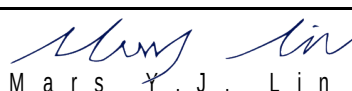
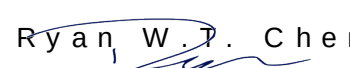


Produkte
Products

Prüfbericht-Nr.: <i>Test report no.:</i>	50349163 001	Auftrags-Nr.: <i>Order no.:</i>	238113226	Seite 1 von 161 <i>Page 1 of 161</i>
Kunden-Referenz-Nr.: <i>Client reference no.:</i>	N/A	Auftragsdatum <i>Order date:</i>	2019.12.12	
Auftraggeber: <i>Client:</i>	Eve Systems LLC 100 Pine St., Suite 1250, San Francisco CA 94111 USA			
Prüfgegenstand: <i>Test item:</i>	Eve Cam			
Bezeichnung / Typ-Nr.: <i>Identification / Type no.:</i>	20EBK9901			
Auftrags-Inhalt: <i>Order content:</i>	FCC Part 15E / ISSED RSS-247 Issue 2 Test report (Wi-Fi 5GHz)			
Prüfgrundlage: <i>Test specification:</i>	FCC 47CFR Part 15: Subpart E Section 15.407(U-NII) ISSED RSS-247 Issue 2 Feb 2017			
Wareneingangsdatum: <i>Date of sample receipt:</i>	2019.12.12			
Prüfmuster-Nr.: <i>Test sample no.:</i>	A001040872-011, A001040872-014			
Prüfzeitraum: <i>Testing period:</i>	2020.01.02 - 2020.05.11			
Ort der Prüfung: <i>Place of testing:</i>	EMC/RF Laboratory Taipei			
Prüflaboratorium: <i>Testing laboratory:</i>	TUV Rheinland Taiwan Ltd.			
Prüfergebnis*: <i>Test result*:</i>	Pass			
überprüft von: <i>reviewed by:</i>	 Mars Y. J. Lin		genehmigt von: <i>authorized by:</i>	 Ryan W. T. Chen
Datum: 2020.05.11 <i>Date:</i>			Datum: 2020.05.11 <i>Date:</i>	
Stellung / Position:	Project Engineer		Stellung / Position:	Project Manager
Sonstiges / Other:				
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>		Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>		
* Legende:	1 = sehr gut P(ass) = entspricht o.g. Prüfgrundlage(n)	2 = gut	3 = befriedigend F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	4 = ausreichend N/A = nicht anwendbar
* Legend:	1 = very good P(ass) = passed a.m. test specification(s)	2 = good	3 = satisfactory F(ail) = failed a.m. test specification(s)	4 = sufficient N/A = not applicable
5 = mangelhaft N/T = nicht getestet				
5 = poor N/T = not tested				
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>				

V05

TEST SUMMARY

5.1.1 ANTENNA REQUIREMENT*RESULT: Passed***5.1.2 DUTY CYCLE***RESULT: Passed***5.1.3 MAXIMUM CONDUCTED AVERAGE OUTPUT POWER***RESULT: Passed***5.1.4 26dB & 99% BANDWIDTH***RESULT: Passed***5.1.5 6dB BANDWIDTH***RESULT: Passed***5.1.6 POWER DENSITY***RESULT: Passed***5.1.7 FREQUENCY STABILITY MEASUREMENT***RESULT: Passed***5.1.8 SPURIOUS EMISSION***RESULT: Passed***5.1.9 DYNAMIC FREQUENCY SELECTION***RESULT: Passed***5.2.1 MAINS CONDUCTED EMISSIONS***RESULT: Passed***6.1.1 ELECTROMAGNETIC FIELDS***RESULT: Passed*

Contents

1.	GENERAL REMARKS	5
1.1	COMPLEMENTARY MATERIALS	5
1.2	DECISION RULE OF CONFORMITY	5
2.	TEST SITES	6
2.1	TEST LABORATORY	6
2.2	TEST FACILITY	6
2.3	LIST OF TEST AND MEASUREMENT INSTRUMENTS	7
2.4	TRACEABILITY	8
2.5	CALIBRATION.....	8
2.6	MEASUREMENT UNCERTAINTY	8
3.	GENERAL PRODUCT INFORMATION	9
3.1	PRODUCT FUNCTION AND INTENDED USE.....	9
3.2	SYSTEM DETAILS AND RATINGS	9
3.3	INDEPENDENT OPERATION MODES.....	11
3.4	NOISE GENERATING AND NOISE SUPPRESSING PARTS.....	11
3.5	SUBMITTED DOCUMENTS	11
4.	TEST SET-UP AND OPERATION MODES	12
4.1	PRINCIPLE OF CONFIGURATION SELECTION.....	12
4.2	TEST OPERATION AND TEST SOFTWARE	14
4.3	SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT.....	15
4.4	COUNTERMEASURES TO ACHIEVE EMC COMPLIANCE	15
4.5	TEST SETUP DIAGRAM.....	16
5.	TEST RESULTS	18
5.1	TRANSMITTER REQUIREMENT & TEST SUITES	18
5.1.1	<i>Antenna Requirement</i>	<i>18</i>
5.1.2	<i>Duty Cycle.....</i>	<i>19</i>
5.1.3	<i>Maximum Conducted Average Output Power</i>	<i>22</i>
5.1.4	<i>26dB & 99% Bandwidth.....</i>	<i>27</i>
5.1.5	<i>6dB Bandwidth.....</i>	<i>97</i>
5.1.6	<i>Power Density.....</i>	<i>103</i>
5.1.7	<i>Frequency Stability Measurement</i>	<i>145</i>
5.1.8	<i>Spurious Emission.....</i>	<i>148</i>
5.1.9	<i>Dynamic Frequency Selection</i>	<i>149</i>
5.2	MAINS EMISSIONS.....	154
5.2.1	<i>Mains Conducted Emissions</i>	<i>154</i>

6.	RADIO FREQUENCY EXPOSURE COMPLIANCE	155
6.1.1	<i>Electromagnetic Fields</i>	<i>155</i>
7.	PHOTOGRAPHS OF THE TEST SET-UP	156
8.	LIST OF TABLES	161
9.	LIST OF PHOTOGRAPHS	161

1. General Remarks

1.1 Complementary Materials

These attachments are integral parts of this test report:

Appendix P: Photo Documentation internal view
(File Name: 50329162 001, 50329163 001 Appendix P)

Appendix D: Test Result of Radiated Emissions
(File Name: 50329163 001 Appendix D)

Test Specifications

Table 1: Applied Standard and Test Levels

Radio
FCC CFR47 Part 15: Subpart E Section 15.407 FCC 47CFR Part 2: Subpart J Section 2.1091 ANSI C63.10:2013 ISED RSS-247 Issue 2 Feb 2017 ISED RSS-Gen Issue 5 Apr 2018 ISED RSS-102 Issue 5 Mar 2015 KDB789033 D02 General UNII Test Procedures New Rules v02r01 KDB447498 D01 General RF Exposure Guidance v06 KDB905462 D02 UNII DFS Compliance Procedures New Rules v02 KDB905462 D03 UNII Clients Without Radar Detection New Rules v01r02

1.2 Decision rule of conformity

The decision rule of conformity of this test report is following the requirements of the requested standard in the quotation, and agreed among testing laboratory and manufacturer (applicant) to exclude the consideration of Measurement Uncertainty, unless it is required by the specific standard.

2. Test Sites

2.1 Test Laboratory

TUV Rheinland Taiwan Ltd.

11F. No.758, Sec. 4, Bade Rd., Songshan Dist.
Taipei City 105
Taiwan (R.O.C.)

2.2 Test Facility

TUV Rheinland Taiwan Ltd.

AC Mains Conduction:
11F. No.758, Sec. 4, Bade Rd., Songshan Dist.
Taipei City 105
Taiwan (R.O.C.)
FCC Registration No.: 180491
IC Canada Registration No.: 9465A

Conducted Test / Radiated Test:
No. 458-18, Sec 2, Fenliao., Linkou Dist.
New Taipei City 244
Taiwan (R.O.C.)
FCC Registration No.: 226631
IC Canada Registration No.: 25563

TAF Accredited NCC Test Lab. No.:3567
TAF ISO17025 Certification effective period: 6th-May-2019 to 05th-May-2022



Testing Laboratory
3567

2.3 List of Test and Measurement Instruments

Table 2: List of Test and Measurement Equipment

Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due Date
EMI Test Receiver	R&S	ESR7	102108	2020/03/17	2021/03/16
Spectrum Analyzer	R&S	FSV40	101112	2019/10/15	2020/10/15
Pre-Amplifier	Agilent	8447D	2944A10772	2020/2/14	2021/2/13
Pre-Amplifier	EMCI	EMC051845SE	980633	2020/2/07	2021/2/06
Pre-Amplifier	EMCI	EMC184045SE	980657	2020/2/07	2021/2/06
Bilog Antenna	SCHWARZBECK	VULB-9168	00951	2020/1/14	2021/1/13
Horn Antenna	ETS-Lindgren	3117	00218930	2020/12/27	2021/12/26
Horn Antenna	SCHWARZBECK	BBHA 9170	00887	2020/4/12	2021/4/11
Loop Antenna	EMCI	LPA600	287	2019/12/20	2020/12/19
Test Software	Audix	e3	Ver. 9	N/A	N/A
Test Cable	HUBER+SUHNER	SUCOFLEX 104EA_9k~18G	800056/4EA	2020/4/18	2021/4/17
Test Cable	HUBER+SUHNER	SUCOFLEX 104_9k~18G	804680/4	2020/4/18	2021/4/17
Test Cable	HUBER+SUHNER	SUCOFLEX 104_9k~18G	MY37202/4	2020/4/18	2021/4/17
Test Cable	HUBER+SUHNER	SUCOFLEX 102EA_1G~40G	800898/2EA	2020/4/18	2021/4/17
Test Cable	HUBER+SUHNER	SUCOFLEX 102EA_1G~40G	800901/2EA	2020/4/18	2021/4/17
Test Cable	HUBER+SUHNER	SUCOFLEX 102EA_1G~40G	801027/2EA	2020/4/18	2021/4/17
Thermo Chamber	Giant Force	GHT-150-40-CP-SD	MAA1902-010	2020/2/1	2021/2/1
Signal Generator	R&S	SMB100A03	181335	2020/1/23	2021/1/23
Power Meter	Anritsu	ML2495A	1901008	2020/4/29	2021/4/28
Power Sensor	Anritsu	MA2411B	1725269	2020/4/29	2021/4/28
EXG-B RF Analog Signal Generator	Agilent	N5171B	MY53050377	2020/04/22	2021/04/21
MXG-B RF Vector Signal Generator	Agilent	N5182B	MY53050524	2020/04/22	2021/04/21
Two-Line V-Network (for EUT)	Rohde & Schwarz	ENV216	101243	2019/06/23	2020/06/23
Two-Line V-Network	Rohde & Schwarz	ENV216	101262	2019/07/16	2020/07/16
Telecom ISN 4 Line	Fischer Custom Communications	FFCC-TLISN- T4-02-09	101168	2020/02/03	2021/02/03
Impedance Stabilization Network	TESEQ	ISN T800	51949	2020/02/25	2021/02/25
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	0357.8810.54- 102102-HN	2019/07/25	2020/07/25
Test Software	Audix	e3	Ver. 9	N/A	N/A

2.4 Traceability

All measurement equipment calibrations are traceable to NML(Taiwan)/NIST(USA) or where calibration is performed outside Taiwan, to equivalent nationally recognized standards organizations.

2.5 Calibration

Equipment requiring calibration is calibrated periodically in a suitably accredited Calibration Lab. Additionally all equipment is verified for proper performance on a regular schedule using in house standards or comparisons.

2.6 Measurement Uncertainty

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

Table 3: Emission Measurement Uncertainty

Parameter	Uncertainty
Radio Frequency	± 0.1 ppm
RF power, conducted	± 1.5 dB
RF power density, conducted	± 3 dB
spurious emissions, conducted	± 3 dB
all emissions, radiated	± 6 dB
Temperature	± 1 °C
Humidity	± 5 %
DC and low frequency voltages	±3 %

3. General Product Information

3.1 Product Function and Intended Use

The EUT is an video surveillance equipment. It contains a WiFi 5G compatible module enabling the user to communicate data through a Wireless interface.
For details refer to the User Guide, Data Sheet and Block Diagram.

3.2 System Details and Ratings

Table 4: Basic Information of EUT

Item	EUT information
Kind of Equipment/Test Item	Eve Cam
Type Identification	20EBK9901
FCC ID	SNE-IDC-001
IC ID	11192A-IDC001

Table 5: Technical Specification of EUT

Technical Specification	Value
Operating Frequencies	Band 1: 5180~5240MHz Band 2: 5260~5320MHz Band 3: 5500~5700MHz Band 4: 5745~5825MHz
Channel Spacing	10 MHz
Channel number	24 for 20MHz bandwidth ; 11 for 40MHz bandwidth ; 5 for 80MHz bandwidth ;
Operation Voltage	5Vdc
Modulation	802.11a/n: OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM,
Antenna gain	4.4 dBi
Product Type	802.11a: WLAN (TX , RX) 802.11n: WLAN (TX , RX) 802.11ac: WLAN (TX , RX)
Beamforming Mode	No support
Operation Mode	Client device without DFS detection

Table 6: Channel Frequency Table

Band	Channel	Frequency (MHz)	Bandwidth 20M	Bandwidth 40M	Bandwidth 80M
U-NII-1 (Band 1)	36	5180	V		
	38	5190		V	
	40	5200	V		
	42	5210			V
	44	5220	V		
	46	5230		V	
	48	5240	V		
U-NII-2A (Band 2)	52	5260	V		
	54	5270		V	
	56	5280	V		
	58	5290			V
	60	5300	V		
	62	5310		V	
	64	5320	V		
U-NII-2C (Band 3)	100	5500	V		
	102	5510		V	
	104	5520	V		
	106	5530			V
	108	5540	V		
	110	5550		V	
	112	5560	V		
	116	5580	V		
	118	5590		V	
	120	5600	V		
	122	5610			V
	124	5620	V		
	126	5630		V	
	128	5640	V		
	132	5660	V		
	134	5670		V	
	136	5680	V		
	140	5700	V		
U-NII-3 (Band 4)	149	5745	V		
	151	5755		V	
	153	5765	V		
	155	5775			V
	157	5785	V		
	159	5795		V	
	161	5805	V		
	165	5825	V		

For ISSED, the channels 118 to 128 are not be used.

3.3 Independent Operation Modes

Basic operation modes are:

- A. Transmitting
- B. Receiving
- C. Normal Link

3.4 Noise Generating and Noise Suppressing Parts

Refer to the Block Diagram.

3.5 Submitted Documents

- Block Diagram
- Instruction Manual
- Rating Label
- Technical Description

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

The test modes were adapted accordingly in reference to the instructions for use.

During testing, Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

Based on evaluation, 802.11an is in worst mode, 802.11ac20 and 802.11ac40 are covered by 802.11an20 and 802.11an40.

Table 7: Table for Parameters of Test Software Setting for FCC

UNII Band	NCB: 20MHz			NCB: 40MHz		NCB: 80MHz	
	Channel	Mode		Channel	Mode	Channel	Mode
		802.11a	802.11an		802.11an		802.11ac
		Setting	Setting		Setting		Setting
Band 1	36	17	18	38	15	42	13
	40	25	25	46	15		
	48	20	20				
Band 2	52	25	25	54	25	58	15
	60	25	25	62	15		
	64	18	19				
Band 3	100	16	17	102	15	106	15
	116	22	22	110	22	112	20
	140	15	18	134	18		
Band 4	149	21	21	151	23	155	23
	157	22	22	159	25		
	165	25	25				

Table 8: Table for Parameters of Test Software Setting for ISED

UNII Band	NCB: 20MHz			NCB: 40MHz		NCB: 80MHz	
	Channel	Mode		Channel	Mode	Channel	Mode
		802.11a	802.11an				
		Setting	Setting				
Band 1	36	17	18	38	15	42	13
	40	19	20	46	15		
	48	19	20				
Band 2	52	22	22	54	22	58	15
	60	22	22	62	15		
	64	18	19				
Band 3	100	16	15	102	15	106	15
	116	22	22	110	22		
	140	15	18	134	18		
Band 4	149	21	21	151	23	155	23
	157	22	22	159	25		
	165	25	25				

4.2 Test Operation and Test Software

Setup for testing: Test samples are provided with USB interface which makes it possible to control them through a test software installed on a notebook computer.

This software Putty.exe was running on the laptop computer connected to the EUT. It was used to enable the operation modes listed in section 3.3 as appropriate.

The samples were used as follows:

Conduction: A001040872-014

Radiated: A001040872-011

The modulation and bandwidth are similar for 802.11n mode for 20MHz/40MHz and 802.11ac mode for 20MHz/40MHz, therefore investigated worst case to representative mode in test report.

Full test was applied on all test modes, but only worst case was shown.

IEEE 802.11a mode:

Band 1 Channel Low (5180MHz), Channel Mid (5200MHz) and Channel High (5240MHz) with 6Mbps data rate were chosen for full testing.

Band 2 Channel Low (5260MHz), Channel Mid (5300MHz) and Channel High (5320MHz) with 6Mbps data rate were chosen for full testing.

Band 3 Channel Low (5500MHz), Channel Mid (5580MHz) and Channel High (5700MHz) with 6Mbps data rate were chosen for full testing.

Band 4 Channel Low (5745MHz), Channel Mid (5785MHz) and Channel High (5825MHz) with 6Mbps data rate were chosen for full testing.

IEEE 802.11an HT20 mode:

Band 1 Channel Low (5180MHz), Channel Mid (5200MHz) and Channel High (5240MHz) with MCS0/NSS1 data rate were chosen for full testing.

Band 2 Channel Low (5260MHz), Channel Mid (5300MHz) and Channel High (5320MHz) with MCS0/NSS1 data rate were chosen for full testing.

Band 3 Channel Low (5500MHz), Channel Mid (5580MHz) and Channel High (5700MHz) with MCS0/NSS1 data rate were chosen for full testing.

Band 4 Channel Low (5745MHz), Channel Mid (5785MHz) and Channel High (5825MHz) with MCS0/NSS1 data rate were chosen for full testing.

IEEE 802.11an HT40 mode:

Band 1 Channel Low (5190MHz) and Channel High (5230MHz) with MCS0/NSS1 data rate were chosen for full testing.

Band 2 Channel Low (5270MHz) and Channel High (5310MHz) with MCS0/NSS1 data rate were chosen for full testing.

Band 3 Channel Low (5510MHz), Channel Mid (5550MHz) and Channel High (5670MHz) with MCS0/NSS1 data rate were chosen for full testing.

Band 4 Channel Low (5755MHz) and Channel High (5795MHz) with MCS0/NSS1 data rate were chosen for full testing.

IEEE 802.11ac VHT80 mode:

Band 1 Channel Low (5120MHz) with MCS0/NSS1 data rate were chosen for full testing.

Band 2 Channel Low (5290MHz) with MCS0/NSS1 data rate were chosen for full testing.

Band 3 Channel Low (5530MHz) and Channel High (5610MHz) with MCS0/NSS1 data rate were chosen for full testing.

Band 4 Channel Low (5775MHz) with MCS0/NSS1 data rate were chosen for full testing.

4.3 Special Accessories and Auxiliary Equipment

The product has been tested together with the following additional accessories:

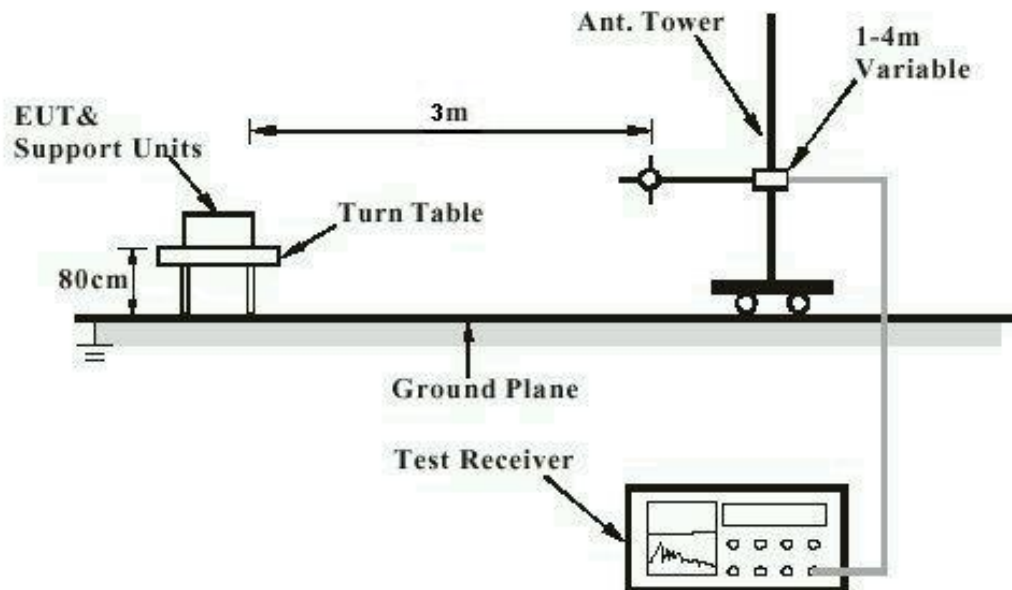
Kind of Equipment	Manufacturer	Model Name	S/N
Adapter	ADAPTER TECH.	ATS012T-W050E	N/A

4.4 Countermeasures to achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Constructional Data Form or the Technical Construction File. No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test



Note: Measurements above 1 GHz are done with a table height of 1.5m

Diagram of Measurement Equipment Configuration for Mains Conduction Measurement (if applicable)

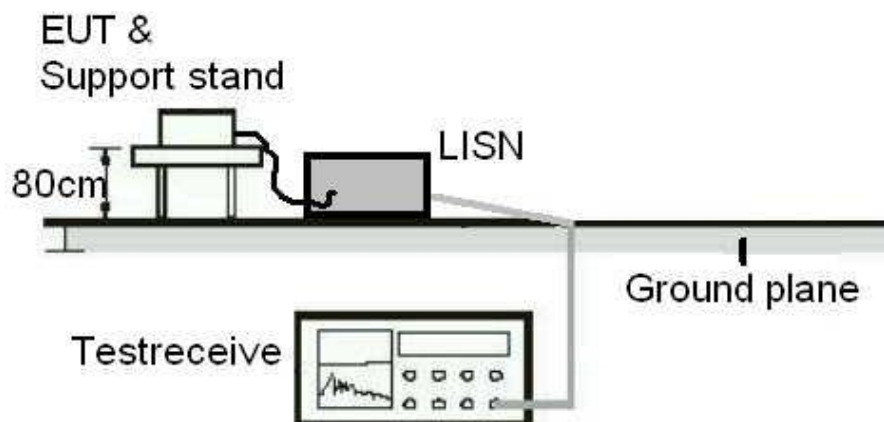
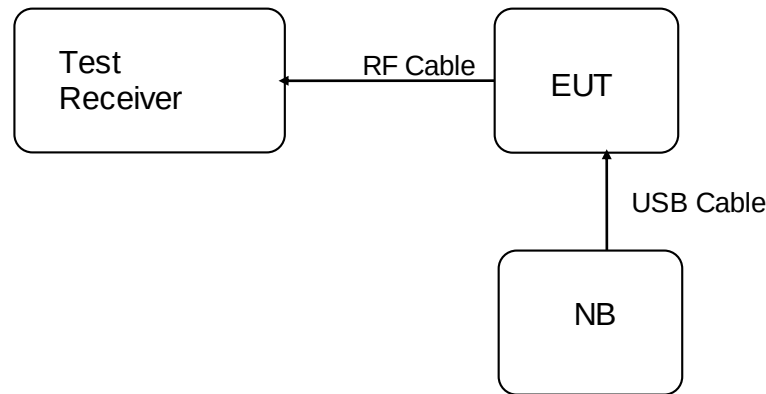
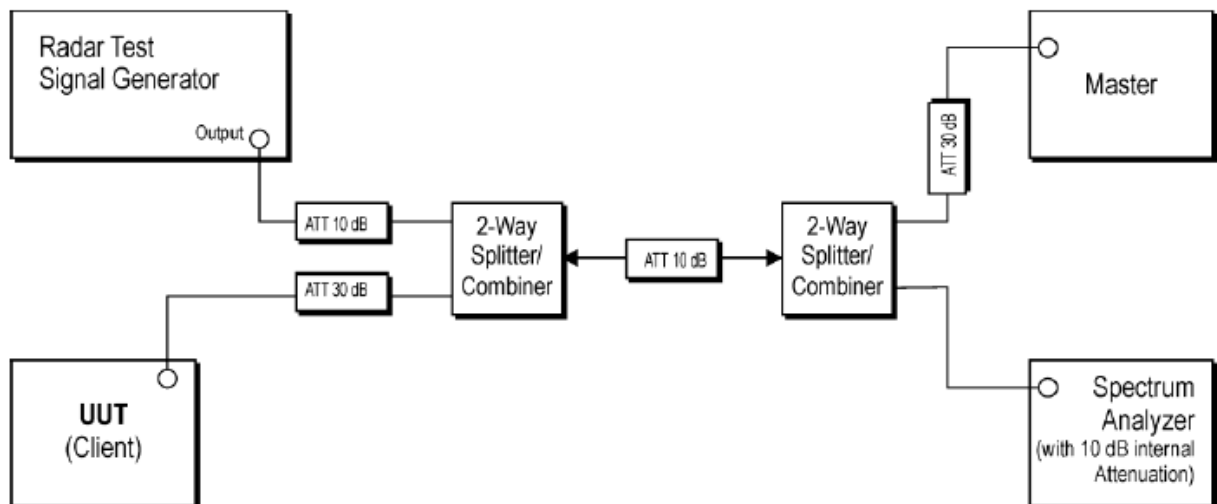


Diagram of Measurement Equipment Configuration for Conducted Transmitter Measurement

Diagram of Measurement Configuration for DFS Test


5. Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT:**Passed**

Test standard : FCC Part 15.407(a), Part 15.203,
ISED RSS-Gen 6.8, KDB662911 D02

Requirement : use of approved antennas only with directional gains that
do not exceed 6 dBi

According to the manufacturer declaration, the EUT has an antenna with a directional gain of 4.4dBi. The antenna is a printed trace with no possibility of replacement with a non-approved antenna by the end-user. Therefore, the EUT is considered to comply with this provision.

Refer to EUT photo for details.

5.1.2 Duty Cycle

RESULT:
Passed

Test standard : KDB 789033 Zero-Span Spectrum Analyzer Method,
 ISSED RSS-Gen Zero-Span Spectrum Analyzer
 Method
 Limit : None; for reporting purposes only
 Kind of test site : Shielded room / Conducted room

Test setup

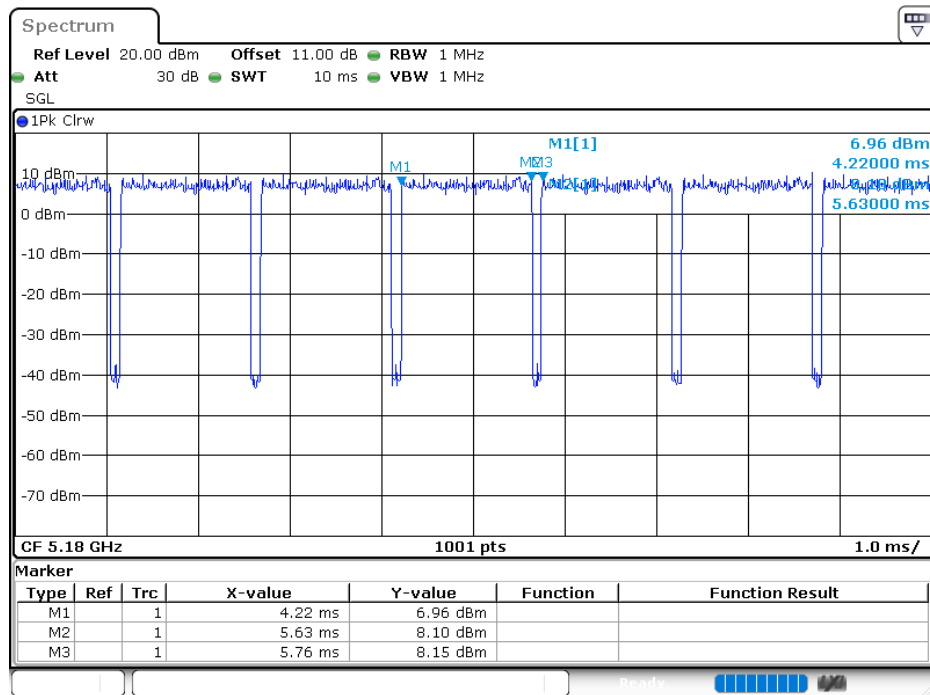
Operation Mode : A
 Test Channel : Each operation mode of band 1 of low channel

Table 9: Test result of Duty Cycle

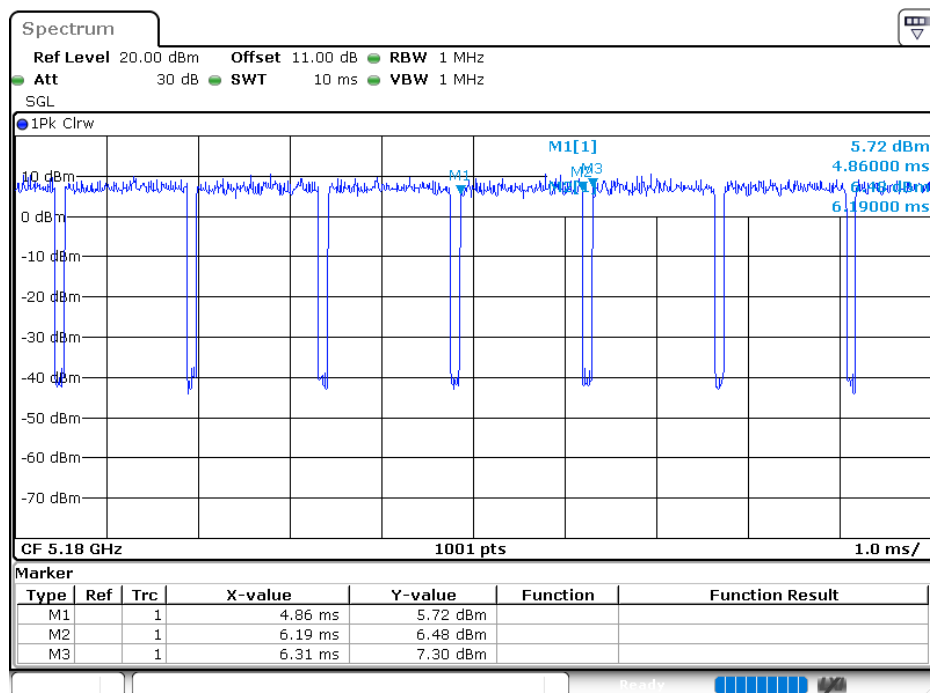
Mode	On Time(ms)	On+Off Time(ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	1.41	1.54	91.56	0.38	0.71
802.11an HT20	1.33	1.45	91.72	0.38	0.75
802.11an HT40	0.63	0.77	81.82	0.87	1.59
802.11ac VHT80	0.3	0.45	66.67	1.76	3.33

The duty factor is $10\log(1/(\text{Duty Cycle}(\%) / 100))$.
 Duty factor and 1/T minimum VBW used in radiated test items.
 Test results listed in section 5.1.3 (Output Power) and 5.1.6 (PSD) have been corrected by duty cycle.

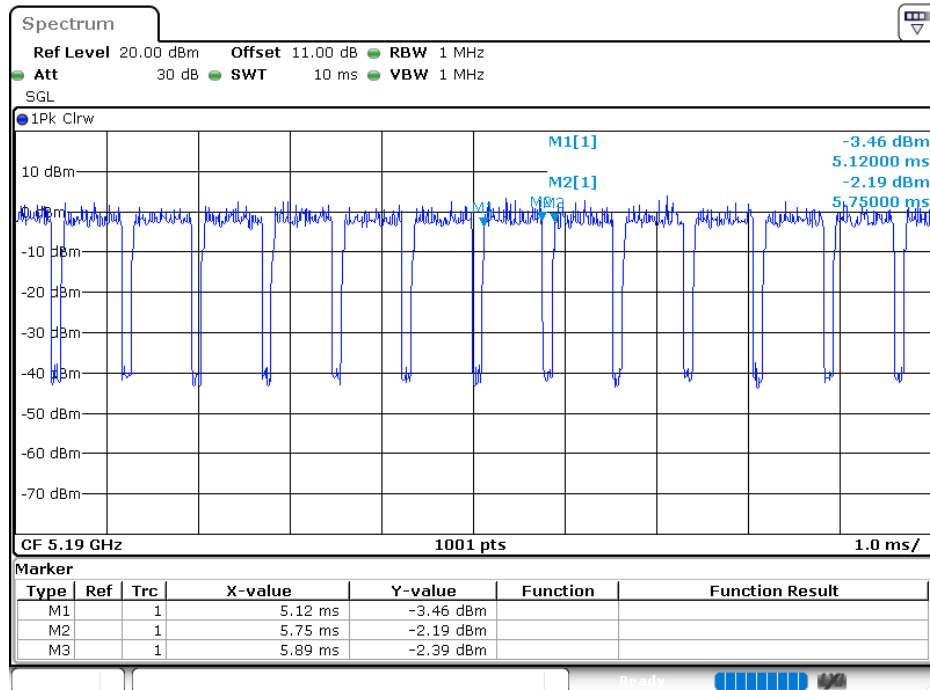
Test Plot of Duty Cycle

802.11a


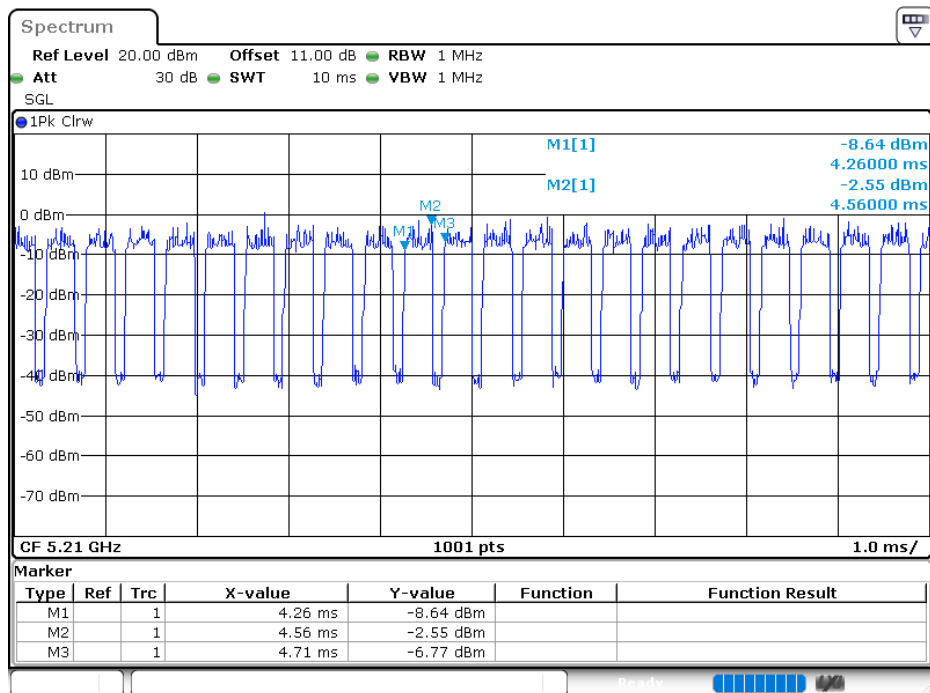
Date: 5.MAR.2020 08:17:52

802.11an HT20


Date: 5.MAR.2020 08:58:18

802.11an HT40


Date: 5.MAR.2020 10:00:12

802.11ac VHT80


Date: 5.MAR.2020 10:34:56

5.1.3 Maximum Conducted Average Output Power

RESULT:**Passed**

Test standard	:	FCC Part 15.407(a), ISED RSS-247 6.2
Basic standard	:	ANSI C63.10:2013
Kind of test site	:	Shielded room

Test setup

Test Channel	:	FCC refer to the Table 7 ISED refer to the Table 8
Operation Mode	:	A
Ambient temperature	:	20-24 °C
Relative humidity	:	50-65 %
Atmospheric pressure	:	100-103 kPa

FCC Limit

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

ISED Limit

For the 5.15-5.25GHz, the maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in megahertz.

For the 5.25-5.35 GHz, the maximum conducted output power shall not exceed 250 mW or $11 + 10 \log_{10} B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz.

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

For the band 5.47-5.6GHz and 5.65-5.725GHz, the maximum conducted output power shall not exceed 250 mW or $11 + 10 \log_{10} B$, dBm, whichever is less.

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

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

Table 10: Test result of Average Output Power for FCC

Mode	Channel Frequency (MHz)	Average Output Power		Limit (dBm)
		Ant 1 (dBm)	Total (dBm)	
802.11a	5180	14.38	14.38	24.00
	5200	19.82	19.82	24.00
	5240	16.30	16.30	24.00
	5260	20.03	20.03	24.00
	5300	19.87	19.87	24.00
	5320	14.90	14.90	24.00
	5500	13.97	13.97	24.00
	5580	18.63	18.63	24.00
	5700	13.75	13.75	24.00
	5745	18.63	18.63	30.00
	5785	19.25	19.25	30.00
	5825	19.75	19.75	30.00
802.11an HT20	5180	14.80	14.80	24.00
	5200	20.13	20.13	24.00
	5240	19.96	19.96	24.00
	5260	16.45	16.45	24.00
	5300	19.80	19.80	24.00
	5320	15.49	15.49	24.00
	5500	14.31	14.31	24.00
	5580	18.17	18.17	24.00
	5700	15.76	15.76	24.00
	5745	18.44	18.44	30.00
	5785	18.93	18.93	30.00
	5825	20.42	20.42	30.00
802.11an HT40	5190	12.93	12.93	24.00
	5230	12.69	12.69	24.00
	5270	19.80	19.80	24.00
	5310	12.72	12.72	24.00
	5510	13.22	13.22	24.00
	5550	19.01	19.01	24.00
	5670	16.12	16.12	24.00
	5755	20.73	20.73	30.00
	5795	20.48	20.48	30.00
802.11ac VHT80	5210	10.71	10.71	24.00
	5290	12.05	12.05	24.00
	5530	12.83	12.83	24.00
	5610	17.06	17.06	24.00
	5775	20.22	20.22	30.00

Table 11: Test result of Average Output Power for ISED

Mode	Channel Frequency (MHz)	Conducted Average Output Power		Conducted Limit (dBm)	EIRP Power (dBm)	EIRP Limit (dBm)
		Ant 1 (dBm)	Total (dBm)			
802.11a	5180	14.38	14.38	-	18.78	22.32
	5200	16.06	16.06	-	20.46	23.00
	5240	16.01	16.01	-	20.41	23.00
	5260	18.05	18.05	24.00	22.45	30.00
	5300	18.16	18.16	24.00	22.56	30.00
	5320	14.90	14.90	23.44	19.30	29.44
	5500	13.97	13.97	23.32	18.37	29.32
	5580	18.63	18.63	24.00	23.03	30.00
	5700	13.75	13.75	23.30	18.15	29.30
	5745	18.63	18.63	30.00	-	-
	5785	19.25	19.25	30.00	-	-
	5825	19.75	19.75	30.00	-	-
802.11an HT20	5180	14.80	14.80	-	19.20	22.62
	5200	16.73	16.73	-	21.13	23.00
	5240	16.45	16.45	-	20.85	23.00
	5260	17.92	17.92	24.00	22.32	30.00
	5300	18.06	18.06	24.00	22.46	30.00
	5320	15.49	15.49	23.71	19.89	29.71
	5500	14.31	14.31	23.62	18.71	29.62
	5580	18.17	18.17	24.00	22.57	30.00
	5700	15.76	15.76	23.58	20.16	29.58
	5745	18.44	18.44	30.00	-	-
	5785	18.93	18.93	30.00	-	-
	5825	20.42	20.42	30.00	-	-
802.11an HT40	5190	12.93	12.93	-	17.33	23.00
	5230	12.69	12.69	-	17.09	23.00
	5270	18.54	18.54	24.00	22.94	30.00
	5310	12.72	12.72	24.00	17.12	30.00
	5510	13.22	13.22	24.00	17.62	30.00
	5550	19.01	19.01	24.00	23.41	30.00
	5670	16.12	16.12	24.00	20.52	30.00
	5755	20.73	20.73	30.00	-	-
	5795	20.48	20.48	30.00	-	-
802.11ac VHT80	5210	10.71	10.71	-	15.11	23.00
	5290	12.05	12.05	24.00	16.45	30.00
	5530	12.83	12.83	24.00	17.23	30.00
	5775	20.22	20.22	30.00	-	-

For 802.11a 5180MHz, the EIRP limit is using $10 \text{ dBm} + 10 \log(B)$, where B is the 17.06MHz, So, the EIRP limit equal 22.32dBm.

For 802.11a 5320MHz, the Conducted power limit is $11 \text{ dBm} + 10 \log(B)$ and the EIRP limit is $17 \text{ dBm} + 10 \log(B)$, where B is the 17.54MHz, So, the Conducted limit equal 23.44dBm and the EIRP limit equal 29.44dBm.

For 802.11a 5500MHz, the Conducted power limit is $11 \text{ dBm} + 10 \log(B)$ and the EIRP limit is $17 \text{ dBm} + 10 \log(B)$, where B is the 17.06MHz, So, the Conducted limit equal 23.32dBm and the EIRP limit equal 29.32dBm.

For 802.11a 5700MHz, the Conducted power limit is $11 \text{ dBm} + 10 \log(B)$ and the EIRP limit is $17 \text{ dBm} + 10 \log(B)$, where B is the 16.98MHz, So, the Conducted limit equal 23.30dBm and the EIRP limit equal 29.30dBm.

For 802.11an HT20 5180MHz, the EIRP limit is using $10 \text{ dBm} + 10 \log(B)$, where B is the 18.26MHz, So, the EIRP limit equal 22.62dBm.

For 802.11an HT20 5320MHz, the Conducted power limit is $11 \text{ dBm} + 10 \log(B)$ and the EIRP limit is $17 \text{ dBm} + 10 \log(B)$, where B is the 18.66MHz, So, the Conducted limit equal 23.71dBm and the EIRP limit equal 29.71dBm.

For 802.11an HT20 5500MHz, the Conducted power limit is $11 \text{ dBm} + 10 \log(B)$ and the EIRP limit is $17 \text{ dBm} + 10 \log(B)$, where B is the 18.26MHz, So, the Conducted limit equal 23.62dBm and the EIRP limit equal 29.62dBm.

For 802.11an HT20 5700MHz, the Conducted power limit is $11 \text{ dBm} + 10 \log(B)$ and the EIRP limit is $17 \text{ dBm} + 10 \log(B)$, where B is the 18.10MHz, So, the Conducted limit equal 23.58dBm and the EIRP limit equal 29.58dBm.

Prüfbericht - Nr.: 50349163 001
Test Report No.**Seite 27 von 161**
Page 27 of 161**5.1.4 26dB & 99% Bandwidth****RESULT:****Passed**

Test standard	:	FCC Part 15.407(a), ISED RSS-247 6.2
Basic standard	:	ANSI C63.10:2013
Kind of test site	:	Conducted room

Test setup

Test Channel	:	FCC refer to the Table 7 ISED refer to the Table 8
Operation Mode	:	A

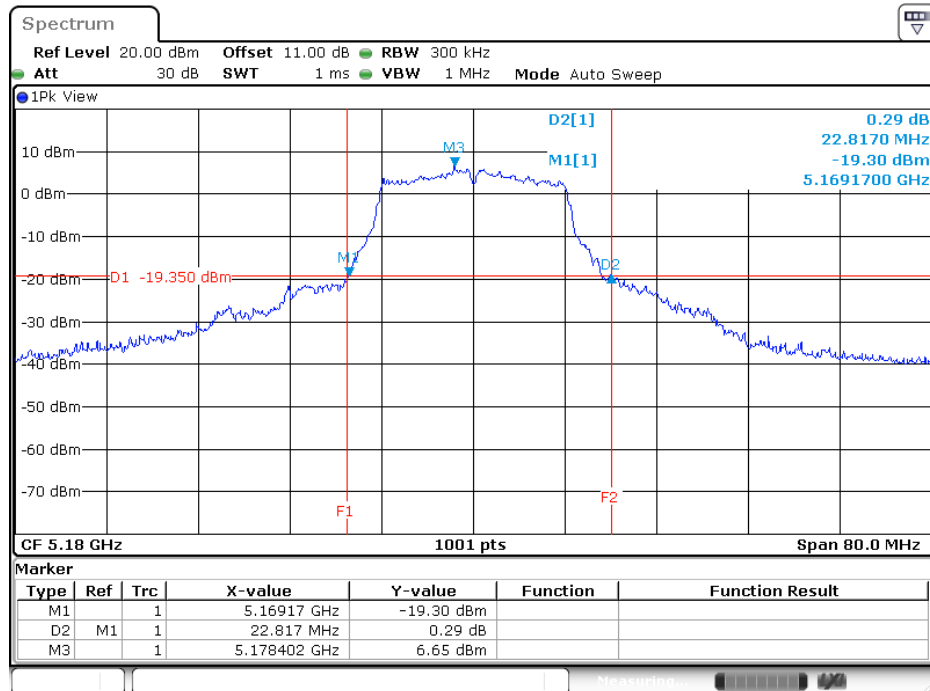
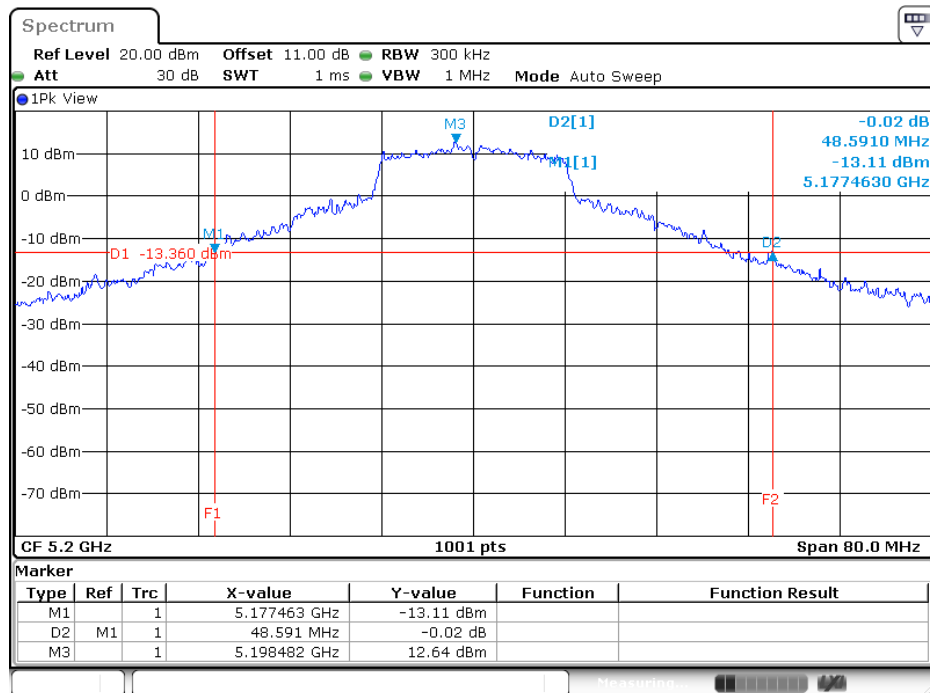
Table 12: Test result of 26dB & 99% Bandwidth for FCC

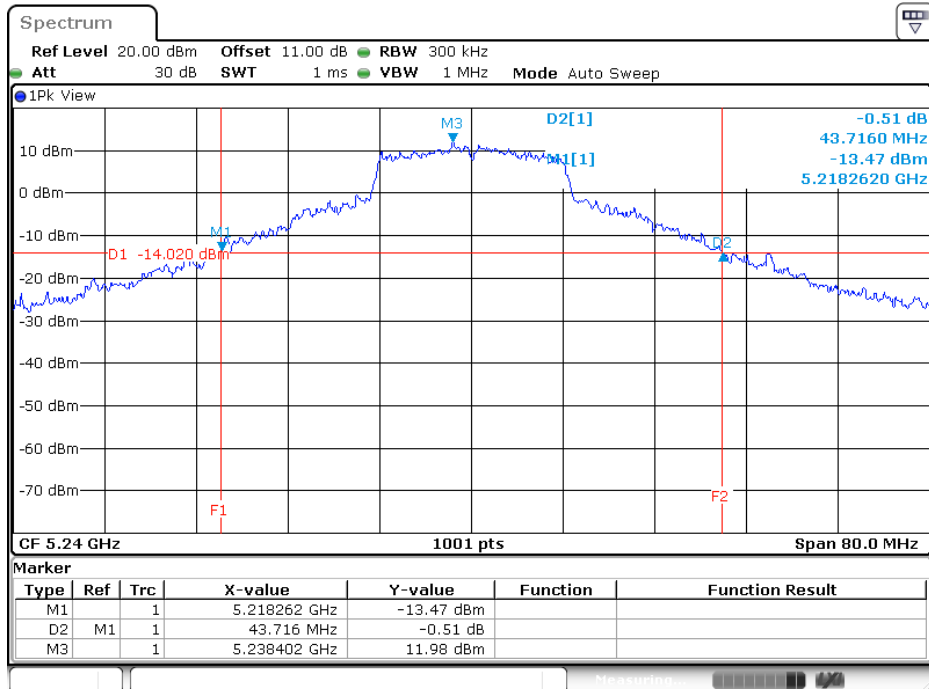
Mode	channel	Channel Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
802.11a	36	5180	22.82	17.06
	40	5200	48.59	29.93
	48	5240	43.72	19.06
	52	5260	43.68	29.37
	60	5300	43.56	28.73
	64	5320	29.01	17.54
	100	5500	21.58	17.06
	116	5580	36.92	21.94
	140	5700	21.38	16.98
	149	5745	-	21.26
	157	5785	-	24.78
	165	5825	-	29.09
802.11an HT20	36	5180	29.61	18.42
	40	5200	49.87	30.65
	48	5240	49.55	19.18
	52	5260	47.87	30.13
	60	5300	47.67	29.25
	64	5320	30.53	18.50
	100	5500	25.65	18.14
	116	5580	41.96	23.02
	140	5700	30.20	18.34
	149	5745	-	21.26
	157	5785	-	23.46
	165	5825	-	29.13
802.11an HT40	38	5190	65.77	37.24
	46	5230	54.35	37.16
	54	5270	102.94	59.54
	62	5310	65.61	37.08
	102	5510	55.94	36.92
	110	5550	94.31	53.47
	134	5670	79.60	38.44
	151	5755	-	60.10
	159	5795	-	60.90
802.11ac VHT80	42	5210	82.32	75.60
	58	5290	87.27	75.92
	106	5530	86.79	75.76
	122	5610	154.73	77.20
	155	5775	-	108.05

Table 13: Test result of 26dB & 99% Bandwidth for ISED

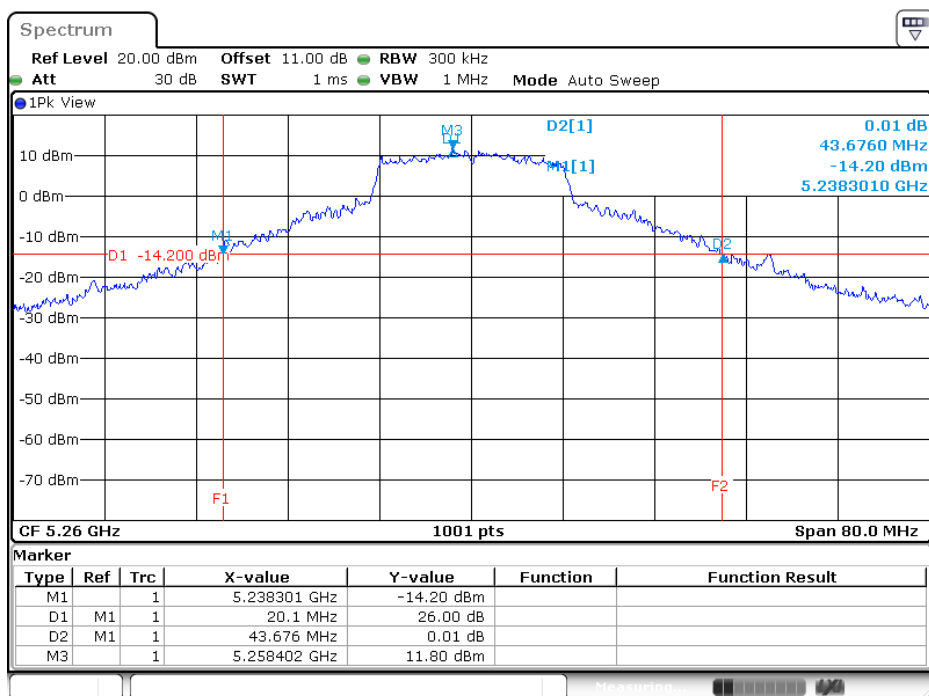
Mode	channel	Channel Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
802.11a	36	5180	22.82	17.06
	40	5200	30.37	18.18
	48	5240	30.61	18.22
	52	5260	36.92	22.74
	60	5300	37.32	23.98
	64	5320	29.01	17.54
	100	5500	21.58	17.06
	116	5580	36.92	21.94
	140	5700	21.38	16.98
	149	5745	-	21.26
	157	5785	-	24.78
	165	5825	-	29.09
802.11an HT20	36	5180	28.53	18.26
	40	5200	50.87	30.69
	48	5240	48.51	19.18
	52	5260	48.39	29.85
	60	5300	46.95	28.73
	64	5320	31.25	18.66
	100	5500	27.01	18.26
	116	5580	41.08	22.50
	140	5700	27.17	18.10
	149	5745	-	21.26
	157	5785	-	23.46
	165	5825	-	29.13
802.11an HT40	38	5190	54.67	37.00
	46	5230	51.15	36.92
	54	5270	101.34	59.38
	62	5310	49.15	36.92
	102	5510	50.19	37.00
	110	5550	93.99	52.91
	134	5670	77.84	38.36
	151	5755	-	60.10
	159	5795	-	60.90
802.11ac VHT80	42	5210	82.32	75.60
	58	5290	87.27	75.92
	106	5530	86.79	75.76
	155	5775	-	108.05

Test Plot of 26dB Bandwidth for FCC

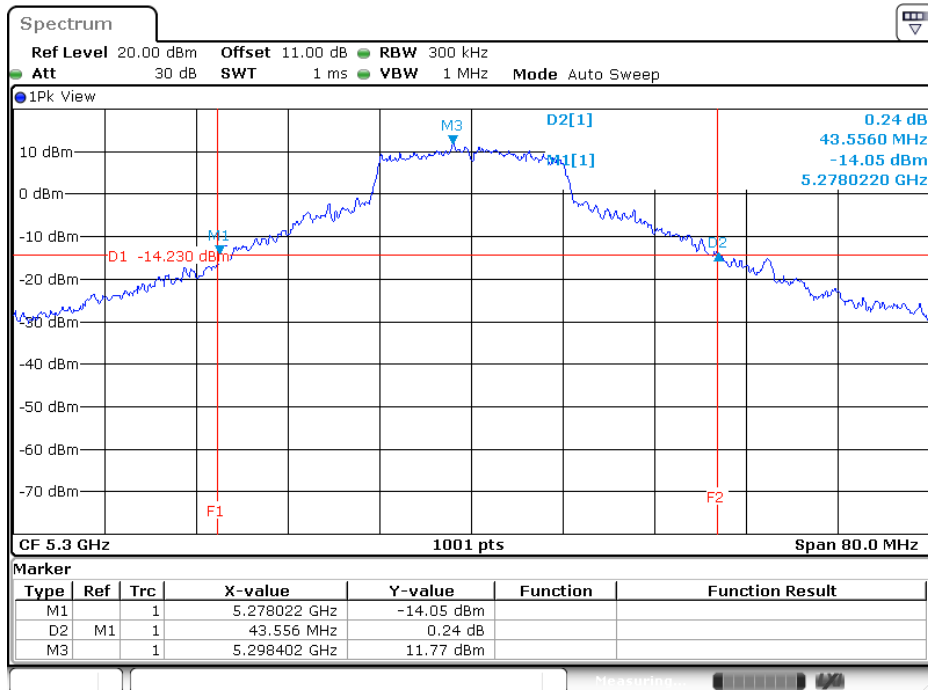
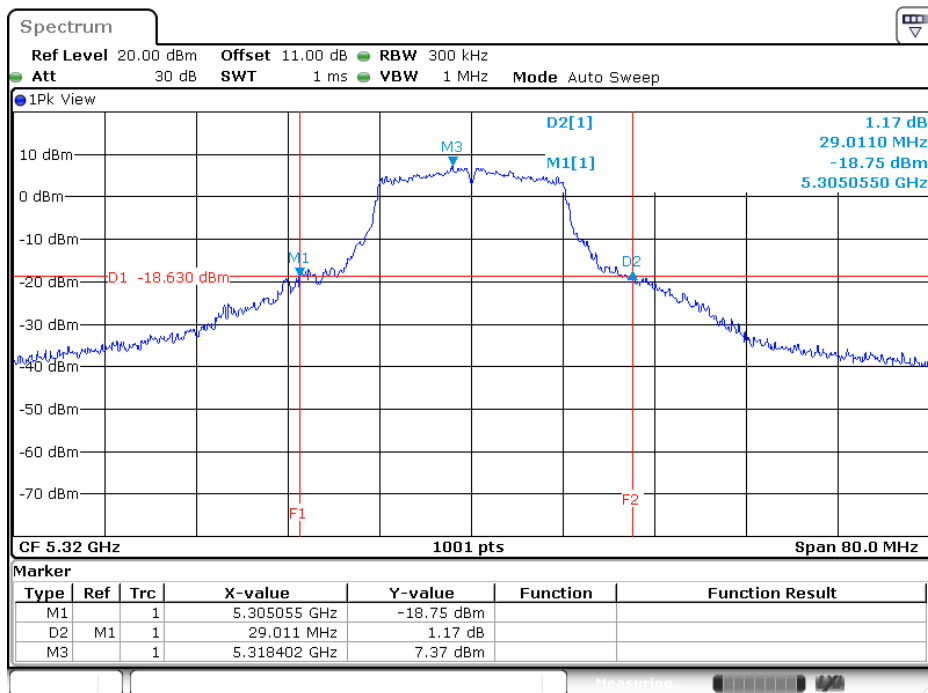
802.11a 5180MHz

802.11a 5200MHz


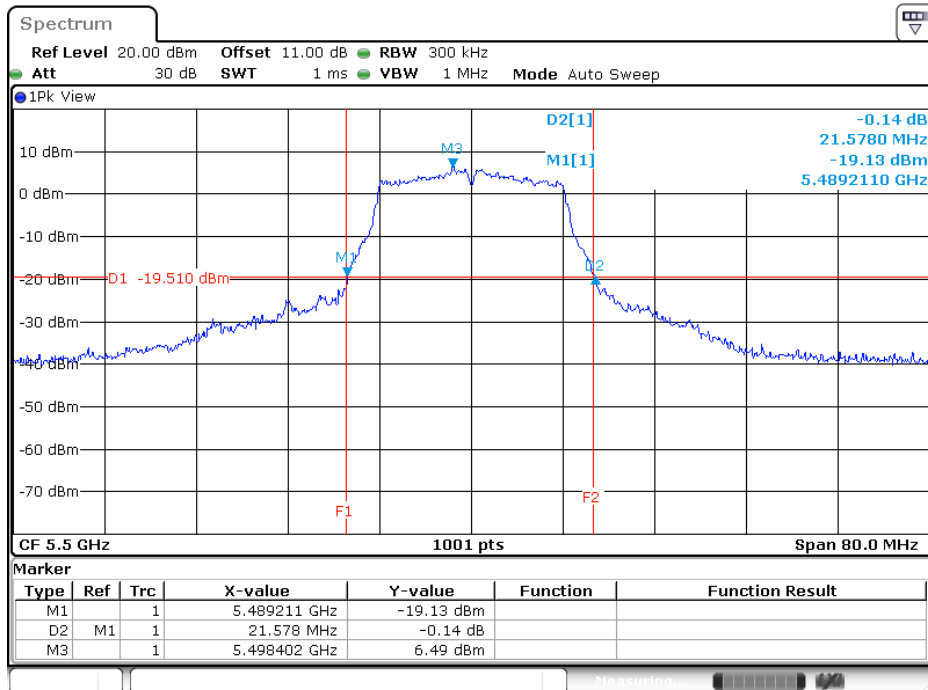
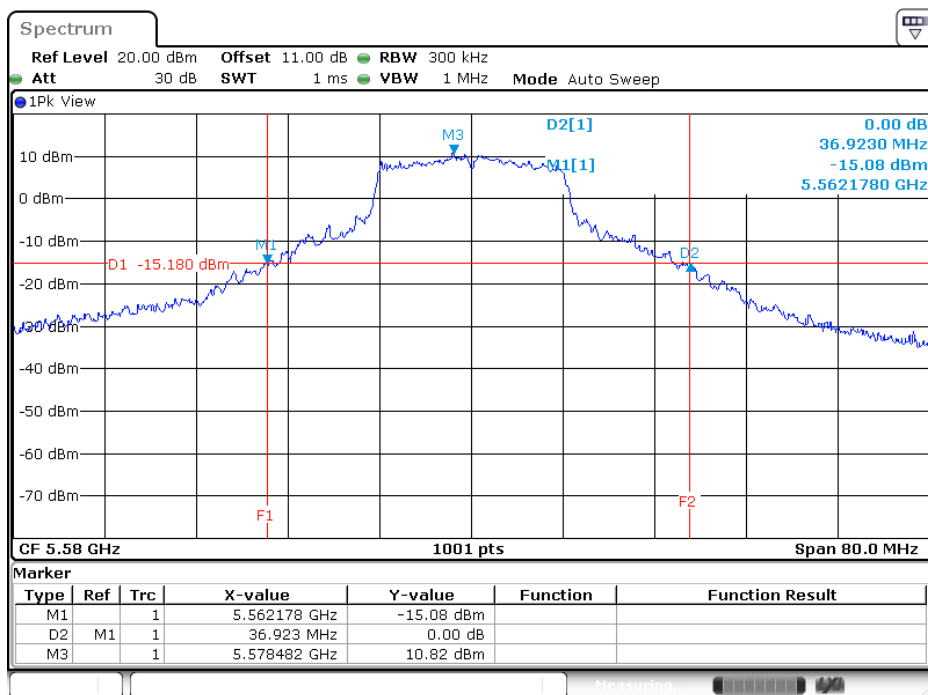
802.11a 5240MHz


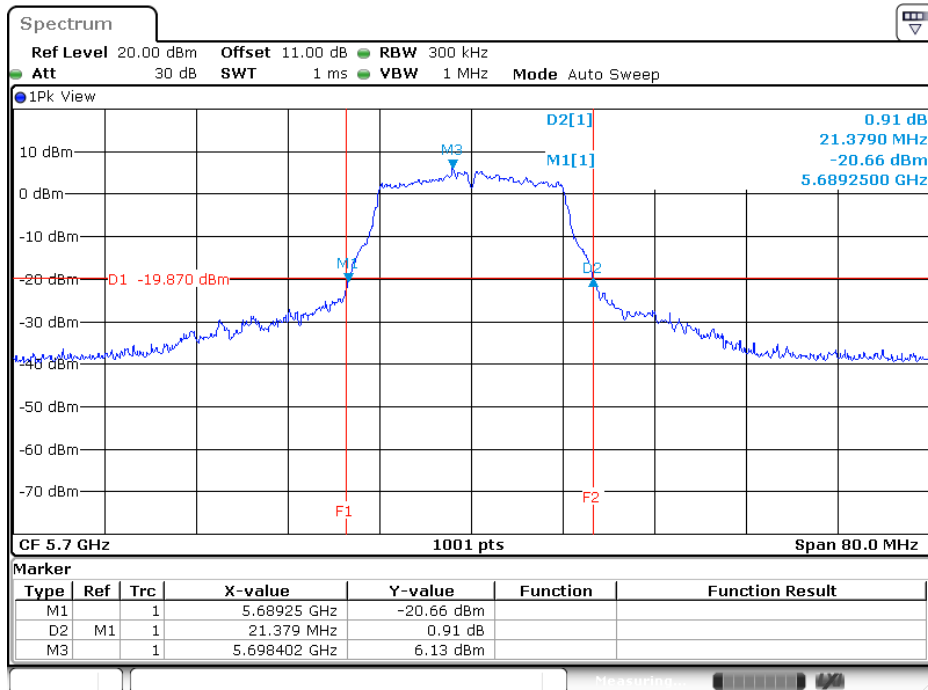
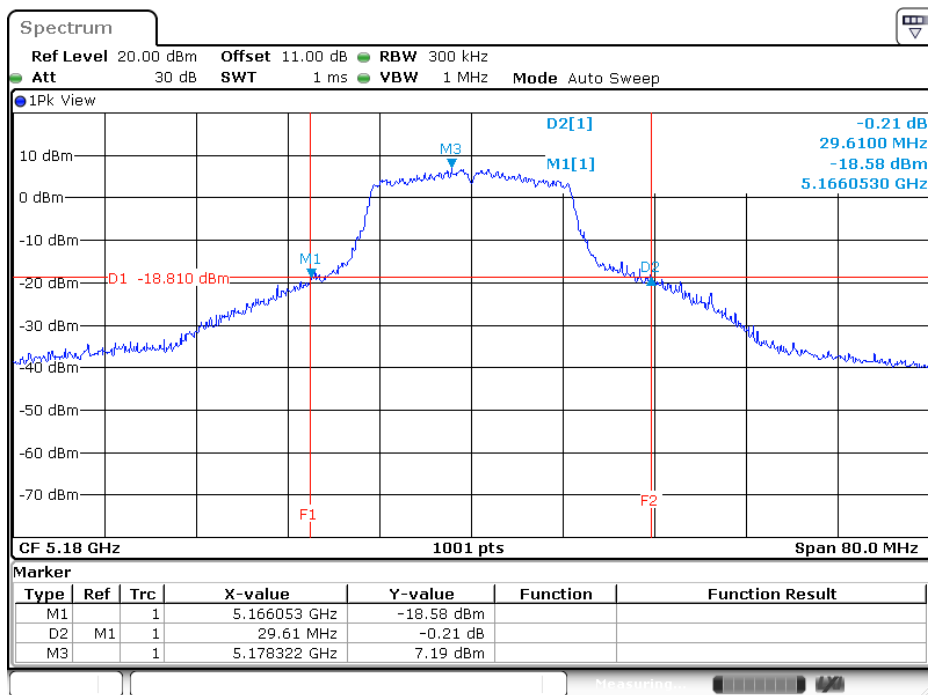
Date: 5.MAR.2020 08:33:03

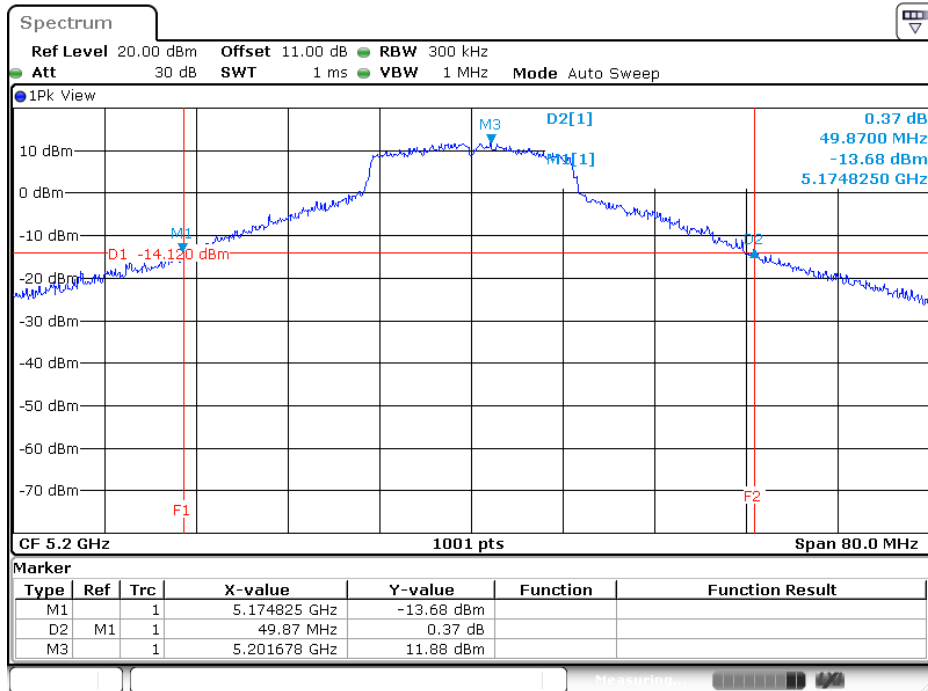
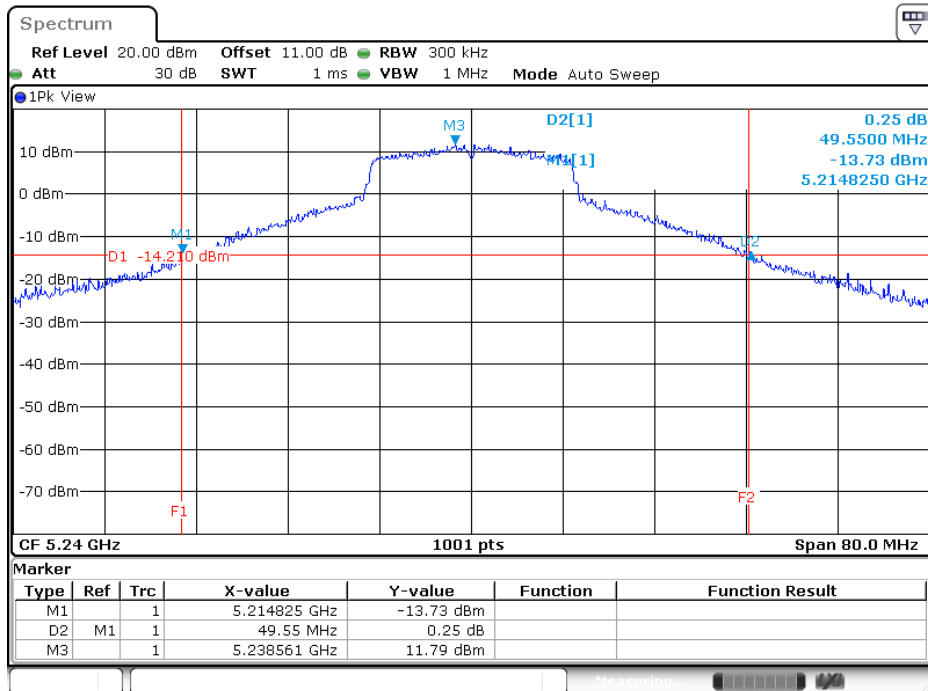
802.11a 5260MHz


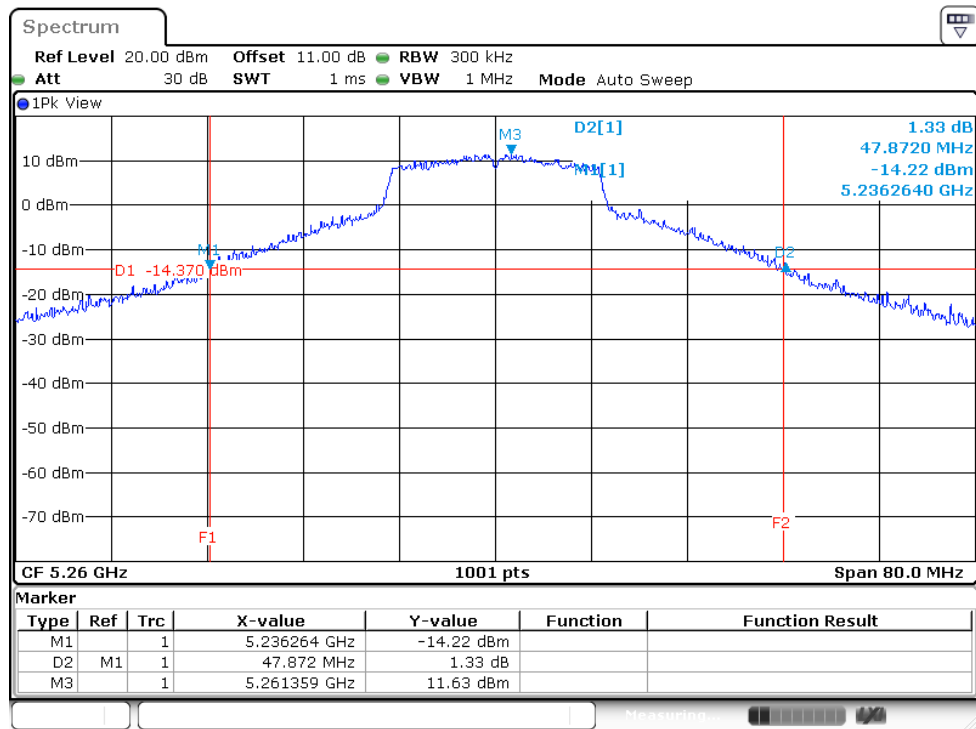
Date: 5.MAR.2020 08:36:14

802.11a 5300MHz

802.11a 5320MHz


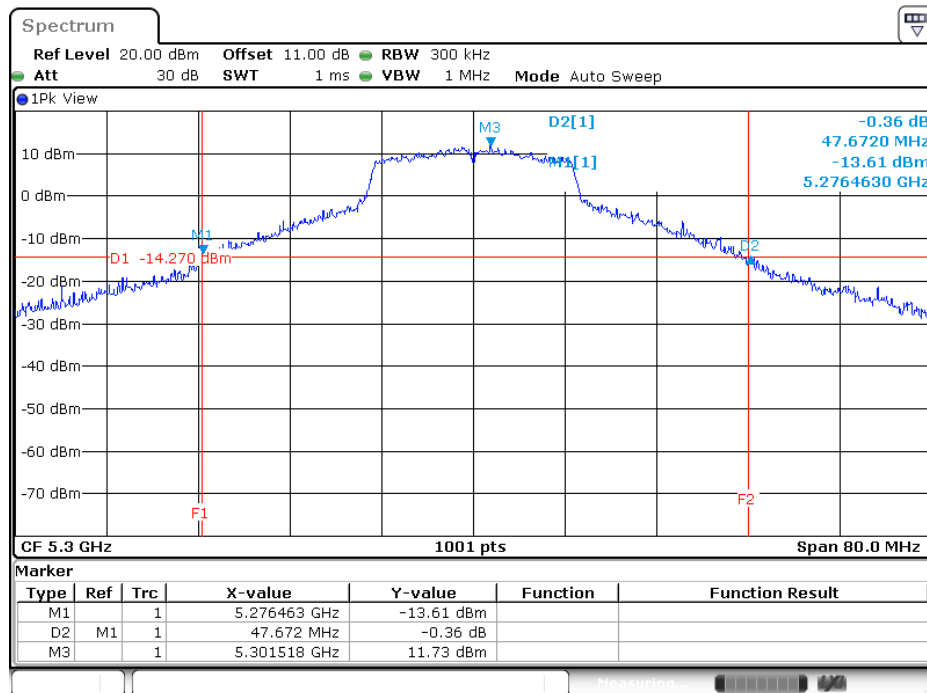
802.11a 5500MHz

802.11a 5580MHz


802.11a 5700MHz

802.11an HT20 5180MHz


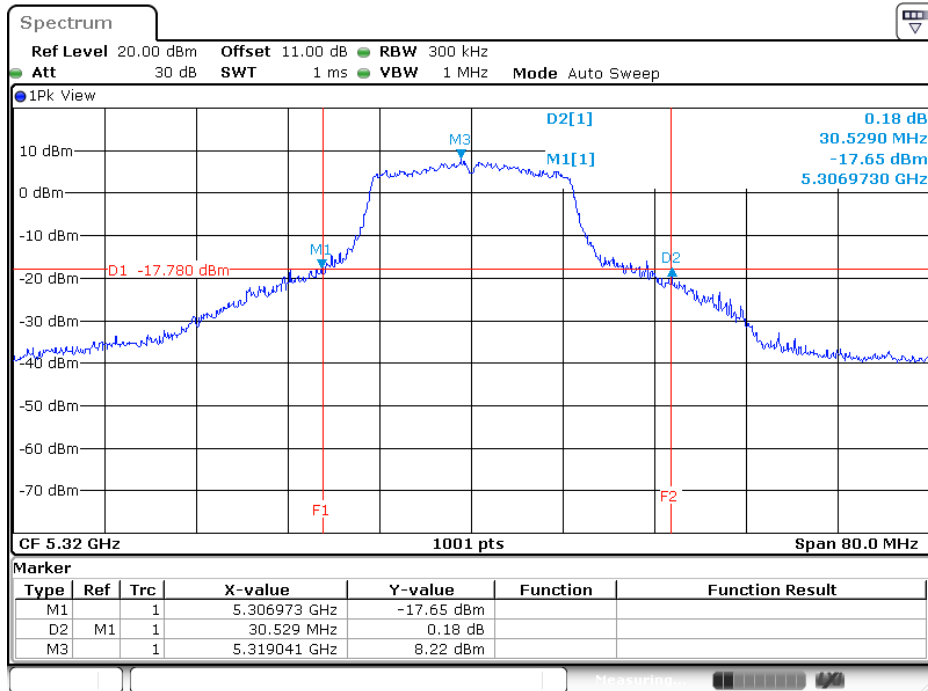
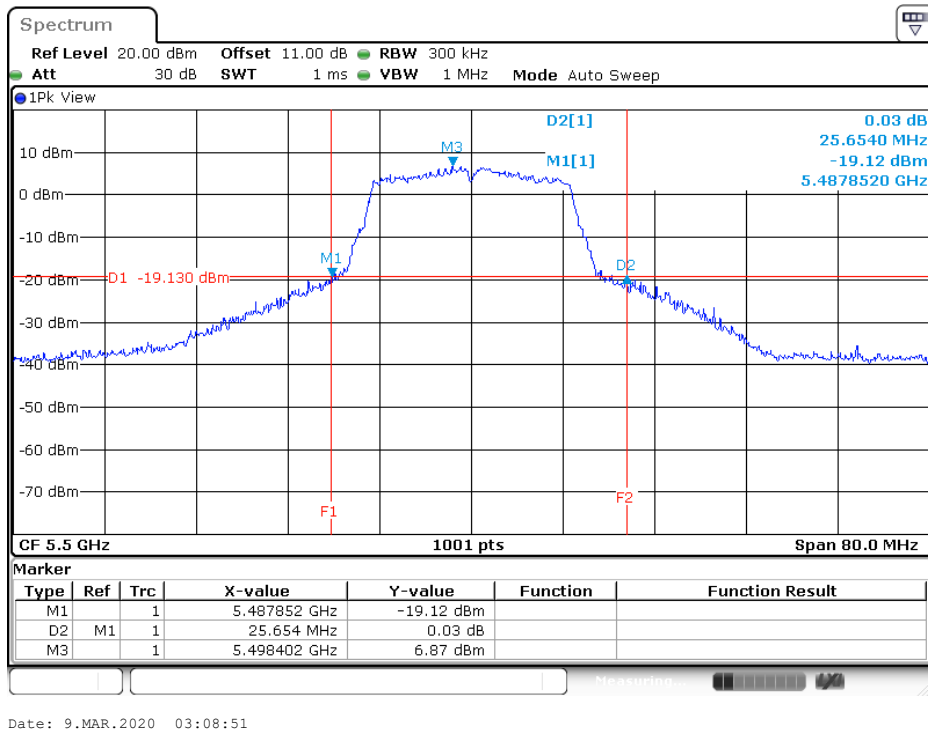
802.11an HT20 5200MHz

802.11an HT20 5240MHz


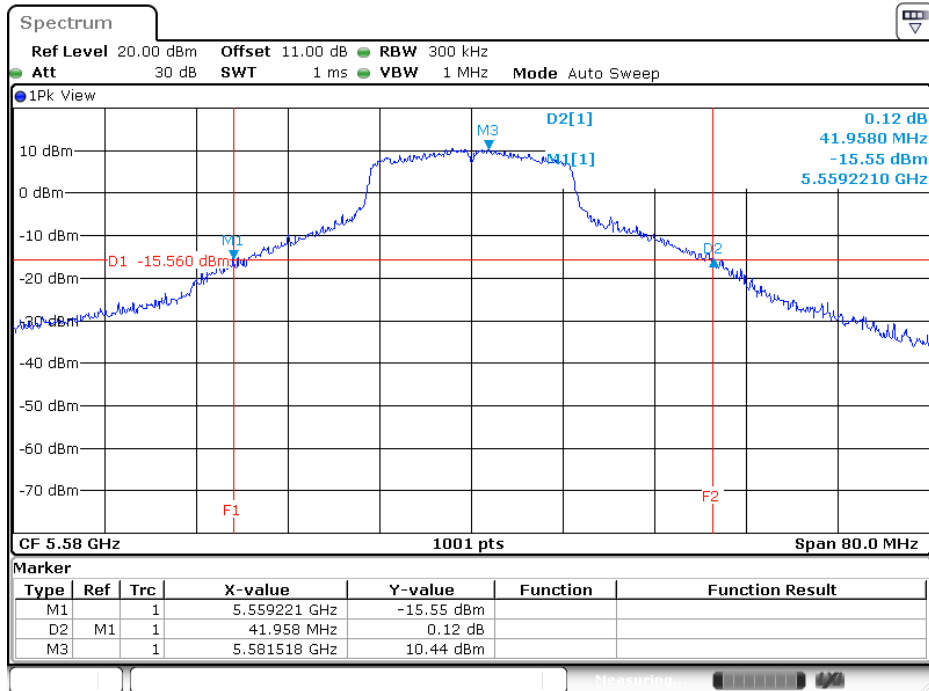
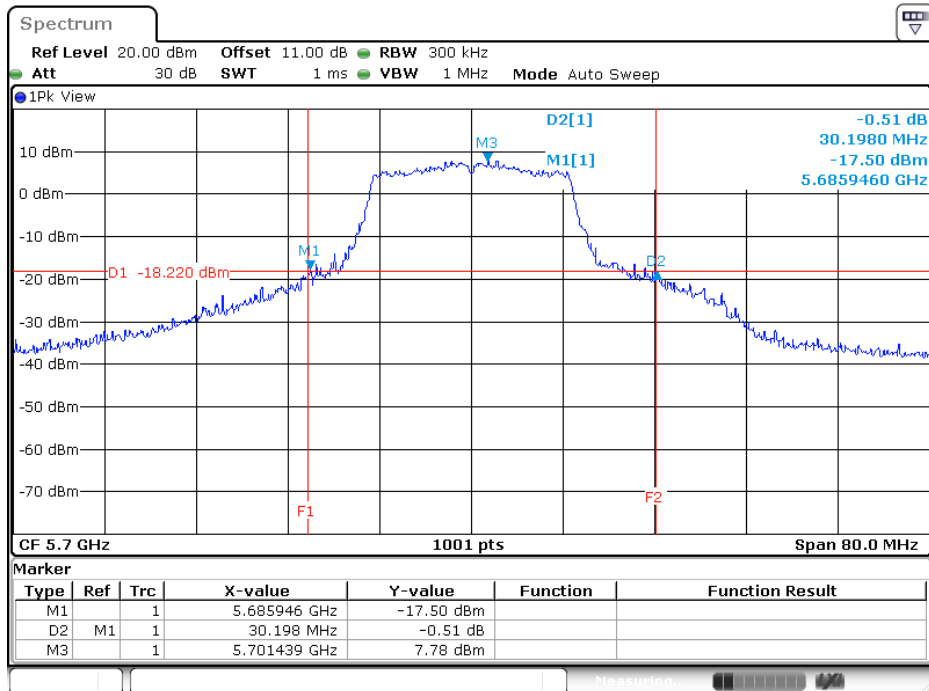
802.11an HT20 5260MHz


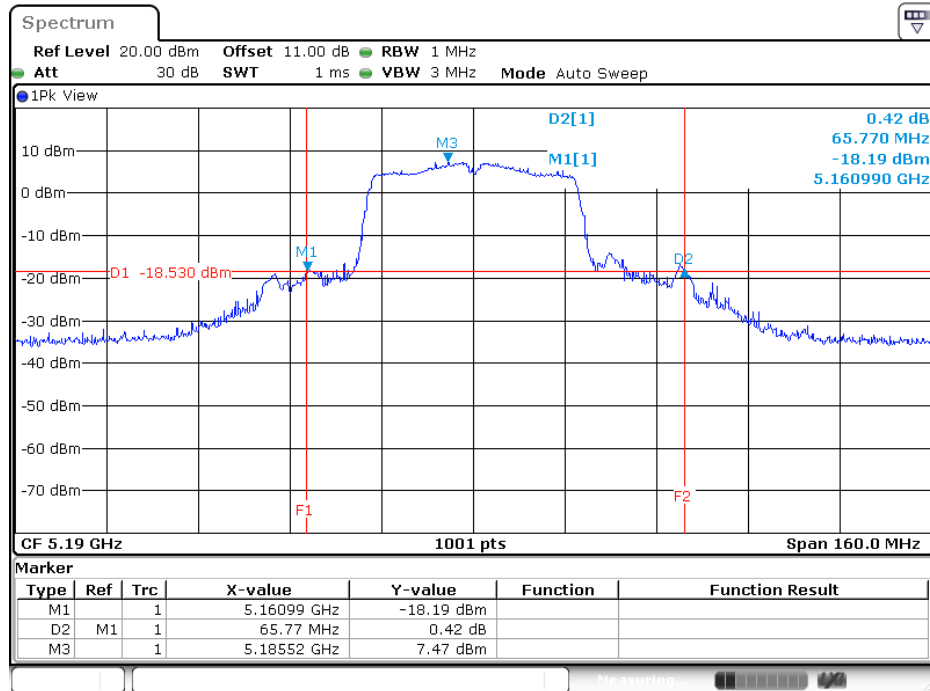
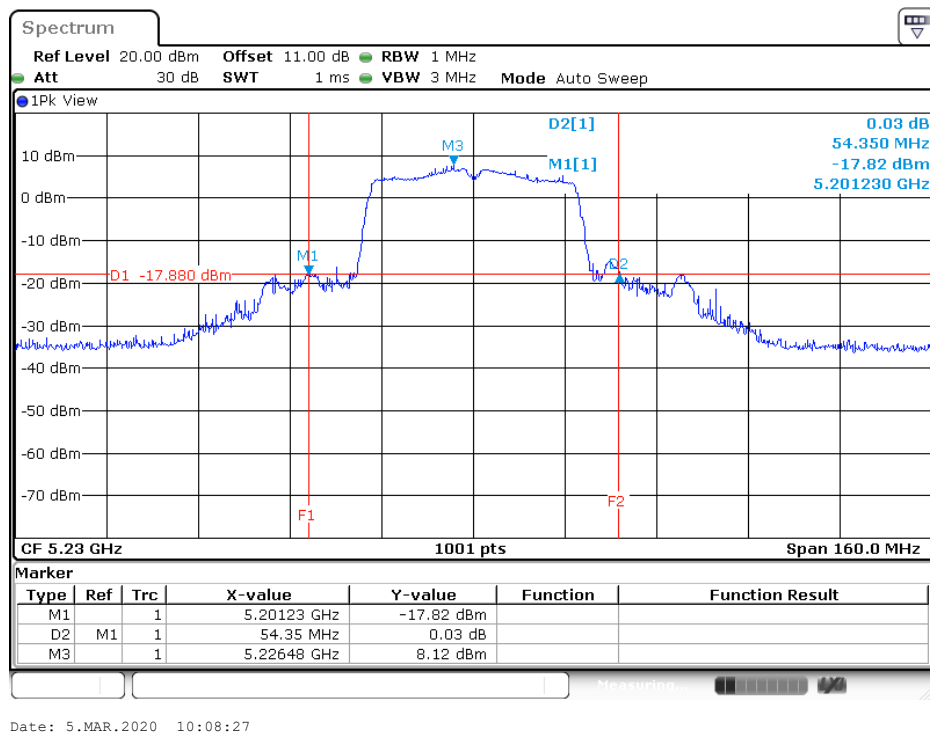
Date: 5.MAR.2020 09:13:56

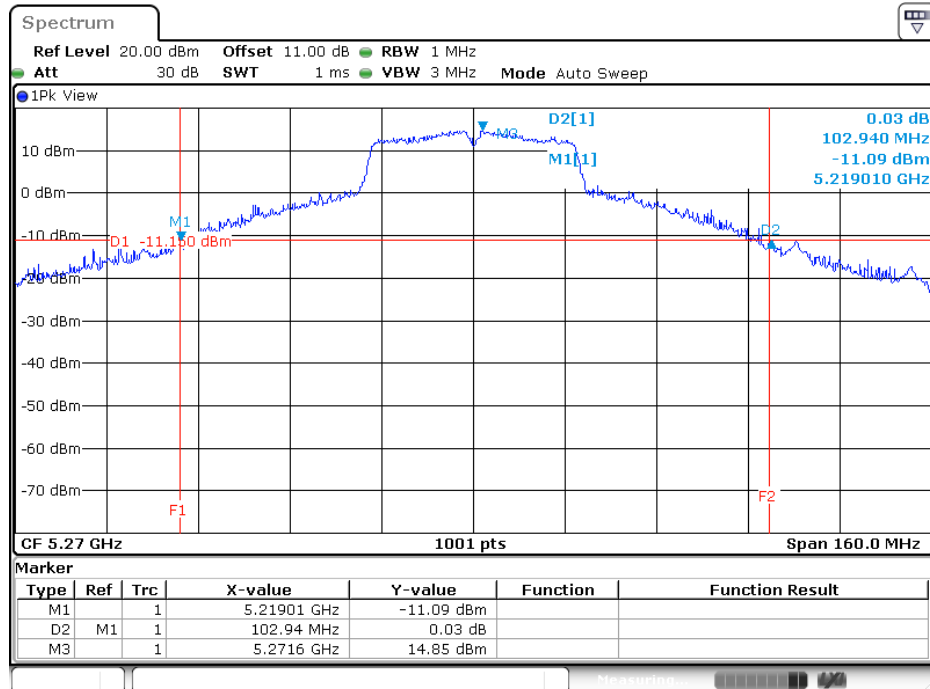
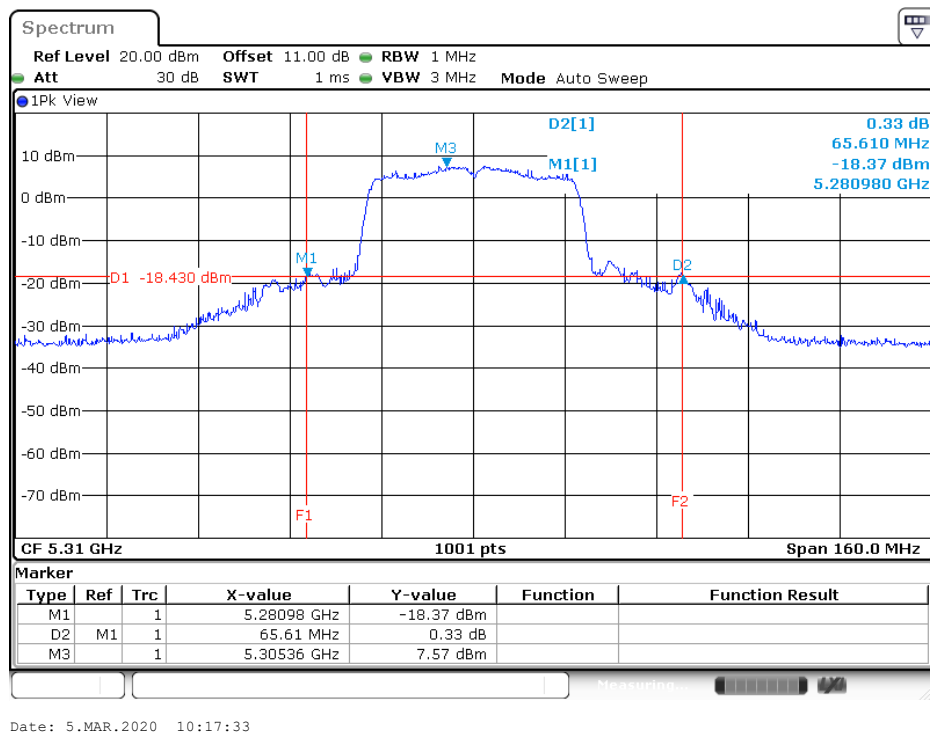
802.11an HT20 5300MHz


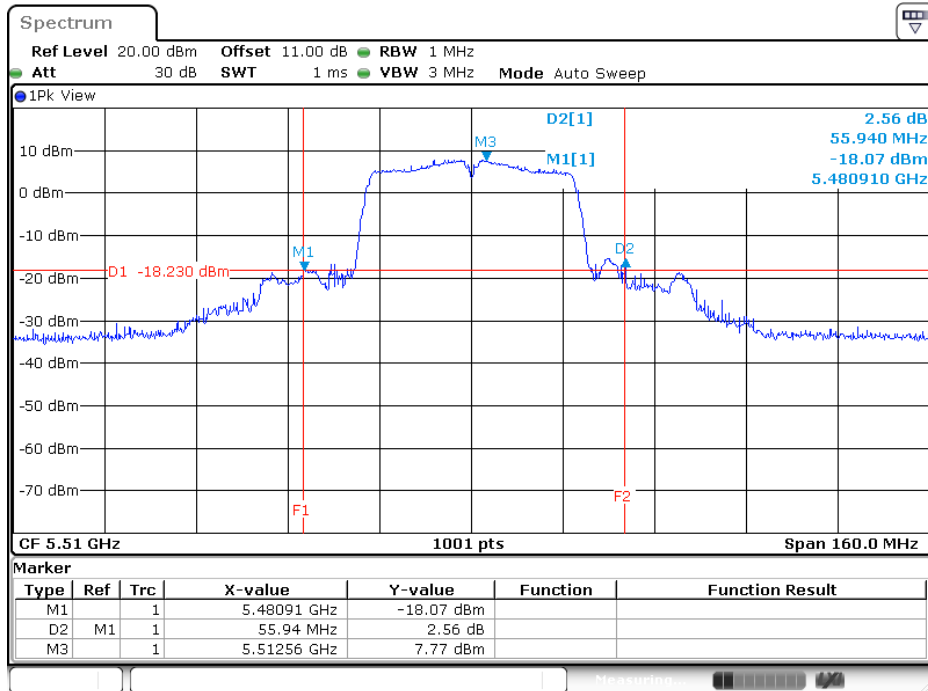
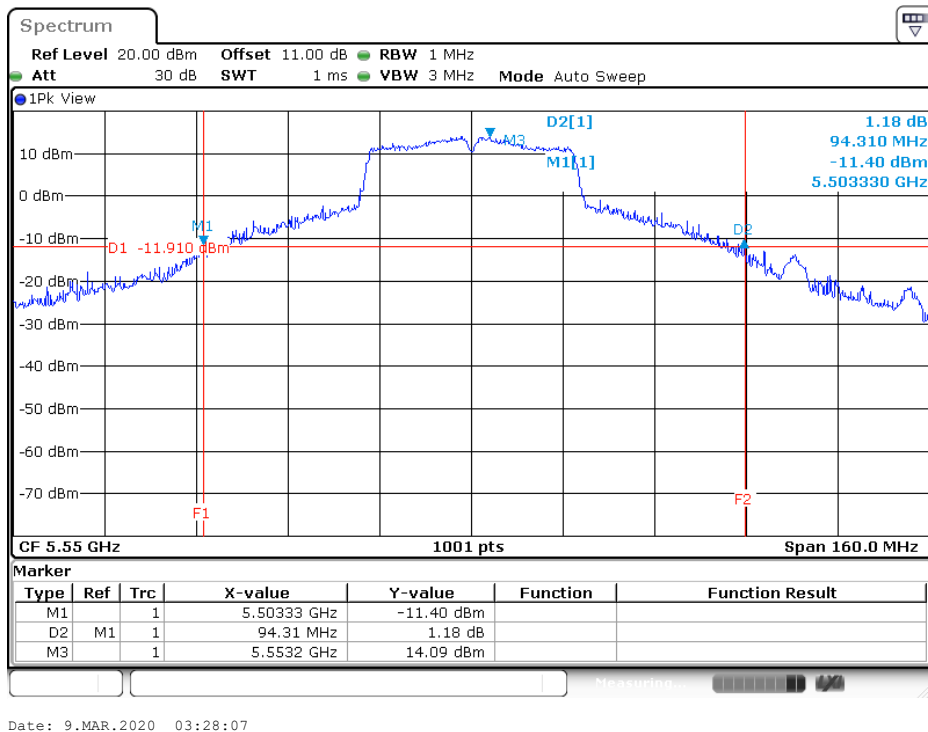
Date: 5.MAR.2020 09:18:33

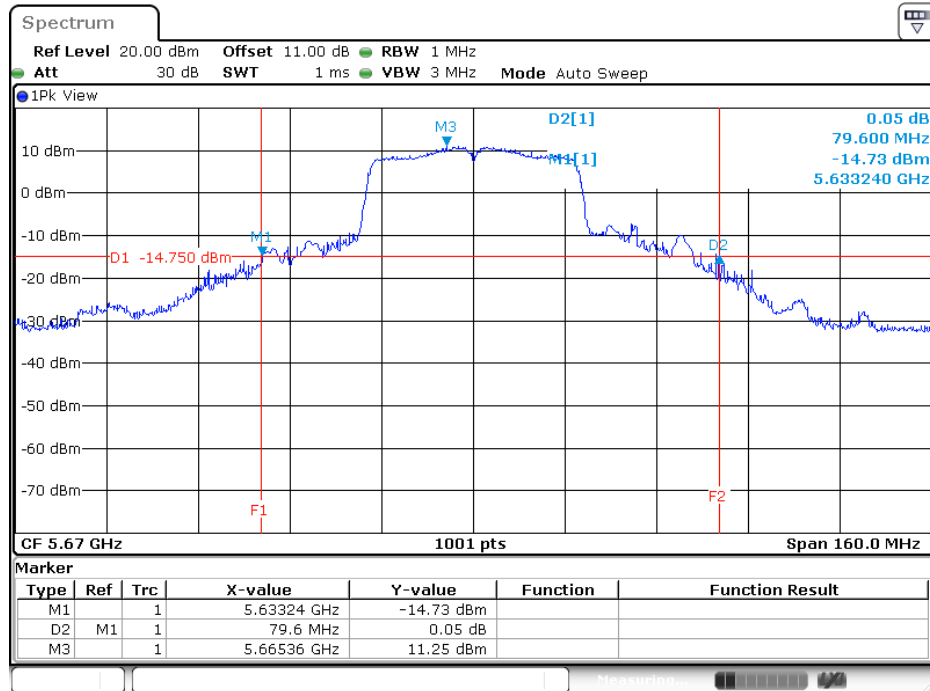
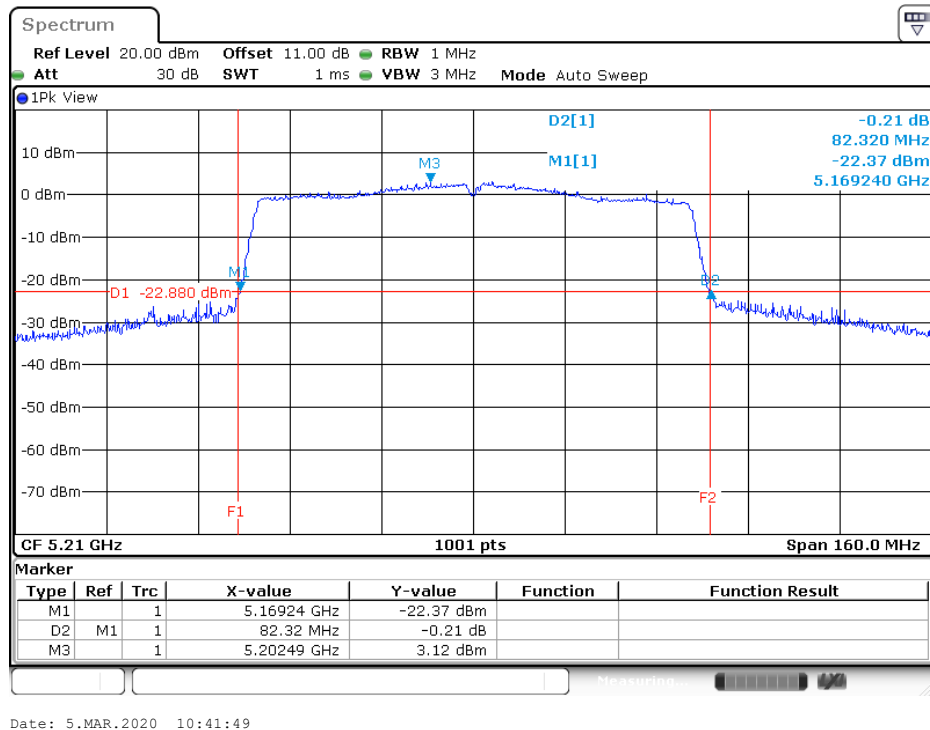
802.11an HT20 5320MHz

802.11an HT20 5500MHz


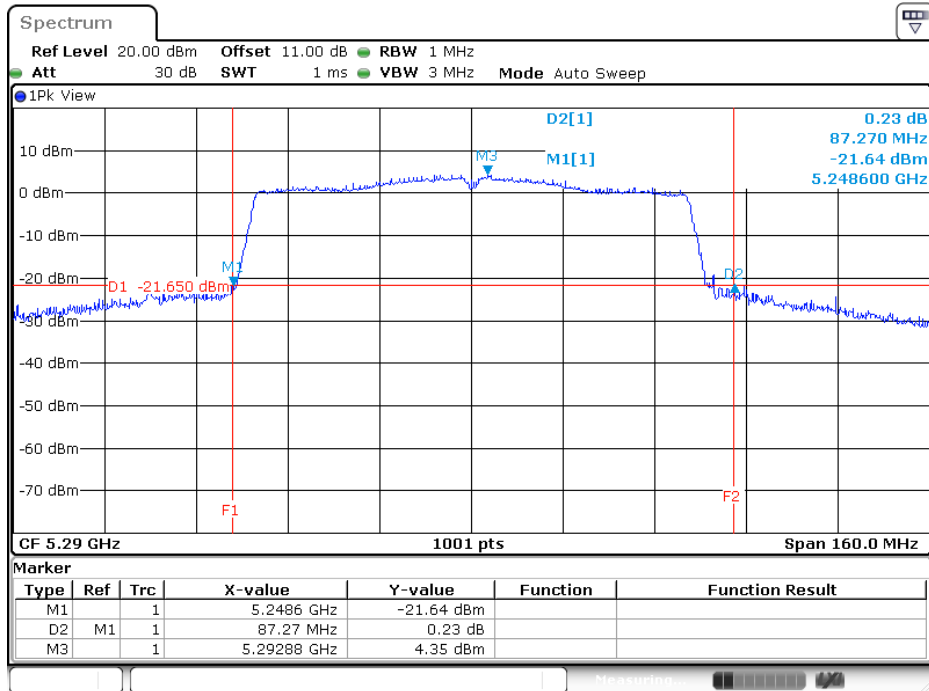
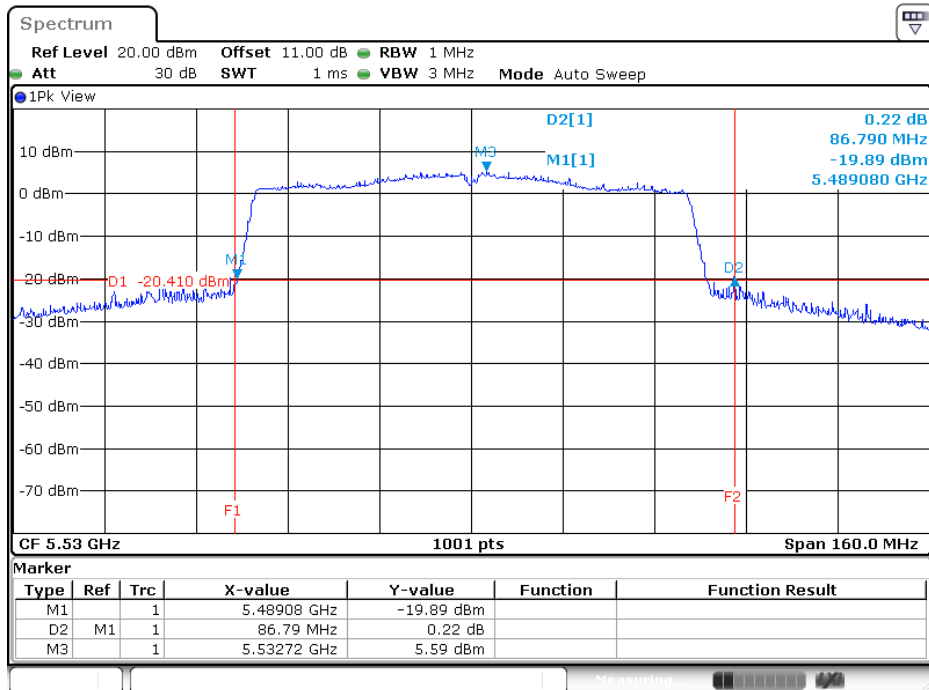
802.11an HT20 5580MHz

802.11an HT20 5700MHz


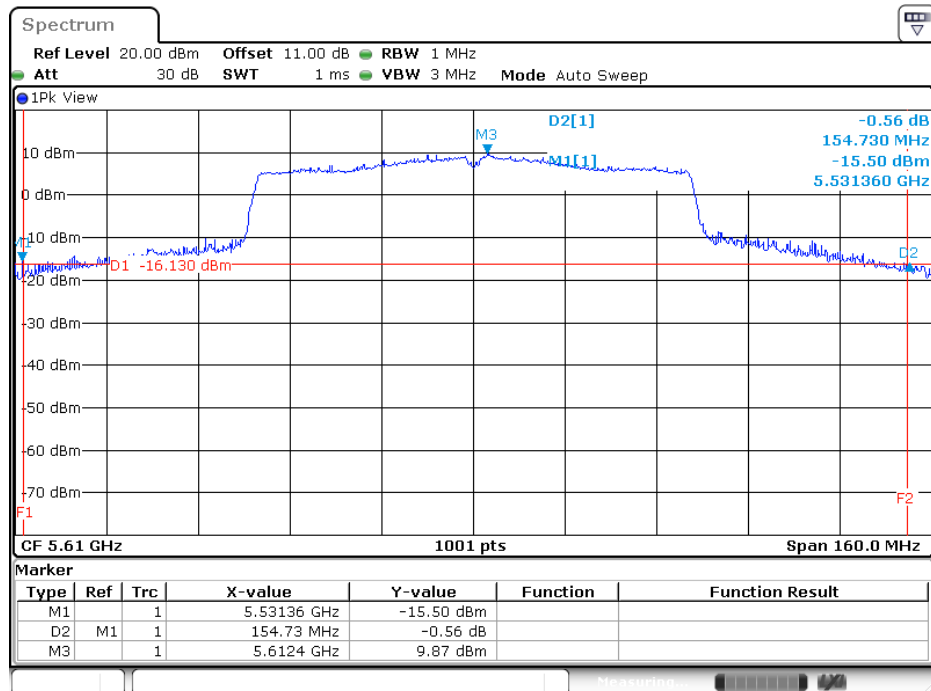
802.11an HT40 5190MHz

802.11an HT40 5230MHz


802.11an HT40 5270MHz

802.11an HT40 5310MHz


802.11an HT40 5510MHz

802.11an HT40 5550MHz


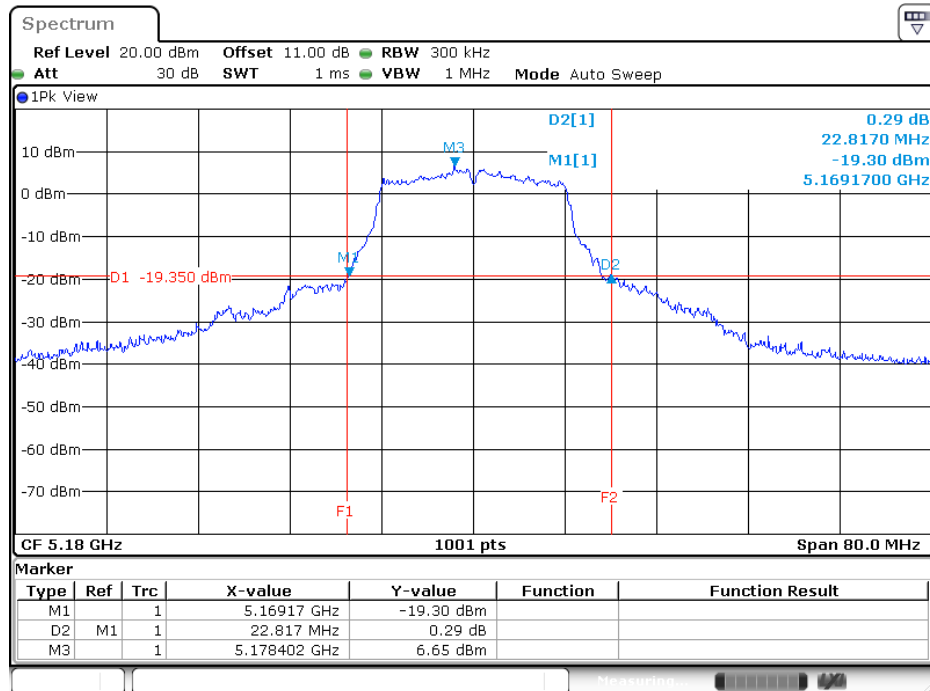
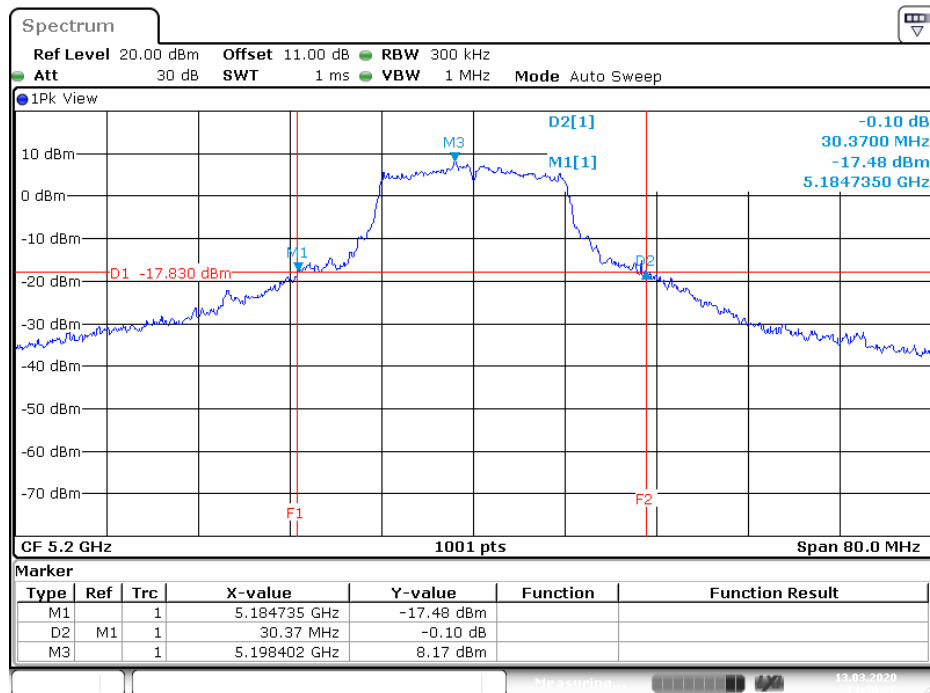
802.11an HT40 5670MHz

802.11ac VHT80 5210MHz


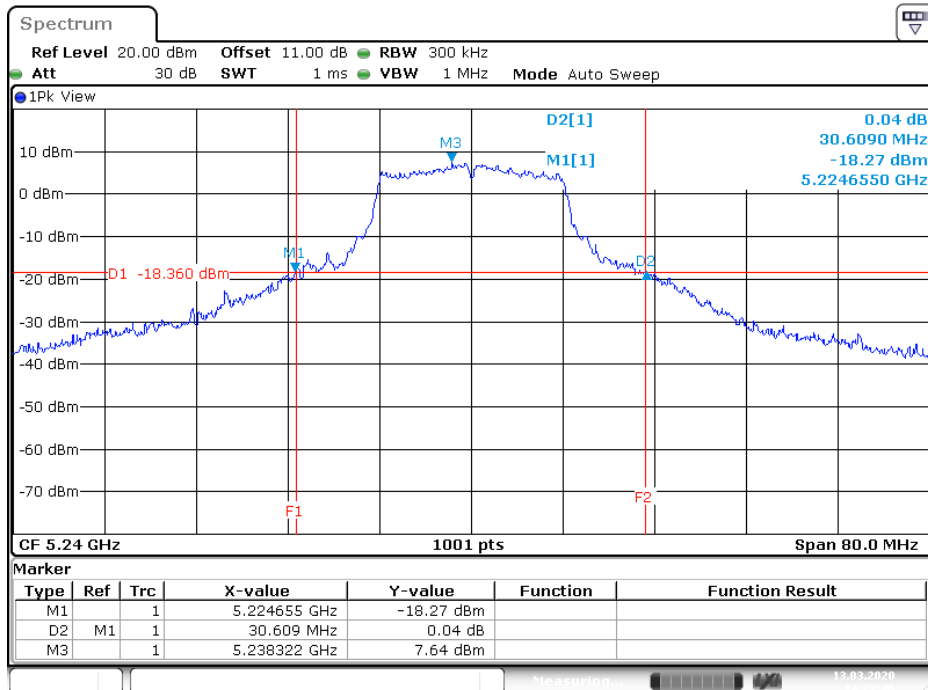
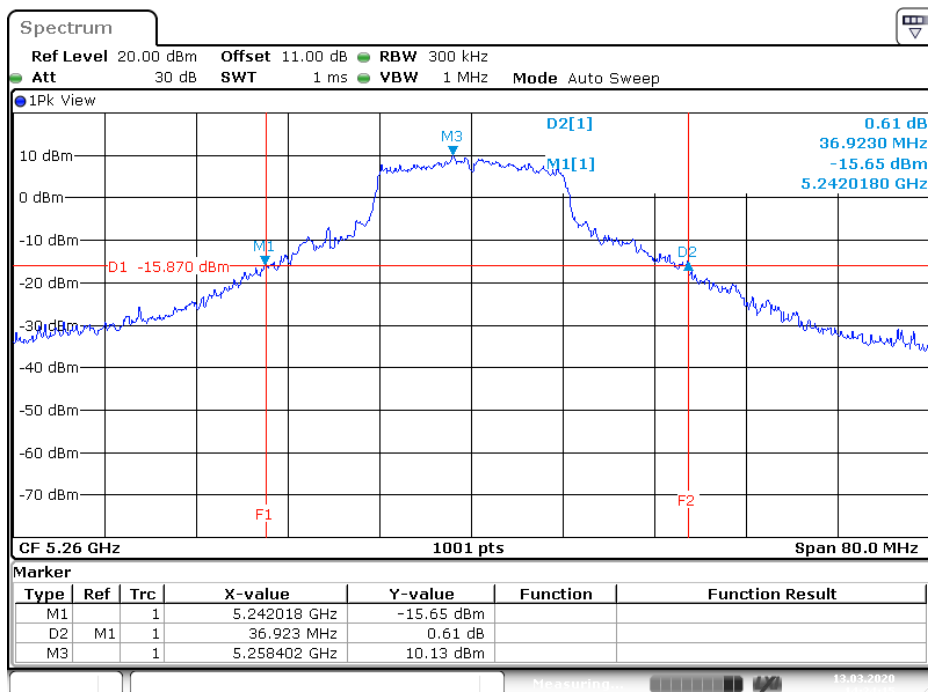
802.11ac VHT80 5290MHz

802.11ac VHT80 5530MHz


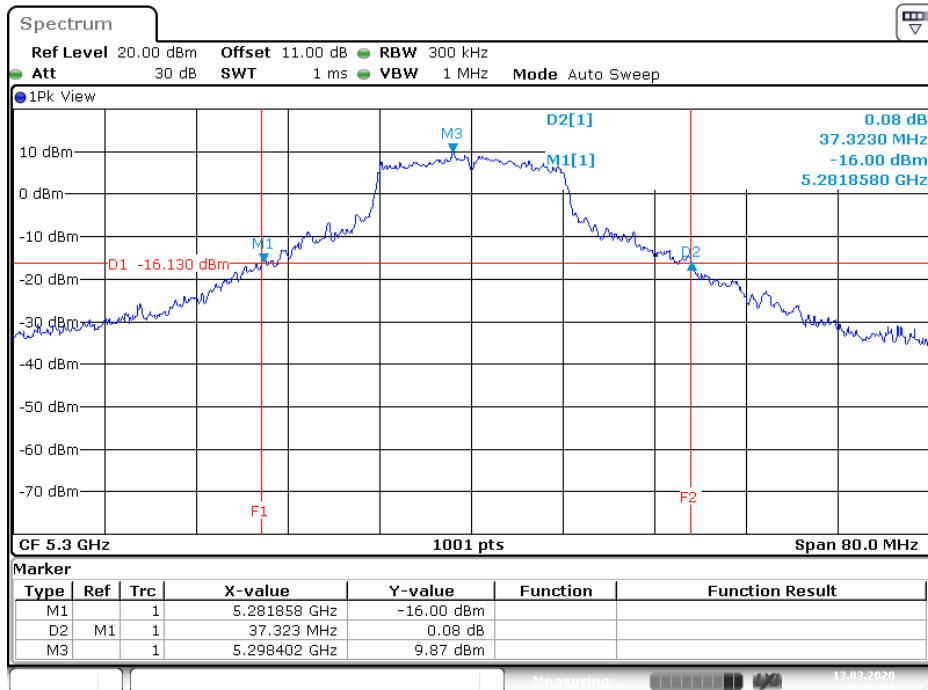
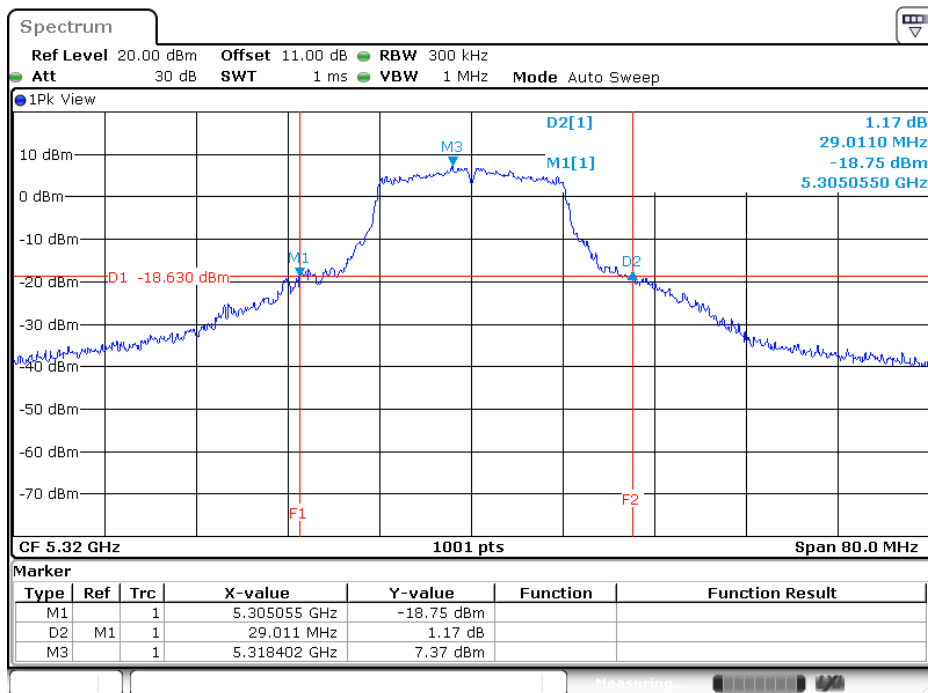
802.11ac VHT80 5610MHz


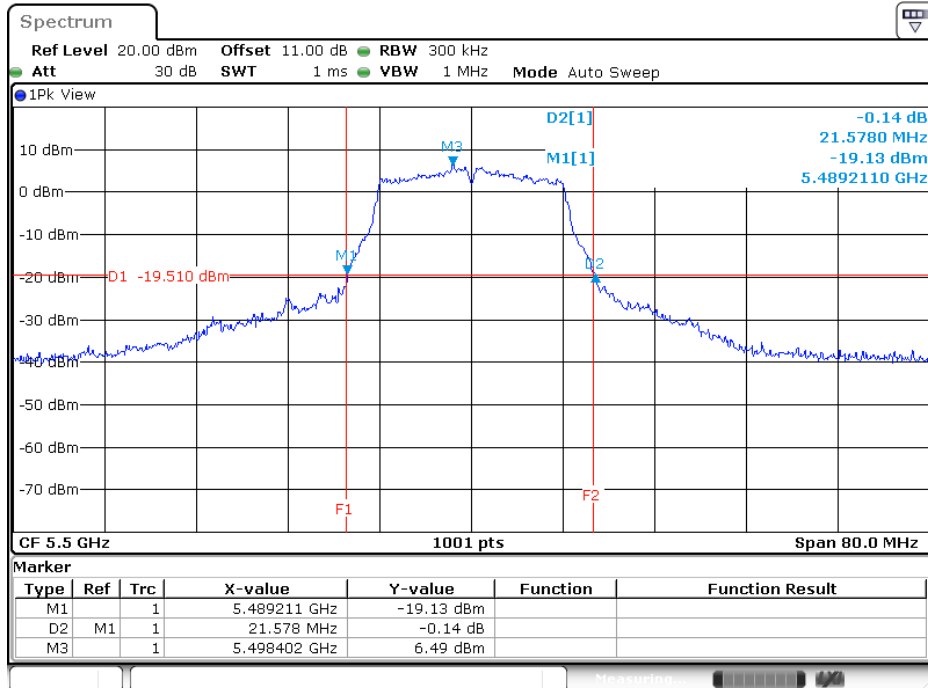
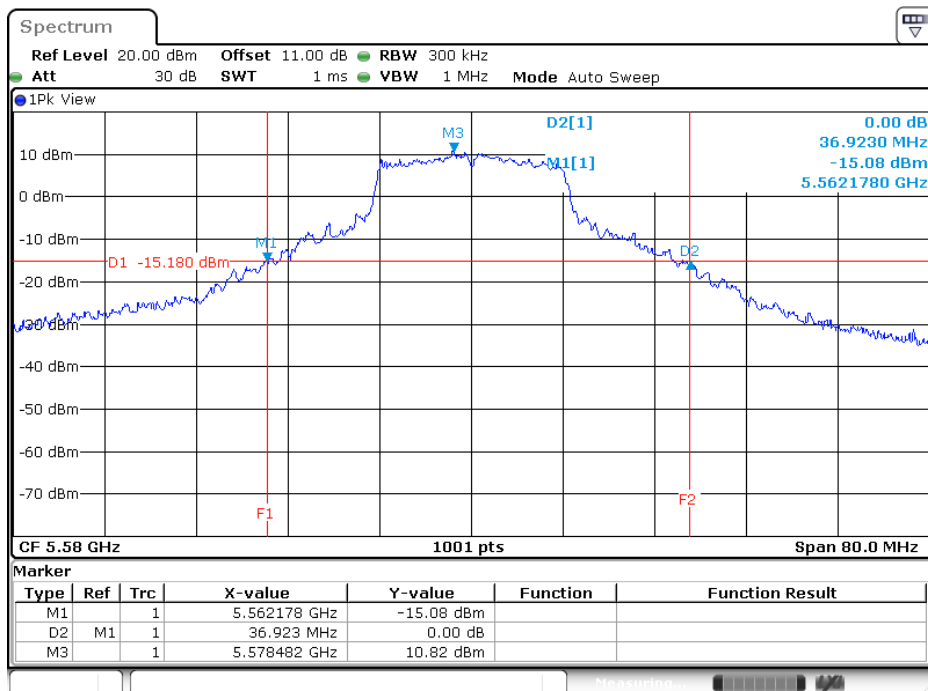
Date: 9.MAR.2020 03:43:53

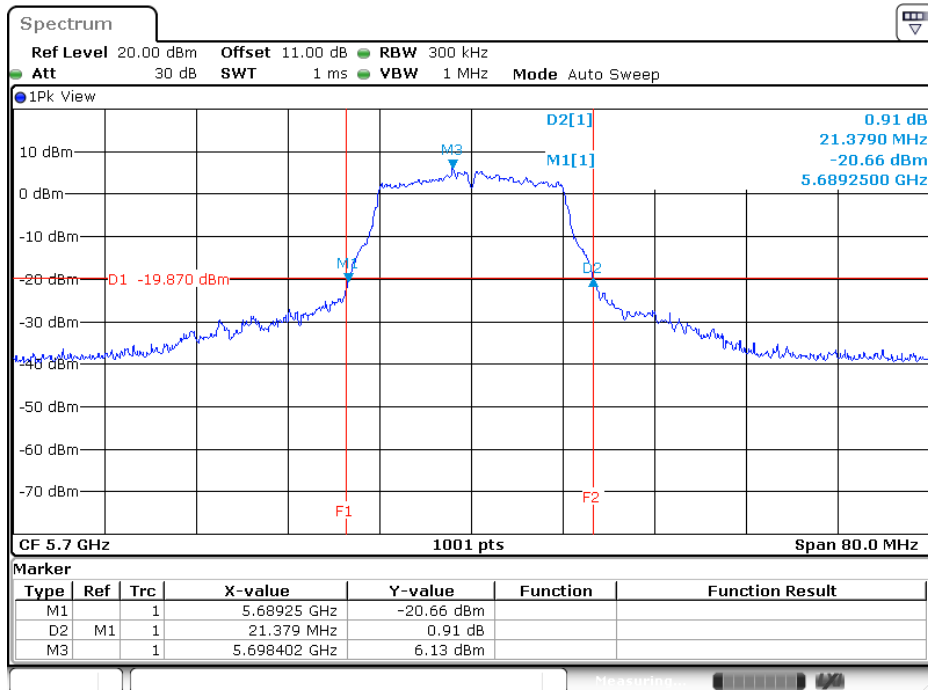
Test Plot of 26dB Bandwidth for ISED

802.11a 5180MHz

802.11a 5200MHz


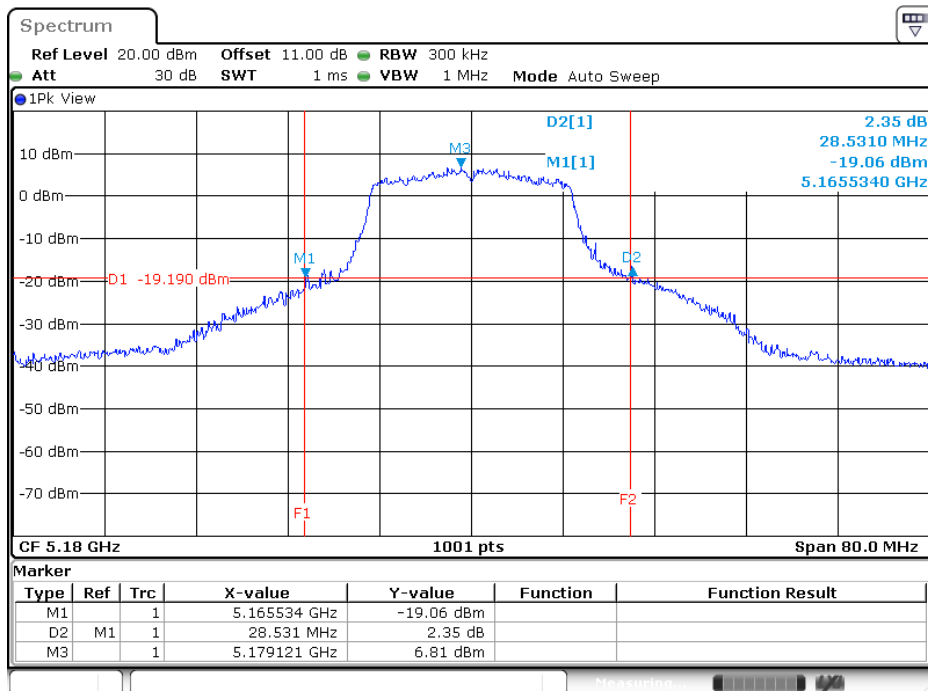
802.11a 5240MHz

802.11a 5260MHz


802.11a 5300MHz

802.11a 5320MHz


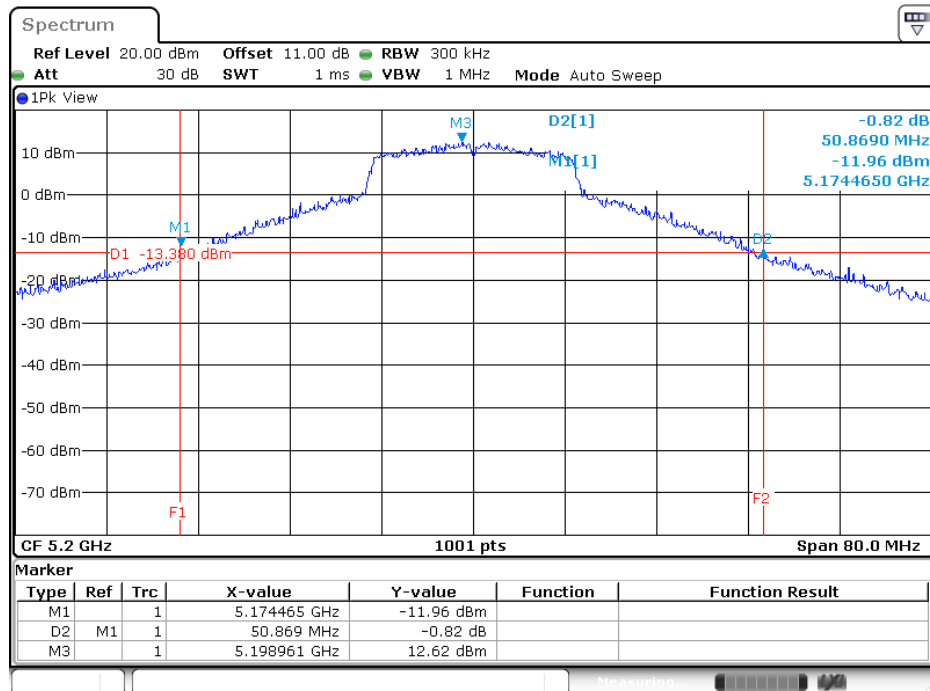
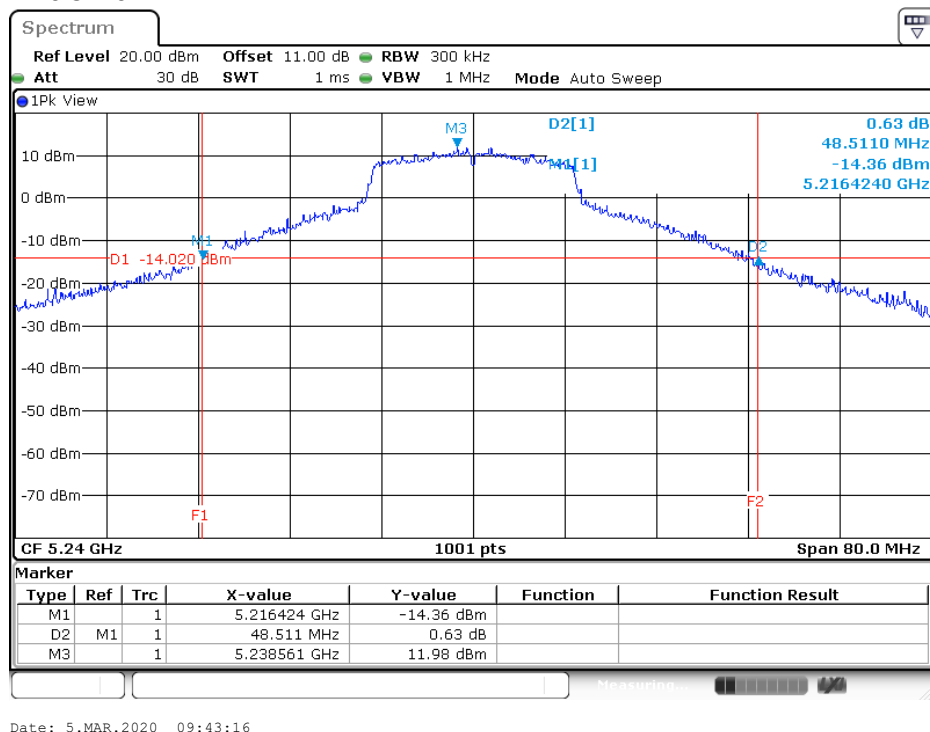
802.11a 5500MHz

802.11a 5580MHz


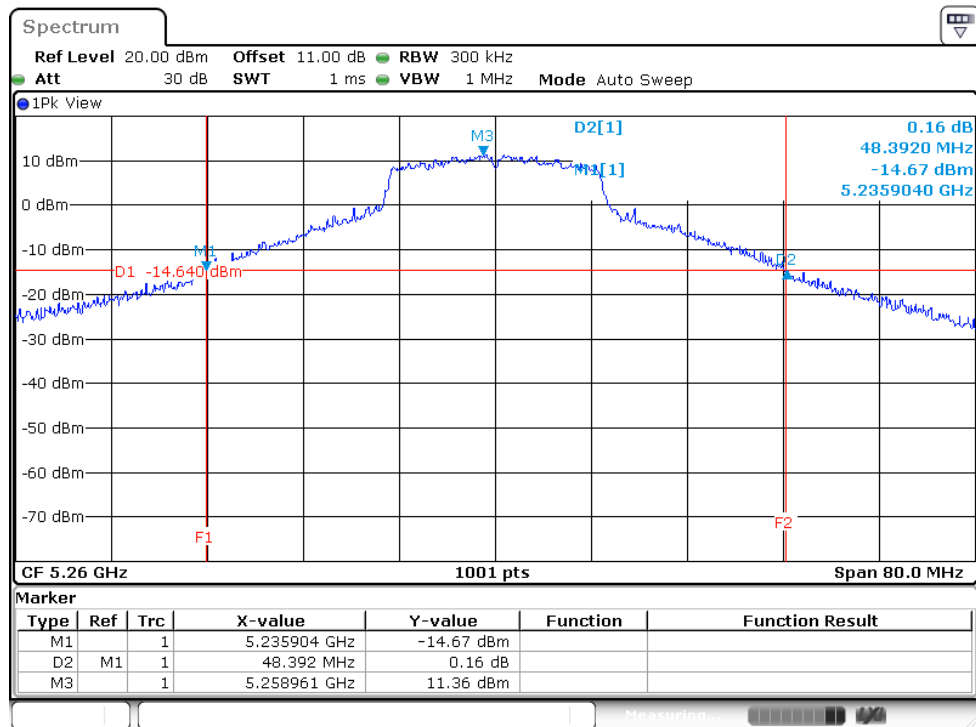
802.11a 5700MHz


Date: 9.MAR.2020 02:56:06

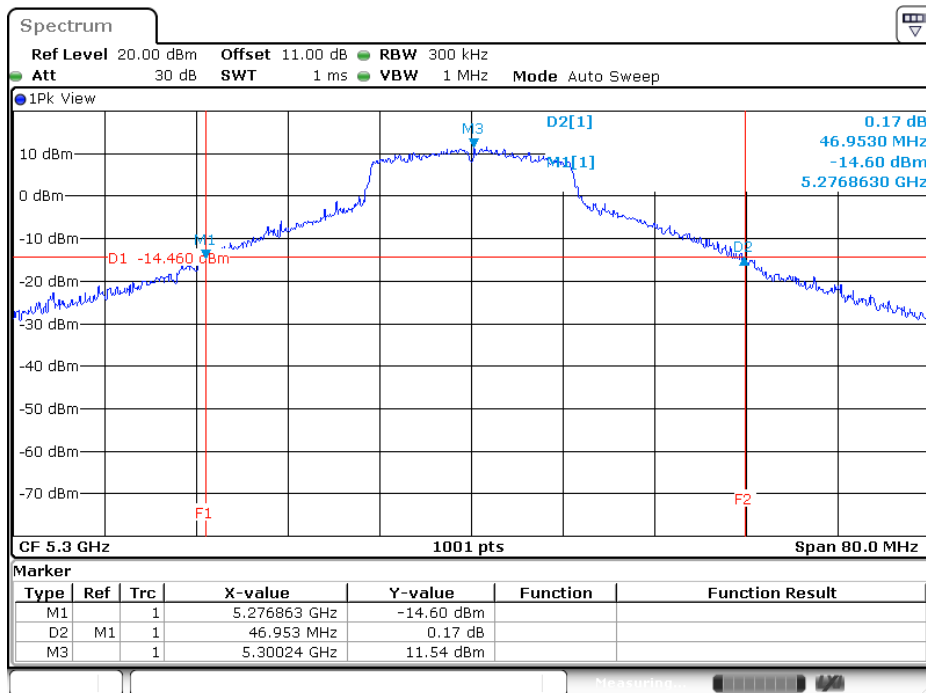
802.11an HT20 5180MHz


Date: 5.MAR.2020 09:37:15

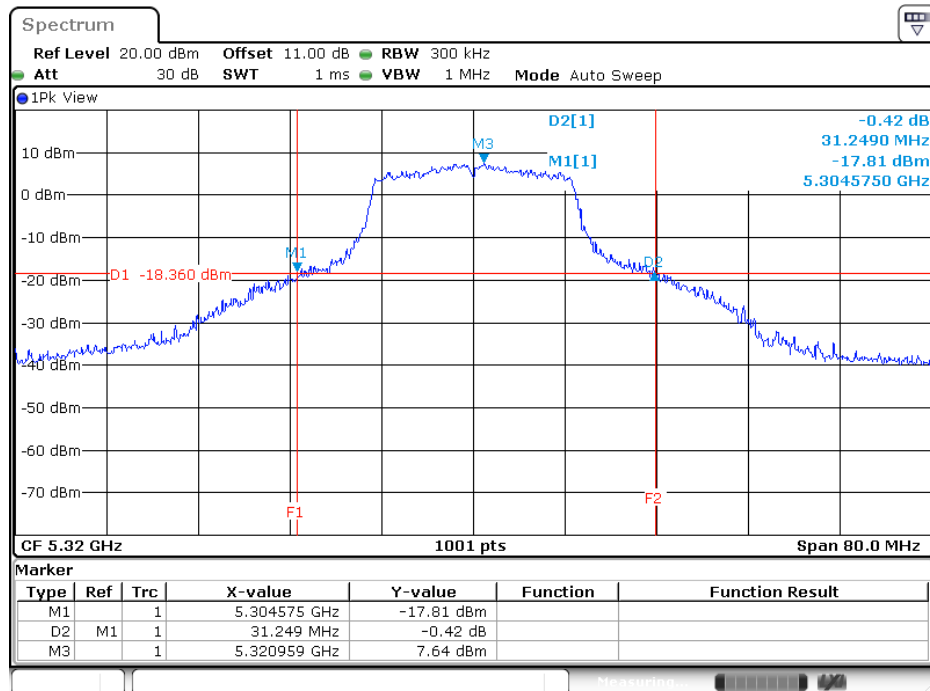
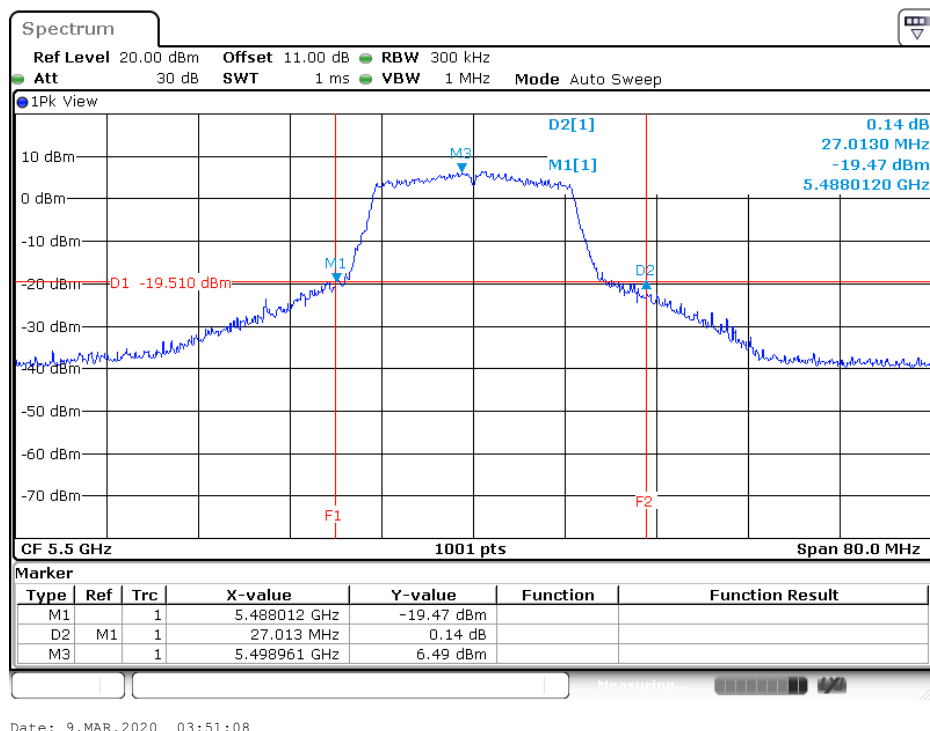
802.11an HT20 5200MHz

802.11an HT20 5240MHz


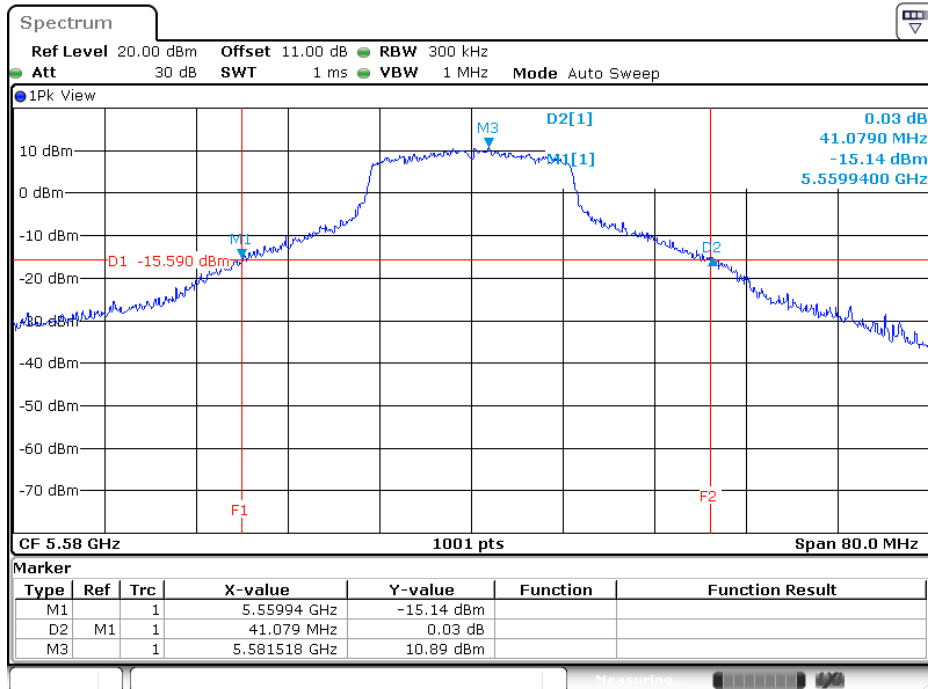
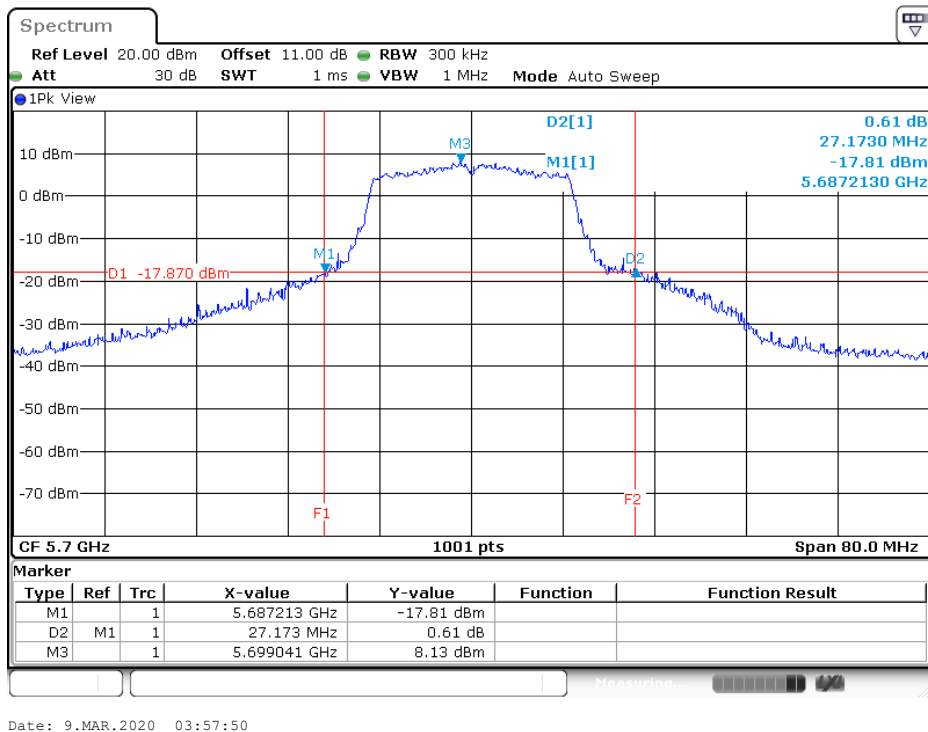
802.11an HT20 5260MHz


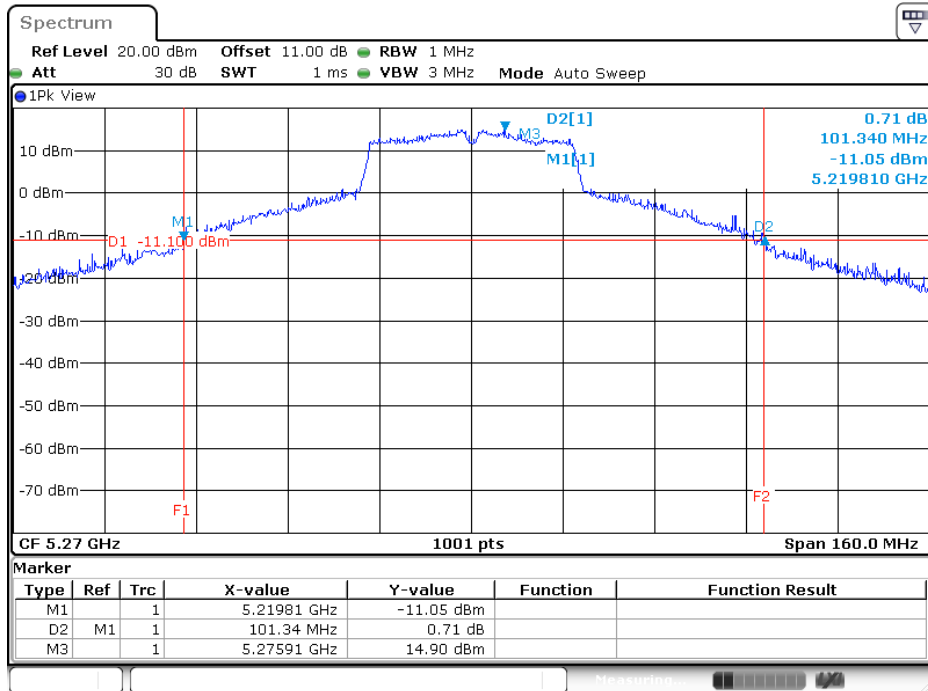
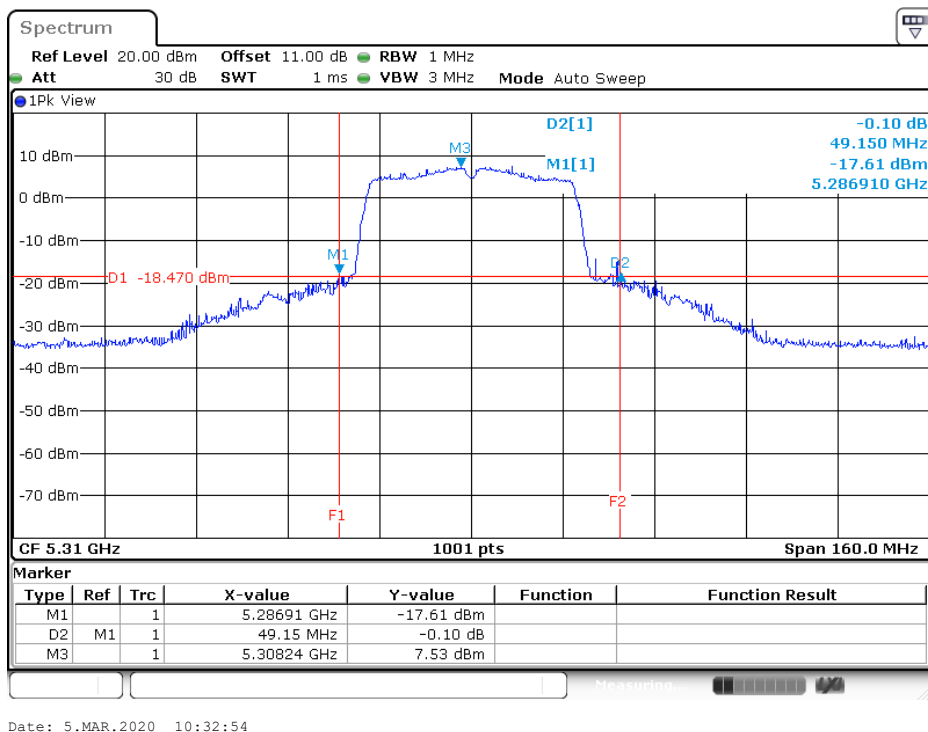
Date: 5.MAR.2020 09:49:23

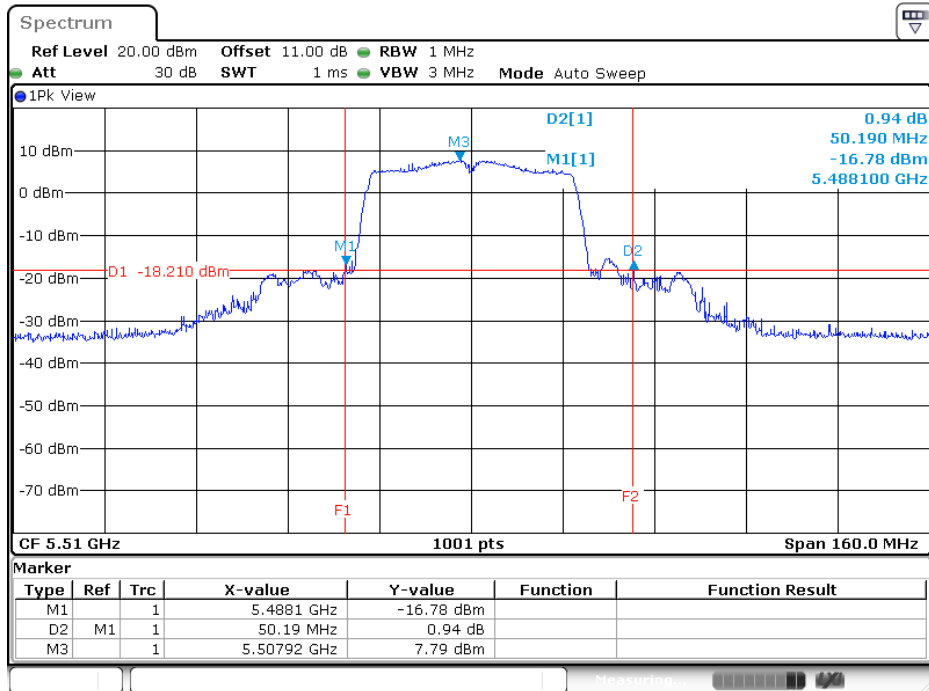
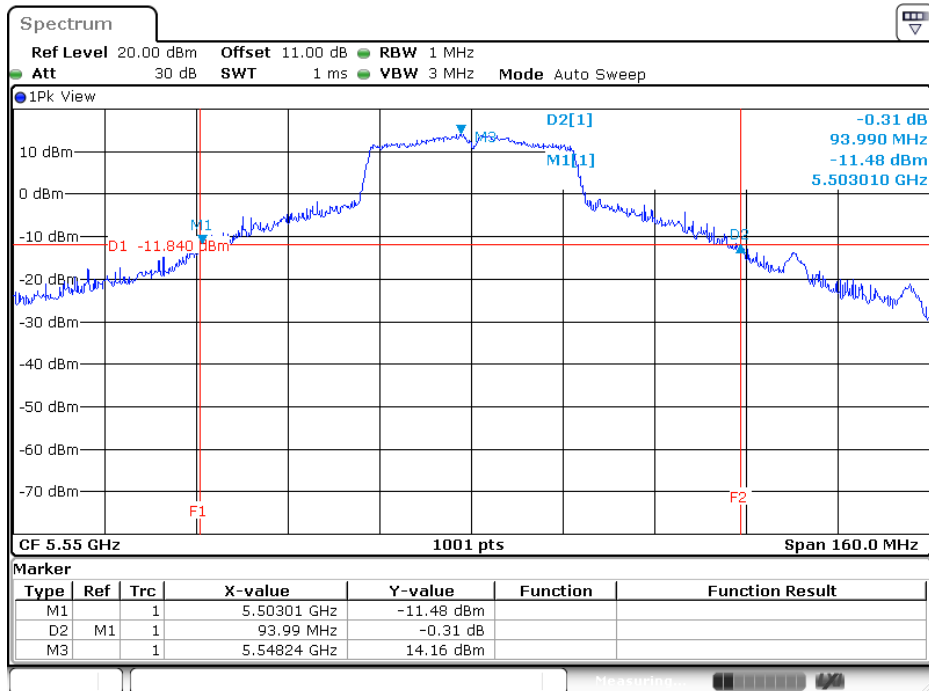
802.11an HT20 5300MHz


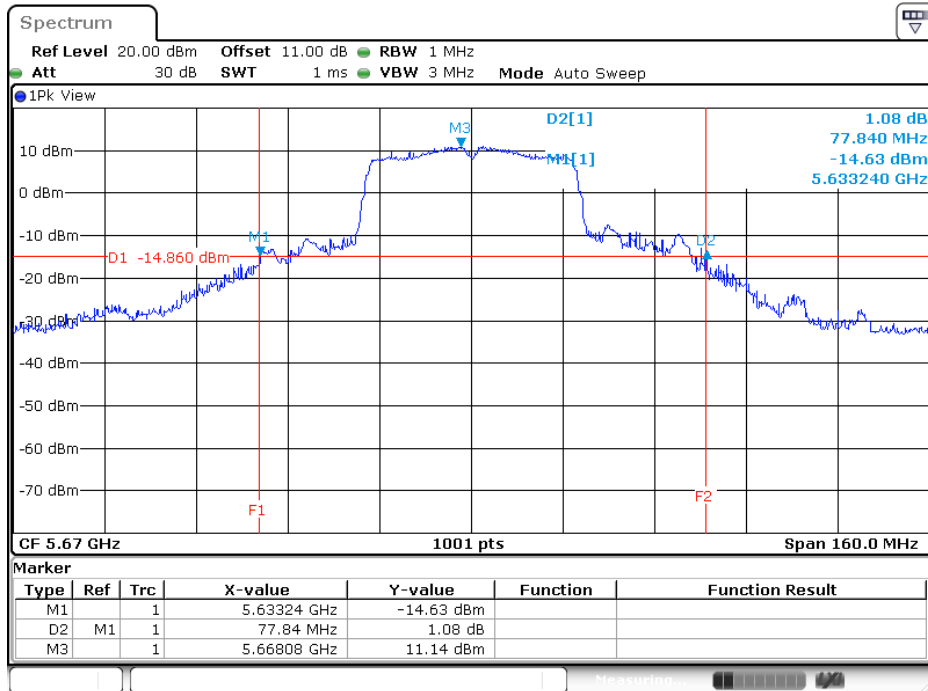
Date: 5.MAR.2020 09:52:38

802.11an HT20 5320MHz

802.11an HT20 5500MHz


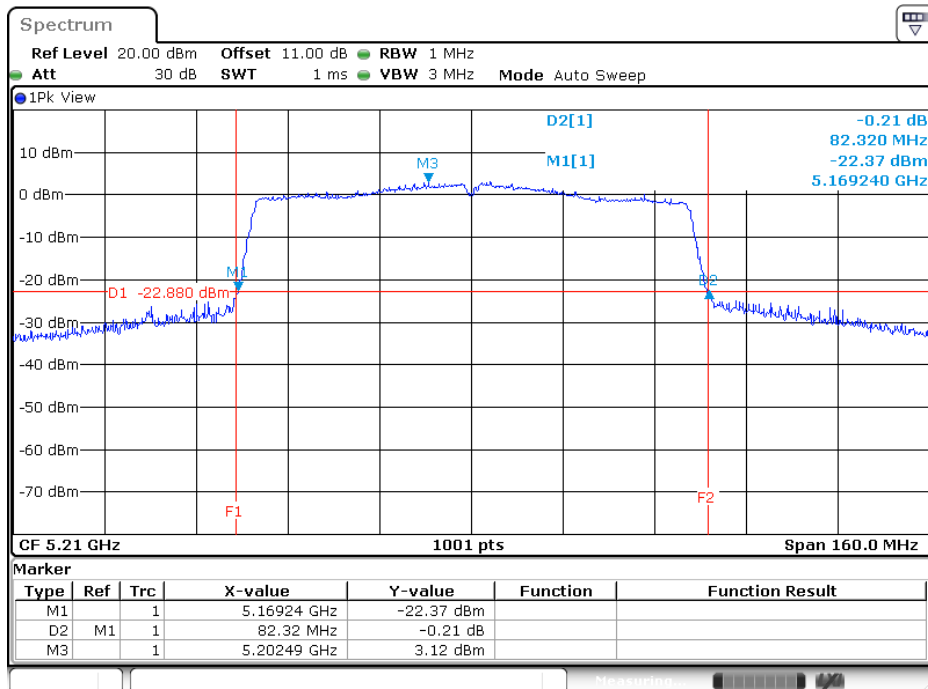
802.11an HT20 5580MHz

802.11an HT20 5700MHz


802.11an HT40 5270MHz

802.11an HT40 5310MHz


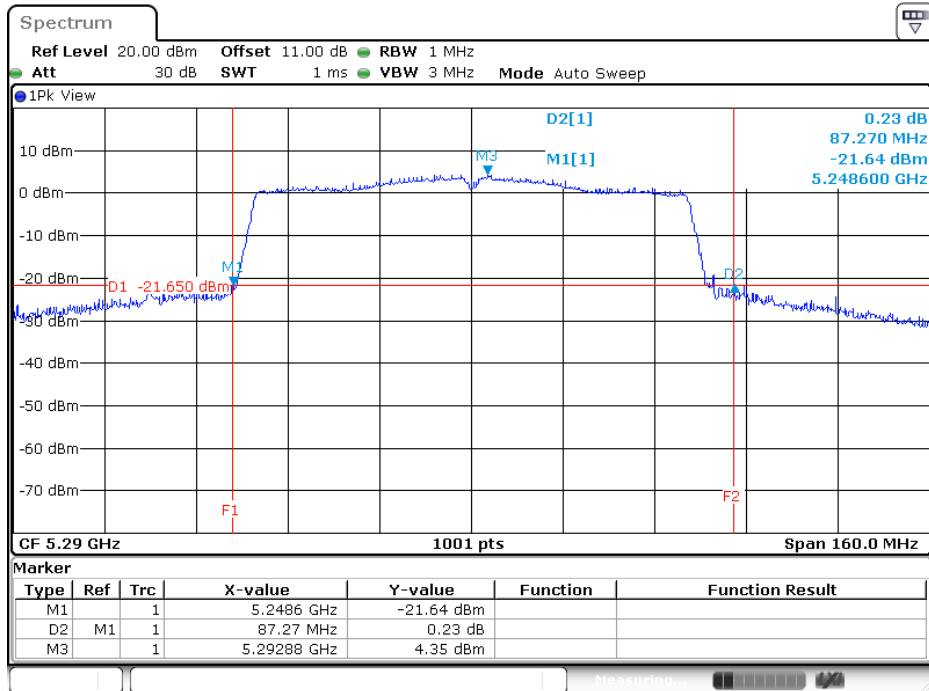
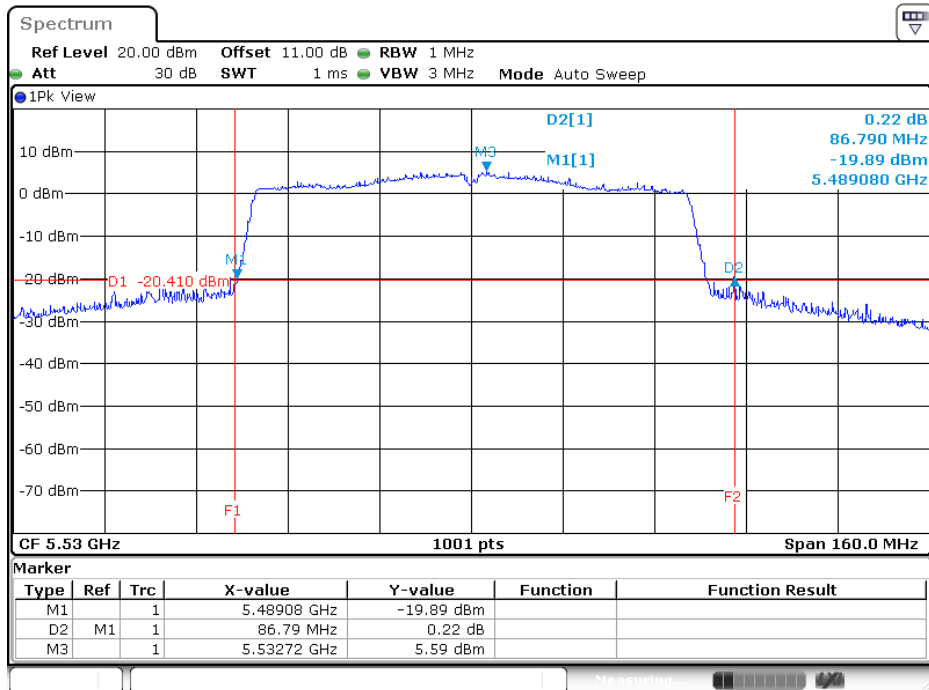
802.11an HT40 5510MHz

802.11an HT40 5550MHz


802.11an HT40 5670MHz


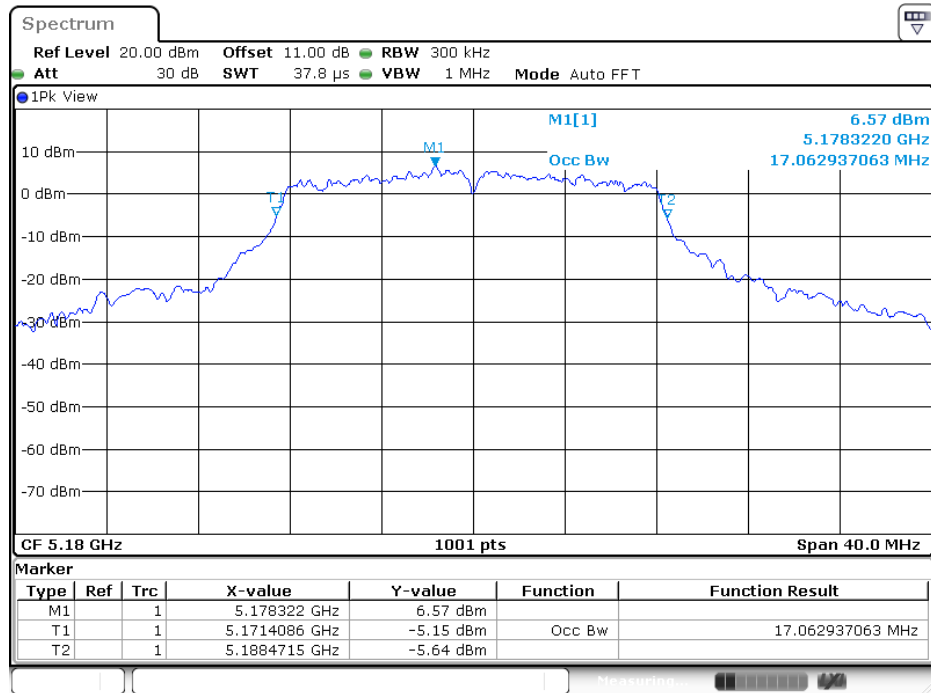
Date: 9.MAR.2020 04:13:12

802.11ac VHT80 5210MHz


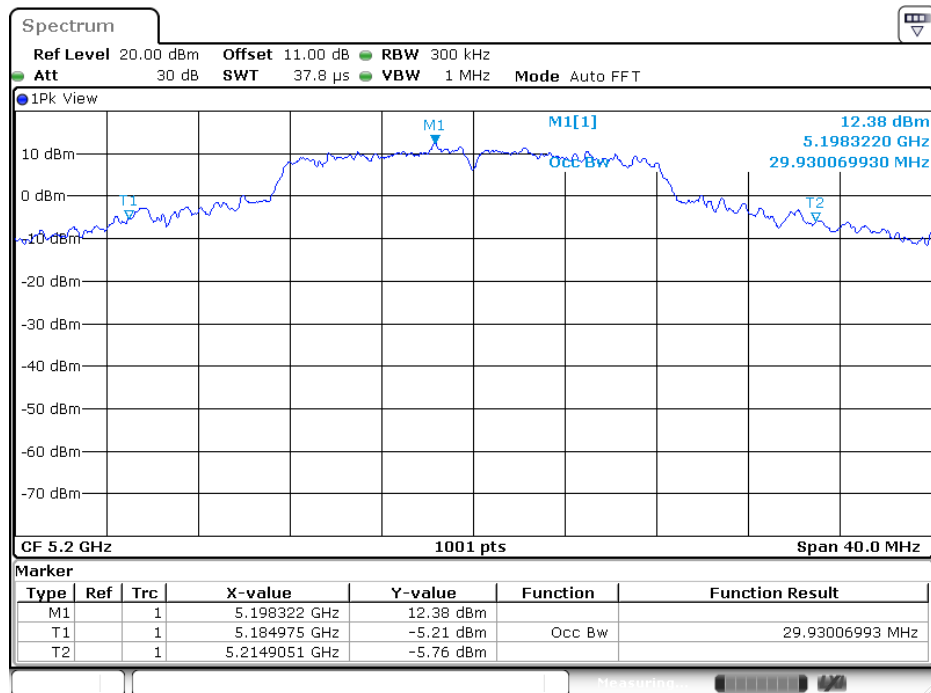
Date: 5.MAR.2020 10:41:49

802.11ac VHT80 5290MHz

802.11ac VHT80 5530MHz


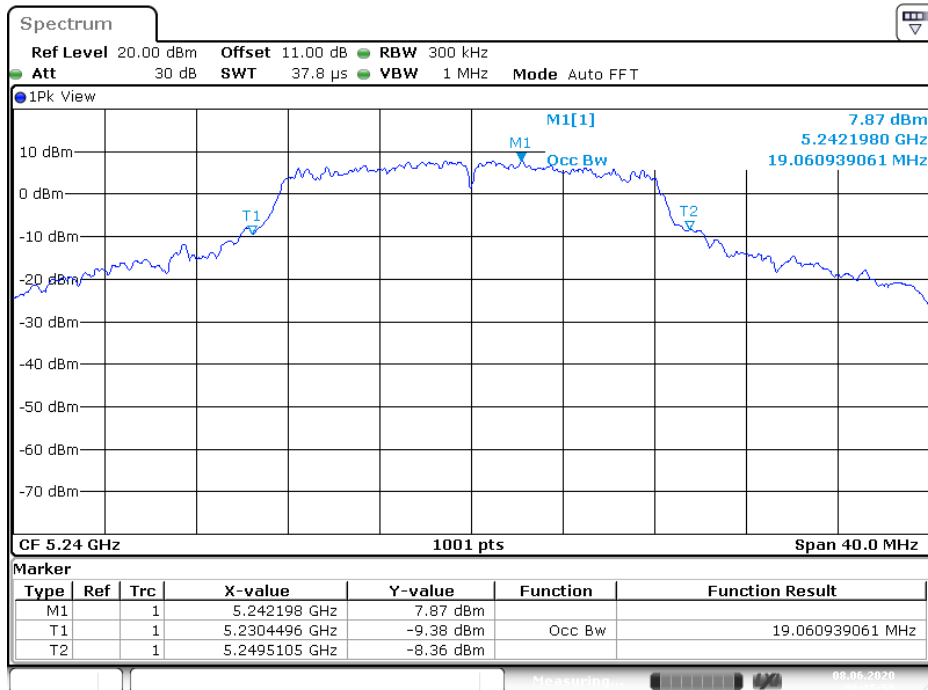
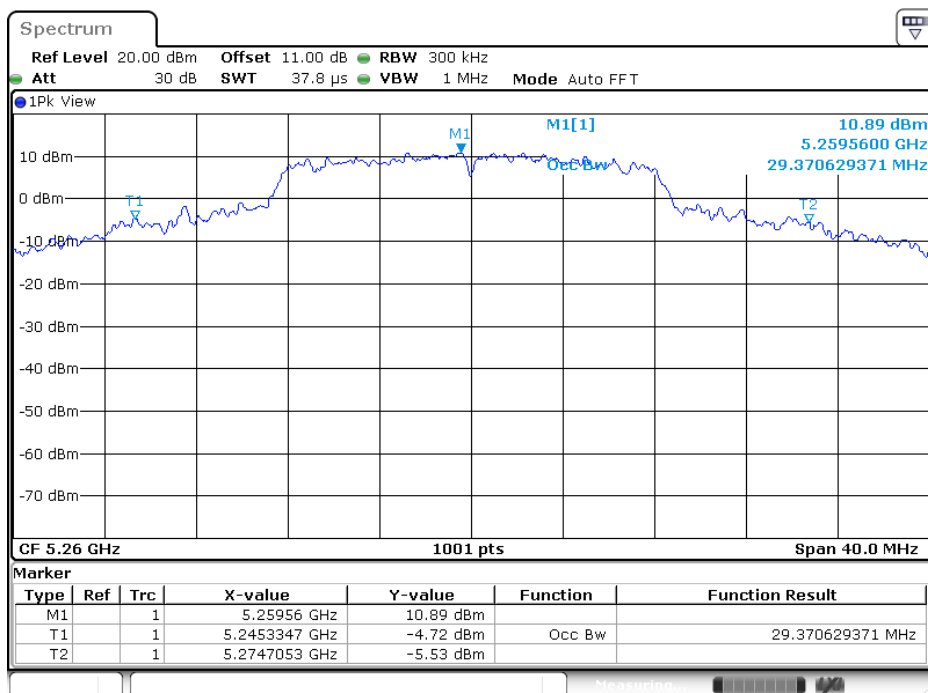
The Plot of 99% Bandwidth for FCC

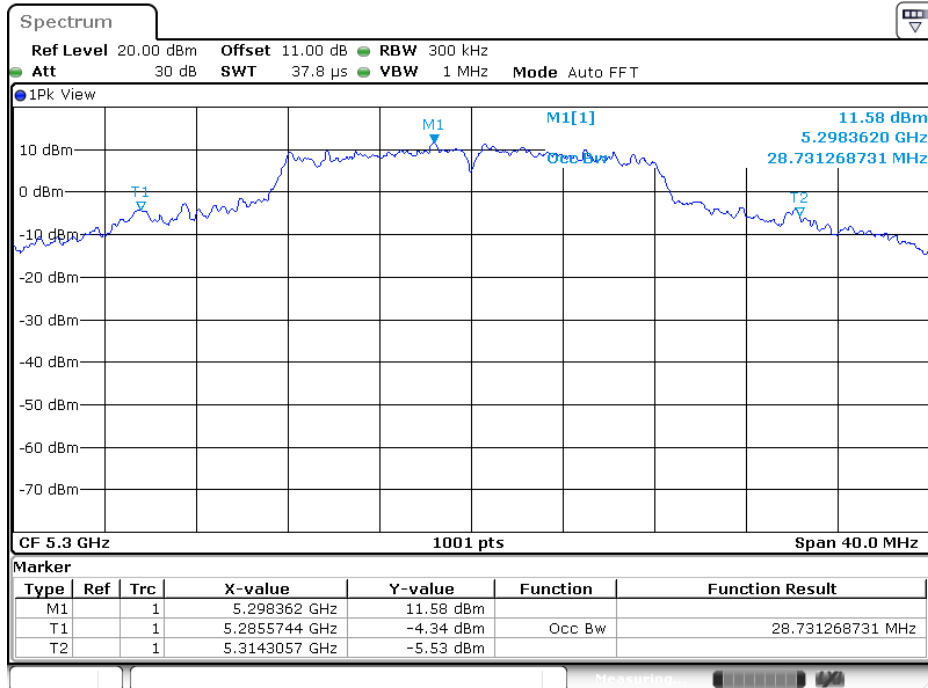
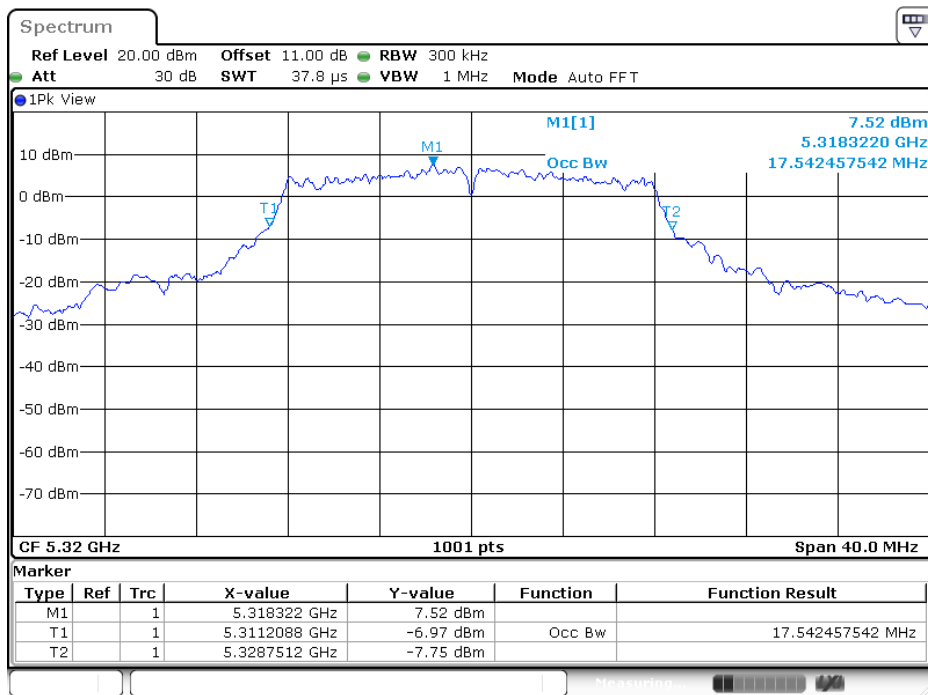
802.11a 5180MHz


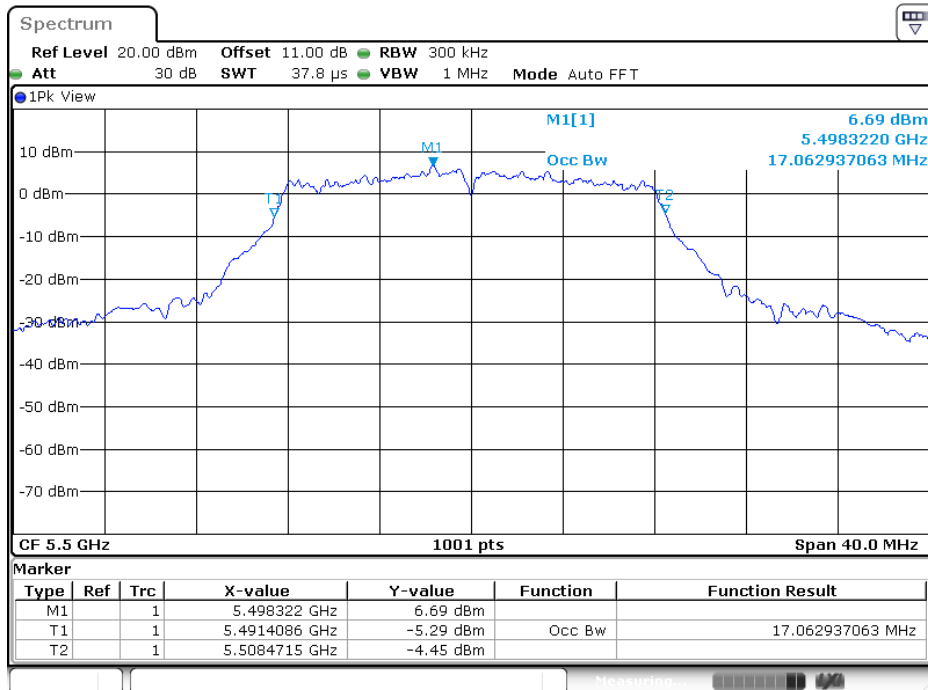
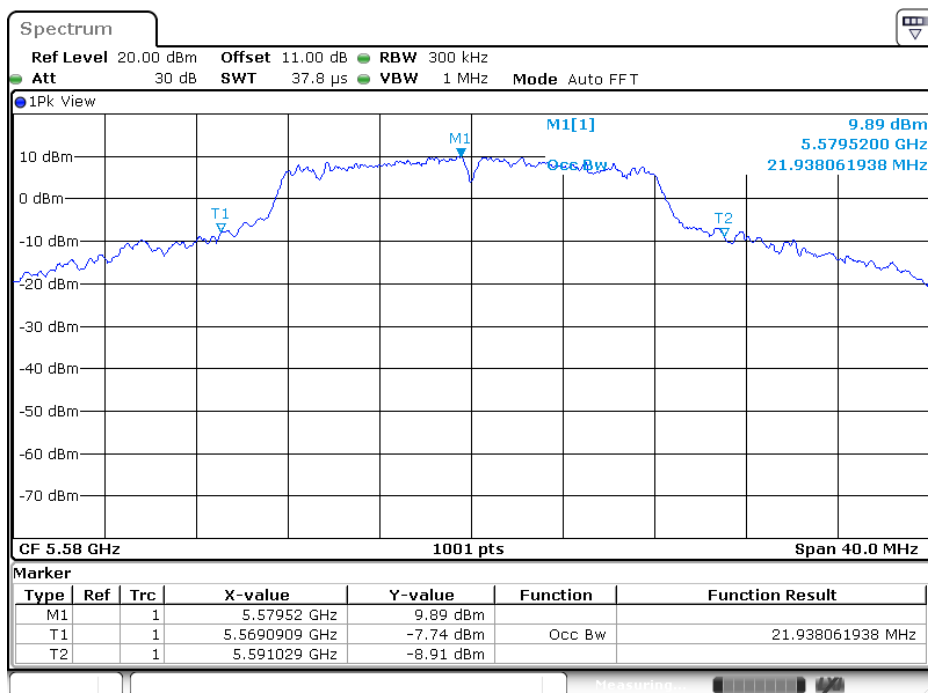
Date: 5.MAR.2020 08:23:56

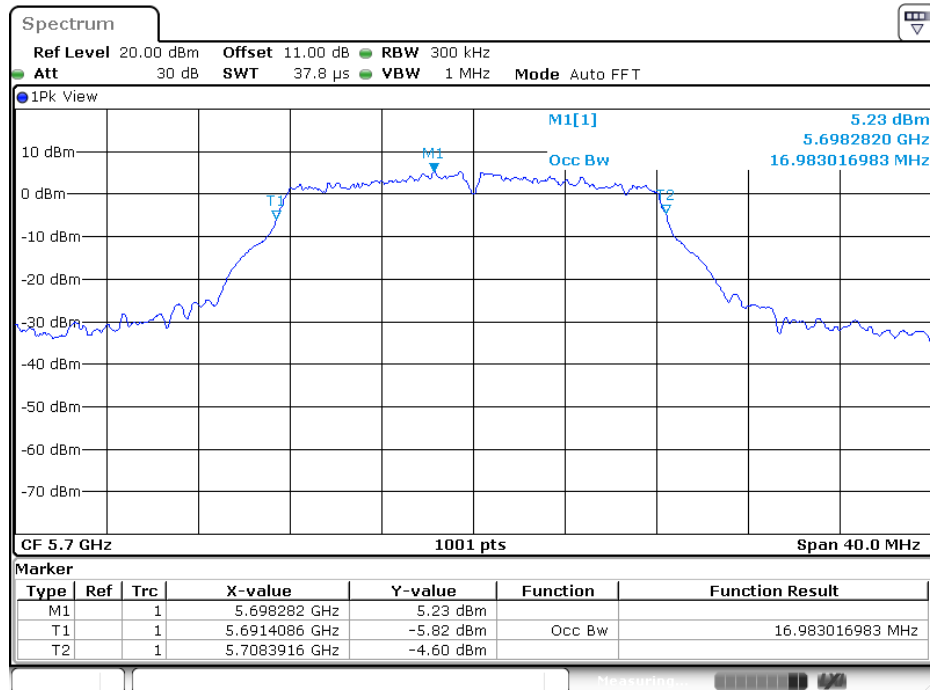
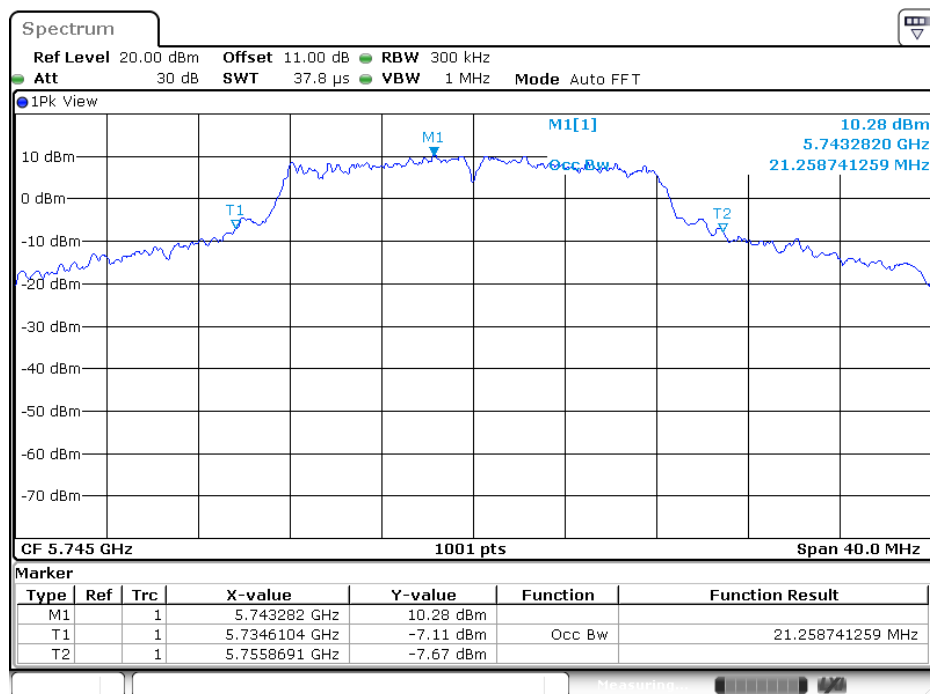
802.11a 5200MHz


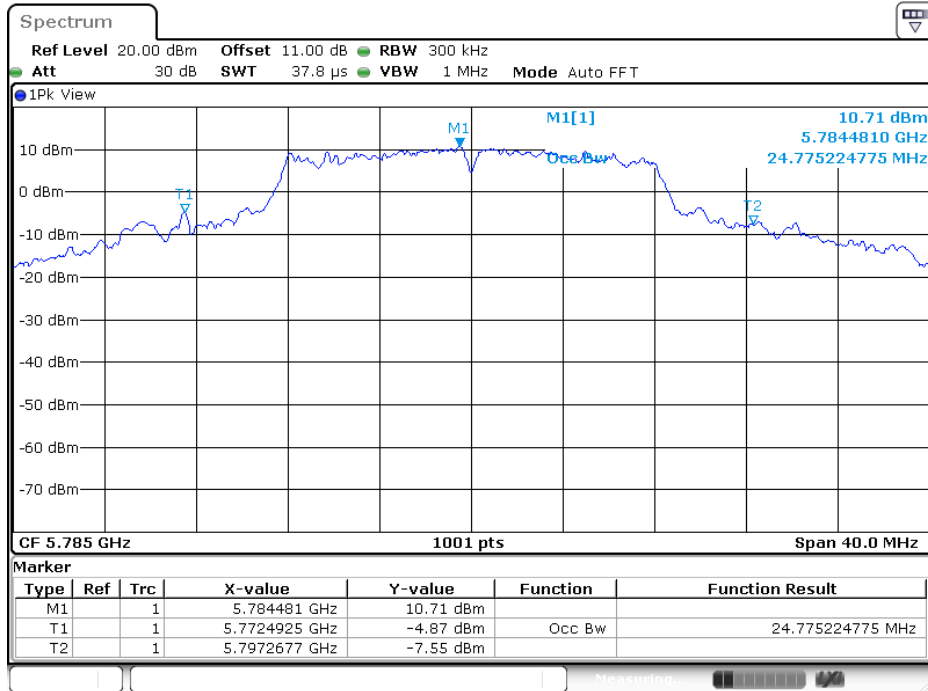
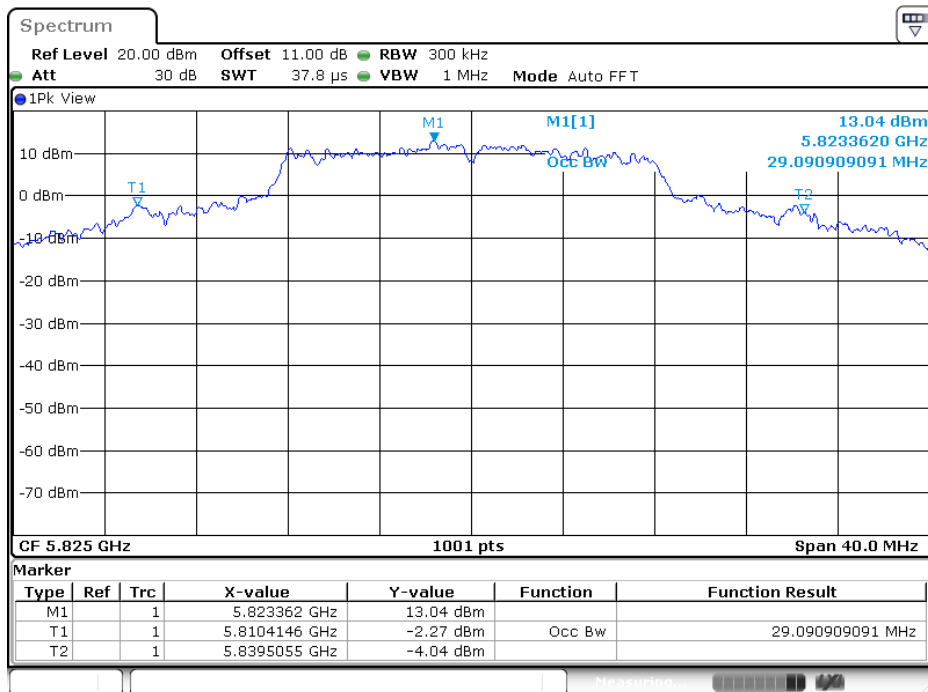
Date: 5.MAR.2020 08:28:13

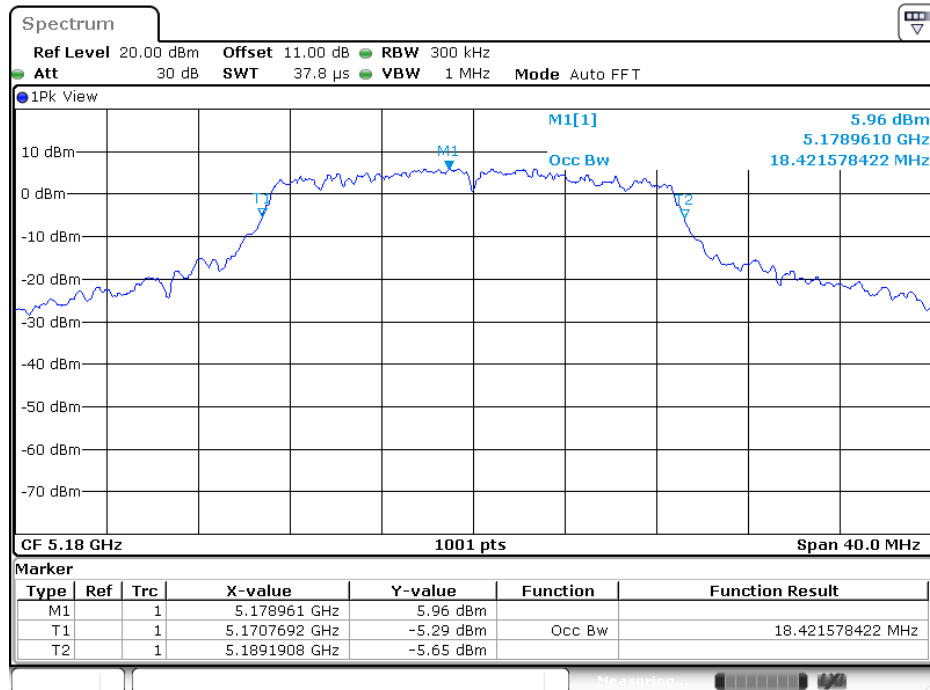
802.11a 5240MHz

802.11a 5260MHz


802.11a 5300MHz

802.11a 5320MHz


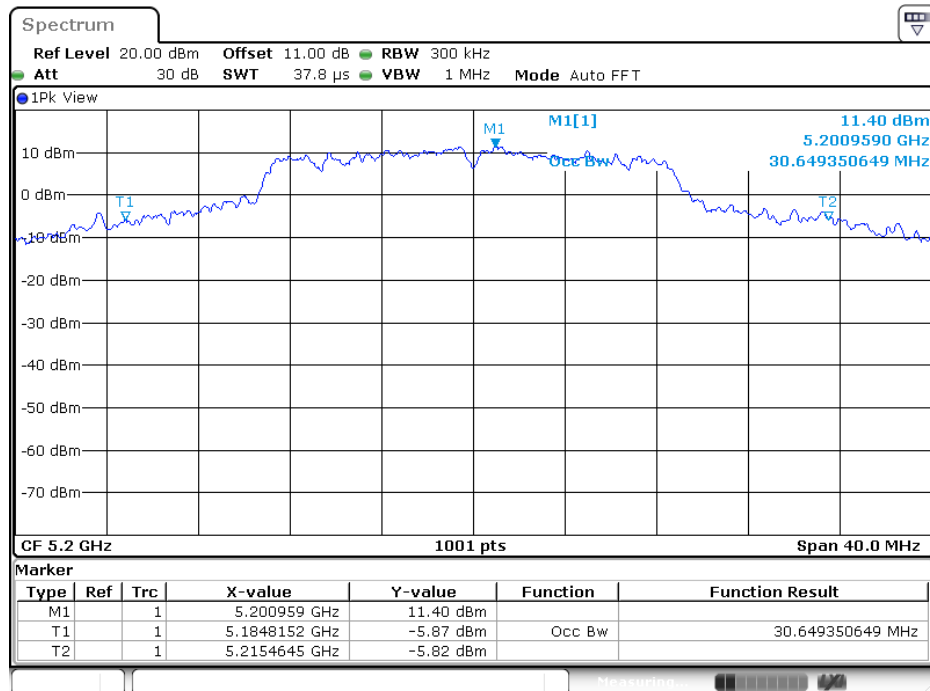
802.11a 5500MHz

802.11a 5580MHz


802.11a 5700MHz

802.11a 5745MHz


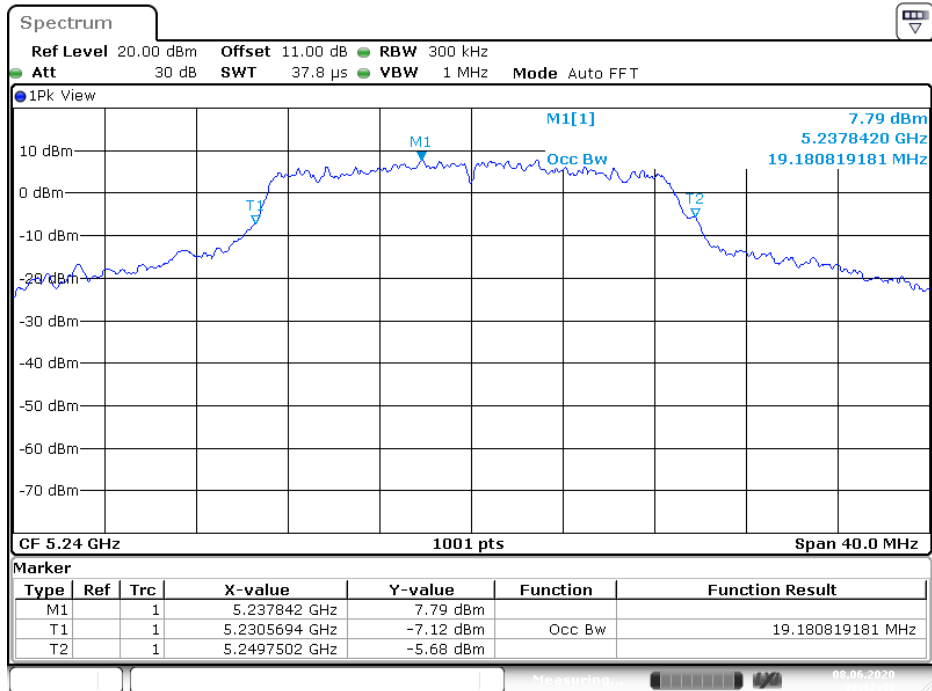
802.11a 5785MHz

802.11a 5825MHz


802.11an HT20 5180MHz


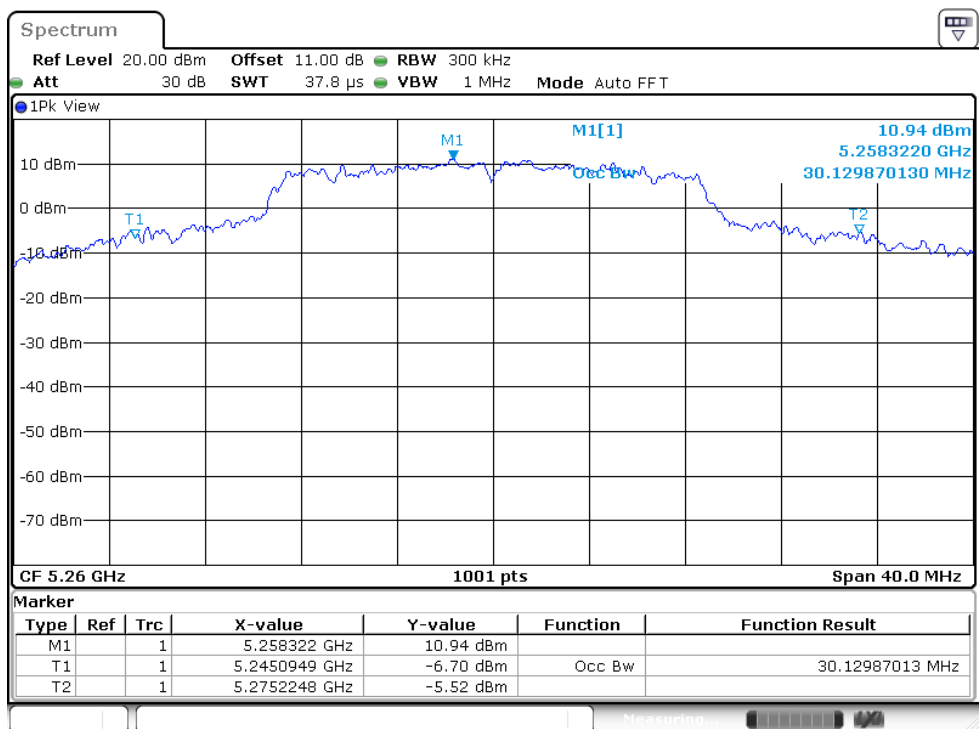
Date: 5.MAR.2020 09:01:52

802.11an HT20 5200MHz


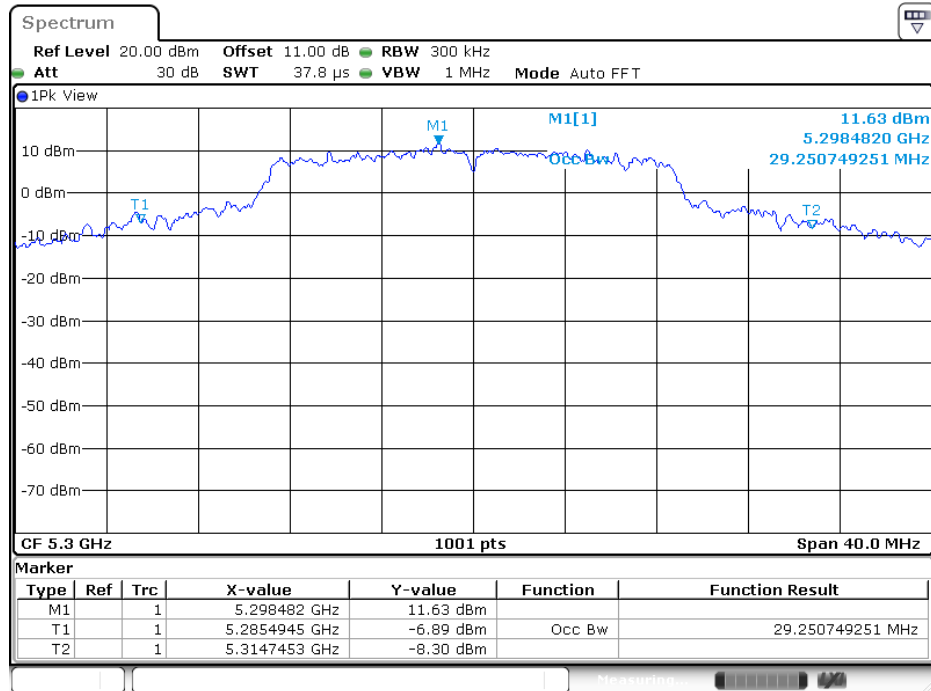
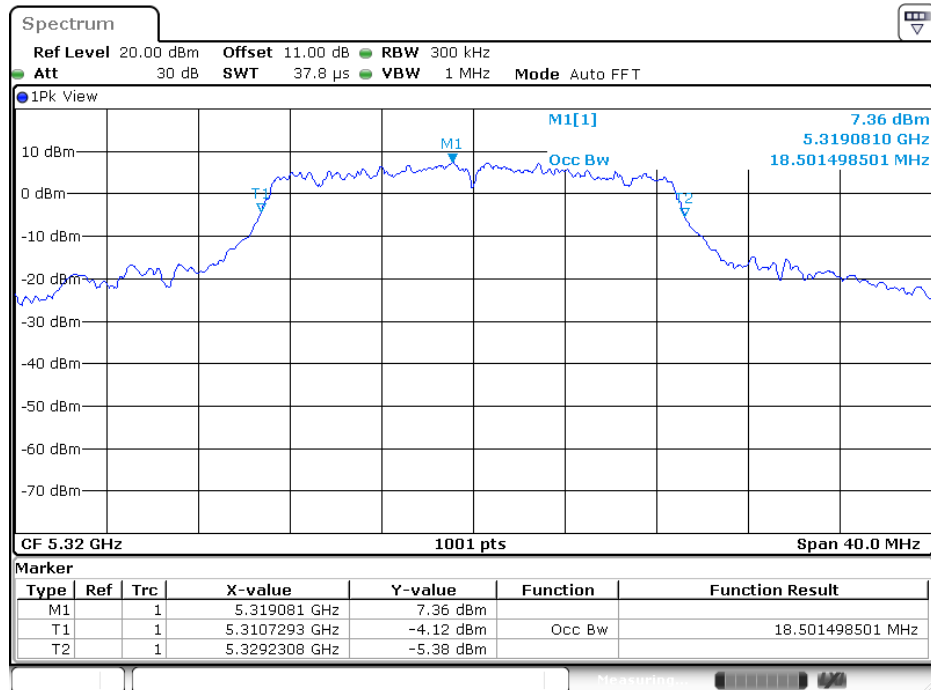
Date: 5.MAR.2020 09:05:50

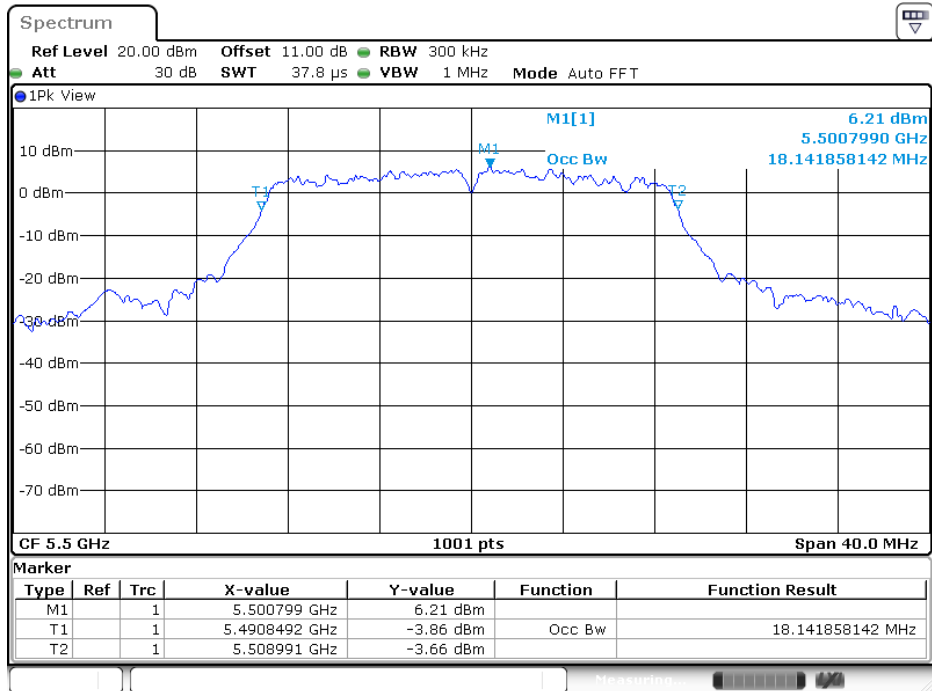
802.11an HT20 5240MHz


Date: 8.JUN.2020 08:17:43

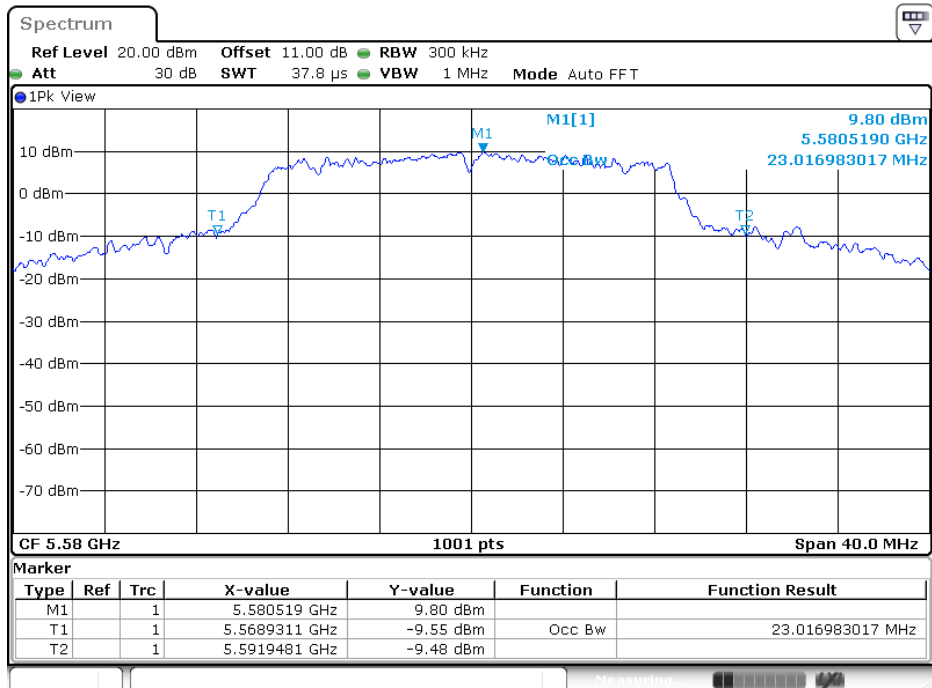
802.11an HT20 5260MHz


Date: 5.MAR.2020 09:14:15

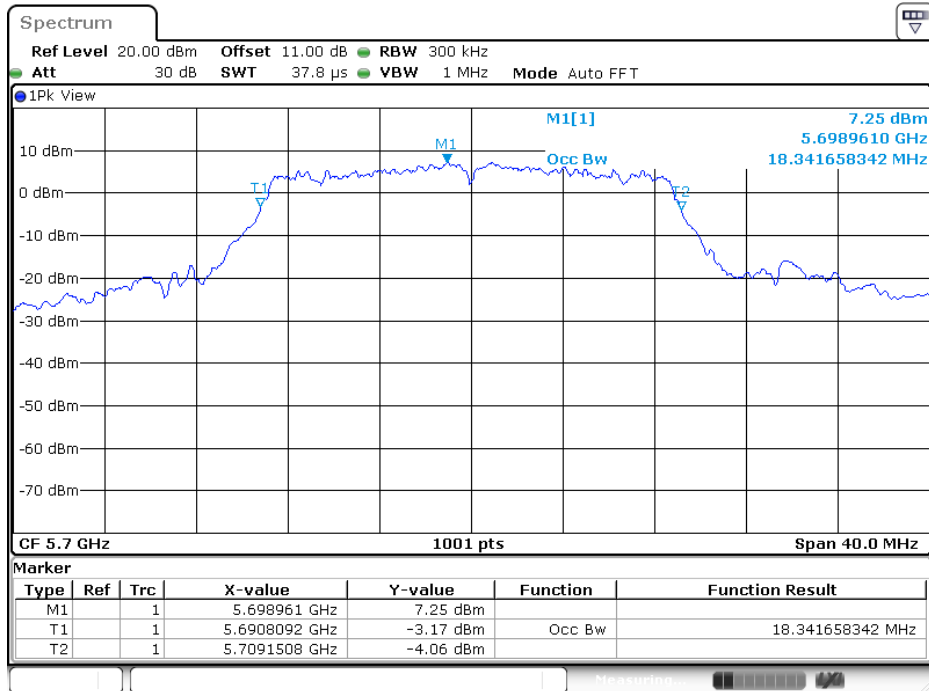
802.11an HT20 5300MHz

802.11an HT20 5320MHz


802.11an HT20 5500MHz


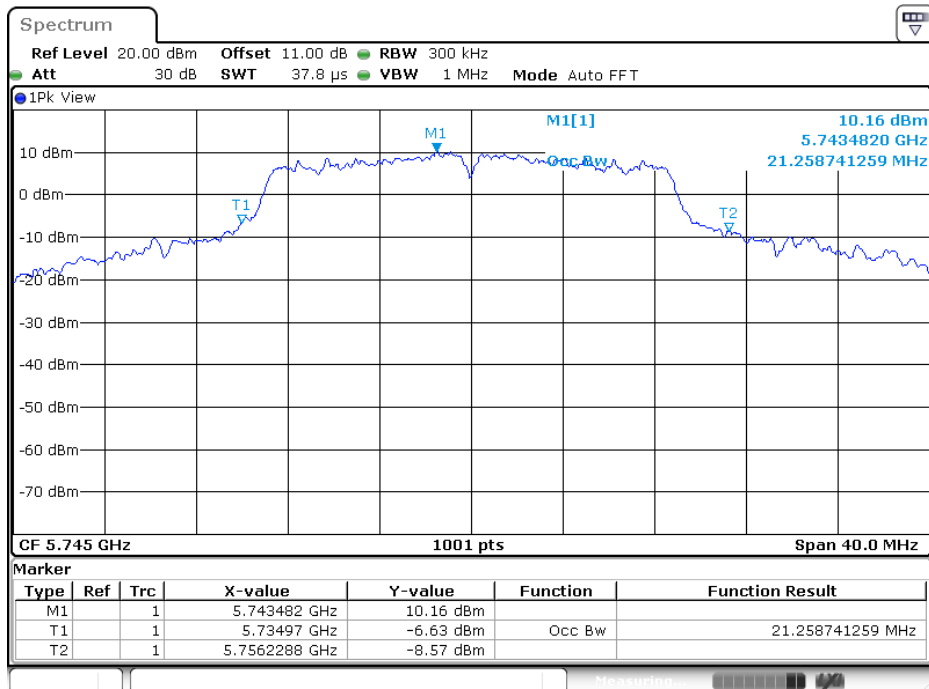
Date: 9.MAR.2020 03:09:32

802.11an HT20 5580MHz


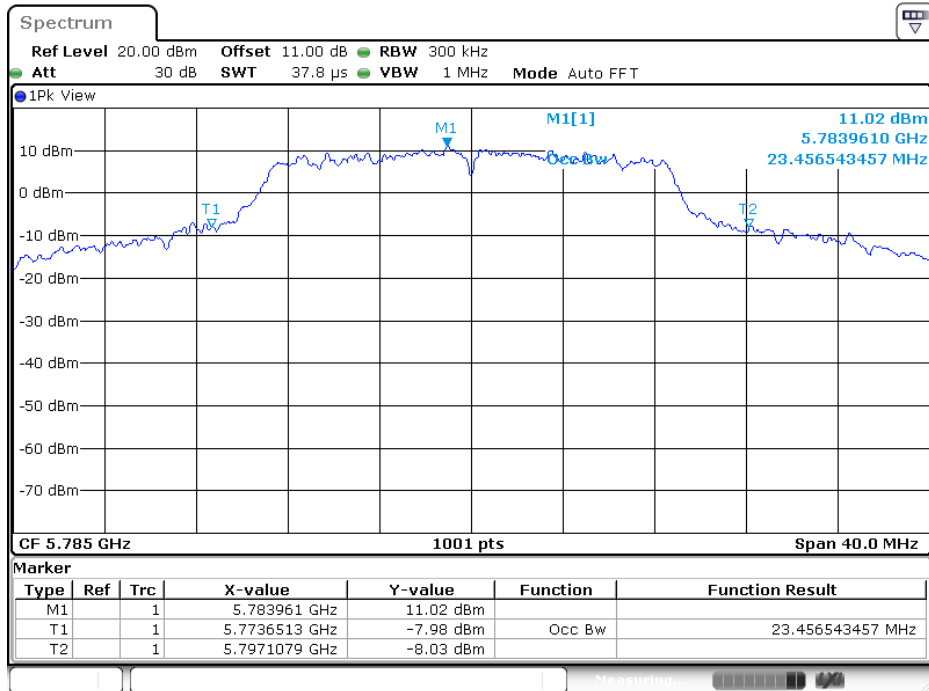
Date: 9.MAR.2020 03:12:22

802.11an HT20 5700MHz


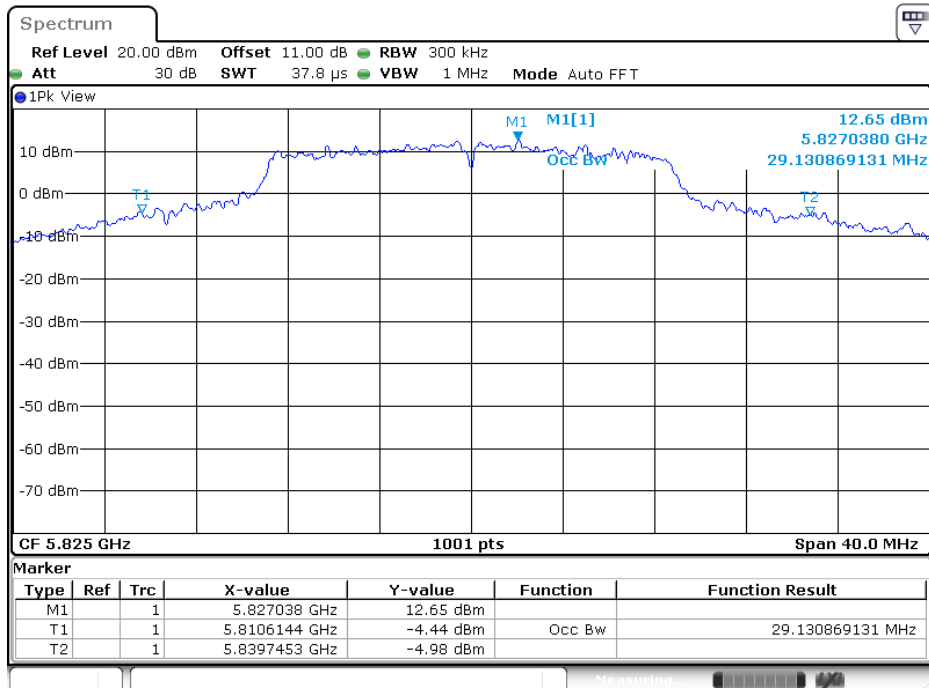
Date: 9.MAR.2020 03:15:26

802.11an HT20 5745MHz


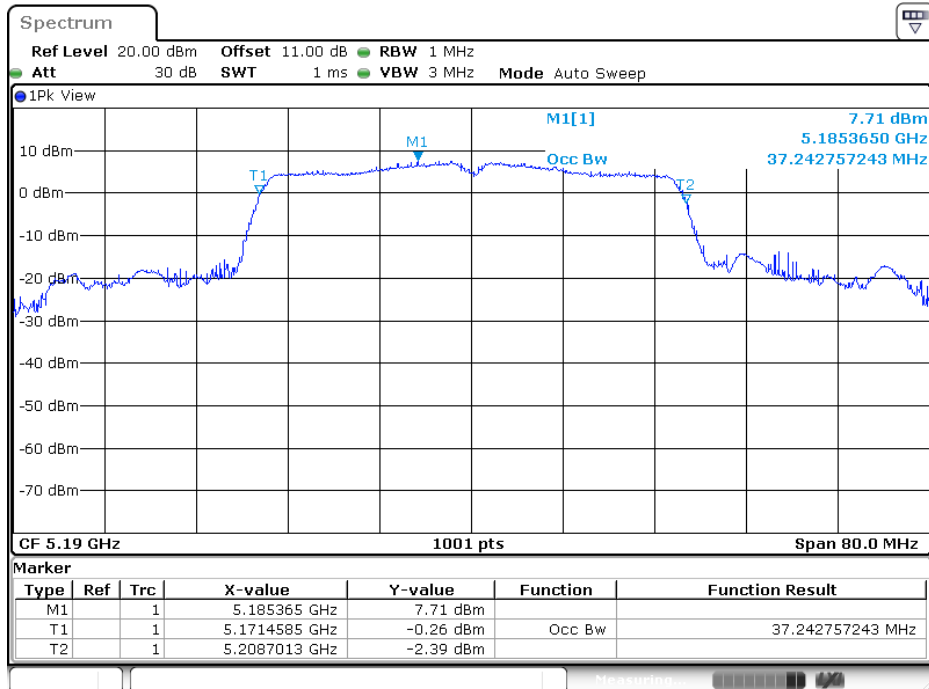
Date: 9.MAR.2020 03:18:06

802.11an HT20 5785MHz


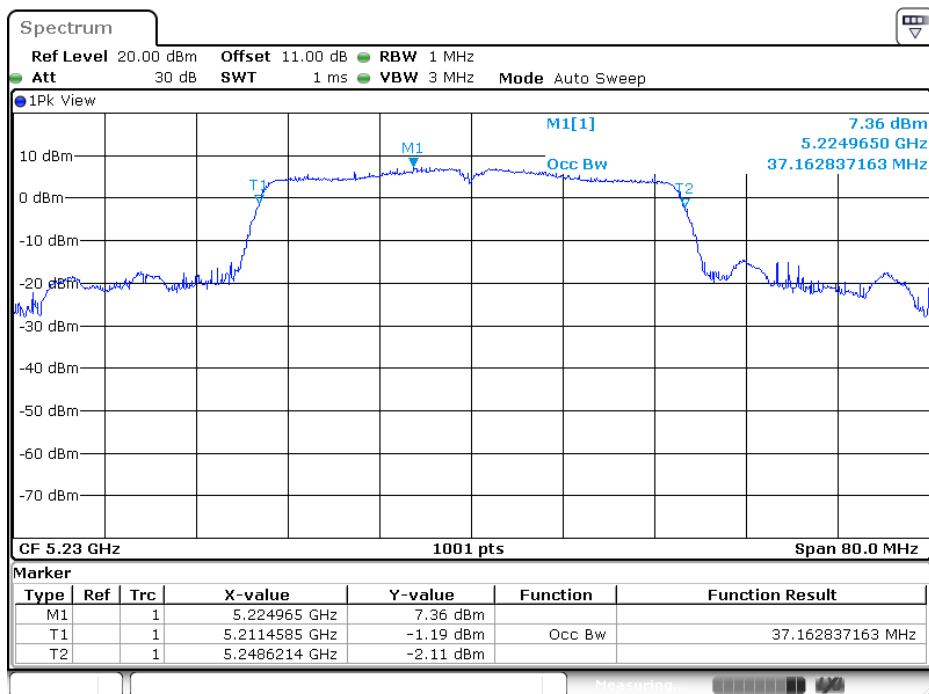
Date: 9.MAR.2020 03:19:40

802.11an HT20 5825MHz


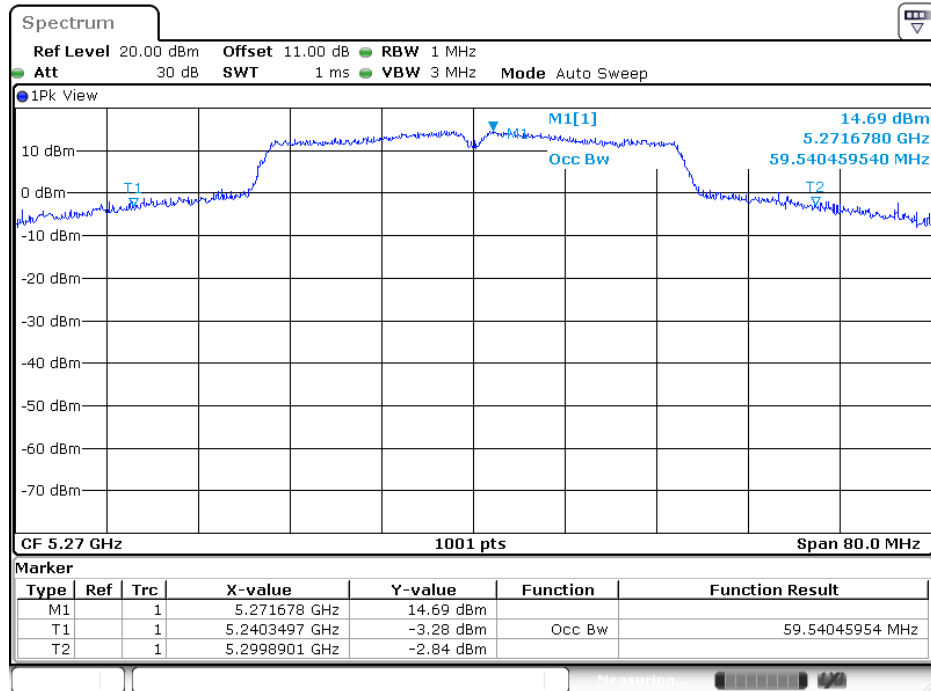
Date: 9.MAR.2020 03:21:25

802.11an HT40 5190MHz


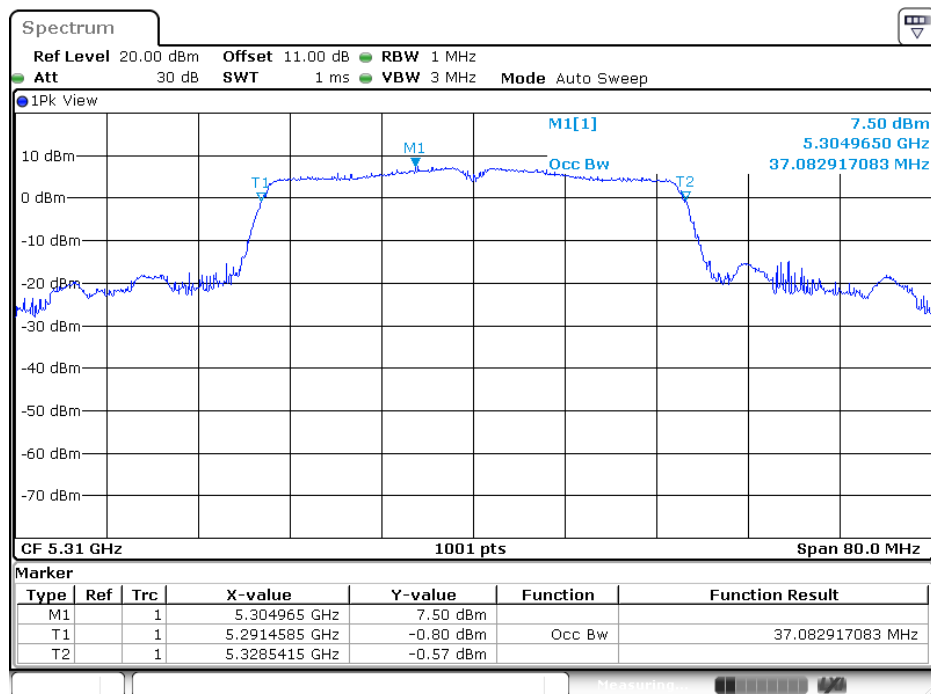
Date: 5.MAR.2020 10:05:17

802.11an HT40 5230MHz


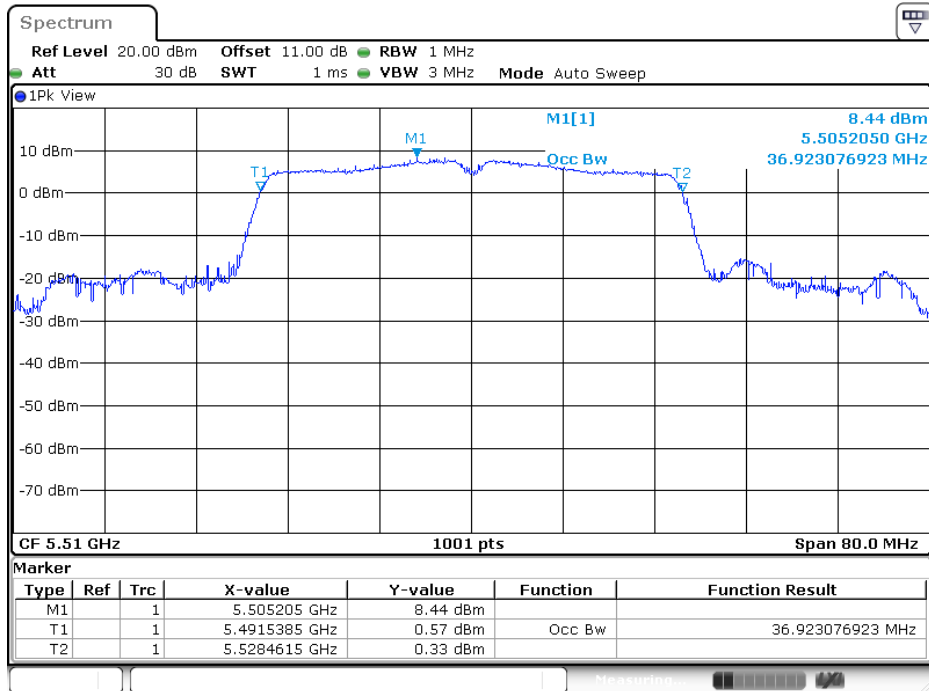
Date: 5.MAR.2020 10:08:56

802.11an HT40 5270MHz


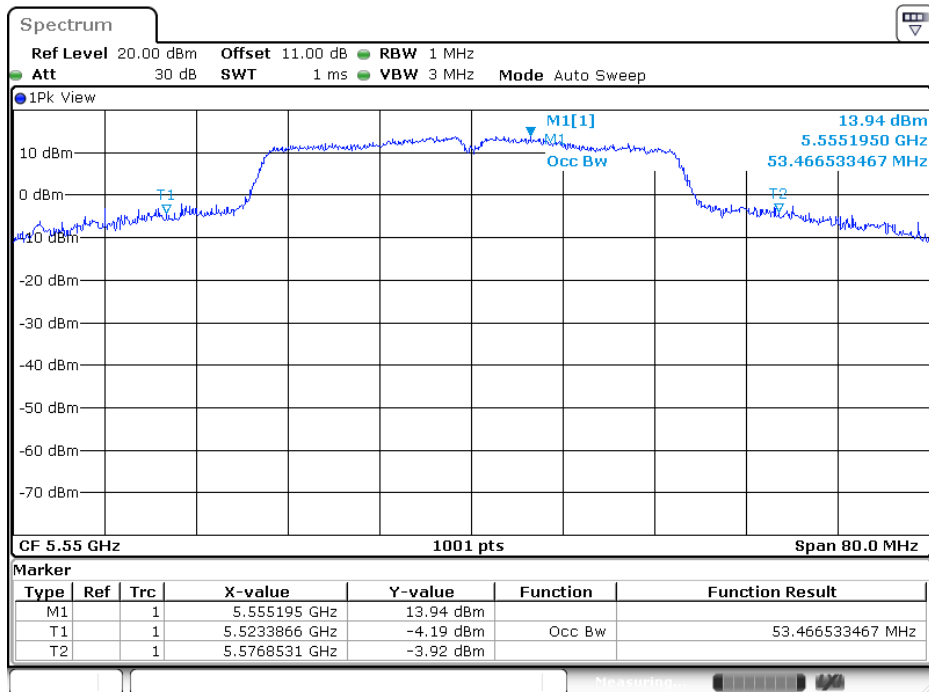
Date: 5.MAR.2020 10:14:28

802.11an HT40 5310MHz


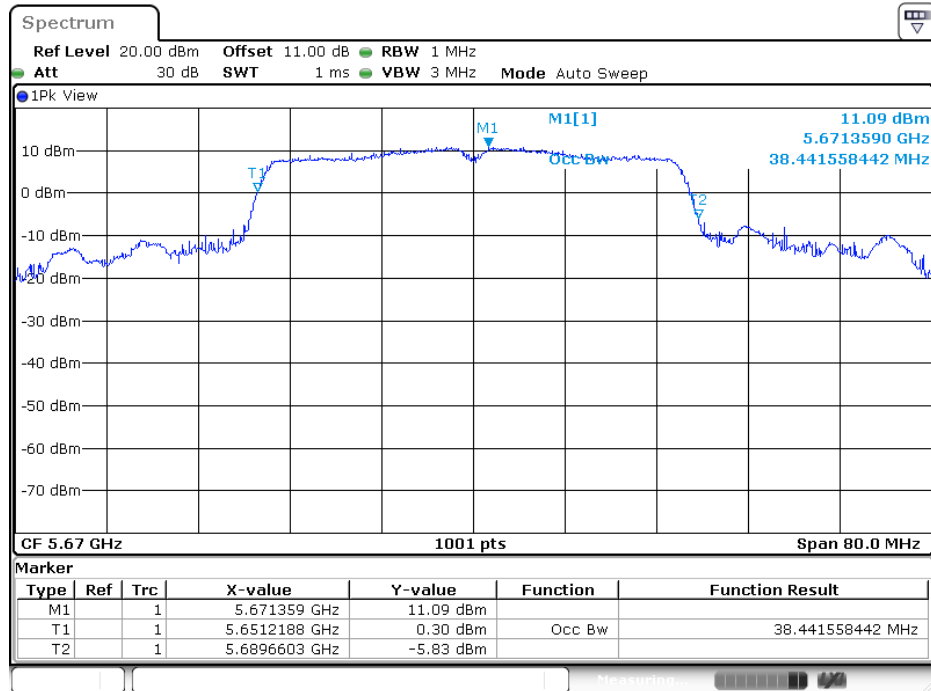
Date: 5.MAR.2020 10:17:56

802.11an HT40 5510MHz


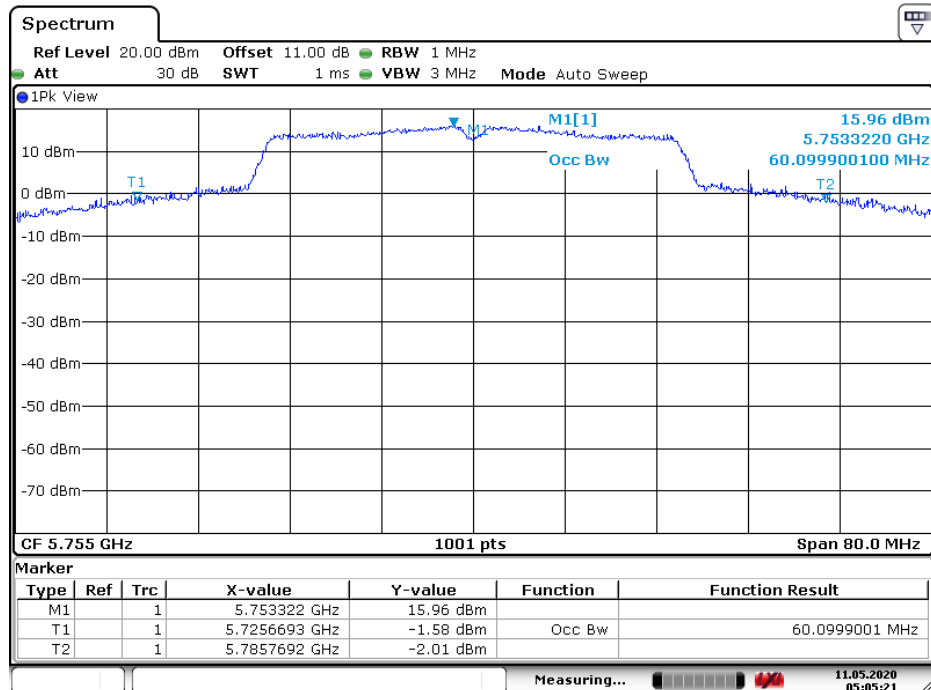
Date: 9.MAR.2020 03:25:53

802.11an HT40 5550MHz


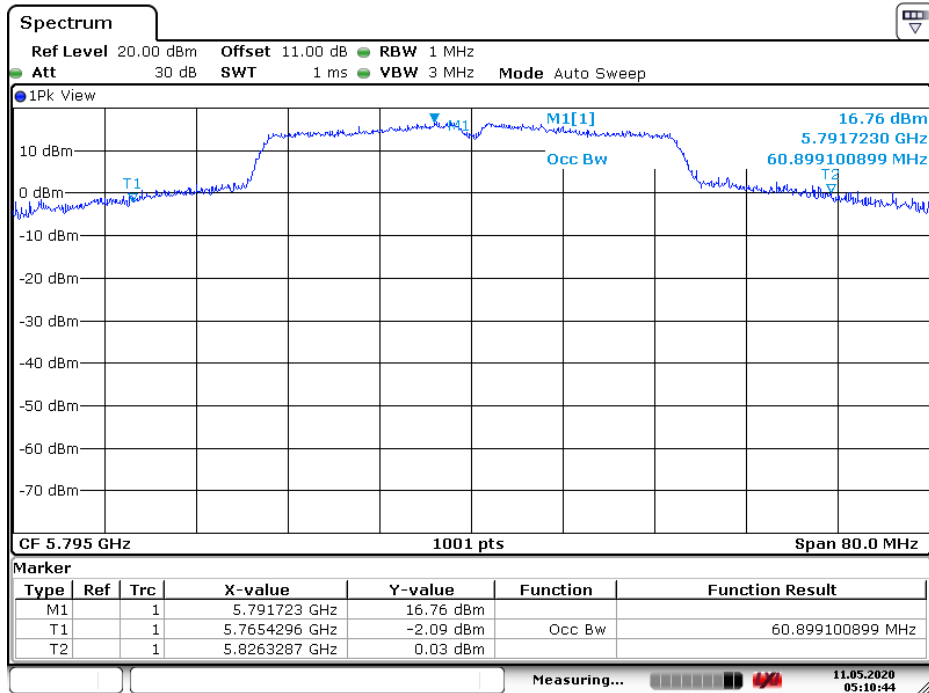
Date: 9.MAR.2020 03:28:30

802.11an HT40 5670MHz


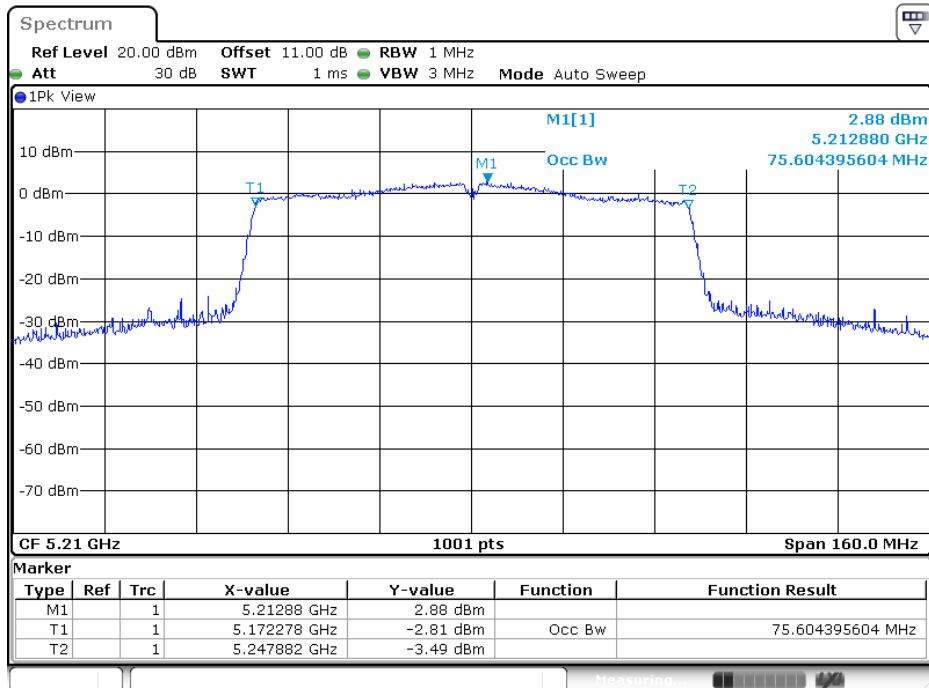
Date: 9.MAR.2020 03:31:42

02.11an HT40 5755MHz


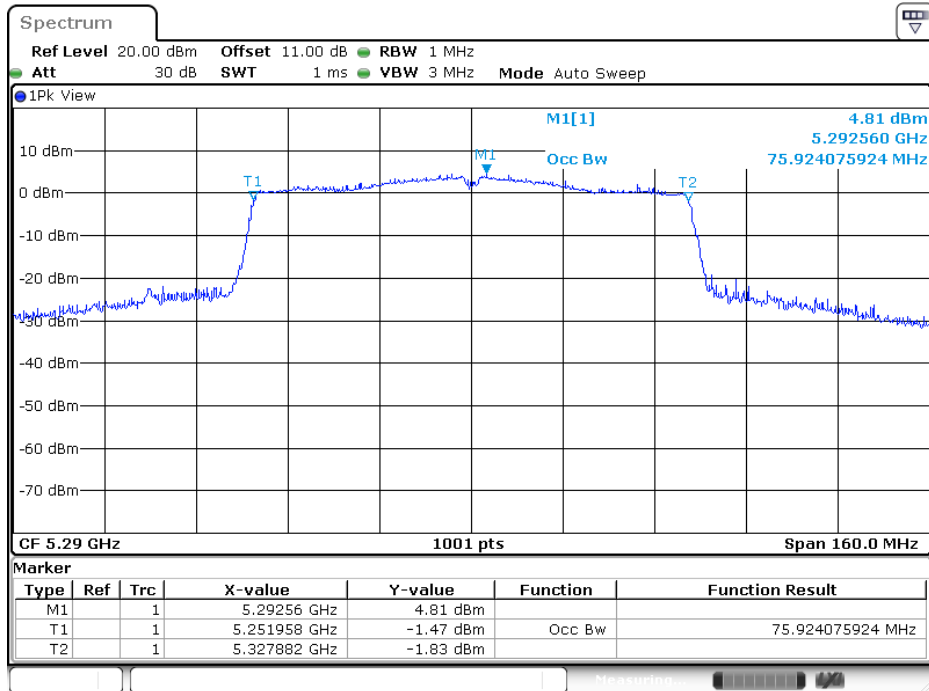
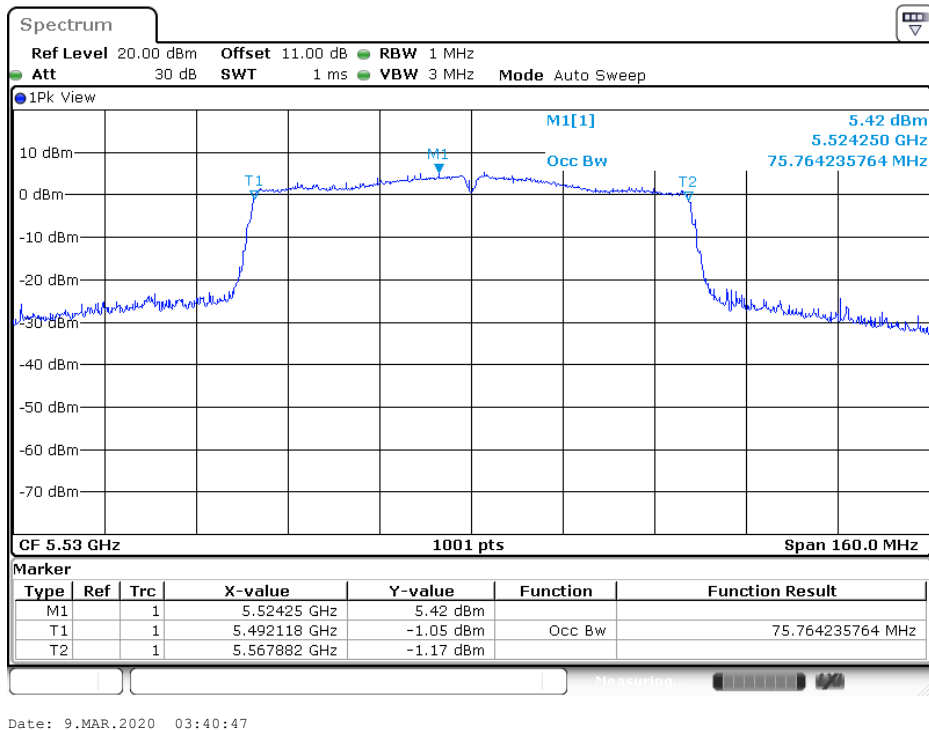
Date: 11.MAY.2020 05:05:21

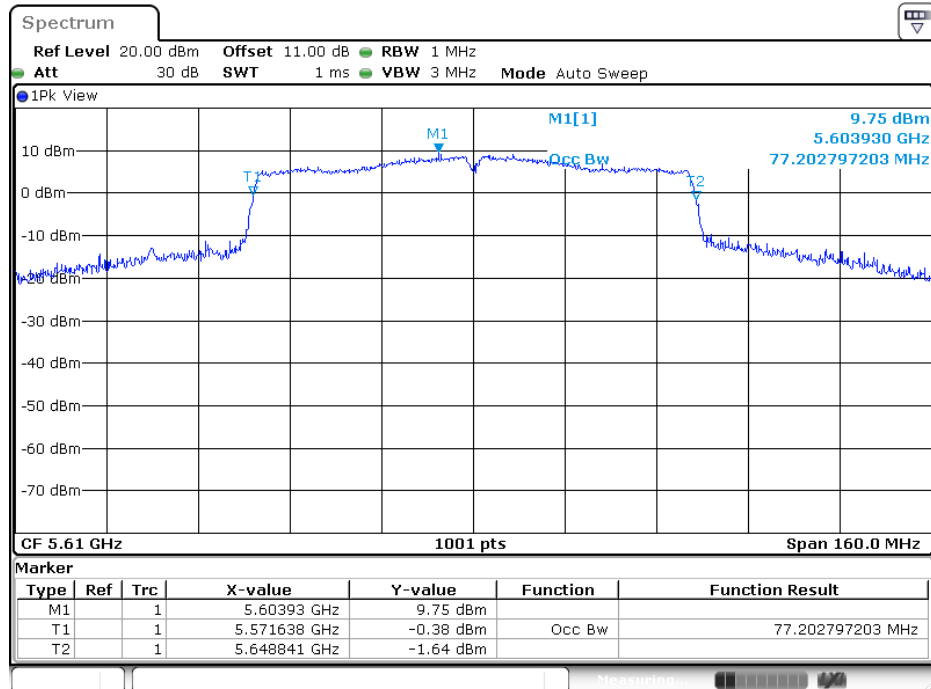
802.11an HT40 5795MHz


Date: 11.MAY.2020 05:10:45

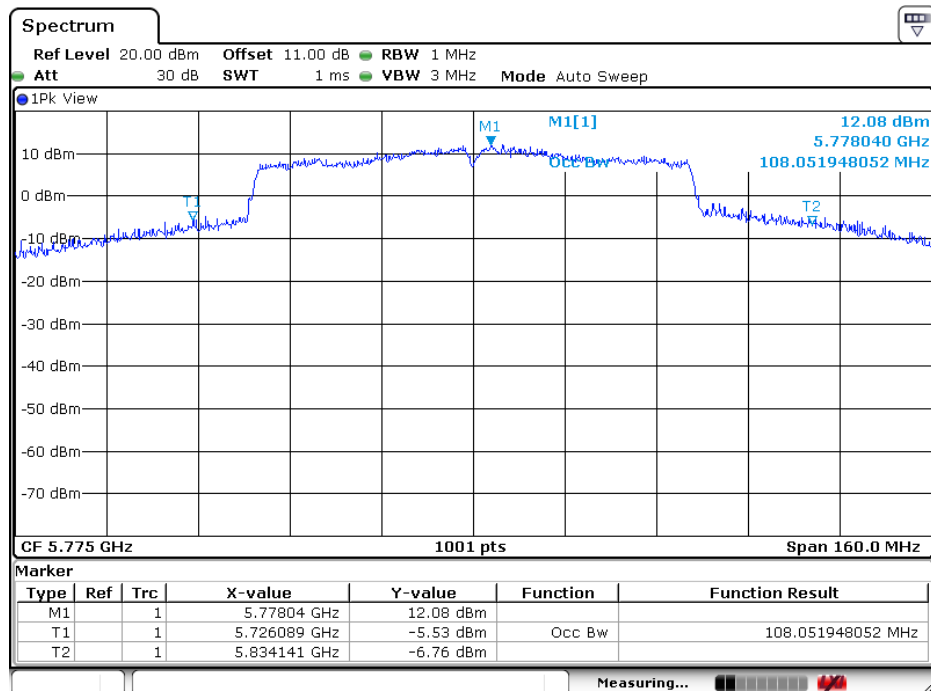
802.11ac VHT80 5210MHz


Date: 5.MAR.2020 10:35:29

802.11ac VHT80 5290MHz

802.11ac VHT80 5530MHz


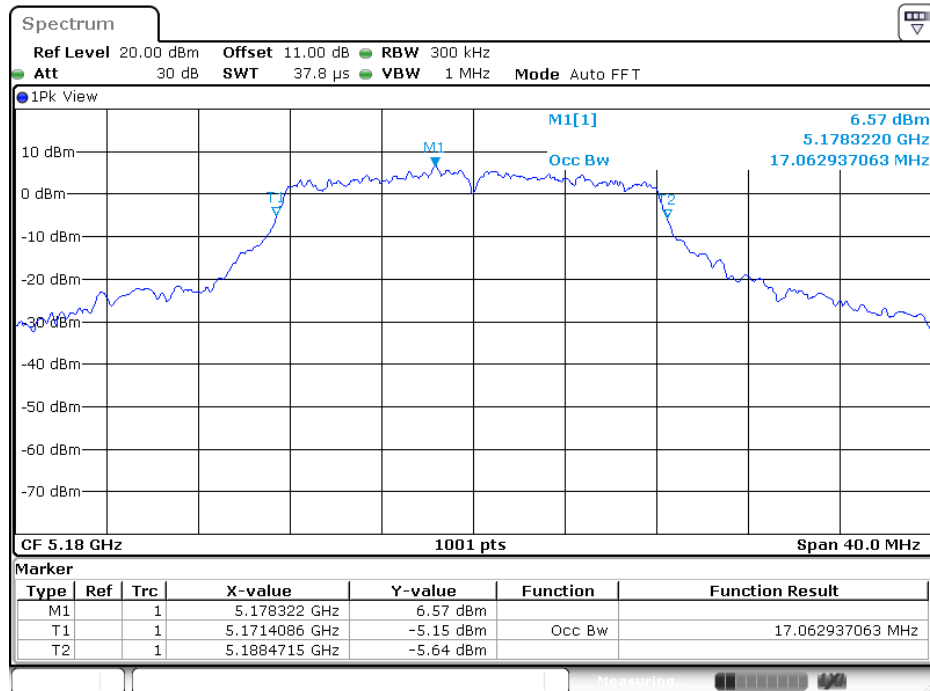
802.11ac VHT80 5610MHz


Date: 9.MAR.2020 03:45:10

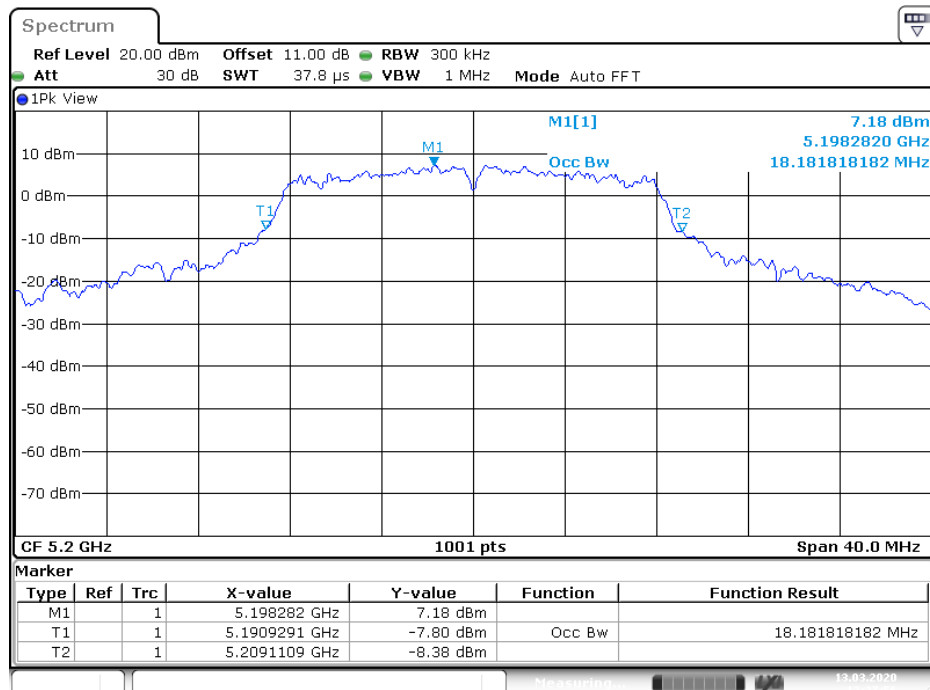
802.11ac VHT80 5775MHz


Date: 10.JUN.2020 14:50:46

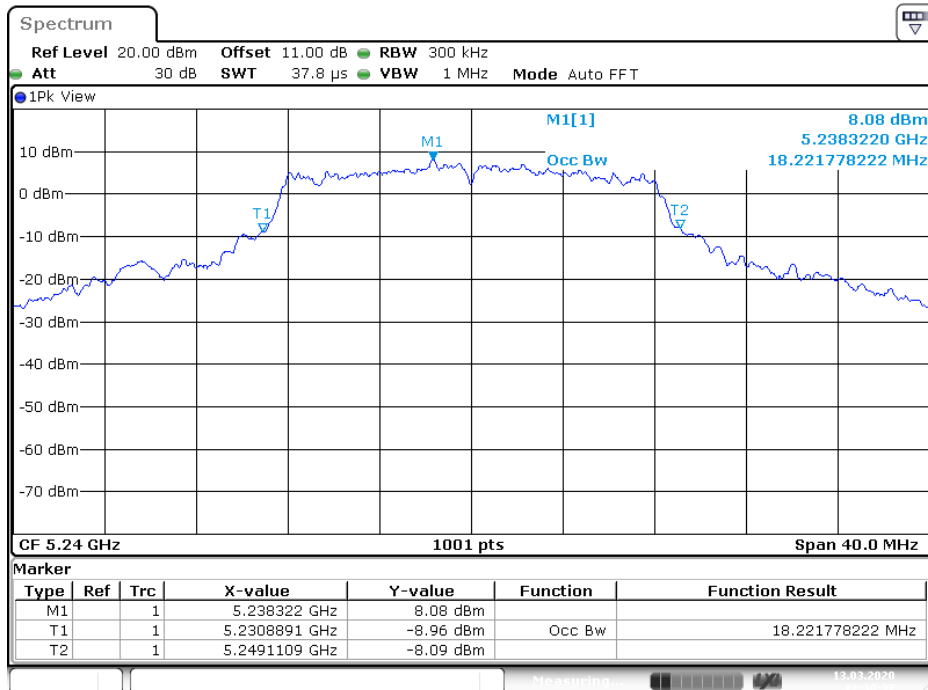
The Plot of 99% Bandwidth for ISED

802.11a 5180MHz


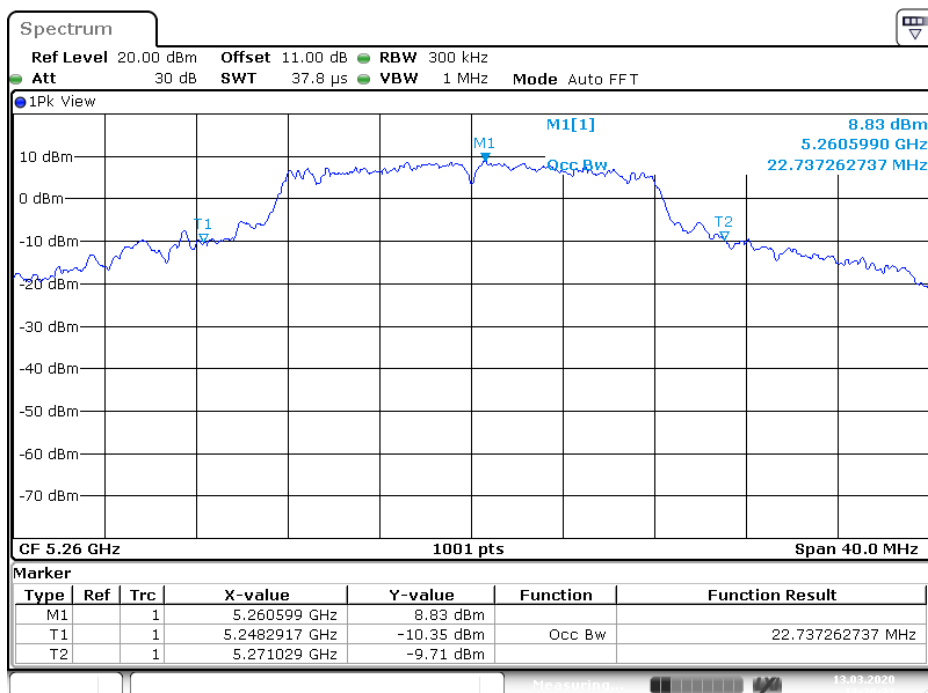
Date: 5.MAR.2020 08:23:56

802.11a 5200MHz


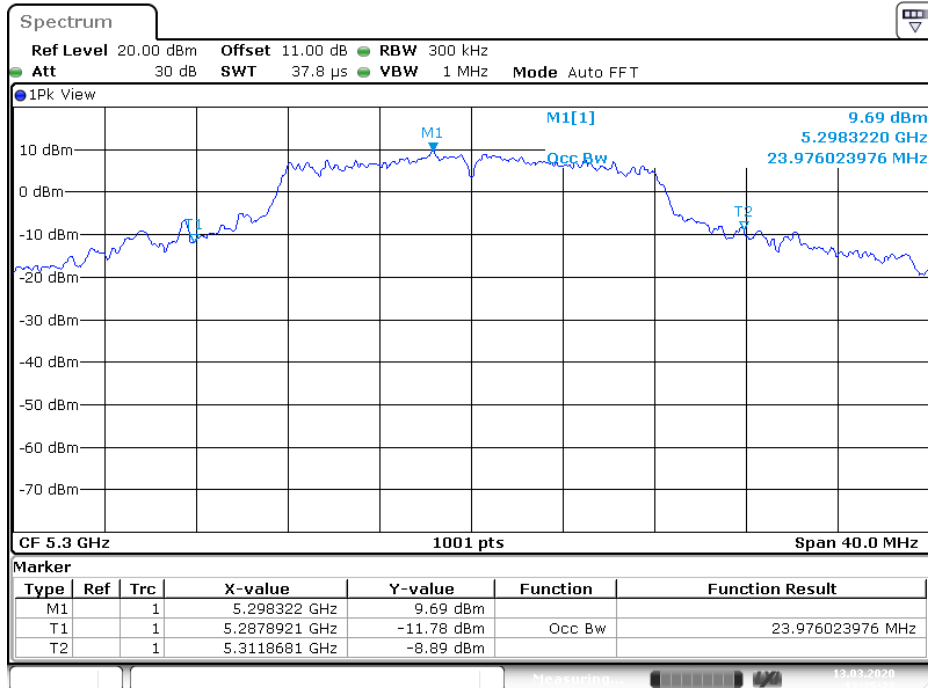
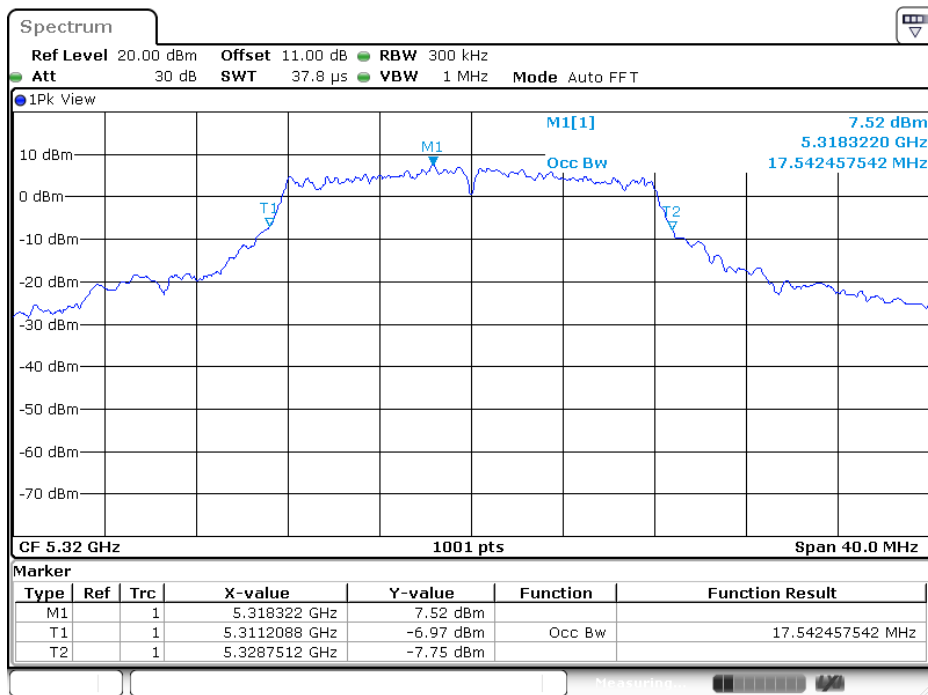
Date: 13.MAR.2020 12:27:57

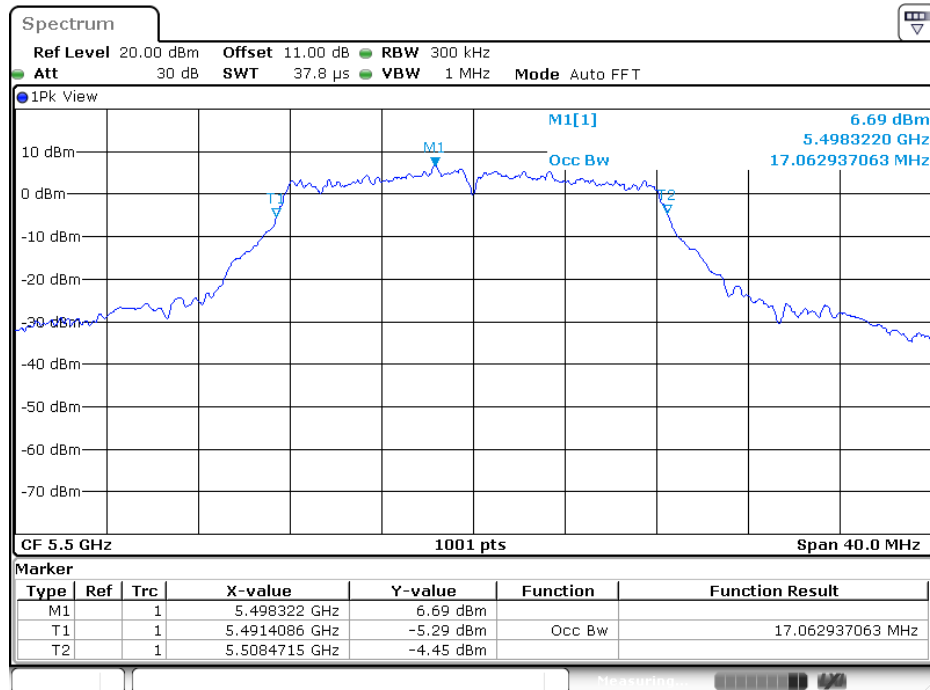
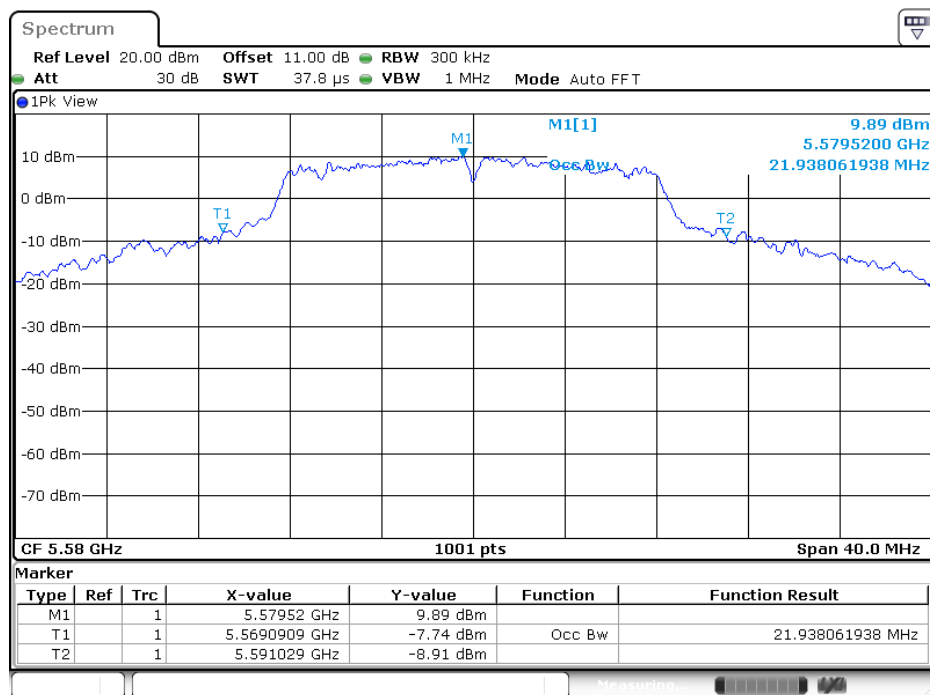
802.11a 5240MHz


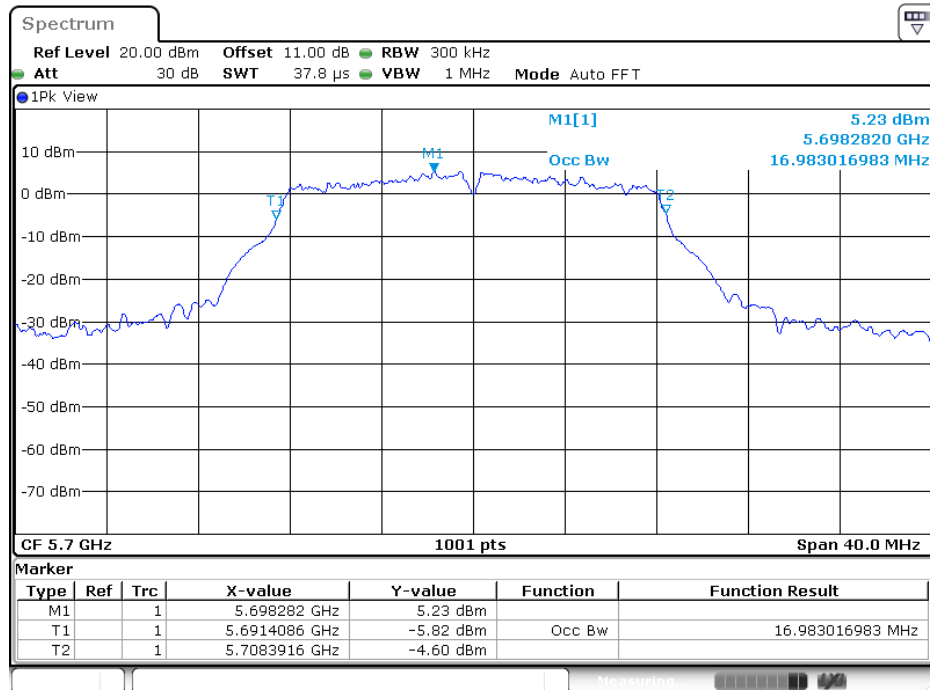
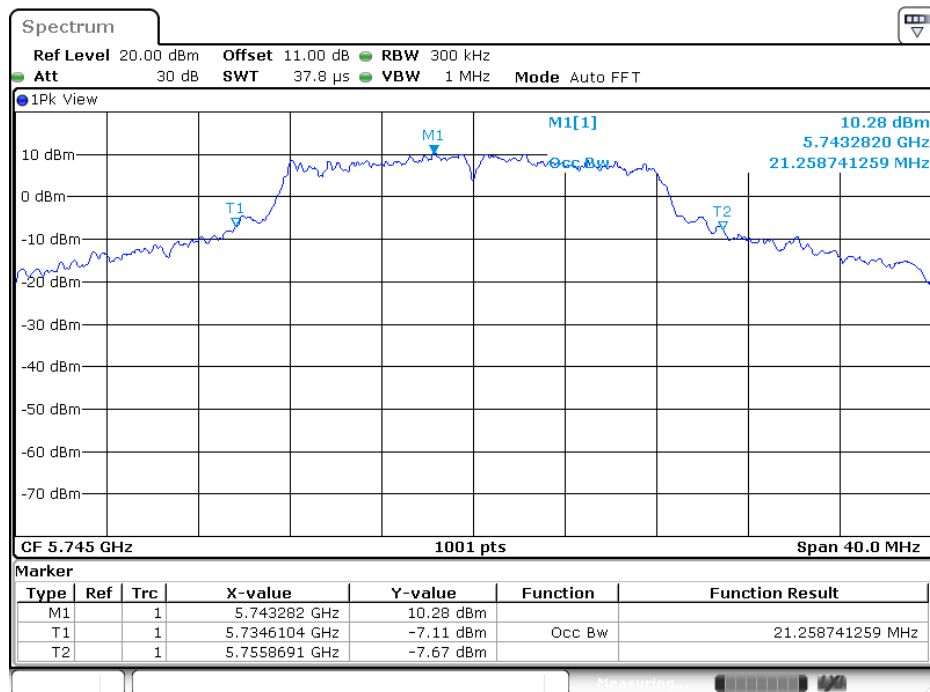
Date: 13.MAR.2020 12:30:38

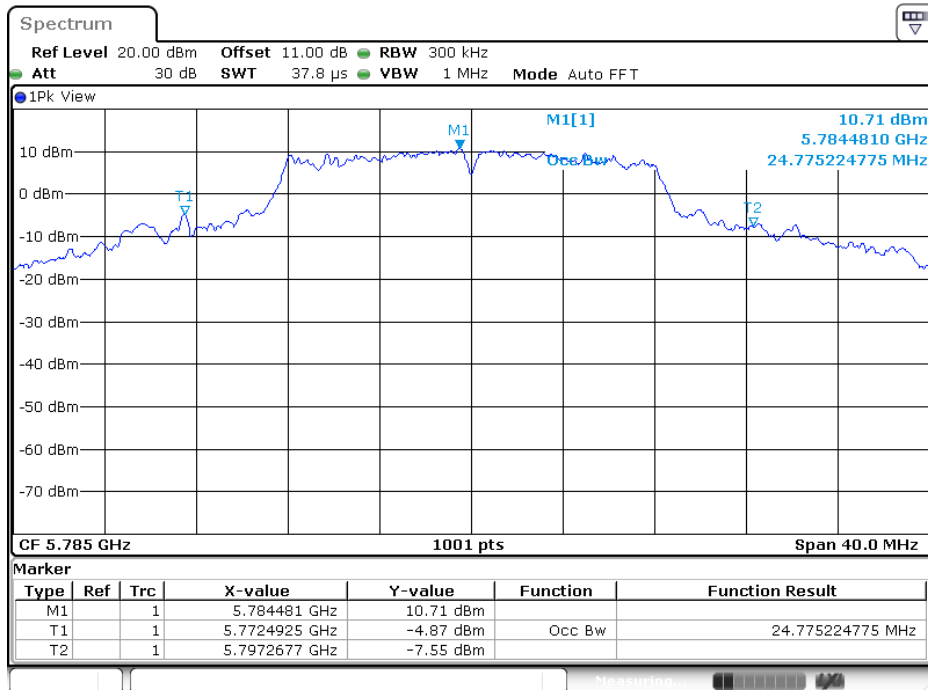
802.11a 5260MHz


Date: 13.MAR.2020 13:20:32

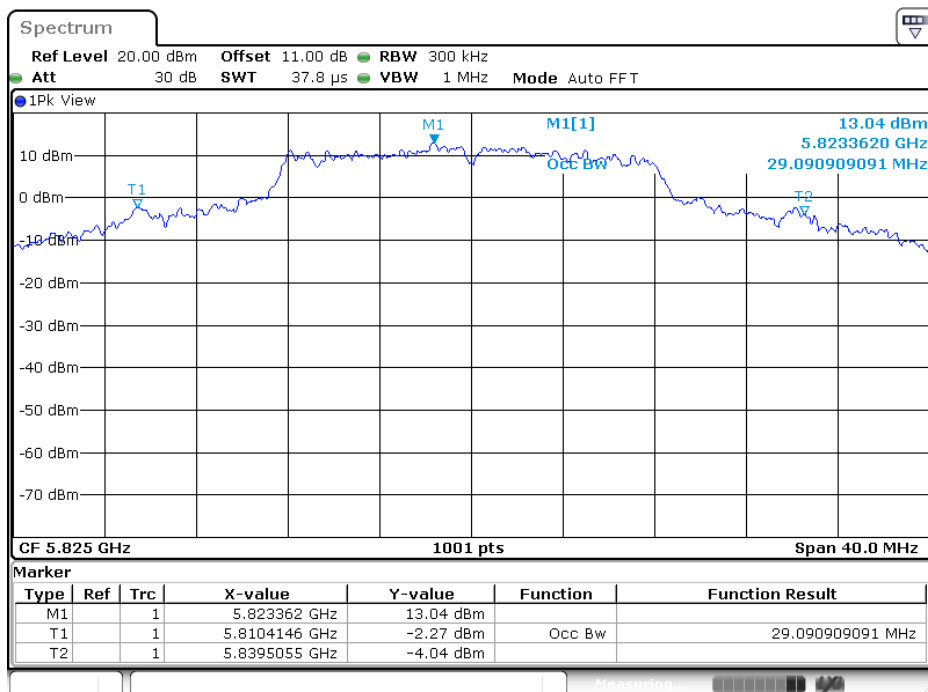
802.11a 5300MHz

802.11a 5320MHz


802.11a 5500MHz

802.11a 5580MHz


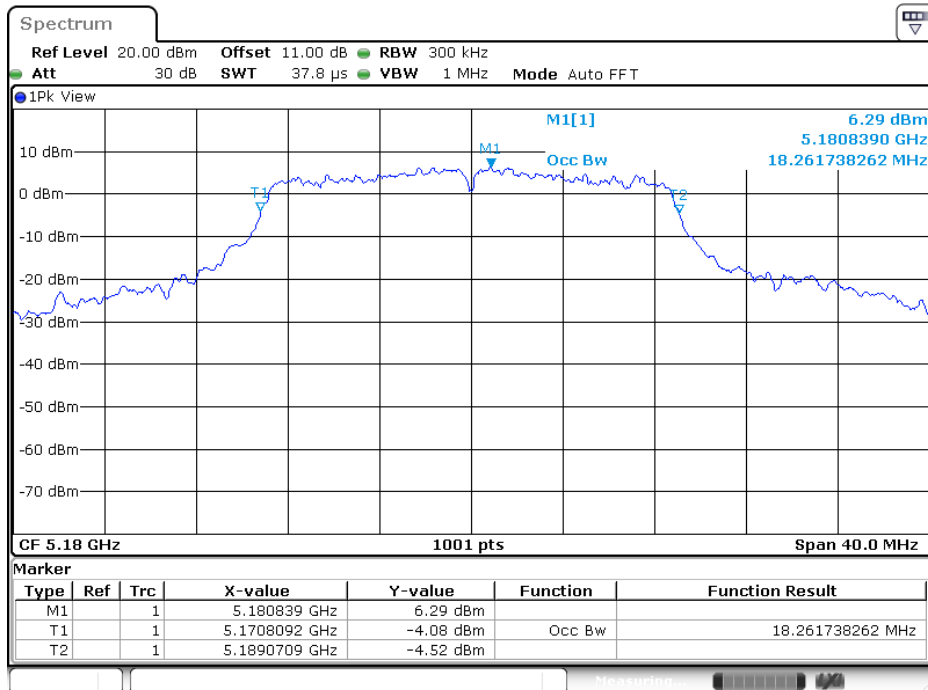
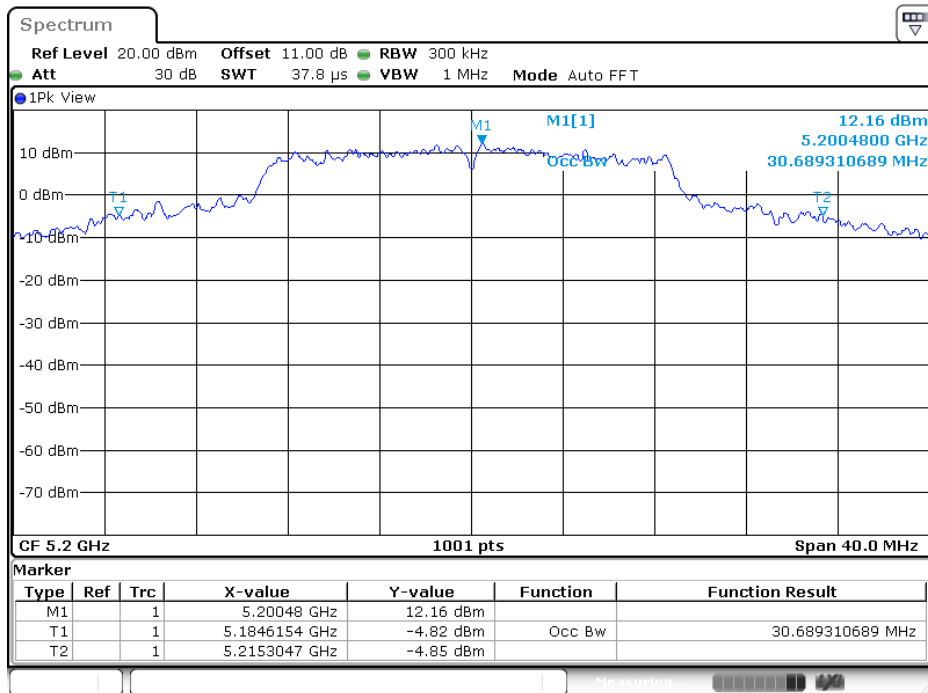
802.11a 5700MHz

802.11a 5745MHz


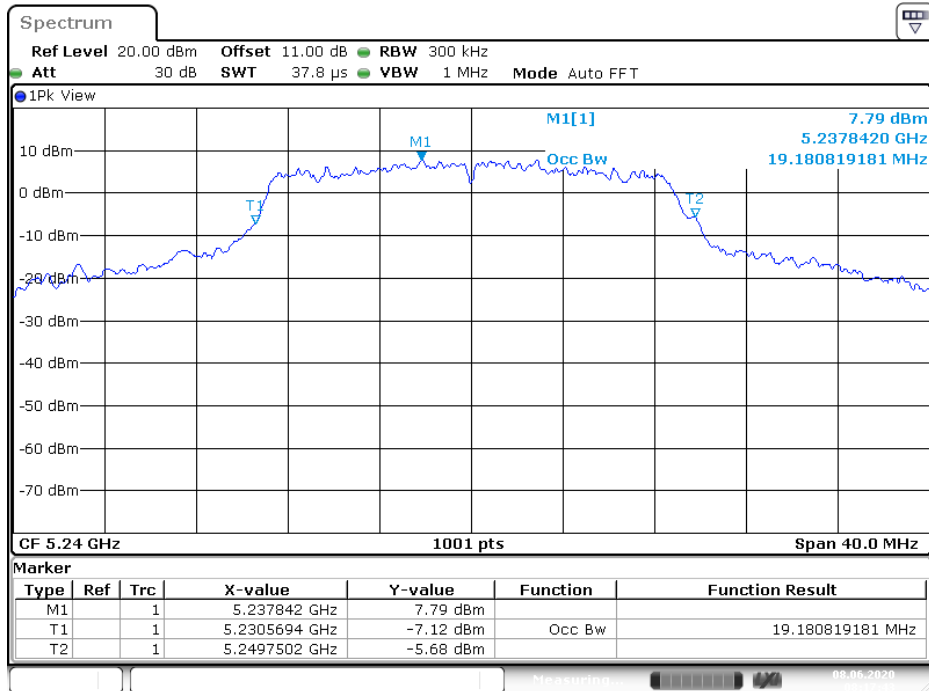
802.11a 5785MHz


Date: 9.MAR.2020 03:01:00

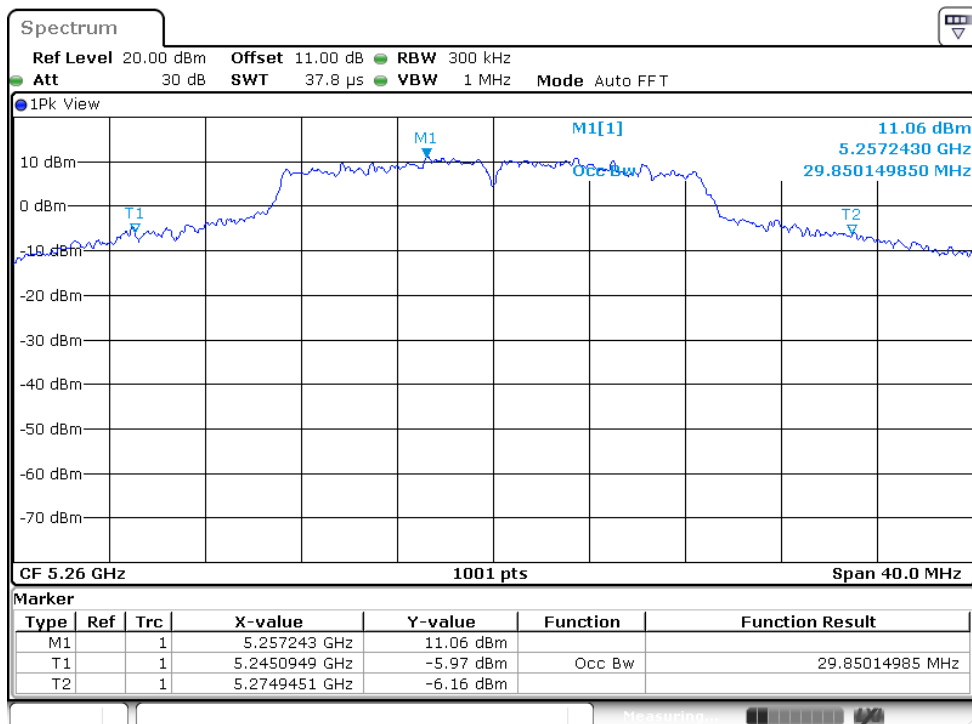
802.11a 5825MHz


Date: 9.MAR.2020 03:04:20

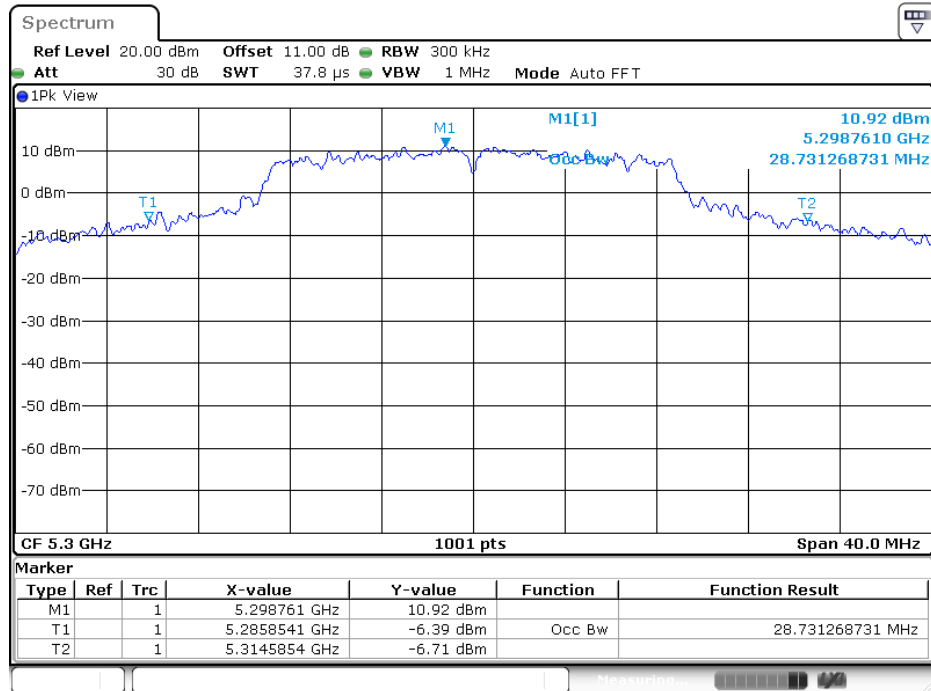
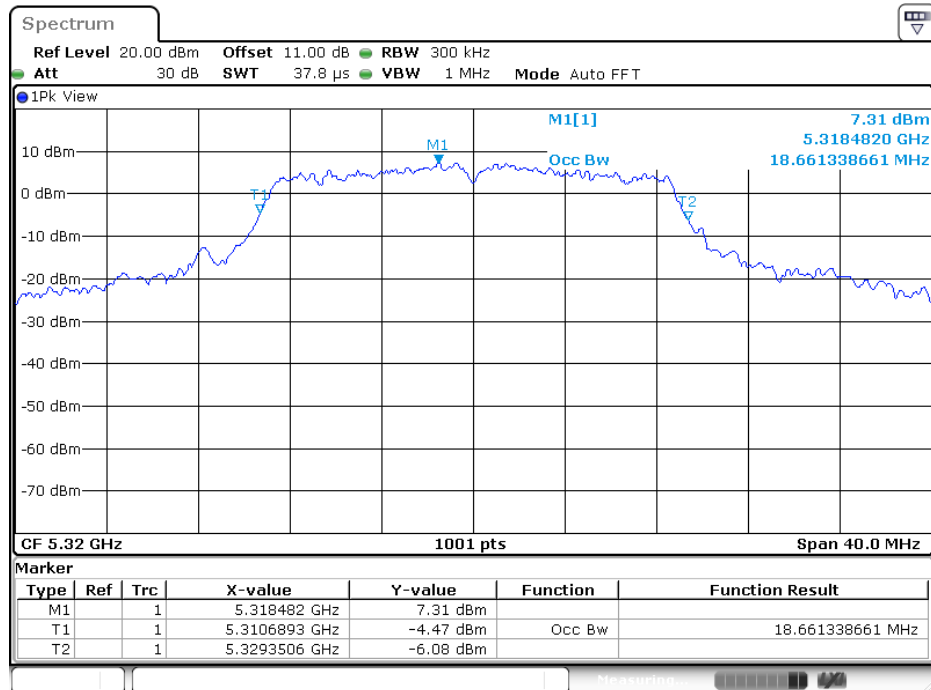
802.11an HT20 5180MHz

802.11an HT20 5200MHz


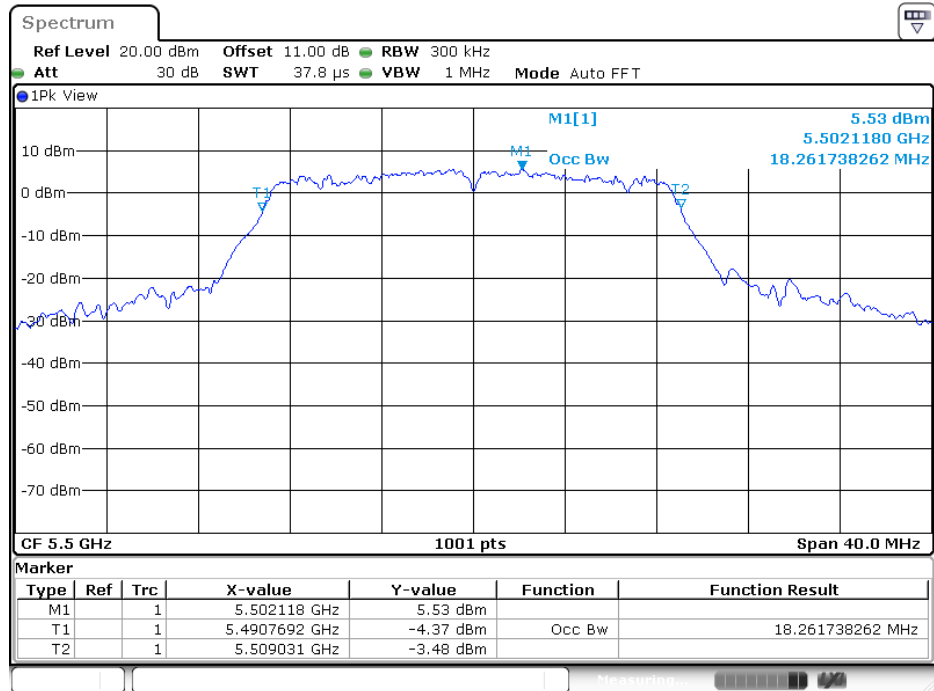
802.11an HT20 5240MHz


Date: 8.JUN.2020 08:17:43

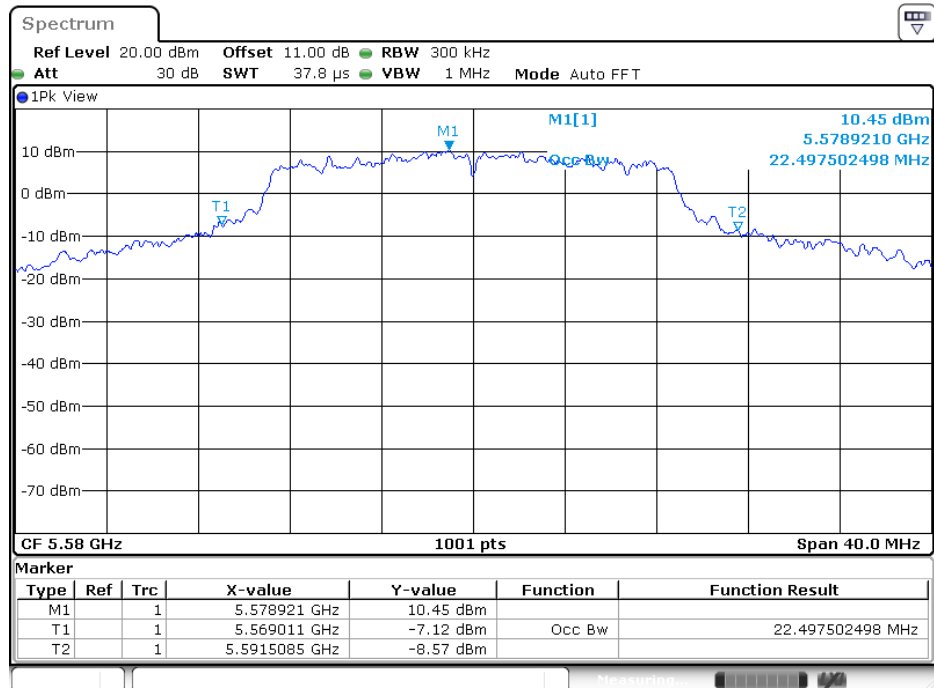
802.11an HT20 5260MHz


Date: 5.MAR.2020 09:49:49

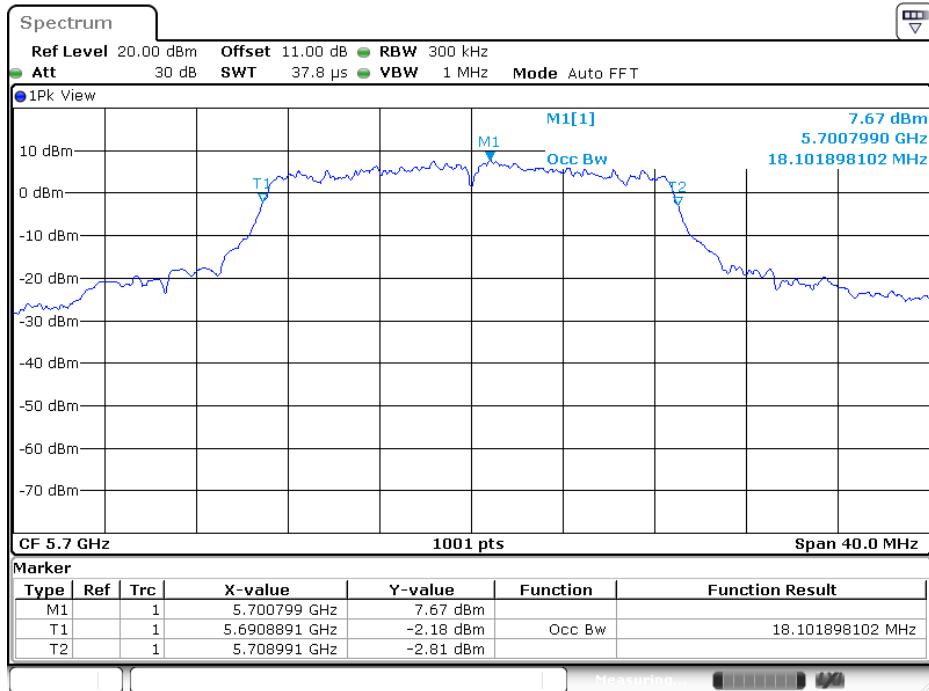
802.11an HT20 5300MHz

802.11an HT20 5320MHz


802.11an HT20 5500MHz


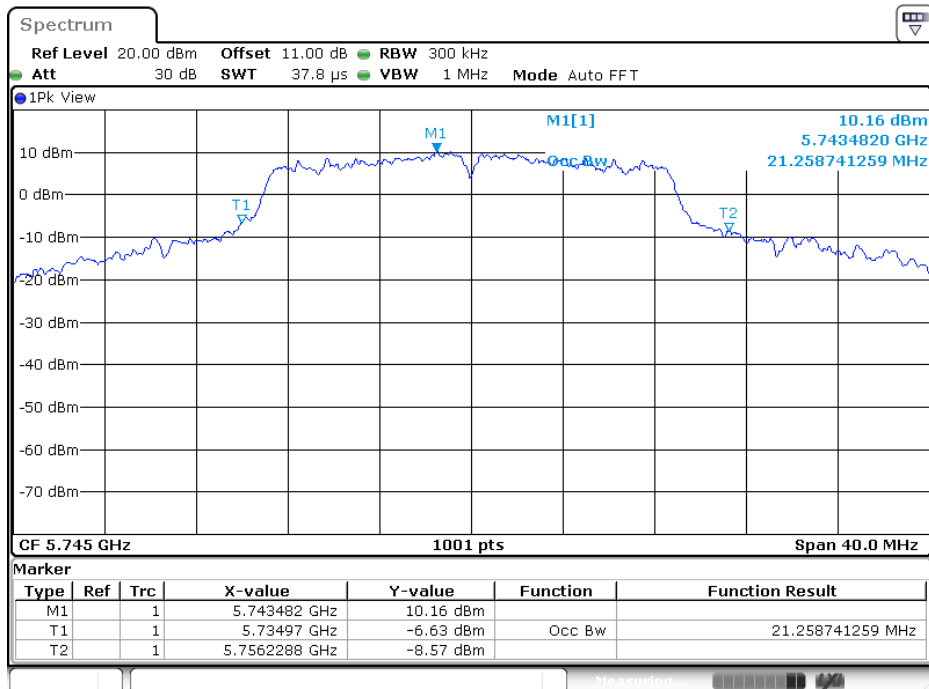
Date: 9.MAR.2020 03:51:33

802.11an HT20 5580MHz


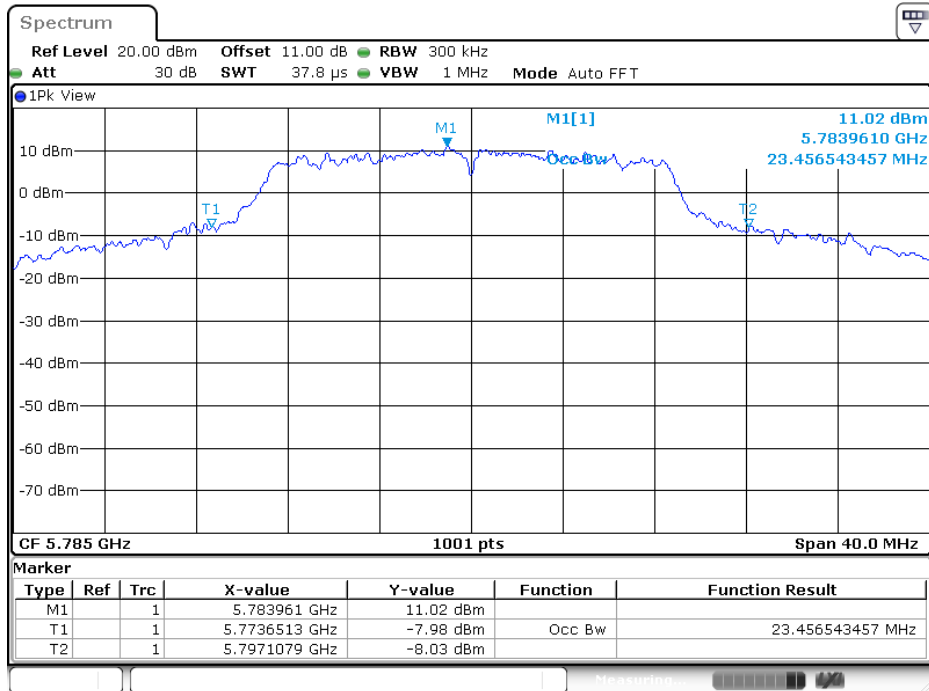
Date: 9.MAR.2020 03:55:16

802.11an HT20 5700MHz


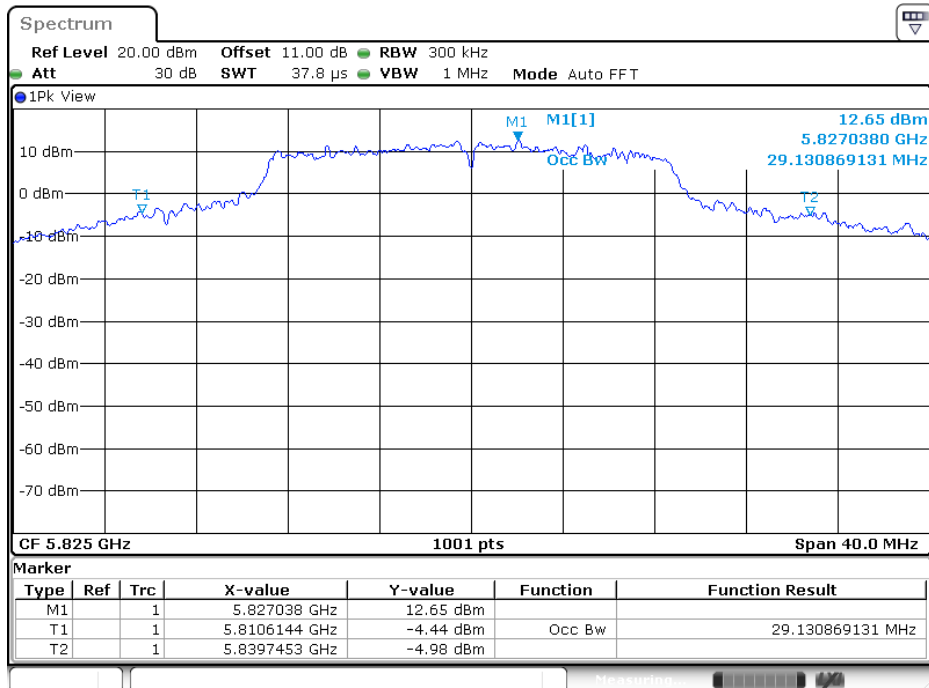
Date: 9.MAR.2020 03:58:13

802.11an HT20 5745MHz


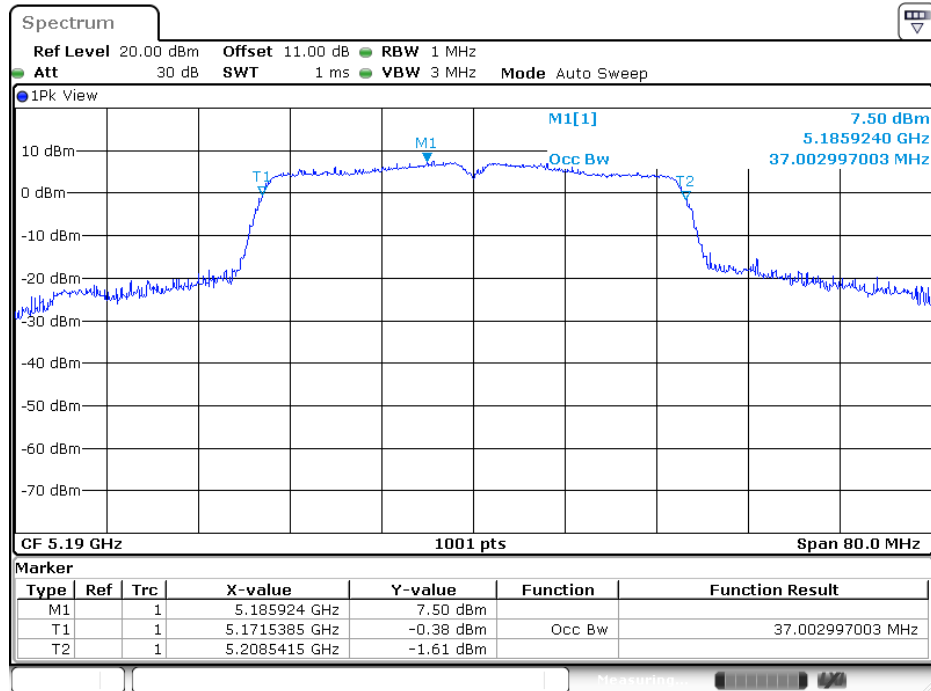
Date: 9.MAR.2020 03:18:06

802.11an HT20 5785MHz


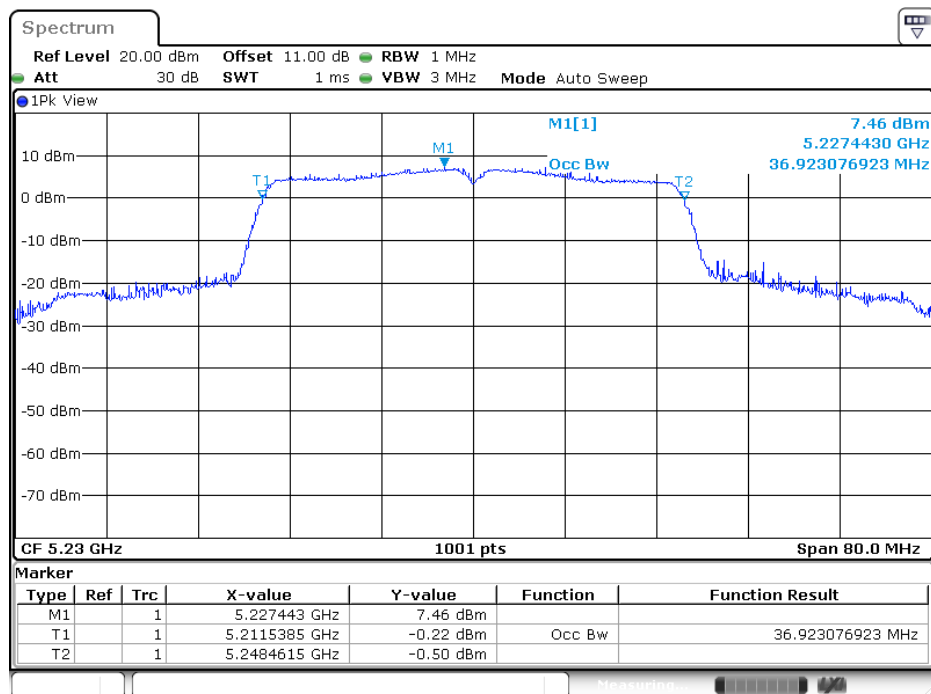
Date: 9.MAR.2020 03:19:40

802.11an HT20 5825MHz


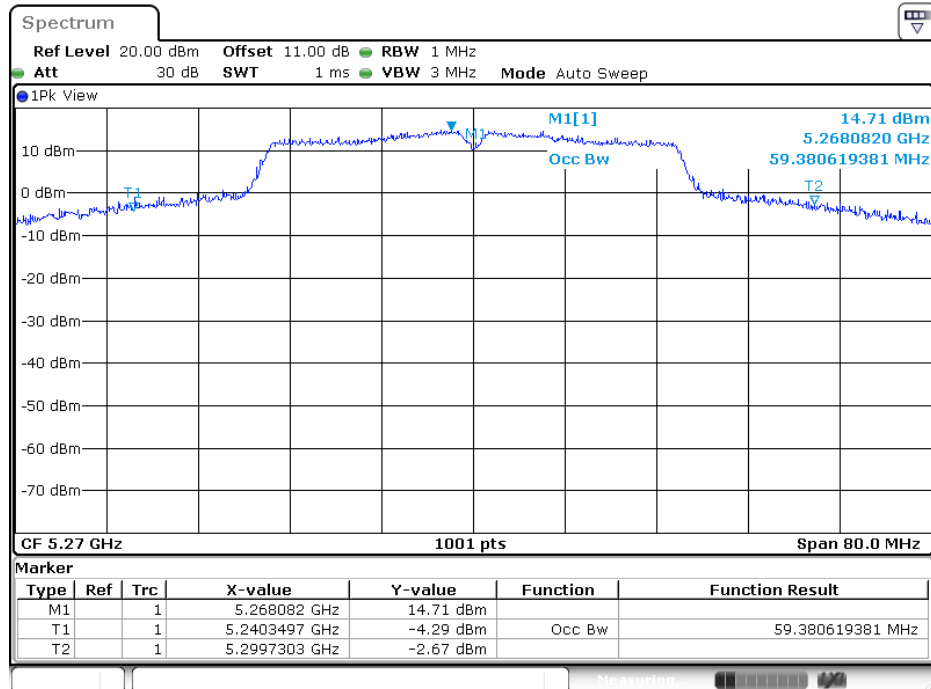
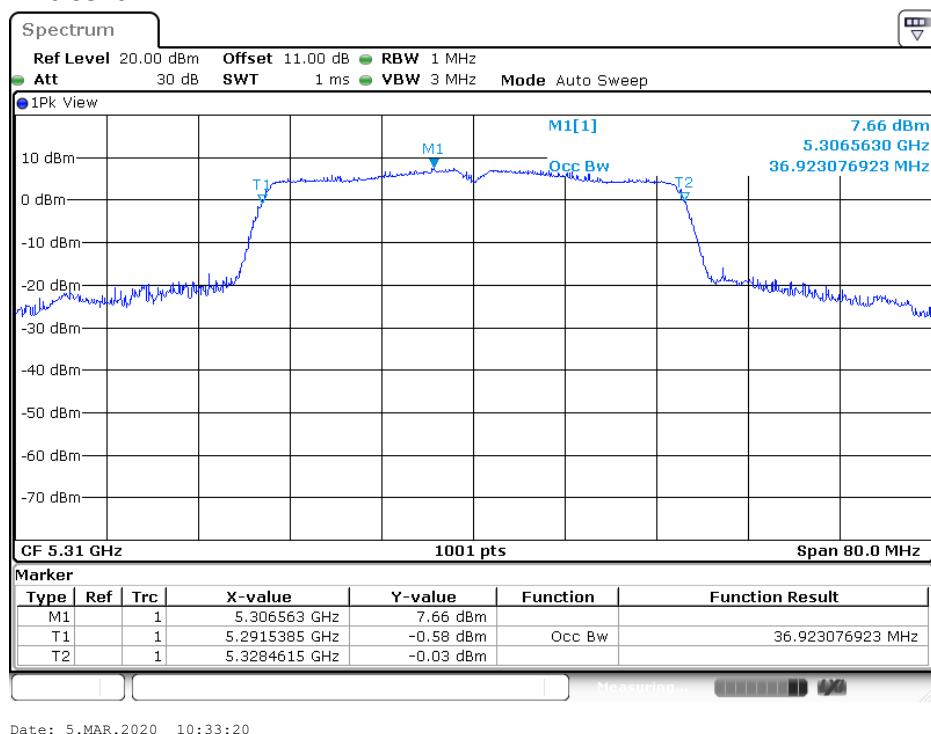
Date: 9.MAR.2020 03:21:25

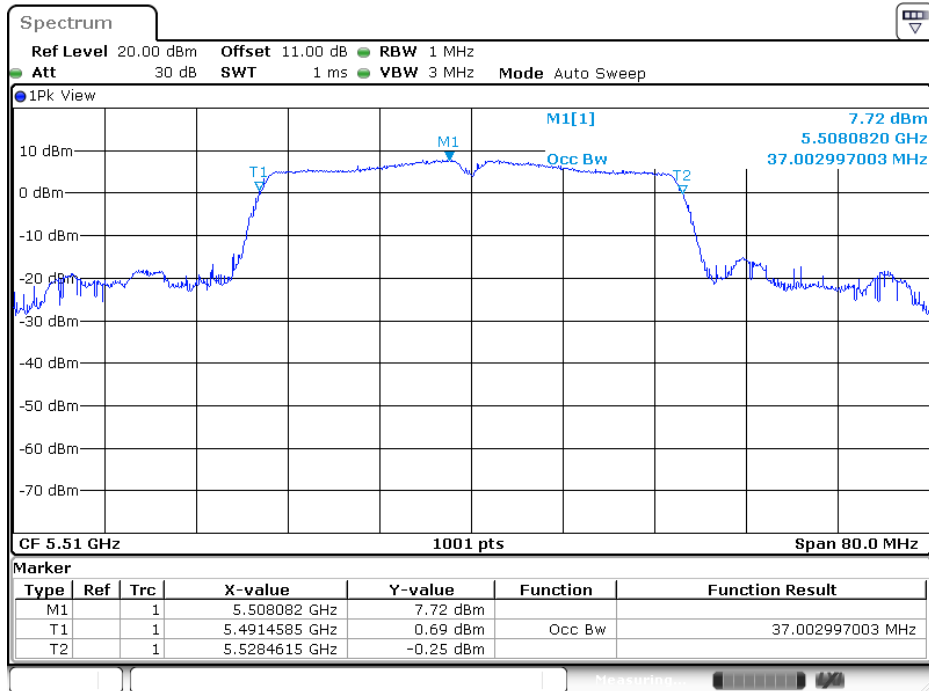
802.11an HT40 5190MHz


Date: 5.MAR.2020 10:22:33

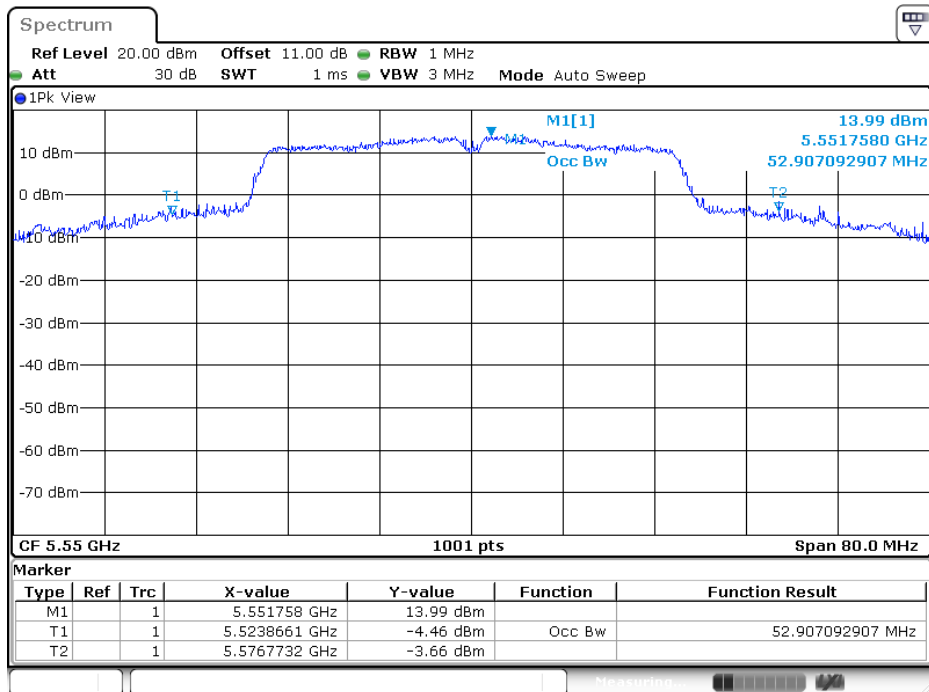
802.11an HT40 5230MHz


Date: 5.MAR.2020 10:26:04

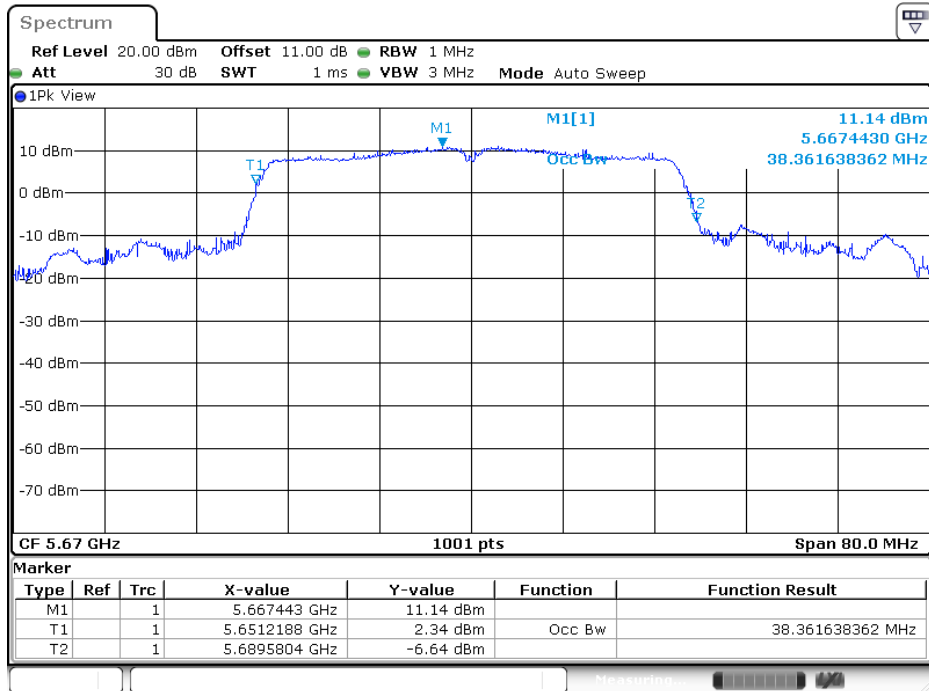
802.11an HT40 5270MHz

802.11an HT40 5310MHz


802.11an HT40 5510MHz


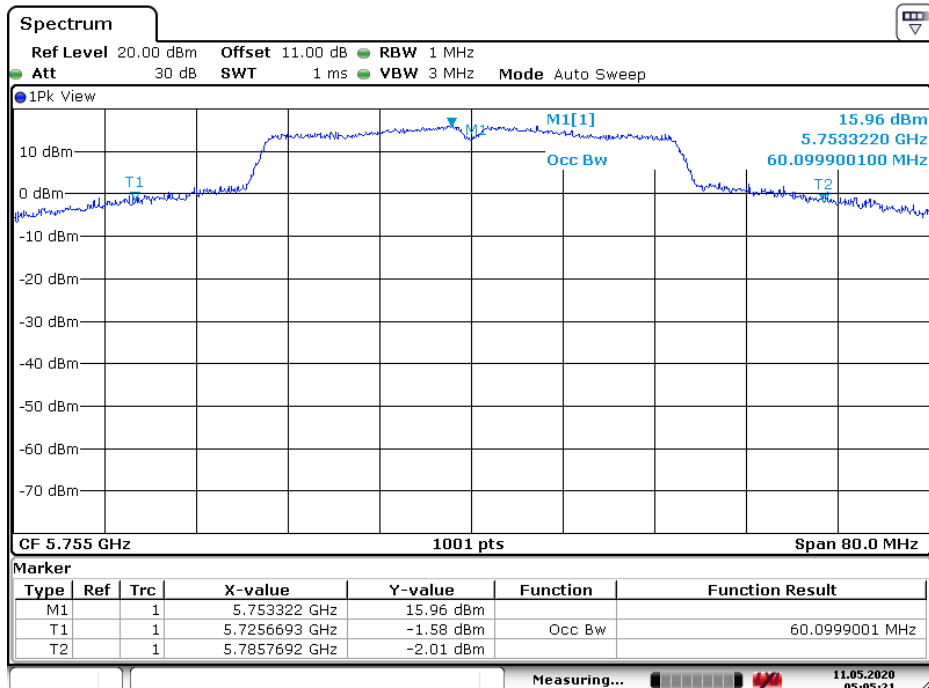
Date: 9.MAR.2020 04:08:20

802.11an HT40 5550MHz


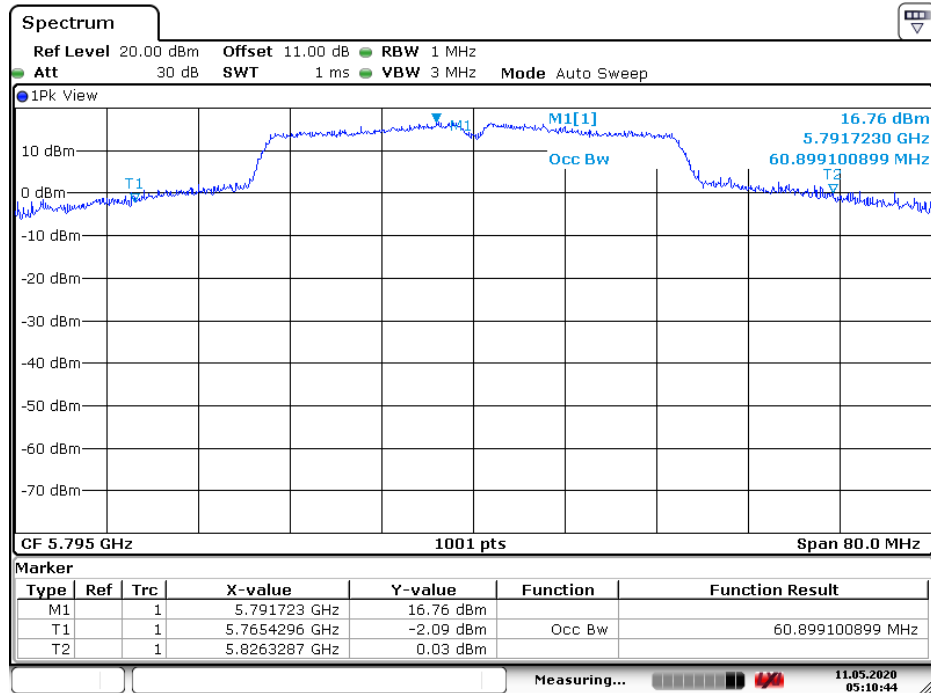
Date: 9.MAR.2020 04:11:05

802.11an HT40 5670MHz


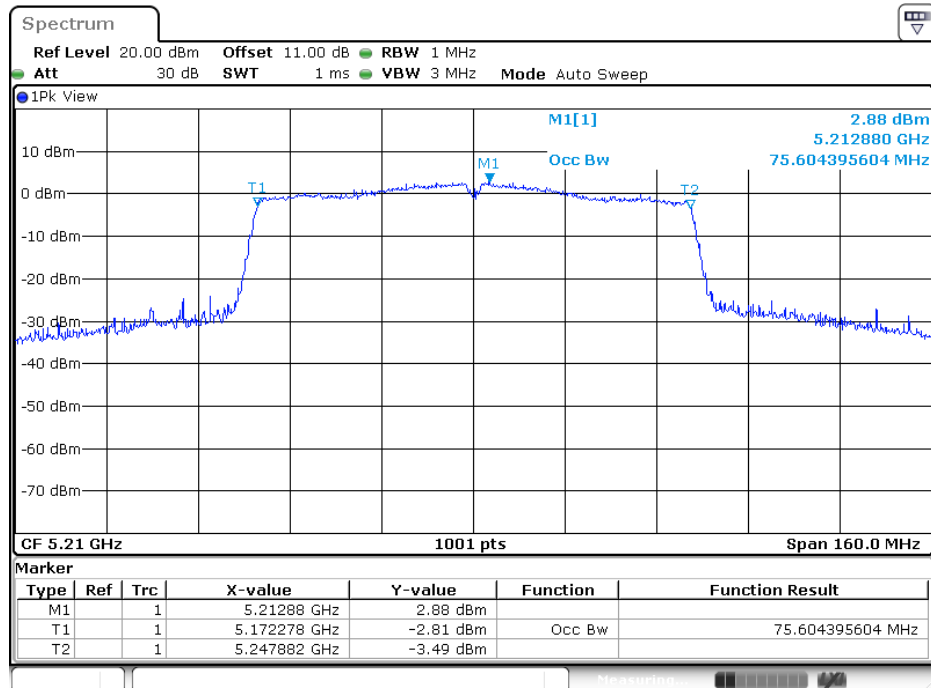
Date: 9.MAR.2020 04:13:40

02.11an HT40 5755MHz

 11.05.2020
 05:05:21

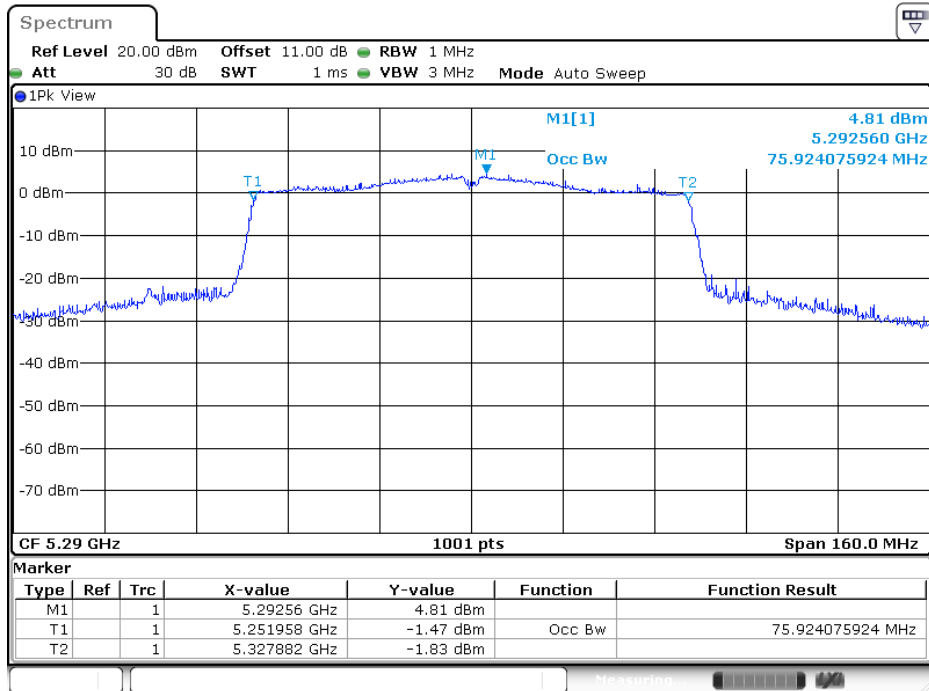
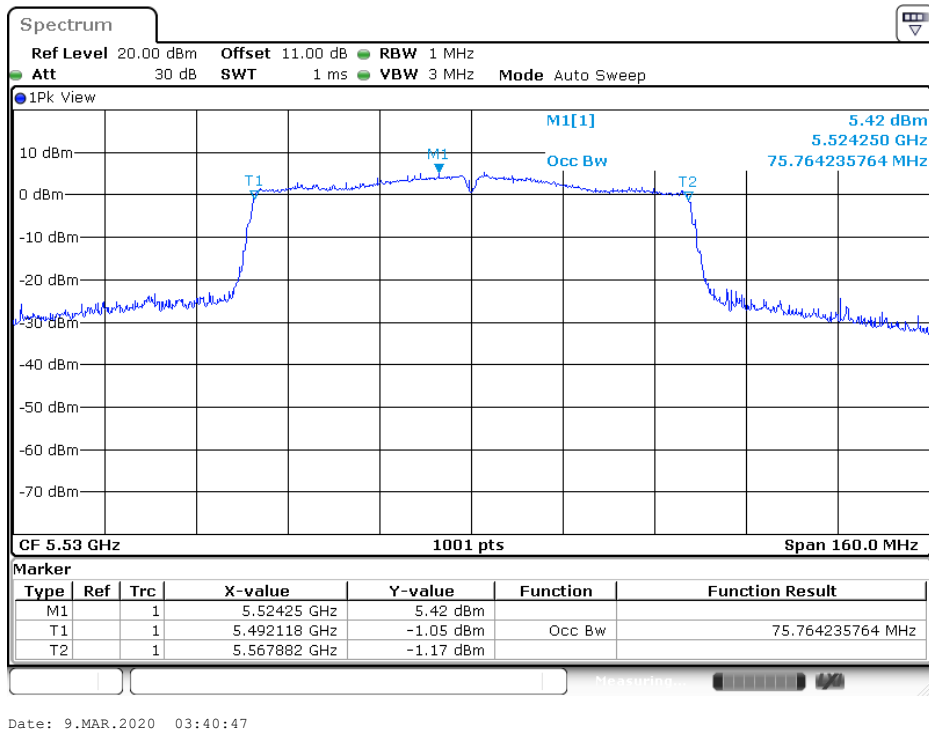
Date: 11.MAY.2020 05:05:21

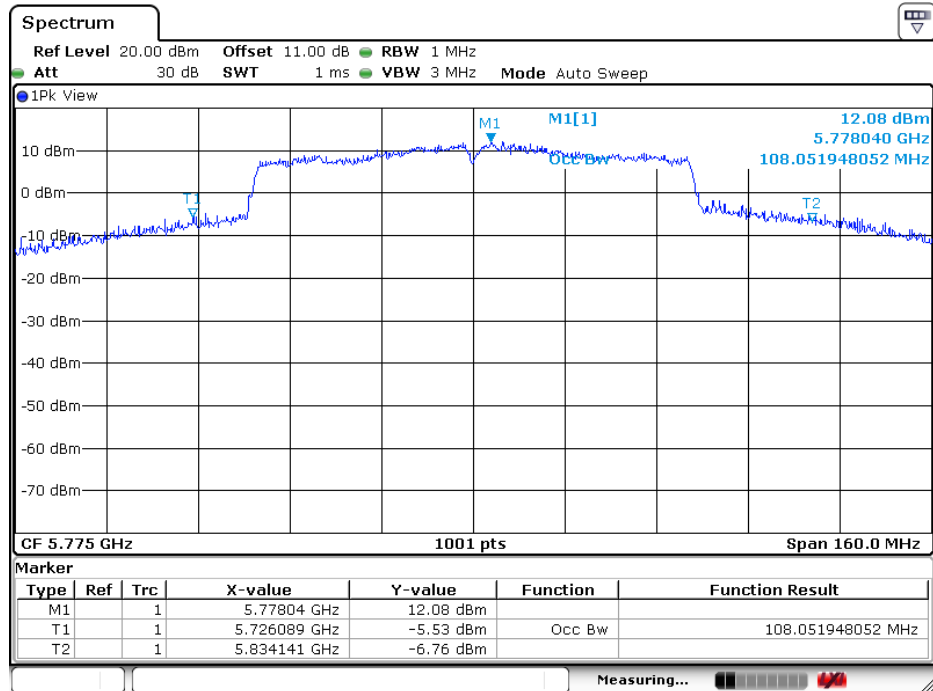
802.11an HT40 5795MHz


Date: 11.MAY.2020 05:10:45

802.11ac VHT80 5210MHz


Date: 5.MAR.2020 10:35:29

802.11ac VHT80 5290MHz

802.11ac VHT80 5530MHz


802.11ac VHT80 5775MHz


Date: 10.JUN.2020 14:50:46

5.1.5 6dB Bandwidth

RESULT:
Passed

Test standard : FCC Part 15.407
 Limit : ISED RSS-247 6.2.4
 Basic standard : ANSI C63.10:2013
 Kind of test site : Conducted room

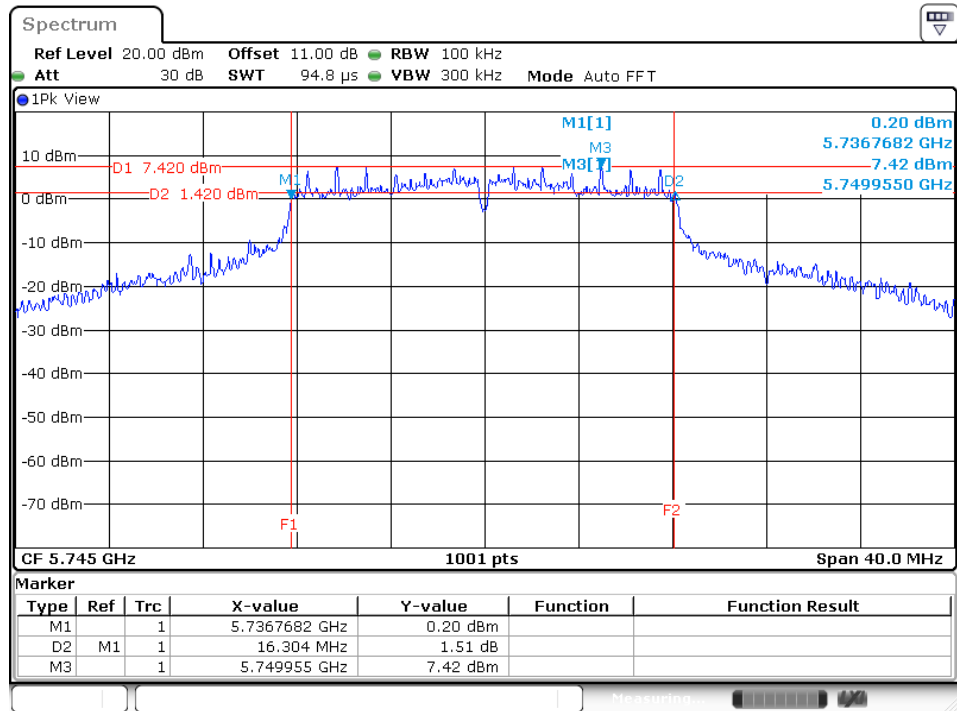
Test setup

Test Channel : FCC refer to the Table 7, Band 4 only
 ISED refer to the Table 8, Band 4 only
 Operation Mode : A

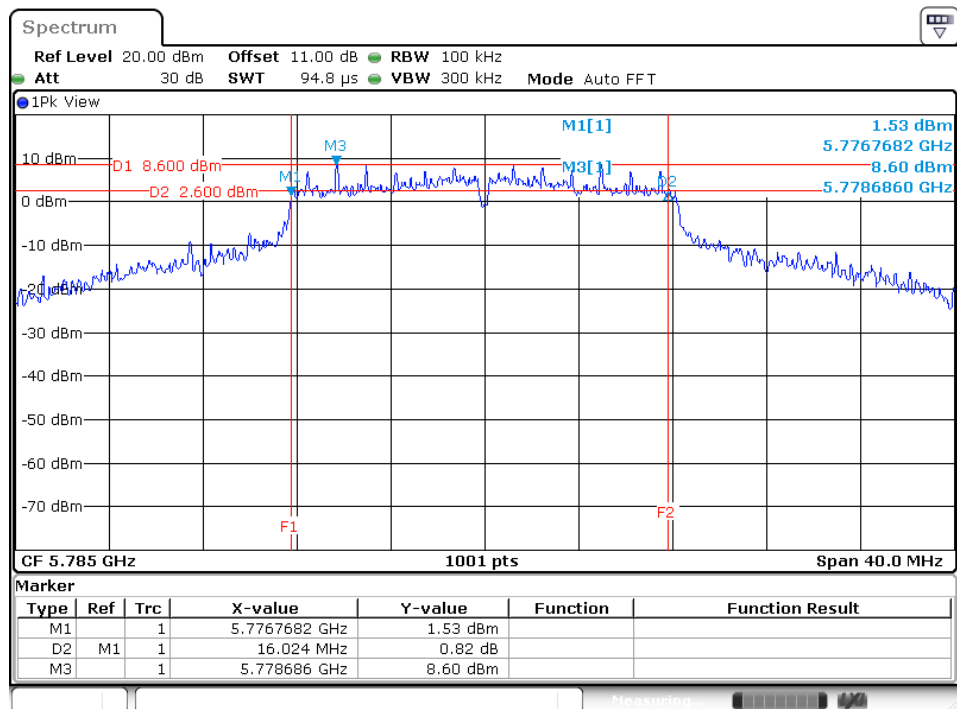
Table 14: Test result of 6dB Bandwidth for FCC / ISED

Mode	Channel Frequency	6dB Bandwidth	6dB Bandwidth Limit	Result
	(MHz)	(MHz)	(kHz)	
802.11a	5745	16.30	>500	Pass
	5785	16.02	>500	Pass
	5825	15.70	>500	Pass
802.11an HT20	5745	16.90	>500	Pass
	5785	17.50	>500	Pass
	5825	16.94	>500	Pass
802.11an HT40	5755	36.28	>500	Pass
	5795	36.28	>500	Pass
802.11ac VHT80	5775	75.12	>500	Pass

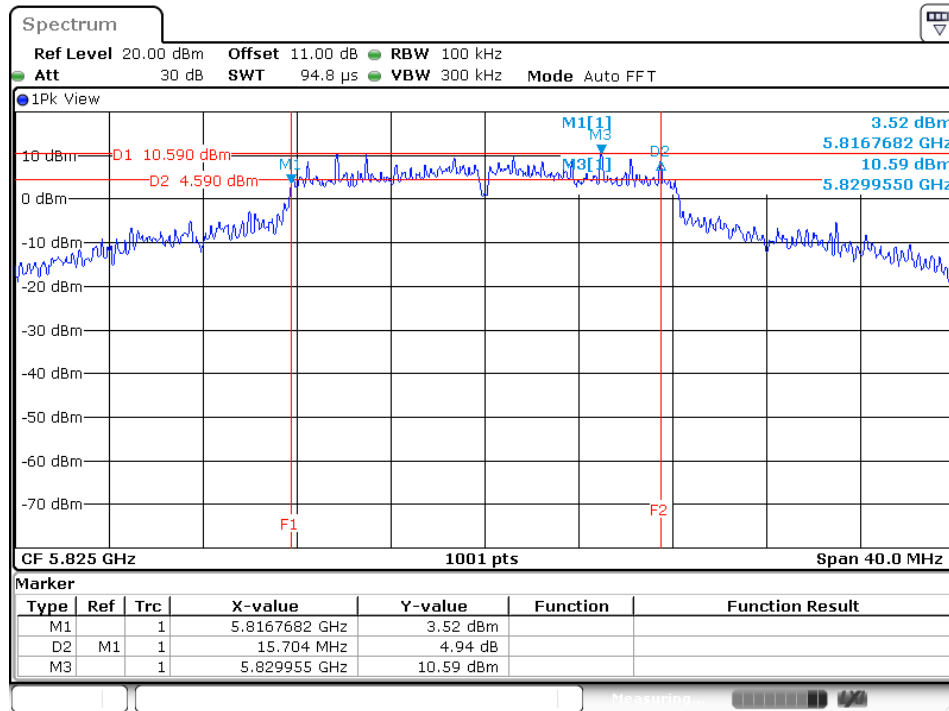
Test Plot of 6dB Bandwidth

802.11a 5745MHz


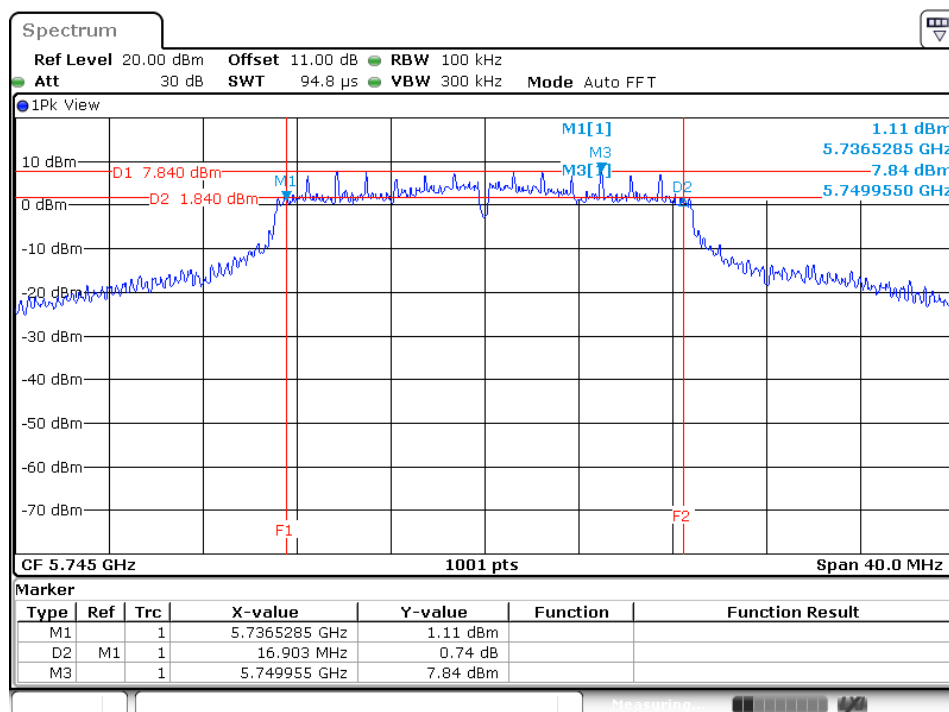
Date: 9.MAR.2020 02:58:54

802.11a 5785MHz


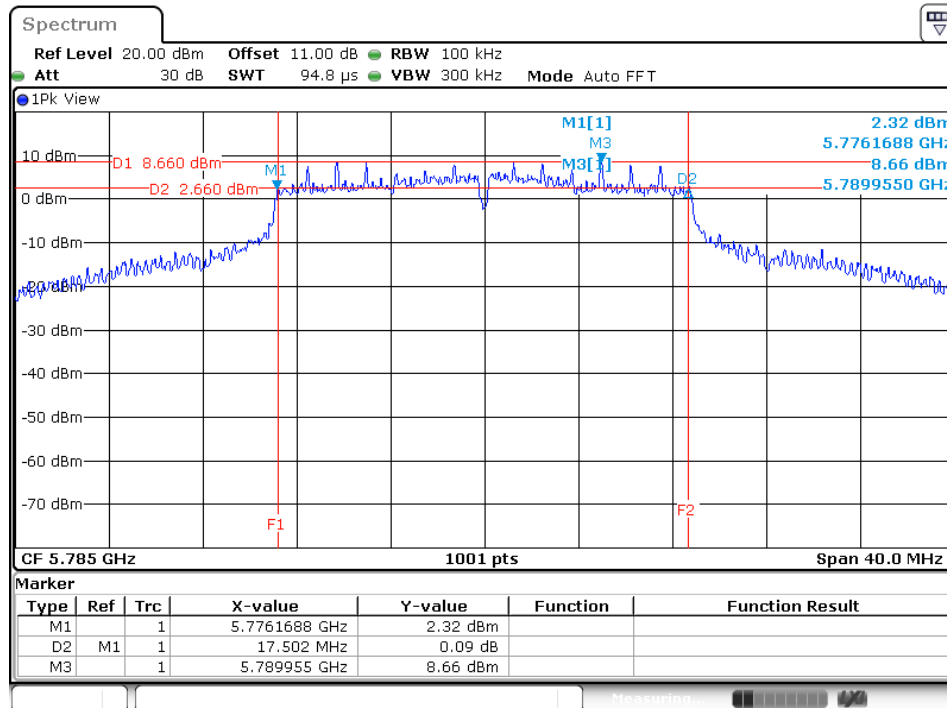
Date: 9.MAR.2020 03:00:43

802.11a 5825MHz


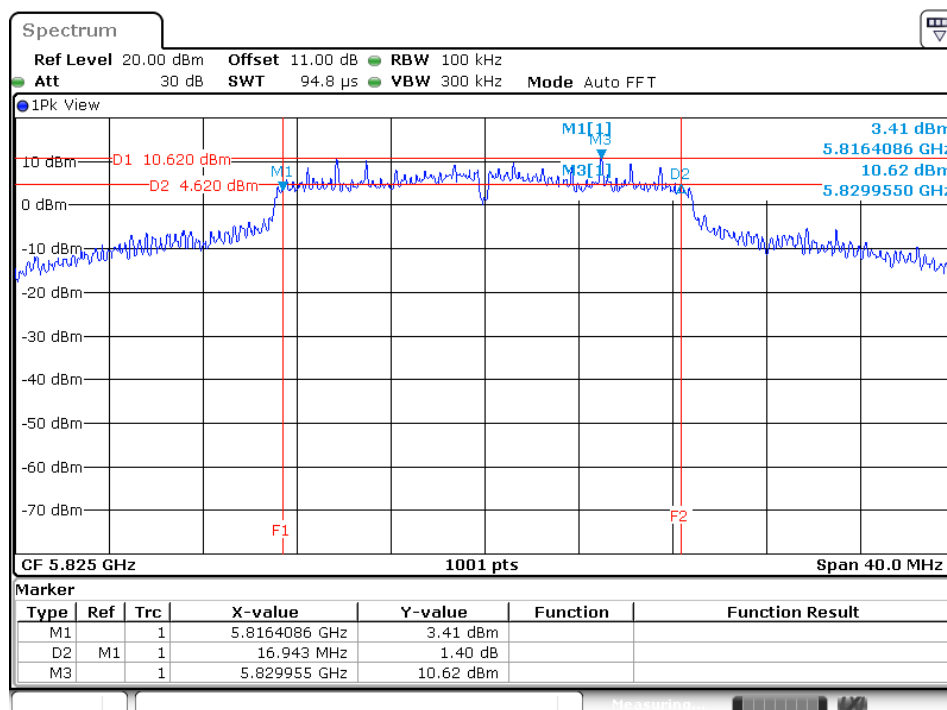
Date: 9.MAR.2020 03:02:31

802.11an HT20 5745MHz


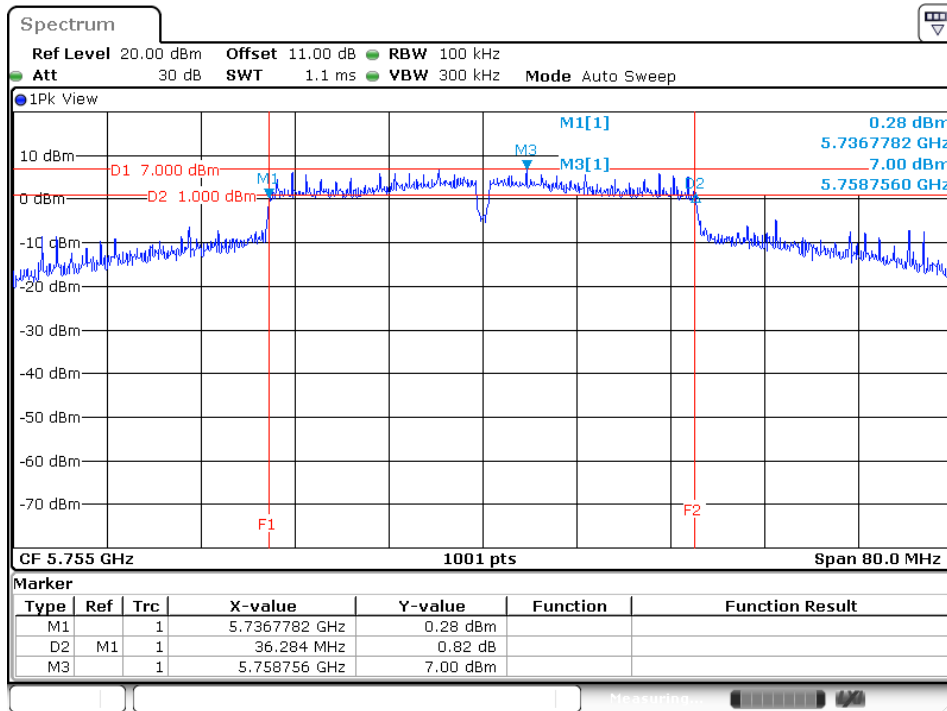
Date: 9.MAR.2020 03:17:44

802.11an HT20 5785MHz


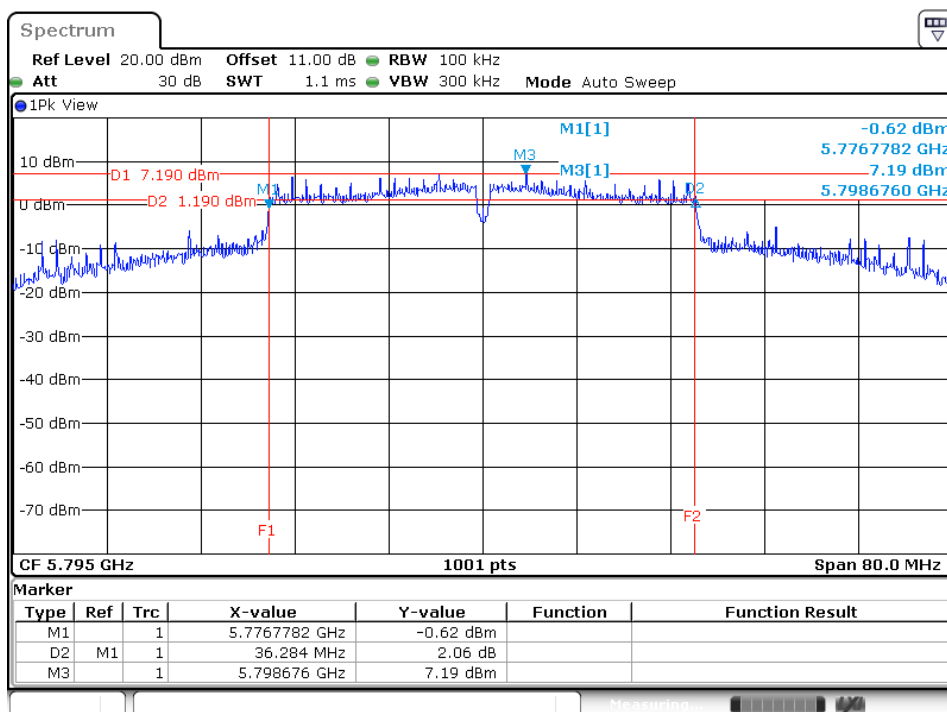
Date: 9.MAR.2020 03:19:24

802.11an HT20 5825MHz


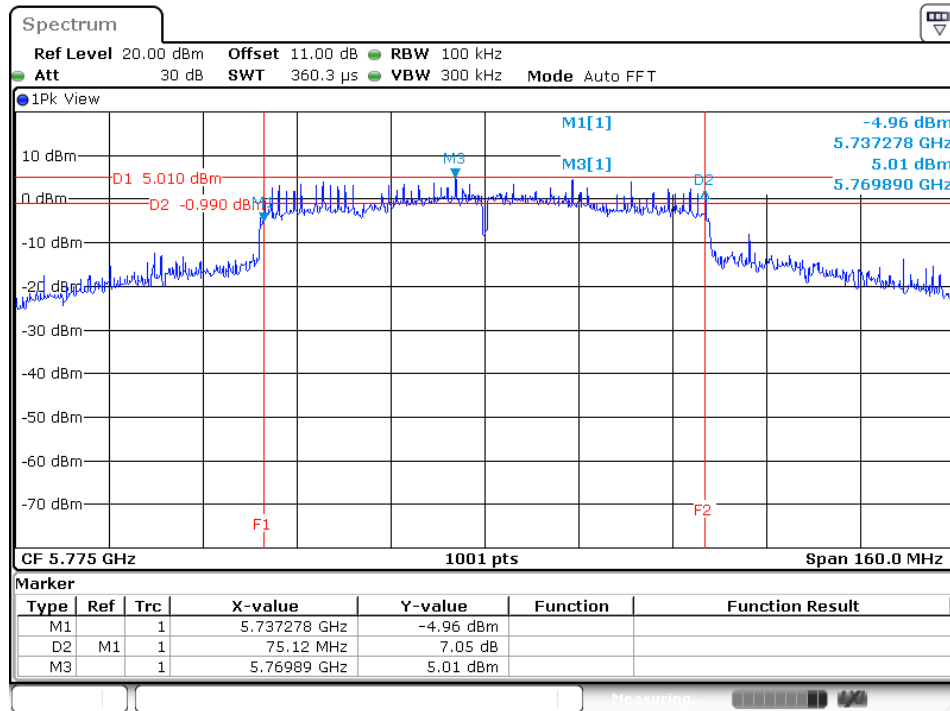
Date: 9.MAR.2020 03:21:01

802.11an HT40 5755MHz


Date: 9.MAR.2020 03:34:00

802.11an HT40 5795MHz


Date: 9.MAR.2020 03:36:20

802.11ac VHT80 5775MHz


Date: 9.MAR.2020 03:47:15

5.1.6 Power Density

RESULT:**Passed**

Test standard : FCC Part 15.407(a)(1),(3), ISSED RSS-247 6.2
Basic standard : ANSI C63.10:2013, KDB789033 D02
Kind of test site : Shielded room

Test setup

Test Channel : FCC refer to the table 7
ISED refer to the table 8
Operation Mode : A

FCC Limit :

For client devices in the 5.15-5.25 GHz band, the maximum conducted power spectral density shall not exceed 11 dBm in any 1 megahertz band.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

For the band 5.725-5.85 GHz, the maximum conducted power spectral density shall not exceed 30 dBm in any 500-kHz band.

ISED Limit :

For client devices in the 5.15-5.25 GHz band, The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

For the 5.25-5.35 GHz band, the maximum conducted power spectral density shall not exceed 11 dBm in any 1 megahertz band.

For the 5.47-5.60 GHz and 5.65-5.725 GHz bands, the maximum conducted power spectral density shall not exceed 11 dBm in any 1 megahertz band.

For the band 5.725-5.85 GHz, the maximum conducted power spectral density shall not exceed 30 dBm in any 500-kHz band.

Table 15: Test result of Power Density for FCC

Mode	Channel Frequency (MHz)	Conducted Power Density			Power Density Limit
		Ant 1 (dBm/MHz)	Total (dBm/MHz)	Total (dBm/500kHz)	B1-B3 (dBm/MHz) B4 (dBm/500kHz)
802.11a	5180	3.85	3.85	-	11.00
	5200	9.58	9.58	-	11.00
	5240	8.49	8.49	-	11.00
	5260	8.61	8.61	-	11.00
	5300	8.70	8.70	-	11.00
	5320	4.98	4.98	-	11.00
	5500	3.43	3.43	-	11.00
	5580	7.81	7.81	-	11.00
	5700	3.29	3.29	-	11.00
	5745	5.84	-	5.84	30.00
	5785	6.06	-	6.06	30.00
	5825	7.58	-	7.58	30.00
802.11an HT20	5180	4.16	4.16	-	11.00
	5200	8.76	8.76	-	11.00
	5240	8.75	8.75	-	11.00
	5260	8.34	8.34	-	11.00
	5300	8.40	8.40	-	11.00
	5320	4.60	4.60	-	11.00
	5500	3.81	3.81	-	11.00
	5580	7.56	7.56	-	11.00
	5700	5.29	5.29	-	11.00
	5745	4.95	-	4.95	30.00
	5785	5.40	-	5.40	30.00
	5825	7.18	-	7.18	30.00
802.11an HT40	5190	-1.19	-1.19	-	11.00
	5230	-1.62	-1.62	-	11.00
	5270	5.11	5.11	-	11.00
	5310	-1.52	-1.52	-	11.00
	5510	-0.55	-0.55	-	11.00
	5550	5.24	5.24	-	11.00
	5670	2.10	2.10	-	11.00
	5755	3.05	-	3.05	30.00
	5795	3.50	-	3.50	30.00
802.11ac VHT80	5210	-6.58	-6.58	-	11.00
	5290	-4.71	-4.71	-	11.00
	5530	-4.52	-4.52	-	11.00
	5610	-0.25	-0.25	-	11.00
	5775	-0.03	-	-0.03	30.00

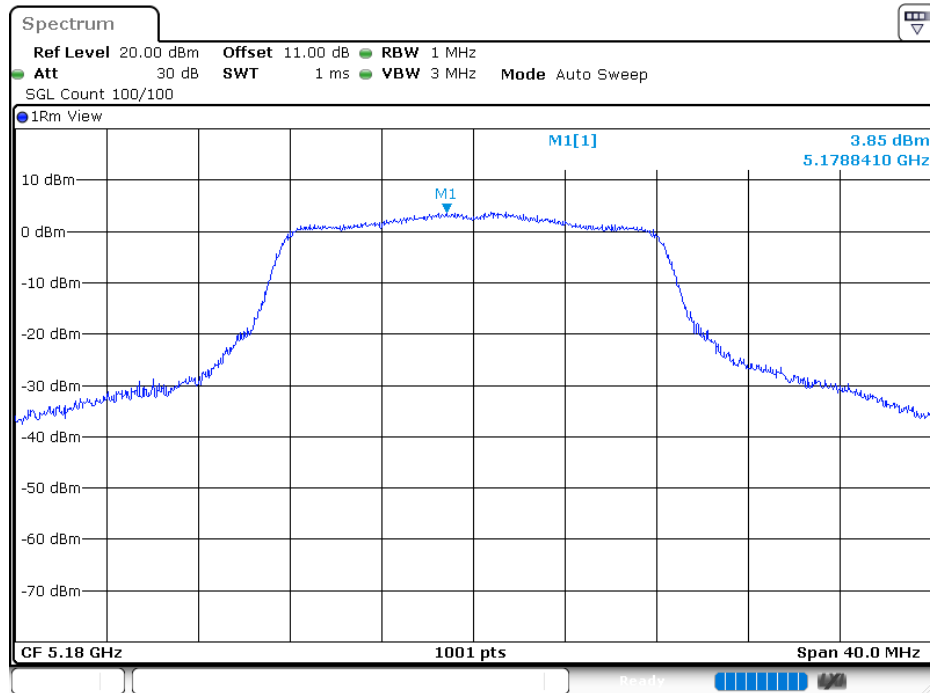
Table 16: Test result of Power Density for ISED

Mode	Channel Frequency (MHz)	Conducted Power Density			EIRP Power Density Limit
		Ant 1 (dBm/MHz)	Total (dBm/MHz)	Total EIRP (dBm/kHz)	(dBm/MHz)
802.11a	5180	3.85	3.85	8.35	10.00
	5200	5.21	5.21	9.71	10.00
	5240	5.33	5.33	9.83	10.00
802.11an HT20	5180	4.16	4.16	8.76	10.00
	5200	5.11	5.11	9.71	10.00
	5240	5.37	5.37	9.97	10.00
802.11an HT40	5190	-1.47	-1.47	3.31	10.00
	5230	-1.29	-1.29	2.88	10.00
802.11ac VHT80	5210	-6.58	-6.58	-2.04	10.00

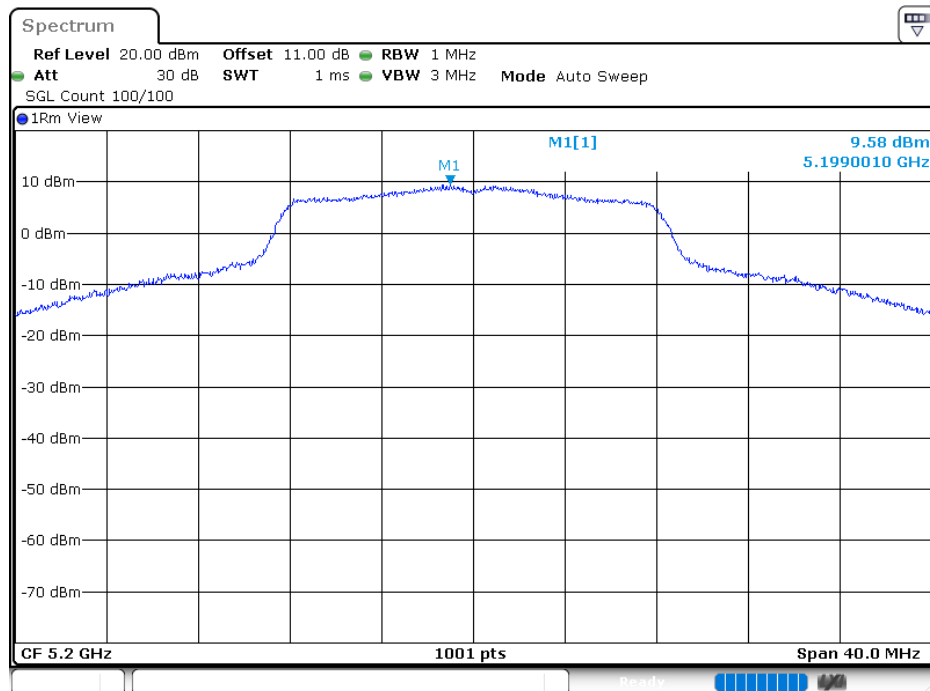
Mode	Channel Frequency (MHz)	Conducted Power Density			Power Density Limit
		Ant 1 (dBm/MHz)	Total (dBm/MHz)	Total (dBm/500kHz)	B2-B3 (dBm/MHz) B4 (dBm/500kHz)
802.11a	5260	7.09	7.09	-	11.00
	5300	6.83	6.83	-	11.00
	5320	4.98	4.98	-	11.00
	5500	3.43	3.43	-	11.00
	5580	7.81	7.81	-	11.00
	5700	3.29	3.29	-	11.00
	5745	5.48	-	5.48	30.00
	5785	6.06	-	6.06	30.00
	5825	7.58	-	7.58	30.00
802.11an HT20	5260	8.62	8.62	-	11.00
	5300	7.95	7.95	-	11.00
	5320	5.18	5.18	-	11.00
	5500	3.83	3.83	-	11.00
	5580	7.78	7.78	-	11.00
	5700	5.07	5.07	-	11.00
	5745	5.30	-	5.30	30.00
	5785	5.18	-	5.18	30.00
	5825	6.97	-	6.97	30.00

Mode	Channel Frequency (MHz)	Conducted Power Density			Power Density Limit
		Ant 1 (dBm/MHz)	Total (dBm/MHz)	Total (dBm/500kHz)	B2-B3 (dBm/MHz) B4 (dBm/500kHz)
802.11an HT40	5270	5.30	5.30	-	11.00
	5310	-1.32	-1.32	-	11.00
	5510	-0.78	-0.78	-	11.00
	5550	4.95	4.95	-	11.00
	5670	2.19	2.19	-	11.00
	5755	3.63	-	3.63	30.00
	5795	3.71	-	3.71	30.00
802.11ac VHT80	5290	-4.71	-4.71	-	11.00
	5530	-4.52	-4.52	-	11.00
	5775	-0.03	-	-0.03	30.00

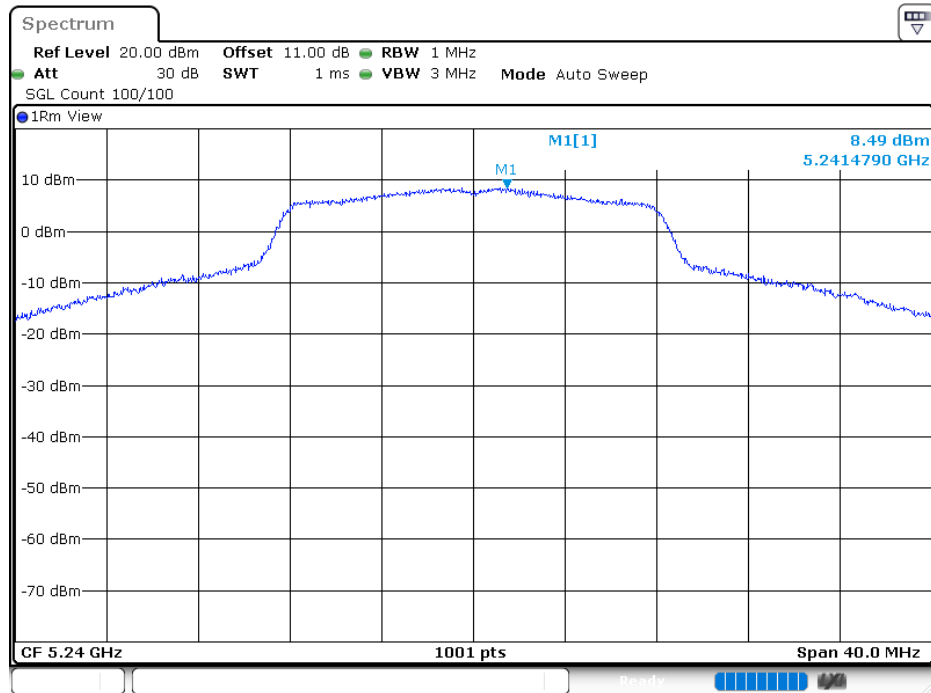
Test Plot of Power Density for FCC

802.11a 5180MHz


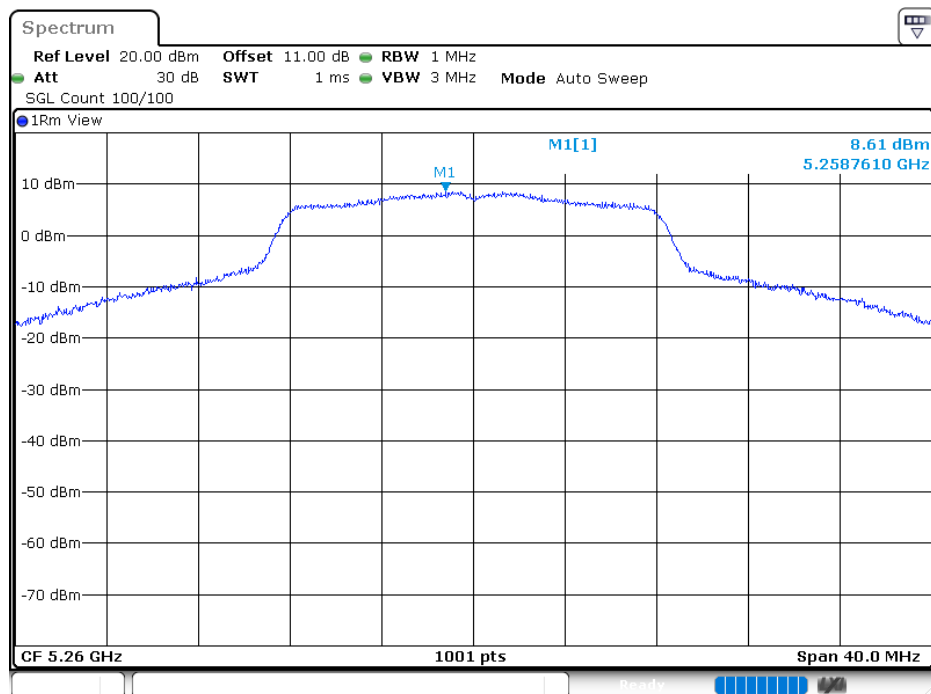
Date: 5.MAR.2020 08:24:25

802.11a 5200MHz


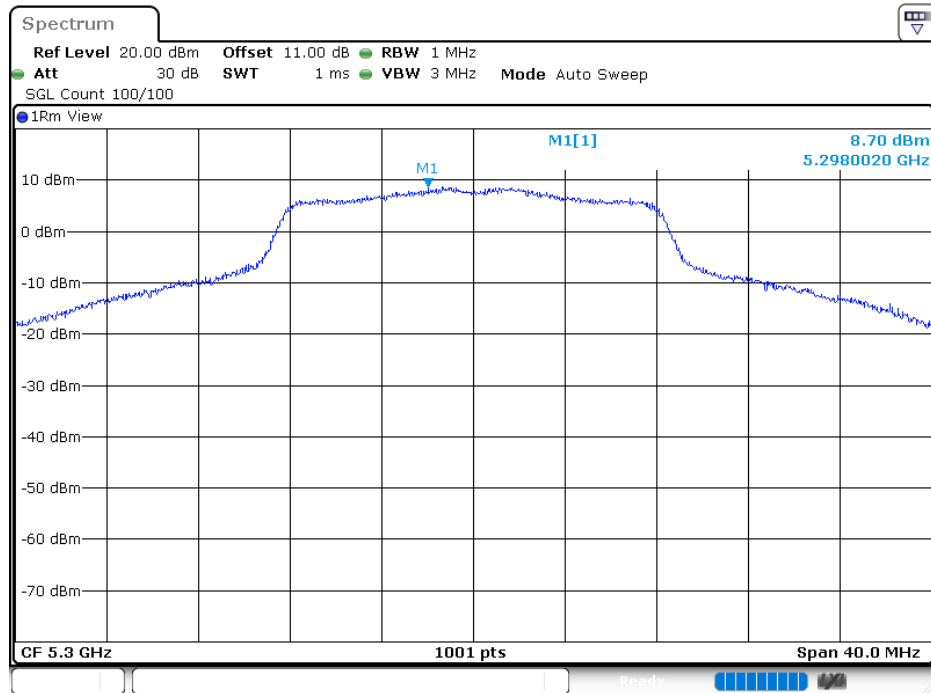
Date: 5.MAR.2020 08:28:44

802.11a 5240MHz


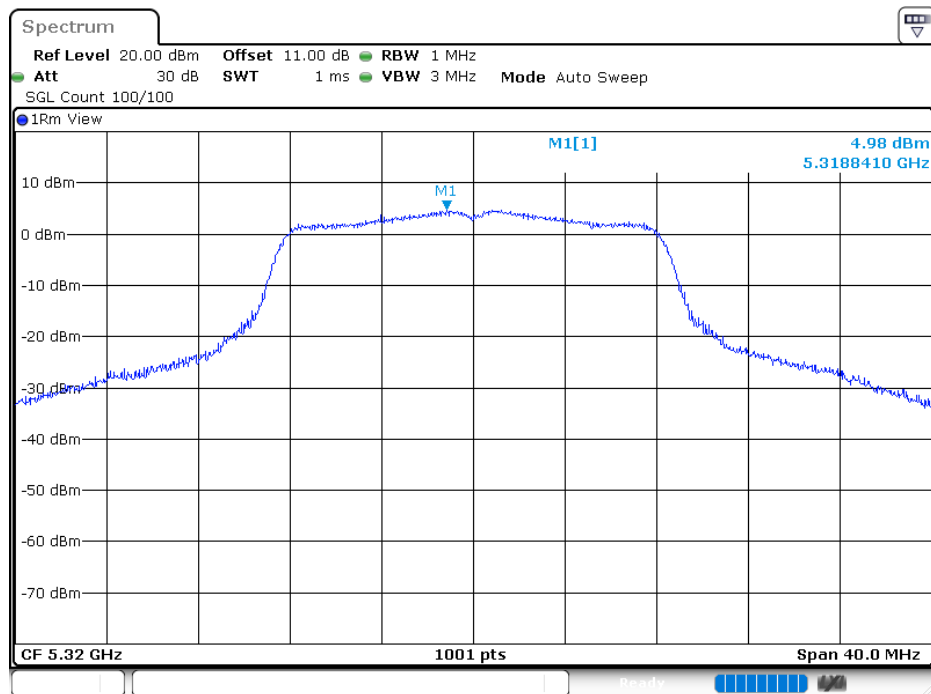
Date: 5.MAR.2020 08:33:45

802.11a 5260MHz


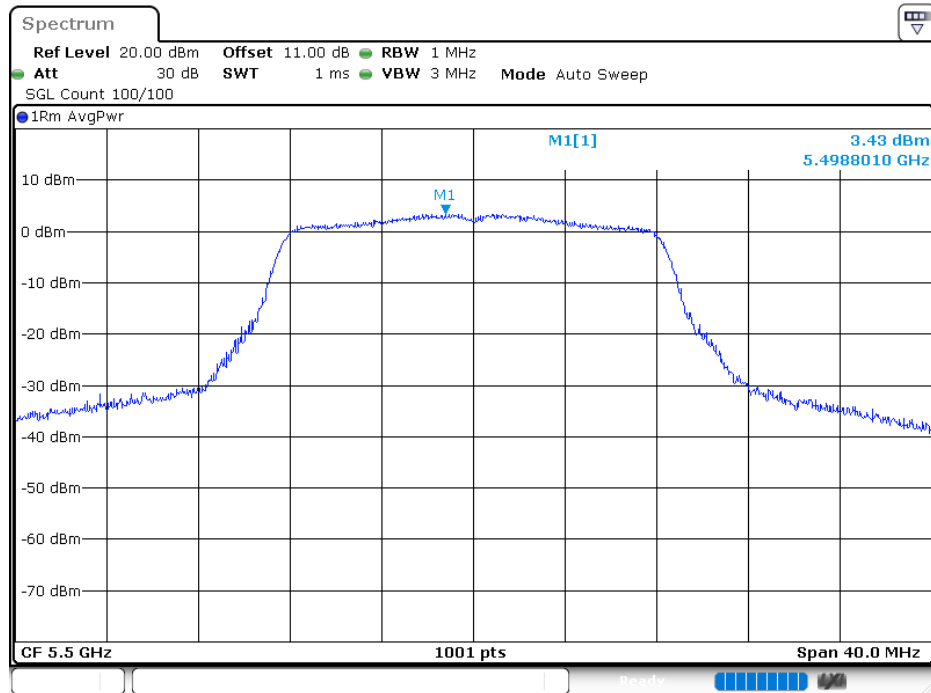
Date: 5.MAR.2020 08:36:55

802.11a 5300MHz


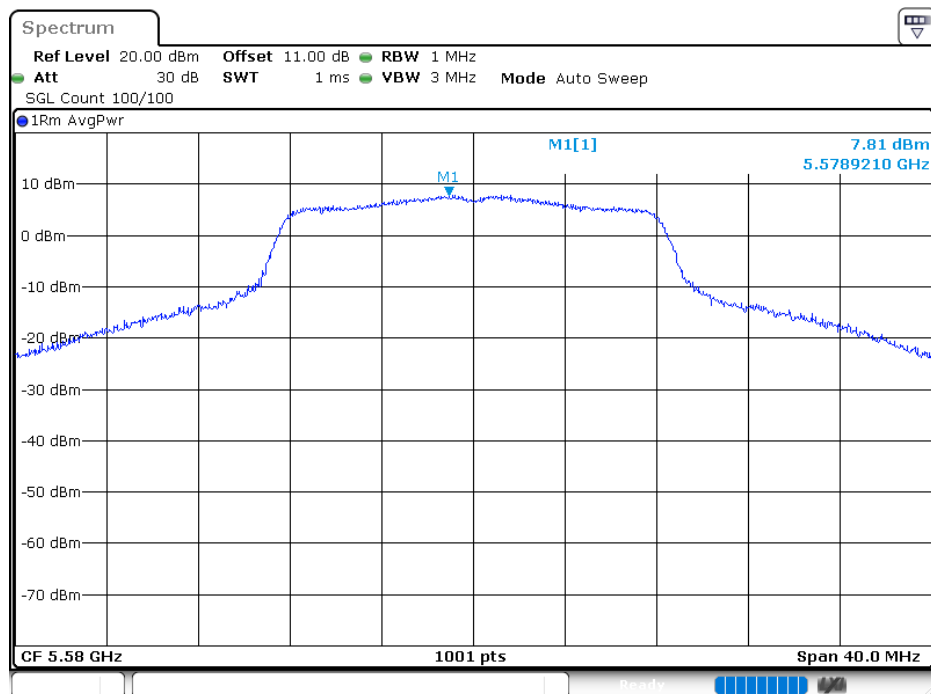
Date: 5.MAR.2020 08:40:01

802.11a 5320MHz


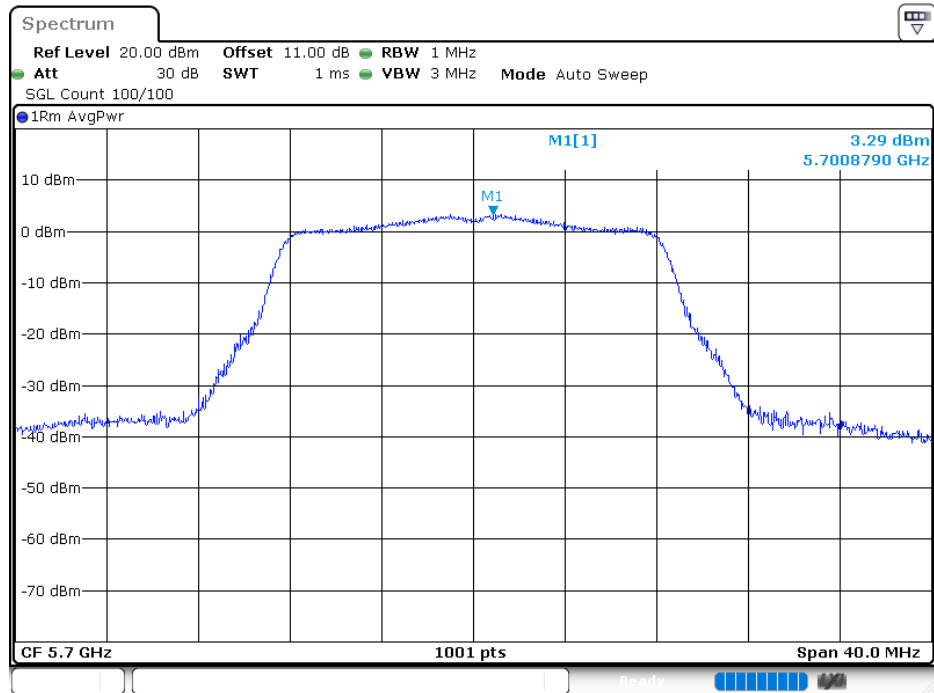
Date: 5.MAR.2020 08:47:44

802.11a 5500MHz


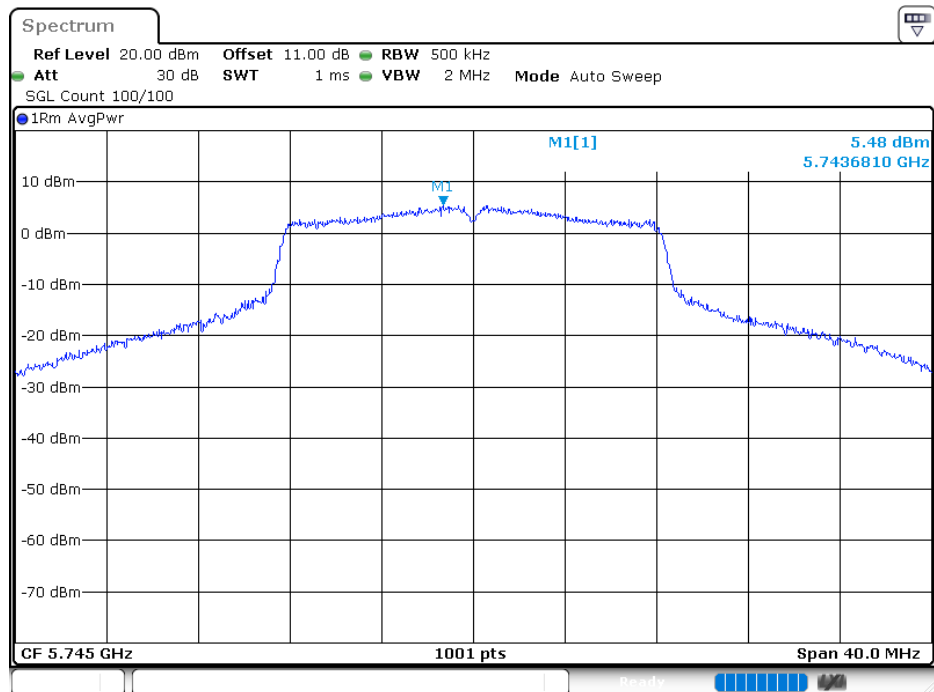
Date: 9.MAR.2020 02:39:21

802.11a 5580MHz


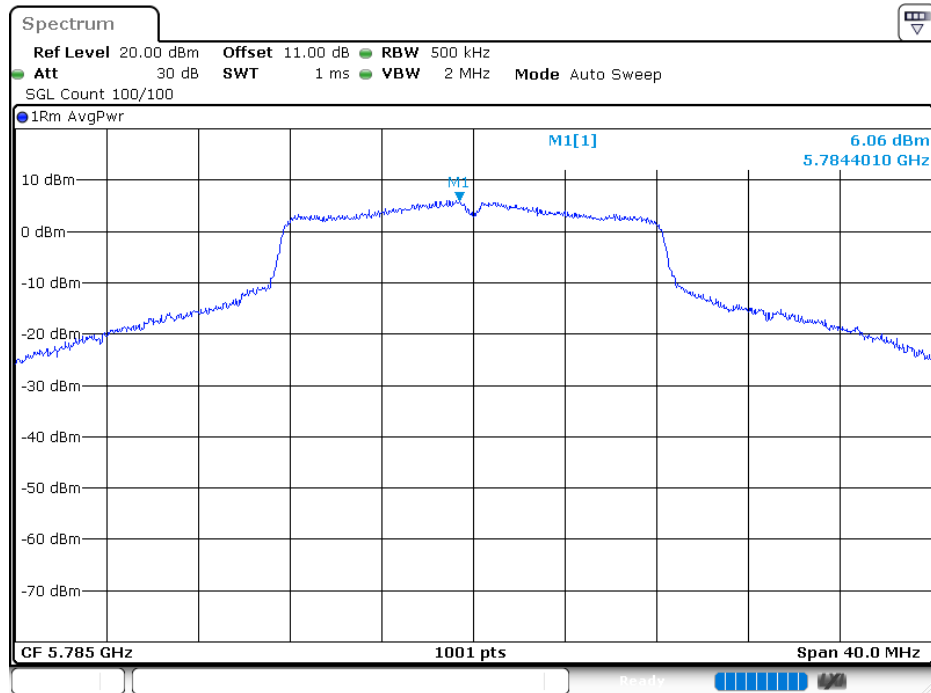
Date: 9.MAR.2020 02:54:03

802.11a 5700MHz


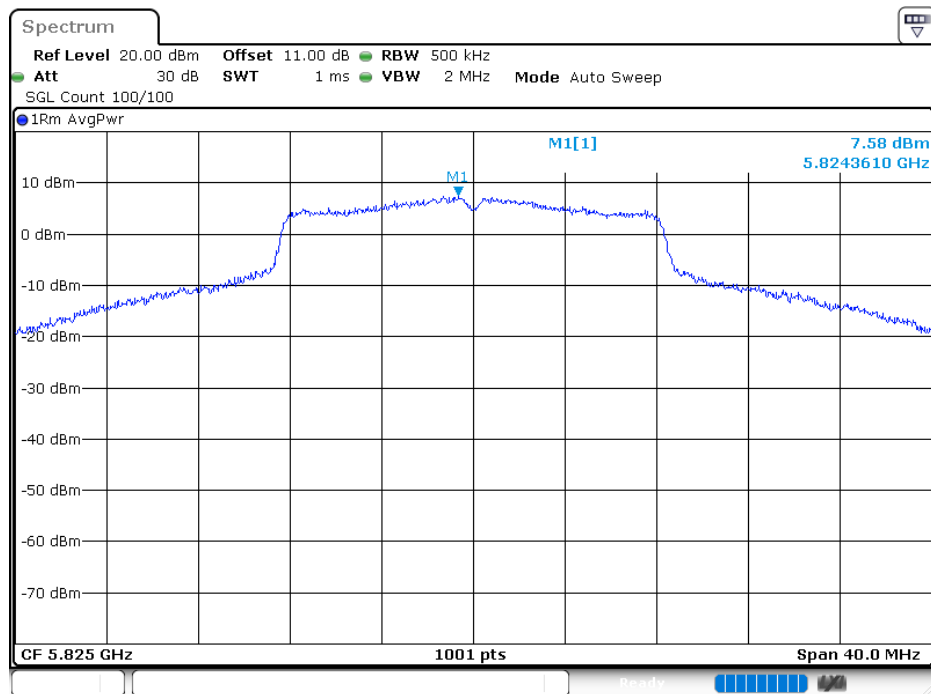
Date: 9.MAR.2020 02:57:02

802.11a 5745MHz


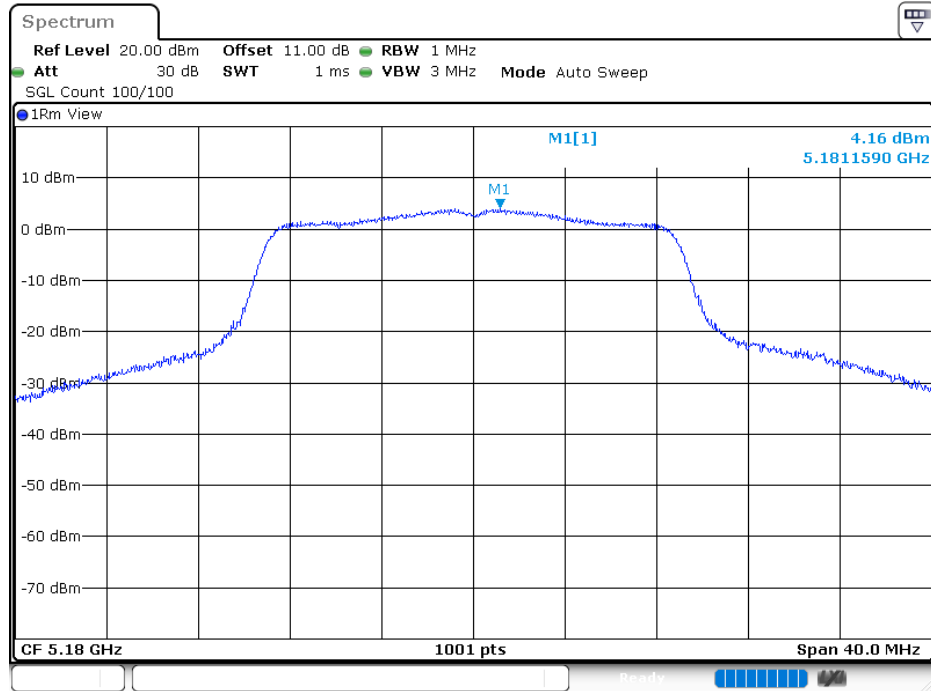
Date: 9.MAR.2020 02:59:39

802.11a 5785MHz


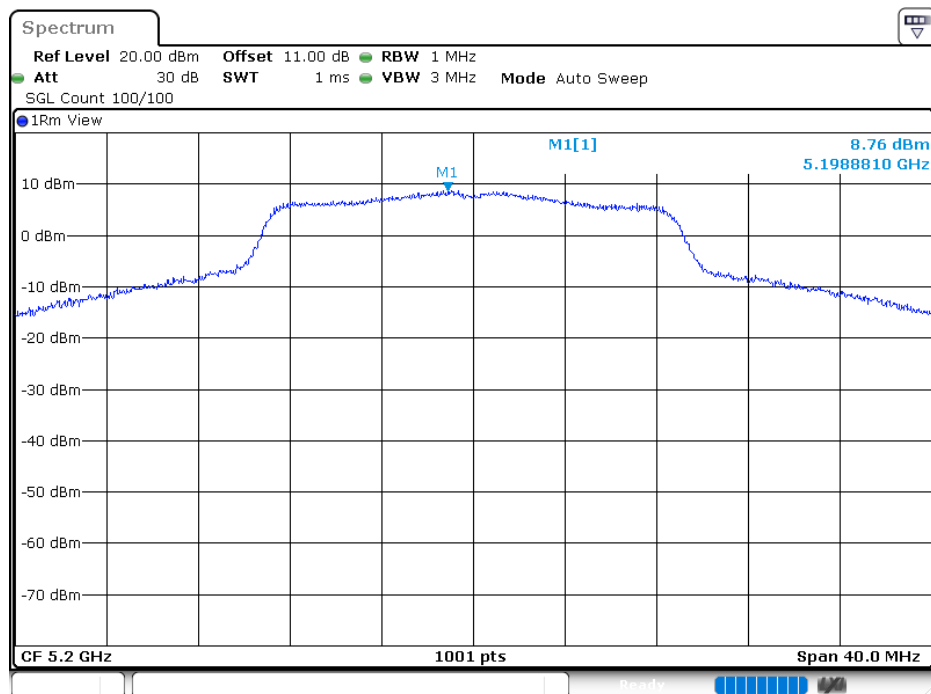
Date: 9.MAR.2020 03:01:31

802.11a 5825MHz


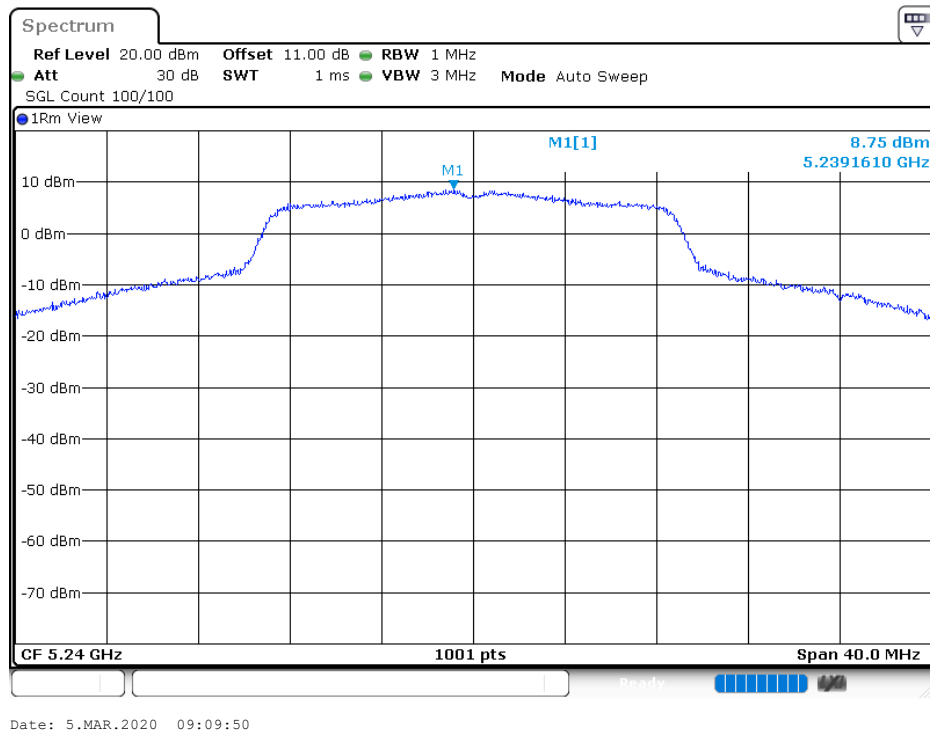
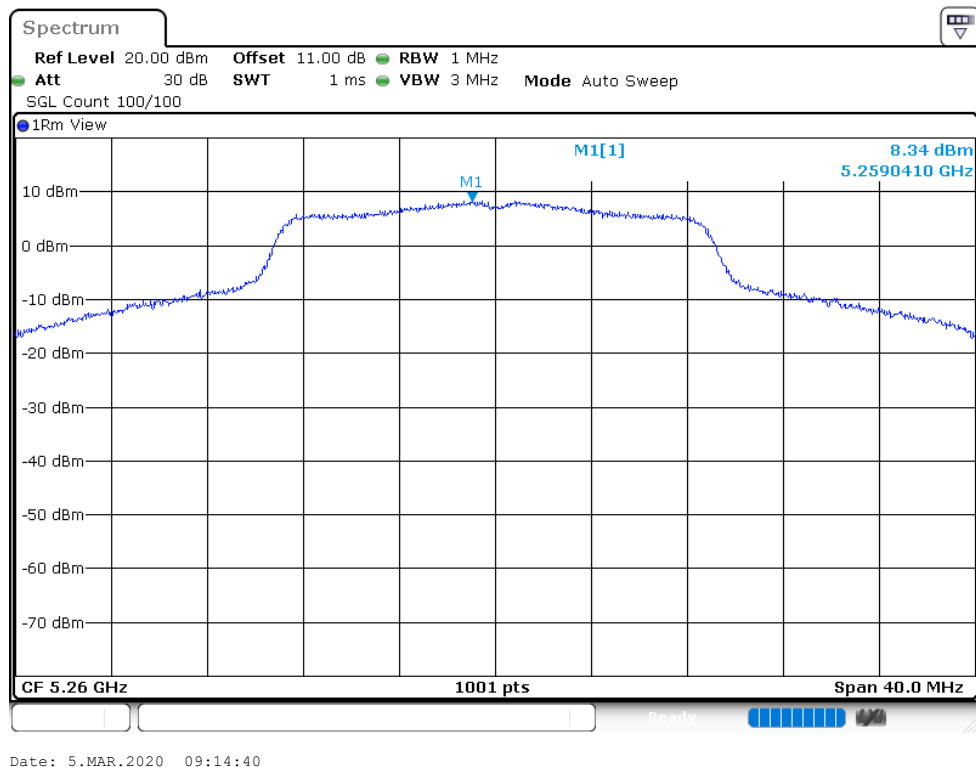
Date: 9.MAR.2020 03:03:57

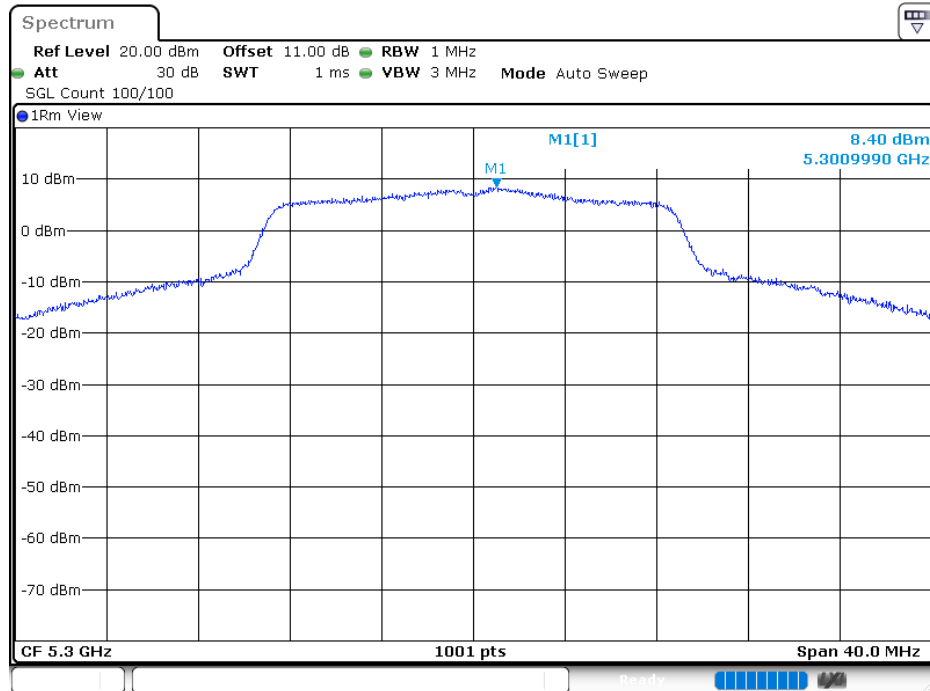
802.11an HT20 5180MHz


Date: 5.MAR.2020 09:02:16

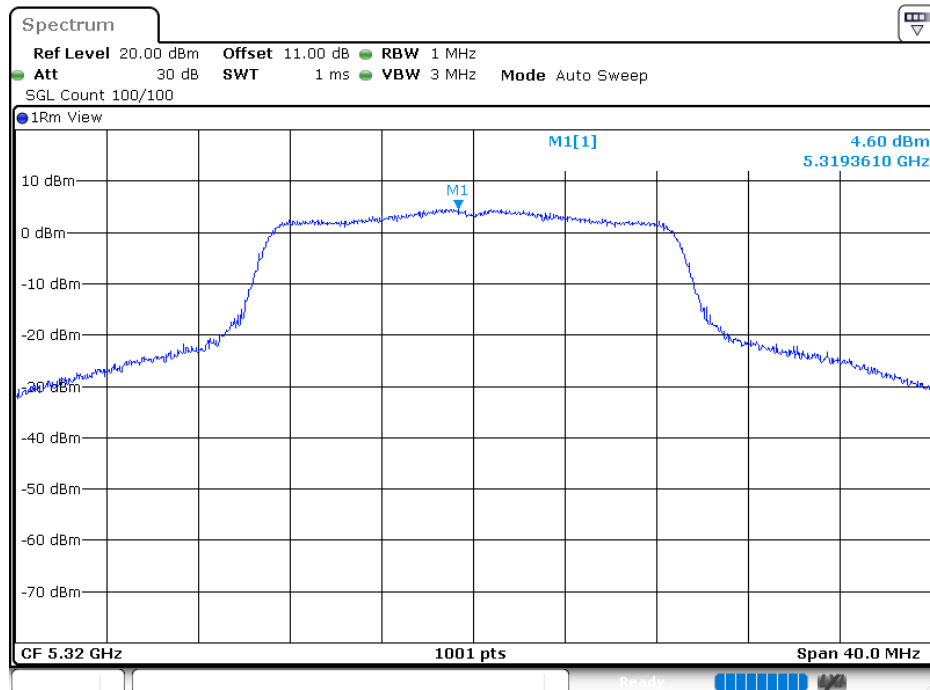
802.11an HT20 5200MHz


Date: 5.MAR.2020 09:06:19

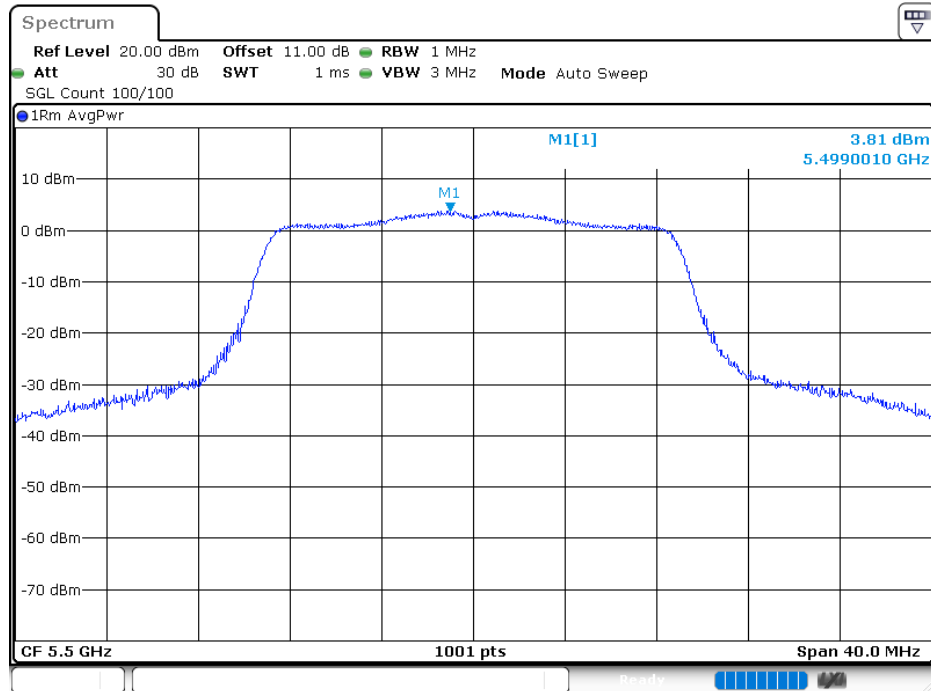
802.11an HT20 5240MHz

802.11an HT20 5260MHz


802.11an HT20 5300MHz


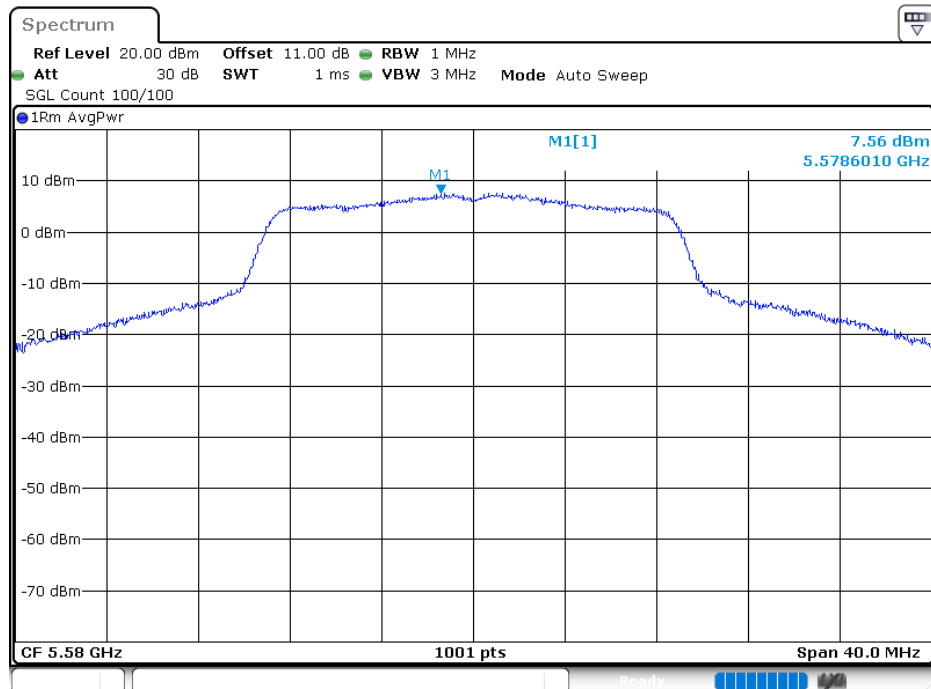
Date: 5.MAR.2020 09:19:40

802.11an HT20 5320MHz


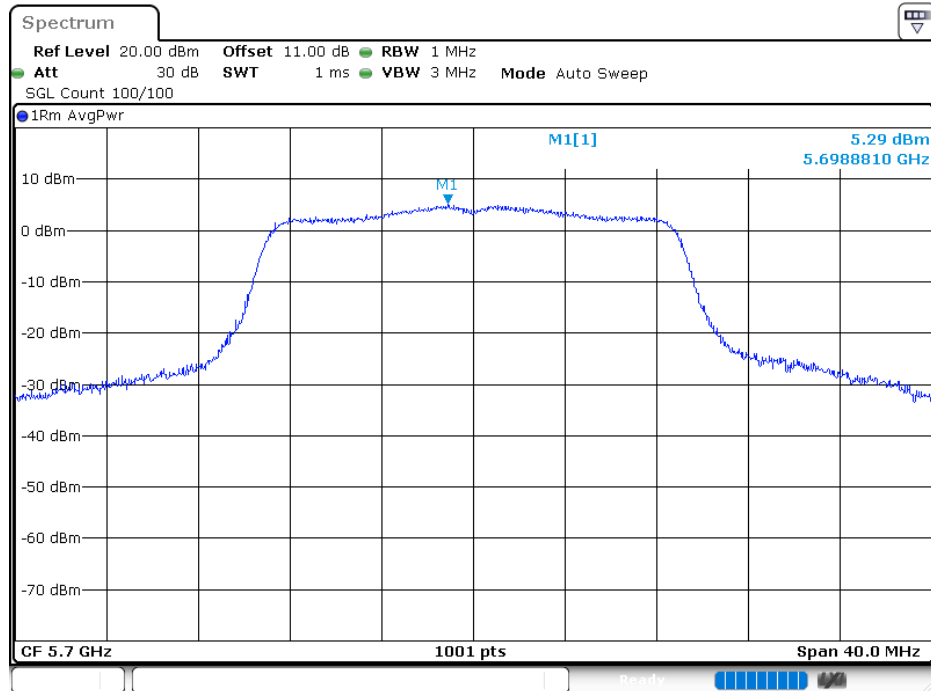
Date: 5.MAR.2020 09:29:00

802.11ac HT20 5500MHz


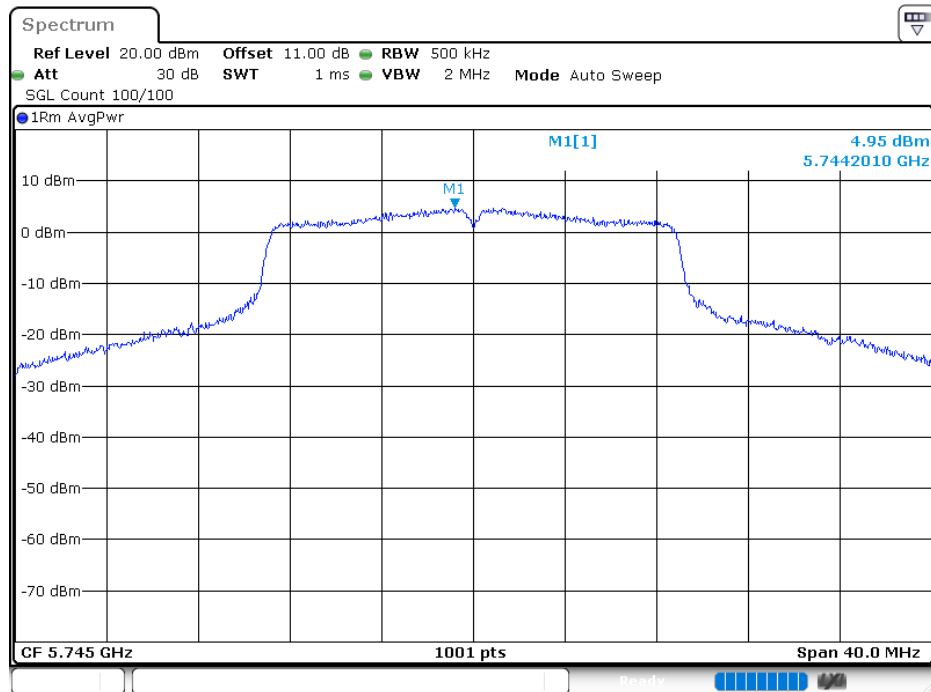
Date: 9.MAR.2020 03:09:54

802.11an HT20 5580MHz


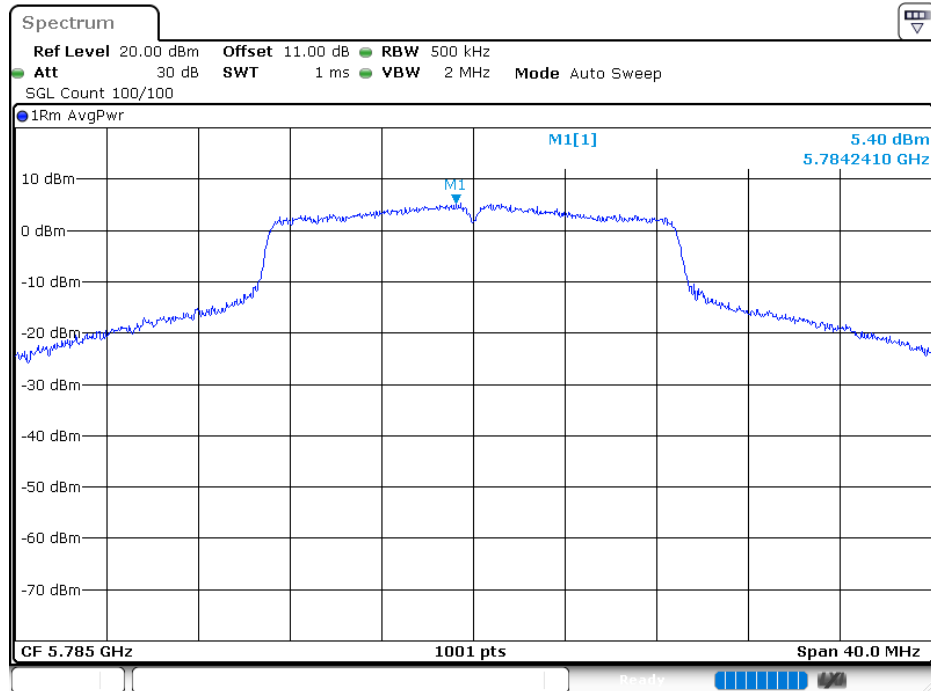
Date: 9.MAR.2020 03:12:59

802.11an HT20 5700MHz


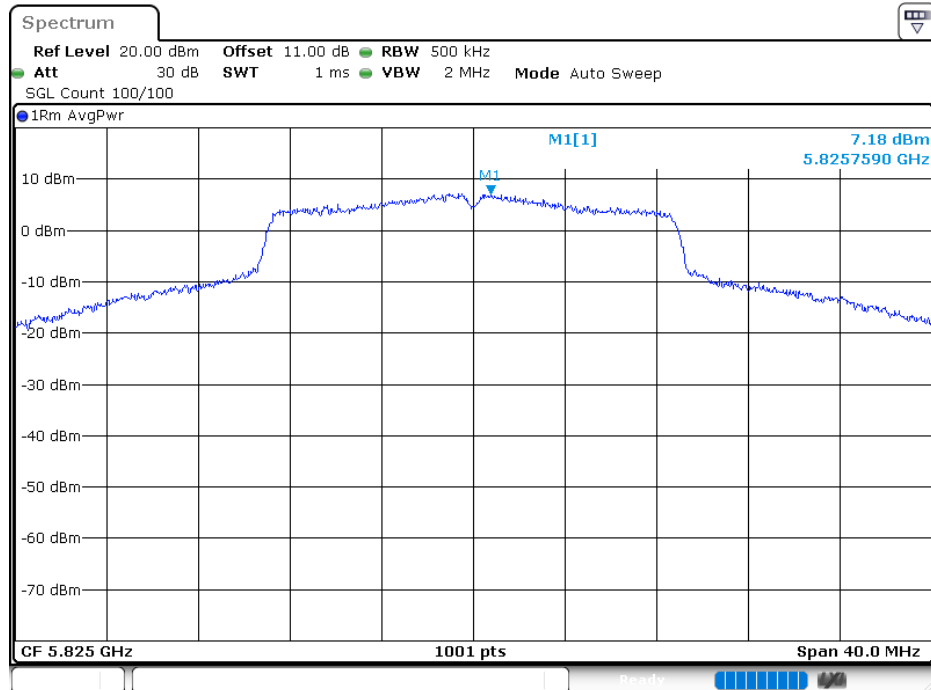
Date: 9.MAR.2020 03:15:48

802.11an HT20 5745MHz


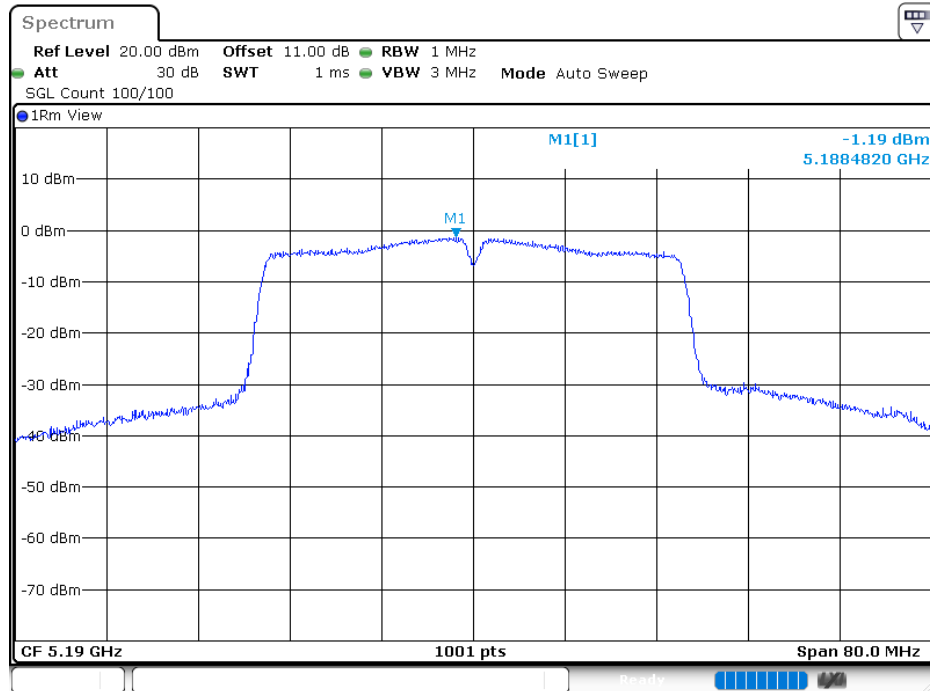
Date: 9.MAR.2020 03:18:29

802.11an HT20 5785MHz


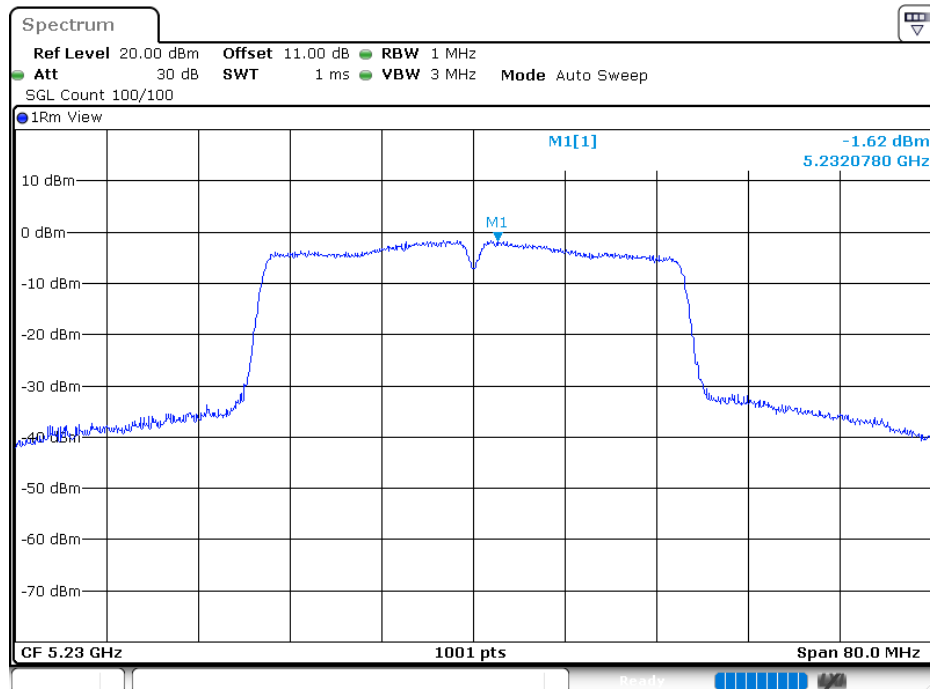
Date: 9.MAR.2020 03:20:02

802.11an HT20 5825MHz


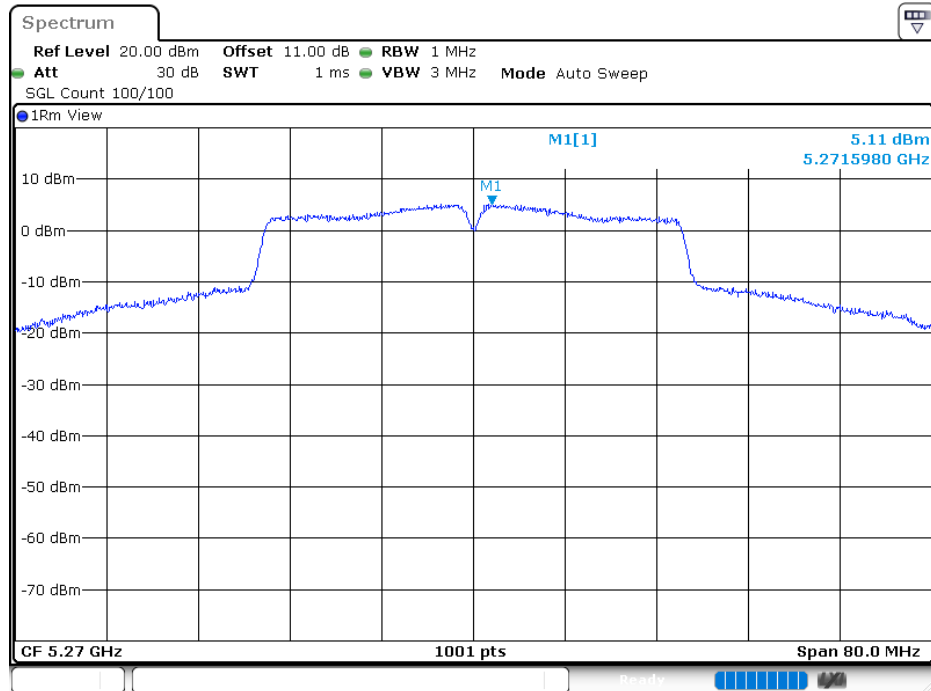
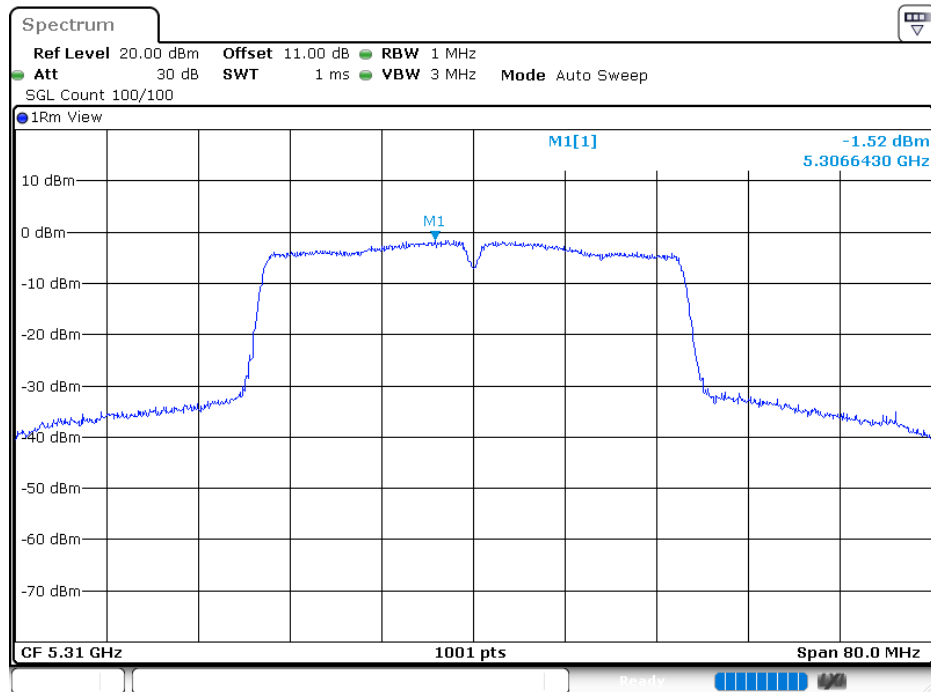
Date: 9.MAR.2020 03:21:48

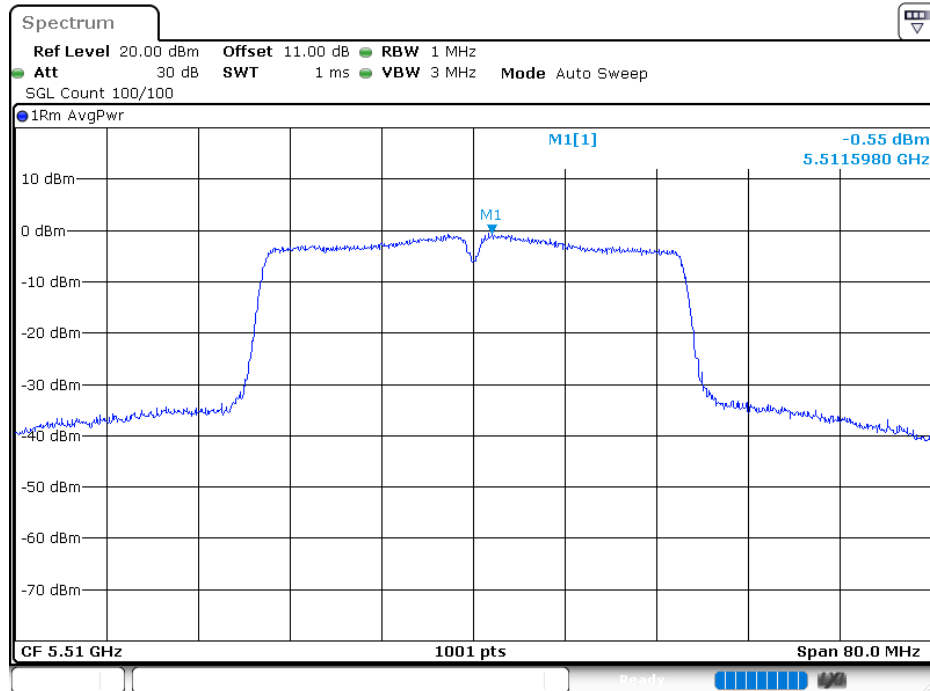
802.11an HT40 5190MHz


Date: 5.MAR.2020 10:05:42

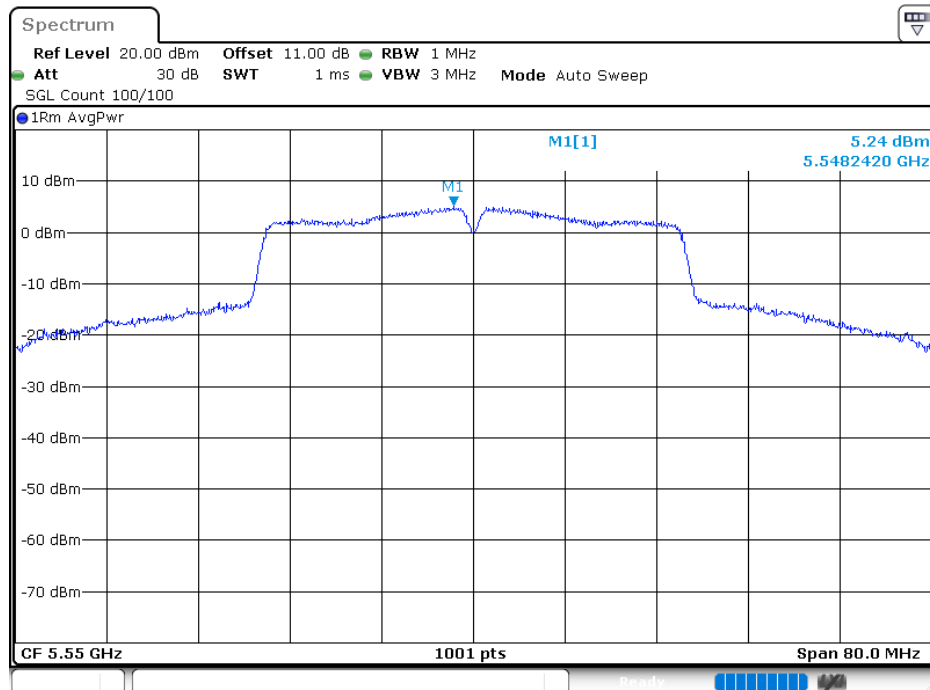
802.11an HT40 5230MHz


Date: 5.MAR.2020 10:09:34

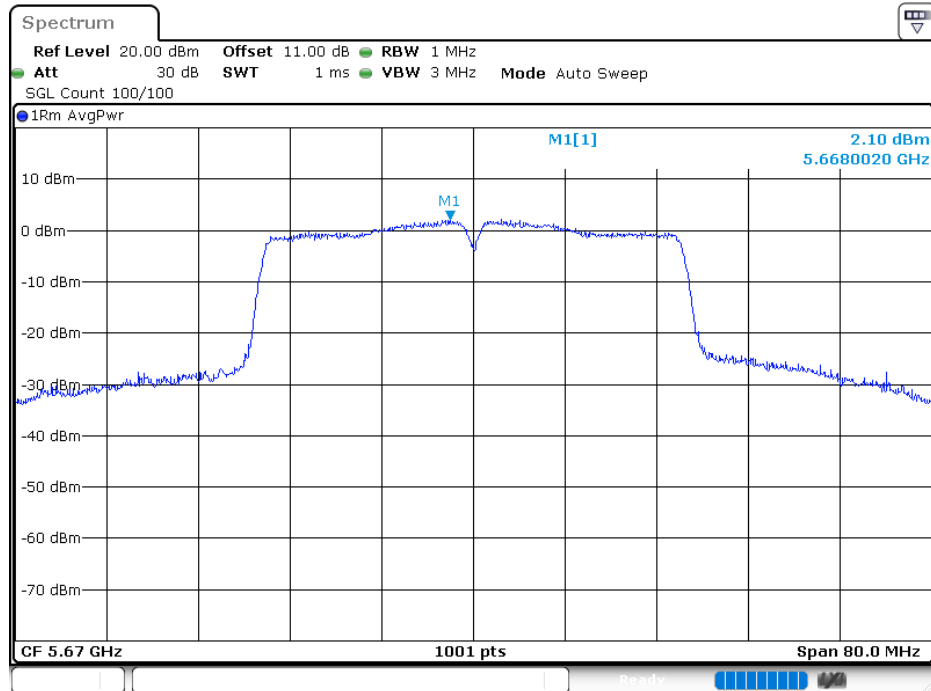
802.11an HT40 5270MHz

802.11an HT40 5310MHz


802.11an HT40 5510MHz


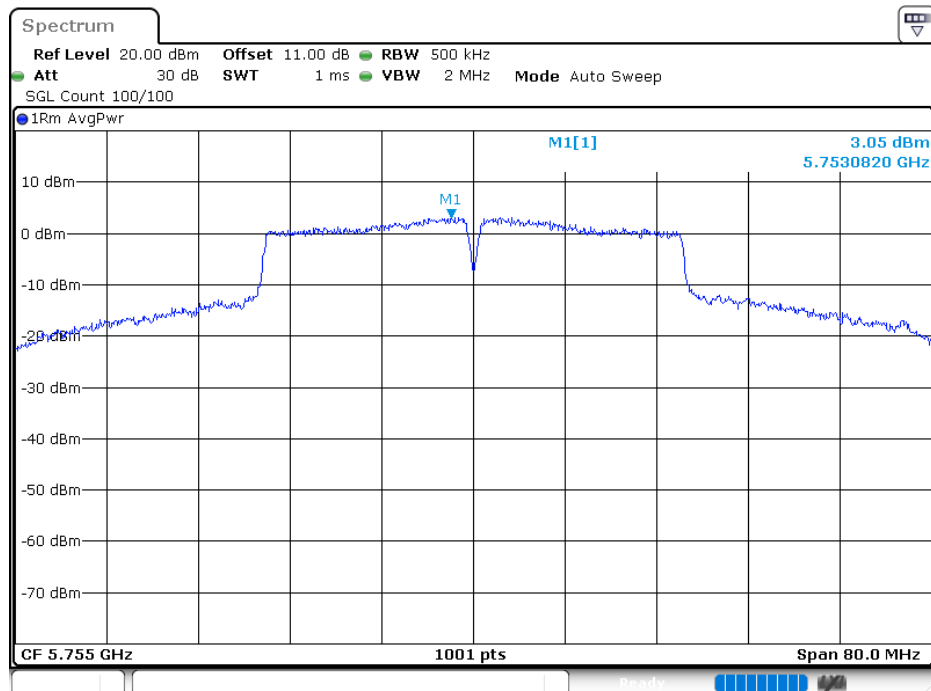
Date: 9.MAR.2020 03:26:14

802.11an HT40 5550MHz


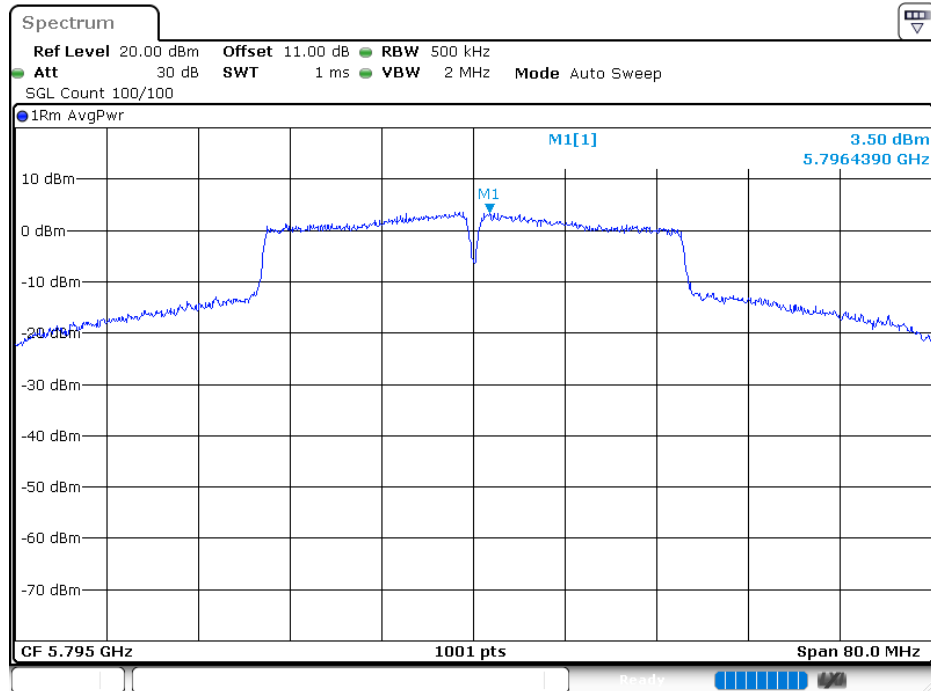
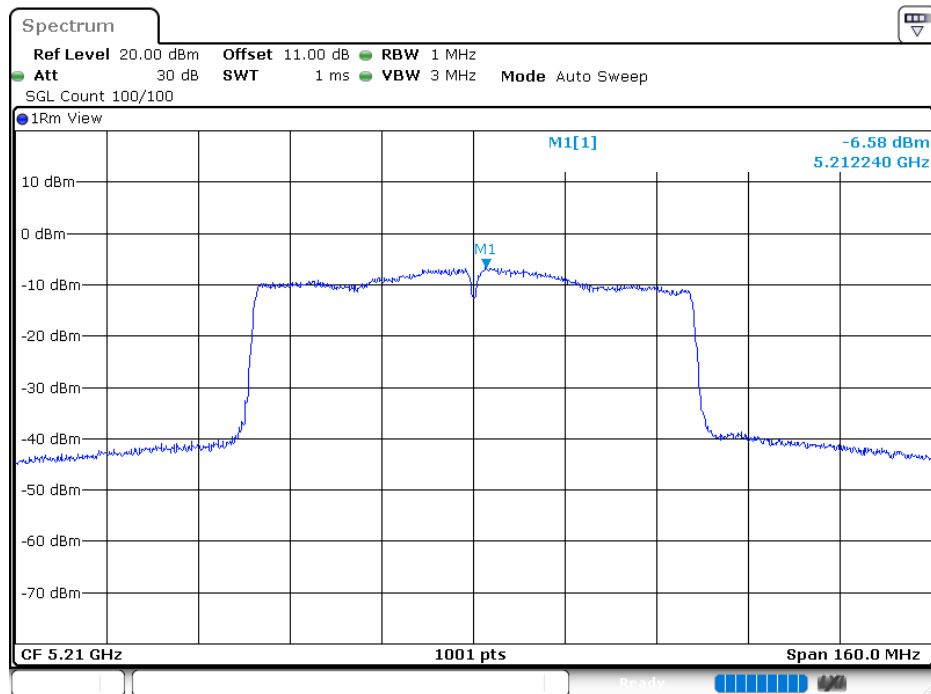
Date: 9.MAR.2020 03:28:52

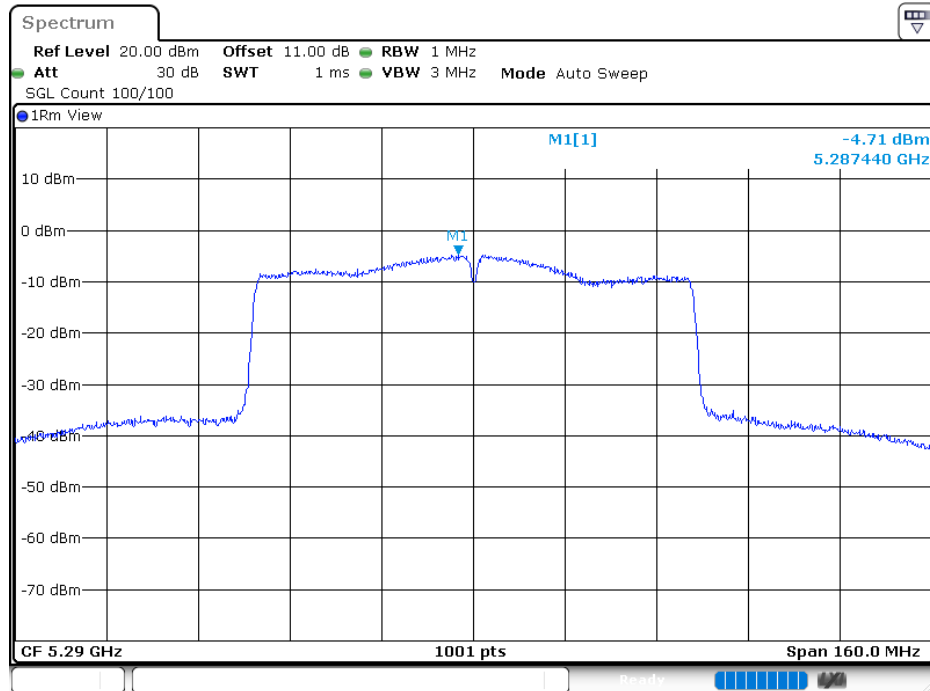
802.11an HT40 5670MHz


Date: 9.MAR.2020 03:32:06

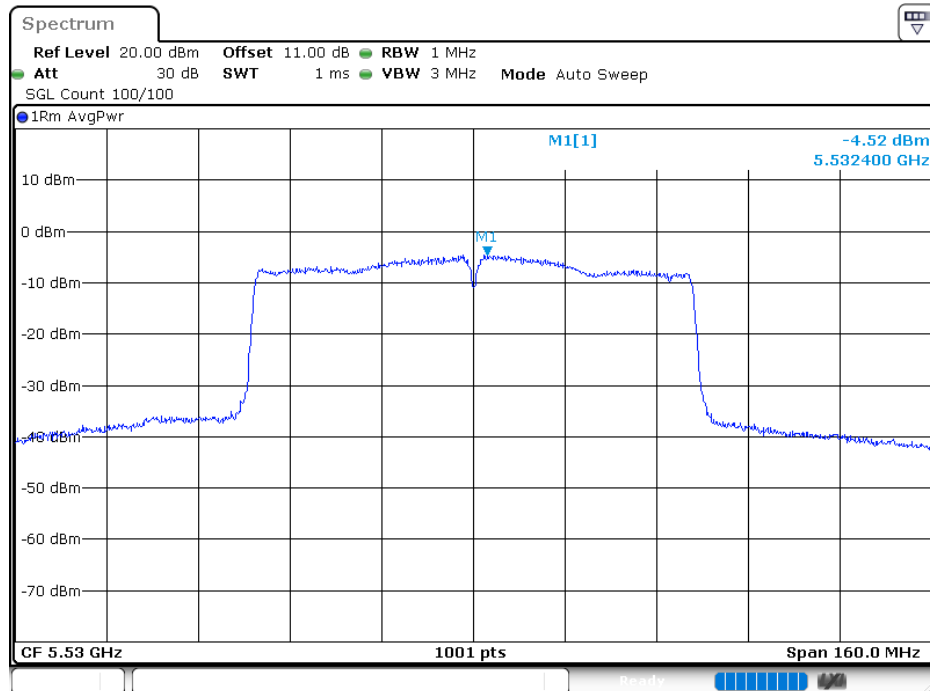
802.11an HT40 5755MHz


Date: 9.MAR.2020 03:35:25

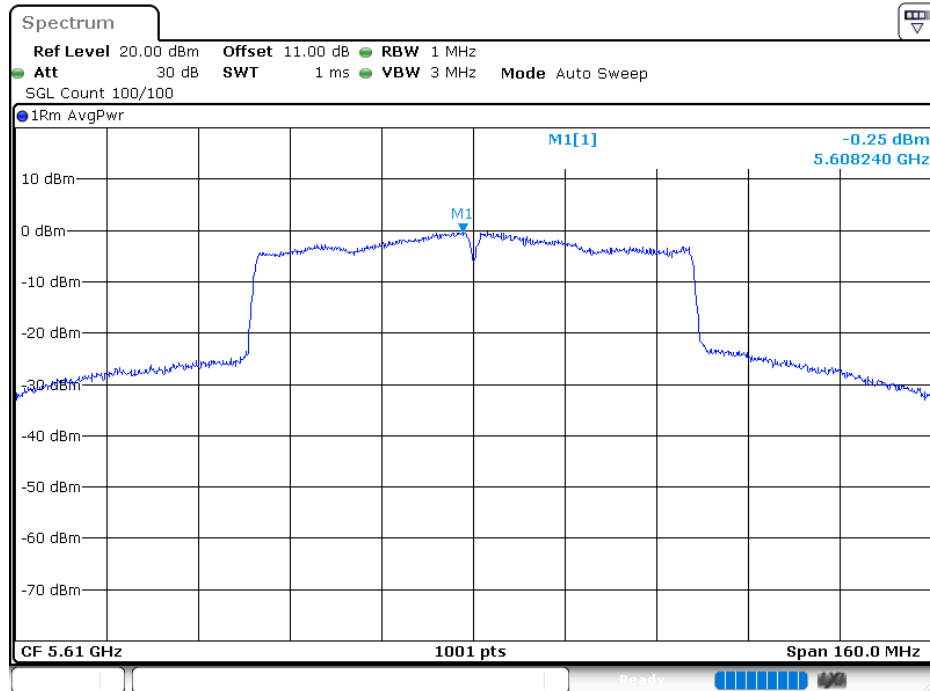
802.11an HT40 5795MHz

802.11ac VHT80 5210MHz


802.11ac VHT80 5290MHz


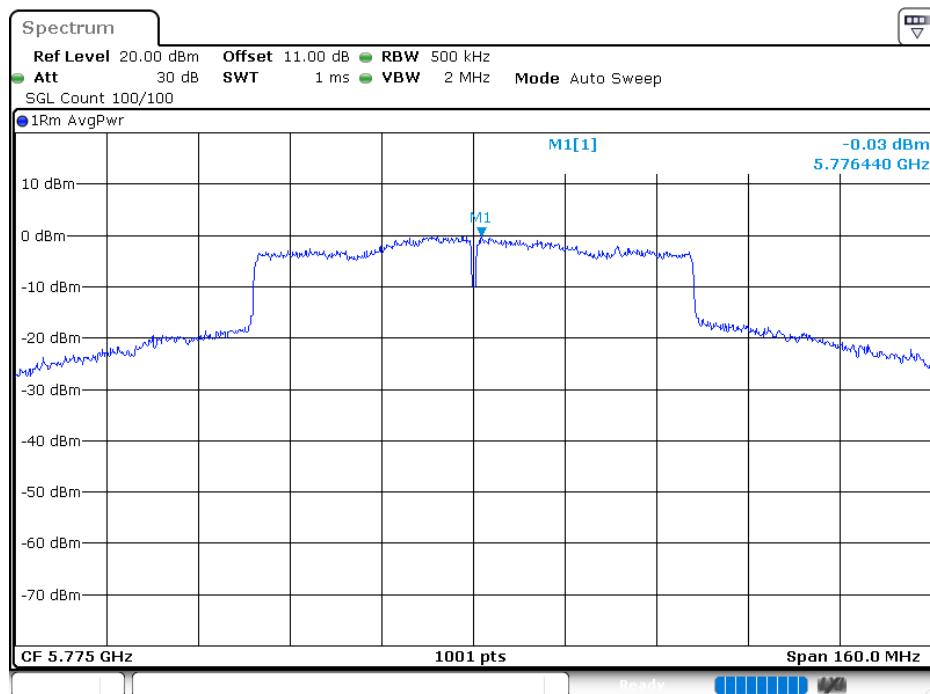
Date: 5.MAR.2020 10:39:49

802.11ac VHT80 5530MHz


Date: 9.MAR.2020 03:41:09

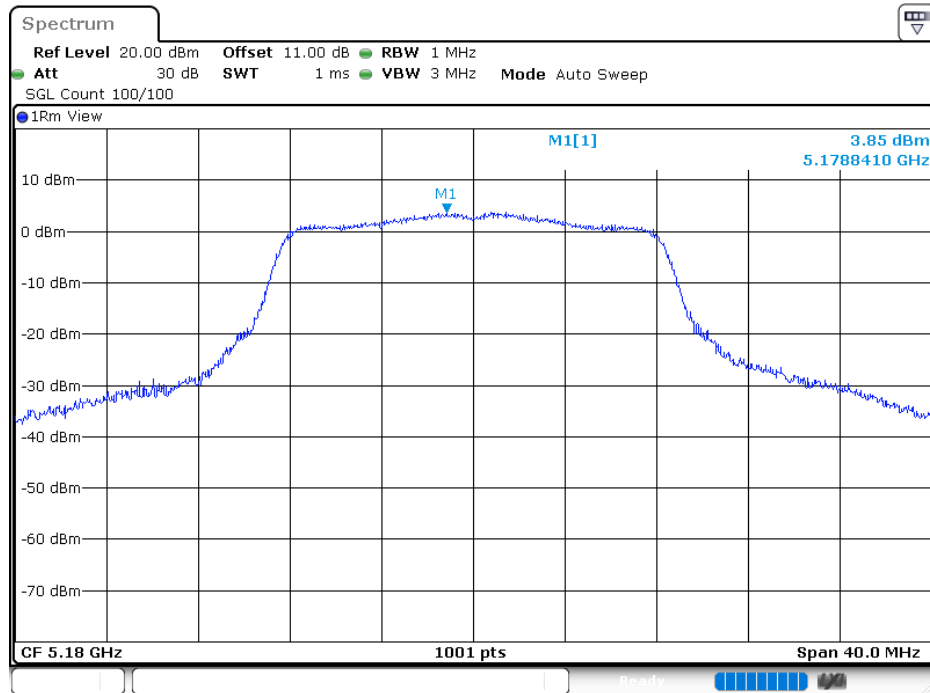
802.11ac VHT80 5610MHz


Date: 9.MAR.2020 03:45:35

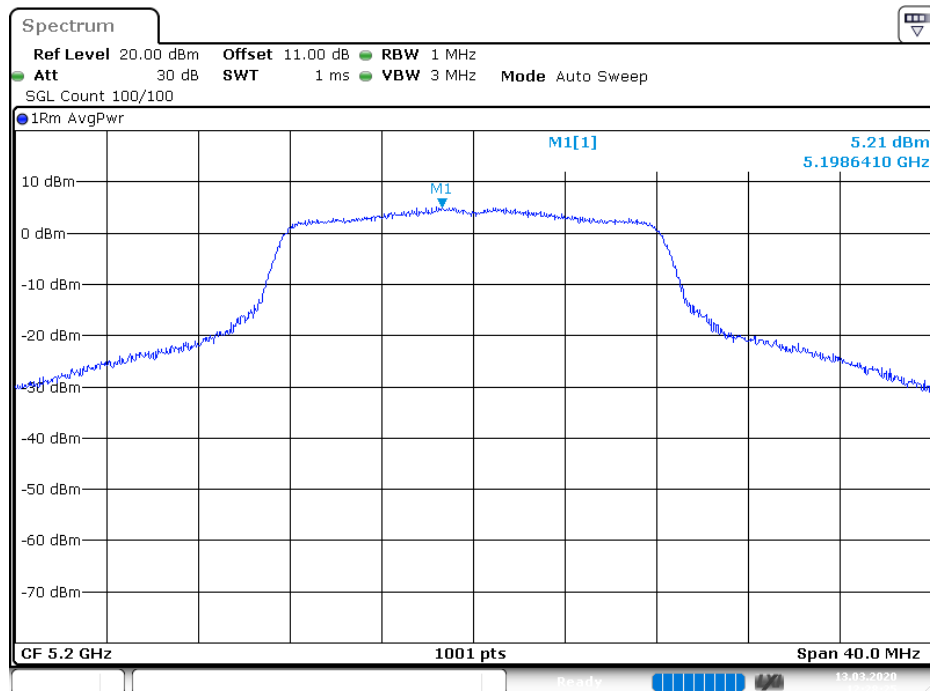
802.11ac VHT80 5775MHz


Date: 9.MAR.2020 03:47:58

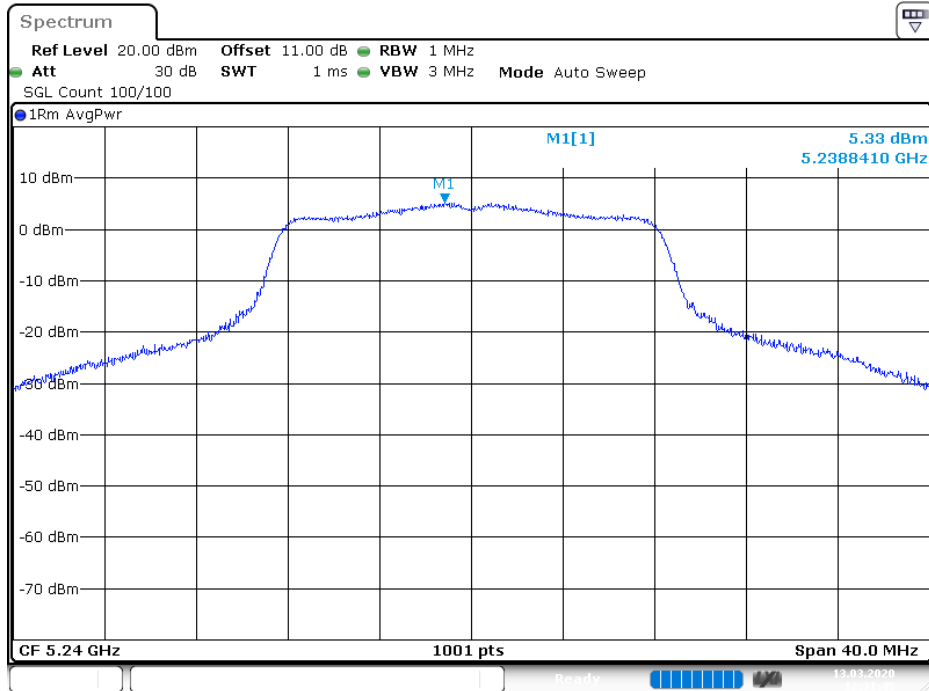
Test Plot of Power Density for ISED

802.11a 5180MHz


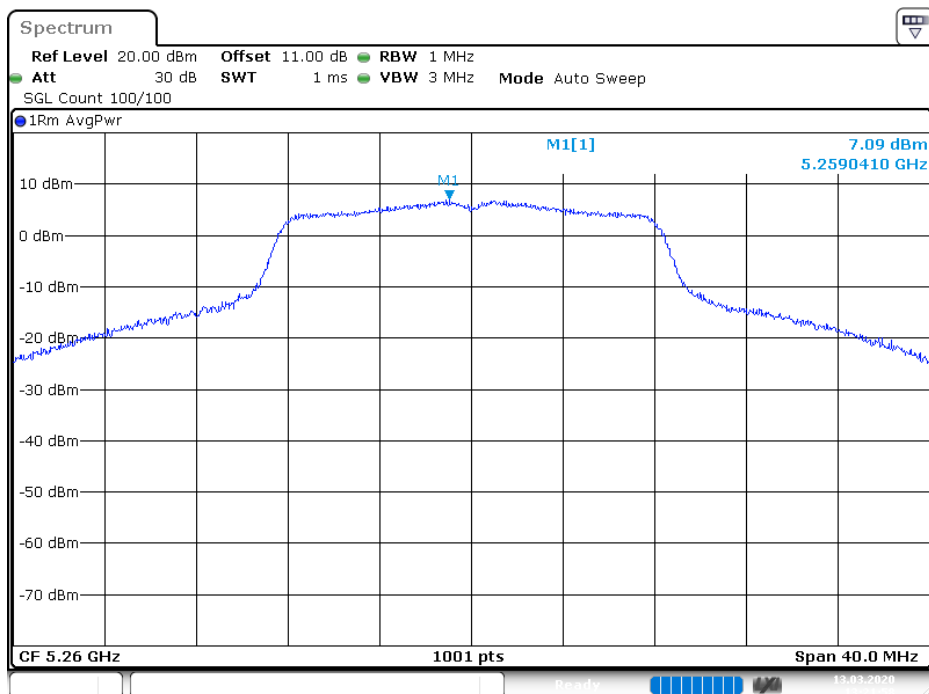
Date: 5.MAR.2020 08:24:25

802.11a 5200MHz


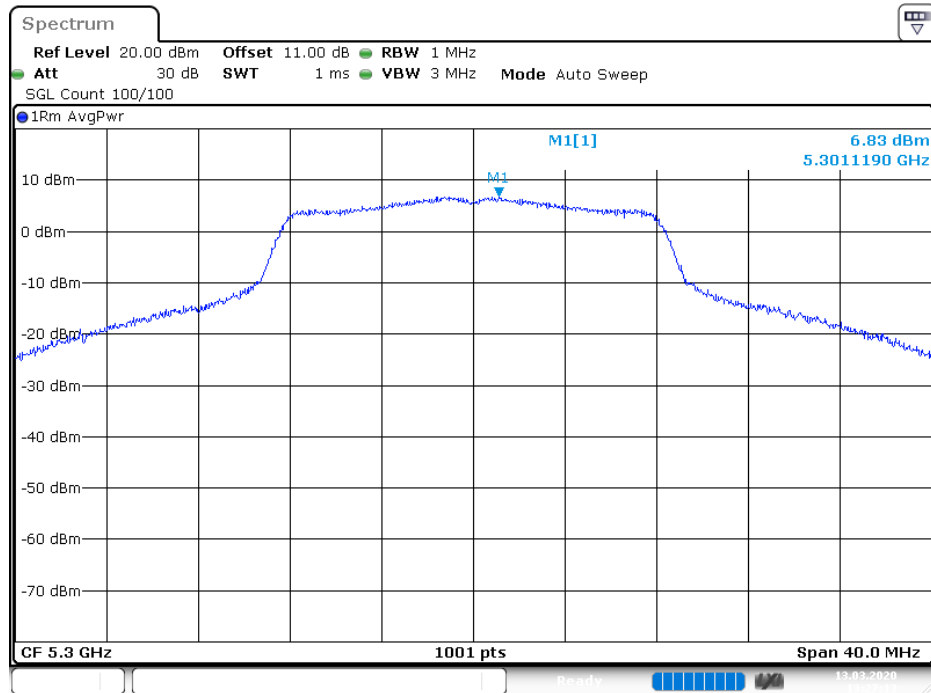
Date: 13.MAR.2020 12:28:25

802.11a 5240MHz


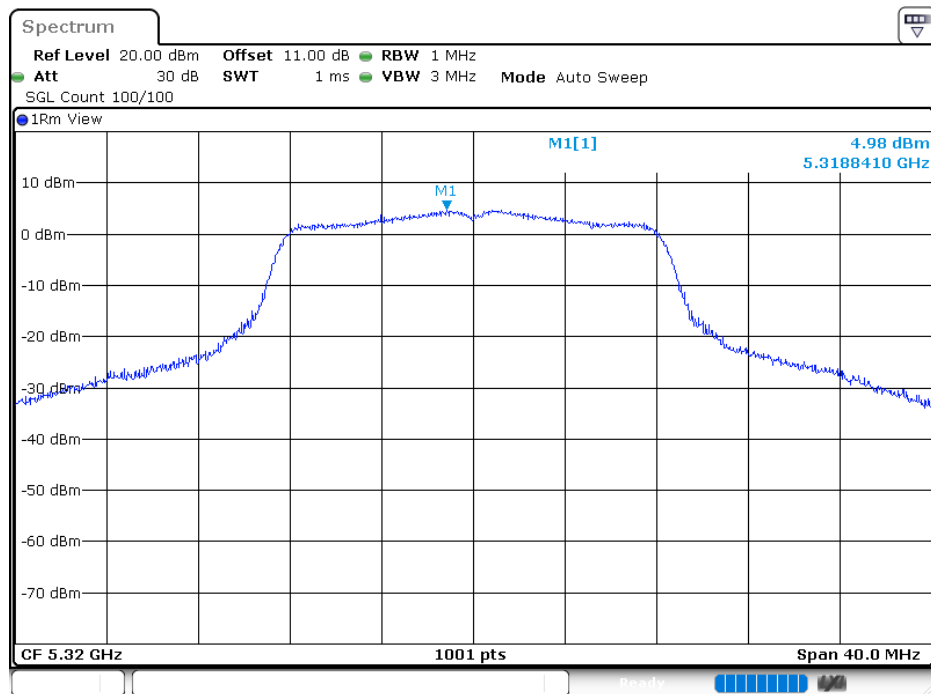
Date: 13.MAR.2020 12:31:46

802.11a 5260MHz


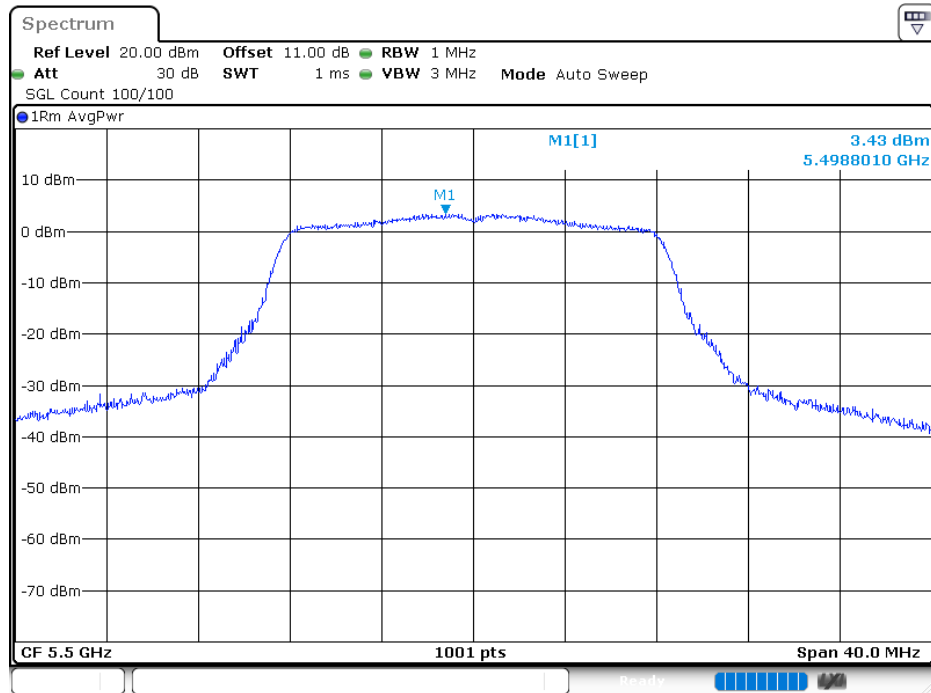
Date: 13.MAR.2020 13:21:58

802.11a 5300MHz


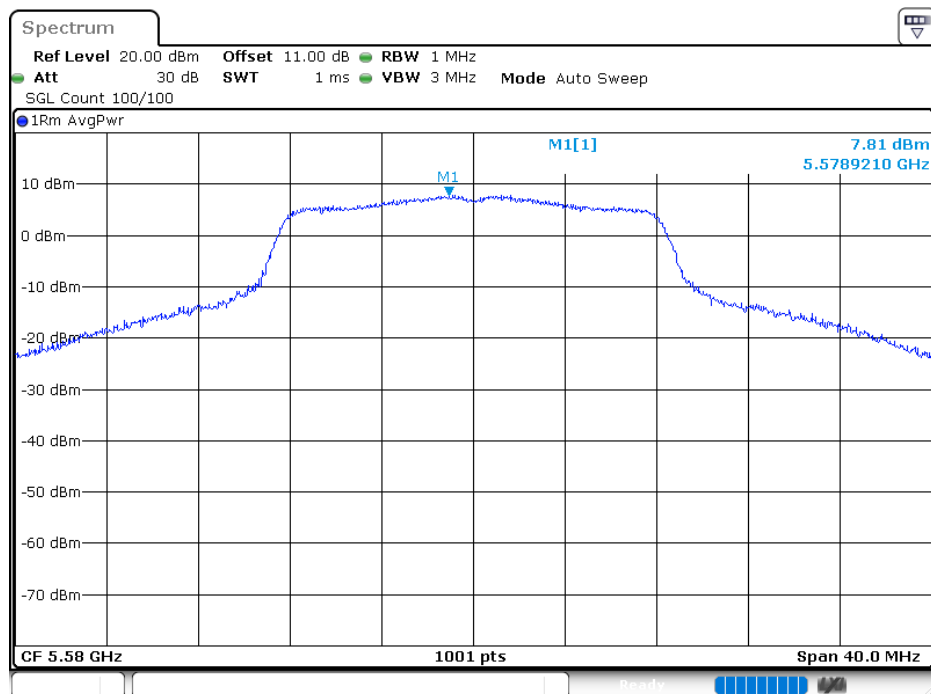
Date: 13.MAR.2020 13:27:13

802.11a 5320MHz


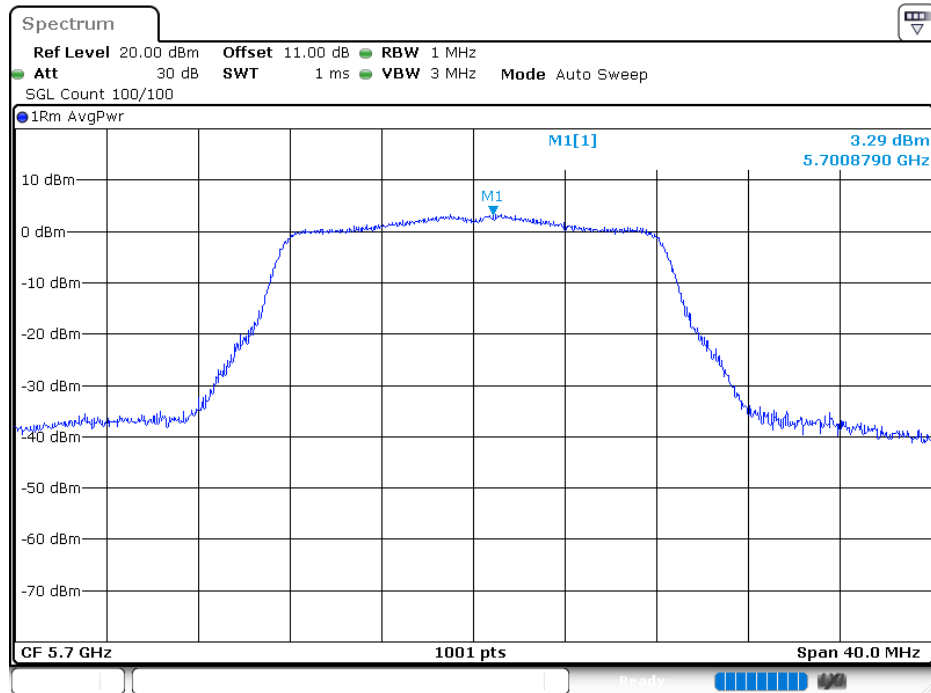
Date: 5.MAR.2020 08:47:44

802.11a 5500MHz


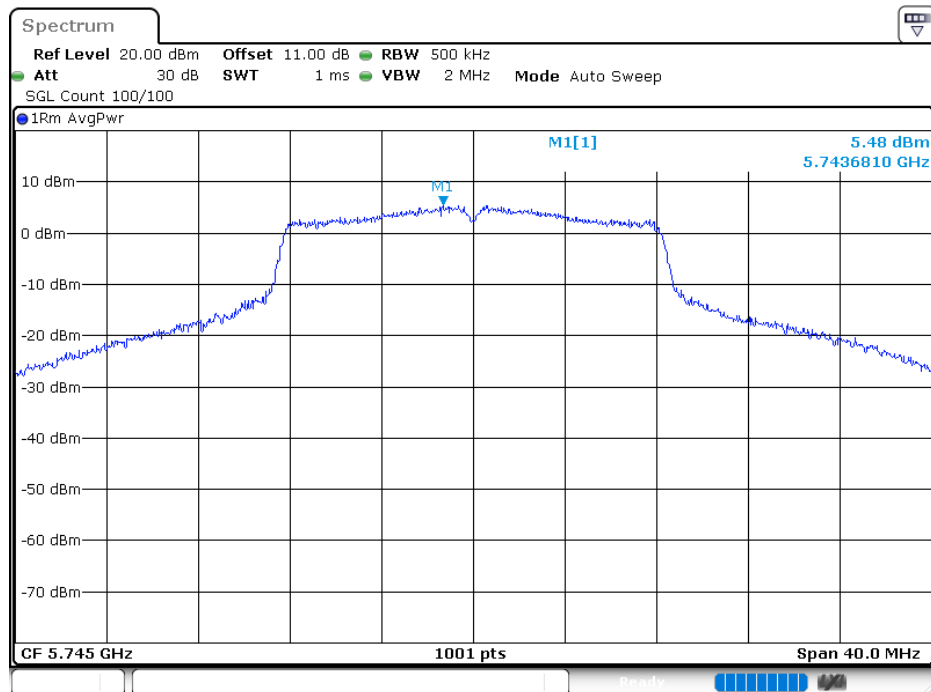
Date: 9.MAR.2020 02:39:21

802.11a 5580MHz


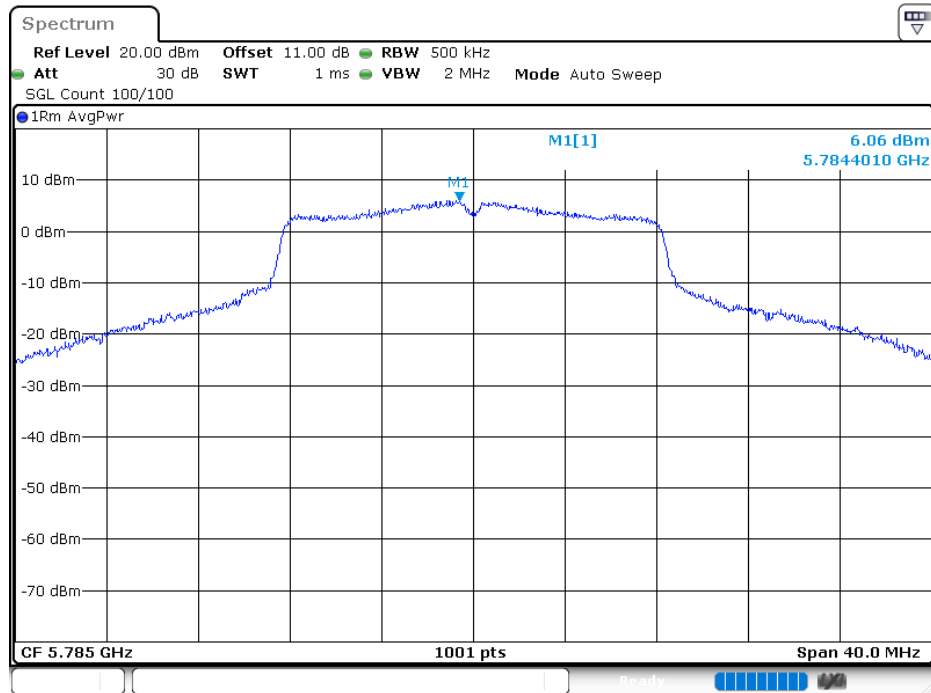
Date: 9.MAR.2020 02:54:03

802.11a 5700MHz


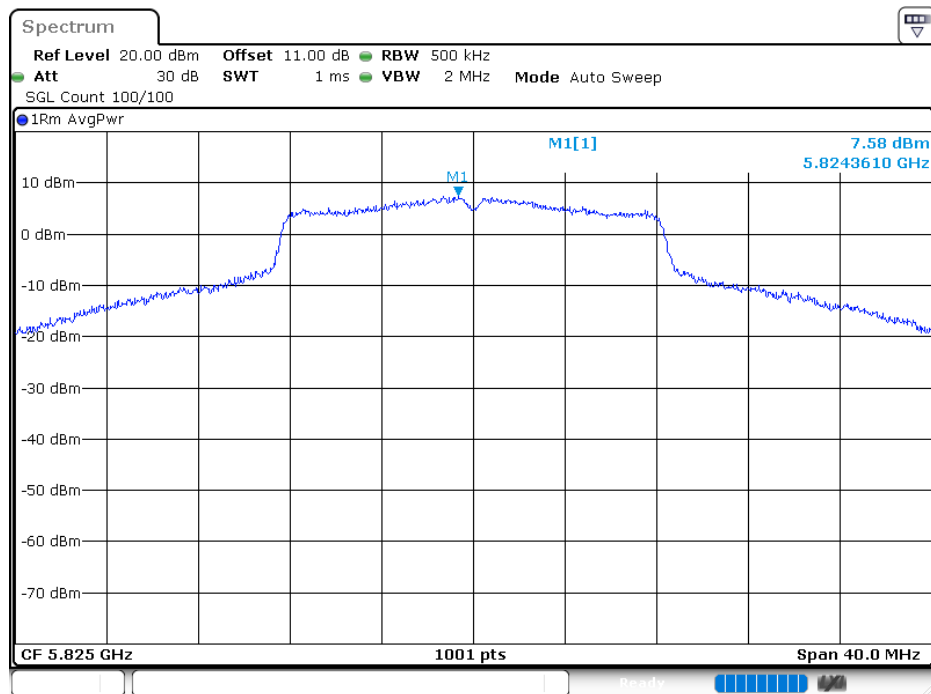
Date: 9.MAR.2020 02:57:02

802.11a 5745MHz


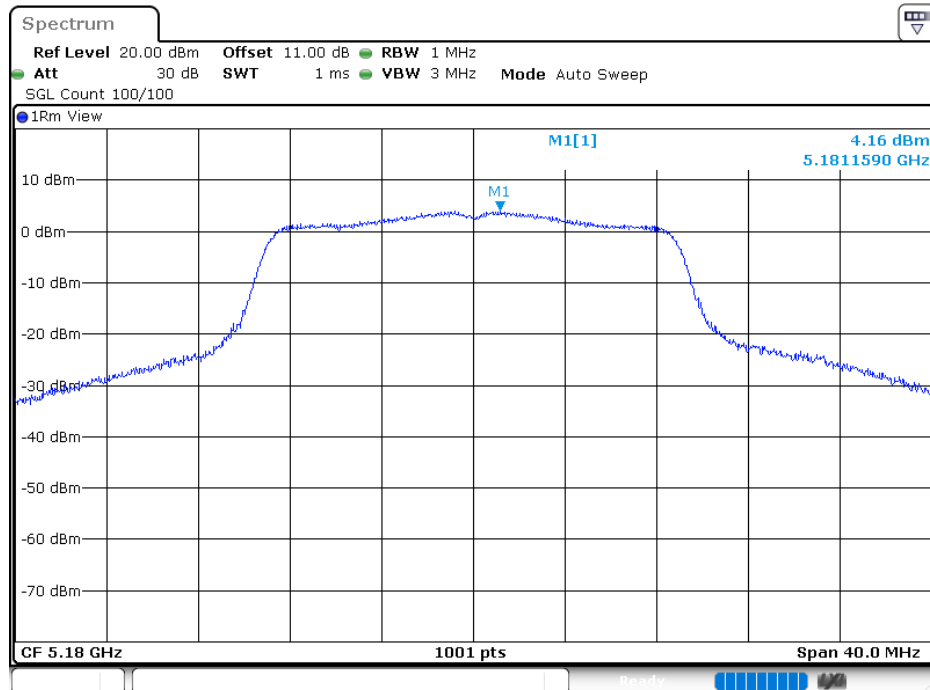
Date: 9.MAR.2020 02:59:39

802.11a 5785MHz


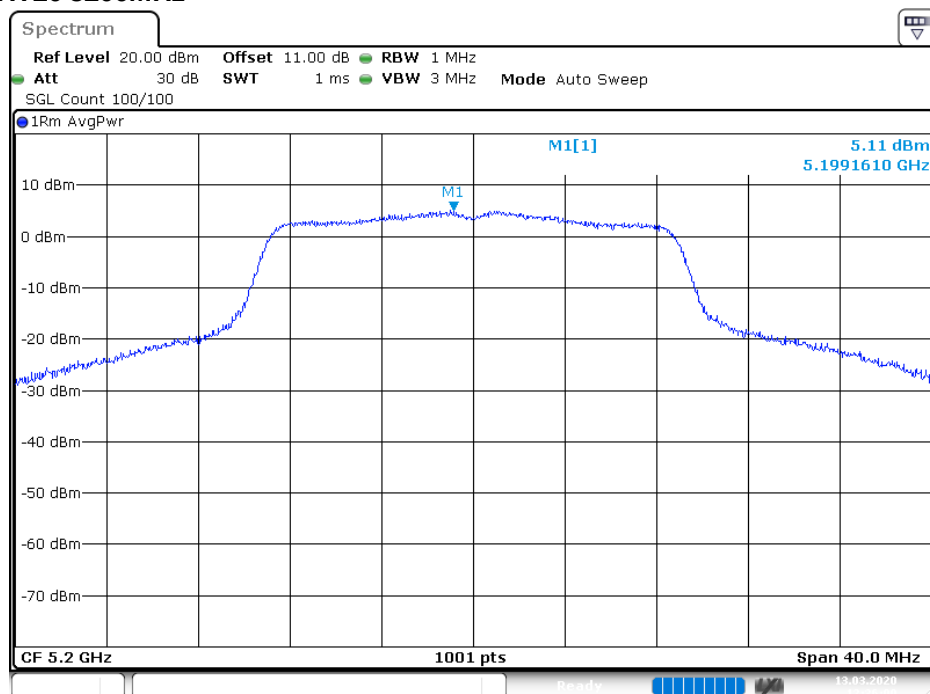
Date: 9.MAR.2020 03:01:31

802.11a 5825MHz


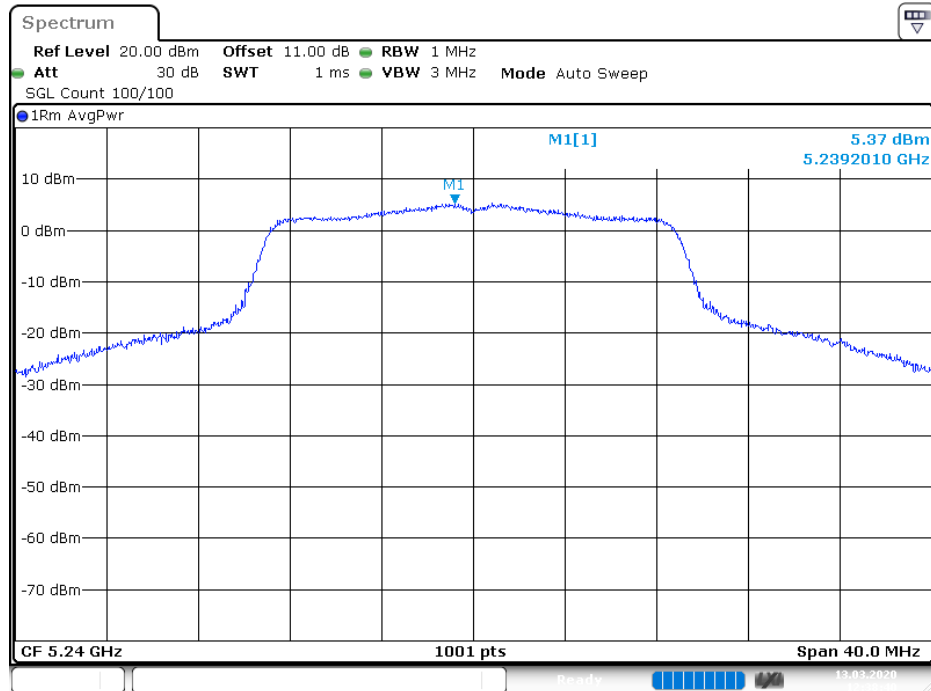
Date: 9.MAR.2020 03:03:57

802.11an HT20 5180MHz


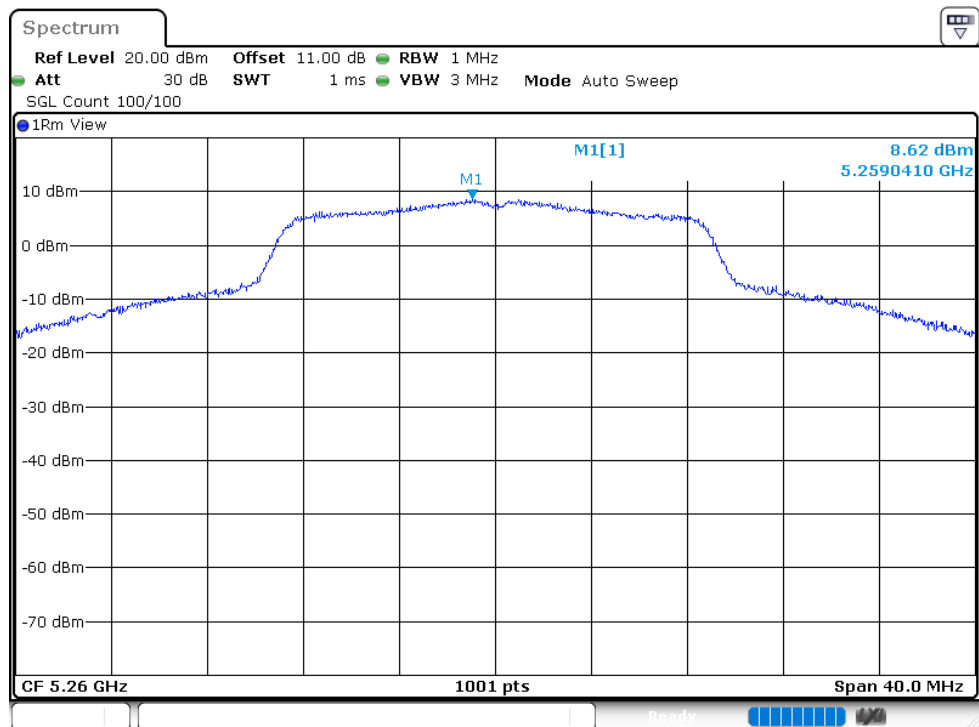
Date: 5.MAR.2020 09:02:16

802.11an HT20 5200MHz


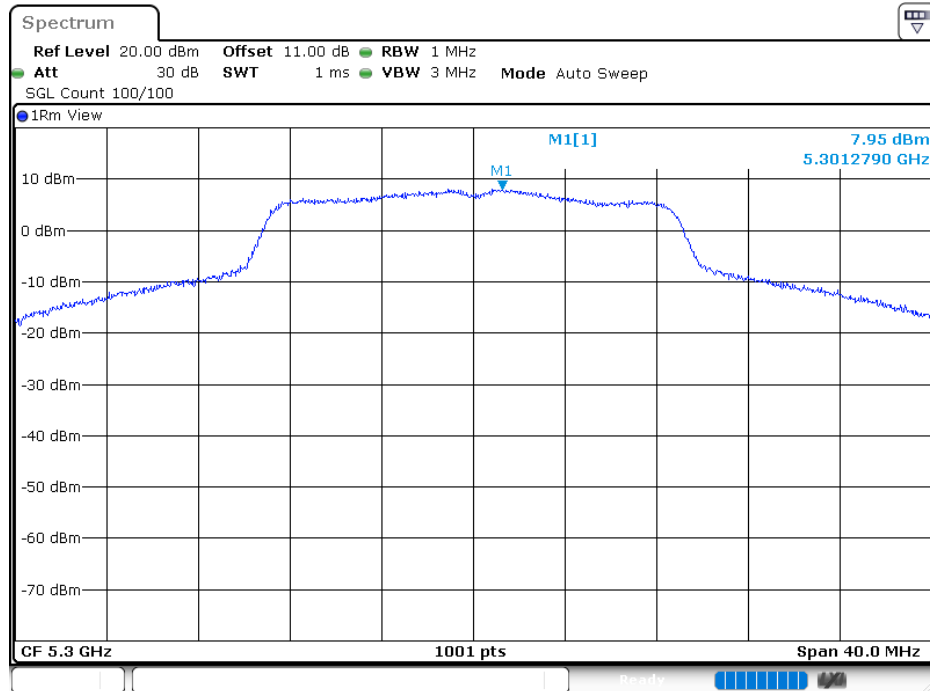
Date: 13.MAR.2020 12:36:01

802.11an HT20 5240MHz


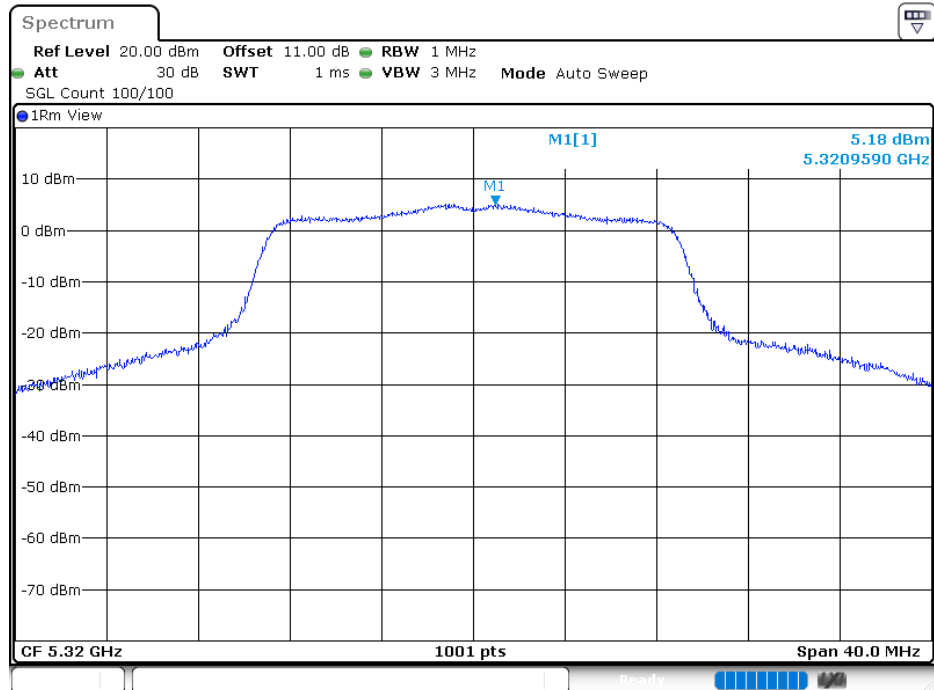
Date: 13.MAR.2020 12:38:41

802.11an HT20 5260MHz


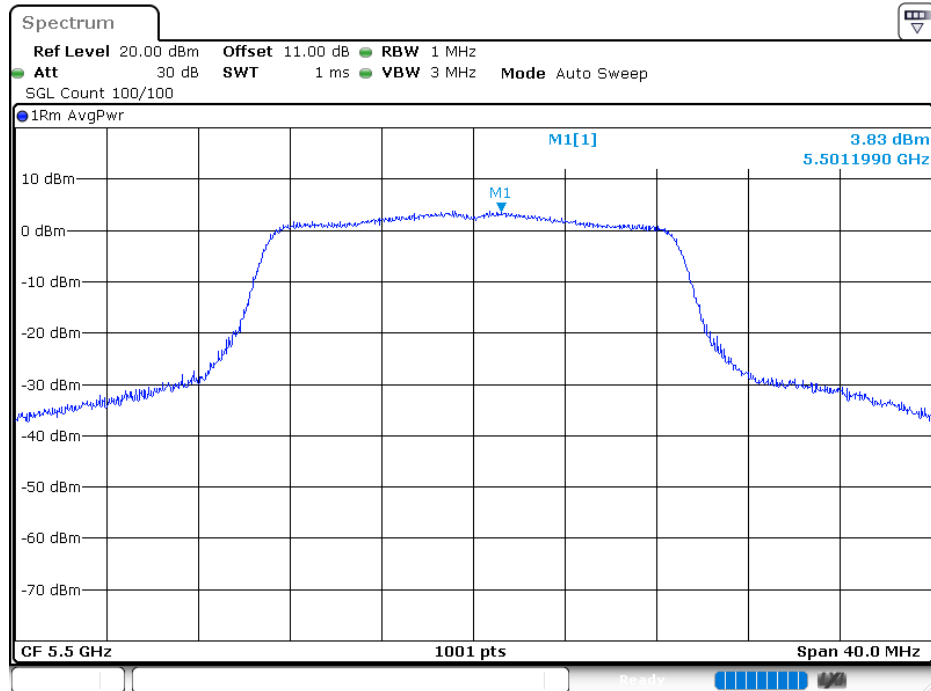
Date: 5.MAR.2020 09:50:13

802.11an HT20 5300MHz


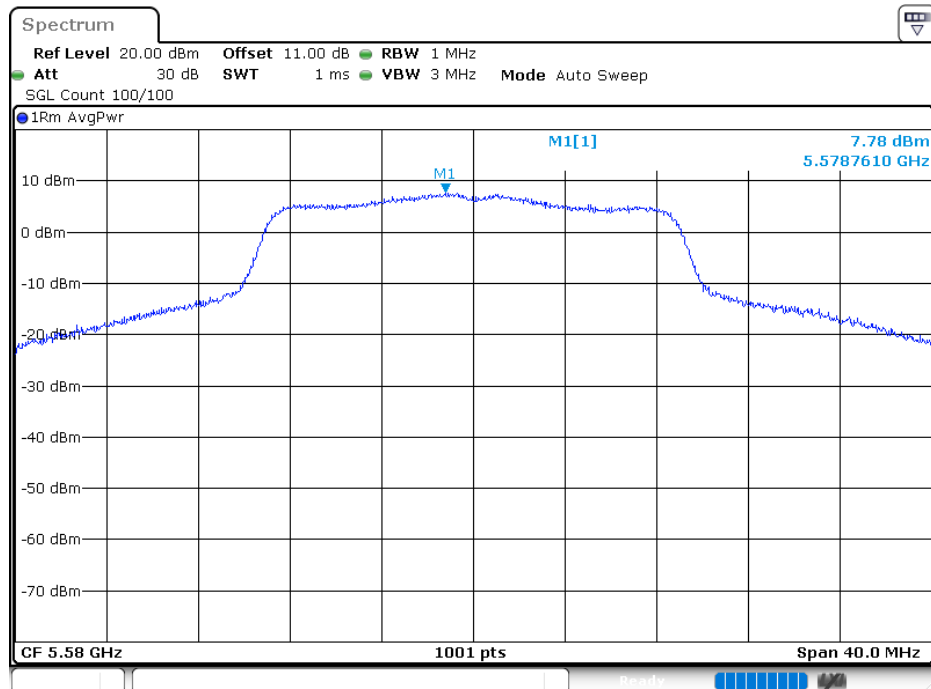
Date: 5.MAR.2020 09:53:24

802.11an HT20 5320MHz


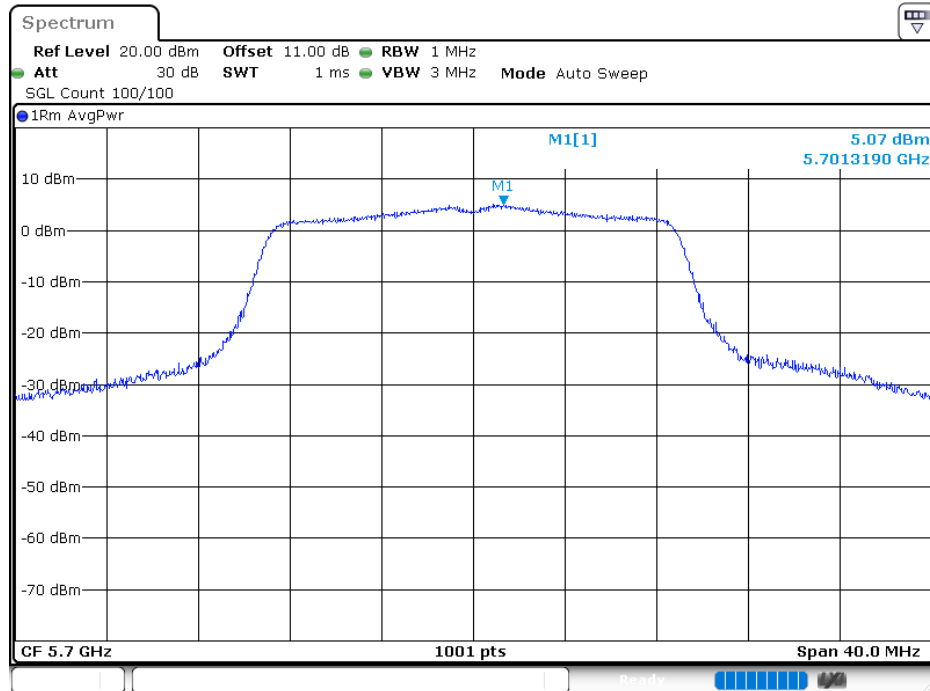
Date: 5.MAR.2020 09:57:02

802.11ac HT20 5500MHz


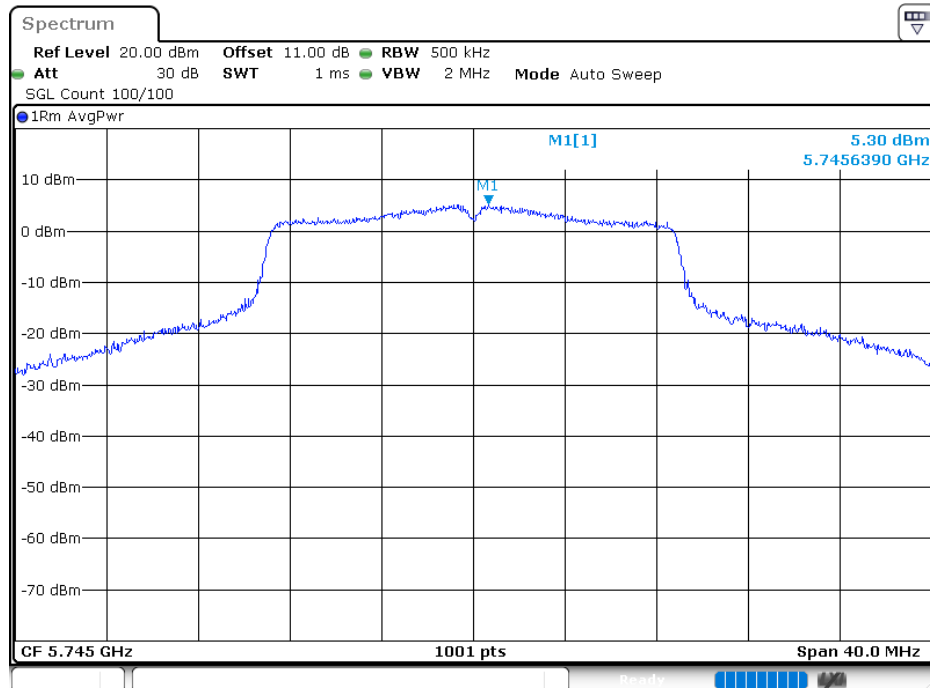
Date: 9.MAR.2020 03:51:58

802.11an HT20 5580MHz


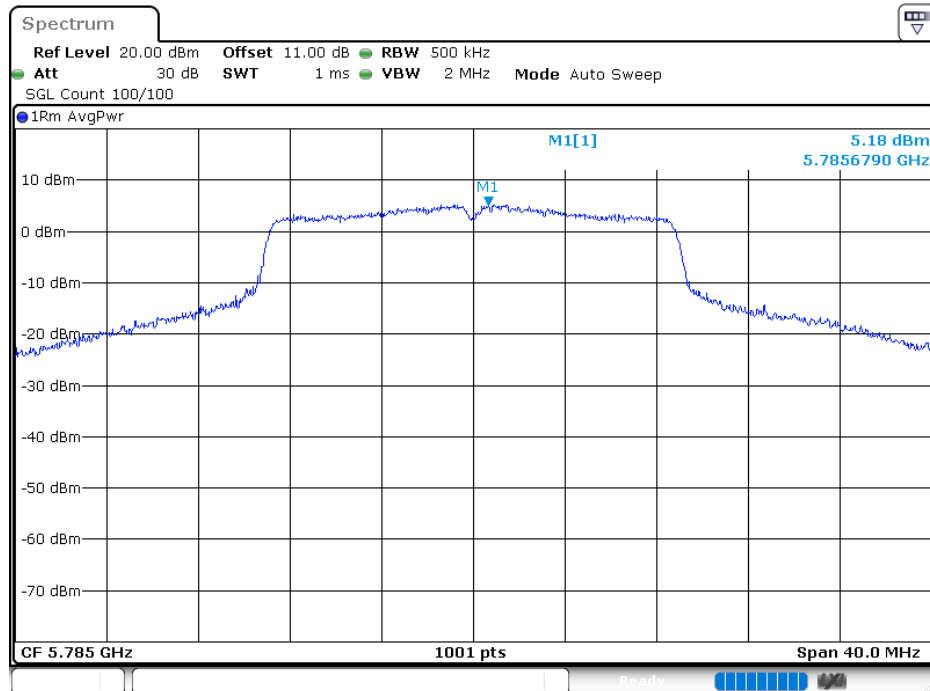
Date: 9.MAR.2020 03:55:37

802.11an HT20 5700MHz


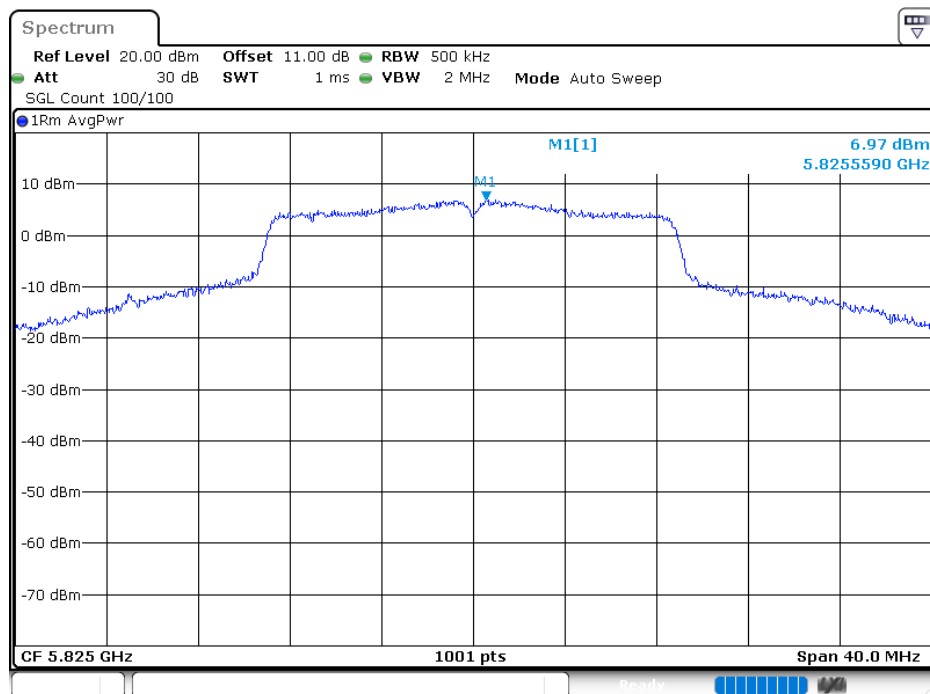
Date: 9.MAR.2020 03:59:09

802.11an HT20 5745MHz


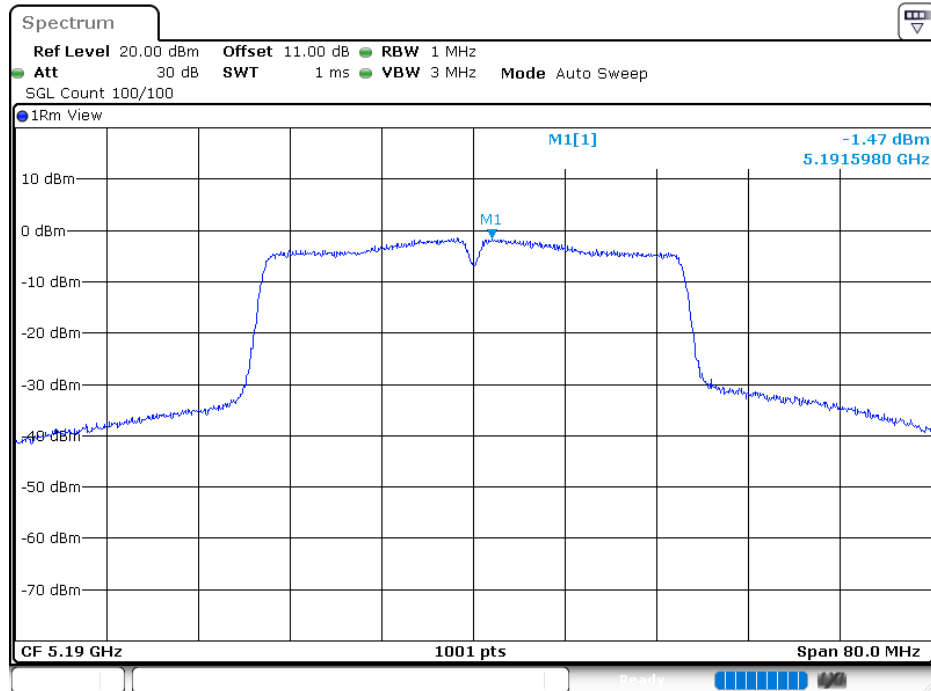
Date: 9.MAR.2020 04:01:23

802.11an HT20 5785MHz


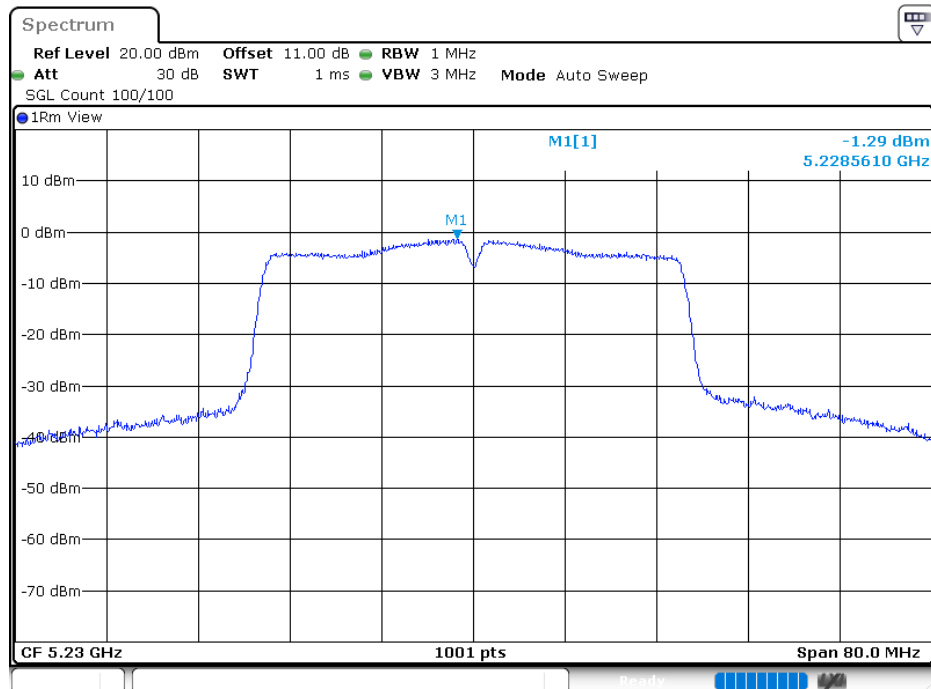
Date: 9.MAR.2020 04:02:57

802.11an HT20 5825MHz


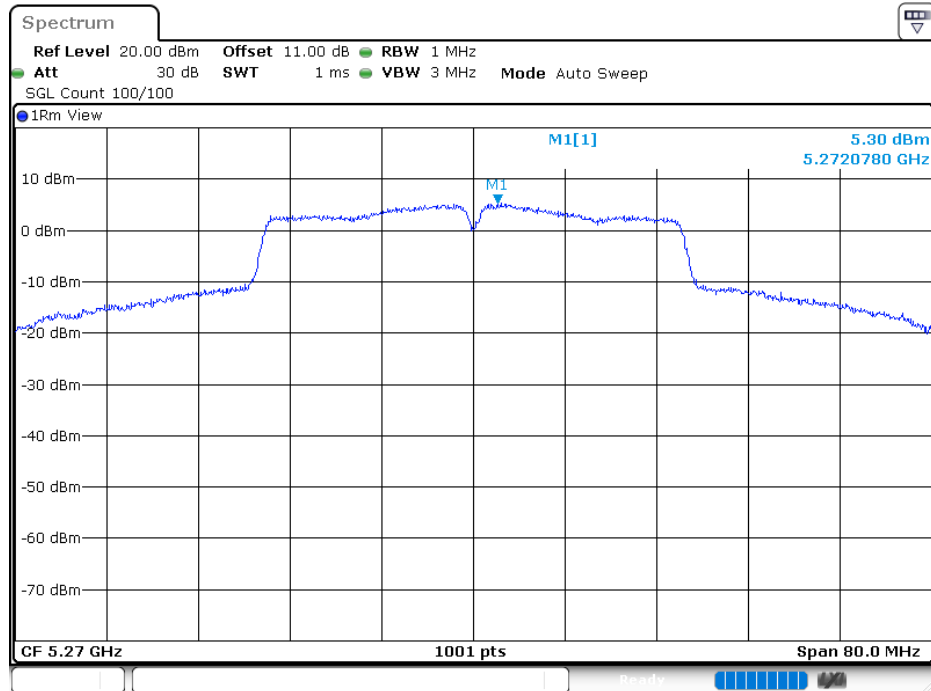
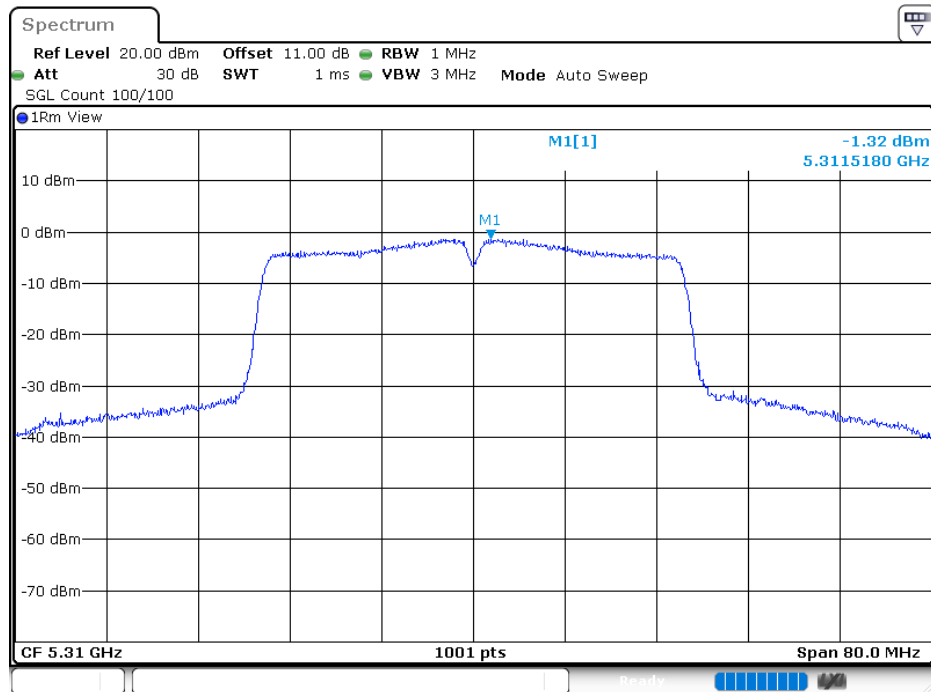
Date: 9.MAR.2020 04:04:39

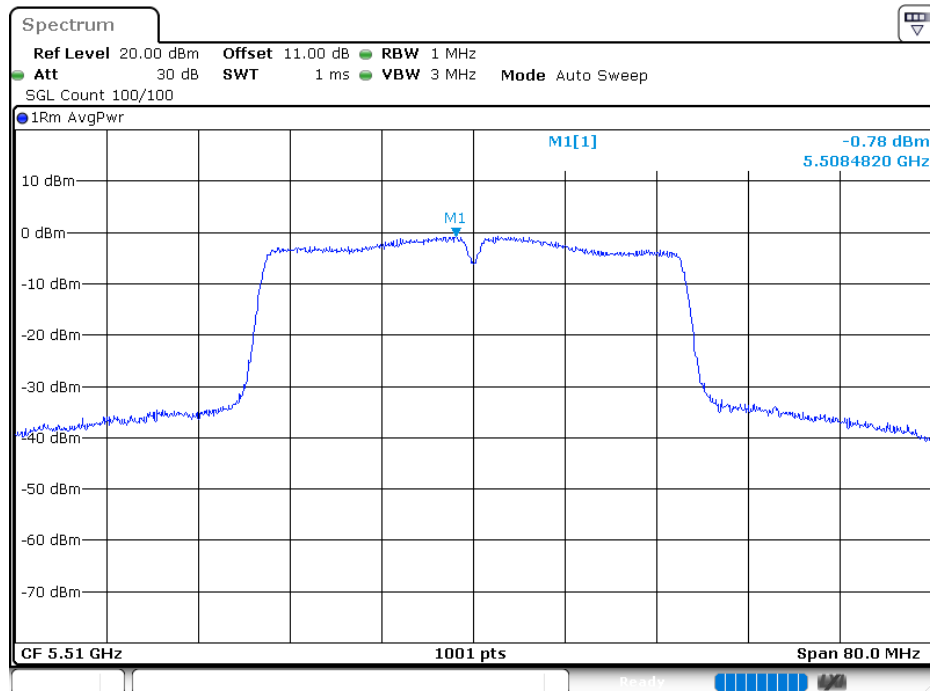
802.11an HT40 5190MHz


Date: 5.MAR.2020 10:22:55

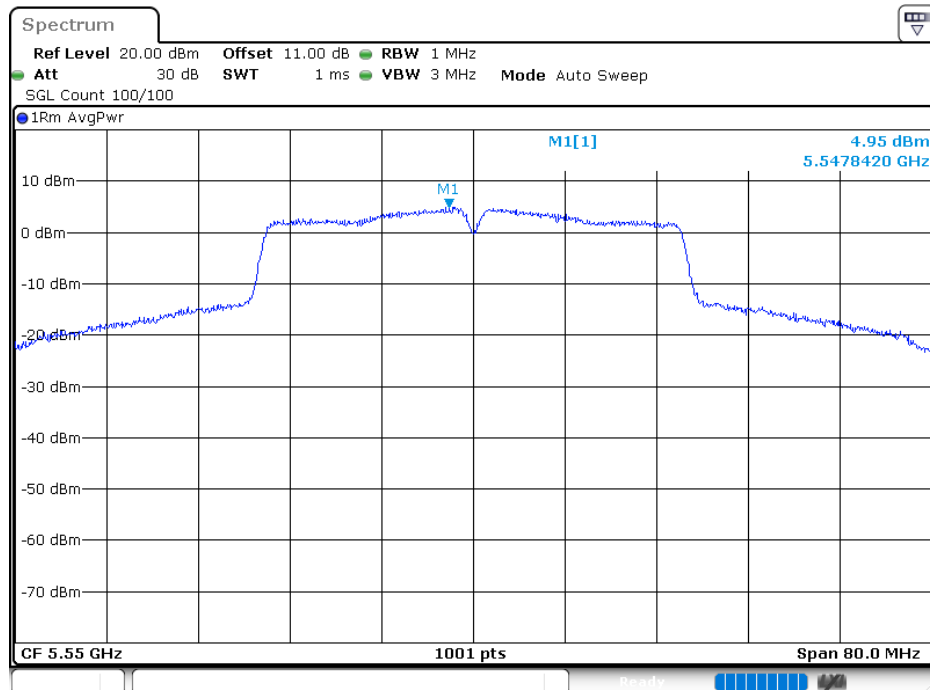
802.11an HT40 5230MHz


Date: 5.MAR.2020 10:26:26

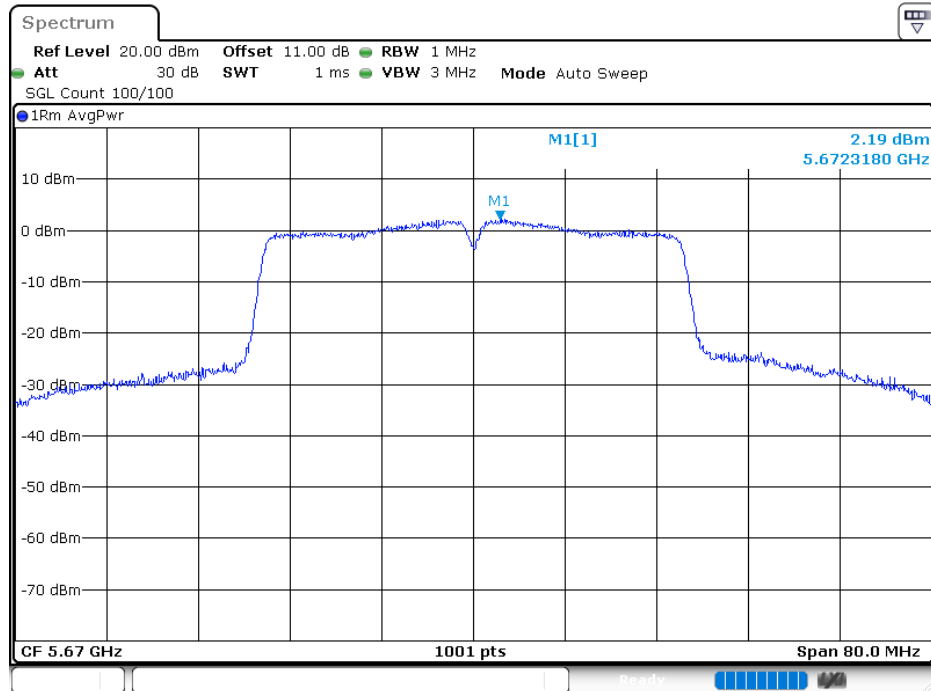
802.11an HT40 5270MHz

802.11an HT40 5310MHz


802.11an HT40 5510MHz


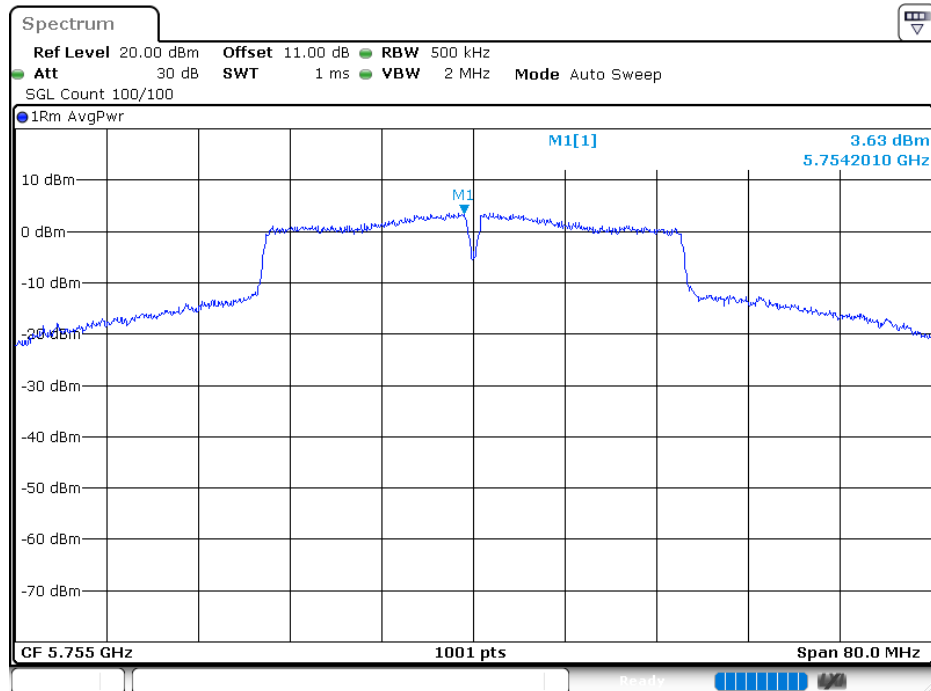
Date: 9.MAR.2020 04:08:43

802.11an HT40 5550MHz


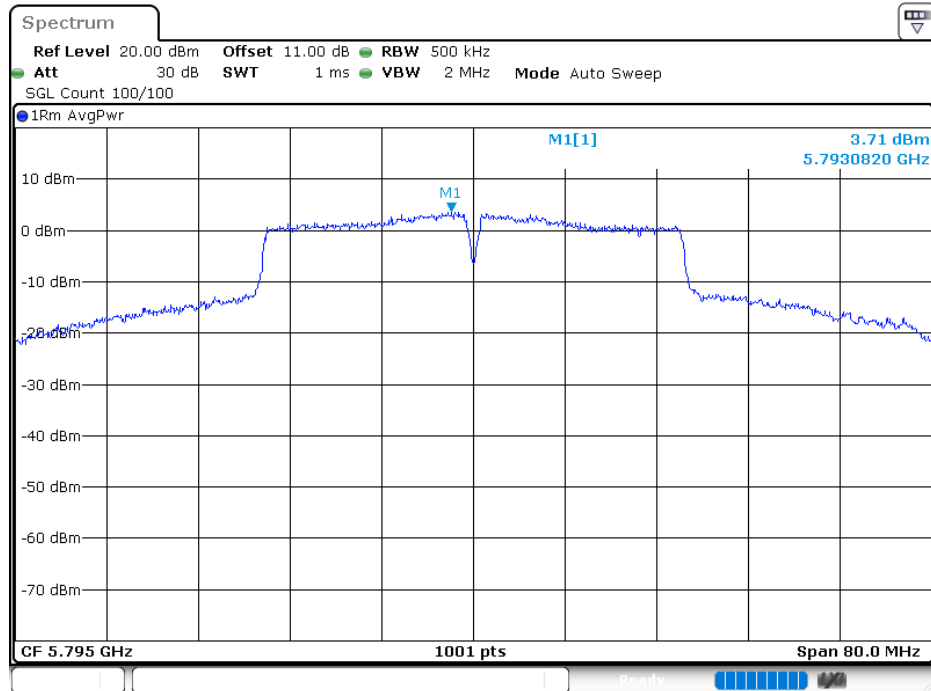
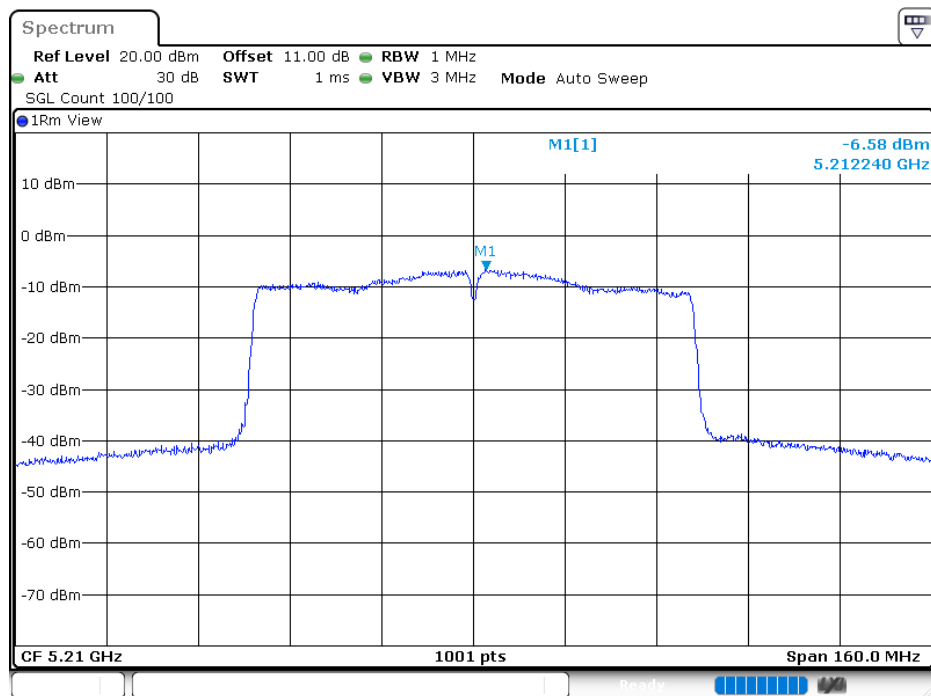
Date: 9.MAR.2020 04:11:27

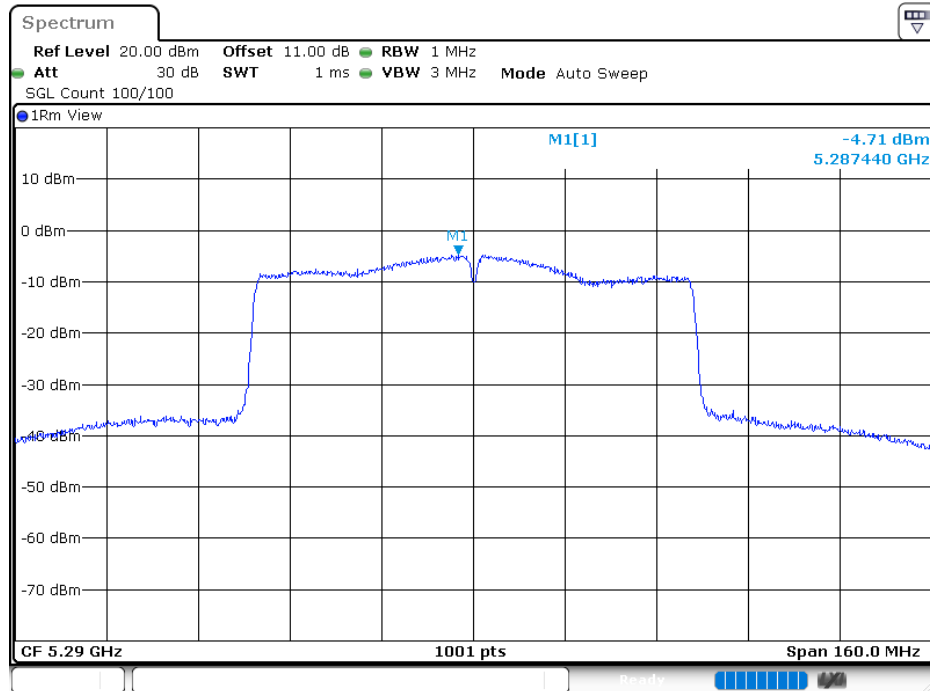
802.11an HT40 5670MHz


Date: 9.MAR.2020 04:14:02

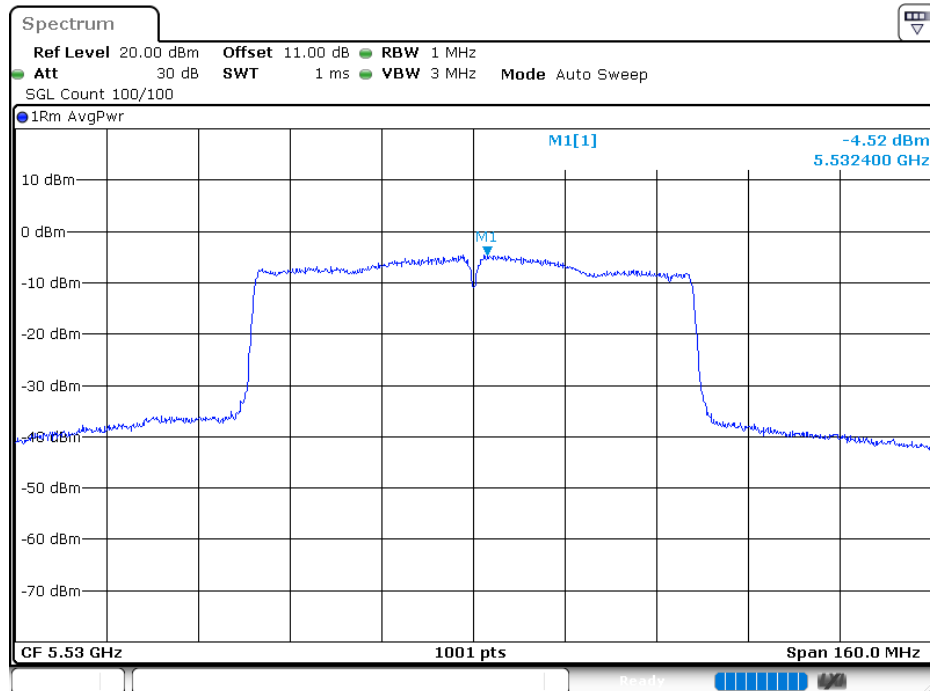
802.11an HT40 5755MHz


Date: 9.MAR.2020 04:16:10

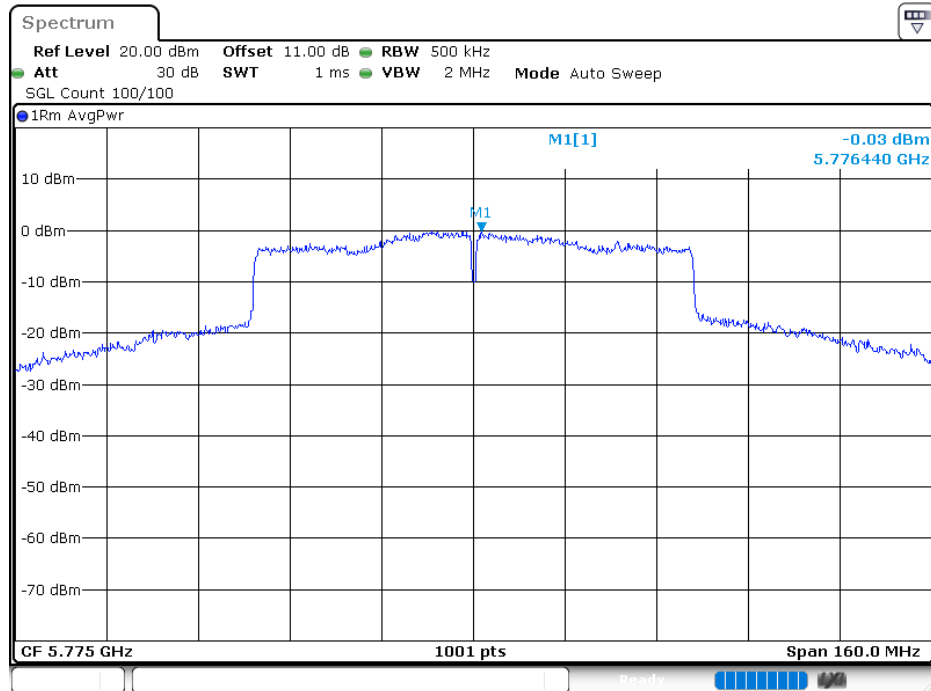
802.11an HT40 5795MHz

802.11ac VHT80 5210MHz


802.11ac VHT80 5290MHz


Date: 5.MAR.2020 10:39:49

802.11ac VHT80 5530MHz


Date: 9.MAR.2020 03:41:09

802.11ac VHT80 5775MHz


Date: 9.MAR.2020 03:47:58

5.1.7 Frequency Stability Measurement

RESULT:**Passed**

Test standard	:	FCC 15.407(g)
Basic standard	:	ANSI C63.10: 2013
Limits	:	±20ppm
Kind of test site	:	Shielded room

Test setup

Test Band	:	Band 1, Band 2, Band 3, Band 4
Operation mode	:	A

Remark: Measure with un-modulation mode.

Table 17: Test result of Frequency Stability 未有資料
Band 1

Freq(MHz)	5200			
Voltage (V)	Measurement Frequency (MHz)			Deviation(ppm)
132	5199.95224			9.185
120	5199.95224			9.185
108	5199.95224			9.185
Min Temp°C	0	2	5	10
50	5200.02489	5200.03444	5200.03531	5200.03589
40	5199.98119	5199.98119	5199.98061	5199.9809
30	5199.96151	5199.96151	5199.96122	5199.96151
20	5199.95224	5199.95253	5199.95253	5199.95253
10	5199.95514	5199.95514	5199.95485	5199.95485
0	5199.96122	5199.96151	5199.96151	5199.96179
-10	5199.98003	5199.978	5199.978	5199.978
-20	5199.99653	5199.99074	5199.98958	5199.98987
Limit(ppm)	20			
Max. Deviation (ppm)	9.185	9.129	9.129	9.129

Band 2

Freq(MHz)	5300			
Voltage (V)	Measurement Frequency (MHz)			Deviation(ppm)
132	5299.95137			9.175
120	5299.95137			9.175
108	5299.95137			9.175
Min Temp°C	0	2	5	10
50	5300.03473	5300.03618	5300.03734	5300.03618
40	5299.97395	5299.97887	5299.97916	5299.97945
30	5299.95948	5299.95919	5299.95919	5299.95948
20	5299.95137	5299.95137	5299.95137	5299.95137
10	5299.9563	5299.95456	5299.95456	5299.95427
0	5299.96151	5299.96151	5299.96151	5299.96151
-10	5299.97916	5299.97511	5299.97424	5299.97424
-20	5299.99479	5299.99363	5299.99363	5299.99334
Limit(ppm)	20			
Max. Deviation (ppm)	9.175	9.175	9.175	9.175

Band 3

Freq(MHz)	5580			
Voltage (V)	Measurement Frequency (MHz)			Deviation(ppm)
121	5579.94848			9.908
110	5579.94848			9.908
99	5579.94848			9.908
Min Temp°C	0	2	5	10
50	5580.02923	5580.02981	5580.02952	5580.03039
40	5579.98524	5579.9864	5579.98321	5579.98321
30	5579.95253	5579.95514	5579.95543	5579.95572
20	5579.94848	5579.94848	5579.94848	5579.94848
10	5579.95398	5579.95369	5579.95369	5579.95369
0	5579.96353	5579.96151	5579.96122	5579.96093
-10	5579.98061	5579.97656	5579.97627	5579.97598
-20	5579.99566	5579.99247	5579.99247	5579.99219
Limit(ppm)	20			
Max. Deviation (ppm)	9.908	9.908	9.908	9.908

Band4

Freq(MHz)	5785			
Voltage (V)	Measurement Frequency (MHz)			Deviation(ppm)
121	5784.94732			10.131
110	5784.94732			10.131
99	5784.94703			10.187
Min Temp°C	0	2	5	10
50	5785.03965	5785.04052	5785.04168	5785.04255
40	5784.97685	5784.97598	5784.97713	5784.97656
30	5784.9534	5784.9534	5784.9534	5784.95369
20	5784.94732	5784.94703	5784.94732	5784.94732
10	5784.94935	5784.94935	5784.94935	5784.94964
0	5784.95745	5784.95745	5784.95745	5784.95745
-10	5784.97974	5784.97598	5784.97569	5784.97569
-20	5784.99508	5784.99219	5784.99219	5784.99161
Limit(ppm)	20			
Max. Deviation (ppm)	10.131	10.187	10.131	10.131

5.1.8 Spurious Emission

RESULT:**Passed**

Test standard : FCC 15.205, FCC 15.209, FCC15.407, RSS-Gen, RSS-247

Basic standard : ANSI C63.10: 2013
Limits : Radiated emissions which fall in the restricted bands, as defined in FCC 15.205(a) and RSS-Gen i5, 8.10 (Table 7), must comply with the radiated emission limits specified in FCC 15.209(a) and RSS-Gen i5, 8.9 (Table 5 and 6).

Emission radiated outside the restricted and authorized frequency bands must either comply with the radiated emission limits specified for the restricted bands or in FCC15.407 and RSS-247 i2, 6.2

Kind of test site : 3m Semi-Anechoic Chamber

Test setup

Test Channel : FCC refer to Table 7
ISED refer to Table 8

Operation mode : A

Ambient temperature : 20-24 °C
Relative humidity : 50-65 %
Atmospheric pressure : 100-103 kPa

Factor (dB/m)=Antenna Factor(dB/m)+Cable loss (dB)

Level(dBuV/m)=Reading(dBuV)+ Factor(dB/m)

Testing was carried out within frequency range 9kHz to the tenth harmonic. For details refer to Appendix D.

The Radiated Emissions testing was performed in the X, Y and Z axis orientation. The worst-case Axis orientation is recorded in this test report.

All tests are based on current power, which is a worse mode under MIMO conditions.

5.1.9 Dynamic Frequency Selection

RESULT:
Passed

Test standard : FCC Part 15.407(h)(2), RSS-247 6.3
 Basic standard : ANSI C63.10:2013, KDB905462 D02,
 KDB905462 D03
 Kind of test site : Shielded room

Test setup

Test Channel : 20M, 5500MHz, 40M, 5510MHz,
 80M, 5530MHz
 Operation Mode : C

Requirement:

Requirement	Operational Mode	
	Master Device or Client with Radar Detection	Client Without Radar Detection
<i>DFS Detection Threshold</i>	Yes	Not required
<i>Channel Closing Transmission Time</i>	Yes	Yes
<i>Channel Move Time</i>	Yes	Yes
<i>U-NII Detection Bandwidth</i>	Yes	Not required

Additional requirements for devices with multiple bandwidth modes	Master Device or Client with Radar Detection	Client Without Radar Detection
<i>U-NII Detection Bandwidth and Statistical Performance Check</i>	All BW modes must be tested	Not required
<i>Channel Move Time and Channel Closing Transmission Time</i>	Test using widest BW mode available	Test using the widest BW mode available for the link
<i>All other tests</i>	Any single BW mode	Not required
Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.		

Limit:

Parameter	Value
<i>Non-occupancy period</i>	Minimum 30 minutes
<i>Channel Availability Check Time</i>	60 seconds
<i>Channel Move Time</i>	10 seconds See Note 1.
<i>Channel Closing Transmission Time</i>	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
<i>U-NII Detection Bandwidth</i>	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.

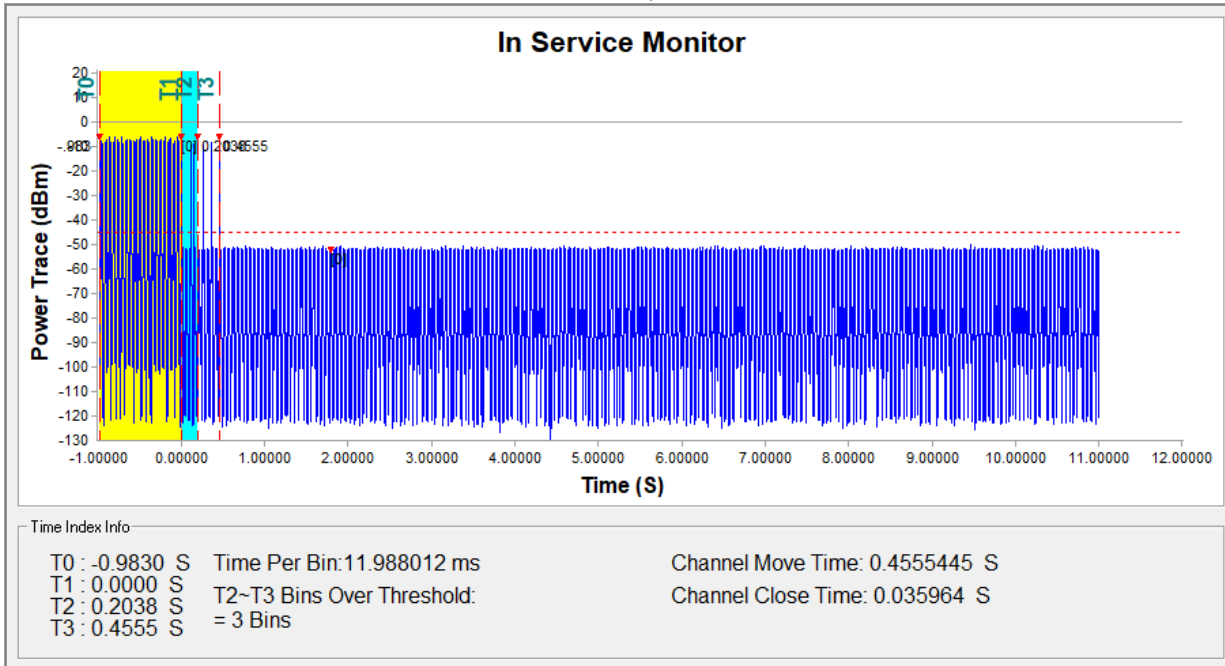
Note 1: *Channel Move Time* and the *Channel Closing Transmission Time* should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

Note 2: The *Channel Closing Transmission Time* is comprised of 200 milliseconds starting at the beginning of the *Channel Move Time* plus any additional intermittent control signals required to facilitate a *Channel move* (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

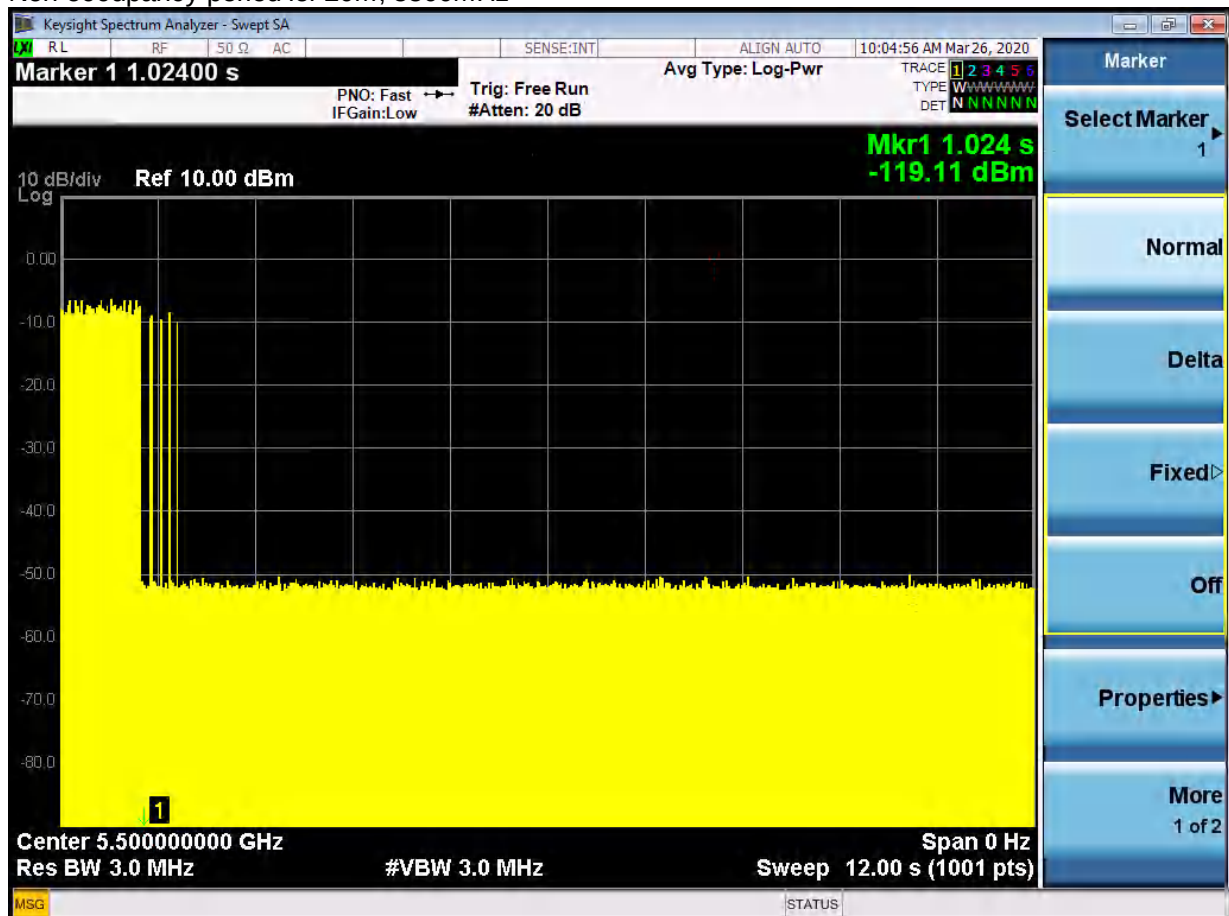
Note 3: During the *U-NII Detection Bandwidth* detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

Test Plot of DFS Result

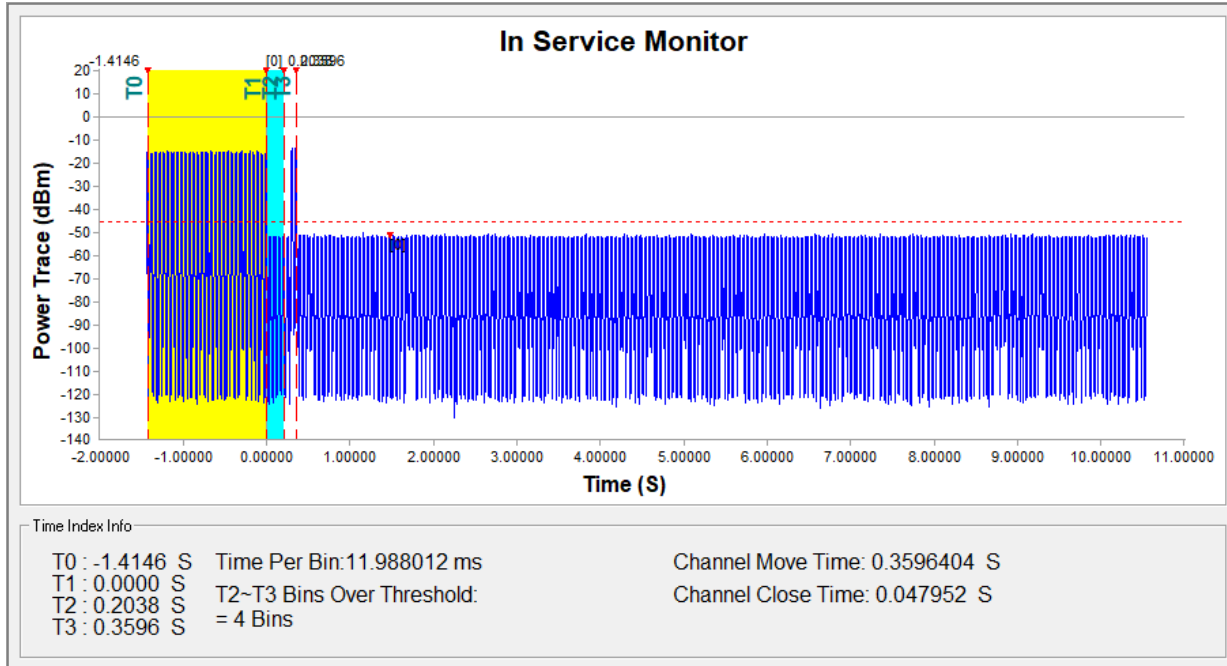
Channel Move Time with Channel Close Time for 20M, 5500MHz



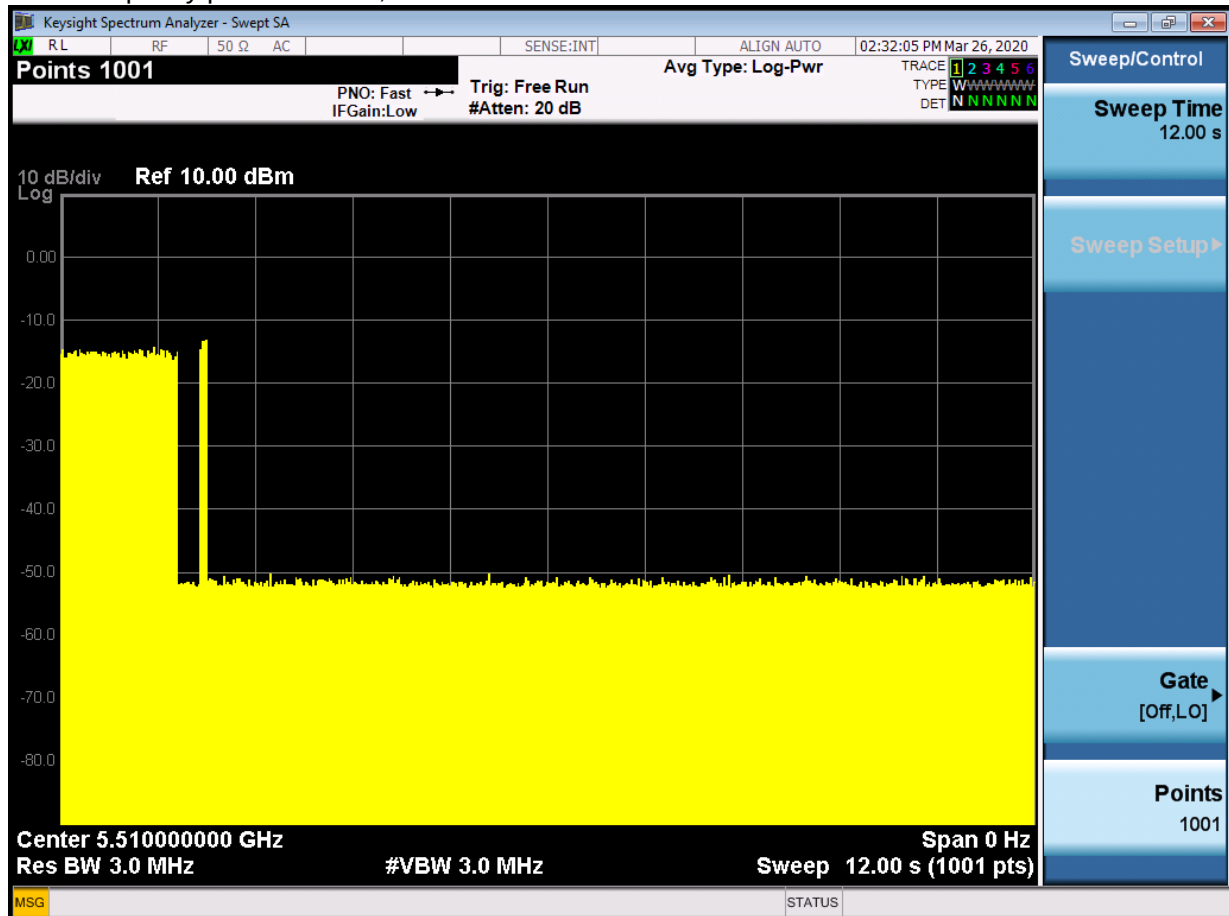
Non-occupancy period for 20M, 5500MHz



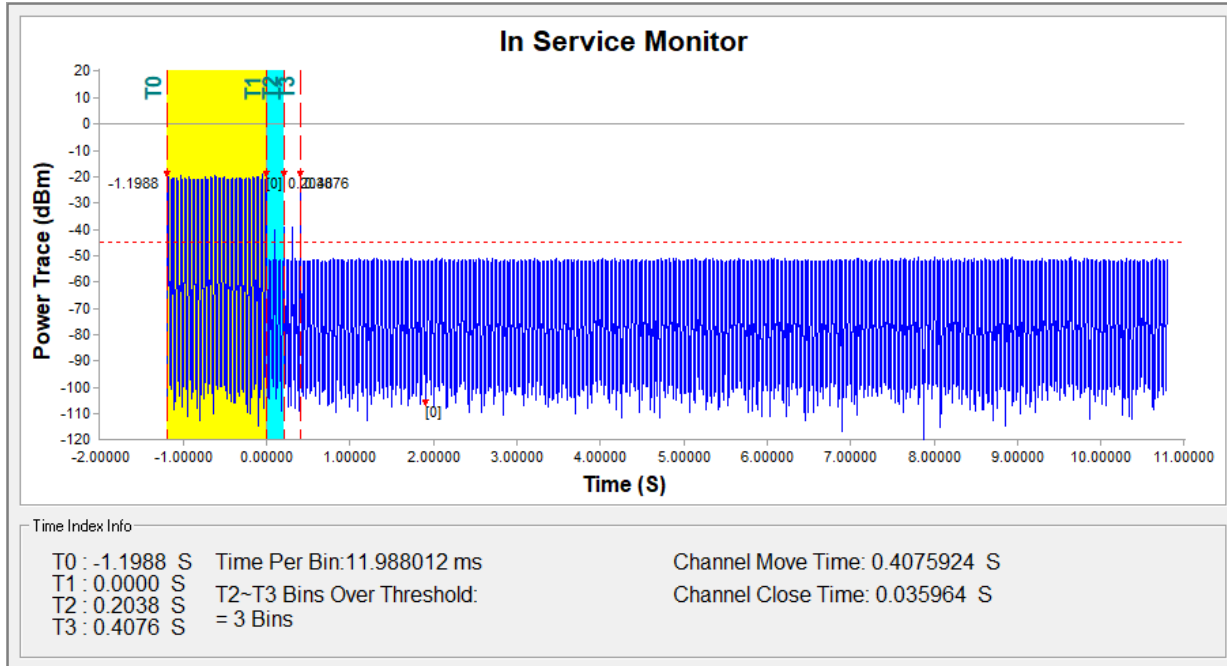
Channel Move Time with Channel Close Time for 40M, 5510MHz



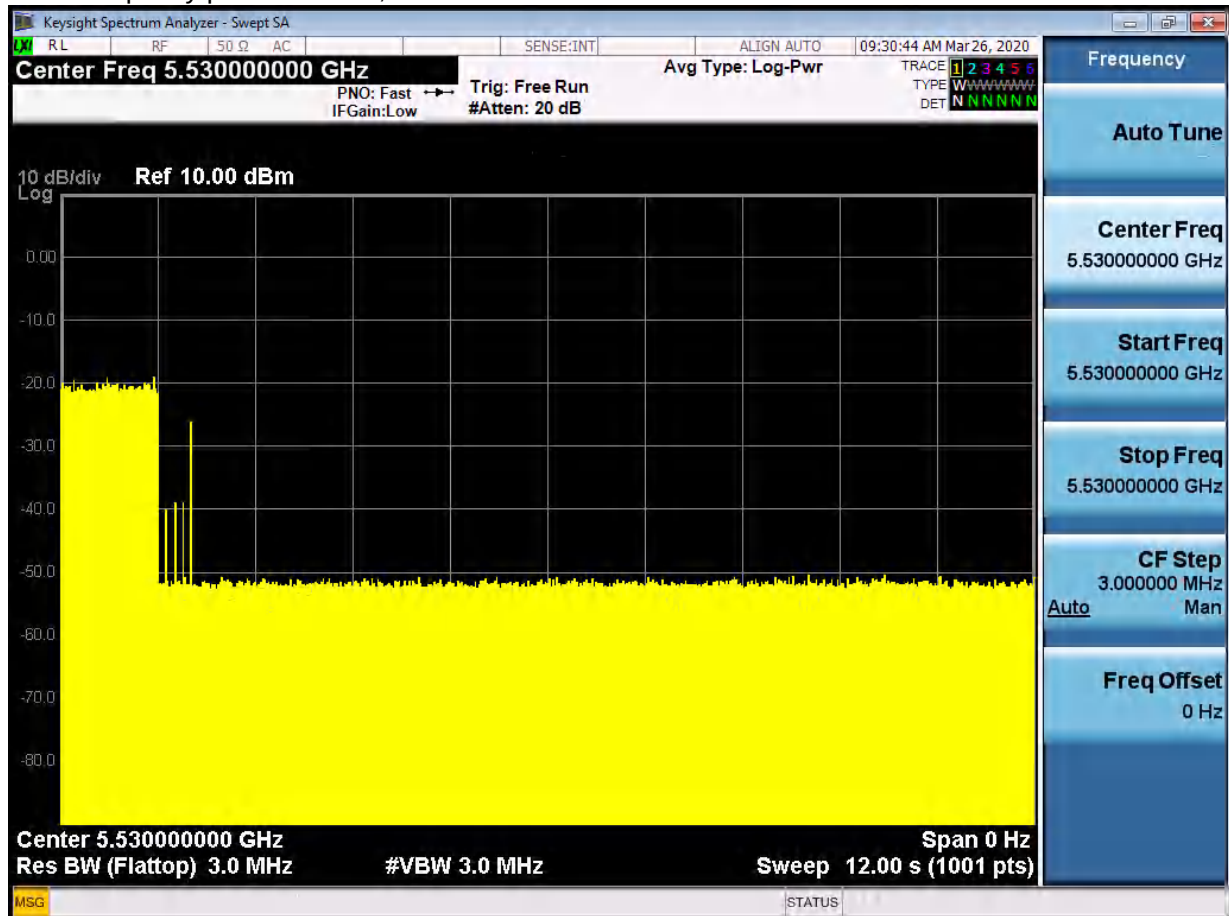
Non-occupancy period for 40M, 5510MHz



Channel Move Time with Channel Close Time for 80M, 5530MHz



Non-occupancy period for 80M, 5530MHz



5.2 Mains Emissions

5.2.1 Mains Conducted Emissions

RESULT:**Passed**

Test standard : FCC Part 15.207,
FCC Part 15.107,
ISED RSS-Gen 8.8

Limits : Mains Conducted emissions as defined in
above test standards must comply with the
mains conducted emission limits specified

Kind of test site : Shielded Room

Test setup

Test channel : 802.11a, 5580MHz
Operation mode : A

Ambient temperature : 20-24°C
Relative humidity : 50-65%
Atmospheric pressure : 100-103 kPa

Factor (dB/m)=Antenna Factor(dB/m)+Cable loss (dB)

Level(dBuV/m)=Reading(dBuV)+ Factor(dB/m)

Remark: For details refer to Appendix D.

6. Radio Frequency Exposure Compliance

6.1.1 Electromagnetic Fields

RESULT:
Passed

Test standard : FCC CFR 47 Part 2 Subpart J Section 2.1091
 RSS-102 Issue 5, 2.5.2

Separation distance is more than 20 cm, thus mobile device exposure limits can be applied.

FCC Maximum Exposure:

Mode	Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Maximum Output Power (dBm)	Output Power (mW)	Power Density (S)(mW/cm ²)	Test Result
802.11an HT40	5755	4.4	2.7542	20.73	118.3042	0.064856	Pass

Limit FCC: 1500-100,000 MHz 1.0 mW/cm²

ISED:
Exemption Limits for Routine Evaluation – RF Exposure Evaluation

At or above 300MHz and below 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than $1.31 \times 10^{-2} f^{0.6834}$ W, where f is in MHz;

f= 5755MHz

$$1.31 \times 10^{-2} \times 5755^{0.6834} = 4.863W$$

After evaluation the 5755MHz e.i.r.p 25.13dBm calculated result is closer to its limit.

25.13dBm = 0.32584W, it is well below the limit of Exemption Limits for Routine Evaluation, so RF exposure assessment meets its standards.

7. Photographs of the Test Set-Up

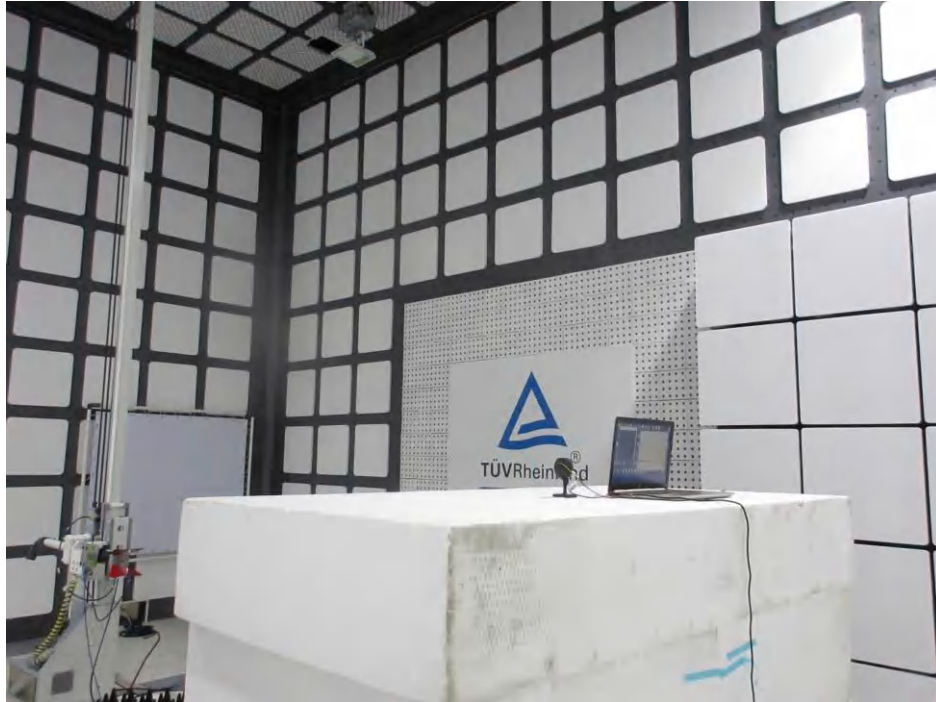
Photograph 1: Set-up for Spurious Emissions (Front View 1)



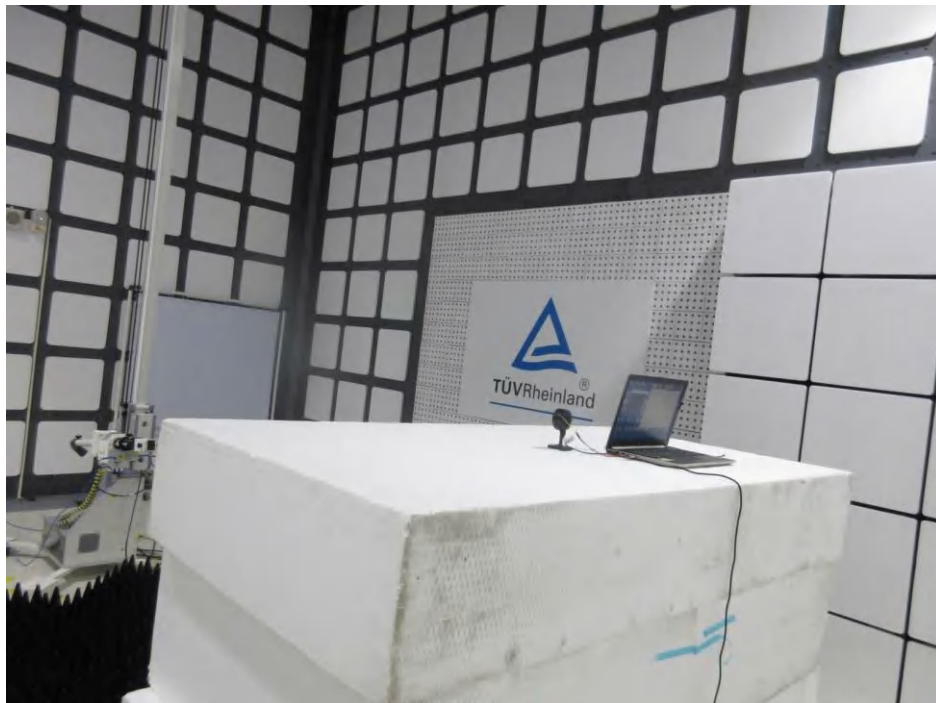
Photograph 2: Set-up for Spurious Emissions (Front View 2)



Photograph 3: Set-up for Spurious Emissions (Back View 1)



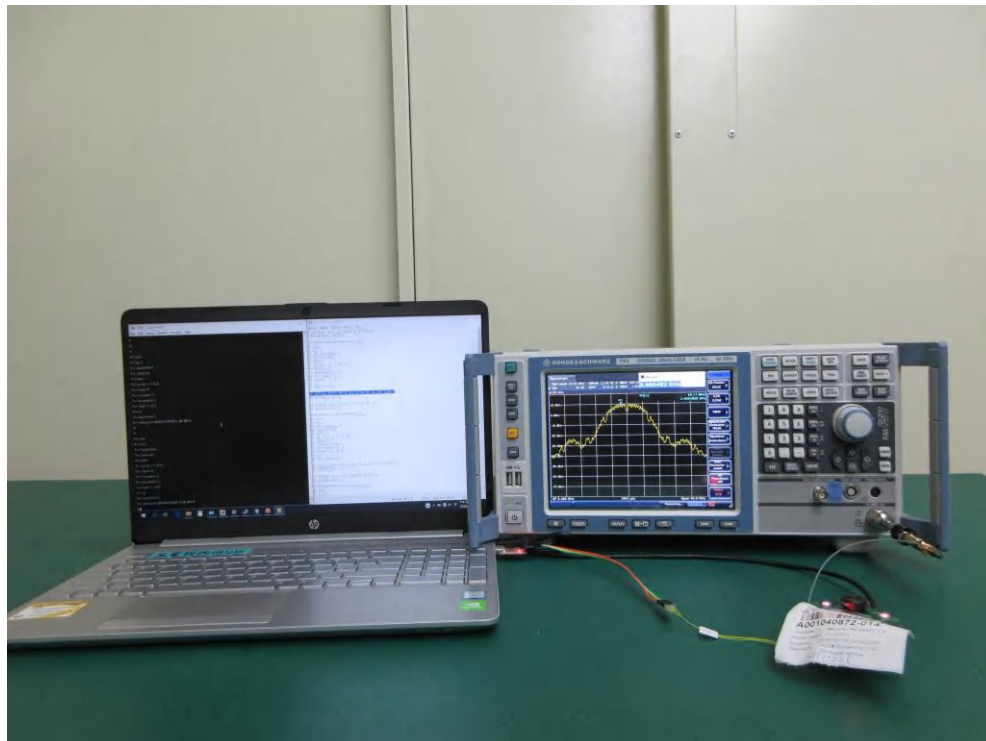
Photograph 4: Set-up for Spurious Emissions (Back View 2)



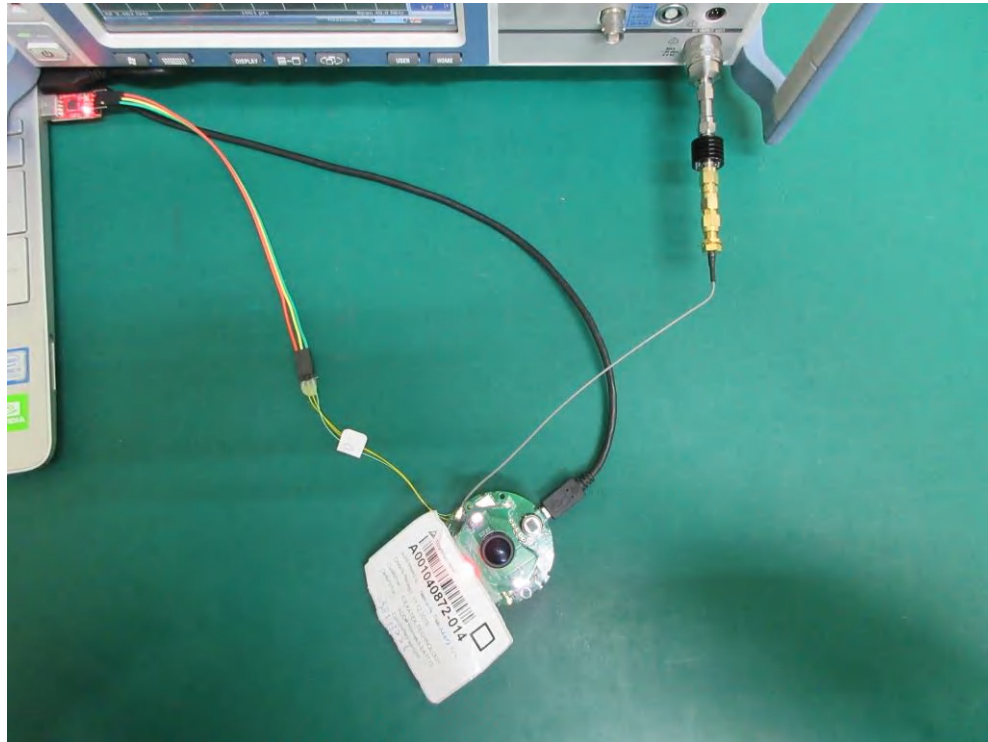
Photograph 5: Set-up for Spurious Emissions (Back View 3)



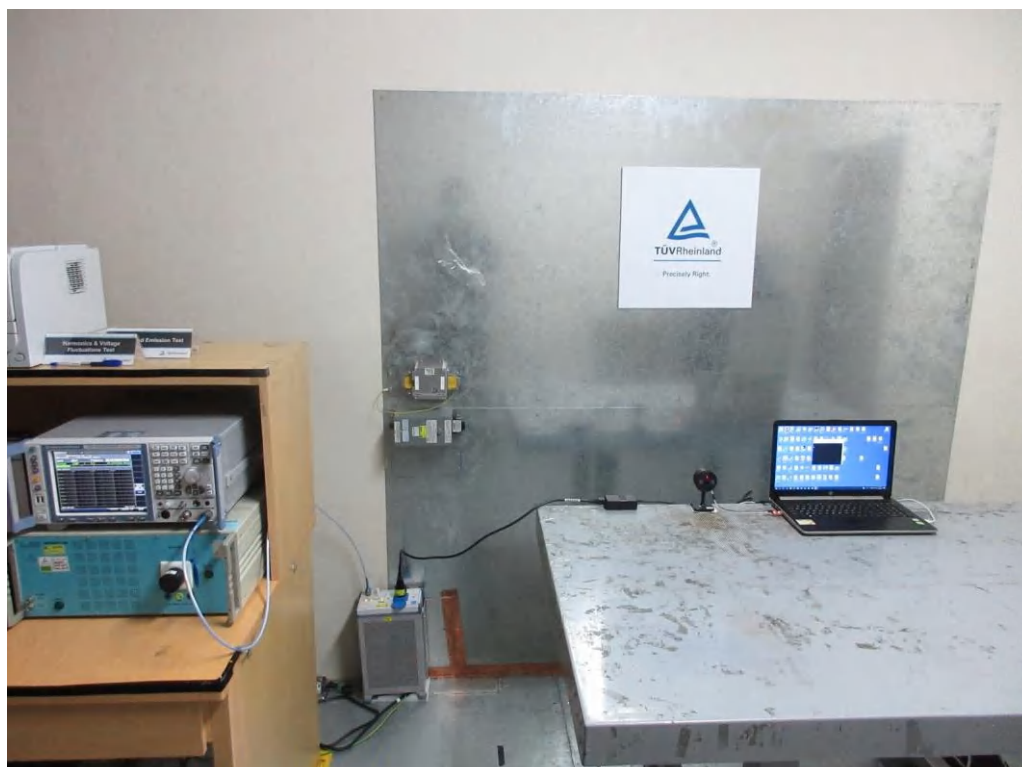
Photograph 6: Set-up for Conducted testing(View 1)



Photograph 7: Set-up for Conducted testing(View 2)



Photograph 8: Set-up for AC Mains (Front View)



Photograph 9: Set-up for AC Mains (Back View)



8. List of Tables

Table 1: Applied Standard and Test Levels.....	5
Table 2: List of Test and Measurement Equipment.....	7
Table 3: Emission Measurement Uncertainty	8
Table 4: Basic Information of EUT.....	9
Table 5: Technical Specification of EUT	9
Table 6: Channel Frequency Table.....	10
Table 7: Table for Parameters of Test Software Setting for FCC	12
Table 8: Table for Parameters of Test Software Setting for ISSED	13
Table 9: Test result of Duty Cycle.....	19
Table 10: Test result of Average Output Power for FCC.....	24
Table 11: Test result of Average Output Power for ISSED.....	25
Table 12: Test result of 26dB & 99% Bandwidth for FCC.....	28
Table 13: Test result of 26dB & 99% Bandwidth for ISSED.....	29
Table 14: Test result of 6dB Bandwidth for FCC / ISSED	97
Table 15: Test result of Power Density for FCC.....	104
Table 16: Test result of Power Density for ISSED.....	105
Table 17: Test result of Frequency Stability 未有資料.....	146

9. List of Photographs

Photograph 1: Set-up for Spurious Emissions (Front View 1).....	156
Photograph 2: Set-up for Spurious Emissions (Front View 2).....	156
Photograph 3: Set-up for Spurious Emissions (Back View 1).....	157
Photograph 4: Set-up for Spurious Emissions (Back View 2).....	157
Photograph 5: Set-up for Spurious Emissions (Back View 3).....	158
Photograph 6: Set-up for Conducted testing(View 1).....	158
Photograph 7: Set-up for Conducted testing(View 2).....	159
Photograph 8: Set-up for AC Mains (Front View).....	159
Photograph 9: Set-up for AC Mains (Back View).....	160