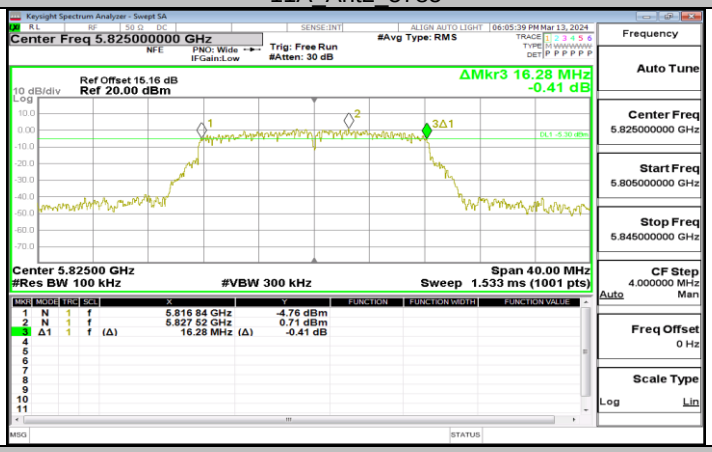
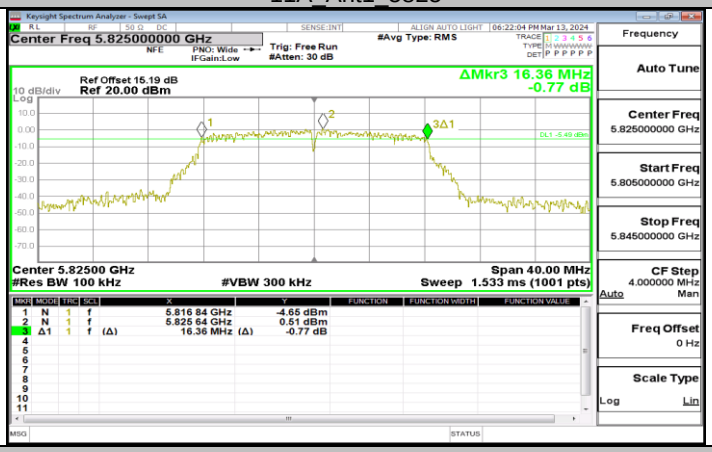
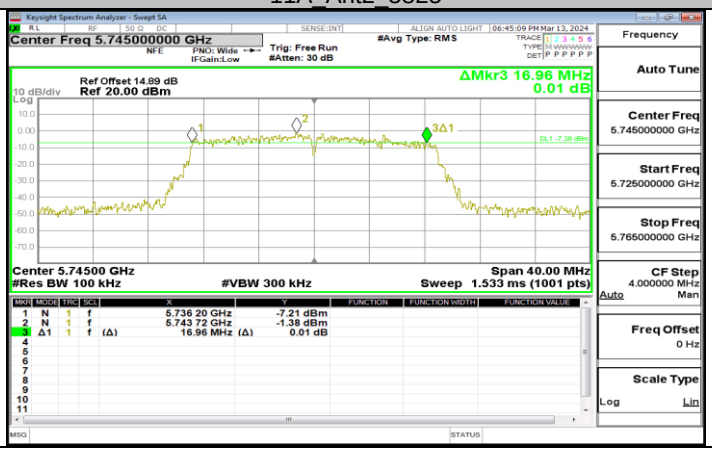
11A_Ant2_5785



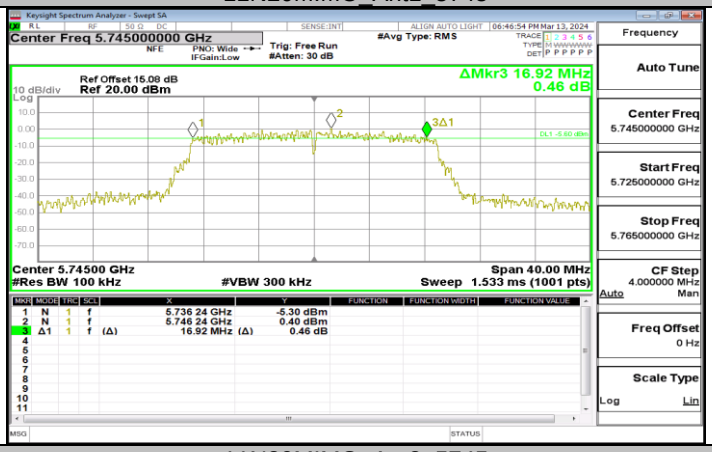
11A_Ant1_5825



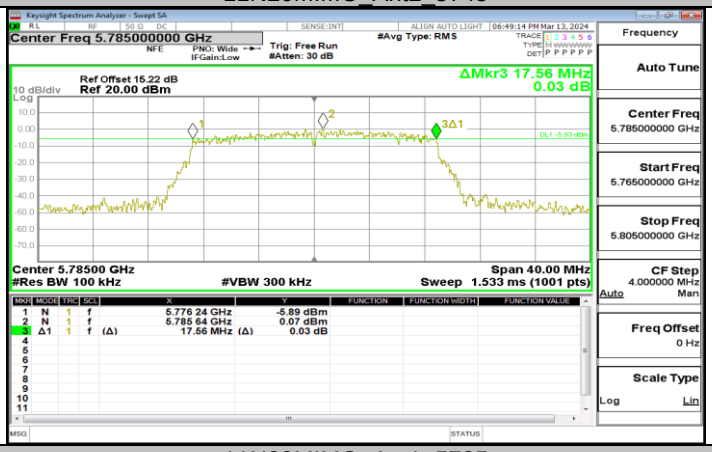
11A_Ant2_5825



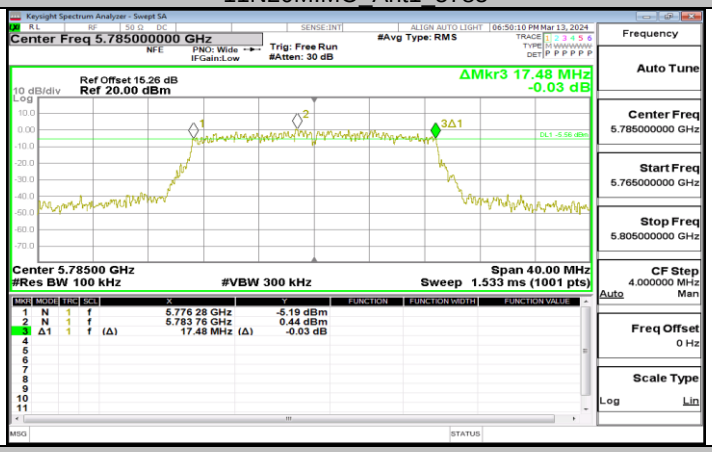
11N20MIMO_Ant1_5745



11N20MIMO_Ant2_5745

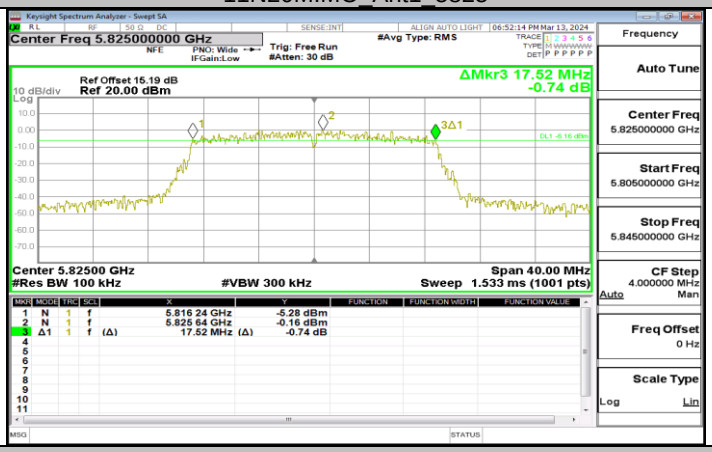


11N20MIMO_Ant1_5785

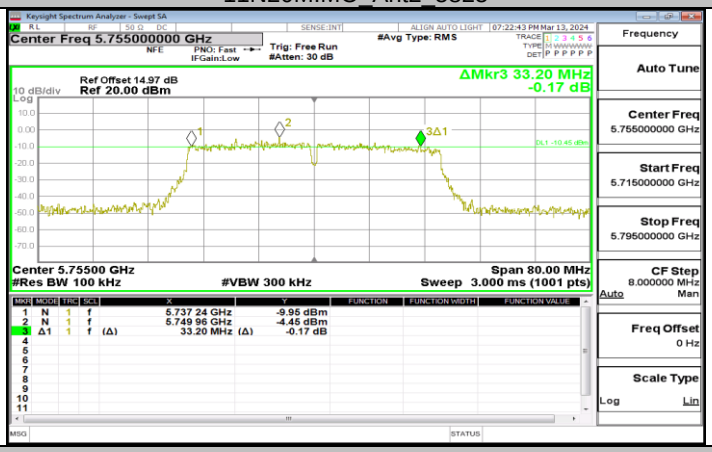


11N20MIMO_Ant2_5785

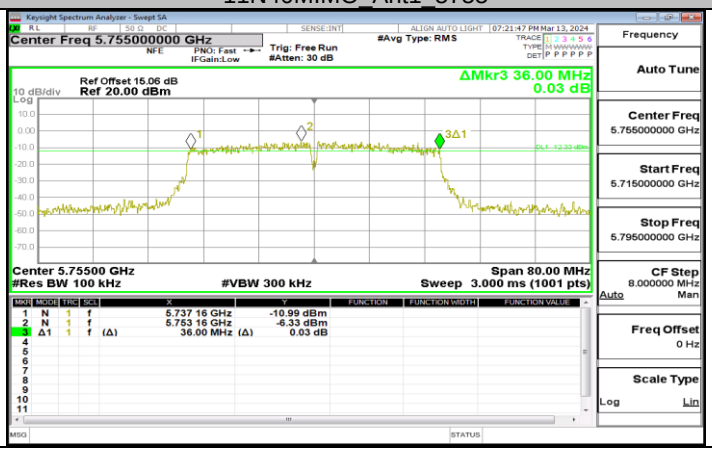
11N20MIMO_Ant1_5825



11N20MIMO_Ant2_5825



11N40MIMO_Ant1_5755



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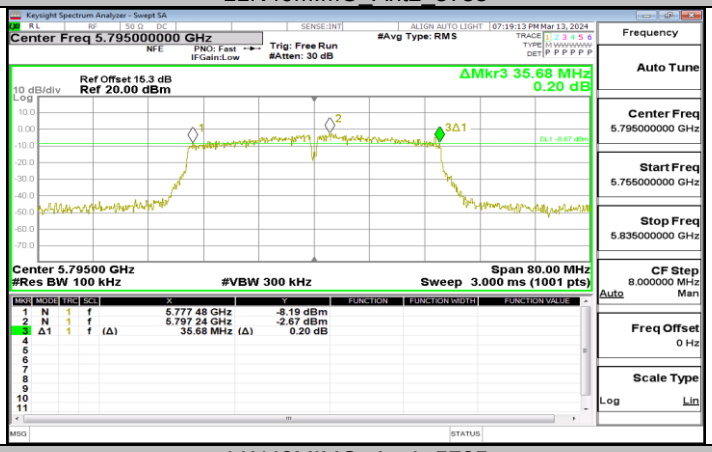
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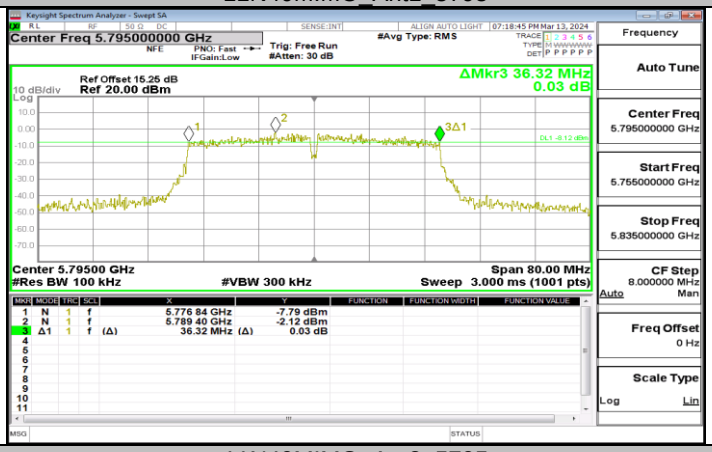
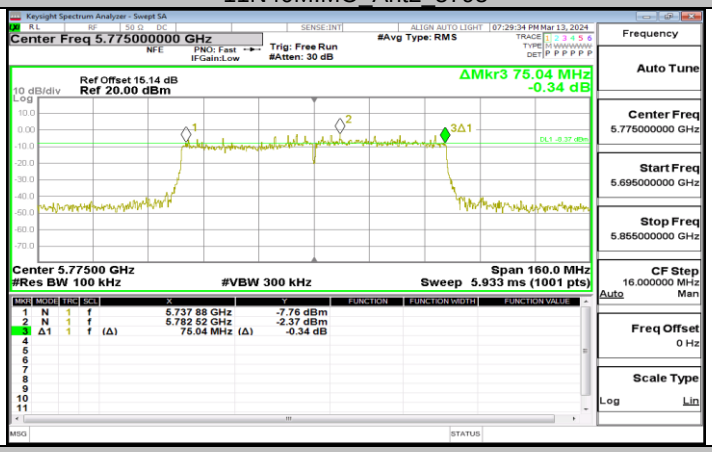
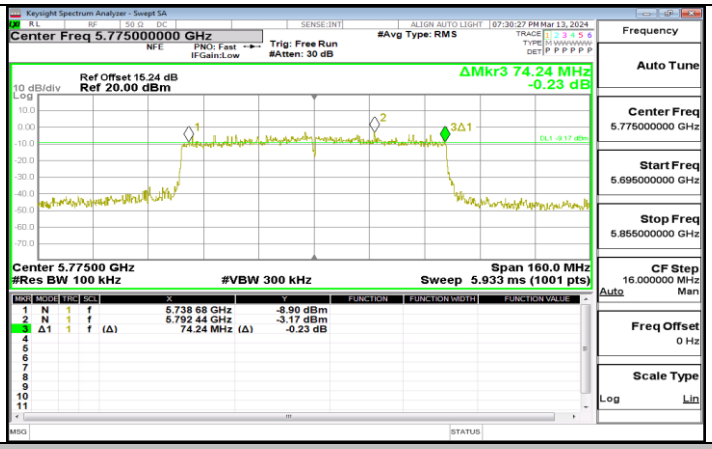

11N40MIMO_Ant2_5795

11AC80MIMO_Ant1_5775



11AC80MIMO_Ant2_5775

11.4. APPENDIX B: MAXIMUM CONDUCTED OUTPUT POWER

11.4.1. Test Result

Test Mode	Antenna	Frequency[MHz]	Power [dBm]	FCC Limit [dBm]	ISED Limit [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	14.95	≤30.00	---	18.64	≤22.20	PASS
	Ant2	5180	15.23	≤30.00	---	18.92	≤22.20	PASS
	Ant1	5200	15.22	≤30.00	---	18.91	≤22.24	PASS
	Ant2	5200	14.68	≤30.00	---	18.37	≤22.20	PASS
	Ant1	5240	14.93	≤30.00	---	18.62	≤22.20	PASS
	Ant2	5240	15.26	≤30.00	---	18.95	≤22.20	PASS
	Ant1	5745	15.05	≤30.00	≤30.00	18.74	---	PASS
	Ant2	5745	14.79	≤30.00	≤30.00	18.48	---	PASS
	Ant1	5785	15.09	≤30.00	≤30.00	18.78	---	PASS
	Ant2	5785	15.07	≤30.00	≤30.00	18.76	---	PASS
	Ant1	5825	14.98	≤30.00	≤30.00	18.67	---	PASS
	Ant2	5825	14.95	≤30.00	≤30.00	18.64	---	PASS
11N20MIMO	Ant1	5180	9.10	≤30.00	---	12.79	≤22.49	PASS
	Ant2	5180	9.42	≤30.00	---	13.11	≤22.45	PASS
	total	5180	12.27	≤30.00	---	15.96	≤22.45	PASS
	Ant1	5200	8.70	≤30.00	---	12.39	≤22.49	PASS
	Ant2	5200	9.37	≤30.00	---	13.06	≤22.46	PASS
	total	5200	12.06	≤30.00	---	15.75	≤22.46	PASS
	Ant1	5240	8.98	≤30.00	---	12.67	≤22.48	PASS
	Ant2	5240	9.46	≤30.00	---	13.15	≤22.46	PASS
	total	5240	12.24	≤30.00	---	15.93	≤22.46	PASS
	Ant1	5745	13.90	≤30.00	≤30.00	17.59	---	PASS
	Ant2	5745	13.87	≤30.00	≤30.00	17.56	---	PASS
	total	5745	16.90	≤30.00	≤30.00	20.59	---	PASS
	Ant1	5785	14.08	≤30.00	≤30.00	17.77	---	PASS
	Ant2	5785	14.16	≤30.00	≤30.00	17.85	---	PASS
	total	5785	17.13	≤30.00	≤30.00	20.82	---	PASS
	Ant1	5825	13.95	≤30.00	≤30.00	17.64	---	PASS
	Ant2	5825	13.97	≤30.00	≤30.00	17.66	---	PASS
	total	5825	16.97	≤30.00	≤30.00	20.66	---	PASS
11N40MIMO	Ant1	5190	12.50	≤30.00	---	16.19	≤23.00	PASS
	Ant2	5190	12.97	≤30.00	---	16.66	≤23.00	PASS
	total	5190	15.75	≤30.00	---	19.44	≤23.00	PASS
	Ant1	5230	11.80	≤30.00	---	15.49	≤23.00	PASS
	Ant2	5230	12.17	≤30.00	---	15.86	≤23.00	PASS
	total	5230	15.00	≤30.00	---	18.69	≤23.00	PASS
	Ant1	5755	14.25	≤30.00	≤30.00	17.94	---	PASS
	Ant2	5755	13.87	≤30.00	≤30.00	17.56	---	PASS
	total	5755	17.07	≤30.00	≤30.00	20.76	---	PASS
	Ant1	5795	14.51	≤30.00	≤30.00	18.20	---	PASS
	Ant2	5795	14.14	≤30.00	≤30.00	17.83	---	PASS
	total	5795	17.34	≤30.00	≤30.00	21.03	---	PASS
11AC80MIMO	Ant1	5210	14.07	≤30.00	---	17.76	≤23.00	PASS
	Ant2	5210	14.39	≤30.00	---	18.08	≤23.00	PASS
	total	5210	17.24	≤30.00	---	20.93	≤23.00	PASS
	Ant1	5775	14.07	≤30.00	≤30.00	17.76	---	PASS
	Ant2	5775	13.85	≤30.00	≤30.00	17.54	---	PASS
	total	5775	16.97	≤30.00	≤30.00	20.66	---	PASS

Note: The Duty Cycle Factor is compensated in the test result.

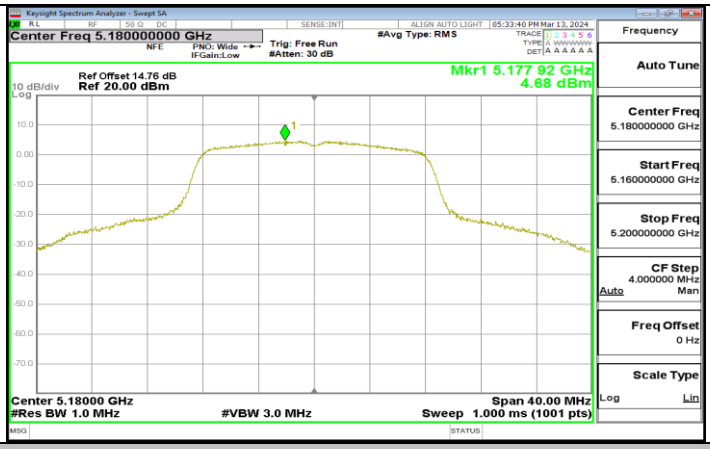
11.5. APPENDIX C: MAXIMUM POWER SPECTRAL DENSITY

11.5.1. Test Result

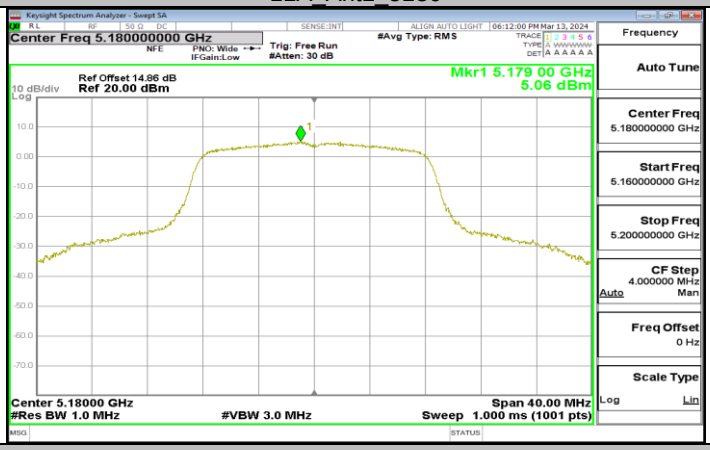
Test Mode	Antenna	Frequency[MHz]	Power [dBm/MHz]	Limit [dBm/MHz]	EIRP [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant1	5180	4.68	≤17.00	8.37	≤10.00	PASS
	Ant2	5180	5.06	≤17.00	8.75	≤10.00	PASS
	Ant1	5200	5.14	≤17.00	8.83	≤10.00	PASS
	Ant2	5200	4.59	≤17.00	8.28	≤10.00	PASS
	Ant1	5240	4.87	≤17.00	8.56	≤10.00	PASS
	Ant2	5240	5.33	≤17.00	9.02	≤10.00	PASS
	Ant1	5745	2.10	≤30.00	5.79	---	PASS
	Ant2	5745	2.02	≤30.00	5.71	---	PASS
	Ant1	5785	1.99	≤30.00	5.68	---	PASS
	Ant2	5785	2.11	≤30.00	5.80	---	PASS
	Ant1	5825	2.13	≤30.00	5.82	---	PASS
	Ant2	5825	2.09	≤30.00	5.78	---	PASS
11N20MIMO	Ant1	5180	-1.16	≤17.00	2.53	≤10.00	PASS
	Ant2	5180	-0.54	≤17.00	3.15	≤10.00	PASS
	total	5180	2.17	≤16.30	8.87	≤10.00	PASS
	Ant1	5200	-0.97	≤17.00	2.72	≤10.00	PASS
	Ant2	5200	-0.69	≤17.00	3.00	≤10.00	PASS
	total	5200	2.18	≤16.30	8.88	≤10.00	PASS
	Ant1	5240	-1.30	≤17.00	2.39	≤10.00	PASS
	Ant2	5240	-0.74	≤17.00	2.95	≤10.00	PASS
	total	5240	2.00	≤16.30	8.70	≤10.00	PASS
	Ant1	5745	1.31	≤30.00	5.00	---	PASS
	Ant2	5745	1.36	≤30.00	5.05	---	PASS
	total	5745	4.35	≤29.30	11.05	---	PASS
	Ant1	5785	1.52	≤30.00	5.21	---	PASS
	Ant2	5785	1.42	≤30.00	5.11	---	PASS
	total	5785	4.48	≤29.30	11.18	---	PASS
	Ant1	5825	1.11	≤30.00	4.80	---	PASS
	Ant2	5825	1.76	≤30.00	5.45	---	PASS
	total	5825	4.46	≤29.30	11.16	---	PASS
11N40MIMO	Ant1	5190	-1.07	≤17.00	2.62	≤10.00	PASS
	Ant2	5190	0.02	≤17.00	3.71	≤10.00	PASS
	total	5190	2.52	≤16.30	9.22	≤10.00	PASS
	Ant1	5230	-0.79	≤17.00	2.90	≤10.00	PASS
	Ant2	5230	-0.35	≤17.00	3.34	≤10.00	PASS
	total	5230	2.45	≤16.30	9.15	≤10.00	PASS
	Ant1	5755	-2.05	≤30.00	1.64	---	PASS
	Ant2	5755	-2.29	≤30.00	1.40	---	PASS
	total	5755	0.84	≤29.30	7.54	---	PASS
	Ant1	5795	-1.14	≤30.00	2.55	---	PASS
	Ant2	5795	-1.34	≤30.00	2.35	---	PASS
	total	5795	1.77	≤29.30	8.47	---	PASS
11AC80MIMO	Ant1	5210	-1.99	≤17.00	1.70	≤10.00	PASS
	Ant2	5210	-0.41	≤17.00	3.28	≤10.00	PASS
	total	5210	1.88	≤16.30	8.58	≤10.00	PASS
	Ant1	5775	-4.66	≤30.00	-0.97	---	PASS
	Ant2	5775	-5.13	≤30.00	-1.44	---	PASS
	total	5775	-1.88	≤29.30	4.82	---	PASS

Note：1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

11.5.2. Test Graphs



11A_Ant1_5180



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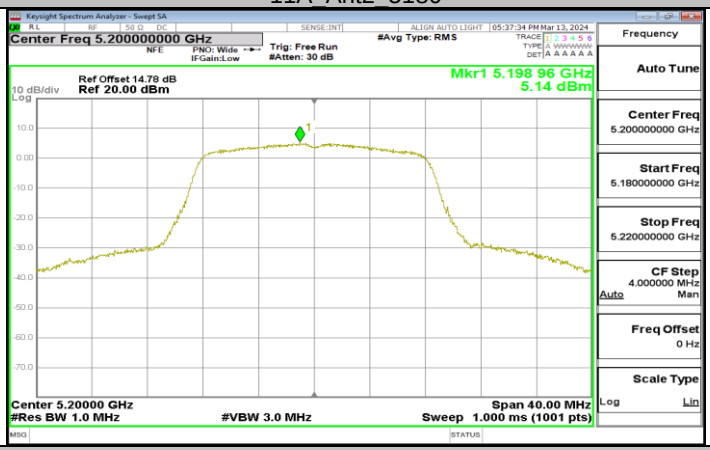

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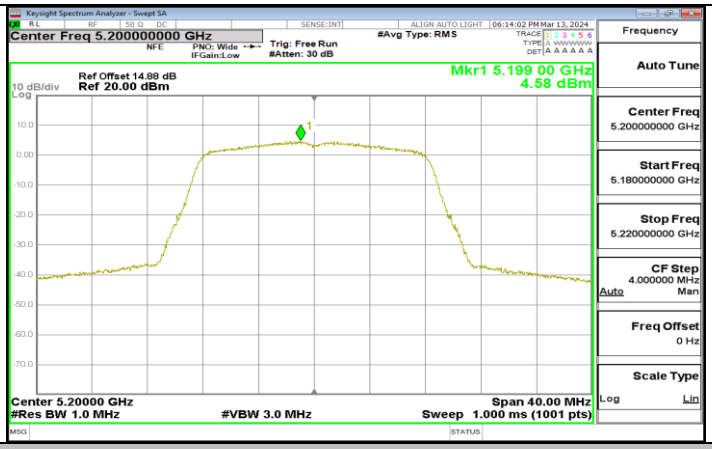

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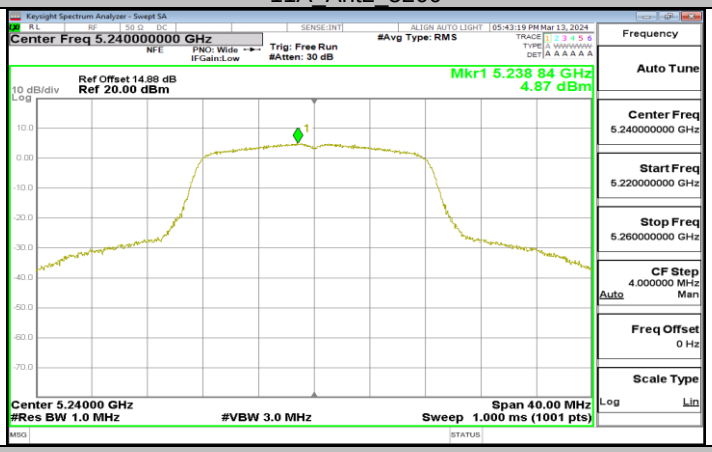

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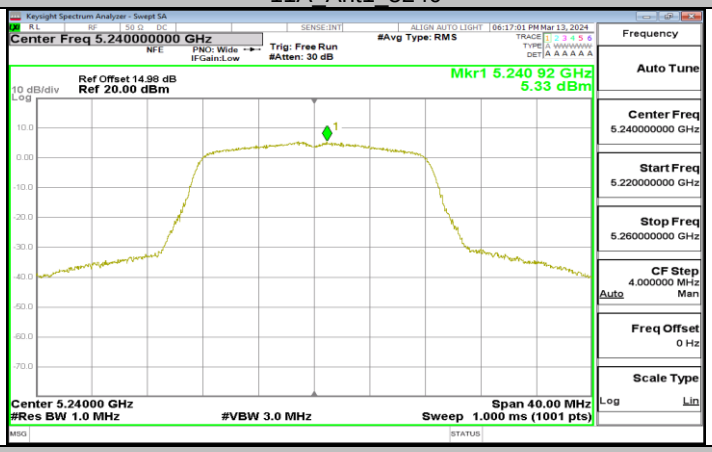
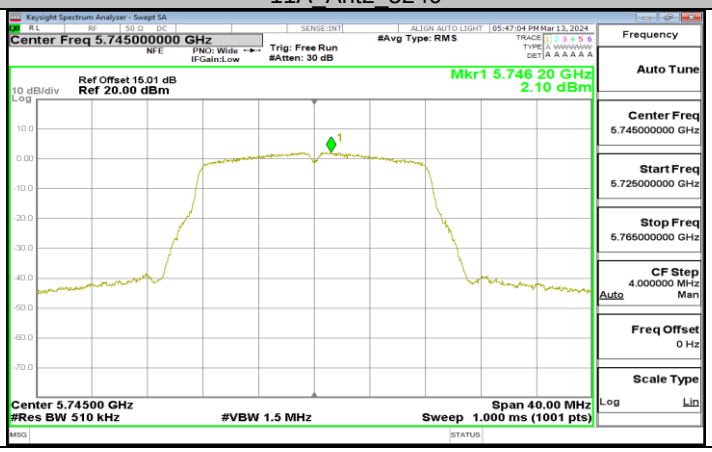


11A_Ant2_5240



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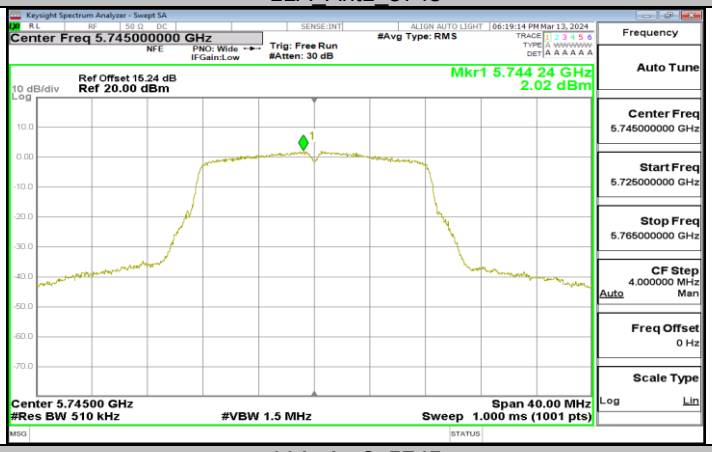
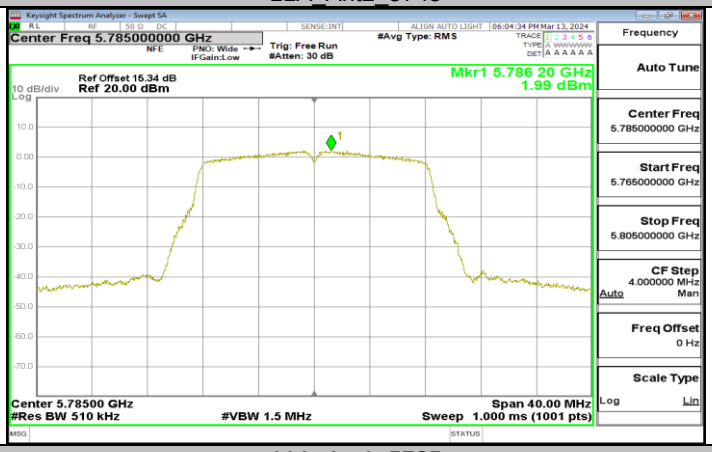


11A_Ant2_5745



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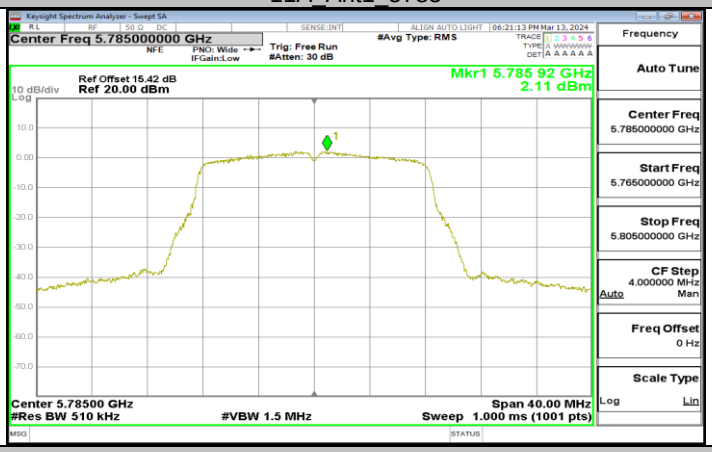

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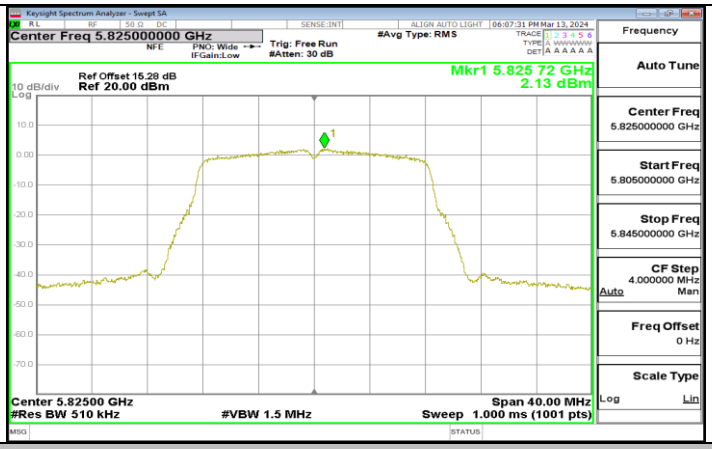

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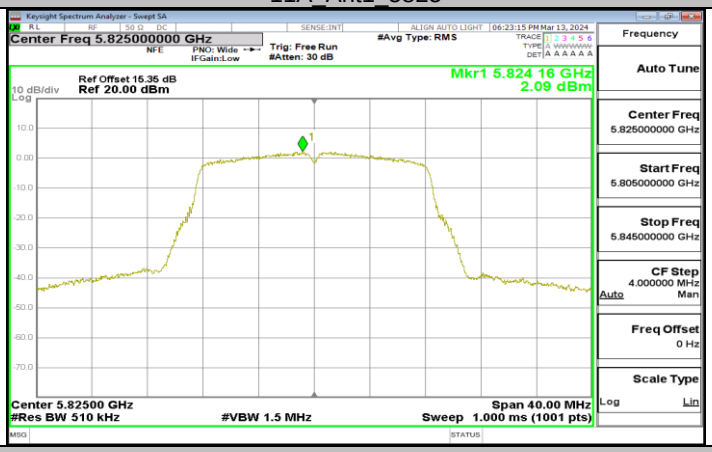
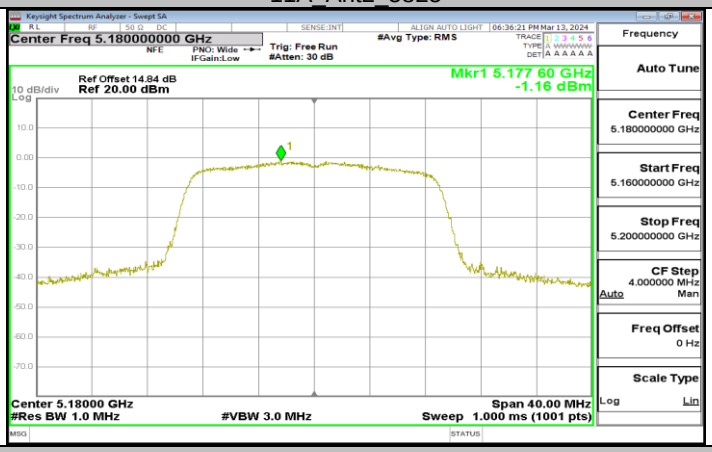


11A_Ant2_5825



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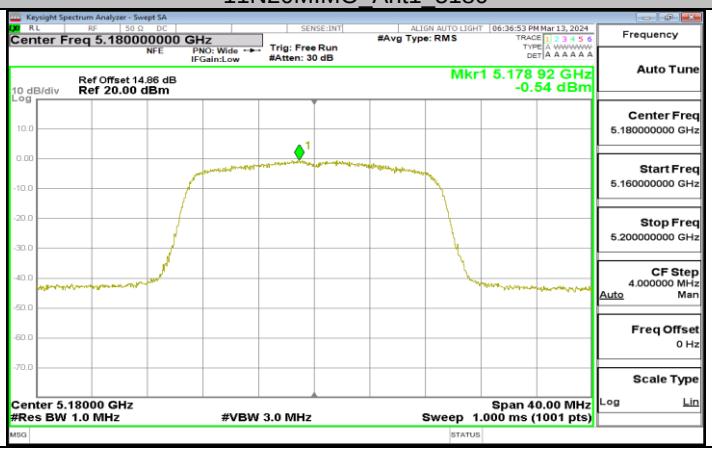
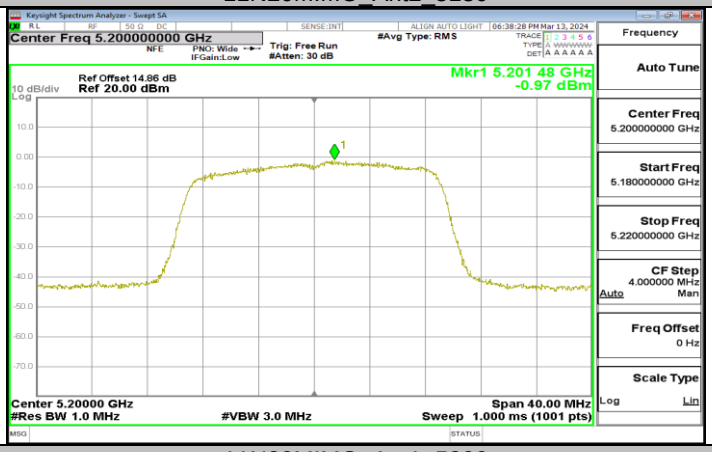


11N20MIMO_Ant2_5180



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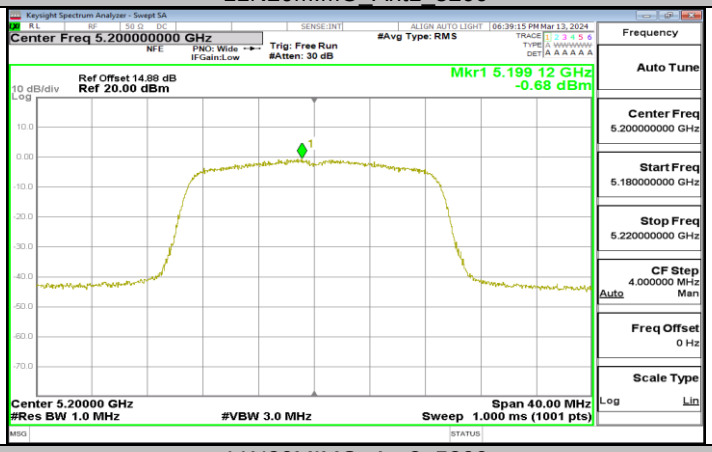
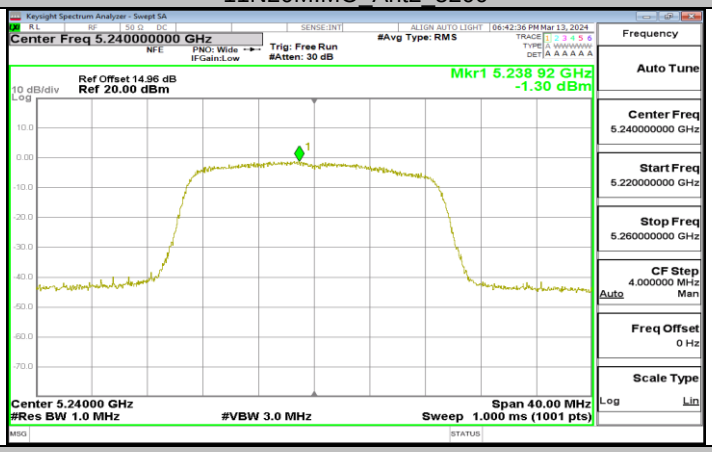


11N20MIMO_Ant2_5200



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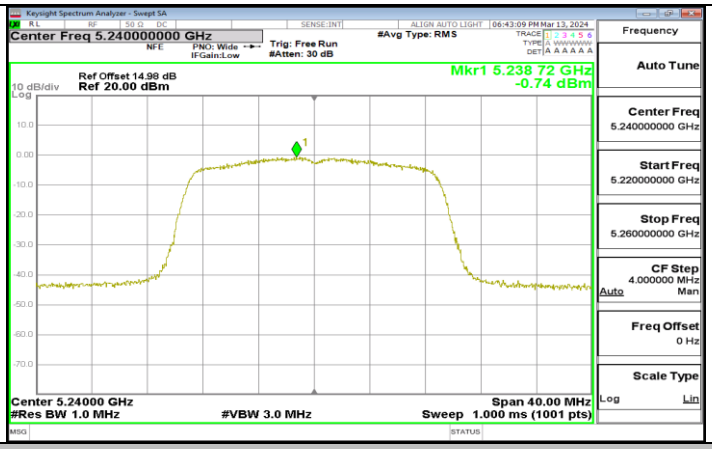

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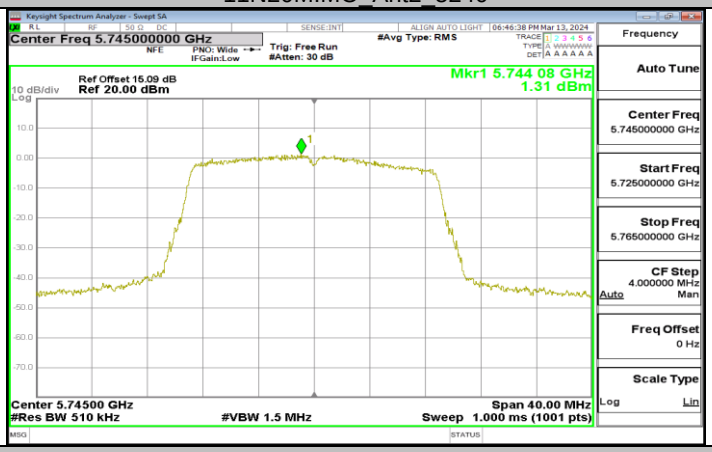
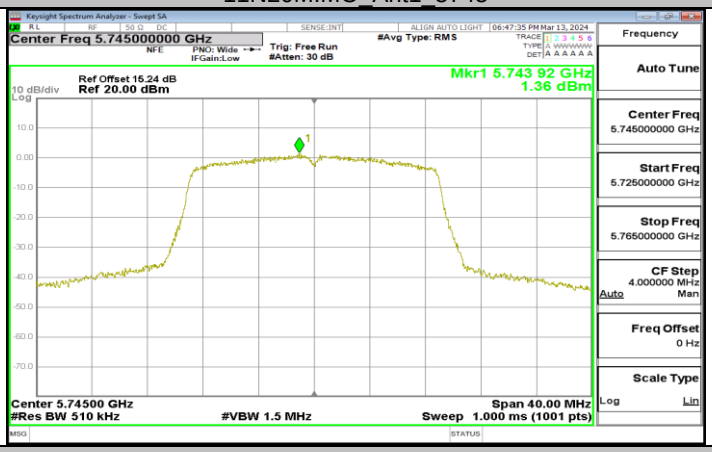


11N20MIMO_Ant1_5745



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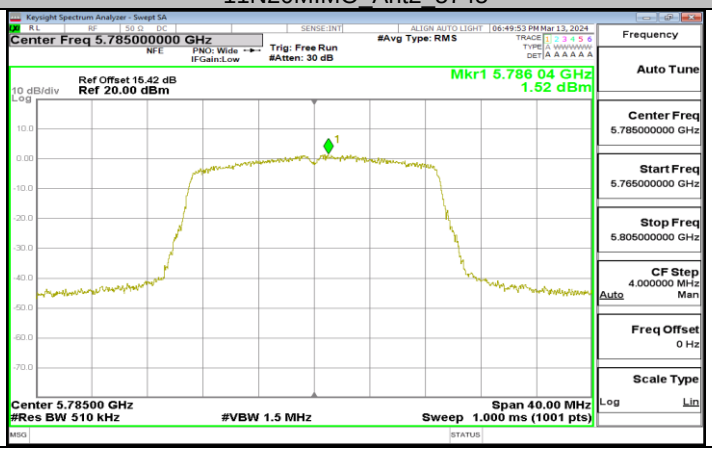

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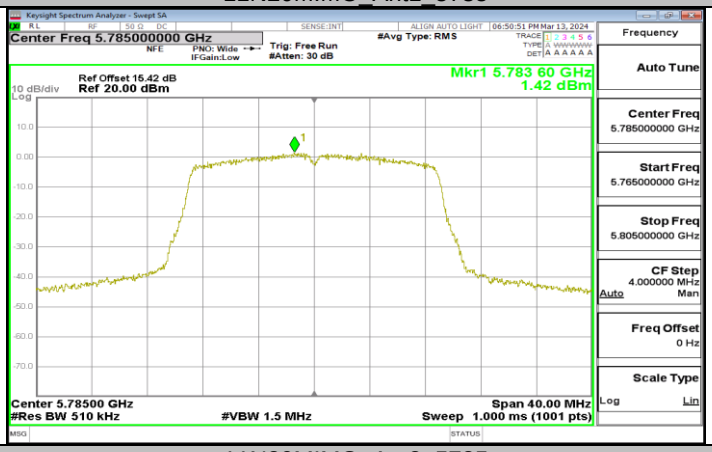
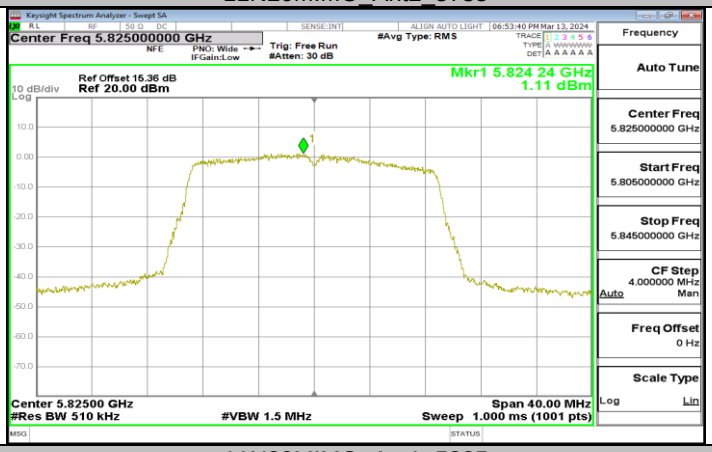
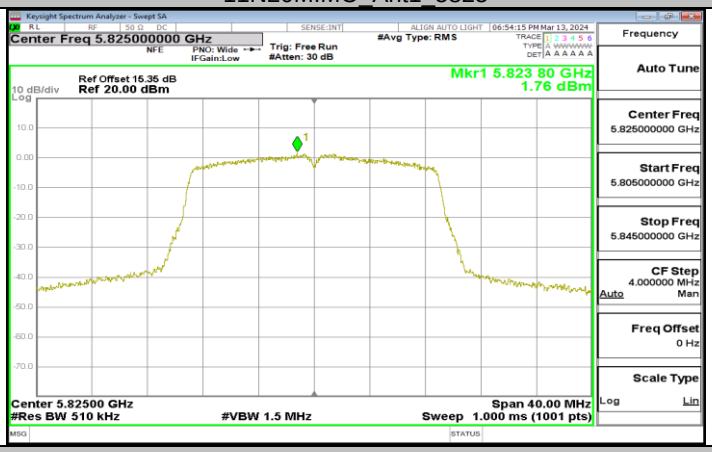


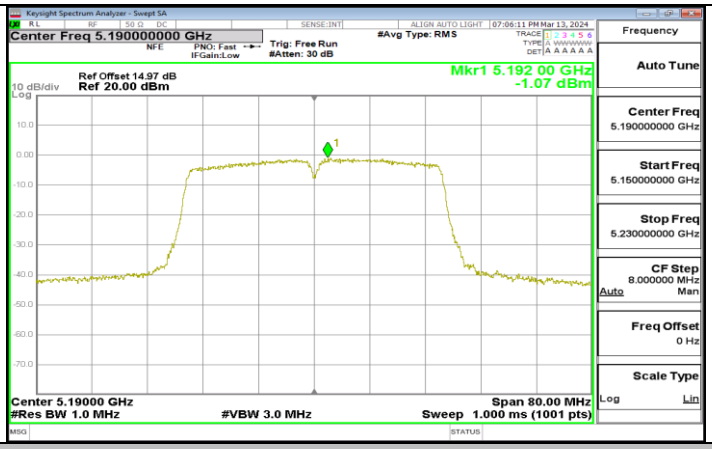
11N20MIMO_Ant2_5785



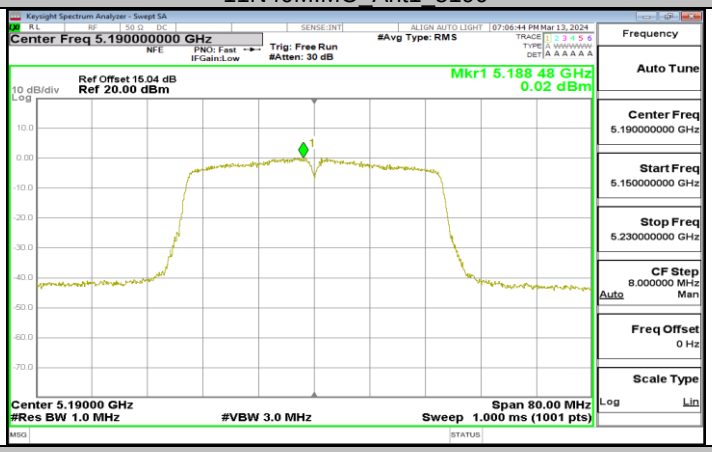
11N20MIMO_Ant1_5825



11N20MIMO_Ant2_5825



11N40MIMO_Ant1_5190



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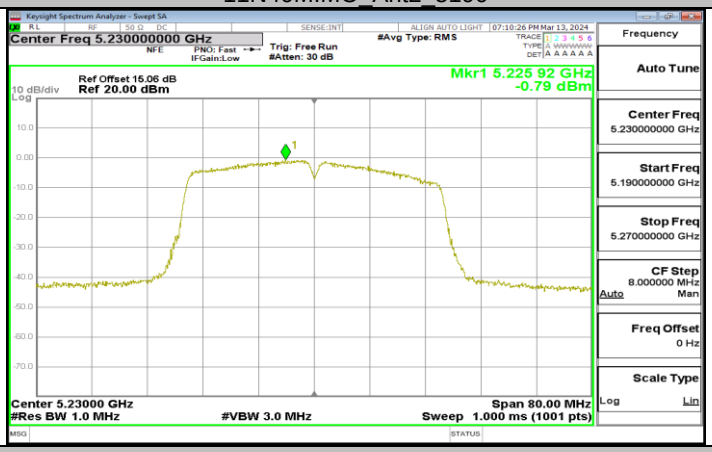

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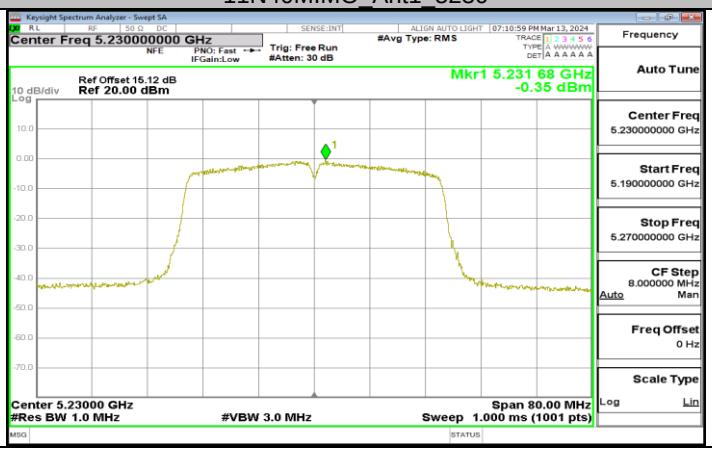

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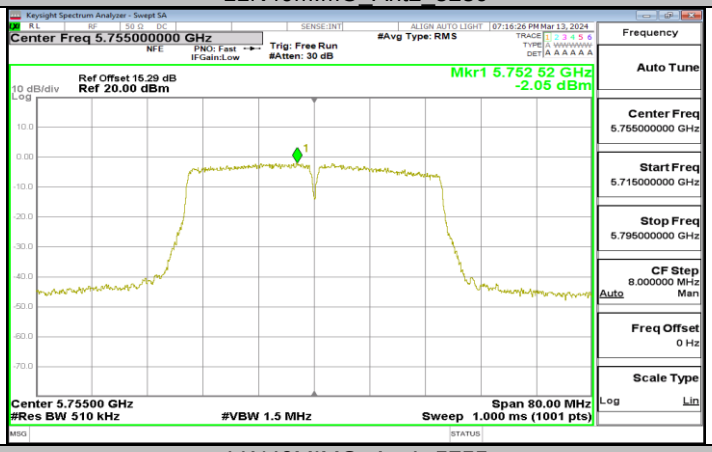
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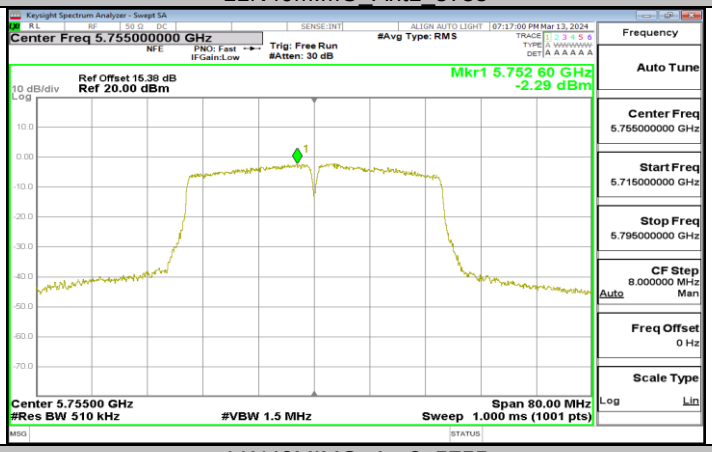
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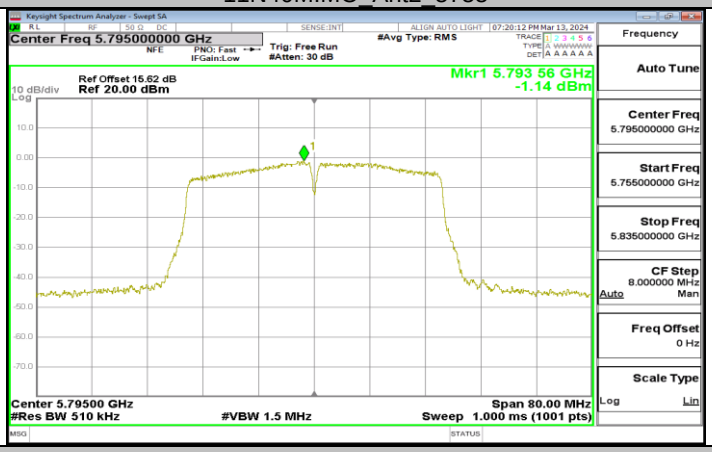
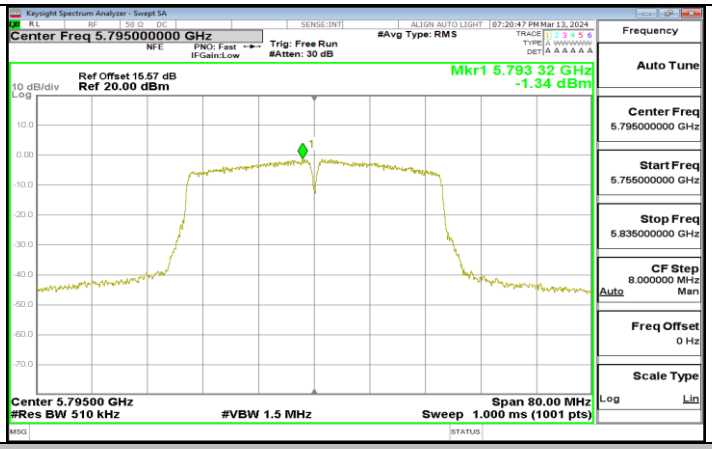
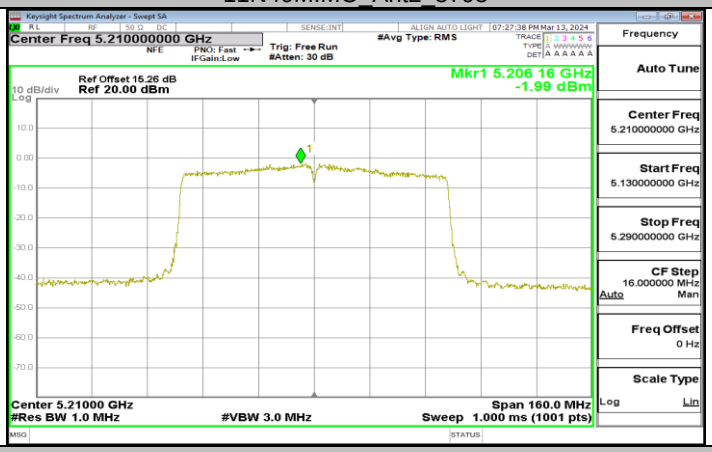
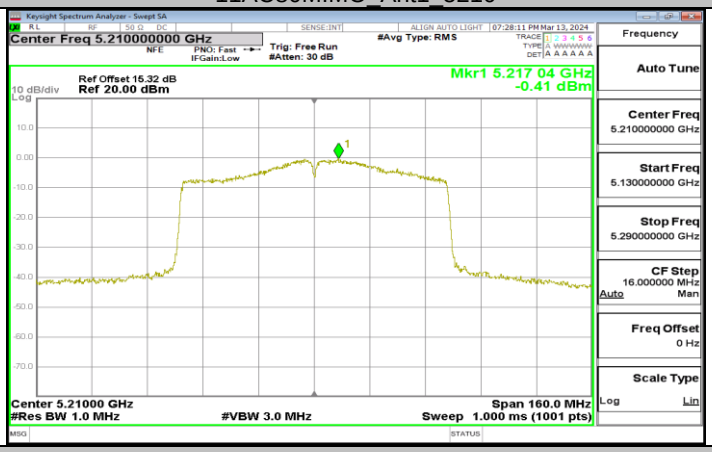

11N40MIMO_Ant1_5795



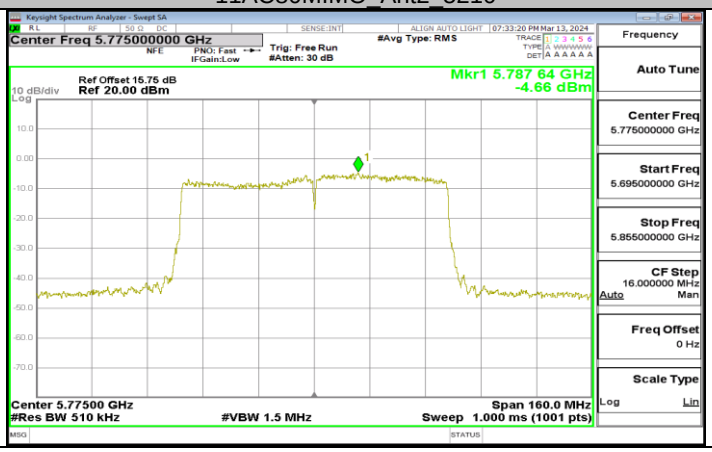
11N40MIMO_Ant2_5795

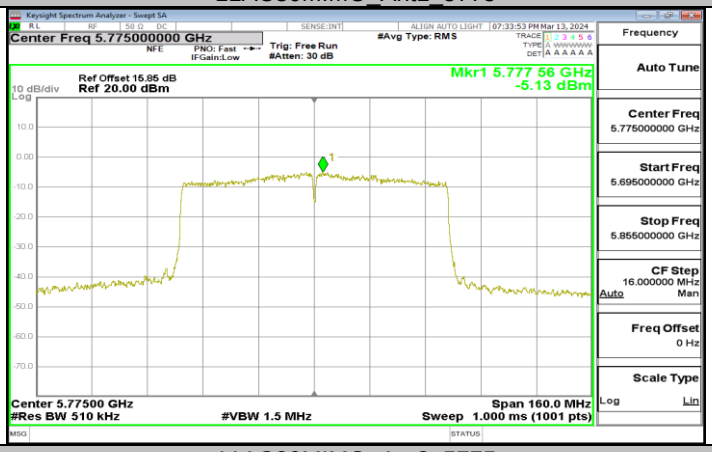


11AC80MIMO_Ant1_5210



11AC80MIMO_Ant2_5210



11AC80MIMO_Ant1_5775

11AC80MIMO_Ant2_5775

11.6. APPENDIX D: DUTY CYCLE

11.6.1. 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	1.39	1.43	0.9720	97.20	0.12	0.72	1
11N20MIMO	1.3	1.36	0.9559	95.59	0.20	0.77	1
11N40MIMO	0.65	0.7	0.9286	92.86	0.32	1.54	2
11AC80MIMO	0.33	0.38	0.8684	86.84	0.61	3.03	4

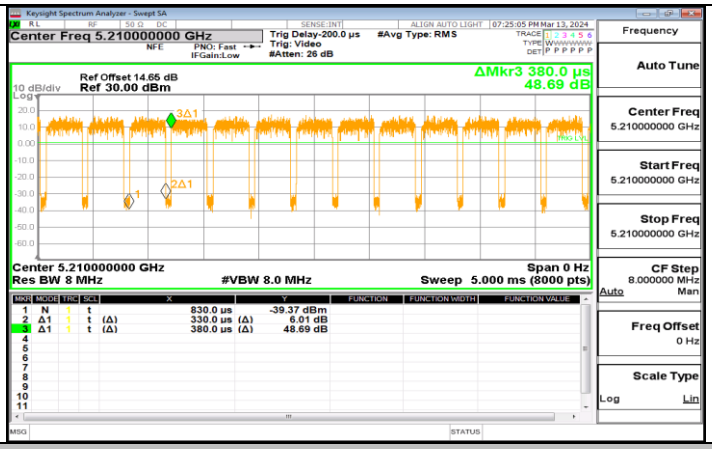
Note:
Duty Cycle Correction Factor=10log (1/x).
Where: x is Duty Cycle (Linear)
Where: T is On Time
If that calculated VBW is not available on the analyzer then the next higher value should be used.

11.6.2. Test Graphs

11A_Ant1_5180

11N20MIMO_Ant1_5180

11N40MIMO_Ant1_5190



11AC80MIMO_Ant1_5210

11.7. APPENDIX H: FREQUENCY STABILITY

11.7.1. Test Result

Frequency Error vs. Voltage									
802.11a:5180MHz									
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	5180.0086	1.66	5179.9877	-2.36	5179.9953	-0.90	5179.9798	-3.90
TN	VN	5179.9768	-4.48	5180.0018	0.35	5180.0097	1.87	5179.9803	-3.80
TN	VH	5179.9843	-3.02	5180.0234	4.53	5179.9877	-2.38	5180.0189	3.64
Frequency Error vs. Temperature									
802.11a:5180MHz									
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	5180.0204	3.94	5180.0171	3.30	5179.9817	-3.54	5180.0207	4.00
30	VN	5180.0086	1.66	5179.9871	-2.50	5179.9857	-2.76	5180.0048	0.93
20	VN	5180.0108	2.08	5180.0165	3.19	5180.0096	1.86	5180.0091	1.75
10	VN	5180.0229	4.41	5179.9853	-2.83	5180.0143	2.75	5180.0215	4.16
0	VN	5179.9981	-0.37	5179.9935	-1.26	5180.0165	3.19	5179.9891	-2.10

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.

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	5824.9825	-3.00	5824.9787	-3.66	5824.9948	-0.90	5825.0181	3.11
TN	VN	5824.9986	-0.25	5825.0028	0.48	5824.9834	-2.85	5825.0031	0.52
TN	VH	5825.0191	3.28	5824.9812	-3.22	5824.9942	-0.99	5824.9787	-3.66
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)
40	VN	5825.0099	1.69	5824.9845	-2.66	5825.0238	4.08	5824.9992	-0.15
30	VN	5824.9811	-3.24	5824.9830	-2.92	5825.0166	2.85	5825.0068	1.16
20	VN	5824.9984	-0.27	5824.9932	-1.17	5824.9985	-0.26	5824.9753	-4.24
10	VN	5824.9974	-0.45	5825.0168	2.89	5824.9828	-2.95	5825.0129	2.22
0	VN	5825.0106	1.81	5825.0159	2.72	5824.9830	-2.92	5824.9968	-0.56

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.

END OF REPORT