

Test report no.: <i>Prüfbericht-Nr.:</i>	CN24AVVQ 001	Order No.: <i>Auftragsnr.:</i>	170374382	Page 1 of 22 <i>Seite 1 von 22</i>
Client reference no.: <i>Kunden-Referenz-Nr.:</i>	N/A	Order date: <i>Auftragsdatum:</i>	2024-04-02	
Client: <i>Auftraggeber:</i>	ZG Technology Co., Ltd. Floor 1-2, BLDG #1, Dingxin Industrial Park, #9 Guandong Industrial Park, Guandong Street, Wuhan, Donghu New Technology Development Zone, Wuhan, China			
Test item: <i>Prüfgegenstand:</i>	Wireless Scanning Module			
Identification / Type no.: <i>Bezeichnung / Typ-Nr.:</i>	FREEBOX-II			
Order content: <i>Auftrags-Inhalt:</i>	Test Report			
Test specification <i>Prüfgrundlage:</i>	CFR47 FCC Part 15: Subpart E Section 15.407			
Date of sample receipt: <i>Wareneingangsdatum:</i>	2024-04-02	Please refer to Photo Document		
Test sample no: <i>Prüfmuster-Nr.:</i>	170374382-001/002			
Testing period: <i>Prüfzeitraum:</i>	2024-04-08 - 2023-04-18			
Place of testing: <i>Ort der Prüfung:</i>	Refer to section 2.1			
Testing laboratory: <i>Prüflaboratorium:</i>	TÜV Rheinland (Guangdong) Ltd.			
Test result*: <i>Prüfergebnis*:</i>	Pass			
tested by: <i>geprüft von:</i> Amy Wang Date: 2024-04-28 <i>Datum:</i>	 authorized by: <i>genehmigt von:</i> Storm Shu Issue date: 2024-04-28 <i>Ausstellungsdatum:</i>			
Position / Stellung:	Expert/Sachverständige(r)	Position / Stellung:	Expert/Sachverständige(r)	
Other: <i>Sonstiges:</i>	FCC ID: 2A2FV-FREEBOX-II			
Condition of the test item at delivery: <i>Zustand des Prüfgegenstandes bei Anlieferung:</i>		Test item complete and undamaged Prüfmuster vollständig und unbeschädigt		
* Legend: P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested				
* Legende: P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet				
This test report only relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark. <i>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</i>				

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Remarks
Anmerkungen

- | | |
|----------|--|
| 1 | <p>The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.</p> <p><i>Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben.</i></p> <p><i>Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden.</i></p> |
| 2 | <p>As contractually agreed, this document has been signed digitally only. TÜV Rheinland has not verified and unable to verify which legal or other pertaining requirements are applicable for this document. Such verification is within the responsibility of the user of this document. Upon request by its client, TÜV Rheinland can confirm the validity of the digital signature by a separate document. Such request shall be addressed to our Sales department. An environmental fee for such additional service will be charged.</p> <p><i>Wie vertraglich vereinbart, wurde dieses Dokument nur digital unterzeichnet. Der TÜV Rheinland hat nicht überprüft, welche rechtlichen oder sonstigen diesbezüglichen Anforderungen für dieses Dokument gelten. Diese Überprüfung liegt in der Verantwortung des Benutzers dieses Dokuments. Auf Verlangen des Kunden kann der TÜV Rheinland die Gültigkeit der digitalen Signatur durch ein gesondertes Dokument bestätigen. Diese Anfrage ist an unseren Vertrieb zu richten. Eine Umweltgebühr für einen solchen zusätzlichen Service wird erhoben.</i></p> |
| 3 | <p>Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report. Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.</p> <p><i>Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben. Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt.</i></p> |
| 4 | <p>The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.</p> <p><i>Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnissen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezüglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019.</i></p> |

Test Summary

5.1.1 ANTENNA REQUIREMENT

RESULT: Pass

5.1.2 MAXIMUM CONDUCTED OUTPUT POWER

RESULT: Pass

5.1.3 CONDUCTED POWER SPECTRAL DENSITY

RESULT: Pass

5.1.4 FREQUENCY STABILITY

RESULT: Pass

5.1.5 26dB BANDWIDTH AND 99% BANDWIDTH

RESULT: Pass

5.1.6 6dB BANDWIDTH

RESULT: Pass

5.1.7 RADIATED SPURIOUS EMISSION

RESULT: Pass

5.1.8 CONDUCTED EMISSION ON AC MAINS

RESULT: Pass

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1 General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Test Results of 5.2GHz Wi-Fi

Appendix B: Test Results of 5.8GHz Wi-Fi

Appendix C: Photographs of the Test Set-up

1.2 TEST METHODOLOGY

KDB 789033 D02 General U-NII Test Procedures New Rules.

KDB 905462 D04 Test Mode New Rules.

KDB 662911 D01 Multiple Transmitter Output

ANSI C63.10:2013: American National Standard for Testing Unlicensed Wireless Devices

2 Test Sites

2.1 Test Facilities

Shenzhen LCS Compliance Testing Laboratory Ltd.

101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

FCC Designation Number is CN5024.

Test Firm Registration Number: 254912.

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Radio Spectrum Testing

Item	Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	Power Meter	R&S	NRVS	100444	2023-06-09	2024-06-08
2	Power Sensor	R&S	NRV-Z81	100458	2023-06-09	2024-06-08
3	Power Sensor	R&S	NRV-Z32	10057	2023-06-09	2024-06-08
4	Test Software	Tonscend	JS1120-2	/	N/A	N/A
5	RF Control Unit	Tonscend	JS0806-2	N/A	2023-08-15	2024-08-14
6	MXA Signal Analyzer	Agilent	N9020A	MY50510140	2023-10-18	2024-10-17
7	DC Power Supply	Agilent	E3642A	N/A	2023-10-18	2024-10-17
8	EMI Test Software	AUDIX	E3	/	N/A	N/A
9	3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	2023-06-09	2024-06-08
10	Positioning Controller	Max-Full	MF7802BS	MF780208586	N/A	N/A
11	Active Loop Antenna	SCHWARZBEC K	FMZB 1519B	00005	2021-08-29	2024-08-28
12	By-log Antenna	SCHWARZBEC K	VULB9163	9163-470	2021-09-12	2024-09-11
13	Horn Antenna	SCHWARZBEC K	BBHA 9120D	9120D-1925	2021-09-05	2024-09-04
14	Broadband Horn Antenna	SCHWARZBEC K	BBHA 9170	791	2021-08-29	2024-08-28
15	Broadband Preamplifier	SCHWARZBEC K	BBV9719	9719-025	2021-08-29	2024-08-28
16	EMI Test Receiver	R&S	ESR 7	101181	2023-08-15	2024-08-14
17	RS SPECTRUM ANALYZER	R&S	FSP40	100503	2023-07-17	2024-07-16
18	Low-frequency amplifier	SchwarzZBECK	BBV9745	00253	2023-10-18	2024-10-17
19	High-frequency amplifier	JS Denki Pte	PA0118-43	JSPA21009	2023-10-18	2024-10-17
20	6dB Attenuator	/	100W/6dB	1172040	2023-06-09	2024-06-08
21	3dB Attenuator	/	2N-3dB	/	2023-10-18	2024-10-17
22	EMI Test Receiver	R&S	ESPI	101940	2023-08-15	2024-08-14
23	Artificial Mains	R&S	ENV216	101288	2023-06-09	2024-06-08
24	10dB Attenuator	SCHWARZBEC K	MTS-IMP-136	261115-001-0032	2023-06-09	2024-06-08
25	EMI Test Software	Farad	EZ	/	N/A	N/A

26	Antenna Mast	Max-Full	MFA-515BSN	1308572	N/A	N/A
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Conducted Emission

Item	Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	EMI Test Software	Farad	EZ	/	N/A	N/A
2	EMI Test Receiver	R&S	ESR3	102312	2023-02-25	2024-02-24
3	Artificial Mains	R&S	ENV216	101288	2023-06-09	2024-06-08
4	Pulse Limiter	R&S	ESH3-Z2	102750-NB	2023-08-15	2024-08-14
5	Impedance Stabilization Network	TESEQ	ISN T800	45130	2023-10-18	2024-10-17
6	WIDEBAND RADIO COMMUNICATION TESTER	R&S	CMW 500	103818	2023-06-09	2024-06-08

2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally, all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table.

Parameter	Uncertainty (k=2)
RF output power, conducted	± 0.57 dB
Occupied Channel Bandwidth	± 5.0 %
RF power density, conducted	± 0.99 dB
Unwanted Emissions, conducted	± 1.80 dB
All emissions, radiated	±3.90 dB
Conducted Emissions	±1.63 dB

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A & B of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Guangdong) Co., Ltd. File for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The Shenzhen LCS Compliance Testing Laboratory Ltd. Test facility located at 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3 General Product Information

3.1 Product Function and Intended Use

The Product is Wireless Scanning Module which supports 5GHz Wi-Fi functions.

For details refer to the User Manual, Technical Description and Circuit Diagram.

3.2 Ratings and System Details

Table 2: Technical Specification of EUT

General Information of EUT	Value
Kind of Equipment:	Wireless Scanning Module
Type Designation:	FREEBOX-II
Operating Voltage:	Input: 25.5V $\overline{\text{---}}$ 3.0A For AC Adapter (Model: FY255300): Input: 100-240V~, 50/60Hz, 2.5A Output: 25.5V $\overline{\text{---}}$ 3.0A, 76.5W
Testing Voltage:	DC 25.5V
Operating Temperature Range:	-20 °C ~ +40 °C
FCC ID:	2A2FV-FREEBOX-II
Technical Specification of Wi-Fi 802.11 a/n/ac	
Operating Frequency:	5180-5240MHz, 5745-5825MHz
Type of Modulation:	802.11n/a: BPSK, QPSK, 16QAM, 64QAM 802.11ac: BPSK, QPSK, 16QAM, 64QAM, 256QAM
Protocol:	802.11 a/n20/n40/ac20/ac40/ac80
Data Rate:	6/9/12/18/24/36/48/54 Mbps for 802.11a MCS0~MCS7 for 802.11n MCS0~MCS9 for 802.11ac (All data rates considered, only the Worst-cases reported)
Channel Separation	5 MHz
Antenna Type:	Integral Antenna
Number of Antenna:	2
Antenna Gain:	5.0 dBi Max (As detailed in Antenna spec)
Type of Device	Without Radar Detection
Note: WLAN 5GHz 802.11n/802.11ac. For directional gain: Array Gain = 10 log (NANT/NSS) dB. So, the Directional gain =GANT + 10 log (NANT) dBi (The worst-case directional gain will occur when NSS = 1).	

Table 3: RF Channel and Frequency of 5GHz Wi-Fi 802.11 a/n/ac

U-NII-1					
20MHz Bandwidth		40MHz Bandwidth		80MHz Bandwidth	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	38	5190	42	5210
40	5200	46	5230		
44	5220				
48	5240				

U-NII-3					
20MHz Bandwidth		40MHz Bandwidth		80MHz Bandwidth	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	151	5755	155	5775
153	5765	159	5795		
157	5785				
161	5805				
165	5825				

3.3 Independent Operation Modes

The basic operation modes are:

- A. On, Wi-Fi 802.11 a/n/ac wireless transmitting mode
 - 1. Low channel
 - 2. Middle channel
 - 3. High channel
- B. On, Normal operation with Wi-Fi connected.
- C. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

- | | |
|------------------------------|-------------------------|
| - Application Form | - User Manual |
| - ID Label and Location Info | - Operation Description |

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Radio Spectrum: The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All tests were performed according to the procedures in ANSI C63.10: 2013.

According to clause 3.1, all tests were performed on model FREEBOX-II in this report.

4.3 Special Accessories and Auxiliary Equipment

Table 4: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	Remark
Notebook	HP	HSN-Q36C	FCC
Router	Xiaomi	AX3000T	FCC
AC Adapter	Fuyuang	FY255300	FCC

4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

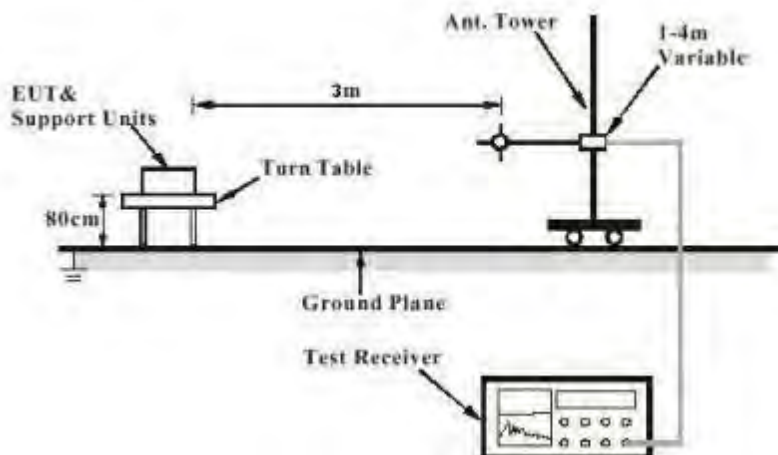


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

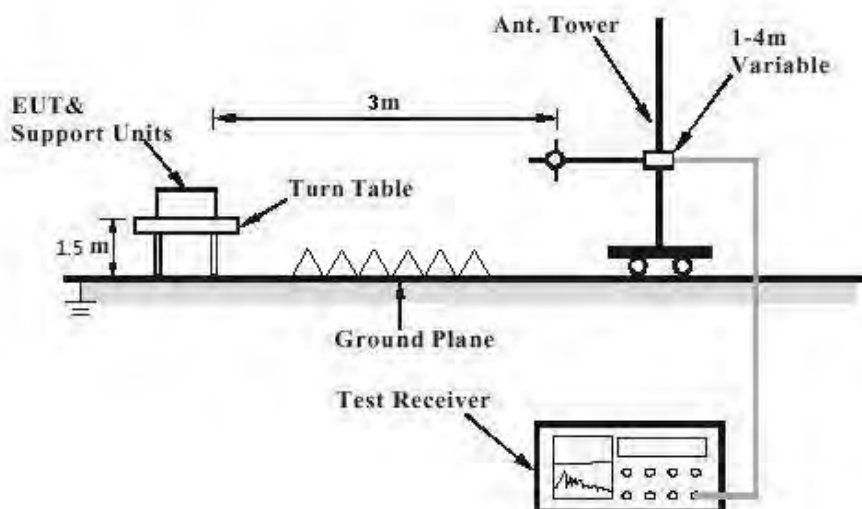


Diagram of Measurement Configuration for Mains Conduction Measurement

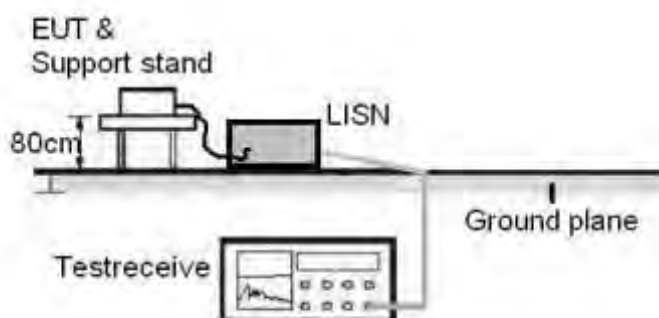
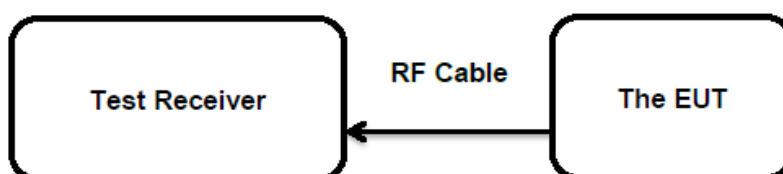


Diagram of Measurement Configuration for Conducted Transmitter Measurement



5 Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT: **Pass**

Test Specification

Test standard : FCC Part 15.203

The EUT have integral Antennas, the Maximum antenna gain of antenna is 5.0 dBi, and permanently attached, no consideration of replacement.

Therefore, the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

5.1.2 Maximum Conducted Output Power**RESULT:****Pass****Test Specification**

Test standard	: FCC Part 15.407(a)(1)&(2)&(4)
Basic standard	: ANSI C63.10: 2013
Limits	: FCC: <250mW (23.98dBm) (5150-5250MHz) <1W (30dBm) (5725-5850MHz)
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2024-04-08 to 2024-04-09
Input voltage	: DC 25.5V
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: 24.1 °C
Relative humidity	: 61 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix A & B.

*For the WLAN 5GHz 802.11n/802.11ac/802.11ax, the directional gain is 8.01dBi for MIMO mode, thus the power limit should be reduced by 2.01dB.

The Duty Cycle Factor is compensated in the tables.

Both SISO and MIMO tested, only the higher power mode MIMO reported.

Antenna gain(G): 5.0 dBi

e.i.r.p.=P(Average power)+ G (directional gain)

5.1.3 Conducted Power Spectral Density**RESULT:****Pass****Test Specification**

Test standard : FCC part 15.407(a)
Basic standard : ANSI C63.10: 2013
KDB 789033 D02 v01r03
Limits : FCC:
<11dBm/MHz (5150-5250MHz)
<30dBm/500KHz (5725-5850MHz)
Kind of test site : Shielded Room

Test Setup

Date of testing : 2024-04-08 to 2024-04-09
Input voltage : DC 25.5V
Operation mode : A
Test channel : Low / Middle / High
Ambient temperature : 24.1 °C
Relative humidity : 61 %
Atmospheric pressure : 101 kPa

For the measurement records, refer to the appendix A & B.

5.1.4 Frequency Stability**RESULT:****Pass****Test Specification**

Test standard : FCC Part 15.407(g)
Basic standard : ANSI C63.10: 2013
Limits : Within assigned bands
Kind of test site : Shielded Room

Test Setup

Date of testing : 2024-04-08 to 2024-04-09
Input voltage : DC 25.5V
Operation mode : A
Test channel : Low / Middle / High
Ambient temperature : 24.1 °C
Relative humidity : 61 %
Atmospheric pressure : 101 kPa

For the measurement records, refer to the appendix A & B..

5.1.5 26dB Bandwidth and 99% Bandwidth**RESULT:****Pass****Test Specification**

Test standard	: FCC Part 15.407(e)
Basic standard	: ANSI C63.10: 2013
Limits	: N/A
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2024-04-08 to 2024-04-09
Input voltage	: DC 25.5V
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: 24.1 °C
Relative humidity	: 61 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix A.

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Page 19 of 22**5.1.6 6dB Bandwidth****RESULT:****Pass****Test Specification**

Test standard : FCC Part 15.407(e)
Basic standard : ANSI C63.10: 2013
Limits : At least 500KHz (5725-5850MHz)
Kind of test site : Shielded Room

Test Setup

Date of testing : 2024-04-08 to 2024-04-09
Input voltage : DC 25.5V
Operation mode : A
Test channel : Low / Middle / High
Ambient temperature : 24.1 °C
Relative humidity : 61 %
Atmospheric pressure : 101 kPa

For the measurement records, refer to the appendix B..

5.1.7 Radiated Spurious Emission

RESULT:**Pass****Test Specification**

Test standard	: FCC Part 15.407(b) & FCC Part 15.205 & FCC Part 15.209
Basic standard	: ANSI C63.10: 2013 KDB 789033 D02 v01r03
Limits	: • 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 e.i.r.p. of -27 dBm/MHz. • 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 e.i.r.p. of -27 dBm/MHz. • 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 e.i.r.p. of -27 dBm/MHz. Emissions outside the band 5470-5600 MHz and 5650-5725 MHz shall not exceed -27 dBm/MHz e.i.r.p. • For transmitters operating in the 5.725-5.85 GHz band: 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.
Kind of test site	: 3m Semi-anechoic Chamber

Test Setup

Date of testing	: 2024-04-08 to 24024-04-18
Input voltage	: DC 25.5V
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: Refer to test result
Relative humidity	: Refer to test result
Atmospheric pressure	: 101 kPa

Remark:

Testing was carried out within frequency range 9kHz to the tenth harmonics. Only the worst-case spurious emissions configuration of each mode was reported.

For the measurement records, refer to the appendix A & B..

5.1.8 Conducted Emission on AC Mains**RESULT:****Pass****Test Specification**

Test standard	: FCC Part 15.207(a)
Basic standard	: ANSI C63.10: 2013
Frequency range	: 0.15 – 30MHz
Limits	: FCC Part 15.207(a) RSS-Gen Table 4
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2024-04-08 to 2024-04-09
Input voltage	: DC 25.5V via AC/DC Adapter
Operation mode	: B
Earthing	: Not connected
Ambient temperature	: 23.2 °C
Relative humidity	: 50.6 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix B.

6 Photographs of the Test Set-Up

For photographs of the test set-up, refer to the appendix C.

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Appendix A.1: Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	12.63	0.24	12.87	24	Pass
NVNT	a	5200	Ant1	12.75	0.24	12.99	24	Pass
NVNT	a	5240	Ant1	12.15	0.24	12.39	24	Pass
NVNT	n20	5180	Ant1	11.04	0.28	11.32	24	Pass
NVNT	n20	5200	Ant1	11.7	0.28	11.98	24	Pass
NVNT	n20	5240	Ant1	11.14	0.28	11.42	24	Pass
NVNT	n40	5190	Ant1	10.41	0.24	10.65	24	Pass
NVNT	n40	5230	Ant1	10.38	0.24	10.62	24	Pass
NVNT	ac20	5180	Ant1	11.13	0.28	11.41	24	Pass
NVNT	ac20	5200	Ant1	11.61	0.28	11.89	24	Pass
NVNT	ac20	5240	Ant1	11.03	0.28	11.31	24	Pass
NVNT	ac40	5190	Ant1	10.59	0.24	10.83	24	Pass
NVNT	ac40	5230	Ant1	10.3	0.23	10.53	24	Pass
NVNT	ac80	5210	Ant1	9.52	0.25	9.77	24	Pass

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant2	12.23	0.24	12.47	24	Pass
NVNT	a	5200	Ant2	12.12	0.24	12.36	24	Pass
NVNT	a	5240	Ant2	11	0.24	11.24	24	Pass
NVNT	n20	5180	Ant2	11.06	0.28	11.34	24	Pass
NVNT	n20	5200	Ant2	11.78	0.28	12.06	24	Pass
NVNT	n20	5240	Ant2	11.04	0.28	11.32	24	Pass
NVNT	n40	5190	Ant2	10.01	0.24	10.25	24	Pass
NVNT	n40	5230	Ant2	10.88	0.24	11.12	24	Pass
NVNT	ac20	5180	Ant2	11.64	0.28	11.92	24	Pass
NVNT	ac20	5200	Ant2	11.7	0.28	11.98	24	Pass
NVNT	ac20	5240	Ant2	11.11	0.28	11.39	24	Pass
NVNT	ac40	5190	Ant2	10.68	0.23	10.91	24	Pass
NVNT	ac40	5230	Ant2	10.83	0.24	11.07	24	Pass
NVNT	ac80	5210	Ant2	9.88	0.25	10.13	24	Pass

MIMO

Condition	Mode	Frequency (MHz)	Total Power (dBm)			Limit (dBm)	Verdict
			Ant1	Ant2	Ant1+Ant2		
NVNT	n20	5180	11.32	11.34	14.34	21.99	Pass
NVNT	n20	5200	11.98	12.06	15.03	21.99	Pass
NVNT	n20	5240	11.42	11.32	14.38	21.99	Pass
NVNT	n40	5190	10.65	10.25	13.46	21.99	Pass
NVNT	n40	5230	10.62	11.12	13.89	21.99	Pass
NVNT	ac20	5180	11.41	11.92	14.68	21.99	Pass
NVNT	ac20	5200	11.89	11.98	14.95	21.99	Pass
NVNT	ac20	5240	11.31	11.39	14.36	21.99	Pass
NVNT	ac40	5190	10.83	10.91	13.88	21.99	Pass
NVNT	ac40	5230	10.53	11.07	13.82	21.99	Pass
NVNT	ac80	5210	9.77	10.13	12.96	21.99	Pass

Appendix A.2: Maximum Power Spectral Density Level

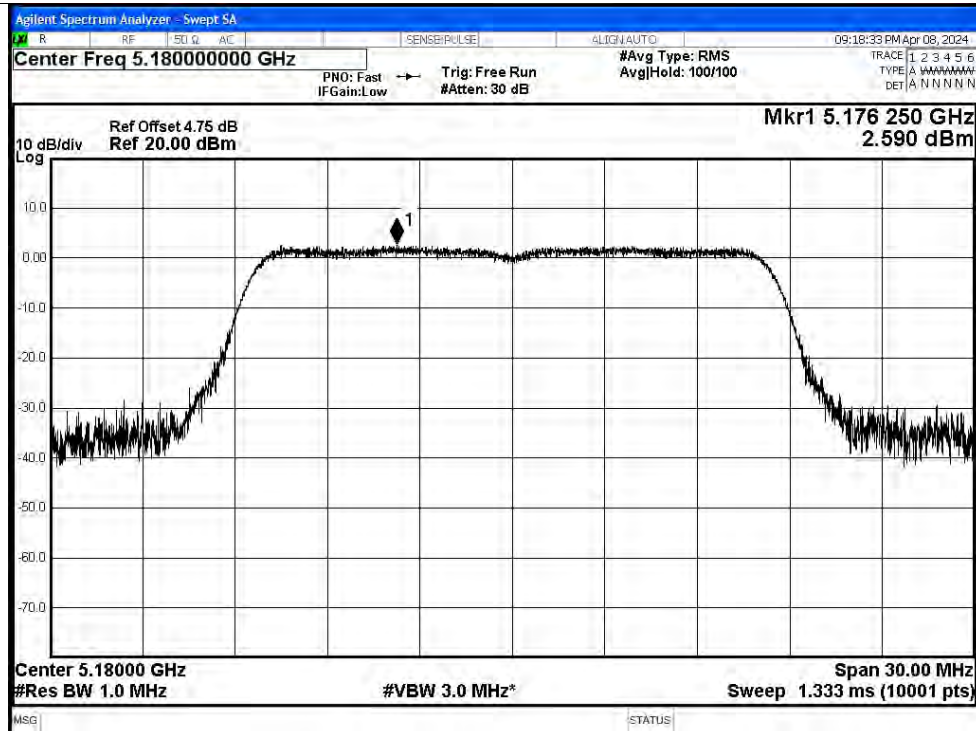
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	a	5180	Ant1	2.59	0.24	2.83	11	Pass
NVNT	a	5200	Ant1	2.19	0.24	2.43	11	Pass
NVNT	a	5240	Ant1	1.63	0.24	1.87	11	Pass
NVNT	n20	5180	Ant1	0.3	0.28	0.58	11	Pass
NVNT	n20	5200	Ant1	0.89	0.28	1.17	11	Pass
NVNT	n20	5240	Ant1	0.32	0.28	0.6	11	Pass
NVNT	n40	5190	Ant1	-2.94	0.24	-2.7	11	Pass
NVNT	n40	5230	Ant1	-3.13	0.24	-2.89	11	Pass
NVNT	ac20	5180	Ant1	1.17	0.28	1.45	11	Pass
NVNT	ac20	5200	Ant1	0.87	0.28	1.15	11	Pass
NVNT	ac20	5240	Ant1	0.15	0.28	0.43	11	Pass
NVNT	ac40	5190	Ant1	-3.18	0.24	-2.94	11	Pass
NVNT	ac40	5230	Ant1	-3.01	0.23	-2.78	11	Pass
NVNT	ac80	5210	Ant1	-6.74	0.25	-6.49	11	Pass

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	a	5180	Ant2	2.03	0.24	2.27	11	Pass
NVNT	a	5200	Ant2	1.79	0.24	2.03	11	Pass
NVNT	a	5240	Ant2	0.62	0.24	0.86	11	Pass
NVNT	n20	5180	Ant2	0.6	0.28	0.88	11	Pass
NVNT	n20	5200	Ant2	1.18	0.28	1.46	11	Pass
NVNT	n20	5240	Ant2	0.05	0.28	0.33	11	Pass
NVNT	n40	5190	Ant2	-3.36	0.24	-3.12	11	Pass
NVNT	n40	5230	Ant2	-2.79	0.24	-2.55	11	Pass
NVNT	ac20	5180	Ant2	1.25	0.28	1.53	11	Pass
NVNT	ac20	5200	Ant2	0.85	0.28	1.13	11	Pass
NVNT	ac20	5240	Ant2	0.34	0.28	0.62	11	Pass
NVNT	ac40	5190	Ant2	-2.65	0.23	-2.42	11	Pass
NVNT	ac40	5230	Ant2	-2.93	0.24	-2.69	11	Pass
NVNT	ac80	5210	Ant2	-6.07	0.25	-5.82	11	Pass

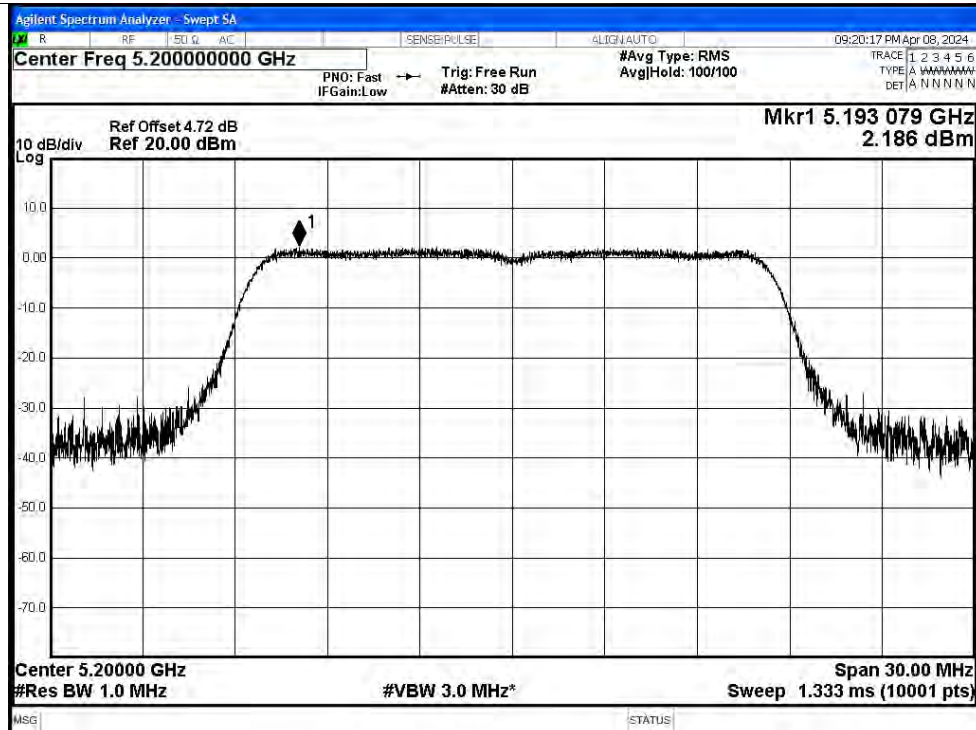
MIMO

Condition	Mode	Frequency (MHz)	Total PSD (dBm/MHz)			Limit (dBm/MHz)	Verdict
			Ant1	Ant2	Ant1+Ant2		
NVNT	n20	5180	0.58	0.88	3.74	8.99	Pass
NVNT	n20	5200	1.17	1.46	4.33	8.99	Pass
NVNT	n20	5240	0.6	0.33	3.48	8.99	Pass
NVNT	n40	5190	-2.7	-3.12	0.11	8.99	Pass
NVNT	n40	5230	-2.89	-2.55	0.29	8.99	Pass
NVNT	ac20	5180	1.45	1.53	4.50	8.99	Pass
NVNT	ac20	5200	1.15	1.13	4.15	8.99	Pass
NVNT	ac20	5240	0.43	0.62	3.54	8.99	Pass
NVNT	ac40	5190	-2.94	-2.42	0.34	8.99	Pass
NVNT	ac40	5230	-2.78	-2.69	0.28	8.99	Pass
NVNT	ac80	5210	-6.49	-5.82	-3.13	8.99	Pass

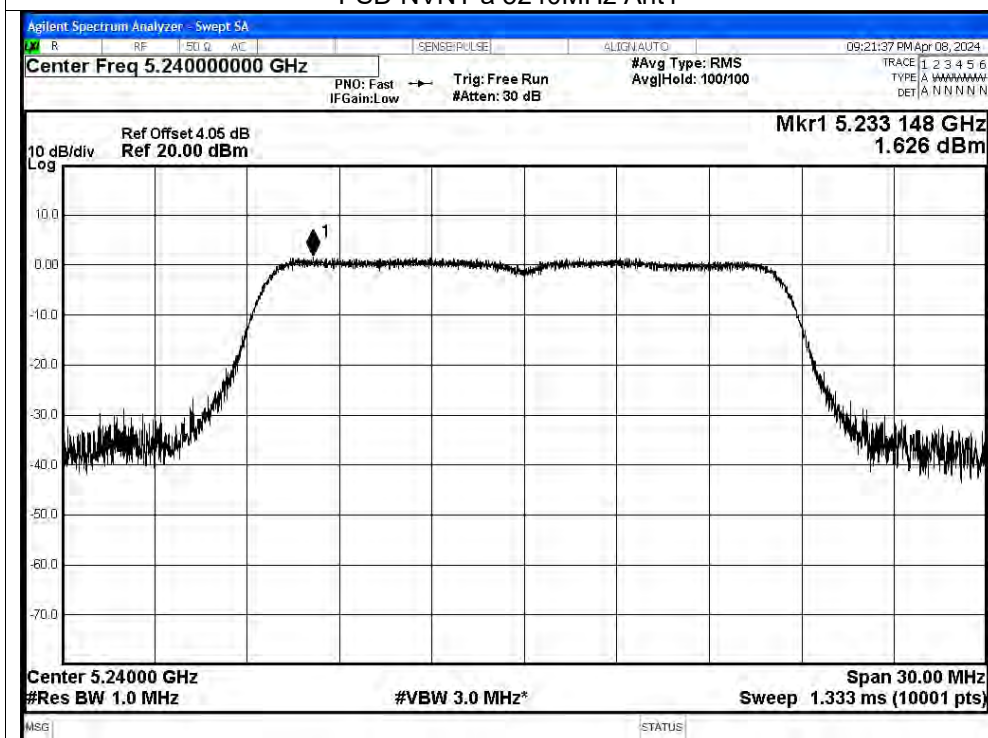
Test Graphs
PSD NVNT a 5180MHz Ant1



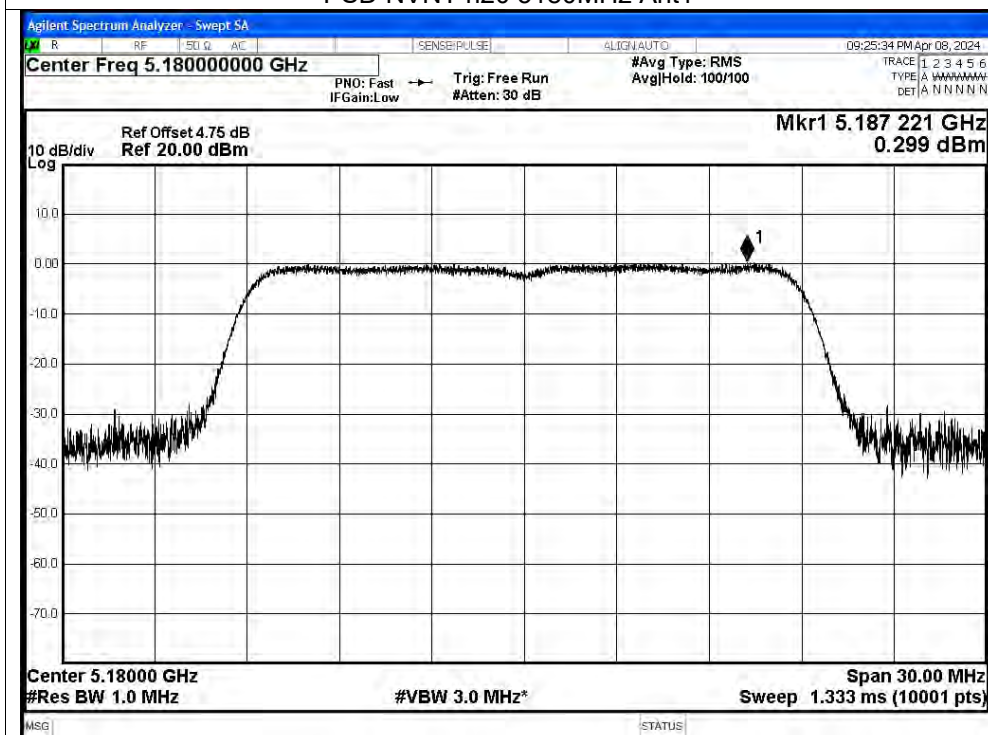
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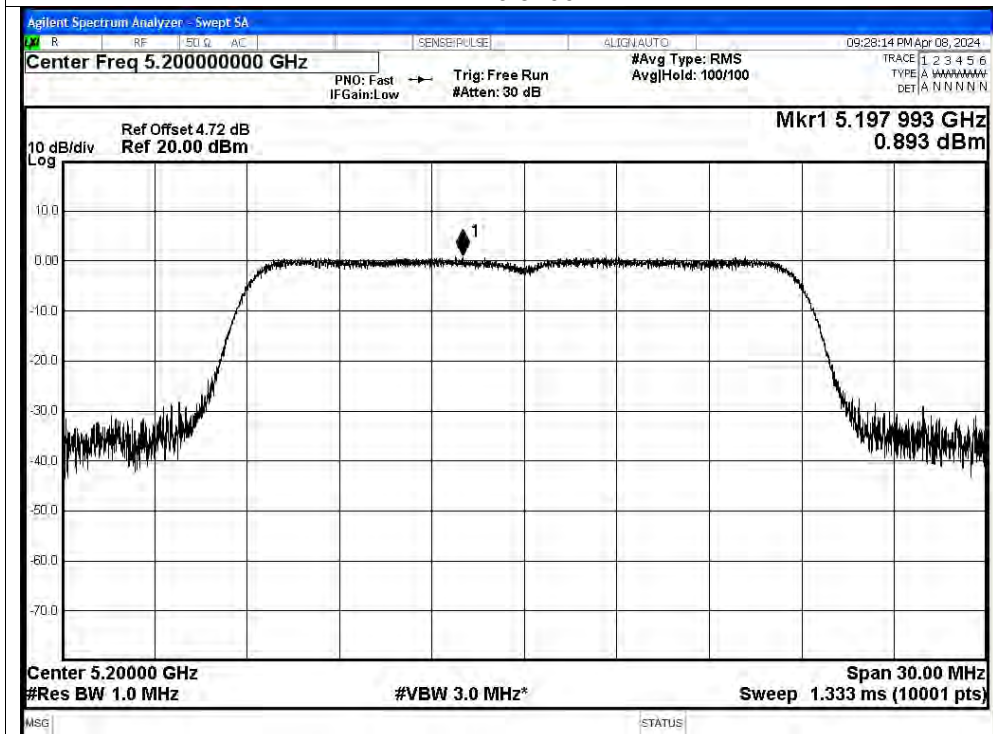
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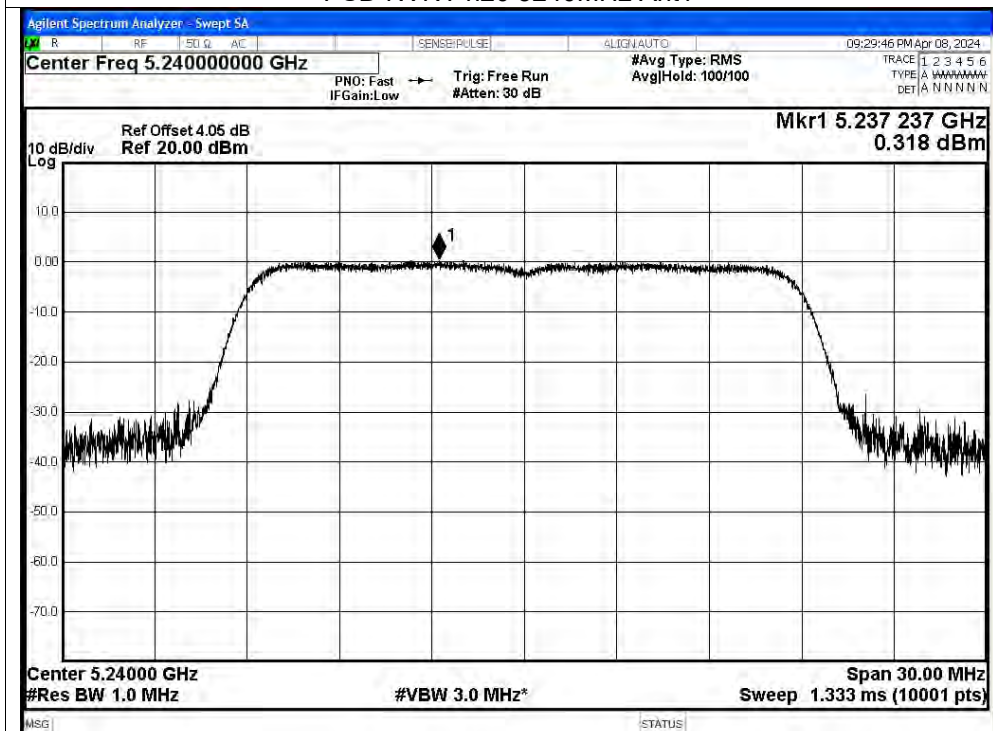
PSD NVNT n20 5180MHz Ant1



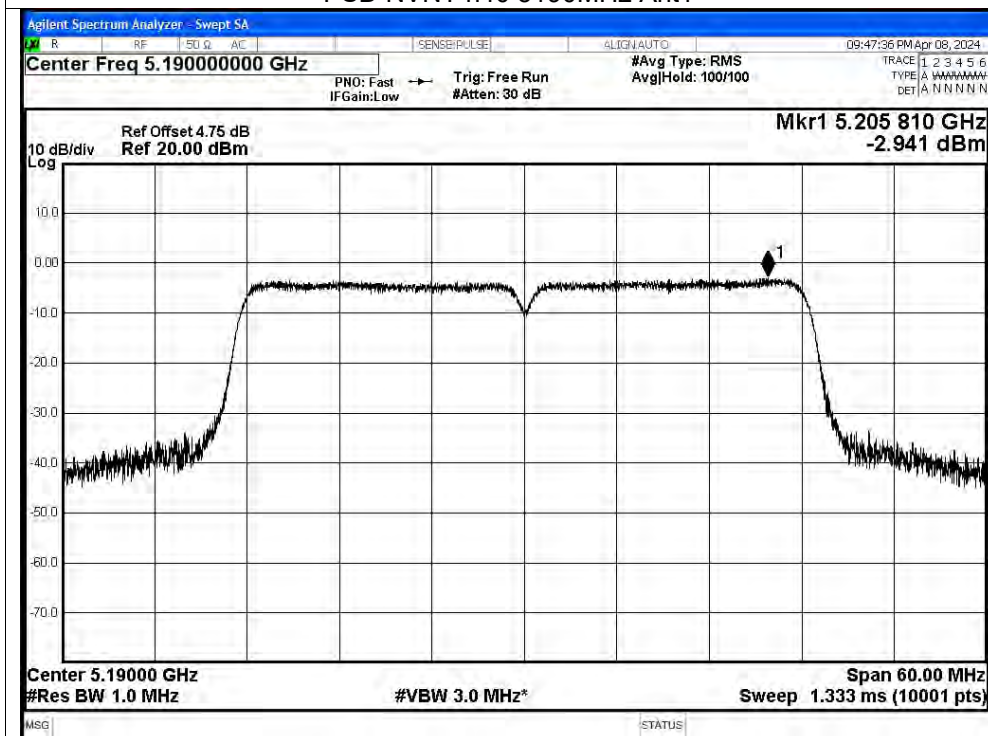
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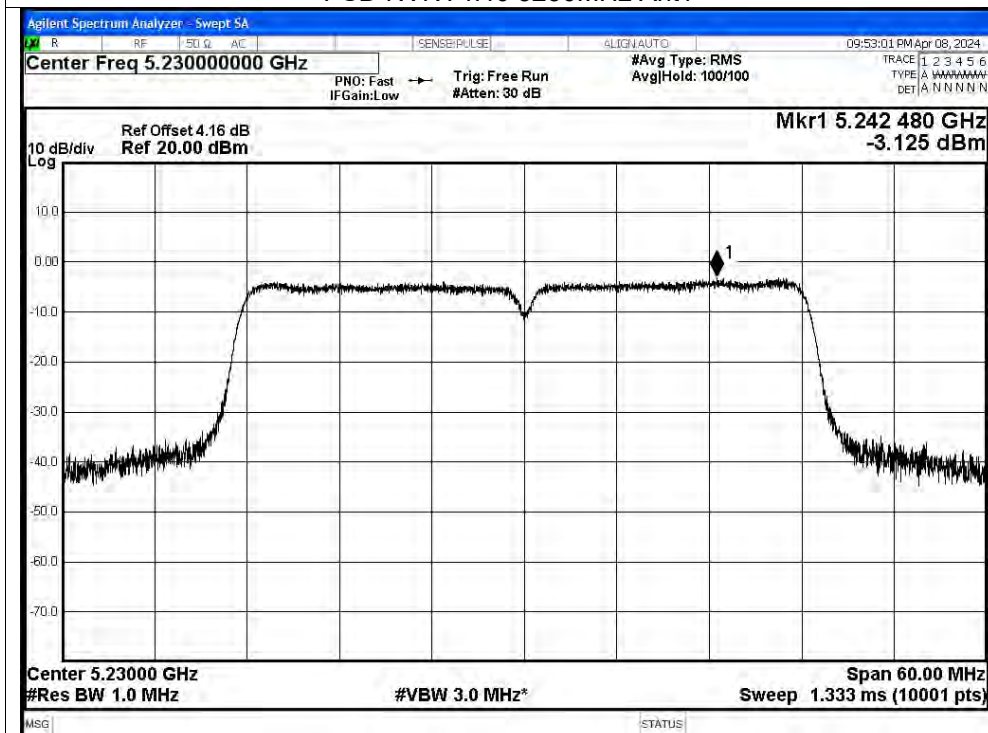
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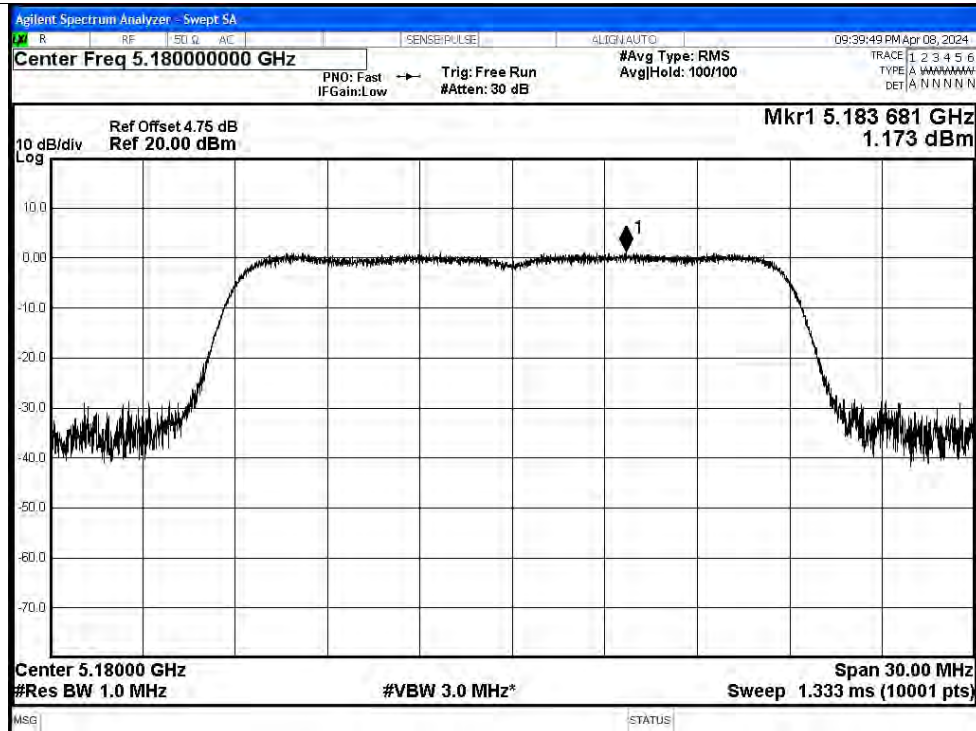
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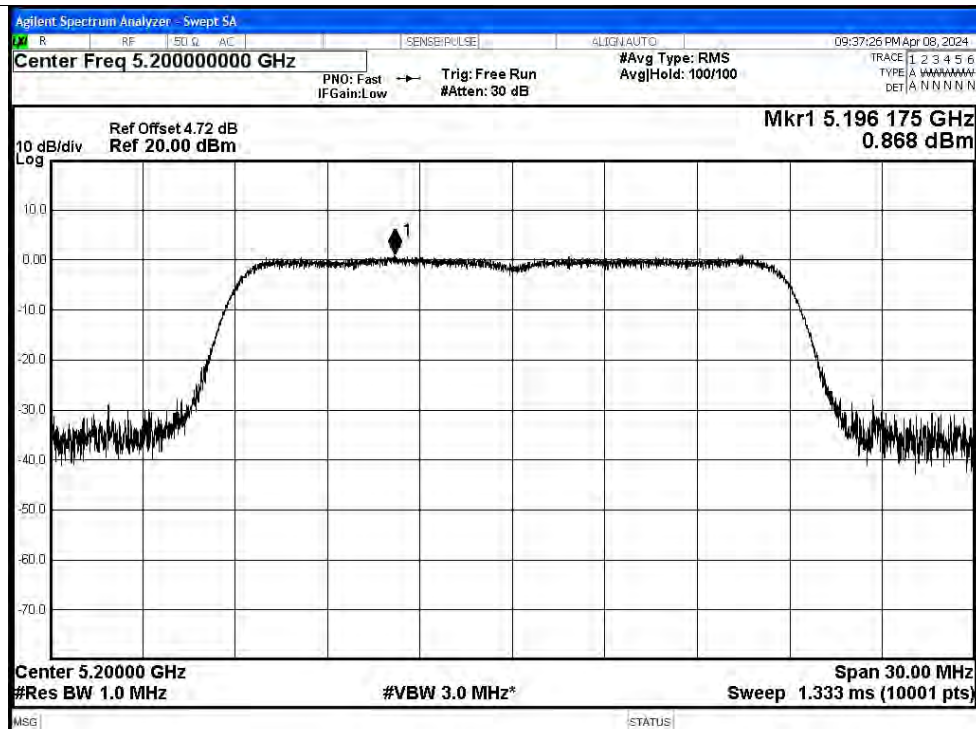
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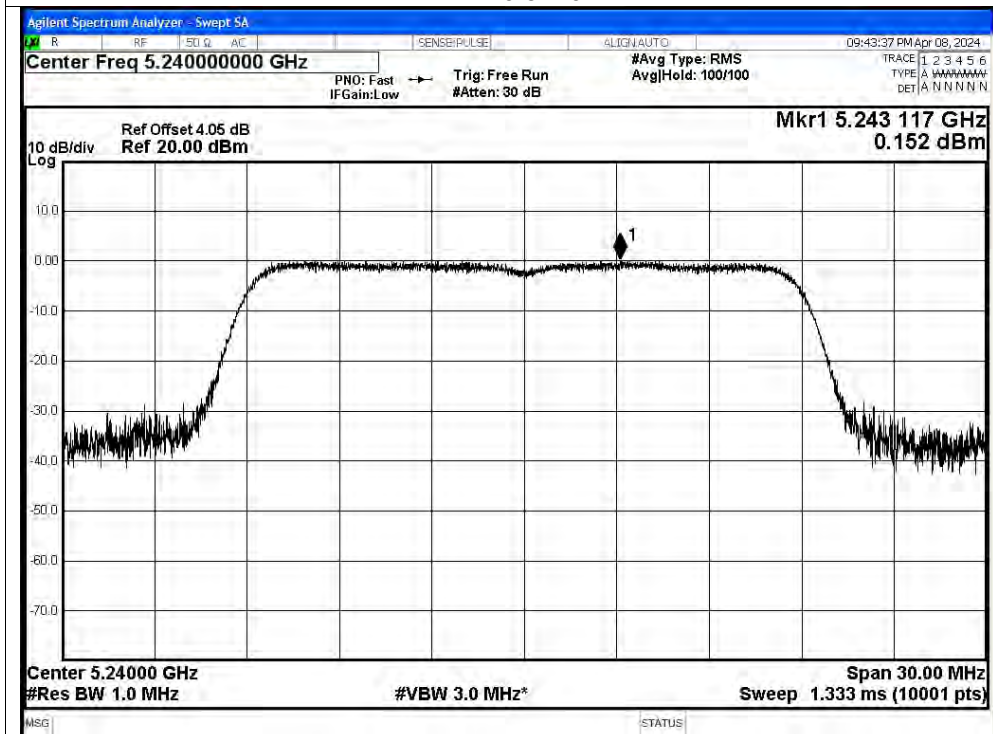
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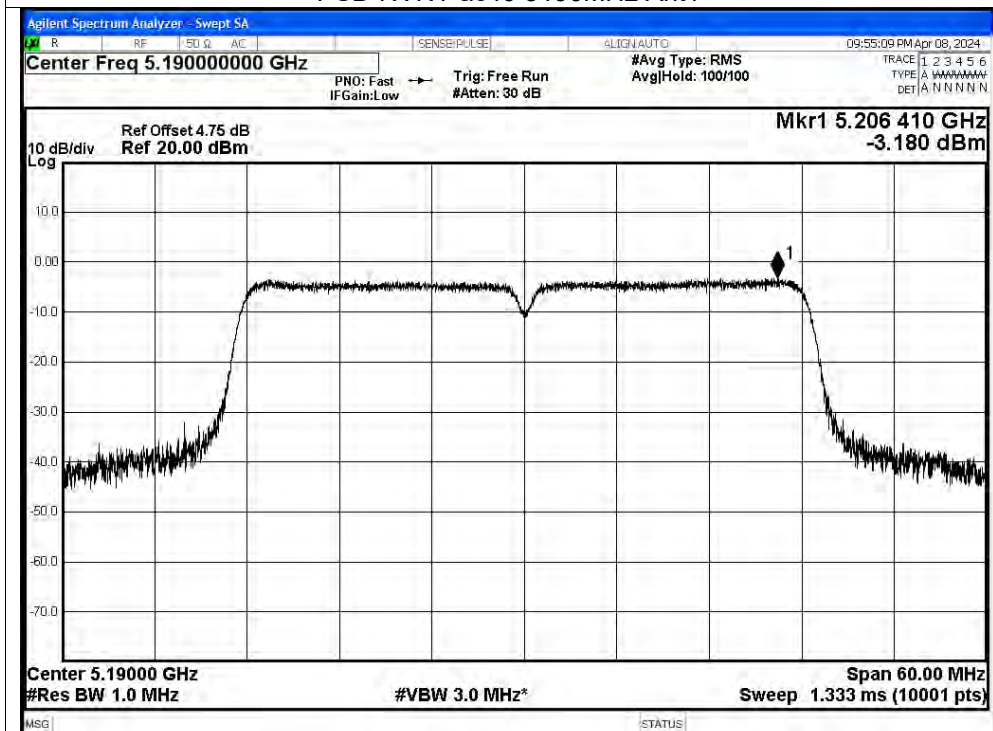
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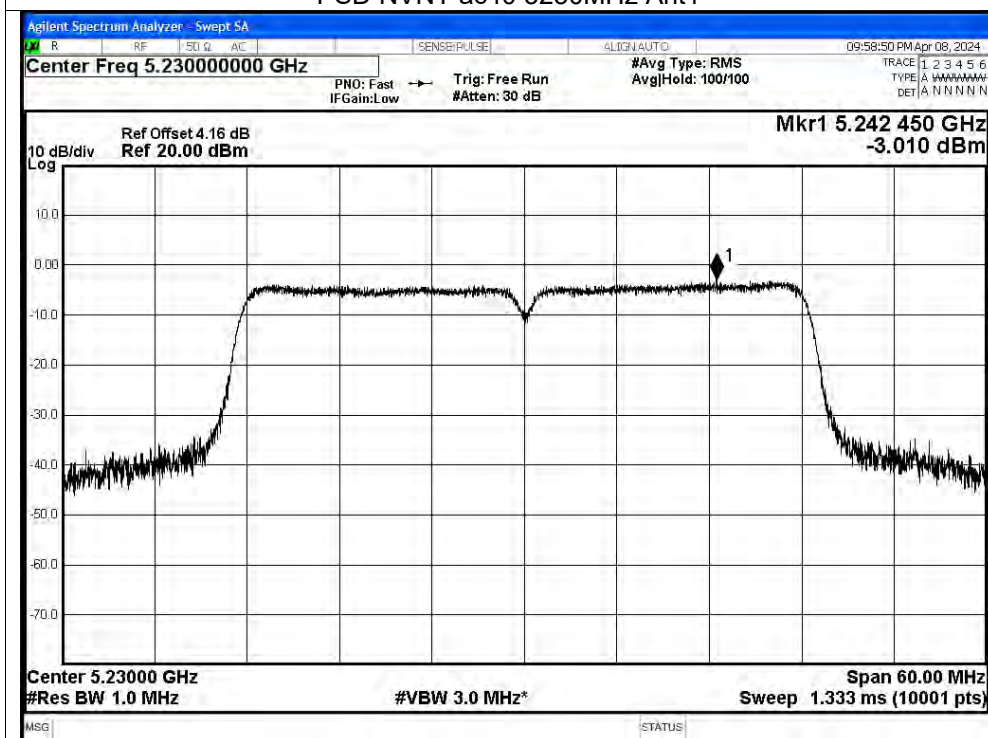
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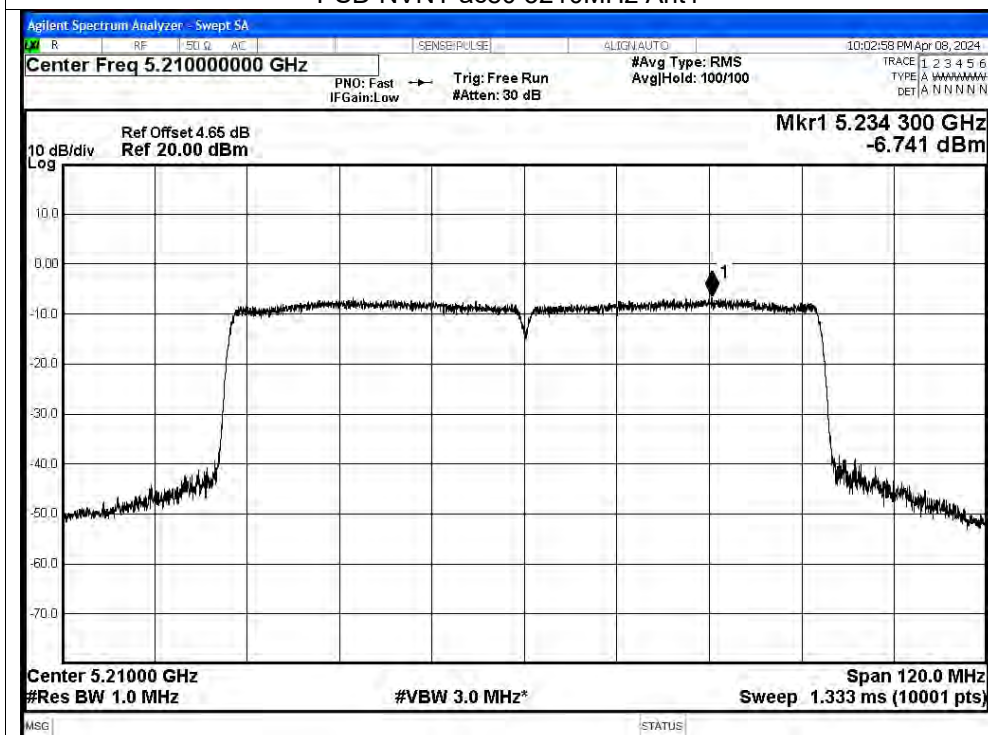
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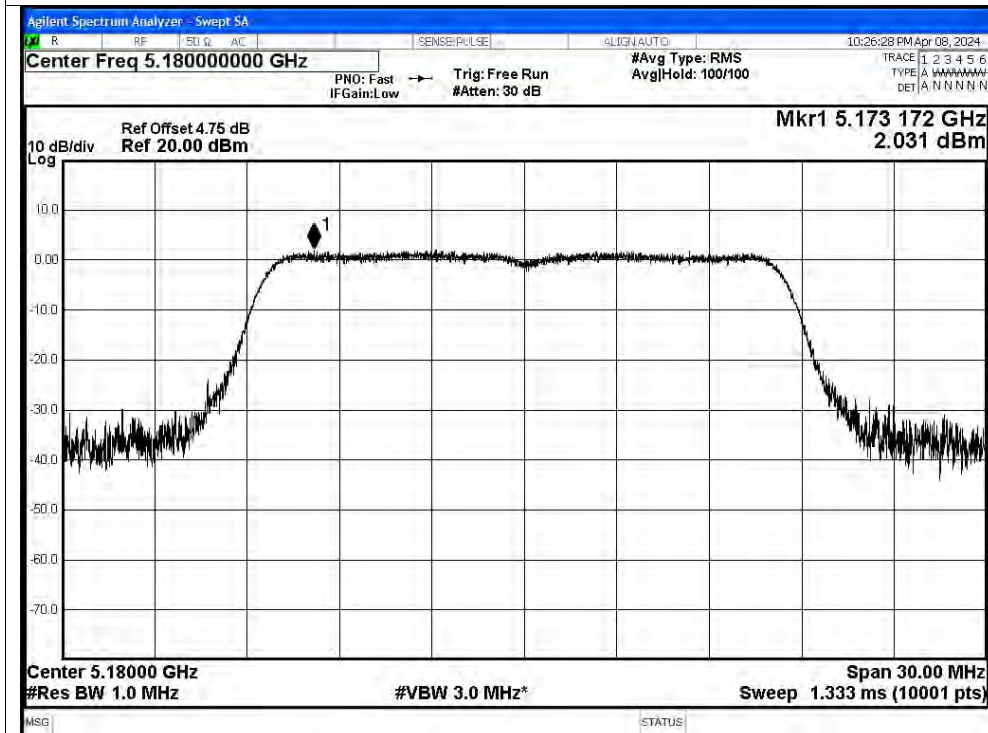
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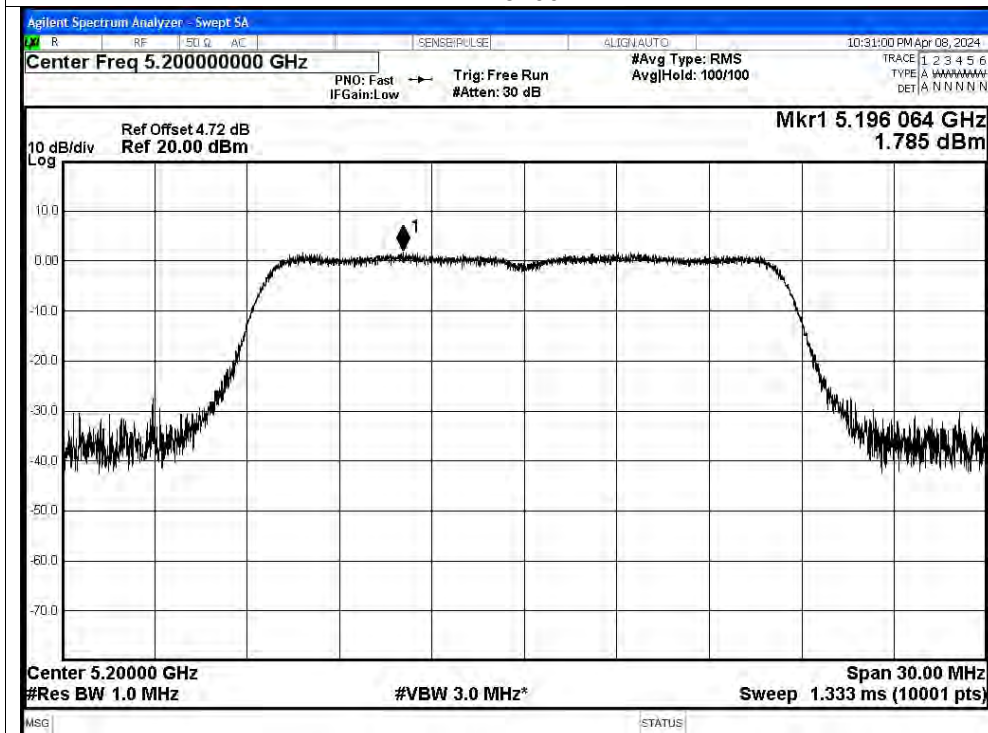
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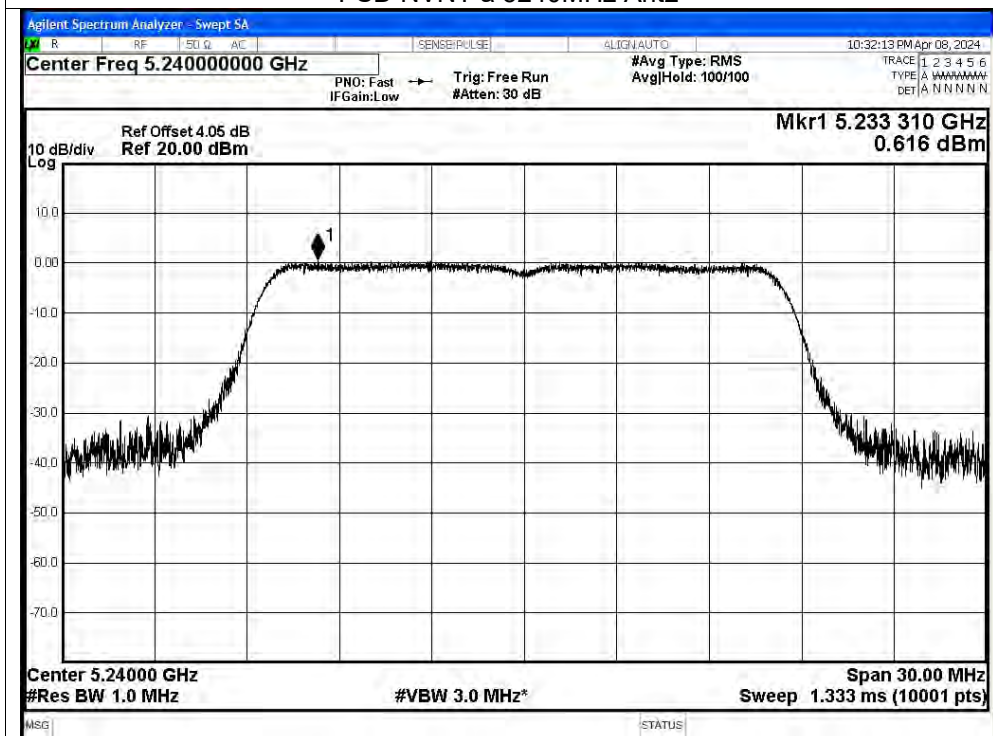
Test Graphs
PSD NVNT a 5180MHz Ant2



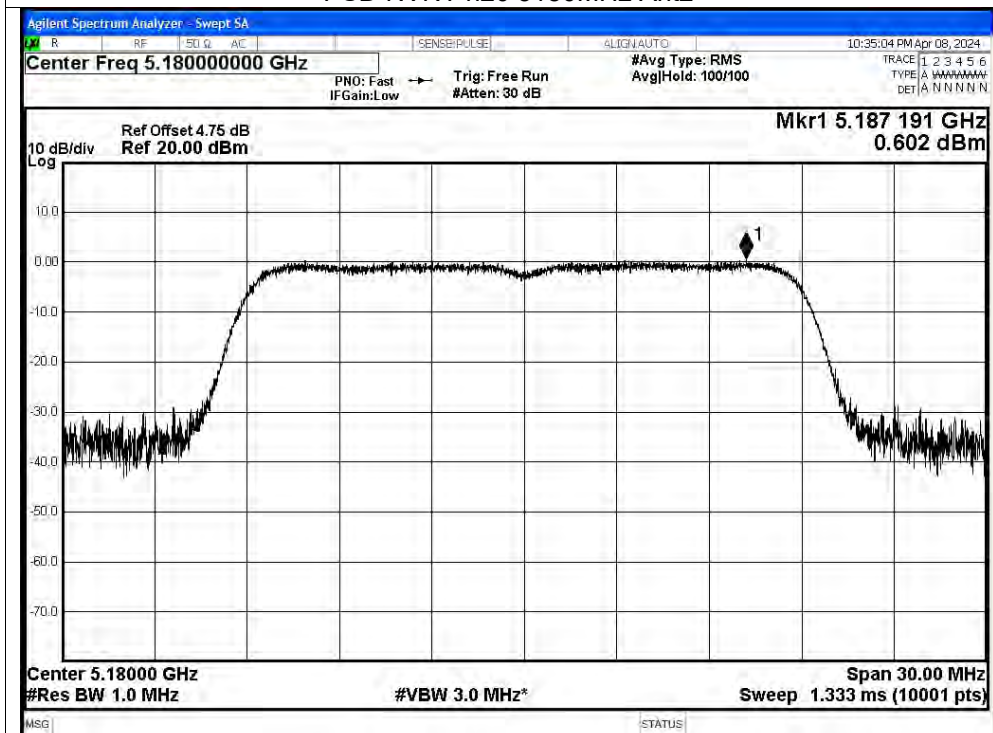
PSD NVNT a 5200MHz Ant2



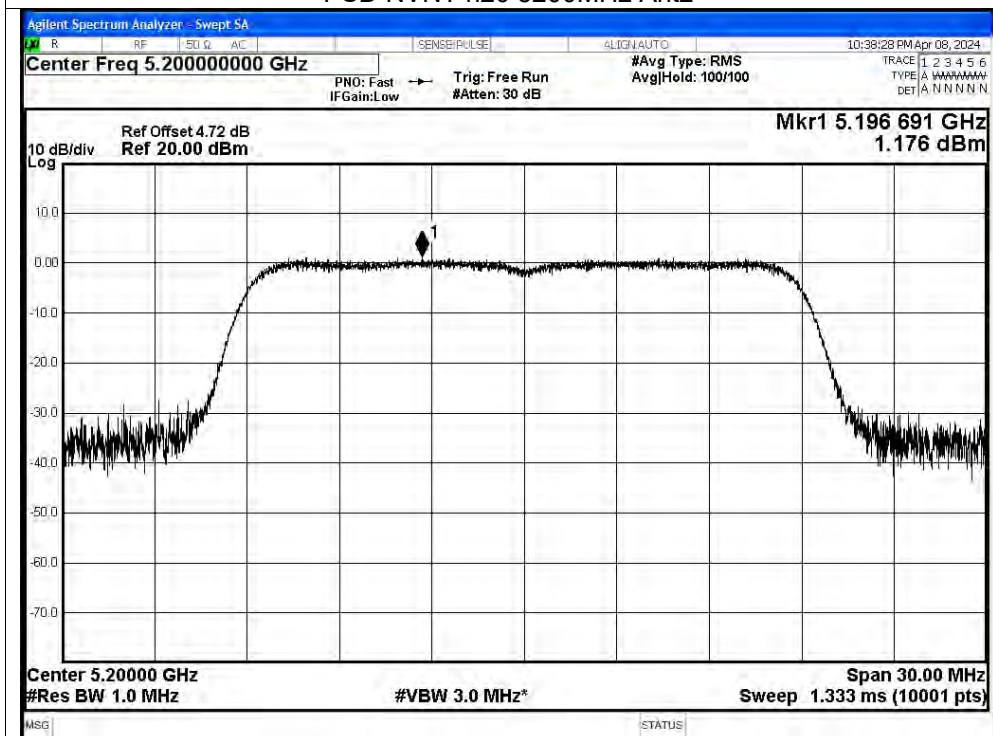
PSD NVNT a 5240MHz Ant2



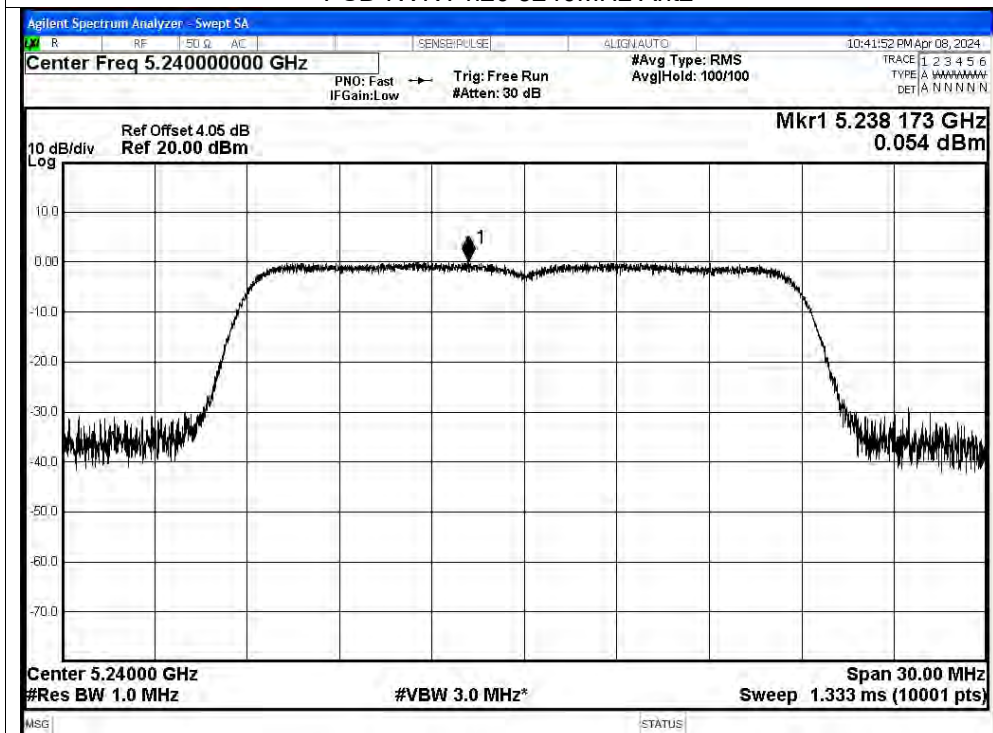
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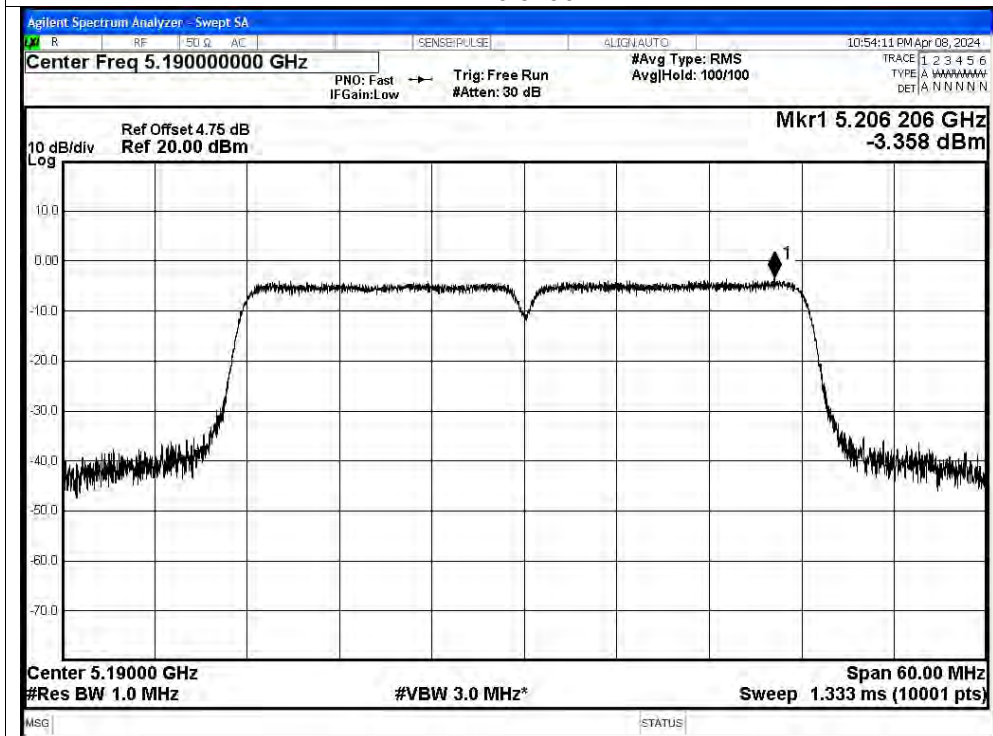
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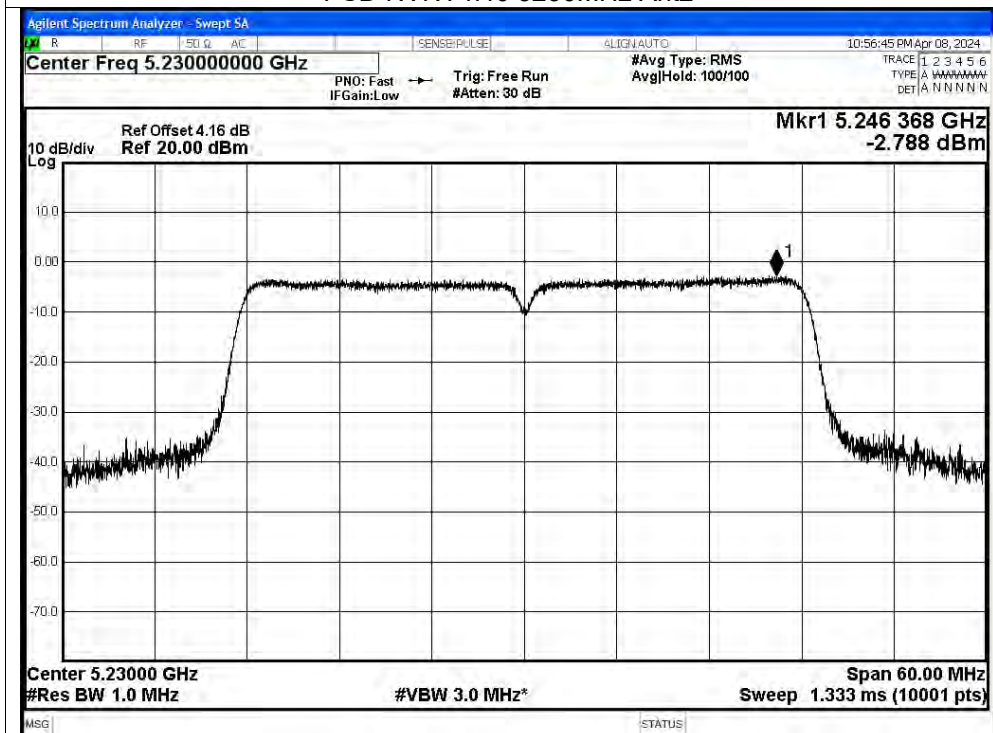
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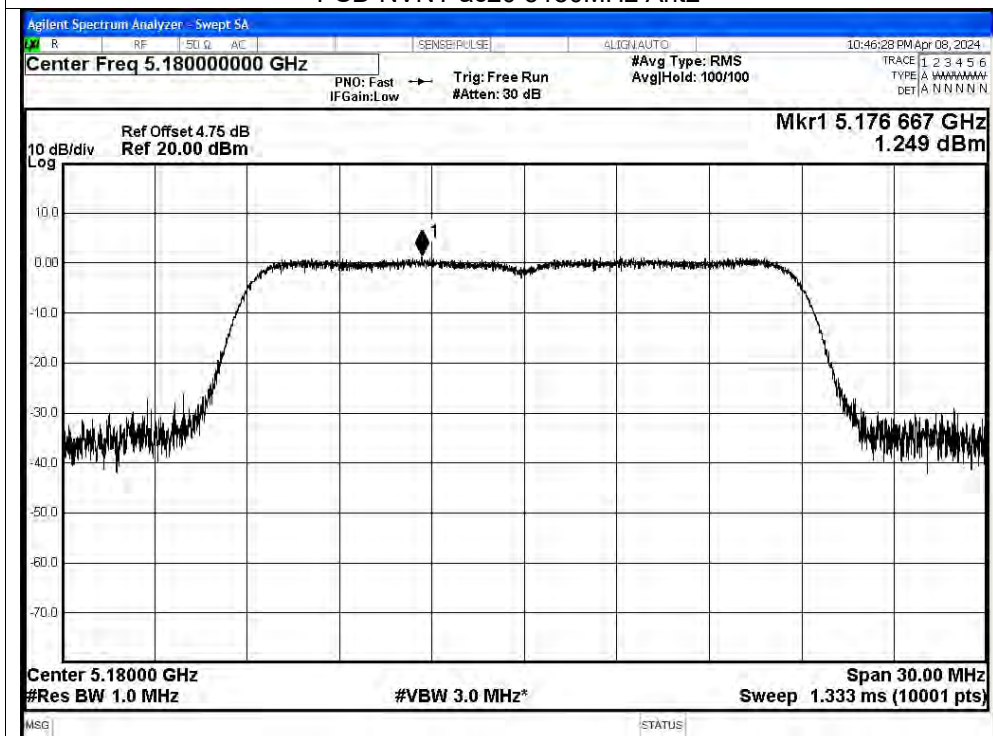
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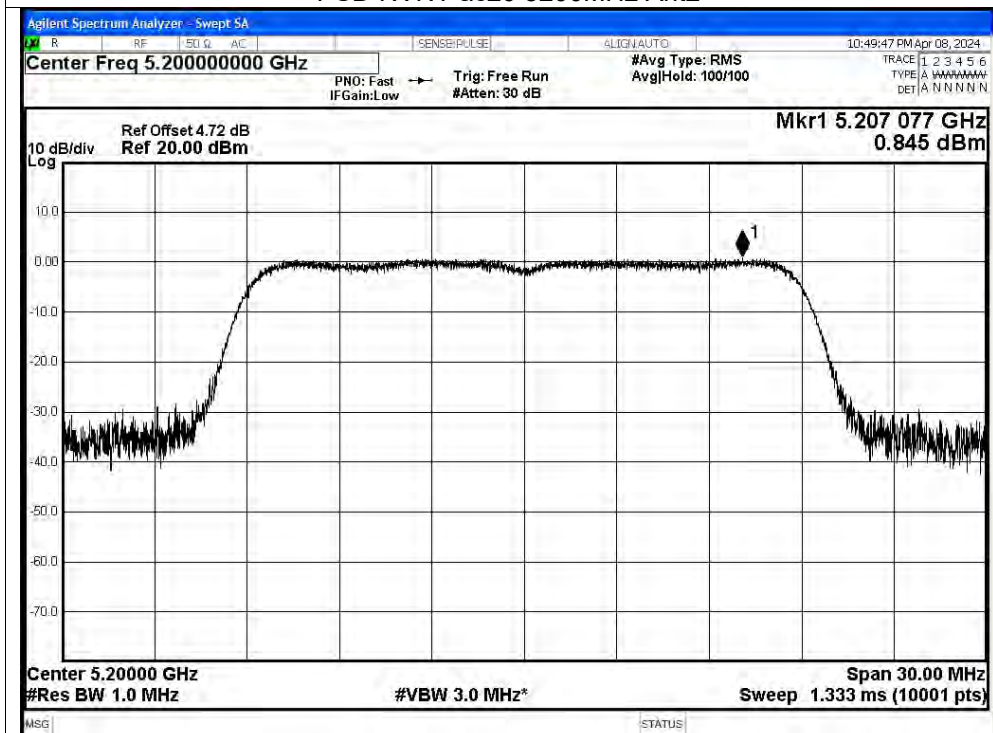
PSD NVNT n40 5230MHz Ant2



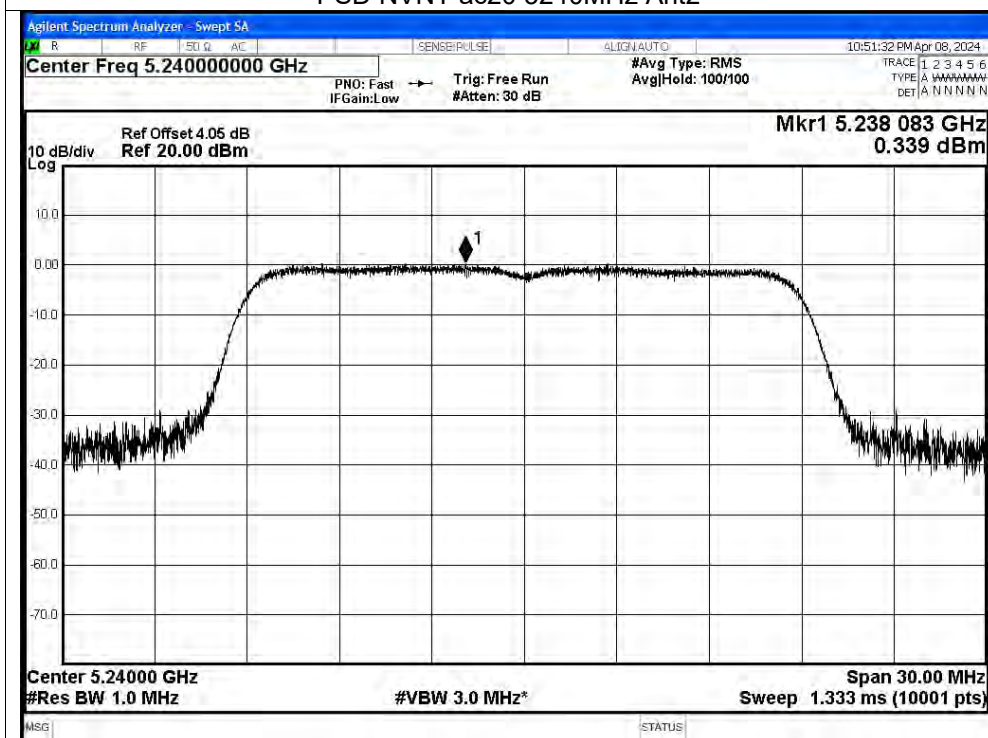
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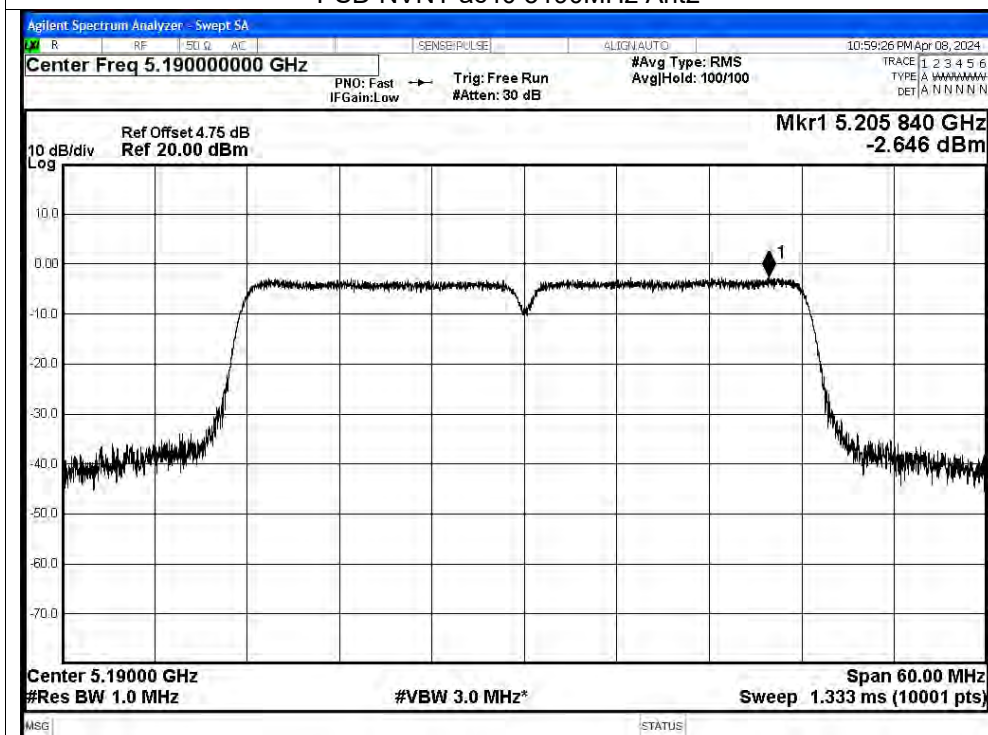
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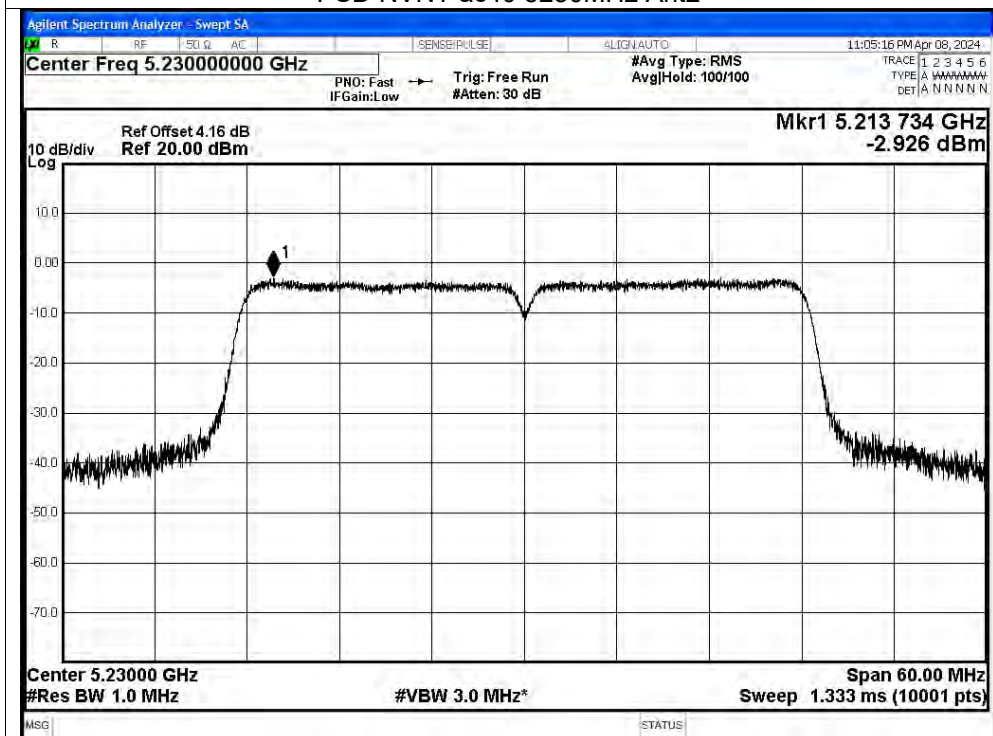
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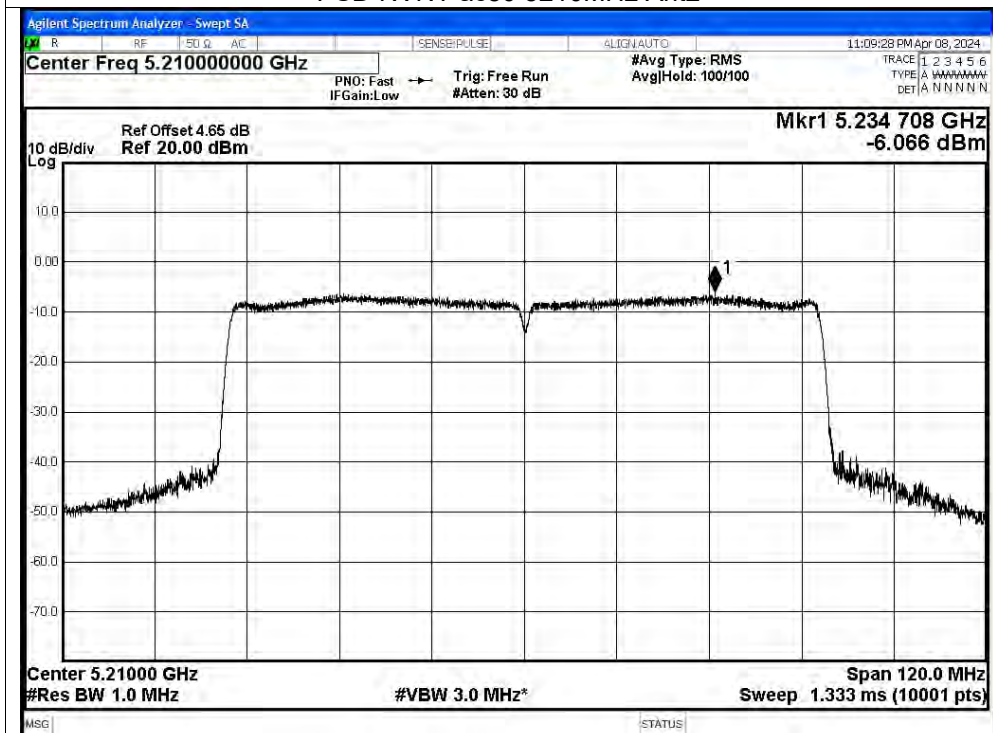
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PSD NVNT ac40 5230MHz Ant2



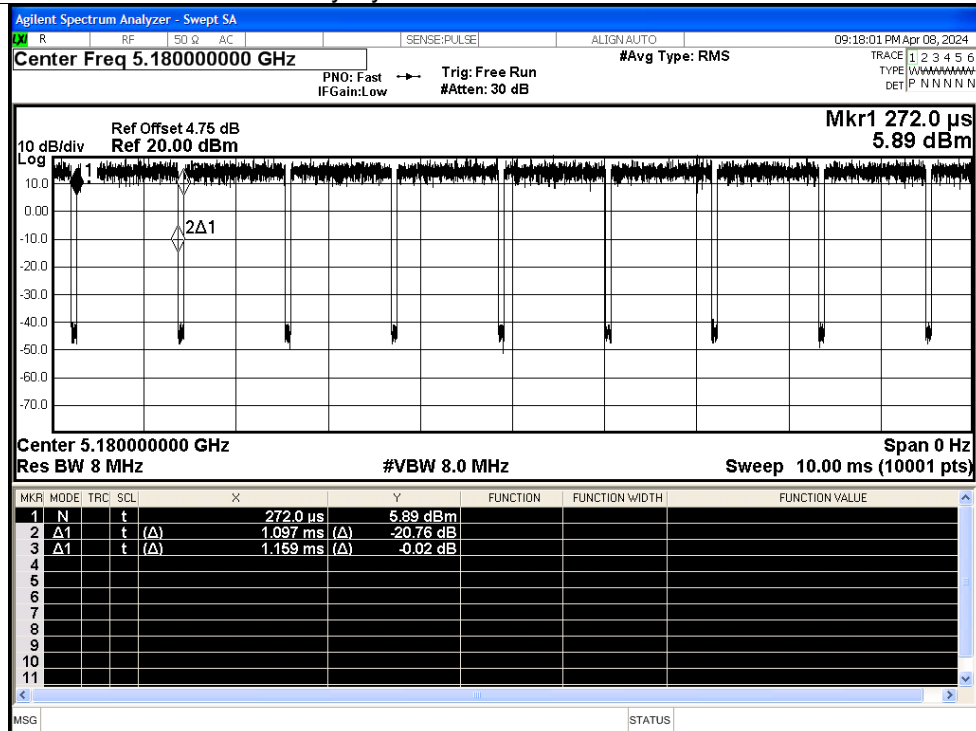
PSD NVNT ac80 5210MHz Ant2



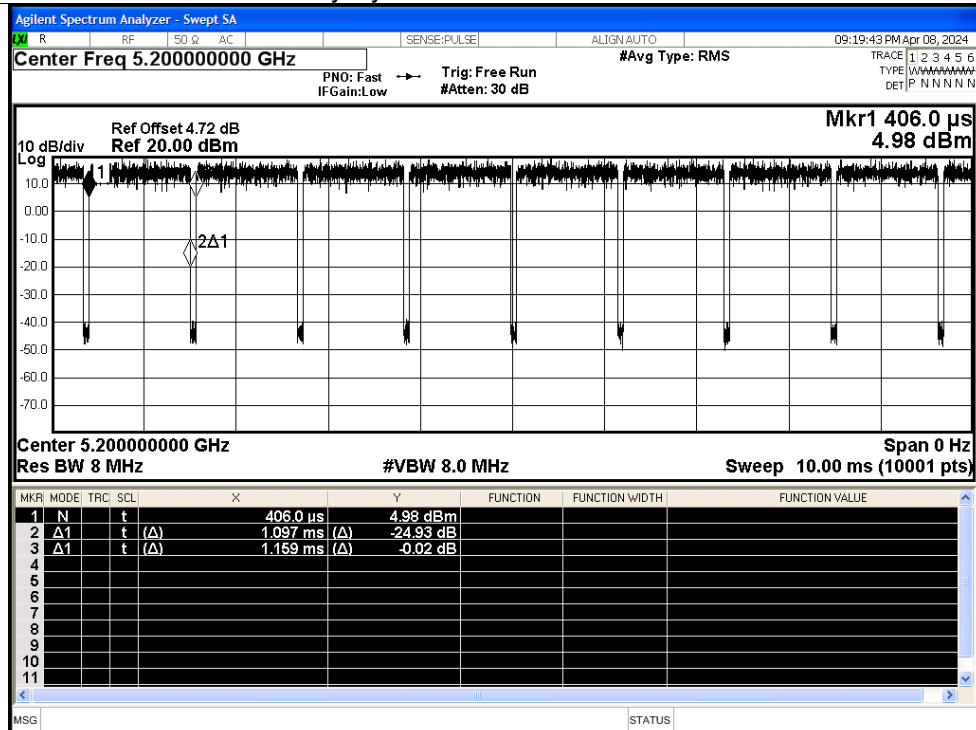
Appendix A.3: Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	94.65	0.24	0.91
NVNT	a	5200	Ant1	94.65	0.24	0.91
NVNT	a	5240	Ant1	94.56	0.24	0.91
NVNT	n20	5180	Ant1	93.77	0.28	1.07
NVNT	n20	5200	Ant1	93.77	0.28	1.07
NVNT	n20	5240	Ant1	93.67	0.28	1.07
NVNT	n40	5190	Ant1	94.71	0.24	0.9
NVNT	n40	5230	Ant1	94.71	0.24	0.9
NVNT	ac20	5180	Ant1	93.83	0.28	1.06
NVNT	ac20	5200	Ant1	93.72	0.28	1.06
NVNT	ac20	5240	Ant1	93.72	0.28	1.06
NVNT	ac40	5190	Ant1	94.72	0.24	0.9
NVNT	ac40	5230	Ant1	94.81	0.23	0.9
NVNT	ac80	5210	Ant1	94.41	0.25	0.97

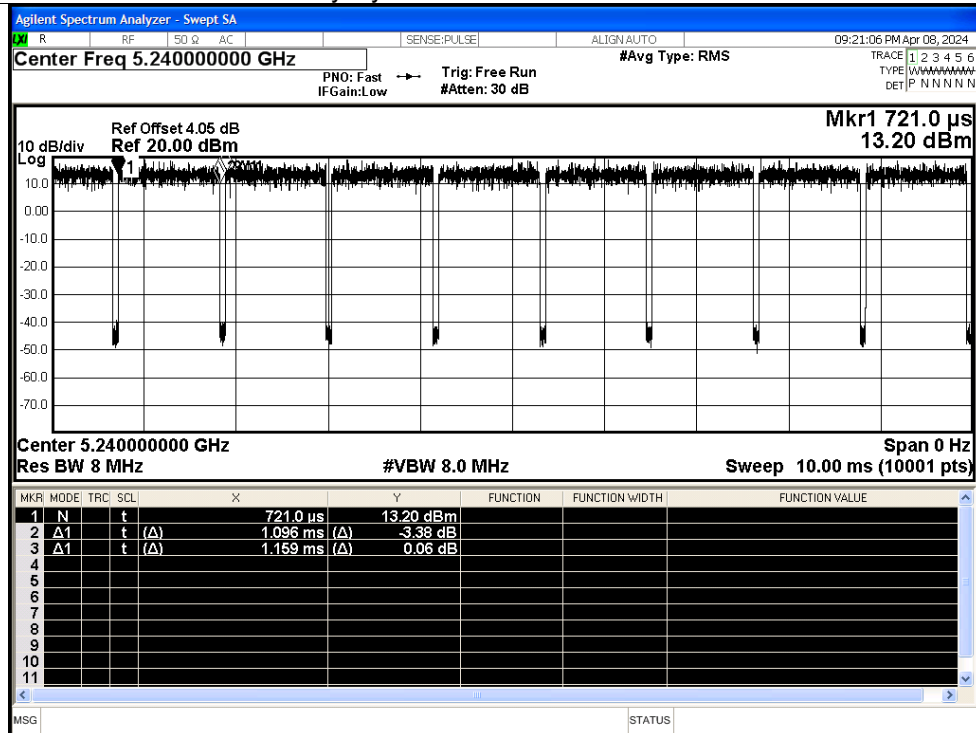
Test Graphs
Duty Cycle NVNT a 5180MHz Ant1



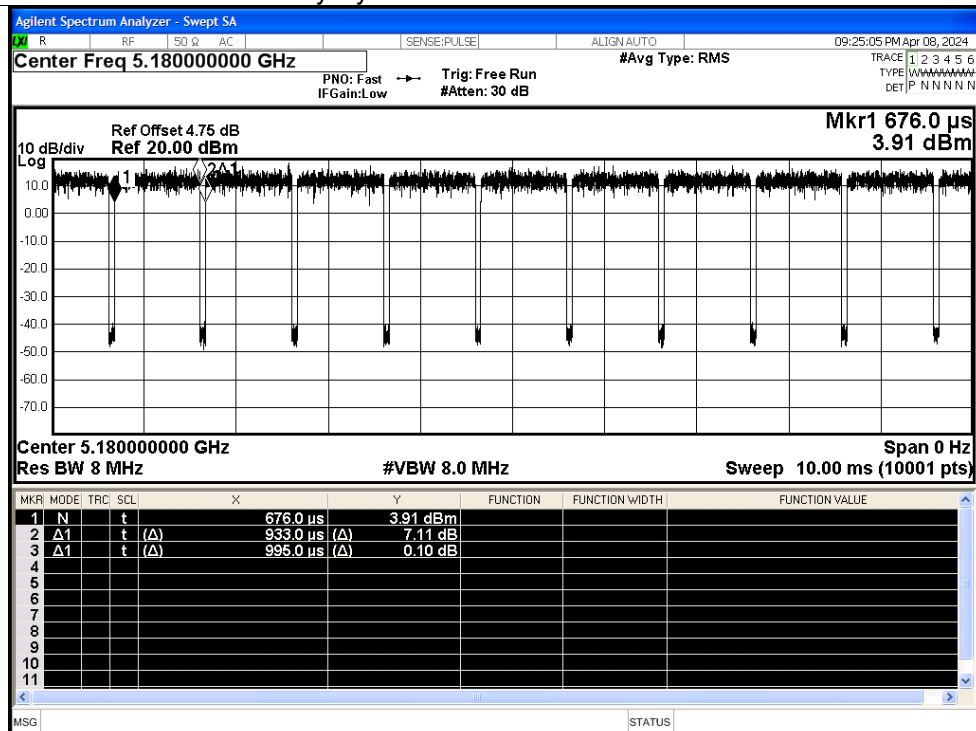
Duty Cycle NVNT a 5200MHz Ant1

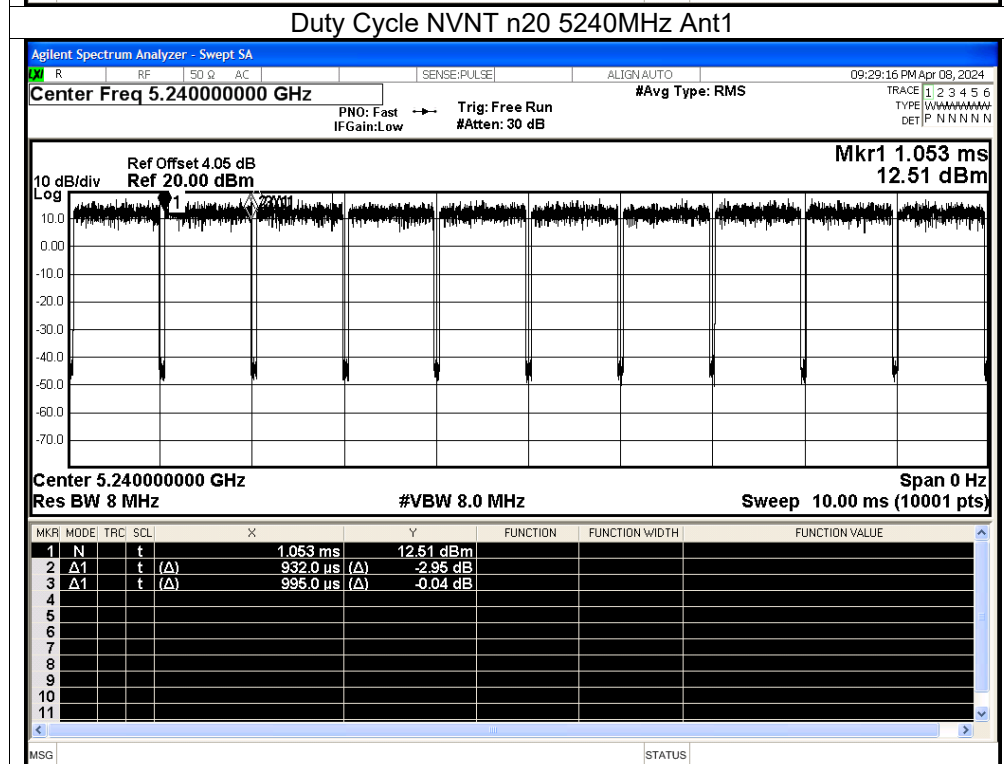
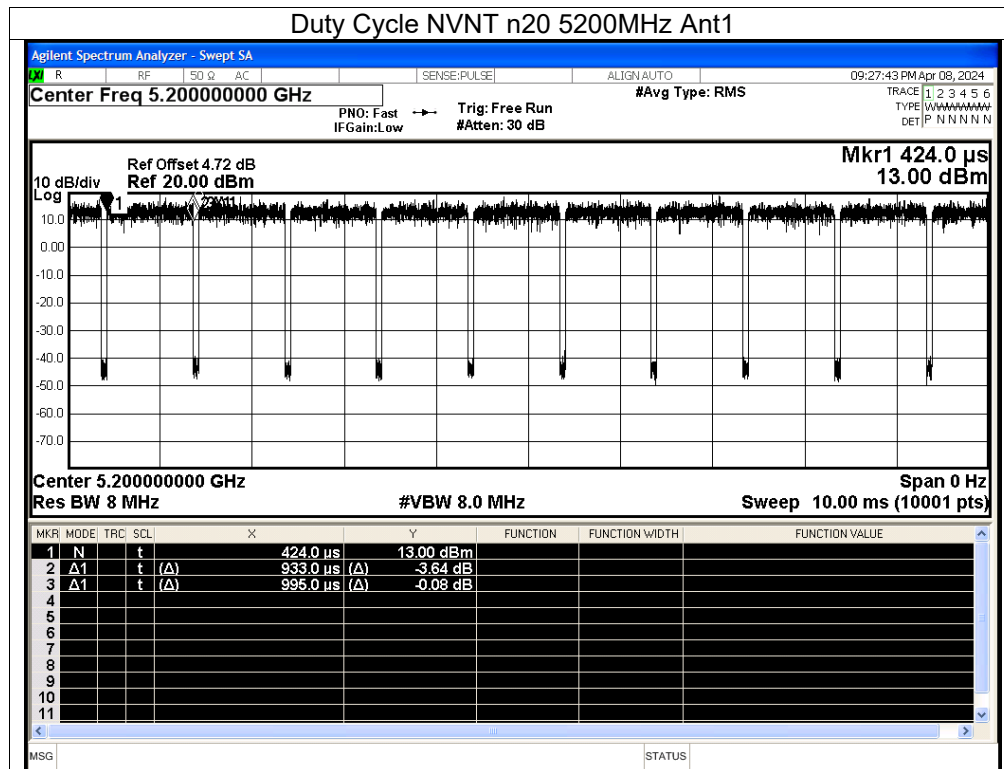


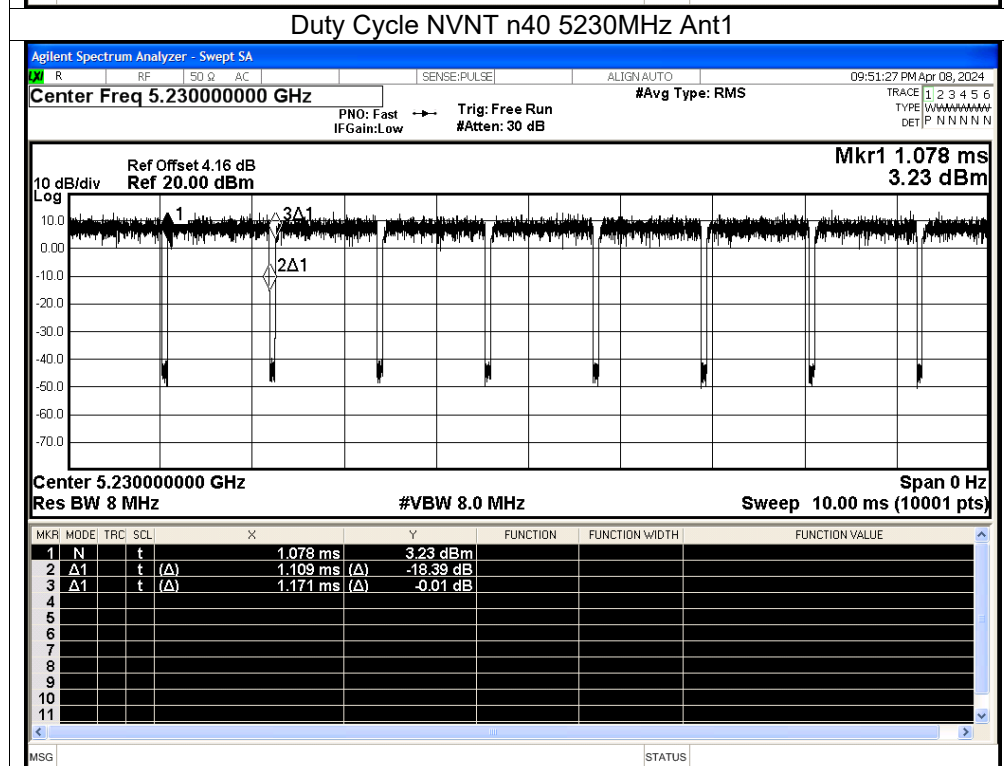
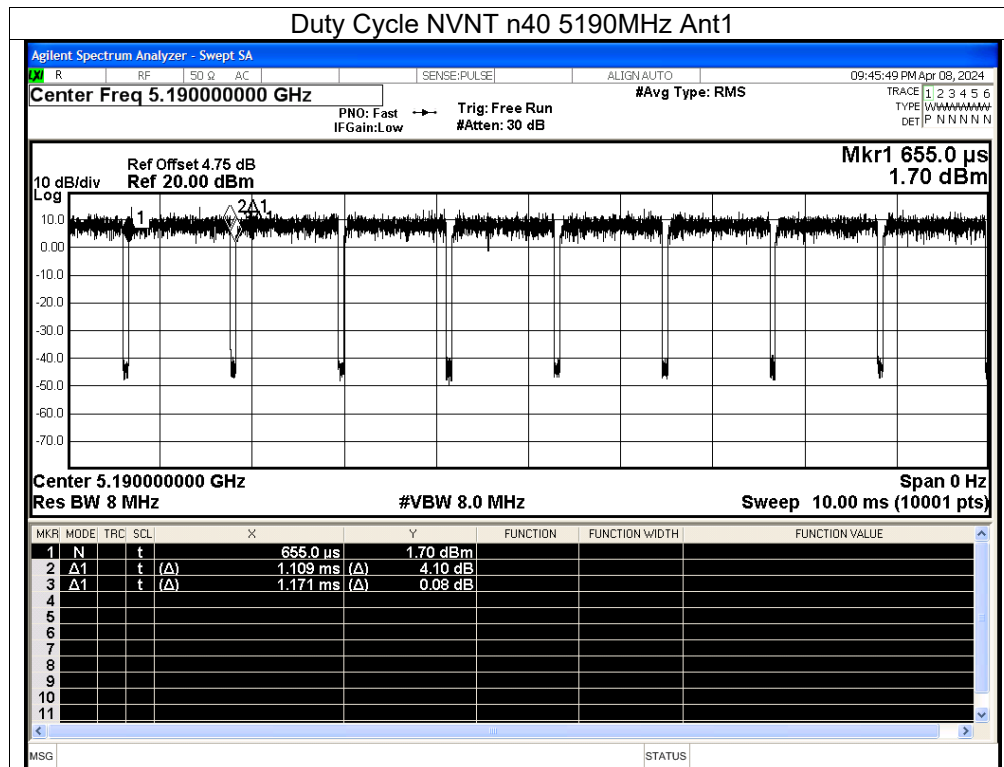
Duty Cycle NVNT a 5240MHz Ant1



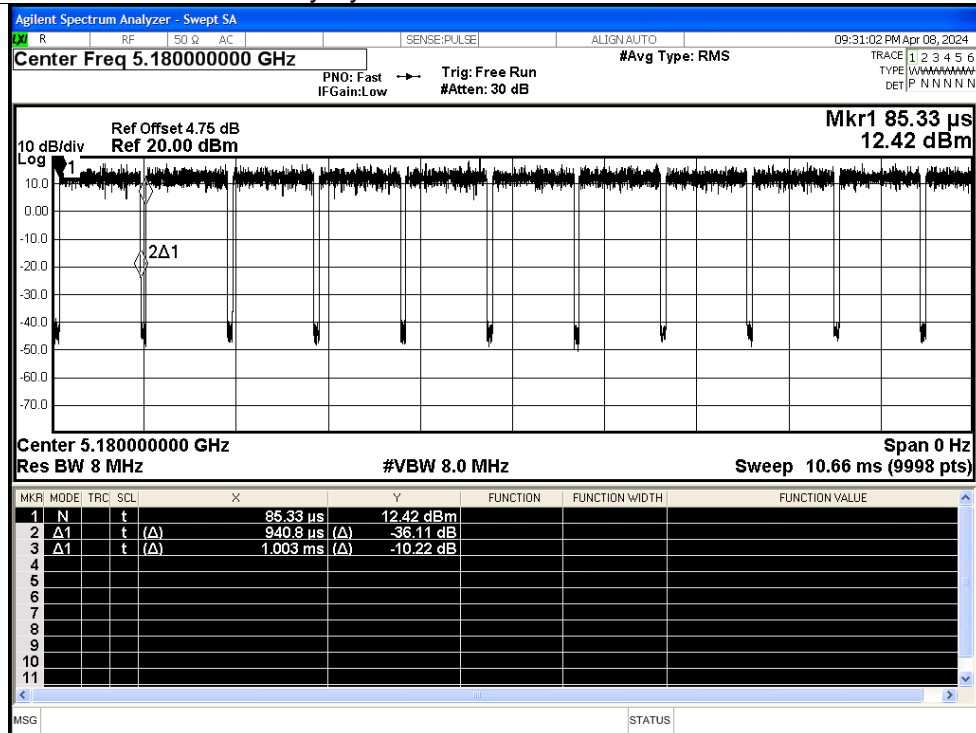
Duty Cycle NVNT n20 5180MHz Ant1



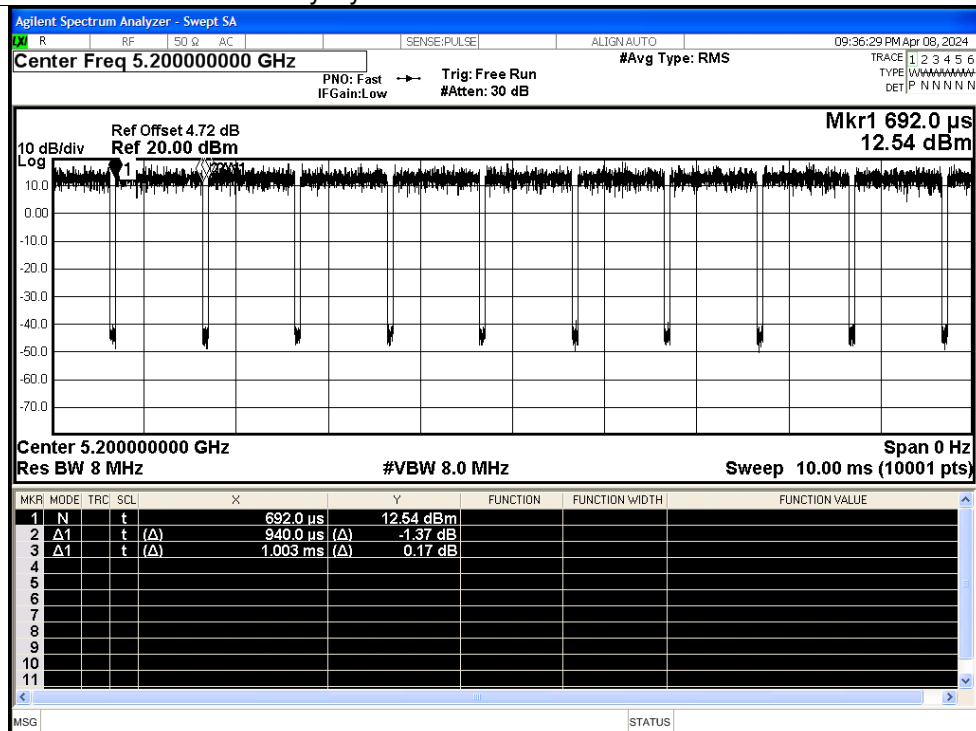




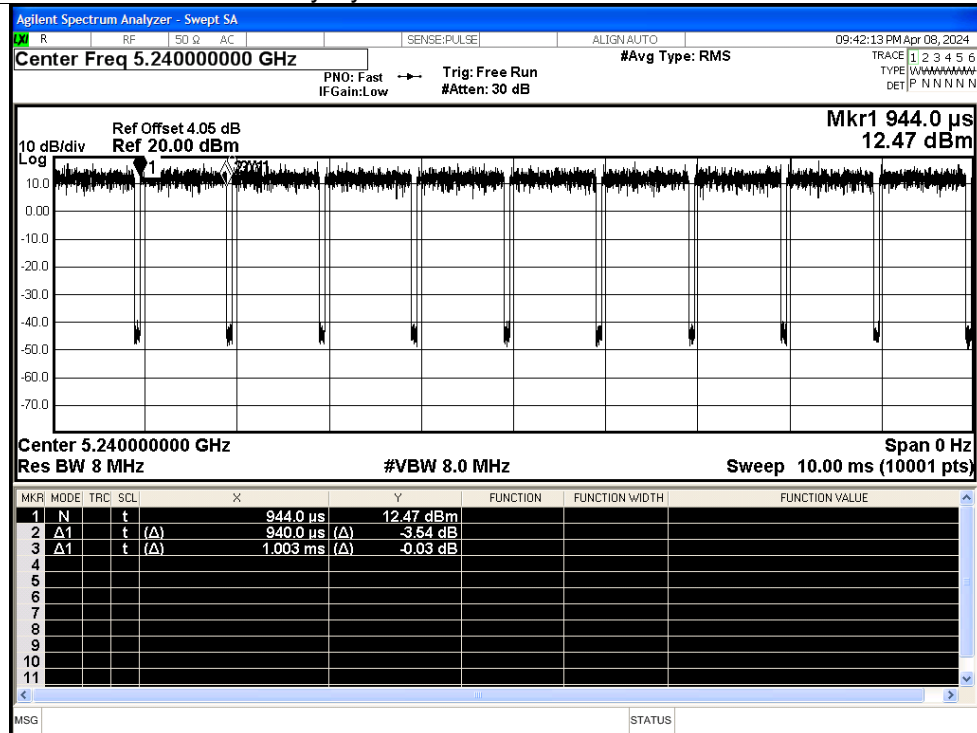
Duty Cycle NVNT ac20 5180MHz Ant1



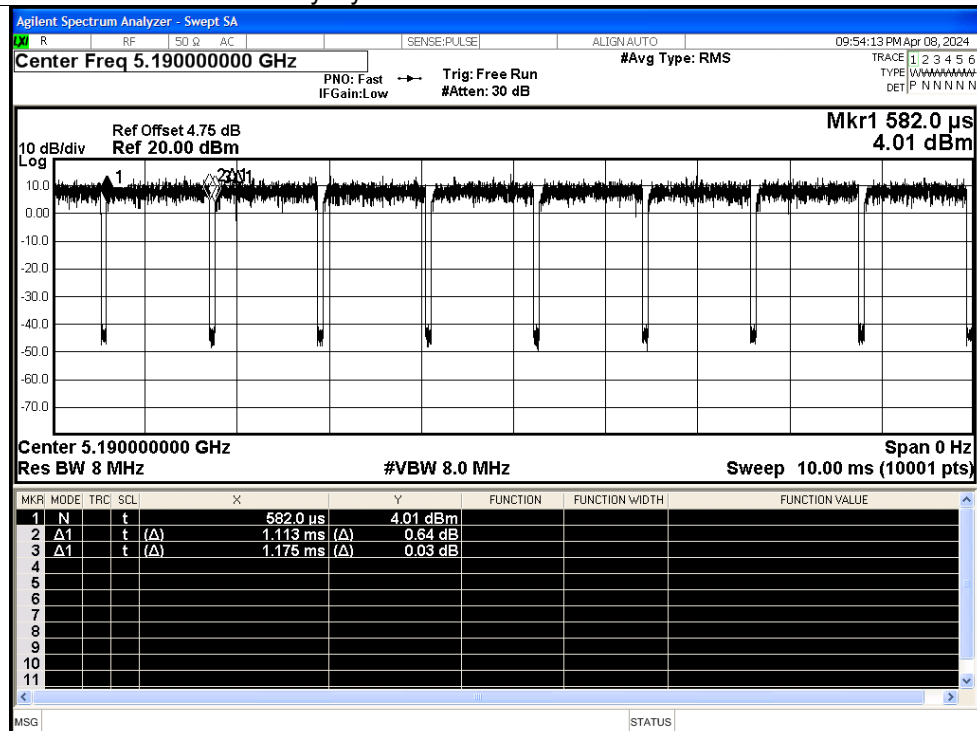
Duty Cycle NVNT ac20 5200MHz Ant1



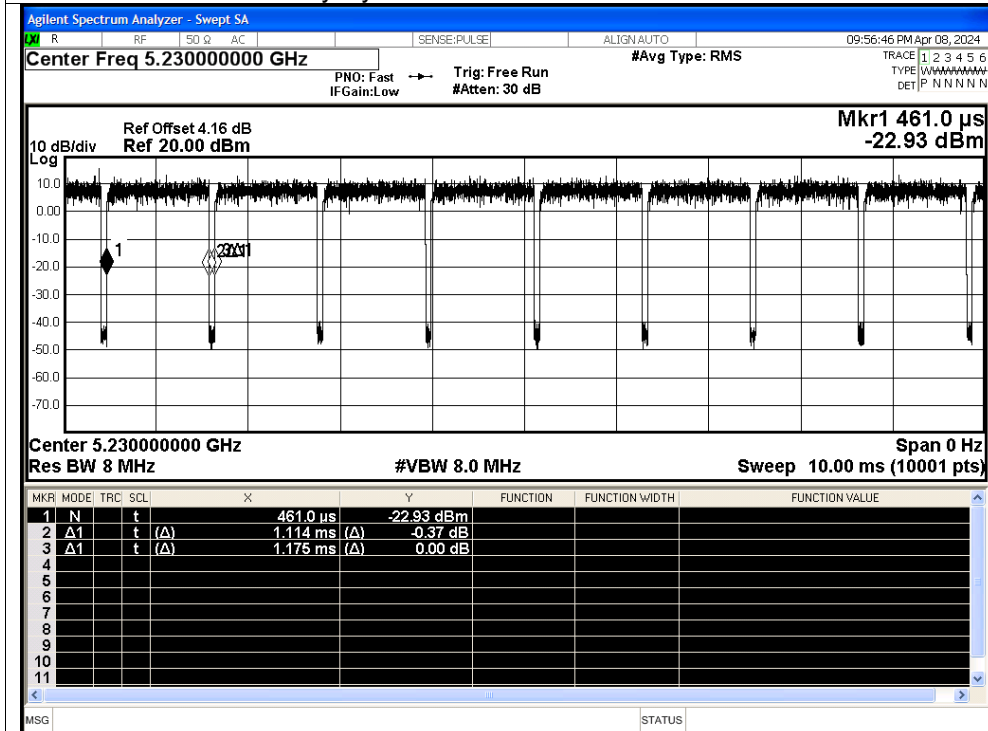
Duty Cycle NVNT ac20 5240MHz Ant1



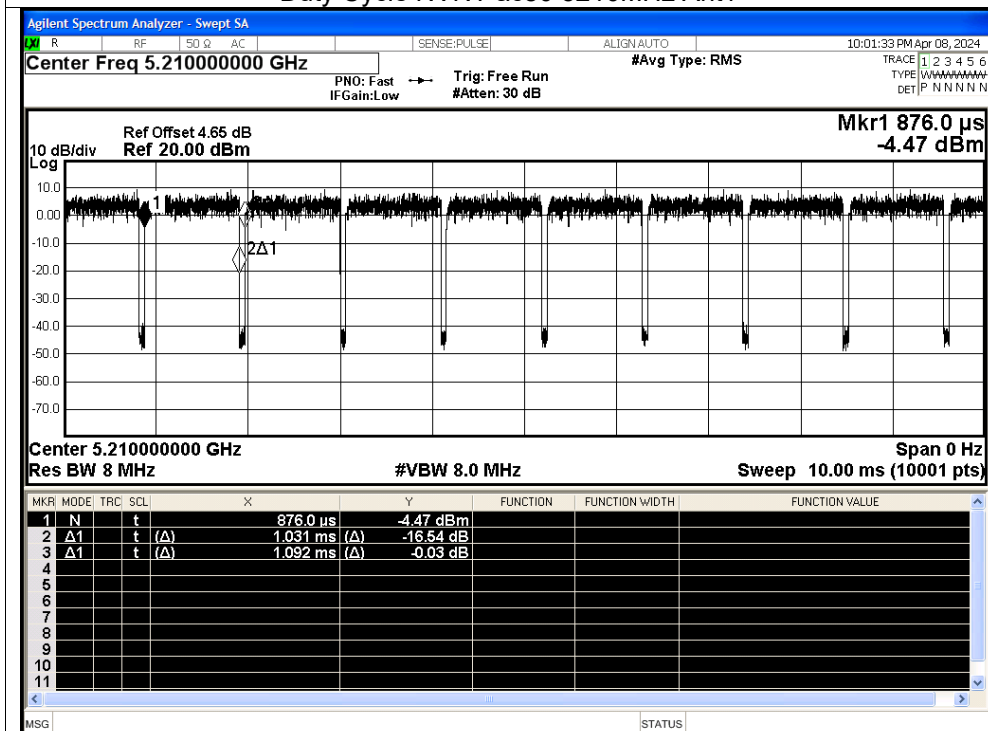
Duty Cycle NVNT ac40 5190MHz Ant1



Duty Cycle NVNT ac40 5230MHz Ant1

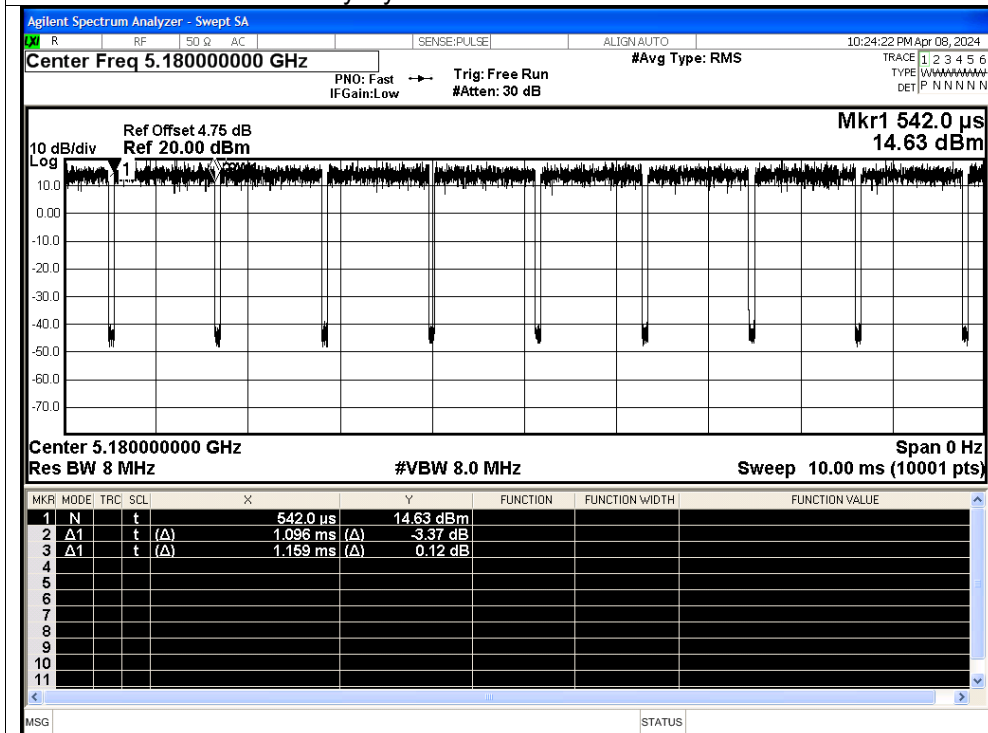


Duty Cycle NVNT ac80 5210MHz Ant1

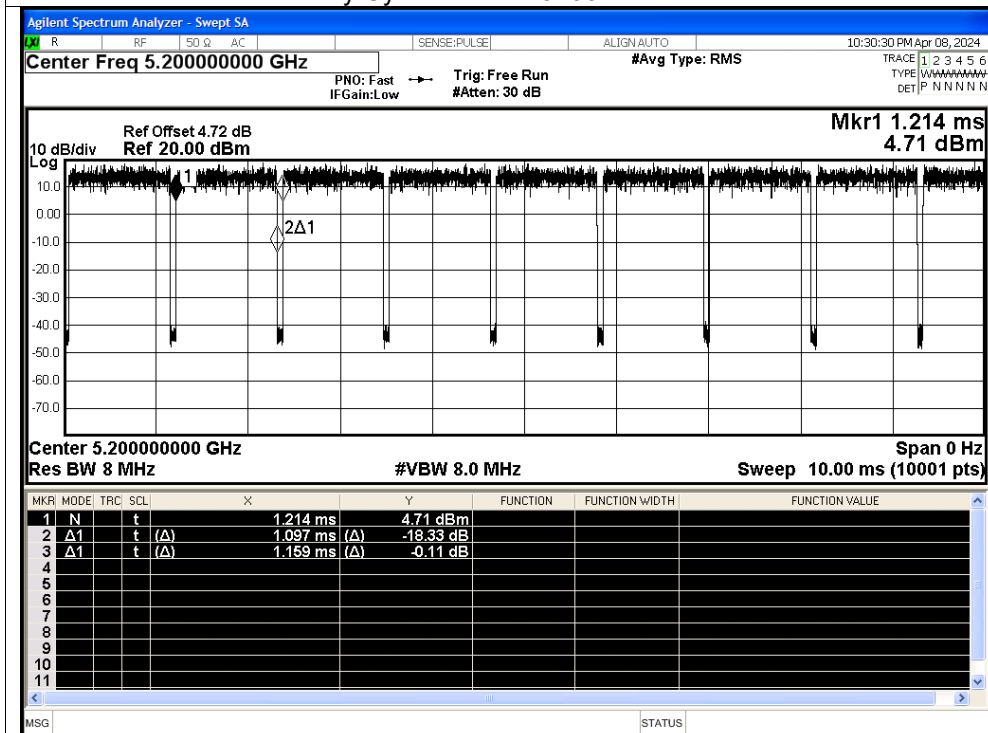


Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant2	94.56	0.24	0.91
NVNT	a	5200	Ant2	94.65	0.24	0.91
NVNT	a	5240	Ant2	94.56	0.24	0.91
NVNT	n20	5180	Ant2	93.77	0.28	1.07
NVNT	n20	5200	Ant2	93.77	0.28	1.07
NVNT	n20	5240	Ant2	93.67	0.28	1.07
NVNT	n40	5190	Ant2	94.71	0.24	0.9
NVNT	n40	5230	Ant2	94.71	0.24	0.9
NVNT	ac20	5180	Ant2	93.72	0.28	1.06
NVNT	ac20	5200	Ant2	93.82	0.28	1.06
NVNT	ac20	5240	Ant2	93.72	0.28	1.06
NVNT	ac40	5190	Ant2	94.81	0.23	0.9
NVNT	ac40	5230	Ant2	94.72	0.24	0.9
NVNT	ac80	5210	Ant2	94.32	0.25	0.97

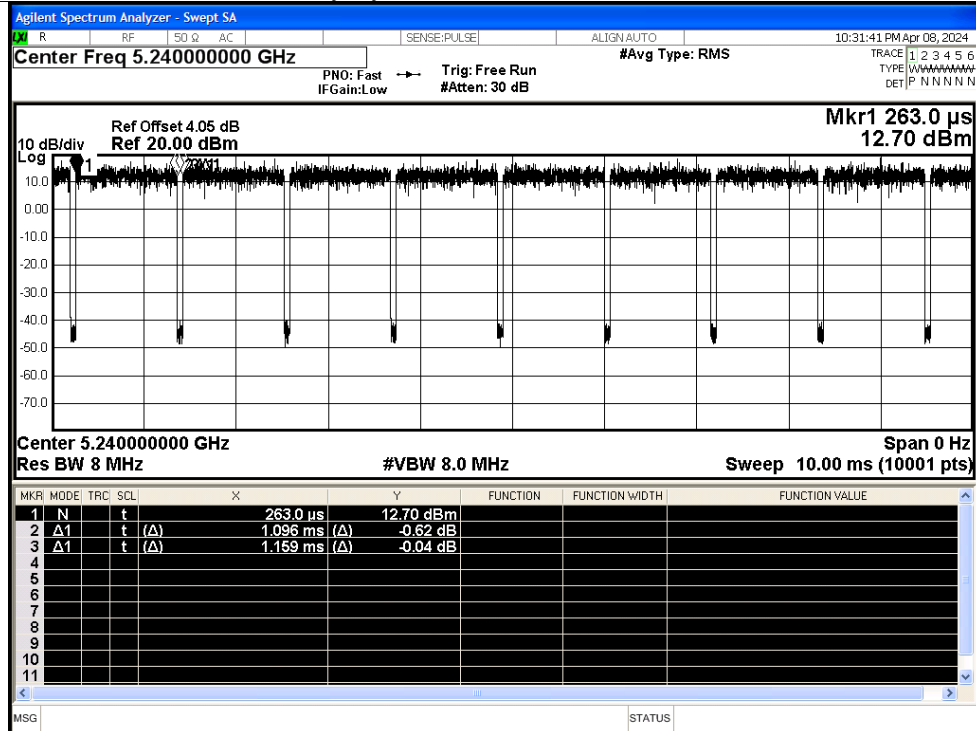
Test Graphs
Duty Cycle NVNT a 5180MHz Ant2



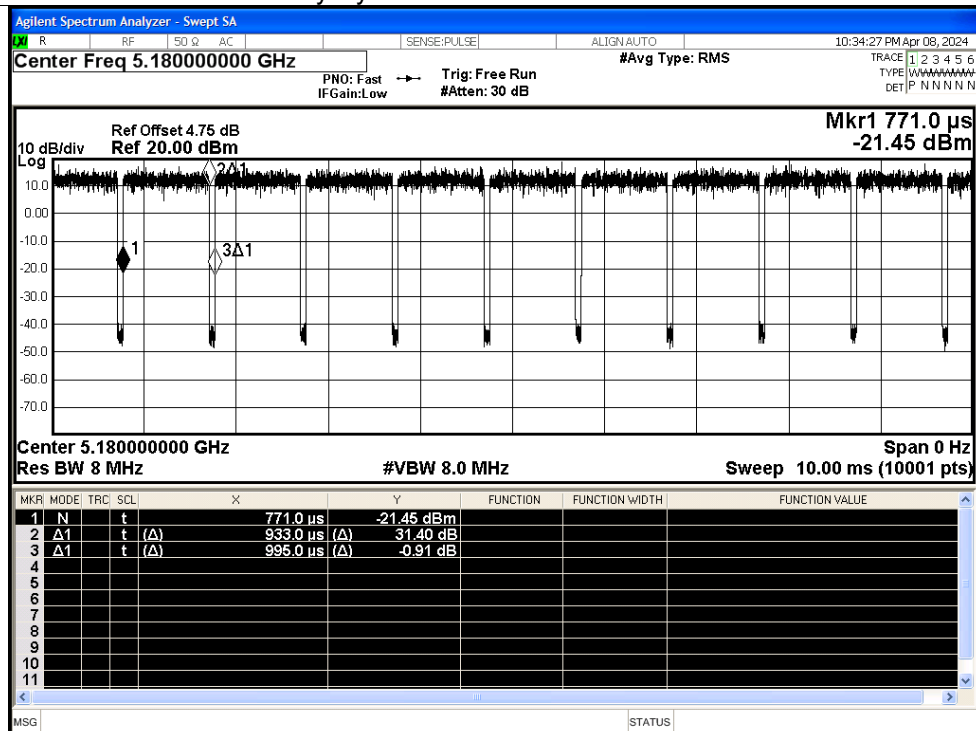
Duty Cycle NVNT a 5200MHz Ant2

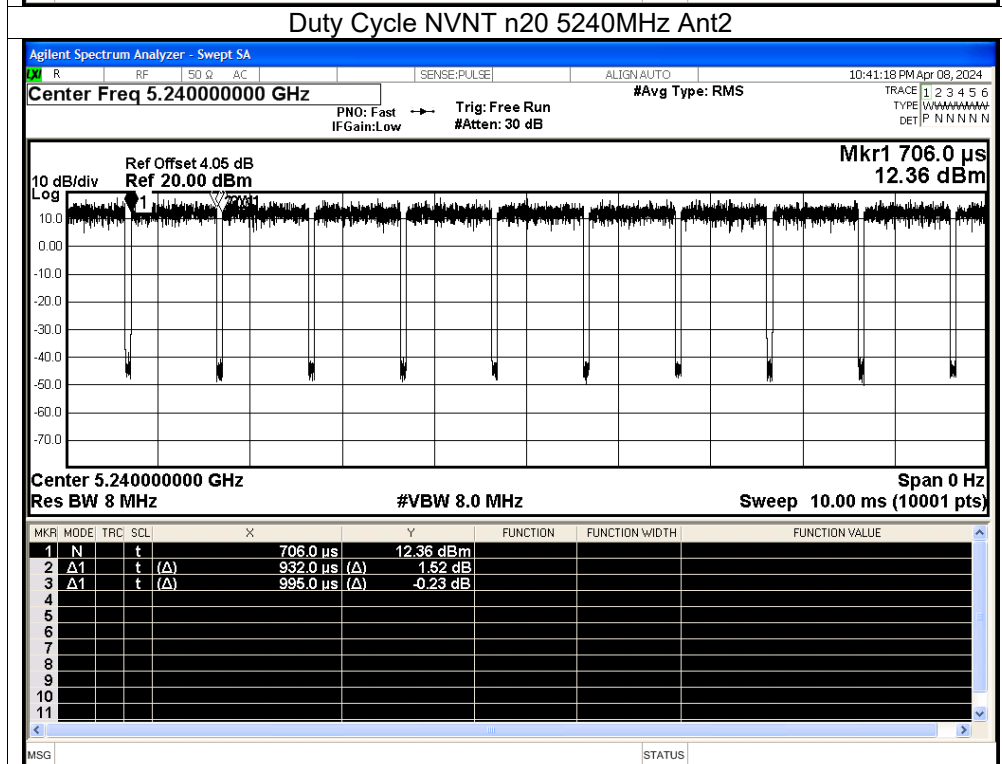
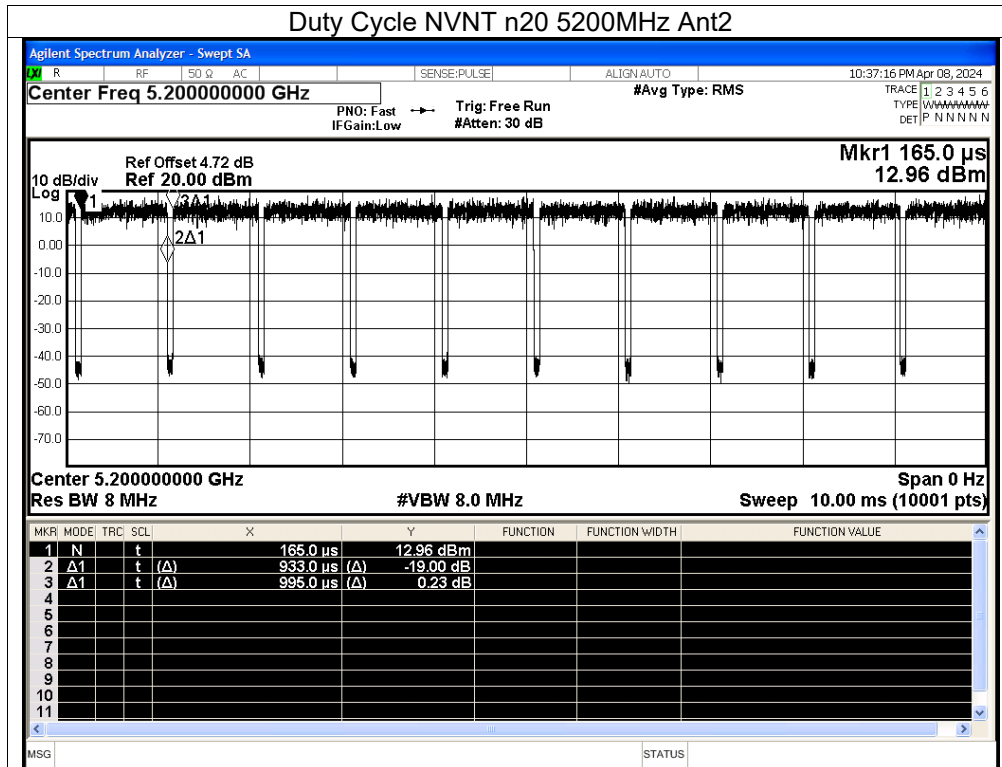


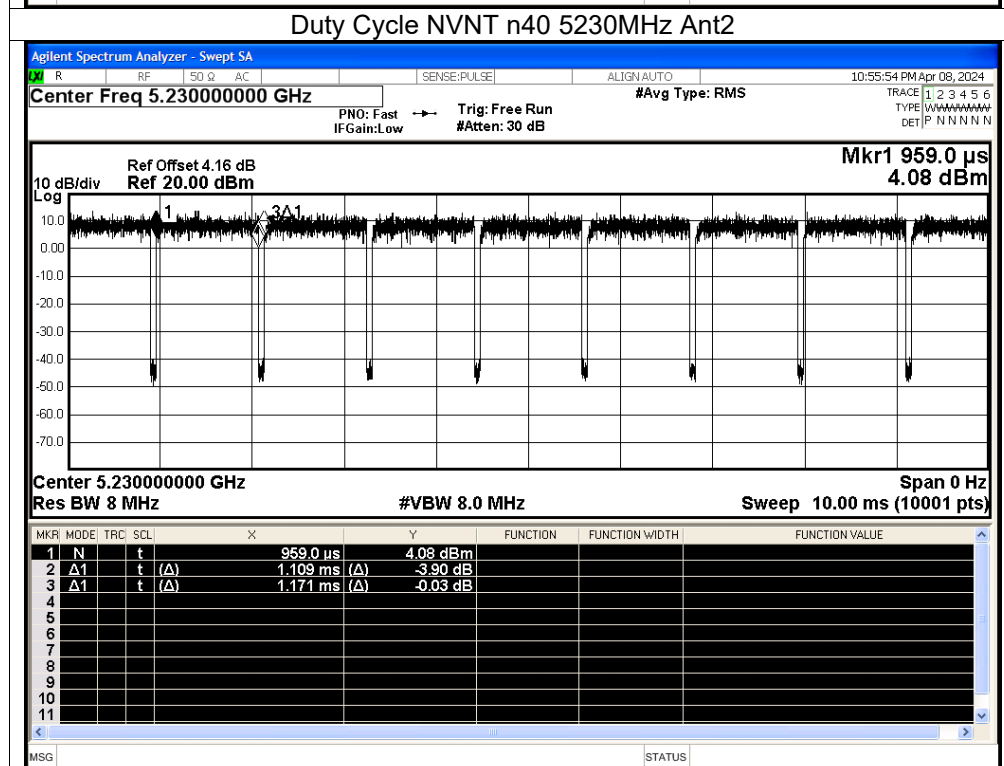
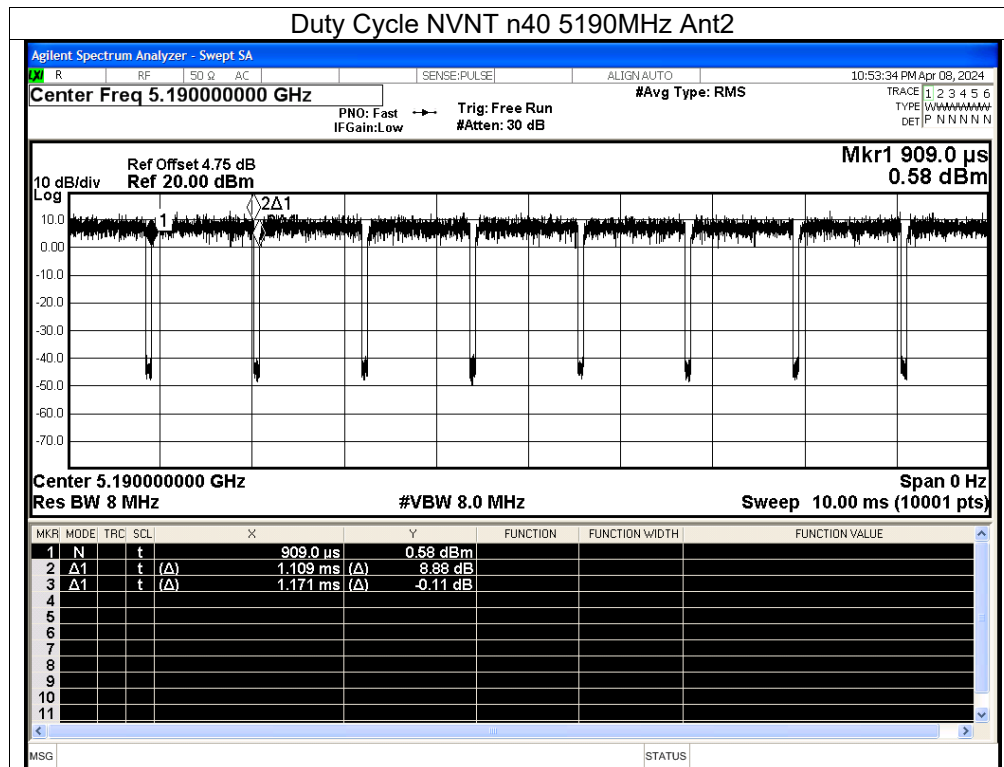
Duty Cycle NVNT a 5240MHz Ant2



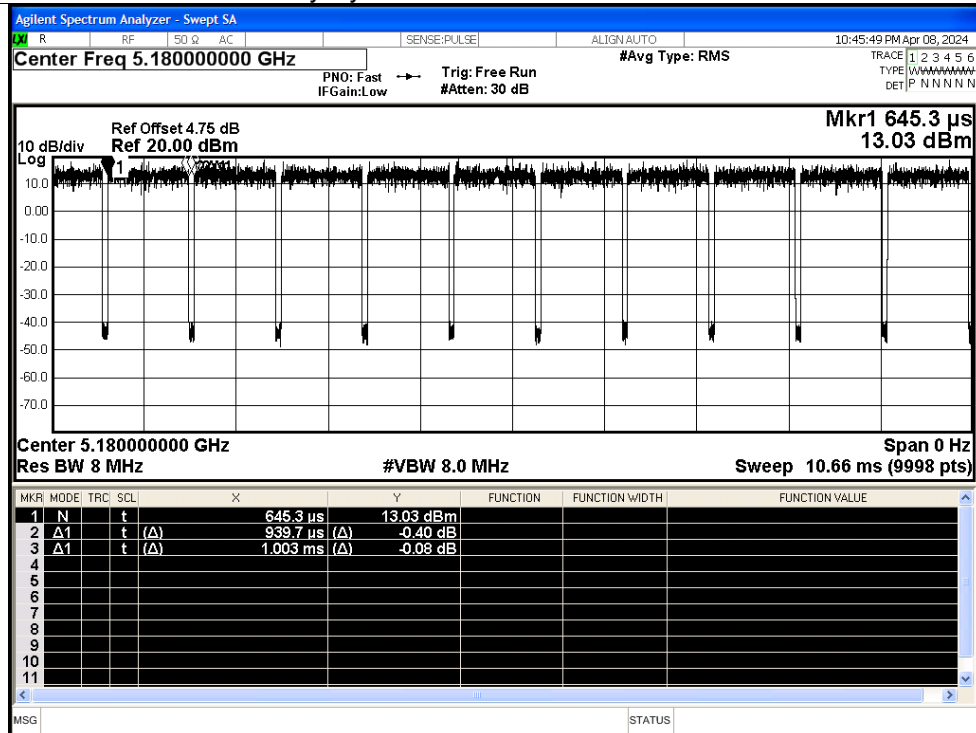
Duty Cycle NVNT n20 5180MHz Ant2



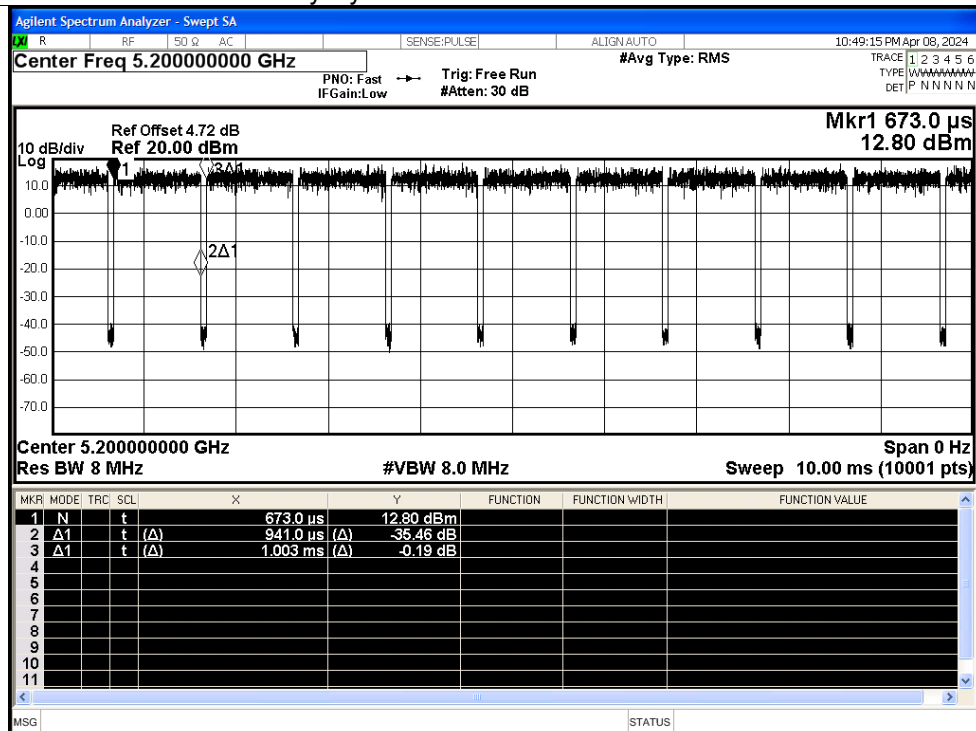




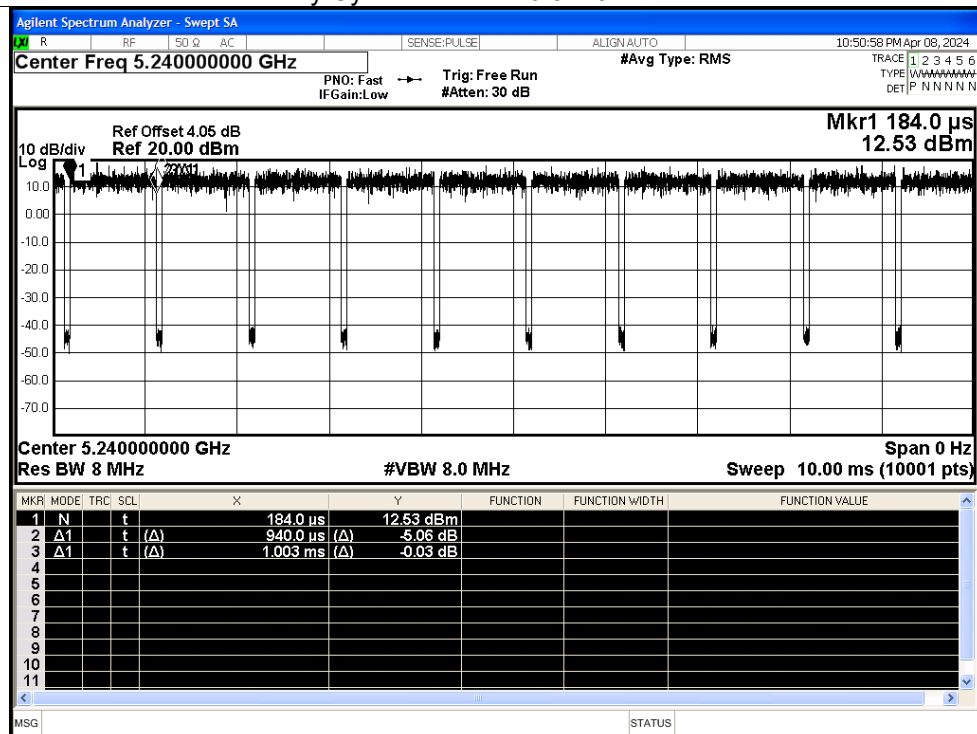
Duty Cycle NVNT ac20 5180MHz Ant2



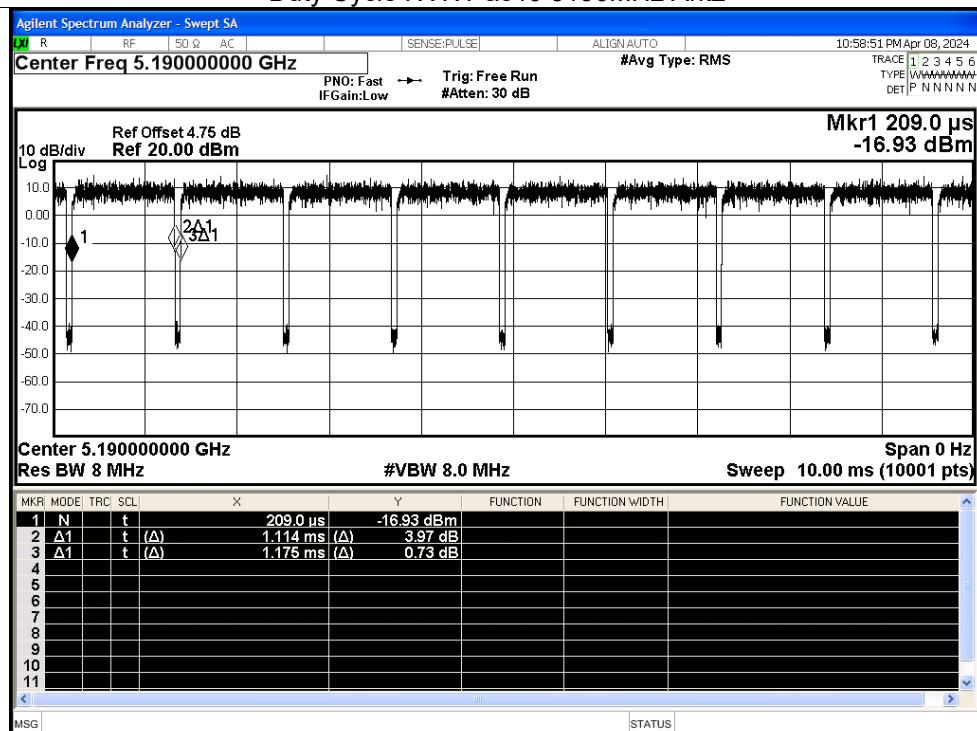
Duty Cycle NVNT ac20 5200MHz Ant2



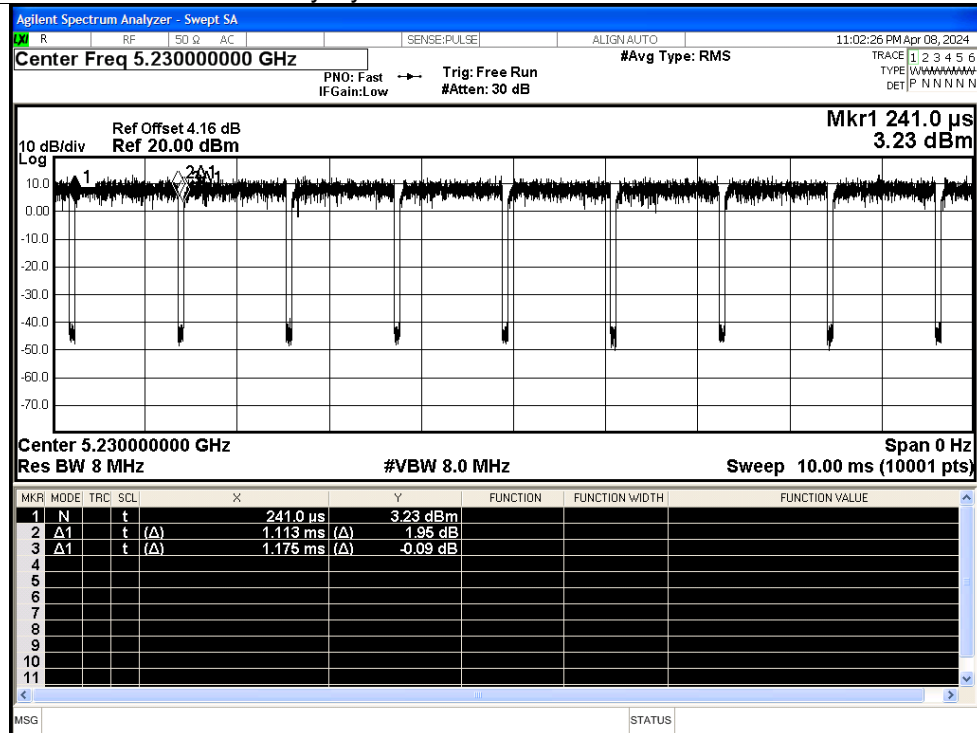
Duty Cycle NVNT ac20 5240MHz Ant2



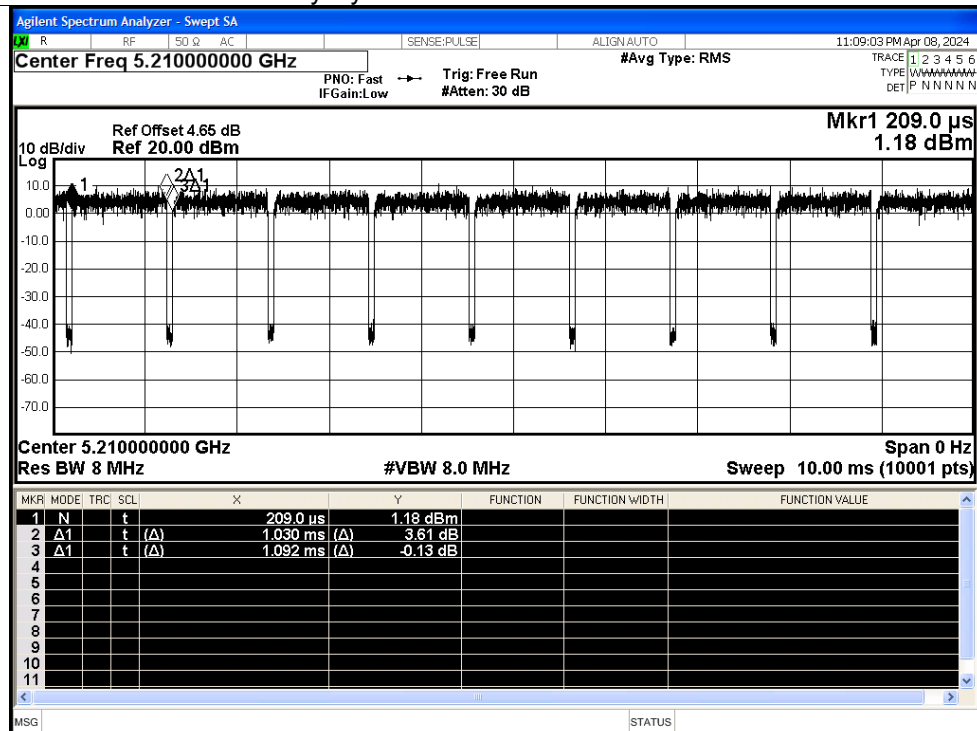
Duty Cycle NVNT ac40 5190MHz Ant2



Duty Cycle NVNT ac40 5230MHz Ant2



Duty Cycle NVNT ac80 5210MHz Ant2

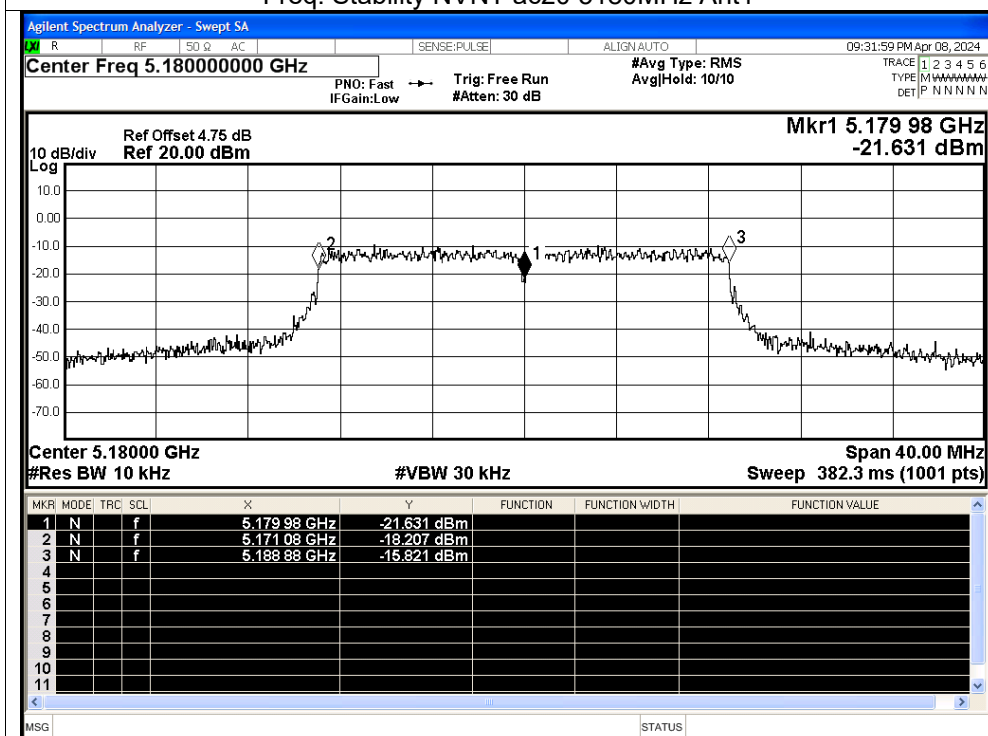


Appendix A.4: Test Results of Frequency Stability

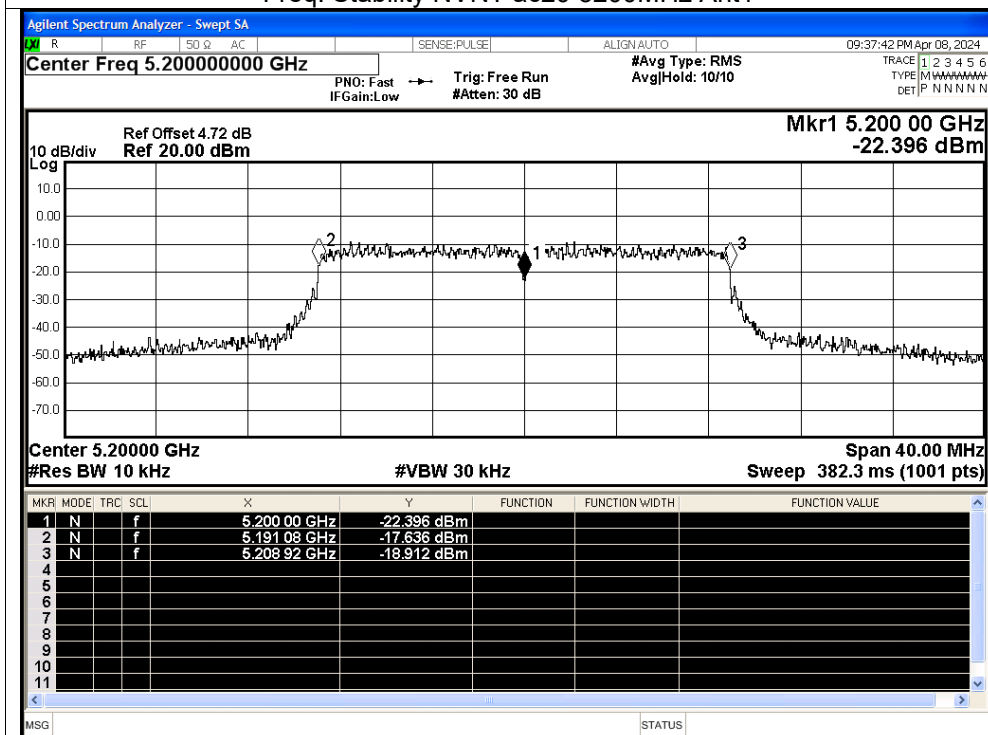
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	ac20	5180	Ant1	5179.98	-20000	-3.86	25	Pass
NVNT	ac20	5200	Ant1	5200	0	0	25	Pass
NVNT	ac20	5240	Ant1	5240	0	0	25	Pass
NVNT	ac40	5190	Ant1	5190.04	40000	7.71	25	Pass
NVNT	ac40	5230	Ant1	5230	0	0	25	Pass
NVNT	ac80	5210	Ant1	5210	0	0	25	Pass

Test Graphs

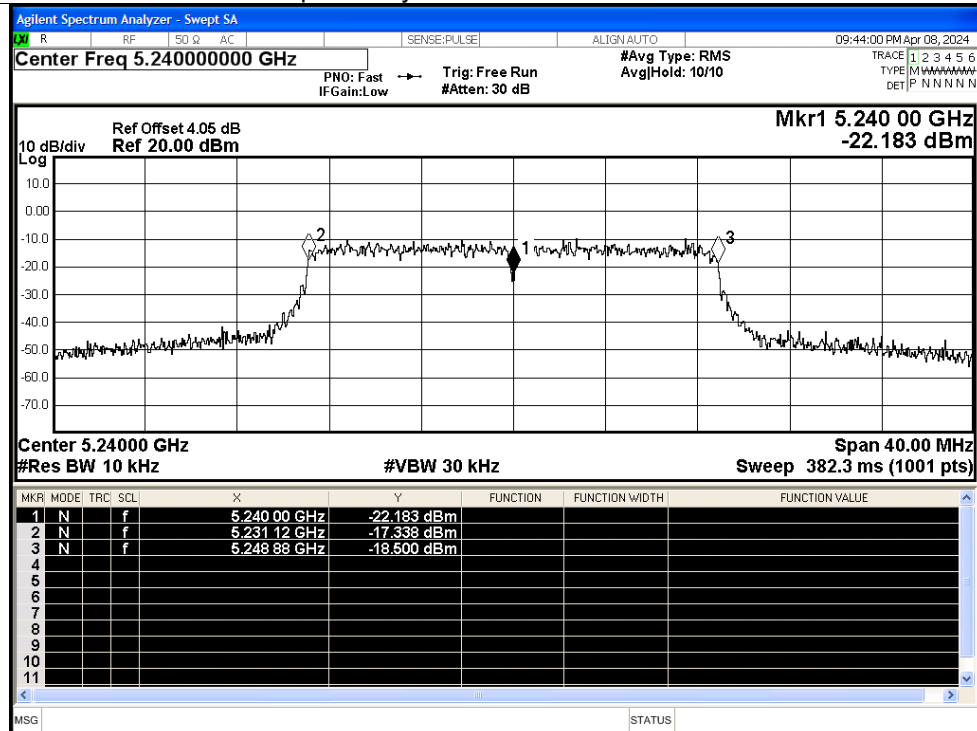
Freq. Stability NVNT ac20 5180MHz Ant1



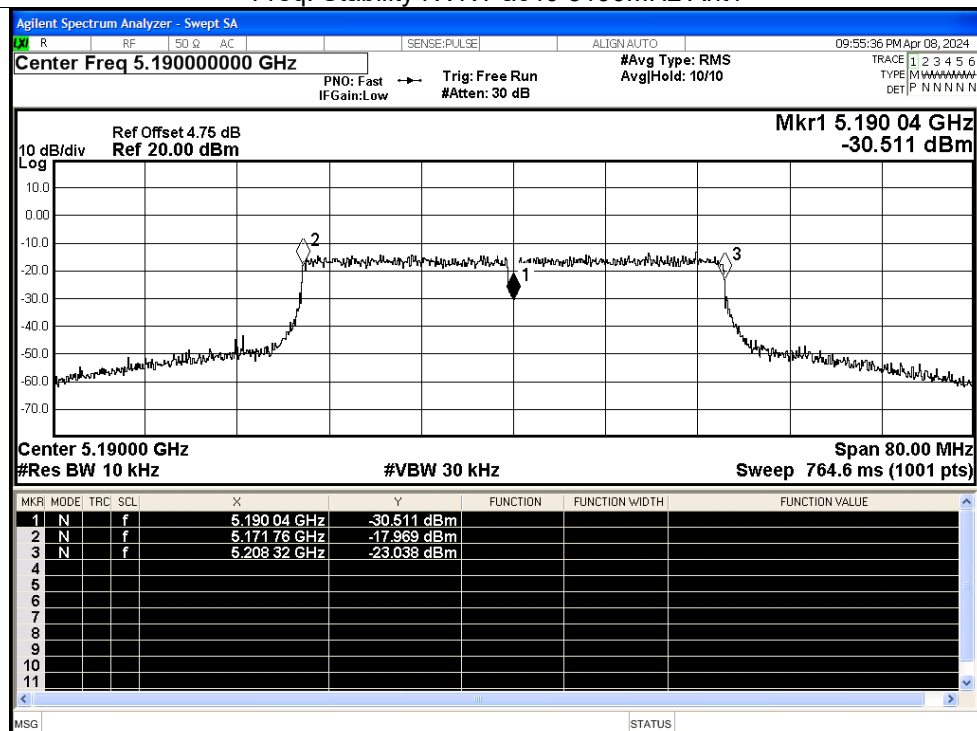
Freq. Stability NVNT ac20 5200MHz Ant1



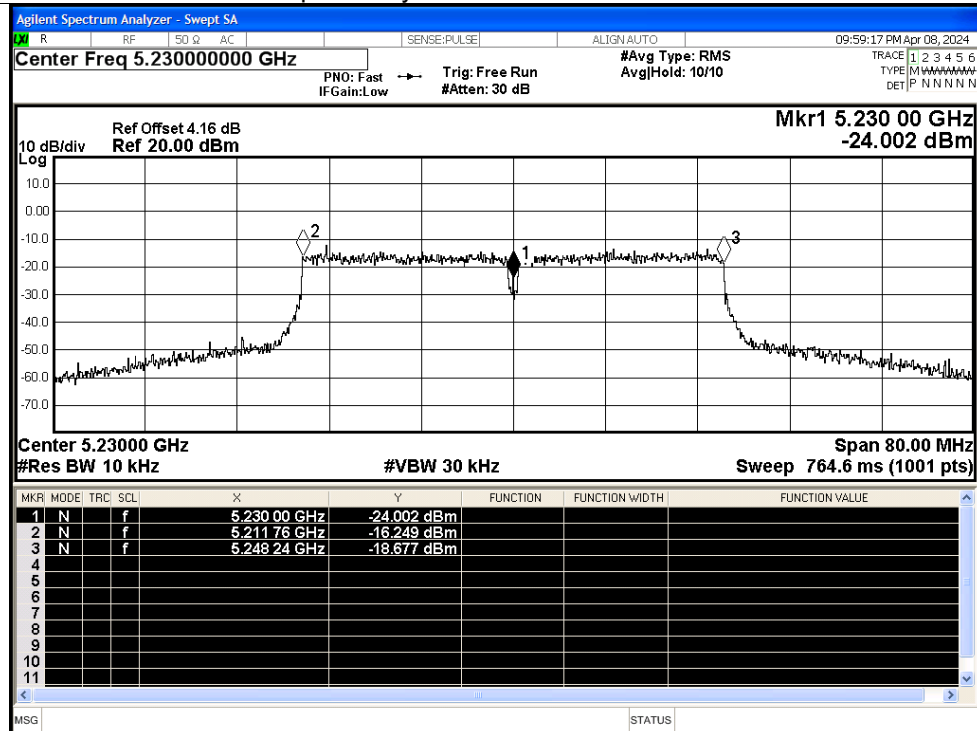
Freq. Stability NVNT ac20 5240MHz Ant1



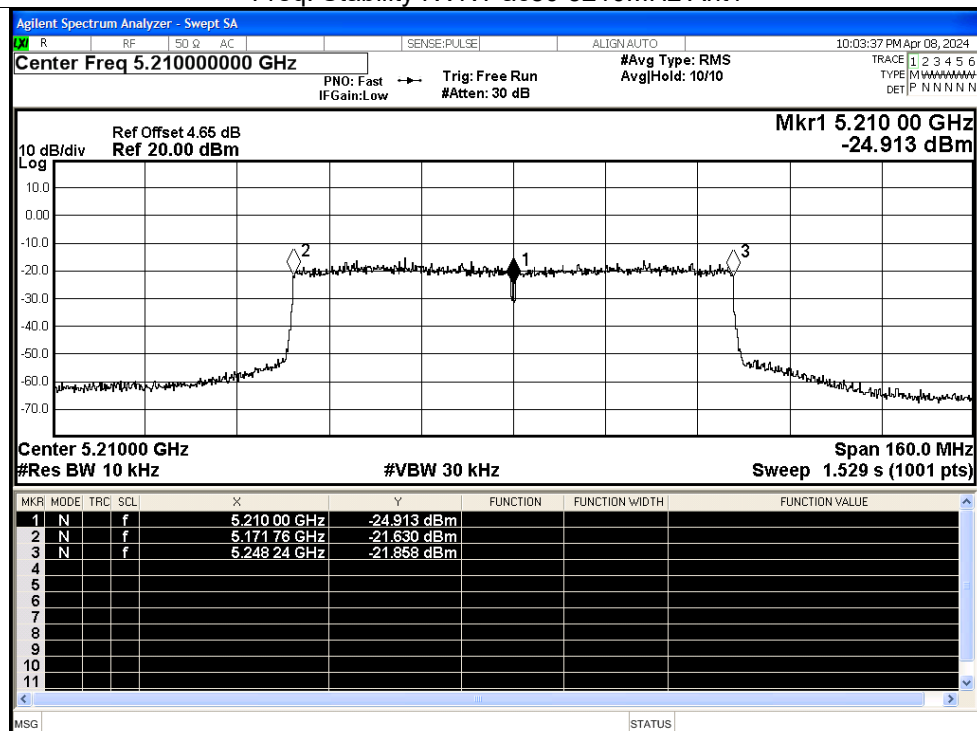
Freq. Stability NVNT ac40 5190MHz Ant1



Freq. Stability NVNT ac40 5230MHz Ant1



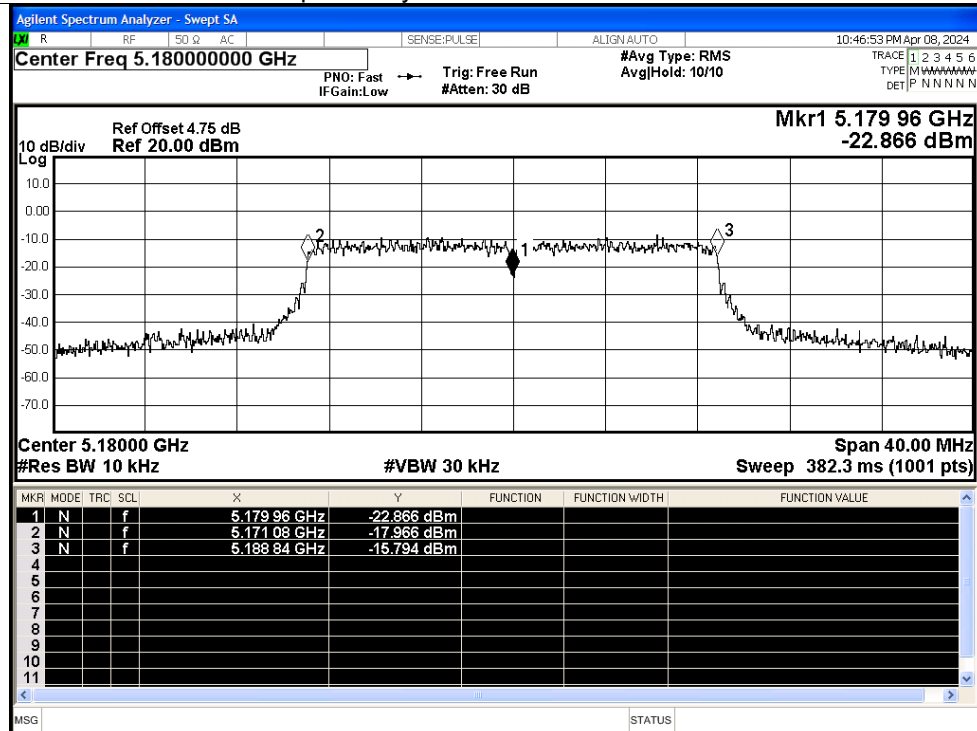
Freq. Stability NVNT ac80 5210MHz Ant1



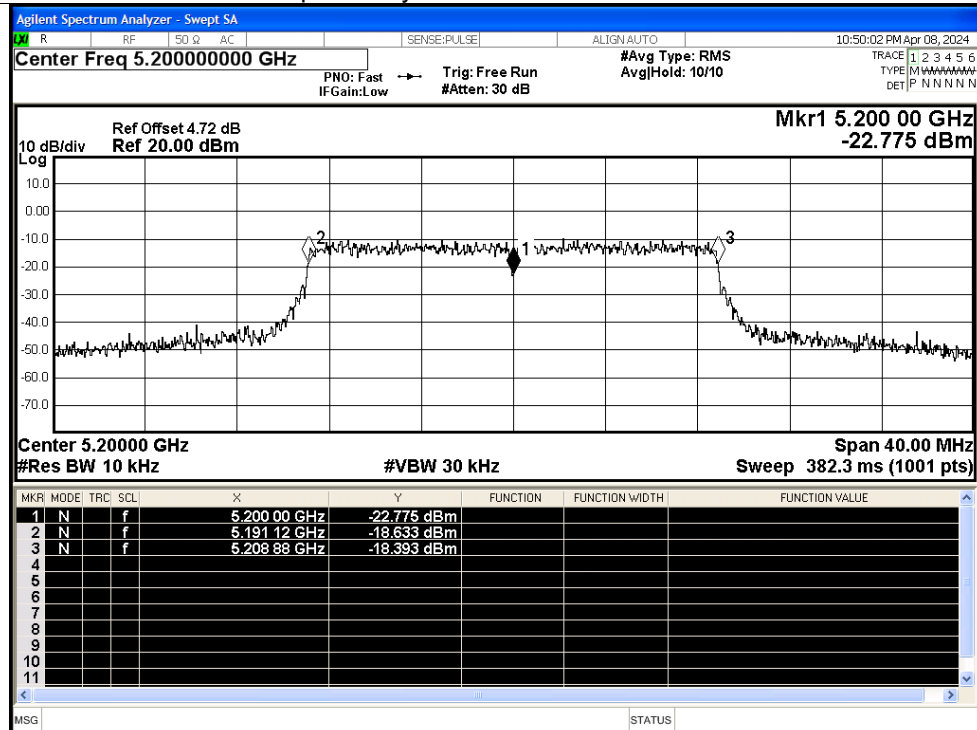
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	ac20	5180	Ant2	5179.96	-40000	-7.72	25	Pass
NVNT	ac20	5200	Ant2	5200	0	0	25	Pass
NVNT	ac20	5240	Ant2	5240	0	0	25	Pass
NVNT	ac40	5190	Ant2	5190	0	0	25	Pass
NVNT	ac40	5230	Ant2	5230.04	40000	7.65	25	Pass
NVNT	ac80	5210	Ant2	5210	0	0	25	Pass

Test Graphs

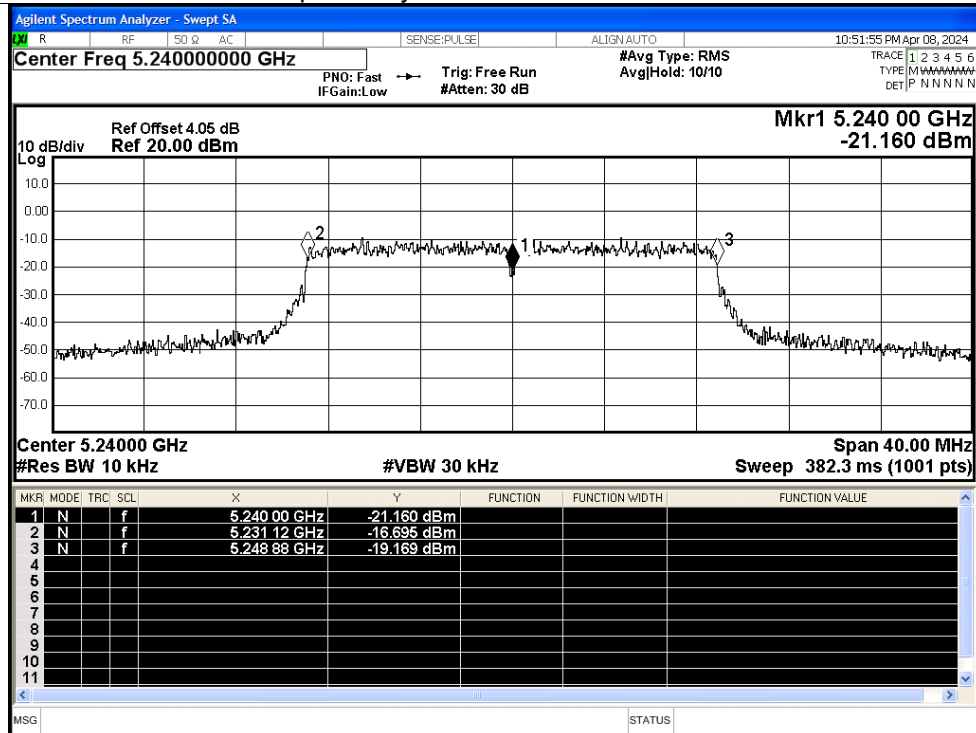
Freq. Stability NVNT ac20 5180MHz Ant2



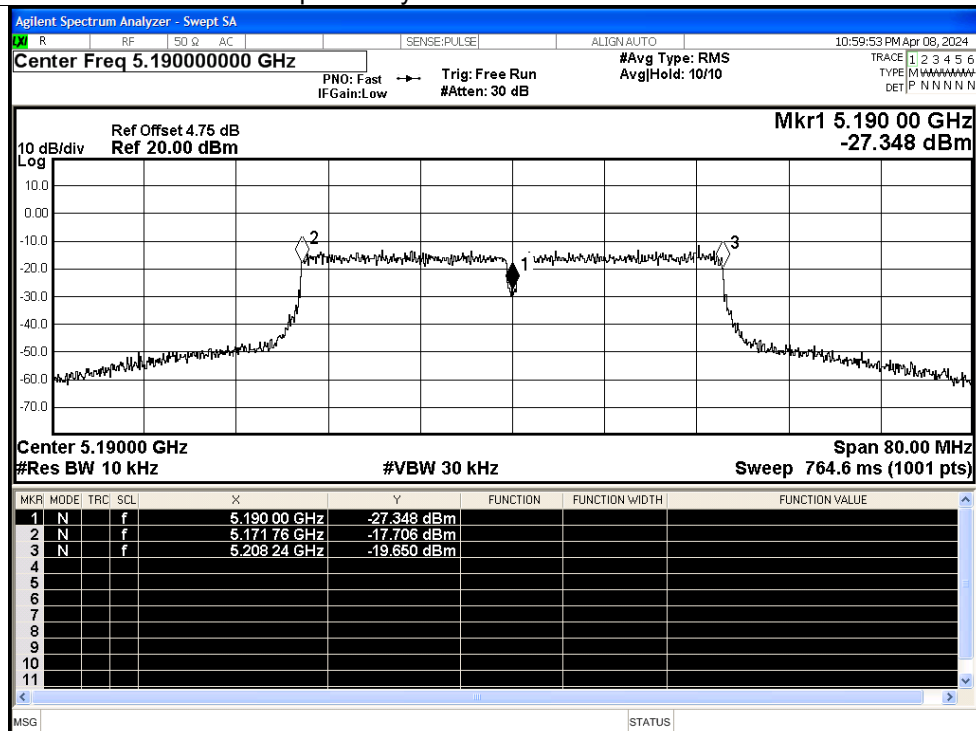
Freq. Stability NVNT ac20 5200MHz Ant2

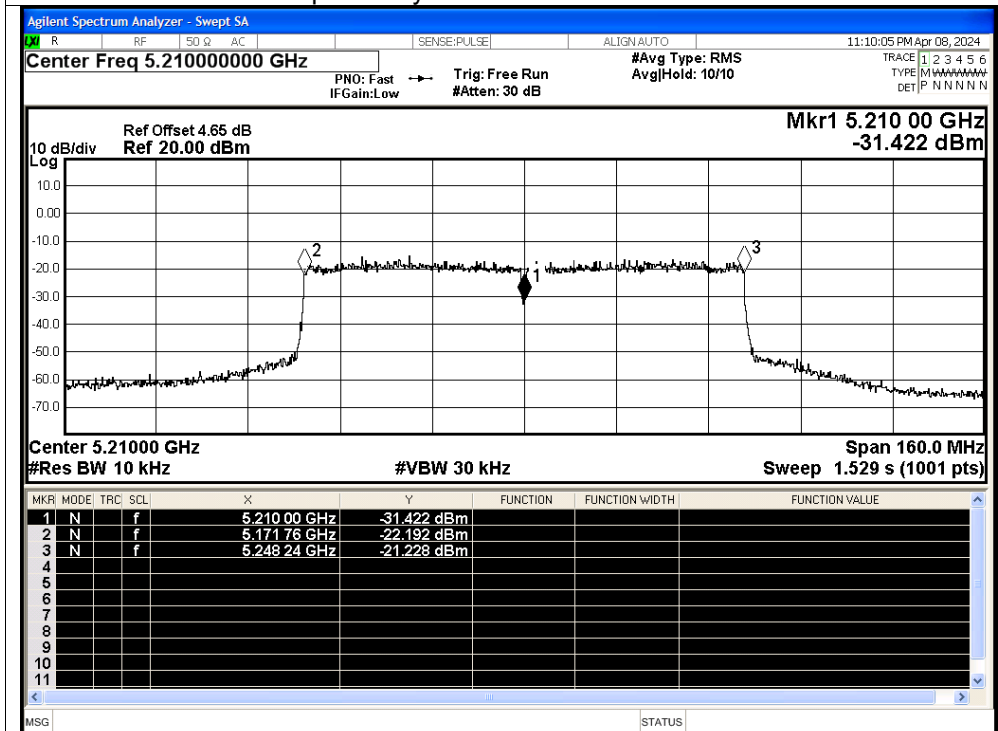


Freq. Stability NVNT ac20 5240MHz Ant2



Freq. Stability NVNT ac40 5190MHz Ant2



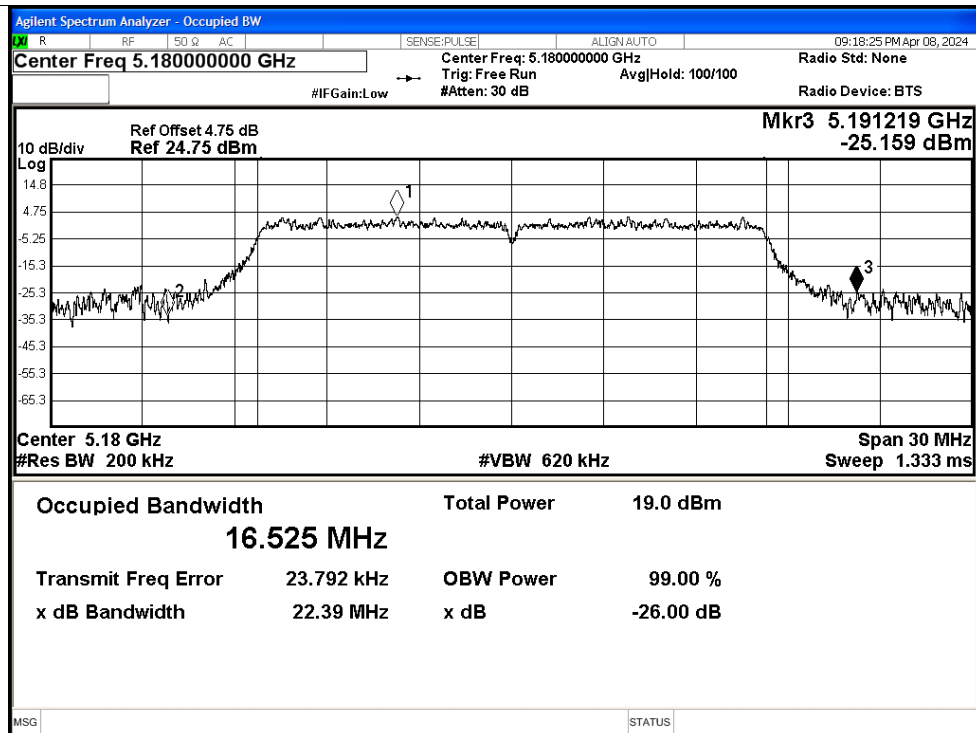


Appendix A.5: Test Results of 26dB Bandwidth

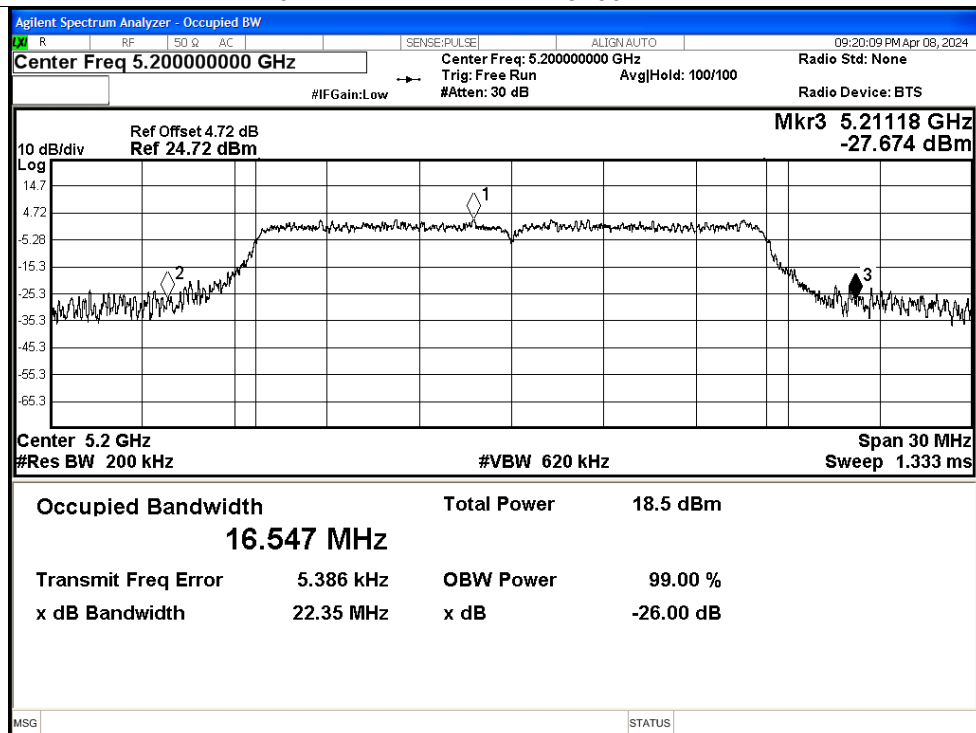
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	22.39	---	Pass
NVNT	a	5200	Ant1	22.348	---	Pass
NVNT	a	5240	Ant1	23.116	---	Pass
NVNT	n20	5180	Ant1	25.811	---	Pass
NVNT	n20	5200	Ant1	26.56	---	Pass
NVNT	n20	5240	Ant1	25.052	---	Pass
NVNT	n40	5190	Ant1	41.874	---	Pass
NVNT	n40	5230	Ant1	44.329	---	Pass
NVNT	ac20	5180	Ant1	26.918	---	Pass
NVNT	ac20	5200	Ant1	26.661	---	Pass
NVNT	ac20	5240	Ant1	24.26	---	Pass
NVNT	ac40	5190	Ant1	44.345	---	Pass
NVNT	ac40	5230	Ant1	44.991	---	Pass
NVNT	ac80	5210	Ant1	80.437	---	Pass

Test Graphs

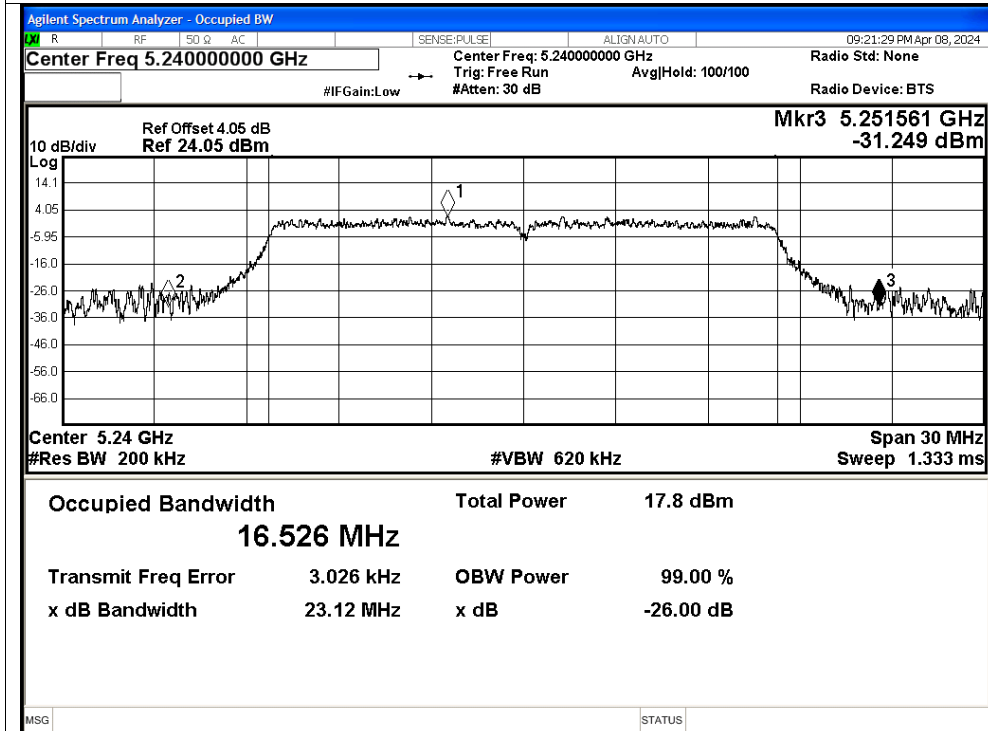
-26dB Bandwidth NVNT a 5180MHz Ant1



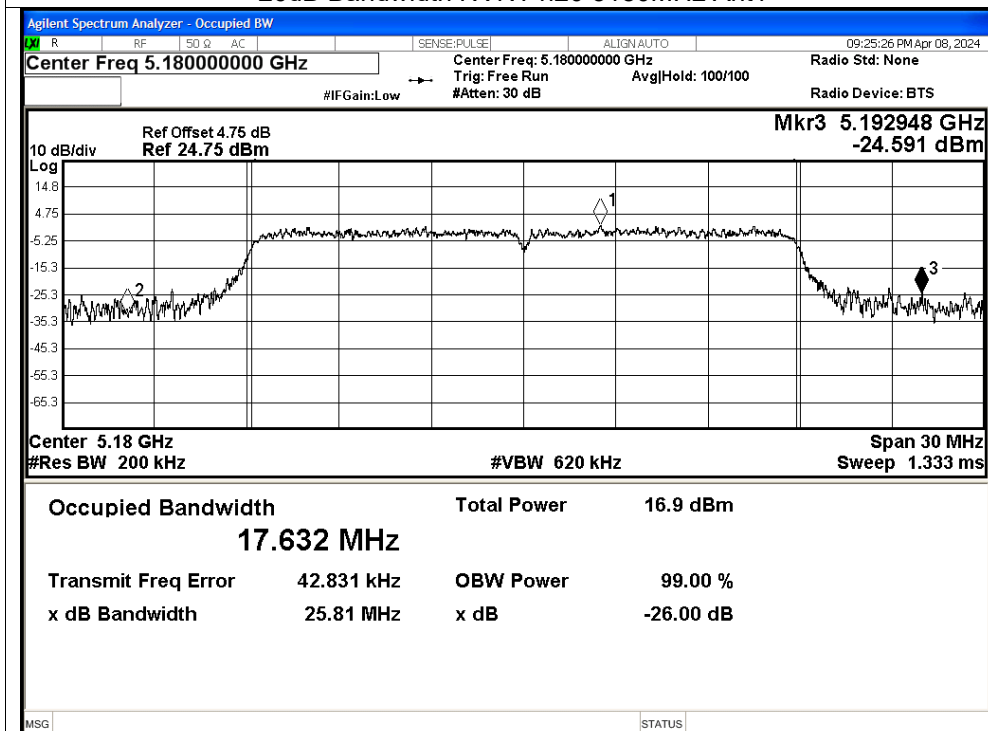
-26dB Bandwidth NVNT a 5200MHz Ant1



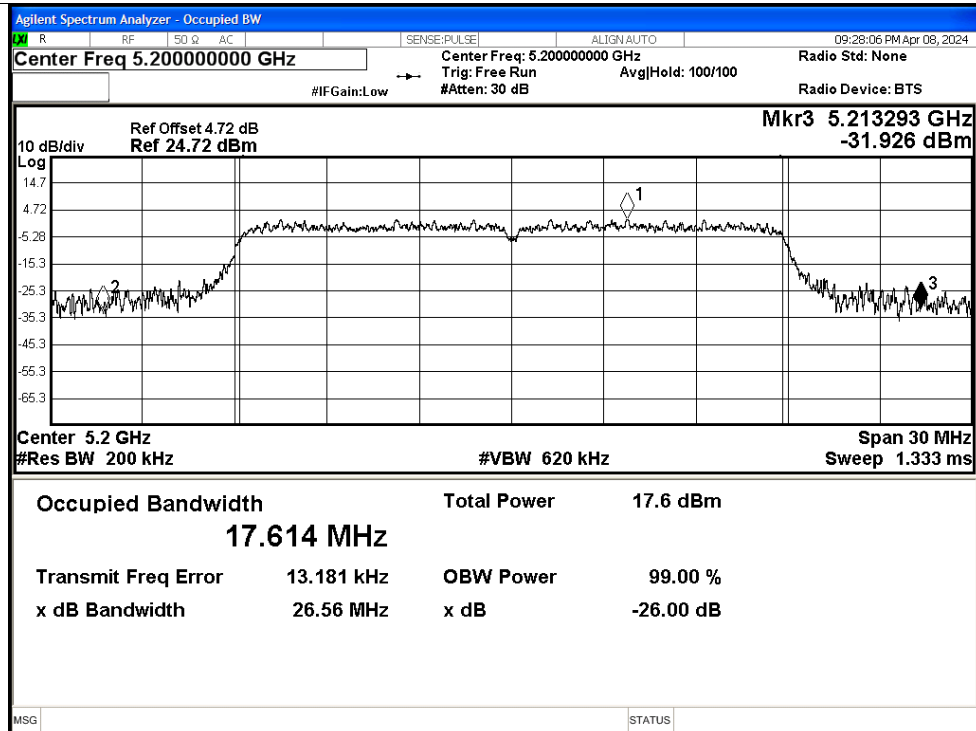
-26dB Bandwidth NVNT a 5240MHz Ant1



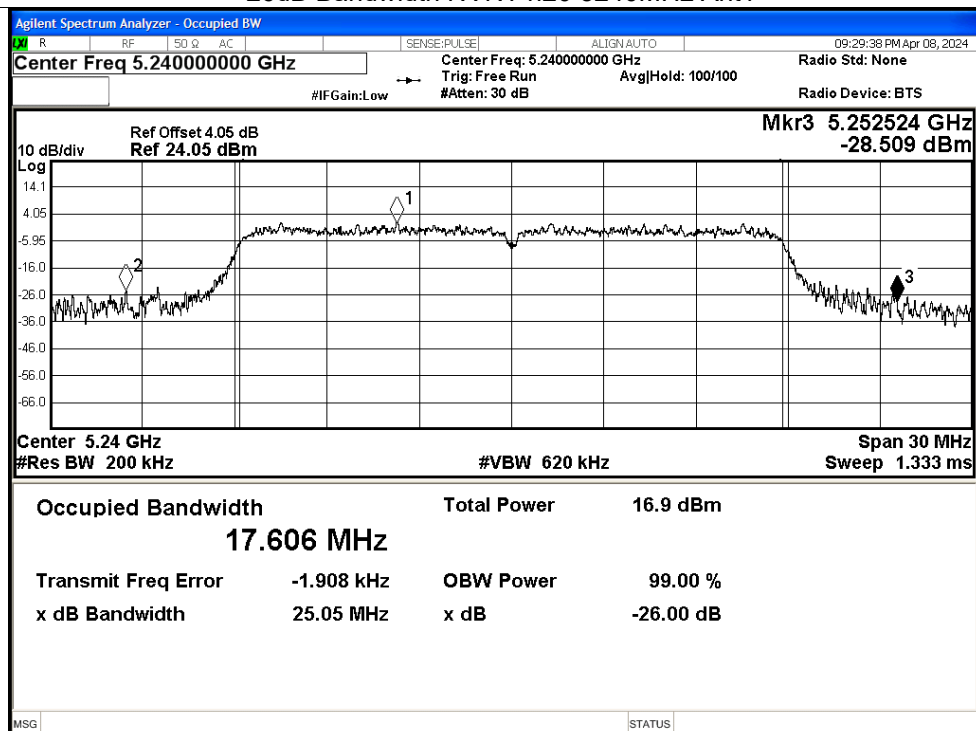
-26dB Bandwidth NVNT n20 5180MHz Ant1



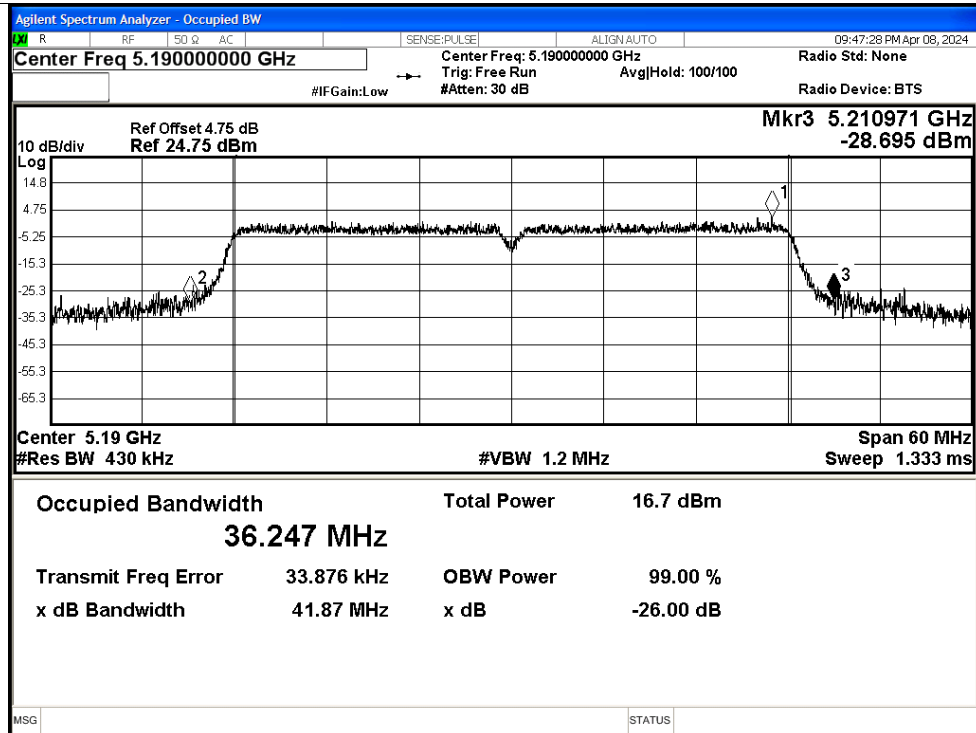
-26dB Bandwidth NVNT n20 5200MHz Ant1



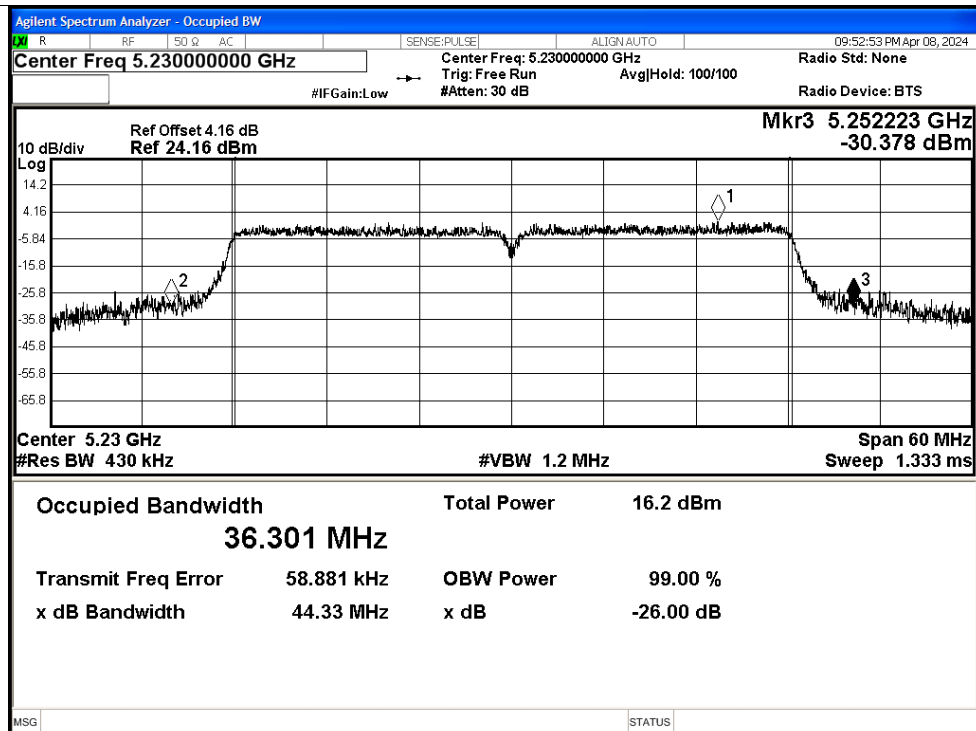
-26dB Bandwidth NVNT n20 5240MHz Ant1



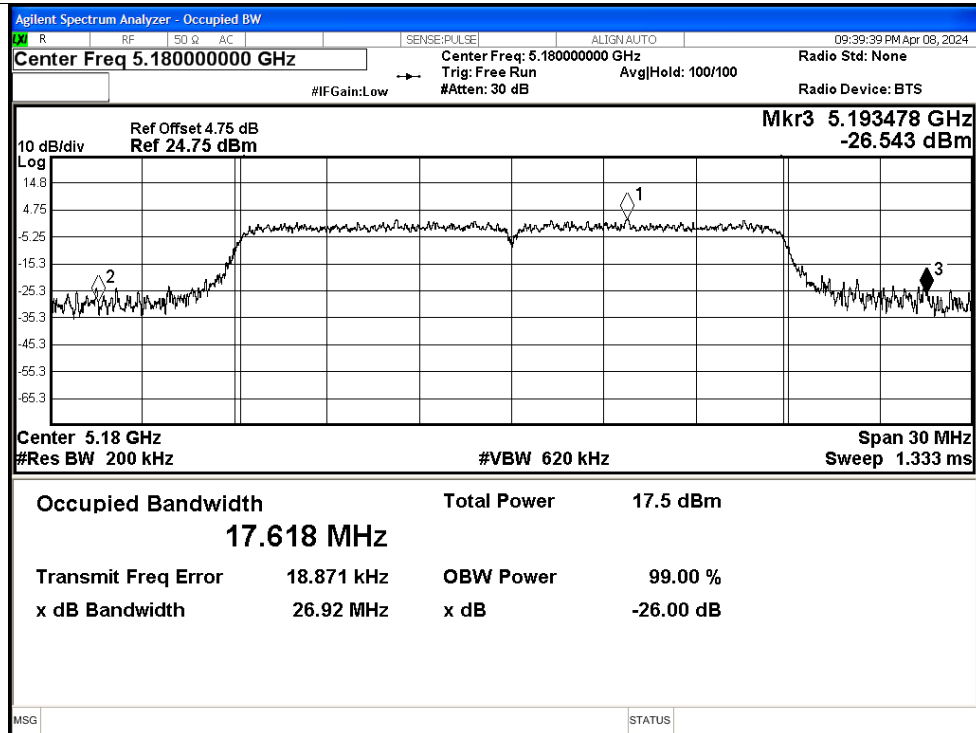
-26dB Bandwidth NVNT n40 5190MHz Ant1



-26dB Bandwidth NVNT n40 5230MHz Ant1



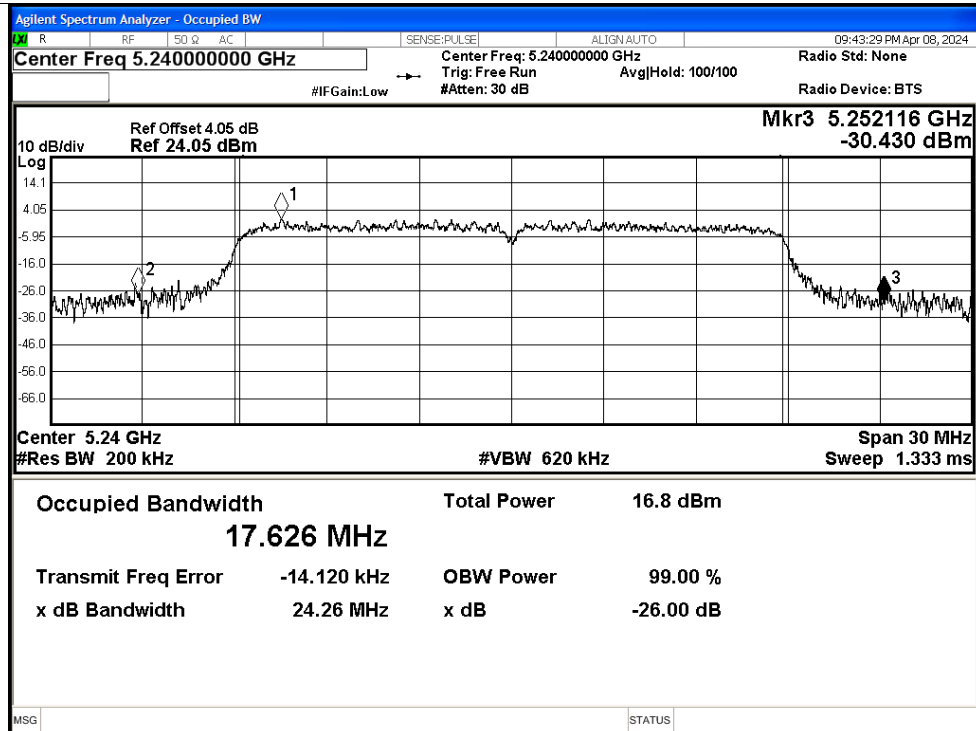
-26dB Bandwidth NVNT ac20 5180MHz Ant1



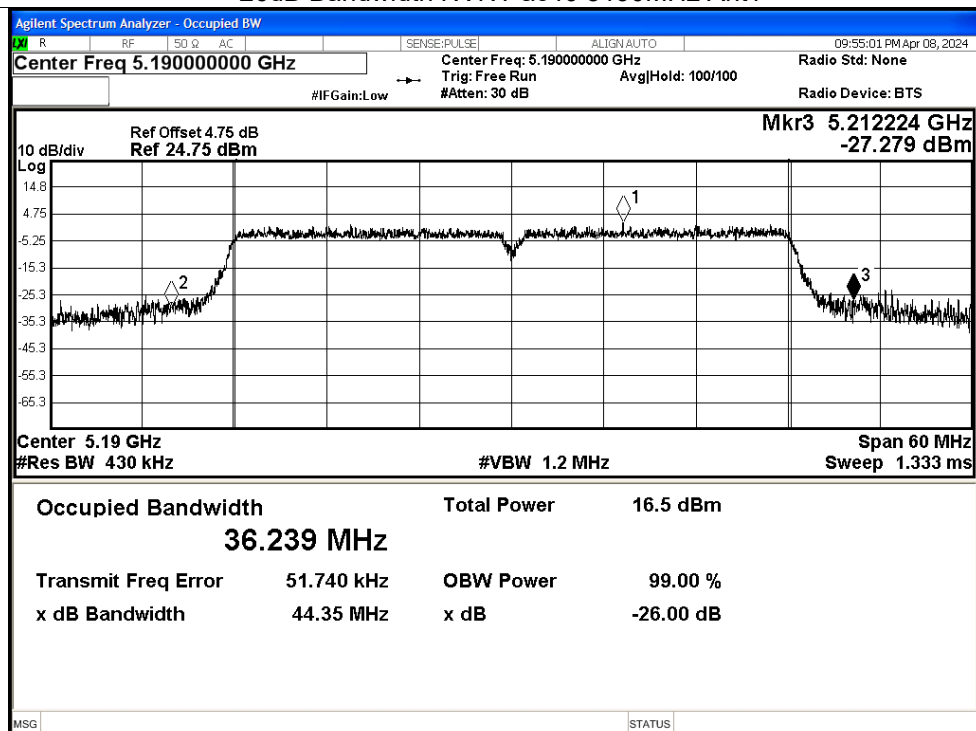
-26dB Bandwidth NVNT ac20 5200MHz Ant1



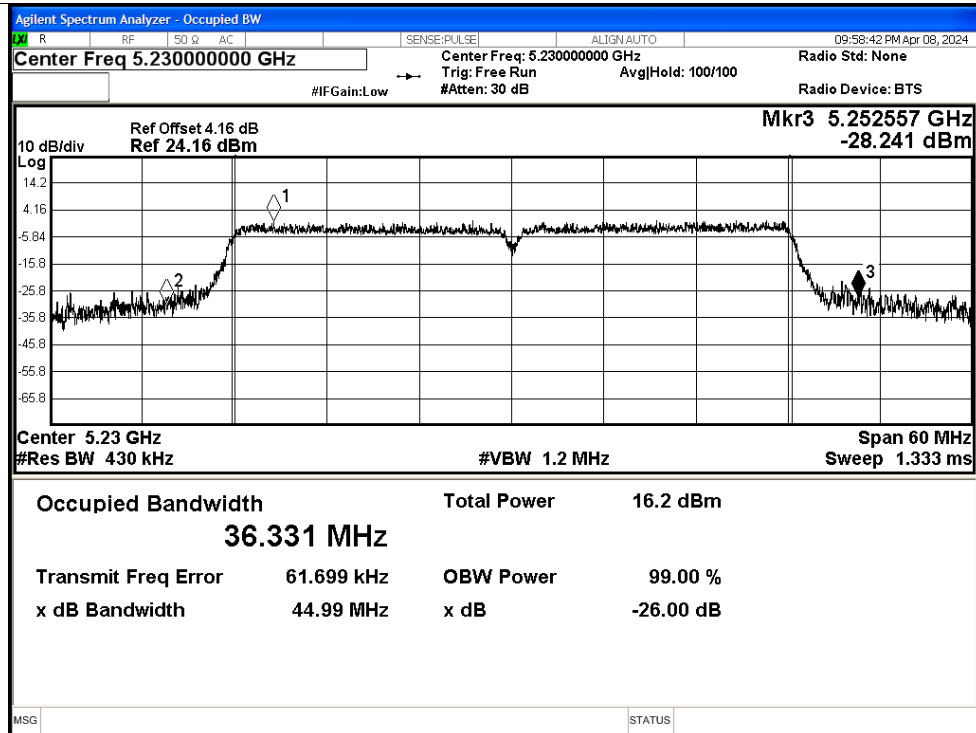
-26dB Bandwidth NVNT ac20 5240MHz Ant1



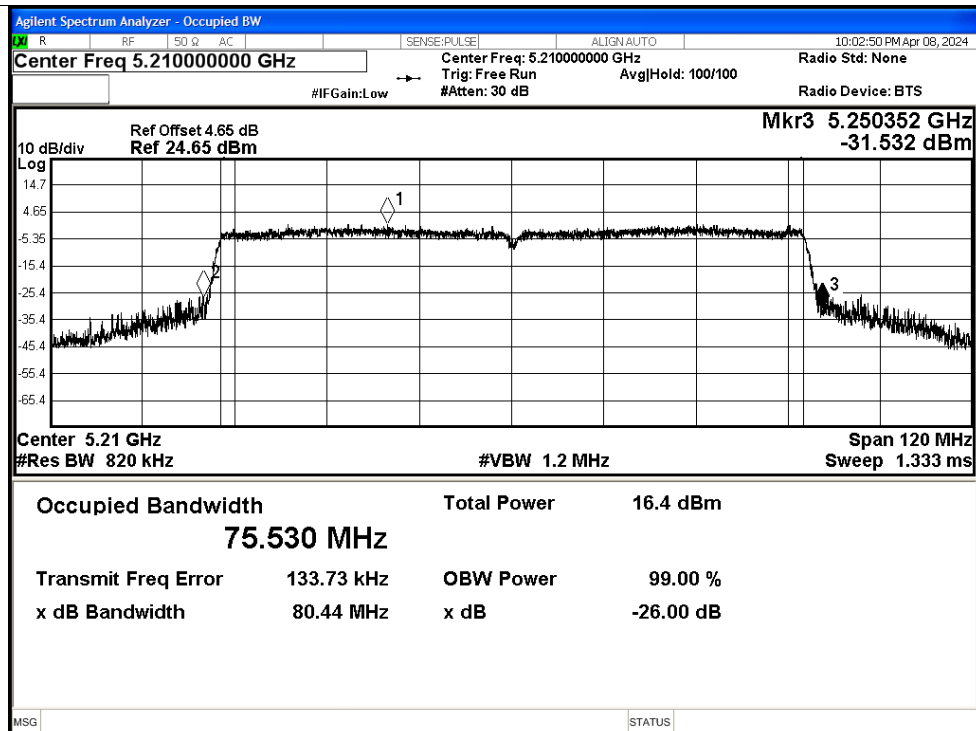
-26dB Bandwidth NVNT ac40 5190MHz Ant1



-26dB Bandwidth NVNT ac40 5230MHz Ant1



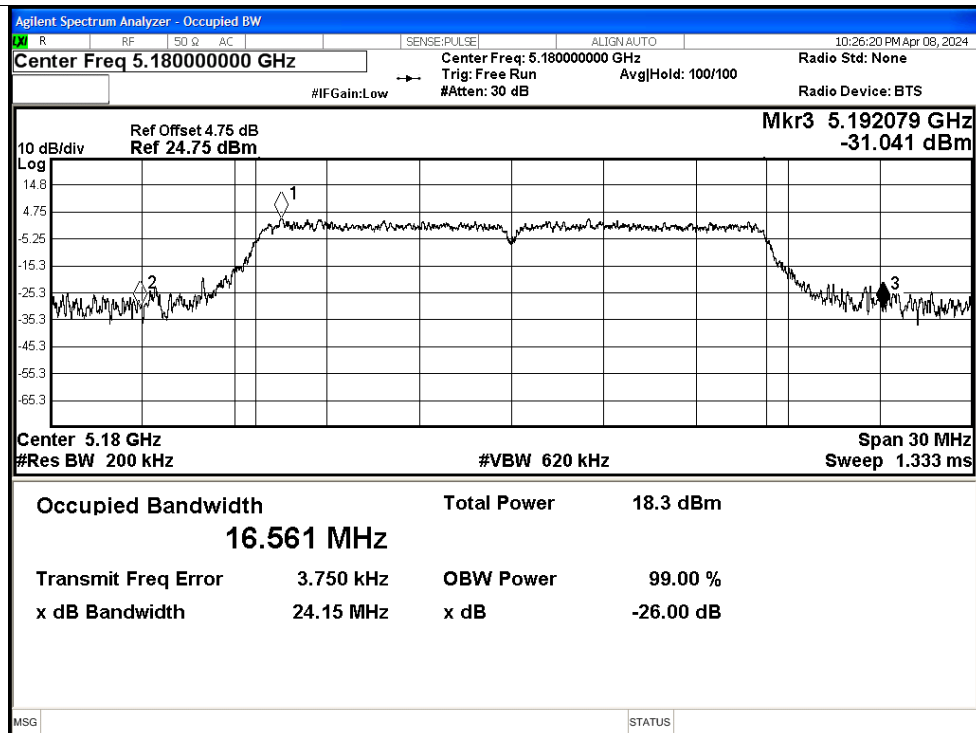
-26dB Bandwidth NVNT ac80 5210MHz Ant1



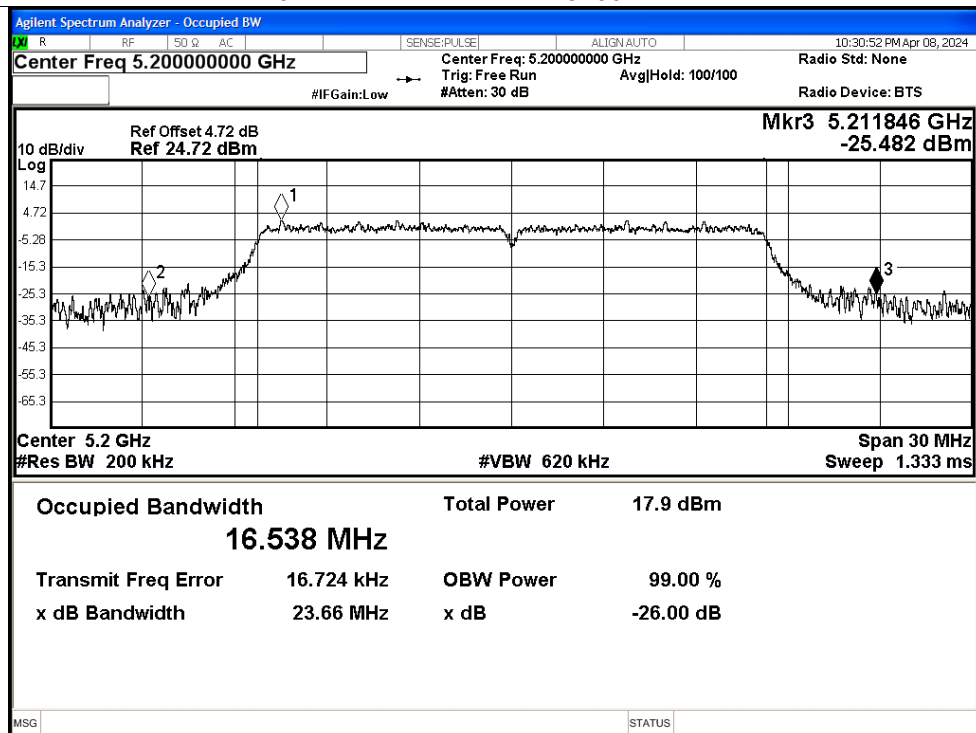
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant2	24.151	≥ 0.5	Pass
NVNT	a	5200	Ant2	23.658	≥ 0.5	Pass
NVNT	a	5240	Ant2	23.37	≥ 0.5	Pass
NVNT	n20	5180	Ant2	28.135	≥ 0.5	Pass
NVNT	n20	5200	Ant2	26.649	≥ 0.5	Pass
NVNT	n20	5240	Ant2	26.009	≥ 0.5	Pass
NVNT	n40	5190	Ant2	41.267	≥ 0.5	Pass
NVNT	n40	5230	Ant2	43.117	≥ 0.5	Pass
NVNT	ac20	5180	Ant2	26.441	≥ 0.5	Pass
NVNT	ac20	5200	Ant2	27.468	≥ 0.5	Pass
NVNT	ac20	5240	Ant2	25.676	≥ 0.5	Pass
NVNT	ac40	5190	Ant2	43.222	≥ 0.5	Pass
NVNT	ac40	5230	Ant2	49.93	≥ 0.5	Pass
NVNT	ac80	5210	Ant2	85.133	≥ 0.5	Pass

Test Graphs

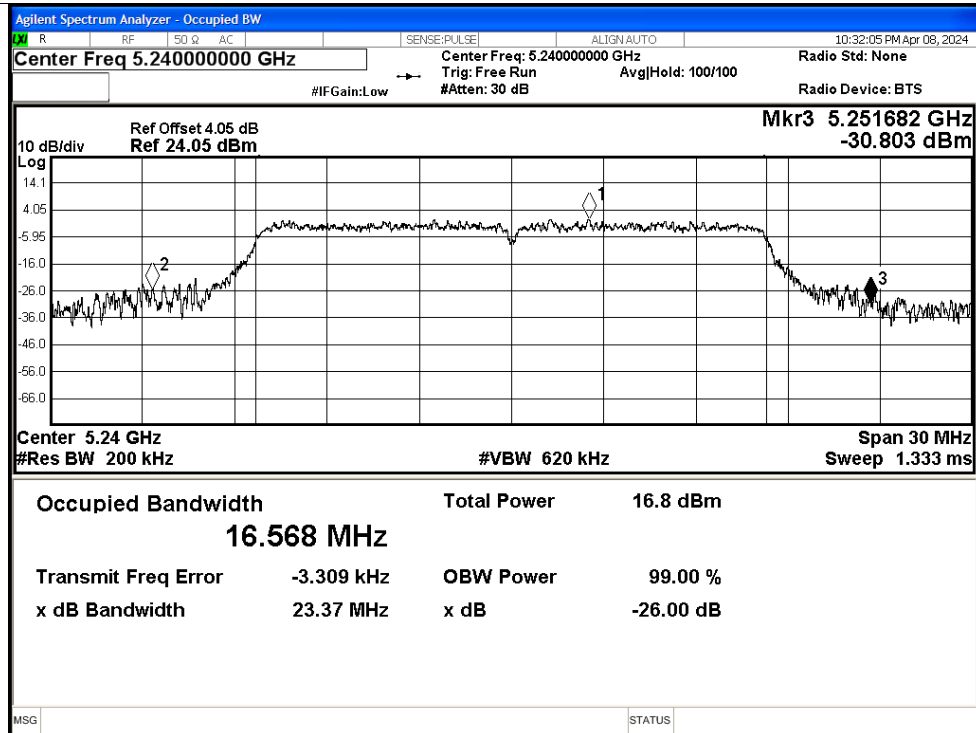
-26dB Bandwidth NVNT a 5180MHz Ant2



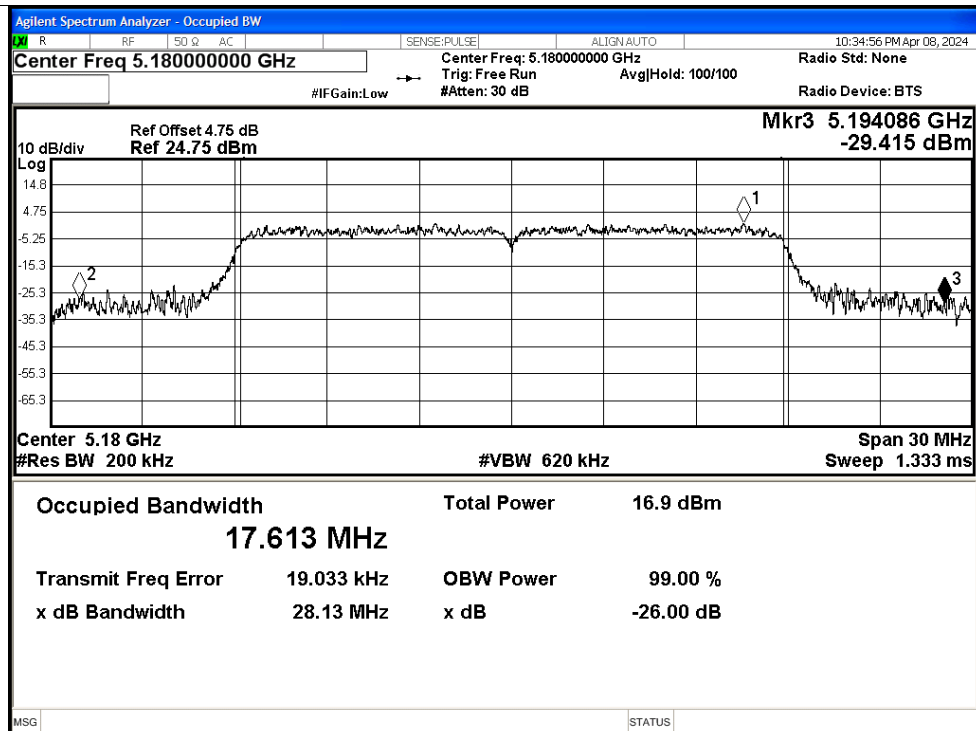
-26dB Bandwidth NVNT a 5200MHz Ant2



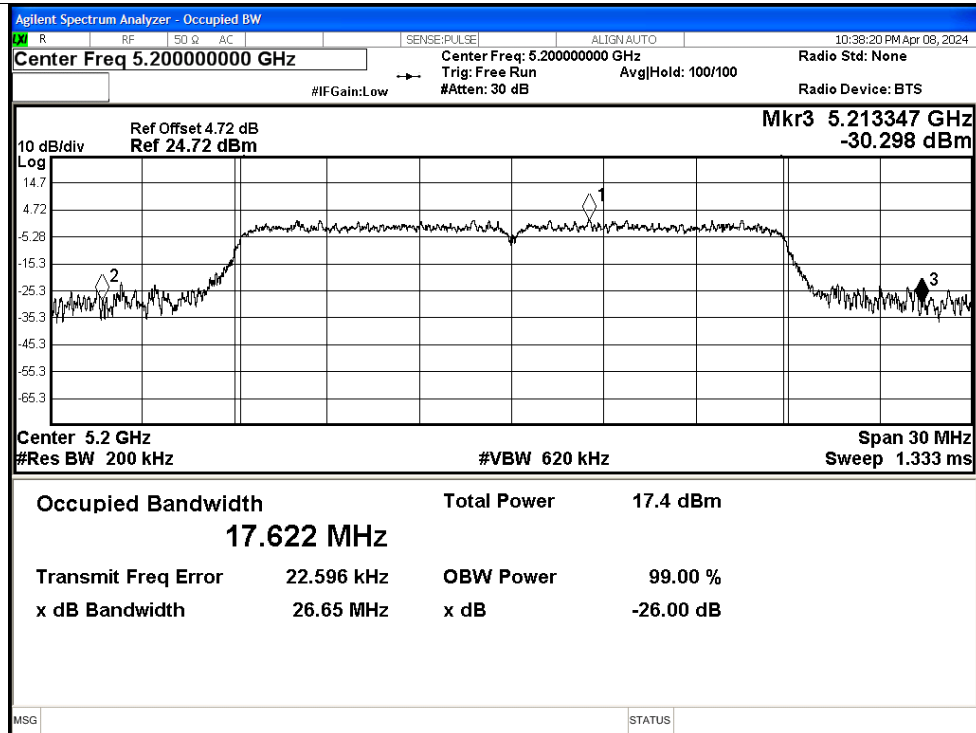
-26dB Bandwidth NVNT a 5240MHz Ant2



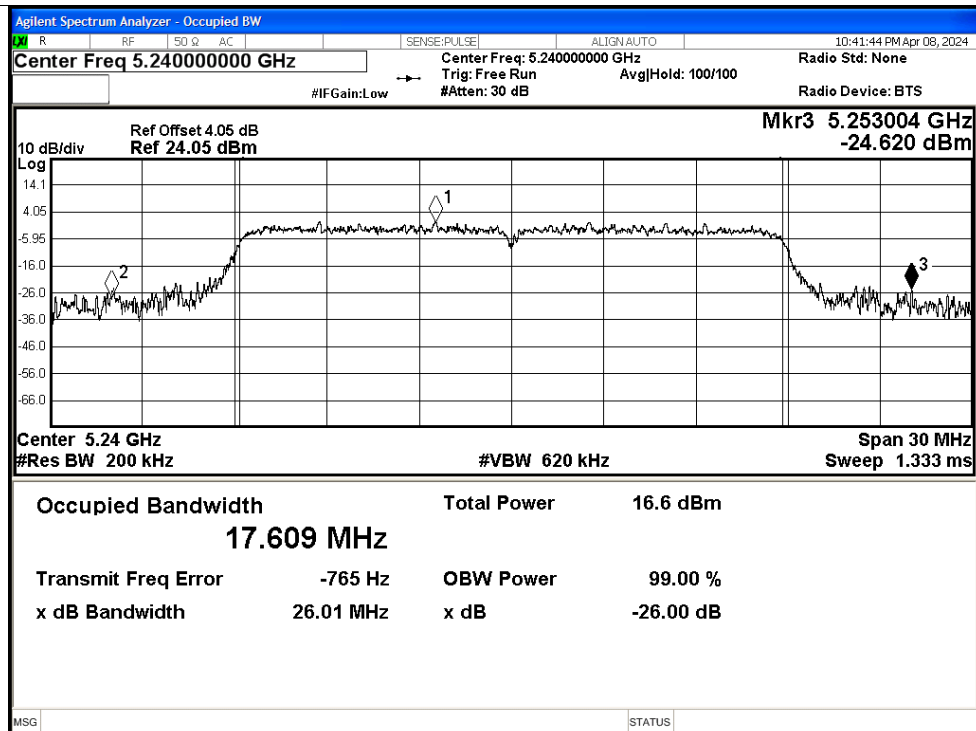
-26dB Bandwidth NVNT n20 5180MHz Ant2



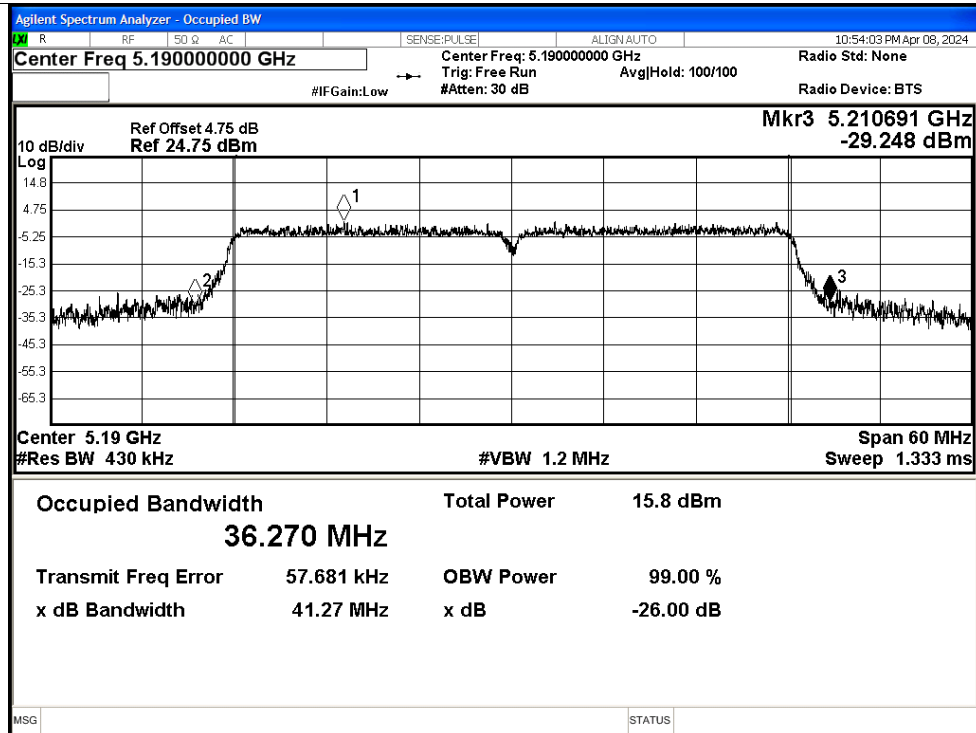
-26dB Bandwidth NVNT n20 5200MHz Ant2



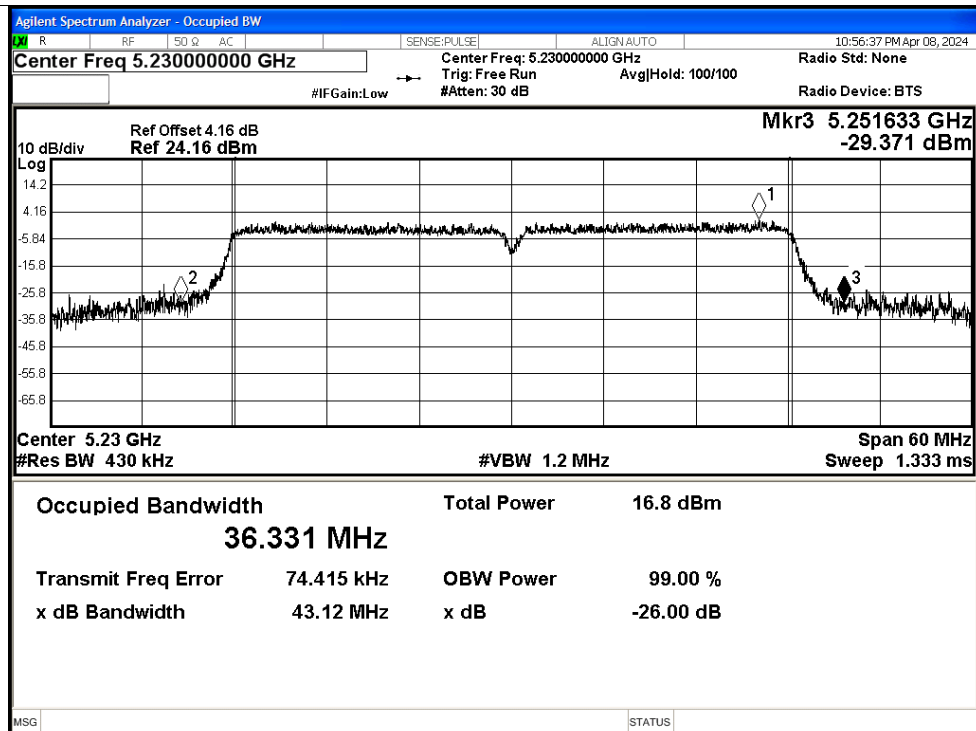
-26dB Bandwidth NVNT n20 5240MHz Ant2



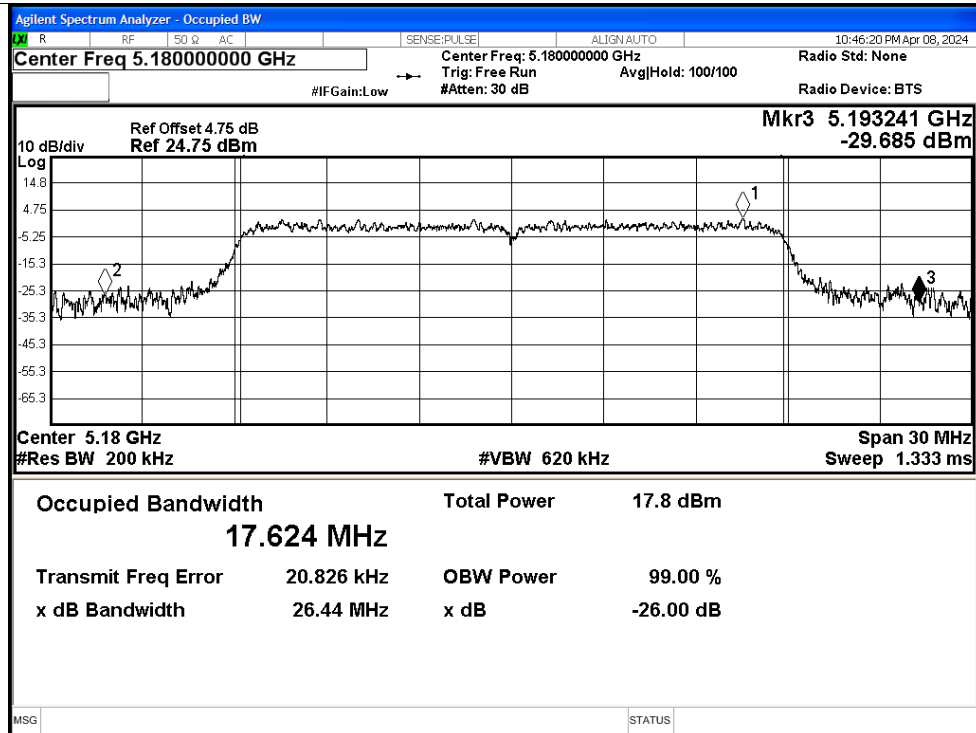
-26dB Bandwidth NVNT n40 5190MHz Ant2



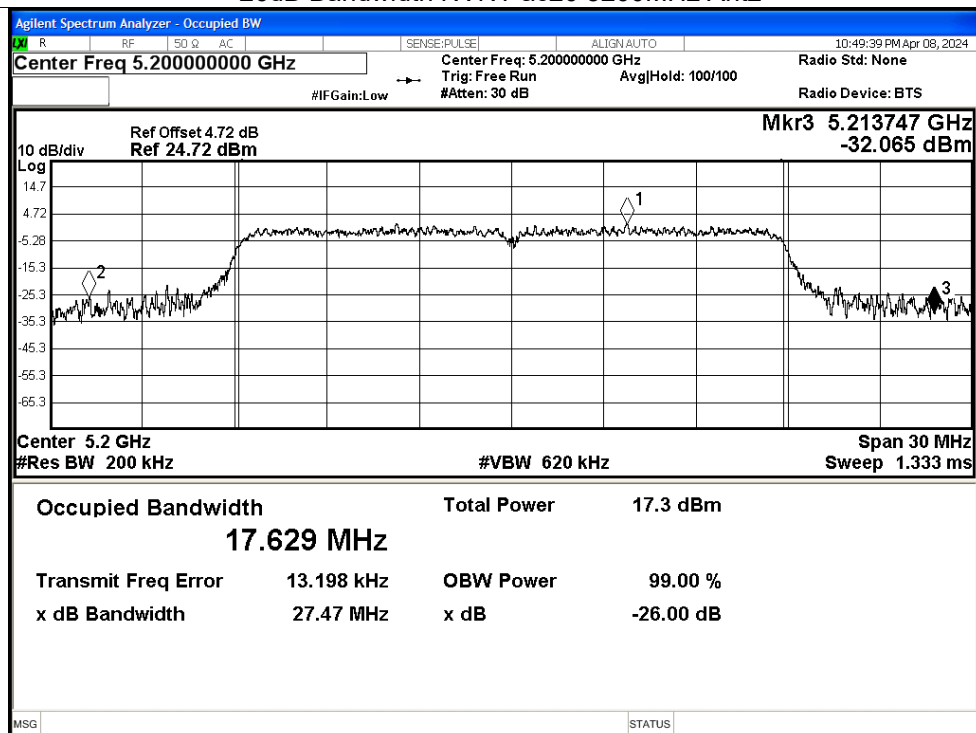
-26dB Bandwidth NVNT n40 5230MHz Ant2



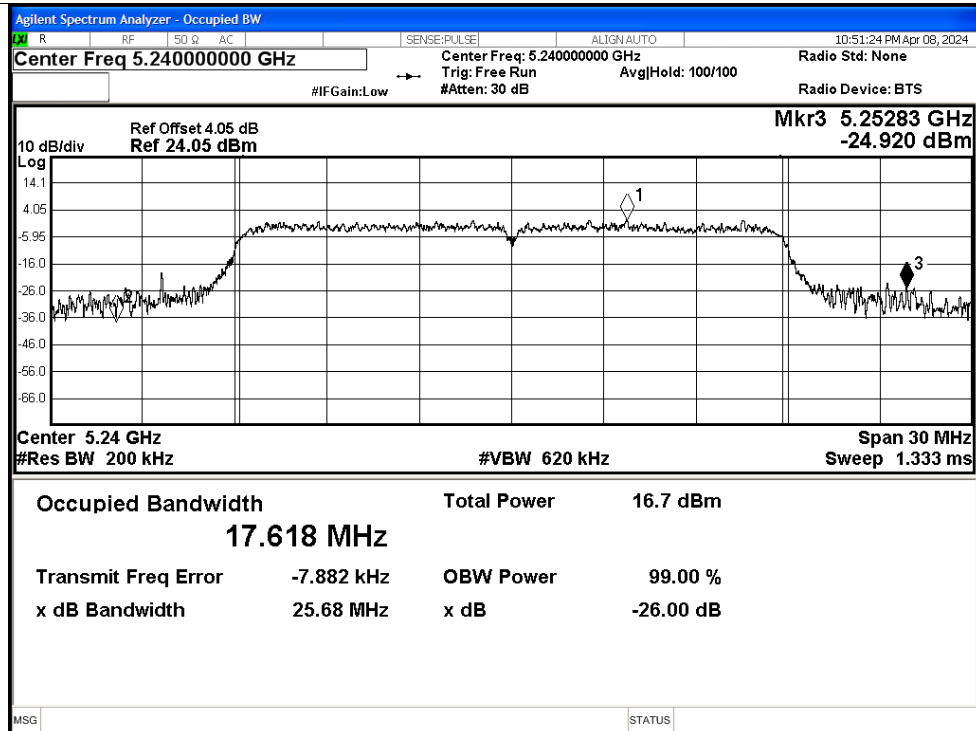
-26dB Bandwidth NVNT ac20 5180MHz Ant2



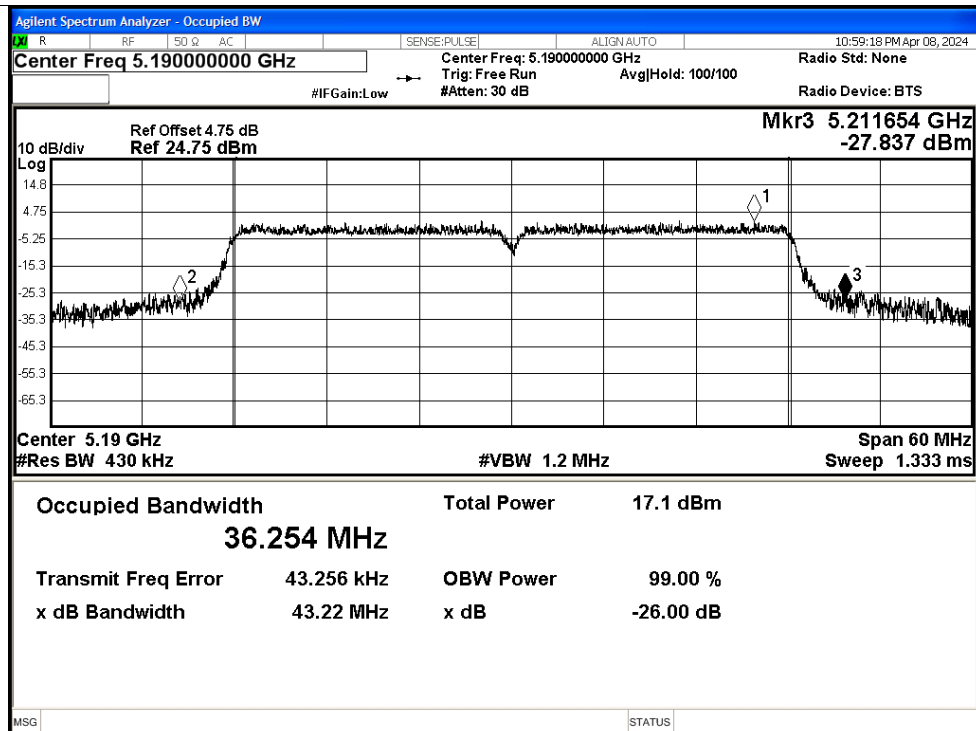
-26dB Bandwidth NVNT ac20 5200MHz Ant2



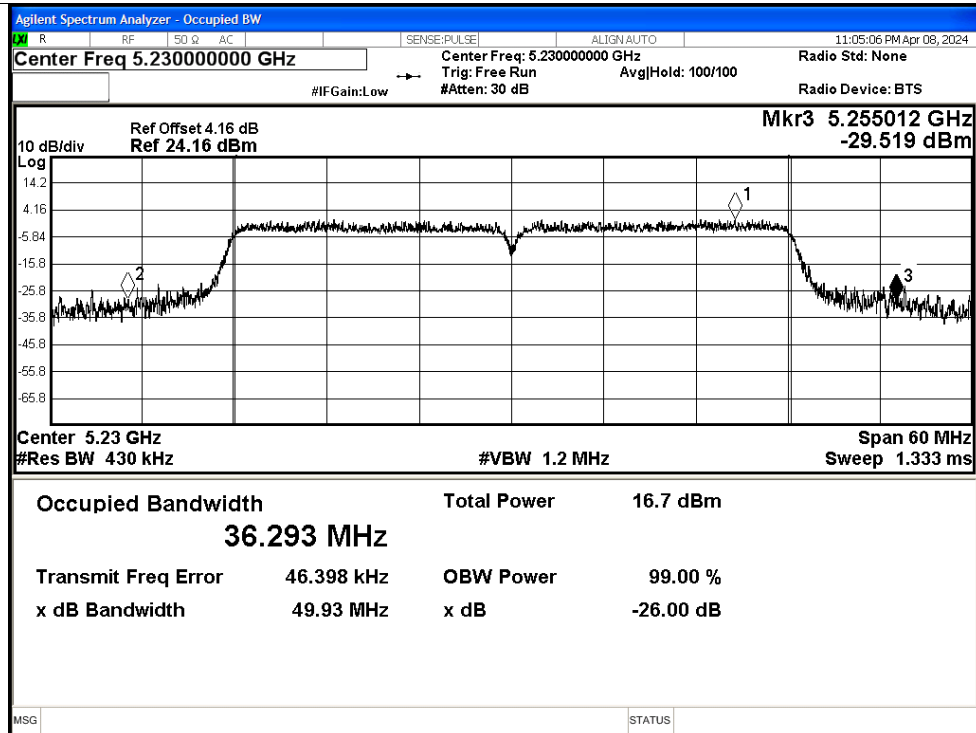
-26dB Bandwidth NVNT ac20 5240MHz Ant2



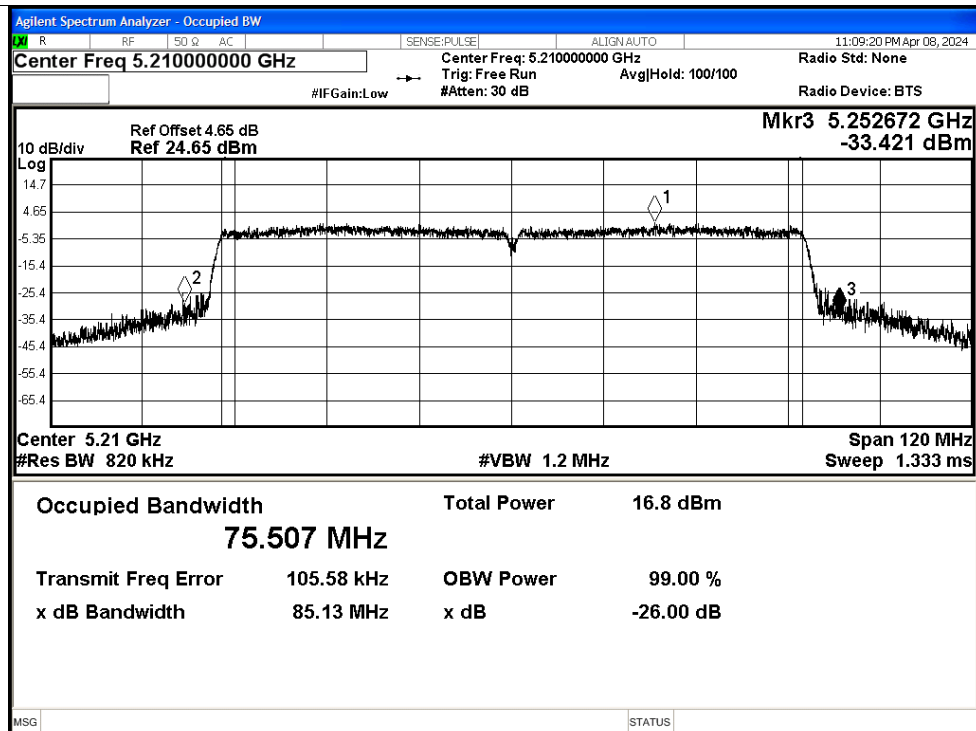
-26dB Bandwidth NVNT ac40 5190MHz Ant2



-26dB Bandwidth NVNT ac40 5230MHz Ant2



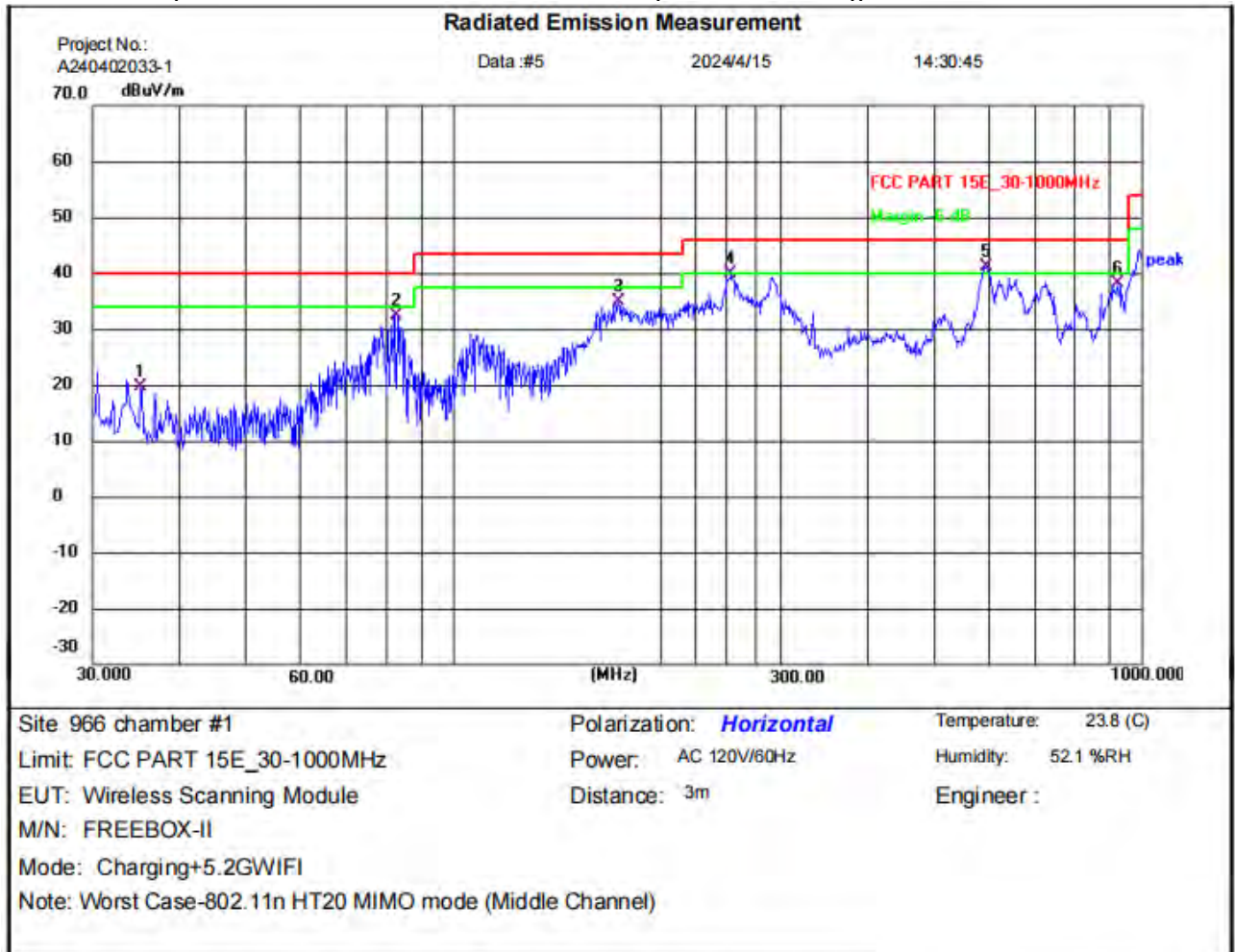
-26dB Bandwidth NVNT ac80 5210MHz Ant2



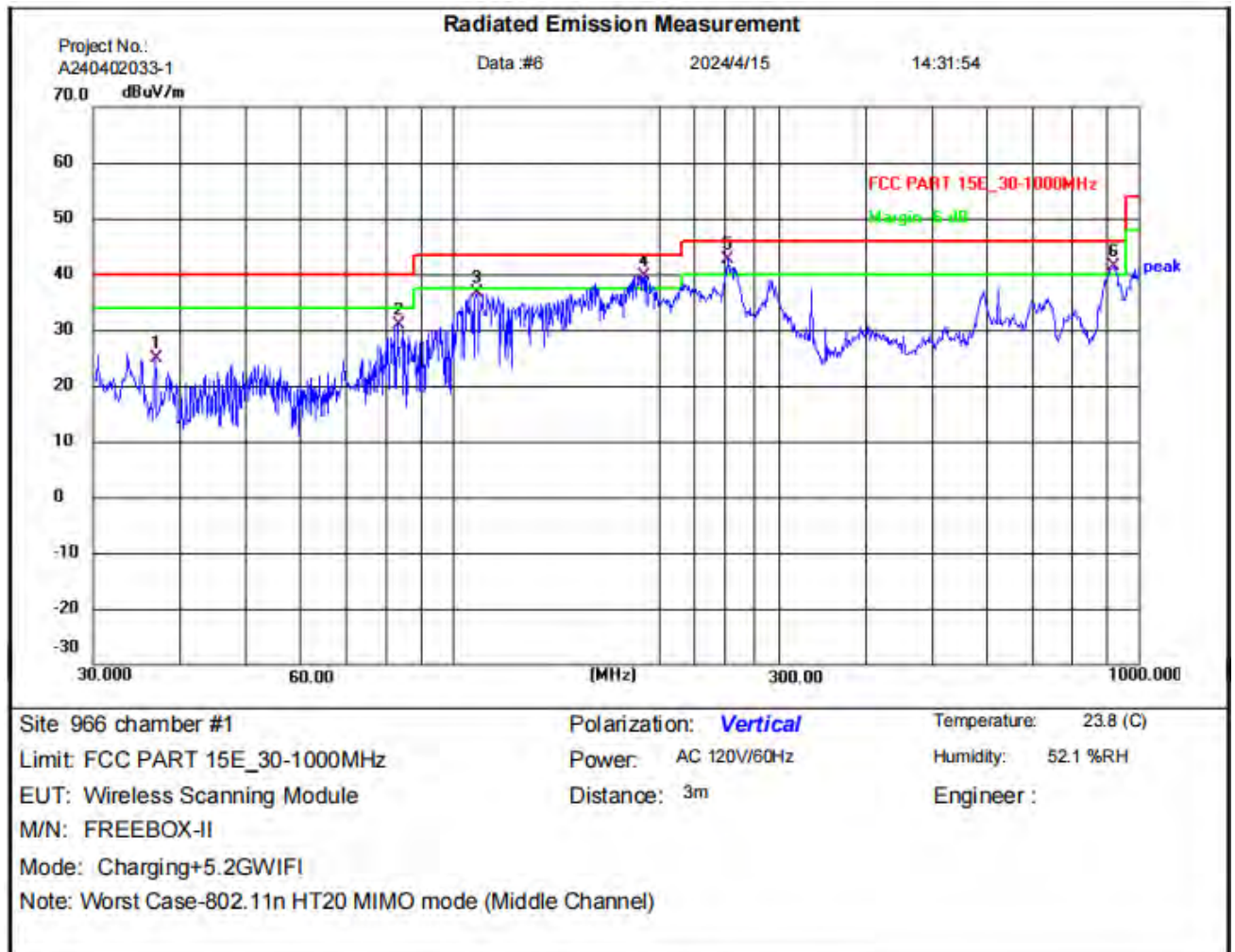
Appendix A.6: Test Results of Radiated Spurious Emissions

Note: Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and above 27GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 27GHz were reported.

30MHz - 1GHz (Worst Case-802.11n HT20 MIMO mode (Middle Channel))



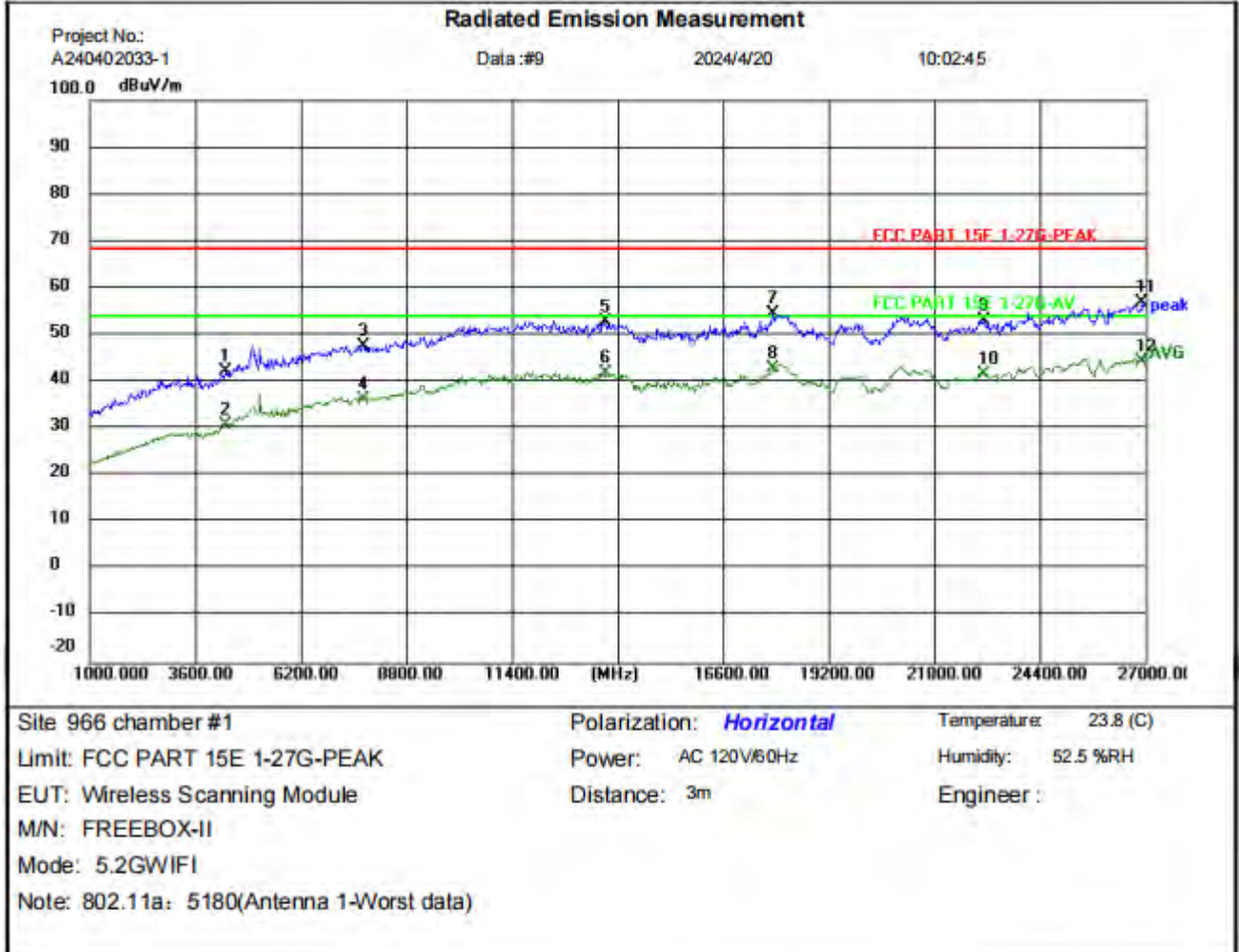
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	35.2511	37.33	-17.79	19.54	40.00	-20.46	QP	P	
2	82.6481	51.98	-19.62	32.36	40.00	-7.64	QP	P	
3	174.4240	54.08	-19.16	34.92	43.50	-8.58	QP	P	
4	253.8366	55.41	-15.57	39.84	46.00	-6.16	QP	P	
5	595.1327	51.72	-10.52	41.20	46.00	-4.80	QP	P	
6	925.7562	46.11	-7.93	38.18	46.00	-7.82	QP	P	



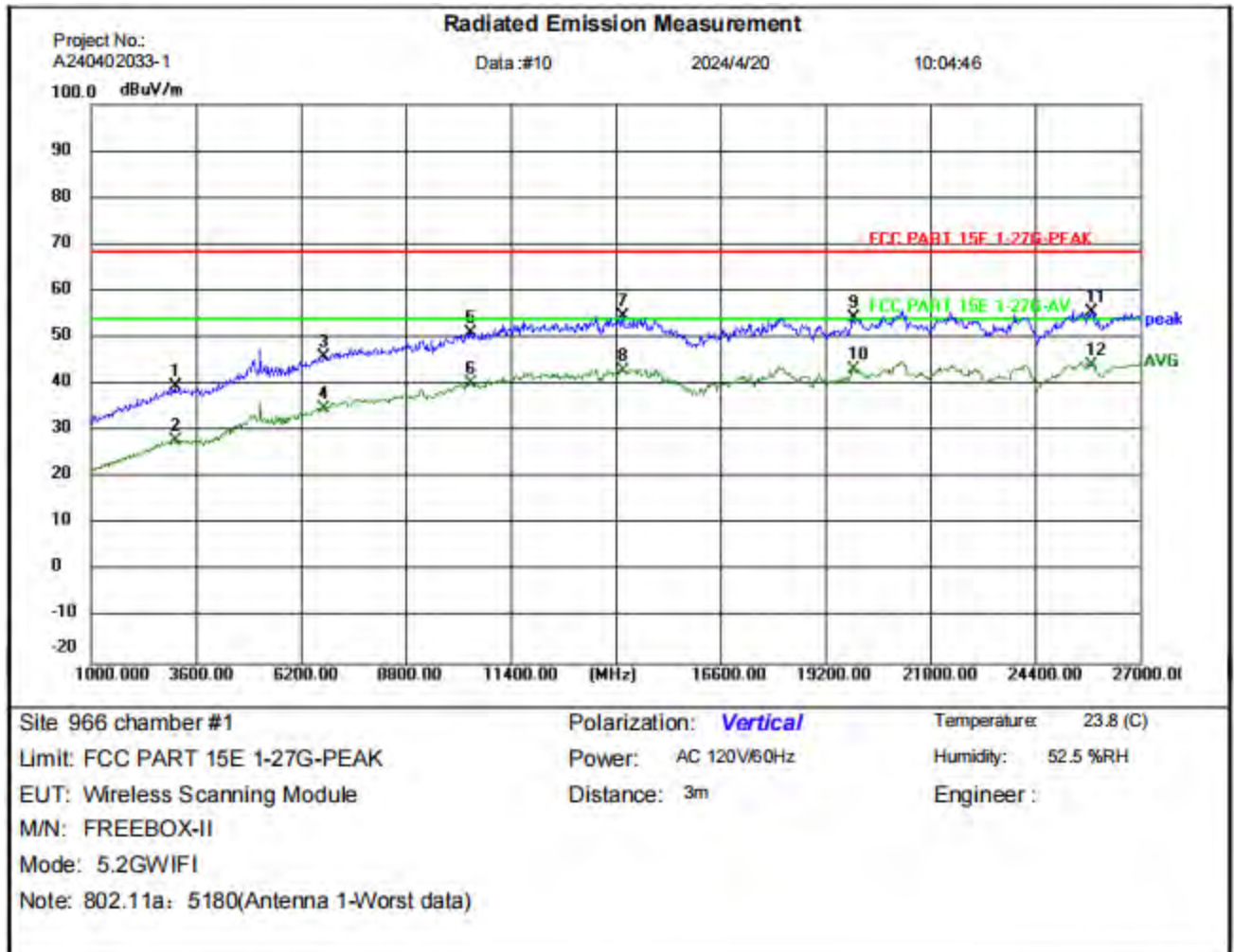
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	36.8953	42.69	-17.70	24.99	40.00	-15.01	QP	P	
2	83.2298	50.38	-19.56	30.82	40.00	-9.18	QP	P	
3	108.6470	55.52	-18.94	36.58	43.50	-6.92	QP	P	
4	190.4050	57.91	-18.30	39.61	43.50	-3.89	QP	P	
5	252.0627	58.25	-15.58	42.67	46.00	-3.33	QP	P	
6	922.5157	49.43	-7.97	41.46	46.00	-4.54	QP	P	

1GHz - 27GHz

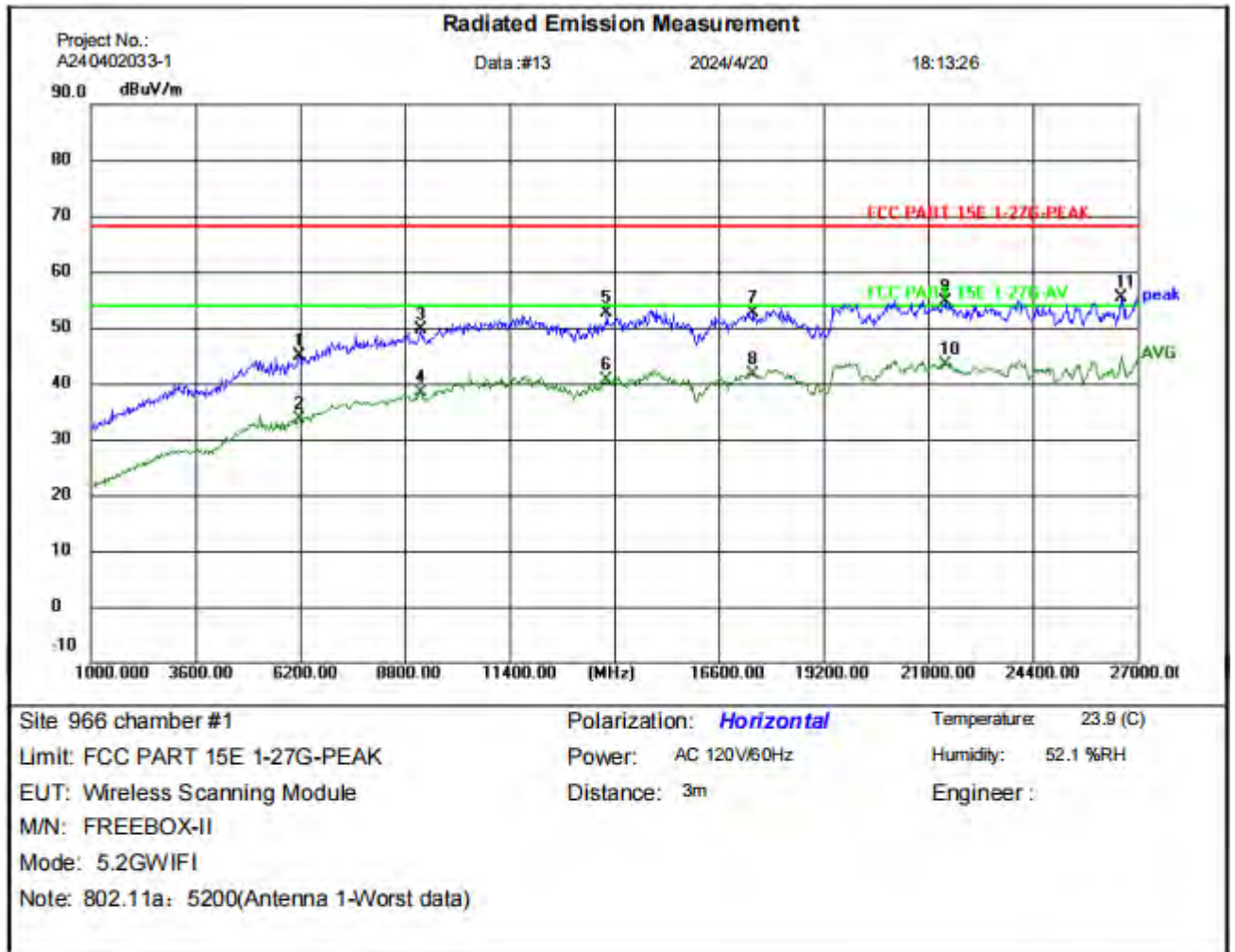
Note: The highest waveform in the figure is 5GHz Wi-Fi Fundamental.



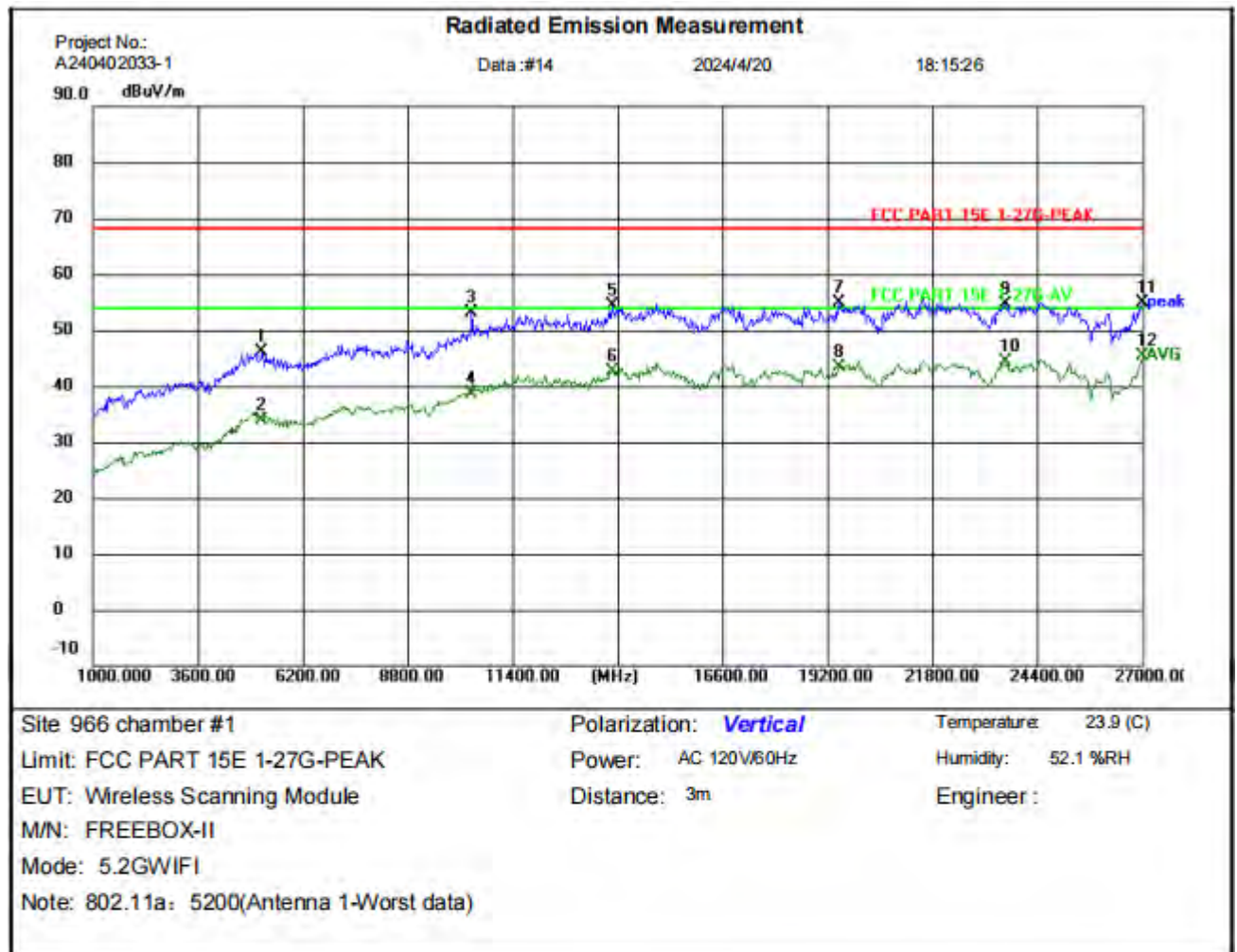
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	4328.000	49.41	-7.26	42.15	68.20	-26.05	peak	P	
2	4328.000	38.01	-7.26	30.75	54.00	-23.25	AVG	P	
3	7734.000	46.86	0.76	47.62	68.20	-20.58	peak	P	
4	7734.000	35.57	0.76	36.33	54.00	-17.67	AVG	P	
5	13714.000	44.54	8.34	52.88	68.20	-15.32	peak	P	
6	13714.000	33.65	8.34	41.99	54.00	-12.01	AVG	P	
7	17822.000	37.91	16.53	54.44	68.20	-13.76	peak	P	
8	17822.000	26.27	16.53	42.80	54.00	-11.20	AVG	P	
9	23022.000	40.18	12.90	53.08	68.20	-15.12	peak	P	
10	23022.000	28.73	12.90	41.63	54.00	-12.37	AVG	P	
11	26922.000	41.32	15.60	56.92	68.20	-11.28	peak	P	
12	26922.000	28.90	15.60	44.50	54.00	-9.50	AVG	P	



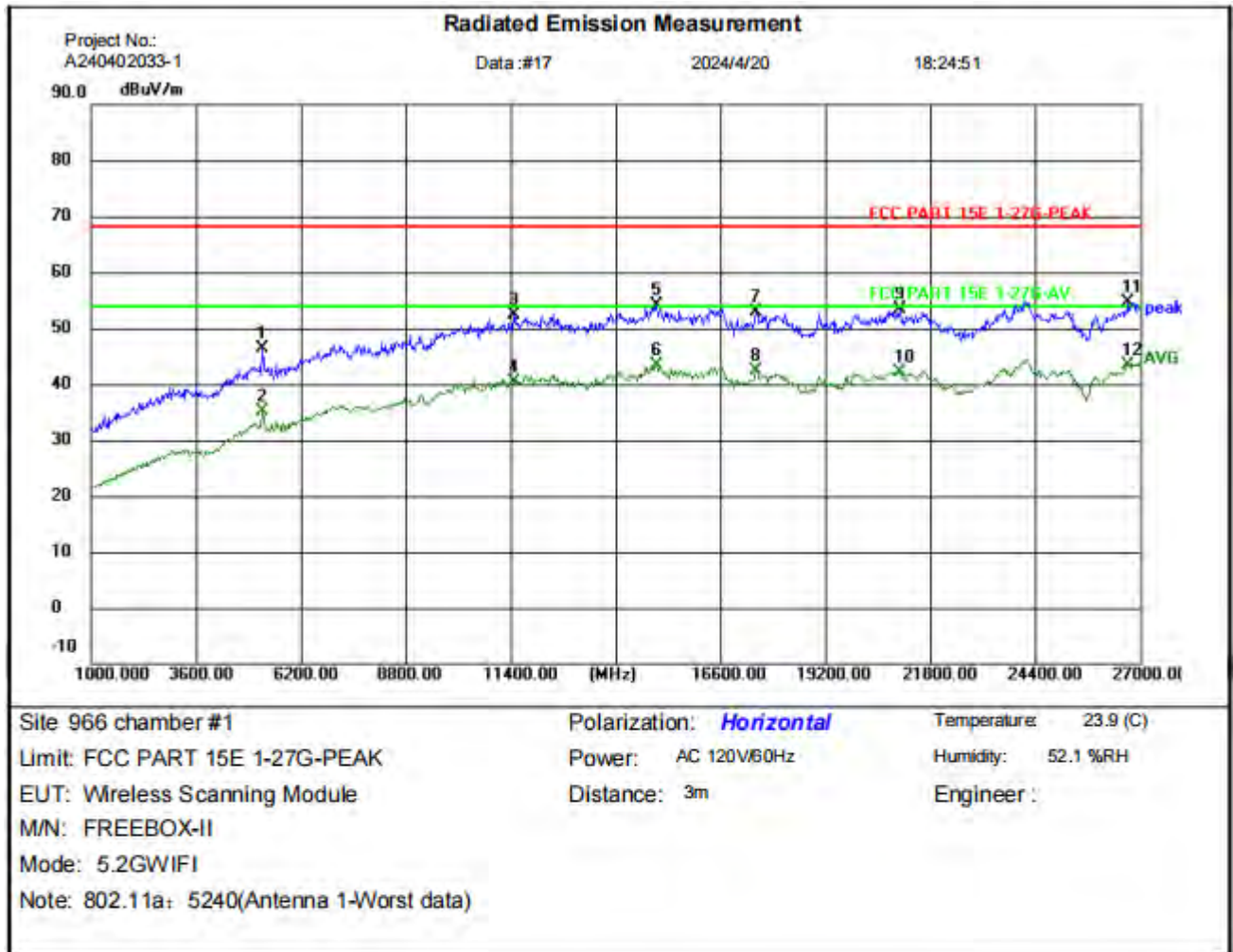
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	3080.000	49.22	-9.56	39.66	68.20	-28.54	peak	P	
2	3080.000	37.48	-9.56	27.92	54.00	-26.08	AVG	P	
3	6772.000	46.72	-0.77	45.95	68.20	-22.25	peak	P	
4	6772.000	35.57	-0.77	34.80	54.00	-19.20	AVG	P	
5	10412.000	46.80	4.29	51.09	68.20	-17.11	peak	P	
6	10412.000	35.88	4.29	40.17	54.00	-13.83	AVG	P	
7	14182.000	45.26	9.33	54.59	68.20	-13.61	peak	P	
8	14182.000	33.53	9.33	42.86	54.00	-11.14	AVG	P	
9	19902.000	42.81	11.44	54.25	68.20	-13.95	peak	P	
10	19902.000	31.58	11.44	43.02	54.00	-10.98	AVG	P	
11	25804.000	41.13	14.35	55.48	68.20	-12.72	peak	P	
12	25804.000	29.72	14.35	44.07	54.00	-9.93	AVG	P	



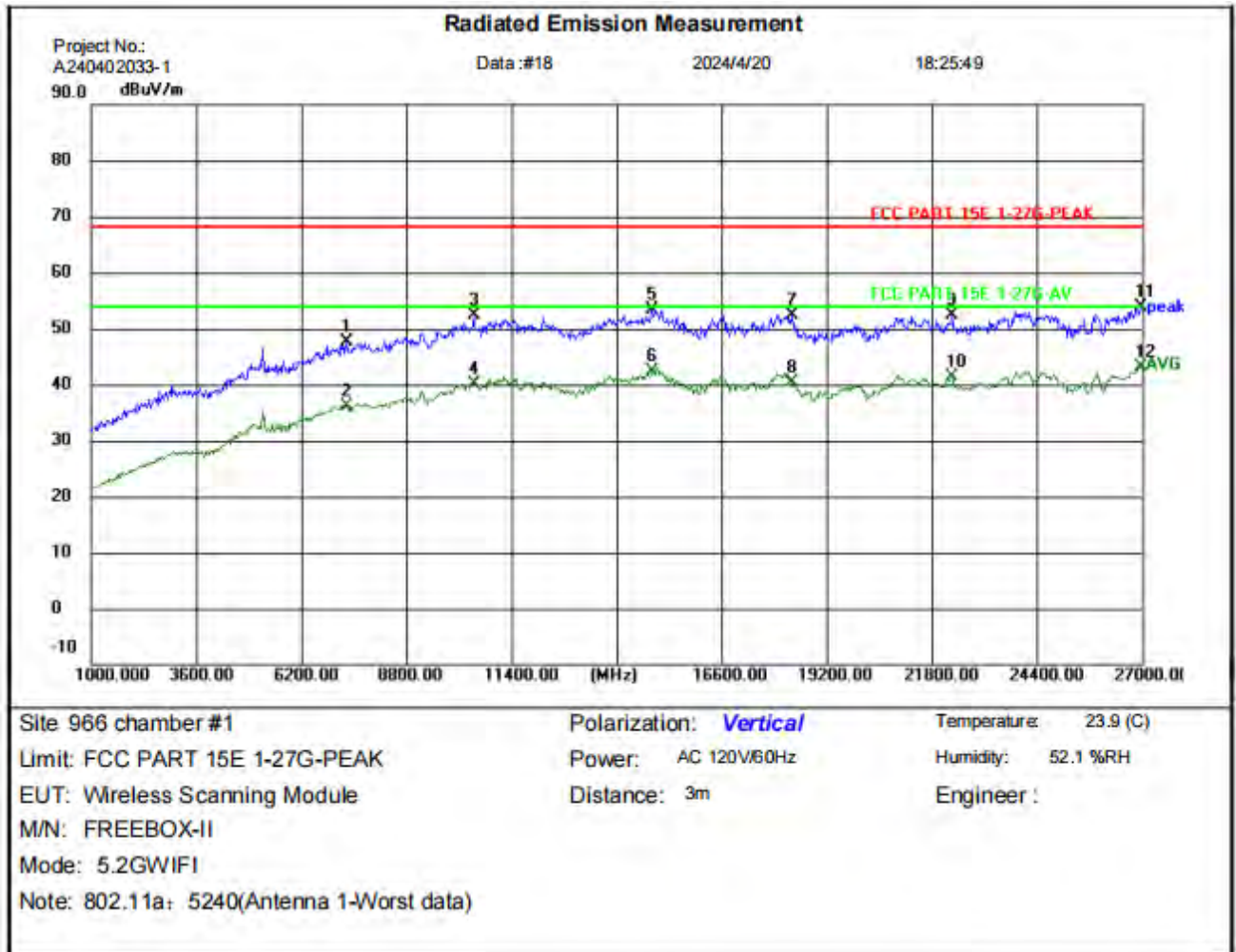
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	6174.000	47.72	-2.90	44.82	68.20	-23.38	peak	P	
2	6174.000	36.46	-2.90	33.56	54.00	-20.44	AVG	P	
3	9190.000	47.45	2.21	49.66	68.20	-18.54	peak	P	
4	9190.000	36.27	2.21	38.48	54.00	-15.52	AVG	P	
5	13818.000	43.87	8.64	52.51	68.20	-15.69	peak	P	
6	13818.000	31.96	8.64	40.60	54.00	-13.40	AVG	P	
7	17458.000	38.48	14.23	52.71	68.20	-15.49	peak	P	
8	17458.000	27.38	14.23	41.61	54.00	-12.39	AVG	P	
9	22242.000	42.37	12.33	54.70	68.20	-13.50	peak	P	
10	22242.000	30.99	12.33	43.32	54.00	-10.68	AVG	P	
11	26610.000	40.12	15.23	55.35	68.20	-12.85	peak	P	



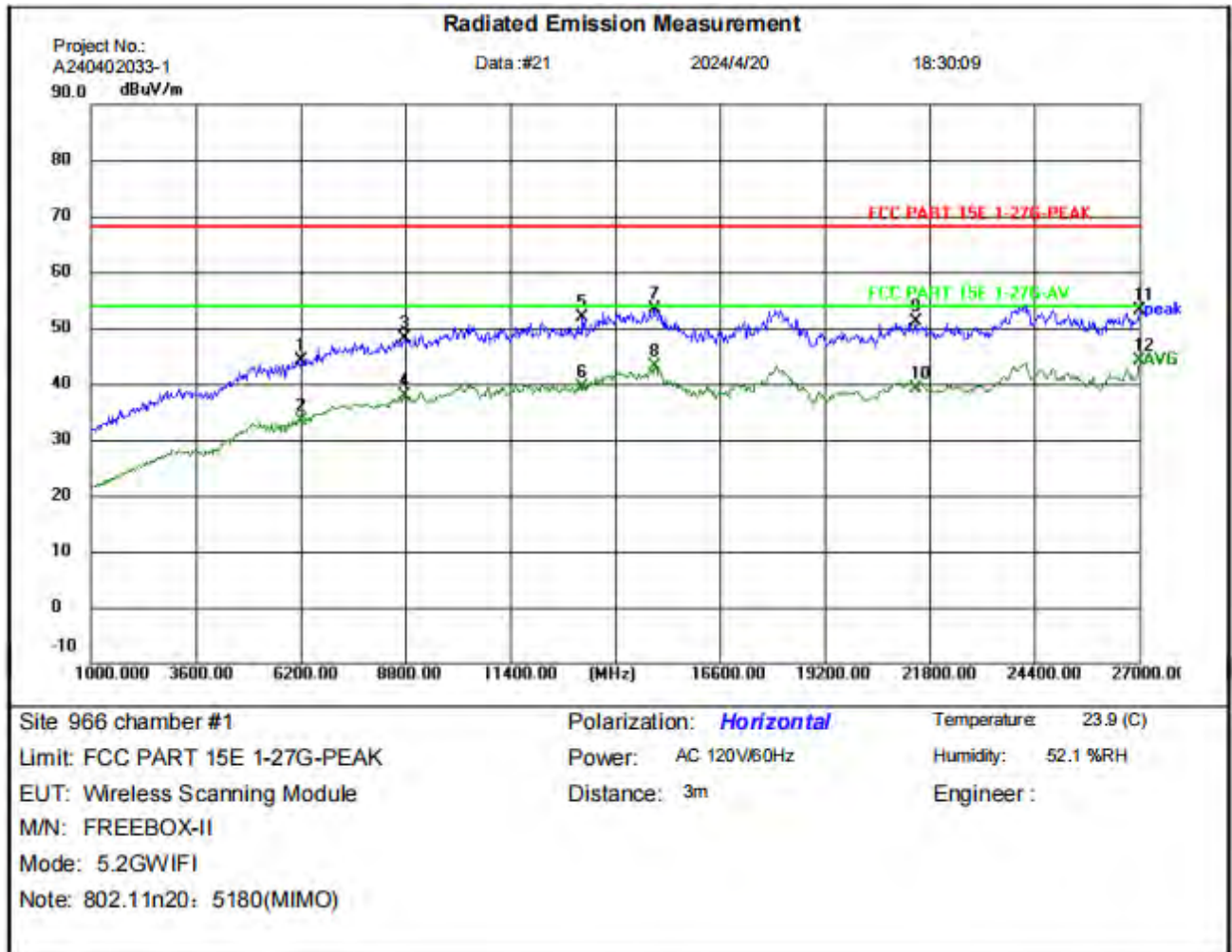
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark:
1	5186.000	49.91	-3.77	46.14	68.20	-22.06	peak	P	
2	5186.000	37.57	-3.77	33.80	54.00	-20.20	AVG	P	
3	10386.000	48.89	4.25	53.14	68.20	-15.06	peak	P	
4	10386.000	34.32	4.25	38.57	54.00	-15.43	AVG	P	
5	13870.000	45.46	8.80	54.26	68.20	-13.94	peak	P	
6	13870.000	33.76	8.80	42.56	54.00	-11.44	AVG	P	
7	19486.000	43.48	11.29	54.77	68.20	-13.43	peak	P	
8	19486.000	31.97	11.29	43.26	54.00	-10.74	AVG	P	
9	23620.000	41.44	13.11	54.55	68.20	-13.65	peak	P	
10	23620.000	31.23	13.11	44.34	54.00	-9.66	AVG	P	
11	27000.000	39.18	15.69	54.87	68.20	-13.33	peak	P	
12	27000.000	29.72	15.69	45.41	54.00	-8.59	AVG	P	



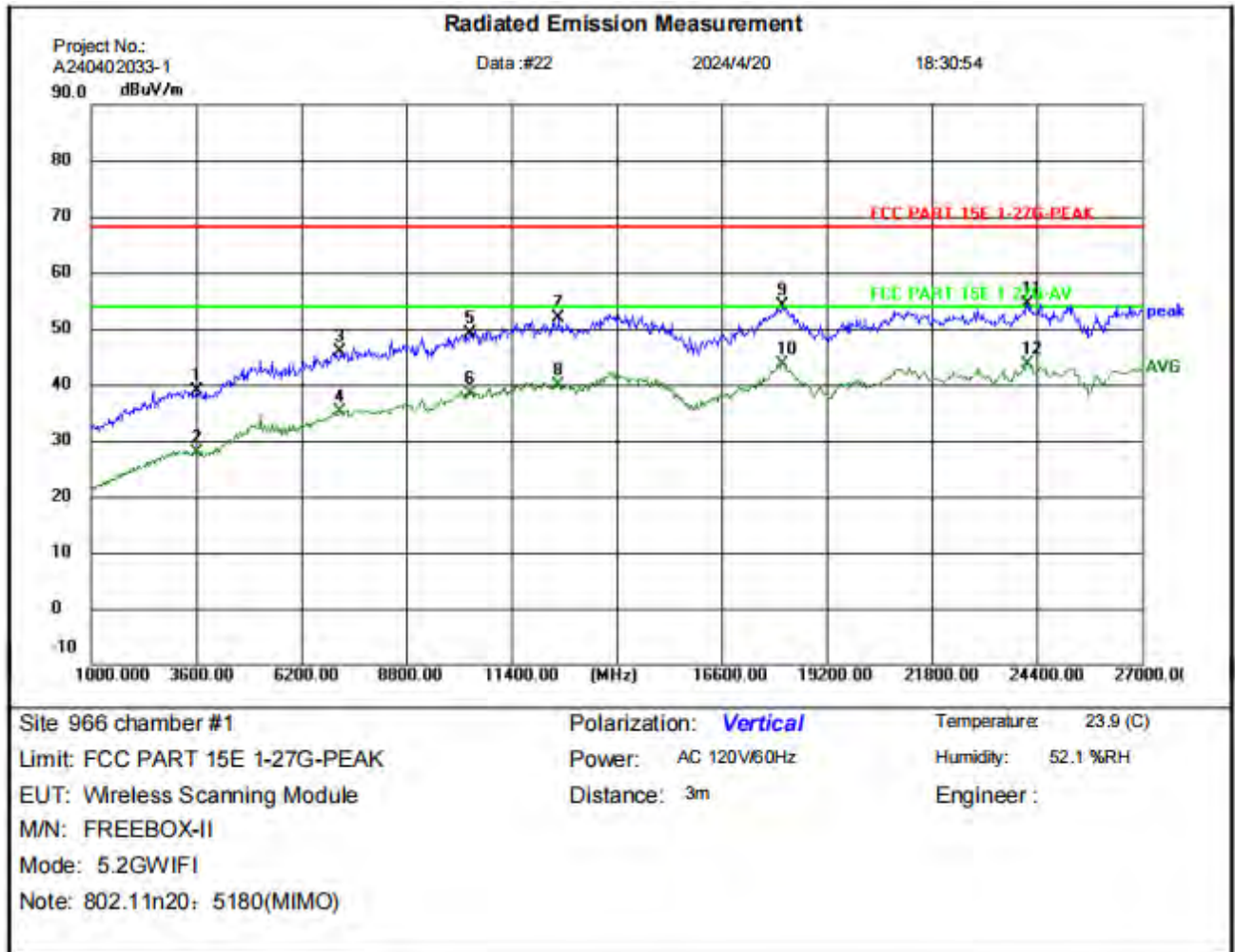
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5238.000	49.95	-3.69	46.26	68.20	-21.94	peak	P	
2	5238.000	38.79	-3.69	35.10	54.00	-18.90	AVG	P	
3	11478.000	46.37	5.99	52.36	68.20	-15.84	peak	P	
4	11478.000	34.35	5.99	40.34	54.00	-13.66	AVG	P	
5	15014.000	44.21	9.96	54.17	68.20	-14.03	peak	P	
6	15014.000	33.41	9.96	43.37	54.00	-10.63	AVG	P	
7	17484.000	38.60	14.39	52.99	68.20	-15.21	peak	P	
8	17484.000	28.02	14.39	42.41	54.00	-11.59	AVG	P	
9	21046.000	41.38	12.04	53.42	68.20	-14.78	peak	P	
10	21046.000	30.02	12.04	42.06	54.00	-11.94	AVG	P	
11	26714.000	39.31	15.36	54.67	68.20	-13.53	peak	P	
12	26714.000	28.07	15.36	43.43	54.00	-10.57	AVG	P	



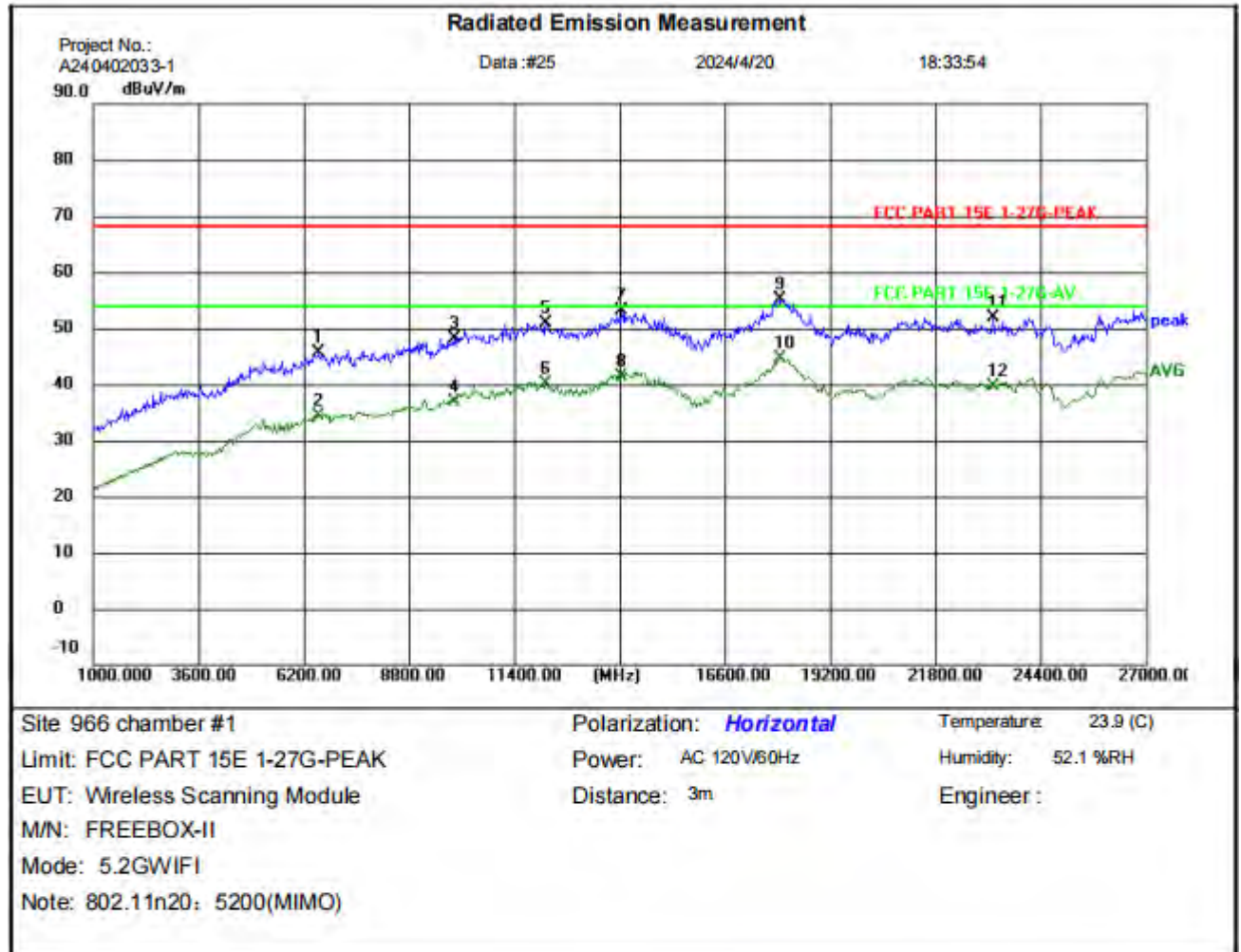
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	7318.000	47.26	0.33	47.59	68.20	-20.61	peak	P	
2	7318.000	35.92	0.33	36.25	54.00	-17.75	AVG	P	
3	10464.000	47.96	4.38	52.34	68.20	-15.86	peak	P	
4	10464.000	35.82	4.38	40.20	54.00	-13.80	AVG	P	
5	14884.000	43.59	9.90	53.49	68.20	-14.71	peak	P	
6	14884.000	32.41	9.90	42.31	54.00	-11.69	AVG	P	
7	18342.000	41.78	10.63	52.41	68.20	-15.79	peak	P	
8	18342.000	29.67	10.63	40.30	54.00	-13.70	AVG	P	
9	22294.000	39.91	12.37	52.28	68.20	-15.92	peak	P	
10	22294.000	28.89	12.37	41.26	54.00	-12.74	AVG	P	
11	26974.000	38.19	15.66	53.85	68.20	-14.35	peak	P	
12	26974.000	27.53	15.66	43.19	54.00	-10.81	AVG	P	



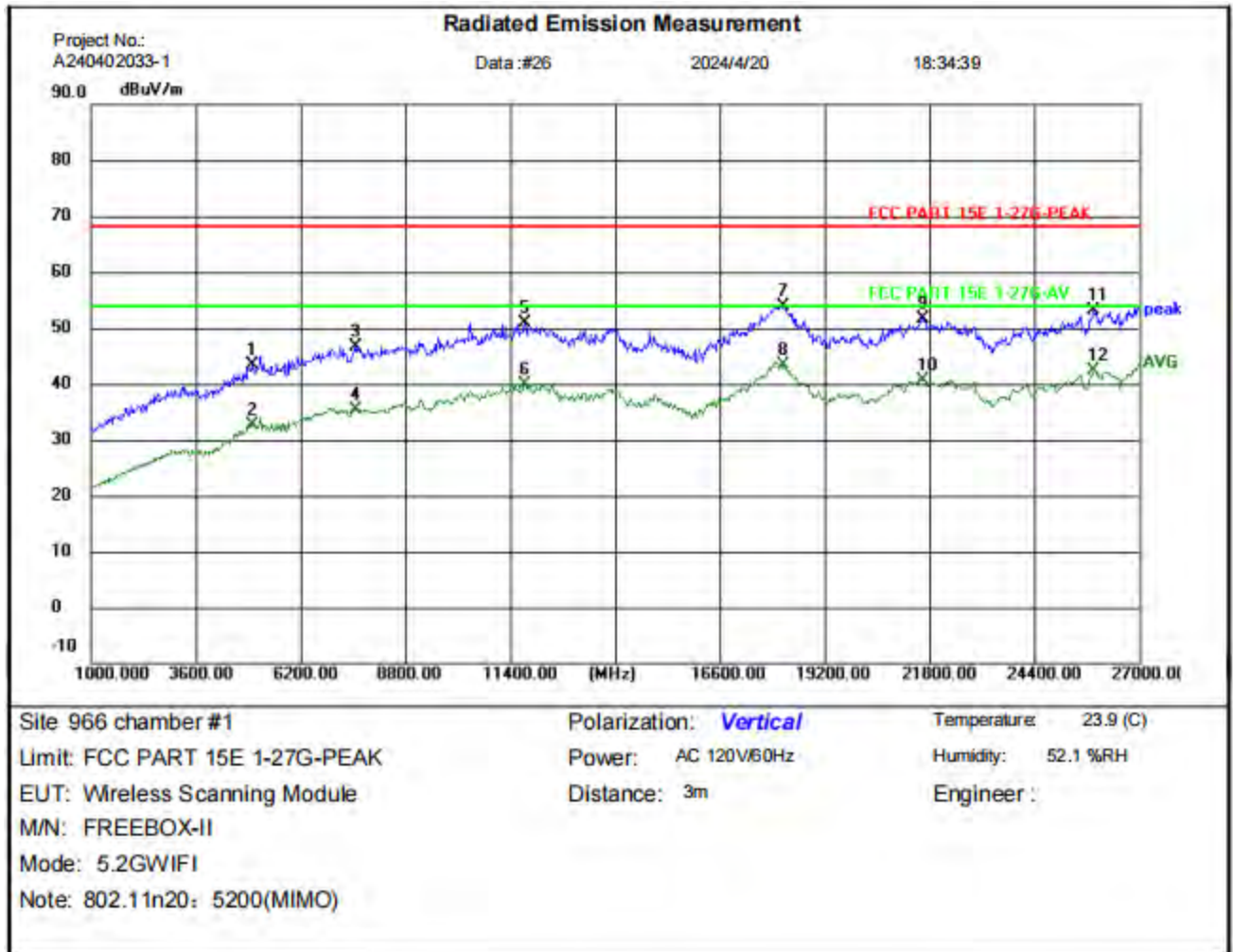
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	6226.000	46.84	-2.68	44.16	68.20	-24.04	peak	P	
2	6226.000	36.04	-2.68	33.36	54.00	-20.64	AVG	P	
3	8774.000	46.45	1.66	48.11	68.20	-20.09	peak	P	
4	8774.000	36.15	1.66	37.81	54.00	-16.19	AVG	P	
5	13194.000	45.05	6.81	51.86	68.20	-16.34	peak	P	
6	13194.000	32.51	6.81	39.32	54.00	-14.68	AVG	P	
7	14988.000	43.48	9.99	53.47	68.20	-14.73	peak	P	
8	14988.000	33.23	9.99	43.22	54.00	-10.78	AVG	P	
9	21462.000	38.92	12.09	51.01	68.20	-17.19	peak	P	
10	21462.000	27.07	12.09	39.16	54.00	-14.84	AVG	P	
11	27000.000	37.35	15.69	53.04	68.20	-15.16	peak	P	
12	27000.000	28.48	15.69	44.17	54.00	-9.83	AVG	P	



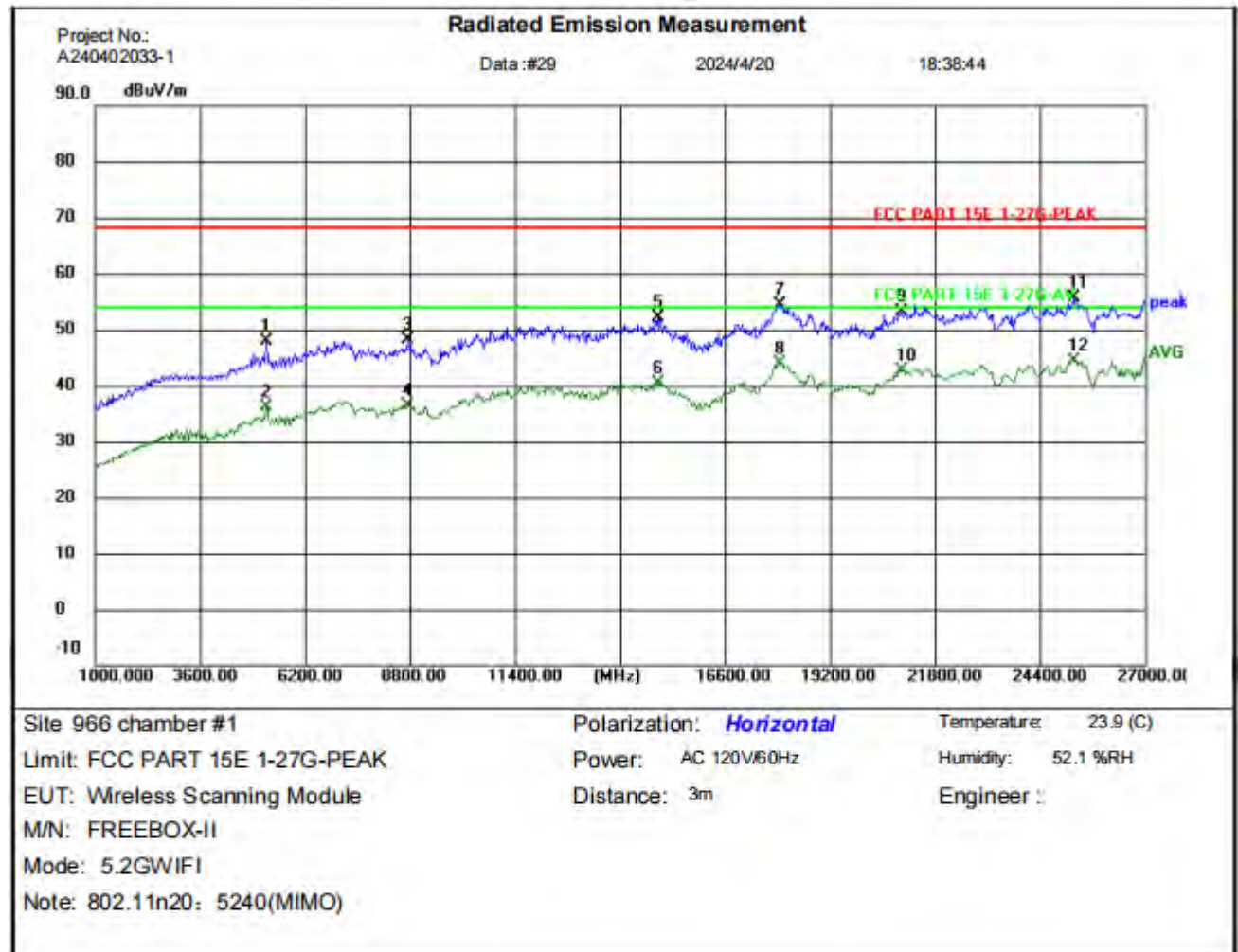
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	3600.000	48.19	-9.24	38.95	68.20	-29.25	peak	P	
2	3600.000	37.21	-9.24	27.97	54.00	-26.03	AVG	P	
3	7162.000	45.79	0.07	45.86	68.20	-22.34	peak	P	
4	7162.000	35.06	0.07	35.13	54.00	-18.87	AVG	P	
5	10386.000	44.79	4.25	49.04	68.20	-19.16	peak	P	
6	10386.000	34.20	4.25	38.45	54.00	-15.55	AVG	P	
7	12570.000	45.45	6.43	51.88	68.20	-16.32	peak	P	
8	12570.000	33.33	6.43	39.76	54.00	-14.24	AVG	P	
9	18108.000	43.69	10.46	54.15	68.20	-14.05	peak	P	
10	18108.000	33.12	10.46	43.58	54.00	-10.42	AVG	P	
11	24166.000	41.14	13.31	54.45	68.20	-13.75	peak	P	
12	24166.000	30.31	13.31	43.62	54.00	-10.38	AVG	P	



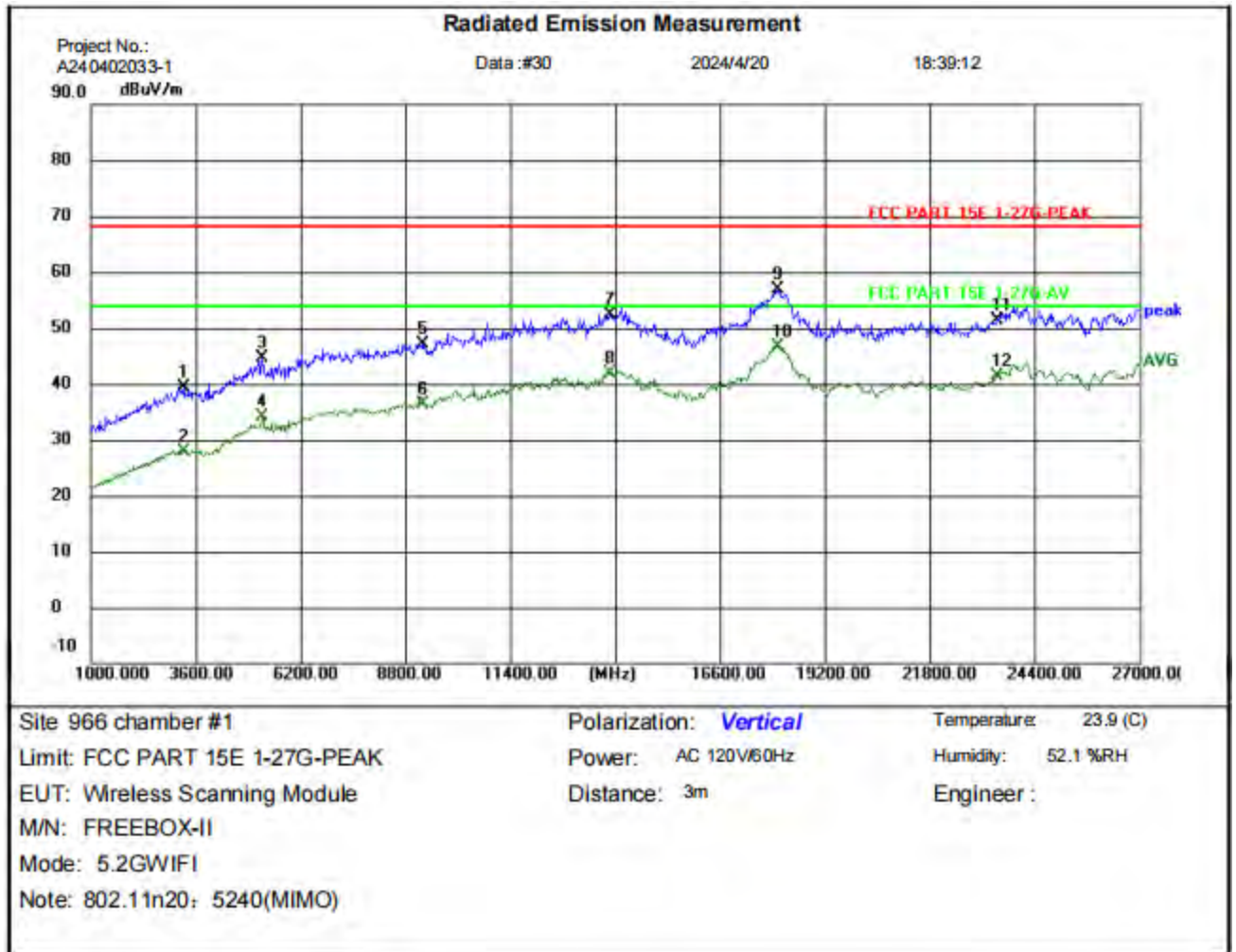
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark:
1	6564.000	46.82	-1.29	45.53	68.20	-22.67	peak	P	
2	6564.000	35.78	-1.29	34.49	54.00	-19.51	AVG	P	
3	9918.000	44.73	3.41	48.14	68.20	-20.06	peak	P	
4	9918.000	33.55	3.41	36.96	54.00	-17.04	AVG	P	
5	12180.000	44.40	6.60	51.00	68.20	-17.20	peak	P	
6	12180.000	33.44	6.60	40.04	54.00	-13.96	AVG	P	
7	14052.000	43.82	9.22	53.04	68.20	-15.16	peak	P	
8	14052.000	32.09	9.22	41.31	54.00	-12.69	AVG	P	
9	17952.000	37.75	17.36	55.11	68.20	-13.09	peak	P	
10	17952.000	27.16	17.36	44.52	54.00	-9.48	AVG	P	
11	23230.000	38.96	12.97	51.93	68.20	-16.27	peak	P	
12	23230.000	26.63	12.97	39.60	54.00	-14.40	AVG	P	



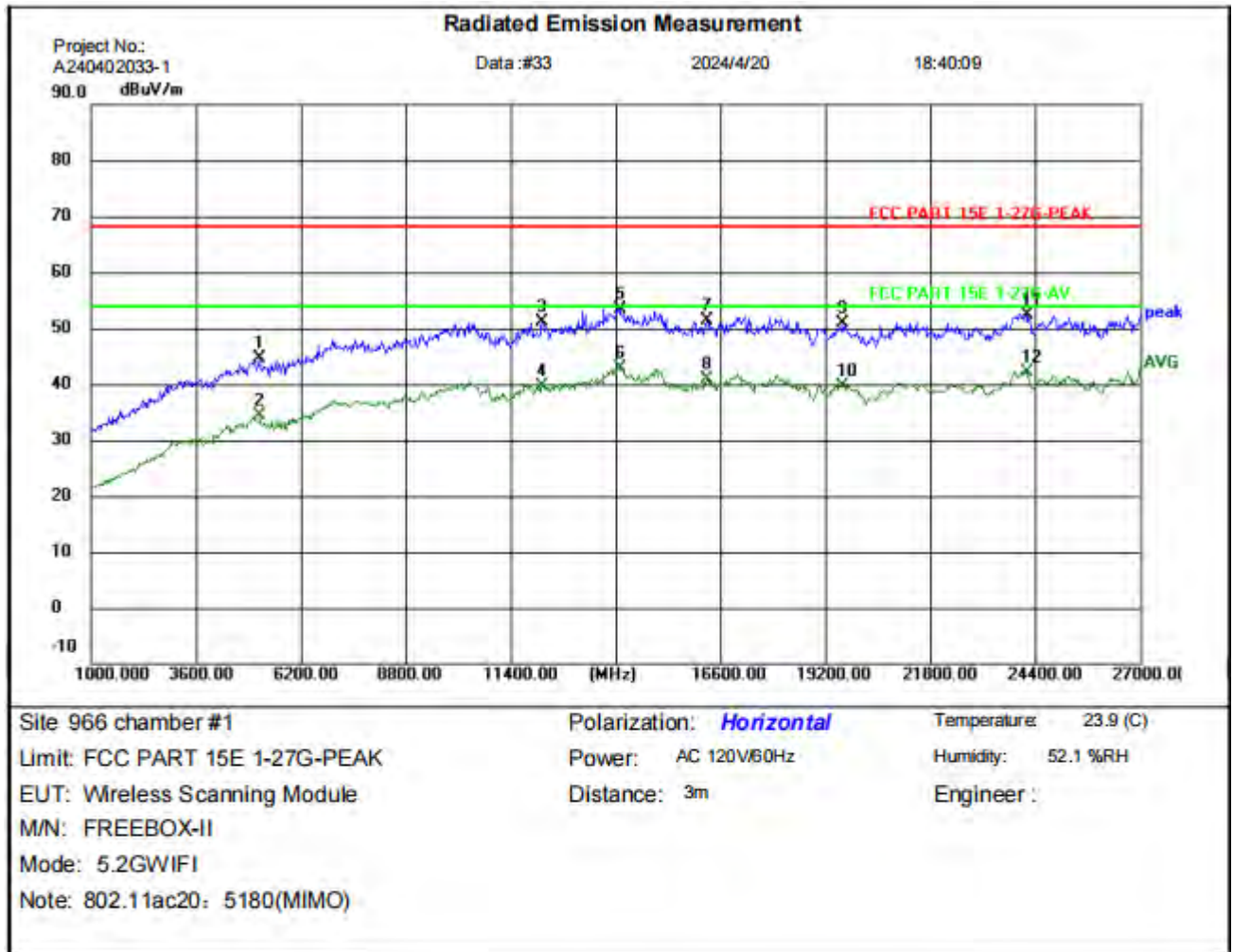
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5004.000	47.56	-4.11	43.45	68.20	-24.75	peak	P	
2	5004.000	36.81	-4.11	32.70	54.00	-21.30	AVG	P	
3	7578.000	45.92	0.65	46.57	68.20	-21.63	peak	P	
4	7578.000	34.69	0.65	35.34	54.00	-18.66	AVG	P	
5	11764.000	44.63	6.36	50.99	68.20	-17.21	peak	P	
6	11764.000	33.49	6.36	39.85	54.00	-14.15	AVG	P	
7	18160.000	43.44	10.50	53.94	68.20	-14.26	peak	P	
8	18160.000	32.90	10.50	43.40	54.00	-10.60	AVG	P	
9	21644.000	39.44	12.11	51.55	68.20	-16.65	peak	P	
10	21644.000	28.61	12.11	40.72	54.00	-13.28	AVG	P	
11	25882.000	38.69	14.42	53.11	68.20	-15.09	peak	P	
12	25882.000	28.01	14.42	42.43	54.00	-11.57	AVG	P	



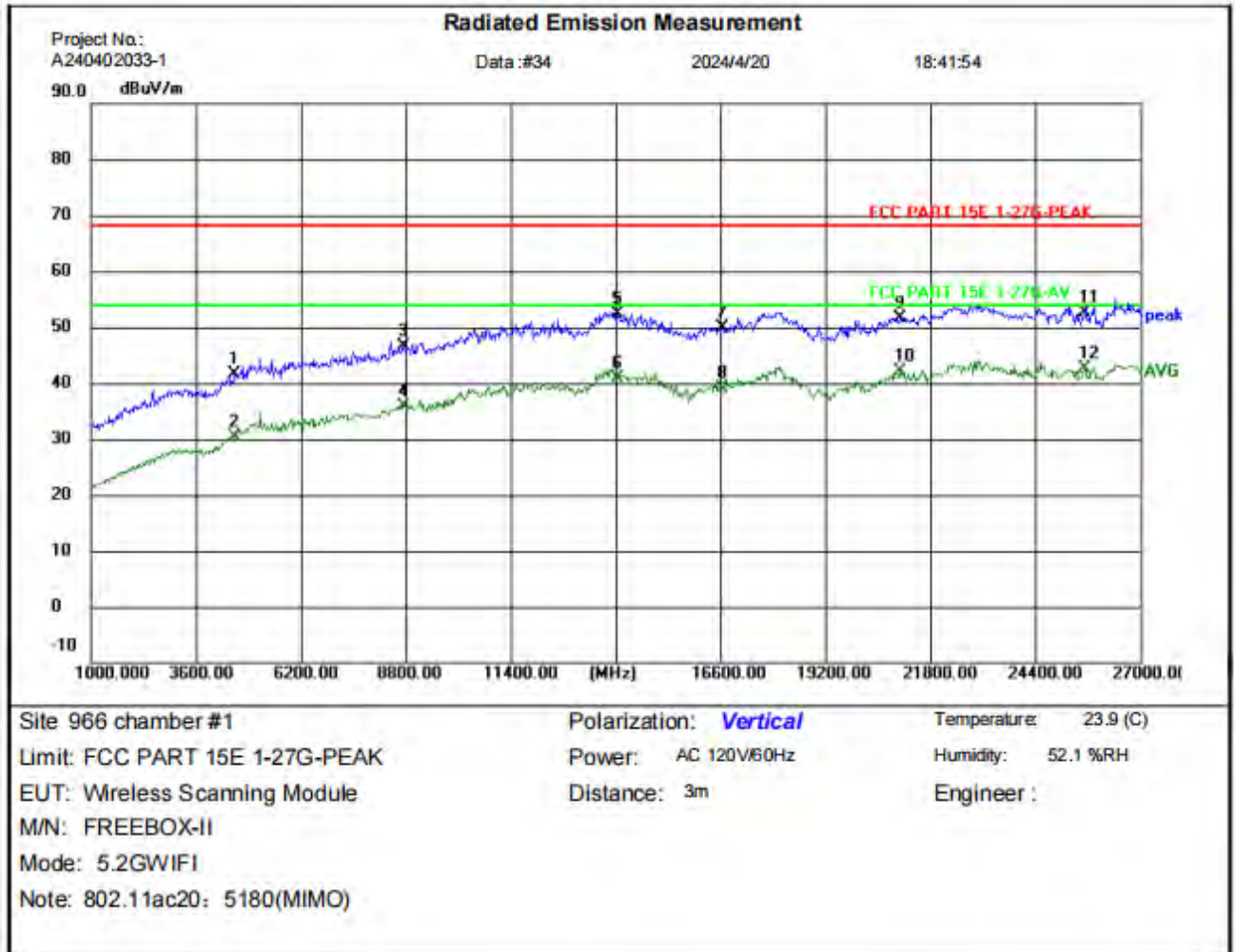
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5238.000	51.59	-3.69	47.90	68.20	-20.30	peak	P	
2	5238.000	39.87	-3.69	36.18	54.00	-17.82	AVG	P	
3	8748.000	46.57	1.64	48.21	68.20	-19.99	peak	P	
4	8748.000	34.82	1.64	36.46	54.00	-17.54	AVG	P	
5	14962.000	42.06	9.97	52.03	68.20	-16.17	peak	P	
6	14962.000	30.44	9.97	40.41	54.00	-13.59	AVG	P	
7	17978.000	36.96	17.52	54.48	68.20	-13.72	peak	P	
8	17978.000	26.41	17.52	43.93	54.00	-10.07	AVG	P	
9	20994.000	41.20	12.03	53.23	68.20	-14.97	peak	P	
10	20994.000	30.65	12.03	42.68	54.00	-11.32	AVG	P	
11	25258.000	41.65	13.89	55.54	68.20	-12.66	peak	P	
12	25258.000	30.50	13.89	44.39	54.00	-9.61	AVG	P	



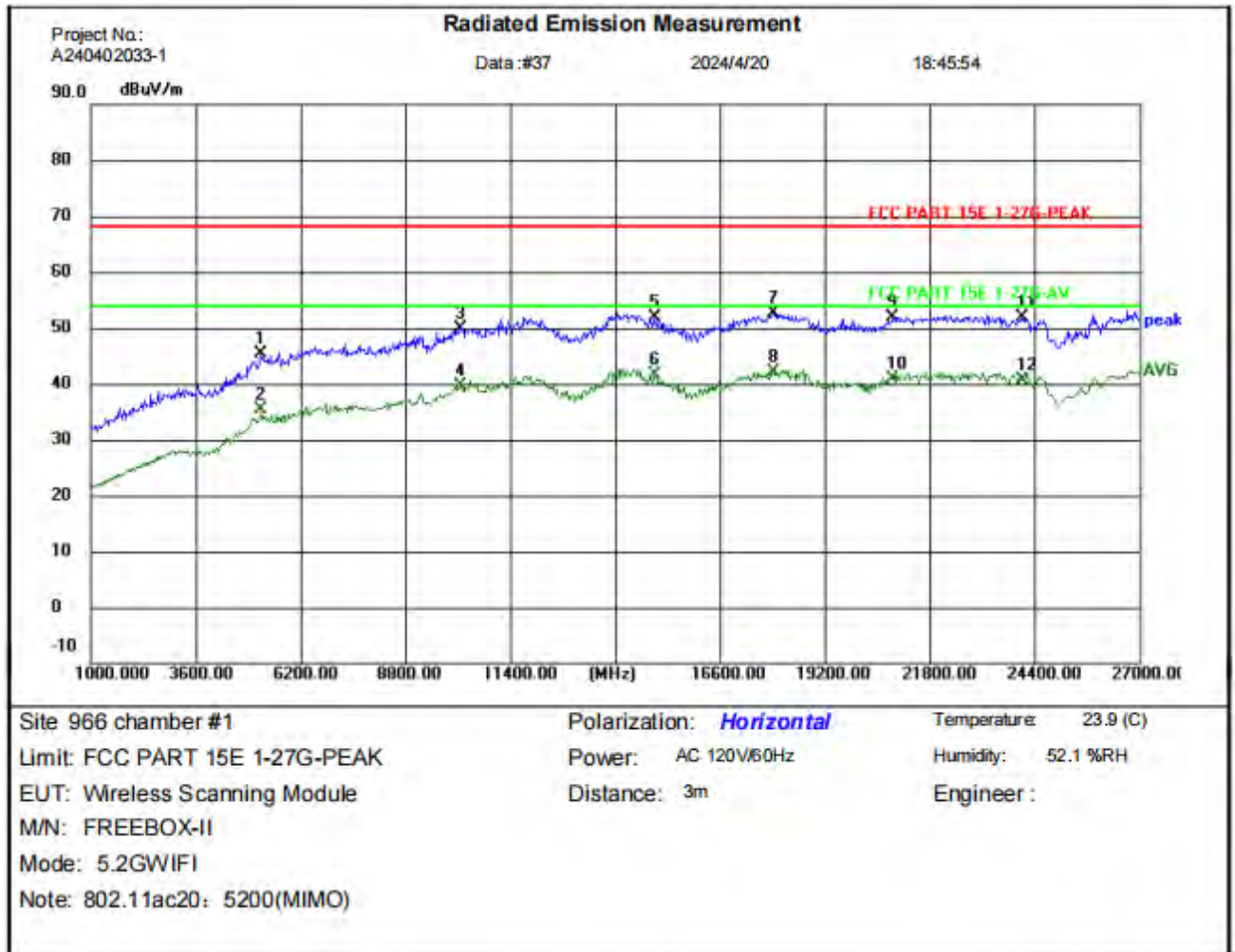
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	3288.000	48.78	-9.48	39.30	68.20	-28.90	peak	P	
2	3288.000	37.28	-9.48	27.80	54.00	-26.20	AVG	P	
3	5238.000	48.27	-3.69	44.58	68.20	-23.62	peak	P	
4	5238.000	37.85	-3.69	34.16	54.00	-19.84	AVG	P	
5	9242.000	44.86	2.30	47.16	68.20	-21.04	peak	P	
6	9242.000	34.18	2.30	36.48	54.00	-17.52	AVG	P	
7	13870.000	43.63	8.80	52.43	68.20	-15.77	peak	P	
8	13870.000	33.13	8.80	41.93	54.00	-12.07	AVG	P	
9	18030.000	46.47	10.40	56.87	68.20	-11.33	peak	P	
10	18030.000	36.18	10.40	46.58	54.00	-7.42	AVG	P	
11	23464.000	38.29	13.05	51.34	68.20	-16.86	peak	P	
12	23464.000	28.27	13.05	41.32	54.00	-12.68	AVG	P	



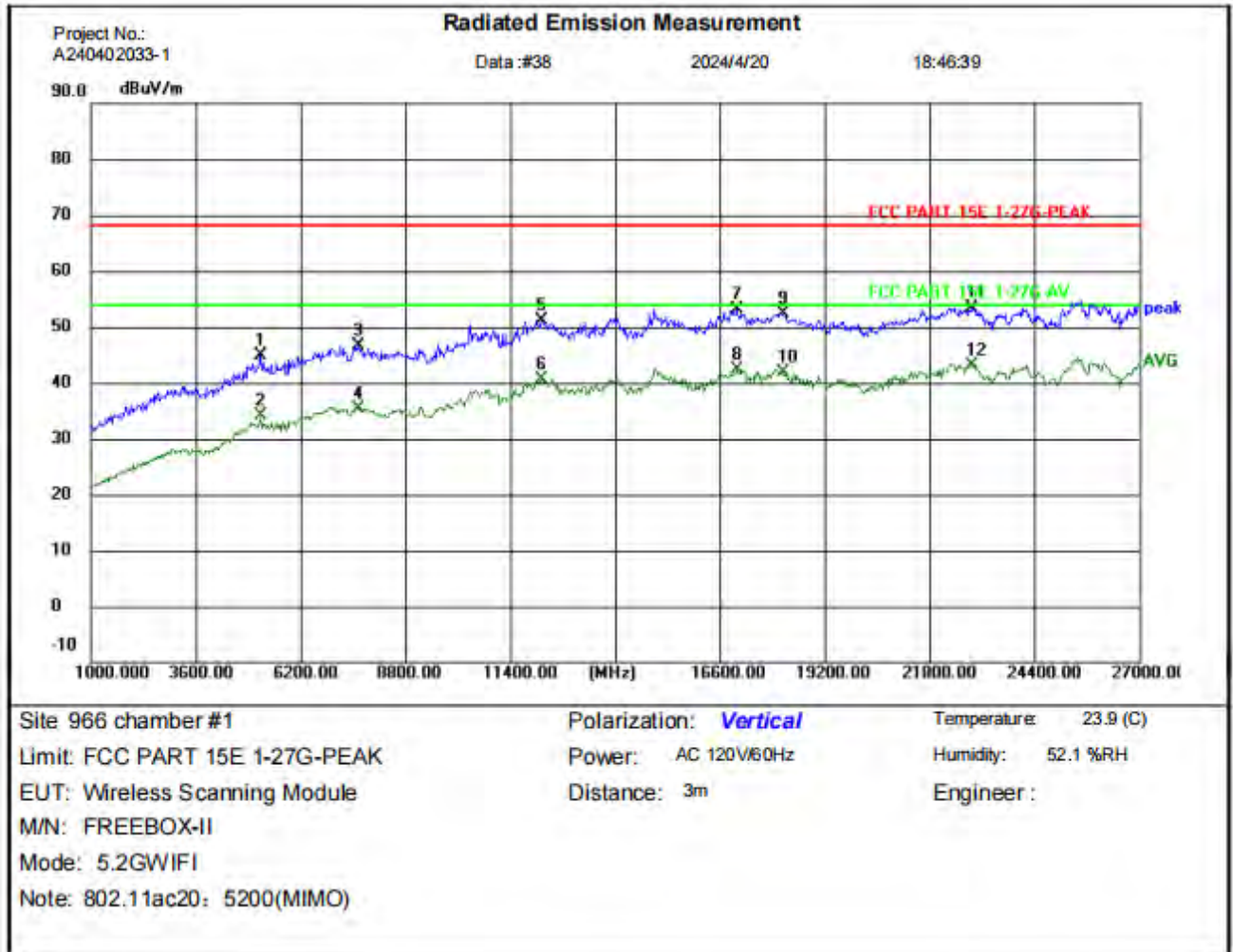
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5186.000	48.29	-3.77	44.52	68.20	-23.68	peak	P	
2	5186.000	38.09	-3.77	34.32	54.00	-19.68	AVG	P	
3	12180.000	44.57	6.60	51.17	68.20	-17.03	peak	P	
4	12180.000	33.00	6.60	39.60	54.00	-14.40	AVG	P	
5	14104.000	44.23	9.27	53.50	68.20	-14.70	peak	P	
6	14104.000	33.53	9.27	42.80	54.00	-11.20	AVG	P	
7	16262.000	43.10	8.37	51.47	68.20	-16.73	peak	P	
8	16262.000	32.59	8.37	40.96	54.00	-13.04	AVG	P	
9	19642.000	39.62	11.35	50.97	68.20	-17.23	peak	P	
10	19642.000	28.35	11.35	39.70	54.00	-14.30	AVG	P	
11	24192.000	39.09	13.32	52.41	68.20	-15.79	peak	P	
12	24192.000	28.70	13.32	42.02	54.00	-11.98	AVG	P	



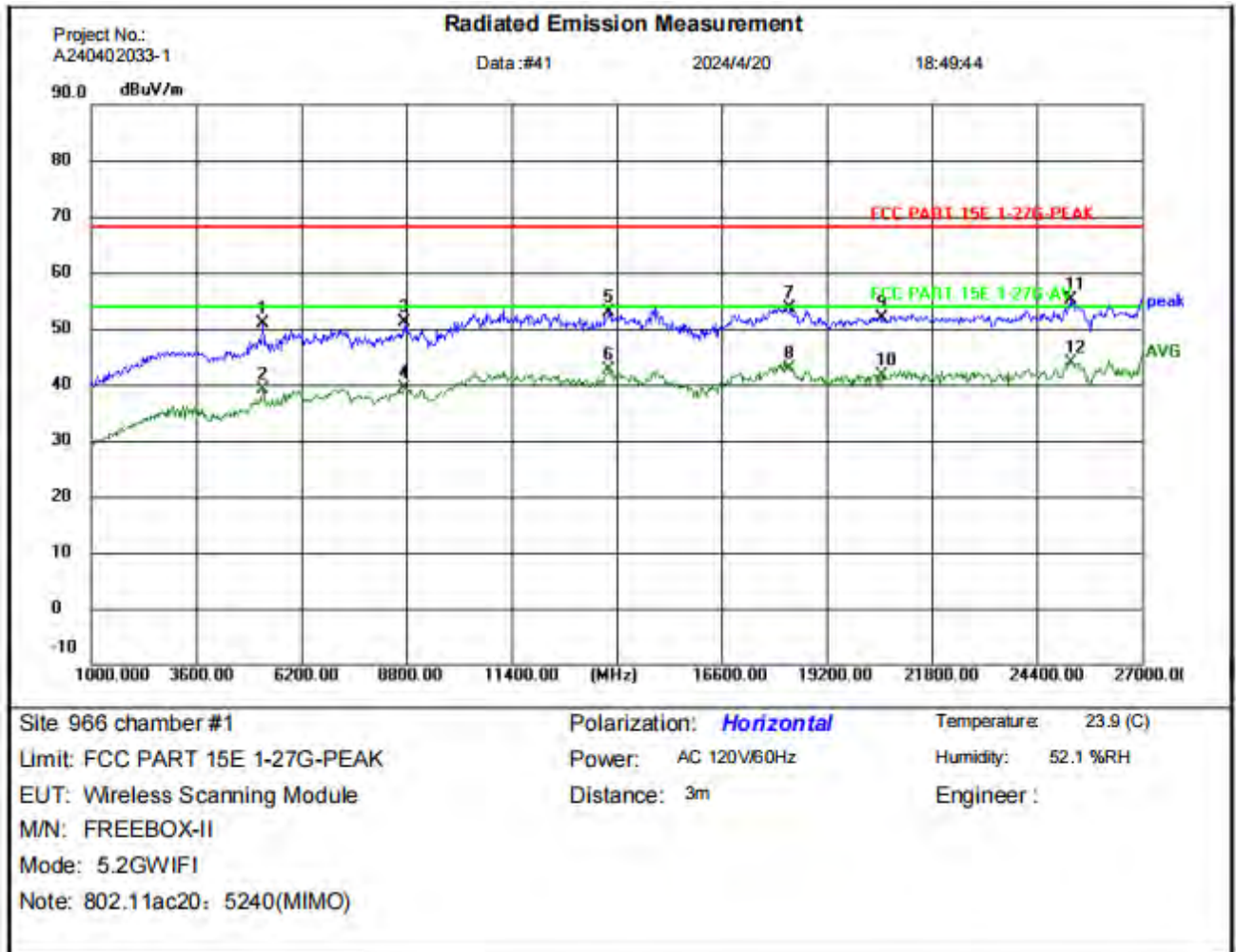
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	4562.000	47.87	-6.27	41.60	68.20	-26.60	peak	P	
2	4562.000	36.76	-6.27	30.49	54.00	-23.51	AVG	P	
3	8748.000	44.96	1.59	46.55	68.20	-21.65	peak	P	
4	8748.000	34.37	1.59	35.96	54.00	-18.04	AVG	P	
5	14052.000	43.24	9.22	52.46	68.20	-15.74	peak	P	
6	14052.000	31.71	9.22	40.93	54.00	-13.07	AVG	P	
7	16652.000	40.05	9.94	49.99	68.20	-18.21	peak	P	
8	16652.000	29.15	9.94	39.09	54.00	-14.91	AVG	P	
9	21046.000	39.66	12.04	51.70	68.20	-16.50	peak	P	
10	21046.000	30.17	12.04	42.21	54.00	-11.79	AVG	P	
11	25622.000	38.39	14.20	52.59	68.20	-15.61	peak	P	
12	25622.000	28.42	14.20	42.62	54.00	-11.38	AVG	P	



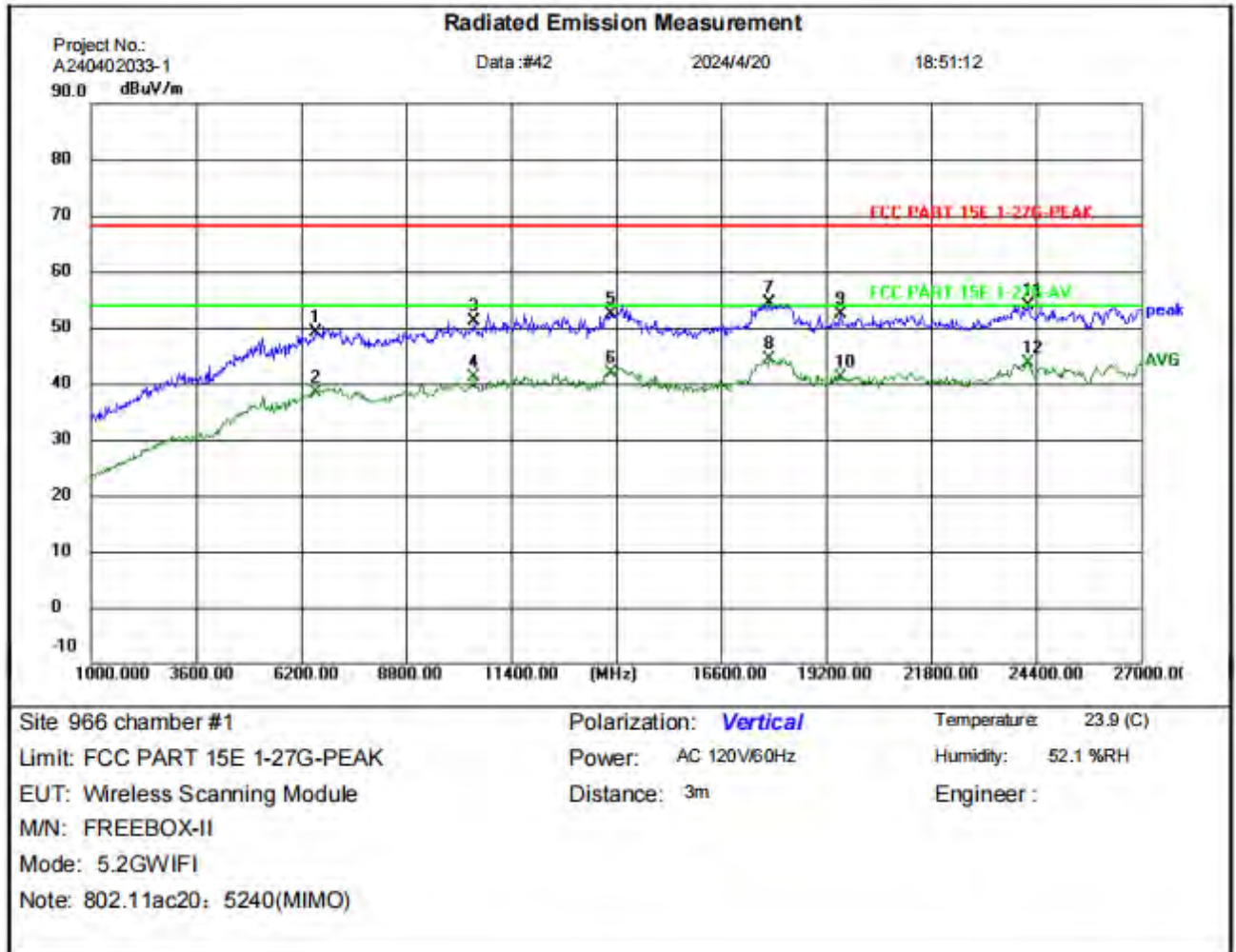
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5212.000	49.16	-3.73	45.43	68.20	-22.77	peak	P	
2	5212.000	39.20	-3.73	35.47	54.00	-18.53	AVG	P	
3	10152.000	45.99	3.82	49.81	68.20	-18.39	peak	P	
4	10152.000	35.69	3.82	39.51	54.00	-14.49	AVG	P	
5	14988.000	41.89	9.99	51.88	68.20	-16.32	peak	P	
6	14988.000	31.67	9.99	41.66	54.00	-12.34	AVG	P	
7	17926.000	35.44	17.19	52.63	68.20	-15.57	peak	P	
8	17926.000	24.98	17.19	42.17	54.00	-11.83	AVG	P	
9	20890.000	39.94	11.97	51.91	68.20	-16.29	peak	P	
10	20890.000	28.95	11.97	40.92	54.00	-13.08	AVG	P	
11	24088.000	38.62	13.28	51.90	68.20	-16.30	peak	P	
12	24088.000	27.39	13.28	40.67	54.00	-13.33	AVG	P	



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5212.000	48.64	-3.73	44.91	68.20	-23.29	peak	P	
2	5212.000	37.95	-3.73	34.22	54.00	-19.78	AVG	P	
3	7630.000	45.93	0.66	46.59	68.20	-21.61	peak	P	
4	7630.000	34.63	0.66	35.29	54.00	-18.71	AVG	P	
5	12180.000	44.59	6.60	51.19	68.20	-17.01	peak	P	
6	12180.000	34.03	6.60	40.63	54.00	-13.37	AVG	P	
7	17016.000	41.71	11.43	53.14	68.20	-15.06	peak	P	
8	17016.000	30.96	11.43	42.39	54.00	-11.61	AVG	P	
9	18160.000	41.94	10.50	52.44	68.20	-15.76	peak	P	
10	18160.000	31.40	10.50	41.90	54.00	-12.10	AVG	P	
11	22840.000	40.71	12.77	53.48	68.20	-14.72	peak	P	
12	22840.000	30.41	12.77	43.18	54.00	-10.82	AVG	P	



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5238.000	54.59	-3.69	50.90	68.20	-17.30	peak	P	
2	5238.000	42.87	-3.69	39.18	54.00	-14.82	AVG	P	
3	8748.000	49.57	1.64	51.21	68.20	-16.99	peak	P	
4	8748.000	37.82	1.64	39.46	54.00	-14.54	AVG	P	
5	13818.000	44.29	8.64	52.93	68.20	-15.27	peak	P	
6	13818.000	34.08	8.64	42.72	54.00	-11.28	AVG	P	
7	18290.000	43.10	10.59	53.69	68.20	-14.51	peak	P	
8	18290.000	32.27	10.59	42.86	54.00	-11.14	AVG	P	
9	20552.000	40.16	11.78	51.94	68.20	-16.26	peak	P	
10	20552.000	29.85	11.78	41.63	54.00	-12.37	AVG	P	
11	25258.000	41.15	13.89	55.04	68.20	-13.16	peak	P	
12	25258.000	30.00	13.89	43.89	54.00	-10.11	AVG	P	



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	6564.000	50.37	-1.29	49.08	68.20	-19.12	peak	P	
2	6564.000	39.79	-1.29	38.50	54.00	-15.50	AVG	P	
3	10490.000	46.75	4.43	51.18	68.20	-17.02	peak	P	
4	10490.000	36.60	4.43	41.03	54.00	-12.97	AVG	P	
5	13870.000	43.63	8.80	52.43	68.20	-15.77	peak	P	
6	13870.000	33.13	8.80	41.93	54.00	-12.07	AVG	P	
7	17796.000	38.02	16.37	54.39	68.20	-13.81	peak	P	
8	17796.000	28.03	16.37	44.40	54.00	-9.60	AVG	P	
9	19564.000	41.03	11.32	52.35	68.20	-15.85	peak	P	
10	19564.000	29.69	11.32	41.01	54.00	-12.99	AVG	P	
11	24192.000	40.48	13.32	53.80	68.20	-14.40	peak	P	
12	24192.000	30.34	13.32	43.66	54.00	-10.34	AVG	P	