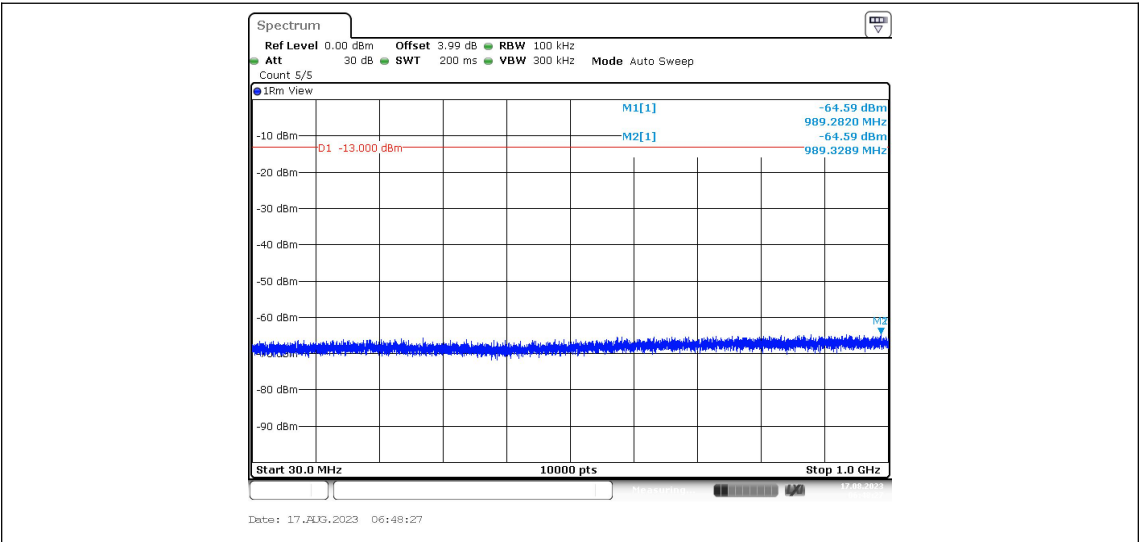
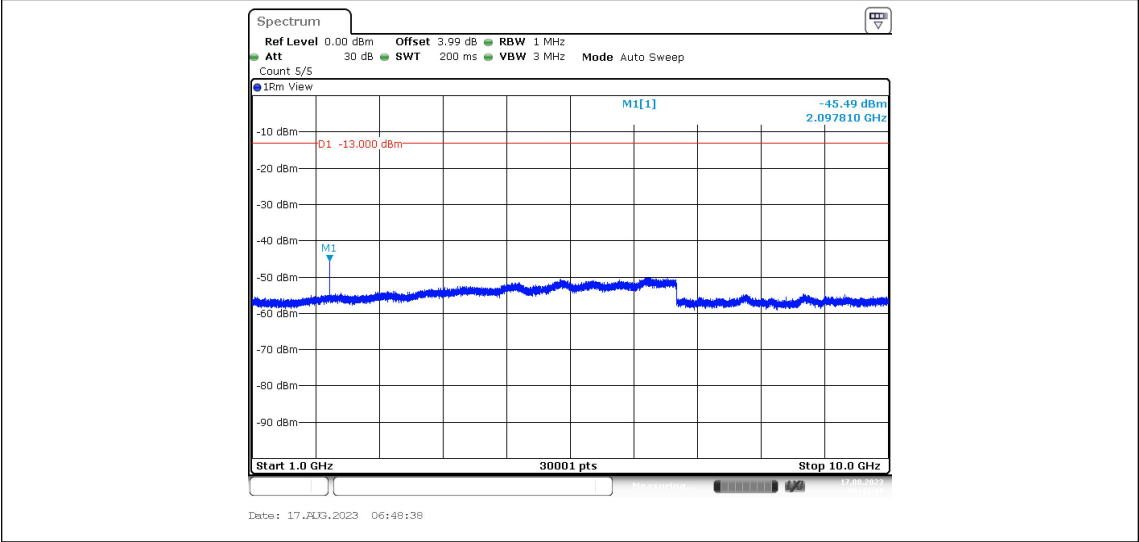
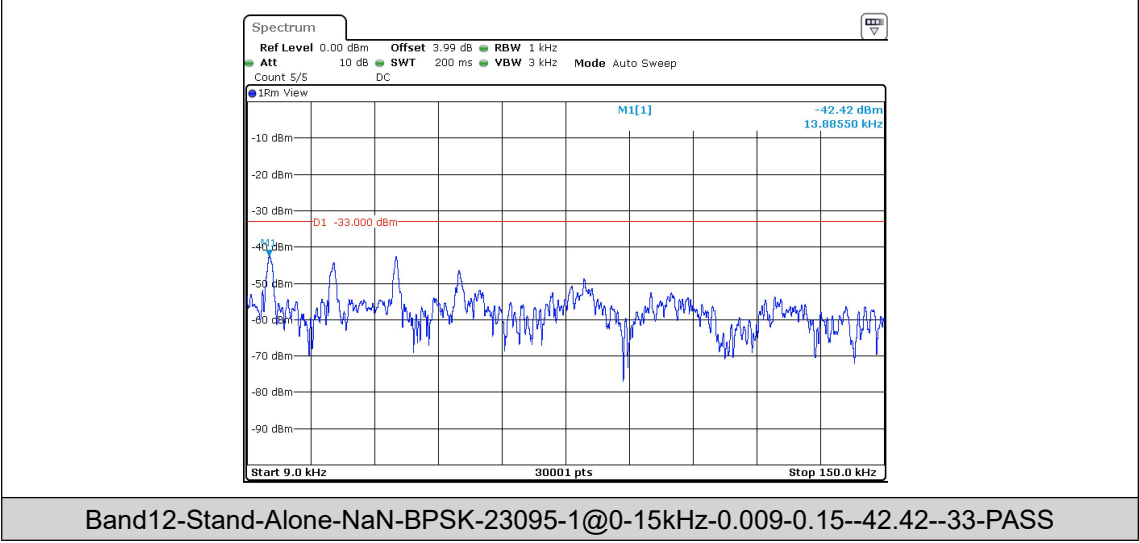




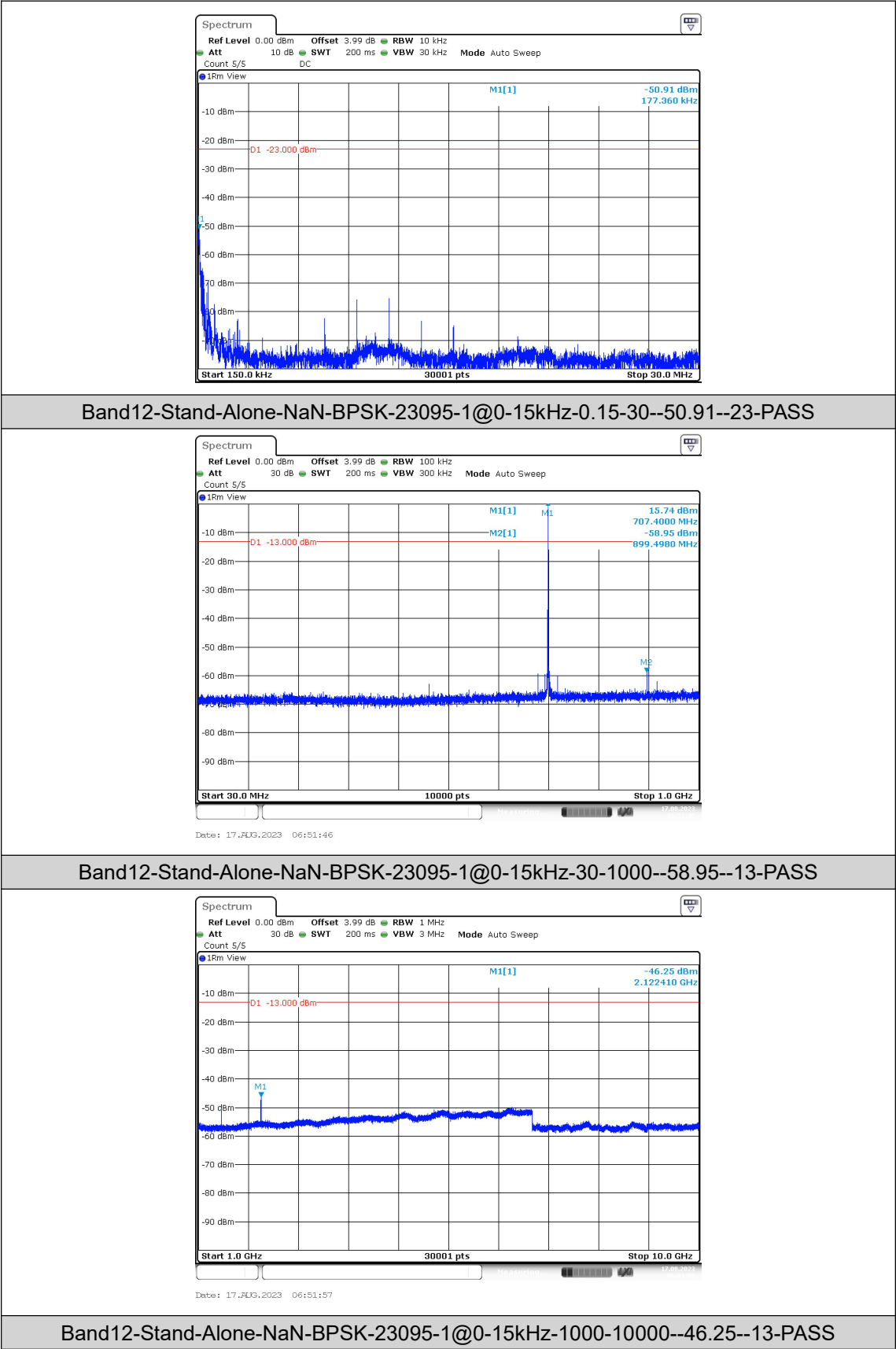
Band12-Stand-Alone-NaN-BPSK-23011-1@11-15kHz-30-1000--64.59--13-PASS

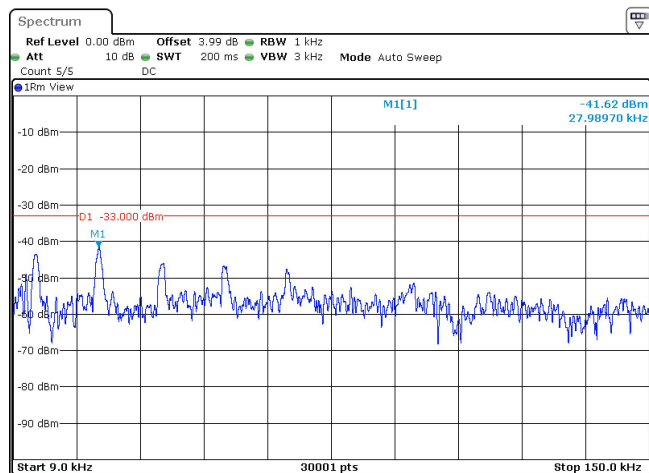


Band12-Stand-Alone-NaN-BPSK-23011-1@11-15kHz-1000-10000--45.49--13-PASS

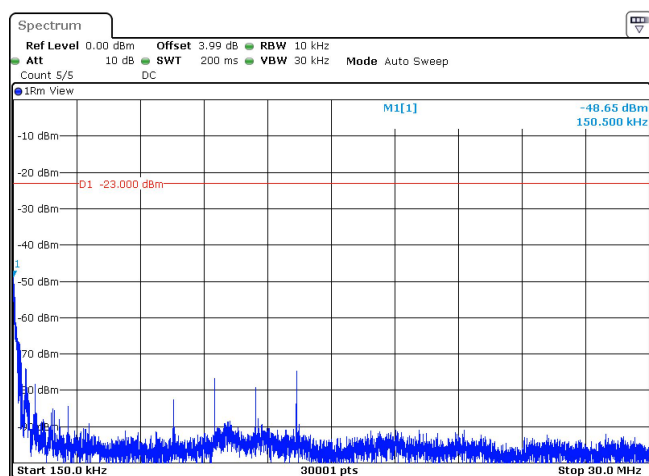


Band12-Stand-Alone-NaN-BPSK-23095-1@0-15kHz-0.009-0.15--42.42--33-PASS

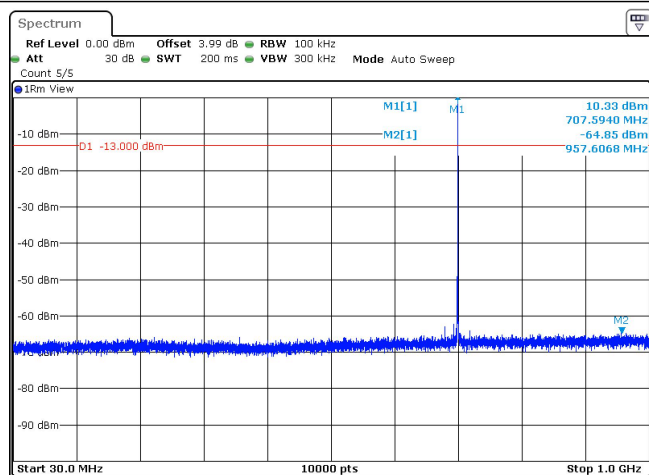




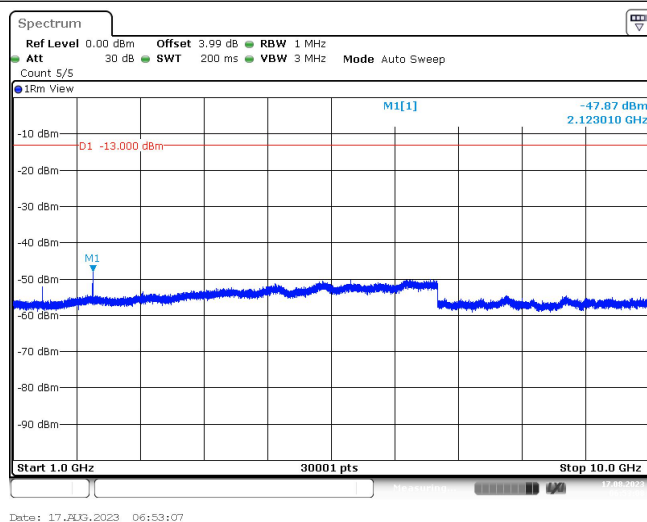
Band12-Stand-Alone-NaN-BPSK-23095-1@11-15kHz-0.009-0.15--41.62--33-PASS



Band12-Stand-Alone-NaN-BPSK-23095-1@11-15kHz-0.15-30--48.65--23-PASS

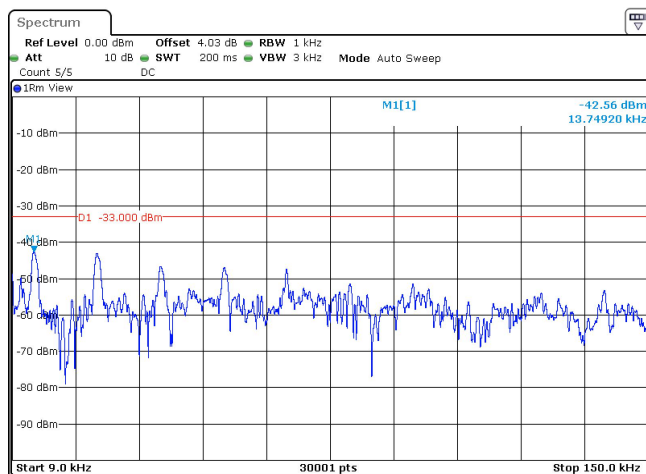


Band12-Stand-Alone-NaN-BPSK-23095-1@11-15kHz-30-1000--64.85--13-PASS

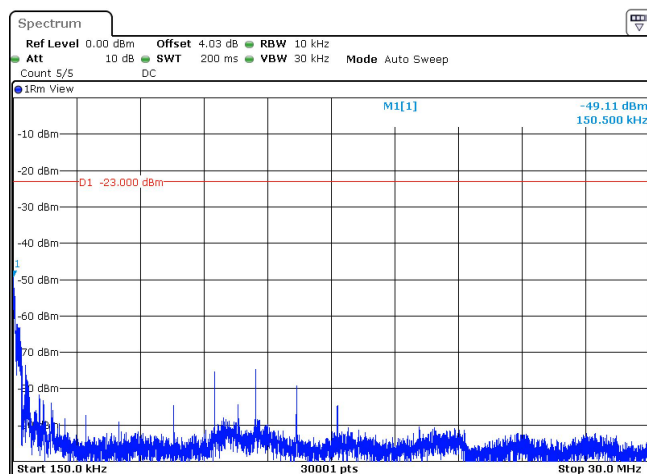


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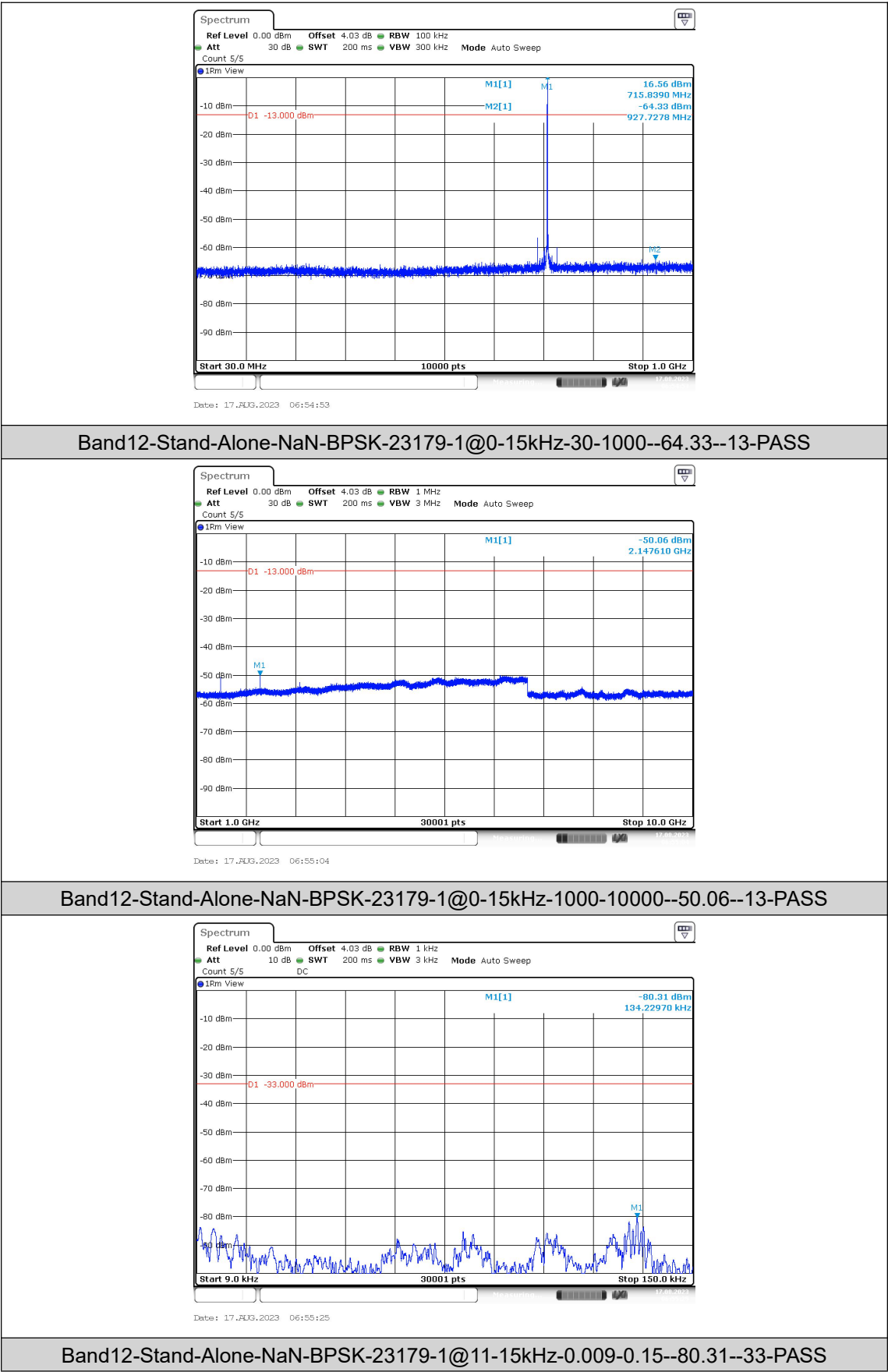
Band12-Stand-Alone-NaN-BPSK-23095-1@11-15kHz-1000-10000--47.87--13-PASS

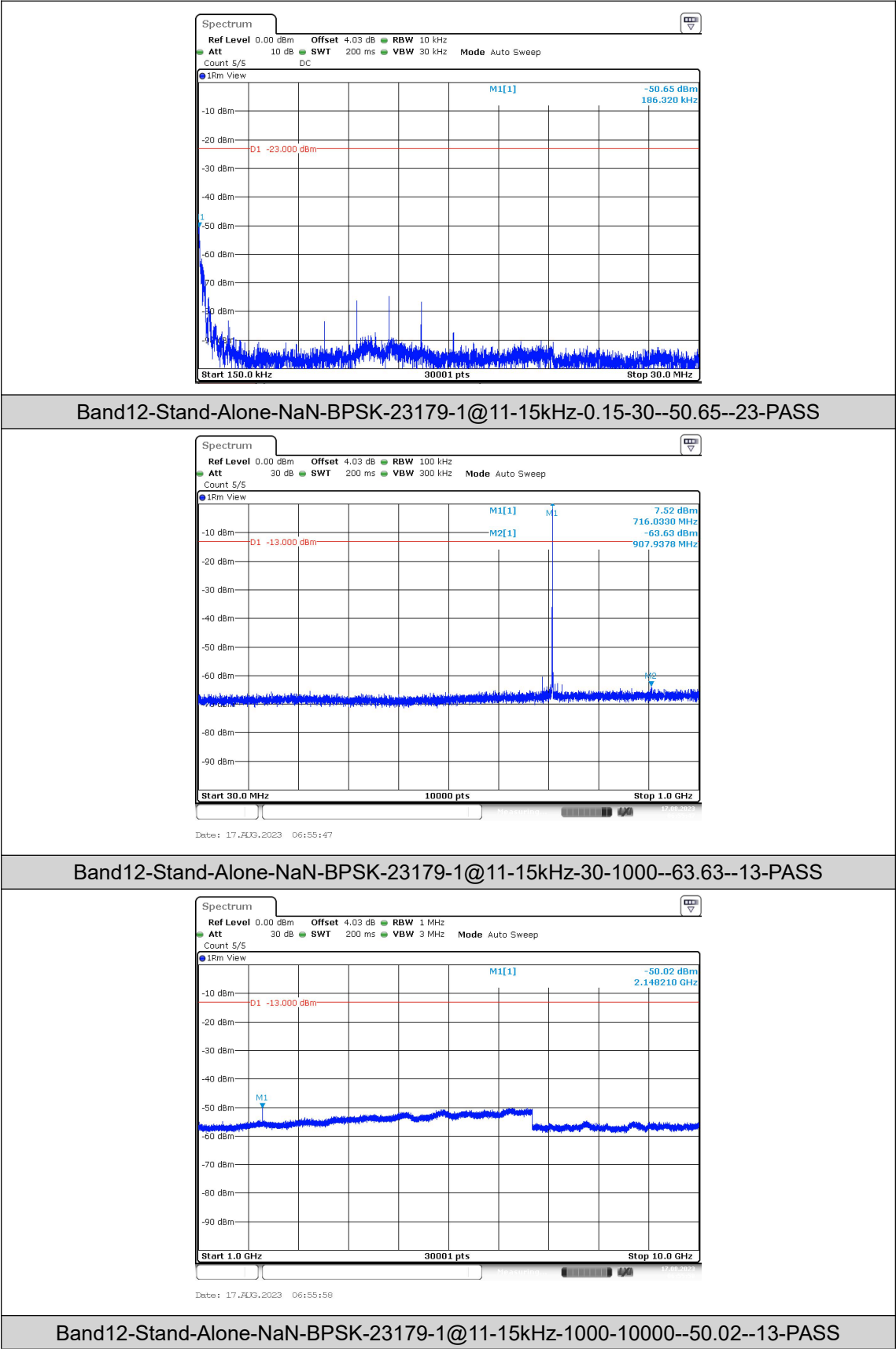


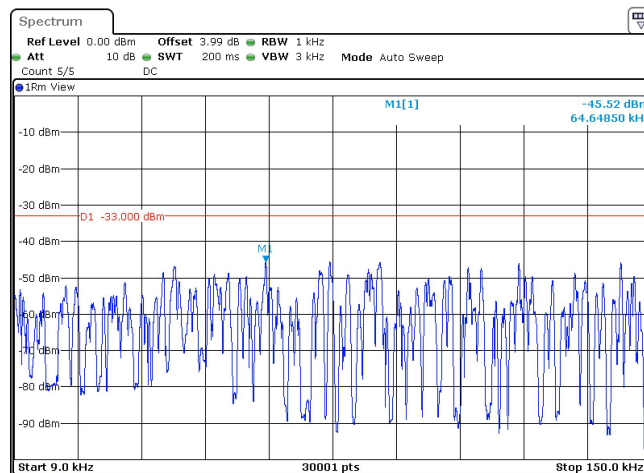
Band12-Stand-Alone-NaN-BPSK-23179-1@0-15kHz-0.009-0.15--42.56--33-PASS



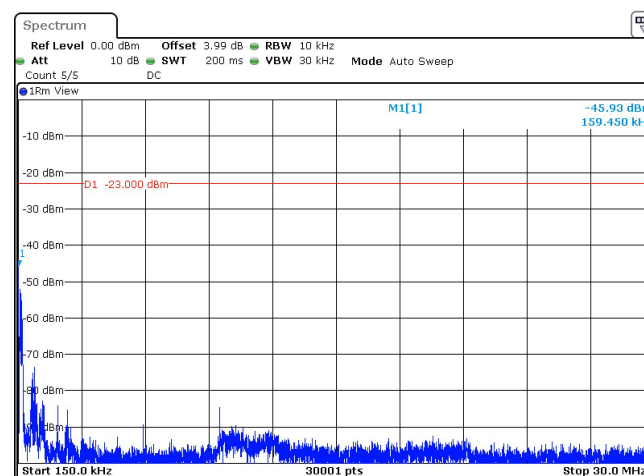
Band12-Stand-Alone-NaN-BPSK-23179-1@0-15kHz-0.15-30--49.11--23-PASS



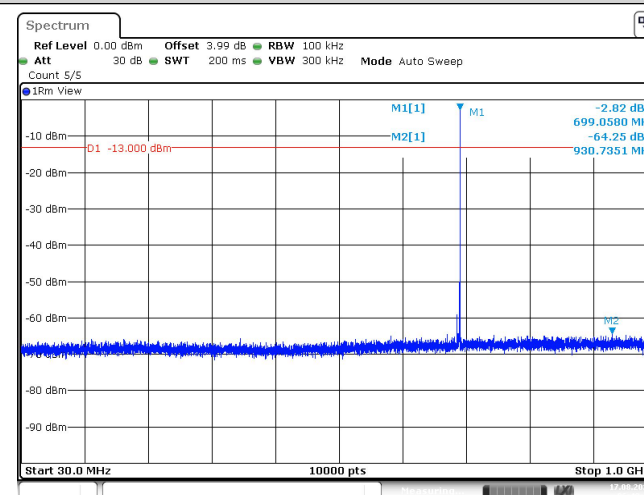




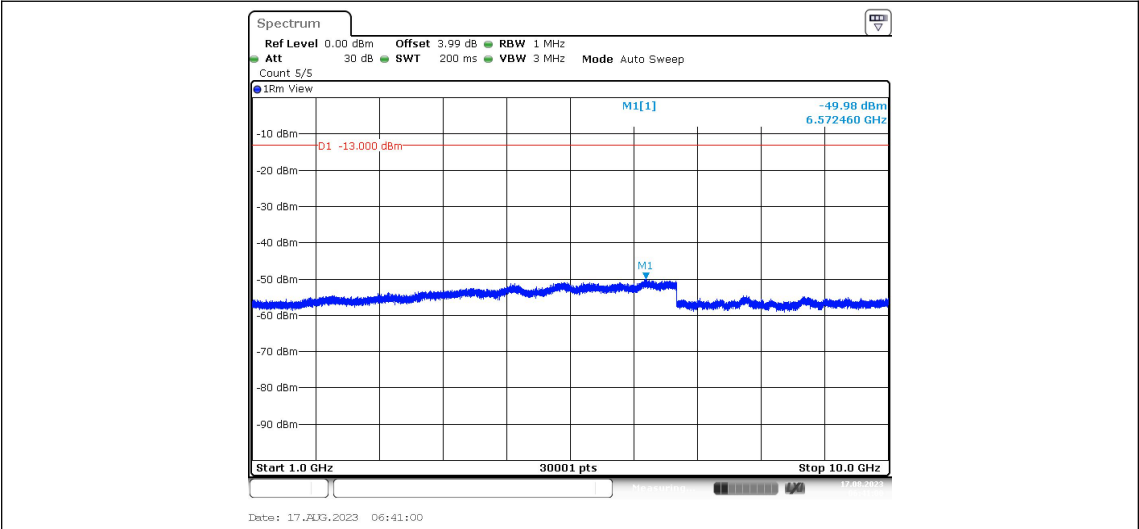
Band12-Stand-Alone-NaN-QPSK-23011-12@0-15kHz-0.009-0.15--45.52--33-PASS



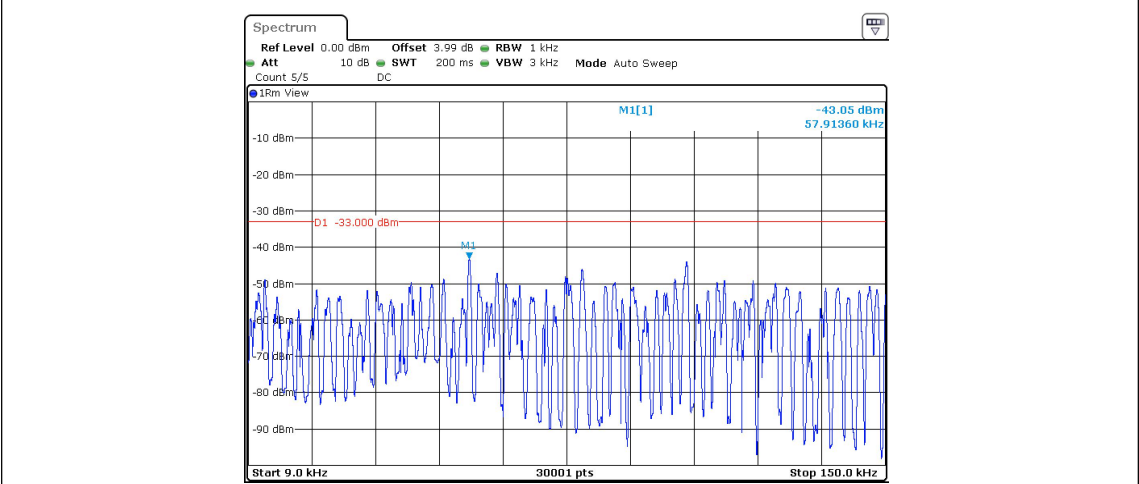
Band12-Stand-Alone-NaN-QPSK-23011-12@0-15kHz-0.15-30--45.93--23-PASS



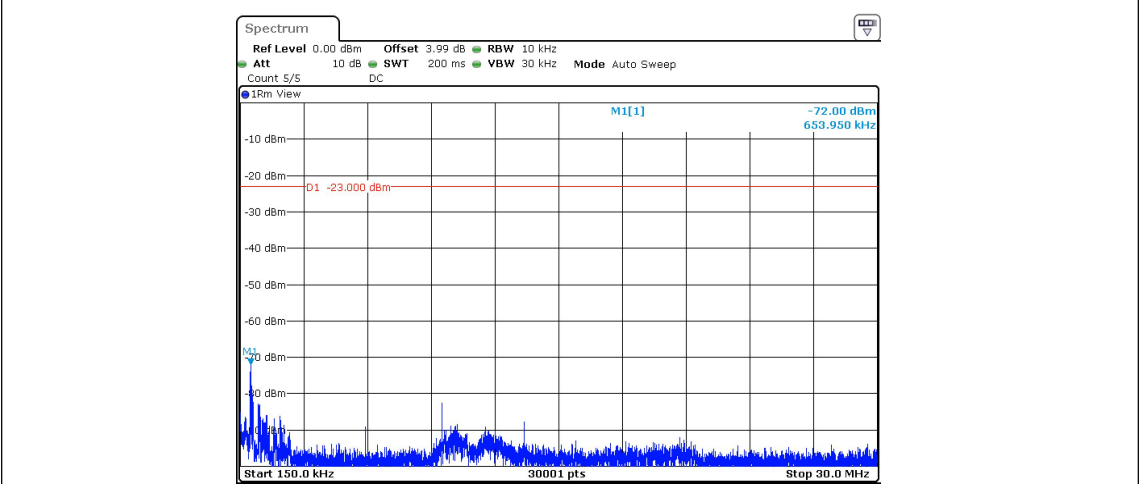
Band12-Stand-Alone-NaN-QPSK-23011-12@0-15kHz-30-1000--64.25--13-PASS



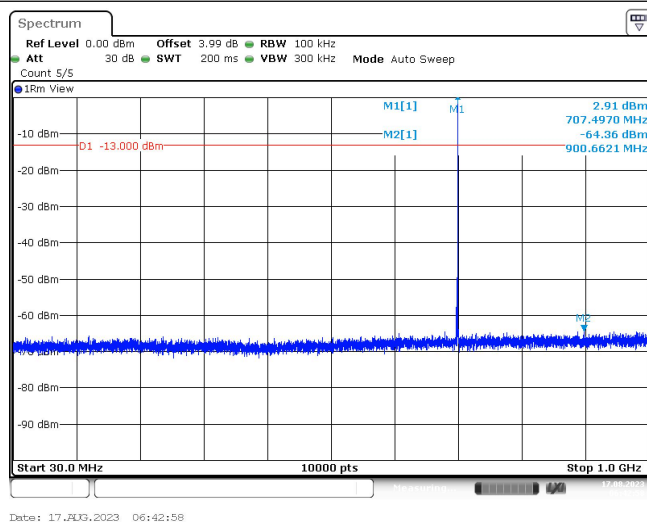
Band12-Stand-Alone-NaN-QPSK-23011-12@0-15kHz-1000-10000--49.98--13-PASS



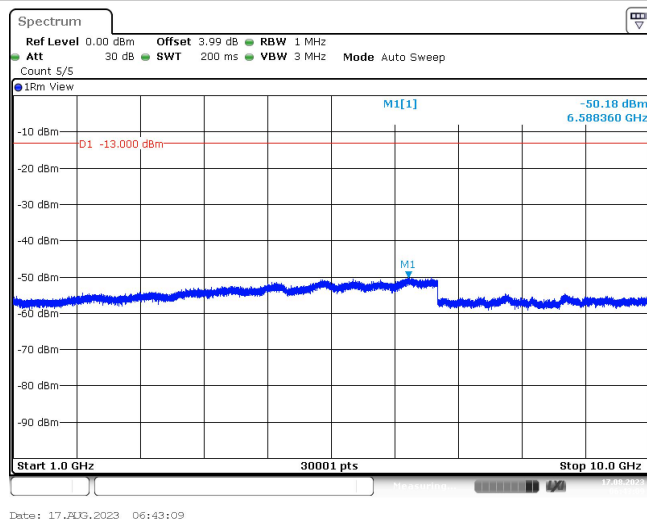
Band12-Stand-Alone-NaN-QPSK-23095-12@0-15kHz-0.009-0.15--43.05--33-PASS



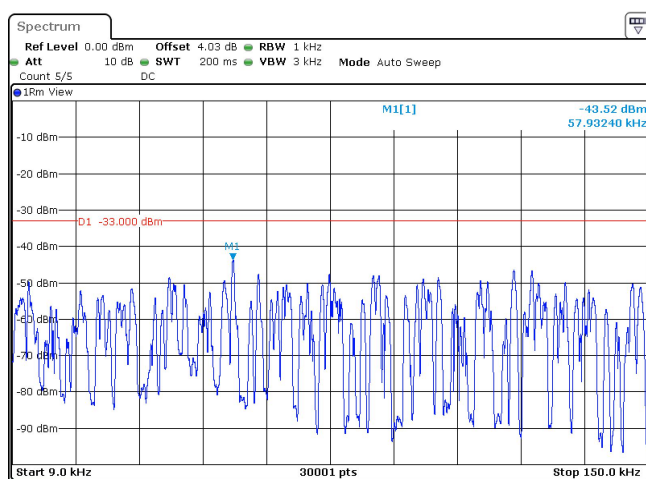
Band12-Stand-Alone-NaN-QPSK-23095-12@0-15kHz-0.15-30--72--23-PASS



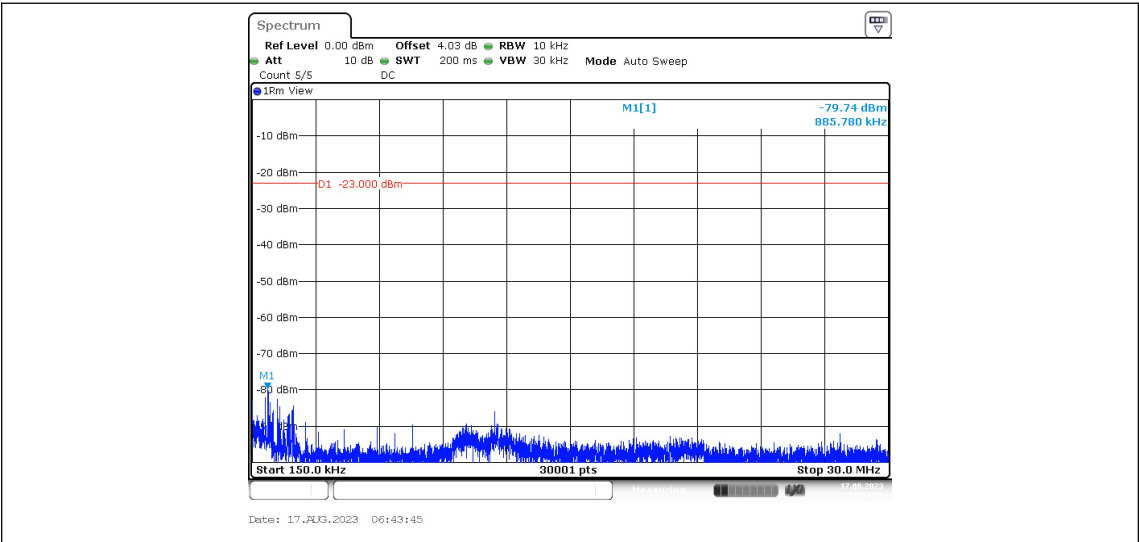
Band12-Stand-Alone-NaN-QPSK-23095-12@0-15kHz-30-1000--64.36--13-PASS



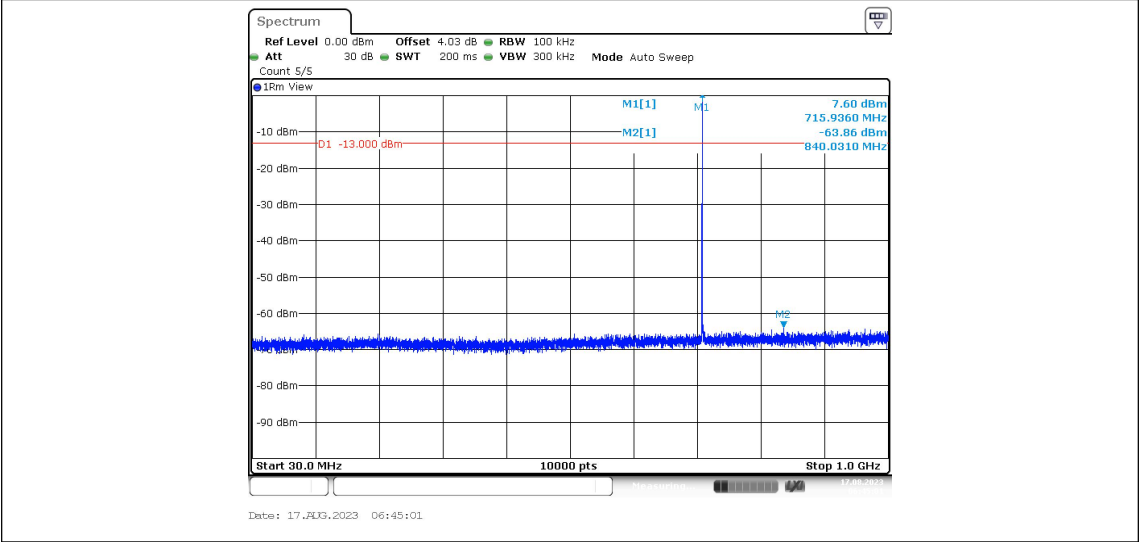
Band12-Stand-Alone-NaN-QPSK-23095-12@0-15kHz-1000-10000--50.18--13-PASS



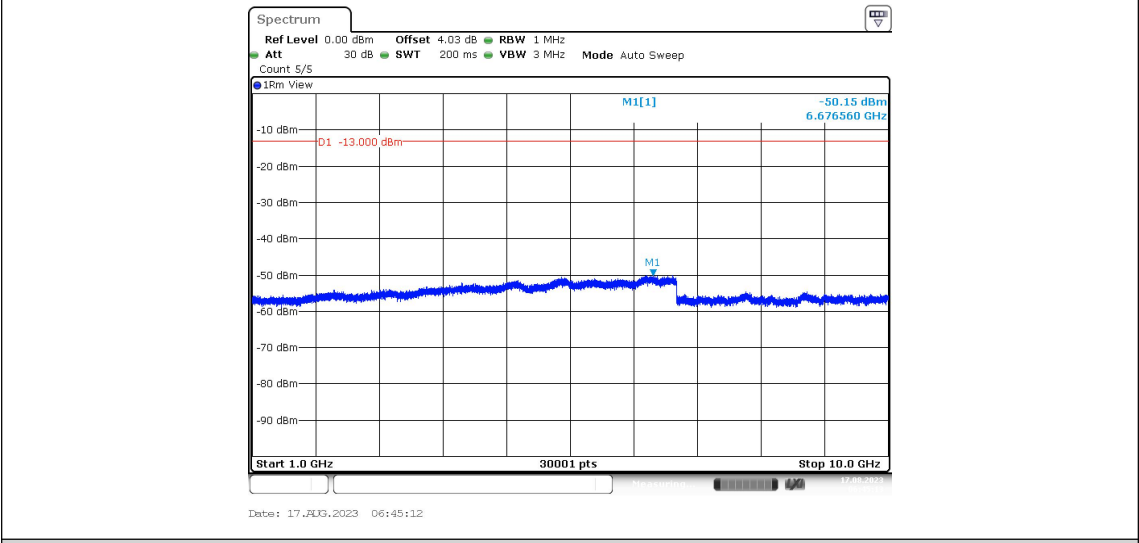
Band12-Stand-Alone-NaN-QPSK-23179-12@0-15kHz-0.009-0.15--43.52--33-PASS



Band12-Stand-Alone-NaN-QPSK-23179-12@0-15kHz-0.15-30--79.74--23-PASS



Band12-Stand-Alone-NaN-QPSK-23179-12@0-15kHz-30-1000--63.86--13-PASS



Band12-Stand-Alone-NaN-QPSK-23179-12@0-15kHz-1000-10000--50.15--13-PASS

Appendix F: Frequency Stability for NB1

Test Result

Voltage												
Band	OpMode	SCS	Bandwidth	Modulation	Channel	Tones	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@0	VH	NT	-8.40	-0.011873	±2.5	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@0	VL	NT	-7.91	-0.011180	±2.5	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@0	VN	NT	-8.04	-0.011364	±2.5	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@47	VH	NT	-9.16	-0.012947	±2.5	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@47	VL	NT	-9.28	-0.013117	±2.5	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@47	VN	NT	-9.36	-0.013230	±2.5	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@0	VH	NT	-8.03	-0.011350	±2.5	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@0	VL	NT	-9.87	-0.013951	±2.5	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@0	VN	NT	-7.74	-0.010940	±2.5	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@11	VH	NT	-7.90	-0.011166	±2.5	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@11	VL	NT	-6.98	-0.009866	±2.5	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@11	VN	NT	-6.51	-0.009201	±2.5	PASS

Temperature												
Band	OpMode	Bandwidth	Modulation	Channel	Tones	SCS	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@0	NV	50	-6.67	-0.009428	±2.5	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@0	NV	-20	-8.28	-0.011703	±2.5	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@0	NV	-10	-8.84	-0.012495	±2.5	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@0	NV	0	-8.67	-0.012254	±2.5	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@0	NV	10	-8.88	-0.012551	±2.5	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@0	NV	20	-9.10	-0.012862	±2.5	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@0	NV	30	-8.81	-0.012452	±2.5	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@0	NV	40	-8.73	-0.012339	±2.5	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@0	NV	-30	-9.66	-0.013654	±2.5	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@47	NV	30	-7.80	-0.011025	±2.5	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@47	NV	20	-7.78	-0.010996	±2.5	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@47	NV	10	-8.97	-0.012678	±2.5	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@47	NV	0	-8.37	-0.011830	±2.5	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@47	NV	-10	-8.57	-0.012113	±2.5	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@47	NV	40	-8.54	-0.012071	±2.5	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@47	NV	-30	-9.86	-0.013936	±2.5	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@47	NV	50	-8.41	-0.011887	±2.5	PASS

Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@47	NV	-20	-9.10	-0.012862	±2.5	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@0	NV	50	-8.81	-0.012452	±2.5	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@0	NV	-20	-9.30	-0.013145	±2.5	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@0	NV	-10	-7.32	-0.010346	±2.5	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@0	NV	0	-8.91	-0.012594	±2.5	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@0	NV	10	-6.64	-0.009385	±2.5	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@0	NV	20	-8.78	-0.012410	±2.5	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@0	NV	30	-10.17	-0.014375	±2.5	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@0	NV	40	-8.44	-0.011929	±2.5	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@0	NV	-30	-8.13	-0.011491	±2.5	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@11	NV	40	-6.55	-0.009258	±2.5	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@11	NV	30	-7.50	-0.010601	±2.5	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@11	NV	20	-6.84	-0.009668	±2.5	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@11	NV	10	-6.69	-0.009456	±2.5	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@11	NV	0	-7.71	-0.010898	±2.5	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@11	NV	-10	-7.15	-0.010106	±2.5	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@11	NV	-30	-9.21	-0.013018	±2.5	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@11	NV	50	-5.56	-0.007859	±2.5	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@11	NV	-20	-6.91	-0.009767	±2.5	PASS