

TEST REPORT

Applicant Name : Shenzhen Huion Trend Technology Co., Ltd.
Address : Huion Science and Technology Park, Keji 1st Road, Bao'an District, Shenzhen China
Report Number: RA221230-64660E-RF-00
FCC ID: 2A8IG-D226

Test Standard (s)

FCC PART 15.407

Sample Description

Product Type: Creative Pen Computer
Model No.: KS1601
Multiple Model(s) No.: KS1301,KT1001,KT1101,KT1201,KT1601
Trade Mark:



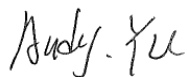
Date Received: 2022/12/30
Report Date: 2023/04/10

Test Result:	Pass*
--------------	-------

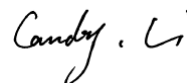
* In the configuration tested, the EUT complied with the standards above.

Prepared and Checked By:

Approved By:



Andy Yu
EMC Engineer



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.

This report cannot be reproduced except in full, without prior written approval of the Company. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

Shenzhen Accurate Technology Co., Ltd.

1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China
Tel: +86 755-26503290 Fax: +86 755-26503396 Web: www.atc-lab.com

TABLE OF CONTENTS

DOCUMENT REVISION HISTORY	4
GENERAL INFORMATION.....	5
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	5
OBJECTIVE	5
TEST METHODOLOGY	5
MEASUREMENT UNCERTAINTY	6
TEST FACILITY	6
SYSTEM TEST CONFIGURATION	7
DESCRIPTION OF TEST CONFIGURATION	7
EUT EXERCISE SOFTWARE	8
DUTY CYCLE	10
EQUIPMENT MODIFICATIONS	10
SUPPORT EQUIPMENT LIST AND DETAILS	10
EXTERNAL I/O CABLE.....	11
BLOCK DIAGRAM OF TEST SETUP	11
SUMMARY OF TEST RESULTS	13
TEST EQUIPMENT LIST	14
FCC §1.1307(B)& §2.1093 - RF EXPOSURE INFORMATION.....	16
APPLICABLE STANDARD	16
TEST RESULT	16
FCC §15.203 – ANTENNA REQUIREMENT.....	17
APPLICABLE STANDARD	17
ANTENNA CONNECTOR CONSTRUCTION	17
FCC §15.407 (B) (6) §15.207 (A) – CONDUCTED EMISSIONS	18
APPLICABLE STANDARD	18
EUT SETUP	18
EMI TEST RECEIVER SETUP.....	18
TEST PROCEDURE	18
CORRECTED FACTOR & MARGIN CALCULATION	19
TEST DATA	19
§15.205& §15.209&§15.407(B)– UNDESIRABLE EMISSION.....	22
APPLICABLE STANDARD	22
EUT SETUP	22
EMI TEST RECEIVER& SPECTRUM ANALYZER SETUP	23
TEST PROCEDURE	23
FACTOR& MARGIN CALCULATION	24
TEST DATA	24
FCC §15.407(A),(E) – 26DB & 6DB EMISSION BANDWIDTH.....	65
APPLICABLE STANDARD	65
TEST PROCEDURE	65
TEST DATA	66

FCC §15.407(A)–CONDUCTED TRANSMITTER OUTPUT POWER.....	67
APPLICABLE STANDARD	67
TEST PROCEDURE	67
TEST DATA	68
FCC §15.407(A)- POWER SPECTRAL DENSITY	69
TEST PROCEDURE	69
TEST DATA	70
APPENDIX	71
APPENDIX A1: EMISSION BANDWIDTH	71
APPENDIX A2: OCCUPIED CHANNEL BANDWIDTH.....	125
APPENDIX A3: MIN EMISSION BANDWIDTH.....	192
APPENDIX B: DUTY CYCLE	207
APPENDIX C: MAXIMUM CONDUCTED OUTPUT POWER	231
APPENDIX D: MAXIMUM POWER SPECTRAL DENSITY	244

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	RA221230-64660E-RF-00	Original Report	2023-04-10

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product	Creative Pen Computer
Tested Model	KS1601
Multiple Models	KS1301,KT1001,KT1101,KT1201,KT1601 (model difference see product declaration letter of similarity)
Frequency Range	5G Wi-Fi: 5150~5250MHz ; 5250-5350MHz ; 5470-5725MHz ; 5725~5850 MHz
Mode	802.11a/n20/n40/ac20/ac40/ac80/ax20/ax40/ax80
Maximum Conducted Average Output Power	5150-5250MHz: 16.90dBm 5250-5350MHz: 17.55dBm 5470-5725MHz: 18.98dBm 5725-5850MHz: 17.93dBm
Modulation Technique	OFDM, OFDMA
Antenna Specification*	ANT1: 3.92dBi, ANT2: 3.92dBi(It is provided by the applicant)
Voltage Range	DC 15.4V from battery or DC 5V/9V/12V/15V/20V from adapter
Sample serial number	1WNZ for Conducted and Radiated Emissions Test 1WO0 for RF Conducted Test (Assigned by ATC)
Sample/EUT Status	Good condition
Adapter Information	Model: RH-PD65W Input: AC 100-240V,50/60Hz,1.5A Output: DC 5V,3A/9V,3A/12V,3A/15V,3A/20V,3.25A,65W max

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 Shenzhen Accurate Technology Co., Ltd. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Each test item follows test standards and with no deviation.

Measurement Uncertainty

Parameter		Uncertainty
Occupied Channel Bandwidth		5%
RF Frequency		0.082×10^{-7}
RF output power, conducted		0.73dB
Unwanted Emission, conducted		1.6dB
AC Power Lines Conducted Emissions		2.72dB
Emissions, Radiated	9kHz - 30MHz	2.66dB
	30MHz - 1GHz	4.28dB
	1GHz - 18GHz	4.98dB
	18GHz -26.5GHz	5.06dB
	26.5GHz -40GHz	4.72dB
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 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 429 7.01.

Listed by Innovation, Science and Economic Development Canada (ISED), 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.

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 802.11a, 802.11n20/ac20/ax20 mode: channel 36, 40, 48 were tested; For 802.11n40/ac40/ax40mode: channel 38, 46 were tested. For 802.11ac80/ax80 mode, channel 42 was tested.

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 802.11a, 802.11n20/ac20/ax20 mode: channel 52, 56, 64 were tested; For 802.11n40/ac40/ax40mode: channel 54, 62 were tested. For 802.11ac80/ax80 mode, channel 58 was tested.

For 5470-5725MHz Band, 21 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	138	5690
116	5580	140	5700
118	5590	142	5710
120	5600	144	5720
122	5610	/	/

For 802.11a, 802.11n20/ac20/ax20 mode: channel 100, 116, 140, 144 were tested;

For 802.11n40/ac40/ax40mode: channel 102, 110, 134, 142 were tested.

For 802.11ac80/ax80 mode, channel 106, 122, 138was 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 802.11a, 802.11n20/ac20/ax20 mode: channel 149, 157, 165 were tested; For 802.11n40/ac40/ax40mode: channel 151, 159 were tested. For 802.11ac80/ax80 mode, channel 155 was tested.

EUT Exercise Software

“AX Series MP Toolkit.exe” exercise software was used. The software and power level was provided by the applicant.

The worst case was performed under:

U-NII	TestMode	Data rate	RU Size	RUIndex	Power Level*		
					Low Channel	Middle Channel	High Channel
5150 – 5250MHz	802.11a	6 Mbps	NA	NA	16	16	16
	802.11n20	MCS0	NA	NA	16	16	16
	802.11n40	MCS0	NA	NA	16	/	16
	802.11ac20	MCS0	NA	NA	16	16	16
	802.11ac40	MCS0	NA	NA	16	/	16
	802.11ac80	MCS0	NA	NA	/	16	/
	11AX20	MCS0	26Tone	RU0	8	8	8
			52Tone	RU37	10	10	10
			106Tone	RU53	12	12	12
			242Tone	RU61	16	16	16
	11AX40	MCS0	26Tone	RU0	6	/	6
			52Tone	RU37	8	/	8
			106Tone	RU53	10	/	10
			242Tone	RU61	13	/	13
			484Tone	RU65	16	/	16
	11AX80	MCS0	26Tone	RU0	/	4	/
			52Tone	RU37	/	6	/
			106Tone	RU53	/	8	/
			242Tone	RU61	/	10	/
			484Tone	RU65	/	13	/
			996Tone	RU67	/	16	/

U-NII	TestMode	Data rate	RU Size	RUIndex	Power Level*		
					Low Channel	Middle Channel	High Channel
5250 – 5350MHz	802.11a	6 Mbps	NA	NA	16	16	16
	802.11n20	MCS0	NA	NA	16	16	16
	802.11n40	MCS0	NA	NA	16	/	16
	802.11ac20	MCS0	NA	NA	16	16	16
	802.11ac40	MCS0	NA	NA	16	/	16
	802.11ac80	MCS0	NA	NA	/	16	/
	11AX20	MCS0	26Tone	RU0	8	10	10
			52Tone	RU37	10	10	10
			106Tone	RU53	12	10	10
			242Tone	RU61	16	16	16
	11AX40	MCS0	26Tone	RU0	6	/	6
			52Tone	RU37	8	/	8
			106Tone	RU53	10	/	10
			242Tone	RU61	13	/	13
			484Tone	RU65	16	/	16
	11AX80	MCS0	26Tone	RU0	/	4	/
			52Tone	RU37	/	6	/
			106Tone	RU53	/	8	/
			242Tone	RU61	/	10	/
			484Tone	RU65	/	13	/
			996Tone	RU67	/	16	/

U-NII	TestMode	Data rate	RU Size	RUIndex	Power Level*			
					Low Channel	Middle Channel	High Channel	
5470-5725MHz	802.11a	6 Mbps	NA	NA	16	16	16	16
	802.11n20	MCS0	NA	NA	16	16	16	16
	802.11n40	MCS0	NA	NA	16	16	16	16
	802.11ac20	MCS0	NA	NA	16	16	16	16
	802.11ac40	MCS0	NA	NA	16	16	16	16
	802.11ac80	MCS0	NA	NA	16	16	16	
	11AX20	MCS0	26Tone	RU0	8	8	8	8
			52Tone	RU37	10	10	10	10
			106Tone	RU53	12	12	12	12
			242Tone	RU61	16	16	16	16
	11AX40	MCS0	26Tone	RU0	6	6	6	6
			52Tone	RU37	8	8	8	8
			106Tone	RU53	10	10	10	10
			242Tone	RU61	13	13	13	13
			484Tone	RU65	16	16	16	16
	11AX80	MCS0	26Tone	RU0	4	4	4	
			52Tone	RU37	6	6	6	
			106Tone	RU53	8	8	8	
			242Tone	RU61	10	10	10	
			484Tone	RU65	13	13	13	
			996Tone	RU67	16	16	16	

U-NII	TestMode	Data rate	RU Size	RUIndex	Power Level		
					Low Channel	Middle Channel	High Channel
5725-5850MHz	802.11a	6 Mbps	NA	NA	16	16	16
	802.11n20	MCS0	NA	NA	16	16	16
	802.11n40	MCS0	NA	NA	16	/	16
	802.11ac20	MCS0	NA	NA	16	16	16
	802.11ac40	MCS0	NA	NA	16	/	16
	802.11ac80	MCS0	NA	NA	/	16	/
	11AX20	MCS0	26Tone	RU0	8	8	8
			52Tone	RU37	10	10	10
			106Tone	RU53	12	12	12
			242Tone	RU61	16	16	16
	11AX40	MCS0	26Tone	RU0	6	/	6
			52Tone	RU37	8	/	8
			106Tone	RU53	10	/	10
			242Tone	RU61	13	/	13
			484Tone	RU65	16	/	16
	11AX80	MCS0	26Tone	RU0	/	4	/
			52Tone	RU37	/	6	/
			106Tone	RU53	/	8	/
			242Tone	RU61	/	10	/
			484Tone	RU65	/	13	/
			996Tone	RU67	/	16	/

For Wi-Fi mode, EUT have two antennas, the 802.11 a/n/ac/ax mode support SISO/MIMO transmitting. According pre-scan, the worst case MIMO mode was selected to test and record in report.

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

All the antenna ports have the same power level.

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

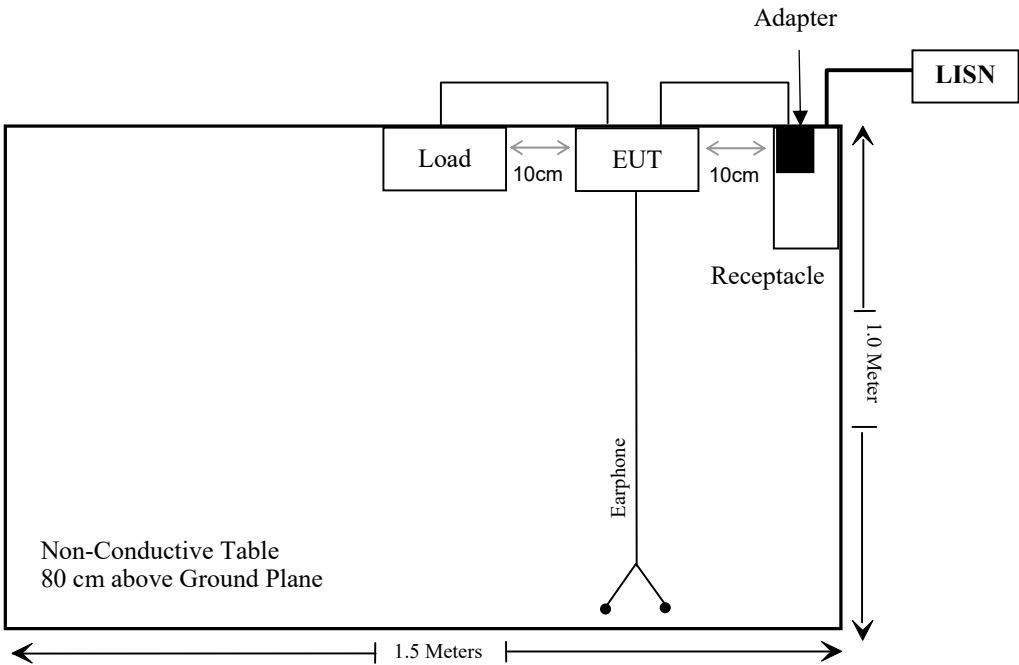
Manufacturer	Description	Model	Serial Number
Unknown	Earphone	Unknown	Unknown
ATC	Load	Unknown	Unknown

External I/O Cable

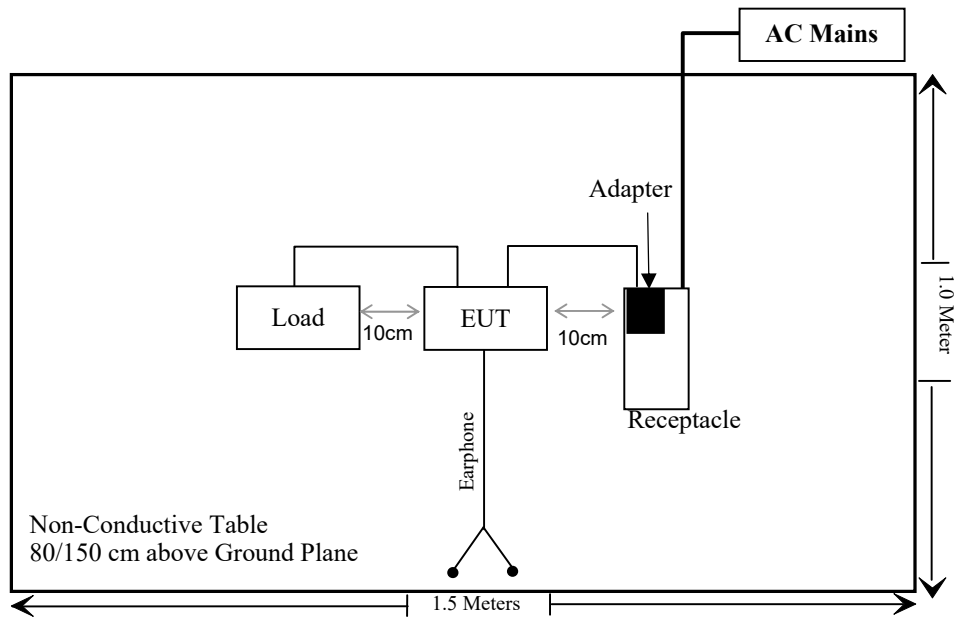
Cable Description	Length (m)	From Port	To
Un-shielding Un-Detachable AC Cable	1.2	Receptacle	LISN/AC Mains
Un-shielding Detachable Type-C Cable	1.2	Adapter	EUT
Un-shielding Un-Detachable DC Cable	0.2	Load	EUT

Block Diagram of Test Setup

For conducted emission:



For Radiated Emissions:



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1307 (b)& §2.1093	RF Exposure (SAR)	Compliant
§15.203	Antenna Requirement	Compliant
§15.407(b)(9)& §15.207(a)	Conducted Emissions	Compliant
§15.205& §15.209 &§15.407(b)	Undesirable Emission& Restricted Bands	Compliant
§15.407(a) (e)	26 dB Emission Bandwidth& 6dB Bandwidth	Compliant
§15.407(a)	Conducted Transmitter Output Power	Compliant
§15.407 (a)	Power Spectral Density	Compliant
§15.407 (h)	Transmit Power Control (TPC)	Not Applicable
§15.407 (h)	Dynamic Frequency Selection (DFS)	Compliant*

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

Compliant*: Please refer to the report: RA221230-64660E-RFC

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Conducted emission 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
Conducted Emission Test Software: e3 19821b (V9)					
Radiated emission 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
Radiated Emission Test Software: e3 19821b (V9)					
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
Unknown	RF Coaxial Cable	No.16	N650	2022/11/25	2023/11/24
CD	Band Reject Filter	BRM-5.15/5.35g-45	075	2022/11/25	2023/11/24
CD	Band Reject Filter	BRM-5.725/5.875G-45	065	2022/11/25	2023/11/24

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
RF Conducted Test					
Rohde&Schwarz	Spectrum Analyzer	FSV-40	101590	2022/11/25	2023/11/24
Tonscend	RF Control Unit	JS0806-2	19G8060182	2022/10/24	2023/10/23
Agilent	USB wideband power sensor	U2021XA	MY54250003	2022/06/27	2023/06/26
HP	20dB Attenuator	8491A	53857	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.31	RF-01	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 INFORMATION

Applicable Standard

FCC§1.1307 and §2.1093.

Test Result

Compliant, please refer to the SAR report: CR230206891-20A

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:

- 1) Antenna must be permanently attached to the unit.
- 2) 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 two internal antennas arrangement for 5G Wi-Fi which were permanently attached. Please refer to the EUT photos.

Antenna	Antenna Type	Antenna Gain	Impedance	Frequency Range
ANT1	FPC	3.92dBi	50 Ω	5150-5850MHz
ANT2	FPC	3.92dBi	50 Ω	5150-5850MHz

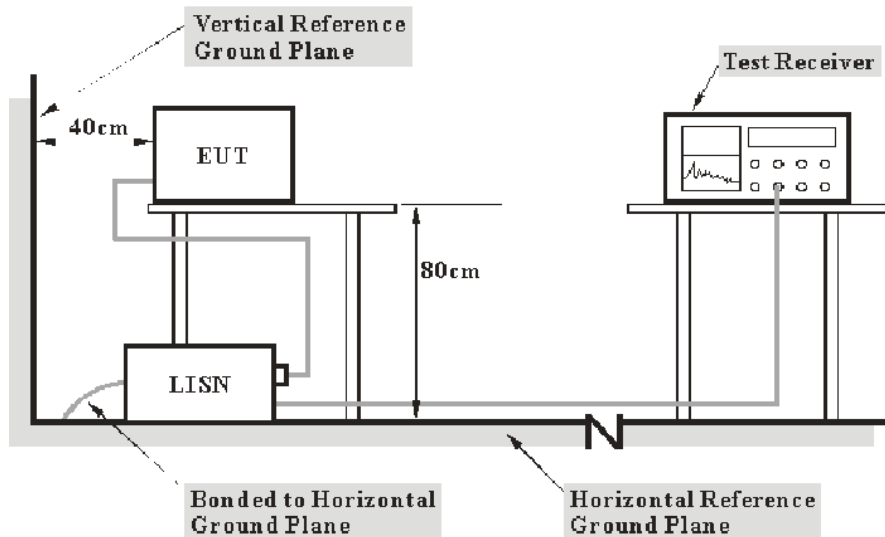
Result: Compliant.

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 10cm.

EMI Test Receiver Setup

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

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

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

Corrected Factor & Margin Calculation

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

$$\text{Transd Factor} = \text{LISN VDF} + \text{Cable Loss}$$

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

$$\begin{aligned}\text{Over Limit} &= \text{Level} - \text{Limit} \\ \text{Level} &= \text{Read Level} + \text{Factor}\end{aligned}$$

Test Data

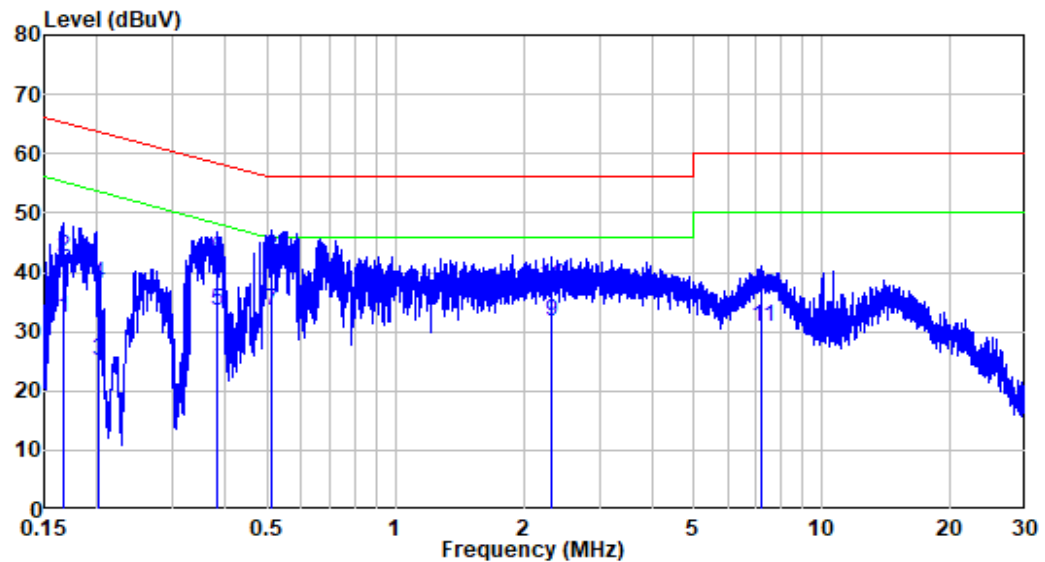
Environmental Conditions

Temperature:	23°C
Relative Humidity:	52%
ATM Pressure:	101.0 kPa

The testing was performed by Lipa on 2023-02-01.

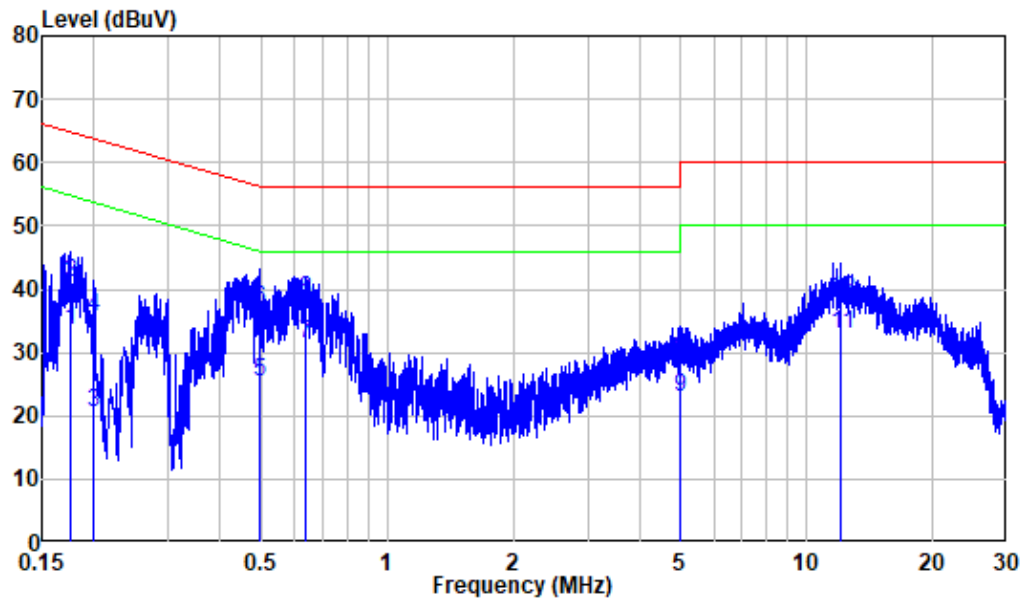
EUT operation mode: Transmitting (worst case is 802.11a, 5200MHz)

AC 120V/60 Hz, Line



Site : Shielding Room
 Condition: Line
 Job No. : RA221230-64660E-RF
 Mode : 5G Wifi
 Power : AC 120V 60Hz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.166	9.90	22.31	32.21	55.14	-22.93	Average
2	0.166	9.90	32.65	42.55	65.14	-22.59	QP
3	0.200	9.90	15.20	25.10	53.59	-28.49	Average
4	0.200	9.90	28.13	38.03	63.59	-25.56	QP
5	0.380	9.83	23.71	33.54	48.28	-14.74	Average
6	0.380	9.83	32.29	42.12	58.28	-16.16	QP
7	0.511	9.82	23.63	33.45	46.00	-12.55	Average
8	0.511	9.82	32.86	42.68	56.00	-13.32	QP
9	2.318	9.92	21.87	31.79	46.00	-14.21	Average
10	2.318	9.92	27.71	37.63	56.00	-18.37	QP
11	7.237	9.97	20.92	30.89	50.00	-19.11	Average
12	7.237	9.97	26.07	36.04	60.00	-23.96	QP

AC 120V/60 Hz, Neutral

Site : Shielding Room
 Condition: Neutral
 Job No. : RA221230-64660E-RF
 Mode : 5G Wifi
 Power : AC 120V 60Hz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.175	9.80	23.79	33.59	54.72	-21.13	Average
2	0.175	9.80	31.37	41.17	64.72	-23.55	QP
3	0.200	9.80	10.71	20.51	53.61	-33.10	Average
4	0.200	9.80	25.88	35.68	63.61	-27.93	QP
5	0.494	9.90	15.59	25.49	46.10	-20.61	Average
6	0.494	9.90	27.03	36.93	56.10	-19.17	QP
7	0.636	9.84	21.71	31.55	46.00	-14.45	Average
8	0.636	9.84	28.48	38.32	56.00	-17.68	QP
9	4.975	9.93	13.06	22.99	46.00	-23.01	Average
10	4.975	9.93	18.65	28.58	56.00	-27.42	QP
11	12.092	10.02	23.02	33.04	50.00	-16.96	Average
12	12.092	10.02	28.21	38.23	60.00	-21.77	QP

§15.205& §15.209&§15.407(B)– UNDESIRABLE EMISSION

Applicable Standard

FCC §15.407 (b); §15.209;§15.205;

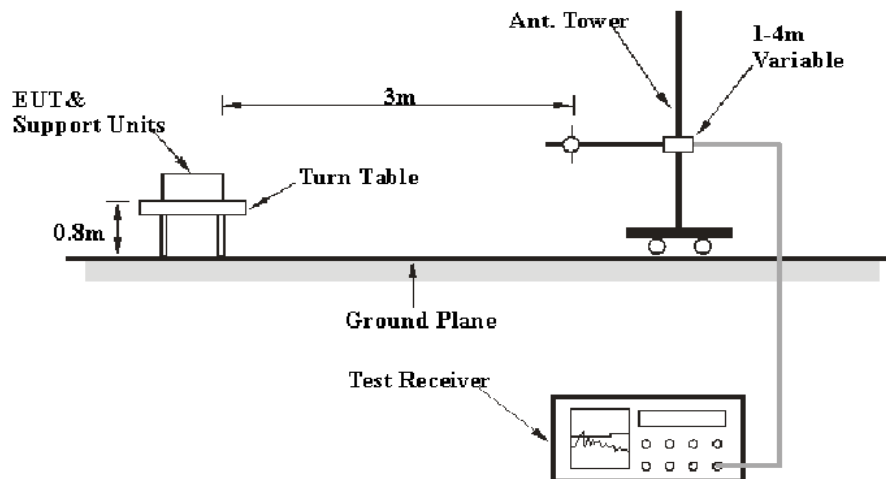
(b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

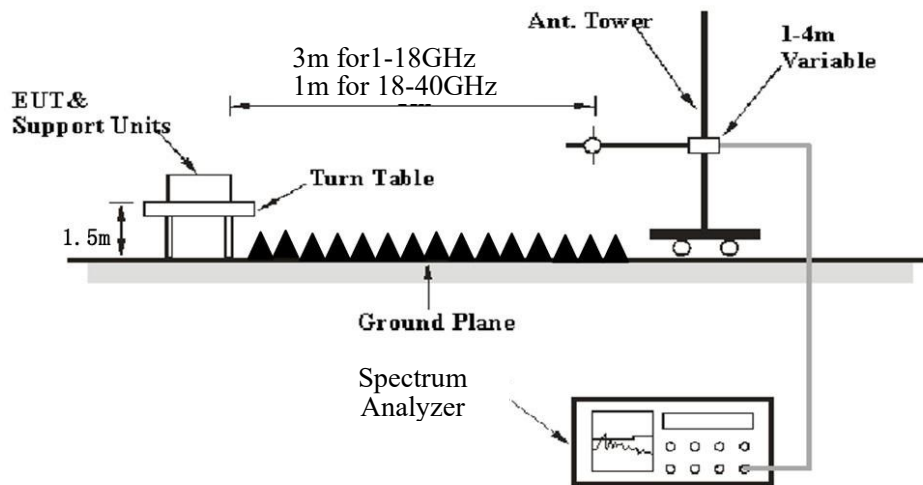
- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (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 1GHz:

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 40cm 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
30MHz – 1000 MHz	100 kHz	300 kHz	120kHz	QP
Above 1 GHz	1MHz	3 MHz	/	PK
	1MHz	10 Hz ^{Note 1}	/	Ave.erage
	1MHz	> 1/T ^{Note 2}	/	Ave.erage

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 Ave.erage detection modes for frequencies above 1GHz.

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;

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

where

$E_{\text{SpecLimit}}$	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
$d_{\text{SpecLimit}}$	is the distance specified by the limit, in m

So the extrapolation factor of 1m is $20 \cdot \log(1/3) = -9.5$ 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:

$$\text{Factor} = \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

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:

$$\begin{aligned} \text{Over Limit/Margin} &= \text{Level} / \text{Corrected Amplitude} - \text{Limit} \\ \text{Level} / \text{Corrected Amplitude} &= \text{Read Level} + \text{Factor} \end{aligned}$$

Test Data

Environmental Conditions

Temperature:	24~25.5°C
Relative Humidity:	52~56%
ATM Pressure:	101.0 kPa

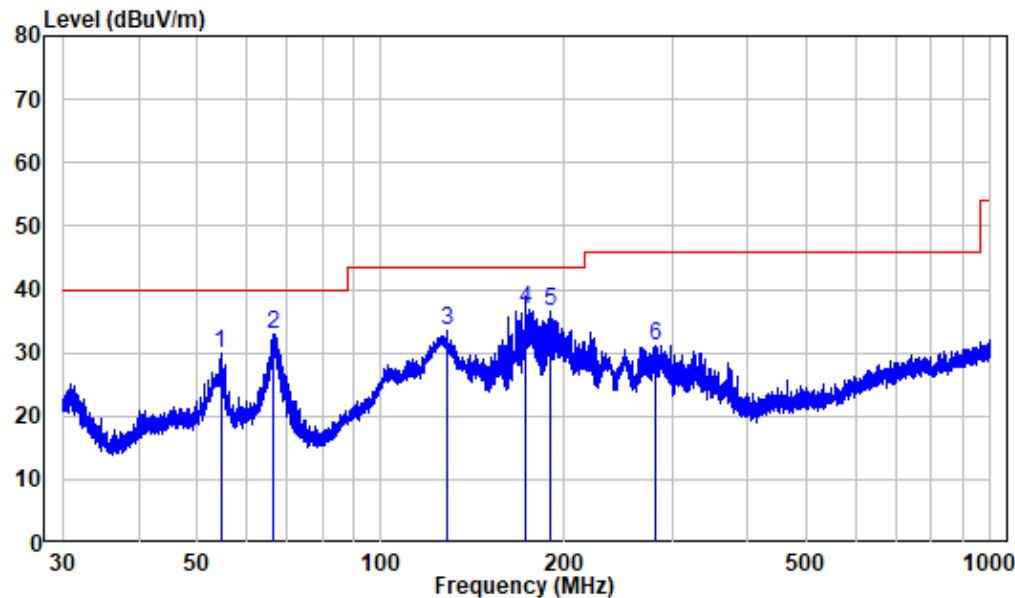
The testing was performed by Jimi Zheng on 2023-02-01 for below 1GHz ,by Level Li on 2023-02-08 for above 1GHz.

EUT operation mode: Transmitting(Pre-scan in the X,Y and Z axes of orientation, the worst case X-axes of orientation was recorded)

30 MHz – 1 GHz:(worst case is 802.11a, 5200MHz)

Note: When the result of Peak less than the limit of QP by more than 6dB, just the peak value was recorded.

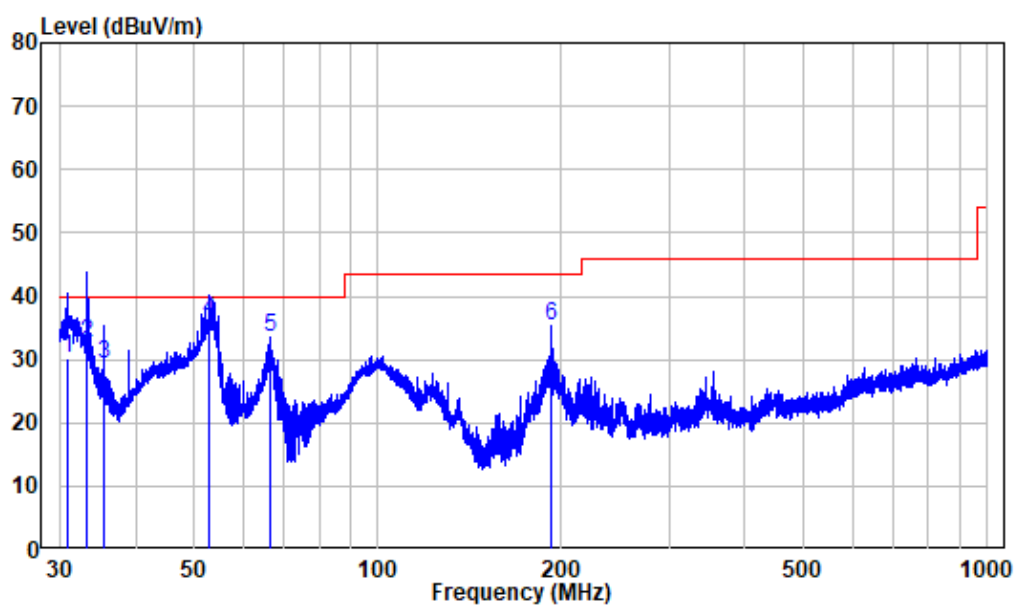
Horizontal



Site : chamber
Condition: 3m HORIZONTAL
Job No. : RA221230-64660E-RF
Test Mode: 5G WIFI

	Freq Factor		Read Level	Level	Limit	Over	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	54.547	-10.31	40.29	29.98	40.00	-10.02	Peak
2	66.412	-13.09	46.00	32.91	40.00	-7.09	Peak
3	128.507	-14.75	48.25	33.50	43.50	-10.00	Peak
4	172.523	-13.32	50.09	36.77	43.50	-6.73	QP
5	189.406	-11.66	48.13	36.47	43.50	-7.03	Peak
6	282.242	-9.52	40.70	31.18	46.00	-14.82	Peak

Vertical



Site : chamber
 Condition: 3m VERTICAL
 Job No. : RA221230-64660E-RF
 Test Mode: 5G WIFI

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	30.908	-12.30	42.50	30.20	40.00	-9.80	QP
2	33.342	-11.96	44.60	32.64	40.00	-7.36	QP
3	35.515	-11.37	40.71	29.34	40.00	-10.66	QP
4	52.922	-10.15	46.34	36.19	40.00	-3.81	QP
5	66.616	-13.18	46.76	33.58	40.00	-6.42	Peak
6	192.503	-11.27	46.62	35.35	43.50	-8.15	Peak

Above 1GHz:**5150-5250 MHz:**

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11A									
5180MHz									
4500	63.95	PK	188	2.1	H	-4.72	59.23	74	-14.77
4500	52.74	AV	188	2.1	H	-4.72	48.02	54	-5.98
4500	64.08	PK	30	1.5	V	-4.72	59.36	74	-14.64
4500	52.86	AV	30	1.5	V	-4.72	48.14	54	-5.86
5150	66.89	PK	8	1.3	H	-2.73	64.16	74	-9.84
5150	53.26	AV	8	1.3	H	-2.73	50.53	54	-3.47
5150	67.08	PK	256	1.4	V	-2.73	64.35	74	-9.65
5150	53.37	AV	256	1.4	V	-2.73	50.64	54	-3.36
10360	52.42	PK	275	1.4	H	8.12	60.54	68.2	-7.66
10360	52.55	PK	220	1.4	V	8.12	60.67	68.2	-7.53
5200MHz									
10400	52.41	PK	64	2.1	H	8.24	60.65	68.2	-7.55
10400	52.58	PK	64	2.1	V	8.24	60.82	68.2	-7.38
5240MHz									
5350	64.81	PK	20	2.4	H	-2.33	62.48	74	-11.52
5350	49.76	AV	20	2.4	H	-2.33	47.43	54	-6.57
5350	65.03	PK	106	1.1	V	-2.33	62.70	74	-11.30
5350	49.90	AV	106	1.1	V	-2.33	47.57	54	-6.43
5460	62.65	PK	41	1.3	H	-2.26	60.39	74	-13.61
5460	48.81	AV	41	1.3	H	-2.26	46.55	54	-7.45
5460	62.78	PK	169	2.4	V	-2.26	60.52	74	-13.48
5460	48.92	AV	169	2.4	V	-2.26	46.66	54	-7.34
10480	52.38	PK	57	1.9	H	8.56	60.94	68.2	-7.26
10480	52.65	PK	150	1.9	V	8.56	61.21	68.2	-6.99

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11N20									
5180MHz									
4500	64.30	PK	307	1.7	H	-4.72	59.58	74	-14.42
4500	52.66	AV	307	1.7	H	-4.72	47.94	54	-6.06
4500	64.41	PK	342	2.1	V	-4.72	59.69	74	-14.31
4500	52.75	AV	342	2.1	V	-4.72	48.03	54	-5.97
5150	67.44	PK	290	1.3	H	-2.73	64.71	74	-9.29
5150	53.45	AV	290	1.3	H	-2.73	50.72	54	-3.28
5150	67.60	PK	209	2.4	V	-2.73	64.87	74	-9.13
5150	53.59	AV	209	2.4	V	-2.73	50.86	54	-3.14
10360	52.60	PK	287	1.5	H	8.12	60.72	68.2	-7.48
10360	52.99	PK	309	1.5	V	8.12	61.11	68.2	-7.09
5200MHz									
10400	52.61	PK	173	1.1	H	8.24	60.85	68.2	-7.35
10400	53.00	PK	327	1.1	V	8.24	61.24	68.2	-6.96
5240MHz									
5350	64.91	PK	175	2.1	H	-2.33	62.58	74	-11.42
5350	49.80	AV	175	2.1	H	-2.33	47.47	54	-6.53
5350	65.04	PK	4	2.4	V	-2.33	62.71	74	-11.29
5350	49.92	AV	4	2.4	V	-2.33	47.59	54	-6.41
5460	62.66	PK	309	2	H	-2.26	60.40	74	-13.60
5460	48.85	AV	309	2	H	-2.26	46.59	54	-7.41
5460	62.78	PK	212	1.9	V	-2.26	60.52	74	-13.48
5460	48.96	AV	212	1.9	V	-2.26	46.70	54	-7.30
10480	52.60	PK	203	1.3	H	8.56	61.16	68.2	-7.04
10480	52.95	PK	207	1.3	V	8.56	61.51	68.2	-6.69

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m))	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11N40									
5190MHz									
4500	64.62	PK	107	2	H	-4.72	59.90	74	-14.10
4500	53.06	AV	107	2	H	-4.72	48.34	54	-5.66
4500	64.73	PK	248	1.1	V	-4.72	60.01	74	-13.99
4500	53.15	AV	248	1.1	V	-4.72	48.43	54	-5.57
5150	68.10	PK	5	2	H	-2.73	65.37	74	-8.63
5150	53.86	AV	5	2	H	-2.73	51.13	54	-2.87
5150	68.35	PK	78	2.2	V	-2.73	65.62	74	-8.38
5150	53.97	AV	78	2.2	V	-2.73	51.24	54	-2.76
10380	52.45	PK	249	1.3	H	8.18	60.63	68.2	-7.57
10380	52.80	PK	320	1.3	V	8.18	60.98	68.2	-7.22
5230MHz									
5350	64.49	PK	157	2.1	H	-2.33	62.16	74	-11.84
5350	50.20	AV	157	2.1	H	-2.33	47.87	54	-6.13
5350	64.62	PK	233	1.7	V	-2.33	62.29	74	-11.71
5350	50.31	AV	233	1.7	V	-2.33	47.98	54	-6.02
5460	62.62	PK	90	1.7	H	-2.26	60.36	74	-13.64
5460	49.30	AV	90	1.7	H	-2.26	47.04	54	-6.96
5460	62.75	PK	77	2.3	V	-2.26	60.49	74	-13.51
5460	49.41	AV	77	2.3	V	-2.26	47.15	54	-6.85
10460	52.48	PK	320	1	H	8.47	60.95	68.2	-7.25
10460	52.89	PK	22	1	V	8.47	61.36	68.2	-6.84

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC20									
5180MHz									
4500	64.46	PK	266	1.4	H	-4.72	59.74	74	-14.26
4500	52.74	AV	266	1.4	H	-4.72	48.02	54	-5.98
4500	64.58	PK	160	2.3	V	-4.72	59.86	74	-14.14
4500	52.85	AV	160	2.3	V	-4.72	48.13	54	-5.87
5150	67.71	PK	60	2.2	H	-2.73	64.98	74	-9.02
5150	53.46	AV	60	2.2	H	-2.73	50.73	54	-3.27
5150	67.85	PK	4	1	V	-2.73	65.12	74	-8.88
5150	53.57	AV	4	1	V	-2.73	50.84	54	-3.16
10360	52.72	PK	65	1.9	H	8.12	60.84	68.2	-7.36
10360	52.95	PK	315	1.9	V	8.12	61.07	68.2	-7.13
5200MHz									
10400	52.71	PK	111	2	H	8.24	60.95	68.2	-7.25
10400	52.98	PK	96	2	V	8.24	61.22	68.2	-6.98
5240MHz									
5350	64.92	PK	73	2.1	H	-2.33	62.59	74	-11.41
5350	49.78	AV	73	2.1	H	-2.33	47.45	54	-6.55
5350	65.06	PK	271	2.3	V	-2.33	62.73	74	-11.27
5350	49.89	AV	271	2.3	V	-2.33	47.56	54	-6.44
5460	62.77	PK	194	1.7	H	-2.26	60.51	74	-13.49
5460	48.84	AV	194	1.7	H	-2.26	46.58	54	-7.42
5460	62.88	PK	76	1.2	V	-2.26	60.62	74	-13.38
5460	48.95	AV	76	1.2	V	-2.26	46.69	54	-7.31
10480	52.70	PK	6	2.3	H	8.56	61.26	68.2	-6.94
10480	53.05	PK	169	2.3	V	8.56	61.61	68.2	-6.59

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC40									
5190MHz									
4500	64.81	PK	37	1.4	H	-4.72	60.09	74	-13.91
4500	53.18	AV	37	1.4	H	-4.72	48.46	54	-5.54
4500	64.92	PK	31	1.4	V	-4.72	60.20	74	-13.80
4500	53.30	AV	31	1.4	V	-4.72	48.58	54	-5.42
5150	69.22	PK	123	1.3	H	-2.73	66.49	74	-7.51
5150	54.11	AV	123	1.3	H	-2.73	51.38	54	-2.62
5150	70.50	PK	327	2.2	V	-2.73	67.77	74	-6.23
5150	54.57	AV	327	2.2	V	-2.73	51.84	54	-2.16
10380	52.65	PK	117	1.6	H	8.18	60.83	68.2	-7.37
10380	52.88	PK	292	1.6	V	8.18	61.06	68.2	-7.14
5230MHz									
5350	64.59	PK	297	1.3	H	-2.33	62.26	74	-11.74
5350	50.26	AV	297	1.3	H	-2.33	47.93	54	-6.07
5350	64.71	PK	127	1.5	V	-2.33	62.38	74	-11.62
5350	50.38	AV	127	1.5	V	-2.33	48.05	54	-5.95
5460	62.82	PK	74	1.1	H	-2.26	60.56	74	-13.44
5460	49.41	AV	74	1.1	H	-2.26	47.15	54	-6.85
5460	62.97	PK	306	1.8	V	-2.26	60.71	74	-13.29
5460	49.53	AV	306	1.8	V	-2.26	47.27	54	-6.73
10460	52.67	PK	109	2.3	H	8.47	61.14	68.2	-7.06
10460	52.89	PK	130	2.3	V	8.47	61.36	68.2	-6.84

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC80									
5210MHz									
4500	64.64	PK	130	2.2	H	-4.72	59.92	74	-14.08
4500	53.78	AV	130	2.2	H	-4.72	49.06	54	-4.94
4500	64.75	PK	125	1.7	V	-4.72	60.03	74	-13.97
4500	53.90	AV	125	1.7	V	-4.72	49.18	54	-4.82
5150	68.02	PK	219	1.8	H	-2.73	65.29	74	-8.71
5150	54.75	AV	219	1.8	H	-2.73	52.02	54	-1.98
5150	68.17	PK	284	2.4	V	-2.73	65.44	74	-8.56
5150	54.90	AV	284	2.4	V	-2.73	52.17	54	-1.83
5350	64.80	PK	299	1.6	H	-2.33	62.47	74	-11.53
5350	51.18	AV	299	1.6	H	-2.33	48.85	54	-5.15
5350	64.91	PK	39	1.5	V	-2.33	62.58	74	-11.42
5350	51.29	AV	39	1.5	V	-2.33	48.96	54	-5.04
5460	62.59	PK	171	1.1	H	-2.26	60.33	74	-13.67
5460	50.03	AV	171	1.1	H	-2.26	47.77	54	-6.23
5460	62.71	PK	141	1.8	V	-2.26	60.45	74	-13.55
5460	50.12	AV	141	1.8	V	-2.26	47.86	54	-6.14
10420	52.33	PK	26	1.1	H	8.32	60.65	68.2	-7.55
10420	52.60	PK	279	1.1	V	8.32	60.92	68.2	-7.28

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AX20_242Tone_RU61(Worst Case)									
5180MHz									
4500	64.62	PK	270	1.3	H	-4.72	59.90	74	-14.10
4500	52.98	AV	270	1.3	H	-4.72	48.26	54	-5.74
4500	64.74	PK	56	1.7	V	-4.72	60.02	74	-13.98
4500	53.09	AV	56	1.7	V	-4.72	48.37	54	-5.63
5150	67.29	PK	291	2.4	H	-2.73	64.56	74	-9.44
5150	53.53	AV	291	2.4	H	-2.73	50.80	54	-3.20
5150	67.61	PK	11	1.6	V	-2.73	64.88	74	-9.12
5150	53.67	AV	11	1.6	V	-2.73	50.94	54	-3.06
10360	52.67	PK	315	1.2	H	8.12	60.79	68.2	-7.41
10360	52.94	PK	359	1.2	V	8.12	61.06	68.2	-7.14
5200MHz									
10400	52.68	PK	217	1.8	H	8.24	60.92	68.2	-7.28
10400	52.95	PK	62	1.8	V	8.24	61.19	68.2	-7.01
5240MHz									
5350	65.00	PK	125	1	H	-2.33	62.67	74	-11.33
5350	49.92	AV	125	1	H	-2.33	47.59	54	-6.41
5350	65.11	PK	314	1.3	V	-2.33	62.78	74	-11.22
5350	50.03	AV	314	1.3	V	-2.33	47.70	54	-6.30
5460	62.99	PK	79	1.5	H	-2.26	60.73	74	-13.27
5460	18.92	AV	79	1.5	H	-2.26	16.66	54	-37.34
5460	63.11	PK	200	1.8	V	-2.26	60.85	74	-13.15
5460	49.03	AV	200	1.8	V	-2.26	46.77	54	-7.23
10480	52.69	PK	339	1.8	H	8.56	61.25	68.2	-6.95
10480	53.06	PK	288	1.8	V	8.56	61.62	68.2	-6.58

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ax40_484Tone_RU65(Worst Case)									
5190MHz									
4500	64.70	PK	351	1.3	H	-4.72	59.98	74	-14.02
4500	53.38	AV	351	1.3	H	-4.72	48.66	54	-5.34
4500	64.81	PK	1	2.4	V	-4.72	60.09	74	-13.91
4500	53.49	AV	1	2.4	V	-4.72	48.77	54	-5.23
5150	68.60	PK	247	2.2	H	-2.73	65.87	74	-8.13
5150	54.19	AV	247	2.2	H	-2.73	51.46	54	-2.54
5150	70.11	PK	156	2	V	-2.73	67.38	74	-6.62
5150	54.48	AV	156	2	V	-2.73	51.75	54	-2.25
10380	52.60	PK	101	1.1	H	8.18	60.78	68.2	-7.42
10380	52.85	PK	308	1.1	V	8.18	61.03	68.2	-7.17
5230MHz									
5350	64.78	PK	248	1.3	H	-2.33	62.45	74	-11.55
5350	50.39	AV	248	1.3	H	-2.33	48.06	54	-5.94
5350	64.90	PK	258	1.5	V	-2.33	62.57	74	-11.43
5350	50.52	AV	258	1.5	V	-2.33	48.19	54	-5.81
5460	62.98	PK	95	1.5	H	-2.26	60.72	74	-13.28
5460	49.52	AV	95	1.5	H	-2.26	47.26	54	-6.74
5460	63.11	PK	323	1.1	V	-2.26	60.85	74	-13.15
5460	49.66	AV	323	1.1	V	-2.26	47.40	54	-6.60
10460	52.71	PK	206	1.5	H	8.47	61.18	68.2	-7.02
10460	52.96	PK	61	1.5	V	8.47	61.43	68.2	-6.77

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ax80_996Tone_RU67(Worst Case)									
5210MHz									
4500	64.74	PK	171	1.4	H	-4.72	60.02	74	-13.98
4500	53.89	AV	171	1.4	H	-4.72	49.17	54	-4.83
4500	64.86	PK	48	1	V	-4.72	60.14	74	-13.86
4500	54.02	AV	48	1	V	-4.72	49.30	54	-4.70
5150	68.16	PK	174	2.1	H	-2.73	65.43	74	-8.57
5150	54.87	AV	174	2.1	H	-2.73	52.14	54	-1.86
5150	68.34	PK	167	1.9	V	-2.73	65.61	74	-8.39
5150	55.01	AV	167	1.9	V	-2.73	52.28	54	-1.72
5350	64.92	PK	84	2	H	-2.33	62.59	74	-11.41
5350	51.30	AV	84	2	H	-2.33	48.97	54	-5.03
5350	65.03	PK	284	2.1	V	-2.33	62.70	74	-11.30
5350	51.38	AV	284	2.1	V	-2.33	49.05	54	-4.95
5460	62.78	PK	121	2.4	H	-2.26	60.52	74	-13.48
5460	50.11	AV	121	2.4	H	-2.26	47.85	54	-6.15
5460	62.96	PK	37	1.9	V	-2.26	60.70	74	-13.30
5460	50.23	AV	37	1.9	V	-2.26	47.97	54	-6.03
10420	52.46	PK	181	1.6	H	8.32	60.78	68.2	-7.42
10420	52.69	PK	7	1.6	V	8.32	61.01	68.2	-7.19

5250-5350 MHz:

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11A									
5260MHz									
4500	64.38	PK	46	2.1	H	-4.72	59.66	74	-14.34
4500	52.73	AV	46	2.1	H	-4.72	48.01	54	-5.99
4500	64.49	PK	234	2.4	V	-4.72	59.77	74	-14.23
4500	52.86	AV	234	2.4	V	-4.72	48.14	54	-5.86
5150	67.57	PK	220	2.2	H	-2.73	64.84	74	-9.16
5150	53.48	AV	220	2.2	H	-2.73	50.75	54	-3.25
5150	67.71	PK	254	1.6	V	-2.73	64.98	74	-9.02
5150	53.60	AV	254	1.6	V	-2.73	50.87	54	-3.13
10520	52.14	PK	59	2.2	H	8.65	60.79	68.2	-7.41
10520	51.99	PK	218	2.2	V	8.65	60.64	68.2	-7.56
5280MHz									
10560	52.96	PK	197	2.5	H	8.69	61.65	68.2	-6.55
10560	52.83	PK	80	2.5	V	8.69	61.52	68.2	-6.68
5320MHz									
5350	64.37	PK	200	2.5	H	-2.33	62.04	74	-11.96
5350	49.86	AV	200	2.5	H	-2.33	47.53	54	-6.47
5350	64.50	PK	281	1.7	V	-2.33	62.17	74	-11.83
5350	49.98	AV	281	1.7	V	-2.33	47.65	54	-6.35
5460	62.51	PK	226	2.4	H	-2.26	60.25	74	-13.75
5460	48.89	AV	226	2.4	H	-2.26	46.63	54	-7.37
5460	62.62	PK	151	2.3	V	-2.26	60.36	74	-13.64
5460	49.00	AV	151	2.3	V	-2.26	46.74	54	-7.26
10640	53.14	PK	195	1.3	H	8.92	62.06	74	-11.94
10640	39.88	AV	351	1.3	H	8.92	48.80	54	-5.20
10640	53.03	PK	87	1.1	V	8.92	61.95	74	-12.05
10640	39.69	AV	38	1.1	V	8.92	48.61	54	-5.39

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11N20									
5260MHz									
4500	64.53	PK	10	1.5	H	-4.72	59.81	74	-14.19
4500	52.71	AV	10	1.5	H	-4.72	47.99	54	-6.01
4500	64.64	PK	9	1.6	V	-4.72	59.92	74	-14.08
4500	52.82	AV	9	1.6	V	-4.72	48.10	54	-5.90
5150	67.02	PK	299	1.8	H	-2.73	64.29	74	-9.71
5150	53.47	AV	299	1.8	H	-2.73	50.74	54	-3.26
5150	67.17	PK	79	2	V	-2.73	64.44	74	-9.56
5150	53.61	AV	79	2	V	-2.73	50.88	54	-3.12
10520	52.51	PK	225	2.5	H	8.65	61.16	68.2	-7.04
10520	52.27	PK	231	2.5	V	8.65	60.92	68.2	-7.28
5280MHz									
10560	53.25	PK	70	2.4	H	8.69	61.94	68.2	-6.26
10560	53.03	PK	266	2.4	V	8.69	61.72	68.2	-6.48
5320MHz									
5350	64.82	PK	24	2	H	-2.33	62.49	74	-11.51
5350	49.68	AV	24	2	H	-2.33	47.35	54	-6.65
5350	64.95	PK	111	1.5	V	-2.33	62.62	74	-11.38
5350	49.79	AV	111	1.5	V	-2.33	47.46	54	-6.54
5460	62.59	PK	14	1.9	H	-2.26	60.33	74	-13.67
5460	48.86	AV	14	1.9	H	-2.26	46.60	54	-7.40
5460	62.68	PK	239	2.3	V	-2.26	60.42	74	-13.58
5460	48.97	AV	239	2.3	V	-2.26	46.71	54	-7.29
10640	53.30	PK	162	2.3	H	8.92	62.22	74	-11.78
10640	39.72	AV	160	2.3	H	8.92	48.64	54	-5.36
10640	53.14	PK	299	1	V	8.92	62.06	74	-11.94
10640	39.61	AV	149	1	V	8.92	48.53	54	-5.47

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11N40									
5270MHz									
4500	64.55	PK	282	1.5	H	-4.72	59.83	74	-14.17
4500	53.20	AV	282	1.5	H	-4.72	48.48	54	-5.52
4500	64.66	PK	287	1	V	-4.72	59.94	74	-14.06
4500	53.31	AV	287	1	V	-4.72	48.59	54	-5.41
5150	67.11	PK	48	1.3	H	-2.73	64.38	74	-9.62
5150	53.98	AV	48	1.3	H	-2.73	51.25	54	-2.75
5150	67.27	PK	220	2.3	V	-2.73	64.54	74	-9.46
5150	54.05	AV	220	2.3	V	-2.73	51.32	54	-2.68
10540	52.44	PK	182	1.7	H	8.65	61.09	68.2	-7.11
10540	52.21	PK	84	1.7	V	8.65	60.86	68.2	-7.34
5310MHz									
5350	67.36	PK	94	2.3	H	-2.33	65.03	74	-8.97
5350	50.47	AV	94	2.3	H	-2.33	48.14	54	-5.86
5350	67.53	PK	299	2.4	V	-2.33	65.20	74	-8.80
5350	50.58	AV	299	2.4	V	-2.33	48.25	54	-5.75
5460	62.87	PK	310	1.3	H	-2.26	60.61	74	-13.39
5460	49.23	AV	310	1.3	H	-2.26	46.97	54	-7.03
5460	62.99	PK	207	2.1	V	-2.26	60.73	74	-13.27
5460	49.36	AV	207	2.1	V	-2.26	47.10	54	-6.90
10620	52.93	PK	11	1.1	H	8.89	61.82	74	-12.18
10620	40.00	AV	348	1.1	H	8.89	48.89	54	-5.11
10620	52.81	PK	125	2.1	V	8.89	61.70	74	-12.30
10620	39.88	AV	129	2.1	V	8.89	48.77	54	-5.23

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC20									
5260MHz									
4500	64.62	PK	245	2.2	H	-4.72	59.90	74	-14.10
4500	51.78	AV	245	2.2	H	-4.72	47.06	54	-6.94
4500	64.75	PK	113	2.4	V	-4.72	60.03	74	-13.97
4500	52.89	AV	113	2.4	V	-4.72	48.17	54	-5.83
5150	67.19	PK	118	1	H	-2.73	64.46	74	-9.54
5150	53.53	AV	118	1	H	-2.73	50.80	54	-3.20
5150	67.30	PK	183	2.5	V	-2.73	64.57	74	-9.43
5150	53.65	AV	183	2.5	V	-2.73	50.92	54	-3.08
10520	52.47	PK	166	2.2	H	8.65	61.12	68.2	-7.08
10520	52.33	PK	360	2.2	V	8.65	60.98	68.2	-7.22
5280MHz									
10560	53.18	PK	121	1.8	H	8.69	61.87	68.2	-6.33
10560	53.01	PK	317	1.8	V	8.69	61.7	68.2	-6.50
5320MHz									
5350	64.93	PK	46	1.3	H	-2.33	62.60	74	-11.40
5350	49.81	AV	46	1.3	H	-2.33	47.48	54	-6.52
5350	65.04	PK	180	1.2	V	-2.33	62.71	74	-11.29
5350	49.92	AV	180	1.2	V	-2.33	47.59	54	-6.41
5460	62.67	PK	322	2.1	H	-2.26	60.41	74	-13.59
5460	48.96	AV	322	2.1	H	-2.26	46.70	54	-7.30
5460	62.80	PK	197	1.5	V	-2.26	60.54	74	-13.46
5460	49.08	AV	197	1.5	V	-2.26	46.82	54	-7.18
10640	53.24	PK	22	1.4	H	8.92	62.16	74	-11.84
10640	39.81	AV	322	1.4	H	8.92	48.73	54	-5.27
10640	53.08	PK	32	1.7	V	8.92	62.00	74	-12.00
10640	39.63	AV	167	1.7	V	8.92	48.55	54	-5.45

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC40									
5270MHz									
4500	64.62	PK	215	2	H	-4.72	59.90	74	-14.10
4500	53.29	AV	215	2	H	-4.72	48.57	54	-5.43
4500	64.74	PK	267	1.8	V	-4.72	60.02	74	-13.98
4500	53.40	AV	267	1.8	V	-4.72	48.68	54	-5.32
5150	67.24	PK	282	1.3	H	-2.73	64.51	74	-9.49
5150	54.02	AV	282	1.3	H	-2.73	51.29	54	-2.71
5150	67.41	PK	263	2.4	V	-2.73	64.68	74	-9.32
5150	54.15	AV	263	2.4	V	-2.73	51.42	54	-2.58
10540	52.54	PK	325	1.8	H	8.65	61.19	68.2	-7.01
10540	52.36	PK	182	1.8	V	8.65	61.01	68.2	-7.19
5310MHz									
5350	67.44	PK	143	1.7	H	-2.33	65.11	74	-8.89
5350	50.59	AV	143	1.7	H	-2.33	48.26	54	-5.74
5350	67.56	PK	14	1.7	V	-2.33	65.23	74	-8.77
5350	50.71	AV	14	1.7	V	-2.33	48.38	54	-5.62
5460	63.00	PK	108	1.7	H	-2.26	60.74	74	-13.26
5460	49.39	AV	108	1.7	H	-2.26	47.13	54	-6.87
5460	63.13	PK	196	1.3	V	-2.26	60.87	74	-13.13
5460	49.52	AV	196	1.3	V	-2.26	47.26	54	-6.74
10620	53.16	PK	124	2.1	H	8.89	62.05	74	-11.95
10620	40.08	AV	268	2.1	H	8.89	48.97	54	-5.03
10620	52.94	PK	268	2.5	V	8.89	61.83	74	-12.17
10620	39.90	AV	69	2.5	V	8.89	48.79	54	-5.21

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC80									
5290MHz									
4500	64.98	PK	46	1.9	H	-4.72	60.26	74	-13.74
4500	53.91	AV	46	1.9	H	-4.72	49.19	54	-4.81
4500	65.12	PK	96	2.1	V	-4.72	60.40	74	-13.60
4500	54.03	AV	96	2.1	V	-4.72	49.31	54	-4.69
5150	67.50	PK	217	1	H	-2.73	64.77	74	-9.23
5150	54.86	AV	217	1	H	-2.73	52.13	54	-1.87
5150	67.71	PK	191	1.7	V	-2.73	64.98	74	-9.02
5150	55.02	AV	191	1.7	V	-2.73	52.29	54	-1.71
5350	64.59	PK	42	1.5	H	-2.33	62.26	74	-11.74
5350	51.04	AV	42	1.5	H	-2.33	48.71	54	-5.29
5350	64.71	PK	341	2.5	V	-2.33	62.38	74	-11.62
5350	51.13	AV	341	2.5	V	-2.33	48.80	54	-5.20
5460	62.45	PK	333	1.1	H	-2.26	60.19	74	-13.81
5460	49.92	AV	333	1.1	H	-2.26	47.66	54	-6.34
5460	62.57	PK	213	2.5	V	-2.26	60.31	74	-13.69
5460	50.03	AV	213	2.5	V	-2.26	47.77	54	-6.23
10580	53.23	PK	315	1.6	H	8.77	62	68.2	-6.20
10580	53.06	PK	317	1.6	V	8.77	61.83	68.2	-6.37

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ax20_242Tone_RU61(Worst Case)									
5260MHz									
4500	64.71	PK	152	1.7	H	-4.72	59.99	74	-14.01
4500	51.85	AV	152	1.7	H	-4.72	47.13	54	-6.87
4500	64.84	PK	147	2.5	V	-4.72	60.12	74	-13.88
4500	52.98	AV	147	2.5	V	-4.72	48.26	54	-5.74
5150	67.25	PK	145	1.1	H	-2.73	64.52	74	-9.48
5150	53.58	AV	145	1.1	H	-2.73	50.85	54	-3.15
5150	67.41	PK	223	1.2	V	-2.73	64.68	74	-9.32
5150	53.69	AV	223	1.2	V	-2.73	50.96	54	-3.04
10520	52.56	PK	36	1.2	H	8.65	61.21	68.2	-6.99
10520	52.30	PK	355	1.2	V	8.65	60.95	68.2	-7.25
5280MHz									
10560	53.20	PK	20	2.5	H	8.69	61.89	68.2	-6.31
10560	53.03	PK	74	2.5	V	8.69	61.72	68.2	-6.48
5320MHz									
5350	64.98	PK	249	1.6	H	-2.33	62.65	74	-11.35
5350	49.86	AV	249	1.6	H	-2.33	47.53	54	-6.47
5350	65.10	PK	178	1.1	V	-2.33	62.77	74	-11.23
5350	49.99	AV	178	1.1	V	-2.33	47.66	54	-6.34
5460	62.80	PK	99	2.5	H	-2.26	60.54	74	-13.46
5460	49.09	AV	99	2.5	H	-2.26	46.83	54	-7.17
5460	59.94	PK	9	1.4	V	-2.26	57.68	74	-16.32
5460	49.21	AV	9	1.4	V	-2.26	46.95	54	-7.05
10640	53.21	PK	61	1.3	H	8.92	62.13	74	-11.87
10640	39.70	AV	50	1.3	H	8.92	48.62	54	-5.38
10640	51.05	PK	138	1.6	V	8.92	59.97	74	-14.03
10640	39.57	AV	72	1.6	V	8.92	48.49	54	-5.51

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ax40_484Tone_RU65(Worst Case)									
5270MHz									
4500	64.69	PK	314	1.4	H	-4.72	59.97	74	-14.03
4500	53.38	AV	314	1.4	H	-4.72	48.66	54	-5.34
4500	64.81	PK	83	1.4	V	-4.72	60.09	74	-13.91
4500	53.50	AV	83	1.4	V	-4.72	48.78	54	-5.22
5150	67.45	PK	2	1.6	H	-2.73	64.72	74	-9.28
5150	54.18	AV	2	1.6	H	-2.73	51.45	54	-2.55
5150	67.60	PK	68	1.3	V	-2.73	64.87	74	-9.13
5150	54.29	AV	68	1.3	V	-2.73	51.56	54	-2.44
10540	52.51	PK	70	1.6	H	8.65	61.16	68.2	-7.04
10540	52.28	PK	186	1.6	V	8.65	60.93	68.2	-7.27
5310MHz									
5350	67.55	PK	293	1.7	H	-2.33	65.22	74	-8.78
5350	50.70	AV	293	1.7	H	-2.33	48.37	54	-5.63
5350	63.71	PK	120	2	V	-2.33	61.38	74	-12.62
5350	50.82	AV	120	2	V	-2.33	48.49	54	-5.51
5460	63.16	PK	26	2	H	-2.26	60.90	74	-13.10
5460	49.53	AV	26	2	H	-2.26	47.27	54	-6.73
5460	63.28	PK	245	1.8	V	-2.26	61.02	74	-12.98
5460	49.62	AV	245	1.8	V	-2.26	47.36	54	-6.64
10620	53.10	PK	286	2.3	H	8.89	61.99	74	-12.01
10620	40.01	AV	9	2.3	H	8.89	48.90	54	-5.10
10620	52.93	PK	258	1.8	V	8.89	61.82	74	-12.18
10620	39.86	AV	15	1.8	V	8.89	48.75	54	-5.25

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ax80_996Tone_RU67(Worst Case)									
5290MHz									
4500	65.10	PK	68	1	H	-4.72	60.38	74	-13.62
4500	53.98	AV	68	1	H	-4.72	49.26	54	-4.74
4500	65.21	PK	0	1.7	V	-4.72	60.49	74	-13.51
4500	54.09	AV	0	1.7	V	-4.72	49.37	54	-4.63
5150	67.78	PK	107	1.1	H	-2.73	65.05	74	-8.95
5150	55.05	AV	107	1.1	H	-2.73	52.32	54	-1.68
5150	68.02	PK	164	1.8	V	-2.73	65.29	74	-8.71
5150	55.20	AV	164	1.8	V	-2.73	52.47	54	-1.53
5350	64.80	PK	339	1.1	H	-2.33	62.47	74	-11.53
5350	51.15	AV	339	1.1	H	-2.33	48.82	54	-5.18
5350	64.92	PK	332	1.6	V	-2.33	62.59	74	-11.41
5350	51.29	AV	332	1.6	V	-2.33	48.96	54	-5.04
5460	62.67	PK	221	2.5	H	-2.26	60.41	74	-13.59
5460	49.99	AV	221	2.5	H	-2.26	47.73	54	-6.27
5460	62.78	PK	317	2.1	V	-2.26	60.52	74	-13.48
5460	50.11	AV	317	2.1	V	-2.26	47.85	54	-6.15
10580	53.19	PK	96	1.8	H	8.77	61.96	68.2	-6.24
10580	52.98	PK	177	1.8	V	8.77	61.75	68.2	-6.45

5470-5725MHz:

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11A									
5500MHz									
5460	62.42	PK	270	1.9	H	-2.26	60.16	74	-13.84
5460	48.83	AV	270	1.9	H	-2.26	46.57	54	-7.43
5460	62.56	PK	24	1.3	V	-2.26	60.30	74	-13.70
5460	48.97	AV	24	1.3	V	-2.26	46.71	54	-7.29
5470	64.16	PK	325	1.6	H	-2.22	61.94	68.2	-6.26
5470	64.44	PK	262	1.2	V	-2.22	62.22	68.2	-5.98
11000	50.66	PK	221	1	H	9.67	60.33	74	-13.67
11000	37.43	AV	356	1	H	9.67	47.10	54	-6.90
11000	50.91	PK	200	2.4	V	9.67	60.58	74	-13.42
11000	37.62	AV	254	2.4	V	9.67	47.29	54	-6.71
5580MHz									
11160	52.26	PK	113	2.1	H	8.68	60.94	74	-13.06
11160	38.92	AV	107	2.1	H	8.68	47.60	54	-6.40
11160	52.47	PK	141	1.4	V	8.68	61.15	74	-12.85
11160	39.05	AV	10	1.4	V	8.68	47.73	54	-6.27
5700MHz									
5725	65.09	PK	93	2.1	H	-1.96	63.13	68.2	-5.07
5725	66.26	PK	69	1.1	V	-1.96	64.30	68.2	-3.90
5745	62.70	PK	348	1.1	H	-1.91	60.79	68.2	-7.41
5745	62.95	PK	264	1.6	V	-1.91	61.04	68.2	-7.16
11400	54.18	PK	166	2.1	H	7.26	61.44	74	-12.56
11400	40.56	AV	236	2.1	H	7.26	47.82	54	-6.18
11400	54.41	PK	222	2	V	7.26	61.67	74	-12.33
11400	40.72	AV	331	2	V	7.26	47.98	54	-6.02
5720MHz									
5850	61.82	PK	142	1.5	H	-1.81	63.63	68.2	-4.57
5925	61.3	PK	291	1.6	H	-1.82	63.12	68.2	-5.08
5850	60.94	PK	214	1	V	-1.81	62.75	68.2	-5.45
5925	61.46	PK	230	2	V	-1.82	63.27	68.2	-4.93
11440	53.98	PK	109	1.8	H	6.91	60.89	74	-13.11
11440	40.33	AV	141	1.8	H	6.91	47.24	54	-6.76
11440	53.54	PK	265	1.2	V	6.91	60.45	74	-13.55
11440	40.48	AV	103	1.2	V	6.91	47.39	54	-6.61

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11N20									
5500MHz									
5460	62.70	PK	115	2.2	H	-2.26	60.44	74	-13.56
5460	48.11	AV	115	2.2	H	-2.26	45.85	54	-8.15
5460	62.87	PK	316	2.4	V	-2.26	60.61	74	-13.39
5460	48.28	AV	316	2.4	V	-2.26	46.02	54	-7.98
5470	64.03	PK	251	1.4	H	-2.22	61.81	68.2	-6.39
5470	64.28	PK	101	1.1	V	-2.22	62.06	68.2	-6.14
11000	50.54	PK	209	1.4	H	9.67	60.21	74	-13.79
11000	37.33	AV	88	1.4	H	9.67	47.00	54	-7.00
11000	50.81	PK	150	1.4	V	9.67	60.48	74	-13.52
11000	37.47	AV	216	1.4	V	9.67	47.14	54	-6.86
5580MHz									
11160	51.90	PK	155	1.1	H	8.68	60.58	74	-13.42
11160	38.45	AV	84	1.1	H	8.68	47.13	54	-6.87
11160	52.12	PK	205	2.2	V	8.68	60.80	74	-13.20
11160	38.63	AV	258	2.2	V	8.68	47.31	54	-6.69
5700MHz									
5725	64.88	PK	171	1.8	H	-1.96	62.92	68.2	-5.28
5725	65.16	PK	5	1.8	V	-1.96	63.20	68.2	-5.00
5745	62.58	PK	202	1.8	H	-1.91	60.67	68.2	-7.53
5745	62.80	PK	53	1.1	V	-1.91	60.89	68.2	-7.31
11400	53.89	PK	109	2.3	H	7.26	61.15	74	-12.85
11400	40.38	AV	338	2.3	H	7.26	47.64	54	-6.36
11400	54.22	PK	73	2.1	V	7.26	61.48	74	-12.52
11400	40.55	AV	27	2.1	V	7.26	47.81	54	-6.19
5720MHz									
5850	61.76	PK	352	2	H	1.81	63.57	68.2	-4.63
5925	61.24	PK	91	1.5	H	1.82	63.06	68.2	-5.14
5850	60.63	PK	52	2.3	V	1.81	62.44	68.2	-5.76
5925	61.22	PK	273	1.5	V	1.82	63.04	68.2	-5.16
11440	54.12	PK	218	1.3	H	6.91	61.03	74	-12.97
11440	40.38	AV	315	1.3	H	6.91	47.29	54	-6.71
11440	53.72	PK	229	2.5	V	6.91	60.63	74	-13.37
11440	40.34	AV	77	2.5	V	6.91	47.25	54	-6.75

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11N40									
5510MHz									
5460	63.17	PK	228	1.4	H	-2.26	60.91	74	-13.09
5460	49.59	AV	228	1.4	H	-2.26	47.33	54	-6.67
5460	63.48	PK	115	1.9	V	-2.26	61.22	74	-12.78
5460	49.80	AV	115	1.9	V	-2.26	47.54	54	-6.46
5470	66.58	PK	223	1.4	H	-2.22	64.36	68.2	-3.84
5470	66.92	PK	88	1.4	V	-2.22	64.70	68.2	-3.50
11020	50.83	PK	126	1.6	H	9.57	60.40	74	-13.60
11020	38.05	AV	302	1.6	H	9.57	47.62	54	-6.38
11020	51.10	PK	188	2.2	V	9.57	60.67	74	-13.33
11020	38.21	AV	211	2.2	V	9.57	47.78	54	-6.22
5550MHz									
11100	51.13	PK	276	2.3	H	9.12	60.25	74	-13.75
11100	38.25	AV	304	2.3	H	9.12	47.37	54	-6.63
11100	51.39	PK	92	1.6	V	9.12	60.51	74	-13.49
11100	38.41	AV	329	1.6	V	9.12	47.53	54	-6.47
5670MHz									
5725	65.19	PK	302	1.7	H	-1.96	63.23	68.2	-4.97
5725	65.50	PK	222	1.9	V	-1.96	63.54	68.2	-4.66
5745	63.31	PK	136	2.5	H	-1.91	61.40	68.2	-6.80
5745	63.50	PK	188	2	V	-1.91	61.59	68.2	-6.61
11340	53.13	PK	213	2	H	7.67	60.80	74	-13.20
11340	40.35	AV	93	2	H	7.67	48.02	54	-5.98
11340	53.47	PK	222	2.2	V	7.67	61.14	74	-12.86
11340	40.56	AV	125	2.2	V	7.67	48.23	54	-5.77
5710MHz									
5850	61.63	PK	197	1.6	H	1.81	63.44	68.2	-4.76
5925	60.92	PK	197	1.6	H	1.82	62.74	68.2	-5.46
5850	60.6	PK	183	1.1	V	1.81	62.41	68.2	-5.79
5925	61.23	PK	183	1.1	V	1.82	63.05	68.2	-5.15
11420	53.73	PK	308	2.2	H	7.08	60.81	74	-13.19
11420	40.81	AV	54	2.2	H	7.08	47.89	54	-6.11
11420	53.85	PK	120	1.9	V	7.08	60.93	74	-13.07
11420	41.00	AV	105	1.9	V	7.08	48.08	54	-5.92

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC20									
5500MHz									
5460	62.90	PK	29	1.1	H	-2.26	60.64	74	-13.36
5460	48.29	AV	29	1.1	H	-2.26	46.03	54	-7.97
5460	63.11	PK	109	1.9	V	-2.26	60.85	74	-13.15
5460	48.53	AV	109	1.9	V	-2.26	46.27	54	-7.73
5470	64.34	PK	307	1	H	-2.22	62.12	68.2	-6.08
5470	64.58	PK	54	1.4	V	-2.22	62.36	68.2	-5.84
11000	50.63	PK	206	2	H	9.67	60.30	74	-13.70
11000	37.40	AV	115	2	H	9.67	47.07	54	-6.93
11000	50.91	PK	100	1.5	V	9.67	60.58	74	-13.42
11000	37.54	AV	145	1.5	V	9.67	47.21	54	-6.79
5580MHz									
11160	51.85	PK	36	1.3	H	8.68	60.53	74	-13.47
11160	38.42	AV	290	1.3	H	8.68	47.10	54	-6.90
11160	52.10	PK	133	2	V	8.68	60.78	74	-13.22
11160	38.64	AV	249	2	V	8.68	47.32	54	-6.68
5700MHz									
5725	65.05	PK	124	2.1	H	-1.96	63.09	68.2	-5.11
5725	65.43	PK	150	1.4	V	-1.96	63.47	68.2	-4.73
5745	62.92	PK	218	1.3	H	-1.91	61.01	68.2	-7.19
5745	63.15	PK	41	1.6	V	-1.91	61.24	68.2	-6.96
11400	53.84	PK	125	2.2	H	7.26	61.10	74	-12.90
11400	40.42	AV	27	2.2	H	7.26	47.68	54	-6.32
11400	54.16	PK	12	2	V	7.26	61.42	74	-12.58
11400	40.59	AV	115	2	V	7.26	47.85	54	-6.15
5720 MHz									
5850	61.74	PK	237	1.4	H	1.81	63.55	68.2	-4.65
5925	61.15	PK	87	2	H	1.82	62.97	68.2	-5.23
5850	60.78	PK	155	1.9	V	1.81	62.59	68.2	-5.61
5925	61.21	PK	85	2.4	V	1.82	63.03	68.2	-5.17
11440	54.06	PK	318	1.6	H	6.91	60.97	74	-13.03
11440	40.44	AV	323	1.6	H	6.91	47.35	54	-6.65
11440	54.18	PK	131	2.3	V	6.91	61.09	74	-12.91
11440	40.35	AV	197	2.3	V	6.91	47.26	54	-6.74

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC40									
5510MHz									
5460	63.36	PK	156	2.2	H	-2.26	61.10	74	-12.90
5460	49.78	AV	156	2.2	H	-2.26	47.52	54	-6.48
5460	63.67	PK	304	2.4	V	-2.26	61.41	74	-12.59
5460	50.02	AV	304	2.4	V	-2.26	47.76	54	-6.24
5470	66.82	PK	191	2	H	-2.22	64.60	68.2	-3.60
5470	67.07	PK	199	2	V	-2.22	64.85	68.2	-3.35
11020	50.78	PK	6	2	H	9.57	60.35	74	-13.65
11020	38.04	AV	203	2	H	9.57	47.61	54	-6.39
11020	51.13	PK	172	2.5	V	9.57	60.70	74	-13.30
11020	38.25	AV	259	2.5	V	9.57	47.82	54	-6.18
5550MHz									
11100	51.19	PK	233	1.7	H	9.12	60.31	74	-13.69
11100	38.28	AV	206	1.7	H	9.12	47.40	54	-6.60
11100	51.44	PK	125	2	V	9.12	60.56	74	-13.44
11100	38.47	AV	25	2	V	9.12	47.59	54	-6.41
5670MHz									
5725	65.38	PK	300	1.3	H	-1.96	63.42	68.2	-4.78
5725	65.63	PK	53	1.2	V	-1.96	63.67	68.2	-4.53
5745	63.47	PK	18	2.5	H	-1.91	61.56	68.2	-6.64
5745	63.71	PK	309	1.7	V	-1.91	61.80	68.2	-6.40
11340	53.19	PK	170	1.8	H	7.67	60.86	74	-13.14
11340	40.40	AV	55	1.8	H	7.67	48.07	54	-5.93
11340	53.53	PK	49	2.5	V	7.67	61.20	74	-12.80
11340	40.61	AV	227	2.5	V	7.67	48.28	54	-5.72
5710MHz									
5850	61.71	PK	237	1.4	H	1.81	63.52	68.2	-4.68
5925	61.3	PK	87	2	H	1.82	63.12	68.2	-5.08
5850	60.58	PK	155	1.9	V	1.81	62.39	68.2	-5.81
5925	61.16	PK	85	2.4	V	1.82	62.98	68.2	-5.22
11420	53.72	PK	341	1.3	H	7.08	60.80	74	-13.20
11420	40.86	AV	205	1.3	H	7.08	47.94	54	-6.06
11420	53.83	PK	241	1.5	V	7.08	60.91	74	-13.09
11420	40.94	AV	32	1.5	V	7.08	48.02	54	-5.98

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC80									
5530MHz									
5460	63.91	PK	234	2.1	H	-2.26	61.65	74	-12.35
5460	51.29	AV	234	2.1	H	-2.26	49.03	54	-4.97
5460	64.23	PK	122	2.4	V	-2.26	61.97	74	-12.03
5460	51.56	AV	122	2.4	V	-2.26	49.30	54	-4.70
5470	66.74	PK	125	1.3	H	-2.22	64.52	68.2	-3.68
5470	67.58	PK	341	1.5	V	-2.22	65.36	68.2	-2.84
11060	50.74	PK	15	1.3	H	9.37	60.11	74	-13.89
11060	38.78	AV	324	1.3	H	9.37	48.15	54	-5.85
11060	50.99	PK	357	1.3	V	9.37	60.36	74	-13.64
11060	38.93	AV	122	1.3	V	9.37	48.30	54	-5.70
5610MHz									
5725	64.35	PK	73	1.5	H	-1.96	62.39	68.2	-5.81
5725	64.58	PK	198	2.5	V	-1.96	62.62	68.2	-5.58
5745	62.38	PK	39	1.5	H	-1.91	60.47	68.2	-7.73
5745	62.61	PK	116	2.5	V	-1.91	60.70	68.2	-7.50
11220	53.20	PK	163	2.5	H	8.33	61.53	74	-12.47
11220	41.07	AV	348	2.5	H	8.33	49.40	54	-4.60
11220	53.42	PK	113	1.3	V	8.33	61.75	74	-12.25
11220	41.28	AV	133	1.3	V	8.33	49.61	54	-4.39
5690MHz									
5850	61.51	PK	237	1.4	H	1.81	63.32	68.2	-4.88
5925	60.71	PK	87	2	H	1.82	62.53	68.2	-5.67
5850	61.11	PK	155	1.9	V	1.81	62.92	68.2	-5.28
5925	61.58	PK	85	2.4	V	1.82	63.4	68.2	-4.8
11380	54.09	PK	108	1.9	H	7.4	61.49	74	-12.51
11380	41.62	AV	186	1.9	H	7.4	49.02	54	-4.98
11380	53.11	PK	131	1	V	7.4	60.51	74	-13.49
11380	41.50	AV	262	1	V	7.4	48.90	54	-5.10

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ax20_242Tone_RU61(Worst Case)									
5500MHz									
5460	63.02	PK	77	1.4	H	-2.26	60.76	74	-13.24
5460	48.38	AV	77	1.4	H	-2.26	46.12	54	-7.88
5460	63.21	PK	307	1.9	V	-2.26	60.95	74	-13.05
5460	48.86	AV	307	1.9	V	-2.26	46.60	54	-7.40
5470	64.55	PK	68	2.3	H	-2.22	62.33	68.2	-5.87
5470	65.01	PK	209	1.5	V	-2.22	62.79	68.2	-5.41
11000	50.56	PK	145	2	H	9.67	60.23	74	-13.77
11000	37.35	AV	222	2	H	9.67	47.02	54	-6.98
11000	50.81	PK	14	1.5	V	9.67	60.48	74	-13.52
11000	37.53	AV	117	1.5	V	9.67	47.20	54	-6.80
5580MHz									
11160	51.82	PK	130	1.5	H	8.68	60.50	74	-13.50
11160	38.45	AV	282	1.5	H	8.68	47.13	54	-6.87
11160	52.06	PK	242	2.4	V	8.68	60.74	74	-13.26
11160	38.57	AV	183	2.4	V	8.68	47.25	54	-6.75
5700MHz									
5725	65.23	PK	40	2.2	H	-1.96	63.27	68.2	-4.93
5725	65.58	PK	357	2.3	V	-1.96	63.62	68.2	-4.58
5745	63.10	PK	31	2.3	H	-1.91	61.19	68.2	-7.01
5745	63.24	PK	147	1.5	V	-1.91	61.33	68.2	-6.87
11400	53.90	PK	232	1.7	H	7.26	61.16	74	-12.84
11400	40.36	AV	30	1.7	H	7.26	47.62	54	-6.38
11400	54.21	PK	351	1.1	V	7.26	61.47	74	-12.53
11400	40.54	AV	125	1.1	V	7.26	47.80	54	-6.20
5720 MHz									
5850	61.12	PK	237	1.4	H	1.81	62.93	68.2	-5.27
5925	61.48	PK	87	2	H	1.82	63.3	68.2	-4.9
5850	60.84	PK	155	1.9	V	1.81	62.65	68.2	-5.55
5925	60.86	PK	85	2.4	V	1.82	62.68	68.2	-5.52
11440	54.04	PK	204	2.5	H	6.91	60.95	74	-13.05
11440	40.24	AV	89	2.5	H	6.91	47.15	54	-6.85
11440	53.63	PK	26	2.4	V	6.91	60.54	74	-13.46
11440	40.43	AV	253	2.4	V	6.91	47.34	54	-6.66

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ax40_484Tone_RU65(Worst Case)									
5510MHz									
5460	63.52	PK	291	1.1	H	-2.26	61.26	74	-12.74
5460	49.98	AV	291	1.1	H	-2.26	47.72	54	-6.28
5460	63.79	PK	160	1.6	V	-2.26	61.53	74	-12.47
5460	50.13	AV	160	1.6	V	-2.26	47.87	54	-6.13
5470	66.99	PK	293	2.4	H	-2.22	64.77	68.2	-3.43
5470	67.36	PK	24	1.7	V	-2.22	65.14	68.2	-3.06
11020	50.85	PK	325	2.2	H	9.57	60.42	74	-13.58
11020	38.08	AV	212	2.2	H	9.57	47.65	54	-6.35
11020	51.16	PK	221	1.1	V	9.57	60.73	74	-13.27
11020	38.24	AV	16	1.1	V	9.57	47.81	54	-6.19
5550MHz									
11100	51.34	PK	32	1.7	H	9.12	60.46	74	-13.54
11100	38.18	AV	126	1.7	H	9.12	47.30	54	-6.70
11100	51.55	PK	169	1.9	V	9.12	60.67	74	-13.33
11100	38.39	AV	135	1.9	V	9.12	47.51	54	-6.49
5670MHz									
5725	65.52	PK	320	2.5	H	-1.96	63.56	68.2	-4.64
5725	65.94	PK	11	1.2	V	-1.96	63.98	68.2	-4.22
5745	63.70	PK	11	2.4	H	-1.91	61.79	68.2	-6.41
5745	64.98	PK	235	1.5	V	-1.91	63.07	68.2	-5.13
11340	53.27	PK	201	2.3	H	7.67	60.94	74	-13.06
11340	40.35	AV	205	2.3	H	7.67	48.02	54	-5.98
11340	53.60	PK	149	1.2	V	7.67	61.27	74	-12.73
11340	40.56	AV	78	1.2	V	7.67	48.23	54	-5.77
5710MHz									
5850	61.61	PK	237	1.4	H	1.81	63.42	68.2	-4.78
5925	61.03	PK	87	2	H	1.82	62.85	68.2	-5.35
5850	61.09	PK	155	1.9	V	1.81	62.9	68.2	-5.3
5925	61.01	PK	85	2.4	V	1.82	62.83	68.2	-5.37
11420	53.98	PK	281	1.7	H	7.08	61.06	74	-12.94
11420	40.72	AV	224	1.7	H	7.08	47.80	54	-6.20
11420	53.76	PK	68	1.6	V	7.08	60.84	74	-13.16
11420	40.83	AV	241	1.6	V	7.08	47.91	54	-6.09

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ax80_996Tone_RU67(Worst Case)									
5530MHz									
5460	63.99	PK	335	1.9	H	-2.26	61.73	74	-12.27
5460	51.62	AV	335	1.9	H	-2.26	49.36	54	-4.64
5460	64.27	PK	117	2.1	V	-2.26	62.01	74	-11.99
5460	51.86	AV	117	2.1	V	-2.26	49.60	54	-4.40
5470	66.67	PK	28	1.8	H	-2.22	64.45	68.2	-3.75
5470	67.34	PK	101	1.3	V	-2.22	65.12	68.2	-3.08
11060	51.18	PK	303	2.2	H	9.37	60.55	74	-13.45
11060	38.82	AV	81	2.2	H	9.37	48.19	54	-5.81
11060	51.41	PK	77	1.8	V	9.37	60.78	74	-13.22
11060	38.99	AV	53	1.8	V	9.37	48.36	54	-5.64
5610 MHz									
5725	64.85	PK	72	1.9	H	-1.96	62.89	68.2	-5.31
5725	65.16	PK	203	1.5	V	-1.96	63.20	68.2	-5.00
5745	62.74	PK	337	1	H	-1.91	60.83	68.2	-7.37
5745	62.95	PK	273	1.4	V	-1.91	61.04	68.2	-7.16
11220	53.37	PK	292	2.3	H	8.33	61.70	74	-12.30
11220	40.98	AV	306	2.3	H	8.33	49.31	54	-4.69
11220	53.71	PK	330	1.5	V	8.33	62.04	74	-11.96
11220	41.20	AV	33	1.5	V	8.33	49.53	54	-4.47
5690 MHz									
5850	61.82	PK	237	1.4	H	1.81	63.63	68.2	-4.57
5925	61.27	PK	87	2	H	1.82	63.09	68.2	-5.11
5850	61.12	PK	155	1.9	V	1.81	62.93	68.2	-5.27
5925	61.62	PK	85	2.4	V	1.82	63.44	68.2	-4.76
11380	53.41	PK	178	1.8	H	7.4	60.81	74	-13.19
11380	41.79	AV	264	1.8	H	7.4	49.19	54	-4.81
11380	53.28	PK	195	1.3	V	7.4	60.68	74	-13.32
11380	41.58	AV	334	1.3	V	7.4	48.98	54	-5.02

5725-5850 MHz:

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11A									
5745MHz									
5650	63.33	PK	134	2.2	H	-1.95	61.38	68.2	-6.82
5700	63.82	PK	281	2.5	H	-2.02	61.80	105.2	-43.40
5720	65.80	PK	213	1.9	H	-1.97	63.83	110.8	-46.97
5725	73.93	PK	158	2	H	-1.96	71.97	122.2	-50.23
5650	63.44	PK	250	1.7	V	-1.95	61.49	68.2	-6.71
5700	64.02	PK	123	1.6	V	-2.02	62.00	105.2	-43.20
5720	66.64	PK	141	2.2	V	-1.97	64.67	110.8	-46.13
5725	75.50	PK	273	2.4	V	-1.96	73.54	122.2	-48.66
11490	54.59	PK	94	1.4	H	6.63	61.22	74	-12.78
11490	41.23	AV	35	1.4	H	6.63	47.86	54	-6.14
11490	54.84	PK	328	1.2	V	6.63	61.47	74	-12.53
11490	41.40	AV	222	1.2	V	6.63	48.03	54	-5.97
5785MHz									
11570	54.27	PK	60	2.2	H	6.59	60.86	74	-13.14
11570	41.22	AV	39	2.2	H	6.59	47.81	54	-6.19
11570	54.54	PK	153	1.6	V	6.59	61.13	74	-12.87
11570	41.38	AV	229	1.6	V	6.59	47.97	54	-6.03
5825MHz									
5850	70.94	PK	360	1.5	H	-1.81	69.13	122.2	-53.07
5855	68.22	PK	224	1.9	H	-1.82	66.40	110.8	-44.40
5875	65.29	PK	121	2	H	-1.84	63.45	105.2	-41.75
5925	64.94	PK	116	1.7	H	-1.82	63.12	68.2	-5.08
5850	73.56	PK	337	1.5	V	-1.81	71.75	122.2	-50.45
5855	69.90	PK	195	1.4	V	-1.82	68.08	110.8	-42.72
5875	65.44	PK	272	1.4	V	-1.84	63.60	105.2	-41.60
5925	65.09	PK	302	1.7	V	-1.82	63.27	68.2	-4.93
11650	53.18	PK	97	1.2	H	6.77	59.95	74	-14.05
11650	40.57	AV	295	1.2	H	6.77	47.34	54	-6.66
11650	53.45	PK	73	1.4	V	6.77	60.22	74	-13.78
11650	40.70	AV	334	1.4	V	6.77	47.47	54	-6.53

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11N20									
5745MHz									
5650	63.36	PK	16	1.6	H	-1.95	61.41	68.2	-6.79
5700	63.94	PK	85	2.1	H	-2.02	61.92	105.2	-43.28
5720	66.77	PK	282	1.4	H	-1.97	64.80	110.8	-46.00
5725	72.85	PK	171	2.3	H	-1.96	70.89	122.2	-51.31
5650	63.48	PK	119	2	V	-1.95	61.53	68.2	-6.67
5700	64.14	PK	356	1.7	V	-2.02	62.12	105.2	-43.08
5720	68.04	PK	192	1.7	V	-1.97	66.07	110.8	-44.73
5725	76.64	PK	279	1.4	V	-1.96	74.68	122.2	-47.52
11490	54.99	PK	234	2.4	H	6.63	61.62	74	-12.38
11490	41.30	AV	341	2.4	H	6.63	47.93	54	-6.07
11490	55.14	PK	203	2.1	V	6.63	61.77	74	-12.23
11490	41.43	AV	229	2.1	V	6.63	48.06	54	-5.94
5785MHz									
11570	54.58	PK	196	1.4	H	6.59	61.17	74	-12.83
11570	41.32	AV	203	1.4	H	6.59	47.91	54	-6.09
11570	54.87	PK	231	2.4	V	6.59	61.46	74	-12.54
11570	41.43	AV	233	2.4	V	6.59	48.02	54	-5.98
5825MHz									
5850	72.51	PK	123	2	H	-1.81	70.70	122.2	-51.50
5855	69.77	PK	212	1.1	H	-1.82	67.95	110.8	-42.85
5875	65.82	PK	340	2.4	H	-1.84	63.98	105.2	-41.22
5925	65.09	PK	91	1.3	H	-1.82	63.27	68.2	-4.93
5850	75.58	PK	309	1.1	V	-1.81	73.77	122.2	-48.43
5855	71.88	PK	262	2	V	-1.82	70.06	110.8	-40.74
5875	66.07	PK	334	2.4	V	-1.84	64.23	105.2	-40.97
5925	65.31	PK	224	1.4	V	-1.82	63.49	68.2	-4.71
11650	53.82	PK	122	1.1	H	6.77	60.59	74	-13.41
11650	40.66	AV	283	1.1	H	6.77	47.43	54	-6.57
11650	54.08	PK	273	1	V	6.77	60.85	74	-13.15
11650	40.87	AV	173	1	V	6.77	47.64	54	-6.36

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11N40									
5755MHz									
5650	63.72	PK	48	1.9	H	-1.95	61.77	68.2	-6.43
5700	66.72	PK	310	1.6	H	-2.02	64.70	105.2	-40.50
5720	76.19	PK	56	1.4	H	-1.97	74.22	110.8	-36.58
5725	79.45	PK	340	1.9	H	-1.96	77.49	122.2	-44.71
5650	63.84	PK	151	2.2	V	-1.95	61.89	68.2	-6.31
5700	67.54	PK	205	2.2	V	-2.02	65.52	105.2	-39.68
5720	79.08	PK	173	1.8	V	-1.97	77.11	110.8	-33.69
5725	82.36	PK	159	2.3	V	-1.96	80.40	122.2	-41.80
11510	54.41	PK	273	1.1	H	6.59	61.00	74	-13.00
11510	41.38	AV	70	1.1	H	6.59	47.97	54	-6.03
11510	54.84	PK	131	1.2	V	6.59	61.43	74	-12.57
11510	41.60	AV	36	1.2	V	6.59	48.19	54	-5.81
5795MHz									
5850	72.30	PK	40	2.4	H	-1.81	70.49	122.2	-51.71
5855	70.08	PK	293	1.6	H	-1.82	68.26	110.8	-42.54
5875	65.96	PK	174	2	H	-1.84	64.12	105.2	-41.08
5925	65.27	PK	197	1.9	H	-1.82	63.45	68.2	-4.75
5850	74.76	PK	196	2.4	V	-1.81	72.95	122.2	-49.25
5855	73.14	PK	238	1.5	V	-1.82	71.32	110.8	-39.48
5875	66.24	PK	236	1.5	V	-1.84	64.40	105.2	-40.80
5925	65.60	PK	111	2.1	V	-1.82	63.78	68.2	-4.42
11590	54.51	PK	170	2	H	6.57	61.08	74	-12.92
11590	41.28	AV	93	2	H	6.57	47.85	54	-6.15
11590	54.74	PK	94	2.2	V	6.57	61.31	74	-12.69
11590	41.53	AV	355	2.2	V	6.57	48.10	54	-5.90

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC20									
5745MHz									
5650	63.48	PK	186	2.3	H	-1.95	61.53	68.2	-6.67
5700	64.16	PK	240	2.1	H	-2.02	62.14	105.2	-43.06
5720	67.26	PK	227	1.3	H	-1.97	65.29	110.8	-45.51
5725	73.86	PK	119	1.2	H	-1.96	71.90	122.2	-50.30
5650	63.59	PK	278	1.5	V	-1.95	61.64	68.2	-6.56
5700	64.32	PK	65	2.1	V	-2.02	62.30	105.2	-42.90
5720	68.80	PK	2	1.2	V	-1.97	66.83	110.8	-43.97
5725	77.18	PK	243	1.8	V	-1.96	75.22	122.2	-46.98
11490	55.08	PK	356	1	H	6.63	61.71	74	-12.29
11490	41.23	AV	46	1	H	6.63	47.86	54	-6.14
11490	55.26	PK	294	2	V	6.63	61.89	74	-12.11
11490	41.41	AV	74	2	V	6.63	48.04	54	-5.96
5785MHz									
11570	54.45	PK	318	2	H	6.59	61.04	74	-12.96
11570	41.23	AV	338	2	H	6.59	47.82	54	-6.18
11570	54.68	PK	207	1.4	V	6.59	61.27	74	-12.73
11570	41.39	AV	228	1.4	V	6.59	47.98	54	-6.02
5825MHz									
5850	73.35	PK	349	1.9	H	-1.81	71.54	122.2	-50.66
5855	70.27	PK	42	1.3	H	-1.82	68.45	110.8	-42.35
5875	66.07	PK	260	2	H	-1.84	64.23	105.2	-40.97
5925	65.24	PK	244	2.2	H	-1.82	63.42	68.2	-4.78
5850	76.31	PK	224	2.4	V	-1.81	74.50	122.2	-47.70
5855	72.38	PK	282	2.5	V	-1.82	70.56	110.8	-40.24
5875	66.29	PK	47	1.1	V	-1.84	64.45	105.2	-40.75
5925	65.45	PK	141	2	V	-1.82	63.63	68.2	-4.57
11650	53.77	PK	8	2.1	H	6.77	60.54	74	-13.46
11650	40.61	AV	128	2.1	H	6.77	47.38	54	-6.62
11650	54.04	PK	288	1.2	V	6.77	60.81	74	-13.19
11650	40.82	AV	73	1.2	V	6.77	47.59	54	-6.41

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC40									
5755MHz									
5650	63.72	PK	74	1.9	H	-1.95	61.77	68.2	-6.43
5700	66.96	PK	295	1.6	H	-2.02	64.94	105.2	-40.26
5720	77.36	PK	131	1.6	H	-1.97	75.39	110.8	-35.41
5725	80.54	PK	22	2.5	H	-1.96	78.58	122.2	-43.62
5650	63.89	PK	192	1.4	V	-1.95	61.94	68.2	-6.26
5700	67.85	PK	108	1.7	V	-2.02	65.83	105.2	-39.37
5720	79.59	PK	139	1.3	V	-1.97	77.62	110.8	-33.18
5725	83.64	PK	16	1.4	V	-1.96	81.68	122.2	-40.52
11510	54.36	PK	115	1.3	H	6.59	60.95	74	-13.05
11510	41.27	AV	150	1.3	H	6.59	47.86	54	-6.14
11510	54.61	PK	349	1.5	V	6.59	61.20	74	-12.80
11510	41.45	AV	13	1.5	V	6.59	48.04	54	-5.96
5795MHz									
5850	72.56	PK	88	1.9	H	-1.81	70.75	122.2	-51.45
5855	70.50	PK	163	1.7	H	-1.82	68.68	110.8	-42.12
5875	67.17	PK	201	2	H	-1.84	65.33	105.2	-39.87
5925	65.79	PK	193	1.1	H	-1.82	63.97	68.2	-4.23
5850	75.49	PK	222	1.1	V	-1.81	73.68	122.2	-48.52
5855	73.57	PK	56	2	V	-1.82	71.75	110.8	-39.05
5875	67.50	PK	349	1.3	V	-1.84	65.66	105.2	-39.54
5925	65.94	PK	2	1.2	V	-1.82	64.12	68.2	-4.08
11590	54.56	PK	13	1.2	H	6.57	61.13	74	-12.87
11590	41.40	AV	171	1.2	H	6.57	47.97	54	-6.03
11590	54.85	PK	74	2.2	V	6.57	61.42	74	-12.58
11590	41.57	AV	238	2.2	V	6.57	48.14	54	-5.86

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC80									
5775MHz									
5650	64.13	PK	53	1.1	H	-1.95	62.18	68.2	-6.02
5700	70.51	PK	322	1.9	H	-2.02	68.49	105.2	-36.71
5720	72.80	PK	194	1.6	H	-1.97	70.83	110.8	-39.97
5725	74.96	PK	160	1.7	H	-1.96	73.00	122.2	-49.20
5650	64.24	PK	127	1.3	V	-1.95	62.29	68.2	-5.91
5700	73.15	PK	99	2.1	V	-2.02	71.13	105.2	-34.07
5720	76.01	PK	340	1.2	V	-1.97	74.04	110.8	-36.76
5725	78.06	PK	238	1.6	V	-1.96	76.10	122.2	-46.10
5850	74.37	PK	226	1.3	H	-1.81	72.56	122.2	-49.64
5855	72.57	PK	291	1.9	H	-1.82	70.75	110.8	-40.05
5875	70.28	PK	323	2	H	-1.84	68.44	105.2	-36.76
5925	65.60	PK	223	1.9	H	-1.82	63.78	68.2	-4.42
5850	76.74	PK	70	1.2	V	-1.81	74.93	122.2	-47.27
5855	75.02	PK	266	2.3	V	-1.82	73.20	110.8	-37.60
5875	72.39	PK	261	1.4	V	-1.84	70.55	105.2	-34.65
5925	65.78	PK	168	1.2	V	-1.82	63.96	68.2	-4.24
11550	54.52	PK	179	1.1	H	6.61	61.13	74	-12.87
11550	42.33	AV	271	1.1	H	6.61	48.94	54	-5.06
11550	54.81	PK	95	2.5	V	6.61	61.42	74	-12.58
11550	42.46	AV	171	2.5	V	6.61	49.07	54	-4.93

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ax20_242Tone_RU61(Worst Case)									
5745MHz									
5650	64.61	PK	36	1	H	-1.95	62.66	68.2	-5.54
5700	64.33	PK	343	1.2	H	-2.02	62.31	105.2	-42.89
5720	67.44	PK	56	2.4	H	-1.97	65.47	110.8	-45.33
5725	74.76	PK	158	2.3	H	-1.96	72.80	122.2	-49.40
5650	63.74	PK	270	2.4	V	-1.95	61.79	68.2	-6.41
5700	64.54	PK	119	1.8	V	-2.02	62.52	105.2	-42.68
5720	69.27	PK	124	1.7	V	-1.97	67.30	110.8	-43.50
5725	77.99	PK	155	1.5	V	-1.96	76.03	122.2	-46.17
11490	55.00	PK	283	1.3	H	6.63	61.63	74	-12.37
11490	41.09	AV	199	1.3	H	6.63	47.72	54	-6.28
11490	55.17	PK	11	1.4	V	6.63	61.80	74	-12.20
11490	41.28	AV	138	1.4	V	6.63	47.91	54	-6.09
5785MHz									
11570	54.54	PK	92	2.2	H	6.59	61.13	74	-12.87
11570	41.22	AV	57	2.2	H	6.59	47.81	54	-6.19
11570	54.73	PK	214	1	V	6.59	61.32	74	-12.68
11570	41.31	AV	72	1	V	6.59	47.90	54	-6.10
5825MHz									
5850	74.07	PK	39	1.6	H	-1.81	72.26	122.2	-49.94
5855	70.62	PK	49	1.7	H	-1.82	68.80	110.8	-42.00
5875	66.62	PK	102	1.1	H	-1.84	64.78	105.2	-40.42
5925	65.57	PK	23	2	H	-1.82	63.75	68.2	-4.45
5850	77.49	PK	119	1.3	V	-1.81	75.68	122.2	-46.52
5855	73.17	PK	39	1.1	V	-1.82	71.35	110.8	-39.45
5875	66.87	PK	323	2.5	V	-1.84	65.03	105.2	-40.17
5925	65.69	PK	134	2.1	V	-1.82	63.87	68.2	-4.33
11650	53.84	PK	29	1.4	H	6.77	60.61	74	-13.39
11650	40.65	AV	30	1.4	H	6.77	47.42	54	-6.58
11650	54.02	PK	341	1.1	V	6.77	60.79	74	-13.21
11650	40.81	AV	124	1.1	V	6.77	47.58	54	-6.42

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ax40_484Tone_RU65(Worst Case)									
5755MHz									
5650	63.83	PK	15	2.3	H	-1.95	61.88	68.2	-6.32
5700	68.21	PK	255	1.4	H	-2.02	66.19	105.2	-39.01
5720	77.17	PK	107	1.9	H	-1.97	75.20	110.8	-35.60
5725	81.53	PK	266	1.4	H	-1.96	79.57	122.2	-42.63
5650	63.98	PK	232	1.5	V	-1.95	62.03	68.2	-6.17
5700	69.42	PK	202	2.4	V	-2.02	67.40	105.2	-37.80
5720	80.19	PK	241	2.1	V	-1.97	78.22	110.8	-32.58
5725	84.50	PK	35	2.5	V	-1.96	82.54	122.2	-39.66
11510	54.43	PK	191	1.2	H	6.59	61.02	74	-12.98
11510	41.36	AV	16	1.2	H	6.59	47.95	54	-6.05
11510	54.78	PK	248	1.6	V	6.59	61.37	74	-12.63
11510	41.57	AV	50	1.6	V	6.59	48.16	54	-5.84
5795MHz									
5850	73.25	PK	11	1.1	H	-1.81	71.44	122.2	-50.76
5855	71.47	PK	87	2.1	H	-1.82	69.65	110.8	-41.15
5875	67.47	PK	231	1.2	H	-1.84	65.63	105.2	-39.57
5925	65.84	PK	324	2.4	H	-1.82	64.02	68.2	-4.18
5850	76.48	PK	333	1.4	V	-1.81	74.67	122.2	-47.53
5855	74.38	PK	97	2.2	V	-1.82	72.56	110.8	-38.24
5875	67.68	PK	127	2.4	V	-1.84	65.84	105.2	-39.36
5925	66.07	PK	34	2	V	-1.82	64.25	68.2	-3.95
11590	54.63	PK	124	1.7	H	6.57	61.20	74	-12.80
11590	41.44	AV	61	1.7	H	6.57	48.01	54	-5.99
11590	55.01	PK	321	1.8	V	6.57	61.58	74	-12.42
11590	41.65	AV	323	1.8	V	6.57	48.22	54	-5.78

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ax80_996Tone_RU67(Worst Case)									
5775MHz									
5650	64.39	PK	11	2	H	-1.95	62.44	68.2	-5.76
5700	70.91	PK	125	1.7	H	-2.02	68.89	105.2	-36.31
5720	73.07	PK	33	1.7	H	-1.97	71.10	110.8	-39.70
5725	75.59	PK	177	1	H	-1.96	73.63	122.2	-48.57
5650	64.52	PK	360	2.5	V	-1.95	62.57	68.2	-5.63
5700	73.51	PK	122	2.2	V	-2.02	71.49	105.2	-33.71
5720	76.19	PK	15	2.2	V	-1.97	74.22	110.8	-36.58
5725	78.40	PK	129	1	V	-1.96	76.44	122.2	-45.76
5850	75.48	PK	156	1	H	-1.81	73.67	122.2	-48.53
5855	72.41	PK	160	1.7	H	-1.82	70.59	110.8	-40.21
5875	70.70	PK	192	1.7	H	-1.84	68.86	105.2	-36.34
5925	65.76	PK	194	2.1	H	-1.82	63.94	68.2	-4.26
5850	77.90	PK	242	2.1	V	-1.81	76.09	122.2	-46.11
5855	75.38	PK	320	1.4	V	-1.82	73.56	110.8	-37.24
5875	73.71	PK	288	2.2	V	-1.84	71.87	105.2	-33.33
5925	65.94	PK	138	1.9	V	-1.82	64.12	68.2	-4.08
11550	54.69	PK	242	2.3	H	6.61	61.30	74	-12.70
11550	42.42	AV	136	2.3	H	6.61	49.03	54	-4.97
11550	54.96	PK	335	1.2	V	6.61	61.57	74	-12.43
11550	42.60	AV	80	1.2	V	6.61	49.21	54	-4.79

Note:

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

Corrected Amplitude = Factor + Reading

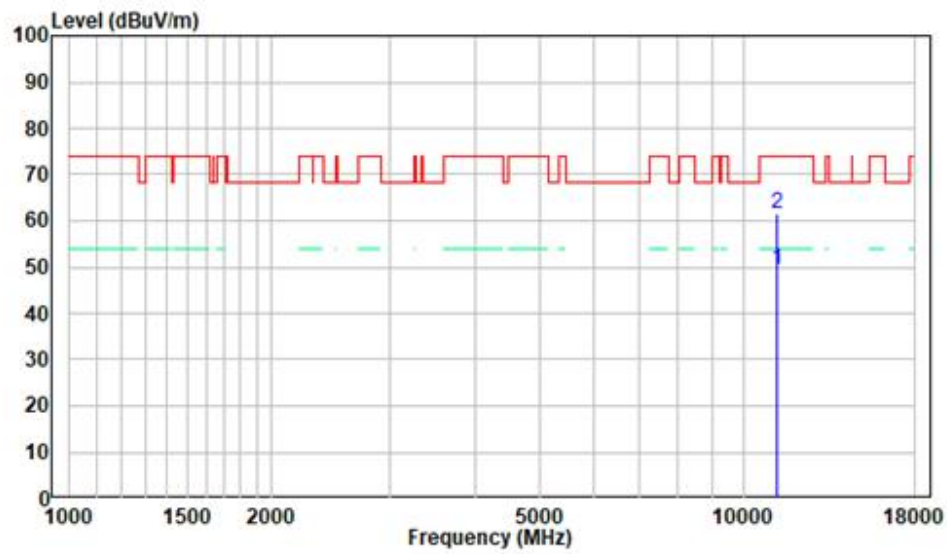
Margin = Corrected. Amplitude - Limit

The other spurious emission which is in the noise floor level was not recorded.

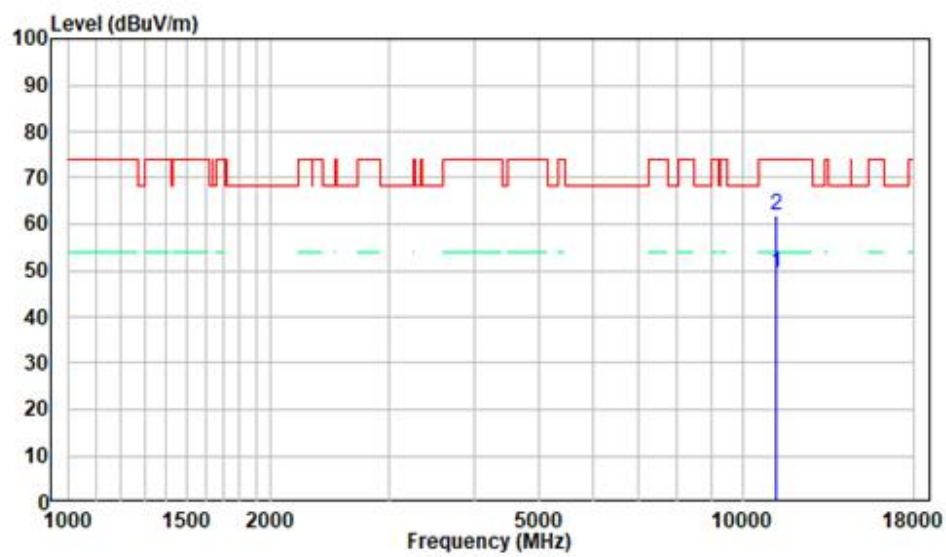
1 GHz - 18 GHz: (Pre-Scan plots)

802.11ac80, 5610MHz

Horizontal



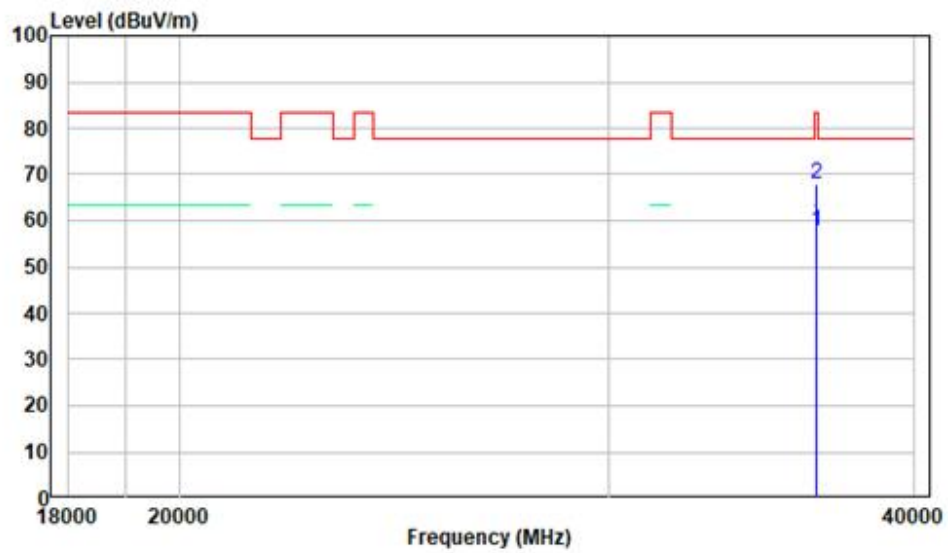
Vertical



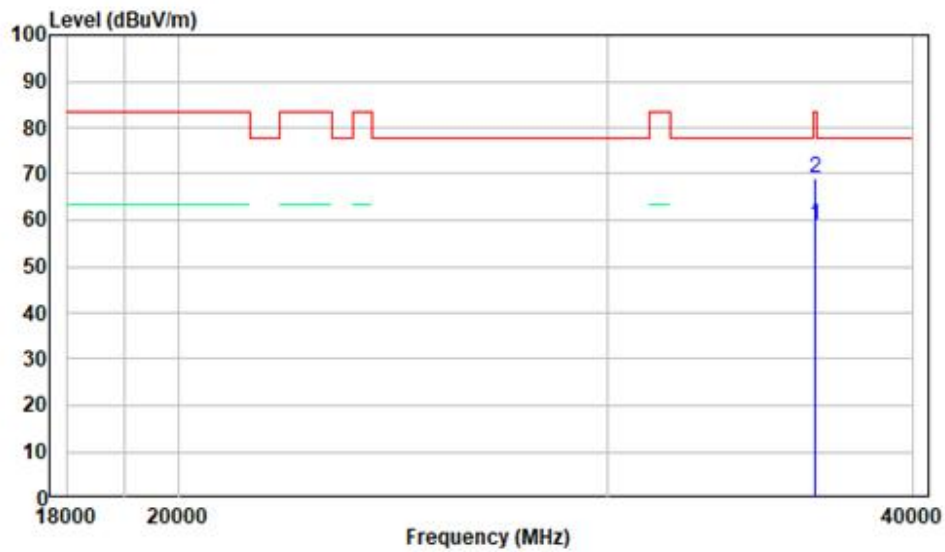
18-40GHz: (Pre-Scan plots)

802.11ac80, 5610MHz

Horizontal



Vertical



FCC §15.407(a),(e) – 26dB & 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

According to KDB789033 D02 section II.C. and section II.D.

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.

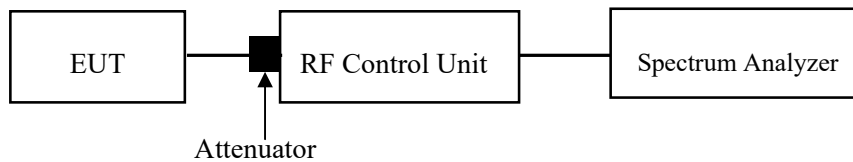
3. 99% Occupied Bandwidth

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:	22℃
Relative Humidity:	56%
ATM Pressure:	101.0 kPa

The testing was performed by Andy Yu on 2023-02-02 and 2023-02-03.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the Appendix.

FCC §15.407(a)–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.

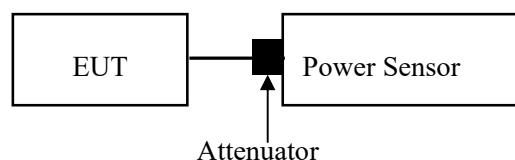
For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not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

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

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



Test Data**Environmental Conditions**

Temperature:	22°C
Relative Humidity:	56%
ATM Pressure:	101.0 kPa

The testing was performed by Andy Yu from 2023-02-02 to 2023-02-26.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the Appendix.

FCC §15.407(a)- 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.

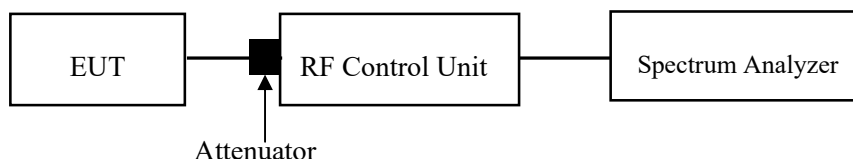
For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum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

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 ($< 1 \text{ MHz}$, or $< 500 \text{ kHz}$) and integrated over 1 MHz, or 500 kHz bandwidth, the following adjustments to the procedures apply:

- Set $\text{RBW} \geq 1/T$, where T is defined in section II.B.1.a).
- Set $\text{VBW} \geq 3 \text{ RBW}$.
- 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.
- 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.
- 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:	22°C
Relative Humidity:	56%
ATM Pressure:	101.0 kPa

The testing was performed by Andy Yu from 2023-02-02 to 2023-04-10.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the Appendix.

APPENDIX

Appendix A1: Emission Bandwidth Test Result

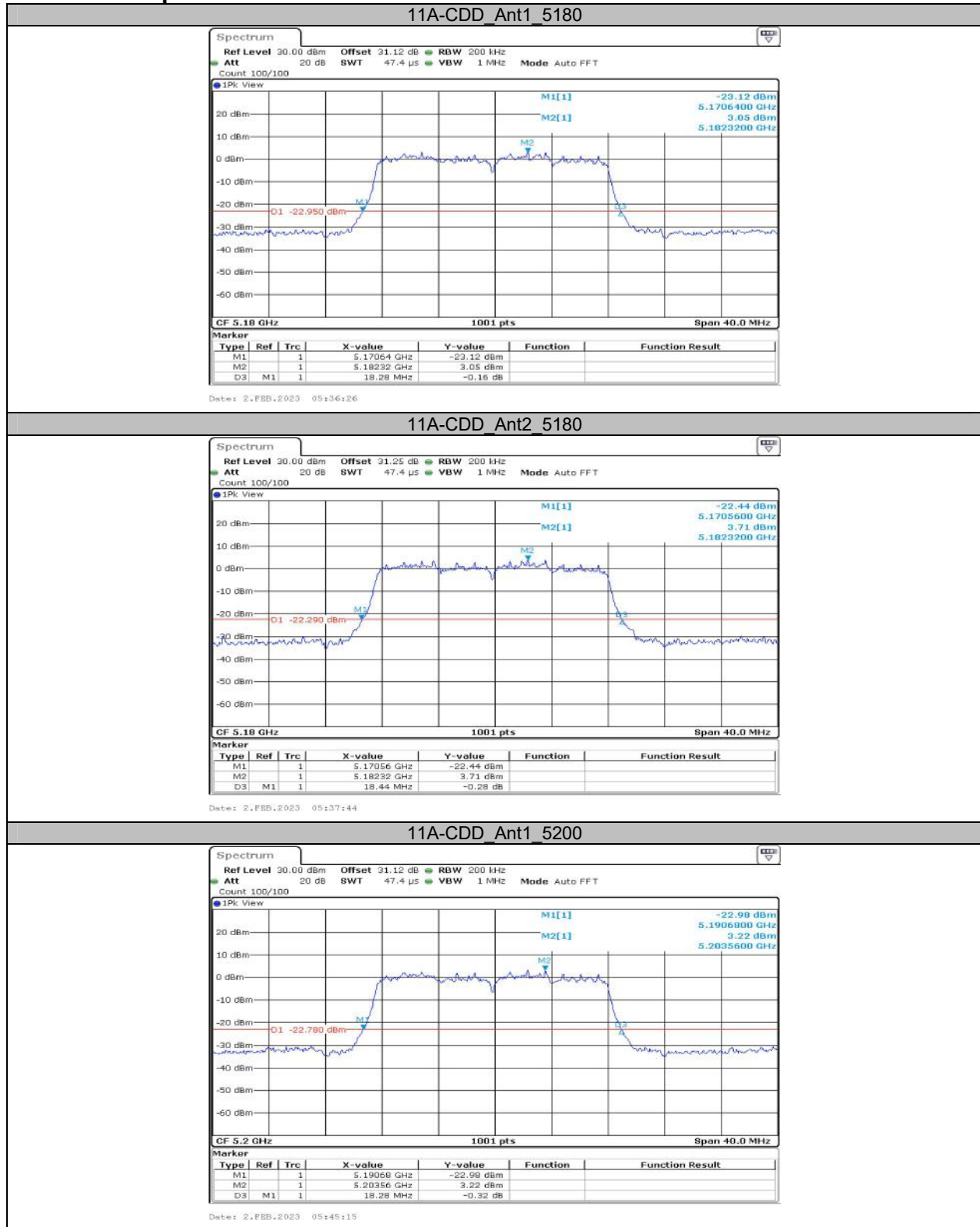
Test Mode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A-CDD	Ant1	5180	18.28	5170.64	5188.92	---	---
	Ant2	5180	18.44	5170.56	5189.00	---	---
	Ant1	5200	18.28	5190.68	5208.96	---	---
	Ant2	5200	18.44	5190.56	5209.00	---	---
	Ant1	5240	18.40	5230.56	5248.96	---	---
	Ant2	5240	18.40	5230.64	5249.04	---	---
	Ant1	5260	18.32	5250.68	5269.00	---	---
	Ant2	5260	18.48	5250.56	5269.04	---	---
	Ant1	5280	18.24	5270.64	5288.88	---	---
	Ant2	5280	18.28	5270.68	5288.96	---	---
	Ant1	5320	18.32	5310.64	5328.96	---	---
	Ant2	5320	18.24	5310.72	5328.96	---	---
	Ant1	5500	18.28	5490.64	5508.92	---	---
	Ant2	5500	18.36	5490.64	5509.00	---	---
	Ant1	5580	18.32	5570.64	5588.96	---	---
	Ant2	5580	18.40	5570.64	5589.04	---	---
	Ant1	5700	18.36	5690.60	5708.96	---	---
	Ant2	5700	18.48	5690.60	5709.08	---	---
	Ant1	5720	18.44	5710.64	5729.08	---	---
	Ant2	5720	18.24	5710.68	5728.92	---	---
11N20MIMO	Ant1	5720 UNII-2C	14.36	5710.64	5725	---	---
	Ant2	5720 UNII-2C	14.32	5710.68	5725	---	---
	Ant1	5720 UNII-3	4.08	5725	5729.08	---	---
	Ant2	5720 UNII-3	3.92	5725	5728.92	---	---
	Ant1	5180	19.32	5170.16	5189.48	---	---
	Ant2	5180	19.36	5170.12	5189.48	---	---
	Ant1	5200	19.32	5190.20	5209.52	---	---
	Ant2	5200	19.32	5190.12	5209.44	---	---
	Ant1	5240	19.32	5230.16	5249.48	---	---
	Ant2	5240	19.28	5230.12	5249.40	---	---
	Ant1	5260	19.20	5250.24	5269.44	---	---
	Ant2	5260	19.28	5250.16	5269.44	---	---
	Ant1	5280	19.32	5270.08	5289.40	---	---
	Ant2	5280	19.28	5270.12	5289.40	---	---
	Ant1	5320	19.44	5310.04	5329.48	---	---
	Ant2	5320	19.24	5310.16	5329.40	---	---
	Ant1	5500	19.32	5490.16	5509.48	---	---
	Ant2	5500	19.28	5490.16	5509.44	---	---
	Ant1	5580	19.36	5570.16	5589.52	---	---
	Ant2	5580	19.40	5570.08	5589.48	---	---
11N40MIMO	Ant1	5700	19.24	5690.20	5709.44	---	---
	Ant2	5700	19.28	5690.16	5709.44	---	---
	Ant1	5720	19.40	5710.12	5729.52	---	---
	Ant2	5720	19.28	5710.16	5729.44	---	---
	Ant1	5720 UNII-2C	14.88	5710.12	5725	---	---
	Ant2	5720 UNII-2C	14.84	5710.16	5725	---	---
	Ant1	5720 UNII-3	4.52	5725	5729.52	---	---
	Ant2	5720 UNII-3	4.44	5725	5729.44	---	---
	Ant1	5190	39.92	5170.00	5209.92	---	---
	Ant2	5190	39.76	5170.08	5209.84	---	---
	Ant1	5230	39.60	5210.08	5249.68	---	---
	Ant2	5230	39.60	5210.00	5249.60	---	---

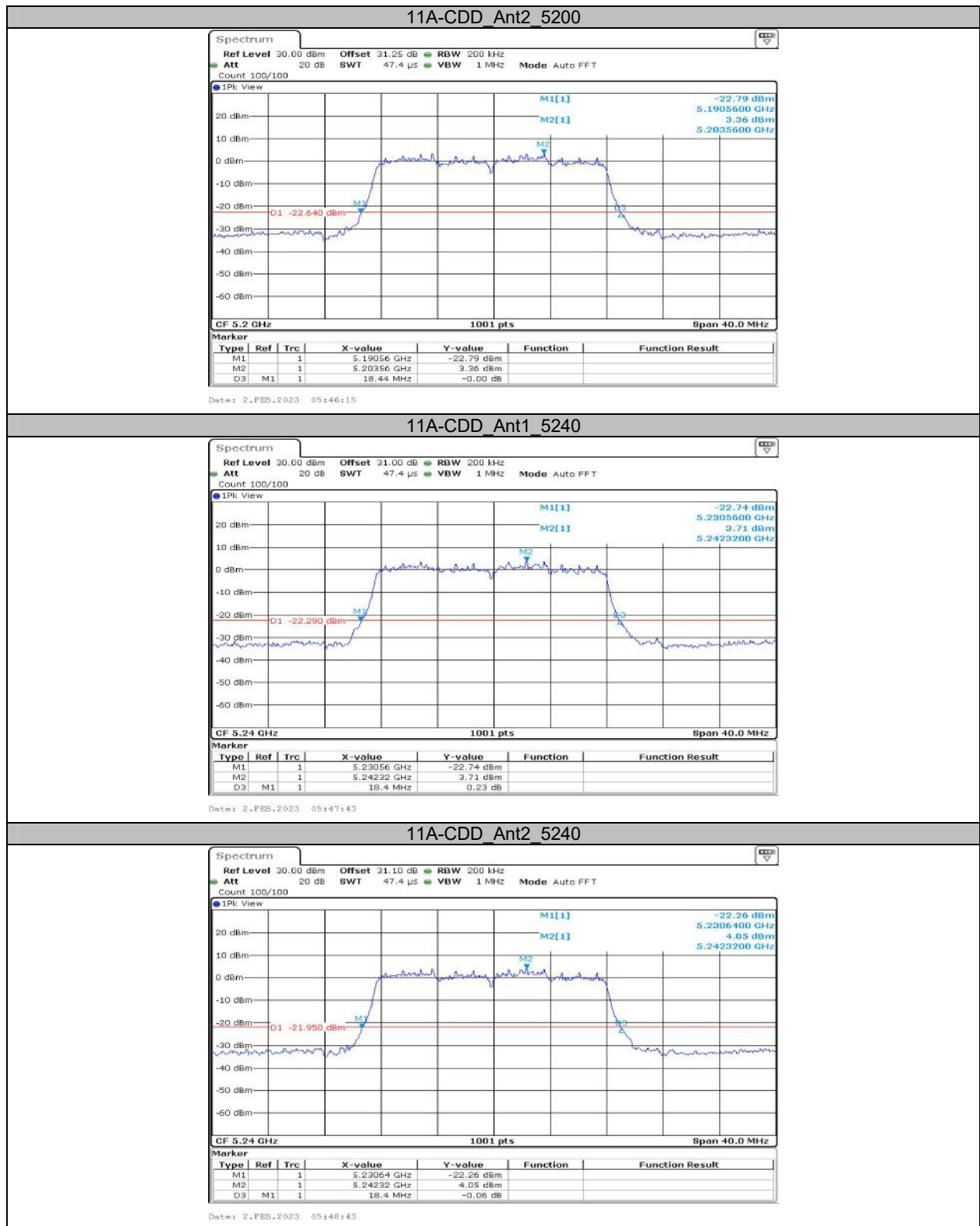
	Ant1	5270	39.36	5250.24	5289.60	---	---
	Ant2	5270	39.52	5250.08	5289.60	---	---
	Ant1	5310	39.36	5290.16	5329.52	---	---
	Ant2	5310	39.60	5290.08	5329.68	---	---
	Ant1	5510	39.52	5490.08	5529.60	---	---
	Ant2	5510	39.44	5490.16	5529.60	---	---
	Ant1	5550	39.44	5530.08	5569.52	---	---
	Ant2	5550	39.20	5530.24	5569.44	---	---
	Ant1	5670	39.44	5650.08	5689.52	---	---
	Ant2	5670	39.36	5650.16	5689.52	---	---
	Ant1	5710	46.88	5690.16	5737.04	---	---
	Ant2	5710	39.52	5690.08	5729.60	---	---
	Ant1	5710 UNII-2C	34.84	5690.16	5725	---	---
	Ant2	5710 UNII-2C	34.92	5690.08	5725	---	---
	Ant1	5710 UNII-3	12.04	5725	5737.04	---	---
	Ant2	5710 UNII-3	4.6	5725	5729.60	---	---
11AC20MIMO	Ant1	5180	19.36	5170.12	5189.48	---	---
	Ant2	5180	19.32	5170.16	5189.48	---	---
	Ant1	5200	19.32	5190.12	5209.44	---	---
	Ant2	5200	19.32	5190.12	5209.44	---	---
	Ant1	5240	19.28	5230.16	5249.44	---	---
	Ant2	5240	19.28	5230.16	5249.44	---	---
	Ant1	5260	19.40	5250.12	5269.52	---	---
	Ant2	5260	19.28	5250.16	5269.44	---	---
	Ant1	5280	19.16	5270.24	5289.40	---	---
	Ant2	5280	19.24	5270.20	5289.44	---	---
	Ant1	5320	19.24	5310.20	5329.44	---	---
	Ant2	5320	19.20	5310.20	5329.40	---	---
	Ant1	5500	19.32	5490.24	5509.56	---	---
	Ant2	5500	19.20	5490.24	5509.44	---	---
	Ant1	5580	19.48	5570.12	5589.60	---	---
	Ant2	5580	19.32	5570.16	5589.48	---	---
	Ant1	5700	19.32	5690.12	5709.44	---	---
	Ant2	5700	19.20	5690.20	5709.40	---	---
	Ant1	5720	19.28	5710.12	5729.40	---	---
	Ant2	5720	19.16	5710.24	5729.40	---	---
11AC40MIMO	Ant1	5720 UNII-2C	14.88	5710.12	5725	---	---
	Ant2	5720 UNII-2C	14.76	5710.24	5725	---	---
	Ant1	5720 UNII-3	4.4	5725	5729.40	---	---
	Ant2	5720 UNII-3	4.4	5725	5729.40	---	---
	Ant1	5190	39.28	5170.24	5209.52	---	---
	Ant2	5190	39.28	5170.24	5209.52	---	---
	Ant1	5230	39.28	5210.32	5249.60	---	---
	Ant2	5230	39.36	5210.32	5249.68	---	---
	Ant1	5270	39.36	5250.24	5289.60	---	---
	Ant2	5270	39.44	5250.32	5289.76	---	---
	Ant1	5310	39.44	5290.24	5329.68	---	---
	Ant2	5310	39.20	5290.32	5329.52	---	---
	Ant1	5510	39.28	5490.16	5529.44	---	---
	Ant2	5510	39.28	5490.32	5529.60	---	---
	Ant1	5550	39.28	5530.24	5569.52	---	---
	Ant2	5550	39.28	5530.24	5569.52	---	---
11AC80MIMO	Ant1	5670	39.36	5650.16	5689.52	---	---
	Ant2	5670	39.44	5650.16	5689.60	---	---
	Ant1	5710	39.44	5690.16	5729.60	---	---
	Ant2	5710	39.44	5690.16	5729.60	---	---
	Ant1	5710 UNII-2C	34.84	5690.16	5725	---	---
	Ant2	5710 UNII-2C	34.84	5690.16	5725	---	---
	Ant1	5710 UNII-3	4.6	5725	5729.60	---	---
	Ant2	5710 UNII-3	4.6	5725	5729.60	---	---
	Ant1	5210	87.04	5166.64	5253.68	---	---

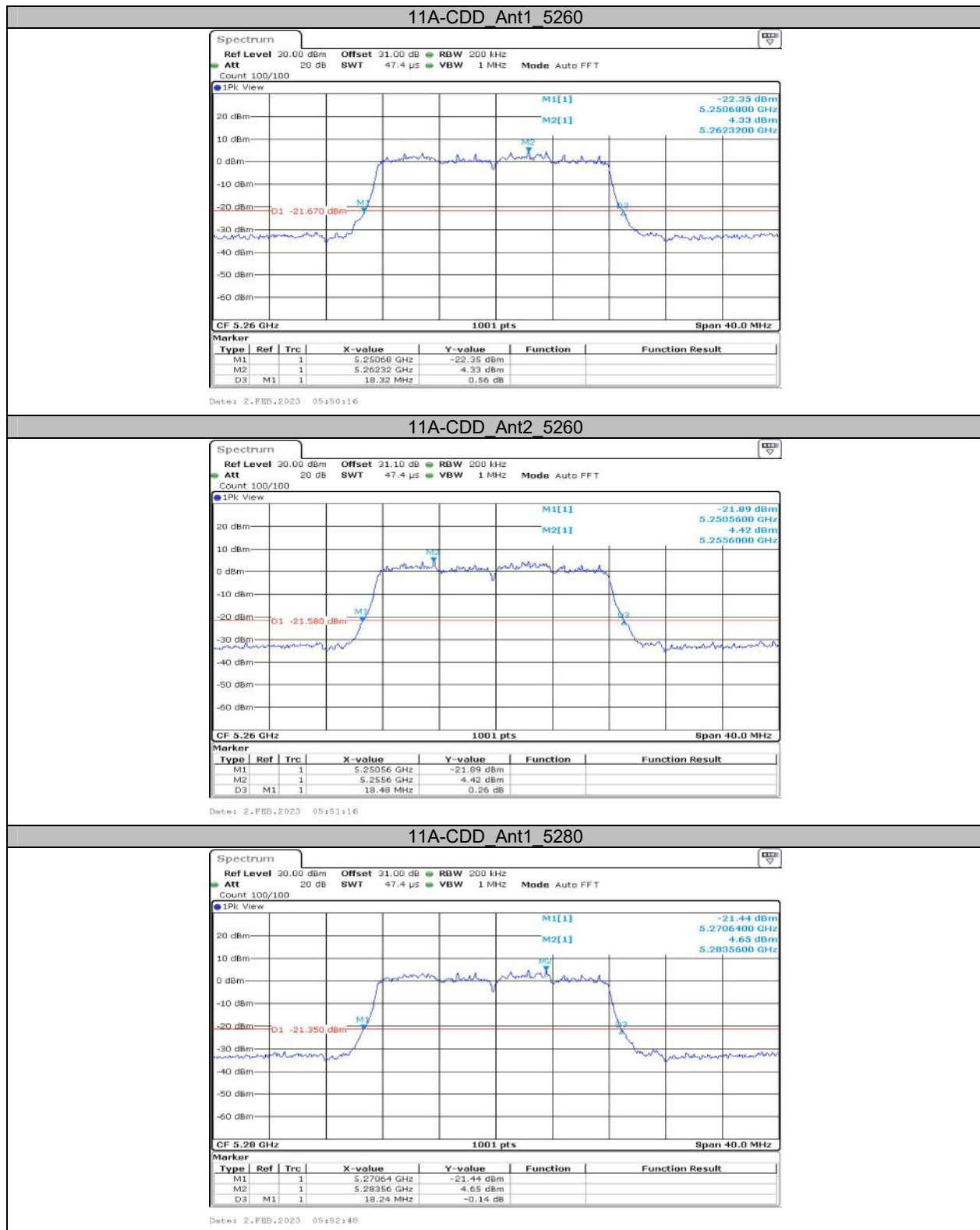
	Ant2	5210	87.84	5166.16	5254.00	---	---
	Ant1	5290	87.04	5246.64	5333.68	---	---
	Ant2	5290	87.36	5246.48	5333.84	---	---
	Ant1	5530	86.40	5486.64	5573.04	---	---
	Ant2	5530	86.88	5486.96	5573.84	---	---
	Ant1	5610	87.04	5566.32	5653.36	---	---
	Ant2	5610	87.20	5566.80	5654.00	---	---
	Ant1	5690	87.84	5646.48	5734.32	---	---
	Ant2	5690	87.52	5646.64	5734.16	---	---
	Ant1	5690 UNII-2C	78.52	5646.48	5725	---	---
	Ant2	5690 UNII-2C	78.36	5646.64	5725	---	---
	Ant1	5690 UNII-3	9.32	5725	5734.32	---	---
11AX20MIMO (worst case 242Tone_RU61)	Ant2	5690 UNII-3	9.16	5725	5734.16	---	---
	Ant1	5180	20.40	5169.76	5190.16	---	---
	Ant2	5180	20.32	5169.80	5190.12	---	---
	Ant1	5200	20.32	5189.80	5210.12	---	---
	Ant2	5200	20.28	5189.84	5210.12	---	---
	Ant1	5240	20.44	5229.80	5250.24	---	---
	Ant2	5240	20.40	5229.72	5250.12	---	---
	Ant1	5260	20.36	5249.80	5270.16	---	---
	Ant2	5260	20.24	5249.88	5270.12	---	---
	Ant1	5280	20.40	5269.76	5290.16	---	---
	Ant2	5280	20.36	5269.80	5290.16	---	---
	Ant1	5320	20.40	5309.72	5330.12	---	---
	Ant2	5320	20.32	5309.80	5330.12	---	---
	Ant1	5500	20.40	5489.80	5510.20	---	---
	Ant2	5500	20.28	5489.84	5510.12	---	---
	Ant1	5580	20.40	5569.80	5590.20	---	---
	Ant2	5580	20.44	5569.76	5590.20	---	---
	Ant1	5700	20.40	5689.76	5710.16	---	---
	Ant2	5700	20.40	5689.72	5710.12	---	---
	Ant1	5720	20.36	5709.60	5729.96	---	---
	Ant2	5720	20.40	5709.56	5729.96	---	---
	Ant1	5720 UNII-2C	15.4	5709.60	5725	---	---
	Ant2	5720 UNII-2C	15.44	5709.56	5725	---	---
	Ant1	5720 UNII-3	4.96	5725	5729.96	---	---
	Ant2	5720 UNII-3	4.96	5725	5729.96	---	---
11AX40MIMO (worst case 484Tone_RU65)	Ant1	5190	40.24	5169.92	5210.16	---	---
	Ant2	5190	40.08	5170.00	5210.08	---	---
	Ant1	5230	40.16	5209.92	5250.08	---	---
	Ant2	5230	40.16	5210.00	5250.16	---	---
	Ant1	5270	40.32	5249.92	5290.24	---	---
	Ant2	5270	40.24	5249.92	5290.16	---	---
	Ant1	5310	40.08	5290.00	5330.08	---	---
	Ant2	5310	40.16	5289.92	5330.08	---	---
	Ant1	5510	40.08	5489.92	5530.00	---	---
	Ant2	5510	39.92	5490.00	5529.92	---	---
	Ant1	5550	40.08	5529.92	5570.00	---	---
	Ant2	5550	40.00	5530.08	5570.08	---	---
	Ant1	5670	40.24	5649.92	5690.16	---	---
	Ant2	5670	40.16	5649.92	5690.08	---	---
	Ant1	5710	40.32	5689.68	5730.00	---	---
	Ant2	5710	40.24	5689.76	5730.00	---	---
	Ant1	5710 UNII-2C	35.32	5689.68	5725	---	---
	Ant2	5710 UNII-2C	35.24	5689.76	5725	---	---
	Ant1	5710 UNII-3	5	5725	5730.00	---	---
	Ant2	5710 UNII-3	5	5725	5730.00	---	---
11AX80MIMO (worst case 996Tone_RU67)	Ant1	5210	81.60	5169.20	5250.80	---	---
	Ant2	5210	81.92	5169.04	5250.96	---	---
	Ant1	5290	81.60	5249.20	5330.80	---	---
	Ant2	5290	81.76	5249.04	5330.80	---	---

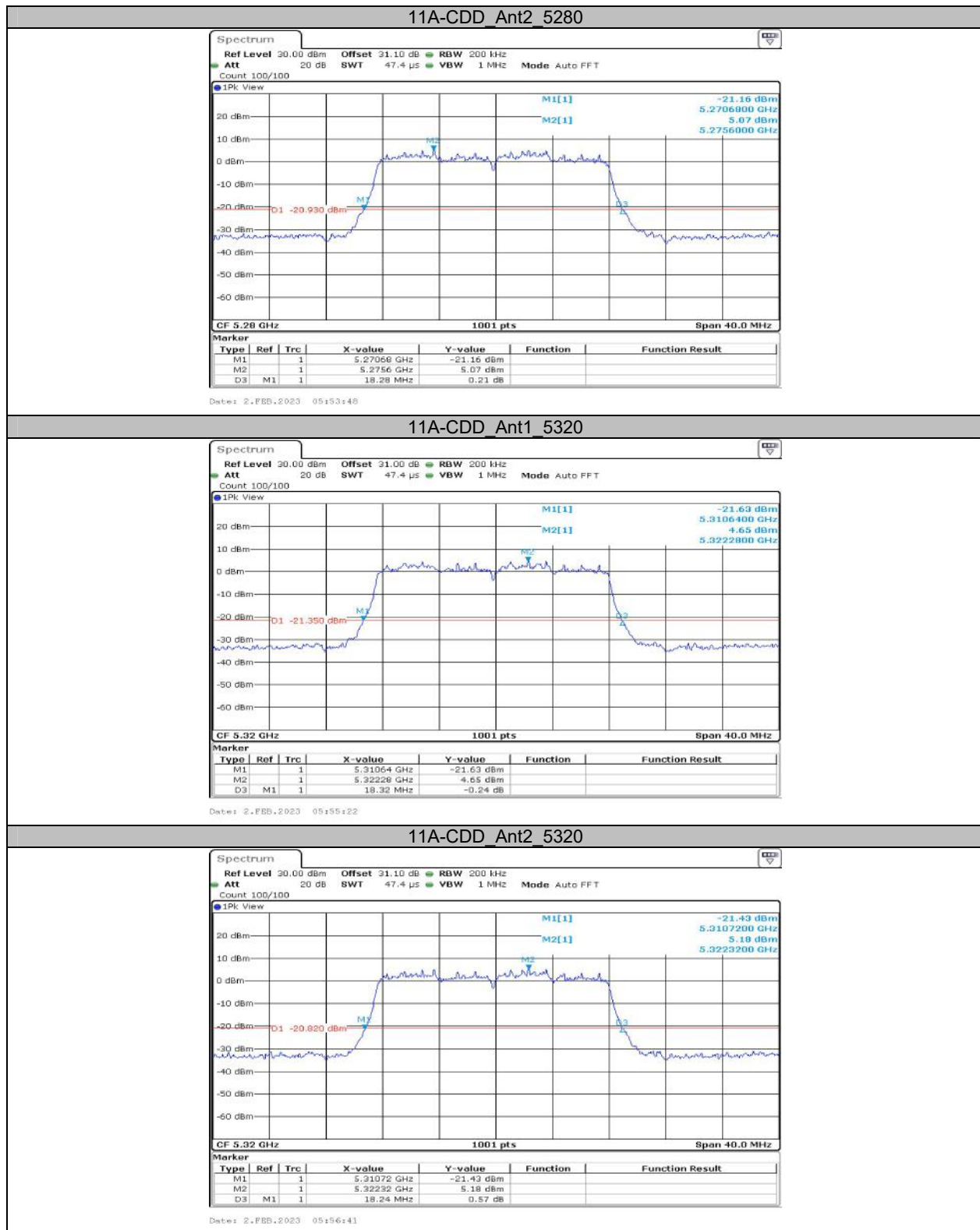
	Ant1	5530	81.76	5489.04	5570.80	---	---
	Ant2	5530	81.60	5489.20	5570.80	---	---
	Ant1	5610	81.76	5569.04	5650.80	---	---
	Ant2	5610	81.60	5569.20	5650.80	---	---
	Ant1	5690	81.60	5649.04	5730.64	---	---
	Ant2	5690	81.60	5649.20	5730.80	---	---
	Ant1	5690 UNII-2C	75.96	5649.04	5725	---	---
	Ant2	5690 UNII-2C	75.8	5649.20	5725	---	---
	Ant1	5690 UNII-3	5.64	5725	5730.64	---	---
	Ant2	5690 UNII-3	5.8	5725	5730.80	---	---

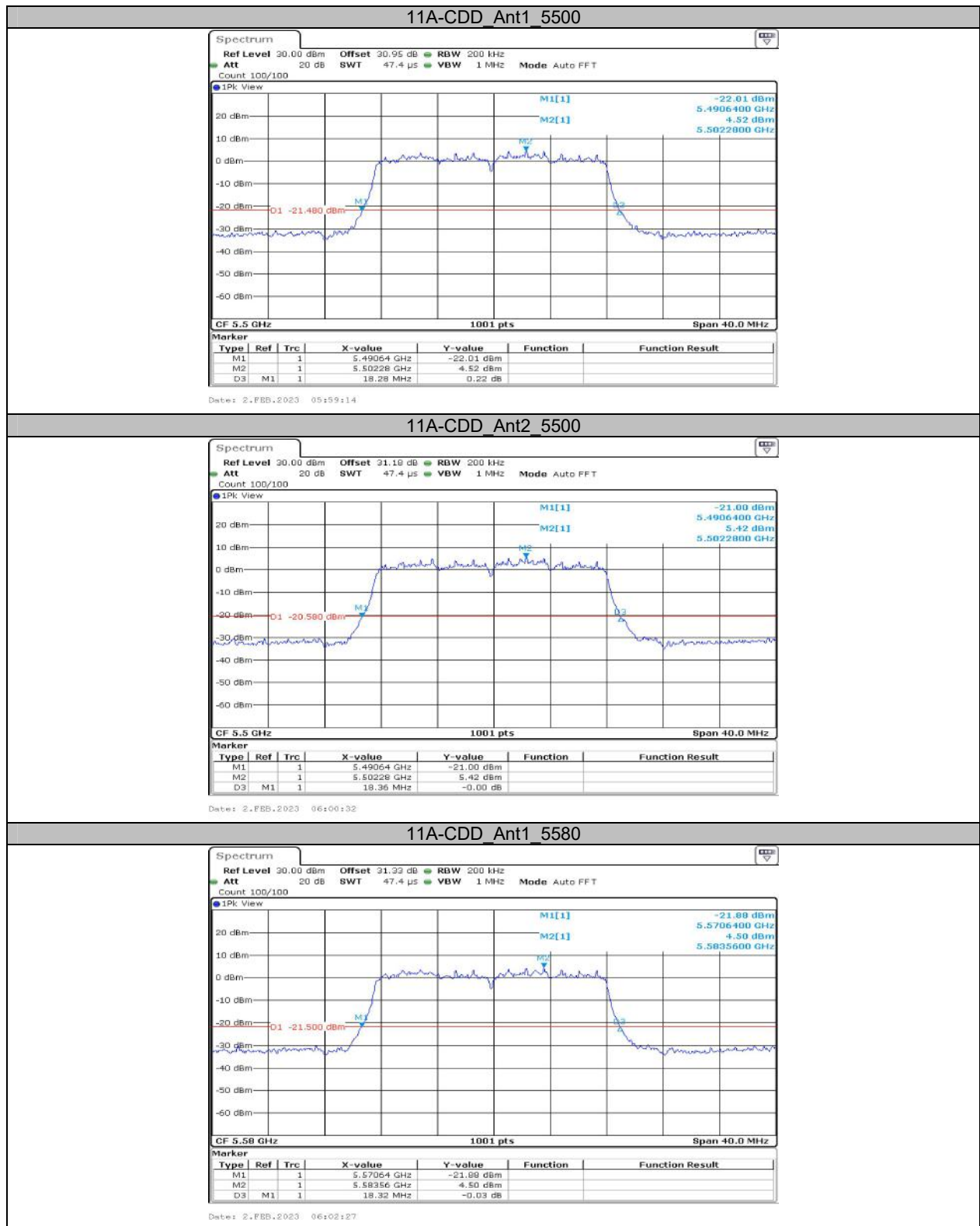
Test Graphs

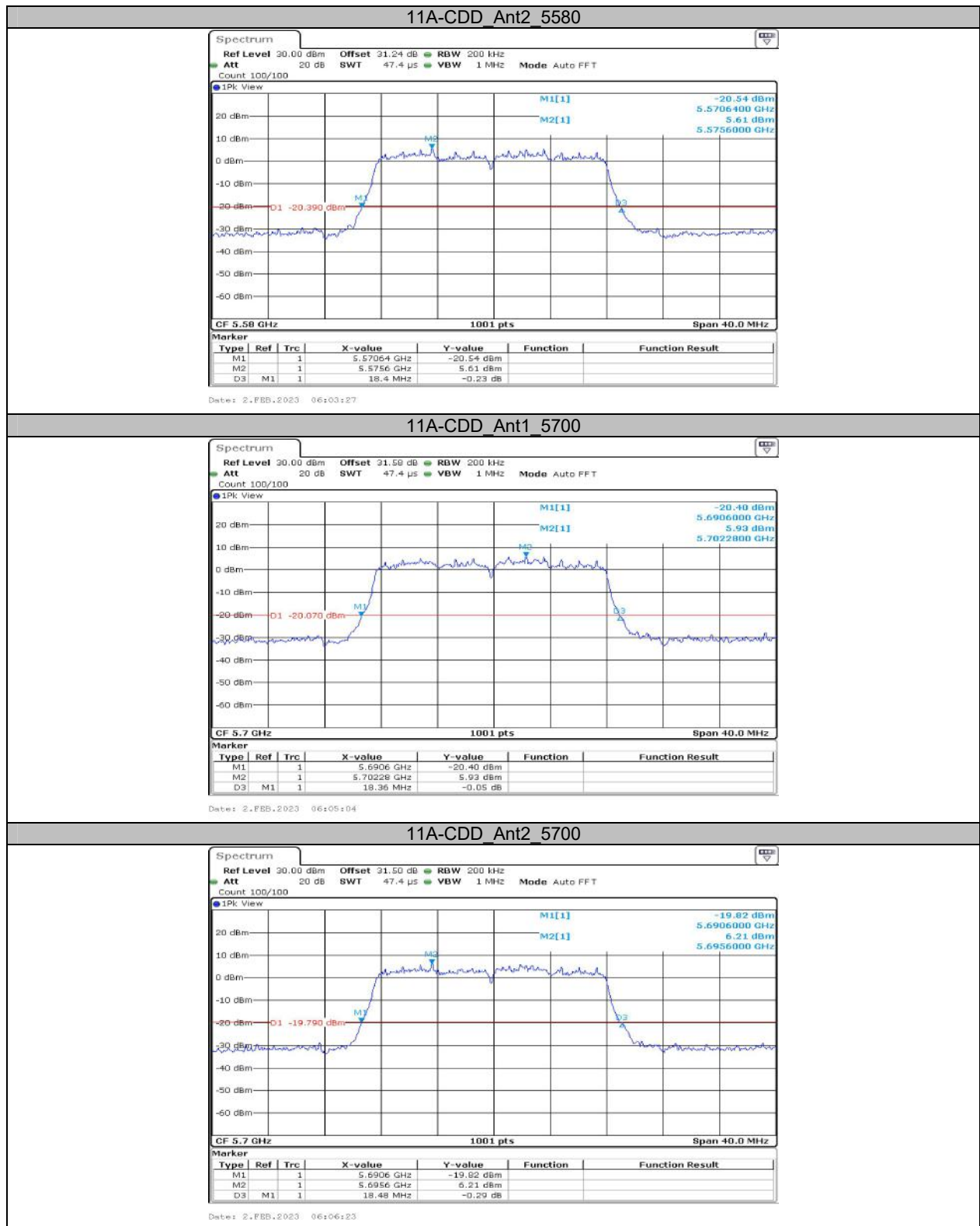


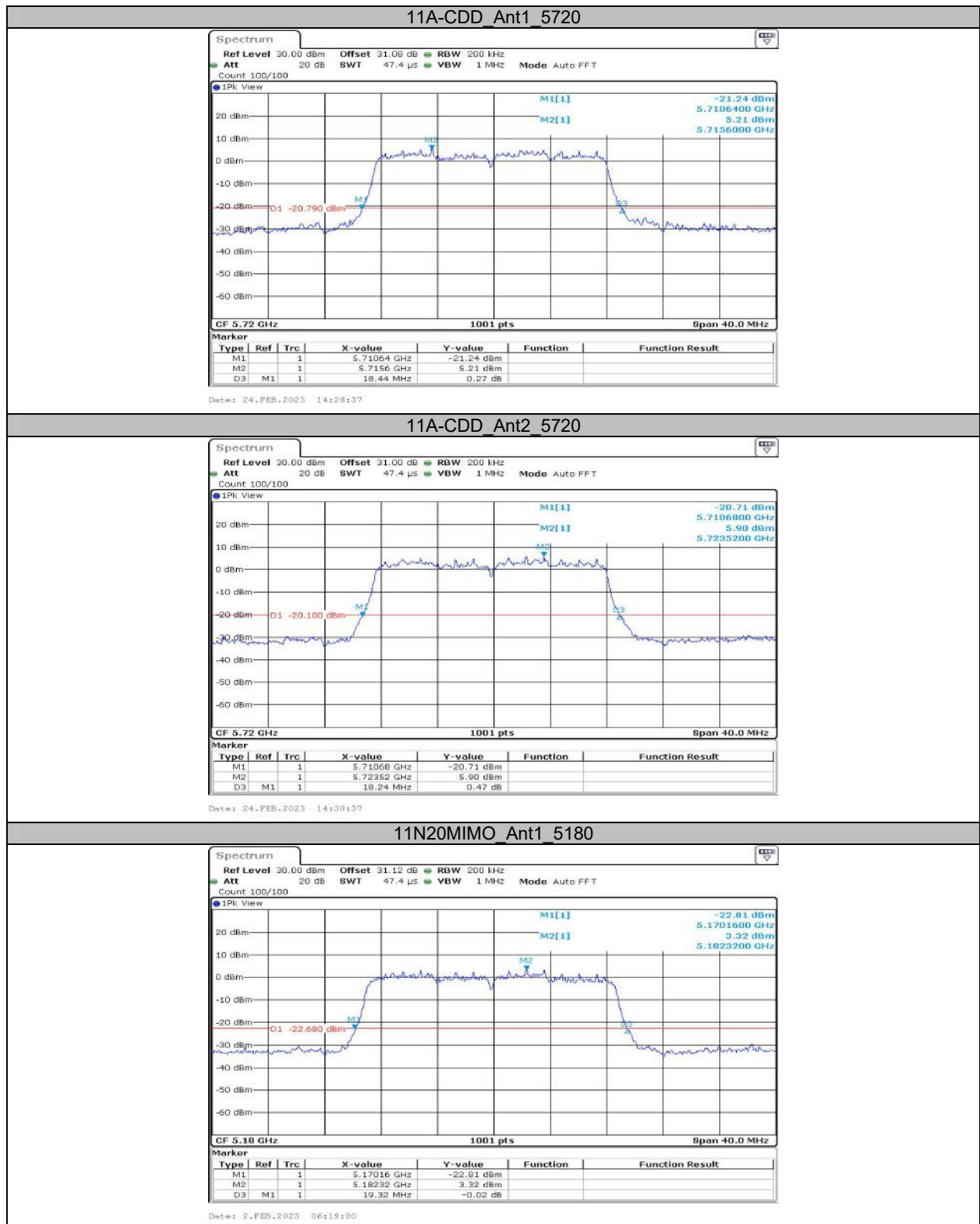


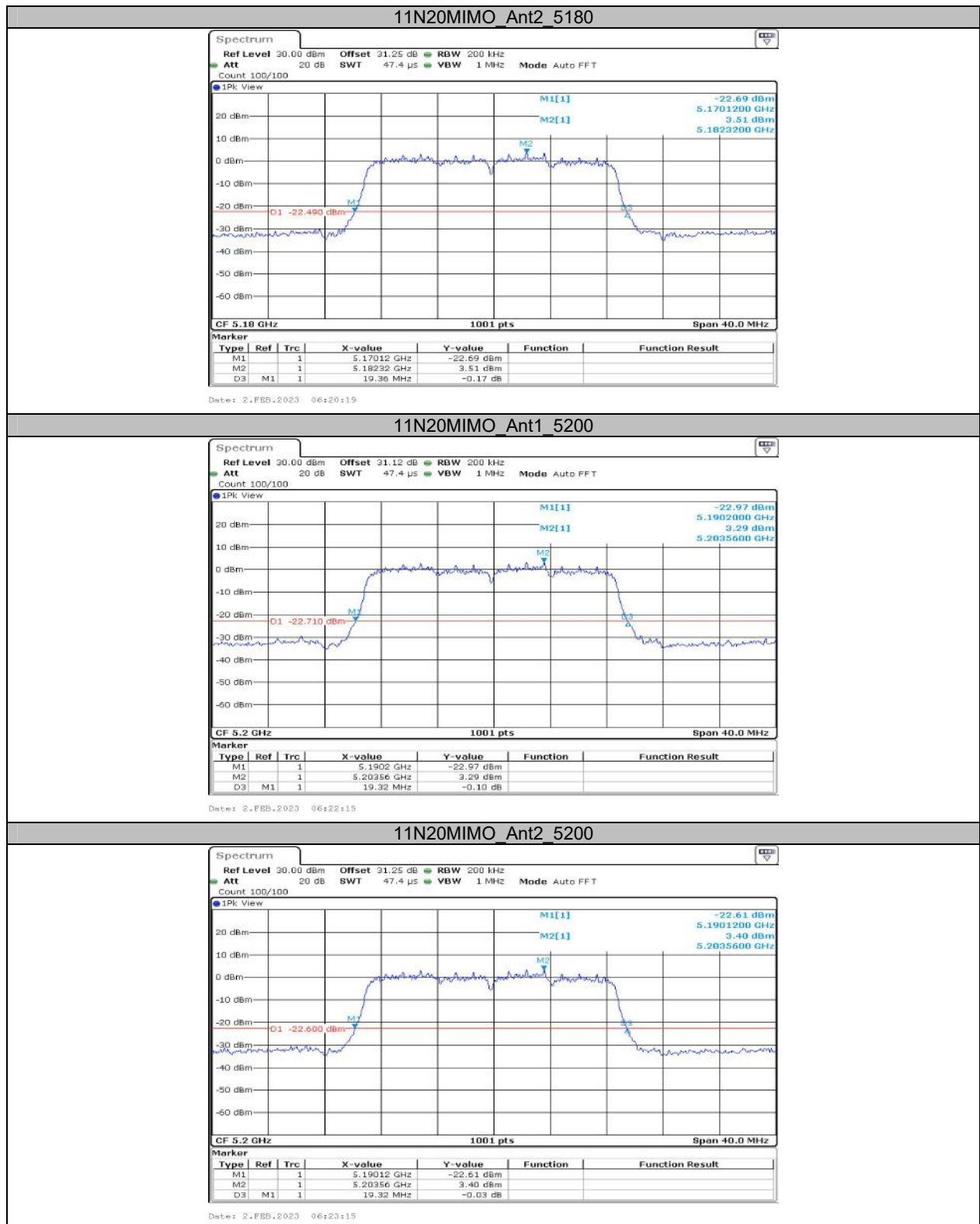


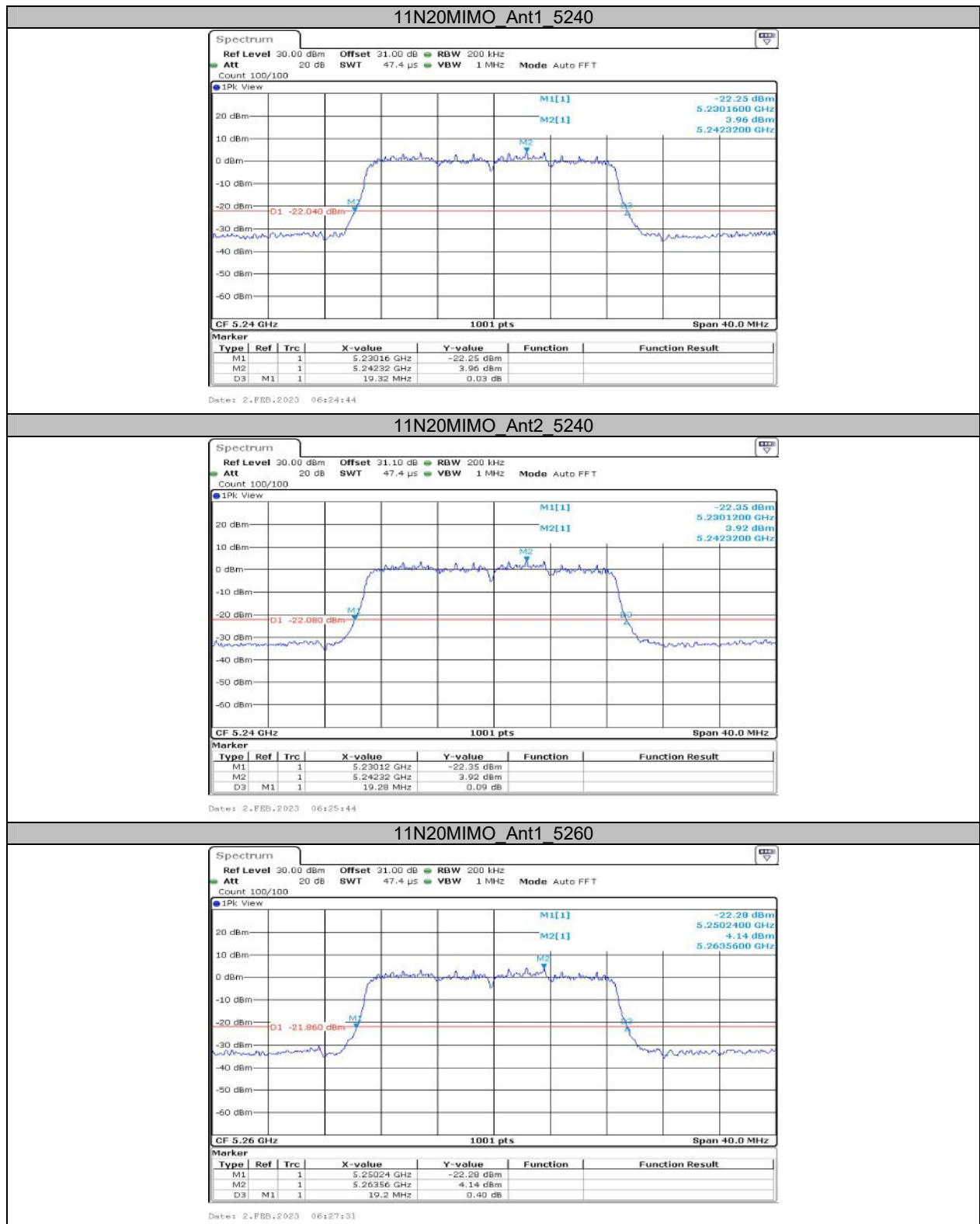


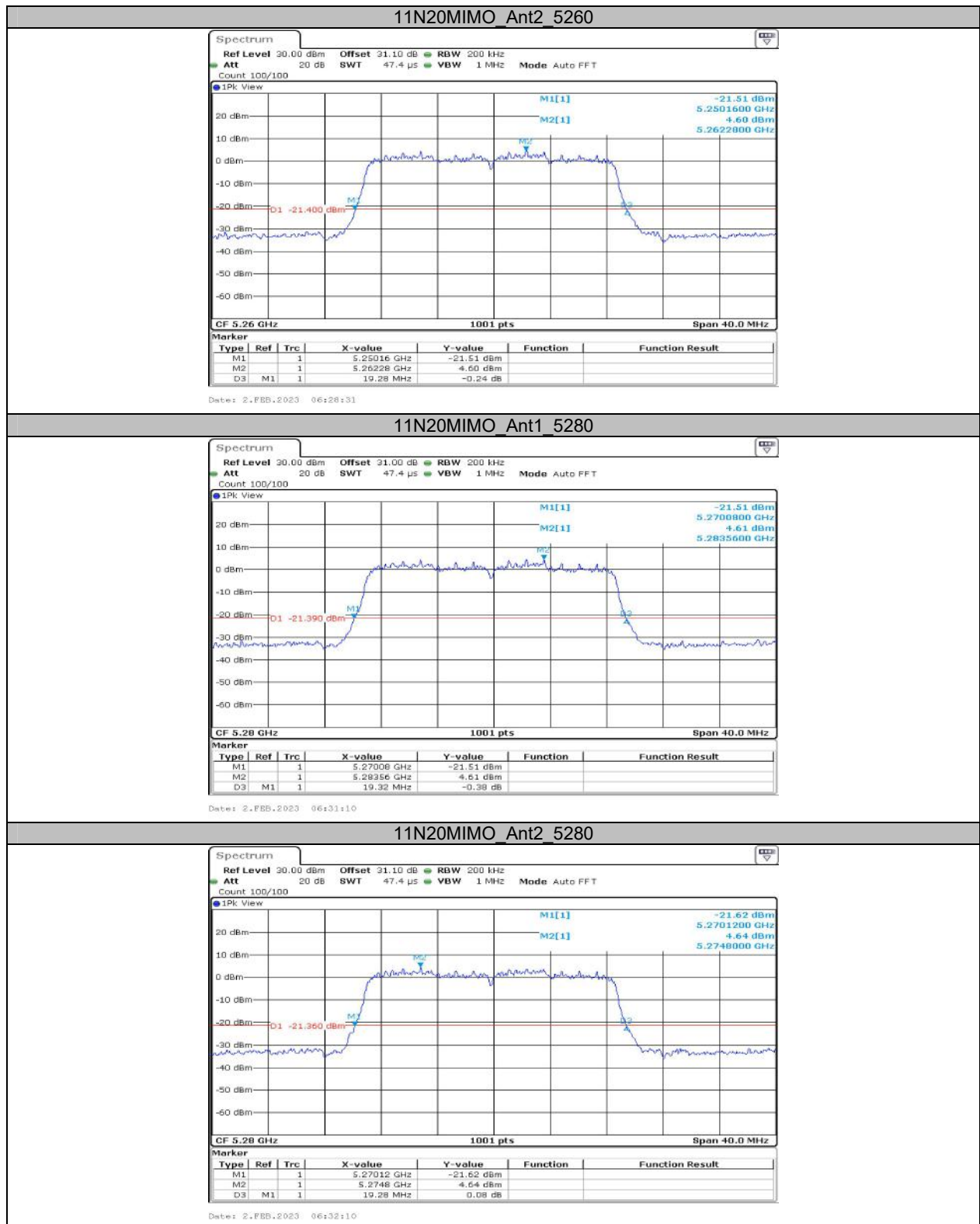


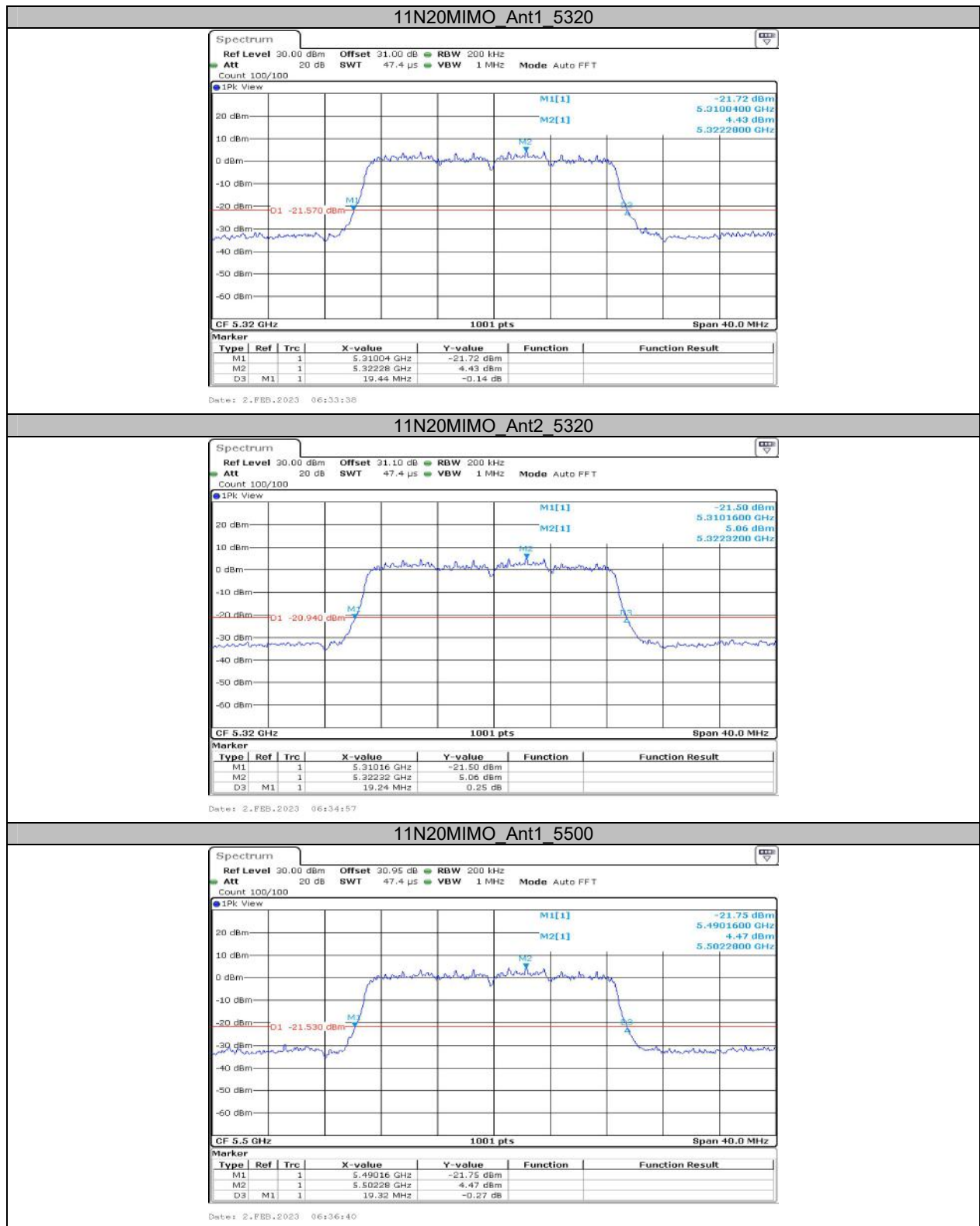


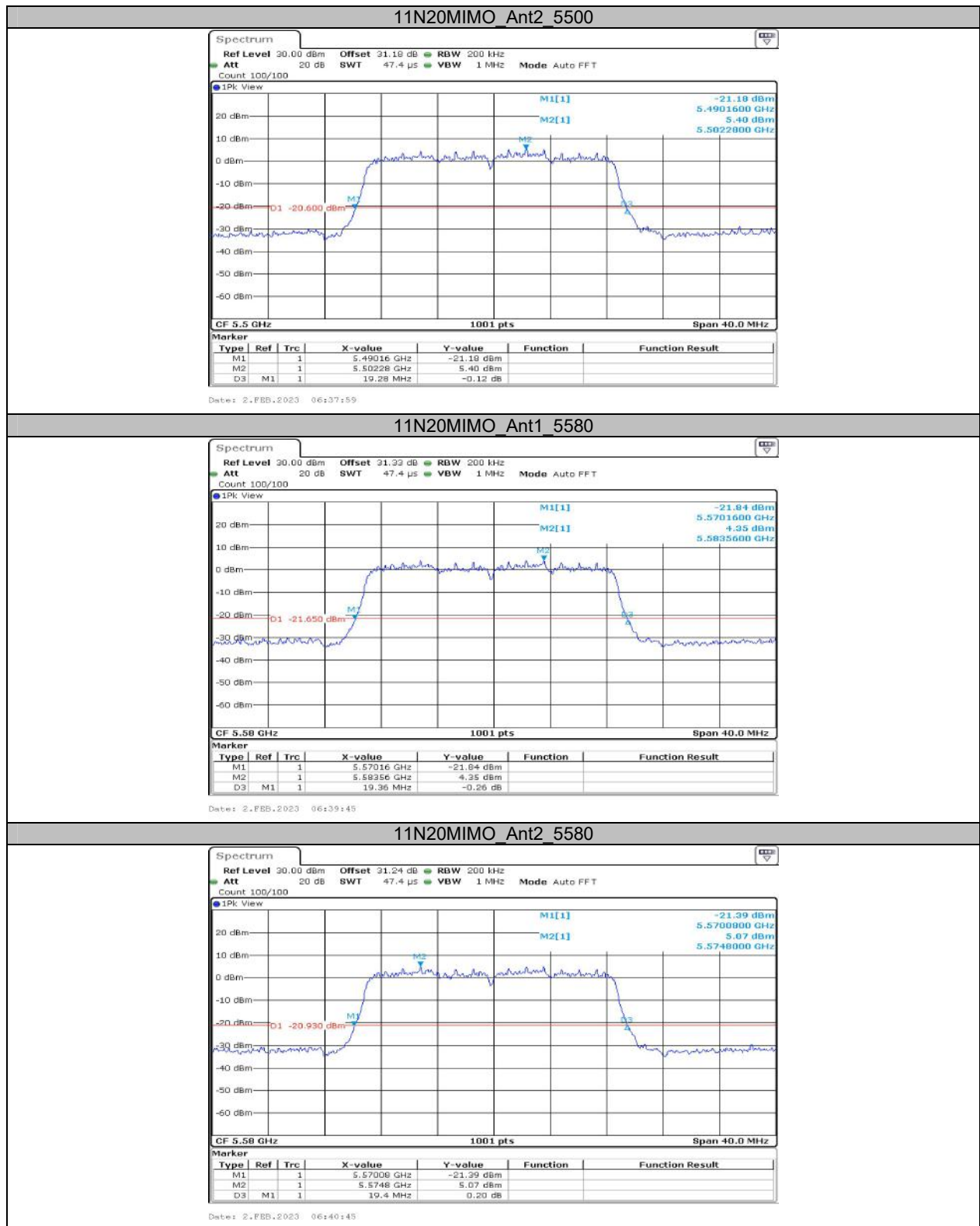


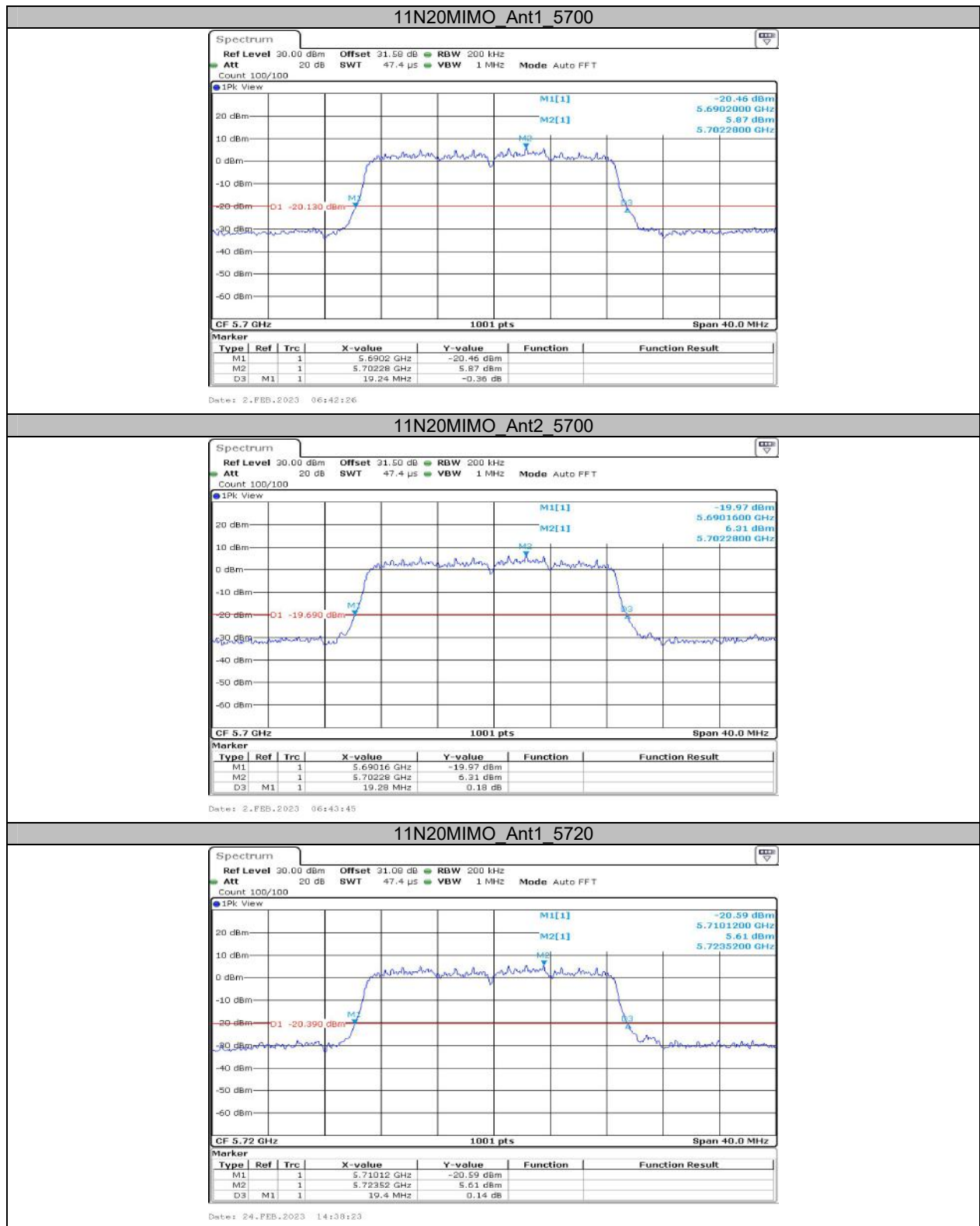


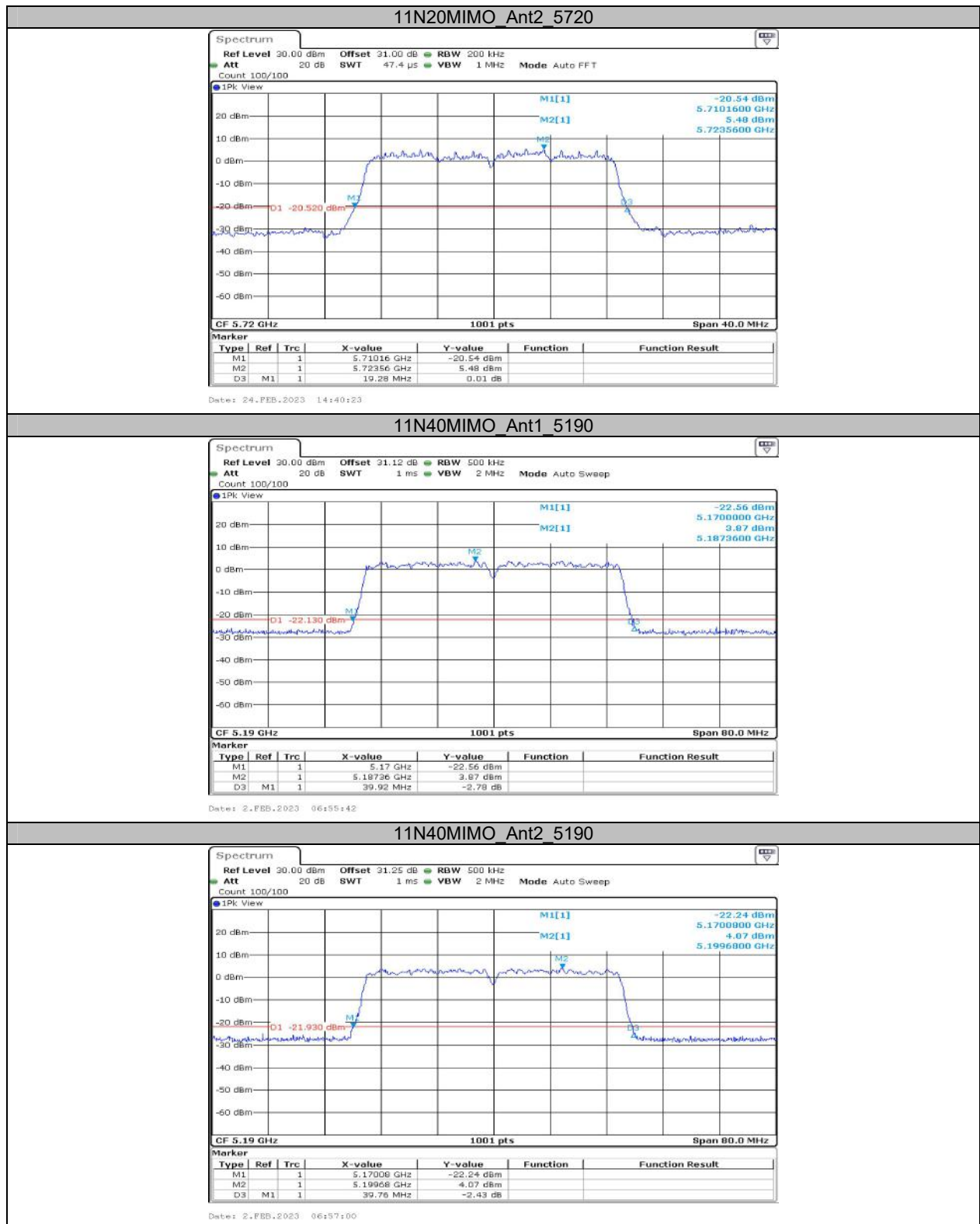


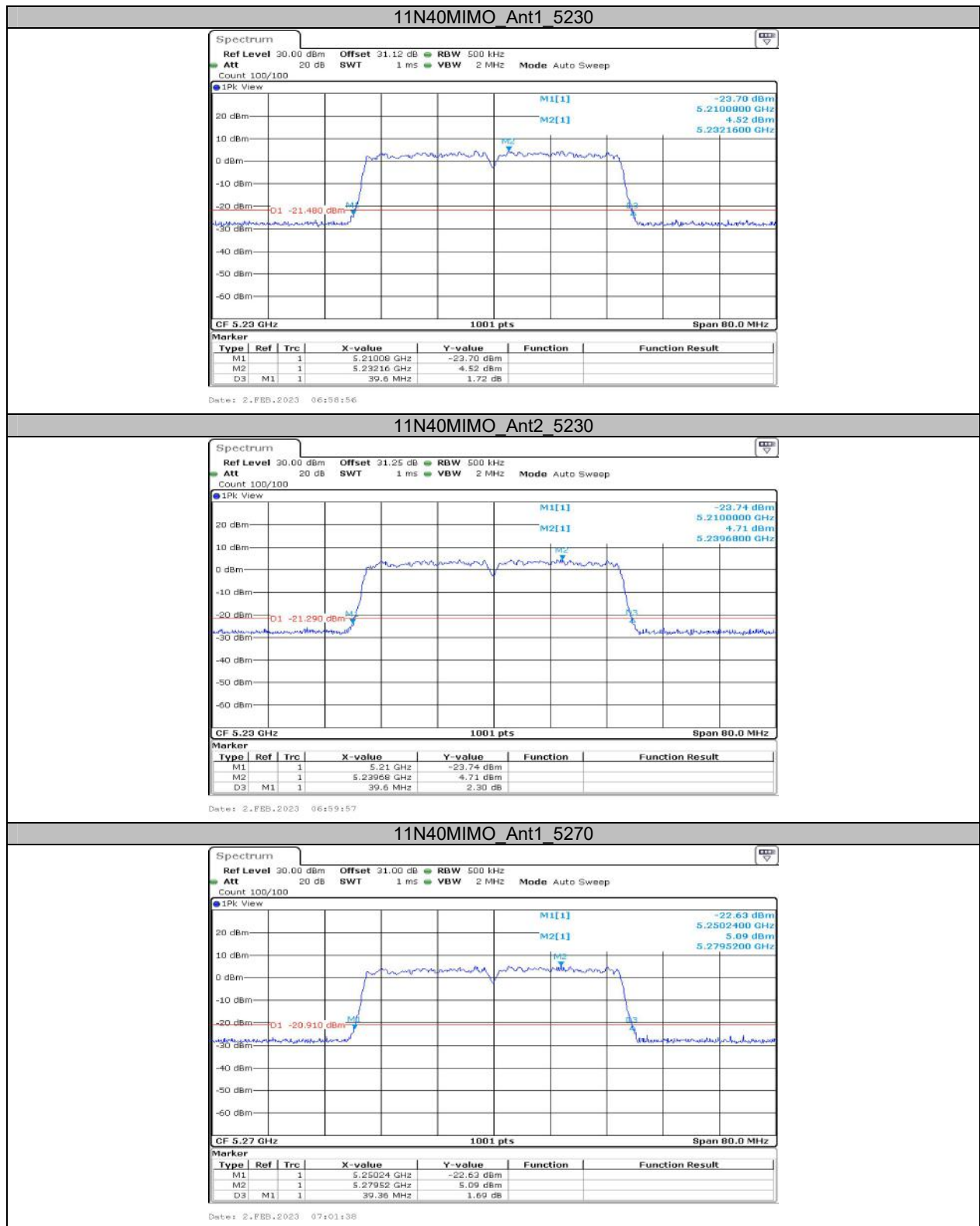


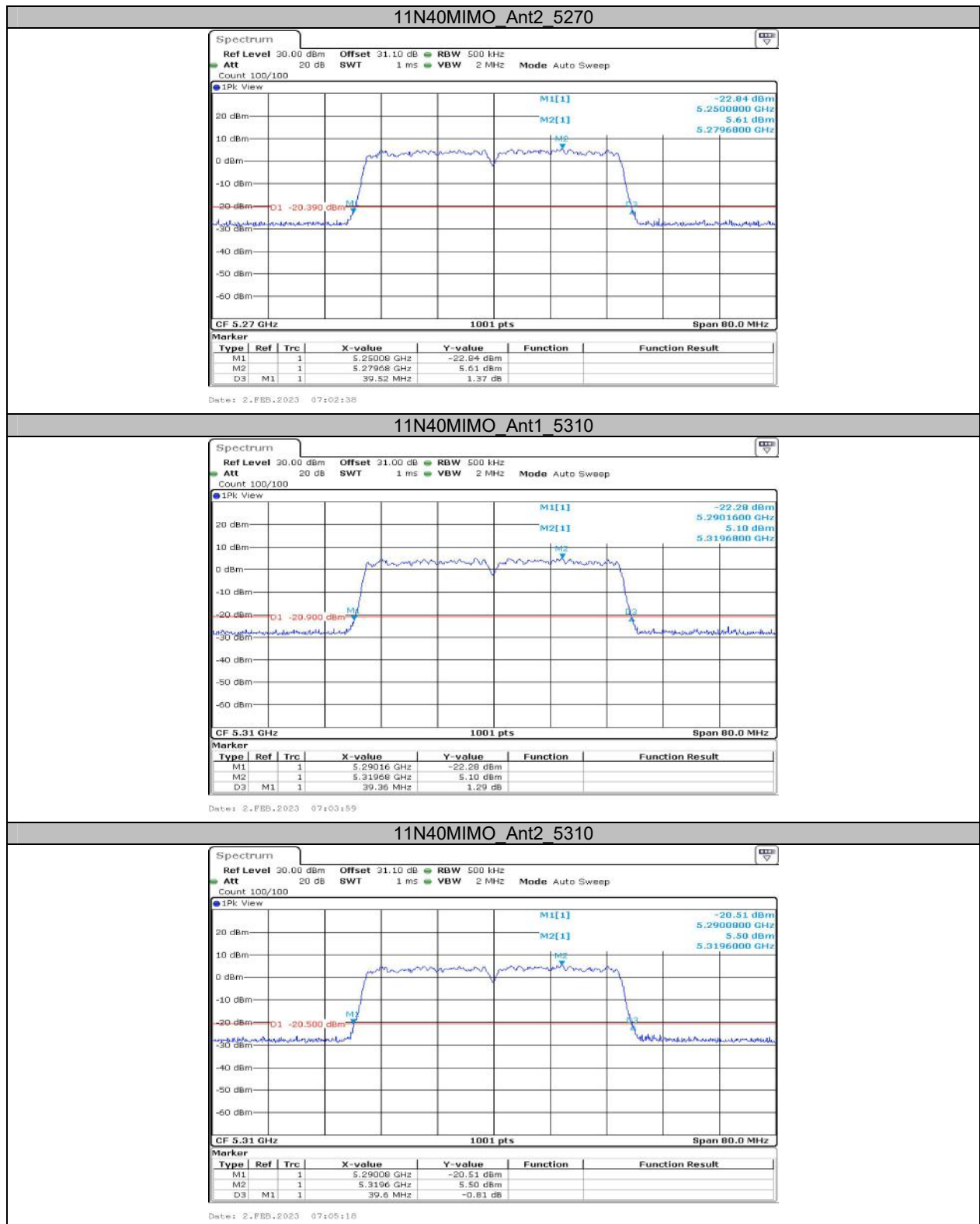


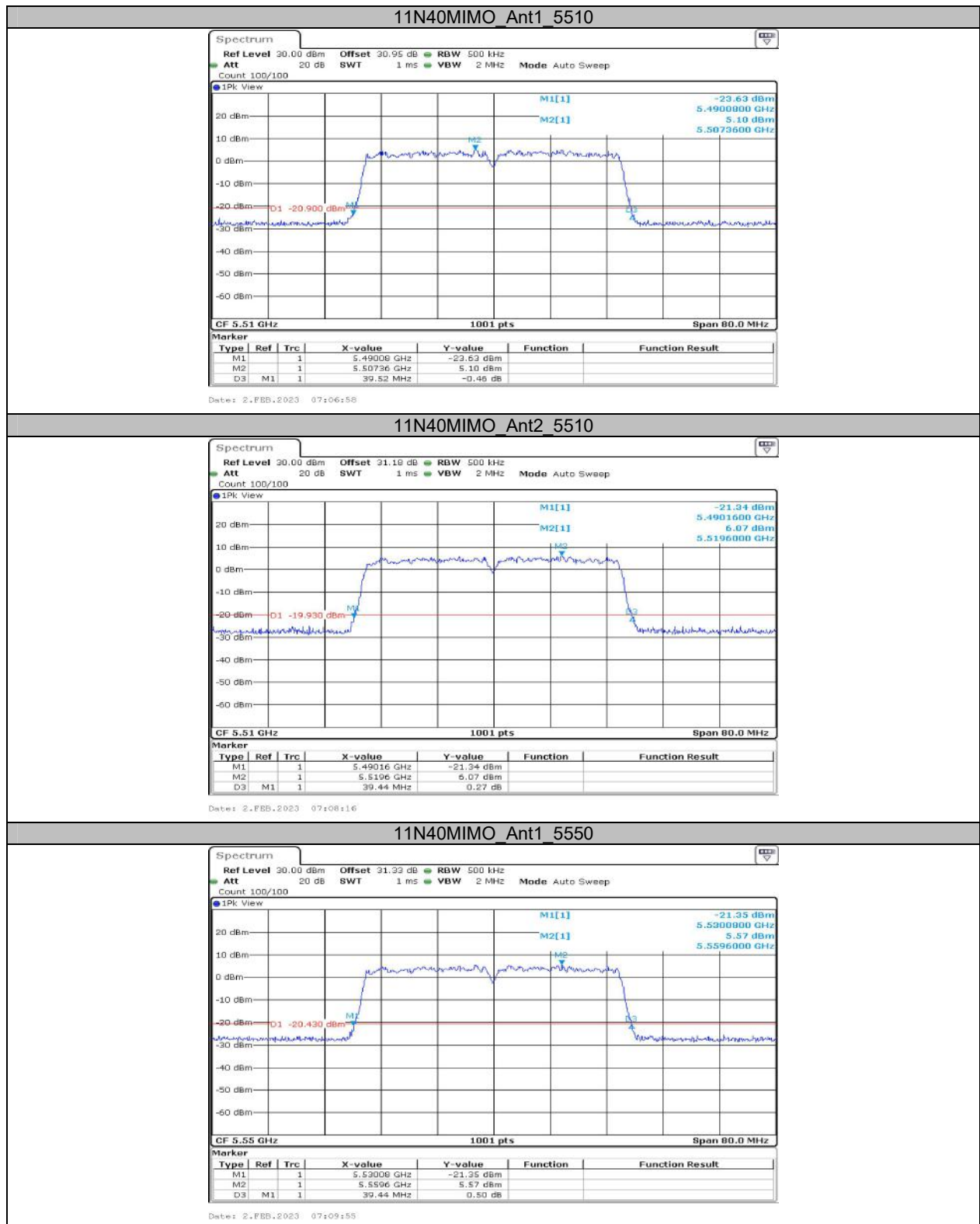


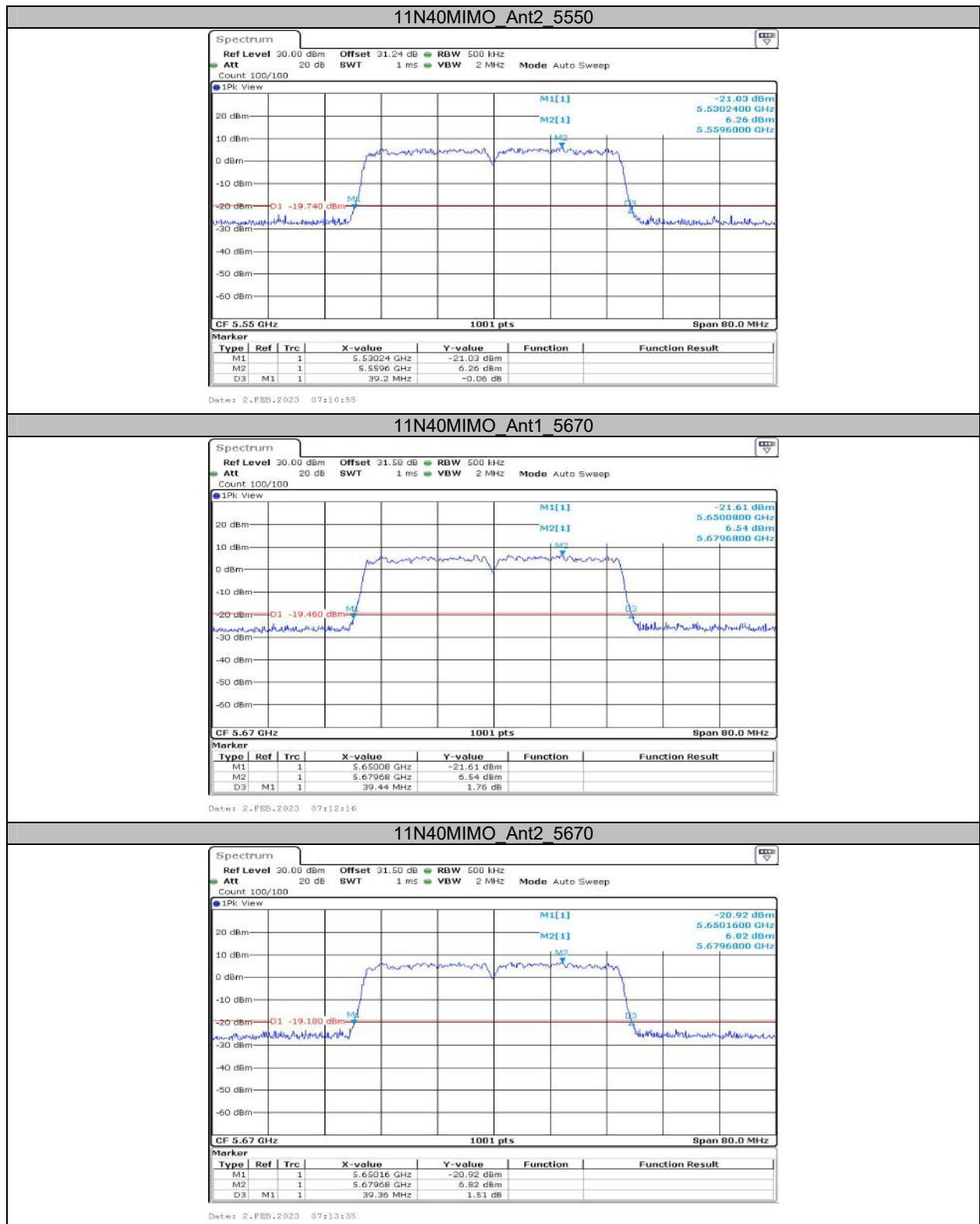


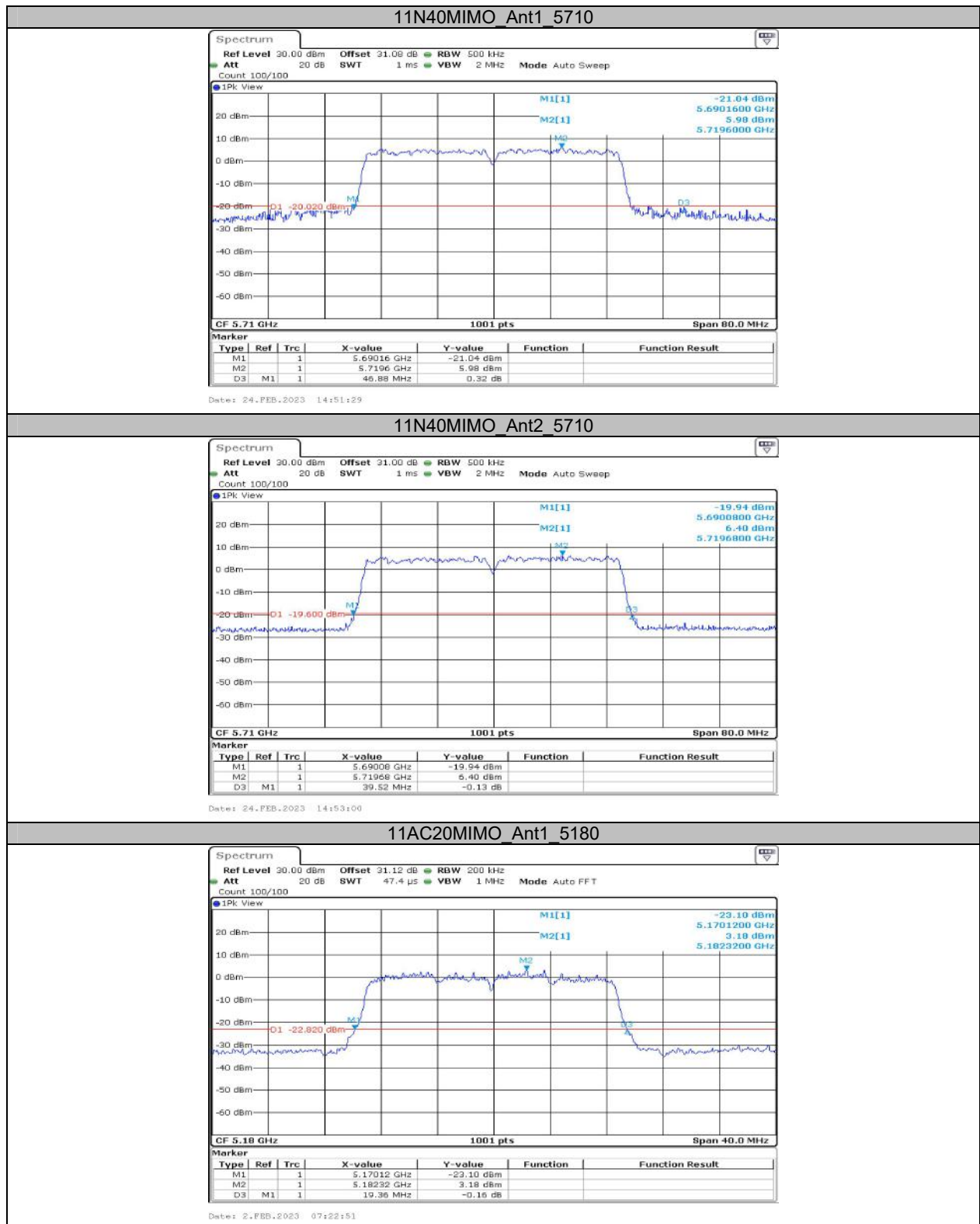




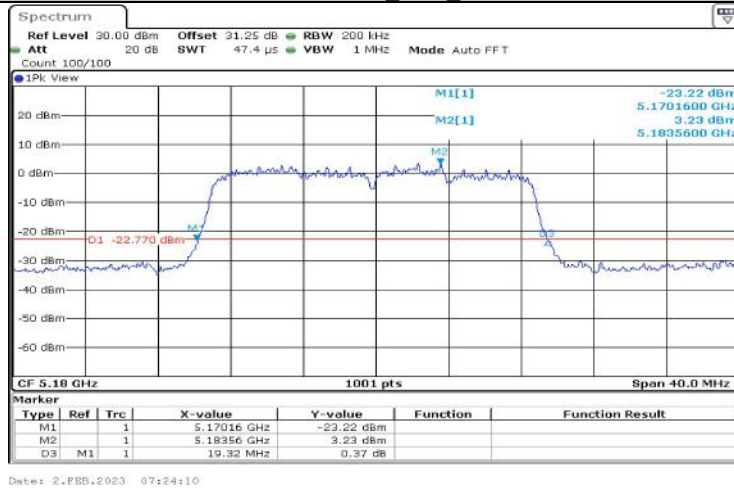




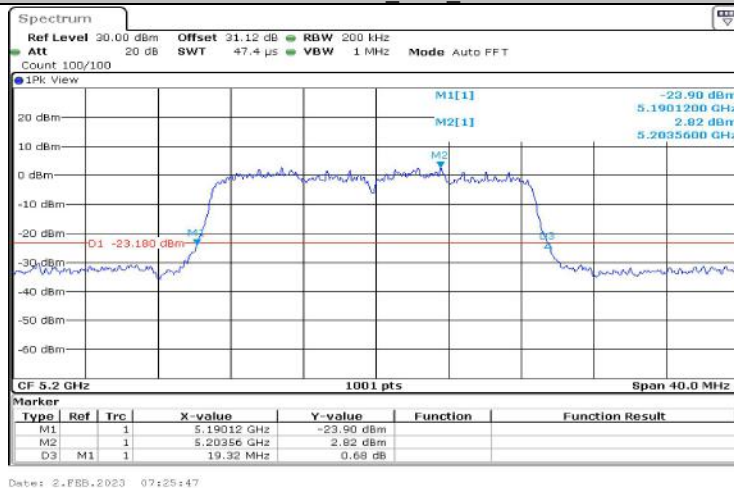




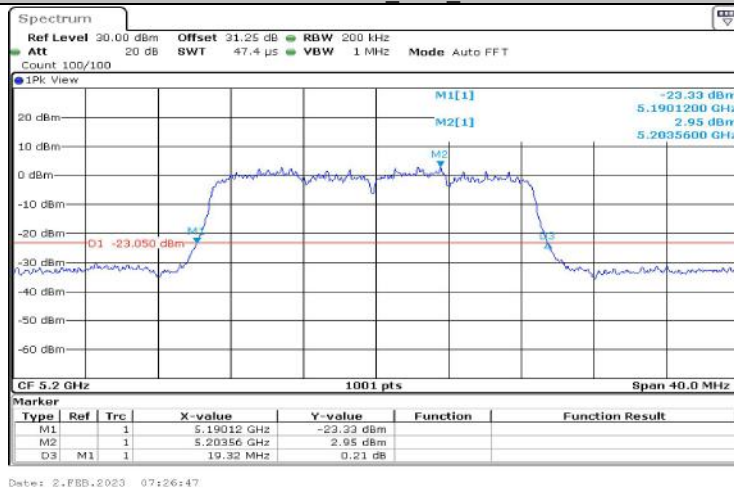
11AC20MIMO Ant2 5180



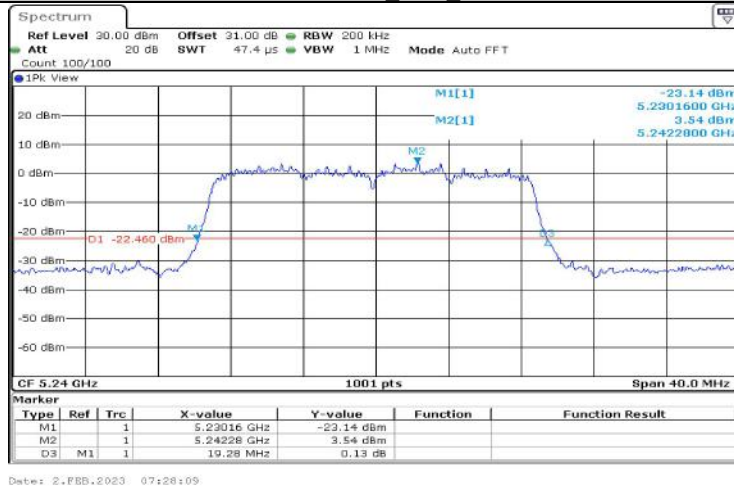
11AC20MIMO Ant1 5200



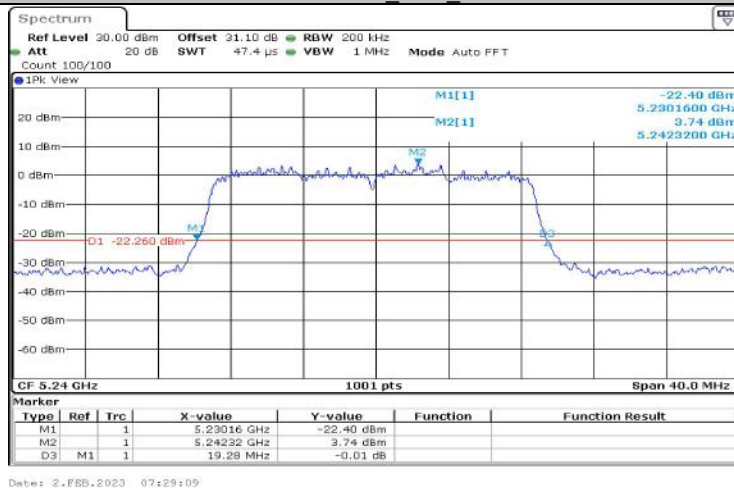
11AC20MIMO Ant2 5200



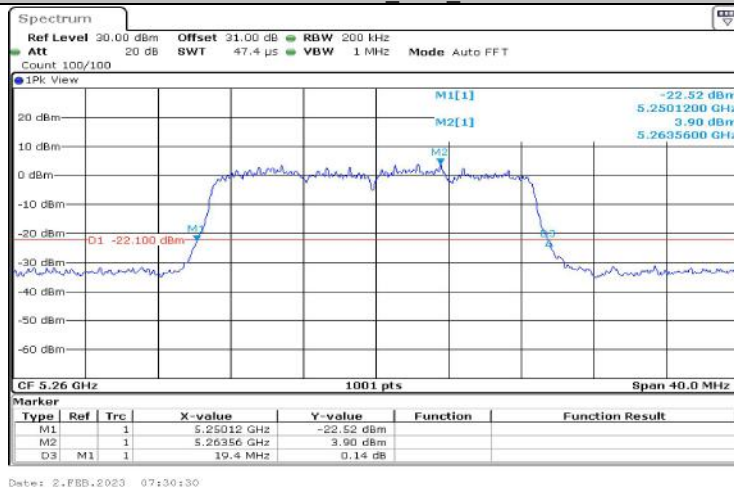
11AC20MIMO Ant1 5240



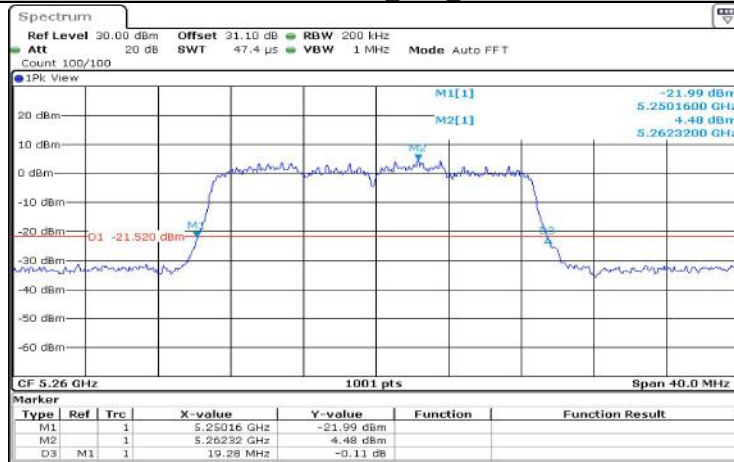
11AC20MIMO Ant2 5240



11AC20MIMO Ant1 5260

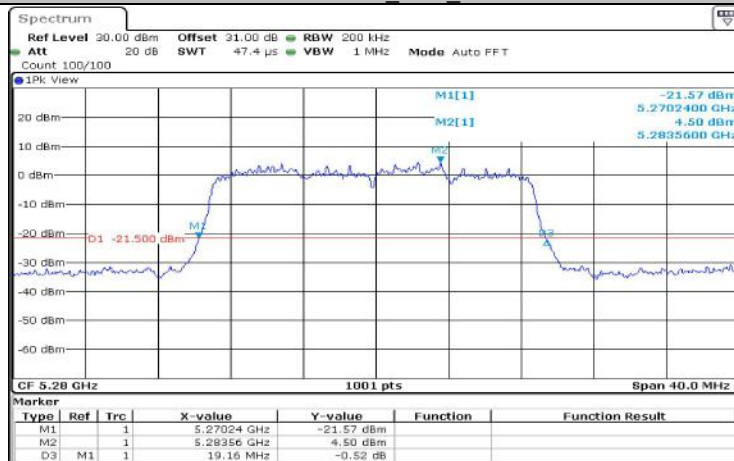


11AC20MIMO Ant2 5260



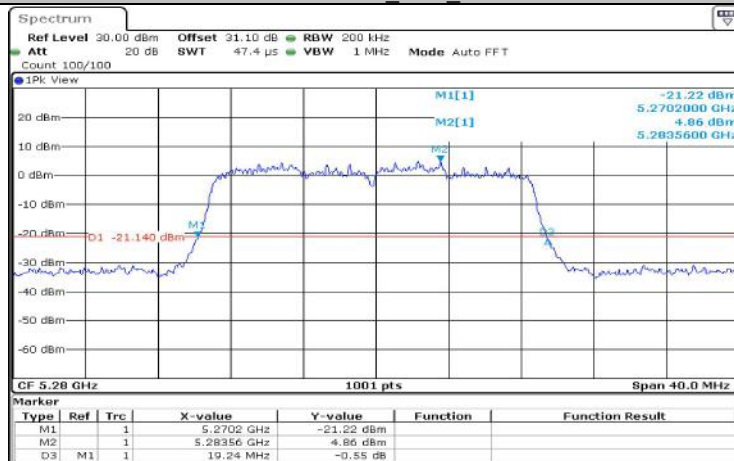
Date: 2.FEB.2023 07:31:30

11AC20MIMO Ant1 5280



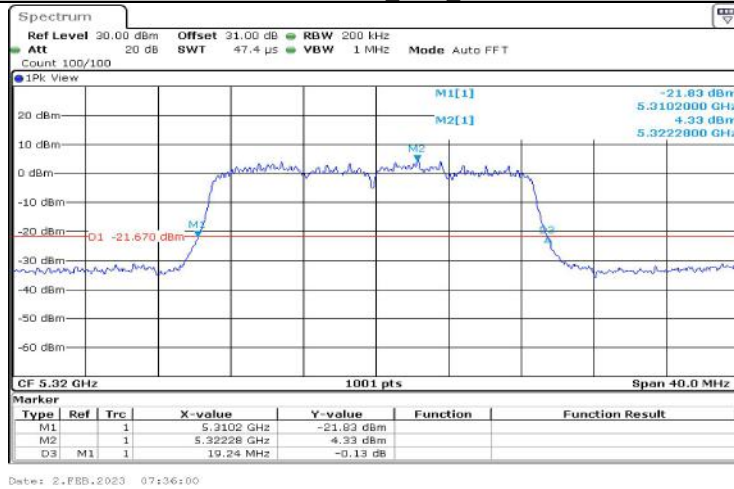
Date: 2.FEB.2023 07:33:31

11AC20MIMO Ant2 5280

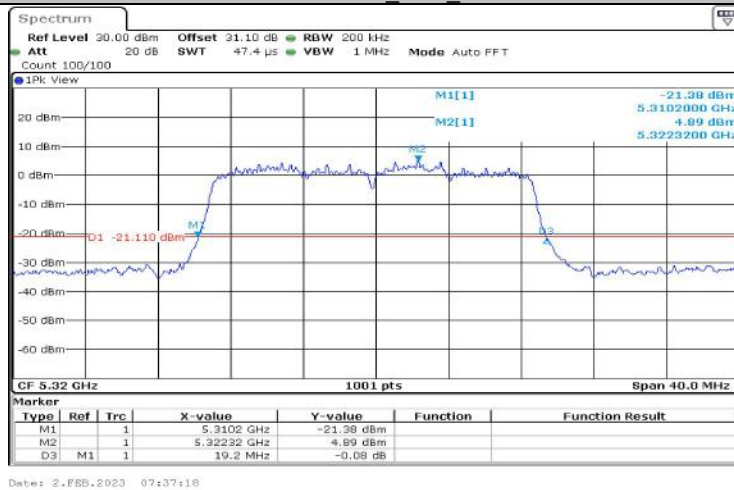


Date: 2.FEB.2023 07:34:31

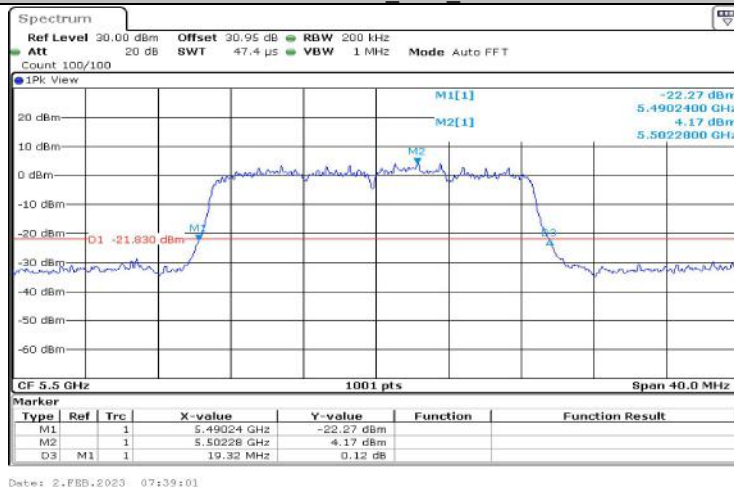
11AC20MIMO Ant1 5320

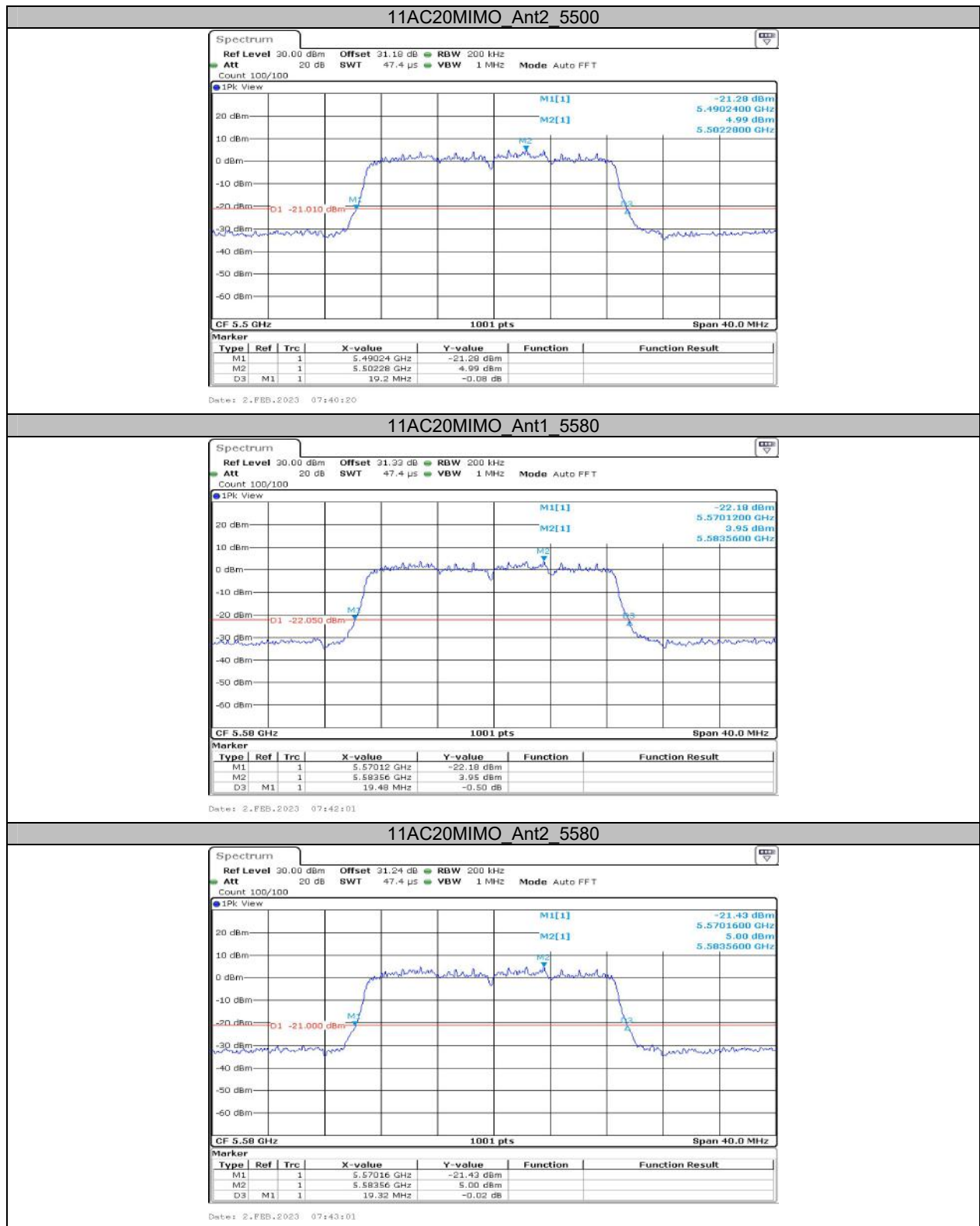


11AC20MIMO Ant2 5320

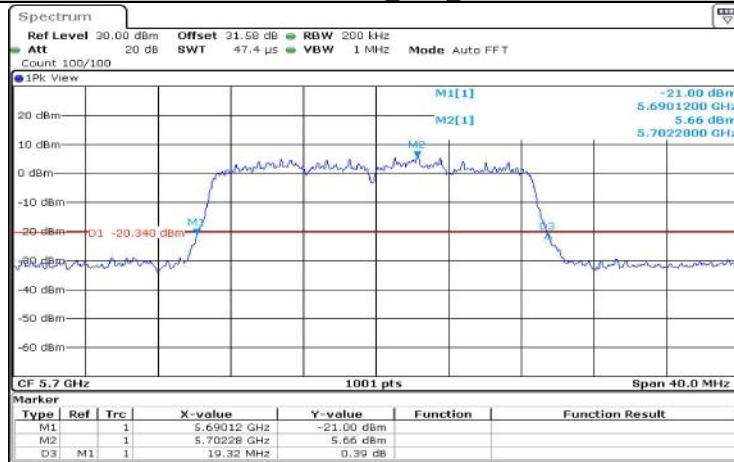


11AC20MIMO Ant1 5500



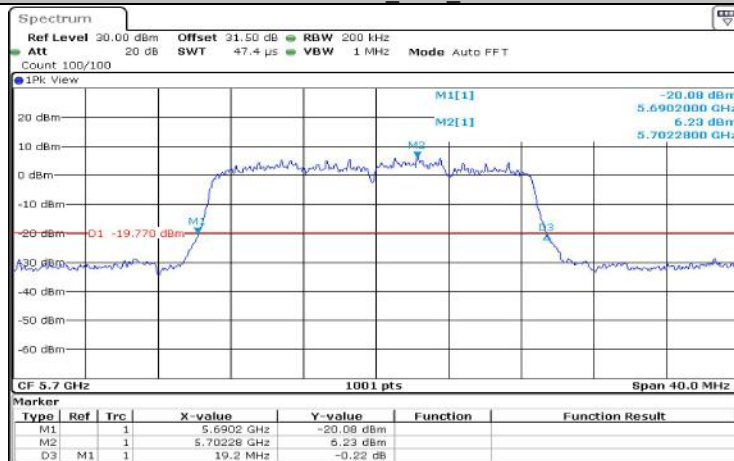


11AC20MIMO Ant1 5700



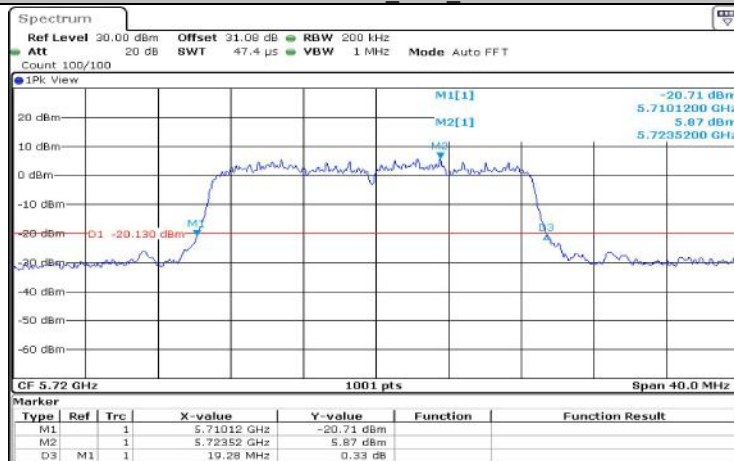
Date: 2.FEB.2023 07:44:42

11AC20MIMO Ant2 5700



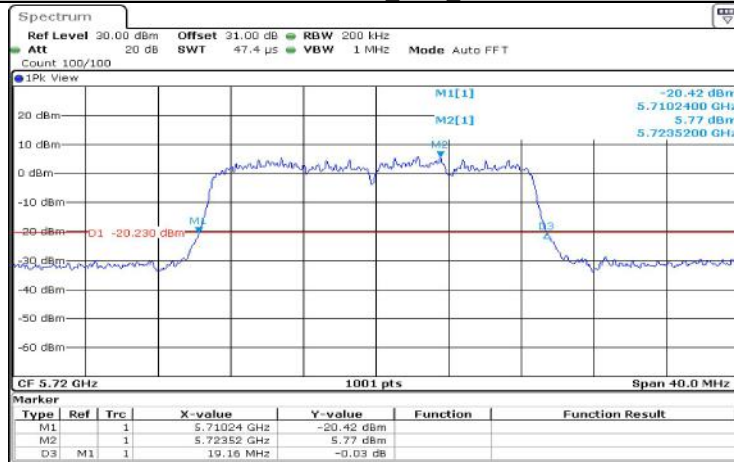
Date: 2.FEB.2023 07:46:01

11AC20MIMO Ant1 5720



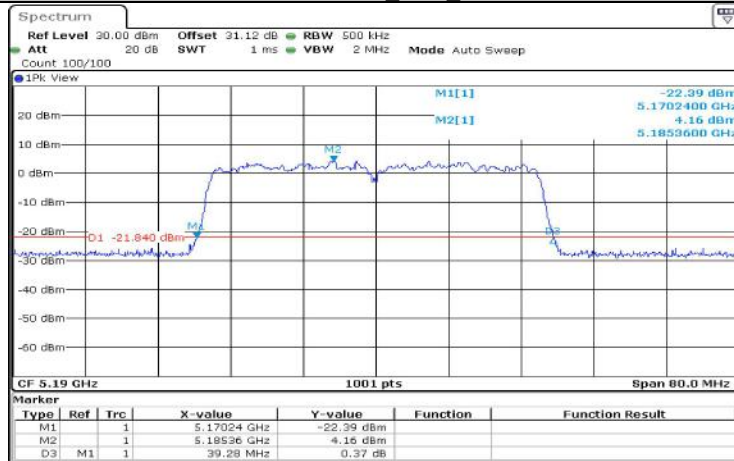
Date: 24.FEB.2023 14:43:06

11AC20MIMO Ant2 5720



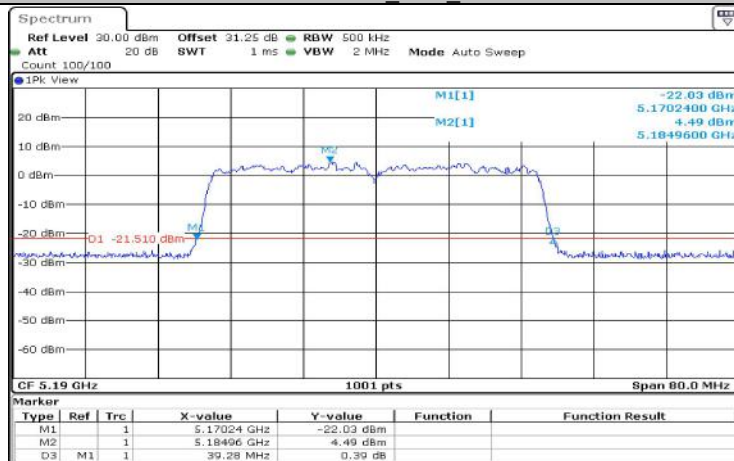
Date: 24-FEB-2023 14:44:37

11AC40MIMO Ant1 5190



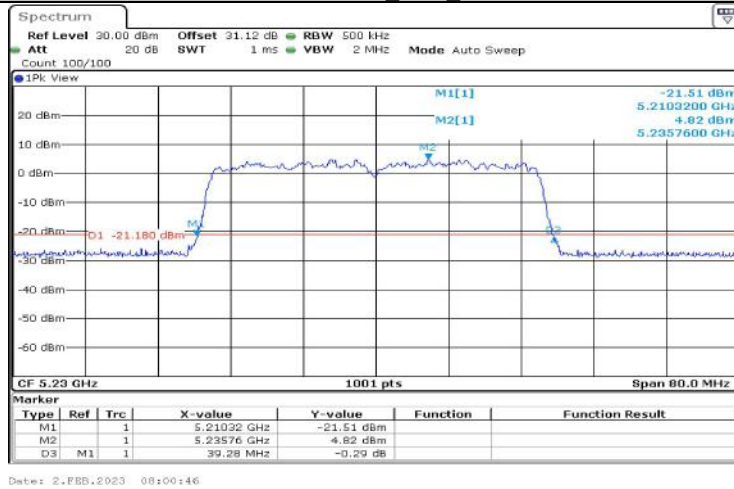
Date: 2-FEB-2023 07:57:44

11AC40MIMO Ant2 5190

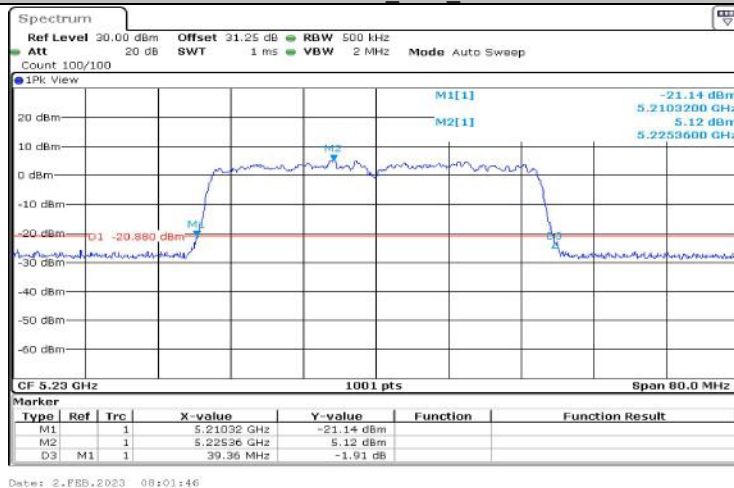


Date: 2-FEB-2023 07:59:02

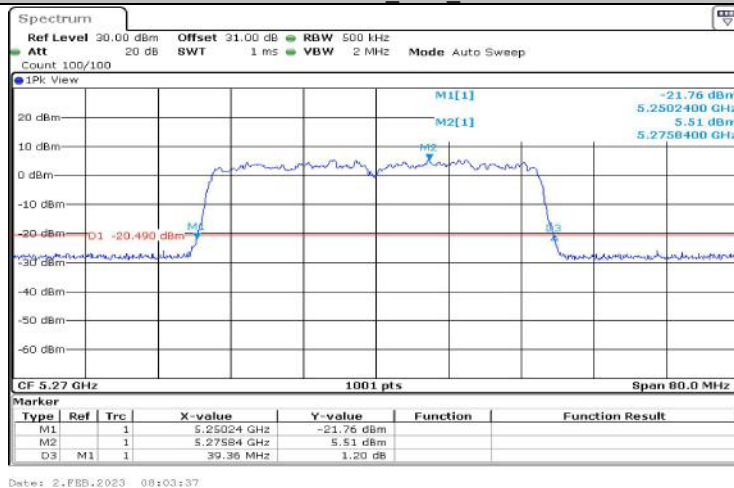
11AC40MIMO Ant1 5230

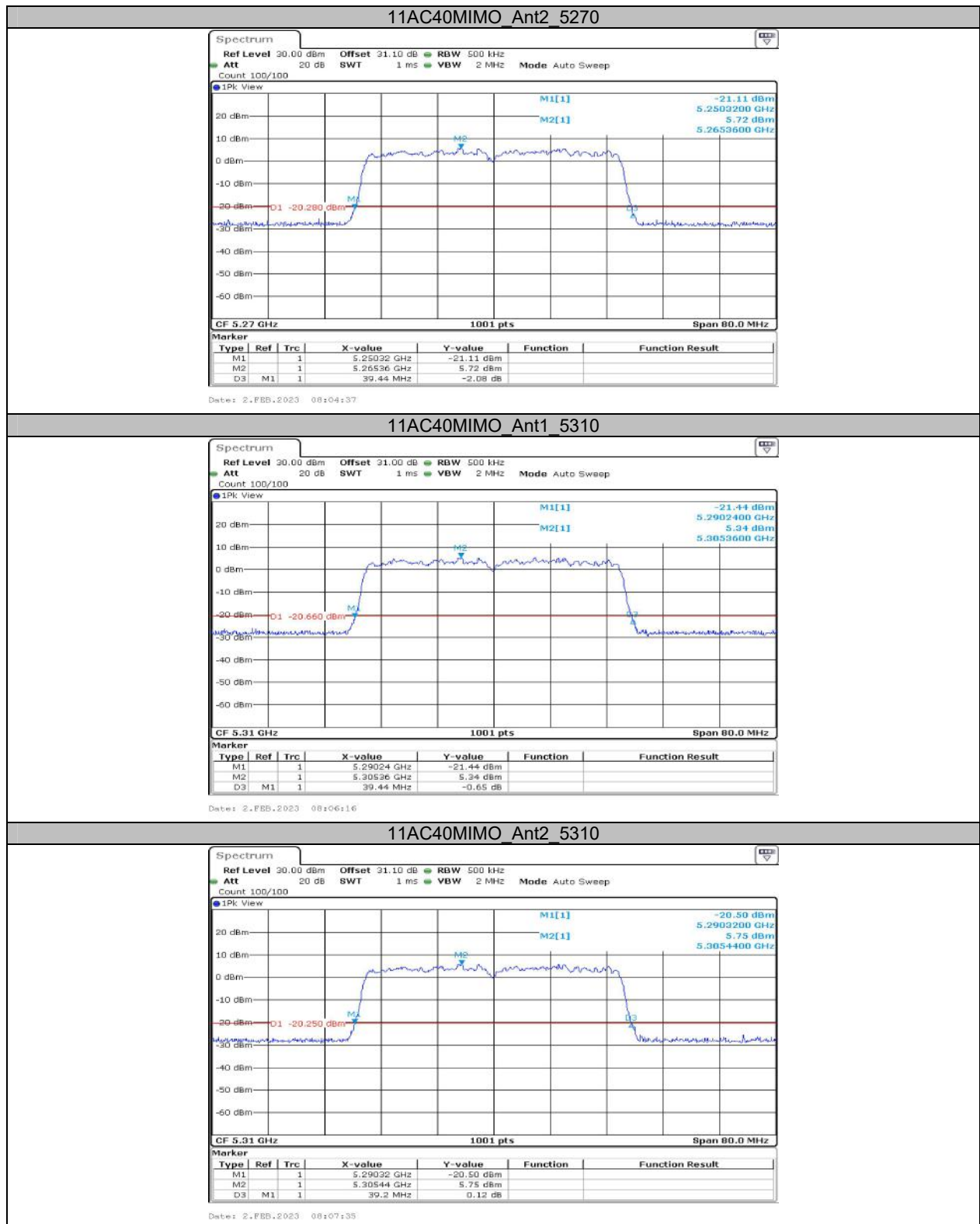


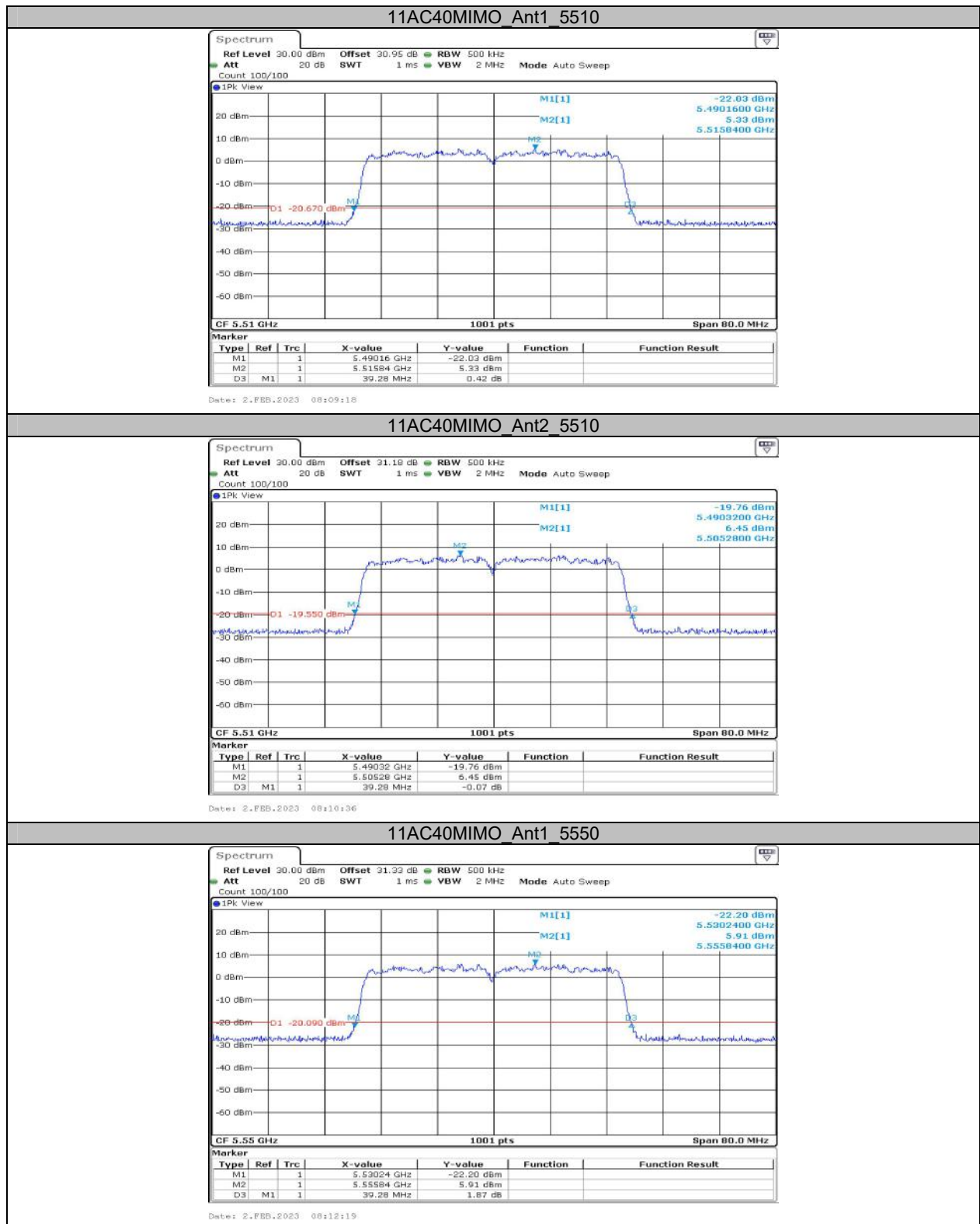
11AC40MIMO Ant2 5230

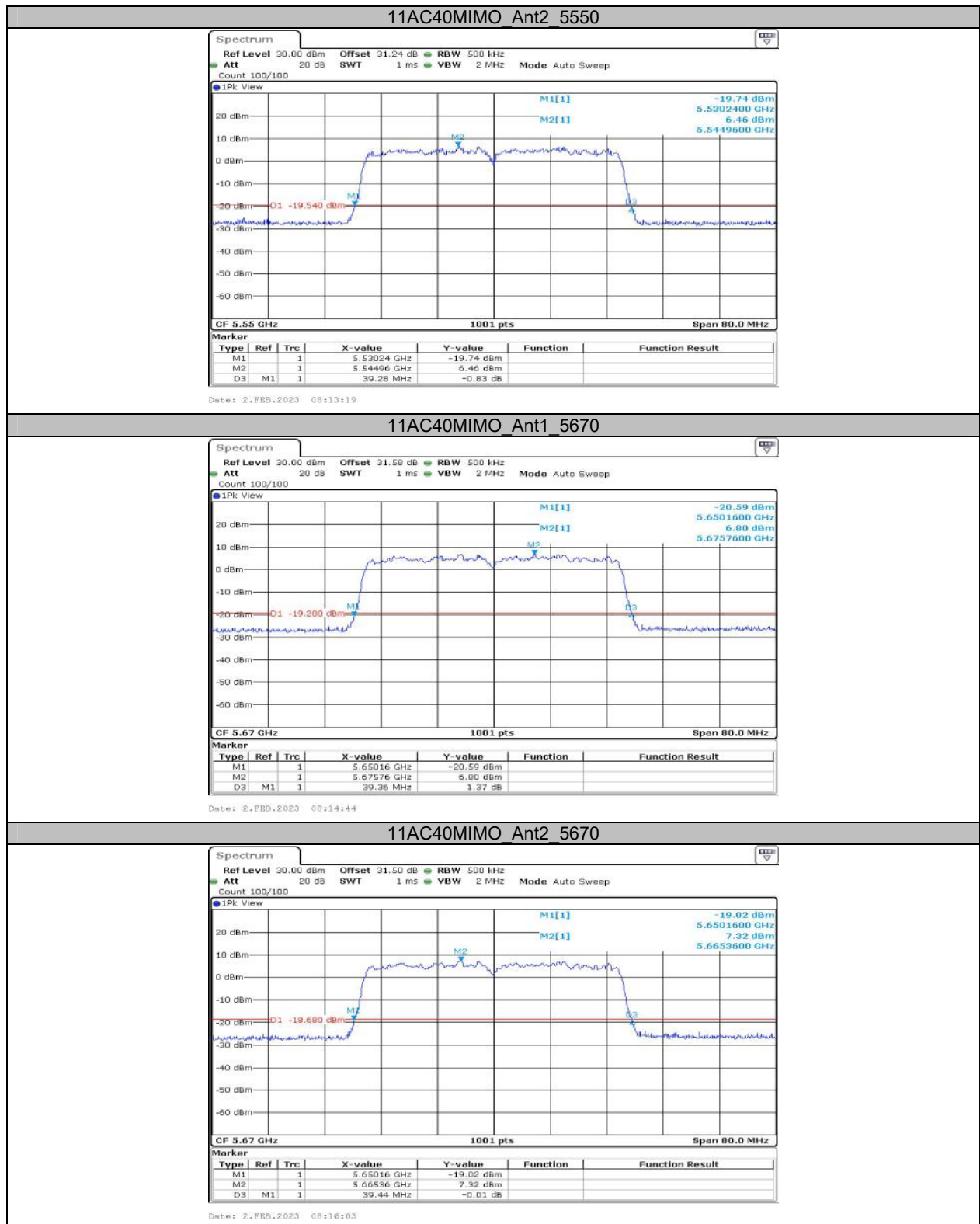


11AC40MIMO Ant1 5270

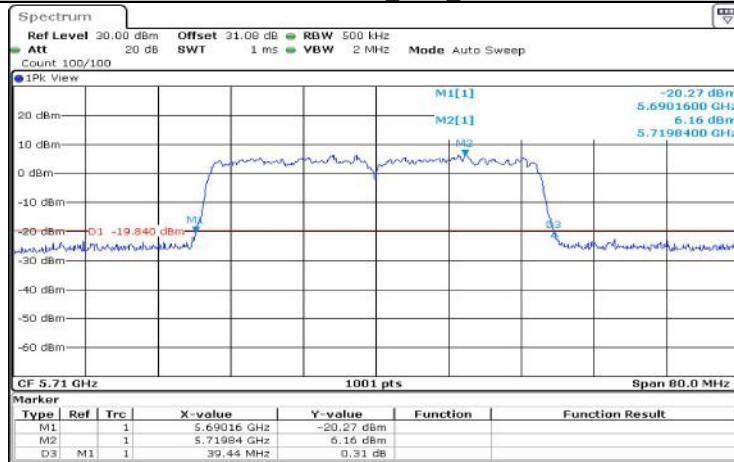




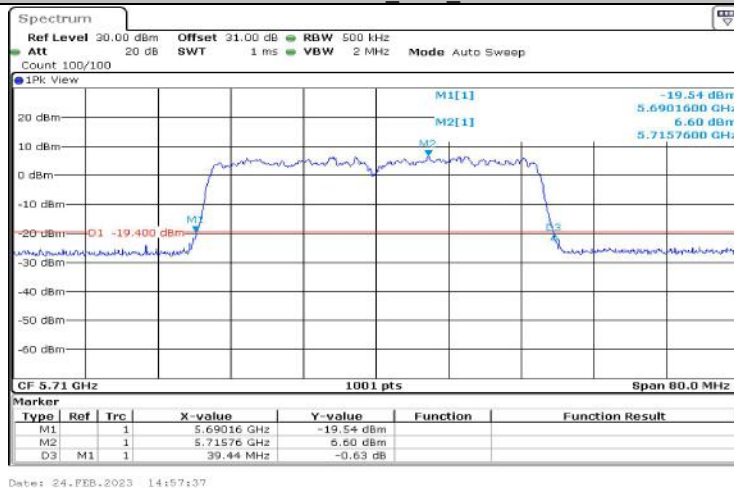




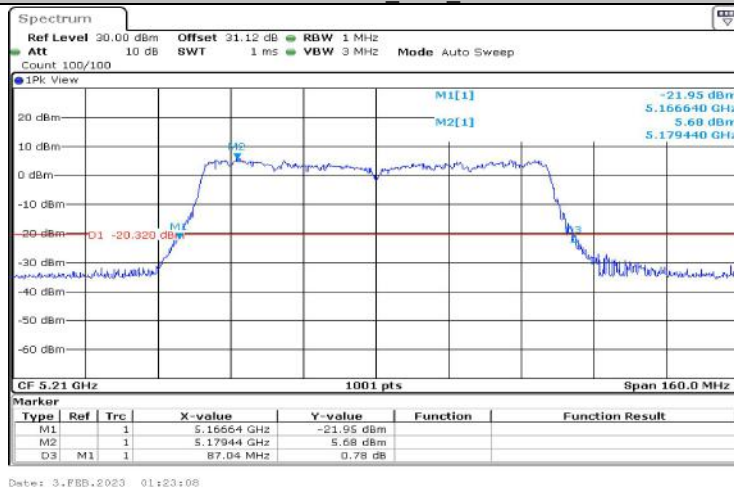
11AC40MIMO Ant1 5710

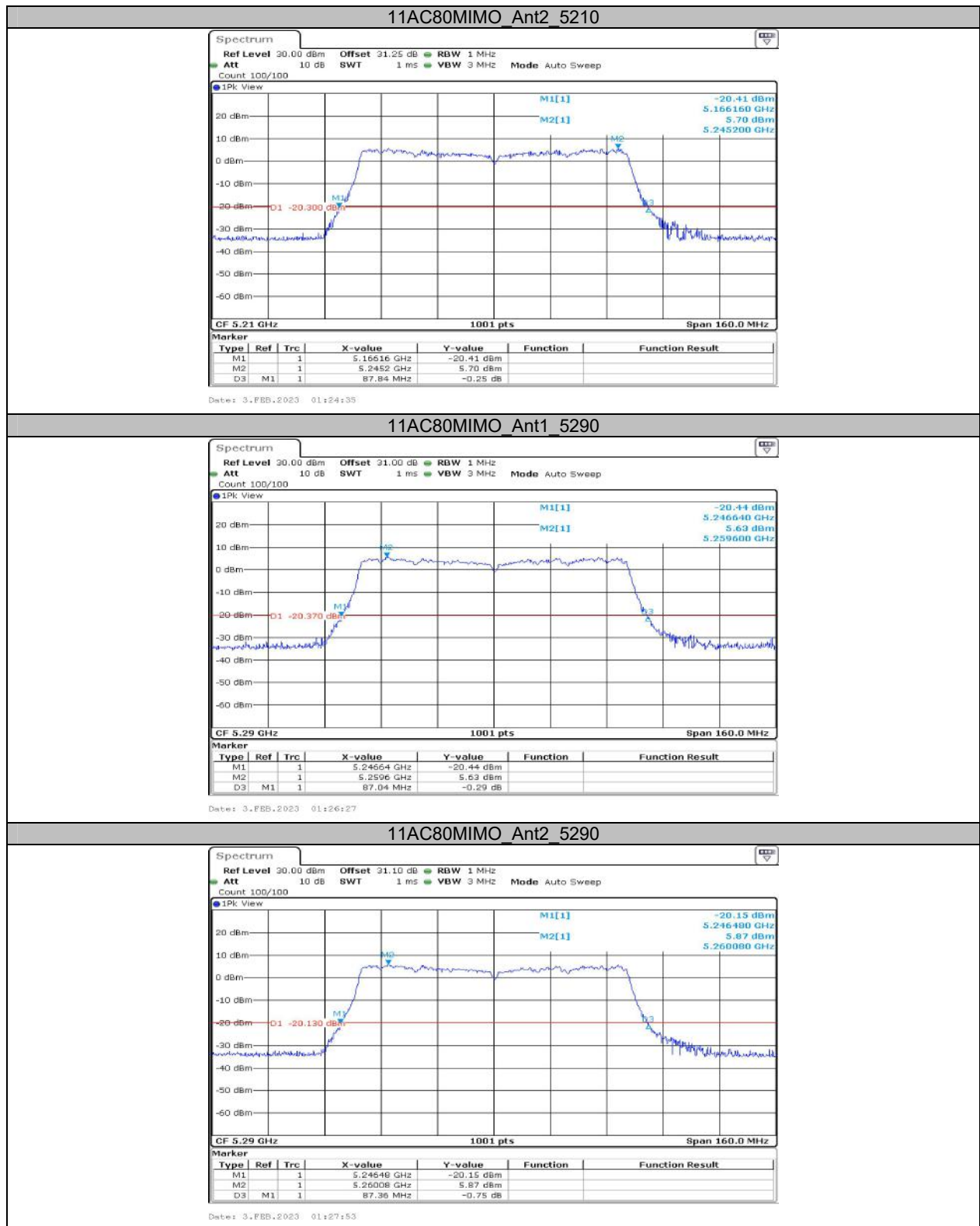


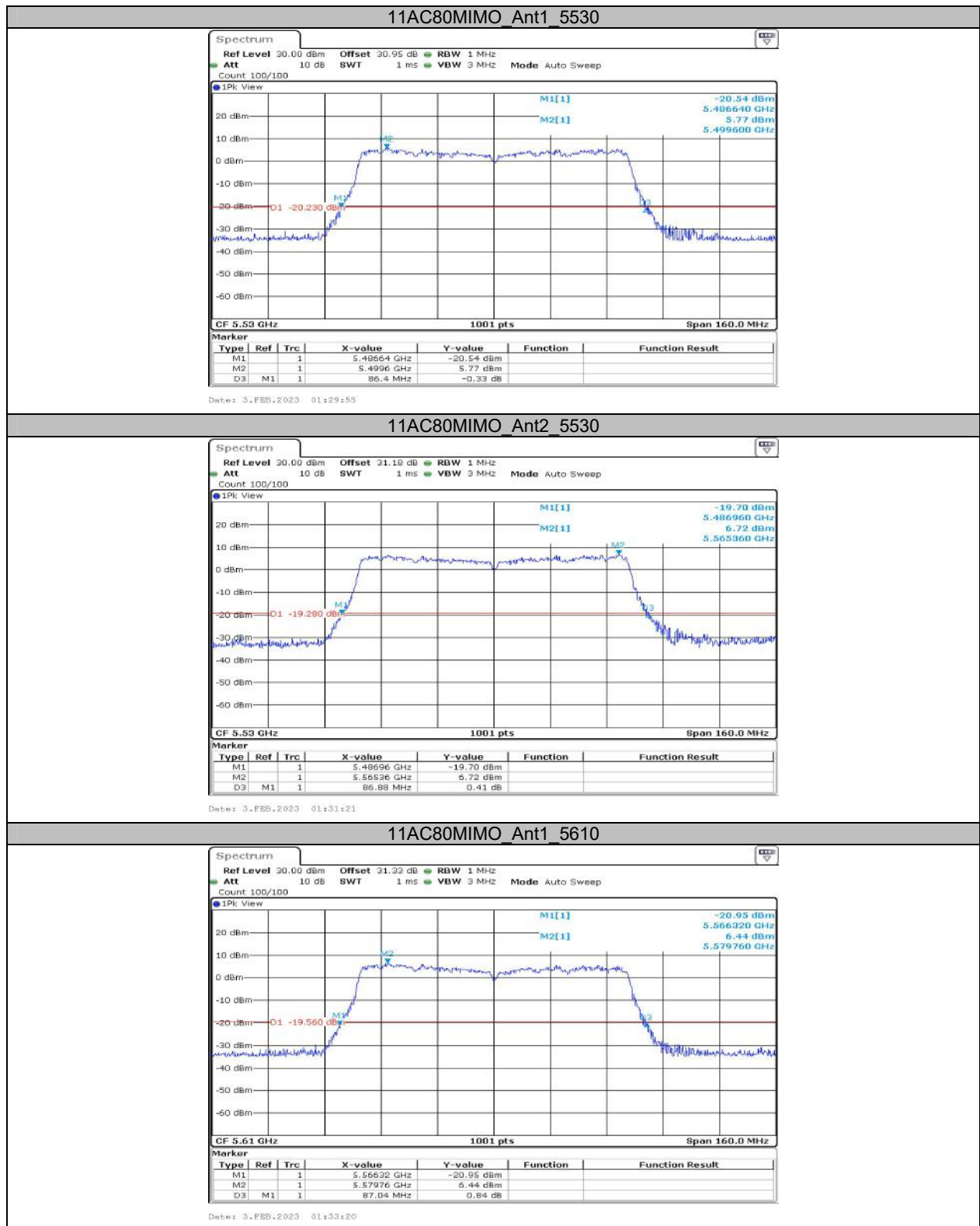
11AC40MIMO Ant2 5710

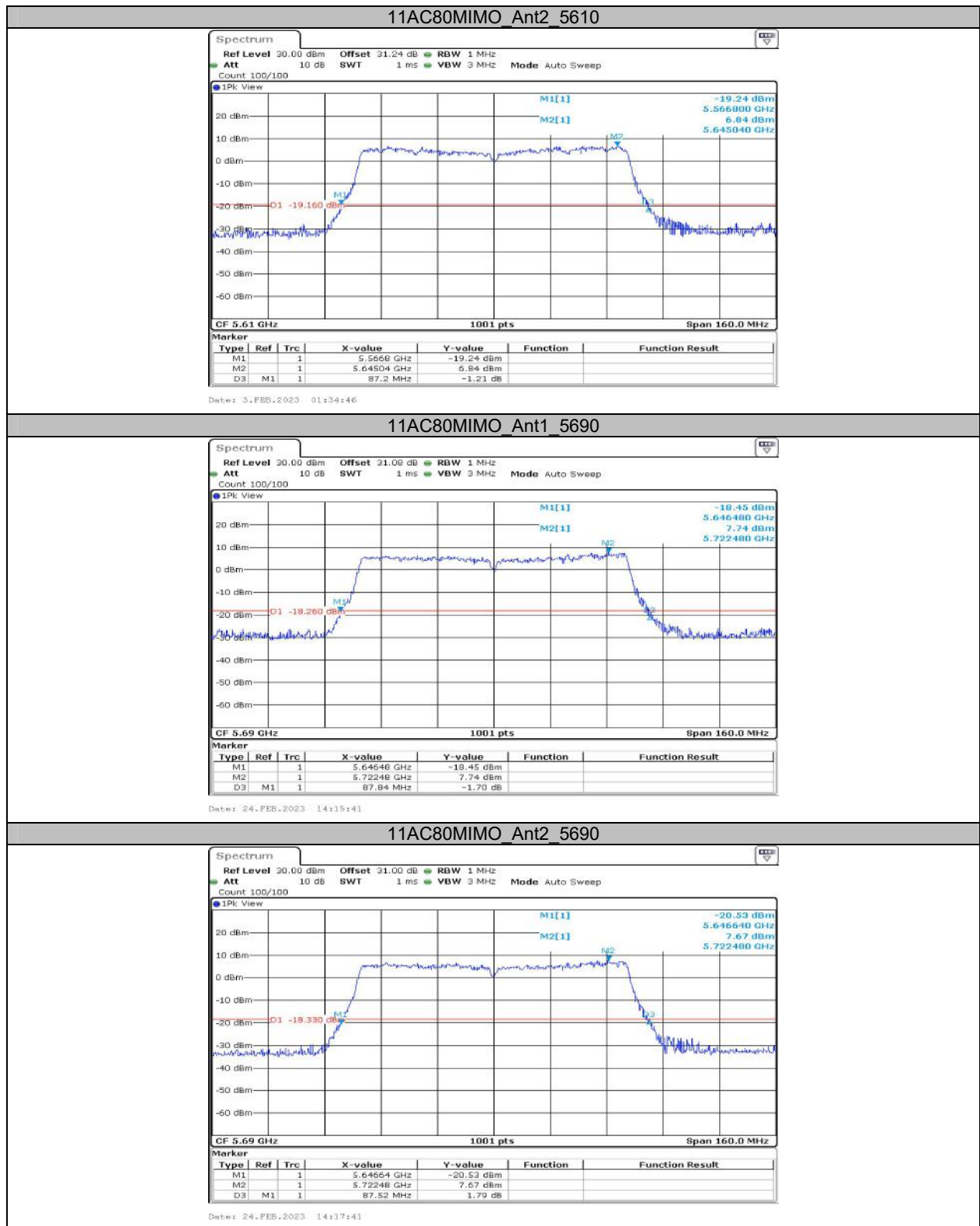


11AC80MIMO Ant1 5210

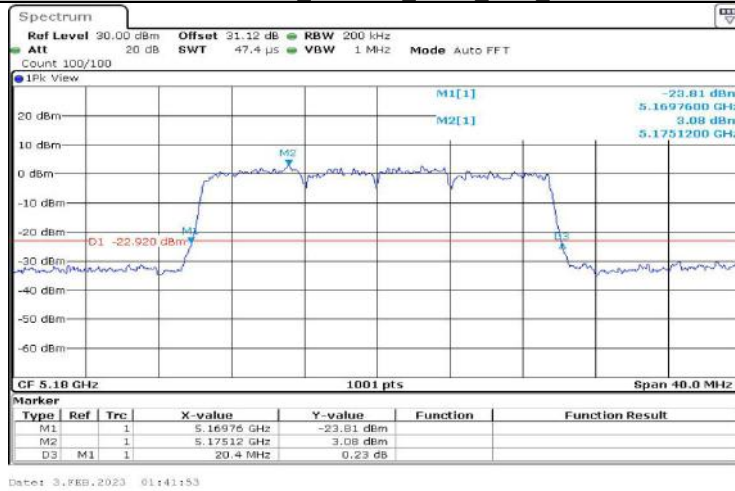




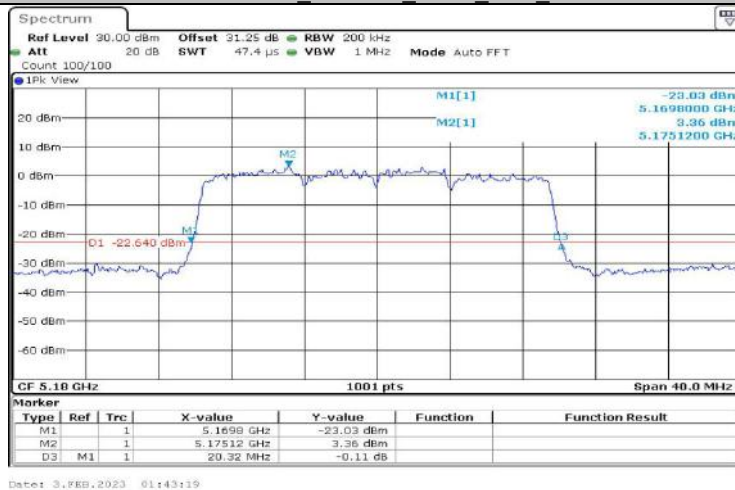




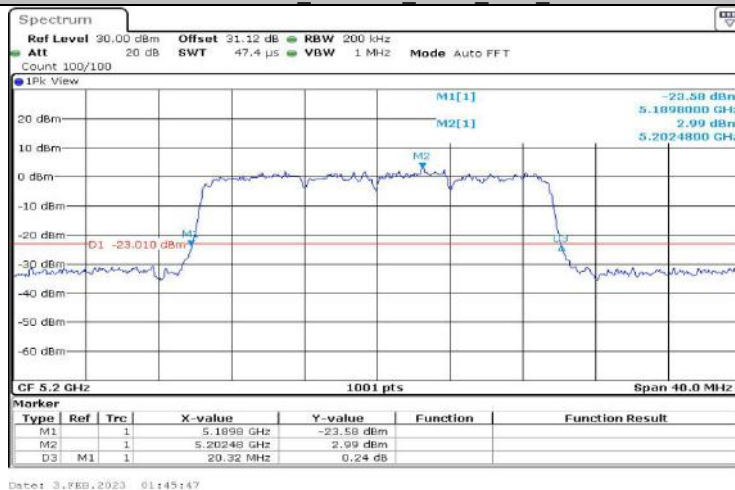
11AX20MIMO_242Tone_RU61_Ant1_5180



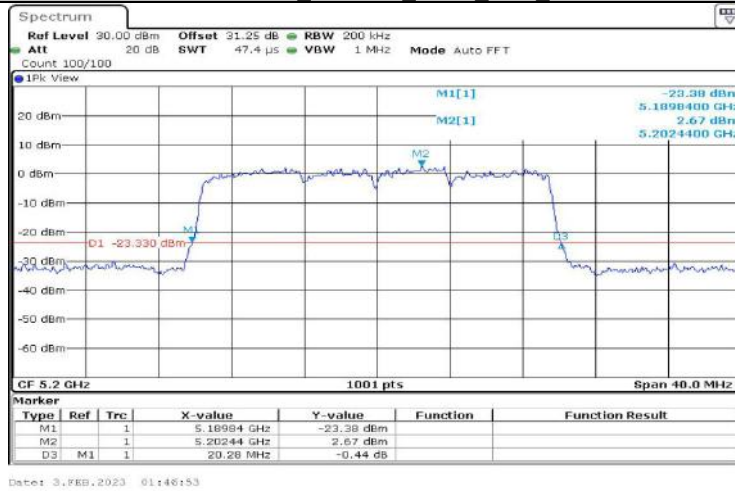
11AX20MIMO_242Tone_RU61_Ant2_5180



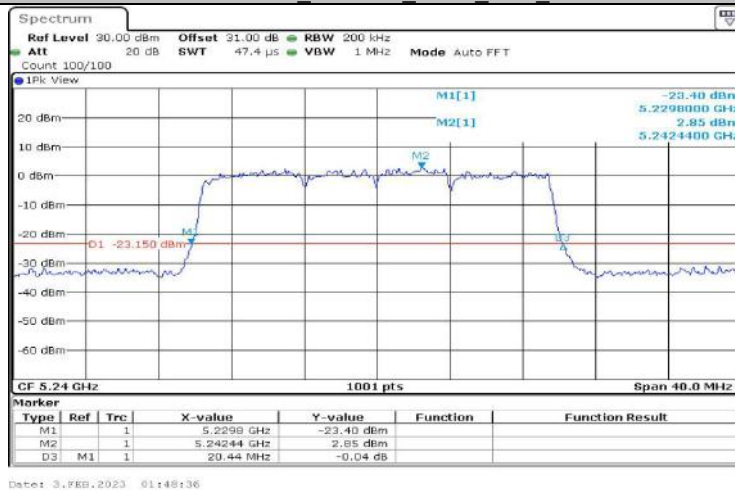
11AX20MIMO_242Tone_RU61_Ant1_5200



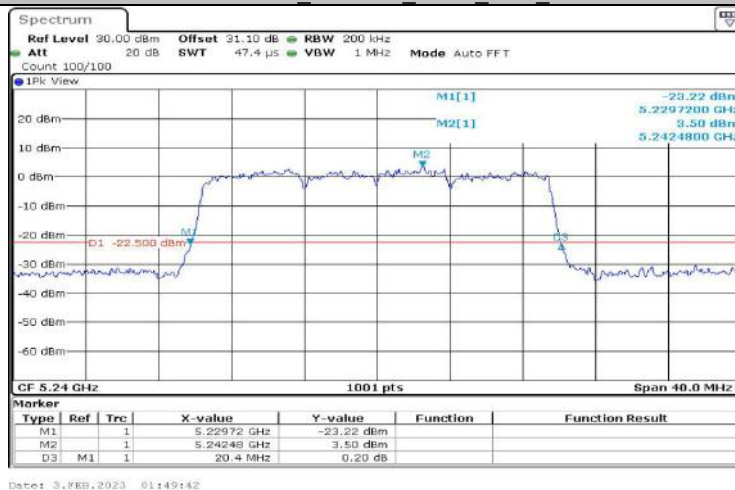
11AX20MIMO_242Tone_RU61_Ant2_5200



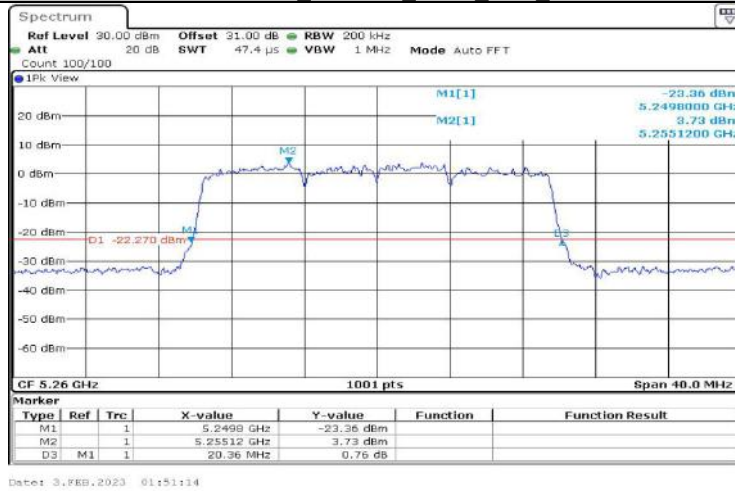
11AX20MIMO_242Tone_RU61_Ant1_5240



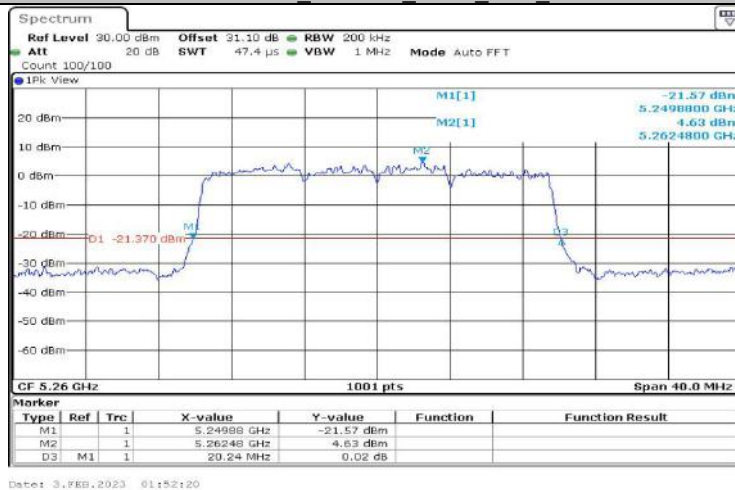
11AX20MIMO_242Tone_RU61_Ant2_5240



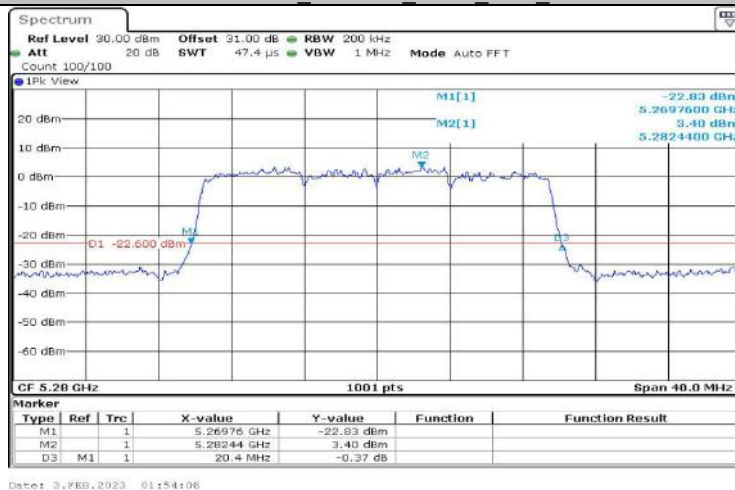
11AX20MIMO_242Tone_RU61_Ant1_5260



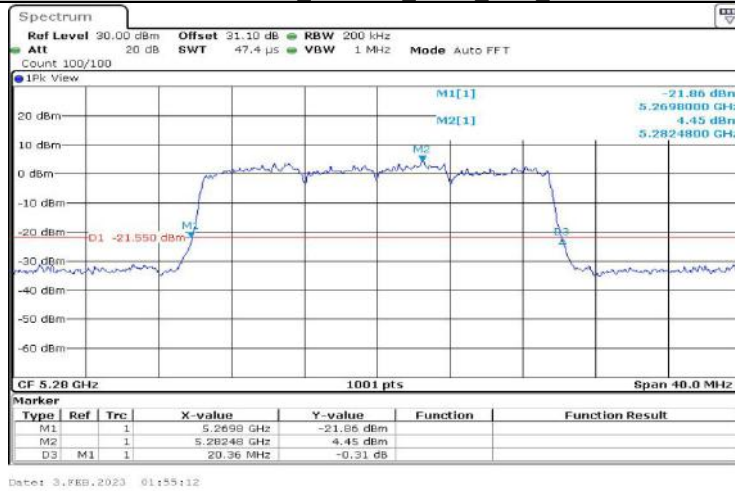
11AX20MIMO_242Tone_RU61_Ant2_5260



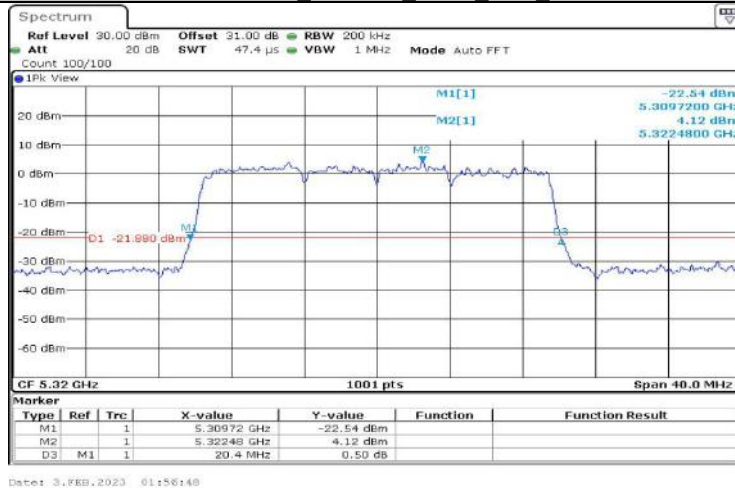
11AX20MIMO_242Tone_RU61_Ant1_5280



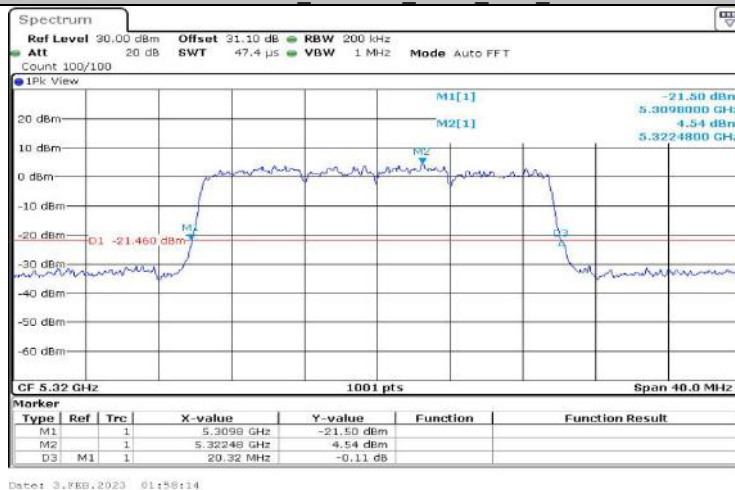
11AX20MIMO_242Tone_RU61_Ant2_5280



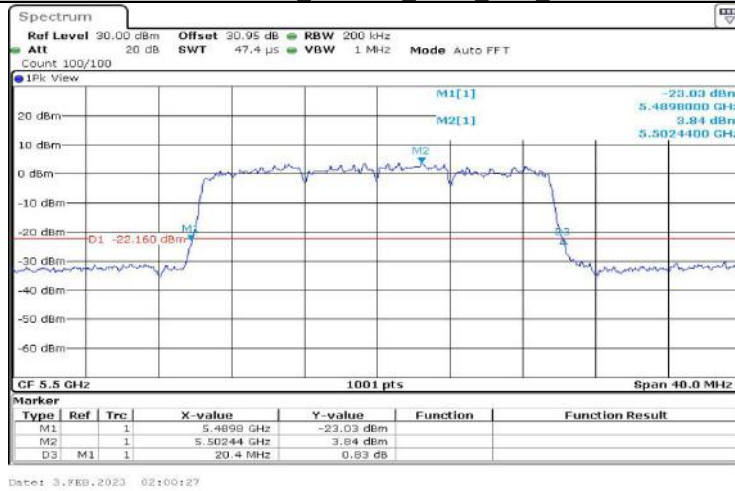
11AX20MIMO_242Tone_RU61_Ant1_5320



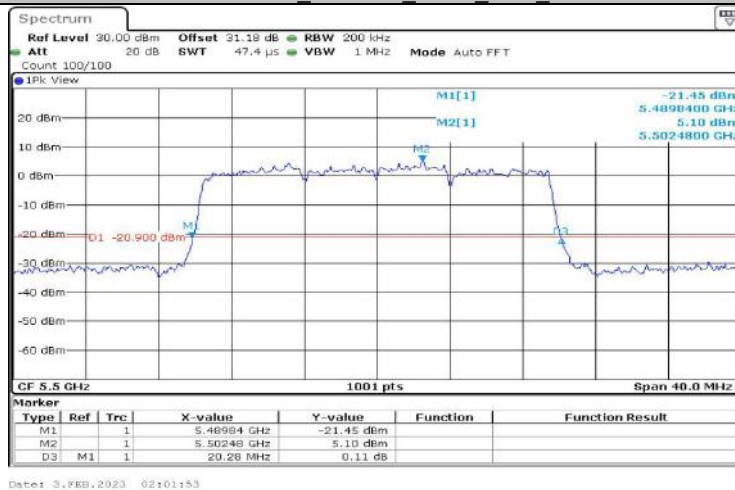
11AX20MIMO_242Tone_RU61_Ant2_5320



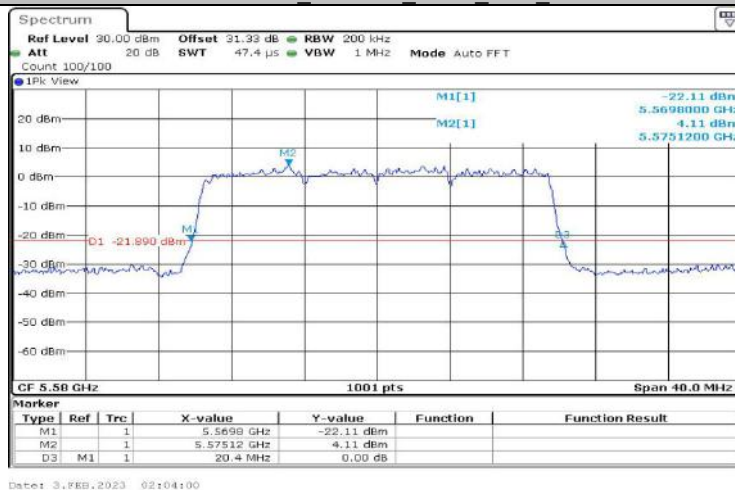
11AX20MIMO_242Tone_RU61_Ant1_5500



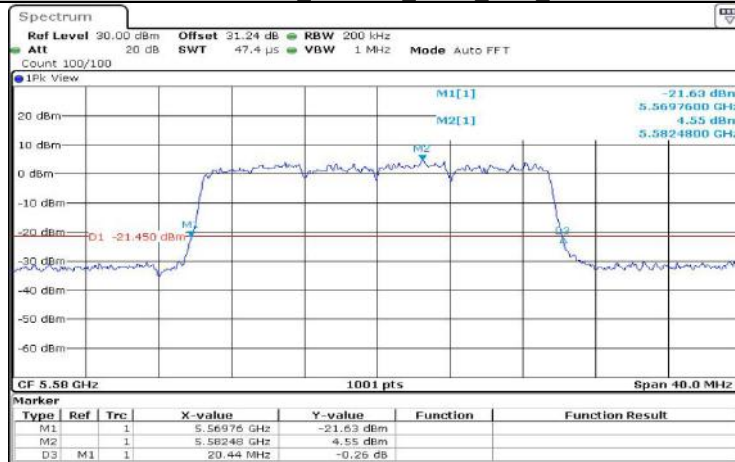
11AX20MIMO_242Tone_RU61_Ant2_5500



11AX20MIMO_242Tone_RU61_Ant1_5580

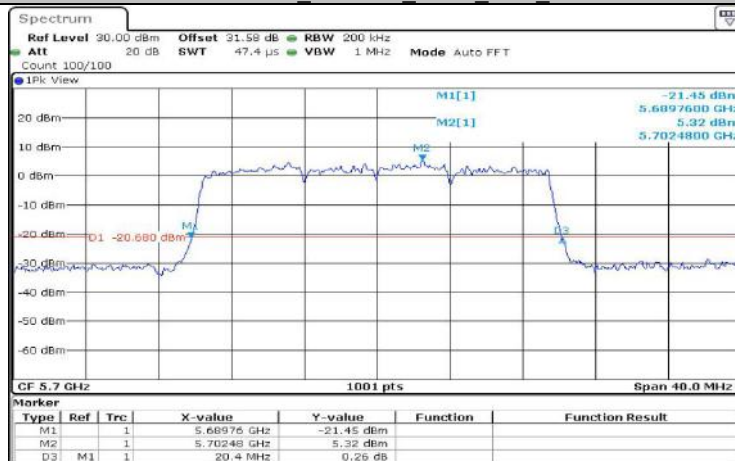


11AX20MIMO_242Tone_RU61_Ant2_5580



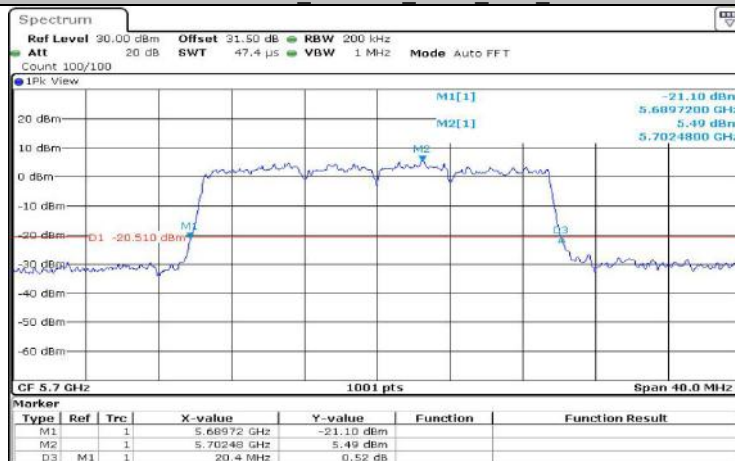
Date: 3.FEB.2023 02:05:06

11AX20MIMO_242Tone_RU61_Ant1_5700

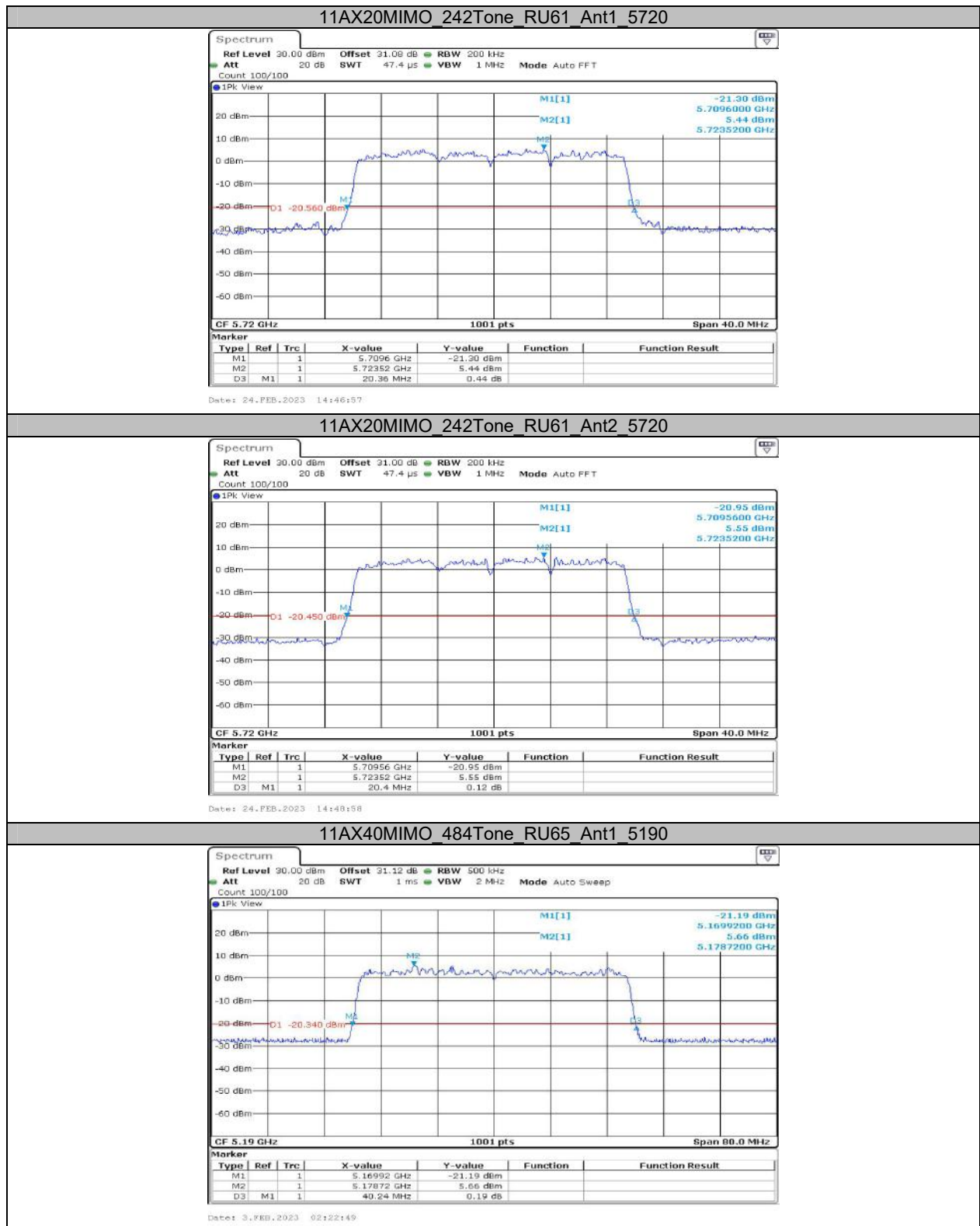


Date: 3.FEB.2023 02:07:12

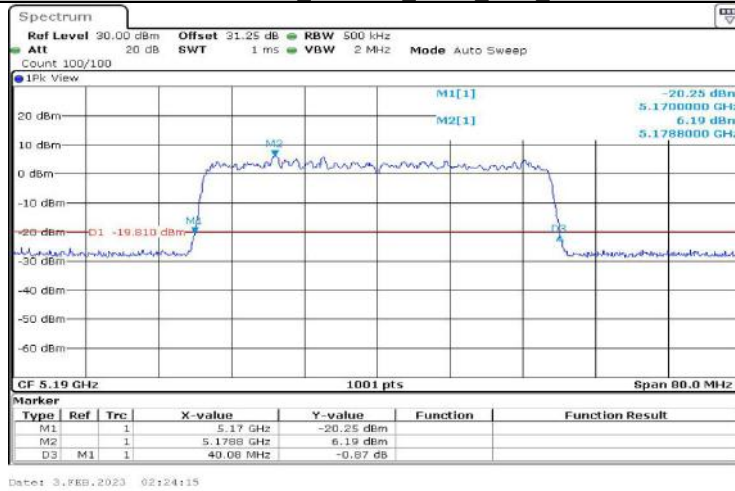
11AX20MIMO_242Tone_RU61_Ant2_5700



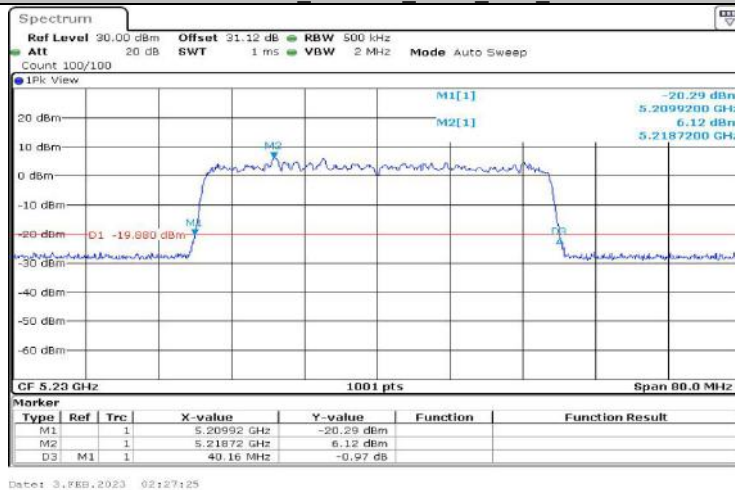
Date: 3.FEB.2023 02:08:30



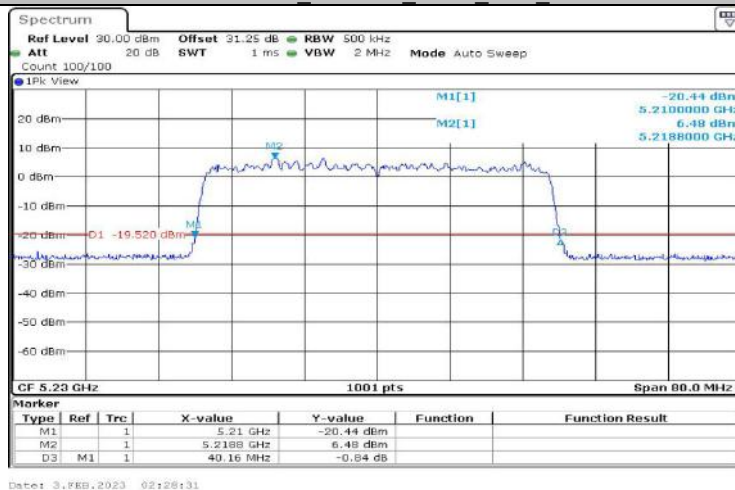
11AX40MIMO_484Tone_RU65_Ant2_5190



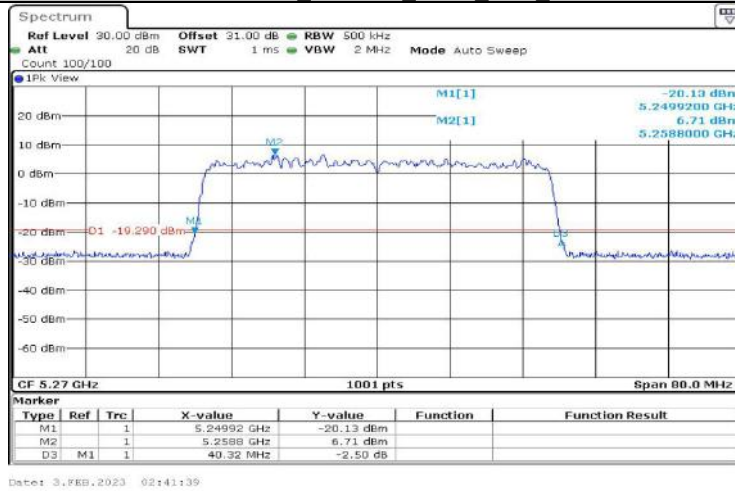
11AX40MIMO_484Tone_RU65_Ant1_5230



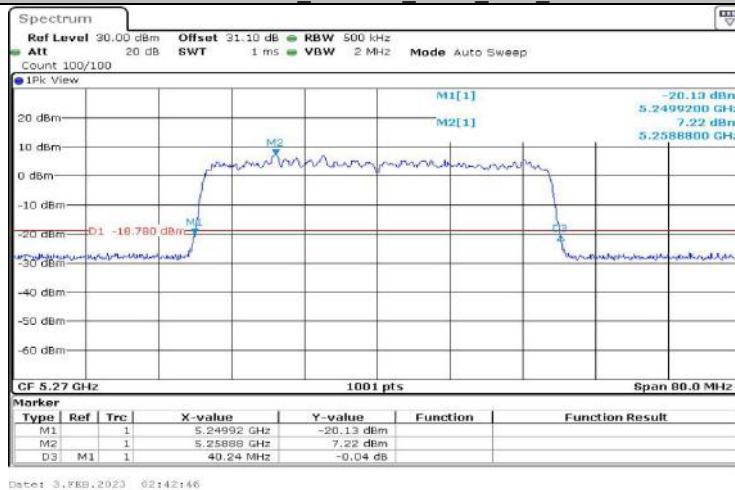
11AX40MIMO_484Tone_RU65_Ant2_5230



11AX40MIMO_484Tone_RU65_Ant1_5270



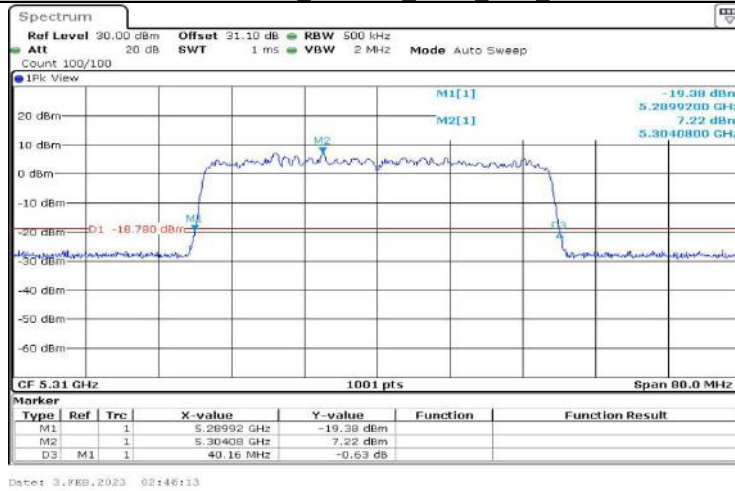
11AX40MIMO_484Tone_RU65_Ant2_5270



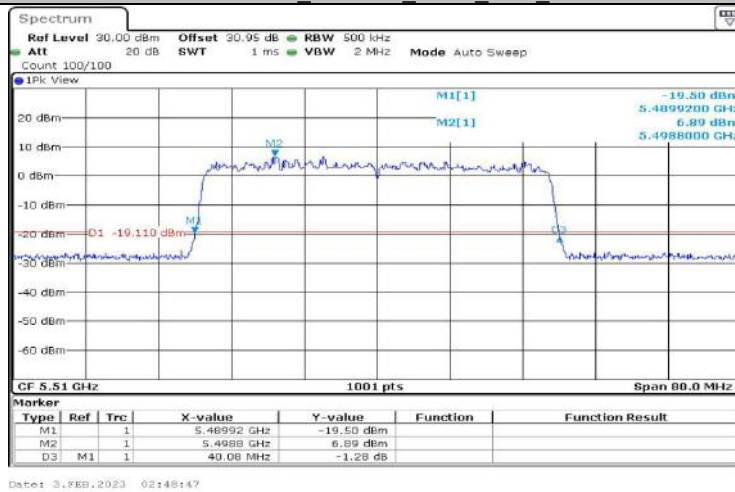
11AX40MIMO_484Tone_RU65_Ant1_5310



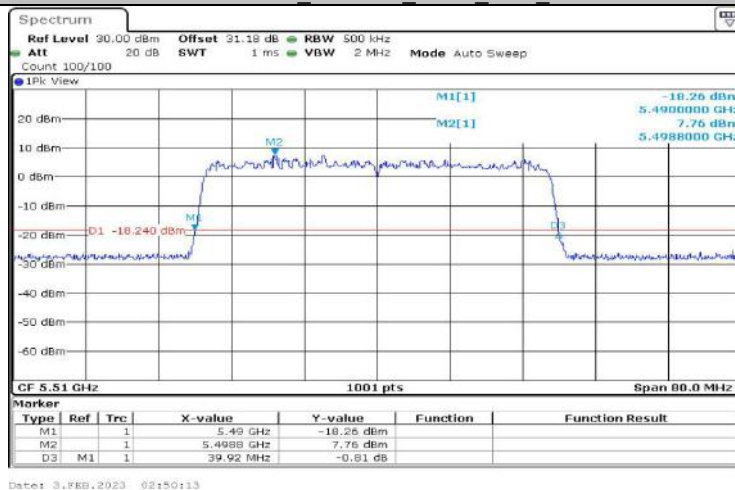
11AX40MIMO_484Tone_RU65_Ant2_5310



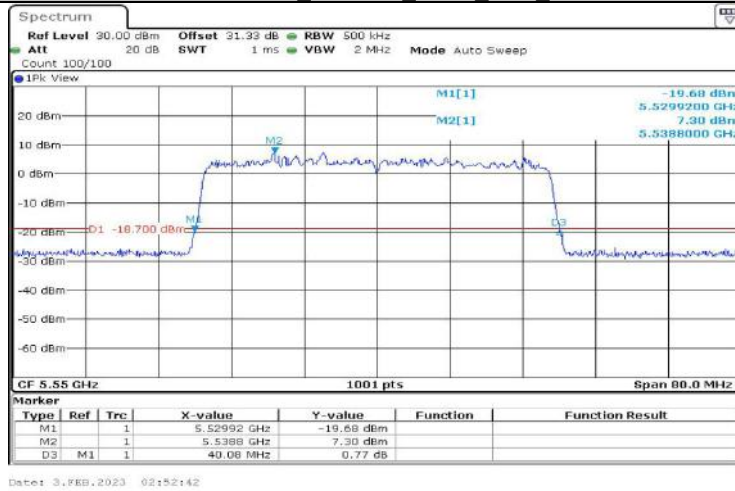
11AX40MIMO_484Tone_RU65_Ant1_5510



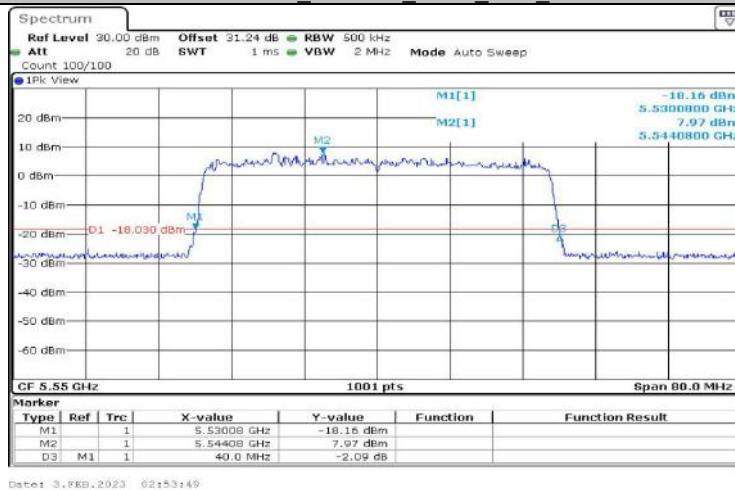
11AX40MIMO_484Tone_RU65_Ant2_5510



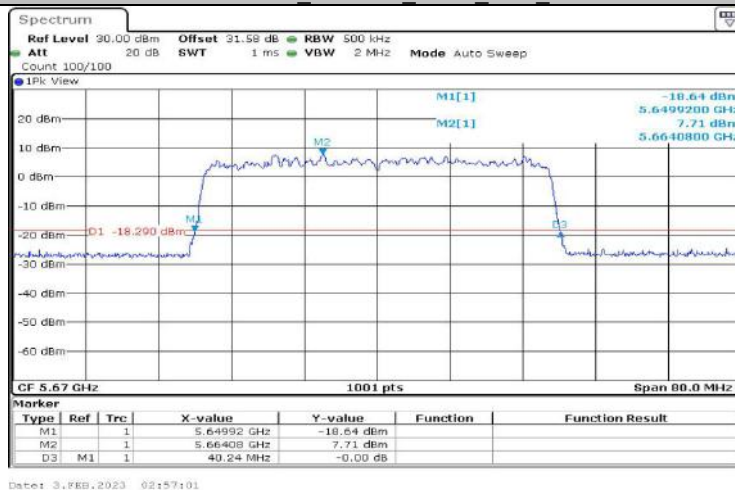
11AX40MIMO_484Tone_RU65_Ant1_5550



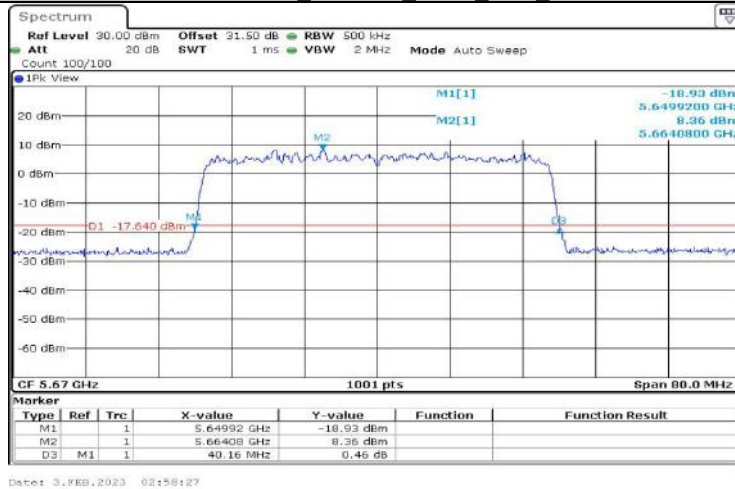
11AX40MIMO_484Tone_RU65_Ant2_5550



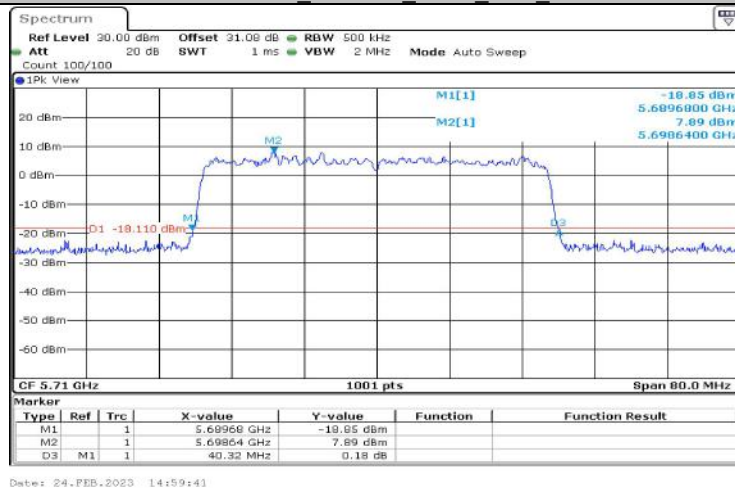
11AX40MIMO_484Tone_RU65_Ant1_5670



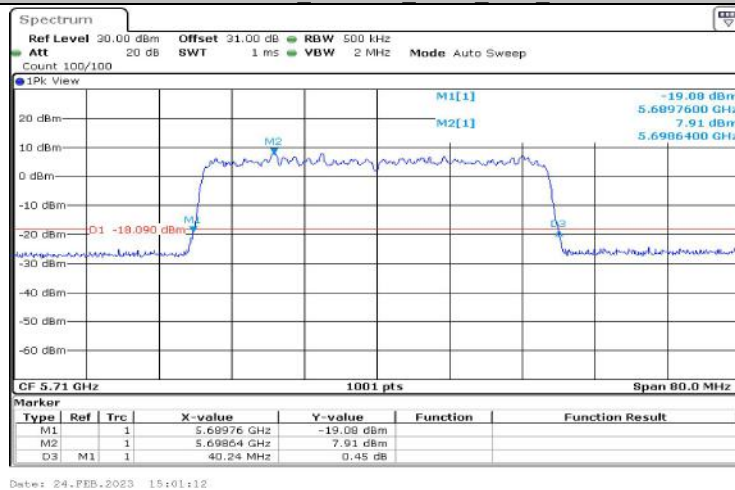
11AX40MIMO_484Tone_RU65_Ant2_5670



11AX40MIMO_484Tone_RU65_Ant1_5710



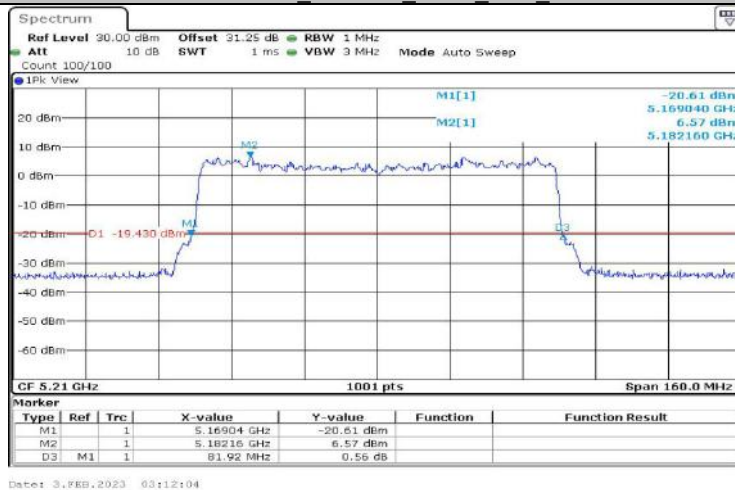
11AX40MIMO_484Tone_RU65_Ant2_5710



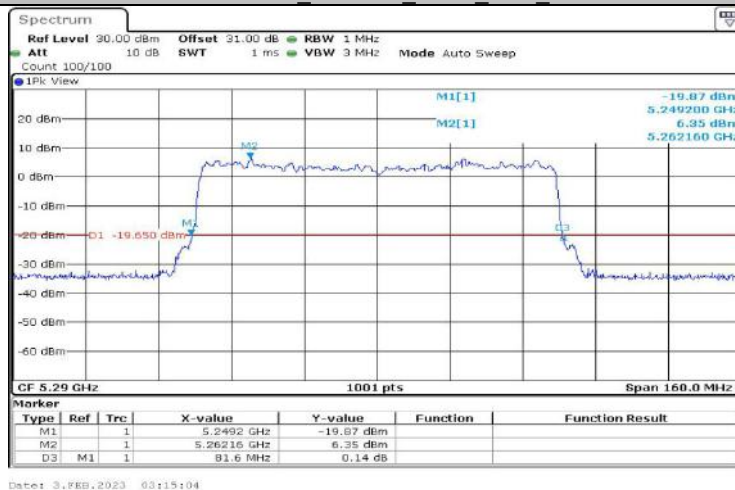
11AX80MIMO_996Tone_RU67_Ant1_5210



11AX80MIMO_996Tone_RU67_Ant2_5210



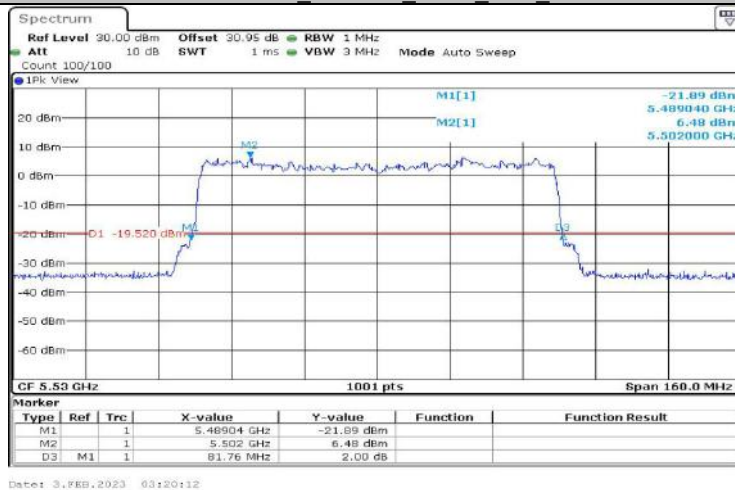
11AX80MIMO_996Tone_RU67_Ant1_5290



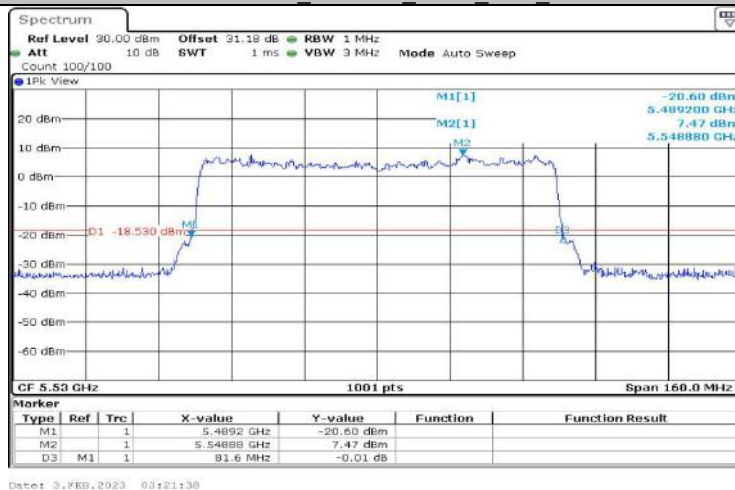
11AX80MIMO_996Tone_RU67_Ant2_5290



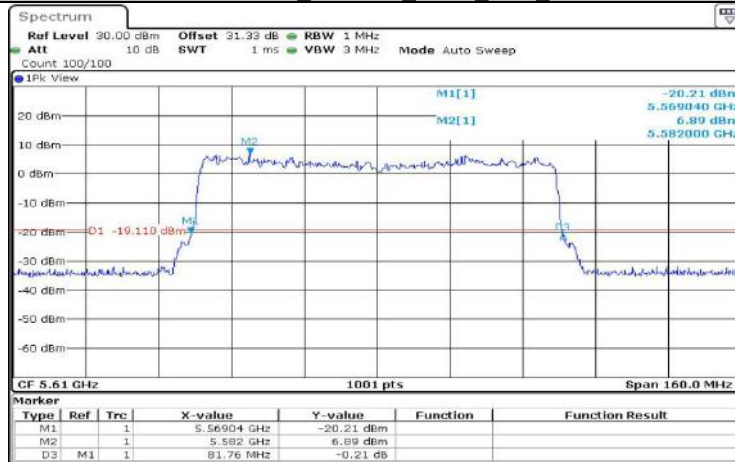
11AX80MIMO_996Tone_RU67_Ant1_5530



11AX80MIMO_996Tone_RU67_Ant2_5530

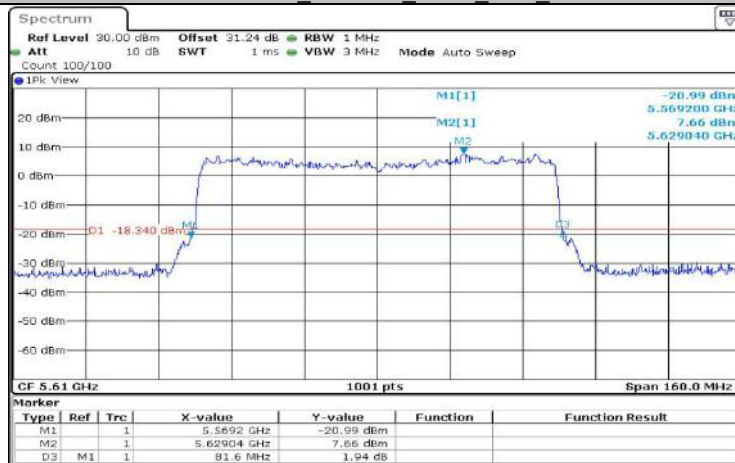


11AX80MIMO_996Tone_RU67_Ant1_5610



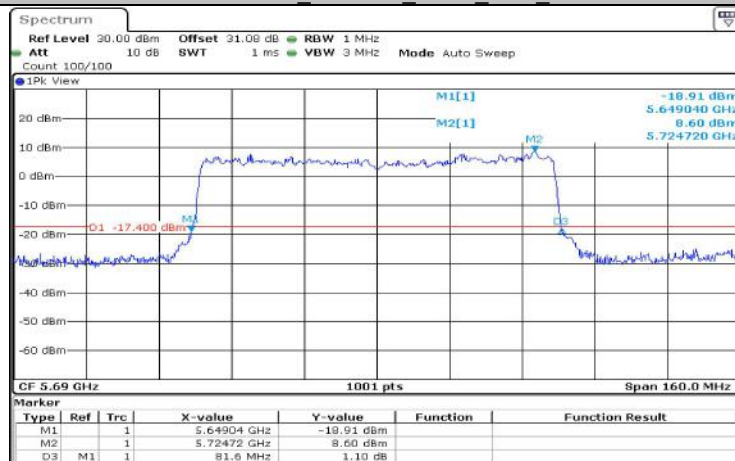
Date: 3.FEB.2023 03:24:14

11AX80MIMO_996Tone_RU67_Ant2_5610

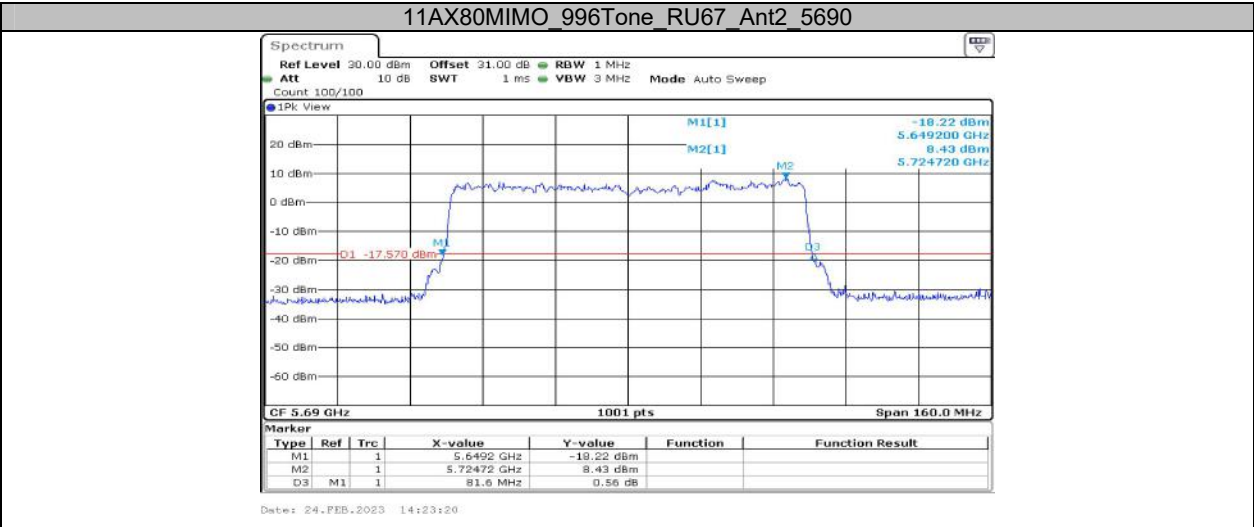


Date: 3.FEB.2023 03:25:41

11AX80MIMO_996Tone_RU67_Ant1_5690



Date: 24.FEB.2023 14:21:20



AppendixA2: Occupied channel bandwidth Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A-CDD	Ant1	5180	16.503	5171.568	5188.072	---	---
	Ant2	5180	16.623	5171.528	5188.152	---	---
	Ant1	5200	16.503	5191.568	5208.072	---	---
	Ant2	5200	16.663	5191.528	5208.192	---	---
	Ant1	5240	16.503	5231.568	5248.072	---	---
	Ant2	5240	16.623	5231.528	5248.152	---	---
	Ant1	5260	16.503	5251.568	5268.072	---	---
	Ant2	5260	16.663	5251.528	5268.192	---	---
	Ant1	5280	16.503	5271.568	5288.072	---	---
	Ant2	5280	16.623	5271.528	5288.152	---	---
	Ant1	5320	16.503	5311.568	5328.072	---	---
	Ant2	5320	16.623	5311.528	5328.152	---	---
	Ant1	5500	16.503	5491.568	5508.072	---	---
	Ant2	5500	16.623	5491.528	5508.152	---	---
	Ant1	5580	16.503	5571.568	5588.072	---	---
	Ant2	5580	16.663	5571.489	5588.152	---	---
	Ant1	5700	16.503	5691.568	5708.072	---	---
	Ant2	5700	16.663	5691.489	5708.152	---	---
	Ant1	5720	16.703	5711.489	5728.192	---	---
	Ant2	5720	16.503	5711.568	5728.072	---	---
	Ant1	5720 UNII-2C	13.511	5711.489	5725	---	PASS
	Ant2	5720 UNII-2C	13.432	5711.568	5725	---	PASS
	Ant1	5720 UNII-3	3.192	5725	5728.192	---	PASS
	Ant2	5720 UNII-3	3.072	5725	5728.072	---	PASS
	Ant1	5745	16.503	5736.528	5753.032	---	---
	Ant2	5745	16.663	5736.489	5753.152	---	---
	Ant1	5785	16.503	5776.528	5793.032	---	---
	Ant2	5785	16.663	5776.489	5793.152	---	---
	Ant1	5825	16.503	5816.528	5833.032	---	---
	Ant2	5825	16.623	5816.528	5833.152	---	---
11N20MIMO	Ant1	5180	17.622	5171.009	5188.631	---	---
	Ant2	5180	17.622	5171.009	5188.631	---	---
	Ant1	5200	17.622	5191.009	5208.631	---	---
	Ant2	5200	17.622	5191.009	5208.631	---	---
	Ant1	5240	17.622	5231.009	5248.631	---	---
	Ant2	5240	17.622	5231.009	5248.631	---	---
	Ant1	5260	17.582	5251.049	5268.631	---	---
	Ant2	5260	17.622	5251.009	5268.631	---	---
	Ant1	5280	17.622	5271.009	5288.631	---	---
	Ant2	5280	17.622	5271.009	5288.631	---	---
	Ant1	5320	17.622	5311.009	5328.631	---	---
	Ant2	5320	17.622	5311.009	5328.631	---	---
	Ant1	5500	17.622	5491.009	5508.631	---	---
	Ant2	5500	17.622	5491.009	5508.631	---	---
	Ant1	5580	17.622	5571.009	5588.631	---	---
	Ant2	5580	17.622	5571.009	5588.631	---	---
	Ant1	5700	17.622	5691.009	5708.631	---	---
	Ant2	5700	17.622	5691.009	5708.631	---	---
	Ant1	5720	17.622	5711.009	5728.631	---	---
	Ant2	5720	17.622	5711.009	5728.631	---	---
	Ant1	5720 UNII-2C	13.991	5711.009	5725	---	PASS
	Ant2	5720 UNII-2C	13.991	5711.009	5725	---	PASS
	Ant1	5720 UNII-3	3.631	5725	5728.631	---	PASS
	Ant2	5720 UNII-3	3.631	5725	5728.631	---	PASS
	Ant1	5745	17.662	5735.969	5753.631	---	---
	Ant2	5745	17.622	5736.009	5753.631	---	---

	Ant1	5785	17.662	5775.969	5793.631	---	---
	Ant2	5785	17.622	5776.009	5793.631	---	---
	Ant1	5825	17.662	5815.969	5833.631	---	---
	Ant2	5825	17.622	5816.009	5833.631	---	---
11N40MIMO	Ant1	5190	36.364	5171.698	5208.062	---	---
	Ant2	5190	36.284	5171.778	5208.062	---	---
	Ant1	5230	36.284	5211.778	5248.062	---	---
	Ant2	5230	36.204	5211.858	5248.062	---	---
	Ant1	5270	36.284	5251.778	5288.062	---	---
	Ant2	5270	36.204	5251.858	5288.062	---	---
	Ant1	5310	36.284	5291.778	5328.062	---	---
	Ant2	5310	36.284	5291.778	5328.062	---	---
	Ant1	5510	36.204	5491.778	5527.982	---	---
	Ant2	5510	36.124	5491.858	5527.982	---	---
	Ant1	5550	36.204	5531.778	5567.982	---	---
	Ant2	5550	36.204	5531.778	5567.982	---	---
	Ant1	5670	36.284	5651.778	5688.062	---	---
	Ant2	5670	36.204	5651.778	5687.982	---	---
	Ant1	5710	36.364	5691.698	5728.062	---	---
	Ant2	5710	36.364	5691.698	5728.062	---	---
	Ant1	5710 UNII-2C	33.302	5691.698	5725	---	PASS
	Ant2	5710 UNII-2C	33.302	5691.698	5725	---	PASS
	Ant1	5710 UNII-3	3.062	5725	5728.062	---	PASS
	Ant2	5710 UNII-3	3.062	5725	5728.062	---	PASS
	Ant1	5755	36.364	5736.698	5773.062	---	---
	Ant2	5755	36.204	5736.778	5772.982	---	---
	Ant1	5795	36.364	5776.698	5813.062	---	---
	Ant2	5795	36.284	5776.778	5813.062	---	---
11AC20MIMO	Ant1	5180	17.622	5171.009	5188.631	---	---
	Ant2	5180	17.622	5171.009	5188.631	---	---
	Ant1	5200	17.662	5191.009	5208.671	---	---
	Ant2	5200	17.662	5191.009	5208.671	---	---
	Ant1	5240	17.622	5231.009	5248.631	---	---
	Ant2	5240	17.622	5231.009	5248.631	---	---
	Ant1	5260	17.662	5251.009	5268.671	---	---
	Ant2	5260	17.622	5251.009	5268.631	---	---
	Ant1	5280	17.622	5271.009	5288.631	---	---
	Ant2	5280	17.622	5271.009	5288.631	---	---
	Ant1	5320	17.622	5311.009	5328.631	---	---
	Ant2	5320	17.622	5311.009	5328.631	---	---
	Ant1	5500	17.622	5491.009	5508.631	---	---
	Ant2	5500	17.622	5491.009	5508.631	---	---
	Ant1	5580	17.662	5570.969	5588.631	---	---
	Ant2	5580	17.622	5571.009	5588.631	---	---
	Ant1	5700	17.622	5691.009	5708.631	---	---
	Ant2	5700	17.622	5691.009	5708.631	---	---
	Ant1	5720	17.622	5711.009	5728.631	---	---
	Ant2	5720	17.622	5711.009	5728.631	---	---
	Ant1	5720 UNII-2C	13.991	5711.009	5725	---	PASS
	Ant2	5720 UNII-2C	13.991	5711.009	5725	---	PASS
	Ant1	5720 UNII-3	3.631	5725	5728.631	---	PASS
	Ant2	5720 UNII-3	3.631	5725	5728.631	---	PASS
	Ant1	5745	17.622	5736.009	5753.631	---	---
	Ant2	5745	17.622	5736.009	5753.631	---	---
	Ant1	5785	17.662	5775.969	5793.631	---	---
	Ant2	5785	17.662	5775.969	5793.631	---	---
	Ant1	5825	17.662	5815.969	5833.631	---	---
	Ant2	5825	17.622	5816.009	5833.631	---	---
11AC40MIMO	Ant1	5190	36.284	5171.778	5208.062	---	---
	Ant2	5190	36.284	5171.778	5208.062	---	---
	Ant1	5230	36.284	5211.778	5248.062	---	---

	Ant2	5230	36.284	5211.778	5248.062	---	---
	Ant1	5270	36.284	5251.778	5288.062	---	---
	Ant2	5270	36.284	5251.778	5288.062	---	---
	Ant1	5310	36.284	5291.778	5328.062	---	---
	Ant2	5310	36.284	5291.778	5328.062	---	---
	Ant1	5510	36.204	5491.778	5527.982	---	---
	Ant2	5510	36.204	5491.778	5527.982	---	---
	Ant1	5550	36.284	5531.778	5568.062	---	---
	Ant2	5550	36.284	5531.778	5568.062	---	---
	Ant1	5670	36.284	5651.778	5688.062	---	---
	Ant2	5670	36.204	5651.778	5687.982	---	---
	Ant1	5710	36.364	5691.698	5728.062	---	---
	Ant2	5710	36.284	5691.778	5728.062	---	---
	Ant1	5710 UNII-2C	33.302	5691.698	5725	---	PASS
	Ant2	5710 UNII-2C	33.222	5691.778	5725	---	PASS
	Ant1	5710 UNII-3	3.062	5725	5728.062	---	PASS
	Ant2	5710 UNII-3	3.062	5725	5728.062	---	PASS
	Ant1	5755	36.284	5736.778	5773.062	---	---
	Ant2	5755	36.204	5736.778	5772.982	---	---
	Ant1	5795	36.364	5776.698	5813.062	---	---
	Ant2	5795	36.284	5776.778	5813.062	---	---
11AC80MIMO	Ant1	5210	77.043	5171.479	5248.521	---	---
	Ant2	5210	76.883	5171.638	5248.521	---	---
	Ant1	5290	76.723	5251.798	5328.521	---	---
	Ant2	5290	76.723	5251.798	5328.521	---	---
	Ant1	5530	76.723	5491.798	5568.521	---	---
	Ant2	5530	76.883	5491.798	5568.681	---	---
	Ant1	5610	76.563	5571.638	5648.202	---	---
	Ant2	5610	76.723	5571.958	5648.681	---	---
	Ant1	5690	77.363	5651.479	5728.841	---	---
	Ant2	5690	77.043	5651.638	5728.681	---	---
	Ant1	5690 UNII-2C	73.521	5651.479	5725	---	PASS
	Ant2	5690 UNII-2C	73.362	5651.638	5725	---	PASS
	Ant1	5690 UNII-3	3.841	5725	5728.841	---	PASS
	Ant2	5690 UNII-3	3.681	5725	5728.681	---	PASS
	Ant1	5775	76.883	5736.798	5813.681	---	---
	Ant2	5775	76.883	5736.798	5813.681	---	---
11AX20MIMO (worst case 242Tone_RU61)	Ant1	5180	18.861	5170.529	5189.391	---	---
	Ant2	5180	18.861	5170.529	5189.391	---	---
	Ant1	5200	18.861	5190.569	5209.431	---	---
	Ant2	5200	18.861	5190.569	5209.431	---	---
	Ant1	5240	18.861	5230.569	5249.431	---	---
	Ant2	5240	18.861	5230.569	5249.431	---	---
	Ant1	5260	18.861	5250.569	5269.431	---	---
	Ant2	5260	18.821	5250.569	5269.391	---	---
	Ant1	5280	18.901	5270.529	5289.431	---	---
	Ant2	5280	18.861	5270.569	5289.431	---	---
	Ant1	5320	18.861	5310.529	5329.391	---	---
	Ant2	5320	18.861	5310.529	5329.391	---	---
	Ant1	5500	18.821	5490.569	5509.391	---	---
	Ant2	5500	18.821	5490.569	5509.391	---	---
	Ant1	5580	18.861	5570.569	5589.431	---	---
	Ant2	5580	18.861	5570.569	5589.431	---	---
	Ant1	5700	18.901	5690.529	5709.431	---	---
	Ant2	5700	18.861	5690.529	5709.391	---	---
	Ant1	5720	19.021	5710.290	5729.311	---	---
	Ant2	5720	19.021	5710.290	5729.311	---	---
	Ant1	5720 UNII-2C	14.71	5710.290	5725	---	PASS
	Ant2	5720 UNII-2C	14.71	5710.290	5725	---	PASS
	Ant1	5720 UNII-3	4.311	5725	5729.311	---	PASS
	Ant2	5720 UNII-3	4.311	5725	5729.311	---	PASS

	Ant1	5745	18.861	5735.529	5754.391	---	---
	Ant2	5745	18.901	5735.529	5754.431	---	---
	Ant1	5785	18.861	5775.529	5794.391	---	---
	Ant2	5785	18.861	5775.529	5794.391	---	---
	Ant1	5825	18.861	5815.529	5834.391	---	---
	Ant2	5825	18.821	5815.569	5834.391	---	---
11AX40MIMO (worst case 484Tone_RU65)	Ant1	5190	37.962	5170.979	5208.941	---	---
	Ant2	5190	37.962	5170.979	5208.941	---	---
	Ant1	5230	37.882	5211.059	5248.941	---	---
	Ant2	5230	37.882	5211.059	5248.941	---	---
	Ant1	5270	37.882	5251.059	5288.941	---	---
	Ant2	5270	37.882	5251.059	5288.941	---	---
	Ant1	5310	37.802	5291.059	5328.861	---	---
	Ant2	5310	37.802	5291.059	5328.861	---	---
	Ant1	5510	37.882	5491.059	5528.941	---	---
	Ant2	5510	37.882	5491.059	5528.941	---	---
	Ant1	5550	37.882	5531.059	5568.941	---	---
	Ant2	5550	37.722	5531.139	5568.861	---	---
	Ant1	5670	37.802	5651.139	5688.941	---	---
	Ant2	5670	37.802	5651.139	5688.941	---	---
	Ant1	5710	37.882	5690.899	5728.781	---	---
	Ant2	5710	37.882	5690.899	5728.781	---	---
	Ant1	5710 UNII-2C	34.101	5690.899	5725	---	PASS
	Ant2	5710 UNII-2C	34.101	5690.899	5725	---	PASS
	Ant1	5710 UNII-3	3.781	5725	5728.781	---	PASS
	Ant2	5710 UNII-3	3.781	5725	5728.781	---	PASS
	Ant1	5755	37.882	5736.059	5773.941	---	---
	Ant2	5755	37.882	5736.059	5773.941	---	---
	Ant1	5795	37.962	5775.979	5813.941	---	---
	Ant2	5795	37.882	5776.059	5813.941	---	---
11AX80MIMO (worst case 996Tone_RU67)	Ant1	5210	77.842	5171.159	5249.001	---	---
	Ant2	5210	78.002	5171.159	5249.161	---	---
	Ant1	5290	77.842	5251.159	5329.001	---	---
	Ant2	5290	77.842	5251.159	5329.001	---	---
	Ant1	5530	77.842	5491.159	5569.001	---	---
	Ant2	5530	78.002	5491.159	5569.161	---	---
	Ant1	5610	77.842	5571.159	5649.001	---	---
	Ant2	5610	77.842	5571.159	5649.001	---	---
	Ant1	5690	78.002	5651.159	5729.161	---	---
	Ant2	5690	77.842	5651.159	5729.001	---	---
	Ant1	5690 UNII-2C	73.841	5651.159	5725	---	PASS
	Ant2	5690 UNII-2C	73.841	5651.159	5725	---	PASS
	Ant1	5690 UNII-3	4.161	5725	5729.161	---	PASS
	Ant2	5690 UNII-3	4.001	5725	5729.001	---	PASS
	Ant1	5775	78.002	5736.159	5814.161	---	---
	Ant2	5775	78.002	5736.159	5814.161	---	---

Note: For 5150-5250 band, the device not operate with any part of OBW fall within 5250-5350MHz range
For 5725-5850 band, the device not operate with any part of OBW fall within 5470-5725MHz range.

Test Graphs

