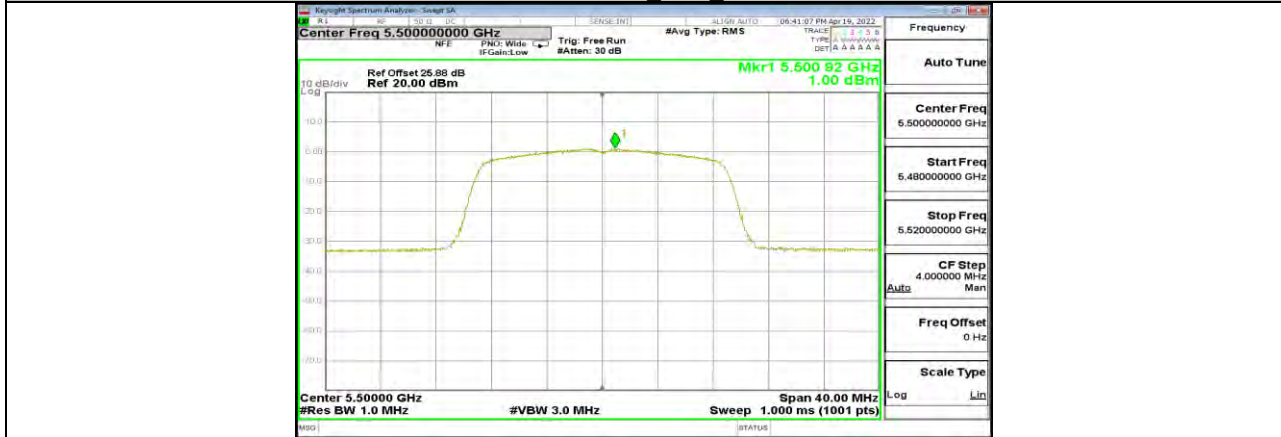




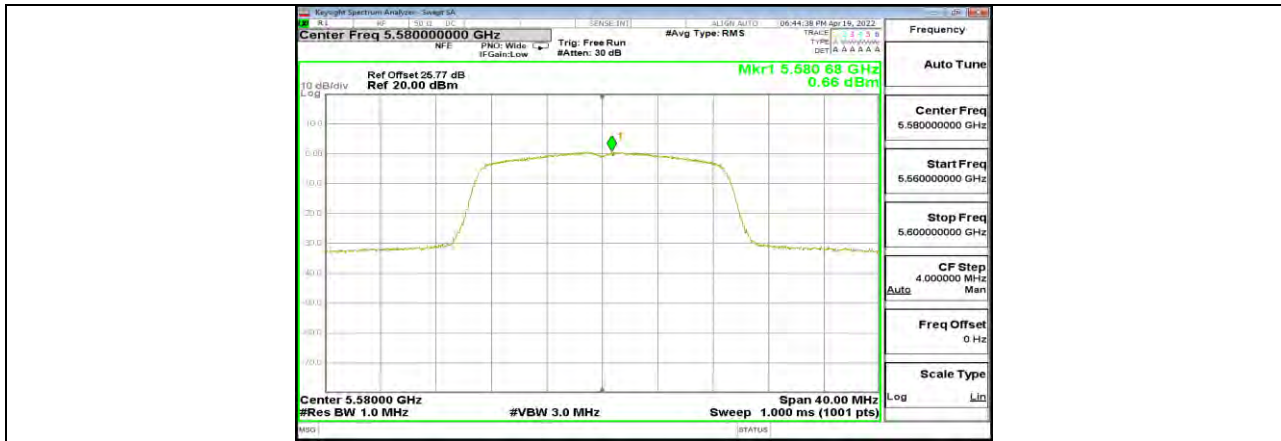
11N20MIMO Ant2 5320



11N20MIMO Ant1 5500



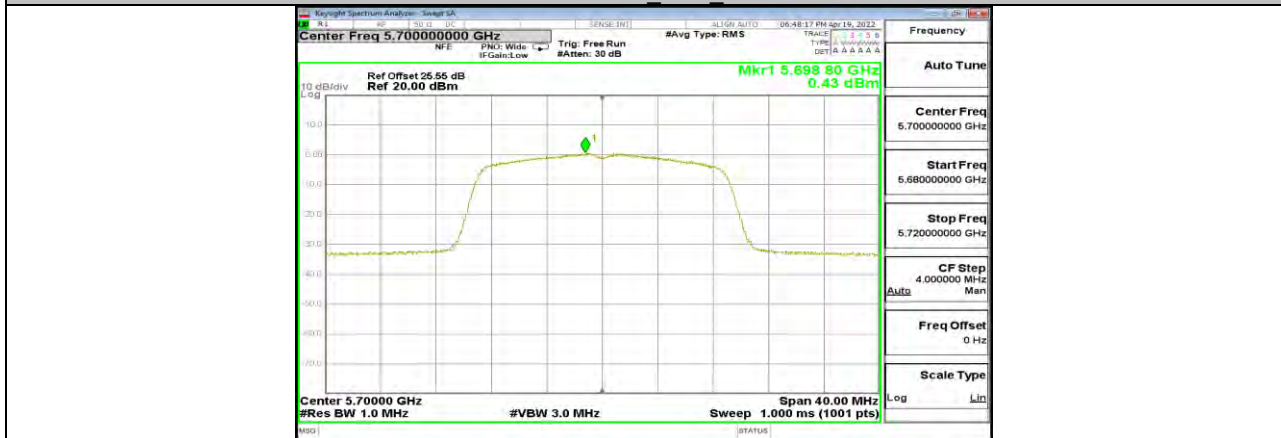
11N20MIMO Ant2 5500



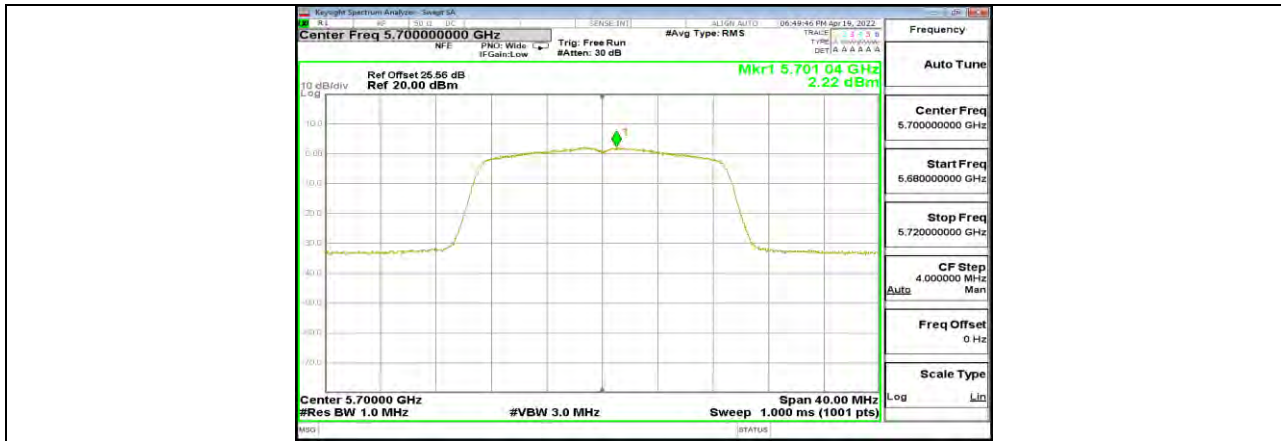
11N20MIMO Ant1 5580



11N20MIMO Ant2 5580



11N20MIMO Ant1 5700



11N20MIMO Ant2 5700



11N20MIMO Ant1 5720 UNII-2C



11N20MIMO Ant2 5720 UNII-2C



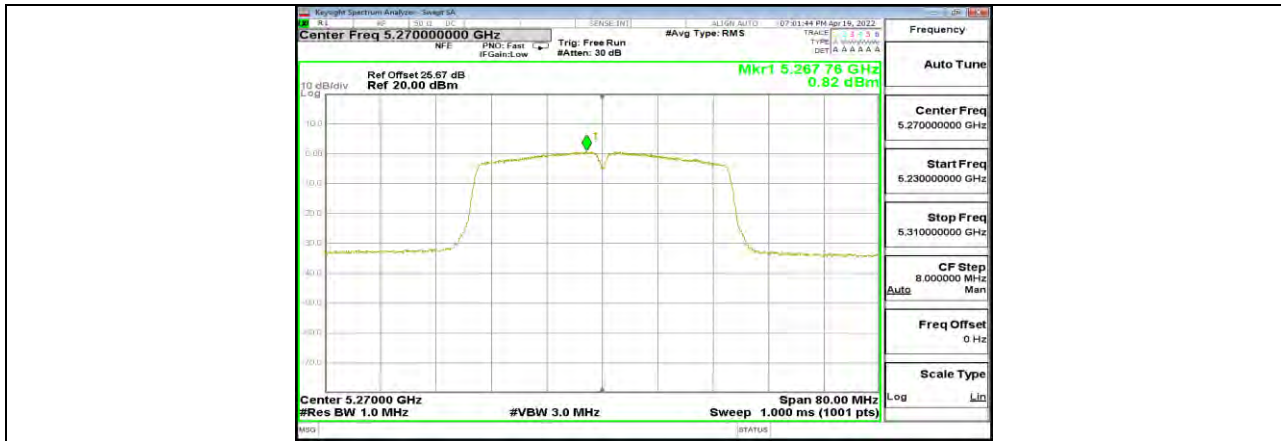
11N20MIMO Ant1 5720 UNII-3



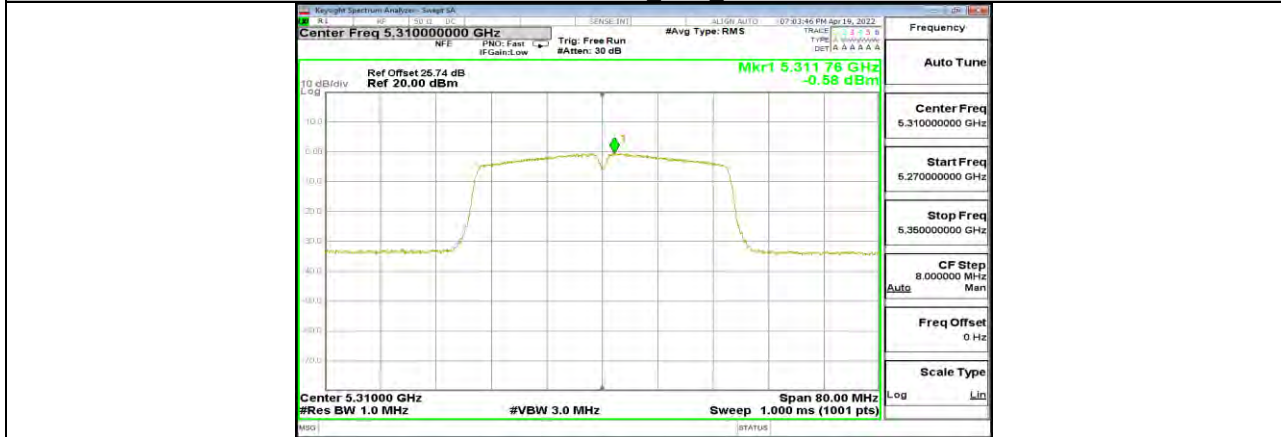
11N20MIMO Ant2 5720 UNII-3



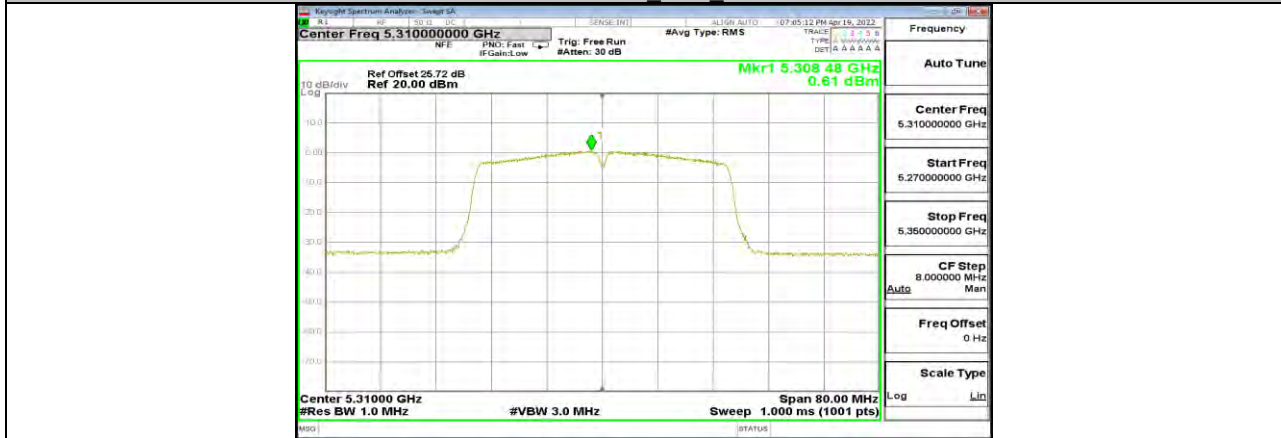
11N40MIMO Ant1 5270



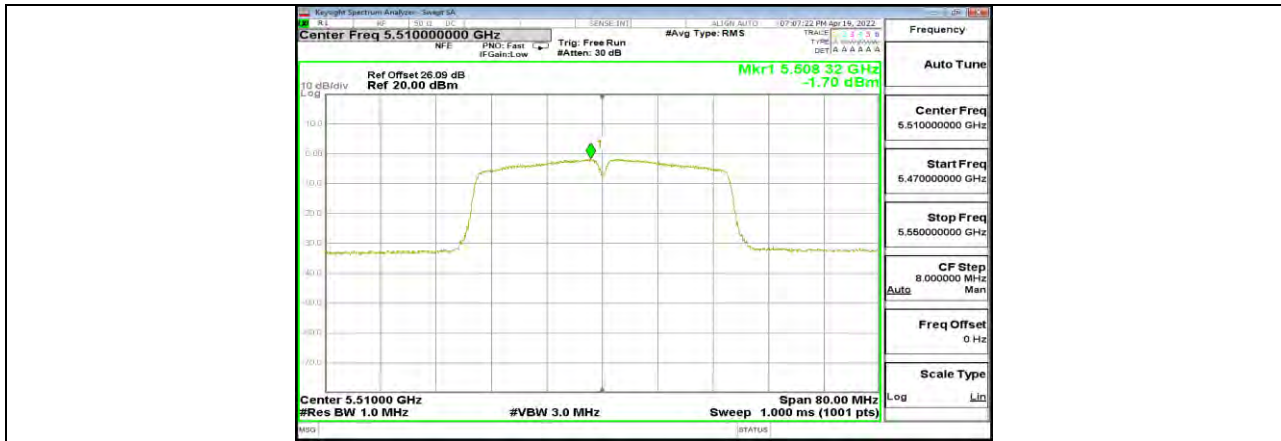
11N40MIMO Ant2 5270



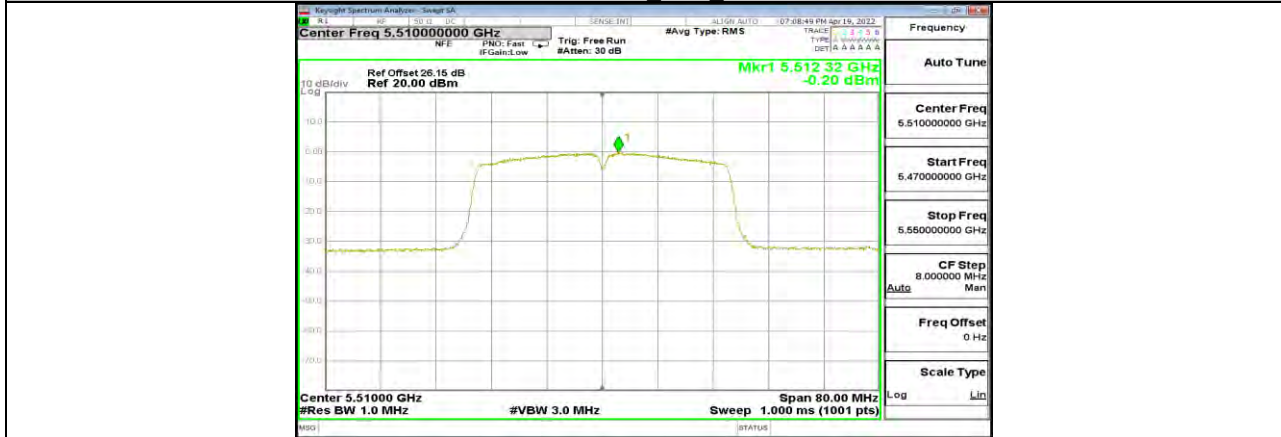
11N40MIMO Ant1 5310



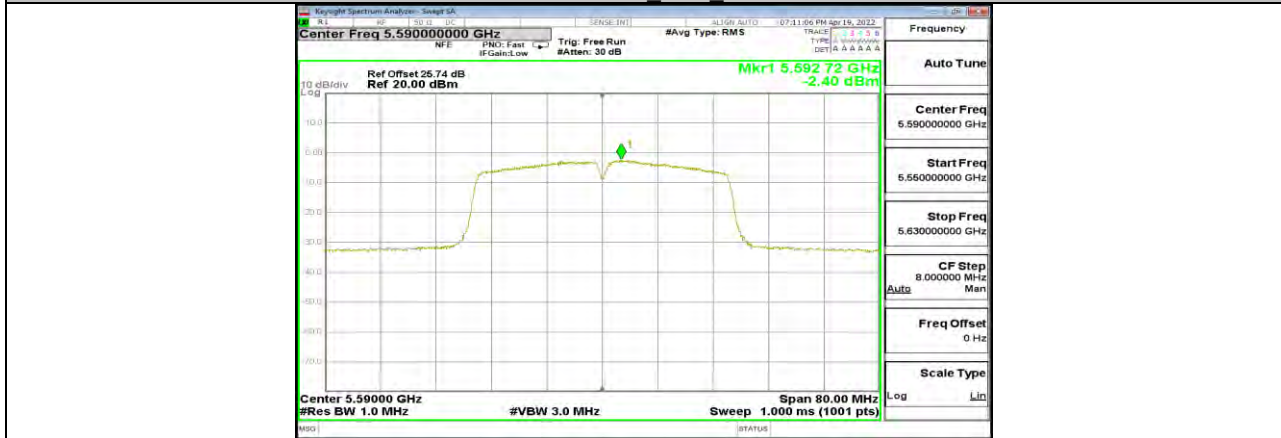
11N40MIMO Ant2 5310



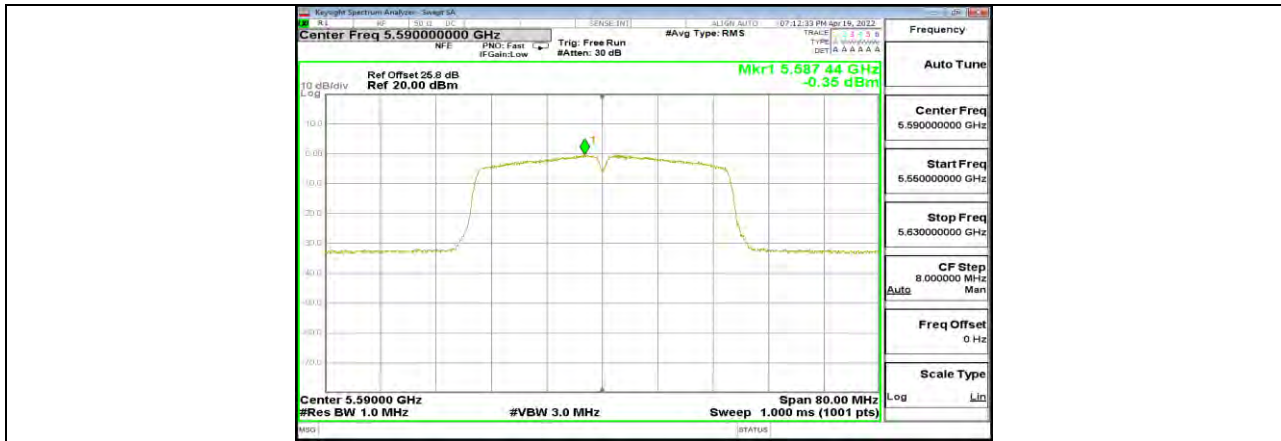
11N40MIMO Ant1 5510



11N40MIMO Ant2 5510



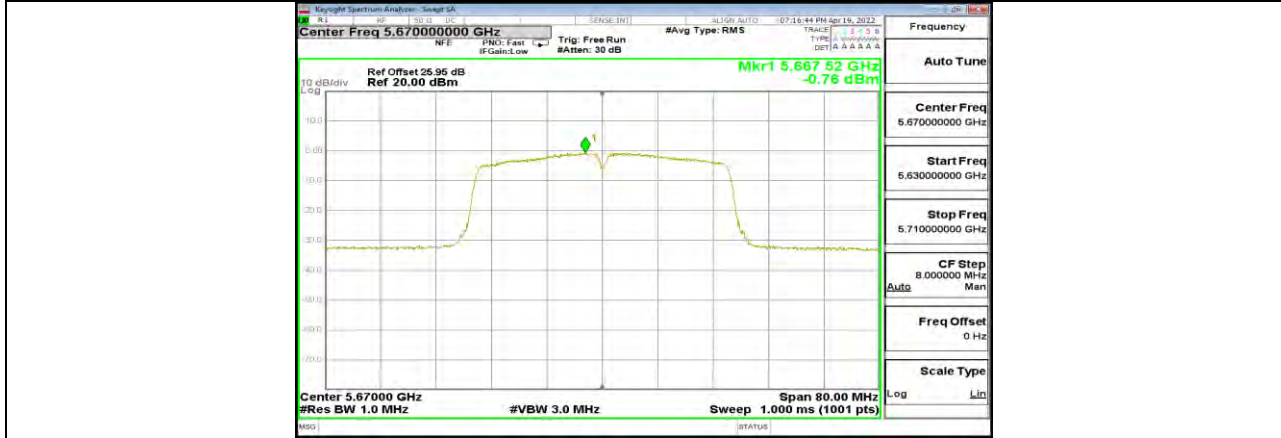
11N40MIMO Ant1 5590



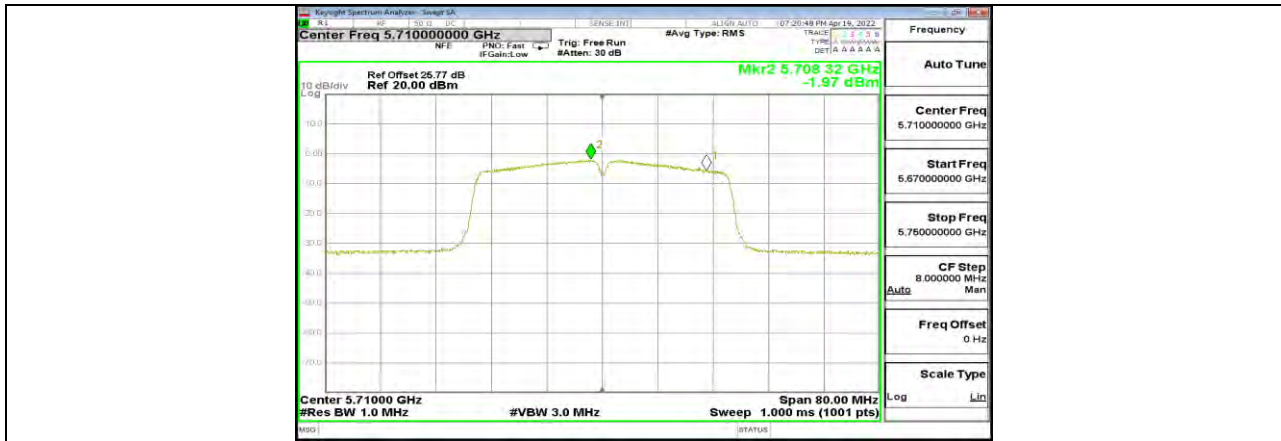
11N40MIMO Ant2 5590



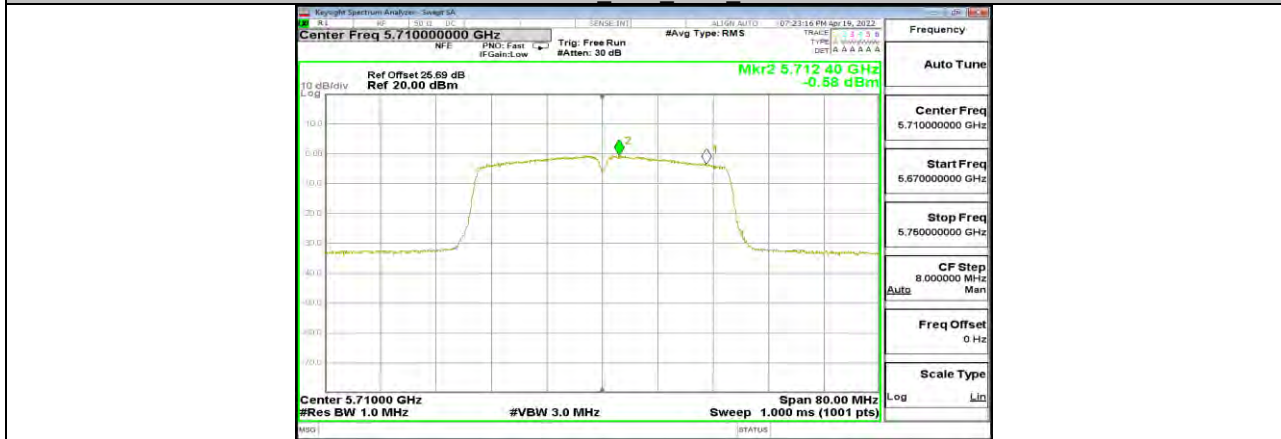
11N40MIMO Ant1 5670



11N40MIMO Ant2 5670



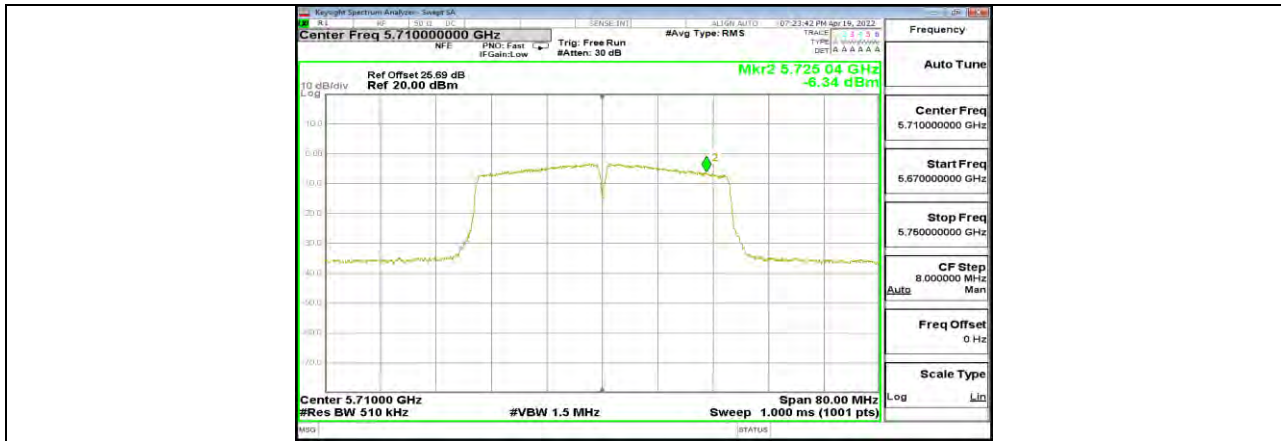
11N40MIMO Ant1 5710 UNII-2C



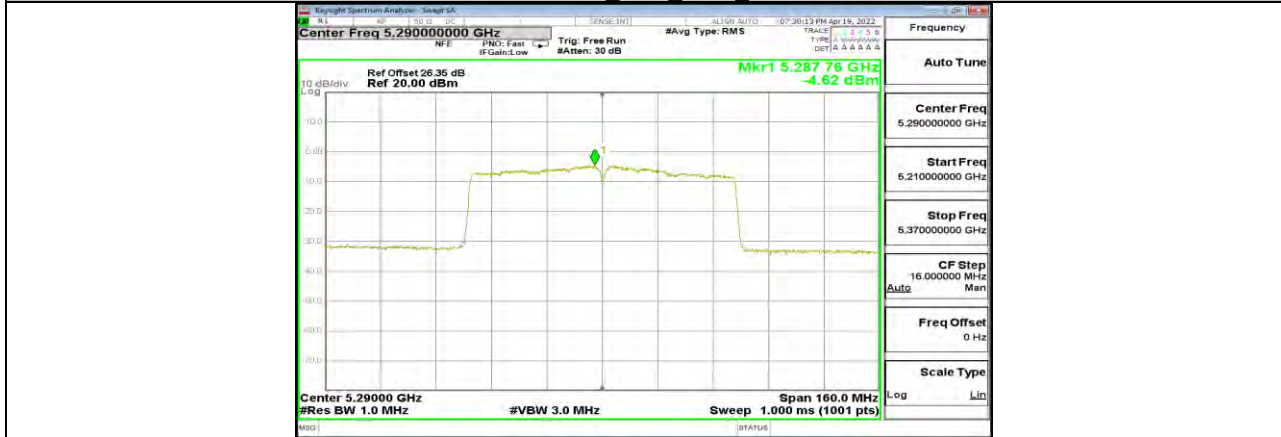
11N40MIMO Ant2 5710 UNII-2C



11N40MIMO Ant1 5710 UNII-3



11N40MIMO Ant2 5710 UNII-3



11AC80MIMO Ant1 5290



11AC80MIMO Ant2 5290



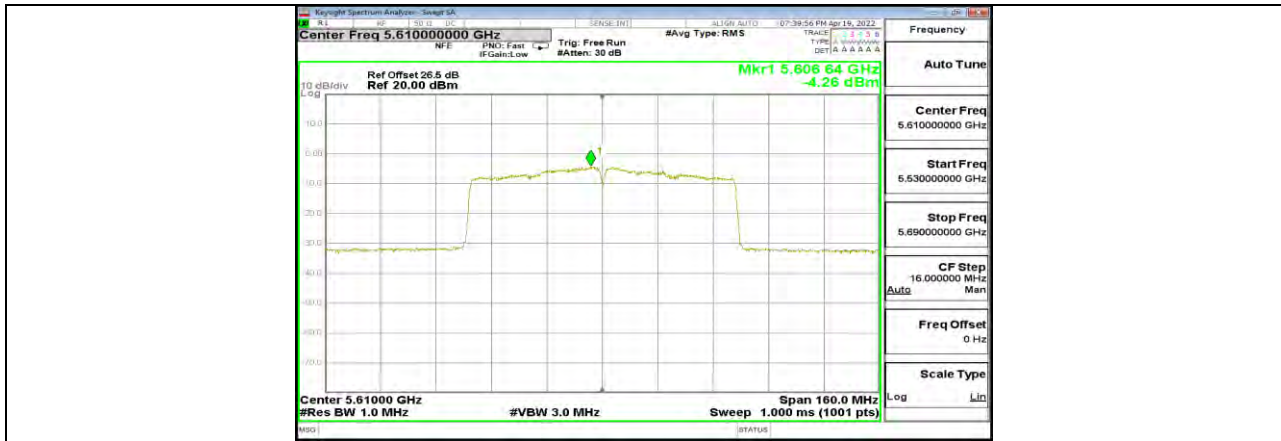
11AC80MIMO Ant1 5530



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



11.6. Appendix D: Duty Cycle

11.6.1. Test Result

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 20	1.39	1.44	0.9653	96.53	0.15	0.72	1
11N20MIMO	1.30	1.35	0.9630	96.30	0.16	0.77	1
11N40MIMO	0.65	0.69	0.9420	94.20	0.26	1.54	2
11AC80MIMO	0.18	0.23	0.7826	78.26	1.06	5.56	6

Note:

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

Where: x is Duty Cycle (Linear)

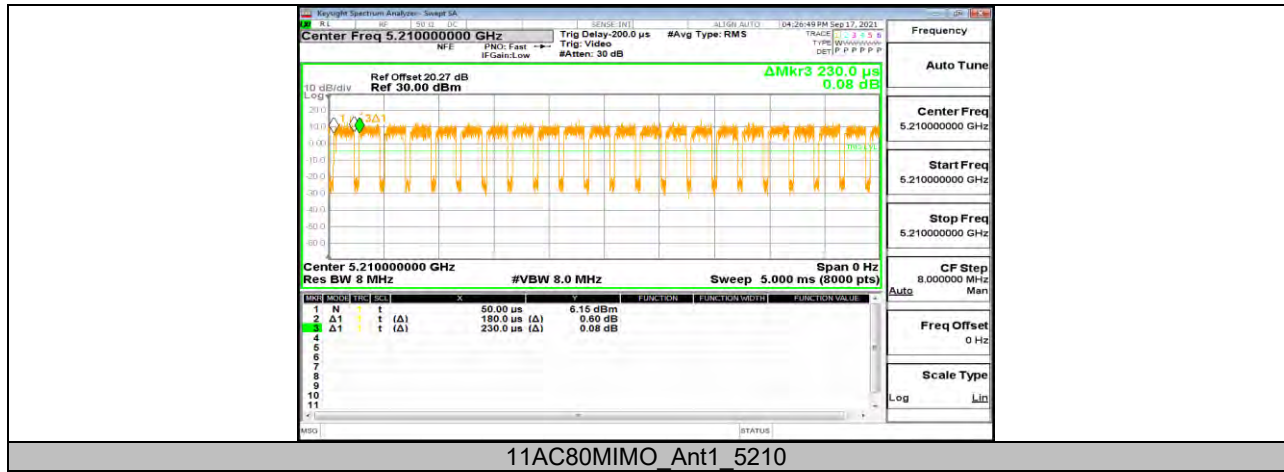
Where: T is On Time

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



11.6.2. Test Graphs







11.7. Appendix E: Frequency Stability

11.7.1. 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	5200.04033	7.76	5200.03942	7.58	5200.04249	8.17	5200.04777	9.19
TN	VN	5200.03657	7.03	5200.03033	5.83	5200.03758	7.23	5200.03369	6.48
TN	VH	5200.03641	7.00	5200.04471	8.60	5200.04241	8.16	5200.04262	8.20
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	5200.04289	8.25	5200.04233	8.14	5200.04841	9.31	5200.04922	9.47
60	VN	5200.03882	7.47	5200.04526	8.70	5200.04737	9.11	5200.04781	9.19
50	VN	5200.03772	7.25	5200.03844	7.39	5200.04322	8.31	5200.04432	8.52
40	VN	5200.03233	6.22	5200.03539	6.81	5200.03951	7.60	5200.03983	7.66
30	VN	5200.02984	5.74	5200.03141	6.04	5200.03668	7.05	5200.03775	7.26
20	VN	5200.02642	5.08	5200.02887	5.55	5200.02951	5.68	5200.03074	5.91
10	VN	5200.03222	6.20	5200.03252	6.25	5200.03549	6.83	5200.03881	7.46
0	VN	5200.03872	7.45	5200.03981	7.66	5200.03838	7.38	5200.04666	8.97



Frequency Error vs. Voltage									
802.11a: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	5825.04461	7.66	5825.03769	6.47	5825.03751	6.44	5825.04251	7.30
TN	VN	5825.02744	4.71	5825.02832	4.86	5825.02879	4.94	5825.03226	5.54
TN	VH	5825.03739	6.42	5825.03365	5.78	5825.04142	7.11	5825.04448	7.64

Frequency Error vs. Temperature									
802.11a: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)
60	VN	5825.04755	8.16	5825.04783	8.21	5825.04868	8.36	5825.05376	9.23
50	VN	5825.03868	6.64	5825.04579	7.86	5825.04677	8.03	5825.04882	8.38
40	VN	5825.03694	6.34	5825.04146	7.12	5825.04684	8.04	5825.04435	7.61
30	VN	5825.03144	5.40	5825.03651	6.27	5825.04345	7.46	5825.03767	6.47
20	VN	5825.02889	4.96	5825.03586	6.16	5825.03326	5.71	5825.03642	6.25
10	VN	5825.02581	4.43	5825.02676	4.59	5825.03137	5.39	5825.03052	5.24
0	VN	5825.03345	5.74	5825.03368	5.78	5825.03558	6.11	5825.03876	6.65

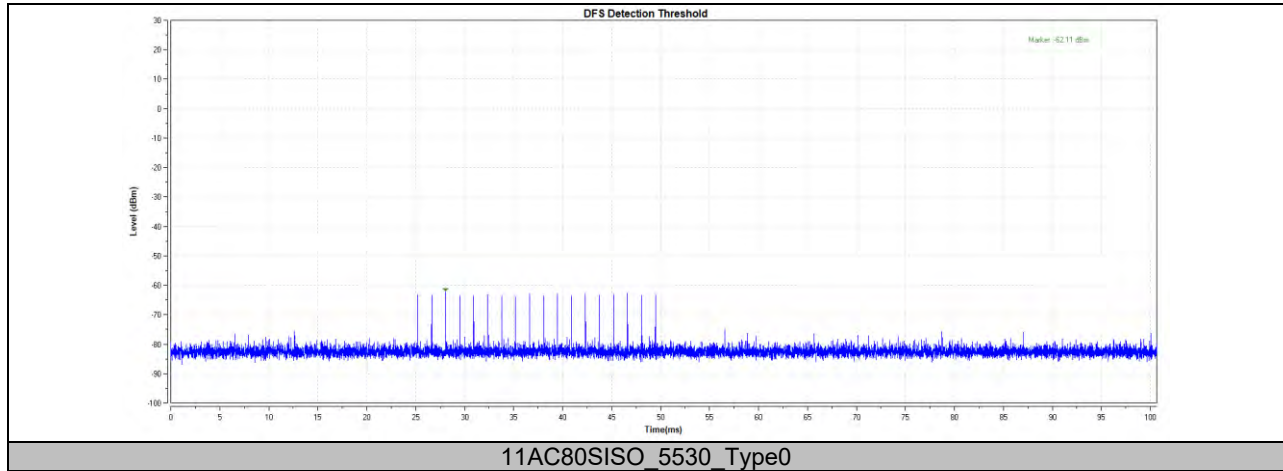
Note: All antennas and modes have been tested, only the worst data was recorded in the report.



11.1. Appendix F: Dynamic Frequency Selection

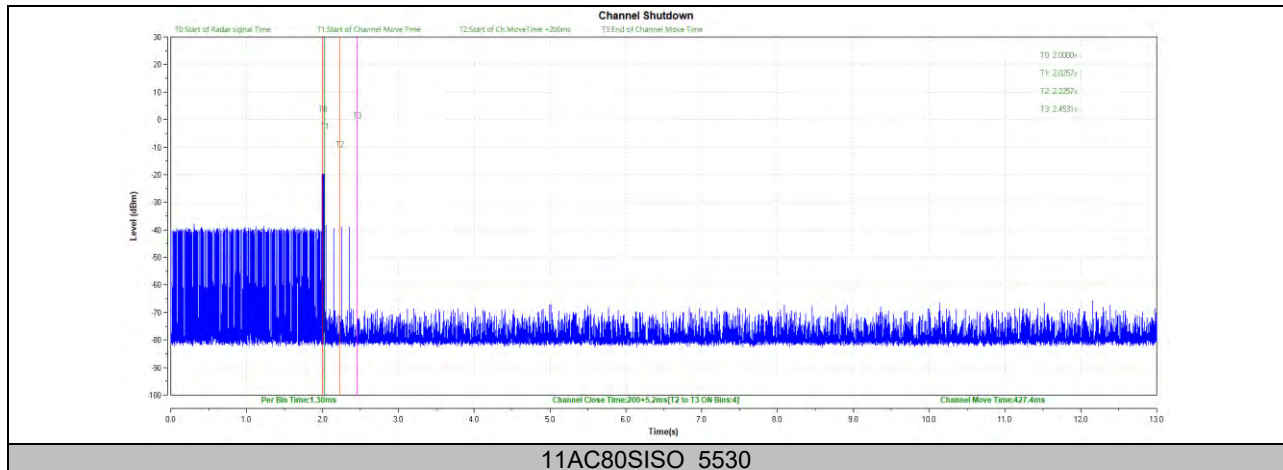
DFS Detection Thresholds

Test Mode	Channel	Radar Type	Result	Limit[dbm]	Verdict
11AC80SISO	5530	Type0	-62.11	-59.70	PASS



Channel Move Time and Channel Closing Transmission Time

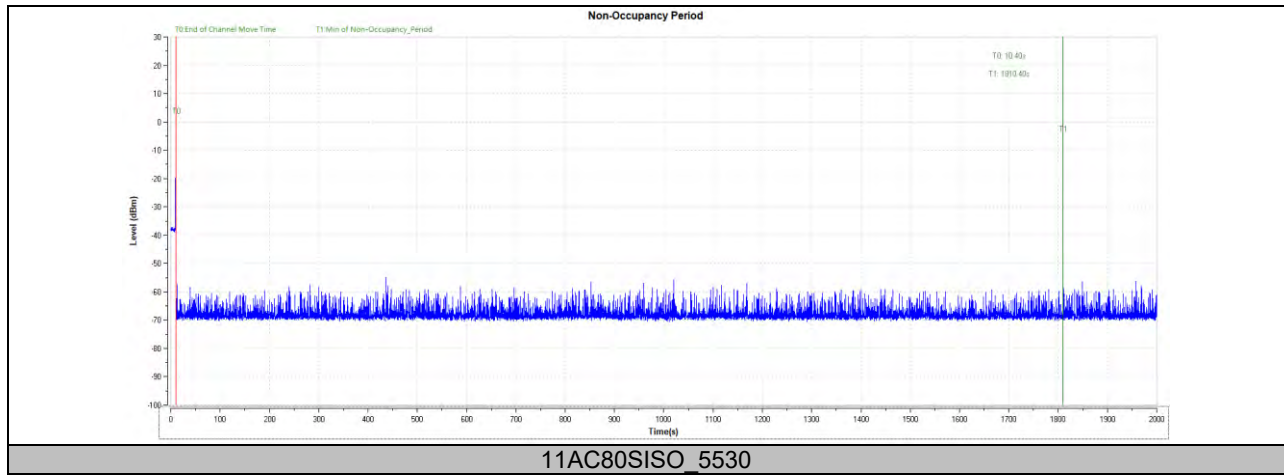
Test Mode	Channel	CCT[ms]	Limit[ms]	CMT[ms]	Limit[ms]	Verdict
11AC80SISO	5530	200+5.2	200+60	427.4	10000	PASS





Non-Occupancy Period

Test Mode	Channel	Result	Limit[s]	Verdict
11AC80SISO	5530	see test graph	≥1800	PASS



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

END OF REPORT