FCC TEST REPORT

FCC ID: 2ABNA-2455A

On Behalf of

Guangzhou Geoelectron Science & Technology Company Limited

Communication Module

Model No.: GEBW2455A

Prepared for	:	Guangzhou Geoelectron Science & Technology Company Limited
Address	:	No.704, 7/F, Building C, No.7, Cai Pin Road, Science City, Luogang District, Guangzhou, China

Prepared By	:	Shenzhen Alpha Product Testing Co., Ltd.
Address	:	Building i, No.2, Lixin Road, Fuyong Street, Bao'an District, 518103, Shenzhen, Guangdong, China

Report Number	:	A1910152-C01-R08
Date of Receipt	:	October 23, 2019
Date of Test	:	October 23, 2019-January 15, 2020
Date of Report	:	January 15, 2020
Version Number	:	V0

Contents

TEST REPORT DECLARATION

Applicant	:	Guangzhou Geoelectron Science & Technology Company Limited
Address	:	No.704, 7/F, Building C, No.7, Cai Pin Road, Science City, Luogang District, Guangzhou, China
Manufacturer	:	Guangzhou Geoelectron Science & Technology Company Limited
Address	:	No.704, 7/F, Building C, No.7, Cai Pin Road, Science City, Luogang District, Guangzhou, China
EUT Description	:	Communication Module
		(A) Model No. : GEBW2455A
		(B) Trademark : Geoelectron

Measurement Standard Used:

FCC CFR Title 47 Part 15 Subpart E Section 15.407

The device described above is tested by Shenzhen Alpha Product Testing Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C limits both conducted and radiated emissions. The test results are contained in this test report and Shenzhen Alpha Product Testing Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

After the test, our opinion is that EUT compliance with the requirement of the above standards.

This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Shenzhen Alpha Product Testing Co., Ltd.

Tested by (name + signature).....:	Ella Liang Project Engineer	Ella Liang
Approved by (name + signature).....:	Simple Guan Project Manager	
Date of issue…… ……..:	January 15, 2020	

Revision History

Revision	Issue Date	Revisions	Revised By
V0	January 15, 2020	Initial released Issue	Simple Guan

1 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203	PASS
AC Power Line Conducted Emission	15.207	PASS
Peak Transmit Power	15.407(a)(1), 15.407 (a)(3)	PASS
Power Spectral Density	15.407(a)(1) , 15.407 (a)(3)	PASS
Emission Bandwidth and 99% Occupied Bandwidth	15.407(b)(6), 15.205/15.209	PASS
Radiated Emission	15.205/15.209	PASS
Band Edge	15.205	PASS
Frequency Stability	15.407(f)	PASS

Remark: 1.Pass: The EUT complies with the essential requirements in the standard.

2. N/A is an abbreviation for Not Applicable.

3. F is an abbreviation for Fail.

2 General Information

2.1 General Description of EUT

Description of Device (EUT)

Description	:	Communication Module
Trademark	:	Geoelectron
Model Number	:	GEBW2455A
DIFF.	:	N/A
Test Voltage	:	DC 3.35-4.2V
Operation Frequency	:	802.11a/ 802.11ac20/ 802.11n(HT20): 5180-5240MHz, 5260-5320MHz, 5500-5700MHz, 5745-5825MHz 802.11ac40/ 802.11n(HT40): 5190-5230MHz, 5270-5310MHz, 5510-5670MHz, 5755-5795MHz 802.11ac80: 5210MHz, 5290MHz, 5530MHz, 5775MHz
Channel separation	:	20MHz for 802.11a/ 802.11ac20/ 802.11n(HT20) 40MHz for 802.11ac40/ 802.11n(HT40) 80MHz for 802.11ac80
Modulation technology:	:	IEEE 802.11n: OFDM (64QAM, 16QAM,QPSK,BPSK) IEEE 802.11a: OFDM (64QAM, 16QAM,QPSK,BPSK) IEEE 802.11ac: OFDM (64QAM, 16QAM,QPSK,BPSK)
Antenna Type	:	Integrated antenna, Maximum Gain is 3dBi
Software version	:	V1.0
Hardware version	:	GEBW2455A_V1_1

2.2 Test mode

Keep the EUT in transmitting with modulation.

EUT was test with 100% duty cycle at its maximum power control level.

Bandwidth Mode	20MHz	40MHz	80MHz
IEEE 802.11a	☑	☐	☐
IEEE 802.11n	☑	☑	☐
IEEE 802.11ac	☑	☑	☐

Remark: During the test, the test voltage was tuned from 85% to 115% of the nominal rated supply voltage, and found that the worst case was under the nominal rated supply condition. So the report just shows that condition's data.

2.3 Test Facility

Shenzhen Alpha Product Testing Co., Ltd
Building i, No.2, Lixin Road, Fuyong Street, Bao'an District, 518103, Shenzhen, Guangdong, China

June 21, 2018 File on Federal Communication Commission
Registration Number: 293961

July 15, 2019 Certificated by IC
Registration Number: CN0085

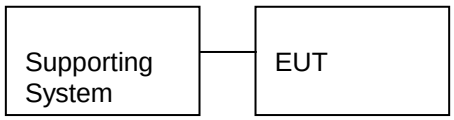
2.4 Accessories of Device (EUT)

Accessories1	:	/
Manufacturer	:	/
Model	:	/
Ratings	:	/

2.5 Tested Supporting System Details

No.	Description	Manufacturer	Model	Serial Number	Certification or DOC
/	/	/	/	/	/

2.6 Block Diagram of connection between EUT and simulators



2.7 Test Conditions

Items	Required	Actual
Temperature range:	15-35℃	24℃
Humidity range:	25-75%	56%
Pressure range:	86-106kPa	98kPa

2.8 Measurement Uncertainty

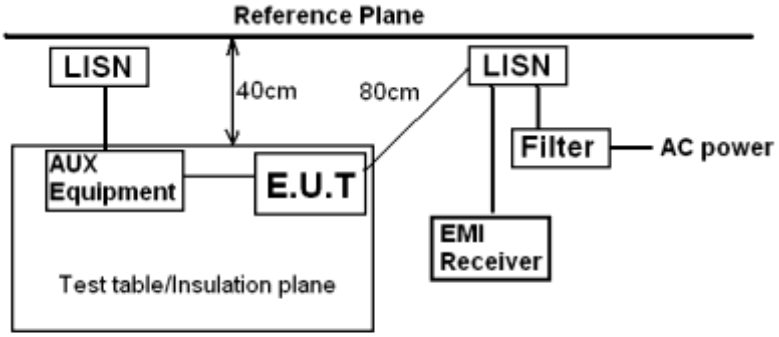
95% confidence levels, k=2)	
Item	Uncertainty
Uncertainty for Power point Conducted Emissions Test	2.74dB
Uncertainty for Radiation Emission test in 3m chamber (below 30MHz)	2.13 dB(Polarize: V)
	2.57dB(Polarize: H)
Uncertainty for Radiation Emission test in 3m chamber (30MHz to 1GHz)	3.77dB(Polarize: V)
	3.80dB(Polarize: H)
Uncertainty for Radiation Emission test in 3m chamber (1GHz to 25GHz)	4.16dB(Polarize: H)
	4.13dB(Polarize: V)
Uncertainty for radio frequency	5.4×10-8
Uncertainty for conducted RF Power	0.37dB
Uncertainty for temperature	0.2℃
Uncertainty for humidity	1%
Uncertainty for DC and low frequency voltages	0.06%

3 Test Instruments list

Equipment	Manufacture	Model No.	Serial No.	Last cal.	Cal Interval
9*6*6 anechoic chamber	CHENYU	9*6*6	N/A	2019.09.06	3Year
Spectrum analyzer	ROHDE&SCHWARZ	FSV40-N	102137	2019.09.05	1Year
Spectrum analyzer	Agilent	N9020A	MY499100060	2019.09.05	1Year
Receiver	ROHDE&SCHWARZ	ESR	1316.3003K03-102082-Wa	2019.09.06	1Year
Receiver	R&S	ESCI	101165	2019.09.05	1Year
Bilog Antenna	Schwarzbeck	VULB 9168	VULB9168-438	2018.04.13	2Year
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D(1201)	2018.04.13	2Year
Active Loop Antenna	SCHWARZBECK	FMZB 1519B	00059	2019.09.07	2Year
Cable	Resenberger	N/A	No.1	2019.09.05	1Year
Cable	Resenberger	N/A	No.2	2019.09.05	1Year
Cable	Resenberger	N/A	No.3	2019.09.05	1Year
Pre-amplifier	HP	HP8347A	2834A00455	2019.09.05	1Year
Pre-amplifier	Agilent	8449B	3008A02664	2019.09.05	1Year
L.I.S.N.#1	Schwarzbeck	NSLK8126	8126466	2019.09.05	1Year
L.I.S.N.#2	ROHDE&SCHWARZ	ENV216	101043	2019.09.05	1 Year
20db Attenuator	ICPROBING	IATS1	82347	2019.08.26	1 Year
Horn Antenna	SCHWARZBECK	BBHA9170	00946	2019.09.07	2 Year
Preamplifier	SKET	LNPA_1840-50	SK2018101801	2019.09.06	1 Year
Power Meter	Agilent	E9300A	MY41496625	2019.09.06	1 Year
Temp. & Humid. Chamber	Weihuang	WHTH-1000-40-880	100631	2019.09.06	1 Year
Switching Mode Power Supply	JUNKE	JK12010S	20140927-6	2019.09.05	1 Year

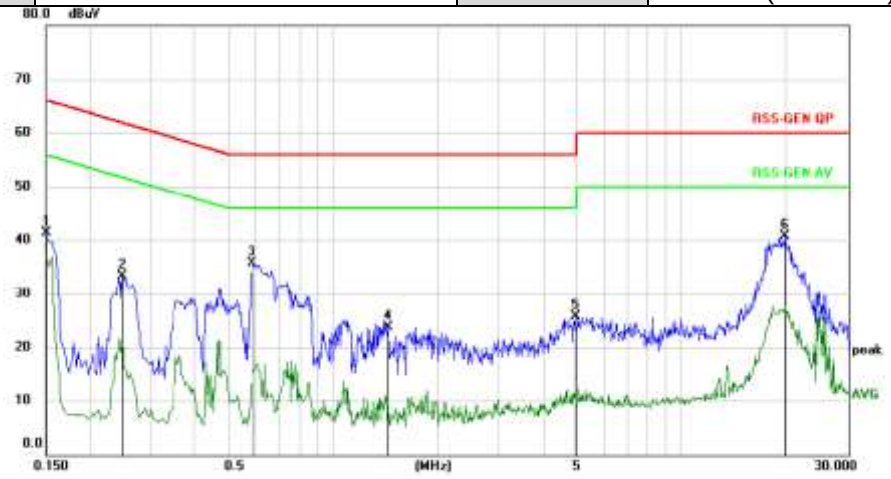
4 Test results and Measurement Data

4.1 Conducted Emissions

<table>
<tr><td>Test Requirement:</td><td>FCC Part15 C Section 15.207</td></tr>
<tr><td>Test Method:</td><td>ANSI C63.10:2013</td></tr>
<tr><td>Test Frequency Range:</td><td>150KHz to 30MHz</td></tr>
<tr><td>Class / Severity:</td><td>Class B</td></tr>
<tr><td>Receiver setup:</td><td>RBW=9KHz, VBW=30KHz</td></tr>
<tr><td>Limit:</td><td>
<table>
<tr><td rowspan="2">Frequency range (MHz)</td><td colspan="2">Limit (dBuV)</td></tr>
<tr><td>Quasi-peak</td><td>Average</td></tr>
<tr><td>0.15-0.5</td><td>66 to 56*</td><td>56 to 46*</td></tr>
<tr><td>0.5-5</td><td>56</td><td>46</td></tr>
<tr><td>5-30</td><td>60</td><td>50</td></tr>
</table>
* Decreases with the logarithm of the frequency.
</td></tr>
<tr><td>Test procedure</td><td>The E.U.T and simulators are connected to the main power through a line impedance stabilization network(L.I.S.N.). The provide a 50ohm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs). Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10:2013 on conducted measurement.</td></tr>
<tr><td>Test setup:</td><td> 

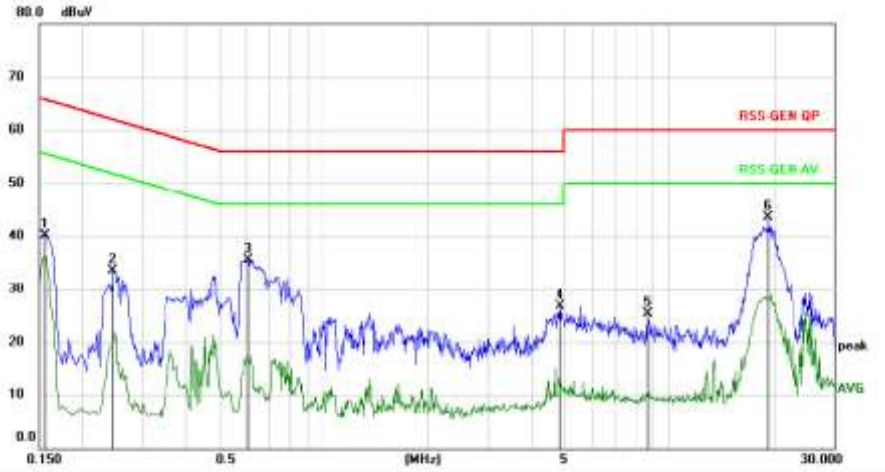
Remark:
E.U.T: Equipment Under Test
LISN: Line Impedence Stabilization Network
Test table height=0.8m</td></tr>
<tr><td>Test results:</td><td>PASS.</td></tr>
</table>

Conclusion: PASS			
EUT Description	Communication Module	**Model No.**	GEBW2455A
Temperature	24℃	**Humidity**	56%
Pol	Line	**Test date**	2019/11/11
Test Voltage	AC 120V/60Hz	**Test mode**	802.11a (5240MHz)



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	31.27	9.94	41.21	66.00	-24.79	peak	
2		0.2490	23.29	9.97	33.26	61.79	-28.53	peak	
3		0.5880	25.81	9.92	35.73	56.00	-20.27	peak	
4		1.4400	13.89	9.90	23.79	56.00	-32.21	peak	
5		4.9680	15.72	10.04	25.76	56.00	-30.24	peak	
6	*	19.8240	30.20	10.47	40.67	60.00	-19.33	peak	

Pol	Neutral

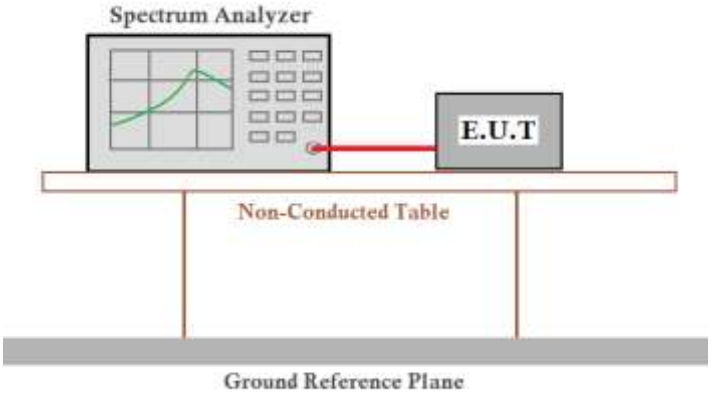


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1560	30.16	9.94	40.10	65.67	-25.57	peak	
2		0.2460	23.48	9.97	33.45	61.89	-28.44	peak	
3		0.6060	25.66	9.92	35.58	56.00	-20.42	peak	
4		4.8360	16.70	10.02	26.72	56.00	-29.28	peak	
5		8.7240	15.11	10.17	25.28	60.00	-34.72	peak	
6	*	19.3830	32.96	10.45	43.41	60.00	-16.59	peak	

*:Maximum data x:Over limit !:over margin (Reference Only

Note: Measurement=Reading Level+Correc Factor. Factor=(LISN or ISN or PLC or Current Probe)Factor+Cable

4.2 Emission Bandwidth and 99% Occupied Bandwidth

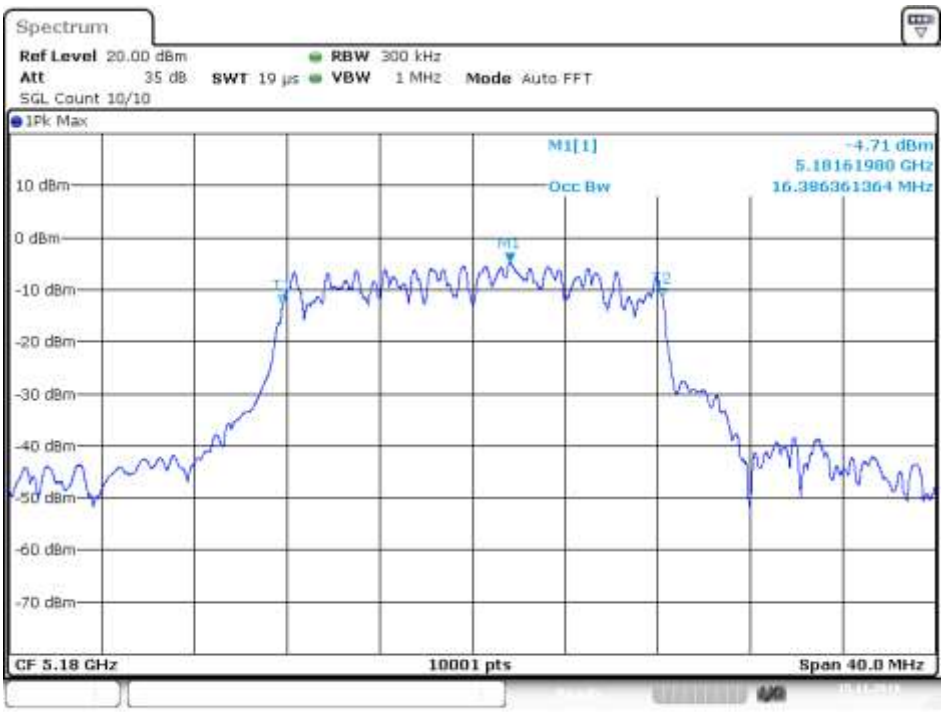
Test Requirement:	FCC Part15 E Section 15.407
Test Method:	KDB 789033 D02 General UNII Test Procedures New Rules v02r01
Limit:	Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 kHz for the band 5.725−5.85 GHz.
Test setup:	
Test procedure:	According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
Test results:	Pass

Measurement Data:

U-NII-1							
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	802.11a	5180	Ant 1	16.3864	18.548	0	Pass
NVNT	802.11a	5200	Ant 1	16.4544	20.316	0	Pass
NVNT	802.11a	5240	Ant 1	16.4984	19.656	0	Pass
NVNT	802.11ac20	5180	Ant 1	17.7702	20.16	0	Pass
NVNT	802.11ac20	5200	Ant 1	17.9462	20.692	0	Pass
NVNT	802.11ac20	5240	Ant 1	18.5741	20.064	0	Pass
NVNT	802.11ac40	5190	Ant 1	35.9244	37.616	0	Pass
NVNT	802.11ac40	5230	Ant 1	35.9004	37.952	0	Pass
NVNT	802.11ac80	5210	Ant 1	75.2245	77.184	0	Pass
NVNT	802.11n(HT20)	5180	Ant 1	17.6062	19.752	0	Pass
NVNT	802.11n(HT20)	5200	Ant 1	17.5902	19.384	0	Pass
NVNT	802.11n(HT20)	5240	Ant 1	17.8422	20.056	0	Pass
NVNT	802.11n(HT40)	5190	Ant 1	36.0364	37.896	0	Pass
NVNT	802.11n(HT40)	5230	Ant 1	36.0604	37.656	0	Pass

Test plots as followed:

OBW NVNT 802.11a 5180MHz Ant1



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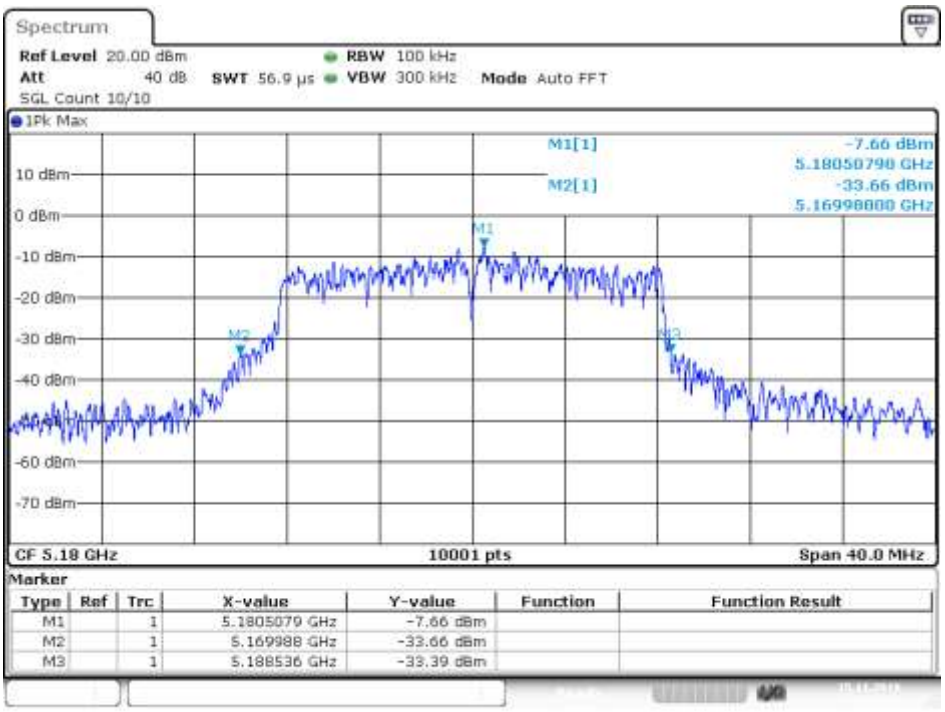

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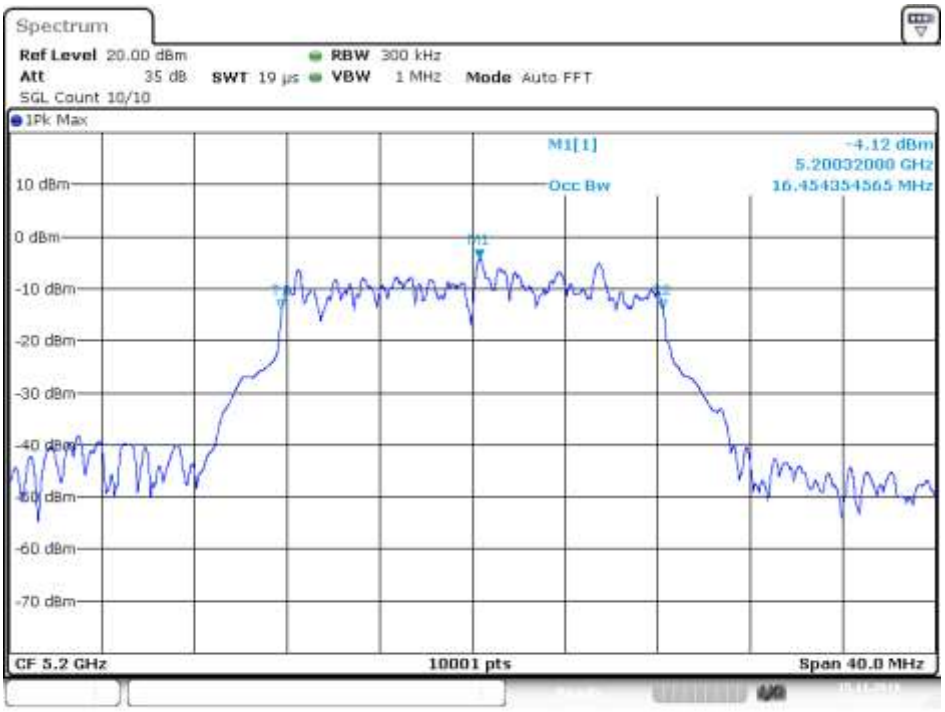

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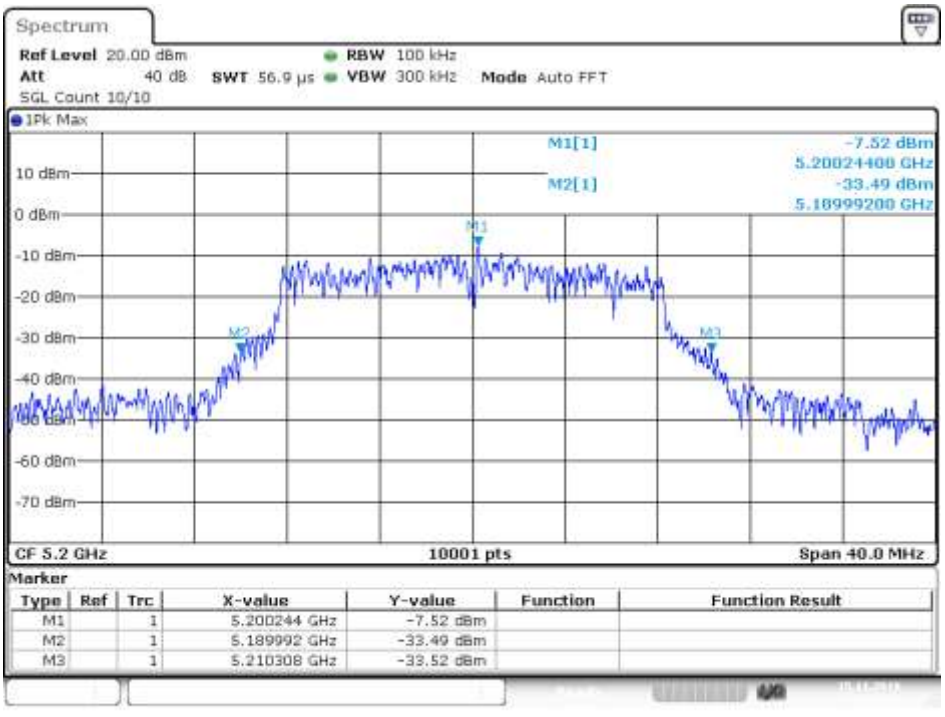
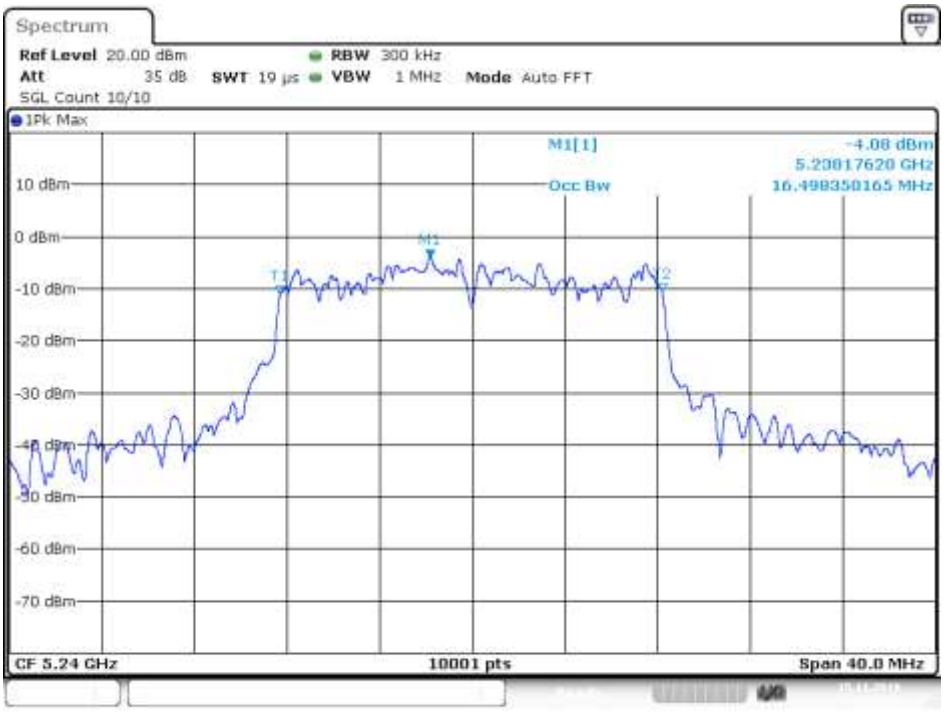


OBW NVNT 802.11a 5240MHz Ant1



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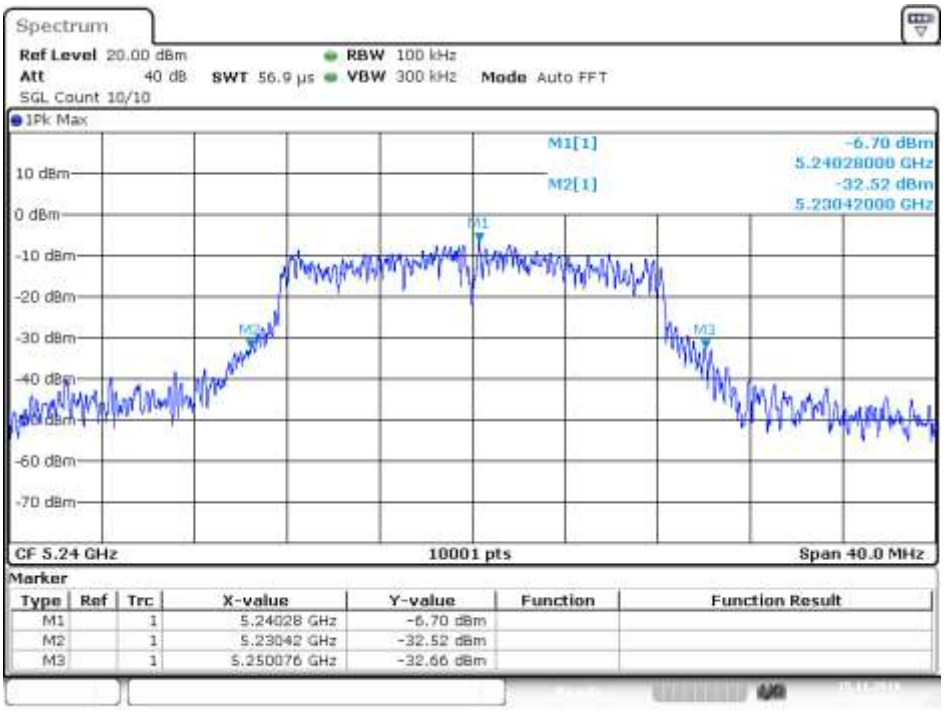

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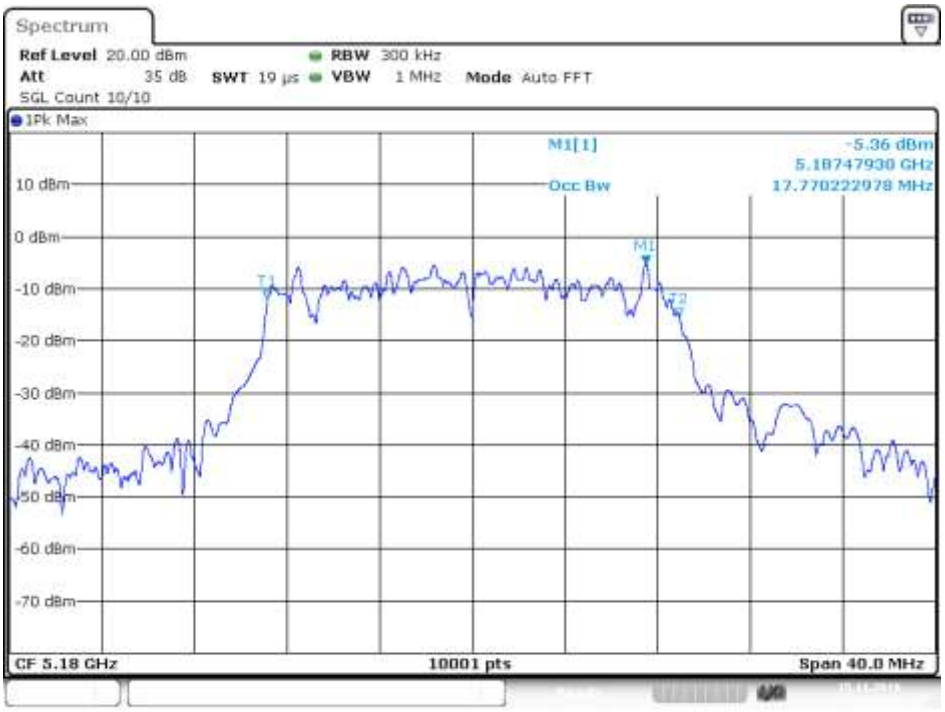

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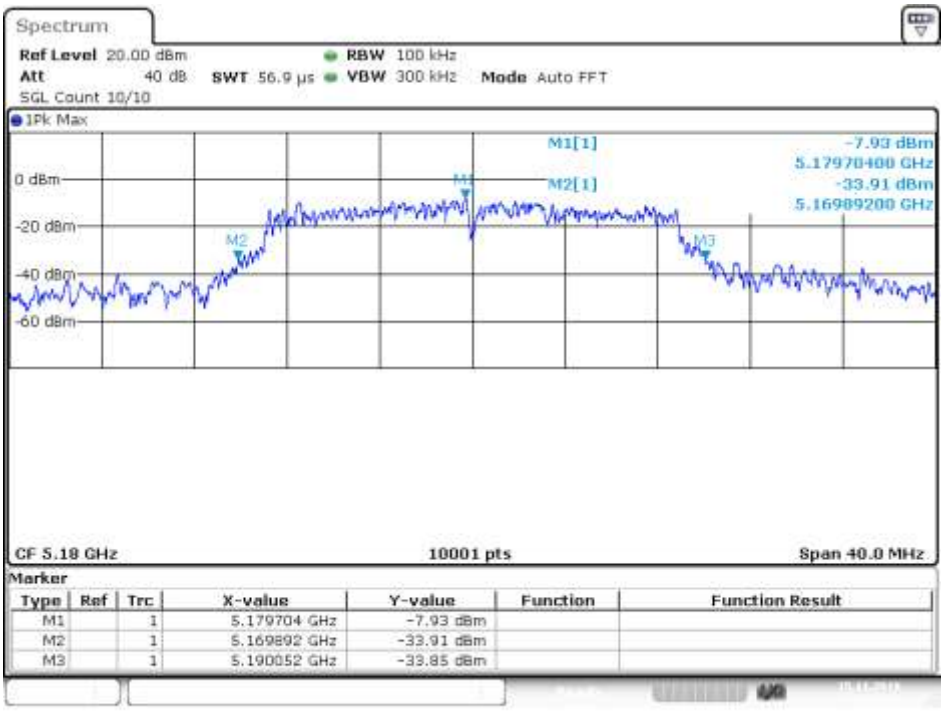

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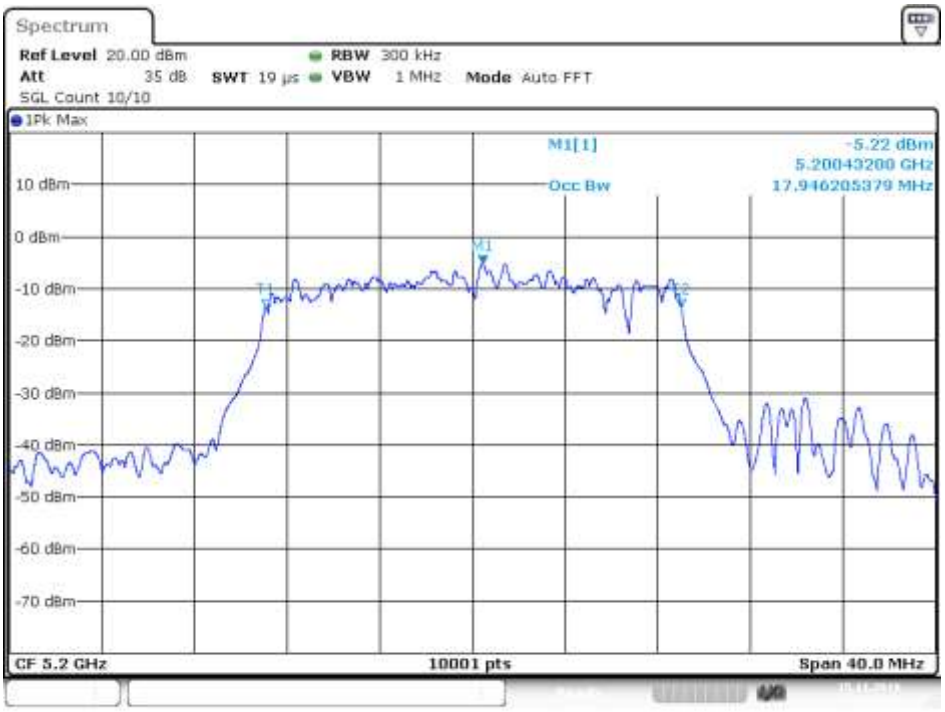

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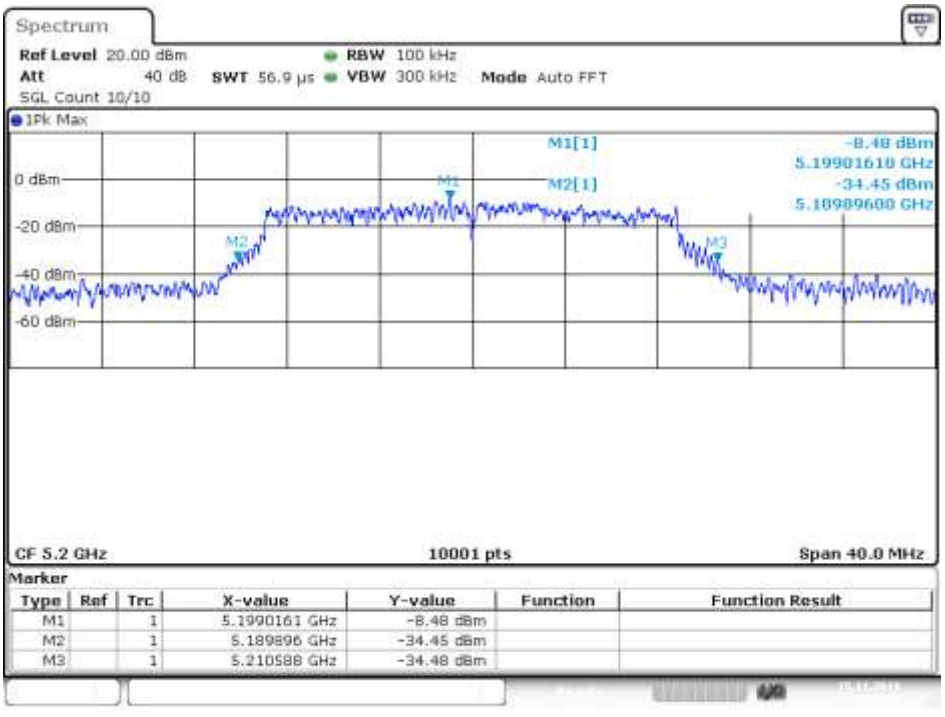

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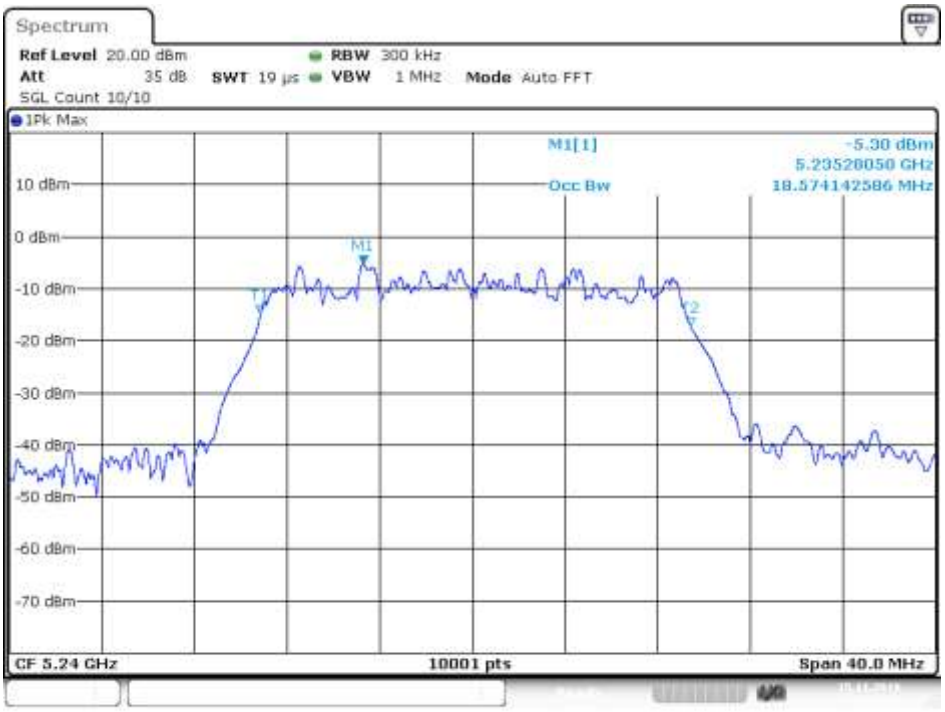

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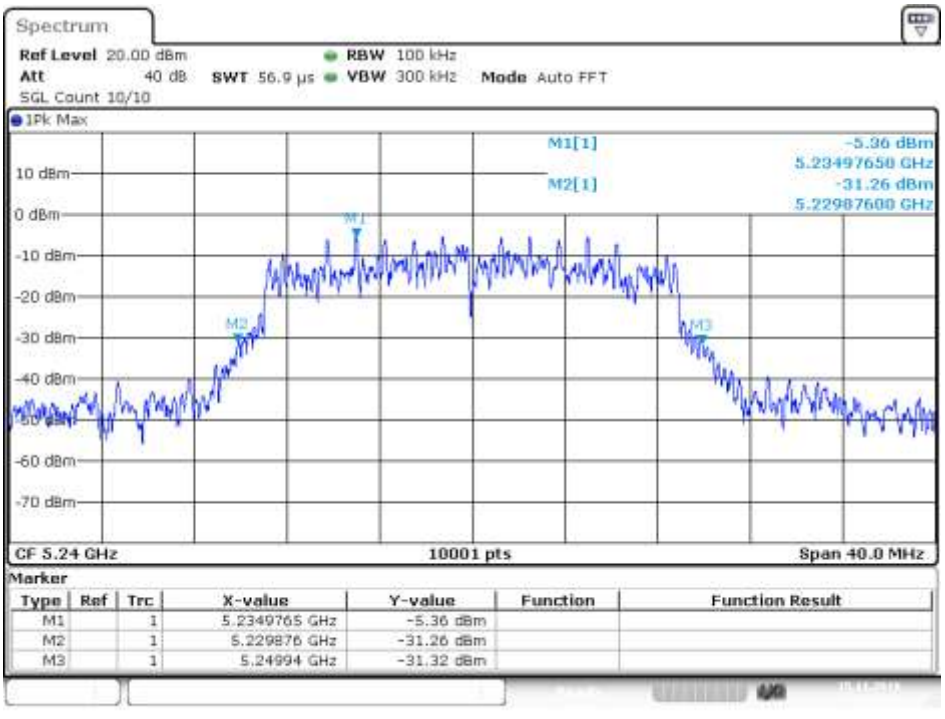

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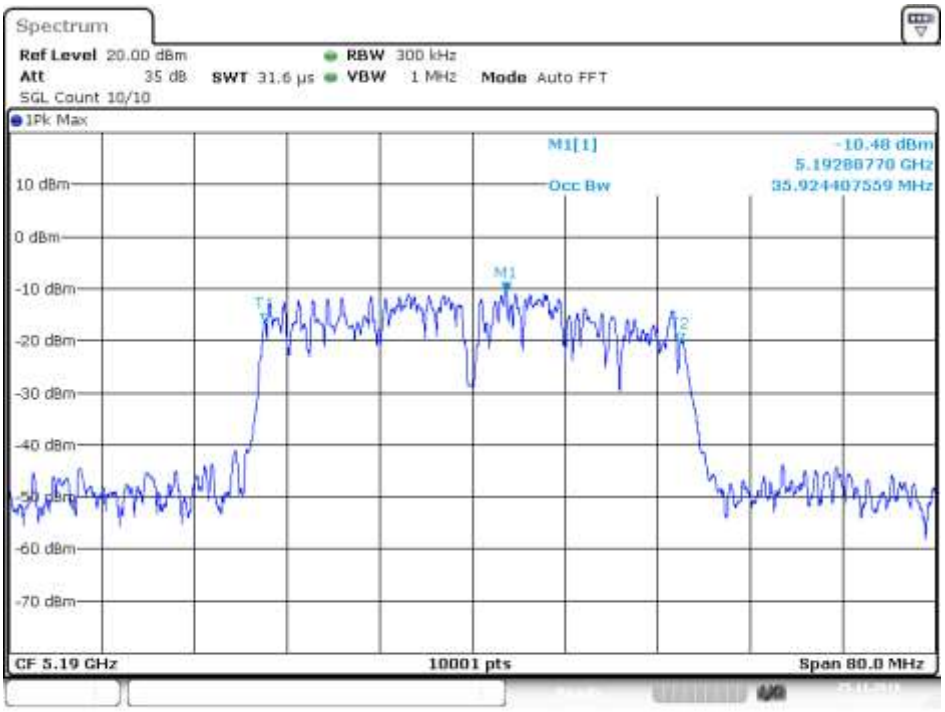

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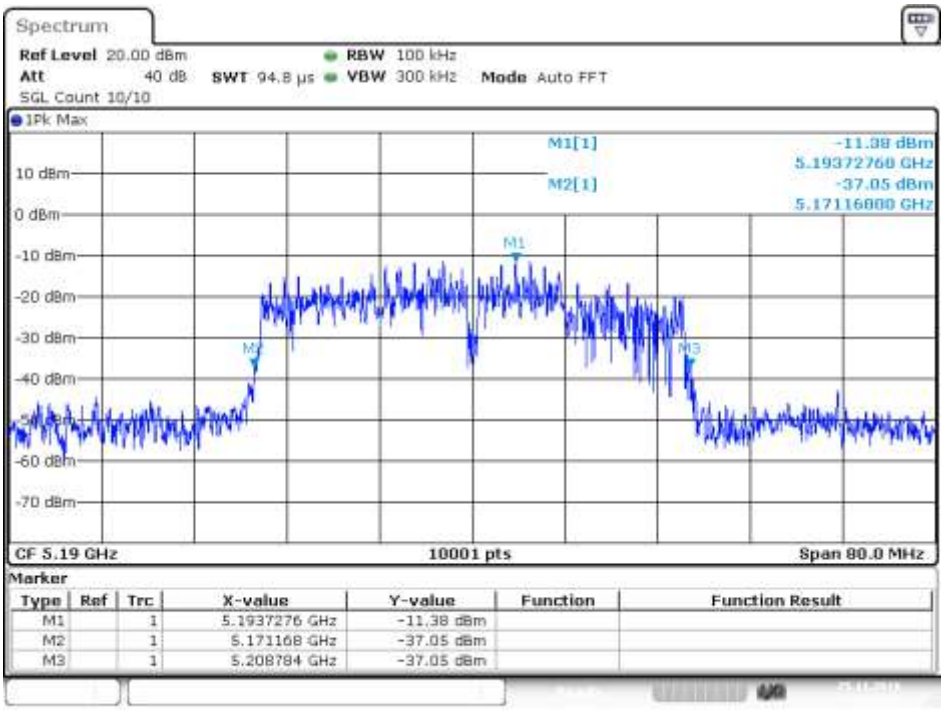
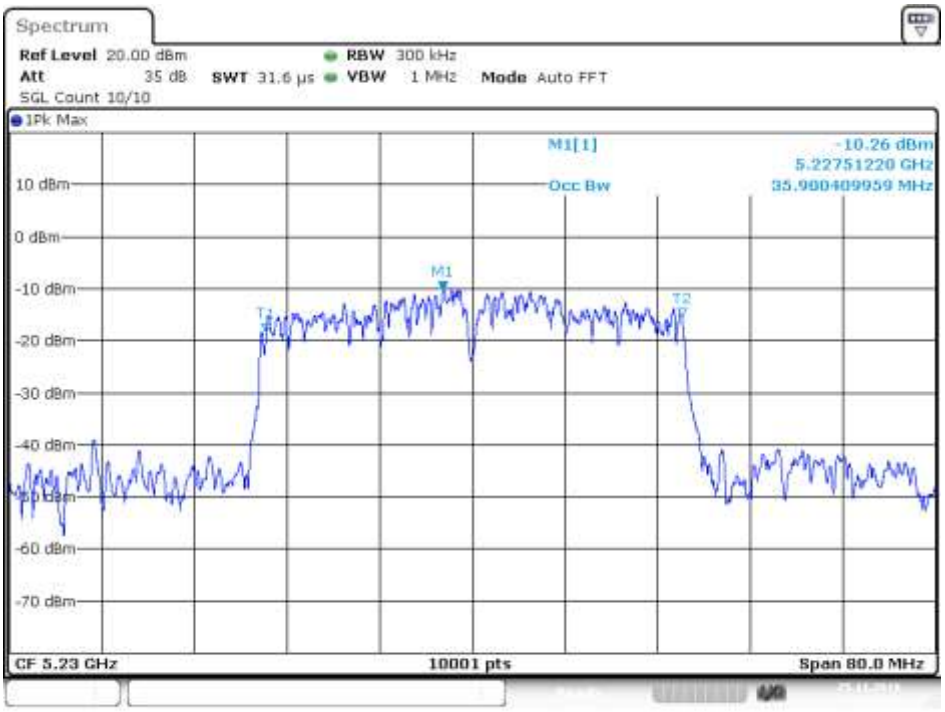


OBW NVNT 802.11ac40 5230MHz Ant1



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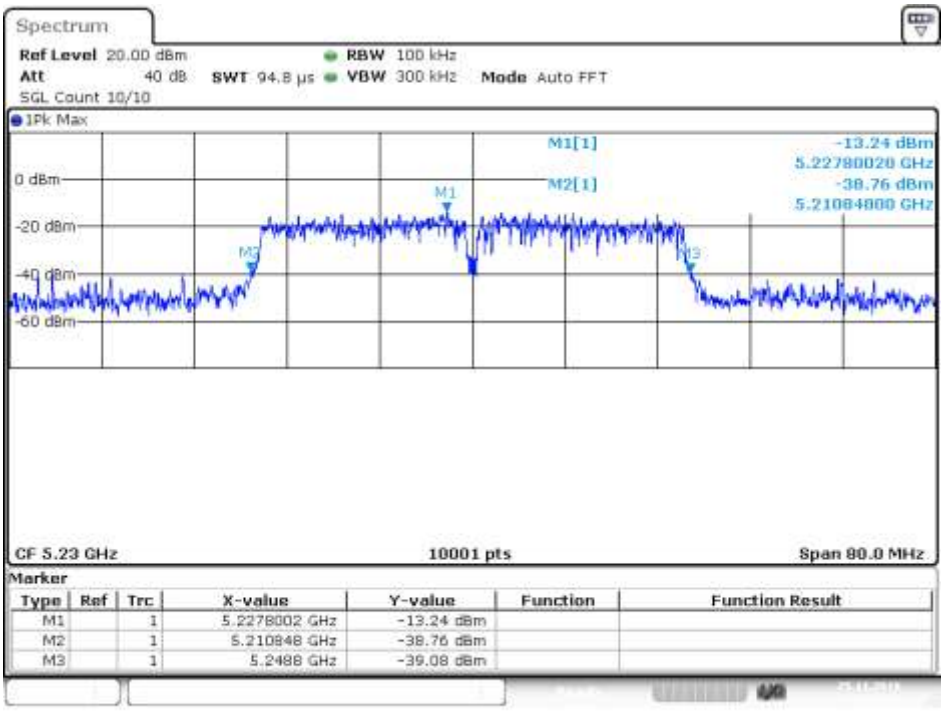
-26 dB BW NVNT 802.11ac40 5230MHz Ant1



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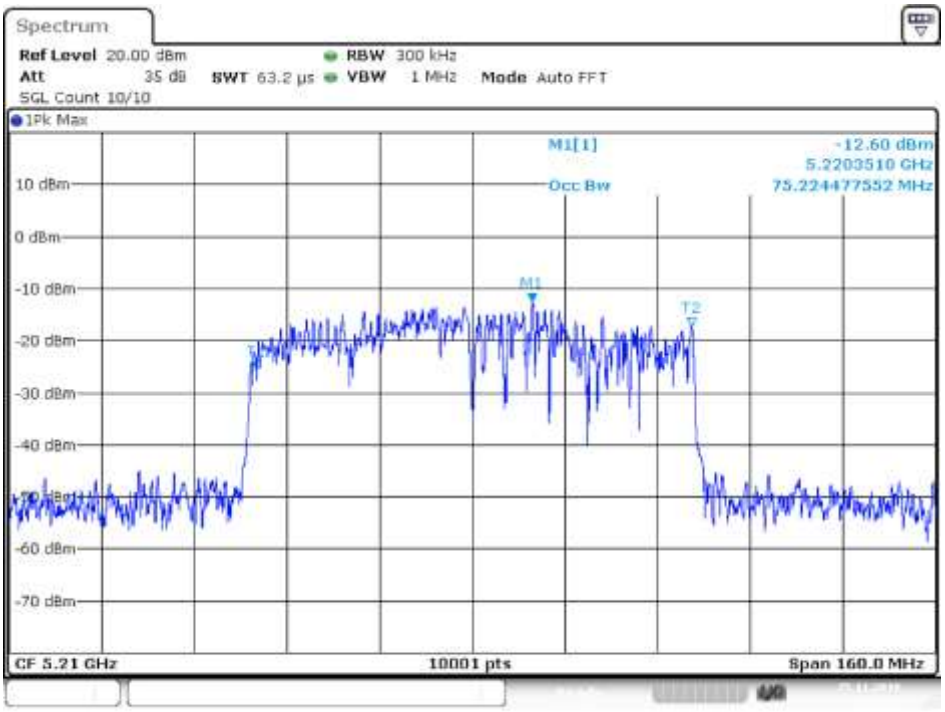
OBW NVNT 802.11ac80 5210MHz Ant1



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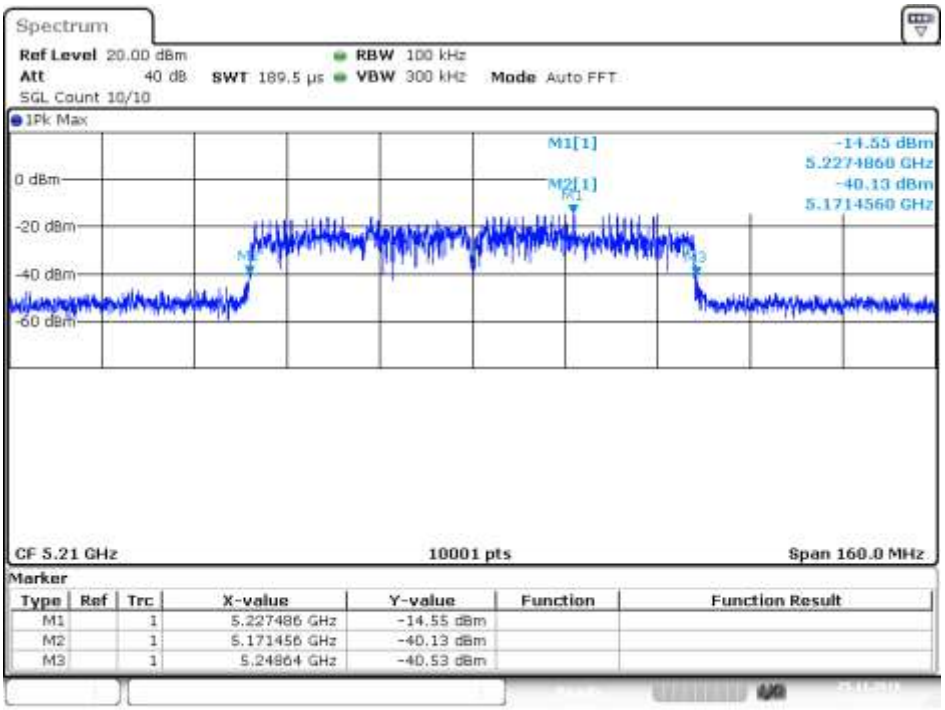

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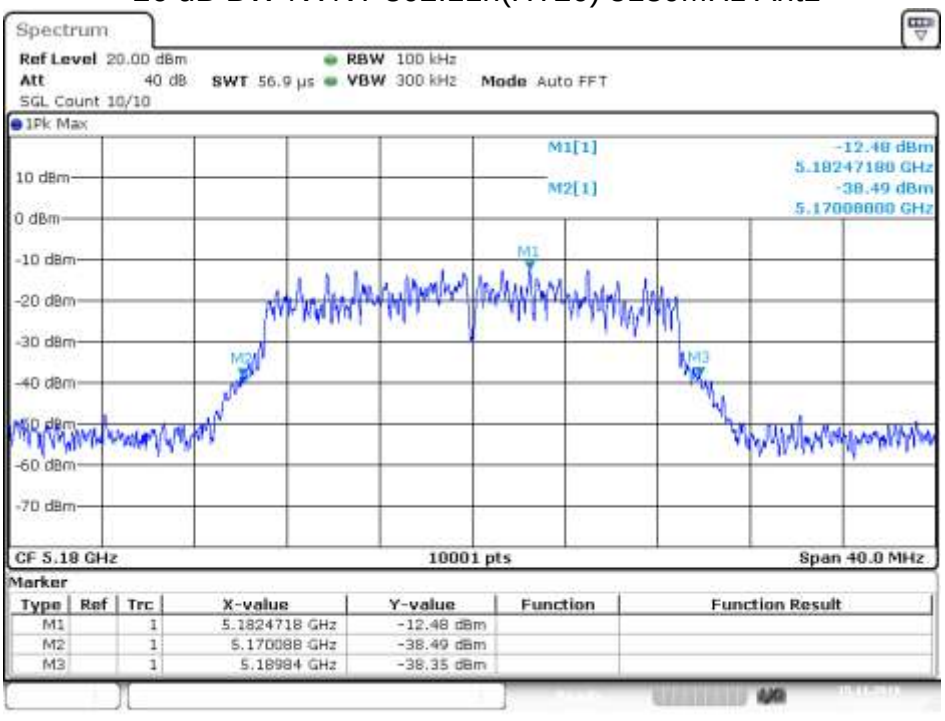
OBW NVNT 802.11n(HT20) 5180MHz Ant1

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



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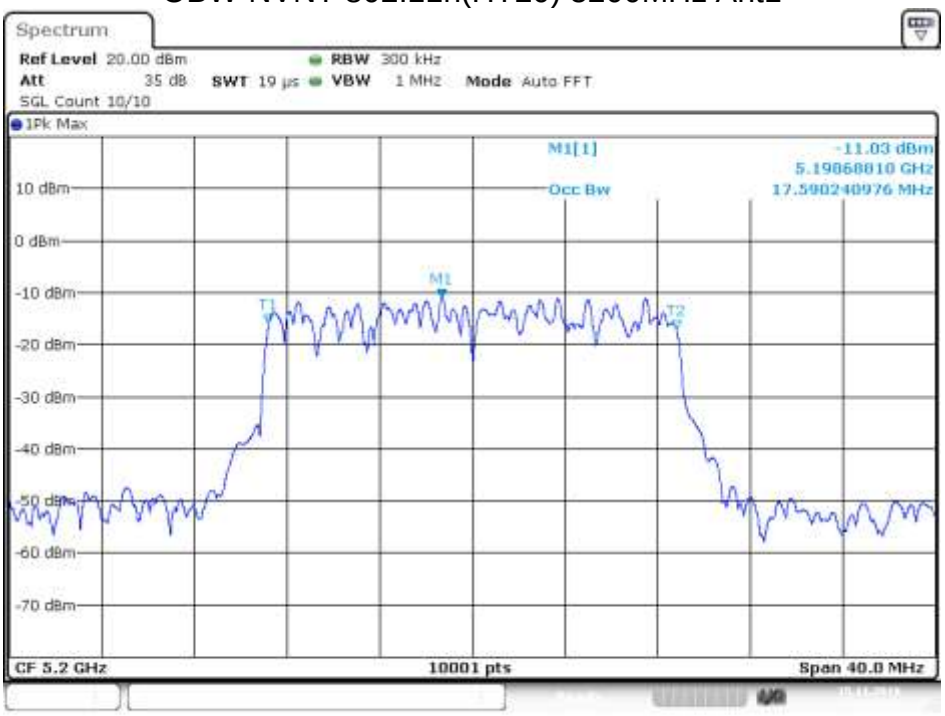
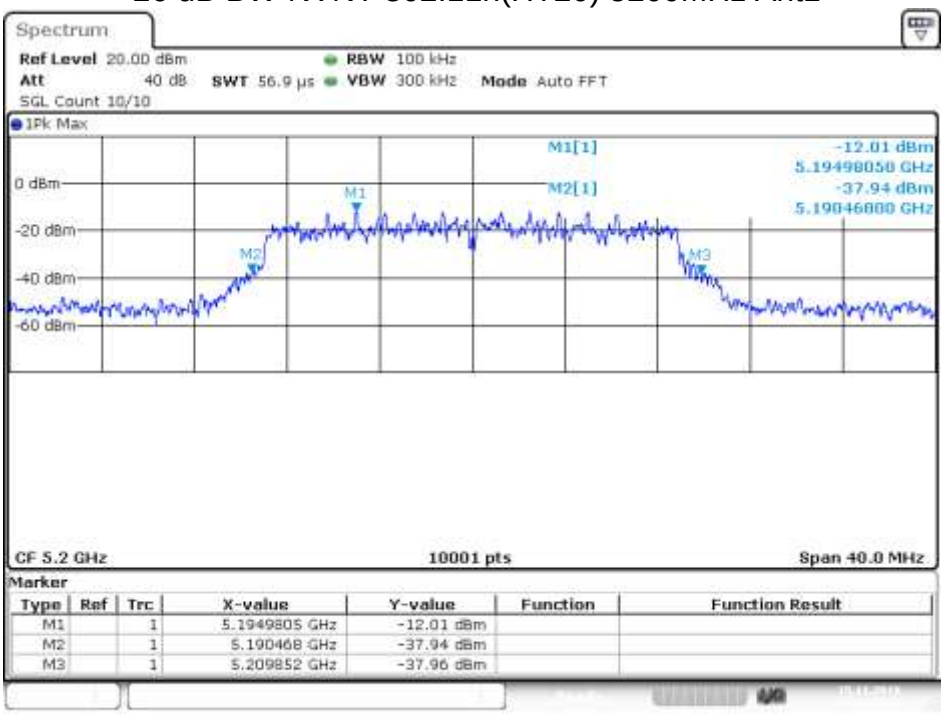
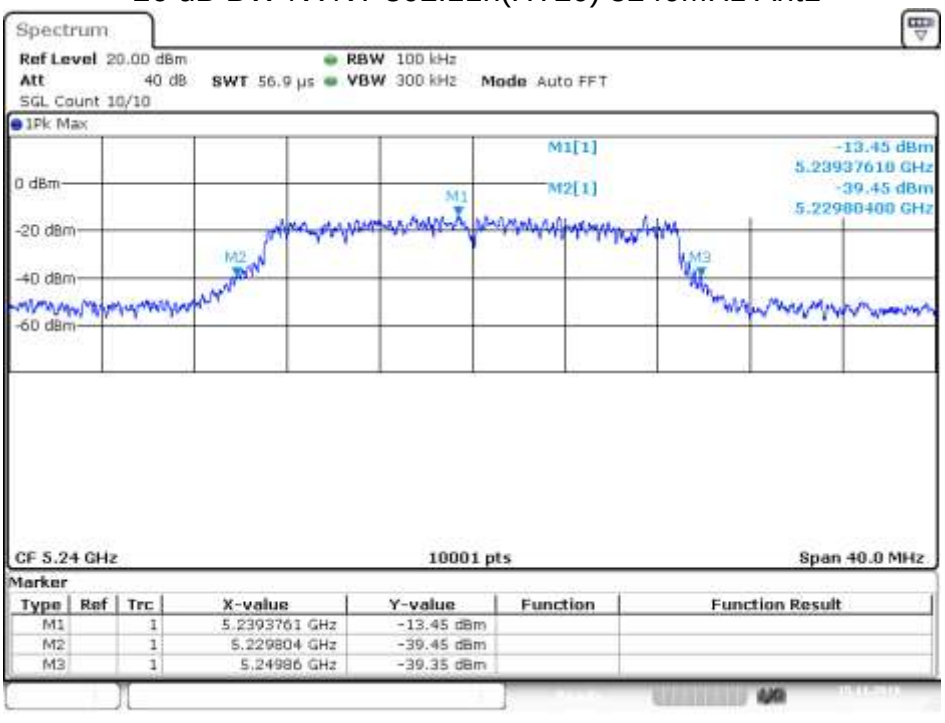


-26 dB BW NVNT 802.11n(HT20) 5200MHz Ant1

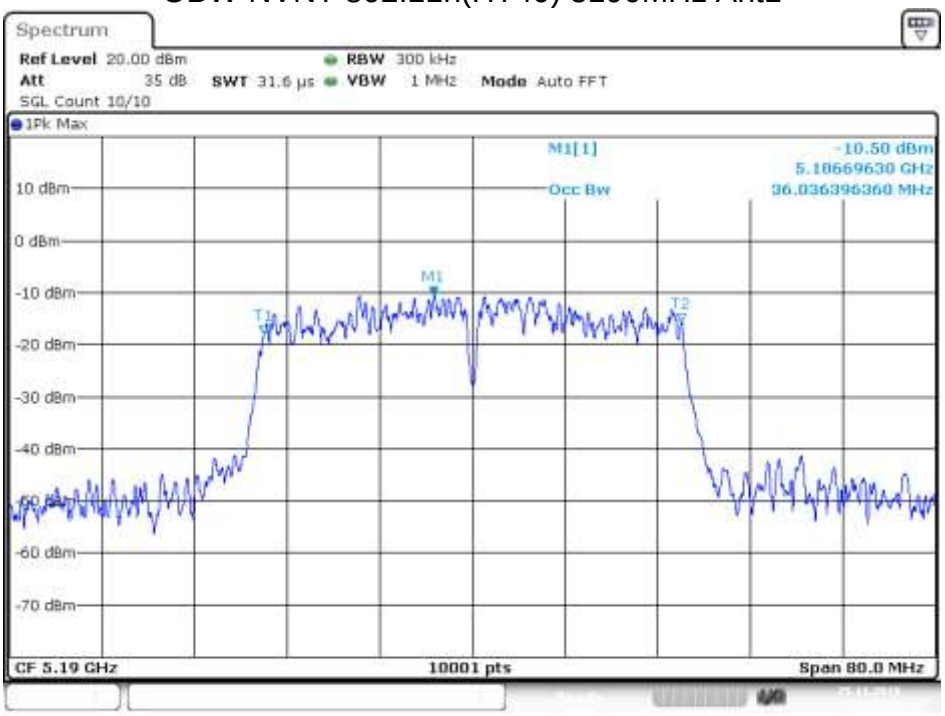


OBW NVNT 802.11n(HT20) 5240MHz Ant1

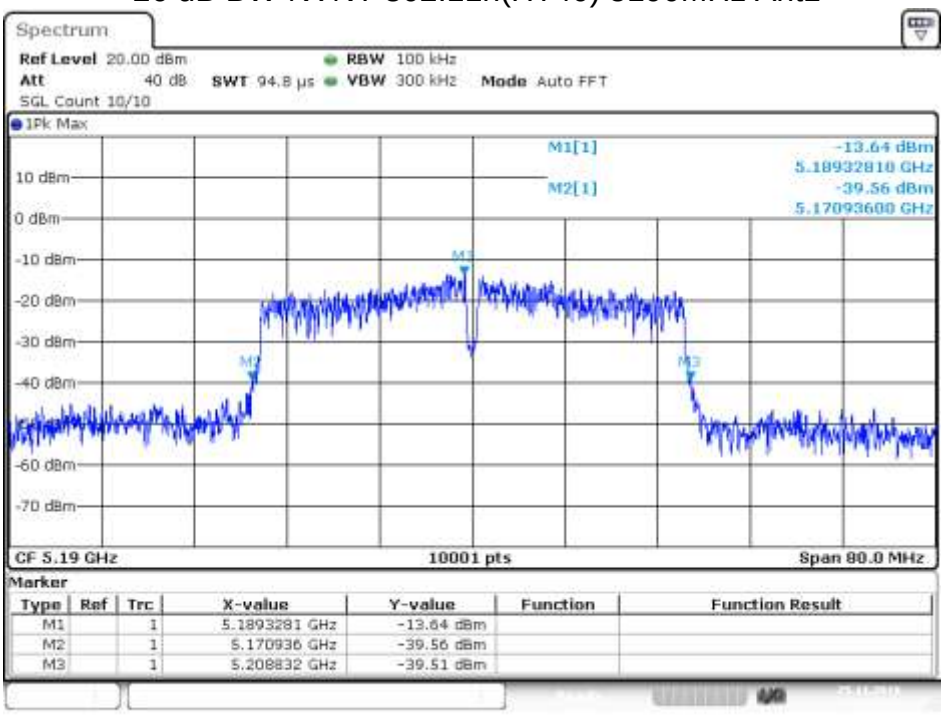
-26 dB BW NVNT 802.11n(HT20) 5240MHz Ant1



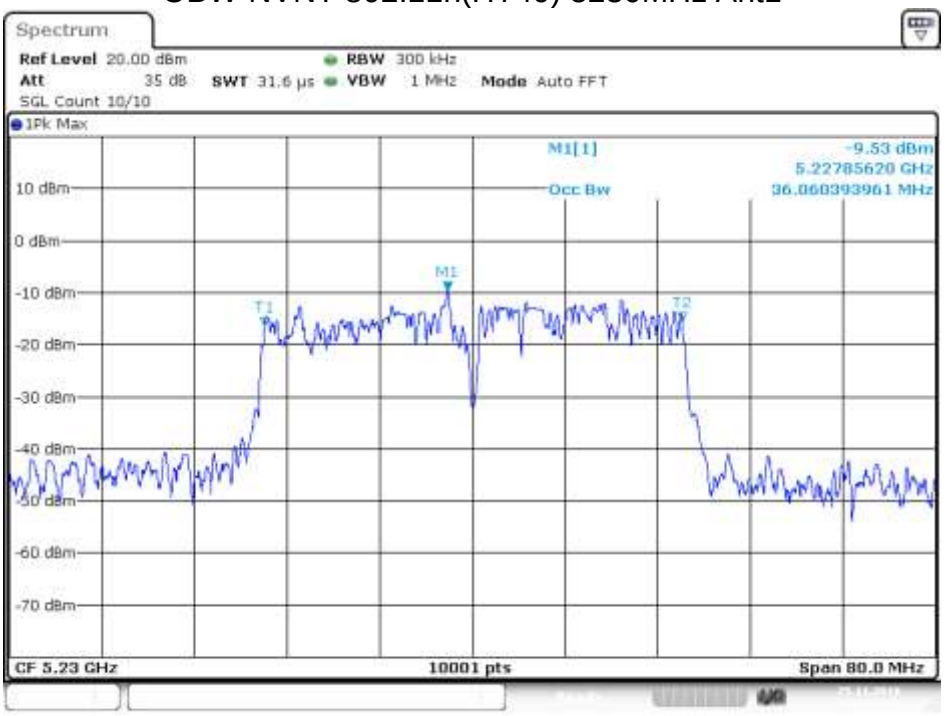
OBW NVNT 802.11n(HT40) 5190MHz Ant1



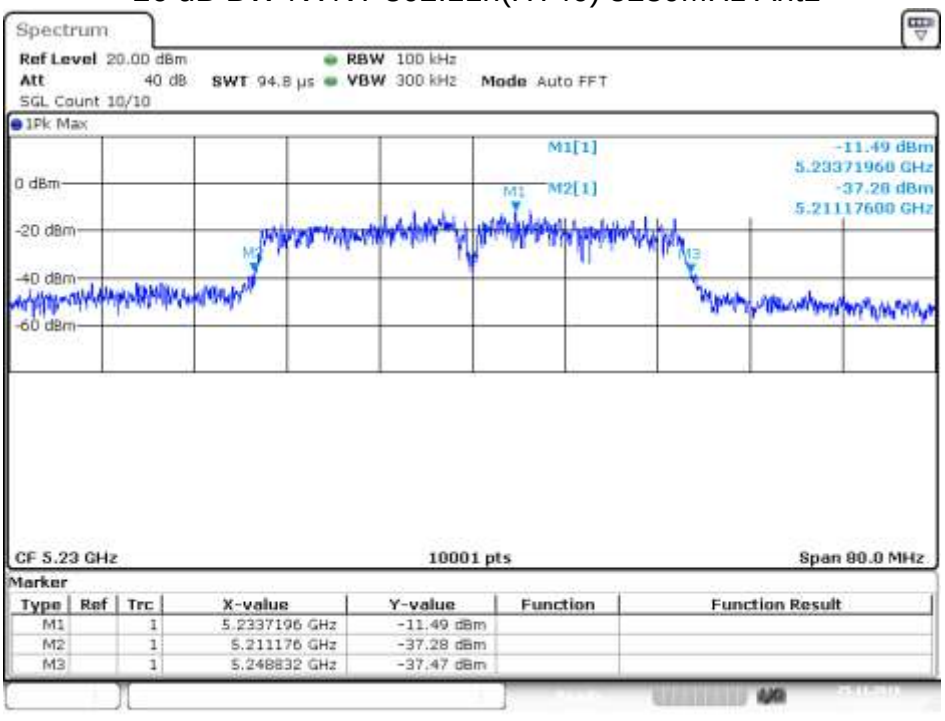
-26 dB BW NVNT 802.11n(HT40) 5190MHz Ant1



OBW NVNT 802.11n(HT40) 5230MHz Ant1

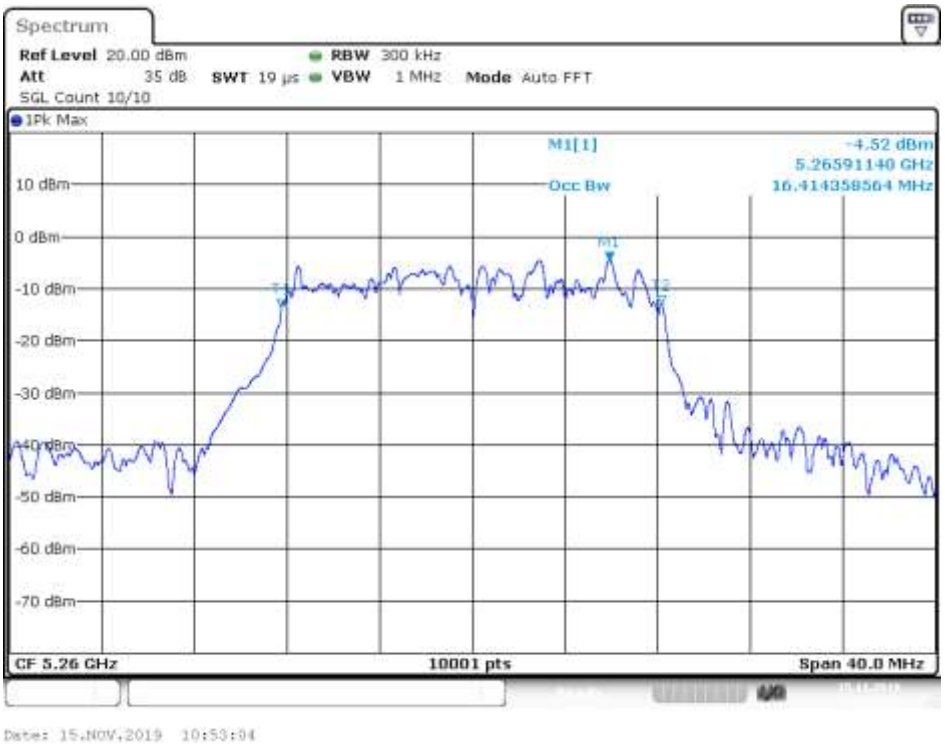


-26 dB BW NVNT 802.11n(HT40) 5230MHz Ant1

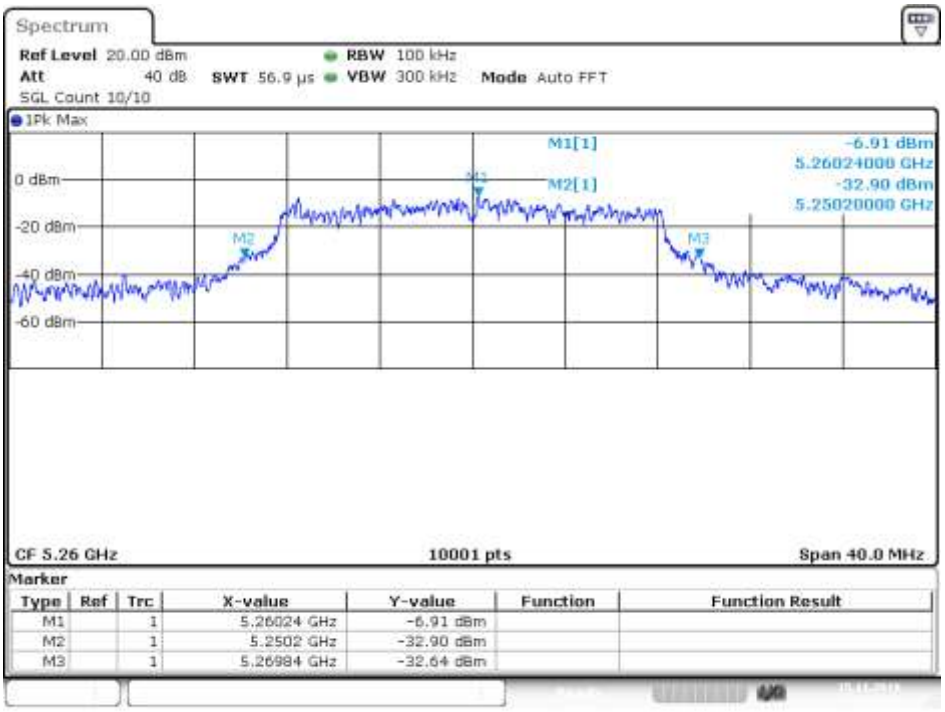


U-NII-2A							
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	802.11a	5260	Ant 1	16.4144	19.64	0	Pass
NVNT	802.11a	5280	Ant 1	16.6103	19.824	0	Pass
NVNT	802.11a	5320	Ant 1	16.4824	19.392	0	Pass
NVNT	802.11ac20	5260	Ant 1	17.7462	19.756	0	Pass
NVNT	802.11ac20	5280	Ant 1	17.7222	20.468	0	Pass
NVNT	802.11ac20	5320	Ant 1	17.7422	20.216	0	Pass
NVNT	802.11ac40	5270	Ant 1	35.8364	37.728	0	Pass
NVNT	802.11ac40	5310	Ant 1	36.1324	38.112	0	Pass
NVNT	802.11ac80	5290	Ant 1	75.8004	77.984	0	Pass
NVNT	802.11n(HT20)	5260	Ant 1	17.4983	18.6	0	Pass
NVNT	802.11n(HT20)	5280	Ant 1	17.5022	20.604	0	Pass
NVNT	802.11n(HT20)	5320	Ant 1	17.6782	19.032	0	Pass
NVNT	802.11n(HT40)	5270	Ant 1	36.1324	37.696	0	Pass
NVNT	802.11n(HT40)	5310	Ant 1	36.0924	37.832	0	Pass

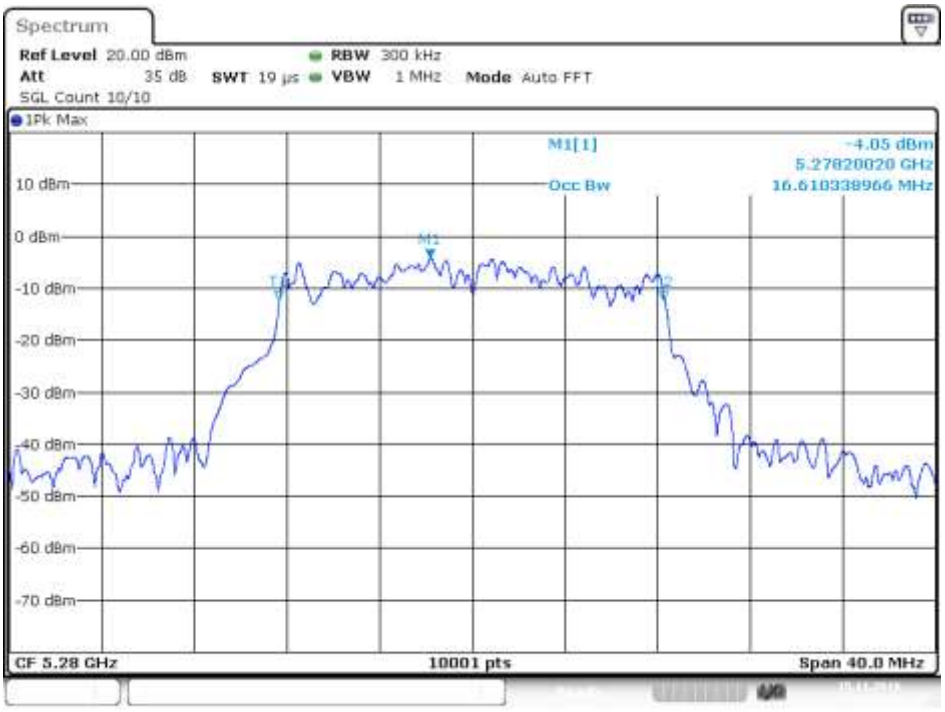
OBW NVNT 802.11a 5260MHz Ant1



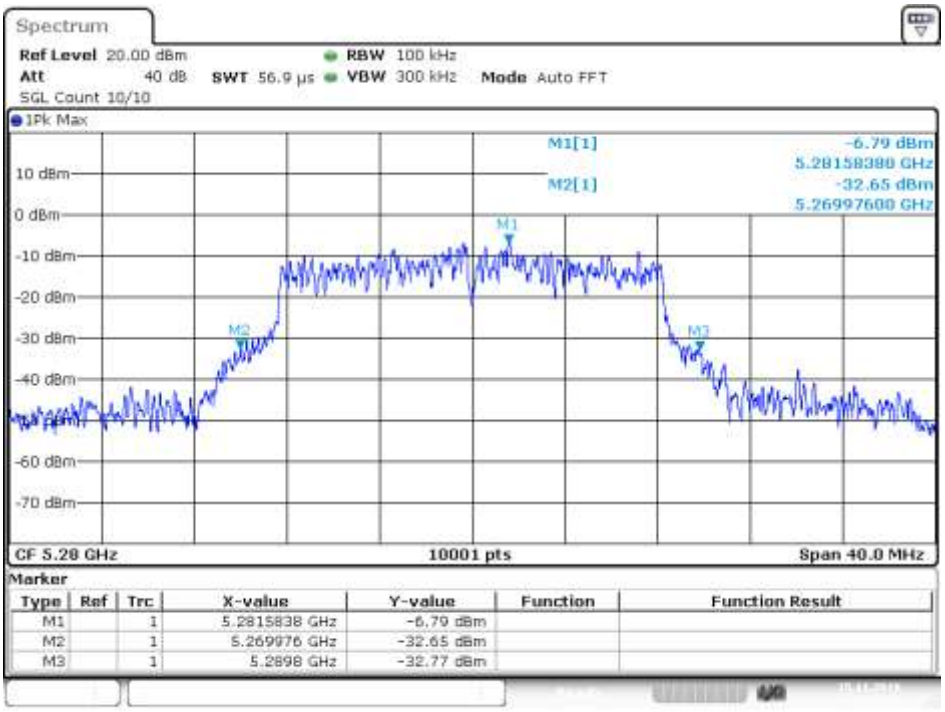
-26 dB BW NVNT 802.11a 5260MHz Ant1



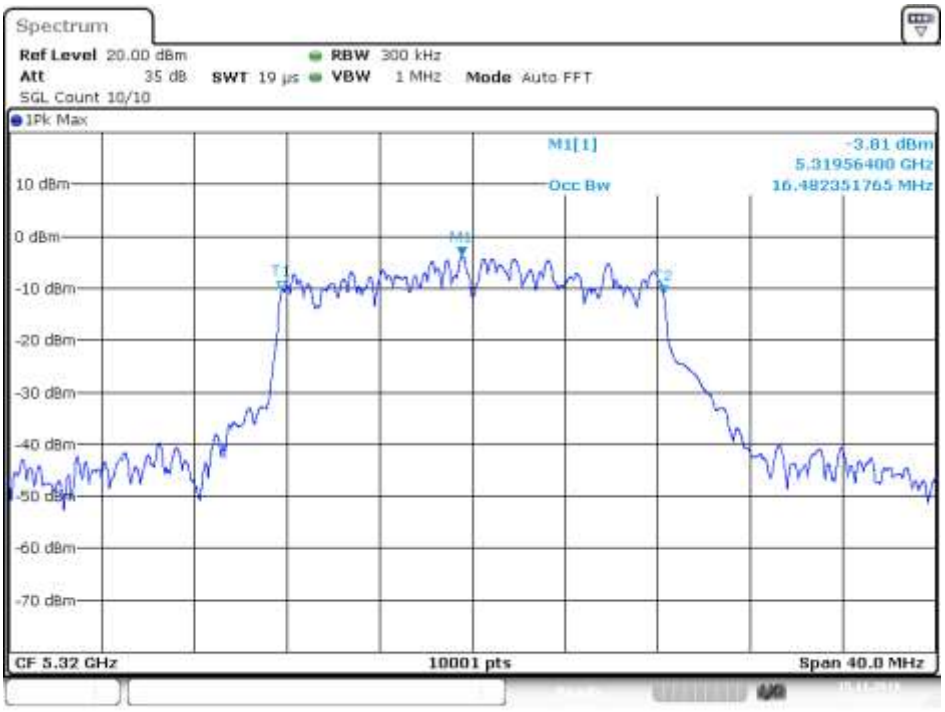
OBW NVNT 802.11a 5280MHz Ant1



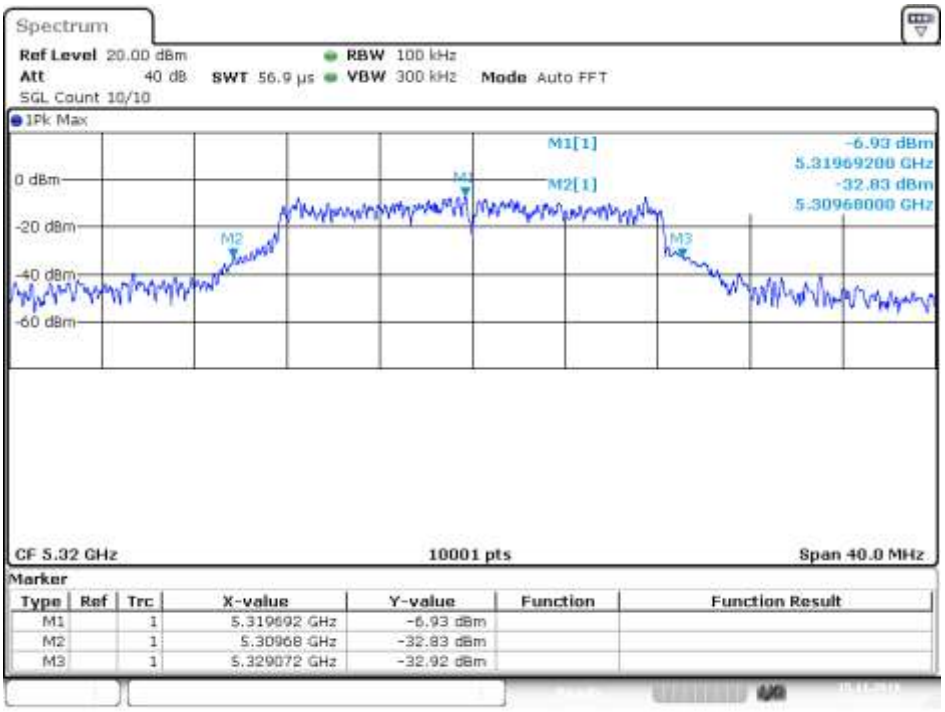
-26 dB BW NVNT 802.11a 5280MHz Ant1



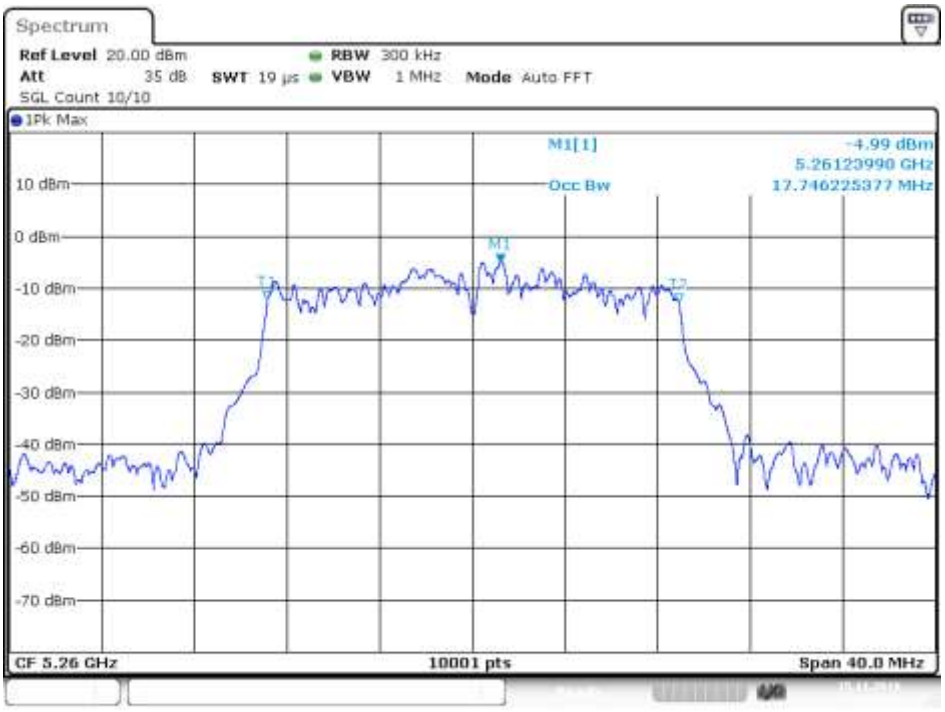
OBW NVNT 802.11a 5320MHz Ant1



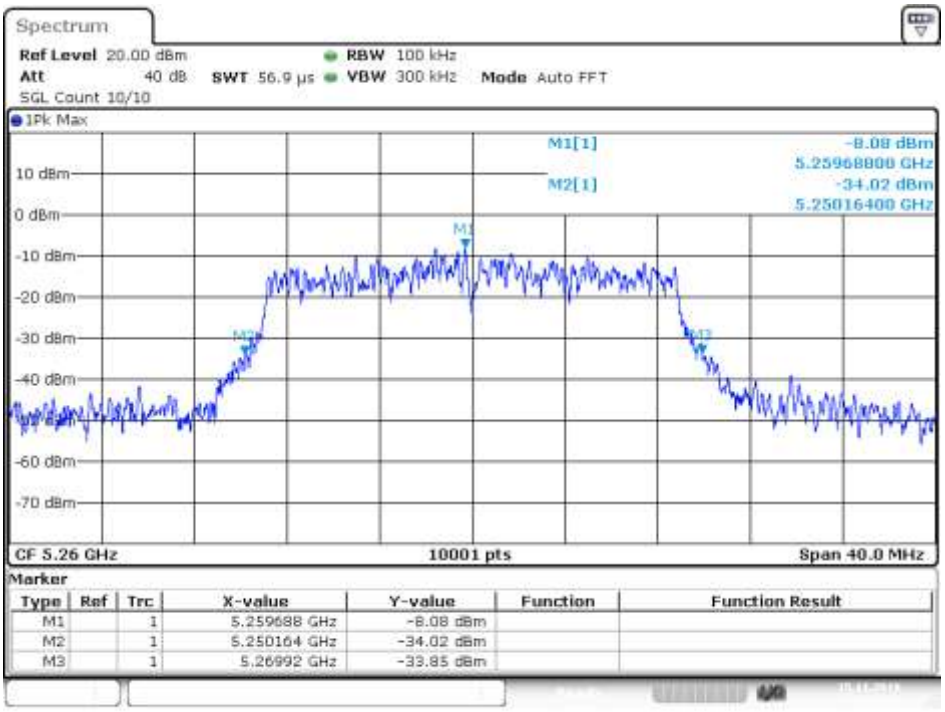
-26 dB BW NVNT 802.11a 5320MHz Ant1



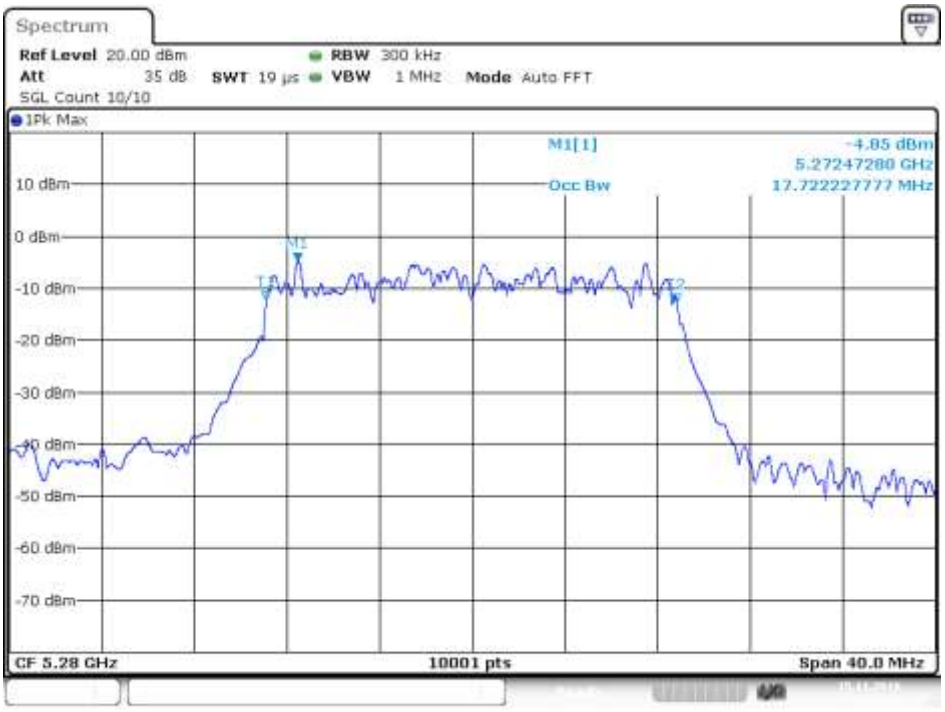
OBW NVNT 802.11ac20 5260MHz Ant1



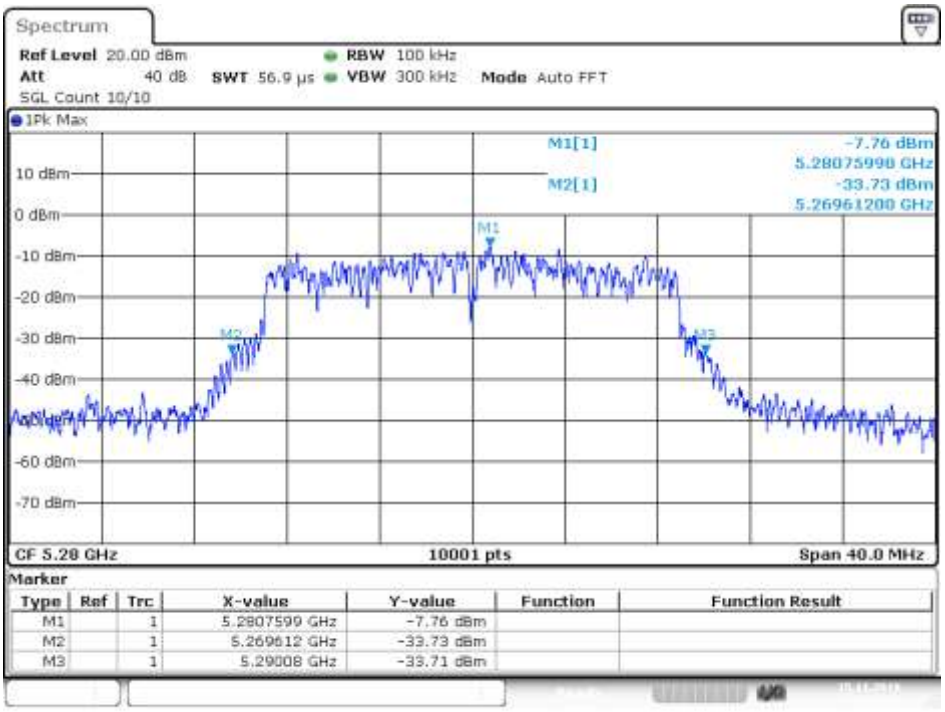
-26 dB BW NVNT 802.11ac20 5260MHz Ant1



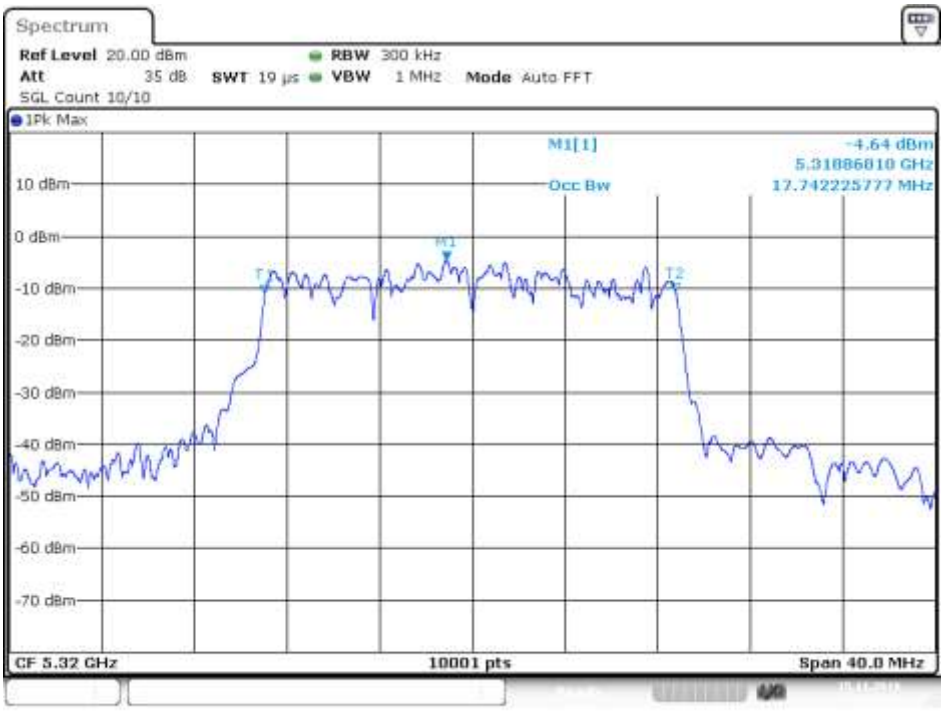
OBW NVNT 802.11ac20 5280MHz Ant1



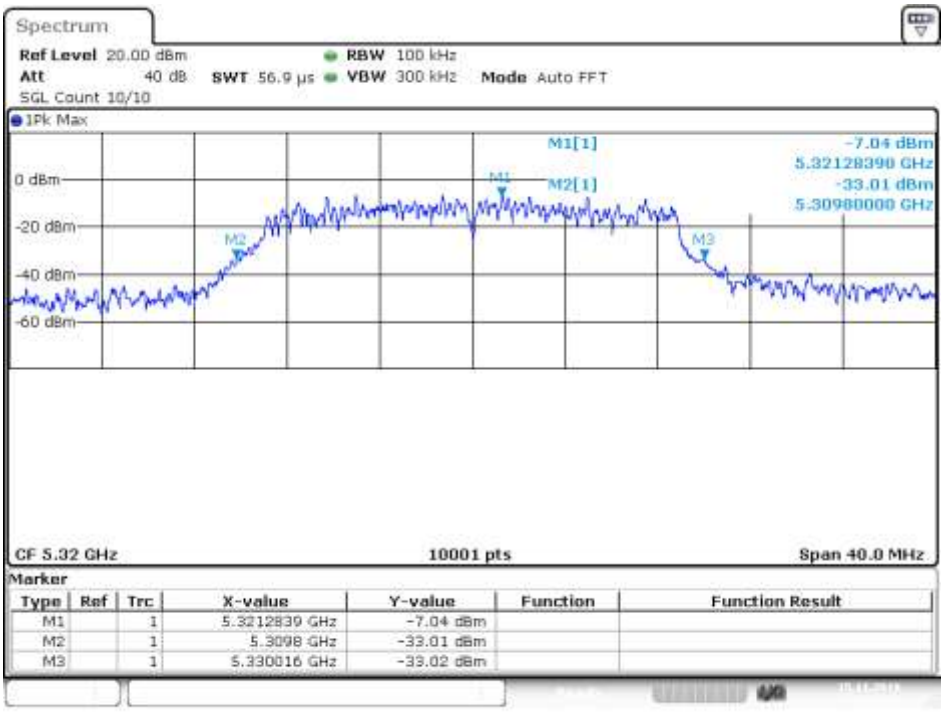
-26 dB BW NVNT 802.11ac20 5280MHz Ant1



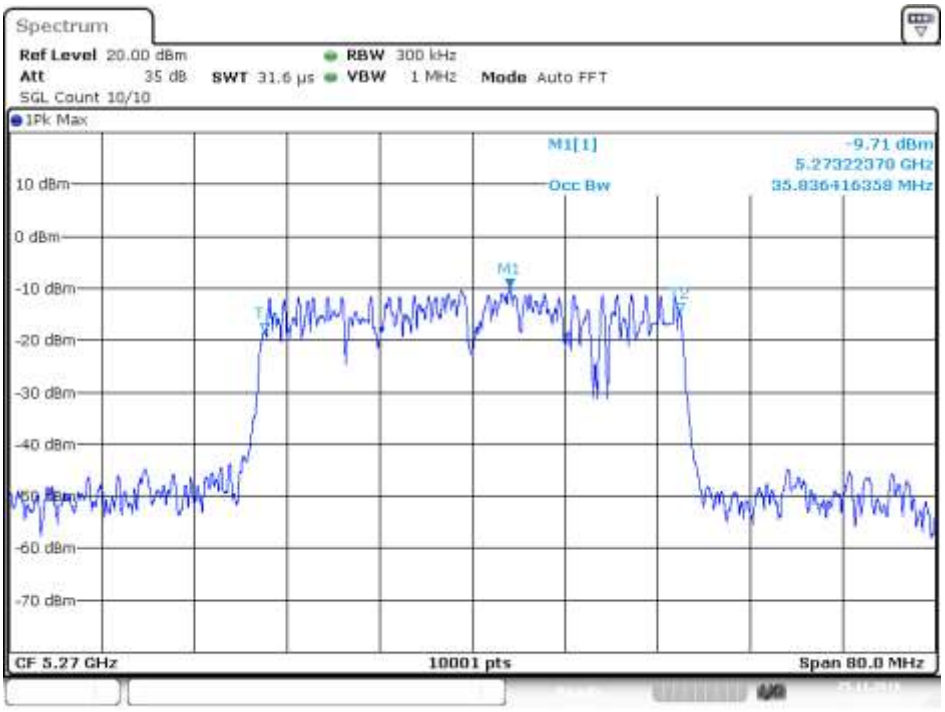
OBW NVNT 802.11ac20 5320MHz Ant1



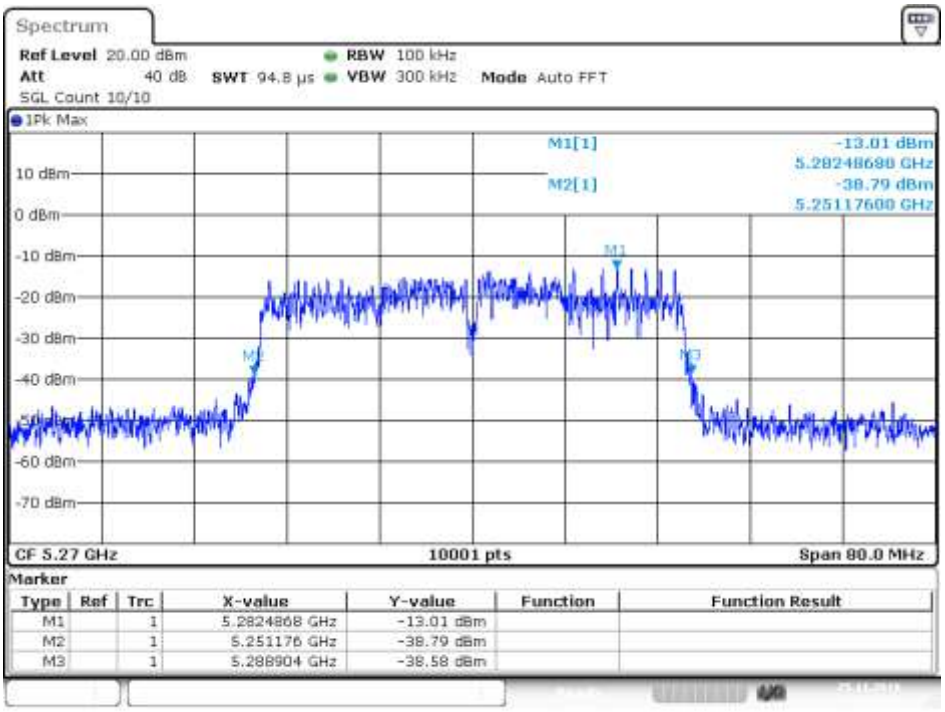
-26 dB BW NVNT 802.11ac20 5320MHz Ant1



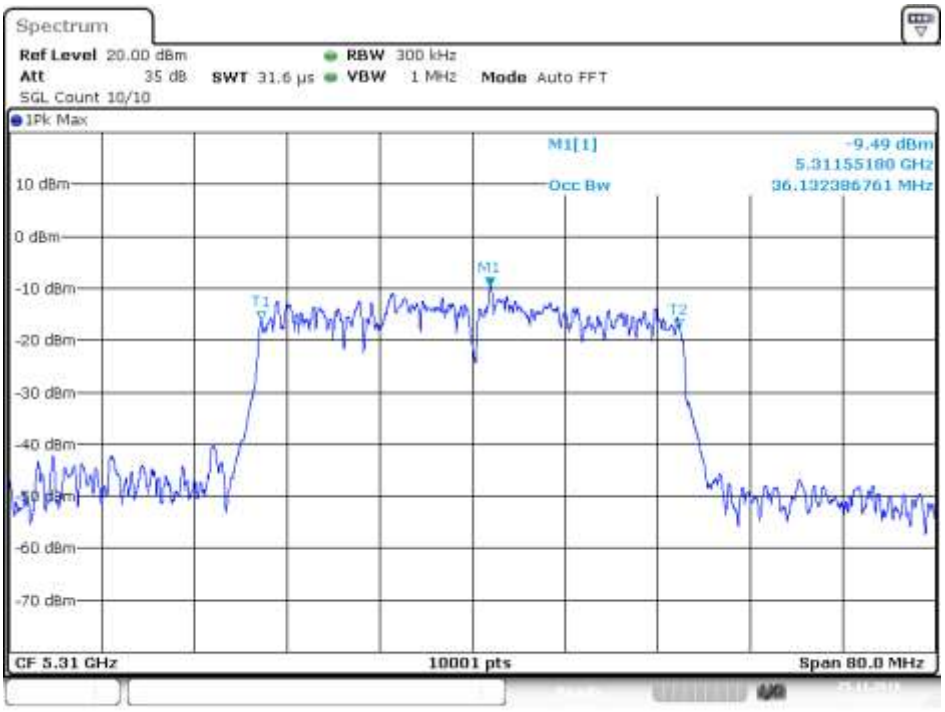
OBW NVNT 802.11ac40 5270MHz Ant1



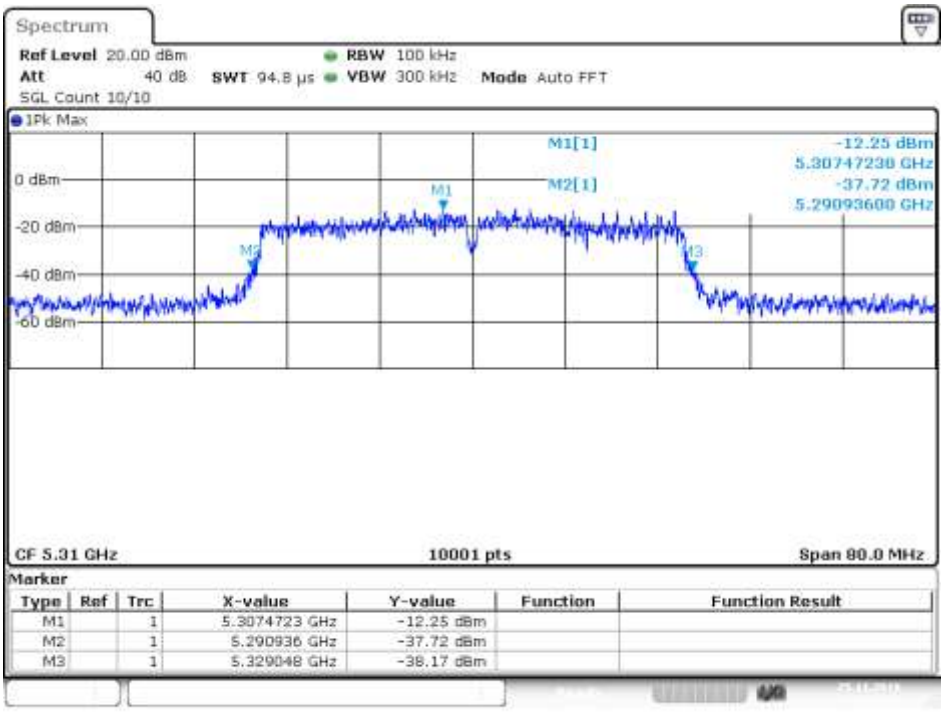
-26 dB BW NVNT 802.11ac40 5270MHz Ant1



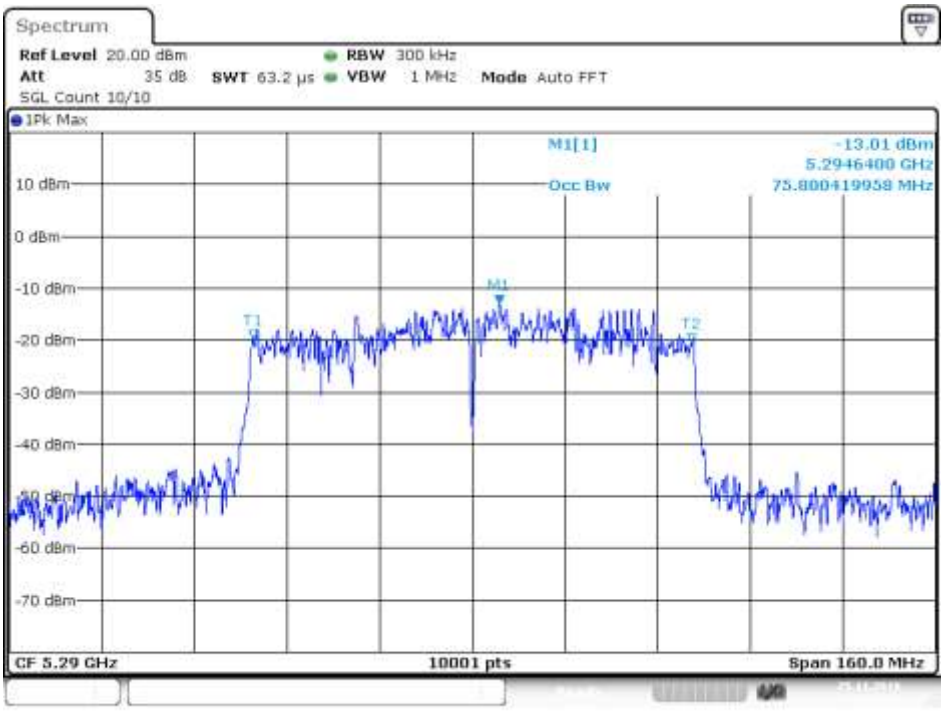
OBW NVNT 802.11ac40 5310MHz Ant1



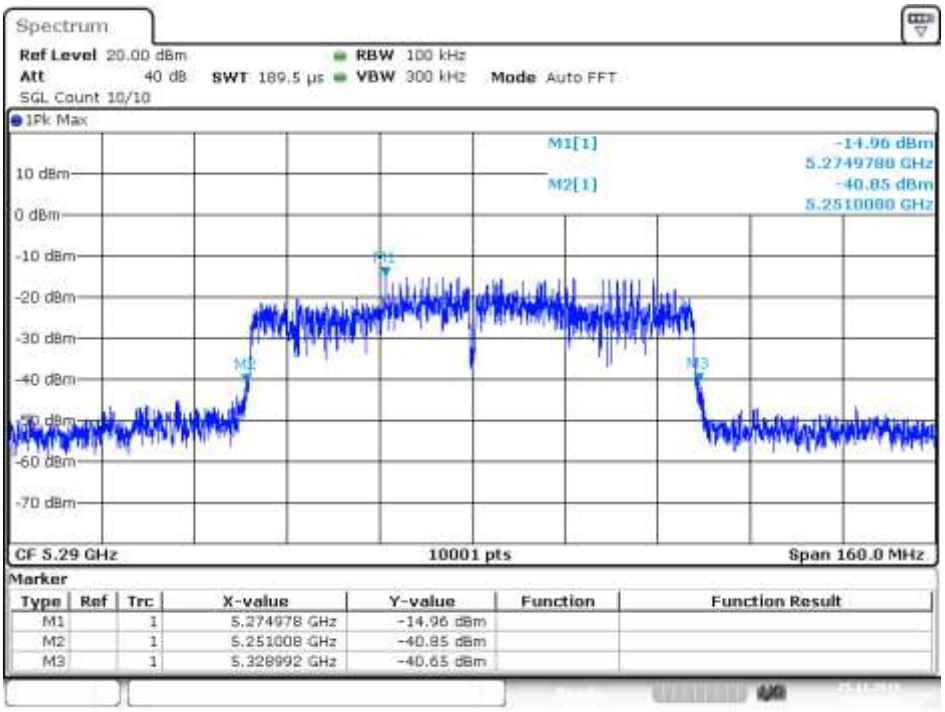
-26 dB BW NVNT 802.11ac40 5310MHz Ant1



OBW NVNT 802.11ac80 5290MHz Ant1

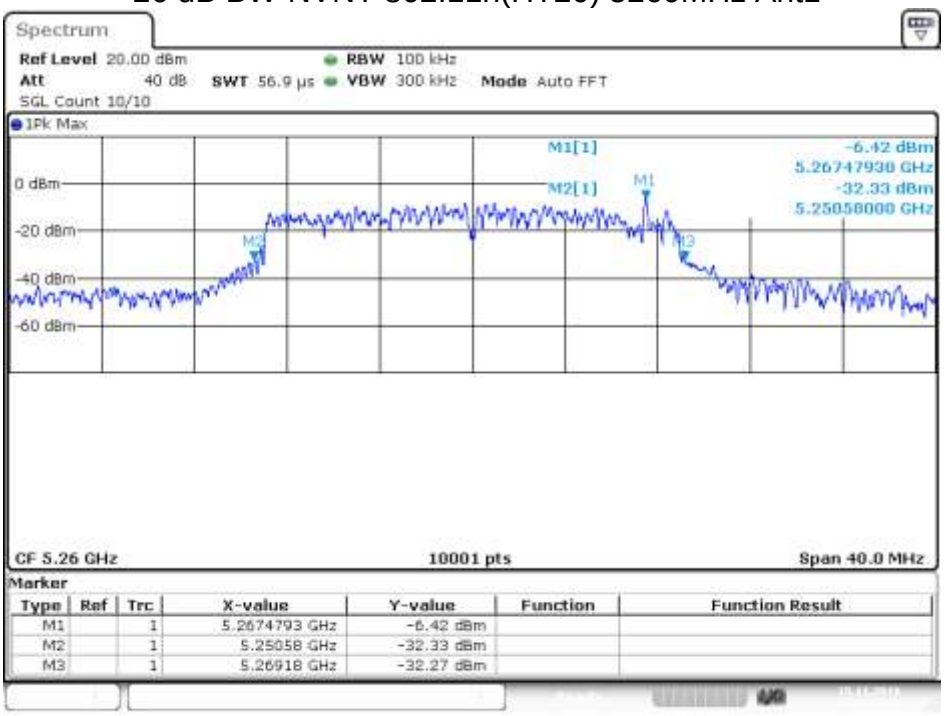


-26 dB BW NVNT 802.11ac80 5290MHz Ant1



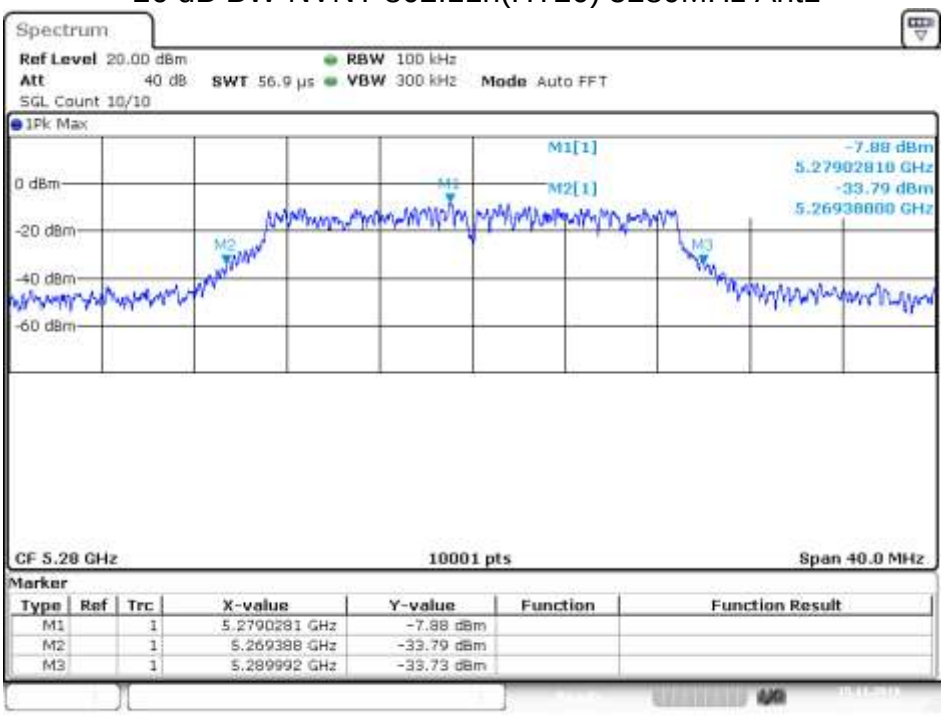
OBW NVNT 802.11n(HT20) 5260MHz Ant1

-26 dB BW NVNT 802.11n(HT20) 5260MHz Ant1



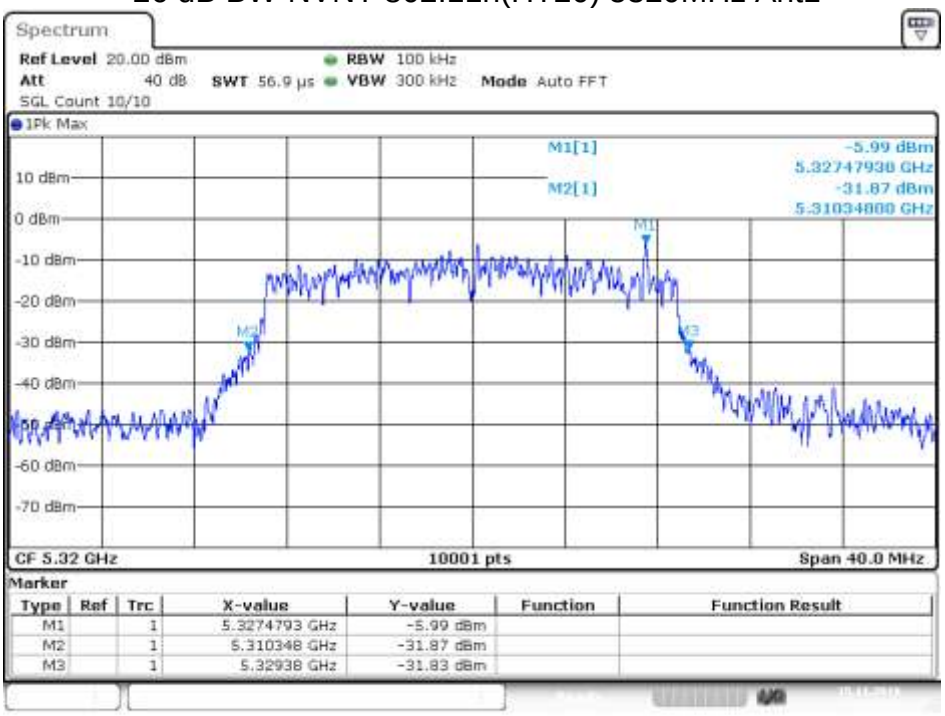
OBW NVNT 802.11n(HT20) 5280MHz Ant1

-26 dB BW NVNT 802.11n(HT20) 5280MHz Ant1

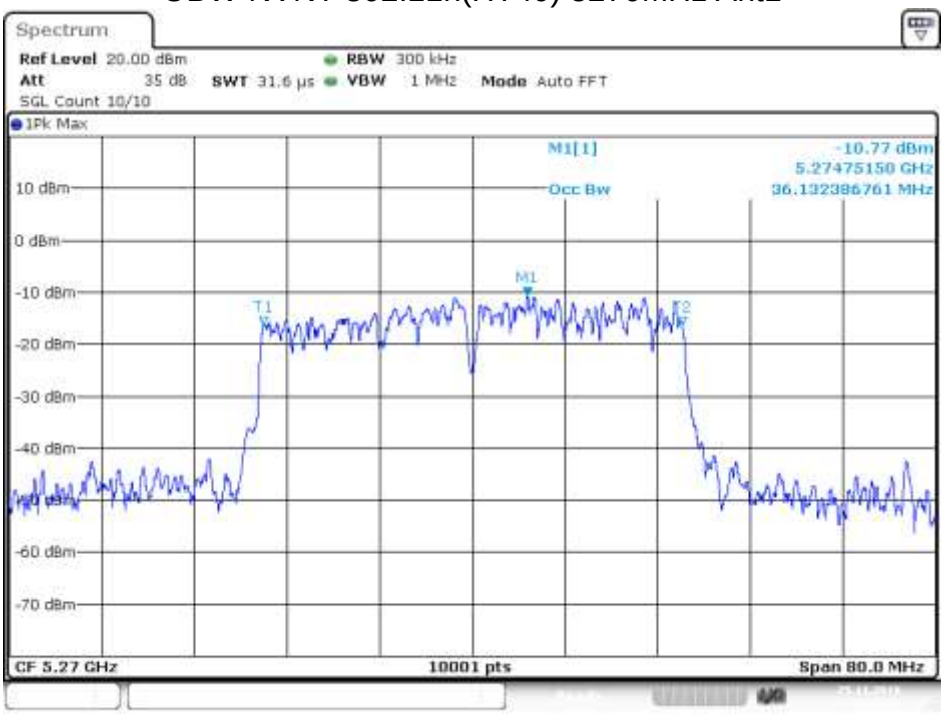


OBW NVNT 802.11n(HT20) 5320MHz Ant1

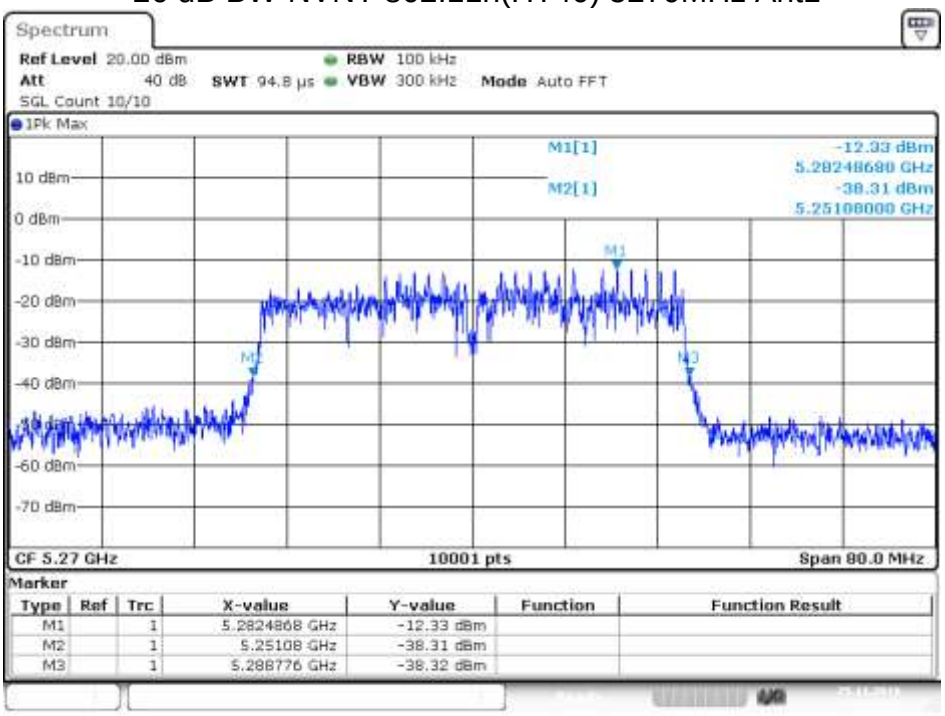
-26 dB BW NVNT 802.11n(HT20) 5320MHz Ant1



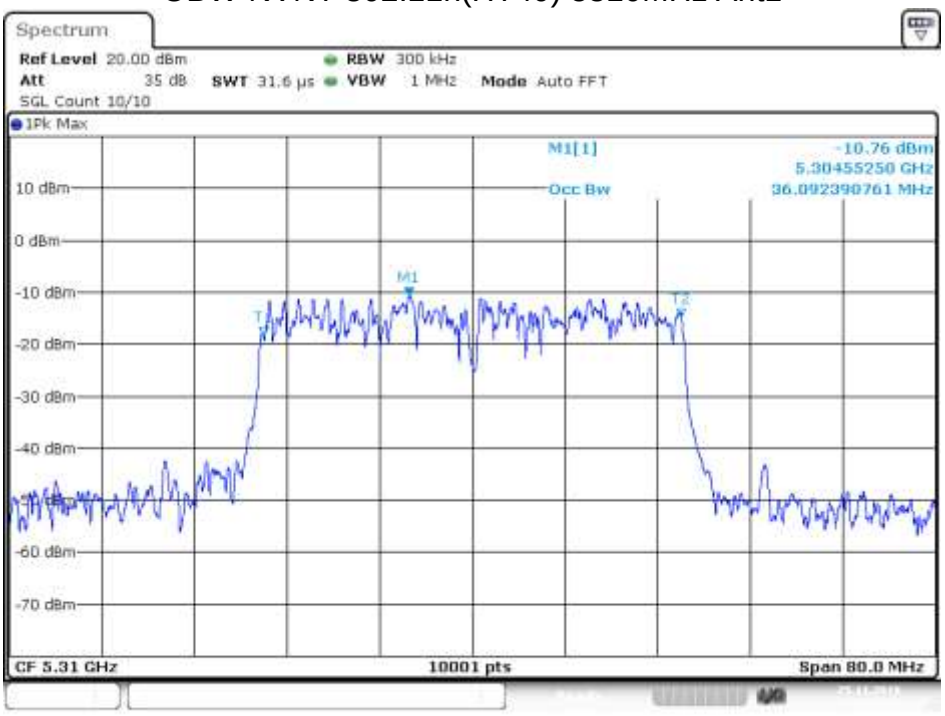
OBW NVNT 802.11n(HT40) 5270MHz Ant1



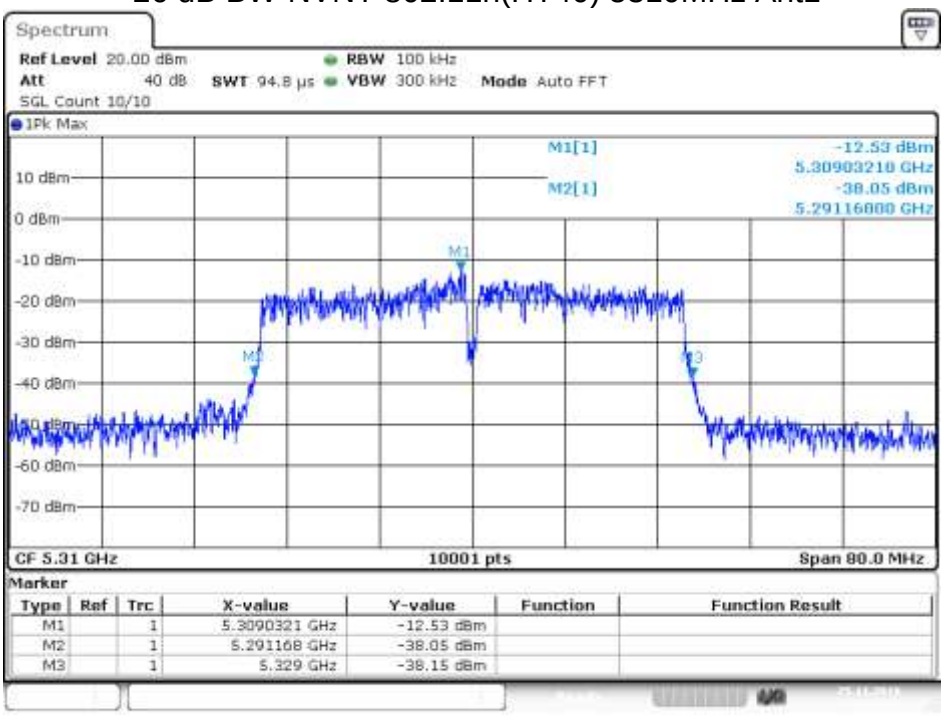
-26 dB BW NVNT 802.11n(HT40) 5270MHz Ant1



OBW NVNT 802.11n(HT40) 5310MHz Ant1

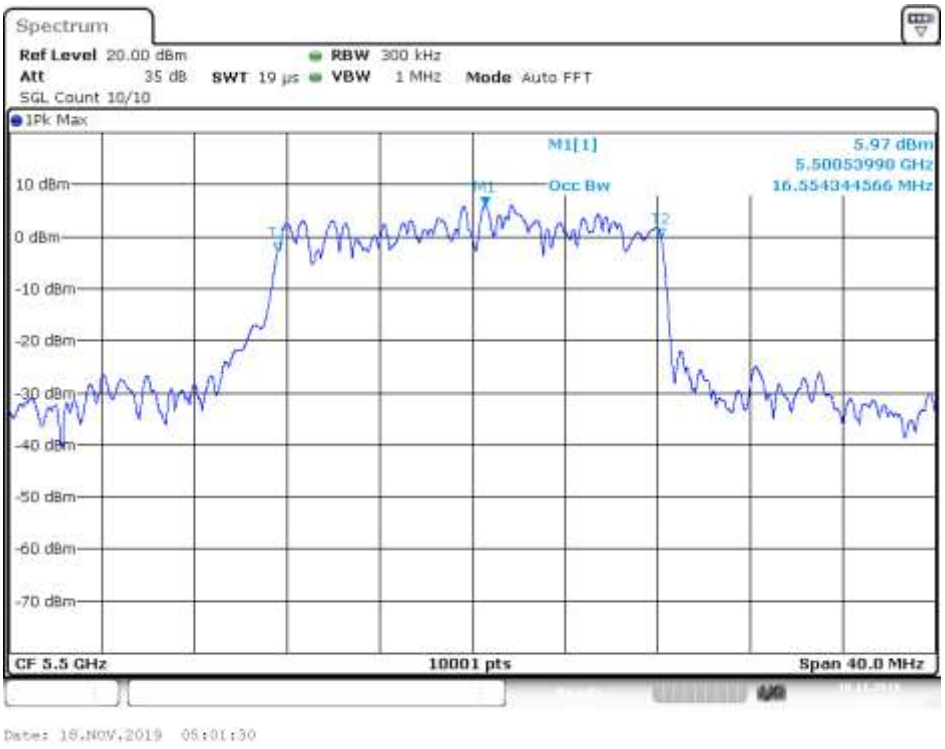


-26 dB BW NVNT 802.11n(HT40) 5310MHz Ant1

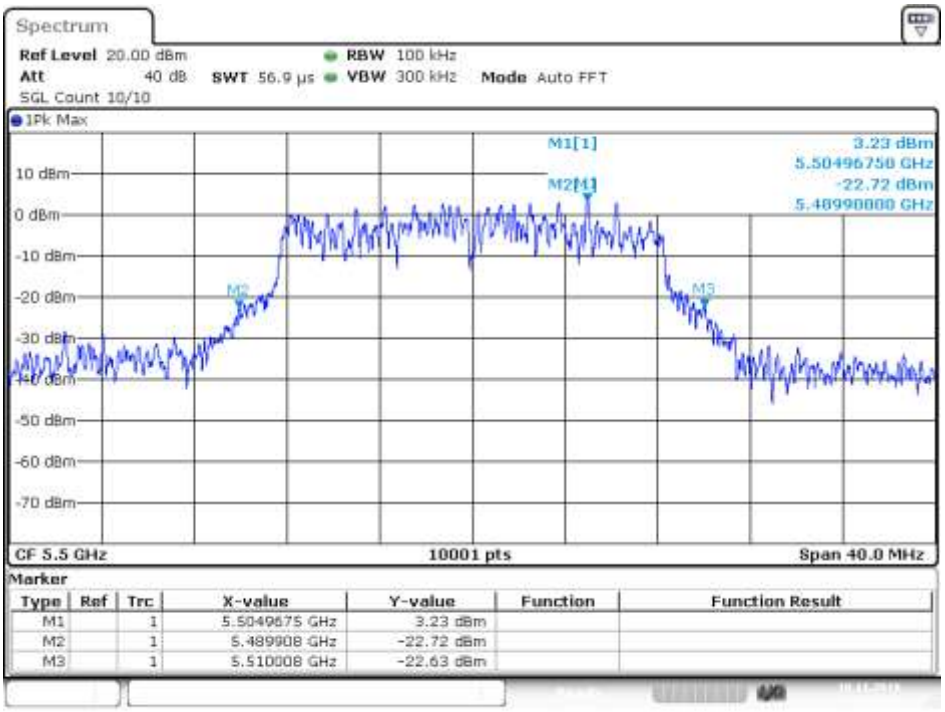


U-NII-2C							
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	802.11a	5500	Ant 1	16.5543	20.1	0	Pass
NVNT	802.11a	5580	Ant 1	16.5983	19.58	0	Pass
NVNT	802.11a	5700	Ant 1	16.2544	19.384	0	Pass
NVNT	802.11ac20	5500	Ant 1	17.5022	19.32	0	Pass
NVNT	802.11ac20	5580	Ant 1	17.7422	20.704	0	Pass
NVNT	802.11ac20	5700	Ant 1	17.6062	20.06	0	Pass
NVNT	802.11ac40	5510	Ant 1	36.1404	37.728	0	Pass
NVNT	802.11ac40	5670	Ant 1	36.1644	37.816	0	Pass
NVNT	802.11ac80	5530	Ant 1	75.6564	155.136	0	Pass
NVNT	802.11n(HT20)	5500	Ant 1	17.5502	19.932	0	Pass
NVNT	802.11n(HT20)	5580	Ant 1	17.7302	19	0	Pass
NVNT	802.11n(HT20)	5700	Ant 1	17.5542	19.876	0	Pass
NVNT	802.11n(HT40)	5510	Ant 1	36.0924	37.832	0	Pass
NVNT	802.11n(HT40)	5670	Ant 1	36.3084	38.04	0	Pass

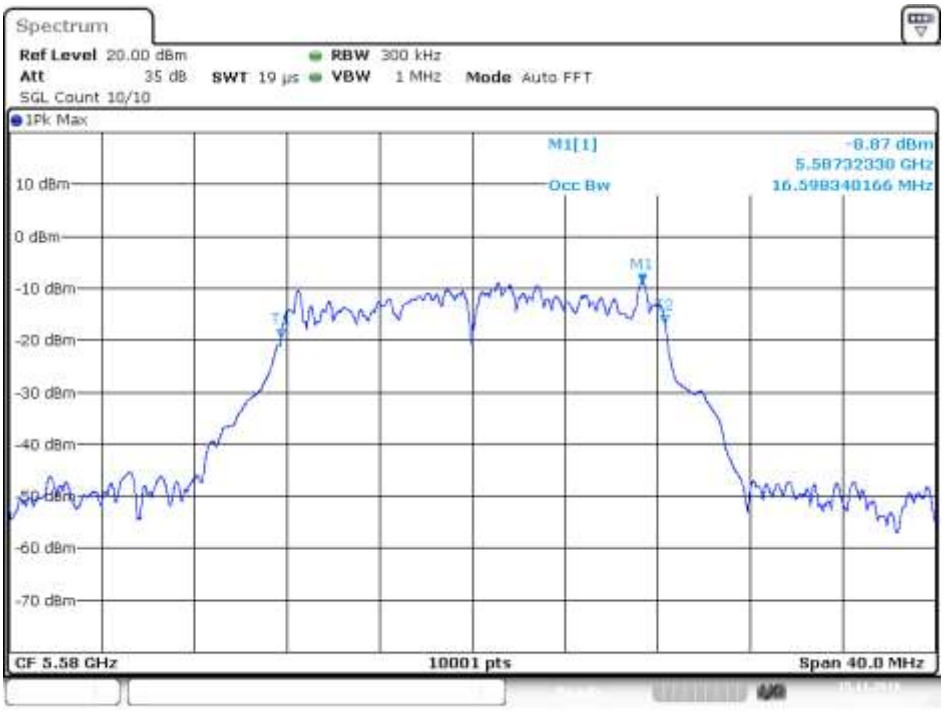
OBW NVNT 802.11a 5500MHz Ant1



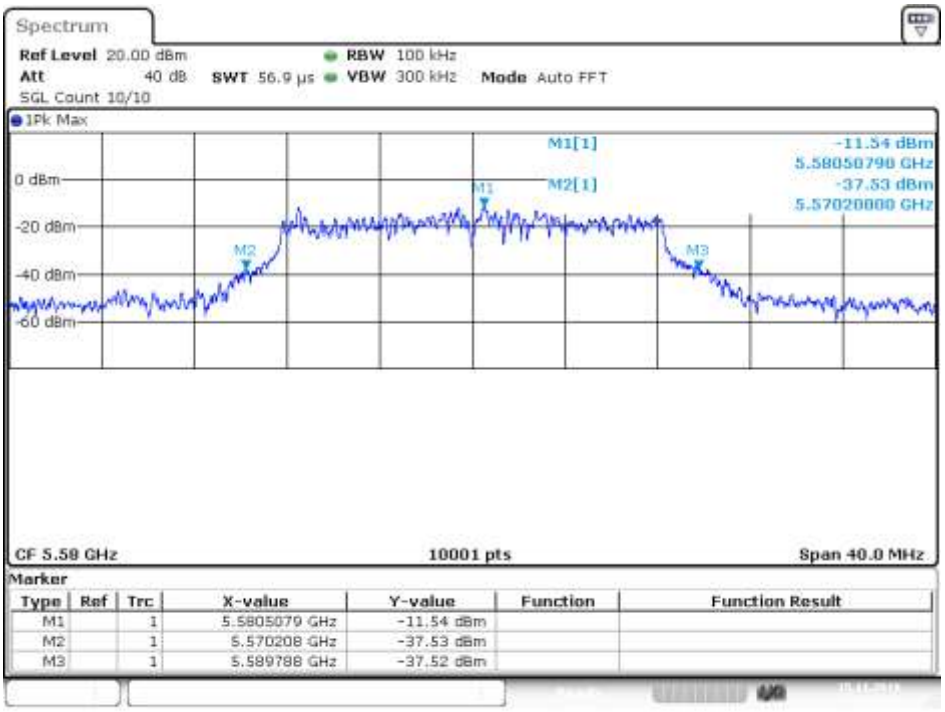
-26 dB BW NVNT 802.11a 5500MHz Ant1



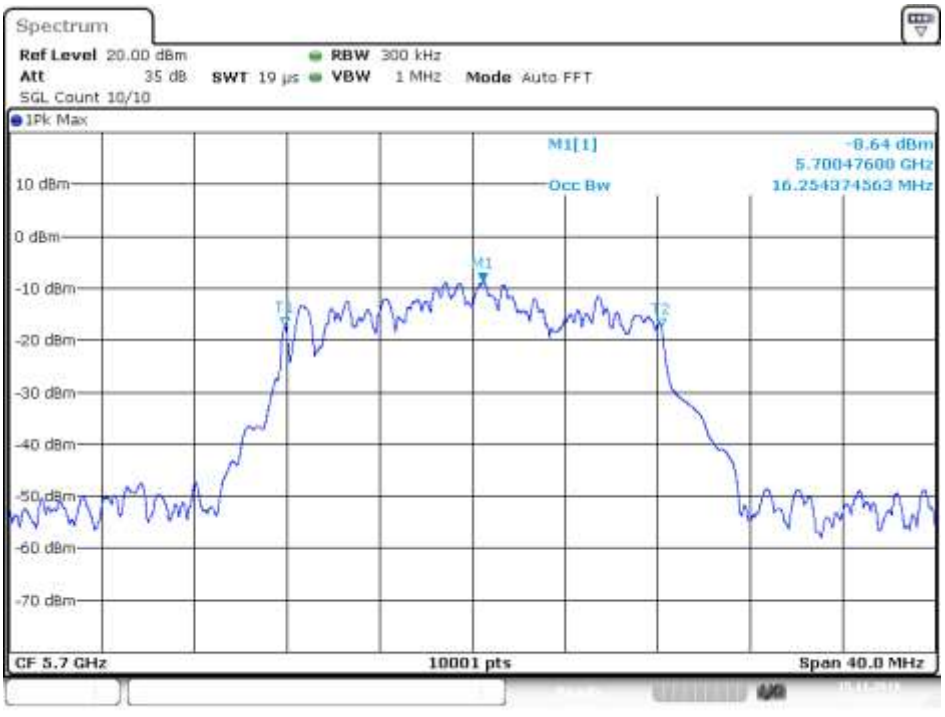
OBW NVNT 802.11a 5580MHz Ant1



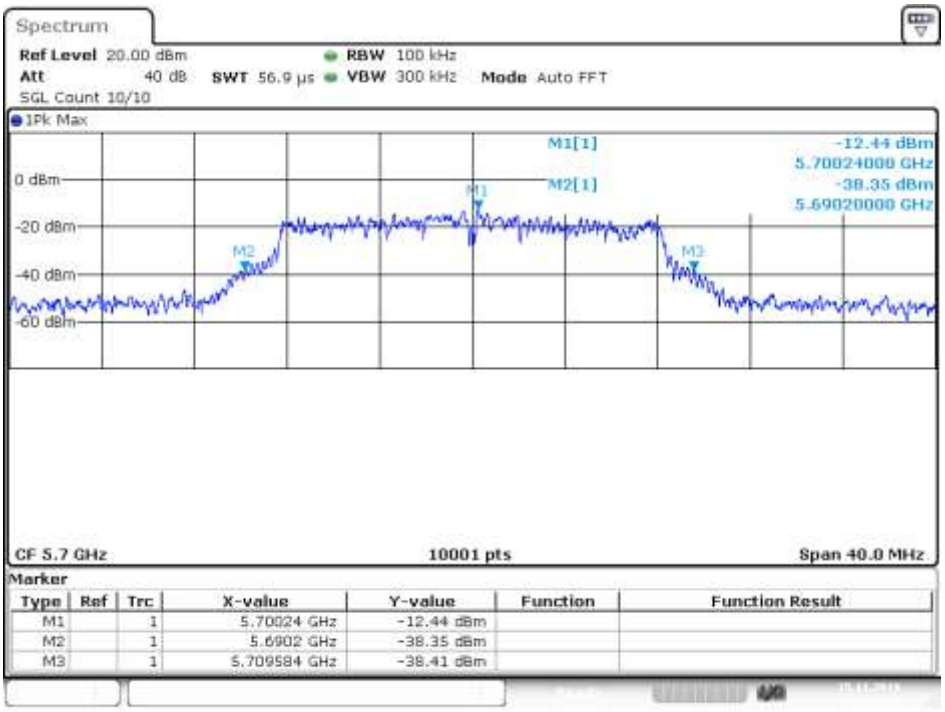
-26 dB BW NVNT 802.11a 5580MHz Ant1



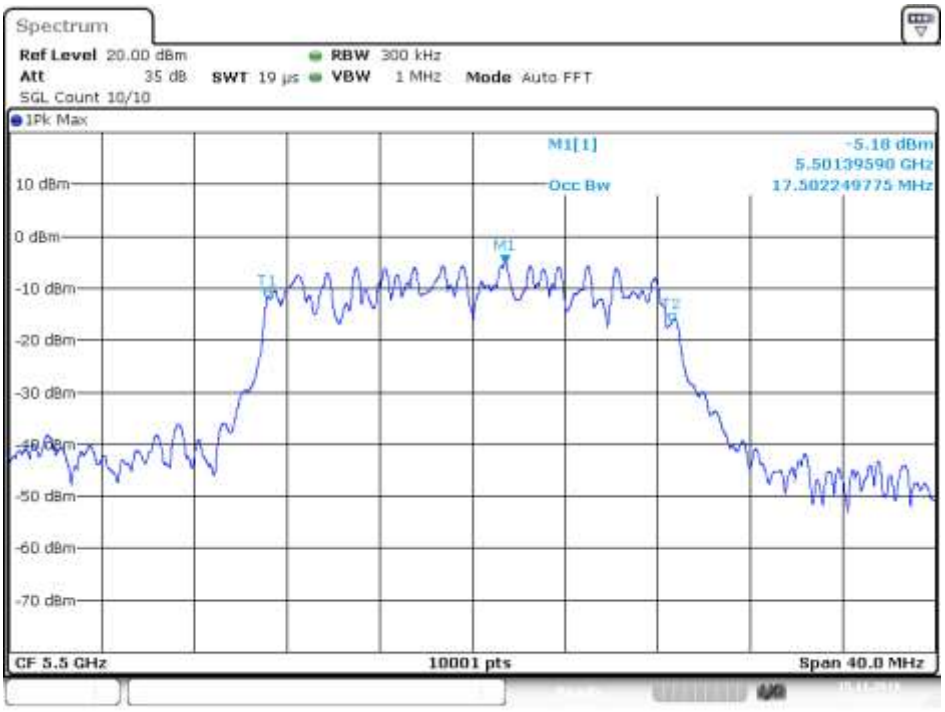
OBW NVNT 802.11a 5700MHz Ant1



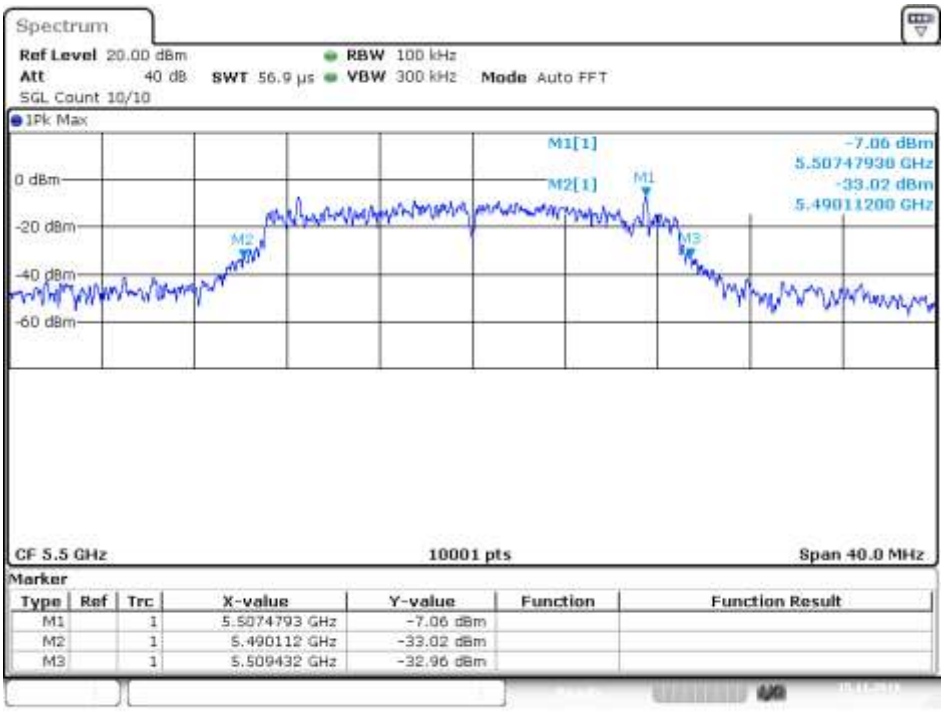
-26 dB BW NVNT 802.11a 5700MHz Ant1



OBW NVNT 802.11ac20 5500MHz Ant1

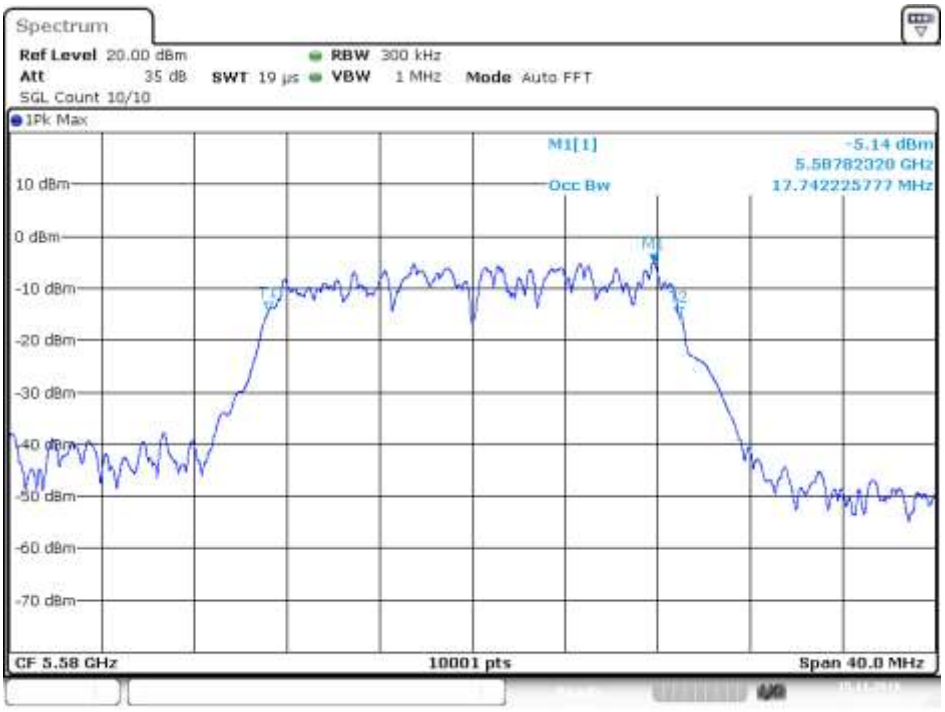


-26 dB BW NVNT 802.11ac20 5500MHz Ant1



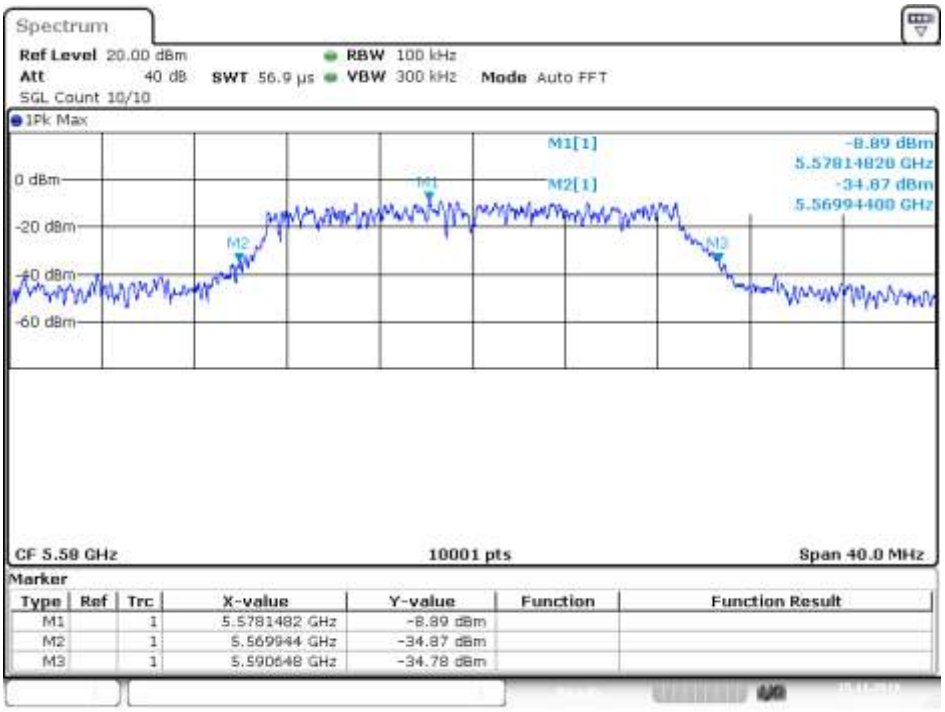
Date: 15.NOV.2019 11:35:19

OBW NVNT 802.11ac20 5580MHz Ant1



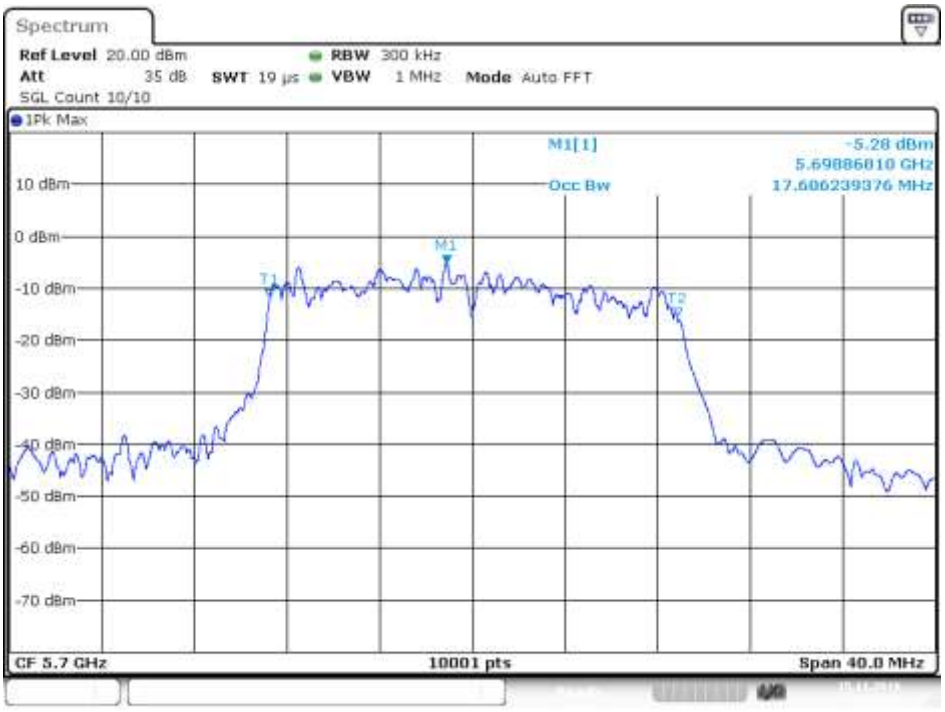
Date: 15.NOV.2019 11:37:47

-26 dB BW NVNT 802.11ac20 5580MHz Ant1



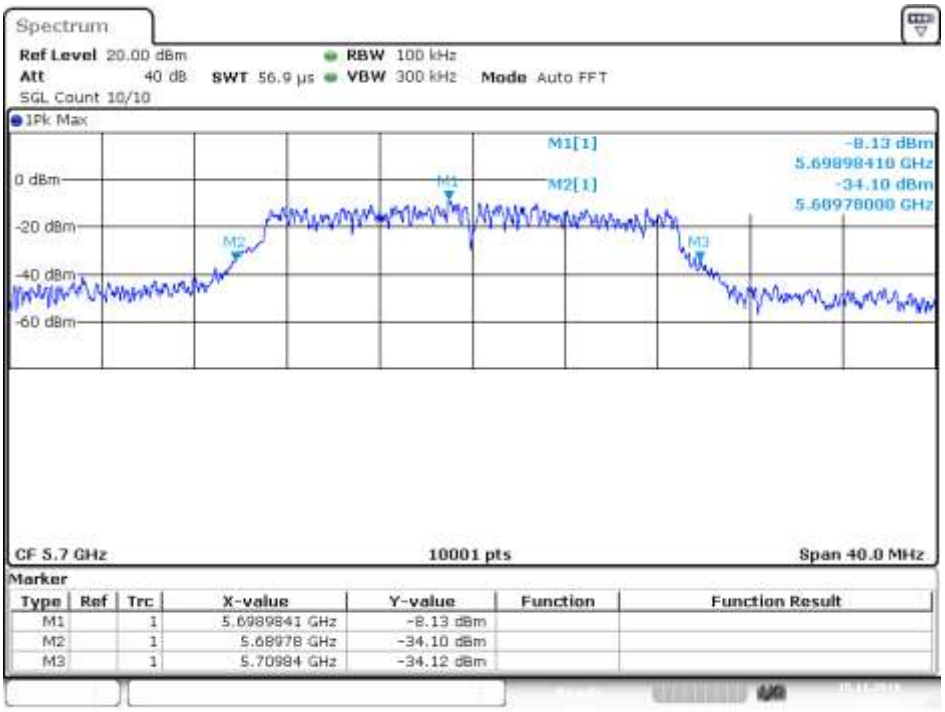
Date: 15.NOV.2019 11:37:49

OBW NVNT 802.11ac20 5700MHz Ant1



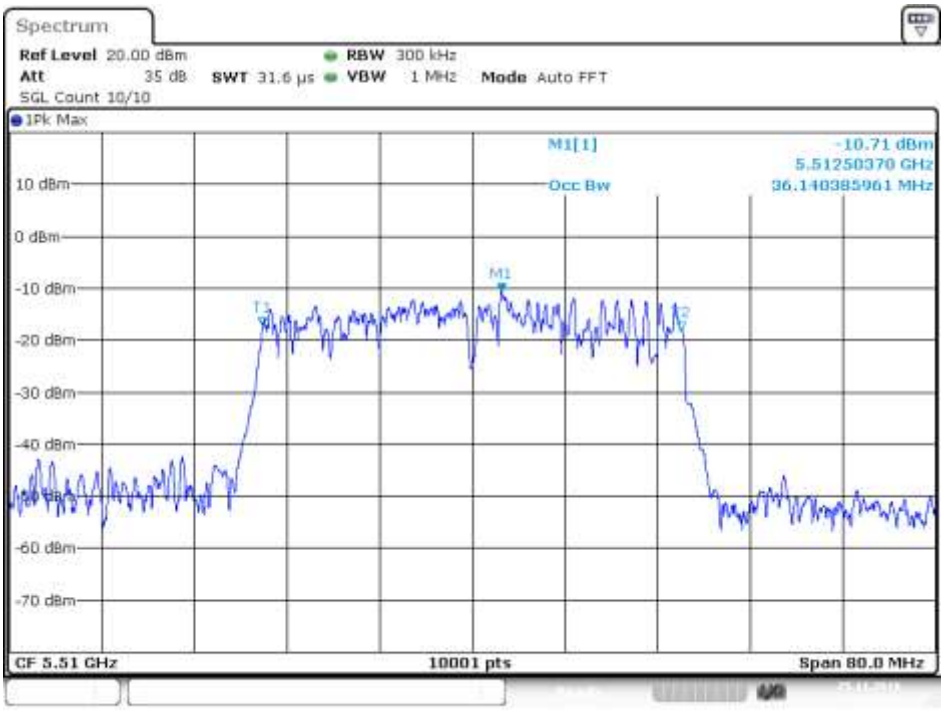
Date: 15.NOV.2019 11:56:15

-26 dB BW NVNT 802.11ac20 5700MHz Ant1



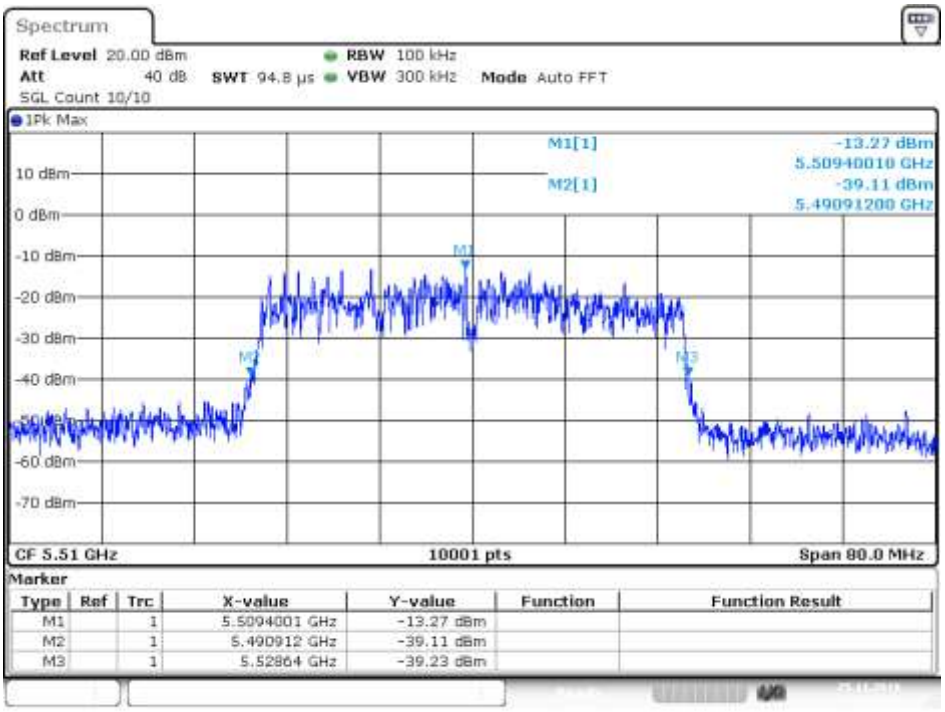
Date: 15.NOV.2019 11:56:18

OBW NVNT 802.11ac40 5510MHz Ant1

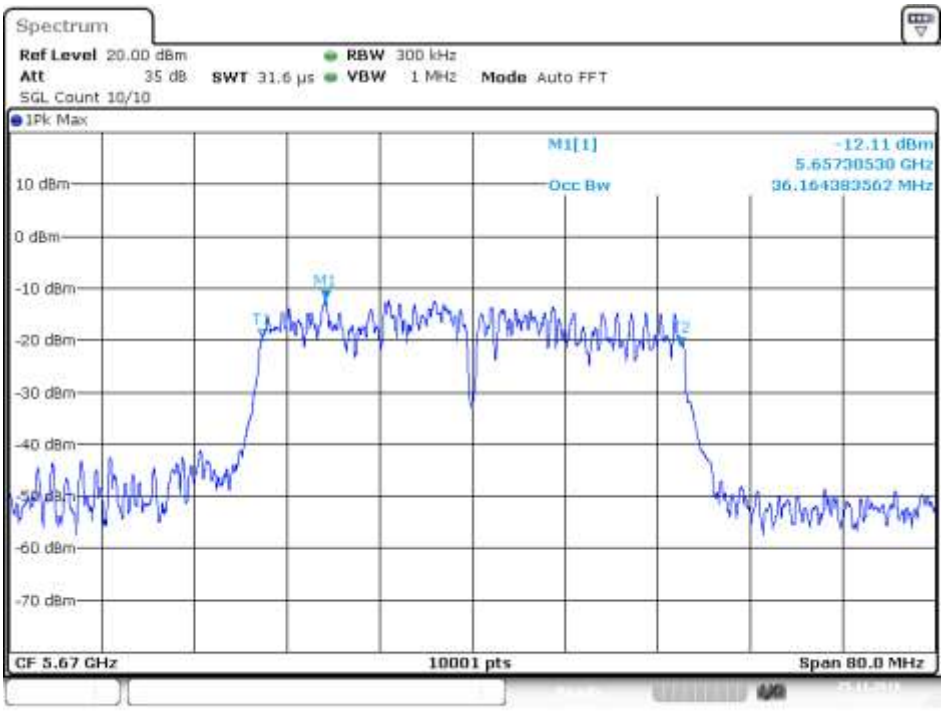


Date: 25.NOV.2019 03:40:04

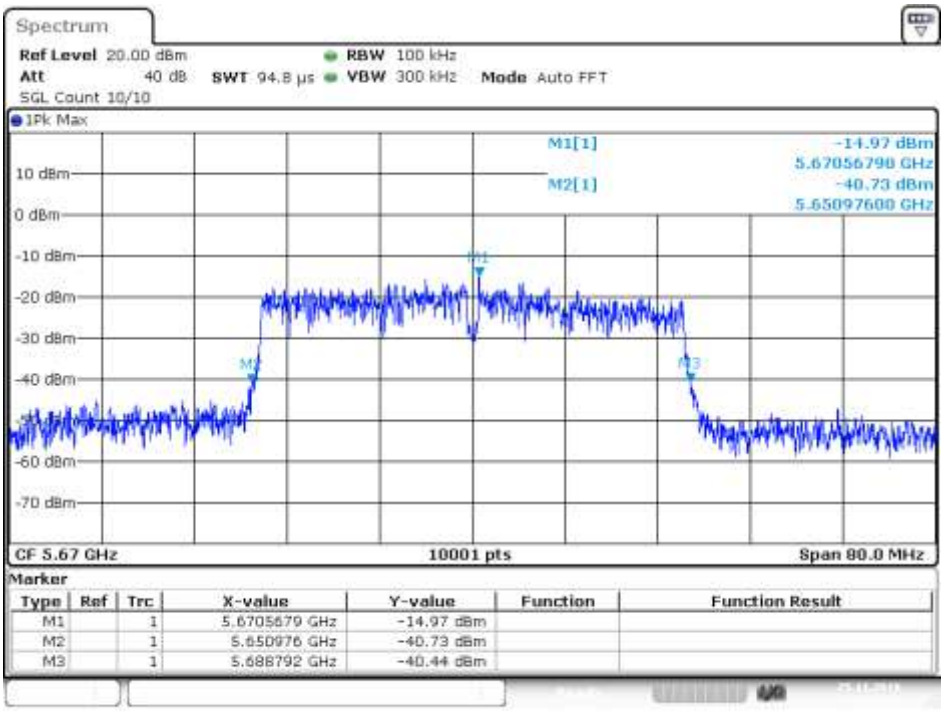
-26 dB BW NVNT 802.11ac40 5510MHz Ant1



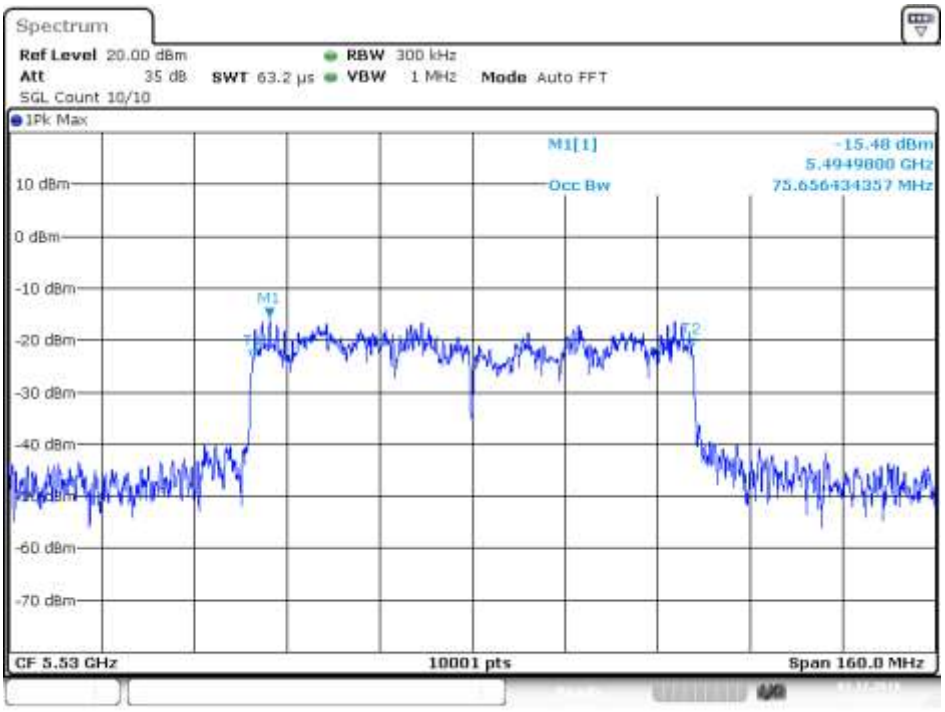
OBW NVNT 802.11ac40 5670MHz Ant1



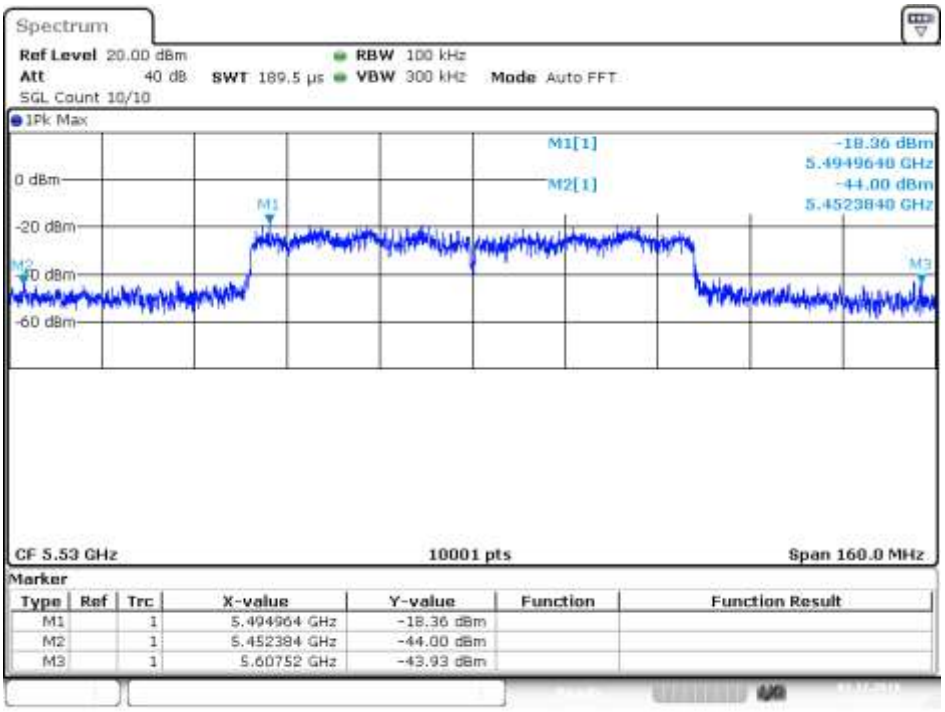
-26 dB BW NVNT 802.11ac40 5670MHz Ant1



OBW NVNT 802.11ac80 5530MHz Ant1



-26 dB BW NVNT 802.11ac80 5530MHz Ant1



OBW NVNT 802.11n(HT20) 5500MHz Ant1

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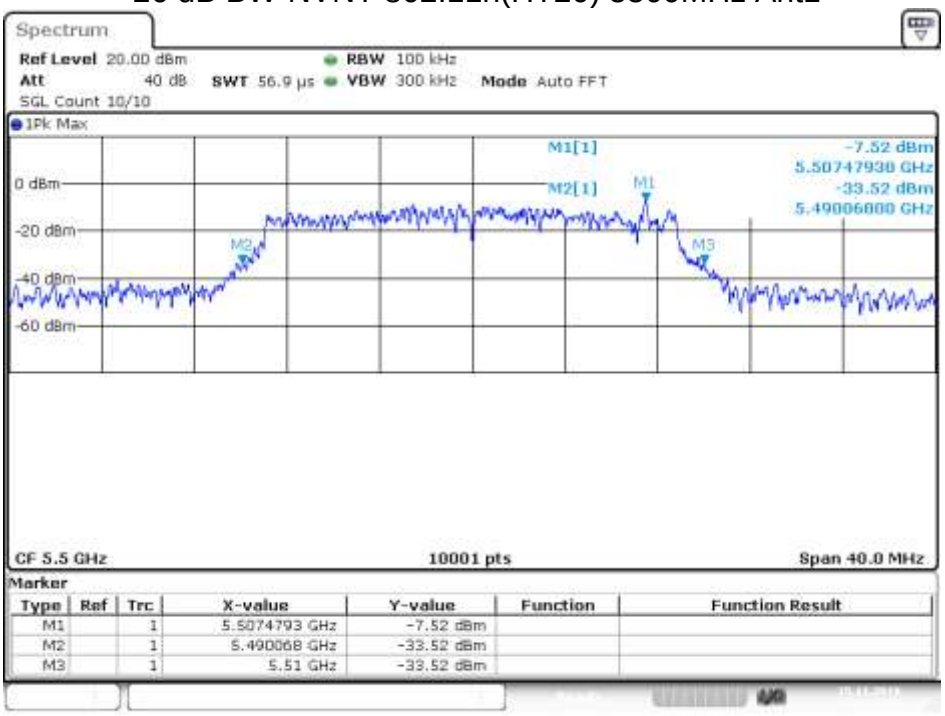

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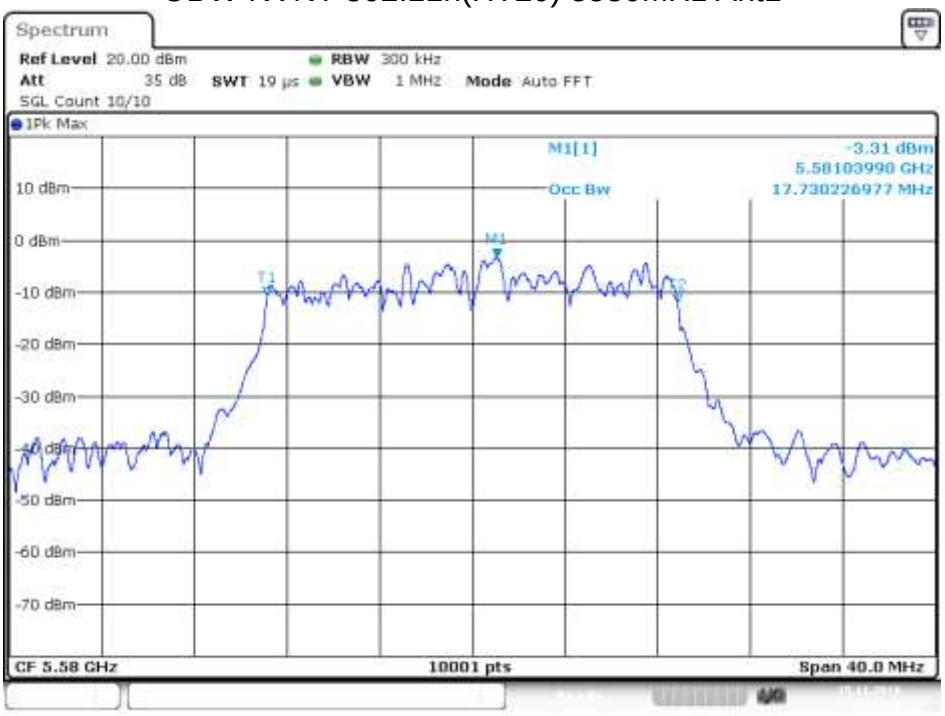

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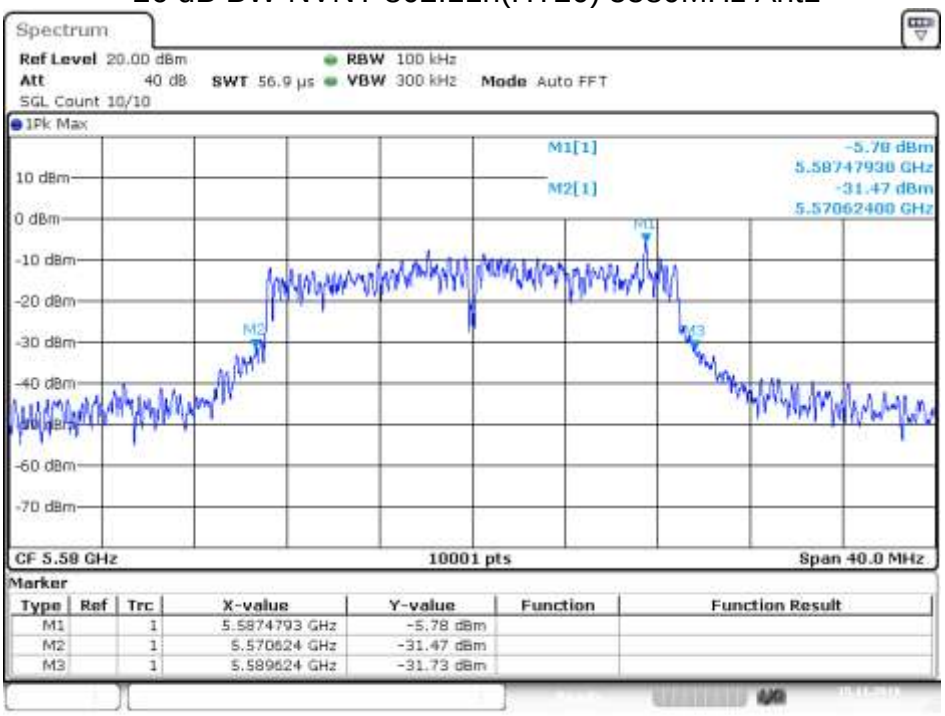

OBW NVNT 802.11n(HT20) 5700MHz Ant1

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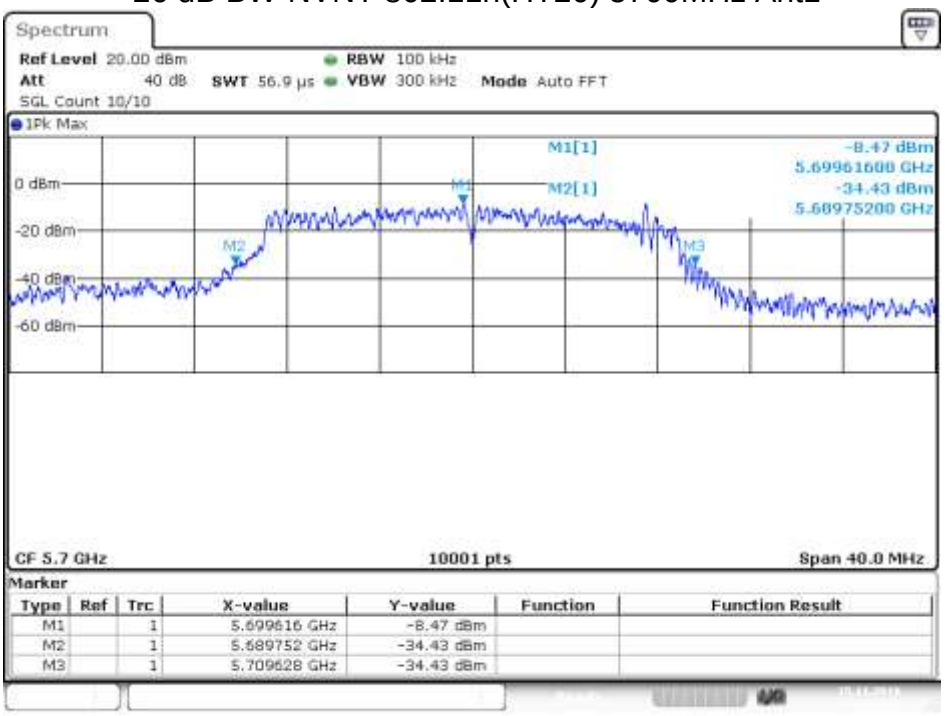

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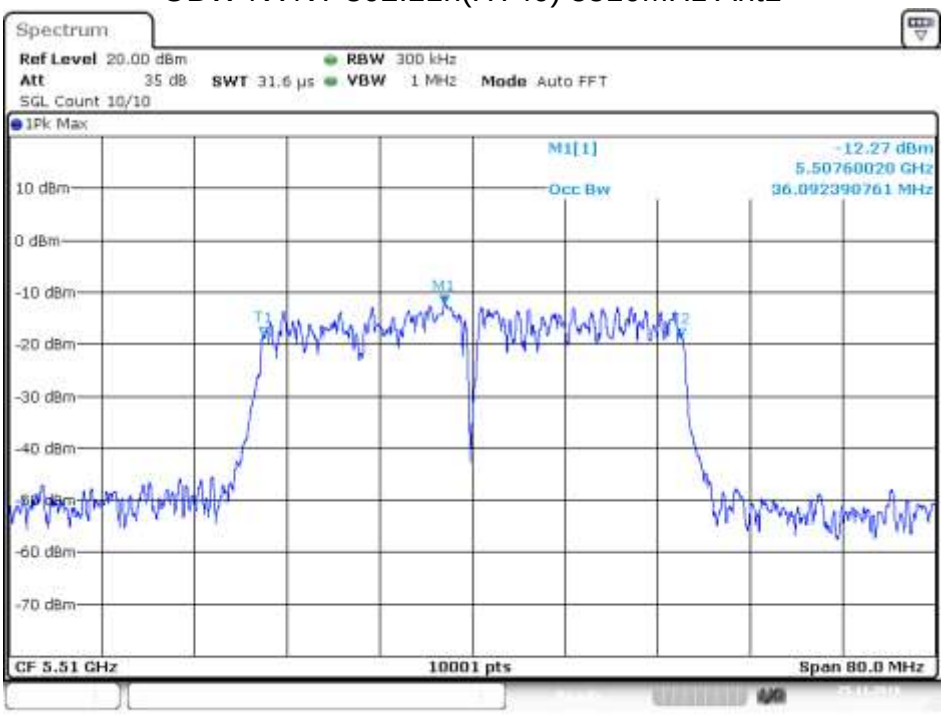

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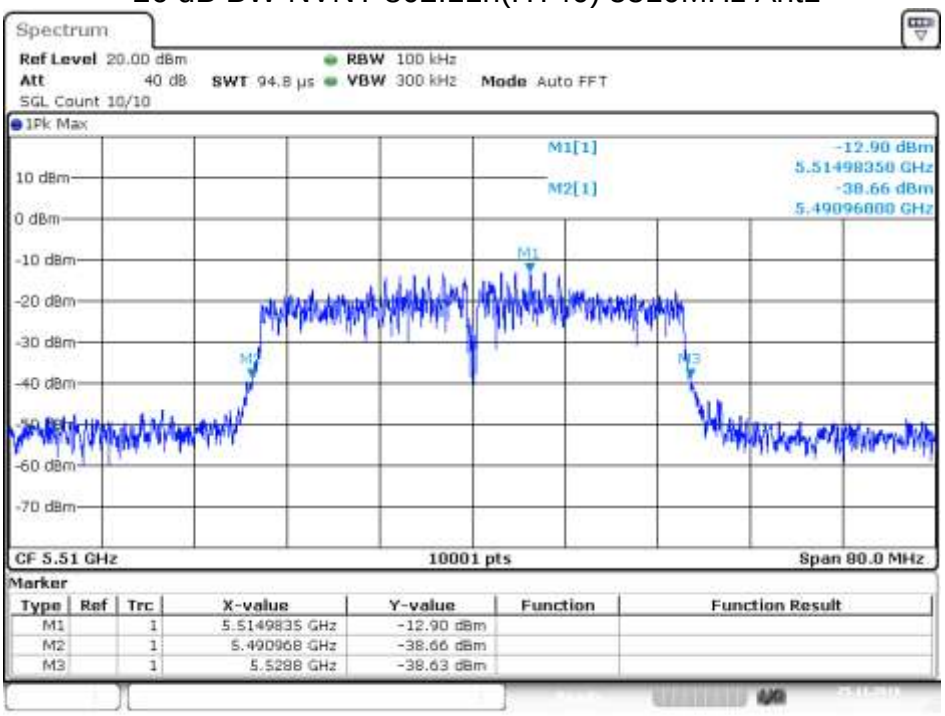
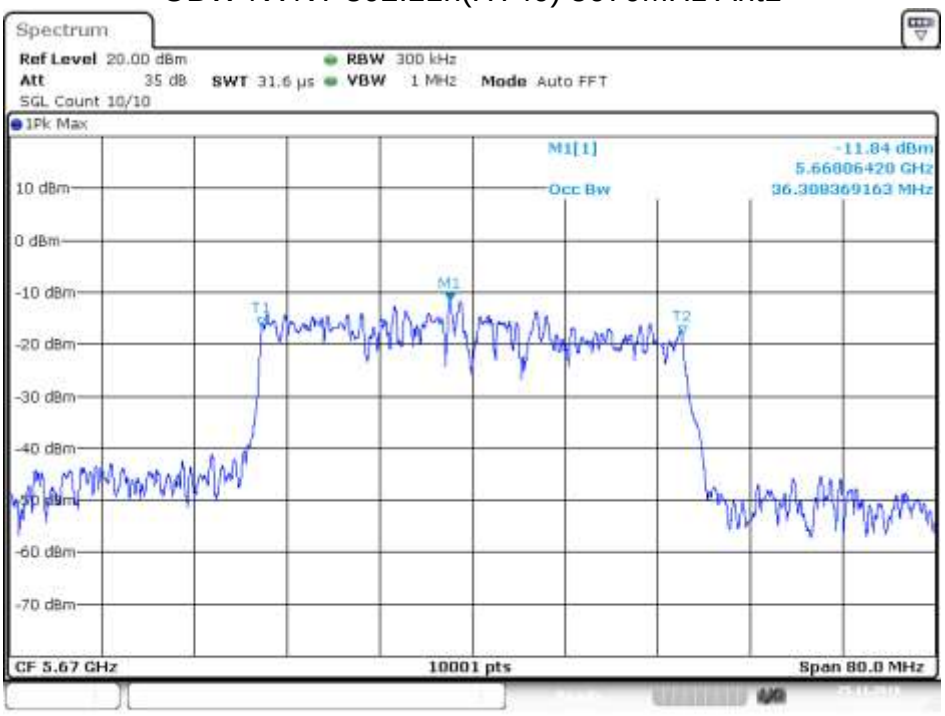


OBW NVNT 802.11n(HT40) 5670MHz Ant1



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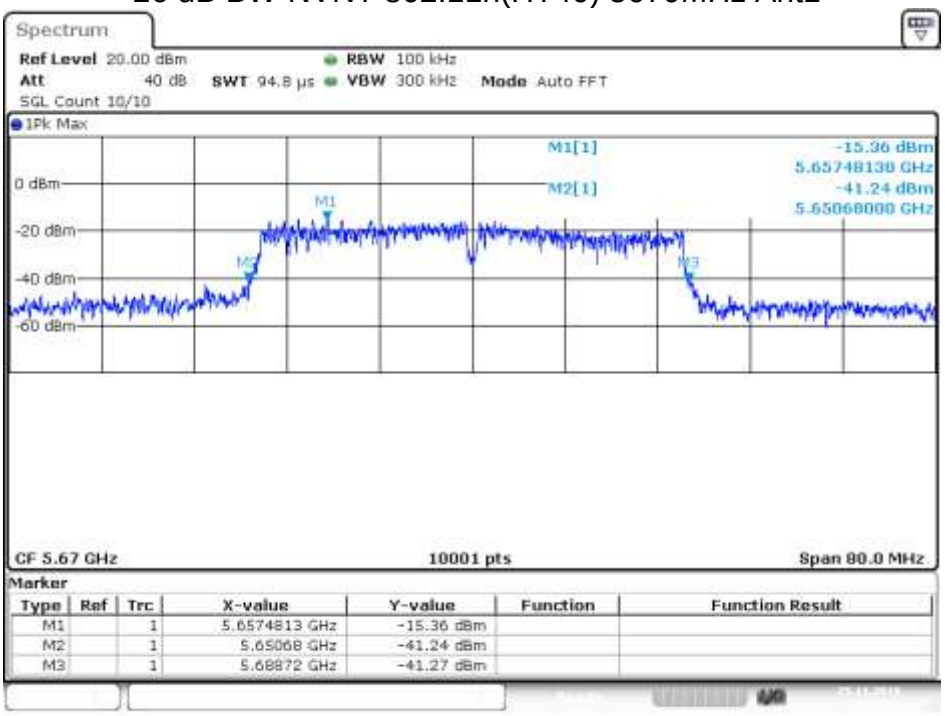
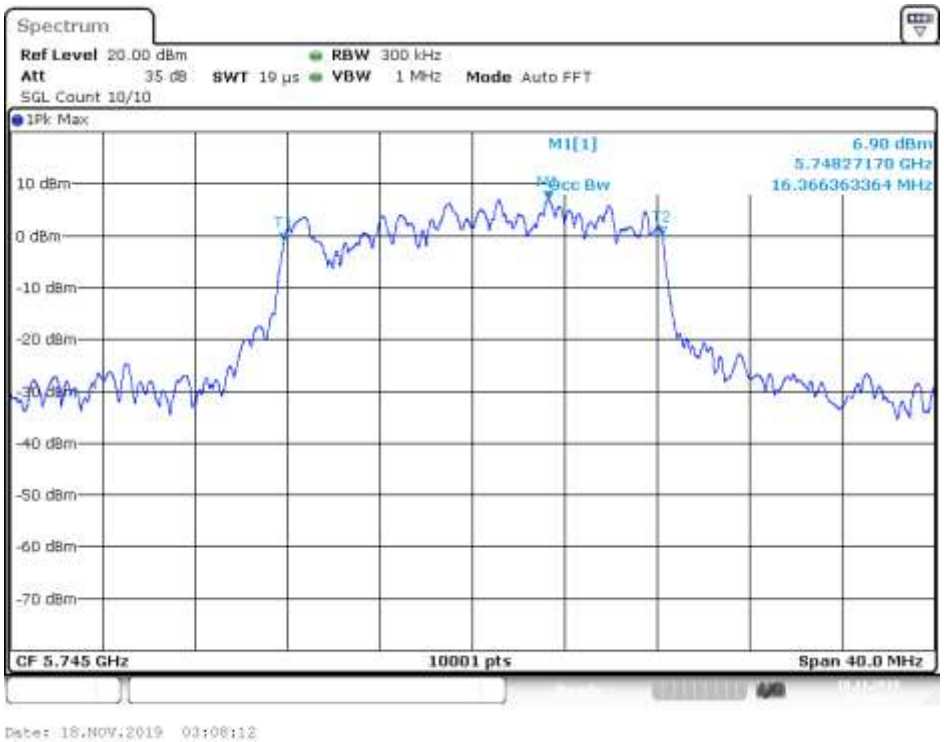
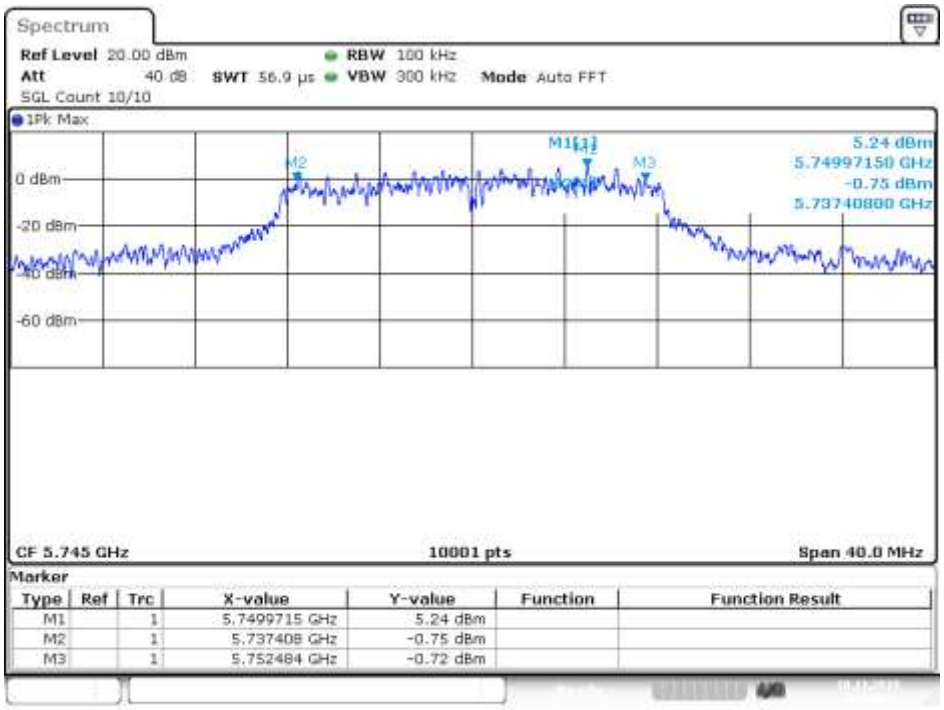


U-NII-3							
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	802.11a	5745	Ant 1	16.3664	15.076	0.5	Pass
NVNT	802.11a	5785	Ant 1	16.6503	15.708	0.5	Pass
NVNT	802.11a	5825	Ant 1	16.5823	16.072	0.5	Pass
NVNT	802.11ac20	5745	Ant 1	17.9262	16	0.5	Pass
NVNT	802.11ac20	5785	Ant 1	17.6302	17.556	0.5	Pass
NVNT	802.11ac20	5825	Ant 1	18.0302	17.3	0.5	Pass
NVNT	802.11ac40	5755	Ant 1	36.0924	35.144	0.5	Pass
NVNT	802.11ac40	5795	Ant 1	35.7244	35.632	0.5	Pass
NVNT	802.11ac80	5775	Ant 1	75.0965	68.48	0.5	Pass
NVNT	802.11n(HT20)	5745	Ant 1	17.7702	14.944	0.5	Pass
NVNT	802.11n(HT20)	5785	Ant 1	18.0022	17.696	0.5	Pass
NVNT	802.11n(HT20)	5825	Ant 1	17.8102	16.4	0.5	Pass
NVNT	802.11n(HT40)	5755	Ant 1	35.9084	35.368	0.5	Pass
NVNT	802.11n(HT40)	5795	Ant 1	35.7164	32.304	0.5	Pass

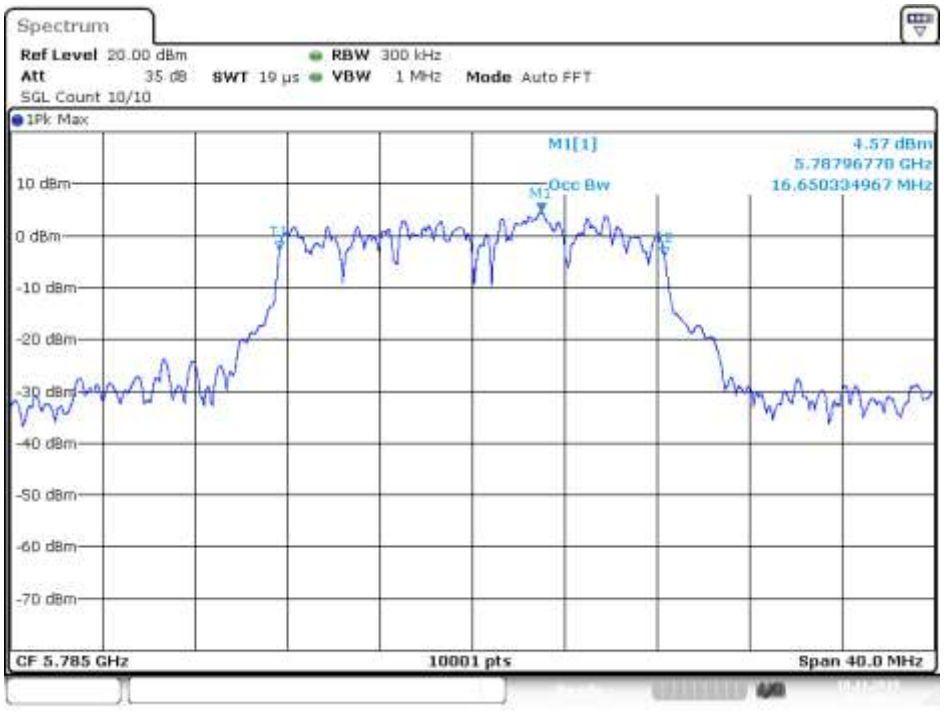
OBW NVNT 802.11a 5745MHz Ant1



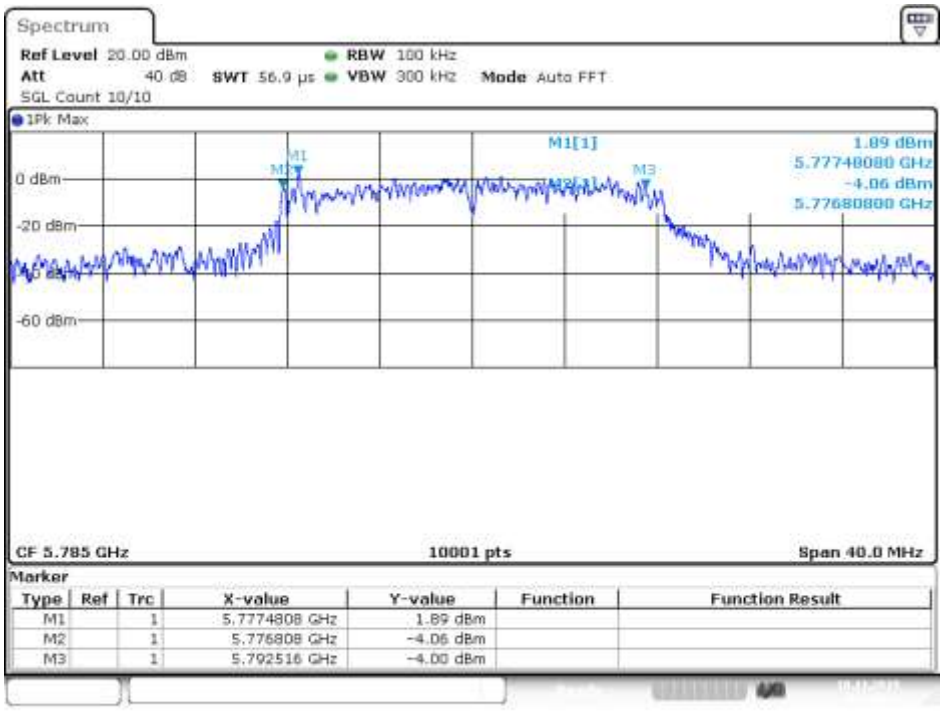
-6 dB BW NVNT 802.11a 5745MHz Ant1



OBW NVNT 802.11a 5785MHz Ant1



-6 dB BW NVNT 802.11a 5785MHz Ant1



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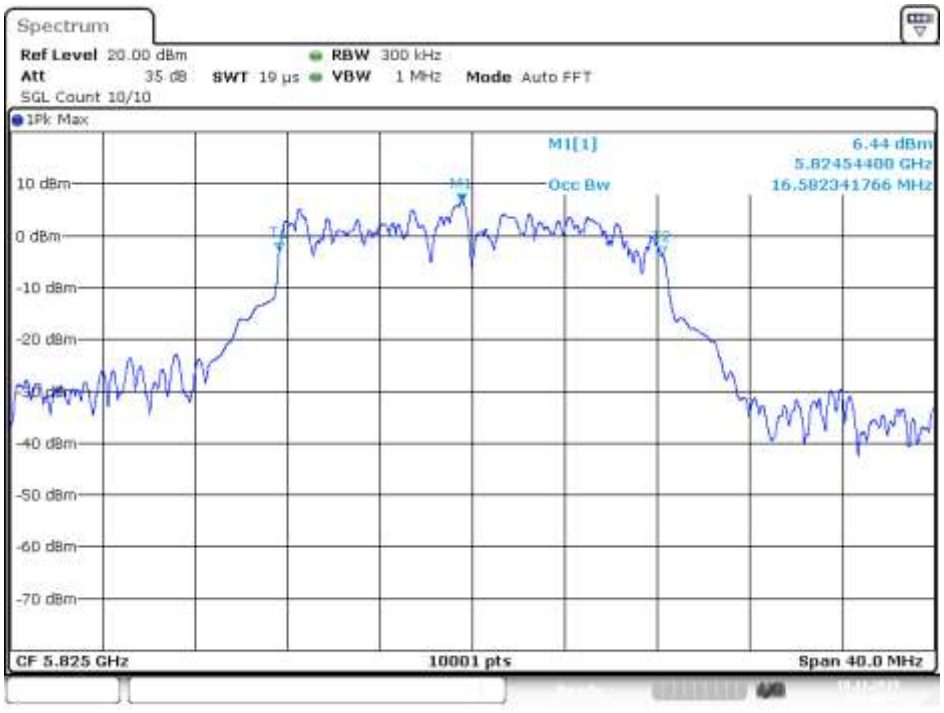
OBW NVNT 802.11a 5825MHz Ant1



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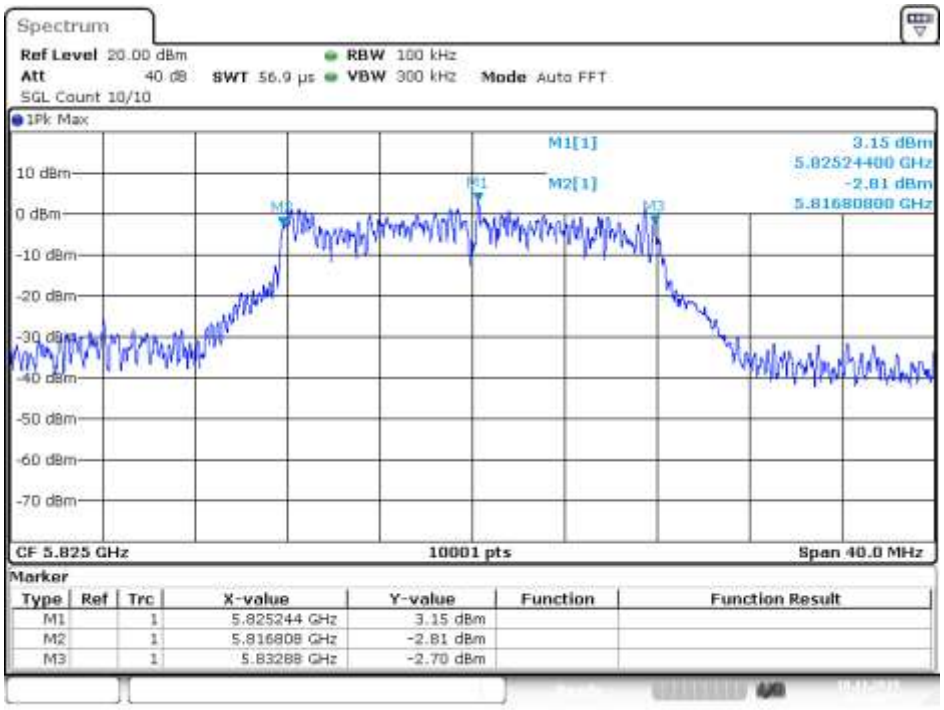
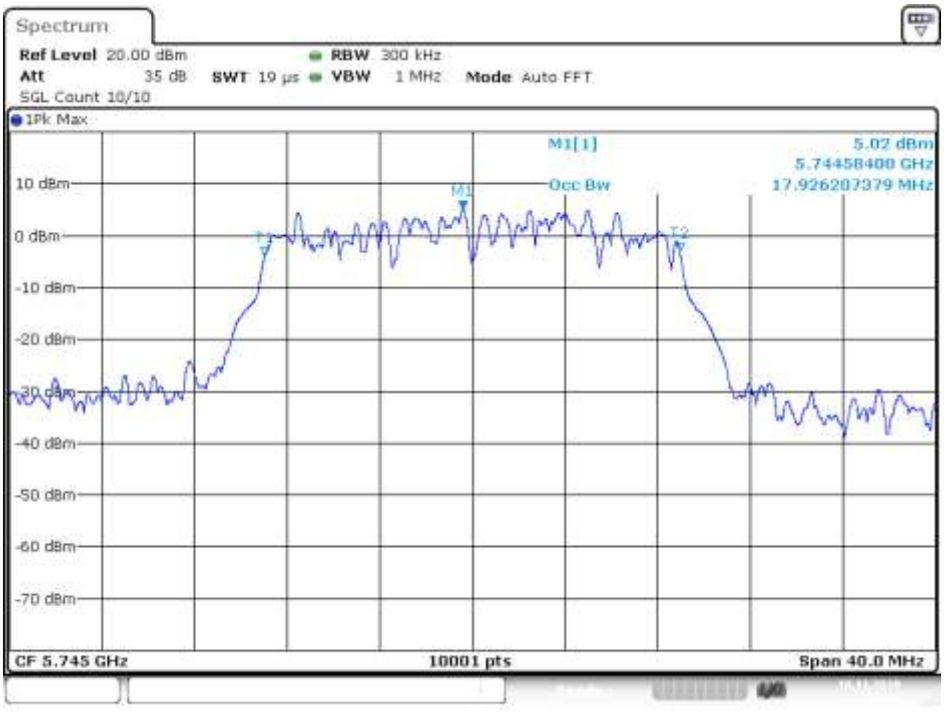
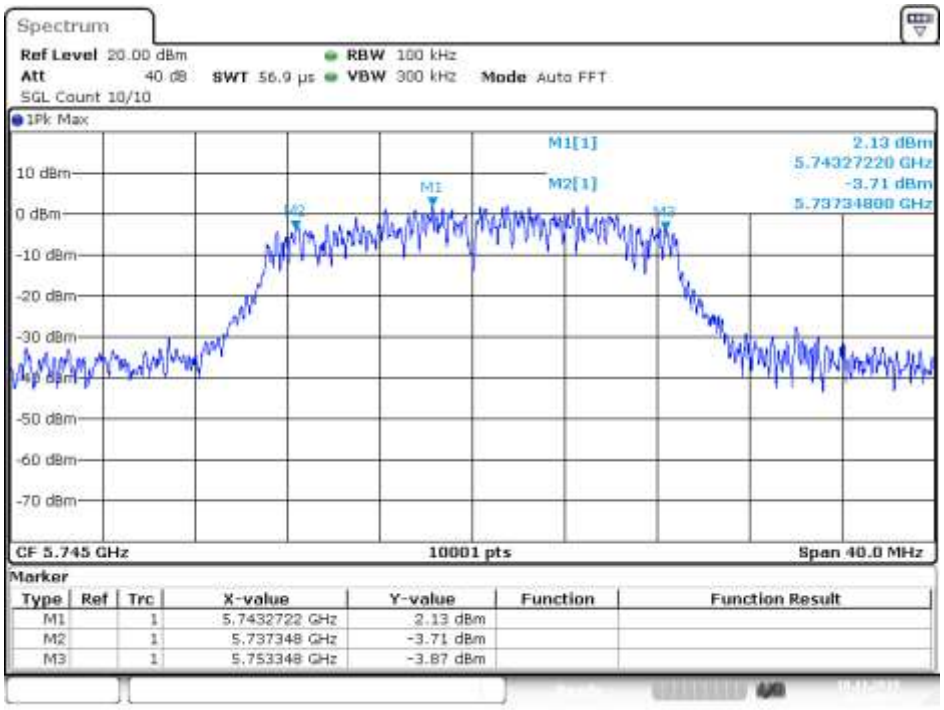
-6 dB BW NVNT 802.11a 5825MHz Ant1



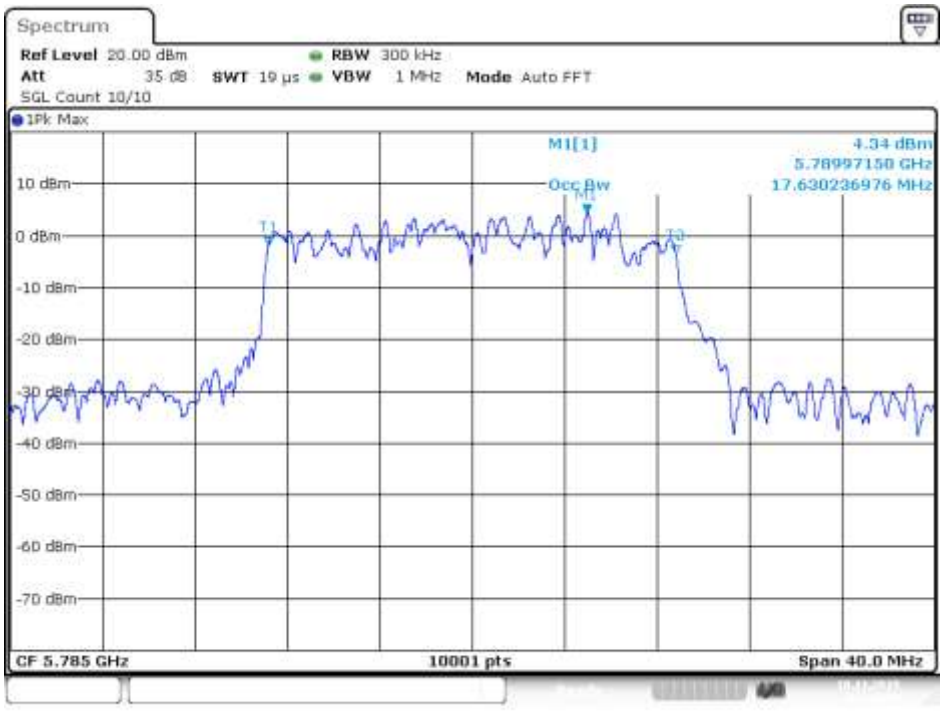
OBW NVNT 802.11ac20 5745MHz Ant1



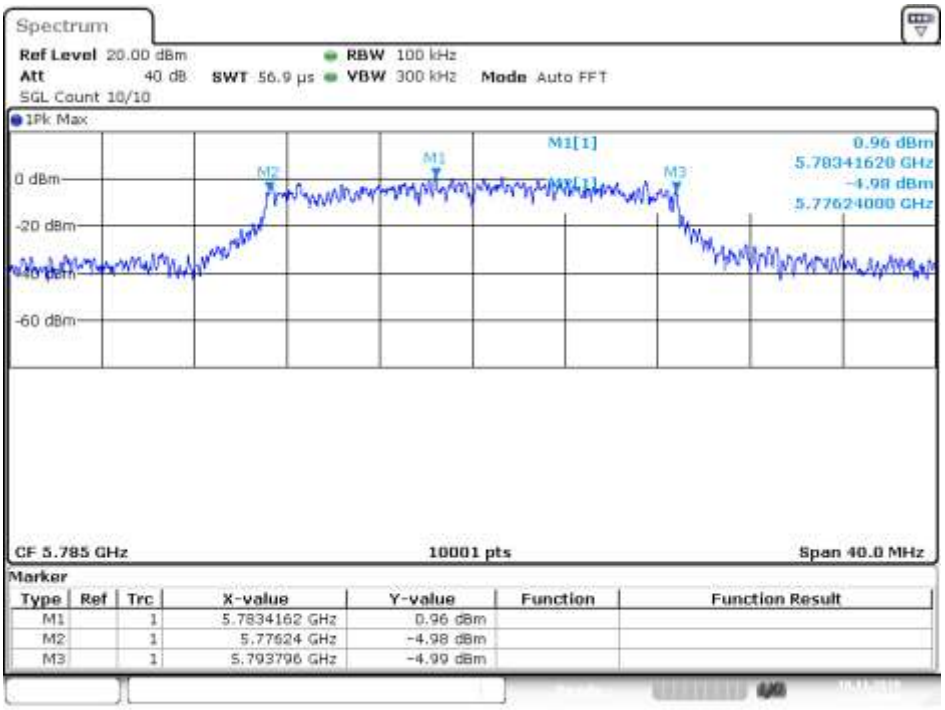
-6 dB BW NVNT 802.11ac20 5745MHz Ant1



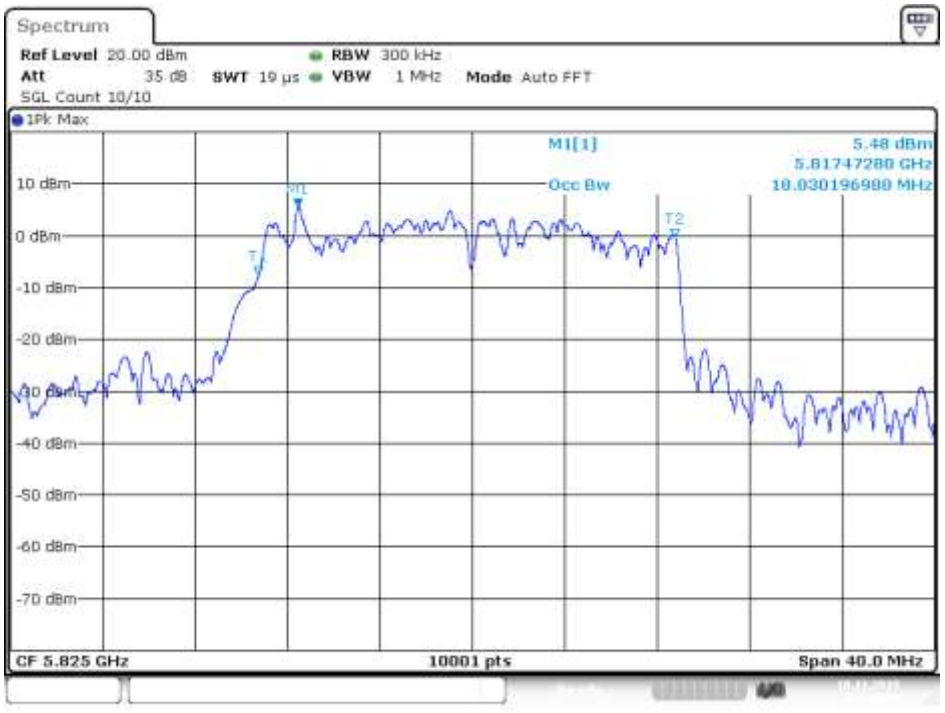
OBW NVNT 802.11ac20 5785MHz Ant1



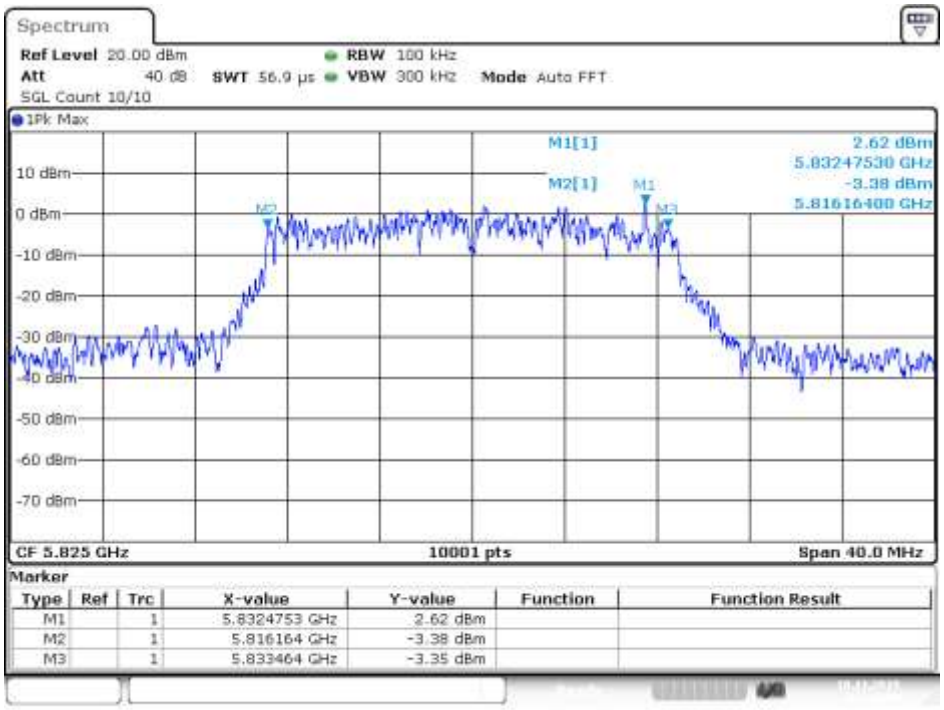
-6 dB BW NVNT 802.11ac20 5785MHz Ant1



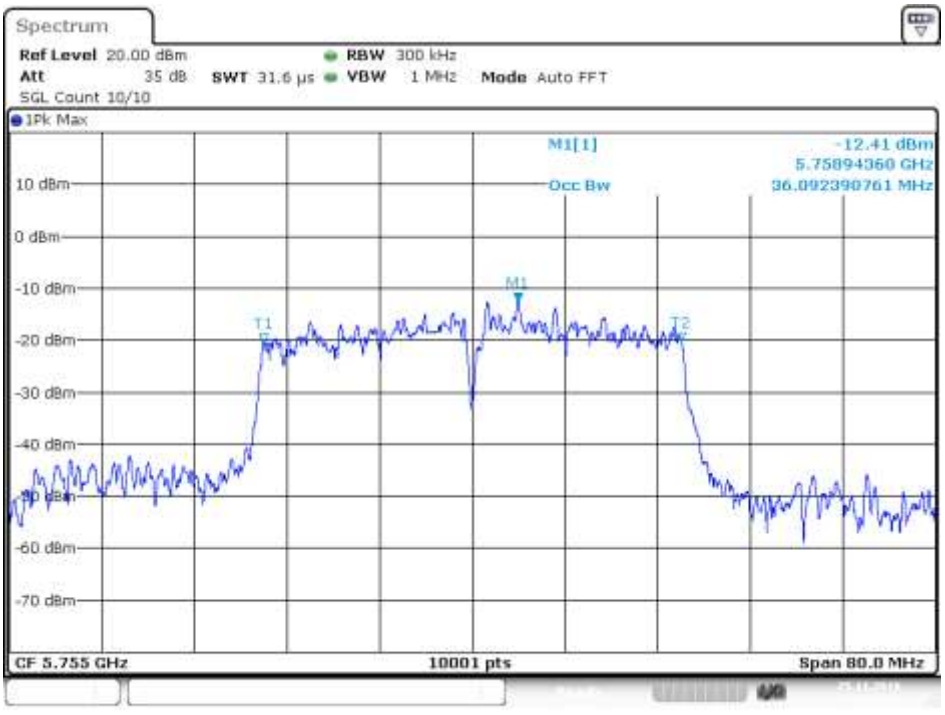
OBW NVNT 802.11ac20 5825MHz Ant1



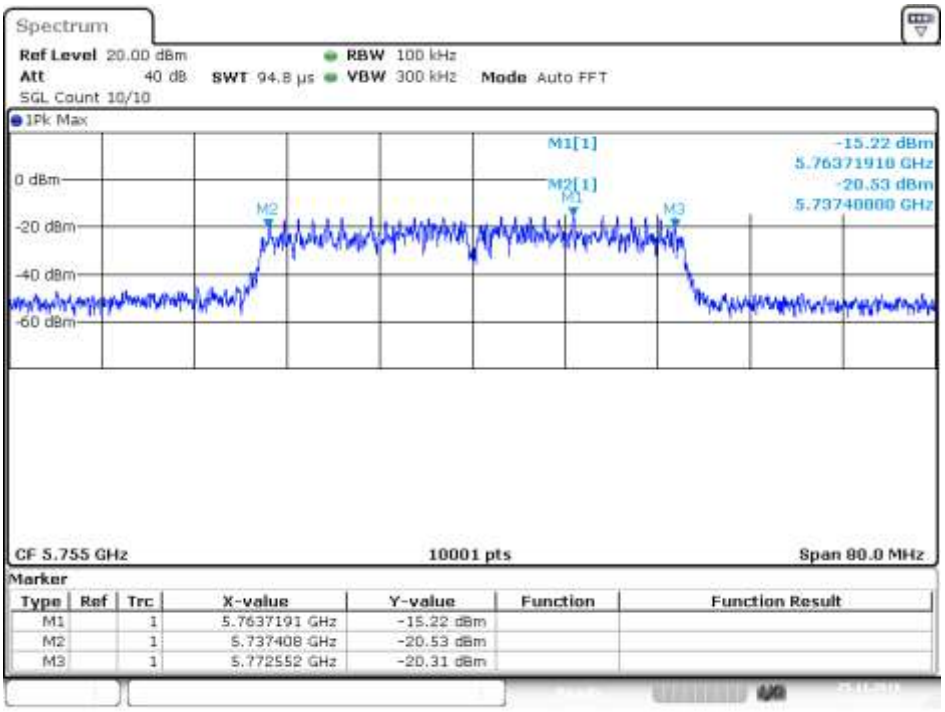
-6 dB BW NVNT 802.11ac20 5825MHz Ant1



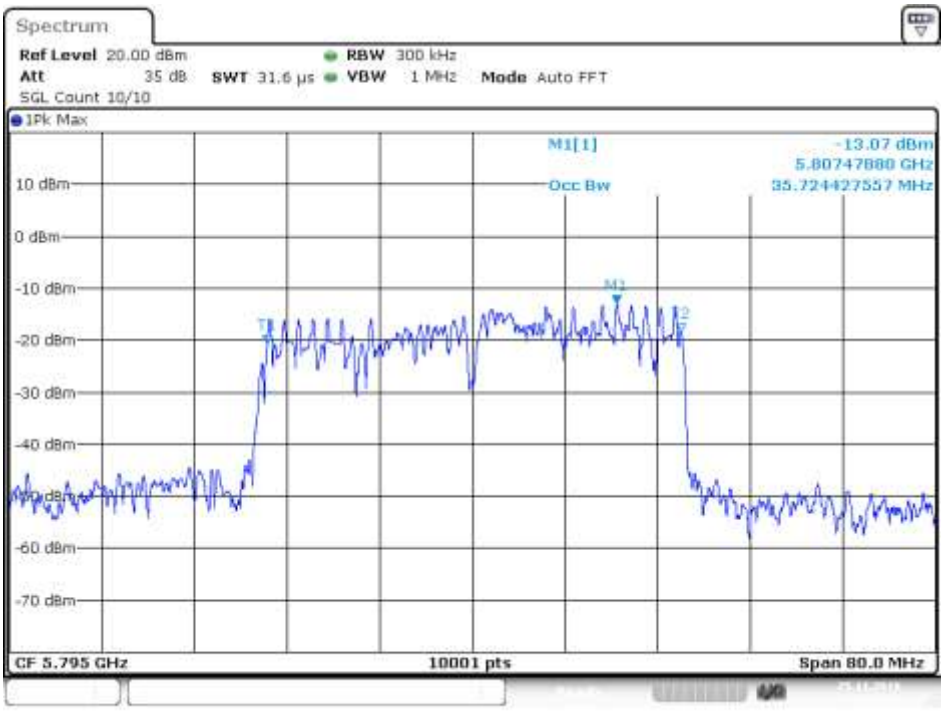
OBW NVNT 802.11ac40 5755MHz Ant1



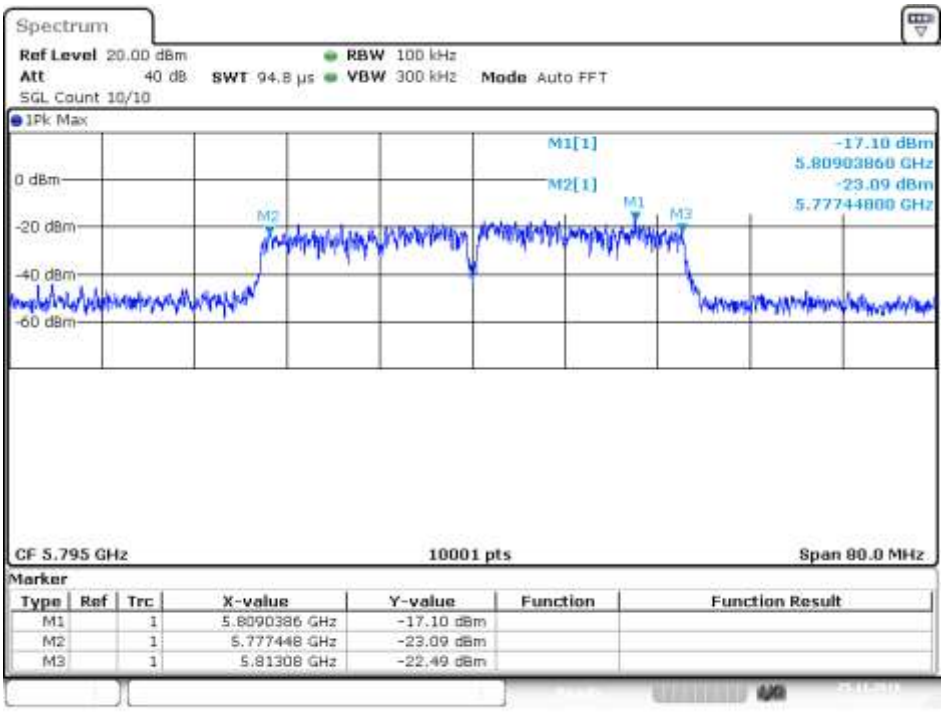
-6 dB BW NVNT 802.11ac40 5755MHz Ant1



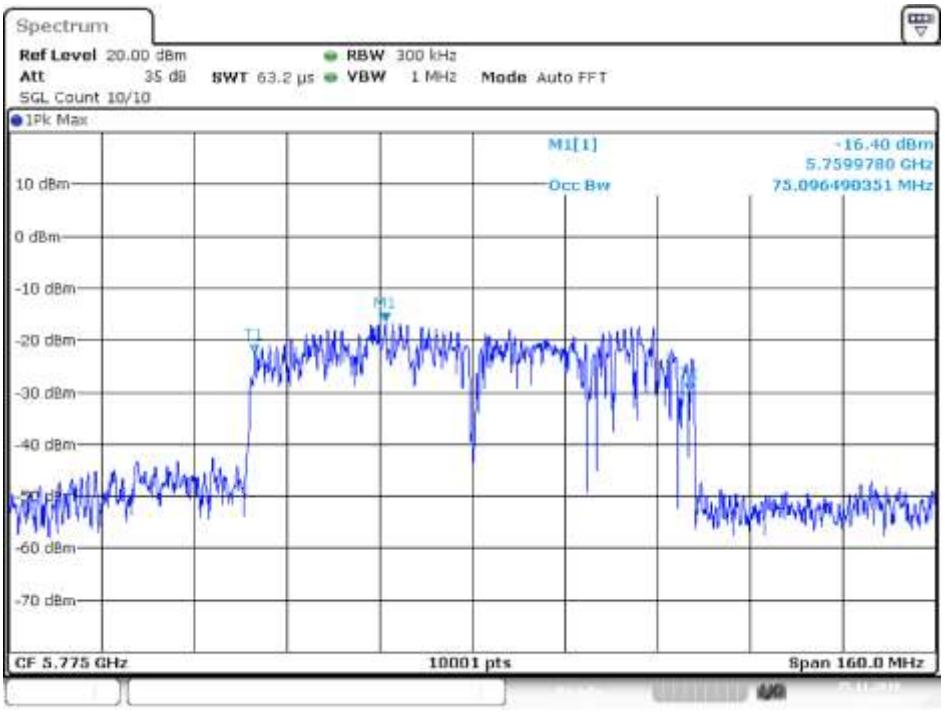
OBW NVNT 802.11ac40 5795MHz Ant1



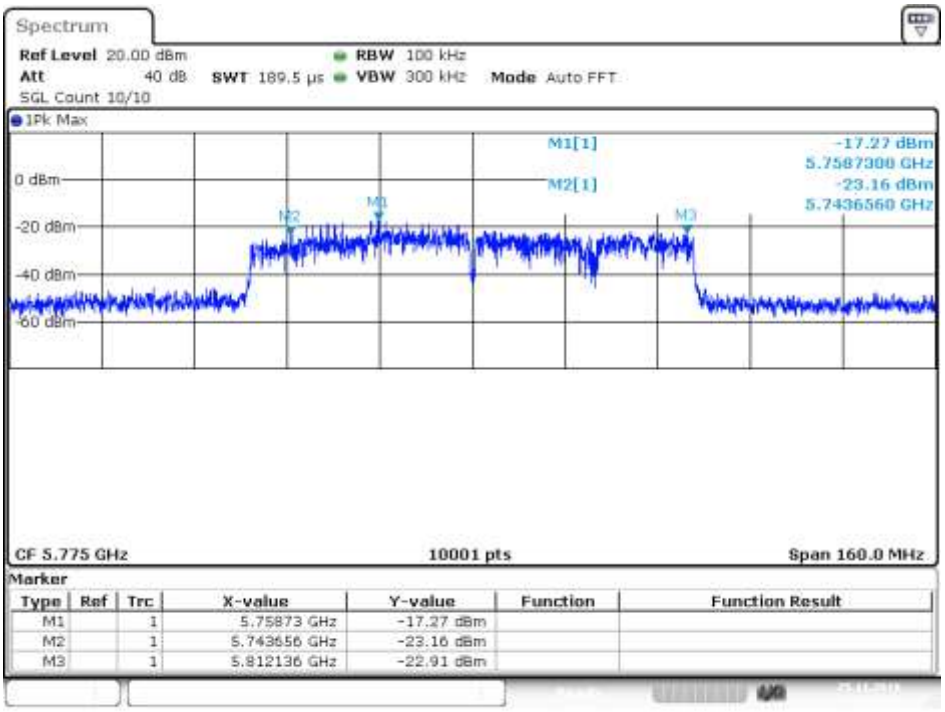
-6 dB BW NVNT 802.11ac40 5795MHz Ant1



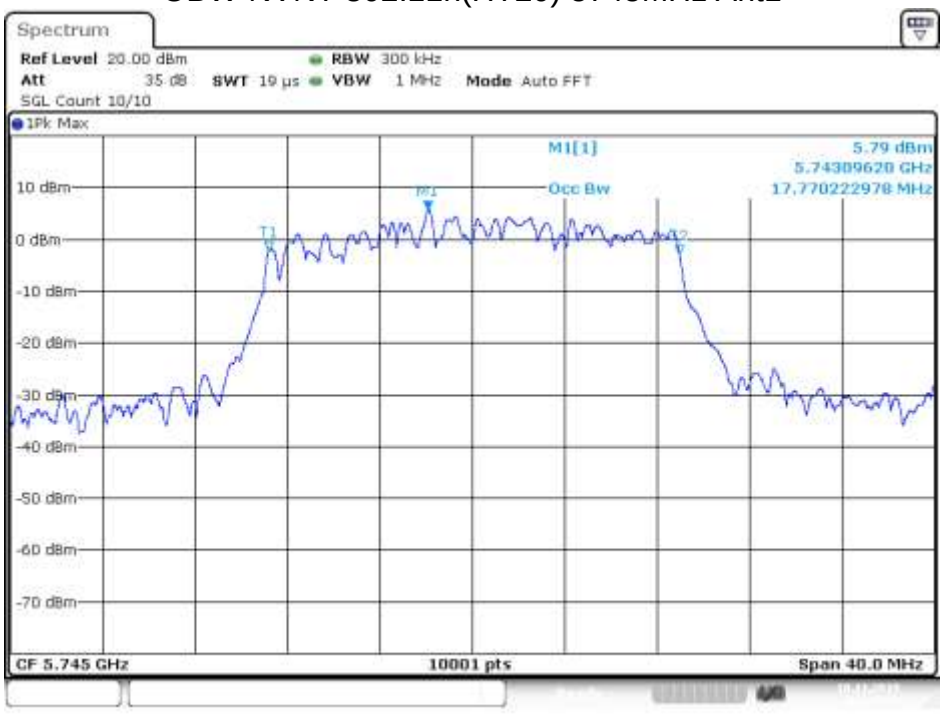
OBW NVNT 802.11ac80 5775MHz Ant1



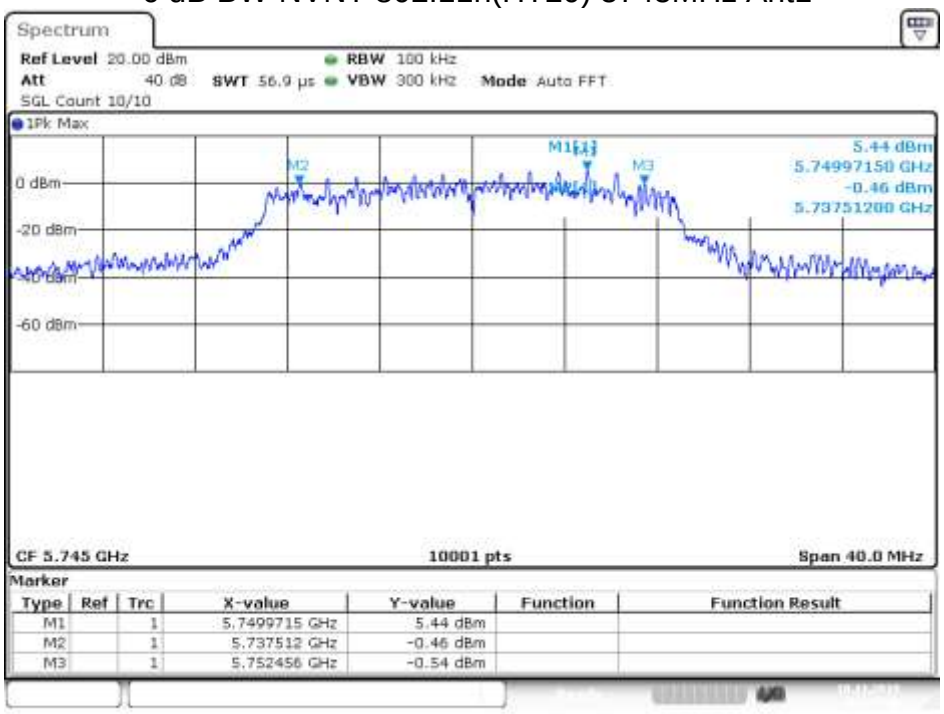
-6 dB BW NVNT 802.11ac80 5775MHz Ant1



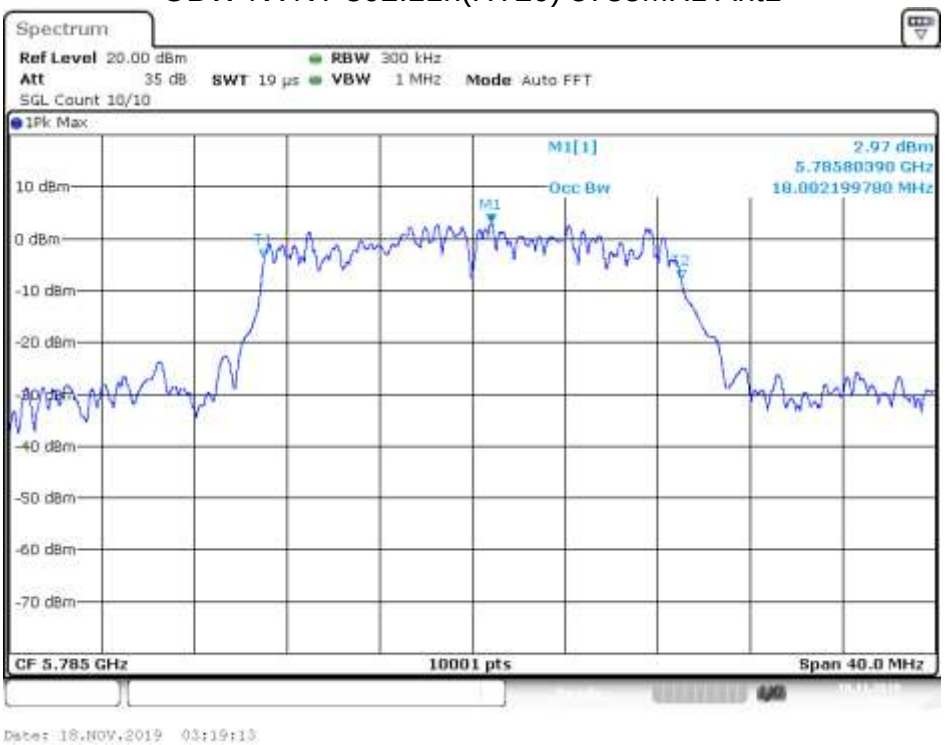
OBW NVNT 802.11n(HT20) 5745MHz Ant1



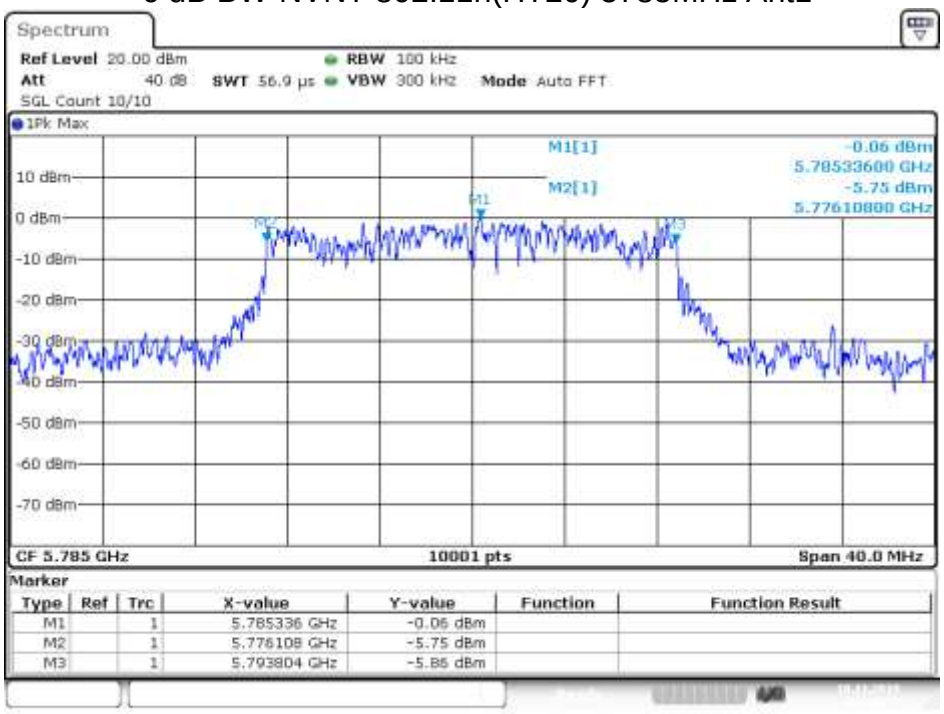
-6 dB BW NVNT 802.11n(HT20) 5745MHz Ant1



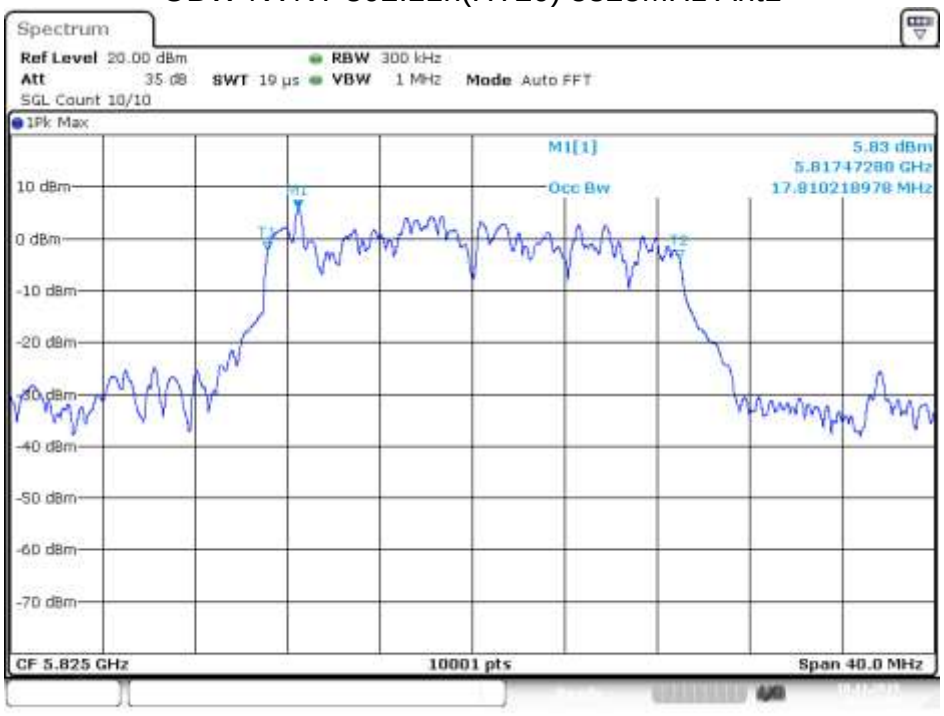
OBW NVNT 802.11n(HT20) 5785MHz Ant1



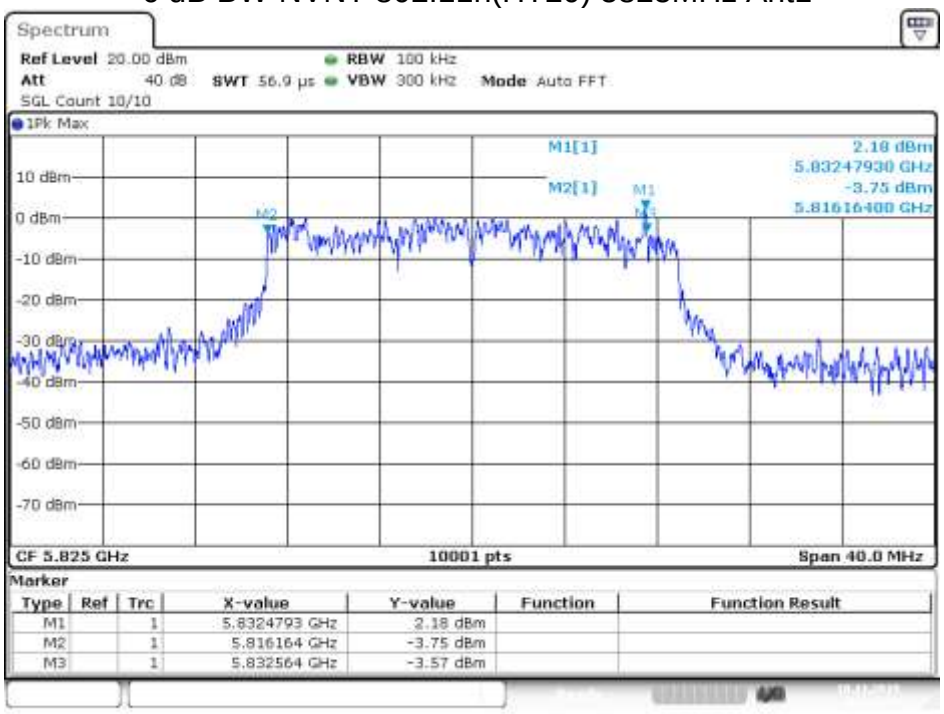
-6 dB BW NVNT 802.11n(HT20) 5785MHz Ant1



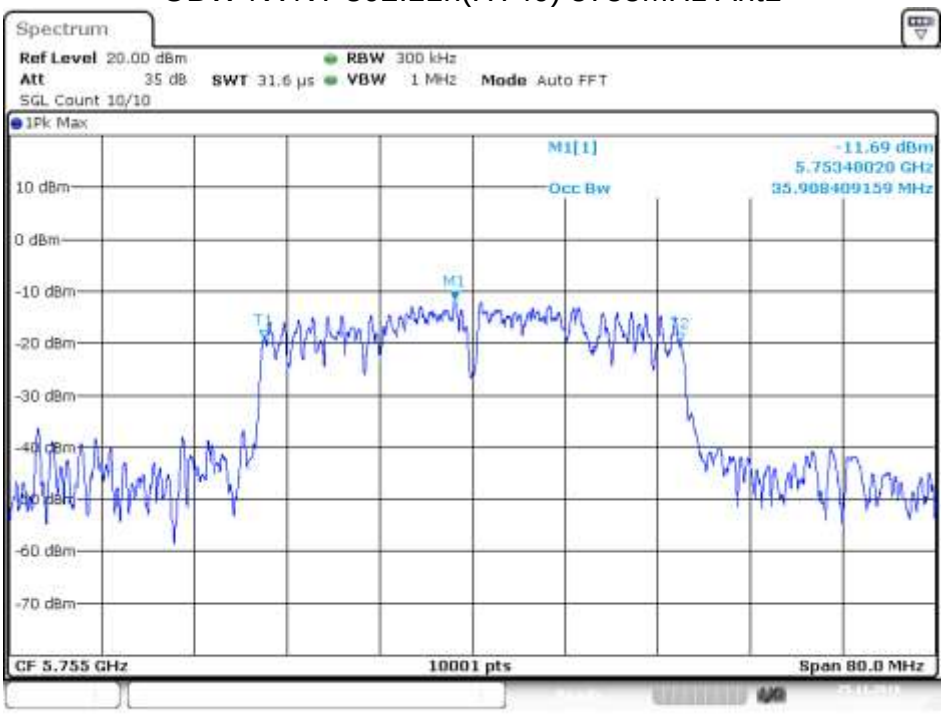
OBW NVNT 802.11n(HT20) 5825MHz Ant1



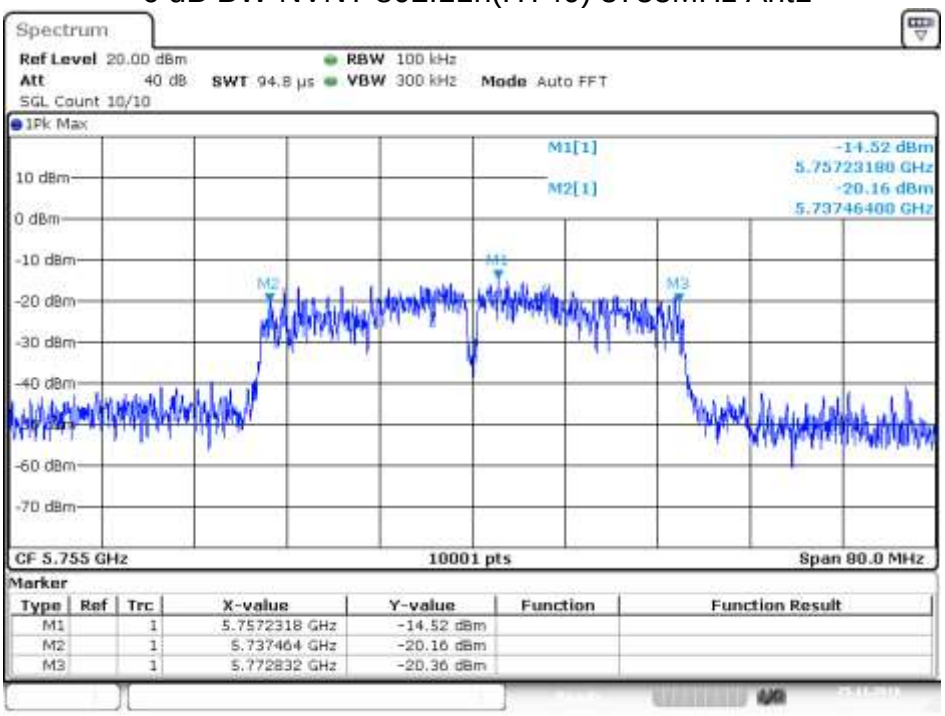
-6 dB BW NVNT 802.11n(HT20) 5825MHz Ant1



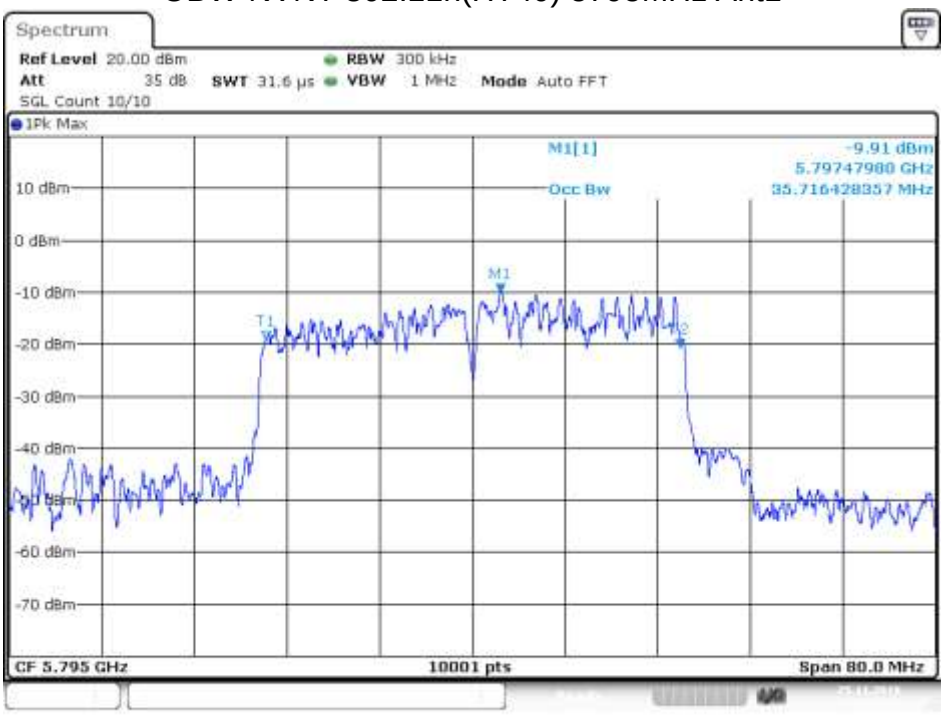
OBW NVNT 802.11n(HT40) 5755MHz Ant1



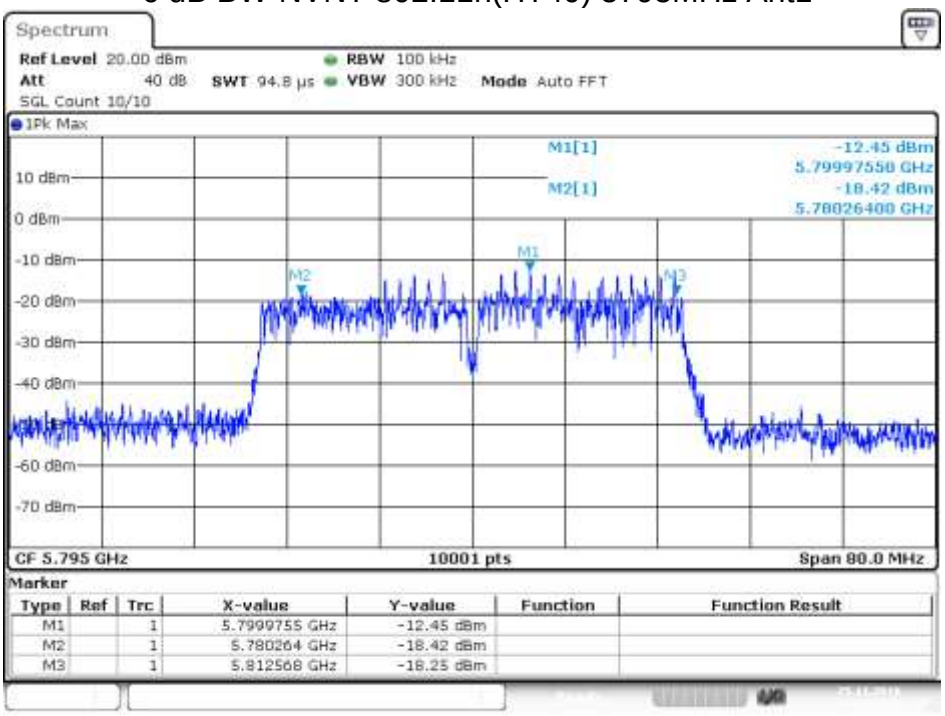
-6 dB BW NVNT 802.11n(HT40) 5755MHz Ant1



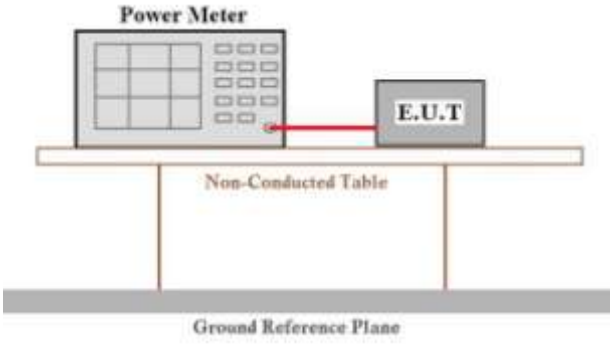
OBW NVNT 802.11n(HT40) 5795MHz Ant1



-6 dB BW NVNT 802.11n(HT40) 5795MHz Ant1



4.3 Peak Transmit Power

Test Requirement:	FCC Part15 E Section 15.407
Test Method:	KDB 789033 D02 General UNII Test Procedures New Rules v02r01
Limit:	For the band 5.15-5.25GHz, 5.25-5.35GHz, 5.47-5.725GHz,the maximum conducted output power over the frequency bands of operation shall not exceed 250mW. For the band 5.725-5.85GHz, the maximum conducted output power over the frequency bands of operation shall not exceed 1W.
Test setup:	
Test procedure:	**Measurement using an RF PK power meter** (i) Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the conditions listed below are satisfied a) The EUT is configured to transmit continuously or to transmit with a constant duty cycle. b) At all times when the EUT is transmitting, it must be transmitting at its maximum power control level. c) The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five. (ii) If the transmitter does not transmit continuously, measure the duty cycle, x, of the transmitter output signal as described in section B). (iii) Measure the PK power of the transmitter. This measurement is a PK over both the on and off periods of the transmitter. (iv) Adjust the measurement in dBm by adding 10 log(1/x) where x is the duty cycle (e.g., 10log(1/0.25) if the duty cycle is 25 percent).
Test results:	Pass

Measurement Data

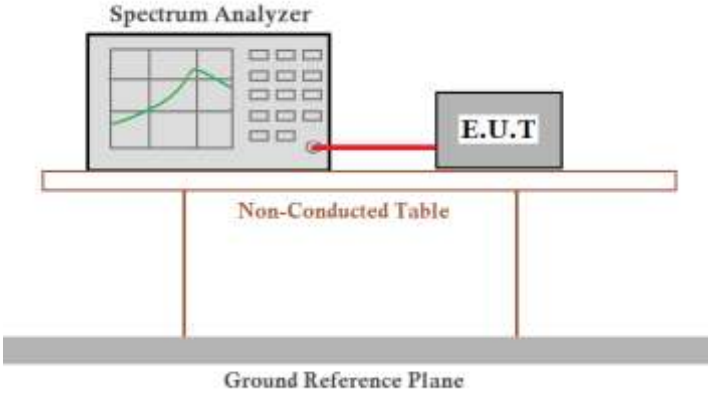
U-NII-1						
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	802.11a	5180	Ant 1	11.21	24	Pass
NVNT	802.11a	5200	Ant 1	11.32	24	Pass
NVNT	802.11a	5240	Ant 1	**12.39**	24	Pass
NVNT	802.11ac20	5180	Ant 1	9.59	24	Pass
NVNT	802.11ac20	5200	Ant 1	10.96	24	Pass
NVNT	802.11ac20	5240	Ant 1	11.43	24	Pass
NVNT	802.11ac40	5190	Ant 1	7.93	24	Pass
NVNT	802.11ac40	5230	Ant 1	8.29	24	Pass
NVNT	802.11ac80	5210	Ant 1	7.66	24	Pass
NVNT	802.11n(HT20)	5180	Ant 1	11.02	24	Pass
NVNT	802.11n(HT20)	5200	Ant 1	10.87	24	Pass
NVNT	802.11n(HT20)	5240	Ant 1	11.55	24	Pass
NVNT	802.11n(HT40)	5190	Ant 1	8.01	24	Pass
NVNT	802.11n(HT40)	5230	Ant 1	7.91	24	Pass

U-NII-2A						
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	802.11a	5260	Ant 1	9.93	24	Pass
NVNT	802.11a	5280	Ant 1	10.52	24	Pass
NVNT	802.11a	5320	Ant 1	11.44	24	Pass
NVNT	802.11ac20	5260	Ant 1	11.43	24	Pass
NVNT	802.11ac20	5280	Ant 1	11.16	24	Pass
NVNT	802.11ac20	5320	Ant 1	11.85	24	Pass
NVNT	802.11ac40	5270	Ant 1	8.17	24	Pass
NVNT	802.11ac40	5310	Ant 1	8.59	24	Pass
NVNT	802.11ac80	5290	Ant 1	7.93	24	Pass
NVNT	802.11n(HT20)	5260	Ant 1	10.85	24	Pass
NVNT	802.11n(HT20)	5280	Ant 1	11.85	24	Pass
NVNT	802.11n(HT20)	5320	Ant 1	11.47	24	Pass
NVNT	802.11n(HT40)	5270	Ant 1	8.34	24	Pass
NVNT	802.11n(HT40)	5310	Ant 1	8.54	24	Pass

U-NII-2C						
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	802.11a	5500	Ant 1	9.94	24	Pass
NVNT	802.11a	5580	Ant 1	8.34	24	Pass
NVNT	802.11a	5700	Ant 1	10	24	Pass
NVNT	802.11ac20	5500	Ant 1	11.29	24	Pass
NVNT	802.11ac20	5580	Ant 1	12.03	24	Pass
NVNT	802.11ac20	5700	Ant 1	11.15	24	Pass
NVNT	802.11ac40	5510	Ant 1	8.1	24	Pass
NVNT	802.11ac40	5670	Ant 1	7.43	24	Pass
NVNT	802.11ac80	5530	Ant 1	7.86	24	Pass
NVNT	802.11n(HT20)	5500	Ant 1	11.37	24	Pass
NVNT	802.11n(HT20)	5580	Ant 1	11.87	24	Pass
NVNT	802.11n(HT20)	5700	Ant 1	11.03	24	Pass
NVNT	802.11n(HT40)	5510	Ant 1	8.14	24	Pass
NVNT	802.11n(HT40)	5670	Ant 1	7.36	24	Pass

U-NII-3						
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	802.11a	5745	Ant 1	10.00	30	Pass
NVNT	802.11a	5785	Ant 1	9.46	30	Pass
NVNT	802.11a	5825	Ant 1	10.36	30	Pass
NVNT	802.11ac20	5745	Ant 1	9.94	30	Pass
NVNT	802.11ac20	5785	Ant 1	9.28	30	Pass
NVNT	802.11ac20	5825	Ant 1	10.19	30	Pass
NVNT	802.11ac40	5755	Ant 1	7.62	30	Pass
NVNT	802.11ac40	5795	Ant 1	8.79	30	Pass
NVNT	802.11ac80	5775	Ant 1	8.68	30	Pass
NVNT	802.11n(HT20)	5745	Ant 1	9.87	30	Pass
NVNT	802.11n(HT20)	5785	Ant 1	9.20	30	Pass
NVNT	802.11n(HT20)	5825	Ant 1	10.20	30	Pass
NVNT	802.11n(HT40)	5755	Ant 1	8.55	30	Pass
NVNT	802.11n(HT40)	5795	Ant 1	8.84	30	Pass

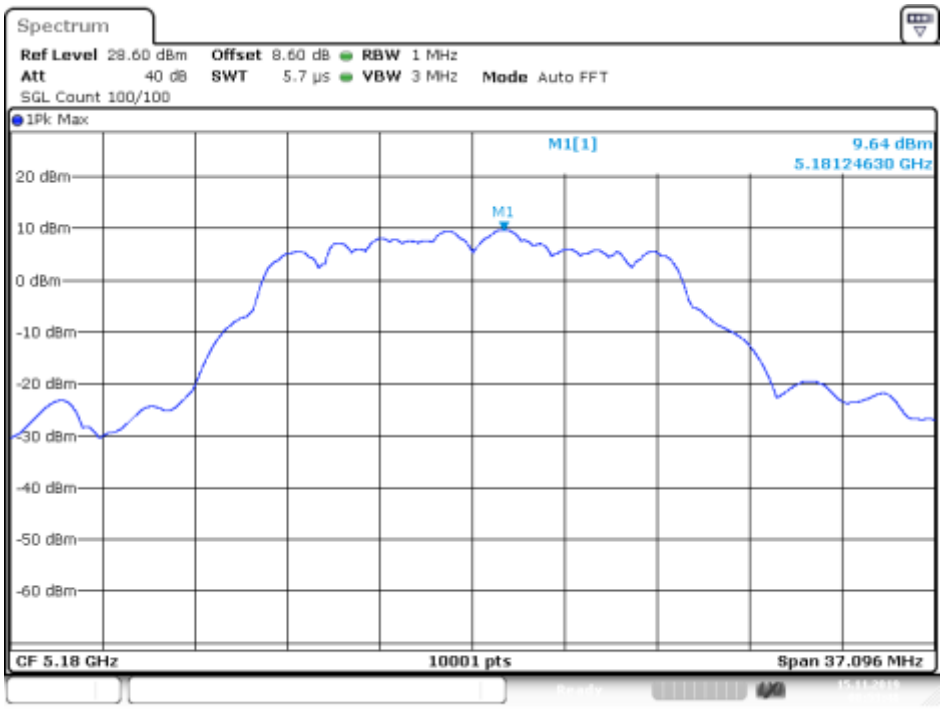
4.4 Power Spectral Density

Test Requirement:	FCC Part15 E Section 15.407
Test Method:	KDB 789033 D02 General UNII Test Procedures New Rules v02r01
Limit:	≤11.00dBm/MHz for 5150MHz-5250MHz, 5250-5350MHz and 5470-5725 MHz ≤30.00dBm/500KHz for 5725MHz-5850MHz
Test setup:	
Test procedure:	1) Create an average power spectrum for the EUT operating mode being tested by following the instructions in section E)2) for measuring maximum conducted output power using a spectrum analyzer or EMI receiver: select the appropriate test method (SA-1, SA-2, SA-3, or alternatives to each) and apply it up to, but not including, the step labeled, “Compute power…”. 2) Use the peak search function on the instrument to find the peak of the spectrum. 3) Make the following adjustments to the peak value of the spectrum, if applicable: a) If Method SA-2 or SA-2 Alternative was used, add 10 log(1/x), where x is the duty cycle, to the peak of the spectrum. b) If Method SA-3 Alternative was used and the linear mode was used in step E)2)g)(viii), add 1 dB to the final result to compensate for the difference between linear averaging and power averaging. 4) The result is the PSD.
Test results:	Pass

Measurement Data

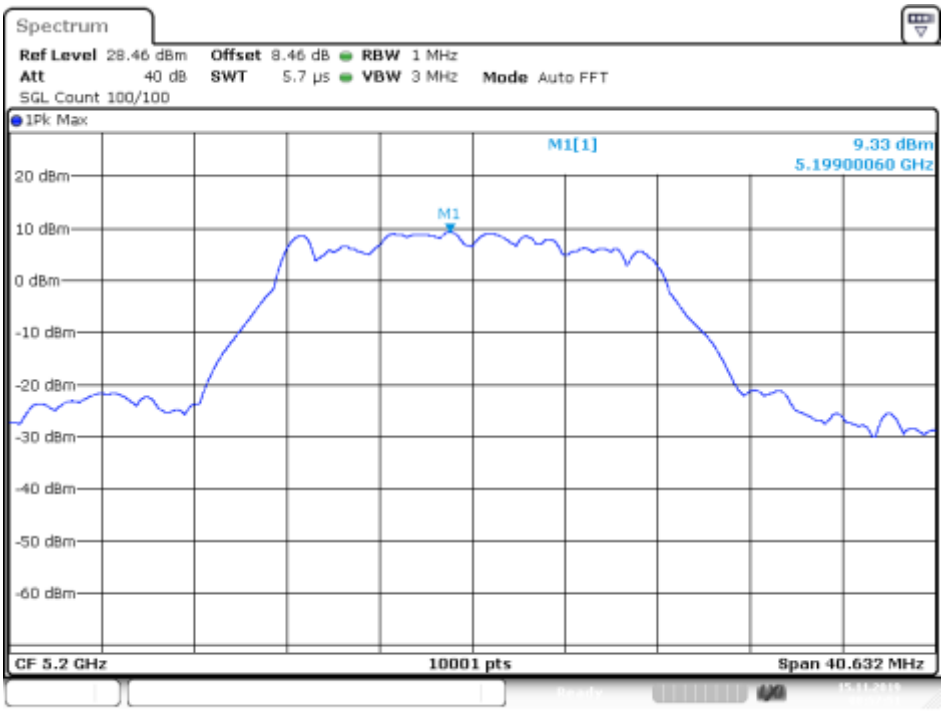
U-NII-1						
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	802.11a	5180	Ant 1	9.644	11	Pass
NVNT	802.11a	5200	Ant 1	9.328	11	Pass
NVNT	802.11a	5240	Ant 1	9.652	11	Pass
NVNT	802.11ac20	5180	Ant 1	9.689	11	Pass
NVNT	802.11ac20	5200	Ant 1	9.698	11	Pass
NVNT	802.11ac20	5240	Ant 1	9.923	11	Pass
NVNT	802.11ac40	5190	Ant 1	3.829	11	Pass
NVNT	802.11ac40	5230	Ant 1	5.012	11	Pass
NVNT	802.11ac80	5210	Ant 1	2.321	11	Pass
NVNT	802.11n(HT20)	5180	Ant 1	3.824	11	Pass
NVNT	802.11n(HT20)	5200	Ant 1	4.033	11	Pass
NVNT	802.11n(HT20)	5240	Ant 1	6.258	11	Pass
NVNT	802.11n(HT40)	5190	Ant 1	5.828	11	Pass
NVNT	802.11n(HT40)	5230	Ant 1	5.636	11	Pass

PSD NVNT 802.11a 5180MHz Ant1



Date: 15.NOV.2019 08:53:48

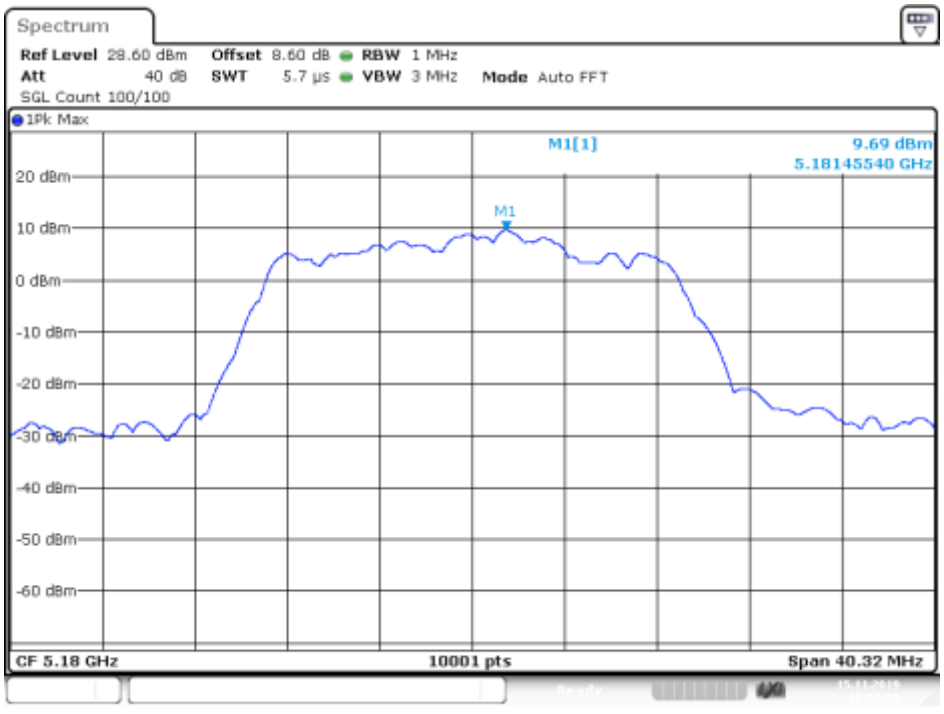
PSD NVNT 802.11a 5200MHz Ant1



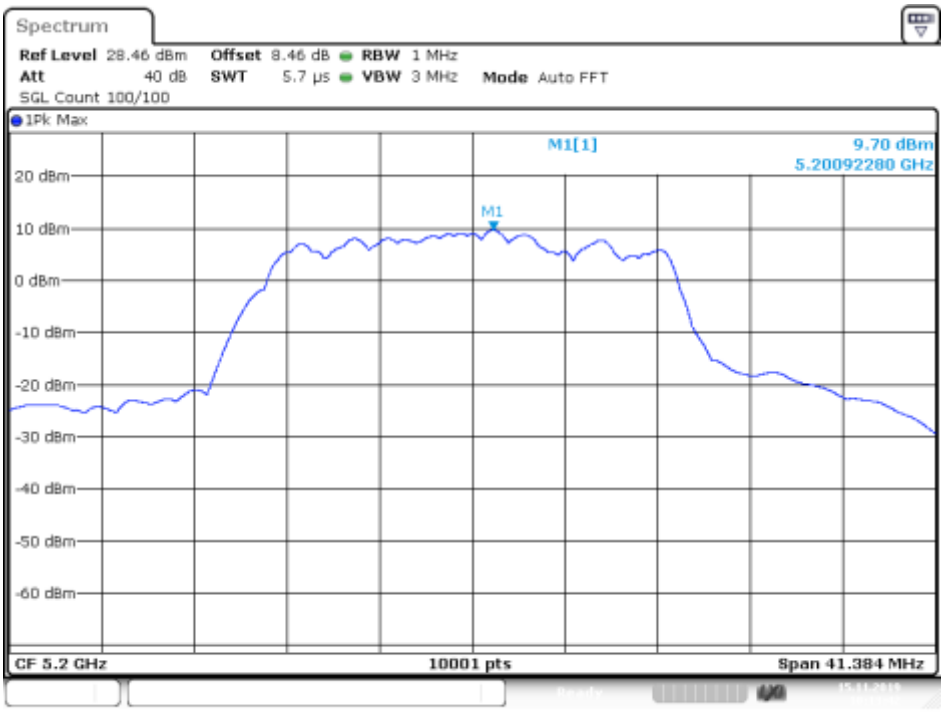
Date: 15.NOV.2019 08:57:51

PSD NVNT 802.11a 5240MHz Ant1

PSD NVNT 802.11ac20 5180MHz Ant1

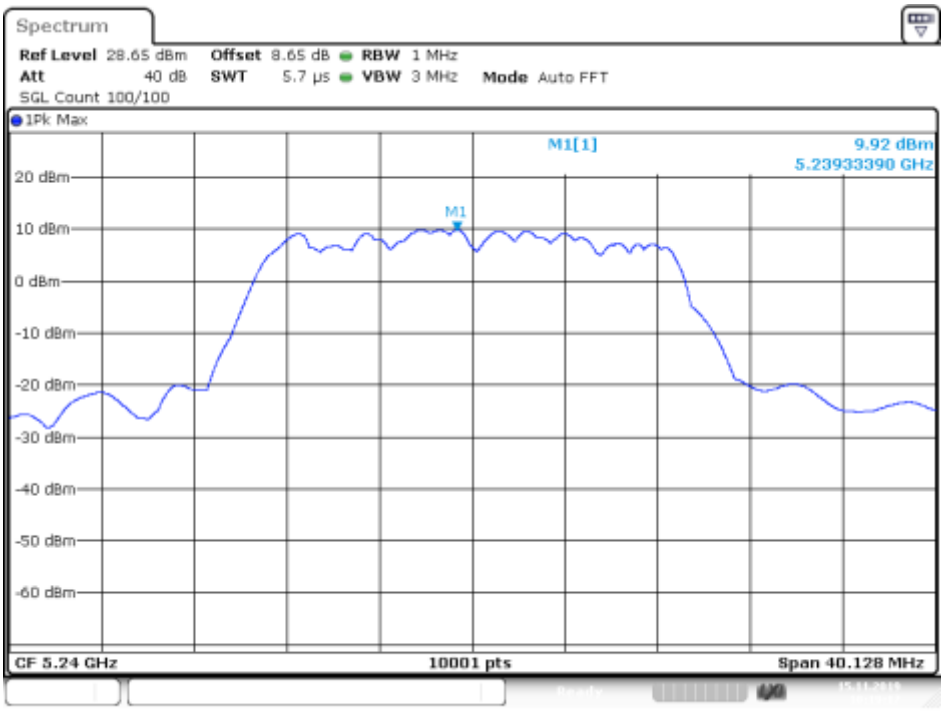


PSD NVNT 802.11ac20 5200MHz Ant1



Date: 15.NOV.2019 10:13:42

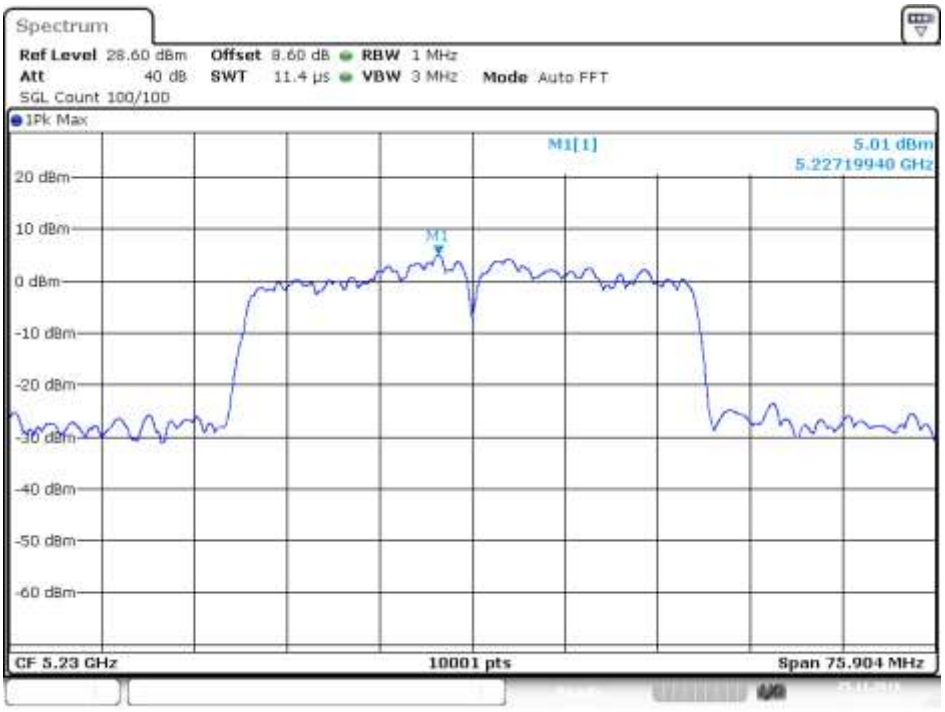
PSD NVNT 802.11ac20 5240MHz Ant1



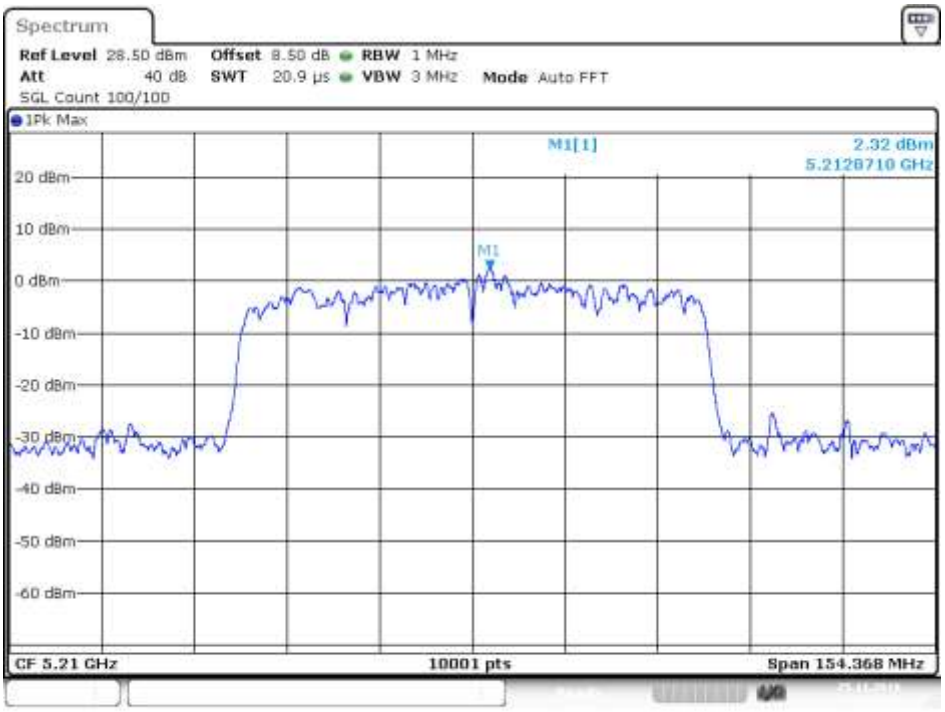
Date: 15.NOV.2019 10:19:17

PSD NVNT 802.11ac40 5190MHz Ant1

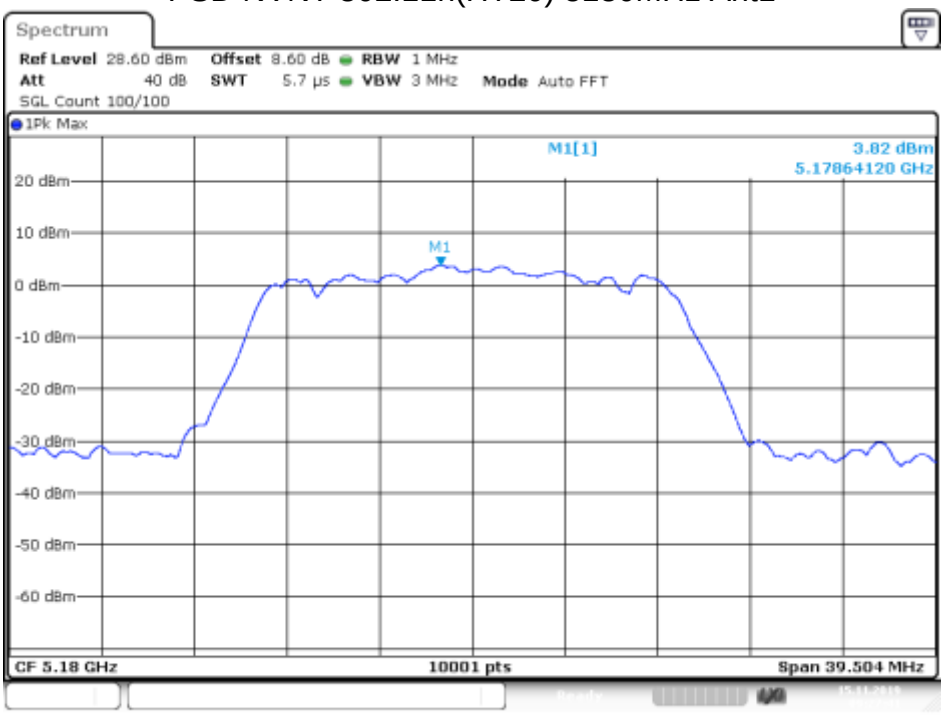
PSD NVNT 802.11ac40 5230MHz Ant1



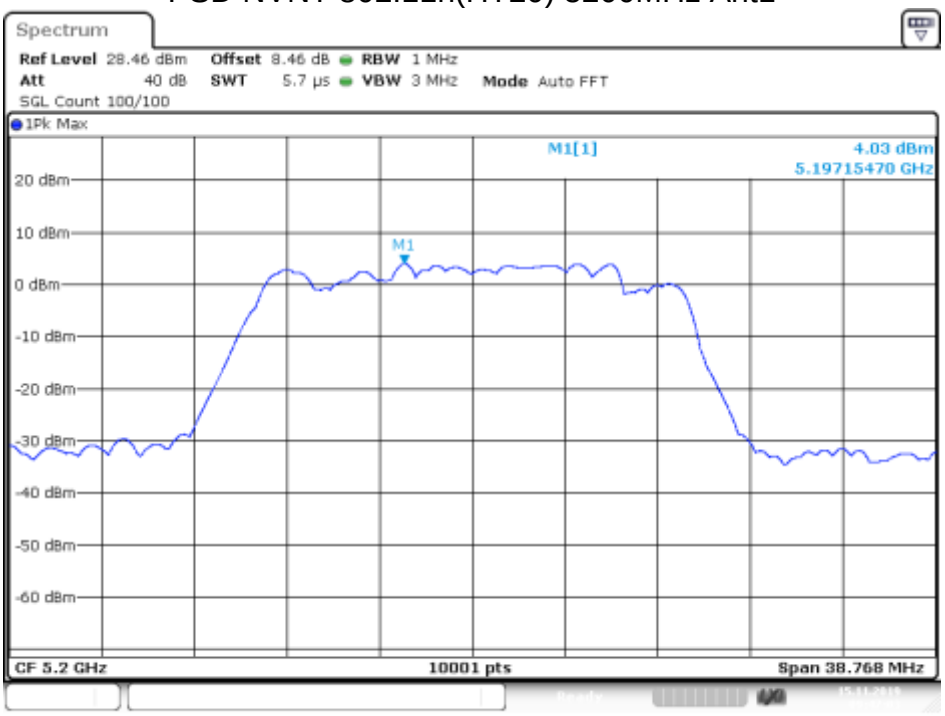
PSD NVNT 802.11ac80 5210MHz Ant1



PSD NVNT 802.11n(HT20) 5180MHz Ant1



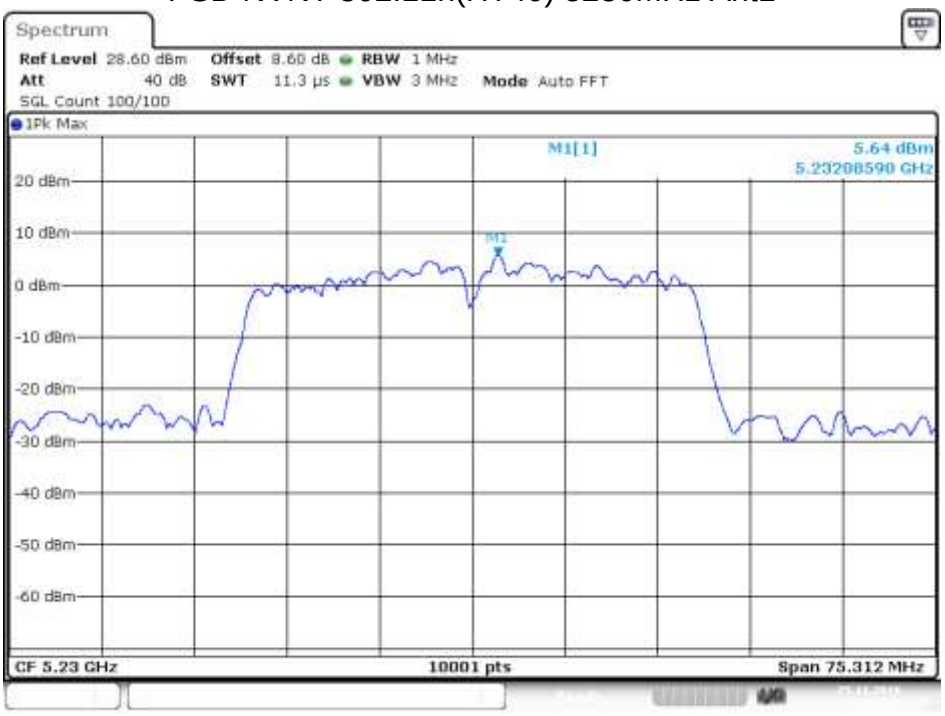
PSD NVNT 802.11n(HT20) 5200MHz Ant1



PSD NVNT 802.11n(HT20) 5240MHz Ant1

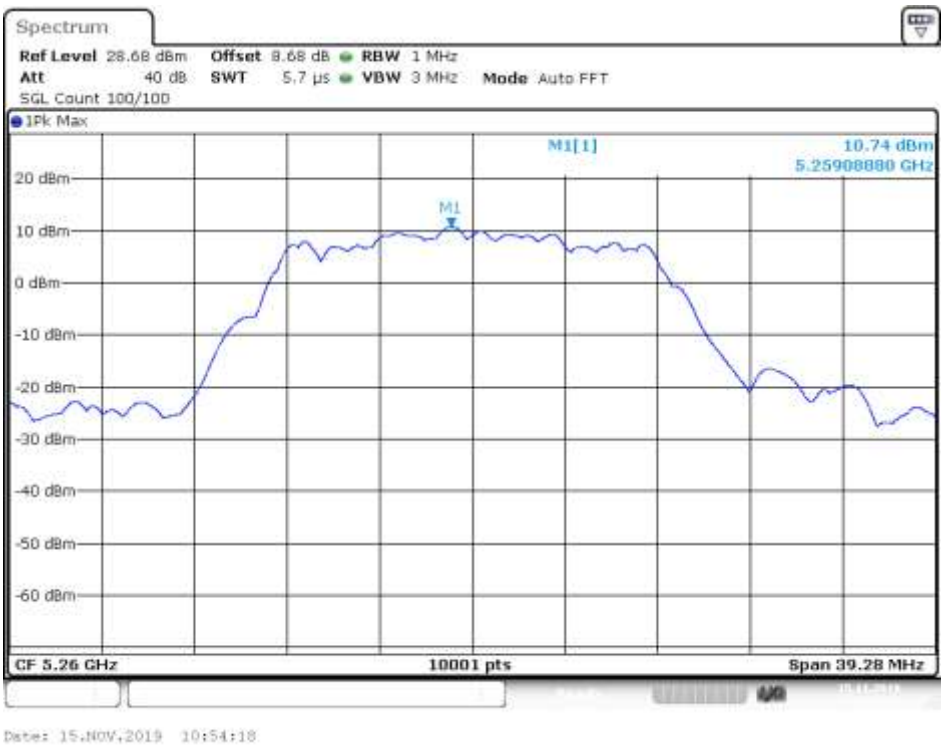
PSD NVNT 802.11n(HT40) 5190MHz Ant1

PSD NVNT 802.11n(HT40) 5230MHz Ant1



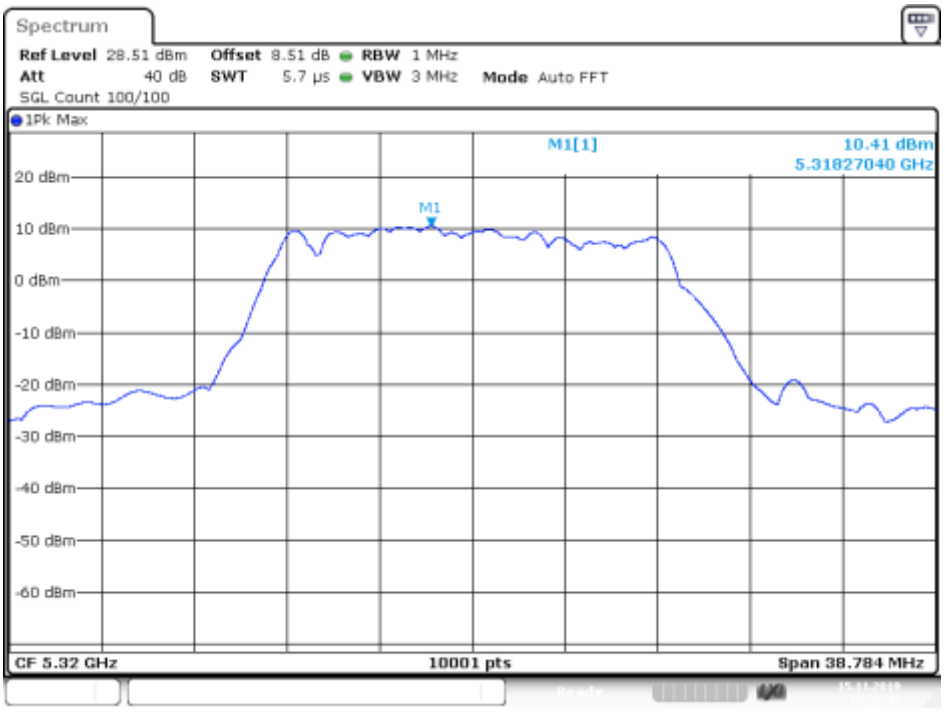
U-NII-2A						
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	802.11a	5260	Ant 1	10.745	11	Pass
NVNT	802.11a	5280	Ant 1	10.517	11	Pass
NVNT	802.11a	5320	Ant 1	10.412	11	Pass
NVNT	802.11ac20	5260	Ant 1	9.479	11	Pass
NVNT	802.11ac20	5280	Ant 1	10.883	11	Pass
NVNT	802.11ac20	5320	Ant 1	10.25	11	Pass
NVNT	802.11ac40	5270	Ant 1	4.672	11	Pass
NVNT	802.11ac40	5310	Ant 1	3.928	11	Pass
NVNT	802.11ac80	5290	Ant 1	1.143	11	Pass
NVNT	802.11n(HT20)	5260	Ant 1	9.851	11	Pass
NVNT	802.11n(HT20)	5280	Ant 1	10.988	11	Pass
NVNT	802.11n(HT20)	5320	Ant 1	10.492	11	Pass
NVNT	802.11n(HT40)	5270	Ant 1	4.013	11	Pass
NVNT	802.11n(HT40)	5310	Ant 1	5.085	11	Pass

PSD NVNT 802.11a 5260MHz Ant1



PSD NVNT 802.11a 5280MHz Ant1

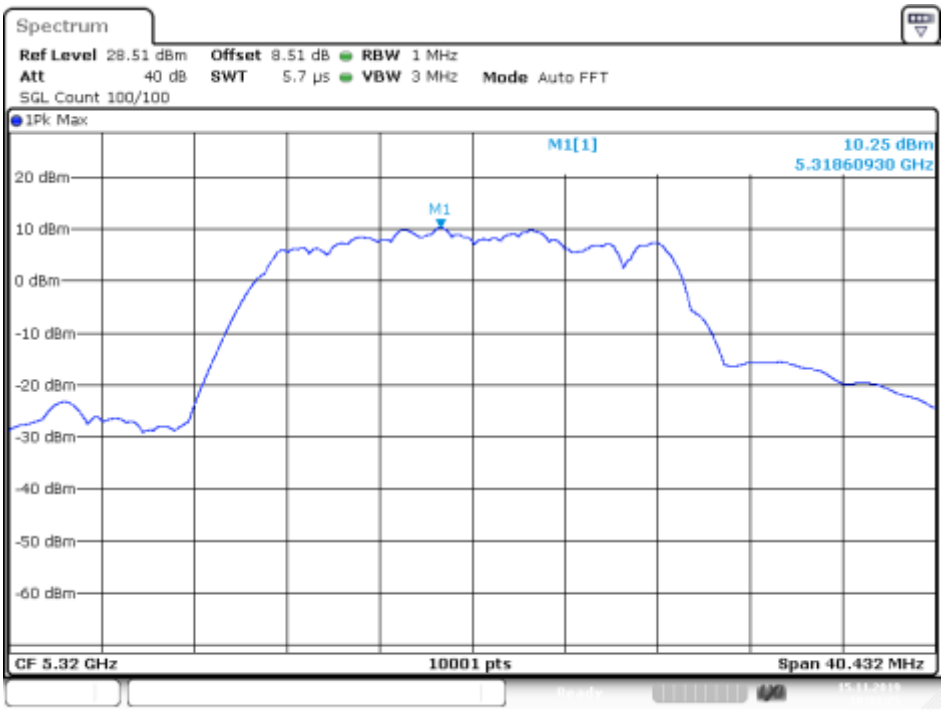
PSD NVNT 802.11a 5320MHz Ant1



PSD NVNT 802.11ac20 5260MHz Ant1

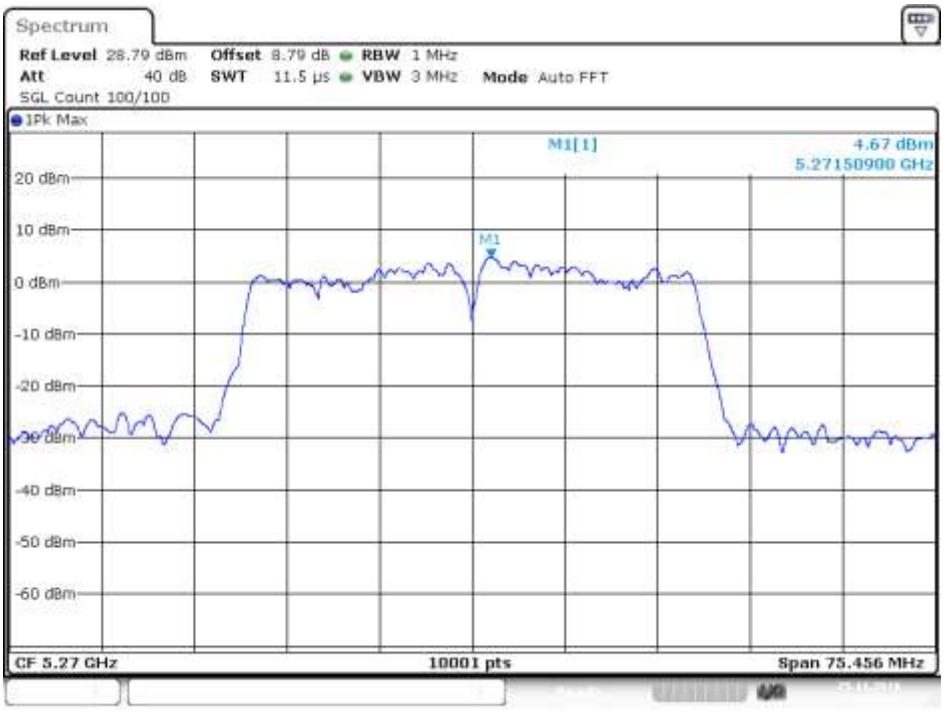
PSD NVNT 802.11ac20 5280MHz Ant1

PSD NVNT 802.11ac20 5320MHz Ant1



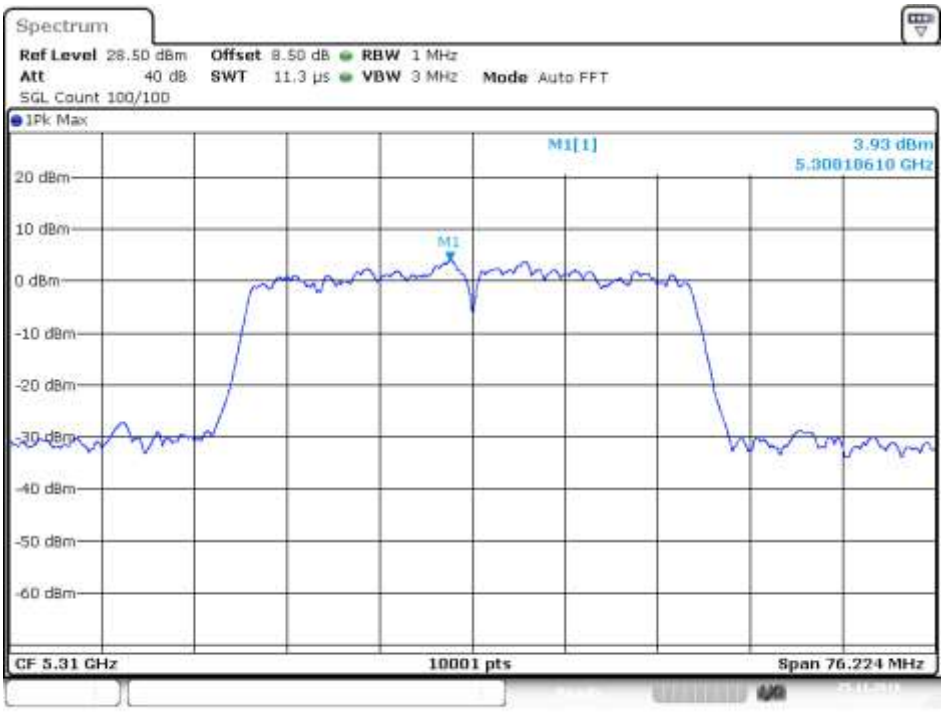
Date: 15.NOV.2019 10:33:25

PSD NVNT 802.11ac40 5270MHz Ant1

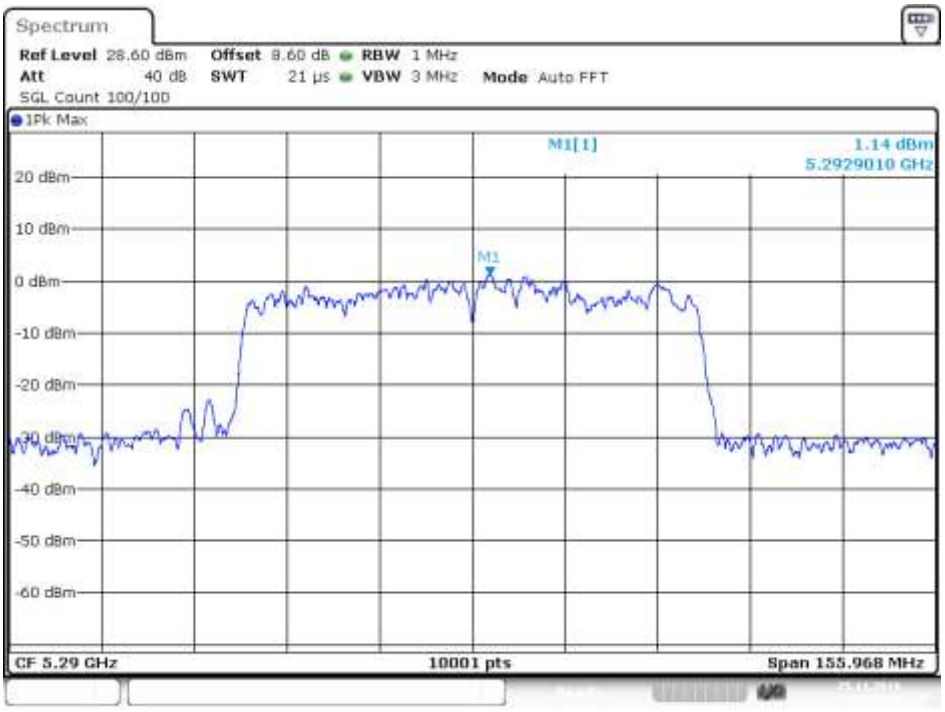


Date: 25.NOV.2019 03:31:27

PSD NVNT 802.11ac40 5310MHz Ant1



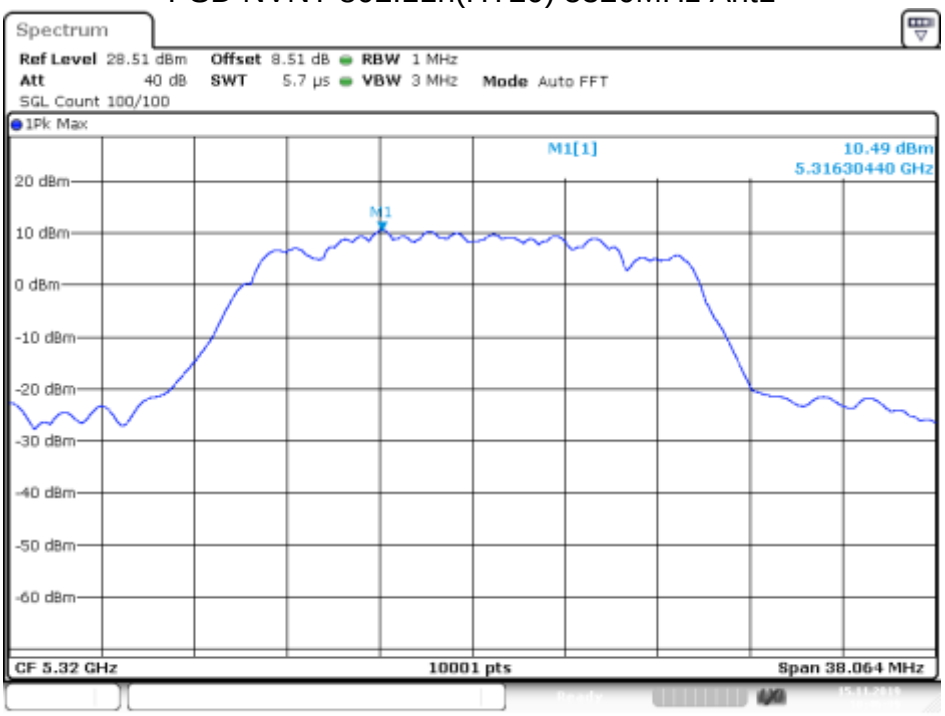
PSD NVNT 802.11ac80 5290MHz Ant1



PSD NVNT 802.11n(HT20) 5260MHz Ant1

PSD NVNT 802.11n(HT20) 5280MHz Ant1

PSD NVNT 802.11n(HT20) 5320MHz Ant1

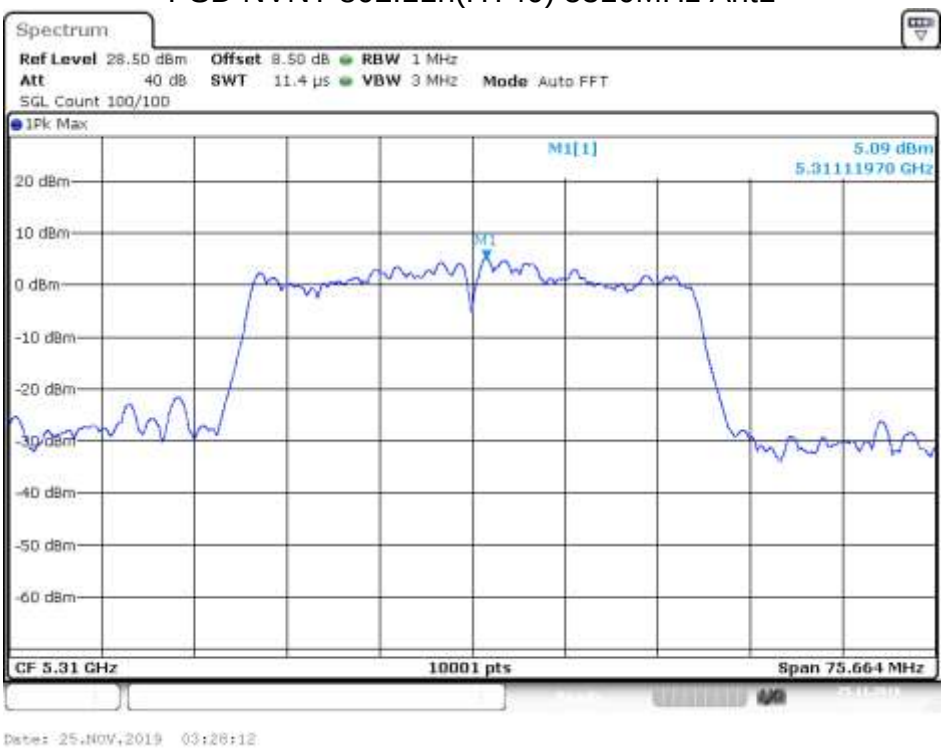


Date: 15.NOV.2019 10:46:39

PSD NVNT 802.11n(HT40) 5270MHz Ant1

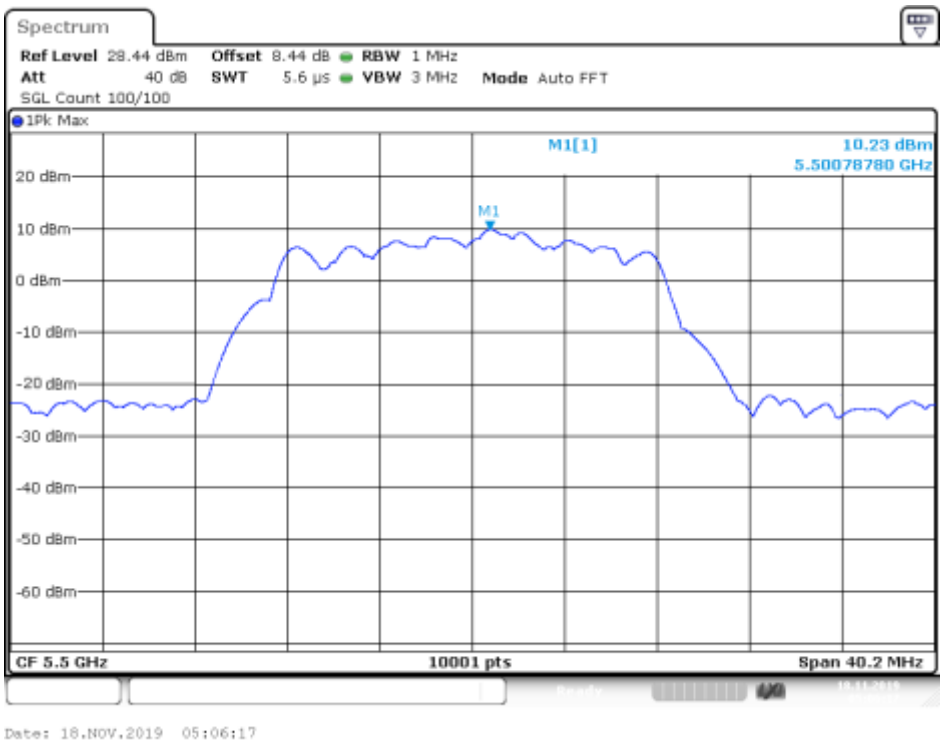
Date: 25.NOV.2019 03:26:21

PSD NVNT 802.11n(HT40) 5310MHz Ant1

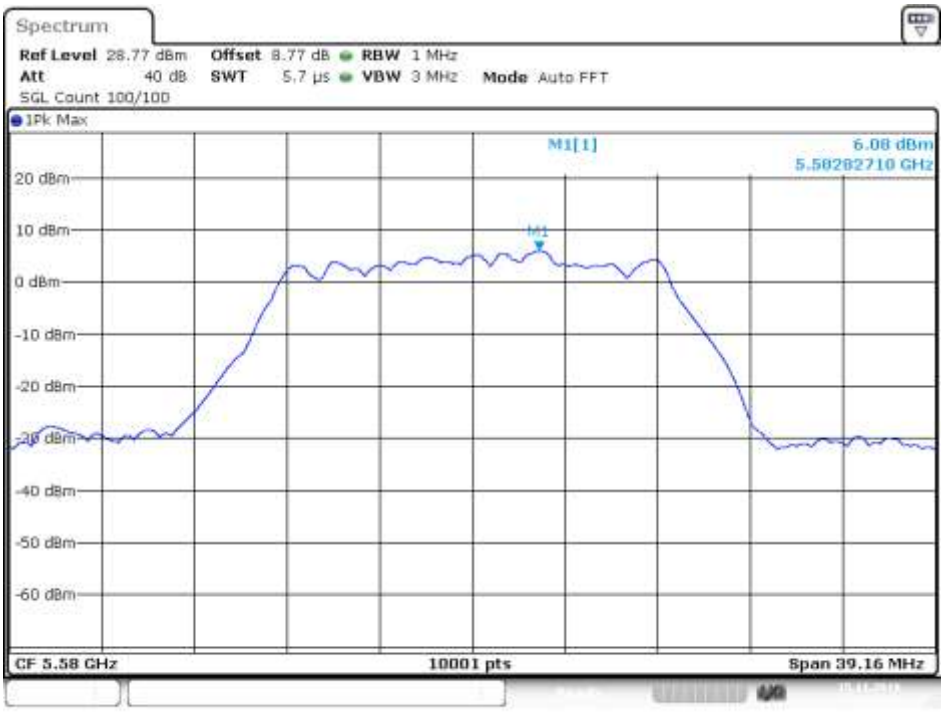


U-NII-2C						
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	802.11a	5500	Ant 1	10.232	11	Pass
NVNT	802.11a	5580	Ant 1	6.084	11	Pass
NVNT	802.11a	5700	Ant 1	5.308	11	Pass
NVNT	802.11ac20	5500	Ant 1	9.977	11	Pass
NVNT	802.11ac20	5580	Ant 1	10.165	11	Pass
NVNT	802.11ac20	5700	Ant 1	9.119	11	Pass
NVNT	802.11ac40	5510	Ant 1	4.705	11	Pass
NVNT	802.11ac40	5670	Ant 1	2.582	11	Pass
NVNT	802.11ac80	5530	Ant 1	-1.034	11	Pass
NVNT	802.11n(HT20)	5500	Ant 1	9.317	11	Pass
NVNT	802.11n(HT20)	5580	Ant 1	10.148	11	Pass
NVNT	802.11n(HT20)	5700	Ant 1	10.704	11	Pass
NVNT	802.11n(HT40)	5510	Ant 1	4.314	11	Pass
NVNT	802.11n(HT40)	5670	Ant 1	3.15	11	Pass

PSD NVNT 802.11a 5500MHz Ant1

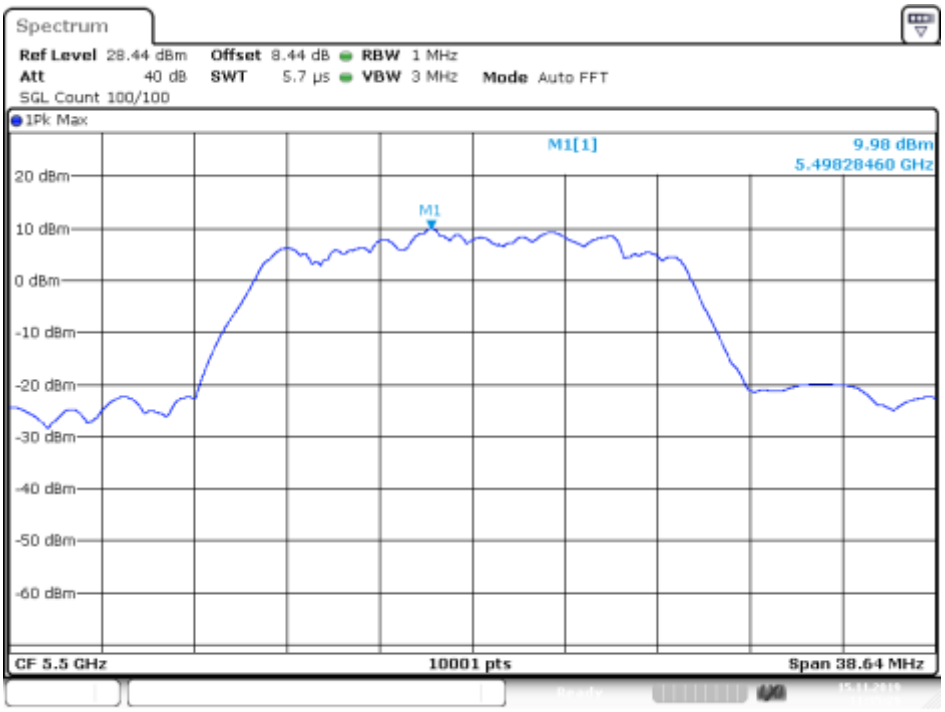


PSD NVNT 802.11a 5580MHz Ant1



PSD NVNT 802.11a 5700MHz Ant1

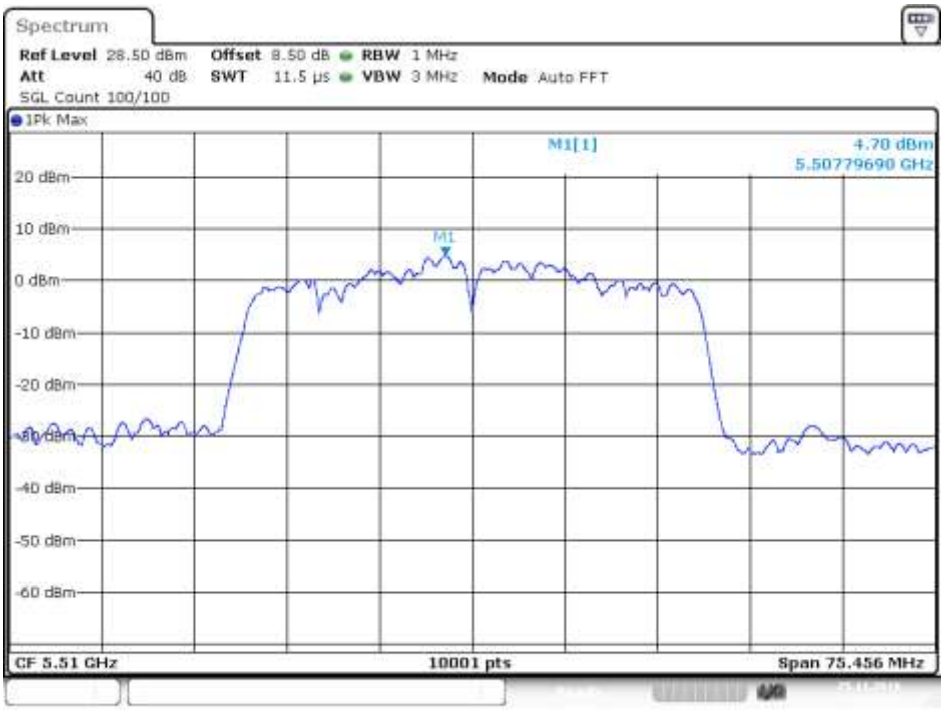
PSD NVNT 802.11ac20 5500MHz Ant1



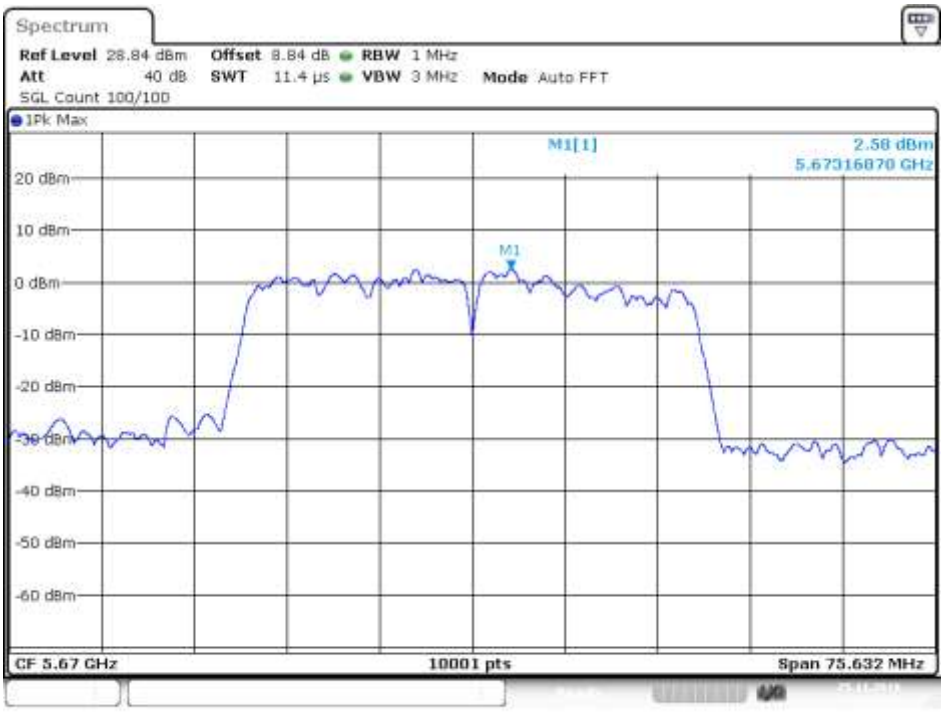
PSD NVNT 802.11ac20 5580MHz Ant1

PSD NVNT 802.11ac20 5700MHz Ant1

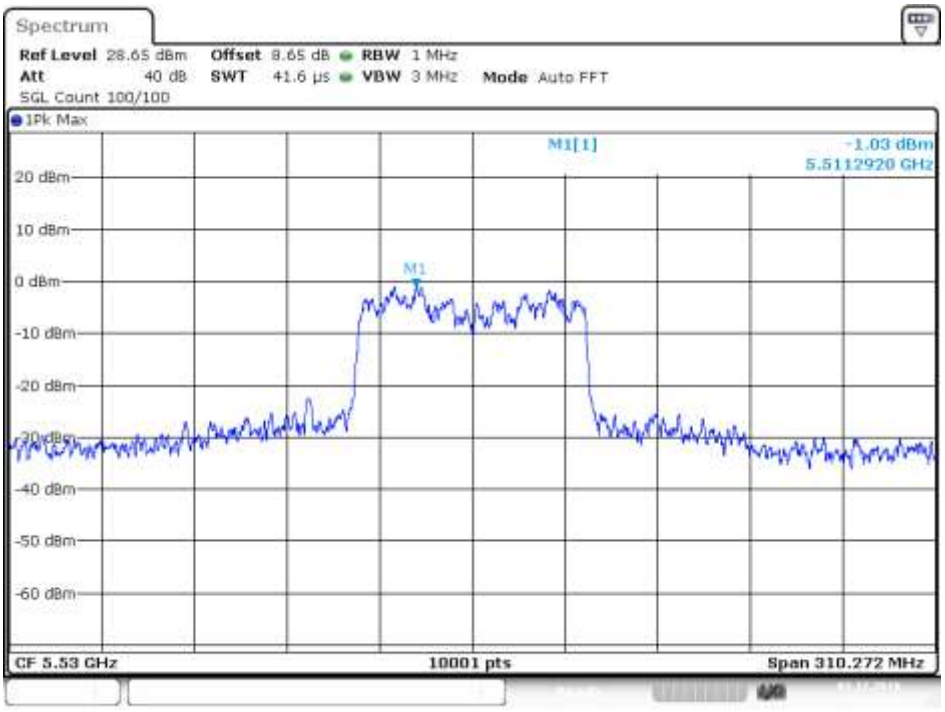
PSD NVNT 802.11ac40 5510MHz Ant1



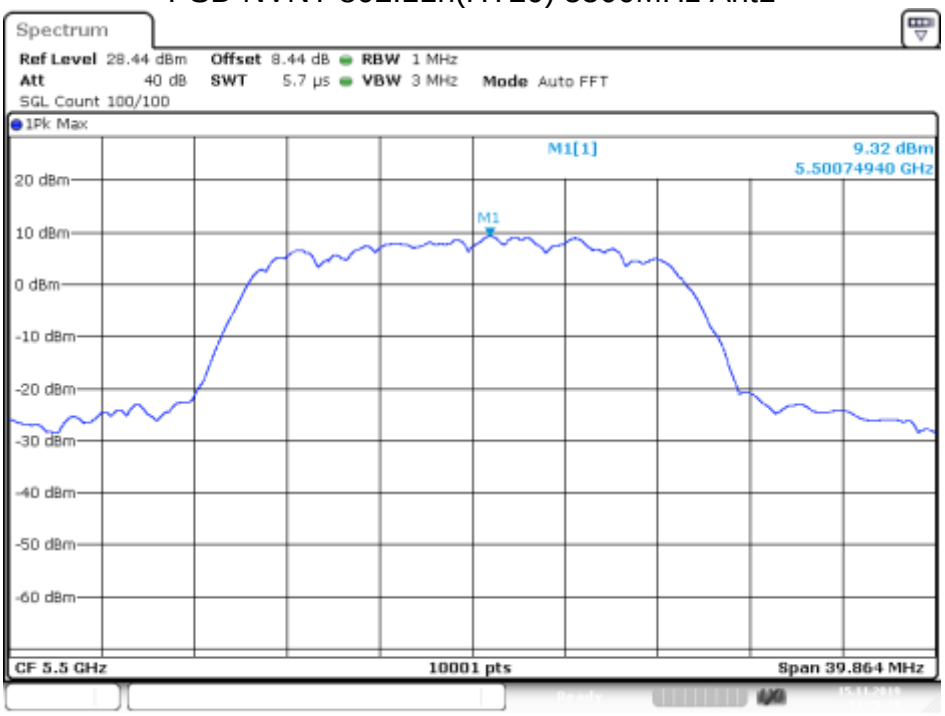
PSD NVNT 802.11ac40 5670MHz Ant1



PSD NVNT 802.11ac80 5530MHz Ant1



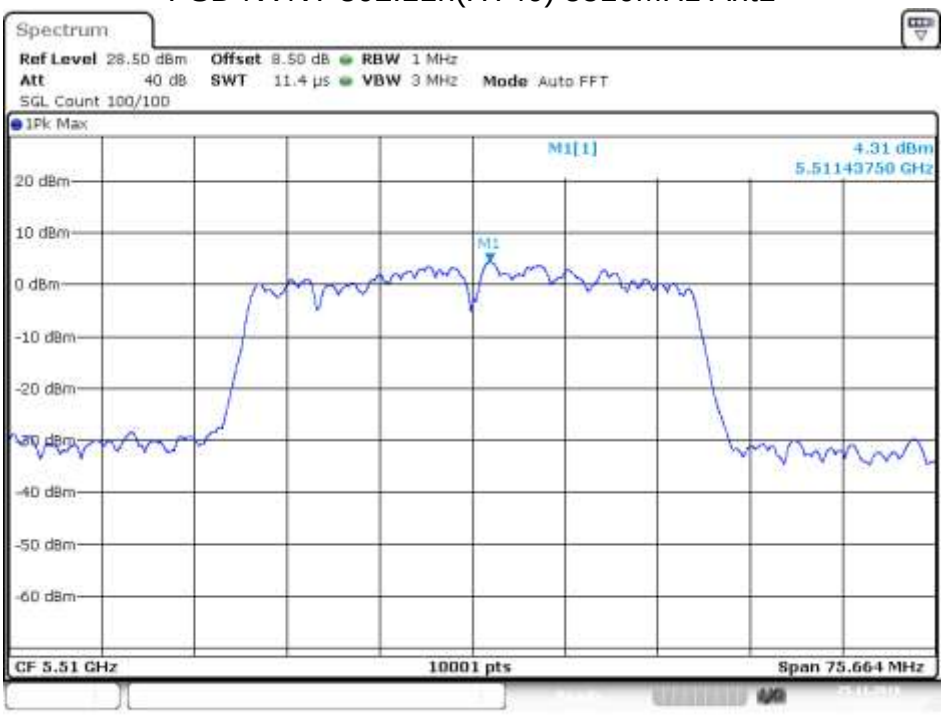
PSD NVNT 802.11n(HT20) 5500MHz Ant1



PSD NVNT 802.11n(HT20) 5580MHz Ant1

PSD NVNT 802.11n(HT20) 5700MHz Ant1

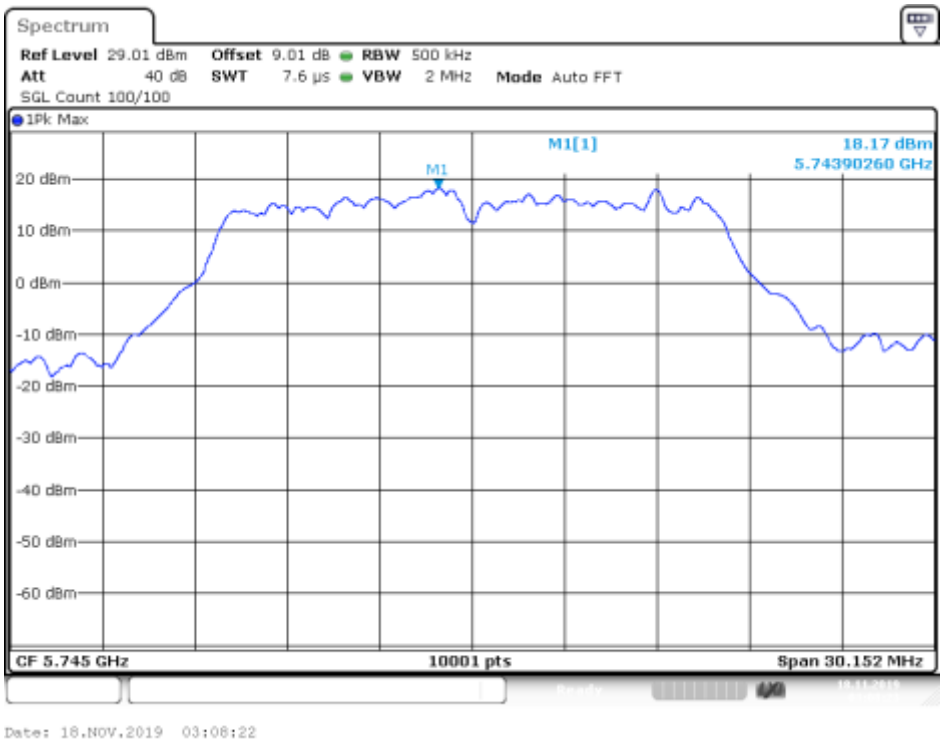
PSD NVNT 802.11n(HT40) 5510MHz Ant1



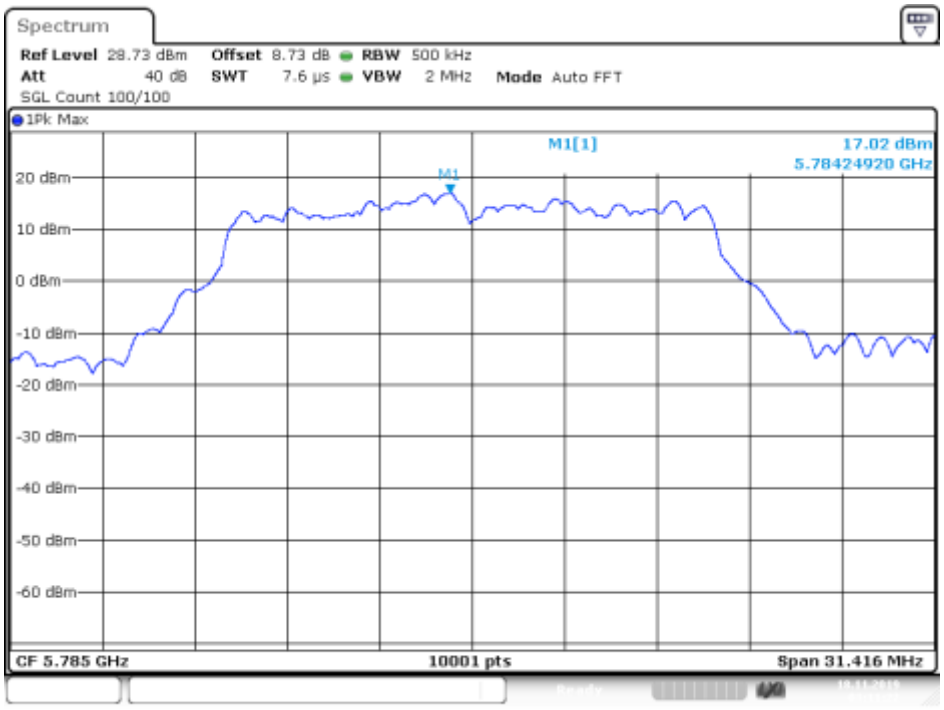
PSD NVNT 802.11n(HT40) 5670MHz Ant1

U-NII-3						
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	802.11a	5745	Ant 1	18.168	30	Pass
NVNT	802.11a	5785	Ant 1	17.02	30	Pass
NVNT	802.11a	5825	Ant 1	17.958	30	Pass
NVNT	802.11ac20	5745	Ant 1	17.117	30	Pass
NVNT	802.11ac20	5785	Ant 1	16.181	30	Pass
NVNT	802.11ac20	5825	Ant 1	17.144	30	Pass
NVNT	802.11ac40	5755	Ant 1	-0.157	30	Pass
NVNT	802.11ac40	5795	Ant 1	-1.183	30	Pass
NVNT	802.11ac80	5775	Ant 1	-4.954	30	Pass
NVNT	802.11n(HT20)	5745	Ant 1	18.629	30	Pass
NVNT	802.11n(HT20)	5785	Ant 1	17.45	30	Pass
NVNT	802.11n(HT20)	5825	Ant 1	16.588	30	Pass
NVNT	802.11n(HT40)	5755	Ant 1	0.558	30	Pass
NVNT	802.11n(HT40)	5795	Ant 1	-1.431	30	Pass

PSD NVNT 802.11a 5745MHz Ant1

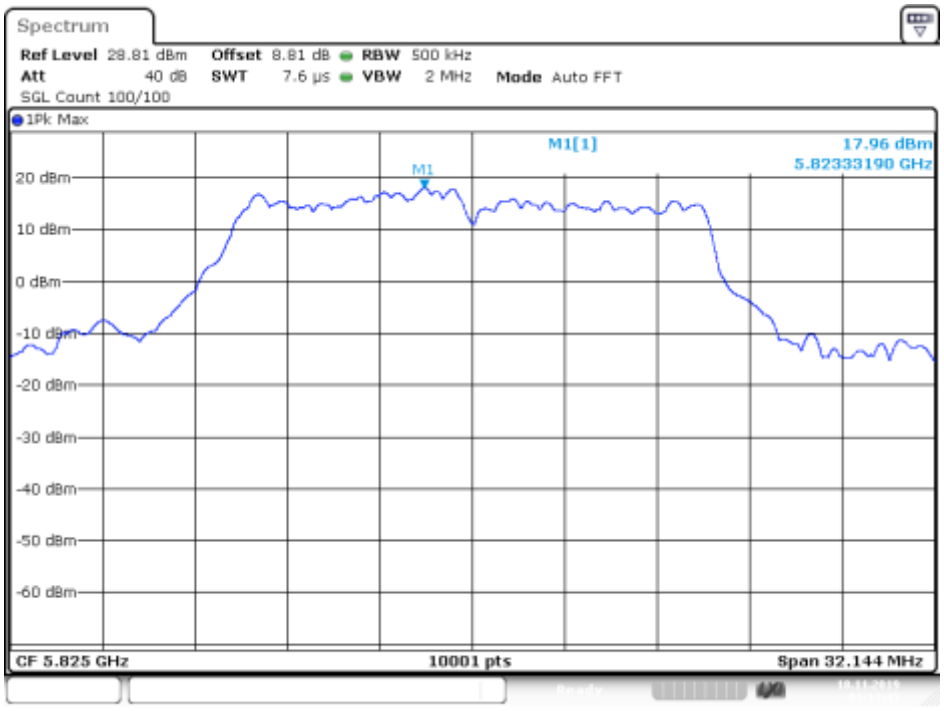


PSD NVNT 802.11a 5785MHz Ant1



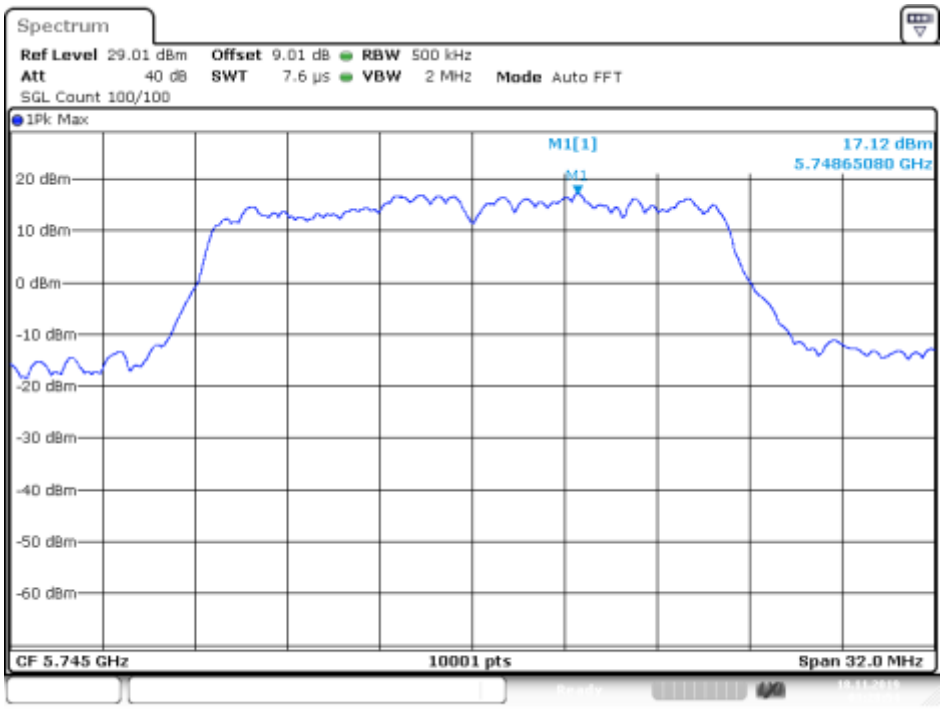
Date: 18.NOV.2019 03:11:22

PSD NVNT 802.11a 5825MHz Ant1



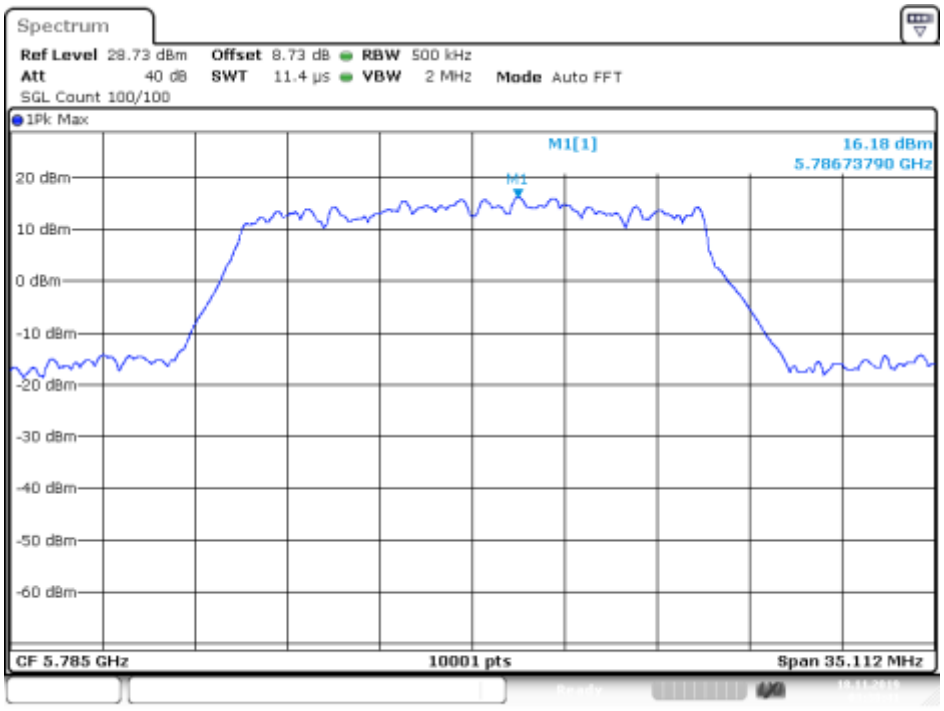
Date: 18.NOV.2019 03:13:45

PSD NVNT 802.11ac20 5745MHz Ant1



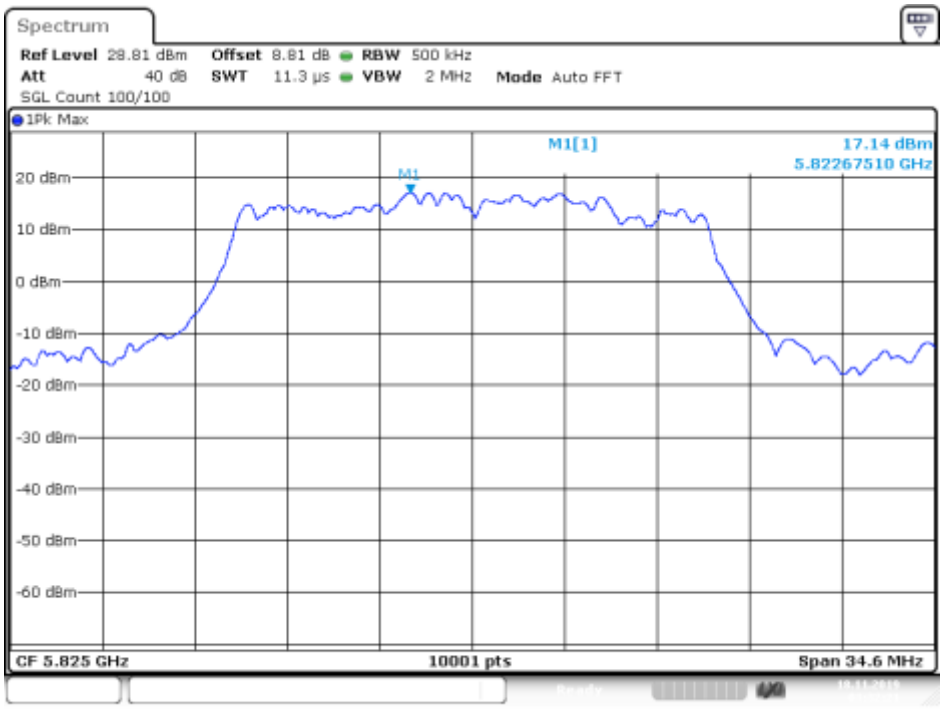
Date: 18.NOV.2019 03:28:54

PSD NVNT 802.11ac20 5785MHz Ant1

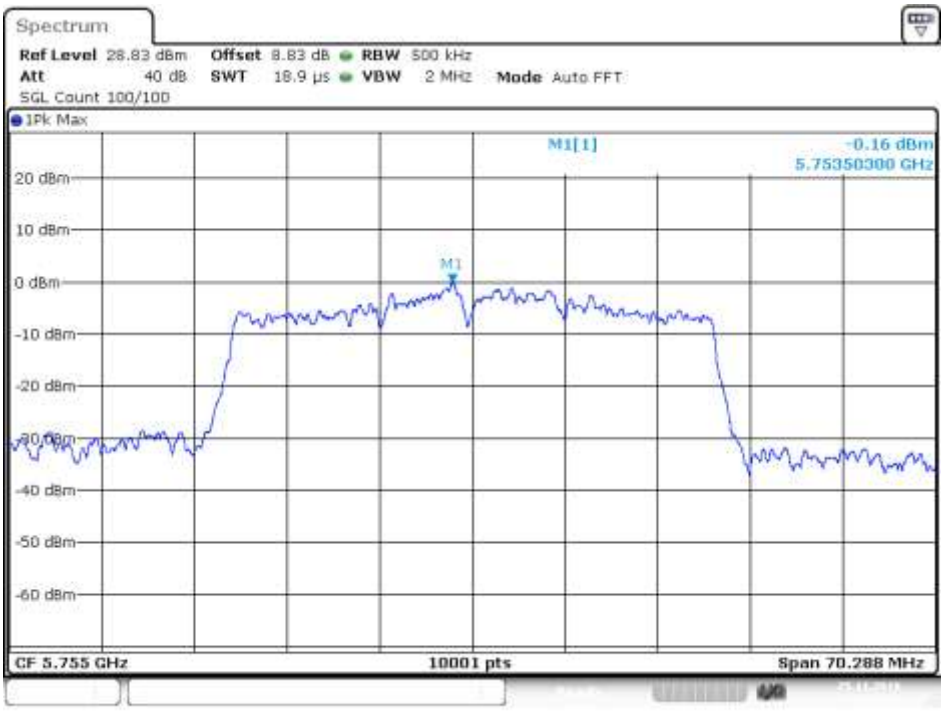


Date: 18.NOV.2019 03:30:41

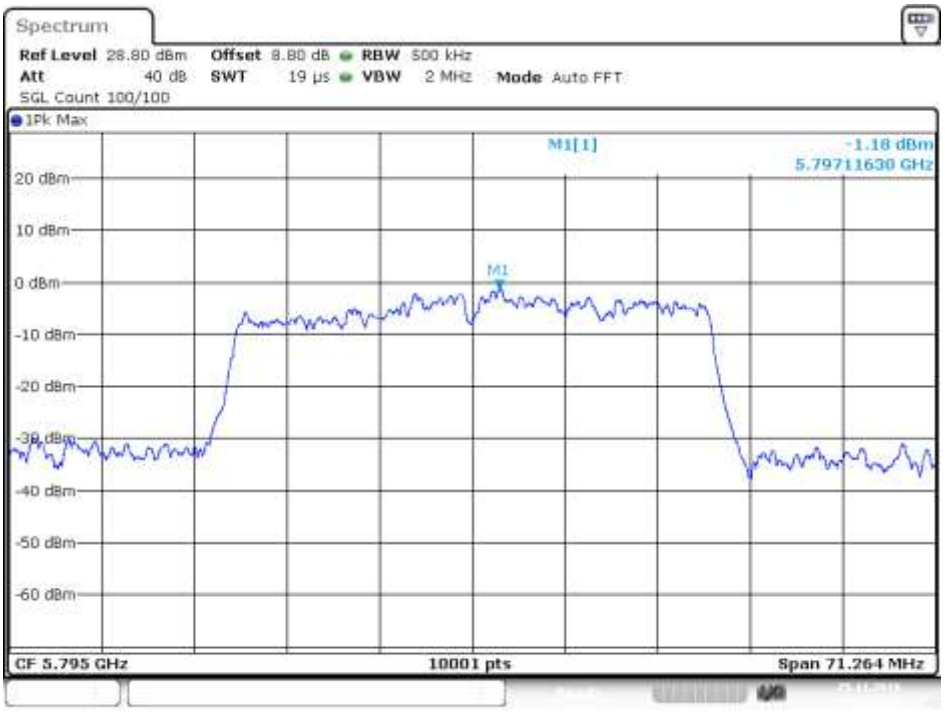
PSD NVNT 802.11ac20 5825MHz Ant1



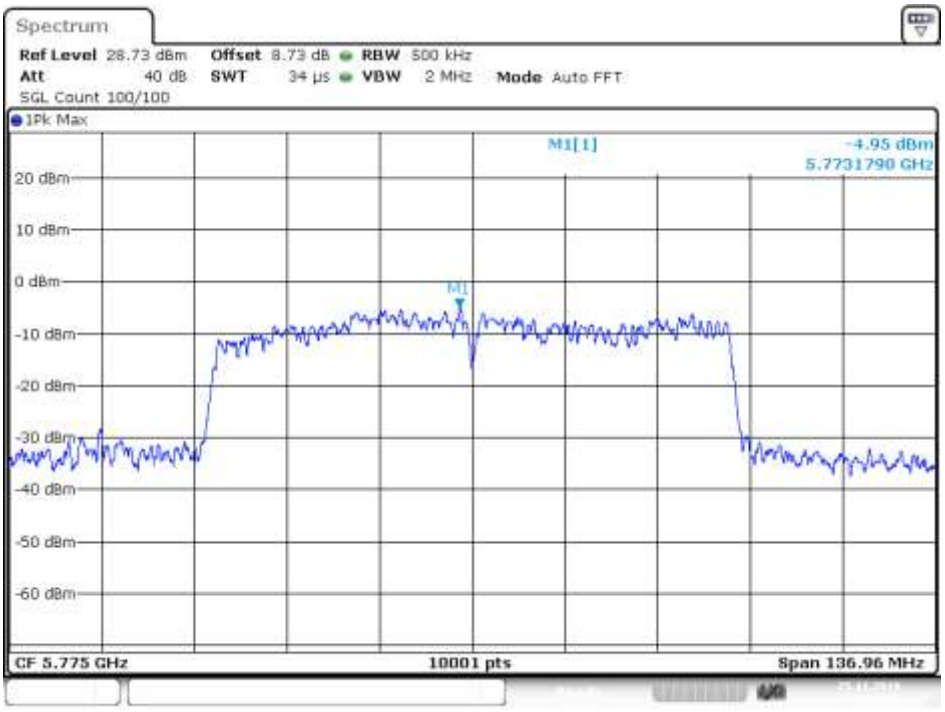
PSD NVNT 802.11ac40 5755MHz Ant1



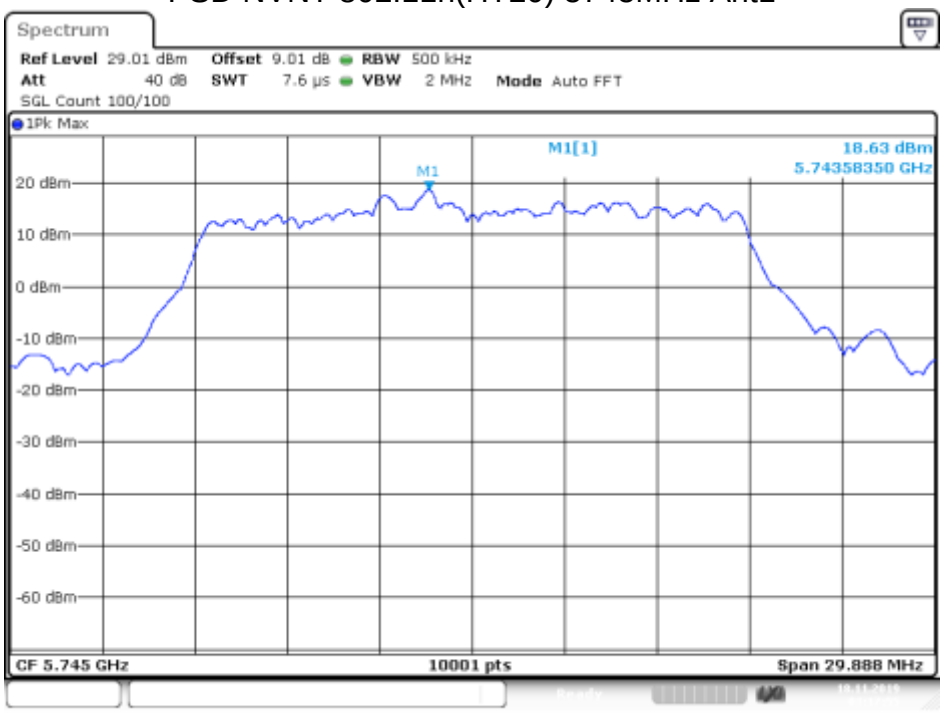
PSD NVNT 802.11ac40 5795MHz Ant1



PSD NVNT 802.11ac80 5775MHz Ant1

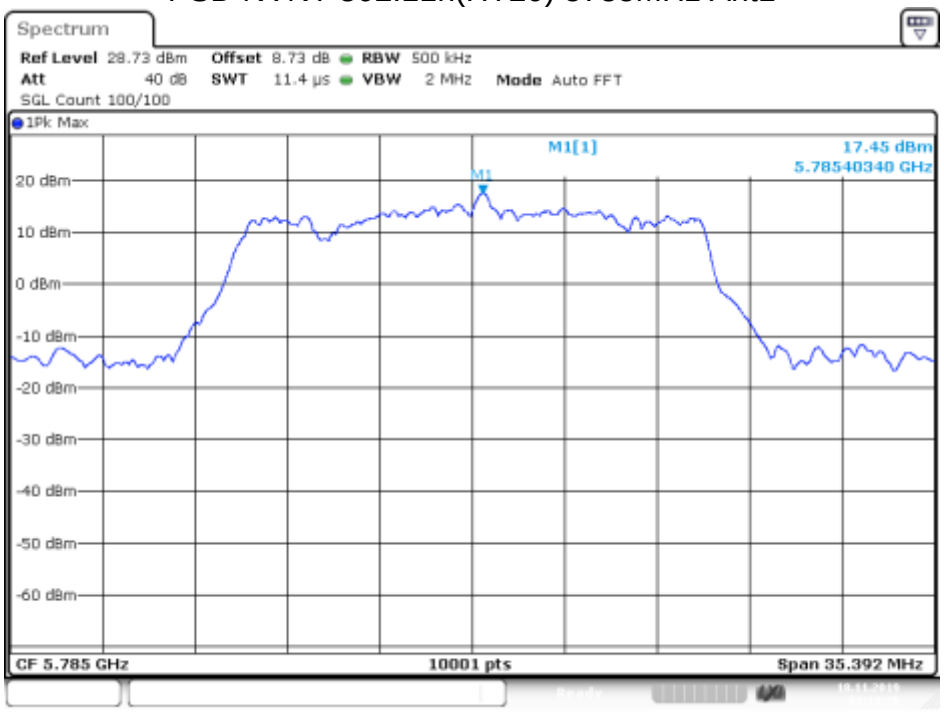


PSD NVNT 802.11n(HT20) 5745MHz Ant1



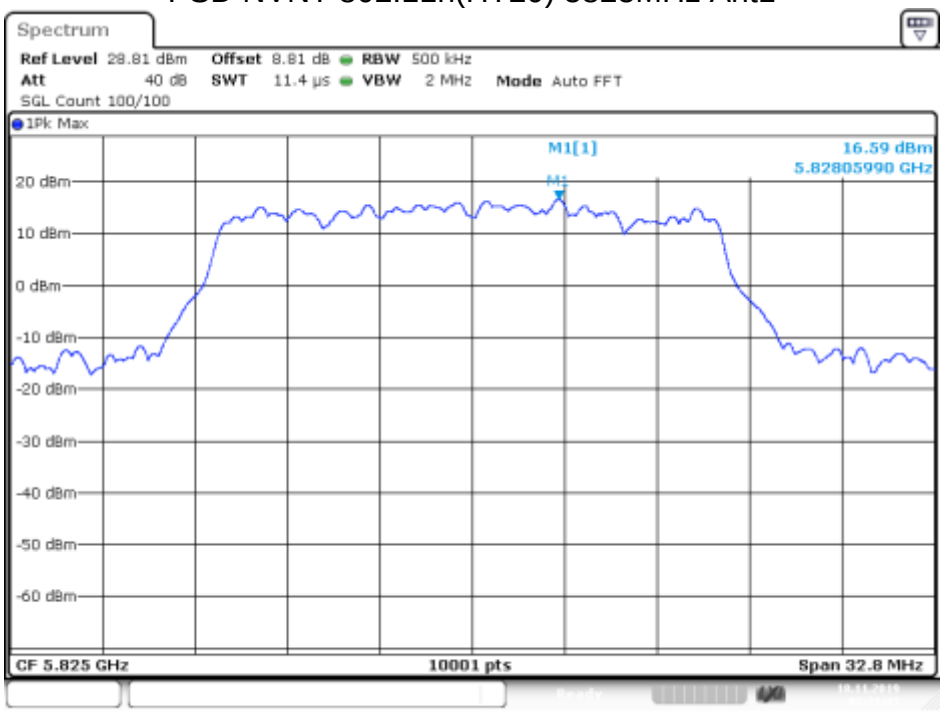
Date: 18.NOV.2019 03:17:55

PSD NVNT 802.11n(HT20) 5785MHz Ant1



Date: 18.NOV.2019 03:19:25

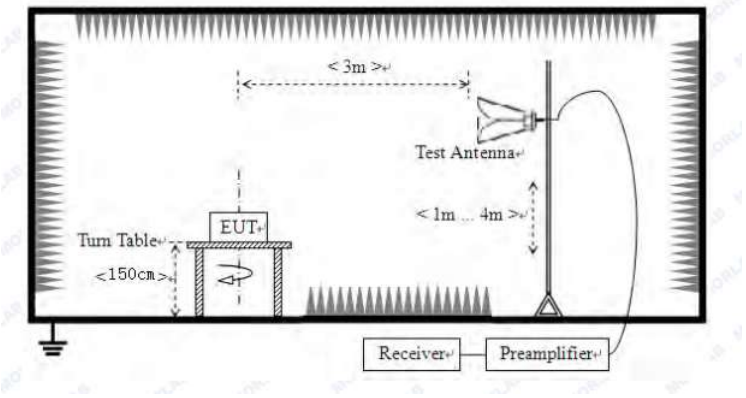
PSD NVNT 802.11n(HT20) 5825MHz Ant1



PSD NVNT 802.11n(HT40) 5755MHz Ant1

PSD NVNT 802.11n(HT40) 5795MHz Ant1

4.5 Band Edge

Test Requirement:	FCC Part15 E Section 15.407 and 15.205
Test Method:	ANSI C63.10:2013
Test setup:	
Limit:	Undesirable emission limits: (1) For transmitters operating in the 5.15-5.25 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -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 EIRP of -27 dBm/MHz. Devices operating in the 5.25-5.35 GHz band that generate emissions in the 5.15-5.25 GHz band must meet all applicable technical requirements for operation in the 5.15-5.25 GHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5.15-5.25 GHz band. (3) For transmitters operating in the 5.47-5.725 GHz band: all emissions outside of the 5.47-5.725 GHz band shall not exceed an EIRP of −27 dBm/MHz. (4) For transmitters operating in the 5.725-5.850 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.
Test Procedure:	1. The power was monitored at the coupler port with a Spectrum Analyzer. The power level was set to the maximum level. 2. Set the RBW = 1MHz. 3. Set the VBW ≥ 3MHz 4. Number of points in sweep ≥ 2 × span / RBW. (This ensures that bin-to-bin spacing is ≤ RBW/2, so that narrowband signals are not lost between frequency bins.) 5. Manually set sweep time ≥ 10 × (number of points in sweep) × (total on/off period of the transmitted signal). 6. Set detector = power averaging (rms). 7. Sweep time = auto couple. 8. Trace mode = max hold. 9. Allow trace to fully stabilize.
Test results:	Pass

Remark:

According to KDB 789033 D02 v02r01 section G) 1) (d), for For measurements above 1000 MHz @ 3m distance, the limit of field strength is computed as follows:

E[dBuV/m] = EIRP[dBm] + 95.2;

For example, if EIRP = -27dBm

E[dBuV/m] = -27 + 95.2 = 68.2dBuV/m.

Band Edge (Radiated)：

Measurement Data:

U-NII-1							
Mode:		802.11a		Frequency:		5180MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	35.96	17.18	53.14	68.20	-15.06	PK
V	5150.00	33.67	17.18	50.85	68.20	-17.35	PK
Mode:		802.11a		Frequency:		5180MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	26.83	17.18	44.01	54.00	-9.99	AV
V	5150.00	22.95	17.18	40.13	54.00	-13.87	AV
Mode:		802.11a		Frequency:		5240MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	35.02	17.18	52.20	68.20	-16.00	PK
V	5350.00	33.86	17.18	51.04	68.20	-17.16	PK
Mode:		802.11a		Frequency:		5240MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	26.32	17.18	43.50	54.00	-10.50	AV
V	5350.00	24.26	17.18	41.44	54.00	-12.56	AV

Mode:		802.11n(HT20)		Frequency:		5180MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	34.13	17.18	51.31	68.20	-16.89	PK
V	5150.00	31.73	17.18	48.91	68.20	-19.29	PK

Mode:		802.11n(HT20)		Frequency:		5180MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	25.02	17.18	42.20	54.00	-11.80	AV
V	5150.00	28.11	17.18	45.29	54.00	-8.71	AV

Mode:		802.11n(HT20)		Frequency:		5240MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	33.46	17.18	50.64	68.20	-17.56	PK
V	5350.00	37.31	17.18	54.49	68.20	-13.71	PK

Mode:		802.11n(HT20)		Frequency:		5240MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	27.75	17.18	44.93	54.00	-9.07	AV
V	5350.00	24.59	17.18	41.77	54.00	-12.23	AV

Mode:		802.11ac(HT20)		Frequency:		5180MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	31.98	17.18	49.16	68.20	-19.04	PK
V	5150.00	35.86	17.18	53.04	68.20	-15.16	PK

Mode:		802.11ac(HT20)		Frequency:		5180MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	28.01	17.18	45.19	54.00	-8.81	AV
V	5150.00	24.61	17.18	41.79	54.00	-12.21	AV

Mode:		802.11ac(HT20)		Frequency:		5240MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	32.75	17.18	49.93	68.20	-18.27	PK
V	5350.00	31.09	17.18	48.27	68.20	-19.93	PK

Mode:		802.11ac(HT20)		Frequency:		5240MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	23.19	17.18	40.37	54.00	-13.63	AV
V	5350.00	24.49	17.18	41.67	54.00	-12.33	AV

Mode:		802.11n(HT40)		Frequency:		5190MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	35.92	17.20	53.12	68.20	-15.08	PK
V	5150.00	33.83	17.20	51.03	68.20	-17.17	PK

Mode:		802.11n(HT40)		Frequency:		5190MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	29.58	17.20	46.78	54.00	-7.22	AV
V	5150.00	23.06	17.20	40.26	54.00	-13.74	AV

Mode:		802.11n(HT40)		Frequency:		5230MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	33.95	17.20	51.15	68.20	-17.05	PK
V	5350.00	35.17	17.20	52.37	68.20	-15.83	PK

Mode:		802.11n(HT40)		Frequency:		5230MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	29.80	17.20	47.00	54.00	-7.00	AV
V	5350.00	25.38	17.20	42.58	54.00	-11.42	AV

Mode:		802.11ac(HT40)		Frequency:		5190MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	34.55	17.20	51.75	68.20	-16.45	PK
V	5150.00	34.71	17.20	51.91	68.20	-16.29	PK

Mode:		802.11ac(HT40)		Frequency:		5190MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	24.48	17.18	41.66	54.00	-12.34	AV
V	5150.00	24.70	17.18	41.88	54.00	-12.12	AV

Mode:		802.11ac(HT40)		Frequency:		5230MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	37.76	17.20	54.96	68.20	-13.24	PK
V	5350.00	33.11	17.20	50.31	68.20	-17.89	PK

Mode:		802.11ac(HT40)		Frequency:		5230MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	26.56	17.20	43.76	54.00	-10.24	AV
V	5350.00	23.07	17.20	40.27	54.00	-13.73	AV

Mode:		802.11ac(HT80)		Frequency:		5210MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	37.79	17.20	54.99	68.20	-13.21	PK
V	5150.00	36.41	17.20	53.61	68.20	-14.59	PK

Mode:		802.11ac(HT80)		Frequency:		5210MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	22.68	17.18	39.86	54.00	-14.14	AV
V	5150.00	23.86	17.18	41.04	54.00	-12.96	AV

Mode:		802.11ac(HT80)		Frequency:		5210MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	36.24	17.20	53.44	68.20	-14.76	PK
V	5350.00	34.08	17.20	51.28	68.20	-16.92	PK

Mode:		802.11ac(HT80)		Frequency:		5210MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	28.21	17.20	45.41	54.00	-8.59	AV
V	5350.00	23.86	17.20	41.06	54.00	-12.94	AV

U-NII-2A							
Mode:		802.11a		Frequency:		5260MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	34.79	17.18	51.97	68.20	-16.23	PK
V	5150.00	33.57	17.18	50.75	68.20	-17.45	PK
Mode:		802.11a		Frequency:		5260MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	29.29	17.18	46.47	54.00	-7.53	AV
V	5150.00	25.35	17.18	42.53	54.00	-11.47	AV
Mode:		802.11a		Frequency:		5320MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	32.30	17.18	49.48	68.20	-18.72	PK
V	5350.00	34.19	17.18	51.37	68.20	-16.83	PK
Mode:		802.11a		Frequency:		5320MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	28.36	17.18	45.54	54.00	-8.46	AV
V	5350.00	24.62	17.18	41.80	54.00	-12.20	AV

Mode:		802.11n(HT20)		Frequency:		5260MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	32.28	17.18	49.46	68.20	-18.74	PK
V	5150.00	33.03	17.18	50.21	68.20	-17.99	PK

Mode:		802.11n(HT20)		Frequency:		5260MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	23.35	17.18	40.53	54.00	-13.47	AV
V	5150.00	25.10	17.18	42.28	54.00	-11.72	AV

Mode:		802.11n(HT20)		Frequency:		5320MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	35.33	17.18	52.51	68.20	-15.69	PK
V	5350.00	33.36	17.18	50.54	68.20	-17.66	PK

Mode:		802.11n(HT20)		Frequency:		5320MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	26.08	17.18	43.26	54.00	-10.74	AV
V	5350.00	26.55	17.18	43.73	54.00	-10.27	AV

Mode:		802.11ac(HT20)		Frequency:		5260MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	38.14	17.18	55.32	68.20	-12.88	PK
V	5150.00	32.48	17.18	49.66	68.20	-18.54	PK

Mode:		802.11ac(HT20)		Frequency:		5260MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	22.50	17.18	39.68	54.00	-14.32	AV
V	5150.00	29.28	17.18	46.46	54.00	-7.54	AV

Mode:		802.11ac(HT20)		Frequency:		5320MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	34.50	17.18	51.68	68.20	-16.52	PK
V	5350.00	30.60	17.18	47.78	68.20	-20.42	PK

Mode:		802.11ac(HT20)		Frequency:		5320MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	25.15	17.18	42.33	54.00	-11.67	AV
V	5350.00	28.70	17.18	45.88	54.00	-8.12	AV

Mode:		802.11n(HT40)		Frequency:		5270MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	35.37	17.20	52.57	68.20	-15.63	PK
V	5150.00	34.01	17.20	51.21	68.20	-16.99	PK

Mode:		802.11n(HT40)		Frequency:		5270MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	27.73	17.20	44.93	54.00	-9.07	AV
V	5150.00	26.32	17.20	43.52	54.00	-10.48	AV

Mode:		802.11n(HT40)		Frequency:		5310MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	37.66	17.20	54.86	68.20	-13.34	PK
V	5350.00	37.86	17.20	55.06	68.20	-13.14	PK

Mode:		802.11n(HT40)		Frequency:		5310MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	28.31	17.18	45.49	54.00	-8.51	AV
V	5350.00	27.24	17.18	44.42	54.00	-9.58	AV

Mode:		802.11ac(HT40)		Frequency:		5270MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	32.73	17.20	49.93	68.20	-18.27	PK
V	5150.00	32.67	17.20	49.87	68.20	-18.33	PK

Mode:		802.11ac(HT40)		Frequency:		5270MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	26.88	17.20	44.08	54.00	-9.92	AV
V	5150.00	26.38	17.20	43.58	54.00	-10.42	AV

Mode:		802.11ac(HT40)		Frequency:		5310MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	33.79	17.20	50.99	68.20	-17.21	PK
V	5350.00	33.28	17.20	50.48	68.20	-17.72	PK

Mode:		802.11ac(HT40)		Frequency:		5310MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	24.98	17.20	42.18	54.00	-11.82	AV
V	5350.00	25.48	17.20	42.68	54.00	-11.32	AV

Mode:		802.11ac(HT80)		Frequency:		5290MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	33.75	17.20	50.95	68.20	-17.25	PK
V	5150.00	34.13	17.20	51.33	68.20	-16.87	PK

Mode:		802.11ac(HT80)		Frequency:		5290MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	24.25	17.20	41.45	54.00	-12.55	AV
V	5150.00	23.94	17.20	41.14	54.00	-12.86	AV

Mode:		802.11ac(HT80)		Frequency:		5290MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	36.89	17.20	54.09	68.20	-14.11	PK
V	5350.00	36.82	17.20	54.02	68.20	-14.18	PK

Mode:		802.11ac(HT80)		Frequency:		5290MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	25.06	17.20	42.26	54.00	-11.74	AV
V	5350.00	24.22	17.20	41.42	54.00	-12.58	AV

U-NII-2C							
Mode:		802.11a		Frequency:		5500MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5470.00	35.68	17.18	52.86	68.20	-15.34	PK
V	5470.00	39.26	17.18	56.44	68.20	-11.76	PK
Mode:		802.11a		Frequency:		5500MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5470.00	26.12	17.18	43.30	54.00	-10.70	AV
V	5470.00	26.03	17.18	43.21	54.00	-10.79	AV
Mode:		802.11a		Frequency:		5700MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5850.00	35.26	17.18	52.44	68.20	-15.76	PK
V	5850.00	35.59	17.18	52.77	68.20	-15.43	PK
Mode:		802.11a		Frequency:		5700MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5850.00	26.63	17.18	43.81	54.00	-10.19	AV
V	5850.00	27.12	17.18	44.30	54.00	-9.70	AV

Mode:		802.11n(HT20)		Frequency:		5500MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5470.00	37.72	17.18	54.90	68.20	-13.30	PK
V	5470.00	38.32	17.18	55.50	68.20	-12.70	PK

Mode:		802.11n(HT20)		Frequency:		5500MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5470.00	25.72	17.18	42.90	54.00	-11.10	AV
V	5470.00	27.46	17.18	44.64	54.00	-9.36	AV

Mode:		802.11n(HT20)		Frequency:		5700MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5850.00	35.31	17.18	52.49	68.20	-15.71	PK
V	5850.00	36.08	17.18	53.26	68.20	-14.94	PK

Mode:		802.11n(HT20)		Frequency:		5700MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5850.00	23.26	17.18	40.44	54.00	-13.56	AV
V	5850.00	26.83	17.18	44.01	54.00	-9.99	AV

Mode:		802.11ac(HT20)		Frequency:		5500MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5470.00	36.94	17.18	54.12	68.20	-14.08	PK
V	5470.00	37.89	17.18	55.07	68.20	-13.13	PK

Mode:		802.11ac(HT20)		Frequency:		5500MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5470.00	22.26	17.18	39.44	54.00	-14.56	AV
V	5470.00	26.61	17.18	43.79	54.00	-10.21	AV

Mode:		802.11ac(HT20)		Frequency:		5700MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5850.00	37.53	17.18	54.71	68.20	-13.49	PK
V	5850.00	35.92	17.18	53.10	68.20	-15.10	PK

Mode:		802.11ac(HT20)		Frequency:		5700MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5850.00	25.83	17.18	43.01	54.00	-10.99	AV
V	5850.00	23.65	17.18	40.83	54.00	-13.17	AV

Mode:		802.11n(HT40)		Frequency:		5510MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5470.00	32.05	17.20	49.25	68.20	-18.95	PK
V	5470.00	37.88	17.20	55.08	68.20	-13.12	PK

Mode:		802.11n(HT40)		Frequency:		5510MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5470.00	24.80	17.20	42.00	54.00	-12.00	AV
V	5470.00	24.10	17.20	41.30	54.00	-12.70	AV

Mode:		802.11n(HT40)		Frequency:		5670MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5850.00	39.66	17.20	56.86	68.20	-11.34	PK
V	5850.00	38.08	17.20	55.28	68.20	-12.92	PK

Mode:		802.11n(HT40)		Frequency:		5670MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5850.00	27.22	17.18	44.40	54.00	-9.60	AV
V	5850.00	28.27	17.18	45.45	54.00	-8.55	AV

Mode:		802.11ac(HT40)		Frequency:		5510MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5470.00	34.53	17.20	51.73	68.20	-16.47	PK
V	5470.00	38.80	17.20	56.00	68.20	-12.20	PK

Mode:		802.11ac(HT40)		Frequency:		5510MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5470.00	28.97	17.18	46.15	54.00	-7.85	AV
V	5470.00	27.38	17.18	44.56	54.00	-9.44	AV

Mode:		802.11ac(HT40)		Frequency:		5670MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5850.00	34.35	17.20	51.55	68.20	-16.65	PK
V	5850.00	35.87	17.20	53.07	68.20	-15.13	PK

Mode:		802.11ac(HT40)		Frequency:		5670MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5850.00	24.79	17.20	41.99	54.00	-12.01	AV
V	5850.00	24.31	17.20	41.51	54.00	-12.49	AV

Mode:		802.11ac(HT80)		Frequency:		5530MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5470.00	33.91	17.20	51.11	68.20	-17.09	PK
V	5470.00	37.38	17.20	54.58	68.20	-13.62	PK

Mode:		802.11ac(HT80)		Frequency:		5530MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5470.00	29.89	17.18	47.07	54.00	-6.93	AV
V	5470.00	29.46	17.18	46.64	54.00	-7.36	AV

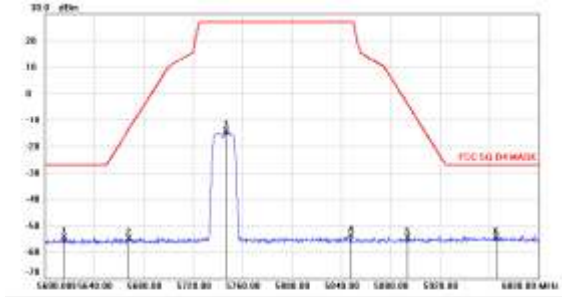
Mode:		802.11ac(HT80)		Frequency:		5530MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5850.00	33.85	17.20	51.05	68.20	-17.15	PK
V	5850.00	37.10	17.20	54.30	68.20	-13.90	PK

Mode:		802.11ac(HT80)		Frequency:		5530MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5850.00	22.84	17.20	40.04	54.00	-13.96	AV
V	5850.00	25.78	17.20	42.98	54.00	-11.02	AV

U-NII-3

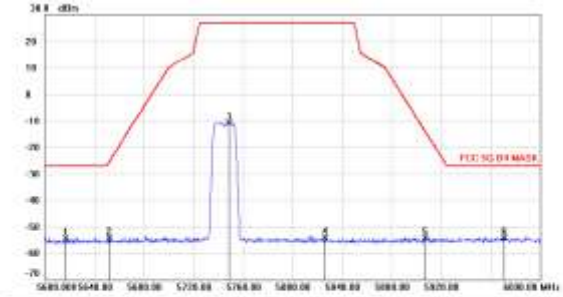
Test Mode: 802.11a Low

Polarization: Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	5615.200	-52.79	-1.47	-54.26	-27.00	-27.26			peak
2		5666.080	-53.44	-1.40	-54.84	-13.62	-41.22			peak
3		5747.120	-53.02	-1.30	-54.32	27.00	-81.32			peak
4		5847.640	-52.70	-1.15	-53.85	27.00	-80.85			peak
5		5883.960	-53.64	-1.09	-54.73	-4.03	-50.70			peak
6		5965.680	-53.62	-0.99	-54.61	-27.00	-27.61			peak

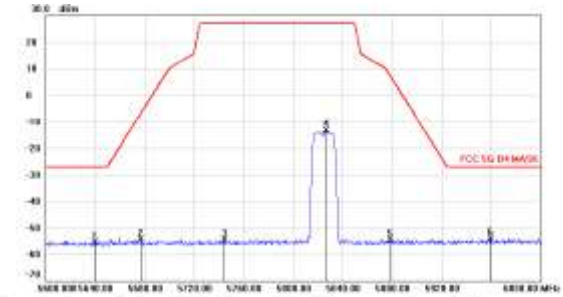
Polarization: Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1		5617.120	-52.85	-1.47	-54.32	-27.00	-27.32			peak
2		5652.040	-52.78	-1.42	-54.20	-25.49	-28.71			peak
3		5749.480	-9.59	-1.29	-10.88	27.00	-37.88			peak
4		5826.640	-53.04	-1.18	-54.22	27.00	-81.22			peak
5		5907.480	-52.93	-1.07	-54.00	-14.04	-39.96			peak
6	*	5971.000	-53.13	-0.99	-54.12	-27.00	-27.12			peak

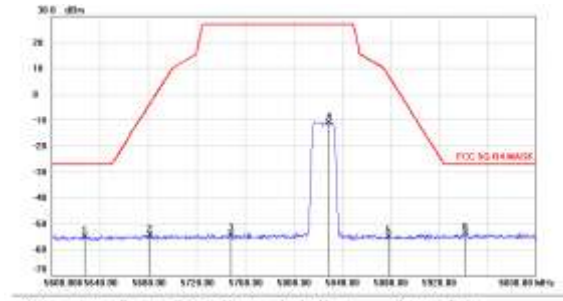
Test Mode: 802.11a High

Polarization: Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1		5639.720	-53.67	-1.44	-55.31	-27.00	-28.31			peak
2		5677.560	-52.95	-1.39	-54.34	-6.61	-47.73			peak
3		5744.920	-53.13	-1.30	-54.43	27.00	-81.43			peak
4		5827.040	-11.95	-1.18	-13.13	27.00	-40.13			peak
5		5878.440	-53.29	-1.11	-54.40	7.45	-61.85			peak
6	*	5959.640	-52.75	-1.00	-53.75	-27.00	-26.75			peak

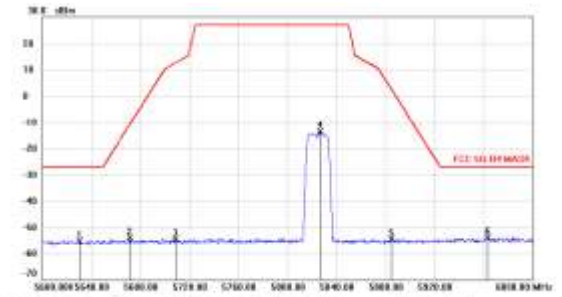
Polarization: Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1		5627.200	-53.49	-1.45	-54.94	-27.00	-27.94			peak
2		5681.280	-53.01	-1.38	-54.39	-3.85	-50.54			peak
3		5748.560	-52.58	-1.29	-53.87	27.00	-80.87			peak
4		5829.880	-9.60	-1.17	-10.77	27.00	-37.77			peak
5		5879.000	-53.66	-1.11	-54.77	7.04	-61.81			peak
6	*	5942.840	-52.55	-1.02	-53.57	-27.00	-26.57			peak

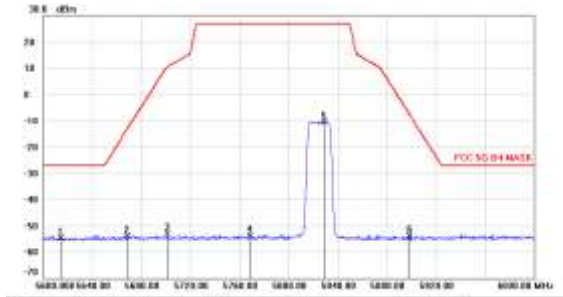
Test Mode: 802.11ac20 Low

Polarization: Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1		5631.040	-53.81	-1.45	-55.26	-27.00	-28.26			peak
2		5671.840	-52.75	-1.40	-54.15	-10.84	-43.31			peak
3		5709.520	-53.19	-1.35	-54.54	12.67	-67.21			peak
4		5827.040	-12.55	-1.18	-13.73	27.00	-40.73			peak
5		5885.520	-53.40	-1.10	-54.59	2.22	-56.81			peak
6	*	5963.720	-52.95	-0.99	-53.94	-27.00	-26.94			peak

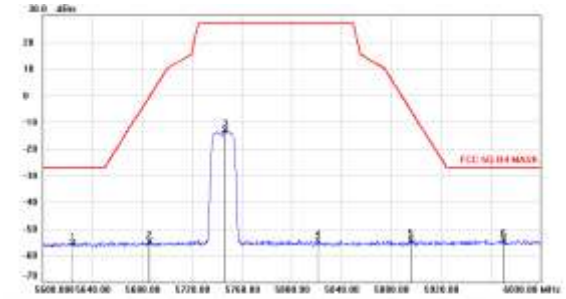
Polarization: Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	5614.240	-53.15	-1.48	-54.63	-27.00	-27.63			peak
2		5666.600	-52.56	-1.40	-53.96	-13.24	-40.72			peak
3		5701.280	-51.40	-1.36	-52.76	10.30	-63.12			peak
4		5788.480	-52.30	-1.26	-53.56	27.00	-80.56			peak
5		5829.560	-9.26	-1.17	-10.43	27.00	-37.43			peak
6		5890.720	-52.53	-1.08	-53.61	-7.55	-46.06			peak

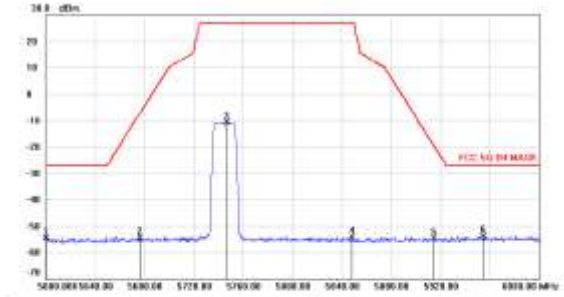
Test Mode: 802.11ac20 High

Polarization: Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		5624.040	-53.62	-1.48	-55.28	-27.00	-28.28	peak			
2		5685.640	-53.46	-1.37	-54.83	-0.63	-54.20	peak			
3		5747.160	-11.03	-1.30	-12.93	27.00	-39.93	peak			
4		5821.360	-53.28	-1.19	-54.47	27.00	-81.47	peak			
5		5885.640	-52.98	-1.09	-54.05	-5.27	-48.78	peak			
6	*	5970.480	-53.21	-0.99	-54.20	-27.00	-27.20	peak			

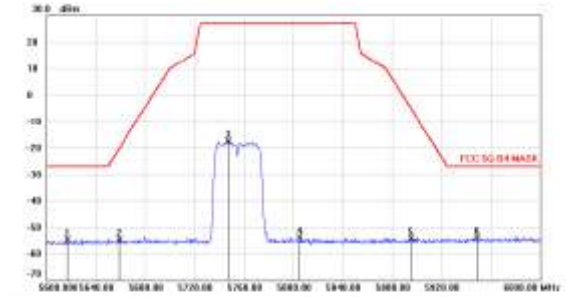
Polarization: Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		5600.000	-52.77	-1.49	-54.26	-27.00	-27.26	peak			
2		5676.680	-53.10	-1.39	-54.49	-7.26	-47.23	peak			
3		5747.160	-9.43	-1.30	-10.73	27.00	-37.73	peak			
4		5848.080	-53.09	-1.10	-54.23	27.00	-81.23	peak			
5		5914.920	-53.54	-1.08	-54.60	-18.54	-35.06	peak			
6	*	5954.600	-52.73	-1.01	-53.74	-27.00	-26.74	peak			

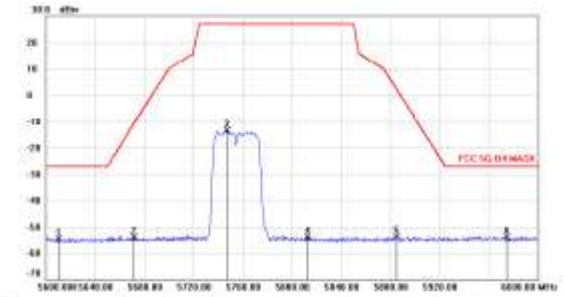
Test Mode: 802.11ac40 Low

Polarization: Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		5618.960	-53.26	-1.47	-54.73	-27.00	-27.73	peak			
2		5658.920	-53.11	-1.41	-54.52	-20.40	-34.12	peak			
3		5747.760	-16.08	-1.29	-17.37	27.00	-44.37	peak			
4		5805.480	-52.73	-1.21	-53.94	27.00	-80.94	peak			
5		5995.200	-52.92	-1.09	-54.01	-4.95	-49.06	peak			
6	*	5949.080	-52.92	-1.01	-53.93	-27.00	-26.93	peak			

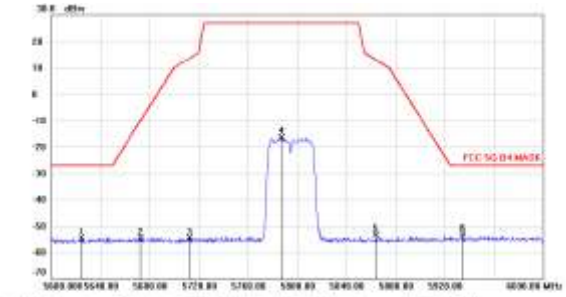
Polarization: Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		5610.440	-52.79	-1.47	-54.26	-27.00	-27.26	peak			
2		5671.880	-52.48	-1.40	-53.88	-10.81	-43.07	peak			
3		5747.760	-12.08	-1.29	-13.37	27.00	-40.37	peak			
4		5812.520	-52.66	-1.21	-53.87	27.00	-80.87	peak			
5		5884.800	-52.53	-1.10	-53.63	2.75	-56.38	peak			
6	*	5974.000	-52.90	-0.98	-53.88	-27.00	-26.88	peak			

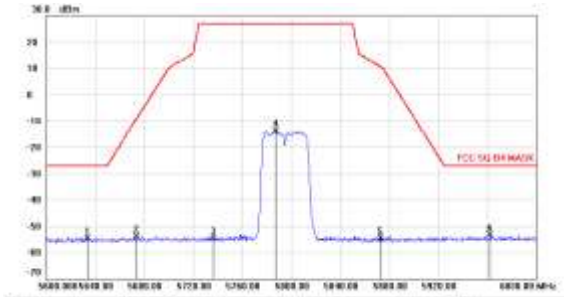
Test Mode: 802.11ac40 High

Polarization: Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		5624.920	-53.09	-1.46	-54.55	-27.00	-27.55	peak			
2		5673.080	-53.12	-1.40	-54.52	-9.02	-44.00	peak			
3		5712.640	-53.26	-1.34	-54.60	15.60	-68.20	peak			
4		5787.600	-15.23	-1.23	-16.46	27.00	-43.46	peak			
5		5864.400	-52.24	-1.13	-53.37	12.97	-66.34	peak			
6	*	5934.720	-52.20	-1.03	-53.23	-27.00	-26.23	peak			

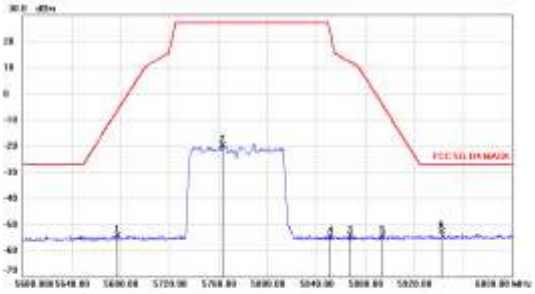
Polarization: Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		5633.640	-52.92	-1.44	-54.36	-27.00	-27.36	peak			
2		5673.080	-52.14	-1.38	-53.53	-9.48	-44.05	peak			
3		5730.400	-53.09	-1.31	-54.40	27.00	-81.40	peak			
4		5797.600	-12.32	-1.23	-13.55	27.00	-40.55	peak			
5		5873.000	-53.14	-1.12	-54.26	10.56	-64.82	peak			
6	*	5962.120	-52.20	-0.99	-53.19	-27.00	-26.19	peak			

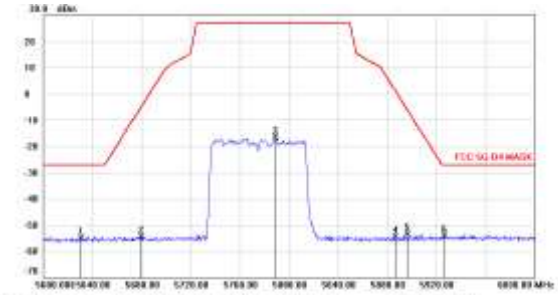
Test Mode: 802.11ac80

Polarization: Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1		5677.920	-52.76	-1.39	-54.15	-6.34	-47.81			peak
2		5703.720	-18.68	-1.27	-19.95	27.00	-46.95			peak
3		5669.040	-53.35	-1.12	-54.47	11.95	-66.42			peak
4		5851.560	-53.37	-1.15	-54.52	23.44	-77.96			peak
5		5894.200	-53.30	-1.09	-54.39	-4.21	-50.18			peak
6	*	5942.900	-51.65	-1.02	-52.67	-27.00	-25.67			peak

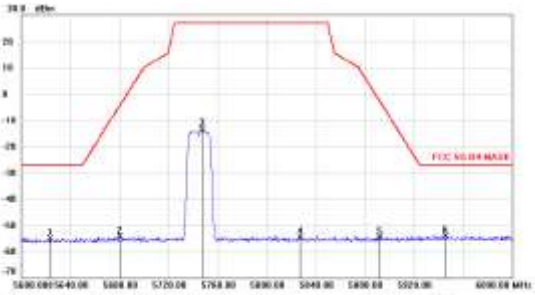
Polarization: Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1		5830.480	-53.34	-1.45	-54.79	-27.00	-27.79			peak
2		5670.840	-53.06	-1.38	-54.44	-4.92	-49.52			peak
3		5769.560	-15.07	-1.23	-16.30	27.00	-43.30			peak
4		5686.960	-53.23	-1.10	-54.33	1.45	-55.78			peak
5		5696.520	-52.29	-1.09	-53.38	-5.92	-47.46			peak
6	*	5926.760	-53.03	-1.04	-54.07	-27.00	-27.07			peak

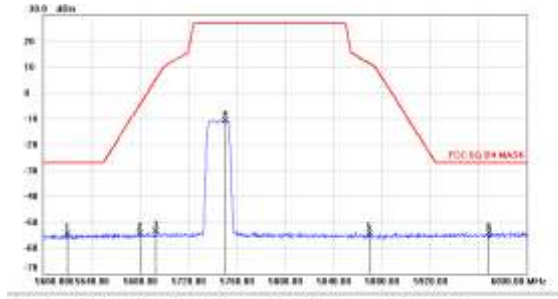
Test Mode: 802.11n(HT20) Low

Polarization: Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1		5623.320	-53.59	-1.46	-55.05	-27.00	-28.05			peak
2		5680.360	-52.91	-1.38	-54.29	-4.53	-49.76			peak
3		5747.200	-12.11	-1.30	-13.41	27.00	-40.41			peak
4		5627.320	-53.44	-1.18	-54.62	27.00	-81.62			peak
5		5692.360	-53.51	-1.09	-54.60	2.85	-51.75			peak
6	*	5946.320	-53.16	-1.01	-54.17	-27.00	-27.17			peak

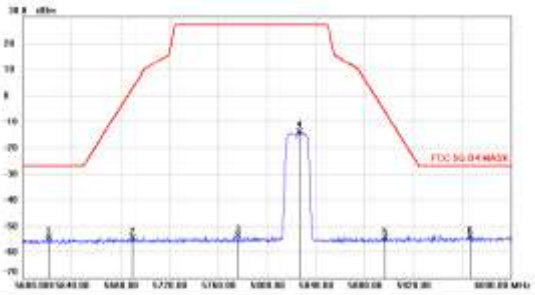
Polarization: Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1		5620.240	-52.97	-1.47	-54.44	-27.00	-27.44			peak
2		5680.320	-52.81	-1.38	-54.19	-4.56	-49.63			peak
3		5693.240	-52.01	-1.37	-53.38	5.00	-58.38			peak
4		5750.760	-9.43	-1.29	-10.72	27.00	-37.72			peak
5		5870.200	-52.96	-1.13	-54.09	11.34	-65.43			peak
6	*	5968.680	-53.04	-0.98	-54.02	-27.00	-27.02			peak

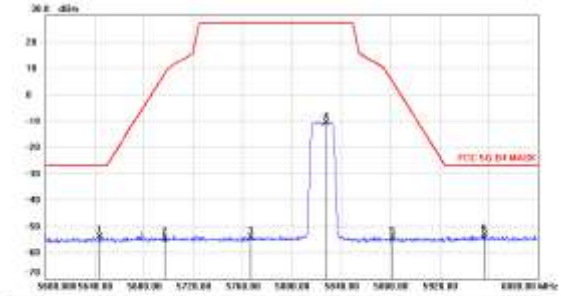
Test Mode: 802.11n(HT20) High

Polarization: Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1		5621.080	-52.87	-1.46	-54.33	-27.00	-27.33			peak
2		5680.160	-53.32	-1.38	-54.70	2.72	-57.42			peak
3		5776.720	-52.42	-1.26	-53.68	27.00	-80.68			peak
4		5827.040	-12.83	-1.18	-13.01	27.00	-40.01			peak
5		5890.920	-53.45	-1.09	-54.54	-6.22	-48.32			peak
6	*	5966.760	-53.26	-0.98	-54.24	-27.00	-27.24			peak

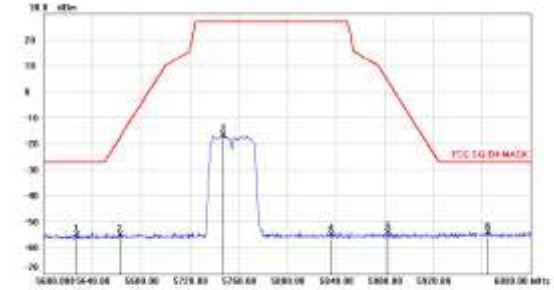
Polarization: Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1		5644.040	-52.20	-1.44	-53.64	-27.00	-26.64			peak
2		5697.040	-53.02	-1.37	-54.39	7.61	-62.20			peak
3		5766.760	-52.93	-1.27	-54.20	27.00	-81.20			peak
4		5828.240	-9.39	-1.19	-10.58	27.00	-37.58			peak
5		5881.960	-53.00	-1.10	-54.10	4.65	-58.75			peak
6	*	5956.440	-52.21	-1.00	-53.21	-27.00	-26.21			peak

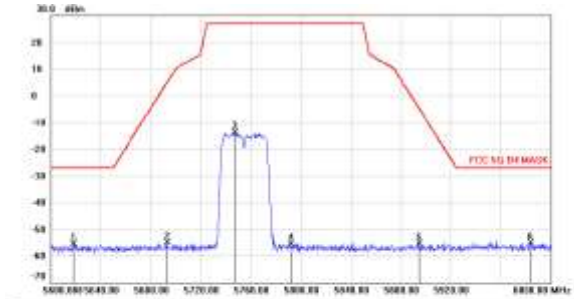
Test Mode: 802.11n(HT40) Low

Polarization: Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		5627.320	-53.45	-1.45	-54.90	-27.00	-27.90	peak			
2		5662.640	-53.47	-1.41	-54.88	-17.65	-37.23	peak			
3		5747.800	-15.18	-1.29	-16.47	27.00	-43.47	peak			
4		5636.200	-53.64	-1.17	-54.81	27.00	-81.81	peak			
5		5683.120	-52.88	-1.10	-53.98	3.99	-57.97	peak			
6	*	5964.840	-53.05	-0.99	-54.04	-27.00	-27.04	peak			

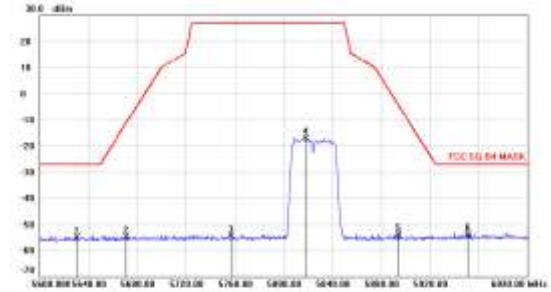
Polarization: Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		5616.320	-53.85	-1.47	-55.32	-27.00	-28.32	peak			
2		5662.880	-53.58	-1.37	-54.95	4.73	-50.68	peak			
3		5747.840	-12.31	-1.29	-13.60	27.00	-40.60	peak			
4		5792.280	-54.11	-1.24	-55.35	27.00	-82.35	peak			
5		5864.880	-54.20	-1.09	-55.29	-4.71	-50.58	peak			
6	*	5964.200	-54.05	-0.96	-55.01	-27.00	-28.01	peak			

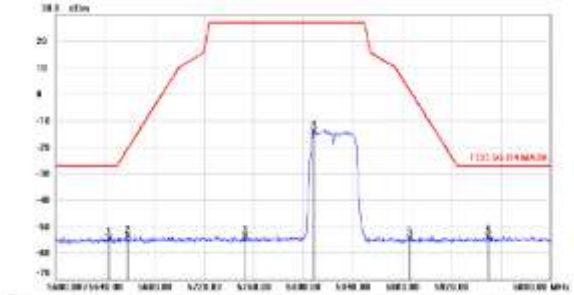
Test Mode: 802.11n(HT40) High

Polarization: Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		5630.480	-53.40	-1.40	-54.85	-27.00	-27.85	peak			
2		5671.240	-53.12	-1.40	-54.52	-11.28	-43.24	peak			
3		5757.520	-53.04	-1.28	-54.32	27.00	-81.32	peak			
4		5817.760	-15.55	-1.20	-16.75	27.00	-43.75	peak			
5		5894.200	-52.52	-1.09	-53.61	-4.21	-49.40	peak			
6	*	5951.320	-52.72	-1.01	-53.73	-27.00	-26.73	peak			

Polarization: Horizontal



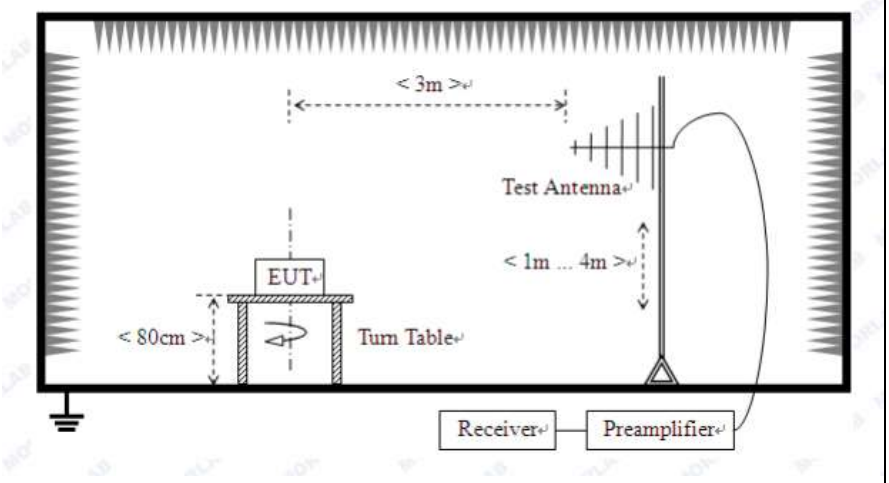
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		5643.360	-52.86	-1.44	-54.30	-27.00	-27.30	peak			
2		5658.760	-52.31	-1.41	-53.72	-20.52	-33.20	peak			
3		5753.560	-52.44	-1.28	-53.72	27.00	-80.72	peak			
4		5809.080	-12.59	-1.20	-13.79	27.00	-40.79	peak			
5		5886.600	-53.06	-1.10	-54.16	1.42	-55.58	peak			
6	*	5960.080	-52.27	-1.00	-53.27	-27.00	-26.27	peak			

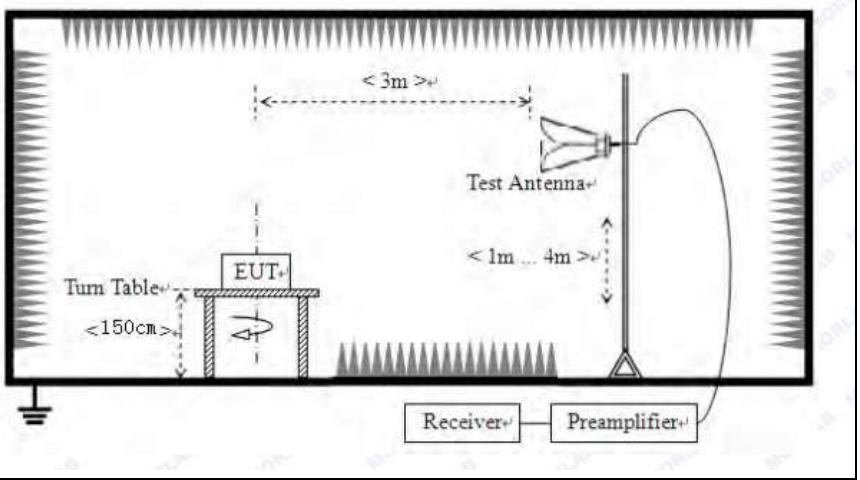
4.6 Radiated Emission

<table>
<tr><td>Test Requirement:</td><td>FCC Part15 C Section 15.209 and 15.205</td></tr>
<tr><td>Test Method:</td><td>ANSI C63.10:2013</td></tr>
<tr><td>Test Frequency Range:</td><td>30MHz to 40GHz</td></tr>
<tr><td>Test site:</td><td>Measurement Distance: 3m (Semi-Anechoic Chamber)</td></tr>
<tr><td>Receiver setup:</td><td>
<table>
<tr><td>Frequency</td><td>Detector</td><td>RBW</td><td>VBW</td><td>Value</td></tr>
<tr><td>30MHz-1GHz</td><td>Quasi-peak</td><td>100KHz</td><td>300KHz</td><td>Quasi-peak Value</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak Value</td></tr>
<tr><td>AV</td><td>1MHz</td><td>3MHz</td><td>Average Value</td></tr>
</table>
</td></tr>
<tr><td>Limit:</td><td>
<table>
<tr><td>Frequency</td><td>Limit (dBuV/m @3m)</td><td>Remark</td></tr>
<tr><td>30MHz-88MHz</td><td>40.0</td><td>Quasi-peak Value</td></tr>
<tr><td>88MHz-216MHz</td><td>43.5</td><td>Quasi-peak Value</td></tr>
<tr><td>216MHz-960MHz</td><td>46.0</td><td>Quasi-peak Value</td></tr>
<tr><td>960MHz-1GHz</td><td>54.0</td><td>Quasi-peak Value</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>74.0</td><td>Peak Value</td></tr>
<tr><td>54.0</td><td>Average Value</td></tr>
</table>
</td></tr>
<tr><td>Test Procedure:</td><td>
Substitution method was performed to determine the actual ERP emission levels of the EUT.
The following test procedure as below:

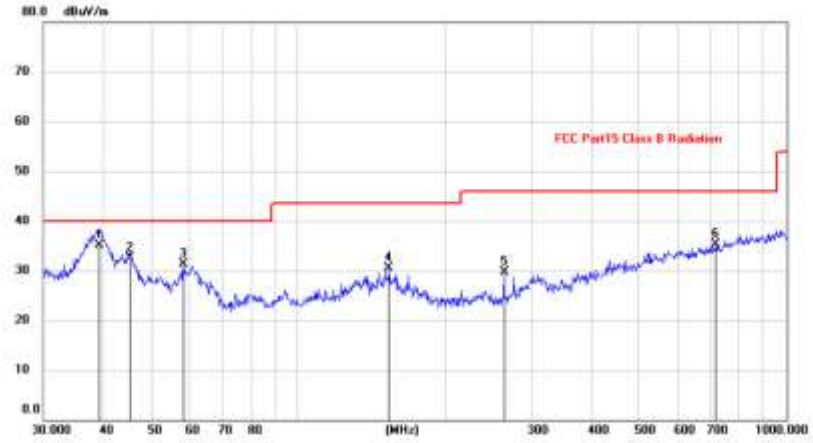
1>.Below 1GHz test procedure:
1. The EUT was placed on the top of a rotating table (0.8m for below 1GHz and 1.5 meters for above 1GHz) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotable table was turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

2>.Above 1GHz test procedure:
1. On the test site as test setup graph above,the EUT shall be placed at the 1.5m support on the turntable and in the position closest to normal use as declared by the provider.
2. The test antenna shall be oriented initially for vertical polarization and shall be chosen to correspond to the frequency of the transmitter.The output of the test antenna shall be connected to the measuring receiver.
3. The transmitter shall be switched on, if possible, without modulation and the measuring receiver shall be tuned to the frequency of the
</td></tr>
</table>

	transmitter under test. 4. The test antenna shall be raised and lowered from 1m to 4m until a maximum signal level is detected by the measuring receiver. Then the turntable should be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver. 5. Repeat step 4 for test frequency with the test antenna polarized horizontally. 6. Remove the transmitter and replace it with a substitution antenna 7. Feed the substitution antenna at the transmitter end with a signal generator connected to the antenna by means of a nonradiating cable. With the antennas at both ends vertically polarized, and with the signal generator tuned to a particular test frequency, raise and lower the test antenna to obtain a maximum reading at the spectrum analyzer. Adjust the level of the signal generator output until the previously recorded maximum reading for this set of conditions is obtained. This should be done carefully repeating the adjustment of the test antenna and generator output. 8. Repeat step 7 with both antennas horizontally polarized for each test frequency. 9. Calculate power in dBm into a reference ideal half-wave dipole antenna by reducing the readings obtained in steps 7 and 8 by the power loss in the cable between the generator and the antenna, and further corrected for the gain of the substitution antenna used relative to an ideal half-wave dipole antenna by the following formula: EIRP(dBm) = Pg(dBm) – cable loss (dB) + antenna gain (dBi) where: Pg is the generator output power into the substitution antenna.
Test setup:	Below 1GHz  Above 1GHz

	
Test results:	Pass

From 30MHz to 1000MHz: Conclusion: PASS			
EUT Description	Communication Module	**Model No.**	GEBW2455A
Temperature	24℃	**Humidity**	56%
Pol	Vertical	**Test date**	2019/11/11
Test Voltage	DC 3.8V from motherboard	**Test mode**	802.11a (5240MHz)



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	39.1613	20.54	14.47	35.01	40.00	-4.99	QP			
2		45.0977	18.50	14.08	32.58	40.00	-7.42	QP			
3		58.0754	17.96	13.39	31.35	40.00	-8.65	peak			
4		153.4018	15.43	14.99	30.42	43.50	-13.08	peak			
5		264.0502	16.61	13.05	29.66	46.00	-16.34	peak			
6		716.6820	13.34	22.02	35.36	46.00	-10.64	peak			

Pol	Horizontal

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		40.5058	15.04	14.41	29.45	40.00	-10.55	peak			
2		60.4123	13.75	13.09	26.84	40.00	-13.16	peak			
3		152.3965	17.21	14.99	32.20	43.50	-11.30	peak			
4		440.5822	14.78	17.28	32.06	46.00	-13.94	peak			
5		694.7218	13.77	21.69	35.46	46.00	-10.54	peak			
6	*	909.6666	13.10	24.38	37.48	46.00	-8.52	peak			

*:Maximum data x:Over limit !:over margin

Note: Measurement=Reading Level+Correc Factor. Factor=(LISN or ISN or PLC or Current Probe)Factor+Cable

Remark: All modes have been tested, and only worst data was listed in this report.

Above 1GHz:

802.11a 5180MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360	28.74	39.67	14.62	32.65	50.38	74.00	-23.62	Vertical
15540	31.50	38.60	17.66	34.46	53.30	74.00	-20.70	Vertical
10360	30.15	39.67	14.62	32.65	51.79	74.00	-22.21	Horizontal
15540	31.50	38.60	17.66	34.46	53.30	74.00	-20.70	Horizontal

802.11a 5200MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10400	28.09	39.67	14.62	32.65	49.73	74.00	-24.27	Vertical
15600	31.18	38.60	17.66	34.46	52.98	74.00	-21.02	Vertical
10400	28.50	39.67	14.62	32.65	50.14	74.00	-23.86	Horizontal
15600	31.91	38.60	17.66	34.46	53.71	74.00	-20.29	Horizontal

802.11a 5240MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10480	30.30	39.67	14.62	32.65	51.94	74.00	-22.06	Vertical
15720	27.84	38.60	17.66	34.46	49.64	74.00	-24.36	Vertical
10480	28.08	39.67	14.62	32.65	49.72	74.00	-24.28	Horizontal
15720	31.68	38.60	17.66	34.46	53.48	74.00	-20.52	Horizontal

802.11ac20 5180MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360	32.21	39.67	14.62	32.65	53.85	74.00	-20.15	Vertical
15540	29.91	38.60	17.66	34.46	51.71	74.00	-22.29	Vertical
10360	31.42	39.67	14.62	32.65	53.06	74.00	-20.94	Horizontal
15540	31.66	38.60	17.66	34.46	53.46	74.00	-20.54	Horizontal

802.11ac20 5200MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10400	30.14	39.67	14.62	32.65	51.78	74.00	-22.22	Vertical
15600	32.16	38.60	17.66	34.46	53.96	74.00	-20.04	Vertical
10400	30.76	39.67	14.62	32.65	52.40	74.00	-21.60	Horizontal
15600	30.66	38.60	17.66	34.46	52.46	74.00	-21.54	Horizontal

802.11ac20 5240MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10480	29.66	39.67	14.62	32.65	51.30	74.00	-22.70	Vertical
15720	28.05	38.60	17.66	34.46	49.85	74.00	-24.15	Vertical
10480	30.90	39.67	14.62	32.65	52.54	74.00	-21.46	Horizontal
15720	30.54	38.60	17.66	34.46	52.34	74.00	-21.66	Horizontal

802.11n(HT20) 5180MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360	32.11	39.67	14.62	32.65	53.75	74.00	-20.25	Vertical
15540	26.88	38.60	17.66	34.46	48.68	74.00	-25.32	Vertical
10360	32.29	39.67	14.62	32.65	53.93	74.00	-20.07	Horizontal
15540	33.83	38.60	17.66	34.46	55.63	74.00	-18.37	Horizontal
15540	20.49	38.60	17.66	34.46	42.29	54.00	-11.71	Horizontal

802.11n(HT20) 5200MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10400	27.25	39.67	14.62	32.65	48.89	74.00	-25.11	Vertical
15600	31.81	38.60	17.66	34.46	53.61	74.00	-20.39	Vertical
10400	30.35	39.67	14.62	32.65	51.99	74.00	-22.01	Horizontal
15600	30.39	38.60	17.66	34.46	52.19	74.00	-21.81	Horizontal

802.11n(HT20) 5240MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10480	30.23	39.67	14.62	32.65	51.87	74.00	-22.13	Vertical
15720	29.67	38.60	17.66	34.46	51.47	74.00	-22.53	Vertical
10480	31.48	39.67	14.62	32.65	53.12	74.00	-20.88	Horizontal
15720	29.38	38.60	17.66	34.46	51.18	74.00	-22.82	Horizontal

802.11n(HT40) 5190MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10380	30.23	39.67	14.62	32.65	51.87	74.00	-22.13	Vertical
15570	31.87	38.60	17.66	34.46	53.67	74.00	-20.33	Vertical
10380	32.12	39.67	14.62	32.65	53.76	74.00	-20.24	Horizontal
15570	31.90	38.60	17.66	34.46	53.70	74.00	-20.30	Horizontal

802.11n(HT40) 5230MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10460	29.77	39.67	14.62	32.65	51.41	74.00	-22.59	Vertical
15690	27.76	38.60	17.66	34.46	49.56	74.00	-24.44	Vertical
10460	30.22	39.67	14.62	32.65	51.86	74.00	-22.14	Horizontal
15690	29.05	38.60	17.66	34.46	50.85	74.00	-23.15	Horizontal

802.11ac40 5190MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10380	28.32	39.67	14.62	32.65	49.96	74.00	-24.04	Vertical
15570	29.72	38.60	17.66	34.46	51.52	74.00	-22.48	Vertical
10380	29.39	39.67	14.62	32.65	51.03	74.00	-22.97	Horizontal
15570	31.25	38.60	17.66	34.46	53.05	74.00	-20.95	Horizontal

802.11ac40 5230MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10460	29.17	39.67	14.62	32.65	50.81	74.00	-23.19	Vertical
15690	28.41	38.60	17.66	34.46	50.21	74.00	-23.79	Vertical
10460	33.11	39.67	14.62	32.65	54.75	74.00	-19.25	Horizontal
10460	21.02	39.67	14.62	32.65	42.66	54.00	-11.34	Horizontal
15690	29.21	38.60	17.66	34.46	51.01	74.00	-22.99	Horizontal

802.11ac80 5210MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10420	26.94	39.67	14.62	32.65	48.58	74.00	-25.42	Vertical
15630	28.46	38.60	17.66	34.46	50.26	74.00	-23.74	Vertical
10420	29.95	39.67	14.62	32.65	51.59	74.00	-22.41	Horizontal
15630	30.47	38.60	17.66	34.46	52.27	74.00	-21.73	Horizontal

Note:

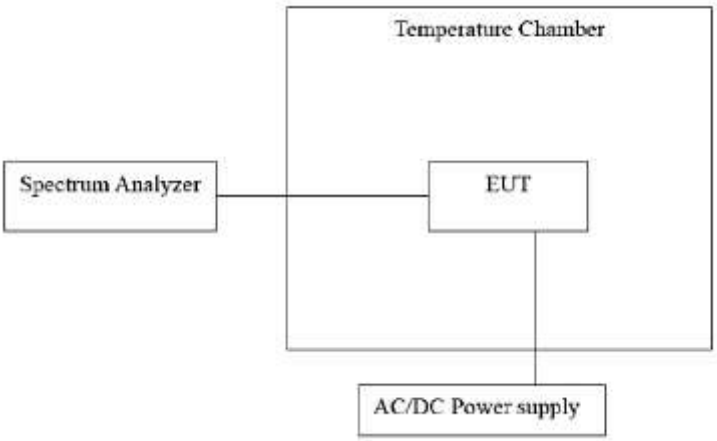
1. Level = Read Level + Antenna Factor+ Cable loss- Preamp Factor.

2. The test trace is same as the ambient noise (the test frequency range: 18GHz~40GHz), therefore no data appear in the report.

3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

4. This Report only show the test plots of the worst case (U-NII-1).

4.7 Frequency Stability Measurement

Test Requirement:	FCC Part15 Section 15.407(g) &Part2 J Section 2.1055
Test Method:	ANSI C63.10: 2013
Limit:	The frequency tolerance shall be maintained within the band of operation frequency over a temperature variation of 0 degrees to 35 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.
Test Setup:	
Test Procedure:	The EUT was placed inside the environmental test chamber and powered by nominal AC/DC voltage. b. Turn the EUT on and couple its output to a spectrum analyzer. c. Turn the EUT off and set the chamber to the highest temperature specified. d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize. e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature. f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.
Test Result:	PASS
Remark:	Only record the worst data.

U-NII-1 for 802.11a Mid Channel (5200MHz)					
Voltage(%)	Power(VDC)	TEMP(°C)	Test Fequnency (MHz)	Freq.Dev (KHz)	Deviation (ppm)
100%	3.8	-20	5199.967	33	6.38
100%		-10	5199.973	27	5.21
100%		0	5199.968	32	6.08
100%		10	5199.972	28	5.39
100%		20	5199.970	30	5.84
100%		30	5199.965	35	6.64
100%		40	5199.972	28	5.42
100%		50	5199.975	25	4.87
100%		60	5199.976	24	4.68
100%		75	5199.982	18	3.37
Low Battery power	3.35	20	5199.981	19	3.73
High Battery power	4.2	20	5199.982	18	3.39

U-NII-2A for 802.11a Mid Channel (5280MHz)					
Voltage(%)	Power(VDC)	TEMP(°C)	Test Fequnency (MHz)	Freq.Dev (MHz)	Deviation (ppm)
100%	3.8	-20	5279.968	32	6.15
100%		-10	5279.975	25	4.80
100%		0	5279.969	31	5.91
100%		10	5279.974	26	4.98
100%		20	5279.972	28	5.22
100%		30	5279.964	36	6.74
100%		40	5279.970	30	5.69
100%		50	5279.975	25	4.71
100%		60	5279.978	22	4.10
100%		75	5279.978	22	4.10
Low Battery power	3.35	20	5279.979	21	4.05
High Battery power	4.2	20	5279.981	19	3.51

U-NII-2C for 802.11a Mid Channel (5580MHz)					
Voltage(%)	Power(VDC)	TEMP(°C)	Test Fequnency (MHz)	Freq.Dev (KHz)	Deviation (ppm)
100%	3.8	-20	5579.964	36	6.48
100%		-10	5579.975	25	4.49
100%		0	5579.967	33	5.95
100%		10	5579.968	32	5.73
100%		20	5579.970	30	5.45
100%		30	5579.968	32	5.79
100%		40	5579.970	30	5.45
100%		50	5579.972	28	4.94
100%		60	5579.976	24	4.39
100%		75	5579.983	17	3.11
Low Battery power	3.35	20	5579.981	19	3.38
High Battery power	4.2	20	5579.983	17	2.99

U-NII-3 for 802.11a Mid Channel (5785MHz)					
Voltage(%)	Power(VDC)	TEMP(°C)	Test Fequnency (MHz)	Freq.Dev (MHz)	Deviation (ppm)
100%	3.8	-20	5784.964	36	6.30
100%		-10	5784.973	27	4.60
100%		0	5784.969	31	5.39
100%		10	5784.970	30	5.22
100%		20	5784.973	27	4.74
100%		30	5784.965	35	6.03
100%		40	5784.973	27	4.58
100%		50	5784.974	26	4.53
100%		60	5784.977	23	3.92
100%		75	5784.980	20	3.48
Low Battery power	3.35	20	5784.980	20	3.48
High Battery power	4.2	20	5784.979	21	3.56

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