



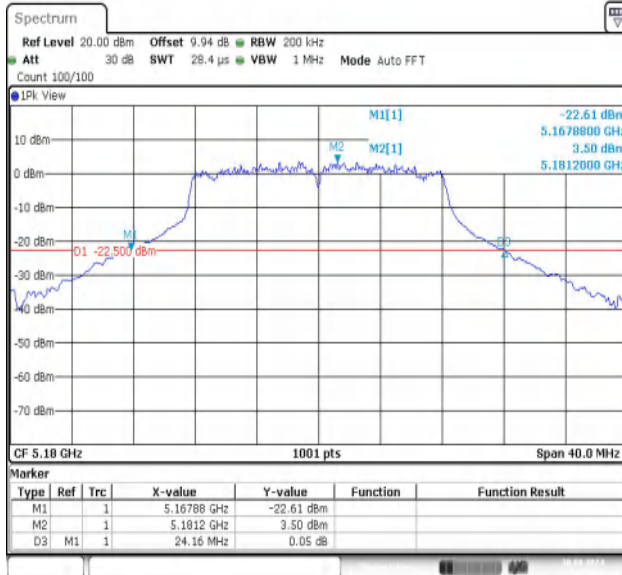
Appendix A1: Emission Bandwidth

Test Result

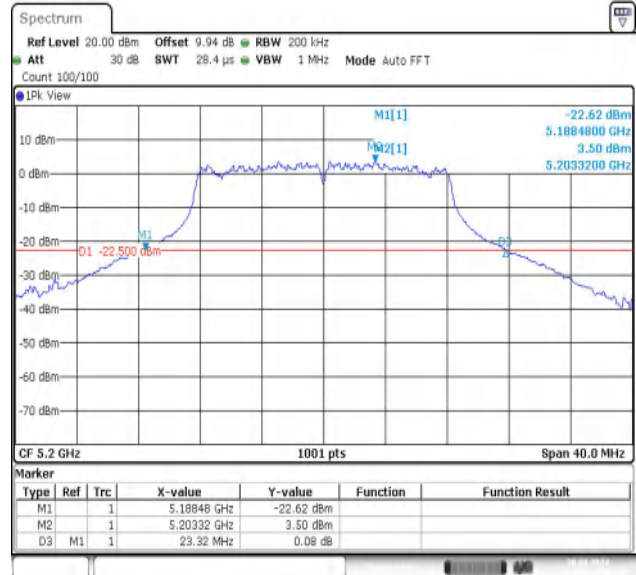
TestMode	Antenna	Freq(MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	24.16	5167.88	5192.04	---	---
11A	Ant1	5200	23.32	5188.48	5211.80	---	---
11A	Ant1	5240	24.00	5227.60	5251.60	---	---
11N20SISO	Ant1	5180	23.72	5168.04	5191.76	---	---
11N20SISO	Ant1	5200	23.80	5187.88	5211.68	---	---
11N20SISO	Ant1	5240	25.20	5227.68	5252.88	---	---
11N40SISO	Ant1	5190	42.56	5169.04	5211.60	---	---
11N40SISO	Ant1	5230	44.48	5208.72	5253.20	---	---
11AC20SISO	Ant1	5180	23.56	5168.12	5191.68	---	---
11AC20SISO	Ant1	5200	24.04	5188.36	5212.40	---	---
11AC20SISO	Ant1	5240	23.88	5228.08	5251.96	---	---
11AC40SISO	Ant1	5190	45.04	5167.44	5212.48	---	---
11AC40SISO	Ant1	5230	45.84	5207.76	5253.60	---	---
11AC80SISO	Ant1	5210	80.32	5169.84	5250.16	---	---
11AX20SISO	Ant1	5180	23.56	5168.64	5192.20	---	---
11AX20SISO	Ant1	5200	24.28	5188.00	5212.28	---	---
11AX20SISO	Ant1	5240	24.76	5227.92	5252.68	---	---
11AX40SISO	Ant1	5190	43.92	5167.28	5211.20	---	---
11AX40SISO	Ant1	5230	42.16	5208.64	5250.80	---	---
11AX80SISO	Ant1	5210	81.76	5169.84	5251.60	---	---



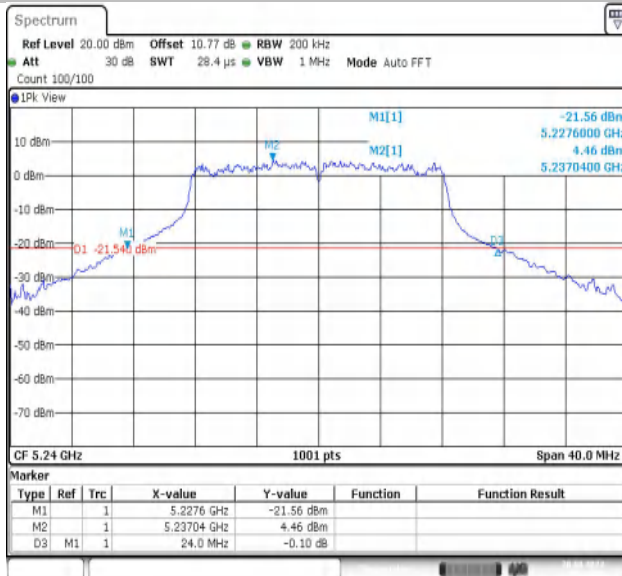
Test Graphs



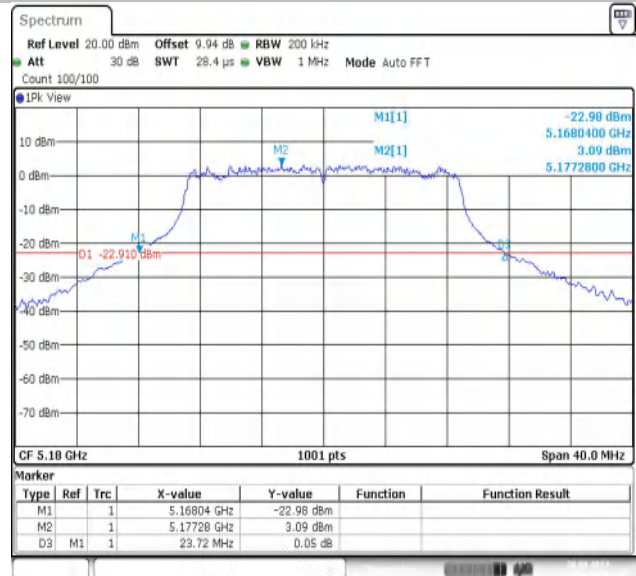
11A-Ant1-5180



11A-Ant1-5200



11A-Ant1-5240

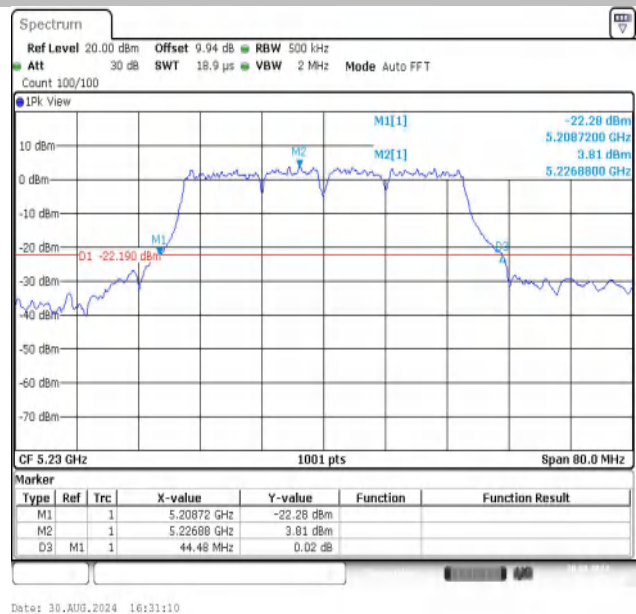
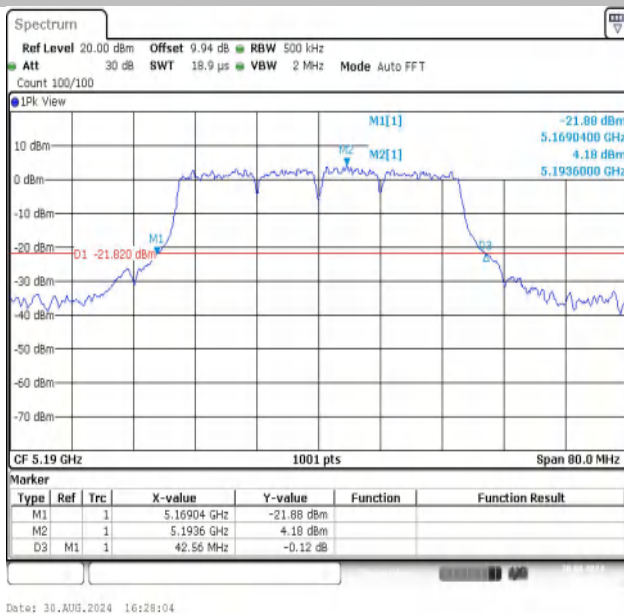


11N20SISO-Ant1-5180



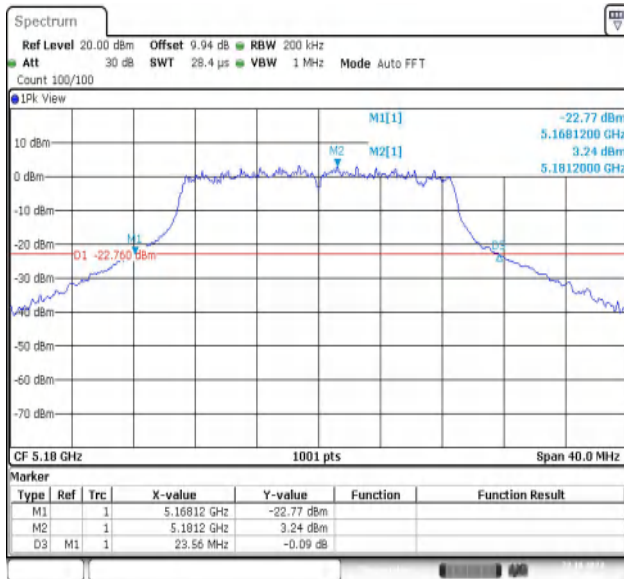
11N20SISO-Ant1-5200

11N20SISO-Ant1-5240



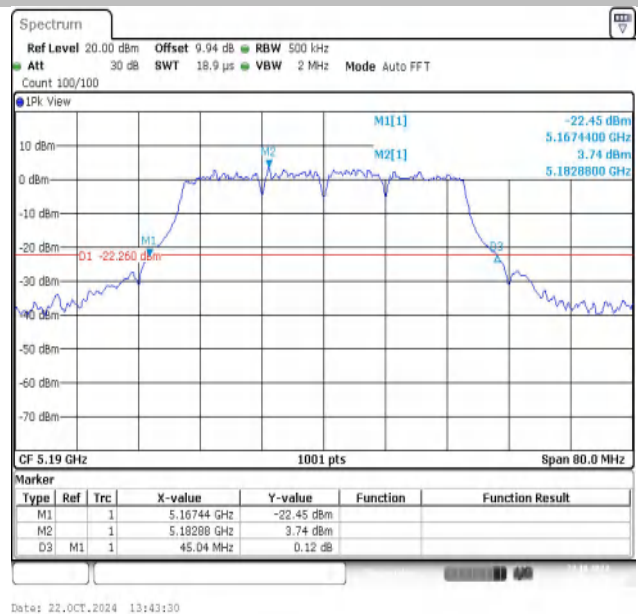
11N40SISO-Ant1-5190

11N40SISO-Ant1-5230



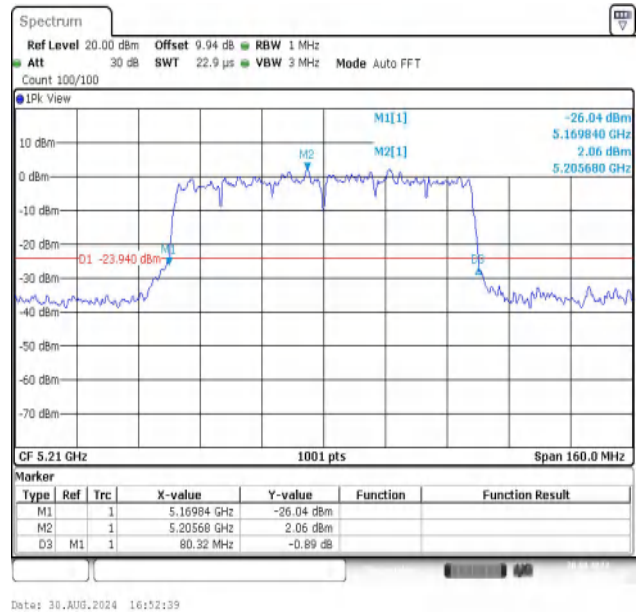
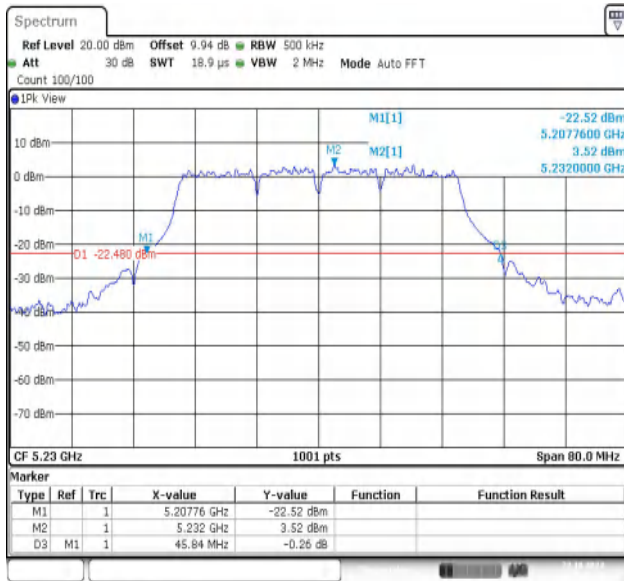
11AC20SISO-Ant1-5180

11AC20SISO-Ant1-5200



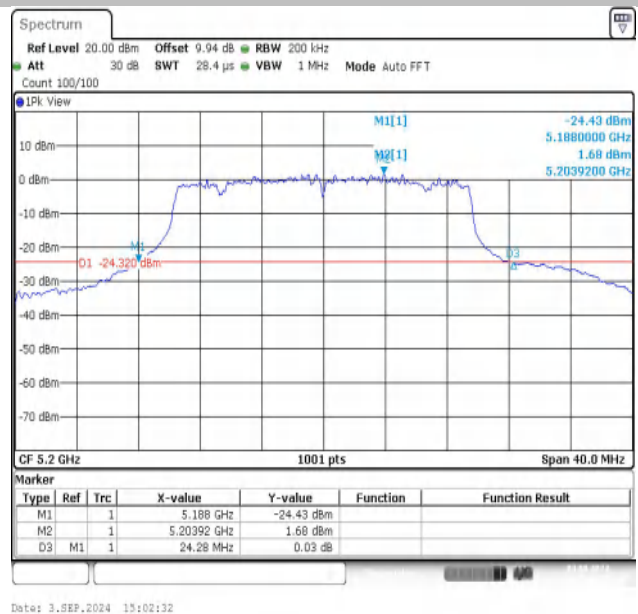
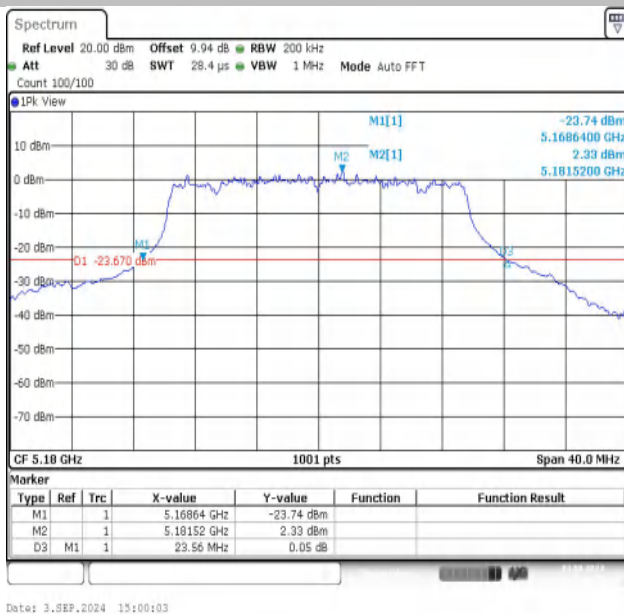
11AC20SISO-Ant1-5240

11AC40SISO-Ant1-5190



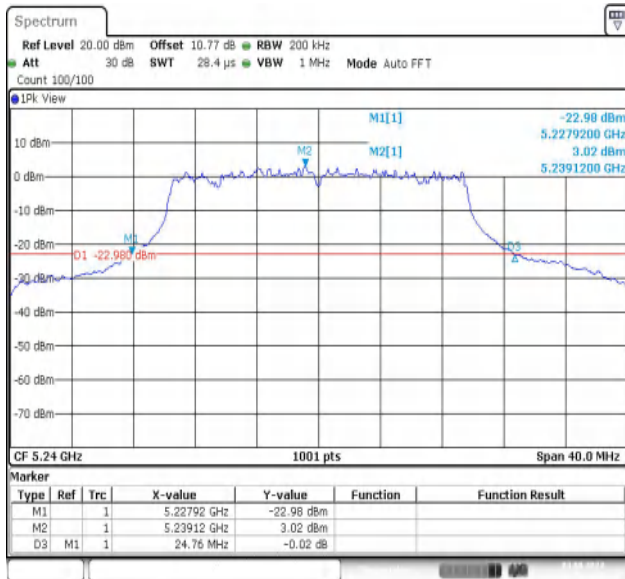
11AC40SISO-Ant1-5230

11AC80SISO-Ant1-5210

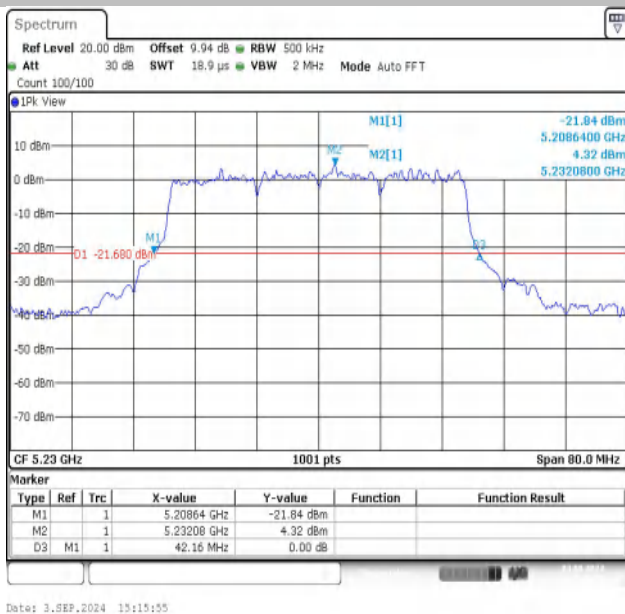


11AX20SISO-Ant1-5180

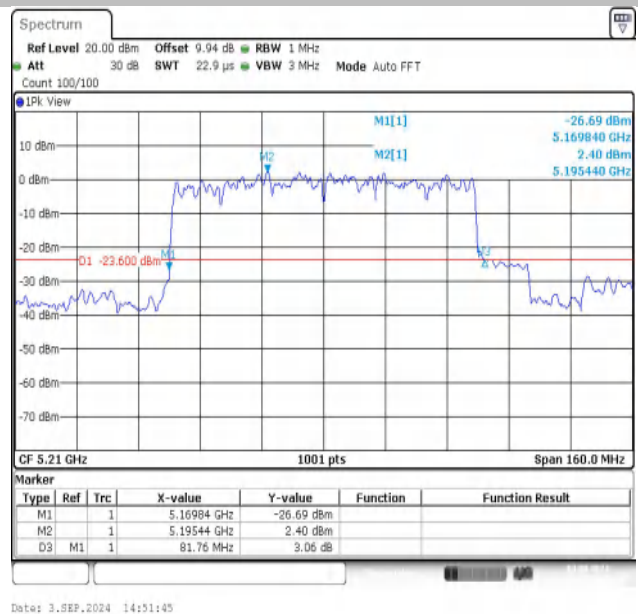
11AX20SISO-Ant1-5200



11AX20SISO-Ant1-5240



11AX40SISO-Ant1-5230



11AX80SISO-Ant1-5210



Appendix A2: Occupied channel bandwidth

Test Result

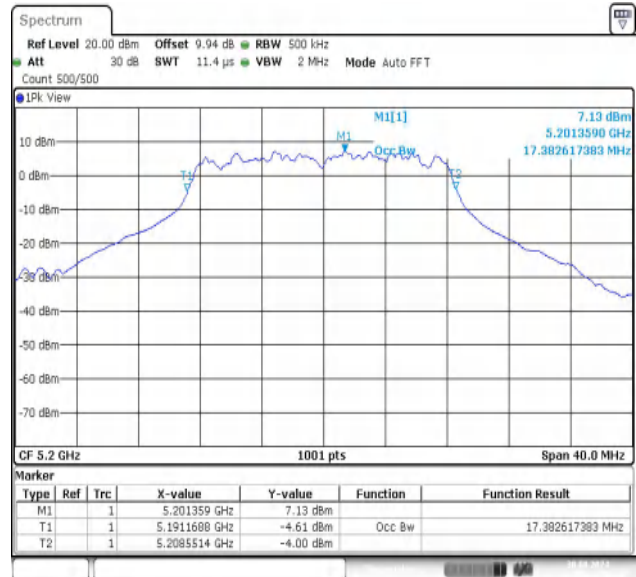
Test Mode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.542	5171.1289	5188.6713	---	---
11A	Ant1	5200	17.383	5191.1688	5208.5514	---	---
11A	Ant1	5240	17.023	5231.4486	5248.4715	---	---
11N20SISO	Ant1	5180	18.262	5170.8092	5189.0709	---	---
11N20SISO	Ant1	5200	17.942	5191.0090	5208.9510	---	---
11N20SISO	Ant1	5240	18.501	5230.7692	5249.2707	---	---
11N40SISO	Ant1	5190	36.444	5171.6983	5208.1419	---	---
11N40SISO	Ant1	5230	36.444	5211.8581	5248.3017	---	---
11AC20SISO	Ant1	5180	19.021	5170.8492	5189.8701	---	---
11AC20SISO	Ant1	5200	18.501	5190.7293	5209.2308	---	---
11AC20SISO	Ant1	5240	18.621	5230.6094	5249.2308	---	---
11AC40SISO	Ant1	5190	36.523	5171.6983	5208.2218	---	---
11AC40SISO	Ant1	5230	36.444	5211.7782	5248.2218	---	---
11AC80SISO	Ant1	5210	76.084	5171.7982	5247.8821	---	---
11AX20SISO	Ant1	5180	19.62	5170.0899	5189.7103	---	---
11AX20SISO	Ant1	5200	19.261	5190.2897	5209.5504	---	---
11AX20SISO	Ant1	5240	19.381	5230.2897	5249.6703	---	---
11AX40SISO	Ant1	5190	37.962	5170.9790	5208.9411	---	---
11AX40SISO	Ant1	5230	38.202	5210.9790	5249.1808	---	---
11AX80SISO	Ant1	5210	77.043	5172.1179	5249.1608	---	---



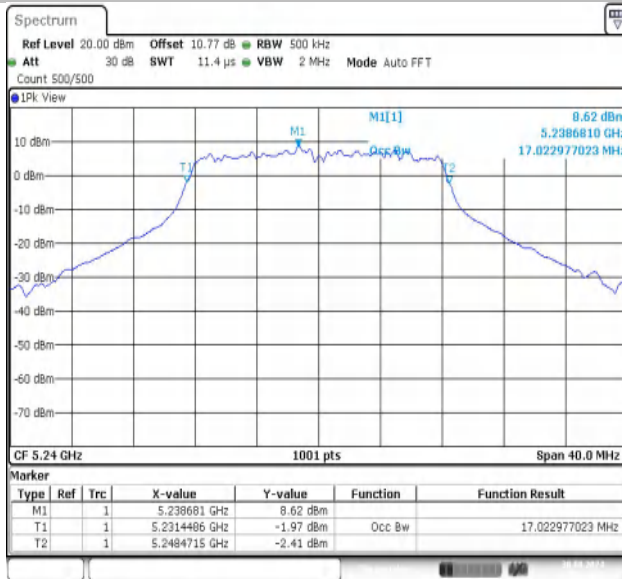
Test Graphs



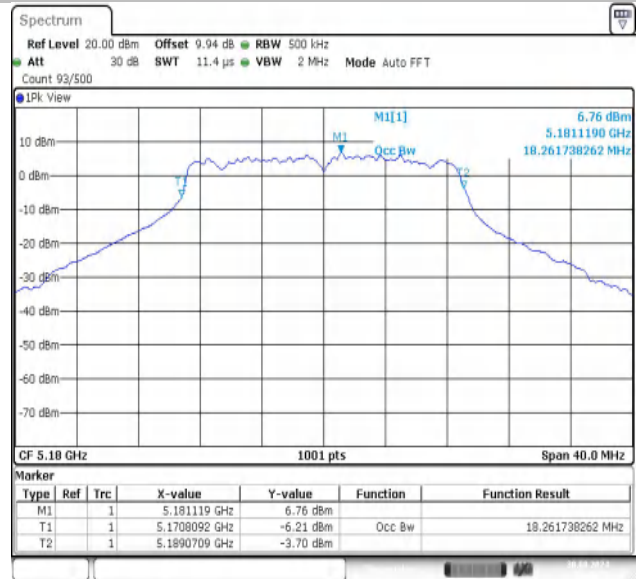
11A-Ant1-5180



11A-Ant1-5200



11A-Ant1-5240

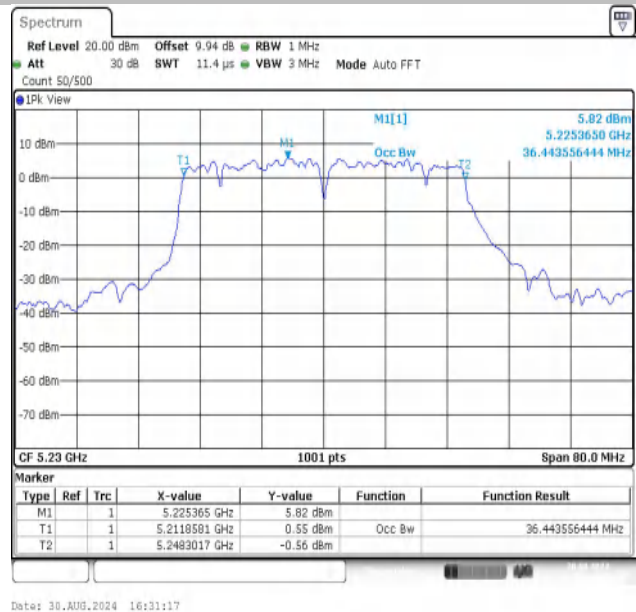
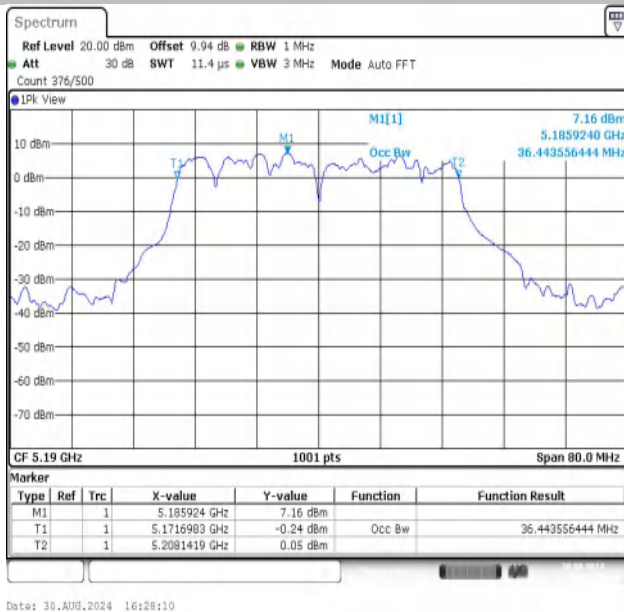


11N20SISO-Ant1-5180



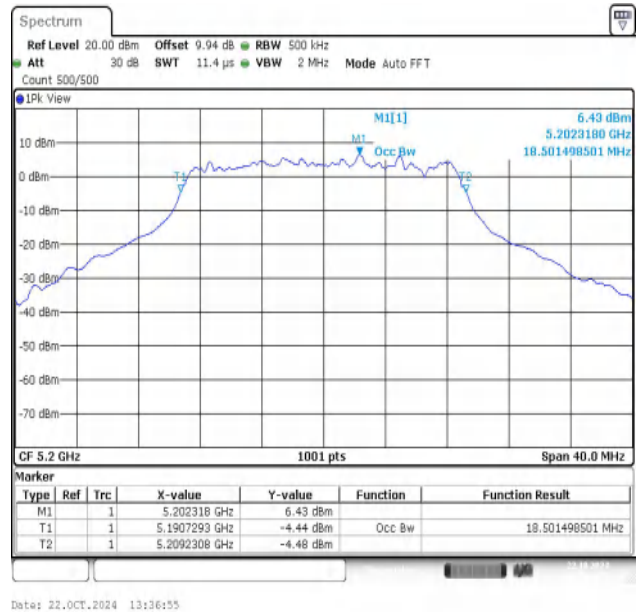
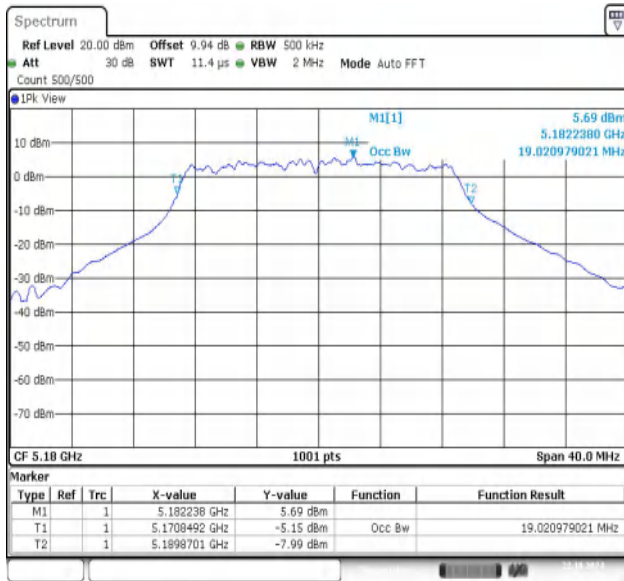
11N20SISO-Ant1-5200

11N20SISO-Ant1-5240



11N40SISO-Ant1-5190

11N40SISO-Ant1-5230



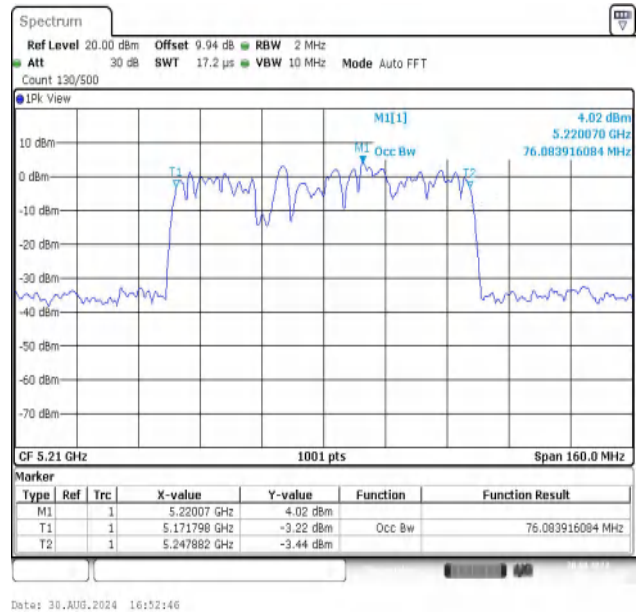
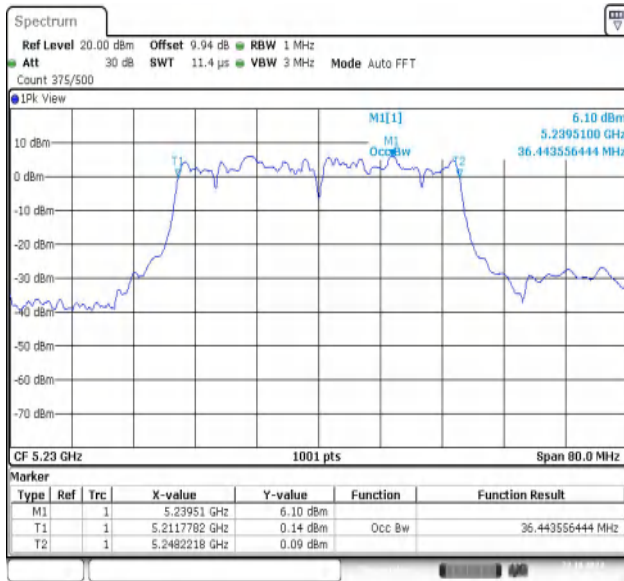
11AC20SISO-Ant1-5180

11AC20SISO-Ant1-5200



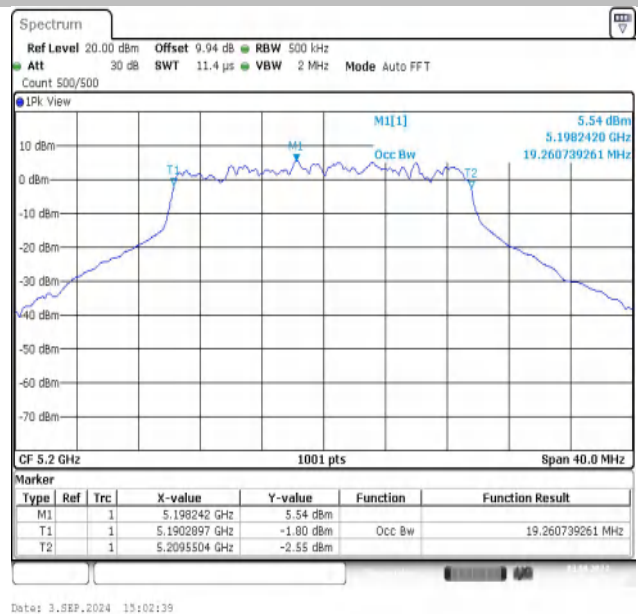
11AC20SISO-Ant1-5240

11AC40SISO-Ant1-5190



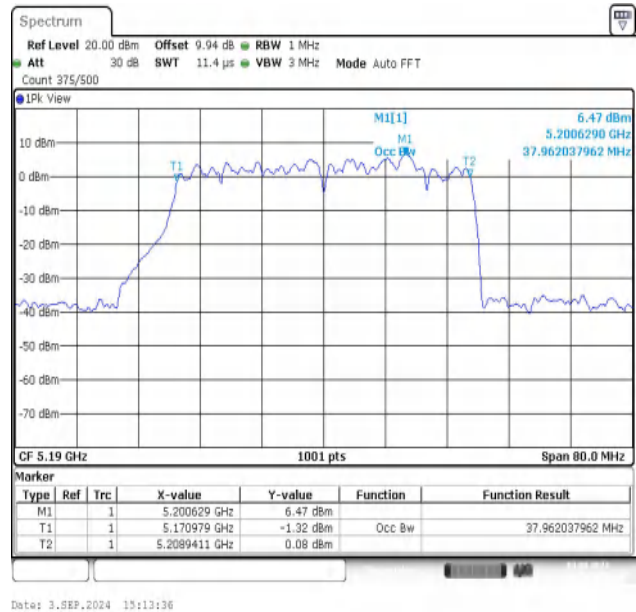
11AC40SISO-Ant1-5230

11AC80SISO-Ant1-5210



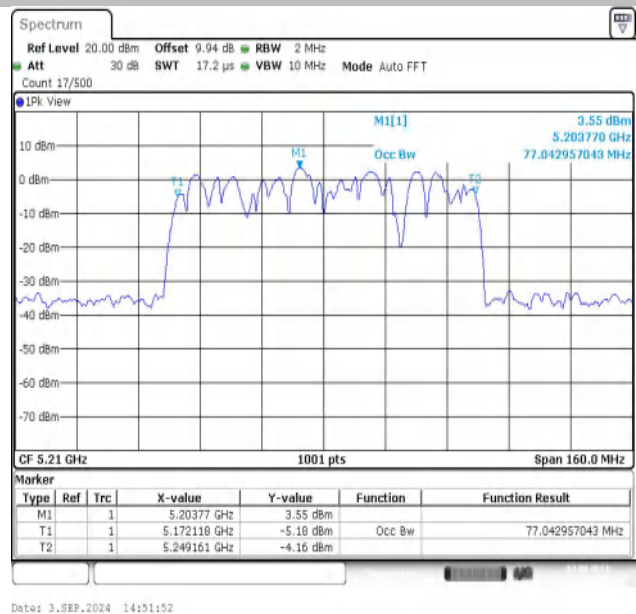
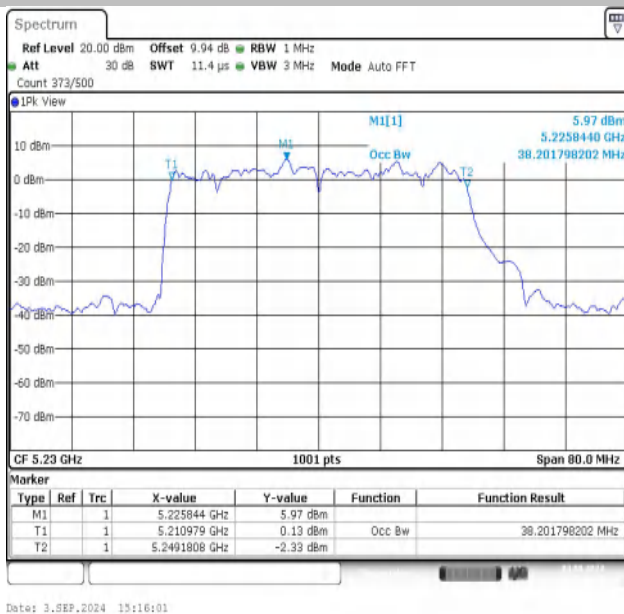
11AX20SISO-Ant1-5180

11AX20SISO-Ant1-5200



11AX20SISO-Ant1-5240

11AX40SISO-Ant1-5190



11AX40SISO-Ant1-5230

11AX80SISO-Ant1-5210



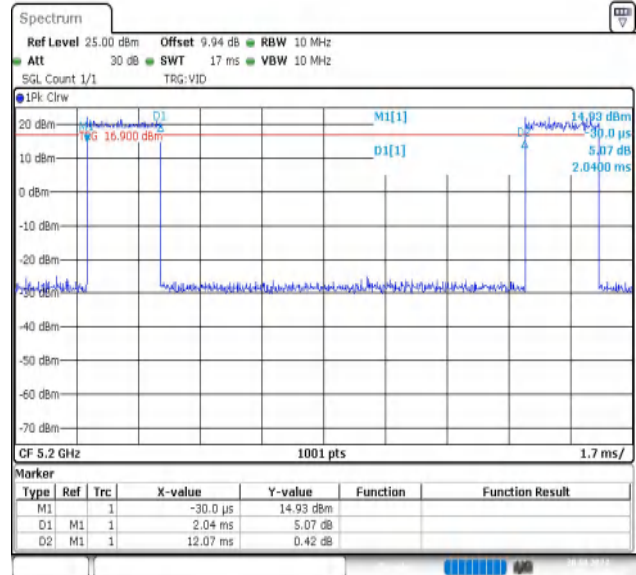
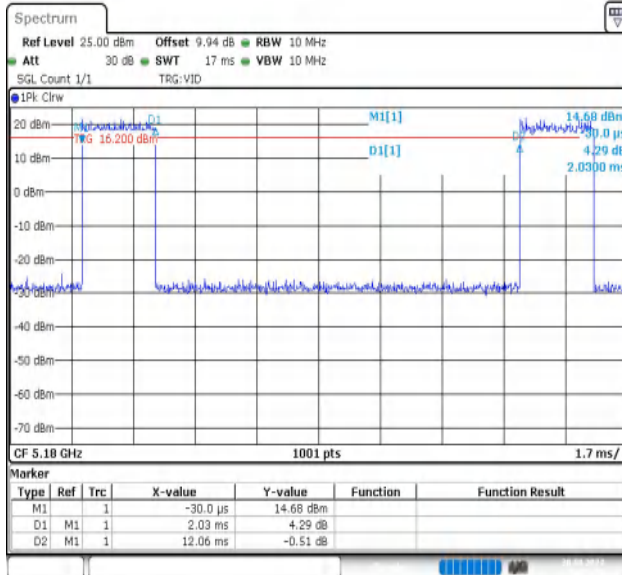
Appendix B: Duty Cycle

Test Result

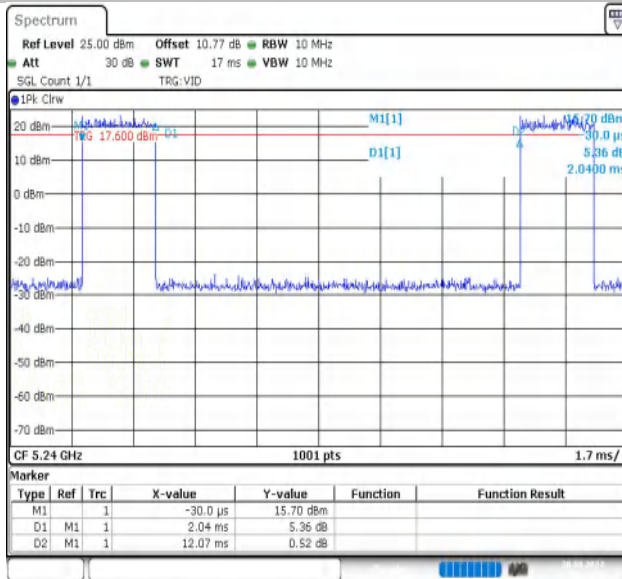
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	DCFactor [dB]	Limit	Verdict
11A	Ant1	5180	2.03	12.06	16.83	7.74	---	---
11A	Ant1	5200	2.04	12.07	16.90	7.72	---	---
11A	Ant1	5240	2.04	12.07	16.90	7.72	---	---
11N20SISO	Ant1	5180	1.89	11.92	15.86	8.00	---	---
11N20SISO	Ant1	5200	1.89	11.92	15.86	8.00	---	---
11N20SISO	Ant1	5240	1.89	11.92	15.86	8.00	---	---
11N40SISO	Ant1	5190	0.93	10.96	8.49	10.71	---	---
11N40SISO	Ant1	5230	0.93	10.96	8.49	10.71	---	---
11AC20SISO	Ant1	5180	1.91	11.94	16.00	7.96	---	---
11AC20SISO	Ant1	5200	1.91	11.94	16.00	7.96	---	---
11AC20SISO	Ant1	5240	1.91	11.94	16.00	7.96	---	---
11AC40SISO	Ant1	5190	0.94	10.97	8.57	10.67	---	---
11AC40SISO	Ant1	5230	0.93	10.96	8.49	10.71	---	---
11AC80SISO	Ant1	5210	0.46	10.49	4.39	13.58	---	---
11AX20SISO	Ant1	5180	1.46	11.49	12.71	8.96	---	---
11AX20SISO	Ant1	5200	1.46	11.49	12.71	8.96	---	---
11AX20SISO	Ant1	5240	1.46	11.49	12.71	8.96	---	---
11AX40SISO	Ant1	5190	0.76	10.79	7.04	11.52	---	---
11AX40SISO	Ant1	5230	0.76	10.79	7.04	11.52	---	---
11AX80SISO	Ant1	5210	0.41	10.42	3.93	14.06	---	---



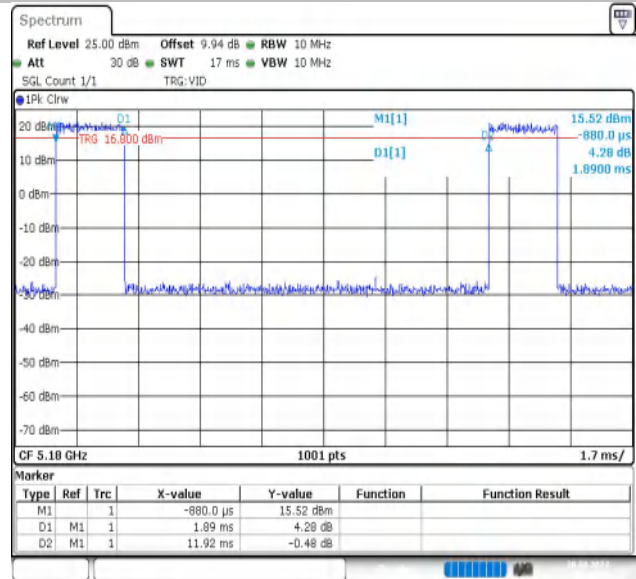
Test Graphs



NTNV-11A-Ant1-5180

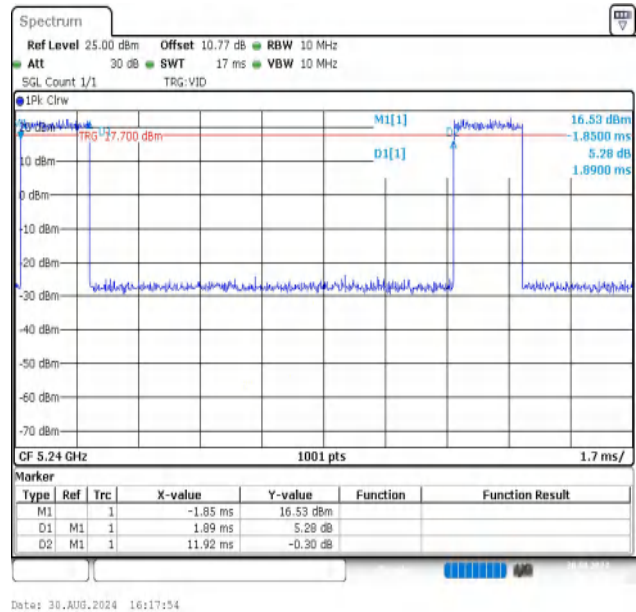
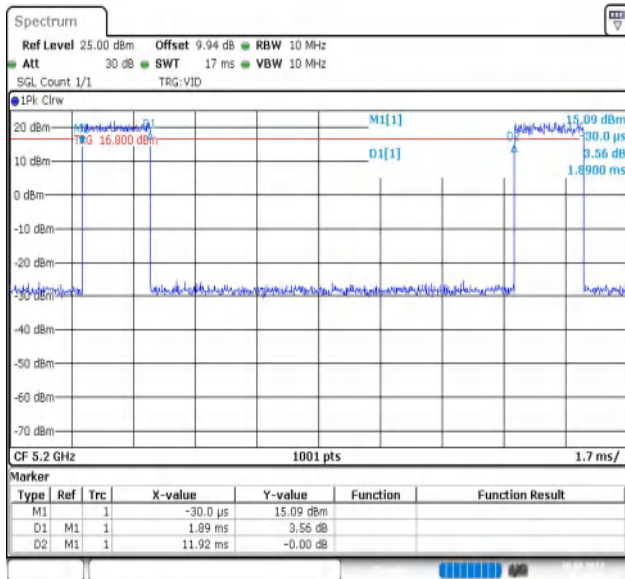


NTNV-11A-Ant1-5200

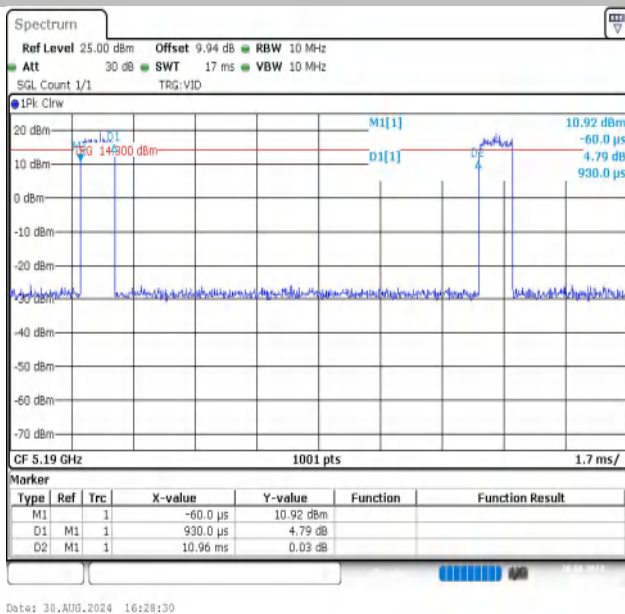


NTNV-11A-Ant1-5240

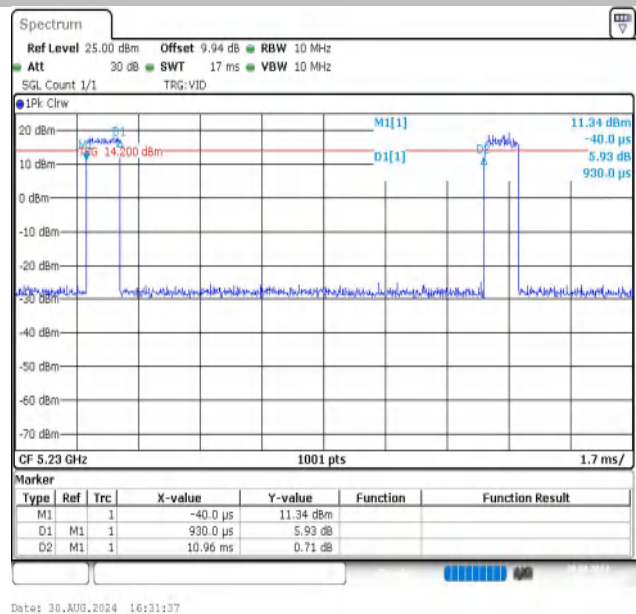
NTNV-11N20SISO-Ant1-5180



NTNV-11N20SISO-Ant1-5200

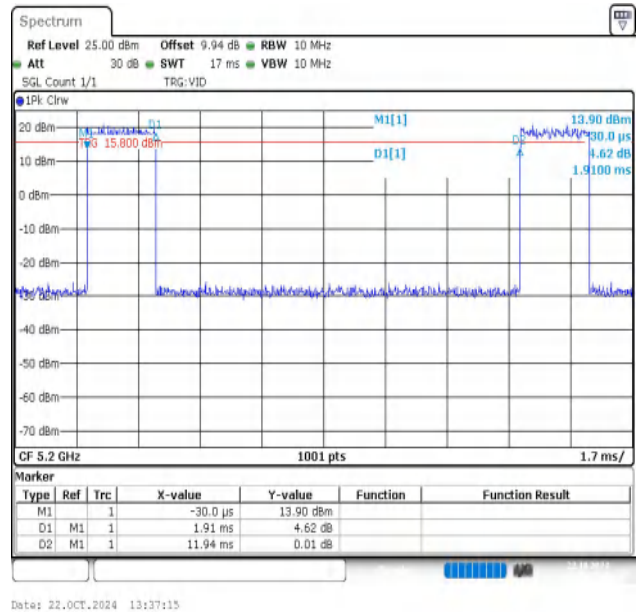
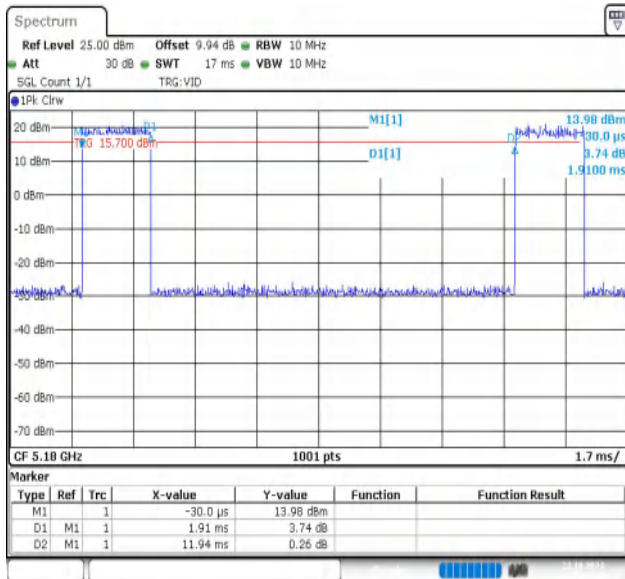


NTNV-11N20SISO-Ant1-5240

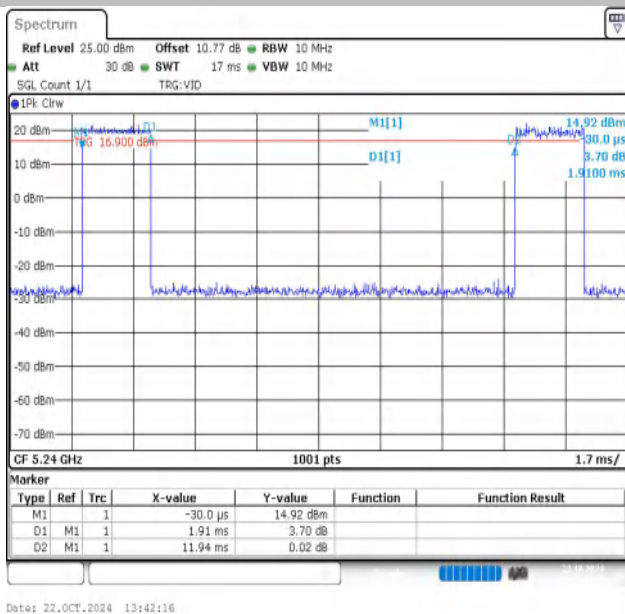


NTNV-11N40SISO-Ant1-5190

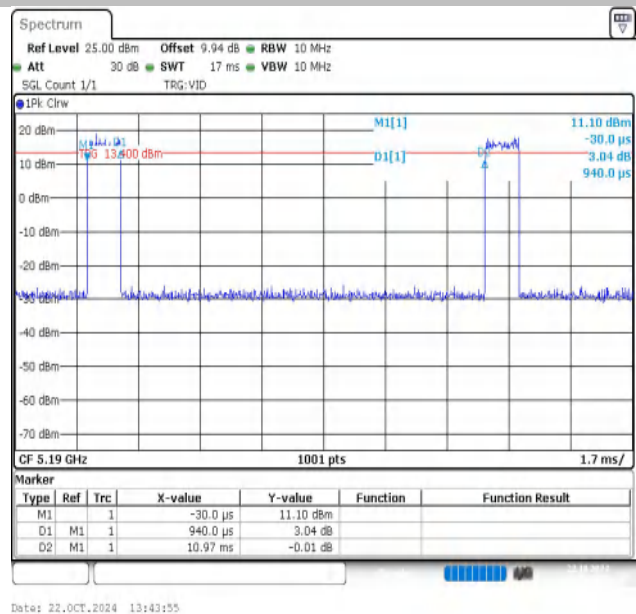
NTNV-11N40SISO-Ant1-5230



NTNV-11AC20SISO-Ant1-5180

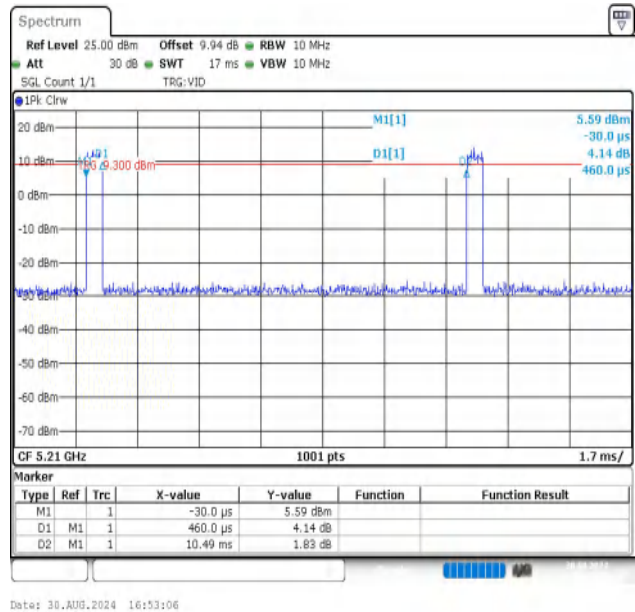
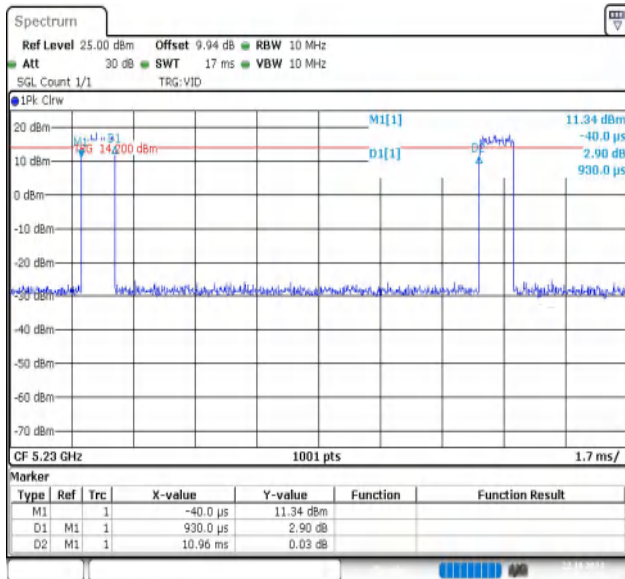


NTNV-11AC20SISO-Ant1-5200

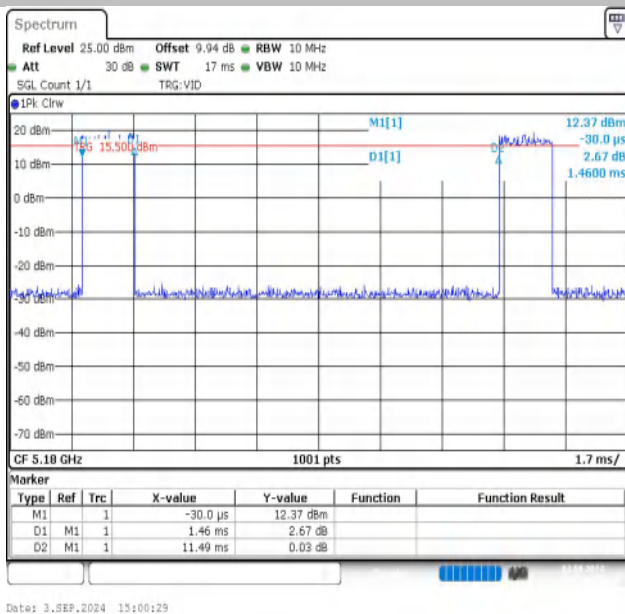


NTNV-11AC20SISO-Ant1-5240

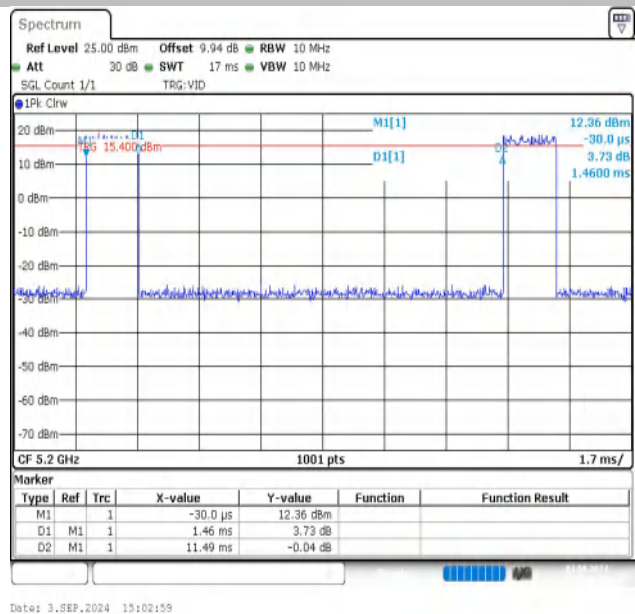
NTNV-11AC40SISO-Ant1-5190



NTNV-11AC40SISO-Ant1-5230

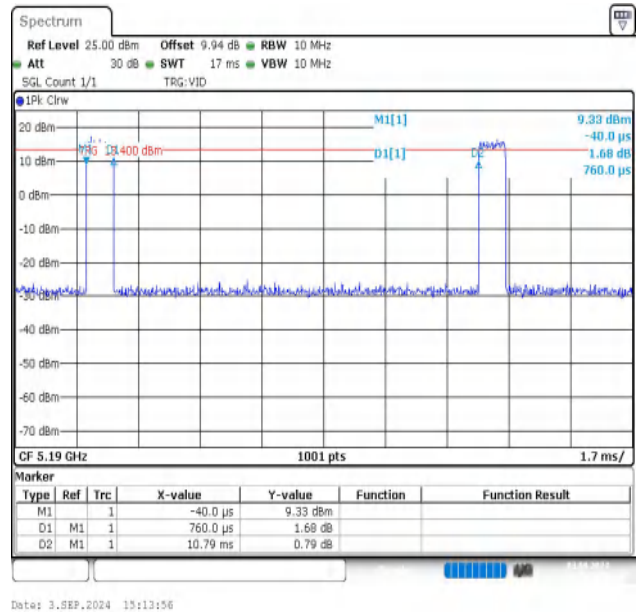
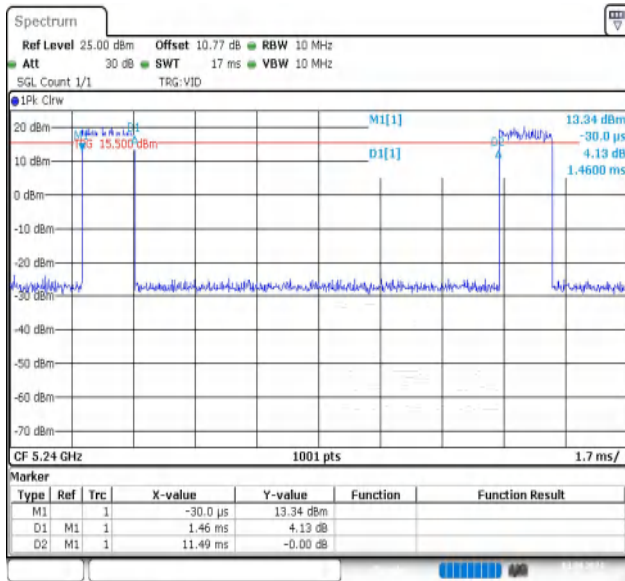


NTNV-11AC80SISO-Ant1-5210

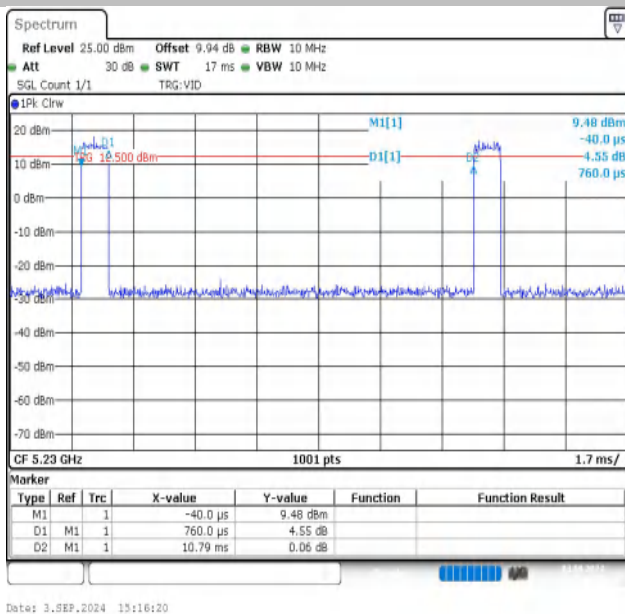


NTNV-11AX20SISO-Ant1-5180

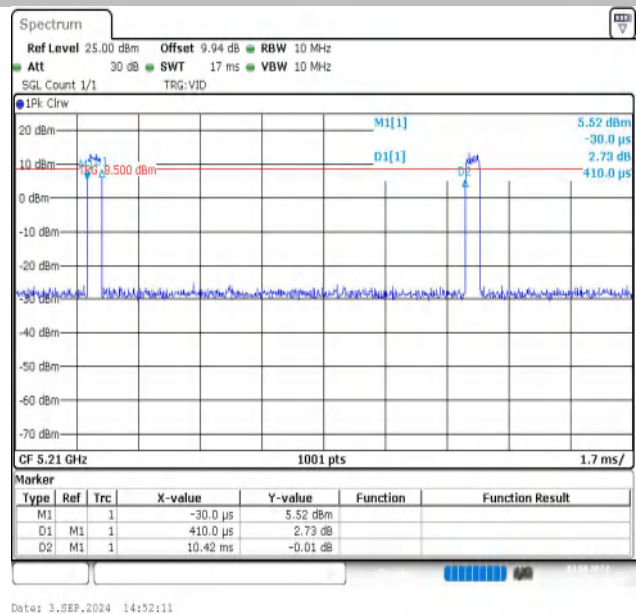
NTNV-11AX20SISO-Ant1-5200



NTNV-11AX20SISO-Ant1-5240



NTNV-11AX40SISO-Ant1-5190



NTNV-11AX40SISO-Ant1-5230

NTNV-11AX80SISO-Ant1-5210



Appendix C: Maximum conducted output power

Test Result Channel Power

Test Mode	Antenna	Freq (MHz)	Channel Power [dBm]	DC Factor [dB]	Output Power Result [dBm]	Limit [dBm]	Gain [dBi]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
11A	Ant1	5180	4.91	7.74	12.65	≤23.98	1.29	13.94	---	PASS
11A	Ant1	5200	5.86	7.72	13.58	≤23.98	1.29	14.87	---	PASS
11A	Ant1	5240	5.98	7.72	13.70	≤23.98	1.29	14.99	---	PASS
11N20SISO	Ant1	5180	5.18	8.00	13.18	≤23.98	1.29	14.47	---	PASS
11N20SISO	Ant1	5200	5.73	8.00	13.73	≤23.98	1.29	15.02	---	PASS
11N20SISO	Ant1	5240	6.76	8.00	14.76	≤23.98	1.29	16.05	---	PASS
11N40SISO	Ant1	5190	2.84	10.71	13.55	≤23.98	1.29	14.84	---	PASS
11N40SISO	Ant1	5230	3.48	10.71	14.19	≤23.98	1.29	15.48	---	PASS
11AC20SISO	Ant1	5200	5.21	7.96	13.17	≤23.98	1.29	14.46	---	PASS
11AC20SISO	Ant1	5240	5.57	7.96	13.53	≤23.98	1.29	14.82	---	PASS
11AC40SISO	Ant1	5190	1.94	10.67	12.61	≤23.98	1.29	13.90	---	PASS
11AC40SISO	Ant1	5230	3.49	10.71	14.20	≤23.98	1.29	15.49	---	PASS
11AC80SISO	Ant1	5210	-1.81	13.58	11.77	≤23.98	1.29	13.06	---	PASS
11AX20SISO	Ant1	5180	1.64	8.96	10.60	≤23.98	1.29	11.89	---	PASS
11AX20SISO	Ant1	5200	2.04	8.96	11.00	≤23.98	1.29	12.29	---	PASS
11AX20SISO	Ant1	5240	2.37	8.96	11.33	≤23.98	1.29	12.62	---	PASS
11AX40SISO	Ant1	5190	-0.39	11.52	11.13	≤23.98	1.29	12.42	---	PASS
11AX40SISO	Ant1	5230	0.12	11.52	11.64	≤23.98	1.29	12.93	---	PASS
11AX80SISO	Ant1	5210	-2.29	14.06	11.77	≤23.98	1.29	13.06	---	PASS

Note: Output Power Result [dBm] = Channel Power[dBm] + DC Factor[dB]



Appendix D: Maximum power spectral density

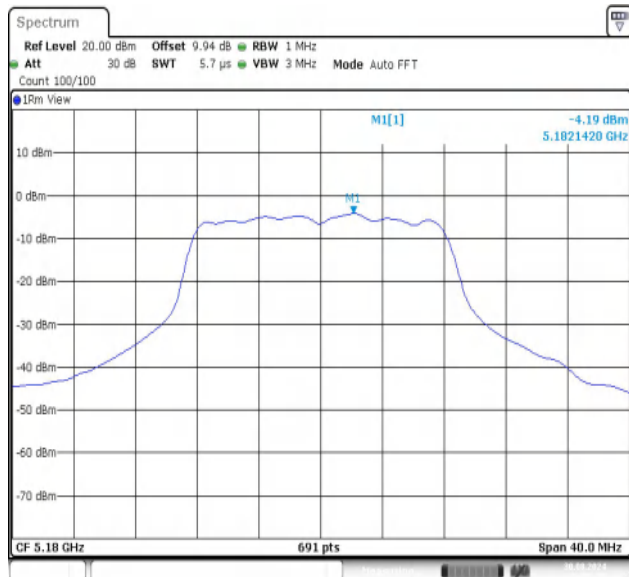
Test Result

Test Mode	Antenna	Freq (MHz)	PSD Reading [dBm]	DC Factor [dB]	PSD Result [dBm]	PSD Limit [dBm]	Gain [dBi]	EIRP.PSD [dBm]	Verdict
11A	Ant1	5180	-4.19	7.74	3.55	≤11.00	1.29	4.84	PASS
11A	Ant1	5200	-3.29	7.72	4.43	≤11.00	1.29	5.72	PASS
11A	Ant1	5240	-2.93	7.72	4.79	≤11.00	1.29	6.08	PASS
11N20SISO	Ant1	5180	-4.26	8.00	3.74	≤11.00	1.29	5.03	PASS
11N20SISO	Ant1	5200	-3.62	8.00	4.38	≤11.00	1.29	5.67	PASS
11N20SISO	Ant1	5240	-3	8.00	5.00	≤11.00	1.29	6.29	PASS
11N40SISO	Ant1	5190	-8.43	10.71	2.28	≤11.00	1.29	3.57	PASS
11N40SISO	Ant1	5230	-10.22	10.71	0.49	≤11.00	1.29	1.78	PASS
11AC20SISO	Ant1	5180	-5.31	7.96	2.65	≤11.00	1.29	3.94	PASS
11AC20SISO	Ant1	5200	-4.83	7.96	3.13	≤11.00	1.29	4.42	PASS
11AC20SISO	Ant1	5240	-3.25	7.96	4.71	≤11.00	1.29	6.00	PASS
11AC40SISO	Ant1	5190	-10.5	10.67	0.17	≤11.00	1.29	1.46	PASS
11AC40SISO	Ant1	5230	-10.25	10.71	0.46	≤11.00	1.29	1.75	PASS
11AC80SISO	Ant1	5210	-16.09	13.58	-2.51	≤11.00	1.29	-1.22	PASS
11AX20SISO	Ant1	5180	-7.63	8.96	1.33	≤11.00	1.29	2.62	PASS
11AX20SISO	Ant1	5200	-8.42	8.96	0.54	≤11.00	1.29	1.83	PASS
11AX20SISO	Ant1	5240	-6.2	8.96	2.76	≤11.00	1.29	4.05	PASS
11AX40SISO	Ant1	5190	-12.6	11.52	-1.08	≤11.00	1.29	0.21	PASS
11AX40SISO	Ant1	5230	-13.17	11.52	-1.65	≤11.00	1.29	-0.36	PASS
11AX80SISO	Ant1	5210	-16.64	14.06	-2.58	≤11.00	1.29	-1.29	PASS

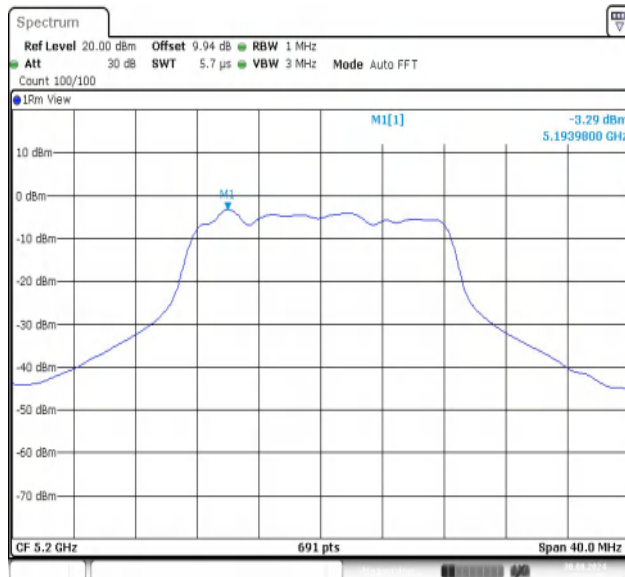
Note: 1. PSD Result [dBm] = PSD Reading [dBm] + DCFactor[dB].



Test Graphs



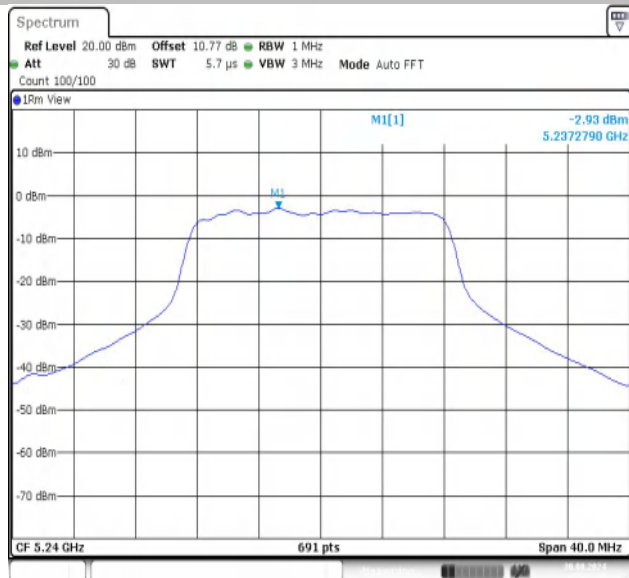
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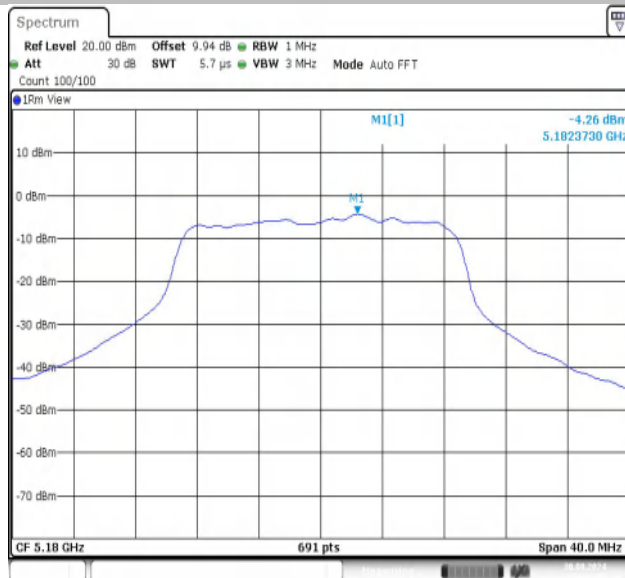
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11A-Ant1-5180-PASS

11A-Ant1-5200-PASS



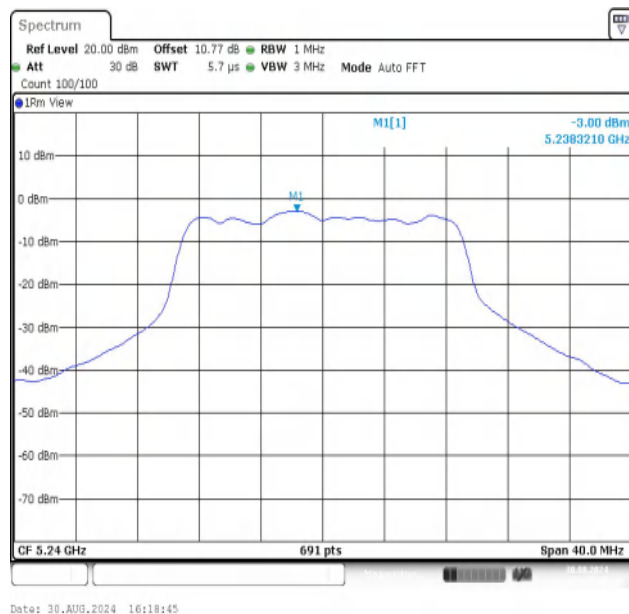
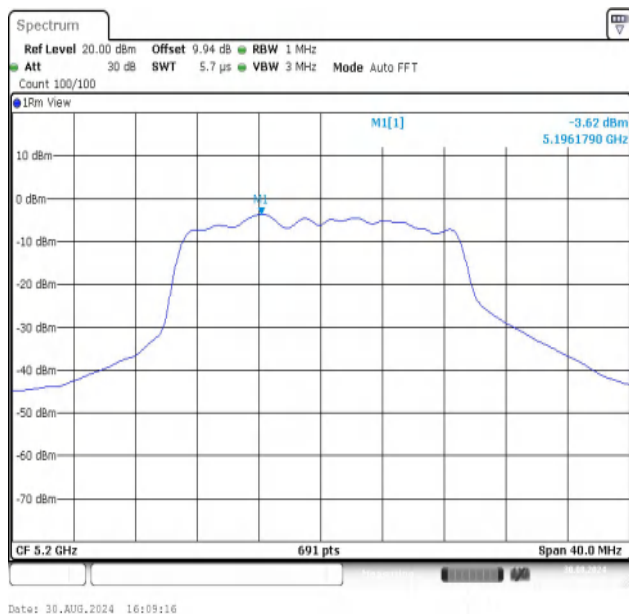
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Date: 30.AUG.2024 16:06:32

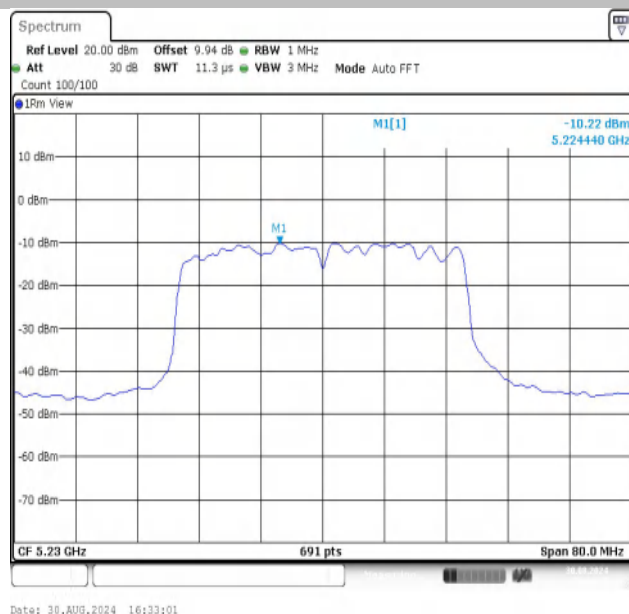
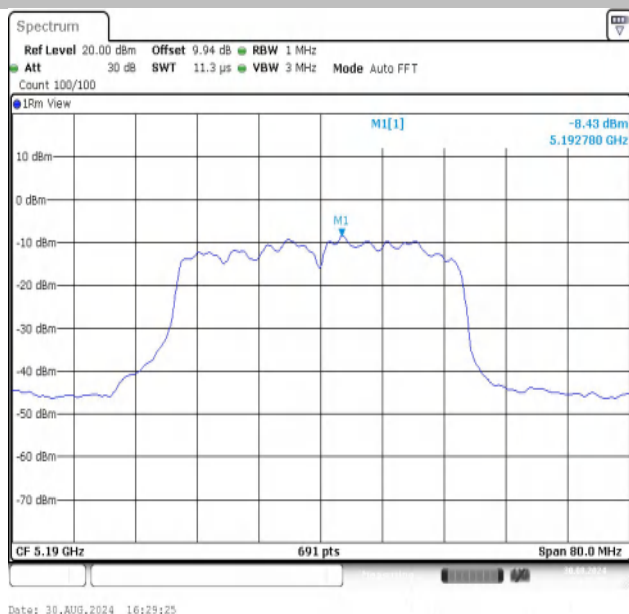
11A-Ant1-5240-PASS

11N20SISO-Ant1-5180-PASS



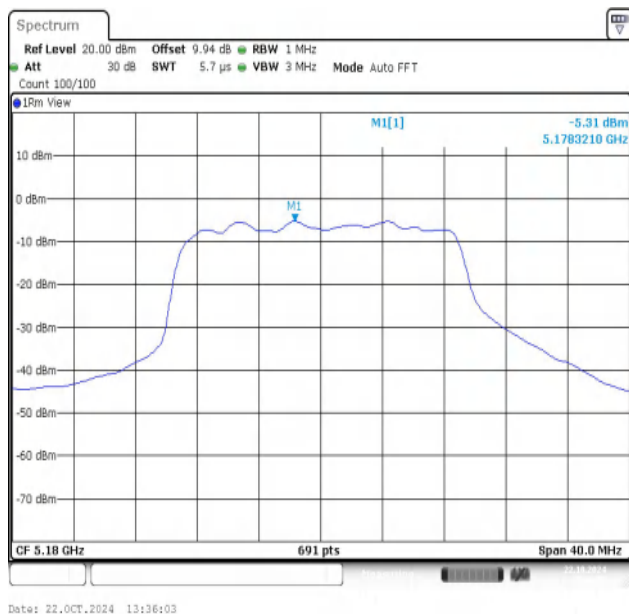
11N20SISO-Ant1-5200-PASS

11N20SISO-Ant1-5240-PASS

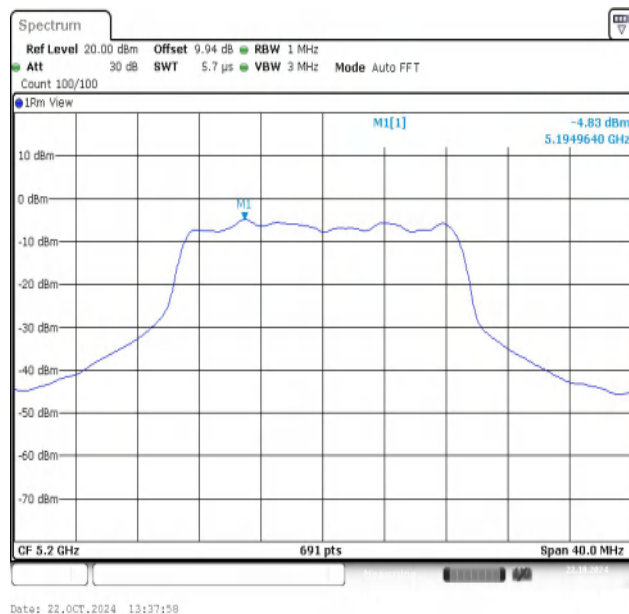


11N40SISO-Ant1-5190-PASS

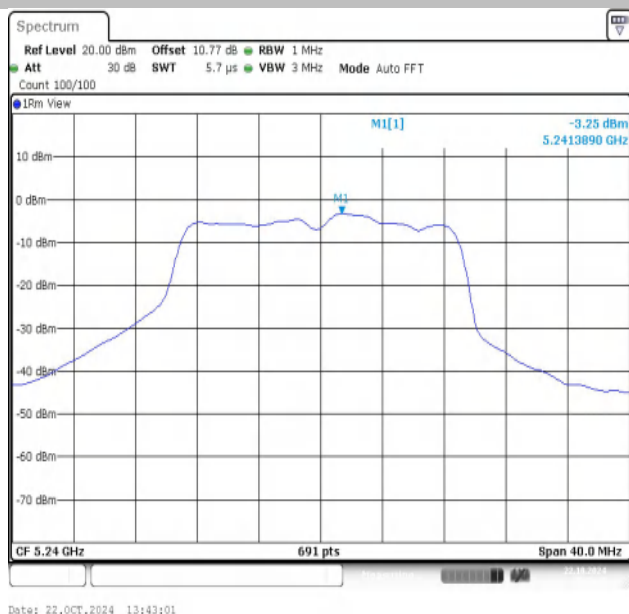
11N40SISO-Ant1-5230-PASS



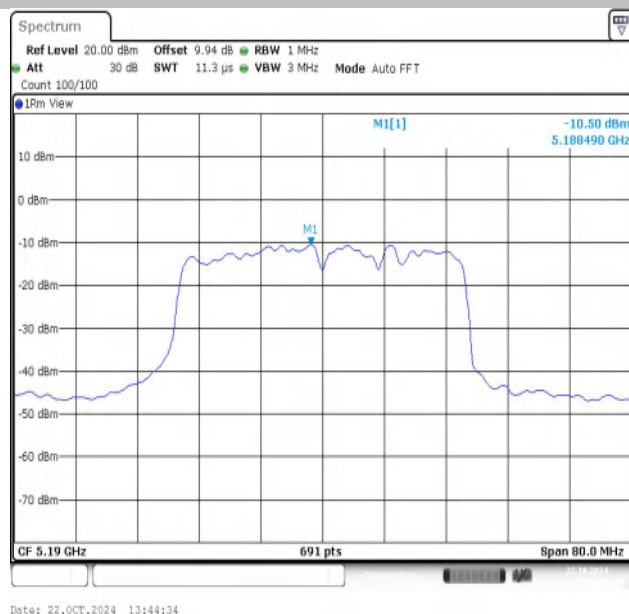
11AC20SISO-Ant1-5180-PASS



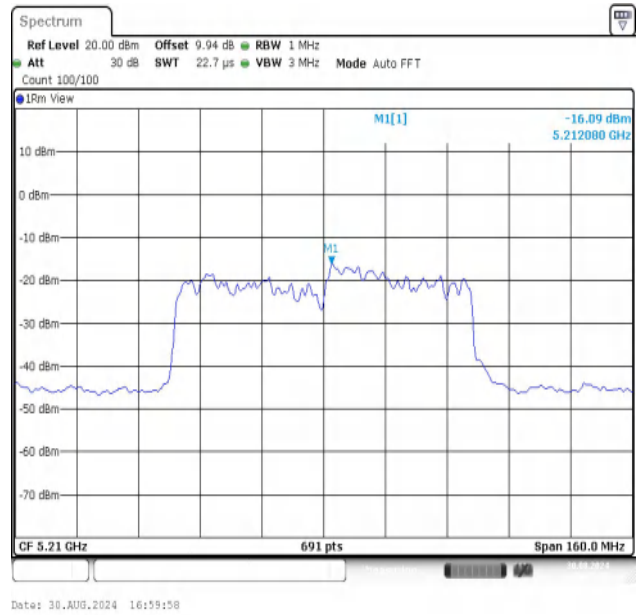
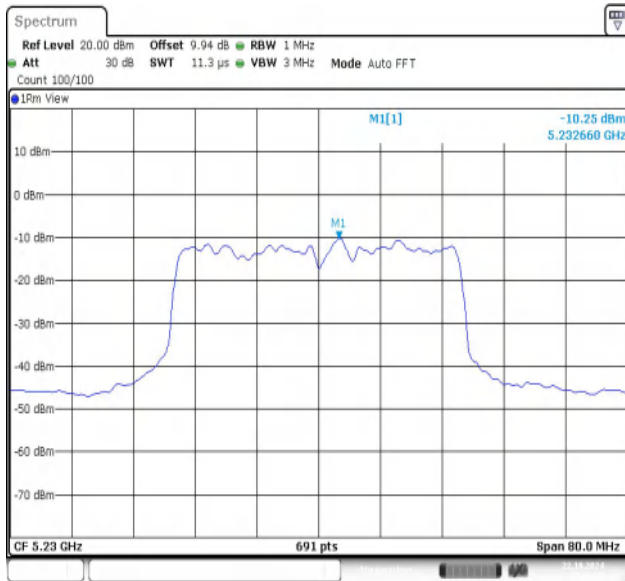
11AC20SISO-Ant1-5200-PASS



11AC20SISO-Ant1-5240-PASS

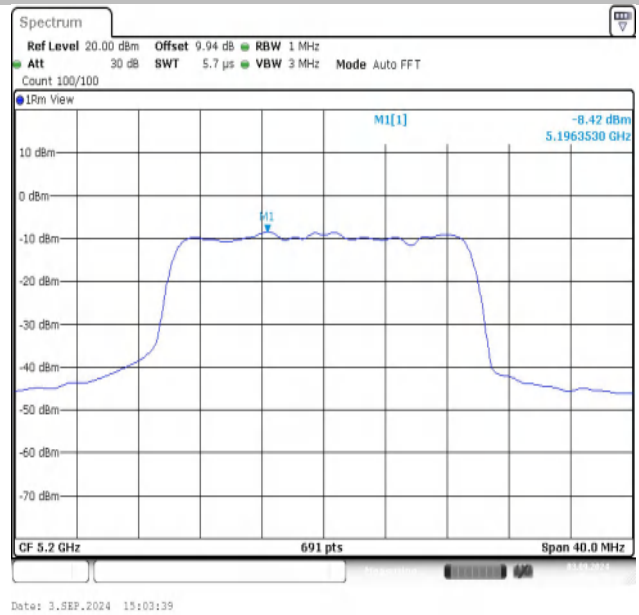
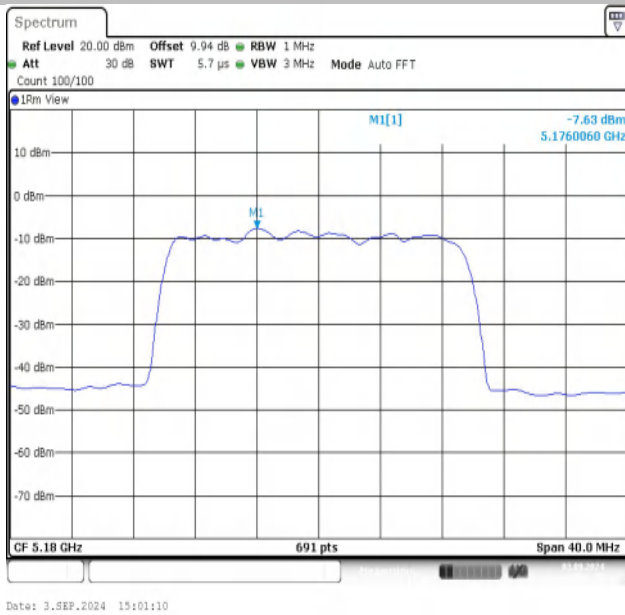


11AC40SISO-Ant1-5190-PASS



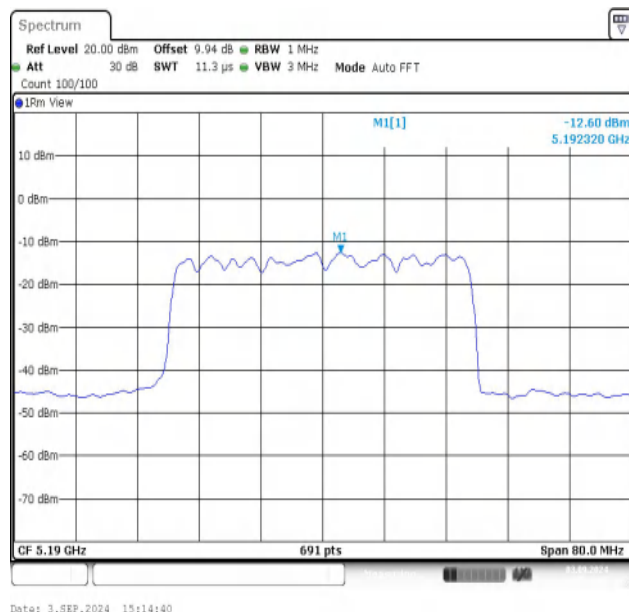
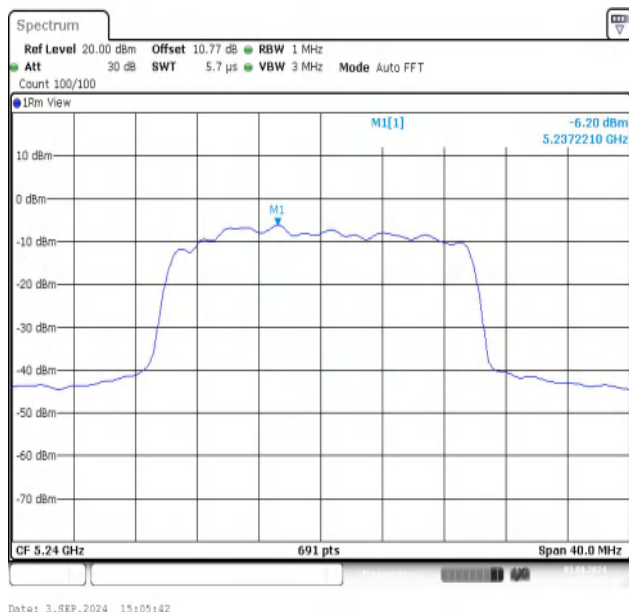
11AC40SISO-Ant1-5230-PASS

11AC80SISO-Ant1-5210-PASS



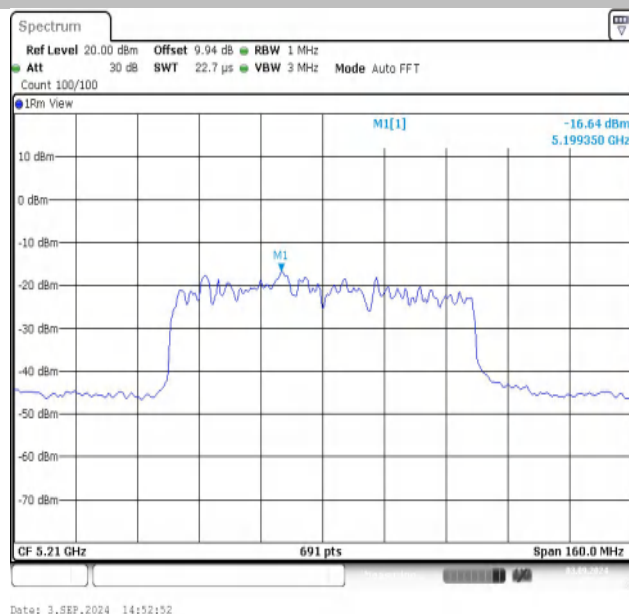
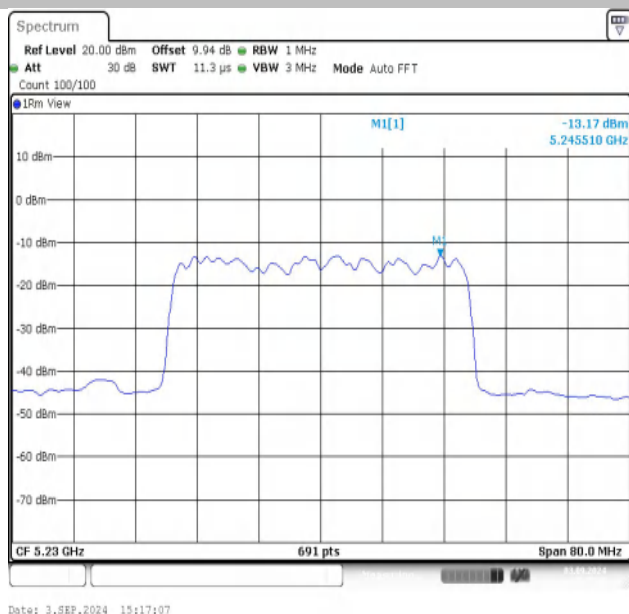
11AX20SISO-Ant1-5180-PASS

11AX20SISO-Ant1-5200-PASS



11AX20SISO-Ant1-5240-PASS

11AX40SISO-Ant1-5190-PASS



11AX40SISO-Ant1-5230-PASS

11AX80SISO-Ant1-5210-PASS



Appendix E: Frequency Stability

Test Result

Voltage								
Test Mode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5180	NV	NT	-40000.00	-7.722008	20	PASS
11A	Ant1	5180	LV	NT	-20000.00	-3.861004	20	PASS
11A	Ant1	5180	HV	NT	-20000.00	-3.861004	20	PASS
11A	Ant1	5200	NV	NT	-40000.00	-7.692308	20	PASS
11A	Ant1	5200	LV	NT	-40000.00	-7.692308	20	PASS
11A	Ant1	5200	HV	NT	-40000.00	-7.692308	20	PASS
11A	Ant1	5240	NV	NT	-60000.00	-11.450382	20	PASS
11A	Ant1	5240	LV	NT	-40000.00	-7.633588	20	PASS
11A	Ant1	5240	HV	NT	-40000.00	-7.633588	20	PASS



Temperature								
Test Mode	Antenna	Freq(MHz)	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5180	NV	-30	-20000.00	-3.861004	20	PASS
11A	Ant1	5180	NV	-20	-40000.00	-7.722008	20	PASS
11A	Ant1	5180	NV	-10	-40000.00	-7.722008	20	PASS
11A	Ant1	5180	NV	0	-20000.00	-3.861004	20	PASS
11A	Ant1	5180	NV	10	-20000.00	-3.861004	20	PASS
11A	Ant1	5180	NV	20	-20000.00	-3.861004	20	PASS
11A	Ant1	5180	NV	30	-40000.00	-7.722008	20	PASS
11A	Ant1	5180	NV	40	-80000.00	-15.444015	20	PASS
11A	Ant1	5180	NV	50	-40000.00	-7.722008	20	PASS
11A	Ant1	5200	NV	-30	0.00	0.000000	20	PASS
11A	Ant1	5200	NV	-20	-40000.00	-7.692308	20	PASS
11A	Ant1	5200	NV	-10	-40000.00	-7.692308	20	PASS
11A	Ant1	5200	NV	0	-40000.00	-7.692308	20	PASS
11A	Ant1	5200	NV	10	-40000.00	-7.692308	20	PASS
11A	Ant1	5200	NV	20	-20000.00	-3.846154	20	PASS
11A	Ant1	5200	NV	30	-20000.00	-3.846154	20	PASS
11A	Ant1	5200	NV	40	-40000.00	-7.692308	20	PASS
11A	Ant1	5200	NV	50	-60000.00	-11.538462	20	PASS
11A	Ant1	5240	NV	-30	-20000.00	-3.816794	20	PASS
11A	Ant1	5240	NV	-20	-40000.00	-7.633588	20	PASS
11A	Ant1	5240	NV	-10	-20000.00	-3.816794	20	PASS
11A	Ant1	5240	NV	0	-40000.00	-7.633588	20	PASS
11A	Ant1	5240	NV	10	-20000.00	-3.816794	20	PASS
11A	Ant1	5240	NV	20	-20000.00	-3.816794	20	PASS
11A	Ant1	5240	NV	30	-40000.00	-7.633588	20	PASS
11A	Ant1	5240	NV	40	-20000.00	-3.816794	20	PASS
11A	Ant1	5240	NV	50	-40000.00	-7.633588	20	PASS

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