TEST REPORT

Applicant Name :	Changsha Qisi Technology Co., Ltd.
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Report Number :	RA230113-02333E-RF-00B
FCC ID:	2AMUA-AV1

Test Standard (s)

FCC PART 15.407

Sample Description

Product:	AURGA Viewer
Tested Model:	AVW1
Trade Name:	AURGA
Date Received:	2023-01-13
Date of Test	2023-02-03 to 2023-02-06
Report Date:	2023-02-16

Test Result:	PASS*

* In the configuration tested, the EUT complied with the standards above.

Prepared and Checked By:

Roger.Ling

EMC Engineer

Approved By:

Candy Li

EMC Engineer

Note: This report may contain data that are not covered by the A2LA accreditation and are marked with an asterisk "★".

Shenzhen Accurate Technology Co., Ltd. is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with an asterisk '*'. Customer model name, addresses, names, trademarks etc. are not considered data.

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	RA230113-02333E-RF-00B	Original Report	2023-02-16

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product	AURGA Viewer
Tested Model	AVW1
Frequency Range	5G Wi-Fi: 5150-5250 MHz; 5725-5850 MHz (802.11ac20/ac40/ac80)
Maximum Average Conducted Output Power	5150-5250 MHz 15.19dBm (802.11ac20), 14.15dBm(802.11ac40), 12.63dBm(802.11ac80) 5725-5850 MHz 15.98dBm (802.11ac20), 14.49dBm(802.11ac40), 14.22dBm(802.11ac80)
Modulation Technique	OFDM
Antenna Specification*	Band1/ Band4: 3.3dBi (provided by the applicant)
Voltage Range	DC 5V from USB port
Sample number	RA230113-02333E-RF-S1 (RF Radiated Test) RA230113-02333E-RF-S2 (RF Conducted Test) (Assigned by ATC, Shenzhen)
Sample/EUT Status	Good condition

Objective

This type approval 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 KDB789033D02 General U-NII Test Procedures New Rules v02r01.

All emissions measurement was performed at Shenzhen Accurate Technology Co., Ltd. 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, conducted		0.73dB
Unwanted Emission, conducted		1.6dB
AC Power Lines Conducted Emissions		2.72dB
Emissions, Radiated	30MHz - 1GHz	4.28dB
	1GHz - 18GHz	4.98dB
	18GHz - 26.5GHz	5.06dB
	26.5GHz - 40GHz	4.72dB
Temperature		1℃
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 Shenzhen Accurate Technology Co., Ltd. to collect test data is located on the 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. 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.: 708358, the FCC Designation No.: CN1189. Accredited by American Association for Laboratory Accreditation (A2LA) The Certificate Number is 4297.01 .

Listed by Innovation, Science and Economic Development Canada (ISEDC), the Registration Number is 5077A.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

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

The device only supports 5G Wi-Fi 802.11ac20/ac40/ac80 modes, which was declared by manufacturer.

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 802.11ac20, Channel 36, 40, 48 were tested.
For 802.11ac40, Channel 38, 46 were tested.
For 802.11ac80, Channel 42 was tested.

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

For 802.11ac20, Channel 149, 157, 165 were tested.
For 802.11ac40, Channel 151, 159 were tested.
For 802.11ac80, Channel 155 was tested.

EUT Exercise Software

“Putty”* software was used to test and power level as below:

Frequency Range	Mode	Date rate	Power Level*
5150 - 5250 MHz &5725 - 5850 MHz	802.11ac20	MCS0	Default
	802.11ac40	MCS0	Default
	802.11ac80	MCS0	Default

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

Duty cycle

Please refer to the Appendix.

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

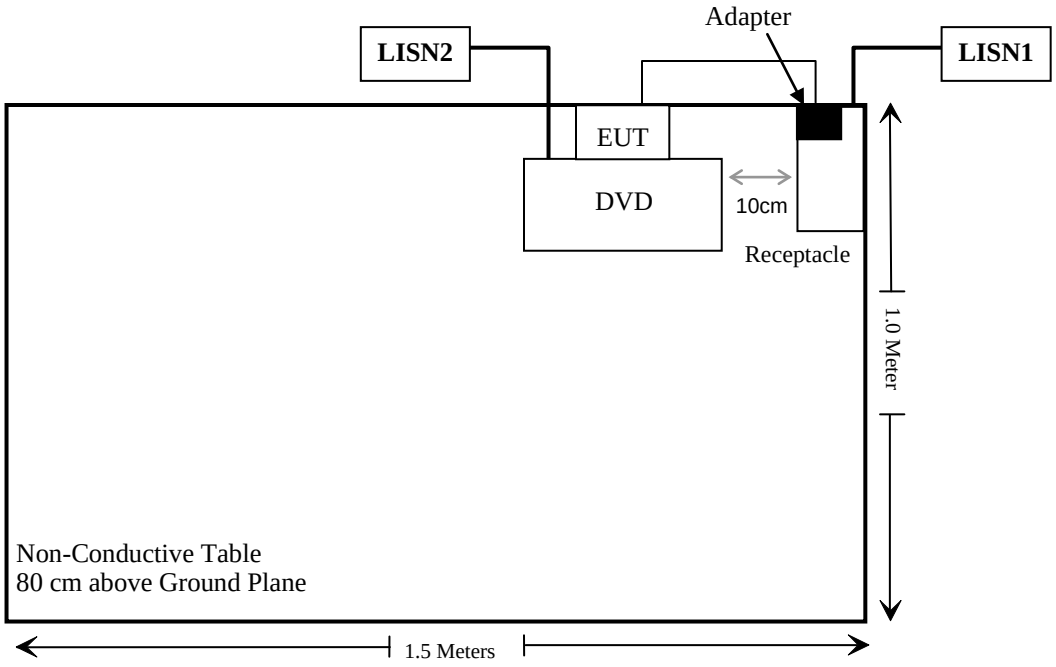
Manufacturer	Description	Model	Serial Number
Giec	DVD	Bdp-G4308	546372048691125
HUAWEI	Adapter	HW-050100C01	H779KBK6V19398

External I/O Cable

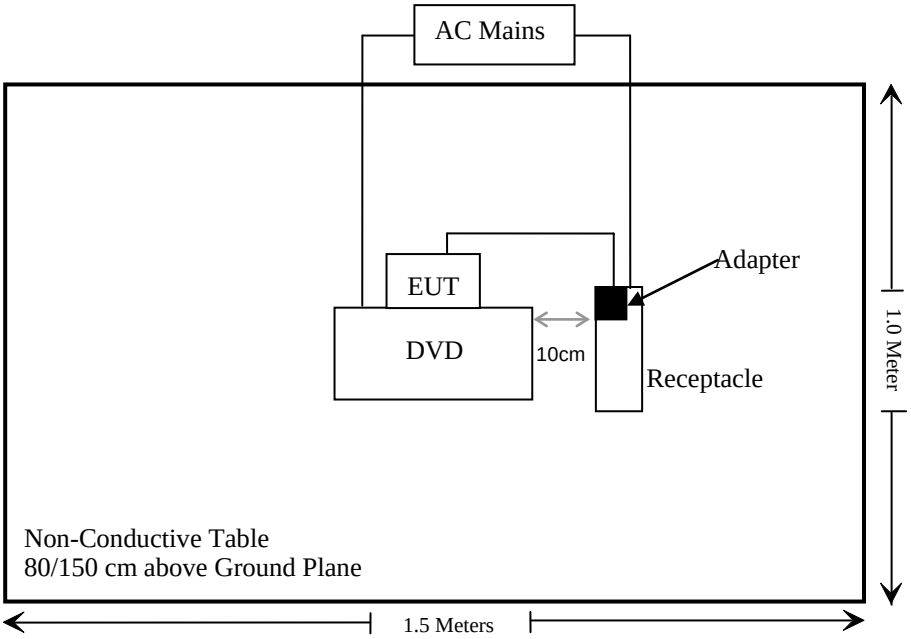
Cable Description	Length (m)	From/Port	To
Un-shielding Detachable USB Cable	1.0	EUT	Notebook

Block Diagram of Test Setup

For Conducted Emission



For Radiated Emission



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1307 & §2.1093	RF Exposure(SAR)	Compliant
§15.203	Antenna Requirement	Compliant
§15.407(b)(8) & §15.207(a)	Conducted Emissions	Compliant
§15.205 & §15.209 & §15.407(b) (1), (4), (8), (9), (10)	Undesirable Emission& Restricted Bands	Compliant
§15.407(a) (12), (e)	Bandwidth	Compliant
§15.407(a) (1), (3)	Conducted Transmitter Output Power	Compliant
§15.407 (a) (1), (3)	Power Spectral Density	Compliant

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Conducted Emissions Test					
Rohde & Schwarz	EMI Test Receiver	ESCI	100784	2022/11/25	2023/11/24
Rohde & Schwarz	L.I.S.N.	ENV216	101314	2022/11/25	2023/11/24
Anritsu Corp	50 Coaxial Switch	MP59B	6100237248	2022/12/07	2023/12/06
Unknown	RF Coaxial Cable	No.17	N0350	2022/11/25	2023/11/24
Radiated Emissions Test					
Rohde & Schwarz	Test Receiver	ESR	102725	2022/11/25	2023/11/24
Rohde & Schwarz	Spectrum Analyzer	FSV40	101949	2022/11/25	2023/11/24
SONOMA INSTRUMENT	Amplifier	310 N	186131	2022/11/08	2023/11/07
A.H. Systems, inc.	Preamplifier	PAM-0118P	135	2022/11/08	2023/11/07
Quinstar	Amplifier	QLW-18405536-J0	15964001002	2022/11/08	2023/11/07
Schwarzbeck	Bilog Antenna	VULB9163	9163-323	2021/07/06	2024/07/05
Schwarzbeck	Horn Antenna	BBHA9120D	9120D-1067	2022/11/30	2025/11/29
Schwarzbeck	HORN ANTENNA	BBHA9170	9170-359	2022/12/26	2025/12/25
CD	High Pass Filter	HPM-8.0/18G-60	020	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.10	N050	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.11	N1000	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.12	N040	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.13	N300	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.14	N800	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.15	N600	2022/11/25	2023/11/24
Radiated Emission Test Software: e3 19821b(V9)					
RF Conducted Test					
Rohde & Schwarz	Spectrum Analyzer	FSV-40	101495	2022/11/25	2023/11/24
Rohde & Schwarz	Open Switch and Control Unit	OSP120 + OSP-B157	101244 + 100866	2022/11/25	2023/11/24
WEINSCHEL	10dB Attenuator	5324	AU 3842	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.33	RF-03	Each time	

*** Statement of Traceability:** Shenzhen Accurate Technology Co., Ltd. attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

FCC §1.1307(b)&§2.1093 - RF EXPOSURE

Applicable Standard

FCC§1.1310 and §2.1093.

Test Result

Compliant, please refer to the SAR report: RA230113-02333E-SA.

FCC §15.203 – ANTENNA REQUIREMENT

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.
c. 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, which was permanently attached and the antenna gain is 3.3dBi, fulfill the requirement of this section. Please refer to the EUT photos.

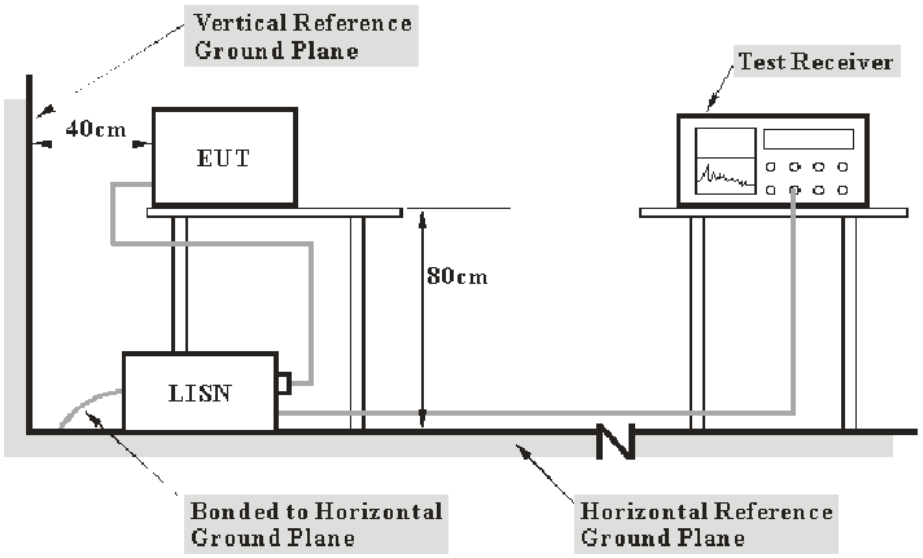
Result: Compliant.

FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS

Applicable Standard

FCC §15.207(a)

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 measurement procedure of EUT setup is according with ANSI C63.10-2013. The related limit was specified in FCC Part 15.207.

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 outlet of the LISN.

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

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

Factor & Margin Calculation

The factor is calculated by adding LISN VDF (Voltage Division Factor) and Cable Loss. The basic equation is as follows:

Factor = LISN VDF + Cable Loss

The "**Over limit**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over limit of -7 dB means the emission is 7 dB below the limit. The equation for calculation is as follows:

Over Limit = Level – Limit
Level = Read Level + Factor

Test Data

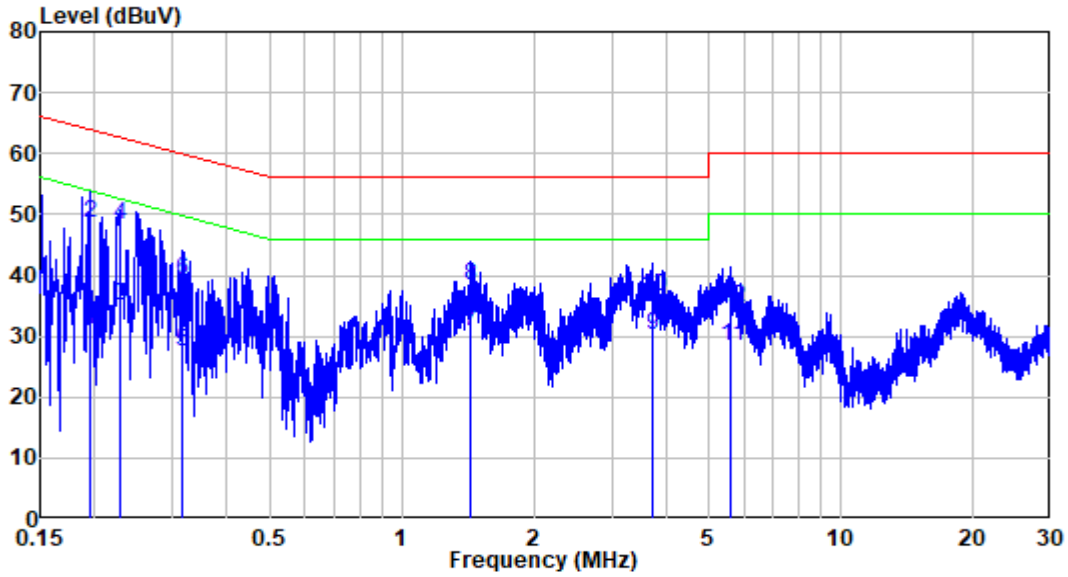
Environmental Conditions

Temperature:	23 ℃
Relative Humidity:	53 %
ATM Pressure:	101.0 kPa

The testing was performed by Lipa Wu on 2023-02-15.

EUT operation mode: 5G WIFI Transmitting (worst case for 802.11ac20, 5745MHz)

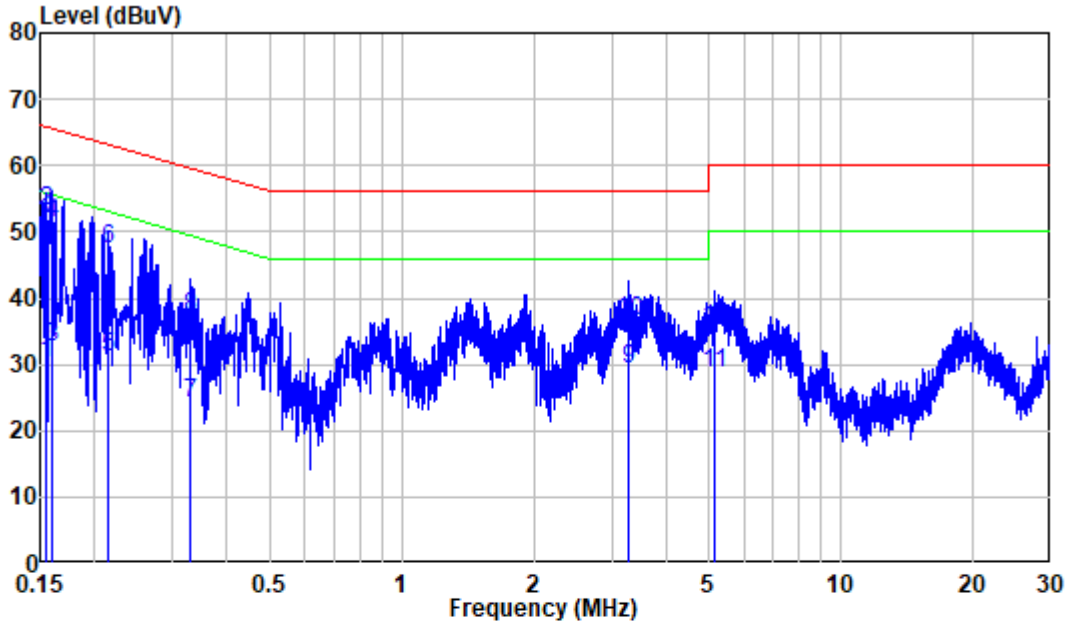
AC 120V/60 Hz, Line



Site : Shielding Room
Condition: Line
Job No. : RA230113-02333E-RF
Mode : 5G WIFI Transmitting

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.194	9.90	21.17	31.07	53.84	-22.77	Average
2	0.194	9.90	38.74	48.64	63.84	-15.20	QP
3	0.228	9.89	25.15	35.04	52.54	-17.50	Average
4	0.228	9.89	38.43	48.32	62.54	-14.22	QP
5	0.315	9.85	17.65	27.50	49.83	-22.33	Average
6	0.315	9.85	29.47	39.32	59.83	-20.51	QP
7	1.438	9.86	21.04	30.90	46.00	-15.10	Average
8	1.438	9.86	28.48	38.34	56.00	-17.66	QP
9	3.722	9.94	20.35	30.29	46.00	-15.71	Average
10	3.722	9.94	26.51	36.45	56.00	-19.55	QP
11	5.627	9.96	18.45	28.41	50.00	-21.59	Average
12	5.627	9.96	24.76	34.72	60.00	-25.28	QP

AC 120V/60 Hz, Neutral



Site : Shielding Room
Condition: Neutral
Job No. : RA230113-02333E-RF
Mode : 5G WIFI Transmitting

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.154	9.80	20.43	30.23	55.77	-25.54	Average
2	0.154	9.80	43.33	53.13	65.77	-12.64	QP
3	0.159	9.80	22.84	32.64	55.50	-22.86	Average
4	0.159	9.80	41.63	51.43	65.50	-14.07	QP
5	0.215	9.81	21.40	31.21	53.01	-21.80	Average
6	0.215	9.81	37.56	47.37	63.01	-15.64	QP
7	0.331	9.85	14.31	24.16	49.43	-25.27	Average
8	0.331	9.85	27.17	37.02	59.43	-22.41	QP
9	3.271	9.83	19.45	29.28	46.00	-16.72	Average
10	3.271	9.83	26.74	36.57	56.00	-19.43	QP
11	5.142	9.94	18.81	28.75	50.00	-21.25	Average
12	5.142	9.94	25.37	35.31	60.00	-24.69	QP

FCC §15.205 & §15.209 & §15.407(B) (1), (4), (8), (9), (10) – UNDESIRABLE EMISSION

Applicable Standard

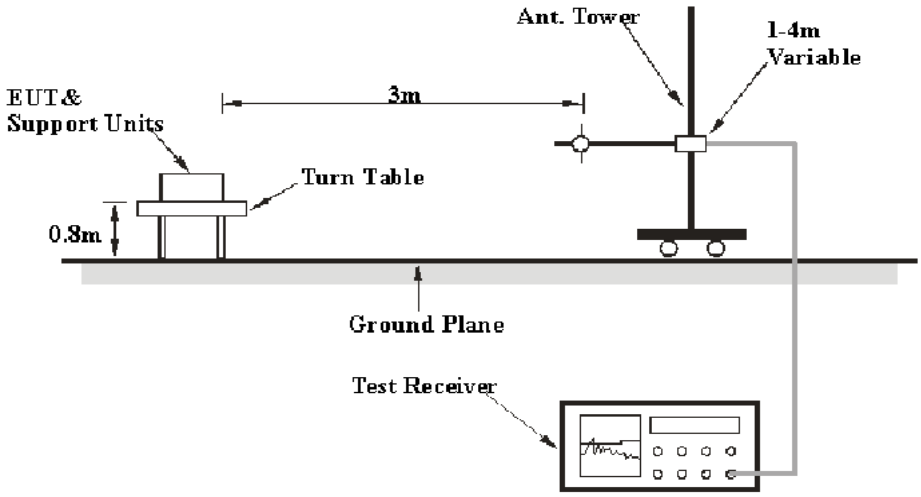
FCC §15.407 (b) (1), (4), (7), (8), (9), (10); §15.209; §15.205;

(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.
(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.

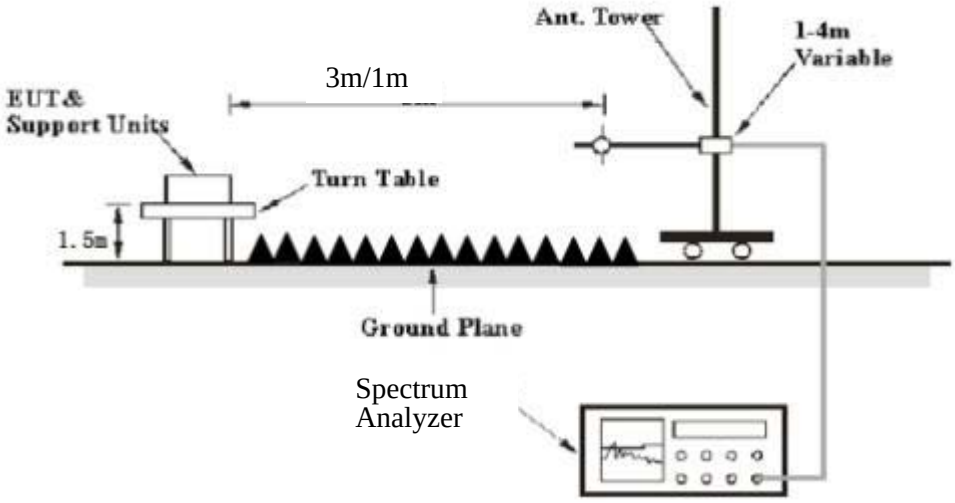
Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.

EUT Setup

Below 1 GHz:



Above 1 GHz:



Note: 1-18GHz tested @3m, 18-40GHz tested @1m.

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.

EMI Test Receiver & Spectrum Analyzer Setup

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 Note 1	/	Average
	1MHz	＞1/T Note 2	/	Average

Note 1: when duty cycle is no less than 98%
Note 2: when duty cycle is less than 98%

If the maximized peak measured value complies with the limit, then it is unnecessary to perform QP/Average measurement.

Test Procedure

Radiated Spurious Emission

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-1 GHz, peak and Average detection modes for frequencies above 1 GHz.

According to ANSI C63.10-2013,9.4: For field strength measurements made at other than the distance at which the applicable limit is specified,extrapolate the measured field strength to the field strength at the distance specified by the limit using an inverse distance correction factor (20 dB/decade of distance). In some cases, a different distance correction factor may be required;

$$E_{\mathrm{SpecLimit}} = E_{\mathrm{Meas}} + 20\log\left(\frac{d_{\mathrm{Meas}}}{d_{\mathrm{SpecLimit}}}\right)$$

where

$E_{\mathrm{SpecLimit}}$	is the field strength of the emission at the distance specified by the limit, in dBμV/m
E_{Meas}	is the field strength of the emission at the measurement distance, in dBμV/m
d_{Meas}	is the measurement distance, in m
$d_{\mathrm{SpecLimit}}$	is the distance specified by the limit, in m

So the extrapolation factor of 1m is 20*log(1/3)= -9.5 dB, for 18-40GHz range, the limit of 1m distance was added by 9.5dB from limit of 3m to compared with the result measurement at 1m distance.

Factor & Margin Calculation

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

Factor = Antenna Factor + Cable Loss - Amplifier Gain

The "**Over Limit/Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over Limit/margin of -7dB means the emission is 7dB below the limit. The equation for calculation is as follows:

Over Limit/Margin = Level / Corrected Amplitude – Limit
Level / Corrected Amplitude = Read Level + Factor

Test Data

Environmental Conditions

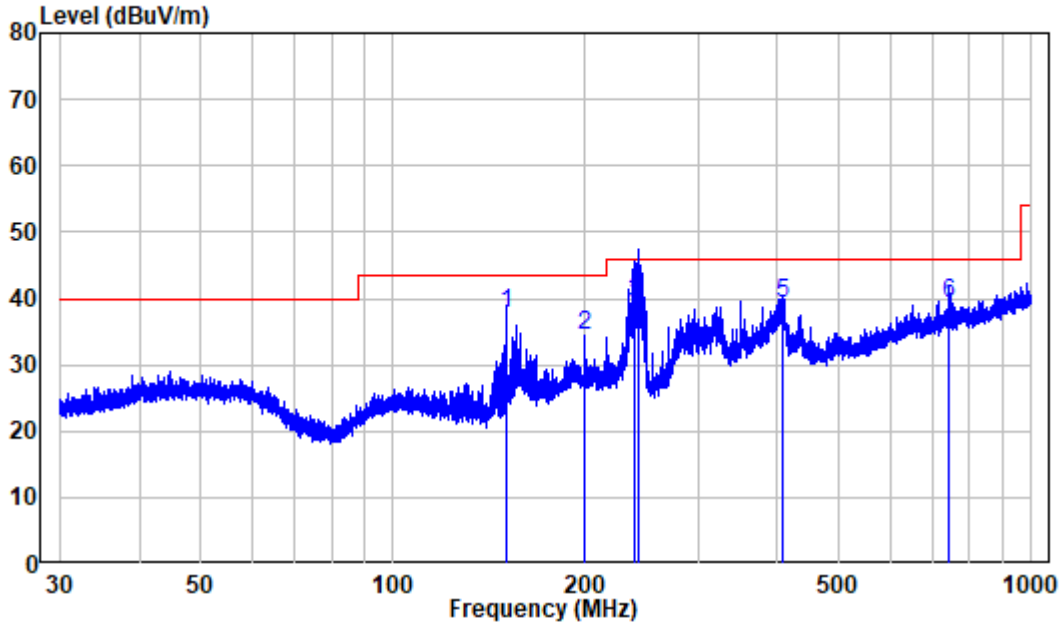
Temperature:	24℃
Relative Humidity:	58-59 %
ATM Pressure:	101.0 kPa

The testing was performed by Jimi Zheng from 2023-02-06 to 2023-02-09.

EUT operation mode: Transmitting (Pre-scan in the X, Y and Z axes of orientation, the worst case as setup photos as below)

30 MHz~1 GHz: (worst case for 802.11ac20, 5745MHz)

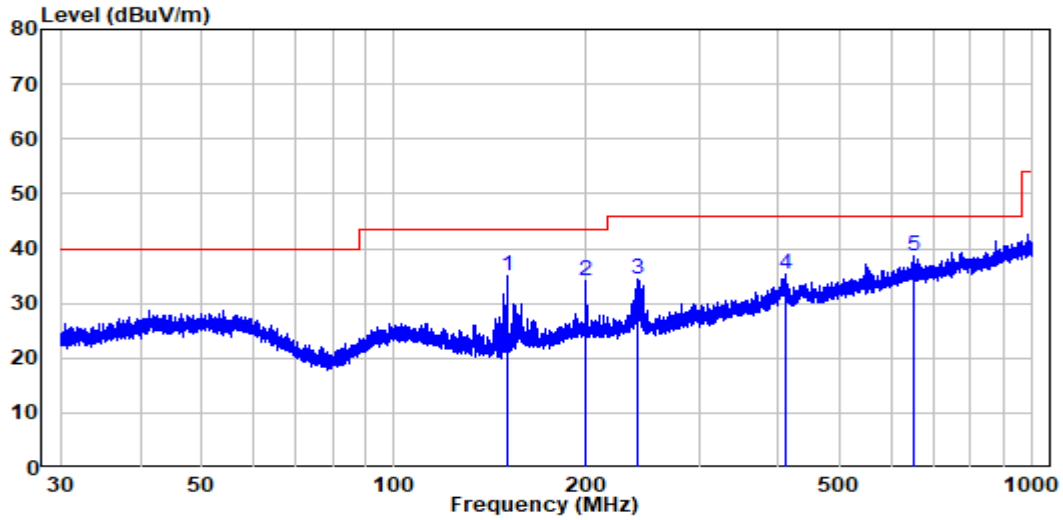
Horizontal



Site : chamber
Condition: 3m HORIZONTAL
Job No. : RA230113-02333E-RF
Test Mode: Transmitting

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	150.011	-15.27	53.00	37.73	43.50	-5.77	QP
2	199.986	-11.40	45.69	34.29	43.50	-9.21	Peak
3	238.101	-10.93	50.30	39.37	46.00	-6.63	QP
4	241.465	-10.81	51.00	40.19	46.00	-5.81	QP
5	407.336	-6.54	45.70	39.16	46.00	-6.84	QP
6	741.934	-0.82	40.10	39.28	46.00	-6.72	QP

Vertical



Site : chamber
Condition: 3m VERTICAL
Job No. : RA230113-02333E-RF
Test Mode: Transmitting

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	150.011	-15.27	50.24	34.97	43.50	-8.53	Peak
2	199.986	-11.40	45.42	34.02	43.50	-9.48	Peak
3	239.987	-10.91	45.40	34.49	46.00	-11.51	Peak
4	409.664	-6.36	41.73	35.37	46.00	-10.63	Peak
5	650.229	-1.72	40.40	38.68	46.00	-7.32	Peak

Note: For below 1GHz, when the test result of peak was below to the limit of QP more than 6dB, just peak value was recorded.

5150-5250MHz:

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBuV)	PK/QP/AV		Height (m)	Polar (H/V)				
802.11 ac20, Low Channel									
4500	59.30	PK	31	1.1	H	-4.72	54.58	74	-19.42
4500	30.50	AV	31	1.1	H	-4.72	25.78	54	-28.22
4500	58.85	PK	344	1.9	V	-4.72	54.13	74	-19.87
4500	28.20	AV	344	1.9	V	-4.72	23.48	54	-30.52
5150	72.72	PK	225	1.0	H	-2.73	69.99	74	-4.01
5150	42.30	AV	225	1.0	H	-2.73	39.57	54	-14.43
5150	68.73	PK	228	1.9	V	-2.73	66.00	74	-8.00
5150	35.18	AV	228	1.9	V	-2.73	32.45	54	-21.55
10360	46.34	PK	341	1.3	H	8.12	54.46	68.2	-13.74
10360	46.79	PK	32	1.5	V	8.12	54.91	68.2	-13.29
802.11 ac20, Middle Channel									
10400	45.17	PK	227	1.6	H	8.24	53.41	68.2	-14.79
10400	46.61	PK	252	1.5	V	8.24	54.85	68.2	-13.35
802.11 ac20, High Channel									
5350	57.01	PK	63	1.7	H	-2.33	54.68	74	-19.32
5350	26.50	AV	63	1.7	H	-2.33	24.17	54	-29.83
5350	58.13	PK	95	2.0	V	-2.33	55.80	74	-18.2
5350	28.54	AV	95	2.0	V	-2.33	26.21	54	-27.79
5460	57.93	PK	31	1.1	H	-2.26	55.67	74	-18.33
5460	28.11	AV	31	1.1	H	-2.26	25.85	54	-28.15
5460	57.70	PK	72	2.1	V	-2.26	55.44	74	-18.56
5460	27.62	AV	72	2.1	V	-2.26	25.36	54	-28.64
10480	45.90	PK	150	1.9	H	8.57	54.47	68.2	-13.73
10480	44.10	PK	140	1.9	V	8.57	52.67	68.2	-15.53
802.11 ac40, Low Channel									
4500	58.26	PK	58	1.8	H	-4.72	53.54	74	-20.46
4500	57.76	PK	89	2.0	V	-4.72	53.04	74	-20.96
5150	69.33	PK	309	1.2	H	-2.73	66.60	74	-7.4
5150	38.53	AV	309	1.2	H	-2.73	35.80	54	-18.2
5150	65.82	PK	339	1.7	V	-2.73	63.09	74	-10.91
5150	32.62	AV	339	1.7	V	-2.73	29.89	54	-24.11
10380	45.69	PK	258	1.6	H	8.19	53.88	68.2	-14.32
10380	46.08	PK	52	1.9	V	8.19	54.27	68.2	-13.93

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit	Margin
	Reading (dBuV)	PK/QP/AV		Height (m)	Polar (H/V)			(dBμV/m)	(dB)
802.11 ac40, High Channel									
5350	57.30	PK	330	1.8	H	-2.33	54.97	74	-19.03
5350	26.58	AV	330	1.8	H	-2.33	24.25	54	-29.75
5350	57.65	PK	120	1.6	V	-2.33	55.32	74	-18.68
5350	27.43	AV	120	1.6	V	-2.33	25.10	54	-28.9
5460	58.14	PK	40	1.6	H	-2.26	55.88	74	-18.12
5460	27.82	AV	40	1.6	H	-2.26	25.56	54	-28.44
5460	58.22	PK	287	1.7	V	-2.26	55.96	74	-18.04
5460	28.18	AV	287	1.7	V	-2.26	25.92	54	-28.08
10460	46.68	PK	331	2.0	H	8.48	55.16	68.2	-13.04
10460	45.24	PK	67	1.3	V	8.48	53.72	68.2	-14.48
802.11 ac80, Middle Channel									
4500	57.08	PK	263	1.9	H	-4.72	52.36	74	-21.64
4500	57.16	PK	309	1.2	V	-4.72	52.44	74	-21.56
5150	63.32	PK	5	1.4	H	-2.73	60.59	74	-13.41
5150	29.17	AV	5	1.4	H	-2.73	26.44	54	-27.56
5150	57.78	PK	234	1.2	V	-2.73	55.05	74	-18.95
5150	27.25	AV	234	1.2	V	-2.73	24.52	54	-29.48
5350	57.76	PK	46	1.1	H	-2.33	55.43	74	-18.57
5350	27.21	AV	46	1.1	H	-2.33	24.88	54	-29.12
5350	57.50	PK	186	2.2	V	-2.33	55.17	74	-18.83
5350	27.21	AV	186	2.2	V	-2.33	24.88	54	-29.12
5460	57.90	PK	304	1.5	H	-2.26	55.64	74	-18.36
5460	26.75	AV	304	1.5	H	-2.26	24.49	54	-29.51
5460	57.16	PK	168	1.2	V	-2.26	54.90	74	-19.1
5460	25.84	AV	168	1.2	V	-2.26	23.58	54	-30.42
10420	46.56	PK	150	1.7	H	8.31	54.87	68.2	-13.33
10420	47.11	PK	46	1.6	V	8.31	55.42	68.2	-12.78

5725-5850MHz:

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBuV)	PK/QP/AV		Height (m)	Polar (H/V)				
802.11 ac20, Low Channel									
5650	58.76	PK	97	1.2	H	-1.95	56.81	68.2	-11.39
5650	58.16	PK	88	1.9	V	-1.95	56.21	68.2	-11.99
5720	70.87	PK	356	2.1	H	-1.96	68.91	110.8	-41.89
5720	64.67	PK	329	1.9	V	-1.96	62.71	110.8	-48.09
5725	77.06	PK	282	1.1	H	-1.96	75.10	122.2	-47.1
5725	68.64	PK	259	1.5	V	-1.96	66.68	122.2	-55.52
5700	60.28	PK	223	1.2	H	-2.02	58.26	105.2	-46.94
5700	58.68	PK	307	1.0	V	-2.02	56.66	105.2	-48.54
11490	44.59	PK	309	1.4	H	6.63	51.22	74	-22.78
11490	45.02	PK	192	1.7	V	6.63	51.65	74	-22.35
802.11 ac20, Middle Channel									
11570	45.53	PK	131	1.4	H	6.59	52.12	74	-21.88
11570	45.45	PK	356	1.4	V	6.59	52.04	74	-21.96
802.11 ac20, High Channel									
5850	65.89	PK	151	1.9	H	-1.81	64.08	122.2	-58.12
5850	63.95	PK	353	2.0	V	-1.81	62.14	122.2	-60.06
5855	65.65	PK	357	2.0	H	-1.82	63.83	110.8	-46.97
5855	60.73	PK	176	1.9	V	-1.82	58.91	110.8	-51.89
5875	58.62	PK	168	2.2	H	-1.84	56.78	105.2	-48.42
5875	58.58	PK	21	2.0	V	-1.84	56.74	105.2	-48.46
5925	57.99	PK	92	2.0	H	-1.83	56.16	68.2	-12.04
5925	58.32	PK	241	2.1	V	-1.83	56.49	68.2	-11.71
11650	44.78	PK	214	1.9	H	6.77	51.55	74	-22.45
11650	47.18	PK	199	1.4	V	6.77	53.95	74	-20.05
802.11 ac40, Low Channel									
5650	58.73	PK	130	1.1	H	-1.95	56.78	68.2	-11.42
5650	57.97	PK	96	1.7	V	-1.95	56.02	68.2	-12.18
5700	63.99	PK	123	1.0	H	-2.02	61.97	105.2	-43.23
5700	59.39	PK	232	2.0	V	-2.02	57.37	105.2	-47.83
5720	67.95	PK	52	1.7	H	-1.96	65.99	110.8	-44.81
5720	61.96	PK	346	1.3	V	-1.96	60.00	110.8	-50.8
5725	70.54	PK	126	1.9	H	-1.96	68.58	122.2	-53.62
5725	64.64	PK	35	2.1	V	-1.96	62.68	122.2	-59.52
11510	45.28	PK	161	2.2	H	6.59	51.87	74	-22.13
11510	45.56	PK	222	1.2	V	6.59	52.15	74	-21.85

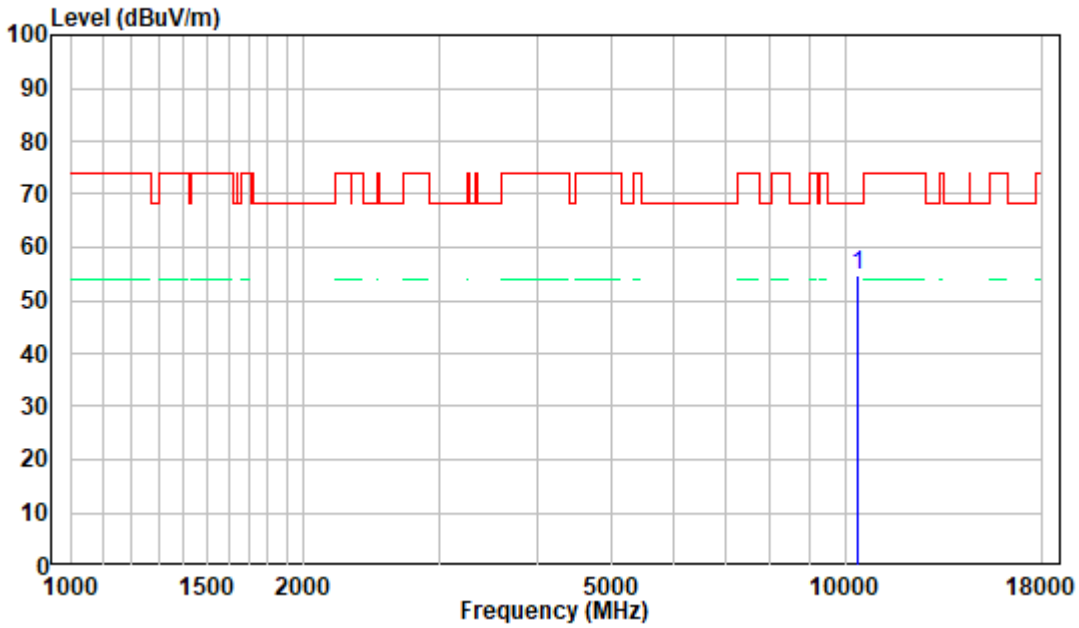
Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit	Margin
	Reading (dBuV)	PK/QP/AV		Height (m)	Polar (H/V)			(dBμV/m)	(dB)
802.11 ac40, High Channel									
5850	57.88	PK	25	2.0	H	-1.81	56.07	122.2	-66.13
5850	55.54	PK	90	2.2	V	-1.81	53.73	122.2	-68.47
5855	61.17	PK	159	1.8	H	-1.82	59.35	110.8	-51.45
5855	60.01	PK	334	1.1	V	-1.82	58.19	110.8	-52.61
5875	58.11	PK	16	2.0	H	-1.84	56.27	105.2	-48.93
5875	60.87	PK	173	1.7	V	-1.84	59.03	105.2	-46.17
5925	58.25	PK	255	2.1	H	-1.83	56.42	68.2	-11.78
5925	58.31	PK	293	2.1	V	-1.83	56.48	68.2	-11.72
11590	45.30	PK	86	2.0	H	6.57	51.87	74	-22.13
11590	46.05	PK	180	1.1	V	6.57	52.62	74	-21.38
802.11 ac80, Middle Channel									
5650	57.78	PK	19	1.6	H	-1.95	55.83	68.2	-12.37
5650	57.96	PK	243	1.8	V	-1.95	56.01	68.2	-12.19
5700	61.45	PK	331	1.9	H	-2.02	59.43	105.2	-45.77
5700	59.06	PK	317	1.7	V	-2.02	57.04	105.2	-48.16
5720	63.68	PK	146	1.4	H	-1.96	61.72	110.8	-49.08
5720	60.51	PK	251	1.9	V	-1.96	58.55	110.8	-52.25
5725	62.00	PK	98	1.7	H	-1.96	60.04	122.2	-62.16
5725	57.76	PK	239	2.1	V	-1.96	55.80	122.2	-66.4
5850	59.54	PK	218	1.4	H	-1.81	57.73	122.2	-64.47
5850	58.33	PK	285	1.3	V	-1.81	56.52	122.2	-65.68
5855	58.42	PK	352	1.2	H	-1.82	56.60	110.8	-54.2
5855	59.61	PK	278	1.9	V	-1.82	57.79	110.8	-53.01
5875	59.14	PK	345	1.1	V	-1.84	57.30	105.2	-47.9
5875	59.36	PK	300	1.3	H	-1.84	57.52	105.2	-47.68
5925	57.89	PK	187	1.8	H	-1.83	56.06	68.2	-12.14
5925	57.57	PK	203	2.1	V	-1.83	55.74	68.2	-12.46
11550	45.13	PK	219	1.6	H	6.61	51.74	74	-22.26
11550	45.10	PK	359	1.5	V	6.61	51.71	74	-22.29

Note:
Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Corrected Factor + Reading
Margin = Corrected Amplitude – Limit
The other spurious emission which is in the noise floor level was not recorded.
When the test result of peak was 20dB below to the limit of peak, which can be compliant to the average limit, just peak value was recorded.

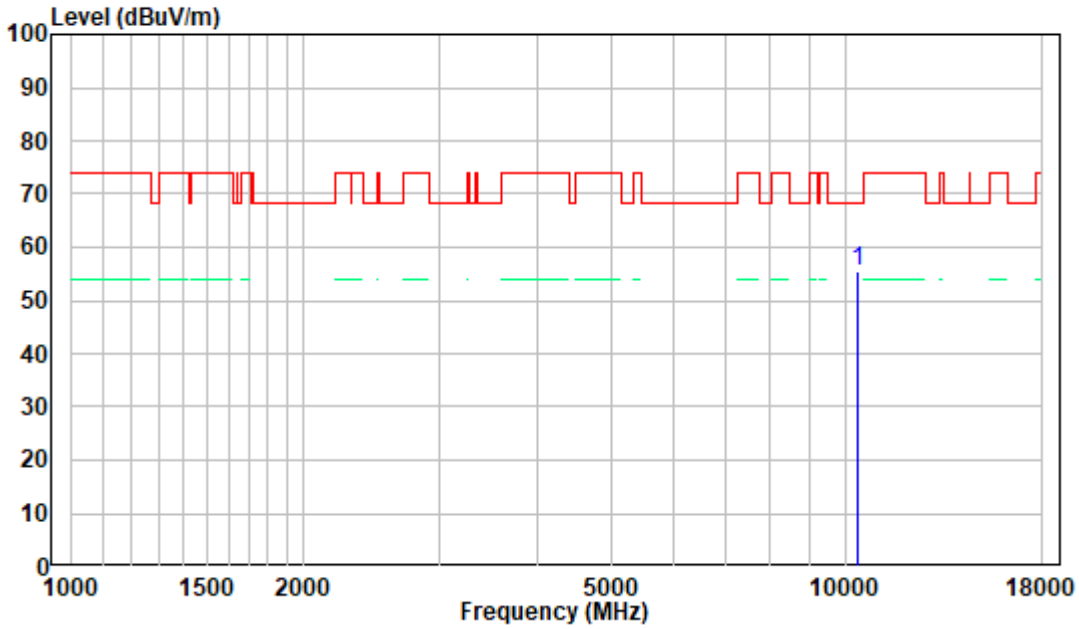
1-18 GHz (Worst case)

Pre-scan plots

802.11 ac80, 5210MHz
Horizontal



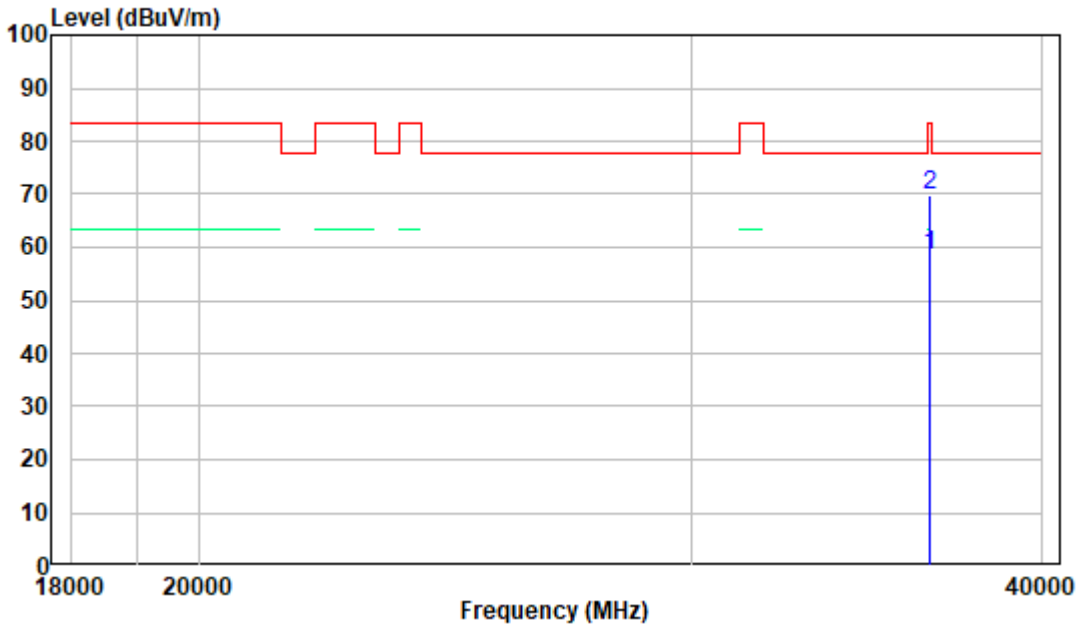
Vertical



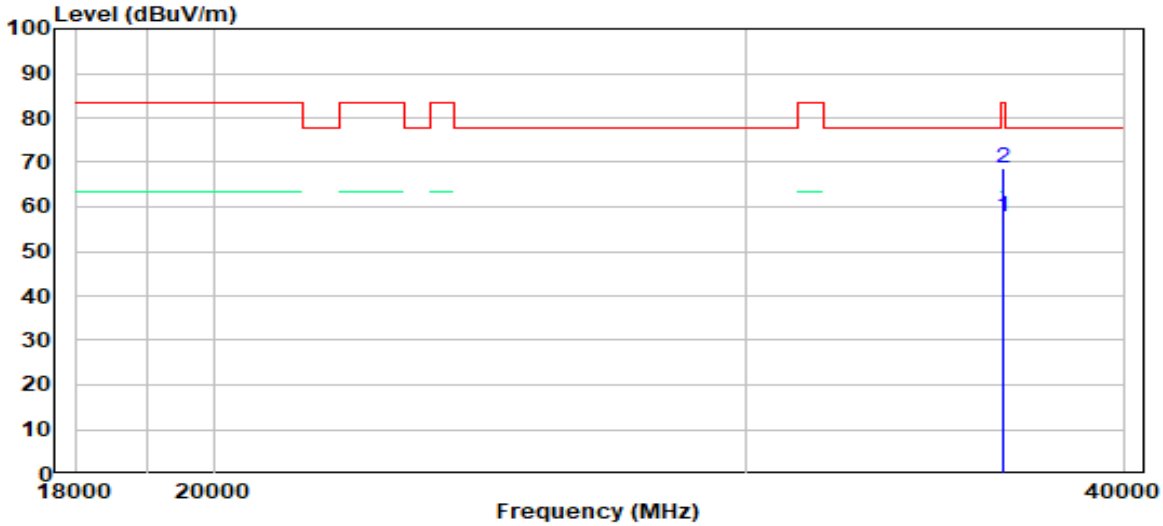
18-40 GHz (Worst case)

Pre-scan plots

802.11 ac80, 5210MHz
Horizontal



Vertical



FCC §15.407(a)(e) – 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

According to KDB789033 D02 section II.C.

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) ≥ 3 × 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.

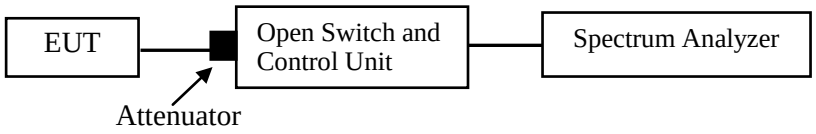
3. **99% Occupied Bandwidth**
The 99% occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission. Measurement of the 99% occupied bandwidth is *required* only as a condition for using the optional bandedge measurement techniques described in II.G.3.d). Measurements of 99% occupied bandwidth may also optionally be used in lieu of the EBW to define the minimum frequency range over which the spectrum is integrated when measuring maximum conducted output power as described in II.E. However, the EBW must be measured to determine bandwidth dependent limits on maximum conducted output power in accordance with Section 15.407(a).

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

1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1% to 5% of the OBW

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

Note: For devices that use channel aggregation refer to III.A and III.C for determining 99% bandwidth.



Test Data

Environmental Conditions

Temperature:	23-24 ℃
Relative Humidity:	48-50 %
ATM Pressure:	101.0 kPa

The testing was performed by Glenn Jiang from 2023-02-03 to 2023-02-06.

EUT operation mode: Transmitting

Test Result: PASS. Please refer to the Appendix.

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

Applicable Standard

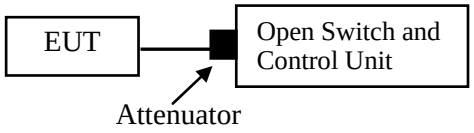
For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting 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 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

According to KDB789033 D02 section II.E.3.a).

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

Temperature:	23-24 ℃
Relative Humidity:	48-50 %
ATM Pressure:	101.0 kPa

The testing was performed by Glenn Jiang from 2023-02-03 to 2023-02-06.

EUT operation mode: Transmitting

Test Result: PASS. Please refer to the Appendix.

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

Applicable Standard

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.

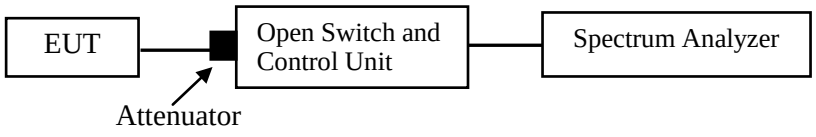
For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum 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

According to KDB789033 D02 section II.F.

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

a) Set RBW ≥ 1/T, where T is defined in section II.B.l.a).
b) Set VBW ≥ 3 RBW.
c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10 log (500 kHz/RBW) to the measured result, whereas RBW (< 500 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 (1MHz/RBW) to the measured result, whereas RBW (< 1 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

Temperature:	23-24 ℃
Relative Humidity:	48-50 %
ATM Pressure:	101.0 kPa

The testing was performed by Glenn Jiang from 2023-02-03 to 2023-02-06.

EUT operation mode: Transmitting

Test Result: PASS. Please refer to the Appendix.

APPENDIX

Appendix A1: Emission Bandwidth

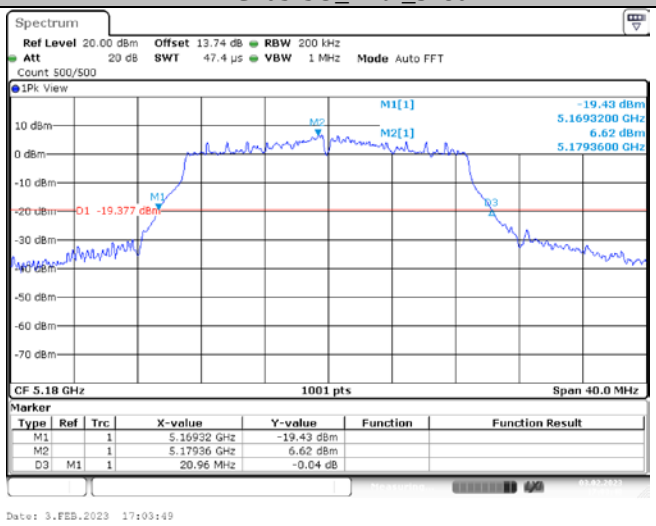
Test Result

5150~5250 MHz

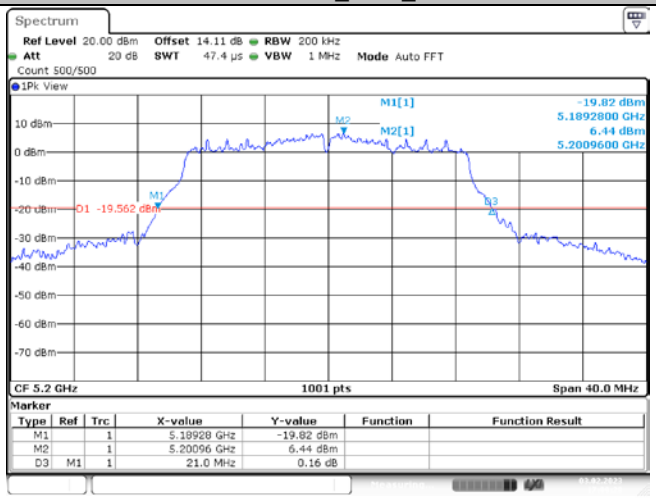
Test Mode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11AC20SISO	Ant1	5180	20.960	5169.320	5190.280	---	PASS
		5200	21.000	5189.280	5210.280	---	PASS
		5240	21.000	5229.360	5250.360	---	PASS
11AC40SISO	Ant1	5190	40.000	5169.760	5209.760	---	PASS
		5230	40.160	5209.680	5249.840	---	PASS
11AC80SISO	Ant1	5210	80.800	5169.840	5250.640	---	PASS

Test Graphs

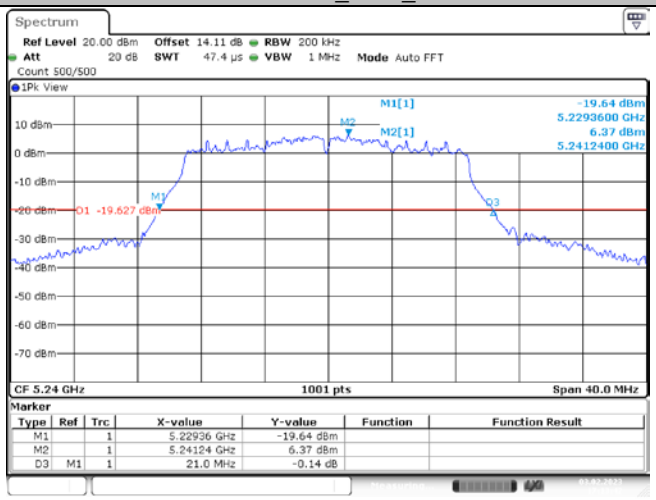
11AC20SISO_Ant1_5180



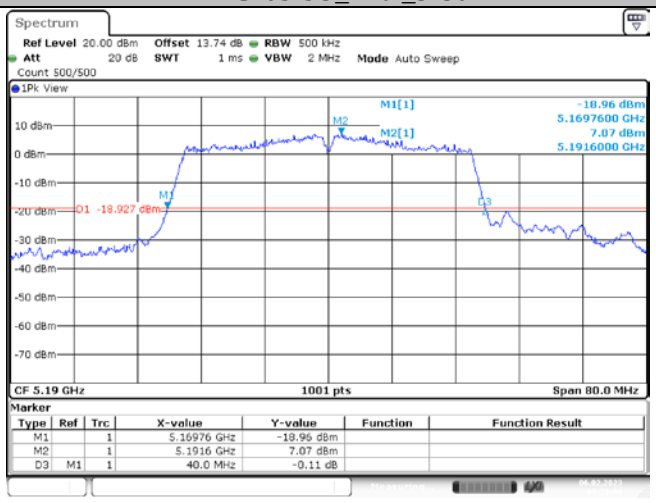
11AC20SISO_Ant1_5200



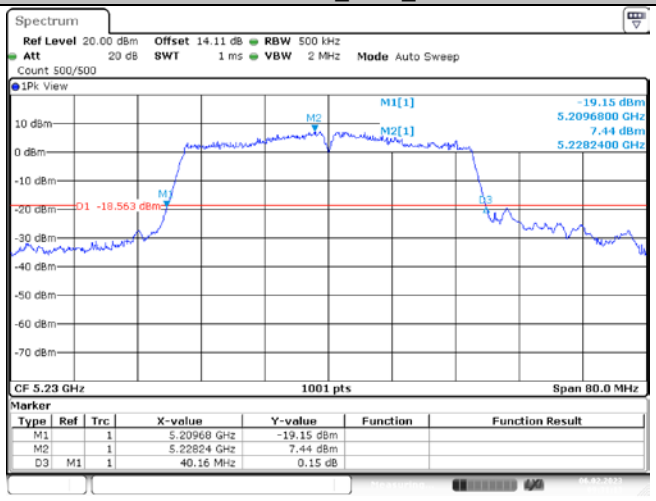
11AC20SISO_Ant1_5240



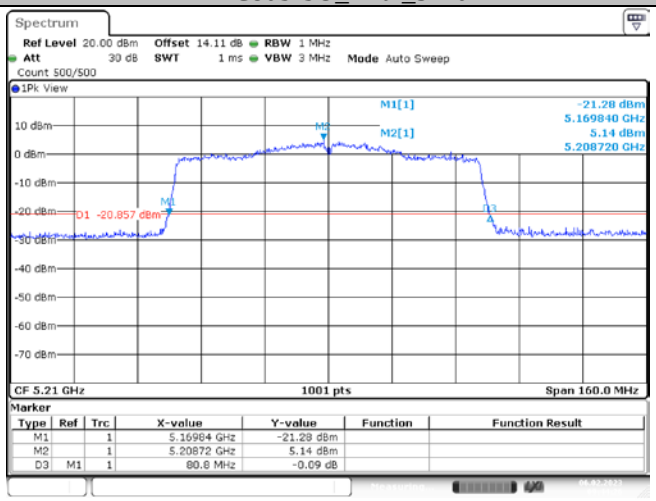
11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



11AC80SISO_Ant1_5210



Appendix A2: Occupied Channel Bandwidth

Test Result

5150~5250 MHz

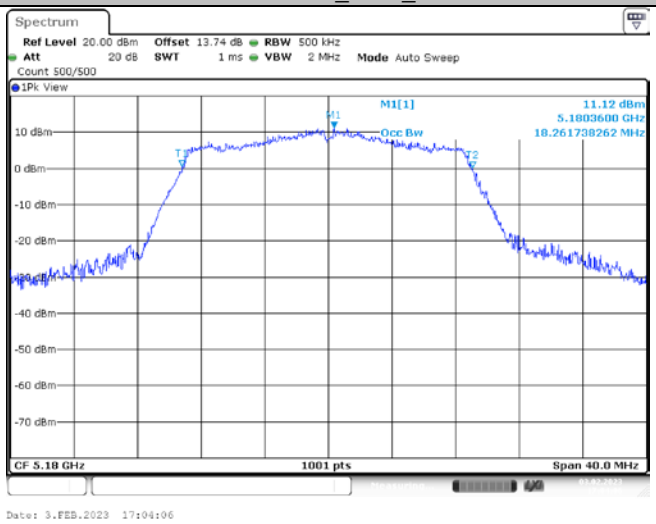
Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11AC20SISO	Ant1	5180	18.262	5170.769	5189.031	No transmitted signal in the 99% bandwidth extends into the U-NII-2A band	PASS
		5200	18.262	5190.769	5209.031		PASS
		5240	18.262	5230.769	5249.031		PASS
11AC40SISO	Ant1	5190	36.763	5171.459	5208.222		PASS
		5230	36.843	5211.379	5248.222		PASS
11AC80SISO	Ant1	5210	75.445	5172.278	5247.722		PASS

5725~5850 MHz

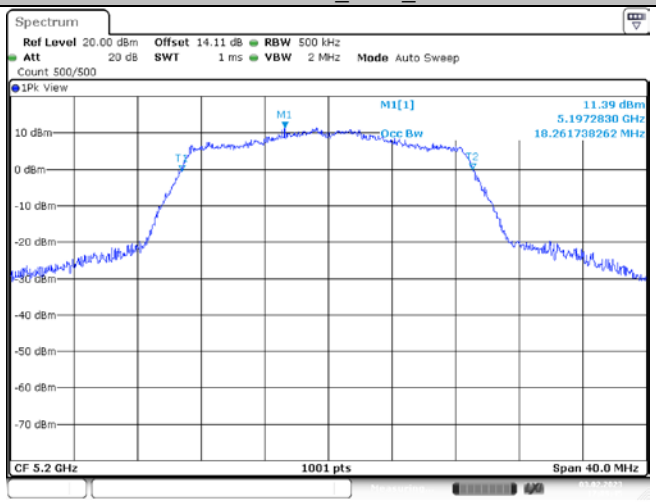
Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11AC20SISO	Ant1	5745	18.302	5735.729	5754.031	No transmitted signal in the 99% bandwidth extends into the U-NII-2C band	PASS
		5785	18.342	5775.729	5794.071		PASS
		5825	18.342	5815.689	5834.031		PASS
11AC40SISO	Ant1	5755	36.683	5736.459	5773.142		PASS
		5795	36.843	5776.379	5813.222		PASS
11AC80SISO	Ant1	5775	75.604	5737.278	5812.882		PASS

Test Graphs

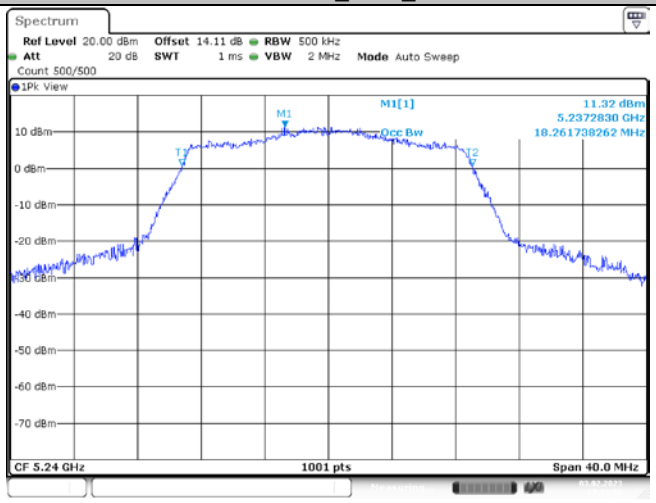
11AC20SISO_Ant1_5180



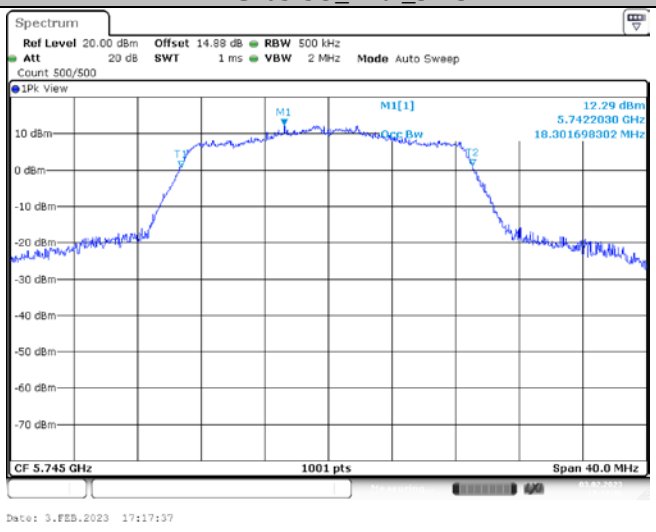
11AC20SISO_Ant1_5200



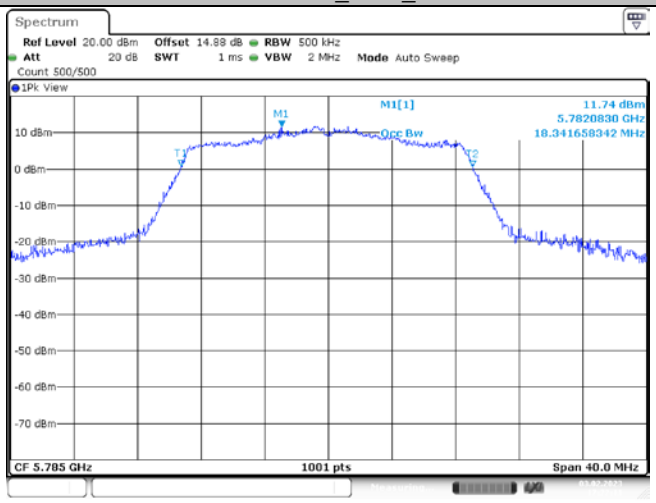
11AC20SISO_Ant1_5240



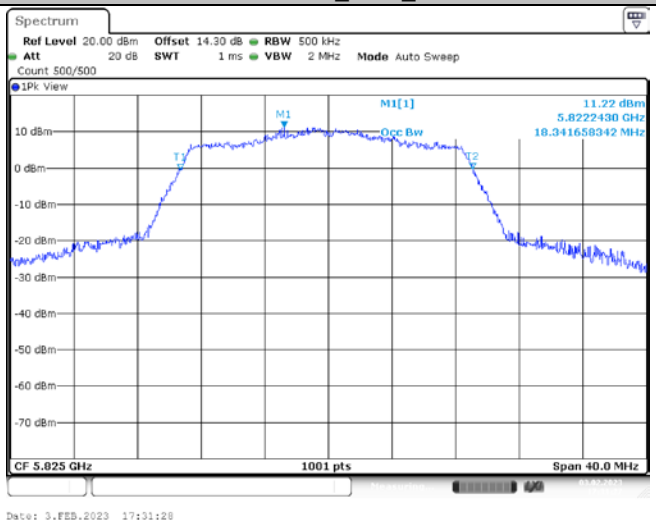
11AC20SISO_Ant1_5745



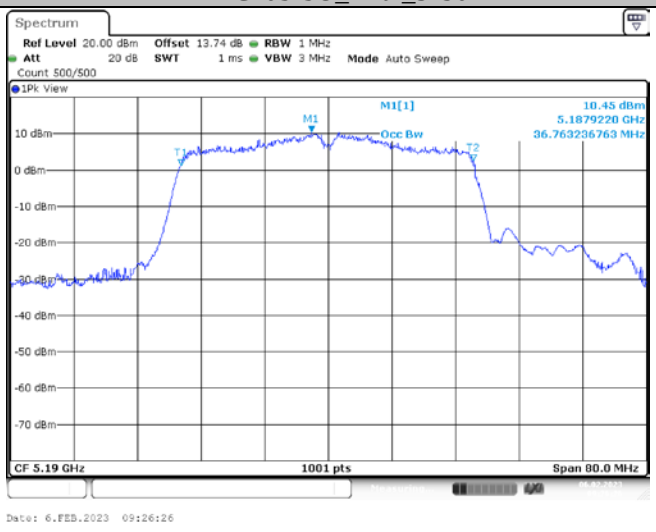
11AC20SISO_Ant1_5785



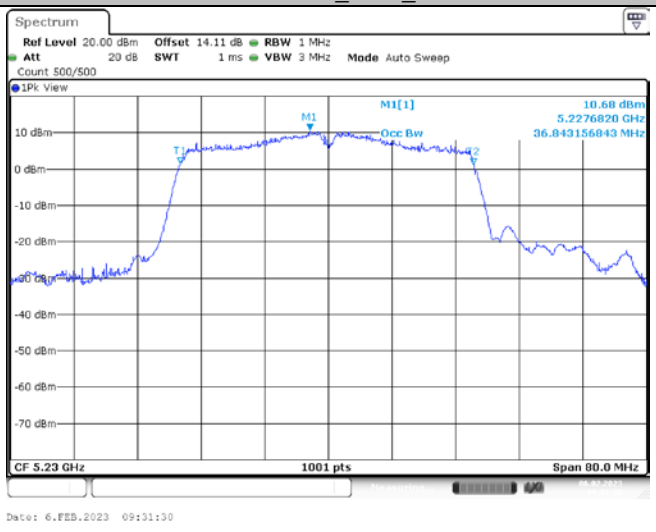
11AC20SISO_Ant1_5825



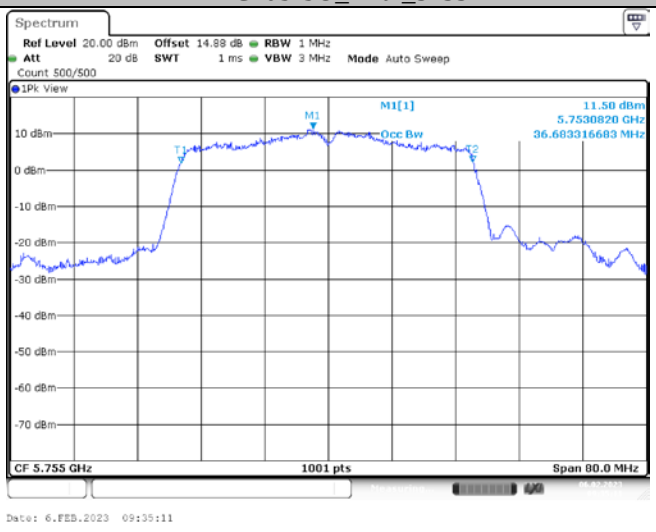
11AC40SISO_Ant1_5190



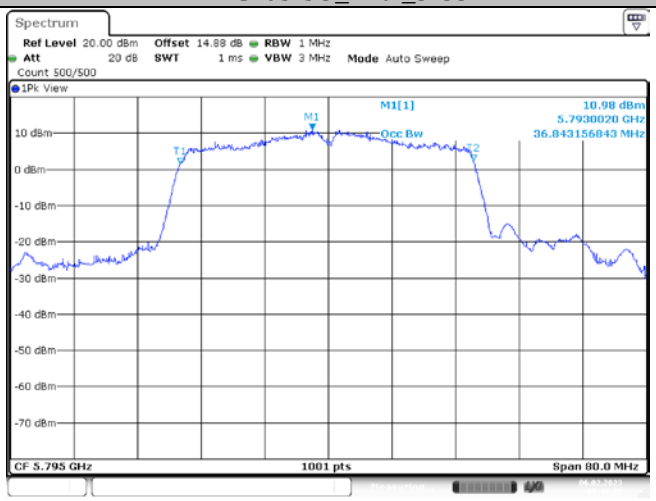
11AC40SISO_Ant1_5230



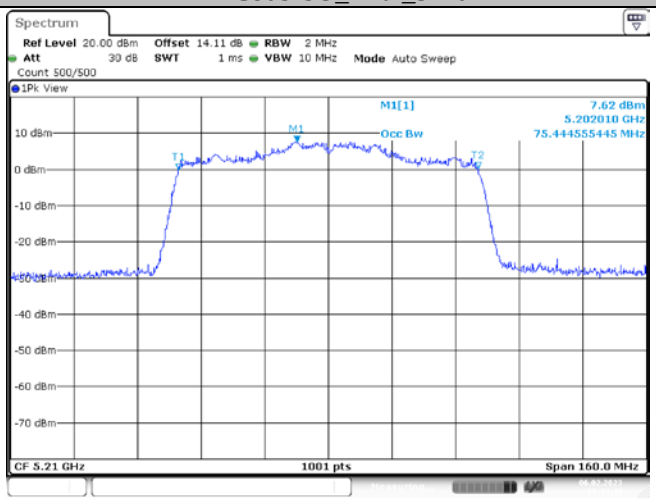
11AC40SISO_Ant1_5755



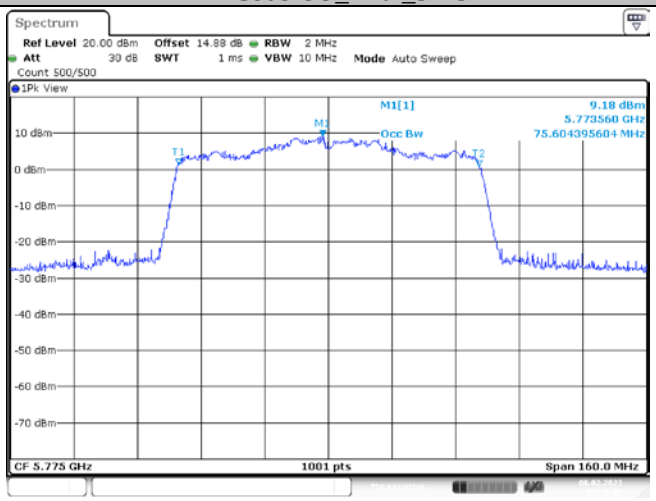
11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5210



11AC80SISO_Ant1_5775



Appendix A3: Min Emission Bandwidth

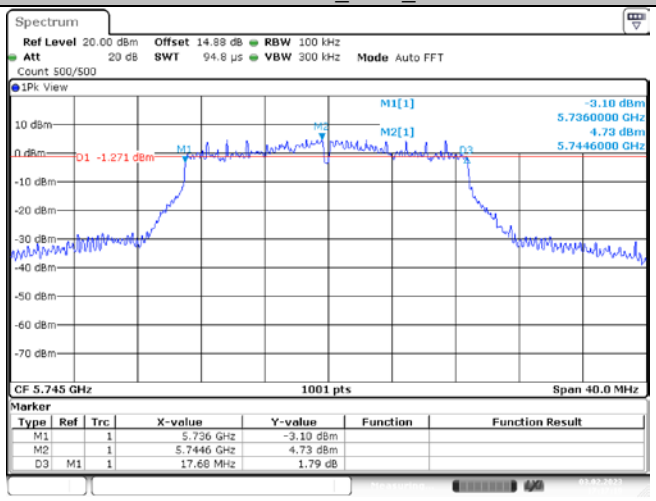
Test Result

5725~5850 MHz

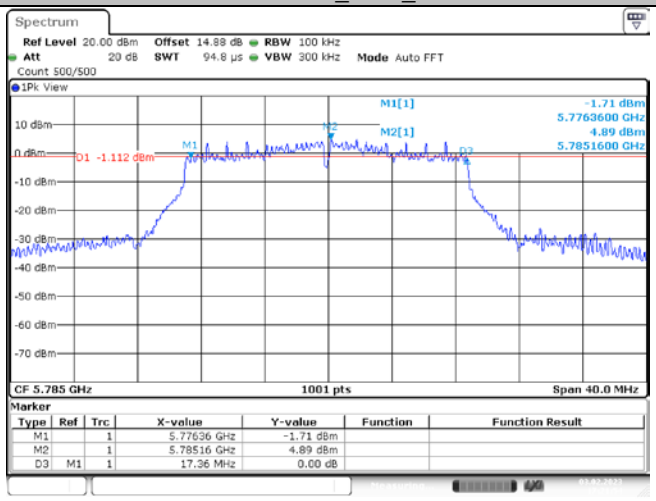
Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11AC20SISO	Ant1	5745	17.680	5736.000	5753.680	0.5	PASS
		5785	17.360	5776.360	5793.720	0.5	PASS
		5825	17.320	5816.040	5833.360	0.5	PASS
11AC40SISO	Ant1	5755	36.000	5736.920	5772.920	0.5	PASS
		5795	36.000	5776.920	5812.920	0.5	PASS
11AC80SISO	Ant1	5775	75.520	5737.080	5812.600	0.5	PASS

Test Graphs

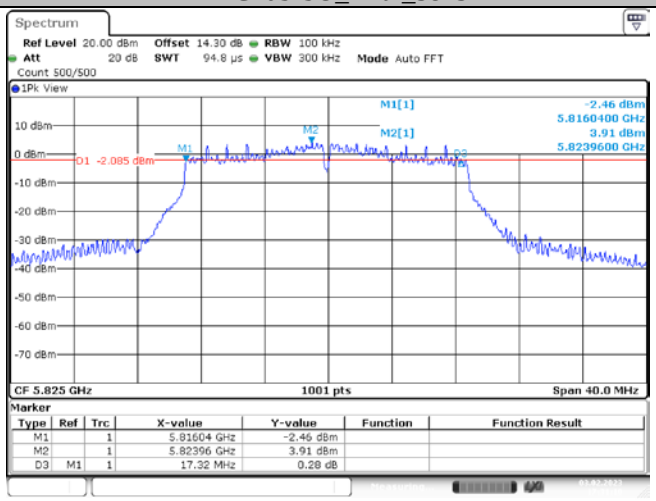
11AC20SISO_Ant1_5745



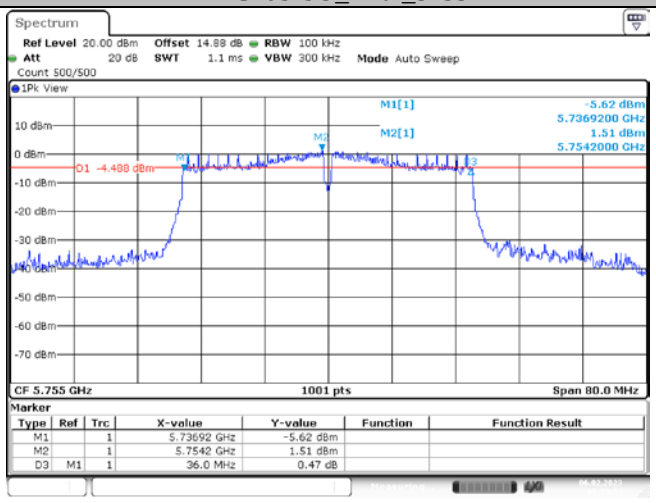
11AC20SISO_Ant1_5785



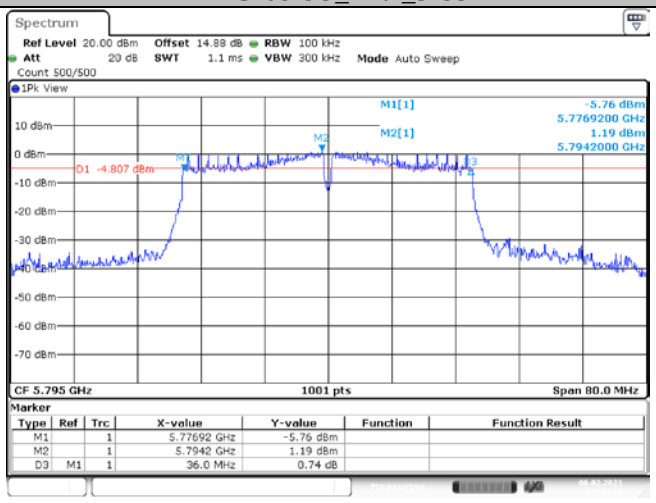
11AC20SISO_Ant1_5825



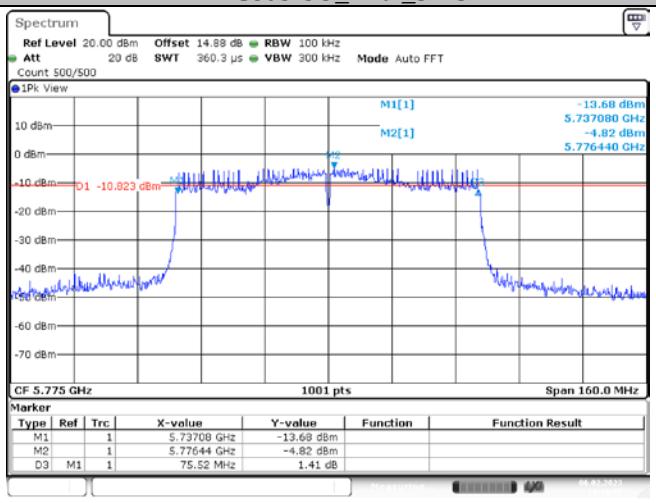
11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5775



Appendix B: Maximum Conducted Output Power

Test Result

5150 MHz – 5250 MHz

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11AC20SISO	Ant1	5180	14.78	<=23.98	PASS
		5200	15.05	<=23.98	PASS
		5240	15.19	<=23.98	PASS
11AC40SISO	Ant1	5190	13.89	<=23.98	PASS
		5230	14.15	<=23.98	PASS
11AC80SISO	Ant1	5210	12.63	<=23.98	PASS

5725MHz – 5850 MHz

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11AC20SISO	Ant1	5745	15.98	<=30	PASS
		5785	15.59	<=30	PASS
		5825	15.00	<=30	PASS
11AC40SISO	Ant1	5755	14.49	<=30	PASS
		5795	14.37	<=30	PASS
11AC80SISO	Ant1	5775	14.22	<=30	PASS

Note: The Duty Cycle Factor is compensated in the Result.

Appendix C: Maximum Power Spectral Density

Test Result

5150 MHz – 5250 MHz

Test Mode	Antenna	Channel	Result[dBm/MHz]	Limit[dBm/MHz]	Verdict
11AC20SISO	Ant1	5180	4.77	<=11	PASS
		5200	5.57	<=11	PASS
		5240	5.55	<=11	PASS
11AC40SISO	Ant1	5180	1.06	<=11	PASS
		5200	1.44	<=11	PASS
11AC80SISO	Ant1	5240	-3.10	<=11	PASS

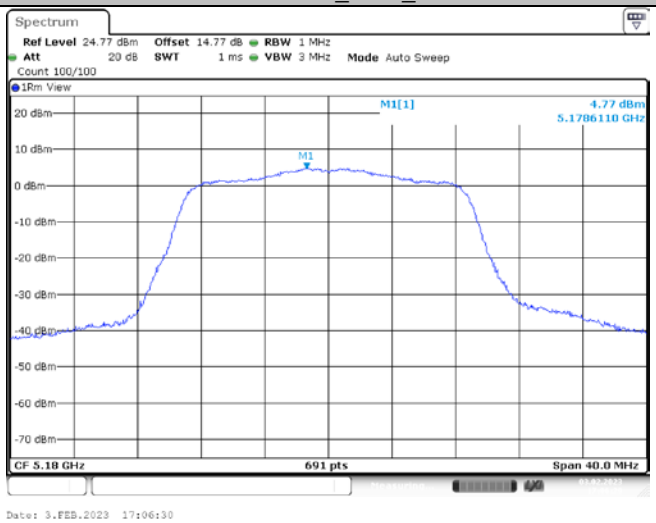
5725MHz – 5850 MHz

Test Mode	Antenna	Channel	Result[dBm/500kHz]	Limit[dBm/500kHz]	Verdict
11AC20SISO	Ant1	5745	3.28	<=30	PASS
		5785	3.04	<=30	PASS
		5825	2.62	<=30	PASS
11AC40SISO	Ant1	5755	-0.79	<=30	PASS
		5795	-1.12	<=30	PASS
11AC80SISO	Ant1	5775	-3.50	<=30	PASS

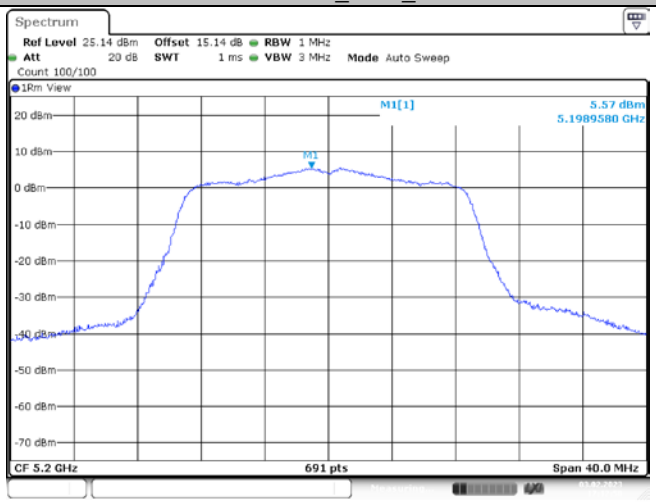
Note: The Duty Cycle Factor is compensated in the graph.

Test Graphs

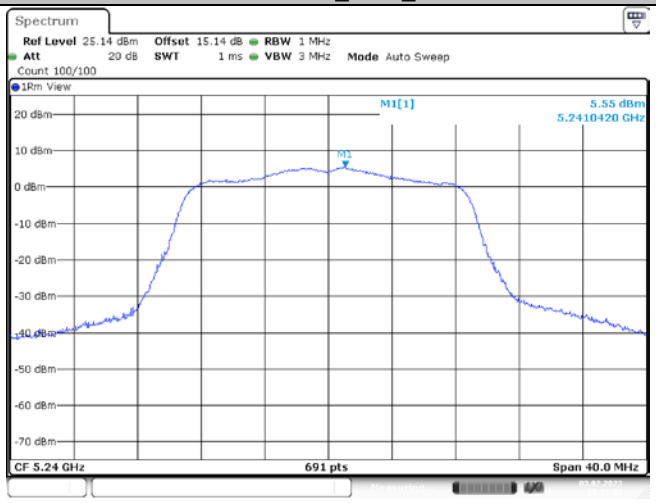
11AC20SISO_Ant1_5180



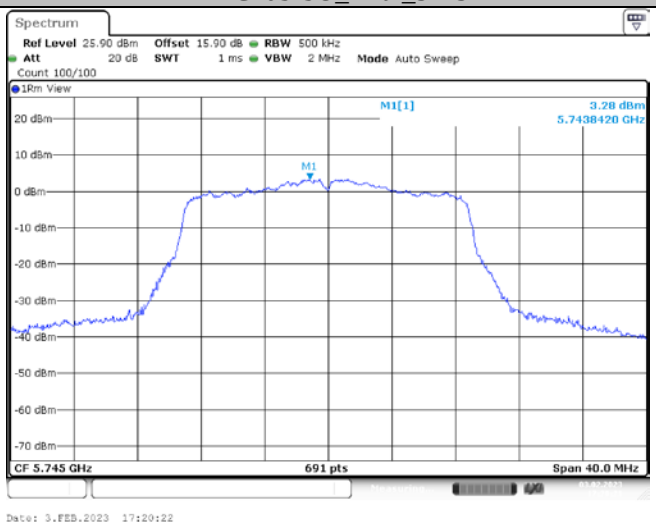
11AC20SISO_Ant1_5200



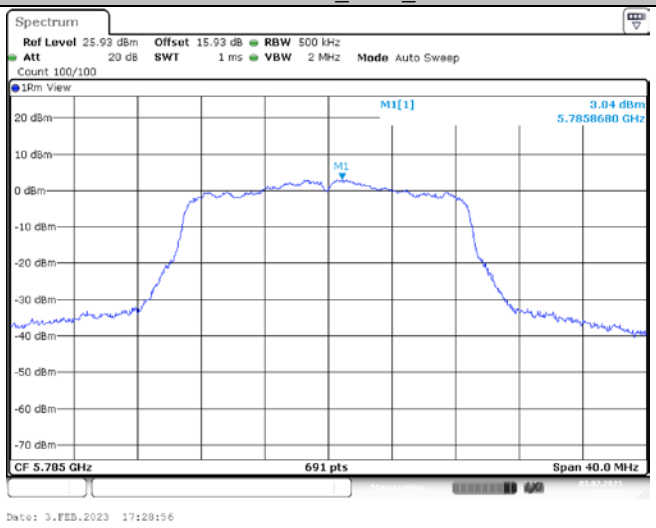
11AC20SISO_Ant1_5240



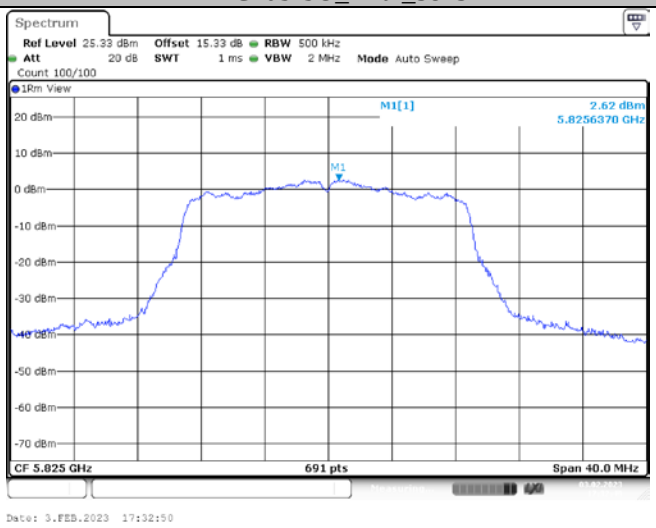
11AC20SISO_Ant1_5745



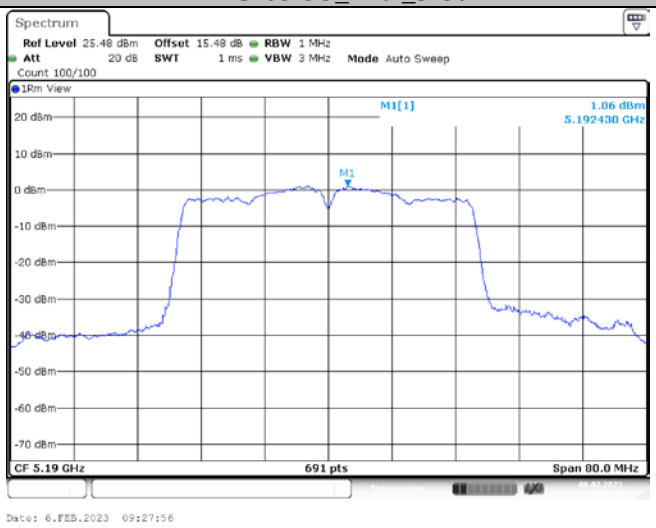
11AC20SISO_Ant1_5785



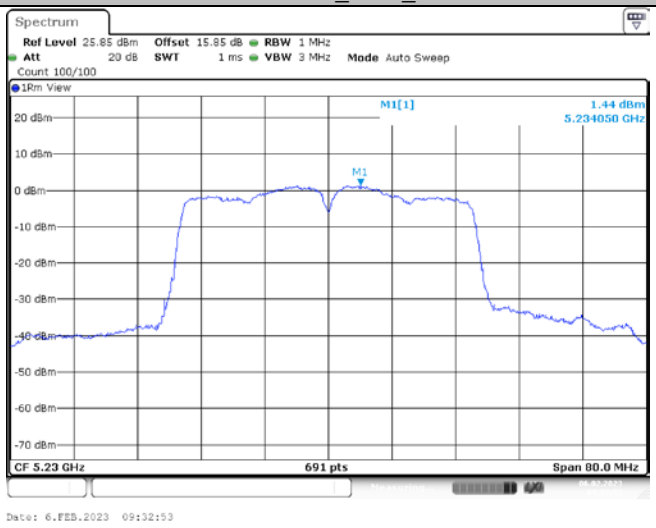
11AC20SISO_Ant1_5825



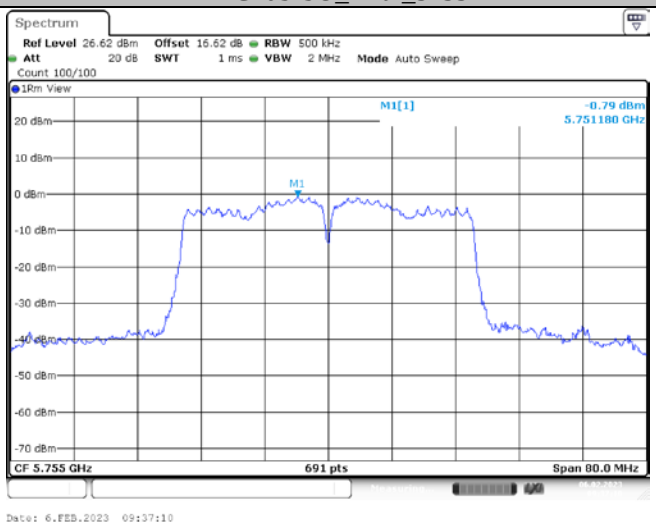
11AC40SISO_Ant1_5190



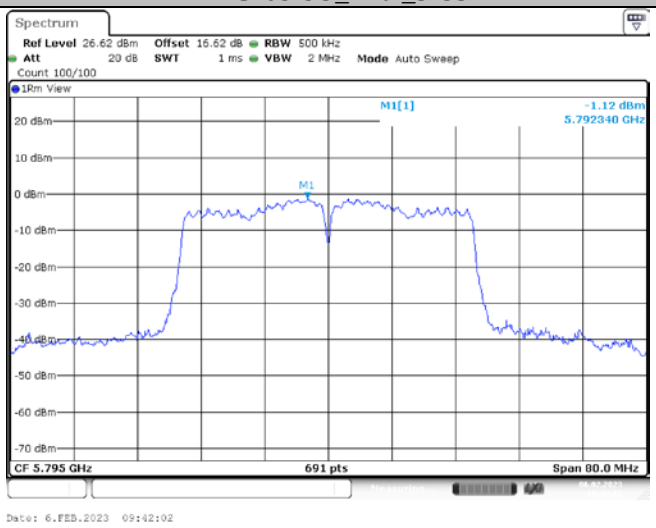
11AC40SISO_Ant1_5230



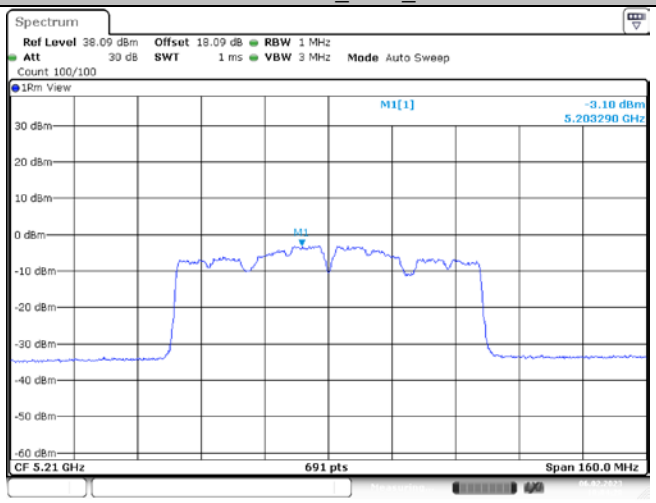
11AC40SISO_Ant1_5755



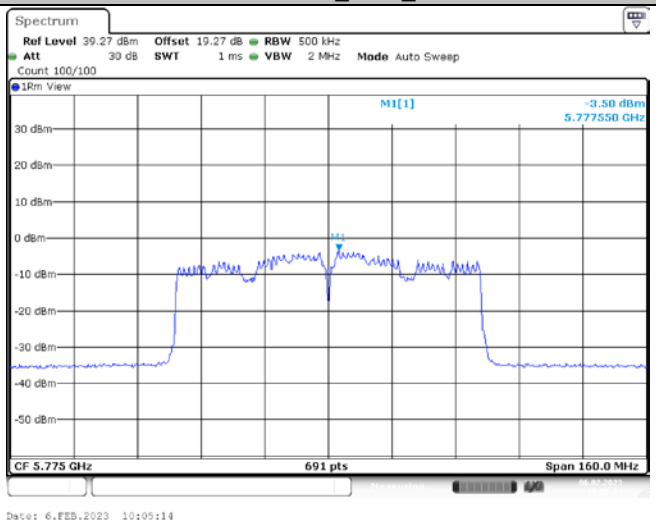
11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5210



11AC80SISO_Ant1_5775



Appendix D: Duty Cycle

Test Result

5150~5250MHz

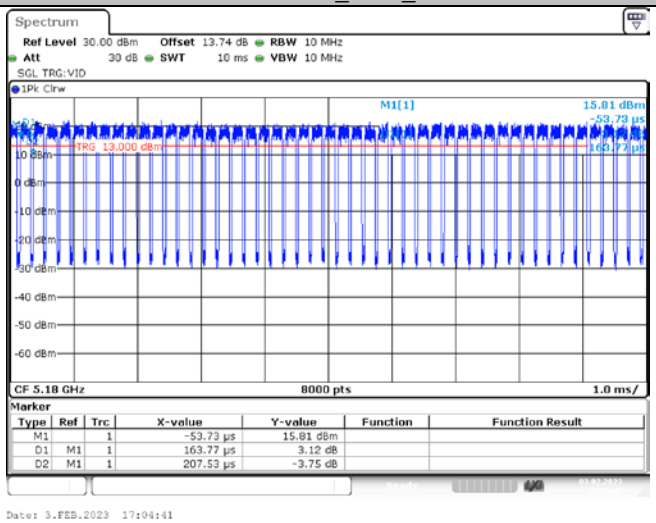
Test Mode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11AC20SISO	Ant1	5180	0.16	0.21	78.92
		5200	0.16	0.21	78.92
		5240	0.16	0.21	78.92
11AC40SISO	Ant1	5190	0.09	0.13	66.98
		5230	0.09	0.13	66.98
11AC80SISO	Ant1	5210	0.04	0.10	40.00

5725~5850MHz

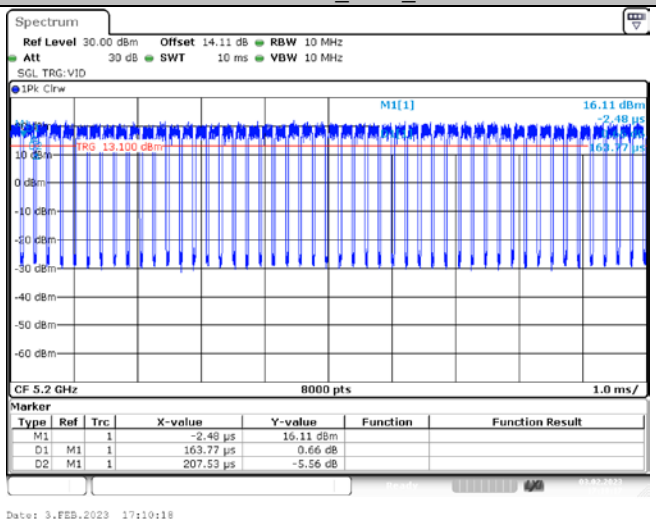
Test Mode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11AC20SISO	Ant1	5745	0.17	0.21	79.04
		5785	0.16	0.21	78.44
		5825	0.16	0.21	78.92
11AC40SISO	Ant1	5755	0.09	0.13	66.98
		5795	0.09	0.13	66.98
11AC80SISO	Ant1	5775	0.04	0.11	36.36

Test Graphs

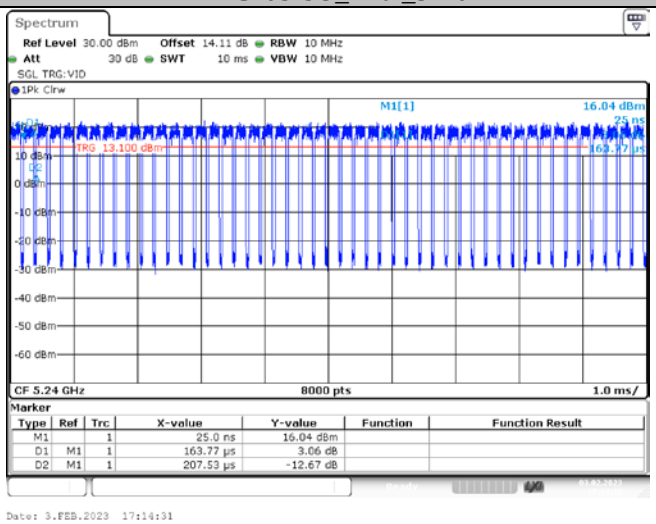
11AC20SISO_Ant1_5180



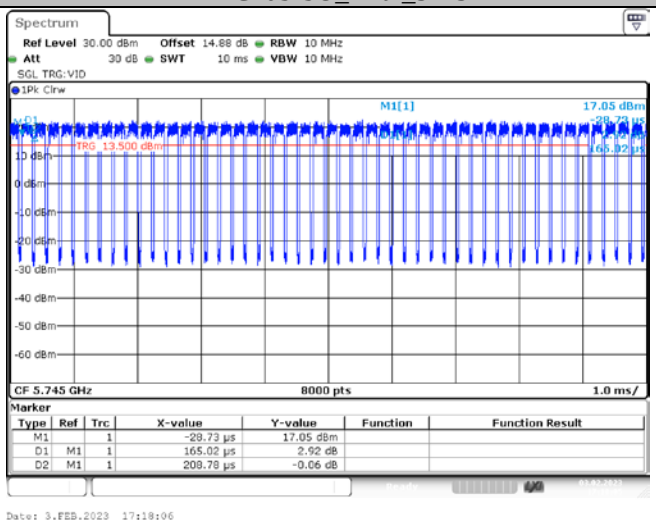
11AC20SISO_Ant1_5200



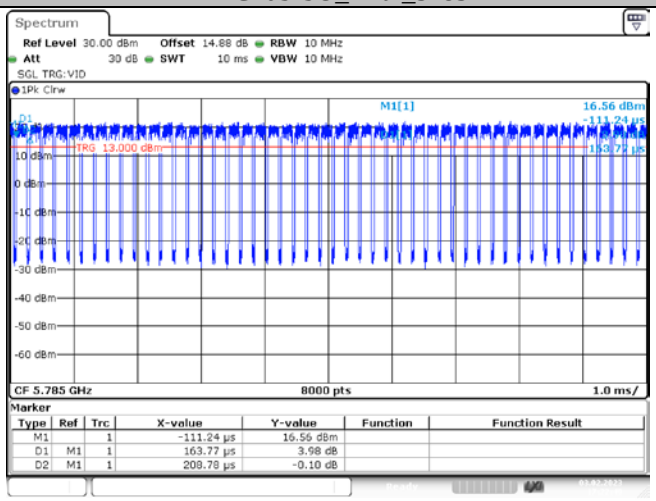
11AC20SISO_Ant1_5240



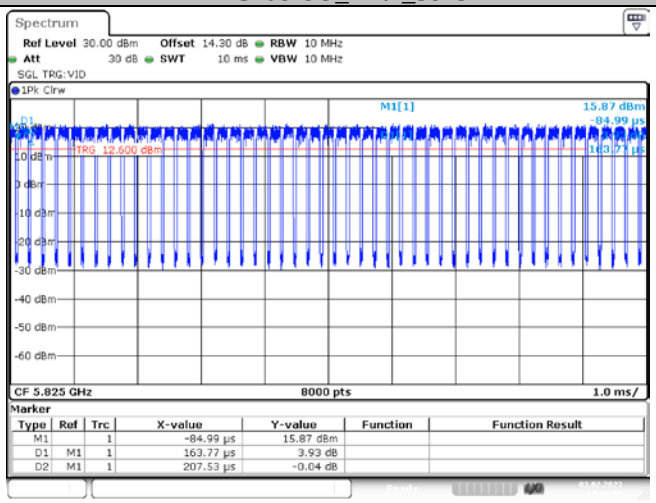
11AC20SISO_Ant1_5745



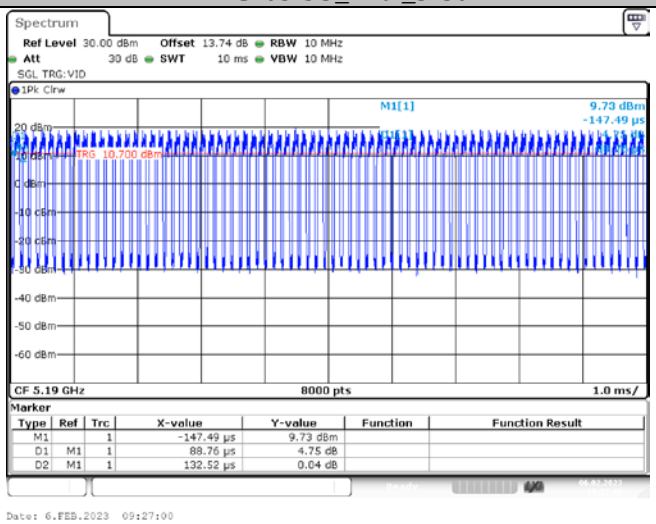
11AC20SISO_Ant1_5785



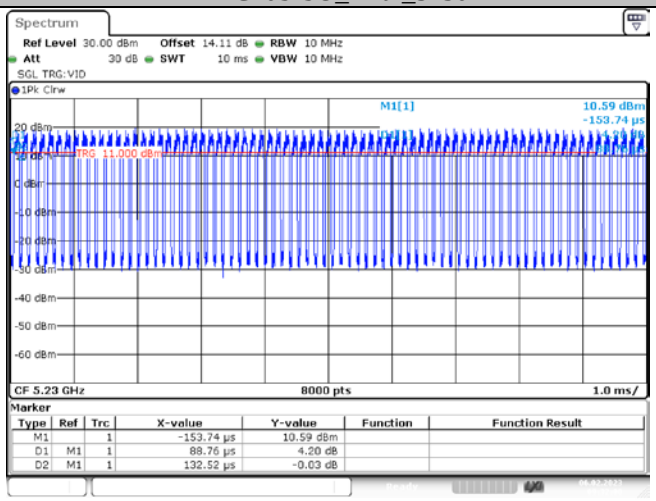
11AC20SISO_Ant1_5825



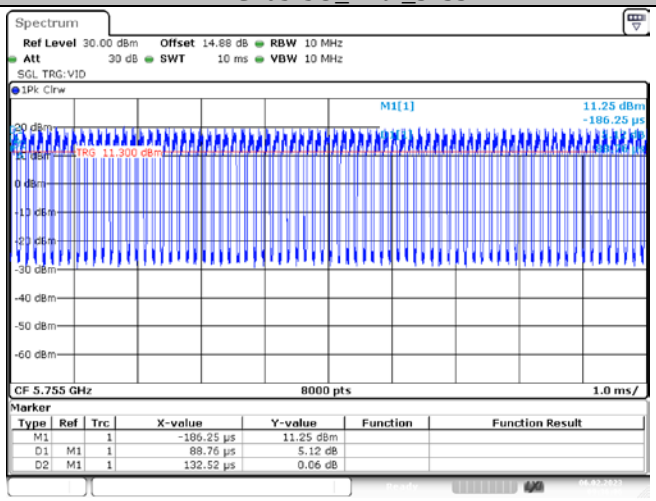
11AC40SISO_Ant1_5190



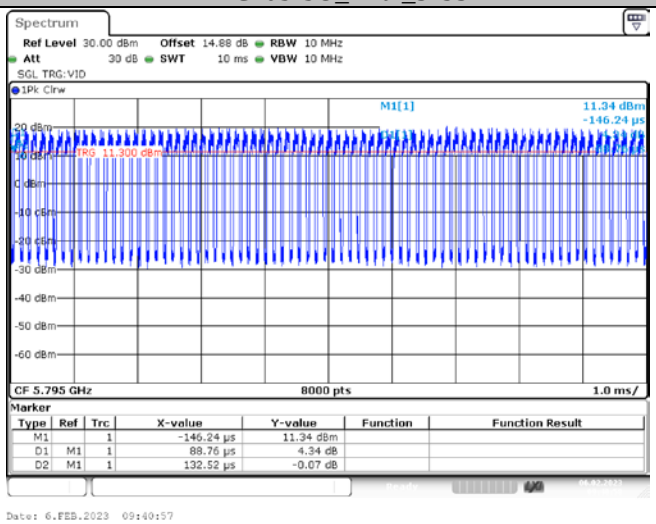
11AC40SISO_Ant1_5230



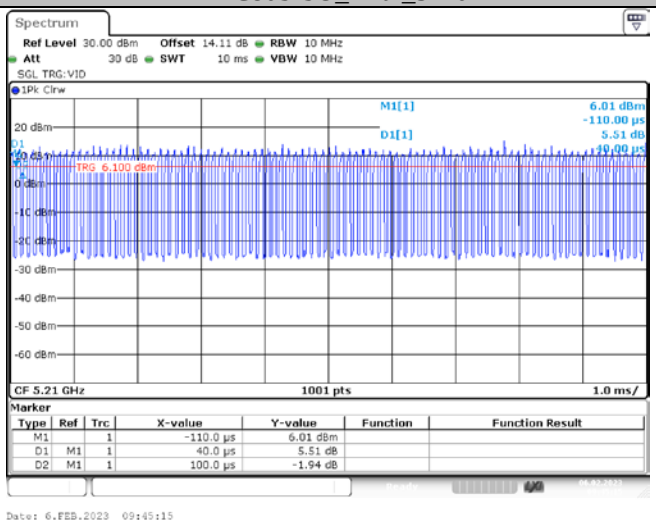
11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5210



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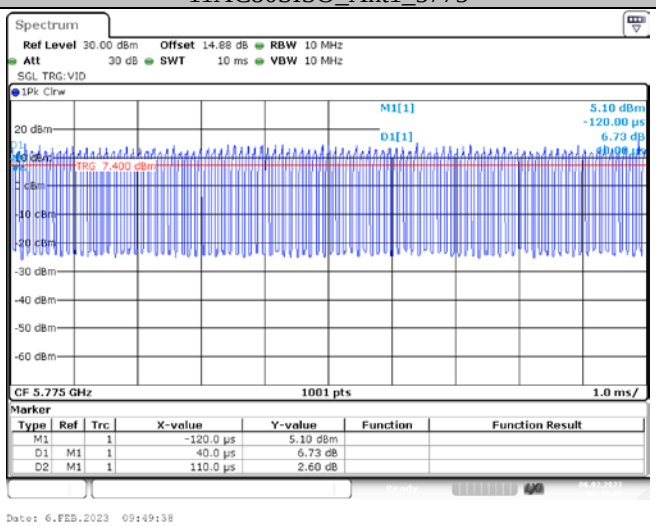

******* END OF REPORT *******