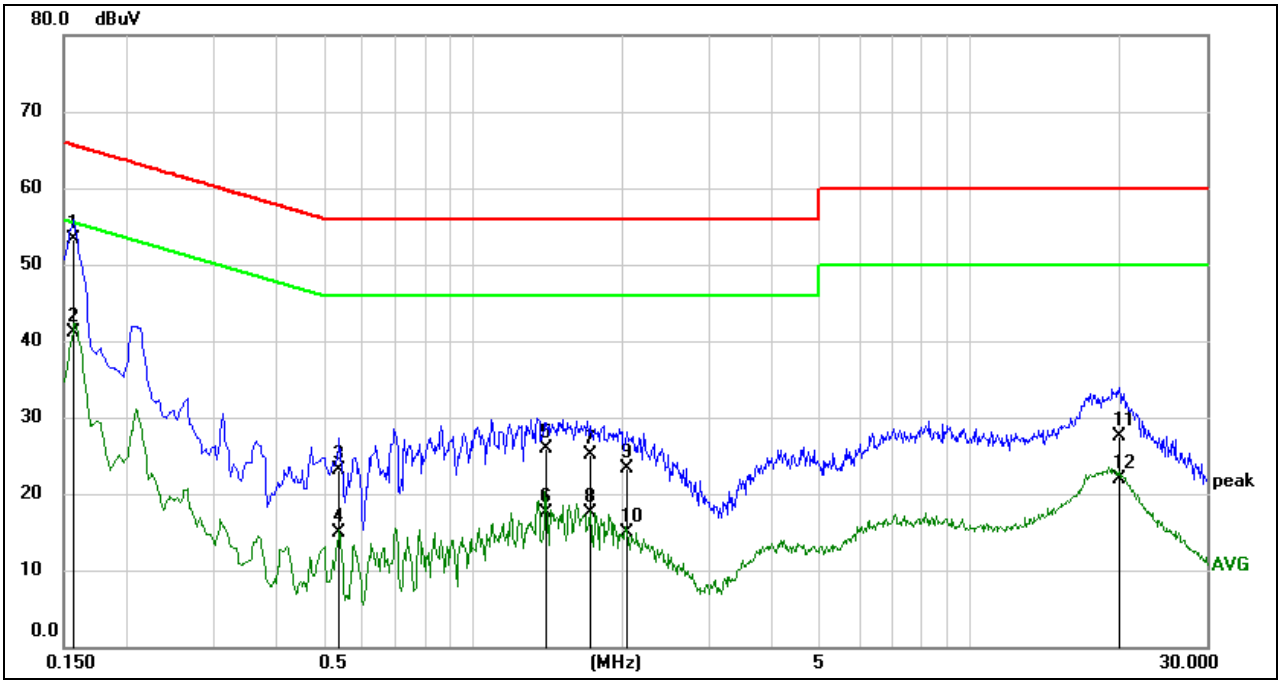
LINE L RESULTS (UNII-2C BAND HIGH CHANNEL, WORST-CASE CONFIGURATION)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1568	43.80	9.50	53.30	65.63	-12.33	QP
2	0.1568	31.63	9.50	41.13	55.63	-14.50	AVG
3	0.5398	13.51	9.50	23.01	56.00	-32.99	QP
4	0.5398	5.34	9.50	14.84	46.00	-31.16	AVG
5	1.4008	16.40	9.55	25.95	56.00	-30.05	QP
6	1.4008	7.98	9.55	17.53	46.00	-28.47	AVG
7	1.7253	15.43	9.59	25.02	56.00	-30.98	QP
8	1.7253	7.97	9.59	17.56	46.00	-28.44	AVG
9	2.0478	13.71	9.63	23.34	56.00	-32.66	QP
10	2.0478	5.24	9.63	14.87	46.00	-31.13	AVG
11	19.9151	17.77	9.74	27.51	60.00	-32.49	QP
12	19.9151	12.11	9.74	21.85	50.00	-28.15	AVG

Note: 1. Result = Reading + Correct Factor.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).
4. Step size: 80 Hz (0.009 MHz ~ 0.15 MHz), 4 kHz (0.15 MHz ~ 30 MHz), Scan time: auto.

Note: All the modes had been tested, but only the worst data was recorded in the report.

10. FREQUENCY STABILITY

LIMITS

The frequency of the carrier signal shall be maintained within band of operation.

TEST PROCEDURE

1. The EUT was placed inside an environmental chamber as the temperature in the chamber was varied between 0 °C ~ 70 °C (declared by customer).

2. The temperature was incremented by 10 °C intervals and the unit allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded.

3. The primary supply voltage is varied from 85 % to 115 % of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

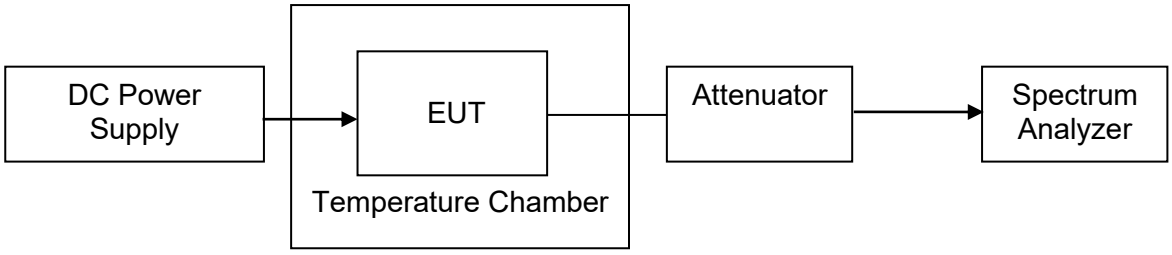
Connect the EUT to the spectrum analyser and use the following settings:

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	10 kHz
VBW	≥3 × RBW
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

4. While maintaining a constant temperature inside the environmental chamber, turn the EUT on and record the operating frequency at startup, and at 2 minutes, 5minutes, and 10 minutes after the EUT is energized.

5. Allow the trace to stabilize, find the peak value of the power envelope and record the frequency, then calculated the frequency drift.

TEST SETUP



TEST ENVIRONMENT

	Normal Test Conditions	Extreme Test Conditions
Relative Humidity	20 % - 75 %	/
Atmospheric Pressure	100 kPa ~102 kPa	/
Temperature	T_N (Normal Temperature): 25.1 °C	T_L (Low Temperature): 0 °C
		T_H (High Temperature): 70 °C
Supply Voltage	V_N (Normal Voltage): AC 120 V	V_L (Low Voltage): AC 102 V
		V_H (High Voltage): DC 138 V

RESULTS

Please refer to Appendix D.

11. DYNAMIC FREQUENCY SELECTION

APPLICABILITY OF DFS REQUIREMENTS

A U-NII network will employ a DFS function to detect signals from radar systems and to avoid co-channel operation with these systems. This applies to the 5250-5350 MHz and/or 5470-5725 MHz bands.
Within the context of the operation of the DFS function, a U-NII device will operate in either Master Mode or Client Mode. U-NII devices operating in Client Mode can only operate in a network controlled by a U-NII device operating in Master Mode.

Table 1: Applicability of DFS Requirements Prior to Use of a Channel

Requirement	Operational Mode		
	☐ Master	☒ Client Without Radar Detection	☐ Client With Radar Detection
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
U-NII Detection Bandwidth	Yes	Not required	Yes

Table 2: Applicability of DFS requirements during normal operation

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

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

LIMITS

(1) DFS Detection Thresholds

Table 3: DFS Detection Thresholds for Master Devices and Client Devices With Radar Detection

Maximum Transmit Power	Value (See Notes 1, 2, and 3)
EIRP ≥ 200 milliwatt	-64 dBm
EIRP < 200 milliwatt and power spectral density < 10 dBm/MHz	-62 dBm
EIRP < 200 milliwatt that do not meet the power spectral density requirement	-64 dBm
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna. Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response. Note3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.	

(2) DFS Response Requirements

Table 4: DFS Response Requirement Values

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds See Note 1.
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.
Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required facilitating a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions. Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.	

PARAMETERS OF RADAR TEST WAVEFORMS

This section provides the parameters for required test waveforms, minimum percentage of successful detections, and the minimum number of trials that must be used for determining DFS conformance. Step intervals of 0.1 microsecond for Pulse Width, 1 microsecond for PRI, 1 MHz for chirp width and 1 for the number of pulses will be utilized for the random determination of specific test waveforms.

Table 5 Short Pulse Radar Test Waveforms

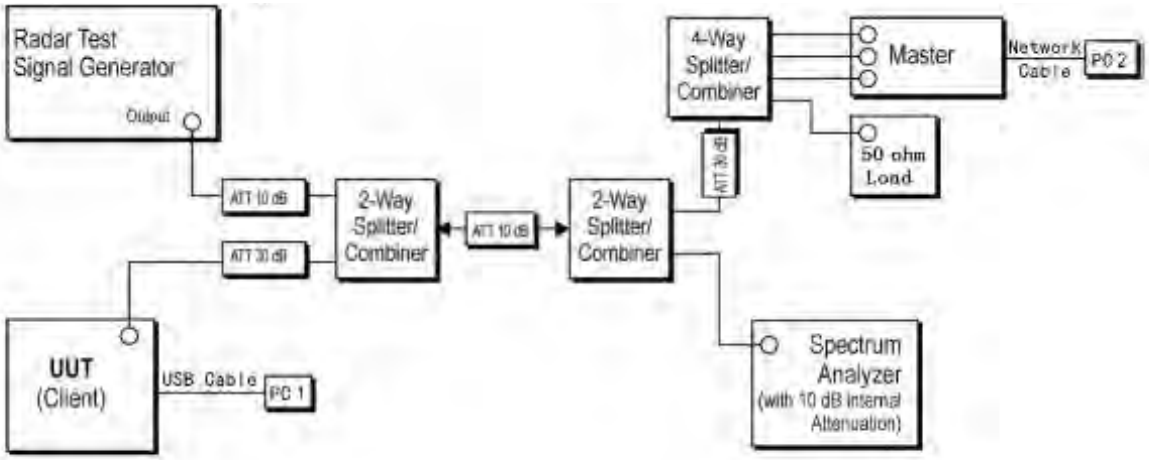
Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A	Roundup $\left\{\left(\frac{1}{360}\right)\cdot\left(\frac{19\cdot 10^6}{PRI_{\mu sec}}\right)\right\}$	60%	30
		Test B			
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120

Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.
Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a
Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A

A minimum of 30 unique waveforms are required for each of the Short Pulse Radar Types 2 through 4. If more than 30 waveforms are used for Short Pulse Radar Types 2 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms. If more than 30 waveforms are used for Short Pulse Radar Type 1, then each additional waveform is generated with Test B and must also be unique and not repeated from the previous waveforms in Tests A or B. Test aggregate is average of the percentage of successful detections of short pulse radar types 1-4.

TEST SETUP

Setup for Client with injection at the Master



TEST ENVIRONMENT

Temperature	25.3 °C	Relative Humidity	58.6 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 3.3 V

RESULTS

Please refer to Appendix F ~ H.

12. ANTENNA REQUIREMENTS

APPLICABLE REQUIREMENTS

Please refer to FCC §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 use of a standard antenna jack or electrical connector is prohibited.

Please refer to FCC §15.247(b)(4)
The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

RESULTS

Complies

12.1. Appendix A1: Emission Bandwidth

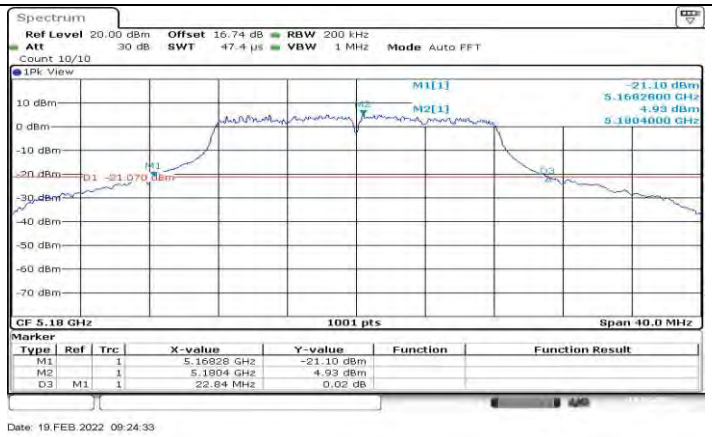
12.1.1. Test Result

Test Mode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Verdict
11A	Ant1	5180	22.84	5168.28	5191.12	PASS
	Ant2	5180	22.56	5168.48	5191.04	PASS
	Ant1	5200	22.80	5188.20	5211.00	PASS
	Ant2	5200	22.80	5188.32	5211.12	PASS
	Ant1	5240	23.44	5228.28	5251.72	PASS
	Ant2	5240	22.04	5229.24	5251.28	PASS
	Ant1	5260	22.44	5249.20	5271.64	PASS
	Ant2	5260	22.16	5249.08	5271.24	PASS
	Ant1	5280	23.16	5268.36	5291.52	PASS
	Ant2	5280	22.72	5268.64	5291.36	PASS
	Ant1	5320	22.92	5308.40	5331.32	PASS
	Ant2	5320	23.28	5308.16	5331.44	PASS
	Ant1	5500	23.96	5487.36	5511.32	PASS
	Ant2	5500	23.36	5488.20	5511.56	PASS
	Ant1	5580	22.56	5568.60	5591.16	PASS
	Ant2	5580	22.20	5568.52	5590.72	PASS
	Ant1	5700	23.52	5688.24	5711.76	PASS
	Ant2	5700	22.80	5688.32	5711.12	PASS
	Ant1	5720	22.32	5708.20	5730.52	PASS
	Ant2	5720	22.96	5708.40	5731.36	PASS
	Ant1	5720_UNII-2C	16.8	5708.20	5725	PASS
	Ant2	5720_UNII-2C	16.6	5708.40	5725	PASS
	Ant1	5720_UNII-3	5.52	5725	5730.52	PASS
	Ant2	5720_UNII-3	6.36	5725	5731.36	PASS
	Ant1	5745	23.16	5733.20	5756.36	PASS
	Ant2	5745	22.40	5733.36	5755.76	PASS
	Ant1	5785	23.04	5773.68	5796.72	PASS
	Ant2	5785	22.96	5773.32	5796.28	PASS
	Ant1	5825	22.12	5813.60	5835.72	PASS
	Ant2	5825	23.20	5813.52	5836.72	PASS
11N20MIMO	Ant1	5180	23.52	5168.16	5191.68	PASS
	Ant2	5180	22.44	5168.52	5190.96	PASS
	Ant1	5200	23.64	5188.16	5211.80	PASS
	Ant2	5200	23.20	5188.16	5211.36	PASS
	Ant1	5240	23.64	5228.16	5251.80	PASS
	Ant2	5240	23.44	5228.28	5251.72	PASS
	Ant1	5260	24.72	5247.16	5271.88	PASS
	Ant2	5260	22.32	5249.40	5271.72	PASS
	Ant1	5280	23.76	5268.16	5291.92	PASS
	Ant2	5280	23.16	5268.48	5291.64	PASS
	Ant1	5320	24.48	5307.32	5331.80	PASS
	Ant2	5320	22.72	5308.56	5331.28	PASS
	Ant1	5500	24.24	5487.48	5511.72	PASS
	Ant2	5500	23.84	5487.48	5511.32	PASS
	Ant1	5580	25.76	5567.48	5593.24	PASS
	Ant2	5580	22.76	5568.28	5591.04	PASS
	Ant1	5700	23.64	5688.16	5711.80	PASS
	Ant2	5700	22.72	5688.24	5710.96	PASS
	Ant1	5720	23.68	5708.08	5731.76	PASS
	Ant2	5720	23.44	5708.28	5731.72	PASS
	Ant1	5720_UNII-2C	16.92	5708.08	5725	PASS
	Ant2	5720_UNII-2C	16.72	5708.28	5725	PASS
	Ant1	5720_UNII-3	6.76	5725	5731.76	PASS
	Ant2	5720_UNII-3	6.72	5725	5731.72	PASS

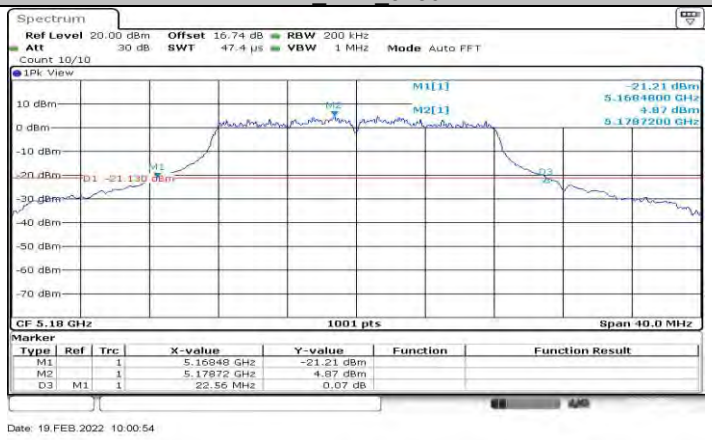
	Ant1	5745	25.16	5731.60	5756.76	PASS
	Ant2	5745	23.32	5733.20	5756.52	PASS
	Ant1	5785	23.64	5773.20	5796.84	PASS
	Ant2	5785	22.32	5773.84	5796.16	PASS
	Ant1	5825	23.56	5813.24	5836.80	PASS
	Ant2	5825	23.20	5813.24	5836.44	PASS
11N40MIMO	Ant1	5190	40.56	5169.68	5210.24	PASS
	Ant2	5190	39.92	5169.92	5209.84	PASS
	Ant1	5230	40.56	5209.92	5250.48	PASS
	Ant2	5230	40.48	5209.92	5250.40	PASS
	Ant1	5270	40.64	5249.84	5290.48	PASS
	Ant2	5270	40.16	5250.16	5290.32	PASS
	Ant1	5310	40.40	5289.92	5330.32	PASS
	Ant2	5310	40.24	5289.92	5330.16	PASS
	Ant1	5510	40.96	5489.68	5530.64	PASS
	Ant2	5510	40.16	5489.84	5530.00	PASS
	Ant1	5590	40.80	5569.68	5610.48	PASS
	Ant2	5590	40.16	5570.00	5610.16	PASS
	Ant1	5670	40.80	5649.68	5690.48	PASS
	Ant2	5670	40.72	5649.76	5690.48	PASS
	Ant1	5710	40.48	5689.84	5730.32	PASS
	Ant2	5710	40.08	5689.92	5730.00	PASS
	Ant1	5710_UNII-2C	35.16	5689.84	5725	PASS
	Ant2	5710_UNII-2C	35.08	5689.92	5725	PASS
	Ant1	5710_UNII-3	5.32	5725	5730.32	PASS
	Ant2	5710_UNII-3	5	5725	5730.00	PASS
	Ant1	5755	41.12	5734.44	5775.56	PASS
	Ant2	5755	40.16	5734.76	5774.92	PASS
	Ant1	5795	40.40	5775.00	5815.40	PASS
	Ant2	5795	40.24	5775.00	5815.24	PASS
11AC80MIMO	Ant1	5210	80.32	5169.84	5250.16	PASS
	Ant2	5210	80.16	5170.00	5250.16	PASS
	Ant1	5290	80.16	5250.00	5330.16	PASS
	Ant2	5290	80.00	5250.32	5330.32	PASS
	Ant1	5530	80.16	5490.16	5570.32	PASS
	Ant2	5530	80.00	5490.16	5570.16	PASS
	Ant1	5610	80.16	5570.00	5650.16	PASS
	Ant2	5610	80.16	5570.16	5650.32	PASS
	Ant1	5690	80.16	5650.00	5730.16	PASS
	Ant2	5690	79.84	5650.16	5730.00	PASS
	Ant1	5690_UNII-2C	75	5650.00	5725	PASS
	Ant2	5690_UNII-2C	74.84	5650.16	5725	PASS
	Ant1	5690_UNII-3	5.16	5725	5730.16	PASS
	Ant2	5690_UNII-3	5	5725	5730.00	PASS
	Ant1	5775	80.16	5735.00	5815.16	PASS
	Ant2	5775	80.00	5735.16	5815.16	PASS
11AX20MIMO	Ant1	5180	25.64	5168.36	5194.00	PASS
	Ant2	5180	23.04	5168.68	5191.72	PASS
	Ant1	5200	29.00	5182.04	5211.04	PASS
	Ant2	5200	22.00	5188.88	5210.88	PASS
	Ant1	5240	19.84	5230.04	5249.88	PASS
	Ant2	5240	19.88	5230.04	5249.92	PASS
	Ant1	5260	22.60	5249.12	5271.72	PASS
	Ant2	5260	22.76	5248.32	5271.08	PASS
	Ant1	5280	23.44	5268.16	5291.60	PASS
	Ant2	5280	23.08	5268.84	5291.92	PASS
	Ant1	5320	21.08	5309.44	5330.52	PASS
	Ant2	5320	23.92	5308.92	5332.84	PASS
	Ant1	5500	22.64	5488.12	5510.76	PASS
	Ant2	5500	21.40	5489.36	5510.76	PASS
	Ant1	5580	21.28	5569.08	5590.36	PASS

	Ant2	5580	24.96	5566.84	5591.80	PASS
	Ant1	5700	22.48	5688.64	5711.12	PASS
	Ant2	5700	21.68	5689.16	5710.84	PASS
	Ant1	5720	21.40	5709.28	5730.68	PASS
	Ant2	5720	21.48	5708.96	5730.44	PASS
	Ant1	5720_UNII-2C	15.72	5709.28	5725	PASS
	Ant2	5720_UNII-2C	16.04	5708.96	5725	PASS
	Ant1	5720_UNII-3	5.68	5725	5730.68	PASS
	Ant2	5720_UNII-3	5.44	5725	5730.44	PASS
	Ant1	5745	21.88	5733.96	5755.84	PASS
	Ant2	5745	21.24	5734.32	5755.56	PASS
	Ant1	5785	21.36	5774.12	5795.48	PASS
	Ant2	5785	21.16	5774.48	5795.64	PASS
	Ant1	5825	21.80	5813.84	5835.64	PASS
	Ant2	5825	21.88	5813.88	5835.76	PASS
11AX40MIMO	Ant1	5190	39.60	5170.24	5209.84	PASS
	Ant2	5190	39.76	5170.08	5209.84	PASS
	Ant1	5230	39.76	5210.16	5249.92	PASS
	Ant2	5230	39.68	5210.16	5249.84	PASS
	Ant1	5270	39.68	5250.24	5289.92	PASS
	Ant2	5270	39.68	5250.24	5289.92	PASS
	Ant1	5310	39.60	5290.24	5329.84	PASS
	Ant2	5310	39.60	5290.24	5329.84	PASS
	Ant1	5510	39.76	5490.08	5529.84	PASS
	Ant2	5510	39.76	5490.08	5529.84	PASS
	Ant1	5590	39.68	5570.16	5609.84	PASS
	Ant2	5590	39.84	5570.08	5609.92	PASS
	Ant1	5670	39.68	5650.16	5689.84	PASS
	Ant2	5670	39.76	5650.16	5689.92	PASS
	Ant1	5710	39.68	5690.16	5729.84	PASS
	Ant2	5710	39.76	5690.16	5729.92	PASS
	Ant1	5710_UNII-2C	34.84	5690.16	5725	PASS
	Ant2	5710_UNII-2C	34.84	5690.16	5725	PASS
	Ant1	5710_UNII-3	4.84	5725	5729.84	PASS
	Ant2	5710_UNII-3	4.92	5725	5729.92	PASS
	Ant1	5755	39.92	5735.08	5775.00	PASS
	Ant2	5755	39.92	5735.00	5774.92	PASS
	Ant1	5795	39.76	5775.16	5814.92	PASS
	Ant2	5795	39.76	5775.24	5815.00	PASS
11AX80MIMO	Ant1	5210	80.80	5169.68	5250.48	PASS
	Ant2	5210	80.64	5169.84	5250.48	PASS
	Ant1	5290	80.48	5249.84	5330.32	PASS
	Ant2	5290	80.48	5249.84	5330.32	PASS
	Ant1	5530	80.48	5489.84	5570.32	PASS
	Ant2	5530	80.48	5489.84	5570.32	PASS
	Ant1	5610	80.64	5569.84	5650.48	PASS
	Ant2	5610	80.80	5569.68	5650.48	PASS
	Ant1	5690	80.48	5649.84	5730.32	PASS
	Ant2	5690	80.48	5649.84	5730.32	PASS
	Ant1	5690_UNII-2C	75.16	5649.84	5725	PASS
	Ant2	5690_UNII-2C	75.16	5649.84	5725	PASS
	Ant1	5690_UNII-3	5.32	5725	5730.32	PASS
	Ant2	5690_UNII-3	5.32	5725	5730.32	PASS
	Ant1	5775	80.64	5734.84	5815.48	PASS
	Ant2	5775	80.64	5734.84	5815.48	PASS

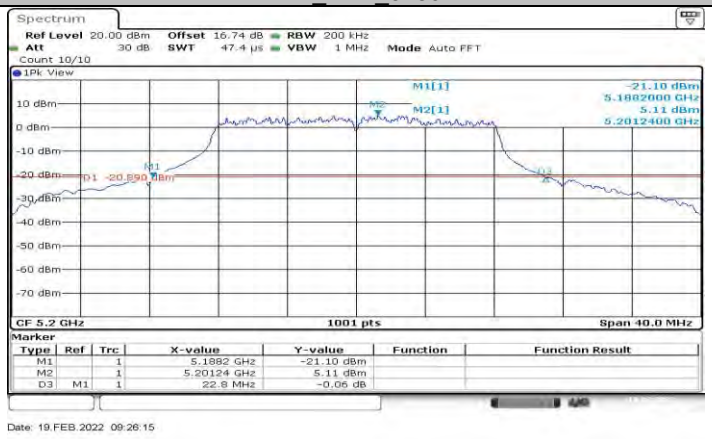
12.1.2. Test Graphs



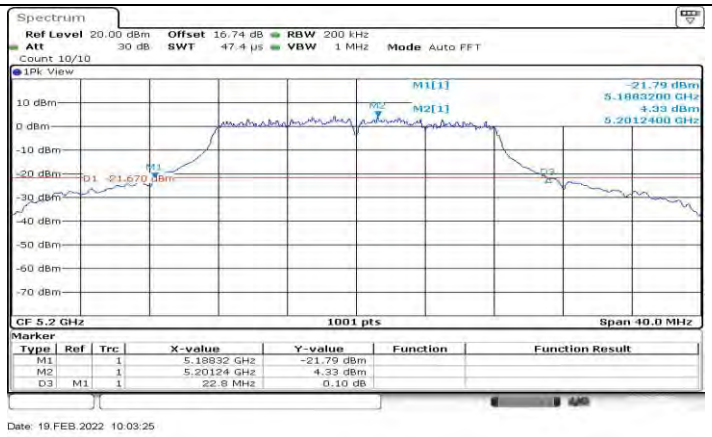
11A_Ant1_5180



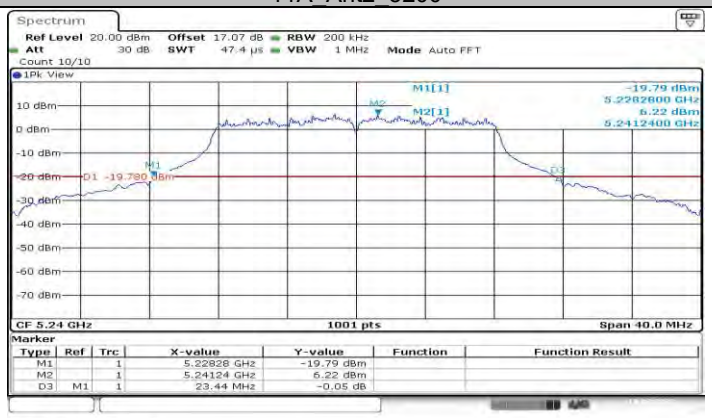
11A_Ant2_5180



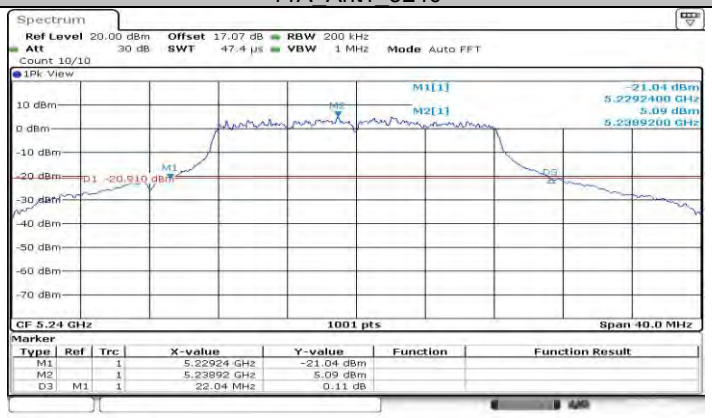
11A_Ant1_5200



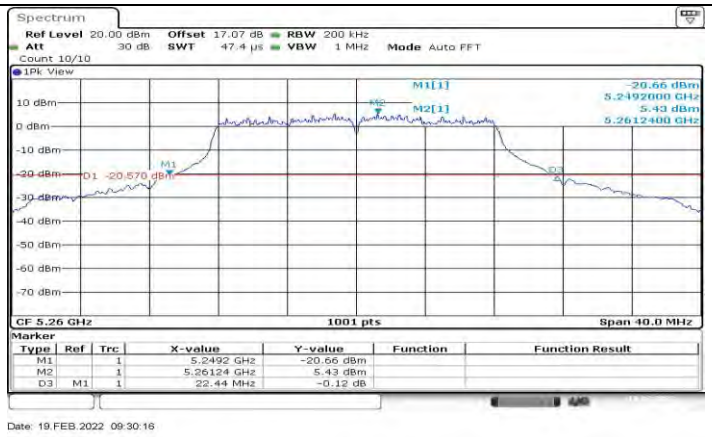
11A_Ant2_5200



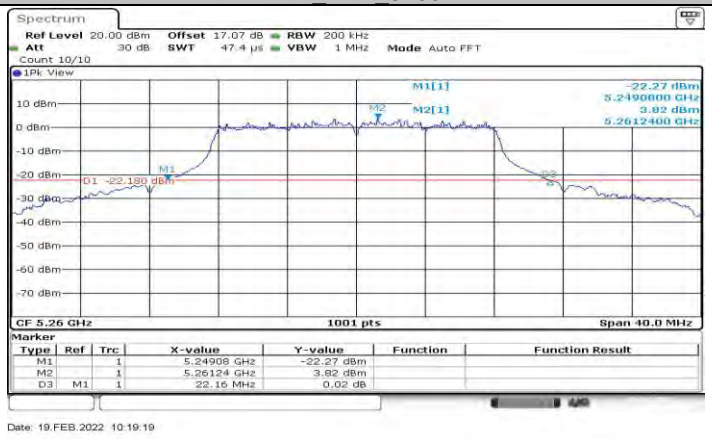
11A_Ant1_5240



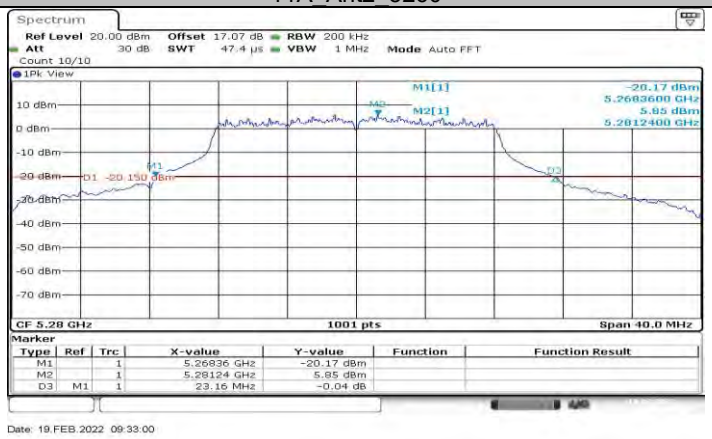
11A_Ant2_5240



11A_Ant1_5260

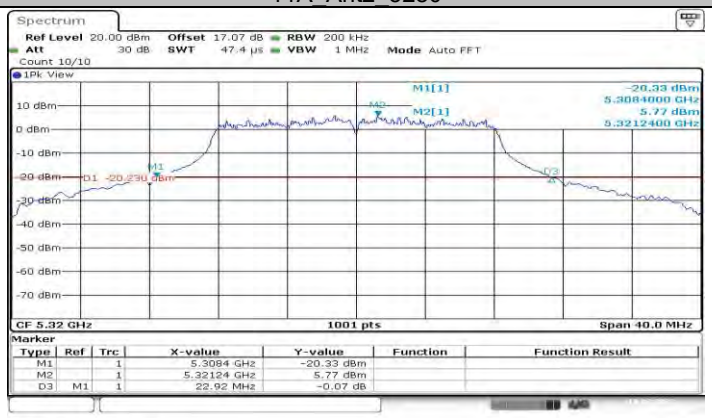


11A_Ant2_5260

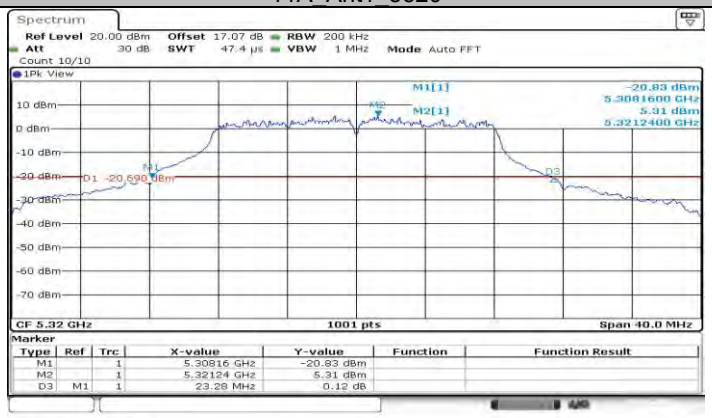


11A_Ant1_5280

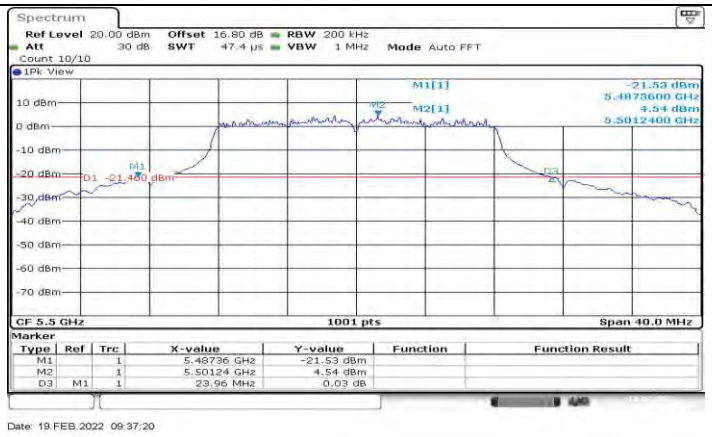
11A_Ant2_5280



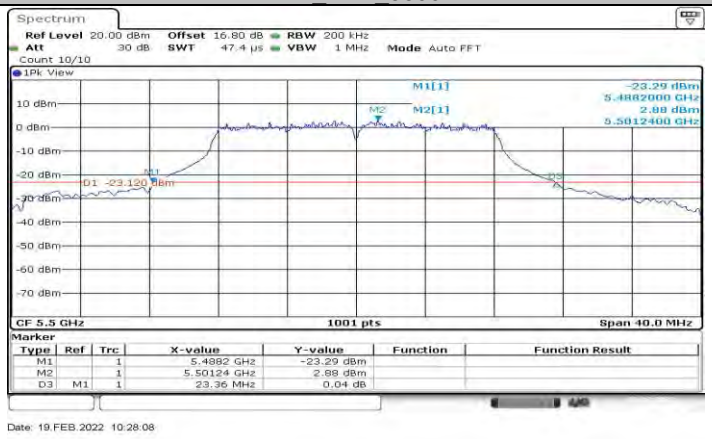
11A_Ant1_5320



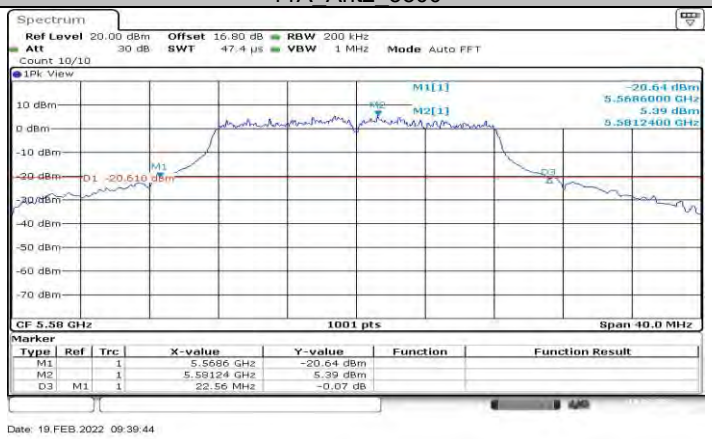
11A_Ant2_5320



11A_Ant1_5500

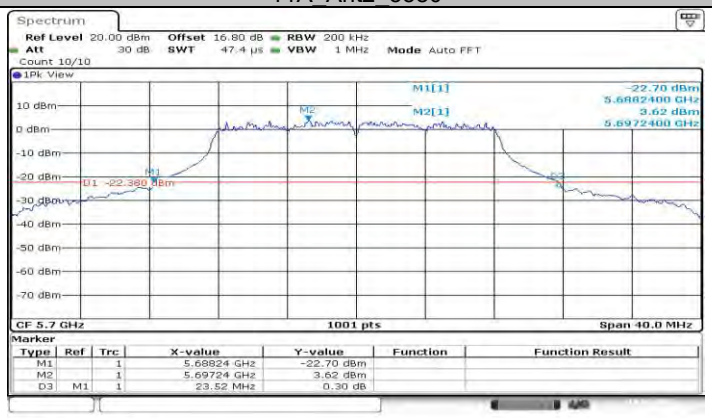


11A_Ant2_5500

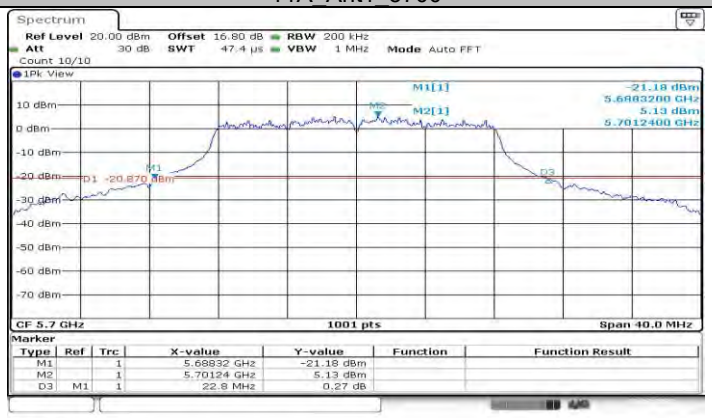


11A_Ant1_5580

11A_Ant2_5580

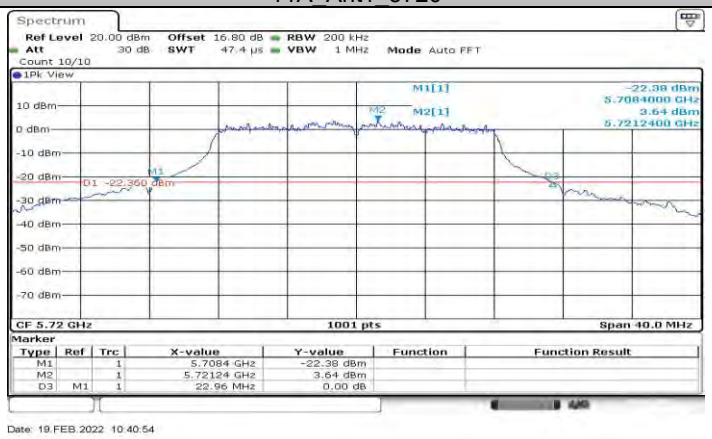


11A_Ant1_5700

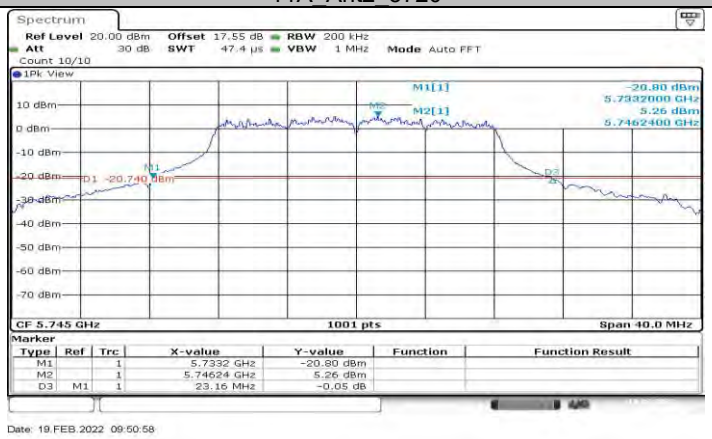


11A_Ant2_5700

11A_Ant1_5720

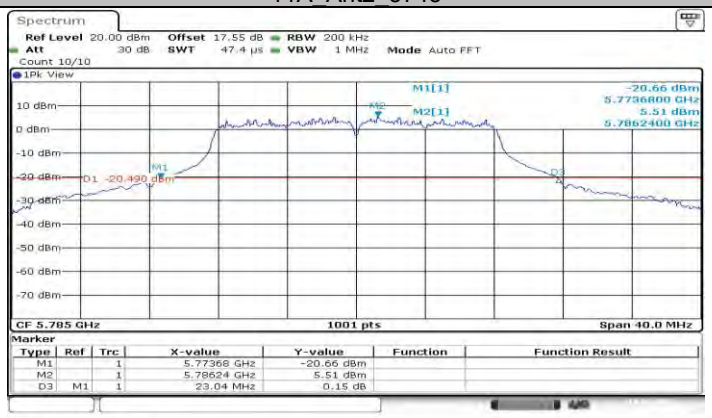


11A_Ant2_5720

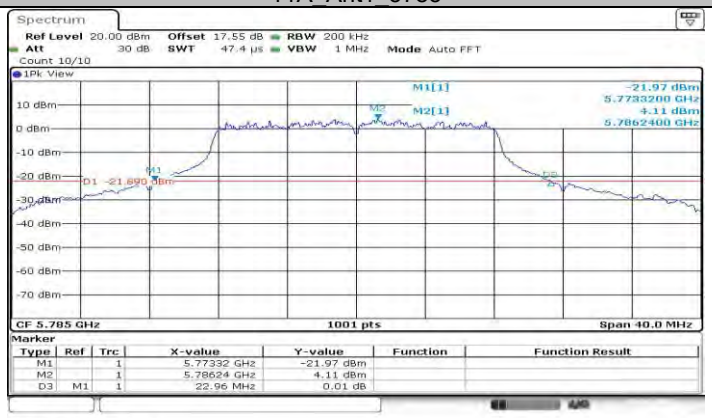


11A_Ant1_5745

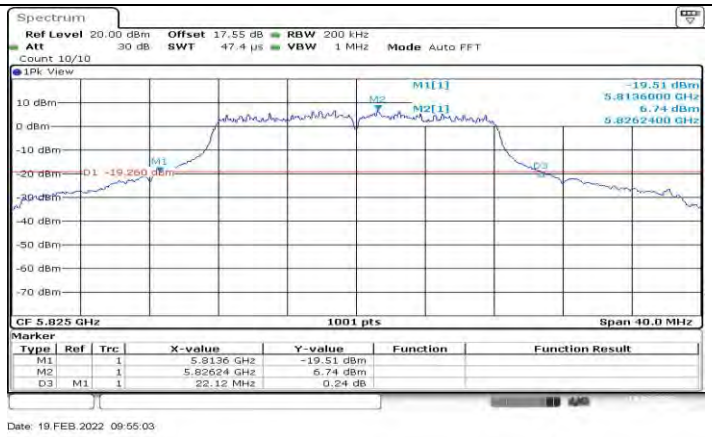
11A_Ant2_5745



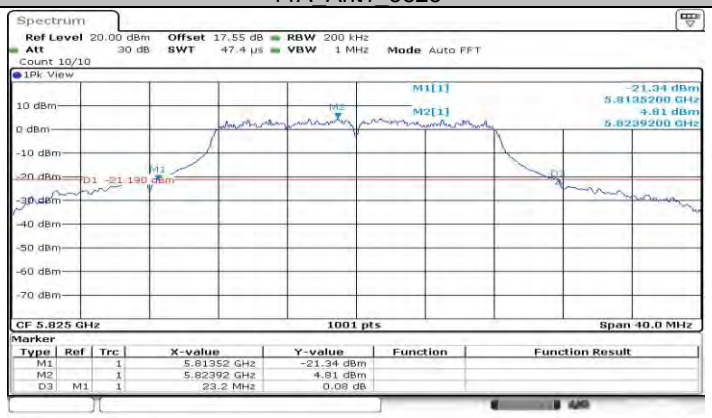
11A_Ant1_5785



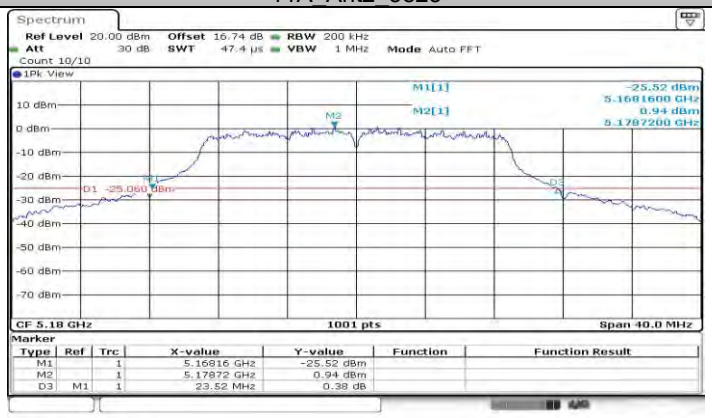
11A_Ant2_5785



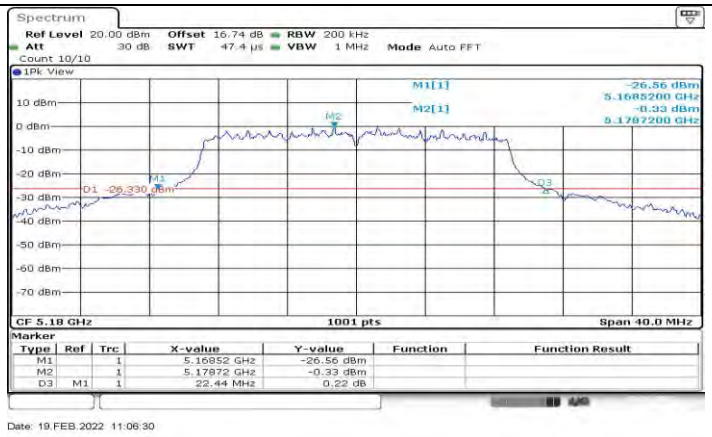
11A_Ant1_5825



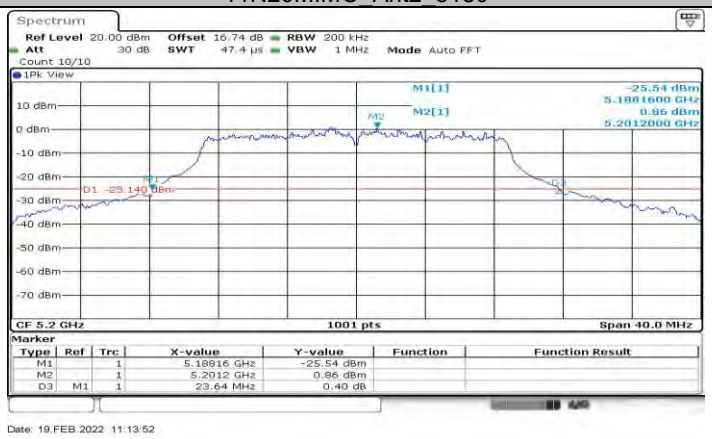
11A_Ant2_5825



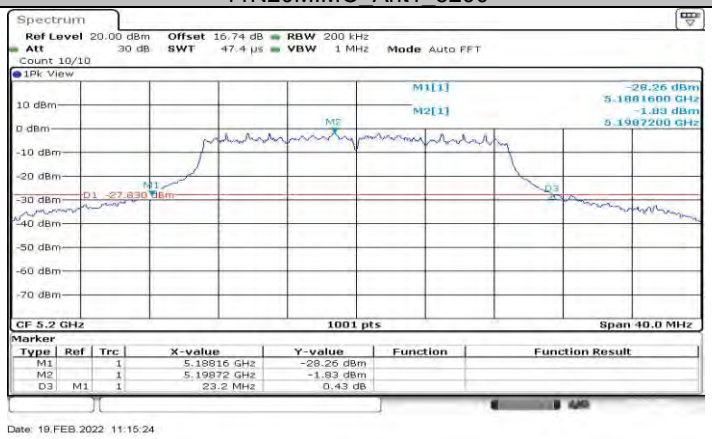
11N20MIMO_Ant1_5180



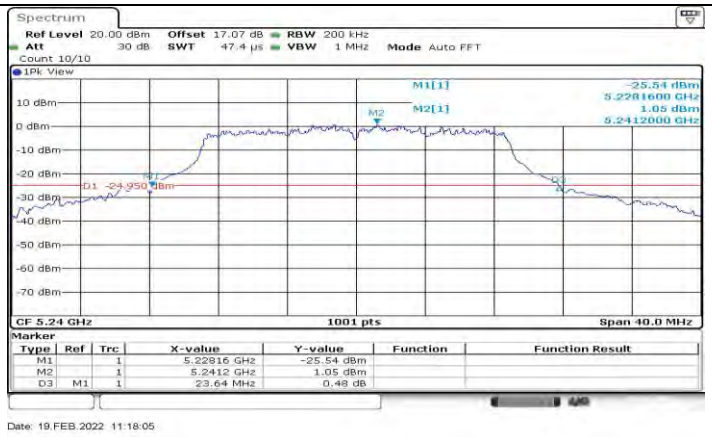
11N20MIMO_Ant2_5180



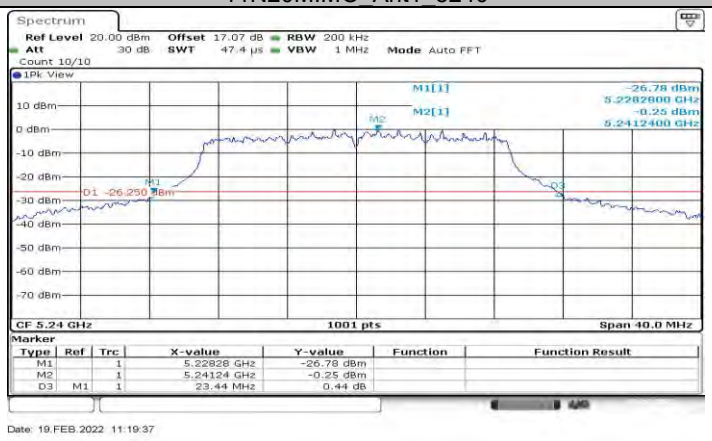
11N20MIMO_Ant1_5200



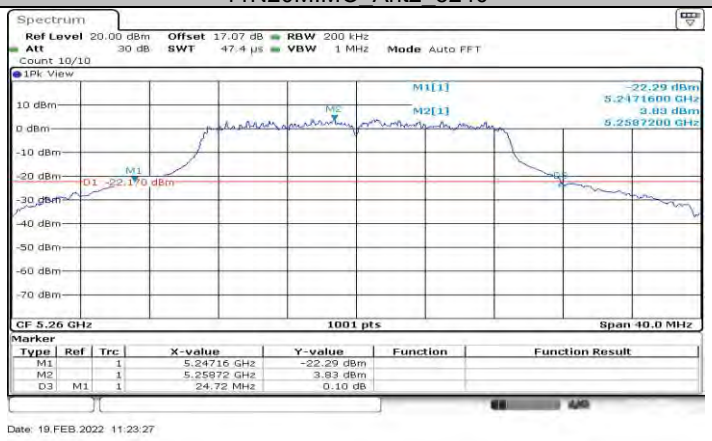
11N20MIMO_Ant2_5200



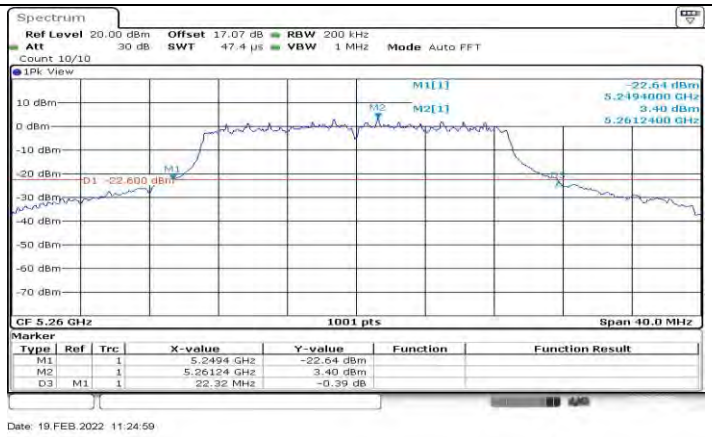
11N20MIMO_Ant1_5240



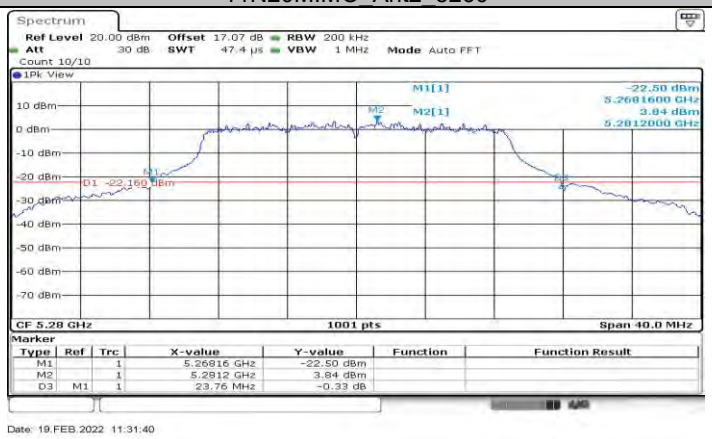
11N20MIMO_Ant2_5240



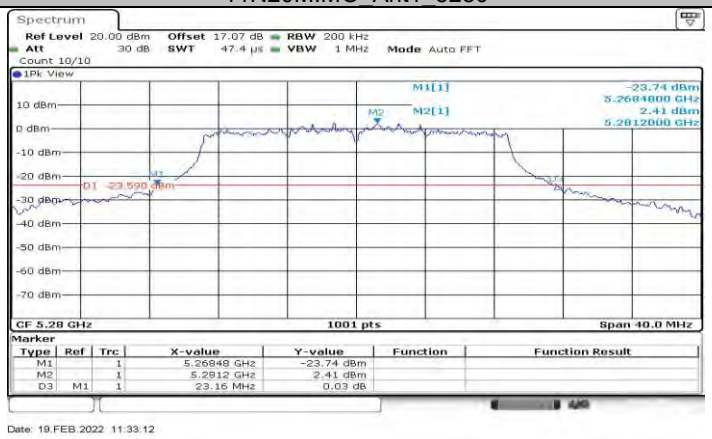
11N20MIMO_Ant1_5260



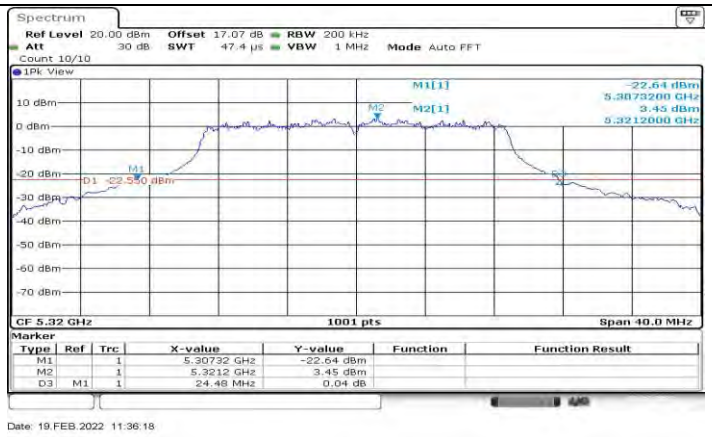
11N20MIMO_Ant2_5260



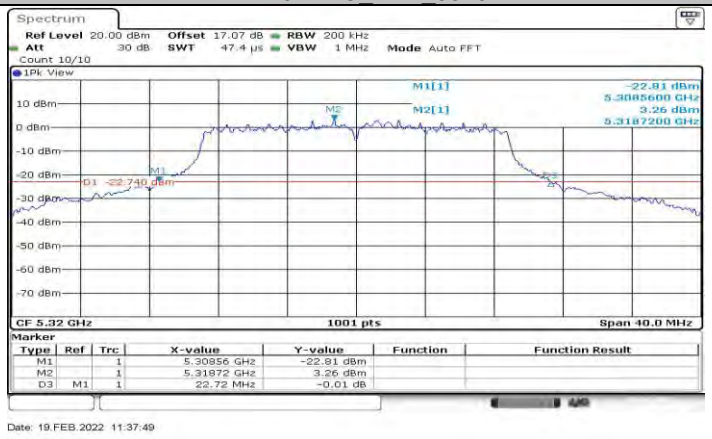
11N20MIMO_Ant1_5280



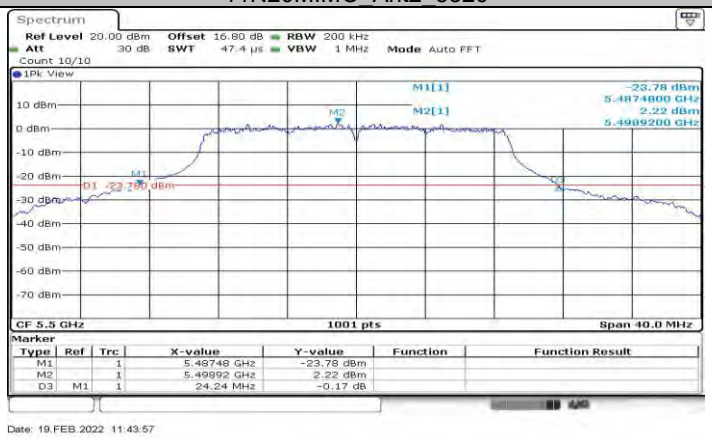
11N20MIMO_Ant2_5280



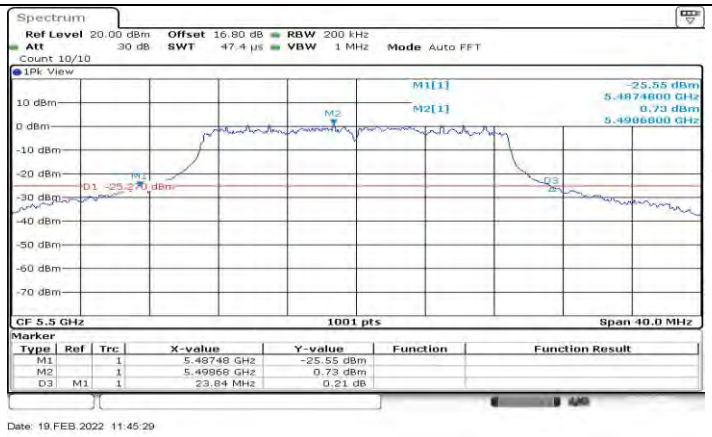
11N20MIMO_Ant1_5320



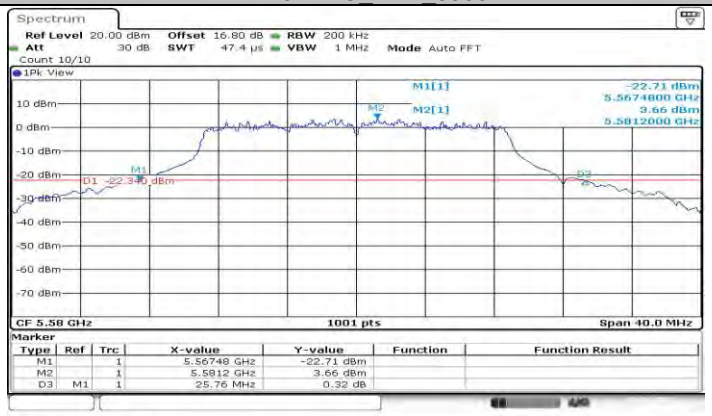
11N20MIMO_Ant2_5320



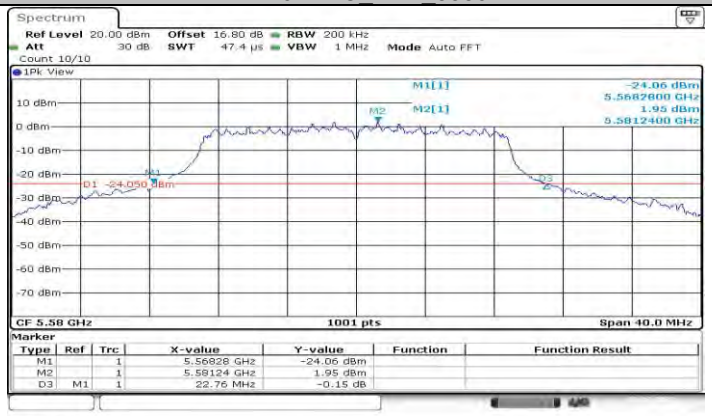
11N20MIMO_Ant1_5500



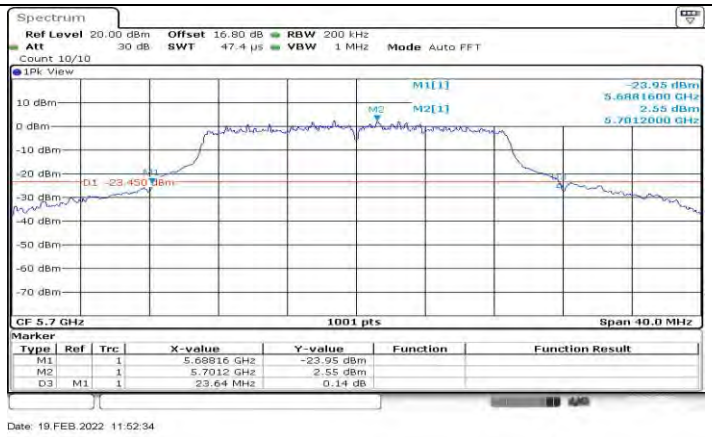
11N20MIMO_Ant2_5500



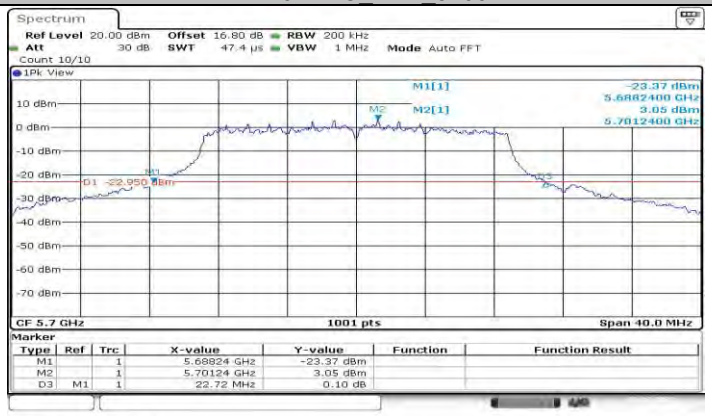
11N20MIMO_Ant1_5580



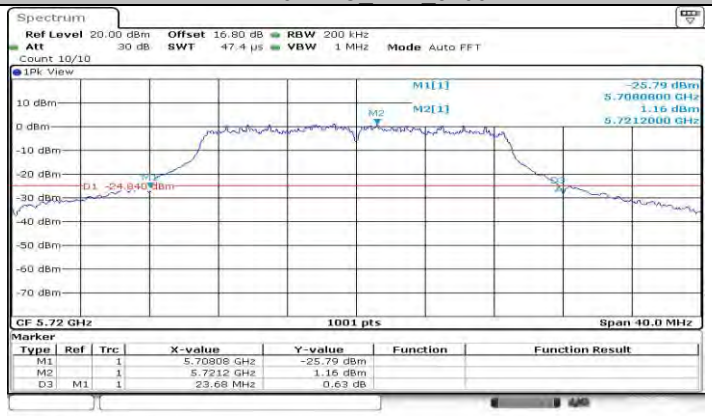
11N20MIMO_Ant2_5580



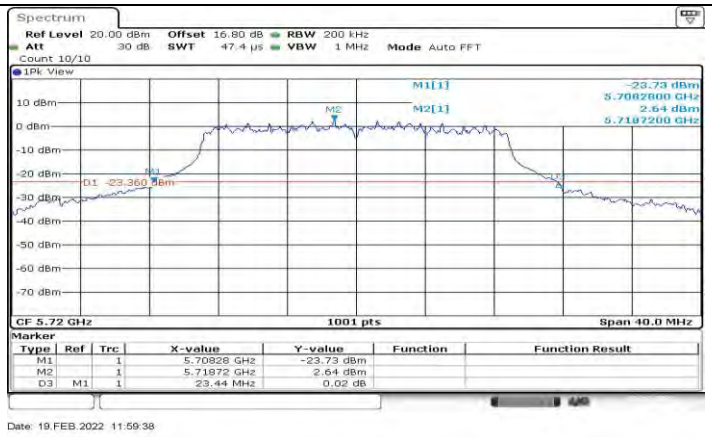
11N20MIMO_Ant1_5700



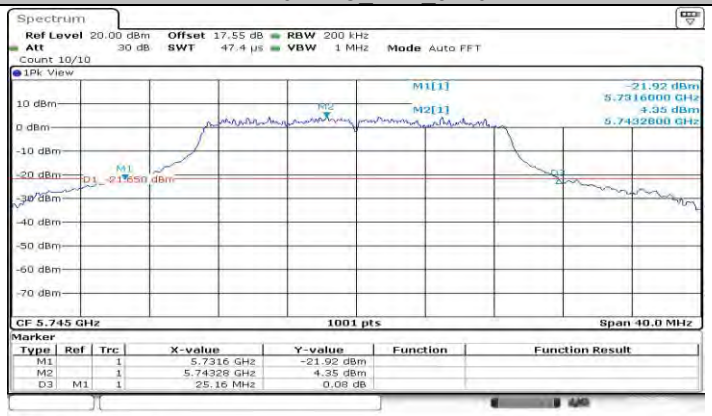
11N20MIMO_Ant2_5700



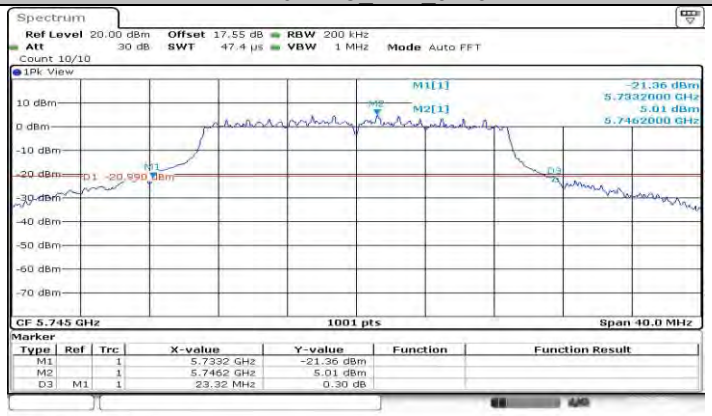
11N20MIMO_Ant1_5720



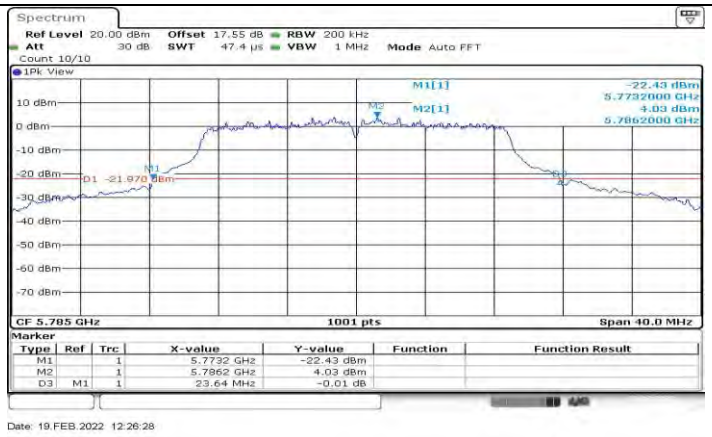
11N20MIMO_Ant2_5720



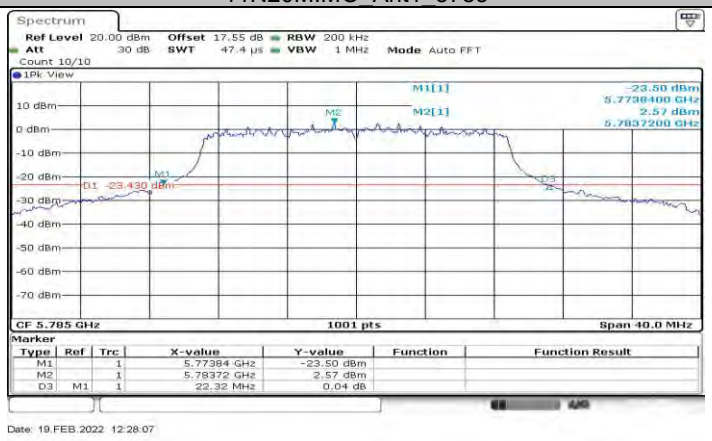
11N20MIMO_Ant1_5745



11N20MIMO_Ant2_5745

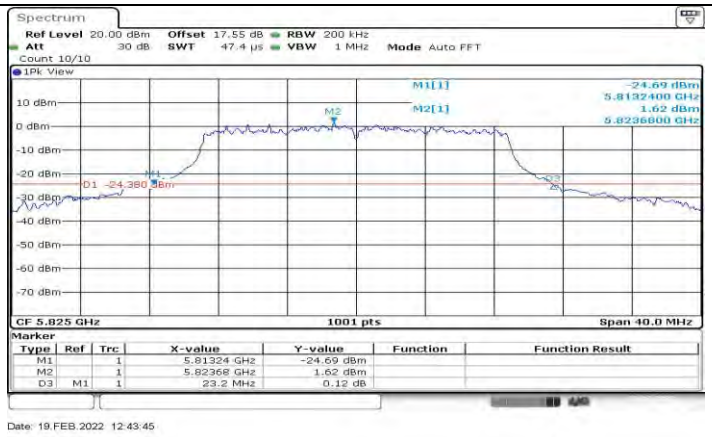


11N20MIMO_Ant1_5785

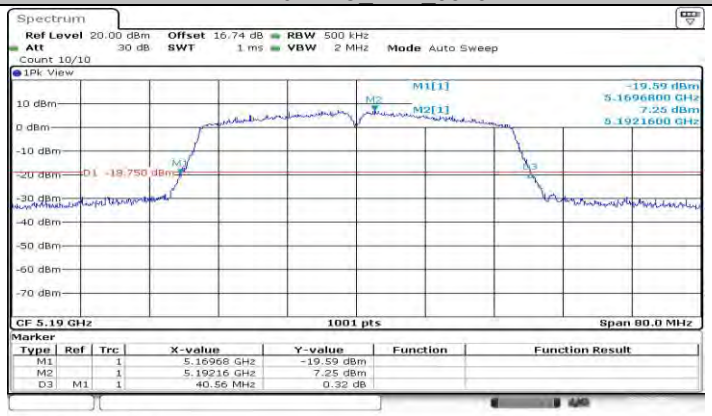


11N20MIMO_Ant2_5785

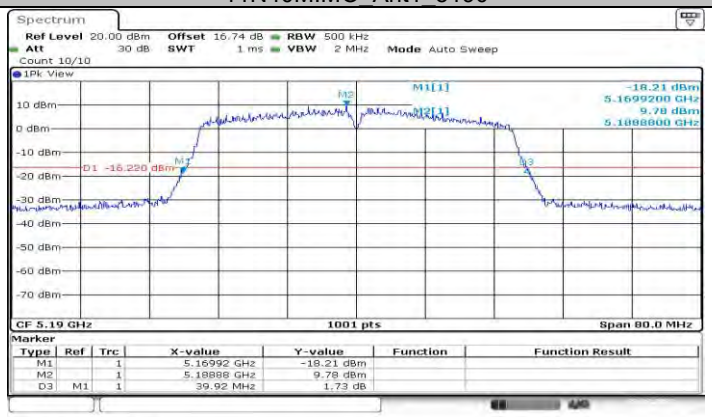
11N20MIMO_Ant1_5825



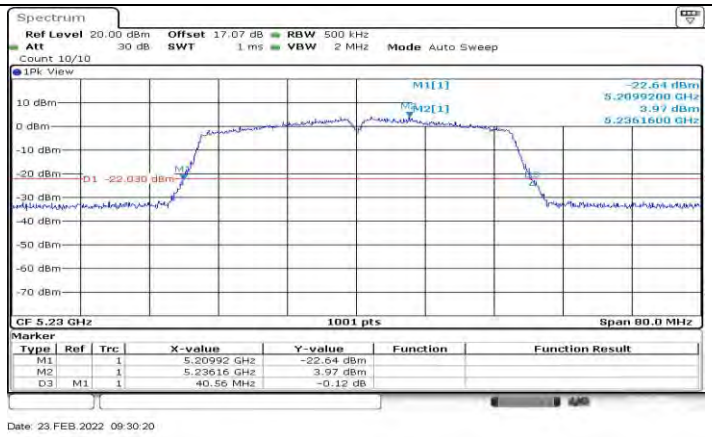
11N20MIMO_Ant2_5825



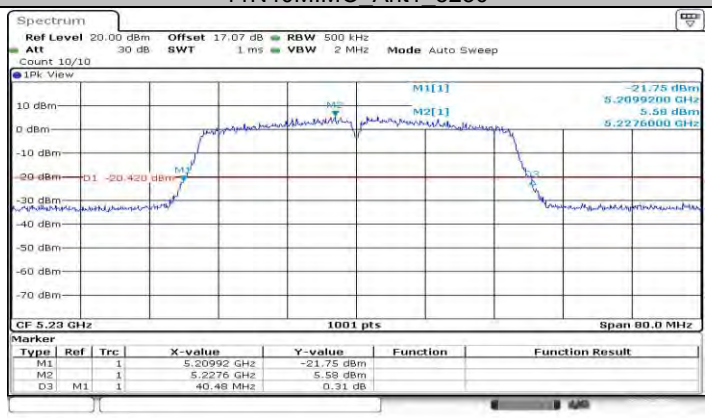
11N40MIMO_Ant1_5190



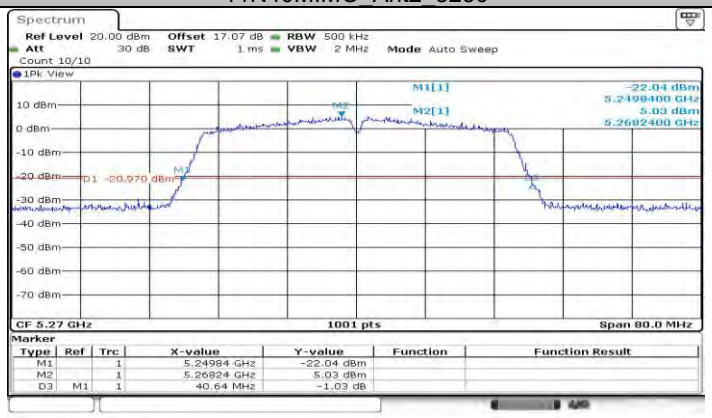
11N40MIMO_Ant2_5190



11N40MIMO_Ant1_5230

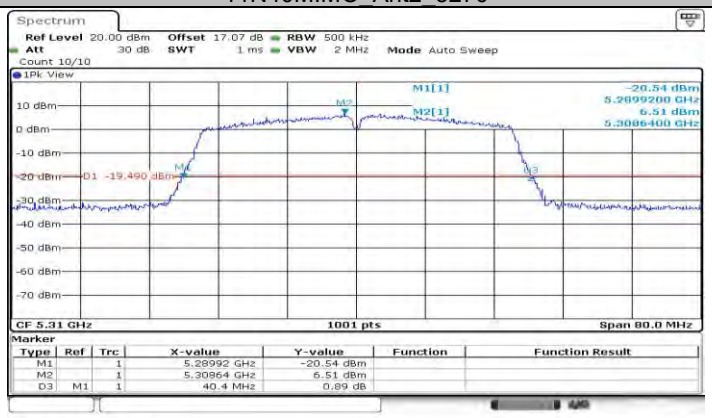


11N40MIMO_Ant2_5230

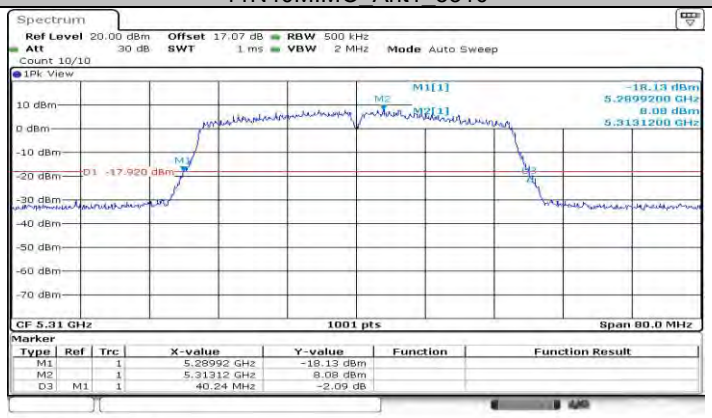


11N40MIMO_Ant1_5270

11N40MIMO_Ant2_5270

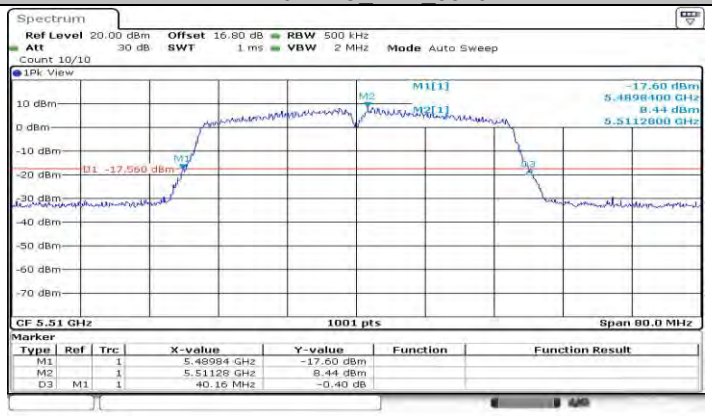


11N40MIMO_Ant1_5310

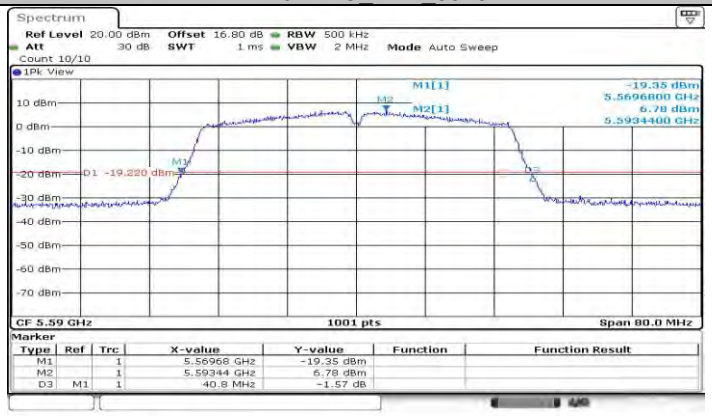


11N40MIMO_Ant2_5310

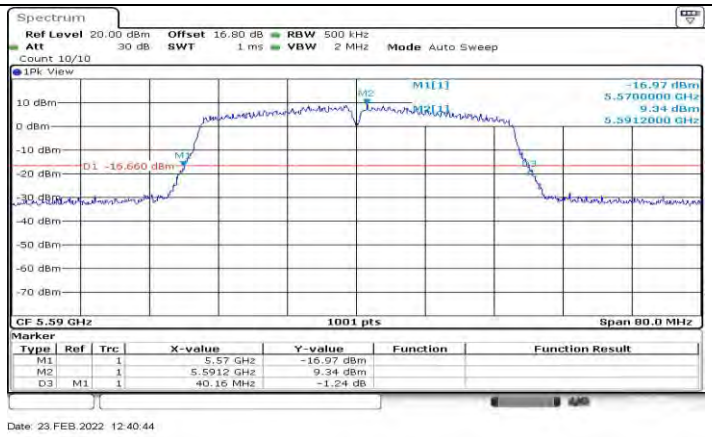
11N40MIMO_Ant1_5510



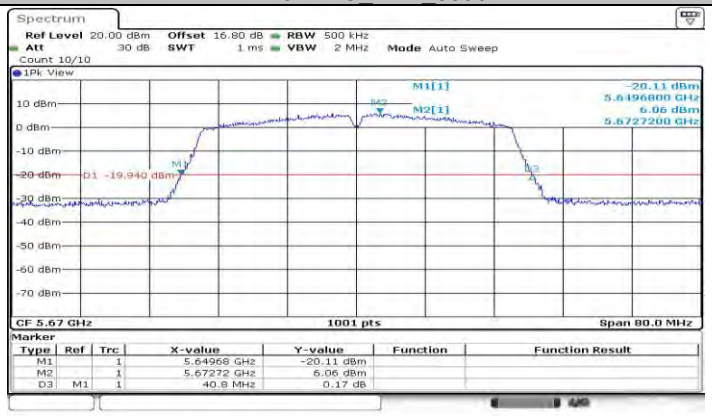
11N40MIMO_Ant2_5510



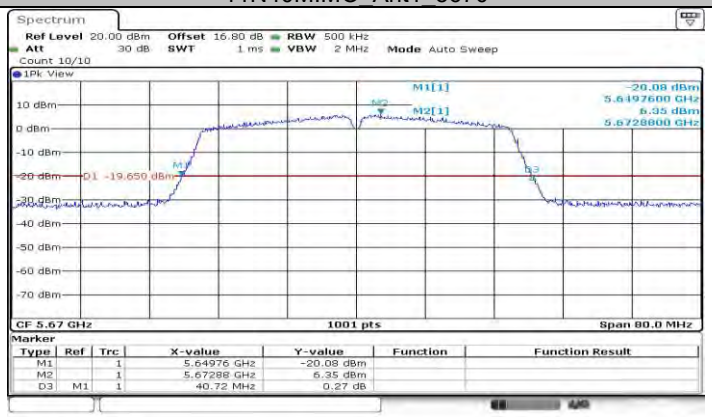
11N40MIMO_Ant1_5590



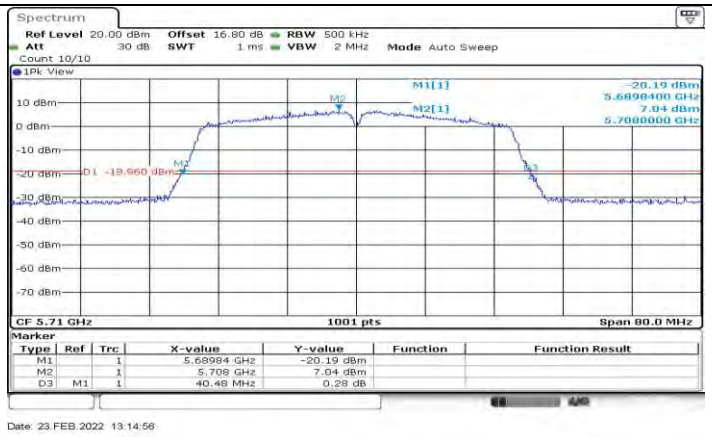
11N40MIMO_Ant2_5590



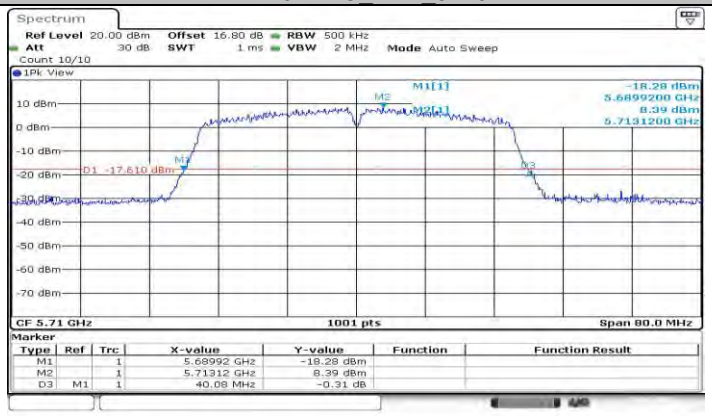
11N40MIMO_Ant1_5670



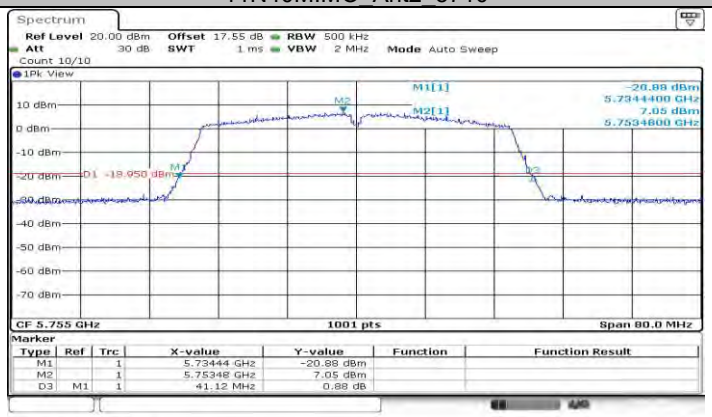
11N40MIMO_Ant2_5670



11N40MIMO_Ant1_5710

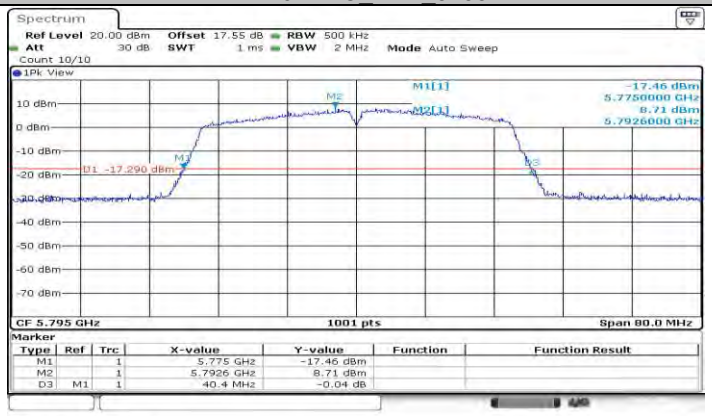


11N40MIMO_Ant2_5710

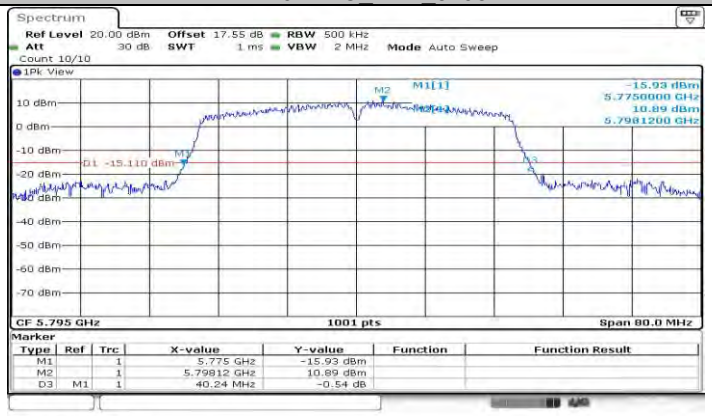


11N40MIMO_Ant1_5755

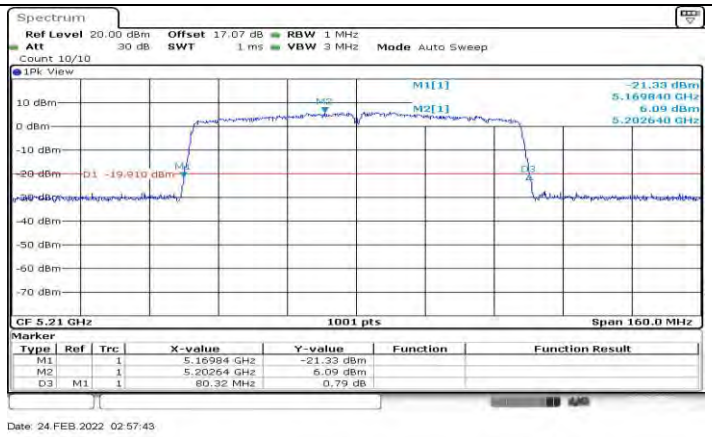
11N40MIMO_Ant2_5755



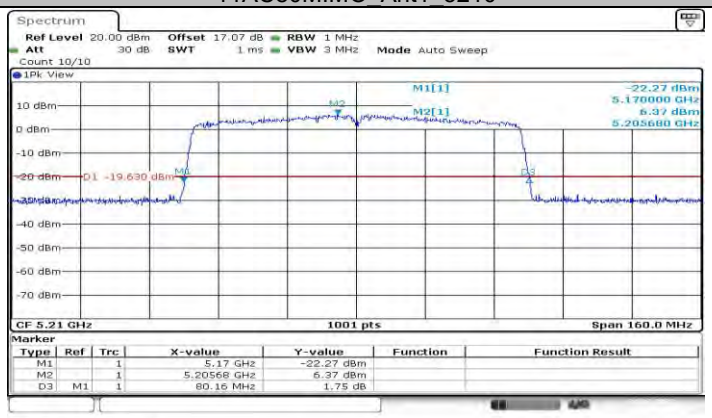
11N40MIMO_Ant1_5795



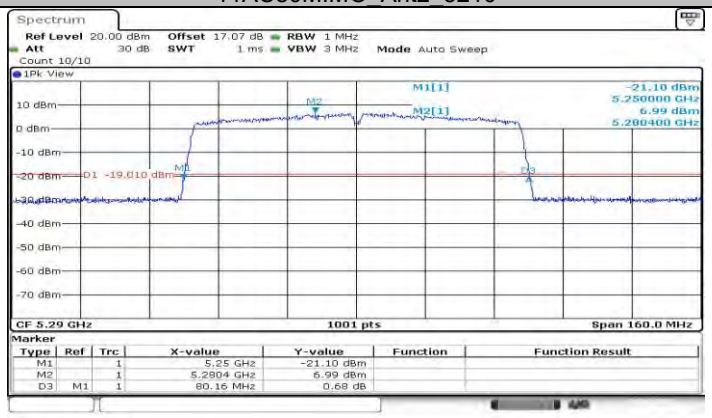
11N40MIMO_Ant2_5795



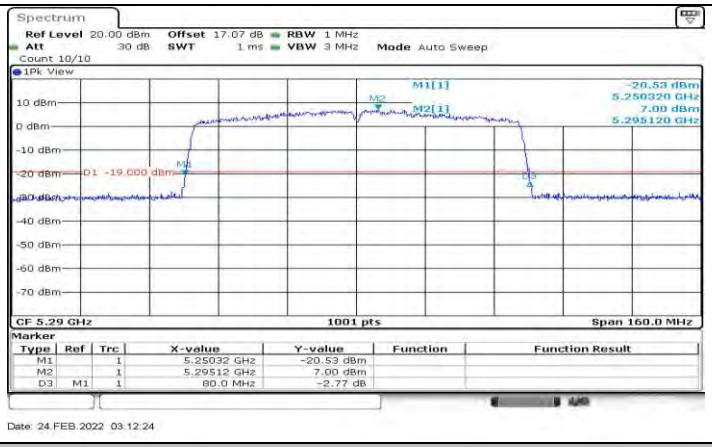
11AC80MIMO_Ant1_5210



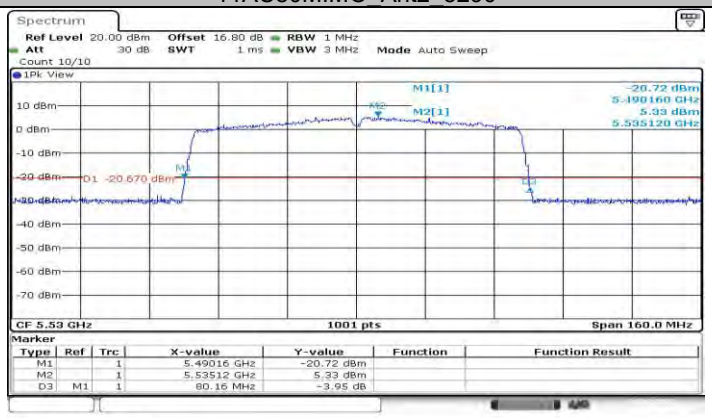
11AC80MIMO_Ant2_5210



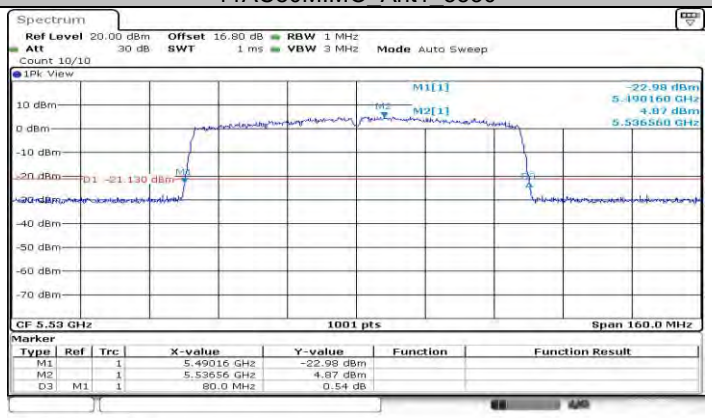
11AC80MIMO_Ant1_5290



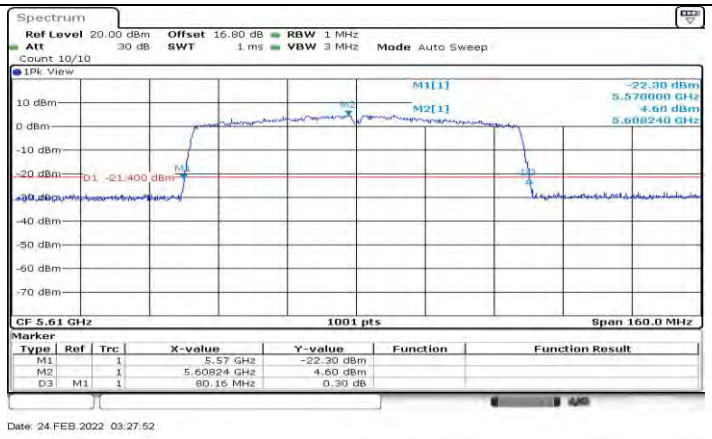
11AC80MIMO_Ant2_5290



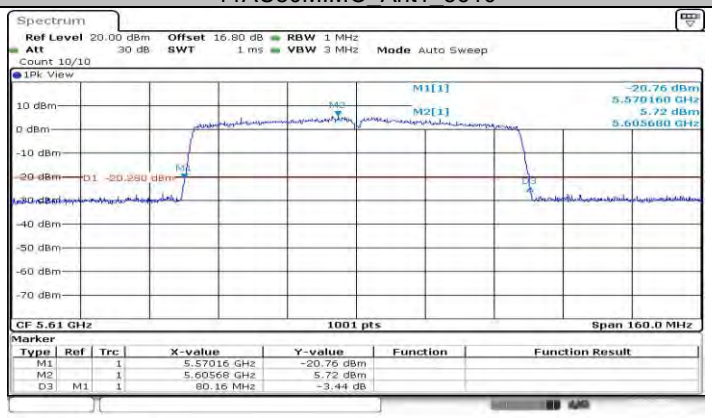
11AC80MIMO_Ant1_5530



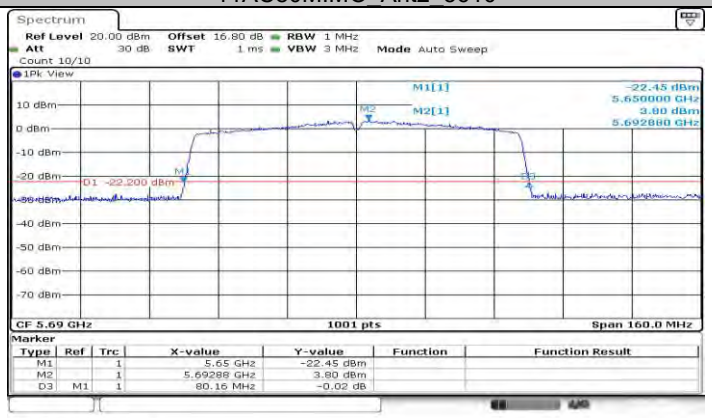
11AC80MIMO_Ant2_5530



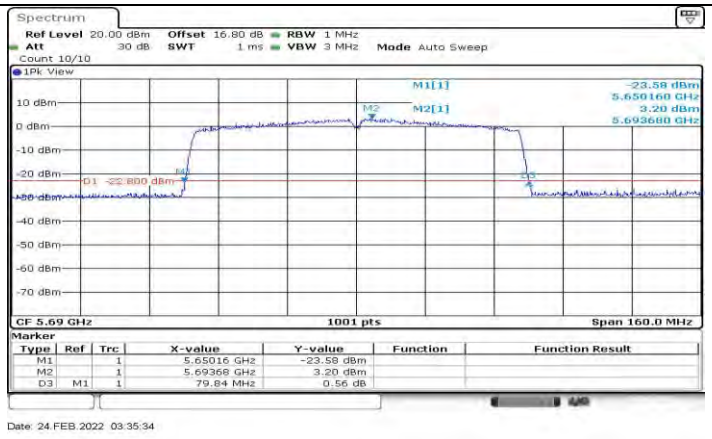
11AC80MIMO_Ant1_5610



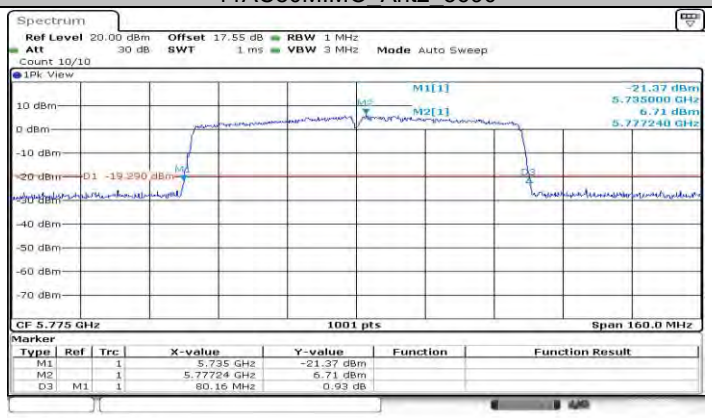
11AC80MIMO_Ant2_5610



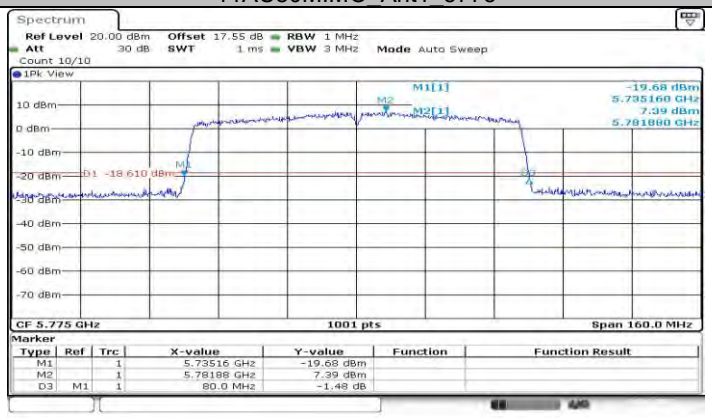
11AC80MIMO_Ant1_5690



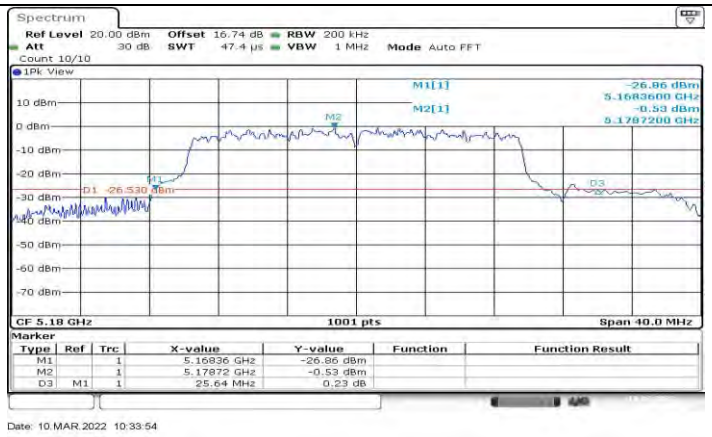
11AC80MIMO_Ant2_5690



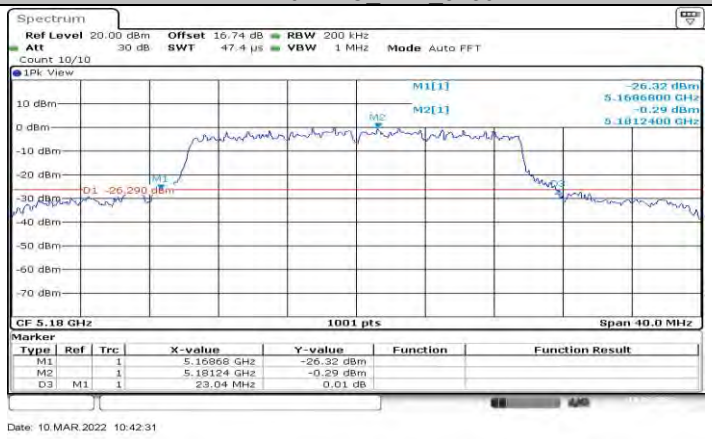
11AC80MIMO_Ant1_5775



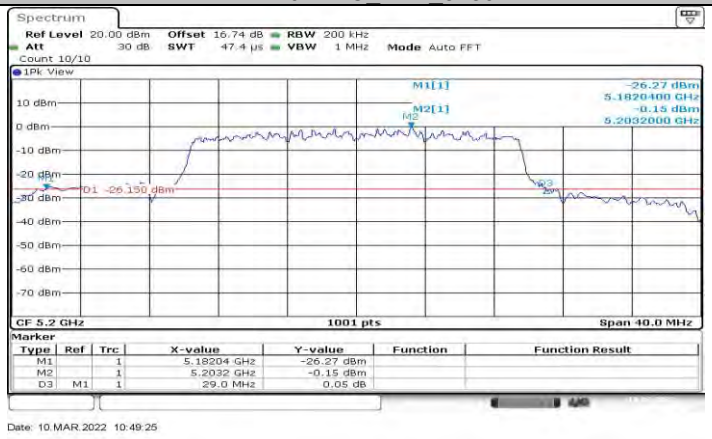
11AC80MIMO_Ant2_5775



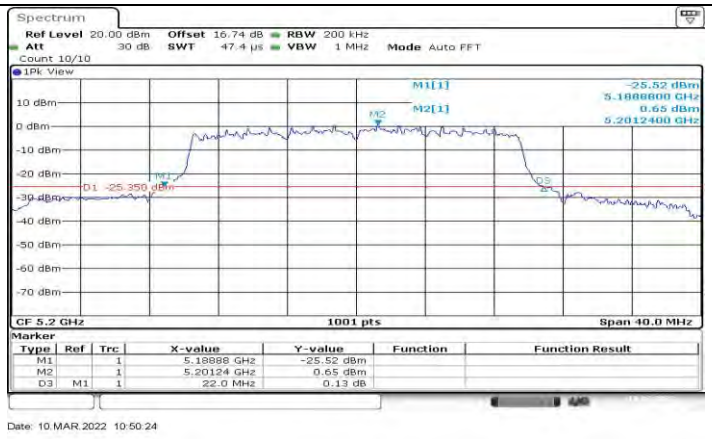
11AX20MIMO_Ant1_5180



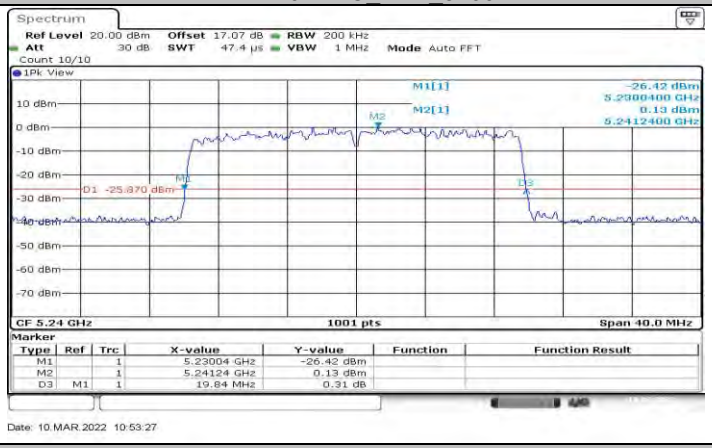
11AX20MIMO_Ant2_5180



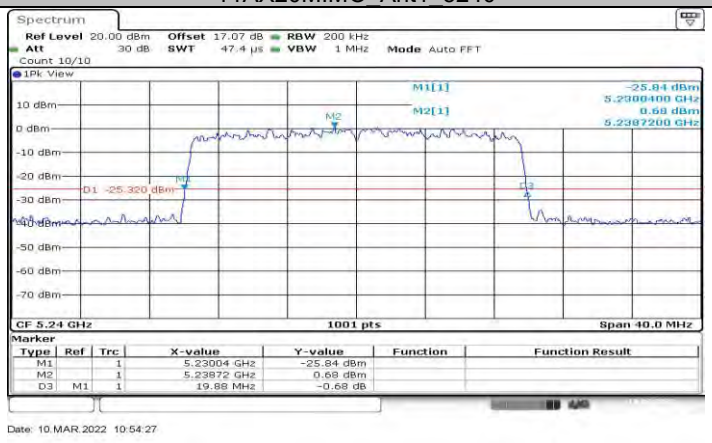
11AX20MIMO_Ant1_5200



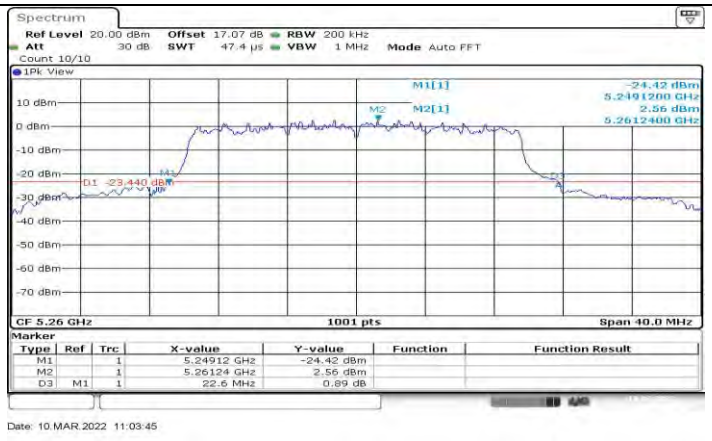
11AX20MIMO_Ant2_5200



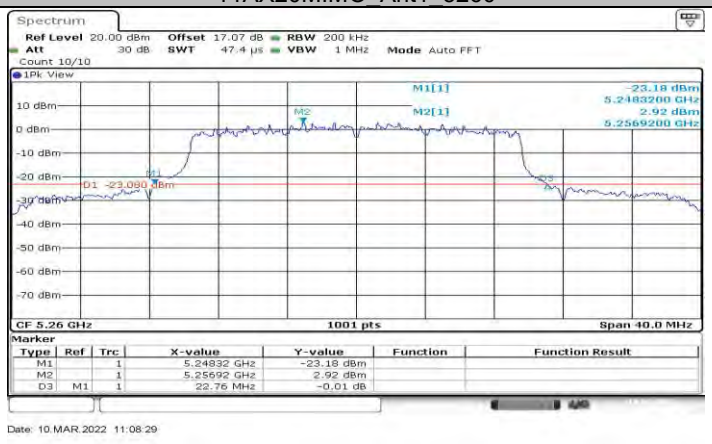
11AX20MIMO_Ant1_5240



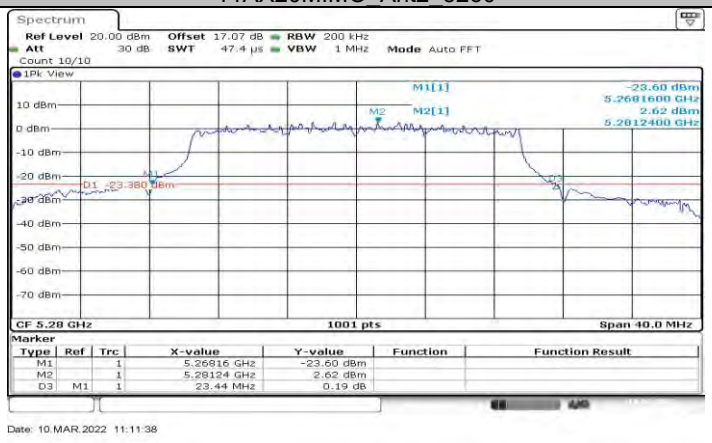
11AX20MIMO_Ant2_5240



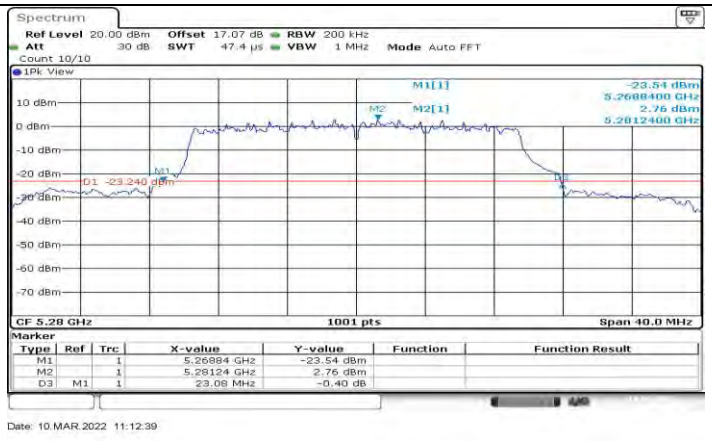
11AX20MIMO_Ant1_5260



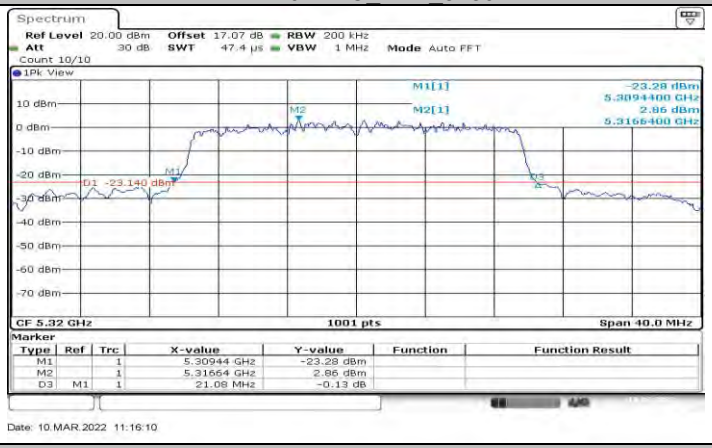
11AX20MIMO_Ant2_5260



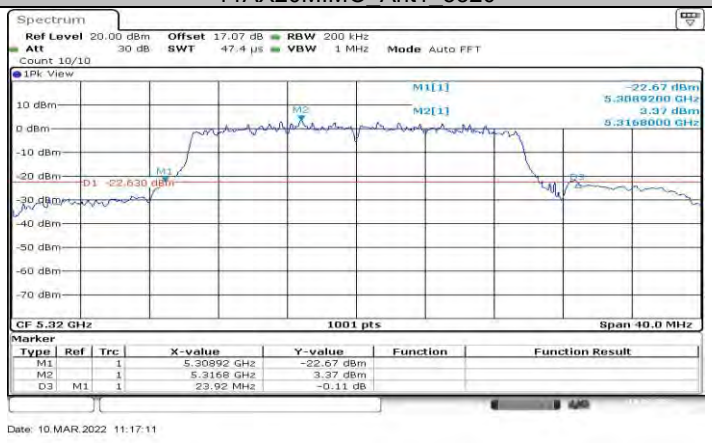
11AX20MIMO_Ant1_5280



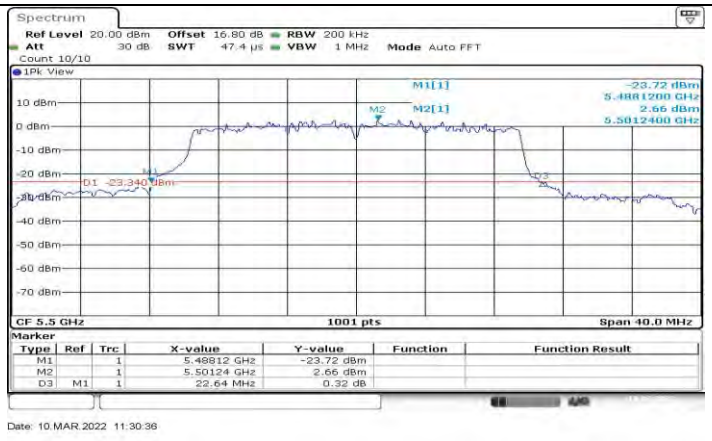
11AX20MIMO_Ant2_5280



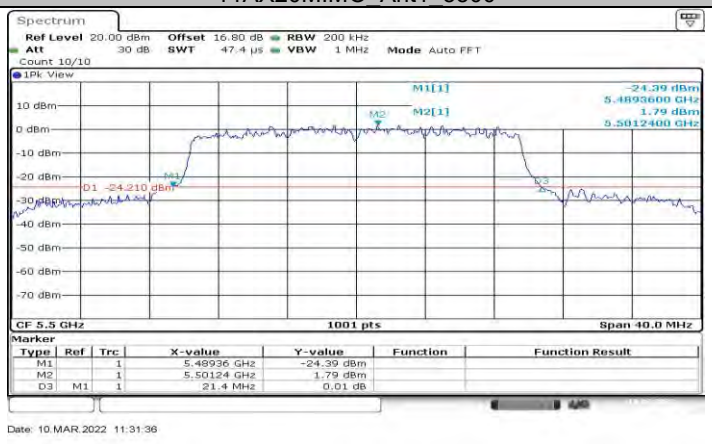
11AX20MIMO_Ant1_5320



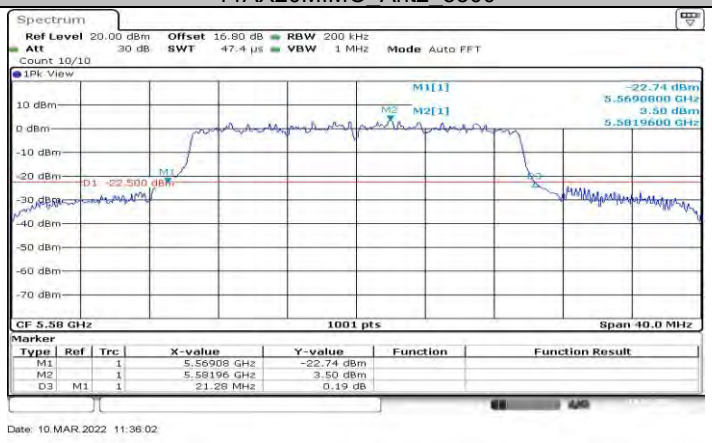
11AX20MIMO_Ant2_5320



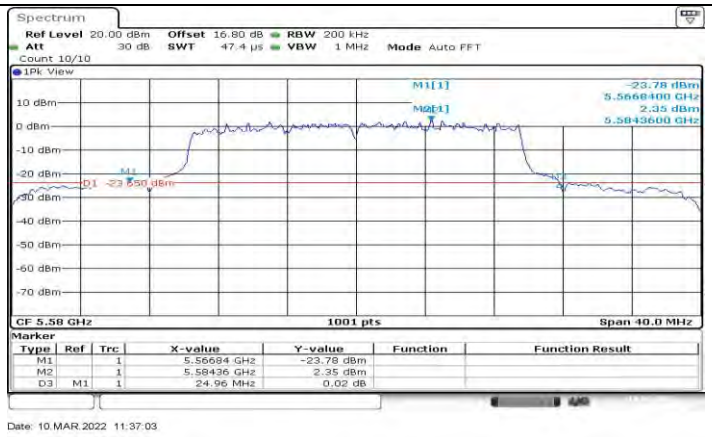
11AX20MIMO_Ant1_5500



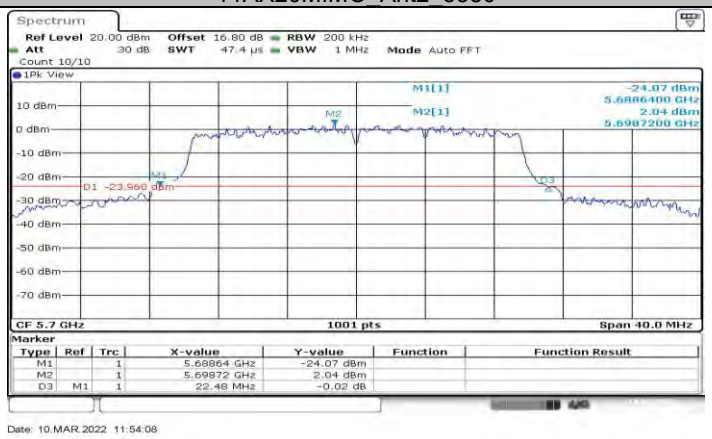
11AX20MIMO_Ant2_5500



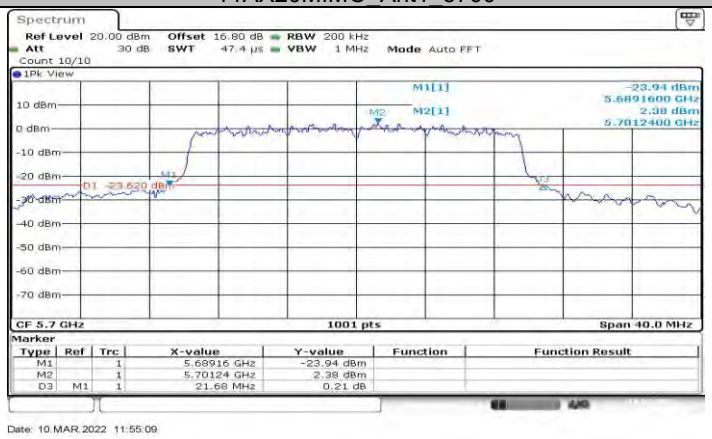
11AX20MIMO_Ant1_5580



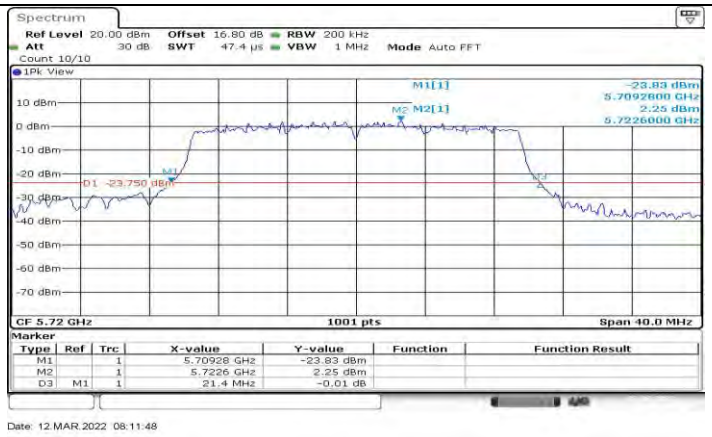
11AX20MIMO_Ant2_5580



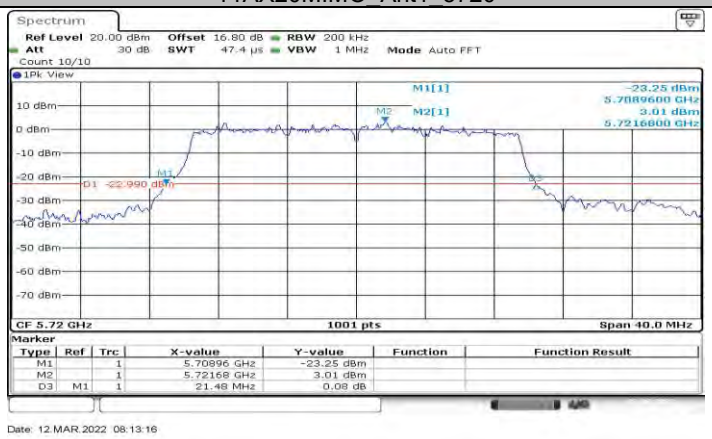
11AX20MIMO_Ant1_5700



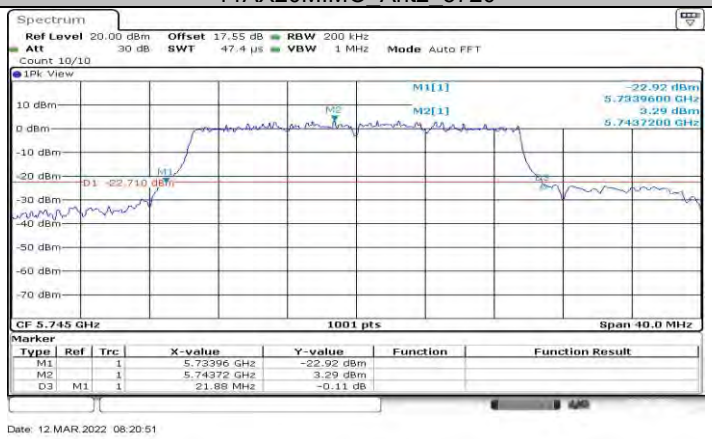
11AX20MIMO_Ant2_5700



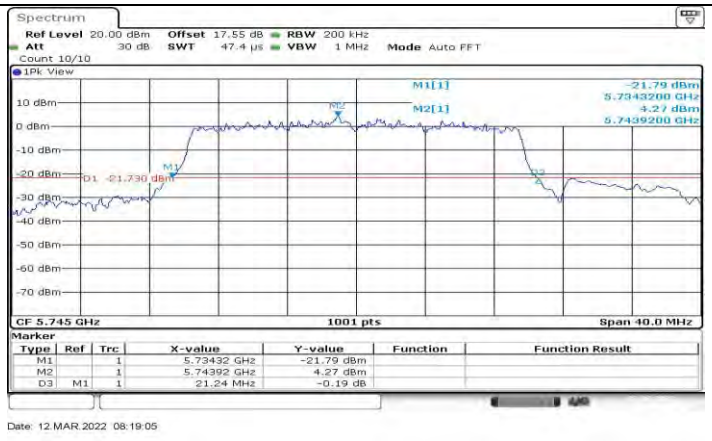
11AX20MIMO_Ant1_5720



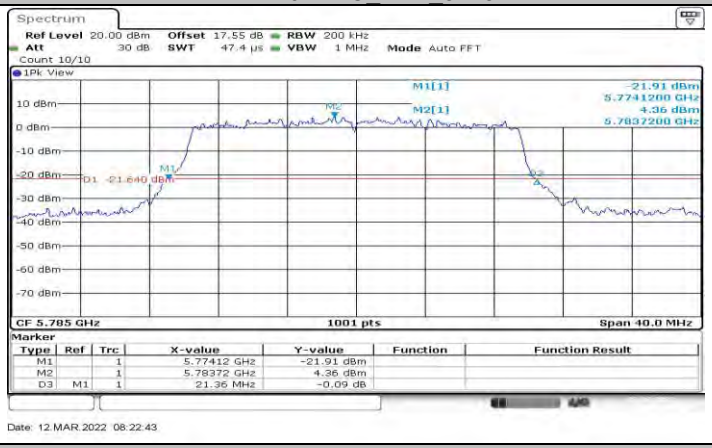
11AX20MIMO_Ant2_5720



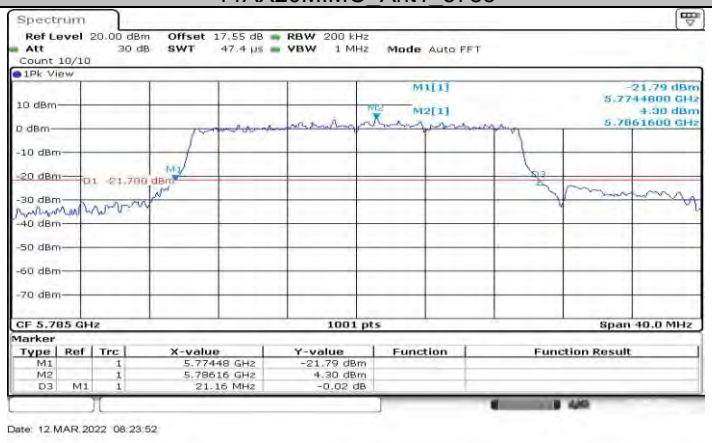
11AX20MIMO_Ant1_5745



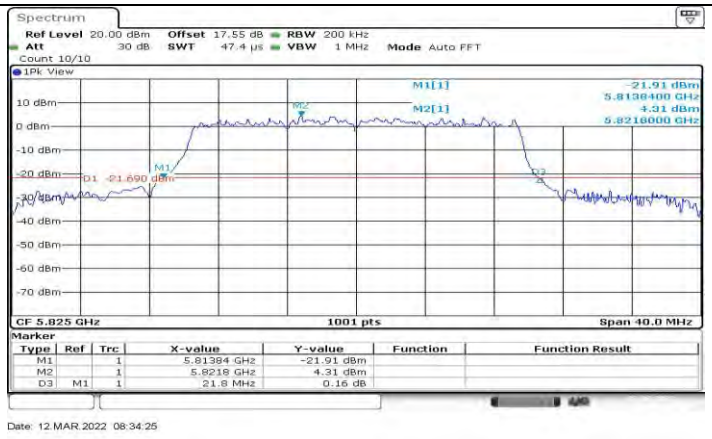
11AX20MIMO_Ant2_5745



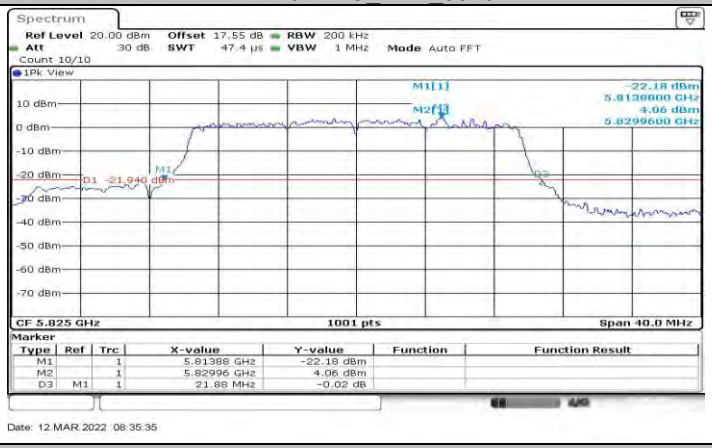
11AX20MIMO_Ant1_5785



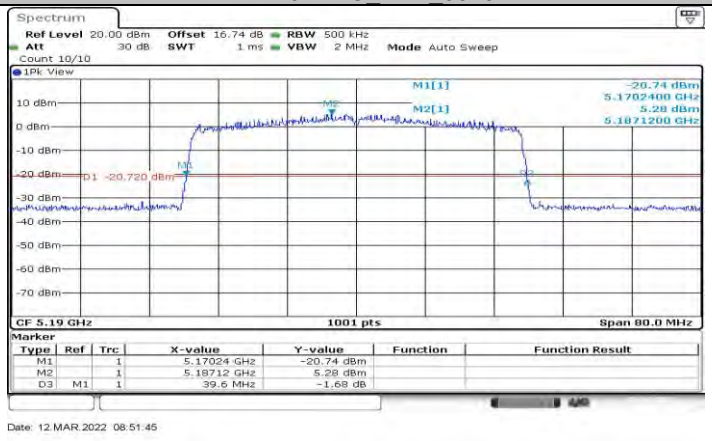
11AX20MIMO_Ant2_5785



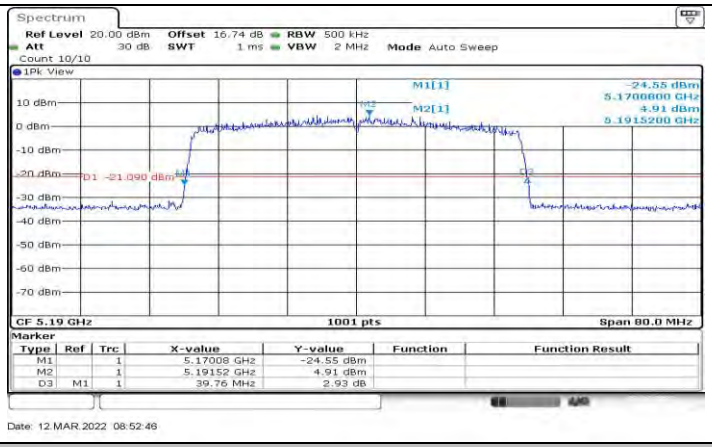
11AX20MIMO_Ant1_5825



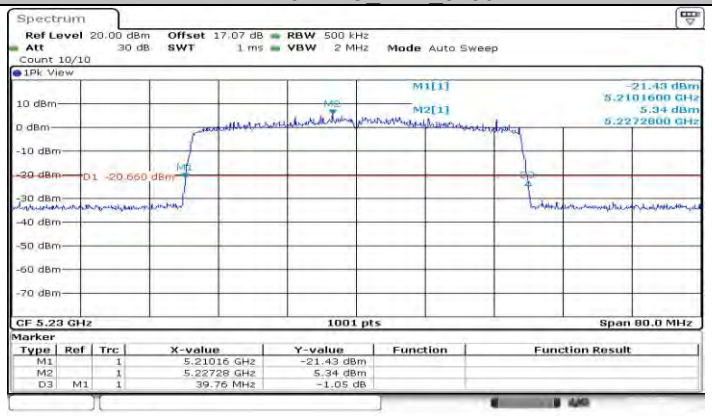
11AX20MIMO_Ant2_5825



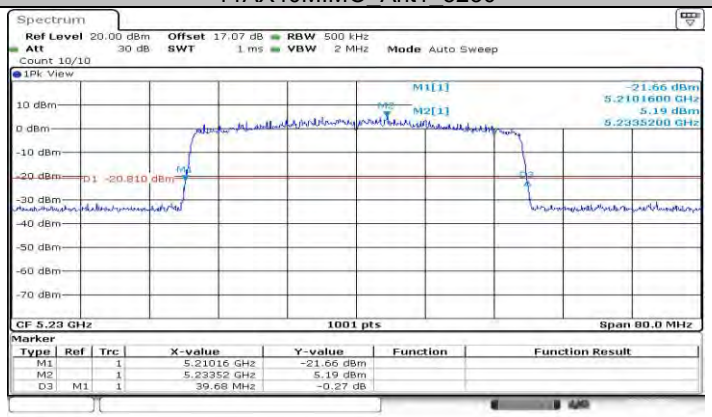
11AX40MIMO_Ant1_5190



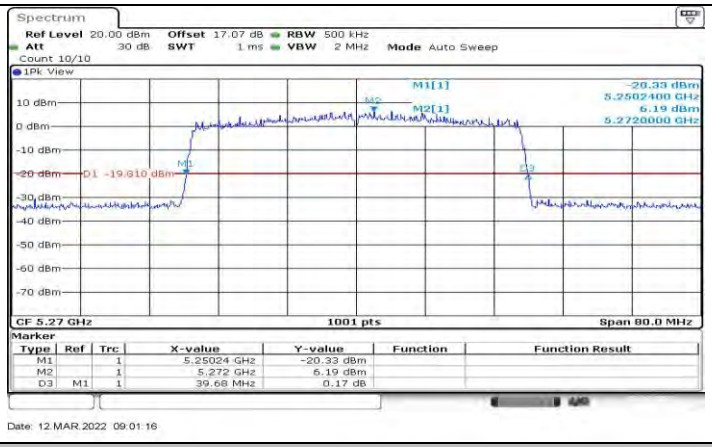
11AX40MIMO_Ant2_5190



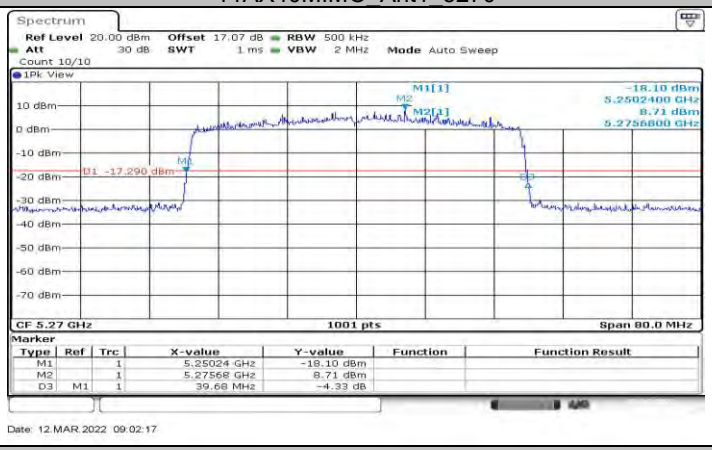
11AX40MIMO_Ant1_5230



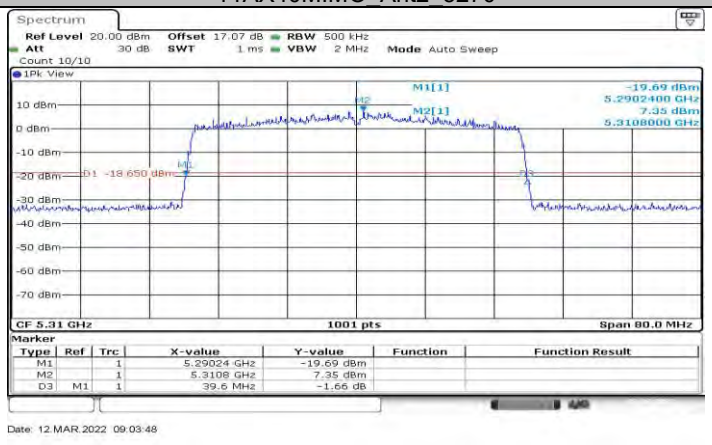
11AX40MIMO_Ant2_5230



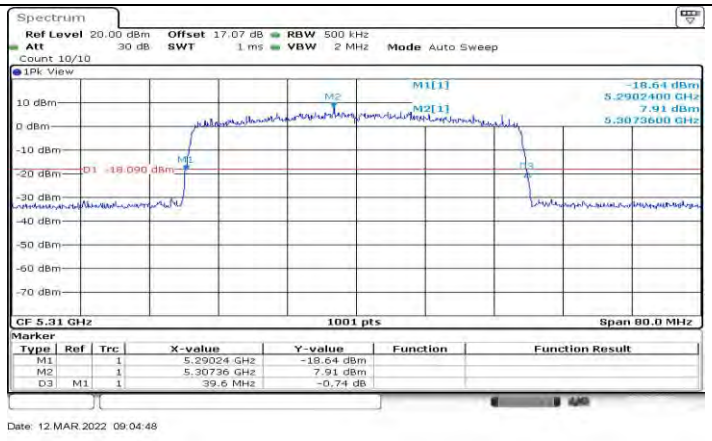
11AX40MIMO_Ant1_5270



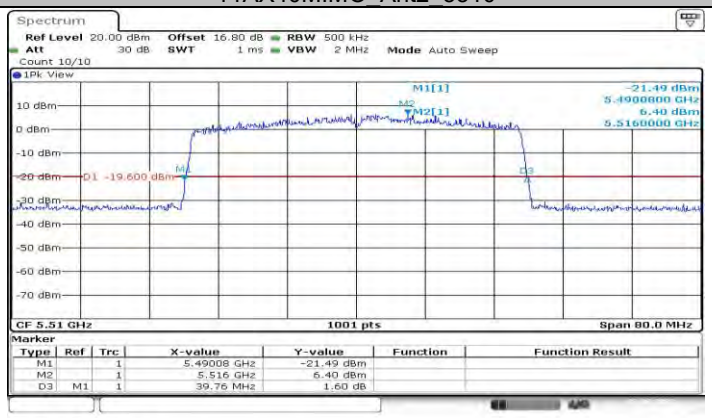
11AX40MIMO_Ant2_5270



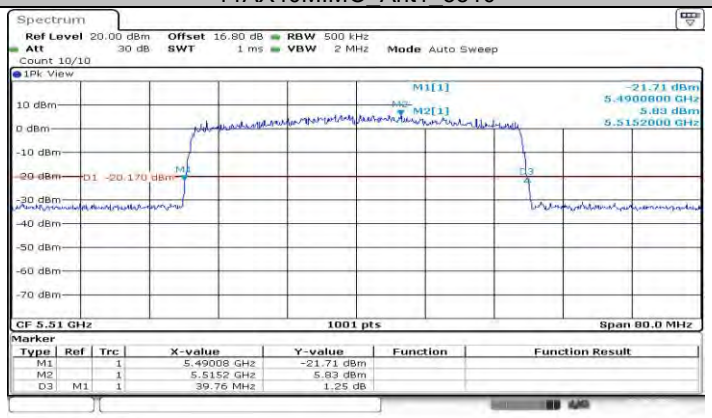
11AX40MIMO_Ant1_5310



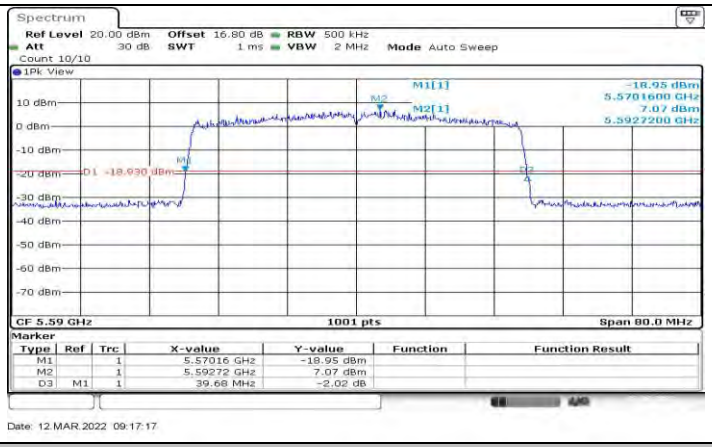
11AX40MIMO_Ant2_5310



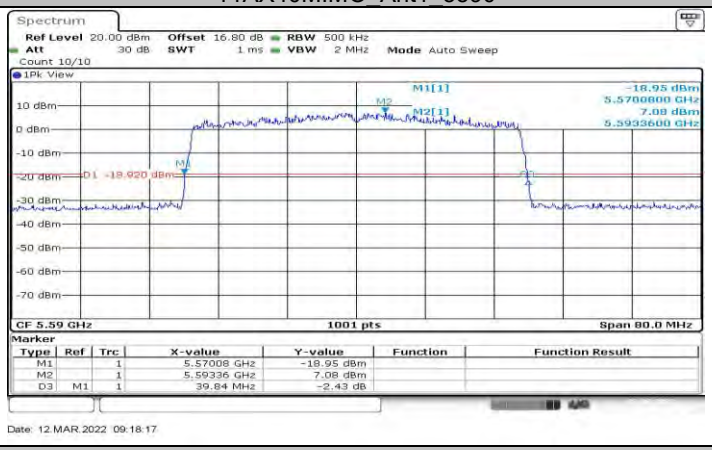
11AX40MIMO_Ant1_5510



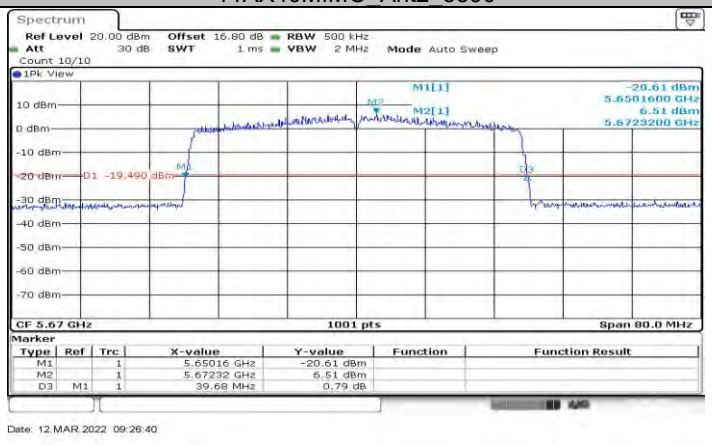
11AX40MIMO_Ant2_5510



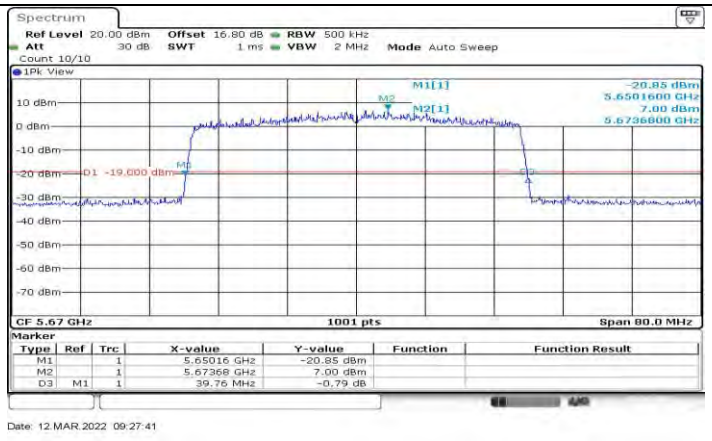
11AX40MIMO_Ant1_5590



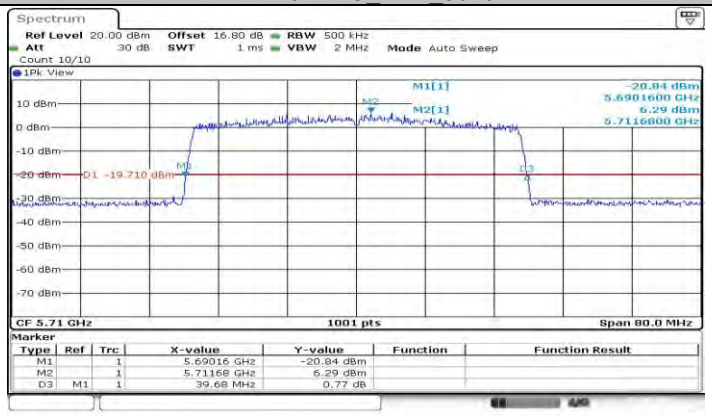
11AX40MIMO_Ant2_5590



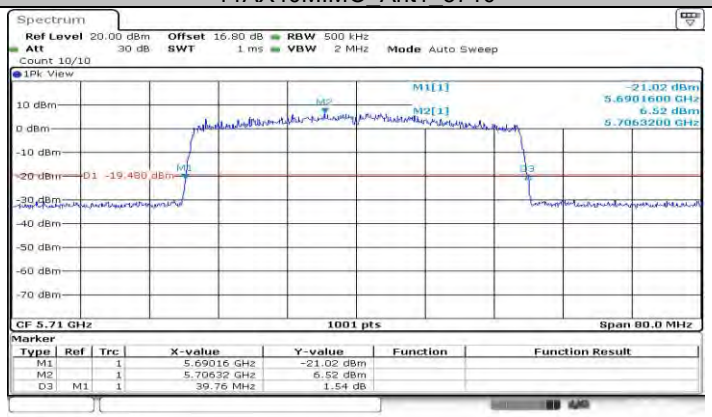
11AX40MIMO_Ant1_5670



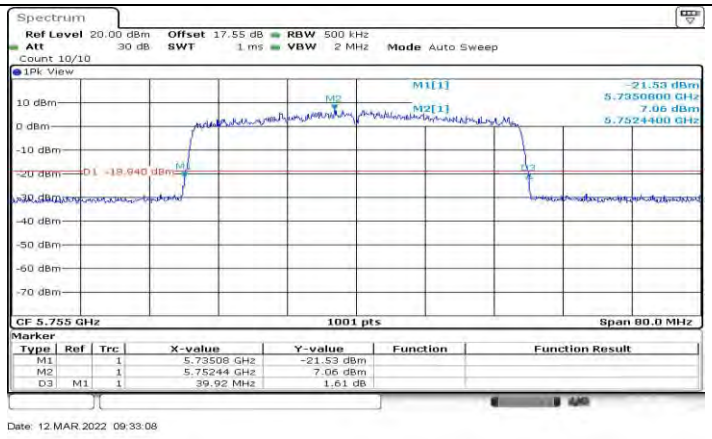
11AX40MIMO_Ant2_5670



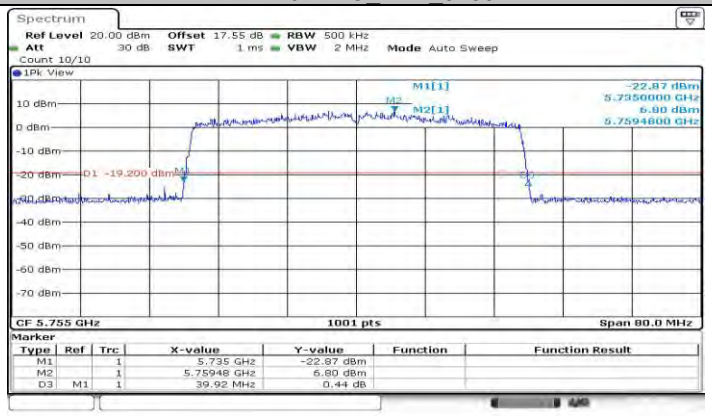
11AX40MIMO_Ant1_5710



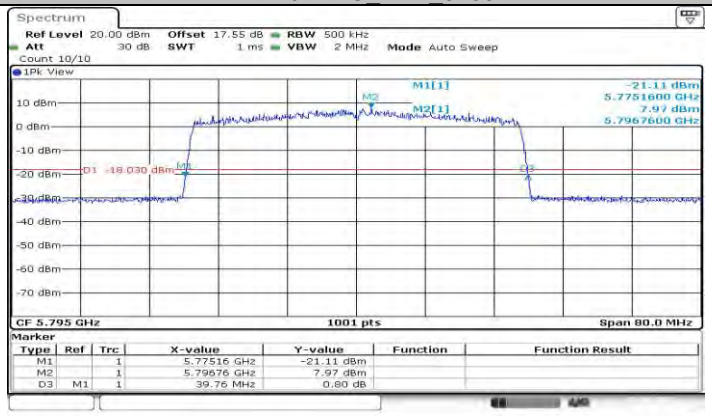
11AX40MIMO_Ant2_5710



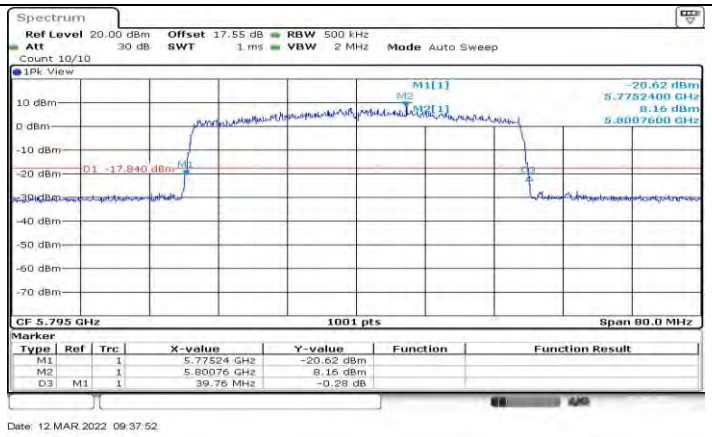
11AX40MIMO_Ant1_5755



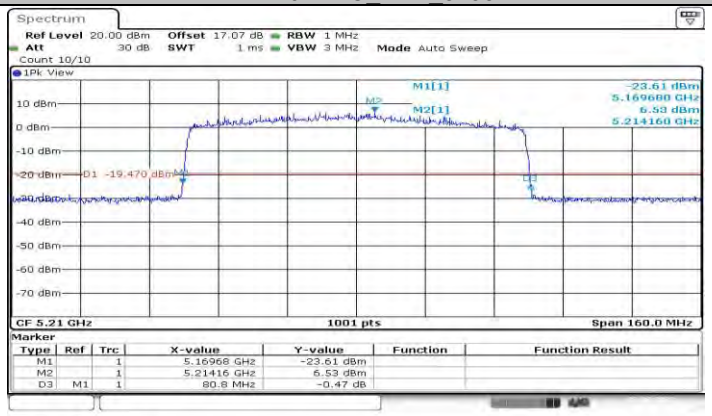
11AX40MIMO_Ant2_5755



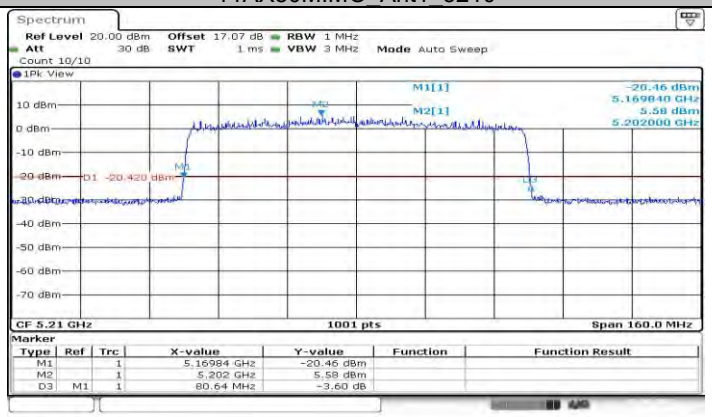
11AX40MIMO_Ant1_5795



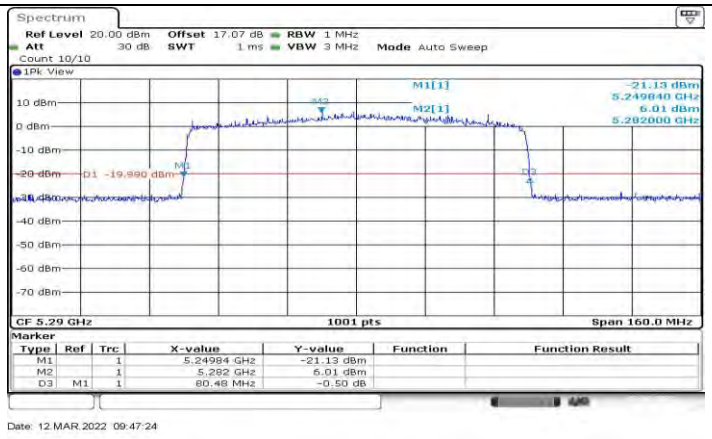
11AX40MIMO_Ant2_5795



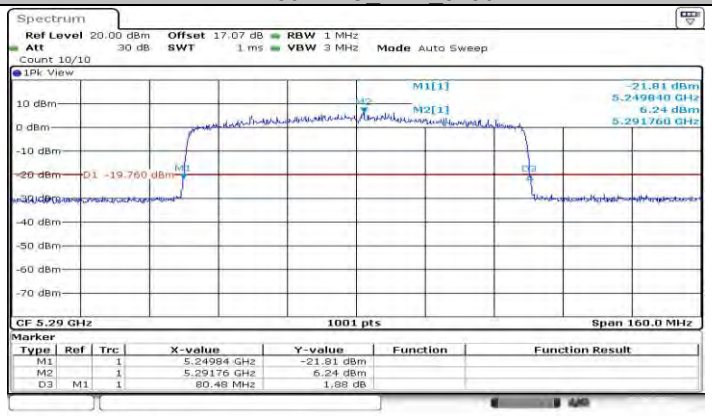
11AX80MIMO_Ant1_5210



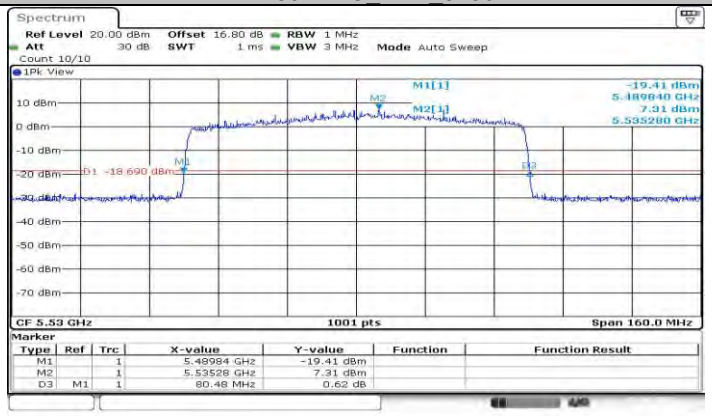
11AX80MIMO_Ant2_5210



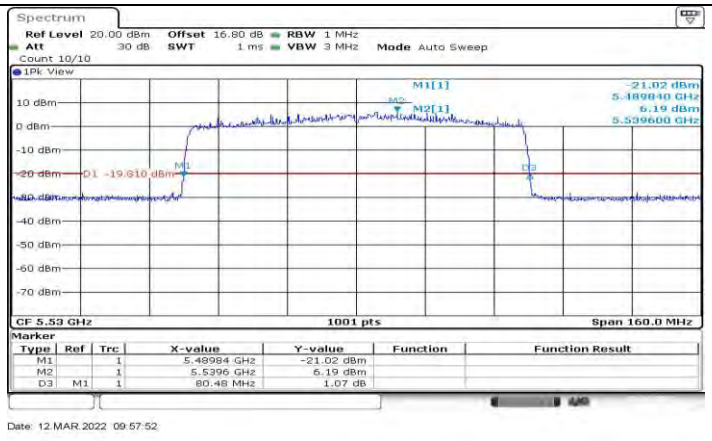
11AX80MIMO_Ant1_5290



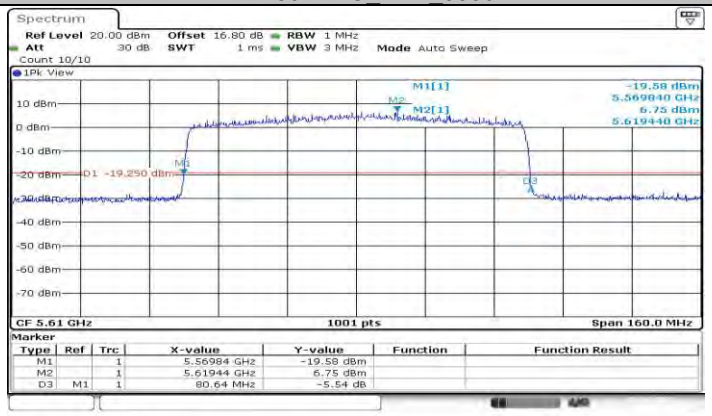
11AX80MIMO_Ant2_5290



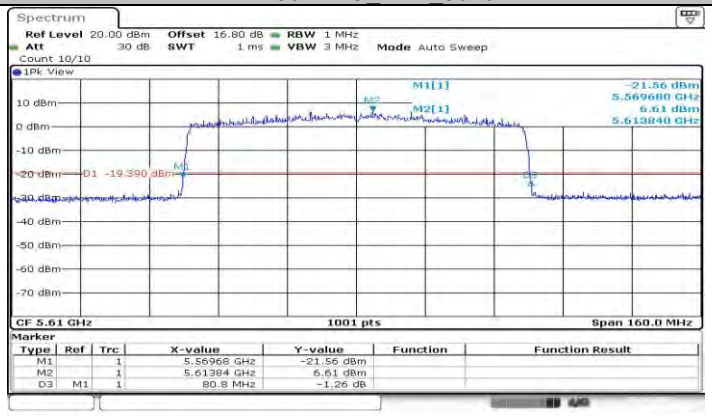
11AX80MIMO_Ant1_5530



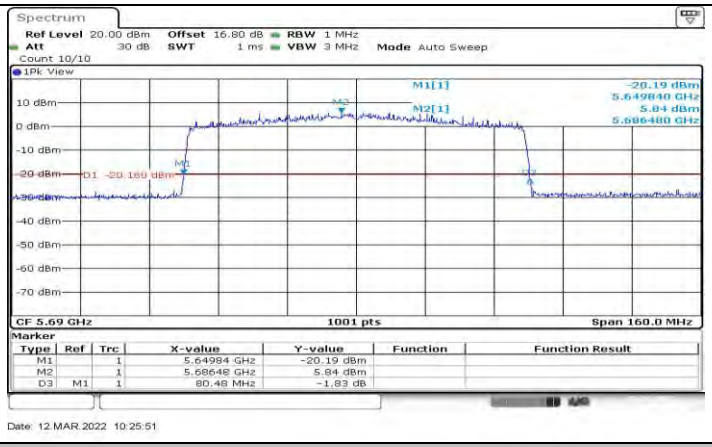
11AX80MIMO_Ant2_5530



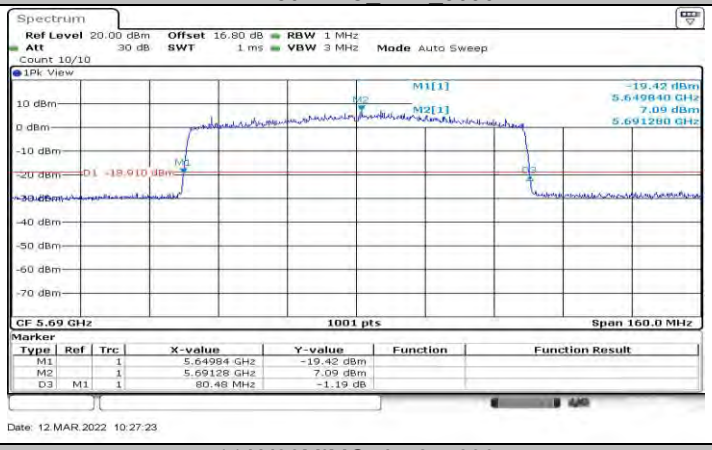
11AX80MIMO_Ant1_5610



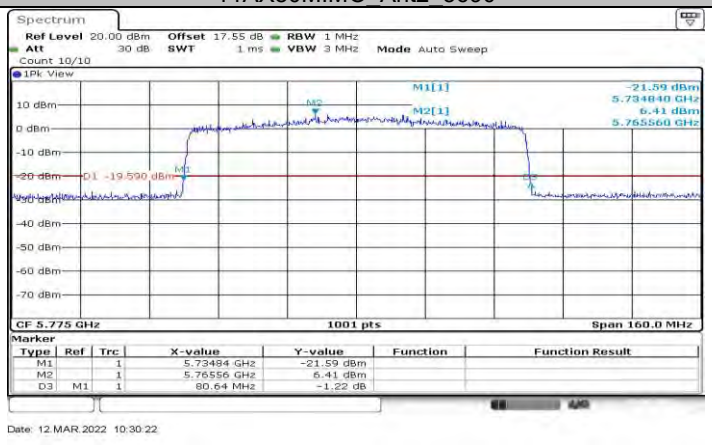
11AX80MIMO_Ant2_5610



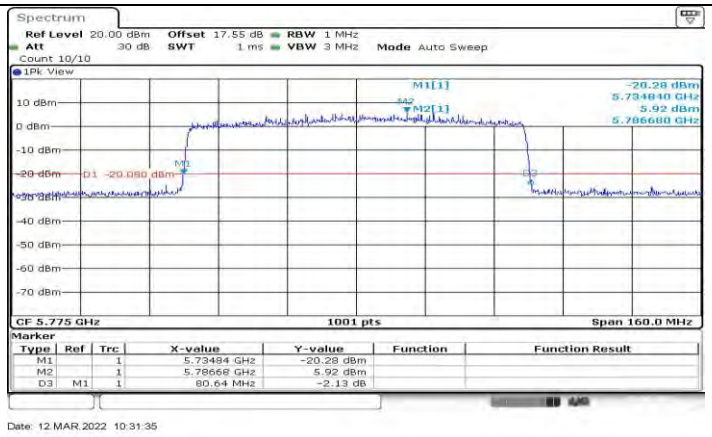
11AX80MIMO_Ant1_5690



11AX80MIMO_Ant2_5690



11AX80MIMO_Ant1_5775



11AX80MIMO_Ant2_5775

12.2. Appendix A2: Occupied Channel Bandwidth

12.2.1. Test Result

Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Verdict
11A	Ant1	5180	18.821	5170.450	5189.271	PASS
	Ant2	5180	18.941	5170.370	5189.311	PASS
	Ant1	5200	19.301	5190.250	5209.550	PASS
	Ant2	5200	19.141	5190.250	5209.391	PASS
	Ant1	5240	19.141	5230.490	5249.630	PASS
	Ant2	5240	19.181	5230.529	5249.710	PASS
	Ant1	5260	19.221	5250.410	5269.630	PASS
	Ant2	5260	19.061	5250.569	5269.630	PASS
	Ant1	5280	19.141	5270.410	5289.550	PASS
	Ant2	5280	19.021	5270.490	5289.510	PASS
	Ant1	5320	19.141	5310.410	5329.550	PASS
	Ant2	5320	19.141	5310.370	5329.510	PASS
	Ant1	5500	19.181	5490.370	5509.550	PASS
	Ant2	5500	19.141	5490.330	5509.471	PASS
	Ant1	5580	19.061	5570.410	5589.471	PASS
	Ant2	5580	19.141	5570.290	5589.431	PASS
	Ant1	5700	19.061	5690.490	5709.550	PASS
	Ant2	5700	19.061	5690.490	5709.550	PASS
	Ant1	5720_UNII-2C	14.79	5710.210	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	4.351	5725	5729.351	PASS
	Ant1	5745	19.261	5735.210	5754.471	PASS
	Ant2	5745	19.181	5735.250	5754.431	PASS
	Ant1	5785	19.221	5775.450	5794.670	PASS
	Ant2	5785	19.141	5775.529	5794.670	PASS
	Ant1	5825	18.981	5815.410	5834.391	PASS
	Ant2	5825	19.061	5815.370	5834.431	PASS
11N20MIMO	Ant1	5180	19.98	5169.890	5189.870	PASS
	Ant2	5180	18.661	5170.649	5189.311	PASS
	Ant1	5200	20.18	5189.810	5209.990	PASS
	Ant2	5200	18.781	5190.529	5209.311	PASS
	Ant1	5240	20.06	5230.050	5250.110	PASS
	Ant2	5240	18.741	5230.689	5249.431	PASS
	Ant1	5260	20.06	5249.930	5269.990	PASS
	Ant2	5260	18.701	5250.729	5269.431	PASS
	Ant1	5280	20.1	5269.890	5289.990	PASS
	Ant2	5280	18.701	5270.689	5289.391	PASS
	Ant1	5320	19.98	5310.050	5330.030	PASS
	Ant2	5320	18.701	5310.609	5329.311	PASS
	Ant1	5500	20.14	5489.930	5510.070	PASS
	Ant2	5500	18.741	5490.569	5509.311	PASS
	Ant1	5580	20.22	5569.890	5590.110	PASS
	Ant2	5580	18.701	5570.609	5589.311	PASS
	Ant1	5700	20.02	5690.010	5710.030	PASS
	Ant2	5700	18.701	5690.649	5709.351	PASS
	Ant1	5720_UNII-2C	15.27	5709.730	5725	PASS
	Ant2	5720_UNII-2C	14.391	5710.609	5725	PASS
	Ant1	5720_UNII-3	4.83	5725	5729.830	PASS
	Ant2	5720_UNII-3	4.271	5725	5729.271	PASS
	Ant1	5745	20.14	5734.690	5754.830	PASS
	Ant2	5745	18.701	5735.529	5754.231	PASS

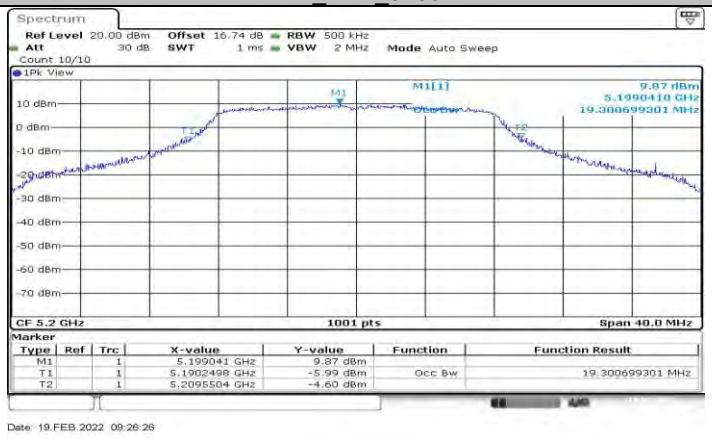
	Ant1	5785	20.14	5775.090	5795.230	PASS
	Ant2	5785	18.741	5775.649	5794.391	PASS
	Ant1	5825	20.02	5814.930	5834.950	PASS
	Ant2	5825	18.701	5815.649	5834.351	PASS
11N40MIMO	Ant1	5190	36.204	5171.938	5208.142	PASS
	Ant2	5190	36.044	5171.938	5207.982	PASS
	Ant1	5230	36.124	5212.098	5248.222	PASS
	Ant2	5230	36.124	5212.098	5248.222	PASS
	Ant1	5270	36.204	5251.938	5288.142	PASS
	Ant2	5270	35.884	5252.178	5288.062	PASS
	Ant1	5310	36.284	5292.018	5328.302	PASS
	Ant2	5310	36.044	5292.018	5328.062	PASS
	Ant1	5510	36.204	5492.018	5528.222	PASS
	Ant2	5510	36.204	5491.938	5528.142	PASS
	Ant1	5590	36.284	5571.938	5608.222	PASS
	Ant2	5590	36.124	5571.938	5608.062	PASS
	Ant1	5670	36.284	5651.938	5688.222	PASS
	Ant2	5670	36.044	5652.098	5688.142	PASS
	Ant1	5710_UNII-2C	33.062	5691.938	5725	PASS
	Ant2	5710_UNII-2C	32.982	5692.018	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	5736.858	5773.142	PASS
	Ant2	5755	36.364	5736.778	5773.142	PASS
	Ant1	5795	36.204	5777.098	5813.302	PASS
	Ant2	5795	36.284	5777.018	5813.302	PASS
11AC80MIMO	Ant1	5210	75.445	5172.438	5247.882	PASS
	Ant2	5210	75.285	5172.438	5247.722	PASS
	Ant1	5290	75.445	5252.438	5327.882	PASS
	Ant2	5290	74.965	5252.757	5327.722	PASS
	Ant1	5530	75.125	5492.597	5567.722	PASS
	Ant2	5530	75.125	5492.597	5567.722	PASS
	Ant1	5610	75.285	5572.438	5647.722	PASS
	Ant2	5610	75.445	5572.278	5647.722	PASS
	Ant1	5690_UNII-2C	72.403	5652.597	5725	PASS
	Ant2	5690_UNII-2C	72.403	5652.597	5725	PASS
	Ant1	5690_UNII-3	2.722	5725	5727.722	PASS
	Ant2	5690_UNII-3	2.722	5725	5727.722	PASS
	Ant1	5775	75.445	5737.438	5812.882	PASS
	Ant2	5775	75.285	5737.597	5812.882	PASS
11AX20MIMO	Ant1	5180	19.66	5170.210	5189.870	PASS
	Ant2	5180	19.58	5170.210	5189.790	PASS
	Ant1	5200	19.86	5190.050	5209.910	PASS
	Ant2	5200	19.62	5190.210	5209.830	PASS
	Ant1	5240	18.901	5230.569	5249.471	PASS
	Ant2	5240	18.901	5230.569	5249.471	PASS
	Ant1	5260	19.82	5250.090	5269.910	PASS
	Ant2	5260	19.7	5250.170	5269.870	PASS
	Ant1	5280	19.7	5270.130	5289.830	PASS
	Ant2	5280	19.62	5270.210	5289.830	PASS
	Ant1	5320	19.74	5310.170	5329.910	PASS
	Ant2	5320	19.66	5310.170	5329.830	PASS
	Ant1	5500	19.78	5490.130	5509.910	PASS
	Ant2	5500	19.62	5490.250	5509.870	PASS
	Ant1	5580	19.78	5570.210	5589.990	PASS
	Ant2	5580	19.62	5570.210	5589.830	PASS
	Ant1	5700	19.74	5690.170	5709.910	PASS
	Ant2	5700	19.58	5690.170	5709.750	PASS
	Ant1	5720_UNII-2C	14.75	5710.250	5725	PASS
	Ant2	5720_UNII-2C	14.75	5710.250	5725	PASS
	Ant1	5720_UNII-3	4.67	5725	5729.670	PASS

	Ant2	5720_UNII-3	4.63	5725	5729.630	PASS
	Ant1	5745	19.421	5735.330	5754.750	PASS
	Ant2	5745	19.341	5735.290	5754.630	PASS
	Ant1	5785	19.341	5775.330	5794.670	PASS
	Ant2	5785	19.341	5775.370	5794.710	PASS
	Ant1	5825	19.421	5815.250	5834.670	PASS
	Ant2	5825	19.301	5815.290	5834.590	PASS
11AX40MIMO	Ant1	5190	37.483	5171.299	5208.781	PASS
	Ant2	5190	37.642	5171.139	5208.781	PASS
	Ant1	5230	37.642	5211.219	5248.861	PASS
	Ant2	5230	37.642	5211.299	5248.941	PASS
	Ant1	5270	37.562	5251.299	5288.861	PASS
	Ant2	5270	37.562	5251.299	5288.861	PASS
	Ant1	5310	37.642	5291.139	5328.781	PASS
	Ant2	5310	37.562	5291.219	5328.781	PASS
	Ant1	5510	37.642	5491.299	5528.941	PASS
	Ant2	5510	37.642	5491.219	5528.861	PASS
	Ant1	5590	37.642	5571.219	5608.861	PASS
	Ant2	5590	37.642	5571.139	5608.781	PASS
	Ant1	5670	37.642	5651.219	5688.861	PASS
	Ant2	5670	37.562	5651.299	5688.861	PASS
	Ant1	5710_UNII-2C	33.781	5691.219	5725	PASS
	Ant2	5710_UNII-2C	33.701	5691.299	5725	PASS
	Ant1	5710_UNII-3	3.781	5725	5728.781	PASS
	Ant2	5710_UNII-3	3.781	5725	5728.781	PASS
	Ant1	5755	37.562	5736.299	5773.861	PASS
	Ant2	5755	37.722	5736.139	5773.861	PASS
	Ant1	5795	37.562	5776.219	5813.781	PASS
	Ant2	5795	37.562	5776.379	5813.941	PASS
11AX80MIMO	Ant1	5210	76.723	5171.638	5248.362	PASS
	Ant2	5210	77.203	5171.479	5248.681	PASS
	Ant1	5290	77.043	5251.638	5328.681	PASS
	Ant2	5290	76.883	5251.798	5328.681	PASS
	Ant1	5530	76.723	5491.798	5568.521	PASS
	Ant2	5530	76.883	5491.798	5568.681	PASS
	Ant1	5610	77.203	5571.479	5648.681	PASS
	Ant2	5610	77.043	5571.479	5648.521	PASS
	Ant1	5690	76.723	5651.638	5728.362	PASS
	Ant2	5690	76.723	5651.798	5728.521	PASS
	Ant1	5690_UNII-2C	73.362	5651.638	5725	PASS
	Ant2	5690_UNII-2C	73.202	5651.798	5725	PASS
	Ant1	5690_UNII-3	3.362	5725	5728.362	PASS
	Ant2	5690_UNII-3	3.521	5725	5728.521	PASS
	Ant1	5775	76.883	5736.798	5813.681	PASS
	Ant2	5775	77.203	5736.638	5813.841	PASS

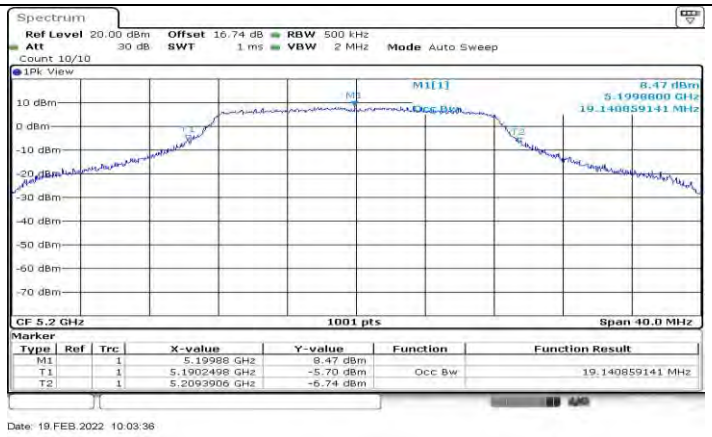
12.2.2. Test Graphs

11A_Ant1_5180

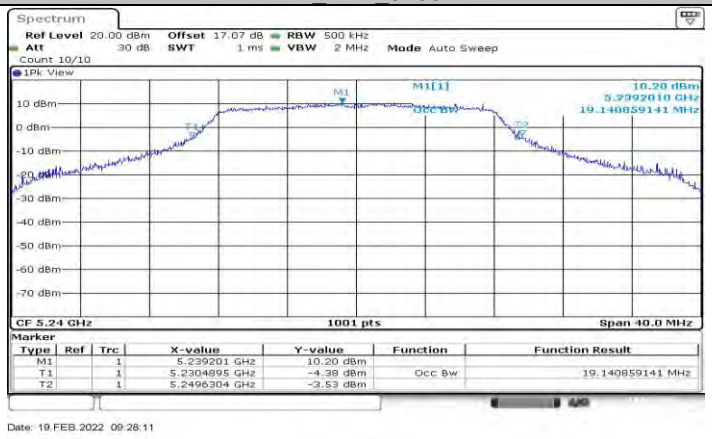
11A_Ant2_5180



11A_Ant1_5200

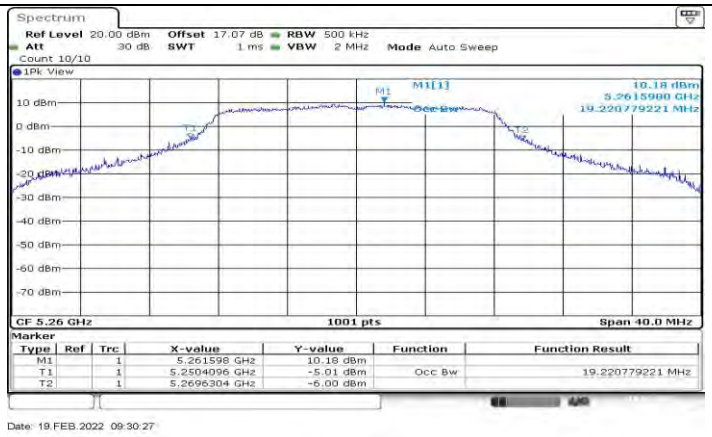


11A_Ant2_5200

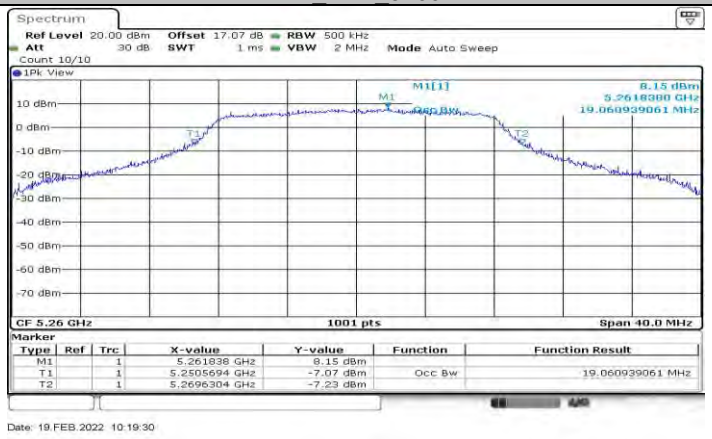


11A_Ant1_5240

11A_Ant2_5240



11A_Ant1_5260

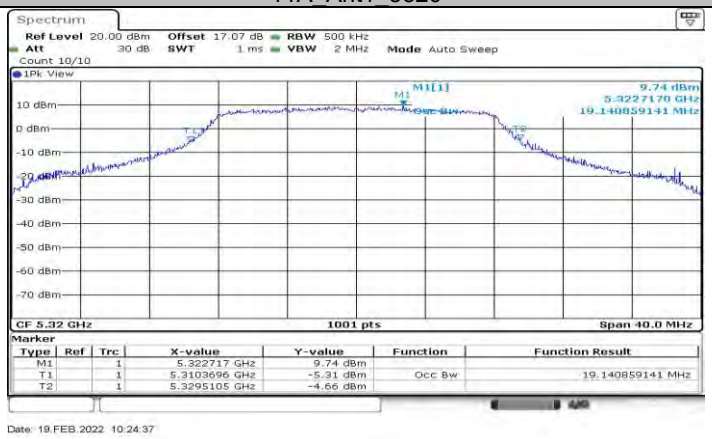


11A_Ant2_5260

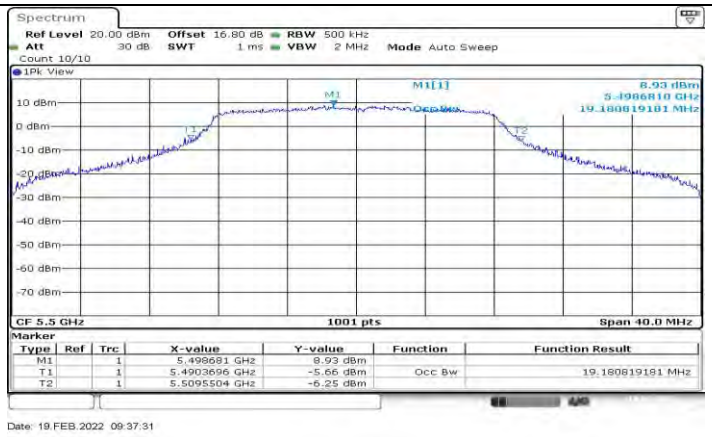
11A_Ant1_5280

11A_Ant2_5280

11A_Ant1_5320

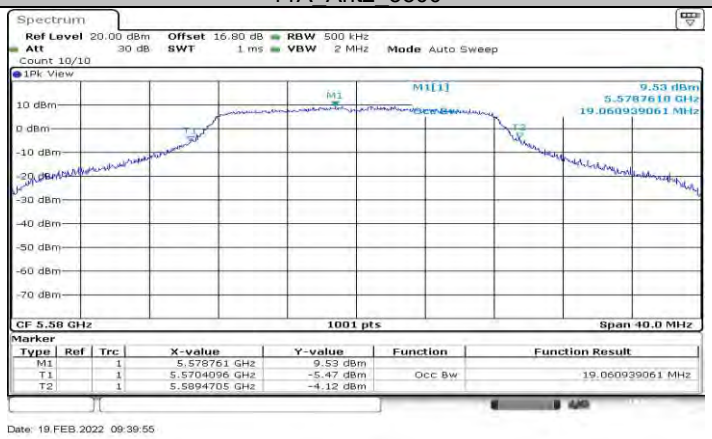


11A_Ant2_5320



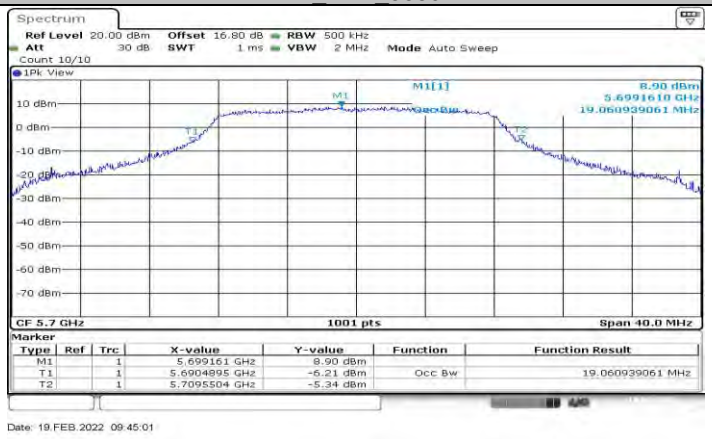
11A_Ant1_5500

11A_Ant2_5500



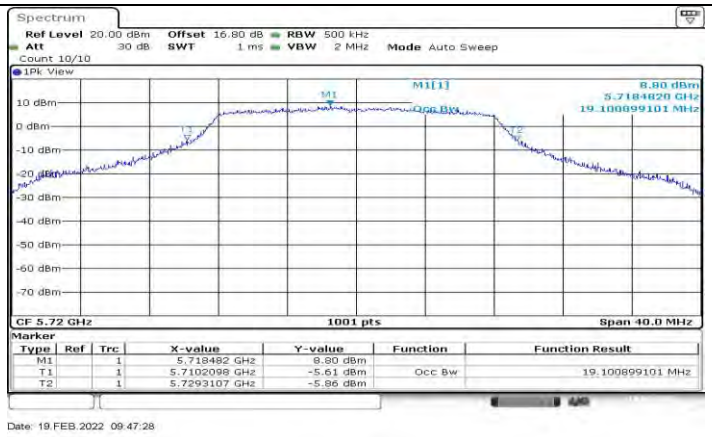
11A_Ant1_5580

11A_Ant2_5580



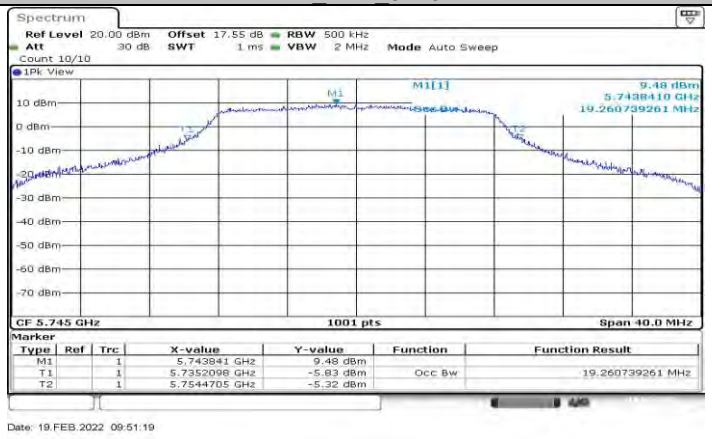
11A_Ant1_5700

11A_Ant2_5700

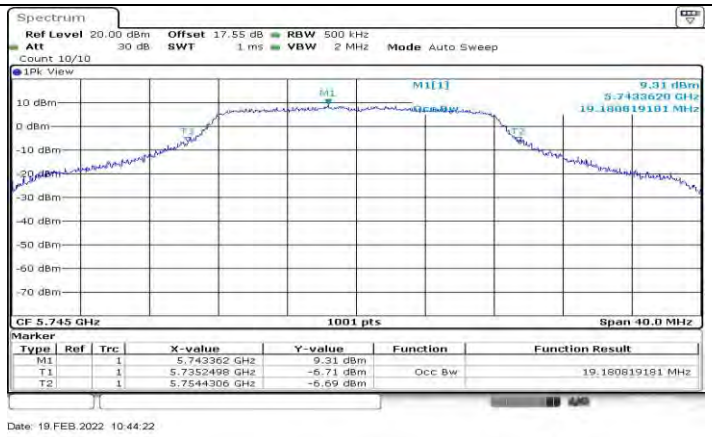


11A_Ant1_5720

11A_Ant2_5720



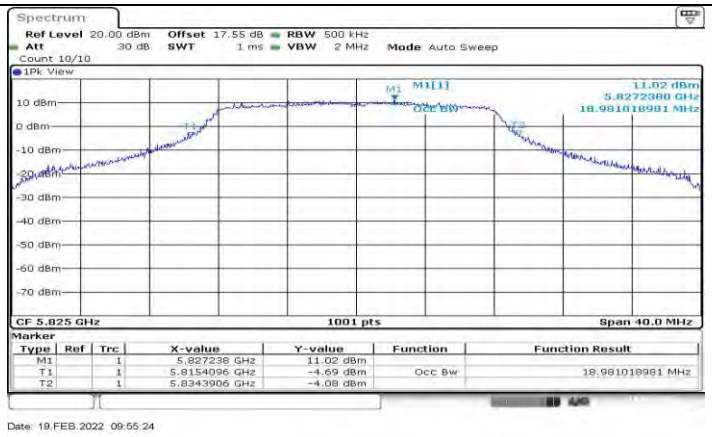
11A_Ant1_5745



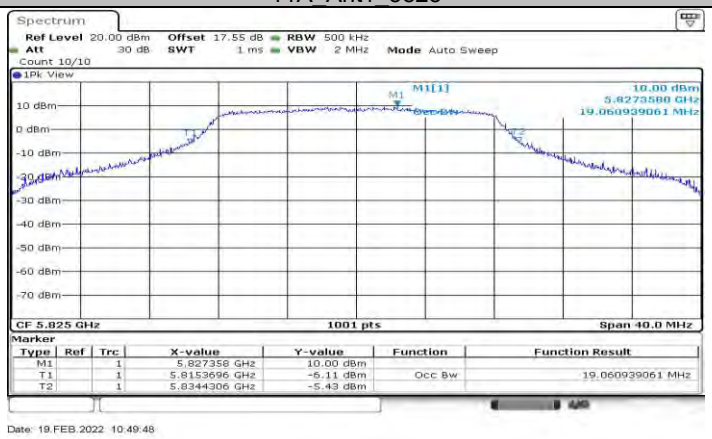
11A_Ant2_5745

11A_Ant1_5785

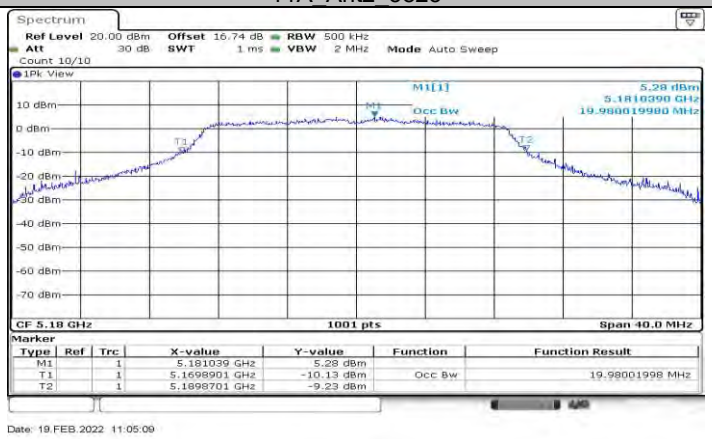
11A_Ant2_5785



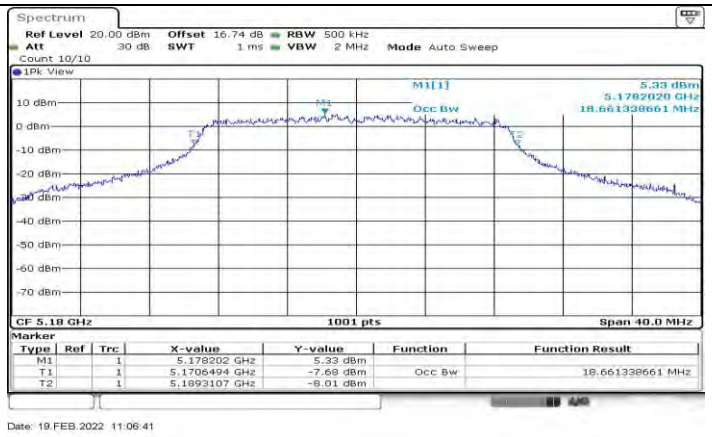
11A_Ant1_5825



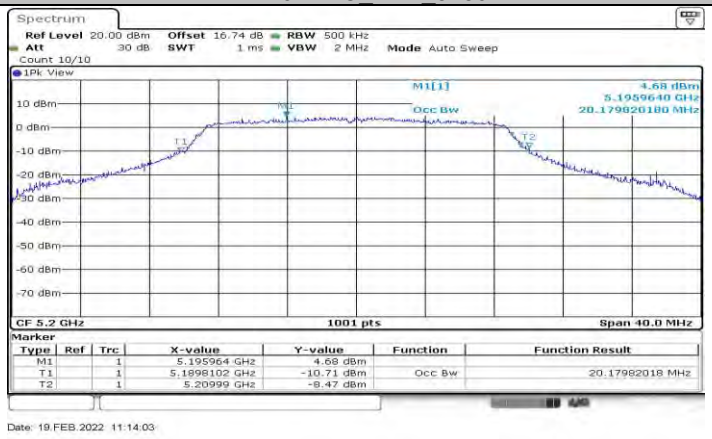
11A_Ant2_5825



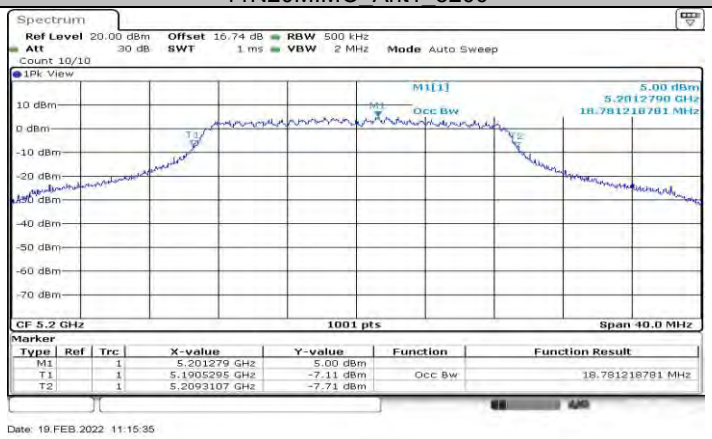
11N20MIMO_Ant1_5180



11N20MIMO_Ant2_5180

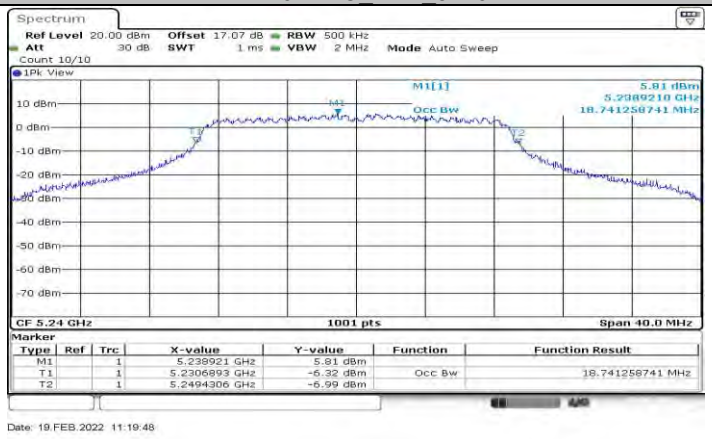


11N20MIMO_Ant1_5200



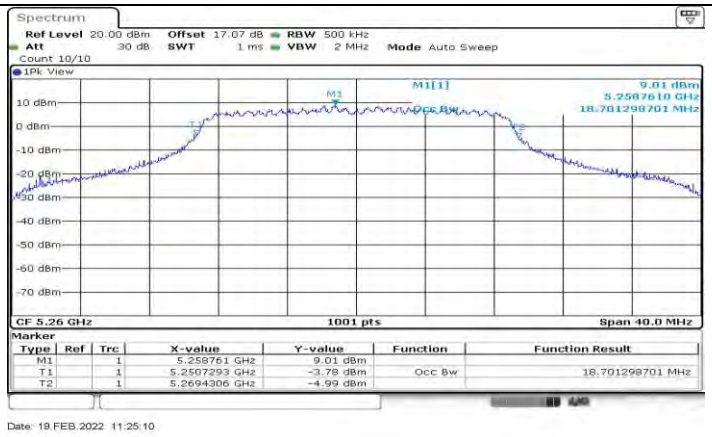
11N20MIMO_Ant2_5200

11N20MIMO_Ant1_5240



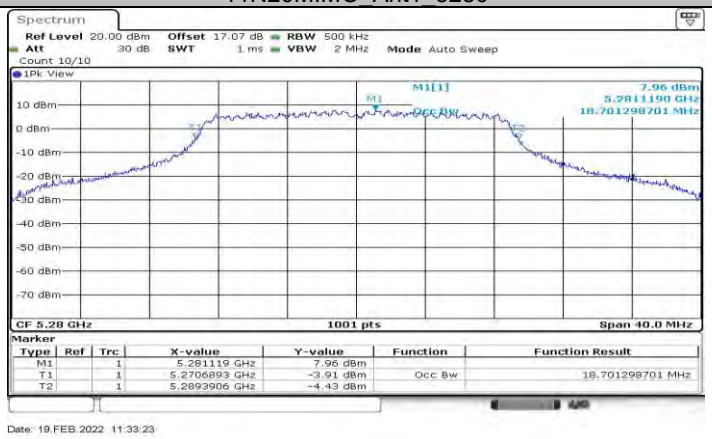
11N20MIMO_Ant2_5240

11N20MIMO_Ant1_5260



11N20MIMO_Ant2_5260

11N20MIMO_Ant1_5280



11N20MIMO_Ant2_5280