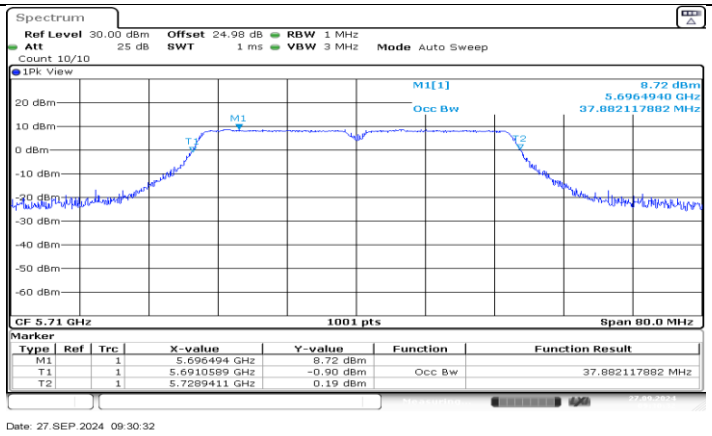
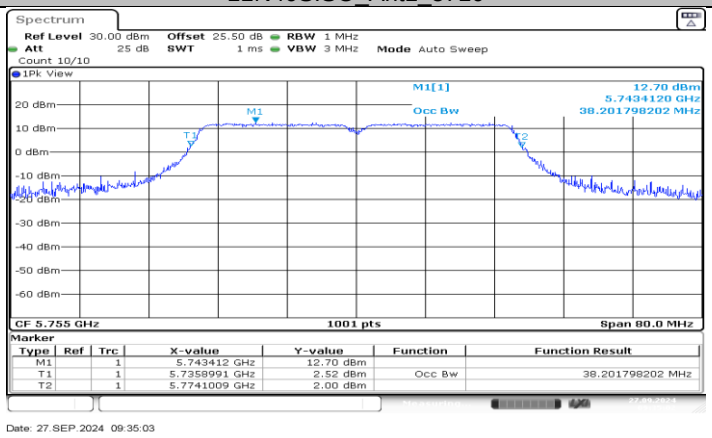
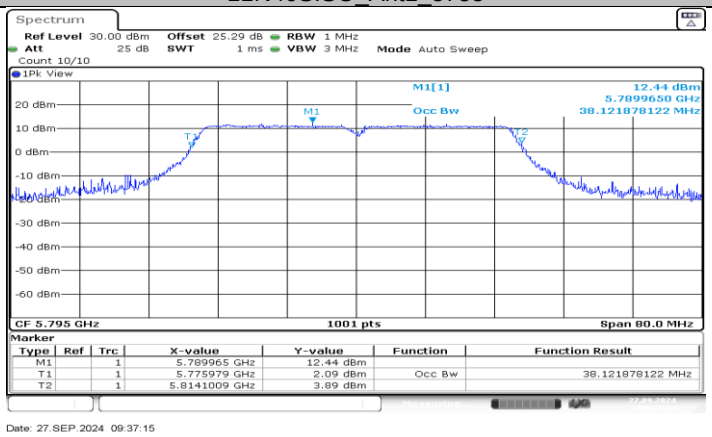


11N40SISO_Ant1_5710



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795

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11.3. APPENDIX C: MIN EMISSION BANDWIDTH

11.3.1. Test Result

Test Mode	Antenna	Frequency[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5720	16.36	5711.80	5728.16	≥0.5	PASS
		5720_UNII-3	3.16	5725	5728.16	≥0.5	PASS
		5745	16.36	5736.80	5753.16	≥0.5	PASS
		5785	16.48	5776.76	5793.24	≥0.5	PASS
		5825	16.32	5816.80	5833.12	≥0.5	PASS
11N20SISO	Ant1	5720	17.68	5711.16	5728.84	≥0.5	PASS
		5720_UNII-3	3.84	5725	5728.84	≥0.5	PASS
		5745	17.60	5736.16	5753.76	≥0.5	PASS
		5785	17.76	5776.08	5793.84	≥0.5	PASS
		5825	17.60	5816.16	5833.76	≥0.5	PASS
11N40SISO	Ant1	5710	36.32	5691.84	5728.16	≥0.5	PASS
		5710_UNII-3	3.16	5725	5728.16	≥0.5	PASS
		5755	36.40	5736.76	5773.16	≥0.5	PASS
		5795	36.32	5776.84	5813.16	≥0.5	PASS

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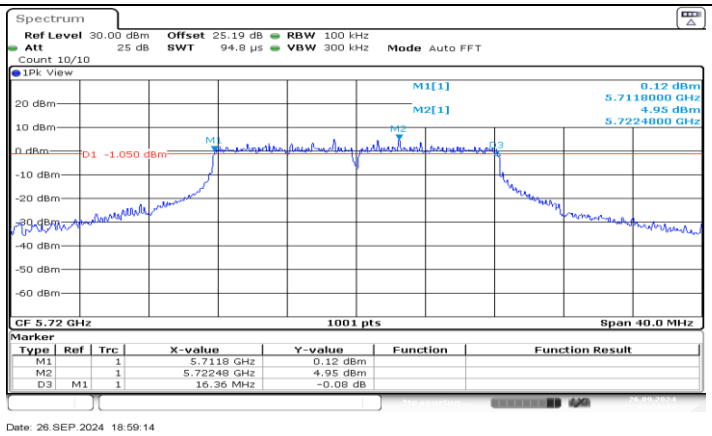
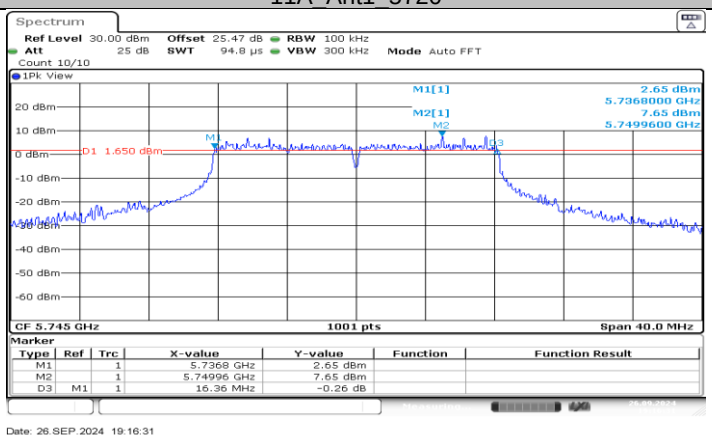
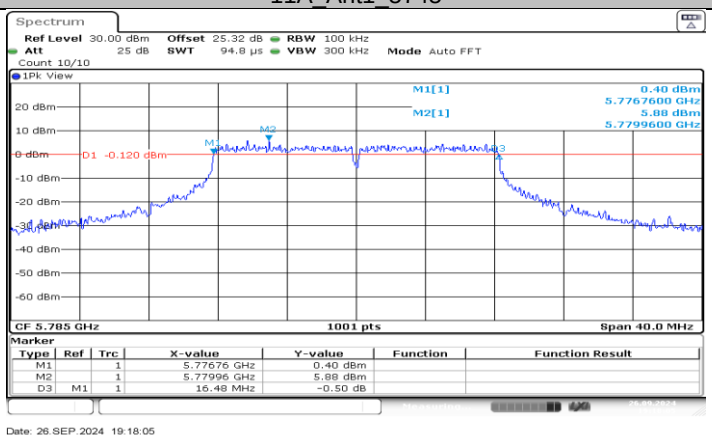
11.3.2. Test Graphs



11A_Ant1_5720



11A_Ant1_5745



11A_Ant1_5785

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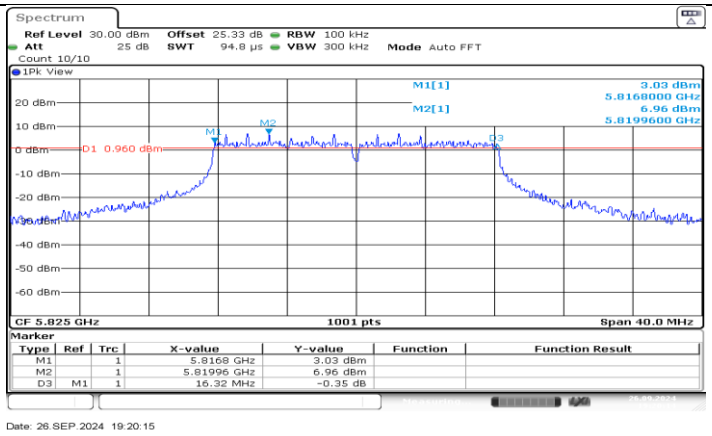
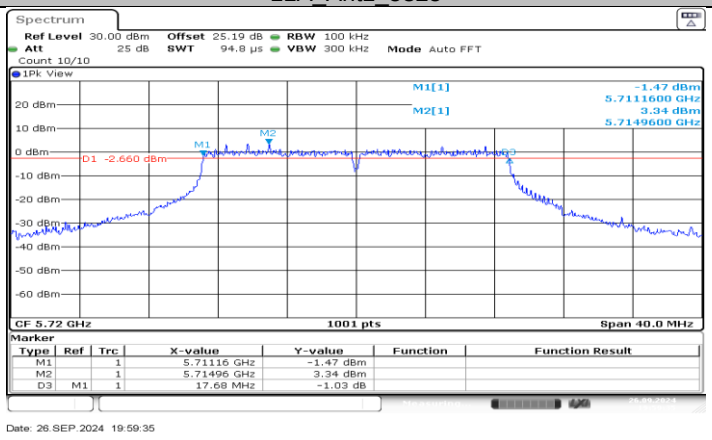
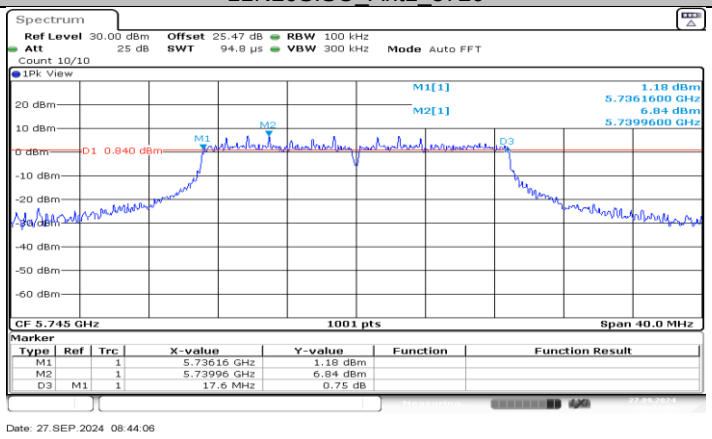


11A_Ant1_5825



11N20SISO_Ant1_5720



11N20SISO_Ant1_5745

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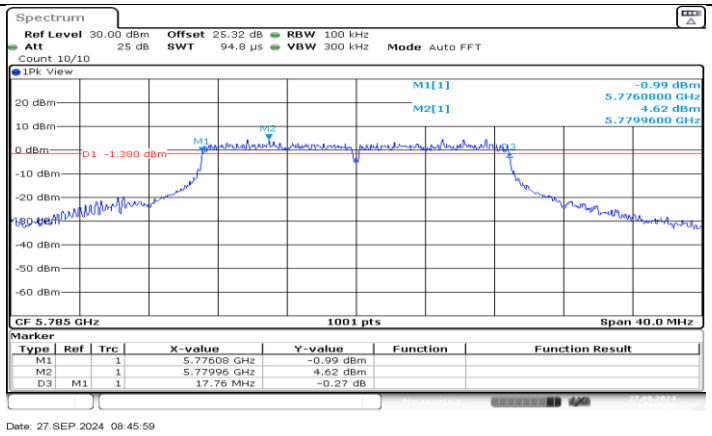

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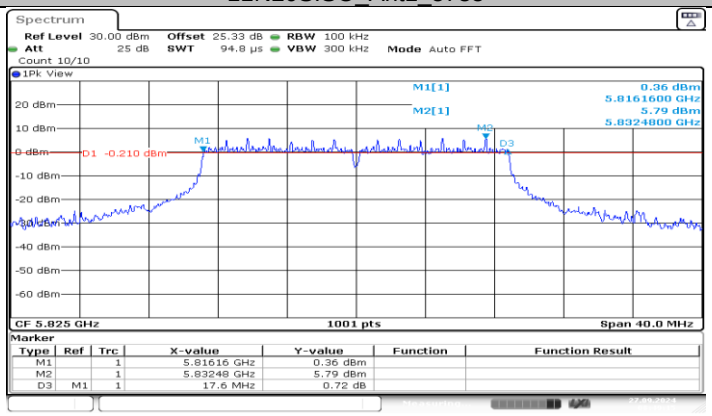

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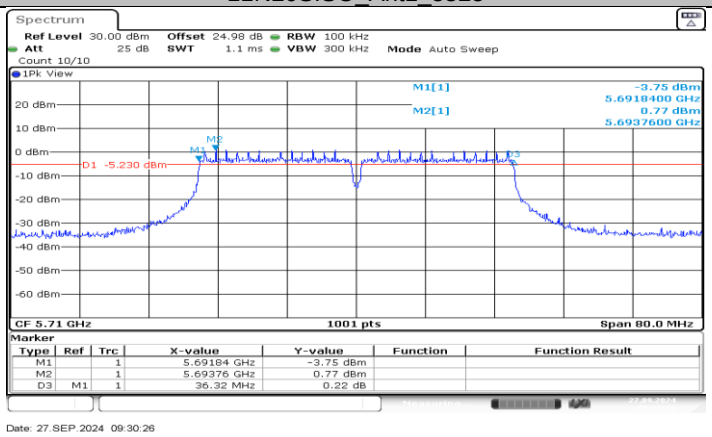

11N40SISO_Ant1_5710

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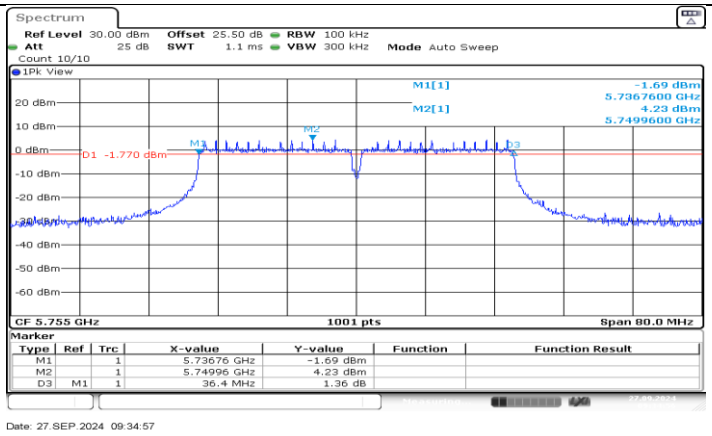
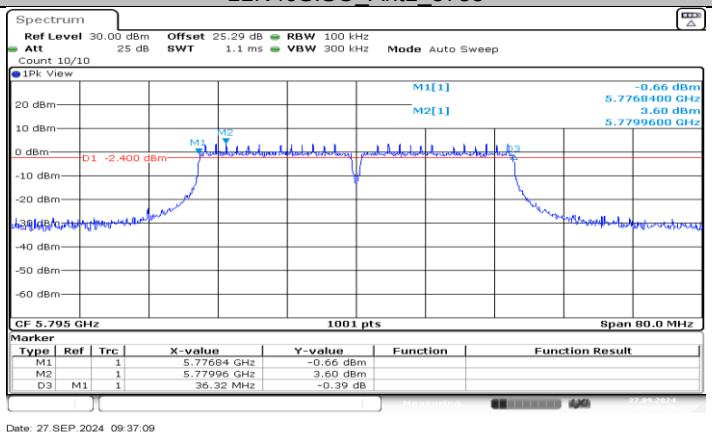


11N40SISO_Ant1_5755



11N40SISO_Ant1_5795

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11.4. APPENDIX D: 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	15.21	≤23.98	---	20.03	≤22.59	PASS
		5200	15.20	≤23.98	---	20.02	≤22.62	PASS
		5240	15.65	≤23.98	---	20.47	≤22.61	PASS
		5260	14.93	≤23.98	≤23.63	19.75	≤29.63	PASS
		5280	14.99	≤23.98	≤23.64	19.81	≤29.64	PASS
		5320	14.99	≤23.98	≤23.63	19.81	≤29.63	PASS
		5500	13.53	≤23.98	≤23.68	18.35	≤29.68	PASS
		5580	13.94	≤23.98	≤23.68	18.76	≤29.68	PASS
		5700	13.32	≤23.98	≤23.71	18.14	≤29.71	PASS
		5720_UNII-2C	12.42	≤23.58	≤22.62	17.24	≤28.62	PASS
		5720_UNII-3	6.00	≤30.00	≤30.00	10.82	---	PASS
		5745	15.16	≤30.00	≤30.00	19.98	---	PASS
		5785	14.64	≤30.00	≤30.00	19.46	---	PASS
		5825	14.41	≤30.00	≤30.00	19.23	---	PASS
11N20SISO	Ant1	5180	15.01	≤23.98	---	19.83	≤22.82	PASS
		5200	15.27	≤23.98	---	20.09	≤22.86	PASS
		5240	15.41	≤23.98	---	20.23	≤22.86	PASS
		5260	15.24	≤23.98	≤23.86	20.06	≤29.86	PASS
		5280	15.25	≤23.98	≤23.85	20.07	≤29.85	PASS
		5320	15.23	≤23.98	≤23.85	20.05	≤29.85	PASS
		5500	12.98	≤23.98	≤23.91	17.8	≤29.91	PASS
		5580	13.27	≤23.98	≤23.92	18.09	≤29.92	PASS
		5700	13.60	≤23.98	≤23.91	18.42	≤29.91	PASS
		5720_UNII-2C	12.63	≤23.59	≤22.71	17.45	≤28.71	PASS
		5720_UNII-3	6.51	≤30.00	≤30.00	11.33	---	PASS
		5745	16.34	≤30.00	≤30.00	21.16	---	PASS
		5785	15.89	≤30.00	≤30.00	20.71	---	PASS
		5825	15.53	≤30.00	≤30.00	20.35	---	PASS
11N40SISO	Ant1	5190	15.12	≤23.98	---	19.94	≤23.00	PASS
		5230	15.11	≤23.98	---	19.93	≤23.00	PASS
		5270	13.85	≤23.98	≤23.98	18.67	≤30.00	PASS
		5310	14.15	≤23.98	≤23.98	18.97	≤30.00	PASS
		5510	13.12	≤23.98	≤23.98	17.94	≤30.00	PASS
		5550	13.49	≤23.98	≤23.98	18.31	≤30.00	PASS
		5670	13.13	≤23.98	≤23.98	17.95	≤30.00	PASS
		5710_UNII-2C	12.50	≤23.98	≤23.98	17.32	≤30.00	PASS
		5710_UNII-3	0.93	≤30.00	≤30.00	5.75	---	PASS
		5755	16.60	≤30.00	≤30.00	21.42	---	PASS
		5795	15.95	≤30.00	≤30.00	20.77	---	PASS

Note: 1. Conducted Power=Meas. Level+ Correction Factor
2. The Duty Cycle Factor (refer to section 7.1) had already compensated to the test data.

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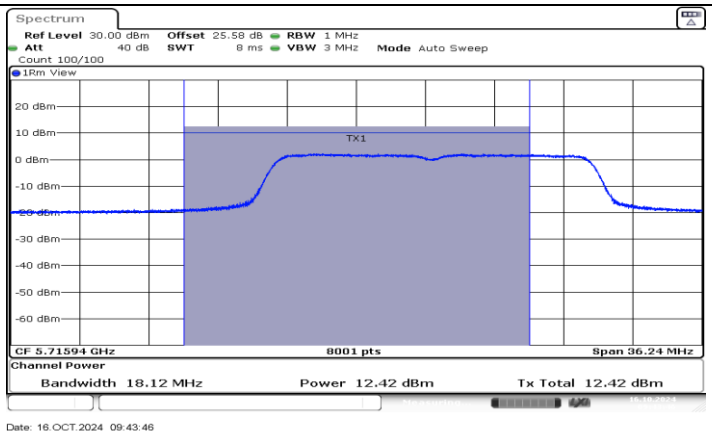
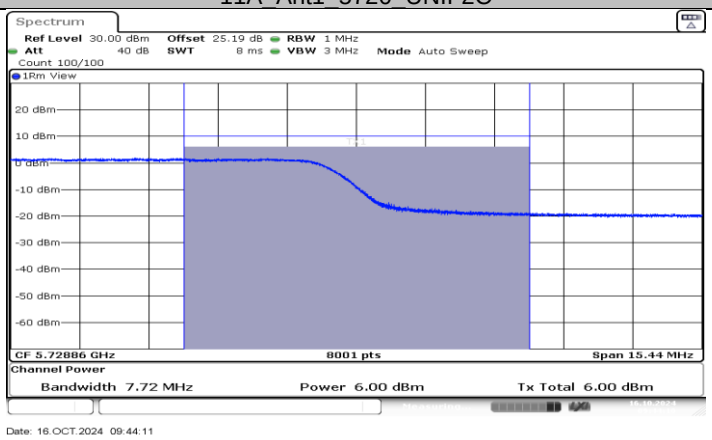
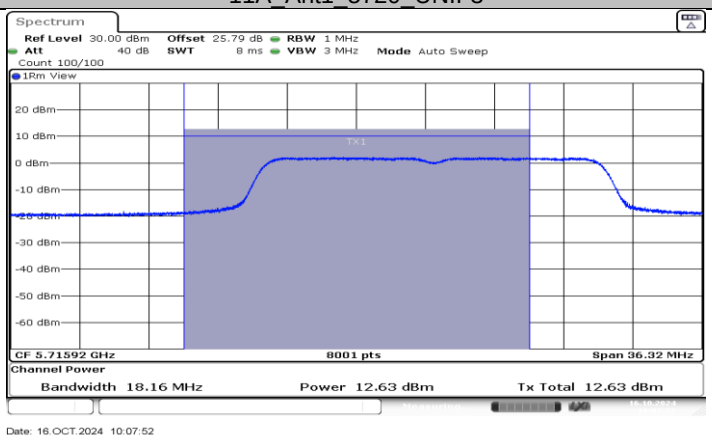
11.4.2. Test Graphs



11A_Ant1_5720_UNII-2C



11A_Ant1_5720_UNII-3



11N20SISO_Ant1_5720_UNII-2C

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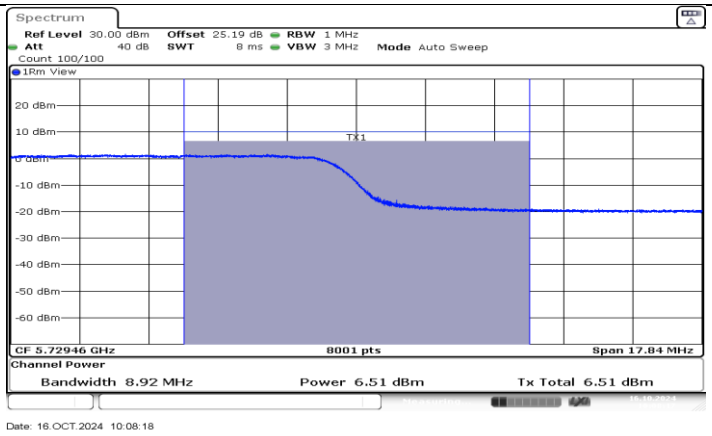
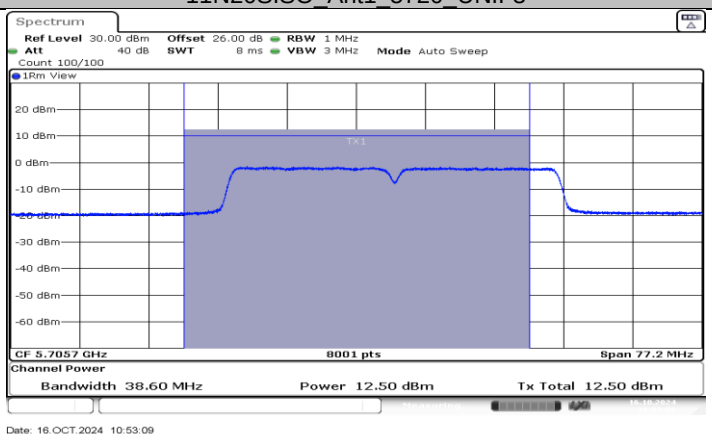
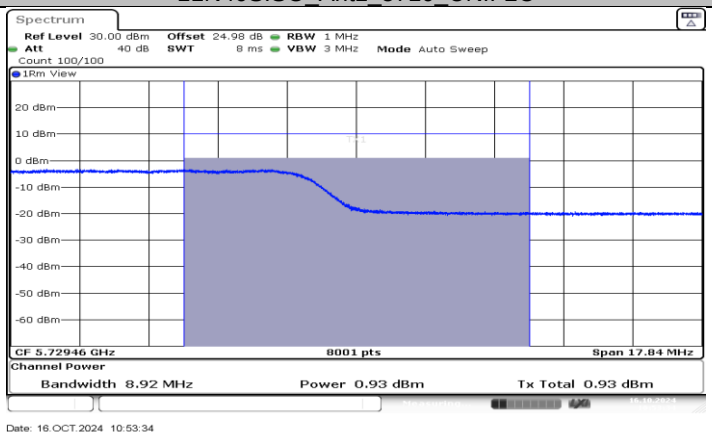


11N20SISO_Ant1_5720_UNII-3



11N40SISO_Ant1_5710_UNII-2C



11N40SISO_Ant1_5710_UNII-3

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11.5. APPENDIX E: 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	4.36	≤11.00	9.18	≤10.00	PASS
		5200	4.14	≤11.00	8.96	≤10.00	PASS
		5240	4.62	≤11.00	9.44	≤10.00	PASS
		5260	3.83	≤11.00	8.65	---	PASS
		5280	3.91	≤11.00	8.73	---	PASS
		5320	3.75	≤11.00	8.57	---	PASS
		5500	2.24	≤11.00	7.06	---	PASS
		5580	2.45	≤11.00	7.27	---	PASS
		5700	1.98	≤11.00	6.8	---	PASS
		5720_UNII-2C	2.04	≤11.00	6.86	---	PASS
		5720_UNII-3	-1.03	≤30.00	3.79	---	PASS
		5745	0.86	≤30.00	5.68	---	PASS
		5785	-0.35	≤30.00	4.47	---	PASS
		5825	-0.15	≤30.00	4.67	---	PASS
11N20SISO	Ant1	5180	4.29	≤11.00	9.11	≤10.00	PASS
		5200	3.93	≤11.00	8.75	≤10.00	PASS
		5240	3.95	≤11.00	8.77	≤10.00	PASS
		5260	3.81	≤11.00	8.63	---	PASS
		5280	3.92	≤11.00	8.74	---	PASS
		5320	3.89	≤11.00	8.71	---	PASS
		5500	1.25	≤11.00	6.07	---	PASS
		5580	1.68	≤11.00	6.5	---	PASS
		5700	1.80	≤11.00	6.62	---	PASS
		5720_UNII-2C	2.01	≤11.00	6.83	---	PASS
		5720_UNII-3	-1.09	≤30.00	3.73	---	PASS
		5745	1.53	≤30.00	6.35	---	PASS
		5785	1.35	≤30.00	6.17	---	PASS
		5825	0.70	≤30.00	5.52	---	PASS
11N40SISO	Ant1	5190	0.66	≤11.00	5.48	≤10.00	PASS
		5230	0.79	≤11.00	5.61	≤10.00	PASS
		5270	-1.73	≤11.00	3.09	---	PASS
		5310	-1.09	≤11.00	3.73	---	PASS
		5510	-1.38	≤11.00	3.44	---	PASS
		5550	-1.04	≤11.00	3.78	---	PASS
		5670	-2.81	≤11.00	2.01	---	PASS
		5710_UNII-2C	-1.91	≤11.00	2.91	---	PASS
		5710_UNII-3	-5.02	≤30.00	-0.2	---	PASS
		5755	-0.93	≤30.00	3.89	---	PASS
		5795	-1.55	≤30.00	3.27	---	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.

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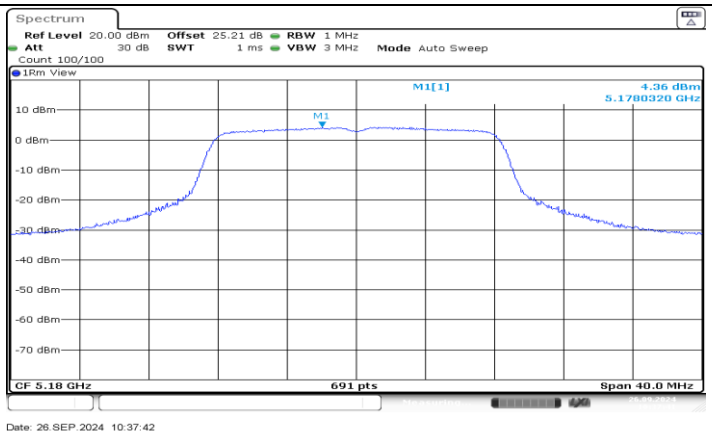
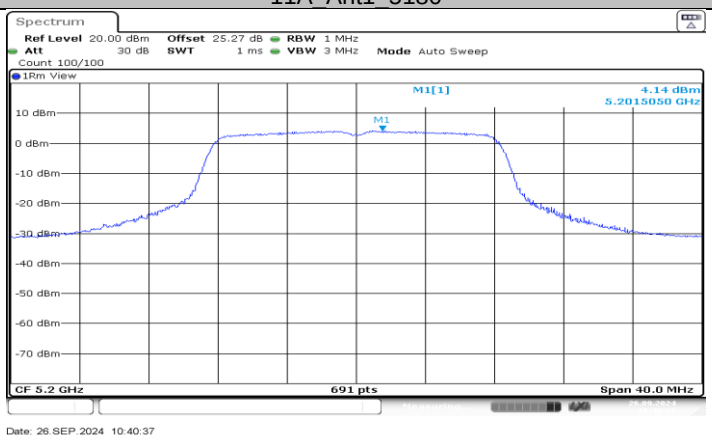
11.5.2. Test Graphs



11A_Ant1_5180



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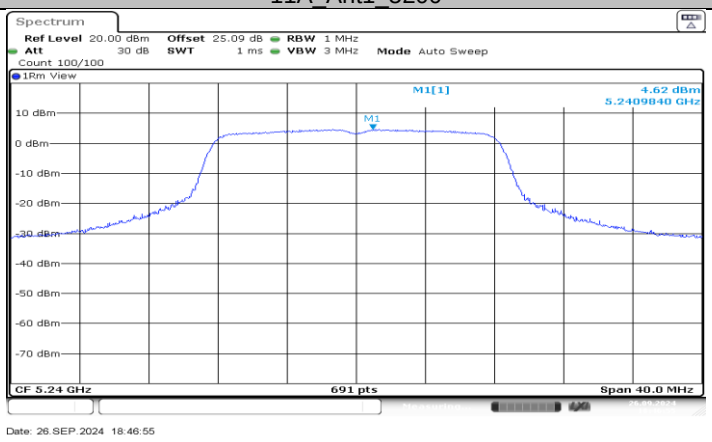

11A_Ant1_5240

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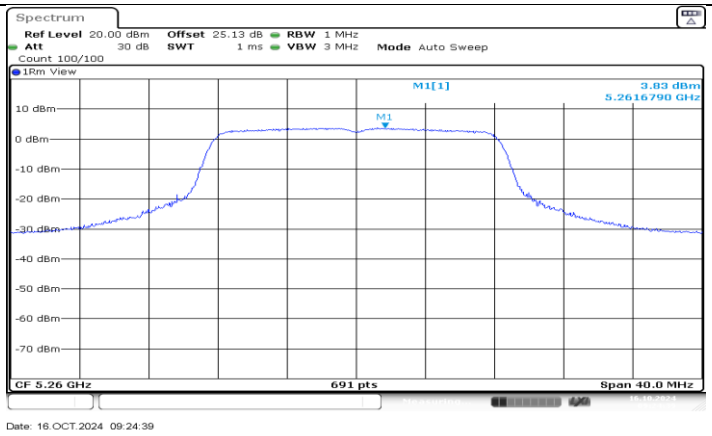

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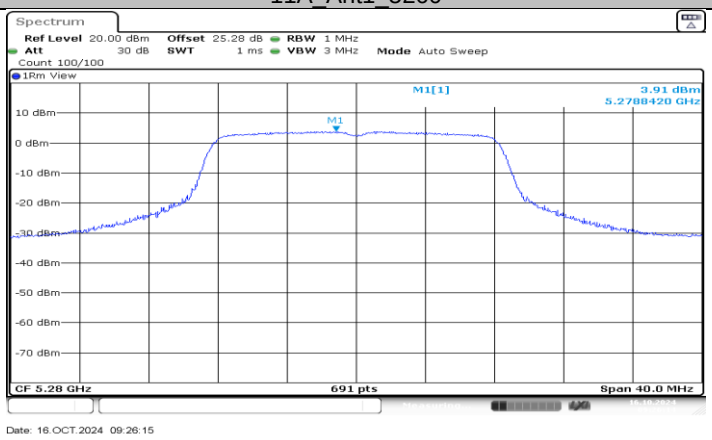

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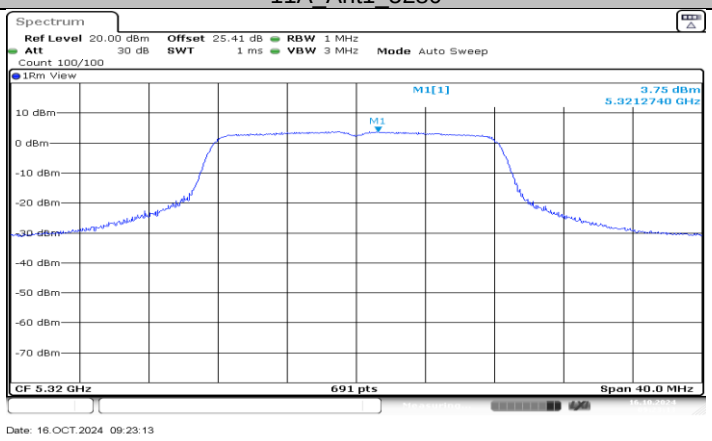

11A_Ant1_5320

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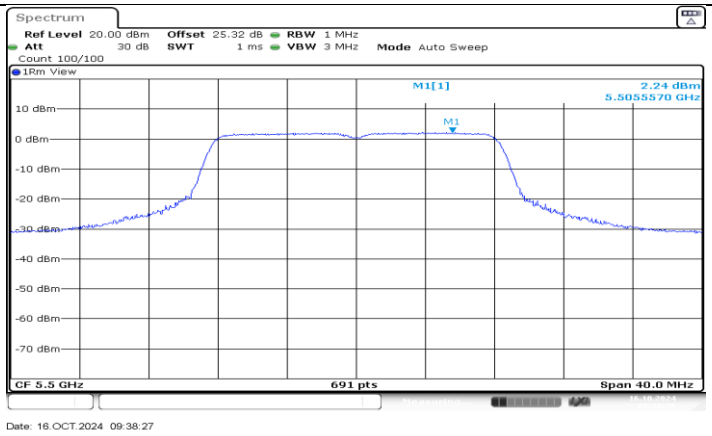
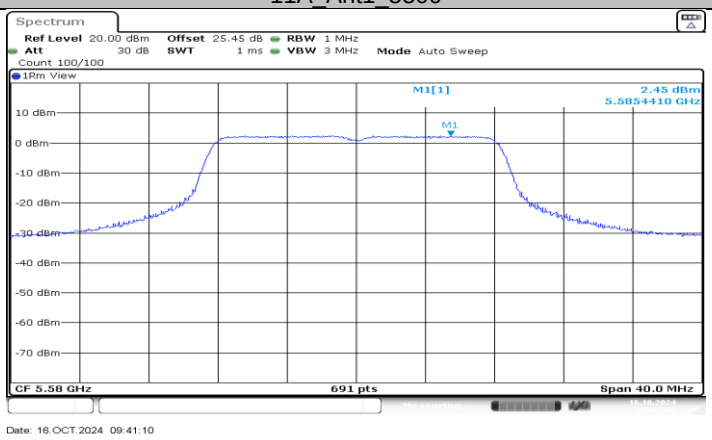
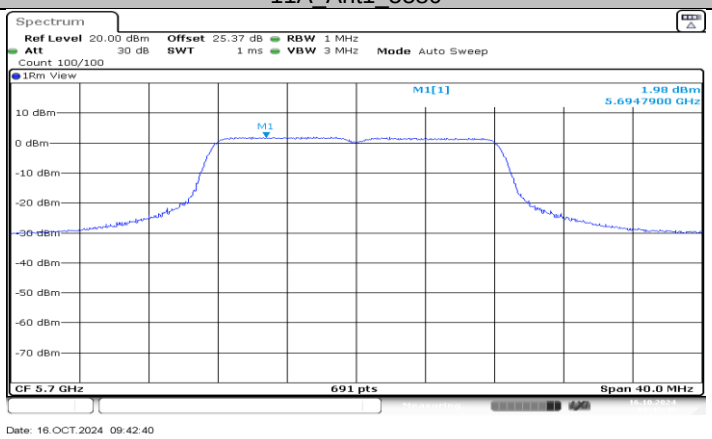


11A_Ant1_5500



11A_Ant1_5580



11A_Ant1_5700

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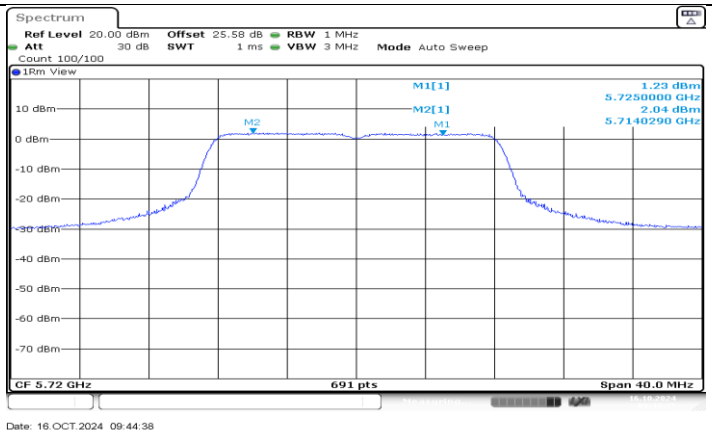
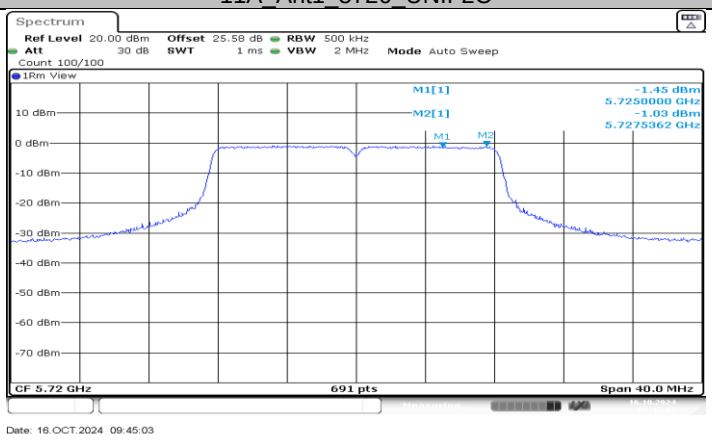
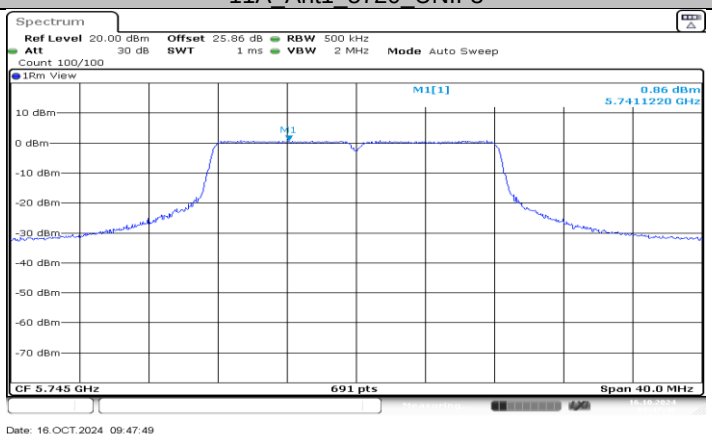


11A_Ant1_5720_UNII-2C



11A_Ant1_5720_UNII-3



11A_Ant1_5745

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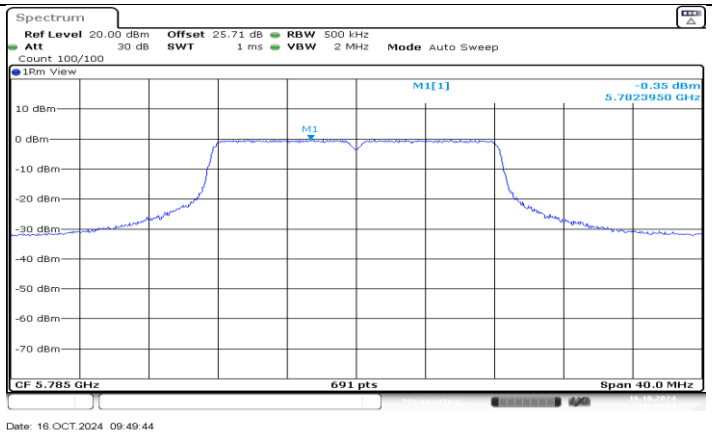

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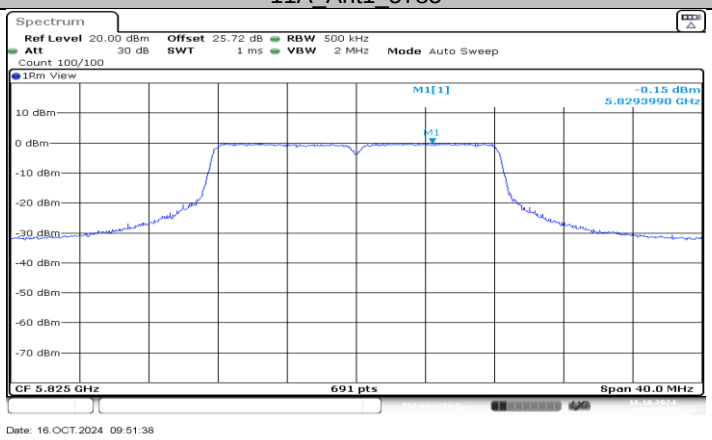

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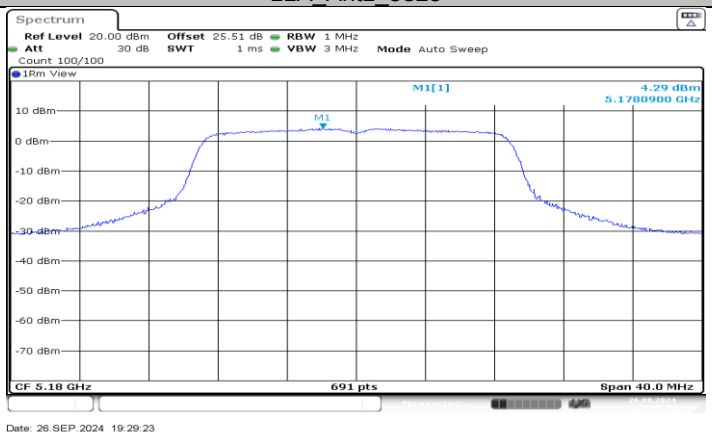

11N20SISO_Ant1_5180

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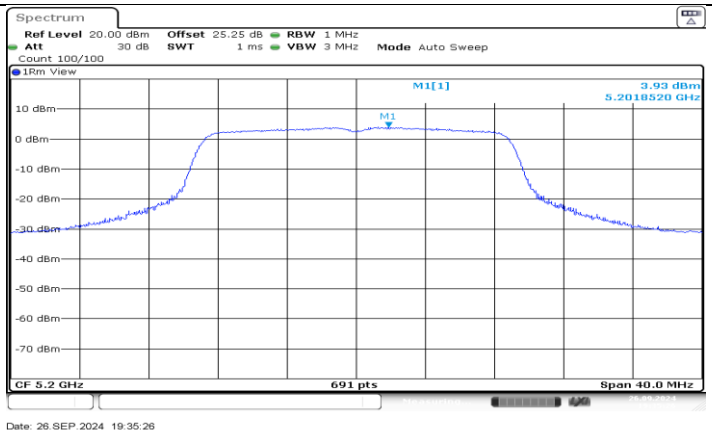

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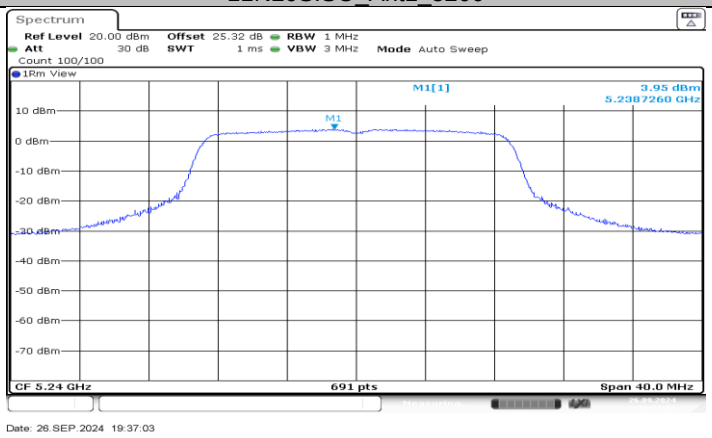

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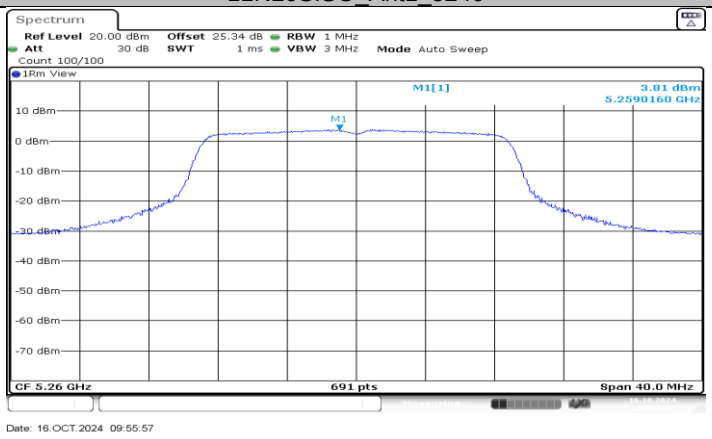

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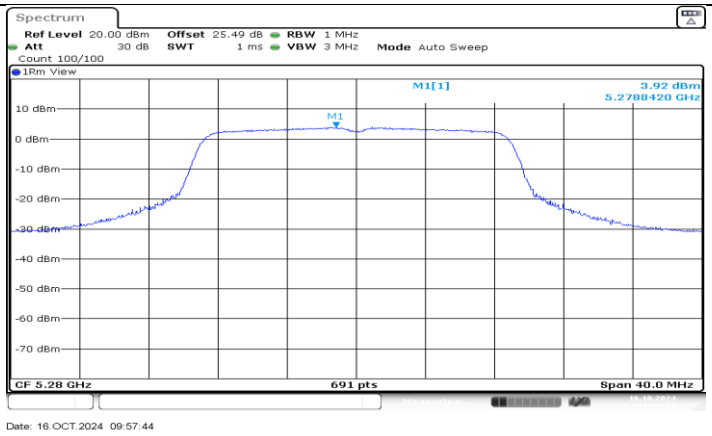

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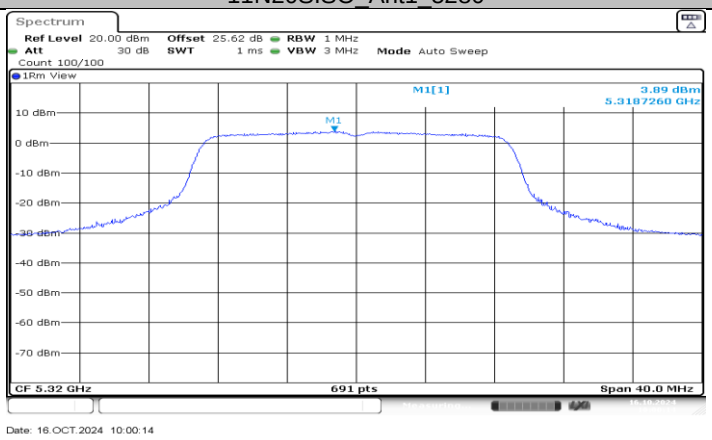

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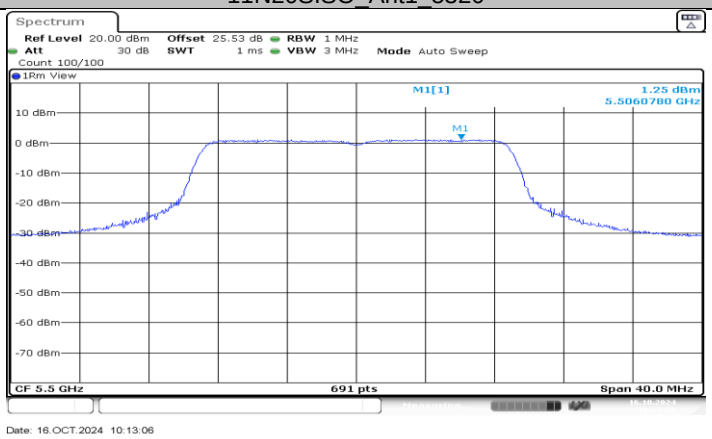

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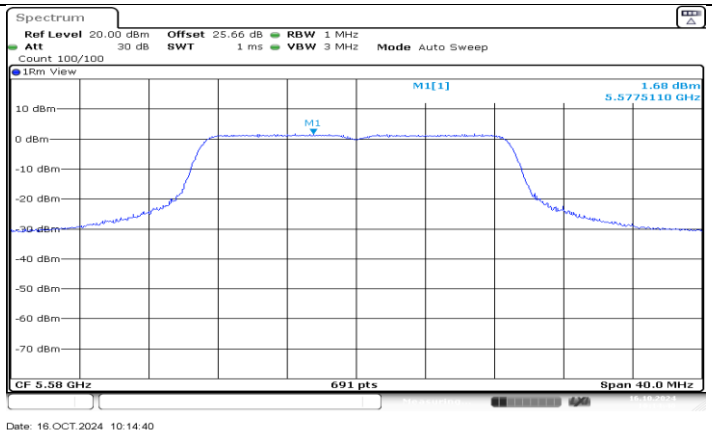

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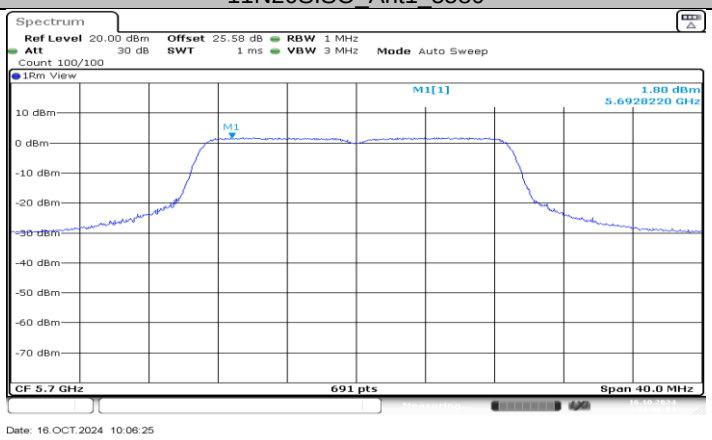

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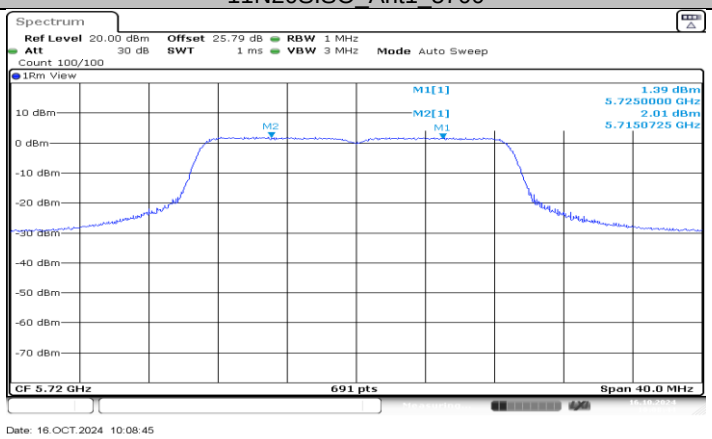

11N20SISO_Ant1_5720_UNII-2C

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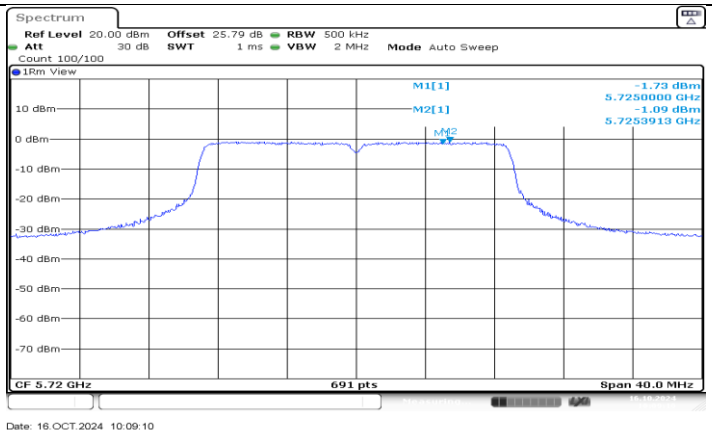

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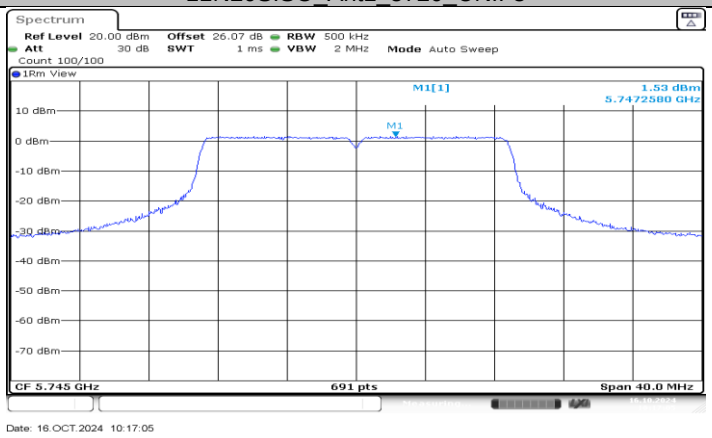

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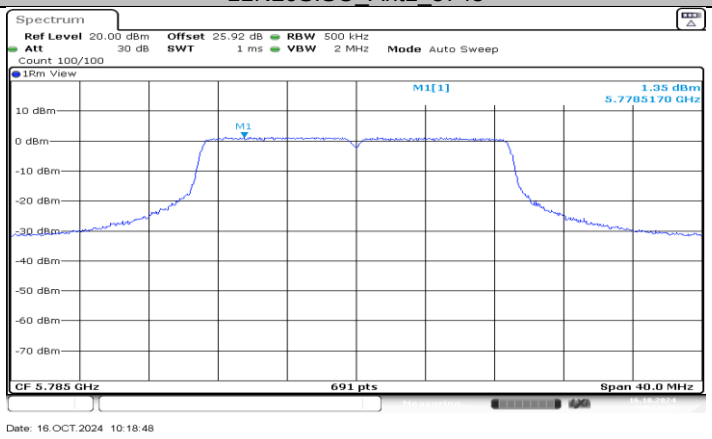

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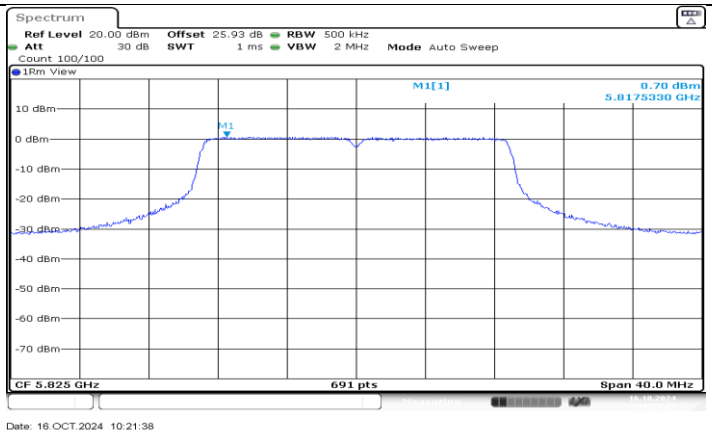

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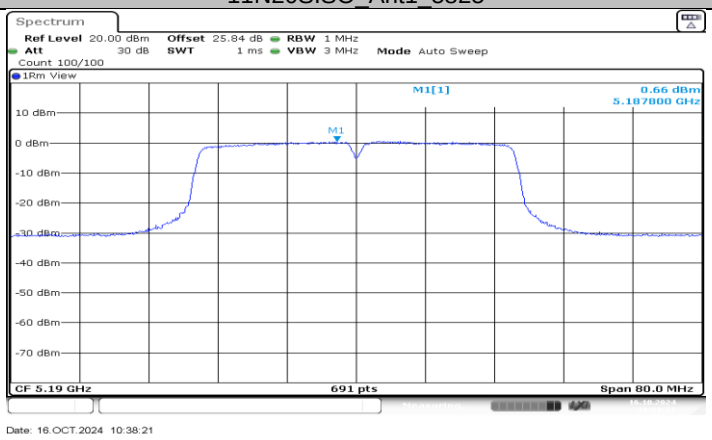

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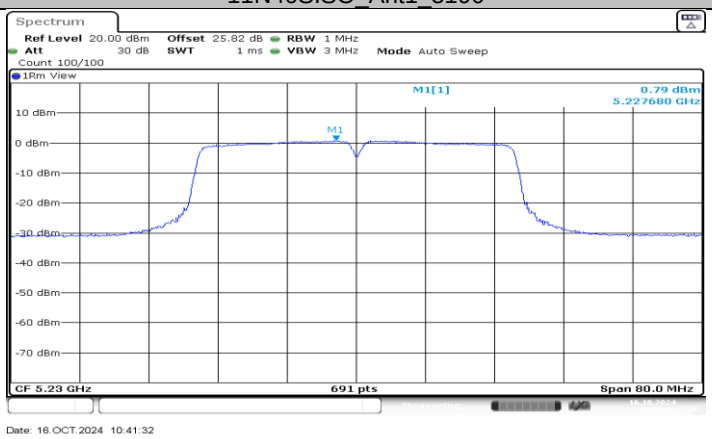

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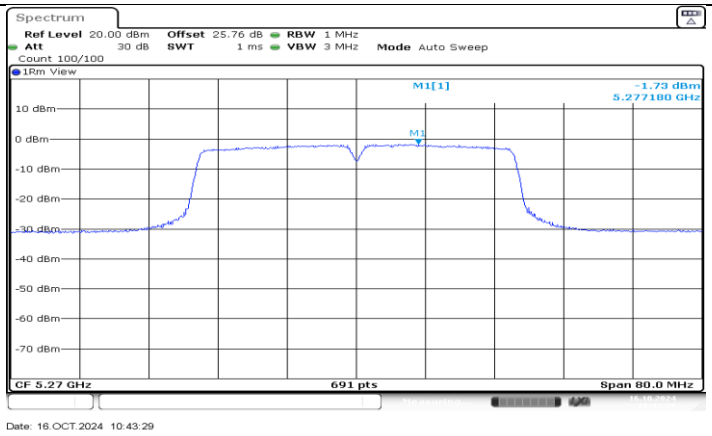

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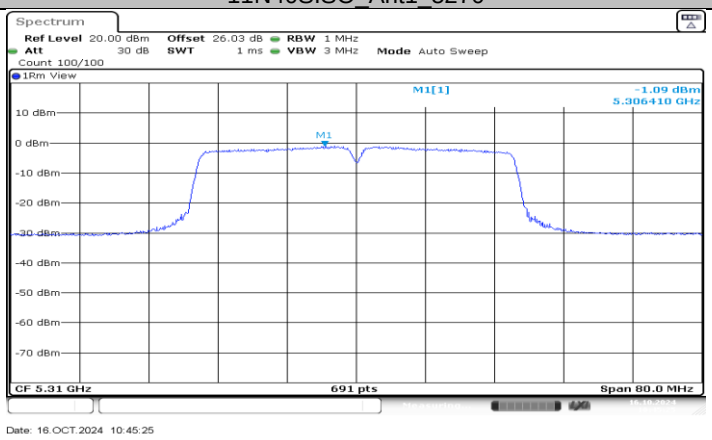

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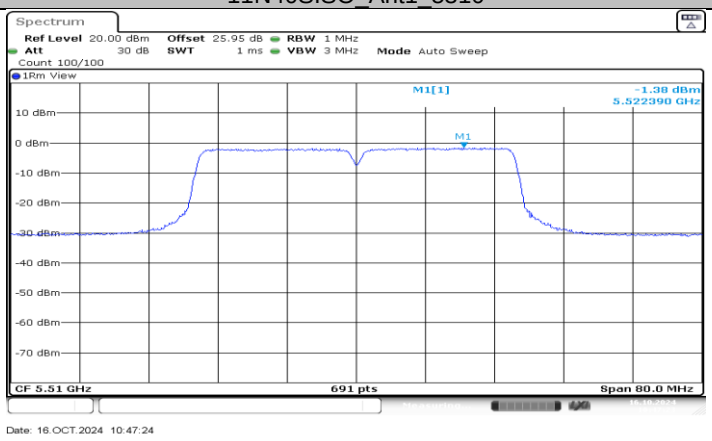

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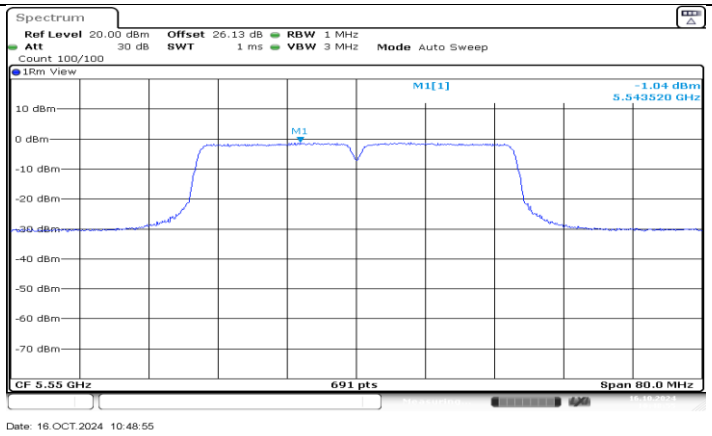

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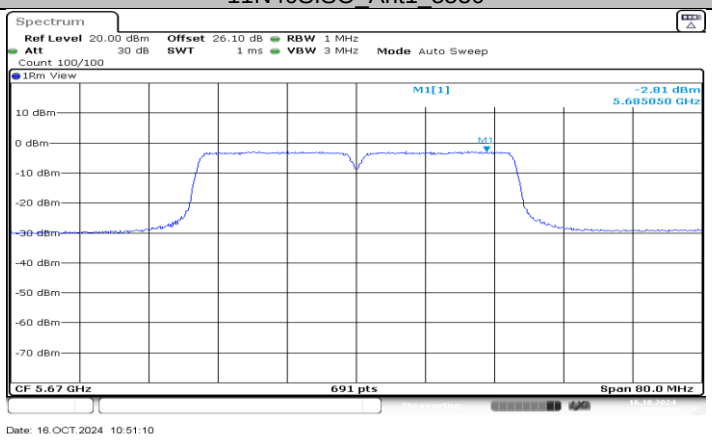

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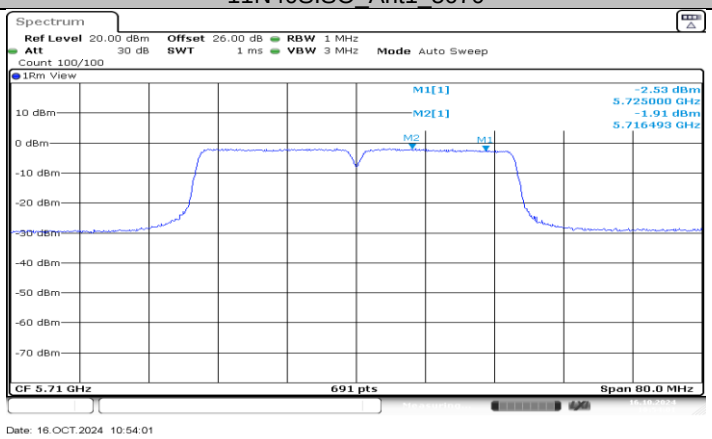

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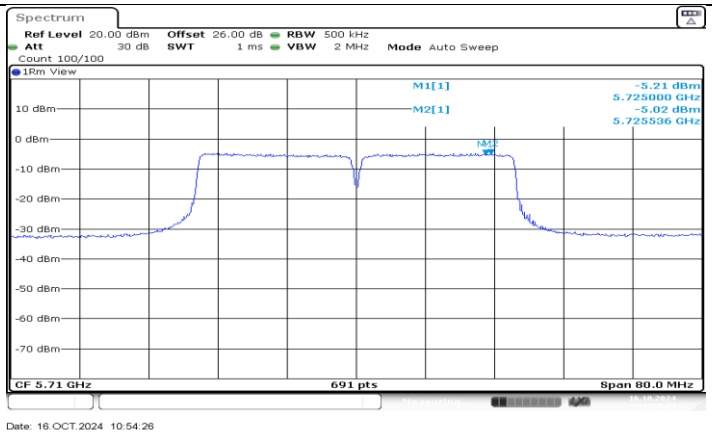

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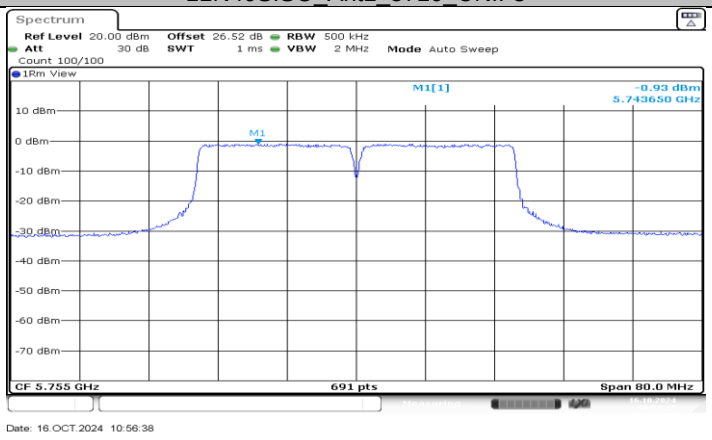

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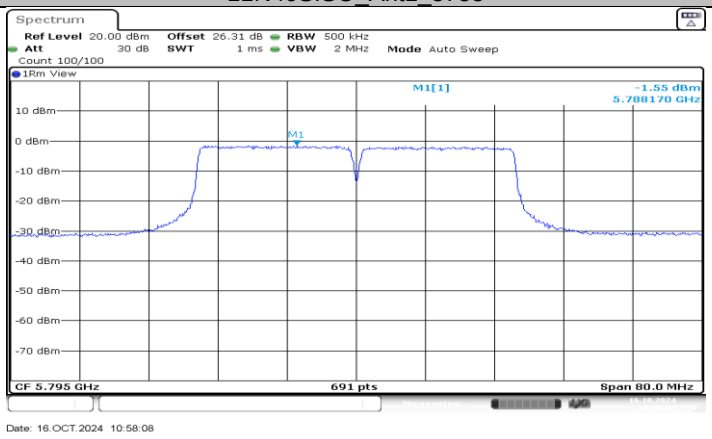

11N40SISO_Ant1_5795

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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	5201.0245	4.70	5200.9852	-2.84	5201.0127	2.44	5200.9914	-1.64
TN	VN	5199.9992	-0.15	5200.0242	4.66	5199.9821	-3.45	5199.9817	-3.52
TN	VH	5199.9861	-2.67	5200.0179	3.44	5200.0193	3.71	5199.9770	-4.42

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	5199.9773	-4.36	5200.0141	2.72	5200.0117	2.25	5200.0101	1.95
60	VN	5200.0046	0.89	5200.0163	3.13	5199.9835	-3.17	5200.0236	4.54
50	VN	5200.0026	0.49	5199.9873	-2.44	5199.9871	-2.48	5200.0073	1.41
40	VN	5200.0163	3.14	5200.0226	4.35	5200.0113	2.17	5199.9975	-0.48
30	VN	5199.9954	-0.89	5199.9908	-1.76	5199.9912	-1.70	5199.9820	-3.46
20	VN	5200.0248	4.77	5200.0117	2.24	5199.9812	-3.62	5199.9939	-1.17
10	VN	5200.0185	3.55	5200.0047	0.91	5200.0217	4.17	5200.0165	3.17
0	VN	5200.0068	1.31	5200.0007	0.14	5199.9897	-1.99	5200.0106	2.04

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.

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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	1.38	1.45	0.9517	95.17	0.21	0.72	1
11N20SISO	1.29	1.40	0.9214	92.14	0.36	0.78	1
11N40SISO	0.63	0.74	0.8514	85.14	0.70	1.59	2

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.

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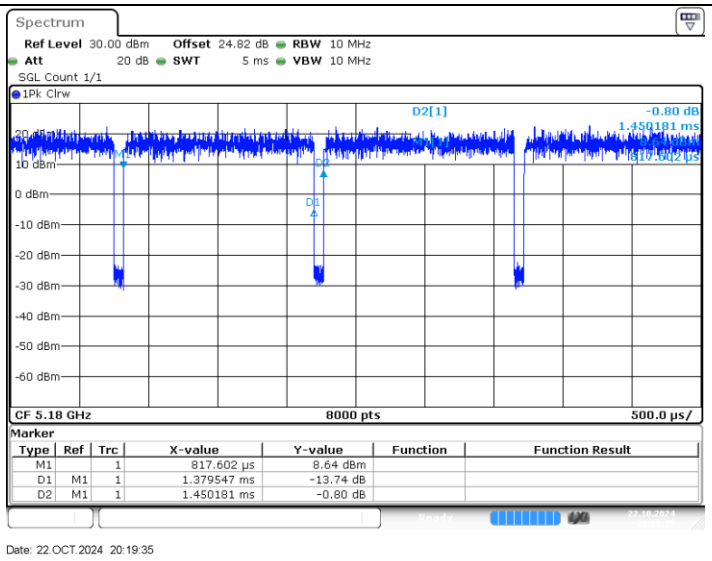
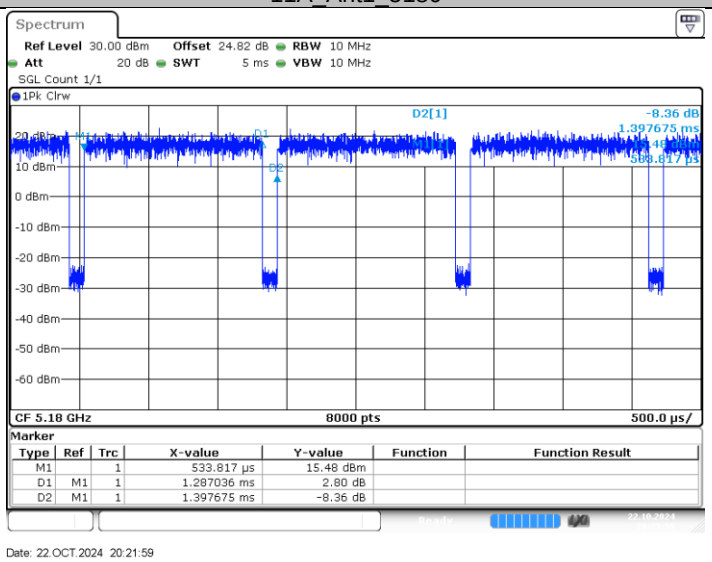
11.7.2. Test Graphs



11A_Ant1_5180



11N20SISO_Ant1_5180

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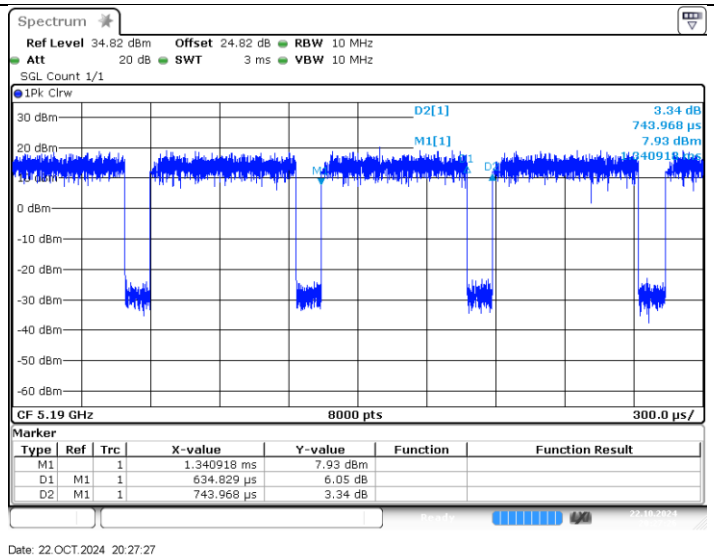

11N40SISO_Ant1_5190

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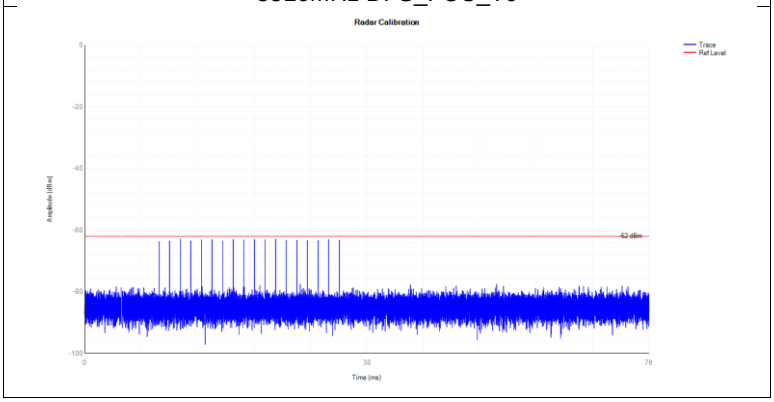
11.8. APPENDIX H: DYNAMIC FREQUENCY SELECTION

11.8.1. Calibration

Mode	Frequency (MHz)	Type	Result	Verdict
11N40SISO	5510	DFS_FCC_T0	See test Graph	Pass

Test Graphs
5510MHz DFS_FCC_T0



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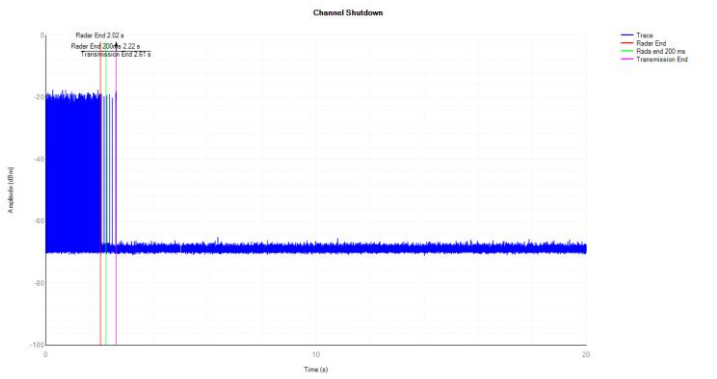
11.8.2. Shutdown Time

Mode	Frequency (MHz)	Channel Move Time (s)	Limit Channel Move Time (s)	Close Transmission Time (s)	Limit Close Transmission Time (s)	Close Transmission Time after 200ms(s)	Limit Close Transmission Time after 200ms (s)	Verdict
11N40SISO	5510	0.583	10	0.03	0.26	0.024	0.06	Pass

Test Graphs

11N40SISO 5510MHz Shutdown



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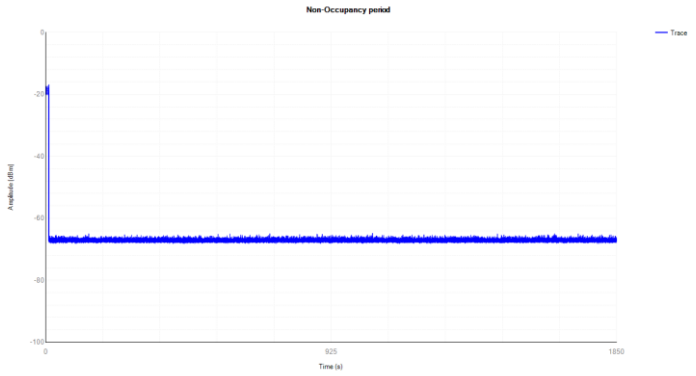
11.8.3. Non-Occupancy

Mode	Frequency (MHz)	Result	Verdict
11N40SISO	5510	See test Graph	Pass

Test Graphs
11N40SISO 5510MHz Non-Occupancy



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