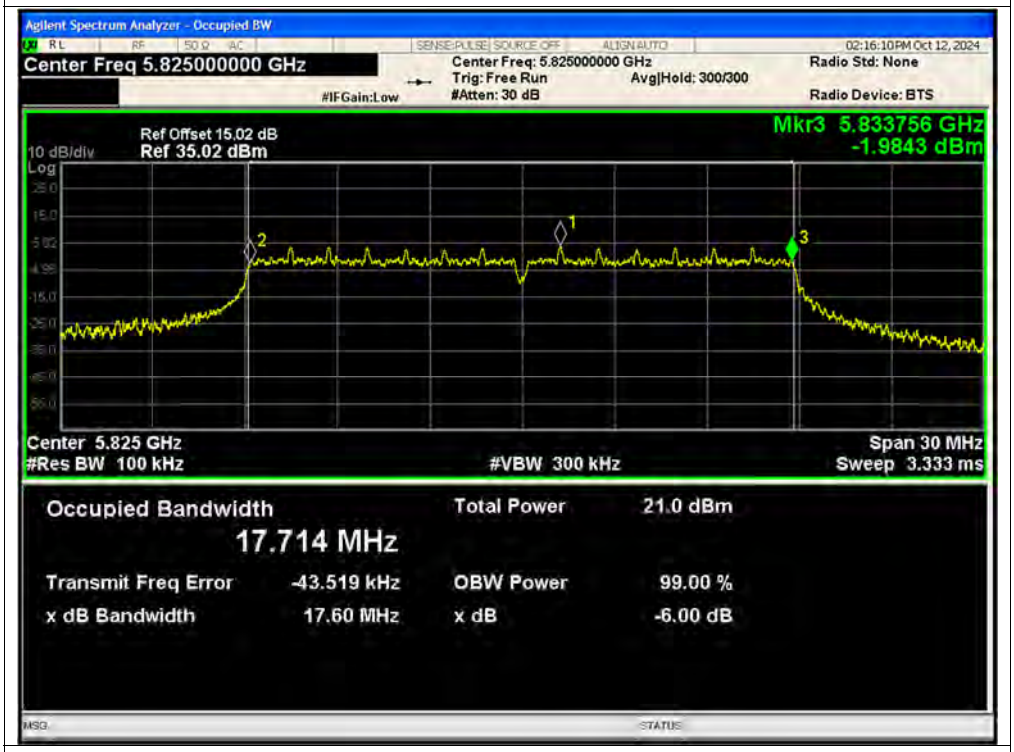
-6dB Bandwidth NVNT ac20 5745MHz Ant1 SISO



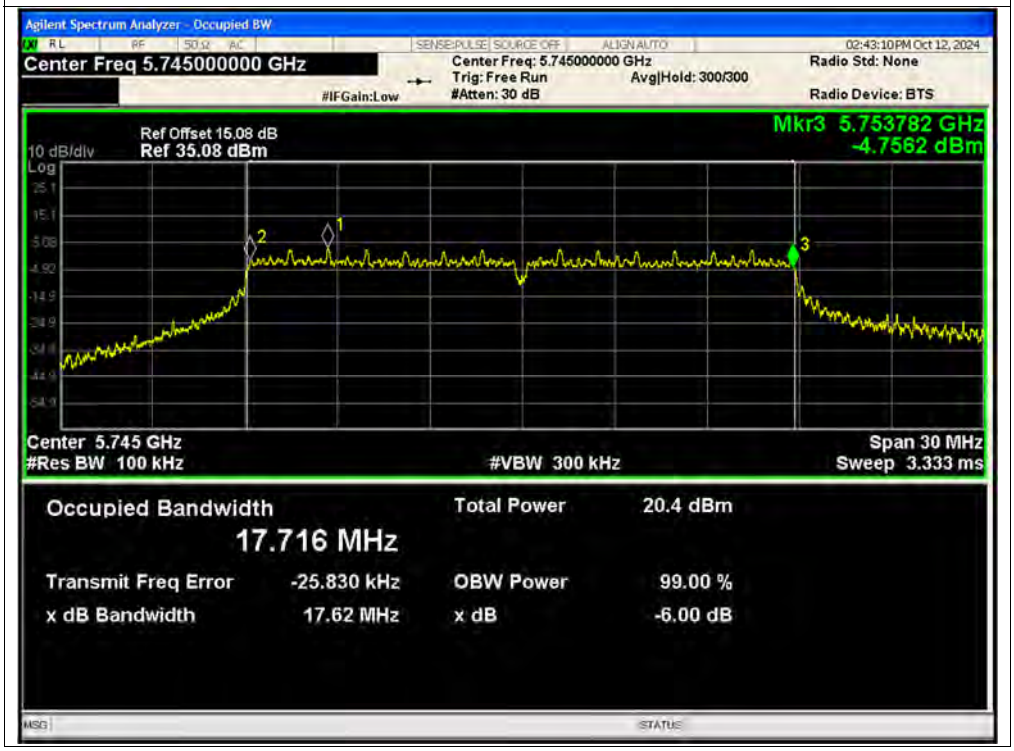
-6dB Bandwidth NVNT ac20 5785MHz Ant1 SISO



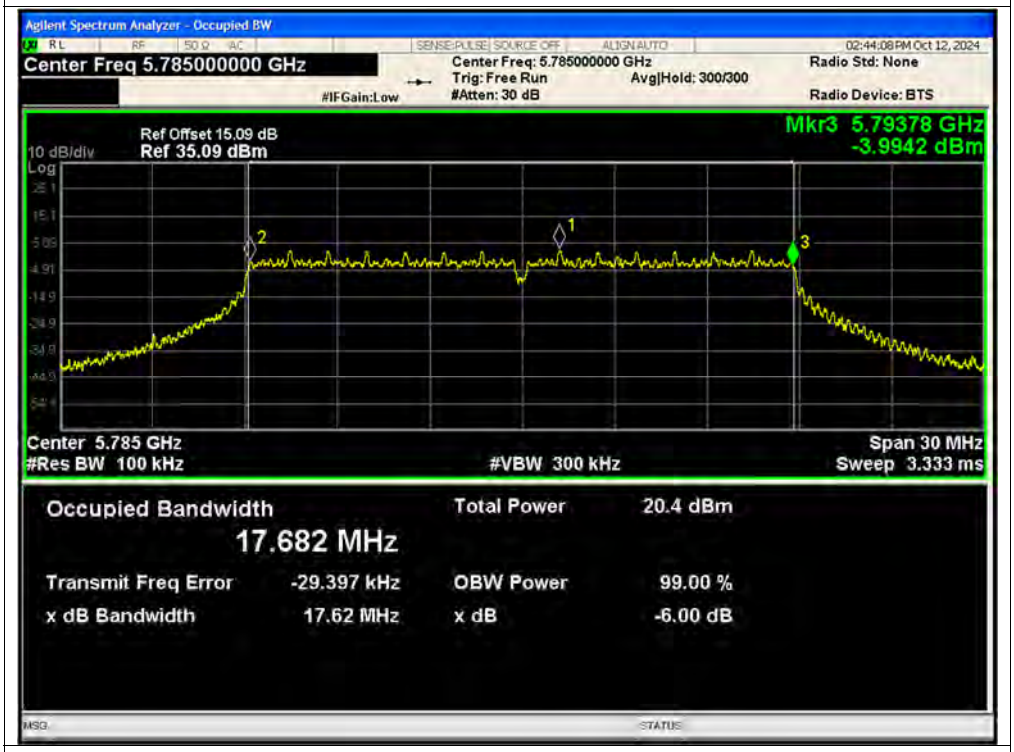
-6dB Bandwidth NVNT ac20 5825MHz Ant1 SISO



-6dB Bandwidth NVNT ac20 5745MHz Ant2 SISO

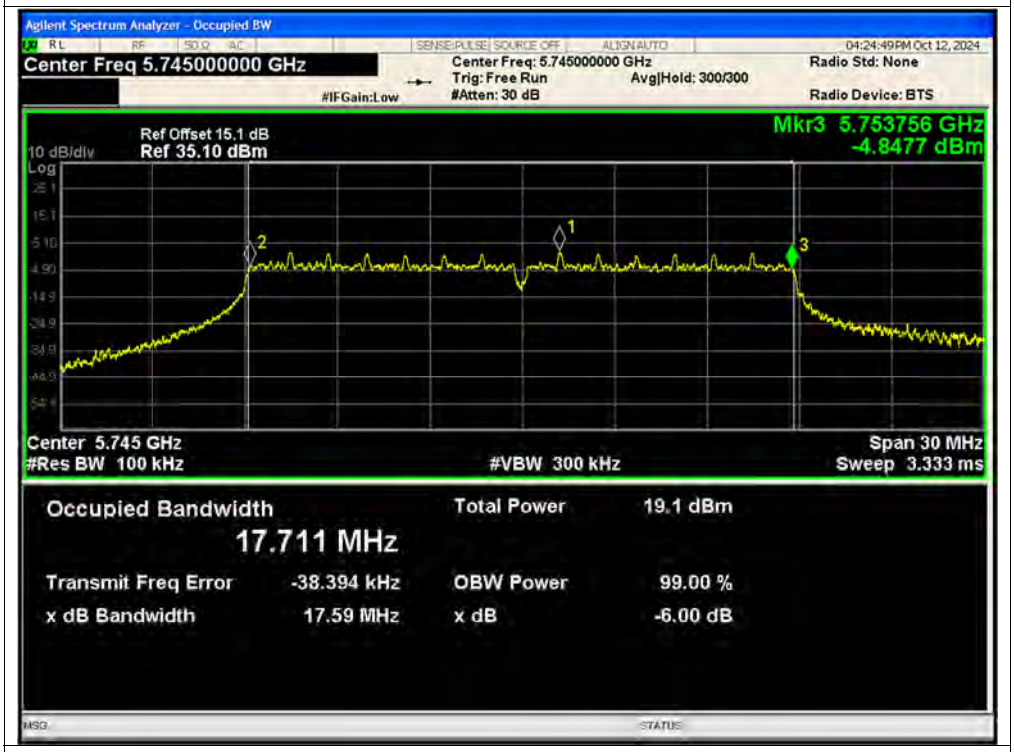


-6dB Bandwidth NVNT ac20 5785MHz Ant2 SISO



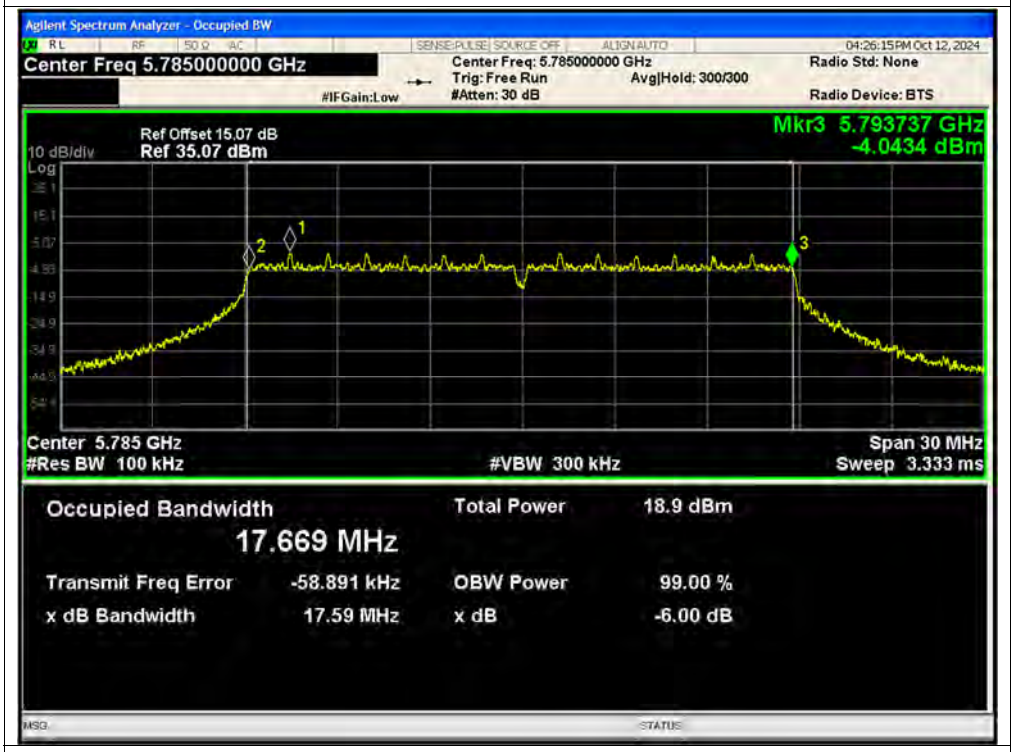
-6dB Bandwidth NVNT ac20 5825MHz Ant2 SISO

-6dB Bandwidth NVNT ac20 5745MHz Ant1 MIMO

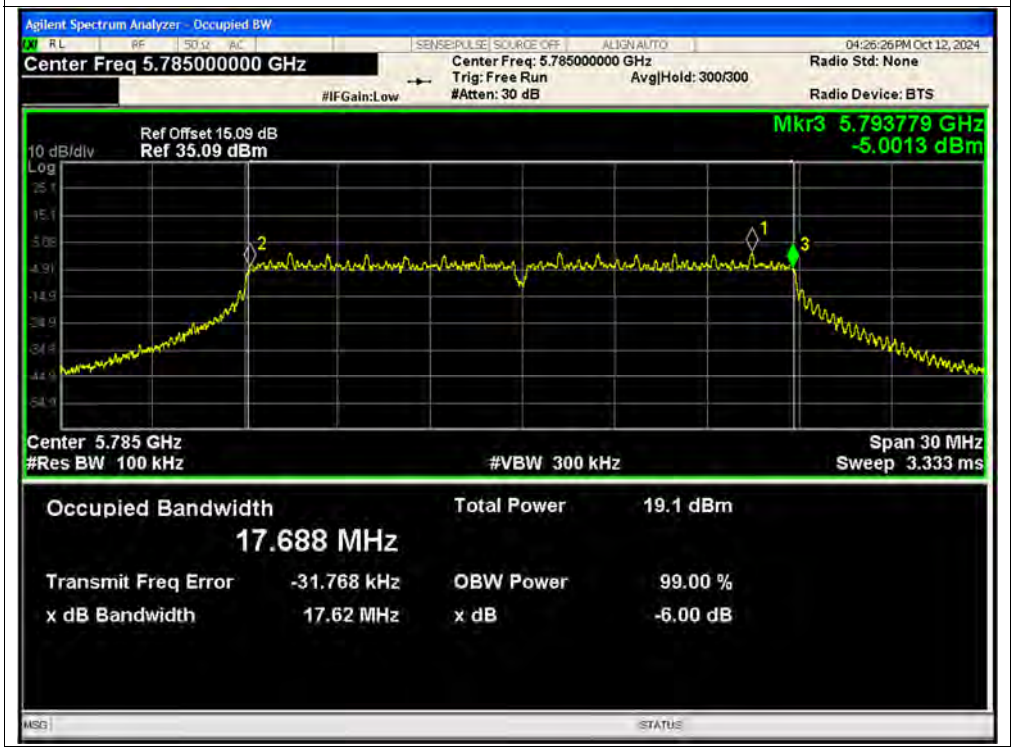


-6dB Bandwidth NVNT ac20 5745MHz Ant2 MIMO

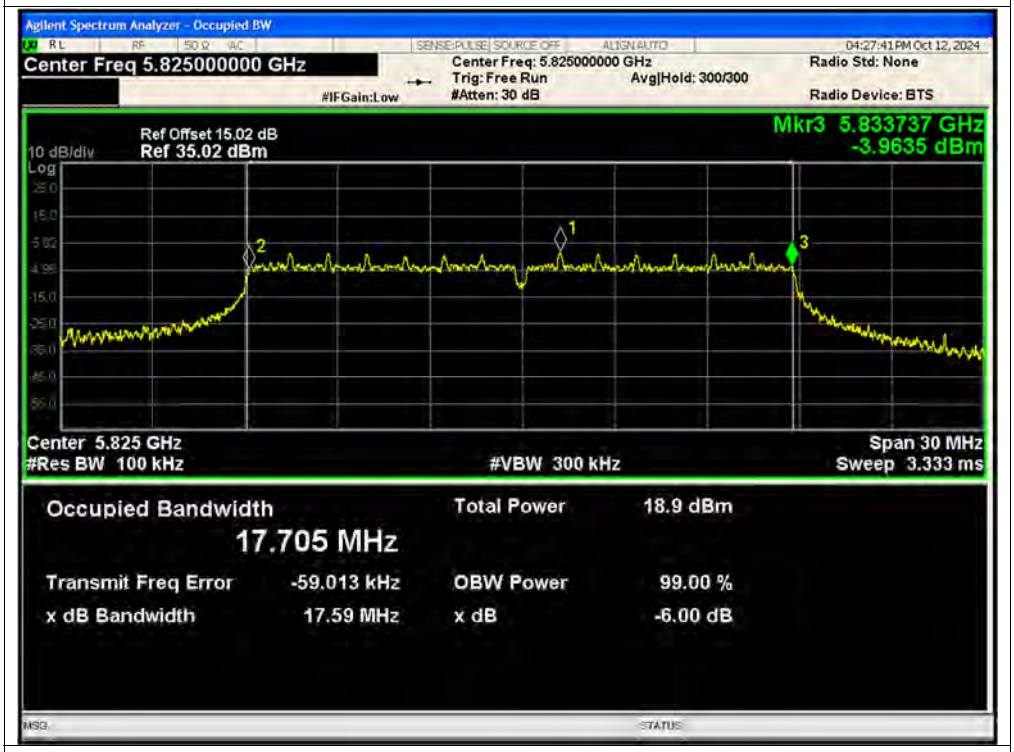
-6dB Bandwidth NVNT ac20 5785MHz Ant1 MIMO



-6dB Bandwidth NVNT ac20 5785MHz Ant2 MIMO



-6dB Bandwidth NVNT ac20 5825MHz Ant1 MIMO



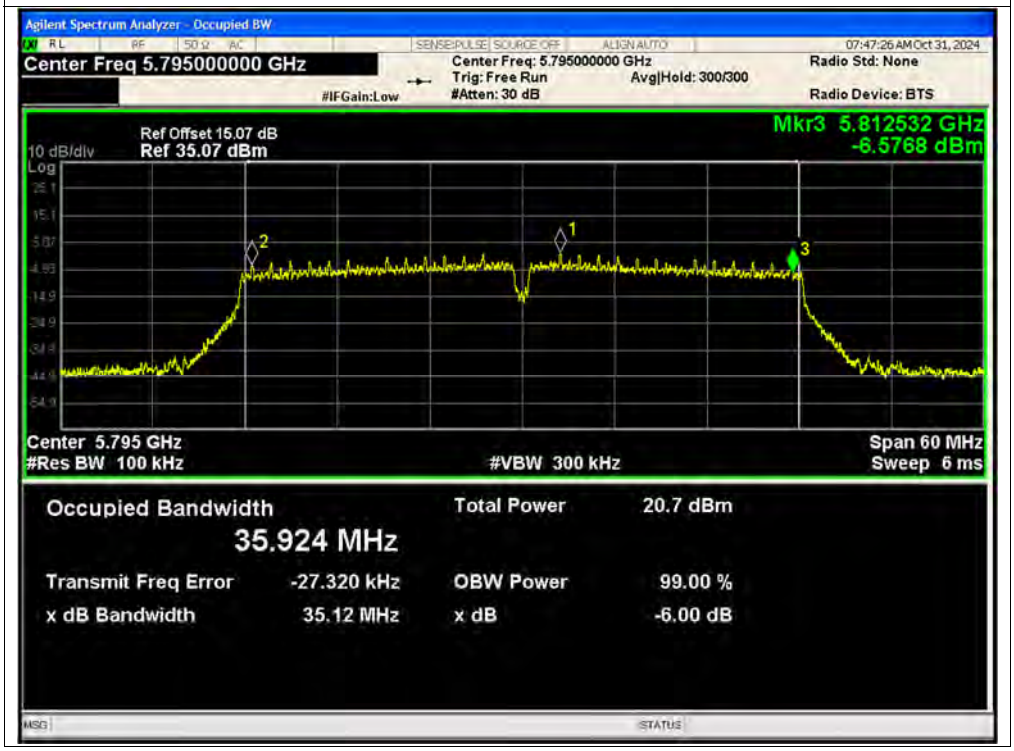
-6dB Bandwidth NVNT ac20 5825MHz Ant2 MIMO

-6dB Bandwidth NVNT ac40 5755MHz Ant1 SISO

-6dB Bandwidth NVNT ac40 5795MHz Ant1 SISO

-6dB Bandwidth NVNT ac40 5755MHz Ant2 SISO

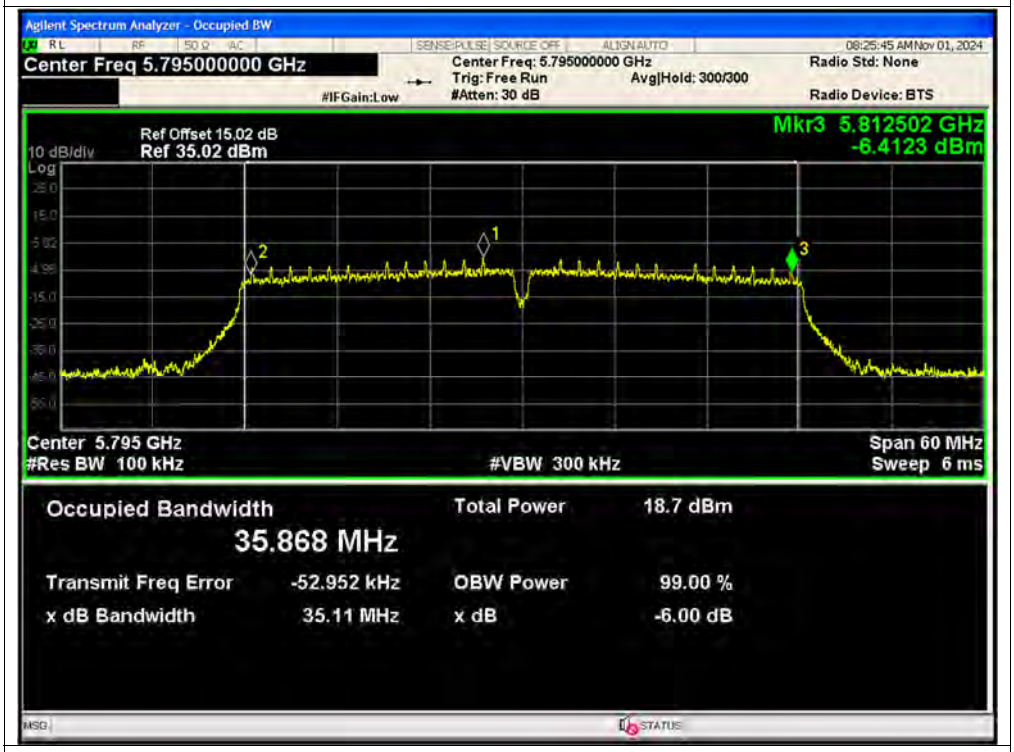
-6dB Bandwidth NVNT ac40 5795MHz Ant2 SISO



-6dB Bandwidth NVNT ac40 5755MHz Ant1 MIMO

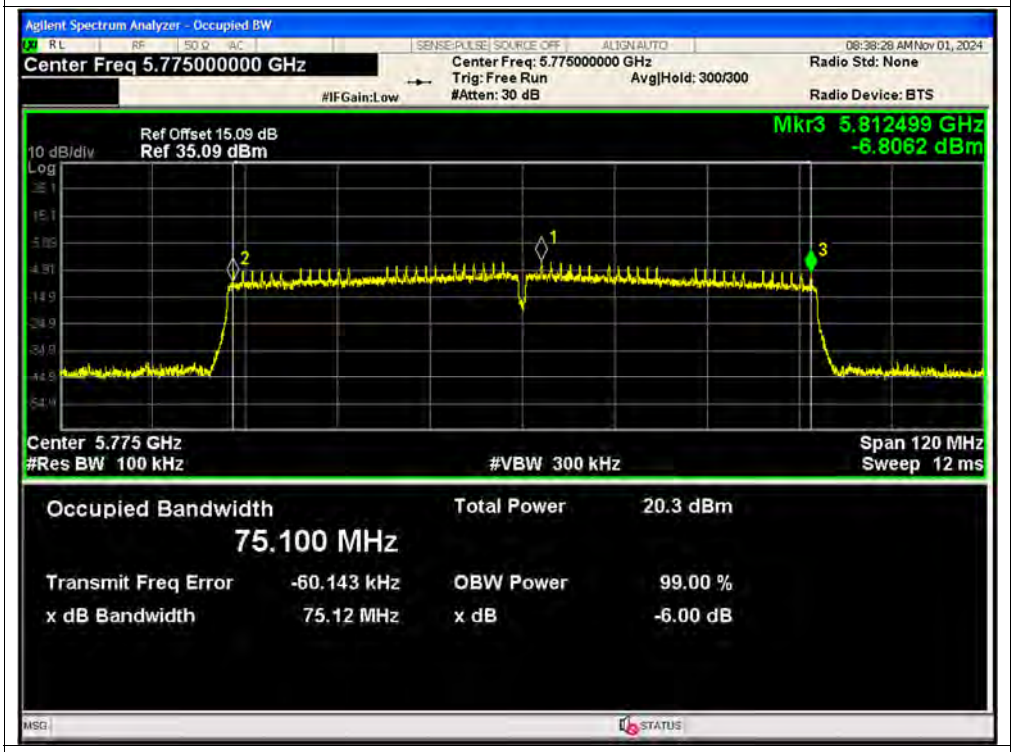
-6dB Bandwidth NVNT ac40 5755MHz Ant2 MIMO

-6dB Bandwidth NVNT ac40 5795MHz Ant1 MIMO

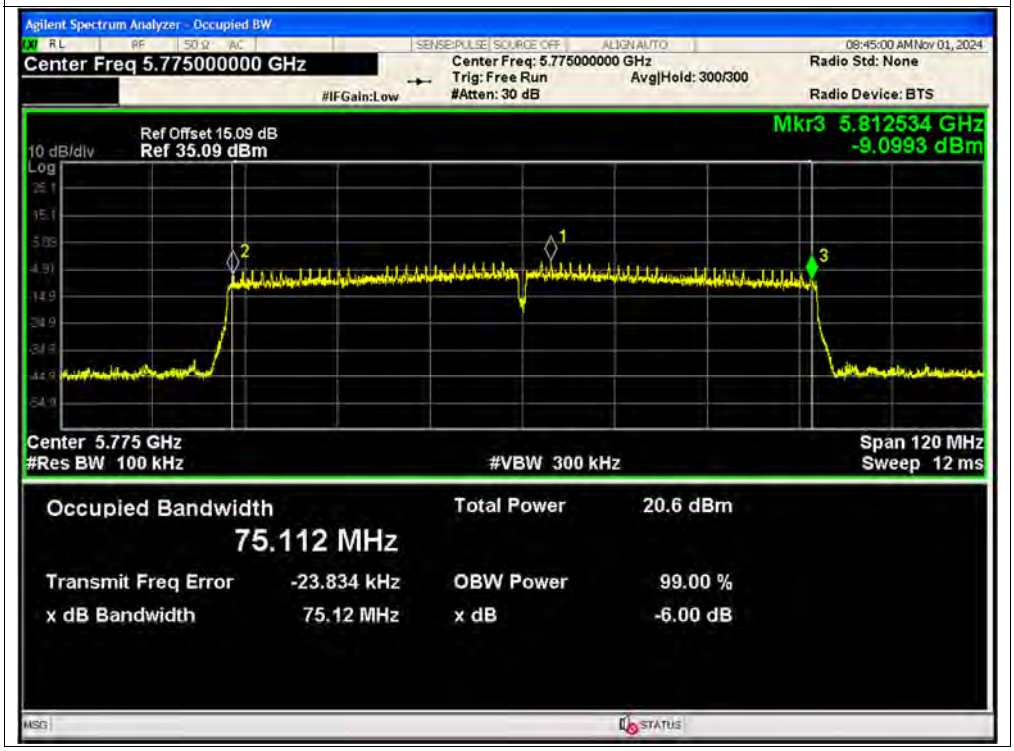


-6dB Bandwidth NVNT ac40 5795MHz Ant2 MIMO

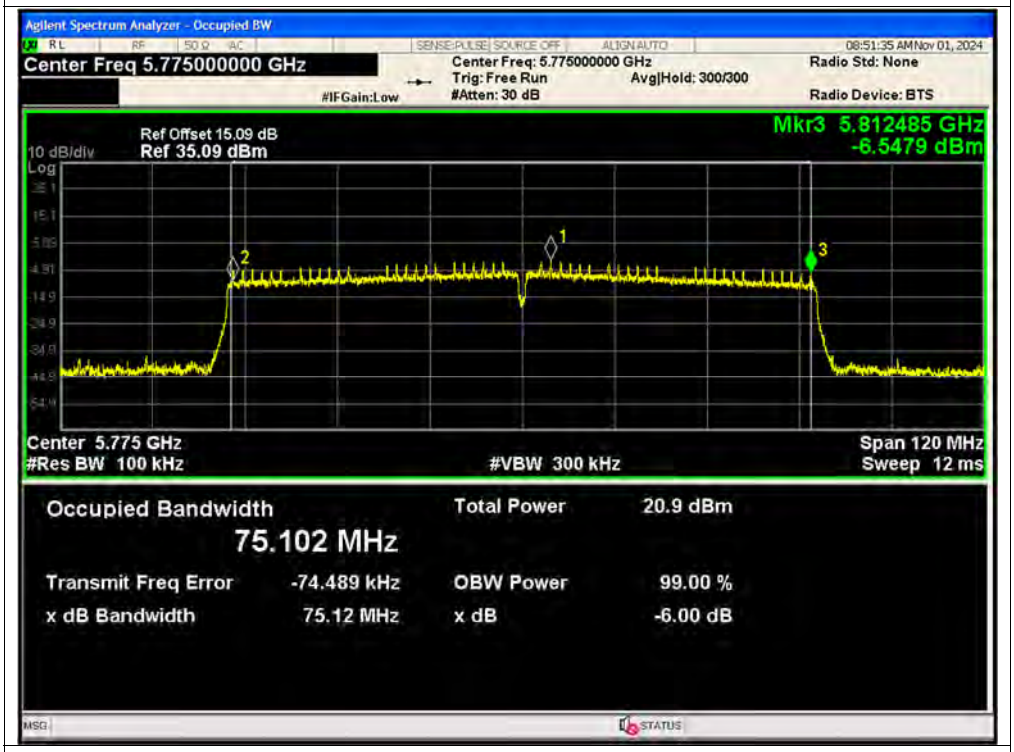
-6dB Bandwidth NVNT ac80 5775MHz Ant1 SISO



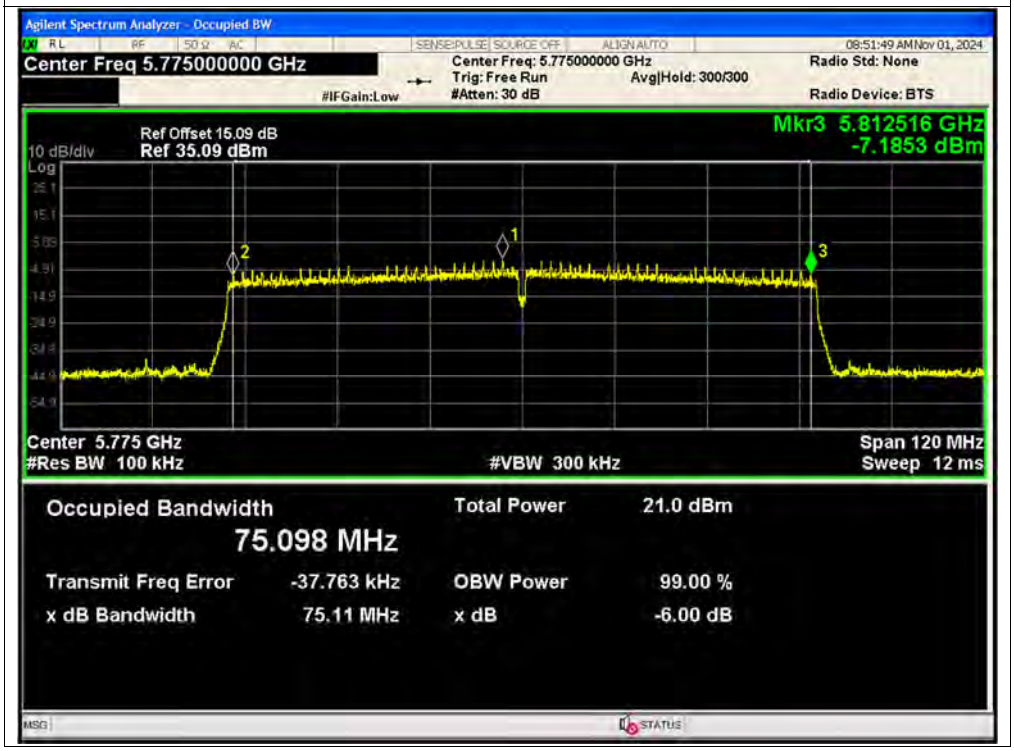
-6dB Bandwidth NVNT ac80 5775MHz Ant2 SISO



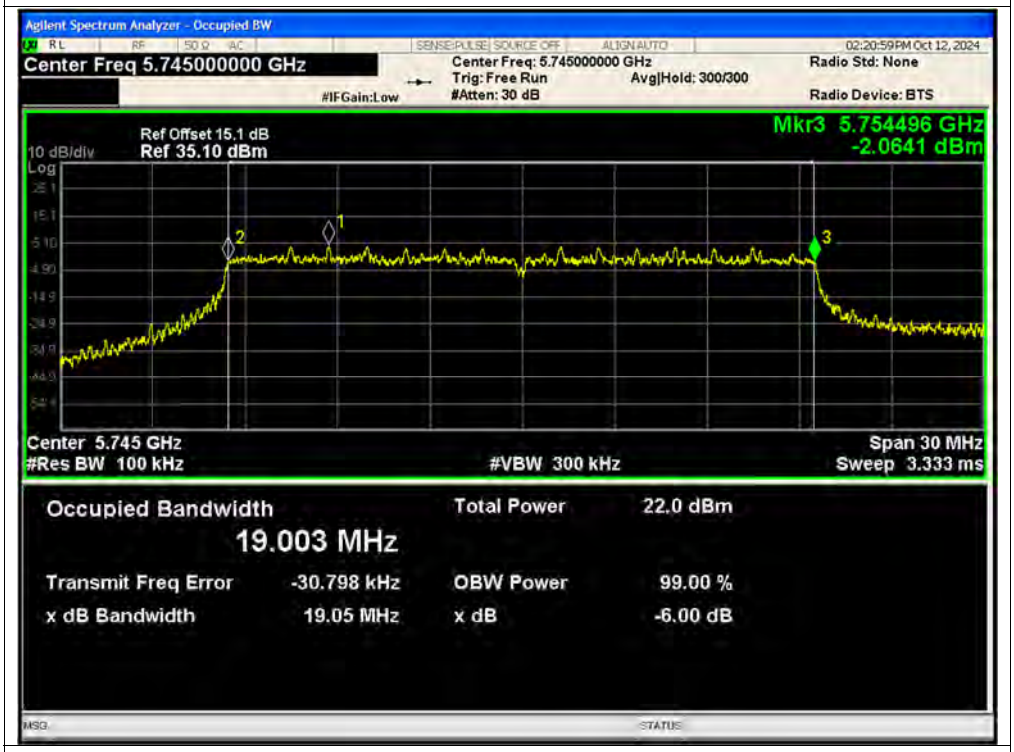
-6dB Bandwidth NVNT ac80 5775MHz Ant1 MIMO



-6dB Bandwidth NVNT ac80 5775MHz Ant2 MIMO

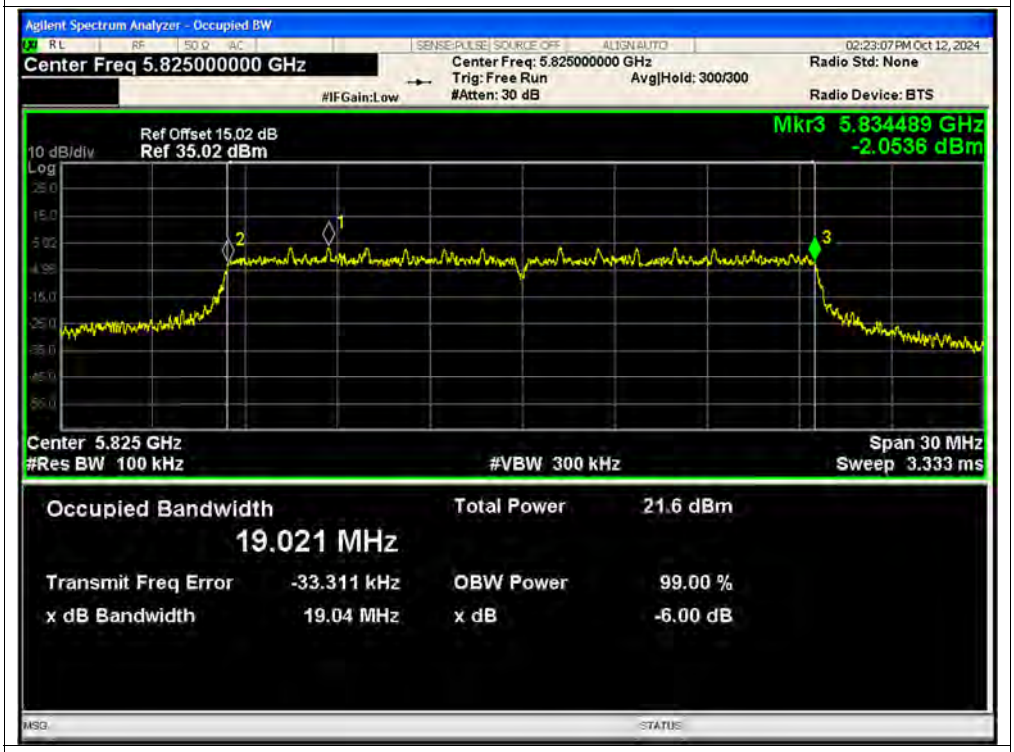


-6dB Bandwidth NVNT ax20 5745MHz Ant1 SISO

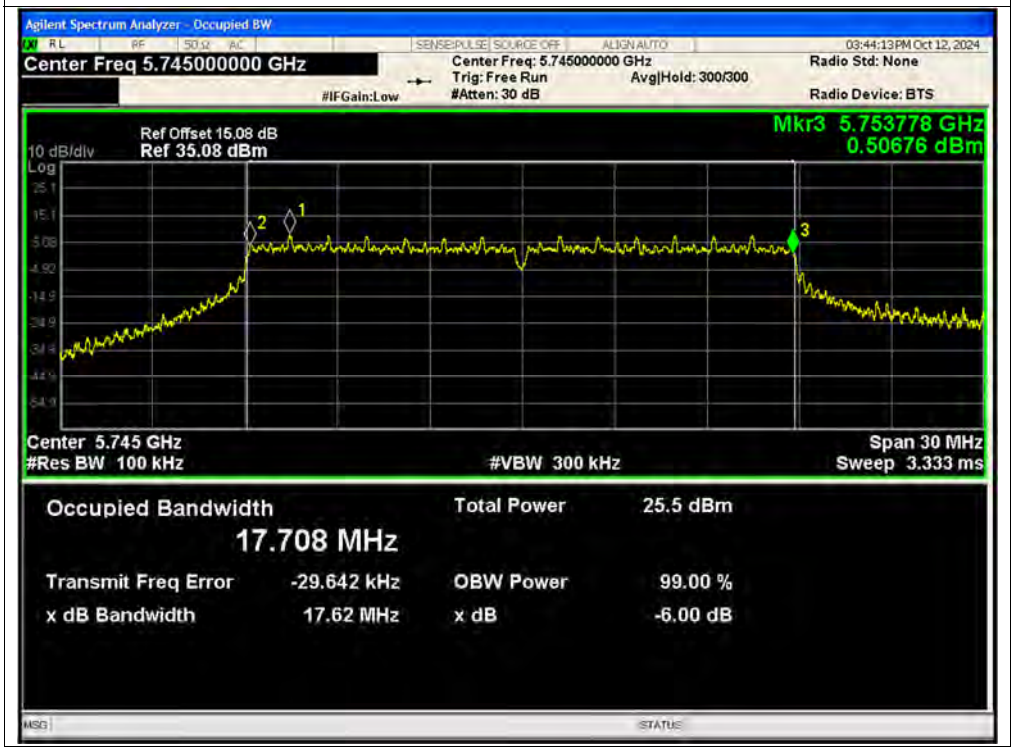


-6dB Bandwidth NVNT ax20 5785MHz Ant1 SISO

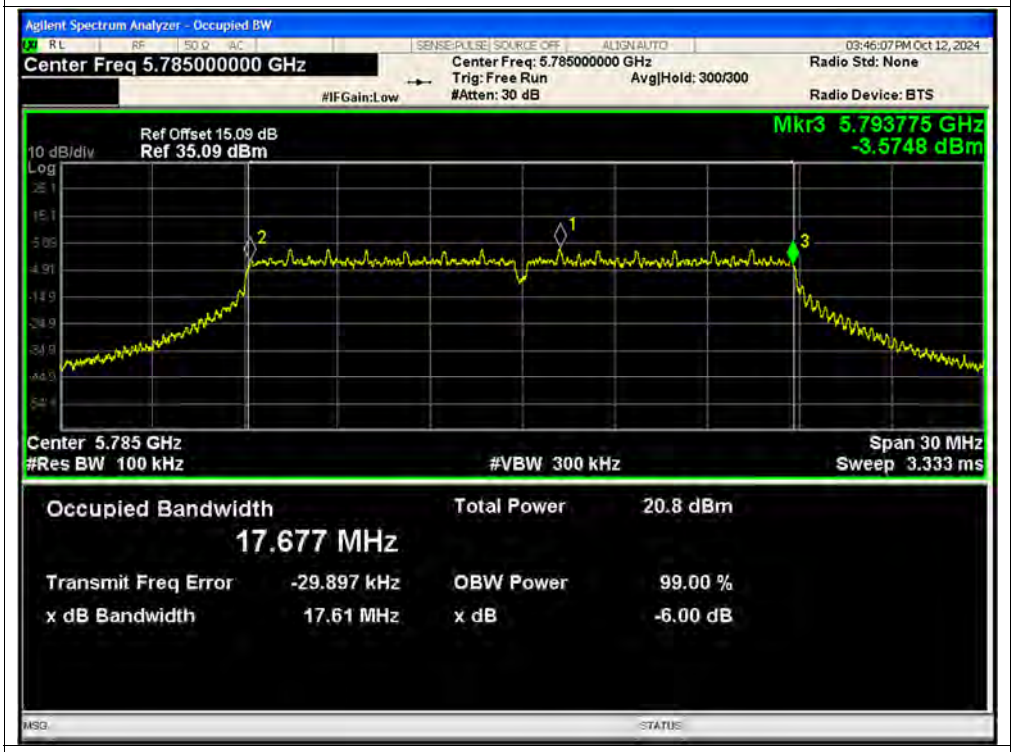
-6dB Bandwidth NVNT ax20 5825MHz Ant1 SISO



-6dB Bandwidth NVNT ax20 5745MHz Ant2 SISO

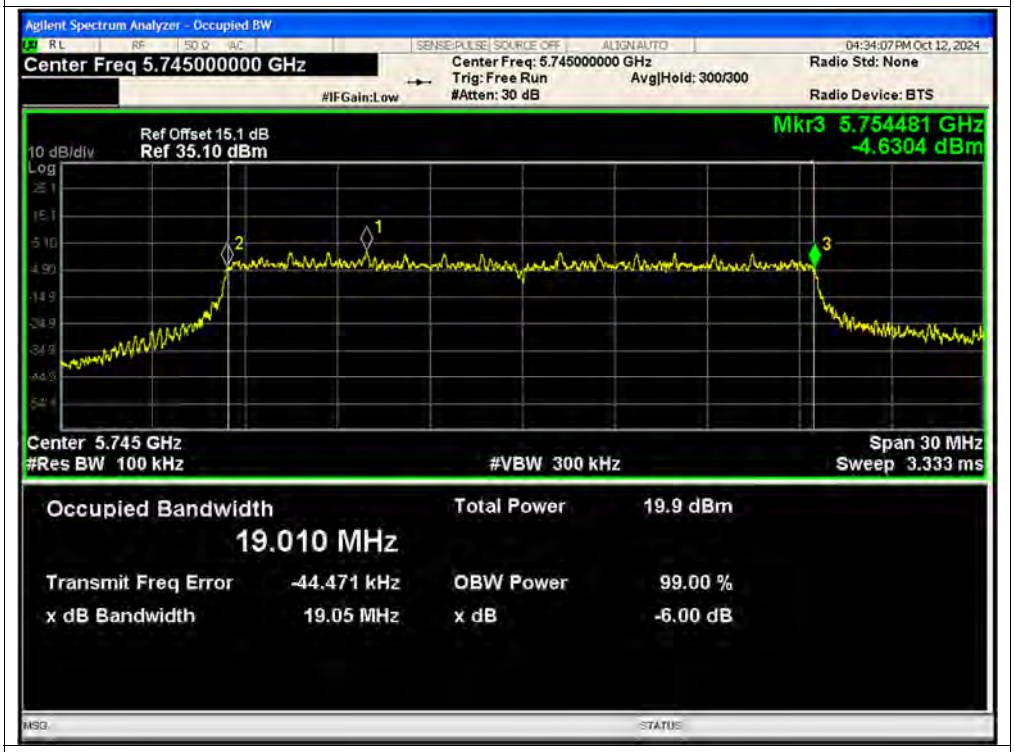


-6dB Bandwidth NVNT ax20 5785MHz Ant2 SISO

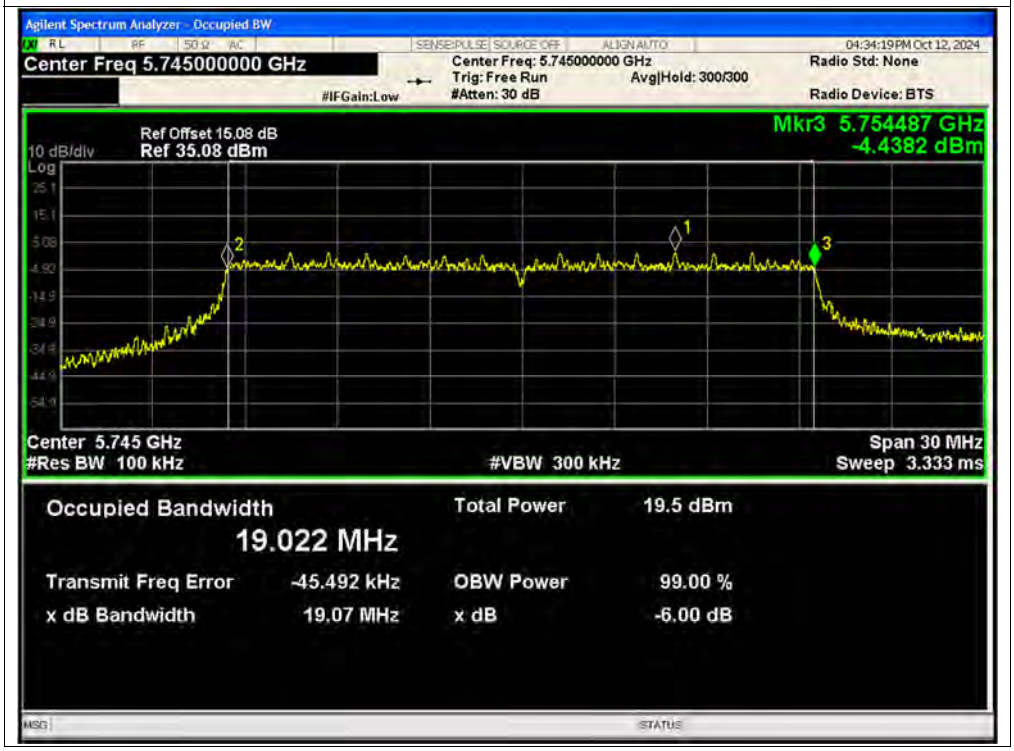


-6dB Bandwidth NVNT ax20 5825MHz Ant2 SISO

-6dB Bandwidth NVNT ax20 5745MHz Ant1 MIMO

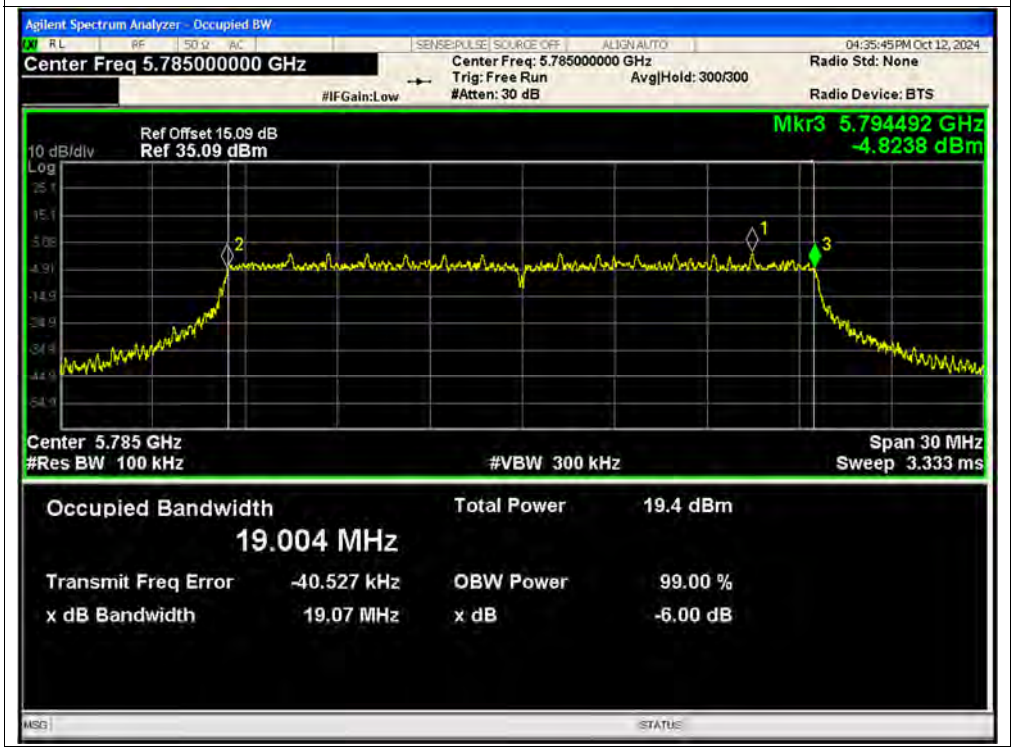


-6dB Bandwidth NVNT ax20 5745MHz Ant2 MIMO

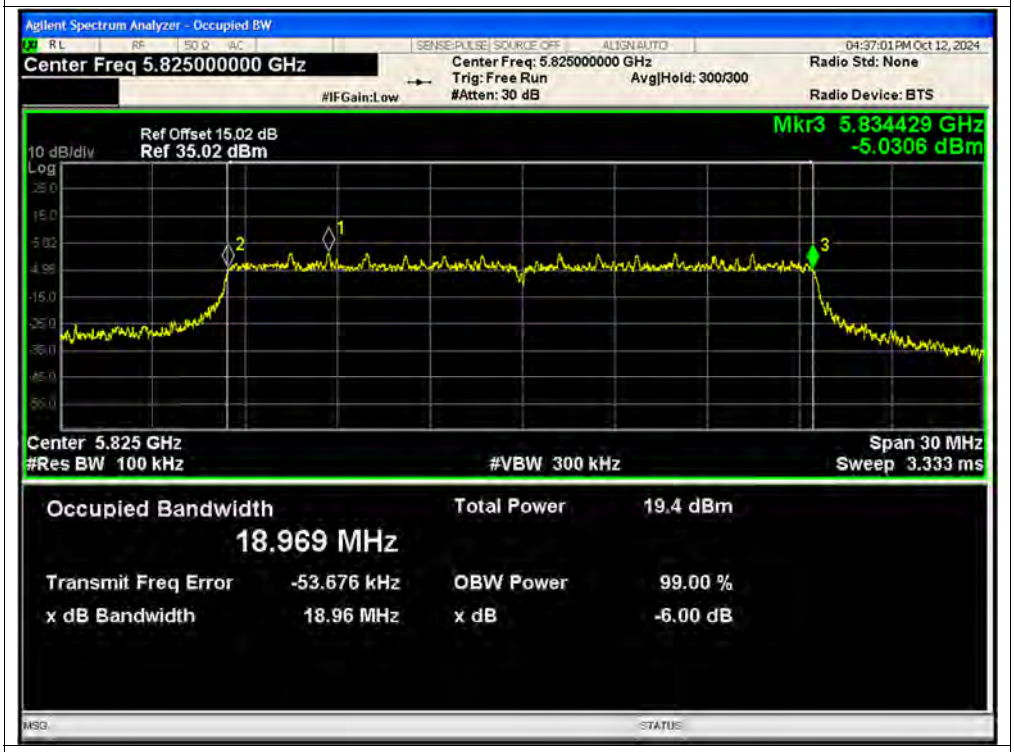


-6dB Bandwidth NVNT ax20 5785MHz Ant1 MIMO

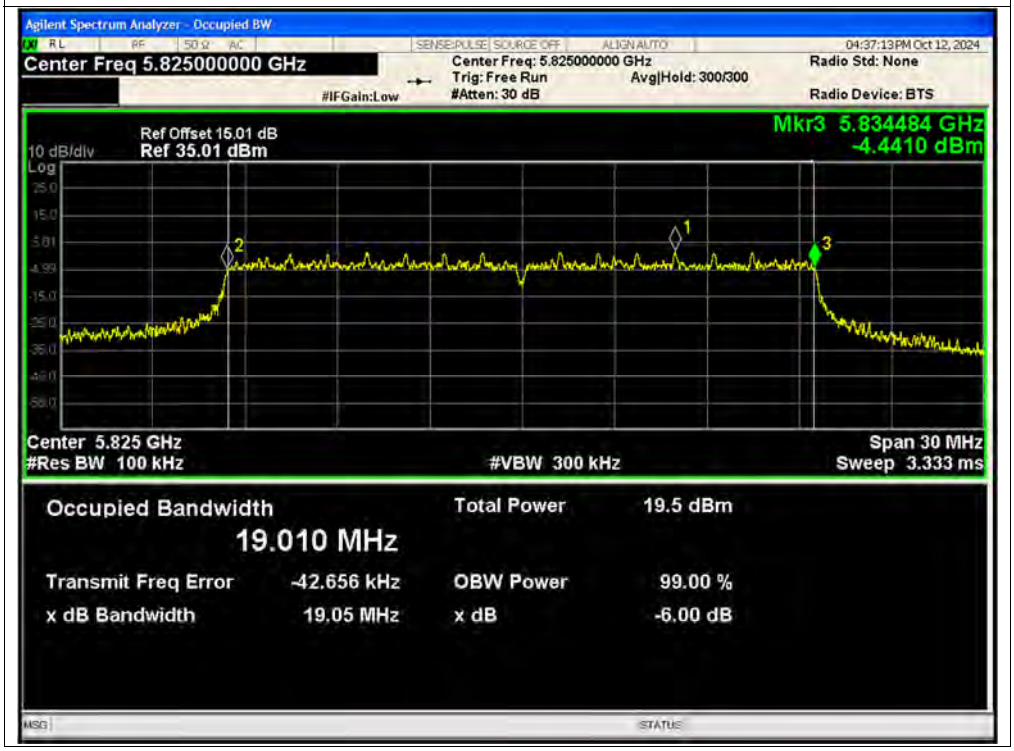
-6dB Bandwidth NVNT ax20 5785MHz Ant2 MIMO



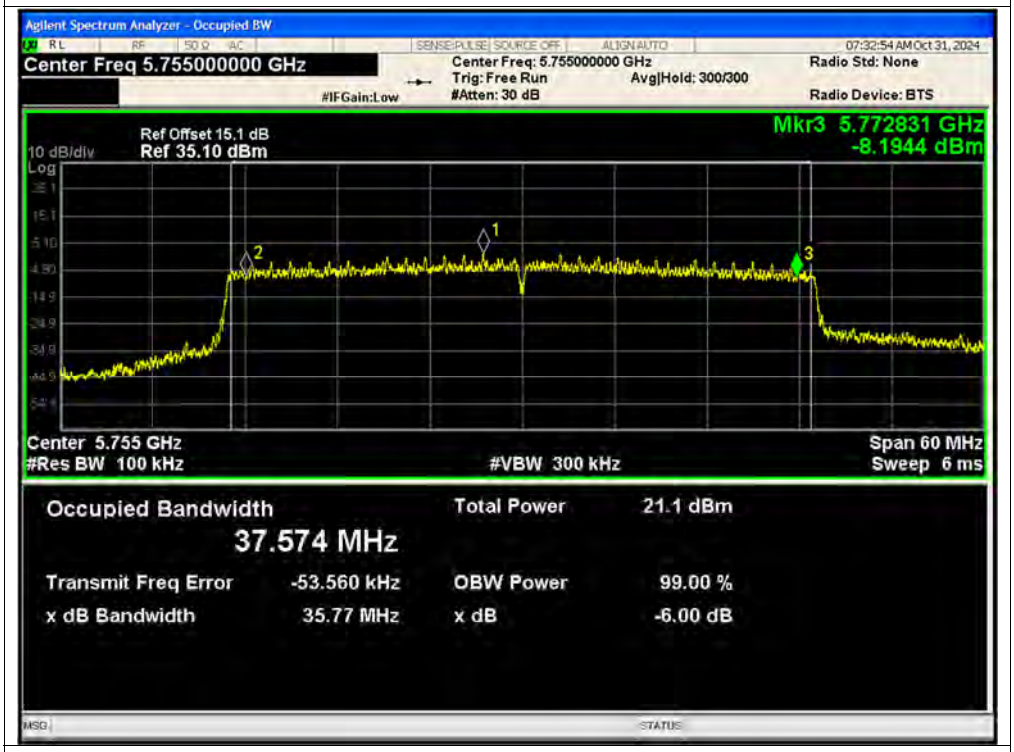
-6dB Bandwidth NVNT ax20 5825MHz Ant1 MIMO



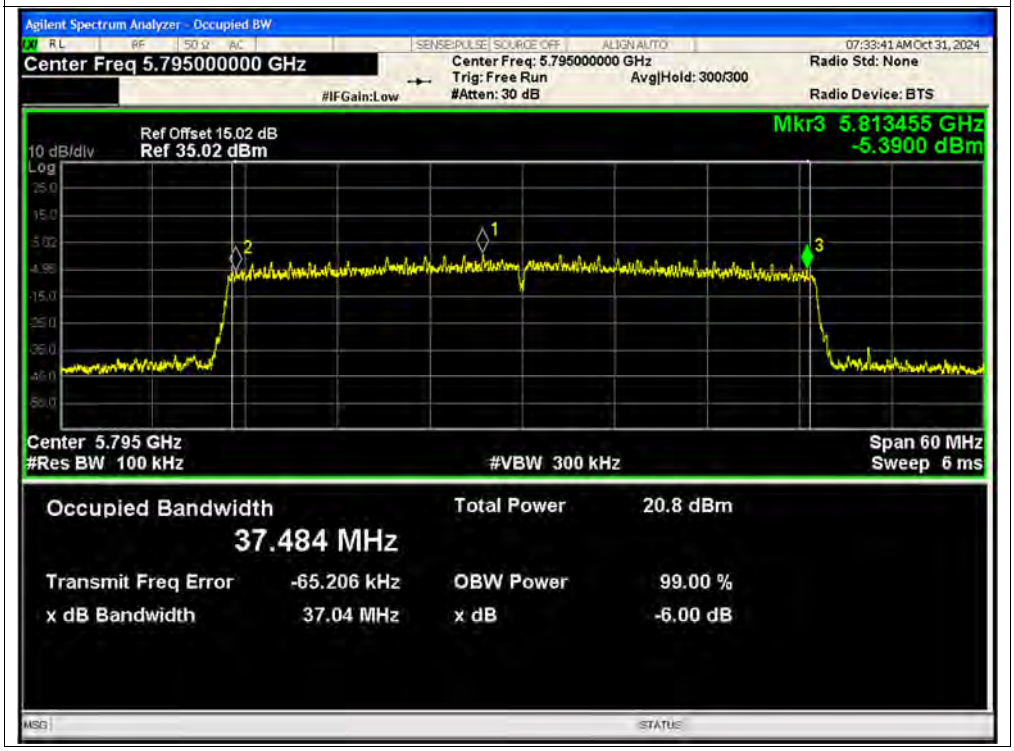
-6dB Bandwidth NVNT ax20 5825MHz Ant2 MIMO



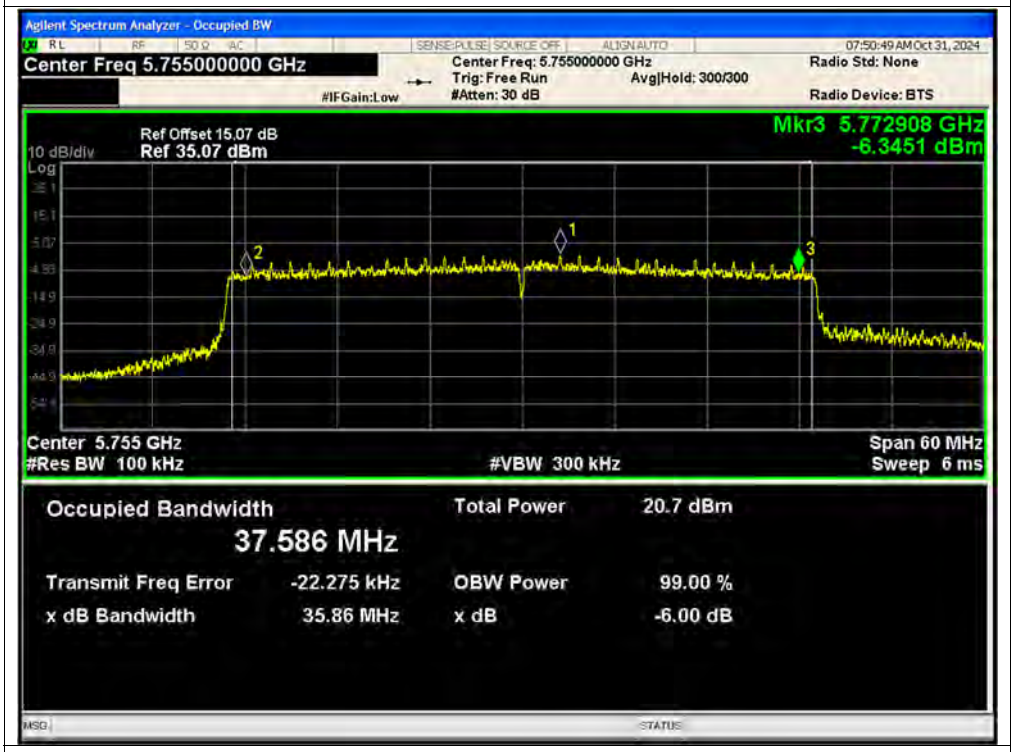
-6dB Bandwidth NVNT ax40 5755MHz Ant1 SISO



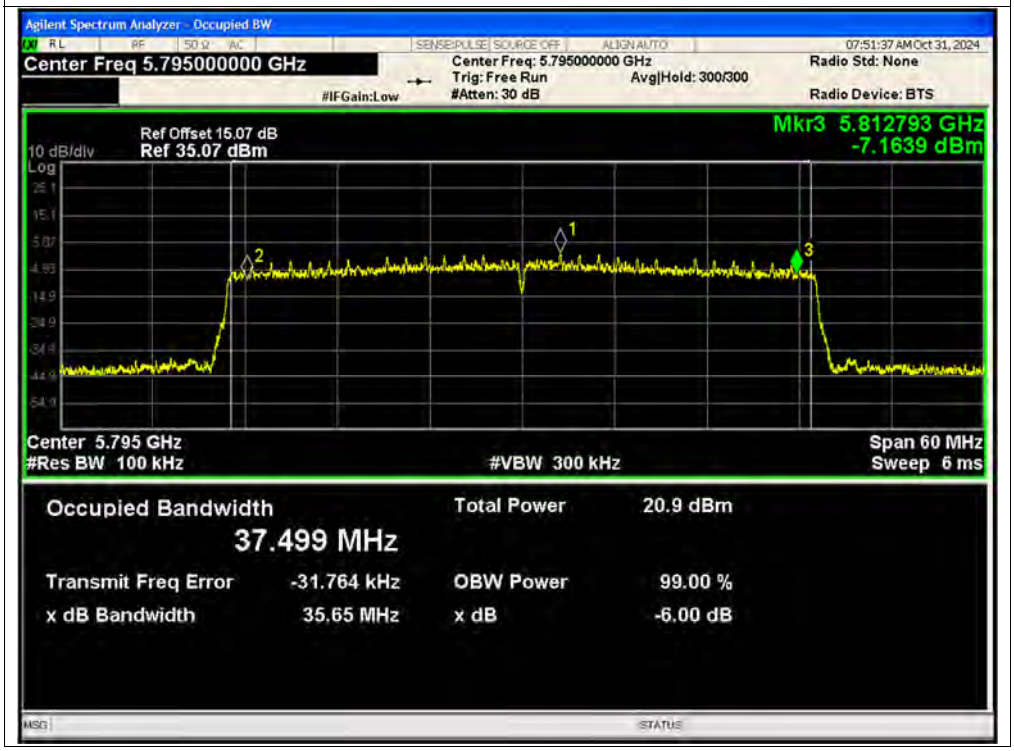
-6dB Bandwidth NVNT ax40 5795MHz Ant1 SISO



-6dB Bandwidth NVNT ax40 5755MHz Ant2 SISO

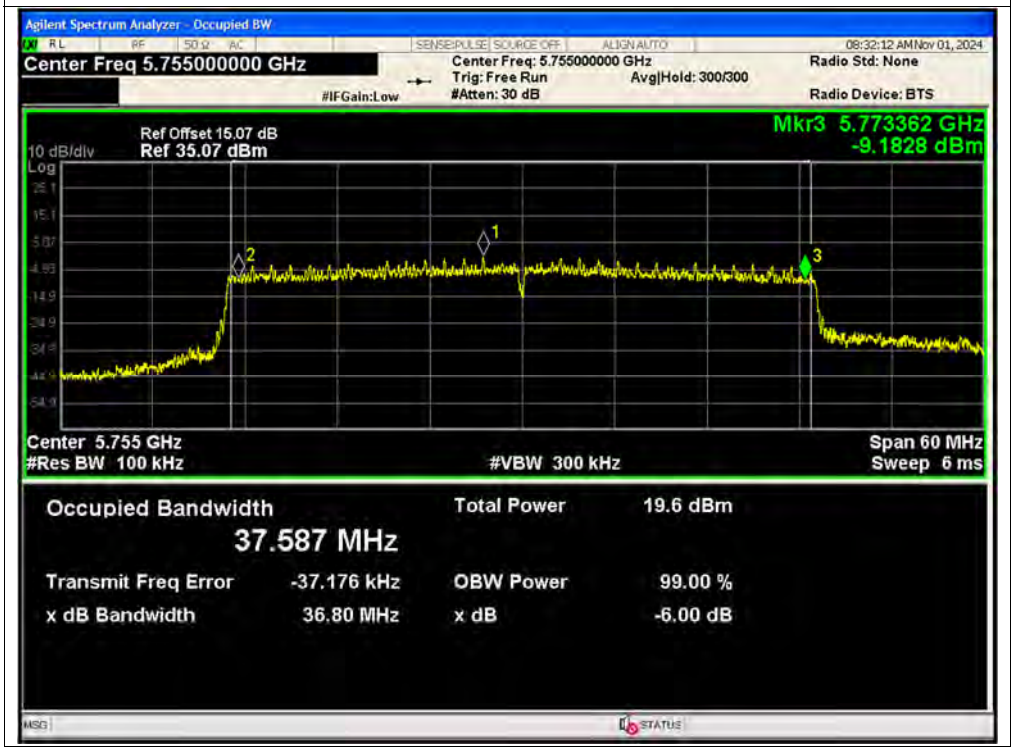


-6dB Bandwidth NVNT ax40 5795MHz Ant2 SISO

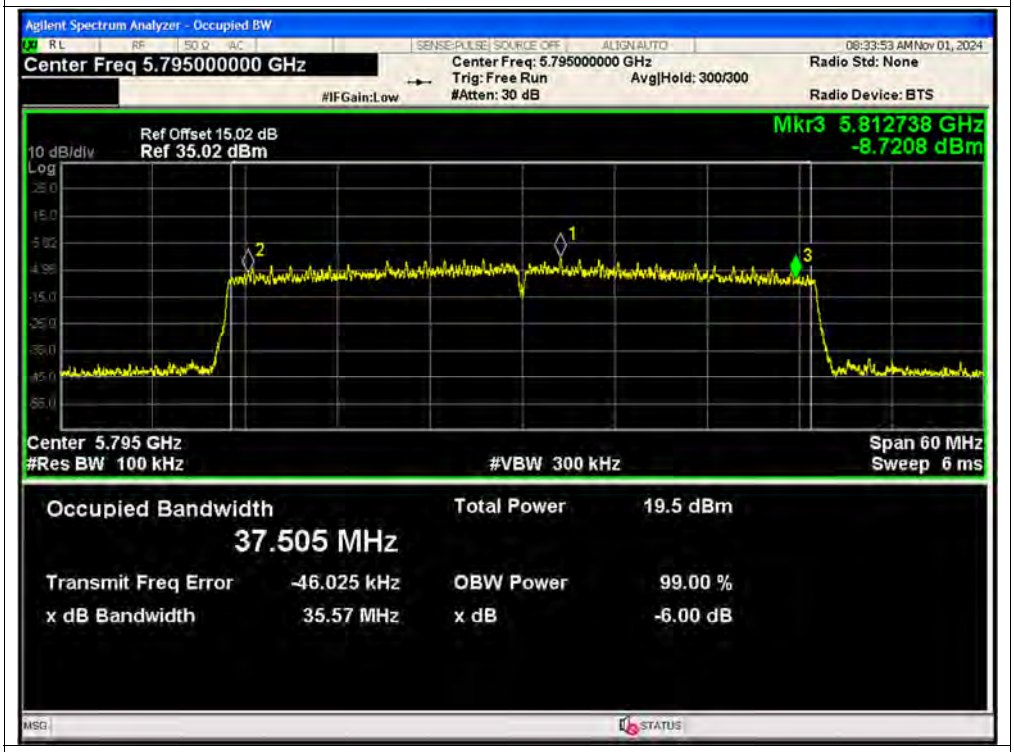


-6dB Bandwidth NVNT ax40 5755MHz Ant1 MIMO

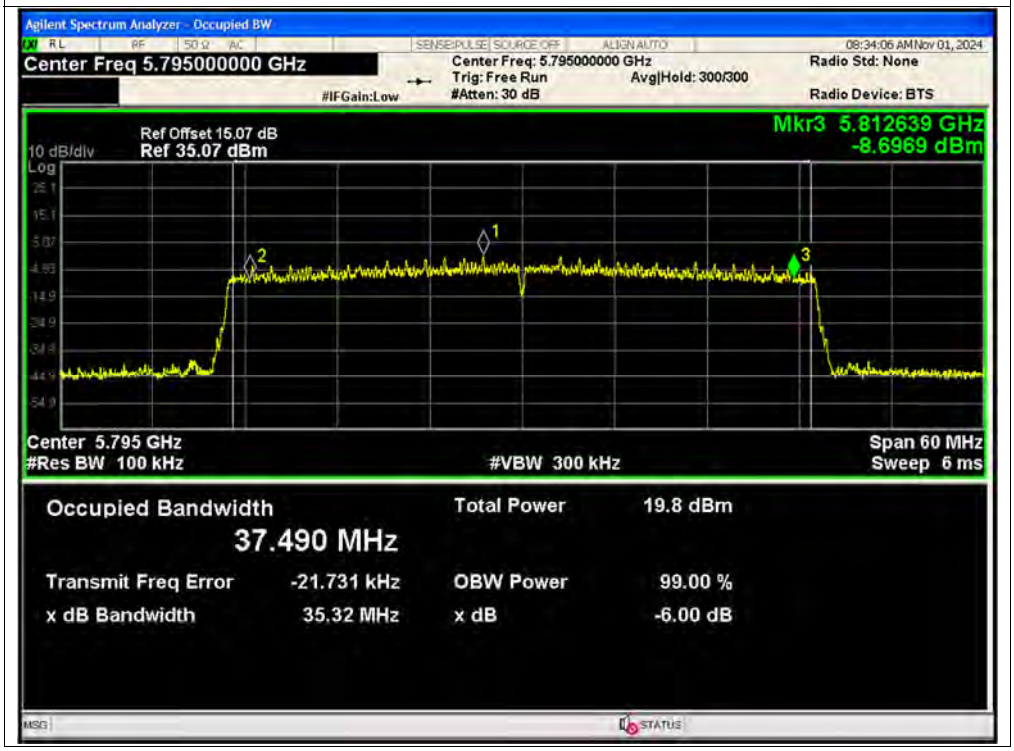
-6dB Bandwidth NVNT ax40 5755MHz Ant2 MIMO



-6dB Bandwidth NVNT ax40 5795MHz Ant1 MIMO

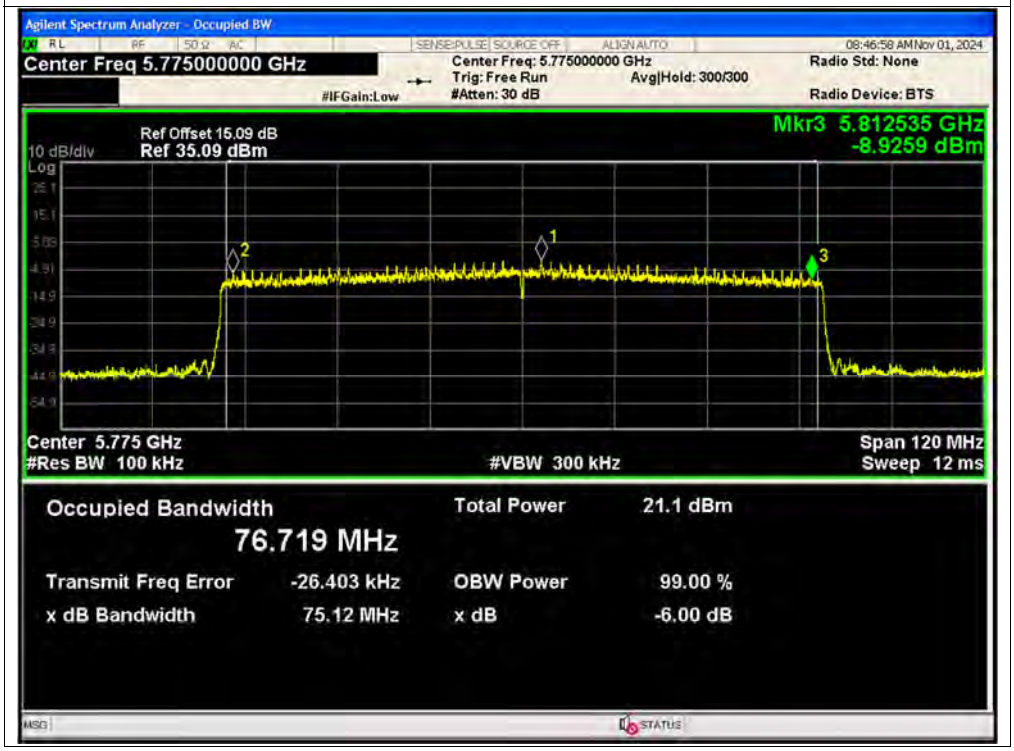


-6dB Bandwidth NVNT ax40 5795MHz Ant2 MIMO

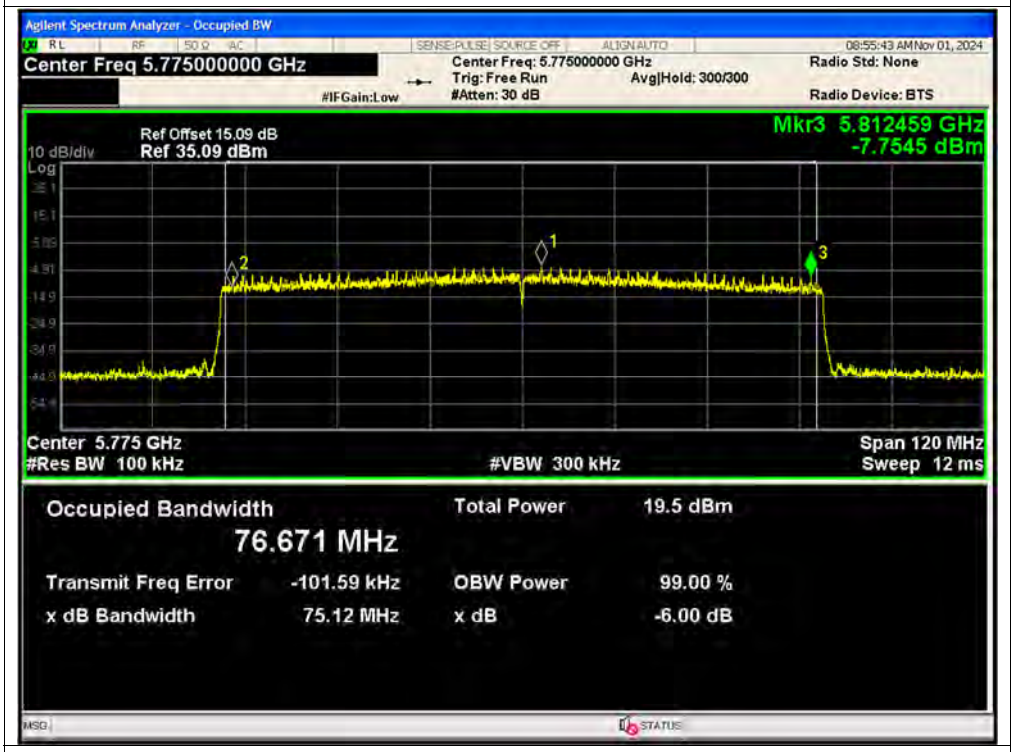


-6dB Bandwidth NVNT ax80 5775MHz Ant1 SISO

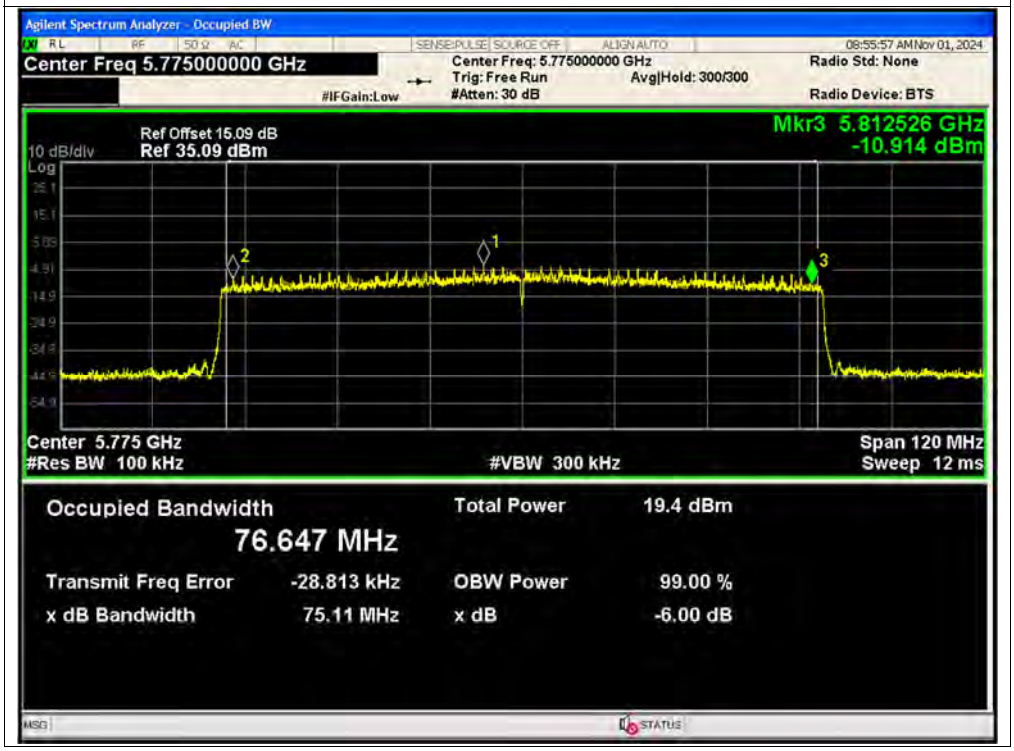
-6dB Bandwidth NVNT ax80 5775MHz Ant2 SISO



-6dB Bandwidth NVNT ax80 5775MHz Ant1 MIMO



-6dB Bandwidth NVNT ax80 5775MHz Ant2 MIMO



A.4. Peak Power Spectral Density

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total Conducted PSD (dBm)	Limit Conducted (dBm)	Verdict
NVNT	a SISO	5180	Ant1	4.17	0.18	4.35	11	Pass
NVNT	a SISO	5220	Ant1	4.12	0.15	4.27	11	Pass
NVNT	a SISO	5240	Ant1	4.25	0.18	4.43	11	Pass
NVNT	a SISO	5745	Ant1	1.17	0.18	1.35	30	Pass
NVNT	a SISO	5785	Ant1	0.67	0.18	0.85	30	Pass
NVNT	a SISO	5825	Ant1	0.53	0.18	0.71	30	Pass
NVNT	a SISO	5180	Ant2	2.49	0.15	2.64	11	Pass
NVNT	a SISO	5220	Ant2	2.6	0.18	2.78	11	Pass
NVNT	a SISO	5240	Ant2	2.68	0.18	2.86	11	Pass
NVNT	a SISO	5745	Ant2	-0.32	0.18	-0.14	30	Pass
NVNT	a SISO	5785	Ant2	-0.33	0.18	-0.15	30	Pass
NVNT	a SISO	5825	Ant2	-0.33	0.15	-0.18	30	Pass
NVNT	n20 SISO	5180	Ant1	3.82	0.19	4.01	11	Pass
NVNT	n20 SISO	5220	Ant1	3.48	0.19	3.67	11	Pass
NVNT	n20 SISO	5240	Ant1	3.53	0.2	3.73	11	Pass
NVNT	n20 SISO	5745	Ant1	0.45	0.19	0.64	30	Pass
NVNT	n20 SISO	5785	Ant1	0.03	0.19	0.22	30	Pass
NVNT	n20 SISO	5825	Ant1	-0.12	0.16	0.04	30	Pass
NVNT	n20 SISO	5180	Ant2	1.57	0.19	1.76	11	Pass
NVNT	n20 SISO	5220	Ant2	2	0.19	2.19	11	Pass
NVNT	n20 SISO	5240	Ant2	1.92	0.19	2.11	11	Pass
NVNT	n20 SISO	5745	Ant2	-1.03	0.2	-0.83	30	Pass
NVNT	n20 SISO	5785	Ant2	-1.07	0.19	-0.88	30	Pass
NVNT	n20 SISO	5825	Ant2	-0.98	0.16	-0.82	30	Pass
NVNT	n20 MIMO	5180	Ant1	1.9	0.19	2.09	11	Pass
NVNT	n20 MIMO	5180	Ant2	0.02	0.19	0.21	11	Pass
NVNT	n20 MIMO	5180	Sum	NaN	NaN	4.27	11	Pass
NVNT	n20 MIMO	5220	Ant1	1.55	0.2	1.75	11	Pass
NVNT	n20 MIMO	5220	Ant2	0.64	0.2	0.84	11	Pass
NVNT	n20 MIMO	5220	Sum	NaN	NaN	4.33	11	Pass
NVNT	n20 MIMO	5240	Ant1	1.85	0.19	2.04	11	Pass
NVNT	n20 MIMO	5240	Ant2	0.61	0.19	0.8	11	Pass
NVNT	n20 MIMO	5240	Sum	NaN	NaN	4.47	11	Pass
NVNT	n20 MIMO	5745	Ant1	-1.22	0.19	-1.03	30	Pass

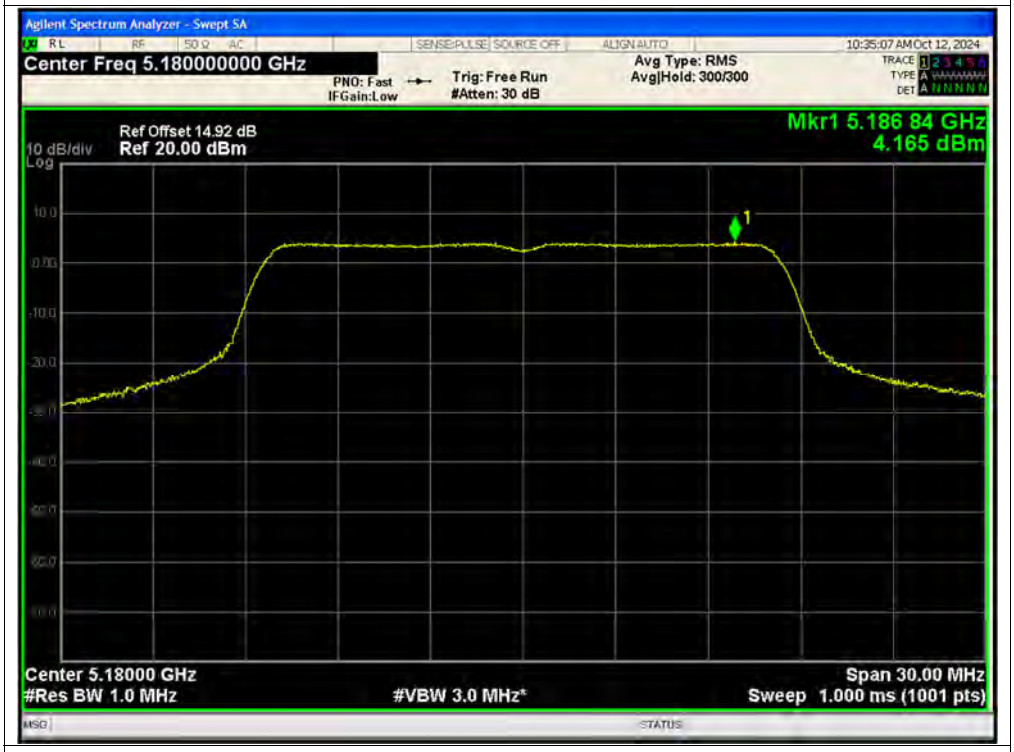
NVNT	n20 MIMO	5745	Ant2	-1.94	0.19	-1.75	30	Pass
NVNT	n20 MIMO	5745	Sum	NaN	NaN	1.64	30	Pass
NVNT	n20 MIMO	5785	Ant1	-1.67	0.19	-1.48	30	Pass
NVNT	n20 MIMO	5785	Ant2	-2.03	0.19	-1.84	30	Pass
NVNT	n20 MIMO	5785	Sum	NaN	NaN	1.37	30	Pass
NVNT	n20 MIMO	5825	Ant1	-1.88	0.19	-1.69	30	Pass
NVNT	n20 MIMO	5825	Ant2	-2.16	0.19	-1.97	30	Pass
NVNT	n20 MIMO	5825	Sum	NaN	NaN	1.17	30	Pass
NVNT	n40 SISO	5190	Ant1	0.28	0.32	0.6	11	Pass
NVNT	n40 SISO	5230	Ant1	0.55	0.38	0.93	11	Pass
NVNT	n40 SISO	5755	Ant1	-2.64	0.32	-2.32	30	Pass
NVNT	n40 SISO	5795	Ant1	-3.02	0.38	-2.64	30	Pass
NVNT	n40 SISO	5190	Ant2	0.65	0.32	0.97	11	Pass
NVNT	n40 SISO	5230	Ant2	0.25	0.38	0.63	11	Pass
NVNT	n40 SISO	5755	Ant2	-3.05	0.32	-2.73	30	Pass
NVNT	n40 SISO	5795	Ant2	-2.84	0.32	-2.52	30	Pass
NVNT	n40 MIMO	5190	Ant1	-0.3	0.38	0.08	11	Pass
NVNT	n40 MIMO	5190	Ant2	-0.88	0.38	-0.5	11	Pass
NVNT	n40 MIMO	5190	Sum	NaN	NaN	2.81	11	Pass
NVNT	n40 MIMO	5230	Ant1	-1.4	0.39	-1.01	11	Pass
NVNT	n40 MIMO	5230	Ant2	-1.36	0.39	-0.97	11	Pass
NVNT	n40 MIMO	5230	Sum	NaN	NaN	2.01	11	Pass
NVNT	n40 MIMO	5755	Ant1	-4.01	0.38	-3.63	30	Pass
NVNT	n40 MIMO	5755	Ant2	-4.38	0.38	-4	30	Pass
NVNT	n40 MIMO	5755	Sum	NaN	NaN	-0.81	30	Pass
NVNT	n40 MIMO	5795	Ant1	-4.52	0.38	-4.14	30	Pass
NVNT	n40 MIMO	5795	Ant2	-3.74	0.38	-3.36	30	Pass
NVNT	n40 MIMO	5795	Sum	NaN	NaN	-0.71	30	Pass
NVNT	ac20 SISO	5180	Ant1	3.32	0.55	3.87	11	Pass
NVNT	ac20 SISO	5220	Ant1	3	0.65	3.65	11	Pass
NVNT	ac20 SISO	5240	Ant1	3	0.55	3.55	11	Pass
NVNT	ac20 SISO	5745	Ant1	0.27	0.55	0.82	30	Pass
NVNT	ac20 SISO	5785	Ant1	-0.15	0.65	0.5	30	Pass
NVNT	ac20 SISO	5825	Ant1	-0.57	0.54	-0.03	30	Pass
NVNT	ac20 SISO	5180	Ant2	1.32	0.65	1.97	11	Pass
NVNT	ac20 SISO	5220	Ant2	1.72	0.65	2.37	11	Pass
NVNT	ac20 SISO	5240	Ant2	1.62	0.65	2.27	11	Pass
NVNT	ac20 SISO	5745	Ant2	-1.22	0.65	-0.57	30	Pass

NVNT	ac20 SISO	5785	Ant2	-1.17	0.65	-0.52	30	Pass
NVNT	ac20 SISO	5825	Ant2	-1.27	0.65	-0.62	30	Pass
NVNT	ac20 MIMO	5180	Ant1	1.44	0.65	2.09	11	Pass
NVNT	ac20 MIMO	5180	Ant2	-0.2	0.65	0.45	11	Pass
NVNT	ac20 MIMO	5180	Sum	NaN	NaN	4.36	11	Pass
NVNT	ac20 MIMO	5220	Ant1	1.14	0.65	1.79	11	Pass
NVNT	ac20 MIMO	5220	Ant2	-0.09	0.65	0.56	11	Pass
NVNT	ac20 MIMO	5220	Sum	NaN	NaN	4.23	11	Pass
NVNT	ac20 MIMO	5240	Ant1	0.89	0.65	1.54	11	Pass
NVNT	ac20 MIMO	5240	Ant2	0.03	0.65	0.68	11	Pass
NVNT	ac20 MIMO	5240	Sum	NaN	NaN	4.13	11	Pass
NVNT	ac20 MIMO	5745	Ant1	-2.22	0.55	-1.67	30	Pass
NVNT	ac20 MIMO	5745	Ant2	-2.7	0.55	-2.15	30	Pass
NVNT	ac20 MIMO	5745	Sum	NaN	NaN	1.11	30	Pass
NVNT	ac20 MIMO	5785	Ant1	-2.59	0.65	-1.94	30	Pass
NVNT	ac20 MIMO	5785	Ant2	-2.16	0.65	-1.51	30	Pass
NVNT	ac20 MIMO	5785	Sum	NaN	NaN	1.3	30	Pass
NVNT	ac20 MIMO	5825	Ant1	-2.52	0.54	-1.98	30	Pass
NVNT	ac20 MIMO	5825	Ant2	-2.56	0.54	-2.02	30	Pass
NVNT	ac20 MIMO	5825	Sum	NaN	NaN	1	30	Pass
NVNT	ac40 SISO	5190	Ant1	0.02	1.09	1.11	11	Pass
NVNT	ac40 SISO	5230	Ant1	-0.29	1.09	0.8	11	Pass
NVNT	ac40 SISO	5755	Ant1	-2.97	1.14	-1.83	30	Pass
NVNT	ac40 SISO	5795	Ant1	-3.72	0.93	-2.79	30	Pass
NVNT	ac40 SISO	5190	Ant2	-0.14	0.93	0.79	11	Pass
NVNT	ac40 SISO	5230	Ant2	-0.38	1.14	0.76	11	Pass
NVNT	ac40 SISO	5755	Ant2	-3.52	1.09	-2.43	30	Pass
NVNT	ac40 SISO	5795	Ant2	-3.39	1.14	-2.25	30	Pass
NVNT	ac40 MIMO	5190	Ant1	-1.26	1.09	-0.17	11	Pass
NVNT	ac40 MIMO	5190	Ant2	-1.55	1.09	-0.46	11	Pass
NVNT	ac40 MIMO	5190	Sum	NaN	NaN	2.7	11	Pass
NVNT	ac40 MIMO	5230	Ant1	-1.66	1.14	-0.52	11	Pass
NVNT	ac40 MIMO	5230	Ant2	-1.8	1.14	-0.66	11	Pass
NVNT	ac40 MIMO	5230	Sum	NaN	NaN	2.43	11	Pass
NVNT	ac40 MIMO	5755	Ant1	-4.88	1.09	-3.79	30	Pass
NVNT	ac40 MIMO	5755	Ant2	-4.98	1.09	-3.89	30	Pass
NVNT	ac40 MIMO	5755	Sum	NaN	NaN	-0.81	30	Pass
NVNT	ac40 MIMO	5795	Ant1	-4.78	1.14	-3.64	30	Pass

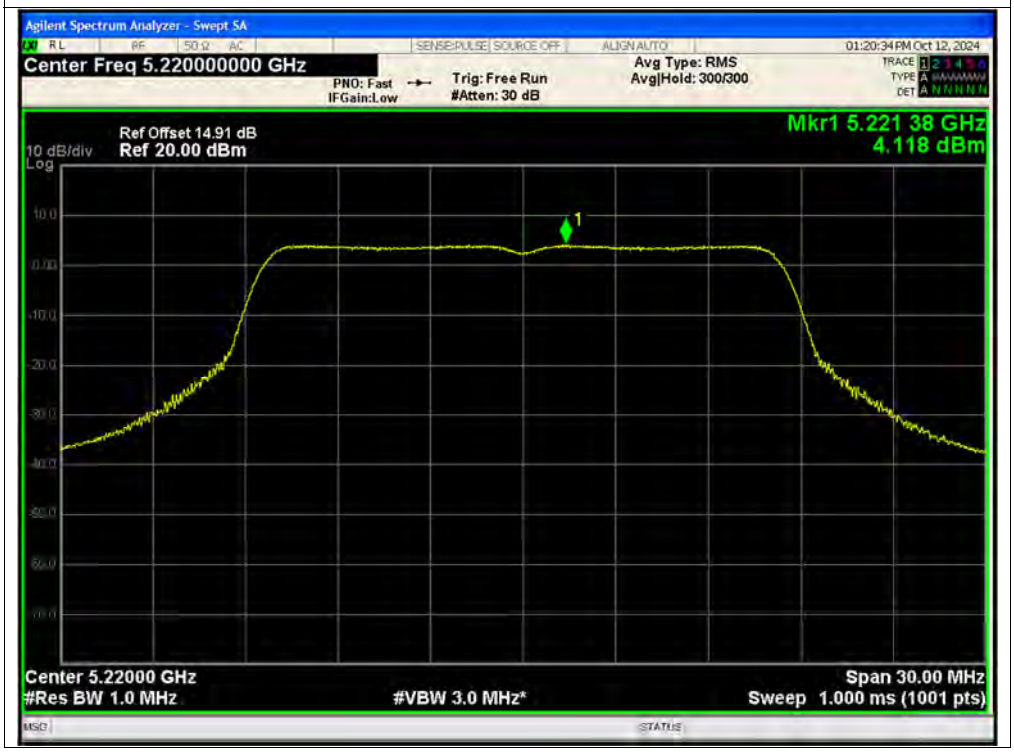
NVNT	ac40 MIMO	5795	Ant2	-4.7	1.14	-3.56	30	Pass
NVNT	ac40 MIMO	5795	Sum	NaN	NaN	-0.6	30	Pass
NVNT	ac80 SISO	5210	Ant1	-3.48	1.76	-1.72	11	Pass
NVNT	ac80 SISO	5775	Ant1	-6.19	1.76	-4.43	30	Pass
NVNT	ac80 SISO	5210	Ant2	-2.91	1.65	-1.26	11	Pass
NVNT	ac80 SISO	5775	Ant2	-6.43	1.76	-4.67	30	Pass
NVNT	ac80 MIMO	5210	Ant1	-5.06	1.76	-3.3	11	Pass
NVNT	ac80 MIMO	5210	Ant2	-5.14	1.76	-3.38	11	Pass
NVNT	ac80 MIMO	5210	Sum	NaN	NaN	-0.32	11	Pass
NVNT	ac80 MIMO	5775	Ant1	-8.12	1.65	-6.47	30	Pass
NVNT	ac80 MIMO	5775	Ant2	-8.36	1.65	-6.71	30	Pass
NVNT	ac80 MIMO	5775	Sum	NaN	NaN	-3.57	30	Pass
NVNT	ax20 SISO	5180	Ant1	3.27	0.71	3.98	11	Pass
NVNT	ax20 SISO	5220	Ant1	3.21	0.69	3.9	11	Pass
NVNT	ax20 SISO	5240	Ant1	3.13	0.58	3.71	11	Pass
NVNT	ax20 SISO	5745	Ant1	0.13	0.69	0.82	30	Pass
NVNT	ax20 SISO	5785	Ant1	-0.43	0.69	0.26	30	Pass
NVNT	ax20 SISO	5825	Ant1	-0.61	0.71	0.1	30	Pass
NVNT	ax20 SISO	5180	Ant2	1.63	0.71	2.34	11	Pass
NVNT	ax20 SISO	5220	Ant2	1.87	0.54	2.41	11	Pass
NVNT	ax20 SISO	5240	Ant2	2.04	0.65	2.69	11	Pass
NVNT	ax20 SISO	5745	Ant2	-0.78	0.54	-0.24	30	Pass
NVNT	ax20 SISO	5785	Ant2	-0.82	0.54	-0.28	30	Pass
NVNT	ax20 SISO	5825	Ant2	-0.78	0.65	-0.13	30	Pass
NVNT	ax20 MIMO	5180	Ant1	1.17	0.58	1.75	11	Pass
NVNT	ax20 MIMO	5180	Ant2	-0.25	0.58	0.33	11	Pass
NVNT	ax20 MIMO	5180	Sum	NaN	NaN	4.1	11	Pass
NVNT	ax20 MIMO	5220	Ant1	1.03	0.69	1.73	11	Pass
NVNT	ax20 MIMO	5220	Ant2	0.21	0.69	0.9	11	Pass
NVNT	ax20 MIMO	5220	Sum	NaN	NaN	4.35	11	Pass
NVNT	ax20 MIMO	5240	Ant1	1.06	0.58	1.63	11	Pass
NVNT	ax20 MIMO	5240	Ant2	0.23	0.58	0.81	11	Pass
NVNT	ax20 MIMO	5240	Sum	NaN	NaN	4.25	11	Pass
NVNT	ax20 MIMO	5745	Ant1	-2.06	0.71	-1.35	30	Pass
NVNT	ax20 MIMO	5745	Ant2	-2.42	0.71	-1.71	30	Pass
NVNT	ax20 MIMO	5745	Sum	NaN	NaN	1.49	30	Pass
NVNT	ax20 MIMO	5785	Ant1	-2.47	0.69	-1.78	30	Pass
NVNT	ax20 MIMO	5785	Ant2	-2.56	0.69	-1.87	30	Pass

NVNT	ax20 MIMO	5785	Sum	NaN	NaN	1.17	30	Pass
NVNT	ax20 MIMO	5825	Ant1	-2.88	0.71	-2.17	30	Pass
NVNT	ax20 MIMO	5825	Ant2	-2.5	0.71	-1.79	30	Pass
NVNT	ax20 MIMO	5825	Sum	NaN	NaN	1.04	30	Pass
NVNT	ax40 SISO	5190	Ant1	0.34	0.71	1.05	11	Pass
NVNT	ax40 SISO	5230	Ant1	-0.15	0.69	0.54	11	Pass
NVNT	ax40 SISO	5755	Ant1	-3.05	0.58	-2.47	30	Pass
NVNT	ax40 SISO	5795	Ant1	-3.34	0.69	-2.65	30	Pass
NVNT	ax40 SISO	5190	Ant2	0.4	0.93	1.33	11	Pass
NVNT	ax40 SISO	5230	Ant2	0.39	1.14	1.53	11	Pass
NVNT	ax40 SISO	5755	Ant2	-3.09	1.09	-2	30	Pass
NVNT	ax40 SISO	5795	Ant2	-2.69	0.93	-1.76	30	Pass
NVNT	ax40 MIMO	5190	Ant1	-0.86	1.05	0.19	11	Pass
NVNT	ax40 MIMO	5190	Ant2	-1.26	1.05	-0.21	11	Pass
NVNT	ax40 MIMO	5190	Sum	NaN	NaN	3.01	11	Pass
NVNT	ax40 MIMO	5230	Ant1	-1.37	1.01	-0.36	11	Pass
NVNT	ax40 MIMO	5230	Ant2	-1.39	1.01	-0.38	11	Pass
NVNT	ax40 MIMO	5230	Sum	NaN	NaN	2.65	11	Pass
NVNT	ax40 MIMO	5755	Ant1	-4.62	1.05	-3.57	30	Pass
NVNT	ax40 MIMO	5755	Ant2	-4.68	1.05	-3.63	30	Pass
NVNT	ax40 MIMO	5755	Sum	NaN	NaN	-0.6	30	Pass
NVNT	ax40 MIMO	5795	Ant1	-4.74	1.01	-3.73	30	Pass
NVNT	ax40 MIMO	5795	Ant2	-4.33	1.01	-3.32	30	Pass
NVNT	ax40 MIMO	5795	Sum	NaN	NaN	-0.51	30	Pass
NVNT	ax80 SISO	5210	Ant1	-2.26	0.71	-1.55	11	Pass
NVNT	ax80 SISO	5775	Ant1	-5.43	0.6	-4.83	30	Pass
NVNT	ax80 SISO	5210	Ant2	-2.51	0.6	-1.91	11	Pass
NVNT	ax80 SISO	5775	Ant2	-5	0.6	-4.4	30	Pass
NVNT	ax80 MIMO	5210	Ant1	-4.24	0.71	-3.53	11	Pass
NVNT	ax80 MIMO	5210	Ant2	-4.68	0.71	-3.97	11	Pass
NVNT	ax80 MIMO	5210	Sum	NaN	NaN	-0.76	11	Pass
NVNT	ax80 MIMO	5775	Ant1	-7.19	0.73	-6.46	30	Pass
NVNT	ax80 MIMO	5775	Ant2	-7.67	0.73	-6.94	30	Pass
NVNT	ax80 MIMO	5775	Sum	NaN	NaN	-3.67	30	Pass

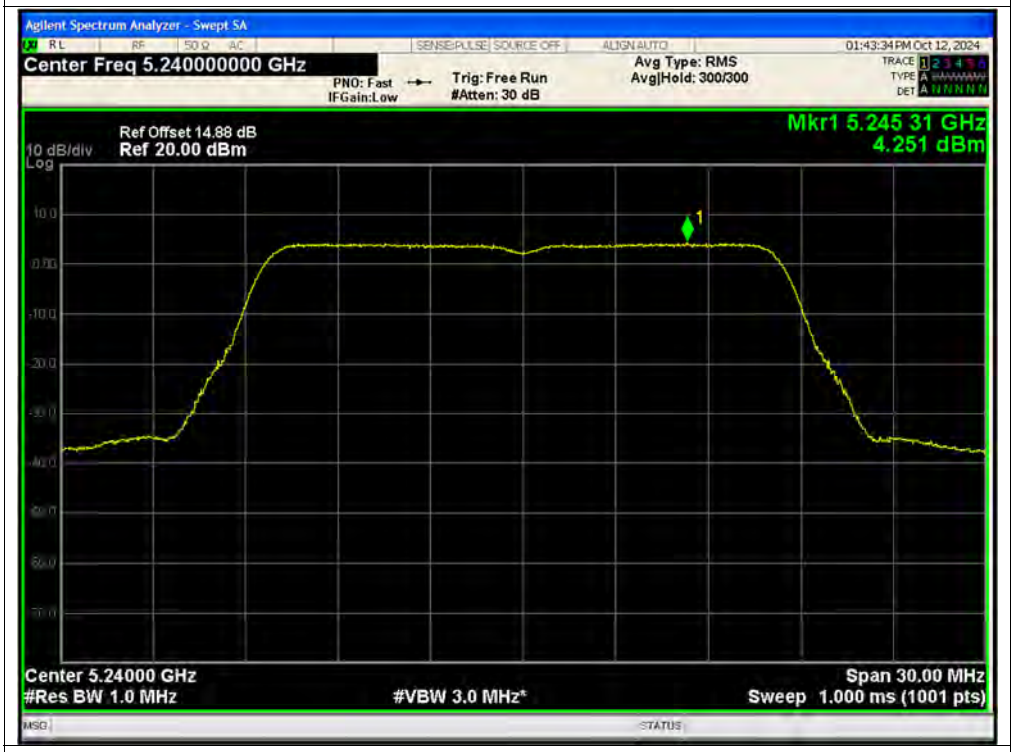
Test Graphs
PSD NVNT a 5180MHz Ant1 SISO



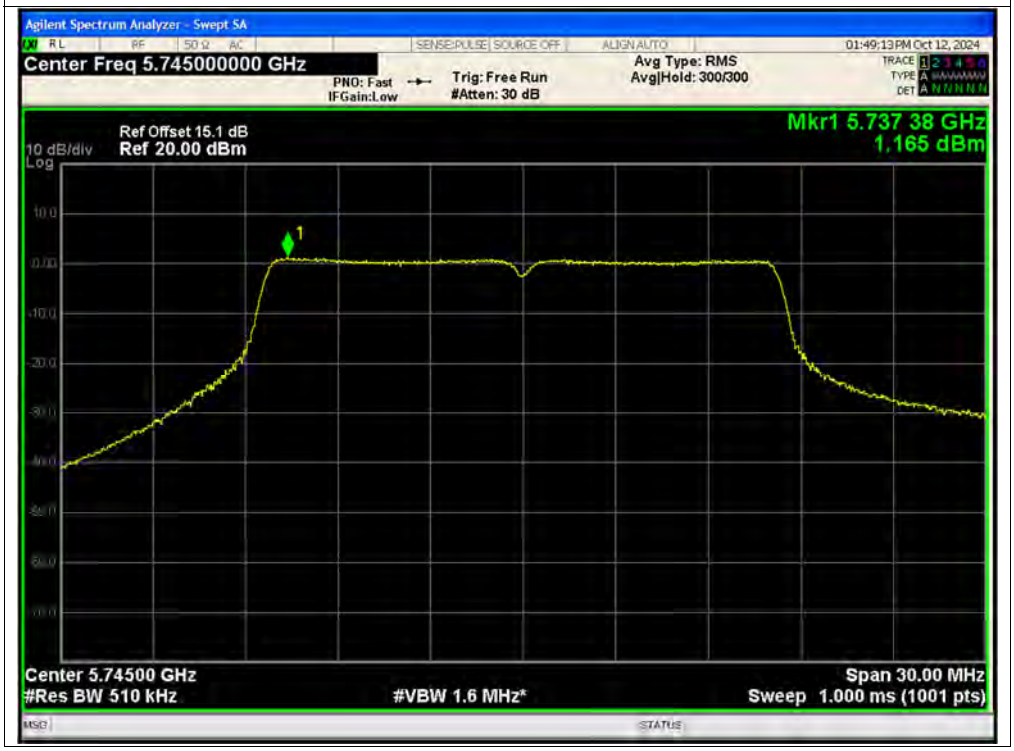
PSD NVNT a 5220MHz Ant1 SISO



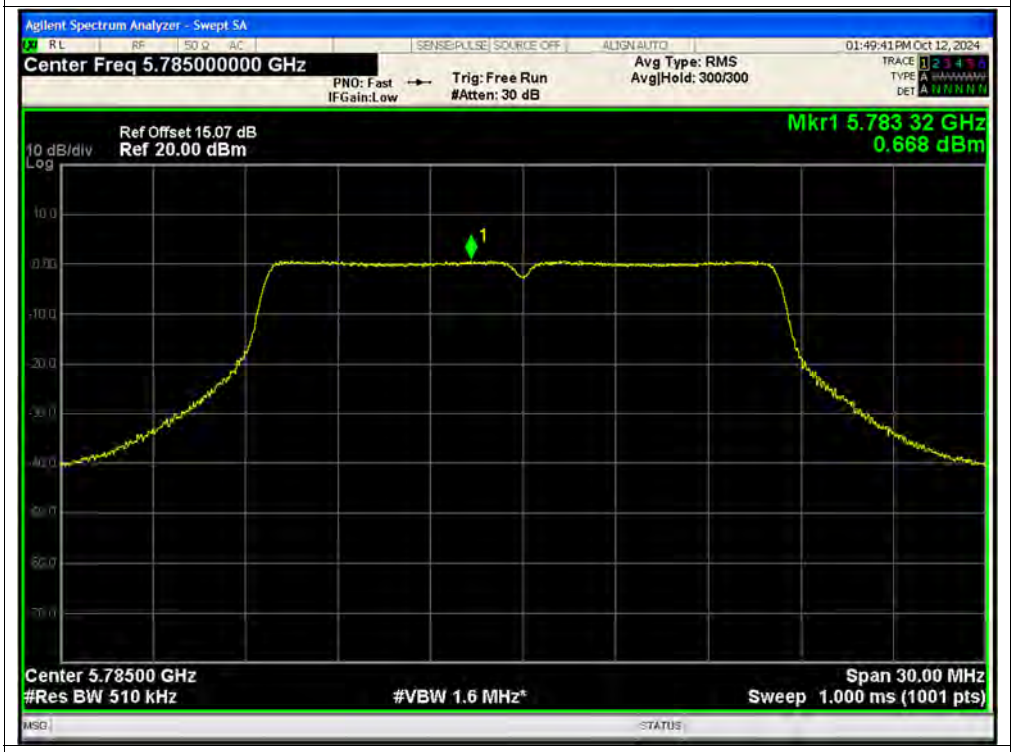
PSD NVNT a 5240MHz Ant1 SISO



PSD NVNT a 5745MHz Ant1 SISO

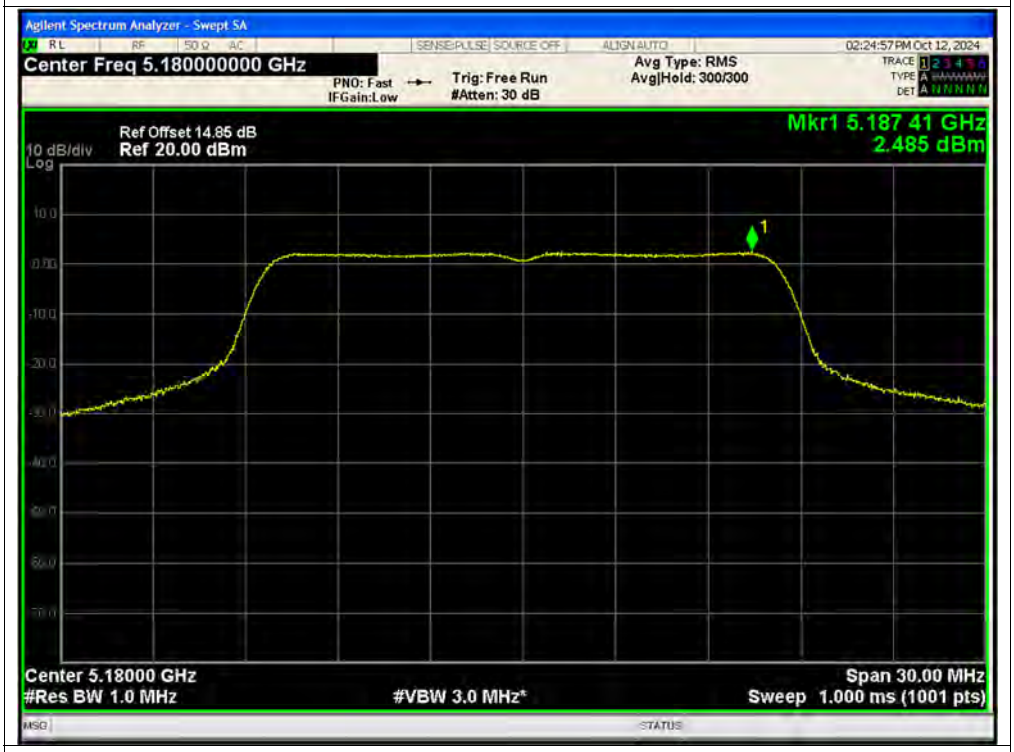


PSD NVNT a 5785MHz Ant1 SISO

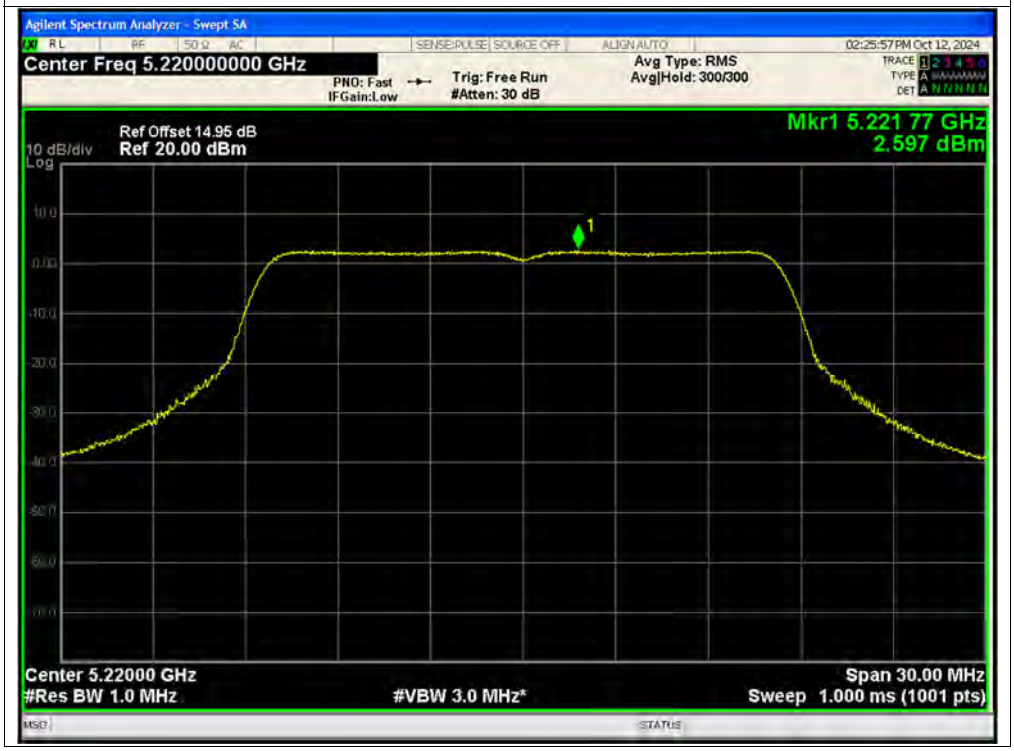


PSD NVNT a 5825MHz Ant1 SISO

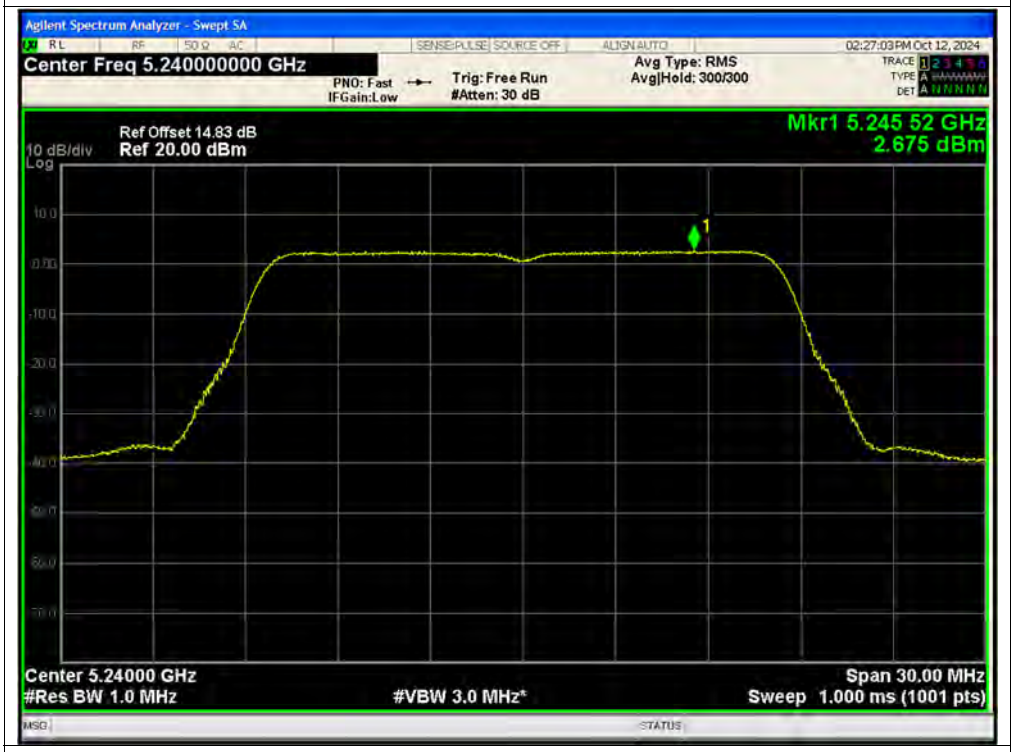
PSD NVNT a 5180MHz Ant2 SISO



PSD NVNT a 5220MHz Ant2 SISO



PSD NVNT a 5240MHz Ant2 SISO



PSD NVNT a 5745MHz Ant2 SISO

PSD NVNT a 5785MHz Ant2 SISO

PSD NVNT a 5825MHz Ant2 SISO