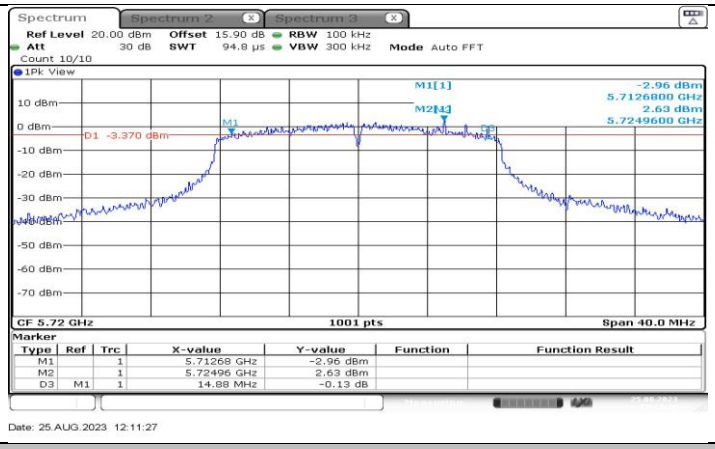
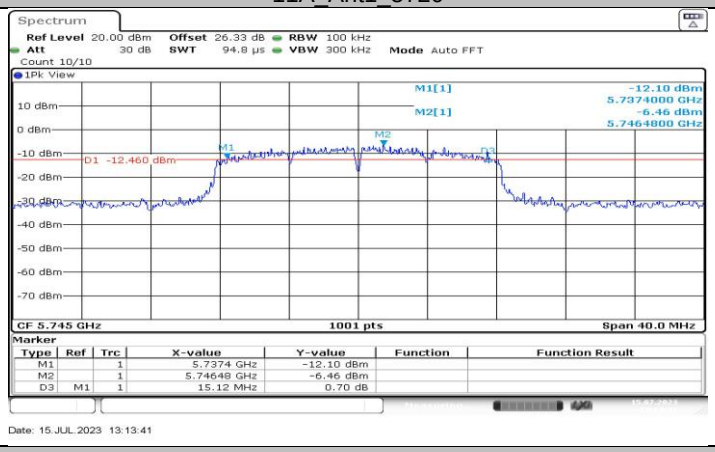
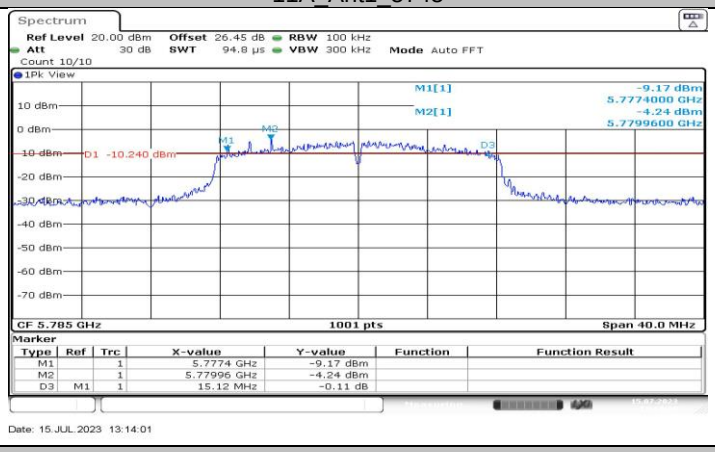
11.3.2. Test Graphs



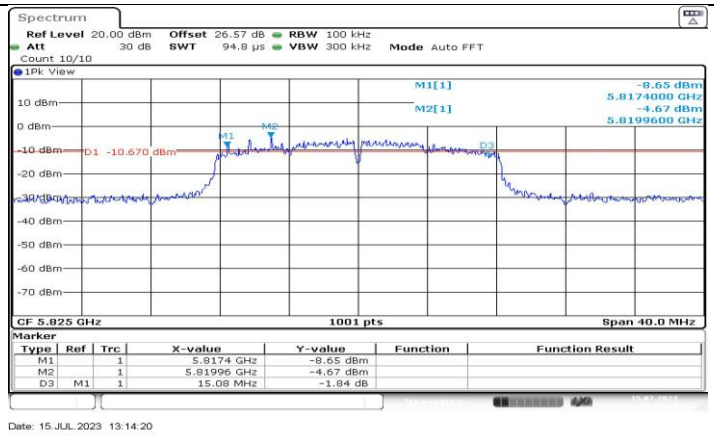
11A_Ant1_5720



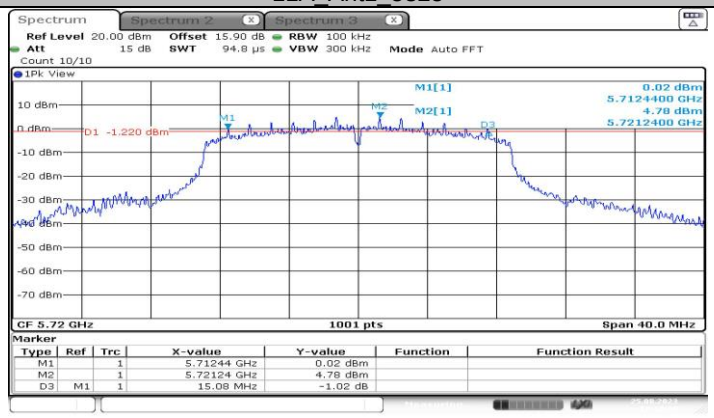
11A_Ant1_5745



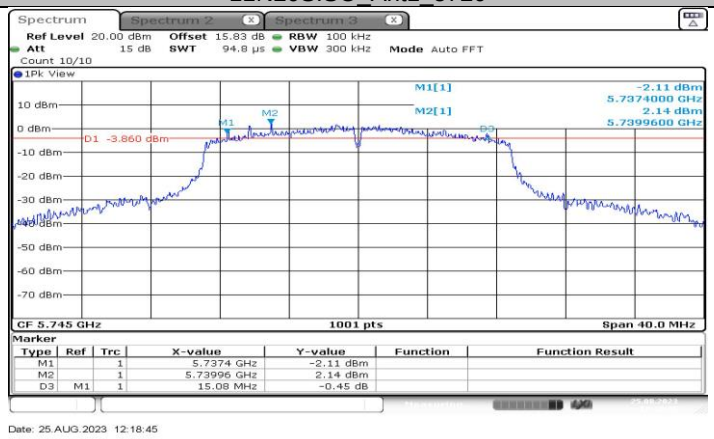
11A_Ant1_5785



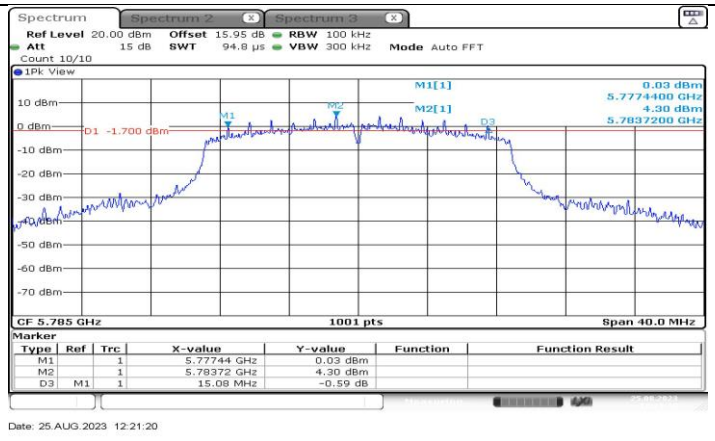
11A_Ant1_5825



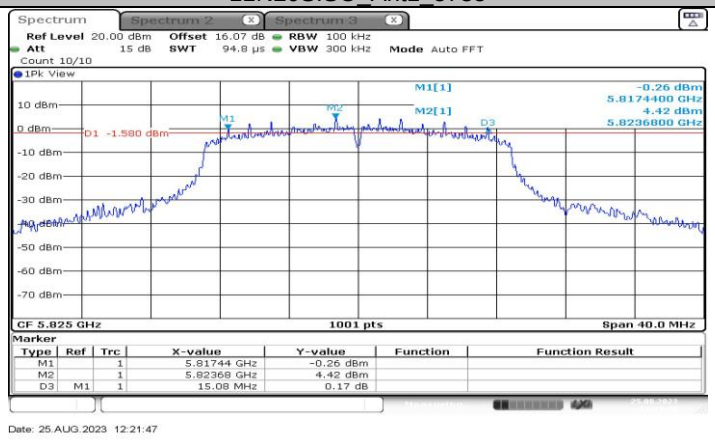
11N20SISO_Ant1_5720



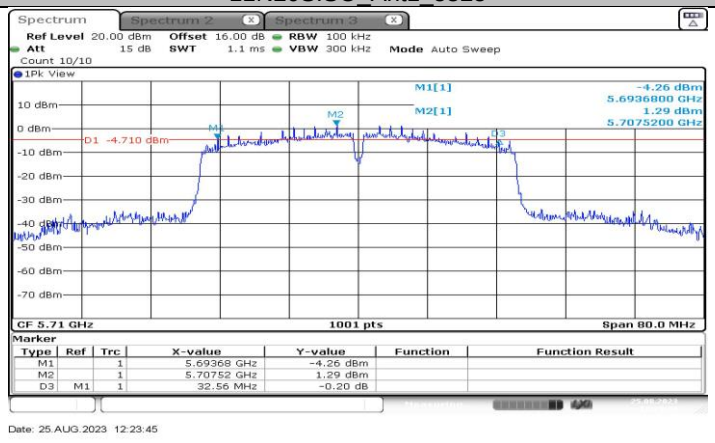
11N20SISO_Ant1_5745



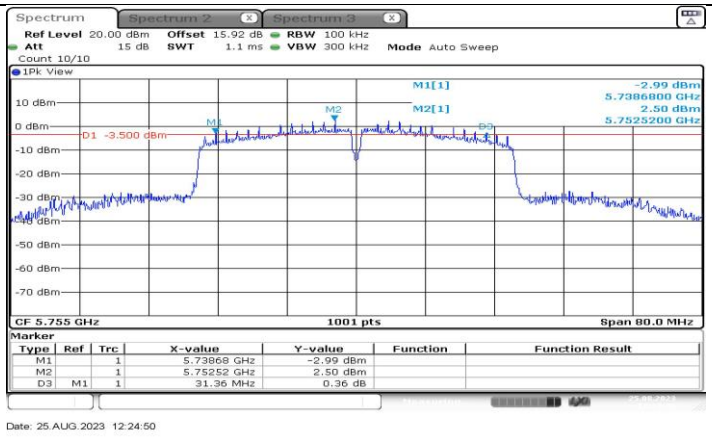
11N20SISO_Ant1_5785



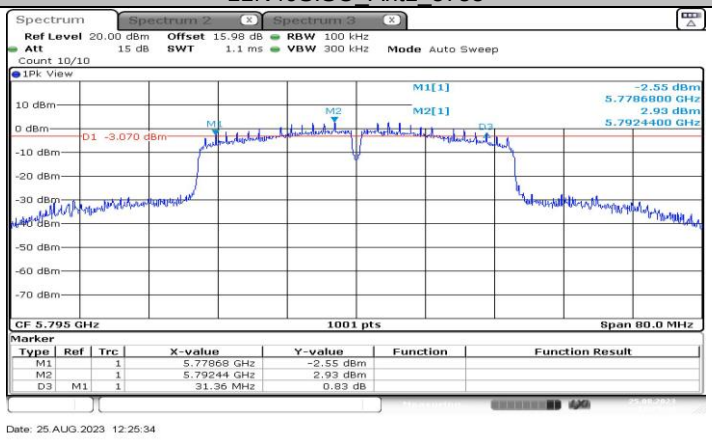
11N20SISO_Ant1_5825



11N40SISO_Ant1_5710



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795

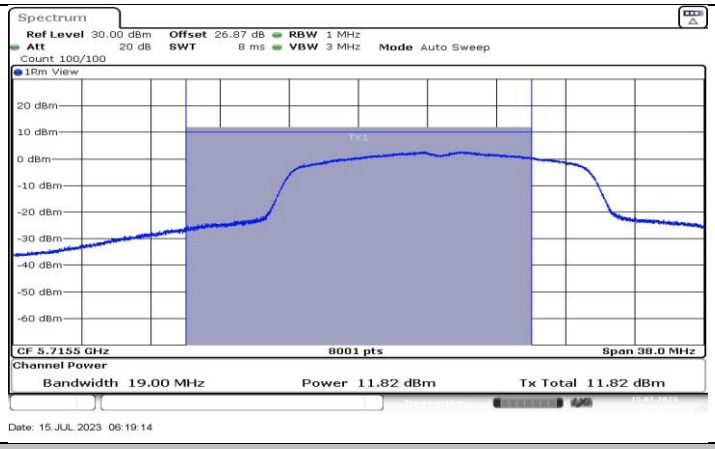
11.4. APPENDIX D: MAXIMUM CONDUCTED OUTPUT POWER

11.4.1. Test Result for ANT1

Test Mode	Antenna	Frequency[MHz]	Power [dBm]	FCC Limit [dBm]	ISED Limit [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	15.14	≤23.98	---	17.56	≤22.26	PASS
		5200	15.17	≤23.98	---	17.59	≤22.26	PASS
		5240	14.73	≤23.98	---	17.15	≤22.25	PASS
		5260	14.85	≤23.98	≤23.30	17.27	≤29.30	PASS
		5280	15.02	≤23.98	≤23.29	17.44	≤29.29	PASS
		5320	15.26	≤23.98	≤23.29	17.68	≤29.29	PASS
		5500	15.41	≤23.98	≤23.31	17.83	≤29.31	PASS
		5580	14.22	≤23.98	≤23.39	16.64	≤29.39	PASS
		5700	14.26	≤23.98	≤23.50	16.68	≤29.50	PASS
		5720_UNII-2C	11.82	≤23.79	≤22.53	14.24	≤28.53	PASS
		5720_UNII-3	3.07	≤30.00	≤30.00	5.49	---	PASS
		5745	14.88	≤30.00	≤30.00	17.30	---	PASS
		5785	14.77	≤30.00	≤30.00	17.19	---	PASS
		5825	14.94	≤30.00	≤30.00	17.36	---	PASS
11N20SISO	Ant1	5180	14.92	≤23.98	---	17.34	≤22.52	PASS
		5200	14.40	≤23.98	---	16.82	≤22.56	PASS
		5240	14.76	≤23.98	---	17.18	≤22.52	PASS
		5260	14.75	≤23.98	≤23.53	17.17	≤29.53	PASS
		5280	14.22	≤23.98	≤23.52	16.64	≤29.52	PASS
		5320	14.33	≤23.98	≤23.51	16.75	≤29.51	PASS
		5500	14.36	≤23.98	≤23.53	16.78	≤29.53	PASS
		5580	14.47	≤23.98	≤23.61	16.89	≤29.61	PASS
		5700	14.45	≤23.98	≤23.65	16.87	≤29.65	PASS
		5720_UNII-2C	11.65	≤23.98	≤22.71	14.07	≤28.71	PASS
		5720_UNII-3	3.33	≤30.00	≤30.00	5.75	---	PASS
		5745	14.46	≤30.00	≤30.00	16.88	---	PASS
		5785	14.14	≤30.00	≤30.00	16.56	---	PASS
		5825	14.53	≤30.00	≤30.00	16.95	---	PASS
11N40SISO	Ant1	5190	14.86	≤23.98	---	17.28	≤23.00	PASS
		5230	14.78	≤23.98	---	17.20	≤23.00	PASS
		5270	14.62	≤23.98	≤23.98	17.04	≤30.00	PASS
		5310	14.88	≤23.98	≤23.98	17.30	≤30.00	PASS
		5510	14.56	≤23.98	≤23.98	16.98	≤30.00	PASS
		5550	14.53	≤23.98	≤23.98	16.95	≤30.00	PASS
		5670	14.47	≤23.98	≤23.98	16.89	≤30.00	PASS
		5710_UNII-2C	8.34	≤23.98	≤23.98	10.76	≤30.00	PASS
		5710_UNII-3	-5.90	≤30.00	≤30.00	-3.48	---	PASS
		5755	14.29	≤30.00	≤30.00	16.71	---	PASS
		5795	14.80	≤30.00	≤30.00	17.22	---	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.

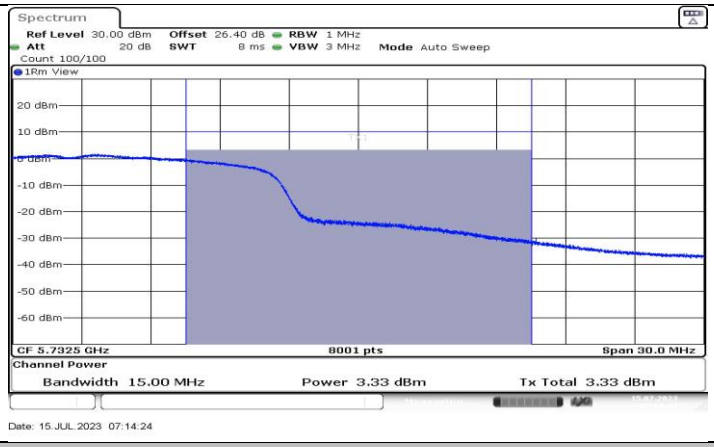
11.4.2. Test Graphs for ANT1



11A_Ant1_5720_UNII-2C

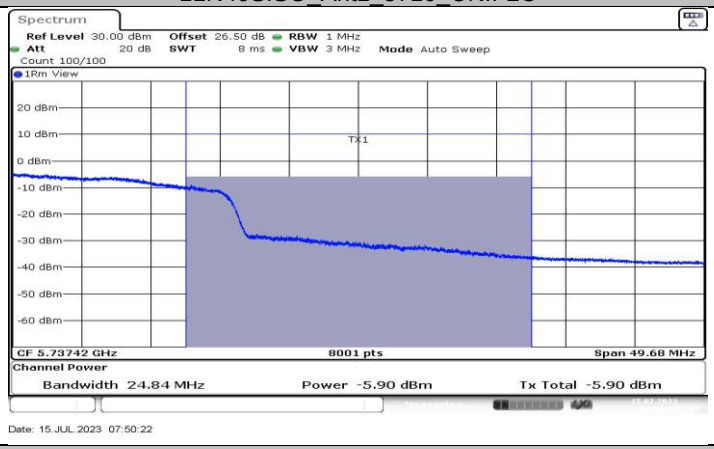
11A_Ant1_5720_UNII-3

11N20SISO_Ant1_5720_UNII-2C



11N20SISO_Ant1_5720_UNII-3

11N40SISO_Ant1_5710_UNII-2C



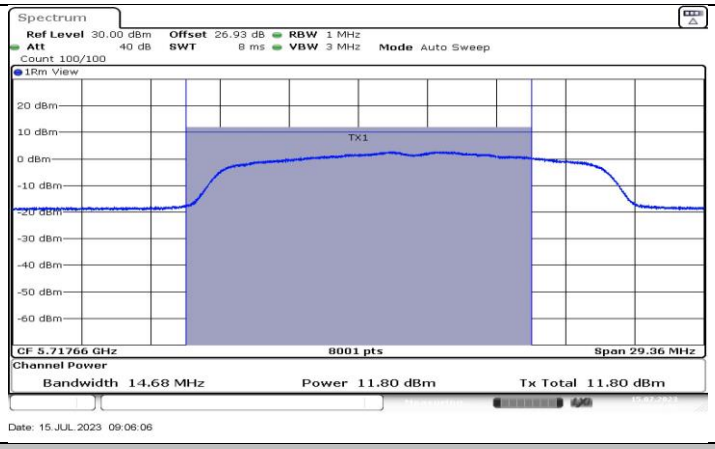
11N40SISO_Ant1_5710_UNII-3

11.4.3. Test Result for ANT2

Test Mode	Antenna	Frequency[MHz]	Power [dBm]	FCC Limit [dBm]	ISED Limit [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
11A	Ant2	5180	14.69	≤23.98	---	17.98	≤22.26	PASS
		5200	14.66	≤23.98	---	17.95	≤22.26	PASS
		5240	14.71	≤23.98	---	18.00	≤22.25	PASS
		5260	14.79	≤23.98	≤23.70	18.08	≤29.30	PASS
		5280	14.64	≤23.98	≤23.70	17.93	≤29.29	PASS
		5320	14.82	≤23.98	≤23.70	18.11	≤29.29	PASS
		5500	14.50	≤23.98	≤23.70	17.79	≤29.31	PASS
		5580	14.42	≤23.98	≤23.70	17.71	≤29.39	PASS
		5700	14.62	≤23.98	≤23.70	17.91	≤29.50	PASS
		5720_UNII-2C	11.80	≤22.67	≤22.31	15.09	≤28.53	PASS
		5720_UNII-3	2.99	≤30.00	≤30.00	6.28	---	PASS
		5745	14.81	≤30.00	≤30.00	18.10	---	PASS
		5785	14.38	≤30.00	≤30.00	17.67	---	PASS
		5825	14.75	≤30.00	≤30.00	18.04	---	PASS
11N20SISO	Ant2	5180	14.43	≤23.98	---	17.72	≤22.52	PASS
		5200	14.75	≤23.98	---	18.04	≤22.56	PASS
		5240	14.67	≤23.98	---	17.96	≤22.52	PASS
		5260	14.59	≤23.98	≤23.70	17.88	≤29.53	PASS
		5280	14.35	≤23.98	≤23.70	17.64	≤29.52	PASS
		5320	14.82	≤23.98	≤23.70	18.11	≤29.51	PASS
		5500	14.60	≤23.98	≤23.70	17.89	≤29.53	PASS
		5580	14.72	≤23.98	≤23.70	18.01	≤29.61	PASS
		5700	14.92	≤23.98	≤23.70	18.21	≤29.65	PASS
		5720_UNII-2C	10.82	≤22.88	≤22.46	14.11	≤28.71	PASS
		5720_UNII-3	2.54	≤30.00	≤30.00	5.83	---	PASS
		5745	14.75	≤30.00	≤30.00	18.04	---	PASS
		5785	14.68	≤30.00	≤30.00	17.97	---	PASS
		5825	14.40	≤30.00	≤30.00	17.69	---	PASS
11N40SISO	Ant2	5190	14.89	≤23.98	---	18.18	≤23.00	PASS
		5230	14.36	≤23.98	---	17.65	≤23.00	PASS
		5270	14.51	≤23.98	≤23.70	17.80	≤30.00	PASS
		5310	14.23	≤23.98	≤23.70	17.52	≤30.00	PASS
		5510	14.32	≤23.98	≤23.70	17.61	≤30.00	PASS
		5550	14.38	≤23.98	≤23.70	17.67	≤30.00	PASS
		5670	14.24	≤23.98	≤23.70	17.53	≤30.00	PASS
		5710_UNII-2C	12.24	≤23.98	≤23.70	15.53	≤30.00	PASS
		5710_UNII-3	-1.37	≤30.00	≤30.00	1.92	---	PASS
		5755	14.22	≤30.00	≤30.00	17.51	---	PASS
		5795	14.99	≤30.00	≤30.00	18.28	---	PASS

Note：The Duty Cycle Factor is compensated in the graph.

11.4.4. Test Graphs for ANT2

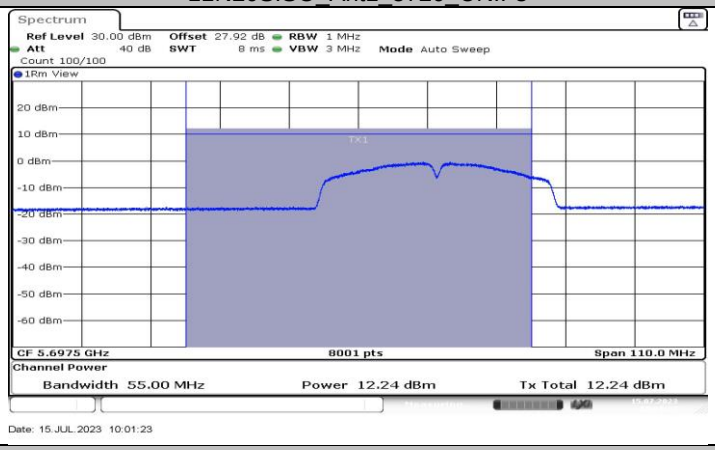


11A_Ant1_5720_UNII-2C

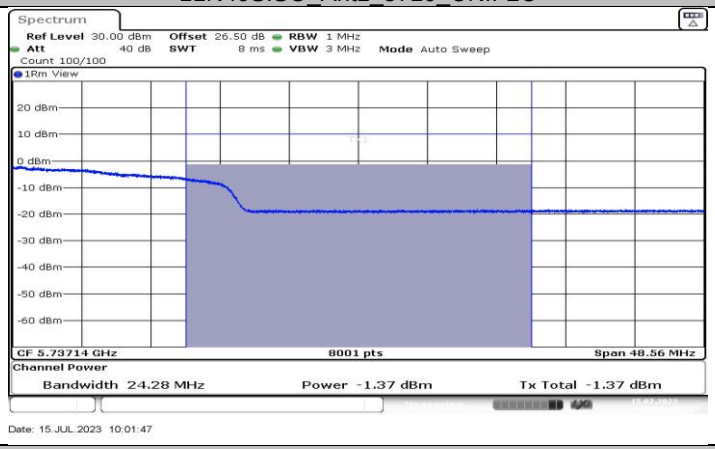
11A_Ant1_5720_UNII-3

11N20SISO_Ant1_5720_UNII-2C

11N20SISO_Ant1_5720_UNII-3



11N40SISO_Ant1_5710_UNII-2C



11N40SISO_Ant1_5710_UNII-3

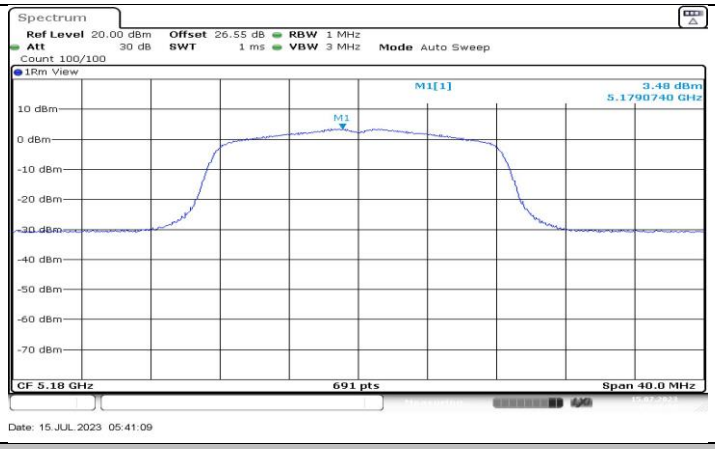
11.5. APPENDIX E: MAXIMUM POWER SPECTRAL DENSITY

11.5.1. Test Result

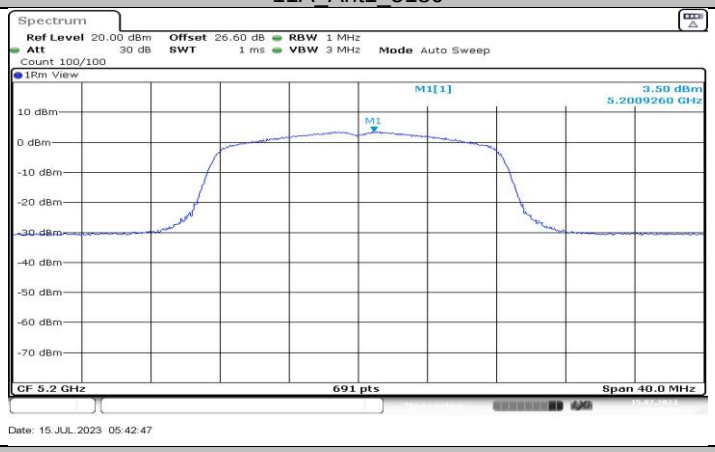
Test Mode	Antenna	Frequency[MHz]	Power [dBm/MHz]	Limit [dBm/MHz]	EIRP [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant1	5180	3.48	≤11.00	5.90	≤10.00	PASS
		5200	3.5	≤11.00	5.92	≤10.00	PASS
		5240	3.05	≤11.00	5.47	≤10.00	PASS
		5260	3.21	≤11.00	5.63	---	PASS
		5280	3.63	≤11.00	6.05	---	PASS
		5320	3.3	≤11.00	5.72	---	PASS
		5500	3.57	≤11.00	5.99	---	PASS
		5580	2.79	≤11.00	5.21	---	PASS
		5700	2.8	≤11.00	5.22	---	PASS
		5720_UNII-2C	2.8	≤11.00	5.22	---	PASS
		5720_UNII-3	-2.54	≤30.00	-0.12	---	PASS
		5745	0.09	≤30.00	2.51	---	PASS
		5785	0.09	≤30.00	2.51	---	PASS
		5825	0.38	≤30.00	2.80	---	PASS
11N20SISO	Ant1	5180	3.38	≤11.00	5.80	≤10.00	PASS
		5200	2.51	≤11.00	4.93	≤10.00	PASS
		5240	3.03	≤11.00	5.45	≤10.00	PASS
		5260	2.98	≤11.00	5.40	---	PASS
		5280	2.23	≤11.00	4.65	---	PASS
		5320	2.53	≤11.00	4.95	---	PASS
		5500	2.19	≤11.00	4.61	---	PASS
		5580	2.5	≤11.00	4.92	---	PASS
		5700	2.51	≤11.00	4.93	---	PASS
		5720_UNII-2C	2.33	≤11.00	4.75	---	PASS
		5720_UNII-3	-2.89	≤30.00	-0.47	---	PASS
		5745	0.04	≤30.00	2.46	---	PASS
		5785	-1.86	≤30.00	0.56	---	PASS
		5825	-0.65	≤30.00	1.77	---	PASS
11N40SISO	Ant1	5190	-0.51	≤11.00	1.91	≤10.00	PASS
		5230	-0.02	≤11.00	2.40	≤10.00	PASS
		5270	-1.51	≤11.00	0.91	---	PASS
		5310	-0.62	≤11.00	1.80	---	PASS
		5510	-0.91	≤11.00	1.51	---	PASS
		5550	-1.79	≤11.00	0.63	---	PASS
		5670	-1.8	≤11.00	0.62	---	PASS
		5710_UNII-2C	-37.37	≤11.00	-34.95	---	PASS
		5710_UNII-3	-9.27	≤30.00	-6.85	---	PASS
		5755	-3.17	≤30.00	-0.75	---	PASS
		5795	-13.64	≤30.00	-11.22	---	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.

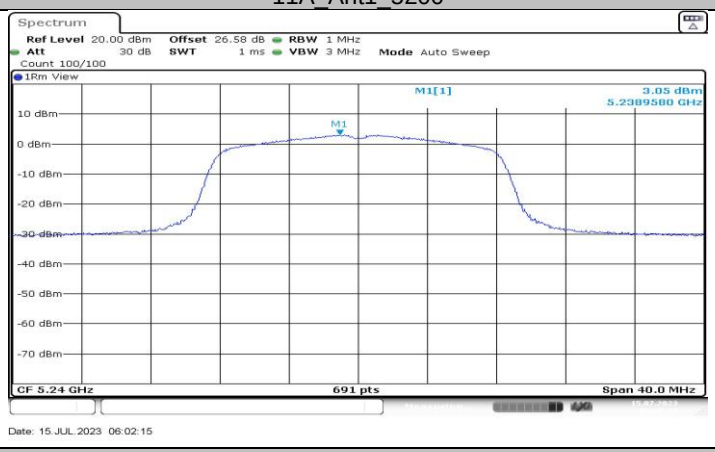
11.5.2. Test Graphs



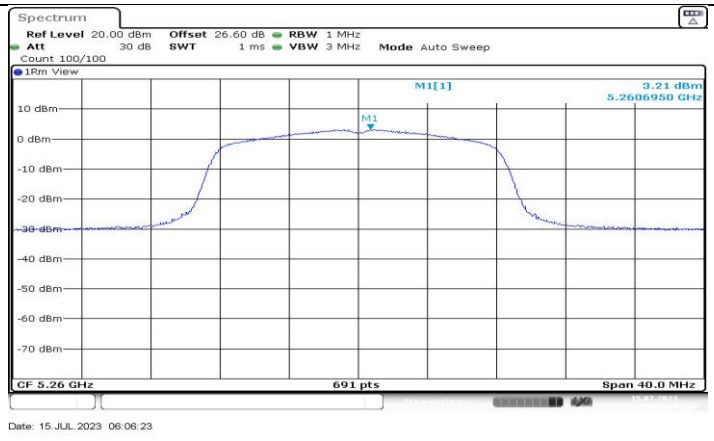
11A_Ant1_5180



11A_Ant1_5200



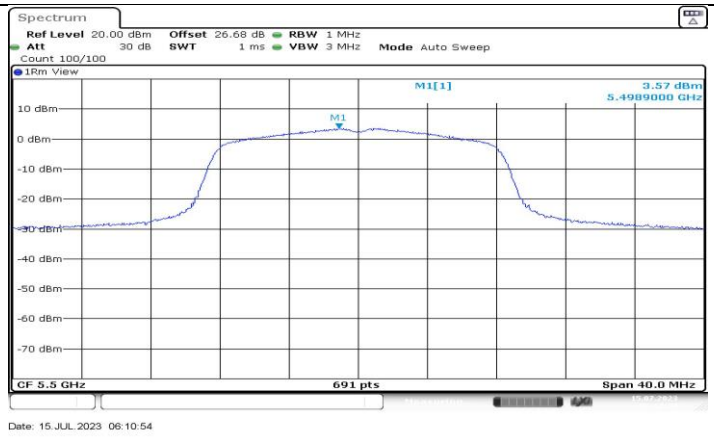
11A_Ant1_5240



11A_Ant1_5260

11A_Ant1_5280

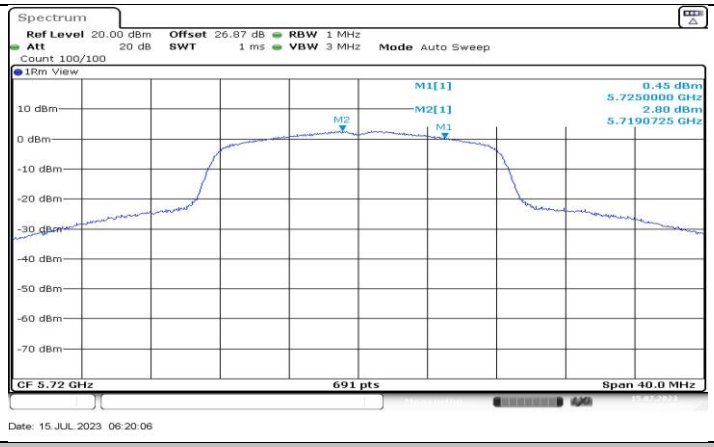
11A_Ant1_5320



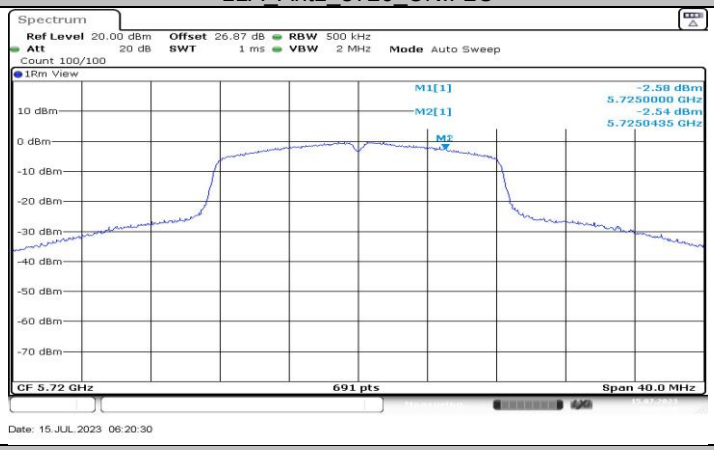
11A_Ant1_5500

11A_Ant1_5580

11A_Ant1_5700



11A_Ant1_5720_UNII-2C



11A_Ant1_5720_UNII-3

11A_Ant1_5745

11A_Ant1_5785

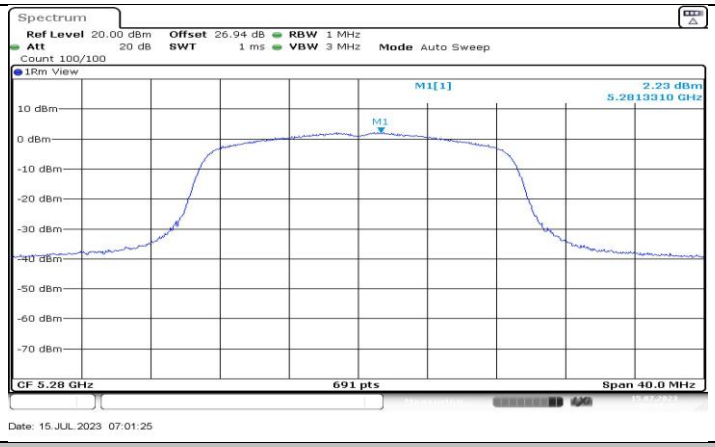
11A_Ant1_5825

11N20SISO_Ant1_5180

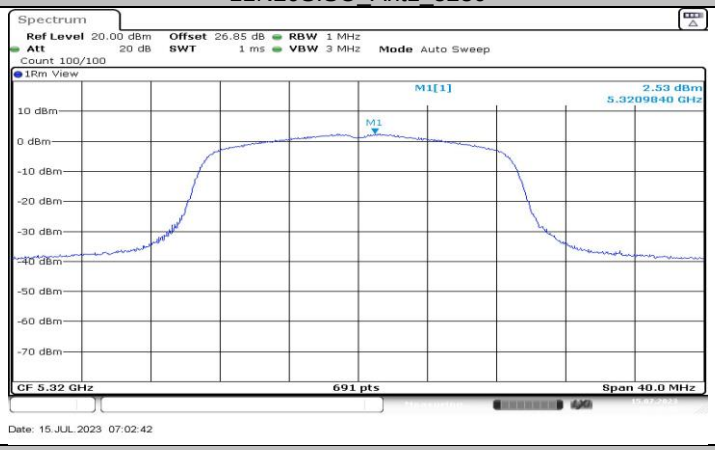
11N20SISO_Ant1_5200

11N20SISO_Ant1_5240

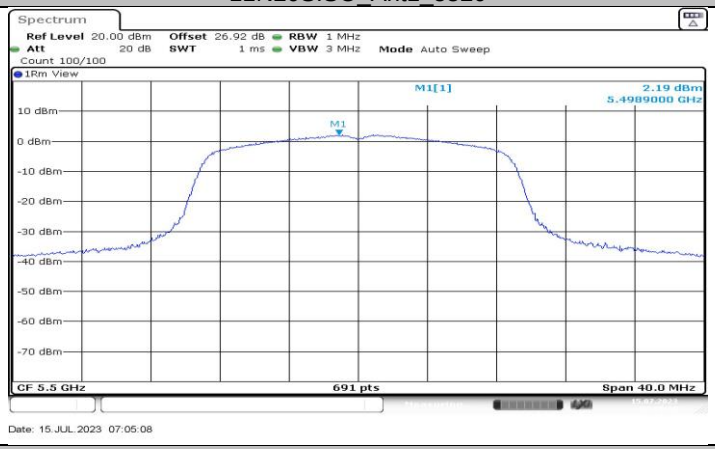
11N20SISO_Ant1_5260



11N20SISO_Ant1_5280



11N20SISO_Ant1_5320

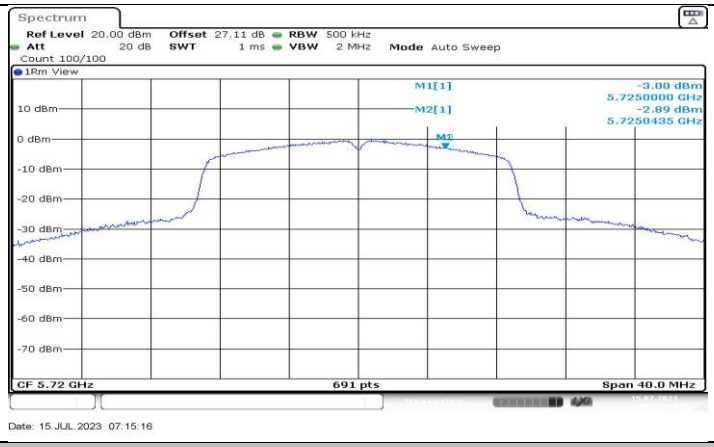


11N20SISO_Ant1_5500

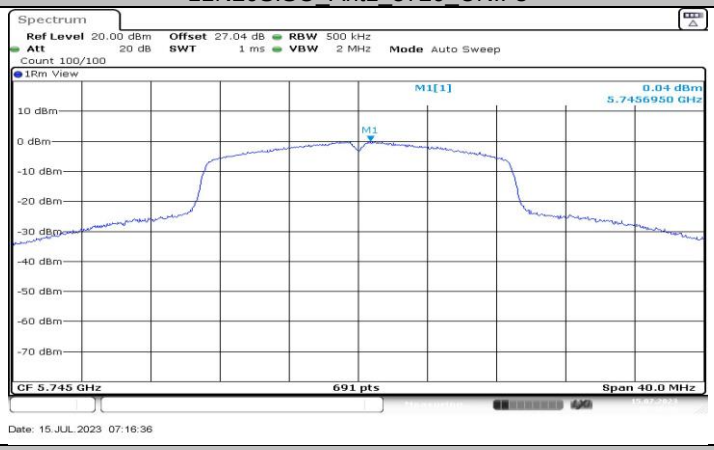
11N20SISO_Ant1_5580

11N20SISO_Ant1_5700

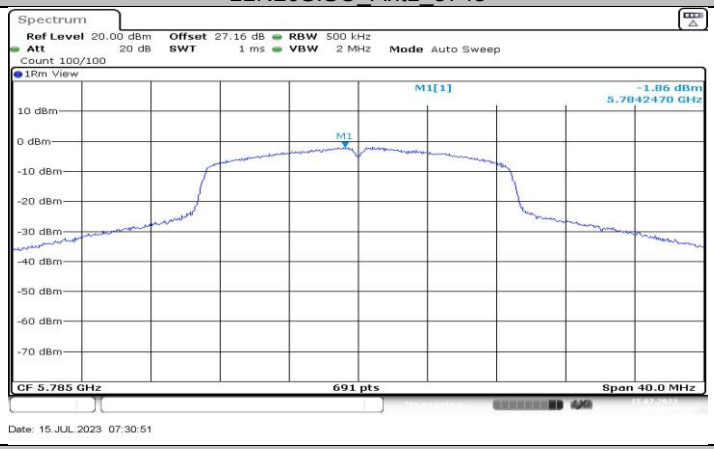
11N20SISO_Ant1_5720_UNII-2C



11N20SISO_Ant1_5720_UNII-3



11N20SISO_Ant1_5745

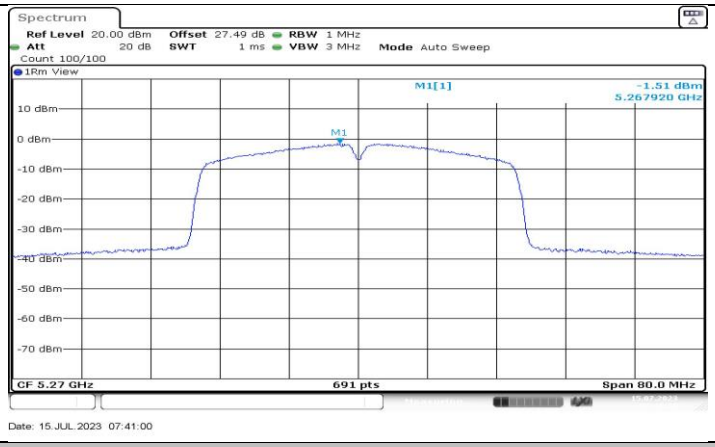


11N20SISO_Ant1_5785

11N20SISO_Ant1_5825

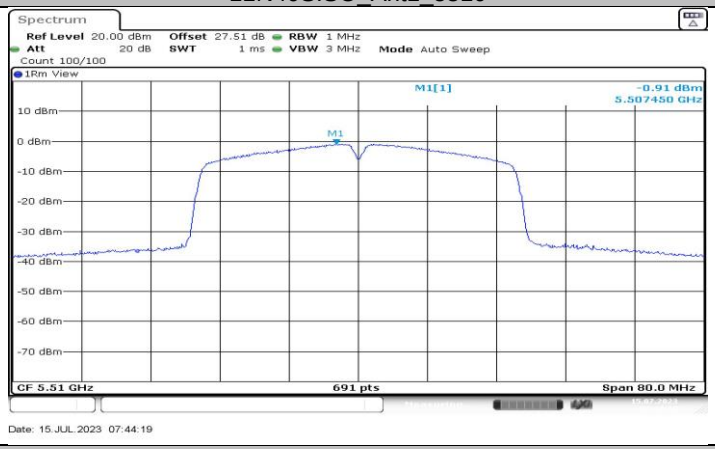
11N40SISO_Ant1_5190

11N40SISO_Ant1_5230



11N40SISO_Ant1_5270

11N40SISO_Ant1_5310

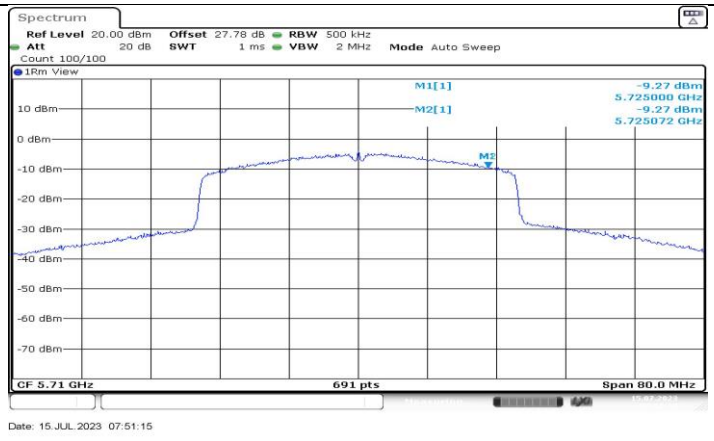


11N40SISO_Ant1_5510

11N40SISO_Ant1_5550

11N40SISO_Ant1_5670

11N40SISO_Ant1_5710_UNII-2C



11N40SISO_Ant1_5710_UNII-3

11N40SISO_Ant1_5755

11N40SISO_Ant1_5795

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	5199.9917	-1.60	5200.0173	3.34	5199.9809	-3.66	5200.0230	4.43
TN	VN	5199.9954	-0.89	5199.9856	-2.76	5200.0216	4.16	5199.9983	-0.33
TN	VH	5199.9860	-2.69	5199.9822	-3.42	5200.0132	2.53	5199.9754	-4.73
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	5200.0055	1.06	5199.9804	-3.76	5199.9809	-3.67	5199.9904	-1.85
60	VN	5199.9826	-3.35	5199.9762	-4.58	5199.9909	-1.74	5199.9993	-0.13
50	VN	5199.9966	-0.65	5199.9881	-2.29	5199.9770	-4.43	5199.9854	-2.81
40	VN	5199.9753	-4.75	5200.0011	0.22	5199.9897	-1.98	5200.0208	4.00
30	VN	5200.0089	1.71	5200.0067	1.29	5200.0188	3.61	5200.0047	0.91
20	VN	5200.0150	2.89	5200.0003	0.05	5200.0117	2.25	5199.9811	-3.64
10	VN	5199.9758	-4.65	5199.9761	-4.59	5199.9908	-1.77	5200.0146	2.81
0	VN	5200.0059	1.14	5199.9819	-3.48	5200.0131	2.53	5199.9940	-1.15

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.

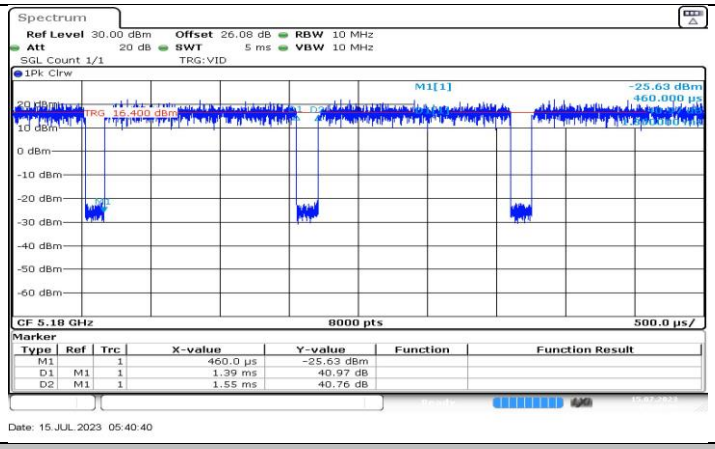
11.7. APPENDIX G: DUTY CYCLE

11.7.1. Test Result

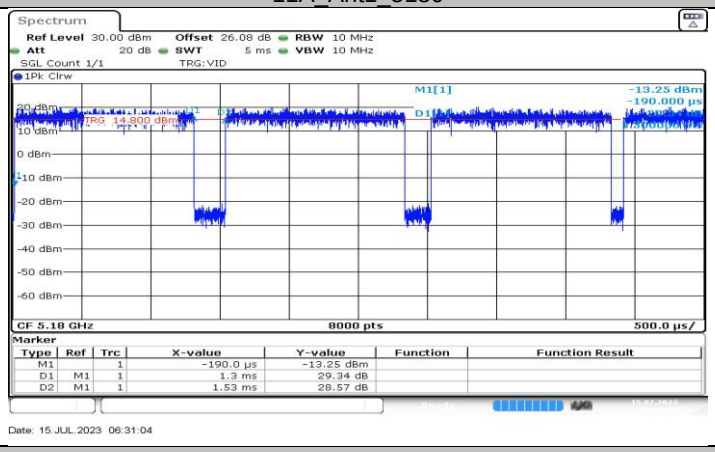
Test Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
11A	1.39	1.55	0.8968	89.68	0.47	0.72	1
11N20SISO	1.30	1.53	0.8497	84.97	0.71	0.77	1
11N40SISO	0.64	0.86	0.7442	74.42	1.28	1.56	2

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.

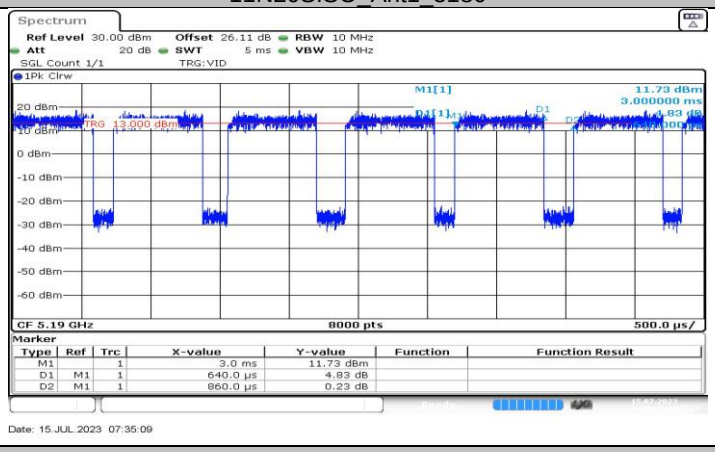
11.7.2. Test Graphs



11A_Ant1_5180



11N20SISO_Ant1_5180



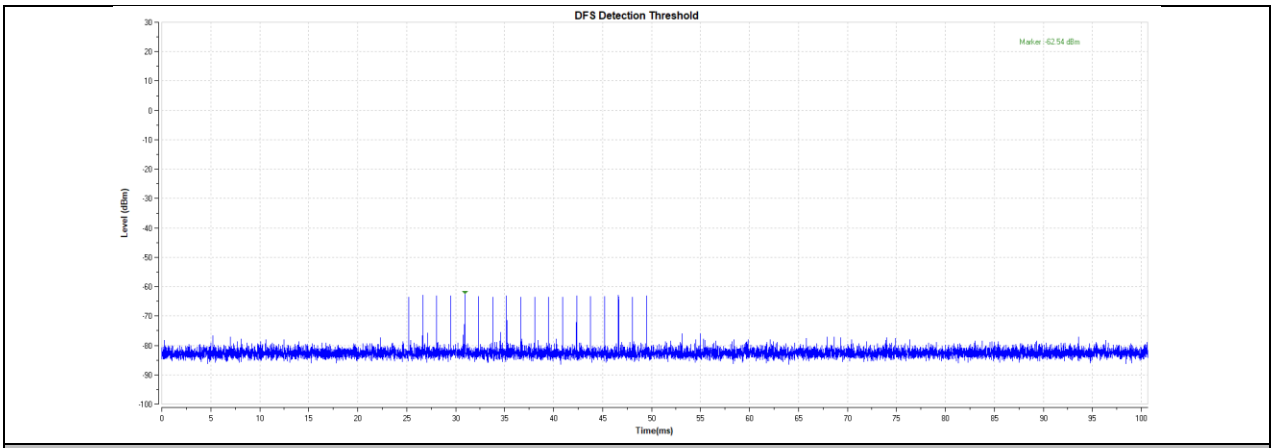
11N40SISO_Ant1_5190

11.8. APPENDIX H: DFS DETECTION THRESHOLDS

11.8.1. Test Result

Test Mode	Channel	Radar Type	Result	Verdict
11N40SISO	5510	Type0	-62.54	PASS

11.8.2. Test Graphs



11N40SISO_5510_Type0

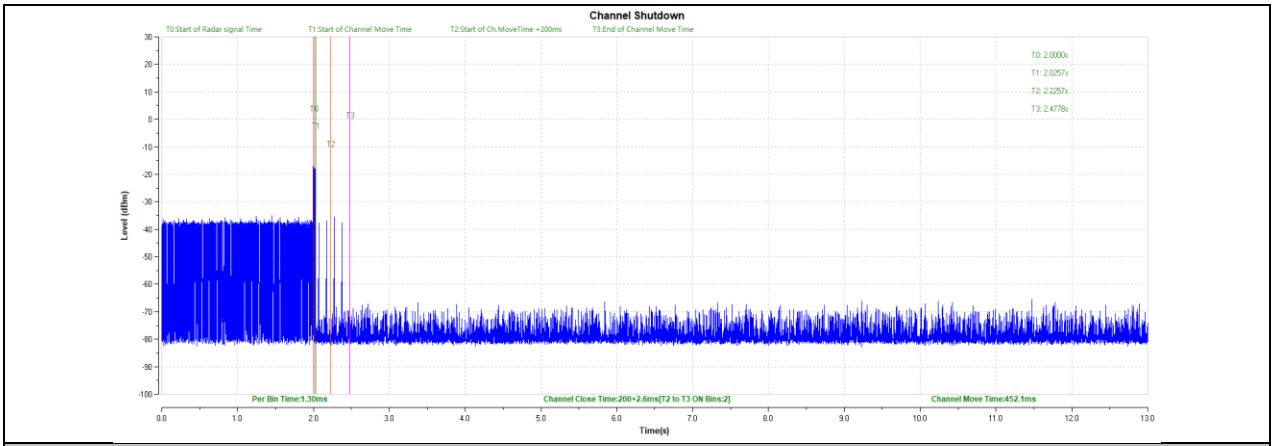
Note: All modes have been tested, only the worst data recorded in the report.

11.9. APPENDIX I: CHANNEL MOVE TIME AND CHANNEL CLOSING TRANSMISSION TIME

11.9.1. Test Result

Test Mode	Channel	CCT[ms]	Limit[ms]	CMT[ms]	Limit[ms]	Verdict
11N40SISO	5510	200+2.6	200+60	452.1	10000	PASS

11.9.2. Test Graphs



11N40SISO_5510

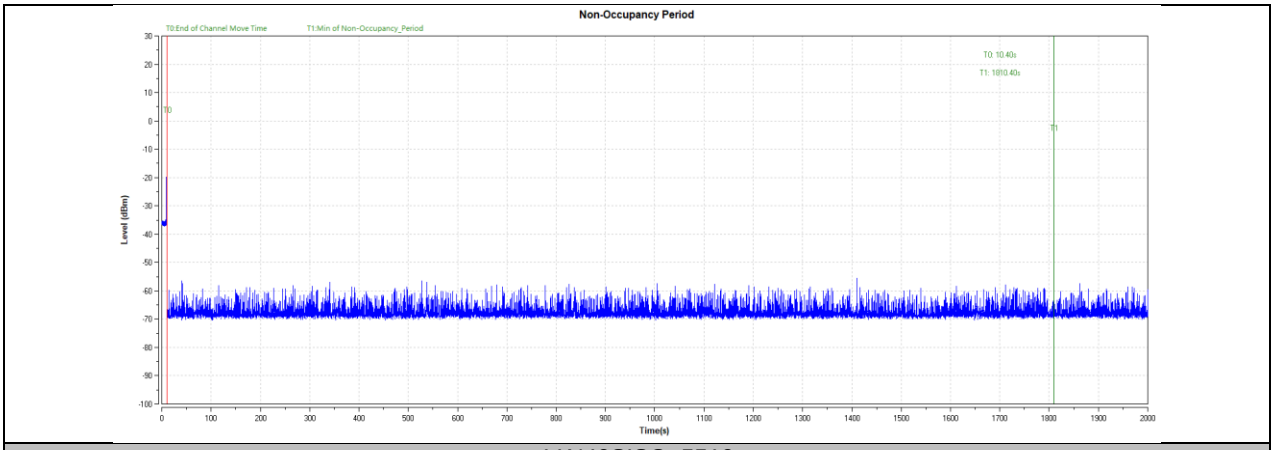
Note: All modes have been tested, only the worst data recorded in the report.

11.10. APPENDIX J: NON-OCCUPANCY PERIOD

Test Result

Test Mode	Channel	Result	Limit[s]	Verdict
11N40SISO	5510	see test graph	≥1800	PASS

11.10.1. Test Graphs



11N40SISO_5510

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

END OF REPORT