



## FCC PART 15.407

### TEST REPORT

For

## Crestron Electronics Inc

15 Volvo Drive, Rockleigh, New Jersey, 07647, USA

**FCC ID: EROUC-P8**

<b>Report Type:</b> Original Report	<b>Product Type:</b> PERSONAL COMMUNICATION DEVICE
<b>Report Number:</b>	RSZ201030001-00D
<b>Report Date:</b>	2020-12-11
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## GENERAL INFORMATION

### Product Description for Equipment under Test (EUT)

Product	PERSONAL COMMUNICATION DEVICE
Tested Model	M202029002
Frequency Range	5G Wi-Fi: 5150-5250MHz; 5250-5350MHz; 5470-5725MHz; 5725-5850MHz
Maximum Conducted Average Output Power	5150-5250 MHz: 15.42dBm (802.11a), 15.48dBm(802.11n20), 14.95dBm(802.11n40) 14.84dBm (802.11ac20), 14.85dBm(802.11 ac40), 13.92dBm(802.11 ac80) 5250-5350MHz: 14.63dBm (802.11a), 14.92dBm(802.11n20), 14.36dBm(802.11n40) 14.76dBm (802.11ac20), 14.68dBm(802.11 ac40), 12.58dBm(802.11 ac80) 5470-5725MHz: 14.35dBm (802.11a), 13.89dBm(802.11n20), 14.27dBm(802.11n40) 13.98dBm (802.11ac20), 13.89dBm(802.11 ac40), 13.89dBm(802.11 ac80) 5725-5850 MHz: 14.34dBm (802.11a), 14.35dBm(802.11n20), 14.52dBm(802.11n40) 14.85dBm (802.11ac20), 14.13dBm(802.11 ac40), 14.38dBm(802.11 ac80)
Modulation Technique	OFDM
Antenna Specification*	6.0 dBi(It is provided by the applicant)
Voltage Range	DC 44~57V from POE
Date of Test	2020-11-05 to 2020-12-11
Sample serial number	RSZ201030001-RF-S1 (Assigned by BACL, Shenzhen)
Received date	2020-10-30
Sample/EUT Status	Good condition

Model	SKU Code	Description
M202029002	UC-P8-T-C-HS	8in Teams Video Phone with Handset and Camera
	UC-P8-T-C-HS-I	8in Teams Video Phone with Handset and Camera (International)
	UC-P8-T-C	8in Teams Video Phone with Camera, No handset
	UC-P8-T-C-I	8in Teams Video Phone with Camera, No handset (International)
	UC-P8-T-HS	8in Teams Phone with Handset, No Camera
	UC-P8-T-HS-I	8in Teams Phone with Handset, No Camera (International)
	UC-P8-T	8in Teams Phone No Handset, No Camera
	UC-P8-T-I	8in Teams Phone No Handset, No Camera (international)

Note: "International" is for world, without "International" is for US, with Sales Purpose

### Objective

This test report is in accordance with Part 2-Subpart J, Part 15-Subparts A and E of the Federal Communication Commissions rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart E, section 15.203, 15.205, 15.207, 15.209 and 15.407 rules.

## Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices. And KDB789033 D02 General U-NII Test Procedures New Rules v02r01.

All emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Shenzhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

## Measurement Uncertainty

Parameter		Uncertainty
Occupied Channel Bandwidth		±5%
RF Output Power with Power meter		±0.73dB
RF conducted test with spectrum		±1.6dB
AC Power Lines Conducted Emissions		±1.95dB
Emissions, Radiated	Below 1GHz	±4.75dB
	Above 1GHz	±4.88dB
Temperature		±1 °C
Humidity		±6%
Supply voltages		±0.4%

*Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.*

## Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 6/F., West Wing, Third Phase of Wanli Industrial Building, Shihua Road, Futian Free Trade Zone, Shenzhen, Guangdong, China.

The test site has been approved by the FCC under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No.: 342867, the FCC Designation No.: CN1221.

The test site has been registered with ISED Canada under ISED Canada Registration Number 3062B.

## SYSTEM TEST CONFIGURATION

### Description of Test Configuration

The system was configured for testing in an engineering mode, which was provided by manufacturer.

The EUT can operate in 802.11a/n20/n40/ac20/ac40/ac80 modes.

For 5150-5250MHz Band, 7 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	44	5220
38	5190	46	5230
40	5200	48	5240
42	5210	/	/

For 5250-5350MHz Band, 7 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	60	5300
54	5270	62	5310
56	5280	64	5320
58	5290	/	/

For 5470-5725MHz Band, 18 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	124	5620
102	5510	126	5630
104	5520	128	5640
106	5530	132	5660
108	5540	134	5670
110	5550	136	5680
112	5560	140	5700
116	5580	/	/
118	5590	/	/
120	5600	/	/
122	5610	/	/

For 5725-5850MHz Band, 8 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	157	5785
151	5755	159	5795
153	5765	161	5805
155	5775	165	5825

**EUT Exercise Software**

“ADB command”\* was used. Test frequencies and power level were configured as below:

U-NII	Mode	Frequency (MHz)	Data Rate	Power Level
5150 – 5250MHz	802.11 a	5180	6Mbps	default
		5200	6Mbps	default
		5240	6Mbps	default
	802.11 n20	5180	MCS0	default
		5200	MCS0	default
		5240	MCS0	default
	802.11 n40	5190	MCS0	13
		5230	MCS0	default
	802.11 ac20	5180	MCS0	default
		5200	MCS0	default
		5240	MCS0	default
	802.11 ac40	5190	MCS0	13
5230		MCS0	default	
802.11 ac80	5210	MCS0	14	
5250 – 5350MHz	802.11 a	5260	6Mbps	default
		5280	6Mbps	default
		5320	6Mbps	default
	802.11 n20	5260	MCS0	default
		5280	MCS0	default
		5320	MCS0	default
	802.11 n40	5270	MCS0	default
		5310	MCS0	13
	802.11 ac20	5260	MCS0	default
		5280	MCS0	default
		5320	MCS0	default
	802.11 ac40	5270	MCS0	default
		5310	MCS0	13
	802.11 ac80	5290	MCS0	13

U-NII	Mode	Frequency (MHz)	Data Rate set	Power Level
5470 – 5725MHz	802.11 a	5500	6Mbps	11
		5580	6Mbps	default
		5700	6Mbps	11
	802.11 n20	5500	MCS0	11
		5580	MCS0	default
		5700	MCS0	11
	802.11 n40	5510	MCS0	11
		5550	MCS0	default
		5670	MCS0	12
	802.11 ac20	5500	MCS0	11
		5580	MCS0	default
		5700	MCS0	11
	802.11 ac40	5510	MCS0	11
		5550	MCS0	default
		5670	MCS8	12
802.11 ac80	5530	MCS9	11	
	5610	MCS9	14	
5725 – 5850MHz	802.11 a	5745	6Mbps	default
		5785	6Mbps	default
		5825	6Mbps	default
	802.11 n20	5745	MCS0	default
		5785	MCS0	default
		5825	MCS0	default
	802.11 n40	5755	MCS0	default
		5795	MCS0	default
	802.11 ac20	5745	MCS0	default
		5785	MCS0	default
		5825	MCS0	default
	802.11 ac40	5755	MCS0	default
		5795	MCS0	default
	802.11 ac80	5775	MCS0	default

The worse-case data rates are determined to be as follows for each mode based upon investigations by measuring the average power and PSD across all data rated bandwidths, and modulations.

The software and power level was provided by the applicant.



**Duty cycle**

Test Result: Pass. Please refer to the Appendix.

**Equipment Modifications**

No modification was made to the EUT tested.

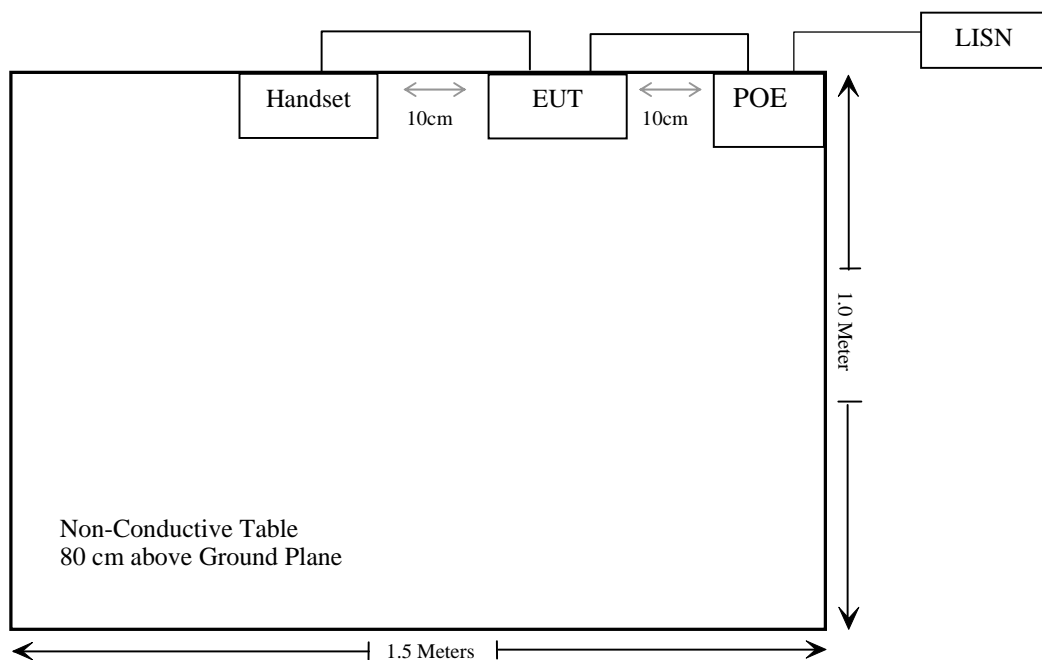
**Support Equipment List and Details**

Manufacturer	Description	Model	Serial Number
GOSPELL	POE	G0720-480-050	G0720-480-050
TECLAST	USB disk	8GB	unknown

**External I/O Cable**

Cable Description	Length (m)	From Port	To
Un-shielded Detachable AC Cable	1.0	LISN	POE
Un-shielded Detachable RJ45 Cable	1.0	POE	EUT

**Block Diagram of Test Setup**



## SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1307 (b) (1) & §2.1091	Maximum Permissible exposure (MPE)	Compliance
§15.203	Antenna Requirement	Compliance
§15.407(b)(6)& §15.207(a)	Conducted Emissions	Compliance
§15.205& §15.209 &§15.407(b) (1), (2), (3), (4), (6) (7)	Undesirable Emission& Restricted Bands	Compliance
§15.407(a) (1), (5),(e)	26 dB Emission Bandwidth & 6dB Bandwidth	Compliance
§15.407(a)(1),(2), (3)	Conducted Transmitter Output Power	Compliance
§15.407 (a)(1), (2), (3)	Power Spectral Density	Compliance
§15.407 (h)	Transmit Power Control (TPC)	Not Applicable
§15.407 (h)	Dynamic Frequency Selection (DFS)	Compliance*

Not Applicable: the EUT has no TPC function which was declared by the applicant.

Compliance\*: Please refer to the DFS report: RSZ201105010-00.

**TEST EQUIPMENT LIST**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
<b>AC Line Conducted test</b>					
Rohde & Schwarz	EMI Test Receiver	ESCI	101120	2020/08/04	2021/08/03
Rohde & Schwarz	LISN	ENV216	101613	2020/08/04	2021/08/03
Rohde & Schwarz	Transient Limiter	ESH3Z2	DE25985	2019/11/29	2020/11/28
Unknown	CE Cable	CE Cable	UF A210B-1-0720-504504	2019/11/29	2020/11/28
Rohde & Schwarz	CE Test software	EMC 32	V8.53.0	NCR	NCR
<b>Radiated Emission Test</b>					
R&S	EMI Test Receiver	ESR3	102455	2020/08/04	2021/08/03
Sonoma instrument	Pre-amplifier	310 N	186238	2020/08/04	2021/08/03
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2017/12/22	2020/12/21
Unknown	Cable 2	RF Cable 2	F-03-EM197	2019/11/29	2020/11/28
Unknown	Cable	Chamber Cable 1	F-03-EM236	2019/11/29	2020/11/28
Rohde & Schwarz	Auto test software	EMC 32	V9.10	NCR	NCR
Rohde & Schwarz	Spectrum Analyzer	FSV40-N	102259	2020/08/04	2021/08/03
COM-POWER	Pre-amplifier	PA-122	181919	2020/11/29	2021/11/28
Quinstar	Amplifier	QLW-18405536-J0	15964001002	2020/11/29	2021/11/28
Sunol Sciences	Horn Antenna	DRH-118	A052604	2017/12/22	2020/12/21
Insulted Wire Inc.	RF Cable	SPS-2503-3150	02222010	2020/11/29	2021/11/28
Unknow	RF Cable	W1101-EQ1 OUT	F-19-EM005	2020/11/29	2021/11/28
Unknown	Signal Cable	RG-214	2	2020/11/29	2021/11/28
SNSD	Band Reject filter	BSF5150-5850MN-0899-004	5G filter	2020/04/20	2021/04/20
Ducommun Technologies	Horn antenna	ARH-4223-02	1007726-02 1304	2020/12/06	2023/12/05
Ducommun Technologies	Horn antenna	ARH-2823-02	1007726-02 1302	2020/12/06	2023/12/05
<b>RF Conducted Test</b>					
Tonscend Corporation	RF control Unit	JS0806-2	19D8060154	2020/08/04	2021/08/03
Rohde & Schwarz	Signal and Spectrum Analyzer	FSV40	101473	2020/08/04	2021/08/03
Unknown	RF Cable 2	Unknown	F-03-EM198	2019/11/12	2020/11/12
Unknown	RF Cable 2	Unknown	F-03-EM198	2020/11/12	2021/11/12

\* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

**1.1307 (b) (1) & §2.1091- MAXIMUM PERMISSIBLE EXPOSURE (MPE)**

**Applicable Standard**

According to subpart 1.1307 (b)(1), 2.1091 systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

Limits for General Population/Uncontrolled Exposure

Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Averaging Time (Minutes)
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f <sup>2</sup> )	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

f = frequency in MHz

\* = Plane-wave equivalent power density

**Result**

**Calculated Formulary:**

Predication of MPE limit at a given distance

$$S = \frac{PG}{4\pi R^2}$$

S = power density (in appropriate units, e.g. mW/cm<sup>2</sup>)

P = power input to the antenna (in appropriate units, e.g., mW).

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain.

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

Frequency (MHz)	Antenna Gain		Tune up conducted power		Evaluation Distance (cm)	Power Density (mW/cm <sup>2</sup> )	MPE Limit (mW/cm <sup>2</sup> )
	(dBi)	(numeric)	(dBm)	(mW)			
5150-5250	6	4	15.6	36.31	20	0.029	1
5250-5350	6	4	15.0	31.62	20	0.025	1
5470-5725	6	4	14.5	28.18	20	0.022	1
5725-5850	6	4	15.0	31.62	20	0.025	1

Note: The 2.4G Wi-Fi can't transmit at the same time with the 5G Wi-Fi.

To maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 20cm from nearby persons.

**Result: Pass**

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## **FCC §15.203 – ANTENNA REQUIREMENT**

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### **Applicable Standard**

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

- a. Antenna must be permanently attached to the unit.
- b. Antenna must use a unique type of connector to attach to the EUT.

Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.407 (a), if the transmitting antennas of directional gain greater than 6dBi are used, the transmit power and power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### **Antenna Connector Construction**

The EUT has one internal antenna arrangement for 5G Wi-Fi, which was permanently attached and the antenna gain is 6.0dBi, fulfill the requirement of this section. Please refer to the EUT photos.

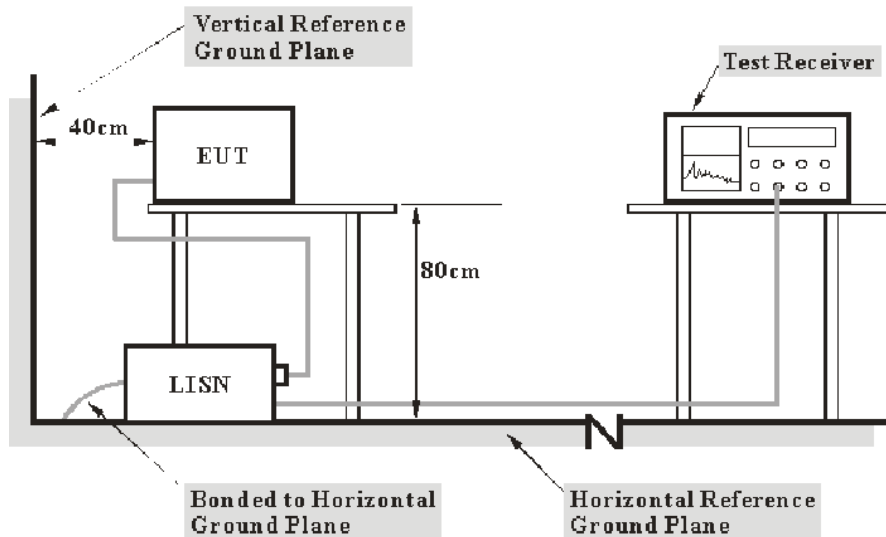
**Result:** Compliance.

**FCC §15.407 (b) (6) §15.207 (a) – CONDUCTED EMISSIONS**

**Applicable Standard**

FCC §15.207, §15.407(b) (6)

**EUT Setup**



- Note: 1. Support units were connected to second LISN.  
 2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

**EMI Test Receiver Setup**

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

**Test Procedure**

During the conducted emission test, the adapter was connected to the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and average detection mode.

**Test Data**

**Environmental Conditions**

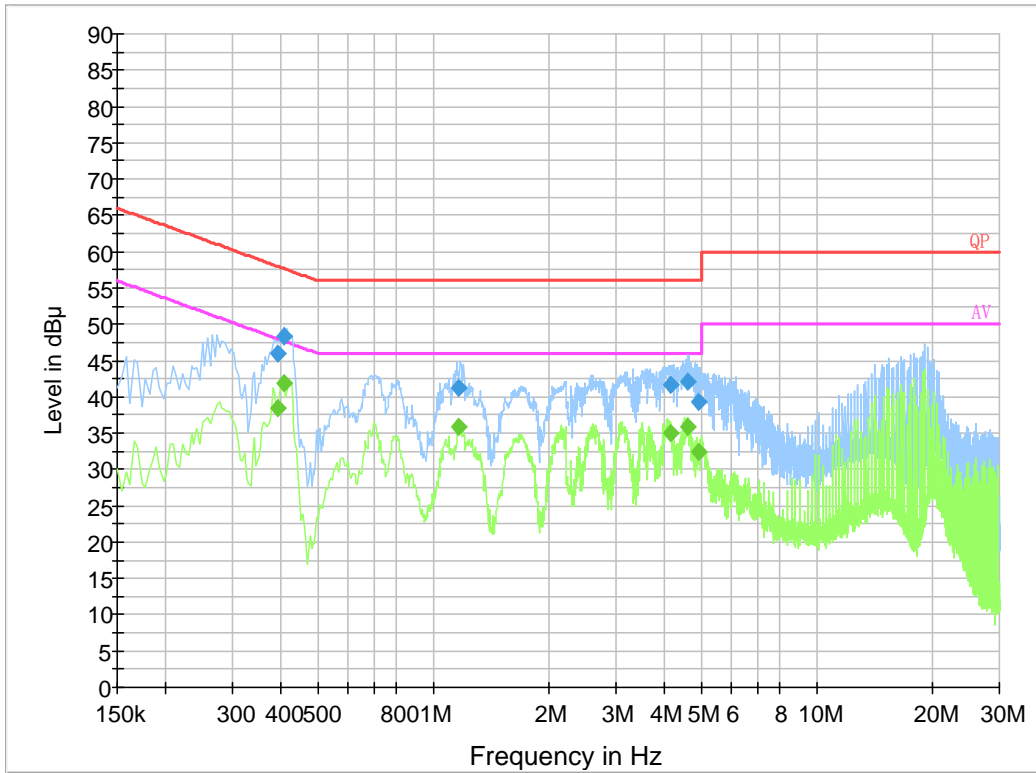
<b>Temperature:</b>	25 °C
<b>Relative Humidity:</b>	65 %
<b>ATM Pressure:</b>	101.0 kPa

*The testing was performed by Haiguo Li on 2020-11-05.*

*EUT operation mode: Transmitting*

*Note: test on Combination Mode: M202029002 (UC-P8-T-HS)*

**AC 120V/60 Hz, Line:**



**Final Result 1**

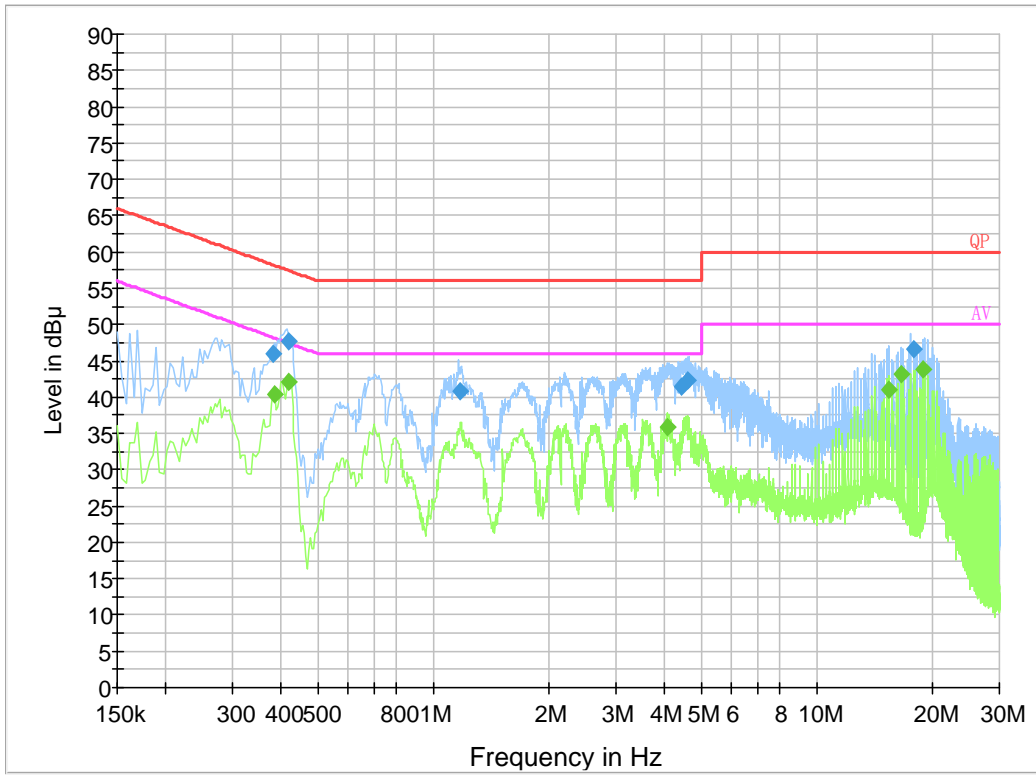
Frequency (MHz)	QuasiPeak (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.391790	46.0	9.000	L1	19.9	12.0	58.0
0.407850	48.3	9.000	L1	19.9	9.4	57.7
1.164330	41.3	9.000	L1	19.8	14.7	56.0
4.166610	41.6	9.000	L1	19.9	14.4	56.0
4.616430	42.0	9.000	L1	19.9	14.0	56.0
4.903390	39.4	9.000	L1	19.9	16.6	56.0

**Final Result 2**

Frequency (MHz)	Average (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.391790	38.4	9.000	L1	19.9	9.6	48.0
0.407850	42.0	9.000	L1	19.9	5.7	47.7
1.164330	35.8	9.000	L1	19.8	10.2	46.0
4.166610	35.0	9.000	L1	19.9	11.0	46.0
4.616430	35.9	9.000	L1	19.9	10.1	46.0
4.903390	32.4	9.000	L1	19.9	13.6	46.0



**AC 120V/60 Hz, Neutral:**



**Final Result 1**

Frequency (MHz)	QuasiPeak (dB µ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB µ V)
0.384210	45.9	9.000	N	19.8	12.3	58.2
0.419730	47.7	9.000	N	19.8	9.8	57.5
1.172510	40.8	9.000	N	19.8	15.2	56.0
4.428270	41.5	9.000	N	19.9	14.5	56.0
4.616130	42.4	9.000	N	19.9	13.6	56.0
17.889010	46.5	9.000	N	20.2	13.5	60.0

**Final Result 2**

Frequency (MHz)	Average (dB µ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB µ V)
0.386000	40.4	9.000	N	19.8	7.7	48.1
0.422000	42.2	9.000	N	19.8	5.2	47.4
4.070000	35.9	9.000	N	19.9	10.1	46.0
15.458000	41.1	9.000	N	20.0	8.9	50.0
16.562000	43.1	9.000	N	20.1	6.9	50.0
18.994000	43.8	9.000	N	20.3	6.2	50.0

**§15.205 & §15.209 & §15.407(B) (1), (2), (3), (4),(6),(7) – UNDESIRABLE EMISSION**

**Applicable Standard**

FCC §15.407 (b) (1), (2), (3), (4), (6), (7); §15.209; §15.205;

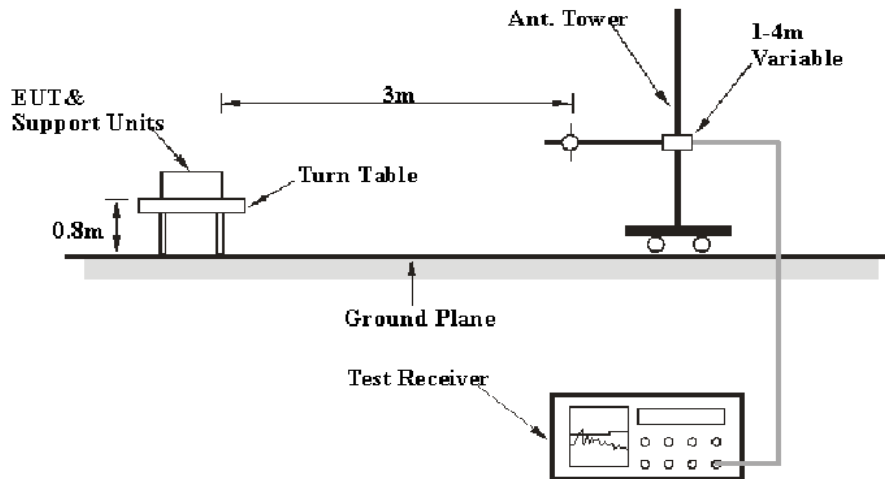
(b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band:
  - (i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

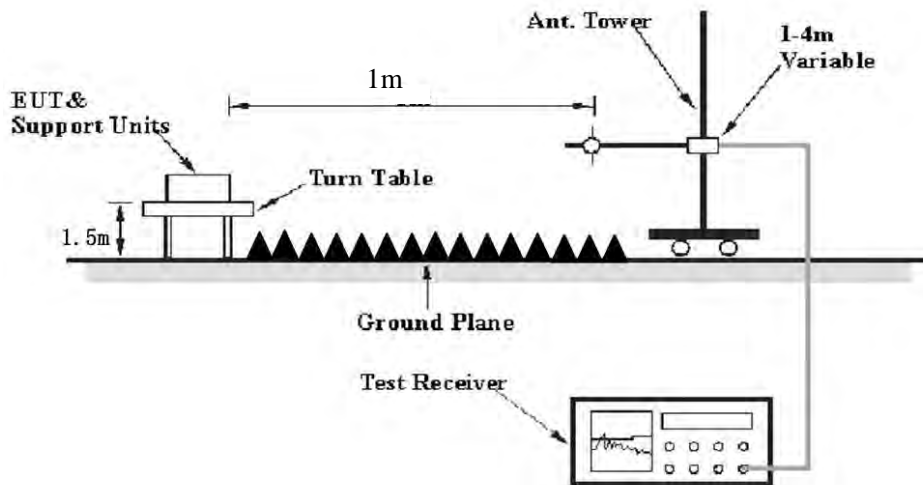
Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.

**EUT Setup**

**Below 1 GHz:**



**Above 1 GHz:**



The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC 15.209 and FCC 15.407 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

**EMI Test Receiver & Spectrum Analyzer Setup**

The system was investigated from 30 MHz to 40 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Measurement
30 MHz – 1000 MHz	100 kHz	300 kHz	120 kHz	QP
Above 1 GHz	1 MHz	3 MHz	/	PK
	1MHz	10 Hz <sup>Note 1</sup>	/	Average
	1MHz	> 1/T <sup>Note 2</sup>	/	Average

Note 1: when duty cycle is no less than 98%

Note 2: when duty cycle is less than 98%

**Test Procedure**

**Radiated Spurious Emission**

During the radiated emission test, the adapter was connected to the AC floor outlet.

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all the installation combinations.

Data was recorded in Quasi-peak detection mode for frequency range of 30 MHz-1GHz, peak and Average detection modes for frequencies above 1GHz.

## Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

$$\text{Corrected Amplitude} = \text{Meter Reading} + \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Limit} - \text{Corrected Amplitude}$$

## Test Data

### Environmental Conditions

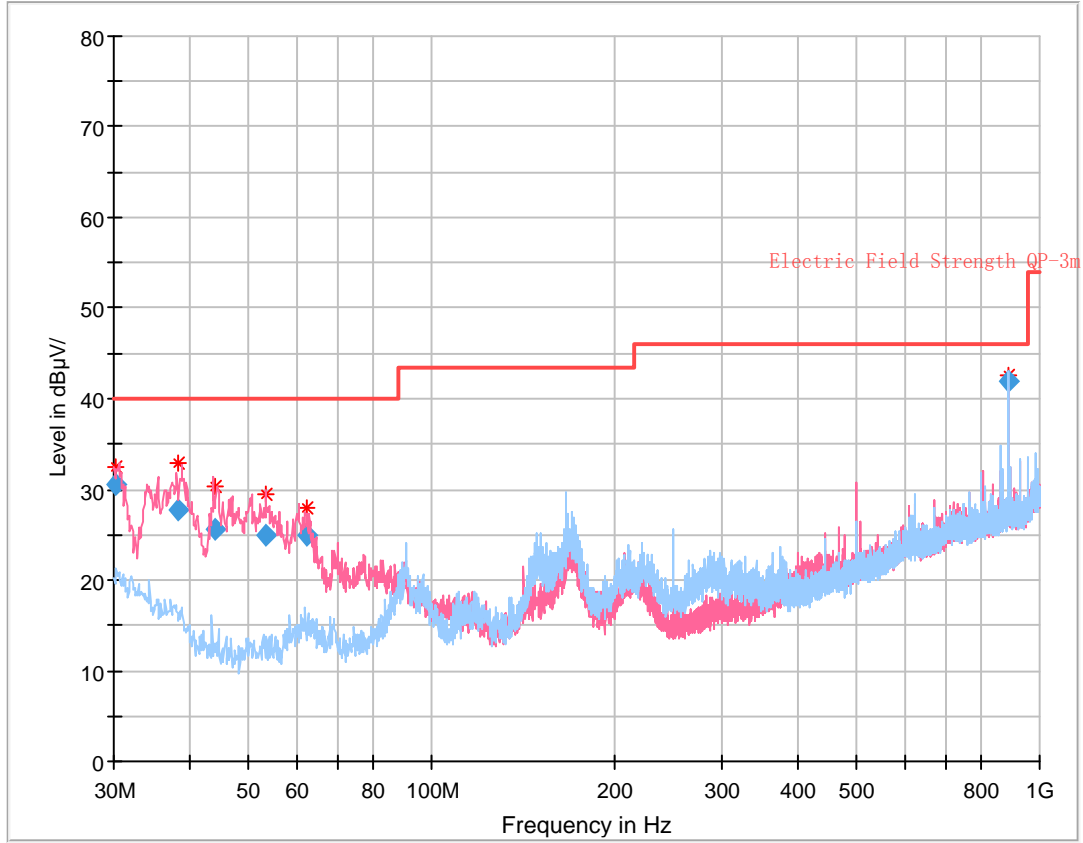
<b>Temperature:</b>	27~27.1.1 °C
<b>Relative Humidity:</b>	4255~58 %
<b>ATM Pressure:</b>	101.0 kPa

*The testing was performed by Holland Yang on 2020-11-07 for below 1GHz and by Leven Gan on 12-08 for above 1GHz.*

*EUT operation mode: Transmitting*

*Note: test on Combination Mode: M202029002 (UC-P8-T-HS)*

**30 MHz – 1 GHz:** (worst case is 802.11a mode 5280 MHz)



**Final Result**

Frequency (MHz)	QuasiPeak (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
30.296000	30.58	40.00	9.42	103.0	V	0.0	-4.6
38.366625	27.64	40.00	12.36	111.0	V	123.0	-9.5
44.152625	25.51	40.00	14.49	108.0	V	0.0	-13.5
53.305000	24.93	40.00	15.07	123.0	V	74.0	-16.7
62.503000	24.86	40.00	15.14	111.0	V	13.0	-17.2
888.002750	42.03	46.00	3.97	211.0	H	88.0	1.2

**1 ~ 40 GHz:**

**Note: The test distance is 1m, so the correct factor from 3m to 1m is  $20\log(3/1)=9.5\text{dB}$  which was added into the final limit.**

**5150-5250 MHz:**

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/QP/Ave.		Height (m)	Polar (H / V)				
802.11a									
5180 MHz									
5149.76	43.13	PK	17	2.4	H	38.36	81.49	83.5	2.01
5149.76	22.79	Ave.	17	2.4	H	38.36	61.15	63.5	2.35
5352.90	31.91	PK	84	1.8	H	39.09	71.00	83.5	12.50
5352.90	18.01	Ave.	84	1.8	H	39.09	57.10	63.5	6.40
10360.00	42.75	PK	165	1.2	H	17.42	60.17	77.7	17.53
5200 MHz									
10400.00	42.27	PK	344	1.9	H	17.52	59.79	77.7	17.91
5240 MHz									
5147.47	32.59	PK	201	2.0	H	38.36	70.95	83.5	12.55
5147.47	18.47	Ave.	201	2.0	H	38.36	56.83	63.5	6.67
5351.01	33.04	PK	14	1.7	H	39.09	72.13	83.5	11.37
5351.01	18.50	Ave.	14	1.7	H	39.09	57.59	63.5	5.91
10480.00	42.43	PK	151	2.1	H	17.25	59.68	77.7	18.02
802.11n20									
5180 MHz									
5149.82	40.07	PK	175	1.5	H	38.36	78.43	83.5	5.07
5149.82	23.10	Ave.	175	1.5	H	38.36	61.46	63.5	2.04
5354.01	32.12	PK	225	1.4	H	39.09	71.21	83.5	12.29
5354.01	18.53	Ave.	225	1.4	H	39.09	57.62	63.5	5.88
10360.00	42.46	PK	151	1.3	H	17.42	59.88	77.7	17.82
5200 MHz									
10400.00	41.89	PK	102	2.1	H	17.52	59.41	77.7	18.29
5240 MHz									
5149.82	40.07	PK	175	1.5	H	38.36	78.43	83.5	5.07
5149.82	23.10	Ave.	175	1.5	H	38.36	61.46	63.5	2.04
5354.01	32.12	PK	225	1.4	H	39.09	71.21	83.5	12.29
5354.01	18.53	Ave.	225	1.4	H	39.09	57.62	63.5	5.88
10360.00	42.46	PK	151	1.3	H	17.42	59.88	77.7	17.82

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/QP/Ave.		Height (m)	Polar (H / V)				
802.11n40									
5190 MHz									
5148.99	39.54	PK	244	1.1	H	38.36	77.90	83.5	5.60
5148.99	23.43	Ave.	244	1.1	H	38.36	61.79	63.5	1.71
5351.85	31.85	PK	26	1.6	H	39.09	70.94	83.5	12.56
5351.85	18.67	Ave.	26	1.6	H	39.09	57.76	63.5	5.74
10380.00	42.33	PK	142	2.0	H	17.42	59.75	77.7	17.95
5230 MHz									
5147.38	32.42	PK	323	2.0	H	38.36	70.78	83.5	12.72
5147.38	19.21	Ave.	323	2.0	H	38.36	57.57	63.5	5.93
5353.26	31.94	PK	126	1.6	H	39.09	71.03	83.5	12.47
5353.26	19.17	Ave.	126	1.6	H	39.09	58.26	63.5	5.24
10460.00	41.86	PK	253	1.6	H	17.15	59.01	77.7	18.69
802.11ac20									
5180 MHz									
5149.04	39.13	PK	46	2.3	H	38.36	77.49	83.5	6.01
5149.04	23.92	Ave.	46	2.3	H	38.36	62.28	63.5	1.22
5351.48	32.64	PK	101	1.1	H	39.09	71.73	83.5	11.77
5351.48	18.62	Ave.	101	1.1	H	39.09	57.71	63.5	5.79
10360.00	42.35	PK	188	2.4	H	17.42	59.77	77.7	17.93
5200 MHz									
10400.00	42.34	PK	304	2.2	H	17.52	59.86	77.7	17.84
5240 MHz									
5148.56	32.37	PK	77	1.5	H	38.36	70.73	83.5	12.77
5148.56	18.65	Ave.	77	1.5	H	38.36	57.01	63.5	6.49
5352.69	32.51	PK	318	1.5	H	39.09	71.60	83.5	11.90
5352.69	18.67	Ave.	318	1.5	H	39.09	57.76	63.5	5.74
10480.00	41.91	PK	235	1.9	H	17.25	59.16	77.7	18.54
802.11ac40									
5190 MHz									
5149.88	37.93	PK	229	1.8	H	38.36	76.29	83.5	7.21
5149.88	23.11	Ave.	229	1.8	H	38.36	61.47	63.5	2.03
5351.27	31.99	PK	282	1.4	H	39.09	71.08	83.5	12.42
5351.27	18.98	Ave.	282	1.4	H	39.09	58.07	63.5	5.43
10380.00	41.68	PK	178	1.4	H	17.42	59.10	77.7	18.60
5230 MHz									
5148.68	31.97	PK	252	2.4	H	38.36	70.33	83.5	13.17
5148.68	18.99	Ave.	252	2.4	H	38.36	57.35	63.5	6.15
5352.66	32.27	PK	281	2.0	H	39.09	71.36	83.5	12.14
5352.66	19.12	Ave.	281	2.0	H	39.09	58.21	63.5	5.29
10460.00	41.92	PK	156	1.7	H	17.15	59.07	77.7	18.63

Frequency (MHz)	Receiver		Turntable	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/QP/Ave.	Degree	Height (m)	Polar (H / V)				
802.11ac80									
5148.68	37.59	PK	50	1.2	H	38.36	75.95	83.5	7.55
5148.68	23.92	Ave.	50	1.2	H	38.36	62.28	63.5	1.22
5351.48	32.47	PK	235	2.3	H	39.09	71.56	83.5	11.94
5351.48	19.87	Ave.	235	2.3	H	39.09	58.96	63.5	4.54
10420.00	41.32	PK	283	1.4	H	17.52	58.84	77.7	18.86



**5250-5350 MHz:**

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/QP/Ave.		Height (m)	Polar (H/V)				
802.11a									
5260 MHz									
5148.42	32.07	PK	256	1.8	H	38.36	70.43	83.5	13.07
5148.42	19.42	Ave.	256	1.8	H	38.36	57.78	63.5	5.72
5351.94	33.17	PK	75	1.3	H	39.09	72.26	83.5	11.24
5351.94	19.51	Ave.	75	1.3	H	39.09	58.60	63.5	4.90
10520.00	42.90	PK	335	1.0	H	17.25	60.15	77.7	17.55
5280 MHz									
10560.00	42.26	PK	62	1.4	H	17.91	60.17	77.7	17.53
5320 MHz									
5148.41	32.42	PK	338	2.5	H	38.36	70.78	83.5	12.72
5148.41	19.11	Ave.	338	2.5	H	38.36	57.47	63.5	6.03
5350.02	39.41	PK	261	2.3	H	39.09	78.50	83.5	5.00
5350.02	23.32	Ave.	261	2.3	H	39.09	62.41	63.5	1.09
10640.00	42.44	PK	305	1.2	H	18.01	60.45	83.5	23.05
10640.00	31.91	Ave.	305	1.2	H	18.01	49.92	63.5	13.58
802.11n20									
5260 MHz									
5148.42	31.95	PK	173	1.4	H	38.36	70.31	83.5	13.19
5148.42	19.37	Ave.	173	1.4	H	38.36	57.73	63.5	5.77
5353.51	32.61	PK	20	1.8	H	39.09	71.70	83.5	11.80
5353.51	19.43	Ave.	20	1.8	H	39.09	58.52	63.5	4.98
10520.00	42.65	PK	209	1.5	H	17.25	59.90	77.7	17.80
5280 MHz									
10560.00	41.76	PK	107	1.2	H	17.91	59.67	77.7	18.03
5320 MHz									
5147.83	32.81	PK	23	1.6	H	38.36	71.17	83.5	12.33
5147.83	19.24	Ave.	23	1.6	H	38.36	57.60	63.5	5.90
5350.09	40.88	PK	178	2.4	H	39.09	79.97	83.5	3.53
5350.09	23.04	Ave.	178	2.4	H	39.09	62.13	63.5	1.37
10640.00	41.97	PK	256	2.3	H	18.01	59.98	83.5	23.52
10640.00	31.71	Ave.	256	2.3	H	18.01	49.72	63.5	13.78

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/QP/Ave.		Height (m)	Polar (H/V)				
802.11n40									
5270MHz									
5148.63	32.45	PK	329	1.5	H	38.36	70.81	83.5	12.69
5148.63	19.56	Ave.	329	1.5	H	38.36	57.92	63.5	5.58
5351.91	33.17	PK	34	1.8	H	39.09	72.26	83.5	11.24
5351.91	19.57	Ave.	34	1.8	H	39.09	58.66	63.5	4.84
10540.00	42.66	PK	331	2.4	H	17.25	59.91	77.7	17.79
5310 MHz									
5148.54	32.61	PK	107	1.8	H	38.36	70.97	83.5	12.53
5148.54	19.19	Ave.	107	1.8	H	38.36	57.55	63.5	5.95
5350.64	41.07	PK	29	1.5	H	39.09	80.16	83.5	3.34
5350.64	23.27	Ave.	29	1.5	H	39.09	62.36	63.5	1.14
10620.00	42.67	PK	192	1.3	H	18.01	60.68	83.5	22.82
10620.00	31.58	Ave.	192	1.3	H	18.01	49.59	63.5	13.91
802.11ac20									
5260 MHz									
5146.57	32.77	PK	159	1.4	H	38.36	71.13	83.5	12.37
5146.57	19.69	Ave.	159	1.4	H	38.36	58.05	63.5	5.45
5354.69	32.87	PK	68	1.8	H	39.09	71.96	83.5	11.54
5354.69	19.71	Ave.	68	1.8	H	39.09	58.80	63.5	4.70
10520.00	42.19	PK	3	1.9	H	17.25	59.44	77.7	18.26
5280 MHz									
10560.00	42.33	PK	318	1.5	H	17.91	60.24	77.7	17.46
5320 MHz									
5146.86	32.93	PK	344	2.3	H	38.36	71.29	83.5	12.21
5146.86	19.25	Ave.	344	2.3	H	38.36	57.61	63.5	5.89
5350.20	40.40	PK	77	2.4	H	39.09	79.49	83.5	4.01
5350.20	22.99	Ave.	77	2.4	H	39.09	62.08	63.5	1.42
10640.00	42.50	PK	211	1.1	H	18.01	60.51	83.5	22.99
10640.00	31.88	Ave.	211	1.1	H	18.01	49.89	63.5	13.61

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/QP/Ave.		Height (m)	Polar (H/V)				
802.11ac40									
5270 MHz									
5148.59	32.69	PK	280	1.8	H	38.36	71.05	83.5	12.45
5148.59	19.63	Ave.	280	1.8	H	38.36	57.99	63.5	5.51
5351.44	33.12	PK	317	2.5	H	39.09	72.21	83.5	11.29
5351.44	19.75	Ave.	317	2.5	H	39.09	58.84	63.5	4.66
10540.00	42.43	PK	59	1.2	H	17.25	59.68	77.7	18.02
5310 MHz									
5148.95	32.74	PK	305	2.0	H	38.36	71.10	83.5	12.40
5148.95	19.24	Ave.	305	2.0	H	38.36	57.60	63.5	5.90
5350.25	40.27	PK	15	1.6	H	39.09	79.36	83.5	4.14
5350.25	23.39	Ave.	15	1.6	H	39.09	62.48	63.5	1.02
10620.00	42.82	PK	146	2.5	H	18.01	60.83	83.5	22.67
10620.00	31.76	Ave.	146	2.5	H	18.01	49.77	63.5	13.73
802.11ac80									
5290 MHz									
5149.04	32.65	PK	226	1.7	H	38.36	71.01	83.5	12.49
5149.04	19.53	Ave.	226	1.7	H	38.36	57.89	63.5	5.61
5350.25	39.17	PK	260	1.8	H	39.09	78.26	83.5	5.24
5350.25	23.40	Ave.	260	1.8	H	39.09	62.49	63.5	1.01
10580.00	42.06	PK	103	1.7	H	17.91	59.97	77.7	17.73

**5470-5725MHz:**

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/QP/Ave.		Height (m)	Polar (H/V)				
802.11a									
5500 MHz									
5469.57	36.32	PK	198	2.3	H	39.37	75.69	77.7	2.01
5726.86	33.01	PK	270	1.8	H	39.49	72.50	77.7	5.20
11000.00	42.59	PK	153	1.5	H	17.66	60.25	83.5	23.25
11000.00	30.50	Ave.	153	1.5	H	17.66	48.16	63.5	15.34
5580MHz									
11160.00	42.47	PK	314	1.2	H	17.39	59.86	83.5	23.64
11160.00	30.41	Ave.	314	1.2	H	17.39	47.80	63.5	15.70
5700 MHz									
5468.47	32.51	PK	140	1.4	H	39.37	71.88	77.7	5.82
5725.04	36.01	PK	332	1.7	H	39.49	75.50	77.7	2.20
11400.00	43.61	PK	96	1.8	H	17.73	61.34	83.5	22.16
11400.00	30.75	Ave.	96	1.8	H	17.73	48.48	63.5	15.02
802.11n20									
5500 MHz									
5468.92	36.86	PK	238	1.8	H	39.37	76.23	77.7	1.47
5727.45	33.47	PK	219	2.4	H	39.49	72.96	77.7	4.74
11000.00	42.86	PK	109	1.6	H	17.66	60.52	83.5	22.98
11000.00	30.81	Ave.	109	1.6	H	17.66	48.47	63.5	15.03
5580 MHz									
11160.00	42.53	PK	5	1.6	H	17.39	59.92	83.5	23.58
11160.00	30.69	Ave.	5	1.6	H	17.39	48.08	63.5	15.42
5700MHz									
5467.75	32.58	PK	298	1.4	H	39.37	71.95	77.7	5.75
5726.27	36.86	PK	194	1.8	H	39.49	76.35	77.7	1.35
11400.00	42.87	PK	279	1.8	H	17.73	60.60	83.5	22.90
11400.00	30.89	Ave.	279	1.8	H	17.73	48.62	63.5	14.88

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/QP/Ave.		Height (m)	Polar (H/V)				
802.11n40									
5510 MHz									
5469.49	36.01	PK	189	2.1	H	39.37	75.38	77.7	2.32
5725.69	33.04	PK	62	1.0	H	39.49	72.53	77.7	5.17
11020.00	42.96	PK	153	1.0	H	17.66	60.62	83.5	22.88
11020.00	30.89	Ave.	153	1.0	H	17.66	48.55	63.5	14.95
5550 MHz									
11100.00	43.39	PK	279	1.9	H	16.72	60.11	83.5	23.39
11100.00	30.68	Ave.	279	1.9	H	16.72	47.40	63.5	16.10
5670 MHz									
5468.81	32.41	PK	294	1.2	H	39.37	71.78	77.7	5.92
5727.27	36.80	PK	16	1.5	H	39.49	76.29	77.7	1.41
11340.00	42.91	PK	311	2.0	H	17.43	60.34	83.5	23.16
11340.00	30.82	Ave.	311	2.0	H	17.43	48.25	63.5	15.25
802.11ac20									
5500 MHz									
5469.49	36.95	PK	162	1.6	H	39.37	76.32	77.7	1.38
5726.38	32.85	PK	225	1.2	H	39.49	72.34	77.7	5.36
11000.00	42.47	PK	260	1.6	H	17.66	60.13	83.5	23.37
11000.00	30.62	Ave.	260	1.6	H	17.66	48.28	63.5	15.22
5580 MHz									
11160.00	42.46	PK	313	2.1	H	17.39	59.85	83.5	23.65
11160.00	30.79	Ave.	313	2.1	H	17.39	48.18	63.5	15.32
5700 MHz									
5468.94	32.47	PK	24	1.6	H	39.37	71.84	77.7	5.86
5726.24	36.99	PK	226	1.9	H	39.49	76.48	77.7	1.22
11400.00	42.81	PK	260	2.0	H	17.73	60.54	83.5	22.96
11400.00	30.81	Ave.	260	2.0	H	17.73	48.54	63.5	14.96

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/QP/Ave.		Height (m)	Polar (H/V)				
802.11ac40									
5510 MHz									
5469.82	36.91	PK	198	2.5	H	39.37	76.28	77.7	1.42
5726.83	32.54	PK	193	2.4	H	39.49	72.03	77.7	5.67
11020.00	42.23	PK	118	2.5	H	17.66	59.89	83.5	23.61
11020.00	30.52	Ave.	118	2.5	H	17.66	48.18	63.5	15.32
5550 MHz									
11100.00	43.12	PK	12	1.0	H	16.72	59.84	83.5	23.66
11100.00	30.50	Ave.	12	1.0	H	16.72	47.22	63.5	16.28
5670 MHz									
5468.47	31.99	PK	76	1.0	H	39.37	71.36	77.7	6.34
5725.95	35.82	PK	233	2.0	H	39.49	75.31	77.7	2.39
11340.00	43.15	PK	249	2.7	H	17.43	60.58	83.5	22.92
11340.00	30.78	Ave.	249	2.7	H	17.43	48.21	63.5	15.29
802.11ac80									
5530MHz									
5469.81	37.44	PK	25	1.8	H	39.37	76.81	77.7	0.89
5726.17	33.15	PK	83	1.6	H	39.49	72.64	77.7	5.06
11060.00	42.64	PK	180	1.7	H	16.72	59.36	83.5	24.14
11060.00	30.52	Ave.	180	1.7	H	16.72	47.24	63.5	16.26
5610 MHz									
5468.41	32.41	PK	214	1.7	H	39.37	71.78	77.7	5.92
5725.45	35.30	PK	232	2.5	H	39.49	74.79	77.7	2.91
11220.00	41.89	PK	112	2.4	H	17.39	59.28	83.5	24.22
11220.00	30.65	Ave.	112	2.4	H	17.39	48.04	63.5	15.46

**5725-5850 MHz:**

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/QP/Ave.		Height (m)	Polar (H/V)				
802.11a									
5745 MHz									
5640.99	32.58	PK	63	1.4	H	39.46	72.04	77.7	5.66
5699.67	36.03	PK	274	2.4	H	39.49	75.52	114.46	38.94
5716.74	49.45	PK	64	1.0	H	39.49	88.94	119.39	30.45
5722.81	53.11	PK	29	1.7	H	39.49	92.60	126.71	34.11
11490.00	42.87	PK	167	2.3	H	17.47	60.34	83.5	23.16
11490.00	30.55	Ave.	167	2.3	H	17.47	48.02	63.5	15.48
5785 MHz									
11570.00	42.45	PK	250	2.0	H	17.51	59.96	83.5	23.54
11570.00	30.63	Ave.	250	2.0	H	17.51	48.14	63.5	15.36
5825 MHz									
5851.03	48.85	PK	331	1.1	H	39.87	88.72	129.35	40.63
5857.30	45.49	PK	113	2.3	H	39.87	85.36	119.66	34.30
5877.06	36.03	PK	287	2.0	H	39.87	75.90	113.18	37.28
5947.86	33.98	PK	122	2.0	H	39.97	73.95	77.7	3.75
11650.00	42.75	PK	98	2.5	H	16.18	58.93	83.5	24.57
11650.00	30.56	Ave.	98	2.5	H	16.18	46.74	63.5	16.76
802.11n20									
5745 MHz									
5639.91	31.96	PK	250	1.3	H	39.46	71.42	77.7	6.28
5699.94	39.22	PK	185	1.6	H	39.49	78.71	114.67	35.96
5717.09	49.37	PK	327	1.5	H	39.49	88.86	119.48	30.62
5722.93	54.31	PK	264	1.5	H	39.49	93.80	126.98	33.18
11490.00	42.68	PK	104	1.9	H	17.47	60.15	83.5	23.35
11490.00	30.65	Ave.	104	1.9	H	17.47	48.12	63.5	15.38
5785 MHz									
11570.00	42.38	PK	25	1.6	H	17.51	59.89	83.5	23.61
11570.00	30.44	AV	25	1.6	H	17.51	47.95	63.5	15.55
5825 MHz									
5850.92	49.23	PK	102	2.4	H	39.87	89.10	129.6	40.50
5857.50	45.49	PK	128	1.9	H	39.87	85.36	119.6	34.24
5875.69	37.35	PK	143	2.3	H	39.87	77.22	114.19	36.97
5943.58	34.52	PK	345	1.6	H	39.97	74.49	77.7	3.21
11650.00	42.57	PK	202	1.5	H	16.18	58.75	83.5	24.75
11650.00	30.53	Ave.	202	1.5	H	16.18	46.71	63.5	16.79

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/QP/Ave.		Height (m)	Polar (H/V)				
802.11n40									
5755 MHz									
5648.37	32.36	PK	298	1.2	H	39.46	71.82	77.7	5.88
5699.60	39.21	PK	345	2.0	H	39.49	78.70	114.4	35.70
5719.06	49.13	PK	111	1.8	H	39.49	88.62	120.04	31.42
5724.34	51.09	PK	229	1.0	H	39.49	90.58	130.2	39.62
11510.00	42.65	PK	278	1.8	H	17.47	60.12	83.5	23.38
11510.00	30.49	Ave.	278	1.8	H	17.47	47.96	63.5	15.54
5795 MHz									
5850.63	40.11	PK	53	1.4	H	39.87	79.98	130.26	50.28
5856.98	37.72	PK	17	1.1	H	39.87	77.59	119.75	42.16
5878.29	36.31	PK	195	1.8	H	39.87	76.18	112.27	36.09
5943.68	34.28	PK	121	1.6	H	39.97	74.25	77.7	3.45
11590.00	42.93	PK	211	1.1	H	17.51	60.44	83.5	23.06
11590.00	30.54	Ave.	211	1.1	H	17.51	48.05	63.5	15.45
802.11ac20									
5745 MHz									
5645.84	31.51	PK	331	1.0	H	39.46	70.97	77.7	6.73
5699.89	38.10	PK	354	2.4	H	39.49	77.59	114.62	37.03
5717.21	48.89	PK	139	1.1	H	39.49	88.38	119.52	31.14
5722.78	53.22	PK	164	1.0	H	39.49	92.71	126.64	33.93
11490.00	42.75	PK	6	1.7	H	17.47	60.22	83.5	23.28
11490.00	30.53	Ave.	6	1.7	H	17.47	48.00	63.5	15.50
5785 MHz									
11570.00	42.27	PK	32	1.3	H	17.51	59.78	83.5	23.72
11570.00	30.41	AV	32	1.3	H	17.51	47.92	63.5	15.58
5825 MHz									
5851.07	49.57	PK	108	2.2	H	39.87	89.44	126.26	36.82
5857.16	44.57	PK	85	1.1	H	39.87	84.44	119.7	35.26
5878.58	34.76	PK	322	2.5	H	39.87	74.63	112.05	37.42
5936.54	34.14	PK	38	1.7	H	39.97	74.11	77.7	3.59
11650.00	42.61	PK	29	1.4	H	16.18	58.79	83.5	24.71
11650.00	30.54	Ave.	29	1.4	H	16.18	46.72	63.5	16.78



Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/QP/Ave.		Height (m)	Polar (H/V)				
802.11ac40									
5755 MHz									
5631.44	33.03	PK	15	2.3	H	39.46	72.49	77.7	5.21
5696.78	40.34	PK	81	1.5	H	39.49	79.83	112.32	32.49
5718.80	47.93	PK	286	1.5	H	39.49	87.42	119.96	32.54
5724.95	51.91	PK	223	2.1	H	39.49	91.40	131.92	40.52
11510.00	42.71	PK	294	2.2	H	17.47	60.18	83.5	23.32
11510.00	30.51	Ave.	294	2.2	H	17.47	47.98	63.5	15.52
5795 MHz									
5850.36	38.04	PK	92	1.3	H	39.87	77.91	130.83	52.92
5861.85	38.34	PK	157	1.7	H	39.87	78.21	104.68	26.47
5910.20	33.95	PK	21	1.2	H	39.87	73.82	88.65	14.83
5945.82	34.36	PK	65	1.0	H	39.97	74.33	77.7	3.37
11590.00	43.01	PK	86	2.0	H	17.51	60.52	83.5	22.98
11590.00	30.53	Ave.	86	2.0	H	17.51	48.04	63.5	15.46
802.11ac80									
5775 MHz									
5623.26	31.45	PK	118	1.6	H	39.46	70.91	77.7	6.79
5693.89	41.01	PK	209	1.6	H	39.49	80.50	110.18	29.68
5718.74	44.11	PK	304	1.9	H	39.49	83.60	119.95	36.35
5721.45	44.11	PK	260	1.9	H	39.49	83.60	123.74	40.14
5852.25	45.94	PK	73	1.9	H	39.87	85.81	126.57	40.76
5860.83	42.91	PK	199	1.8	H	39.87	82.78	118.67	35.89
5880.17	36.18	PK	62	2.0	H	39.87	76.05	110.87	34.82
5951.22	34.76	PK	205	1.1	H	39.84	74.60	77.7	3.10
11550.00	43.32	PK	160	2.1	H	17.51	60.83	83.5	22.67
11550.00	30.42	Ave.	160	2.1	H	17.51	47.93	63.5	15.57

**Note:**

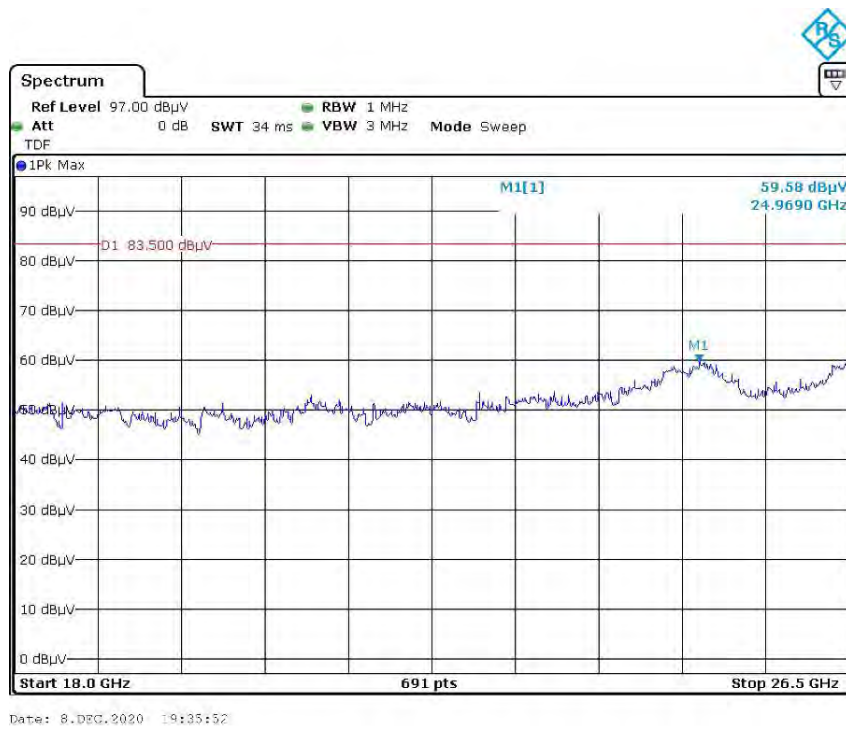
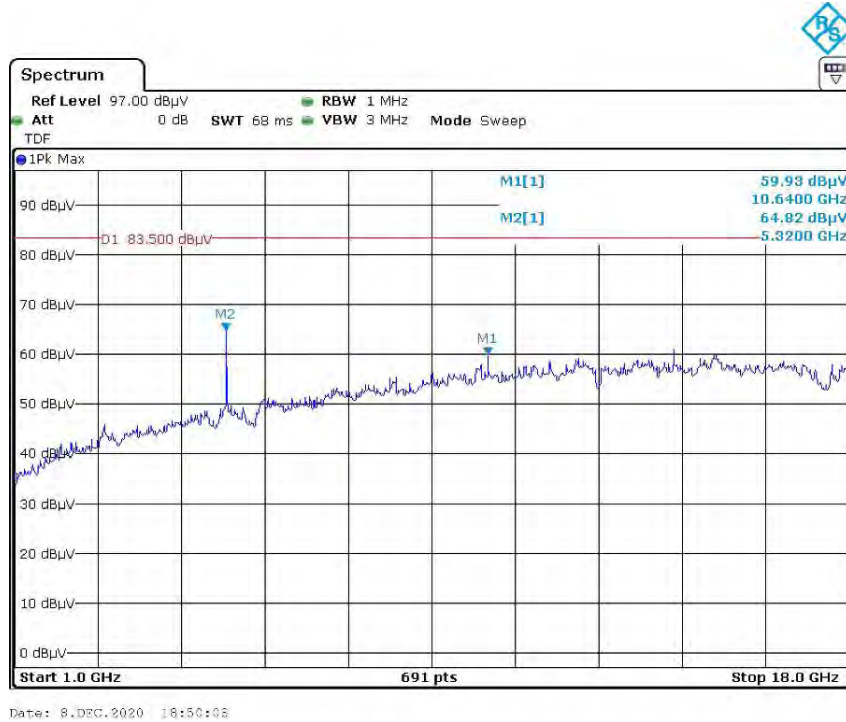
Corrected Amplitude = Corrected Factor + Reading

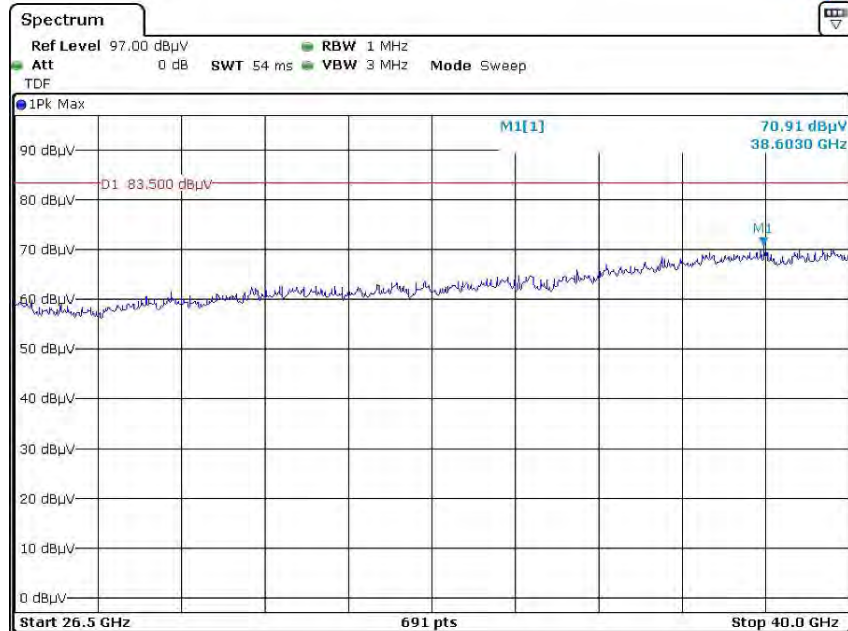
Corrected Factor=Antenna factor (RX) + Cable Loss – Amplifier Factor

Margin = Limit- Corr. Amplitude

All other spurious emissions are 20 dB below the limit or are on the system noise floor level.

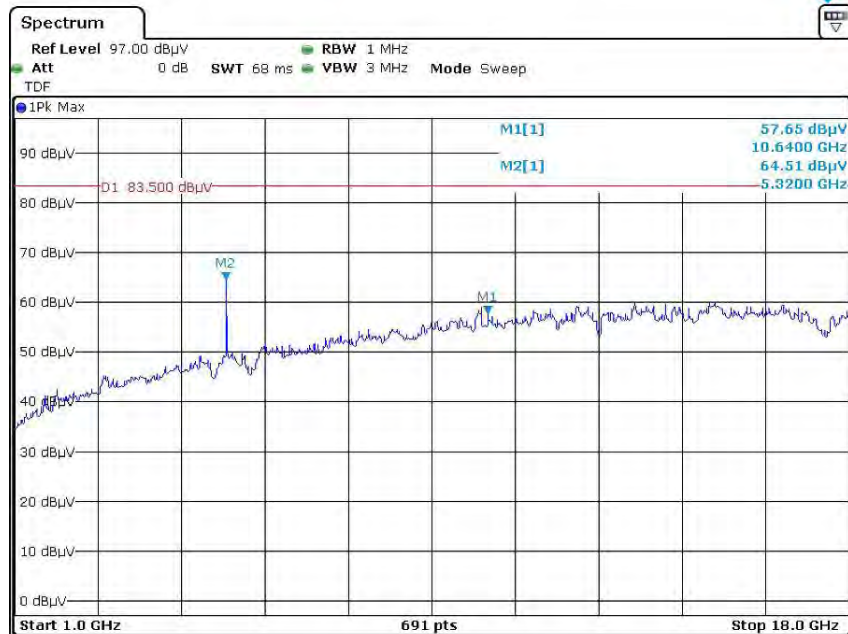
### Peak Pre-scan with 802.11a 5320MHz Horizontal



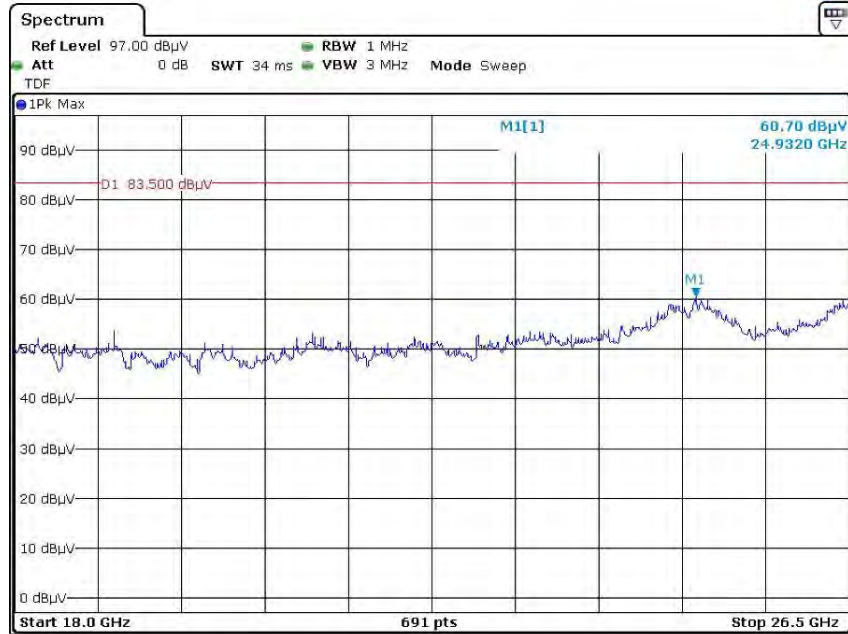


Date: 8. DEC. 2020 19:52:29

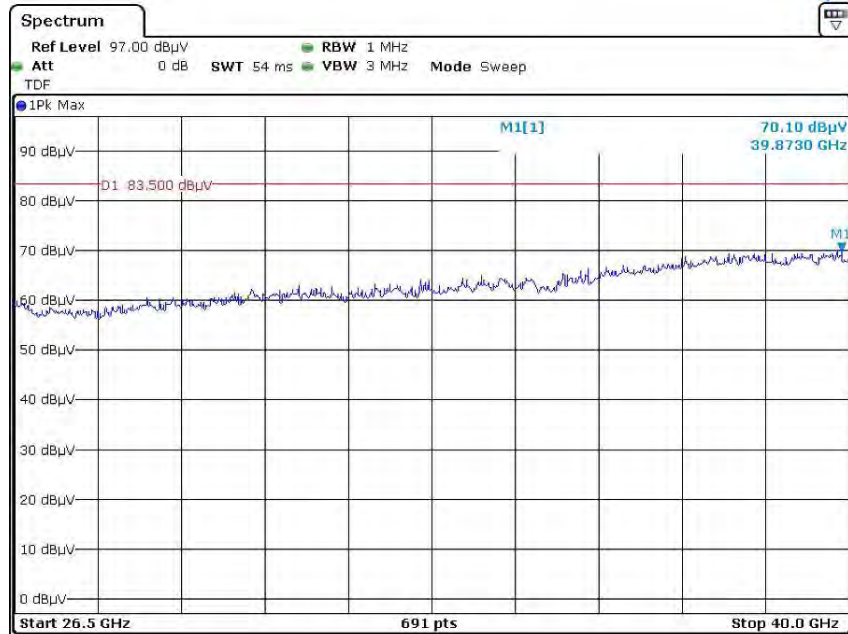
Vertical



Date: 8. DEC. 2020 18:59:41

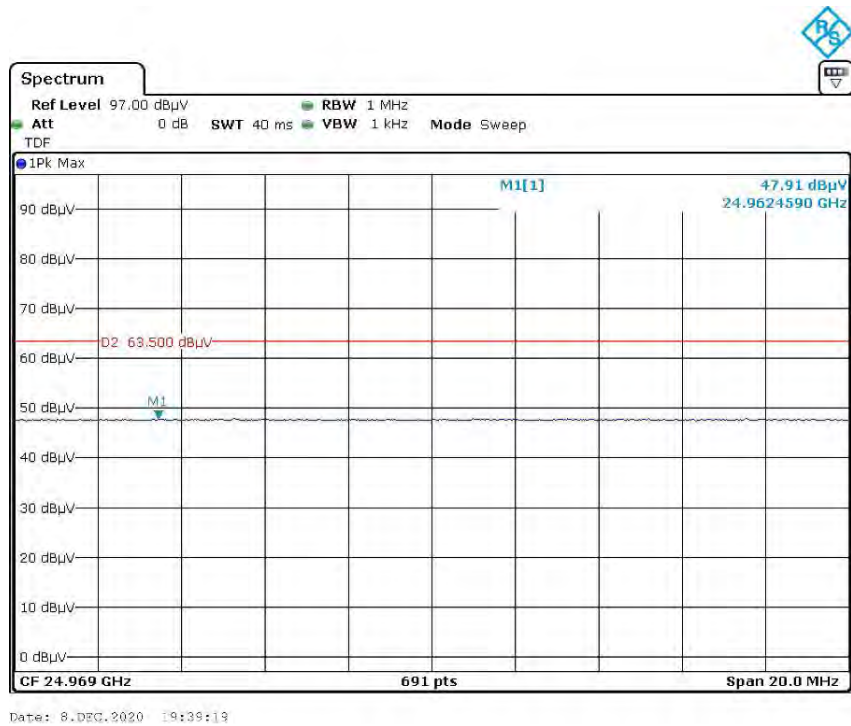
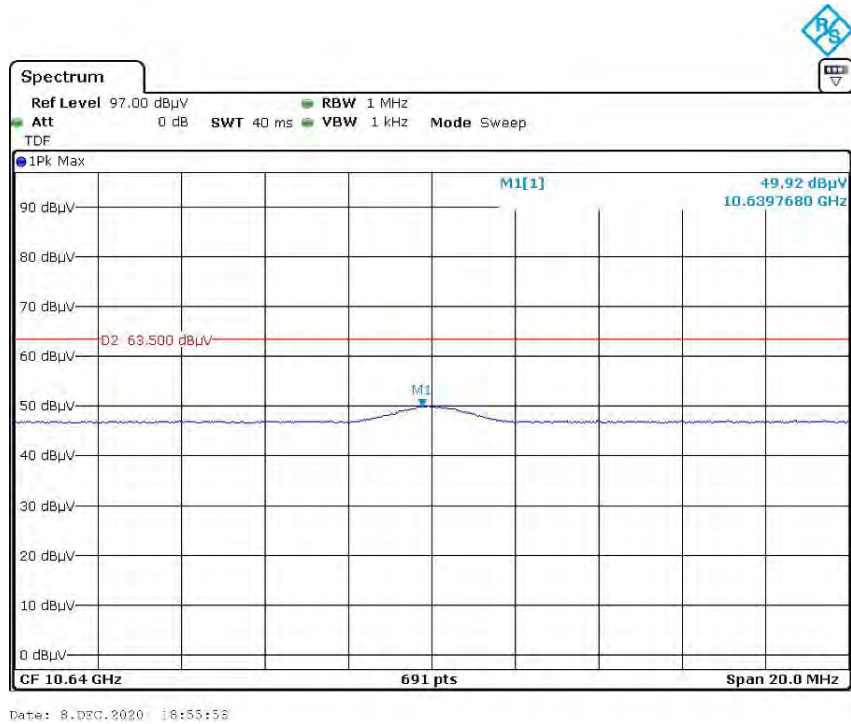


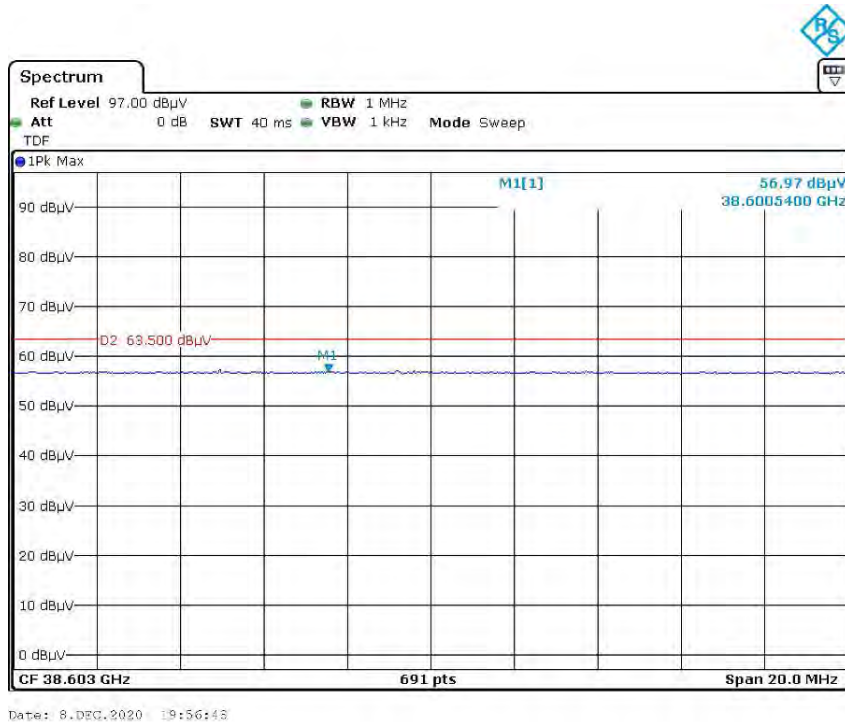
Date: 8.DEC.2020 19:42:39



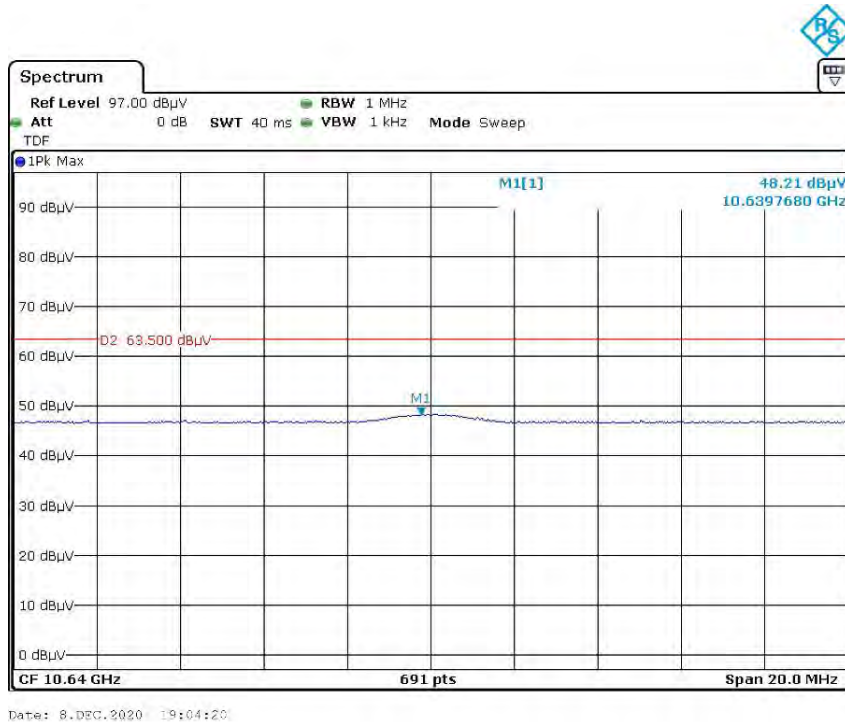
Date: 8.DEC.2020 20:00:09

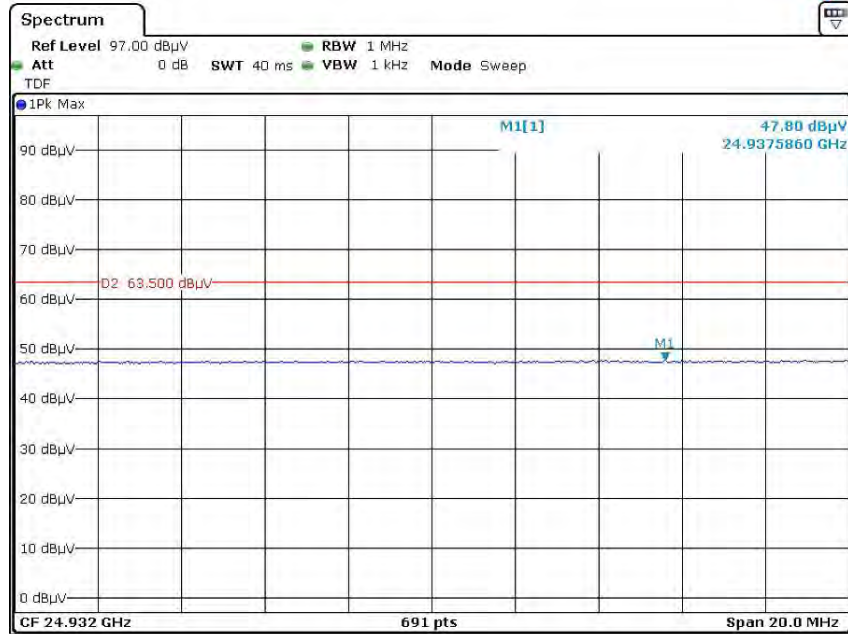
### Average Horizontal



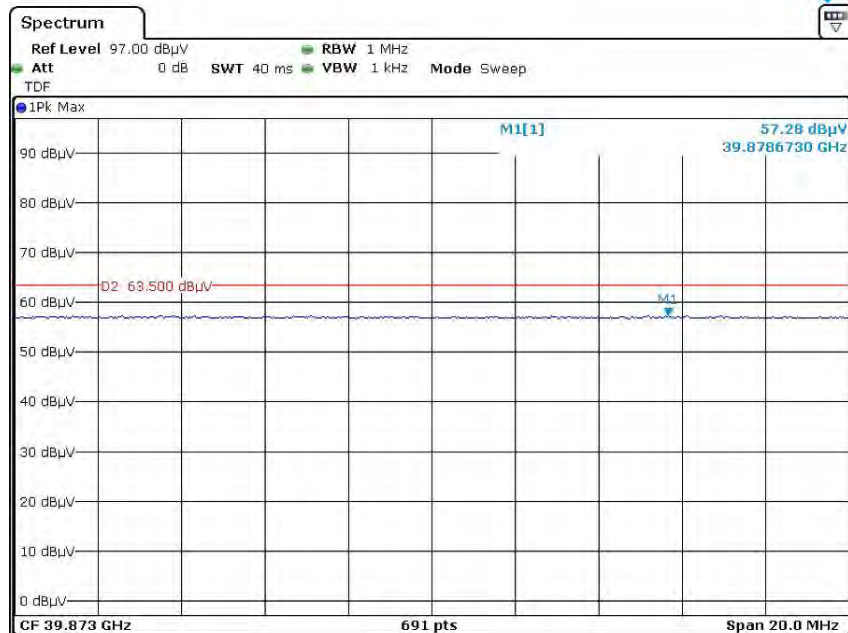


Vertical





Date: 8.DEC.2020 19:46:02



Date: 8.DEC.2020 20:04:26

## FCC §15.407(1), (5),(e) – 26 dB & 6dB EMISSION BANDWIDTH

### Applicable Standard

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

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

### Test Procedure

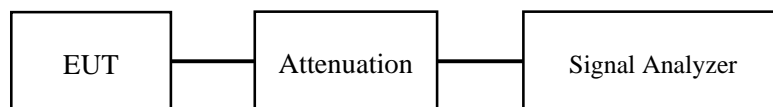
#### 1. Emission Bandwidth (EBW)

- a) Set RBW = approximately 1% of the emission bandwidth.
- b) Set the VBW > RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

#### 2. Minimum Emission Bandwidth for the band 5.725-5.85 GHz

Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.725-5.85 GHz. The following procedure shall be used for measuring this bandwidth:

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW)  $\geq 3 \times$  RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.





**Test Data**

**Environmental Conditions**

<b>Temperature:</b>	27 °C
<b>Relative Humidity:</b>	56 %
<b>ATM Pressure:</b>	101.0 kPa

*The testing was performed by Bravos Zhao on 2020-11-17.*

*EUT operation mode: Transmitting*

**Test Result: Pass**

*Please refer to the Appendix.*

## FCC §15.407(a)(1)(2)(3) – CONDUCTED TRANSMITTER OUTPUT POWER

### Applicable Standard

For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

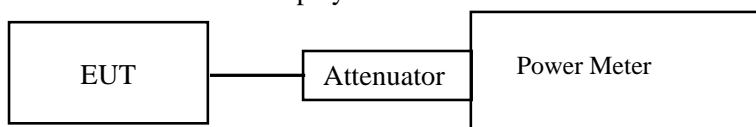
For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 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. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

### Test Procedure

1. Place the EUT on a bench and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.
3. Add a correction factor to the display.



**Test Data**

**Environmental Conditions**

<b>Temperature:</b>	27 °C
<b>Relative Humidity:</b>	56 %
<b>ATM Pressure:</b>	101.0 kPa

*The testing was performed by Bravos Zhao from 2020-11-17 to 2020-12-11.*

*EUT operation mode: Transmitting*

**Test Result: Pass**

*Please refer to the Appendix.*

## **FCC §15.407(a) (1) (2) (3) - POWER SPECTRAL DENSITY**

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. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 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. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

### **Test Procedure**

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

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

**Test Data**

**Environmental Conditions**

<b>Temperature:</b>	27 °C
<b>Relative Humidity:</b>	56 %
<b>ATM Pressure:</b>	101.0 kPa

*The testing was performed by Bravos Zhao from 2020-11-28 to 2020-12-11.*

*EUT operation mode: Transmitting*

**Test Result: Pass**

*Please refer to the Appendix.*

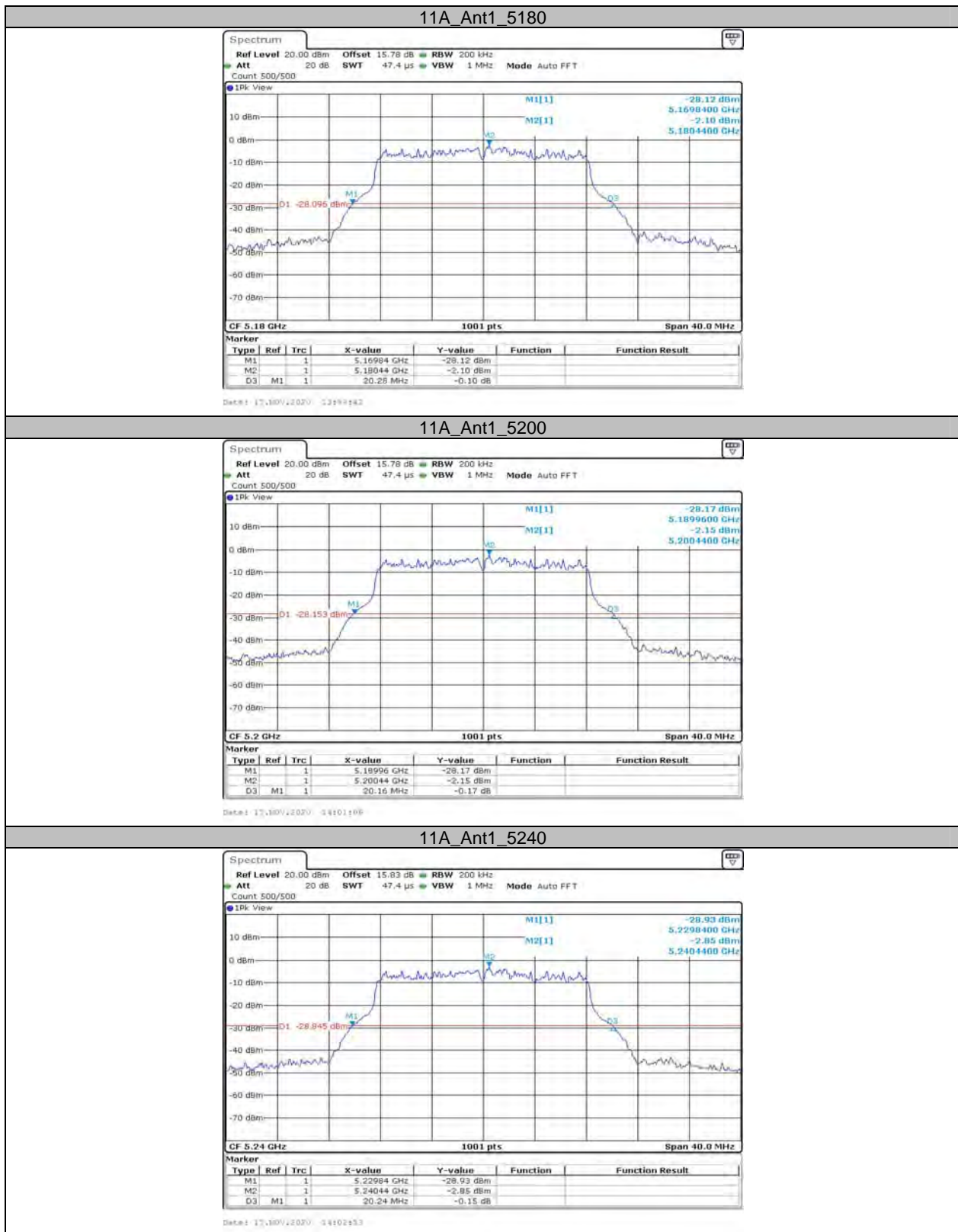
**APPENDIX**

**Appendix A1: Emission Bandwidth**

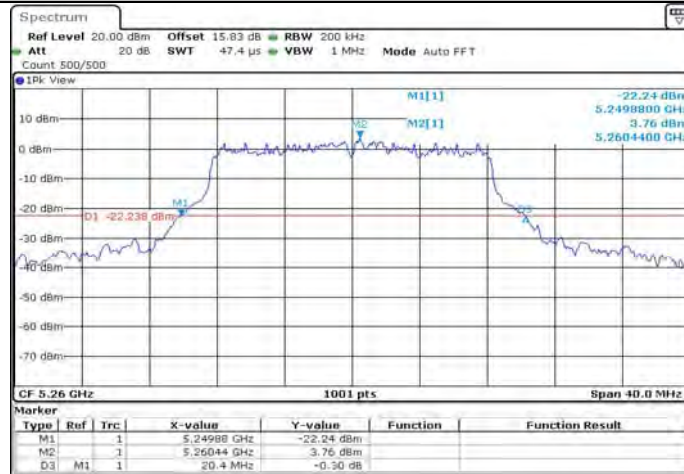
**Test Result**

TestMode	Antenna	Channel	26dB EBW [MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	20.280	---	PASS
		5200	20.160	---	PASS
		5240	20.240	---	PASS
		5260	20.400	---	PASS
		5280	20.360	---	PASS
		5320	20.360	---	PASS
		5500	20.320	---	PASS
		5580	20.360	---	PASS
11N20SISO	Ant1	5700	20.280	---	PASS
		5180	21.040	---	PASS
		5200	21.080	---	PASS
		5240	20.880	---	PASS
		5260	20.840	---	PASS
		5280	21.160	---	PASS
		5320	20.960	---	PASS
		5500	21.120	---	PASS
11N40SISO	Ant1	5580	21.080	---	PASS
		5700	21.200	---	PASS
		5190	39.920	---	PASS
		5230	39.760	---	PASS
		5270	39.920	---	PASS
		5310	39.680	---	PASS
		5510	39.440	---	PASS
11AC20SISO	Ant1	5550	39.760	---	PASS
		5670	39.920	---	PASS
		5180	21.040	---	PASS
		5200	21.080	---	PASS
		5240	21.200	---	PASS
		5260	20.960	---	PASS
		5280	21.240	---	PASS
11AC40SISO	Ant1	5320	21.480	---	PASS
		5500	21.120	---	PASS
		5580	21.040	---	PASS
		5700	21.320	---	PASS
		5190	40.400	---	PASS
		5230	40.400	---	PASS
		5270	40.720	---	PASS
		5310	40.560	---	PASS
11AC80SISO	Ant1	5510	40.320	---	PASS
		5550	40.560	---	PASS
		5670	40.400	---	PASS
		5210	81.120	---	PASS
		5290	81.120	---	PASS
	Ant1	5530	80.960	---	PASS
		5610	81.440	---	PASS

Test Graphs

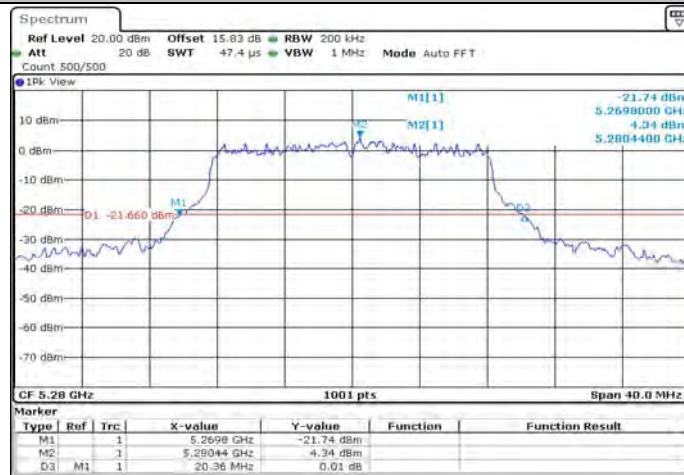


11A\_Ant1\_5260



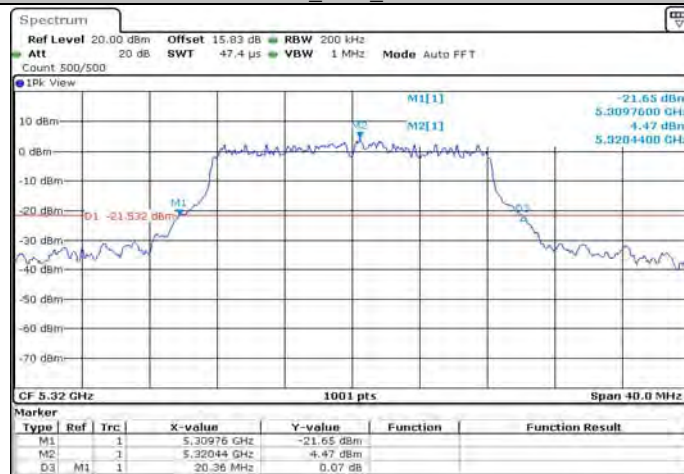
Data: [7,80V4E0Z0]-44108433

11A\_Ant1\_5280



Data: [7,80V4E0Z0]-44108437

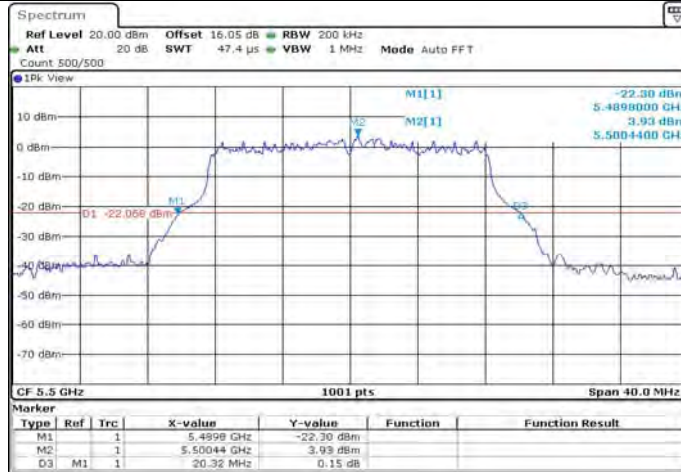
11A\_Ant1\_5320



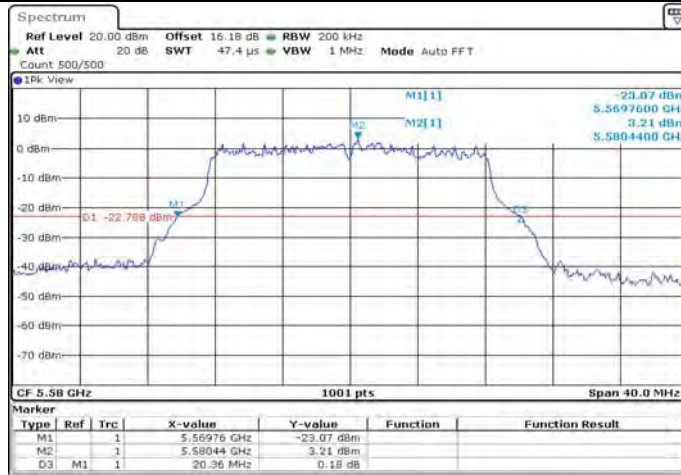
Data: [7,80V4E0Z0]-44120113



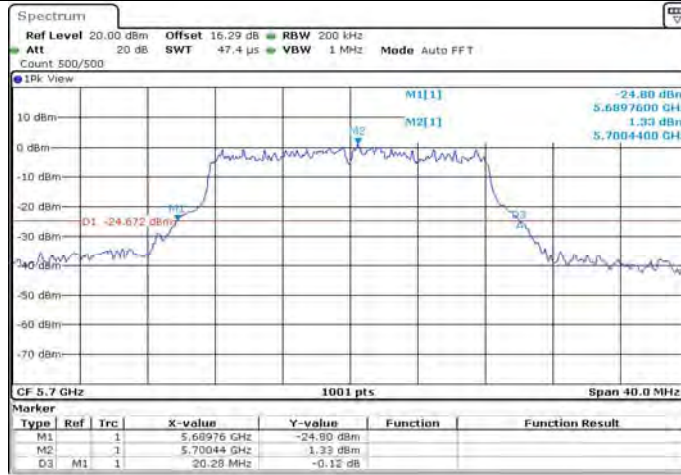
11A\_Ant1\_5500



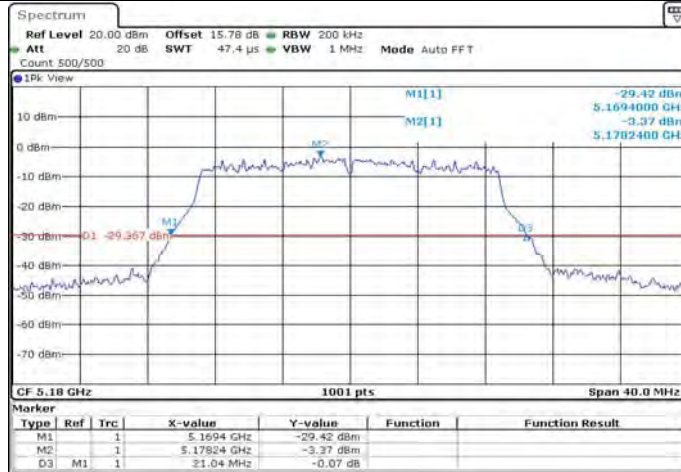
11A\_Ant1\_5580



11A\_Ant1\_5700

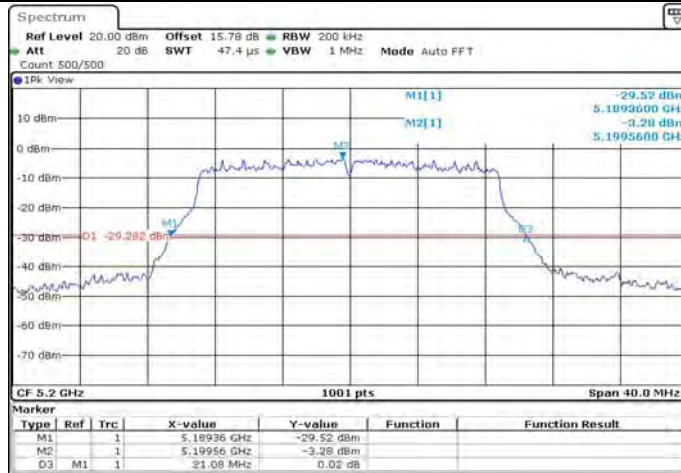


11N20SISO\_Ant1\_5180



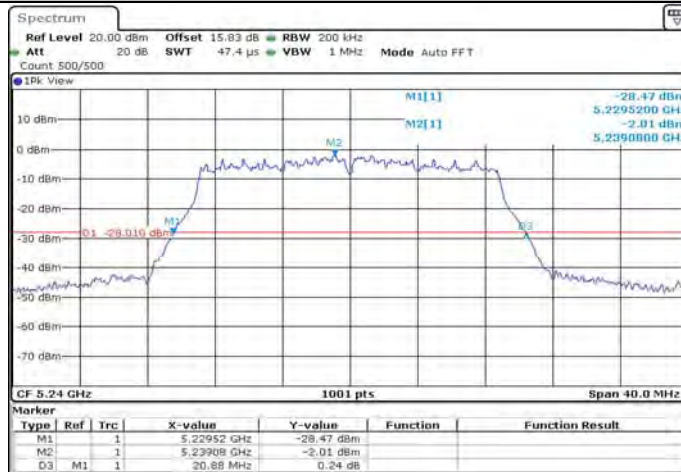
Date: 17/10/2020 09:20:23

11N20SISO\_Ant1\_5200

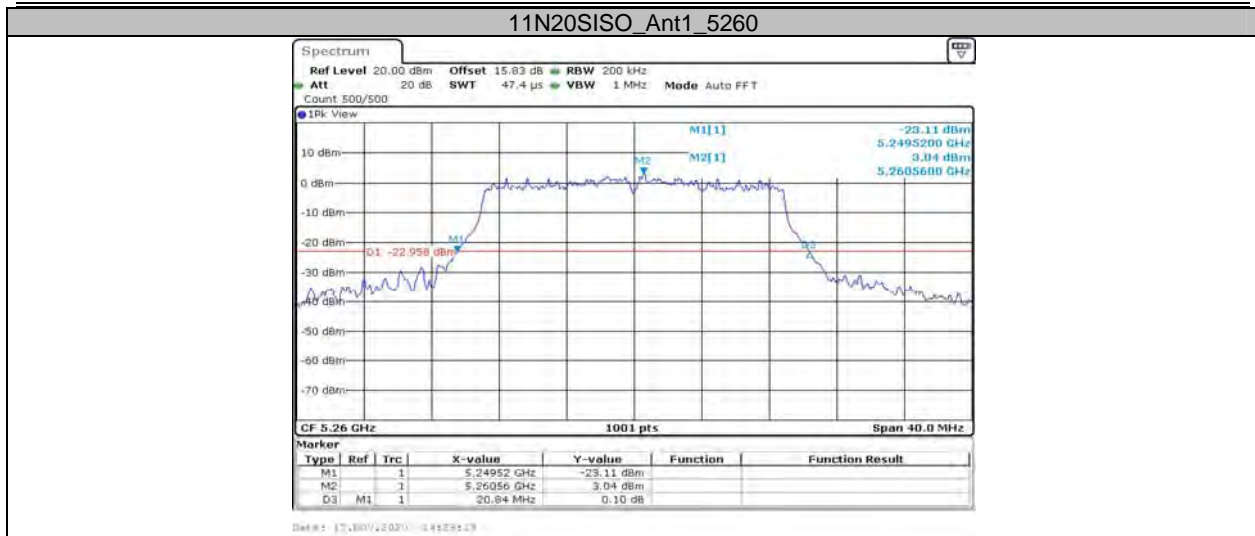


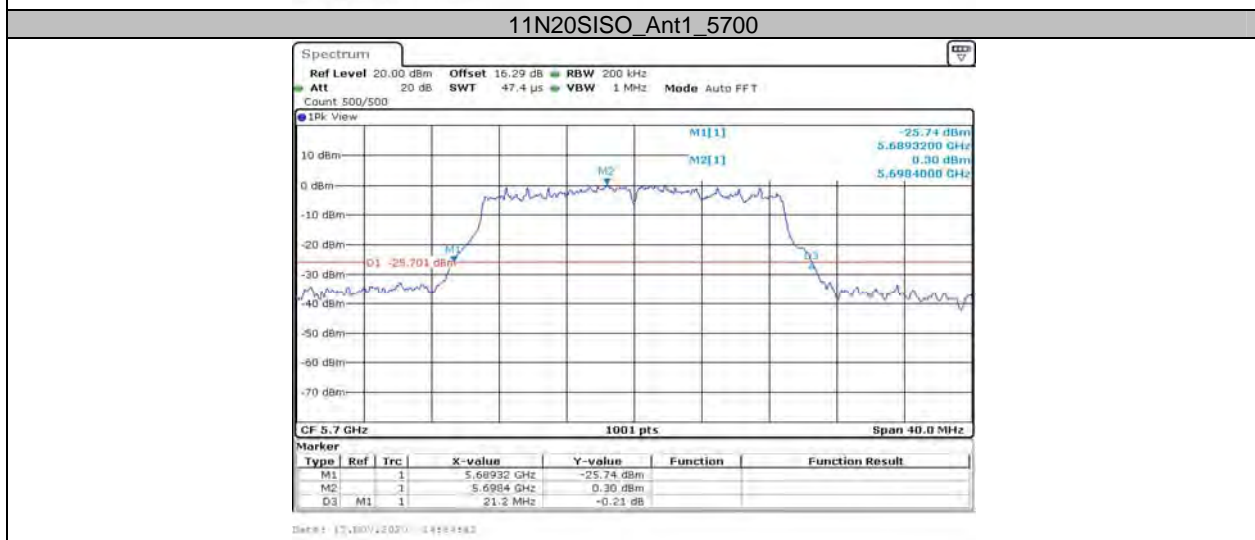
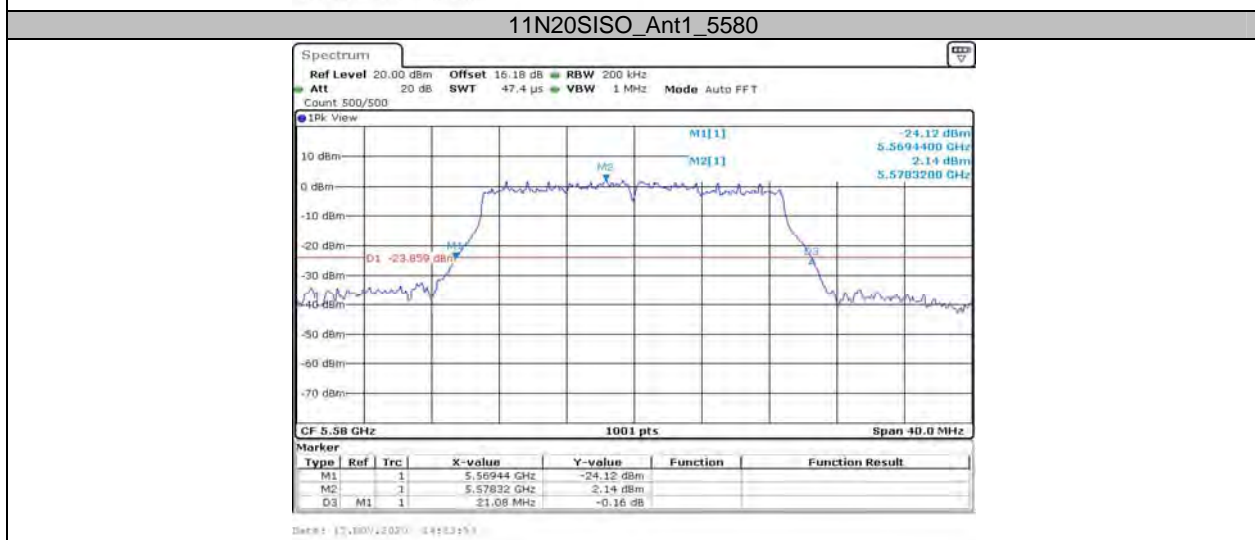
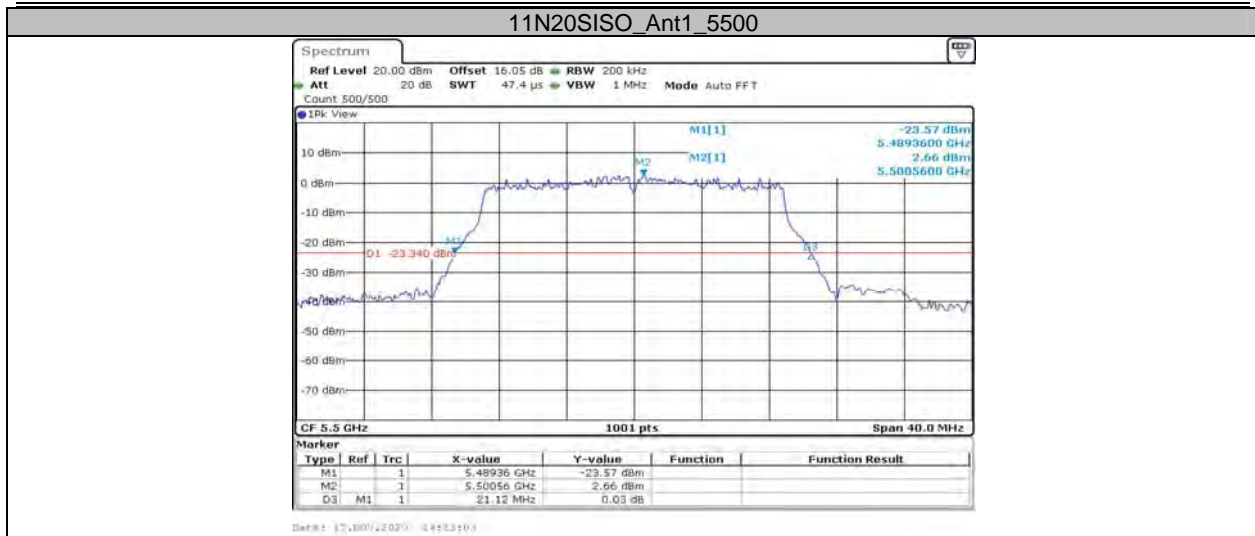
Date: 17/10/2020 09:20:51

11N20SISO\_Ant1\_5240



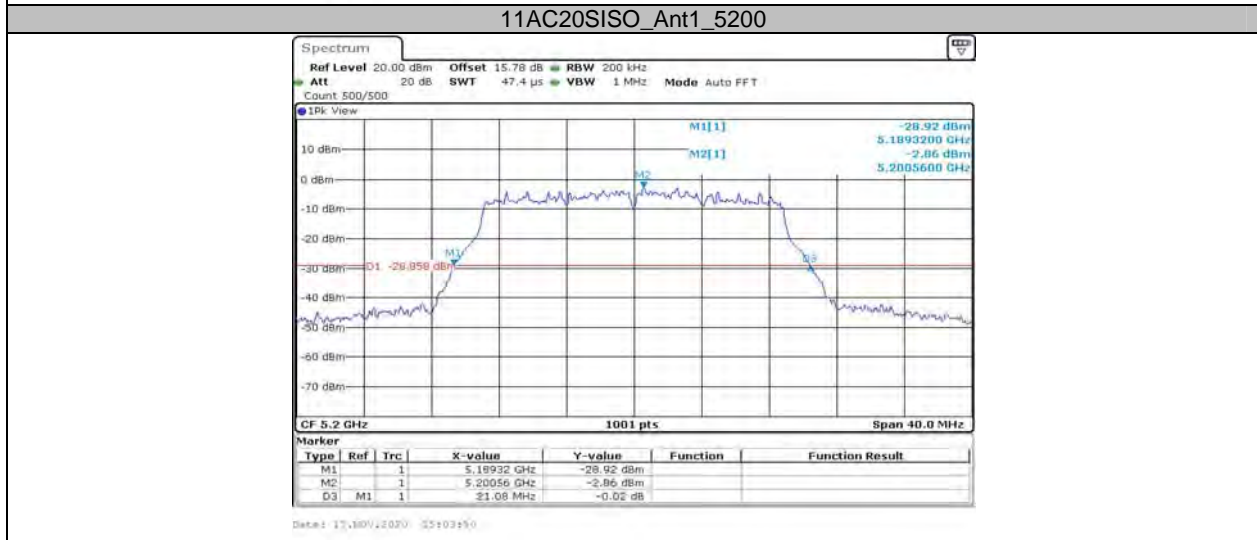
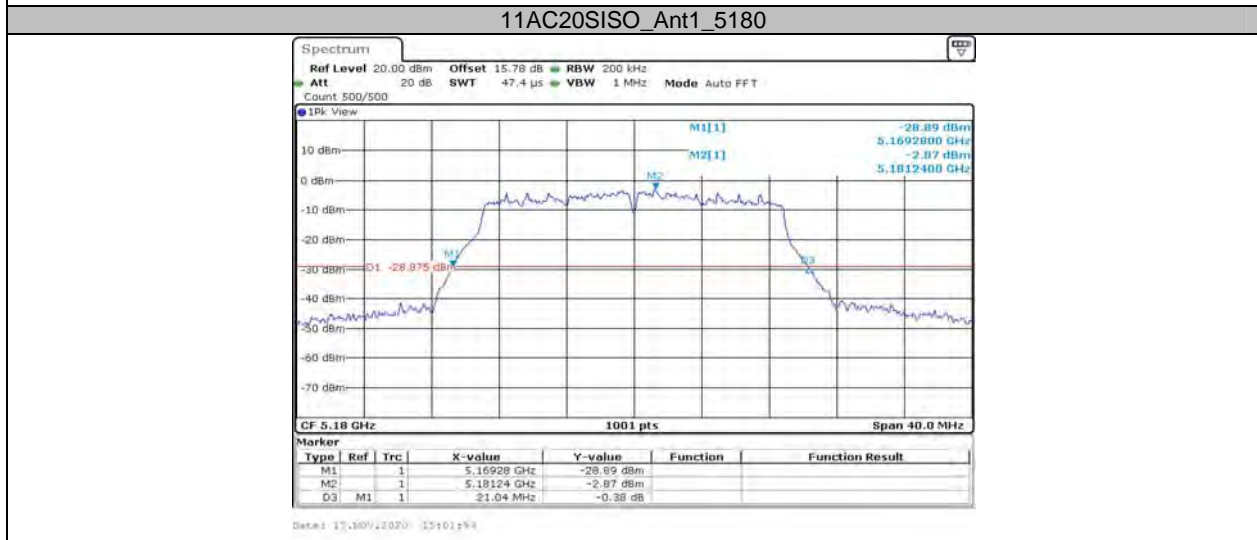
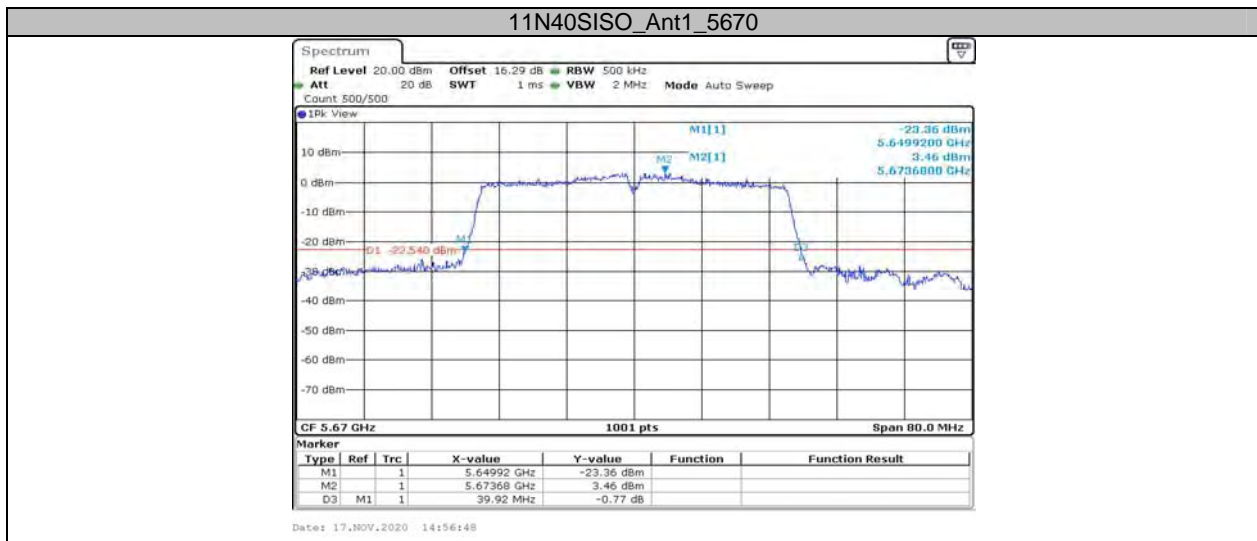
Date: 17/10/2020 09:25:23



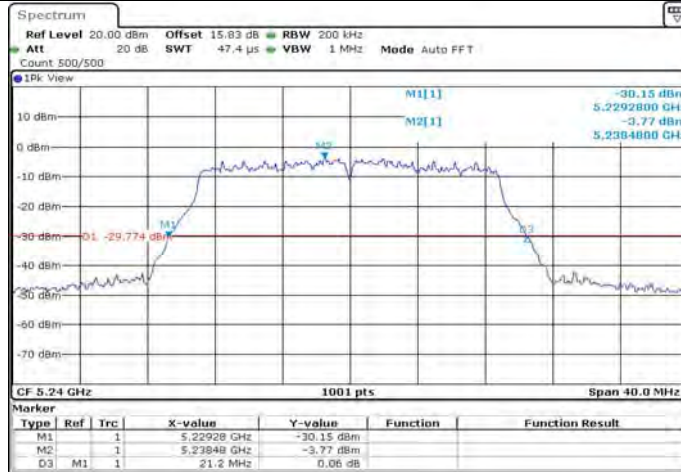






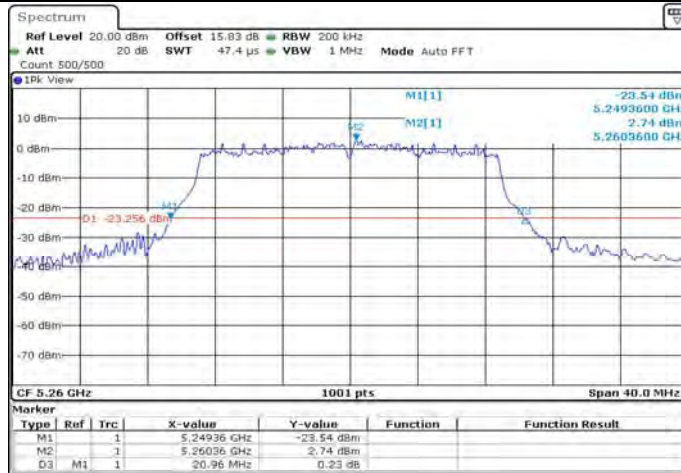


11AC20SISO\_Ant1\_5240



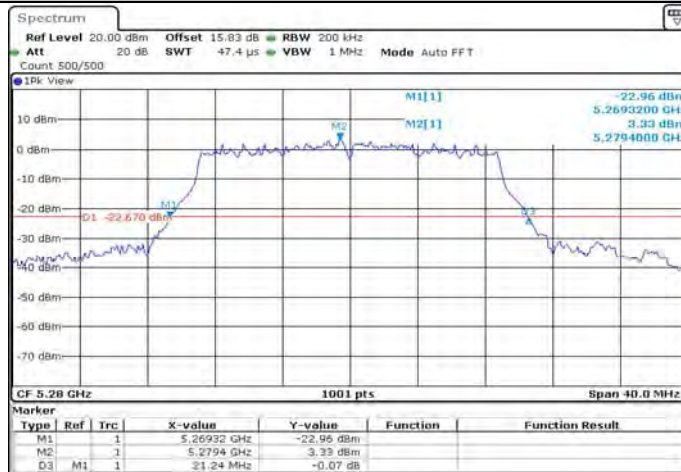
Date: 17-10-14 20:20:25:07:53

11AC20SISO\_Ant1\_5260



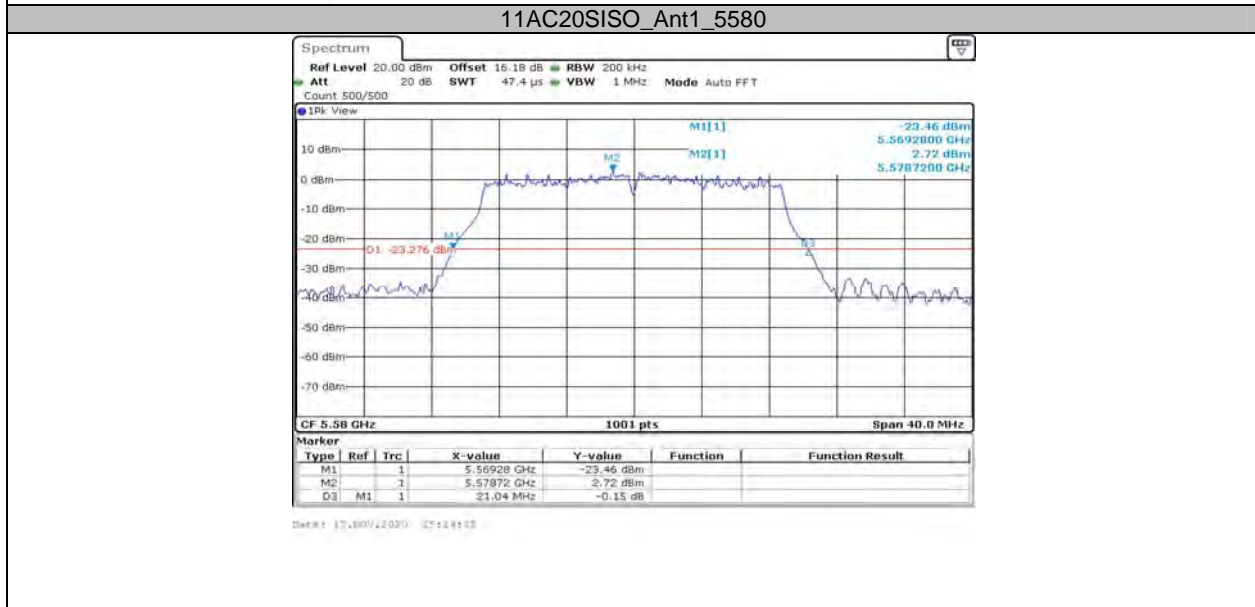
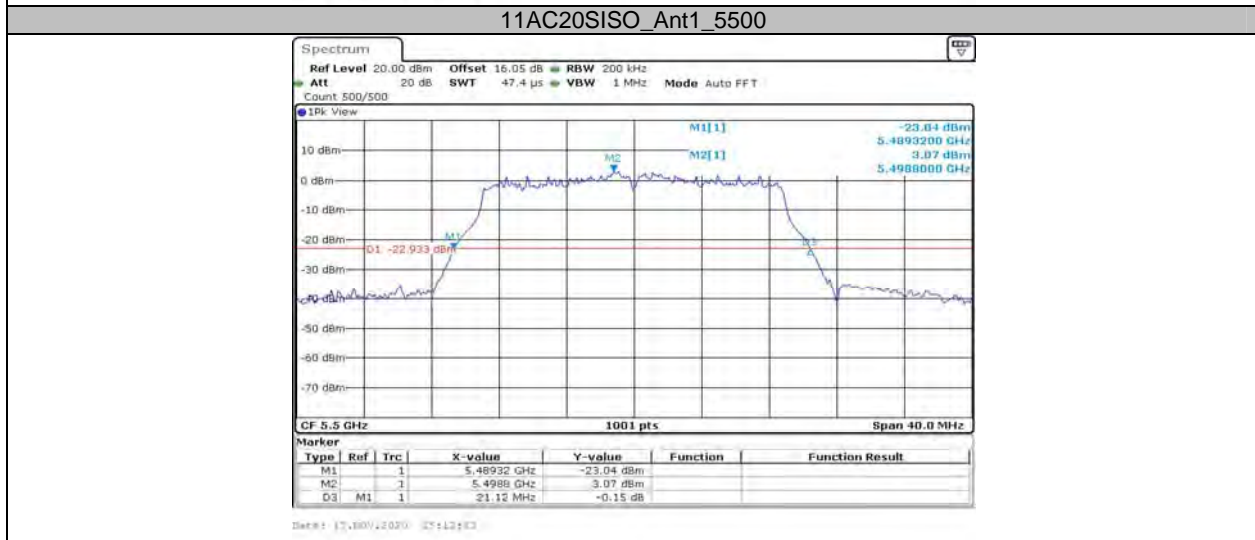
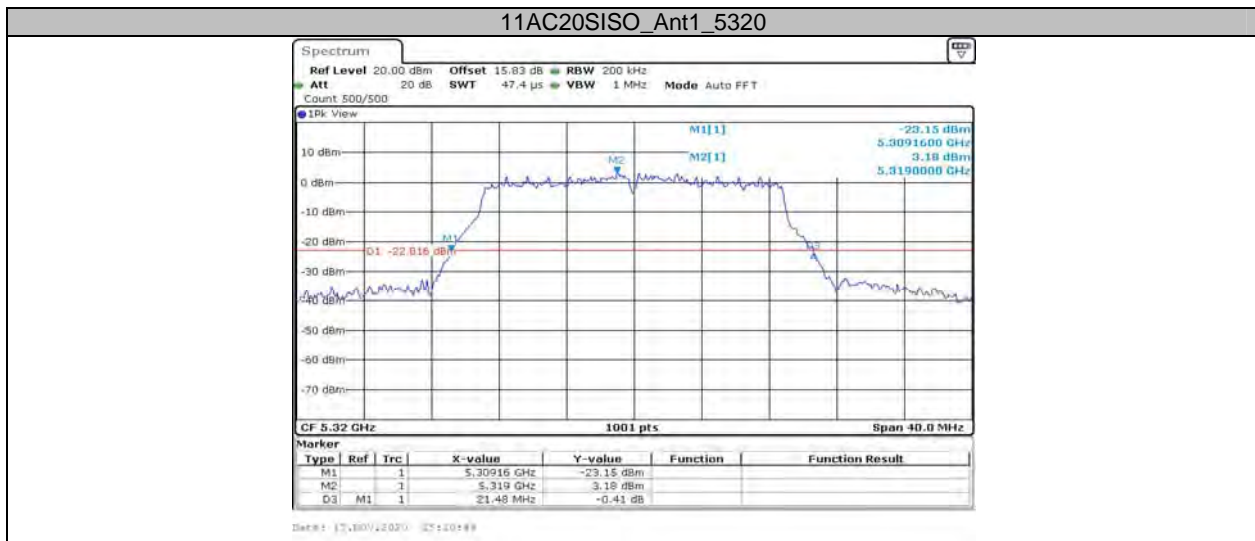
Date: 17-10-14 20:20:25:10:57

11AC20SISO\_Ant1\_5280

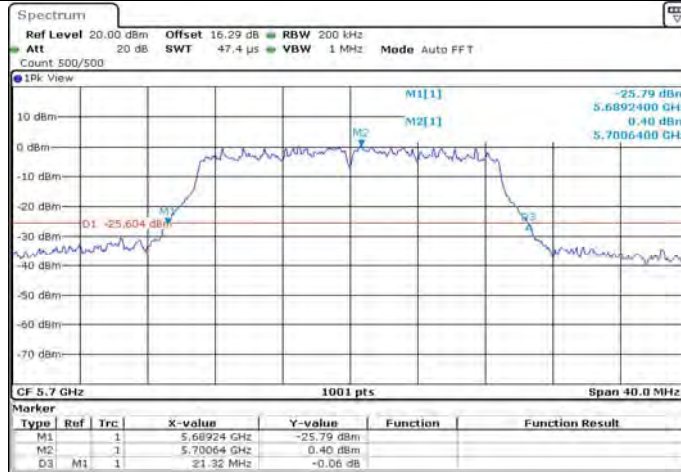


Date: 17-10-14 20:20:25:10:58





11AC20SISO\_Ant1\_5700

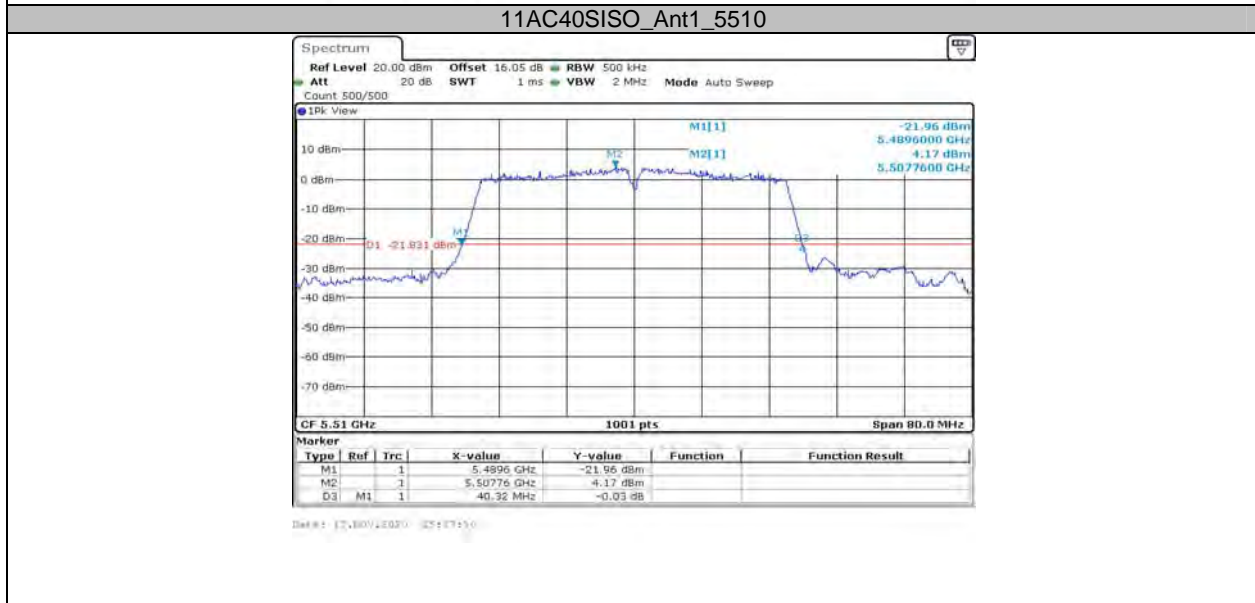
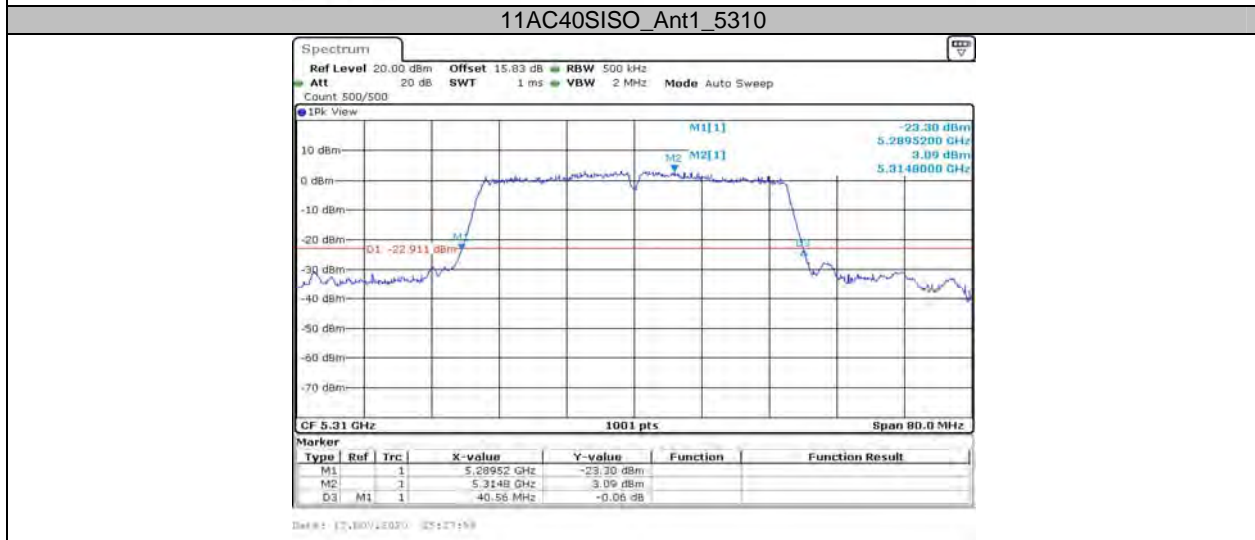
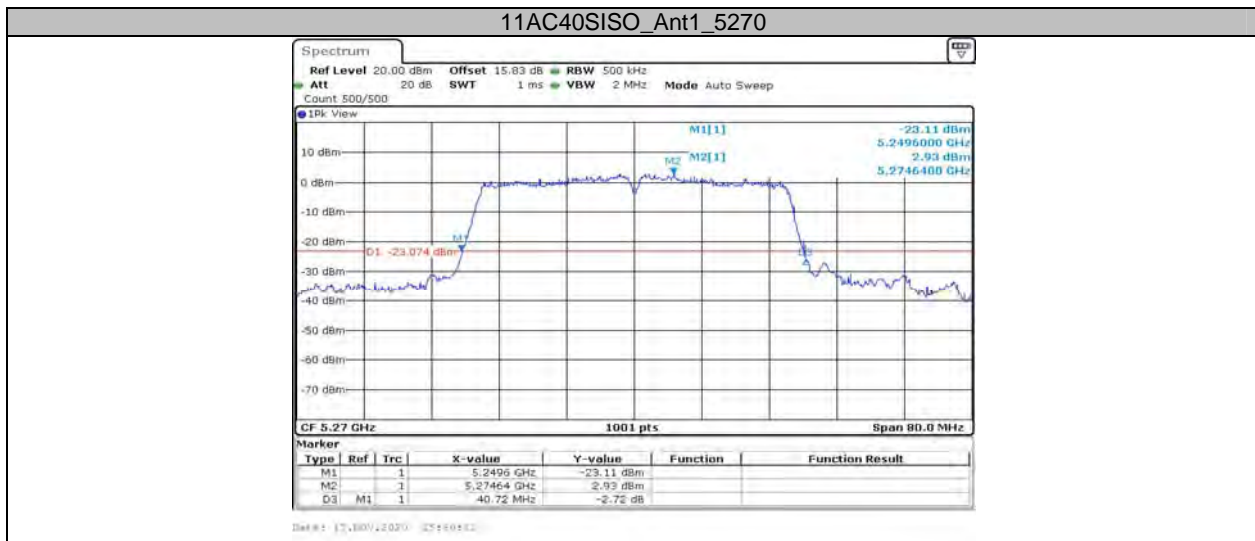


11AC40SISO\_Ant1\_5190

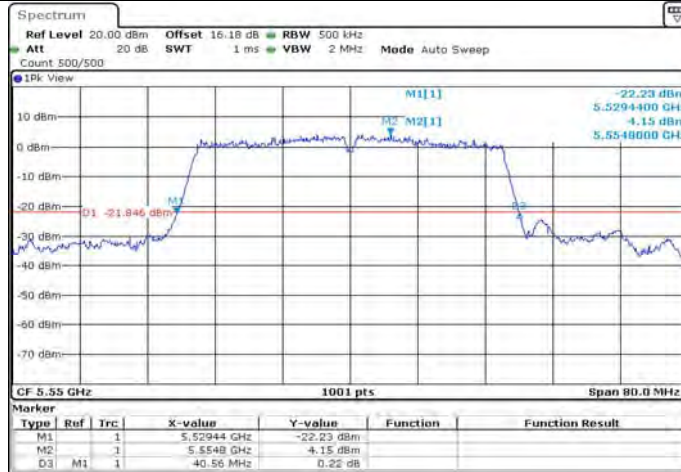


11AC40SISO\_Ant1\_5230

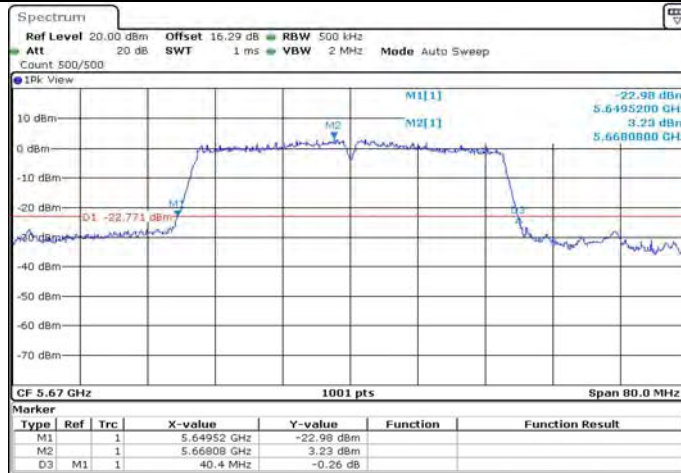




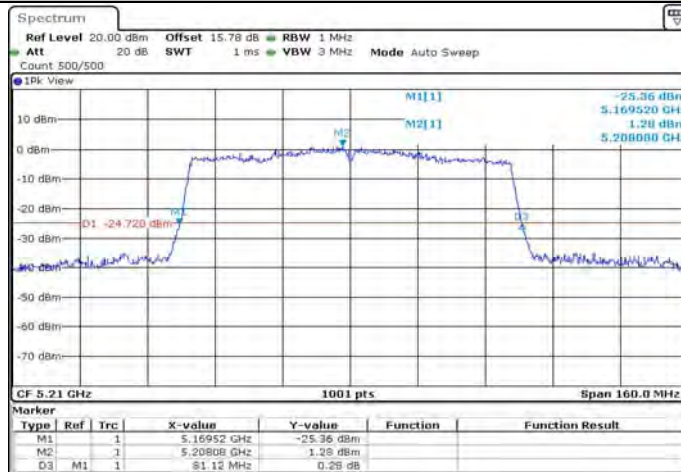
11AC40SISO\_Ant1\_5550

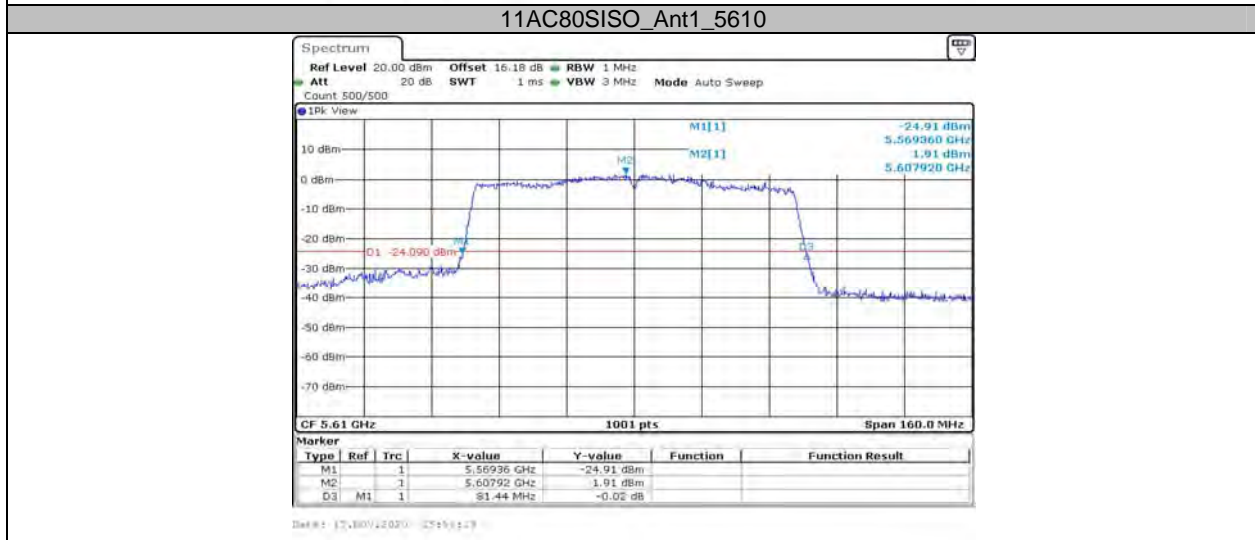
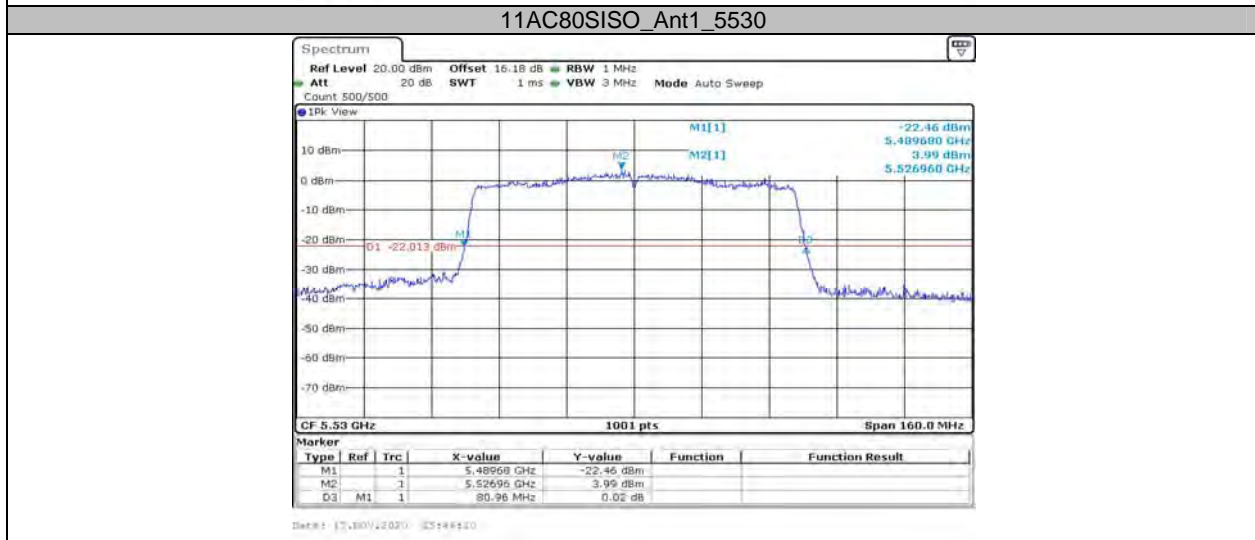
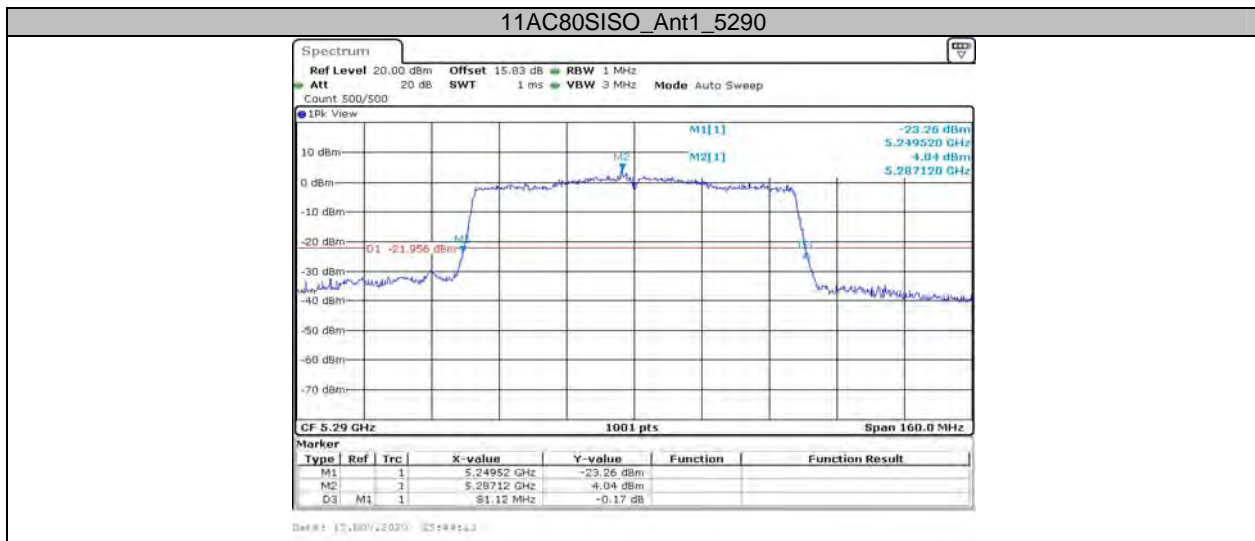


11AC40SISO\_Ant1\_5670



11AC80SISO\_Ant1\_5210



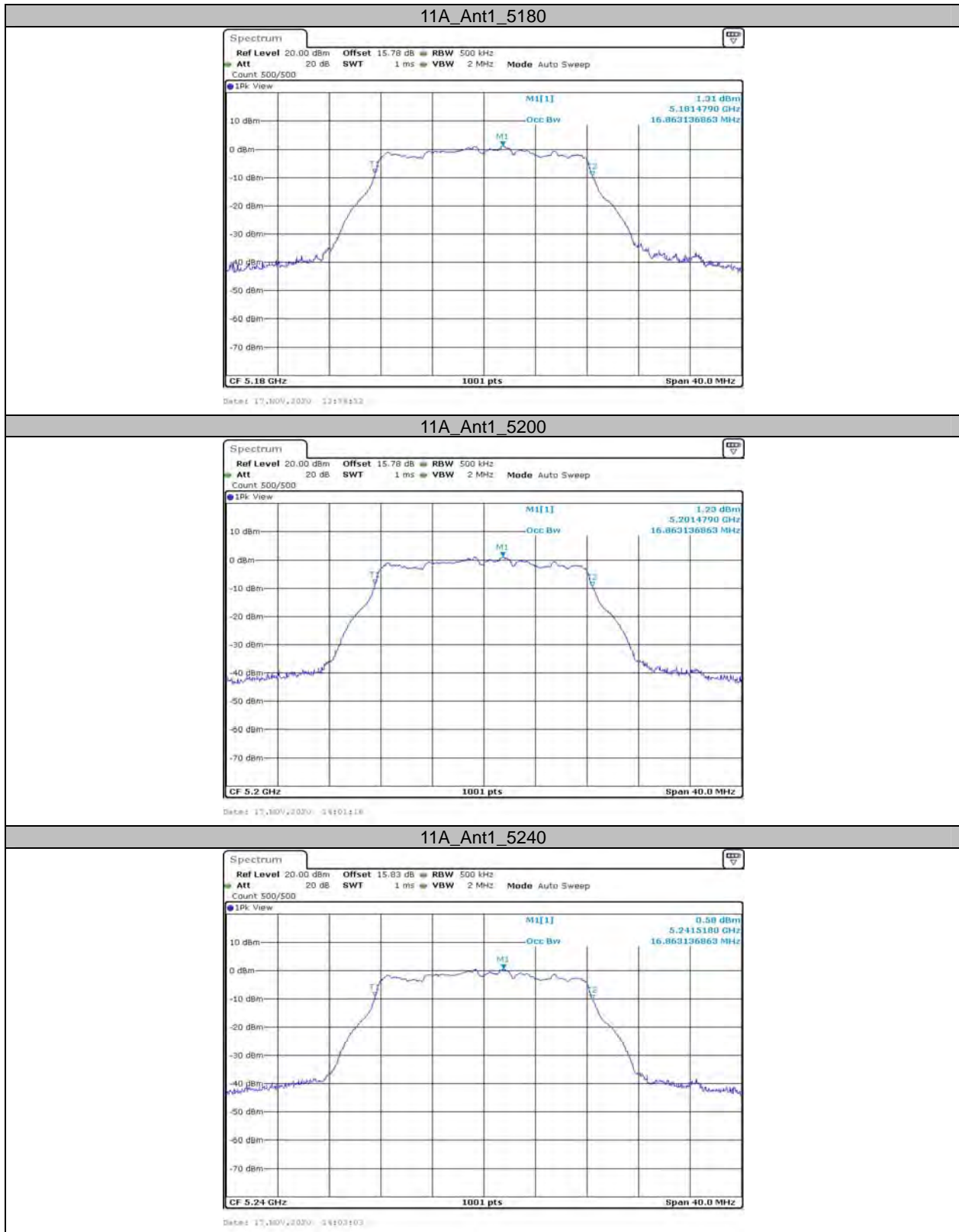


**AppendixA2: Occupied channel bandwidth  
Test Result**

TestMode	Antenna	Channel	OCB [MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	16.863	---	PASS
		5200	16.863	---	PASS
		5240	16.863	---	PASS
		5260	16.943	---	PASS
		5280	16.943	---	PASS
		5320	16.903	---	PASS
		5500	16.863	---	PASS
		5580	16.863	---	PASS
		5700	16.943	---	PASS
		5745	17.143	---	PASS
		5785	17.063	---	PASS
		5825	17.063	---	PASS
11N20SISO	Ant1	5180	18.302	---	PASS
		5200	18.302	---	PASS
		5240	18.302	---	PASS
		5260	18.382	---	PASS
		5280	18.342	---	PASS
		5320	18.342	---	PASS
		5500	18.302	---	PASS
		5580	18.342	---	PASS
		5700	18.382	---	PASS
		5745	18.462	---	PASS
		5785	18.422	---	PASS
		5825	18.422	---	PASS
11N40SISO	Ant1	5190	36.683	---	PASS
		5230	36.683	---	PASS
		5270	36.763	---	PASS
		5310	36.763	---	PASS
		5510	36.603	---	PASS
		5550	36.603	---	PASS
		5670	36.683	---	PASS
		5755	36.843	---	PASS
		5795	36.843	---	PASS
11AC20SISO	Ant1	5180	18.342	---	PASS
		5200	18.382	---	PASS
		5240	18.382	---	PASS
		5260	18.422	---	PASS
		5280	18.422	---	PASS
		5320	18.422	---	PASS
		5500	18.382	---	PASS
		5580	18.422	---	PASS
		5700	18.462	---	PASS
		5745	18.541	---	PASS
		5785	18.501	---	PASS
		5825	18.501	---	PASS
11AC40SISO	Ant1	5190	36.923	---	PASS
		5230	36.843	---	PASS
		5270	36.923	---	PASS
		5310	37.003	---	PASS
		5510	36.843	---	PASS
		5550	37.003	---	PASS
		5670	36.923	---	PASS
		5755	37.003	---	PASS
5795	37.003	---	PASS		
11AC80SISO	Ant1	5210	75.764	---	PASS

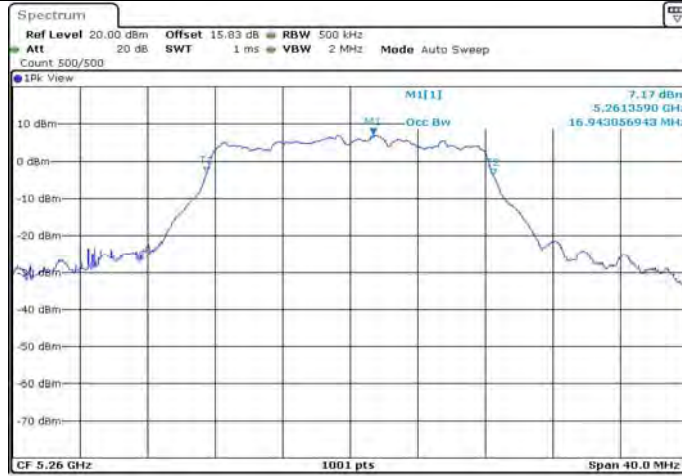
		5290	75.764	---	PASS
		5530	75.764	---	PASS
		5610	75.764	---	PASS
		5775	75.924	---	PASS

### Test Graphs

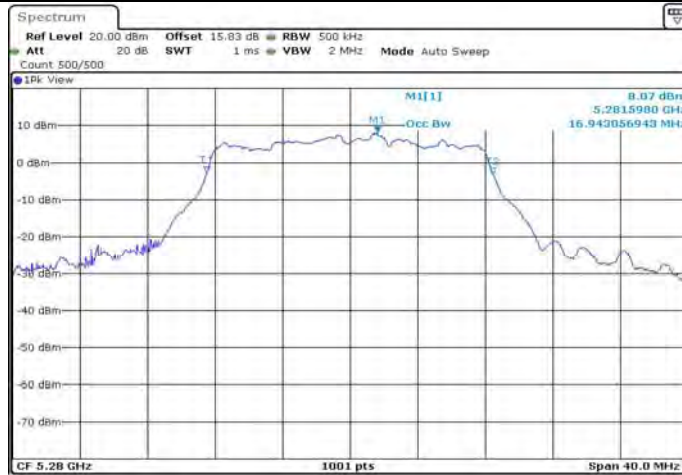




11A\_Ant1\_5260

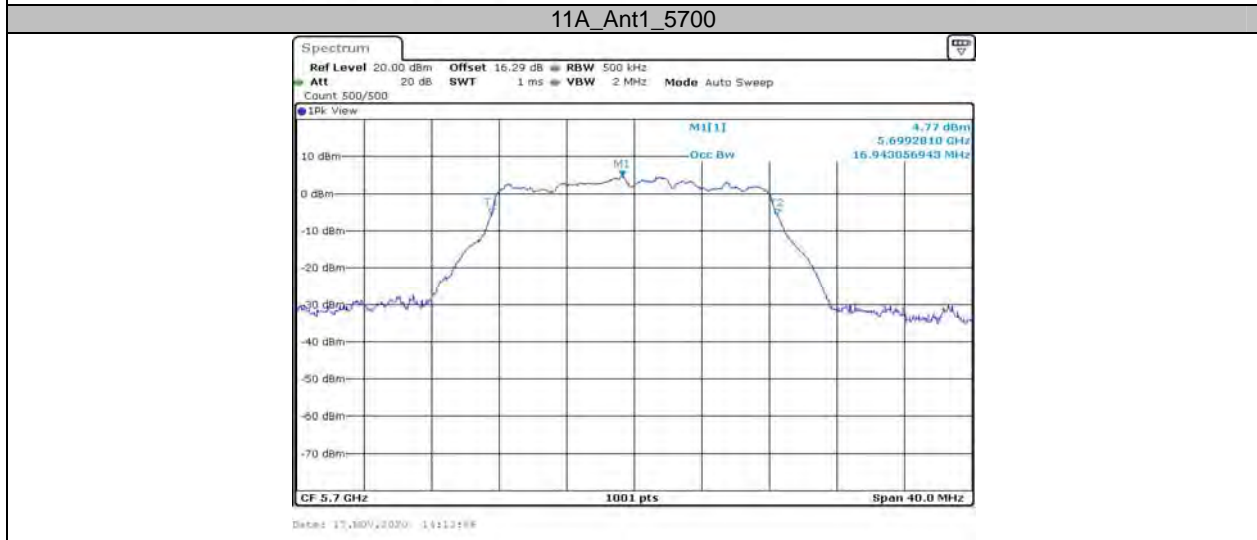
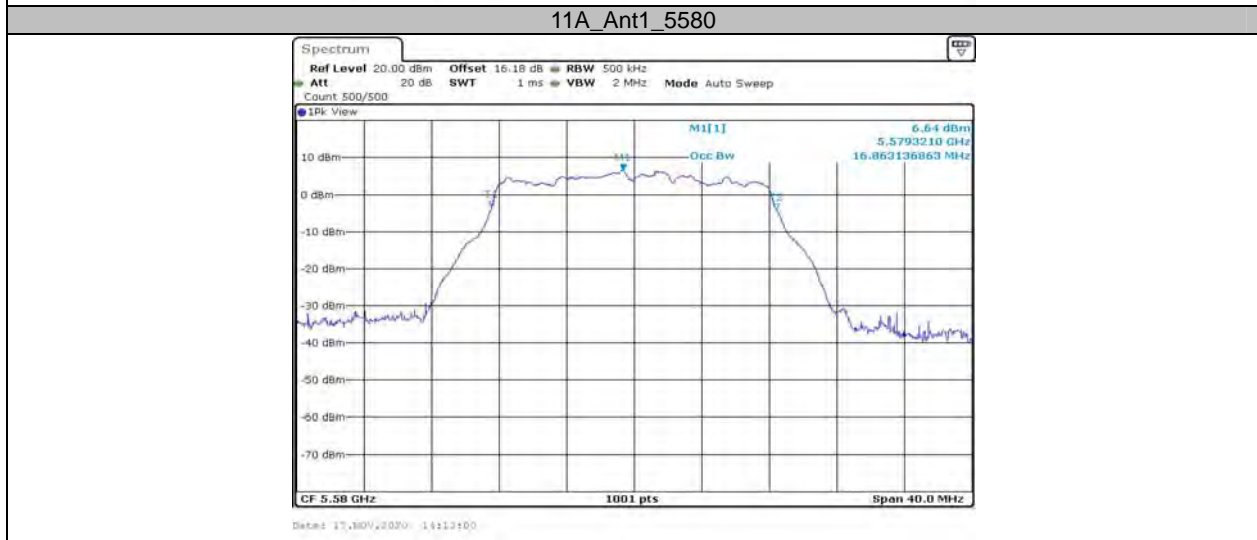
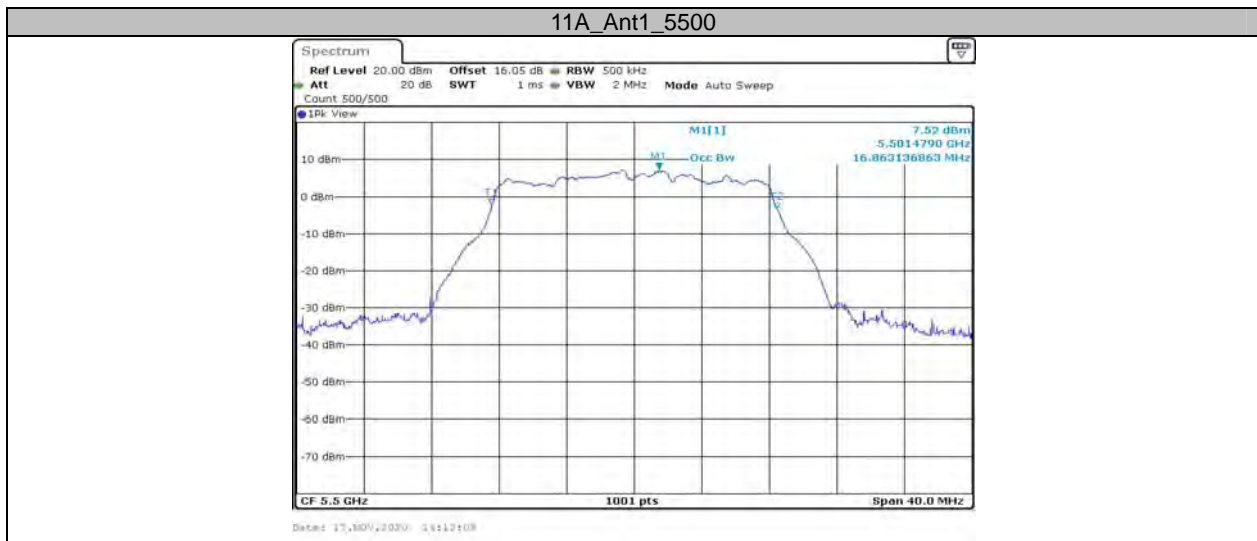


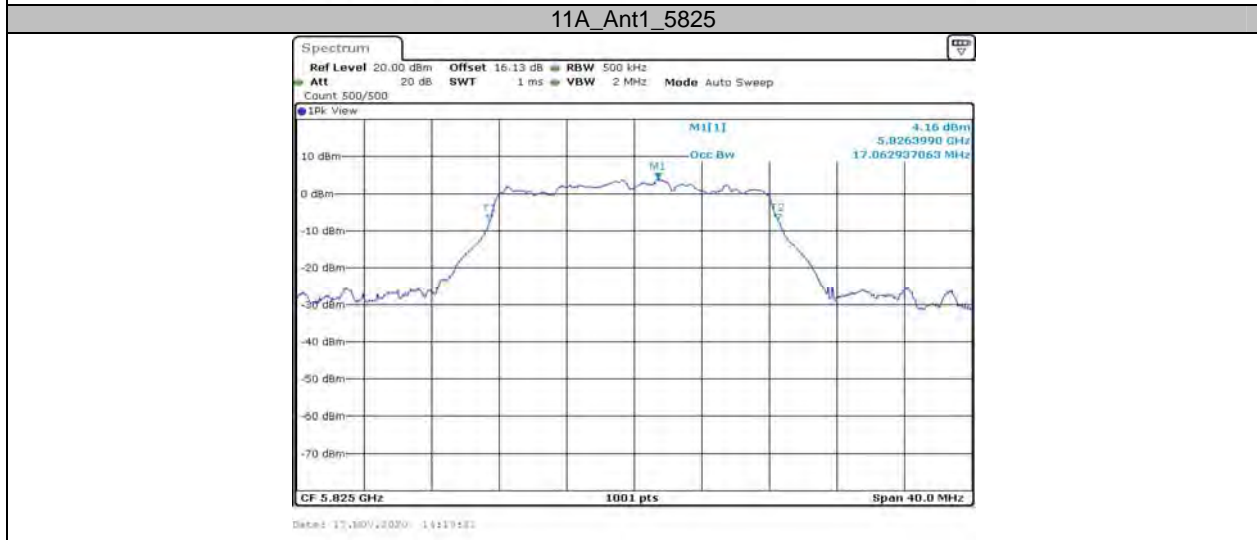
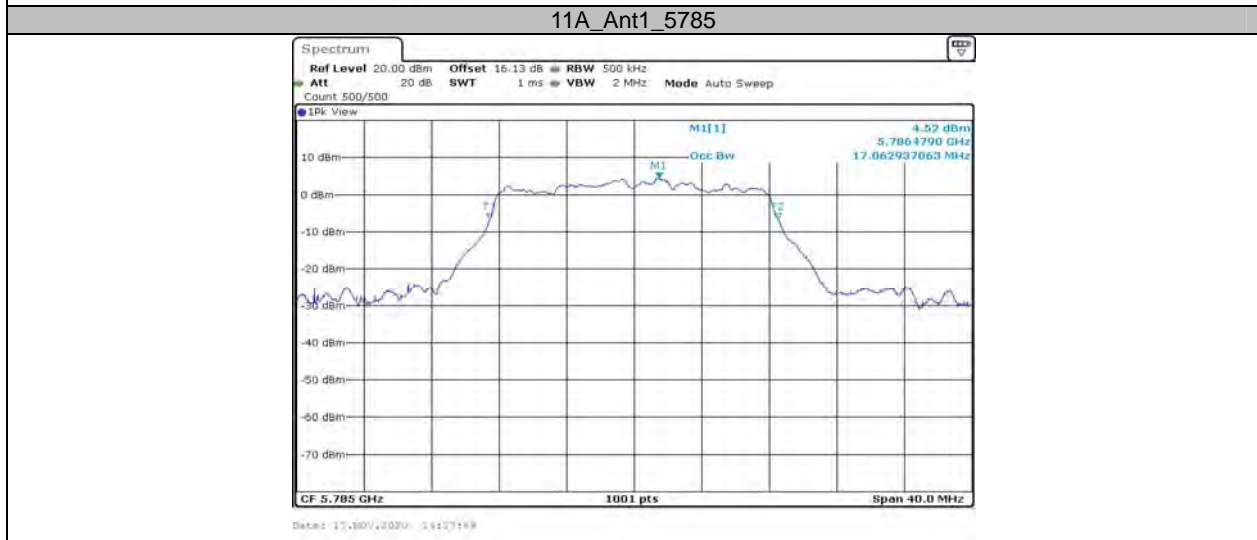
11A\_Ant1\_5280



11A\_Ant1\_5320

















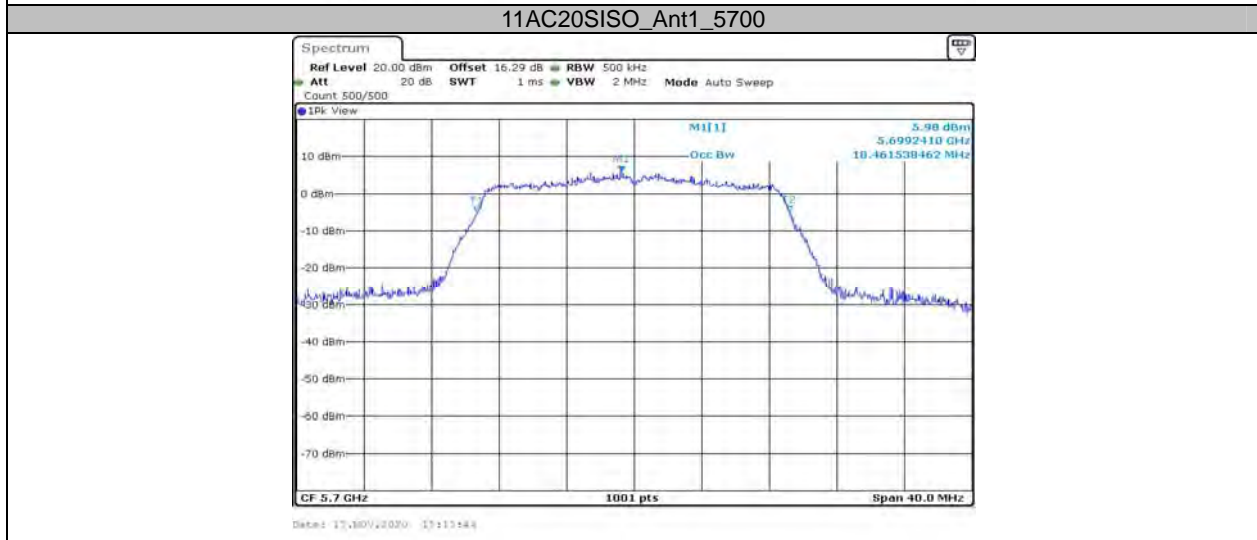
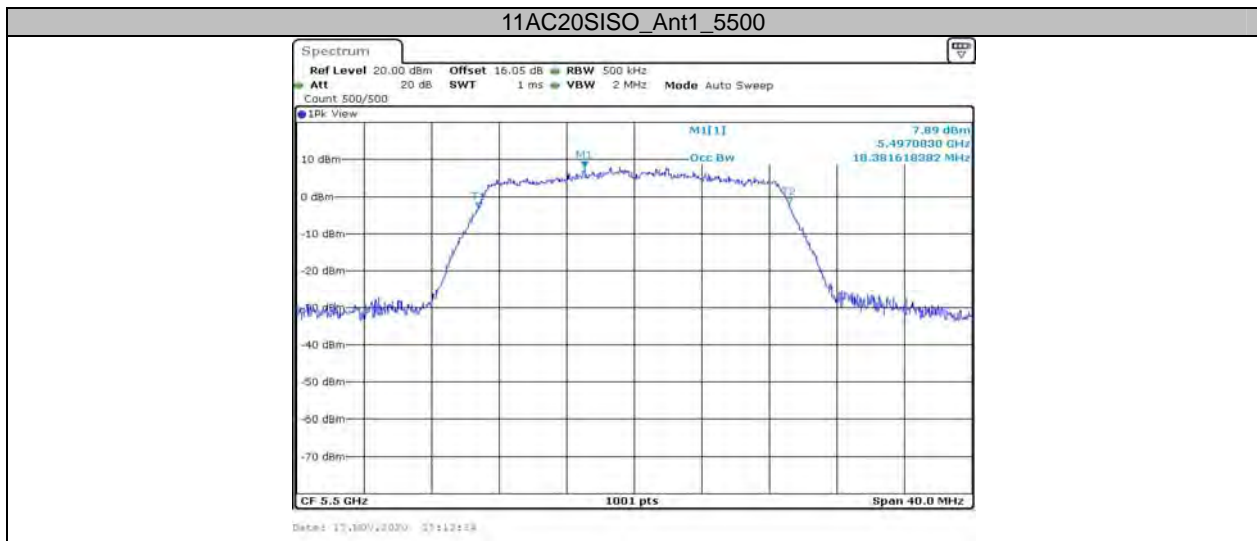


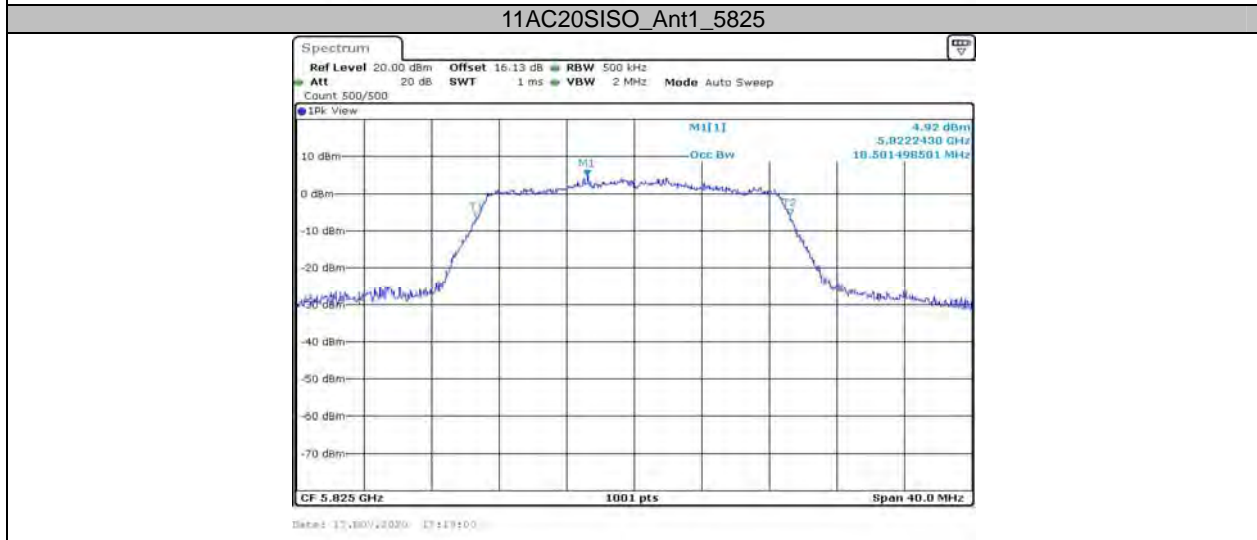


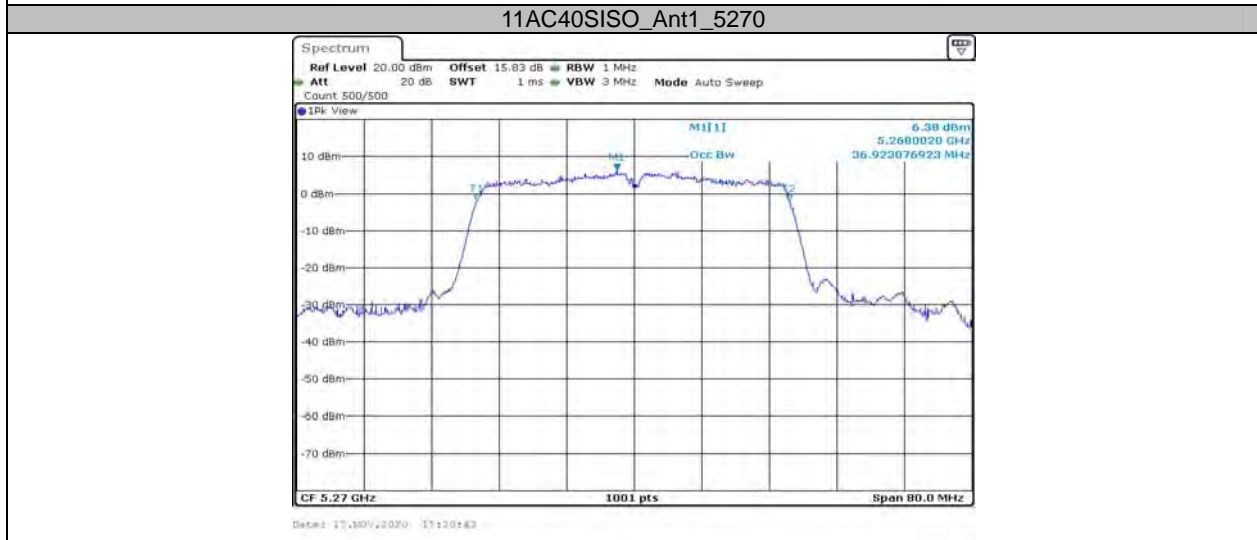
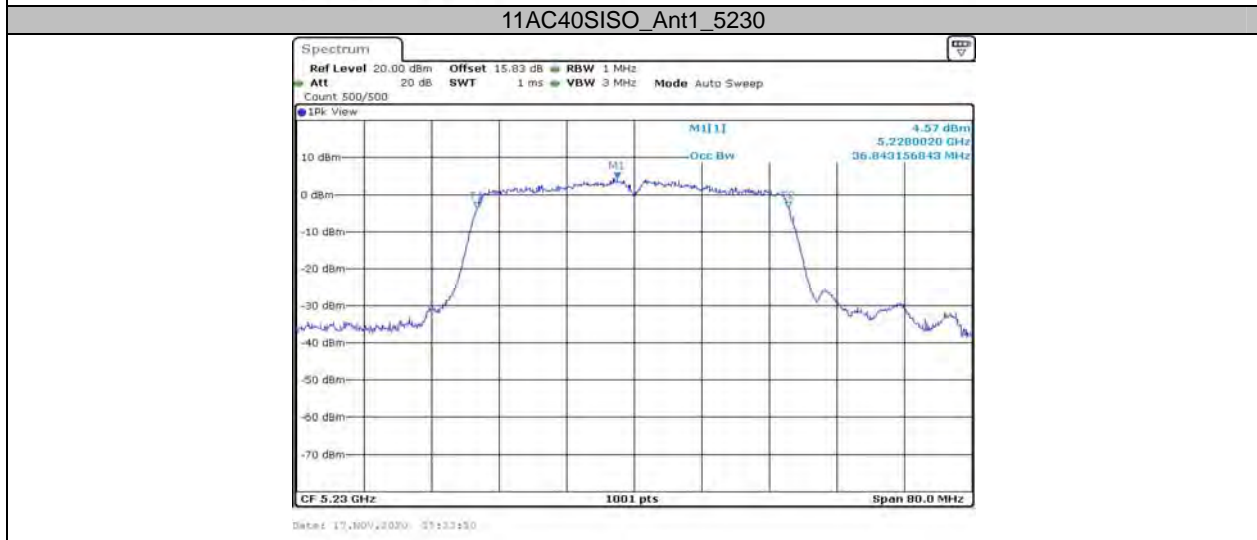


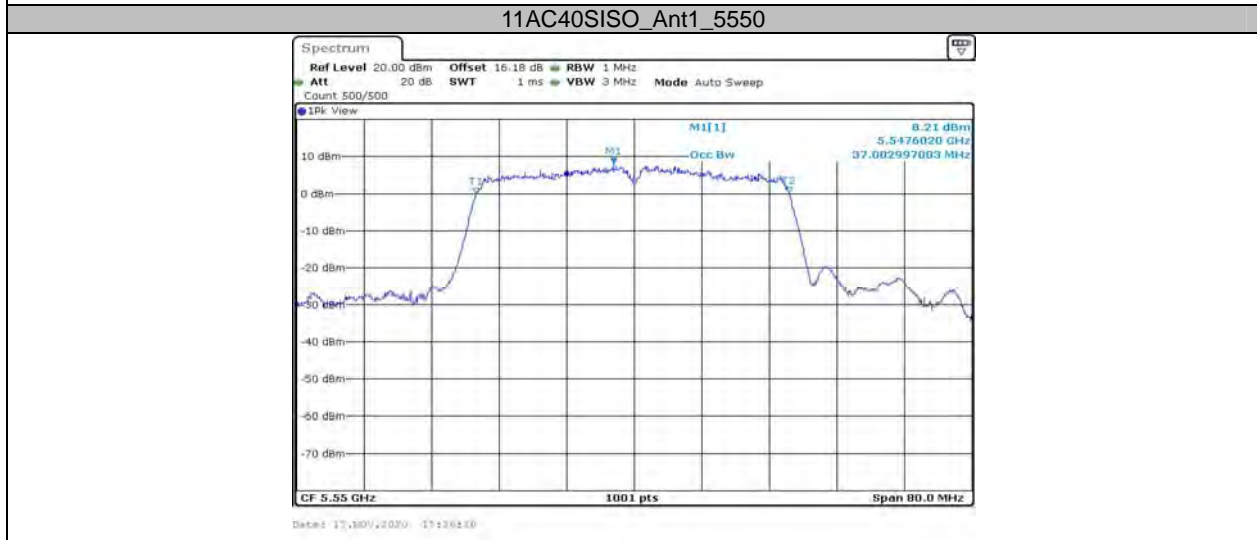




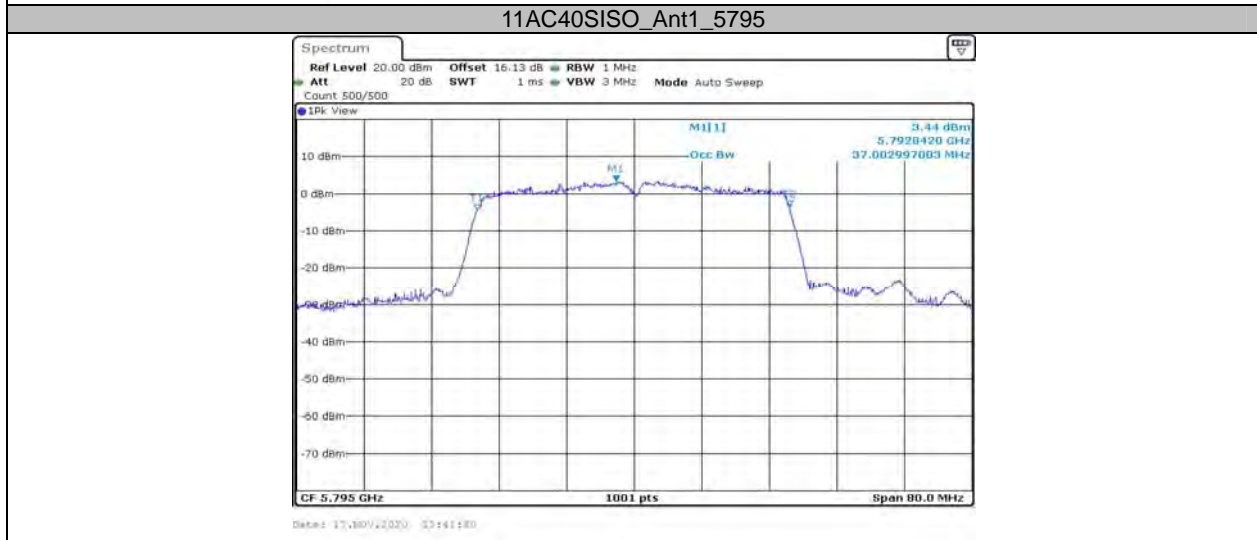


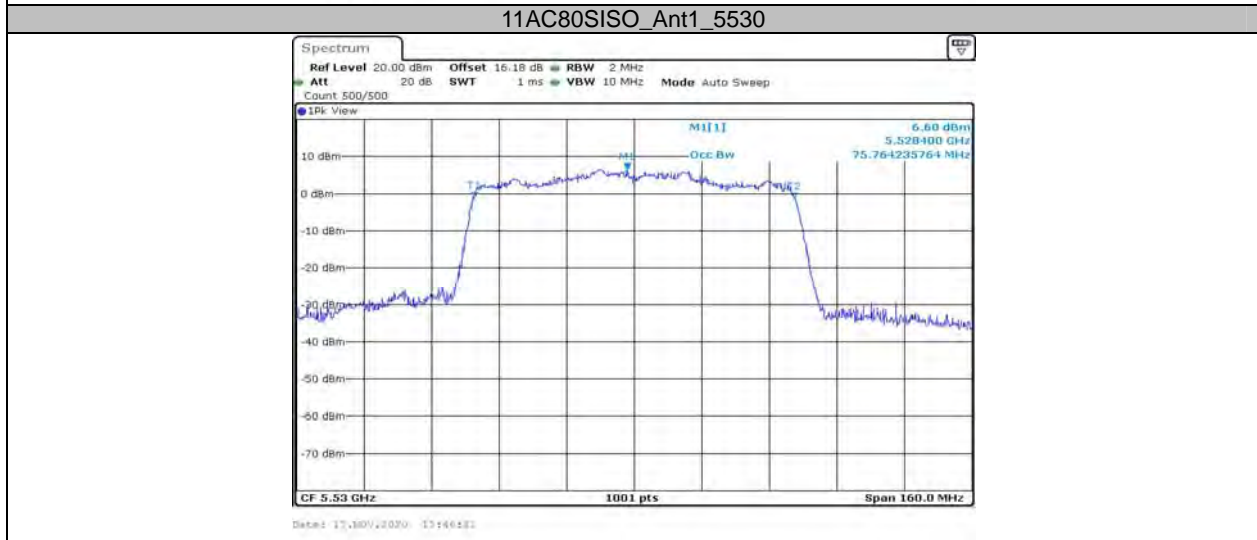
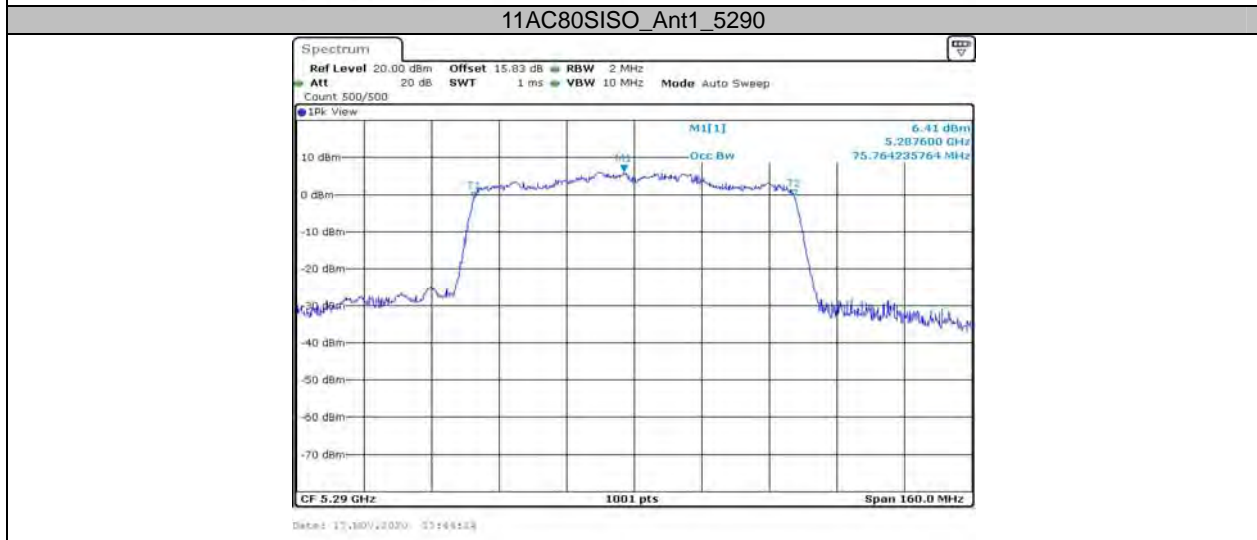










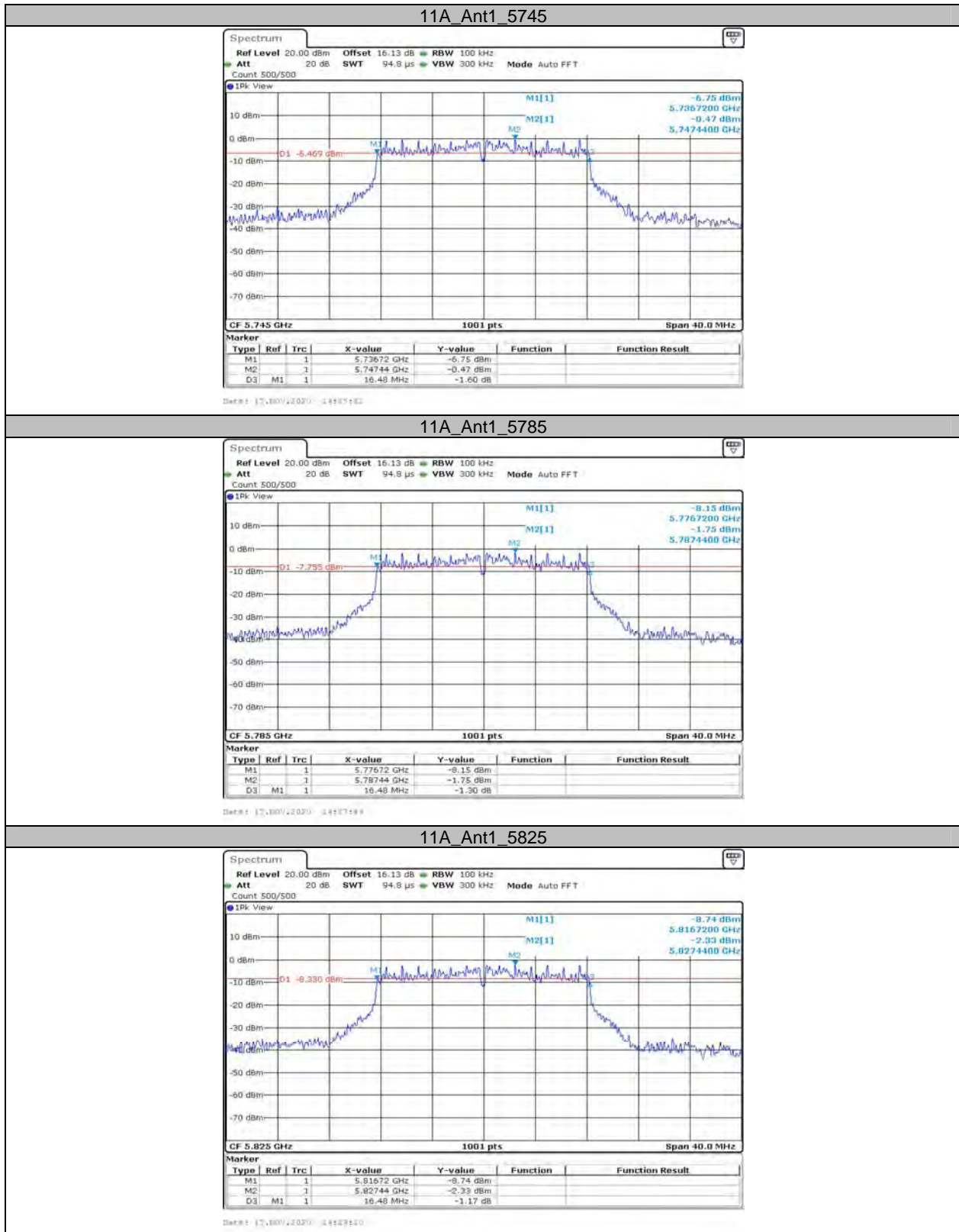


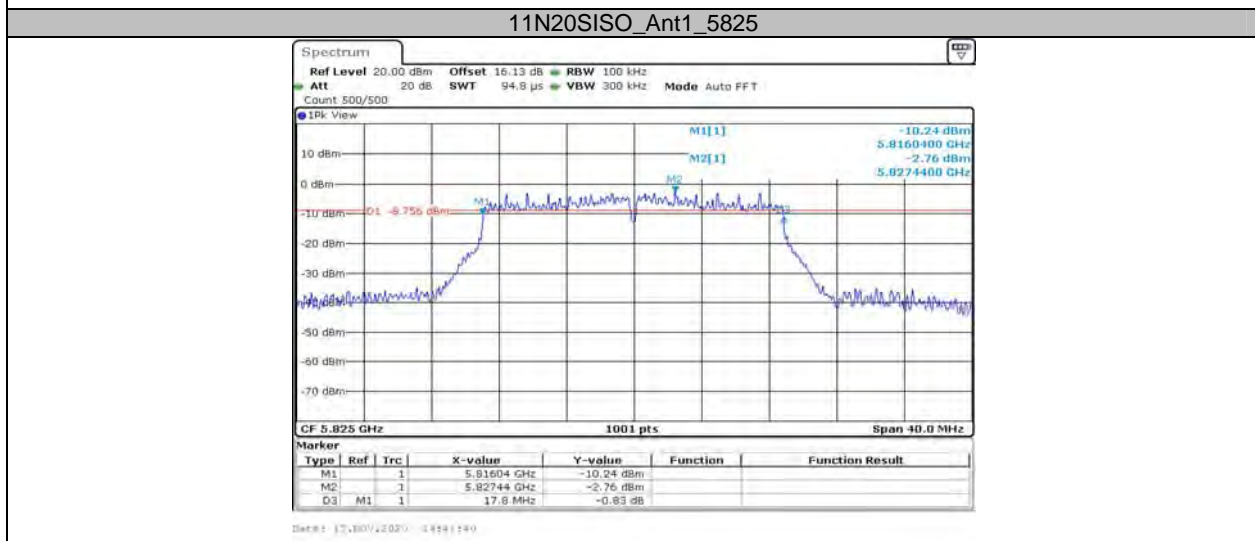
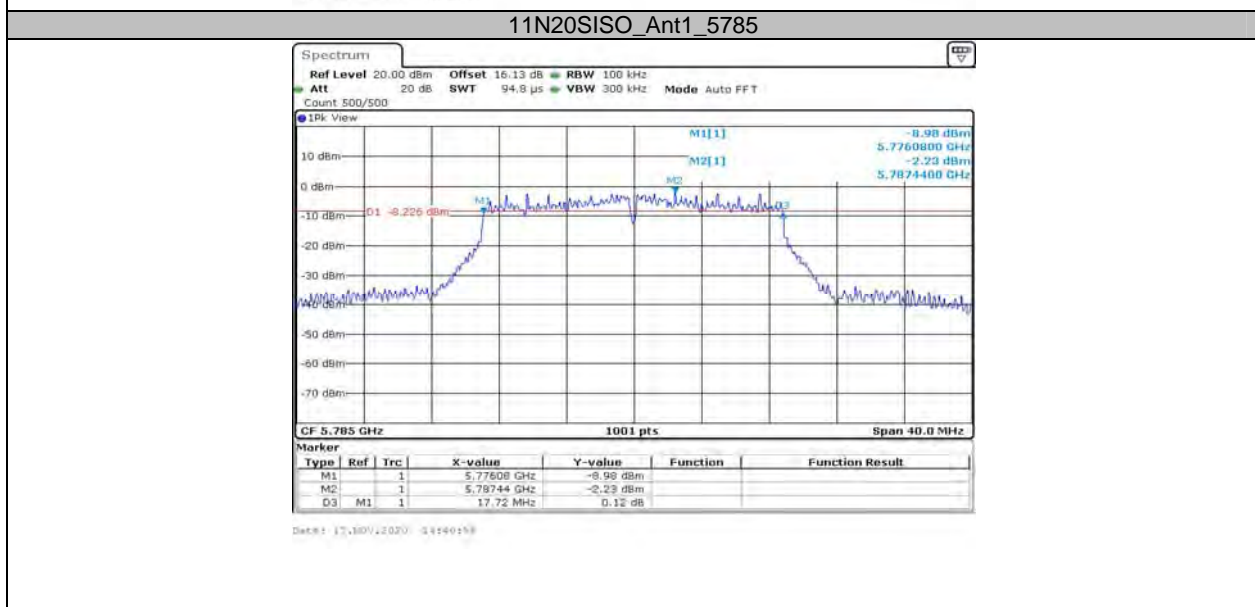
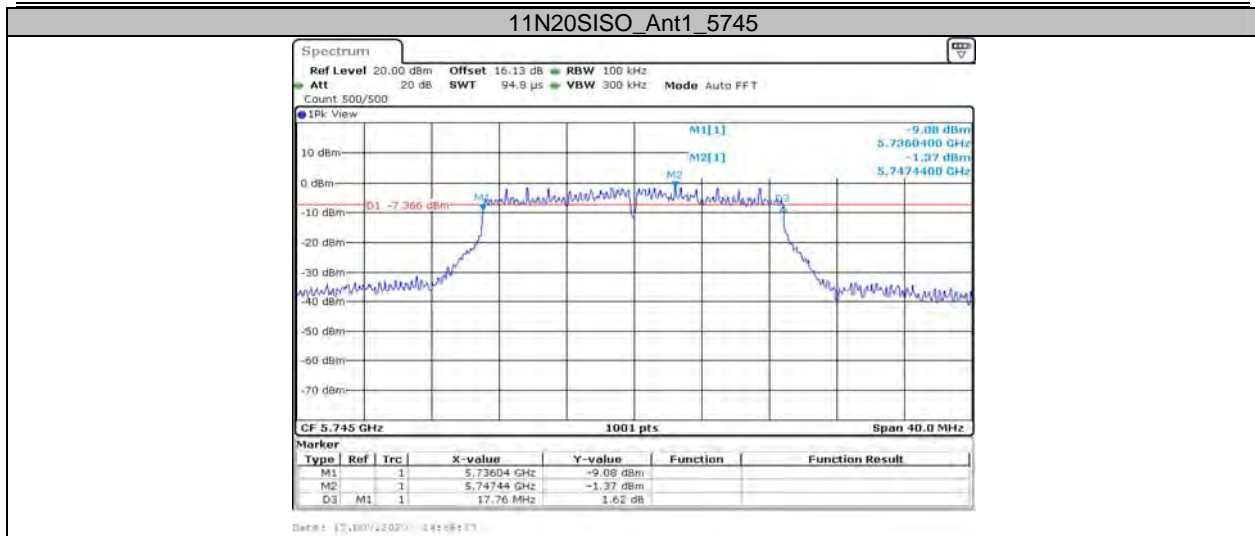


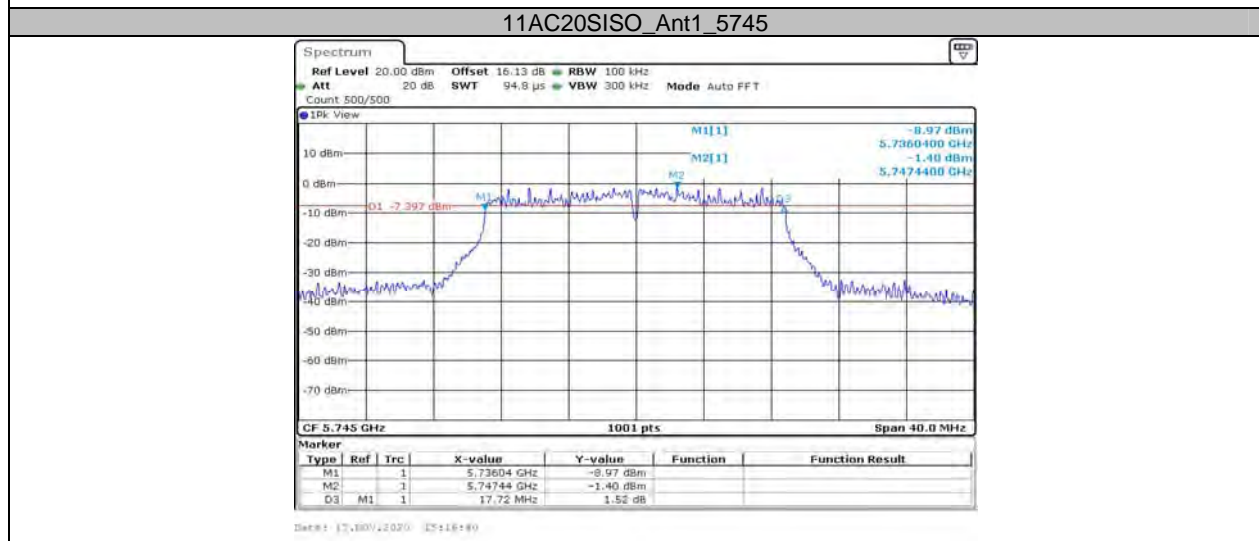
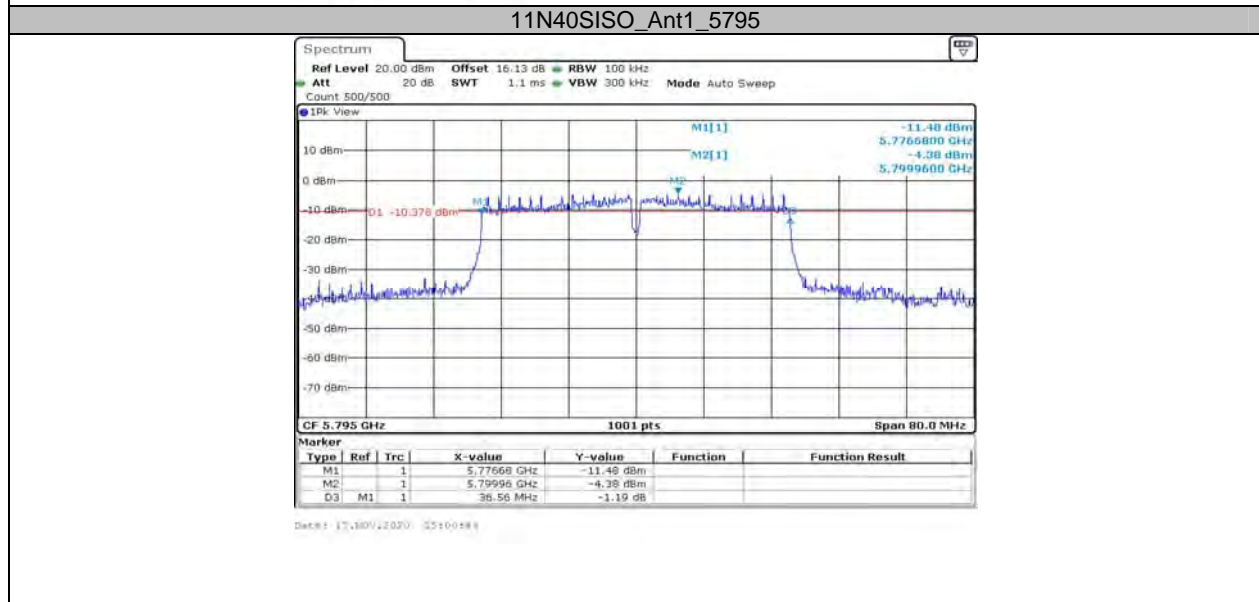
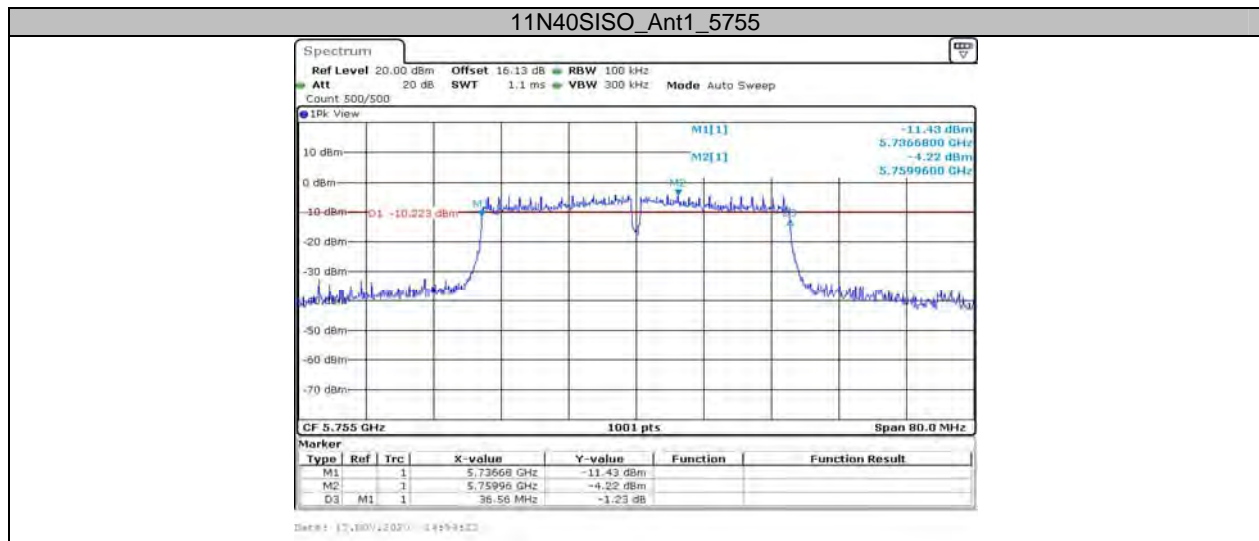
**Appendix A3: 6dB emission bandwidth****Test Result**

TestMode	Antenna	Channel	6db EBW [MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.480	0.5	PASS
		5785	16.480	0.5	PASS
		5825	16.480	0.5	PASS
11N20SISO	Ant1	5745	17.760	0.5	PASS
		5785	17.720	0.5	PASS
		5825	17.800	0.5	PASS
11N40SISO	Ant1	5755	36.560	0.5	PASS
		5795	36.560	0.5	PASS
11AC20SISO	Ant1	5745	17.720	0.5	PASS
		5785	17.760	0.5	PASS
		5825	17.800	0.5	PASS
11AC40SISO	Ant1	5755	36.560	0.5	PASS
		5795	36.560	0.5	PASS
11AC80SISO	Ant1	5775	75.520	0.5	PASS

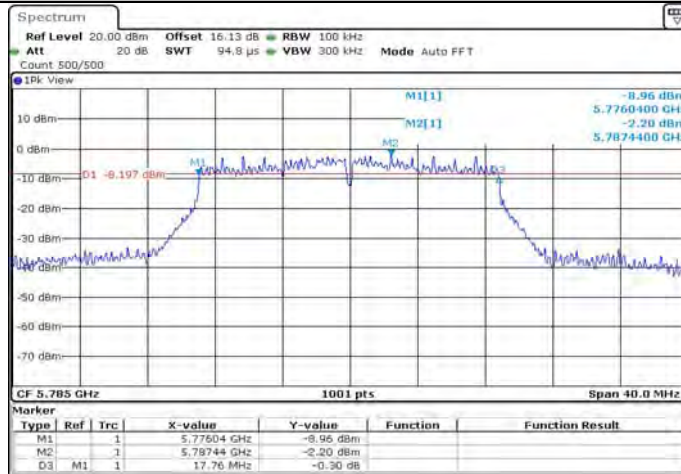
Test Graphs



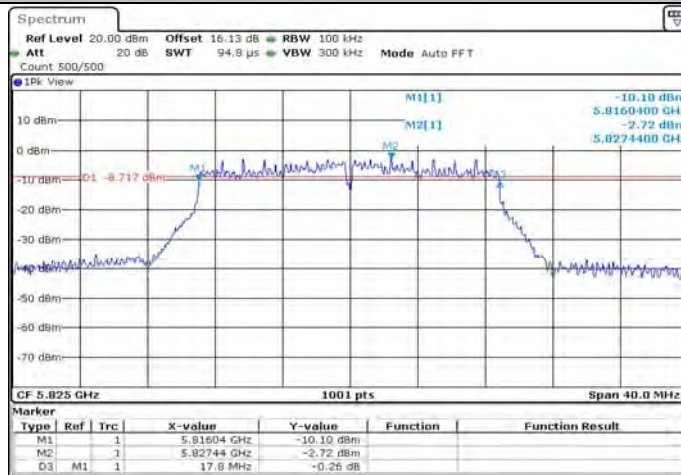




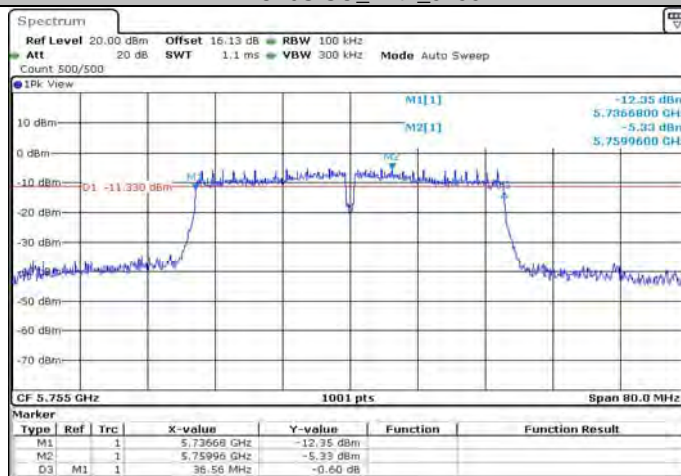
11AC20SISO\_Ant1\_5785



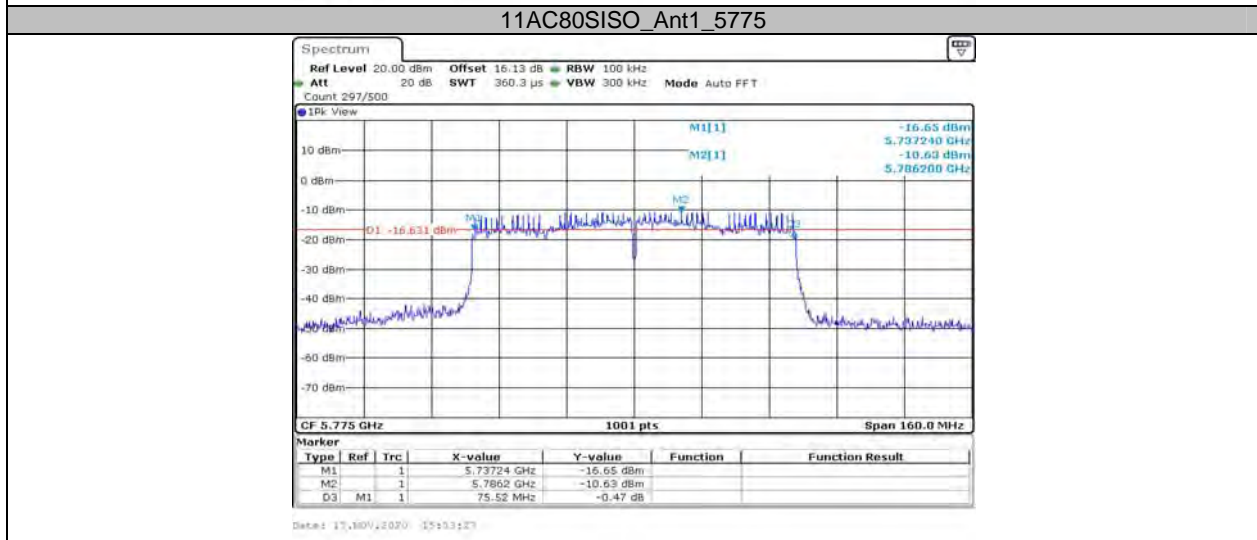
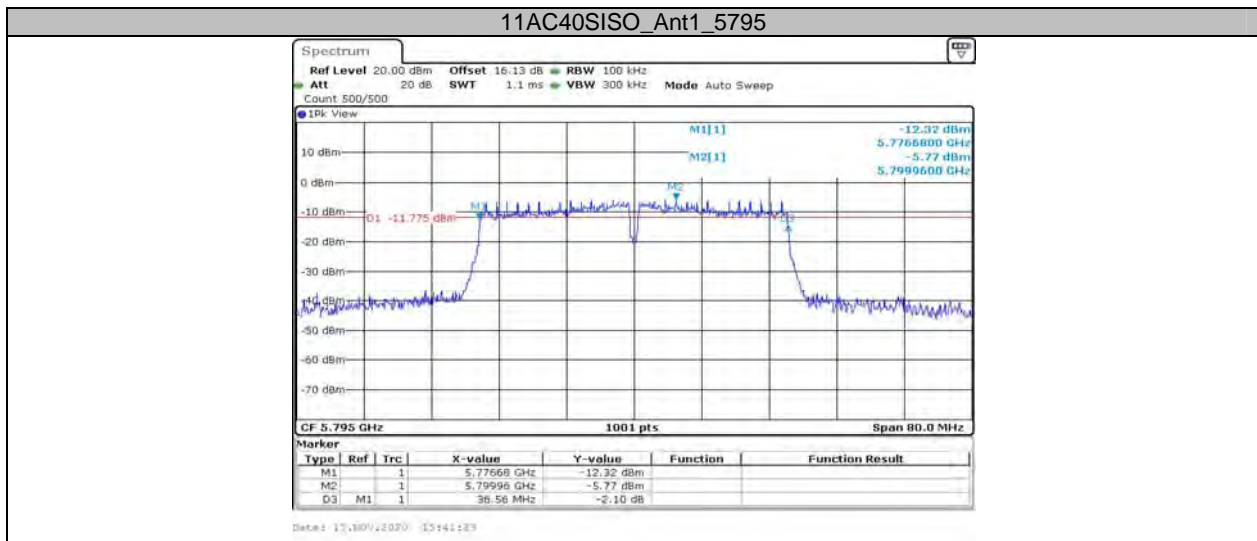
11AC20SISO\_Ant1\_5825



11AC40SISO\_Ant1\_5755







**Appendix B: Maximum conducted output power**

**Test Result**

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	5180	15.42	<=24	PASS
		5200	15.12	<=24	PASS
		5240	14.98	<=24	PASS
		5260	14.29	<=24	PASS
		5280	14.63	<=24	PASS
		5320	14.17	<=24	PASS
		5500	11.34	<=24	PASS
		5580	14.35	<=24	PASS
		5700	11.03	<=24	PASS
		5745	14.26	<=30	PASS
		5785	14.34	<=30	PASS
11N20SISO	Ant1	5180	14.65	<=24	PASS
		5200	14.35	<=24	PASS
		5240	15.48	<=24	PASS
		5260	14.24	<=24	PASS
		5280	14.42	<=24	PASS
		5320	14.92	<=24	PASS
		5500	11.38	<=24	PASS
		5580	13.89	<=24	PASS
		5700	11.23	<=24	PASS
		5745	14.35	<=30	PASS
		5785	14.29	<=30	PASS
11N40SISO	Ant1	5190	13.59	<=24	PASS
		5230	14.95	<=24	PASS
		5270	14.36	<=24	PASS
		5310	13.29	<=24	PASS
		5510	12.58	<=24	PASS
		5550	14.27	<=24	PASS
		5670	13.84	<=24	PASS
		5755	14.52	<=30	PASS
11AC20SISO	Ant1	5180	14.34	<=24	PASS
		5200	14.28	<=24	PASS
		5240	14.84	<=24	PASS
		5260	14.67	<=24	PASS
		5280	14.38	<=24	PASS
		5320	14.76	<=24	PASS
		5500	11.69	<=24	PASS
		5580	13.98	<=24	PASS
		5700	12.06	<=24	PASS
		5745	14.62	<=30	PASS
11AC40SISO	Ant1	5190	13.49	<=24	PASS
		5230	14.85	<=24	PASS
		5270	14.68	<=24	PASS
		5310	13.49	<=24	PASS
		5510	11.59	<=24	PASS
		5550	13.89	<=24	PASS
		5670	12.52	<=24	PASS
		5755	14.13	<=30	PASS
	5795	13.79	<=30	PASS	

11AC80SISO	Ant1	5210	13.92	<=24	PASS
		5290	12.58	<=24	PASS
		5530	11.25	<=24	PASS
		5610	13.89	<=24	PASS
		5775	14.38	<=30	PASS

**Appendix C: Maximum power spectral density**

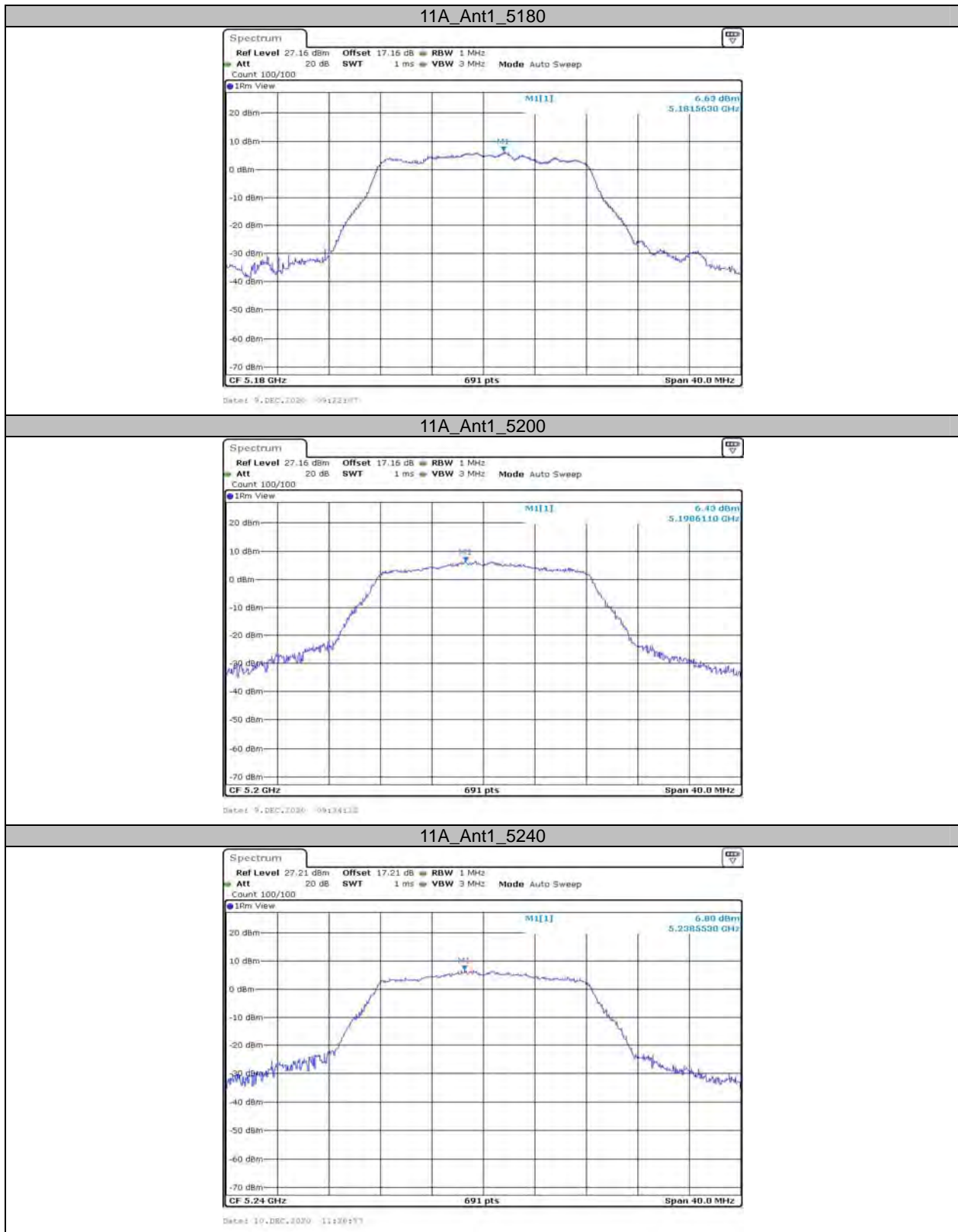
**Test Result**

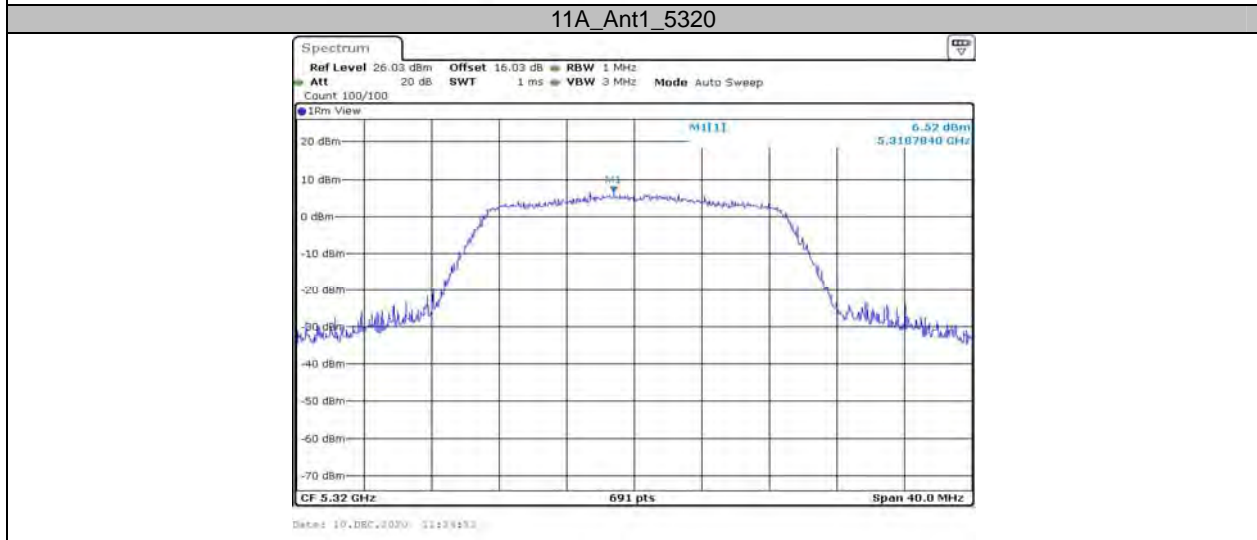
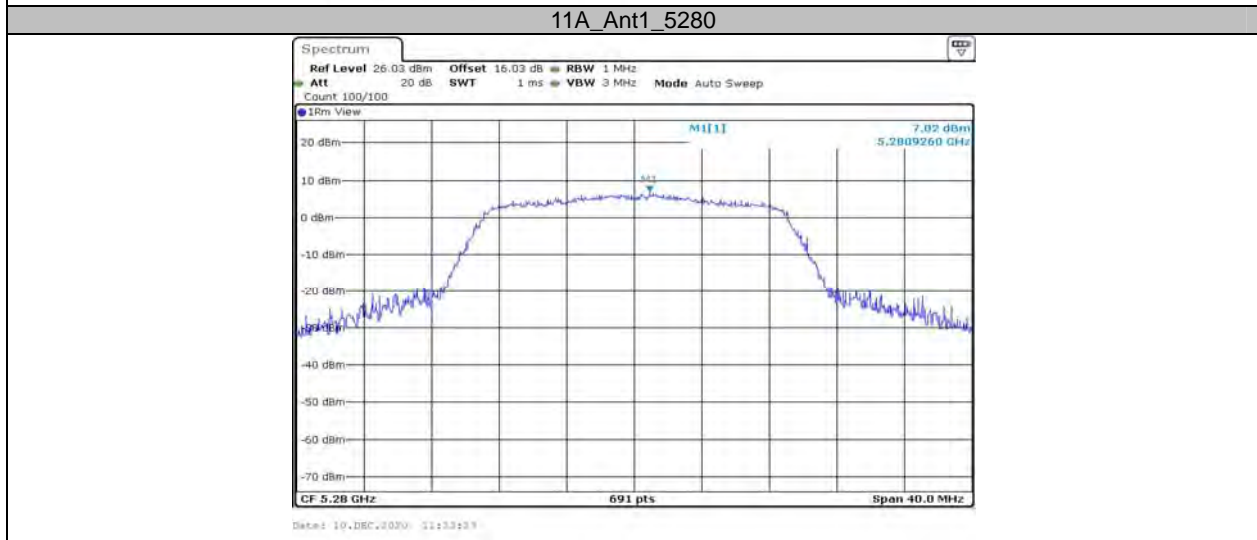
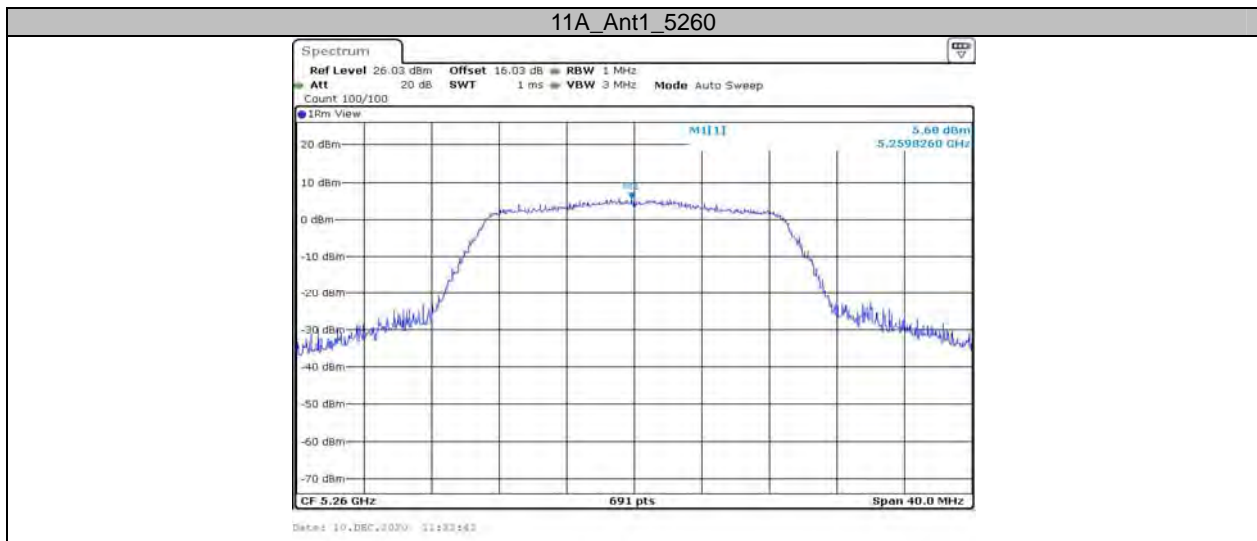
TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	6.63	<=11	PASS
		5200	6.43	<=11	PASS
		5240	6.80	<=11	PASS
		5260	5.68	<=11	PASS
		5280	7.02	<=11	PASS
		5320	6.52	<=11	PASS
		5500	6.25	<=11	PASS
		5580	7.62	<=11	PASS
		5700	5.69	<=11	PASS
		5745	4.85	<=30	PASS
		5785	6.94	<=30	PASS
11N20SISO	Ant1	5180	5.87	<=11	PASS
		5200	6.28	<=11	PASS
		5240	5.55	<=11	PASS
		5260	7.10	<=11	PASS
		5280	8.58	<=11	PASS
		5320	6.51	<=11	PASS
		5500	5.37	<=11	PASS
		5580	6.32	<=11	PASS
		5700	4.60	<=11	PASS
		5745	5.22	<=30	PASS
		5785	4.78	<=30	PASS
11N40SISO	Ant1	5190	2.16	<=11	PASS
		5230	3.19	<=11	PASS
		5270	2.80	<=11	PASS
		5310	4.64	<=11	PASS
		5510	3.34	<=11	PASS
		5550	4.97	<=11	PASS
		5670	3.88	<=11	PASS
		5755	2.68	<=30	PASS
		5795	1.95	<=30	PASS
11AC20SISO	Ant1	5180	6.10	<=11	PASS
		5200	6.86	<=11	PASS
		5240	5.15	<=11	PASS
		5260	7.05	<=11	PASS
		5280	7.08	<=11	PASS
		5320	6.62	<=11	PASS
		5500	5.42	<=11	PASS
		5580	6.35	<=11	PASS
		5700	4.17	<=11	PASS
		5745	5.75	<=30	PASS
		5785	6.08	<=30	PASS
11AC40SISO	Ant1	5190	4.12	<=11	PASS
		5230	4.87	<=11	PASS
		5270	4.52	<=11	PASS
		5310	5.33	<=11	PASS
		5510	4.27	<=11	PASS
		5550	2.44	<=11	PASS
		5670	3.97	<=11	PASS
		5755	2.24	<=30	PASS
		5795	1.71	<=30	PASS

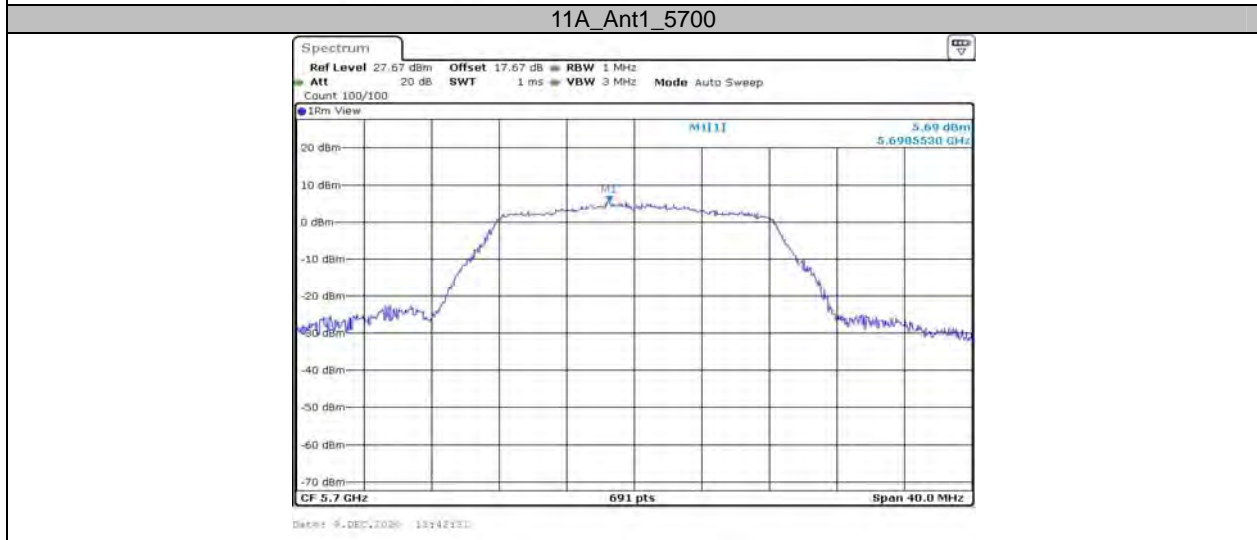
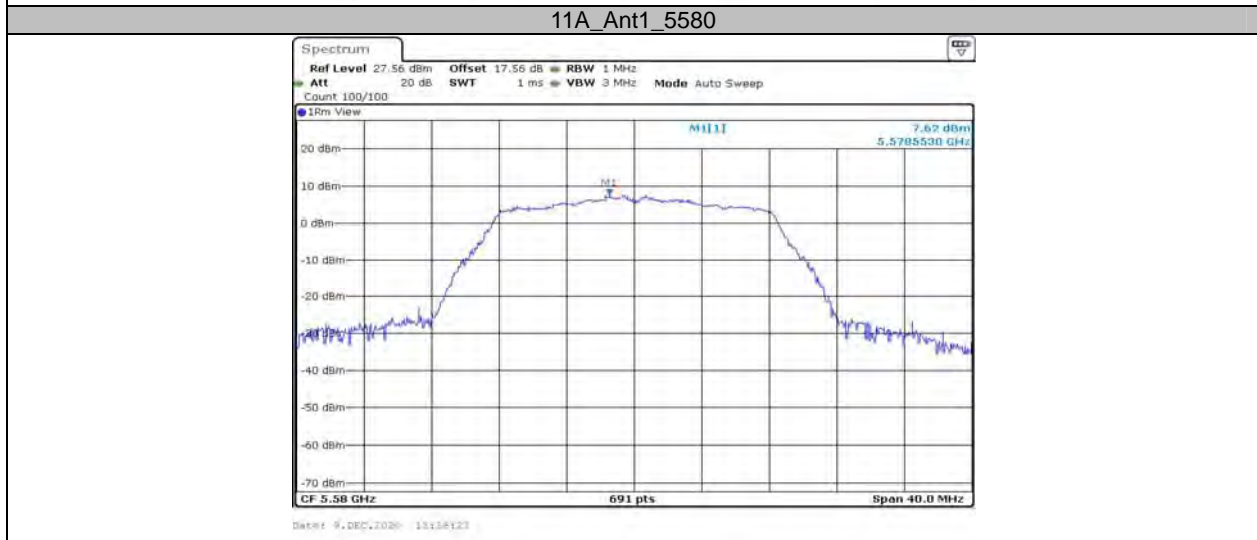
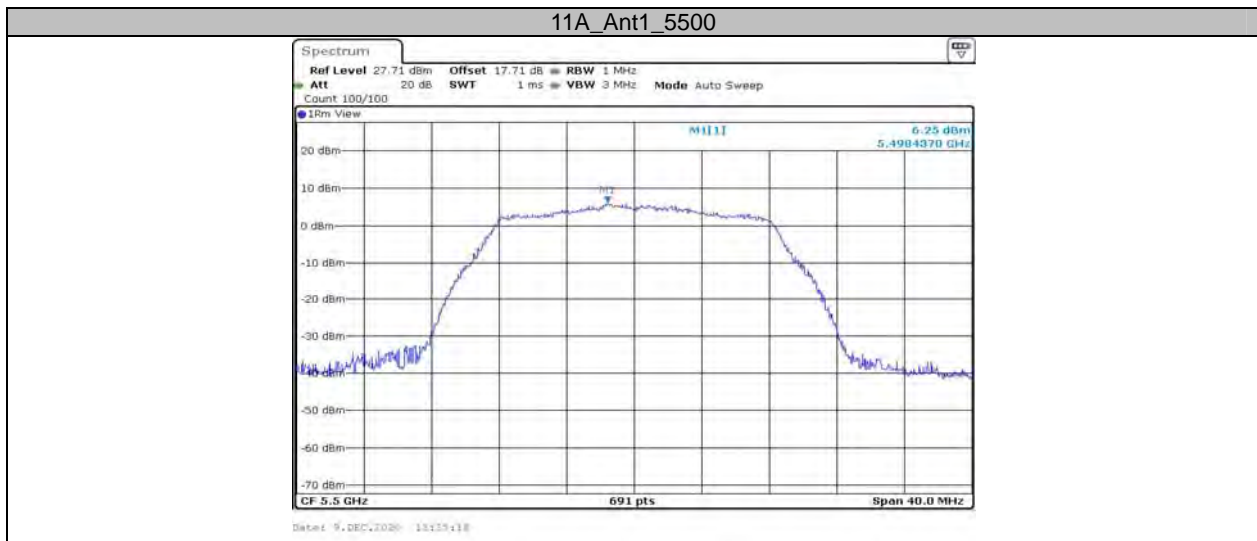
11AC80SISO	Ant1	5210	3.83	<=11	PASS
		5290	4.55	<=11	PASS
		5530	4.62	<=11	PASS
		5610	-0.66	<=11	PASS
		5775	-0.21	<=30	PASS

- Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85GHz.  
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.

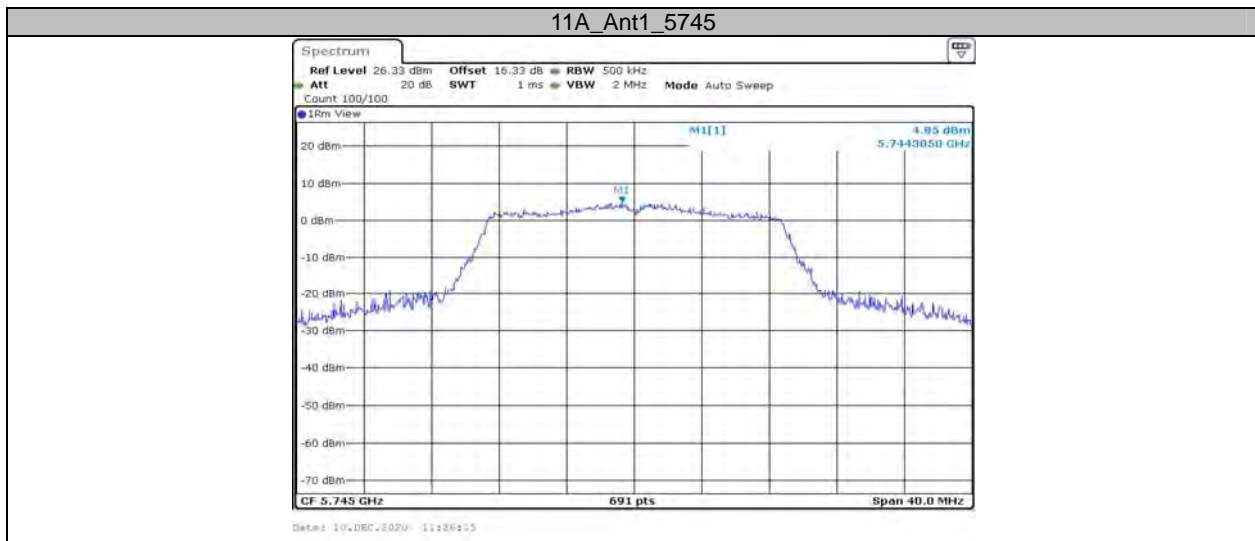
### Test Graphs

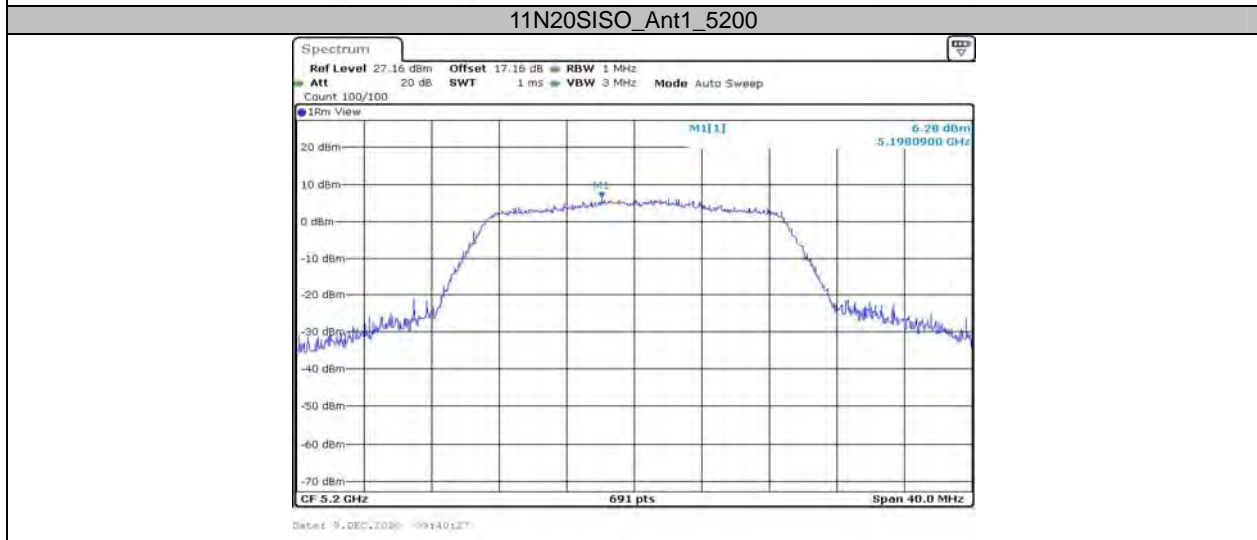




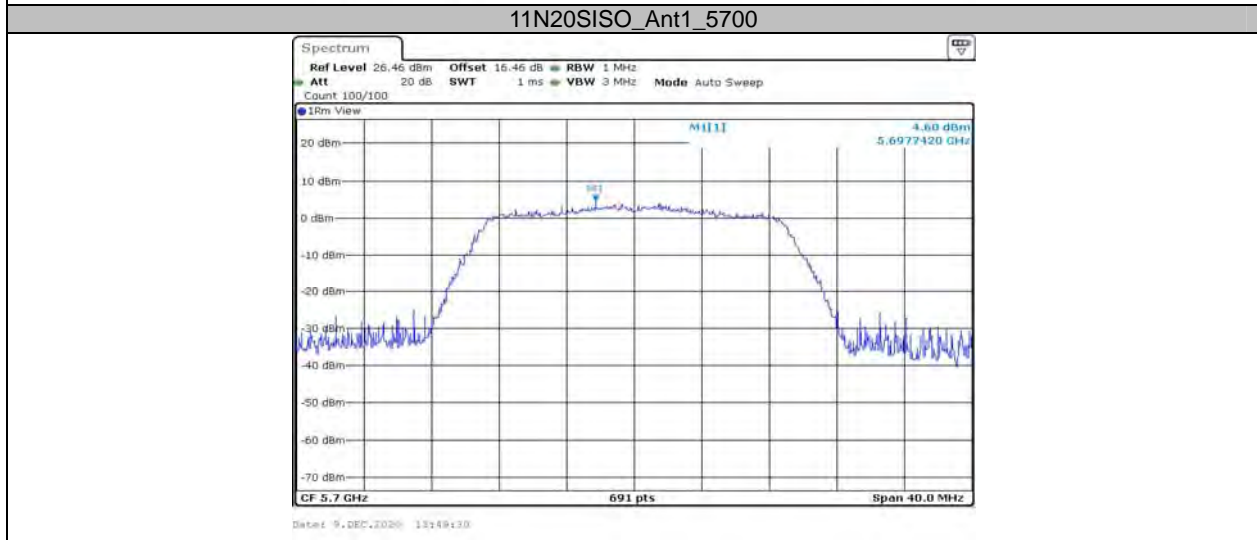
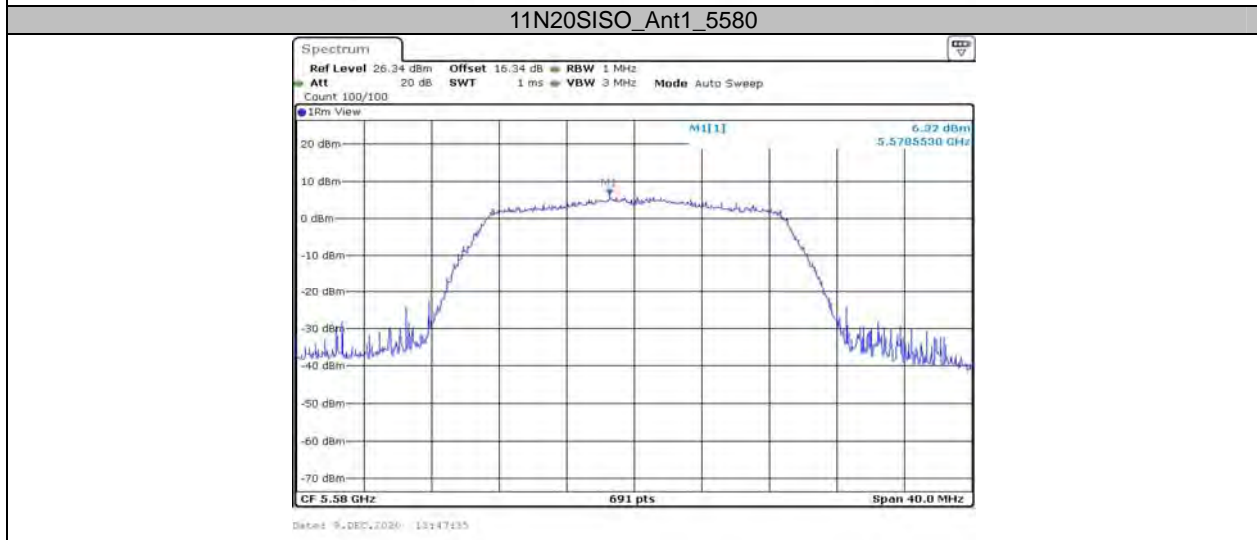






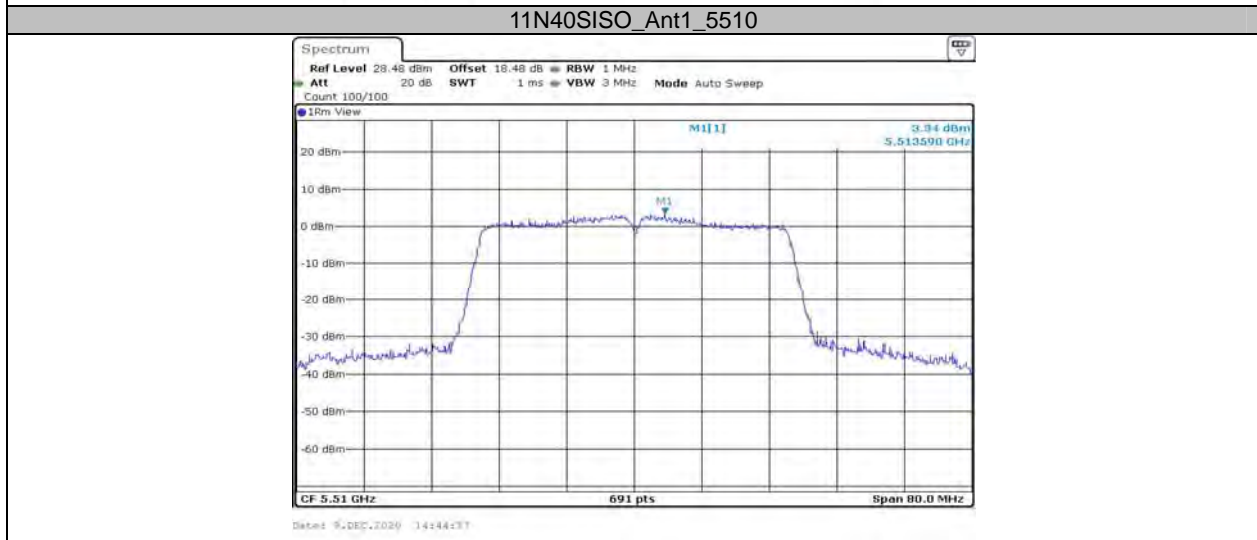


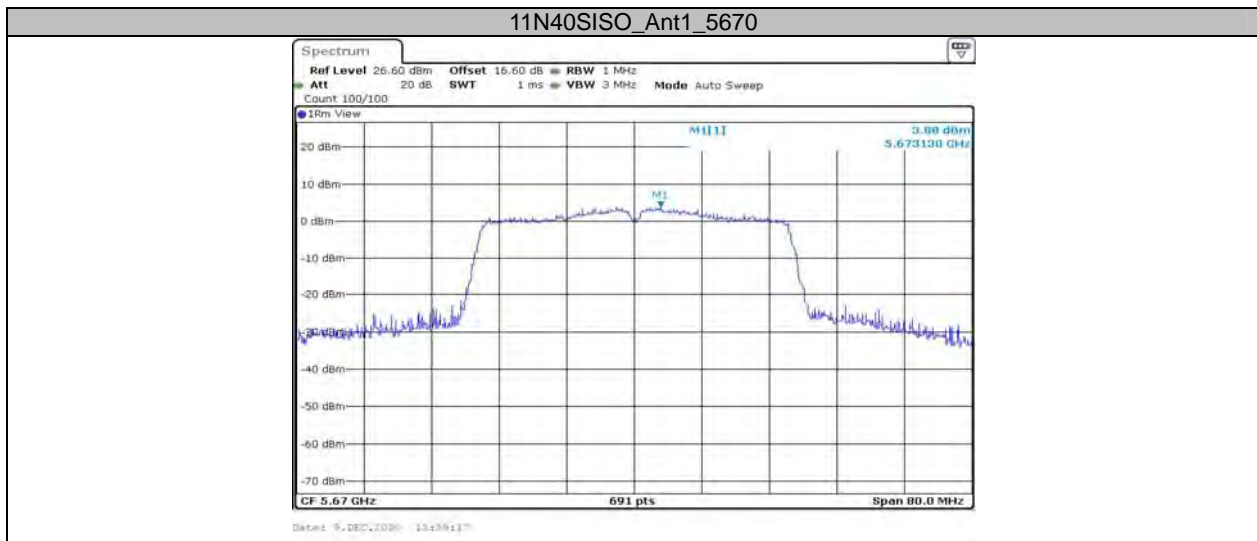




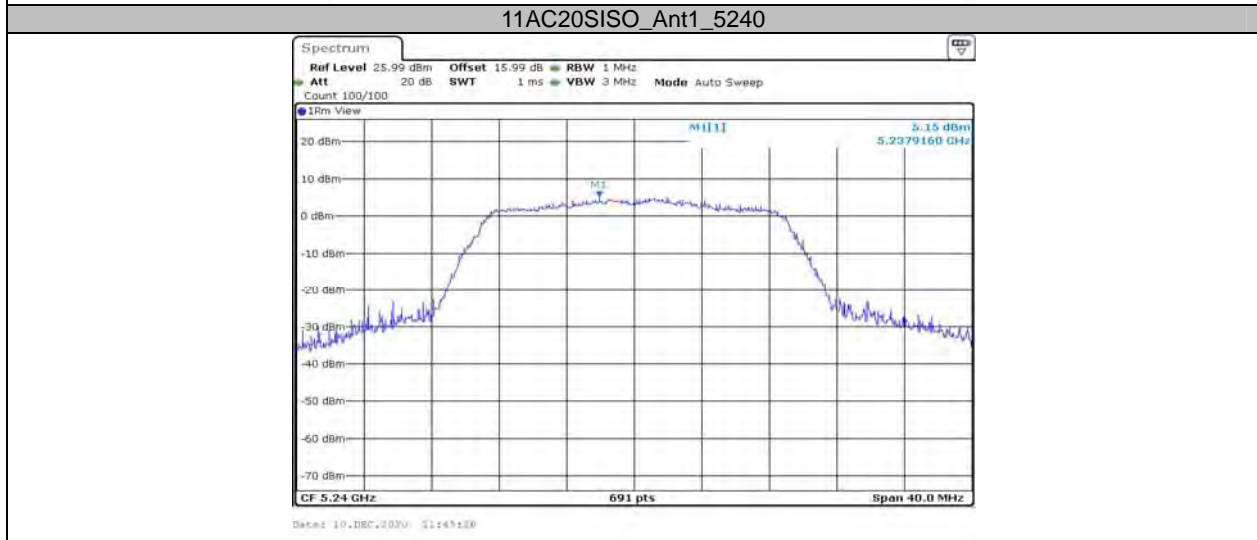
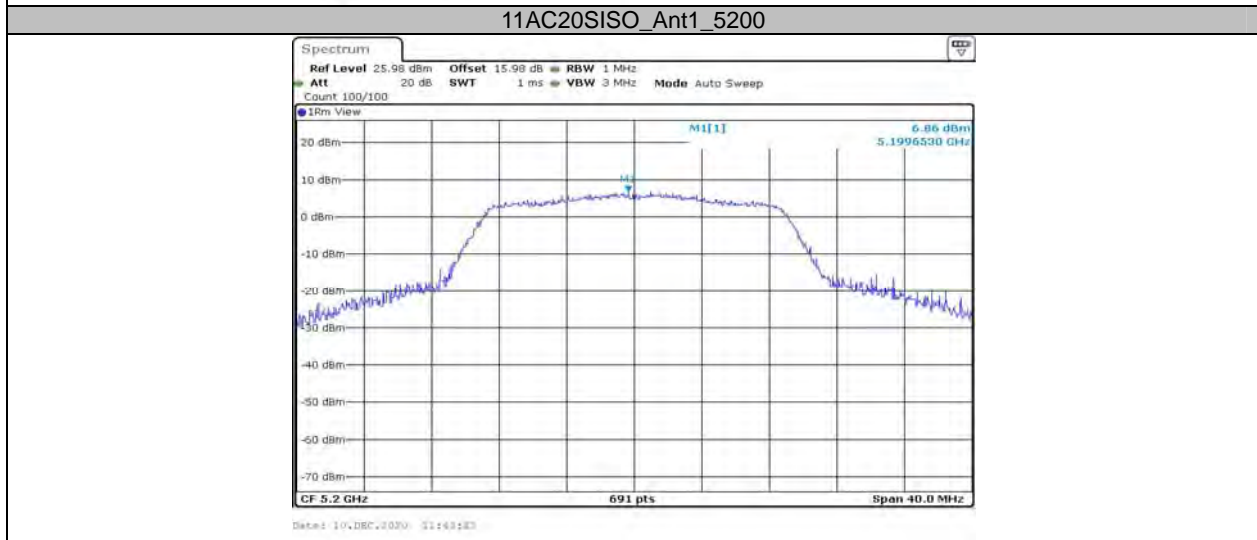


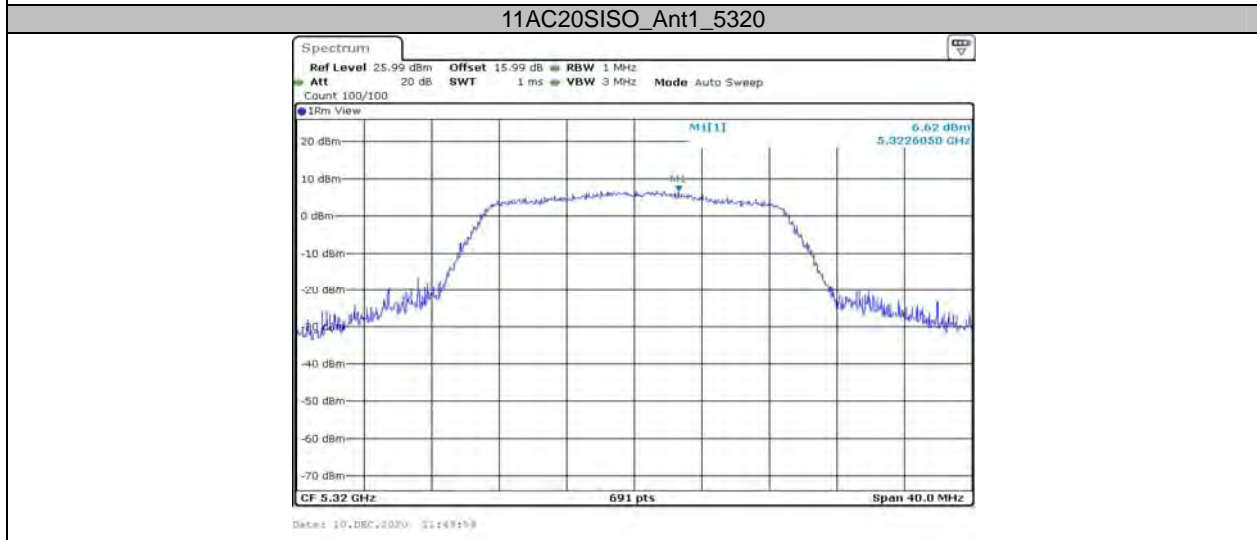
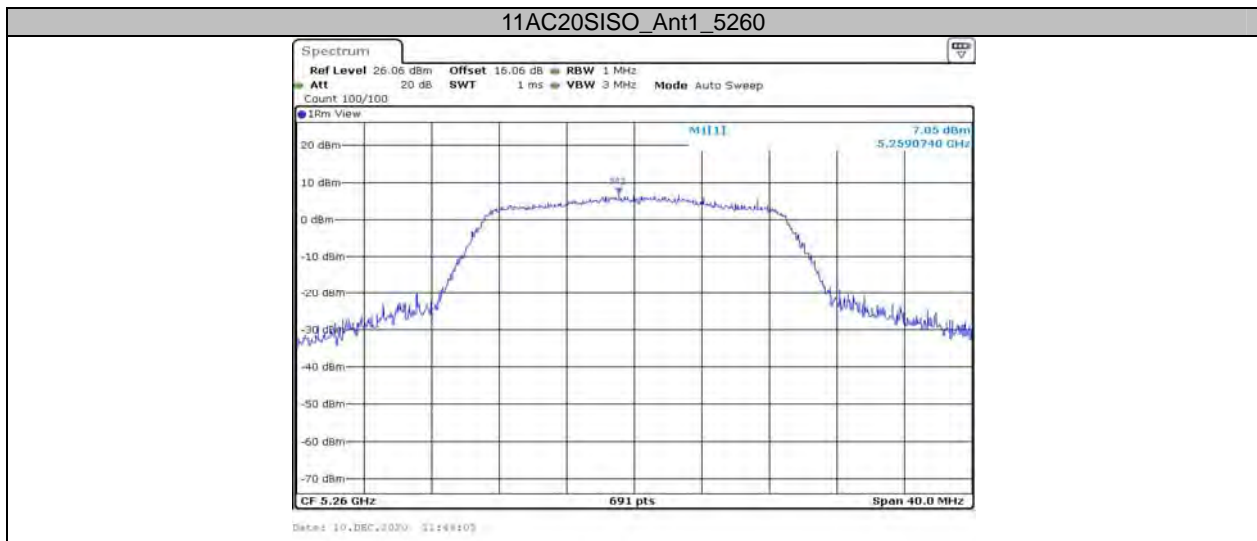


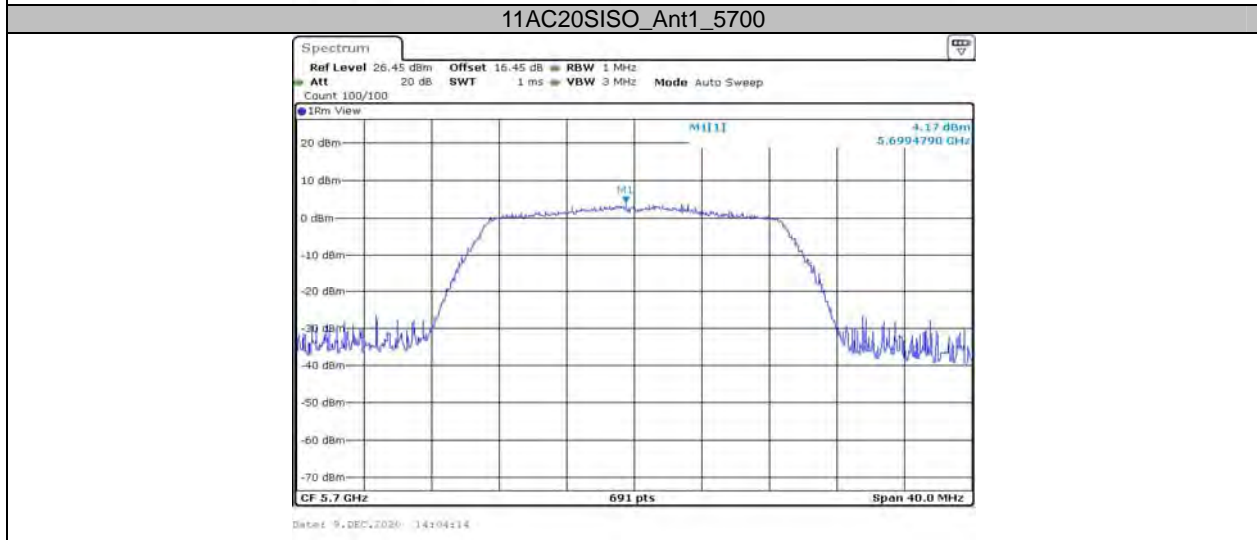
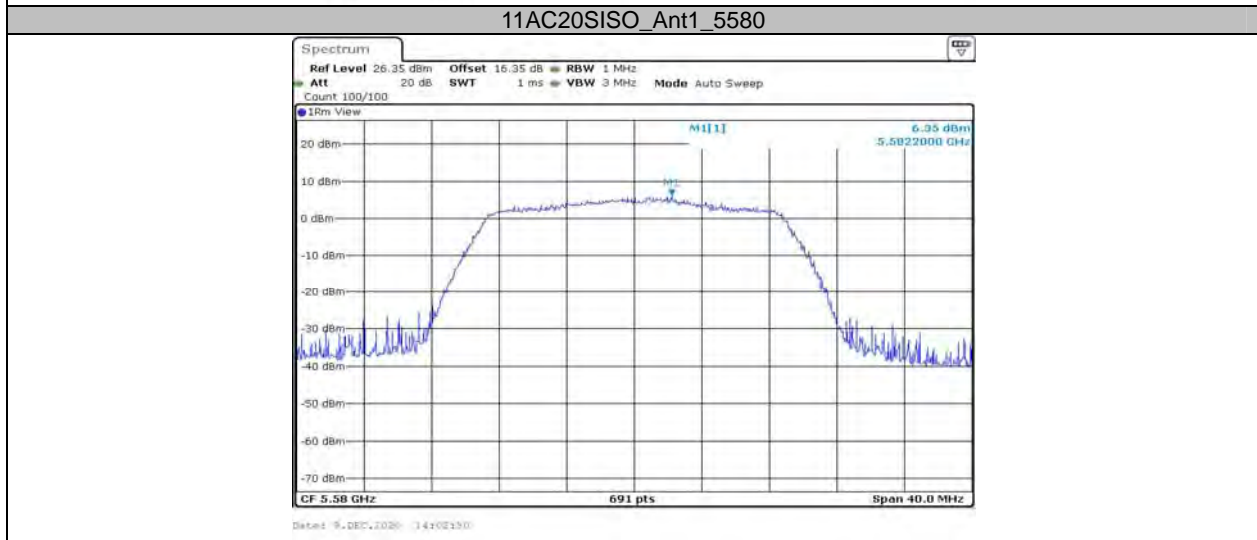
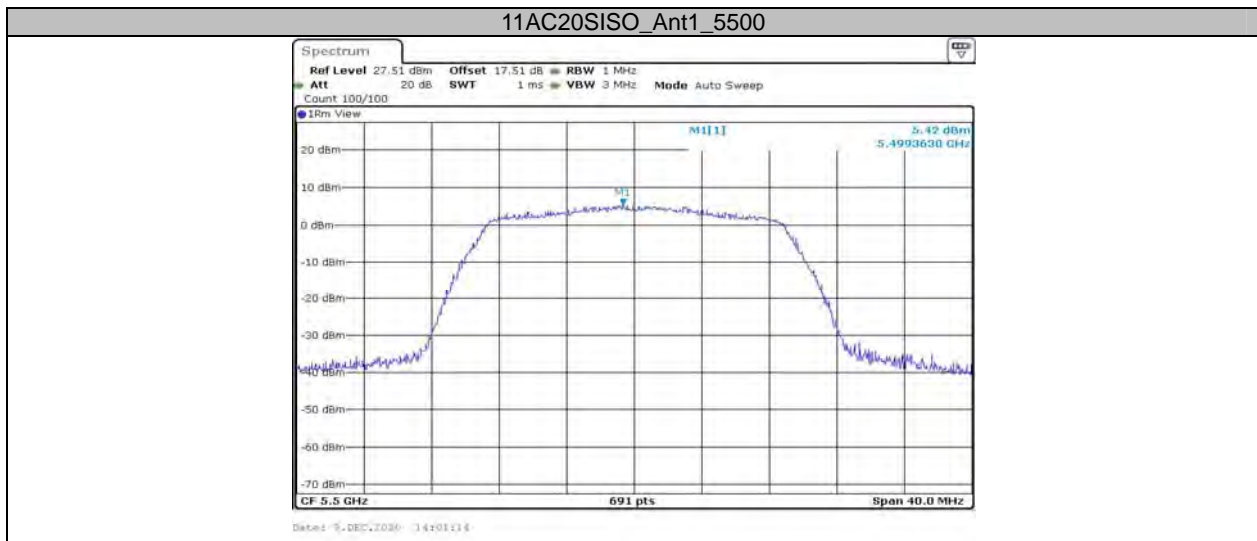


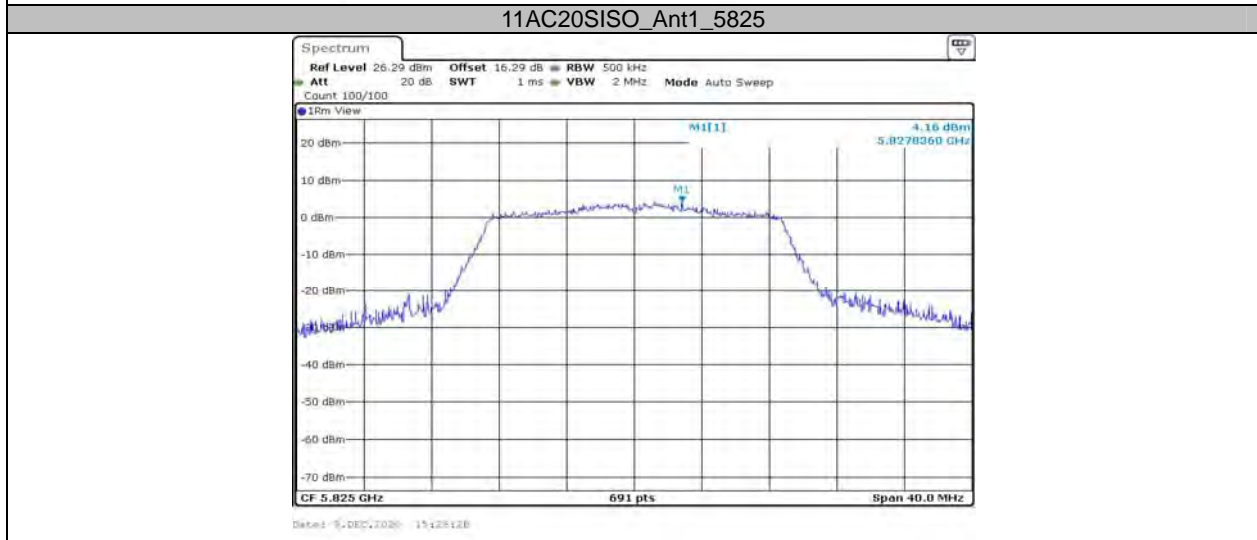
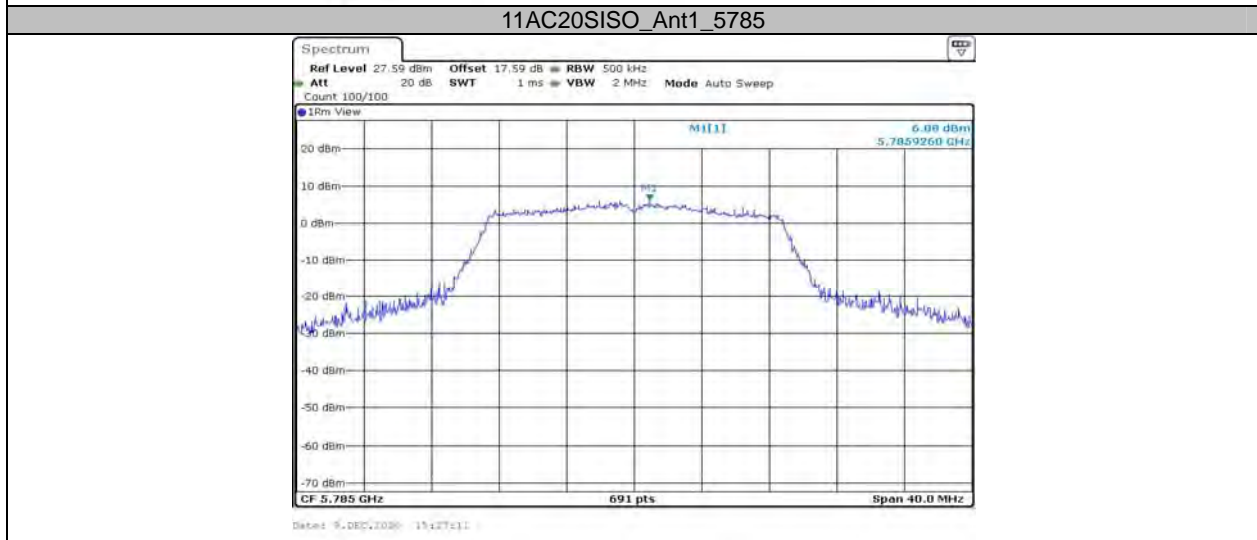
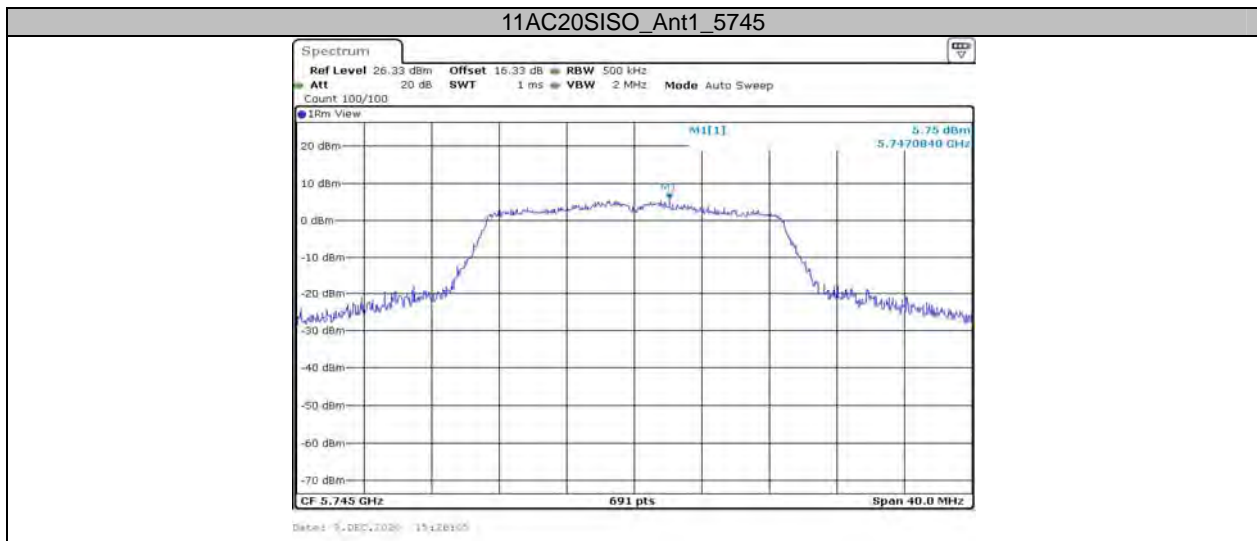


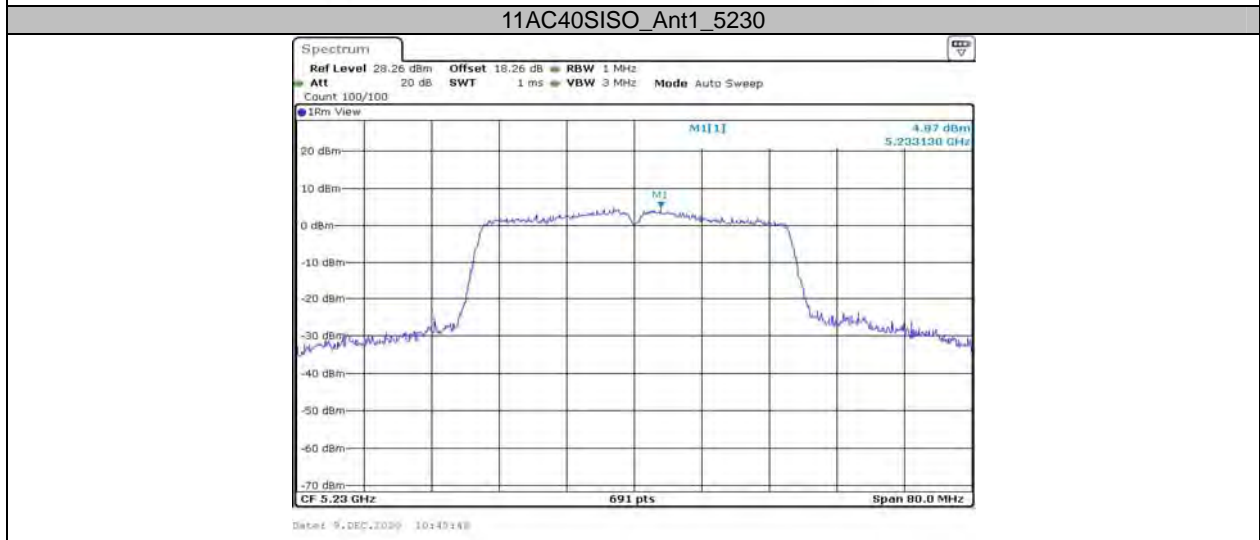
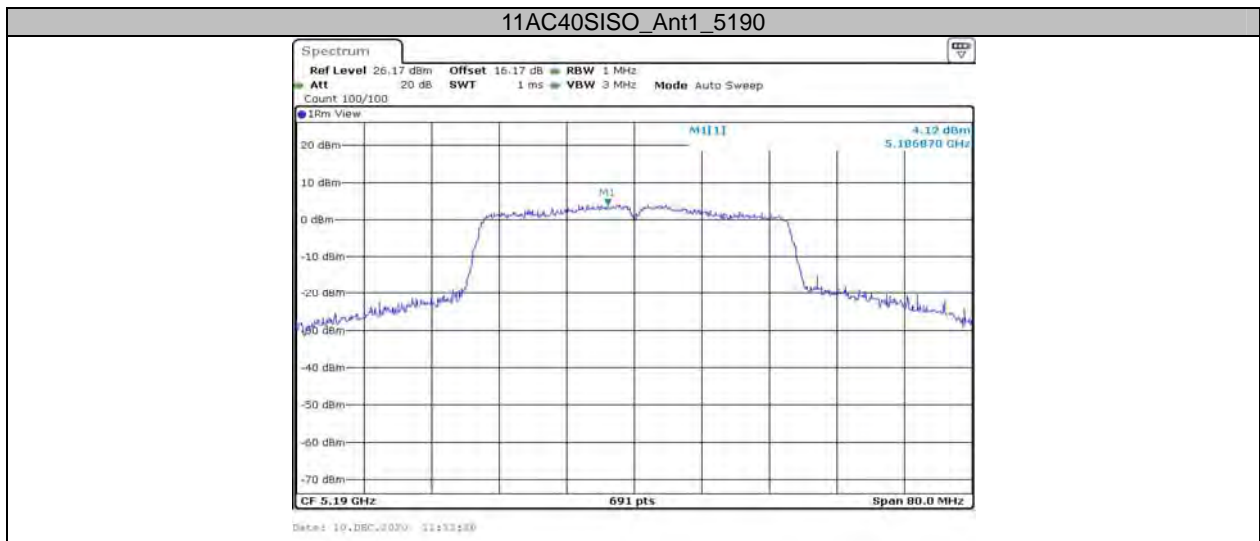


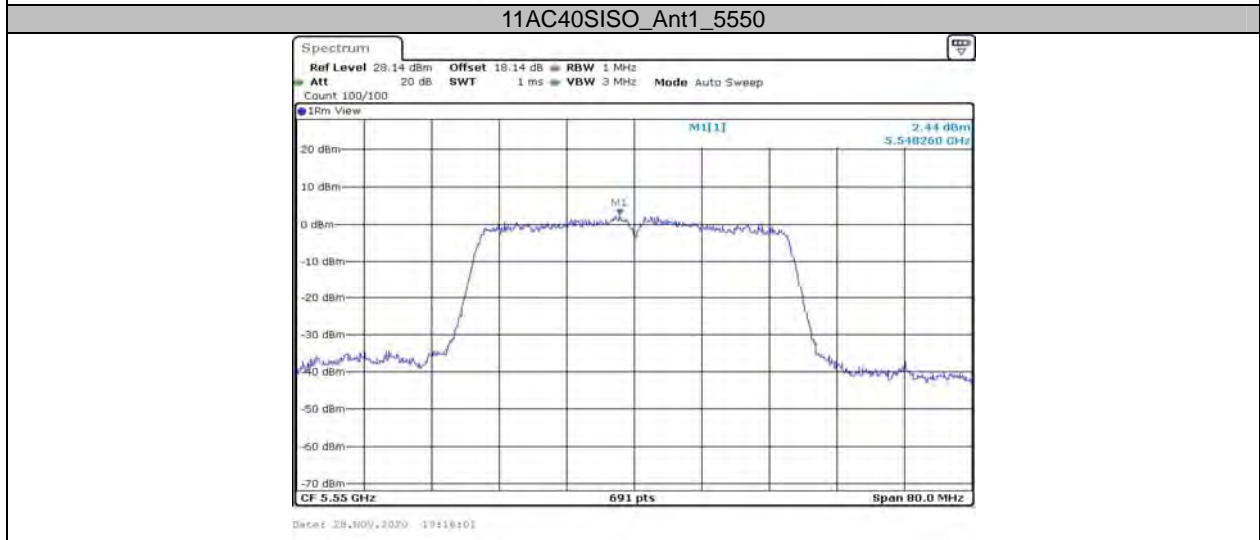
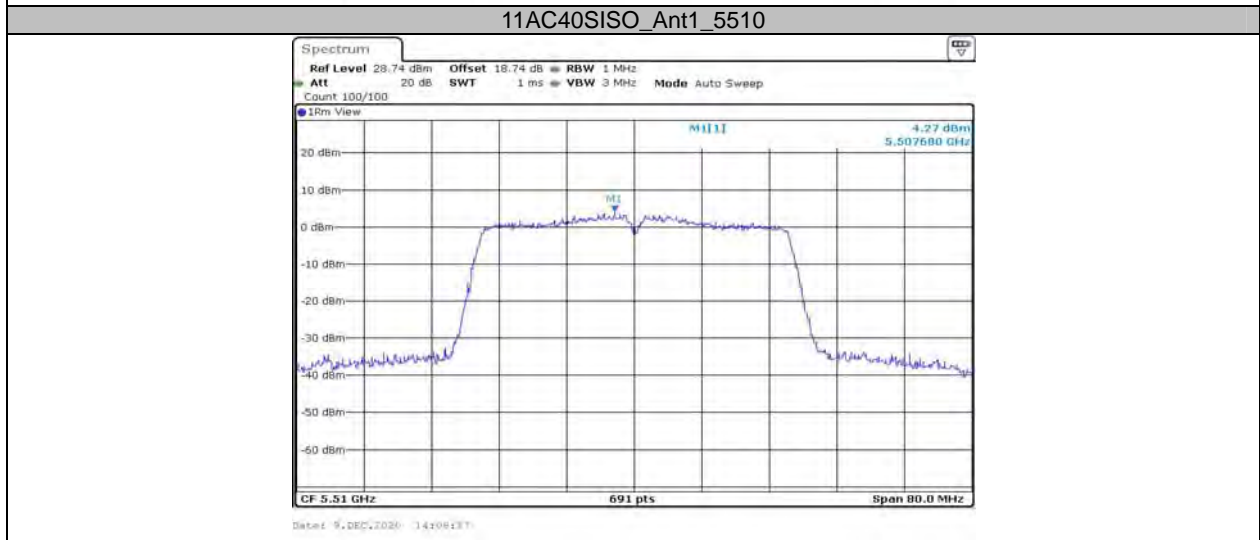
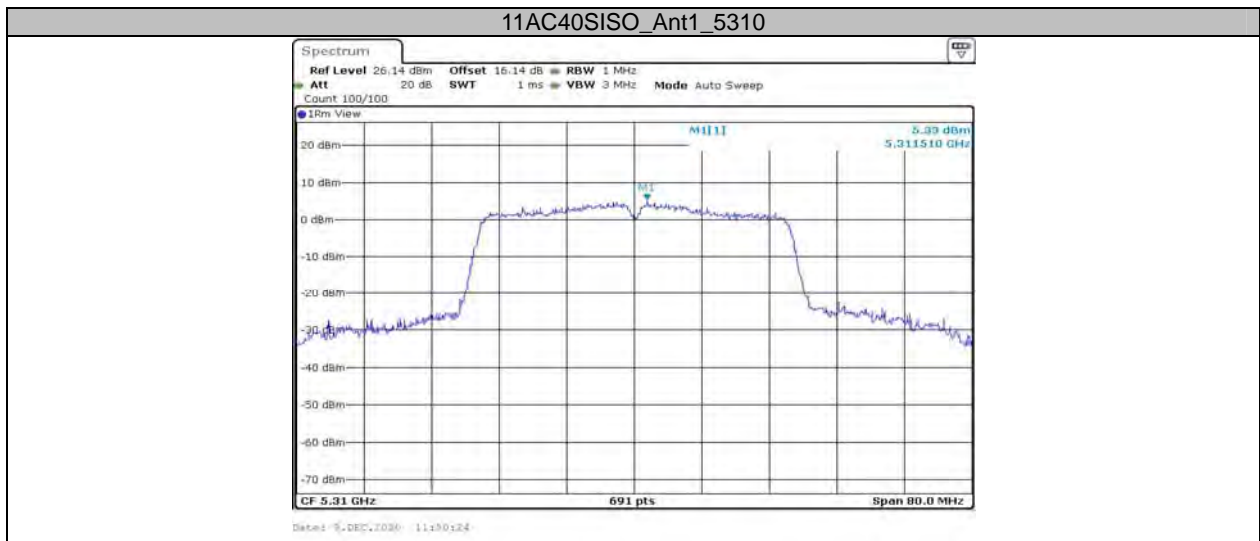


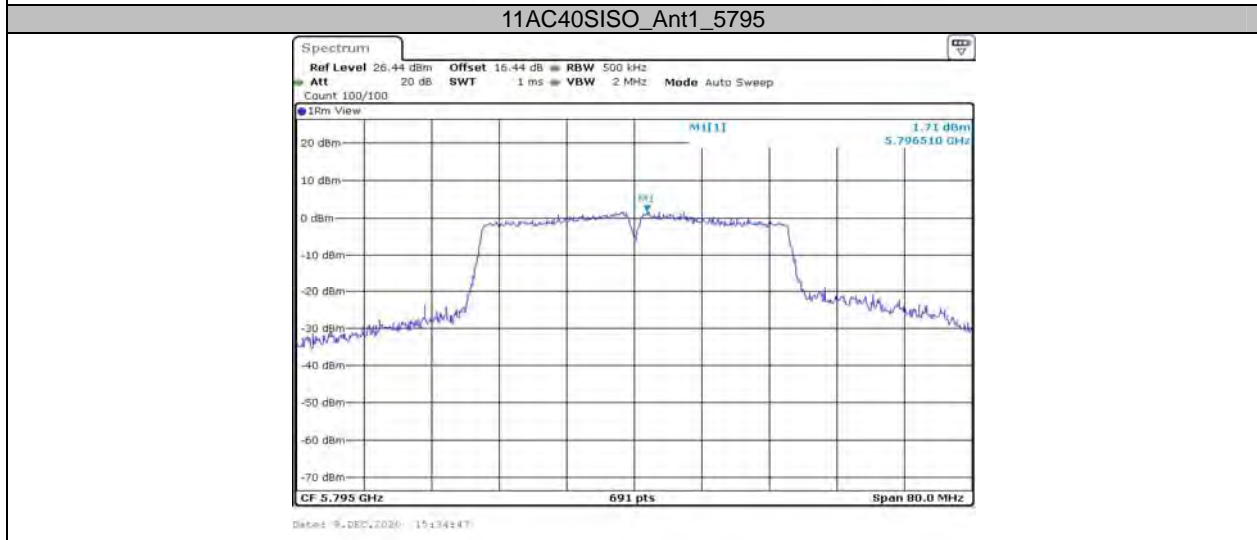
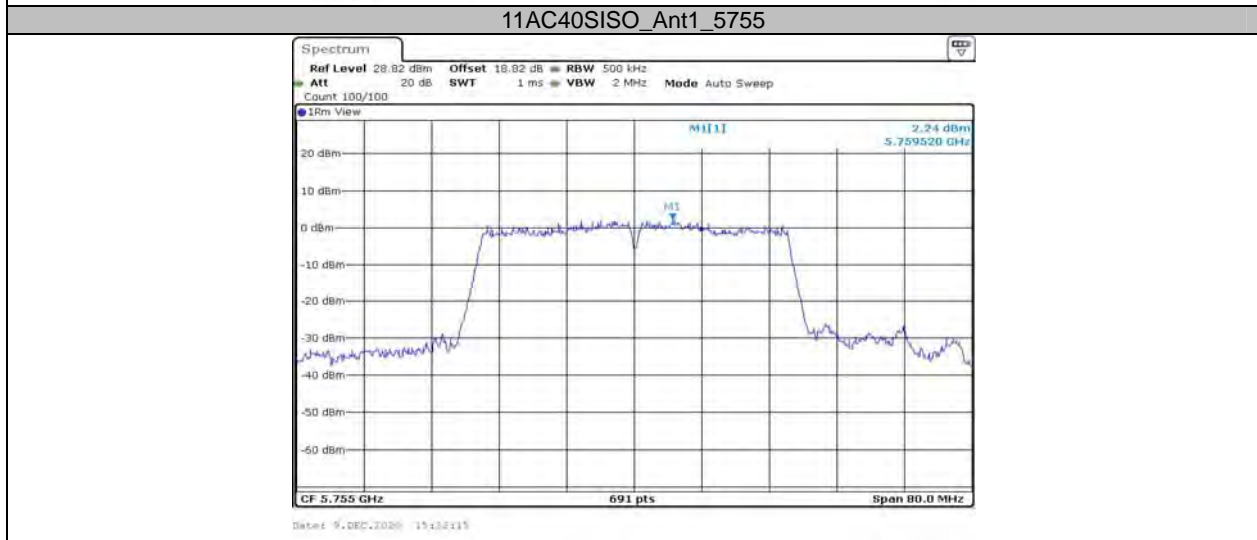
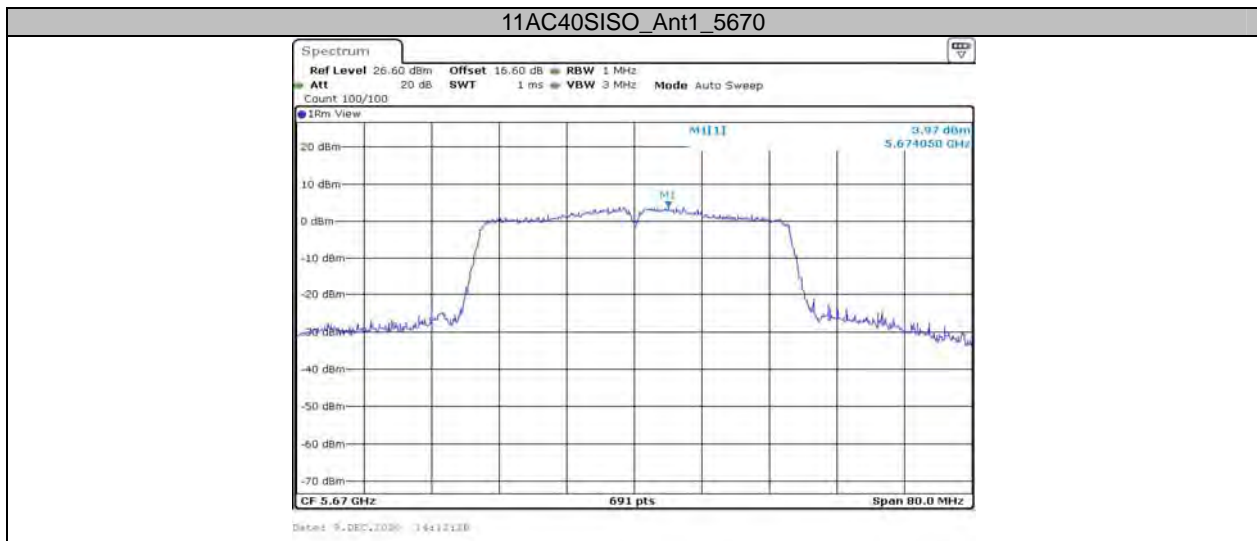


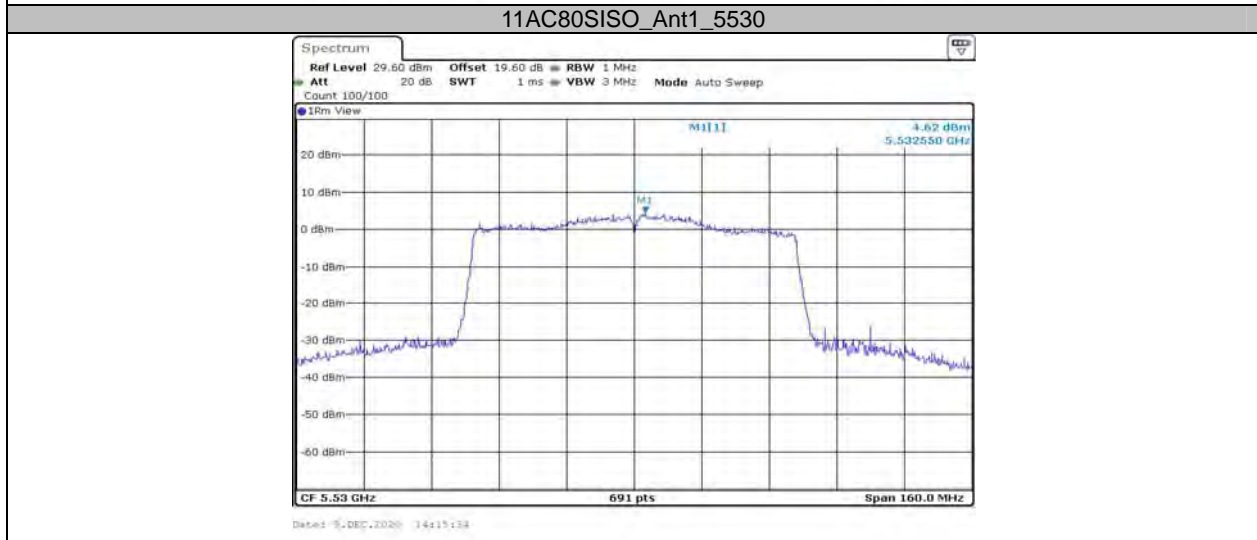
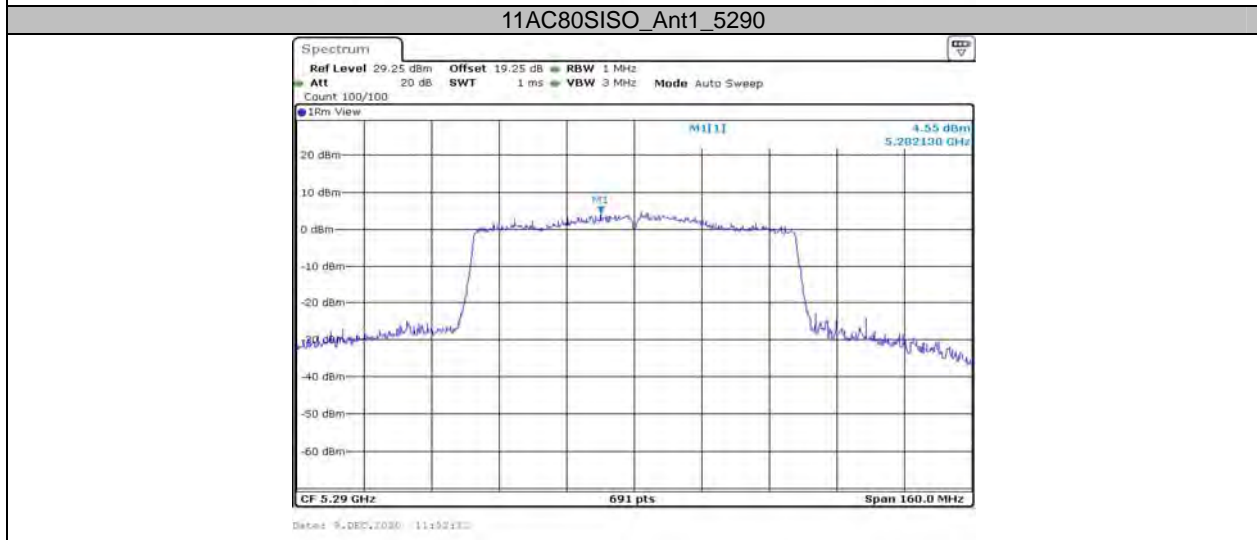
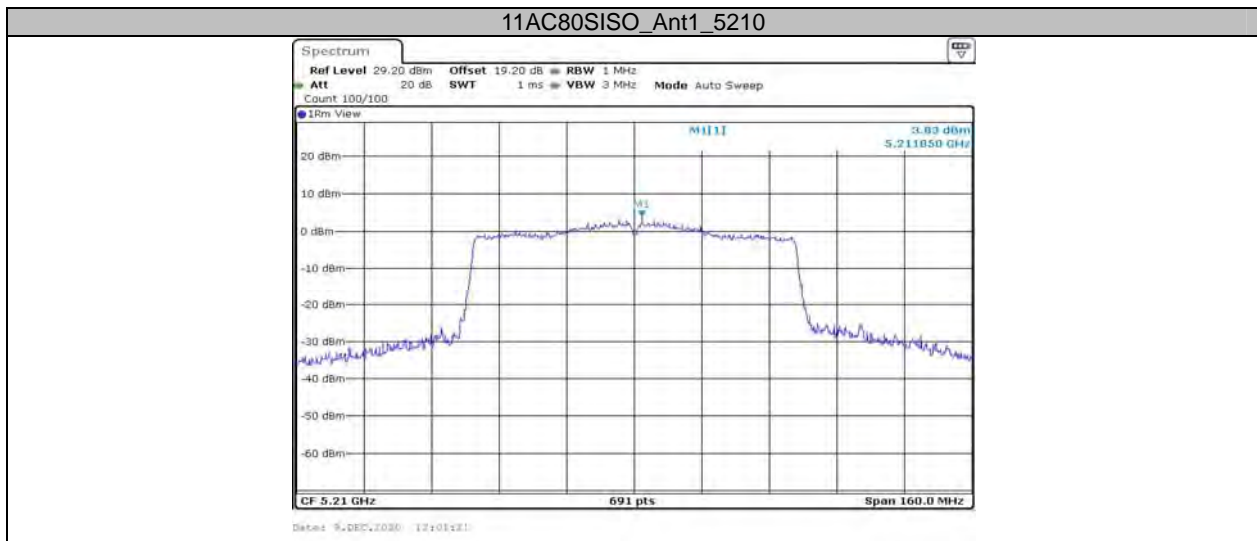




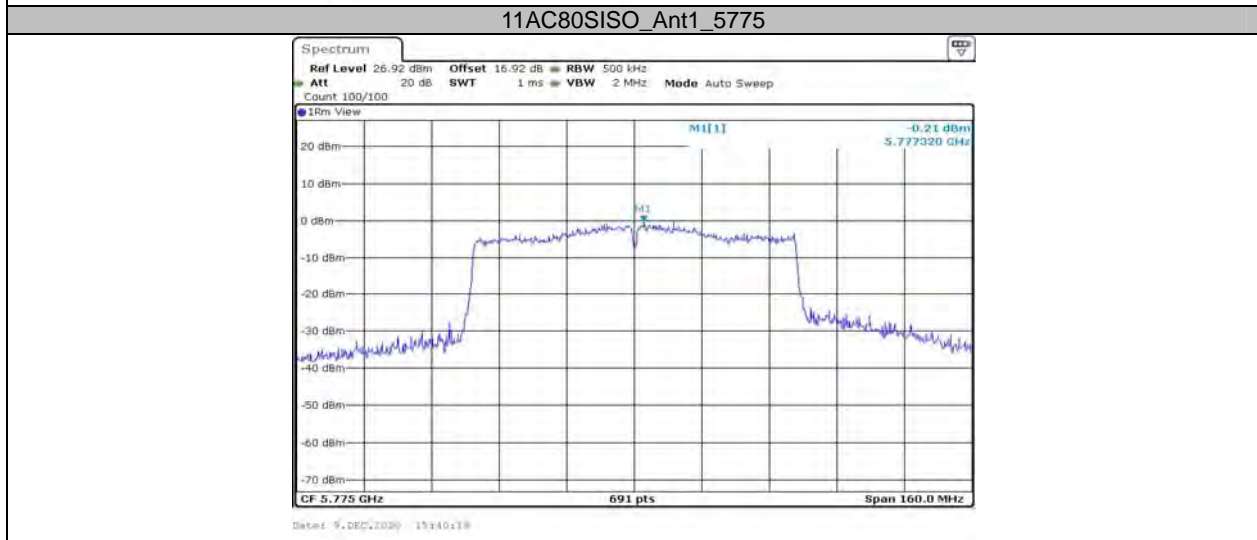
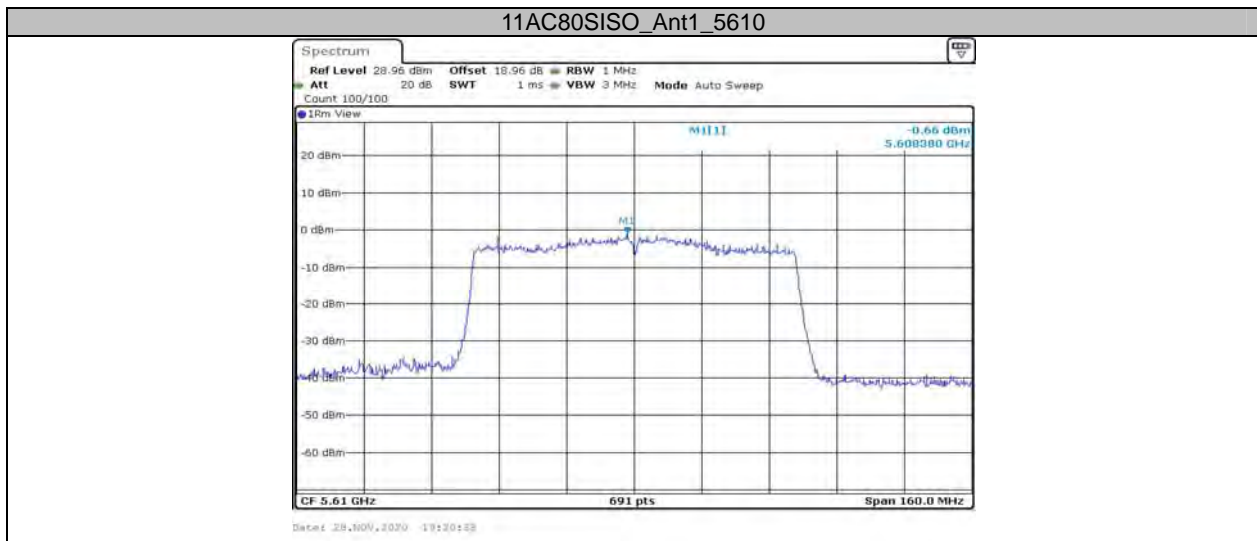










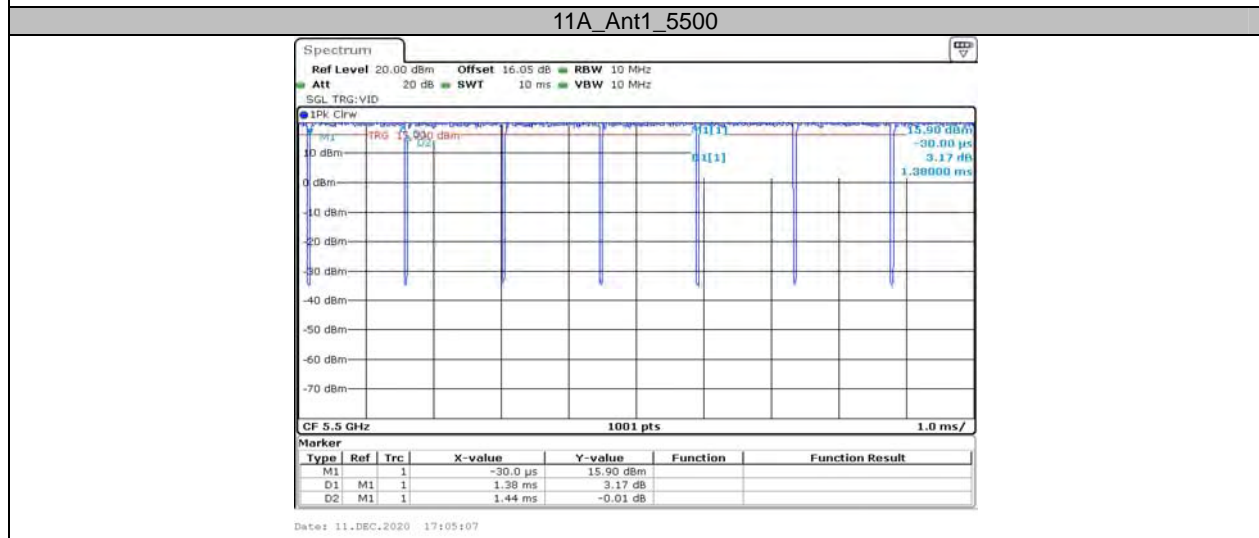
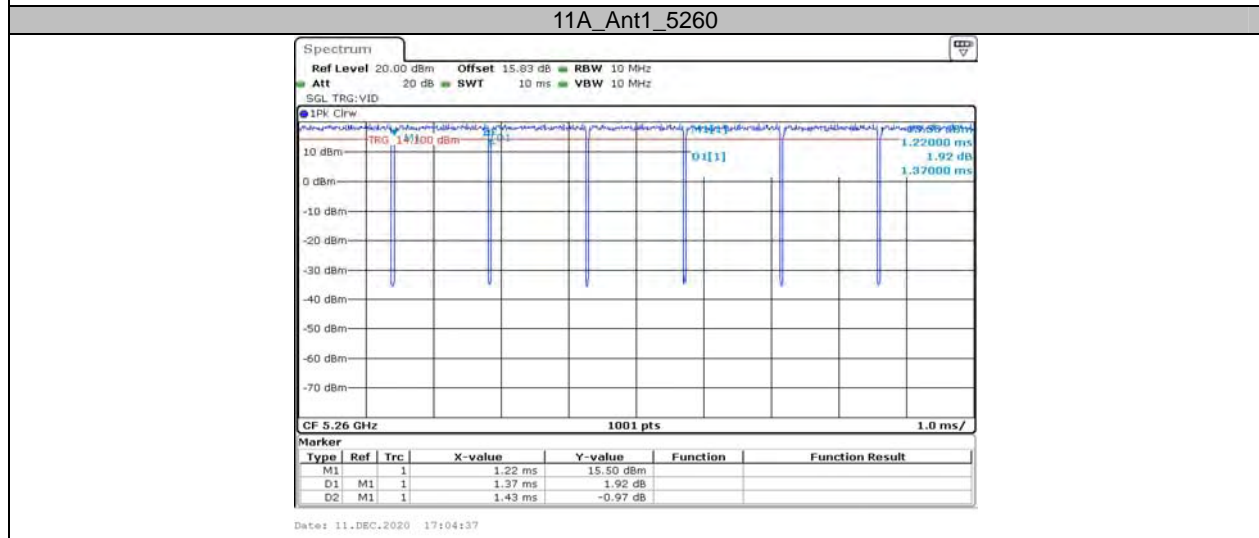
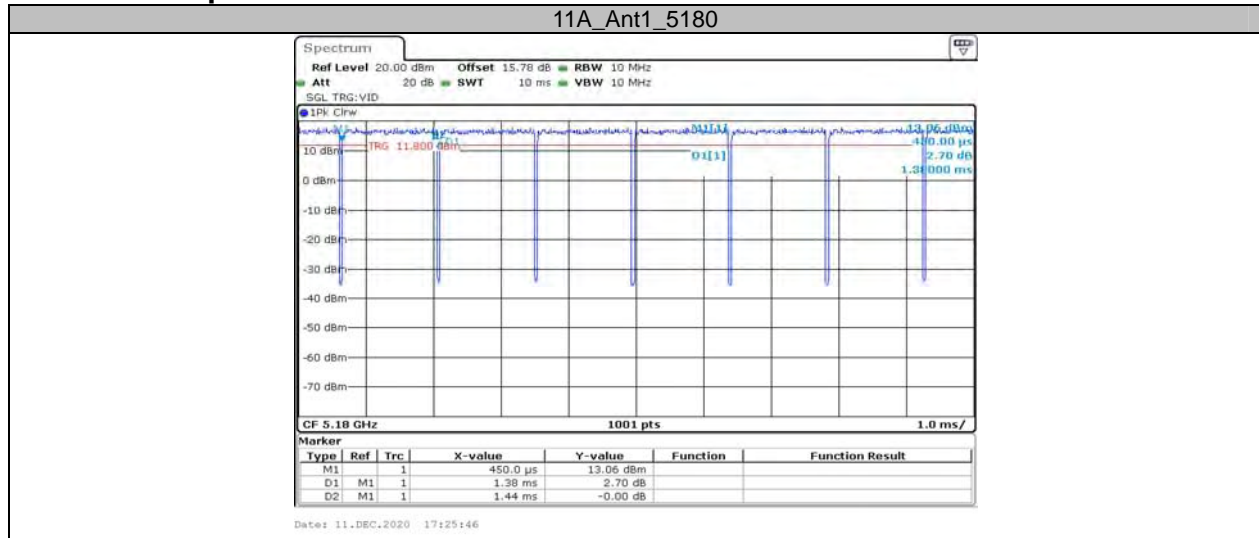


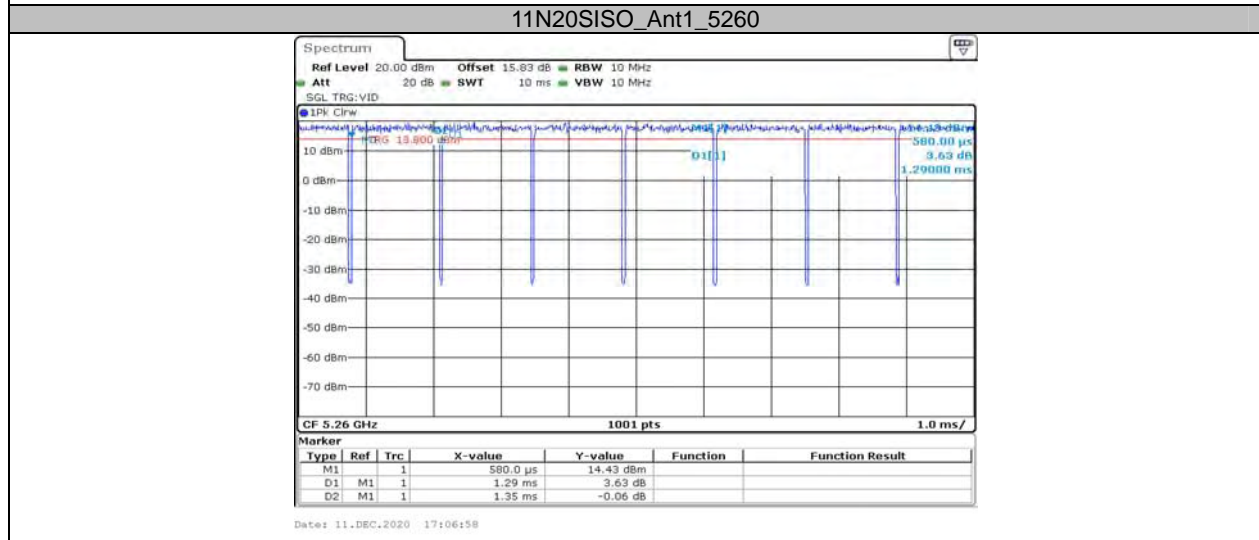
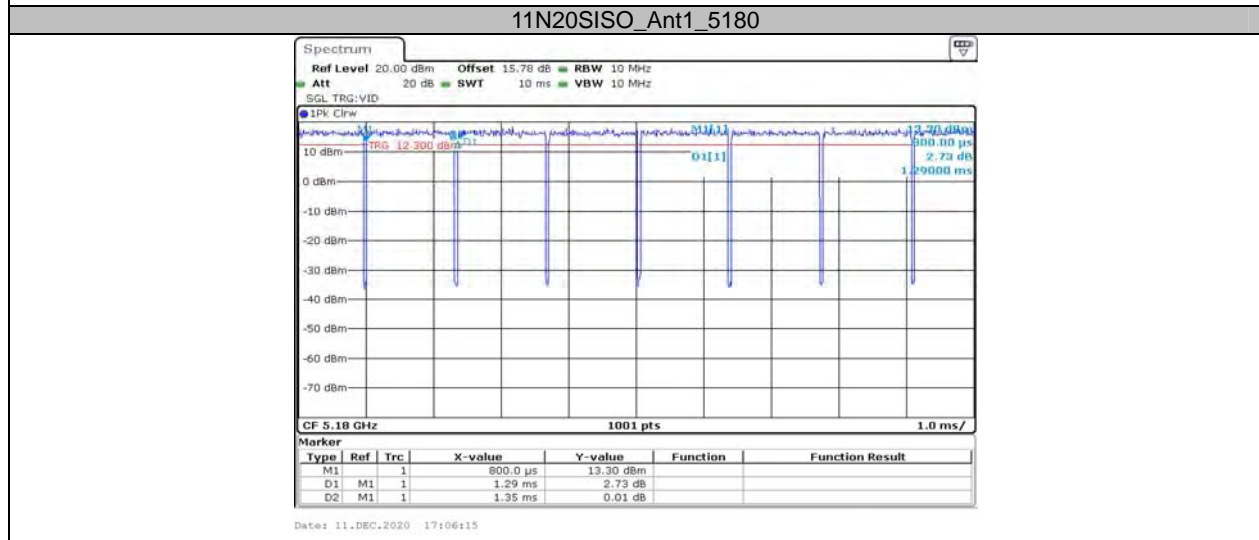
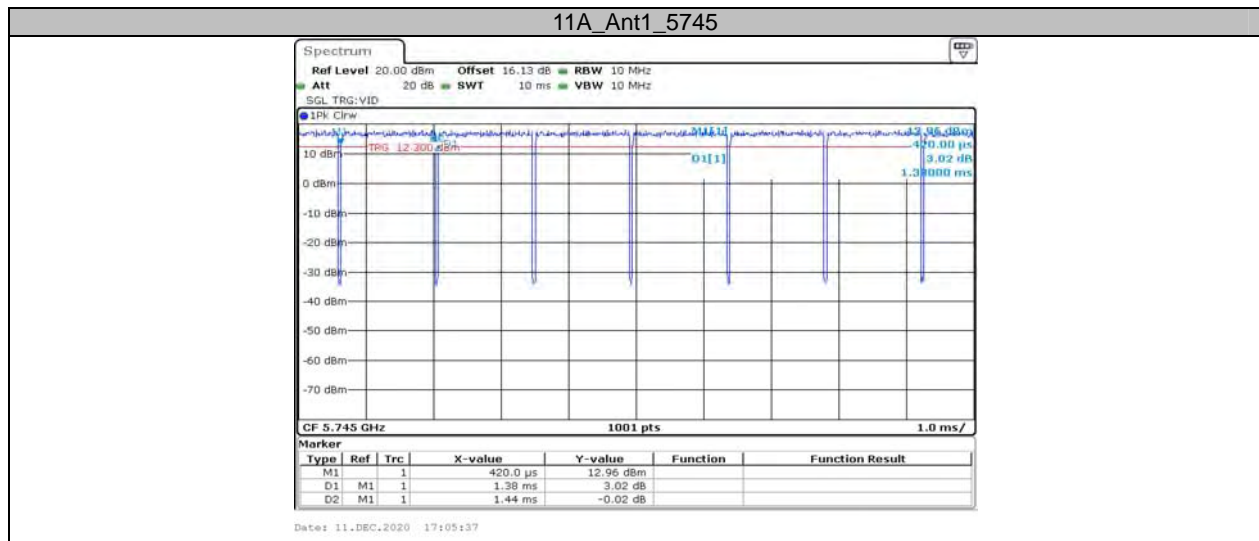
**Appendix D: DutyCycle**

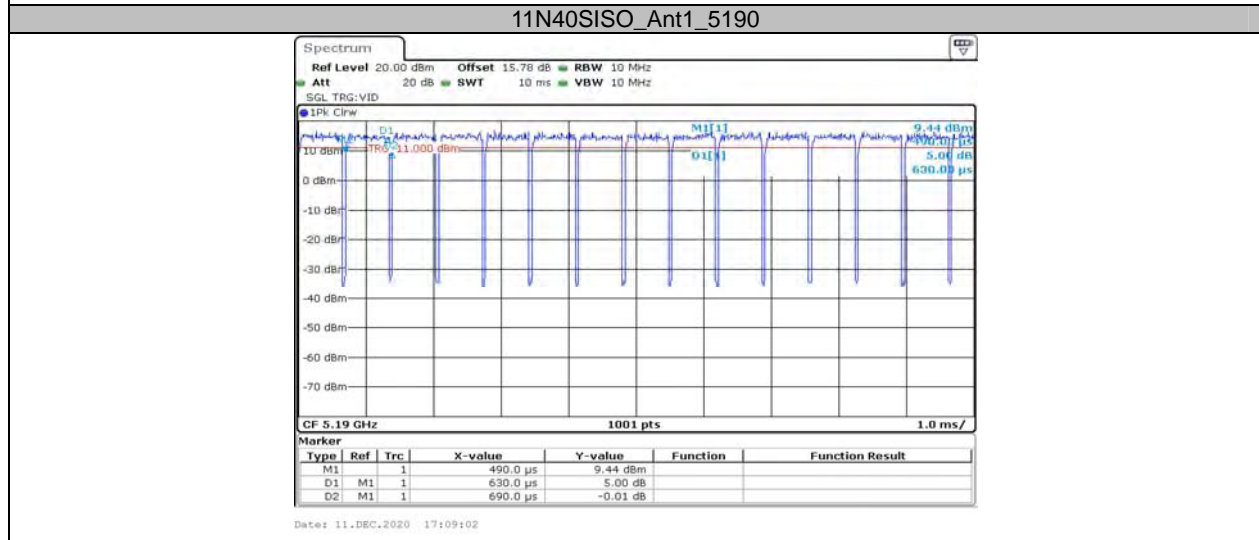
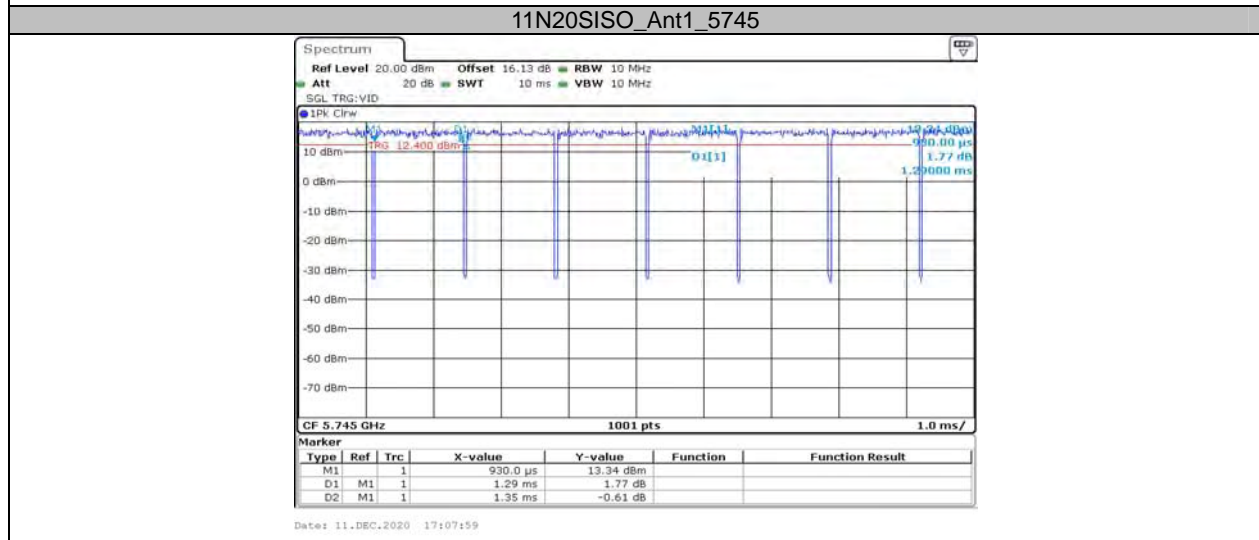
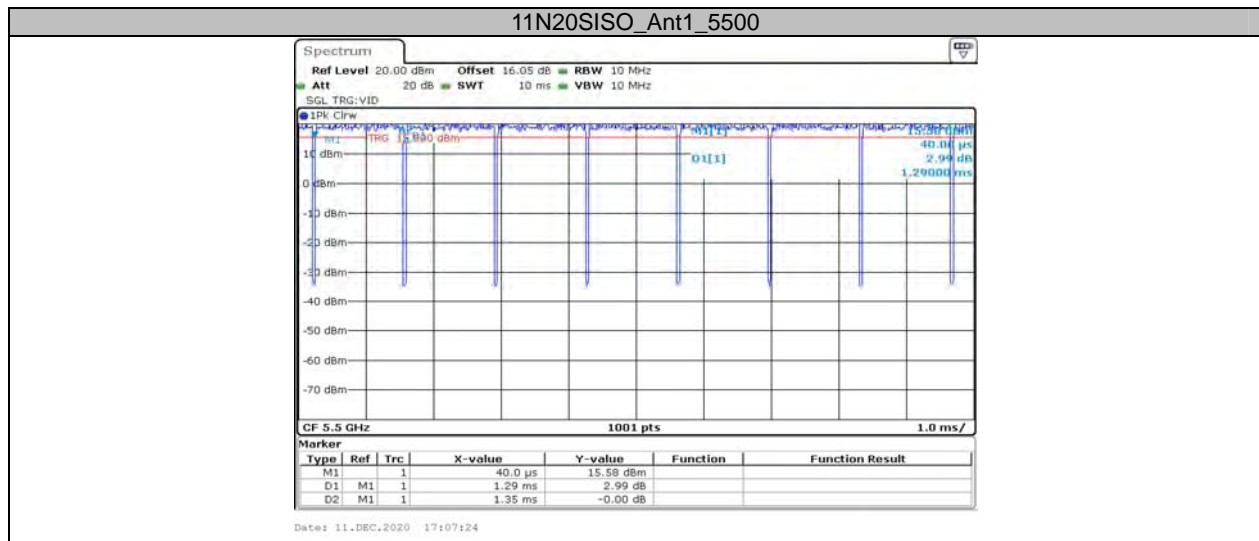
**Test Result**

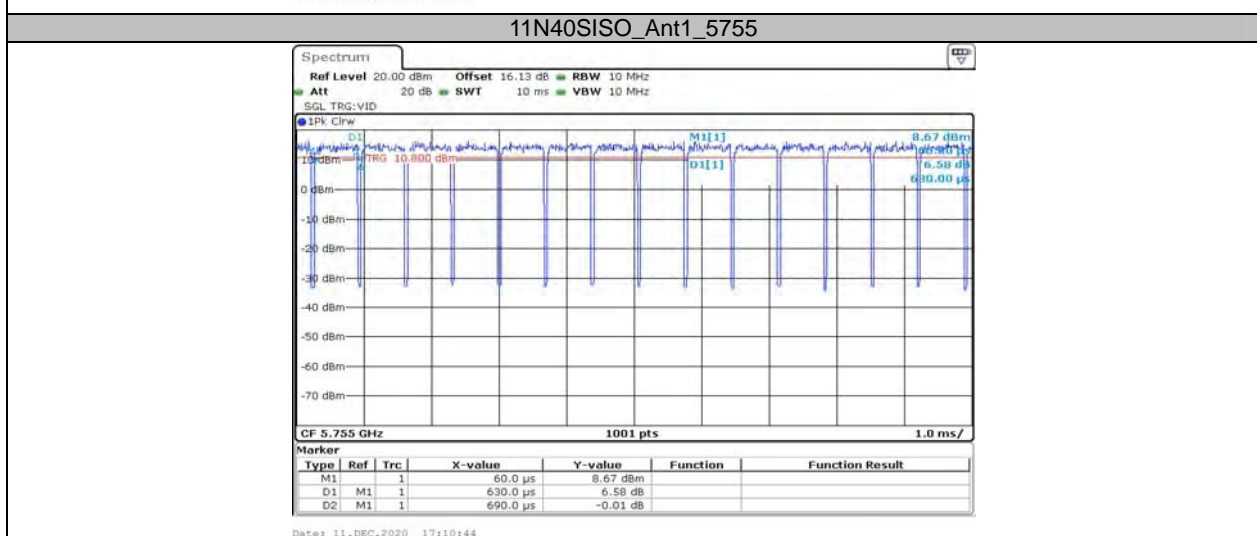
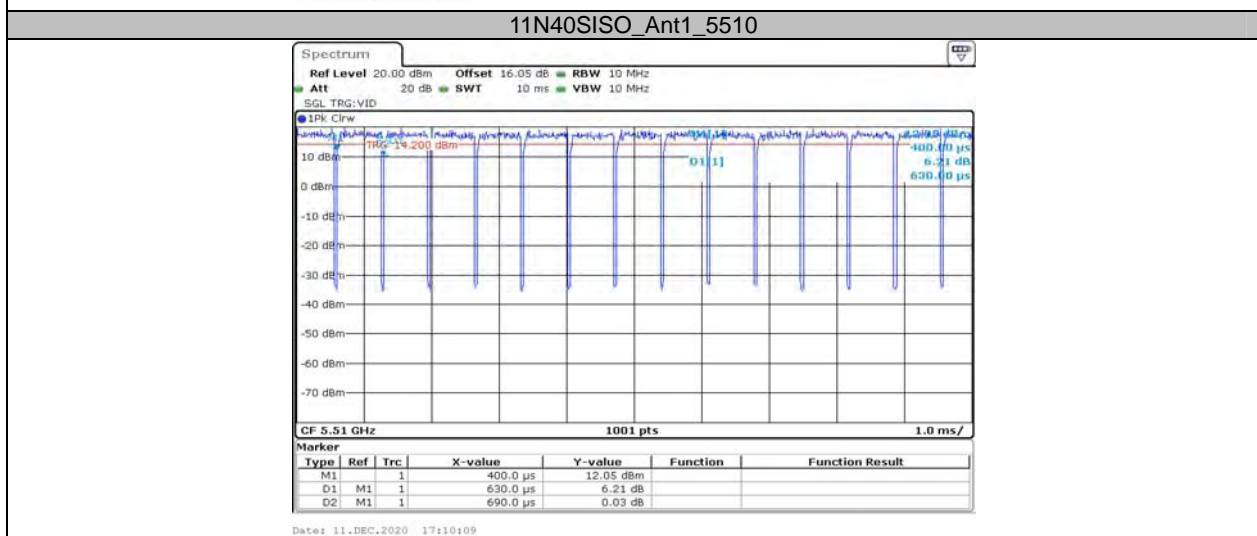
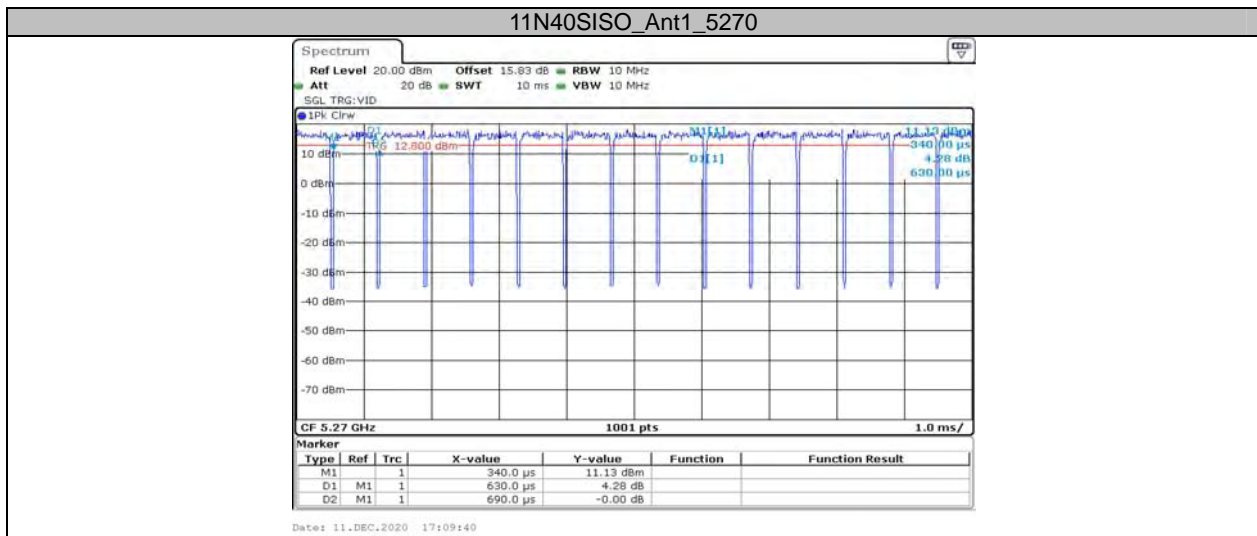
TestMode	Antenna	Channel	TransmissionDuration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant1	5180	1.38	1.44	95.83
		5260	1.37	1.43	95.80
		5500	1.38	1.44	95.83
		5745	1.38	1.44	95.83
11N20SISO	Ant1	5180	1.29	1.35	95.56
		5260	1.29	1.35	95.56
		5500	1.29	1.35	95.56
		5745	1.29	1.35	95.56
11N40SISO	Ant1	5190	0.63	0.69	91.30
		5270	0.63	0.69	91.30
		5510	0.63	0.69	91.30
		5755	0.63	0.69	91.30
11AC20SISO	Ant1	5180	1.30	1.36	95.59
		5260	1.30	1.36	95.59
		5500	1.30	1.36	95.59
		5745	1.30	1.36	95.59
11AC40SISO	Ant1	5190	0.64	0.70	91.43
		5270	0.63	0.69	91.30
		5510	0.64	0.70	91.43
		5755	0.64	0.70	91.43
11AC80SISO	Ant1	5210	0.31	0.37	83.78
		5290	0.31	0.37	83.78
		5530	0.30	0.36	83.33
		5775	0.30	0.36	83.33

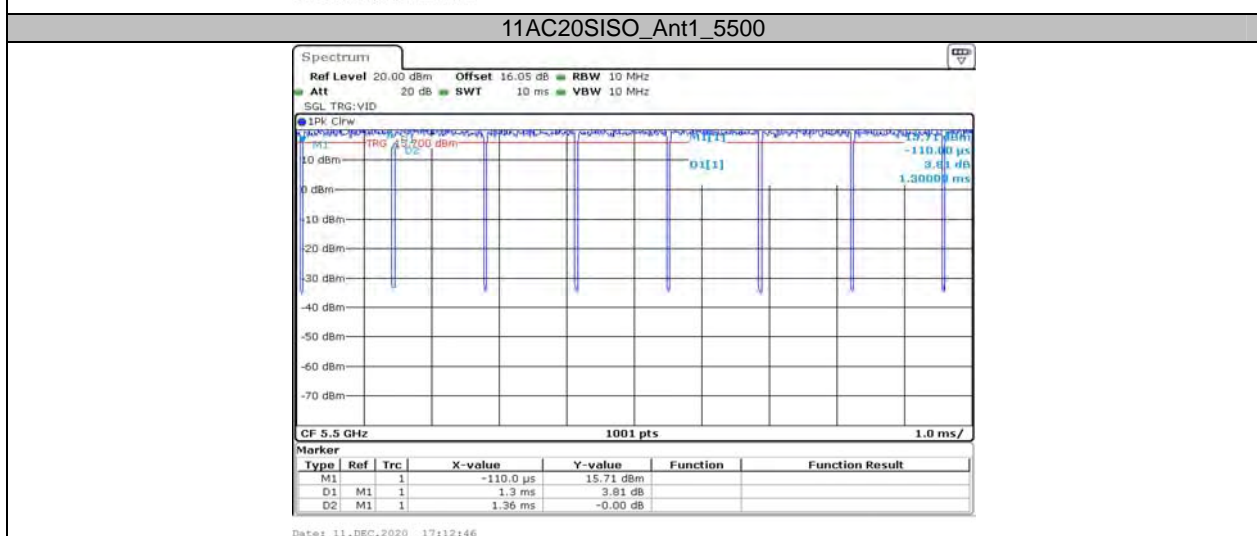
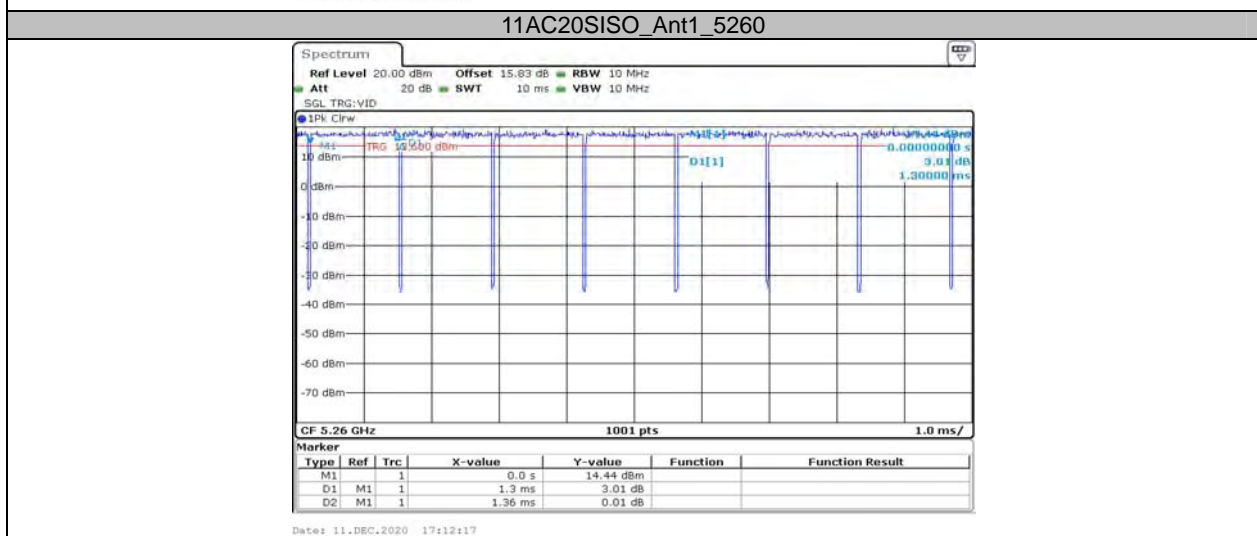
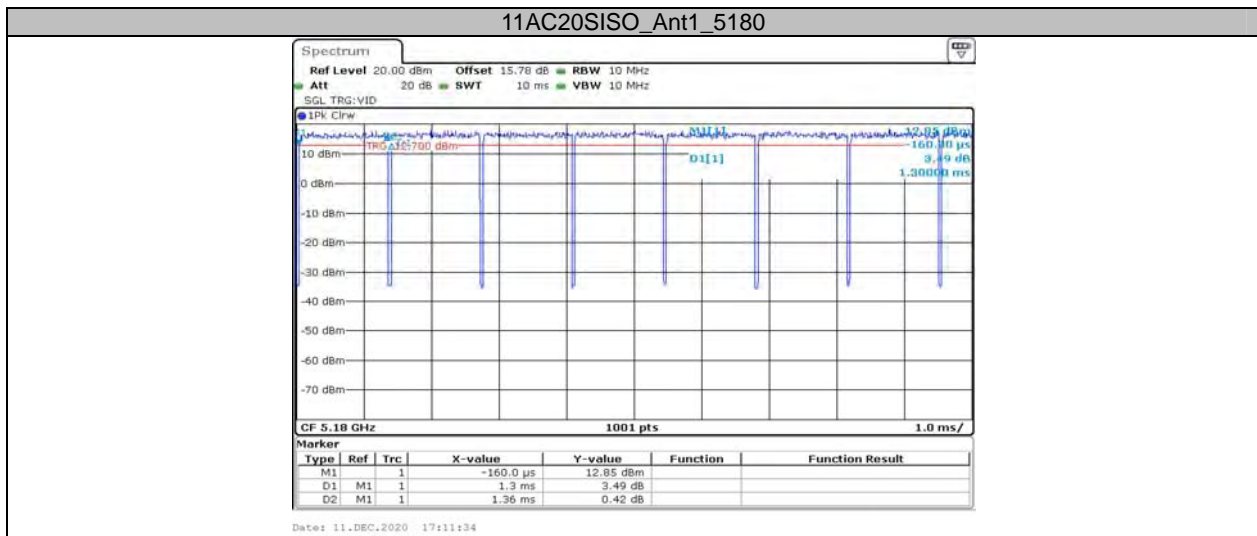
Test Graphs

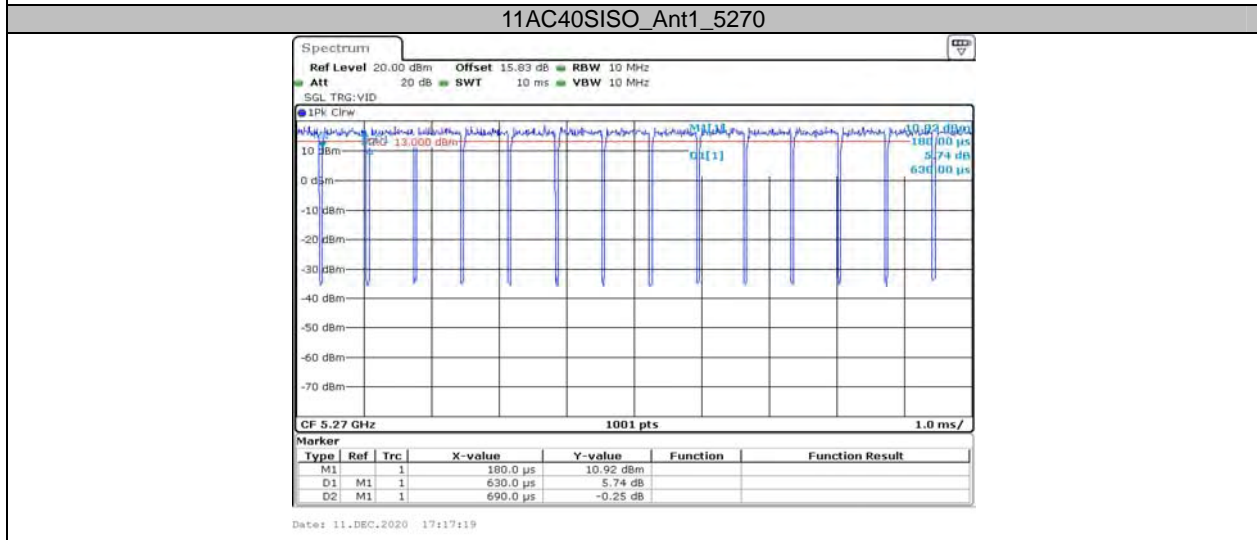
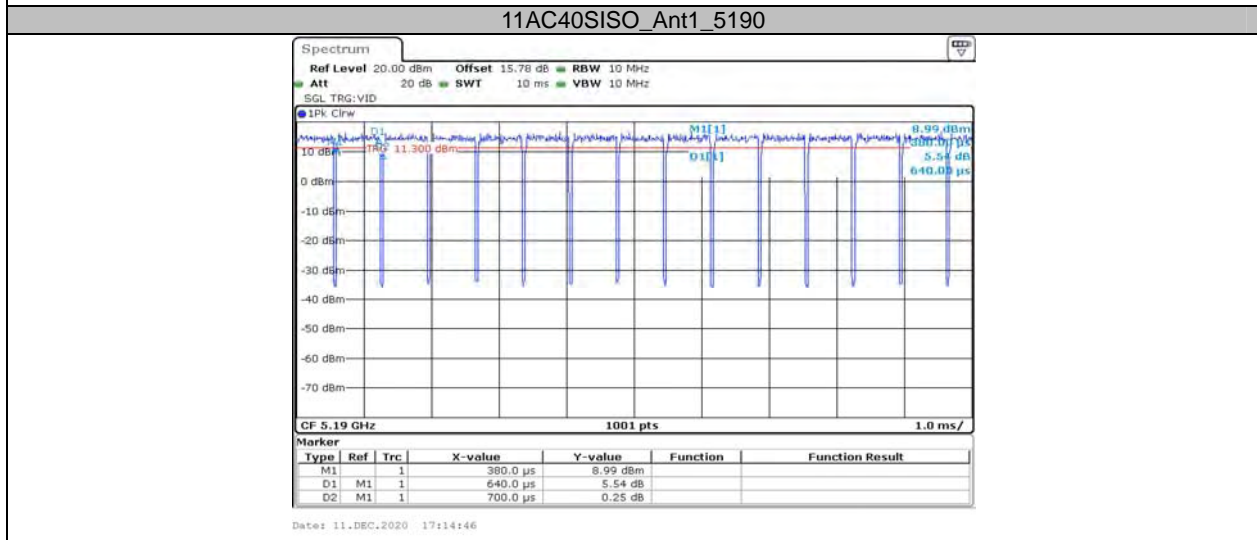
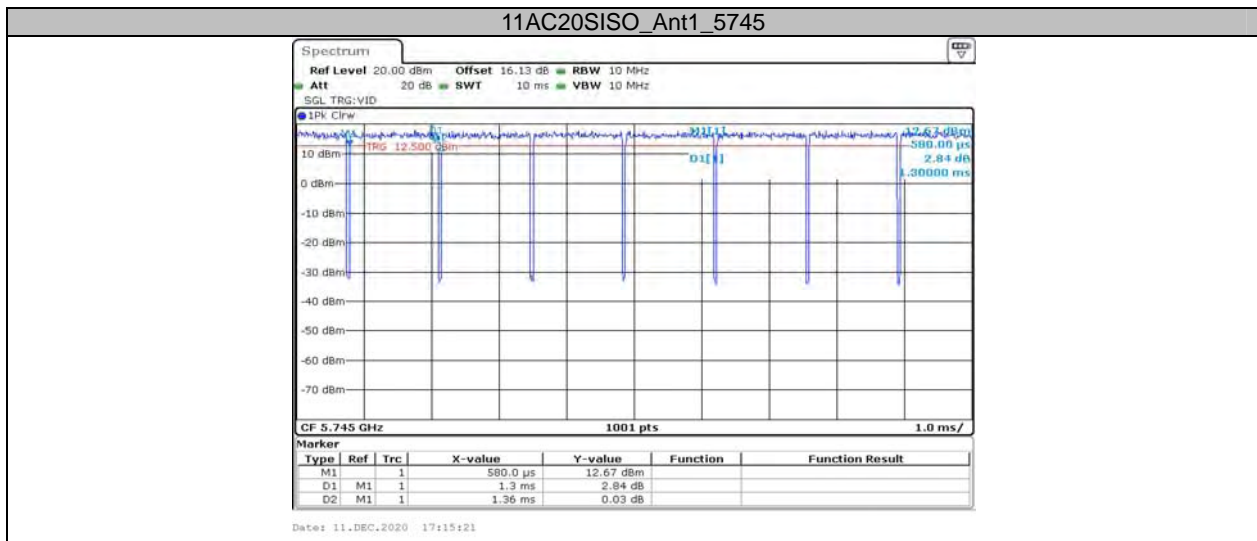




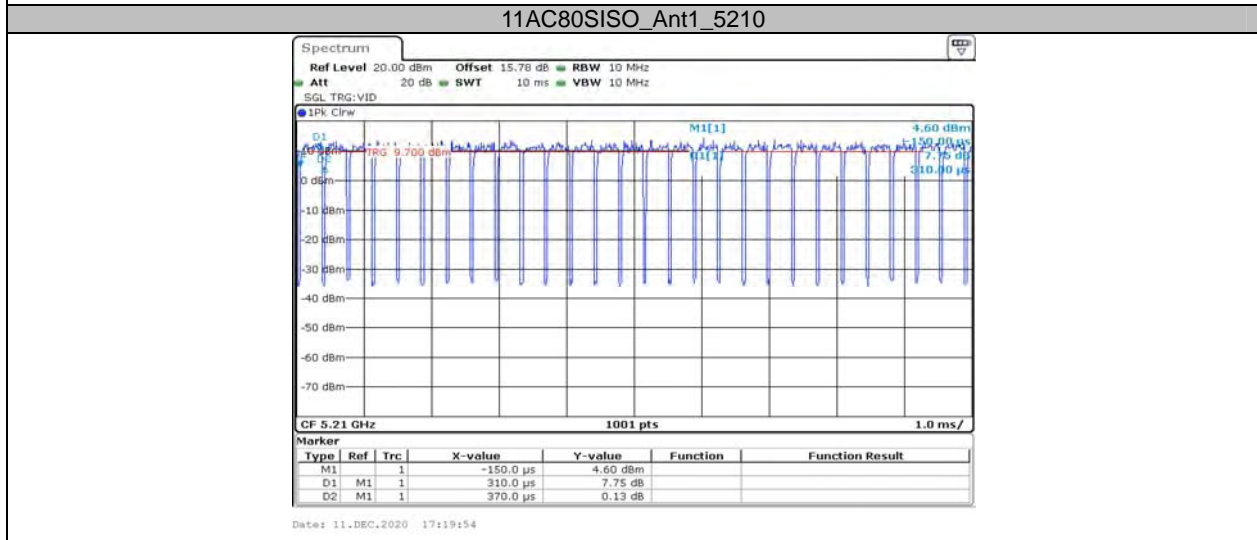
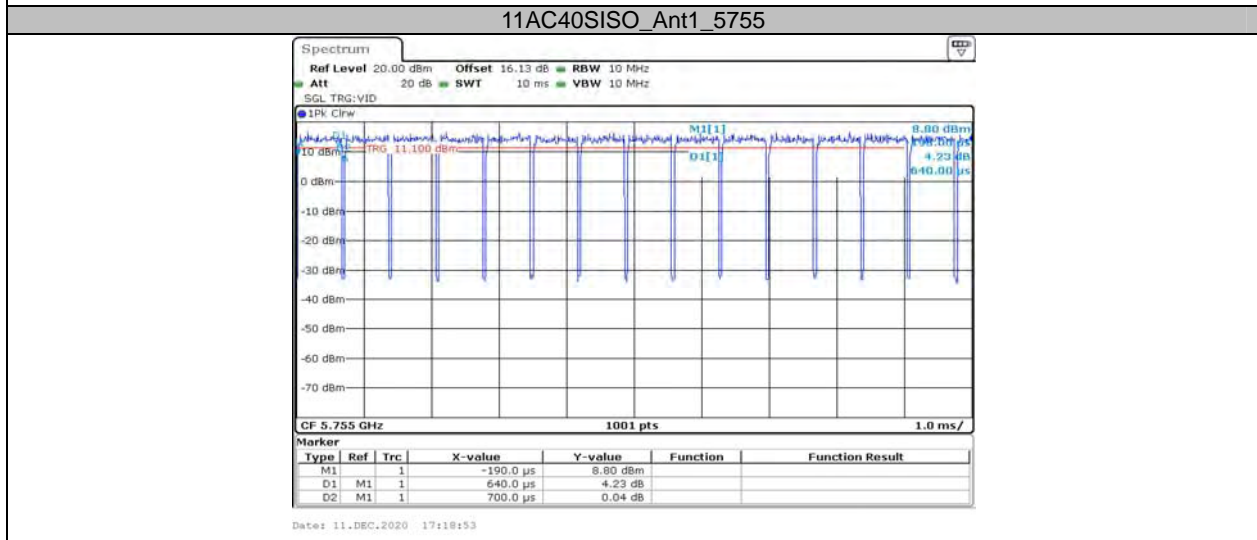
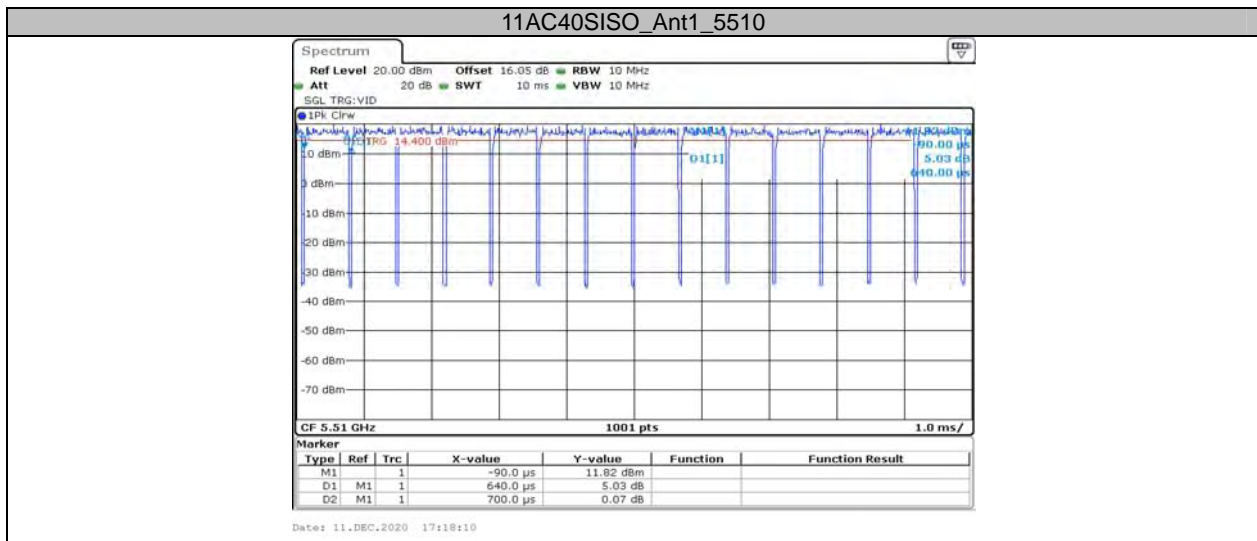


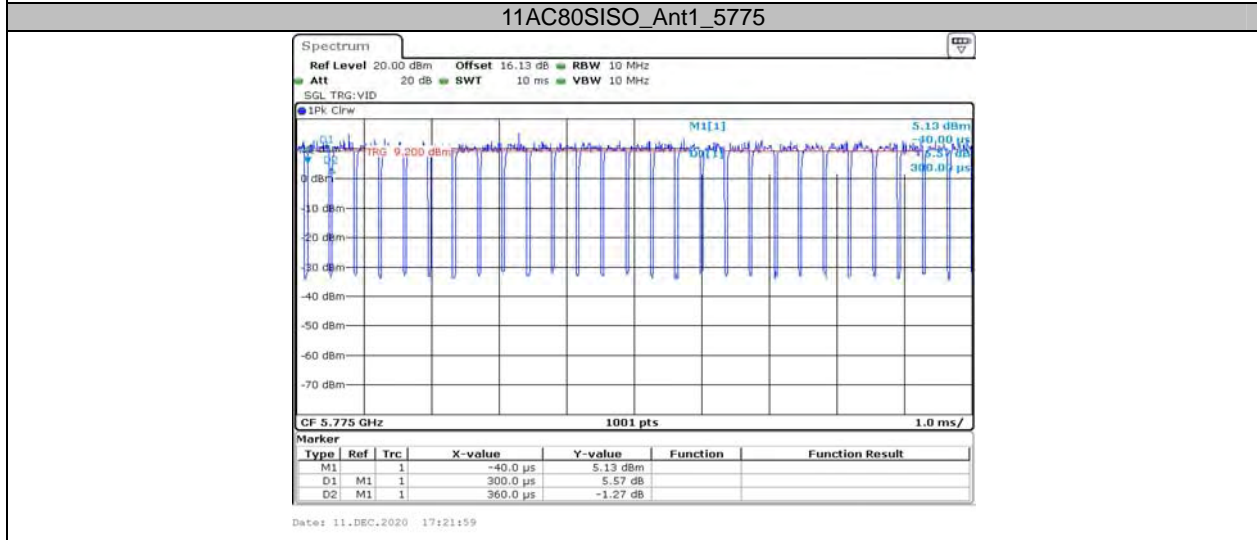
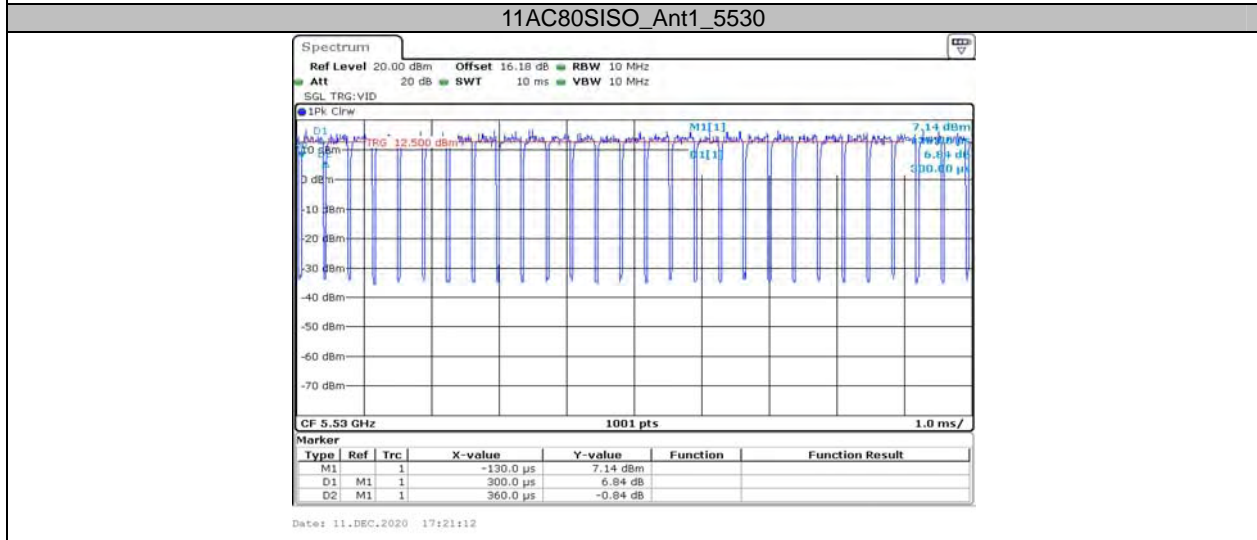
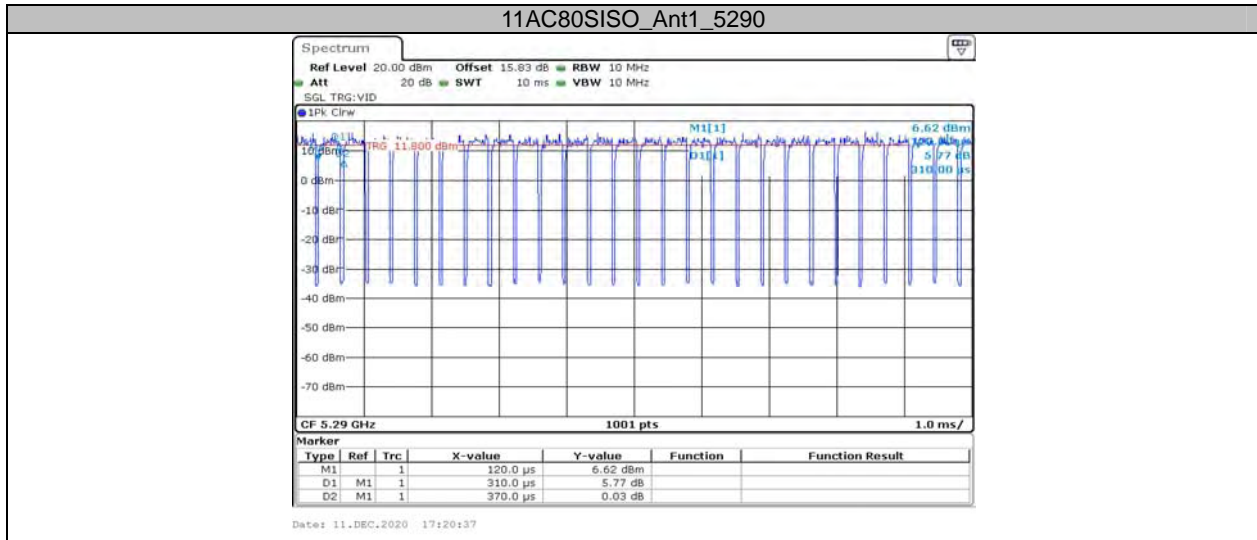












\*\*\*\*\* END OF REPORT \*\*\*\*\*