

Appendix for NB-IOT Band 2

Product Name: Remote Street Lighting Controller

Model No: AGIL LCU 302

Appendix A: Average Power Output Data

Test Result

Band	OpMode	SCS	BW	Modulation	Channel	Tones	Conducted POWER(dBm)	Verdict
Band 2	Stand-Al one	3.75kHz	NaN	BPSK	18601	1@0	20.83	PASS
Band 2	Stand-Al one	3.75kHz	NaN	BPSK	18601	1@47	20.79	PASS
Band 2	Stand-Al one	3.75kHz	NaN	BPSK	18876	1@0	20.83	PASS
Band 2	Stand-Al one	3.75kHz	NaN	BPSK	18876	1@47	20.67	PASS
Band 2	Stand-Al one	3.75kHz	NaN	BPSK	19199	1@0	20.49	PASS
Band 2	Stand-Al one	3.75kHz	NaN	BPSK	19199	1@47	20.37	PASS
Band 2	Stand-Al one	3.75kHz	NaN	QPSK	18601	1@0	20.96	PASS
Band 2	Stand-Al one	3.75kHz	NaN	QPSK	18601	1@47	20.84	PASS
Band 2	Stand-Al one	3.75kHz	NaN	QPSK	18876	1@0	20.82	PASS
Band 2	Stand-Al one	3.75kHz	NaN	QPSK	18876	1@47	20.74	PASS
Band 2	Stand-Al one	3.75kHz	NaN	QPSK	19199	1@0	20.50	PASS
Band 2	Stand-Al one	3.75kHz	NaN	QPSK	19199	1@47	20.44	PASS
Band 2	Stand-Al one	15kHz	NaN	BPSK	18601	1@0	21.00	PASS
Band 2	Stand-Al one	15kHz	NaN	BPSK	18601	1@11	20.81	PASS
Band 2	Stand-Al one	15kHz	NaN	BPSK	18876	1@0	20.88	PASS
Band 2	Stand-Al one	15kHz	NaN	BPSK	18876	1@11	20.88	PASS
Band 2	Stand-Al one	15kHz	NaN	BPSK	19199	1@0	20.58	PASS

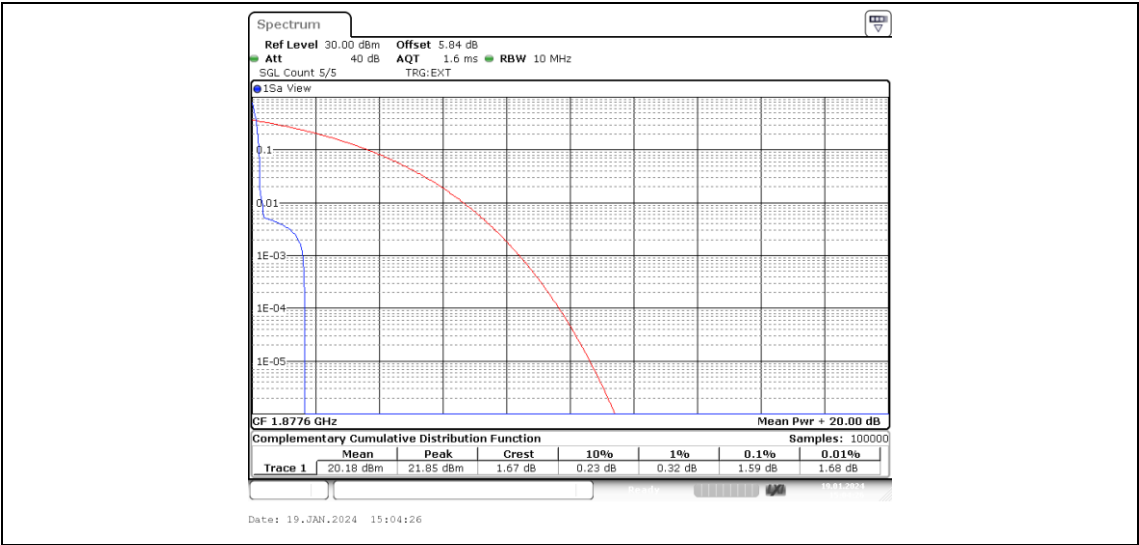
Band 2	Stand-Al one	15kHz	NaN	BPSK	19199	1@11	20.48	PASS
Band 2	Stand-Al one	15kHz	NaN	QPSK	18601	1@0	21.13	PASS
Band 2	Stand-Al one	15kHz	NaN	QPSK	18601	1@11	20.98	PASS
Band 2	Stand-Al one	15kHz	NaN	QPSK	18601	3@3	20.84	PASS
Band 2	Stand-Al one	15kHz	NaN	QPSK	18876	1@0	21.01	PASS
Band 2	Stand-Al one	15kHz	NaN	QPSK	18876	1@11	20.99	PASS
Band 2	Stand-Al one	15kHz	NaN	QPSK	18876	3@3	20.85	PASS
Band 2	Stand-Al one	15kHz	NaN	QPSK	19199	1@0	20.73	PASS
Band 2	Stand-Al one	15kHz	NaN	QPSK	19199	1@11	20.72	PASS
Band 2	Stand-Al one	15kHz	NaN	QPSK	19199	3@3	20.60	PASS

Appendix B: Peak-to-Average Ratio(CCDF)

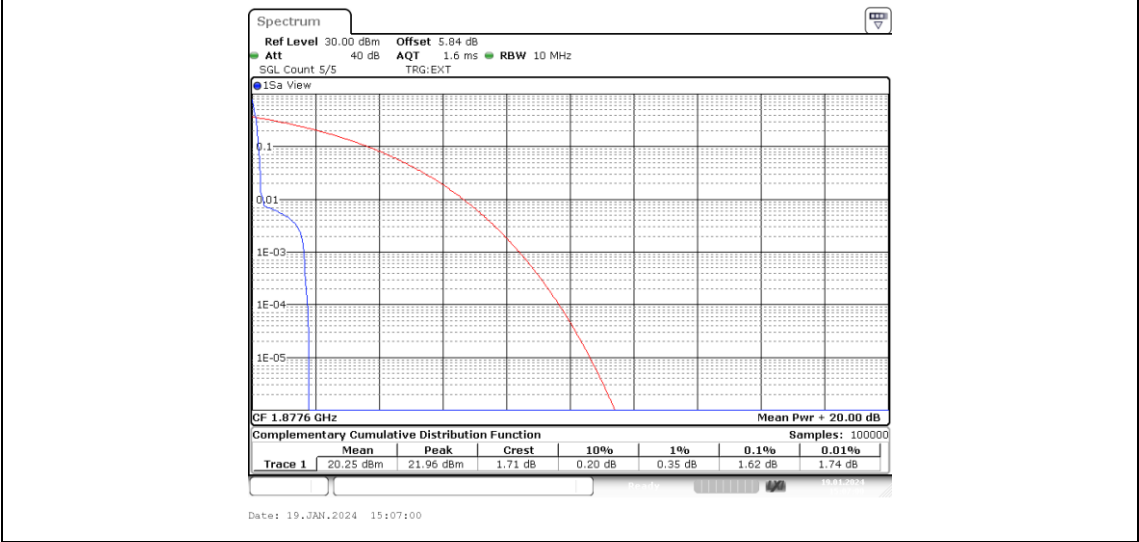
Test Result

Band	OpMode	SCS	BW	Modu	Channel	Tones	Result (dBm)	Limit (dBm)	Verdict
Band2	Stand-Alone	3.75kHz	NaN	BPSK	18876	1@0	1.59	<=13	PASS
Band2	Stand-Alone	3.75kHz	NaN	BPSK	18876	1@47	1.62	<=13	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	18876	1@0	0.55	<=13	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	18876	1@47	1.3	<=13	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18876	1@0	1.36	<=13	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18876	1@11	1.39	<=13	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	18876	1@0	1.36	<=13	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	18876	1@11	1.39	<=13	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	18876	3@3	3.1	<=13	PASS

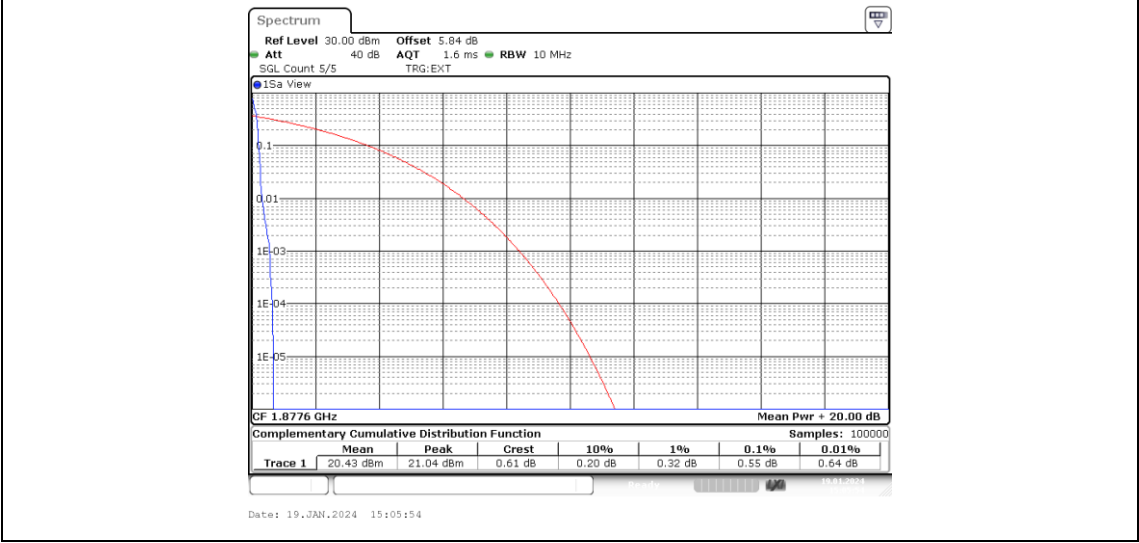
Test Graphs

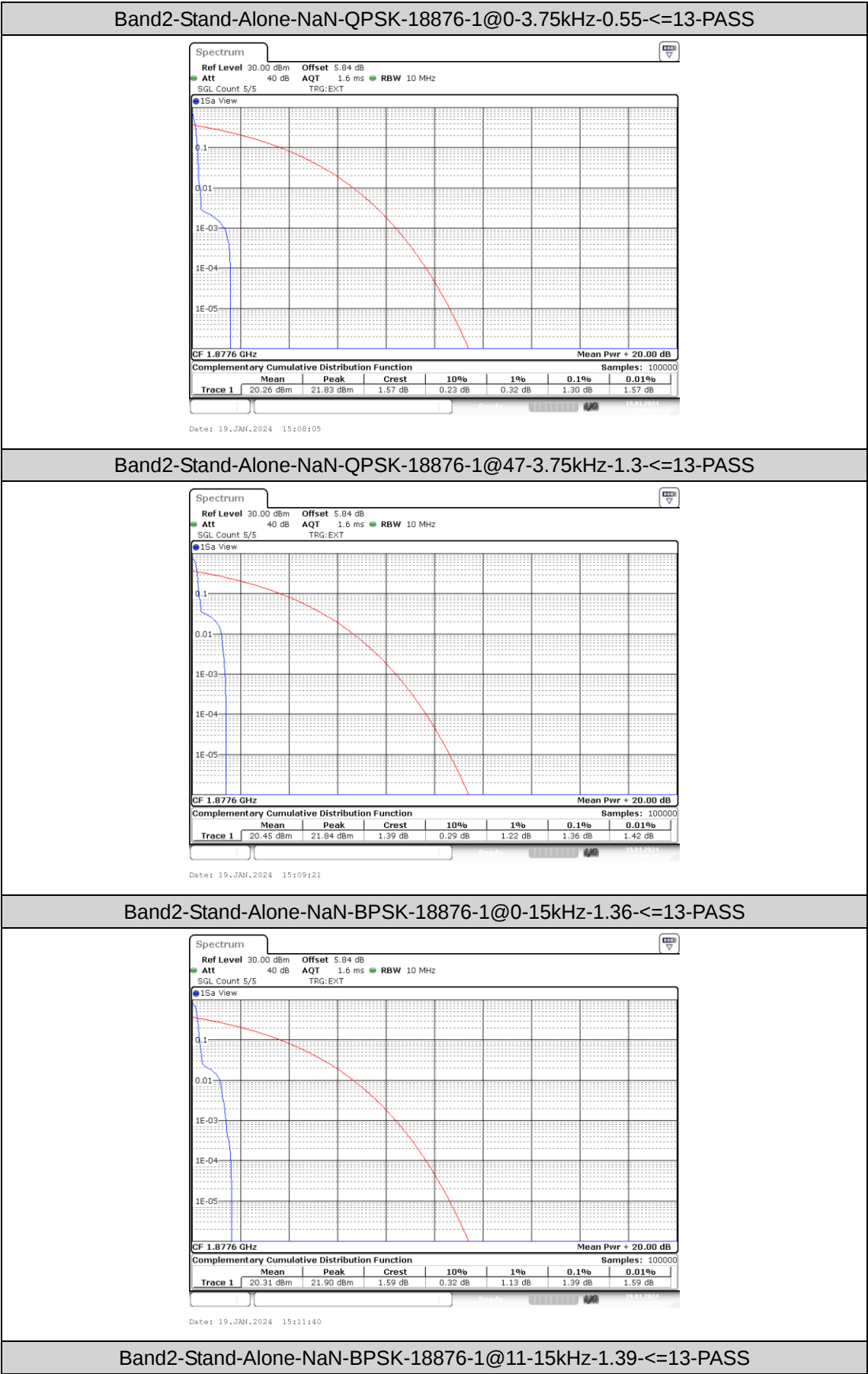


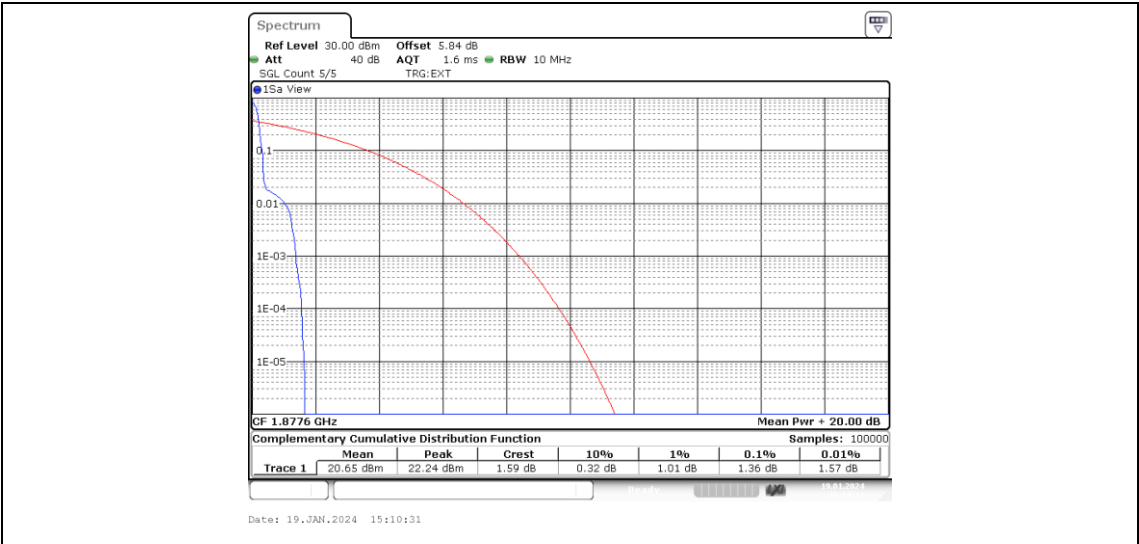
Band2-Stand-Alone-NaN-BPSK-18876-1@0-3.75kHz-1.59-<=13-PASS



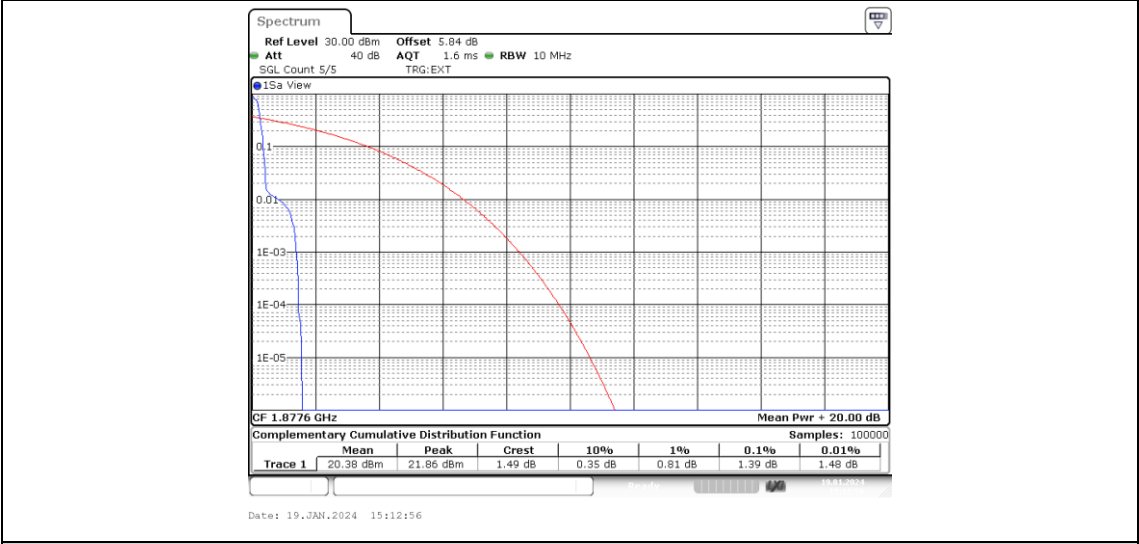
Band2-Stand-Alone-NaN-BPSK-18876-1@47-3.75kHz-1.62-<=13-PASS



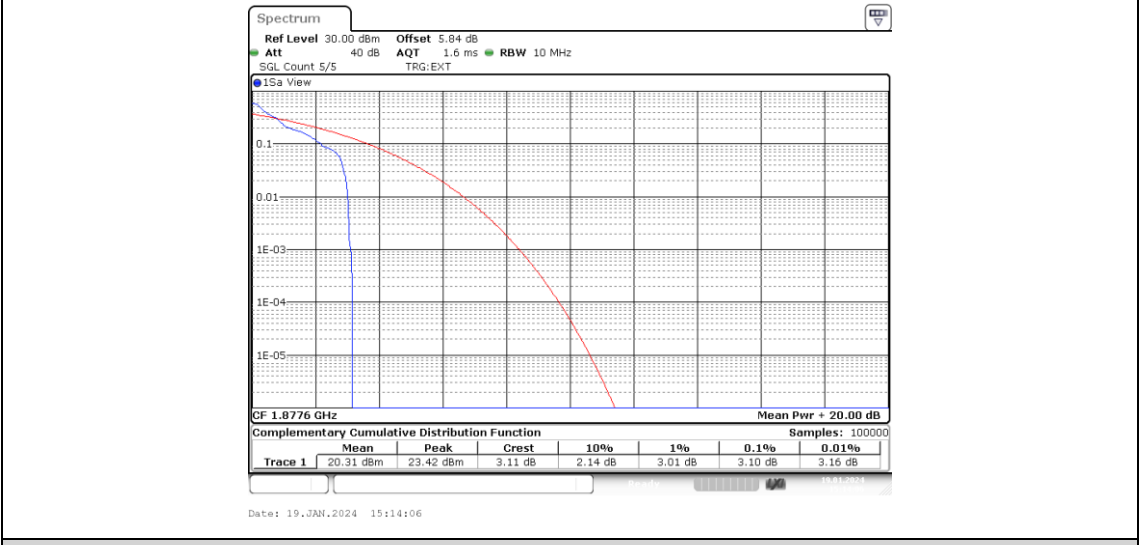




Band2-Stand-Alone-NaN-QPSK-18876-1@0-15kHz-1.36-<=13-PASS



Band2-Stand-Alone-NaN-QPSK-18876-1@11-15kHz-1.39-<=13-PASS



Band2-Stand-Alone-NaN-QPSK-18876-3@3-15kHz-3.1-<=13-PASS

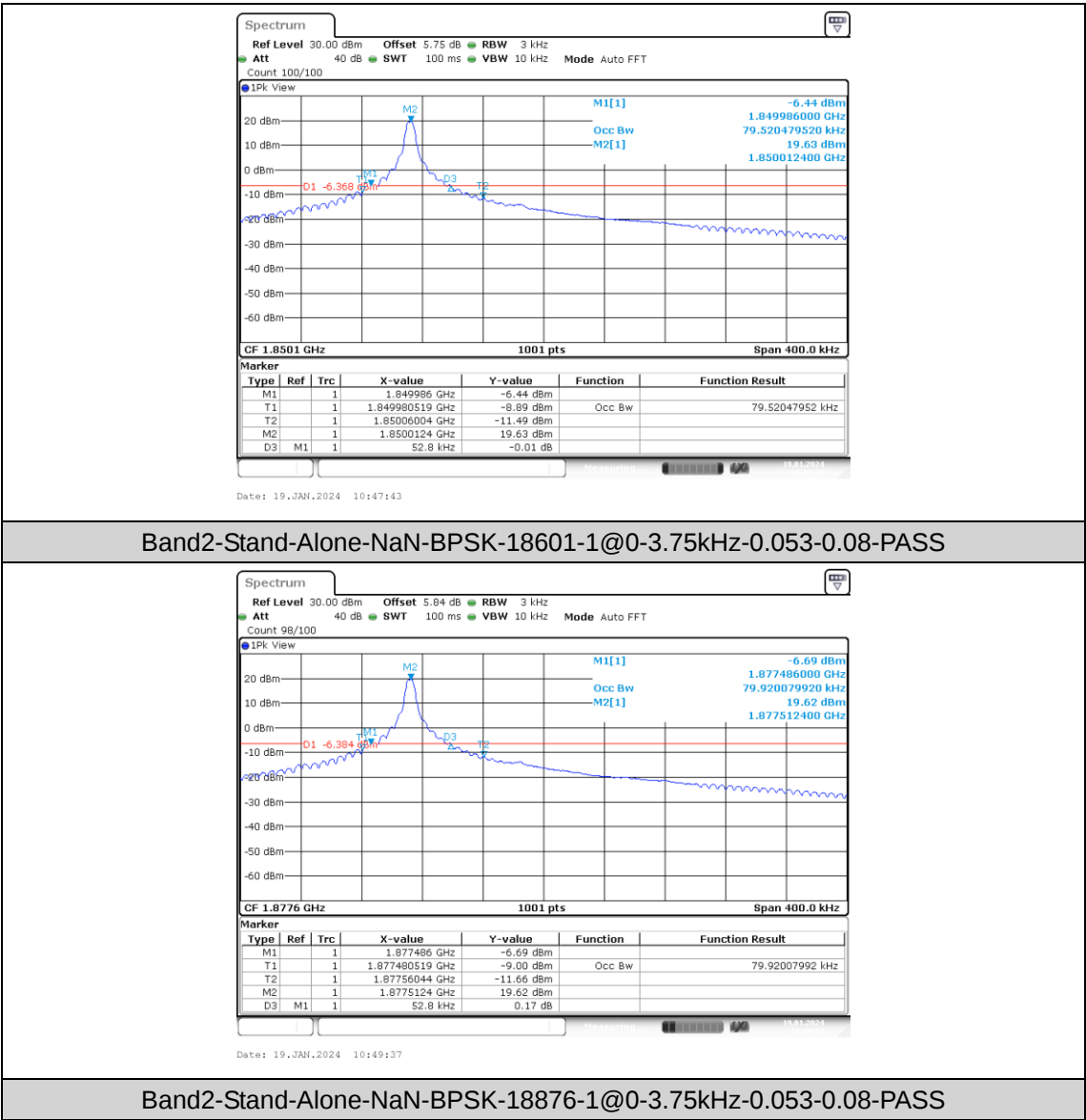
Appendix C: Emission Bandwidth

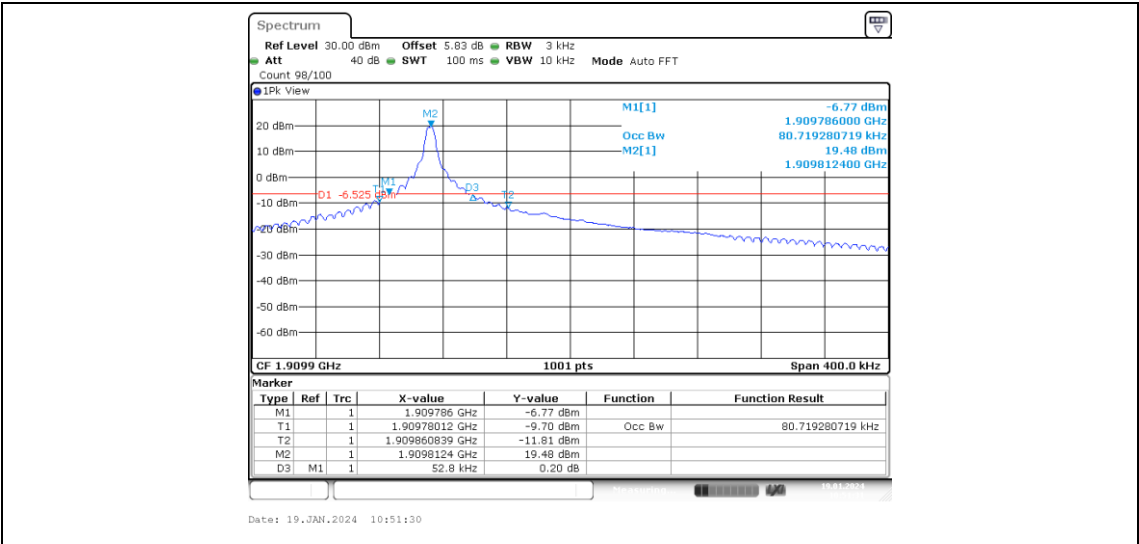
Test Result

Band	OpMode	SCS	BW	Modu	Channel	Tones	OBW(MHz)	EBW(MHz)	Verdict
Band2	Stand-Alone	3.75kHz	NaN	BPSK	18601	1@0	0.08	0.053	PASS
Band2	Stand-Alone	3.75kHz	NaN	BPSK	18876	1@0	0.08	0.053	PASS
Band2	Stand-Alone	3.75kHz	NaN	BPSK	19199	1@0	0.081	0.053	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	18601	1@0	0.095	0.055	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	18876	1@0	0.095	0.055	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	19199	1@0	0.097	0.055	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18601	1@0	0.134	0.108	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18601	12@0	0.185	0.253	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18876	1@0	0.134	0.114	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18876	12@0	0.184	0.251	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	19199	1@0	0.135	0.107	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	19199	12@0	0.185	0.251	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	18601	1@0	0.133	0.119	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	18601	12@0	0.185	0.252	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	18876	1@0	0.133	0.119	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	18876	12@0	0.185	0.251	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	19199	1@0	0.132	0.119	PASS

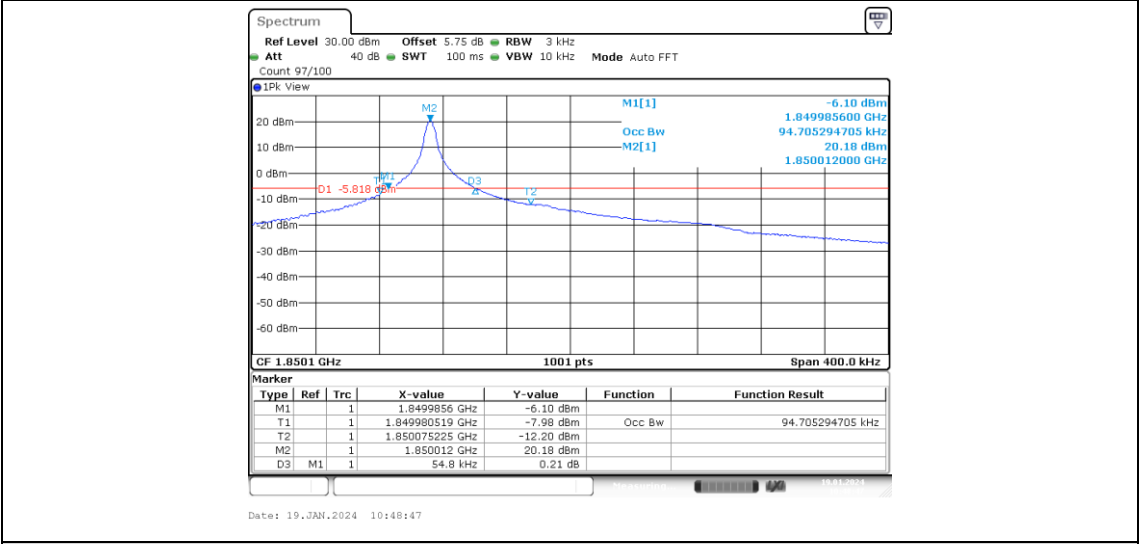
Band2	Stand-Al one	15kHz	NaN	QPSK	19199	12@0	0.185	0.251	PASS
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Test Graphs

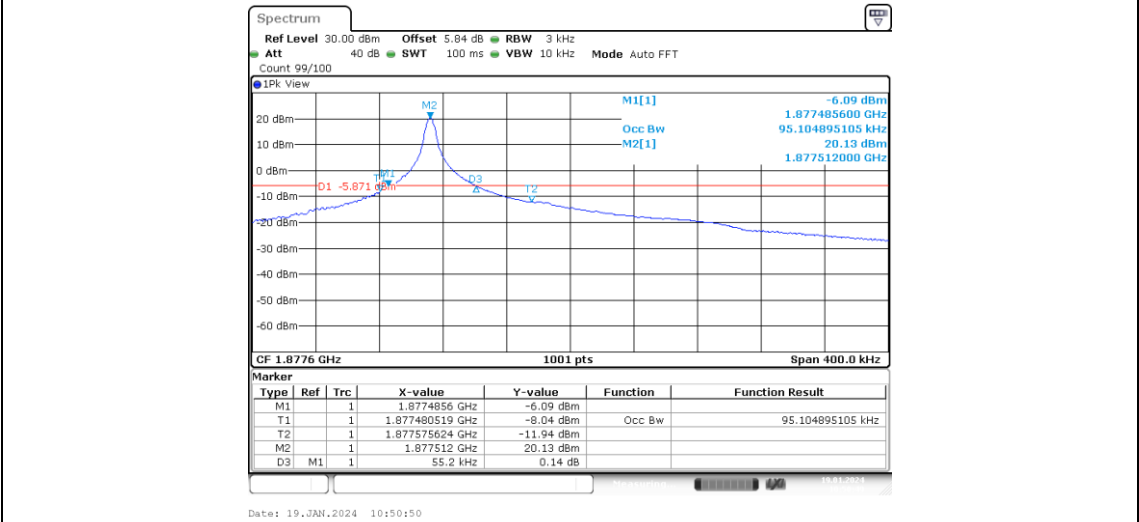




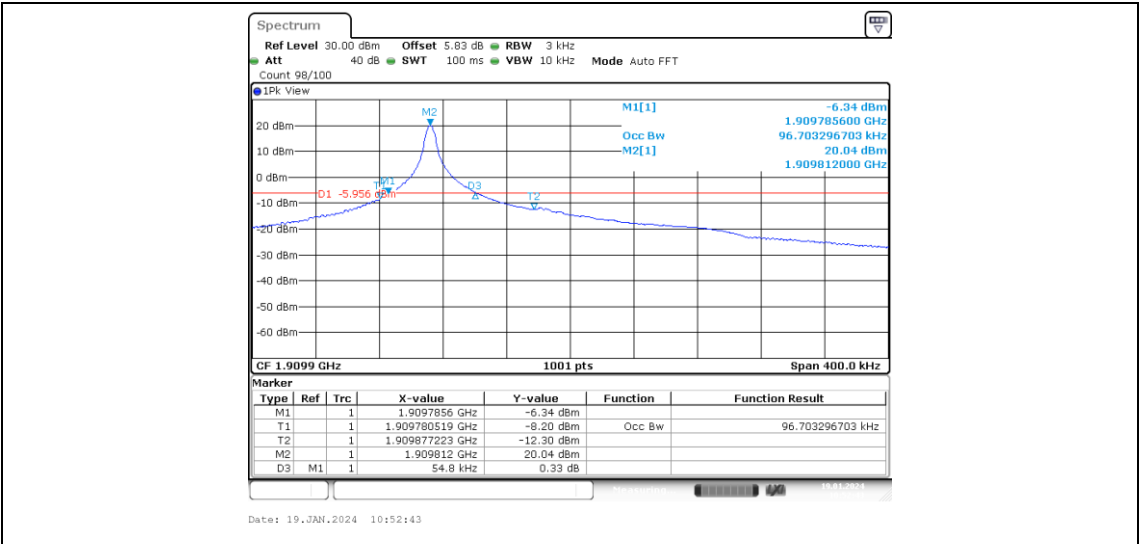
Band2-Stand-Alone-NaN-BPSK-19199-1@0-3.75kHz-0.053-0.081-PASS



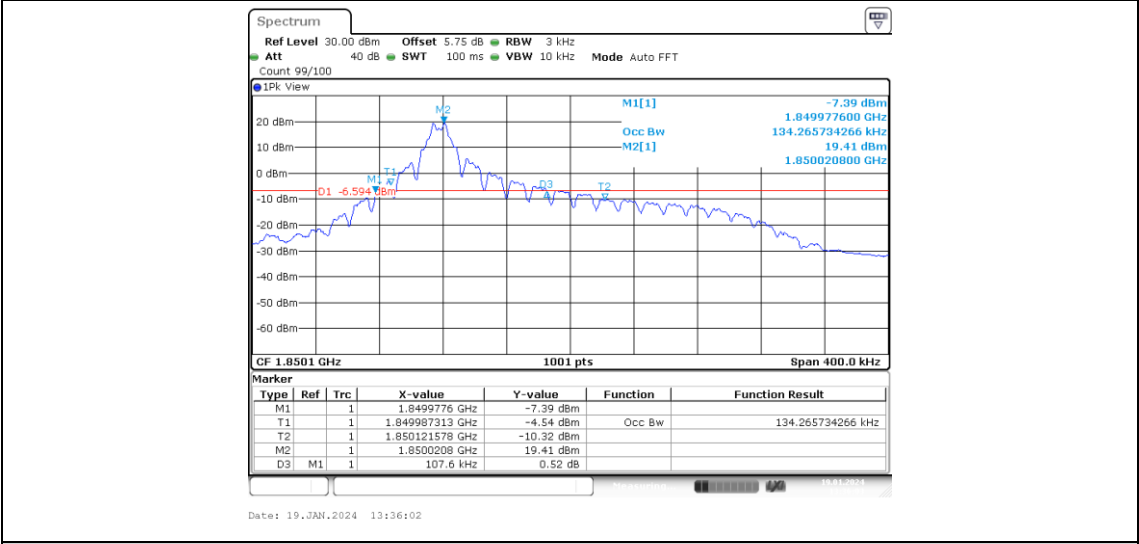
Band2-Stand-Alone-NaN-QPSK-18601-1@0-3.75kHz-0.055-0.095-PASS



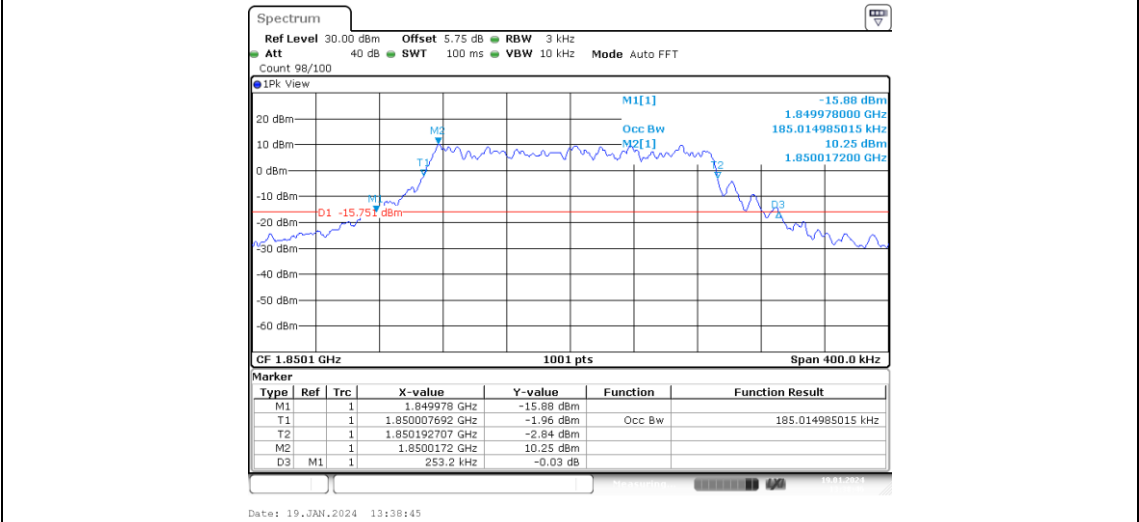
Band2-Stand-Alone-NaN-QPSK-18876-1@0-3.75kHz-0.055-0.095-PASS



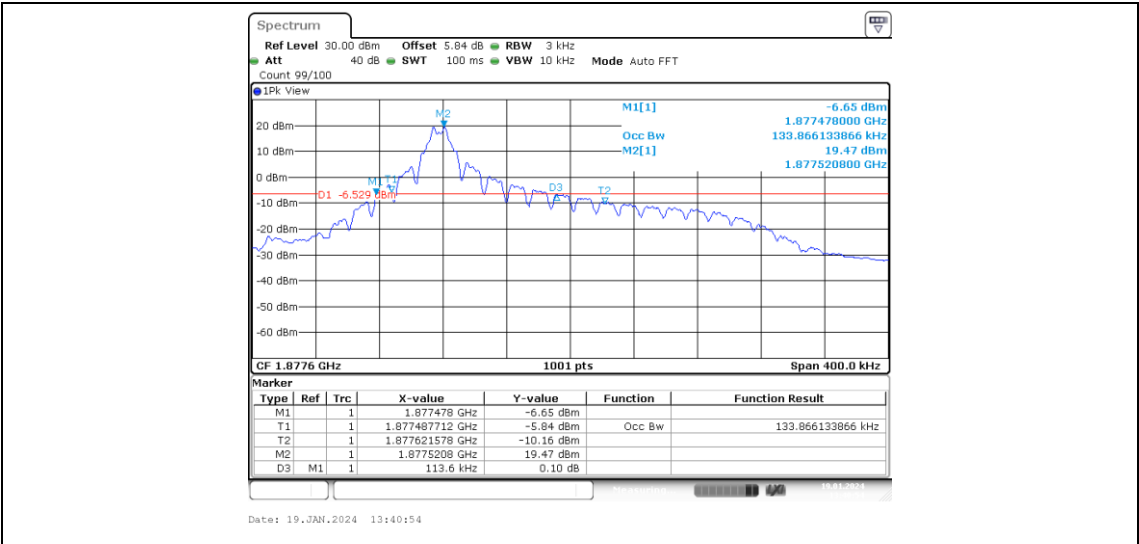
Band2-Stand-Alone-NaN-QPSK-19199-1@0-3.75kHz-0.055-0.097-PASS



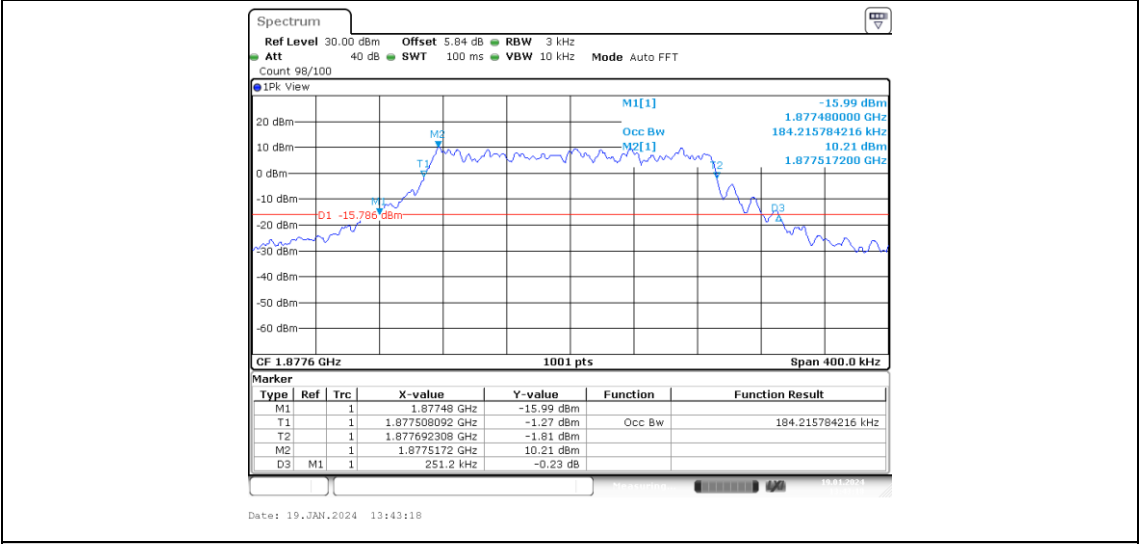
Band2-Stand-Alone-NaN-BPSK-18601-1@0-15kHz-0.108-0.134-PASS



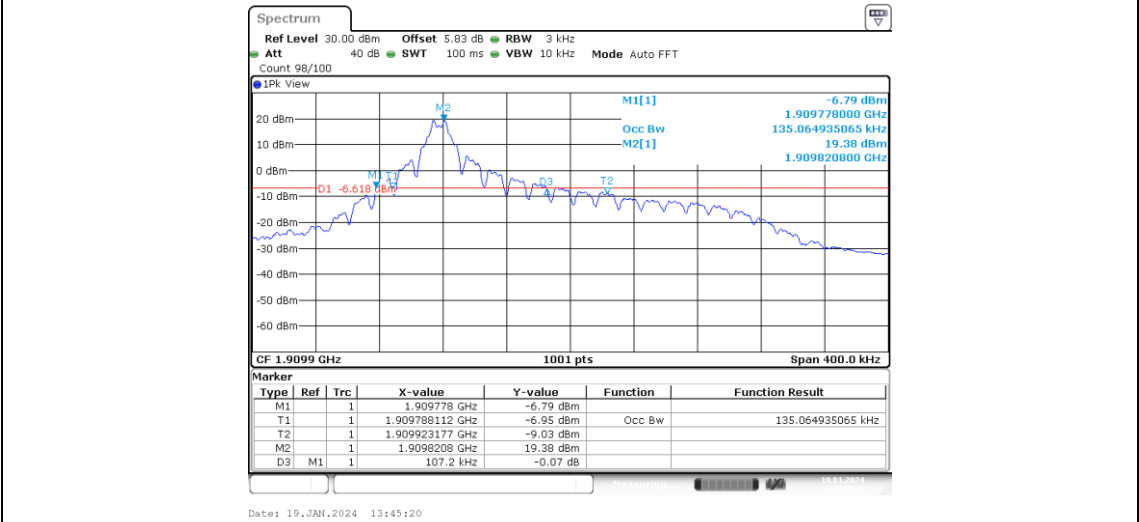
Band2-Stand-Alone-NaN-BPSK-18601-12@0-15kHz-0.253-0.185-PASS



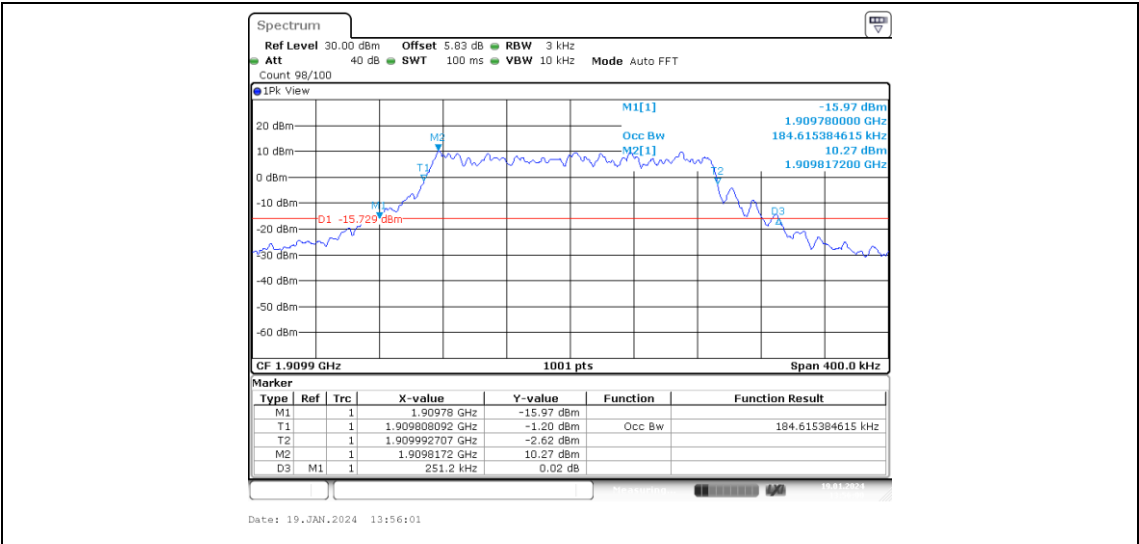
Band2-Stand-Alone-NaN-BPSK-18876-1@0-15kHz-0.114-0.134-PASS



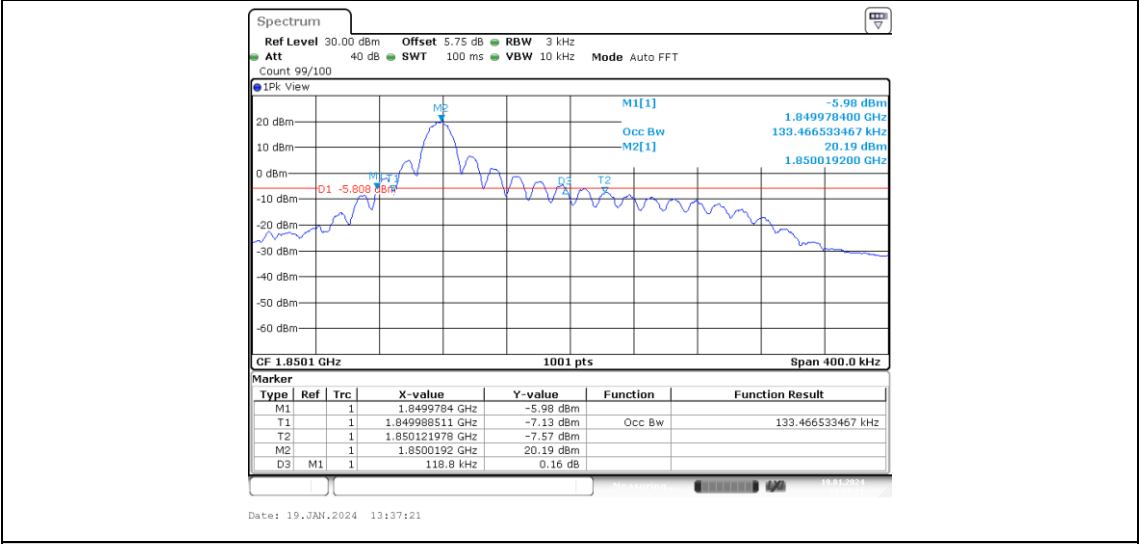
Band2-Stand-Alone-NaN-BPSK-18876-12@0-15kHz-0.251-0.184-PASS



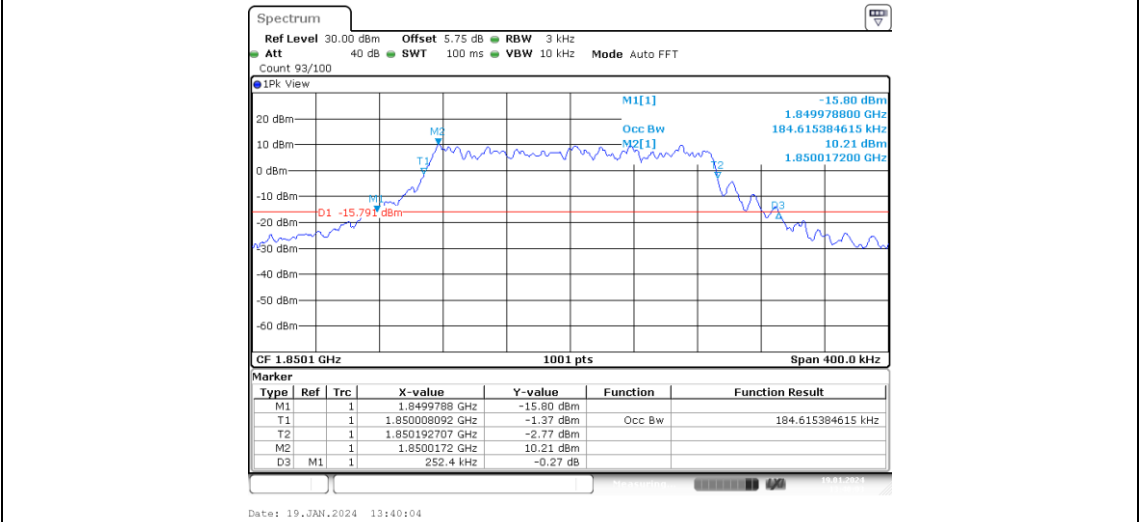
Band2-Stand-Alone-NaN-BPSK-19199-1@0-15kHz-0.107-0.135-PASS



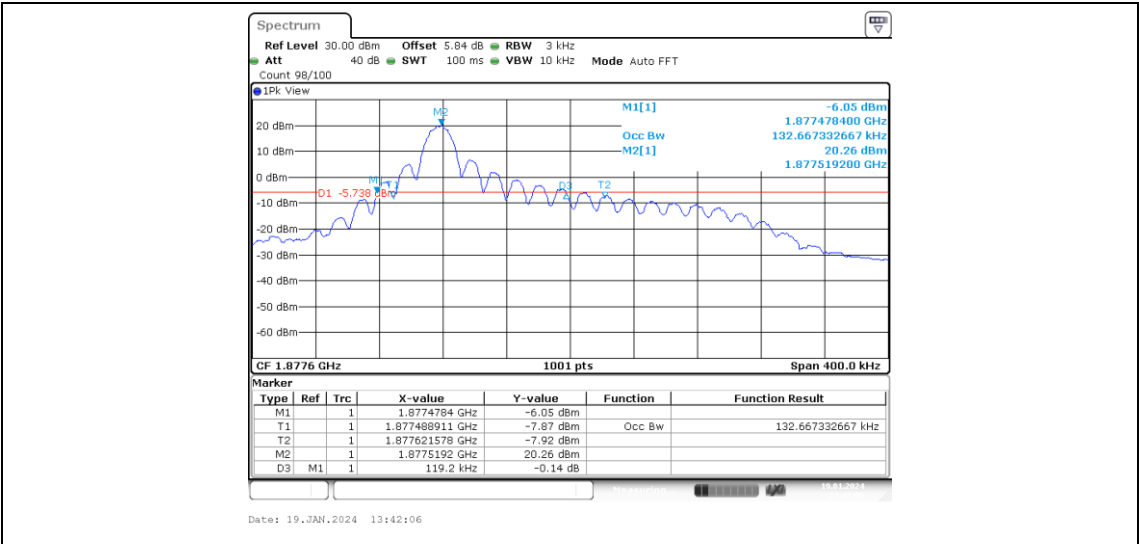
Band2-Stand-Alone-NaN-BPSK-19199-12@0-15kHz-0.251-0.185-PASS



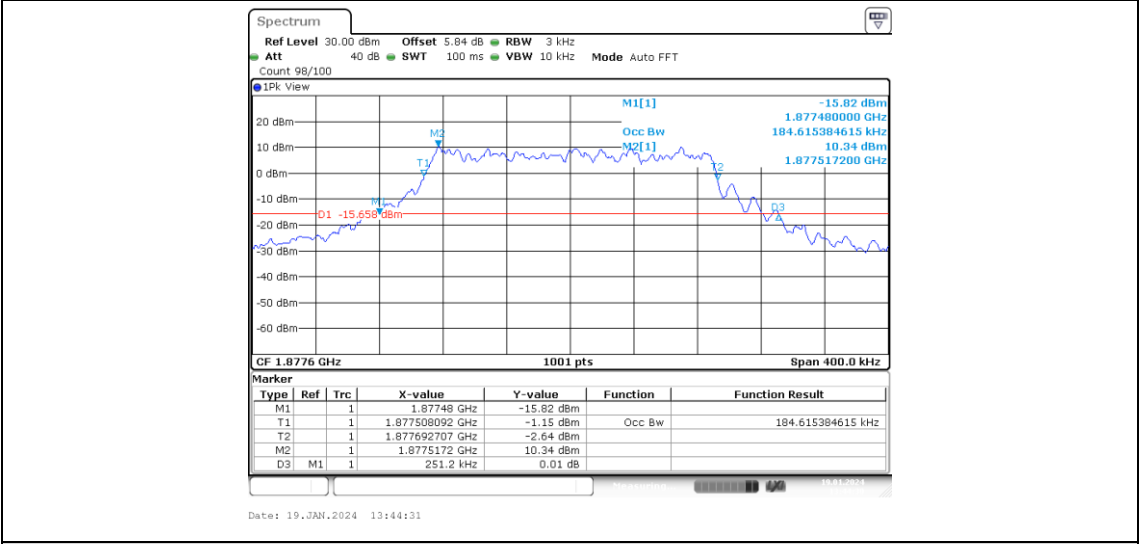
Band2-Stand-Alone-NaN-QPSK-18601-1@0-15kHz-0.119-0.133-PASS



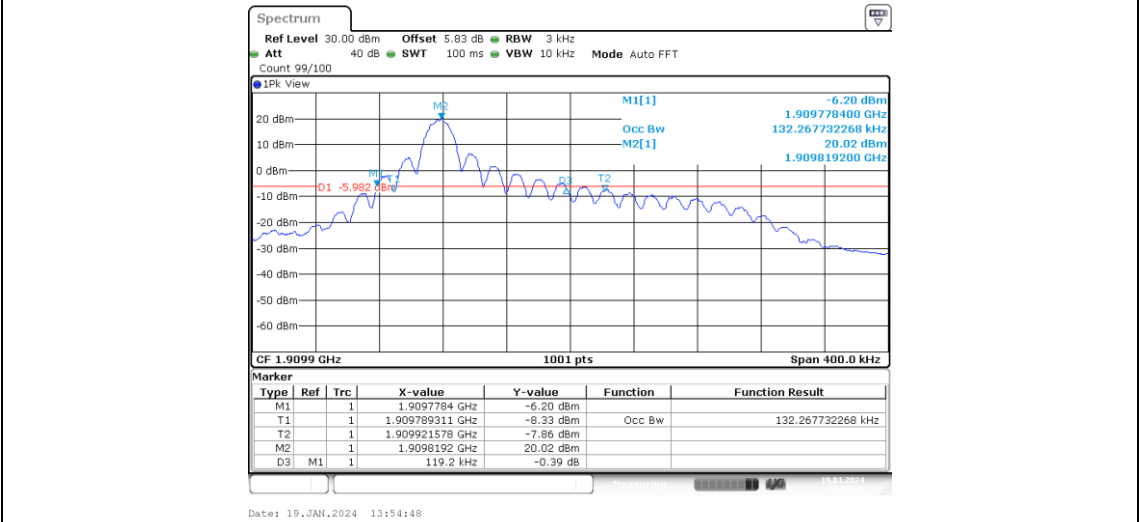
Band2-Stand-Alone-NaN-QPSK-18601-12@0-15kHz-0.252-0.185-PASS



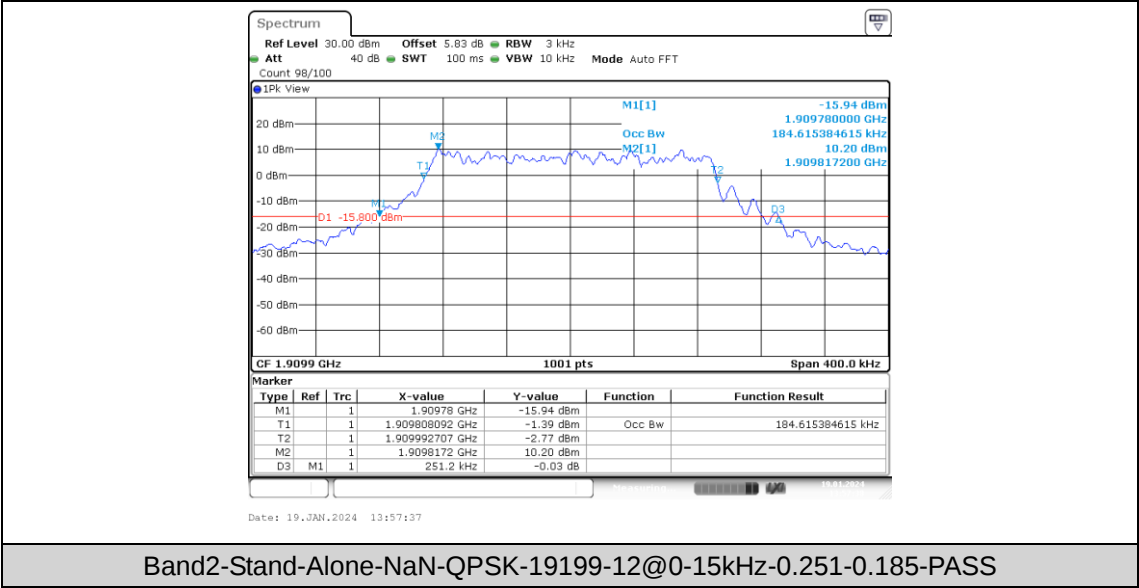
Band2-Stand-Alone-NaN-QPSK-18876-1@0-15kHz-0.119-0.133-PASS



Band2-Stand-Alone-NaN-QPSK-18876-12@0-15kHz-0.251-0.185-PASS



Band2-Stand-Alone-NaN-QPSK-19199-1@0-15kHz-0.119-0.132-PASS



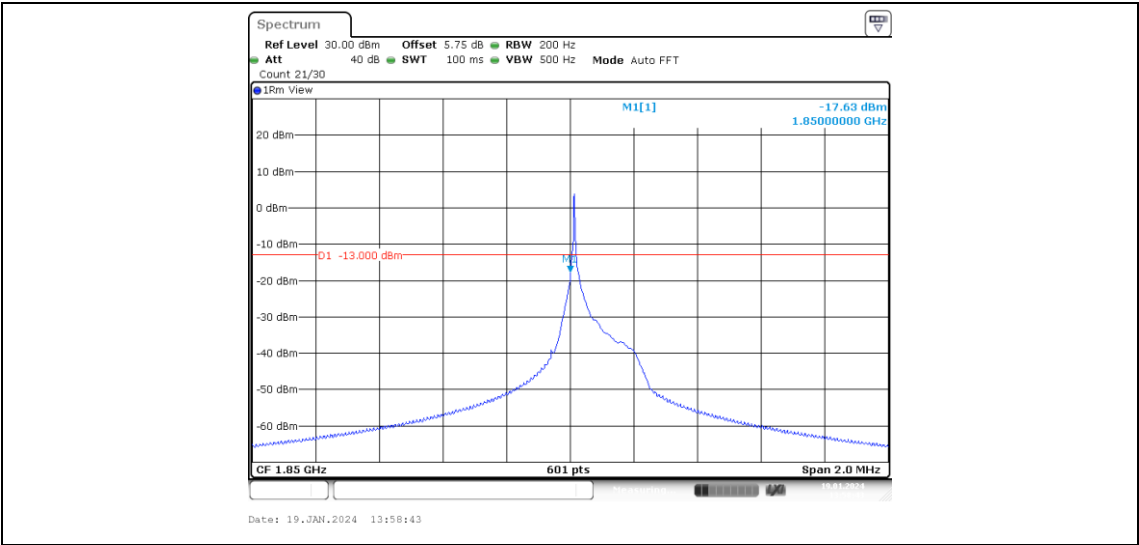
Appendix D: Band Edge

Test Result

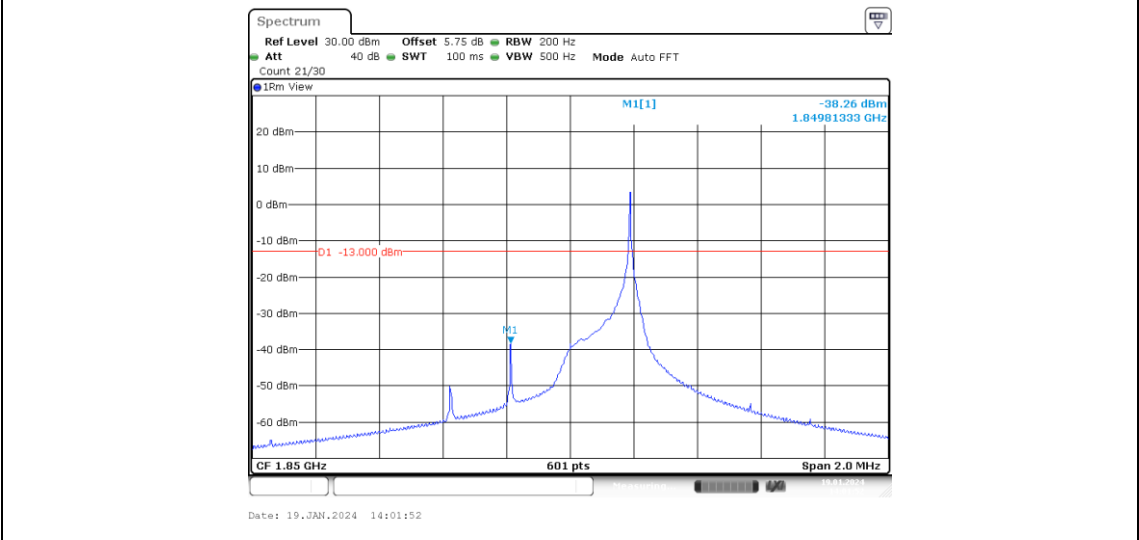
Band	OpMode	SCS	BW	Modu	Channel	Tones	Result (dBm)	Verdict
Band2	Stand-Alone	3.75kHz	NaN	BPSK	18601	1@0	-17.63	PASS
Band2	Stand-Alone	3.75kHz	NaN	BPSK	18601	1@47	-38.26	PASS
Band2	Stand-Alone	3.75kHz	NaN	BPSK	19199	1@0	-39.53	PASS
Band2	Stand-Alone	3.75kHz	NaN	BPSK	19199	1@47	-17.97	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	18601	1@0	-19.04	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	18601	1@47	-38.77	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	19199	1@0	-41.23	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	19199	1@47	-18.82	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18601	1@0	-16.63	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18601	1@11	-35.53	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18601	12@0	-27.33	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	19199	1@0	-35.63	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	19199	1@11	-16.76	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	19199	12@0	-20.38	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	18601	1@0	-18.51	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	18601	1@11	-36.83	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	18601	12@0	-27.1	PASS

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Band2	Stand-Alone	15kHz	NaN	QPSK	19199	1@0	-37.0 1	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	19199	1@11	-17.9 9	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	19199	12@0	-21.5 2	PASS

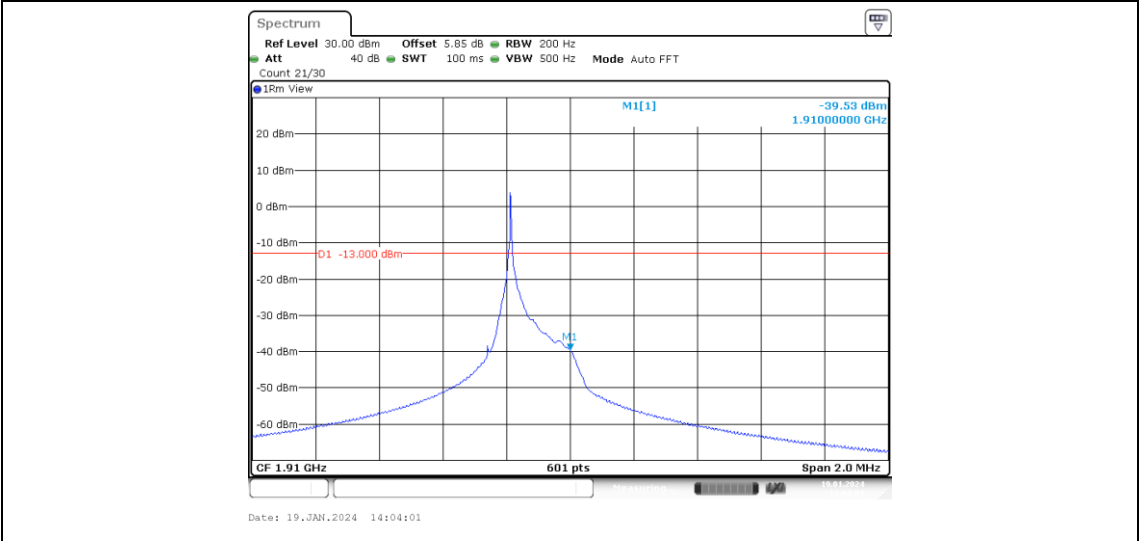
Test Graphs

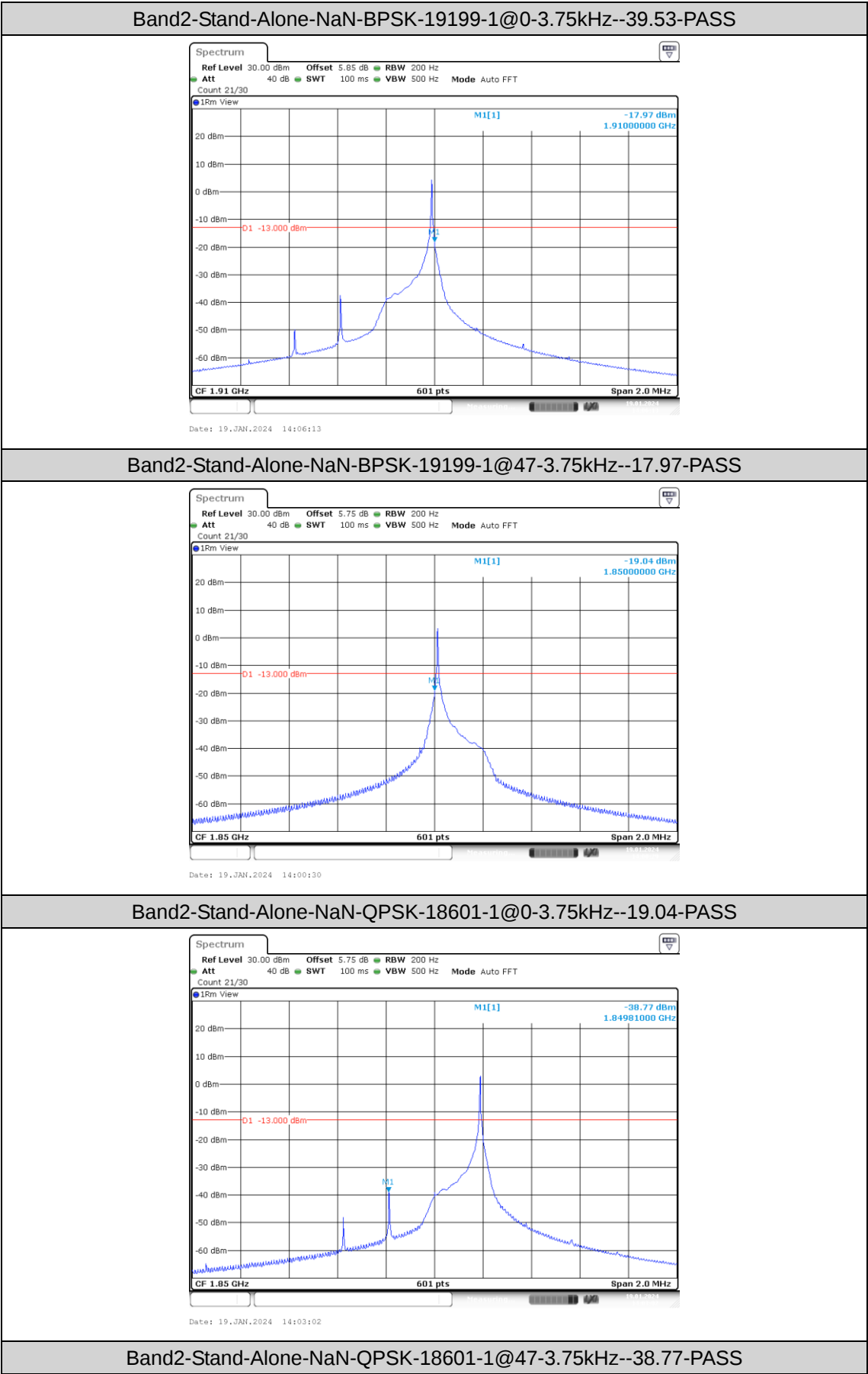


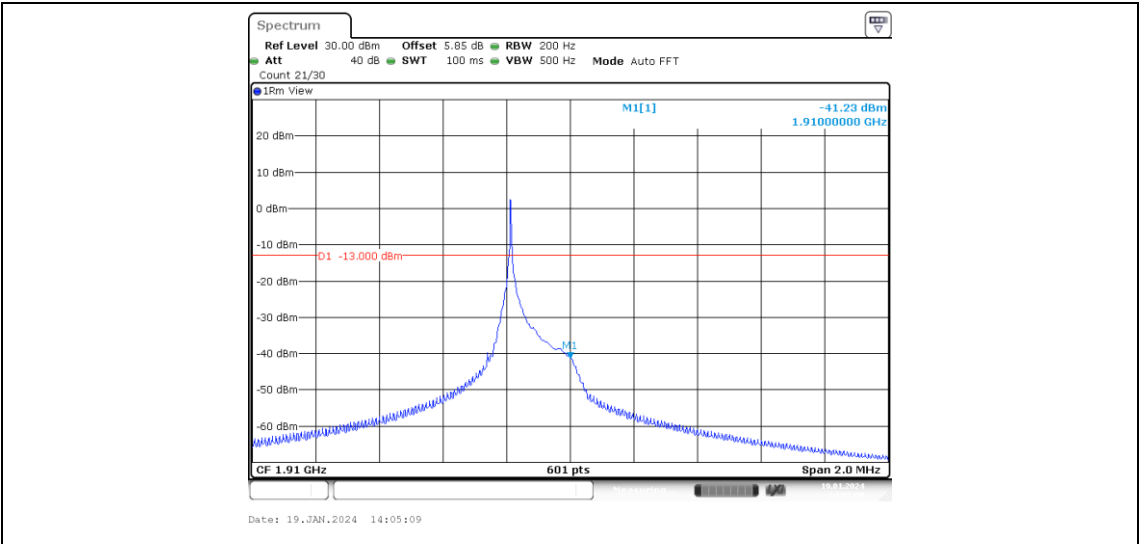
Band2-Stand-Alone-NaN-BPSK-18601-1@0-3.75kHz--17.63-PASS



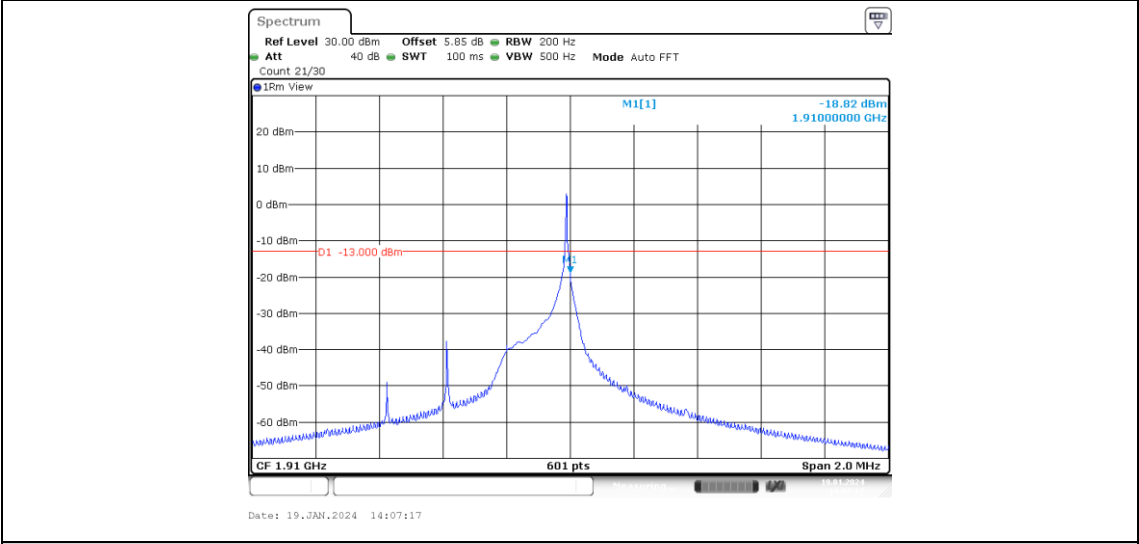
Band2-Stand-Alone-NaN-BPSK-18601-1@47-3.75kHz--38.26-PASS



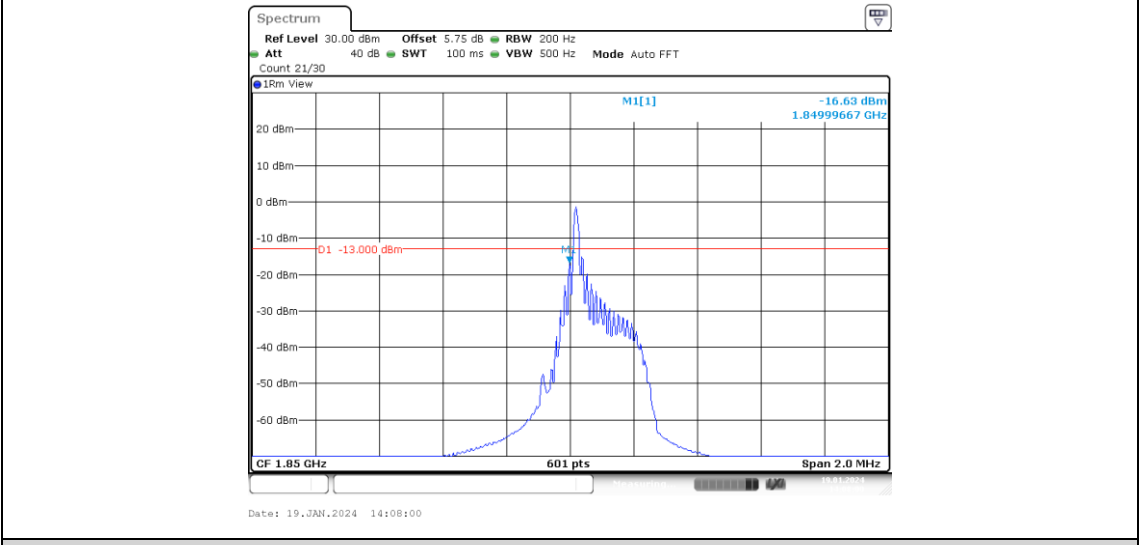




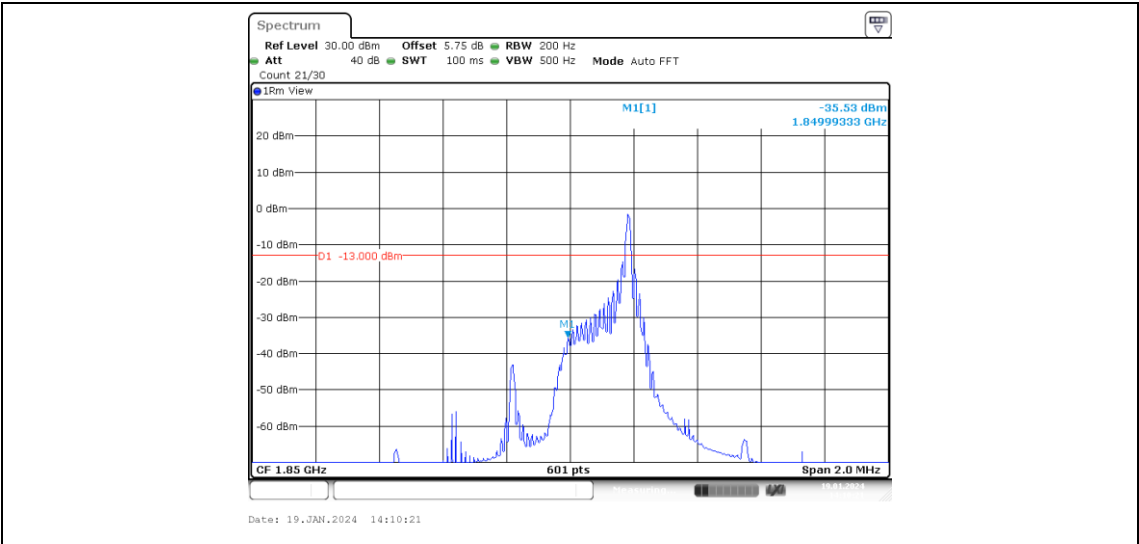
Band2-Stand-Alone-NaN-QPSK-19199-1@0-3.75kHz--41.23-PASS



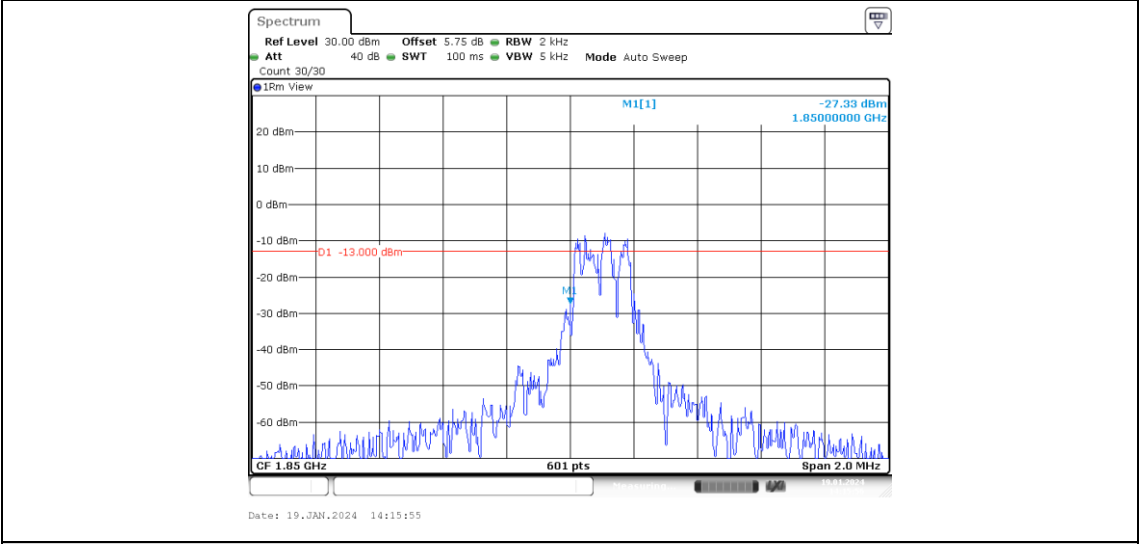
Band2-Stand-Alone-NaN-QPSK-19199-1@47-3.75kHz--18.82-PASS



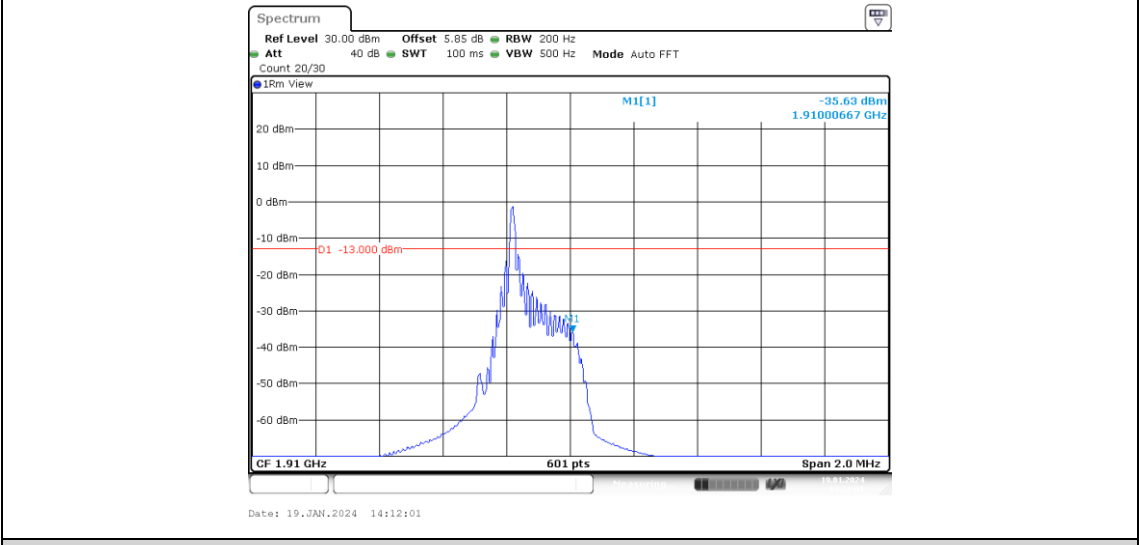
Band2-Stand-Alone-NaN-BPSK-18601-1@0-15kHz--16.63-PASS



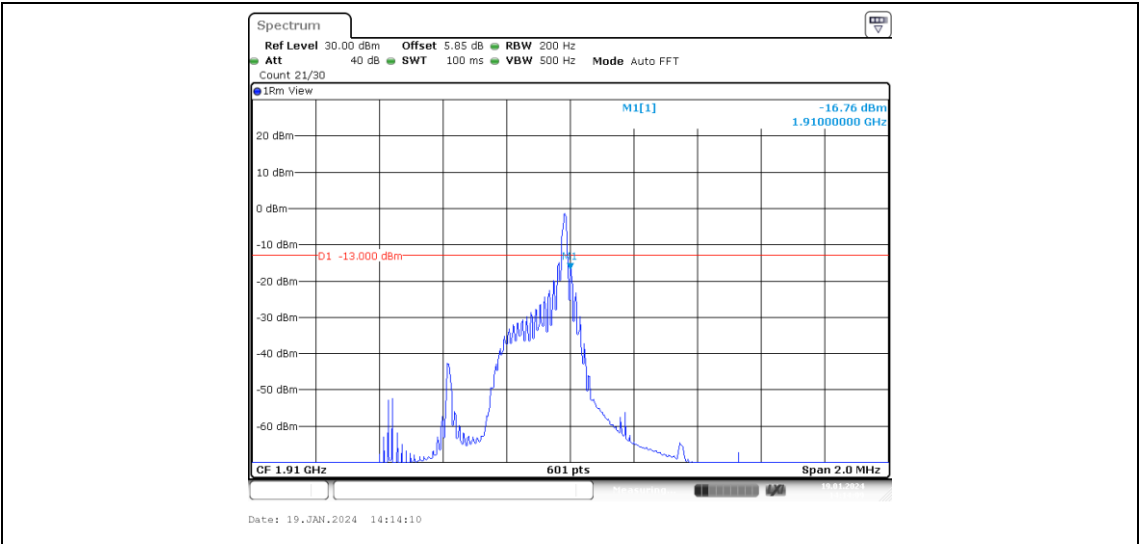
Band2-Stand-Alone-NaN-BPSK-18601-1@11-15kHz--35.53-PASS



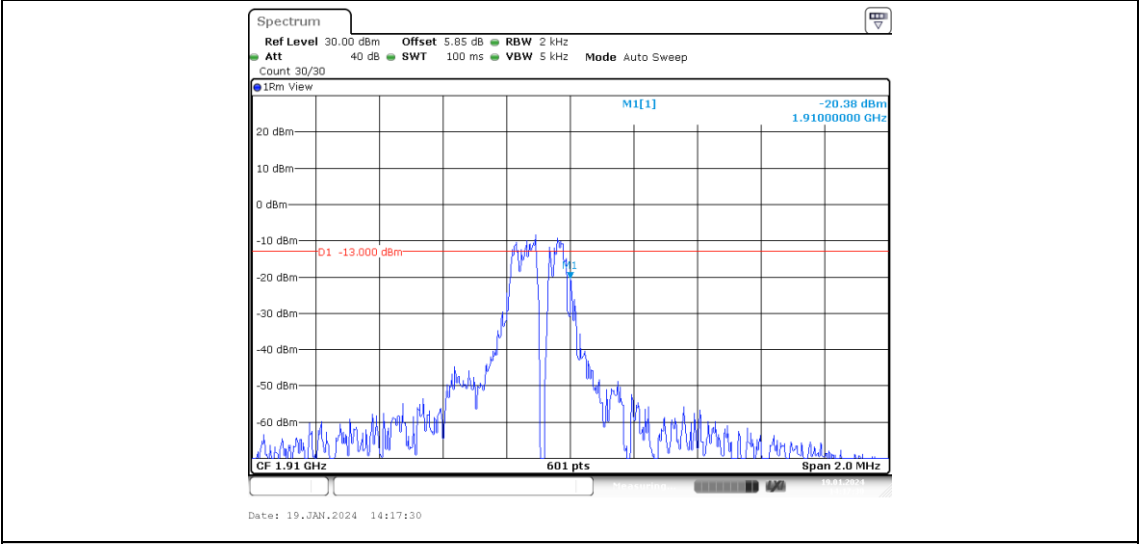
Band2-Stand-Alone-NaN-BPSK-18601-12@0-15kHz--27.33-PASS



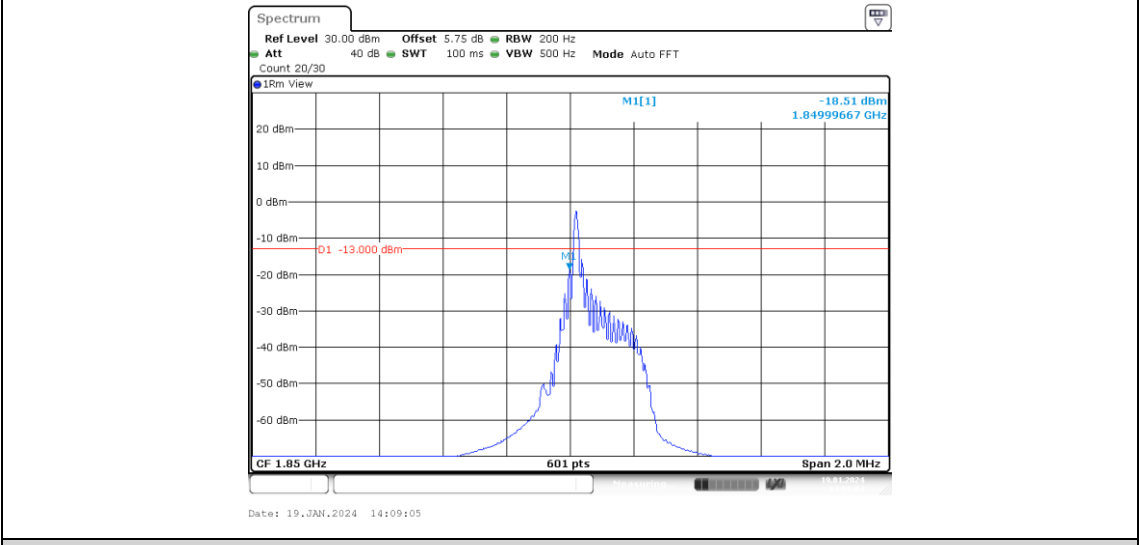
Band2-Stand-Alone-NaN-BPSK-19199-1@0-15kHz--35.63-PASS



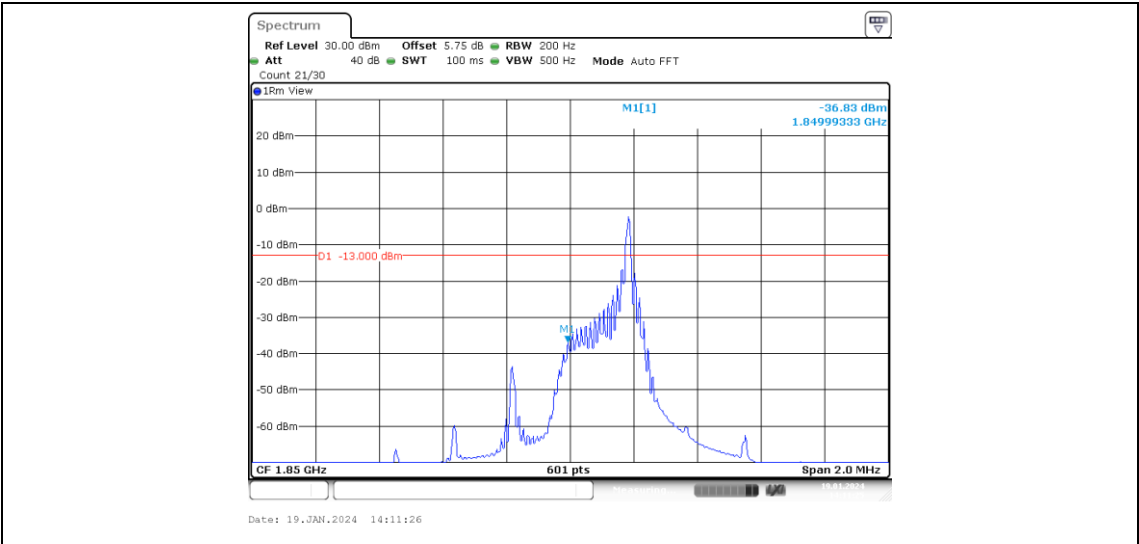
Band2-Stand-Alone-NaN-BPSK-19199-1@11-15kHz--16.76-PASS



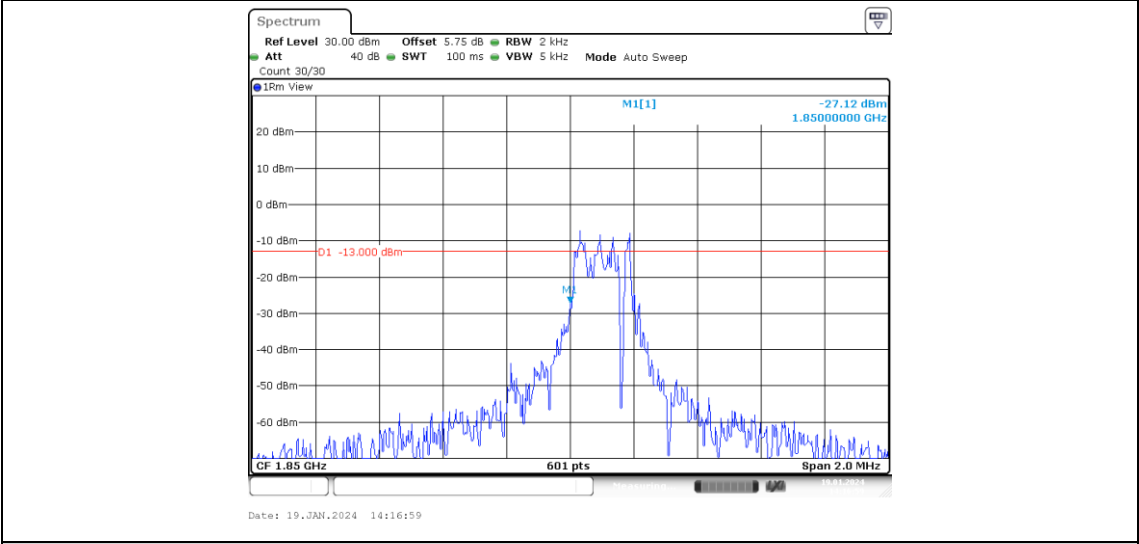
Band2-Stand-Alone-NaN-BPSK-19199-12@0-15kHz--20.38-PASS



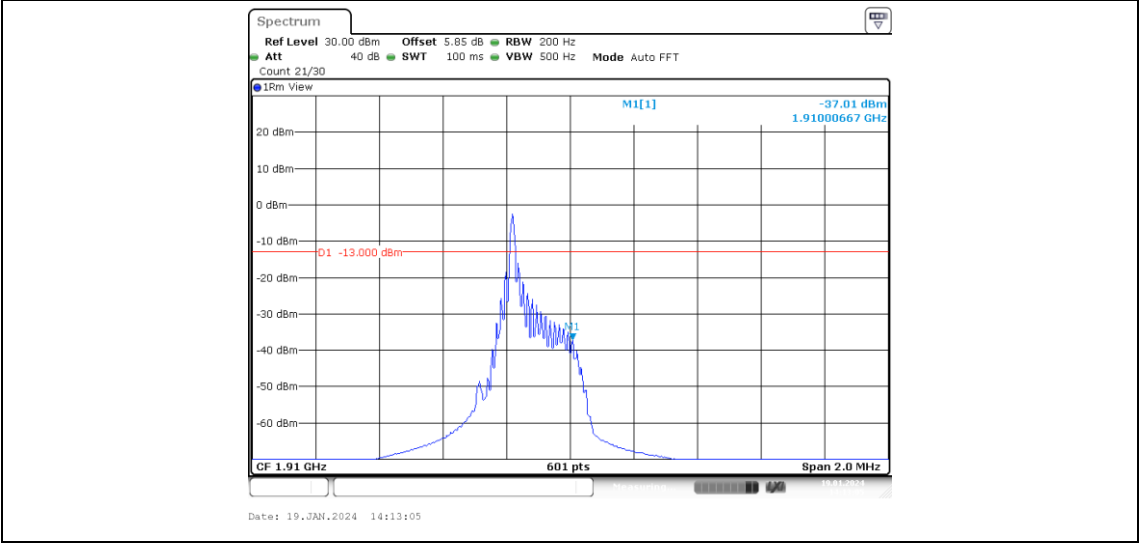
Band2-Stand-Alone-NaN-QPSK-18601-1@0-15kHz--18.51-PASS



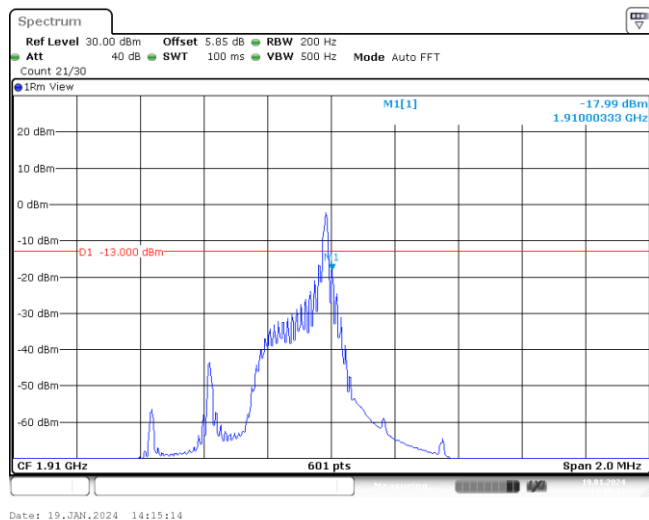
Band2-Stand-Alone-NaN-QPSK-18601-1@11-15kHz--36.83-PASS



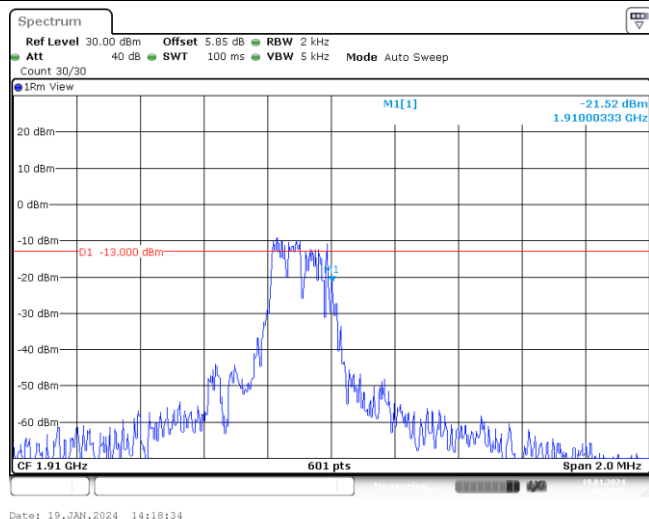
Band2-Stand-Alone-NaN-QPSK-18601-12@0-15kHz--27.12-PASS



Band2-Stand-Alone-NaN-QPSK-19199-1@0-15kHz--37.01-PASS



Band2-Stand-Alone-NaN-QPSK-19199-1@11-15kHz--17.99-PASS



Band2-Stand-Alone-NaN-QPSK-19199-12@0-15kHz--21.52-PASS

Appendix E: Conducted Spurious Emission

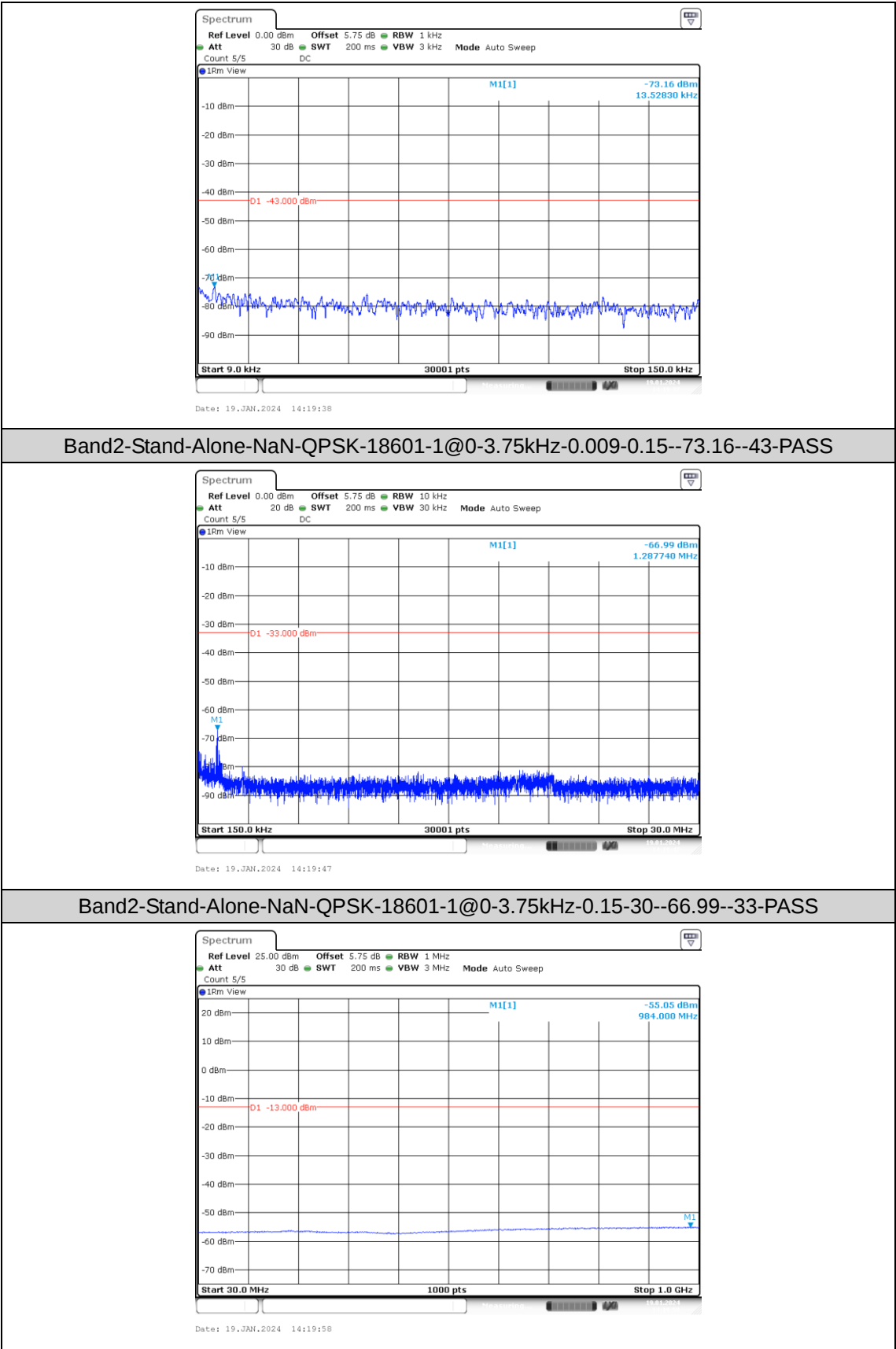
Test Result

Band	OpMode	SCS	BW	Modu	Channel	Tones	Freq Start [MHz]	Freq Stop [MHz]	Result (dBm)	Limit (dBm)	Verdict
Band2	Stand-Alone	3.75kHz	NaN	QPSK	18601	1@0	0.009	0.15	-73.16	-43	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	18601	1@0	0.15	30	-66.99	-33	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	18601	1@0	30	1000	-55.05	-13	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	18601	1@0	1000	20000	-44.69	-13	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	18601	1@47	0.009	0.15	-71.88	-43	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	18601	1@47	0.15	30	-65.58	-33	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	18601	1@47	30	1000	-55.03	-13	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	18601	1@47	1000	20000	-43.78	-13	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	18876	1@0	0.009	0.15	-72.98	-43	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	18876	1@0	0.15	30	-64.18	-33	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	18876	1@0	30	1000	-54.95	-13	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	18876	1@0	1000	20000	-43.04	-13	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	18876	1@47	0.009	0.15	-73.95	-43	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	18876	1@47	0.15	30	-66.69	-33	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	18876	1@47	30	1000	-54.95	-13	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	18876	1@47	1000	20000	-43.13	-13	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	19199	1@0	0.009	0.15	-72.01	-43	PASS

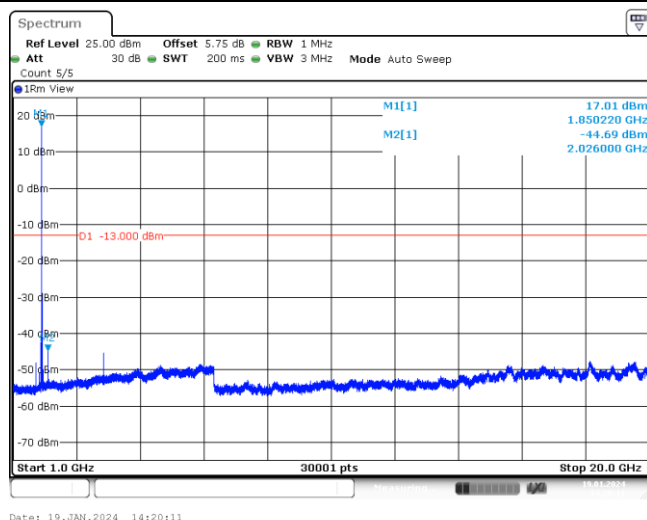
Band2	Stand-Alone	3.75kHz	NaN	QPSK	19199	1@0	0.15	30	-69.74	-33	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	19199	1@0	30	1000	-54.95	-13	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	19199	1@0	1000	20000	-43.94	-13	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	19199	1@47	0.009	0.15	-73.47	-43	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	19199	1@47	0.15	30	-64.25	-33	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	19199	1@47	30	1000	-54.94	-13	PASS
Band2	Stand-Alone	3.75kHz	NaN	QPSK	19199	1@47	1000	20000	-45.49	-13	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18601	1@0	0.009	0.15	-73	-43	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18601	1@0	0.15	30	-72.25	-33	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18601	1@0	30	1000	-55.04	-13	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18601	1@0	1000	20000	-45.76	-13	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18601	1@11	0.009	0.15	-72.39	-43	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18601	1@11	0.15	30	-74.19	-33	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18601	1@11	30	1000	-54.98	-13	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18601	1@11	1000	20000	-45.08	-13	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18876	1@0	0.009	0.15	-72.41	-43	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18876	1@0	0.15	30	-66.72	-33	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18876	1@0	30	1000	-54.96	-13	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18876	1@0	1000	20000	-44.29	-13	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18876	1@11	0.009	0.15	-73.7	-43	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18876	1@11	0.15	30	-67.73	-33	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	18876	1@11	30	1000	-54.93	-13	PASS

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Band2	Stand-Alone	15kHz	NaN	BPSK	18876	1@11	1000	2000 0	-45.34	-13	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	19199	1@0	0.009	0.15	-74.25	-43	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	19199	1@0	0.15	30	-68.91	-33	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	19199	1@0	30	1000	-54.93	-13	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	19199	1@0	1000	2000 0	-43.04	-13	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	19199	1@11	0.009	0.15	-72.79	-43	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	19199	1@11	0.15	30	-63.99	-33	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	19199	1@11	30	1000	-54.88	-13	PASS
Band2	Stand-Alone	15kHz	NaN	BPSK	19199	1@11	1000	2000 0	-44.89	-13	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	18601	12@0	0.009	0.15	-73.46	-43	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	18601	12@0	0.15	30	-70.41	-33	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	18601	12@0	30	1000	-54.99	-13	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	18601	12@0	1000	2000 0	-47.56	-13	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	18876	12@0	0.009	0.15	-74.33	-43	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	18876	12@0	0.15	30	-70.56	-33	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	18876	12@0	30	1000	-54.87	-13	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	18876	12@0	1000	2000 0	-47.13	-13	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	19199	12@0	0.009	0.15	-74.27	-43	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	19199	12@0	0.15	30	-72.26	-33	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	19199	12@0	30	1000	-54.99	-13	PASS
Band2	Stand-Alone	15kHz	NaN	QPSK	19199	12@0	1000	2000 0	-47.49	-13	PASS

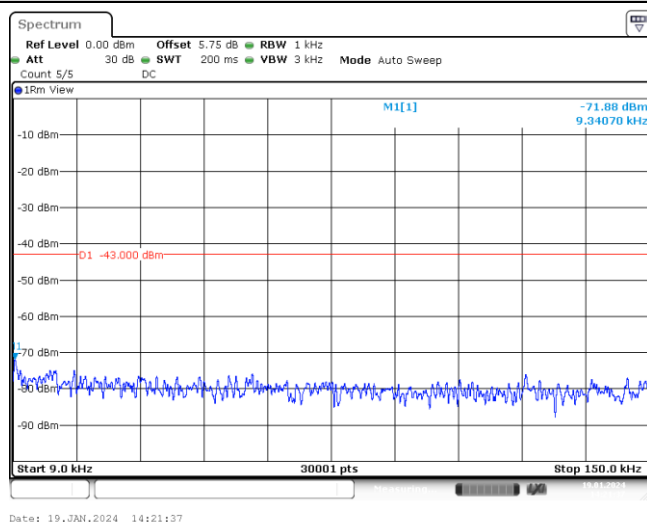
Test Graphs



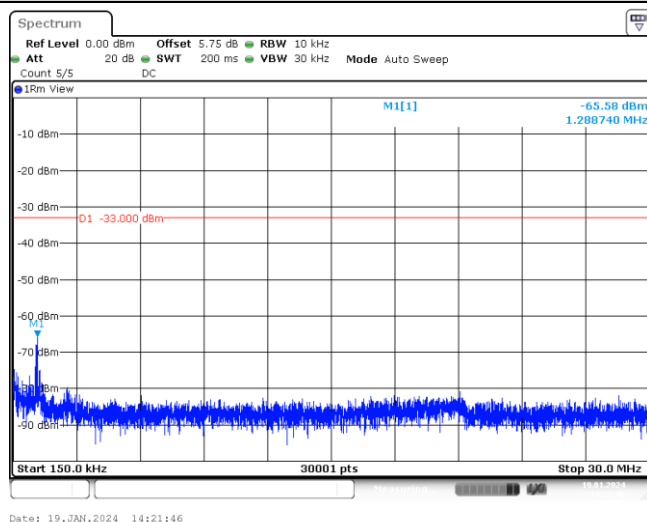
Band2-Stand-Alone-NaN-QPSK-18601-1@0-3.75kHz-30-1000--55.05--13-PASS



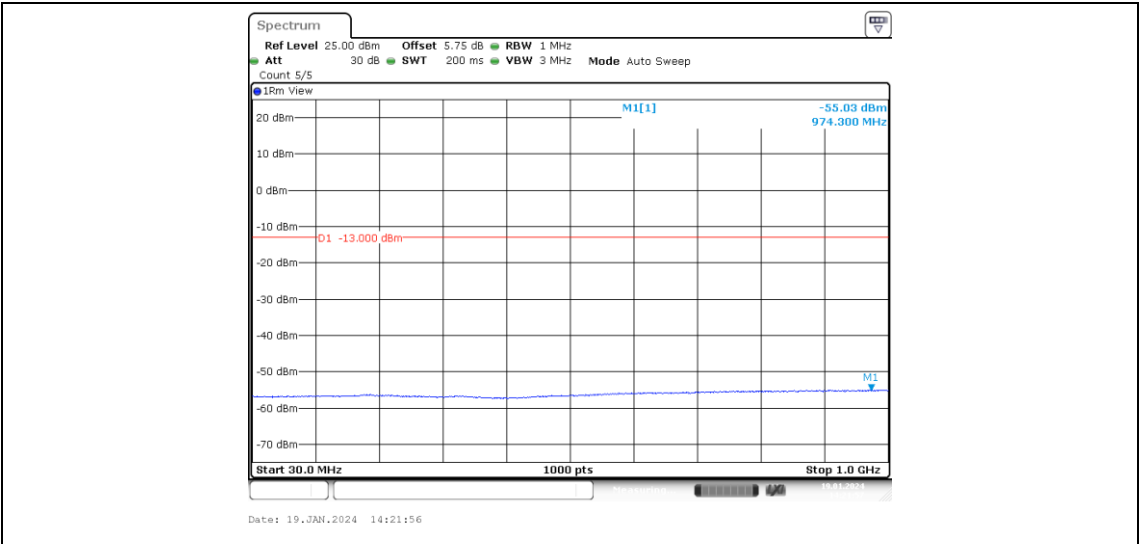
Band2-Stand-Alone-NaN-QPSK-18601-1@0-3.75kHz-1000-20000--44.69--13-PASS



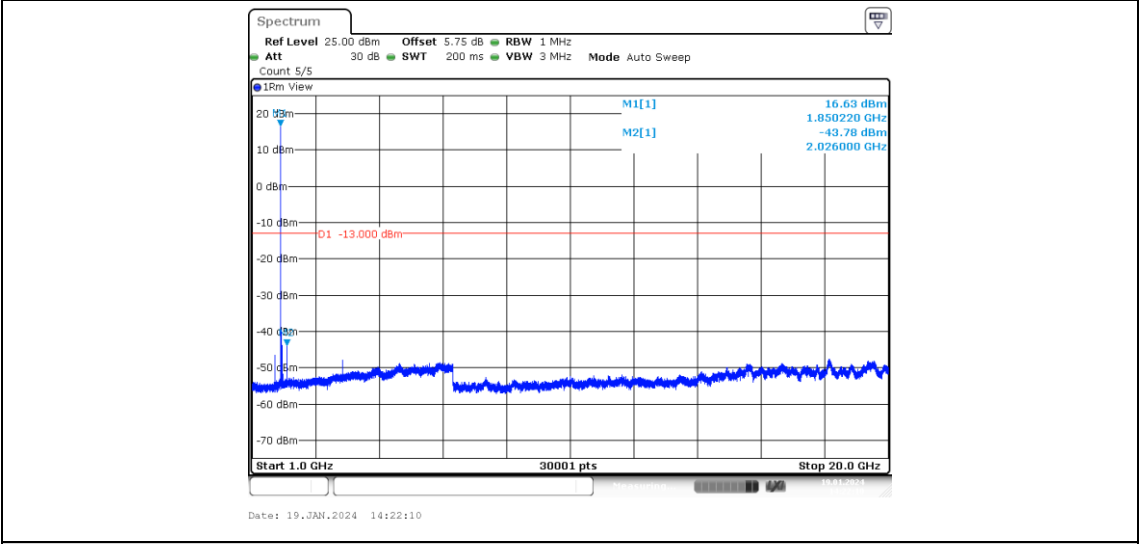
Band2-Stand-Alone-NaN-QPSK-18601-1@47-3.75kHz-0.009-0.15--71.88--43-PASS



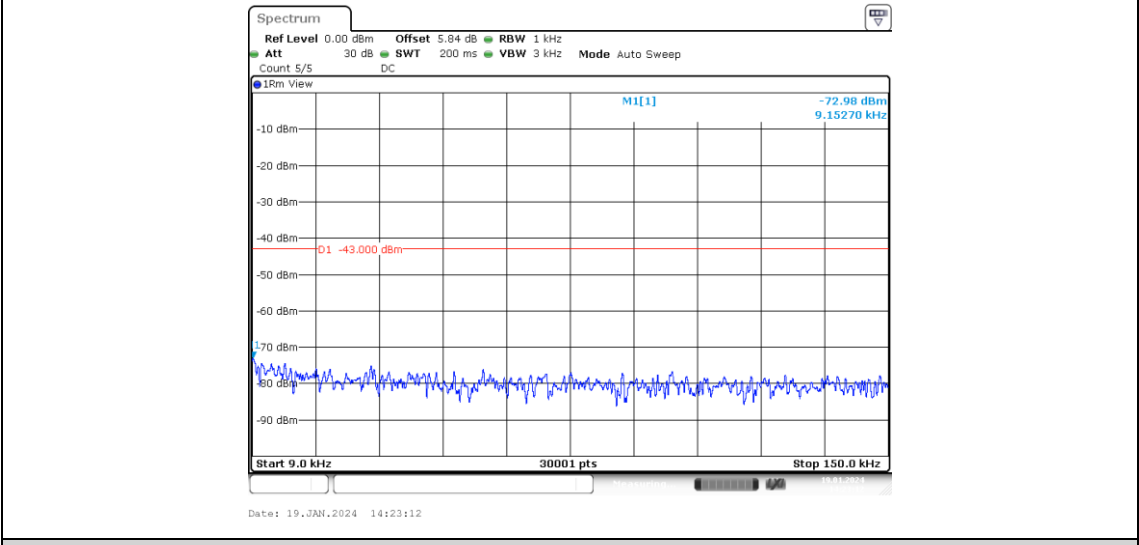
Band2-Stand-Alone-NaN-QPSK-18601-1@47-3.75kHz-0.15-30--65.58--33-PASS



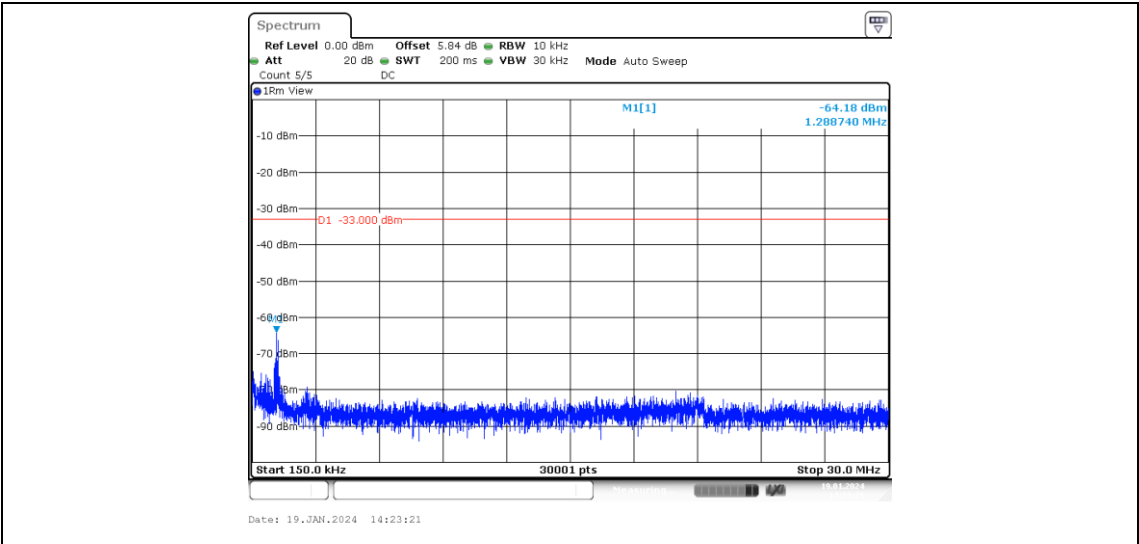
Band2-Stand-Alone-NaN-QPSK-18601-1@47-3.75kHz-30-1000--55.03--13-PASS



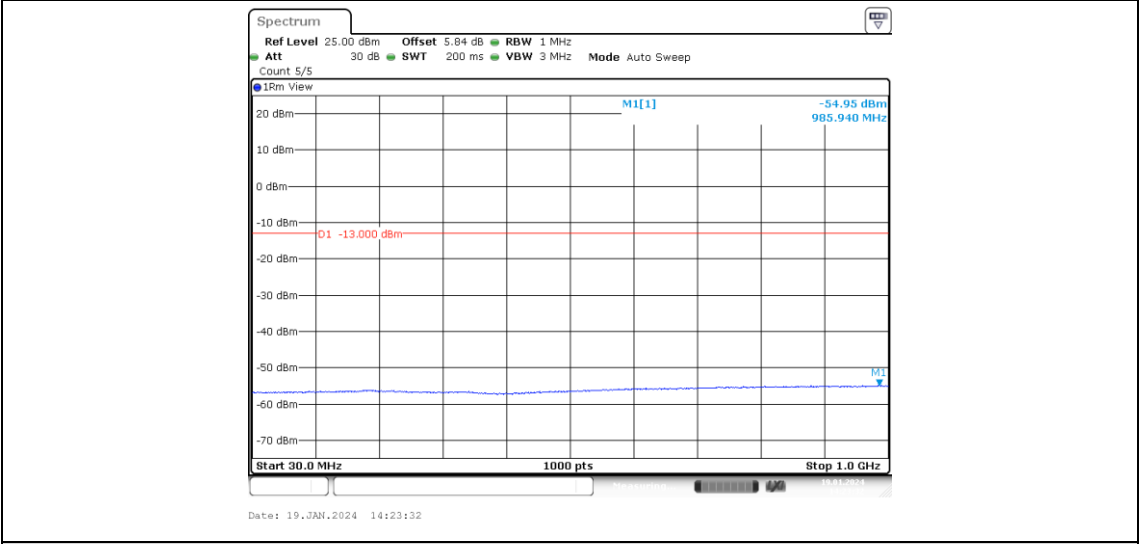
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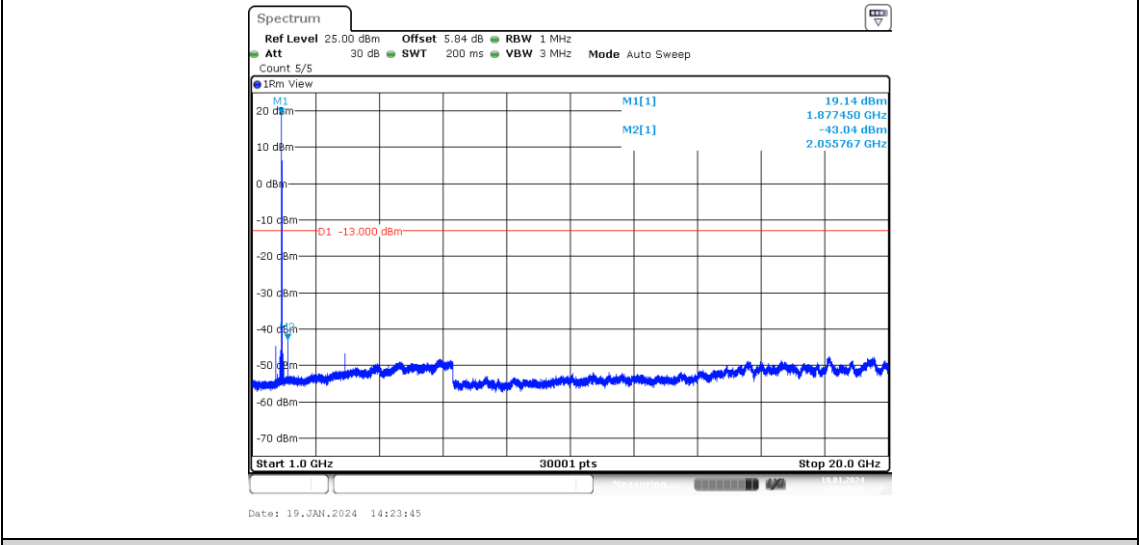
Band2-Stand-Alone-NaN-QPSK-18876-1@0-3.75kHz-0.009-0.15--72.98--43-PASS



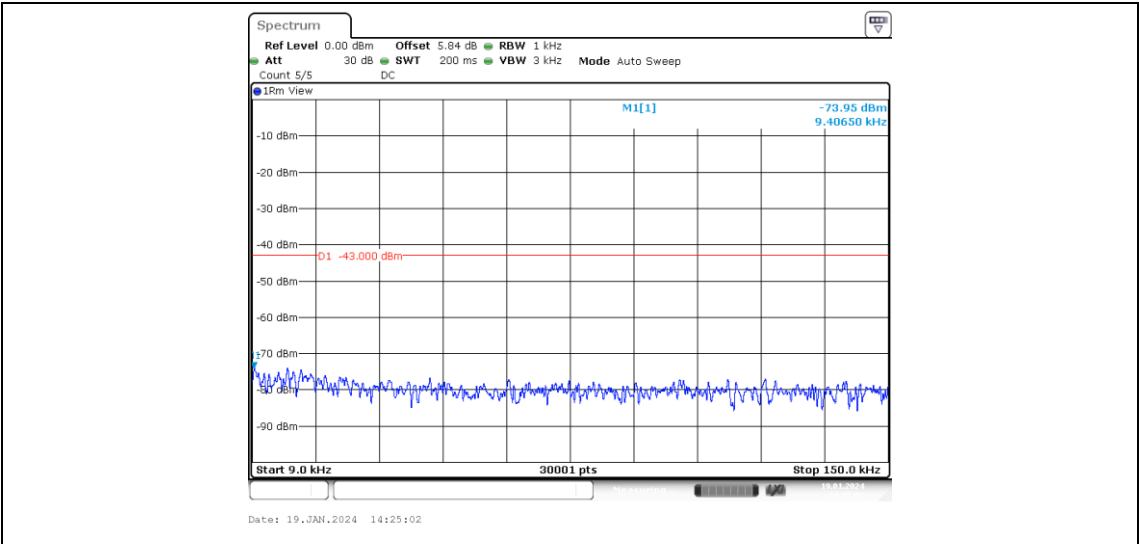
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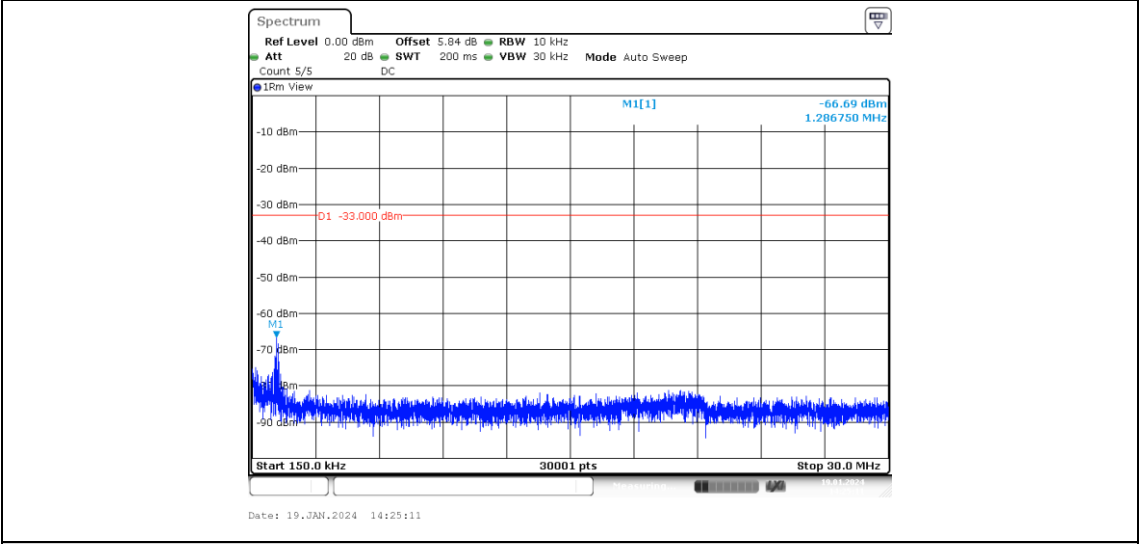
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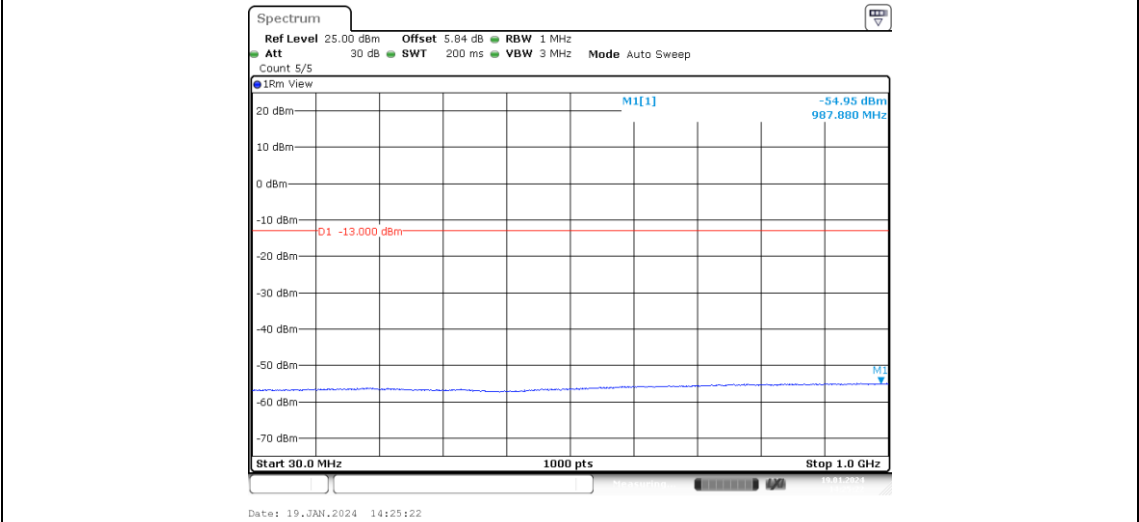
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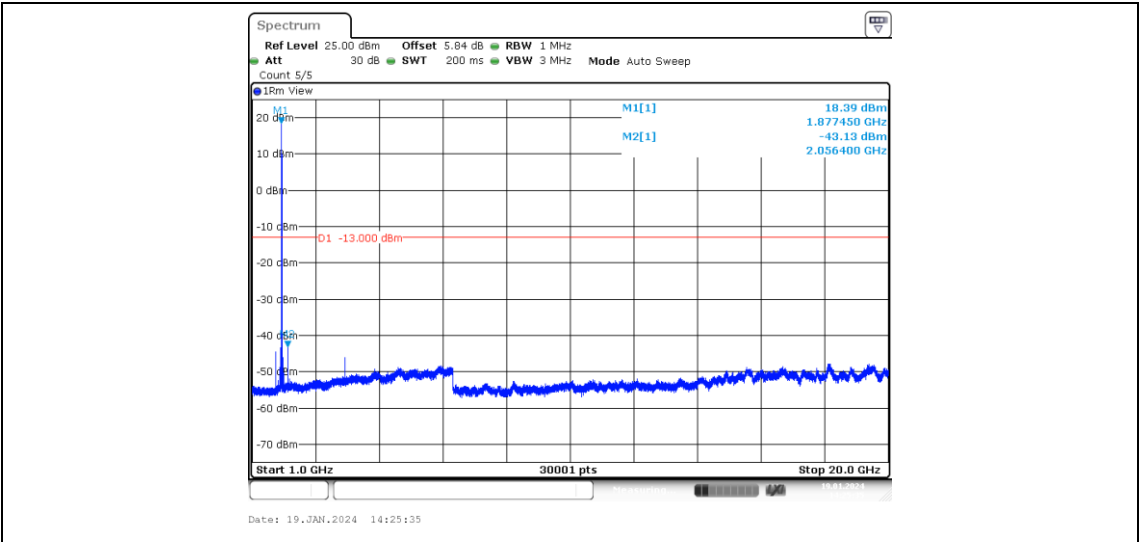
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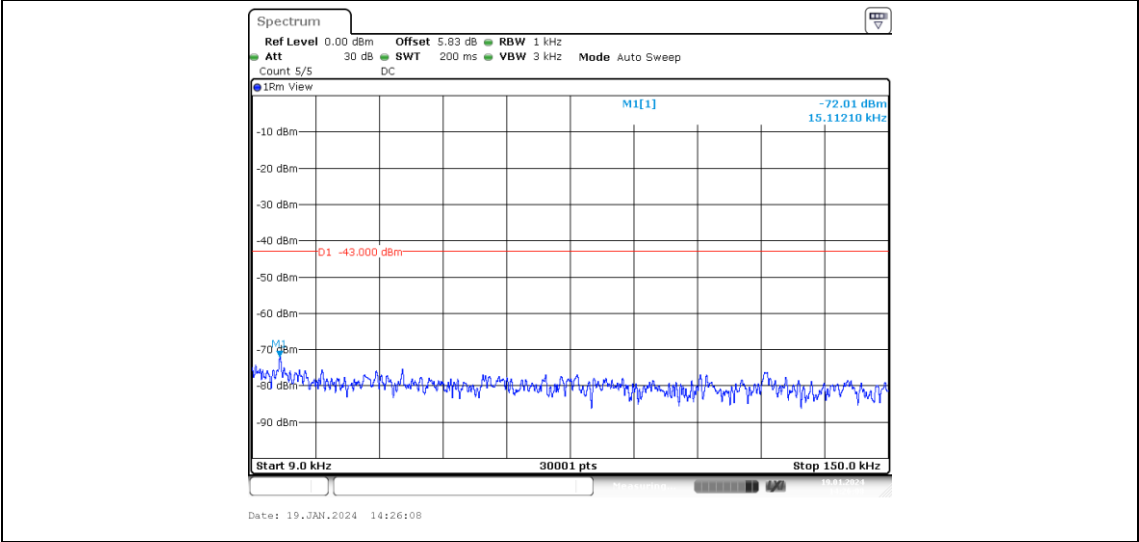
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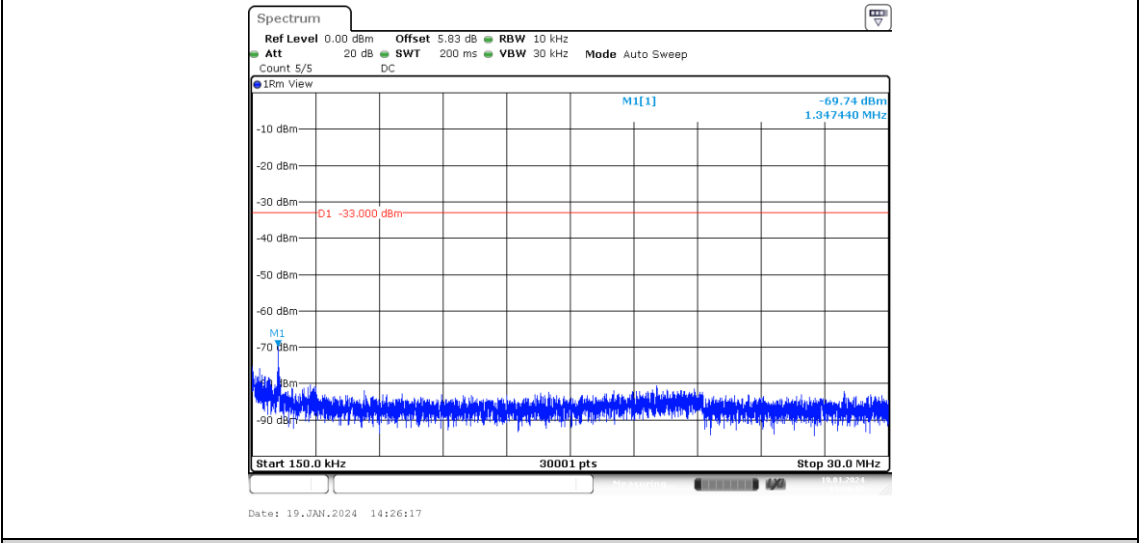
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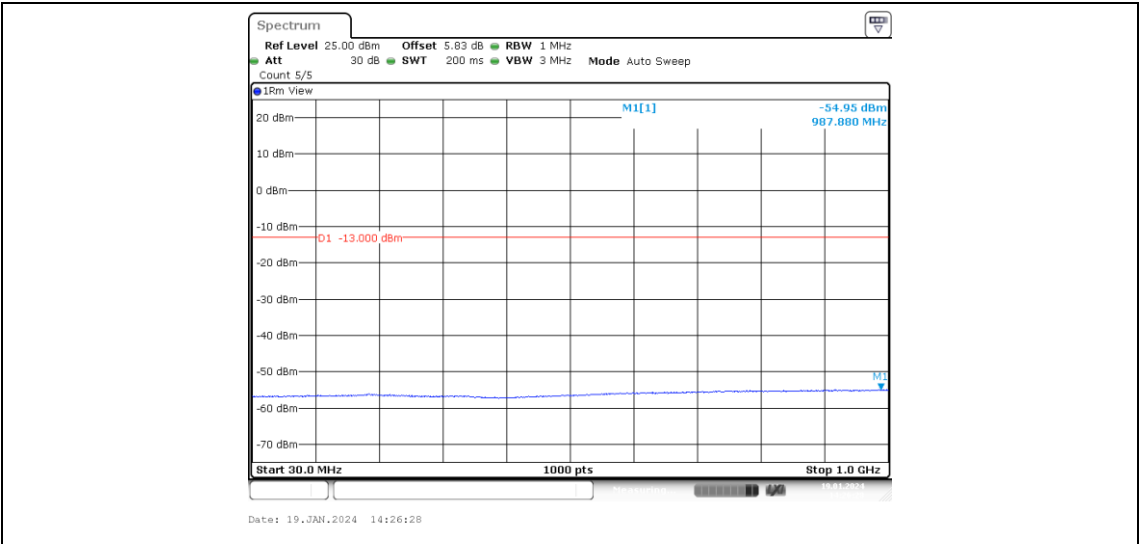
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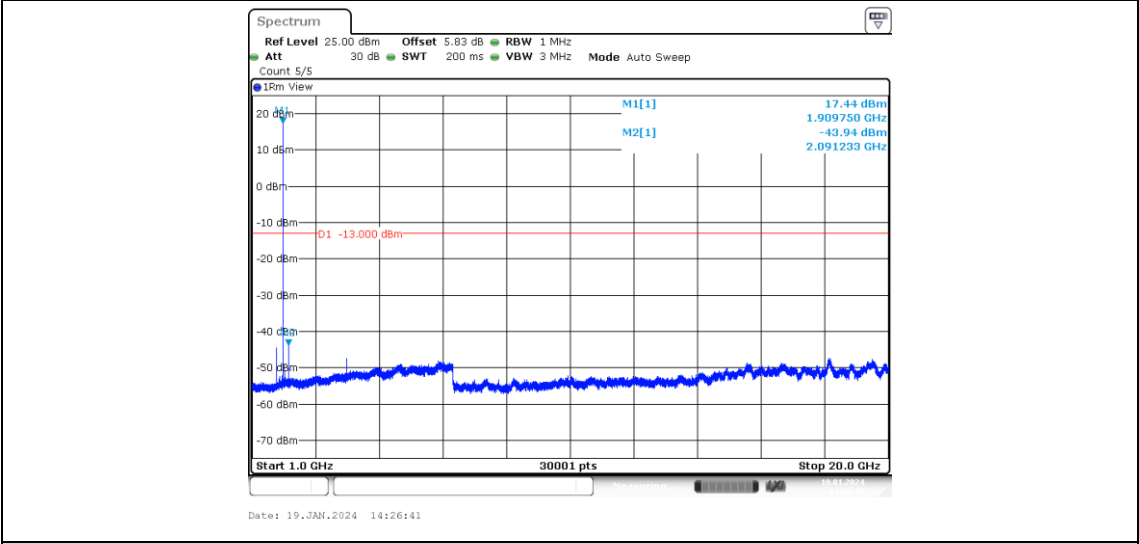
Band2-Stand-Alone-NaN-QPSK-19199-1@0-3.75kHz-0.009-0.15--72.01--43-PASS



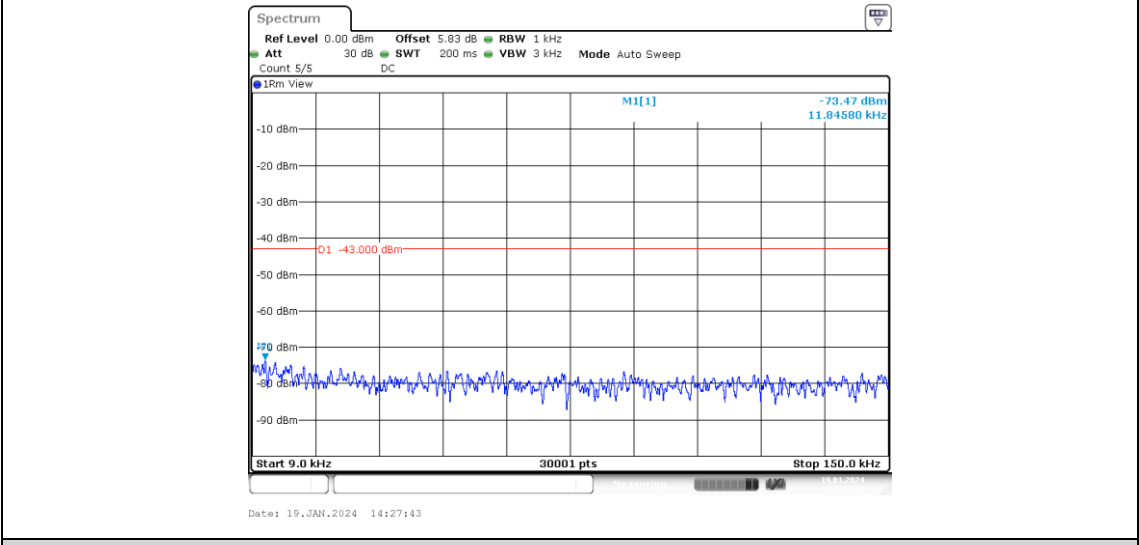
Band2-Stand-Alone-NaN-QPSK-19199-1@0-3.75kHz-0.15-30--69.74--33-PASS



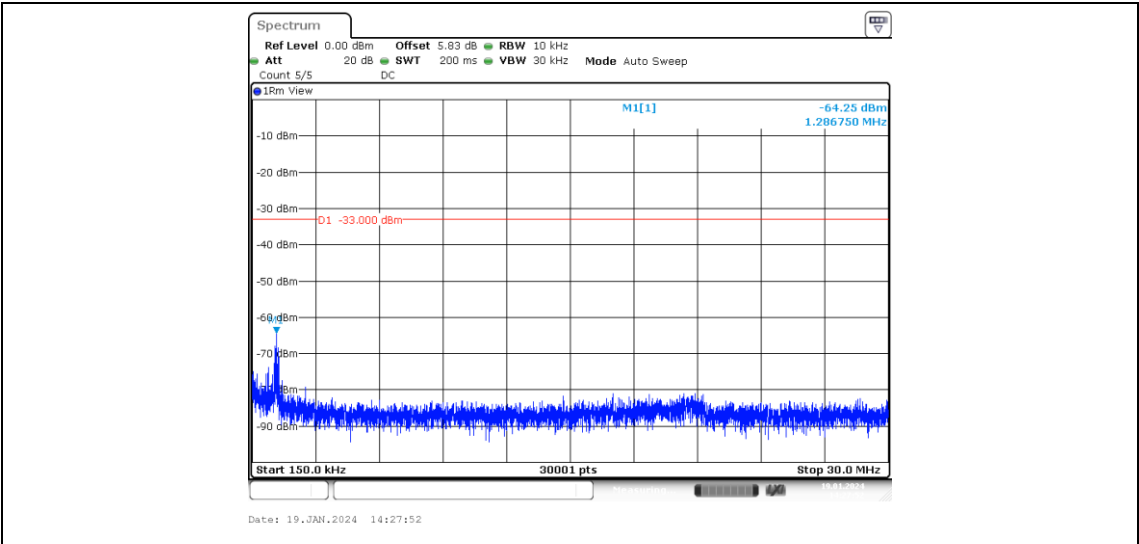
Band2-Stand-Alone-NaN-QPSK-19199-1@0-3.75kHz-30-1000--54.95--13-PASS



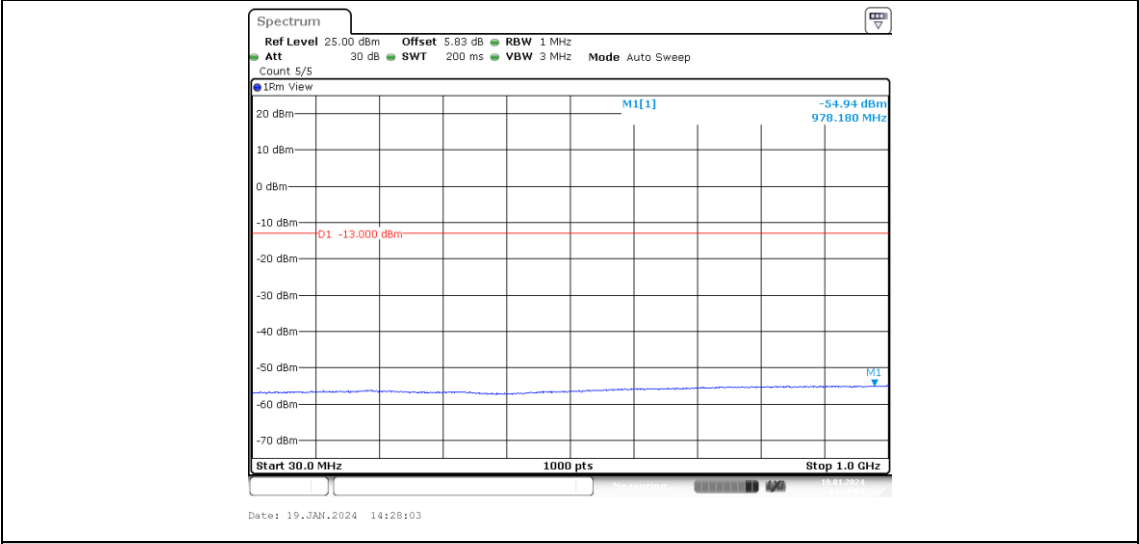
Band2-Stand-Alone-NaN-QPSK-19199-1@0-3.75kHz-1000-20000--43.94--13-PASS



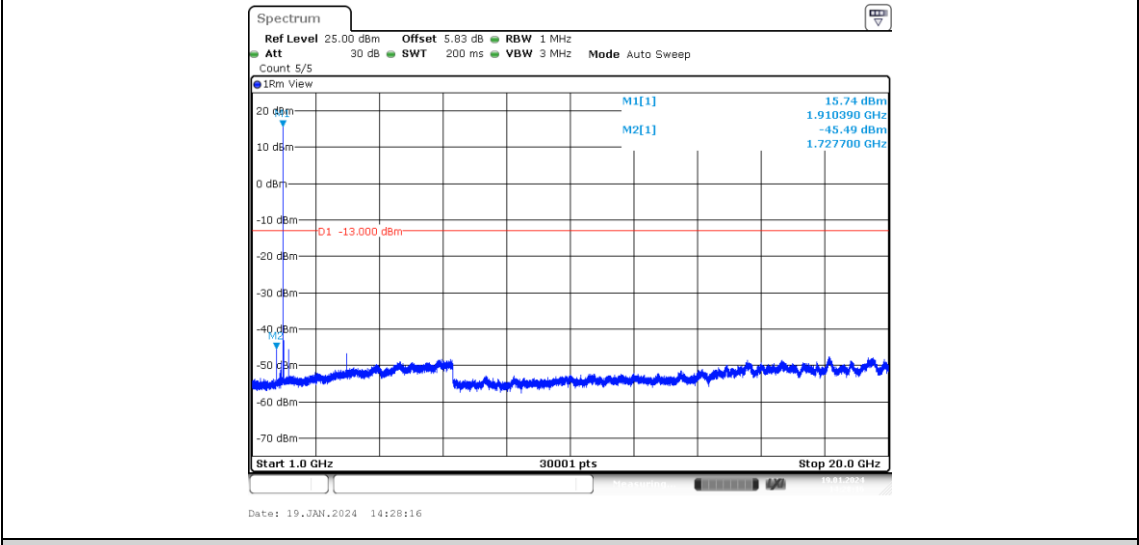
Band2-Stand-Alone-NaN-QPSK-19199-1@47-3.75kHz-0.009-0.15--73.47--43-PASS



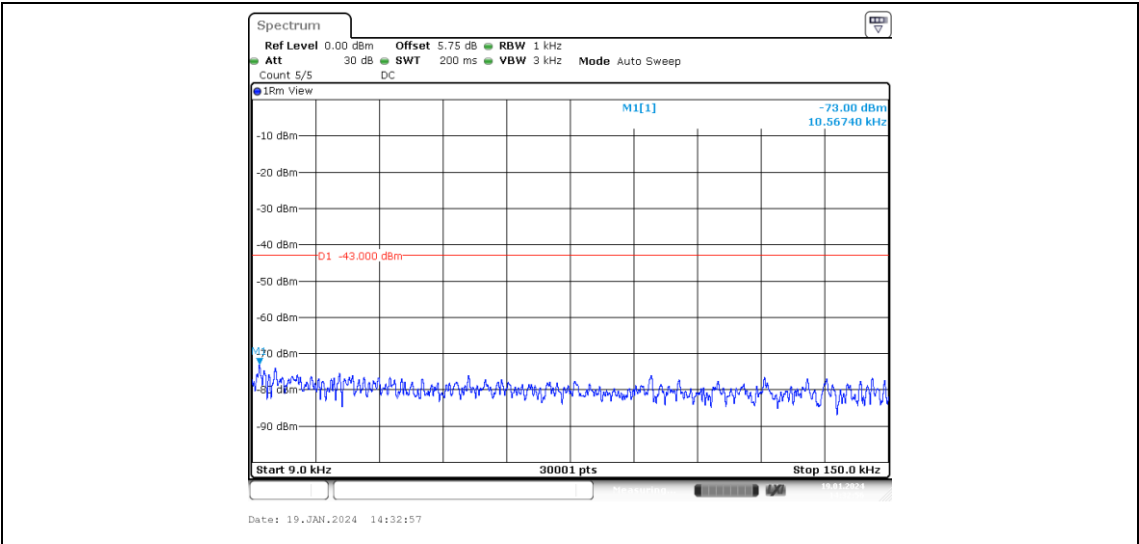
Band2-Stand-Alone-NaN-QPSK-19199-1@47-3.75kHz-0.15-30--64.25--33-PASS



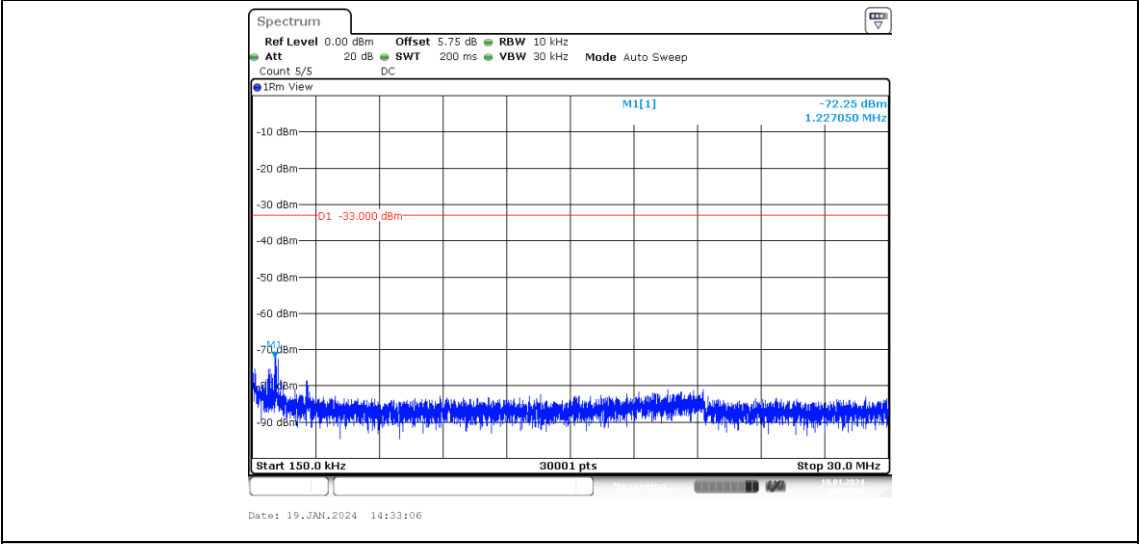
Band2-Stand-Alone-NaN-QPSK-19199-1@47-3.75kHz-30-1000--54.94--13-PASS



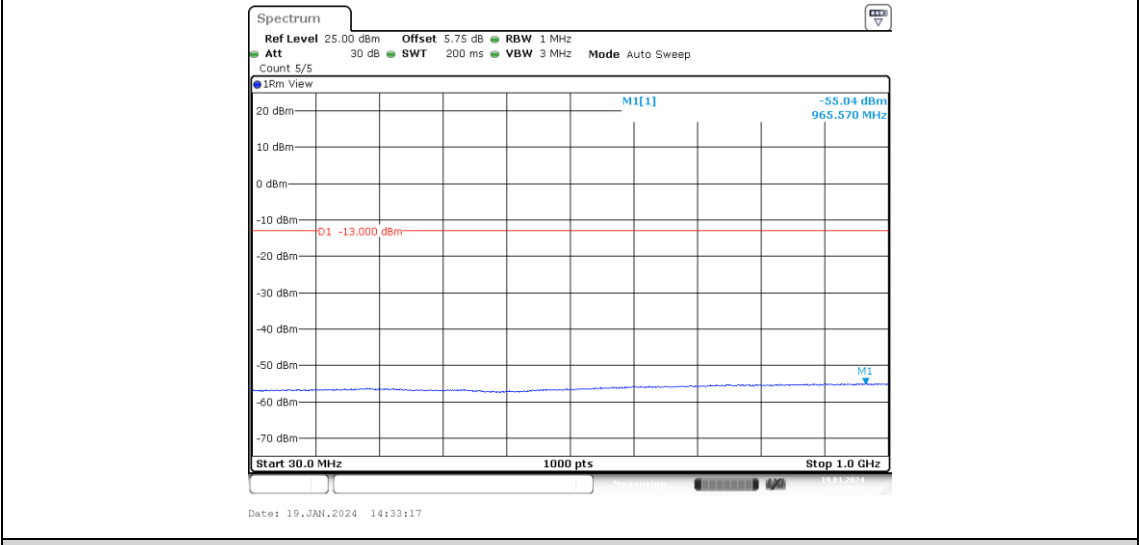
Band2-Stand-Alone-NaN-QPSK-19199-1@47-3.75kHz-1000-20000--45.49--13-PASS



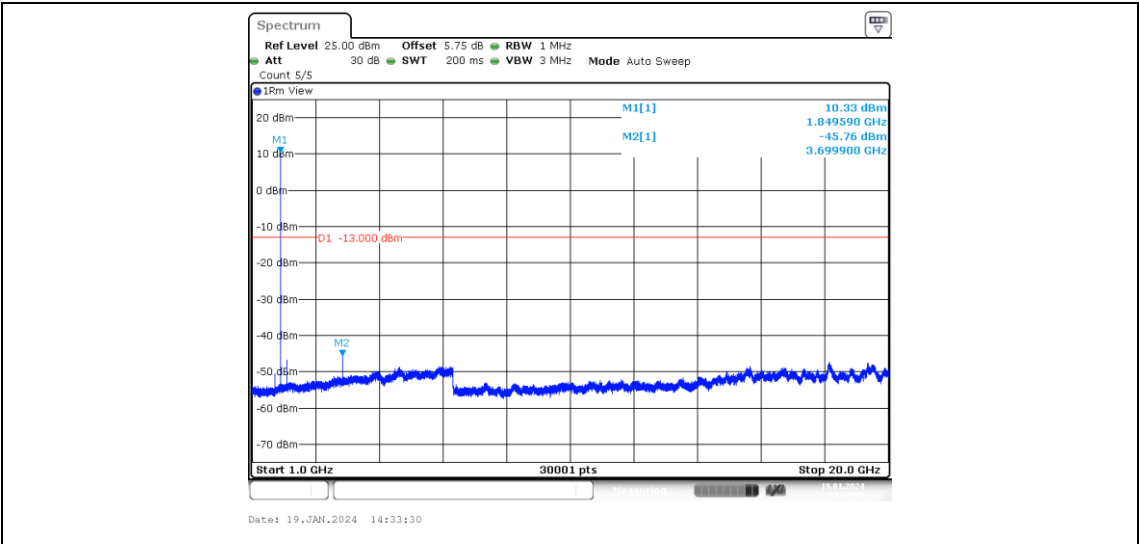
Band2-Stand-Alone-NaN-BPSK-18601-1@0-15kHz-0.009-0.15--73--43-PASS



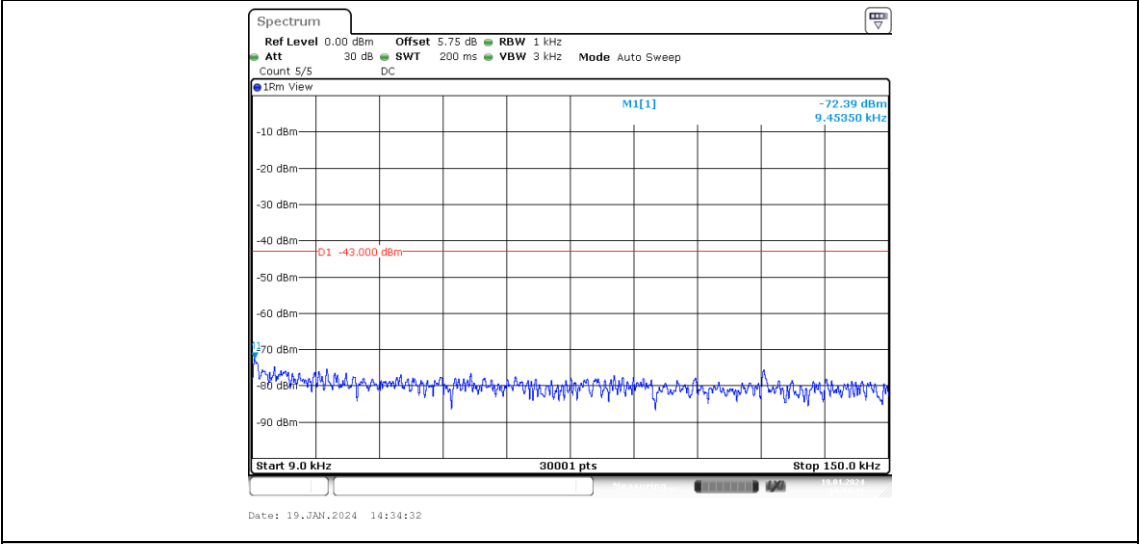
Band2-Stand-Alone-NaN-BPSK-18601-1@0-15kHz-0.15-30--72.25--33-PASS



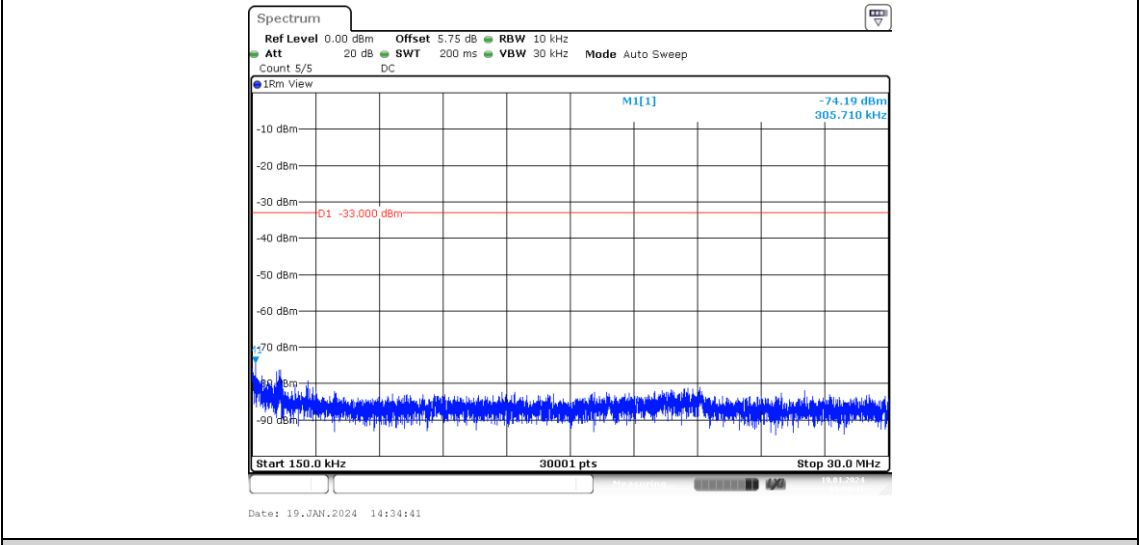
Band2-Stand-Alone-NaN-BPSK-18601-1@0-15kHz-30-1000--55.04--13-PASS



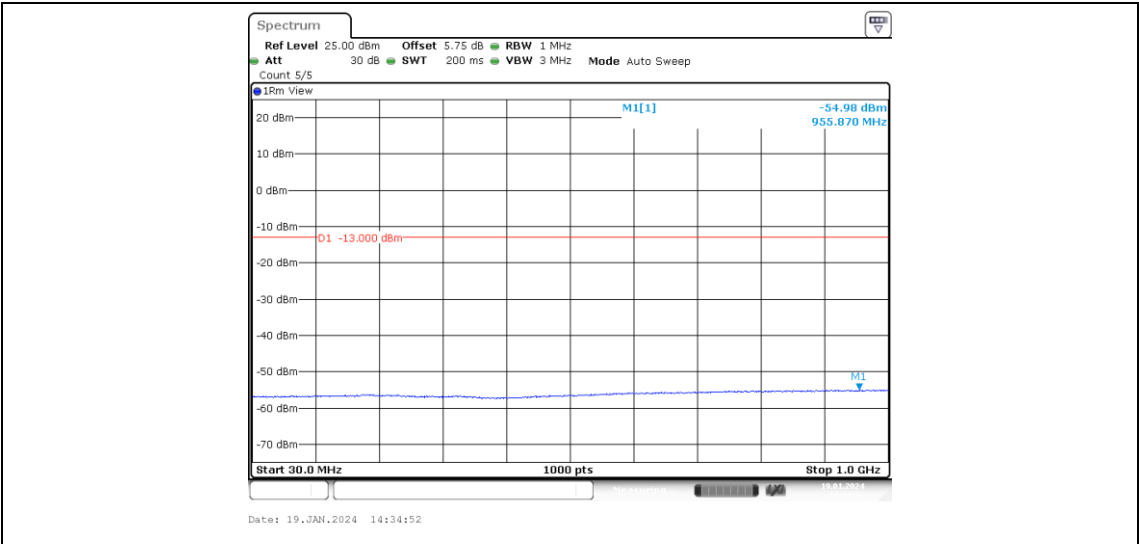
Band2-Stand-Alone-NaN-BPSK-18601-1@0-15kHz-1000-20000--45.76--13-PASS



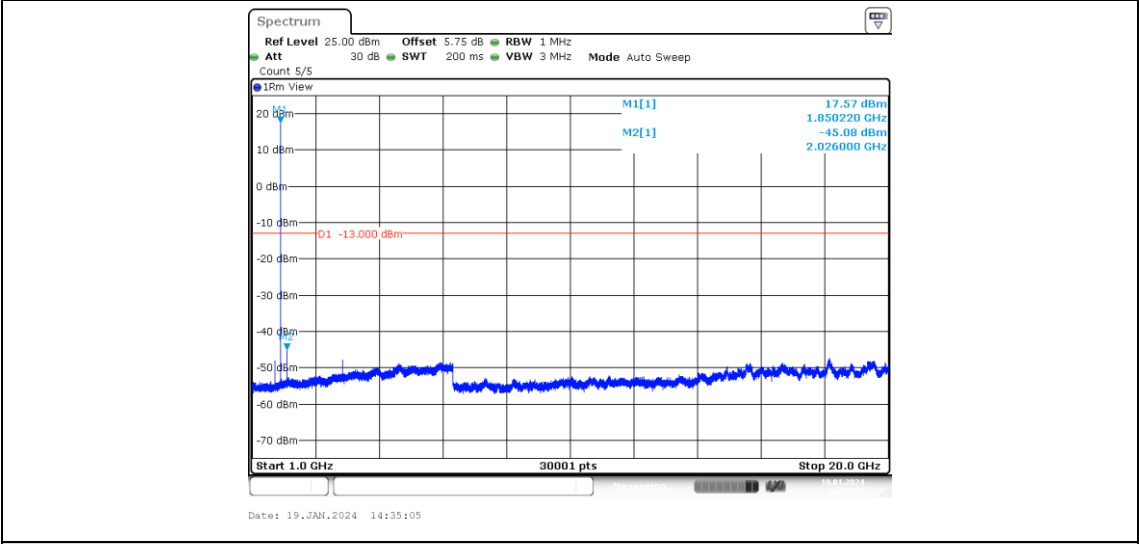
Band2-Stand-Alone-NaN-BPSK-18601-1@11-15kHz-0.009-0.15--72.39--43-PASS



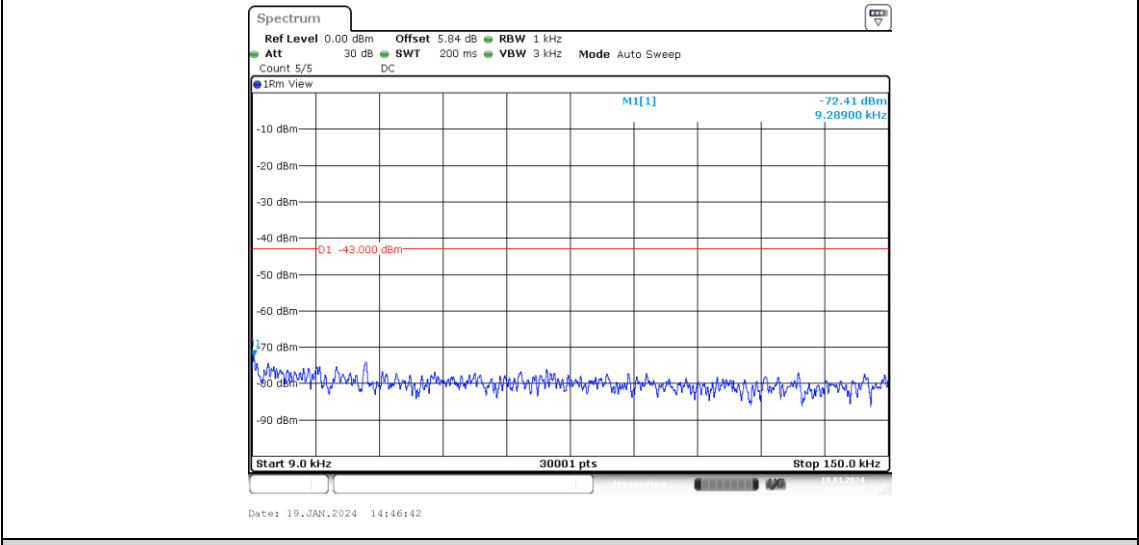
Band2-Stand-Alone-NaN-BPSK-18601-1@11-15kHz-0.15-30--74.19--33-PASS



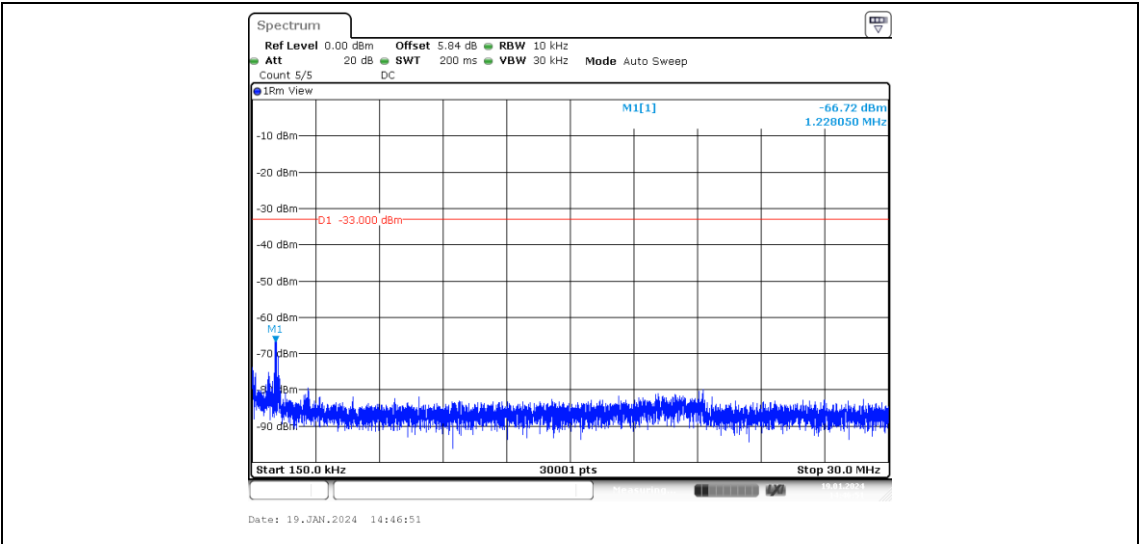
Band2-Stand-Alone-NaN-BPSK-18601-1@11-15kHz-30-1000--54.98--13-PASS



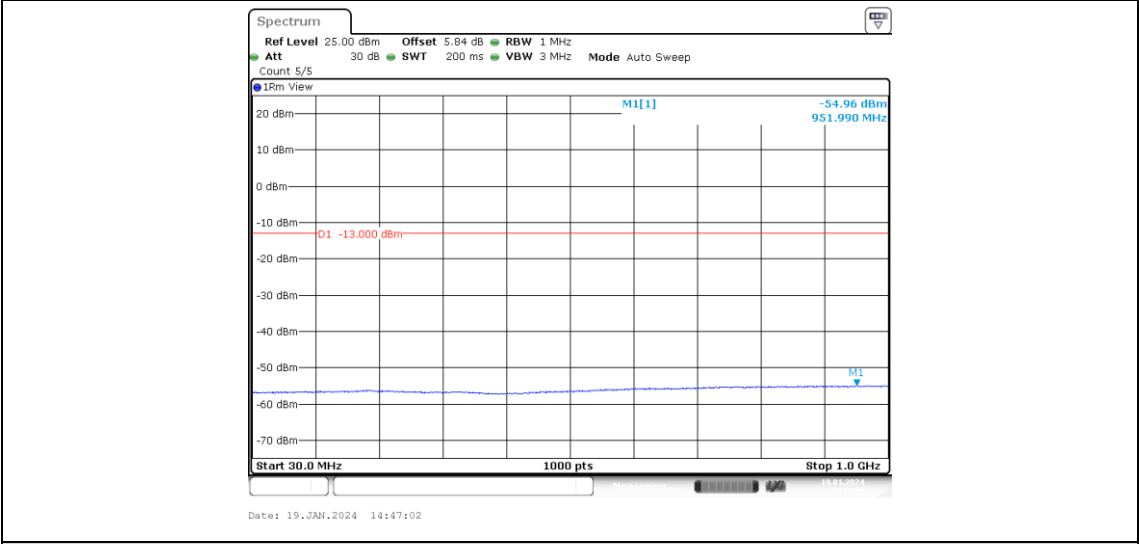
Band2-Stand-Alone-NaN-BPSK-18601-1@11-15kHz-1000-20000--45.08--13-PASS



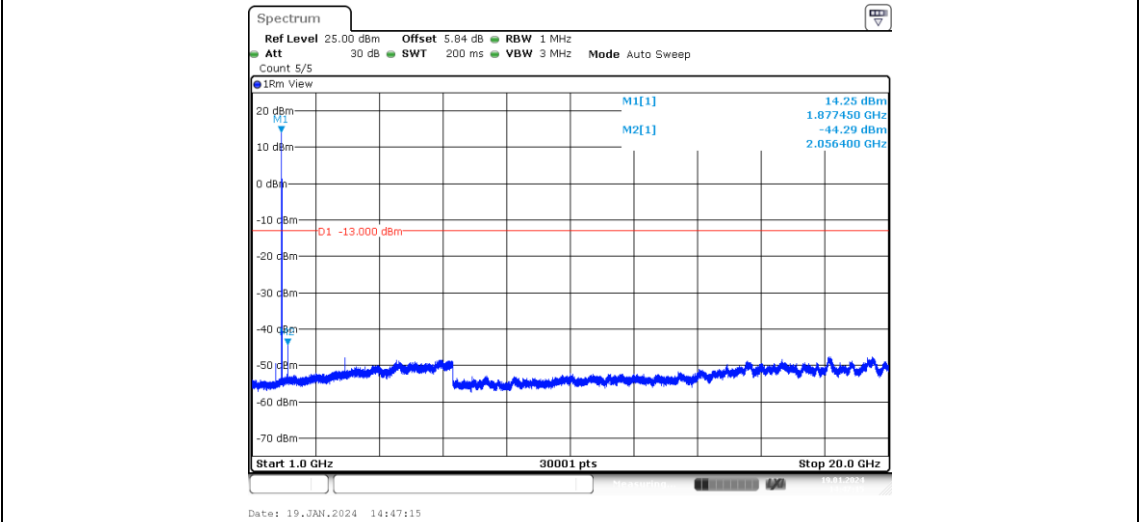
Band2-Stand-Alone-NaN-BPSK-18876-1@0-15kHz-0.009-0.15--72.41--43-PASS



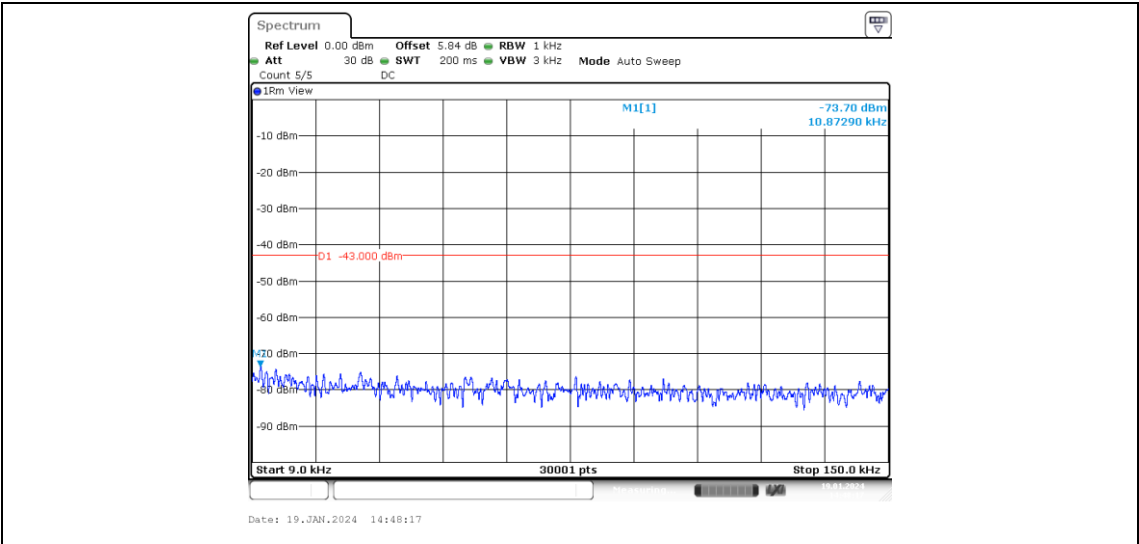
Band2-Stand-Alone-NaN-BPSK-18876-1@0-15kHz-0.15-30--66.72--33-PASS



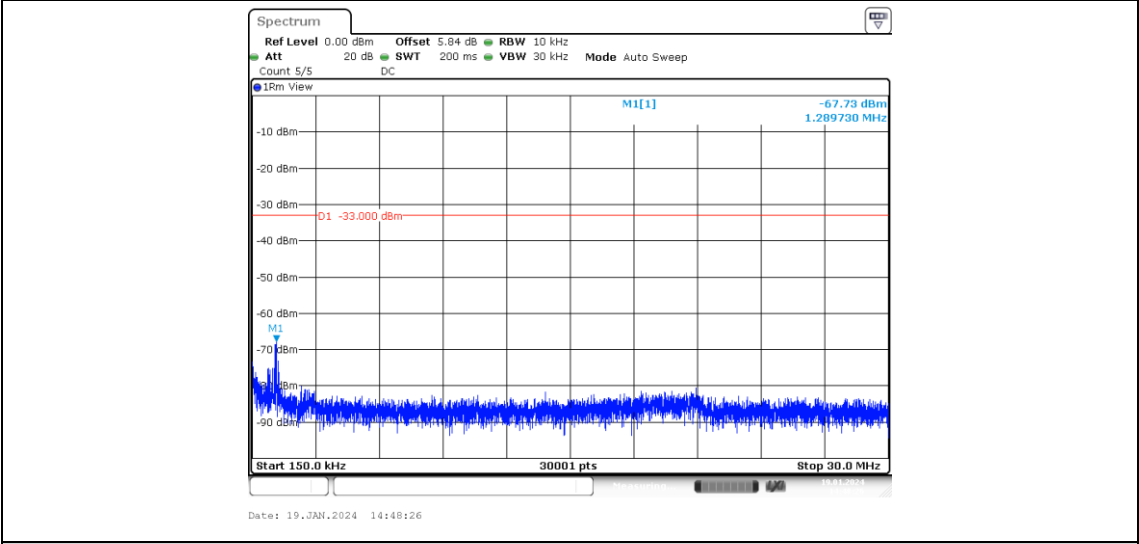
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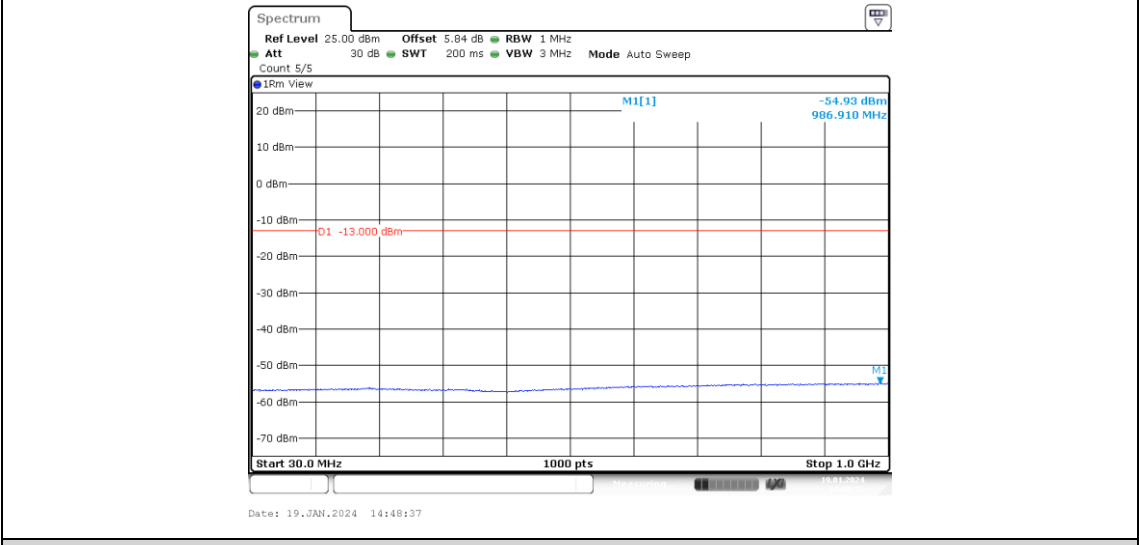
Band2-Stand-Alone-NaN-BPSK-18876-1@0-15kHz-1000-20000--44.29--13-PASS



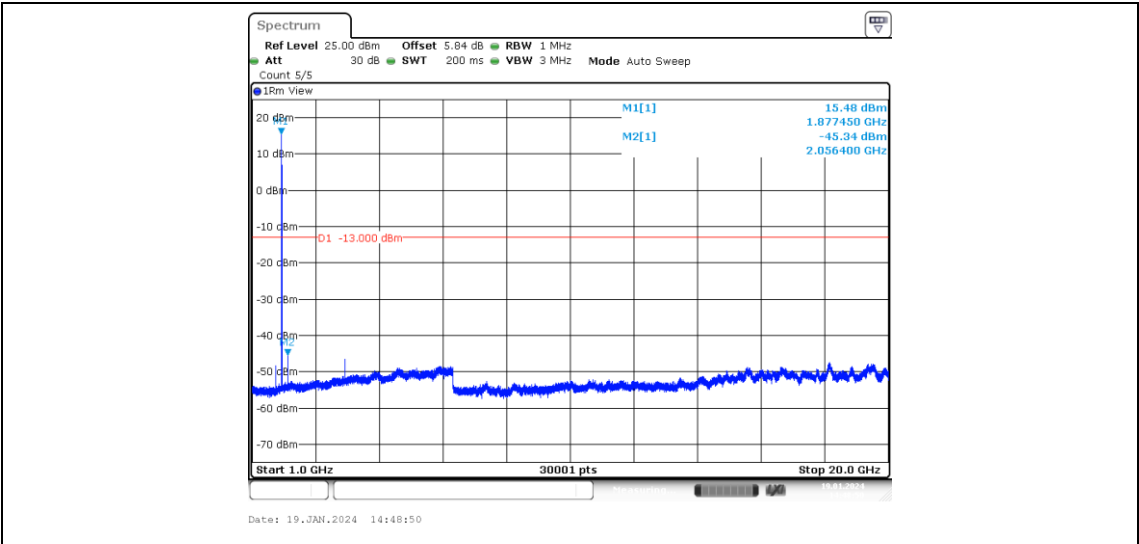
Band2-Stand-Alone-NaN-BPSK-18876-1@11-15kHz-0.009-0.15--73.7--43-PASS



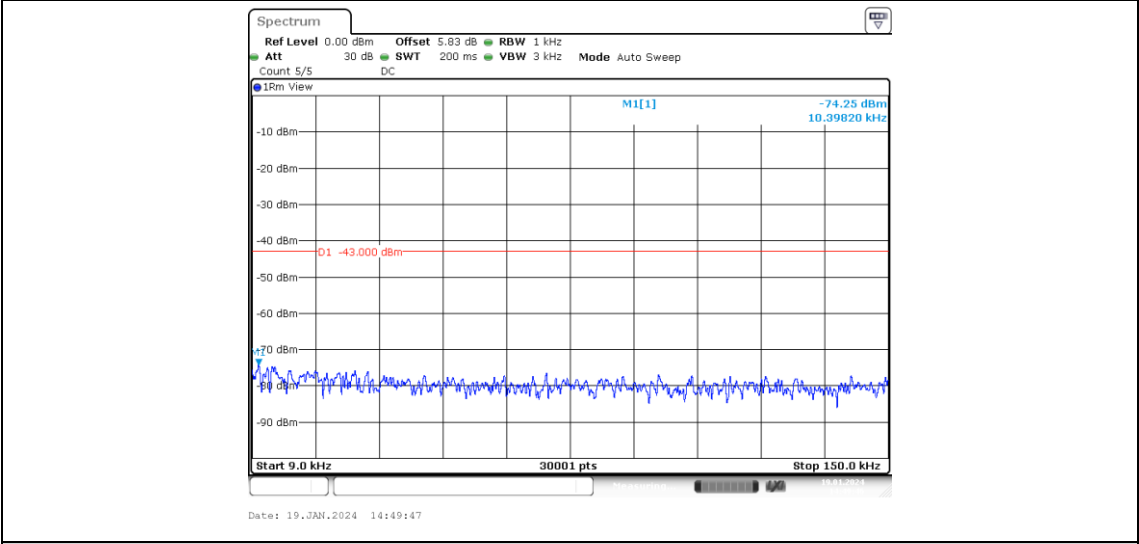
Band2-Stand-Alone-NaN-BPSK-18876-1@11-15kHz-0.15-30--67.73--33-PASS



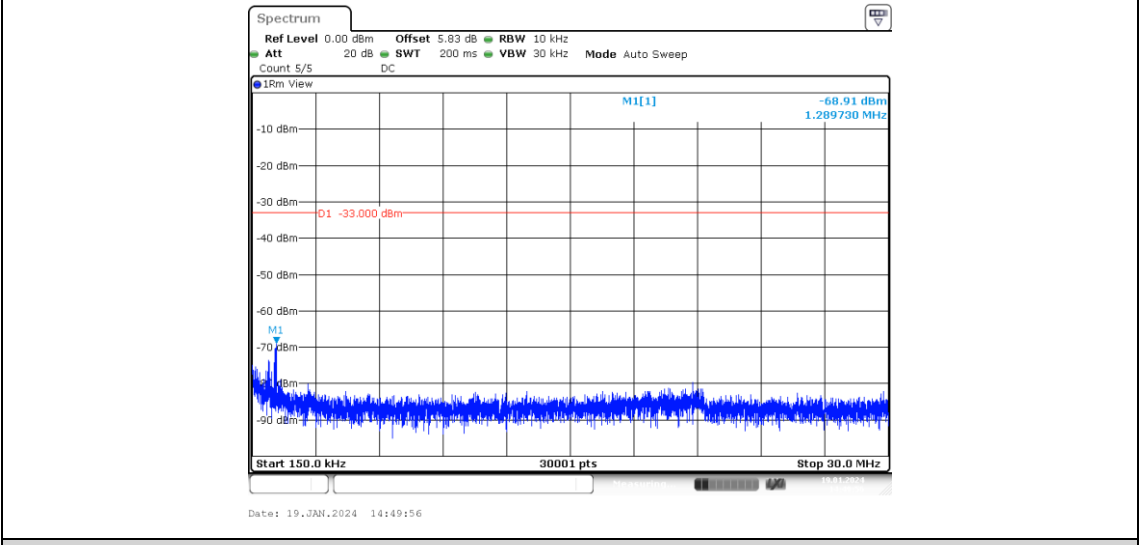
Band2-Stand-Alone-NaN-BPSK-18876-1@11-15kHz-30-1000--54.93--13-PASS



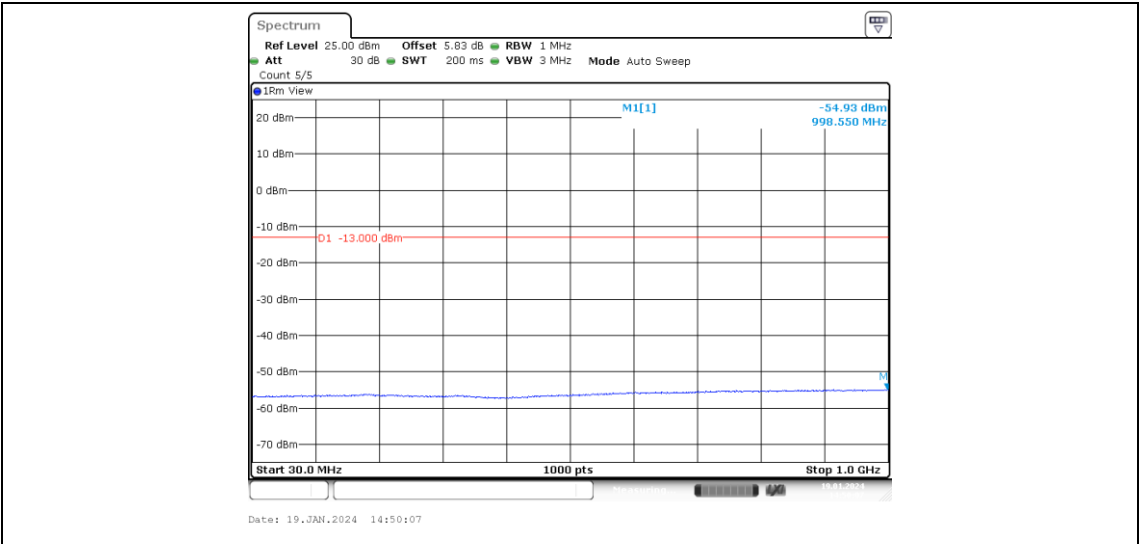
Band2-Stand-Alone-NaN-BPSK-18876-1@11-15kHz-1000-20000--45.34--13-PASS



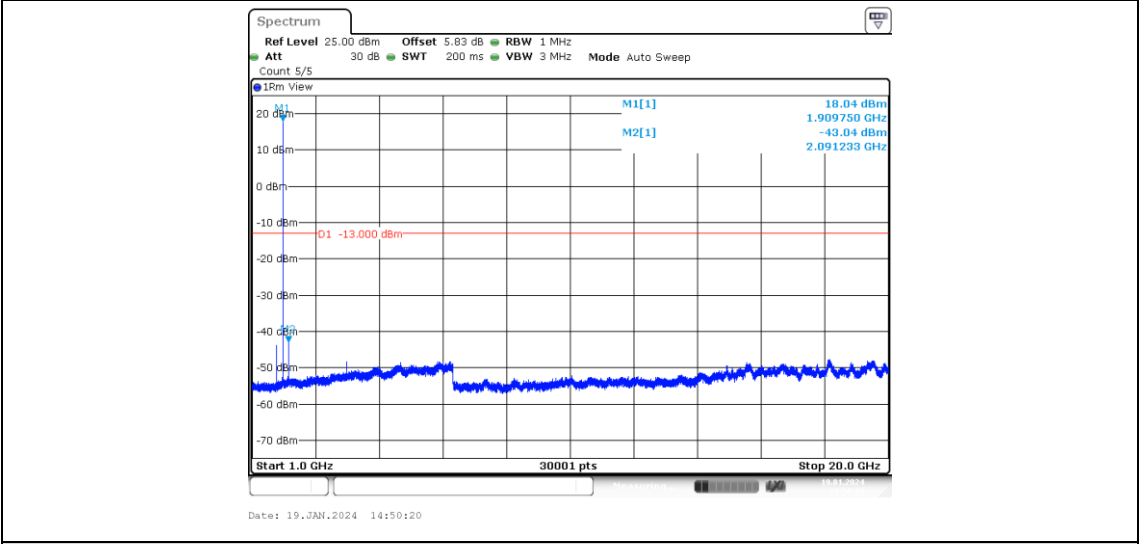
Band2-Stand-Alone-NaN-BPSK-19199-1@0-15kHz-0.009-0.15--74.25--43-PASS



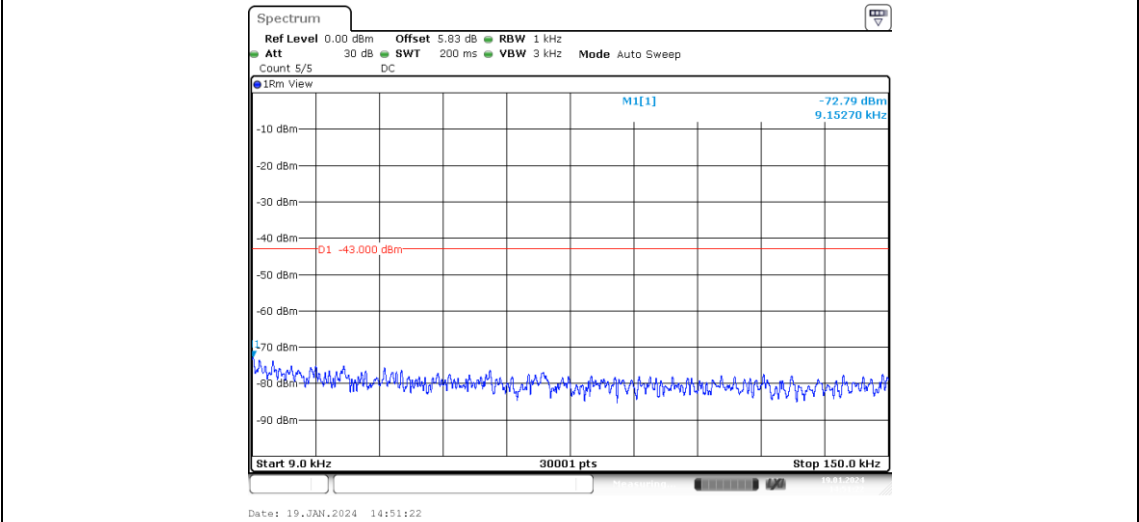
Band2-Stand-Alone-NaN-BPSK-19199-1@0-15kHz-0.15-30--68.91--33-PASS



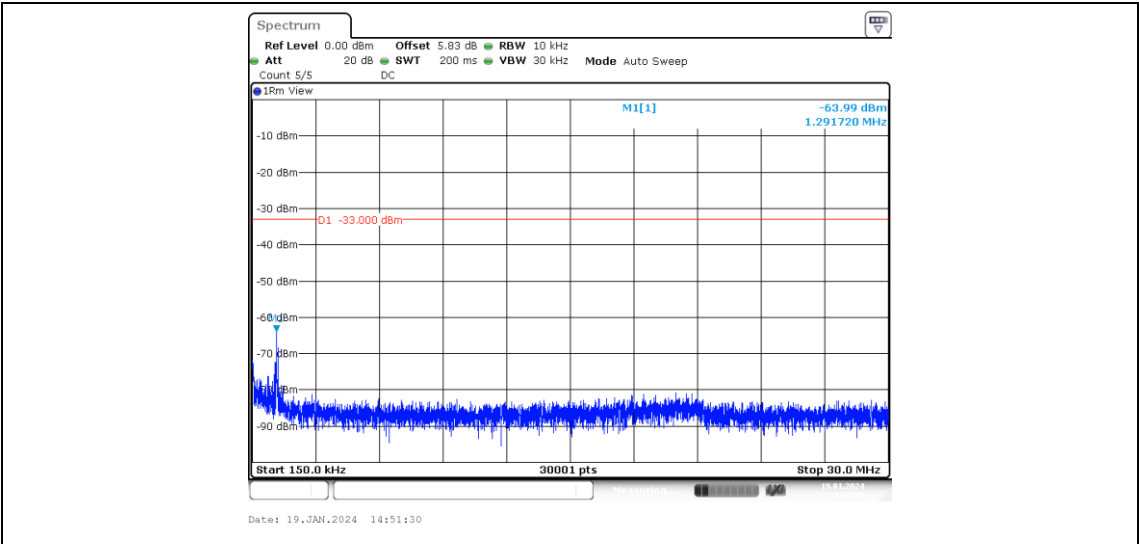
Band2-Stand-Alone-NaN-BPSK-19199-1@0-15kHz-30-1000--54.93--13-PASS



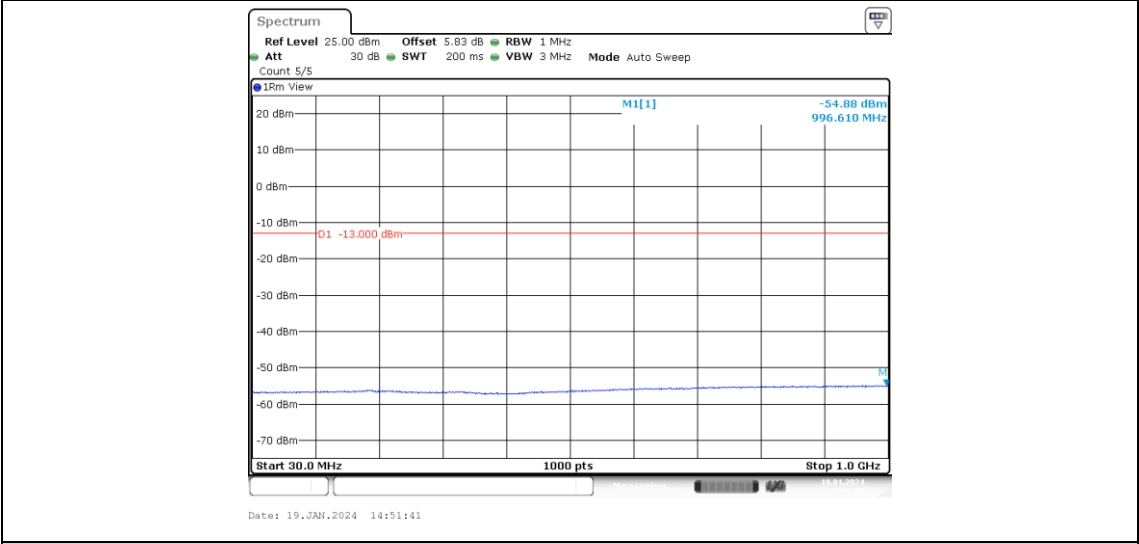
Band2-Stand-Alone-NaN-BPSK-19199-1@0-15kHz-1000-20000--43.04--13-PASS



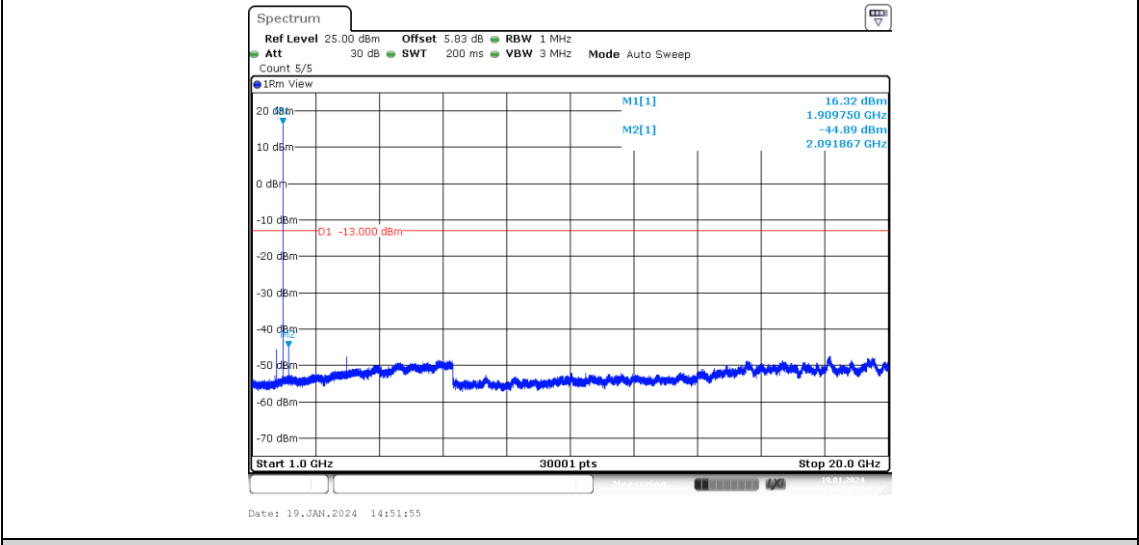
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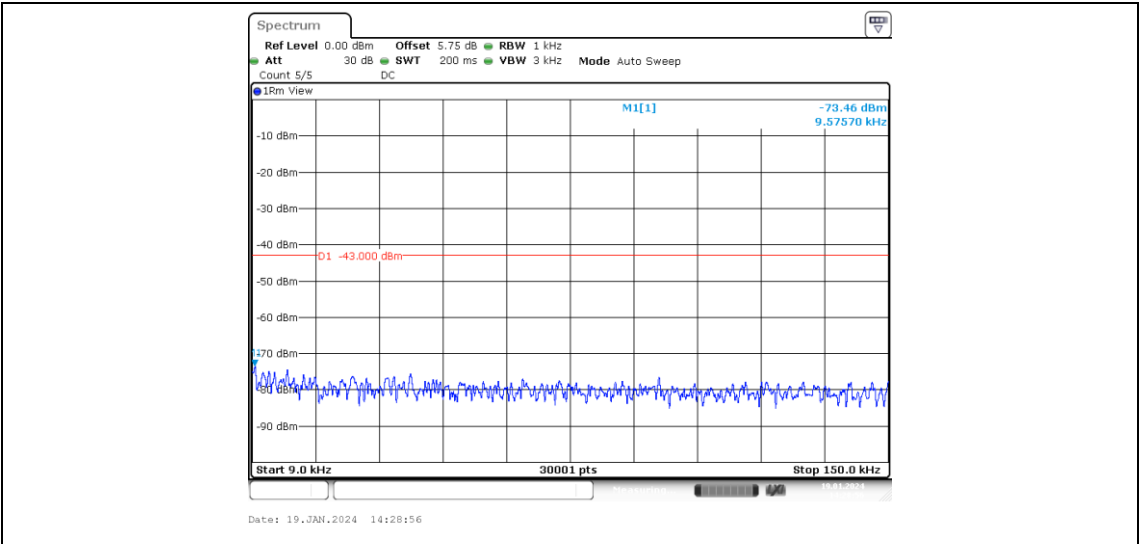
Band2-Stand-Alone-NaN-BPSK-19199-1@11-15kHz-0.15-30--63.99--33-PASS



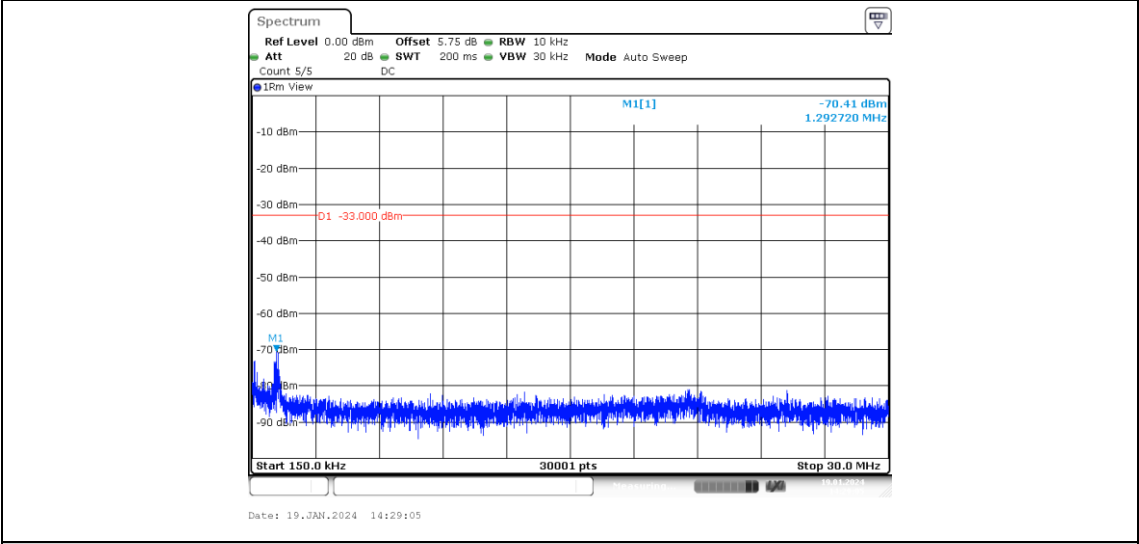
Band2-Stand-Alone-NaN-BPSK-19199-1@11-15kHz-30-1000--54.88--13-PASS



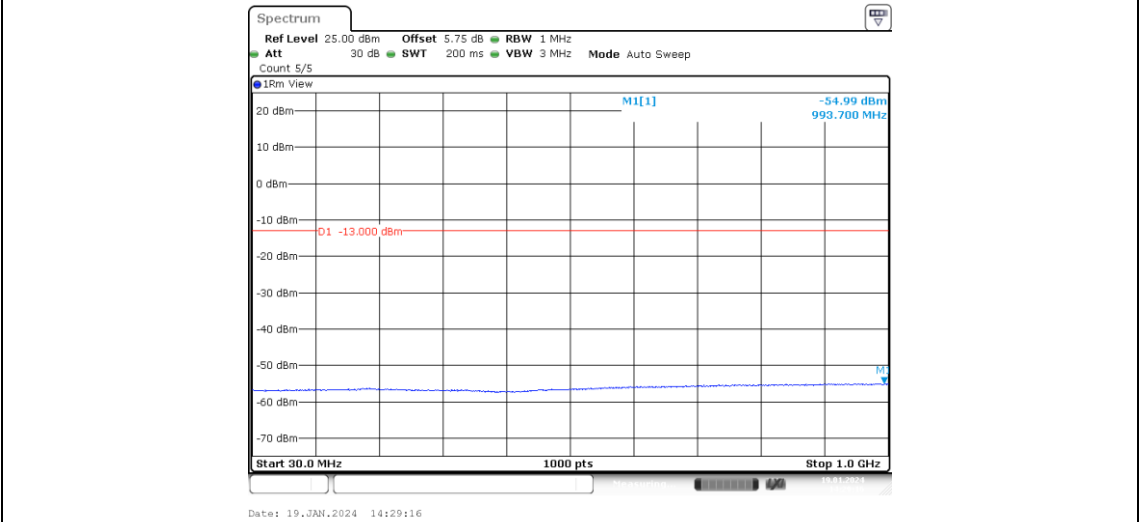
Band2-Stand-Alone-NaN-BPSK-19199-1@11-15kHz-1000-20000--44.89--13-PASS



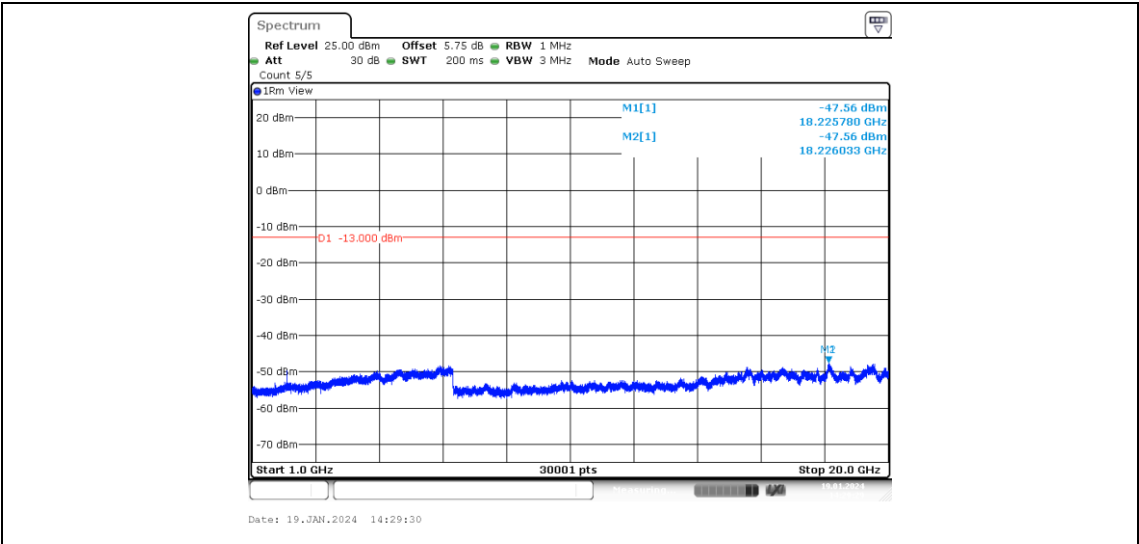
Band2-Stand-Alone-NaN-QPSK-18601-12@0-15kHz-0.009-0.15--73.46--43-PASS



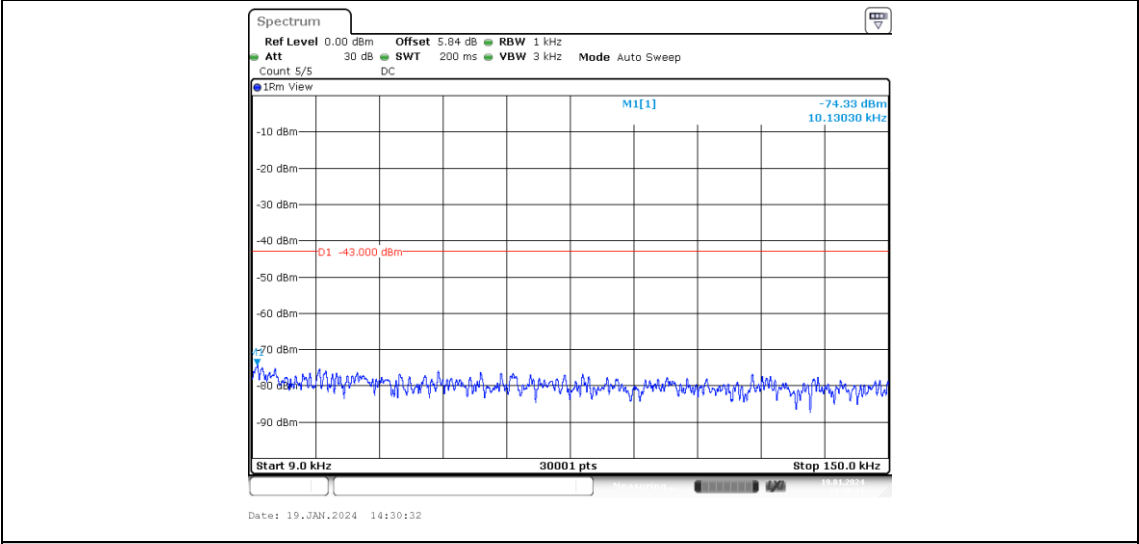
Band2-Stand-Alone-NaN-QPSK-18601-12@0-15kHz-0.15-30--70.41--33-PASS



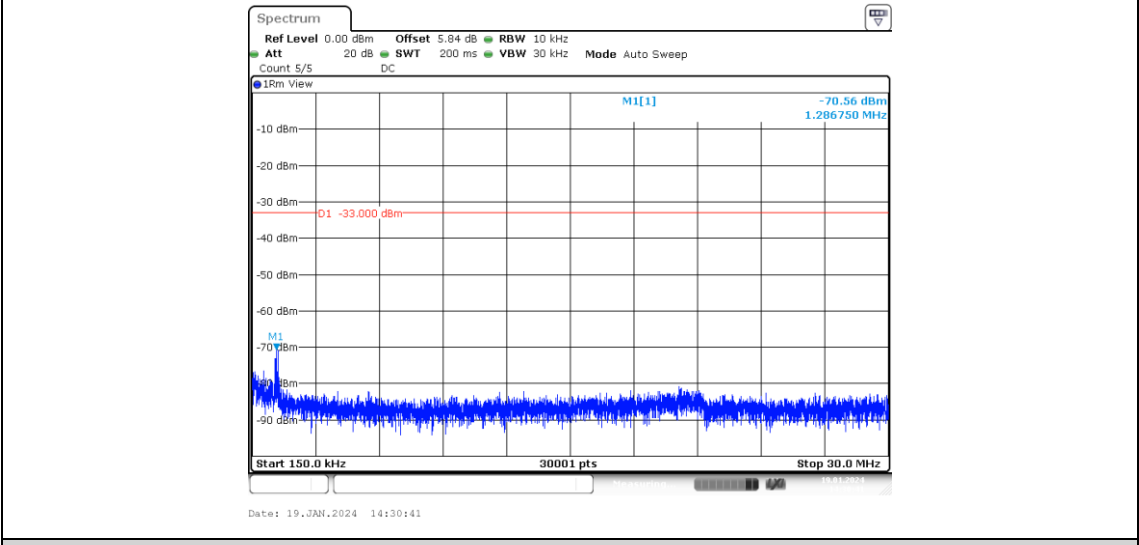
Band2-Stand-Alone-NaN-QPSK-18601-12@0-15kHz-30-1000--54.99--13-PASS



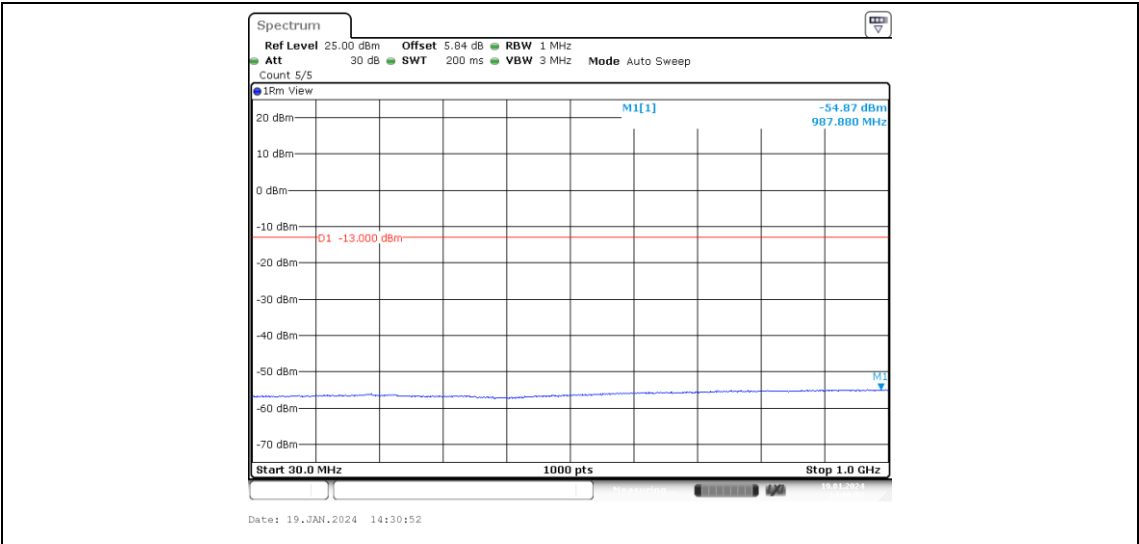
Band2-Stand-Alone-NaN-QPSK-18601-12@0-15kHz-1000-20000--47.56--13-PASS



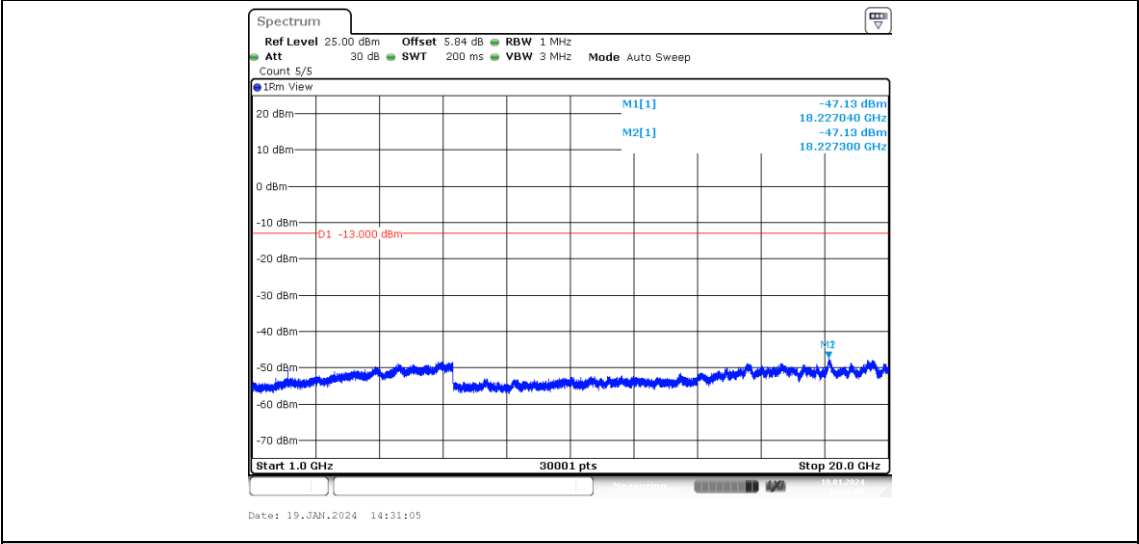
Band2-Stand-Alone-NaN-QPSK-18876-12@0-15kHz-0.009-0.15--74.33--43-PASS



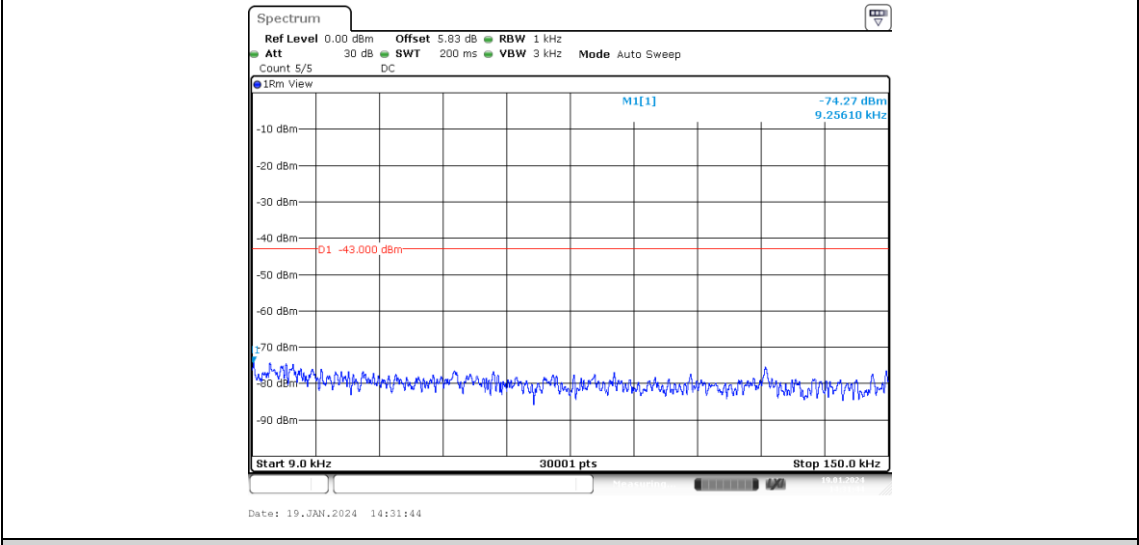
Band2-Stand-Alone-NaN-QPSK-18876-12@0-15kHz-0.15-30--70.56--33-PASS



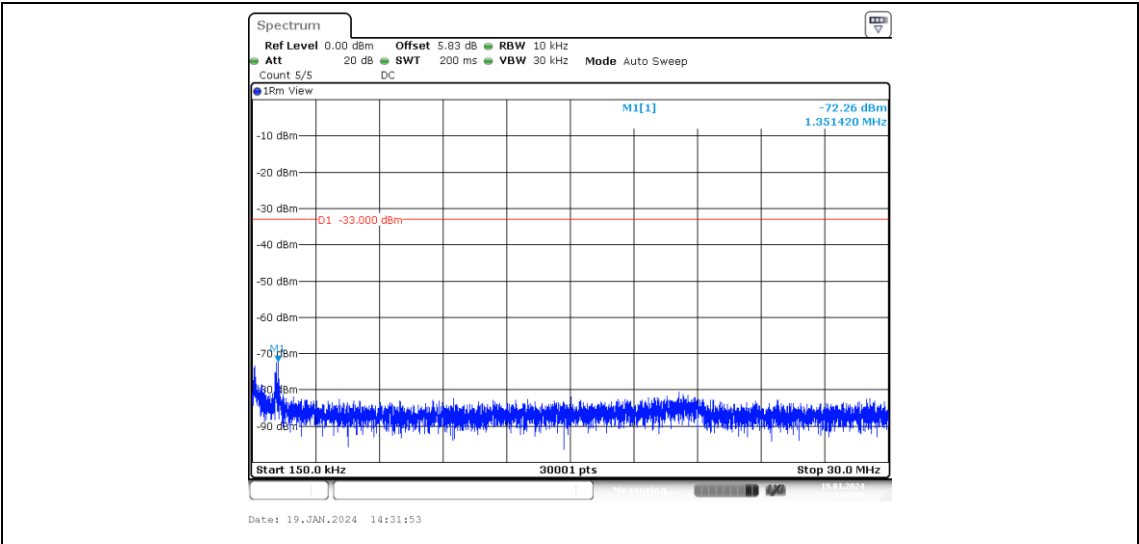
Band2-Stand-Alone-NaN-QPSK-18876-12@0-15kHz-30-1000--54.87--13-PASS



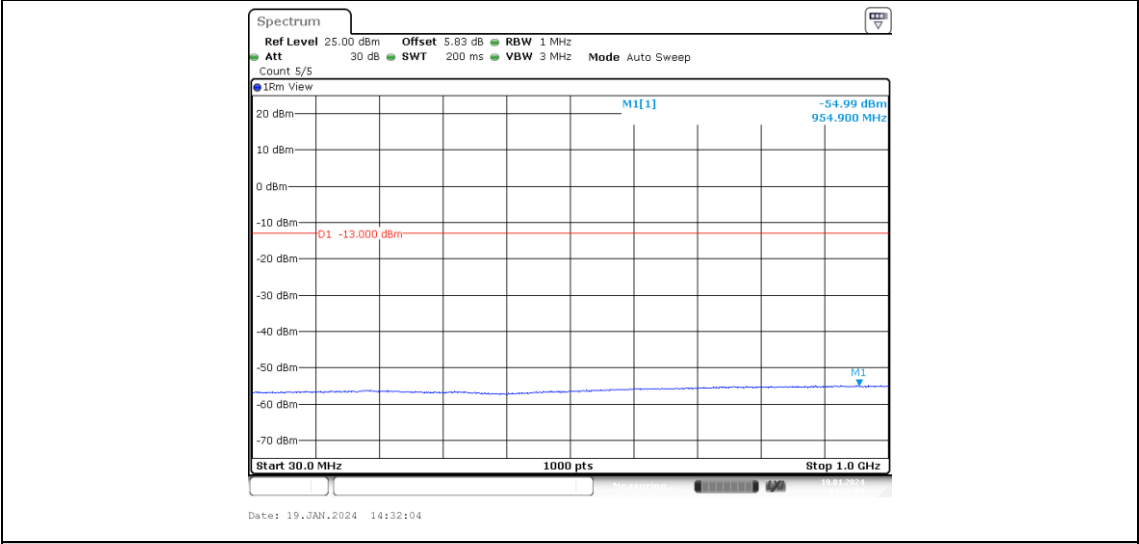
Band2-Stand-Alone-NaN-QPSK-18876-12@0-15kHz-1000-20000--47.13--13-PASS



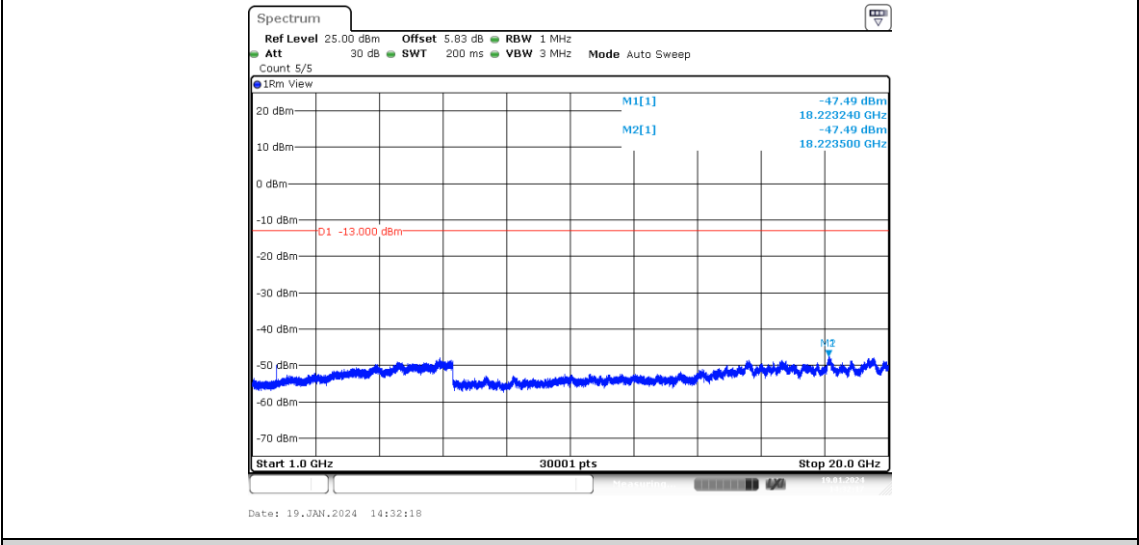
Band2-Stand-Alone-NaN-QPSK-19199-12@0-15kHz-0.009-0.15--74.27--43-PASS



Band2-Stand-Alone-NaN-QPSK-19199-12@0-15kHz-0.15-30--72.26--33-PASS



Band2-Stand-Alone-NaN-QPSK-19199-12@0-15kHz-30-1000--54.99--13-PASS



Band2-Stand-Alone-NaN-QPSK-19199-12@0-15kHz-1000-20000--47.49--13-PASS

Appendix F: Frequency Stability

Test Result

Voltage												
Band	OpMode	SCS	Bandwidth	Modulation	Channel	Tones	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band 2	Stand-Alone	3.75 kHz	NaN	QPSK	18876	1 @ 0	VH	NT	-23.47	-0.012500	±2.5	PASS
Band 2	Stand-Alone	3.75 kHz	NaN	QPSK	18876	1 @ 0	VL	NT	-22.24	-0.011845	±2.5	PASS
Band 2	Stand-Alone	3.75 kHz	NaN	QPSK	18876	1 @ 0	VN	NT	-22.79	-0.012138	±2.5	PASS
Band 2	Stand-Alone	3.75 kHz	NaN	QPSK	18876	1 @ 47	VH	NT	-24.99	-0.013310	±2.5	PASS
Band 2	Stand-Alone	3.75 kHz	NaN	QPSK	18876	1 @ 47	VL	NT	-25.98	-0.013837	±2.5	PASS
Band 2	Stand-Alone	3.75 kHz	NaN	QPSK	18876	1 @ 47	VN	NT	-23.99	-0.012777	±2.5	PASS
Band 2	Stand-Alone	15k Hz	NaN	QPSK	18876	1 @ 0	VH	NT	-41.66	-0.022188	±2.5	PASS
Band 2	Stand-Alone	15k Hz	NaN	QPSK	18876	1 @ 0	VL	NT	-34.72	-0.018492	±2.5	PASS
Band 2	Stand-Alone	15k Hz	NaN	QPSK	18876	1 @ 0	VN	NT	-35.36	-0.018833	±2.5	PASS
Band 2	Stand-Alone	15k Hz	NaN	QPSK	18876	1 @ 11	VH	NT	-27.72	-0.014764	±2.5	PASS
Band 2	Stand-Alone	15k Hz	NaN	QPSK	18876	1 @ 11	VL	NT	-33.17	-0.017666	±2.5	PASS
Ba	Stand-	15k	NaN	QPS	188	1	VN	NT	-28.8	-0.01	±2.	PA

nd 2	Alone	Hz		K	76	@1 1			8	5381	5	SS
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Temperature												
Band	OpMode	Bandwidth	Modulation	Channel	Tones	SCS	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band2	Stand-Alone	3.75k Hz	NaN	QPSK	18876	1 @ 0	NV	50	-22.79	-0.012138	±2.5	PASS
Band2	Stand-Alone	3.75k Hz	NaN	QPSK	18876	1 @ 0	NV	-20	-22.73	-0.012106	±2.5	PASS
Band2	Stand-Alone	3.75k Hz	NaN	QPSK	18876	1 @ 0	NV	-10	-22.56	-0.012015	±2.5	PASS
Band2	Stand-Alone	3.75k Hz	NaN	QPSK	18876	1 @ 0	NV	0	-23.39	-0.012457	±2.5	PASS
Band2	Stand-Alone	3.75k Hz	NaN	QPSK	18876	1 @ 0	NV	10	-24.00	-0.012782	±2.5	PASS
Band2	Stand-Alone	3.75k Hz	NaN	QPSK	18876	1 @ 0	NV	20	-18.01	-0.009592	±2.5	PASS
Band2	Stand-Alone	3.75k Hz	NaN	QPSK	18876	1 @ 0	NV	30	-18.53	-0.009869	±2.5	PASS
Band2	Stand-Alone	3.75k Hz	NaN	QPSK	18876	1 @ 0	NV	40	-19.67	-0.010476	±2.5	PASS
Band2	Stand-Alone	3.75k Hz	NaN	QPSK	18876	1 @ 0	NV	-30	-22.49	-0.011978	±2.5	PASS
Band2	Stand-Alone	3.75k Hz	NaN	QPSK	18876	1 @ 47	NV	30	-21.94	-0.011685	±2.5	PASS
Band2	Stand-Alone	3.75k Hz	NaN	QPSK	18876	1 @ 47	NV	20	-23.80	-0.012676	±2.5	PASS
Band2	Stand-Alone	3.75k Hz	NaN	QPSK	18876	1 @ 47	NV	10	-22.46	-0.011962	±2.5	PASS

Ba nd2	Stand- Alone	3.75k Hz	NaN	QP SK	18 87 6	1 @ 47	NV	0	-23.2 5	-0.01 2383	±2. 5	PA SS
Ba nd2	Stand- Alone	3.75k Hz	NaN	QP SK	18 87 6	1 @ 47	NV	-10	-23.2 9	-0.01 2404	±2. 5	PA SS
Ba nd2	Stand- Alone	3.75k Hz	NaN	QP SK	18 87 6	1 @ 47	NV	40	-21.8 0	-0.01 1611	±2. 5	PA SS
Ba nd2	Stand- Alone	3.75k Hz	NaN	QP SK	18 87 6	1 @ 47	NV	-30	-23.6 5	-0.01 2596	±2. 5	PA SS
Ba nd2	Stand- Alone	3.75k Hz	NaN	QP SK	18 87 6	1 @ 47	NV	50	-21.2 6	-0.01 1323	±2. 5	PA SS
Ba nd2	Stand- Alone	3.75k Hz	NaN	QP SK	18 87 6	1 @ 47	NV	-20	-24.7 0	-0.01 3155	±2. 5	PA SS
Ba nd2	Stand- Alone	15kH z	NaN	QP SK	18 87 6	1 @ 0	NV	50	-37.9 8	-0.02 0228	±2. 5	PA SS
Ba nd2	Stand- Alone	15kH z	NaN	QP SK	18 87 6	1 @ 0	NV	-20	-40.6 8	-0.02 1666	±2. 5	PA SS
Ba nd2	Stand- Alone	15kH z	NaN	QP SK	18 87 6	1 @ 0	NV	-10	-35.9 3	-0.01 9136	±2. 5	PA SS
Ba nd2	Stand- Alone	15kH z	NaN	QP SK	18 87 6	1 @ 0	NV	0	-36.4 6	-0.01 9418	±2. 5	PA SS
Ba nd2	Stand- Alone	15kH z	NaN	QP SK	18 87 6	1 @ 0	NV	10	-40.1 7	-0.02 1394	±2. 5	PA SS
Ba nd2	Stand- Alone	15kH z	NaN	QP SK	18 87 6	1 @ 0	NV	20	-40.0 1	-0.02 1309	±2. 5	PA SS
Ba nd2	Stand- Alone	15kH z	NaN	QP SK	18 87 6	1 @ 0	NV	30	-38.9 2	-0.02 0729	±2. 5	PA SS
Ba nd2	Stand- Alone	15kH z	NaN	QP SK	18 87 6	1 @ 0	NV	40	-39.5 7	-0.02 1075	±2. 5	PA SS
Ba	Stand-	15kH	NaN	QP	18	1	NV	-30	-32.7	-0.01	±2.	PA

nd2	Alone	z		SK	87 6	@ 0			7	7453	5	SS
Ba nd2	Stand- Alone	15kH z	NaN	QP SK	18 87 6	1 @1 1	NV	40	-34.6 8	-0.01 8470	±2. 5	PA SS
Ba nd2	Stand- Alone	15kH z	NaN	QP SK	18 87 6	1 @1 1	NV	30	-27.8 7	-0.01 4843	±2. 5	PA SS
Ba nd2	Stand- Alone	15kH z	NaN	QP SK	18 87 6	1 @1 1	NV	20	-30.9 6	-0.01 6489	±2. 5	PA SS
Ba nd2	Stand- Alone	15kH z	NaN	QP SK	18 87 6	1 @1 1	NV	10	-30.6 3	-0.01 6313	±2. 5	PA SS
Ba nd2	Stand- Alone	15kH z	NaN	QP SK	18 87 6	1 @1 1	NV	0	-27.1 4	-0.01 4455	±2. 5	PA SS
Ba nd2	Stand- Alone	15kH z	NaN	QP SK	18 87 6	1 @1 1	NV	-10	-22.8 3	-0.01 2159	±2. 5	PA SS
Ba nd2	Stand- Alone	15kH z	NaN	QP SK	18 87 6	1 @1 1	NV	-30	-30.3 1	-0.01 6143	±2. 5	PA SS
Ba nd2	Stand- Alone	15kH z	NaN	QP SK	18 87 6	1 @1 1	NV	50	-30.9 0	-0.01 6457	±2. 5	PA SS
Ba nd2	Stand- Alone	15kH z	NaN	QP SK	18 87 6	1 @1 1	NV	-20	-29.0 5	-0.01 5472	±2. 5	PA SS