

FCC RADIO TEST REPORT

FCC ID: 2AZUR-H2

Product: Tablet PC

Trade Mark: G-TiDE

Model No.: H2

Family Model: N/A

Report No.: S22041203503004

Issue Date: May 13. 2022

Prepared for

ShenZhenTelconn Technology Co.,Ltd.

41A Building 301C Room The 5th district of huaidecuigang industrial park ,fuyong town, Baoan district, Shenzhen, Guangdong,China.

Prepared by

Shenzhen NTEK Testing Technology Co., Ltd.

1/F, Building E, Fenda Science Park, Sanwei Community,
Xixiang Street Bao'an District, Shenzhen 518126 P.R. China

Tel. 400-800-6106, 0755-2320 0050, 0755-2320 0090

Website: <http://www.ntek.org.cn>

TEST RESULT CERTIFICATION

Applicant's name : ShenZhenTelconn Technology Co.,Ltd.

Address : 41A Building 301C Room The 5th district of huaidecuigang industrial park ,fuyong town, Baoan district, Shenzhen, Guangdong,China.

Manufacturer's Name : ShenZhenTelconn Technology Co.,Ltd.

Address : 41A Building 301C Room The 5th district of huaidecuigang industrial park ,fuyong town, Baoan district, Shenzhen, Guangdong,China.

Product description

Product name : Tablet PC

Model and/or type reference : H2

Family Model : N/A

Standards : FCC Part15.407

Test procedure ANSI C63.10-2013 and KDB 789033 D02 General UNII Test Procedures
New Rules v02r01

This device described above has been tested by NTEK, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

This report shall not be reproduced except in full, without the written approval of NTEK, this document may be altered or revised by NTEK, personnel only, and shall be noted in the revision of the document.

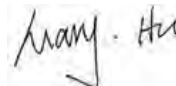
Date of Test

Date (s) of performance of tests Apr 12, 2022 ~ May 13, 2022

Date of Issue May 13, 2022

Test Result **Pass**

Testing Engineer :



(Mary Hu)

Authorized Signatory :



(Alex Li)

Table of Contents

	Page
1. SUMMARY OF TEST RESULTS	6
1.1 FACILITIES AND ACCREDITATIONS	7
1.2 MEASUREMENT UNCERTAINTY	7
1 . GENERAL INFORMATION	8
1.1 GENERAL DESCRIPTION OF EUT	8
1.2 DESCRIPTION OF TEST MODES	10
1.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	11
1.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)	12
1.5 EQUIPMENTS LIST FOR ALL TEST ITEMS	13
2 . EMC EMISSION TEST	15
2.1 CONDUCTED EMISSION MEASUREMENT	15
2.1.1 APPLICABLE STANDARD	15
2.1.2 CONFORMANCE LIMIT	15
2.1.3 TEST CONFIGURATION	15
2.1.4 TEST PROCEDURE	15
2.2 RADIATED EMISSION MEASUREMENT	20
2.2.1 APPLICABLE STANDARD	20
2.2.2 CONFORMANCE LIMIT	20
2.2.3 MEASURING INSTRUMENTS	20
2.2.4 TEST CONFIGURATION	21
2.2.5 TEST PROCEDURE	22
2.2.6 TEST RESULTS (9KHZ – 30 MHZ)	23
2.2.7 TEST RESULTS (30MHZ – 1GHZ)	24
2.2.8 TEST RESULTS (1GHZ-18GHZ)	28
2.2.10 TEST RESULTS (18GHZ-40GHZ)	30
3 . POWER SPECTRAL DENSITY TEST	35
3.1 APPLIED PROCEDURES / LIMIT	35
3.2 TEST PROCEDURE	36
3.3 DEVIATION FROM STANDARD	36
3.4 TEST SETUP	36
3.5 EUT OPERATION CONDITIONS	36
3.6 TEST RESULTS	37
4 . 26DB & 99% EMISSION BANDWIDTH	38
4.1 APPLIED PROCEDURES / LIMIT	38
4.2 TEST PROCEDURE	38
4.3 EUT OPERATION CONDITIONS	39
4.4 TEST RESULTS	39

Table of Contents

	Page
5 . MINIMUM 6 DB BANDWIDTH	40
5.1 APPLIED PROCEDURES / LIMIT	40
5.2 TEST PROCEDURE	40
5.3 DEVIATION FROM STANDARD	40
5.4 TEST SETUP	40
5.5 EUT OPERATION CONDITIONS	40
5.6 TEST RESULTS	41
6 . MAXIMUM CONDUCTED OUTPUT POWER	42
6.1 PPLIED PROCEDURES / LIMIT	42
6.2 TEST RESULTS	44
7 . OUT OF BAND EMISSIONS	45
7.1 APPLICABLE STANDARD	45
7.2 TEST PROCEDURE	46
7.3 DEVIATION FROM STANDARD	46
7.4 TEST SETUP	46
7.5 EUT OPERATION CONDITIONS	46
7.6 TEST RESULTS	47
8. FREQUENCY STABILITY MEASUREMENT	48
8.1 LIMIT	48
8.2 TEST PROCEDURES	48
8.3 TEST SETUP LAYOUT	48
8.4 EUT OPERATION DURING TEST	48
8.5 TEST RESULTS	49
9. ANTENNA REQUIREMENT	55
9.1 STANDARD REQUIREMENT	55
9.2 EUT ANTENNA	55

[illegible]

1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (15.407) , Subpart E			
Standard Section	Test Item	Judgment	Remark
15.207	AC Power Line Conducted Emissions	PASS	
15.209(a), 15.407 (b)(1) 15.407 (b)(4)	Spurious Radiated Emissions	PASS	
15.407 (a)(1) 15.407 (a)(3)	26 dB and 99% Emission Bandwidth	PASS	
15.407(e)	Minimum 6 dB bandwidth	PASS	
15.407 (a)(1) 15.407 (a)(3)	Maximum Conducted Output Power	PASS	
15.407(b)(1) 15.407(b)(4)	Band Edge	PASS	
15.407 (a)(1) 15.407 (a)(3)	Power Spectral Density	PASS	
15.407(b)	Spurious Emissions at Antenna Terminals	PASS	
15.203	Antenna Requirement	PASS	
15.407(c)	Automatically discontinue transmission	PASS	

NOTE:

(1) "N/A" denotes test is not applicable in this Test Report

1.1 FACILITIES AND ACCREDITATIONS

FACILITIES

All measurement facilities used to collect the measurement data are located at
1/F, Building E, Fenda Science Park Sanwei, Xixiang, Bao'an District
Shenzhen, Guangdong, China

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.10 and CISPR Publication 22.

LABORATORY ACCREDITATIONS AND LISTINGS

Site Description

CNAS-Lab. : The Certificate Registration Number is L5516.

IC-Registration : The Certificate Registration Number is 9270A.
CAB identifier:CN0074

FCC- Accredited : Test Firm Registration Number: 463705.
Designation Number: CN1184

A2LA-Lab. : The Certificate Registration Number is 4298.01

Name of Firm : Shenzhen NTEK Testing Technology Co., Ltd.

Site Location : 1/F, Building E, Fenda Science Park Sanwei, Xixiang, Bao'an District
Shenzhen, Guangdong, China

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

No.	Item	Uncertainty
1	Conducted Emission Test	$\pm 2.80\text{dB}$
2	RF power, conducted	$\pm 0.16\text{dB}$
3	Spurious emissions, conducted	$\pm 0.21\text{dB}$
4	All emissions, radiated(30MHz~1GHz)	$\pm 2.64\text{dB}$
5	All emissions, radiated(1GHz~6GHz)	$\pm 2.40\text{dB}$
6	All emissions, radiated(> 6GHz)	$\pm 2.52\text{dB}$
7	Temperature	$\pm 0.5^{\circ}\text{C}$
8	Humidity	$\pm 2\%$

1. GENERAL INFORMATION

1.1 GENERAL DESCRIPTION OF EUT

Equipment	Tablet PC	
Trade Mark	G-TiDE	
Model Name	H2	
Family Model	N/A	
Model Difference	N/A	
FCC ID	2AZUR-H2	
Product Description	Mode Supported	☒ 802.11a ☒ 802.11n(HT20) ☒ 802.11n(HT40) ☒ 802.11ac(HT20) ☒ 802.11ac(HT40)
	Data Rate	802.11a: 6,9,12,18,24,36,48,54Mbps; 802.11n(HT20/HT40):MCS0-MCS15; 802.11ac(VHT20): NSS1, MCS0-MCS8 802.11ac(VHT40):NSS1, MCS0-MCS9 802.11ax (20MHz): MCS0-11, up to 286.8Mbps 802.11ax (40MHz): MCS0-11, up to 573.5Mbps
	Modulation	OFDM with BPSK/QPSK/16QAM/64QAM
	Operating Frequency Range	☒ U-NII-1: 5150 MHz ~5250MHz ☐ U-NII-2A: 5250MHz~5350MHz ☐ U-NII-2C: 5470MHz~5725MHz ☒ U-NII-3: 5725 MHz ~5850 MHz
	Function:	☐ Outdoor AP ☐ Indoor AP ☐ Fixed P2P(for U-NII-1, U-NII-3) ☒ Client(for U-NII-1, U-NII-3)
	Antenna Type	FPCB Antenna
	Antenna Gain	WIFI 5.2G: -0.32dBi WIFI 5.8G: 0.83dBi
	Based on the application, features, or specification exhibited in User's Manual, More details of EUT technical specification, please refer to the User's Manual.	
Power supply	DC 3.8V from battery or DC 5V from Adapter.	
Adapter	Model:TPA-46050200UU Input: 100-240V, 50/60Hz,0.3A Output: 5.0V  2000mA	
Connecting I/O Port(s)	Please refer to the User's Manual	
HW Version	BND-A712C-V2.0	
SW Version	G-TiDE_H2_EEA_V2.0	

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
2. Frequency and Channel list:

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

1.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

For Radiated Emission	
Final Test Mode	Description
Mode 1	Normal Link Mode
Mode 2	802.11a / n/ ac 20 CH36/ CH40/CH48/CH149/ CH157/CH165
Mode 3	802.11n40/ac40 CH38/CH46/CH151/ CH159

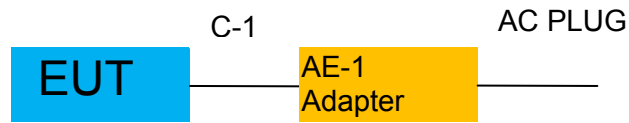
For Conducted Emission	
Final Test Mode	Description
Mode 1	Normal Link Mode
Mode 2	802.11a / n/ ac 20 CH36/ CH40/CH48/CH149/ CH157/CH165
Mode 3	802.11n40/ac40 CH38/CH46/CH151/ CH159

Note:

- (1) The measurements are performed at the highest, middle, lowest available channels.
- (2) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported

1.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

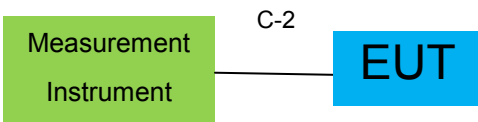
For AC Conducted Emission Mode



For Radiated Test Cases



For Conducted Test Cases



Note: 1. The temporary antenna connector is soldered on the PCB board in order to perform conducted tests and this temporary antenna connector is listed in the equipment list.

1.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Model/Type No.	Series No.	Note
AE-1	Adapter	TPA-46050200UU	N/A	Peripherals

Item	Cable Type	Shielded Type	Ferrite Core	Length	Note
C-1	Power Cable	NO	NO	1.0m	C-1
C-2	RF Cable	YES	NO	0.1m	C-2

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.
- (3) During the battery power test, the battery is fully charged.

1.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation& Conducted Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Spectrum Analyzer	Agilent	E4407B	MY45108040	2022.03.30	2023.03.29	1 year
2	Spectrum Analyzer	Agilent	N9020A	MY49100060	2021.07.01	2022.06.30	1 year
3	Spectrum Analyzer	R&S	FSV40	101417	2021.07.01	2022.06.30	1 year
4	Test Receiver	R&S	ESPI7	101318	2021.07.01	2022.06.30	1 year
5	Bilog Antenna	TESEQ	CBL6111D	31216	2022.03.30	2023.03.29	1 year
6	50Ω Coaxial Switch	Anritsu	MP59B	6200983705	2020.05.11	2023.05.10	3 year
7	Horn Antenna	EM	EM-AH-10180	2011071402	2020.05.11	2023.05.10	3 year
8	Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	803	2021.11.07	2022.11.06	1 year
9	Amplifier	EMC	EMC051835SE	980246	2021.07.01	2022.06.30	1 year
10	Active Loop Antenna	SCHWARZBECK	FMZB 1519B	055	2021.11.07	2022.11.06	1 year
11	Power Meter	DARE	RPR3006W	15100041SN084	2021.07.01	2022.06.30	1 year
12	Test Cable (9KHz-30MHz)	N/A	R-01	N/A	2019.08.06	2022.08.05	3 year
13	Test Cable (30MHz-1GHz)	N/A	R-02	N/A	2019.08.06	2022.08.05	3 year
14	High Test Cable(1G-40G Hz)	N/A	R-03	N/A	2019.06.28	2022.06.27	3 year
15	High Test Cable(1G-40G Hz)	N/A	R-04	N/A	2019.08.06	2022.08.05	3 year
16	Filter	TRILTHIC	2400MHz	29	2021.07.01	2022.06.30	1 year
17	temporary antenna connector (Note)	NTS	R001	N/A	N/A	N/A	N/A

Note:

We will use the temporary antenna connector (soldered on the PCB board) When conducted test
And this temporary antenna connector is listed within the instrument list

AC Conduction Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Test Receiver	R&S	ESCI	101160	2021.07.01	2022.06.30	1 year
2	LISN	R&S	ENV216	101313	2021.07.01	2022.06.30	1 year
3	LISN	SCHWARZBECK	NNLK 8129	8129245	2021.07.01	2022.06.30	1 year
4	50Ω Coaxial Switch	ANRITSU CORP	MP59B	6200983704	2020.05.11	2023.05.10	3 year
5	Test Cable (9KHz-30MHz)	N/A	C01	N/A	2020.05.11	2023.05.10	3 year
6	Test Cable (9KHz-30MHz)	N/A	C02	N/A	2020.05.11	2023.05.10	3 year
7	Test Cable (9KHz-30MHz)	N/A	C03	N/A	2020.05.11	2023.05.10	3 year

Note: Each piece of equipment is scheduled for calibration once a year except the Test Cable& Aux Equipment which is scheduled for calibration every 3 years.

2. EMC EMISSION TEST

2.1 CONDUCTED EMISSION MEASUREMENT

2.1.1 APPLICABLE STANDARD

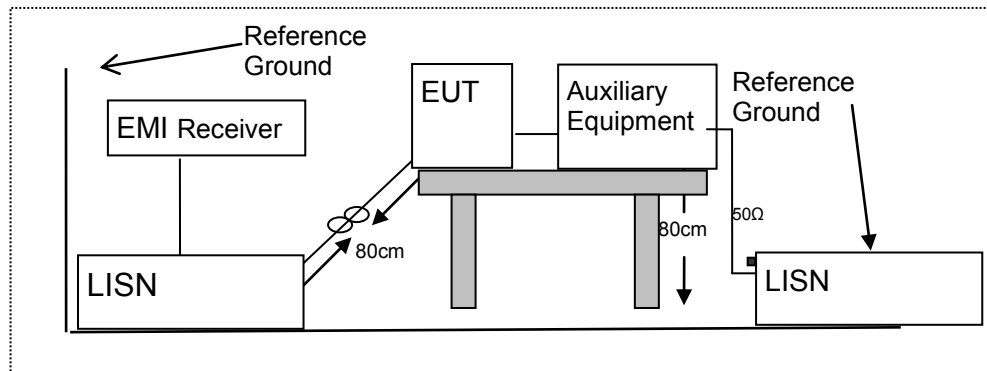
According to FCC Part 15.207(a)

2.1.2 CONFORMANCE LIMIT

Frequency(MHz)	Conducted Emission Limit	
	Quasi-peak	Average
0.15-0.5	66-56*	56-46*
0.5-5.0	56	46
5.0-30.0	60	50

Note: 1. *Decreases with the logarithm of the frequency
2. The lower limit shall apply at the transition frequencies
3. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

2.1.3 TEST CONFIGURATION



2.1.4 TEST PROCEDURE

According to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 Conducted emissions the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode.

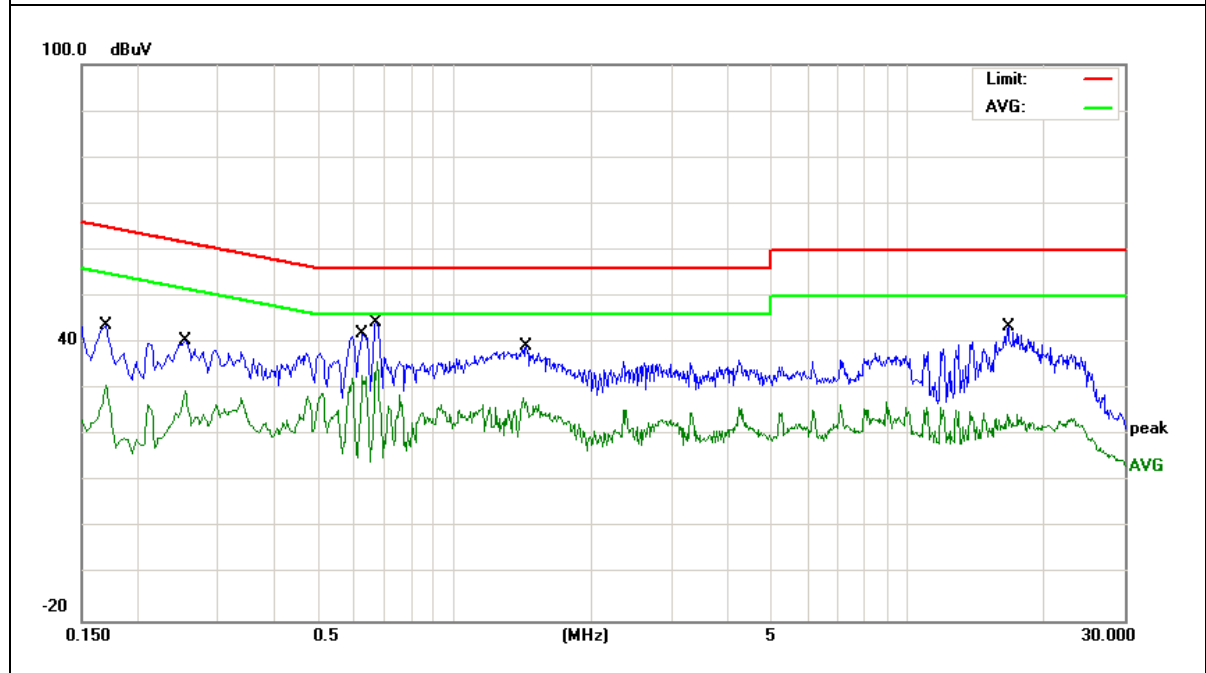
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room.
2. The EUT was placed on a table which is 0.8m above ground plane.
3. Connect EUT to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
4. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40cm long.
5. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
6. LISN at least 80 cm from nearest part of EUT chassis.
7. The frequency range from 150KHz to 30MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth(IF bandwidth=9KHz) with Maximum Hold Mode
9. For the actual test configuration, please refer to the related Item –EUT Test Photos.

EUT :	Tablet PC	Model Name. :	H2
Temperature :	26 °C	Relative Humidity :	56%
Pressure :	1010hPa	Phase :	L
Test Voltage :	DC 5V from Adapter AC 120V/60Hz	Test Mode :	Mode 1(5.2G)

Frequency (MHz)	Reading Level (dBμV)	Correct Factor (dB)	Measure-ment (dBμV)	Limits (dBμV)	Margin (dB)	Remark
0.1700	34.01	9.69	43.70	64.96	-21.26	QP
0.1700	21.14	9.69	30.83	54.96	-24.13	AVG
0.2540	30.68	9.63	40.31	61.62	-21.31	QP
0.2540	20.07	9.63	29.70	51.62	-21.92	AVG
0.6260	32.14	9.70	41.84	56.00	-14.16	QP
0.6260	23.17	9.70	32.87	46.00	-13.13	AVG
0.6700	34.49	9.72	44.21	56.00	-11.79	QP
0.6700	26.32	9.72	36.04	46.00	-9.96	AVG
1.4340	29.53	9.75	39.28	56.00	-16.72	QP
1.4340	18.36	9.75	28.11	46.00	-17.89	AVG
16.6259	33.67	9.84	43.51	60.00	-16.49	QP
16.6259	14.62	9.84	24.46	50.00	-25.54	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

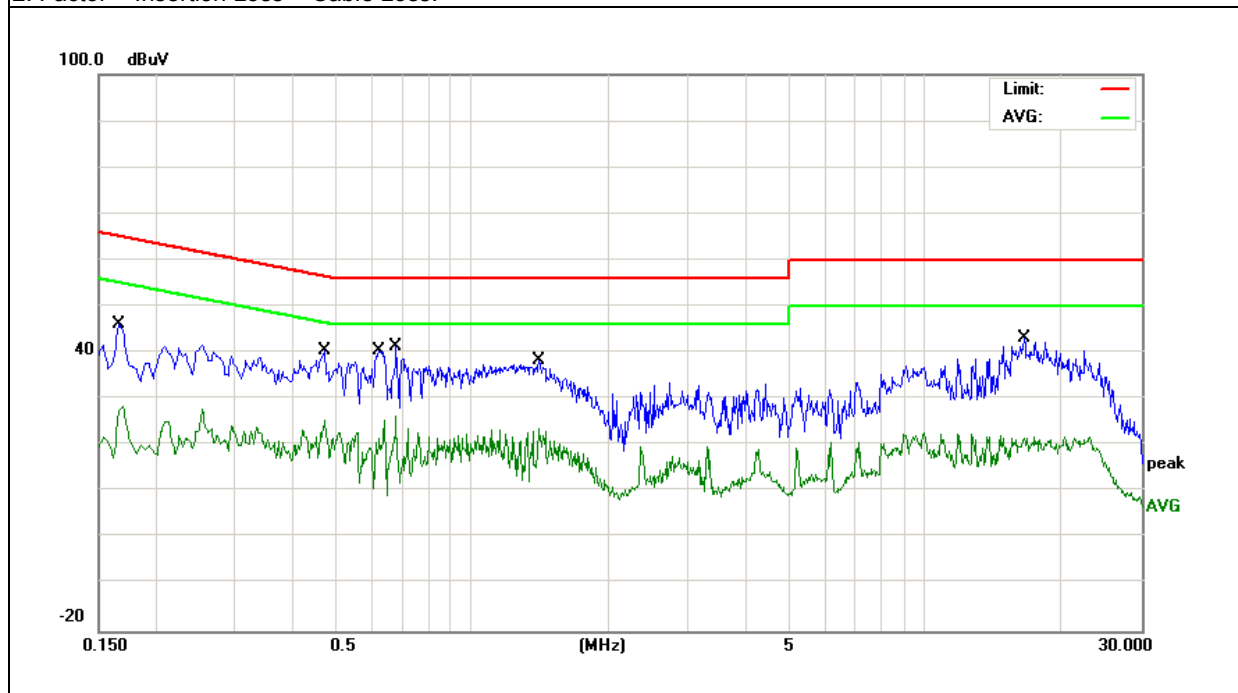


EUT :	Tablet PC	Model Name. :	H2
Temperature :	26 °C	Relative Humidity :	56%
Pressure :	1010hPa	Phase :	N
Test Voltage :	DC 5V from Adapter AC 120V/60Hz	Test Mode :	Mode 1(5.2G)

Frequency (MHz)	Reading Level (dBμV)	Correct Factor (dB)	Measure-ment (dBμV)	Limits (dBμV)	Margin (dB)	Remark
0.1660	36.52	9.63	46.15	65.15	-19.00	QP
0.1660	18.87	9.63	28.50	55.15	-26.65	AVG
0.4740	30.77	9.73	40.50	56.44	-15.94	QP
0.4740	15.61	9.73	25.34	46.44	-21.10	AVG
0.6220	30.85	9.68	40.53	56.00	-15.47	QP
0.6220	11.82	9.68	21.50	46.00	-24.50	AVG
0.6820	31.68	9.65	41.33	56.00	-14.67	QP
0.6820	16.80	9.65	26.45	46.00	-19.55	AVG
1.4100	28.77	9.71	38.48	56.00	-17.52	QP
1.4100	14.03	9.71	23.74	46.00	-22.26	AVG
16.4859	33.33	9.74	43.07	60.00	-16.93	QP
16.4859	12.01	9.74	21.75	50.00	-28.25	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

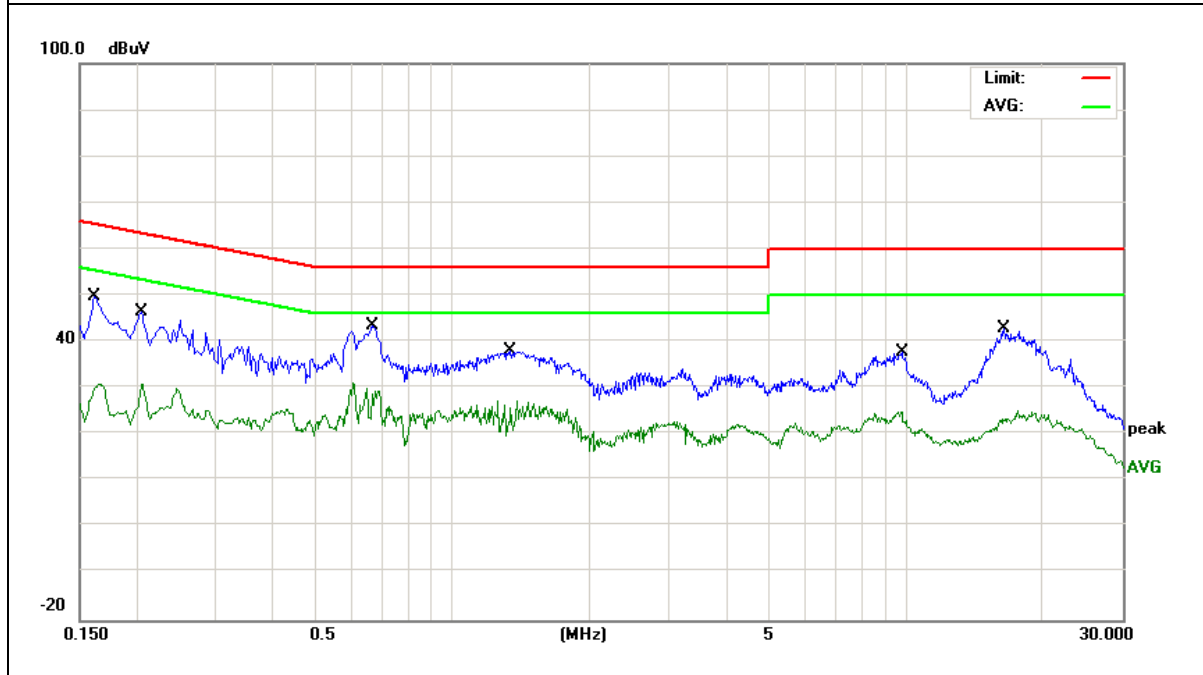


EUT :	Tablet PC	Model Name. :	H2
Temperature :	26 °C	Relative Humidity :	56%
Pressure :	1010hPa	Phase :	L
Test Voltage :	DC 5V from Adapter AC 120V/60Hz	Test Mode :	Mode 1(5.8G)

Frequency (MHz)	Reading Level (dBμV)	Correct Factor (dB)	Measure-ment (dBμV)	Limits (dBμV)	Margin (dB)	Remark
0.1620	40.17	9.71	49.88	65.36	-15.48	QP
0.1620	21.23	9.71	30.94	55.36	-24.42	AVG
0.2059	36.88	9.63	46.51	63.37	-16.86	QP
0.2059	21.32	9.63	30.95	53.37	-22.42	AVG
0.6620	33.60	9.72	43.32	56.00	-12.68	QP
0.6620	19.74	9.72	29.46	46.00	-16.54	AVG
1.3380	28.20	9.75	37.95	56.00	-18.05	QP
1.3380	16.56	9.75	26.31	46.00	-19.69	AVG
9.8058	27.89	9.71	37.60	60.00	-22.40	QP
9.8058	15.24	9.71	24.95	50.00	-25.05	AVG
16.4578	32.91	9.84	42.75	60.00	-17.25	QP
16.4578	13.56	9.84	23.40	50.00	-26.60	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

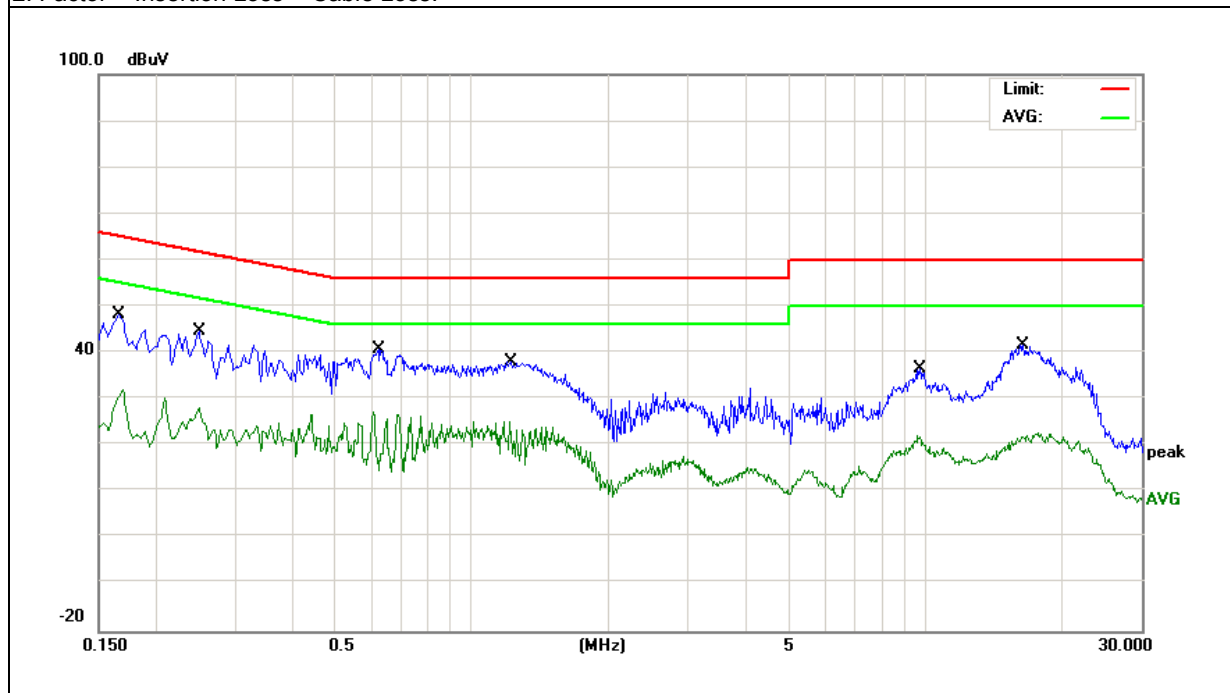


EUT :	Tablet PC	Model Name. :	H2
Temperature :	26 °C	Relative Humidity :	56%
Pressure :	1010hPa	Phase :	N
Test Voltage :	DC 5V from Adapter AC 120V/60Hz	Test Mode :	Mode 1(5.8G)

Frequency (MHz)	Reading Level (dBμV)	Correct Factor (dB)	Measure-ment (dBμV)	Limits (dBμV)	Margin (dB)	Remark
0.1660	38.52	9.63	48.15	65.15	-17.00	QP
0.1660	22.29	9.63	31.92	55.15	-23.23	AVG
0.2500	34.95	9.65	44.60	61.75	-17.15	QP
0.2500	18.60	9.65	28.25	51.75	-23.50	AVG
0.6220	30.96	9.68	40.64	56.00	-15.36	QP
0.6220	17.49	9.68	27.17	46.00	-18.83	AVG
1.2180	28.31	9.73	38.04	56.00	-17.96	QP
1.2180	15.56	9.73	25.29	46.00	-20.71	AVG
9.7259	26.65	9.81	36.46	60.00	-23.54	QP
9.7259	12.43	9.81	22.24	50.00	-27.76	AVG
16.4259	32.02	9.74	41.76	60.00	-18.24	QP
16.4259	12.83	9.74	22.57	50.00	-27.43	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.



2.2 RADIATED EMISSION MEASUREMENT

2.2.1 APPLICABLE STANDARD

According to FCC Part 15.407(d) and 15.209

2.2.2 CONFORMANCE LIMIT

According to FCC Part 15.407(b)(7): radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).
According to FCC Part 15.205, Restricted bands

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(2)
13.36-13.41			

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Restricted Frequency(MHz)	Field Strength (μV/m)	Field Strength (dBμV/m)	Measurement Distance
0.009~0.490	2400/F(KHz)	20 log (uV/m)	300
0.490~1.705	24000/F(KHz)	20 log (uV/m)	30
1.705~30.0	30	29.5	30
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

Limits of Radiated Emission Measurement(Above 1000MHz)

Frequency(MHz)	Class B (dBuV/m) (at 3M)	
	PEAK	AVERAGE
Above 1000	74	54

Remark : 1. Emission level in dBuV/m=20 log (uV/m)

2. Measurement was performed at an antenna to the closed point of EUT distance of meters.

3. For Frequency 9kHz~30MHz:

Distance extrapolation factor =40log(Specific distance/ test distance)(dB);

Limit line=Specific limits(dBuV) + distance extrapolation factor.

For Frequency above 30MHz:

Distance extrapolation factor =20log(Specific distance/ test distance)(dB);

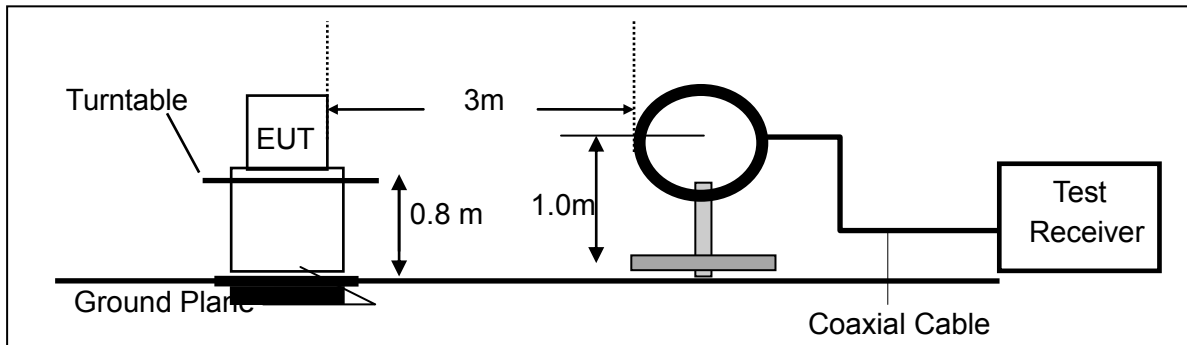
Limit line=Specific limits(dBuV) + distance extrapolation factor.

2.2.3 MEASURING INSTRUMENTS

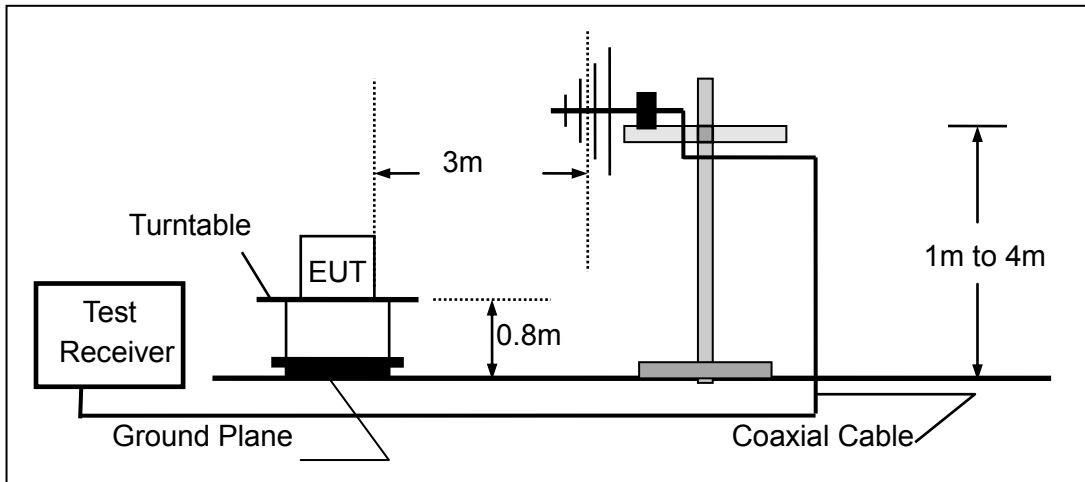
The Measuring equipment is listed in the section 6.3 of this test report.

2.2.4 TEST CONFIGURATION

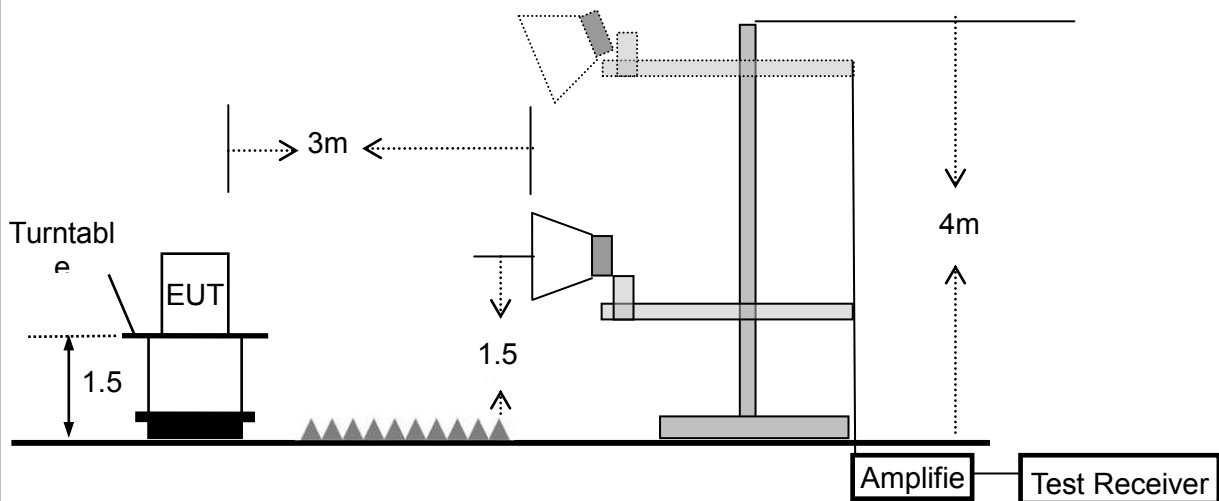
(a) For radiated emissions below 30MHz



(b) For radiated emissions from 30MHz to 1000MHz



(c) For radiated emissions above 1000MHz



2.2.5 TEST PROCEDURE

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.10-2013. The test distance is 3m. The setup is according to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 and CAN/CSA-CEI/IEC CISPR 22.

This test is required for any spurious emission that falls in a Restricted Band, as defined in Section 15.205. It must be performed with the highest gain of each type of antenna proposed for use with the EUT.

Use the following spectrum analyzer settings:

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

- The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- The EUT was placed on the top of a rotating table 0.8 m for below 1GHz and 1.5m for above 1GHz the ground at a 3 meter. The table was rotated 360 degrees to determine the position of the highest radiation.
- The height of the equipment or of the substitution antenna shall be 0.8 m for below 1GHz and 1.5m for above 1GHz; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported

During the radiated emission test, the Spectrum Analyzer was set with the following configurations:

Frequency Band (MHz)	Function	Resolution bandwidth	Video Bandwidth
30 to 1000	QP	120 kHz	300 kHz
Above 1000	Peak	1 MHz	1 MHz
	Average	1 MHz	10 Hz

Note: for the frequency ranges below 30 MHz, a narrower RBW is used for these ranges but the measured value should add a RBW correction factor (RBWCF) where $RBWCF [dB] = 10 \cdot \lg(100 [kHz] / \text{narrower RBW} [kHz])$. , the narrower RBW is 1 kHz and RBWCF is 20 dB for the frequency 9 kHz to 150 kHz, and the narrower RBW is 10 kHz and RBWCF is 10 dB for the frequency 150 kHz to 30 MHz.

2.2.6 TEST RESULTS (9KHZ – 30 MHZ)

EUT :	Tablet PC	Model Name :	H2
Temperature :	26 °C	Relative Humidity :	54%
Pressure:	1010 hPa	Test Voltage :	DC 3.8V
Test Mode :	TX	Polarization :	--

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	N/A
--	--	--	--	N/A

NOTE:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

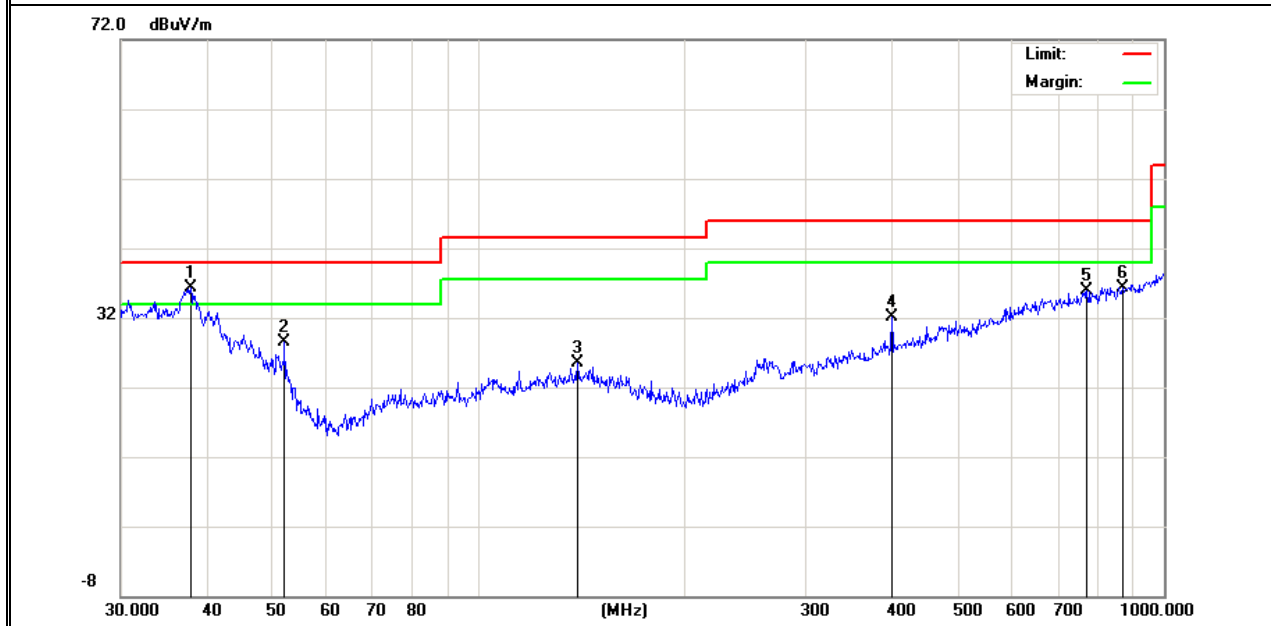
2.2.7 TEST RESULTS (30MHZ – 1GHZ)

EUT :	Tablet PC	Model Name :	H2
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Voltage :	DC 3.8V
Test Mode :	TX(5.2G)- 802.11a (Low CH)		

Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remark
	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
V	37.9450	17.13	19.14	36.27	40.00	-3.73	QP
V	52.0251	14.41	14.00	28.41	40.00	-11.59	QP
V	139.3613	6.88	18.59	25.47	43.50	-18.03	QP
V	400.4319	9.60	22.47	32.07	46.00	-13.93	QP
V	771.4486	6.82	29.01	35.83	46.00	-10.17	QP
V	869.1301	6.21	30.15	36.36	46.00	-9.64	QP

Remark:

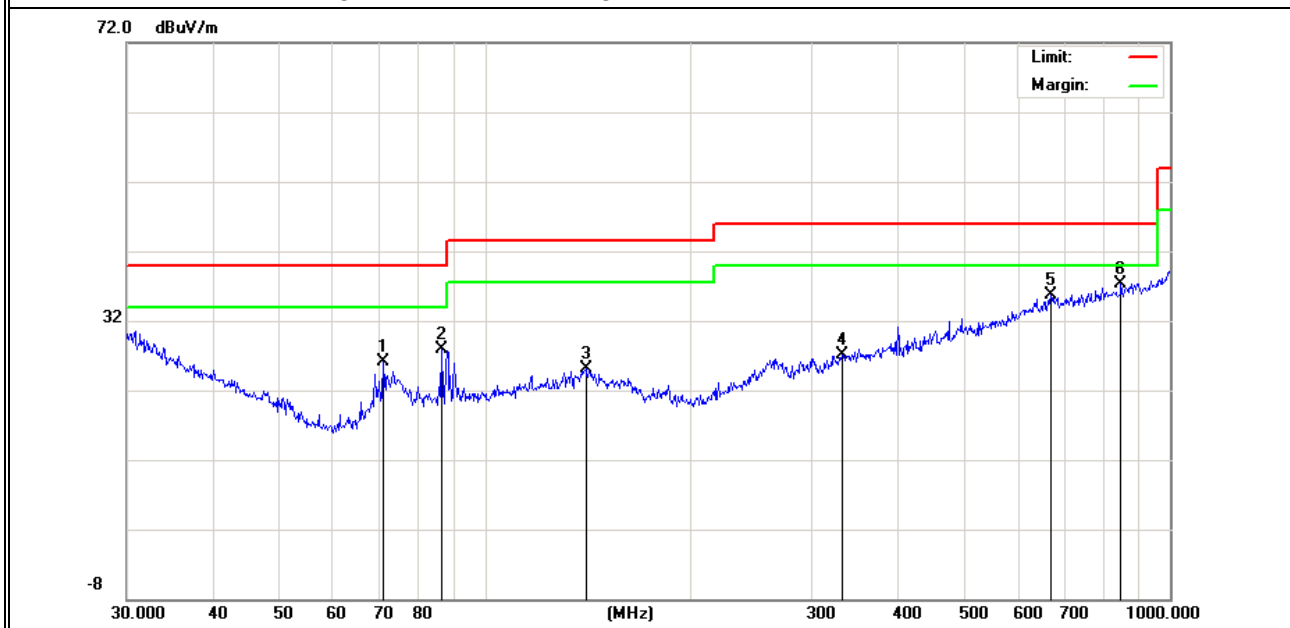
Emission Level= ReadingLevel+ Factor, Margin= Emission Level - Limit



Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remark
	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
H	71.0803	13.34	12.71	26.05	40.00	-13.95	QP
H	86.5029	12.93	14.91	27.84	40.00	-12.16	QP
H	140.3421	6.55	18.62	25.17	43.50	-18.33	QP
H	332.5187	5.81	21.24	27.05	46.00	-18.95	QP
H	670.4893	7.69	28.08	35.77	46.00	-10.23	QP
H	848.0562	7.53	29.77	37.30	46.00	-8.70	QP

Remark:

Emission Level= ReadingLevel+ Factor, Margin= Emission Level - Limit

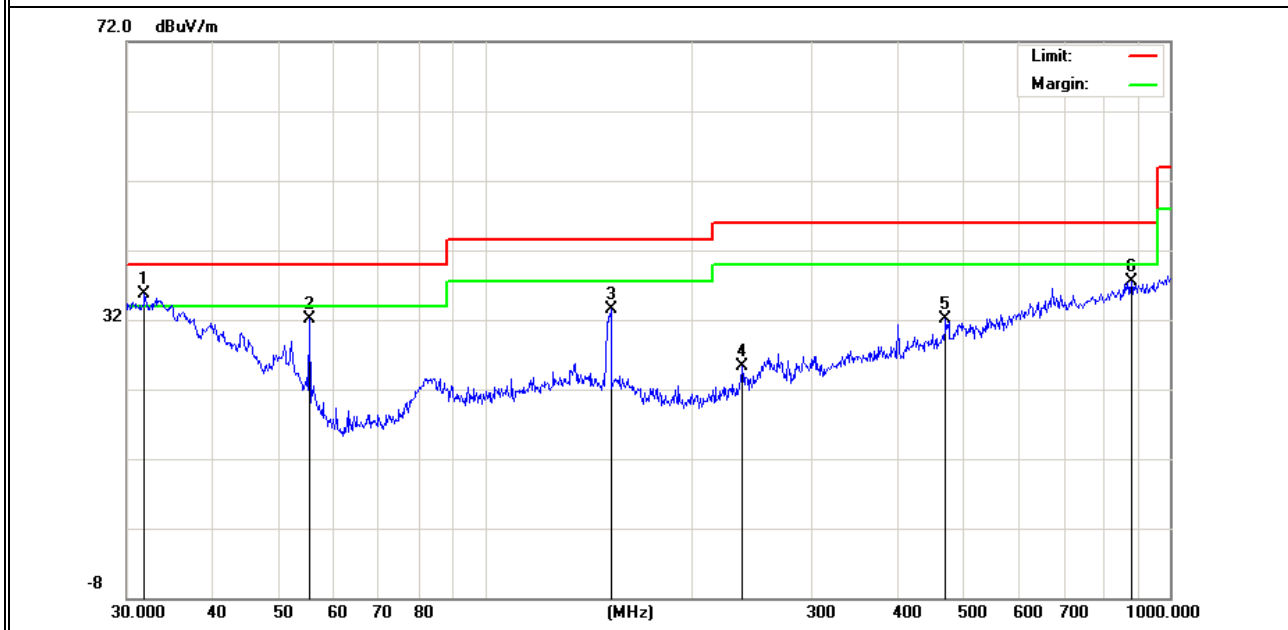


EUT :	Tablet PC	Model Name :	H2
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Voltage :	DC 3.8V
Test Mode :	TX(5.8G) - 802.11a (Middle CH)		

Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remark
	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
V	31.8427	12.48	23.29	35.77	40.00	-4.23	QP
V	55.4147	19.74	12.40	32.14	40.00	-7.86	QP
V	152.6641	15.72	17.78	33.50	43.50	-10.00	QP
V	237.4760	7.66	17.61	25.27	46.00	-20.73	QP
V	470.5232	7.76	24.36	32.12	46.00	-13.88	QP
V	878.3214	7.29	30.20	37.49	46.00	-8.51	QP

Remark:

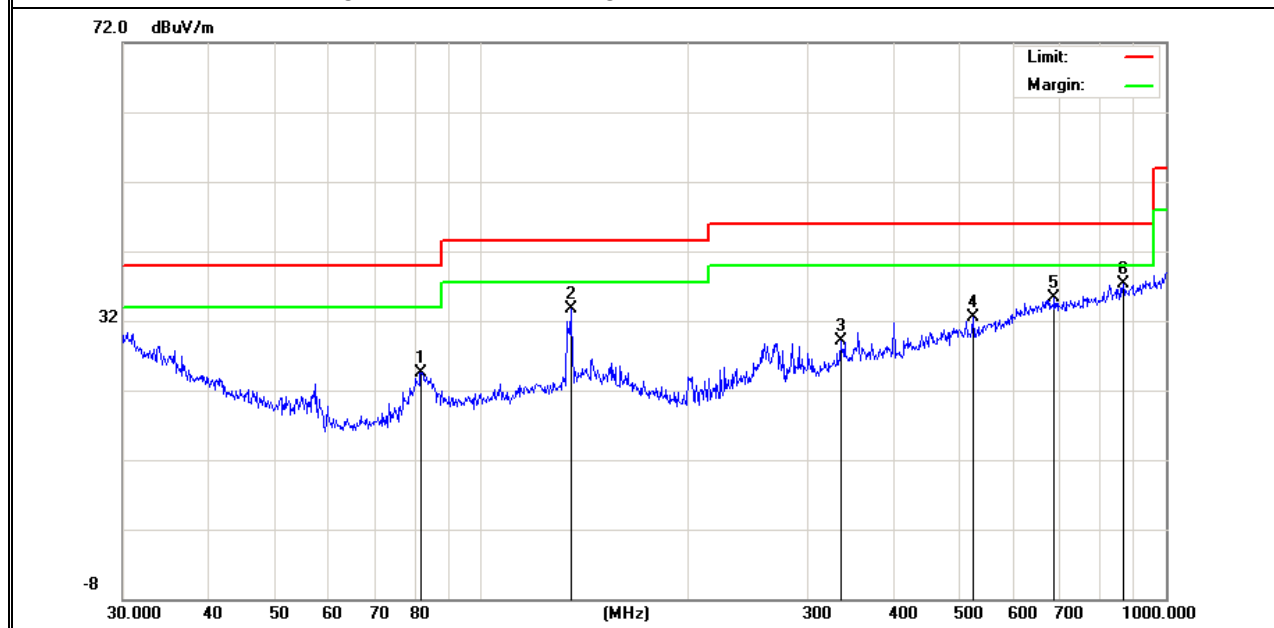
Emission Level= ReadingLevel+ Factor, Margin= Emission Level - Limit



Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remark
	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
H	81.7833	10.53	14.04	24.57	40.00	-15.43	QP
H	135.5062	15.59	18.04	33.63	43.50	-9.87	QP
H	334.8589	7.77	21.31	29.08	46.00	-16.92	QP
H	522.7180	7.31	25.14	32.45	46.00	-13.55	QP
H	687.1507	7.32	28.02	35.34	46.00	-10.66	QP
H	866.0879	7.03	30.28	37.31	46.00	-8.69	QP

Remark:

Emission Level= ReadingLevel+ Factor, Margin= Emission Level - Limit



Note: All modes have been tested, just the the worst mode has been recorded in the report.

2.2.8 TEST RESULTS (1GHz-18GHz)

EUT :	Tablet PC	Model Name. :	H2
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.8V
Test Mode :	TX(5.2G) - 802.11n40 _5180~5240MHz		

Polar	Frequency	Meter Reading	Cable loss	Antenna Factor	Preamplifier Factor	Emission Level	Limits	Margin	Detector Type
(H/V)	(MHz)	(dBuV)	(dB)	dB/m	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5190 MHz)-Above 1G									
Vertical	3016	61.41	5.94	35.40	44.00	58.75	68.2	-9.45	Pk
Vertical	10380	60.01	8.46	39.75	44.50	63.72	68.2	-4.48	Pk
Vertical	10380	44.39	8.46	39.75	44.50	48.10	54	-5.90	AV
Vertical	15570	62.04	10.12	38.80	44.10	66.86	74	-7.14	Pk
Vertical	15570	42.46	10.12	38.80	42.70	48.68	54	-5.32	AV
Horizontal	2982	64.73	5.94	35.18	44.00	61.85	68.2	-6.35	Pk
Horizontal	10380	61.64	8.46	38.71	44.50	64.31	68.2	-3.89	Pk
Horizontal	10380	40.64	8.46	38.71	44.50	43.31	54	-10.69	AV
Horizontal	15570	62.47	10.12	38.38	44.10	66.87	74	-7.13	Pk
Horizontal	15570	41.73	10.12	38.38	44.10	46.13	54	-7.87	AV
High Channel (5230 MHz)-Above 1G									
Vertical	3927	64.92	7.1	37.24	43.5	65.76	74	-8.24	Pk
Vertical	3927	45.91	7.1	37.24	43.5	46.75	54	-7.25	AV
Vertical	10460	62.95	8.46	37.68	44.5	64.59	68.2	-3.61	Pk
Vertical	15690	59.88	10.12	38.8	44.1	64.70	74	-9.30	Pk
Vertical	15690	36.47	10.12	38.8	42.7	42.69	54	-11.31	AV
Horizontal	3885	66.81	7.1	37.24	43.5	67.65	74	-6.35	Pk
Horizontal	3885	42.25	7.1	37.24	43.5	43.09	54	-10.91	AV
Horizontal	10460	60.68	8.46	38.57	44.5	63.21	68.2	-4.99	Pk
Horizontal	15690	61.86	10.12	38.38	44.1	66.26	74	-7.74	Pk
Horizontal	15690	42.25	10.12	38.38	44.1	46.65	54	-7.35	AV

Note:"802.11nHT40 (5G)" mode is the worst mode. PK value is lower than the Average value limit, So average didn't record.

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

EUT :	Tablet PC	Model Name. :	H2
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.8V
Test Mode :	TX (5.8G) -- 802.11 a_5755~5795MHz		

Polar	Frequency	Meter Reading	Cable loss	Antenna Factor	Preamp Factor	Emission Level	Limits	Margin	Detector Type
(H/V)	(MHz)	(dBuV)	(dB)	dB/m	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5755 MHz)-Above 1G									
Vertical	2806.9	64.06	5.94	35.40	44.00	61.40	74.00	-12.60	Pk
Vertical	2806.9	46.11	5.94	35.40	44.00	43.45	54.00	-10.55	AV
Vertical	11490	63.51	8.46	39.75	44.50	67.22	74.00	-6.78	Pk
Vertical	11490	42.73	8.46	39.75	44.50	46.44	54.00	-7.56	AV
Vertical	17235.32	60.08	10.12	38.80	44.10	64.90	68.20	-3.30	Pk
Horizontal	2911.524	64.47	5.94	35.18	44.00	61.59	68.20	-6.61	Pk
Horizontal	11490	63.49	8.46	38.71	44.50	66.16	74.00	-7.84	Pk
Horizontal	11490	40.12	8.46	38.71	44.50	42.79	54.00	-11.21	AV
Horizontal	17235.56	58.94	10.12	38.38	44.10	63.34	68.20	-4.86	Pk
middle Channel (5795 MHz)-Above 1G									
Vertical	3763.083	64.13	6.48	36.35	44.05	62.91	74.00	-11.09	Pk
Vertical	3763.083	42.22	6.48	36.35	44.05	41.00	54.00	-13.00	AV
Vertical	11570	64.13	8.47	37.88	44.51	65.97	74.00	-8.03	Pk
Vertical	11570	46.37	8.47	37.88	44.51	48.21	54.00	-5.79	AV
Vertical	17355.56	60.01	10.12	38.8	44.10	64.83	68.20	-3.37	Pk
Horizontal	3561.585	61.78	6.48	36.37	44.05	60.58	68.20	-7.62	Pk
Horizontal	11570	60.67	8.47	38.64	44.50	63.28	74.00	-10.72	Pk
Horizontal	11570	44.13	8.47	38.64	44.50	46.74	54.00	-7.26	AV
Horizontal	17355	64.02	10.12	38.38	44.10	68.42	74.00	-5.58	Pk
Horizontal	17355	43.08	10.12	38.38	44.10	47.48	54.00	-6.52	AV
High Channel (5795 MHz)-Above 1G									
Vertical	3907.168	61.19	7.10	37.24	43.50	62.03	74.00	-11.97	Pk
Vertical	3907.168	43.85	7.10	37.24	43.50	44.69	54.00	-9.31	AV
Vertical	11650	61.45	8.46	37.68	44.50	63.09	74.00	-10.91	Pk
Vertical	11650	44.20	8.46	37.68	44.50	45.84	54.00	-8.16	AV
Vertical	17475.54	60.15	10.12	38.8	44.10	64.97	68.20	-3.23	Pk
Horizontal	3912	62.73	7.10	37.24	43.50	63.57	74.00	-10.43	Pk
Horizontal	3912	43.69	7.10	37.24	43.50	44.53	54.00	-9.47	AV
Horizontal	11650	63.64	8.46	38.57	44.50	66.17	74.00	-7.83	Pk
Horizontal	11650	43.14	8.46	38.57	44.50	45.67	54.00	-8.33	AV
Horizontal	17475.54	60.38	10.12	38.38	44.10	64.78	68.20	-3.42	Pk

Note:"802.11 a (5G)" mode is the worst mode. PK value is lower than the Average value limit, So average didn't record.

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value

has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

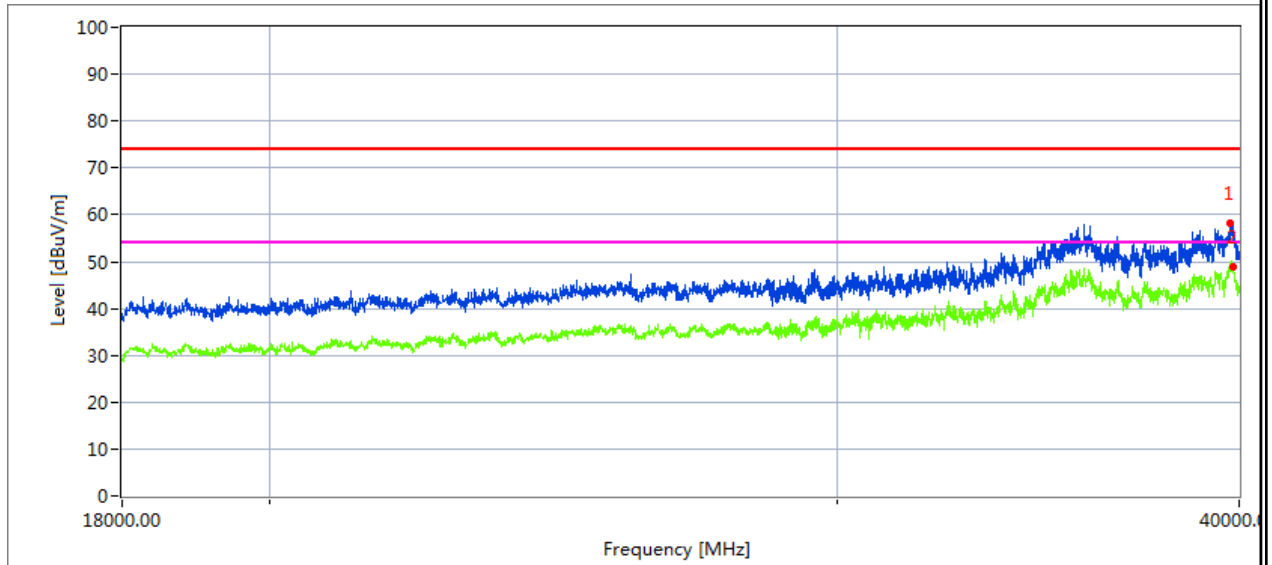
2.2.10 TEST RESULTS (18GHz-40GHz)

EUT :	Tablet PC	Model Name. :	H2
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.8V
Test Mode :	TX (5.2G)-802.11n(HT40) 5190MHz~5230MHz; TX (5.8G)-802.11a 5725MHz~5825MHz		

All the modulation modes have been tested, and the worst result was report as below:

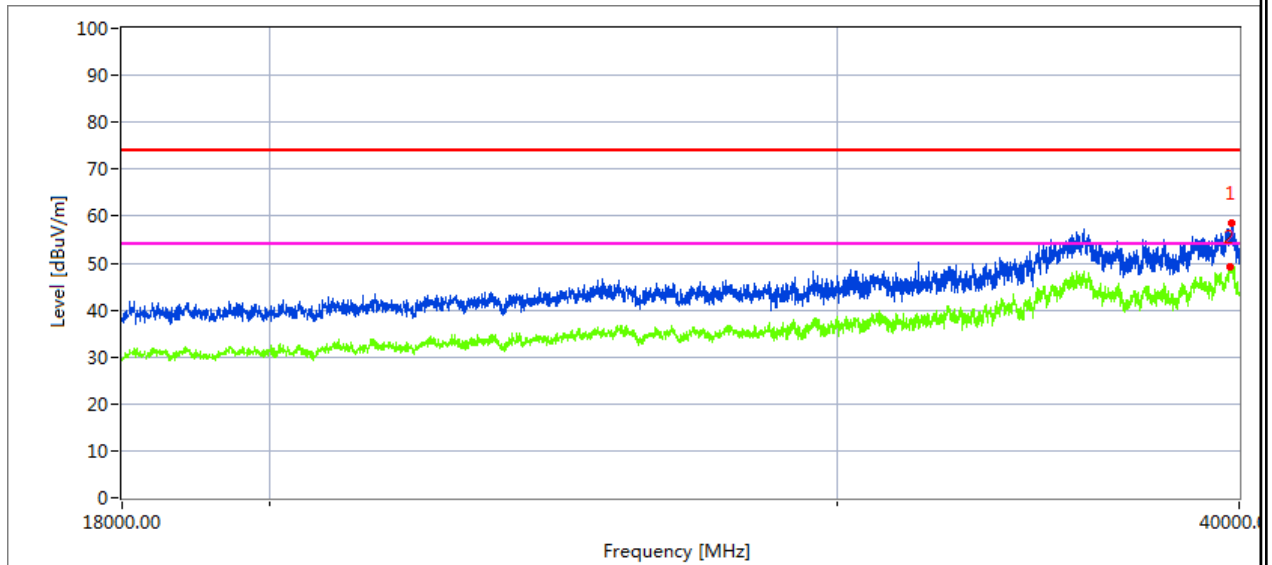
Low Channel (5190 MHz)-Above 1G

Horizontal



Frequency	Meter Reading	Cable loss	Antenna Factor	Preamp Factor	Emission Level	Limits	Margin	Remark
39745.986	37.32	20.09	44.07	43.48	58	68.2	10.2	Peak

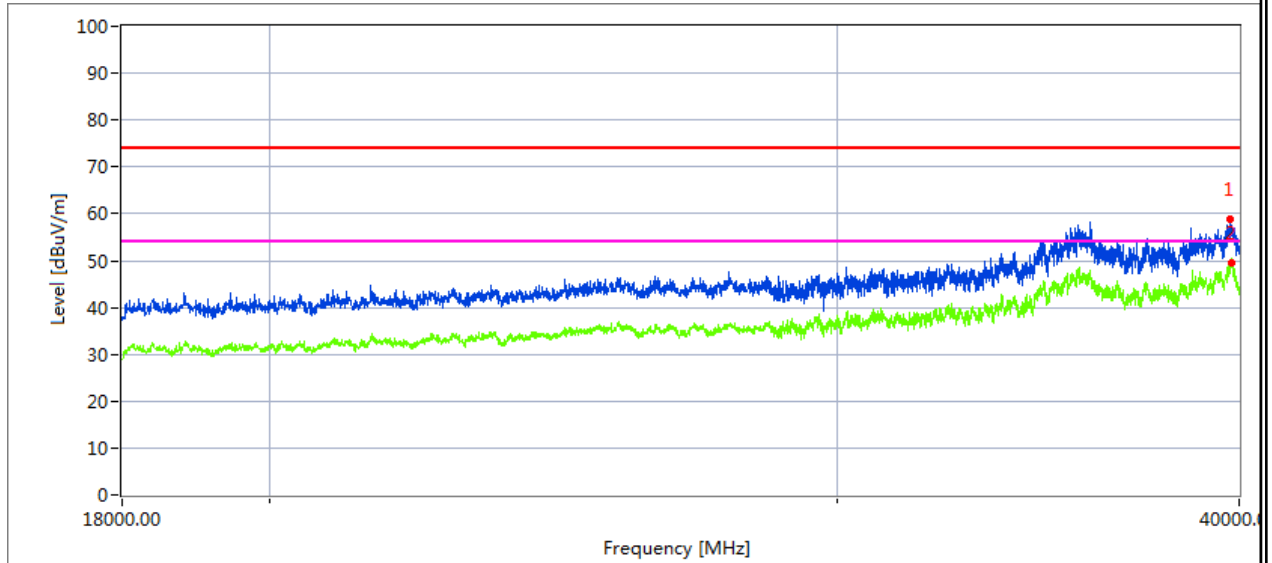
Vertical



Frequency	Meter Reading	Cable loss	Antenna Factor	Preamp Factor	Emission Level	Limits	Margin	Remark
39769.546	14.12	20.09	44.07	43.48	54.8	68.2	13.4	Peak

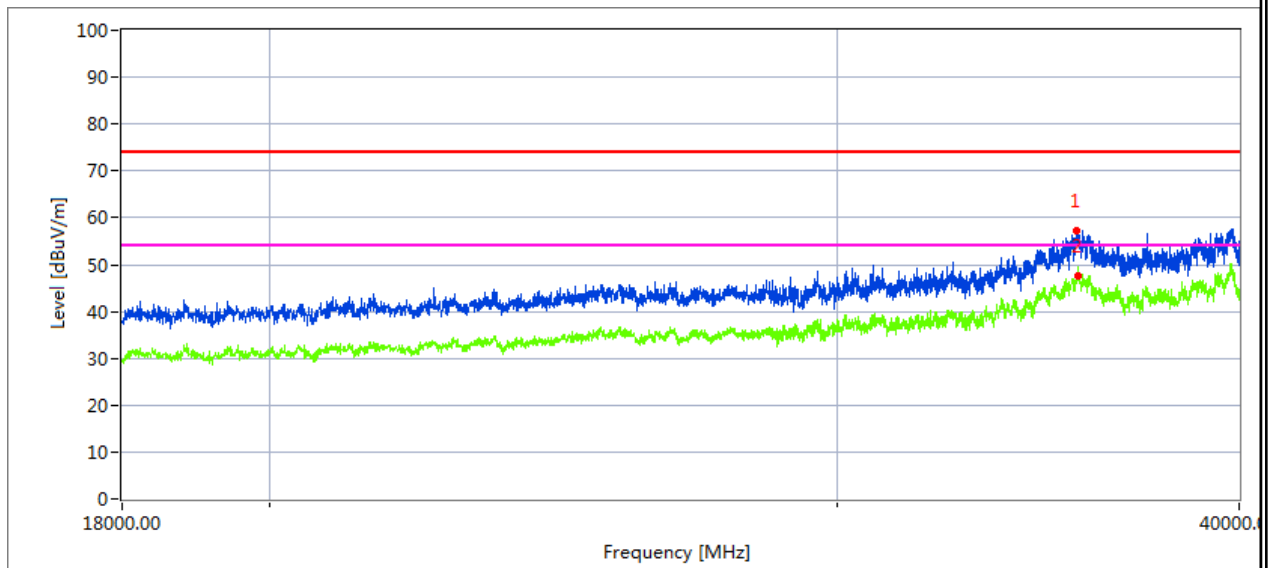
High Channel (5230 MHz)-Above 1G

Horizontal



Frequency	Meter Reading	Cable loss	Antenna Factor	Preamplifier Factor	Emission Level	Limits	Margin	Remark
35628.37	40.77	19.11	42.73	44.61	58	68.2	10.2	Peak

Vertical

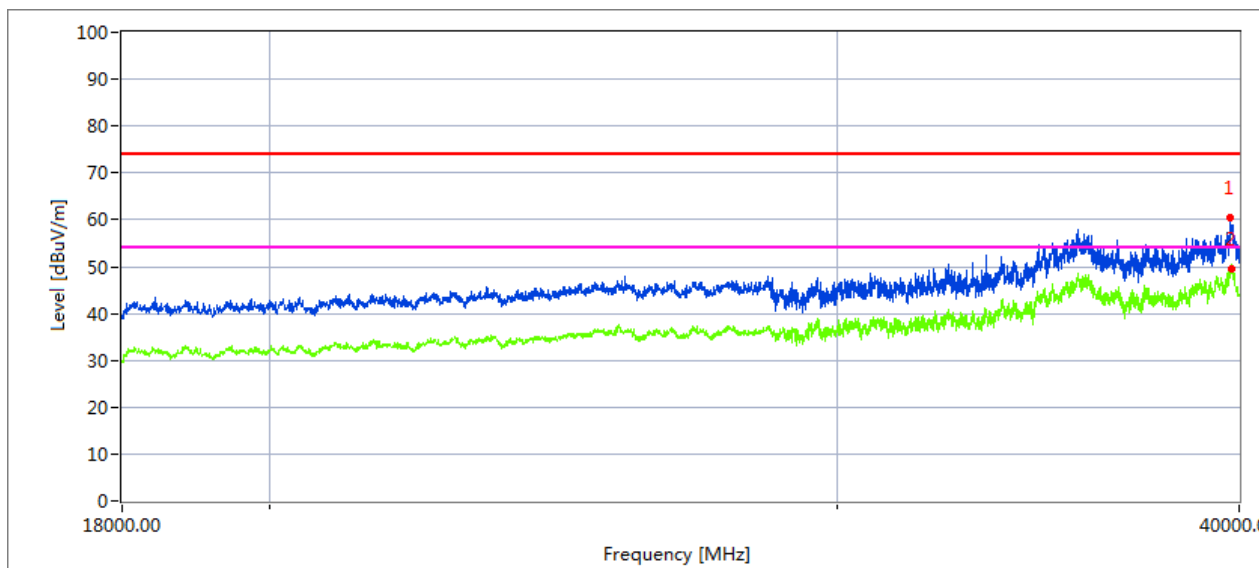


Frequency	Meter Reading	Cable loss	Antenna Factor	Preamplifier Factor	Emission Level	Limits	Margin	Remark
39769.476	34.72	20.09	44.07	43.48	55.4	68.2	12.8	Peak

Note: 802.11n(HT40) mode is the worst mode.

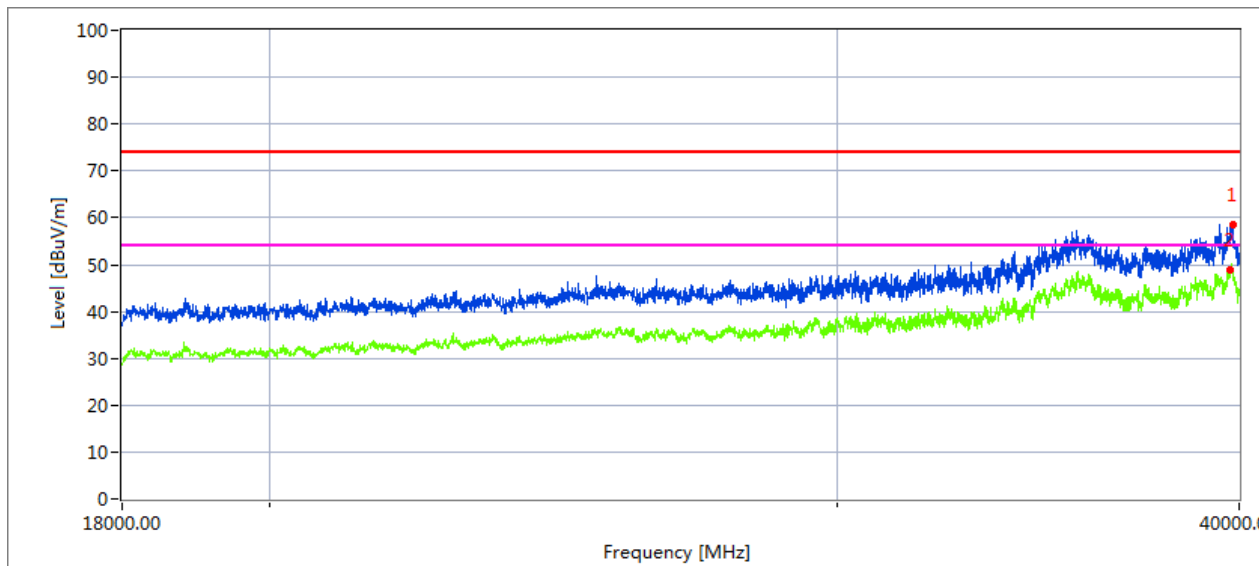
Low Channel (5745 MHz)-Above 1G

Horizontal



Frequency	Meter Reading	Cable loss	Antenna Factor	Preamp Factor	Emission Level	Limits	Margin	Remark
39670.224	36.23	20.09	44.16	43.48	57	68.2	11.2	Peak

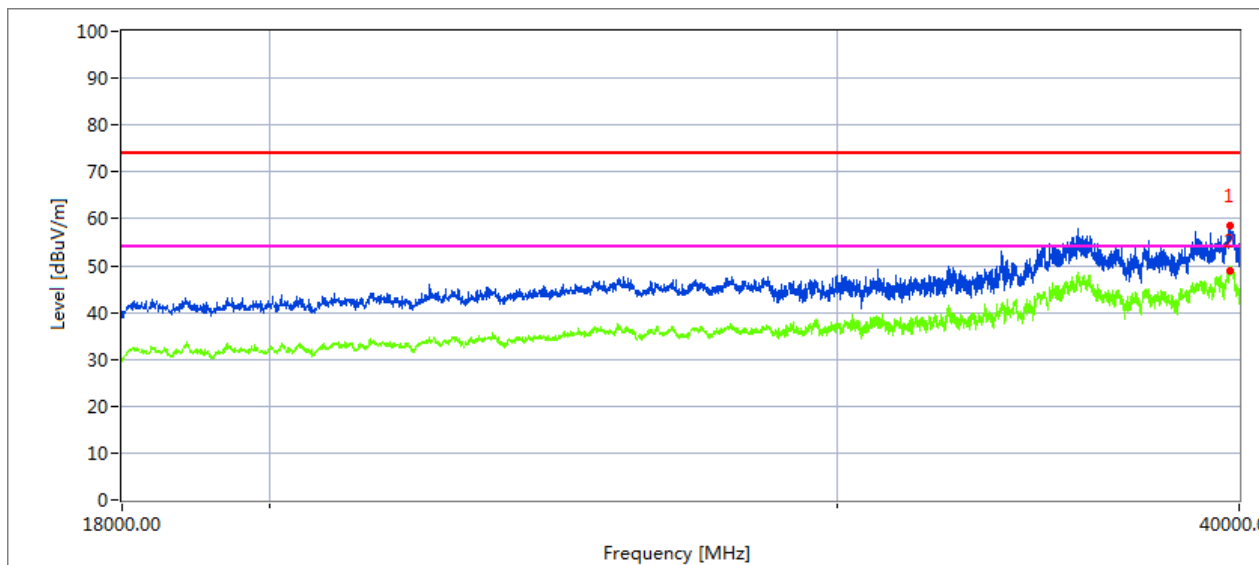
Vertical



Frequency	Meter Reading	Cable loss	Antenna Factor	Preamp Factor	Emission Level	Limits	Margin	Remark
39731.342	34.98	20.06	44.07	43.21	55.9	68.2	12.3	Peak

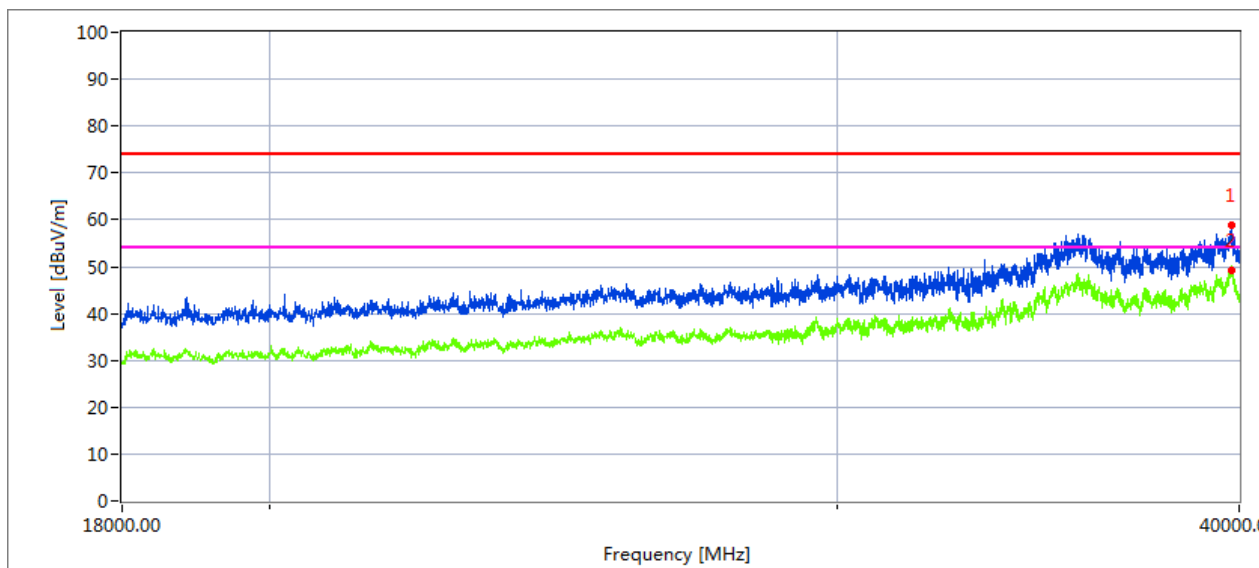
High Channel (5825 MHz)-Above 1G

Horizontal



Frequency	Meter Reading	Cable loss	Antenna Factor	Preamp Factor	Emission Level	Limits	Margin	Remark
35628.534	38.34	19.11	42.63	43.48	56.6	68.2	11.6	Peak

Vertical



Frequency	Meter Reading	Cable loss	Antenna Factor	Preamp Factor	Emission Level	Limits	Margin	Remark
39821.763	35.32	20.1	44.1	43.22	56.3	68.2	11.9	Peak

Note:802.11 ac40 mode is the worst mode.

2.2.10 Spurious Emission in Restricted Band 4.5GHz~5.150 GHz& 5.350GHz~5460GHz

EUT :	Tablet PC	Model Name. :	H2
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.8V
Test Mode :	TX (5.2G)-802.11a 5150MHz~5250MHz		

All the modulation modes have been tested, The report just record the worst data mode.

Frequency	Meter Reading	Cable Loss	Antenna Factor	Preamp Factor	Emission Level	Limits	Margin	Detector	Comment
(MHz)	(dBμV)	(dB)	dB/m	(dB)	(dBμV/m)	(dBμV/m)	(dB)	Type	
Low Channel (5180 MHz)									
4500	62.99	5.2	35.6	44.2	59.59	74	-14.41	Pk	Horizontal
4500	46.53	5.2	35.6	44.2	43.13	54	-10.87	AV	Horizontal
4500	53.50	5.2	35.6	44.2	50.10	74	-23.90	Pk	Horizontal
4500	40.24	5.2	35.6	44.2	36.84	54	-17.16	AV	Horizontal
5150	69.76	5.36	35.66	44.22	66.56	74	-7.44	Pk	Horizontal
5150	50.41	5.36	35.66	44.22	47.21	54	-6.79	AV	Horizontal
5150	69.56	5.36	35.66	44.22	66.36	74	-7.64	Pk	Vertical
5150	50.38	5.36	35.66	44.22	47.18	54	-6.82	AV	Vertical
5350	62.02	5.68	35.68	44.22	59.16	74	-14.84	Pk	Vertical
5350	42.20	5.68	35.68	44.22	39.34	54	-14.66	AV	Vertical
5350	55.51	5.68	35.68	44.22	52.65	74	-21.35	Pk	Horizontal
5350	38.53	5.68	35.68	44.22	35.67	54	-18.33	AV	Horizontal

Note: (1) Emission Level= Antenna Factor + Cable Loss + Read Level - Preamp Factor

(2) "802.11a" mode is the worst mode. When PK value is lower than the Average value limit, average don't record.

3. POWER SPECTRAL DENSITY TEST

3.1 APPLIED PROCEDURES / LIMIT

According to FCC §15.407(a)

For the band 5.15-5.25 GHz,

- (i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).
- (ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
- (iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.
- (iv) For client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz

- (3) For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.2 TEST PROCEDURE

For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 KHz bandwidth, the following adjustments to the procedures apply:

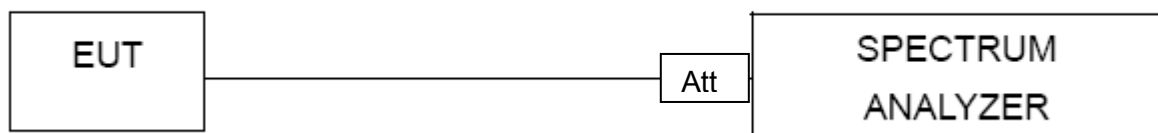
- a) Set $RBW \geq 1/T$, where T is defined in section II.B.I.a).
- b) Set $VBW \geq 3 RBW$.
- c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10\log(500\text{kHz}/RBW)$ to the measured result, whereas $RBW (< 500 \text{ KHz})$ is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10\log(1\text{MHz}/RBW)$ to the measured result, whereas $RBW (< 1 \text{ MHz})$ is the reduced resolution bandwidth of spectrum analyzer set during measurement.
- e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

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

3.3 DEVIATION FROM STANDARD

No deviation.

3.4 TEST SETUP



3.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.1 Unless otherwise a special operating condition is specified in the follows during the testing.

3.6 TEST RESULTS

EUT :	Tablet PC	Model Name :	H2
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1015 hPa	Test Voltage :	DC 3.8V
Test Mode :	TX Frequency Band 1 (5150-5250MHz), Band 3 (5745-5825MHz)		

Test data reference attachment.

4. 26DB & 99% EMISSION BANDWIDTH

4.1 APPLIED PROCEDURES / LIMIT

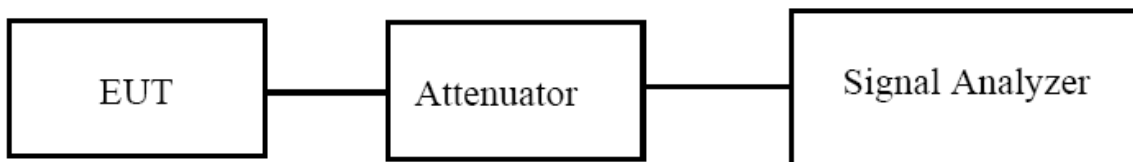
The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.725-5.85 GHz band are made over a reference bandwidth of 500 kHz or the 26 dB emission bandwidth of the device, whichever is less. Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.

4.2 TEST PROCEDURE

- a) Set RBW = approximately 1% of the emission bandwidth.
- b) Set the 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 maximum 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%.

The following procedure shall be used for measuring (99 %) power bandwidth:

1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW $\geq 3 \cdot$ RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.



4.3 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

4.4 TEST RESULTS

EUT :	Tablet PC	Model Name :	H2
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1012 hPa	Test Voltage :	DC 3.8V
Test Mode :	TX Frequency Band 1 (5150-5250MHz), Band 3(5725-5850MHz)		

Test data reference attachment.

5. MINIMUM 6 DB BANDWIDTH

5.1 APPLIED PROCEDURES / LIMIT

According to FCC §15.407(e)

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

5.2 TEST PROCEDURE

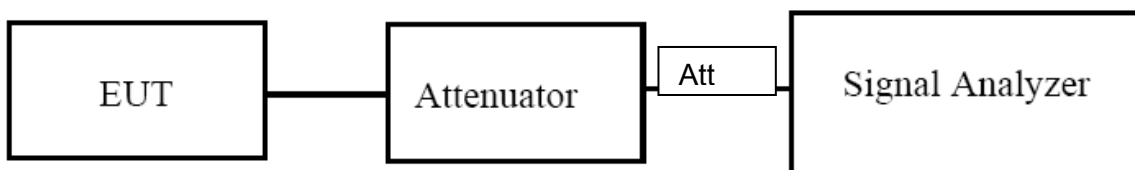
Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.715-5.85 GHz. The following procedure shall be used for measuring this bandwidth:

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) $\geq 3 \times$ 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.

5.3 DEVIATION FROM STANDARD

No deviation.

5.4 TEST SETUP



5.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

5.6 TEST RESULTS

EUT :	Tablet PC	Model Name :	H2
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1012 hPa	Test Voltage :	DC 3.8V
Test Mode :	TX (5G) Mode Frequency Band 3 (5725-5850MHz)		

Test data reference attachment.

6. MAXIMUM CONDUCTED OUTPUT POWER

6.1 PPLIED PROCEDURES / LIMIT

According to FCC §15.407

The maximum conducted output power should not exceed:

Frequency Band(MHz)	Limit
5150~5250	250mW
5250~5350	250 mW or 11 dBm + 10 log B Note: The limit is the smaller of the two, "B" represents -26dB bandwidth.
5470~5725	250 mW or 11 dBm + 10 log B Note: The limit is the smaller of the two, "B" represents -26dB bandwidth.
5725~5850	1W

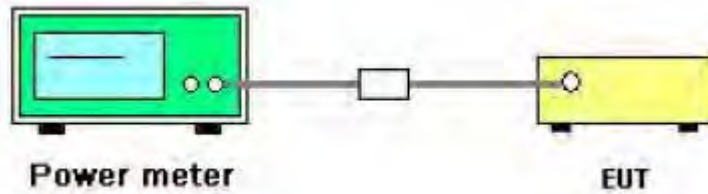
6.2 TEST PROCEDURE

- Method PM is Measurement using an RF average power meter. The procedure for this method is as follows:
 - a) Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the following conditions are satisfied:
 - 1) The EUT is configured to transmit continuously, or to transmit with a constant duty cycle.
 - 2) At all times when the EUT is transmitting, it shall be transmitting at its maximum power control level.
 - 3) The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.
 - b) If the transmitter does not transmit continuously, measure the duty cycle D of the transmitter output signal as described in 12.2.
 - c) Measure the average power of the transmitter. This measurement is an average over both the ON and OFF periods of the transmitter.
 - d) Adjust the measurement in dBm by adding $[10 \log (1 / D)]$, where D is the duty cycle {e.g., $[10 \log (1 / 0.25)]$, if the duty cycle is 25%}.

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

6.2 TEST RESULTS

EUT :	Tablet PC	Model Name :	H2
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1012 hPa	Test Voltage :	DC 3.8V
Test Mode :	TX (5G) Mode Frequency Band 1 (5150-5250MHz), Band 3 (5725-5850MHz)		

Test data reference attachment.

7. OUT OF BAND EMISSIONS

7.1 APPLICABLE STANDARD

According to FCC §15.407(b)

Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum 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 e.i.r.p. of -27 dBm/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 e.i.r.p. of -27 dBm/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 e.i.r.p. of -27 dBm/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.
 - (ii) Devices certified before March 2, 2017 with antenna gain greater than 10 dBi may demonstrate compliance with the emission limits in §15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease by March 2, 2018. Devices certified before March 2, 2018 with antenna gain of 10 dBi or less may demonstrate compliance with the emission limits in §15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease before March 2, 2020.

7.2 TEST PROCEDURE

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW of spectrum analyzer to 1 MHz with a convenient frequency span.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot

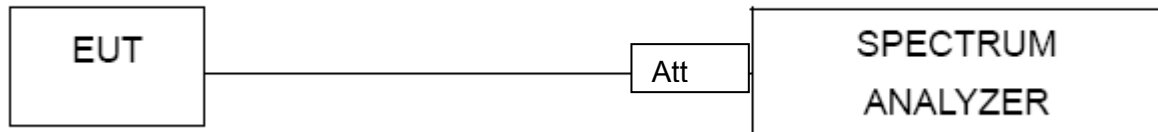
the graph with marking the highest point and edge frequency.

5. Repeat above procedures until all measured frequencies were complete.

7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP



7.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

7.6 TEST RESULTS

EUT :	Tablet PC	Model Name :	H2
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1012 hPa	Test Voltage :	DC 3.8V

Test data reference attachment.

8. Frequency Stability Measurement

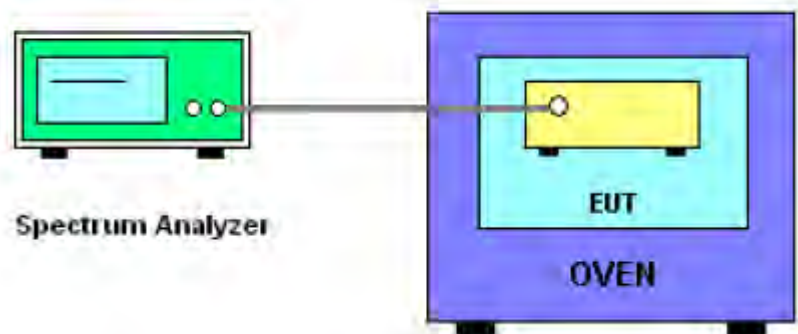
8.1 LIMIT

Manufactures 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.

8.2 TEST PROCEDURES

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. EUT have transmitted absence of modulation signal and fixed channelize.
3. Set the spectrum analyzer span to view the entire absence of modulation emissions bandwidth.
4. Set RBW = 10 kHz, VBW = 10 kHz with peak detector and maxhold settings.
5. f_c is declaring of channel frequency. Then the frequency error formula is $(f_c - f)/f_c \times 10^6$ ppm and the limit is less than ± 20 ppm (IEEE 802.11 specification).
6. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value
7. Extreme temperature is $-20^{\circ}\text{C} \sim 70^{\circ}\text{C}$.

8.3 TEST SETUP LAYOUT



8.4 EUT OPERATION DURING TEST

1. The EUT was programmed to be in continuously un-modulation transmitting mode.
2. The module has two antennas, and the worst data is Antenna 1, only shown Antenna 1 data.

8.5 TEST RESULTS

EUT :	Tablet PC	Model Name. :	H2
Temperature :	25 °C	Relative Humidity :	56%
Pressure :	1012 hPa	Test Voltage :	DC 3.8V
Test Mode :	TX Frequency Band I (5150-5250MHz)		

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5180MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	3.8	5180.0062	5180	0.0062	1.1969
		V max (V)	4.2	5180.0074	5180	0.0074	1.4378
		V min (V)	3.3	5180.0022	5180	0.0022	0.4189
Limits				Within 5150-5250MHz			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5180MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	3.8	T (°C)	-20	5180.0004	5180	0.0004	0.0792
		T (°C)	-10	5180.0071	5180	0.0071	1.3794
		T (°C)	0	5180.0022	5180	0.0022	0.4269
		T (°C)	10	5180.0102	5180	0.0102	1.9734
		T (°C)	20	5180.0041	5180	0.0041	0.7869
		T (°C)	30	5180.0010	5180	0.0010	0.1959
		T (°C)	40	5180.0084	5180	0.0084	1.6276
		T (°C)	50	5180.0092	5180	0.0092	1.7855
		T (°C)	60	5180.0045	5180	0.0045	0.8771
		T (°C)	70	5180.0102	5180	0.0102	1.9658
Limits				Within 5150-5250MHz			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5200MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	3.8	5200.0097	5200	0.0097	1.8655
		V max (V)	4.2	5200.0027	5200	0.0027	0.5282
		V min (V)	3.3	5200.0111	5200	0.0111	2.1259
Limits				Within 5150-5250MHz			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5200MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	3.8	T (°C)	-20	5200.0009	5200	0.0009	0.1815
		T (°C)	-10	5200.0077	5200	0.0077	1.4868
		T (°C)	0	5200.0036	5200	0.0036	0.6882
		T (°C)	10	5200.0069	5200	0.0069	1.3353
		T (°C)	20	5200.0057	5200	0.0057	1.0879
		T (°C)	30	5200.0027	5200	0.0027	0.5143
		T (°C)	40	5200.0060	5200	0.0060	1.1448
		T (°C)	50	5200.0104	5200	0.0104	1.9979
		T (°C)	60	5200.0099	5200	0.0099	1.9107
		T (°C)	70	5200.0035	5200	0.0035	0.6646
Limits				Within 5150-5250MHz			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5240MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	3.8	5240.0020	5240	0.0020	0.3727
		V max (V)	4.2	5240.0004	5240	0.0004	0.0740
		V min (V)	3.3	5240.0087	5240	0.0087	1.6522
Limits				Within 5150-5250MHz			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5240MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	3.8	T (°C)	-20	5240.0409	5240	0.0409	7.8090
		T (°C)	-10	5240.0344	5240	0.0344	6.5598
		T (°C)	0	5240.0360	5240	0.0360	6.8721
		T (°C)	10	5240.0352	5240	0.0352	6.7091
		T (°C)	20	5240.0334	5240	0.0334	6.3672
		T (°C)	30	5240.0363	5240	0.0363	6.9305
		T (°C)	40	5240.0456	5240	0.0456	8.7052
		T (°C)	50	5240.0440	5240	0.0440	8.3964
		T (°C)	60	5240.0334	5240	0.0334	6.3680
		T (°C)	70	5240.0432	5240	0.0432	8.2499
Limits				Within 5150-5250MHz			
Result				Complies			

EUT :	Tablet PC	Model Name. :	H2
Temperature :	25 °C	Relative Humidity :	56%
Pressure :	1012 hPa	Test Voltage :	DC 3.8V
Test Mode :	TX Frequency(5745-5850MHz)		

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5745MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	3.8	5745.0715	5745	0.0715	12.4536
		V max (V)	4.2	5745.0697	5745	0.0697	12.1389
		V min (V)	3.3	5745.0730	5745	0.0730	12.7082
Limits				Within 5745-5850MHz			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5745MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	3.8	T (°C)	-20	5745.0722	5745	0.0722	12.5660
		T (°C)	-10	5745.0751	5745	0.0751	13.0646
		T (°C)	0	5745.0789	5745	0.0789	13.7326
		T (°C)	10	5745.0707	5745	0.0707	12.3095
		T (°C)	20	5745.0790	5745	0.0790	13.7435
		T (°C)	30	5745.0706	5745	0.0706	12.2803
		T (°C)	40	5745.0705	5745	0.0705	12.2739
		T (°C)	50	5745.0676	5745	0.0676	11.7651
		T (°C)	60	5745.0672	5745	0.0672	11.6901
		T (°C)	70	5745.0770	5745	0.0770	13.3977
Limits				Within 5745-5850MHz			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5785MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	3.8	5785.0558	5785	0.05580	-9.6458
		V max (V)	4.2	5785.0521	5785	0.05210	-9.0061
		V min (V)	3.3	5785.0522	5785	0.05215	-9.0155
Limits				Within 5745-5850MHz			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5785MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	3.8	T (°C)	-20	5785.0592	5785	0.0592	10.2349
		T (°C)	-10	5785.0583	5785	0.0583	10.0800
		T (°C)	0	5785.0556	5785	0.0556	9.6044
		T (°C)	10	5785.0634	5785	0.0634	10.9631
		T (°C)	20	5785.0534	5785	0.0534	9.2337
		T (°C)	30	5785.0610	5785	0.0610	10.5419
		T (°C)	40	5785.0581	5785	0.0581	10.0512
		T (°C)	50	5785.0586	5785	0.0586	10.1221
		T (°C)	60	5785.0604	5785	0.0604	10.4350
		T (°C)	70	5785.0528	5785	0.0528	9.1305
Limits				Within 5745-5850MHz			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5825MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	3.8	5825.0260	5825	0.0260	4.4666
		V max (V)	4.2	5825.0261	5825	0.0261	4.4791
		V min (V)	3.3	5825.0260	5825	0.0260	4.4650
Limits				Within 5745-5850MHz			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5825MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	3.8	T (°C)	-20	5825.0664	5825	0.0664	11.3977
		T (°C)	-10	5825.0188	5825	0.0188	3.2288
		T (°C)	0	5825.0626	5825	0.0626	10.7545
		T (°C)	10	5825.0467	5825	0.0467	8.0237
		T (°C)	20	5825.0613	5825	0.0613	10.5192
		T (°C)	30	5825.0425	5825	0.0425	7.2986
		T (°C)	40	5825.0285	5825	0.0285	4.8854
		T (°C)	50	5825.0018	5825	0.0018	0.3120
		T (°C)	60	5825.0642	5825	0.0642	11.0283
		T (°C)	70	5825.0438	5825	0.0438	7.5127
Limits				Within 5745-5850MHz			
Result				Complies			

Note: antenna 1 is the worst case.

9. ANTENNA REQUIREMENT

9.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 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.

9.2 EUT ANTENNA

The EUT antenna is permanent attached FPCB Antenna (antenna gain: WIFI 5.2G: -0.32dBi WIFI 5.8G: 0.83dBi). It comply with the standard requirement.

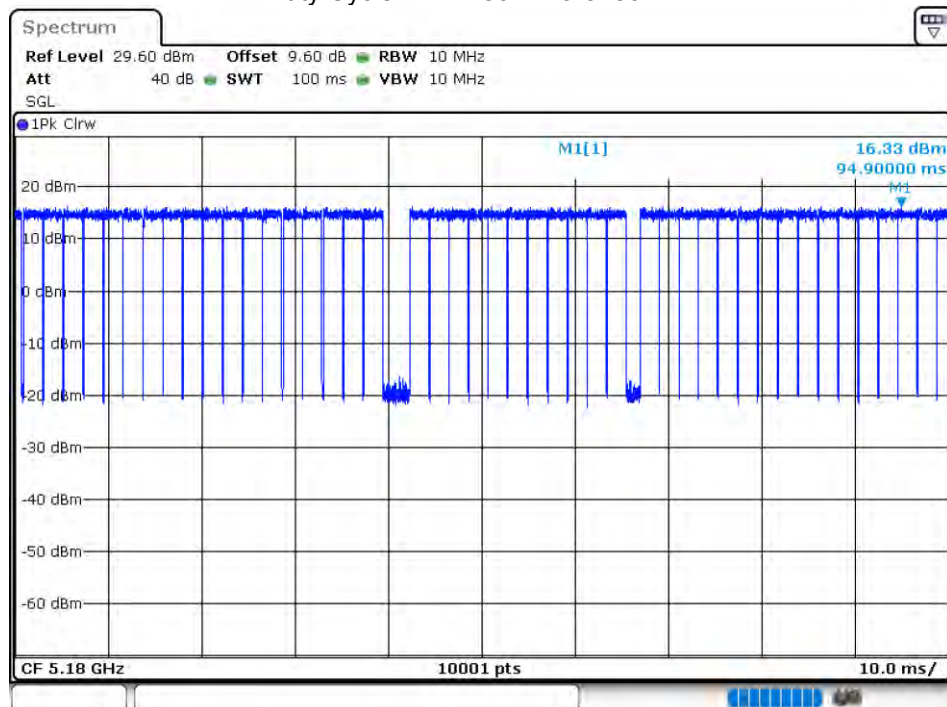
10 TEST RESULT

5.2G

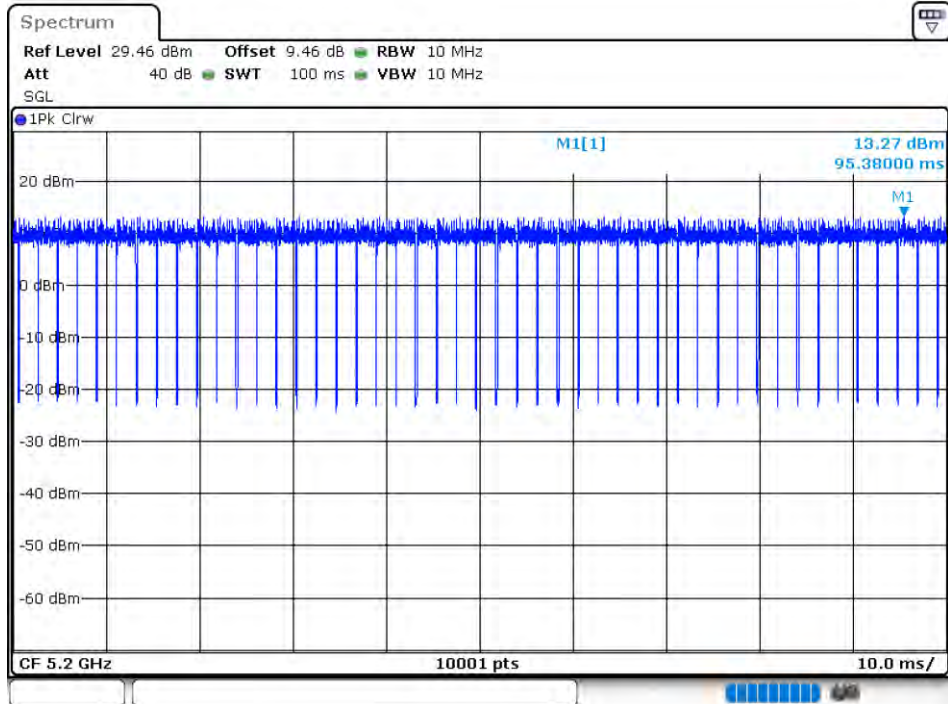
10.1 DUTY CYCLE

Condition	Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor (dB)
NVNT	802.11a	5180	91.72	0.38
NVNT	802.11a	5200	95.4	0.2
NVNT	802.11a	5240	95.11	0.22
NVNT	802.11ac20	5180	93.49	0.29
NVNT	802.11ac20	5200	93.18	0.31
NVNT	802.11ac20	5240	95.36	0.21
NVNT	802.11ac40	5190	90.37	0.44
NVNT	802.11ac40	5230	89.64	0.47
NVNT	802.11ax20	5180	100	0
NVNT	802.11ax20	5200	100	0
NVNT	802.11ax20	5240	100	0
NVNT	802.11ax40	5190	100	0
NVNT	802.11ax40	5230	100	0
NVNT	802.11n(HT20)	5180	92.84	0.32
NVNT	802.11n(HT20)	5200	94.56	0.24
NVNT	802.11n(HT20)	5240	95.76	0.19
NVNT	802.11n(HT40)	5190	89.51	0.48
NVNT	802.11n(HT40)	5230	89.06	0.5

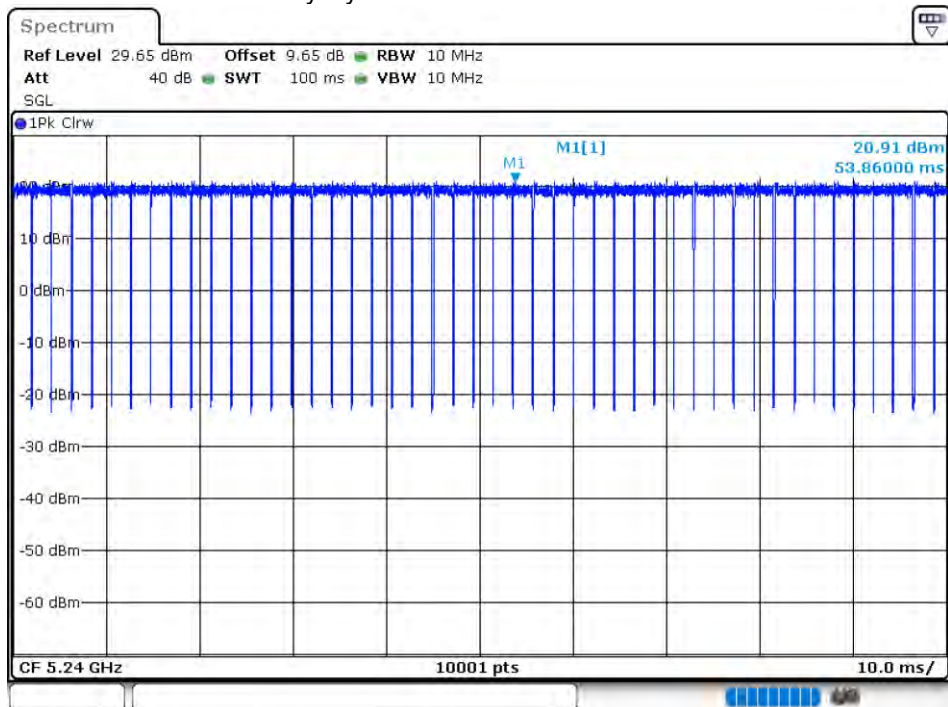
Duty Cycle NVNT 802.11a 5180MHz



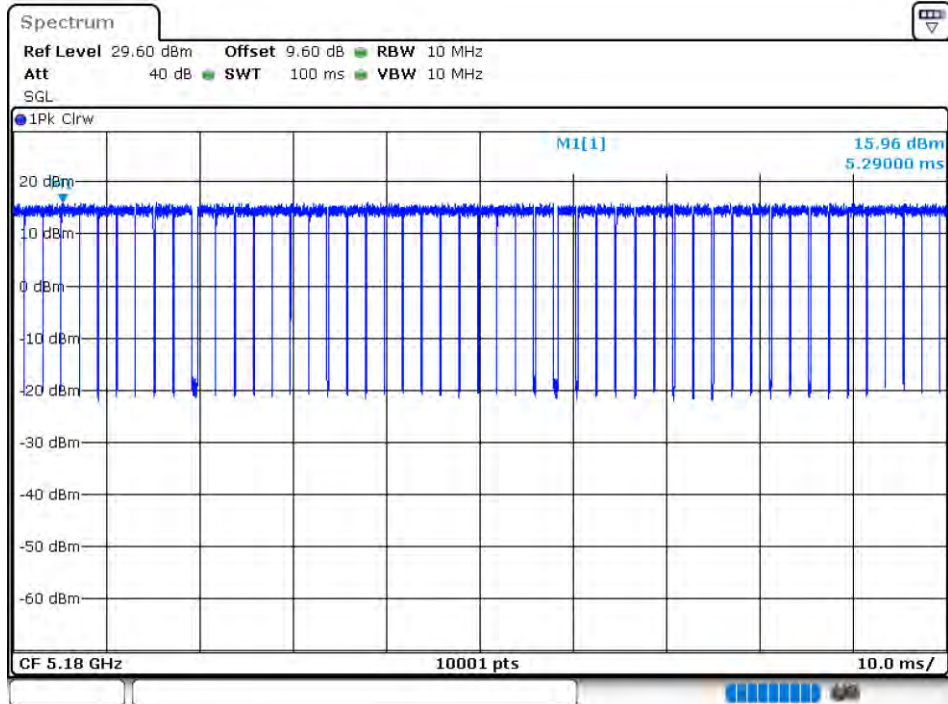
Duty Cycle NVNT 802.11a 5200MHz



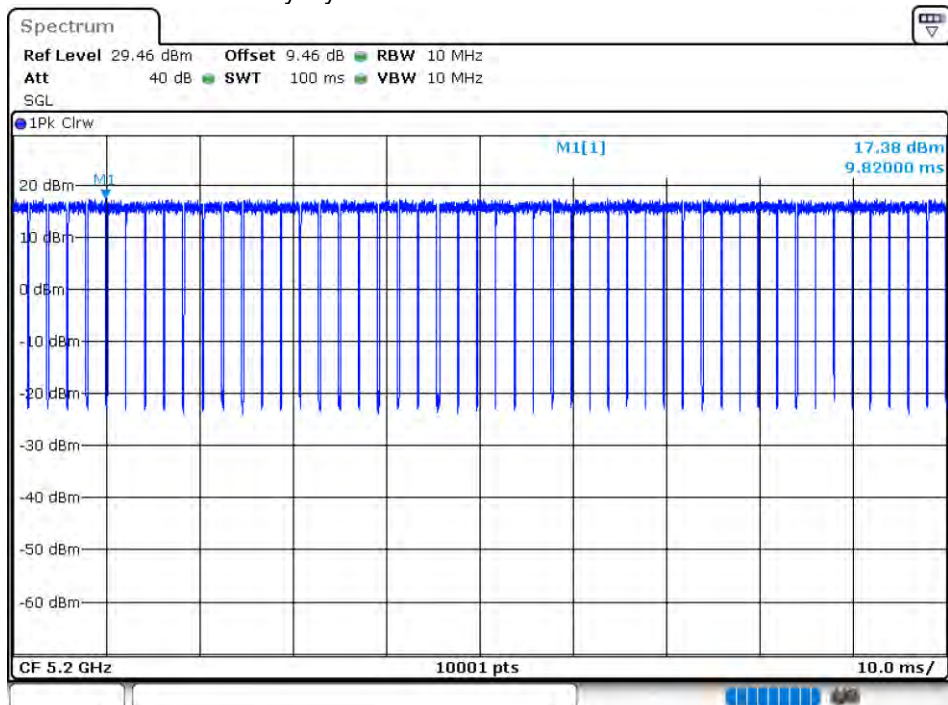
Duty Cycle NVNT 802.11a 5240MHz



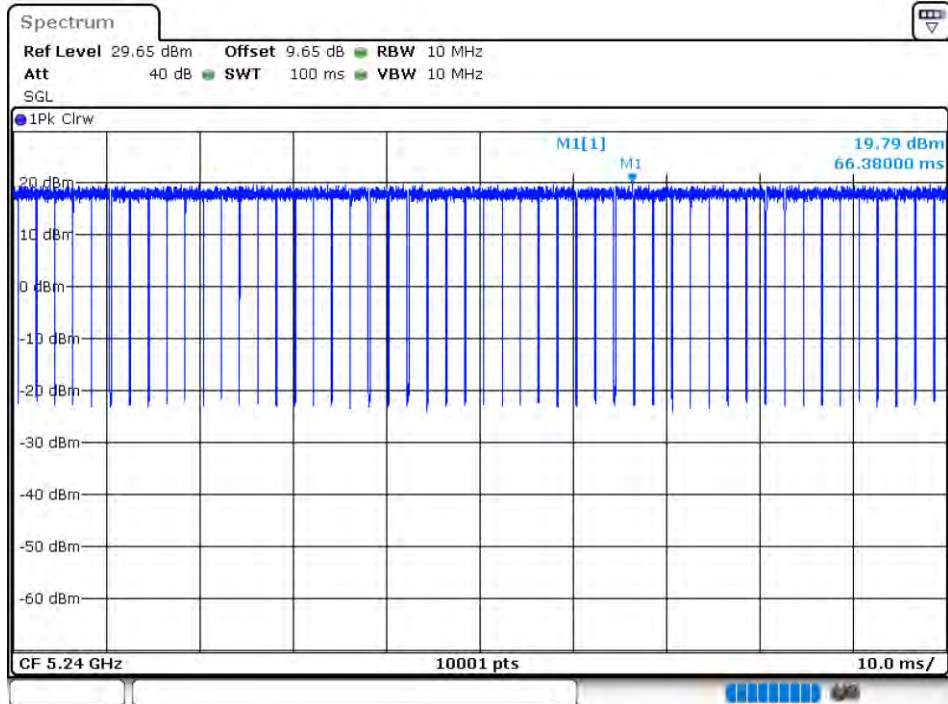
Duty Cycle NVNT 802.11ac20 5180MHz



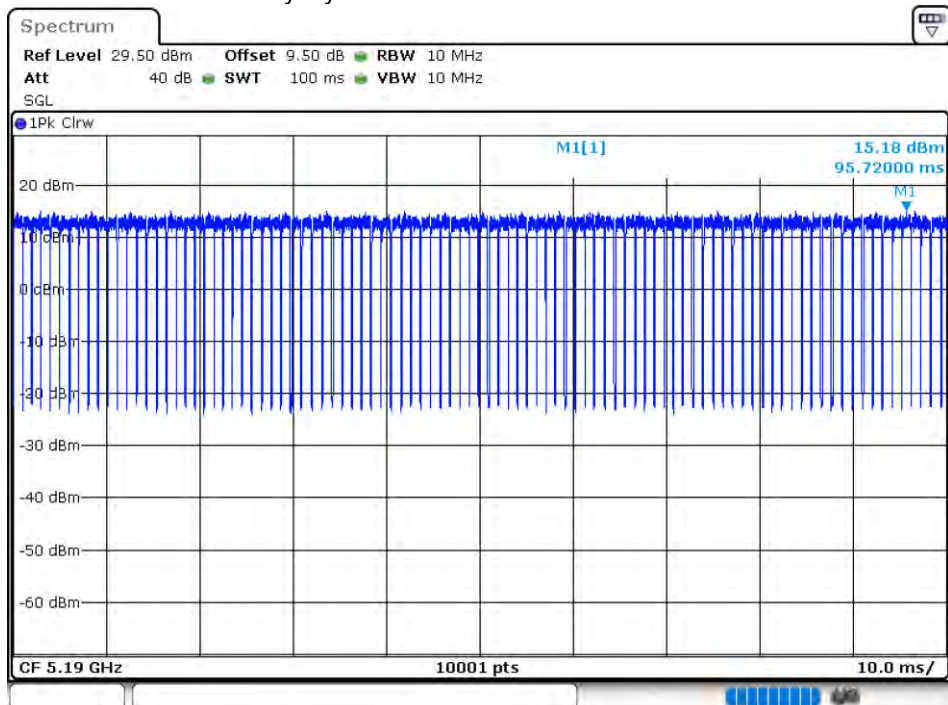
Duty Cycle NVNT 802.11ac20 5200MHz



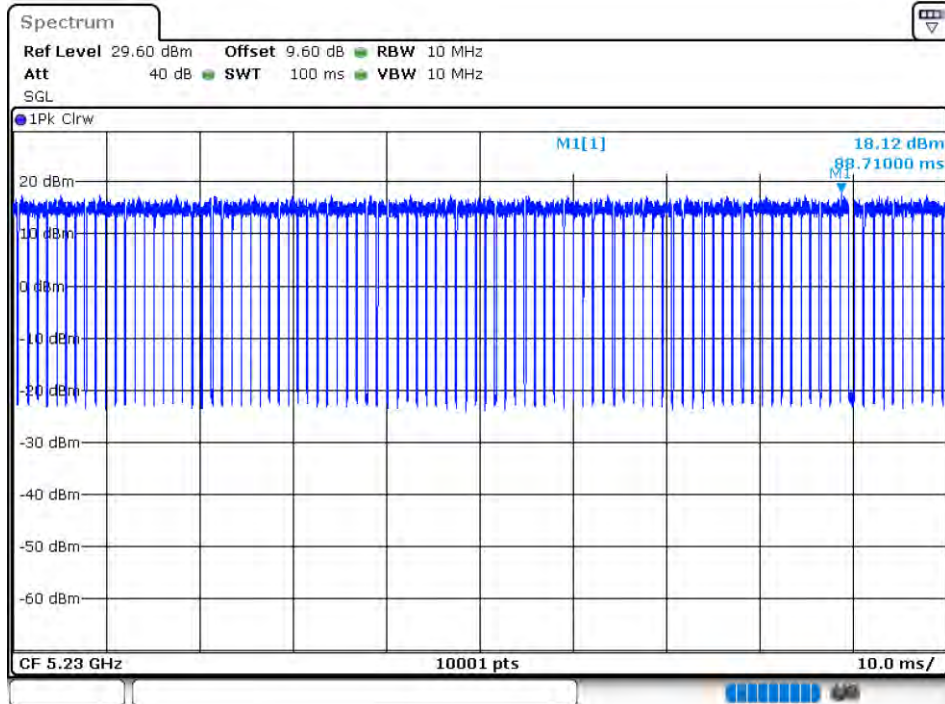
Duty Cycle NVNT 802.11ac20 5240MHz



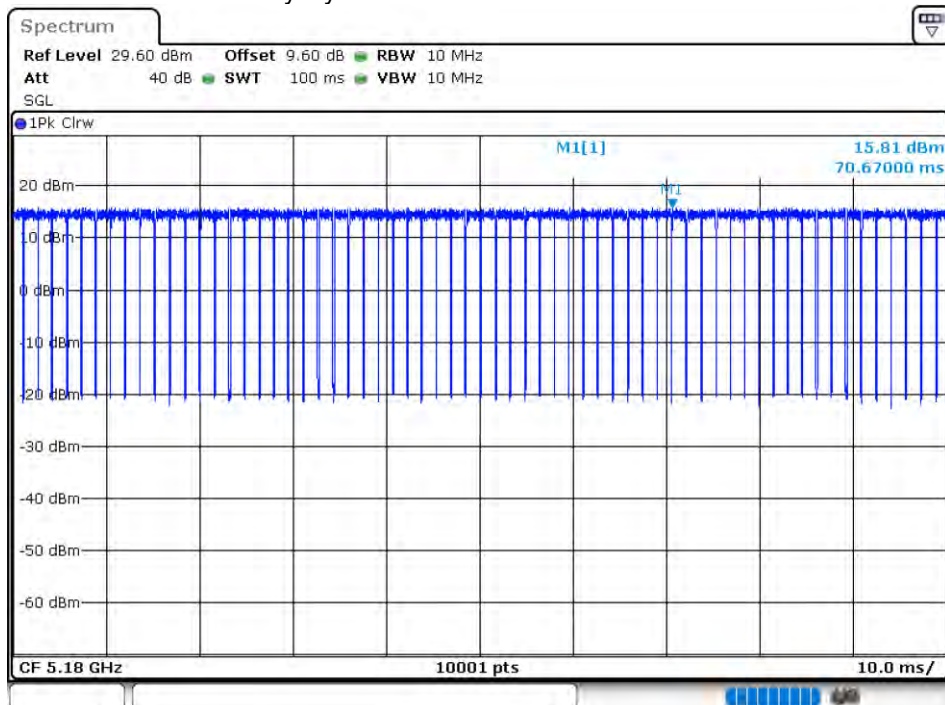
Duty Cycle NVNT 802.11ac40 5190MHz



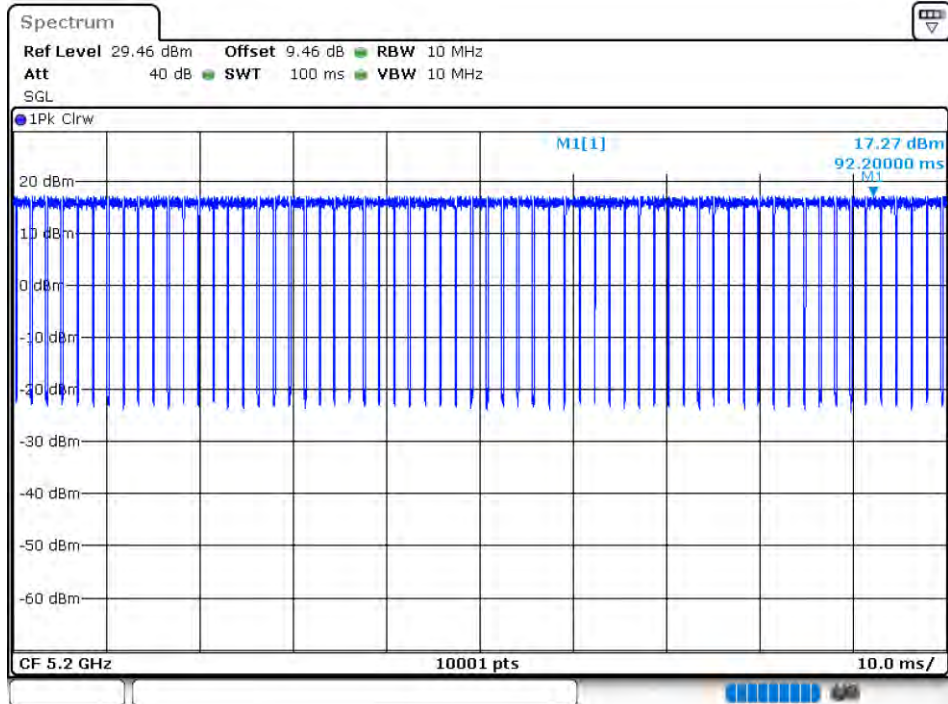
Duty Cycle NVNT 802.11ac40 5230MHz



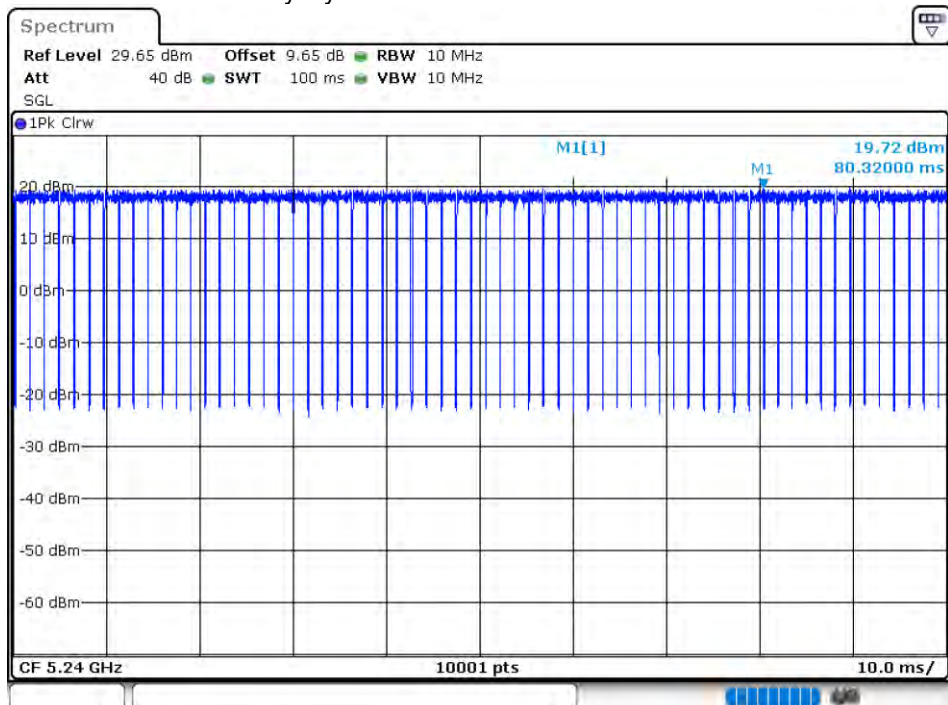
Duty Cycle NVNT 802.11ax20 5180MHz



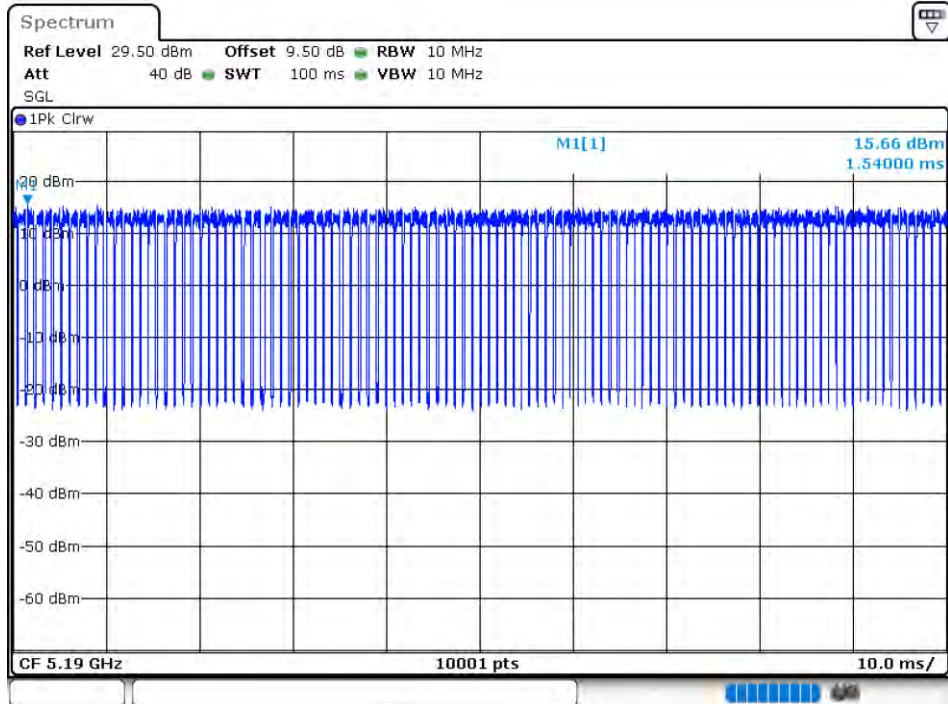
Duty Cycle NVNT 802.11ax20 5200MHz



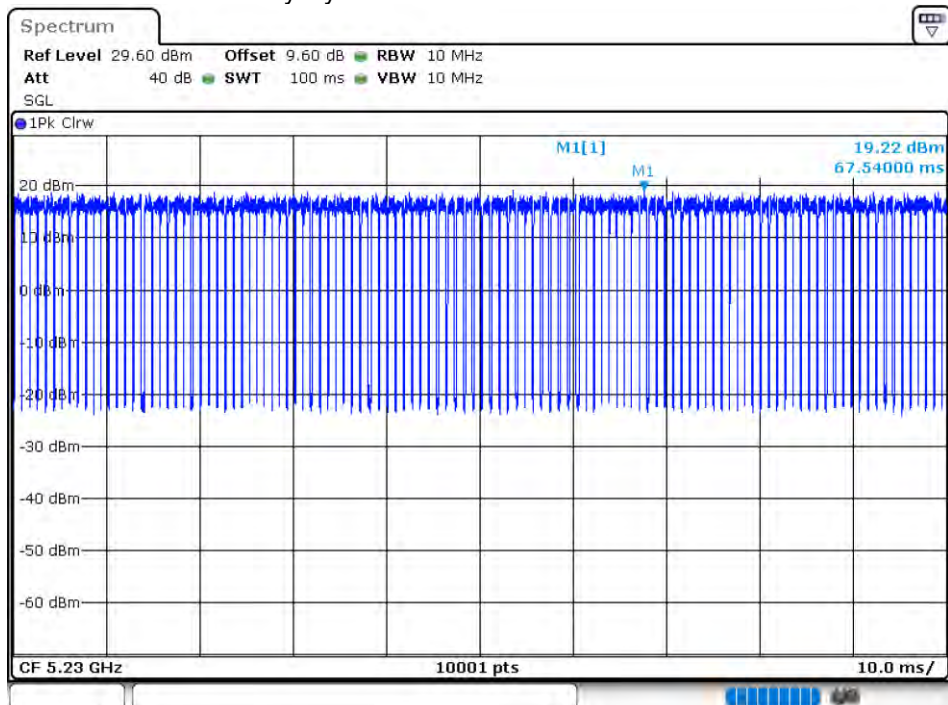
Duty Cycle NVNT 802.11ax20 5240MHz



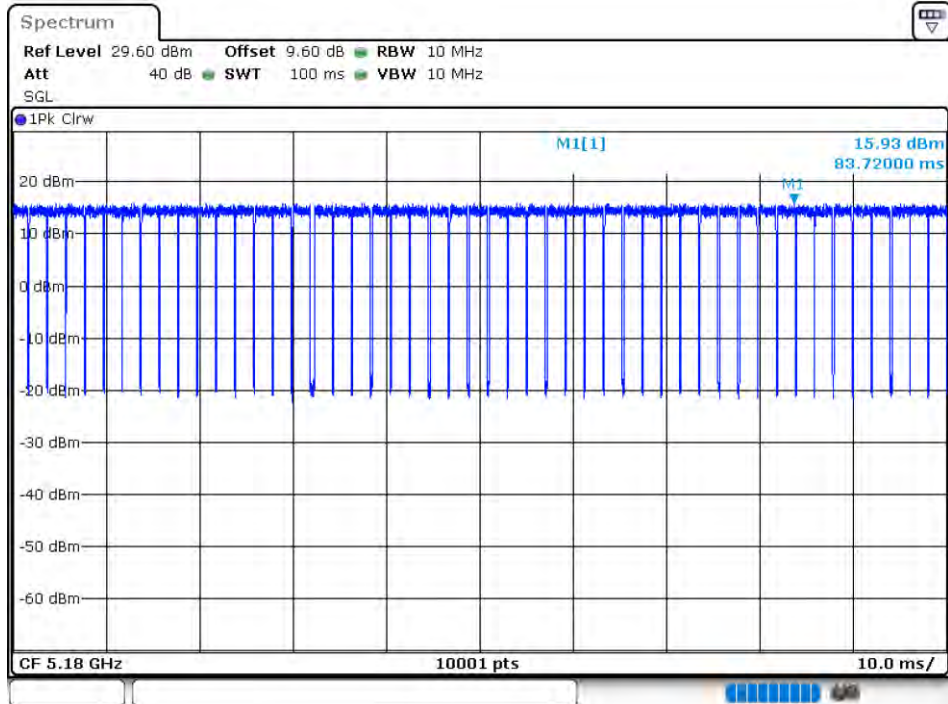
Duty Cycle NVNT 802.11ax40 5190MHz



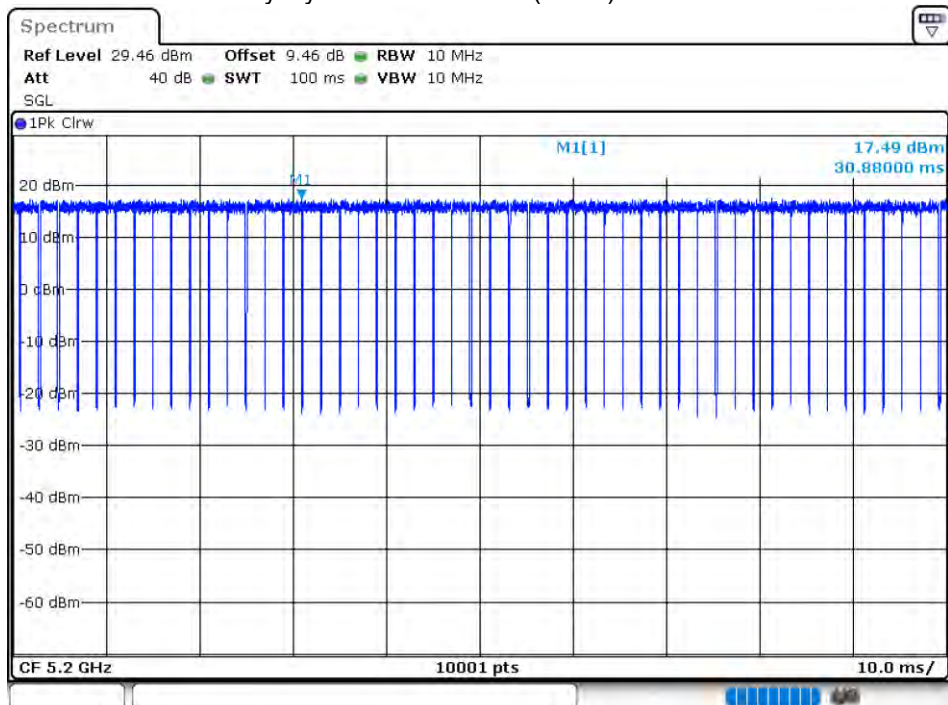
Duty Cycle NVNT 802.11ax40 5230MHz



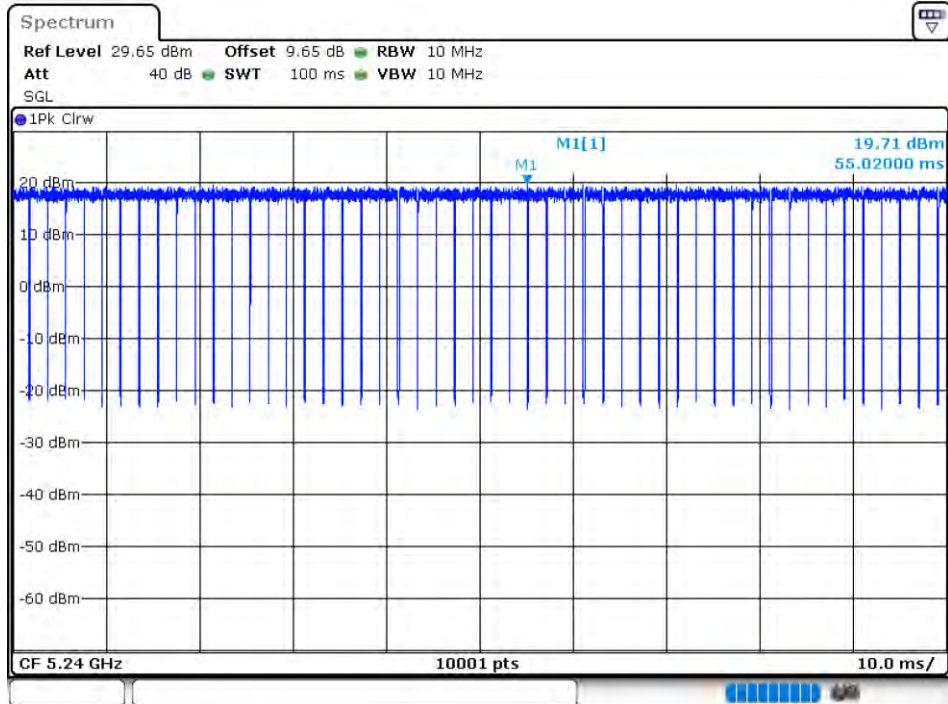
Duty Cycle NVNT 802.11n(HT20) 5180MHz



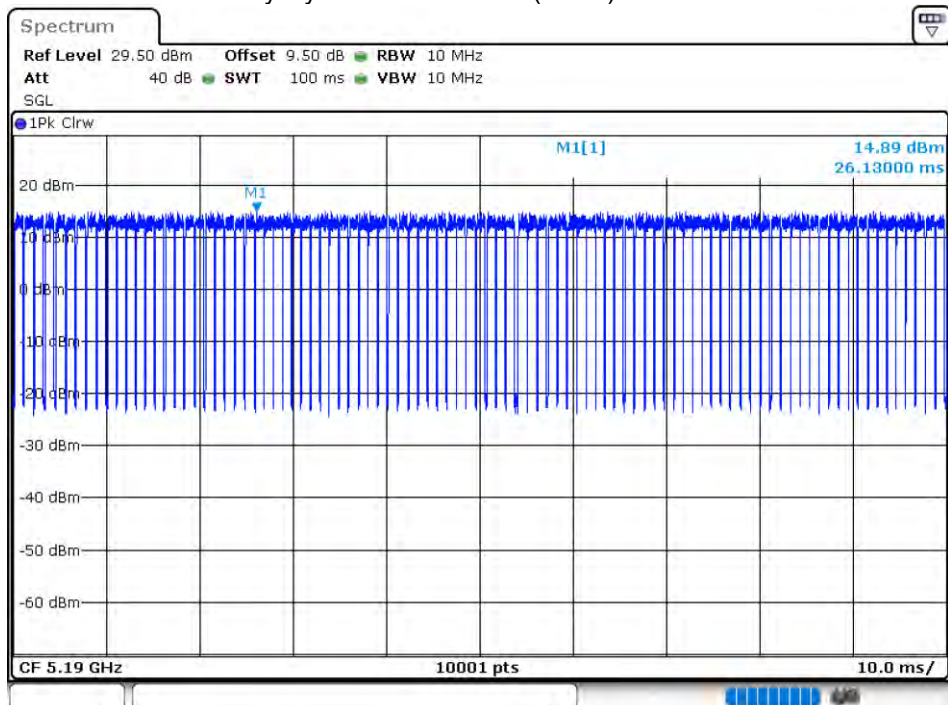
Duty Cycle NVNT 802.11n(HT20) 5200MHz



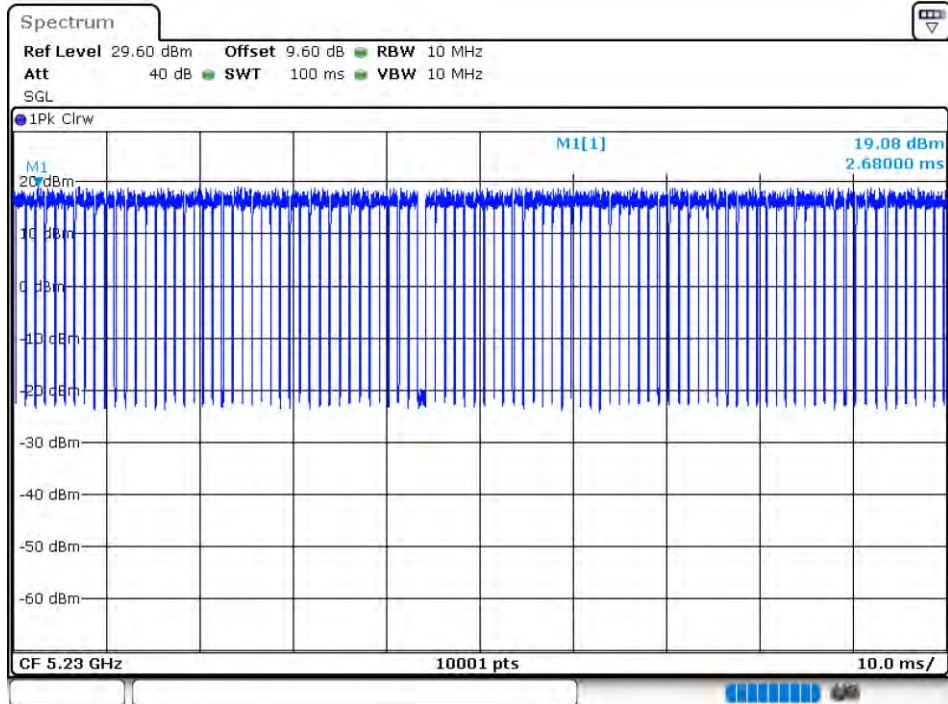
Duty Cycle NVNT 802.11n(HT20) 5240MHz



Duty Cycle NVNT 802.11n(HT40) 5190MHz



Duty Cycle NVNT 802.11n(HT40) 5230MHz



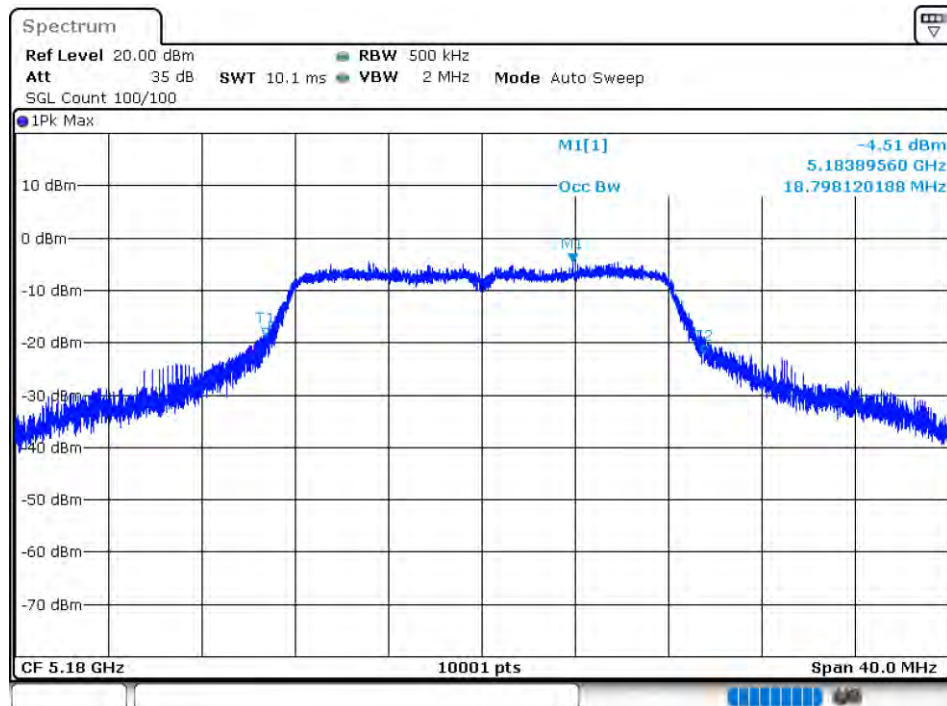
10.2 MAXIMUM CONDUCTED OUTPUT POWER

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	802.11a	5180	Ant 1	9.76	0.38	10.14	24	Pass
NVNT	802.11a	5200	Ant 1	10.93	0.2	11.13	24	Pass
NVNT	802.11a	5240	Ant 1	12.1	0.22	12.32	24	Pass
NVNT	802.11ac20	5180	Ant 1	9.79	0.29	10.08	24	Pass
NVNT	802.11ac20	5200	Ant 1	10.75	0.31	11.06	24	Pass
NVNT	802.11ac20	5240	Ant 1	12.64	0.21	12.85	24	Pass
NVNT	802.11ac40	5190	Ant 1	10.17	0.44	10.61	24	Pass
NVNT	802.11ac40	5230	Ant 1	11.78	0.47	12.25	24	Pass
NVNT	802.11ax20	5180	Ant 1	9.9	0	9.9	24	Pass
NVNT	802.11ax20	5200	Ant 1	10.9	0	10.9	24	Pass
NVNT	802.11ax20	5240	Ant 1	12.63	0	12.63	24	Pass
NVNT	802.11ax40	5190	Ant 1	10.18	0	10.18	24	Pass
NVNT	802.11ax40	5230	Ant 1	13.14	0	13.14	24	Pass
NVNT	802.11n(HT20)	5180	Ant 1	9.74	0.32	10.06	24	Pass
NVNT	802.11n(HT20)	5200	Ant 1	10.79	0.24	11.03	24	Pass
NVNT	802.11n(HT20)	5240	Ant 1	12.37	0.19	12.56	24	Pass
NVNT	802.11n(HT40)	5190	Ant 1	10.12	0.48	10.6	24	Pass
NVNT	802.11n(HT40)	5230	Ant 1	13.37	0.5	13.87	24	Pass

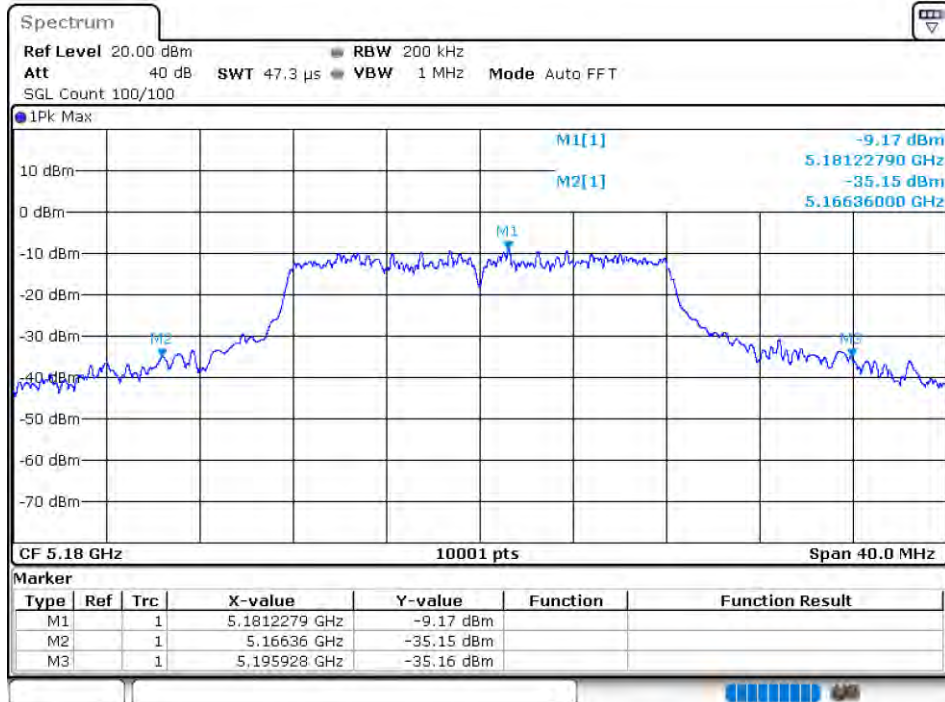
10.3 OCCUPIED CHANNEL BANDWIDTH

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)	-26 dB Bandwidth (MHz)	Verdict
NVNT	802.11a	5180	Ant 1	18.7981	29.568	Pass
NVNT	802.11a	5200	Ant 1	18.8101	26.308	Pass
NVNT	802.11a	5240	Ant 1	18.5541	34.548	Pass
NVNT	802.11ac20	5180	Ant 1	20.162	33.056	Pass
NVNT	802.11ac20	5200	Ant 1	19.874	29.528	Pass
NVNT	802.11ac20	5240	Ant 1	19.2101	26.428	Pass
NVNT	802.11ac40	5190	Ant 1	36.4764	53.512	Pass
NVNT	802.11ac40	5230	Ant 1	36.3484	43.768	Pass
NVNT	802.11ax20	5180	Ant 1	19.3101	27.488	Pass
NVNT	802.11ax20	5200	Ant 1	19.2101	24.184	Pass
NVNT	802.11ax20	5240	Ant 1	19.2941	23.848	Pass
NVNT	802.11ax40	5190	Ant 1	35.9484	40.592	Pass
NVNT	802.11ax40	5230	Ant 1	36.1564	45.592	Pass
NVNT	802.11n(HT20)	5180	Ant 1	20.6059	31.592	Pass
NVNT	802.11n(HT20)	5200	Ant 1	20.5139	28.94	Pass
NVNT	802.11n(HT20)	5240	Ant 1	19.766	27.2	Pass
NVNT	802.11n(HT40)	5190	Ant 1	36.4844	52.992	Pass
NVNT	802.11n(HT40)	5230	Ant 1	36.4124	47.784	Pass

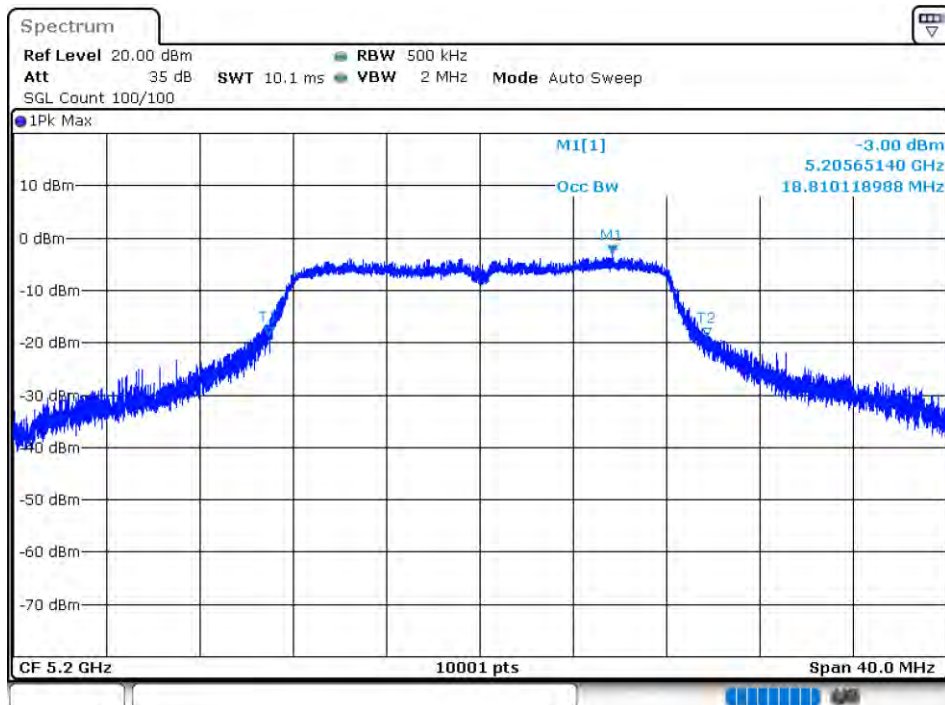
OBW NVNT 802.11a 5180MHz Ant1



-26 dB BW NVNT 802.11a 5180MHz Ant1



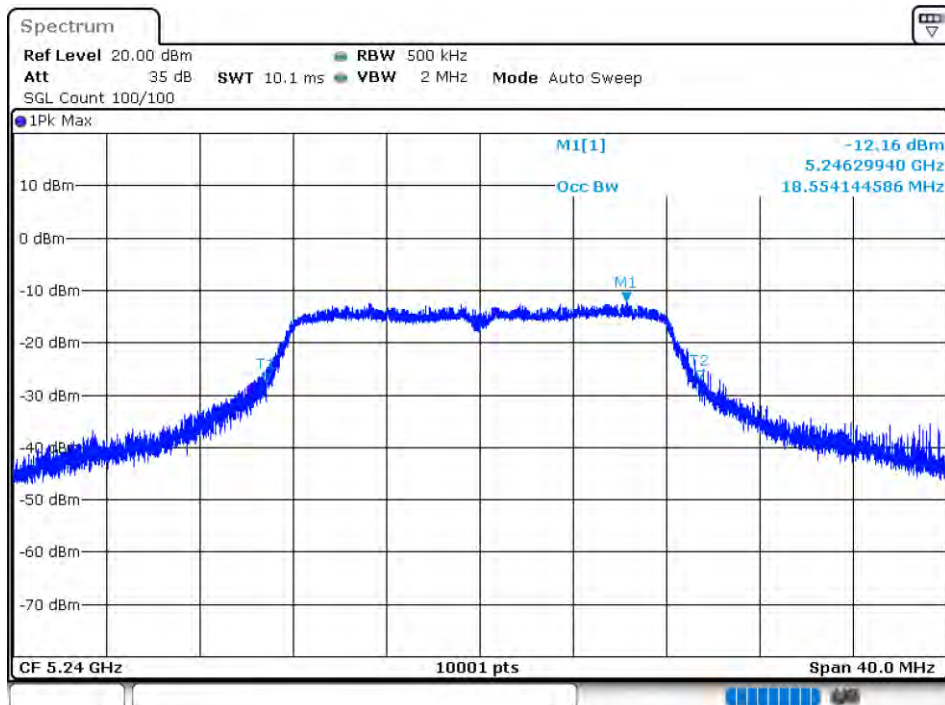
OBW NVNT 802.11a 5200MHz Ant1



-26 dB BW NVNT 802.11a 5200MHz Ant1



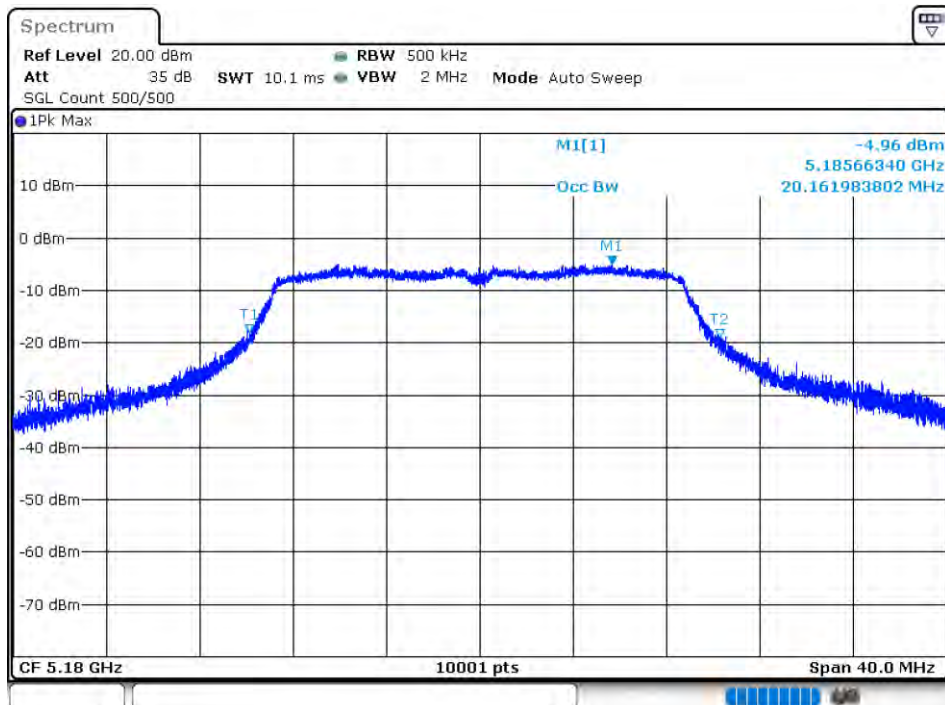
OBW NVNT 802.11a 5240MHz Ant1



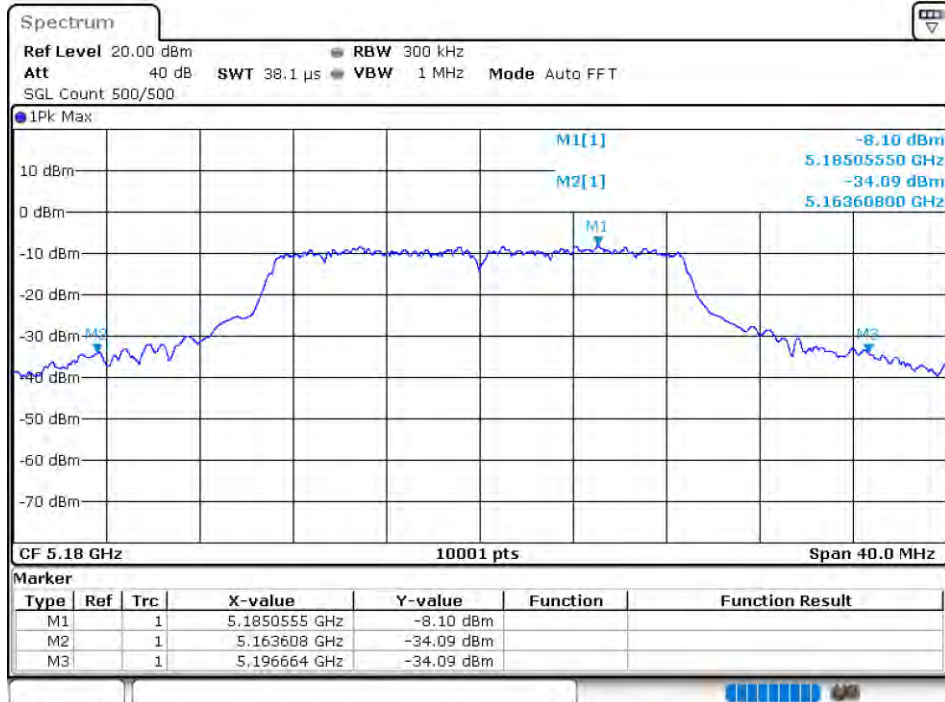
-26 dB BW NVNT 802.11a 5240MHz Ant1



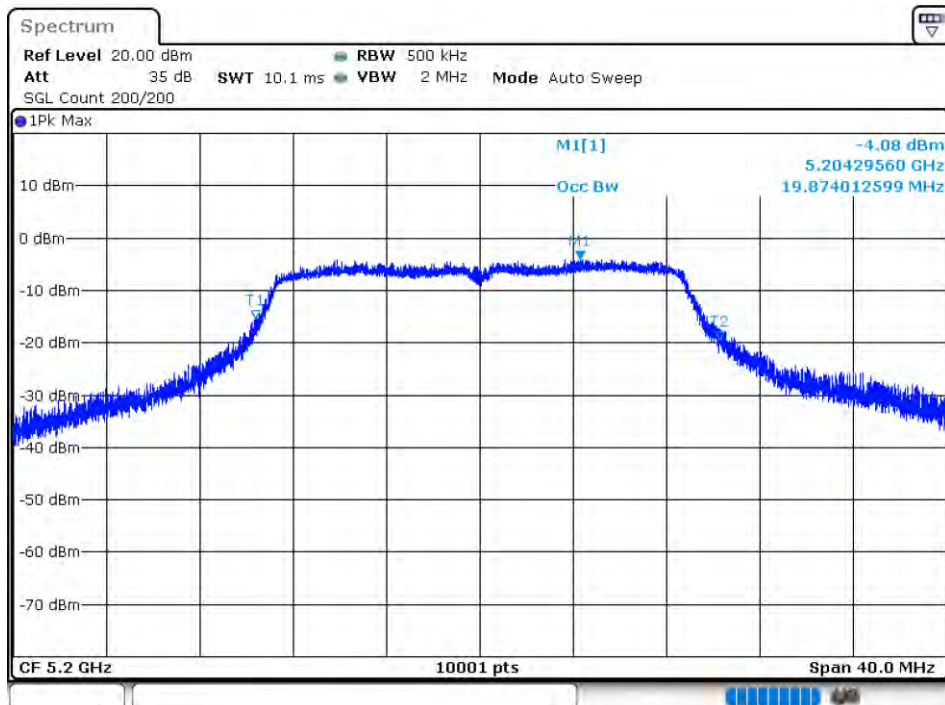
OBW NVNT 802.11ac20 5180MHz Ant1



-26 dB BW NVNT 802.11ac20 5180MHz Ant1



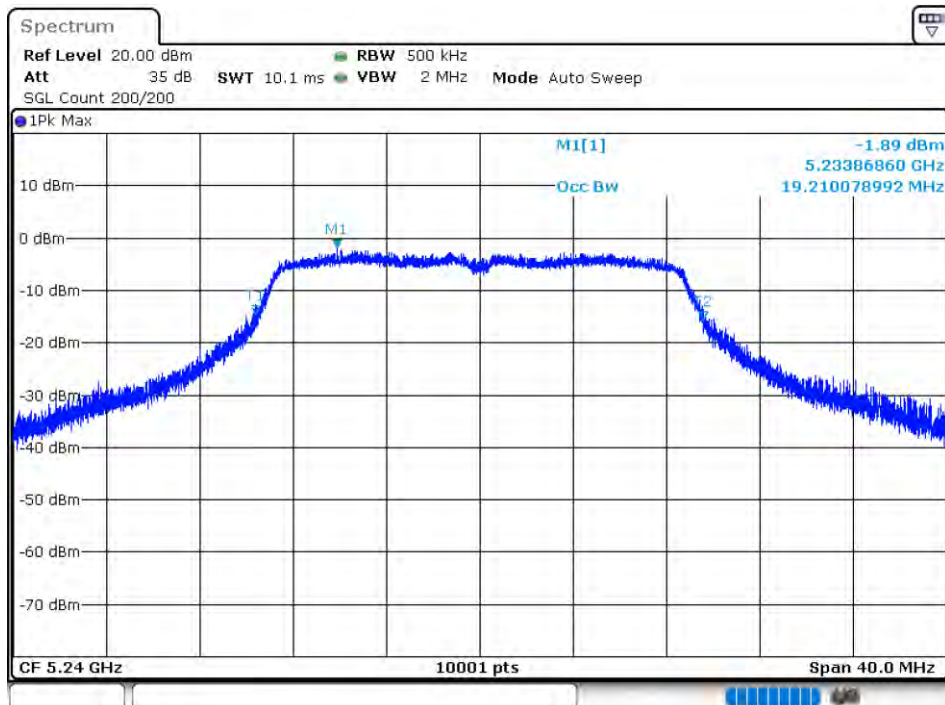
OBW NVNT 802.11ac20 5200MHz Ant1



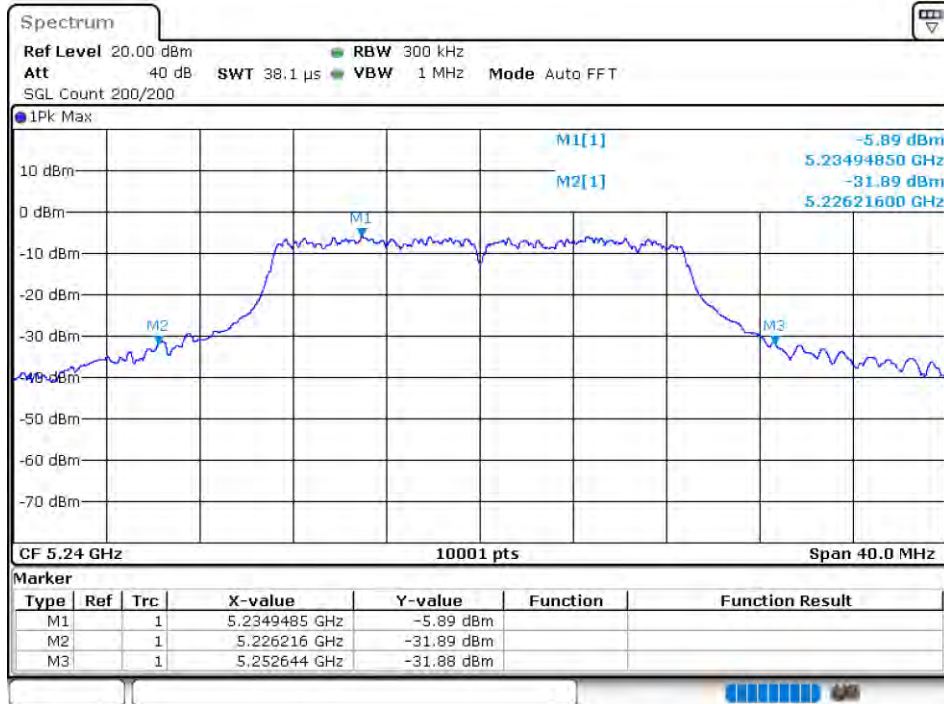
-26 dB BW NVNT 802.11ac20 5200MHz Ant1



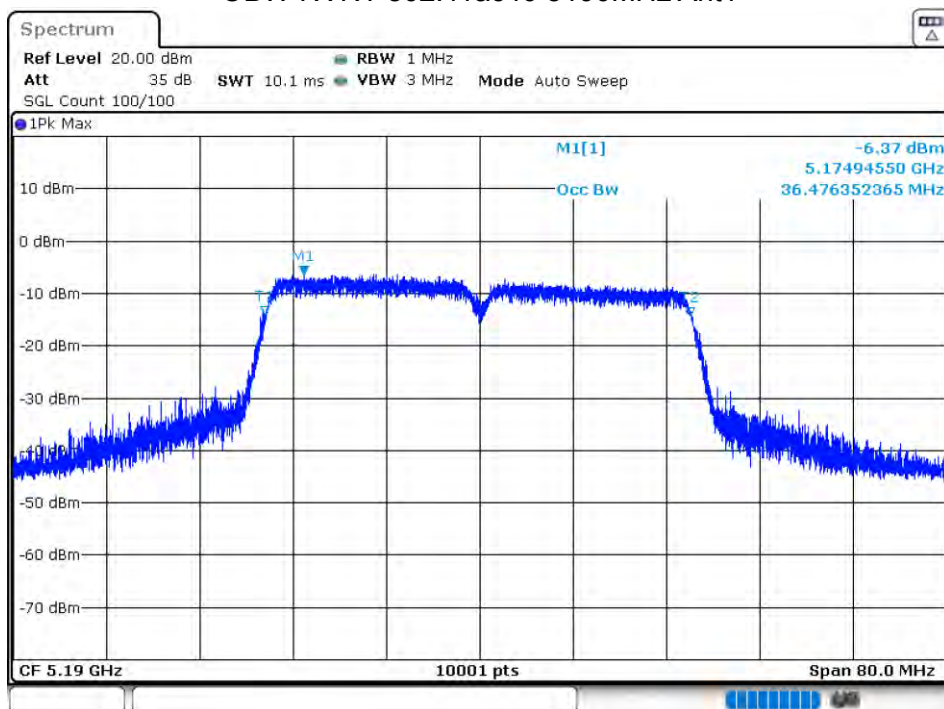
OBW NVNT 802.11ac20 5240MHz Ant1



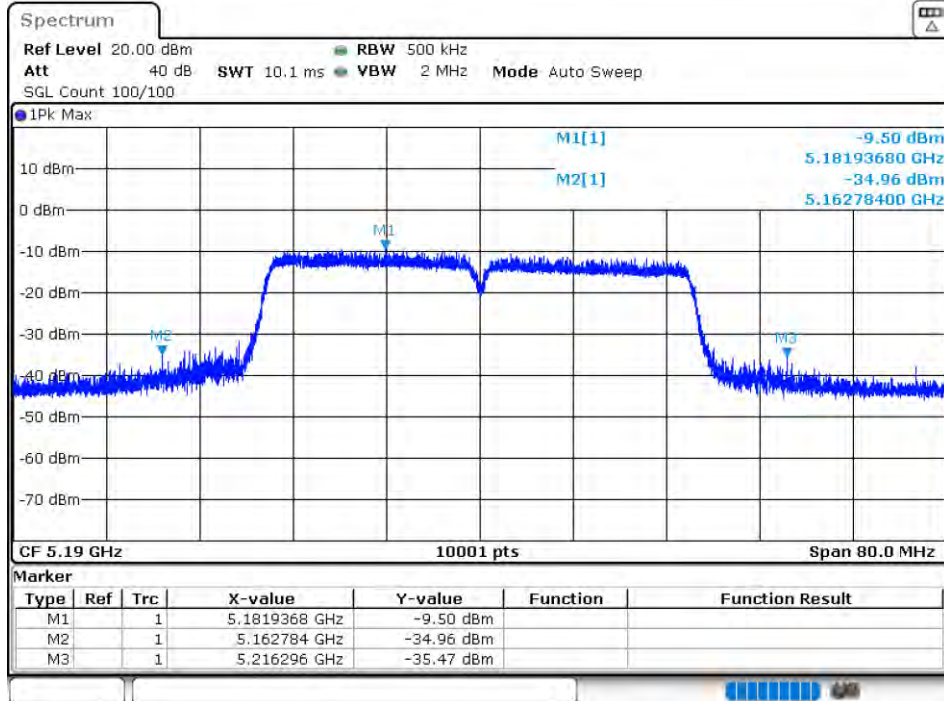
-26 dB BW NVNT 802.11ac20 5240MHz Ant1



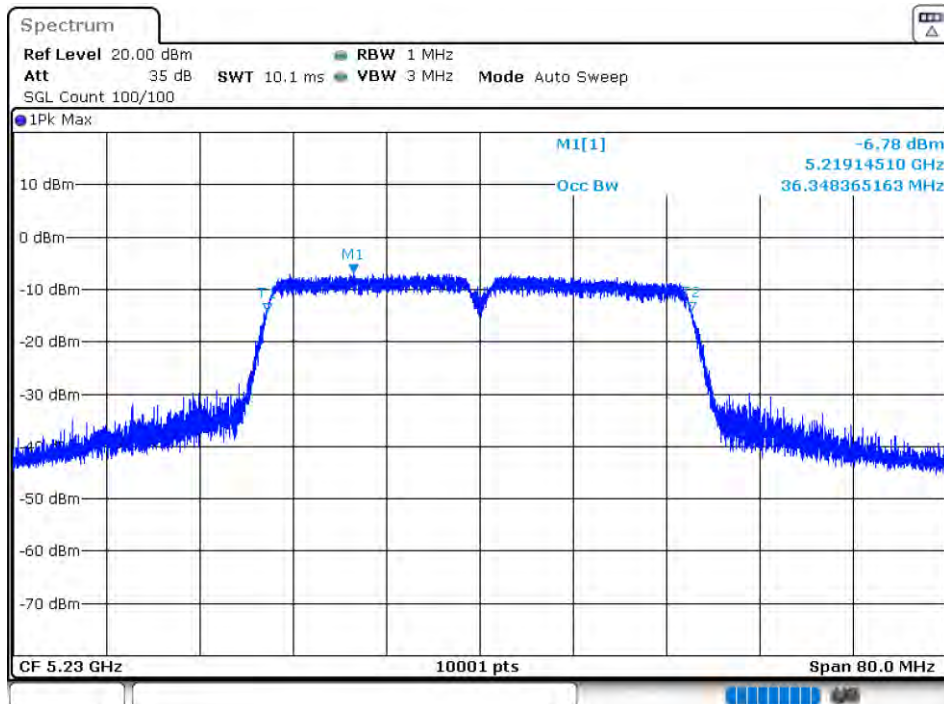
OBW NVNT 802.11ac40 5190MHz Ant1



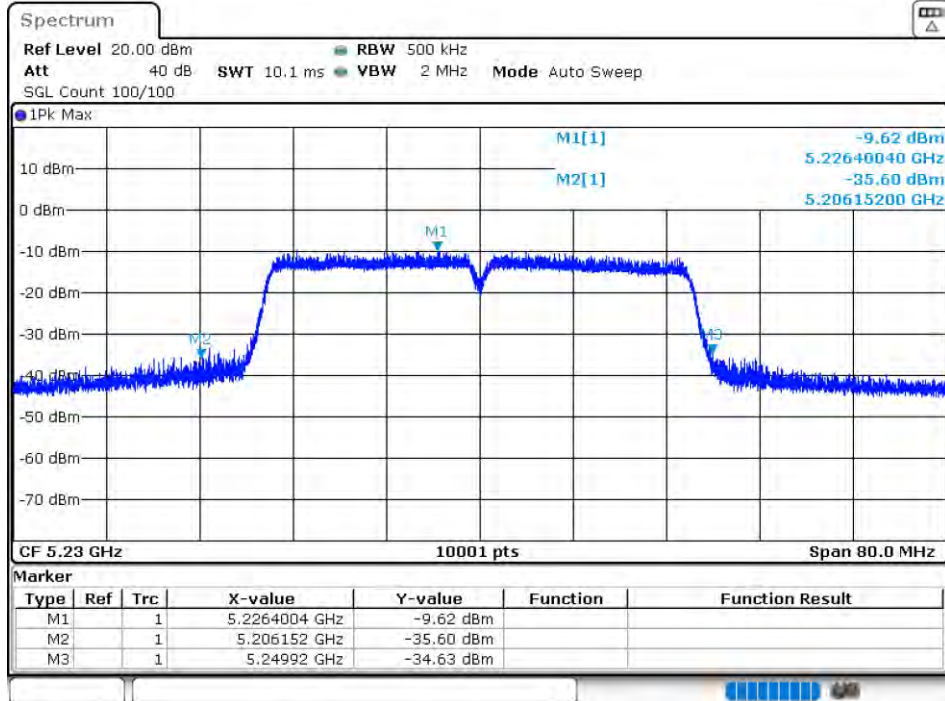
-26 dB BW NVNT 802.11ac40 5190MHz Ant1



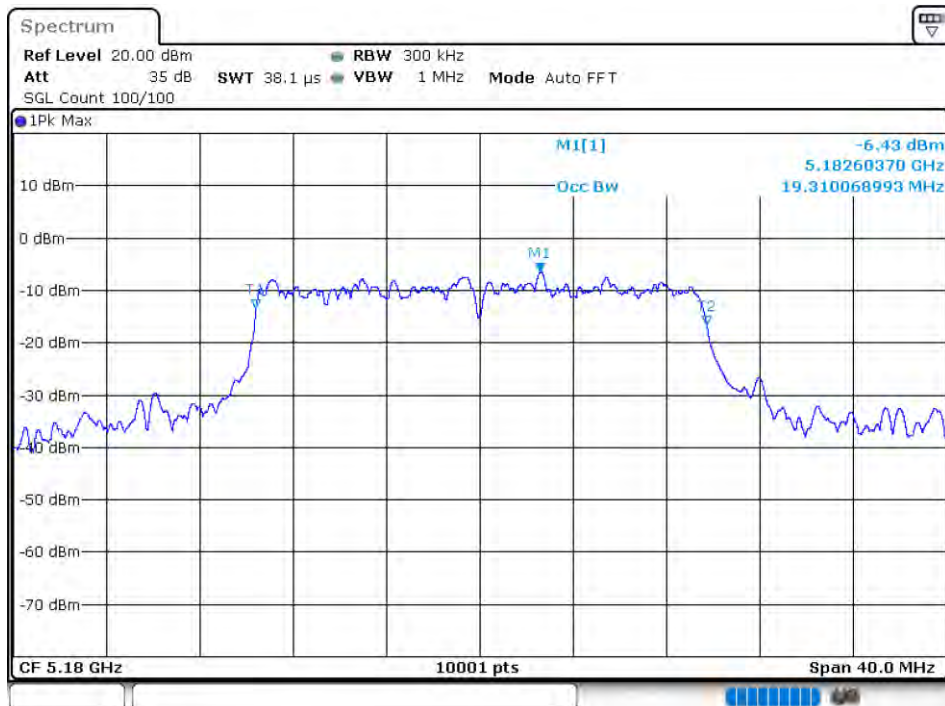
OBW NVNT 802.11ac40 5230MHz Ant1



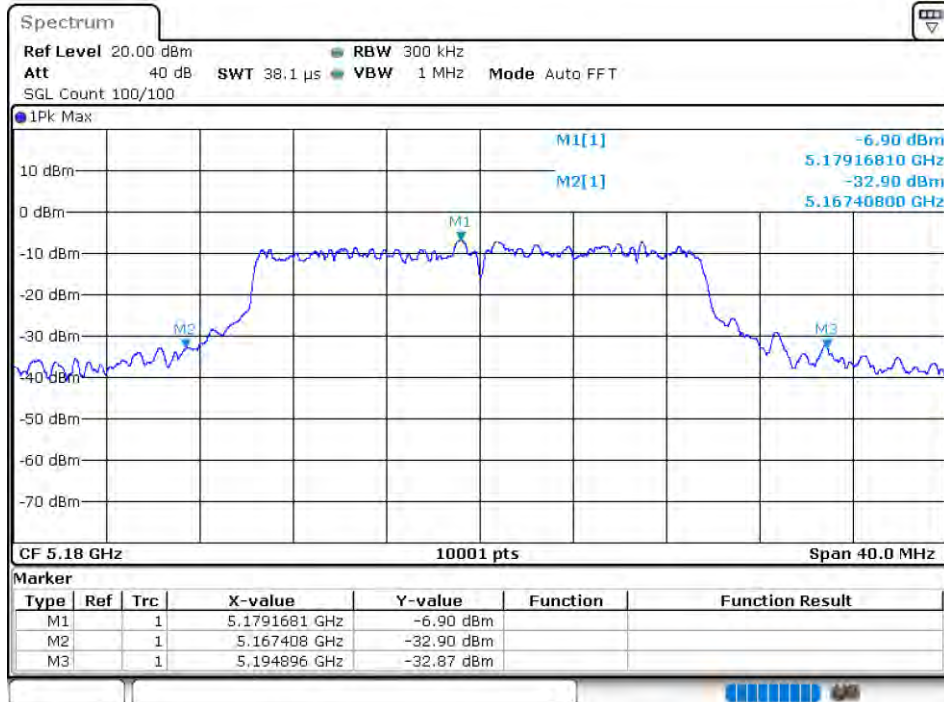
-26 dB BW NVNT 802.11ac40 5230MHz Ant1



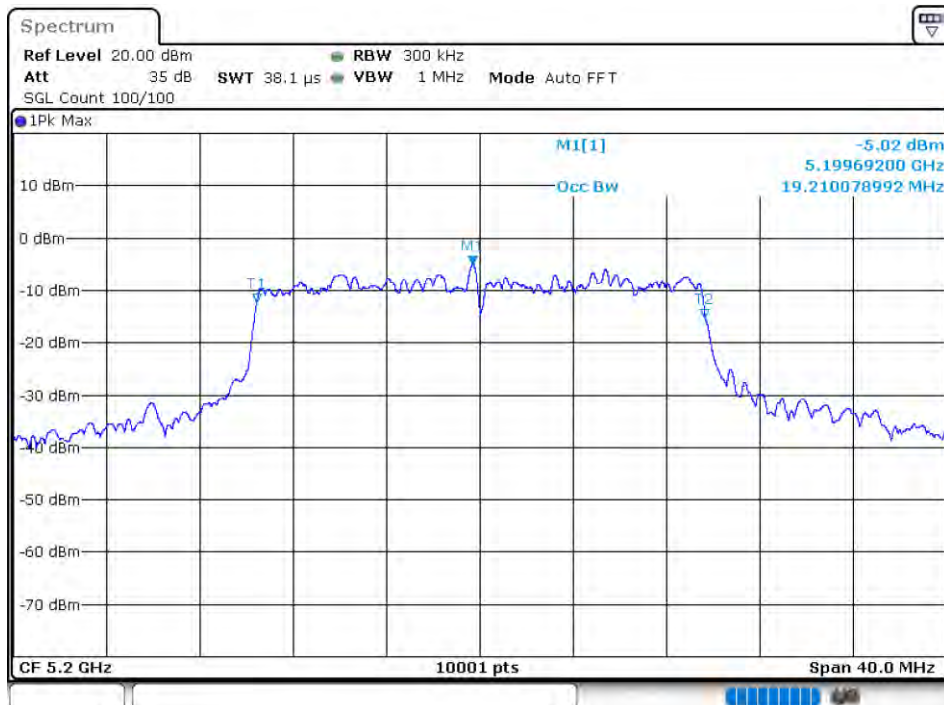
OBW NVNT 802.11ax20 5180MHz Ant1



-26 dB BW NVNT 802.11ax20 5180MHz Ant1



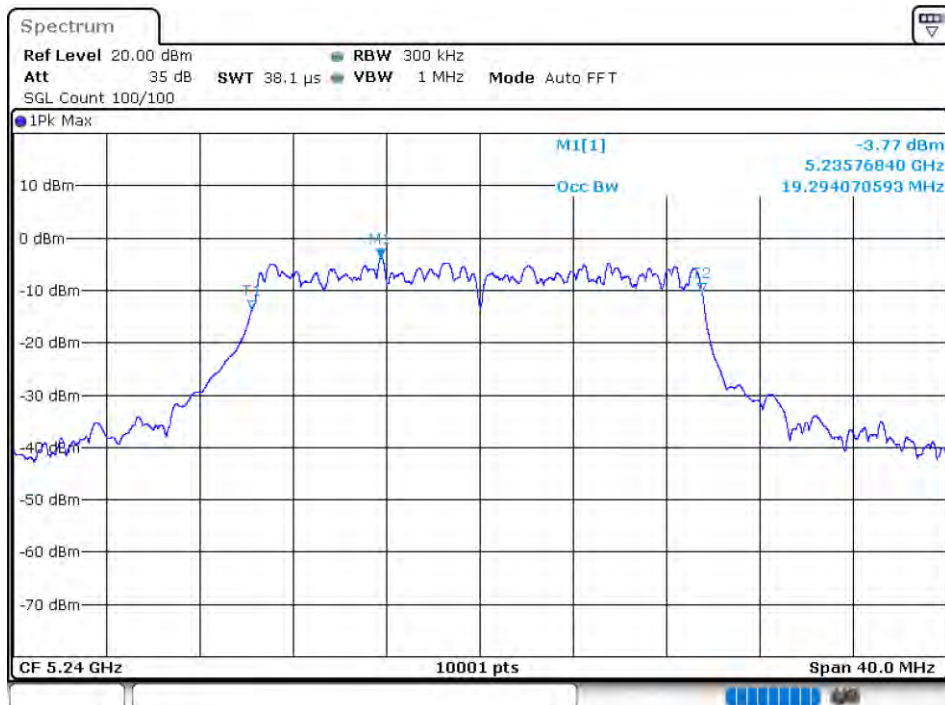
OBW NVNT 802.11ax20 5200MHz Ant1



-26 dB BW NVNT 802.11ax20 5200MHz Ant1



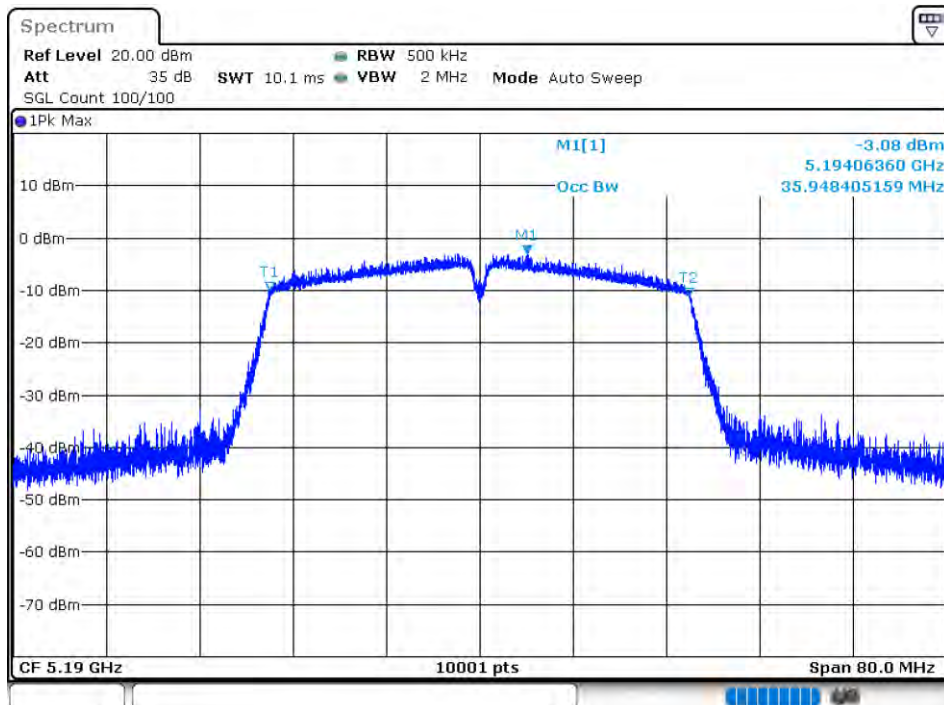
OBW NVNT 802.11ax20 5240MHz Ant1



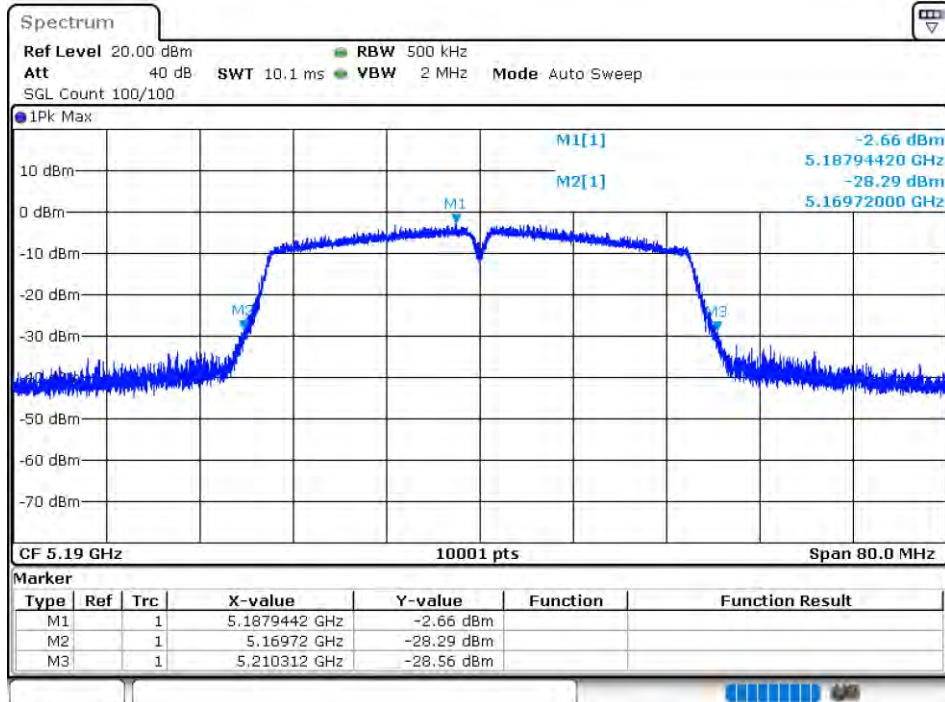
-26 dB BW NVNT 802.11ax20 5240MHz Ant1



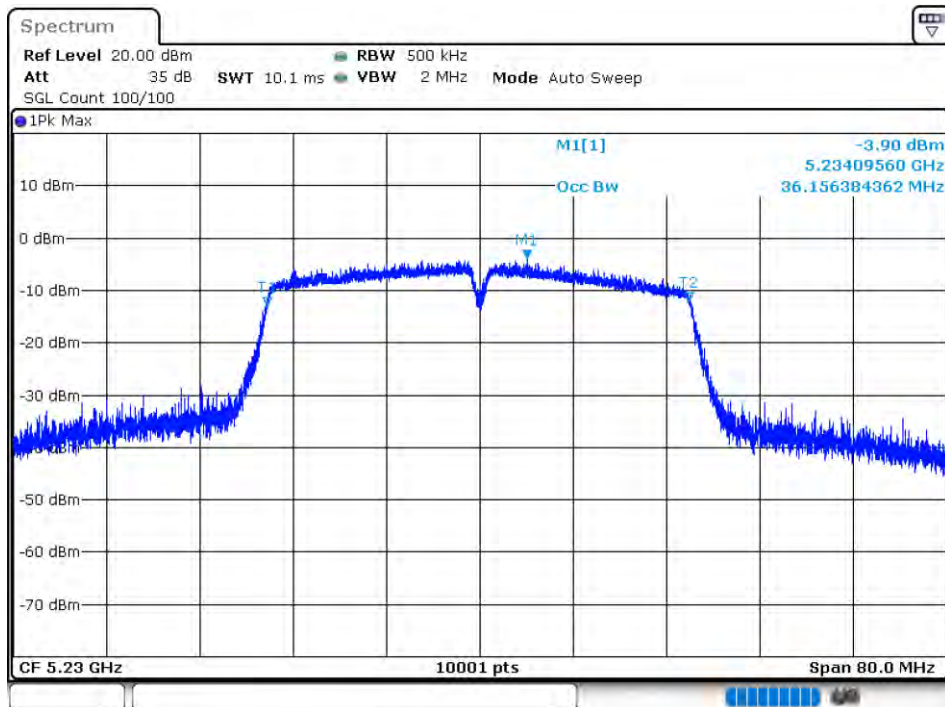
OBW NVNT 802.11ax40 5190MHz Ant1



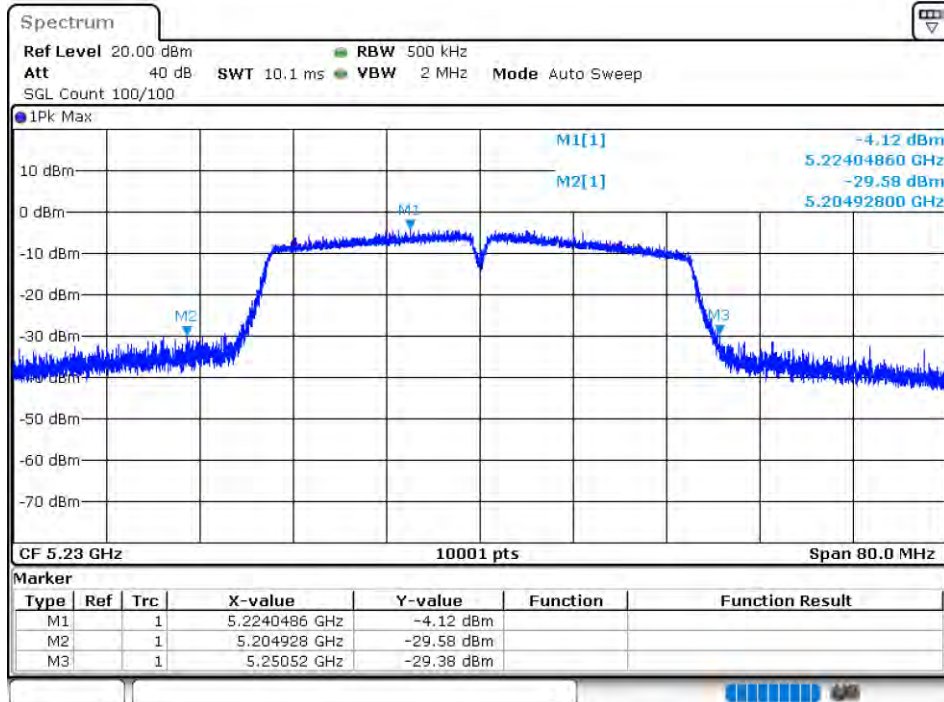
-26 dB BW NVNT 802.11ax40 5190MHz Ant1



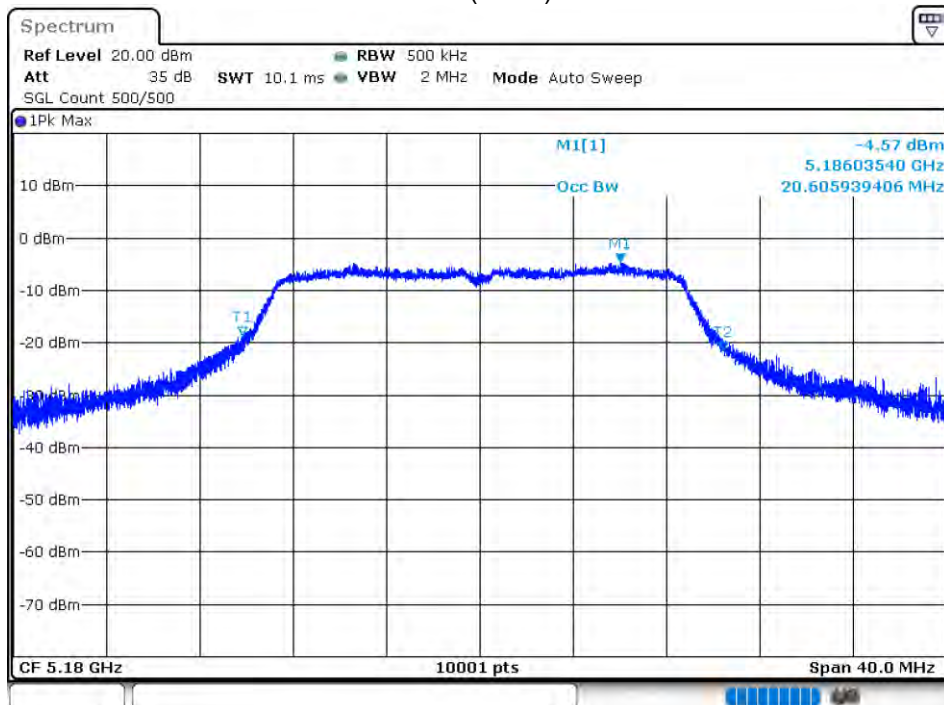
OBW NVNT 802.11ax40 5230MHz Ant1



-26 dB BW NVNT 802.11ax40 5230MHz Ant1



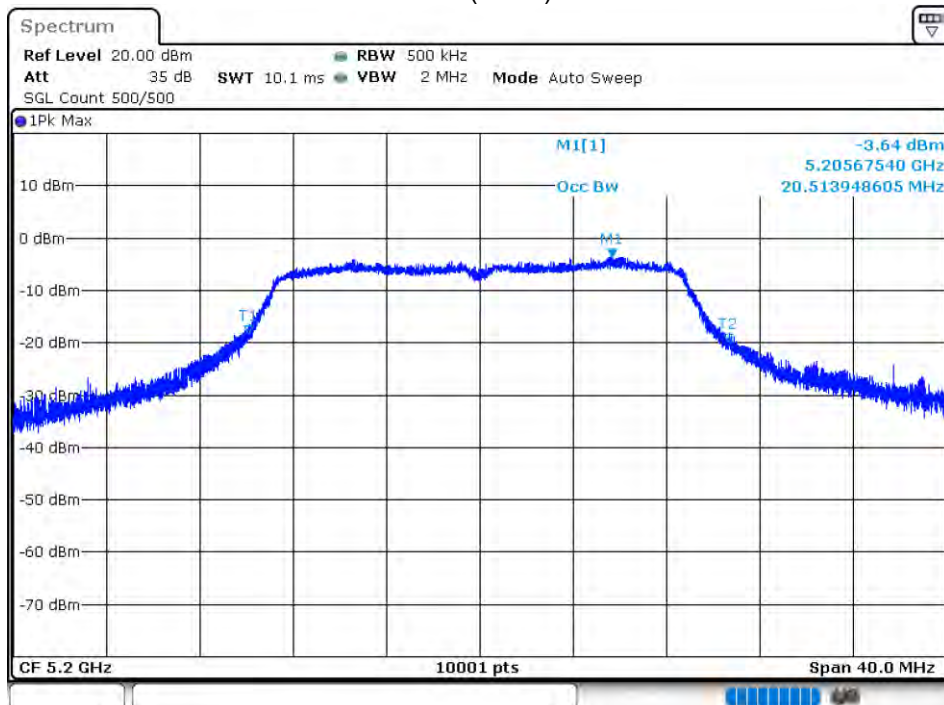
OBW NVNT 802.11n(HT20) 5180MHz Ant1



-26 dB BW NVNT 802.11n(HT20) 5180MHz Ant1



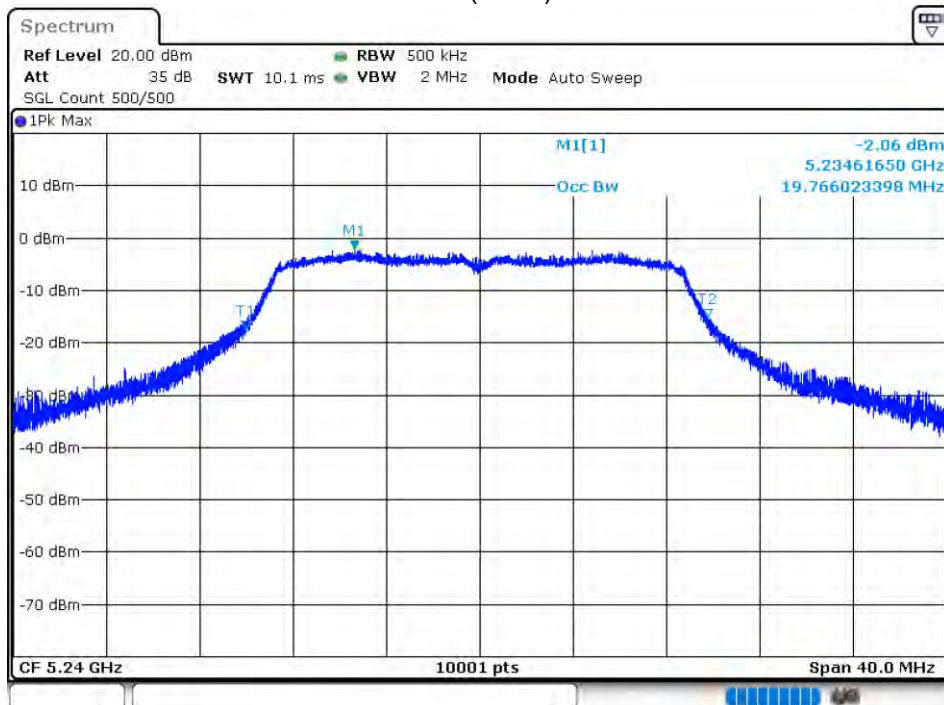
OBW NVNT 802.11n(HT20) 5200MHz Ant1



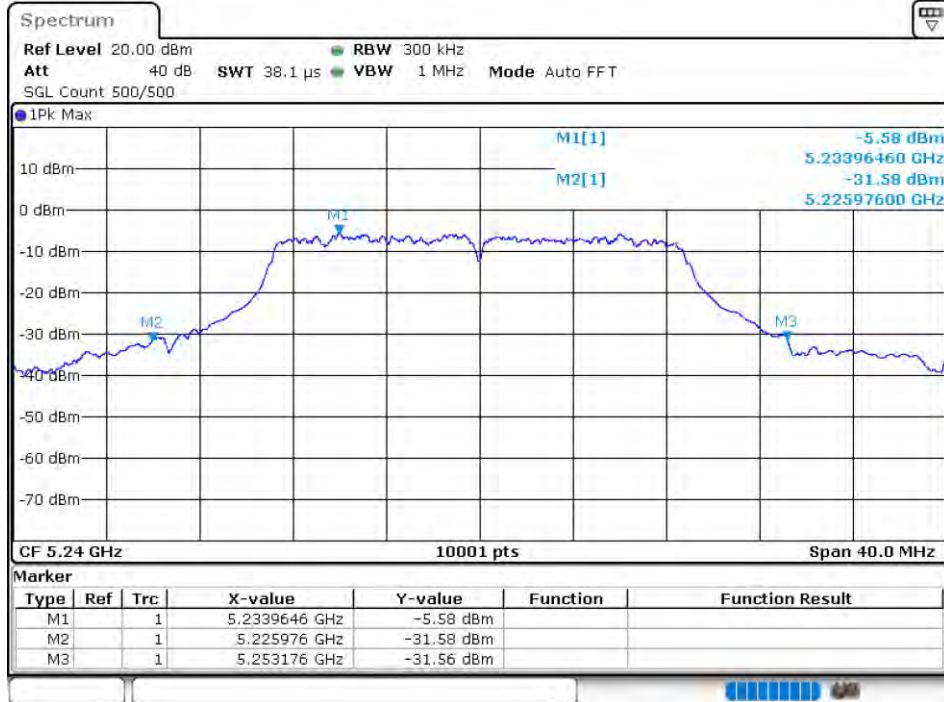
-26 dB BW NVNT 802.11n(HT20) 5200MHz Ant1



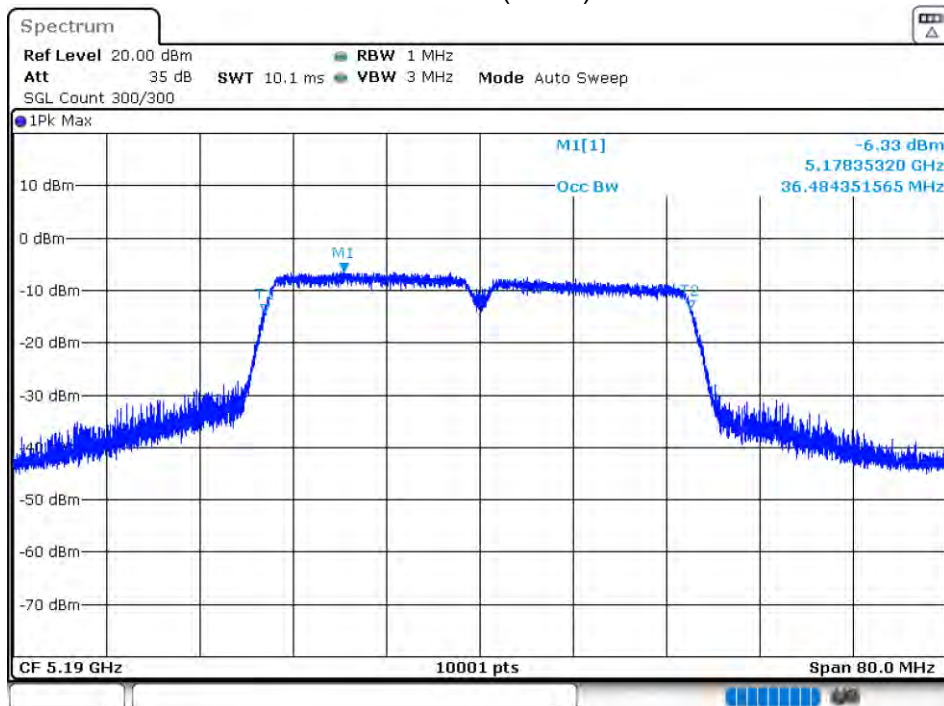
OBW NVNT 802.11n(HT20) 5240MHz Ant1



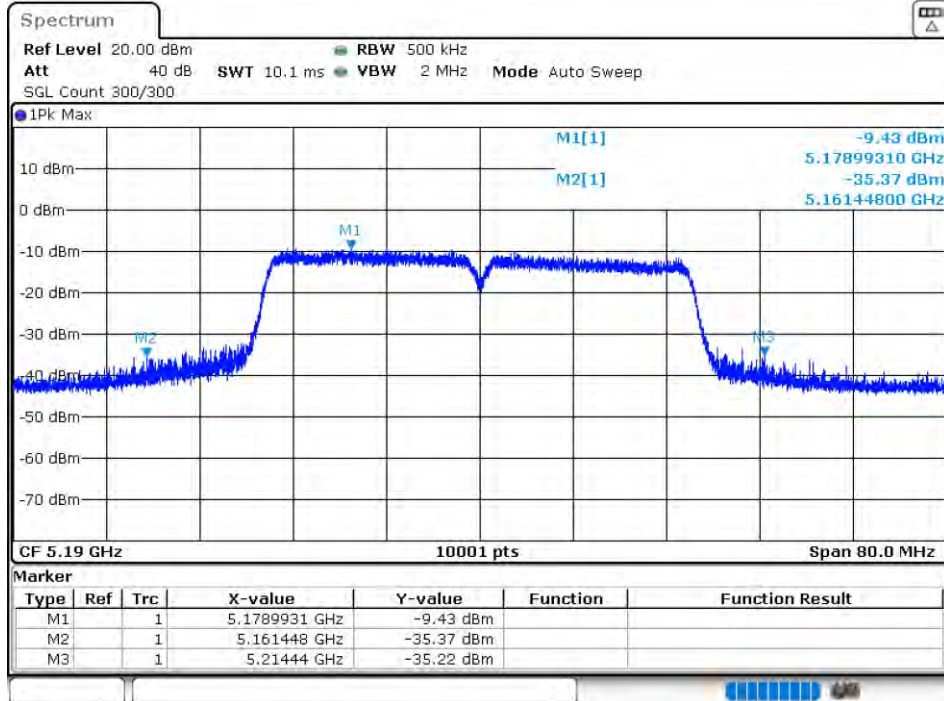
-26 dB BW NVNT 802.11n(HT20) 5240MHz Ant1



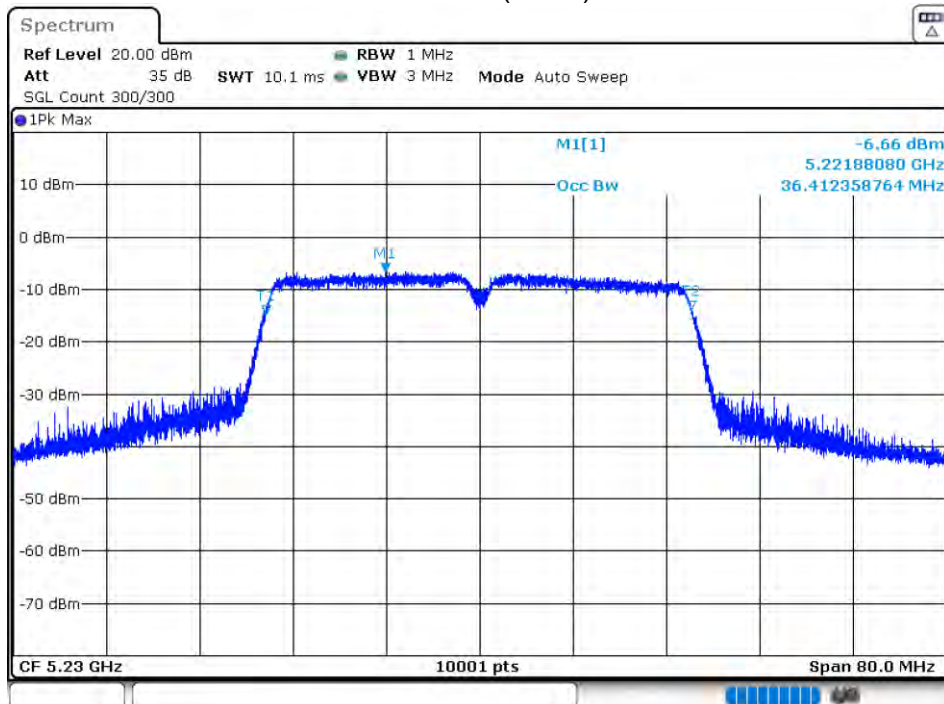
OBW NVNT 802.11n(HT40) 5190MHz Ant1



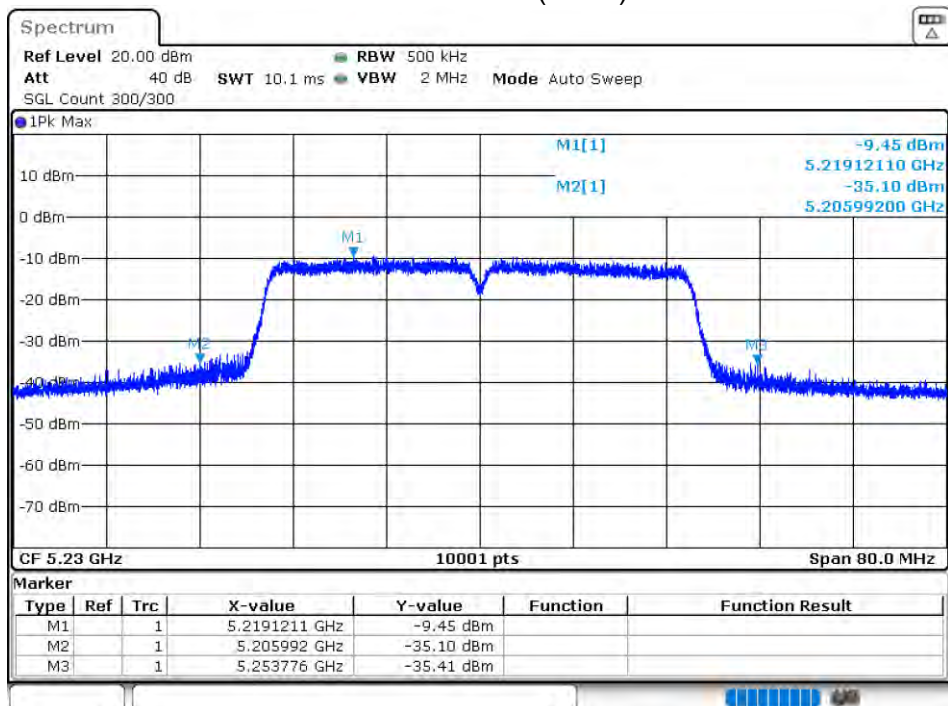
-26 dB BW NVNT 802.11n(HT40) 5190MHz Ant1



OBW NVNT 802.11n(HT40) 5230MHz Ant1



-26 dB BW NVNT 802.11n(HT40) 5230MHz Ant1



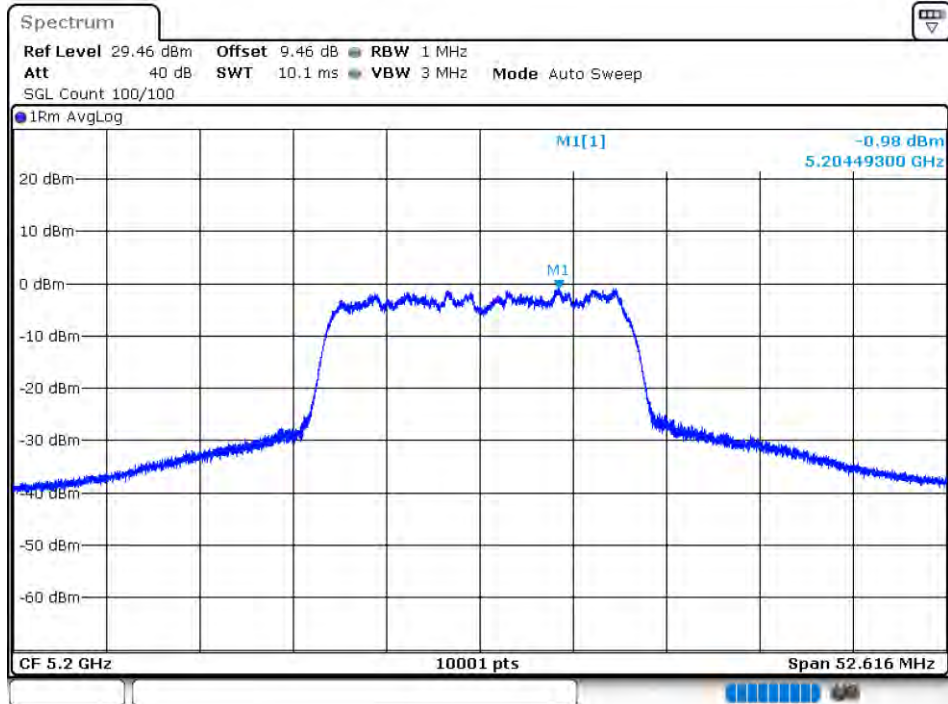
10.4 MAXIMUM POWER SPECTRAL DENSITY LEVEL

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	802.11a	5180	Ant 1	-1.68	0.38	-1.3	11	Pass
NVNT	802.11a	5200	Ant 1	-0.98	0.2	-0.78	11	Pass
NVNT	802.11a	5240	Ant 1	2.52	0.22	2.74	11	Pass
NVNT	802.11ac20	5180	Ant 1	-2.96	0.29	-2.67	11	Pass
NVNT	802.11ac20	5200	Ant 1	-1.63	0.31	-1.32	11	Pass
NVNT	802.11ac20	5240	Ant 1	0.73	0.21	0.94	11	Pass
NVNT	802.11ac40	5190	Ant 1	-5.68	0.44	-5.24	11	Pass
NVNT	802.11ac40	5230	Ant 1	-3.32	0.47	-2.85	11	Pass
NVNT	802.11ax20	5180	Ant 1	-3.47	0	-3.47	11	Pass
NVNT	802.11ax20	5200	Ant 1	-1.32	0	-1.32	11	Pass
NVNT	802.11ax20	5240	Ant 1	0.83	0	0.83	11	Pass
NVNT	802.11ax40	5190	Ant 1	-5.95	0	-5.95	11	Pass
NVNT	802.11ax40	5230	Ant 1	-2.46	0	-2.46	11	Pass
NVNT	802.11n(HT20)	5180	Ant 1	-2.06	0.32	-1.74	11	Pass
NVNT	802.11n(HT20)	5200	Ant 1	-0.17	0.24	0.07	11	Pass
NVNT	802.11n(HT20)	5240	Ant 1	-1.58	0.19	-1.39	11	Pass
NVNT	802.11n(HT40)	5190	Ant 1	-6.86	0.48	-6.38	11	Pass
NVNT	802.11n(HT40)	5230	Ant 1	-2.07	0.5	-1.57	11	Pass

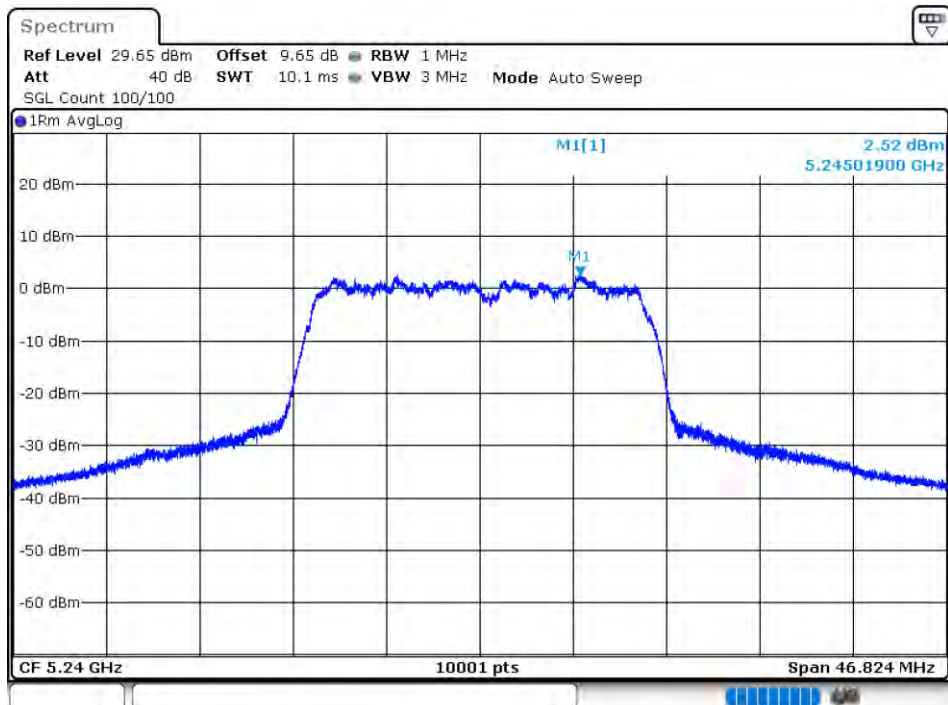
PSD NVNT 802.11a 5180MHz Ant1



PSD NVNT 802.11a 5200MHz Ant1



PSD NVNT 802.11a 5240MHz Ant1



PSD NVNT 802.11ac20 5180MHz Ant1



PSD NVNT 802.11ac20 5200MHz Ant1



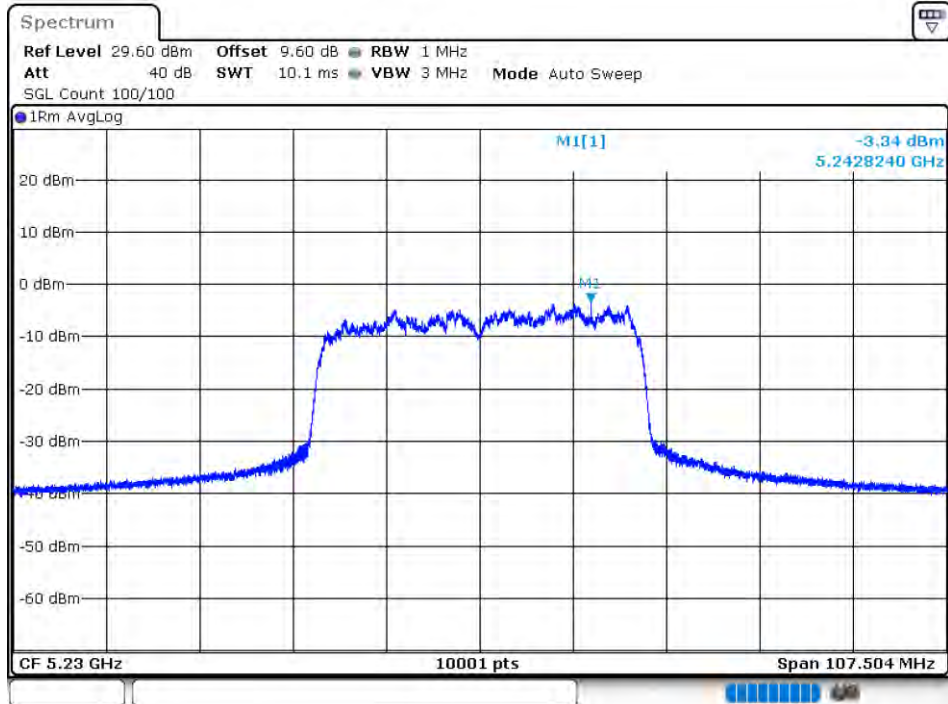
PSD NVNT 802.11ac20 5240MHz Ant1



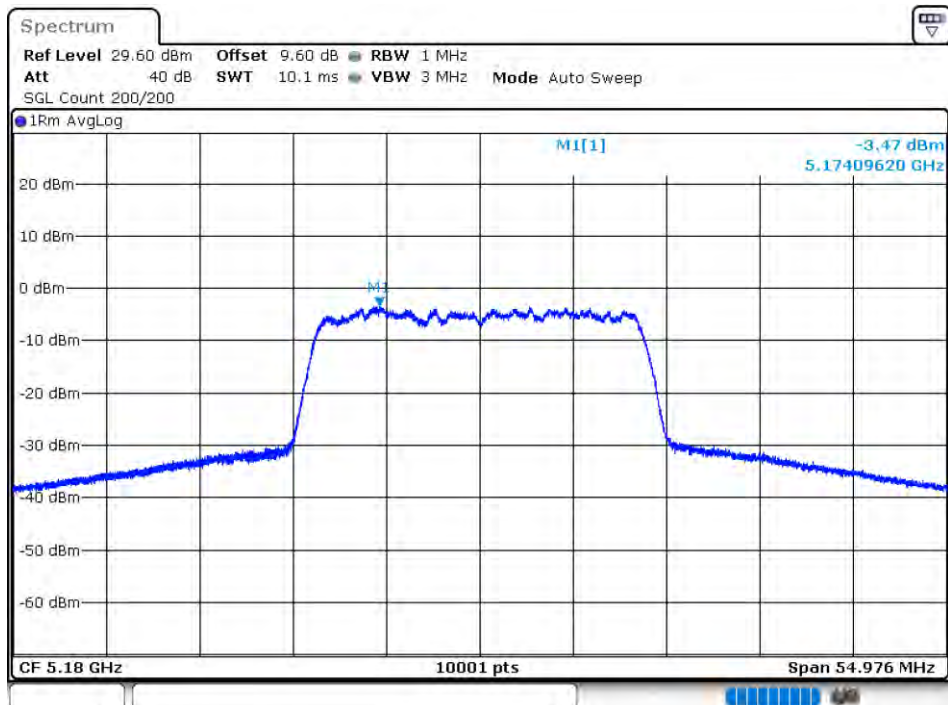
PSD NVNT 802.11ac40 5190MHz Ant1



PSD NVNT 802.11ac40 5230MHz Ant1



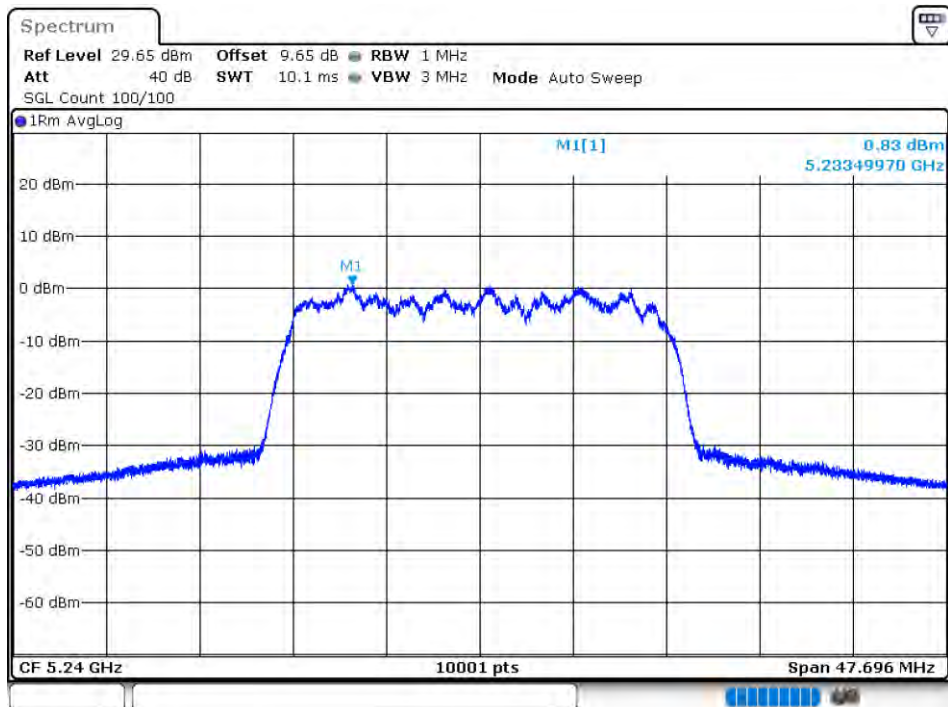
PSD NVNT 802.11ax20 5180MHz Ant1



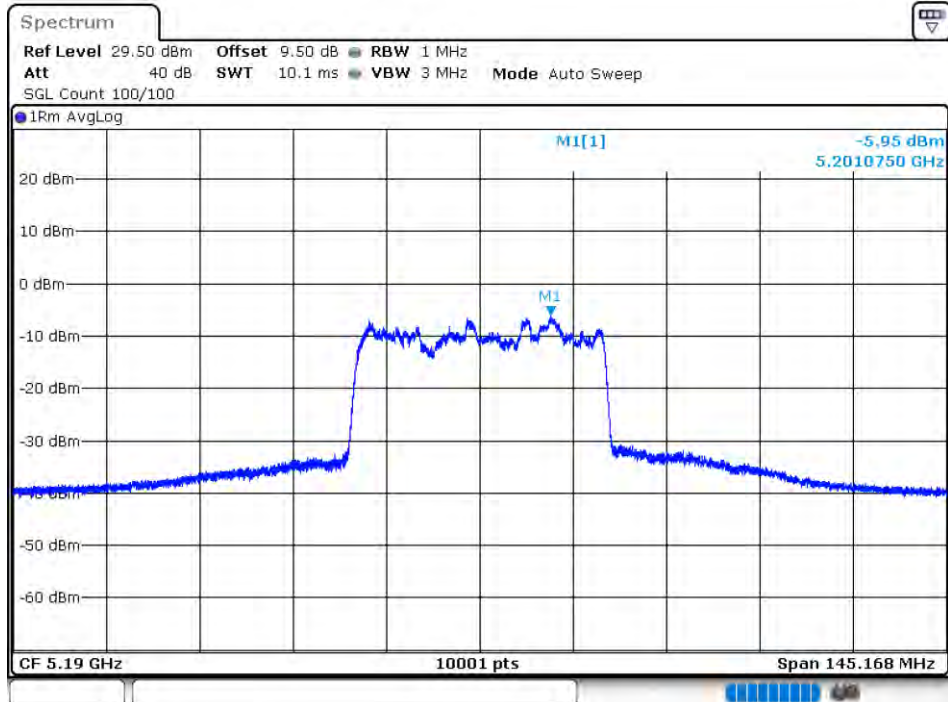
PSD NVNT 802.11ax20 5200MHz Ant1



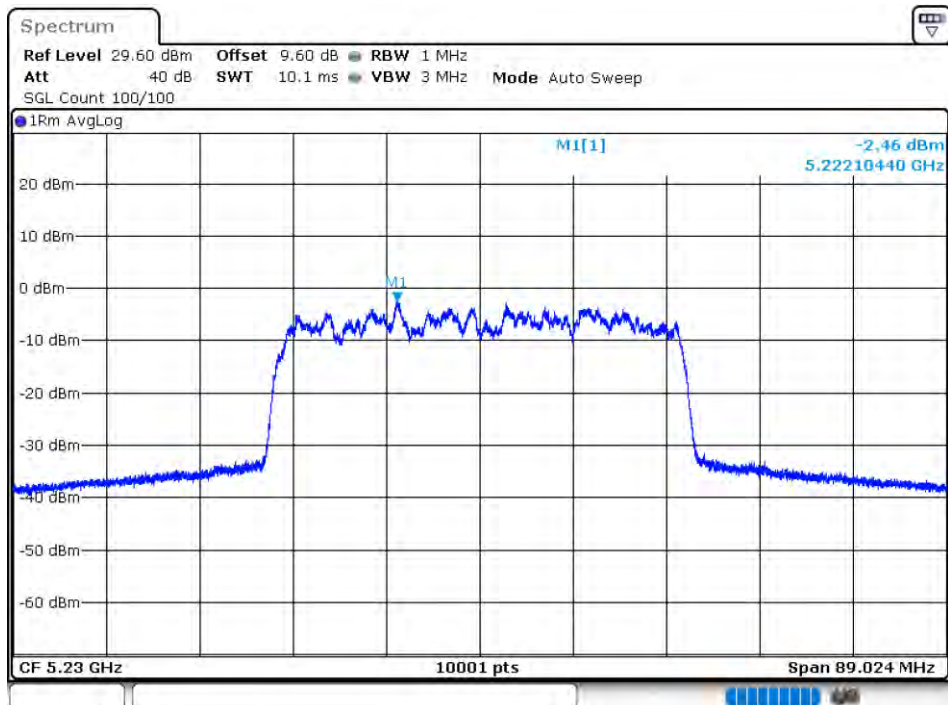
PSD NVNT 802.11ax20 5240MHz Ant1



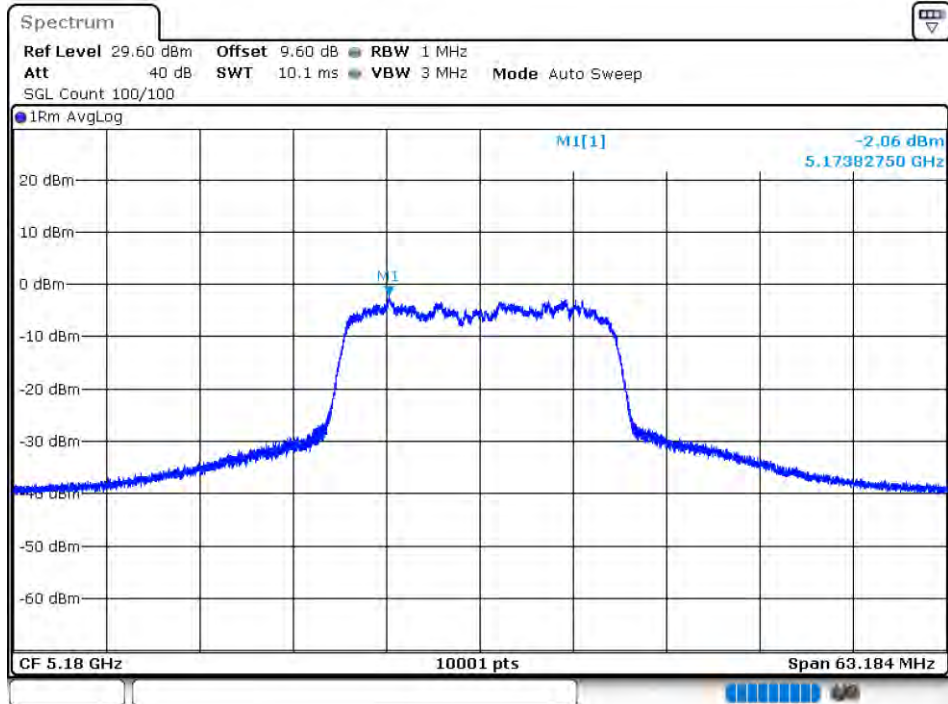
PSD NVNT 802.11ax40 5190MHz Ant1



PSD NVNT 802.11ax40 5230MHz Ant1



PSD NVNT 802.11n(HT20) 5180MHz Ant1



PSD NVNT 802.11n(HT20) 5200MHz Ant1



PSD NVNT 802.11n(HT20) 5240MHz Ant1



PSD NVNT 802.11n(HT40) 5190MHz Ant1



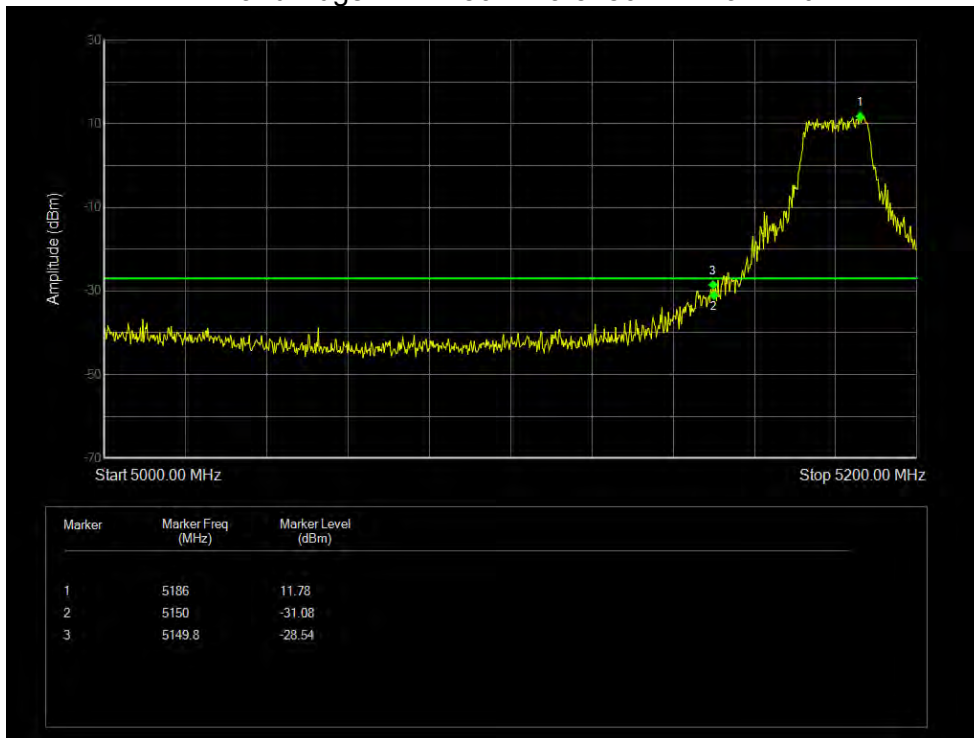
PSD NVNT 802.11n(HT40) 5230MHz Ant1



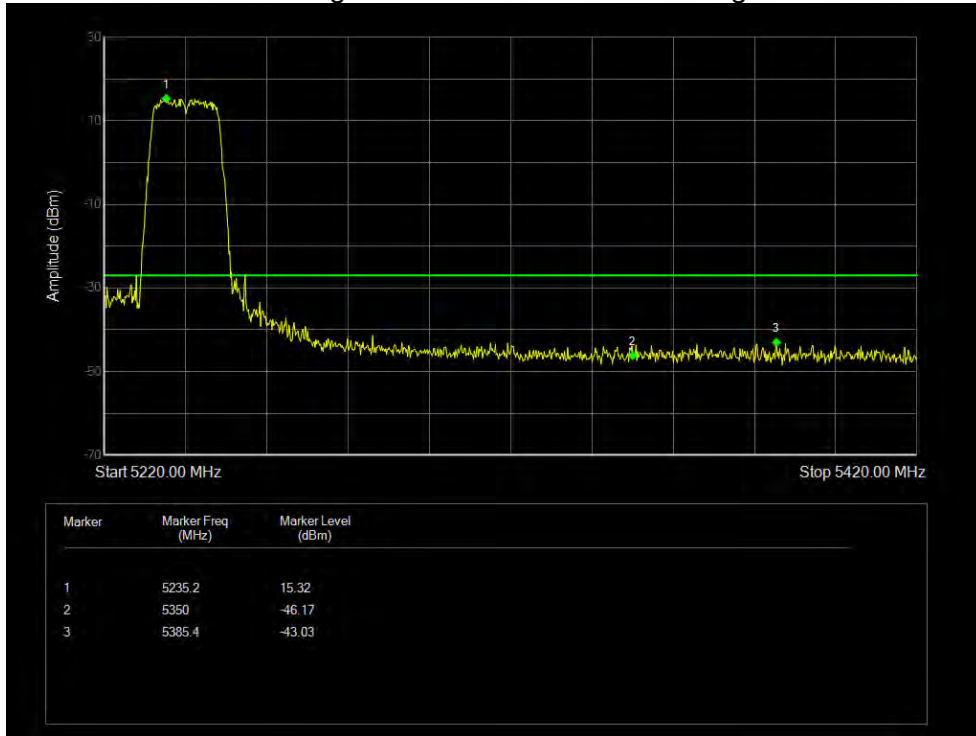
10.5 BAND EDGE

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	802.11a	5180	Ant 1	-28.54	-27	Pass
NVNT	802.11a	5240	Ant 1	-43.03	-27	Pass
NVNT	802.11ac20	5180	Ant 1	-42.12	-27	Pass
NVNT	802.11ac20	5240	Ant 1	-43.99	-27	Pass
NVNT	802.11ac40	5190	Ant 1	-38.45	-27	Pass
NVNT	802.11ac40	5230	Ant 1	-43.73	-27	Pass
NVNT	802.11ax20	5180	Ant 1	-38.62	-27	Pass
NVNT	802.11ax20	5240	Ant 1	-38.21	-27	Pass
NVNT	802.11ax40	5190	Ant 1	-38.89	-27	Pass
NVNT	802.11ax40	5230	Ant 1	-44.7	-27	Pass
NVNT	802.11ax80	5210	Ant 1	-43.07	-27	Pass
NVNT	802.11ax80	5210	Ant 1	-36.06	-27	Pass
NVNT	802.11n(HT20)	5180	Ant 1	-42.96	-27	Pass
NVNT	802.11n(HT20)	5240	Ant 1	-42.51	-27	Pass
NVNT	802.11n(HT40)	5190	Ant 1	-38.12	-27	Pass
NVNT	802.11n(HT40)	5230	Ant 1	-43.77	-27	Pass

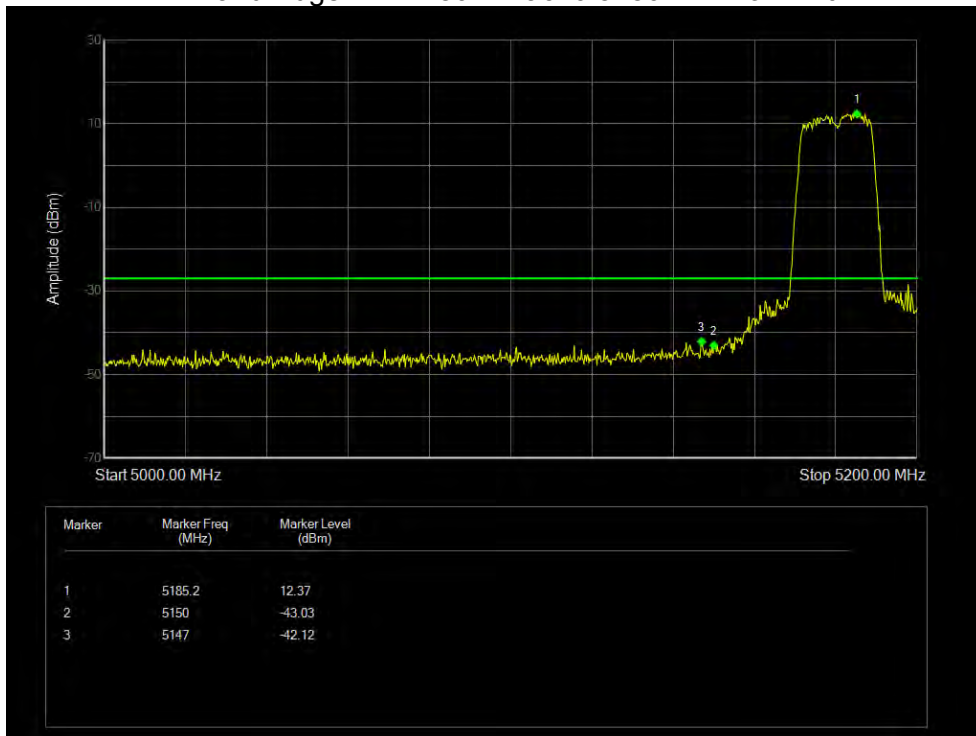
Band Edge NVNT 802.11a 5180MHz Low Ant 1



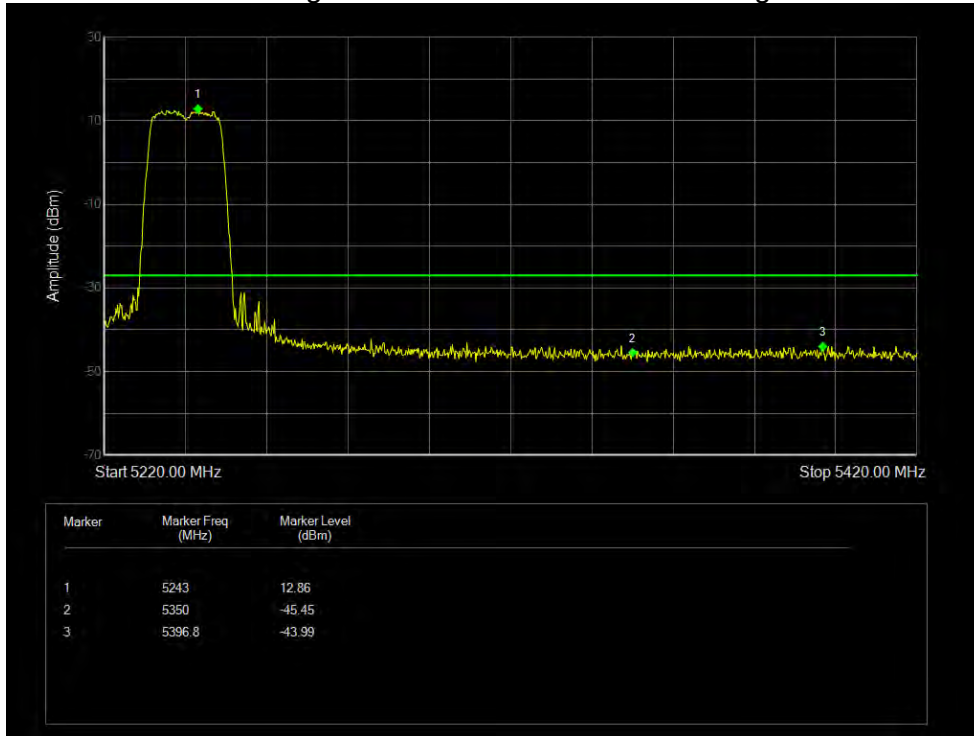
Band Edge NVNT 802.11a 5240MHz High Ant 1



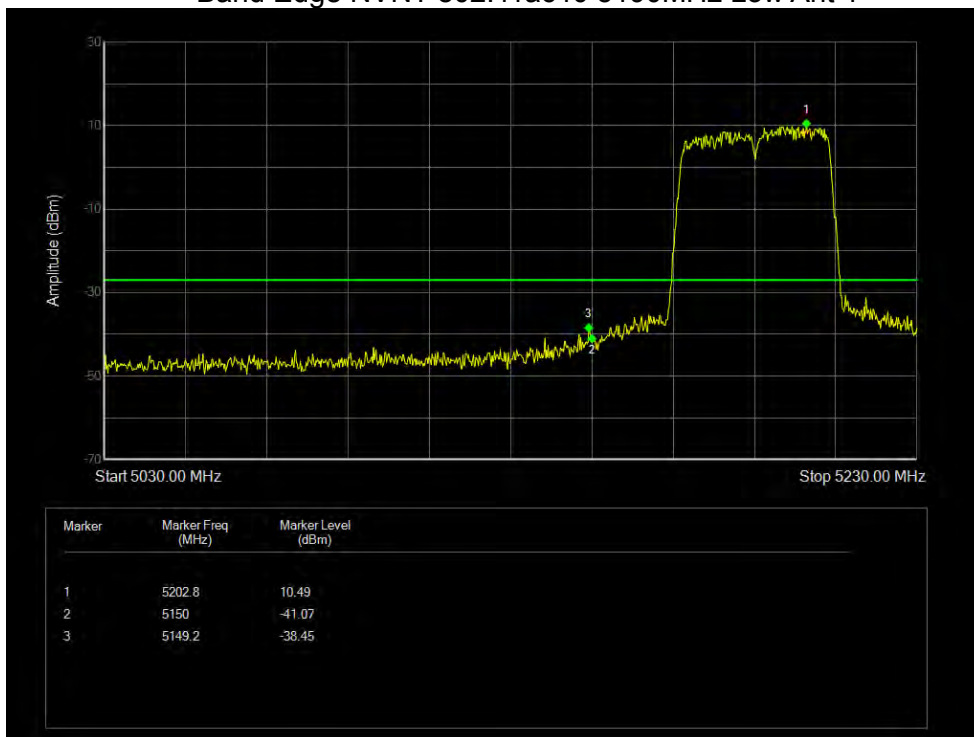
Band Edge NVNT 802.11ac20 5180MHz Low Ant 1



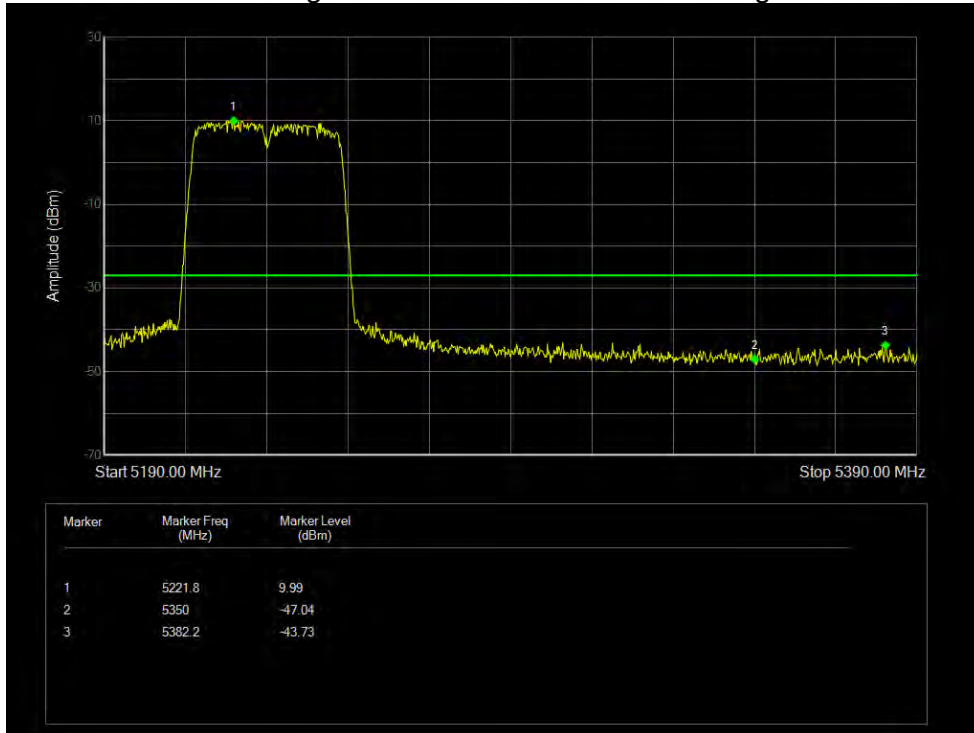
Band Edge NVNT 802.11ac20 5240MHz High Ant 1



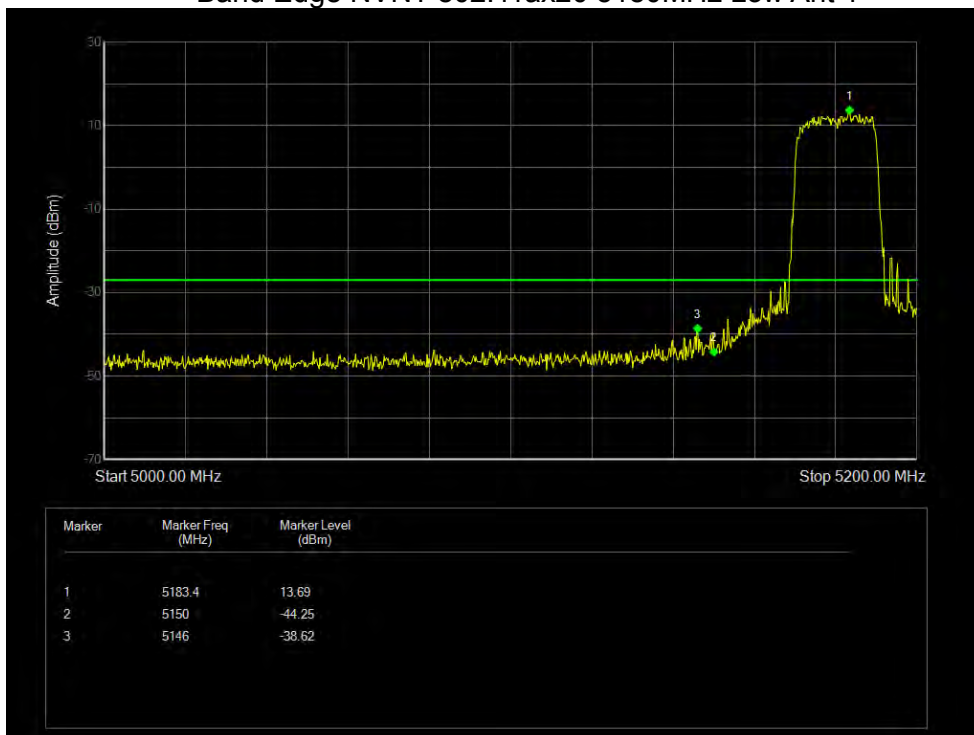
Band Edge NVNT 802.11ac40 5190MHz Low Ant 1



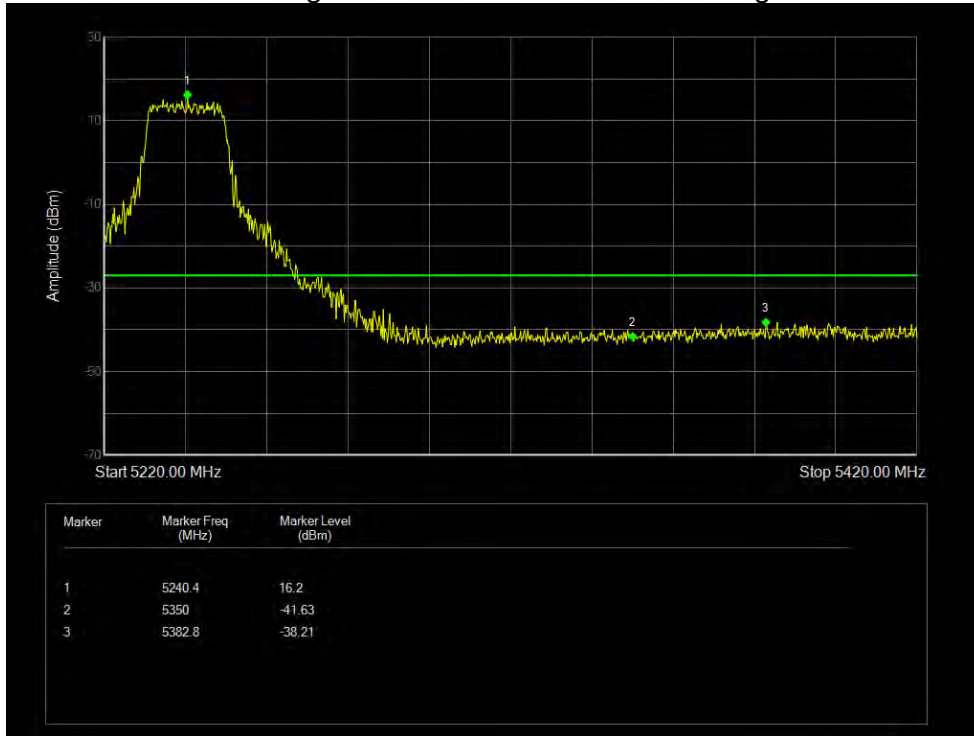
Band Edge NVNT 802.11ac40 5230MHz High Ant 1



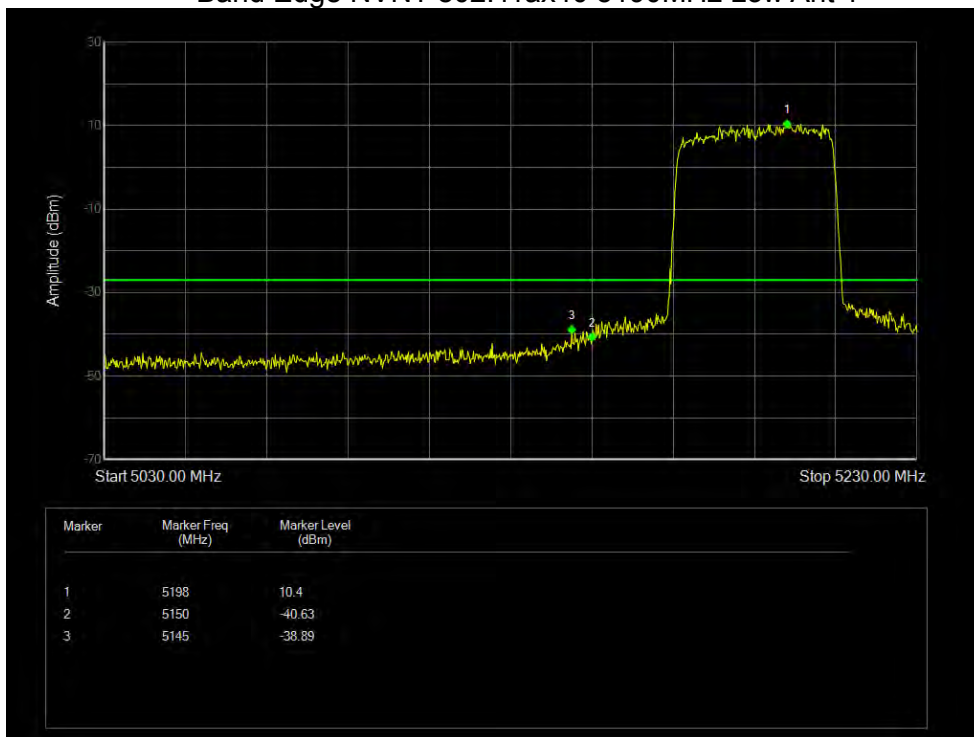
Band Edge NVNT 802.11ax20 5180MHz Low Ant 1



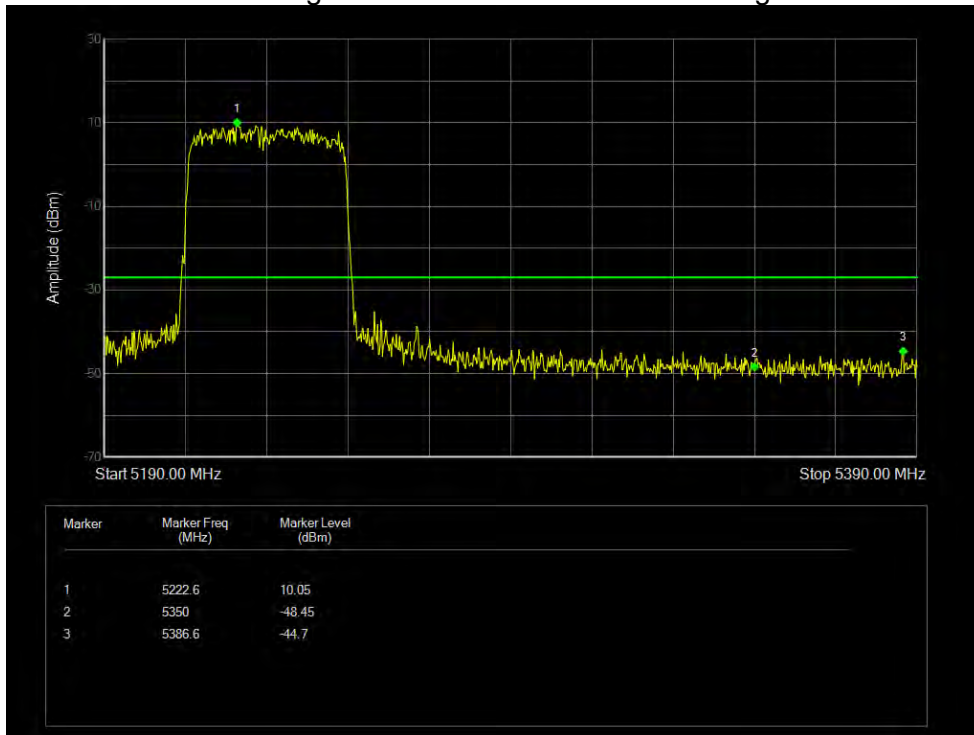
Band Edge NVNT 802.11ax20 5240MHz High Ant 1



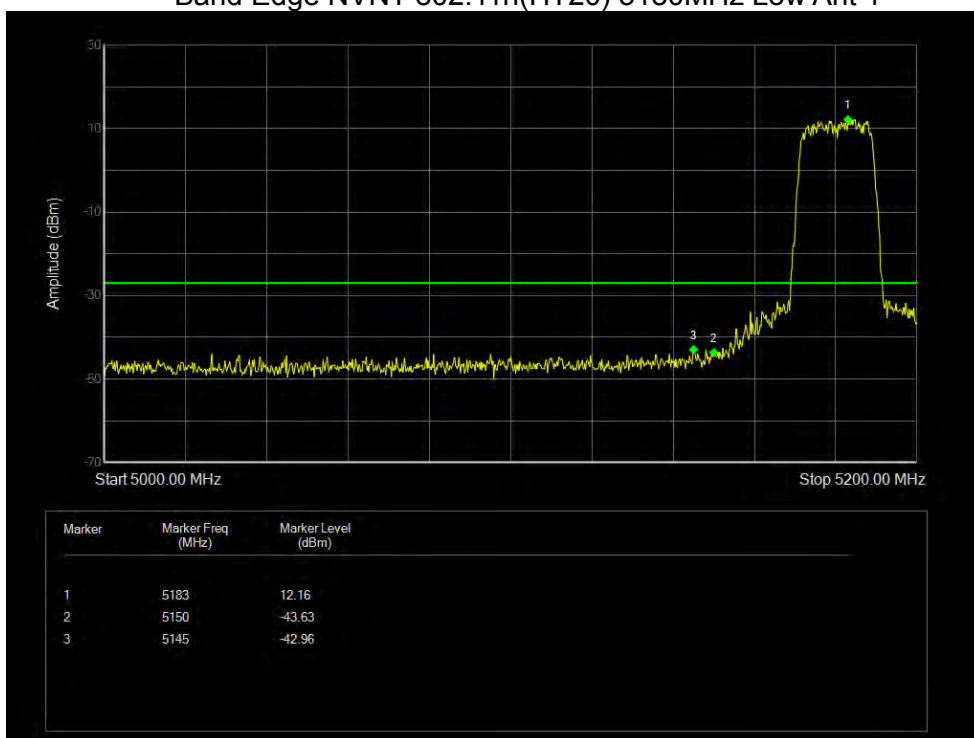
Band Edge NVNT 802.11ax40 5190MHz Low Ant 1



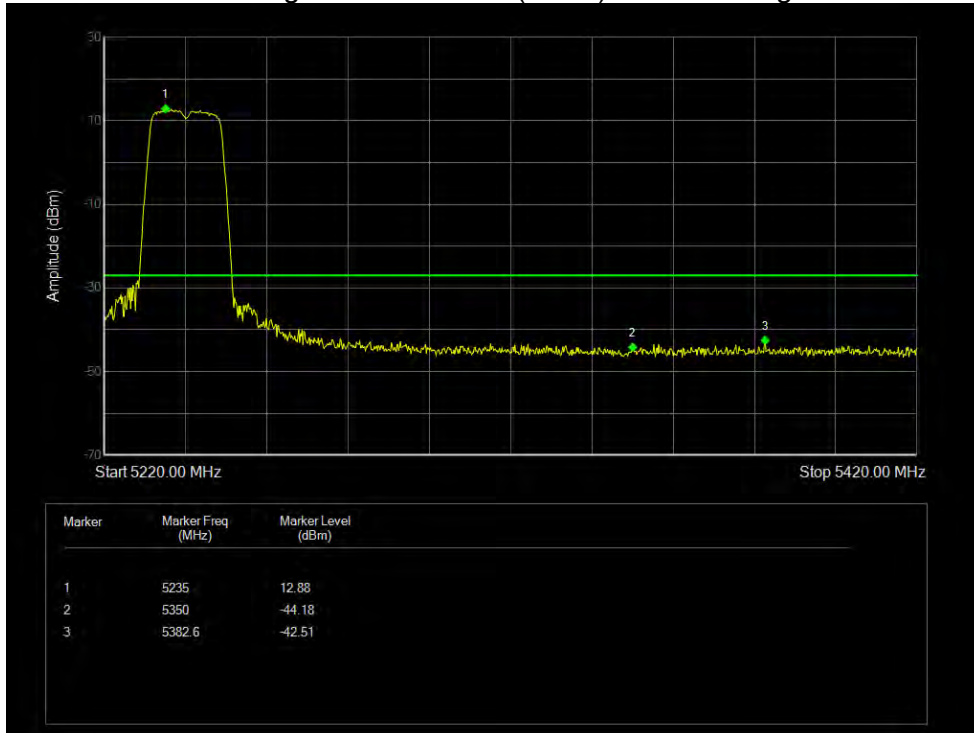
Band Edge NVNT 802.11ax40 5230MHz High Ant 1



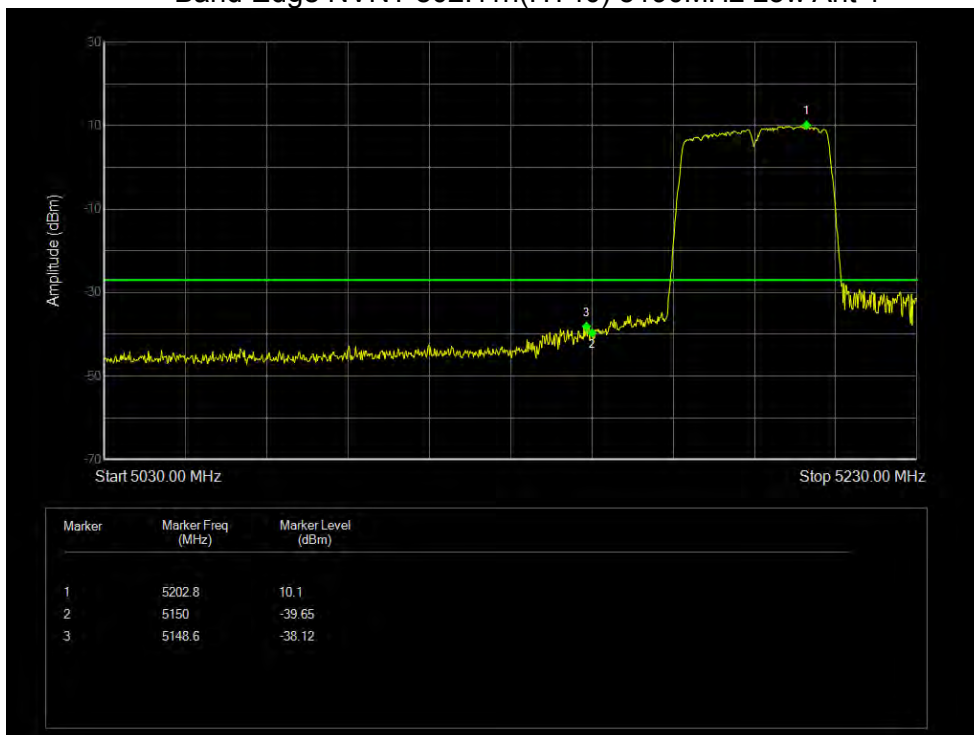
Band Edge NVNT 802.11n(HT20) 5180MHz Low Ant 1



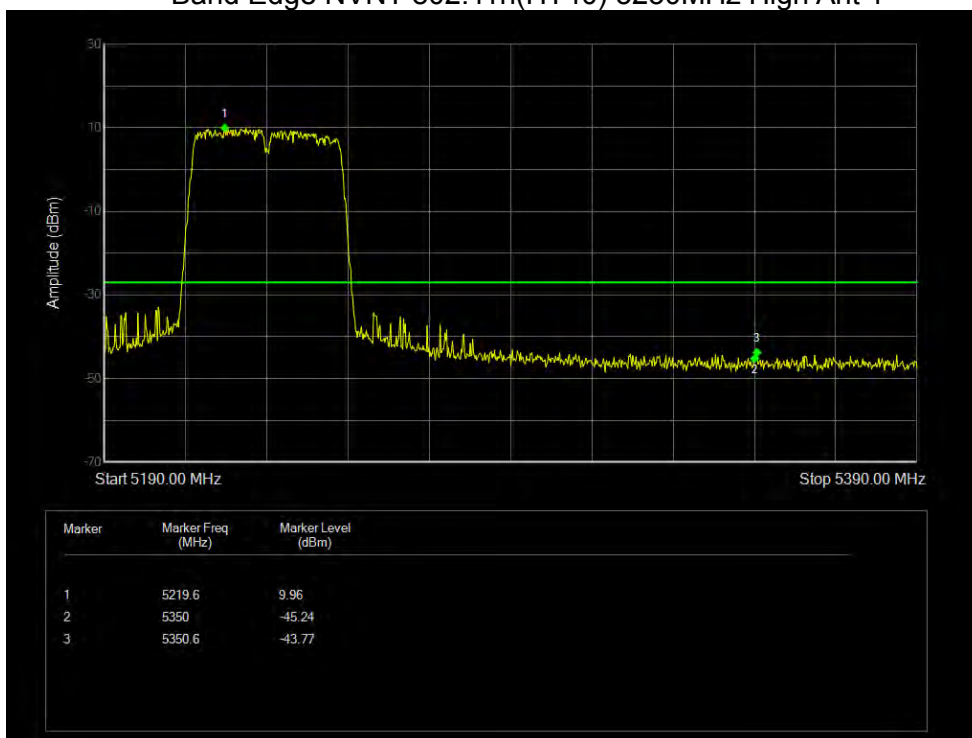
Band Edge NVNT 802.11n(HT20) 5240MHz High Ant 1



Band Edge NVNT 802.11n(HT40) 5190MHz Low Ant 1



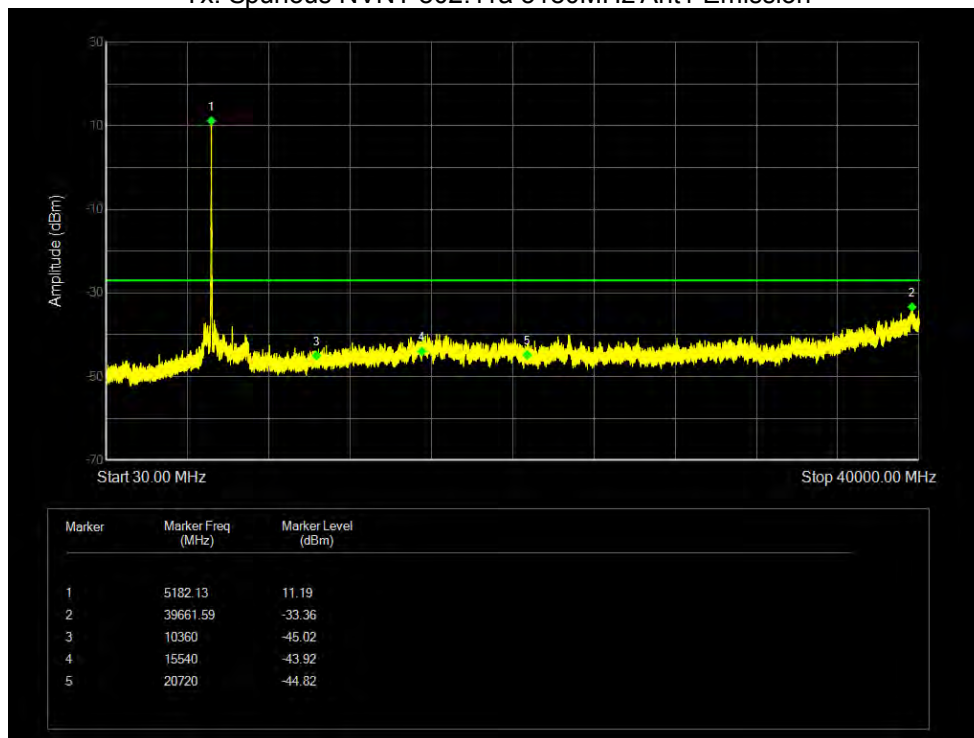
Band Edge NVNT 802.11n(HT40) 5230MHz High Ant 1



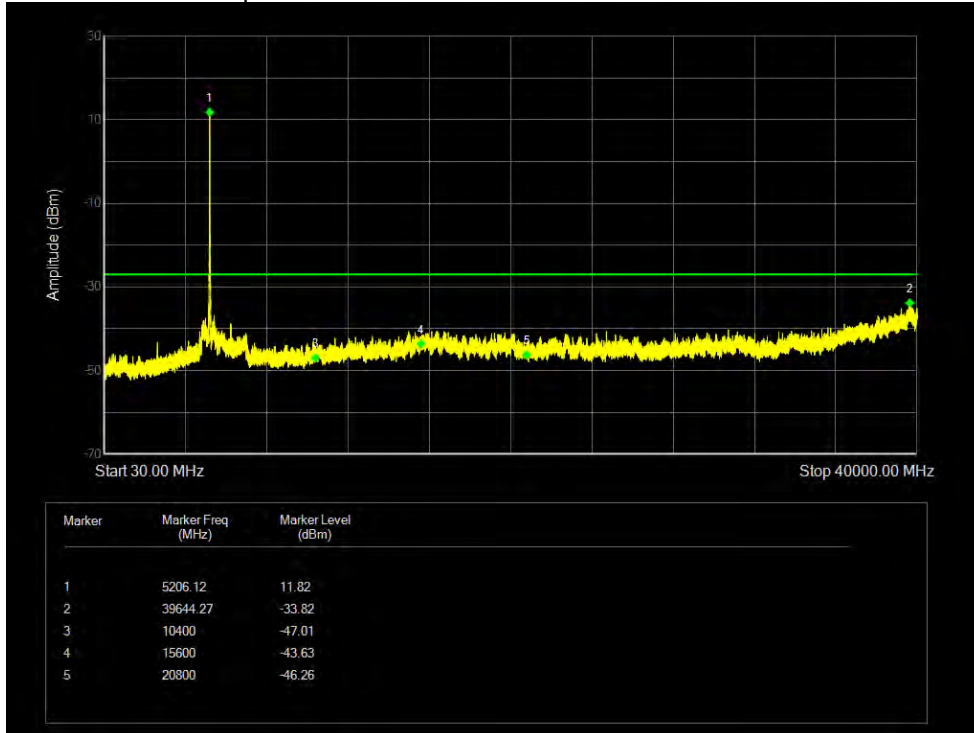
10.6 CONDUCTED RF SPURIOUS EMISSION

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	802.11a	5180	Ant 1	-33.36	-27	Pass
NVNT	802.11a	5200	Ant 1	-33.82	-27	Pass
NVNT	802.11a	5240	Ant 1	-34.29	-27	Pass
NVNT	802.11ac20	5180	Ant 1	-34.2	-27	Pass
NVNT	802.11ac20	5200	Ant 1	-33.49	-27	Pass
NVNT	802.11ac20	5240	Ant 1	-33.49	-27	Pass
NVNT	802.11ac40	5190	Ant 1	-33.96	-27	Pass
NVNT	802.11ac40	5230	Ant 1	-33.58	-27	Pass
NVNT	802.11ax20	5180	Ant 1	-32.46	-27	Pass
NVNT	802.11ax20	5200	Ant 1	-33.7	-27	Pass
NVNT	802.11ax20	5240	Ant 1	-33.86	-27	Pass
NVNT	802.11ax40	5190	Ant 1	-34.25	-27	Pass
NVNT	802.11ax40	5230	Ant 1	-34.3	-27	Pass
NVNT	802.11n(HT20)	5180	Ant 1	-34.02	-27	Pass
NVNT	802.11n(HT20)	5200	Ant 1	-34.03	-27	Pass
NVNT	802.11n(HT20)	5240	Ant 1	-32.91	-27	Pass
NVNT	802.11n(HT40)	5190	Ant 1	-33.94	-27	Pass
NVNT	802.11n(HT40)	5230	Ant 1	-33.65	-27	Pass

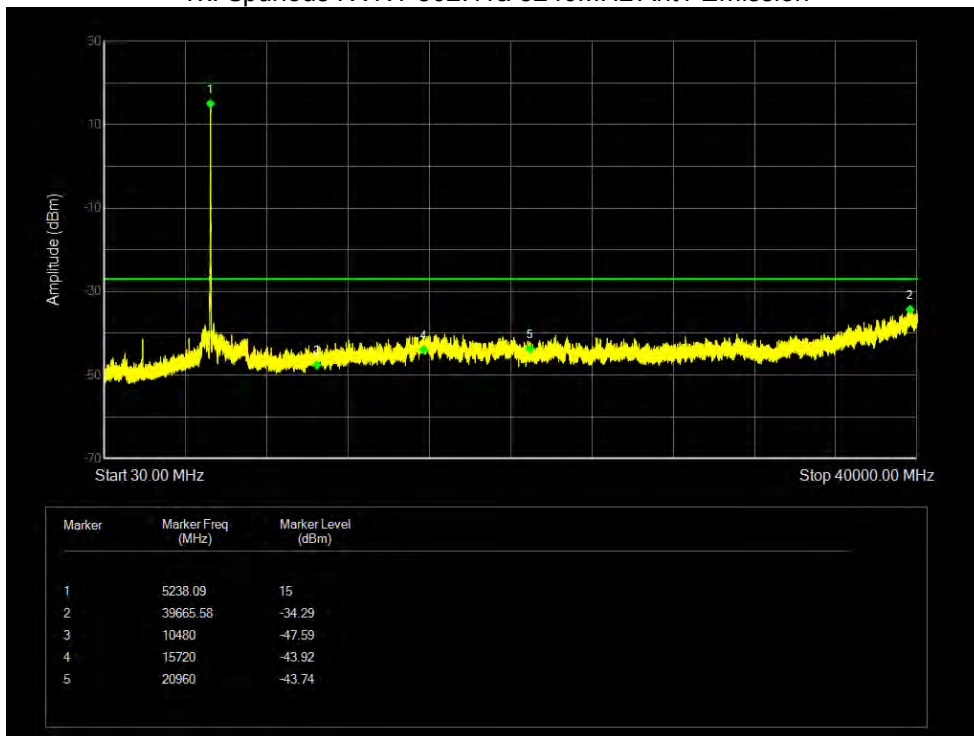
Tx. Spurious NVNT 802.11a 5180MHz Ant1 Emission



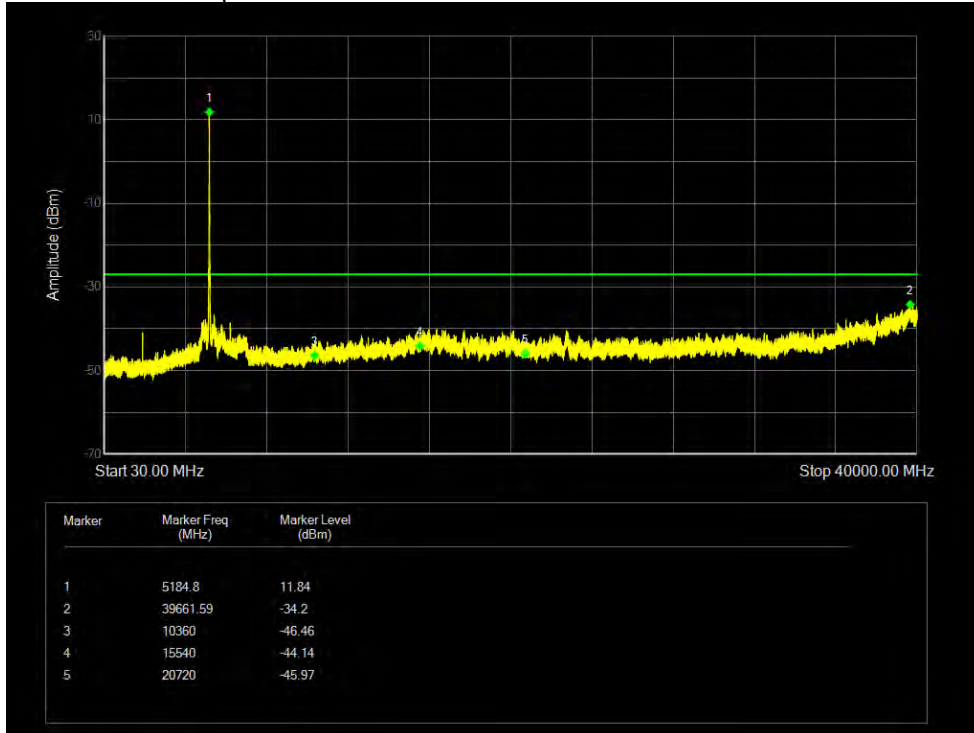
Tx. Spurious NVNT 802.11a 5200MHz Ant1 Emission



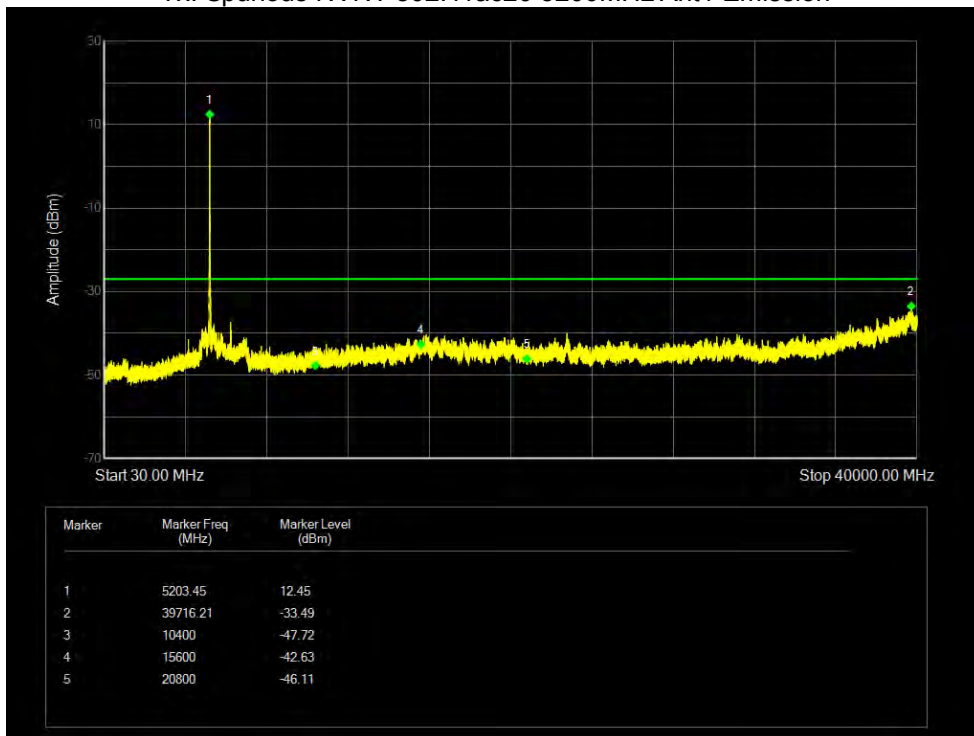
Tx. Spurious NVNT 802.11a 5240MHz Ant1 Emission



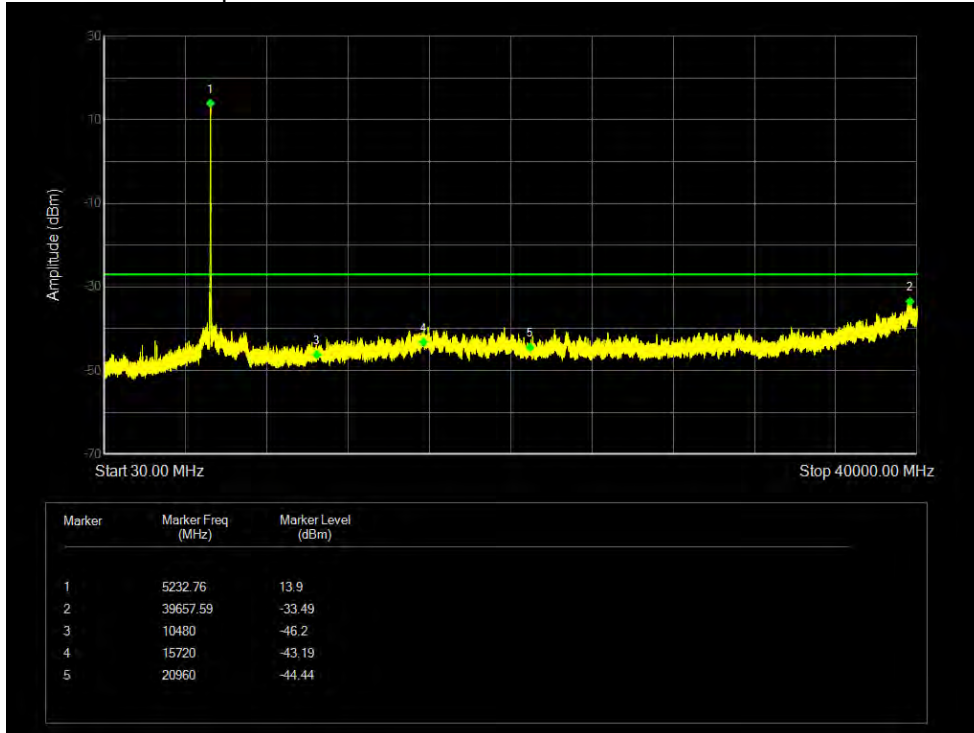
Tx. Spurious NVNT 802.11ac20 5180MHz Ant1 Emission



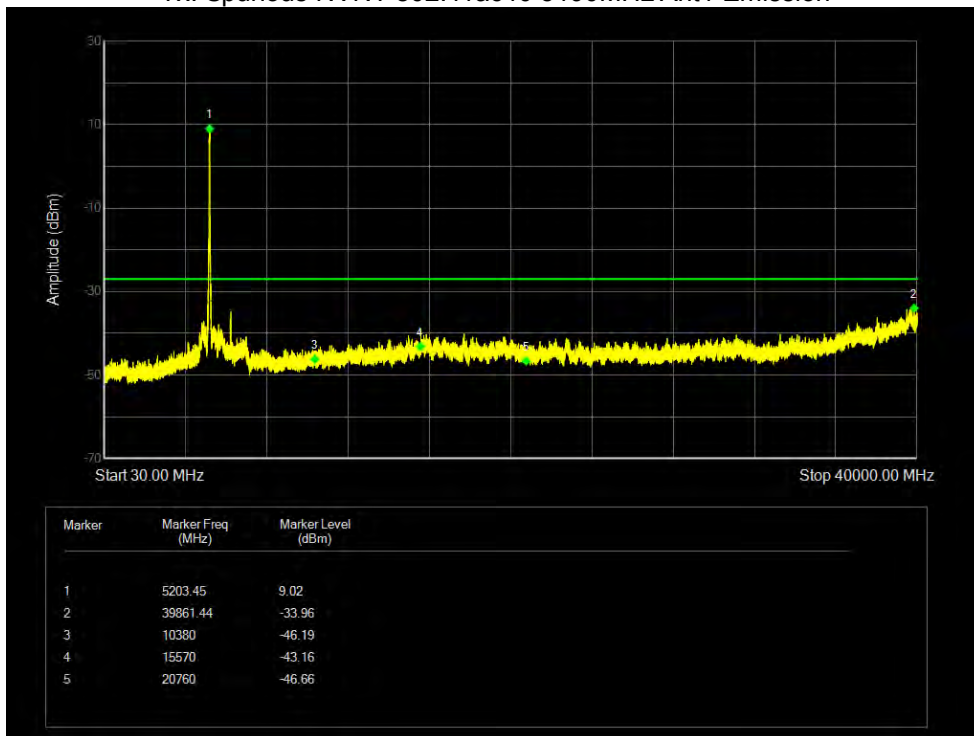
Tx. Spurious NVNT 802.11ac20 5200MHz Ant1 Emission



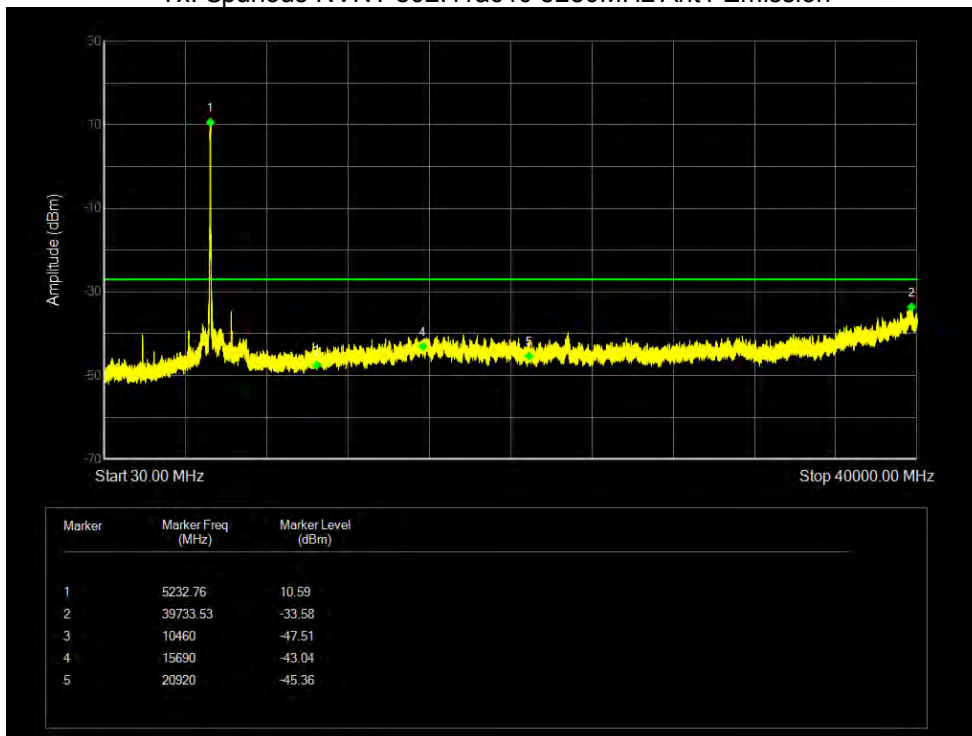
Tx. Spurious NVNT 802.11ac20 5240MHz Ant1 Emission



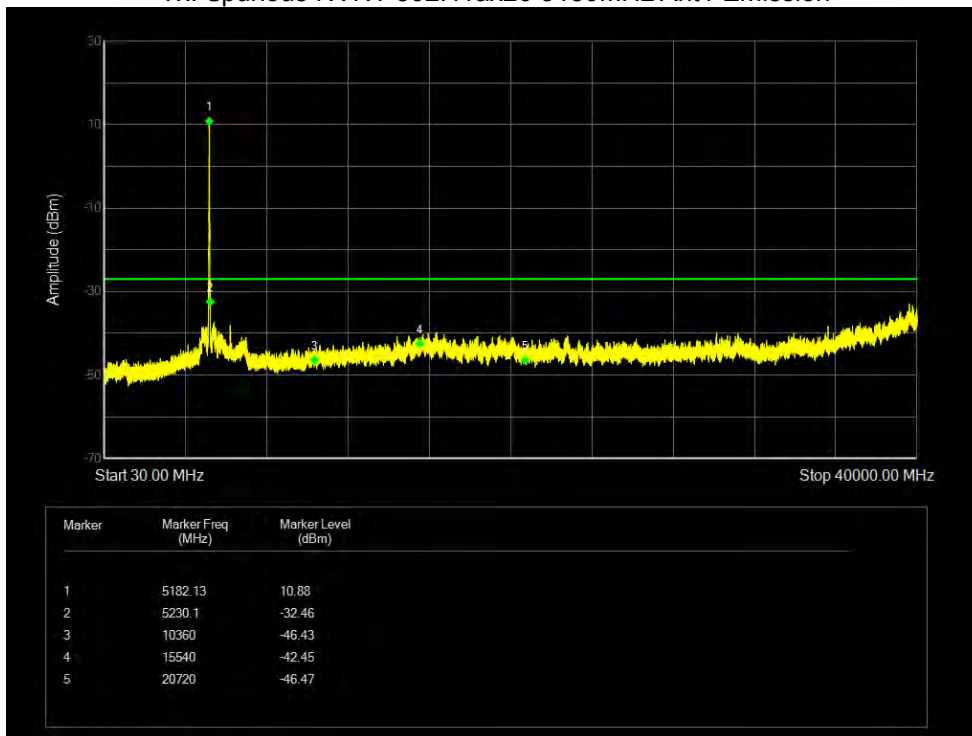
Tx. Spurious NVNT 802.11ac40 5190MHz Ant1 Emission



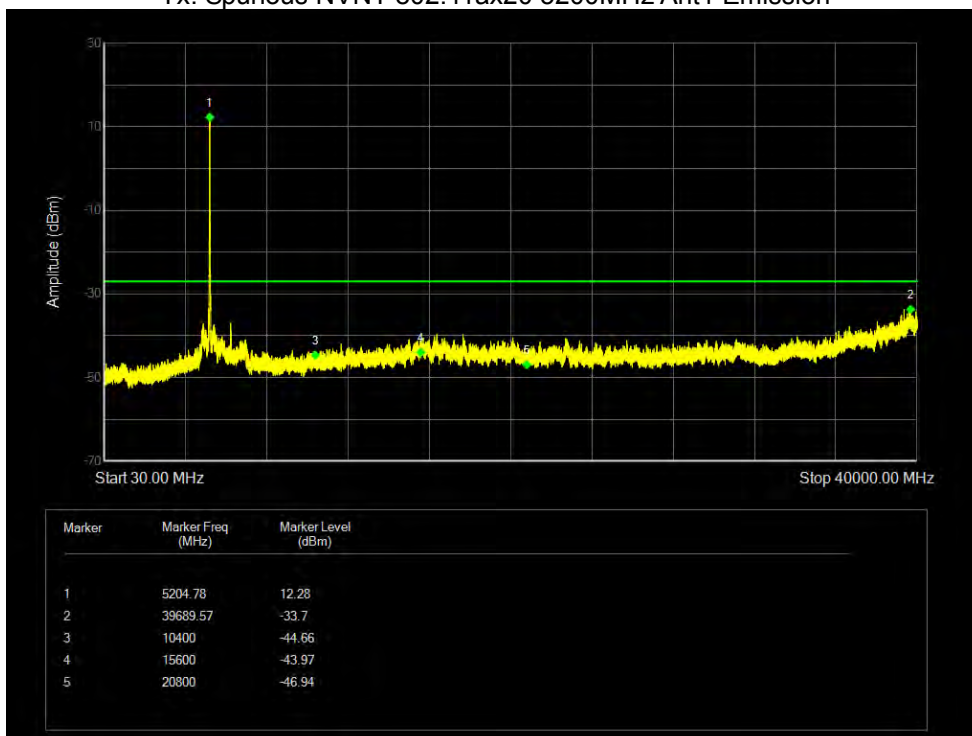
Tx. Spurious NVNT 802.11ac40 5230MHz Ant1 Emission



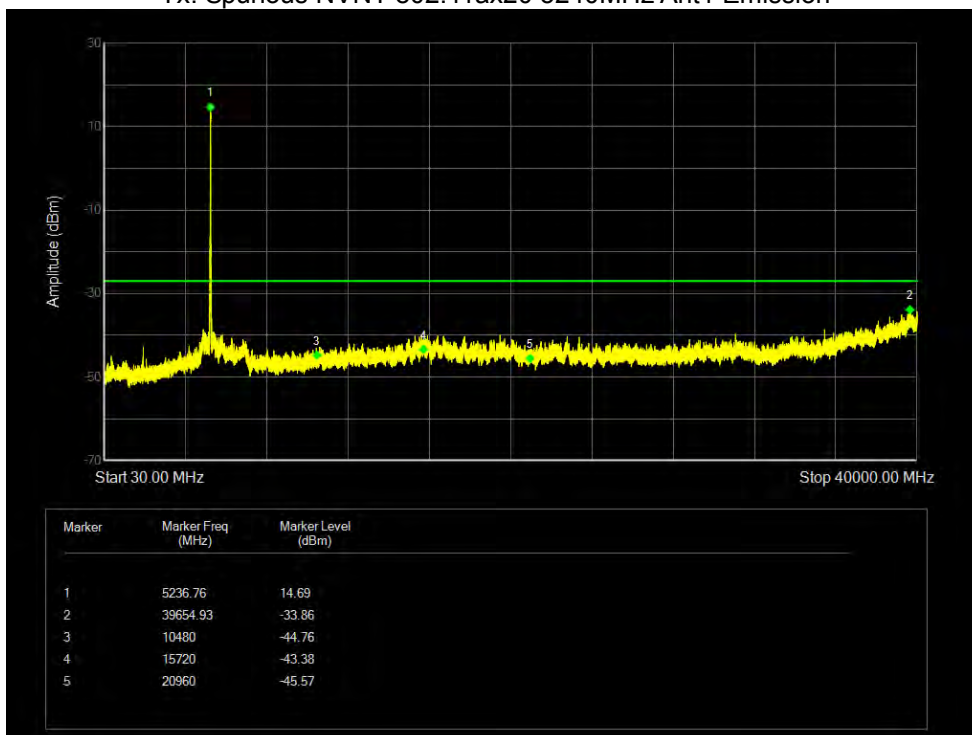
Tx. Spurious NVNT 802.11ax20 5180MHz Ant1 Emission



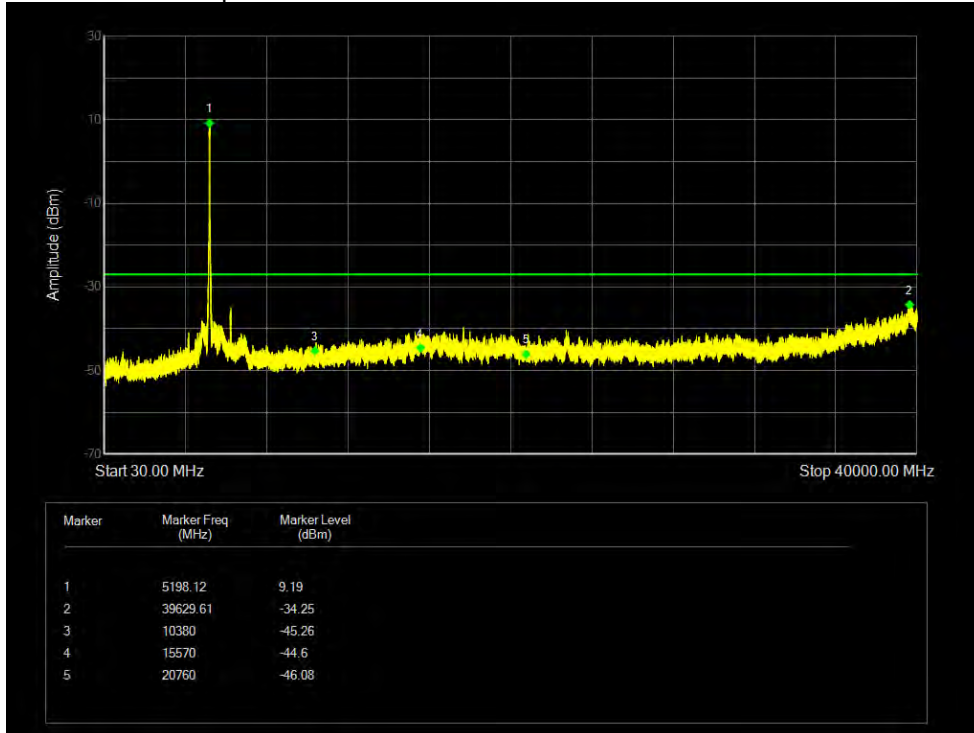
Tx. Spurious NVNT 802.11ax20 5200MHz Ant1 Emission



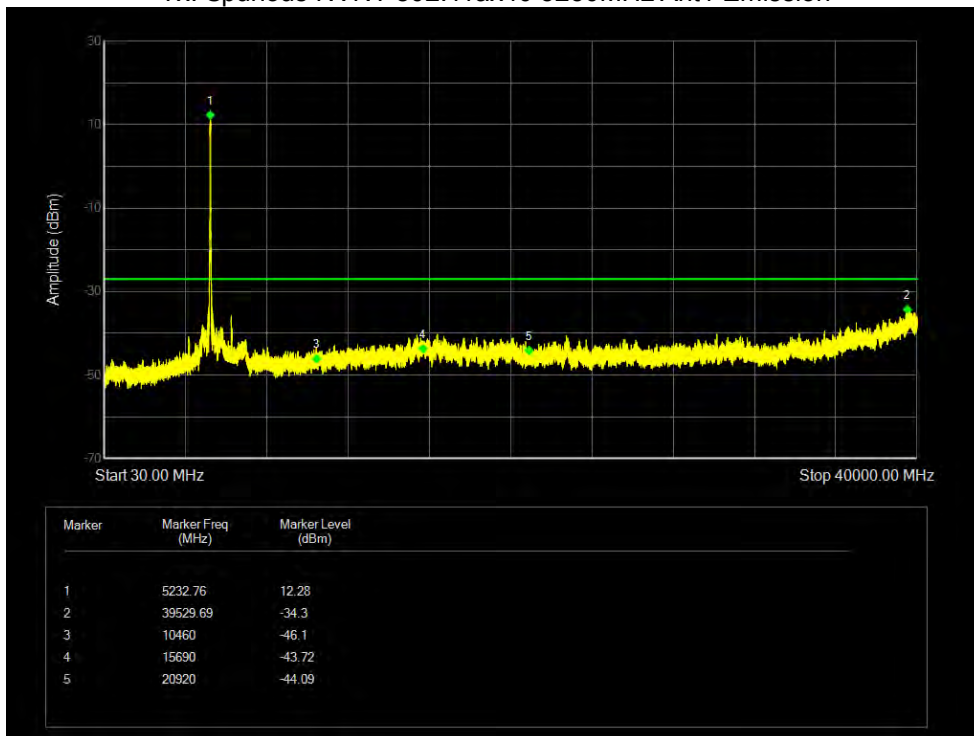
Tx. Spurious NVNT 802.11ax20 5240MHz Ant1 Emission



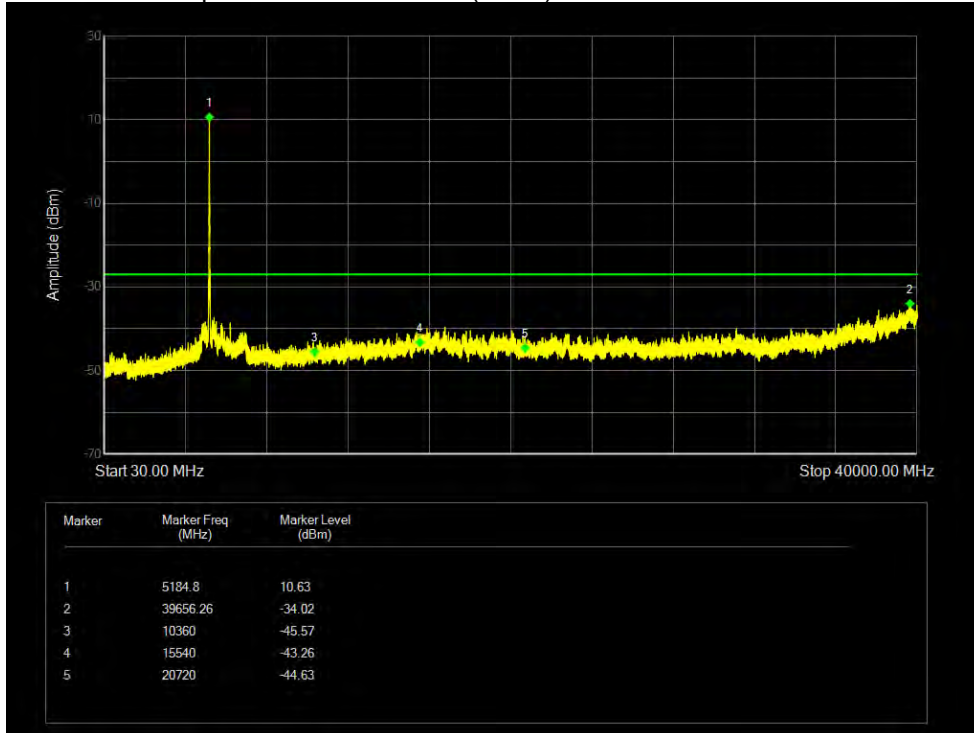
Tx. Spurious NVNT 802.11ax40 5190MHz Ant1 Emission



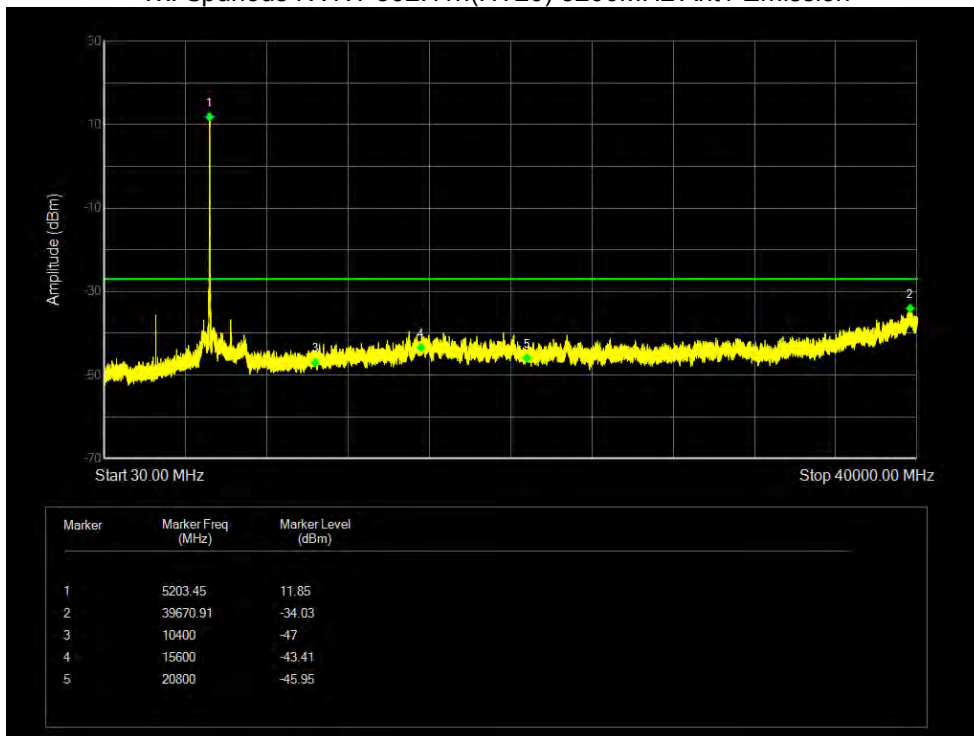
Tx. Spurious NVNT 802.11ax40 5230MHz Ant1 Emission



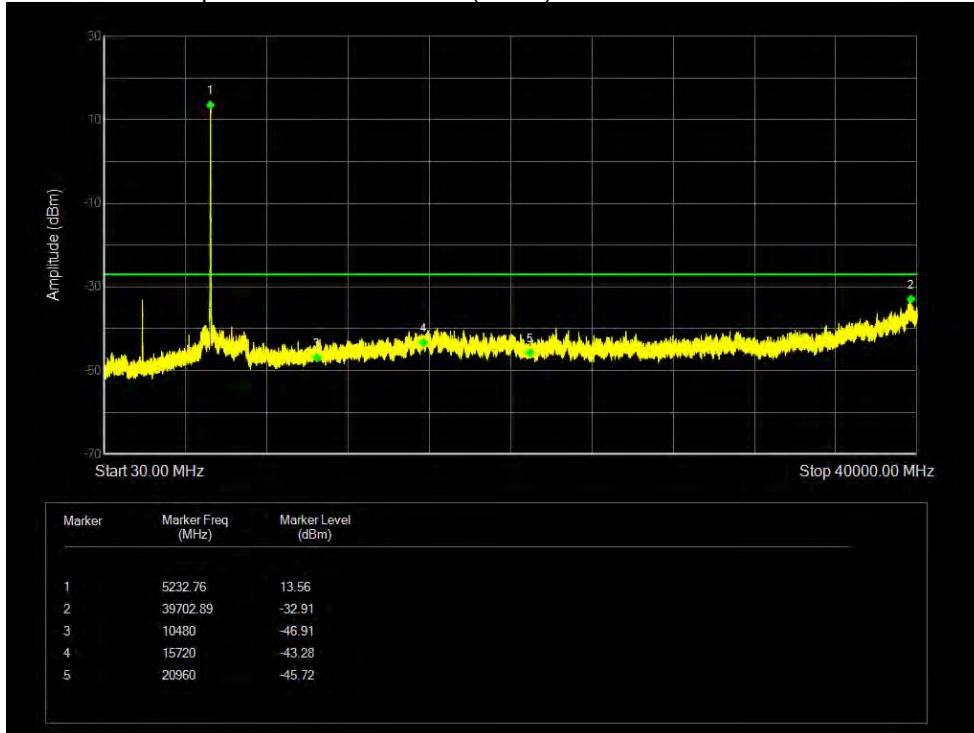
Tx. Spurious NVNT 802.11n(HT20) 5180MHz Ant1 Emission



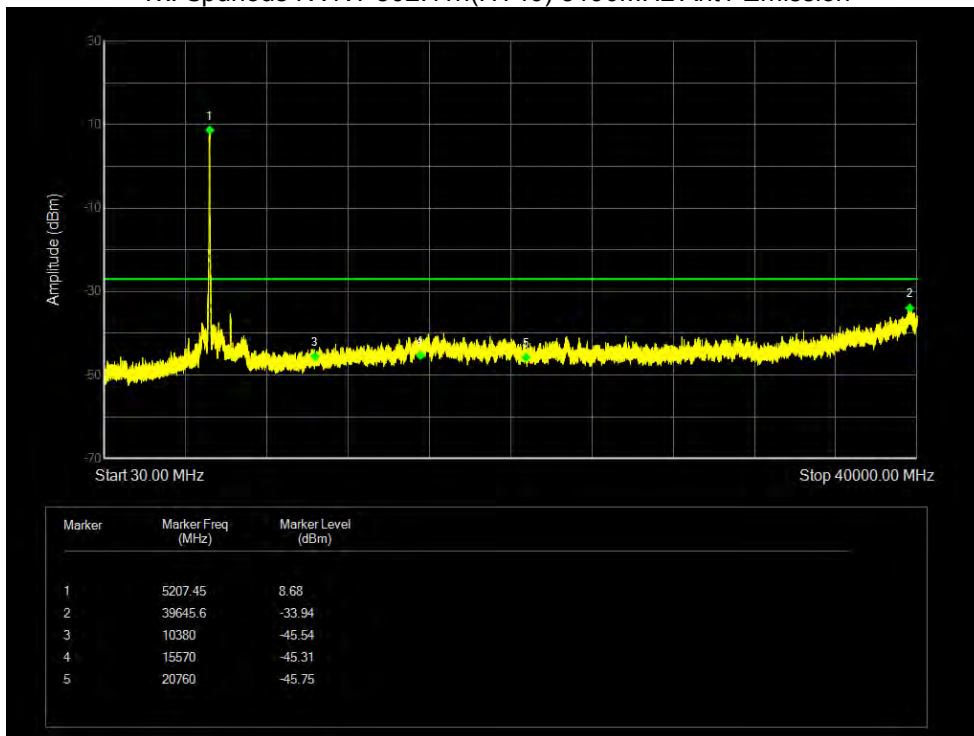
Tx. Spurious NVNT 802.11n(HT20) 5200MHz Ant1 Emission



Tx. Spurious NVNT 802.11n(HT20) 5240MHz Ant1 Emission



Tx. Spurious NVNT 802.11n(HT40) 5190MHz Ant1 Emission



Tx. Spurious NVNT 802.11n(HT40) 5230MHz Ant1 Emission

