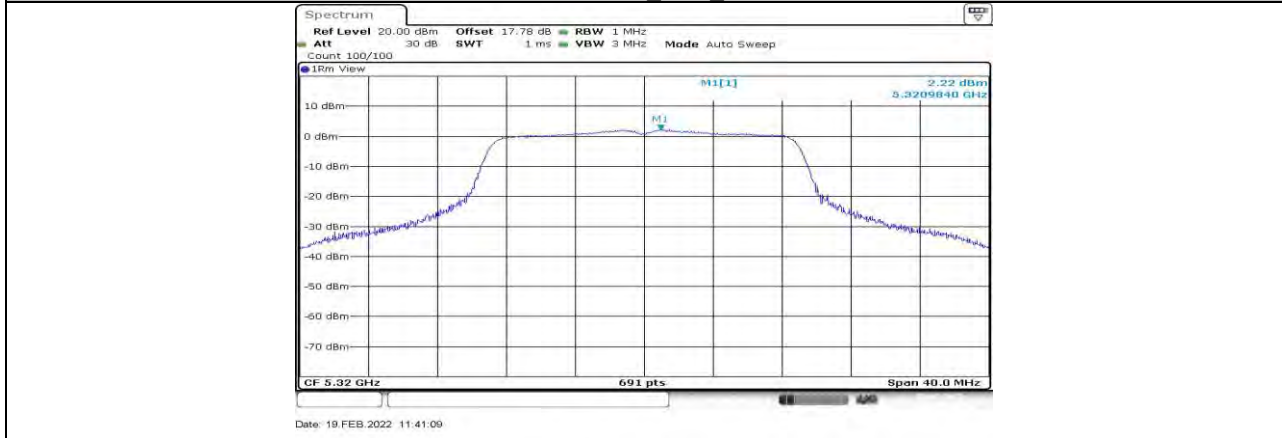


11N20MIMO Ant1 5280



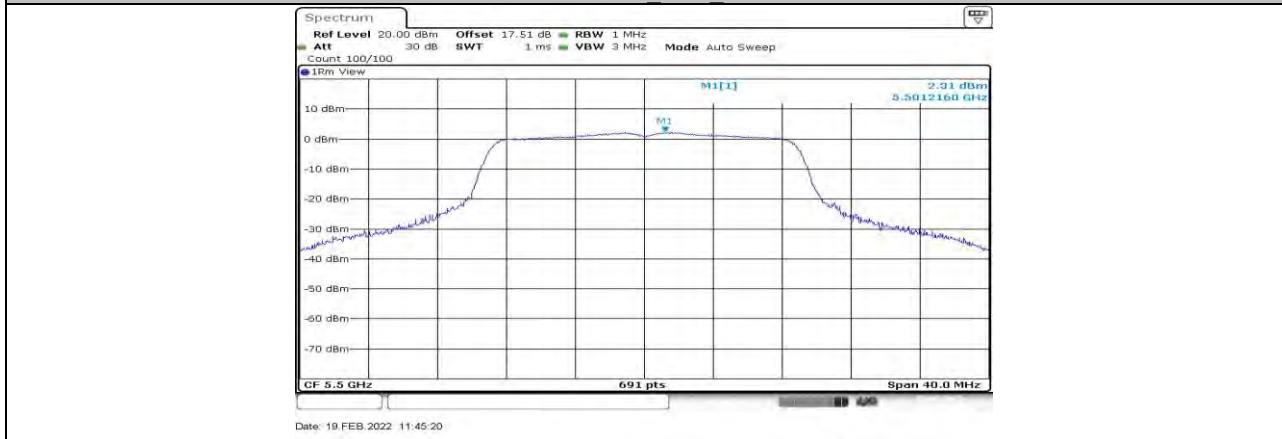
11N20MIMO Ant2 5280



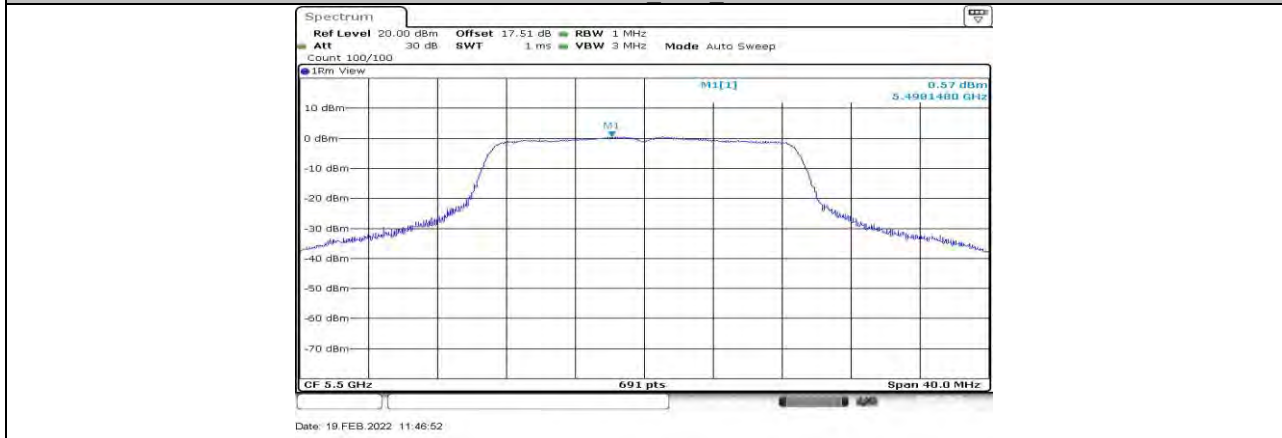
11N20MIMO Ant1 5320



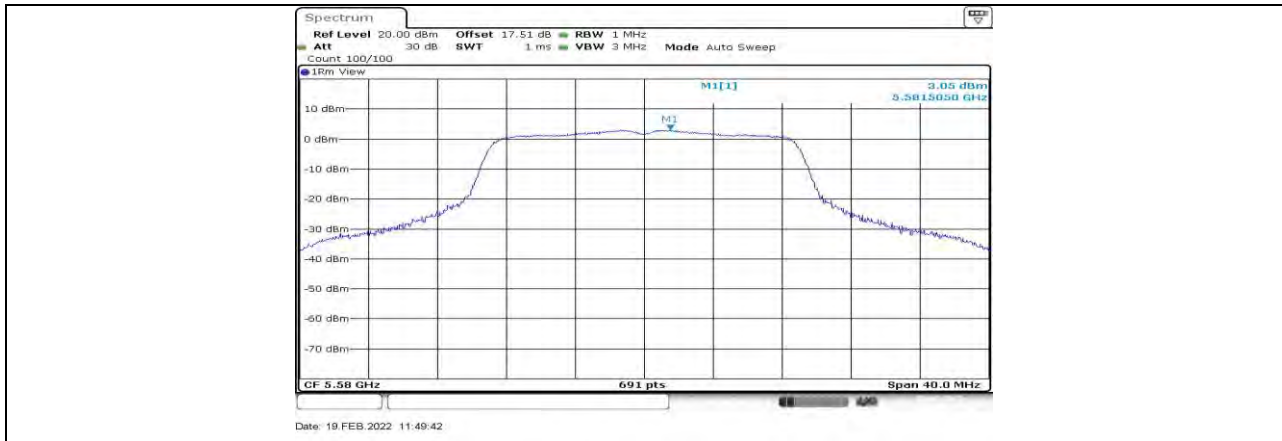
11N20MIMO Ant2 5320



11N20MIMO Ant1 5500



11N20MIMO Ant2 5500



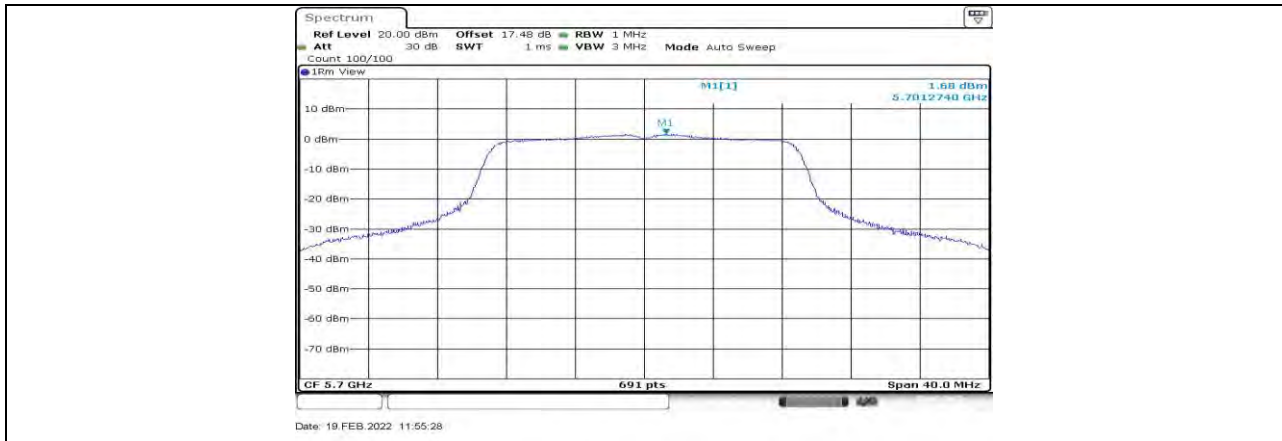
11N20MIMO Ant1 5580



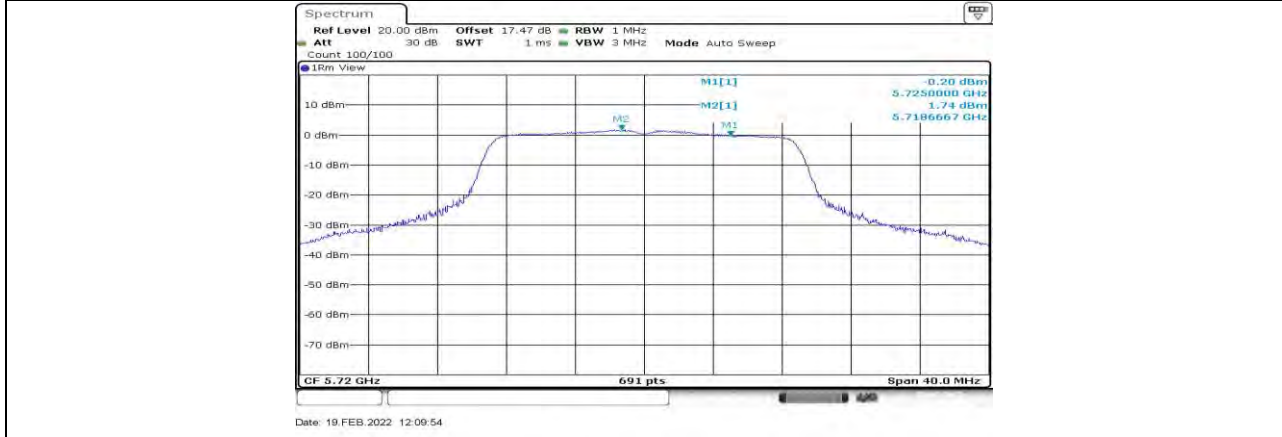
11N20MIMO Ant2 5580



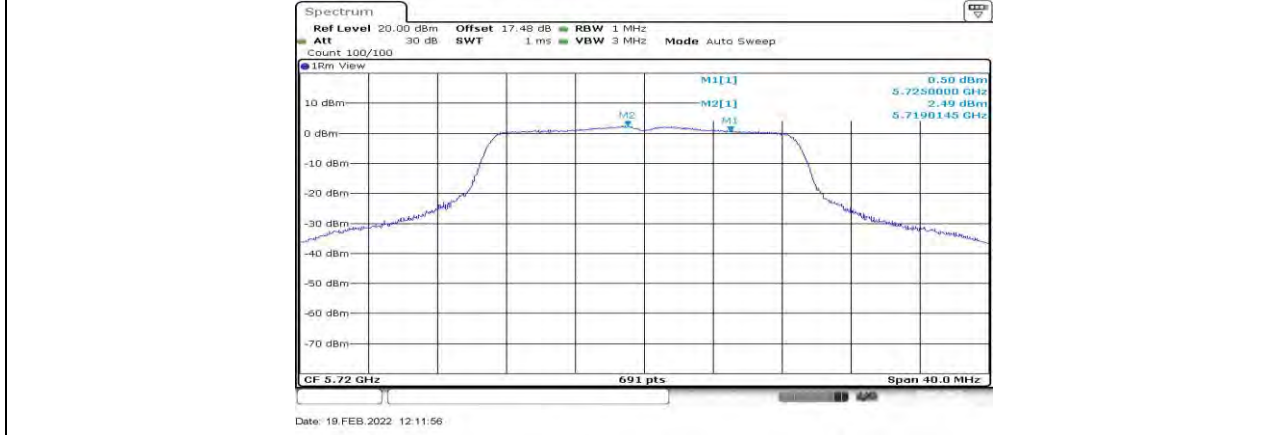
11N20MIMO Ant1 5700



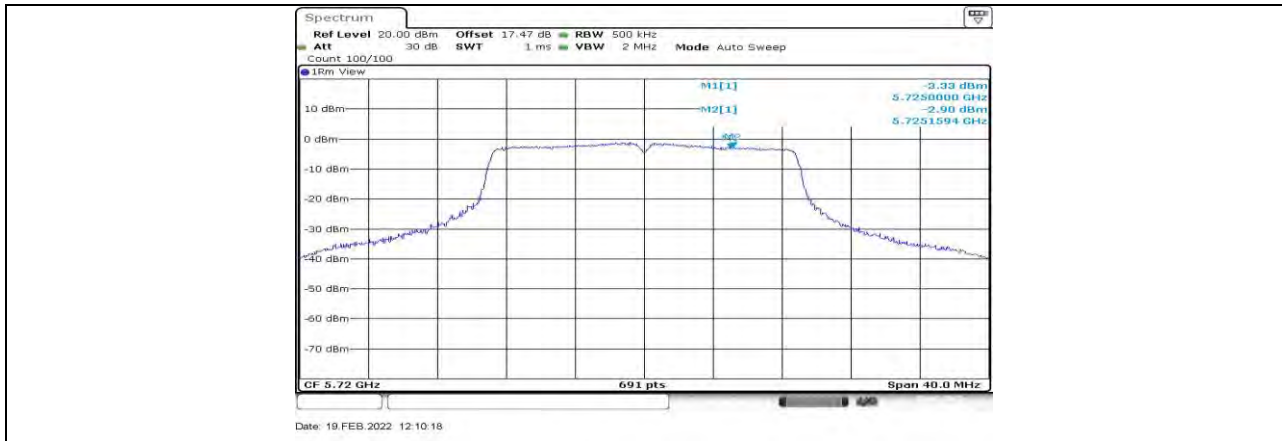
11N20MIMO Ant2 5700



11N20MIMO Ant1 5720 UNII-2C



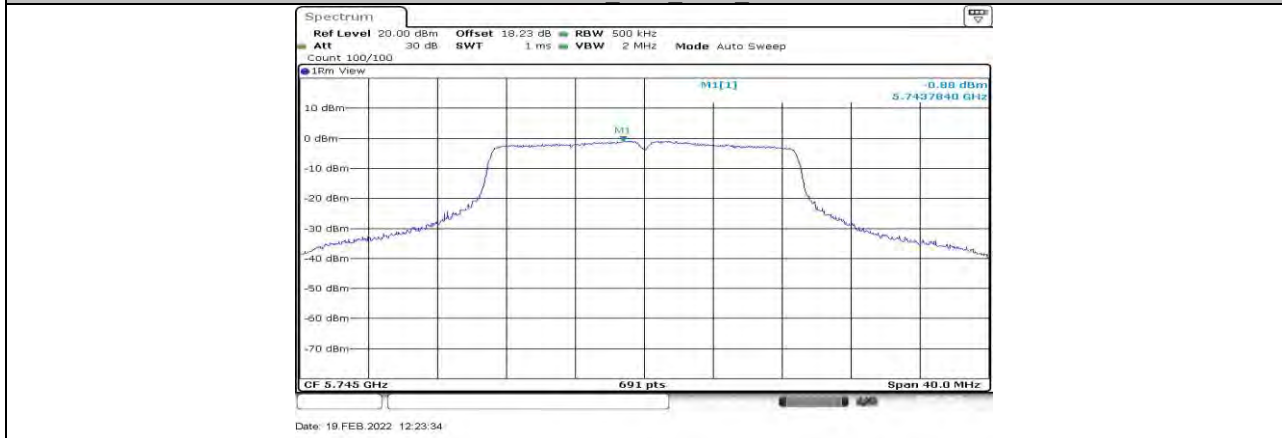
11N20MIMO Ant2 5720 UNII-2C



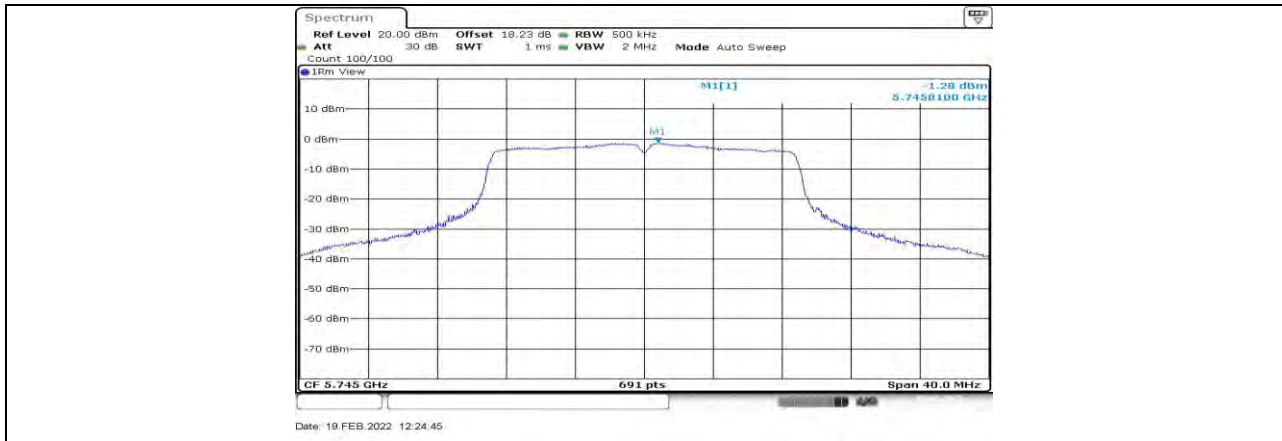
11N20MIMO Ant1_5720 UNII-3



11N20MIMO Ant2_5720 UNII-3



11N20MIMO Ant1_5745



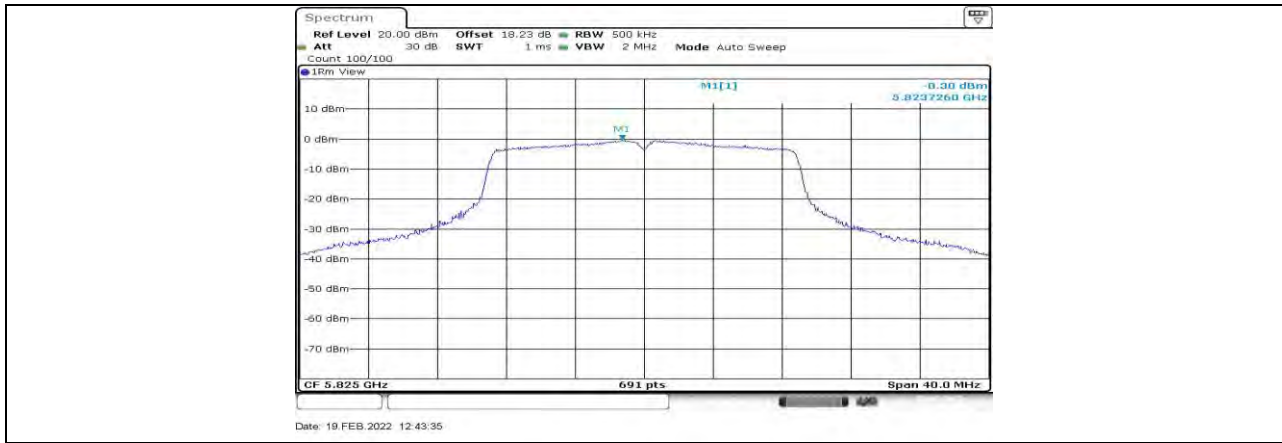
11N20MIMO Ant2 5745



11N20MIMO Ant1 5785



11N20MIMO Ant2 5785



11N20MIMO Ant1 5825



11N20MIMO Ant2 5825



11N40MIMO Ant1 5190



11N40MIMO Ant2 5190



11N40MIMO Ant1 5230



11N40MIMO Ant2 5230



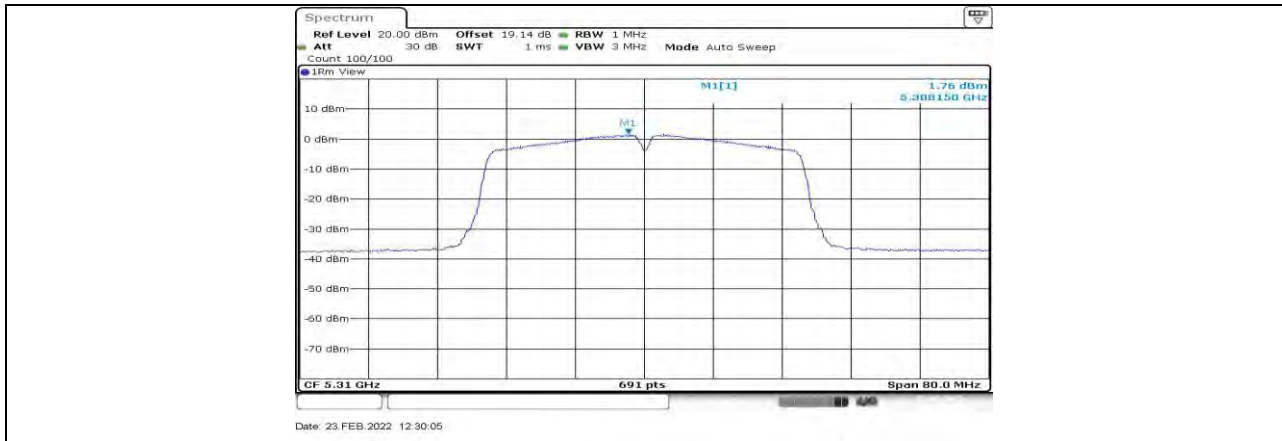
11N40MIMO Ant1 5270



11N40MIMO Ant2 5270



11N40MIMO Ant1 5310



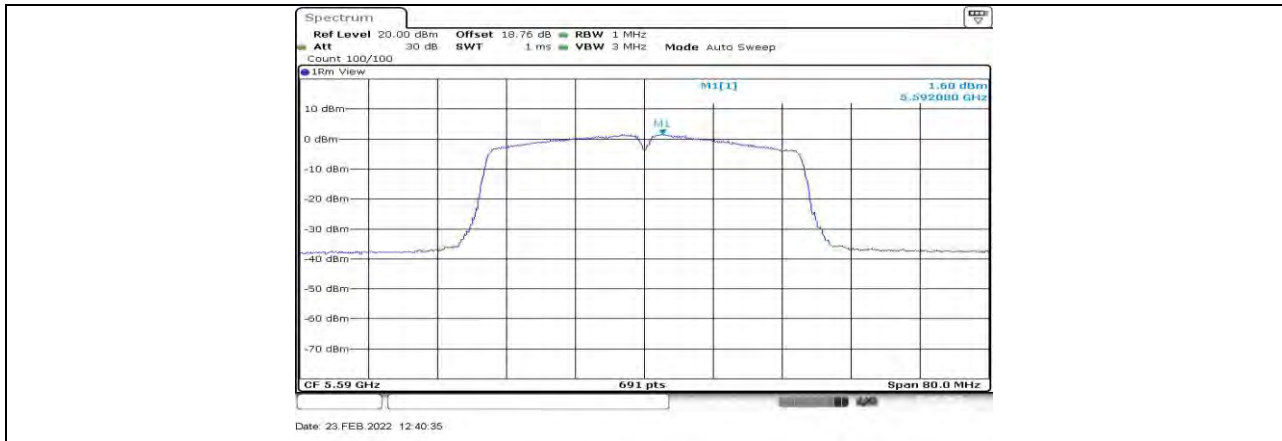
11N40MIMO Ant2 5310



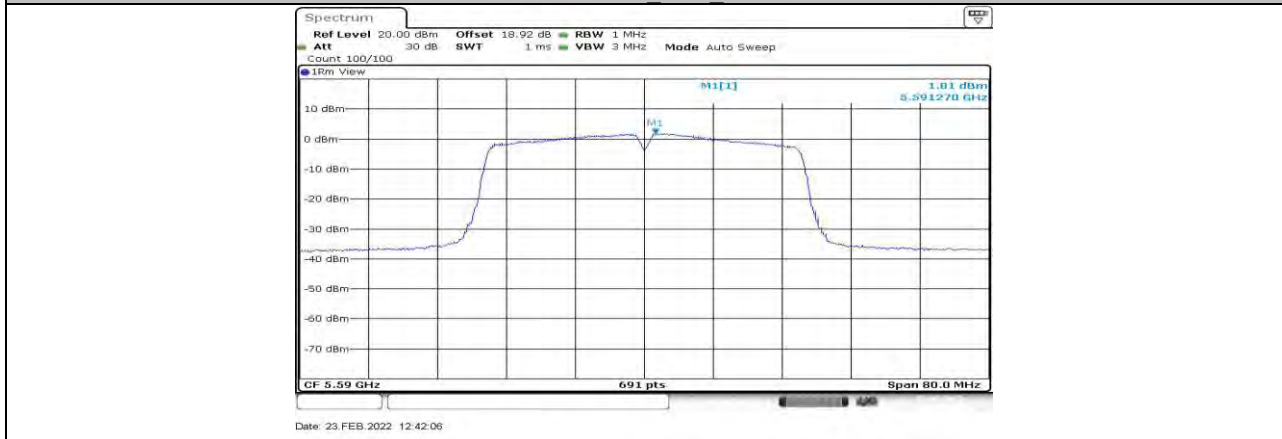
11N40MIMO Ant1 5510



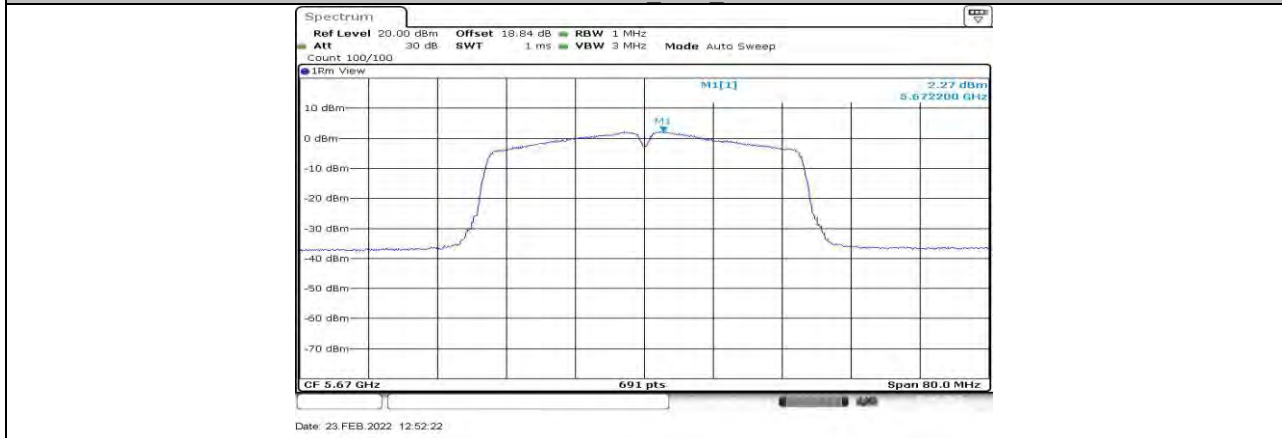
11N40MIMO Ant2 5510



11N40MIMO Ant1 5590



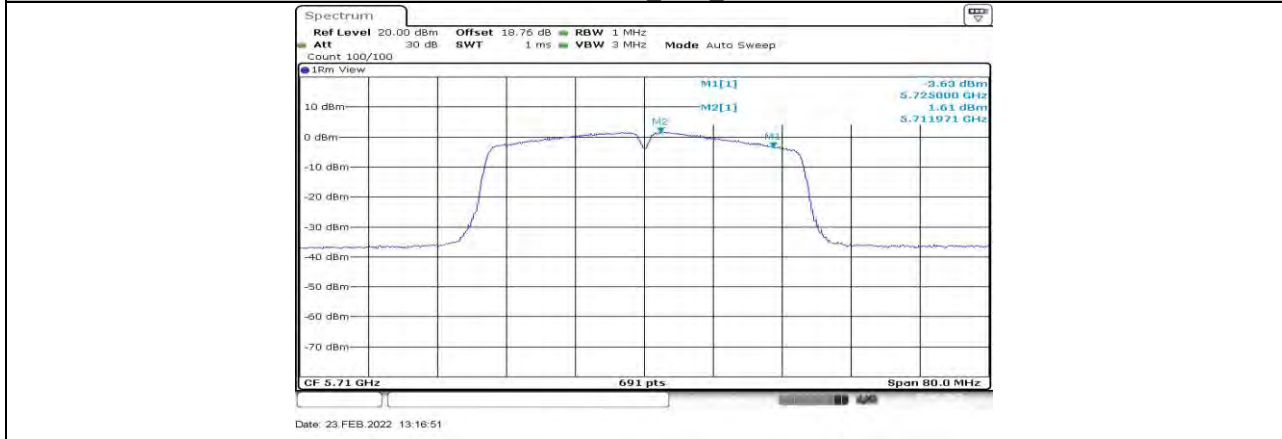
11N40MIMO Ant2 5590



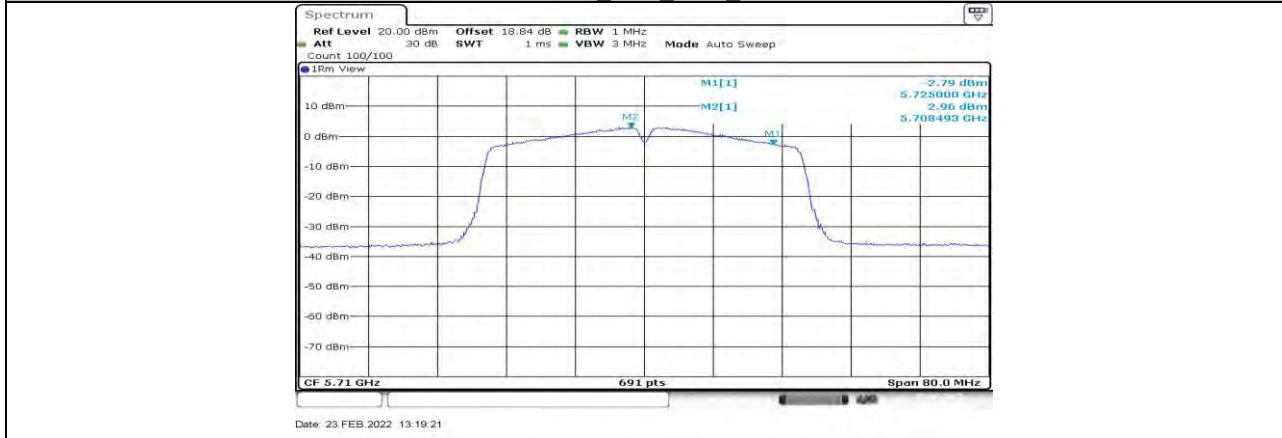
11N40MIMO Ant1 5670



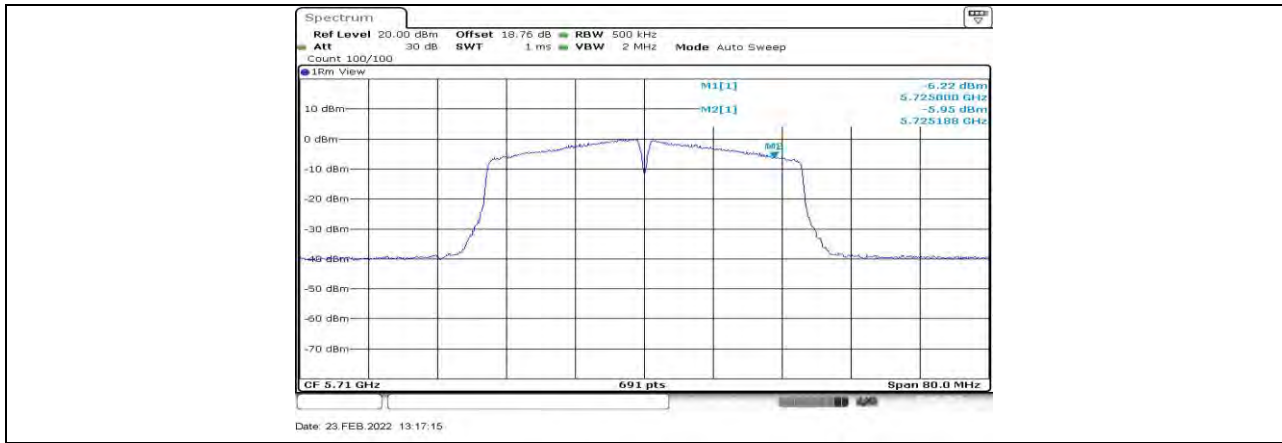
11N40MIMO Ant2 5670



11N40MIMO Ant1 5710 UNII-2C



11N40MIMO Ant2 5710 UNII-2C



11N40MIMO Ant1_5755



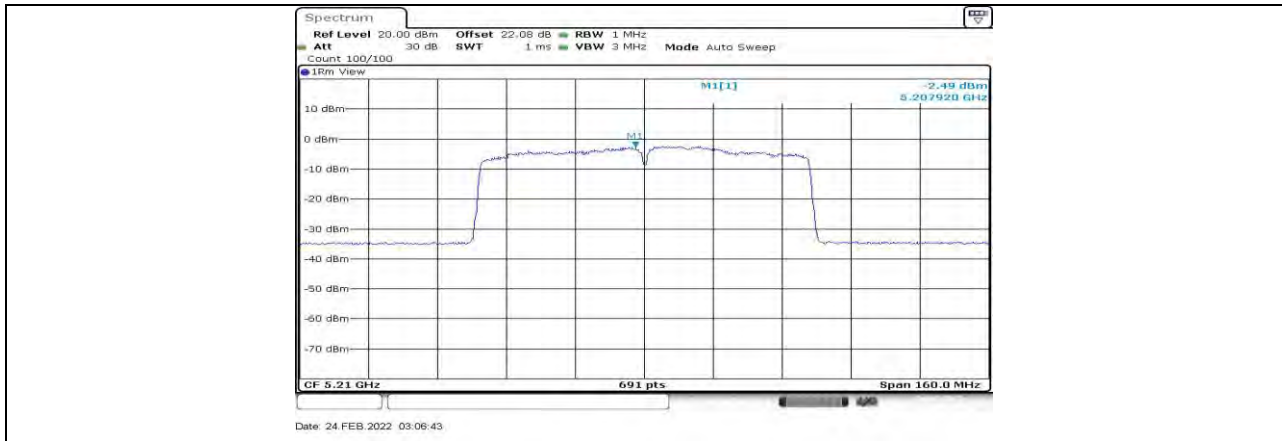
11N40MIMO Ant2 5755



11N40MIMO Ant1 5795



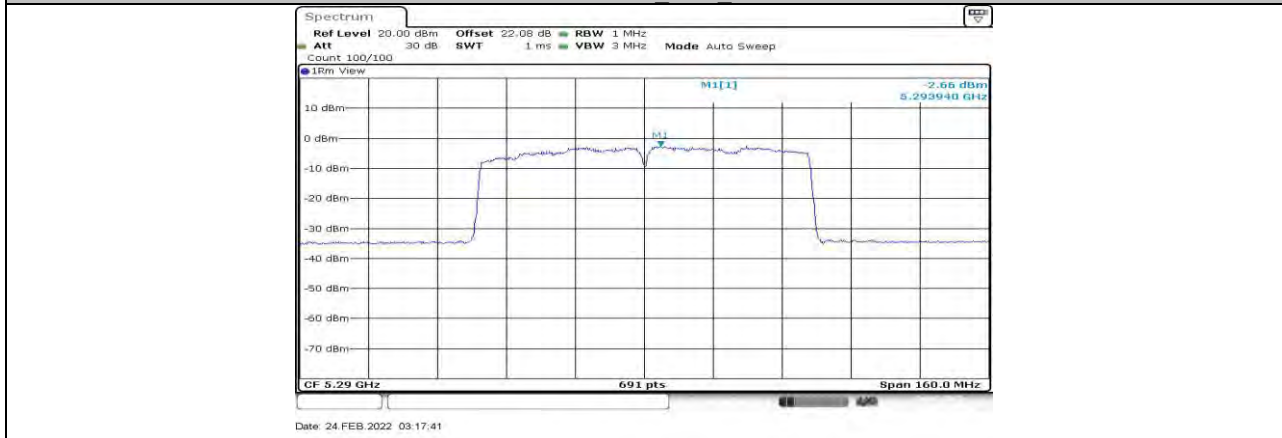
11N40MIMO Ant2 5795



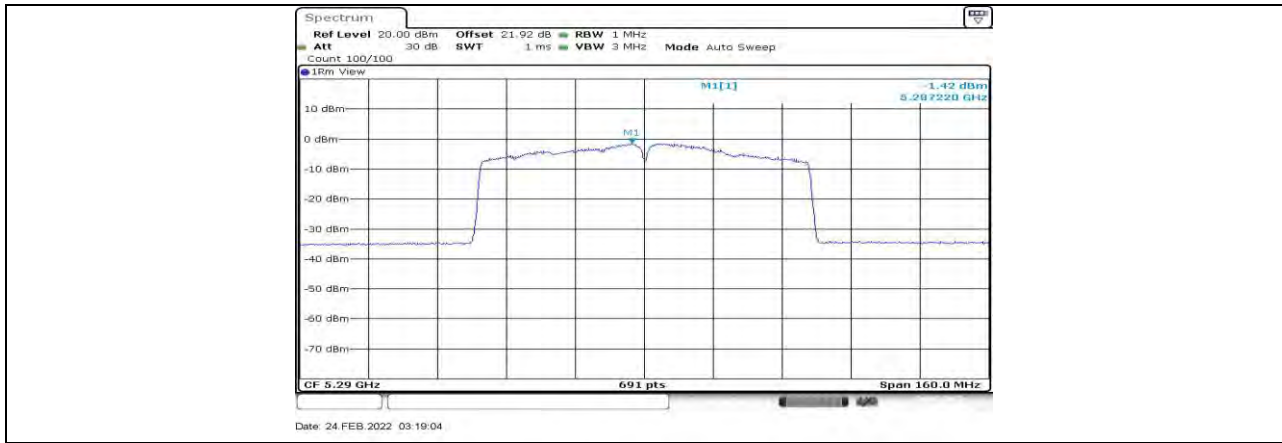
11AC80MIMO Ant1 5210



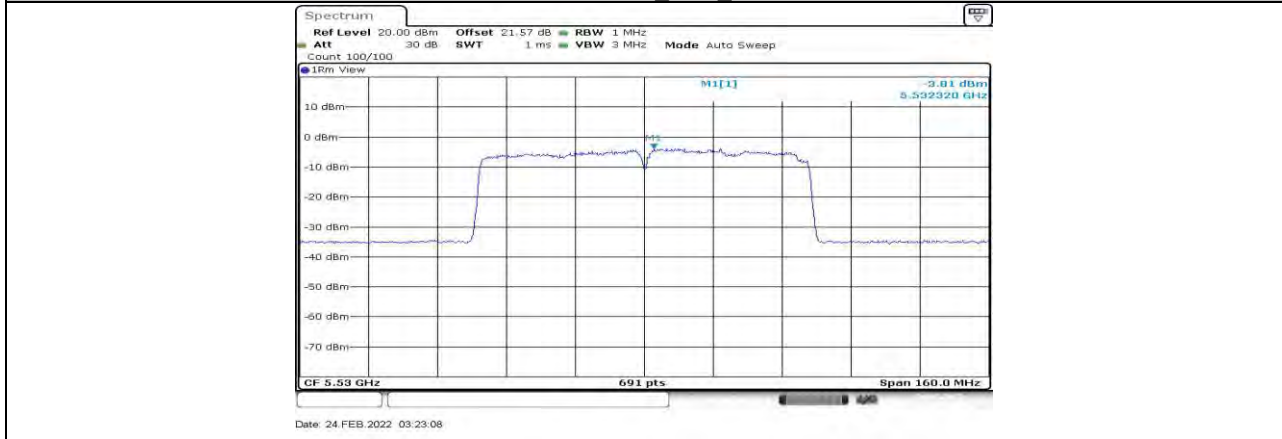
11AC80MIMO Ant2 5210



11AC80MIMO Ant1 5290



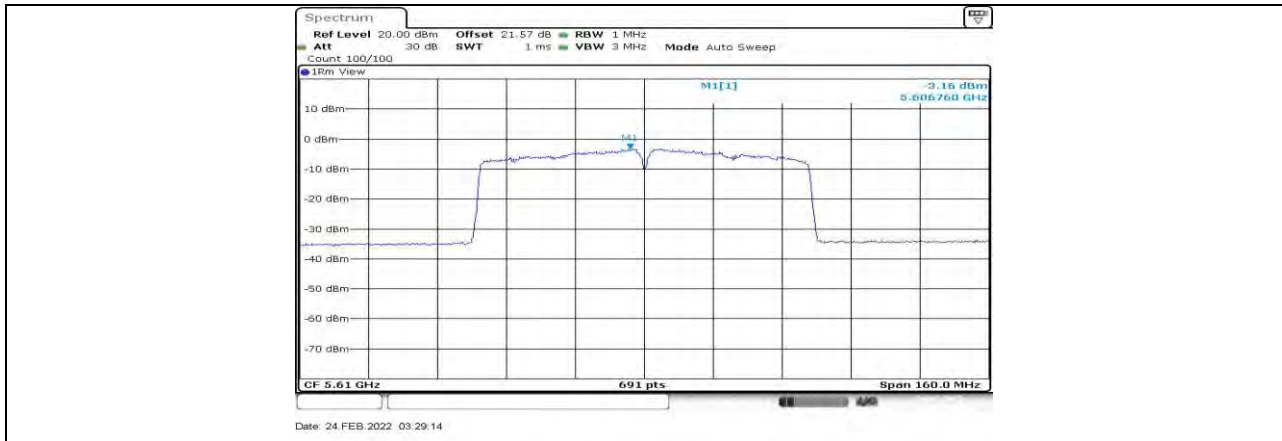
11AC80MIMO Ant2 5290



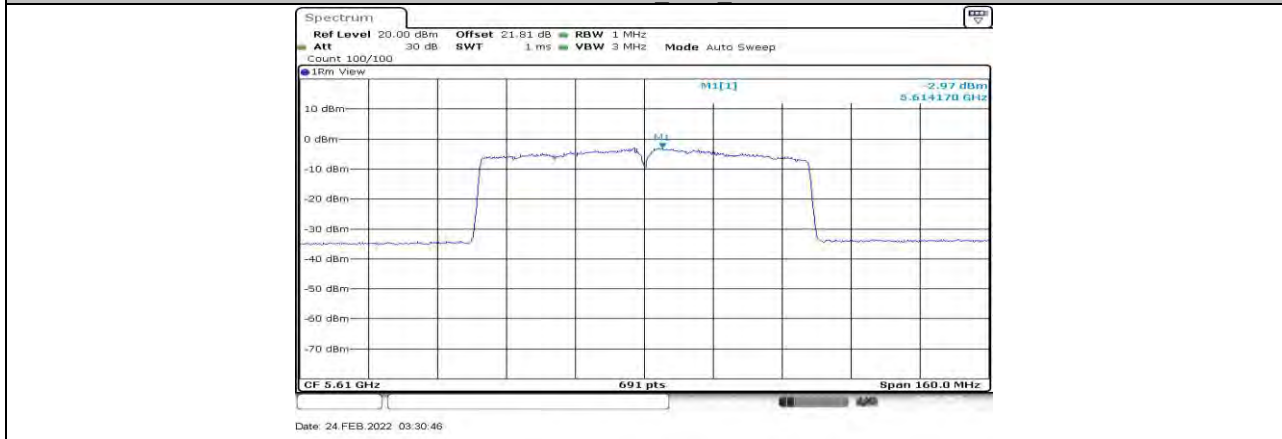
11AC80MIMO Ant1 5530



11AC80MIMO Ant2 5530



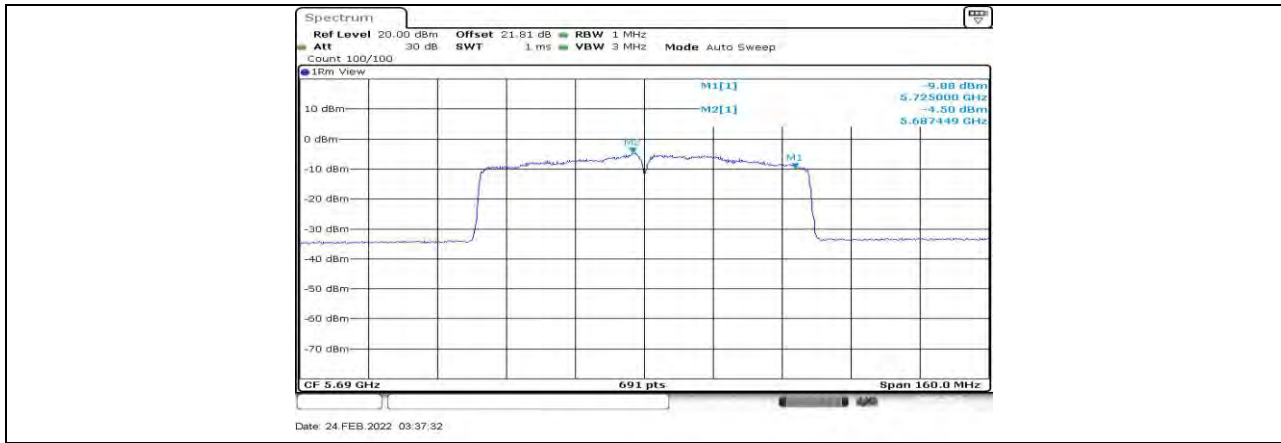
11AC80MIMO Ant1 5610



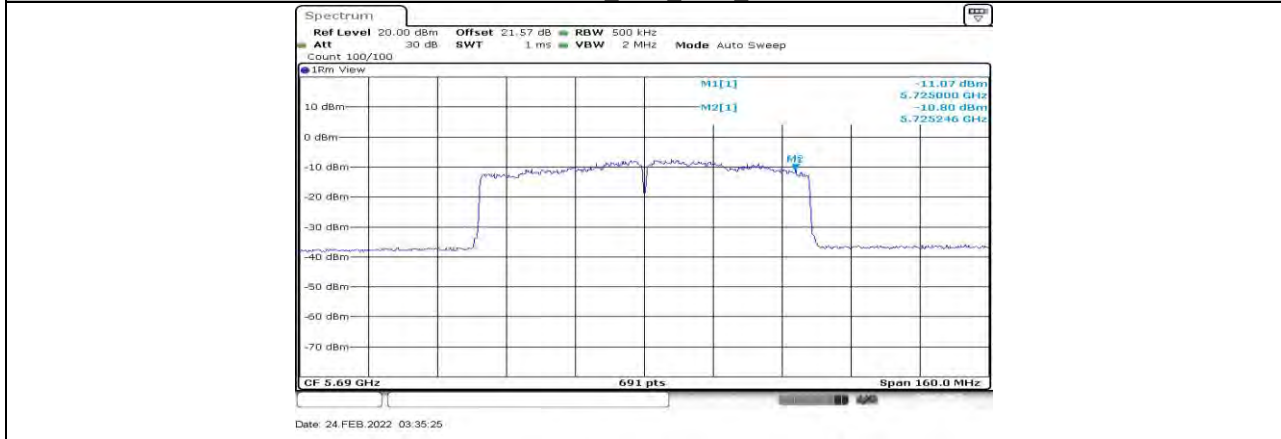
11AC80MIMO Ant2 5610



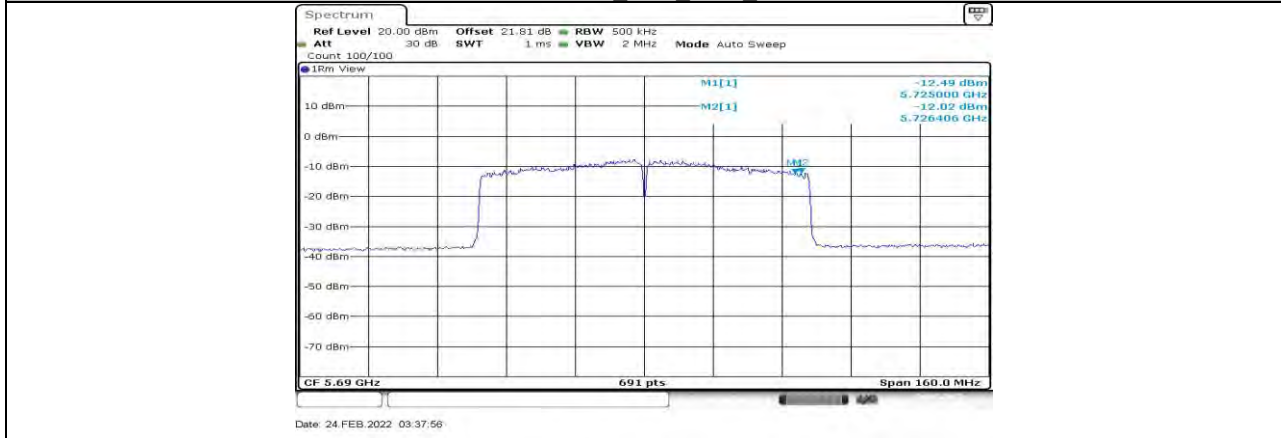
11AC80MIMO Ant1 5690 UNII-2C



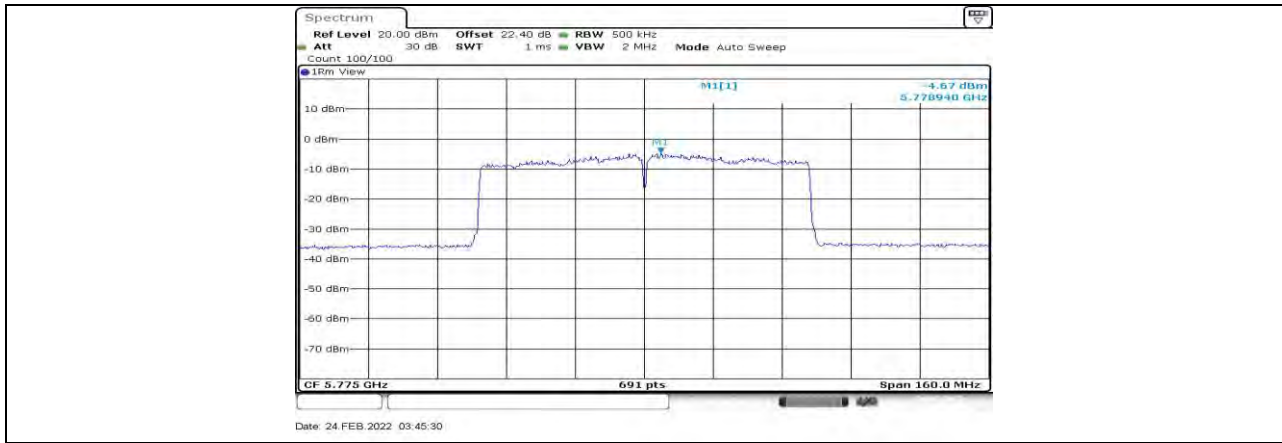
11AC80MIMO Ant2 5690 UNII-2C



11AC80MIMO Ant1 5690 UNII-3



11AC80MIMO Ant2 5690 UNII-3



11AC80MIMO Ant1 5775



11AC80MIMO Ant2 5775



12.6. Appendix D: Frequency Stability

12.6.1. Test Result

Frequency Error vs. Voltage									
802.11a 20: 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	5199.9938	-1.20	5200.0147	2.82	5199.9789	-4.06	5199.9767	-4.47
TN	VN	5200.0120	2.30	5200.0229	4.40	5199.9981	-0.36	5200.0118	2.27
TN	VH	5200.0009	0.17	5199.9776	-4.32	5200.0043	0.82	5200.0169	3.25
Frequency Error vs. Temperature									
802.11a 20: 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)
70	VN	5199.9960	-0.76	5199.9933	-1.28	5200.0138	2.65	5199.9942	-1.12
60	VN	5200.0238	4.58	5199.9859	-2.71	5199.9893	-2.06	5200.0056	1.07
40	VN	5199.9866	-2.58	5199.9937	-1.20	5199.9917	-1.59	5200.0012	0.24
30	VN	5199.9927	-1.40	5199.9933	-1.29	5200.0189	3.63	5200.0130	2.50
20	VN	5200.0249	4.78	5199.9836	-3.15	5199.9851	-2.86	5200.0122	2.35
10	VN	5200.0031	0.59	5200.0130	2.49	5199.9946	-1.04	5200.0154	2.96
0	VN	5200.0101	1.94	5200.0172	3.31	5199.9873	-2.45	5200.0027	0.51



Frequency Error vs. Voltage									
802.11a 20: 5825MHz									
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	5824.9765	-4.04	5825.0216	3.71	5825.0189	3.25	5825.0220	3.78
TN	VN	5824.9974	-0.45	5824.9936	-1.09	5824.9948	-0.89	5824.9823	-3.04
TN	VH	5824.9950	-0.85	5825.0044	0.76	5824.9791	-3.59	5825.0129	2.21
Frequency Error vs. Temperature									
802.11a 20: 5825MHz									
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)
70	VN	5824.9810	-3.27	5824.9776	-3.84	5825.0088	1.51	5824.9845	-2.66
60	VN	5824.9869	-2.24	5825.0102	1.75	5824.9913	-1.49	5825.0031	0.52
40	VN	5825.0074	1.27	5824.9822	-3.06	5825.0173	2.98	5825.0014	0.25
30	VN	5825.0223	3.84	5824.9783	-3.72	5824.9914	-1.48	5824.9758	-4.15
20	VN	5824.9977	-0.40	5824.9901	-1.71	5824.9960	-0.68	5824.9827	-2.97
10	VN	5824.9938	-1.06	5825.0099	1.70	5825.0045	0.77	5824.9942	-0.99
0	VN	5825.0206	3.54	5824.9814	-3.19	5824.9862	-2.36	5825.0140	2.40

Note: All antennas and test modes have been tested, only the worst data record in the report.



12.7. Appendix E: Duty Cycle

12.7.1. 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	1.38	1.75	0.7886	78.86	1.03	0.72	1
11N20MIMO	1.28	1.65	0.7758	77.58	1.10	0.78	1
11N40MIMO	0.64	1.01	0.6337	63.37	1.98	1.56	2
11AC80MIMO	0.18	0.57	0.3158	31.58	5.01	5.56	6
11AX20MIMO	0.20	0.57	0.3509	35.09	4.55	5.00	6
11AX40MIMO	0.20	0.56	0.3571	35.71	4.47	5.00	6
11AX80MIMO	0.19	0.57	0.3333	33.33	4.77	5.26	6

Note:

Duty Cycle Correction Factor= $10\log(1/x)$.

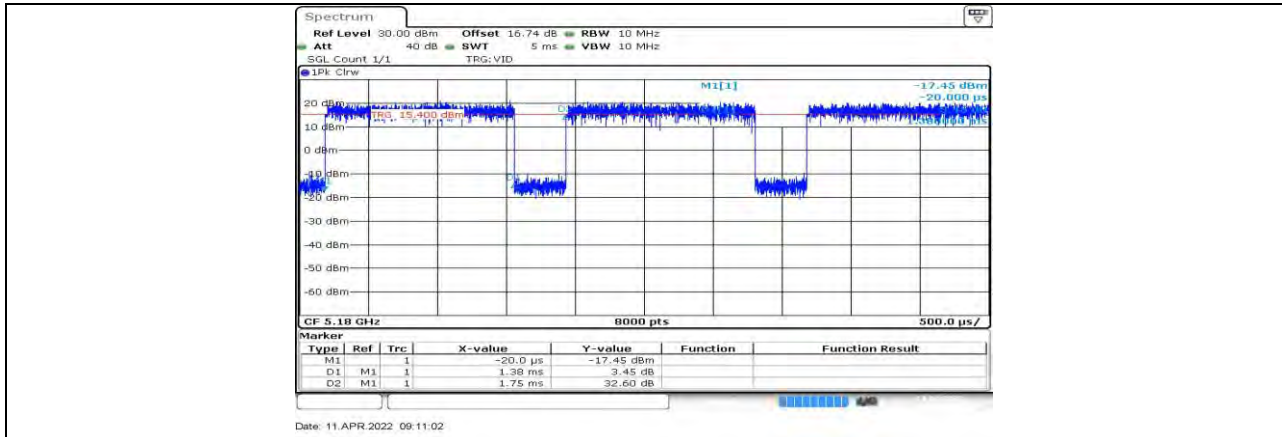
Where: x is Duty Cycle (Linear)

Where: T is On Time

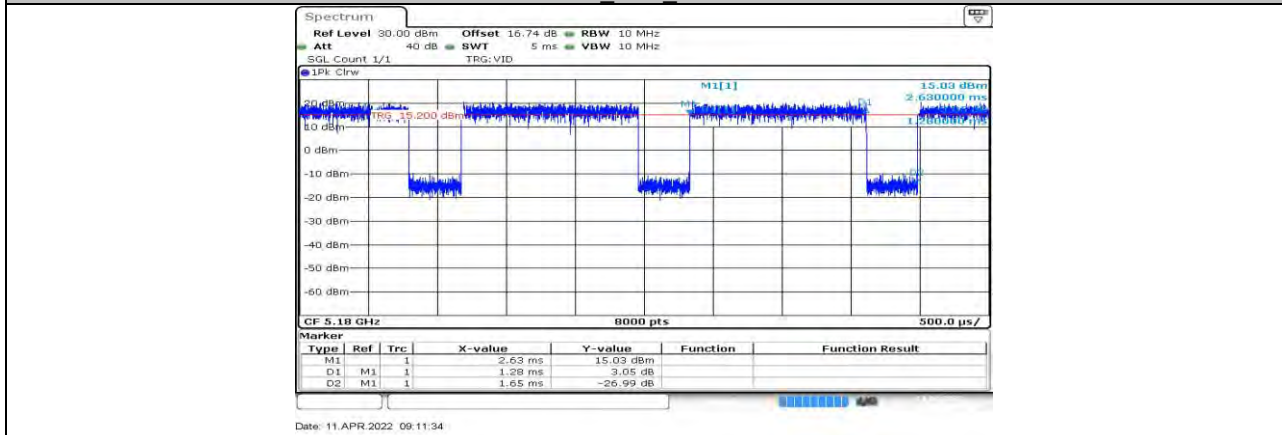
If that calculated VBW is not available on the analyzer then the next higher value should be used.



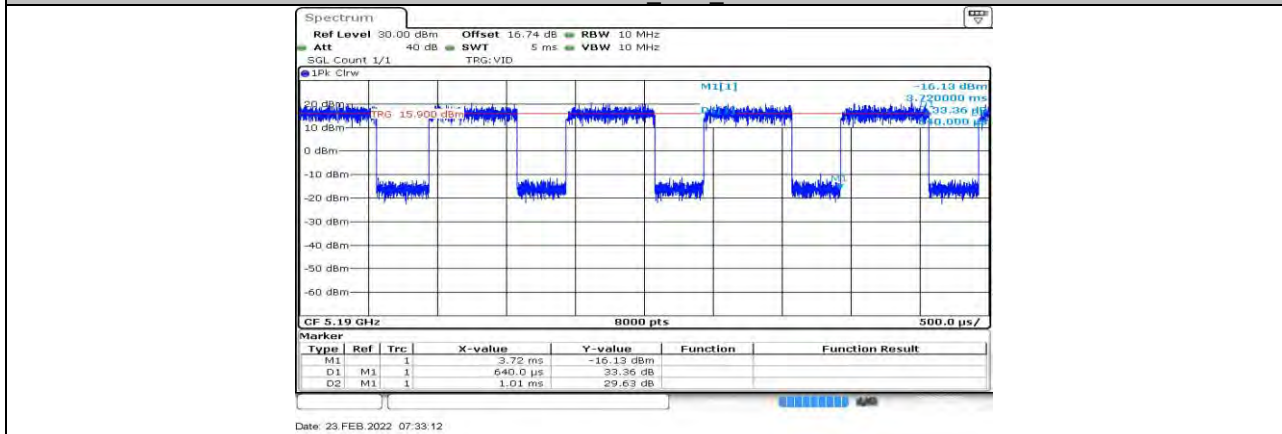
12.7.2. Test Graphs



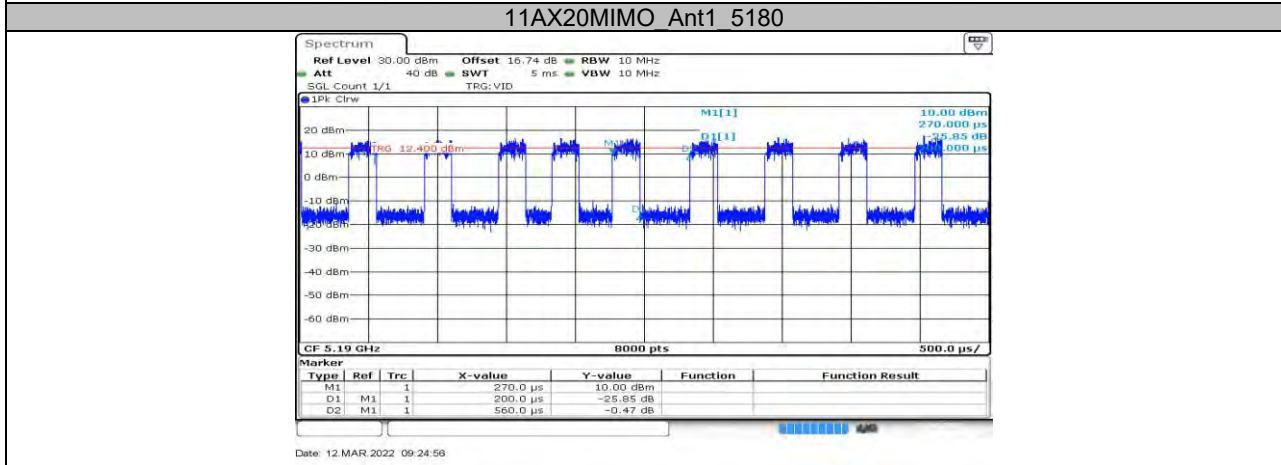
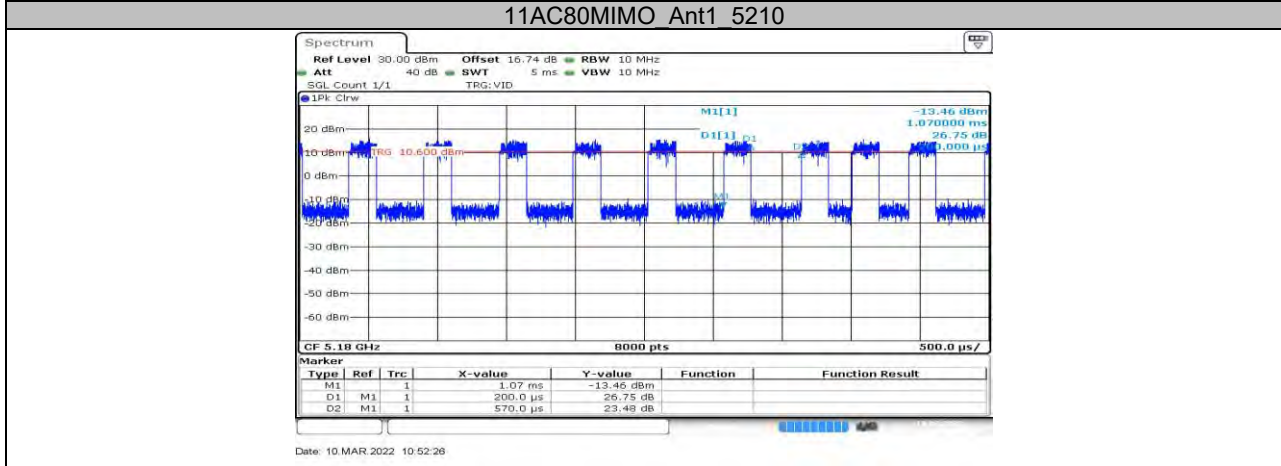
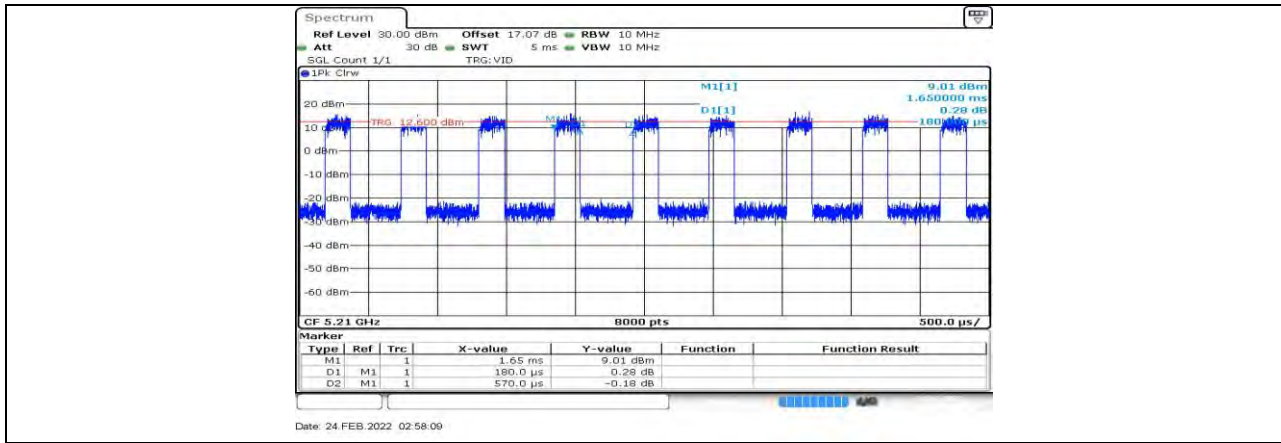
11A Ant1 5180

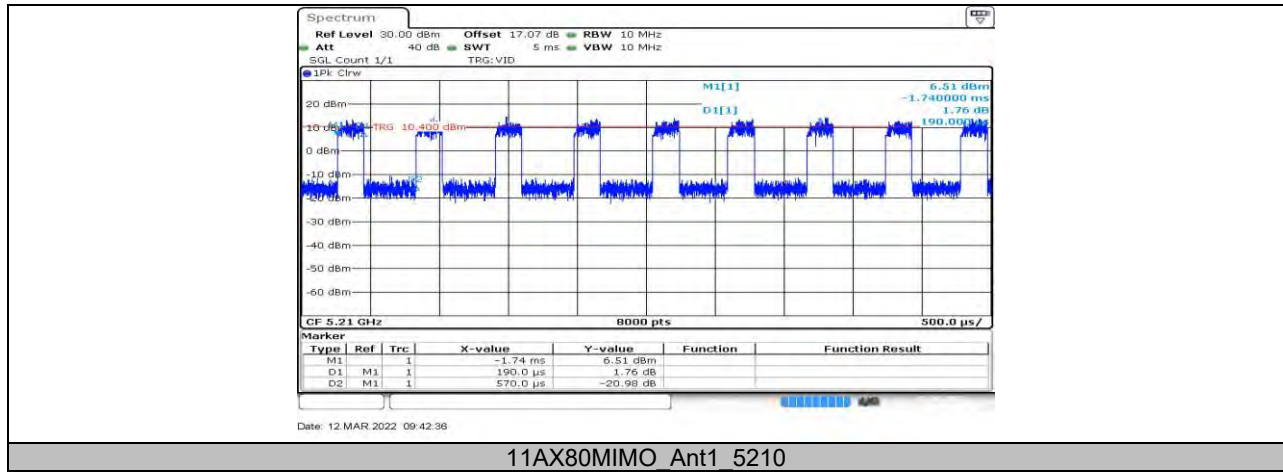


11N20MIMO Ant1 5180



11N40MIMO Ant1 5190





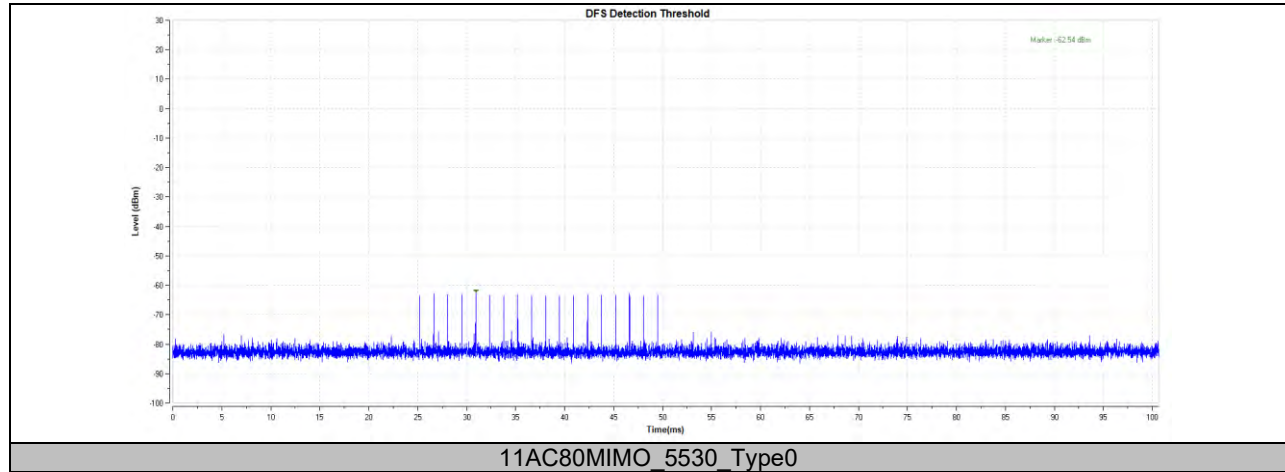


12.8. Appendix F: DFS Detection Thresholds

12.8.1. Test Result

Test Mode	Channel	Radar Type	Result	Limit[dbm]	Verdict
11AC80MIMO	5530	Type0	-62.54	-62.00	PASS

12.8.2. Test Graphs



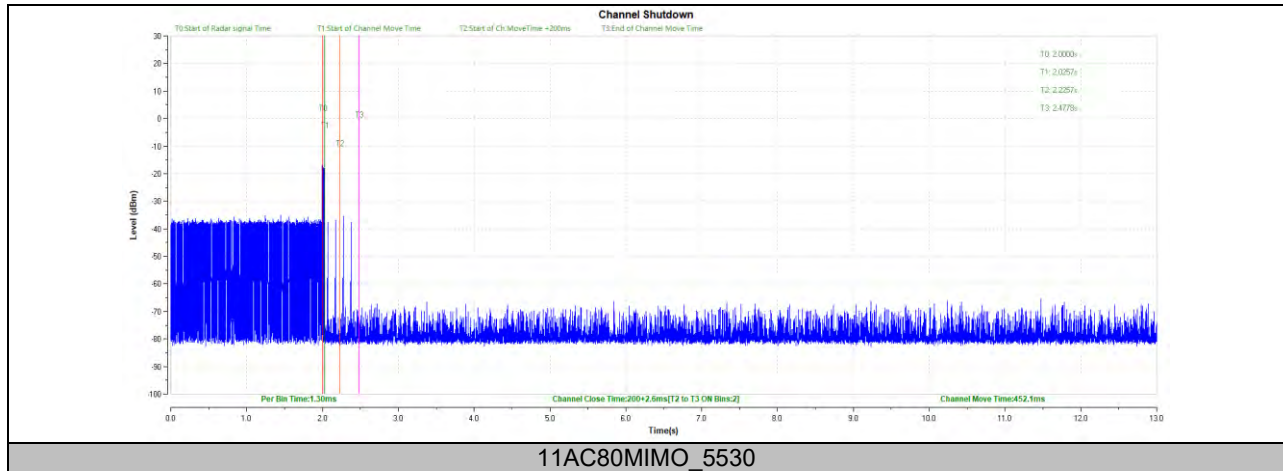


12.9. Appendix G: Channel Move Time and Channel Closing Transmission Time

12.9.1. Test Result

Test Mode	Channel	CCT[ms]	Limit[ms]	CMT[ms]	Limit[ms]	Verdict
11AC80MIMO	5530	200+2.6	200+60	452.1	10000	PASS

12.9.2. Test Graphs





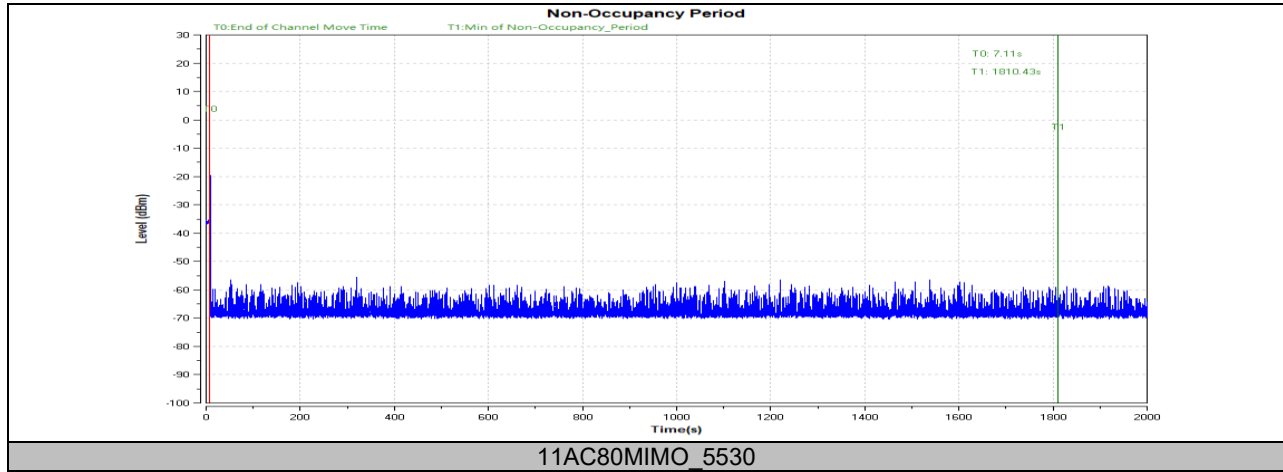
12.10. Appendix H: Non-Occupancy Period

Test Result

Test Mode	Channel	Result	Limit[s]	Verdict
11AC80MIMO	5530	see test graph	≥1800	PASS



12.10.1. Test Graphs



END OF REPORT