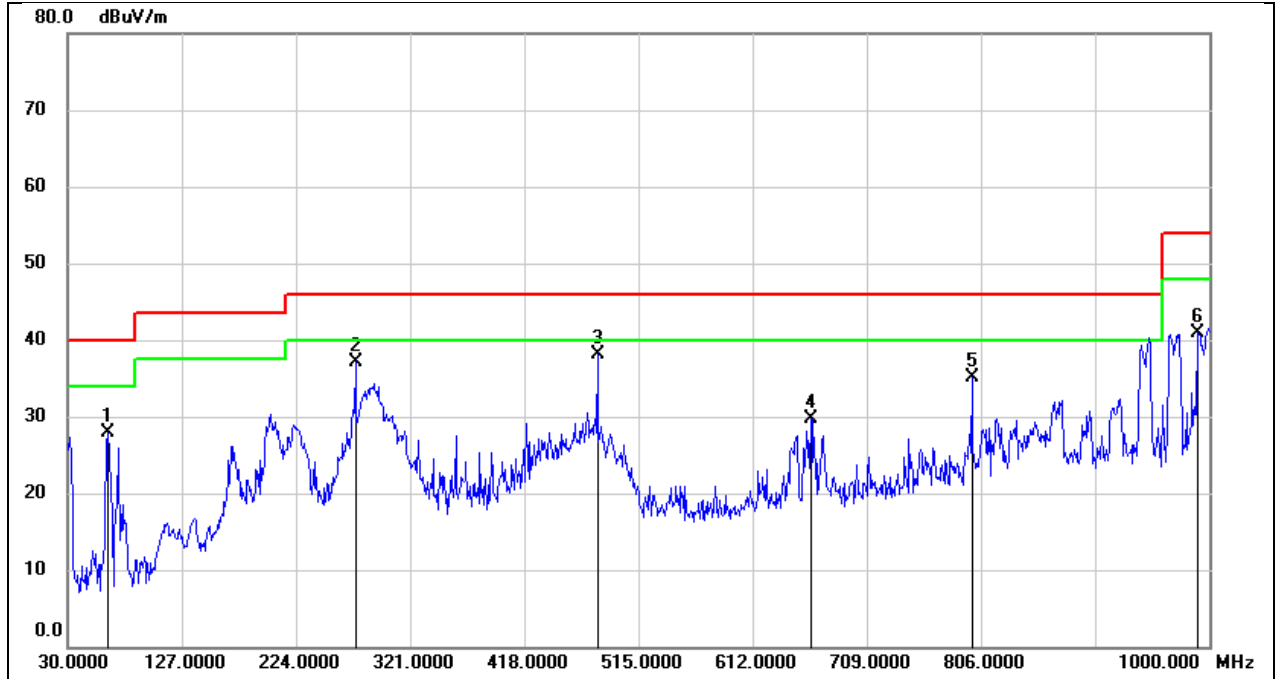


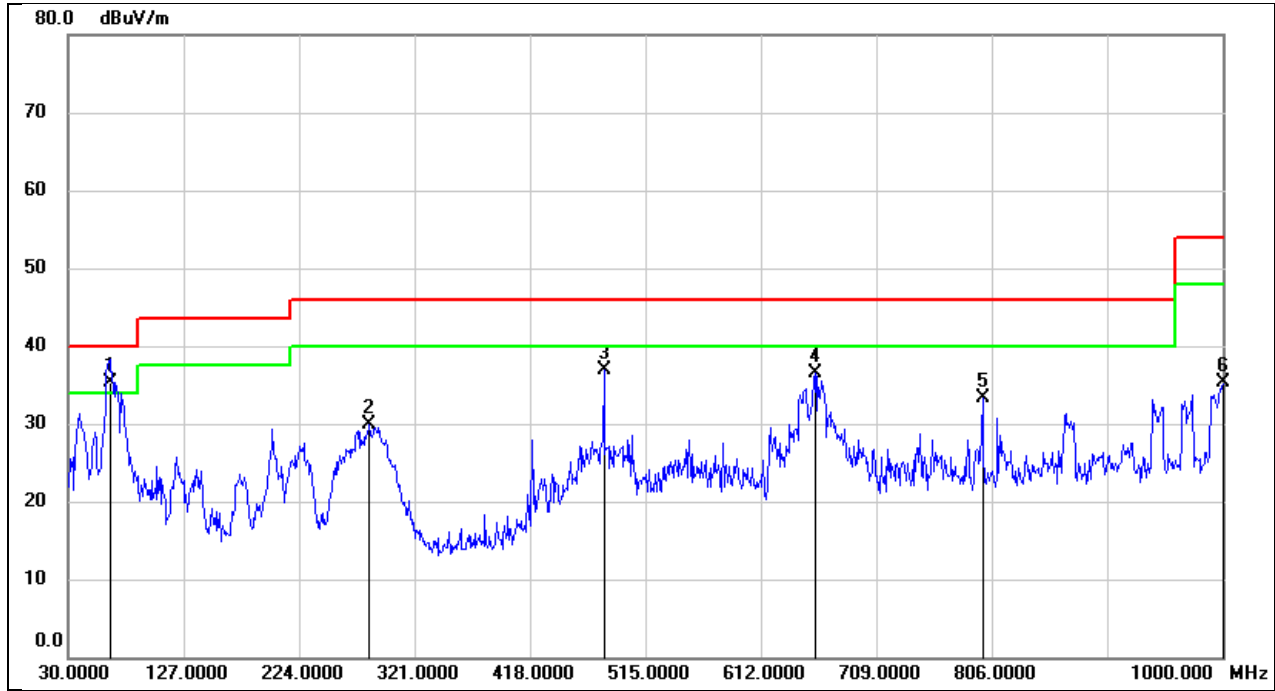
8.7. SPURIOUS EMISSIONS(30 MHZ~1 GHZ)

Test Mode:	802.11a 20	Frequency(MHz):	5180
Polarity:	Horizontal	Test Voltage:	DC 24 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	63.9500	43.21	-15.27	27.94	40.00	-12.06	QP
2	274.4400	50.18	-13.08	37.10	46.00	-8.90	QP
3	480.0800	46.46	-8.30	38.16	46.00	-7.84	QP
4	661.4699	35.53	-5.76	29.77	46.00	-16.23	QP
5	798.2400	38.17	-3.04	35.13	46.00	-10.87	QP
6	990.3000	42.11	-1.19	40.92	54.00	-13.08	QP

Test Mode:	802.11a 20	Frequency(MHz):	5180
Polarity:	Vertical	Test Voltage:	DC 24 V



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	64.9200	50.57	-15.28	35.29	40.00	-4.71	QP
2	283.1700	42.44	-12.54	29.90	46.00	-16.10	QP
3	480.0800	45.28	-8.30	36.98	46.00	-9.02	QP
4	657.5900	42.43	-5.86	36.57	46.00	-9.43	QP
5	798.2400	36.30	-3.04	33.26	46.00	-12.74	QP
6	1000.0000	36.40	-1.13	35.27	54.00	-18.73	QP

9. AC POWER LINE CONDUCTED EMISSION

LIMITS

Please refer to CFR 47 FCC §15.207 (a) and ISED RSS-Gen Clause 8.8

FREQUENCY (MHz)	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

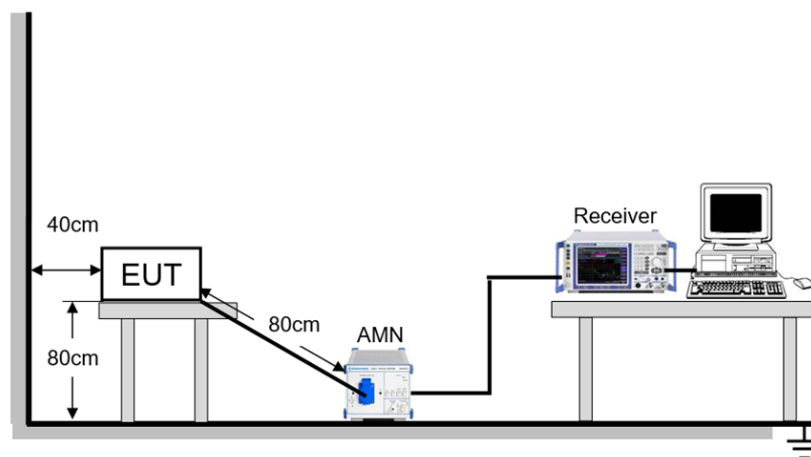
TEST PROCEDURE

Refer to ANSI C63.10-2013 clause 6.2.

The EUT is put on a table of non-conducting material that is 80 cm high. The vertical conducting wall of shielding is located 40 cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 of ANSI C63.10-2013. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9 kHz.

The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

TEST SETUP



TEST ENVIRONMENT

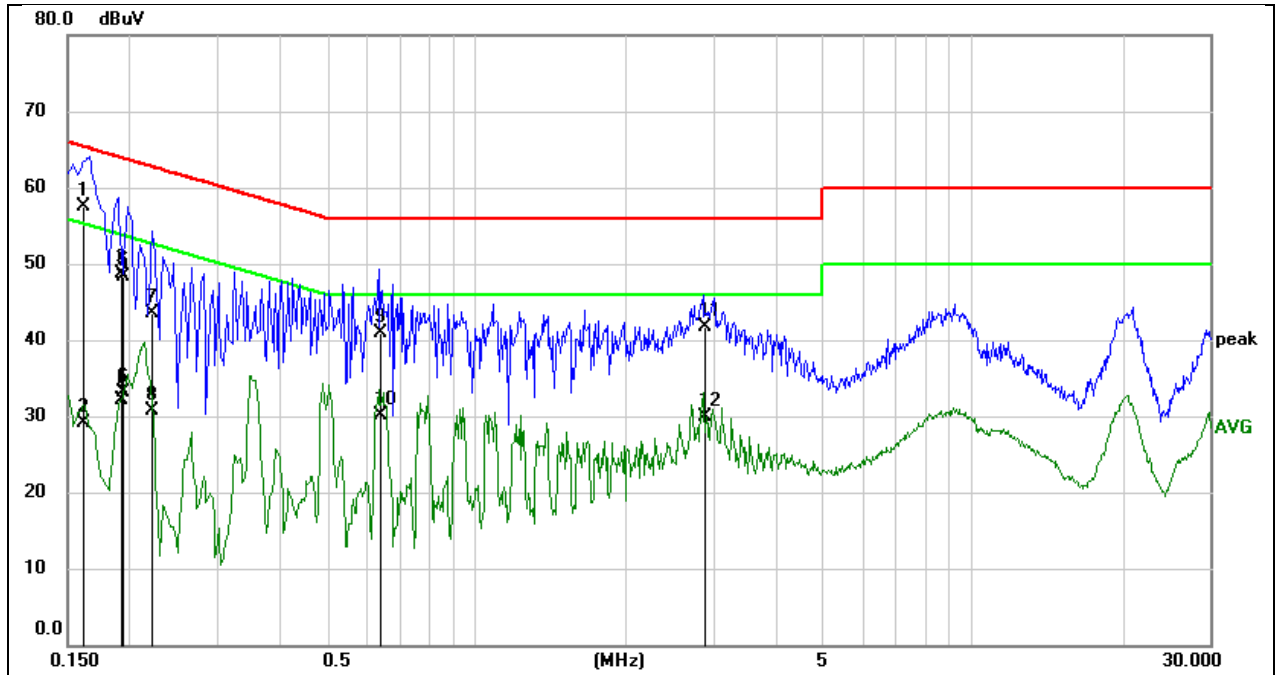
Temperature	22.6°C	Relative Humidity	63%
Atmosphere Pressure	101kPa	Test Voltage	AC 120 V, 60 Hz

TEST DATE / ENGINEER

Test Date	July 12, 2024	Test By	Fanny Huang
-----------	---------------	---------	-------------

TEST RESULTS

Test Mode:	802.11a 20	Frequency(MHz):	5180
Line:	Line		



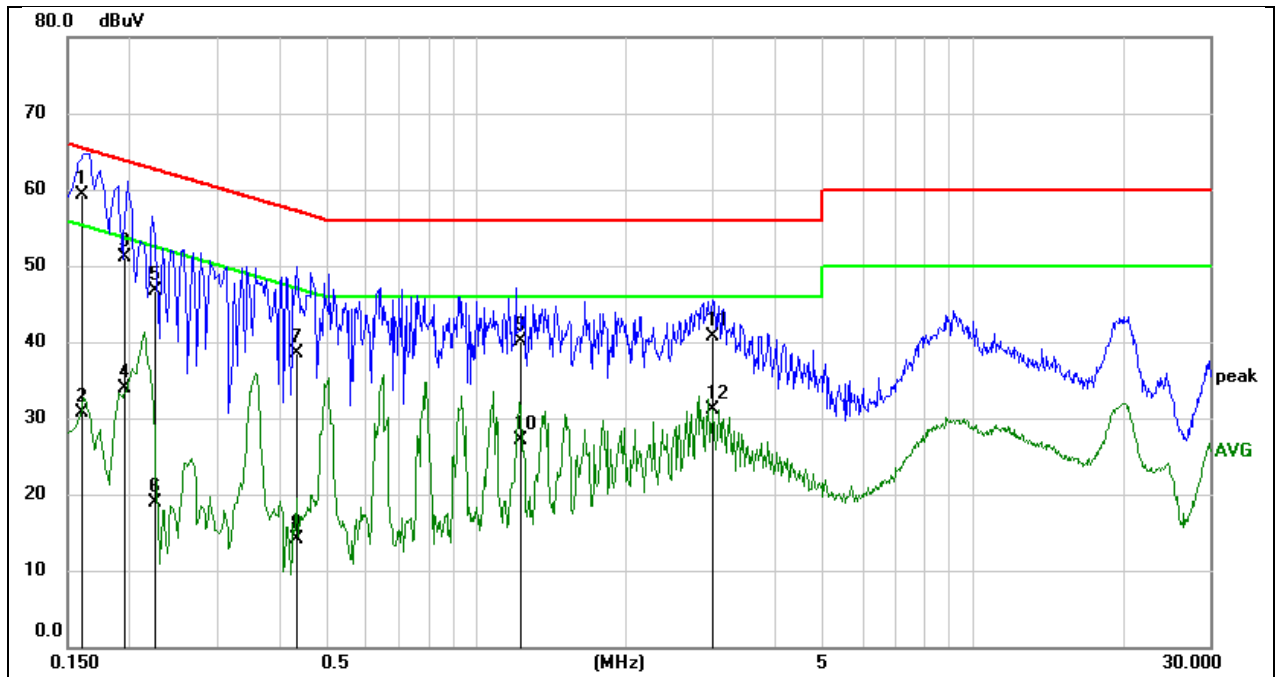
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1612	47.14	10.32	57.46	65.40	-7.94	QP
2	0.1612	18.81	10.32	29.13	55.40	-26.27	AVG
3	0.1926	38.38	10.25	48.63	63.92	-15.29	QP
4	0.1926	21.93	10.25	32.18	53.92	-21.74	AVG
5	0.1941	38.02	10.25	48.27	63.86	-15.59	QP
6	0.1941	22.91	10.25	33.16	53.86	-20.70	AVG
7	0.2218	33.30	10.24	43.54	62.75	-19.21	QP
8	0.2218	20.55	10.24	30.79	52.75	-21.96	AVG
9	0.6416	30.62	10.23	40.85	56.00	-15.15	QP
10	0.6416	19.89	10.23	30.12	46.00	-15.88	AVG
11	2.8924	31.56	10.06	41.62	56.00	-14.38	QP
12	2.8924	19.76	10.06	29.82	46.00	-16.18	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 have been tested, only the worst data was recorded in the report.

Test Mode:	802.11a 20	Frequency(MHz):	5180
Line:	Neutral		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1604	49.15	10.22	59.37	65.44	-6.07	QP
2	0.1604	20.47	10.22	30.69	55.44	-24.75	AVG
3	0.1947	41.02	10.15	51.17	63.83	-12.66	QP
4	0.1947	23.82	10.15	33.97	53.83	-19.86	AVG
5	0.2267	36.53	10.13	46.66	62.57	-15.91	QP
6	0.2267	8.84	10.13	18.97	52.57	-33.60	AVG
7	0.4324	28.49	10.06	38.55	57.21	-18.66	QP
8	0.4324	4.13	10.06	14.19	47.21	-33.02	AVG
9	1.2345	30.14	9.88	40.02	56.00	-15.98	QP
10	1.2345	17.31	9.88	27.19	46.00	-18.81	AVG
11	2.9924	30.50	10.18	40.68	56.00	-15.32	QP
12	2.9924	20.93	10.18	31.11	46.00	-14.89	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 have been tested, only the worst data was recorded in the report.

10. ANTENNA REQUIREMENT

REQUIREMENT

Please refer to FCC part 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 part 15.407(a)

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.

DESCRIPTION

Pass

11. TEST DATA

11.1. APPENDIX A: EMISSION BANDWIDTH

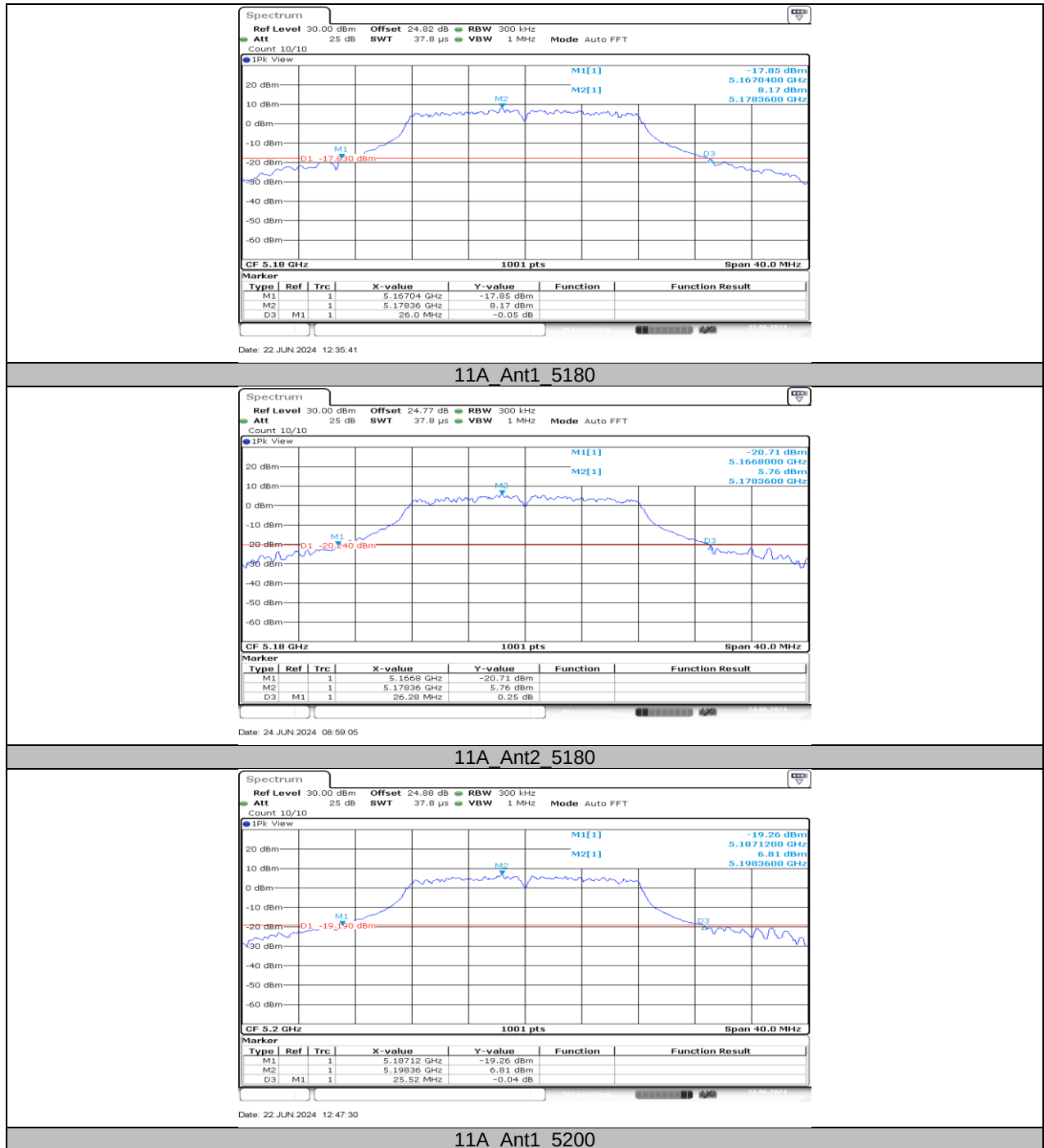
11.1.1. Test Result

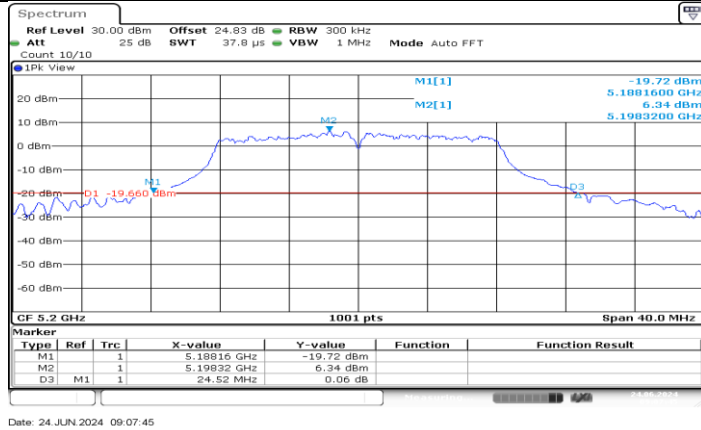
Test Mode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]
11A	Ant1	5180	26.00	5167.04	5193.04
	Ant2	5180	26.28	5166.80	5193.08
	Ant1	5200	25.52	5187.12	5212.64
	Ant2	5200	24.52	5188.16	5212.68
	Ant1	5240	20.24	5230.00	5250.24
	Ant2	5240	19.76	5230.16	5249.92
	Ant1	5260	25.92	5247.04	5272.96
	Ant2	5260	25.88	5247.04	5272.92
	Ant1	5280	25.40	5266.92	5292.32
	Ant2	5280	25.68	5267.00	5292.68
	Ant1	5320	25.60	5307.08	5332.68
	Ant2	5320	26.28	5306.80	5333.08
	Ant1	5500	26.24	5486.84	5513.08
	Ant2	5500	26.00	5487.12	5513.12
	Ant1	5580	25.84	5567.20	5593.04
	Ant2	5580	26.76	5566.96	5593.72
	Ant1	5700	25.60	5686.96	5712.56
	Ant2	5700	25.88	5687.20	5713.08
	Ant1	5720	25.32	5706.84	5732.16
	Ant2	5720	25.84	5706.96	5732.80
	Ant1	5720 UNII-2C	18.16	5706.84	5725
	Ant2	5720 UNII-2C	18.04	5706.96	5725
	Ant1	5720 UNII-3	7.16	5725	5732.16
	Ant2	5720 UNII-3	7.8	5725	5732.80
	Ant1	5745	25.36	5731.84	5757.20
	Ant2	5745	25.44	5731.84	5757.28
	Ant1	5785	25.80	5771.80	5797.60
	Ant2	5785	26.20	5771.92	5798.12
	Ant1	5825	25.88	5811.80	5837.68
	Ant2	5825	26.16	5811.88	5838.04
11N20MIMO	Ant1	5180	26.12	5167.04	5193.16
	Ant2	5180	23.48	5168.32	5191.80
	Ant1	5200	29.28	5185.52	5214.80
	Ant2	5200	22.68	5189.08	5211.76
	Ant1	5240	20.44	5229.76	5250.20
	Ant2	5240	20.08	5230.04	5250.12
	Ant1	5260	25.44	5247.28	5272.72
	Ant2	5260	23.44	5248.92	5272.36
	Ant1	5280	26.32	5266.80	5293.12
	Ant2	5280	25.00	5267.68	5292.68
	Ant1	5320	26.04	5307.04	5333.08
	Ant2	5320	23.76	5308.12	5331.88
	Ant1	5500	26.12	5486.92	5513.04
	Ant2	5500	25.56	5486.04	5511.60
	Ant1	5580	25.92	5567.08	5593.00
	Ant2	5580	24.32	5568.20	5592.52
	Ant1	5700	25.80	5686.88	5712.68
	Ant2	5700	22.88	5688.44	5711.32
	Ant1	5720	26.04	5707.08	5733.12
	Ant2	5720	23.52	5708.56	5732.08
	Ant1	5720 UNII-2C	17.92	5707.08	5725
	Ant2	5720 UNII-2C	16.44	5708.56	5725

	Ant1	5720 UNII-3	8.12	5725	5733.12
	Ant2	5720 UNII-3	7.08	5725	5732.08
	Ant1	5745	26.32	5731.80	5758.12
	Ant2	5745	23.00	5733.68	5756.68
	Ant1	5785	25.92	5771.88	5797.80
	Ant2	5785	24.76	5772.84	5797.60
	Ant1	5825	27.64	5811.88	5839.52
	Ant2	5825	24.44	5812.52	5836.96
11N40MIMO	Ant1	5190	40.40	5169.76	5210.16
	Ant2	5190	40.00	5170.32	5210.32
	Ant1	5230	40.56	5209.92	5250.48
	Ant2	5230	39.68	5210.24	5249.92
	Ant1	5270	40.24	5250.00	5290.24
	Ant2	5270	39.84	5250.24	5290.08
	Ant1	5310	40.32	5289.92	5330.24
	Ant2	5310	39.76	5290.08	5329.84
	Ant1	5510	40.80	5489.60	5530.40
	Ant2	5510	39.84	5490.16	5530.00
	Ant1	5550	40.80	5529.44	5570.24
	Ant2	5550	39.84	5530.08	5569.92
	Ant1	5670	40.48	5649.76	5690.24
	Ant2	5670	39.92	5650.00	5689.92
	Ant1	5710	40.56	5689.60	5730.16
	Ant2	5710	39.76	5690.08	5729.84
	Ant1	5710 UNII-2C	35.4	5689.60	5725
	Ant2	5710 UNII-2C	34.92	5690.08	5725
	Ant1	5710 UNII-3	5.16	5725	5730.16
	Ant2	5710 UNII-3	4.84	5725	5729.84
	Ant1	5755	40.64	5734.68	5775.32
	Ant2	5755	40.08	5734.92	5775.00
	Ant1	5795	41.04	5774.60	5815.64
	Ant2	5795	40.08	5774.92	5815.00
11AC80MIMO	Ant1	5210	80.48	5170.00	5250.48
	Ant2	5210	79.52	5170.32	5249.84
	Ant1	5290	80.64	5249.68	5330.32
	Ant2	5290	79.52	5250.32	5329.84
	Ant1	5530	80.64	5489.84	5570.48
	Ant2	5530	79.52	5490.32	5569.84
	Ant1	5610	80.80	5569.52	5650.32
	Ant2	5610	79.68	5570.32	5650.00
	Ant1	5690	80.64	5649.84	5730.48
	Ant2	5690	79.84	5650.16	5730.00
	Ant1	5690 UNII-2C	75.16	5649.84	5725
	Ant2	5690 UNII-2C	74.84	5650.16	5725
	Ant1	5690 UNII-3	5.48	5725	5730.48
	Ant2	5690 UNII-3	5	5725	5730.00
	Ant1	5775	80.96	5734.52	5815.48
	Ant2	5775	79.84	5735.16	5815.00
11AX20MIMO	Ant1	5180	21.68	5169.36	5191.04
	Ant2	5180	21.64	5169.24	5190.88
	Ant1	5200	21.84	5189.12	5210.96
	Ant2	5200	21.40	5189.56	5210.96
	Ant1	5240	20.04	5229.96	5250.00
	Ant2	5240	20.04	5229.96	5250.00
	Ant1	5260	21.96	5249.04	5271.00
	Ant2	5260	23.12	5248.76	5271.88
	Ant1	5280	22.00	5269.20	5291.20
	Ant2	5280	21.40	5269.44	5290.84
	Ant1	5320	21.96	5308.96	5330.92
	Ant2	5320	21.96	5308.88	5330.84

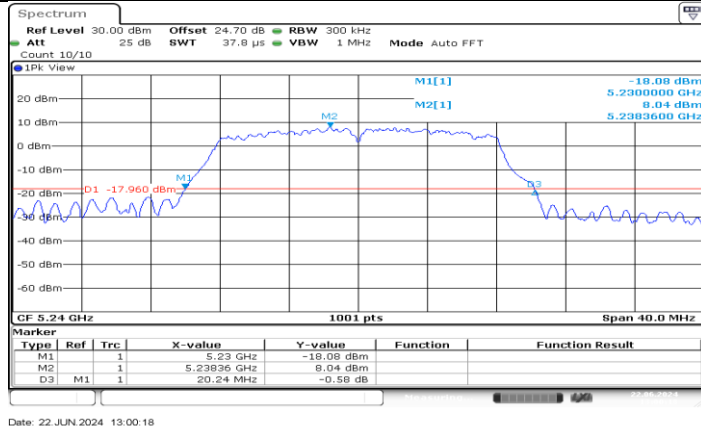
	Ant1	5500	21.72	5489.20	5510.92
	Ant2	5500	24.76	5486.84	5511.60
	Ant1	5580	22.24	5568.80	5591.04
	Ant2	5580	21.64	5569.32	5590.96
	Ant1	5700	21.96	5688.96	5710.92
	Ant2	5700	21.80	5689.24	5711.04
	Ant1	5720	21.60	5709.00	5730.60
	Ant2	5720	21.56	5709.12	5730.68
	Ant1	5720 UNII-2C	16	5709.00	5725
	Ant2	5720 UNII-2C	15.88	5709.12	5725
	Ant1	5720 UNII-3	5.6	5725	5730.60
	Ant2	5720 UNII-3	5.68	5725	5730.68
	Ant1	5745	22.72	5733.36	5756.08
	Ant2	5745	22.36	5734.24	5756.60
	Ant1	5785	22.72	5773.52	5796.24
	Ant2	5785	21.88	5773.92	5795.80
	Ant1	5825	22.64	5814.40	5837.04
	Ant2	5825	21.60	5814.12	5835.72
11AX40MIMO	Ant1	5190	39.68	5170.16	5209.84
	Ant2	5190	39.84	5170.16	5210.00
	Ant1	5230	39.76	5210.16	5249.92
	Ant2	5230	39.84	5210.16	5250.00
	Ant1	5270	39.84	5250.16	5290.00
	Ant2	5270	39.76	5250.16	5289.92
	Ant1	5310	39.68	5290.16	5329.84
	Ant2	5310	39.76	5290.08	5329.84
	Ant1	5510	39.92	5490.00	5529.92
	Ant2	5510	39.84	5490.16	5530.00
	Ant1	5550	39.60	5530.24	5569.84
	Ant2	5550	39.76	5530.16	5569.92
	Ant1	5670	39.84	5650.08	5689.92
	Ant2	5670	39.92	5650.08	5690.00
	Ant1	5710	39.76	5690.08	5729.84
	Ant2	5710	39.76	5690.16	5729.92
	Ant1	5710 UNII-2C	34.92	5690.08	5725
	Ant2	5710 UNII-2C	34.84	5690.16	5725
	Ant1	5710 UNII-3	4.84	5725	5729.84
	Ant2	5710 UNII-3	4.92	5725	5729.92
11AX80MIMO	Ant1	5755	39.76	5735.08	5774.84
	Ant2	5755	39.84	5735.08	5774.92
	Ant1	5795	39.84	5775.00	5814.84
	Ant2	5795	39.84	5775.16	5815.00
	Ant1	5210	80.80	5169.68	5250.48
	Ant2	5210	80.48	5169.84	5250.32
	Ant1	5290	80.64	5249.84	5330.48
	Ant2	5290	80.80	5249.68	5330.48
	Ant1	5530	80.64	5489.84	5570.48
	Ant2	5530	80.48	5489.84	5570.32
	Ant1	5610	80.64	5569.68	5650.32
	Ant2	5610	80.64	5569.84	5650.48
	Ant1	5690	80.64	5649.68	5730.32
	Ant2	5690	80.64	5649.68	5730.32
	Ant1	5690 UNII-2C	75.32	5649.68	5725
	Ant2	5690 UNII-2C	75.32	5649.68	5725
	Ant1	5690 UNII-3	5.32	5725	5730.32
	Ant2	5690 UNII-3	5.32	5725	5730.32
	Ant1	5775	80.48	5734.84	5815.32
	Ant2	5775	80.80	5734.68	5815.48

11.1.2. Test Graphs

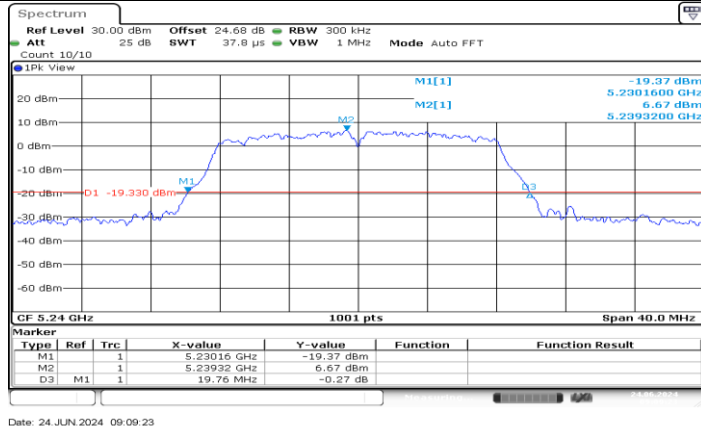




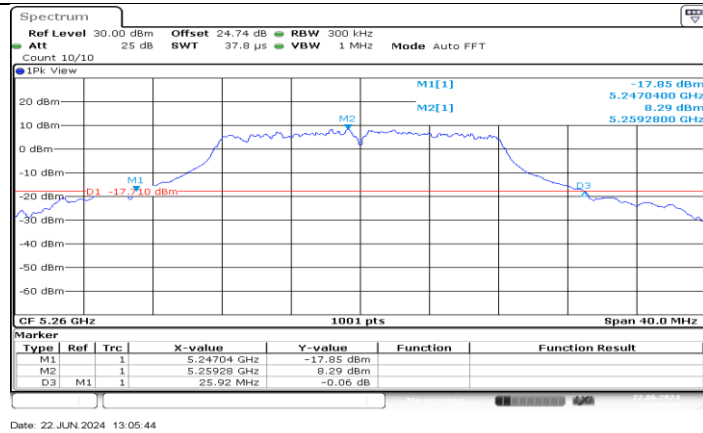
11A_Ant2_5200



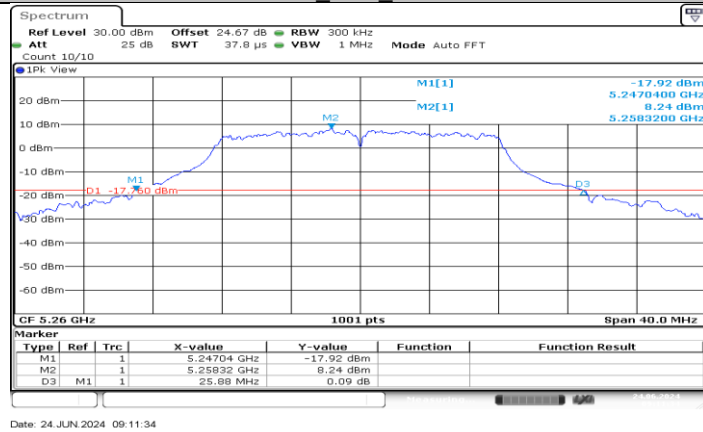
11A_Ant1_5240



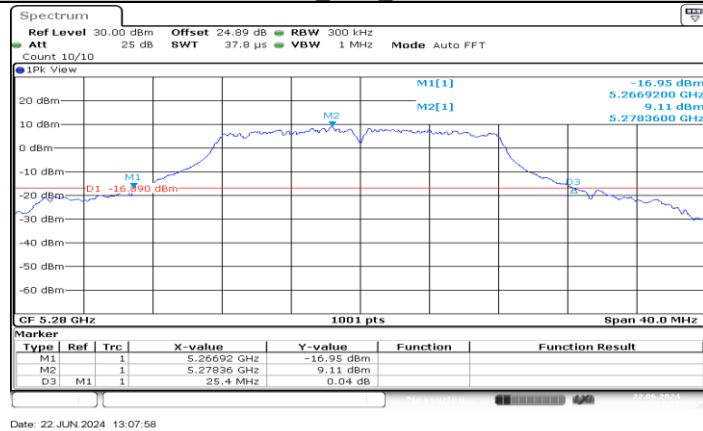
11A_Ant2_5240



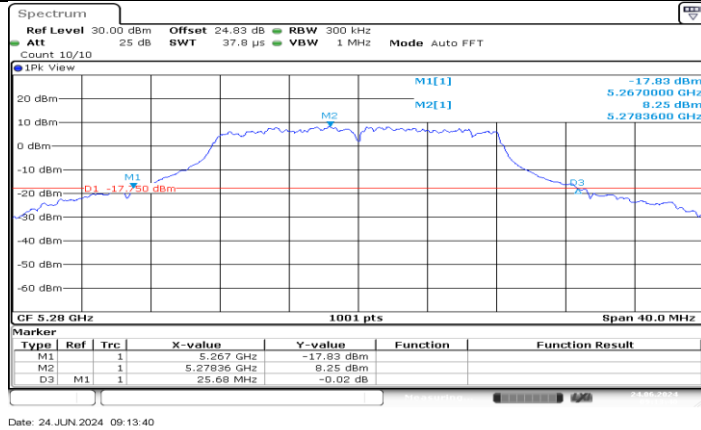
11A_Ant1_5260



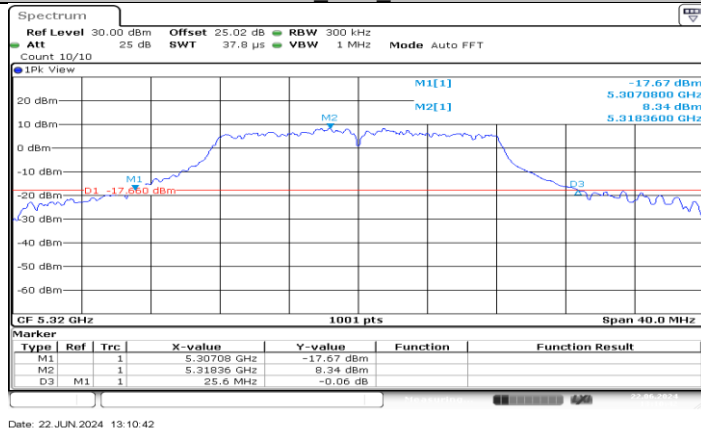
11A_Ant2_5260



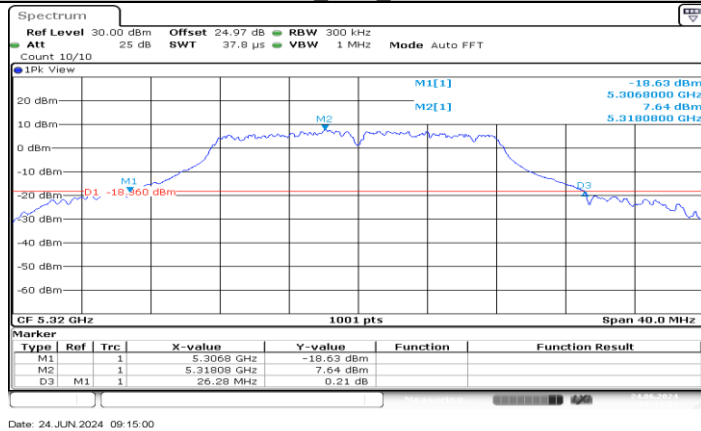
11A_Ant1_5280



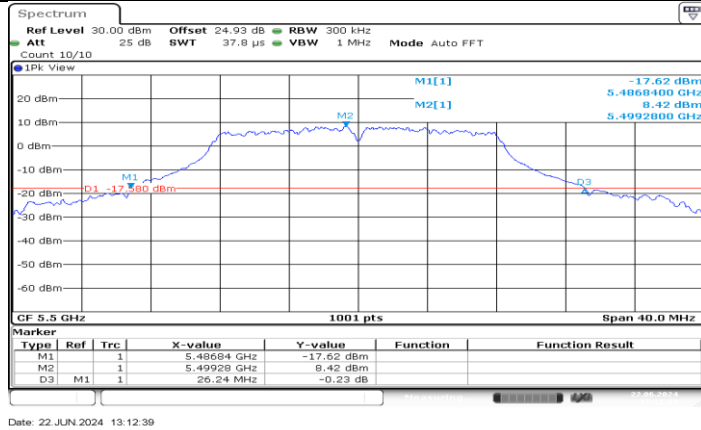
11A_Ant2_5280



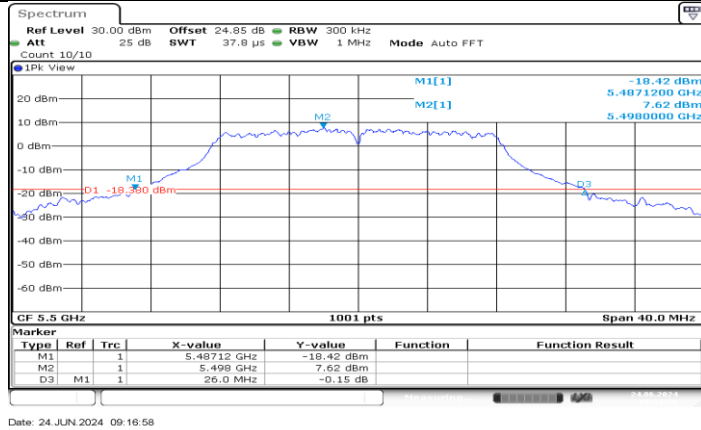
11A_Ant1_5320



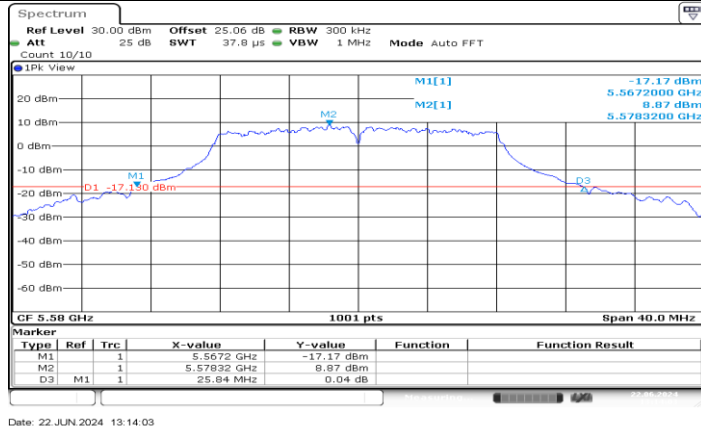
11A_Ant2_5320



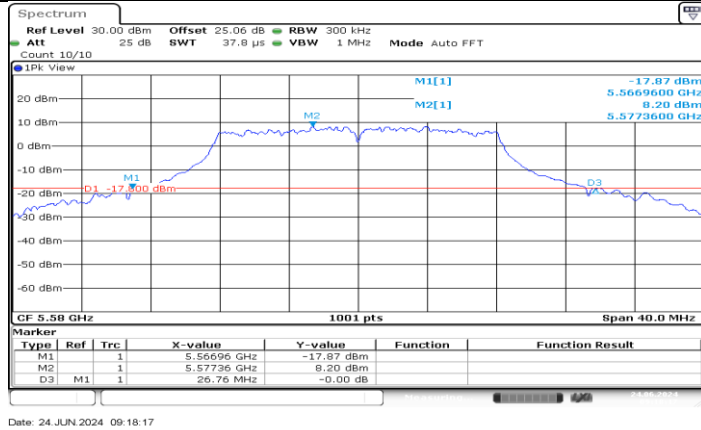
11A_Ant1_5500



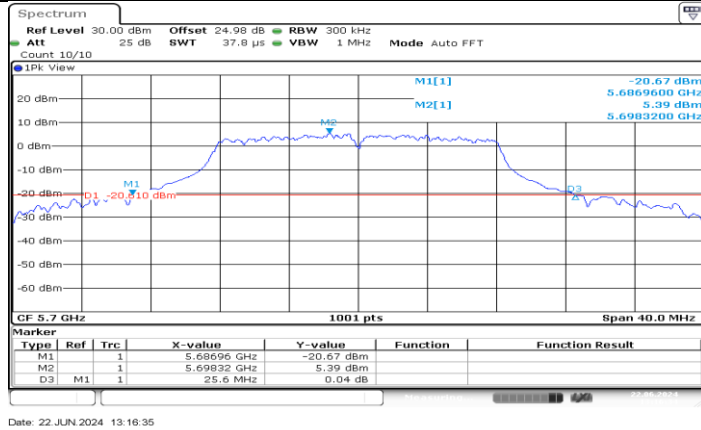
11A_Ant2_5500



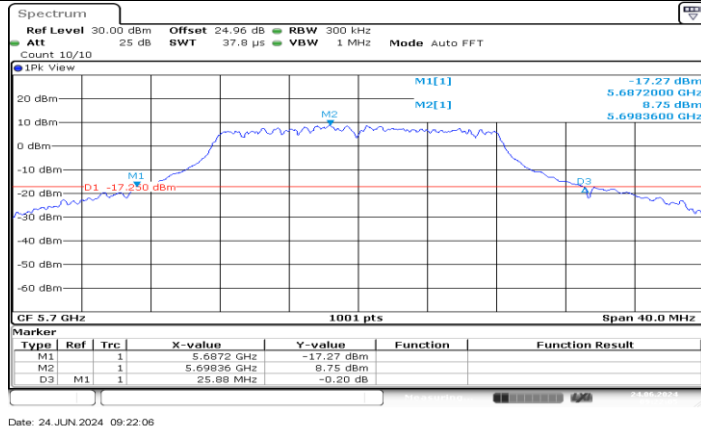
11A_Ant1_5580



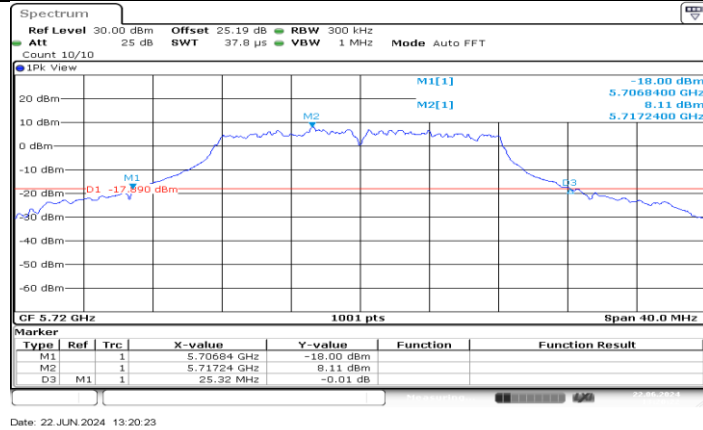
11A_Ant2_5580



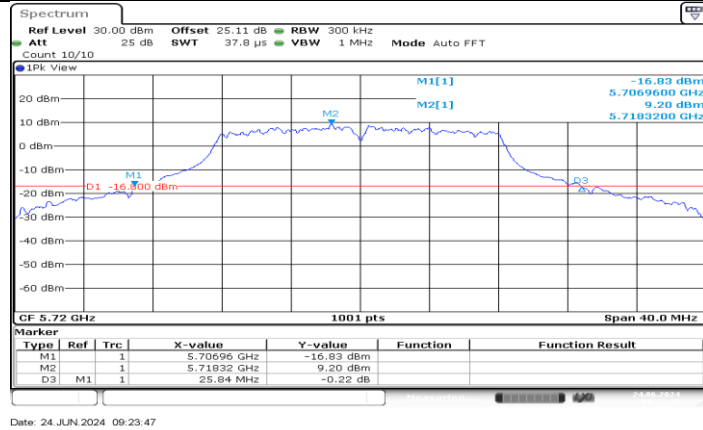
11A_Ant1_5700



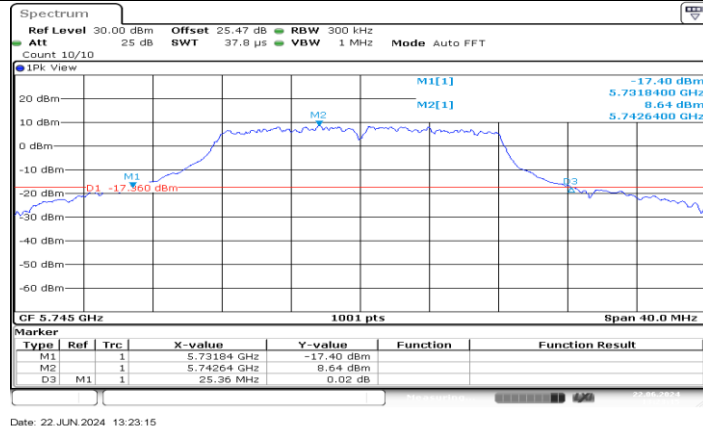
11A_Ant2_5700



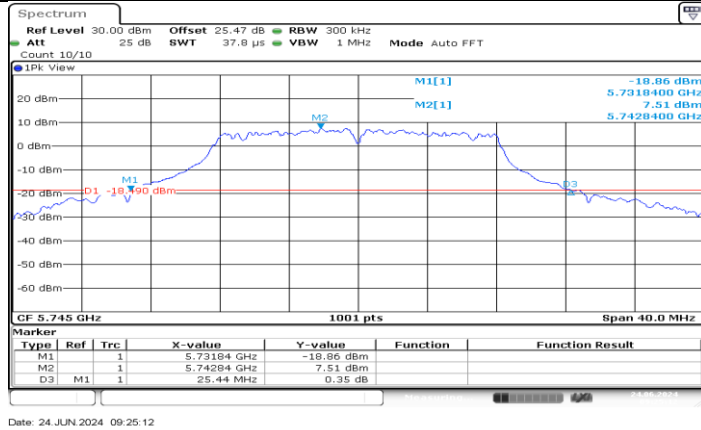
11A_Ant1_5720



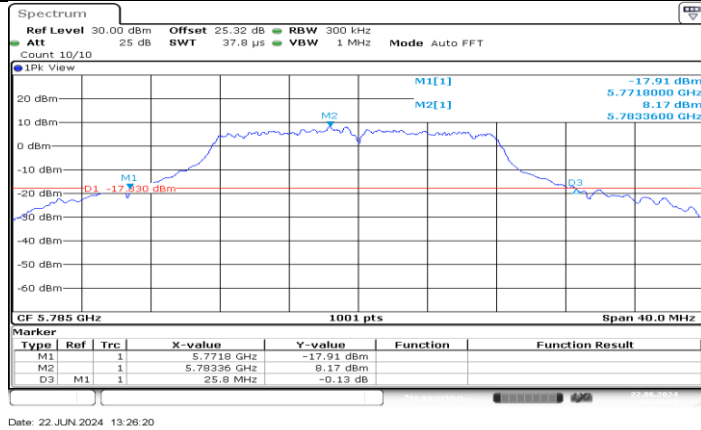
11A_Ant2_5720



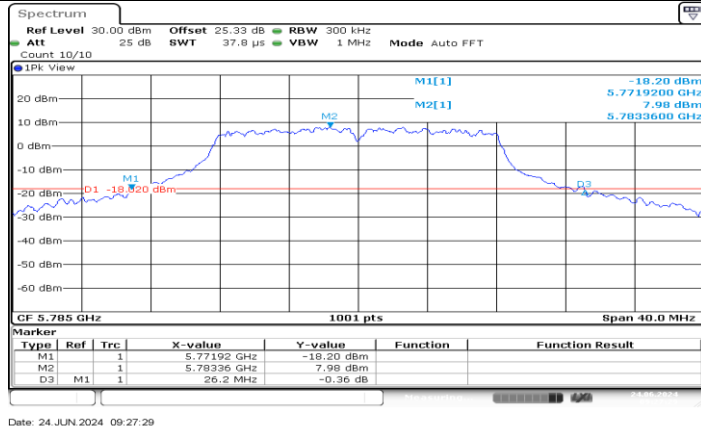
11A_Ant1_5745



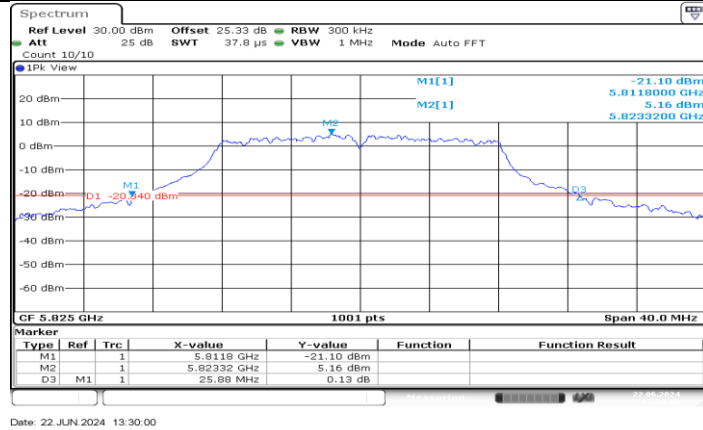
11A_Ant2_5745



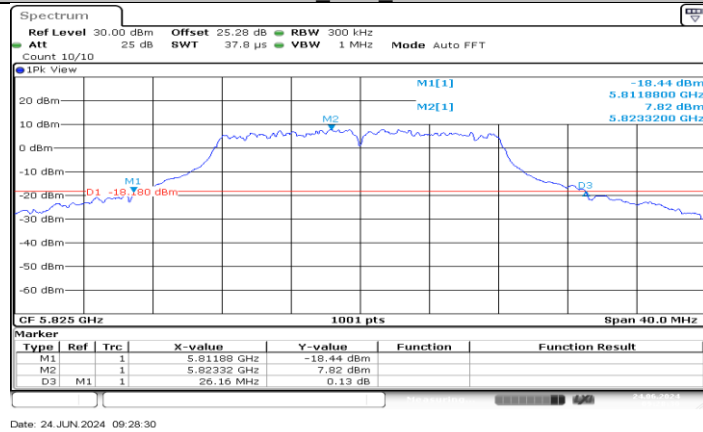
11A_Ant1_5785



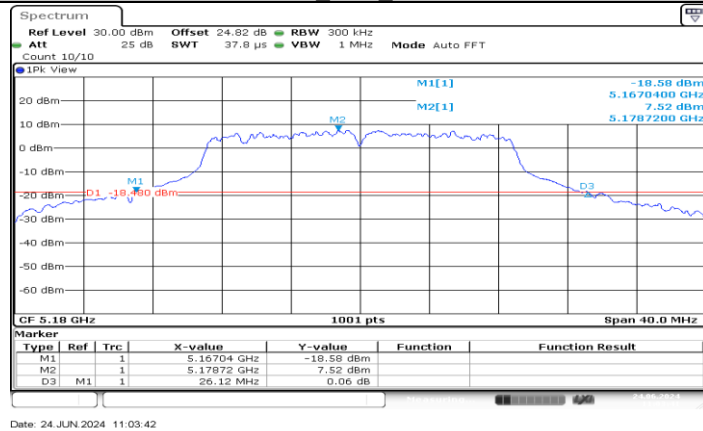
11A_Ant2_5785



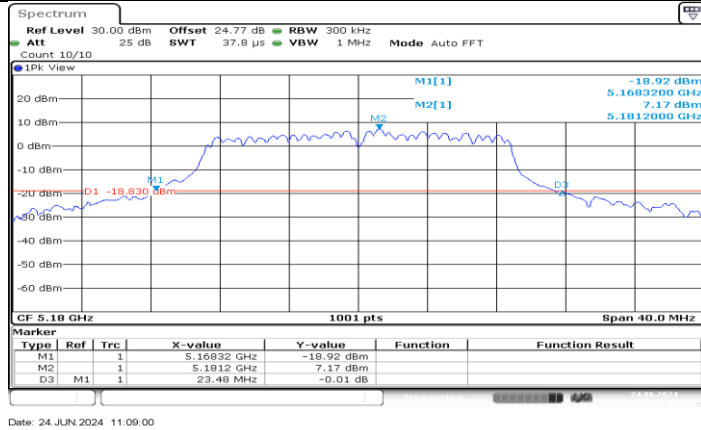
11A_Ant1_5825



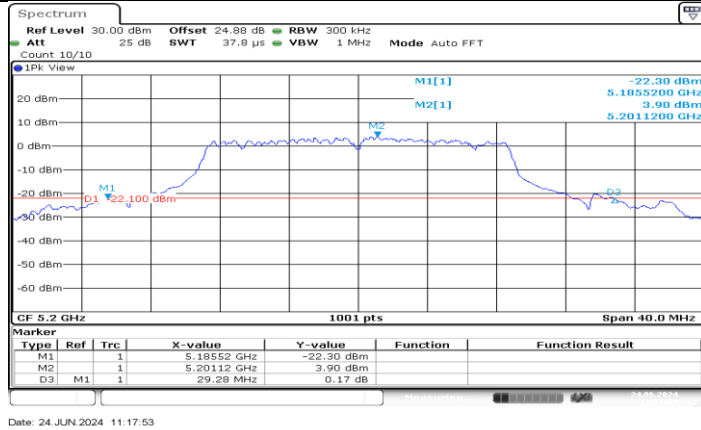
11A_Ant2_5825



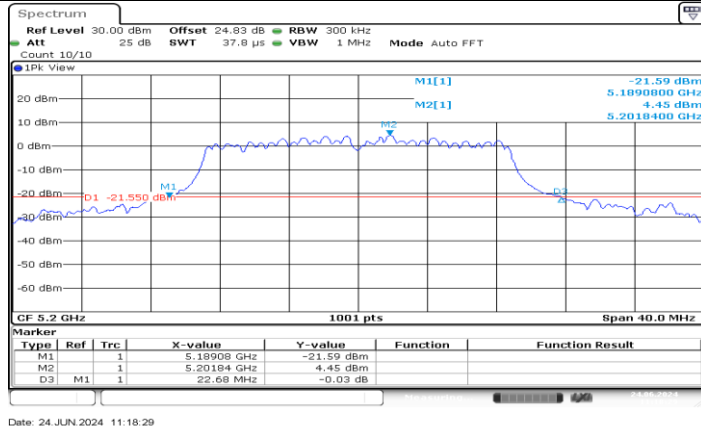
11N20MIMO_Ant1_5180



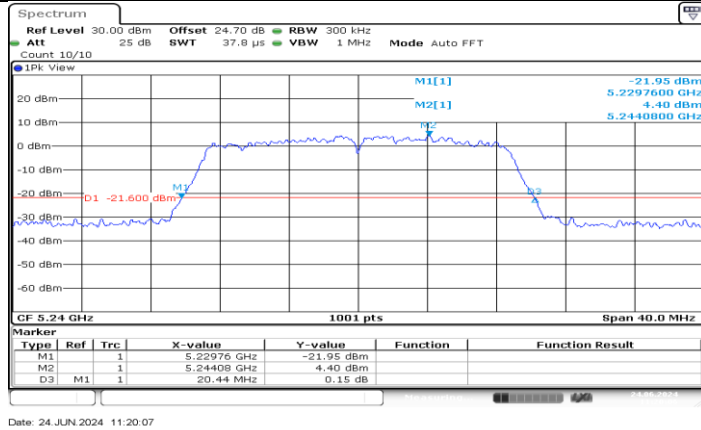
11N20MIMO Ant2 5180



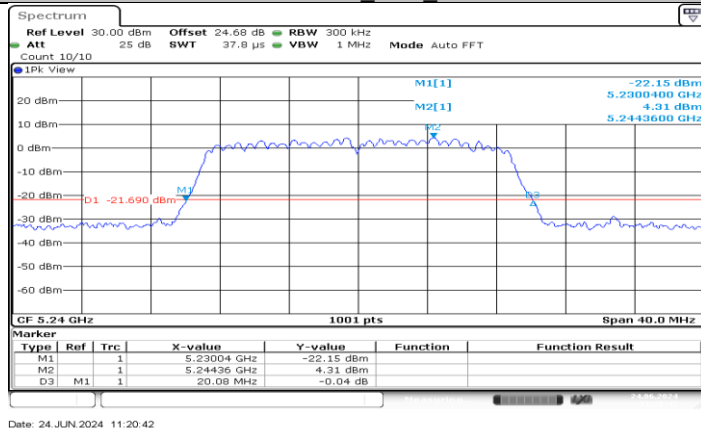
11N20MIMO Ant1 5200



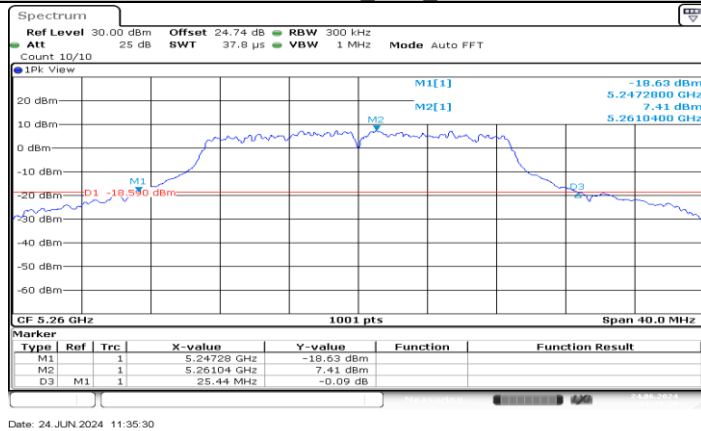
11N20MIMO Ant2 5200



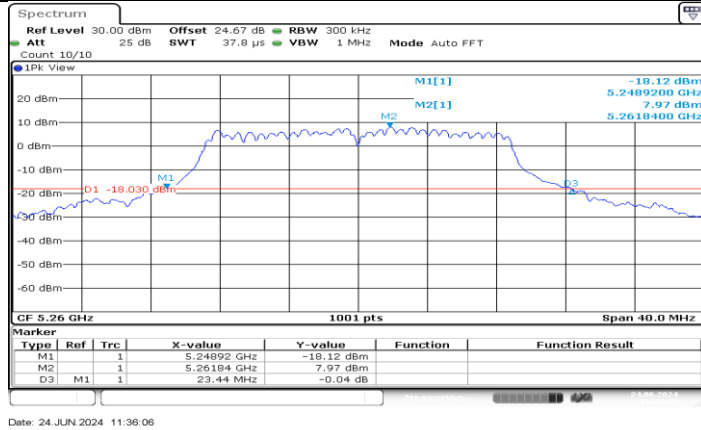
11N20MIMO Ant1 5240



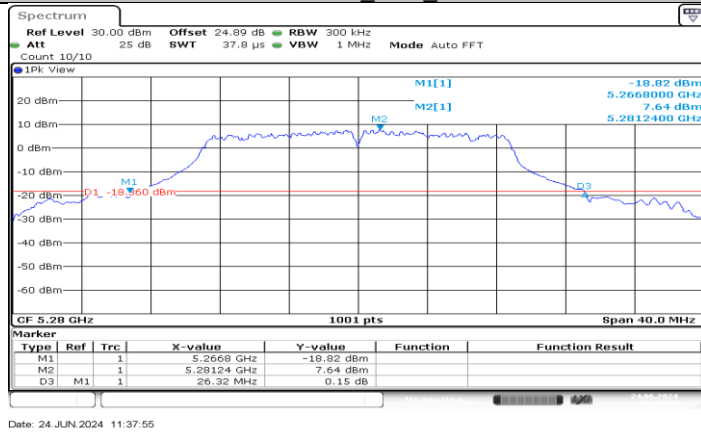
11N20MIMO Ant2 5240



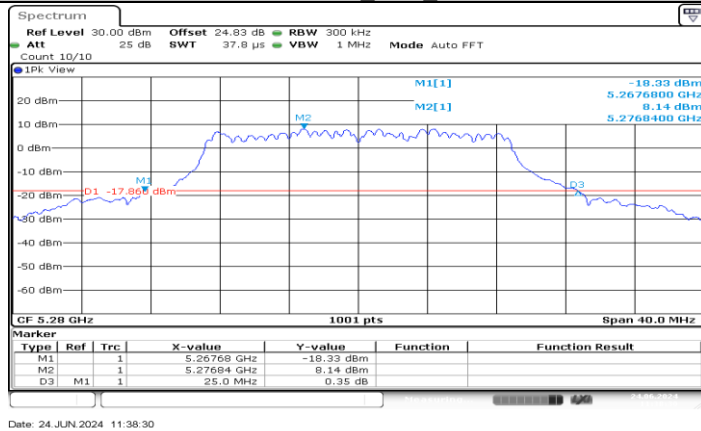
11N20MIMO Ant1 5260



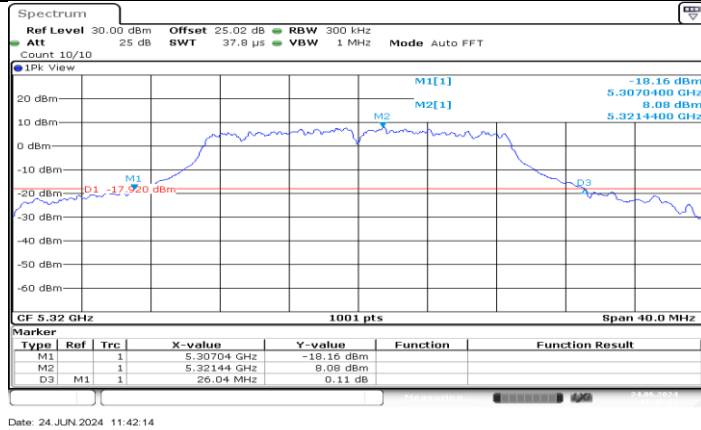
11N20MIMO_Ant2_5260



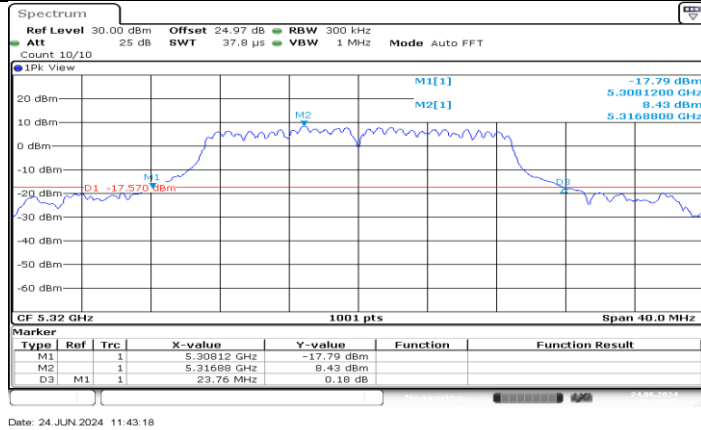
11N20MIMO_Ant1_5280



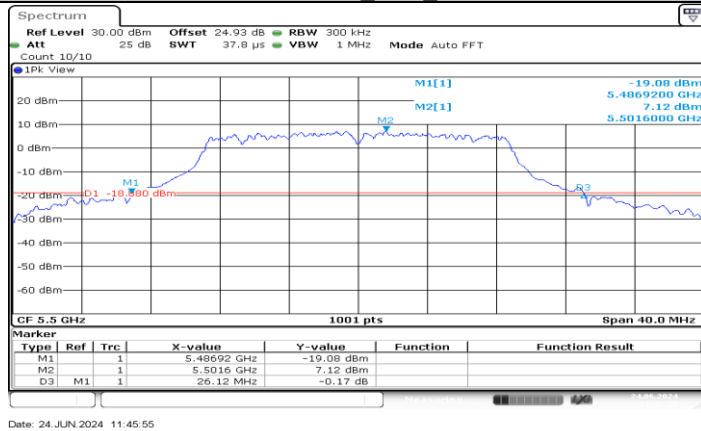
11N20MIMO_Ant2_5280



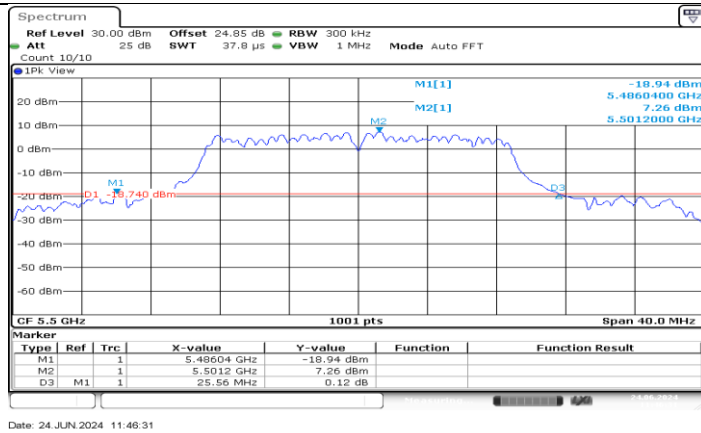
11N20MIMO Ant1 5320



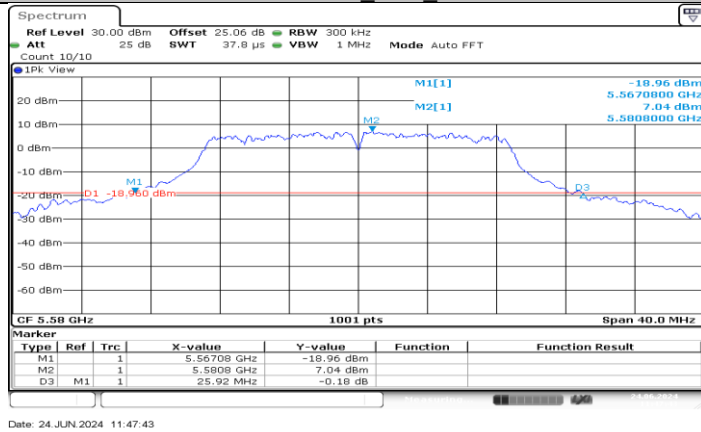
11N20MIMO Ant2 5320



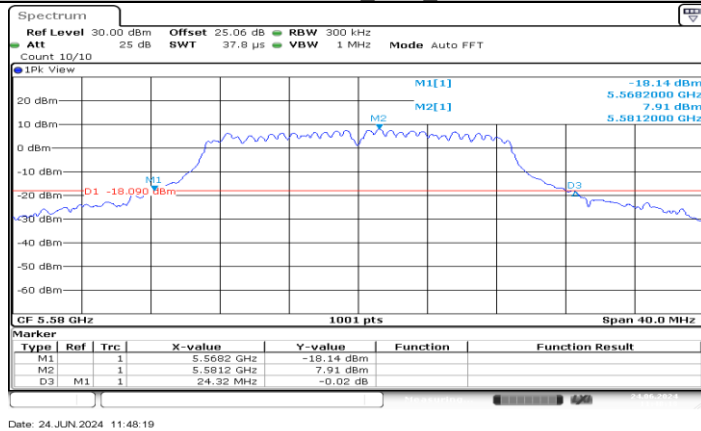
11N20MIMO Ant1 5500



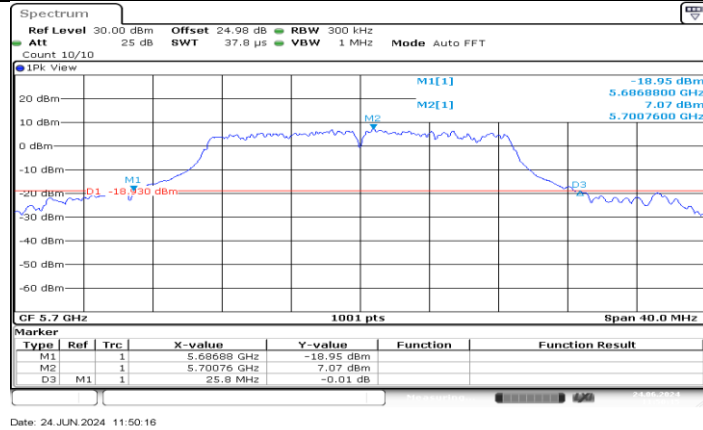
11N20MIMO_Ant2_5500



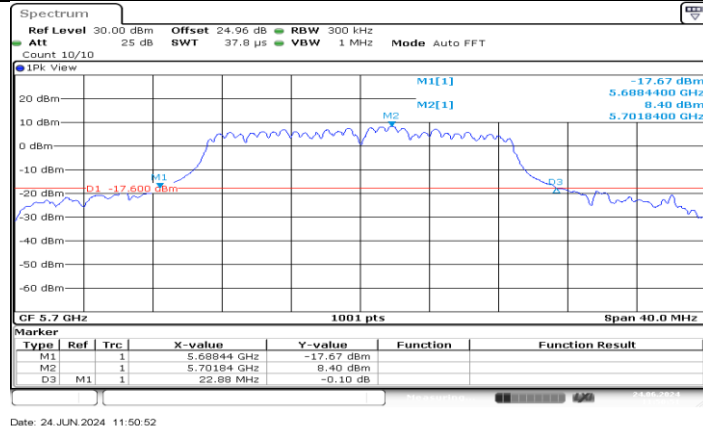
11N20MIMO_Ant1_5580



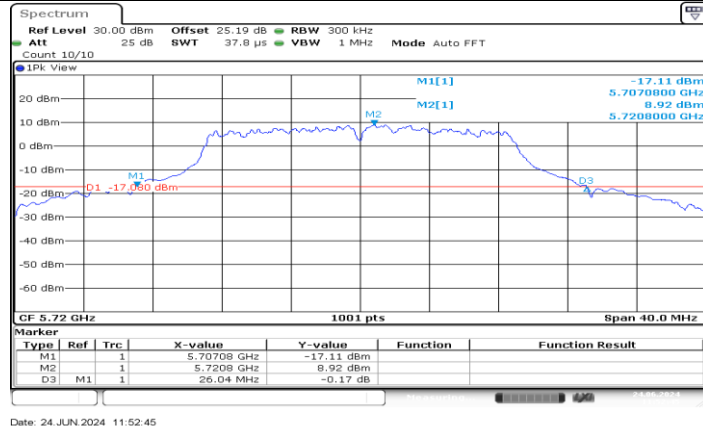
11N20MIMO_Ant2_5580



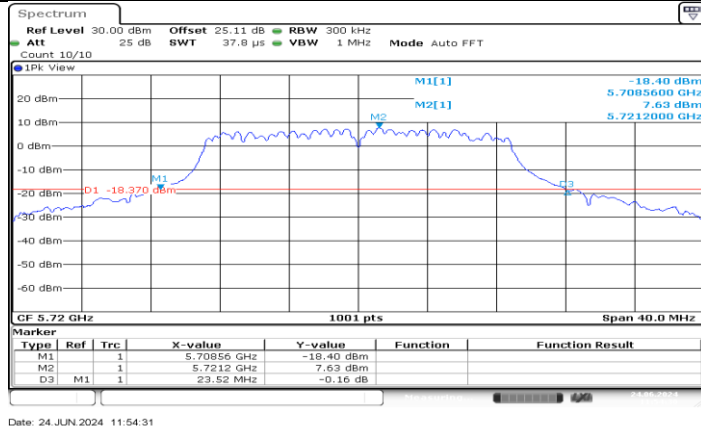
11N20MIMO Ant1 5700



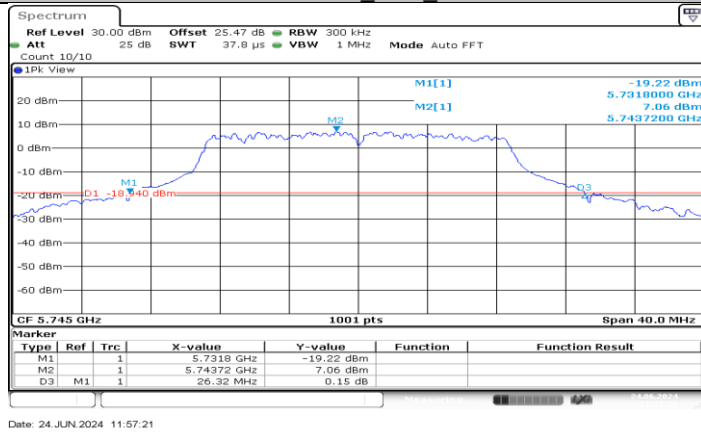
11N20MIMO Ant2 5700



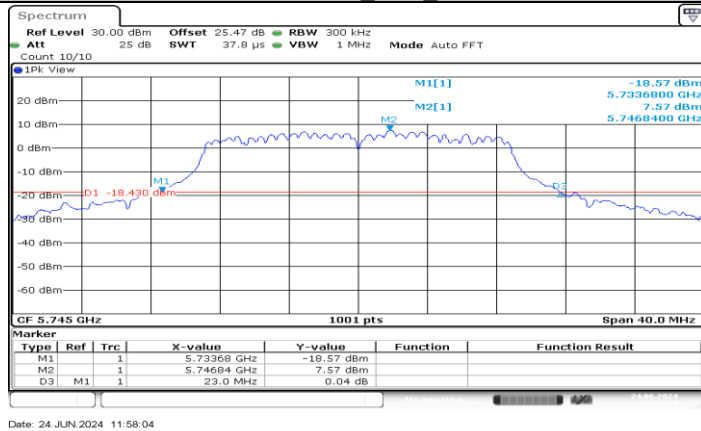
11N20MIMO Ant1 5720



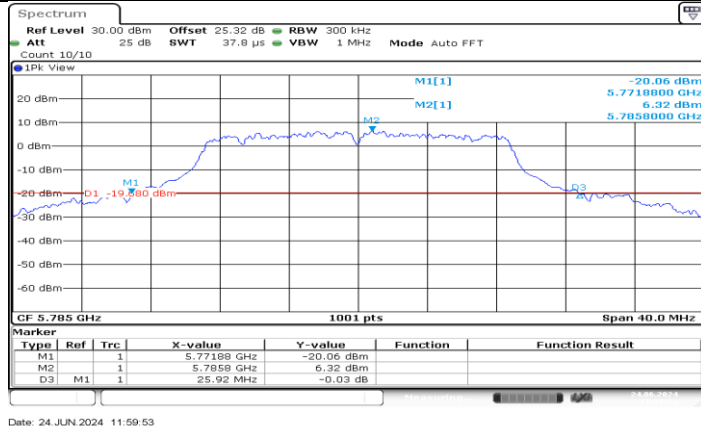
11N20MIMO_Ant2_5720



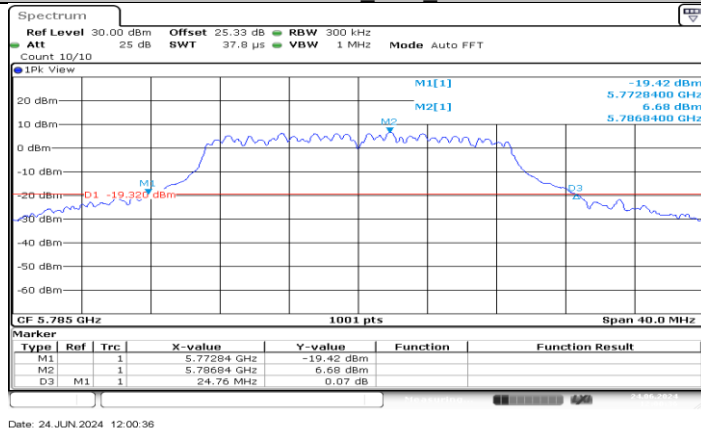
11N20MIMO_Ant1_5745



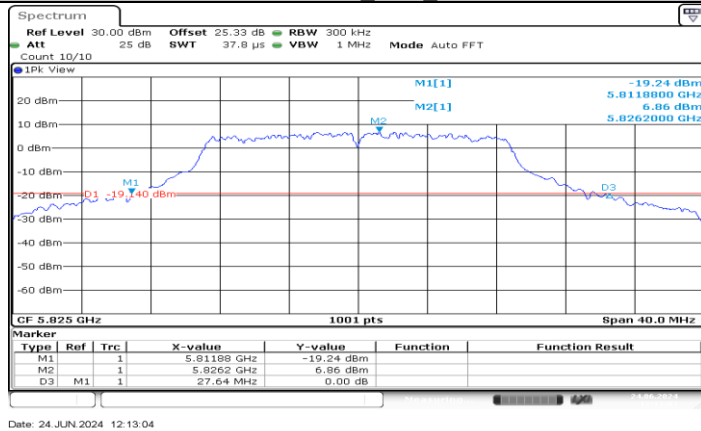
11N20MIMO_Ant2_5745



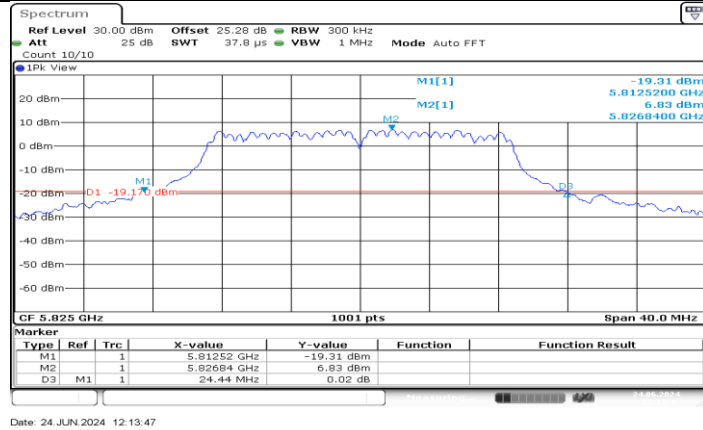
11N20MIMO Ant1 5785



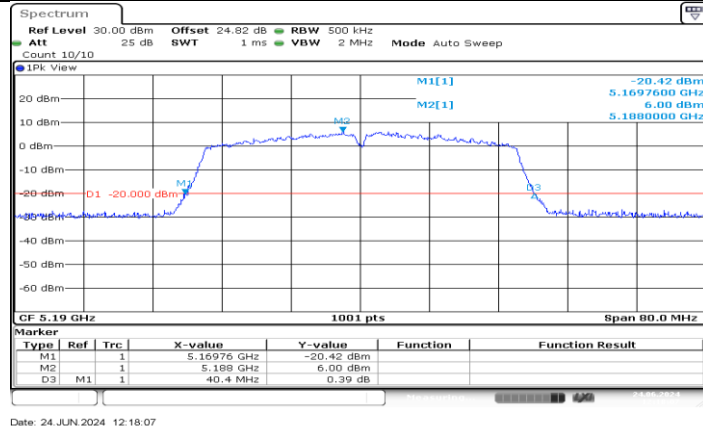
11N20MIMO Ant2 5785



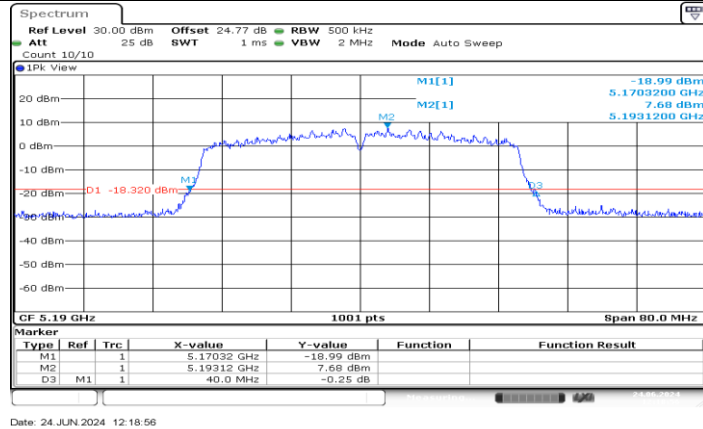
11N20MIMO Ant1 5825



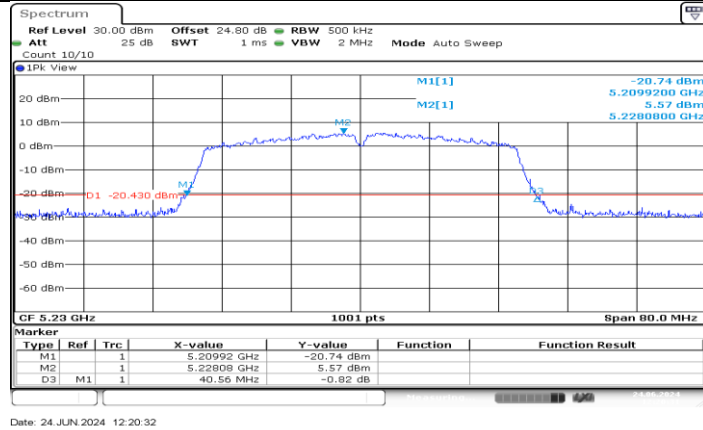
11N20MIMO Ant2 5825



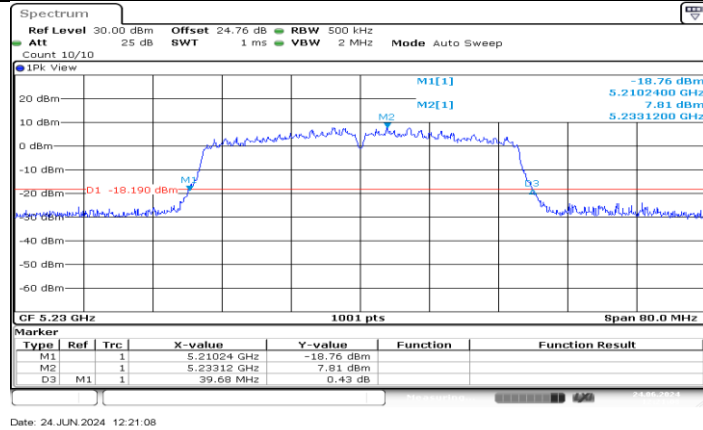
11N40MIMO Ant1 5190



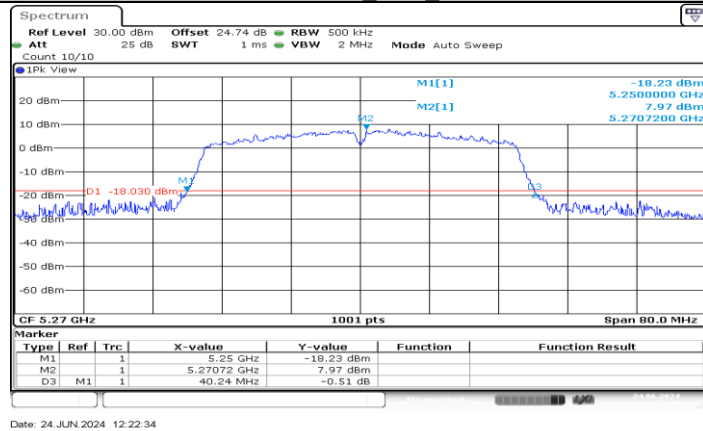
11N40MIMO Ant2 5190



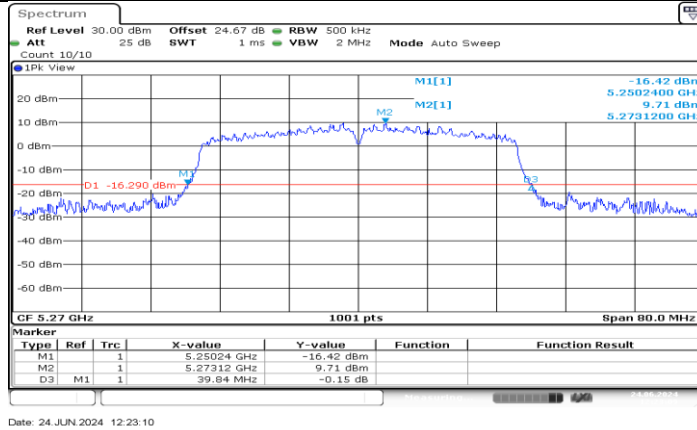
11N40MIMO_Ant1_5230



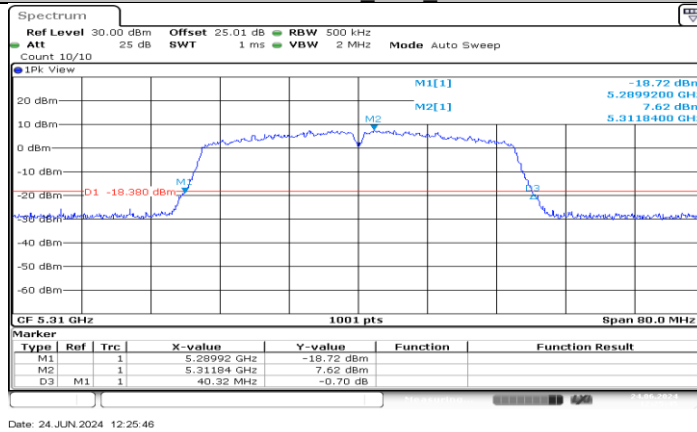
11N40MIMO_Ant2_5230



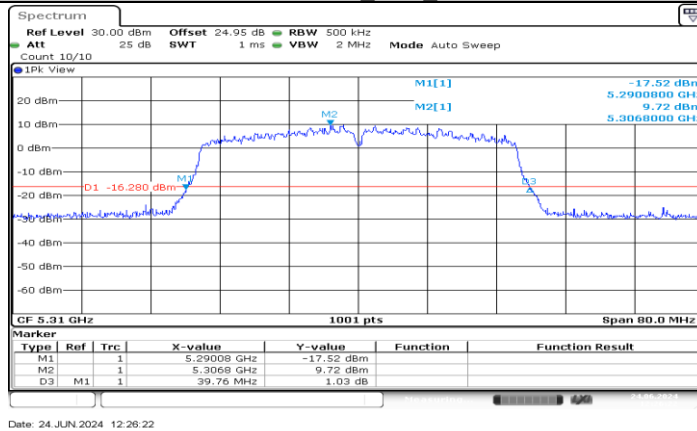
11N40MIMO_Ant1_5270



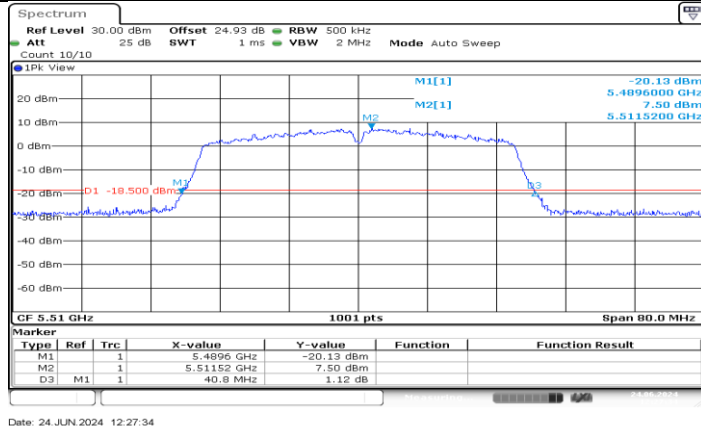
11N40MIMO_Ant2_5270



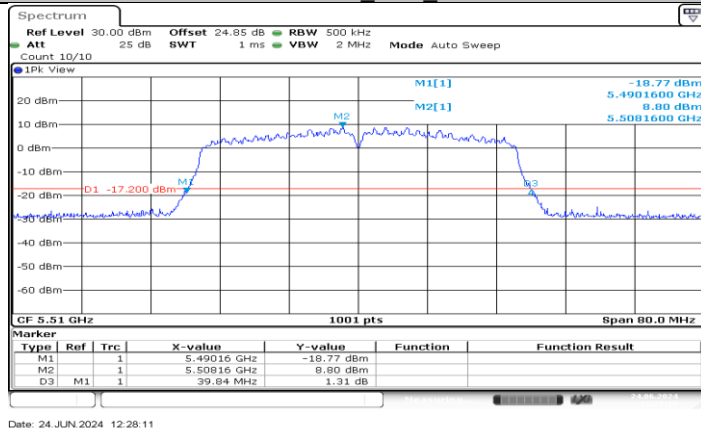
11N40MIMO_Ant1_5310



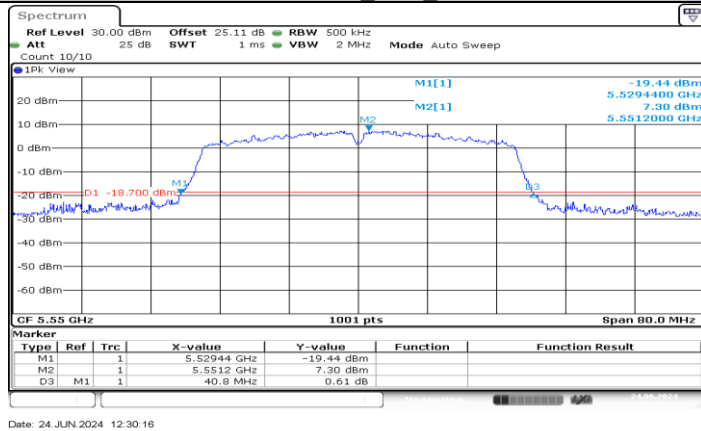
11N40MIMO_Ant2_5310



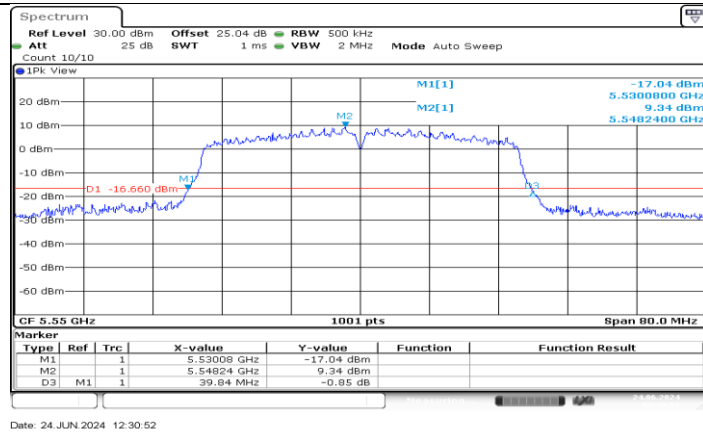
11N40MIMO Ant1 5510



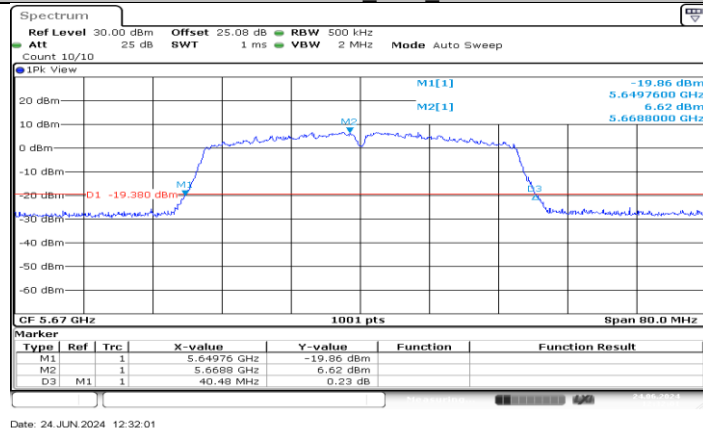
11N40MIMO Ant2 5510



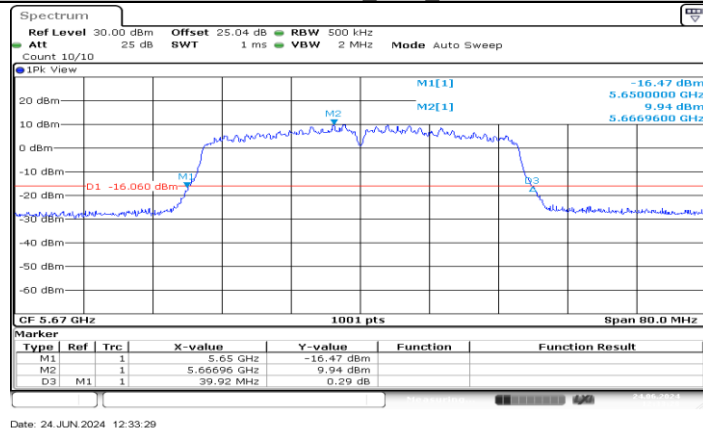
11N40MIMO Ant1 5550



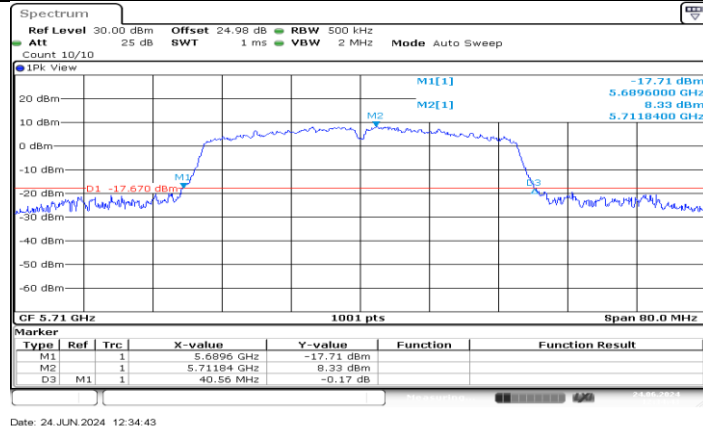
11N40MIMO_Ant2_5550



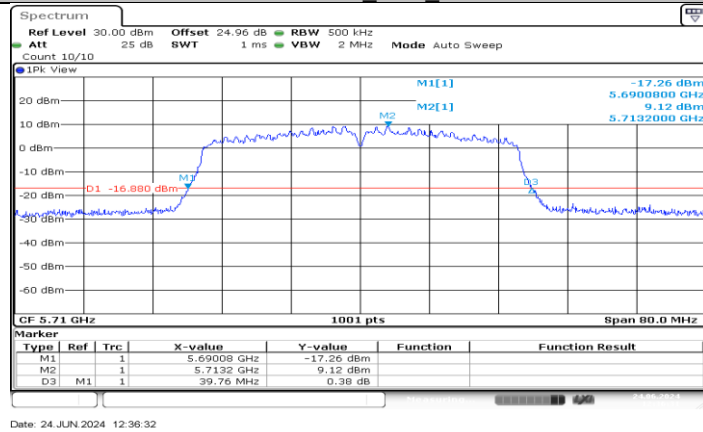
11N40MIMO_Ant1_5670



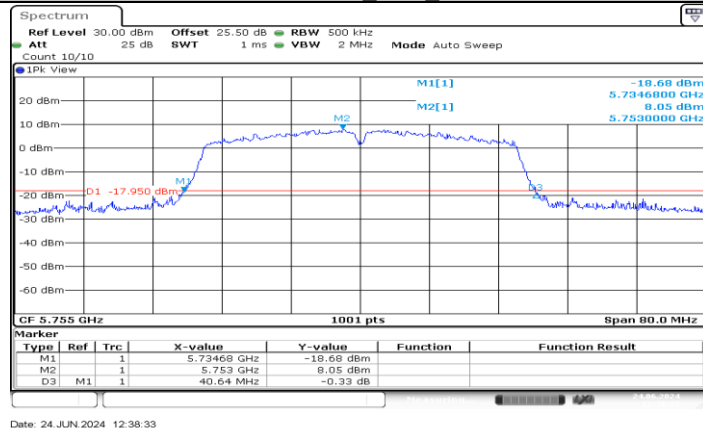
11N40MIMO_Ant2_5670



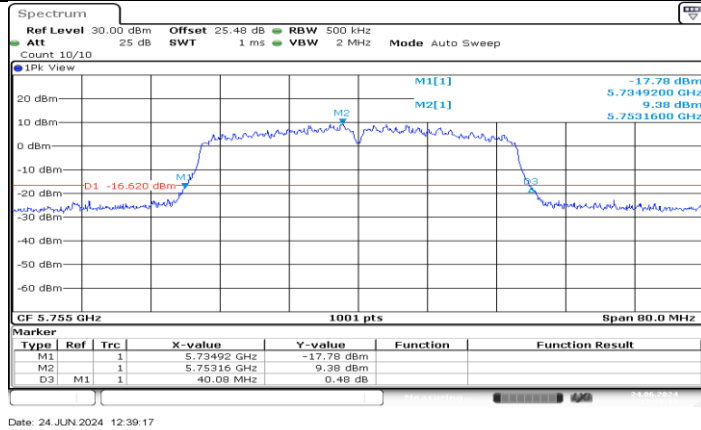
11N40MIMO Ant1 5710



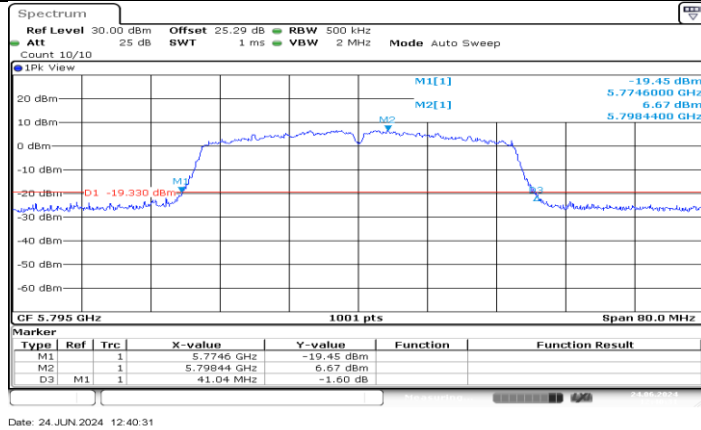
11N40MIMO Ant2 5710



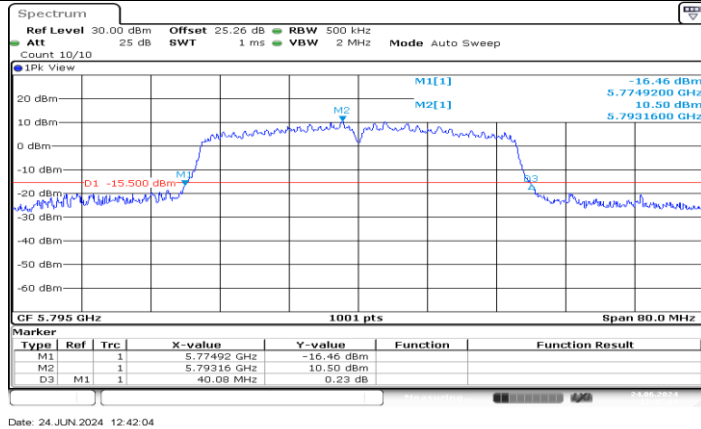
11N40MIMO Ant1 5755



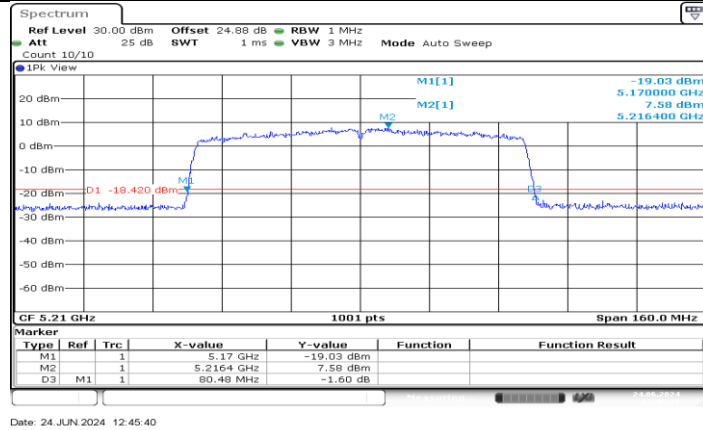
11N40MIMO_Ant2_5755



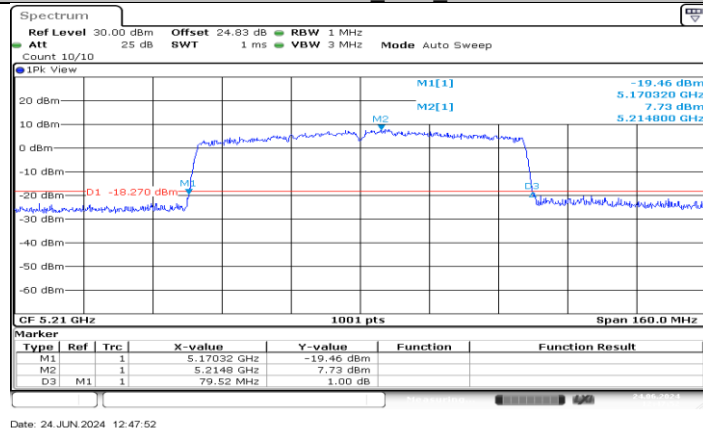
11N40MIMO_Ant1_5795



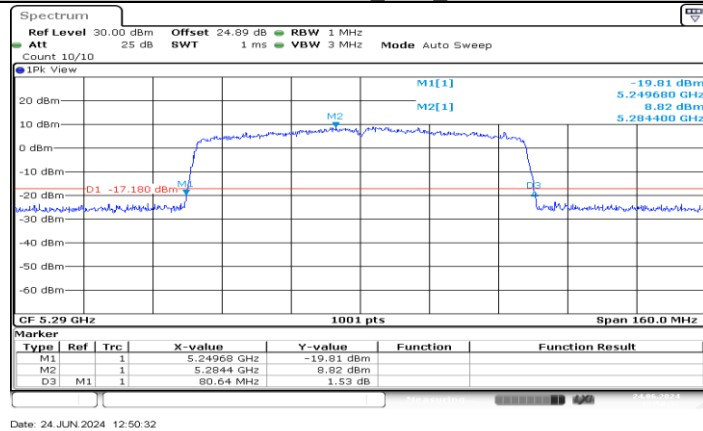
11N40MIMO_Ant2_5795



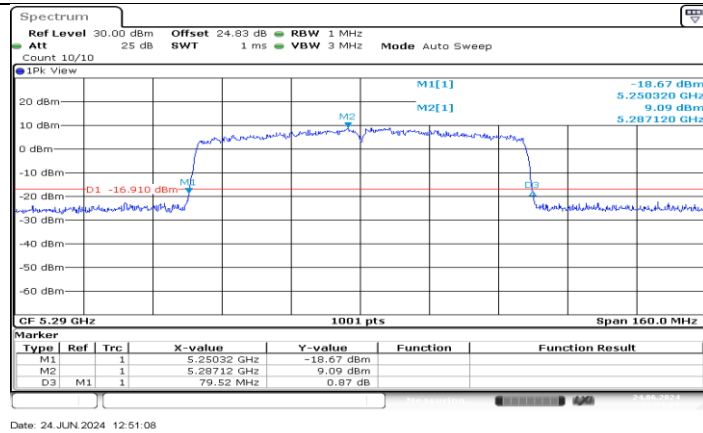
11AC80MIMO_Ant1_5210



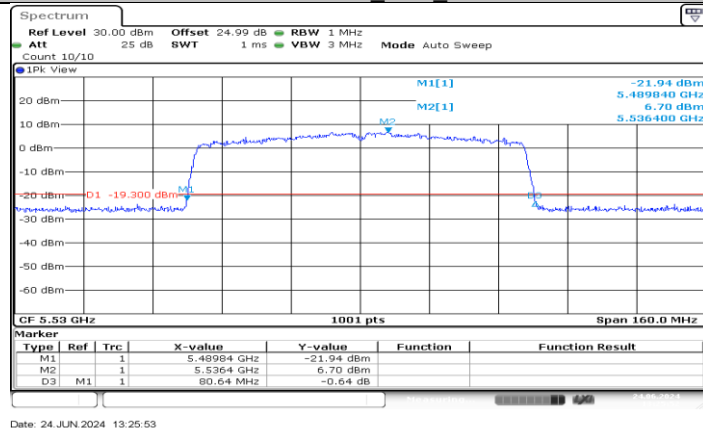
11AC80MIMO_Ant2_5210



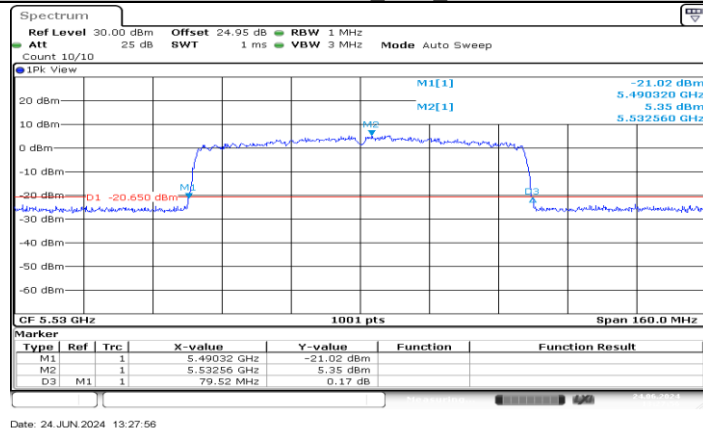
11AC80MIMO_Ant1_5290



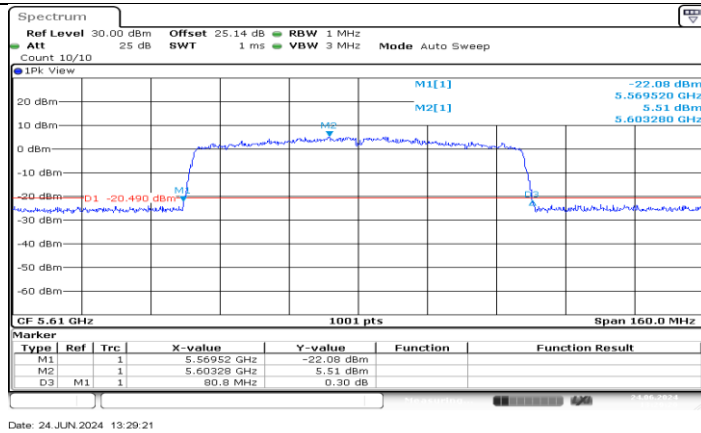
11AC80MIMO_Ant2_5290



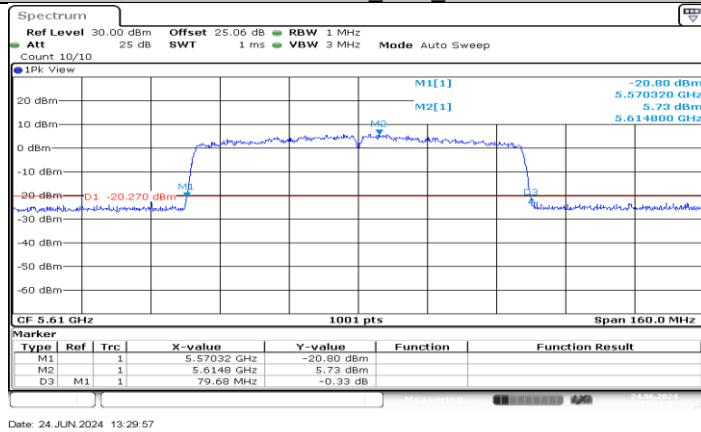
11AC80MIMO_Ant1_5530



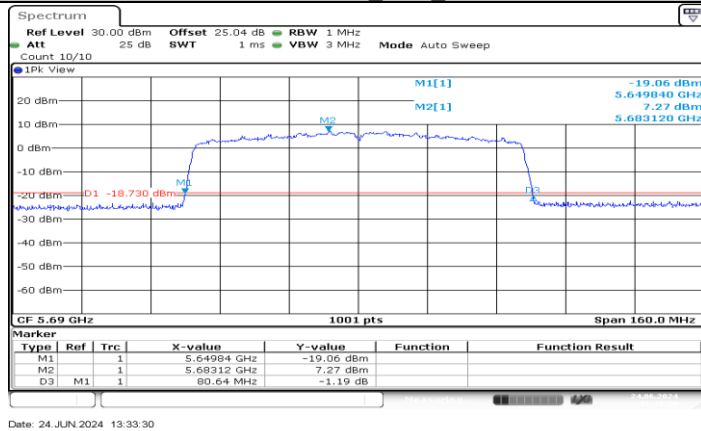
11AC80MIMO_Ant2_5530



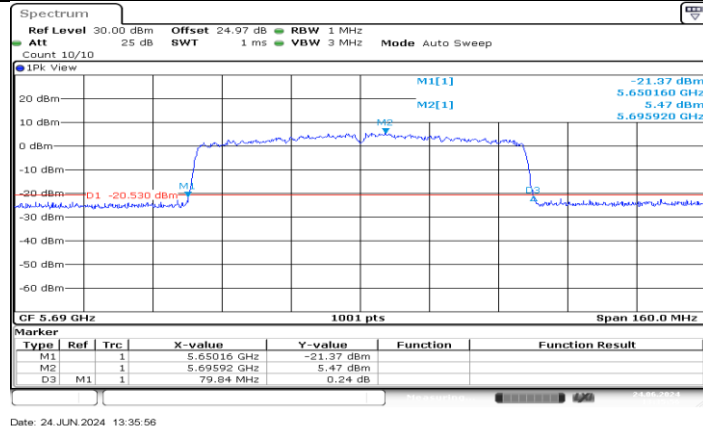
11AC80MIMO_Ant1_5610



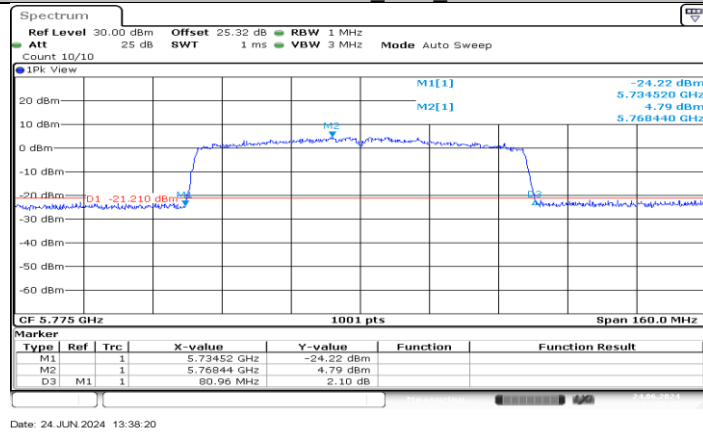
11AC80MIMO_Ant2_5610



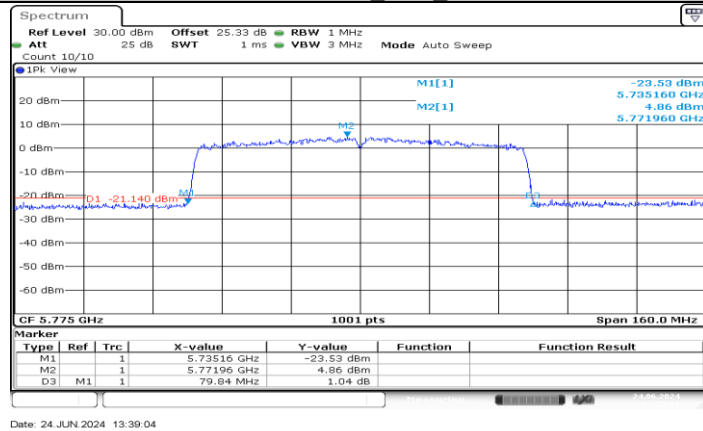
11AC80MIMO_Ant1_5690



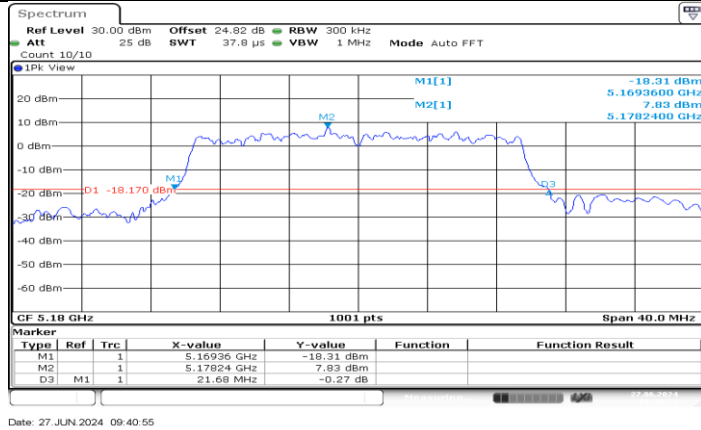
11AC80MIMO_Ant2_5690



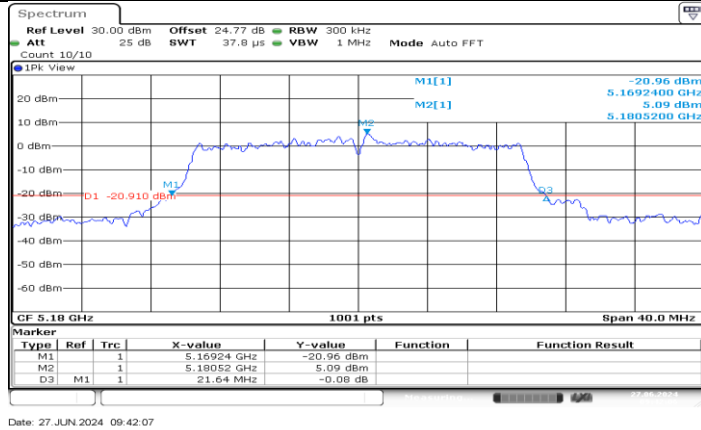
11AC80MIMO_Ant1_5775



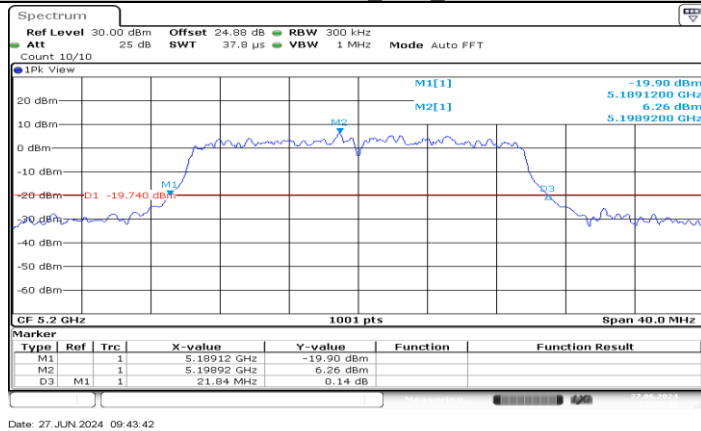
11AC80MIMO_Ant2_5775



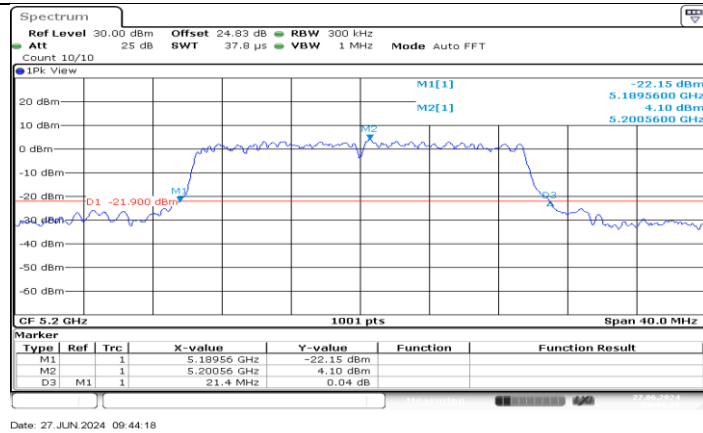
11AX20MIMO_Ant1_5180



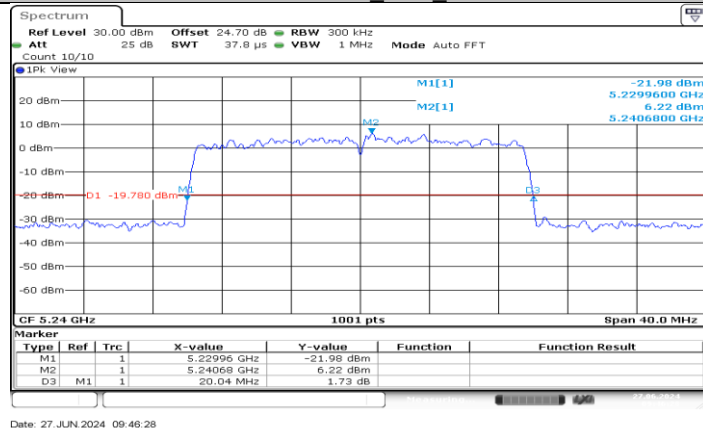
11AX20MIMO_Ant2_5180



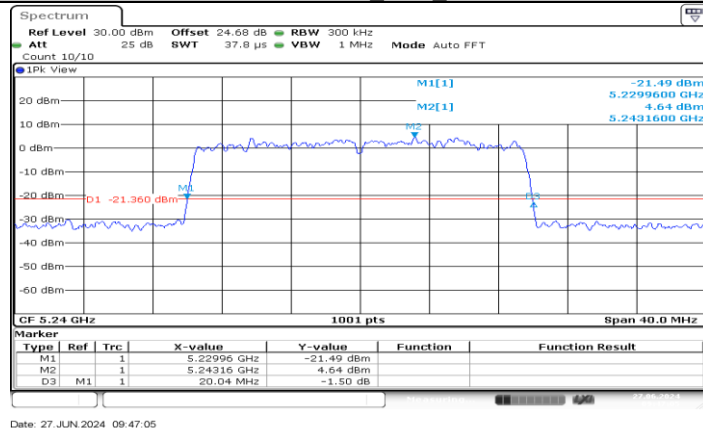
11AX20MIMO_Ant1_5200



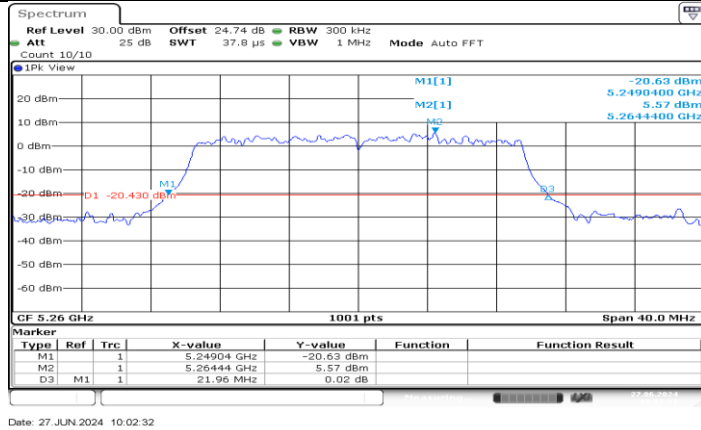
11AX20MIMO_Ant2_5200



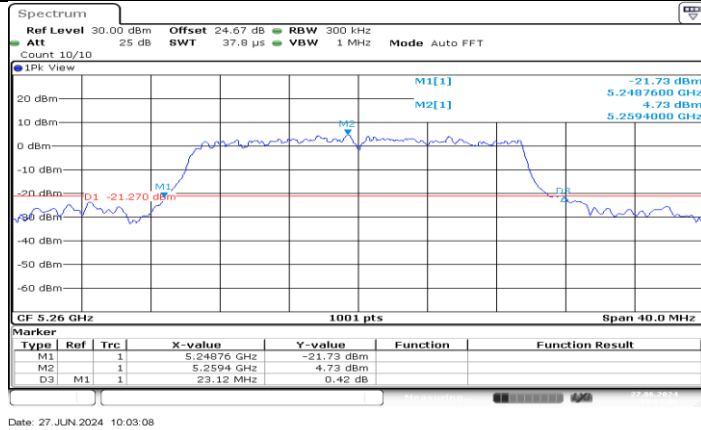
11AX20MIMO_Ant1_5240



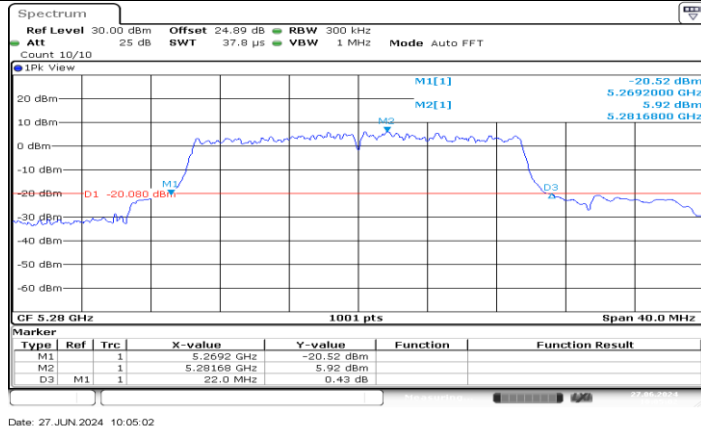
11AX20MIMO_Ant2_5240



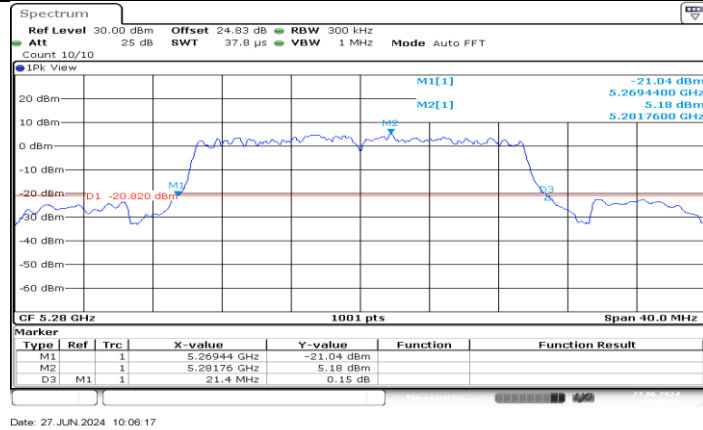
11AX20MIMO_Ant1_5260



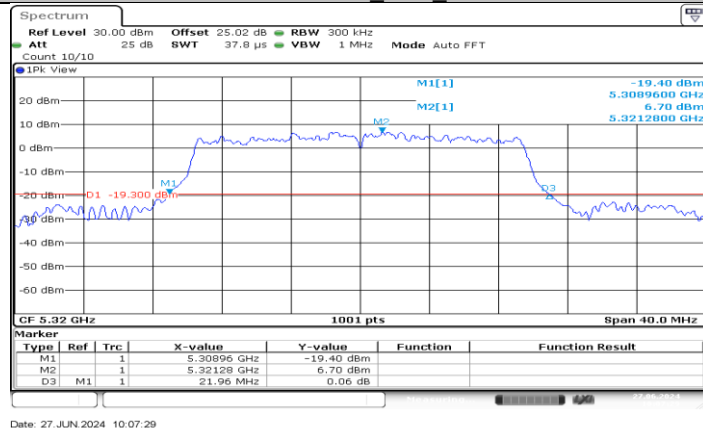
11AX20MIMO_Ant2_5260



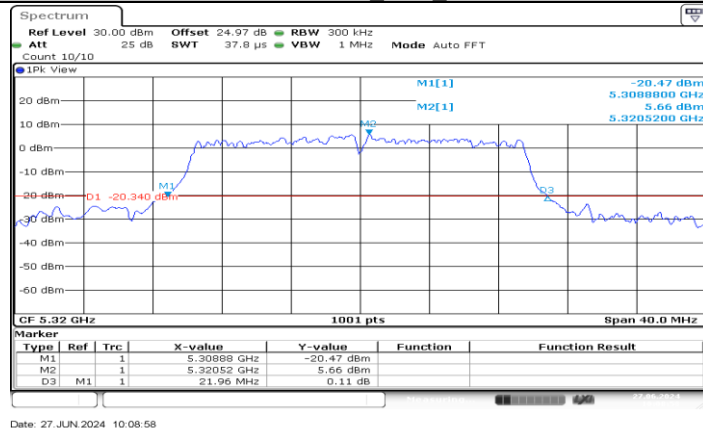
11AX20MIMO_Ant1_5280



11AX20MIMO_Ant2_5280



11AX20MIMO_Ant1_5320



11AX20MIMO_Ant2_5320