11A-CDD_Ant7_5180

11A-CDD_Ant1_5200

11A-CDD_Ant3_5200

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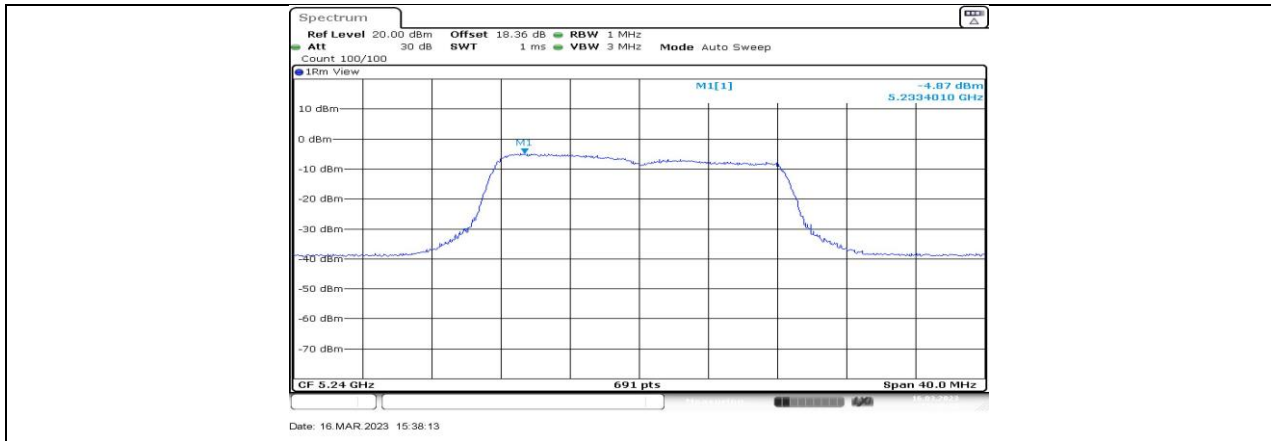*This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.*
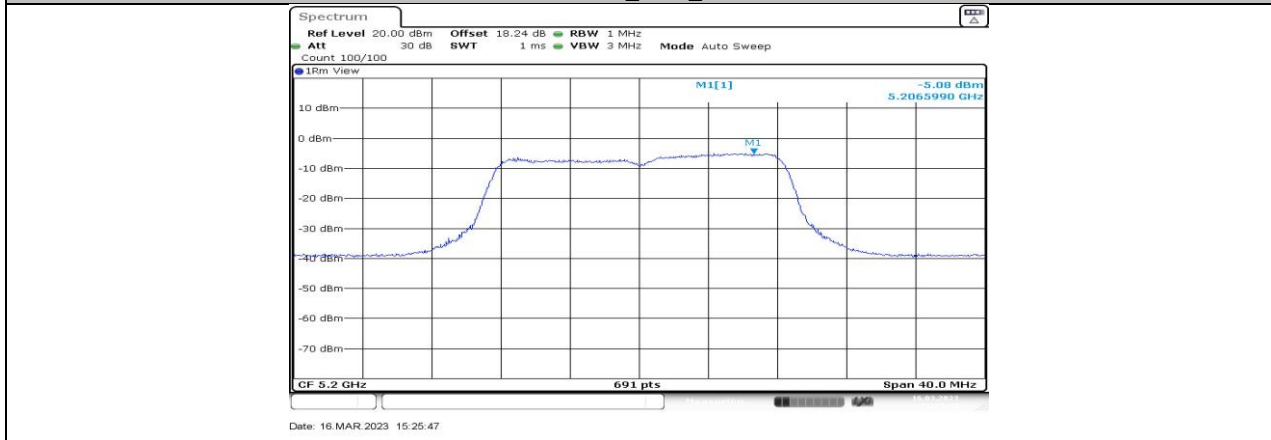
11A-CDD_Ant5_5200

11A-CDD_Ant7_5200

11A-CDD_Ant1_5240

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11A-CDD_Ant3_5240

11A-CDD_Ant5_5240

11A-CDD_Ant7_5240

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11AX20MIMO_Ant1_5180

11AX20MIMO_Ant3_5180

11AX20MIMO_Ant5_5180

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11AX20MIMO_Ant7_5180

11AX20MIMO_Ant1_5200

11AX20MIMO_Ant3_5200

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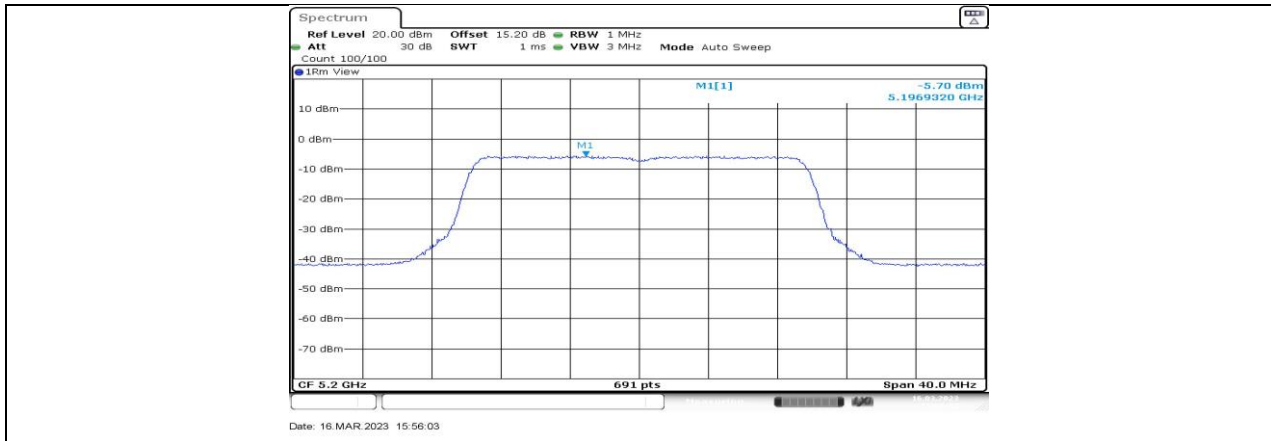
11AX20MIMO_Ant5_5200

11AX20MIMO_Ant7_5200

11AX20MIMO_Ant1_5240

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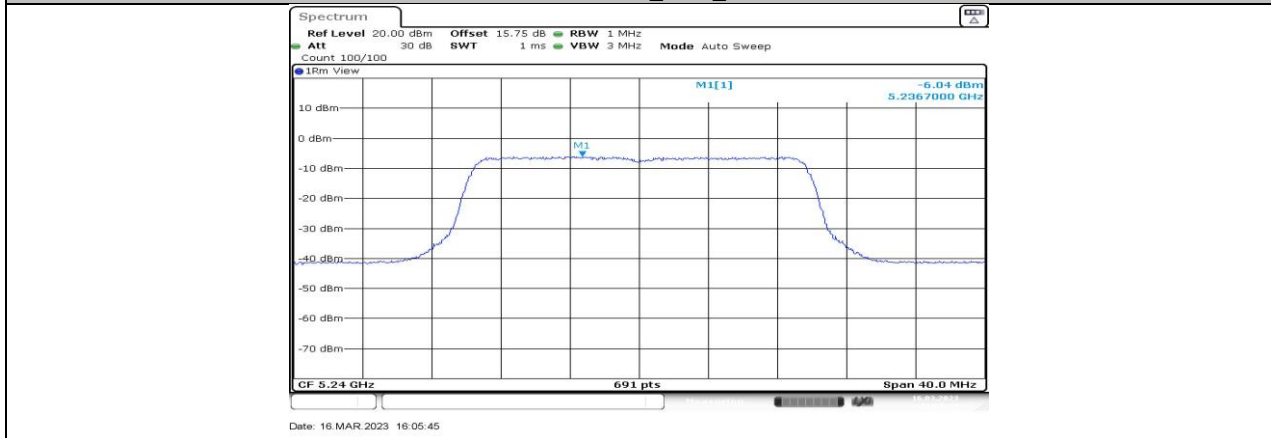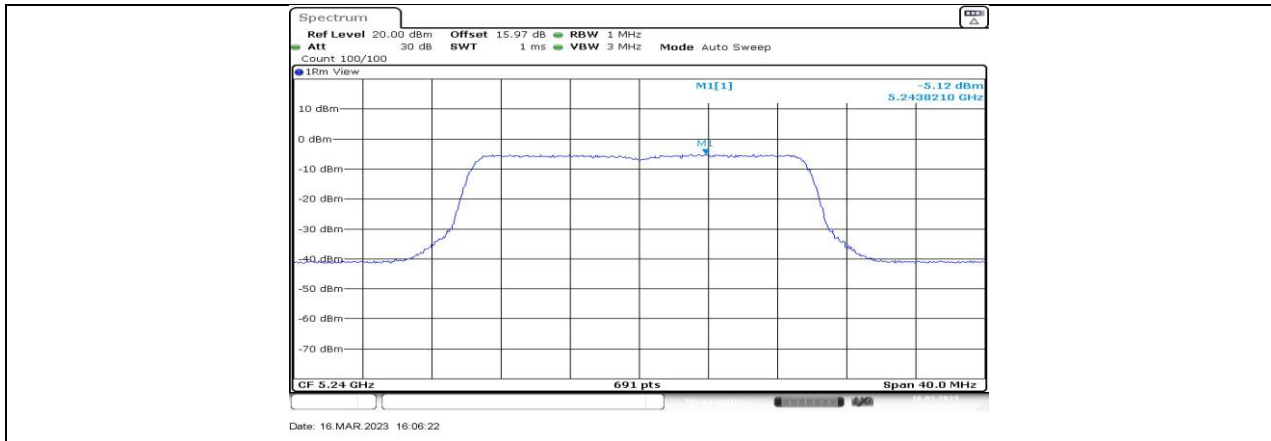
11AX20MIMO_Ant3_5240

11AX20MIMO_Ant5_5240

11AX20MIMO_Ant7_5240

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11AX40MIMO_Ant1_5190

11AX40MIMO_Ant3_5190

11AX40MIMO_Ant5_5190

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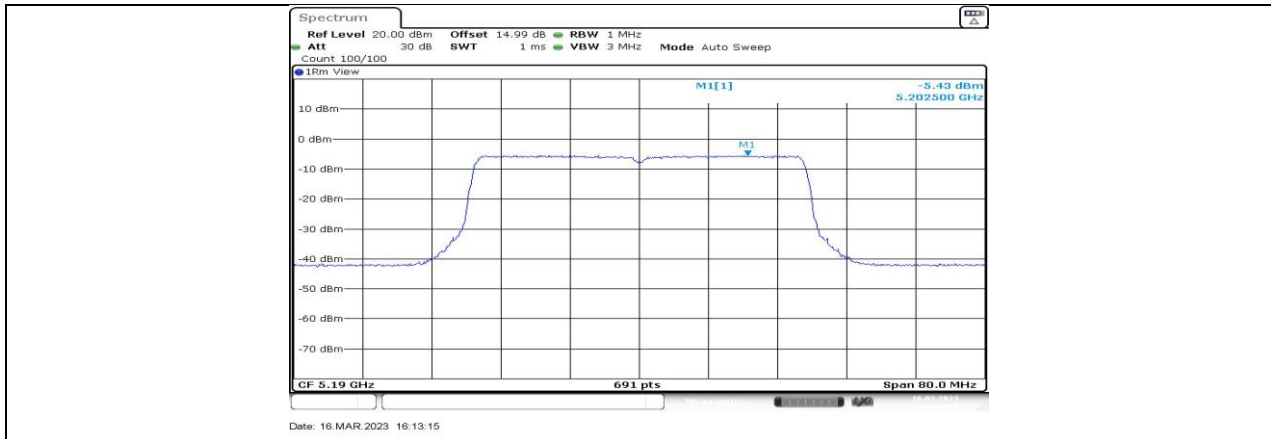
11AX40MIMO_Ant7_5190

11AX40MIMO_Ant1_5230

11AX40MIMO_Ant3_5230

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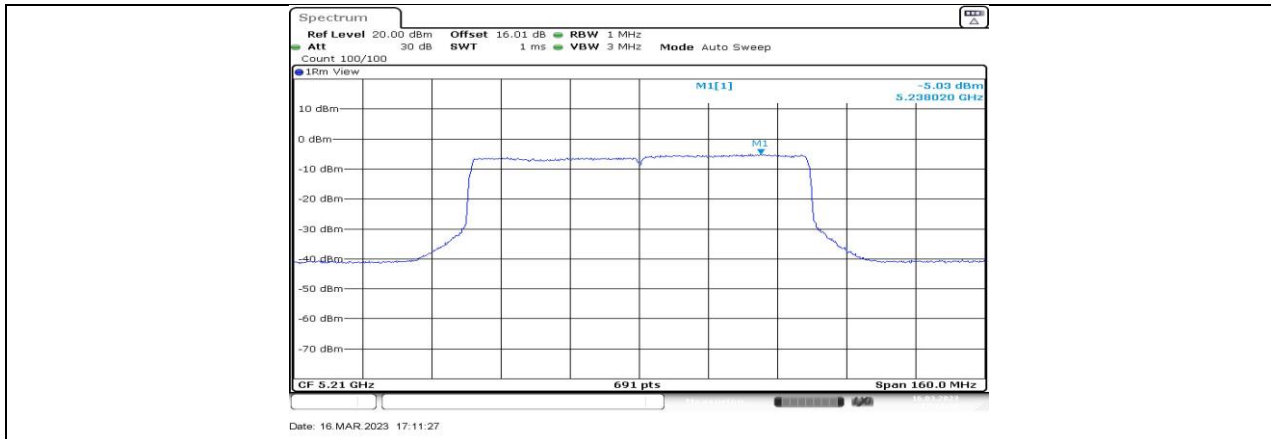11AX40MIMO_Ant5_5230

11AX40MIMO_Ant7_5230

11AX80MIMO_Ant1_5210

11AX80MIMO_Ant3_5210

11AX80MIMO_Ant5_5210

11AX80MIMO_Ant7_5210

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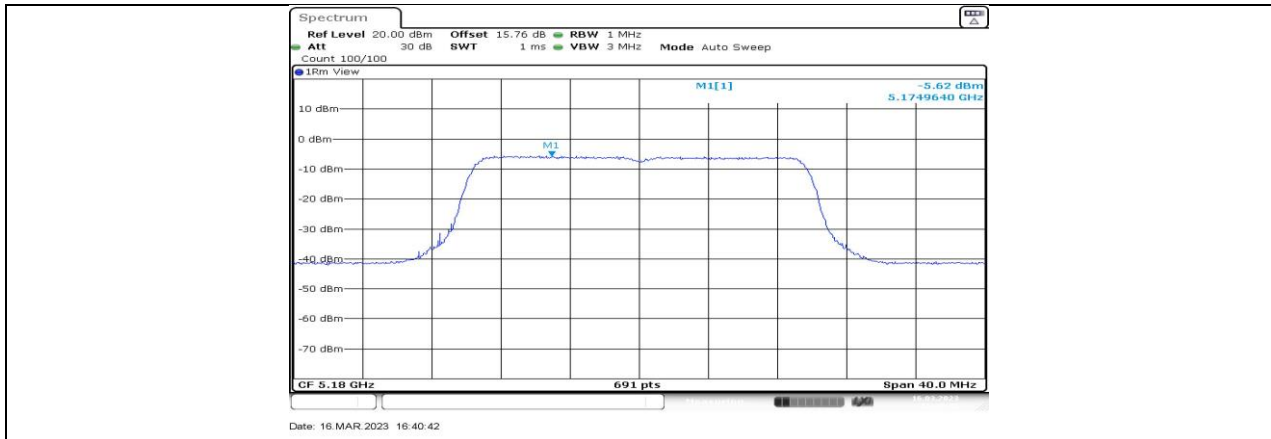
11BE20MIMO_Ant1_5180

11BE20MIMO_Ant3_5180

11BE20MIMO_Ant5_5180

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11BE20MIMO_Ant7_5180

11BE20MIMO_Ant1_5200

11BE20MIMO_Ant3_5200

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11BE20MIMO_Ant5_5200

11BE20MIMO_Ant7_5200

11BE20MIMO_Ant1_5240

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11BE20MIMO_Ant3_5240

11BE20MIMO_Ant5_5240

11BE20MIMO_Ant7_5240

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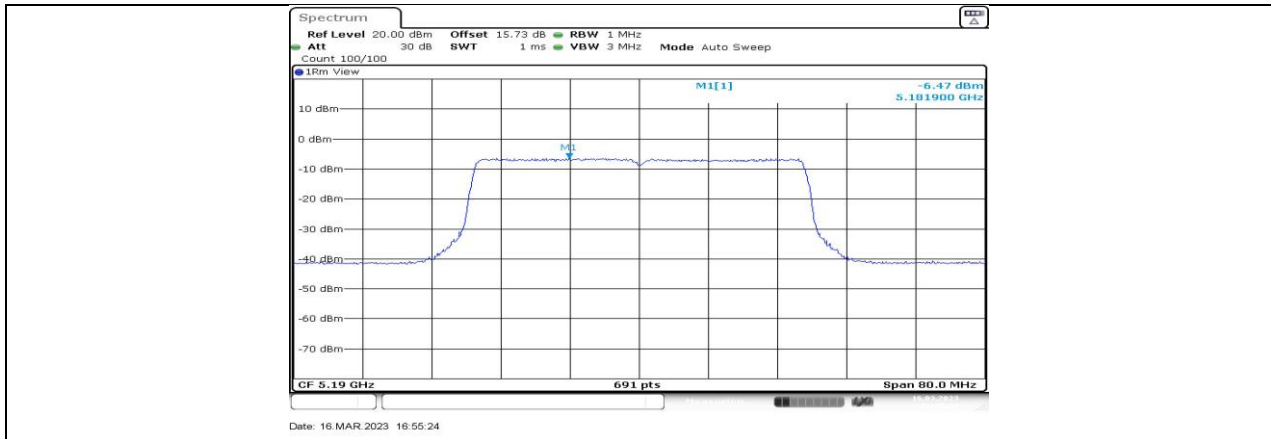
11BE40MIMO_Ant1_5190

11BE40MIMO_Ant3_5190

11BE40MIMO_Ant5_5190

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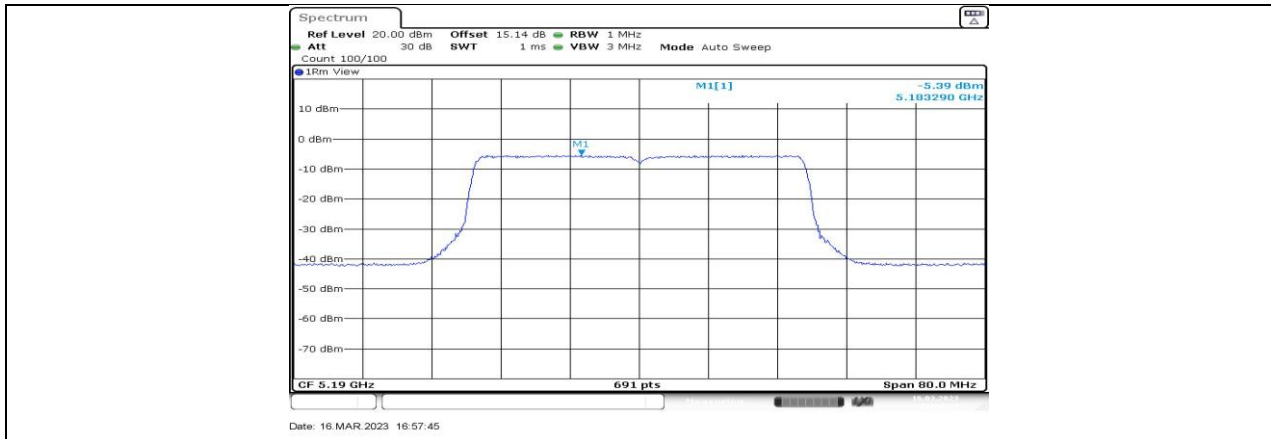
11BE40MIMO_Ant7_5190

11BE40MIMO_Ant1_5230

11BE40MIMO_Ant3_5230

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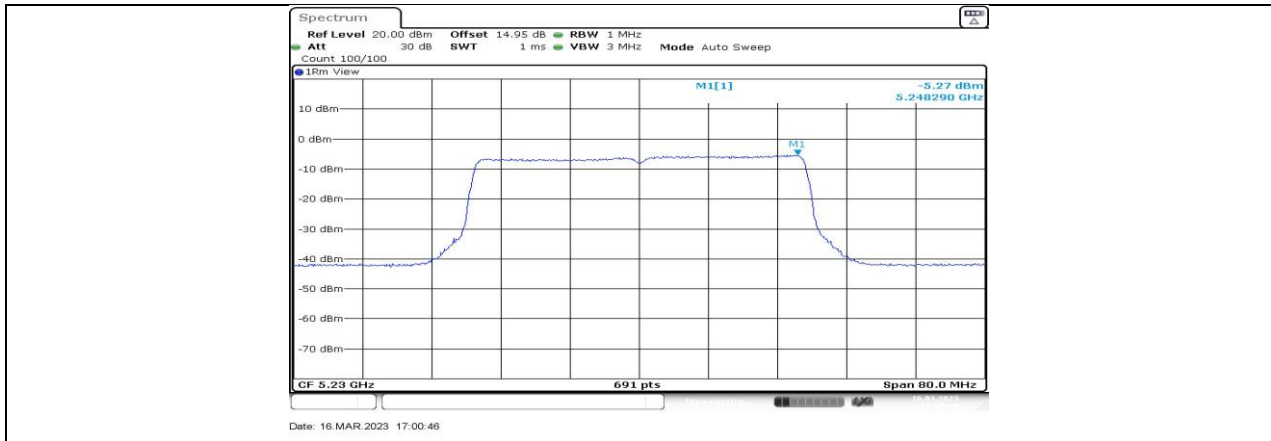
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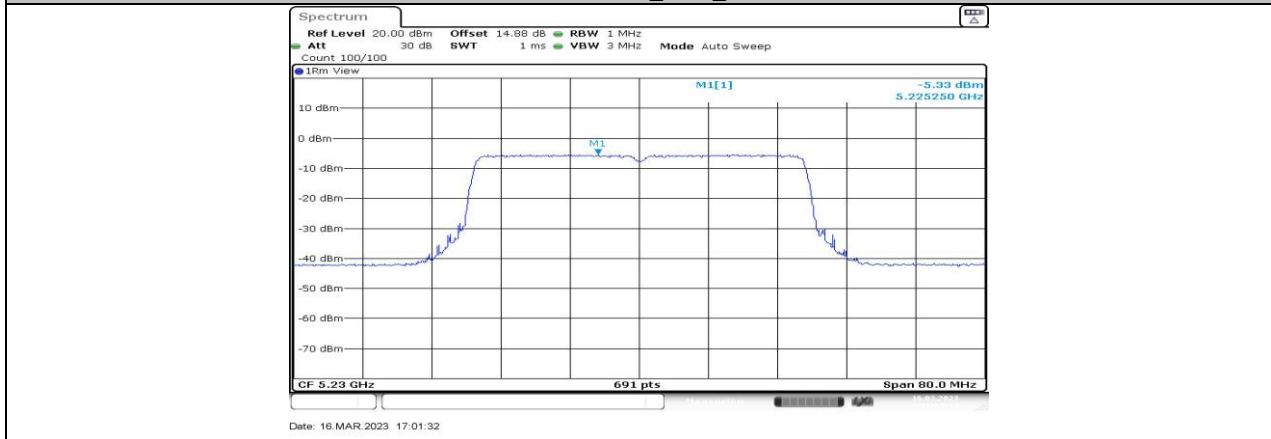
11BE40MIMO_Ant7_5230

11BE80MIMO_Ant1_5210

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11BE80MIMO_Ant3_5210

11BE80MIMO_Ant5_5210
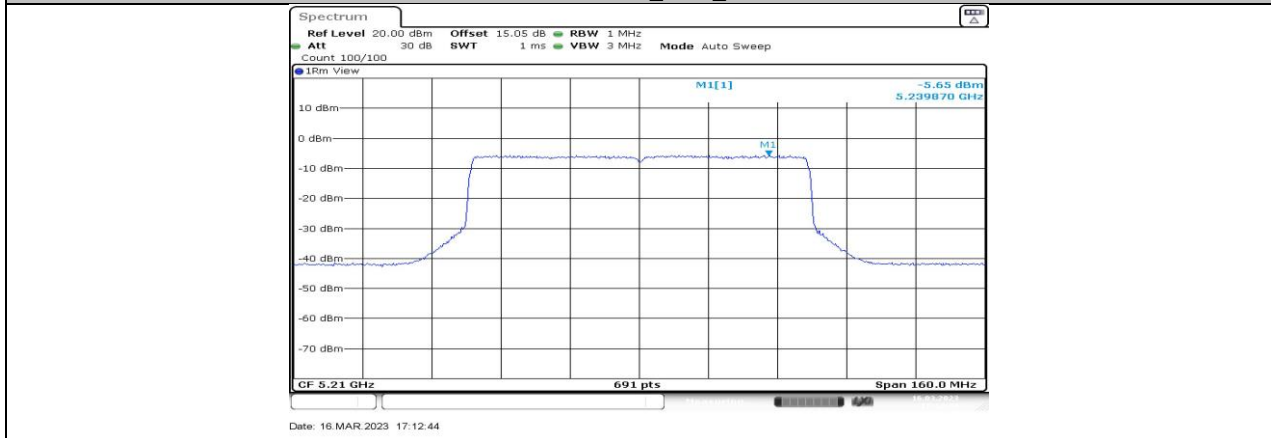
11BE80MIMO_Ant7_5210

11.5.8. Test Graphs

For ISED UNII-1 NSS=4 test graphs:

11AX20MIMO_Ant1_5180

11AX20MIMO_Ant2_5180

11AX20MIMO_Ant3_5180
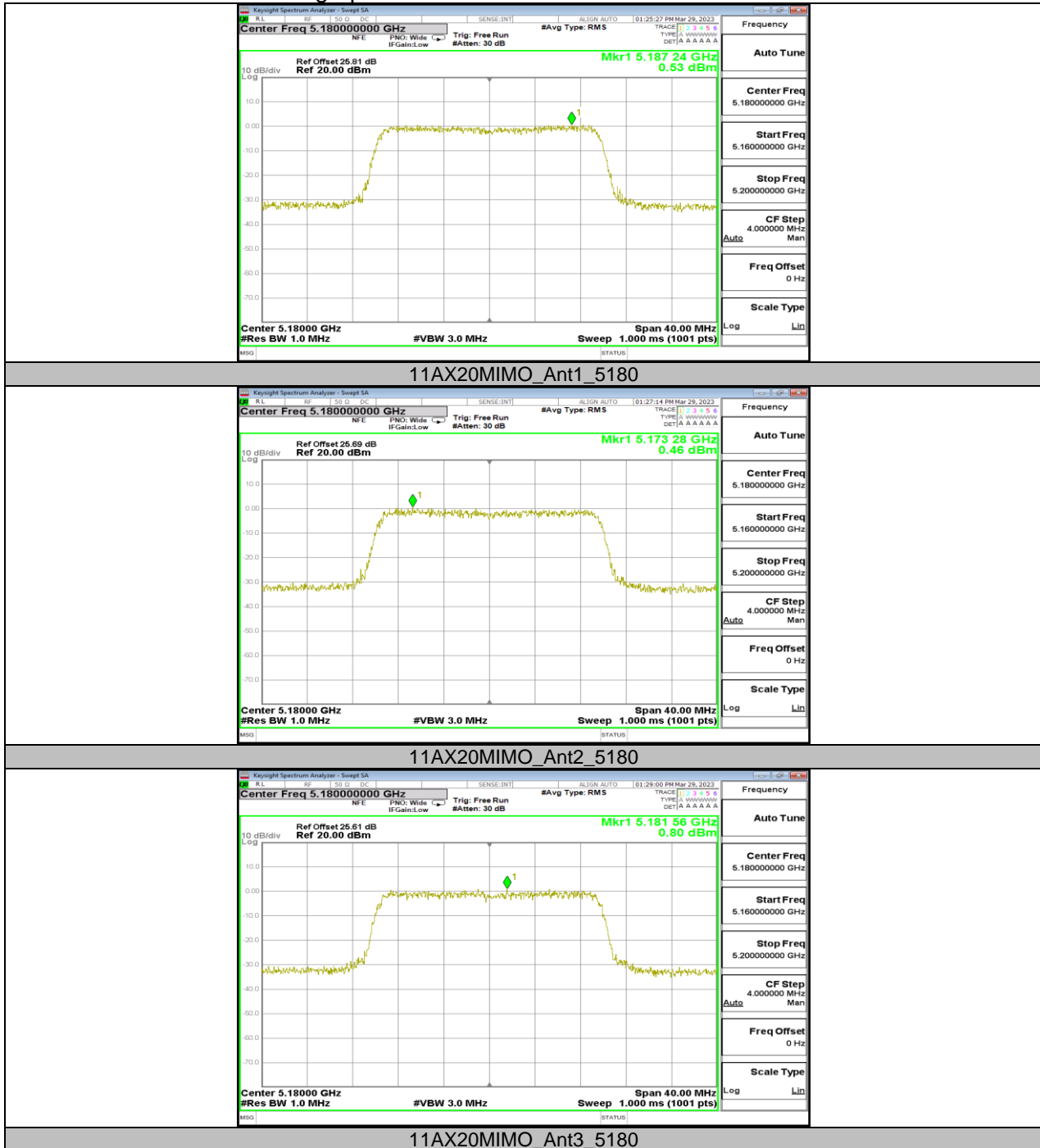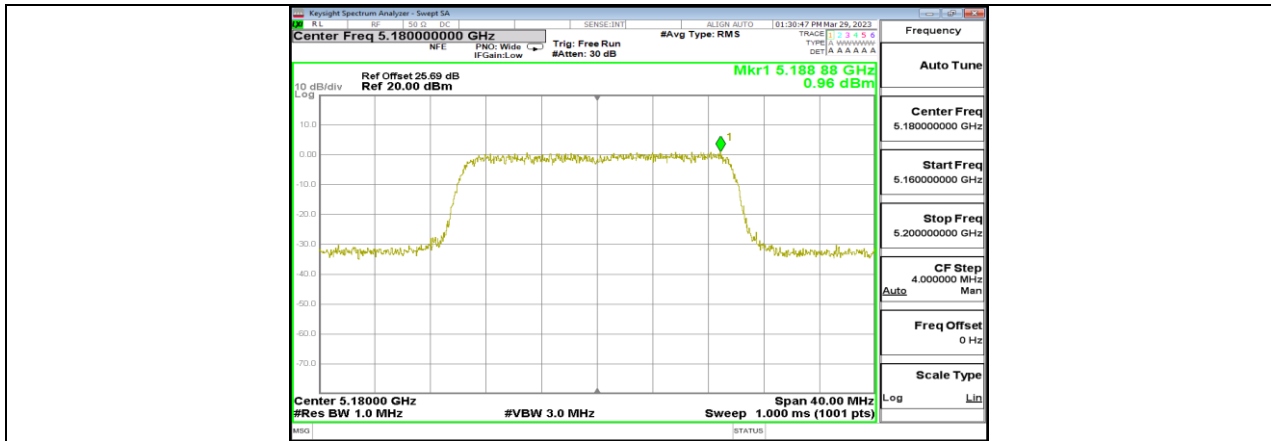
11AX20MIMO_Ant4_5180
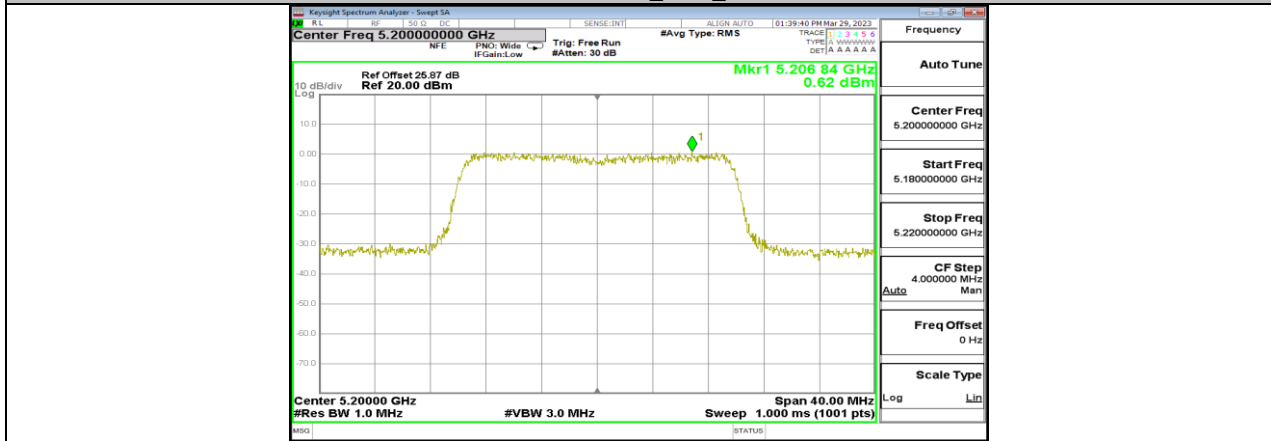
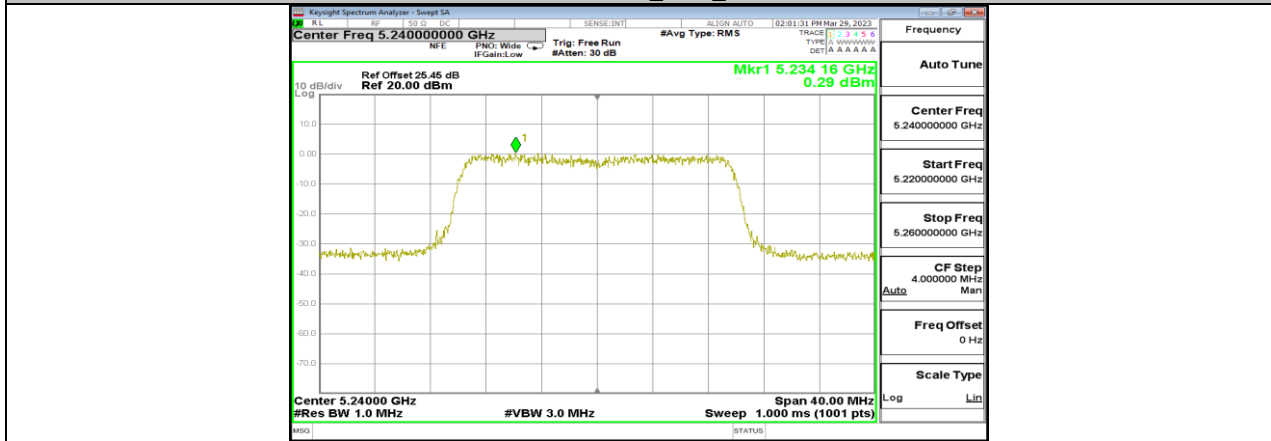11AX20MIMO_Ant1_5200
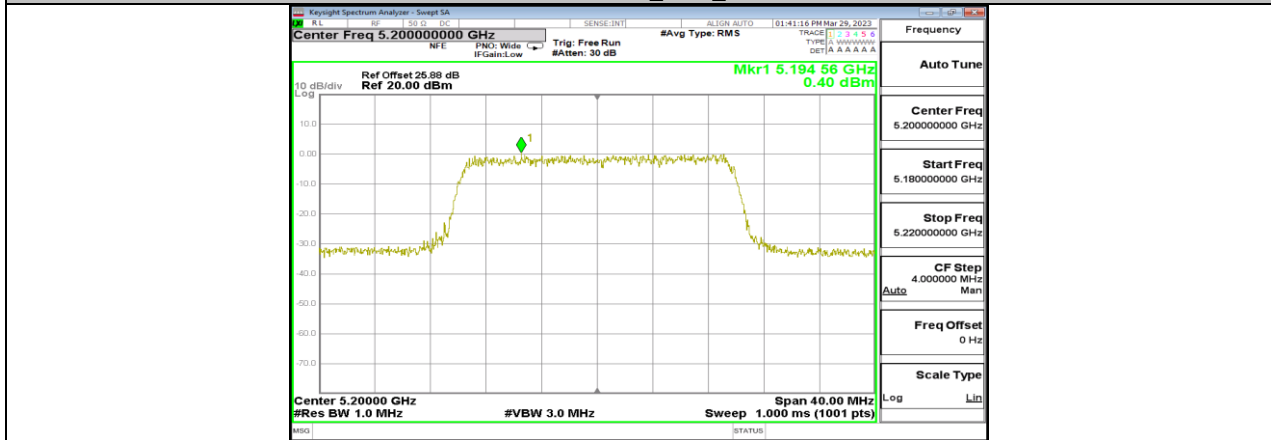
11AX20MIMO_Ant2_5200
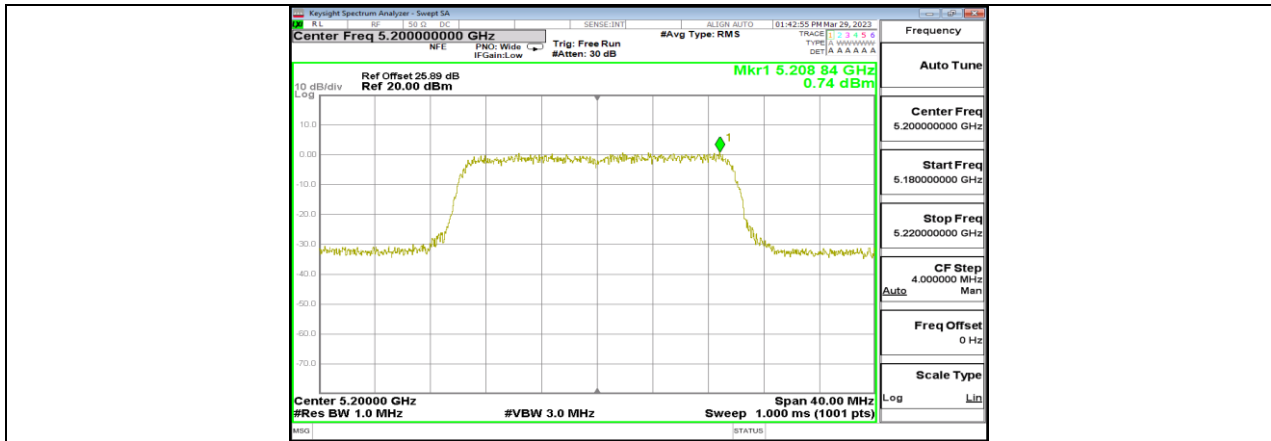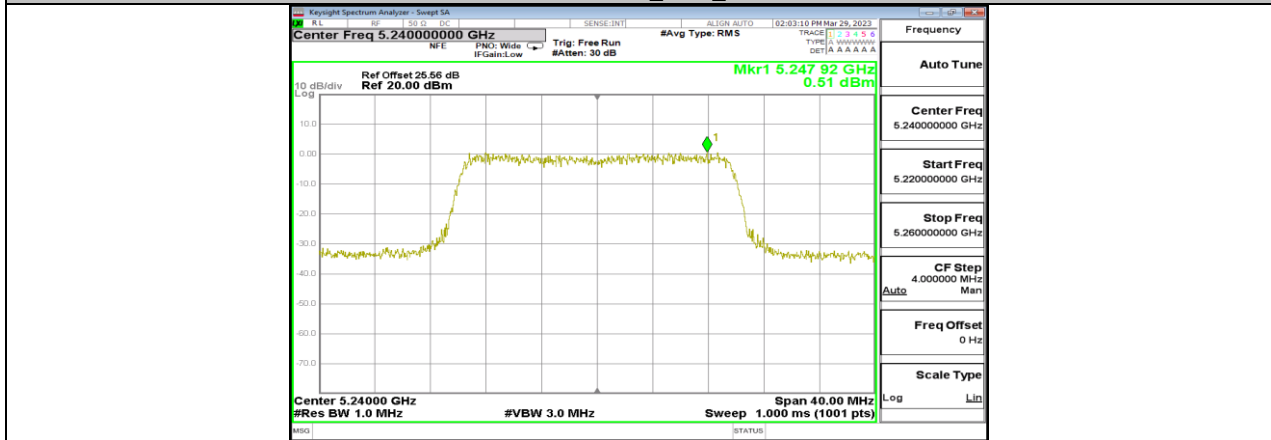

11AX20MIMO_Ant3_5200
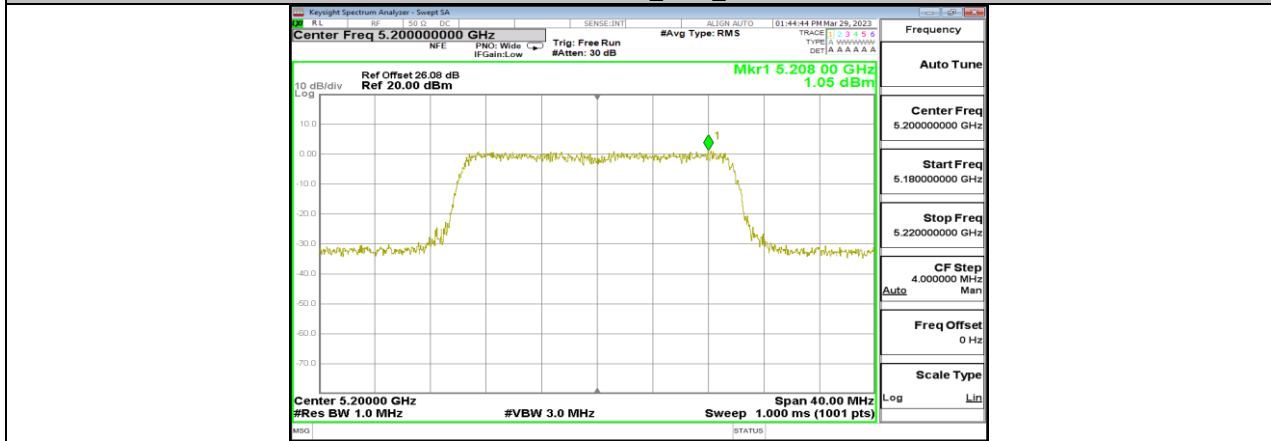
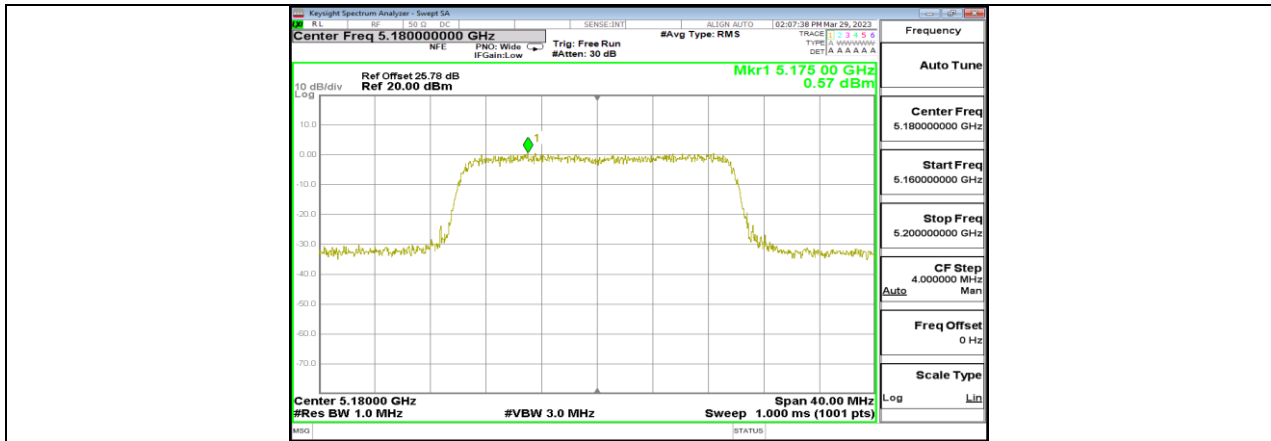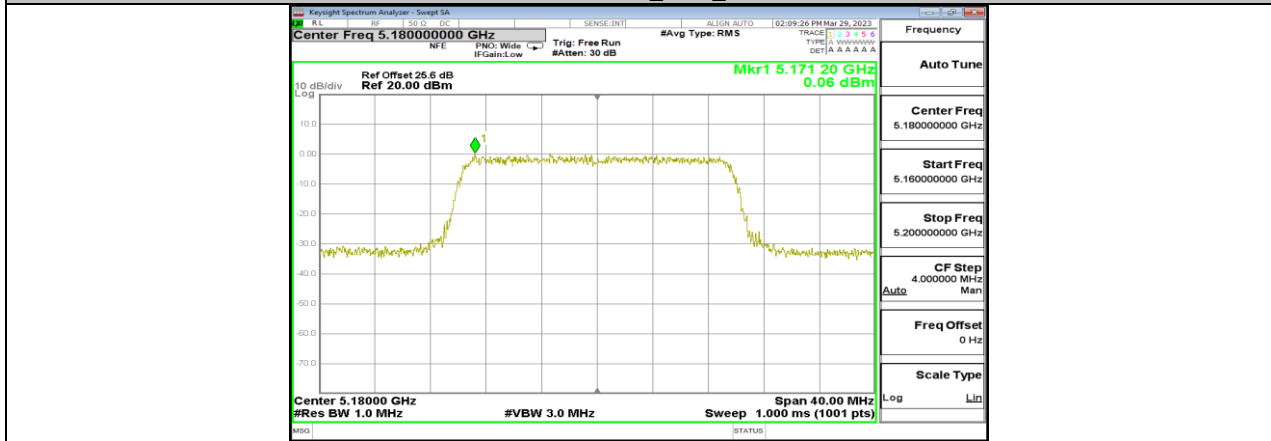
11AX20MIMO_Ant4_5200
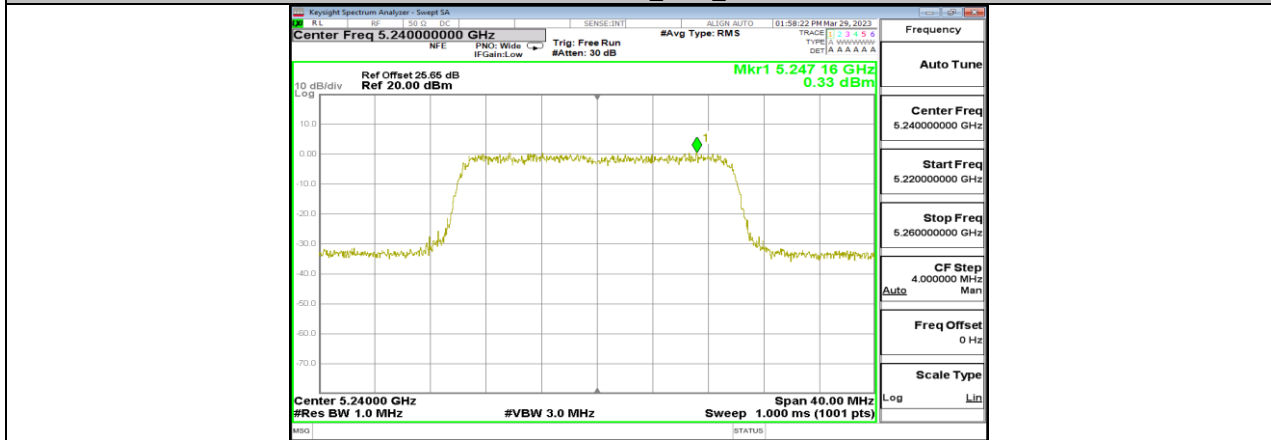
11AX20MIMO_Ant1_5240
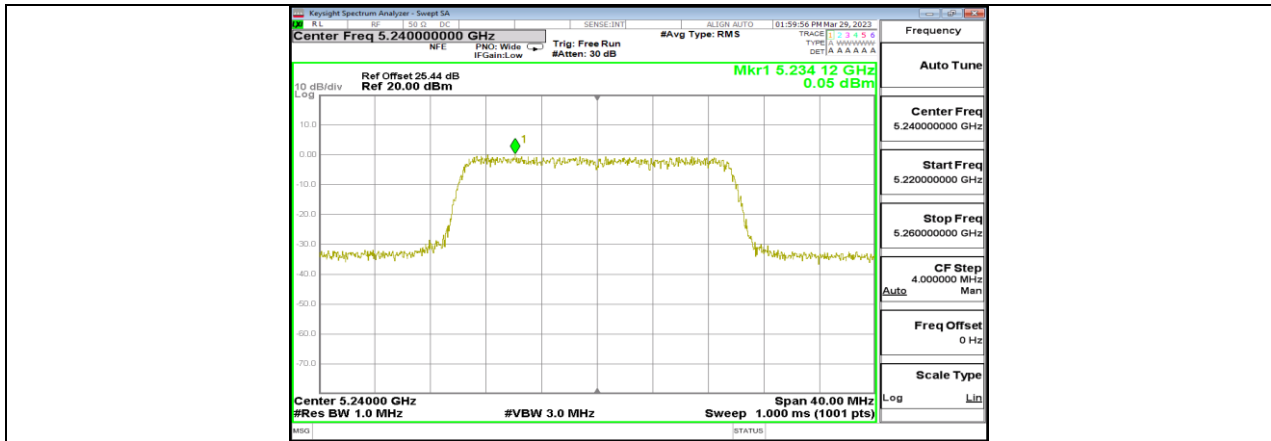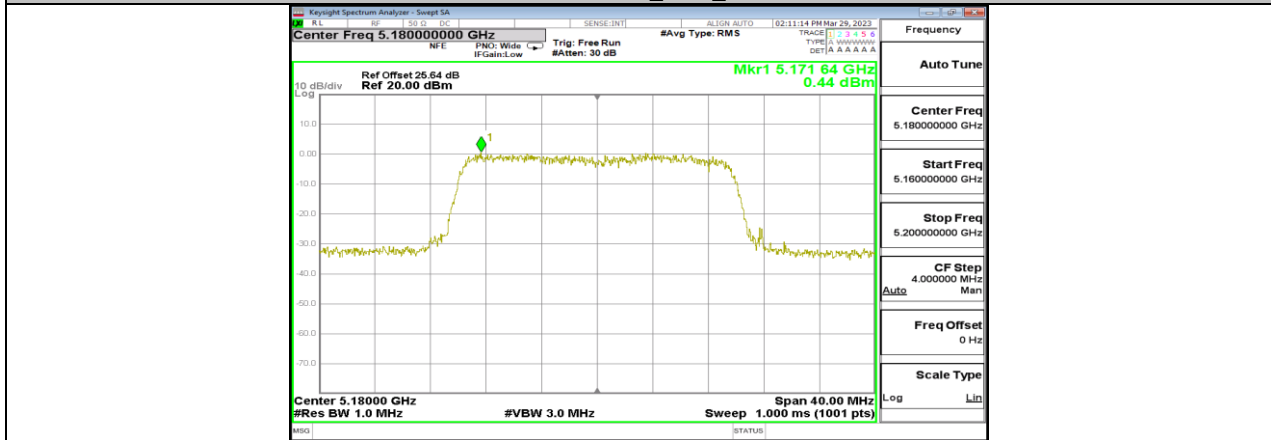
11AX20MIMO_Ant2_5240

11AX20MIMO_Ant3_5240

11AX20MIMO_Ant4_5240

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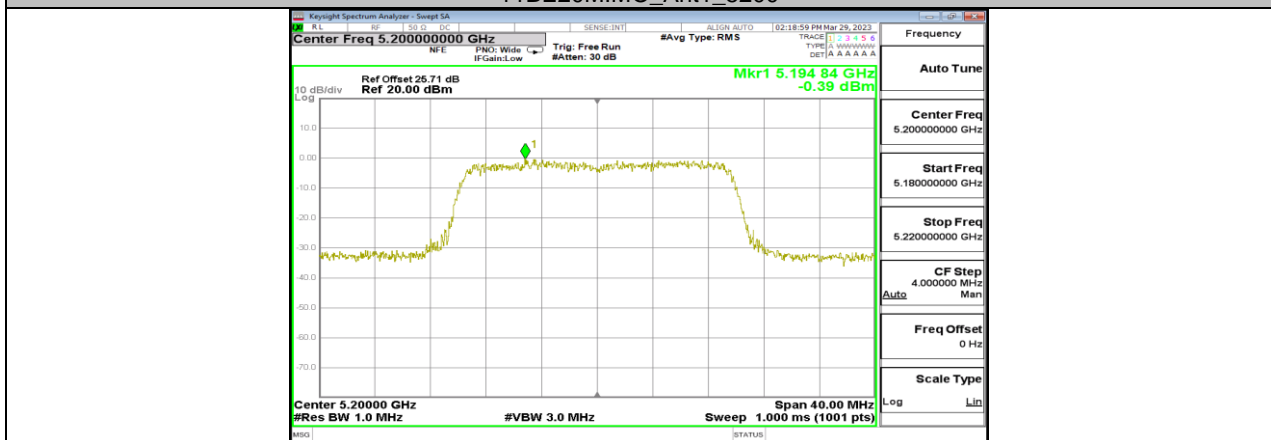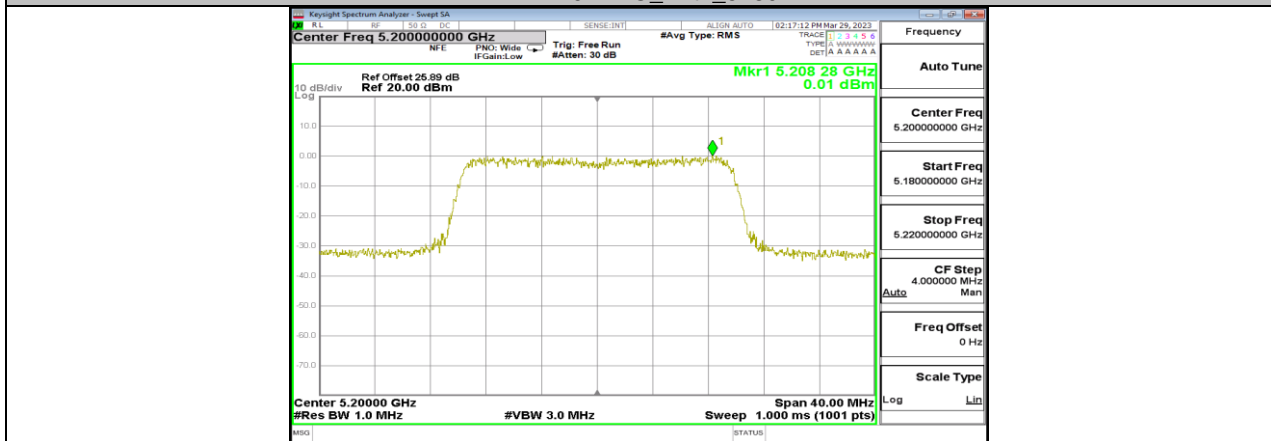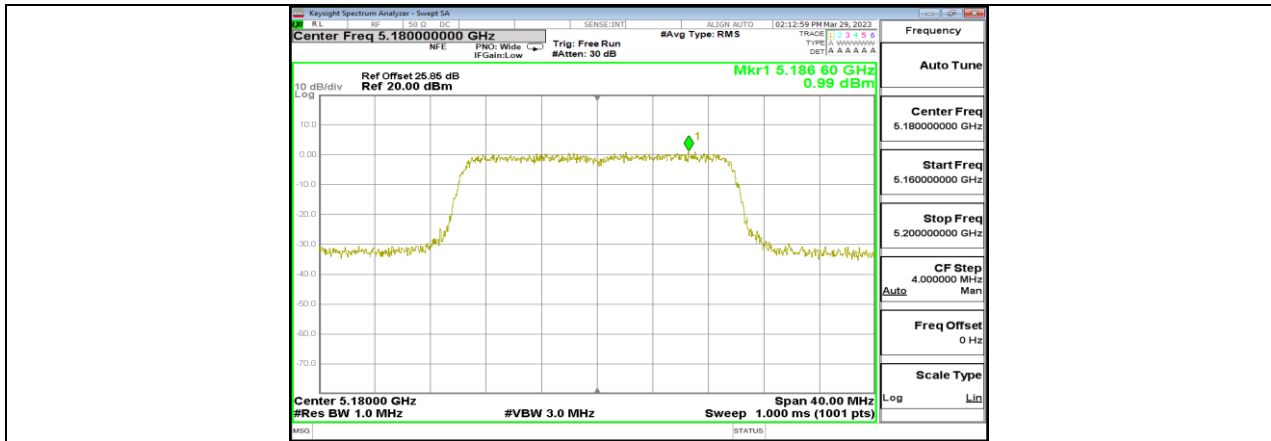
11BE20MIMO_Ant1_5180

11BE20MIMO_Ant2_5180

11BE20MIMO_Ant3_5180

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11BE20MIMO_Ant4_5180

11BE20MIMO_Ant1_5200

11BE20MIMO_Ant2_5200

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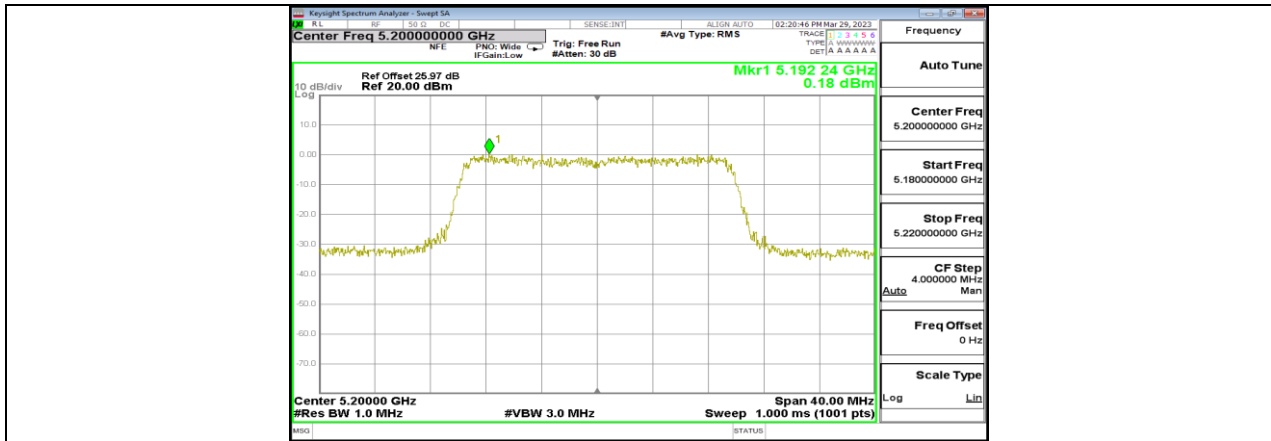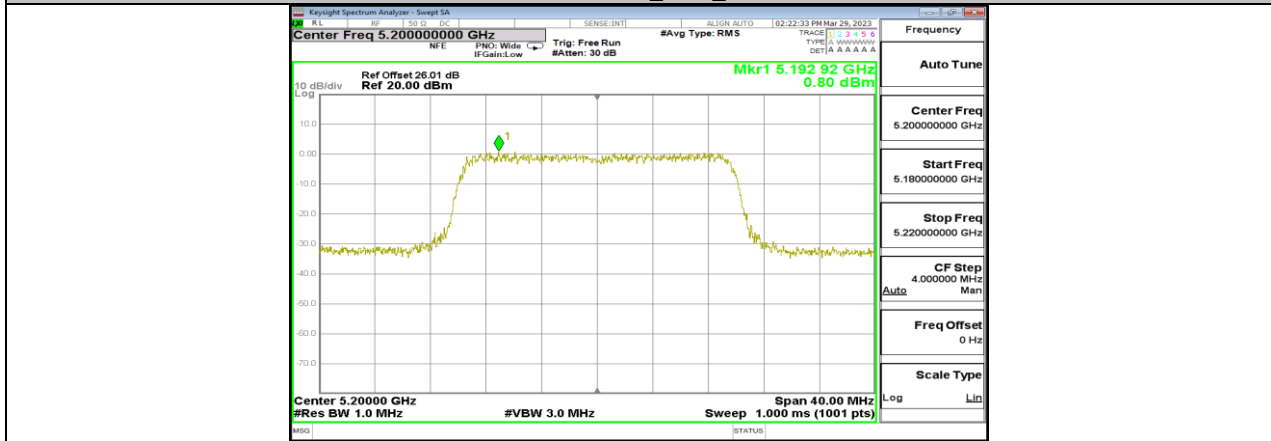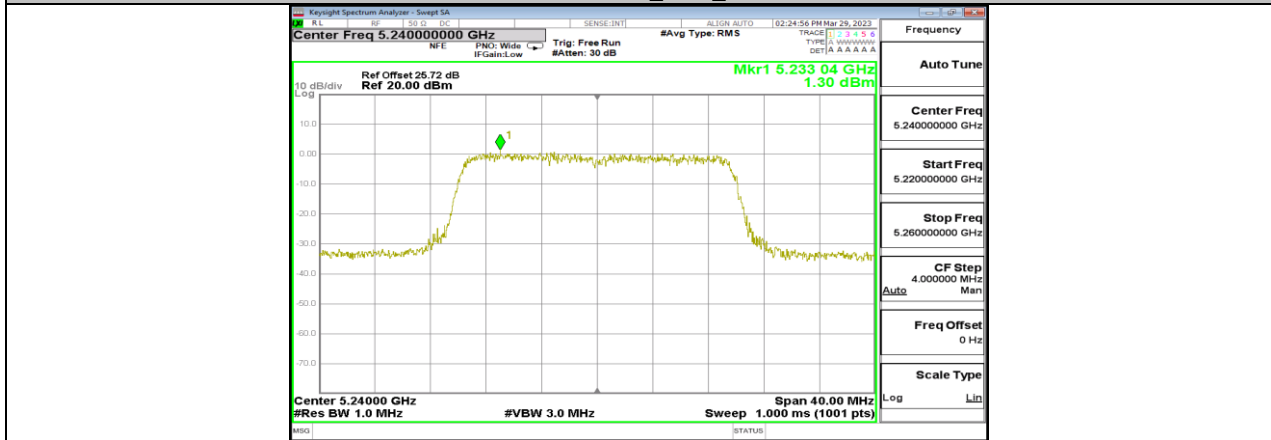
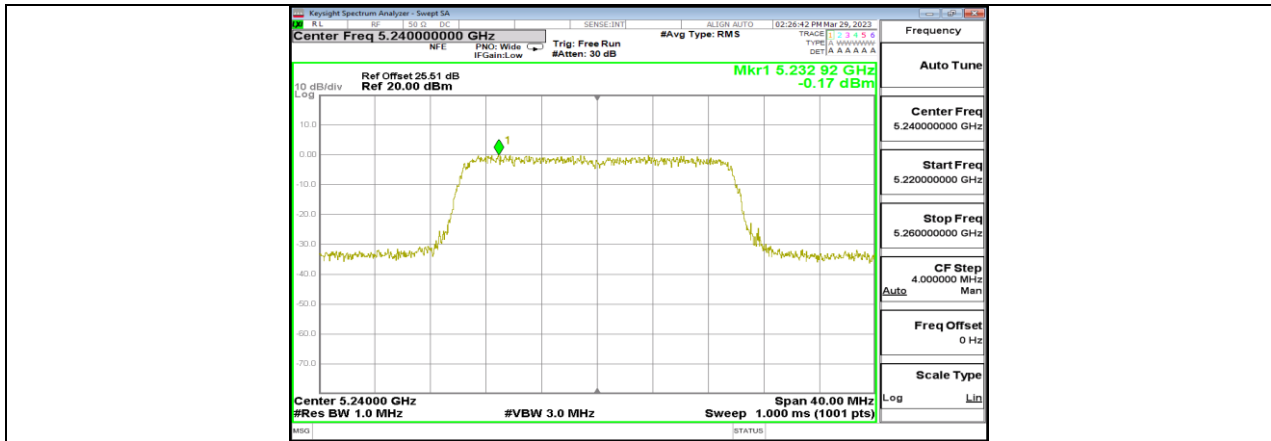11BE20MIMO_Ant3_5200

11BE20MIMO_Ant4_5200

11BE20MIMO_Ant1_5240

11BE20MIMO_Ant2_5240
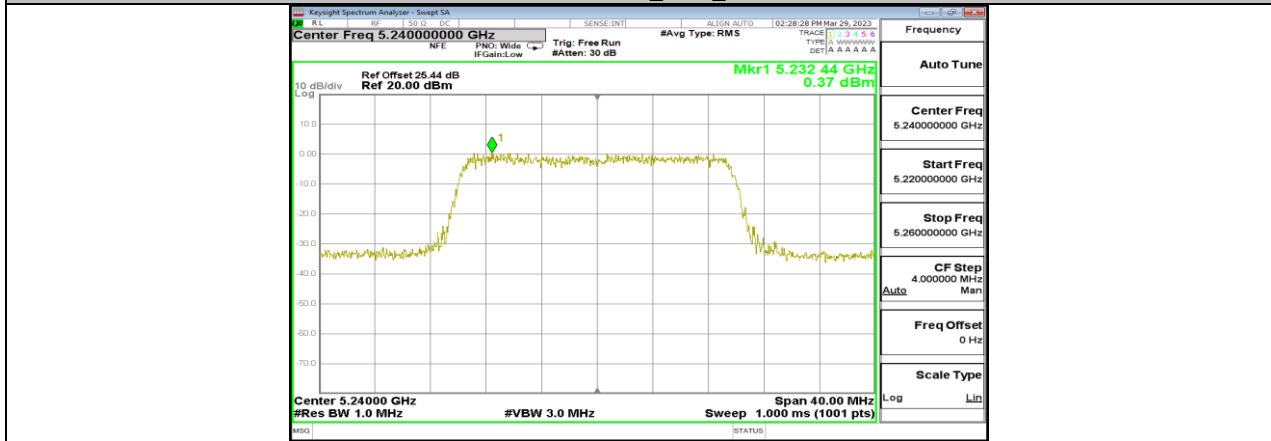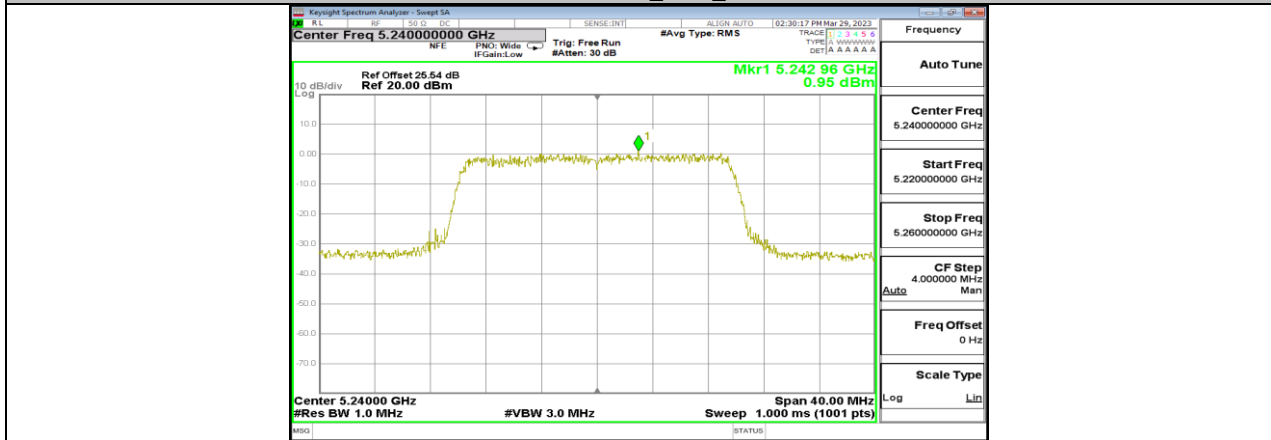

11BE20MIMO_Ant3_5240

11BE20MIMO_Ant4_5240

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11.6. APPENDIX F: FREQUENCY STABILITY
11.6.1. 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	5200.0131	2.52	5200.0003	0.05	5200.0163	3.13	5200.0091	1.76
TN	VN	5199.9826	-3.35	5199.9860	-2.69	5199.9847	-2.94	5200.0126	2.42
TN	VH	5200.0109	2.10	5199.9778	-4.27	5200.0114	2.19	5200.0250	4.80
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	5199.9813	-3.59	5199.9971	-0.55	5200.0138	2.65	5200.0040	0.76
30	VN	5200.0062	1.20	5200.0221	4.25	5200.0148	2.85	5200.0134	2.58
20	VN	5200.0113	2.18	5199.9852	-2.84	5200.0248	4.77	5200.0002	0.04
10	VN	5199.9783	-4.18	5200.0089	1.72	5199.9911	-1.71	5199.9992	-0.16
0	VN	5199.9825	-3.36	5200.0023	0.45	5200.0237	4.57	5200.0118	2.27

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.

11.7. APPENDIX G: DUTY CYCLE
11.7.1. Test Result

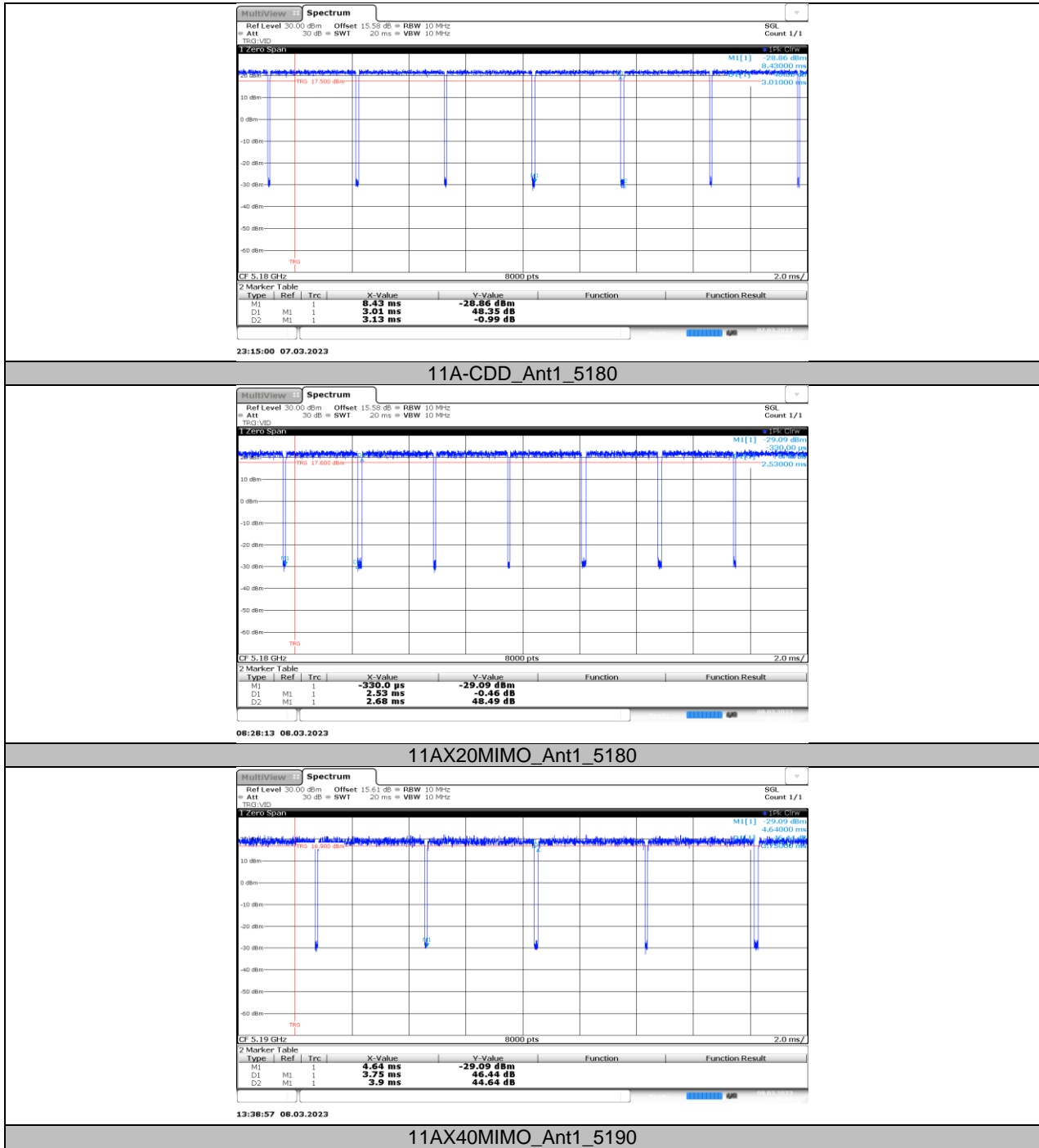| Test Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
11A-CDD	3.01	3.13	0.9617	96.17	0.17	0.33	0.5
11AX20MIMO	2.53	2.68	0.9440	94.40	0.25	0.40	0.5
11AX40MIMO	3.75	3.90	0.9615	96.15	0.17	0.27	0.5
11AX80MIMO	3.58	3.90	0.9179	91.79	0.37	0.28	0.5
11BE20MIMO	2.53	2.71	0.9336	93.36	0.30	0.40	0.5
11BE40MIMO	3.76	3.93	0.9567	95.67	0.19	0.27	0.5
11BE80MIMO	3.58	3.73	0.9598	95.98	0.18	0.28	0.5

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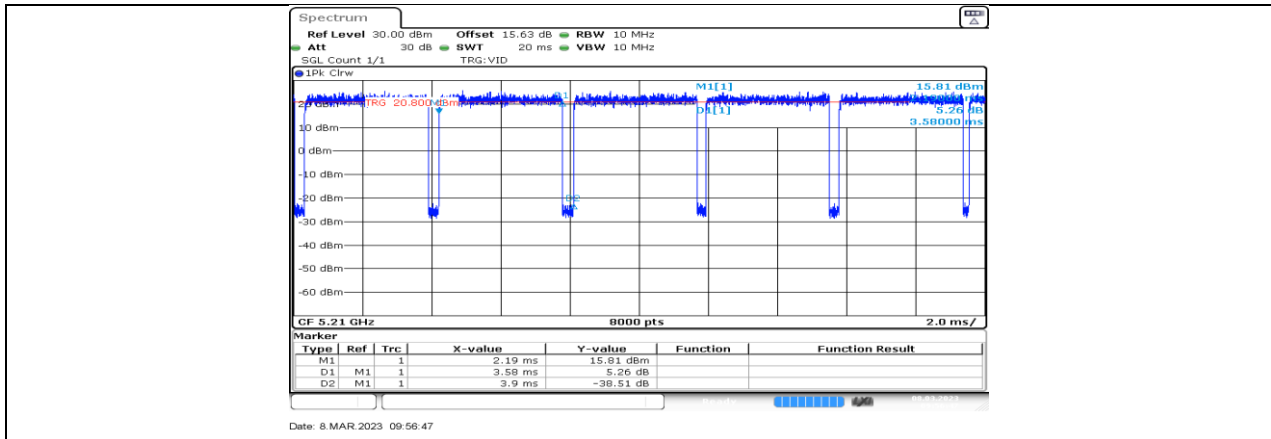Duty Cycle Correction Factor=10log (1/x).
Where: x is Duty Cycle (Linear)
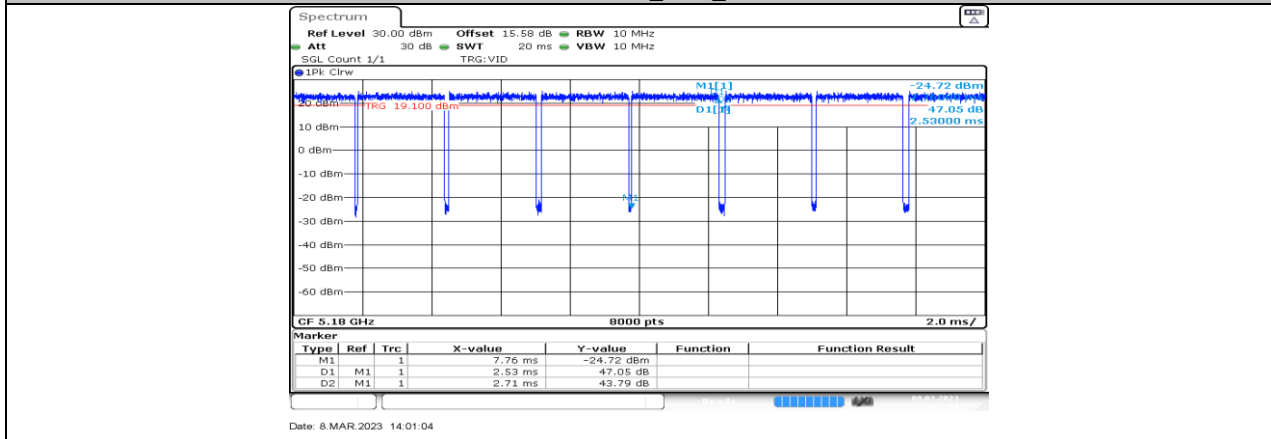Where: T is On Time
If that calculated VBW is not available on the analyzer then the next higher value should be used.
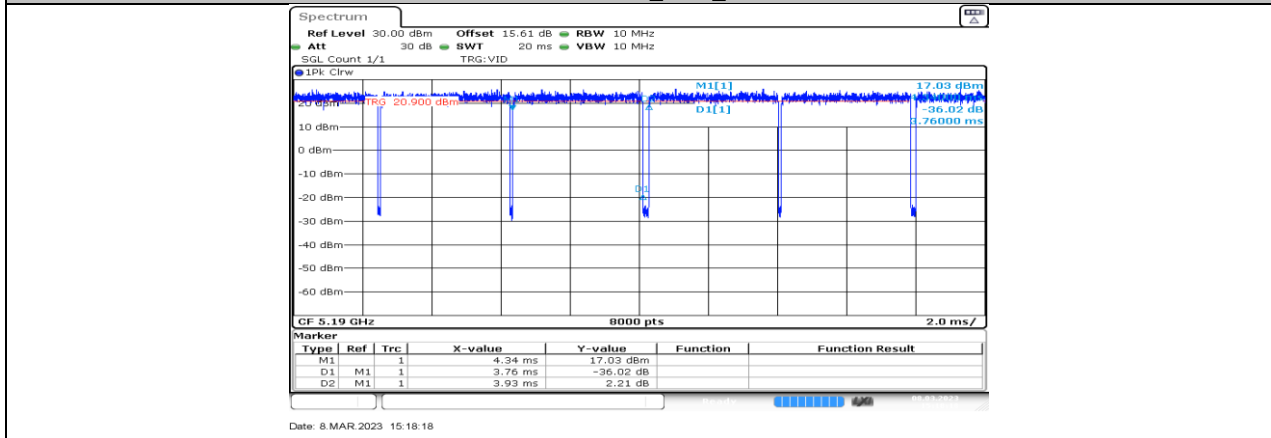
11.7.2. Test Graphs

11A-CDD_Ant1_5180

11AX20MIMO_Ant1_5180

11AX40MIMO_Ant1_5190

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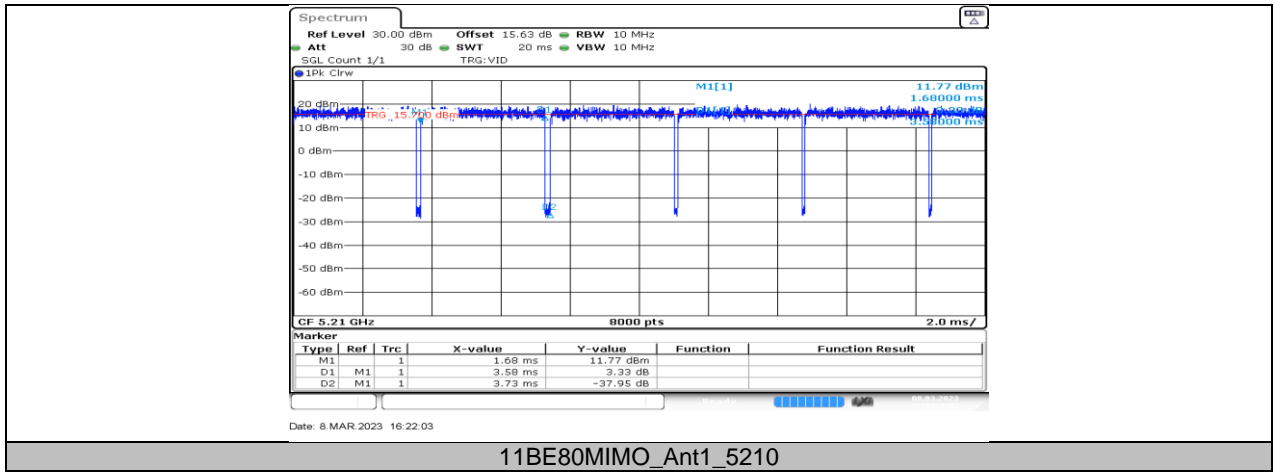
11AX80MIMO_Ant1_5210

11BE20MIMO_Ant1_5180

11BE40MIMO_Ant1_5190

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UL Solutions

11BE80MIMO_Ant1_5210

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