



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 5550



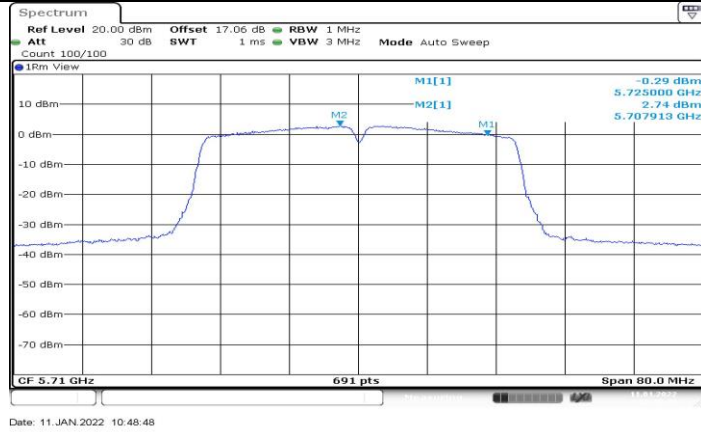
11N40MIMO Ant2 5550



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



11N40MIMO Ant1 5755



11N40MIMO Ant2 5755



11N40MIMO Ant1 5795



11N40MIMO Ant2 5795



11AC80MIMO_Ant1_5210



11AC80MIMO_Ant2_5210



11AC80MIMO_Ant1_5290



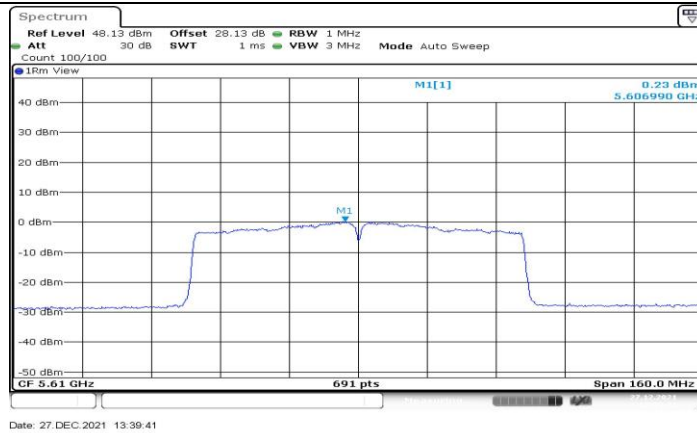
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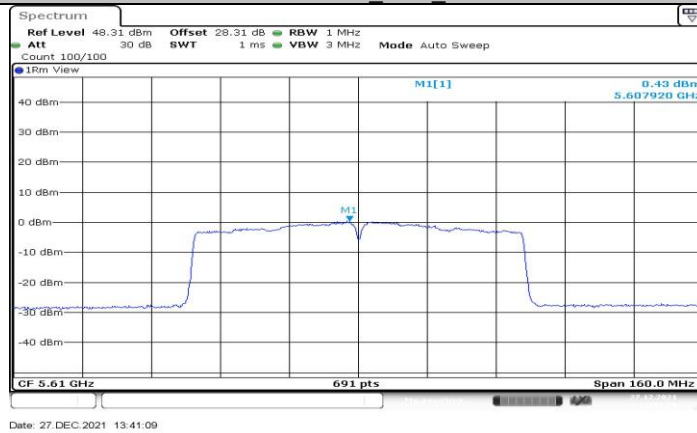
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11AC80MIMO_Ant2_5530



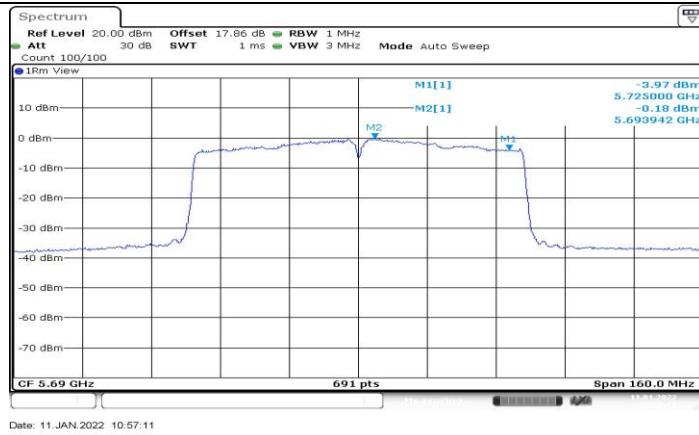
11AC80MIMO_Ant1_5610



11AC80MIMO_Ant2_5610



11AC80MIMO_Ant1_5690_UNII-2C



11AC80MIMO Ant2_5690_UNII-2C



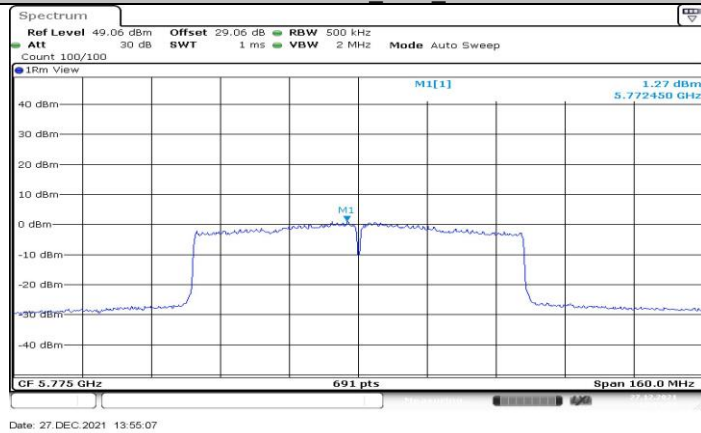
11AC80MIMO Ant1_5690_UNII-3



11AC80MIMO Ant2_5690_UNII-3



11AC80MIMO_Ant1_5775



11AC80MIMO_Ant2_5775



12.6. Appendix D: 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	1.38	1.42	0.9718	97.18	0.12	0.72	1
11N20MIMO	1.29	1.33	0.9699	96.99	0.13	0.78	1
11N40MIMO	1.29	1.33	0.9699	96.99	0.13	0.78	1
11AC80MIMO	0.18	0.23	0.7826	78.26	1.06	5.56	6

Note:

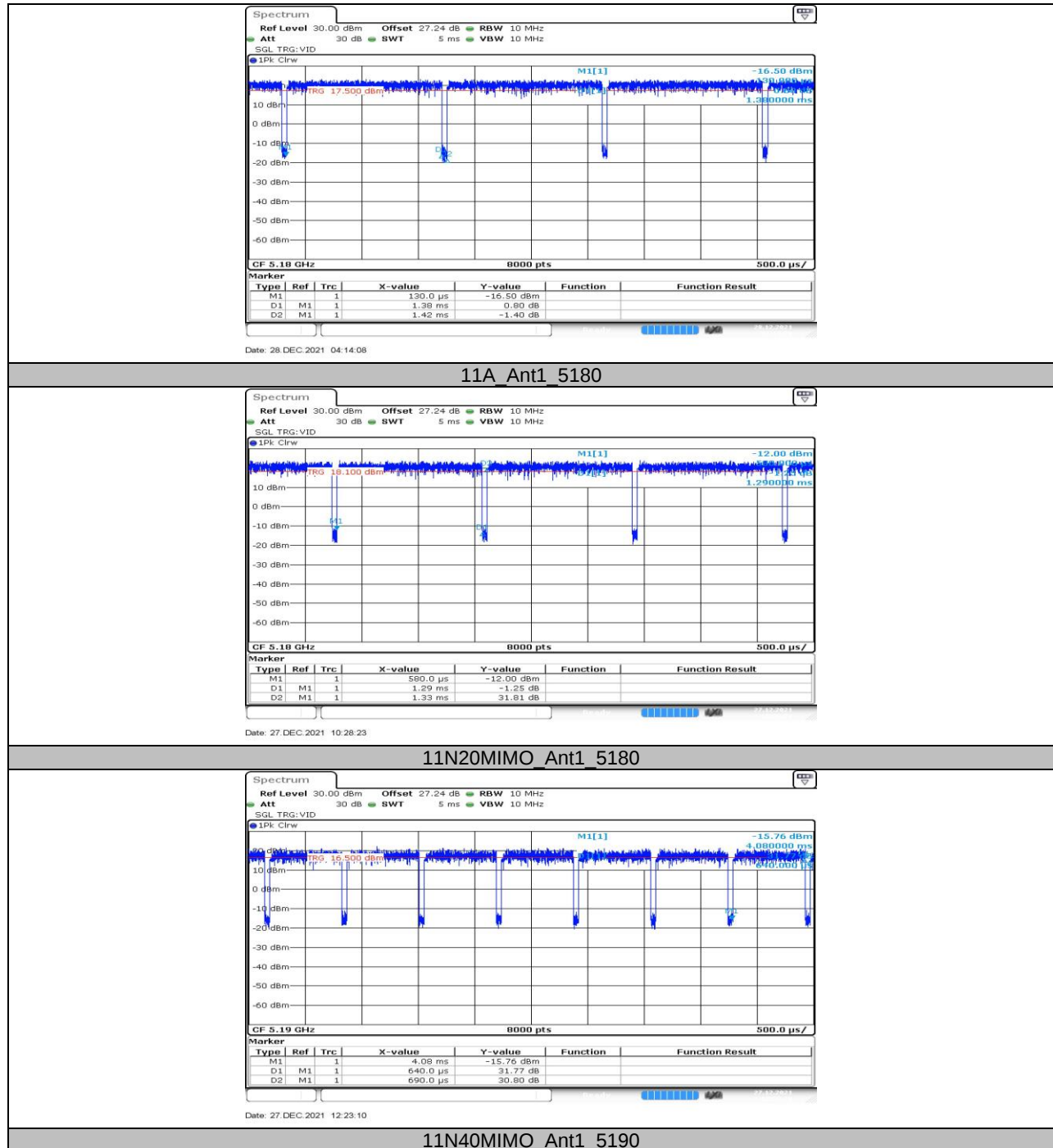
Duty Cycle Correction Factor= $10\log(1/x)$.

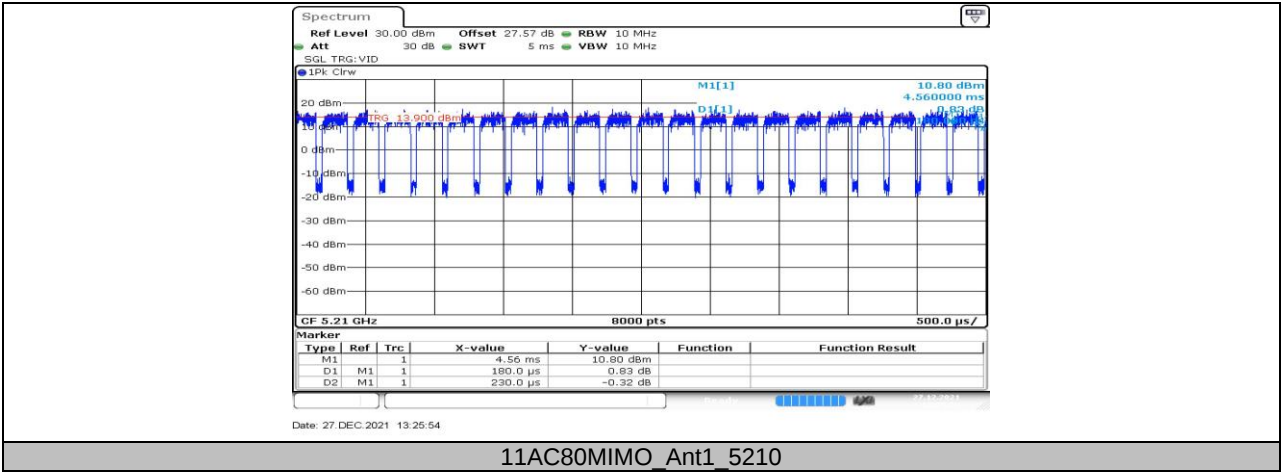
Where: x is Duty Cycle (Linear)

Where: T is On Time

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

12.6.2. Test Graphs





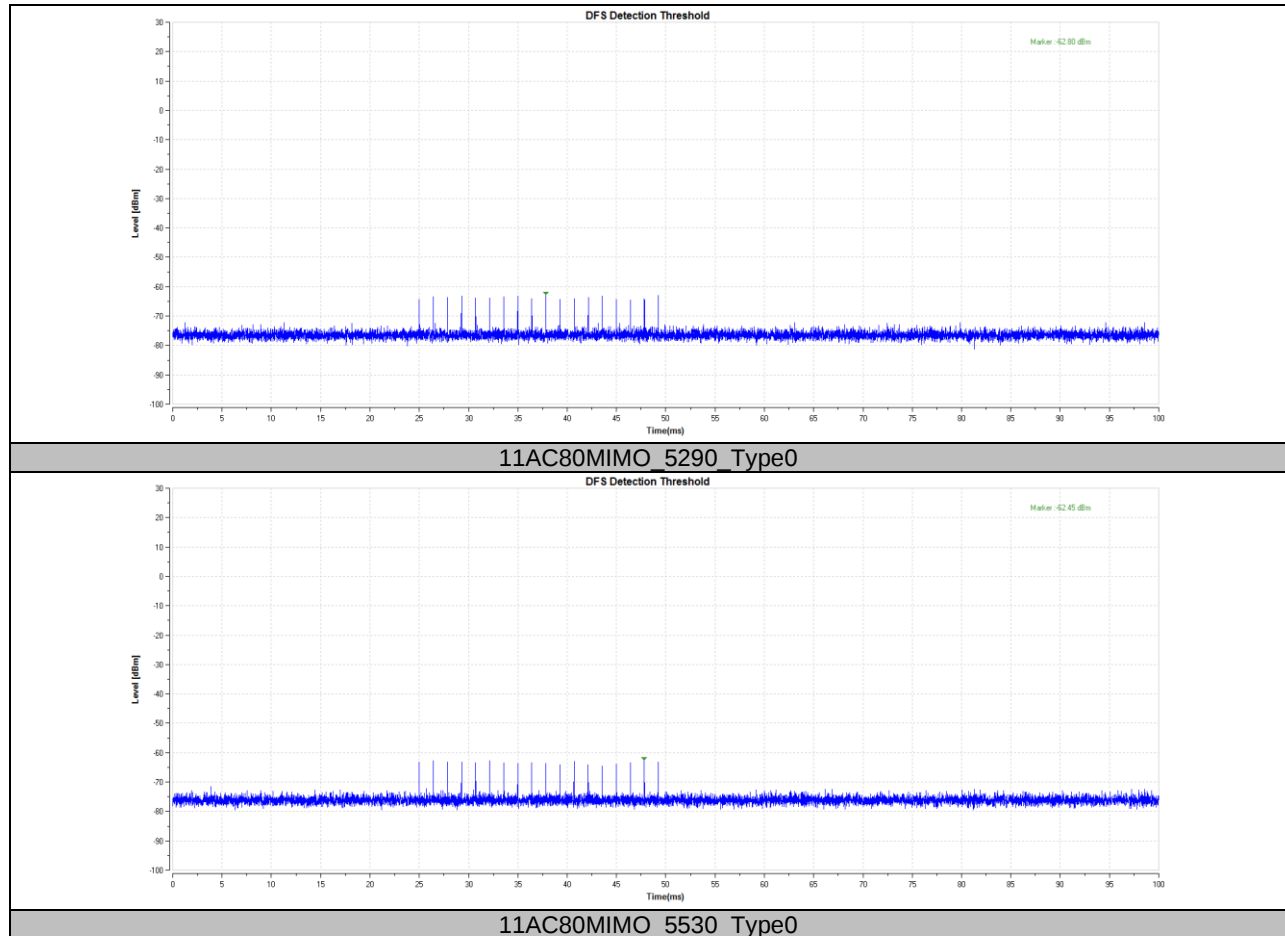


12.7. Appendix E: DFS Detection Thresholds

12.7.1. Test Result

Test Mode	Channel	Radar Type	Result	Limit[dbm]	Verdict
11AC80MIMO	5290	Type0	-62.80	-62.00	PASS
	5530	Type0	-62.45	-62.00	PASS

12.7.2. Test Graphs





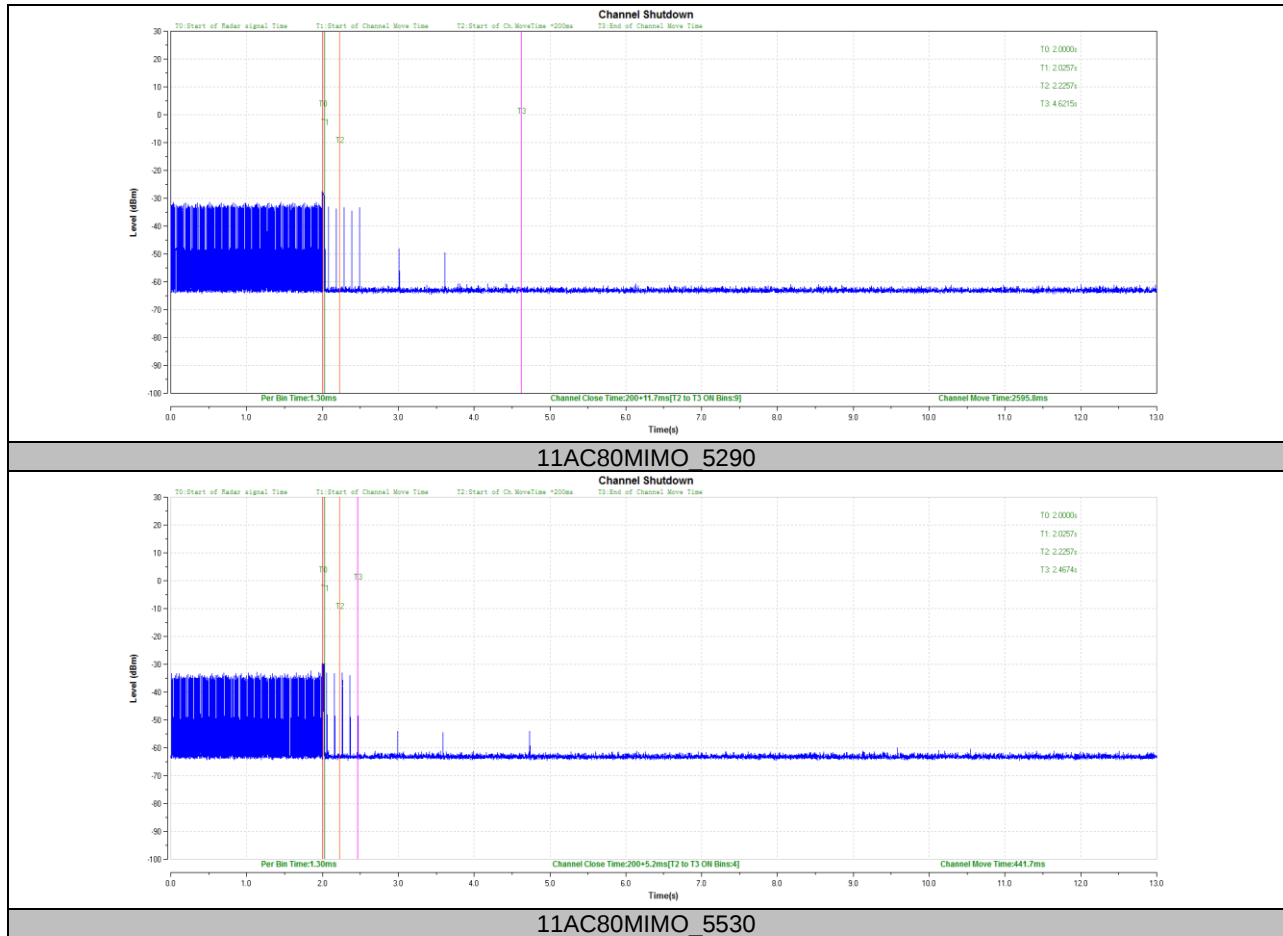
12.8. Appendix F: Channel Move Time and Channel Closing Transmission Time

12.8.1. Test Result

Test Mode	Channel	CCT[ms]	Limit[ms]	CMT[ms]	Limit[ms]	Verdict
11AC80MIMO	5290	200+11.7	200+60	2595.8	10000	PASS
	5530	200+5.2	200+60	441.7	10000	PASS



12.8.2. Test Graphs





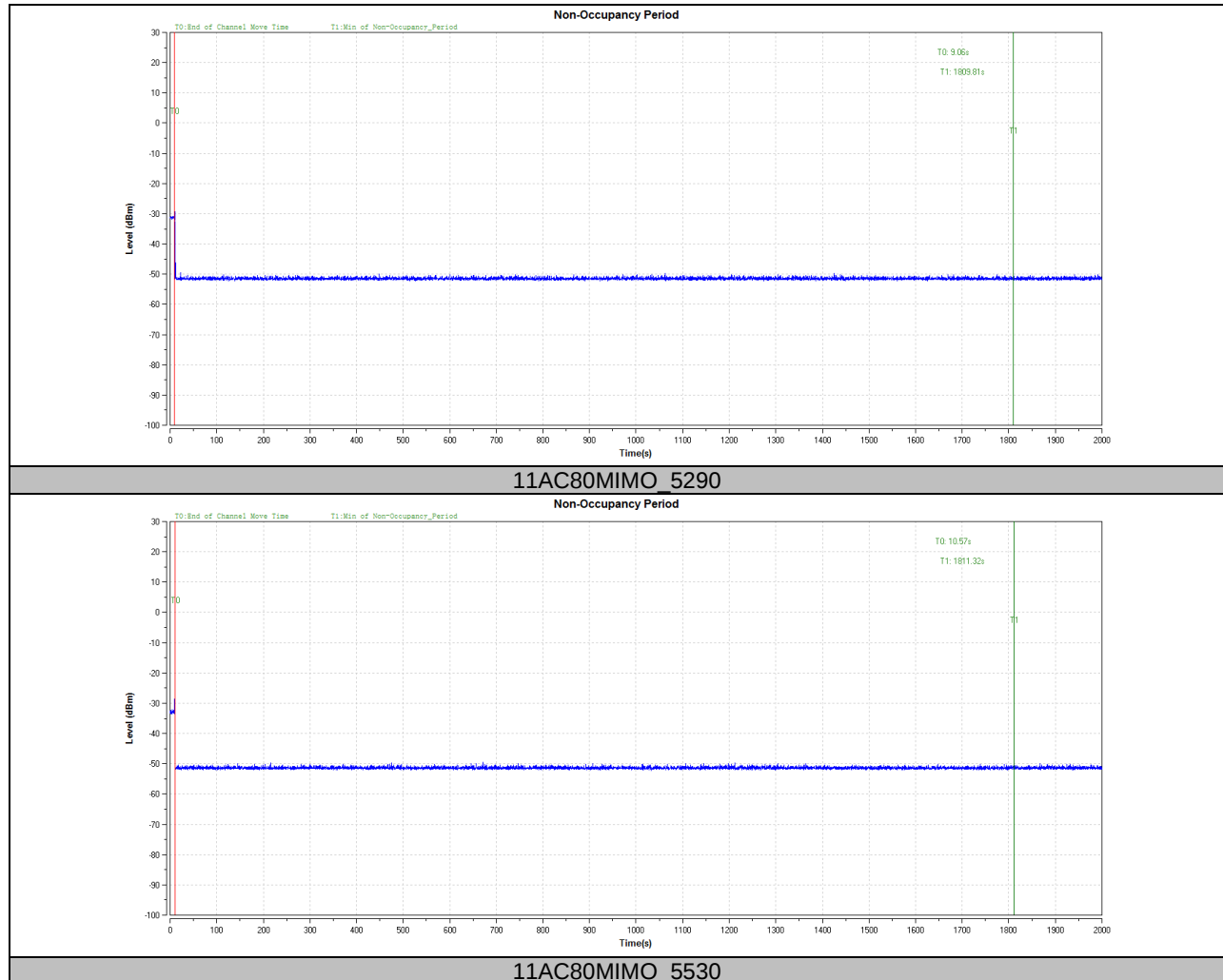
12.9. Appendix G: Non-Occupancy Period

Test Result

Test Mode	Channel	Result	Limit[s]	Verdict
11AC80MIMO	5290	see test graph	≥1800	PASS
	5530	see test graph	≥1800	PASS



12.9.1. Test Graphs





12.10. Appendix H: Frequency Stability

12.10.1. Test Result

Frequency Error vs. Voltage									
802.11a20:5200MHz									
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	5199.9874	-2.42	5199.9777	-4.30	5199.9816	-3.53	5200.0011	0.22
TN	VN	5200.0021	0.41	5200.0084	1.62	5199.9921	-1.52	5199.9753	-4.74
TN	VH	5199.9926	-1.42	5199.9836	-3.16	5200.0147	2.83	5199.9755	-4.72
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)
70	VN	5200.0066	1.27	5199.9790	-4.05	5199.9976	-0.47	5199.9805	-3.76
60	VN	5199.9751	-4.79	5199.9984	-0.31	5200.0214	4.11	5199.9945	-1.07
50	VN	5200.0012	0.24	5200.0227	4.37	5200.0240	4.62	5199.9898	-1.97
40	VN	5200.0172	3.32	5200.0081	1.56	5200.0054	1.04	5200.0200	3.84
30	VN	5199.9896	-2.00	5199.9795	-3.94	5199.9885	-2.21	5199.9861	-2.67
20	VN	5200.0062	1.18	5200.0018	0.35	5199.9838	-3.11	5200.0119	2.28
10	VN	5199.9845	-2.98	5199.9874	-2.42	5200.0075	1.45	5199.9788	-4.07
0	VN	5199.9895	-2.03	5200.0006	0.12	5200.0143	2.76	5200.0157	3.01
-10	VN	5200.0066	1.27	5199.9790	-4.05	5199.9976	-0.47	5199.9805	-3.76

Note:

1. All antennas and test modes have been tested, only the worst data record in the report.
2. For the detail Test Conditions, please refer to section 10 TEST ENVIRONMENT.



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	5825.0134	2.29	5824.9783	-3.73	5824.9803	-3.37	5824.9972	-0.48
TN	VN	5824.9769	-3.96	5825.0016	0.28	5824.9928	-1.24	5824.9894	-1.83
TN	VH	5824.9810	-3.26	5824.9963	-0.64	5825.0084	1.45	5824.9923	-1.31
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)
70	VN	5825.0155	2.66	5824.9850	-2.58	5825.0216	3.71	5824.9877	-2.11
60	VN	5825.0232	3.97	5825.0171	2.94	5825.0152	2.62	5825.0224	3.84
50	VN	5825.0109	1.87	5824.9964	-0.62	5825.0058	0.99	5825.0046	0.79
40	VN	5824.9768	-3.97	5825.0219	3.75	5824.9871	-2.22	5824.9776	-3.84
30	VN	5825.0043	0.73	5825.0059	1.02	5824.9871	-2.21	5825.0123	2.11
20	VN	5825.0044	0.75	5824.9762	-4.09	5825.0239	4.10	5824.9858	-2.44
10	VN	5824.9898	-1.74	5825.0017	0.28	5825.0098	1.68	5824.9780	-3.78
0	VN	5825.0058	1.00	5825.0068	1.17	5824.9851	-2.55	5825.0094	1.62
-10	VN	5825.0155	2.66	5824.9850	-2.58	5825.0216	3.71	5824.9877	-2.11

Note:

1. All antennas and test modes have been tested, only the worst data record in the report.
2. For the detail Test Conditions, please refer to section 10 TEST ENVIRONMENT.

END OF REPORT