11N20MIMO_Ant1_5825

Date: 17.NOV.2023 19:00:47

11N20MIMO_Ant2_5825

Date: 5.DEC.2023 14:33:01

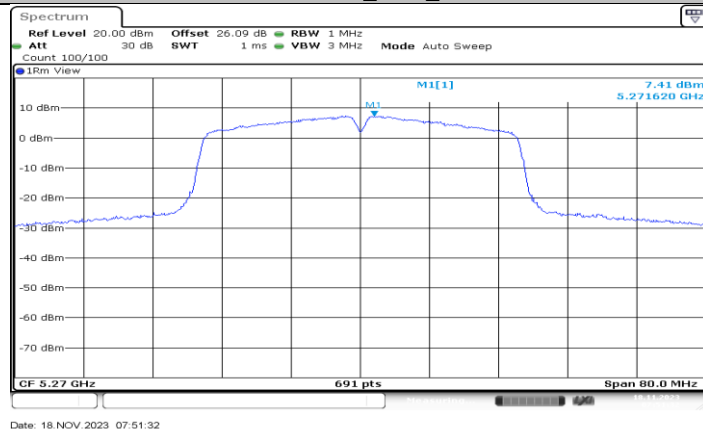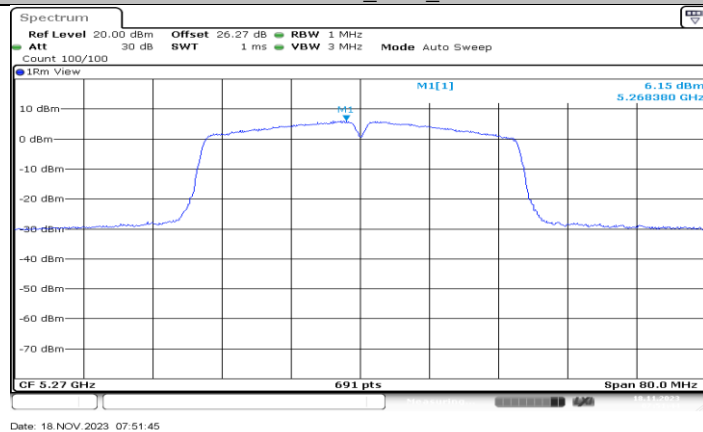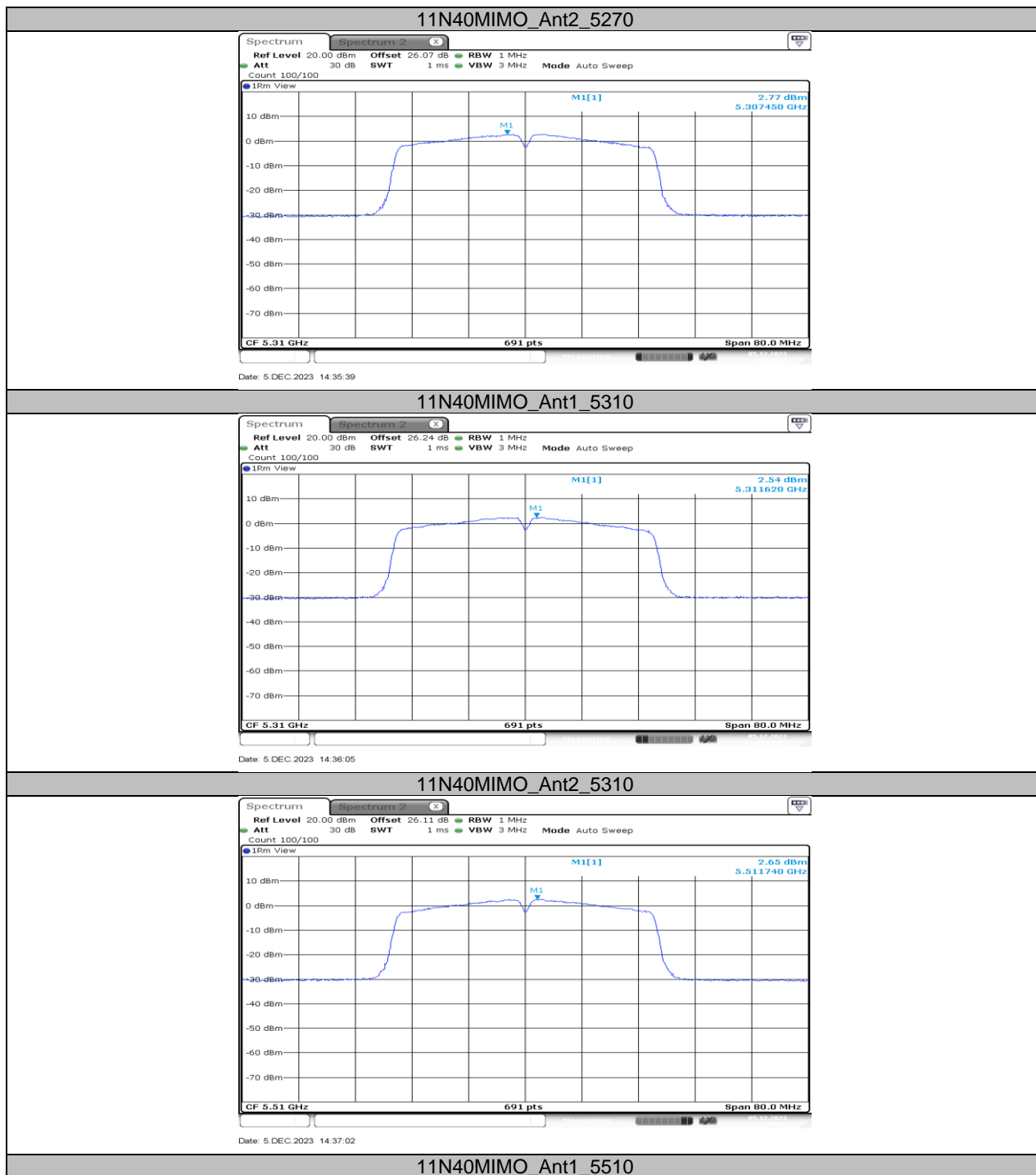| 11N40MIMO_Ant1_5190 |
|---|

Date: 5.DEC.2023 14:33:28

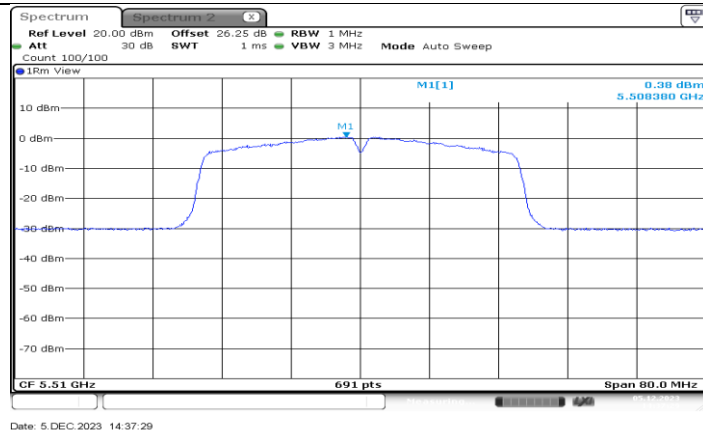| 11N40MIMO_Ant2_5190 |
|---|

11N40MIMO_Ant1_5230

11N40MIMO_Ant2_5230

11N40MIMO_Ant1_5270

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch   FORM NO: 10-SL-F0035

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11N40MIMO_Ant2_5270

Date: 5.DEC.2023 14:35:39

11N40MIMO_Ant1_5310

Date: 5.DEC.2023 14:36:05

11N40MIMO_Ant2_5310

Date: 5.DEC.2023 14:37:02

11N40MIMO_Ant1_5510

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch   FORM NO: 10-SL-F0035

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.
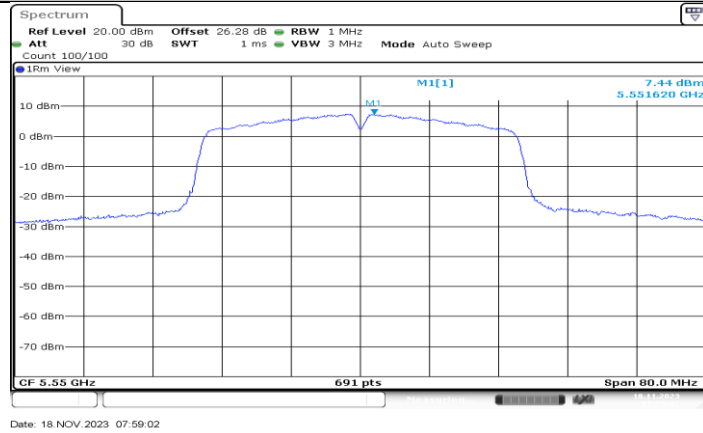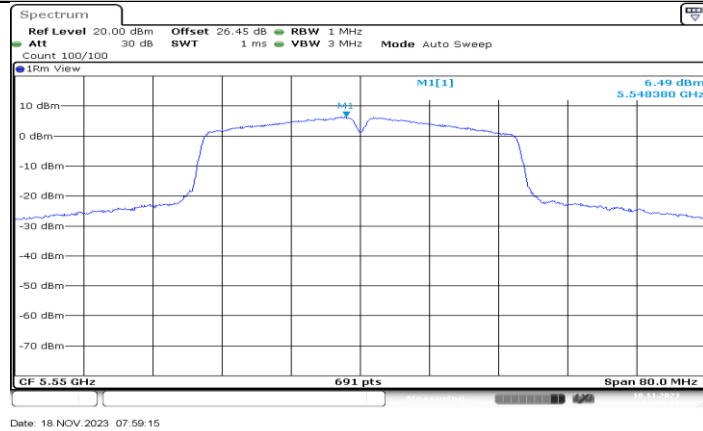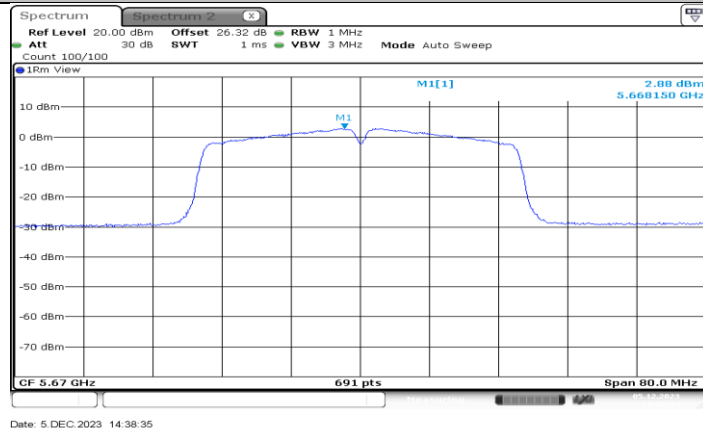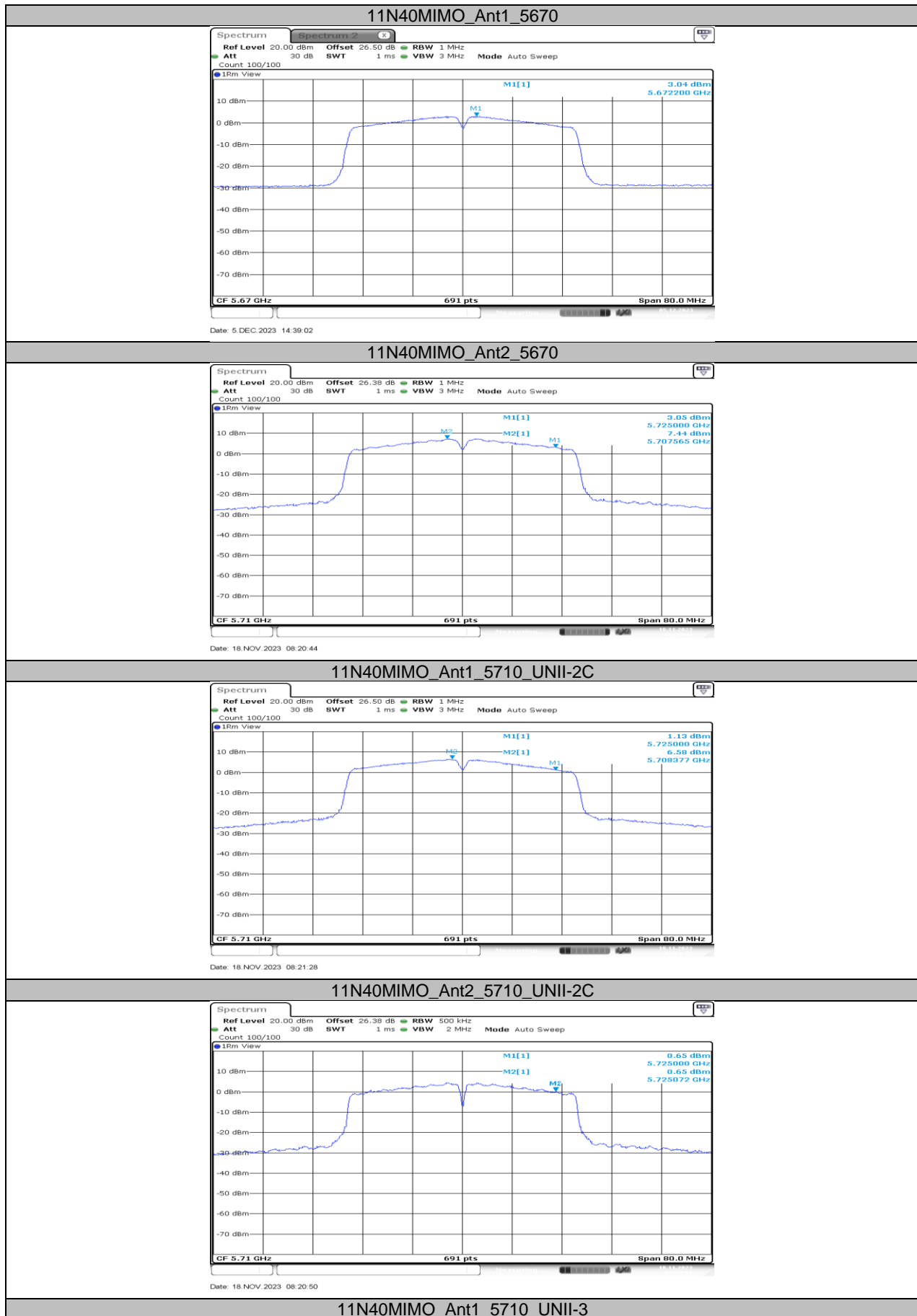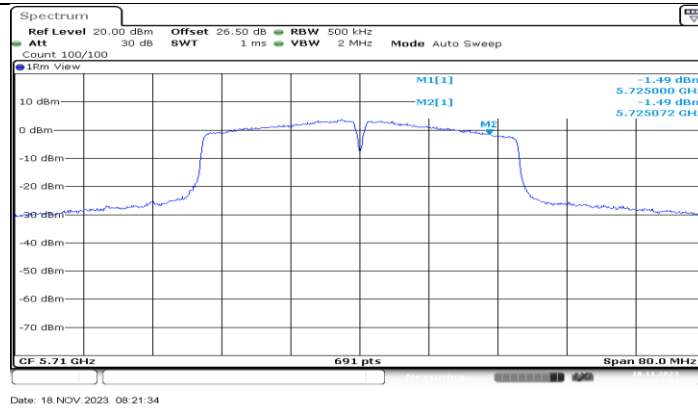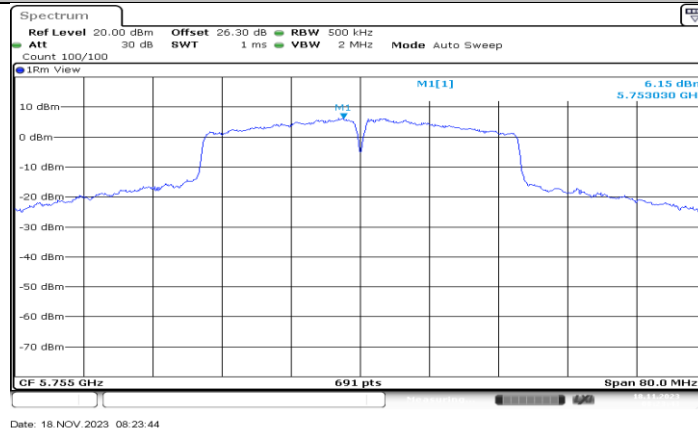
11N40MIMO_Ant2_5510

11N40MIMO_Ant1_5550

11N40MIMO_Ant2_5550

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch   FORM NO: 10-SL-F0035

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11N40MIMO_Ant1_5670
Date: 5.DEC.2023 14:39:02

11N40MIMO_Ant2_5670
Date: 18.NOV.2023 08:20:44

11N40MIMO_Ant1_5710_UNII-2C
Date: 18.NOV.2023 08:21:28

11N40MIMO_Ant2_5710_UNII-2C
Date: 18.NOV.2023 08:20:50

11N40MIMO_Ant1_5710_UNII-3

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch   FORM NO: 10-SL-F0035

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.
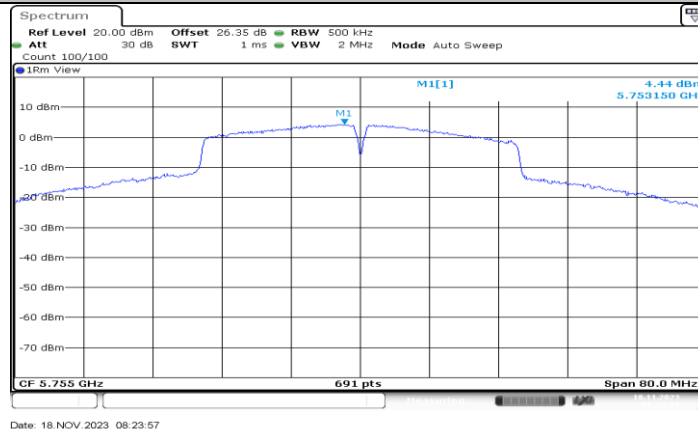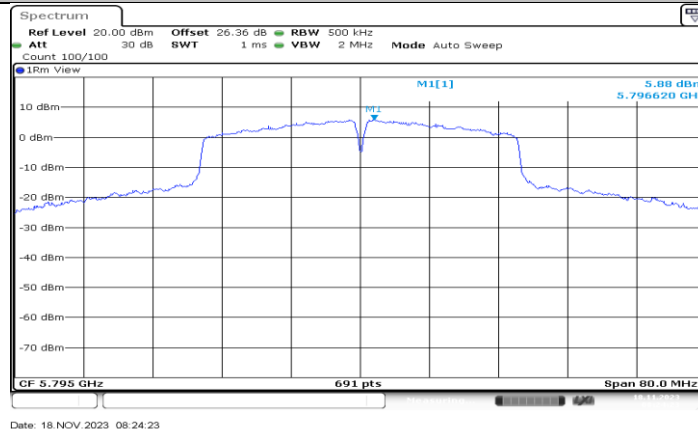
11N40MIMO_Ant2_5710_UNII-3
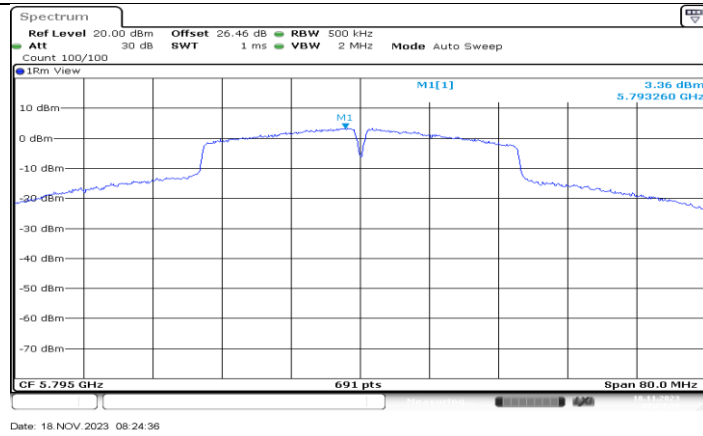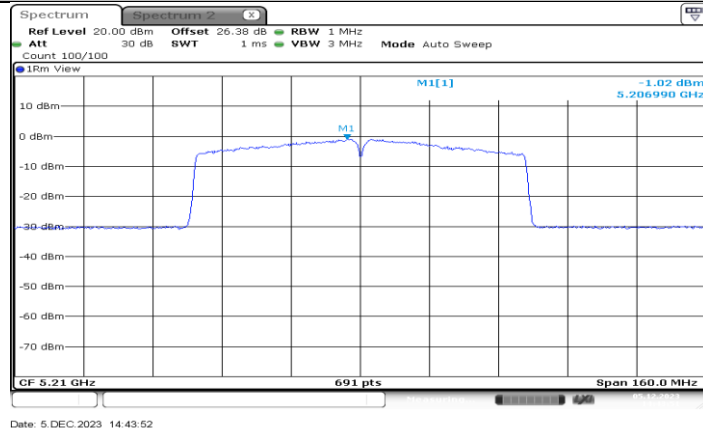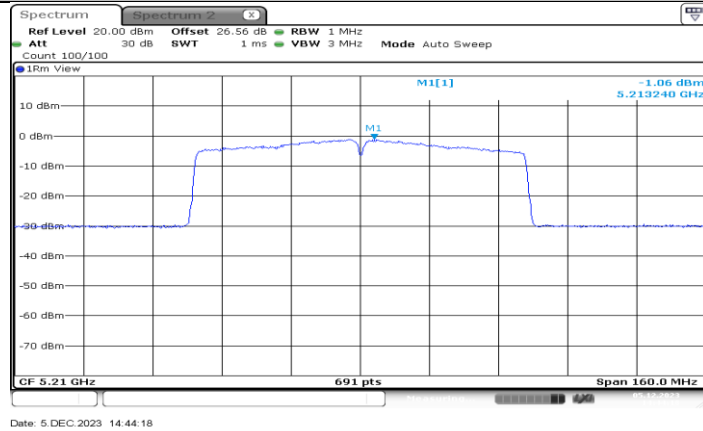

11N40MIMO_Ant1_5755

11N40MIMO_Ant2_5755

11N40MIMO_Ant1_5795

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch   FORM NO: 10-SL-F0035

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.
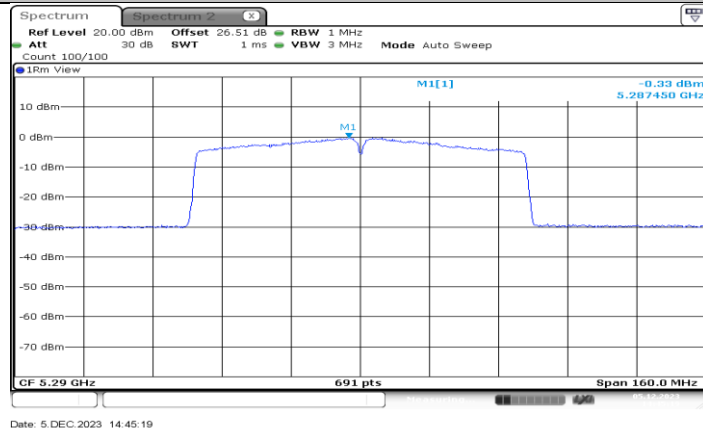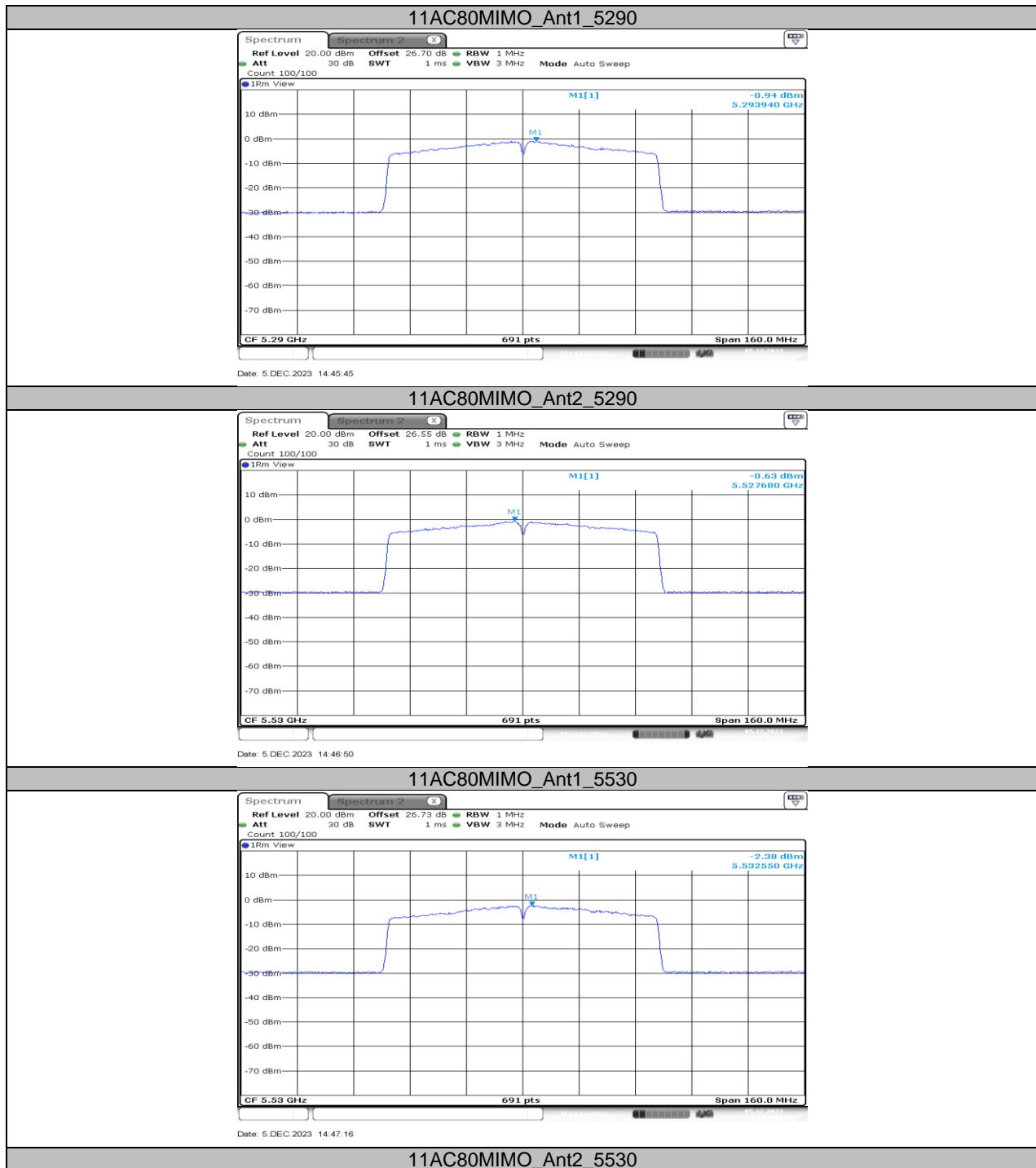
11N40MIMO_Ant2_5795

11AC80MIMO_Ant1_5210

11AC80MIMO_Ant2_5210

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch   FORM NO: 10-SL-F0035

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

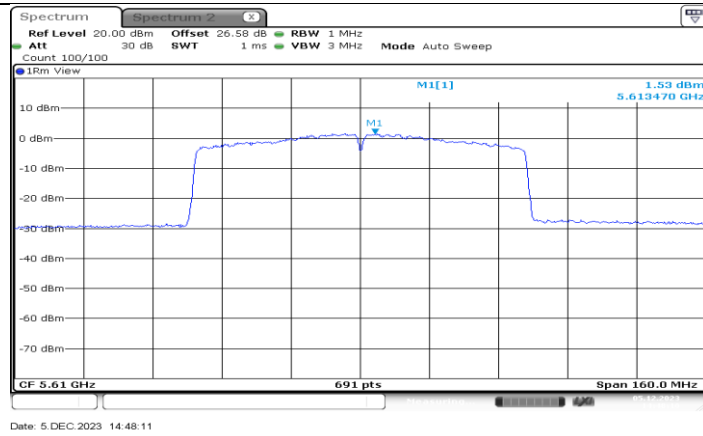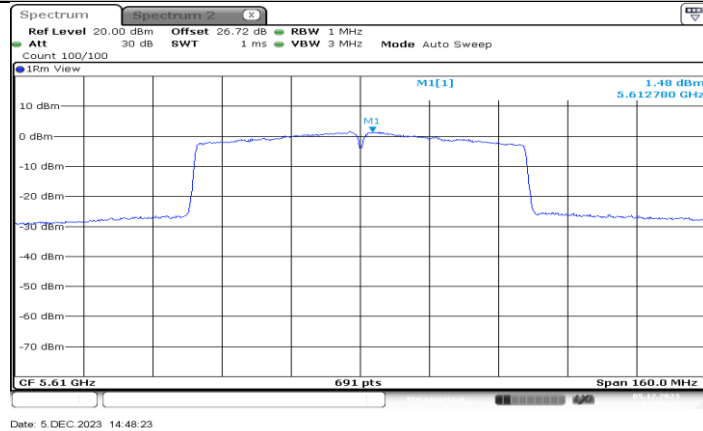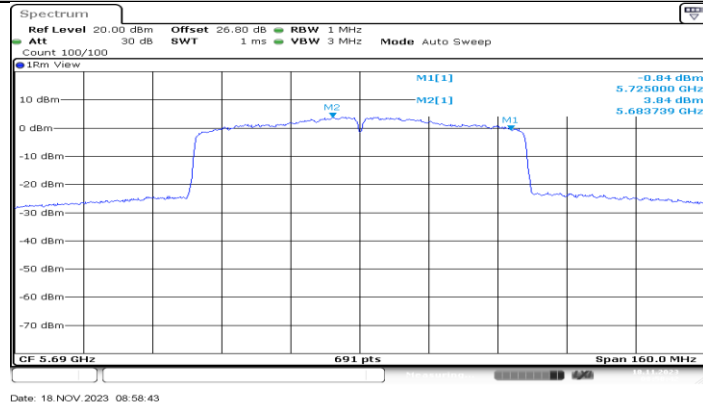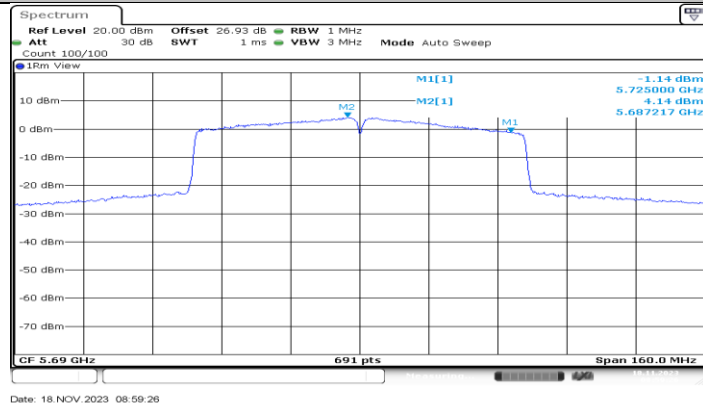| 11AC80MIMO_Ant1_5290 |
|---|
| |
| 11AC80MIMO_Ant2_5290 |
| |
| 11AC80MIMO_Ant1_5530 |
| |
| 11AC80MIMO_Ant2_5530 |

11AC80MIMO_Ant1_5610
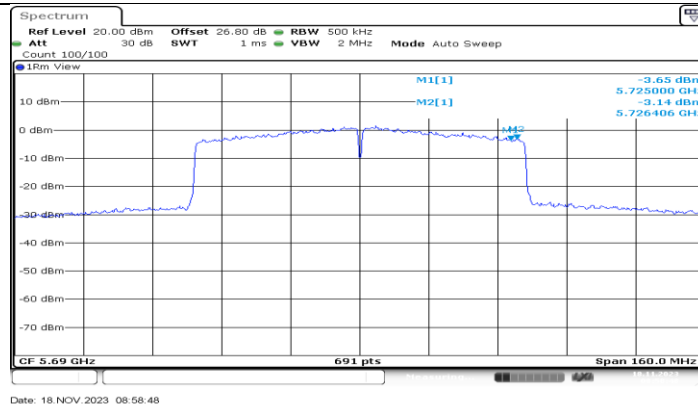

11AC80MIMO_Ant2_5610

11AC80MIMO_Ant1_5690_UNII-2C

11AC80MIMO_Ant2_5690_UNII-2C

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch   FORM NO: 10-SL-F0035

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.
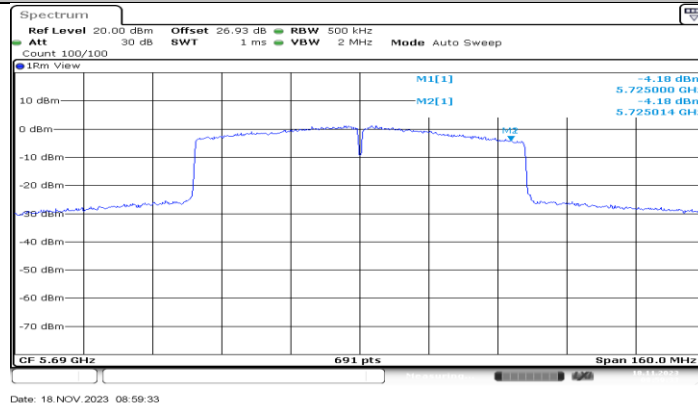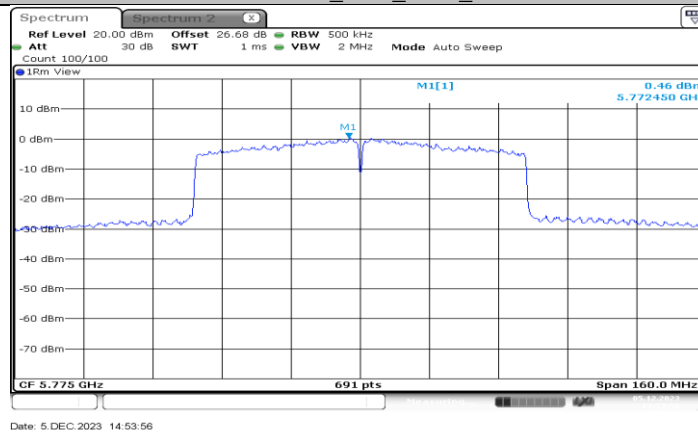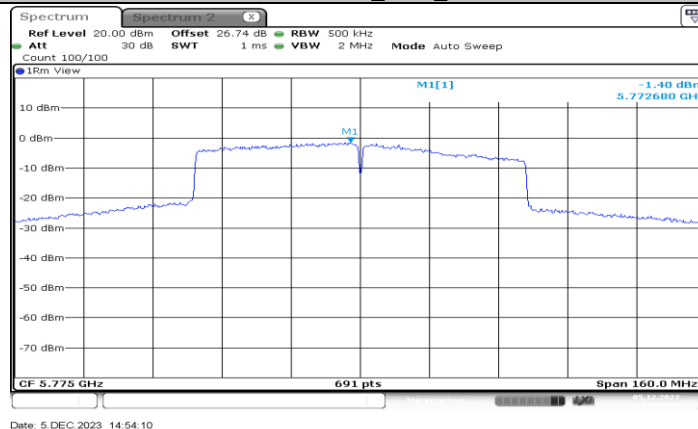
11AC80MIMO_Ant1_5690_UNII-3
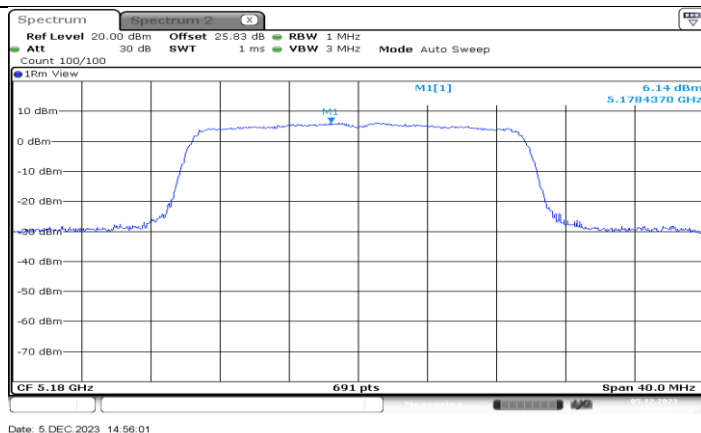

11AC80MIMO_Ant2_5690_UNII-3

11AC80MIMO_Ant1_5775

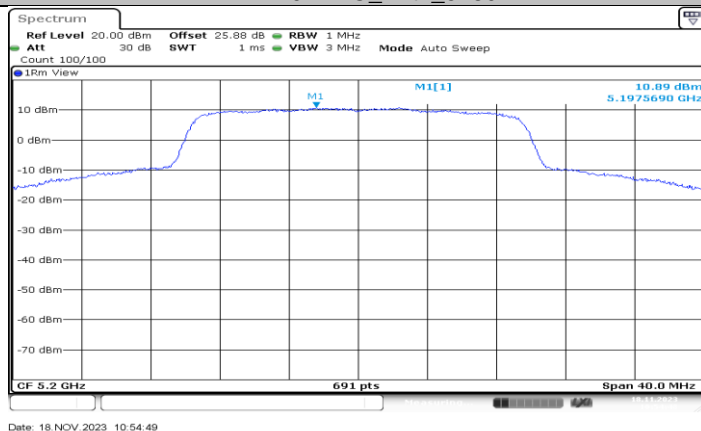11AC80MIMO_Ant2_5775

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch   FORM NO: 10-SL-F0035

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11AX20MIMO_Ant1_5180
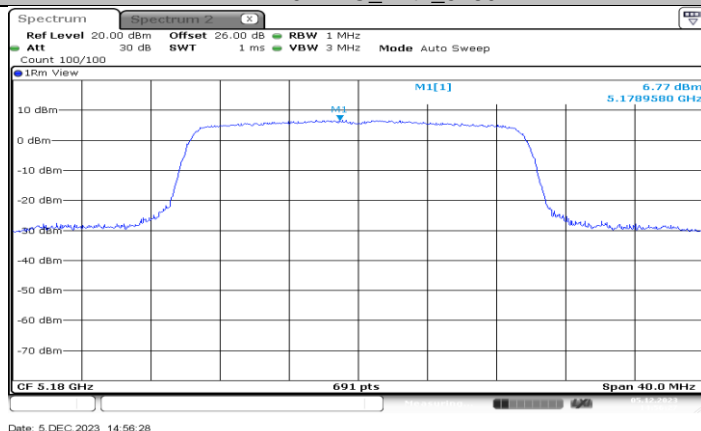
11AX20MIMO_Ant2_5180

11AX20MIMO_Ant1_5200

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch   FORM NO: 10-SL-F0035

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11AX20MIMO_Ant2_5200

Date: 18.NOV.2023 10:58:42

11AX20MIMO_Ant1_5240

Date: 18.NOV.2023 10:58:54

11AX20MIMO_Ant2_5240

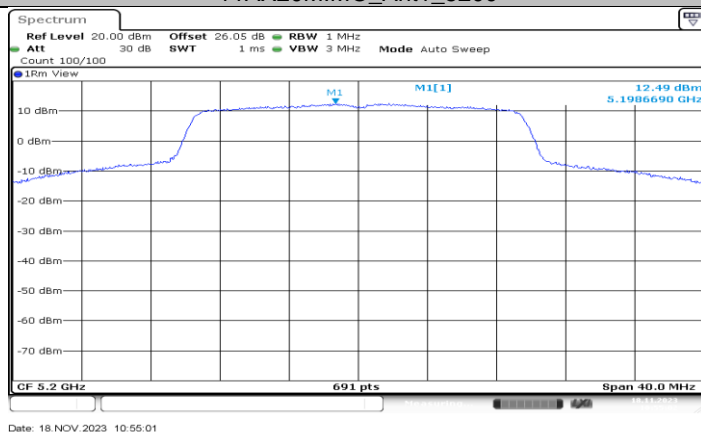Date: 18.NOV.2023 11:06:48

11AX20MIMO_Ant1_5260
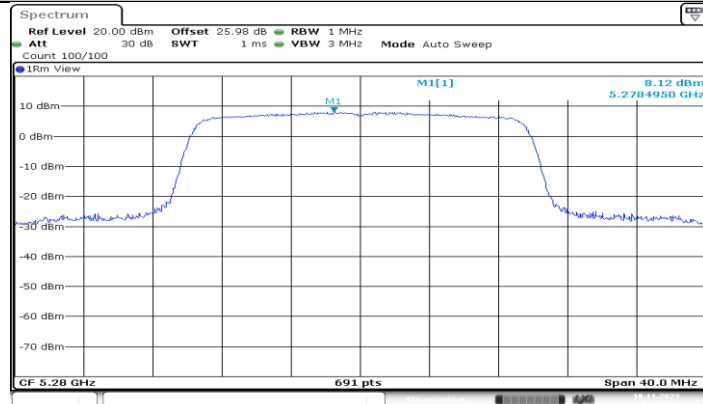
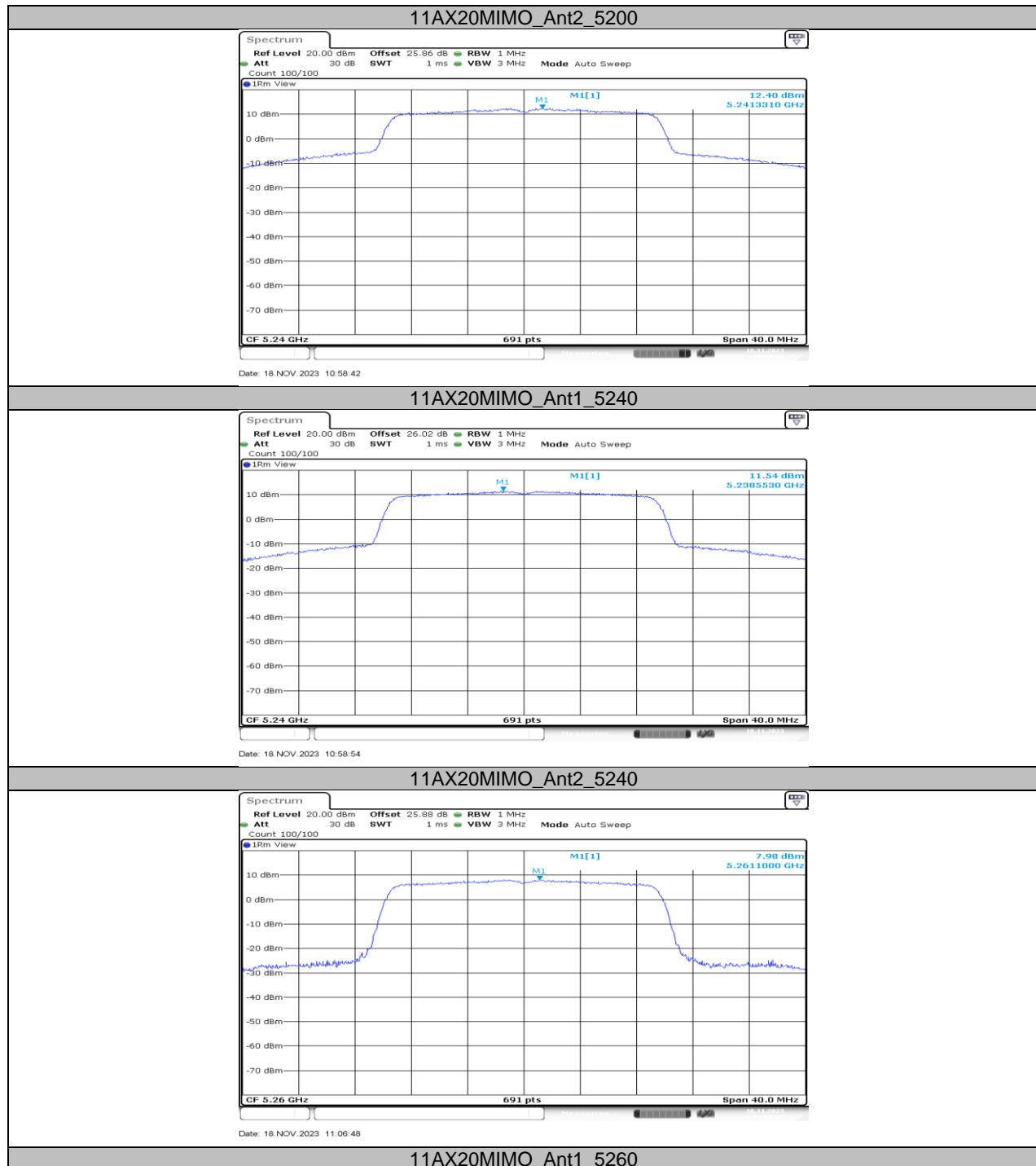11AX20MIMO_Ant2_5260
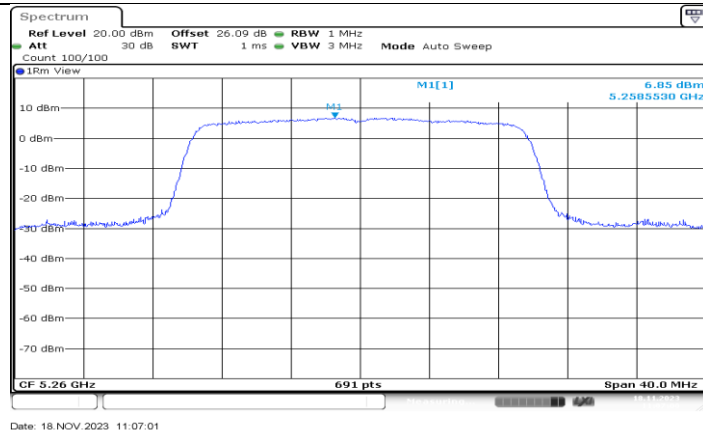

11AX20MIMO_Ant1_5280

11AX20MIMO_Ant2_5280

11AX20MIMO_Ant1_5320

Date: 18.NOV.2023 11:10:36

11AX20MIMO_Ant2_5320

Date: 5.DEC.2023 14:57:28

11AX20MIMO_Ant1_5500

Date: 5.DEC.2023 14:57:41

11AX20MIMO_Ant2_5500

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch   FORM NO: 10-SL-F0035

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

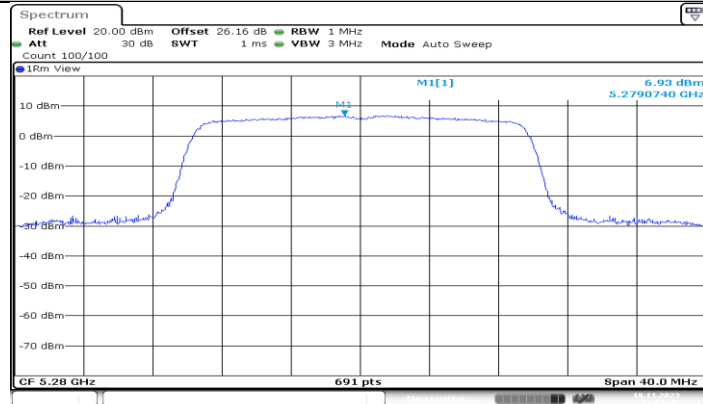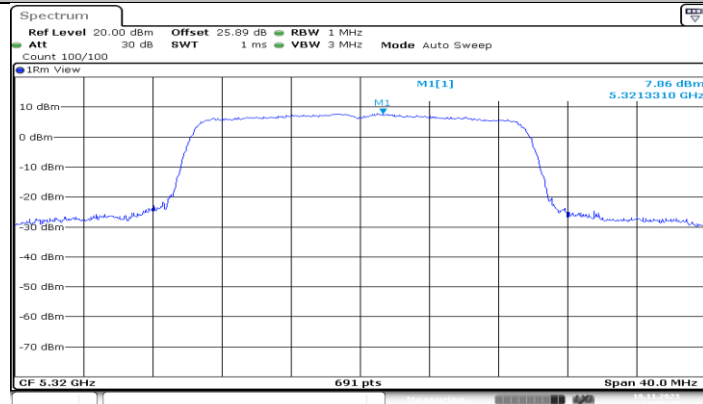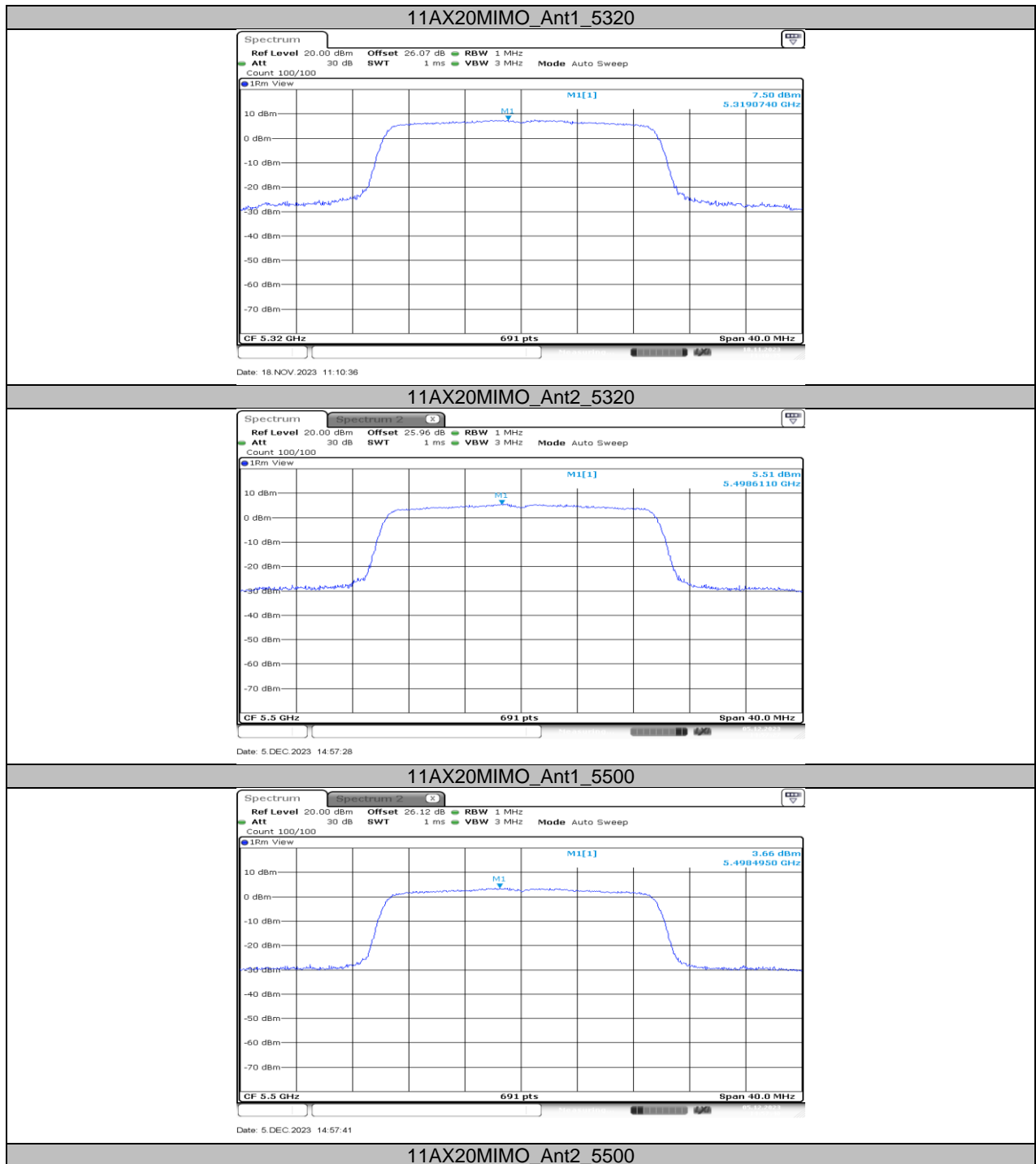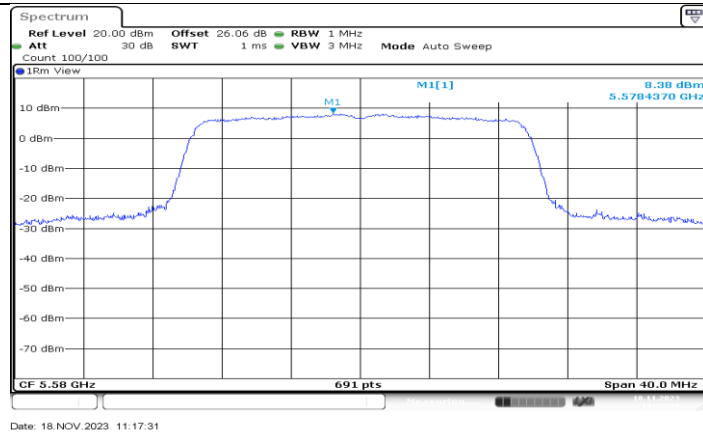11AX20MIMO_Ant1_5580
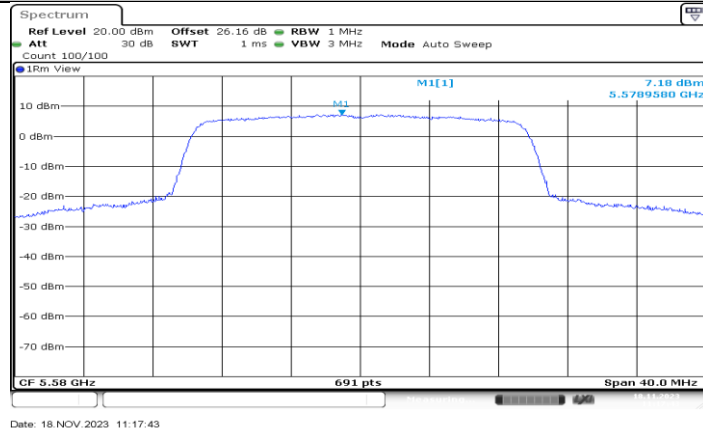
11AX20MIMO_Ant2_5580

11AX20MIMO_Ant1_5700

11AX20MIMO_Ant2_5700

11AX20MIMO_Ant1_5720_UNII-2C

11AX20MIMO_Ant2_5720_UNII-2C

11AX20MIMO_Ant1_5720_UNII-3

11AX20MIMO_Ant2_5720_UNII-3

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch   FORM NO: 10-SL-F0035

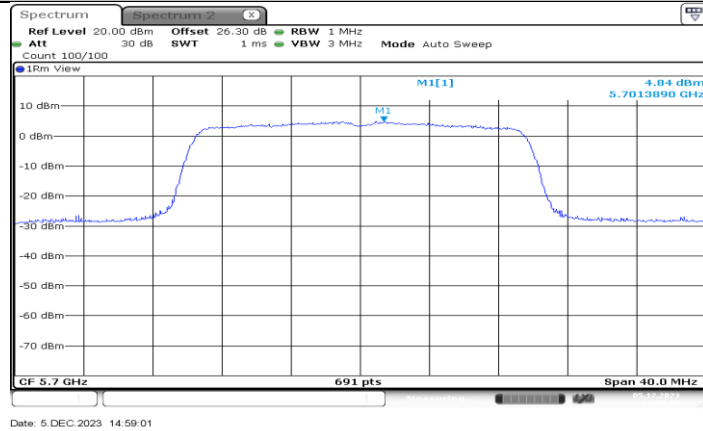*This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.*
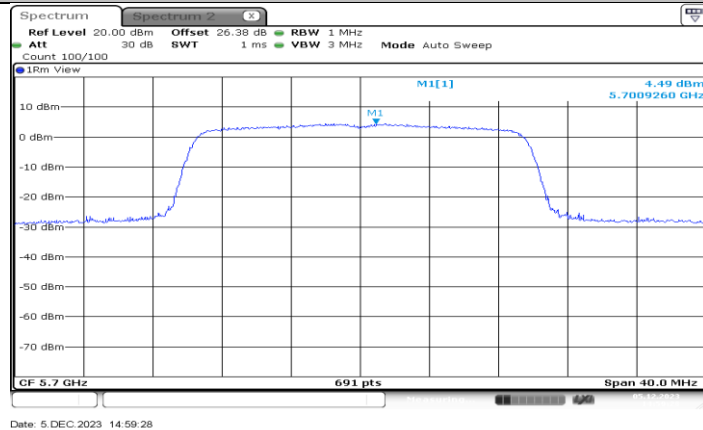
11AX20MIMO_Ant1_5745
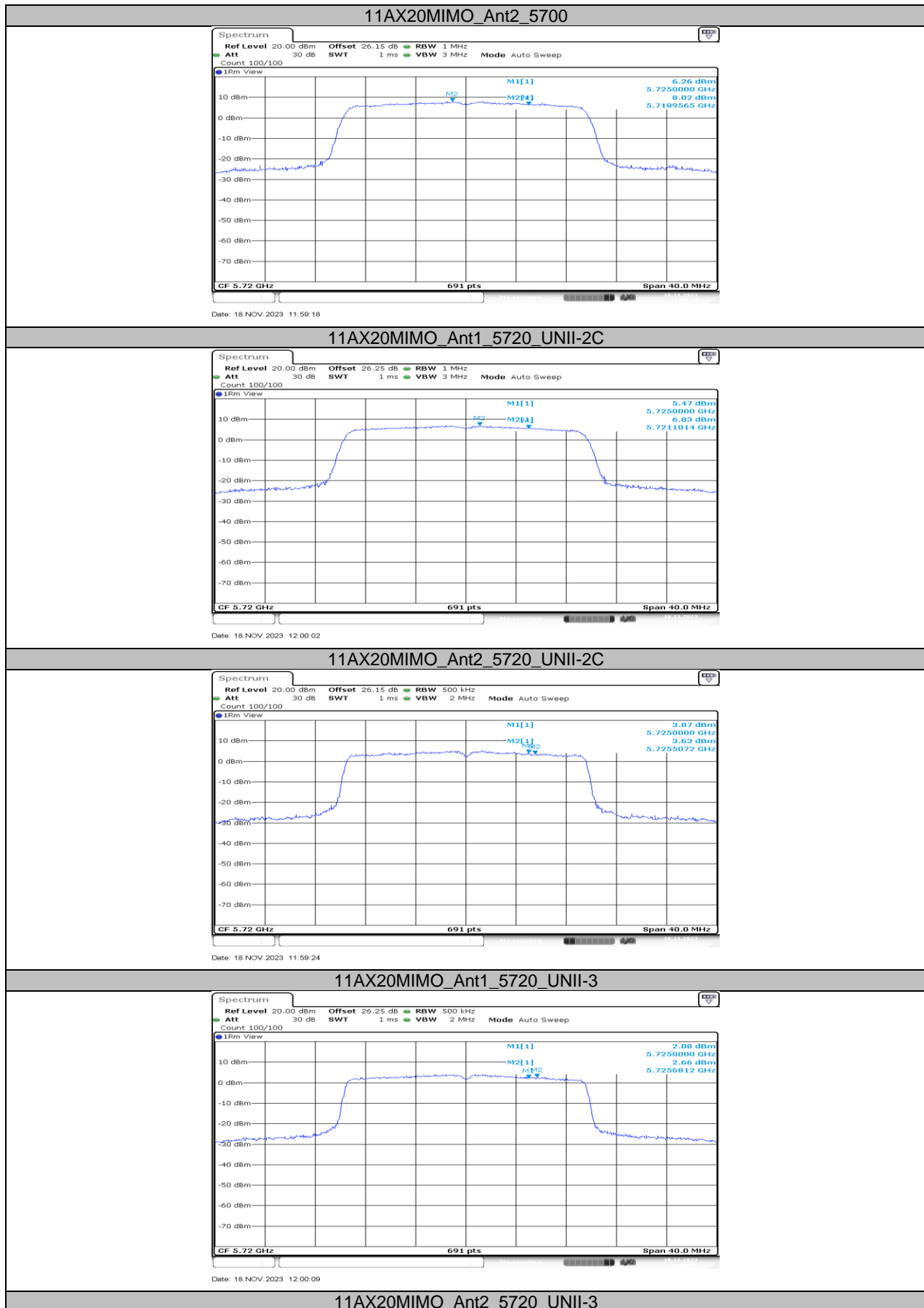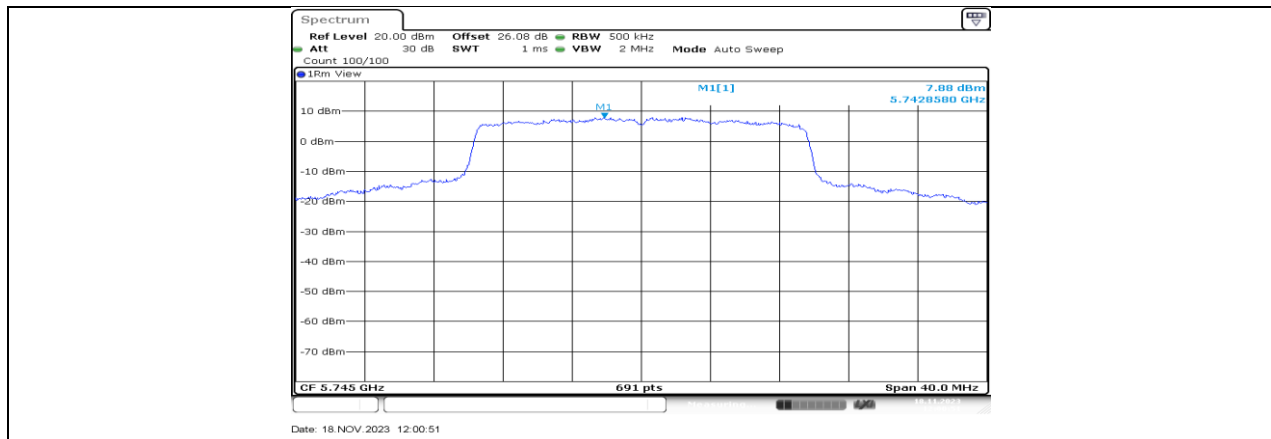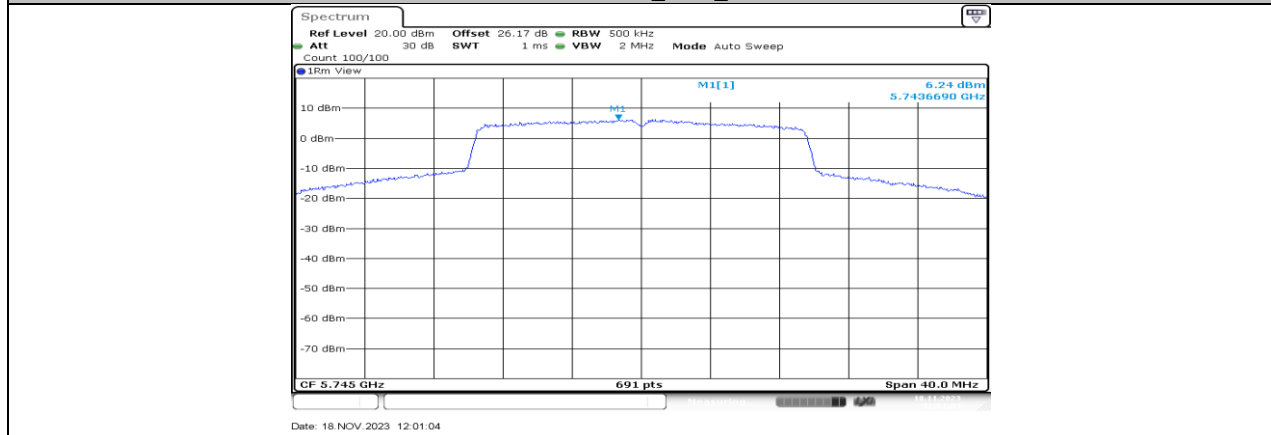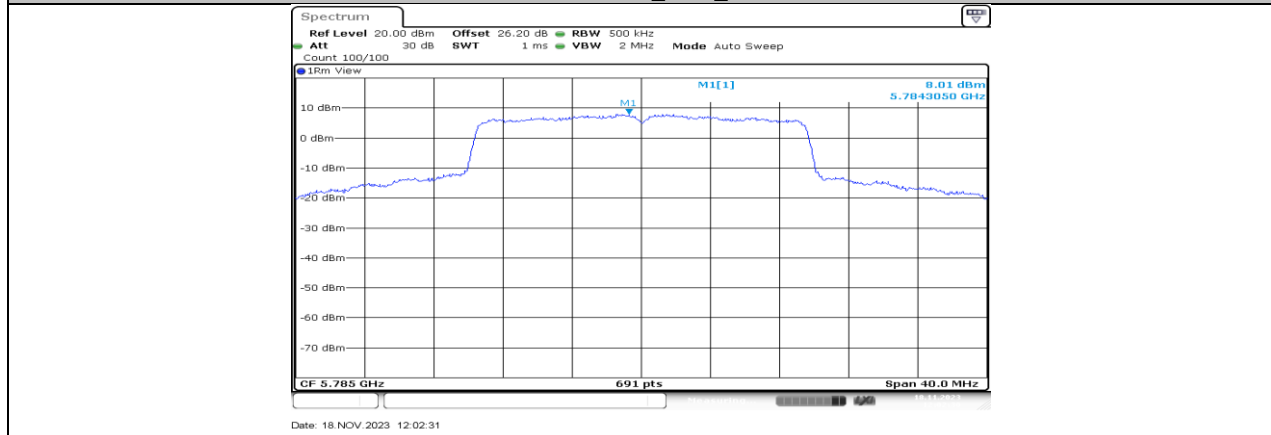

11AX20MIMO_Ant2_5745

11AX20MIMO_Ant1_5785

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch   FORM NO: 10-SL-F0035

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11AX20MIMO_Ant2_5785
11AX20MIMO_Ant1_5825
11AX20MIMO_Ant2_5825
11AX40MIMO_Ant1_5190

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch   FORM NO: 10-SL-F0035

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Date: 5.DEC.2023 15:03:42

11AX40MIMO_Ant2_5190

Date: 5.DEC.2023 15:05:24

11AX40MIMO_Ant1_5230

Date: 5.DEC.2023 15:05:37

11AX40MIMO_Ant2_5230

Date: 18.NOV.2023 12:08:22

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch   FORM NO: 10-SL-F0035

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11AX40MIMO_Ant1_5270
11AX40MIMO_Ant2_5270
11AX40MIMO_Ant1_5310
11AX40MIMO_Ant2_5310

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch   FORM NO: 10-SL-F0035

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.
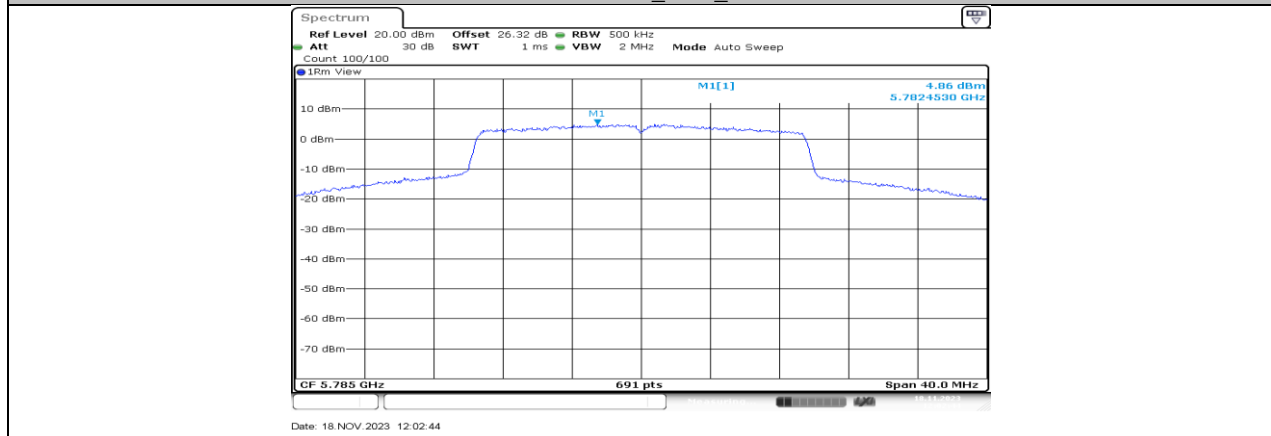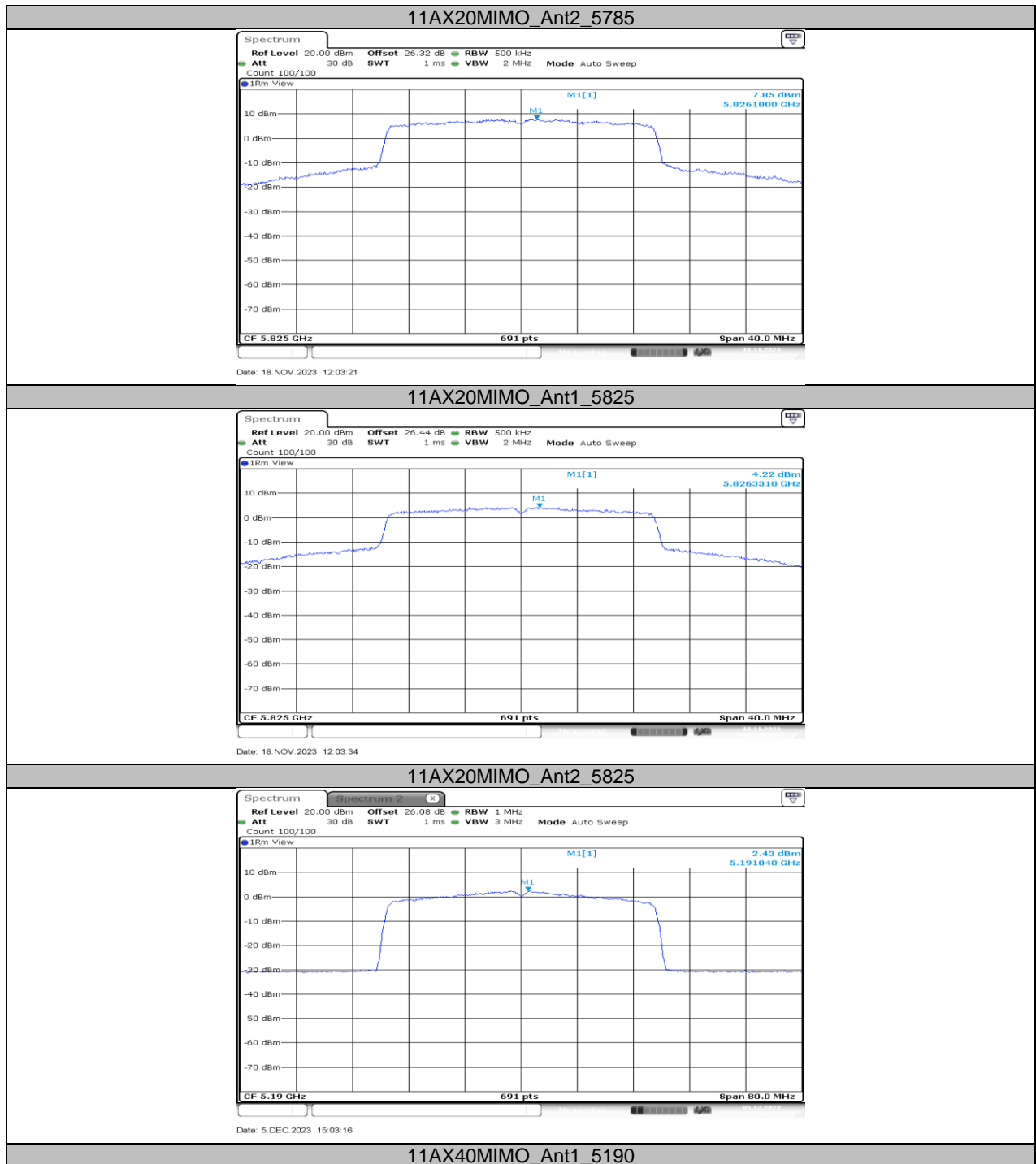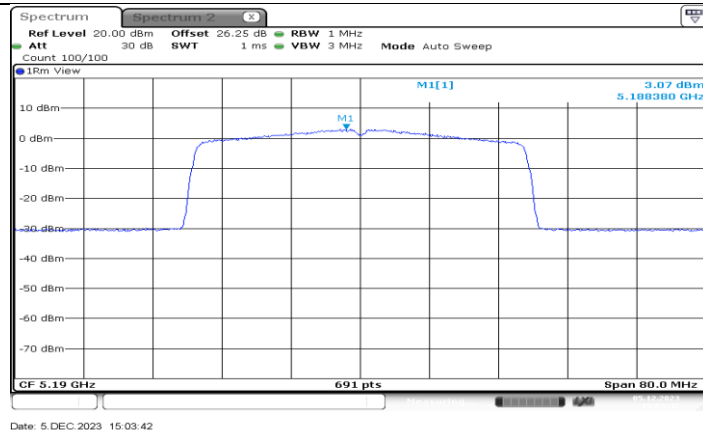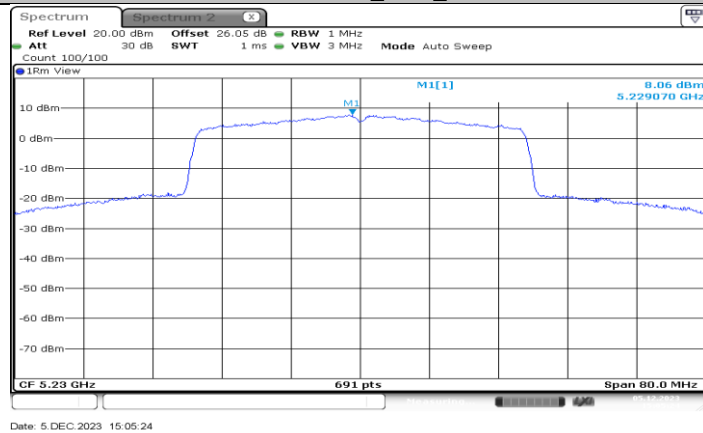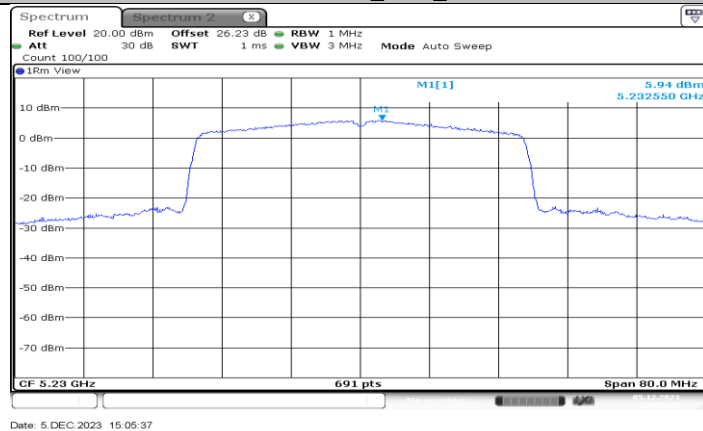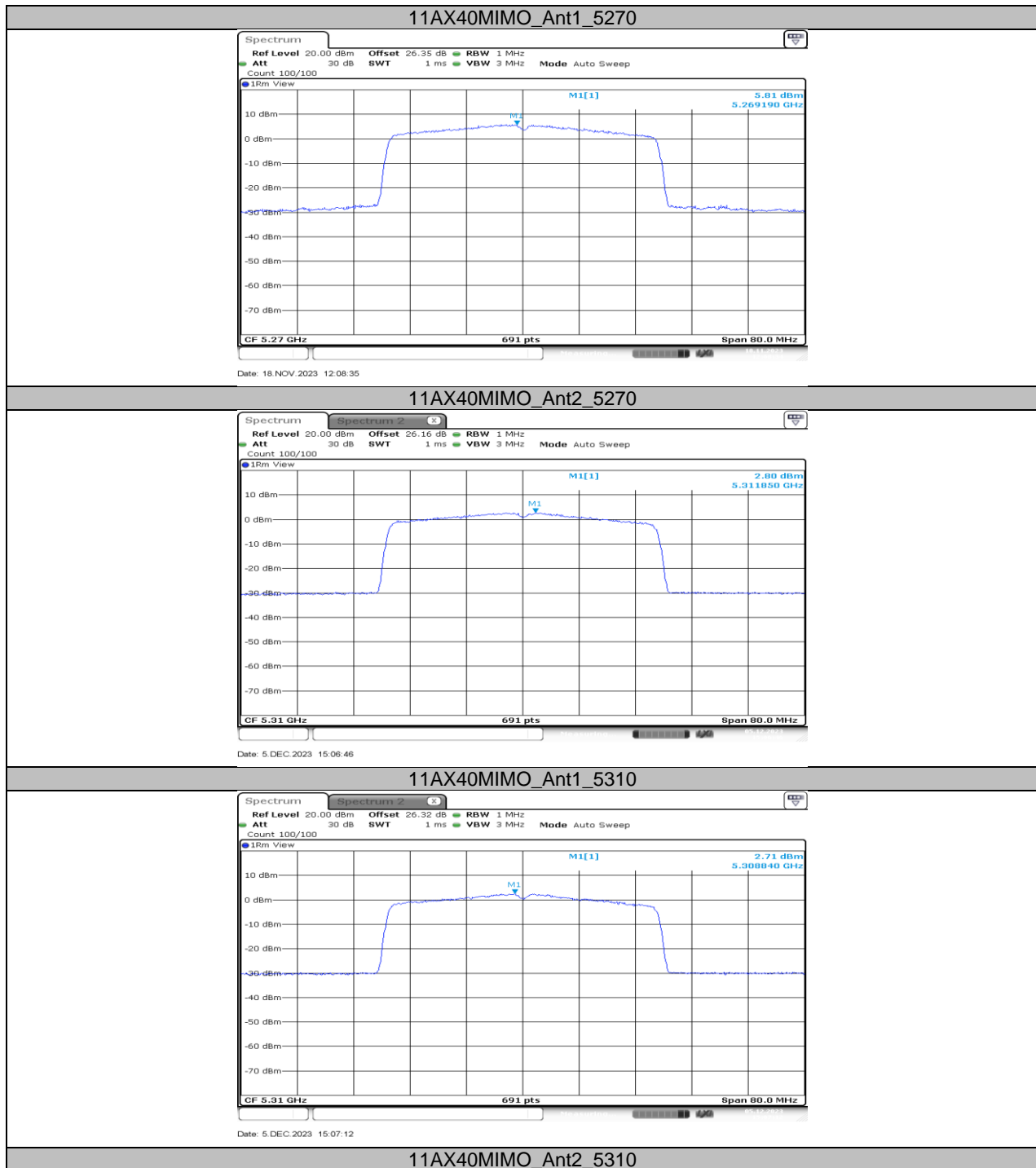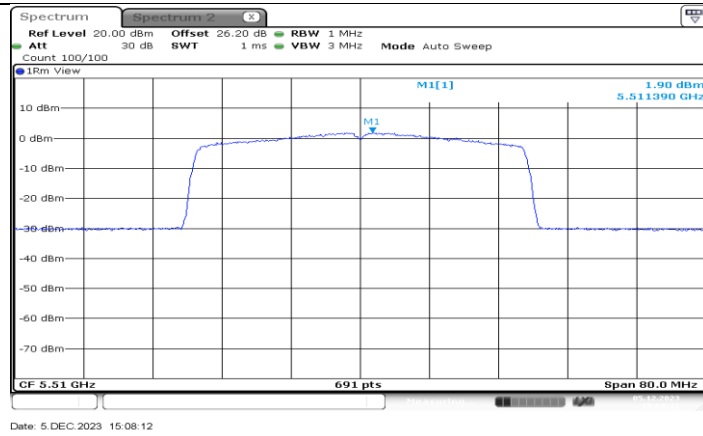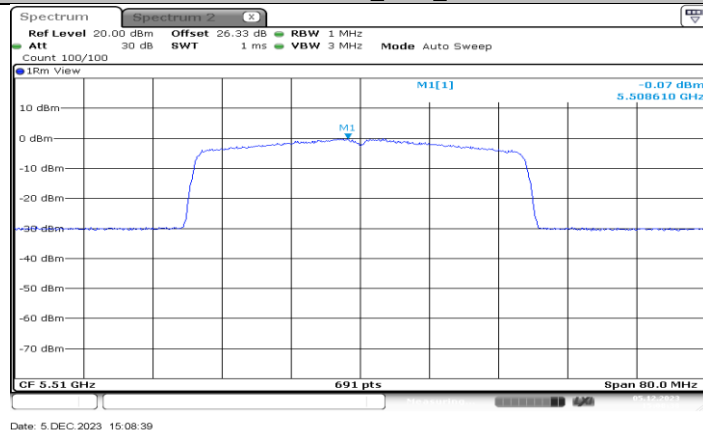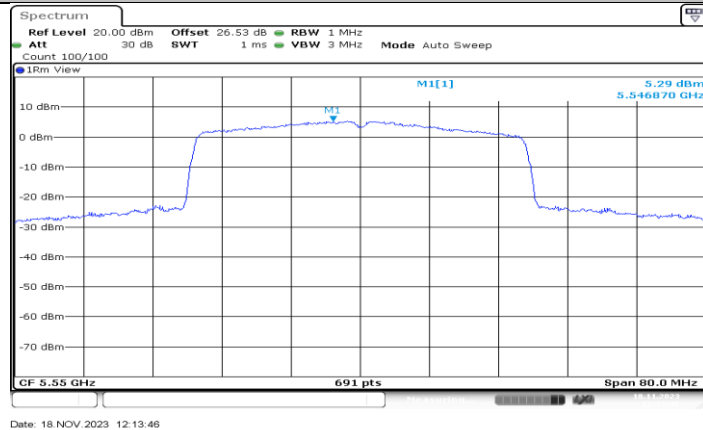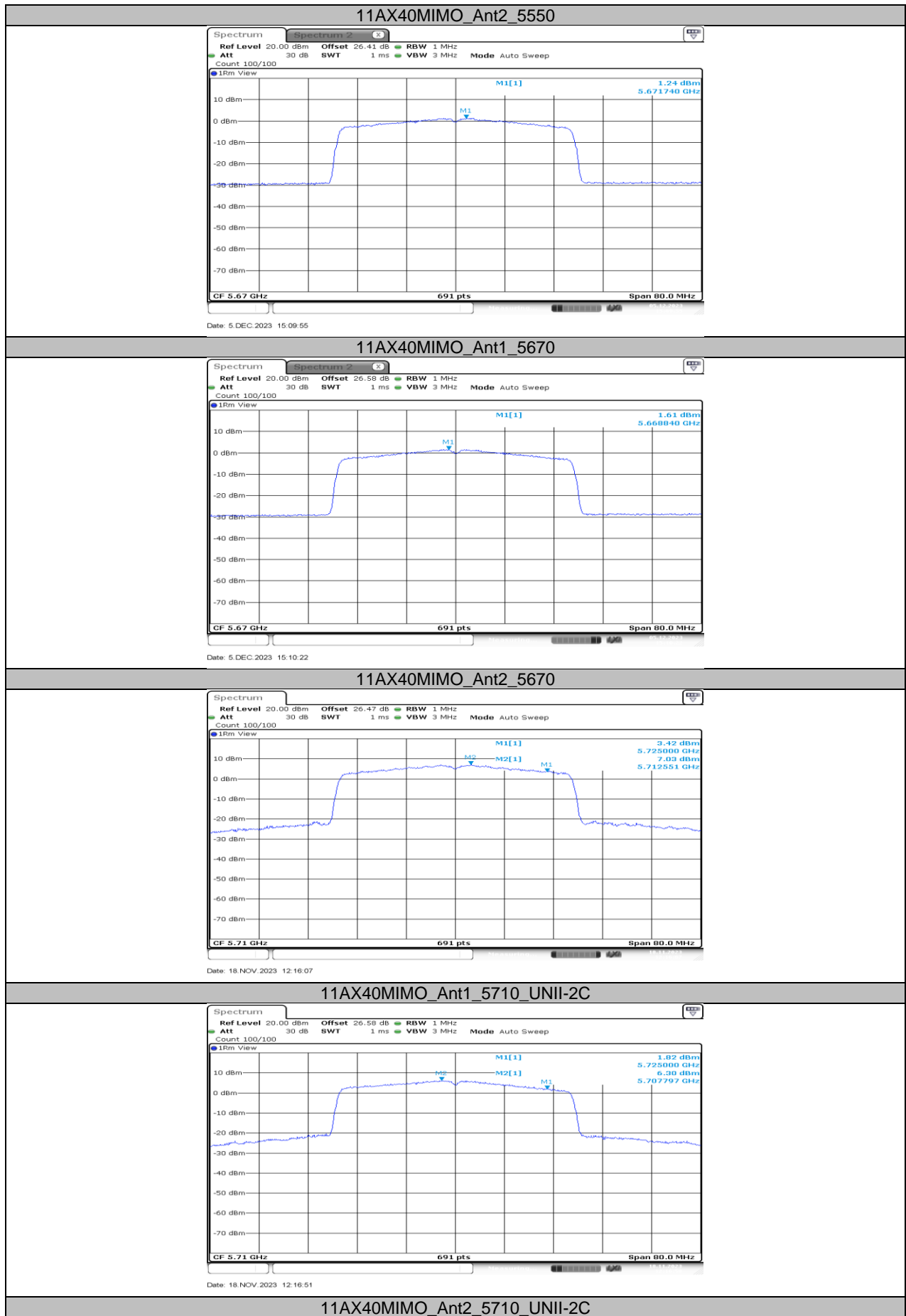
11AX40MIMO_Ant1_5510

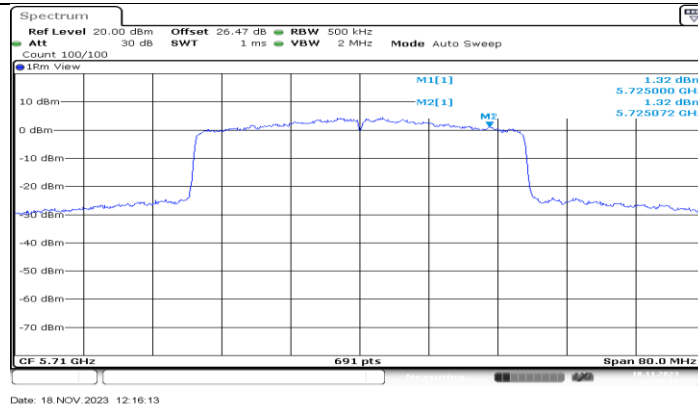11AX40MIMO_Ant2_5510

11AX40MIMO_Ant1_5550

11AX40MIMO_Ant2_5550

Date: 5.DEC.2023 15:09:55

11AX40MIMO_Ant1_5670

Date: 5.DEC.2023 15:10:22

11AX40MIMO_Ant2_5670

Date: 18.NOV.2023 12:16:07

11AX40MIMO_Ant1_5710_UNII-2C

Date: 18.NOV.2023 12:16:51

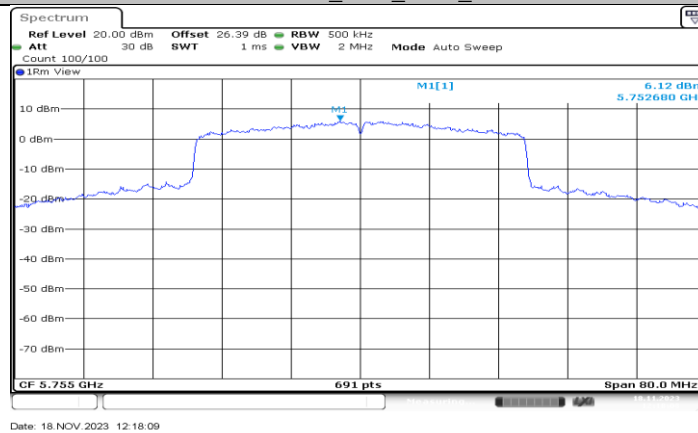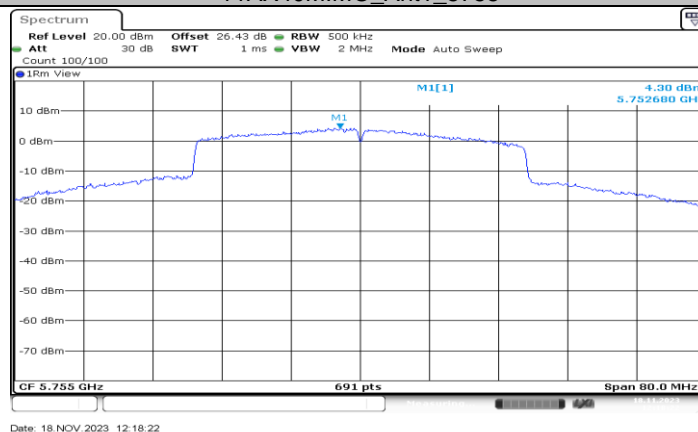| 11AX40MIMO_Ant2_5710_UNII-2C |
|---|

11AX40MIMO_Ant1_5710_UNII-3
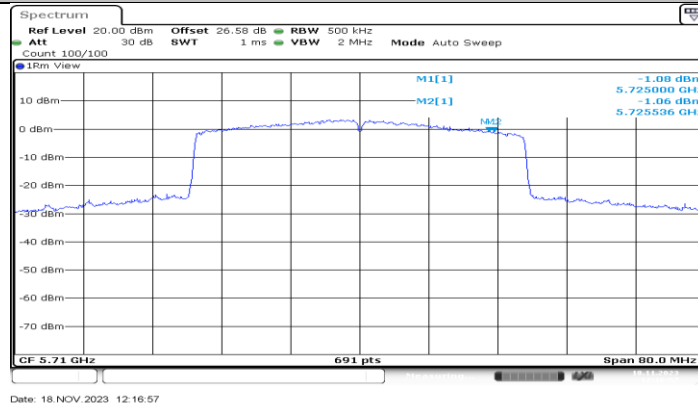
11AX40MIMO_Ant2_5710_UNII-3

11AX40MIMO_Ant1_5755

11AX40MIMO_Ant2_5755

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch   FORM NO: 10-SL-F0035

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.
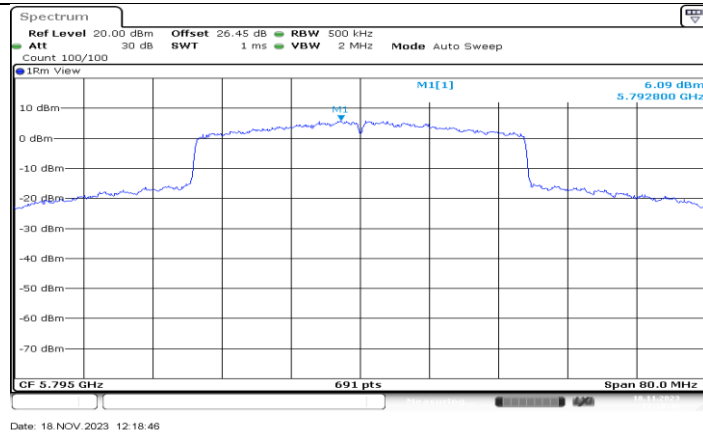
11AX40MIMO_Ant1_5795
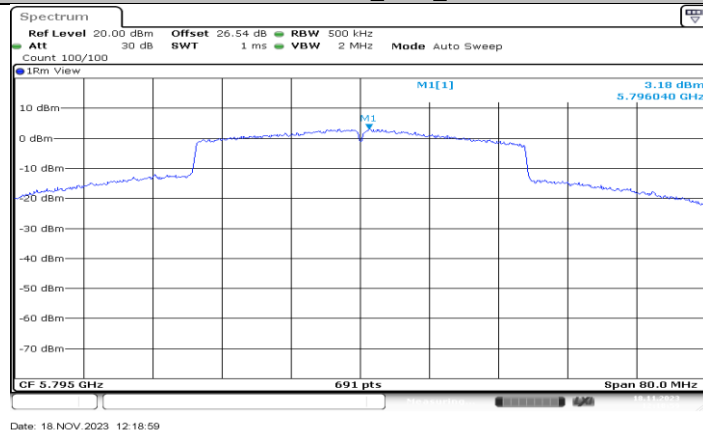
11AX40MIMO_Ant2_5795

11AX80MIMO_Ant1_5210

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch   FORM NO: 10-SL-F0035

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11AX80MIMO_Ant2_5210

Date: 5.DEC.2023 15:16:42

11AX80MIMO_Ant1_5290

Date: 5.DEC.2023 15:17:09

11AX80MIMO_Ant2_5290

Date: 5.DEC.2023 15:18:23

11AX80MIMO_Ant1_5530

11AX80MIMO_Ant2_5530

11AX80MIMO_Ant1_5610

11AX80MIMO_Ant2_5610

11AX80MIMO_Ant1_5690_UNII-2C

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch   FORM NO: 10-SL-F0035

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11AX80MIMO_Ant2_5690_UNII-2C

11AX80MIMO_Ant1_5690_UNII-3
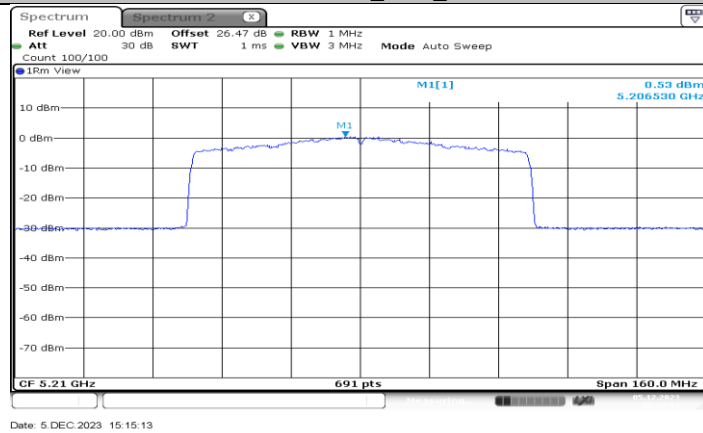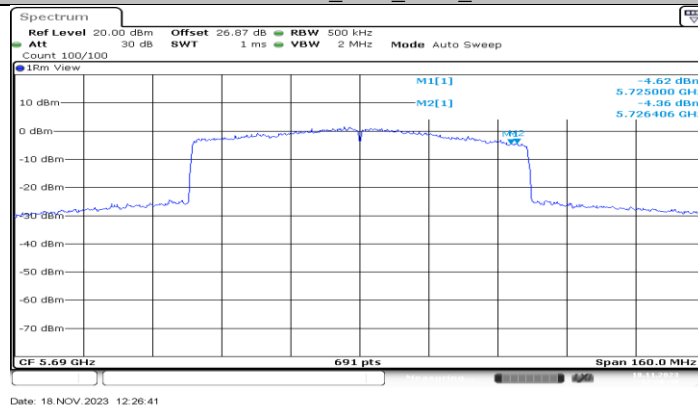

11AX80MIMO_Ant2_5690_UNII-3

11AX80MIMO_Ant1_5775

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch   FORM NO: 10-SL-F0035

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.
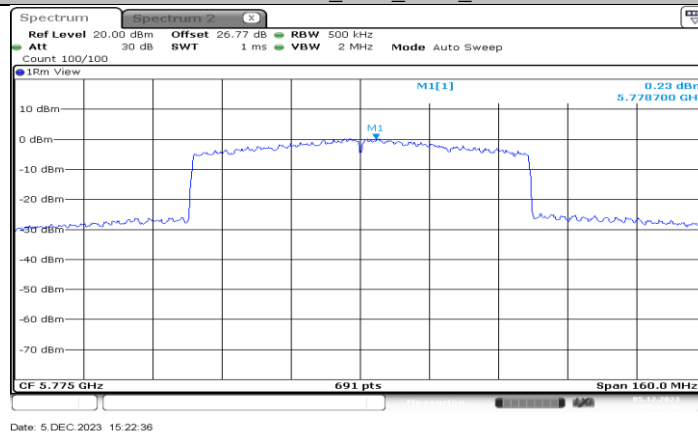
11AX80MIMO_Ant2_5775
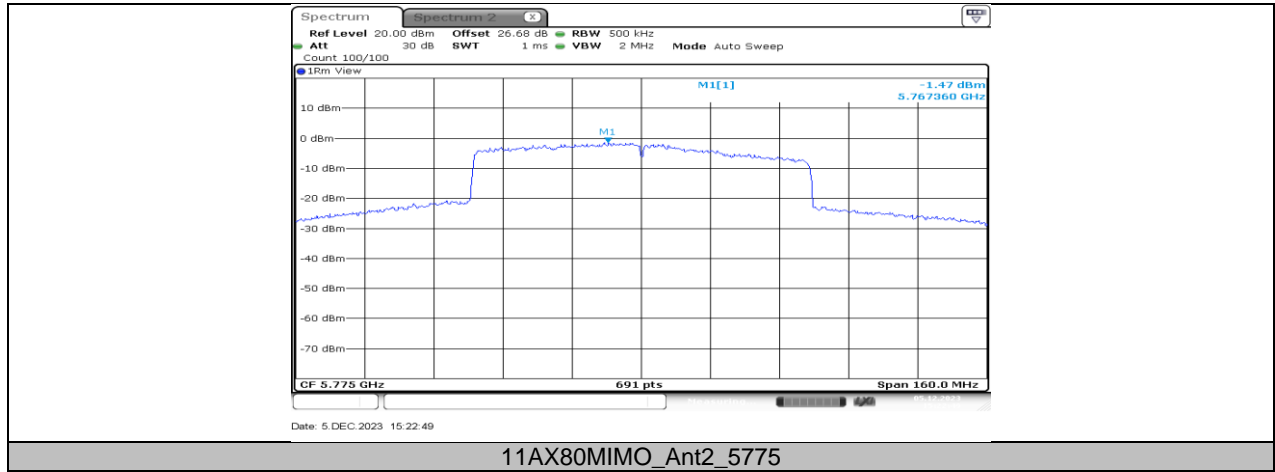
12.6. APPENDIX D2: DUTY CYCLE
12.6.1. Test Result

Test Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
11A-CDD	1.39	1.45	0.9586	95.86	0.18	0.72	1
11N20MIMO	1.31	1.37	0.9562	95.62	0.19	0.76	1
11N40MIMO	0.65	0.71	0.9155	91.55	0.38	1.54	2
11AC80MIMO	0.32	0.38	0.8421	84.21	0.75	3.13	4
11AX20MIMO	1.01	1.07	0.9439	94.39	0.25	0.99	1
11AX40MIMO	0.53	0.59	0.8983	89.83	0.47	1.89	2
11AX80MIMO	0.28	0.34	0.8235	82.35	0.84	3.57	4

Note:
Duty Cycle Correction Factor=10log (1/x).
Where: x is Duty Cycle (Linear)
Where: T is On Time
If that calculated VBW is not available on the analyzer then the next higher value should be used.

12.6.2. Test Graphs

11A-CDD_Ant1_5180

11N20MIMO_Ant1_5180
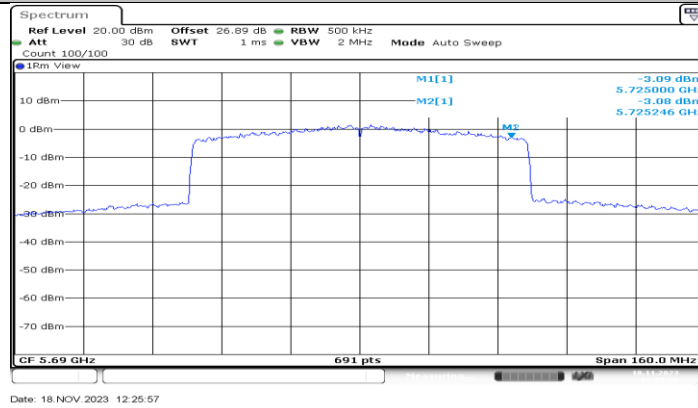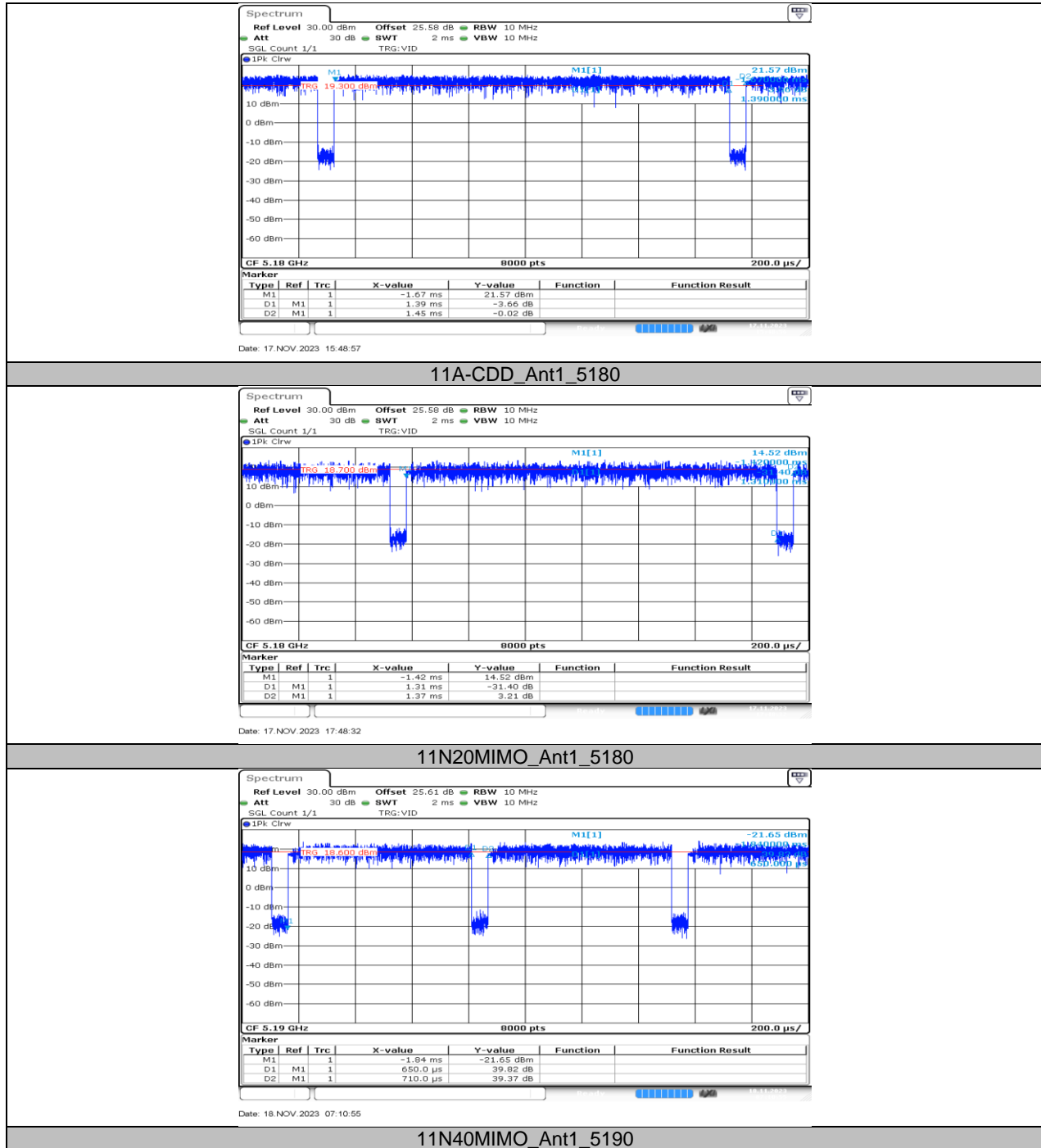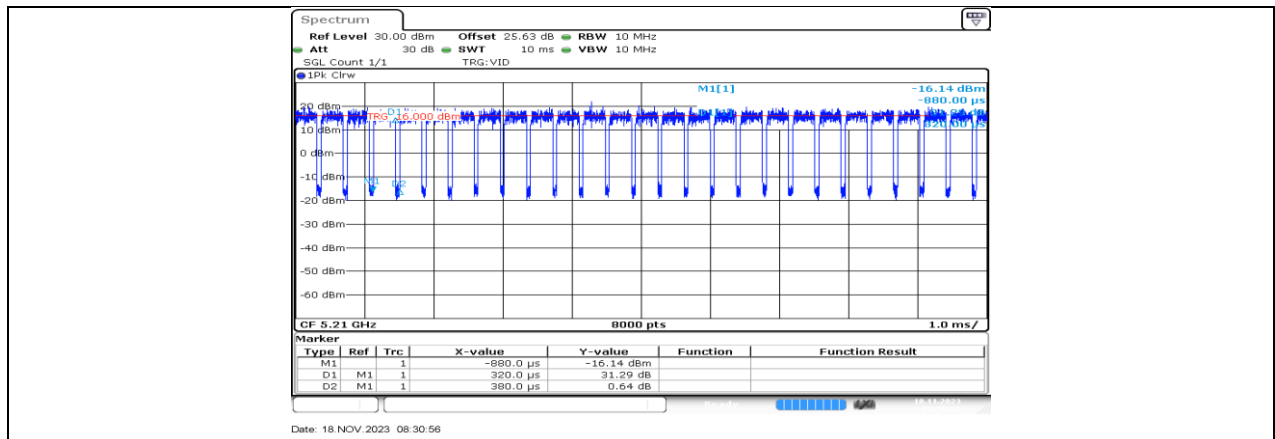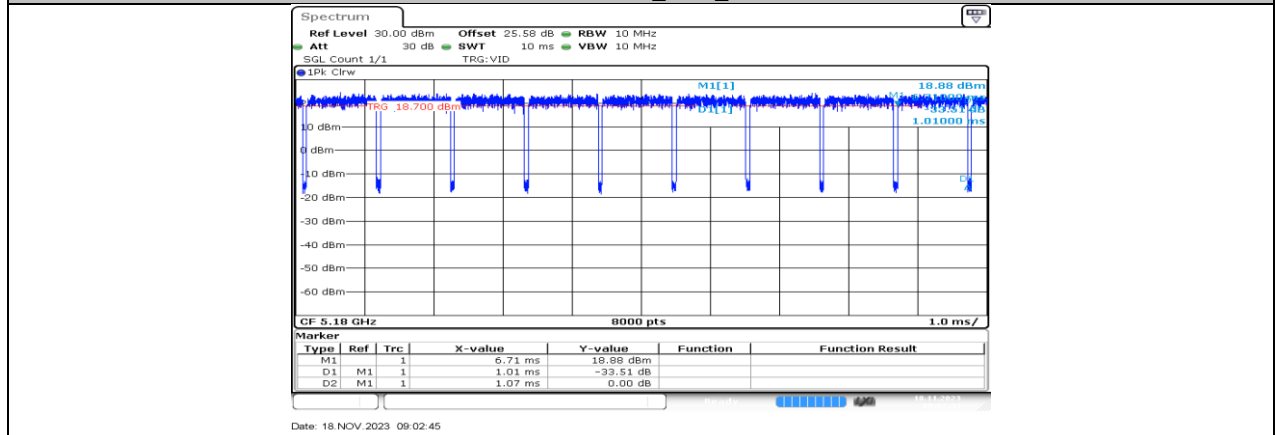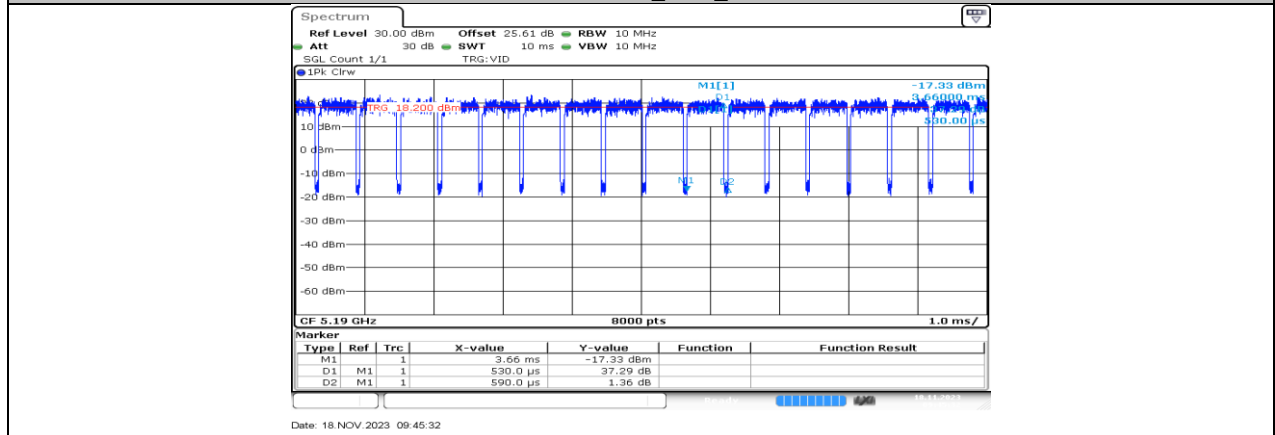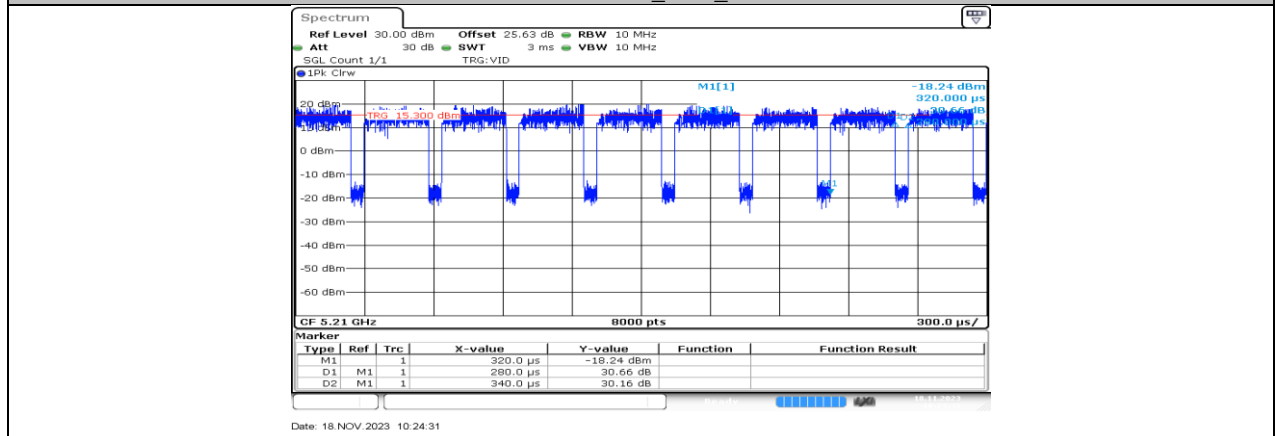

11N40MIMO_Ant1_5190

11AC80MIMO_Ant1_5210

11AX20MIMO_Ant1_5180

11AX40MIMO_Ant1_5190

11AX80MIMO_Ant1_5210

12.7. APPENDIX E2: FREQUENCY STABILITY
12.7.1. Test Result

Frequency Error vs. Voltage									
802.11a:5200MHz									
Temp.	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
TN	VL	5199.9905	-1.82	5200.0169	3.26	5200.0180	3.46	5200.0061	1.16
TN	VN	5199.9956	-0.85	5200.0020	0.38	5199.9916	-1.61	5199.9846	-2.97
TN	VH	5200.0038	0.74	5199.9891	-2.10	5200.0106	2.04	5200.0079	1.51
Frequency Error vs. Temperature									
802.11a:5200MHz									
Temp.	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
40	VN	5200.0122	2.35	5199.9835	-3.17	5200.0194	3.73	5199.9839	-3.09
30	VN	5200.0181	3.48	5200.0124	2.38	5199.9992	-0.15	5200.0029	0.56
20	VN	5200.0099	1.90	5200.0079	1.51	5199.9754	-4.73	5199.9750	-4.81
10	VN	5200.0102	1.96	5199.9763	-4.55	5200.0011	0.22	5199.9772	-4.38
0	VN	5200.0064	1.22	5200.0214	4.11	5200.0135	2.59	5200.0230	4.43

Note:
1. All antennas, test modes and test channels have been tested, only the worst data record in the report.
2. For the detail Test Conditions, please refer to section 7.5 TEST ENVIRONMENT.
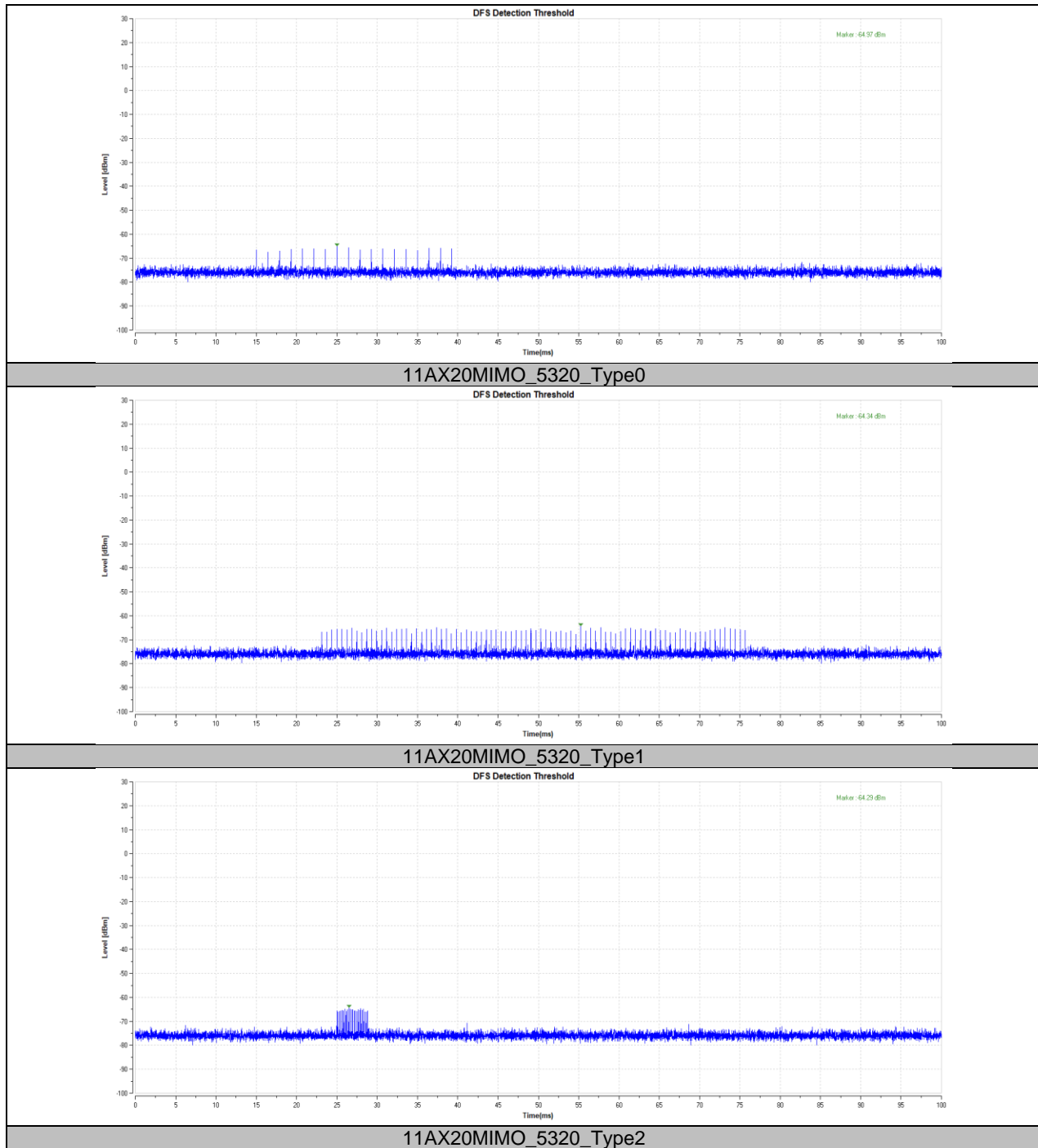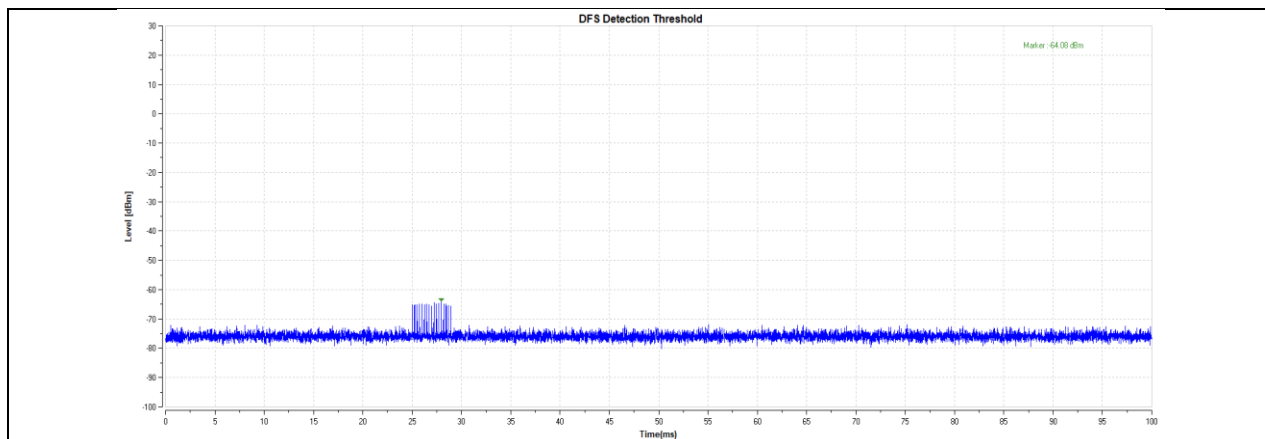
13. DFS TEST DATA FOR MASTER

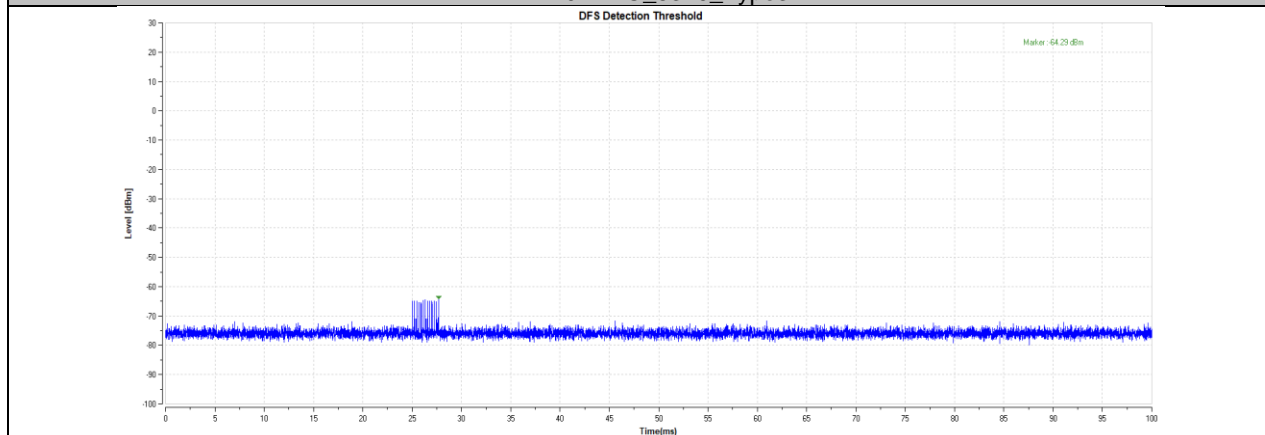## 13.1. APPENDIX F1: DFS DETECTION THRESHOLDS
13.1.1. Test Result

Test Mode	Frequency[MHz]	Radar Type	Result	Limit[dbm]	Verdict
11AX20MIMO	5320	Type0	-64.97	-61.00	PASS
		Type1	-64.34	-61.00	PASS
		Type2	-64.29	-61.00	PASS
		Type3	-64.08	-61.00	PASS
		Type4	-64.29	-61.00	PASS
		Type5	-64.29	-61.00	PASS
		Type6	-64.57	-61.00	PASS
11AX40MIMO	5310	Type0	-64.66	-59.00	PASS
		Type1	-64.27	-59.00	PASS
		Type2	-64.75	-59.00	PASS
		Type3	-64.58	-59.00	PASS
		Type4	-64.27	-59.00	PASS
		Type5	-64.88	-59.00	PASS
		Type6	-64.39	-59.00	PASS
11AX80MIMO	5290	Type0	-64.45	-59.00	PASS
		Type1	-64.48	-59.00	PASS
		Type2	-64.22	-59.00	PASS
		Type3	-64.26	-59.00	PASS
		Type4	-64.31	-59.00	PASS
		Type5	-64.08	-59.00	PASS
		Type6	-64.94	-59.00	PASS

13.1.2. Test Graphs

11AX20MIMO_5320_Type0

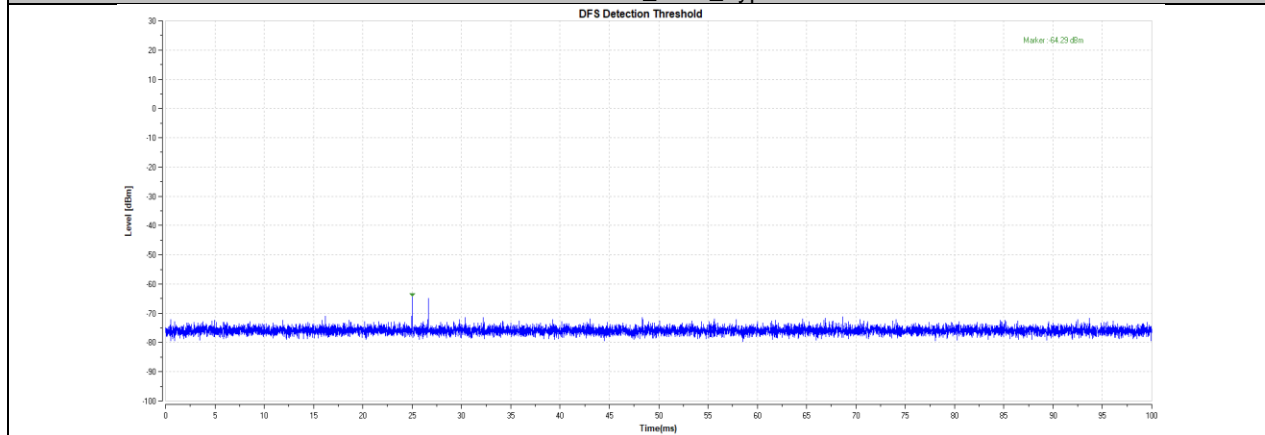
11AX20MIMO_5320_Type1

11AX20MIMO_5320_Type2

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch   FORM NO: 10-SL-F0035

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.
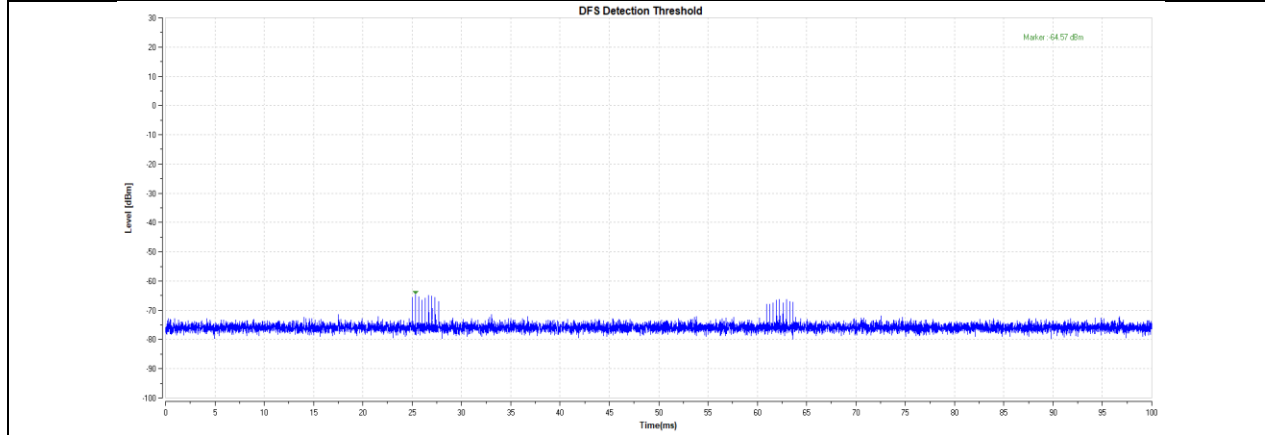
11AX20MIMO_5320_Type3

11AX20MIMO_5320_Type4

11AX20MIMO_5320_Type5

11AX20MIMO_5320_Type6

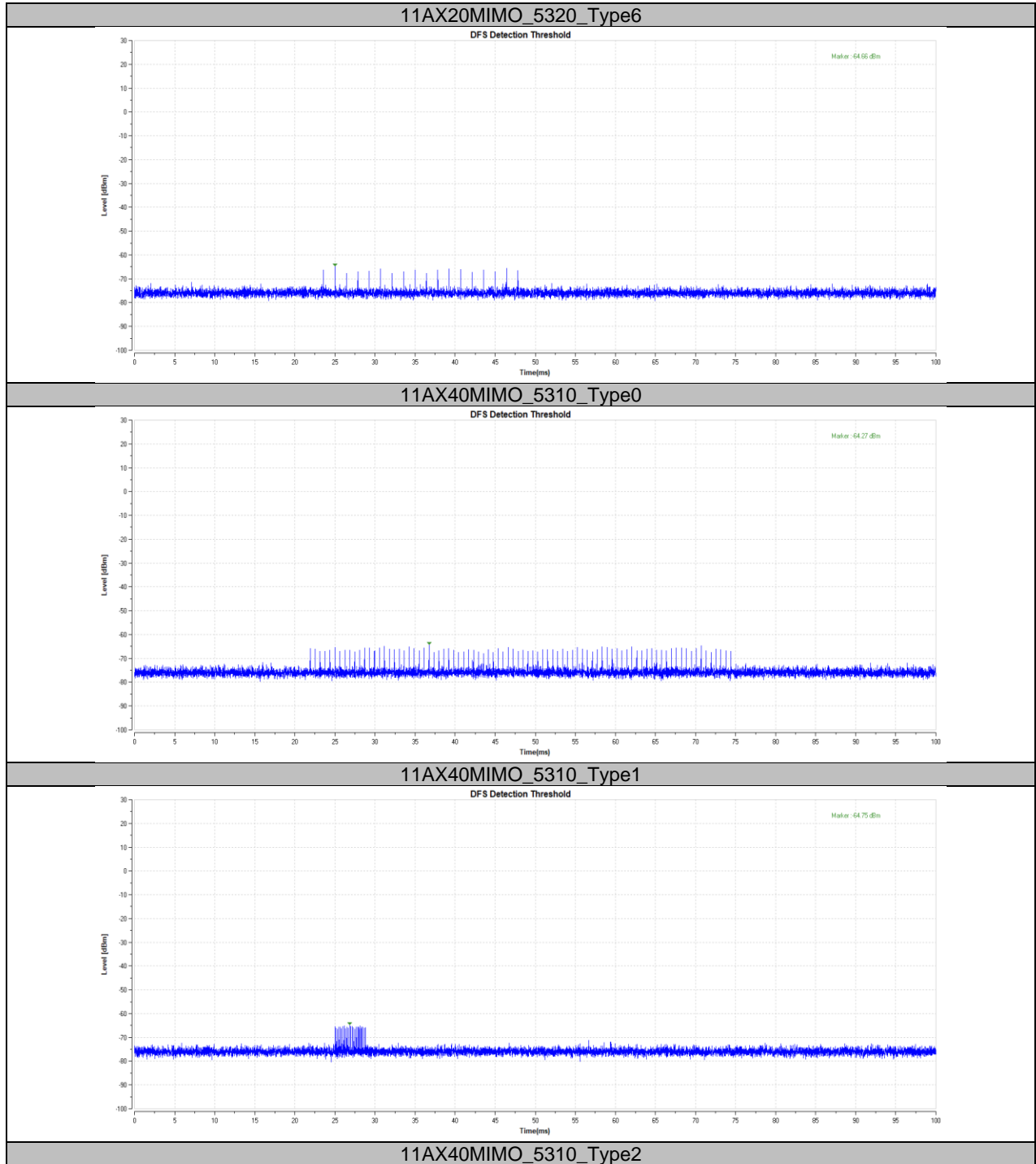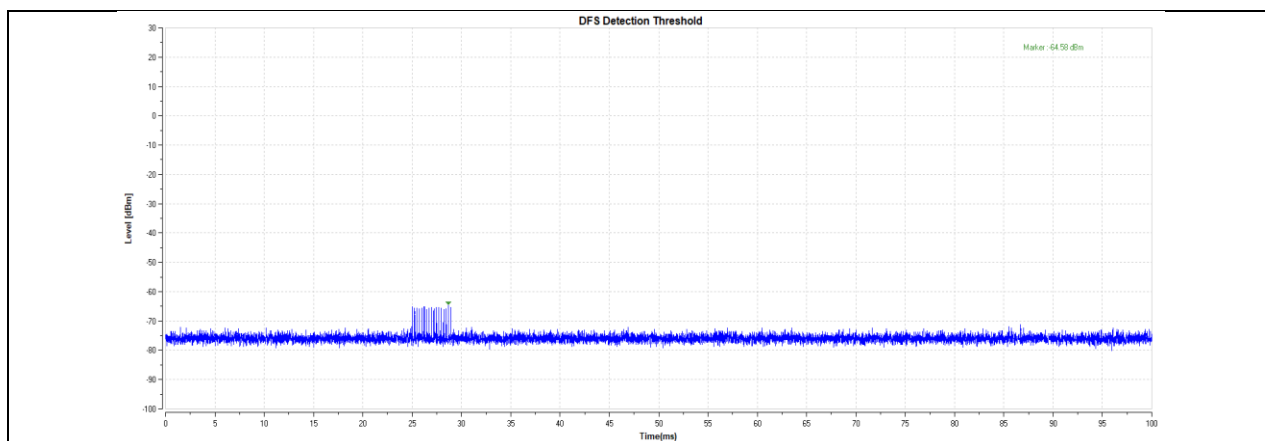## 11AX40MIMO_5310_Type0

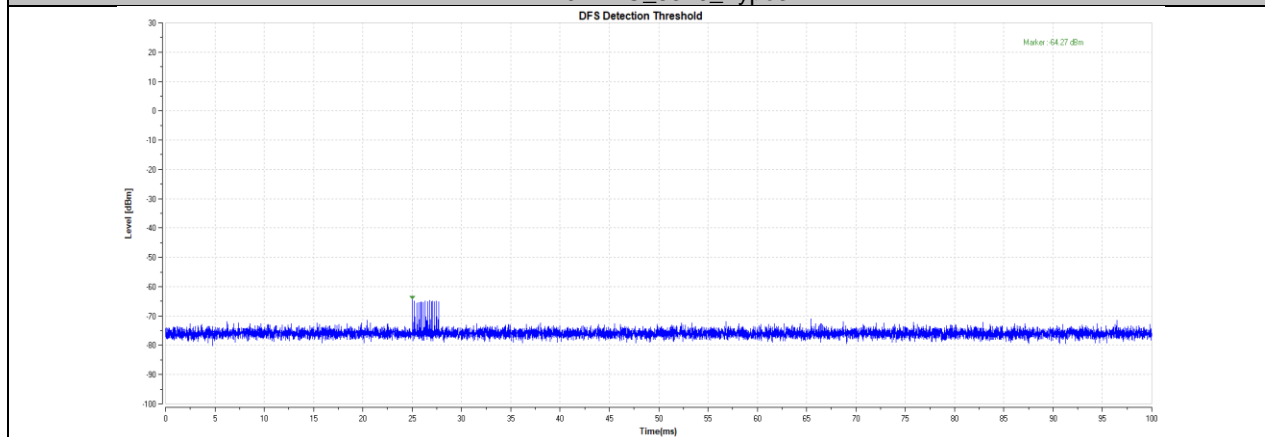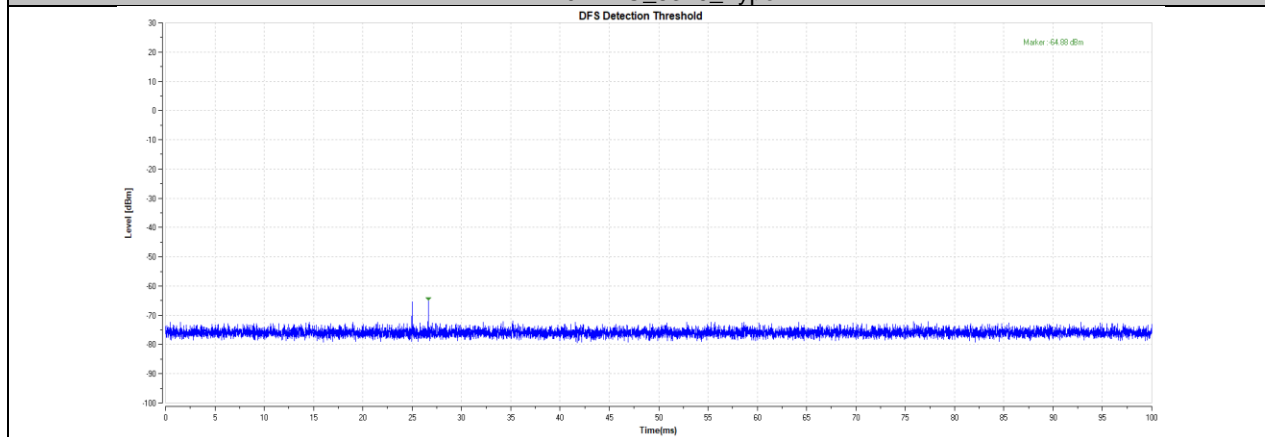

11AX40MIMO_5310_Type1

11AX40MIMO_5310_Type2

11AX40MIMO_5310_Type3

11AX40MIMO_5310_Type4

11AX40MIMO_5310_Type5

11AX40MIMO_5310_Type6

11AX80MIMO_5290_Type0

11AX80MIMO_5290_Type1

11AX80MIMO_5290_Type2

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch   FORM NO: 10-SL-F0035

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.