

Appendix I: Test Results of Band 66 for NB-IoT operation

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Appendix I.1: RF Power Output and Effective (Isotropic) Radiated Power Output Data for NB

Test Result

Band	OpMode	Bandwidth	Modulation	Channel	Tones	SCS	Result			Limit (watts)	Verdict
							dBm	dBm	Watts		
Band66	Stand-Alone	NaN	QPSK	131973	1@47	3.75kHz	12.33	14.47	0.028	1	PASS
Band66	Stand-Alone	NaN	QPSK	131973	1@0	3.75kHz	12.43	14.57	0.029	1	PASS
Band66	Stand-Alone	NaN	QPSK	131973	1@0	15kHz	11.94	14.08	0.026	1	PASS
Band66	Stand-Alone	NaN	QPSK	131973	1@11	15kHz	11.97	14.11	0.026	1	PASS
Band66	Stand-Alone	NaN	QPSK	131973	3@3	15kHz	12.01	14.15	0.026	1	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@47	3.75kHz	20.85	22.99	0.199	1	PASS
Band66	Stand-Alone	NaN	QPSK	132322	3@3	15kHz	21.15	23.29	0.213	1	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@11	15kHz	21.23	23.37	0.217	1	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	15kHz	21.27	23.41	0.219	1	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	3.75kHz	20.9	23.04	0.201	1	PASS
Band66	Stand-Alone	NaN	QPSK	132671	1@0	15kHz	11.32	13.46	0.022	1	PASS
Band66	Stand-Alone	NaN	QPSK	132671	1@0	3.75kHz	12.42	14.56	0.029	1	PASS
Band66	Stand-Alone	NaN	QPSK	132671	3@3	15kHz	11.78	13.92	0.025	1	PASS
Band66	Stand-Alone	NaN	QPSK	132671	1@47	3.75kHz	12.37	14.51	0.028	1	PASS
Band66	Stand-Alone	NaN	QPSK	132671	1@11	15kHz	11.35	13.49	0.022	1	PASS
Band66	Stand-Alone	NaN	BPSK	131973	3@3	15kHz	12.12	14.26	0.027	1	PASS
Band66	Stand-Alone	NaN	BPSK	131973	1@11	15kHz	12.22	14.36	0.027	1	PASS
Band66	Stand-Alone	NaN	BPSK	131973	1@0	15kHz	12.01	14.15	0.026	1	PASS
Band66	Stand-Alone	NaN	BPSK	131973	1@47	3.75kHz	12.36	14.5	0.028	1	PASS
Band66	Stand-Alone	NaN	BPSK	131973	1@0	3.75kHz	12.4	14.54	0.028	1	PASS
Band66	Stand-Alone	NaN	BPSK	132322	3@3	15kHz	21.13	23.27	0.212	1	PASS
Band66	Stand-Alone	NaN	BPSK	132322	1@11	15kHz	21.13	23.27	0.212	1	PASS
Band66	Stand-Alone	NaN	BPSK	132322	1@0	15kHz	21.07	23.21	0.209	1	PASS
Band66	Stand-Alone	NaN	BPSK	132322	1@47	3.75kHz	20.96	23.1	0.204	1	PASS
Band66	Stand-Alone	NaN	BPSK	132322	1@0	3.75kHz	20.95	23.09	0.204	1	PASS
Band66	Stand-Alone	NaN	BPSK	132671	3@3	15kHz	11.17	13.31	0.021	1	PASS
Band66	Stand-Alone	NaN	BPSK	132671	1@11	15kHz	11.84	13.98	0.025	1	PASS
Band66	Stand-Alone	NaN	BPSK	132671	1@0	15kHz	11.97	14.11	0.026	1	PASS
Band66	Stand-Alone	NaN	BPSK	132671	1@0	3.75kHz	12.44	14.58	0.029	1	PASS
Band66	Stand-Alone	NaN	BPSK	132671	1@47	3.75kHz	12.41	14.55	0.029	1	PASS
Band66	Stand-Alone	NaN	QPSK	131973	1@47	3.75kHz	12.33	14.47	0.028	1	PASS
Band66	Stand-Alone	NaN	QPSK	131973	1@0	3.75kHz	12.43	14.57	0.029	1	PASS
Band66	Stand-Alone	NaN	QPSK	131973	1@0	15kHz	11.94	14.08	0.026	1	PASS
Band66	Stand-Alone	NaN	QPSK	131973	1@11	15kHz	11.97	14.11	0.026	1	PASS
Band66	Stand-Alone	NaN	QPSK	131973	3@3	15kHz	12.01	14.15	0.026	1	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@47	3.75kHz	20.85	22.99	0.199	1	PASS
Band66	Stand-Alone	NaN	QPSK	132322	3@3	15kHz	21.15	23.29	0.213	1	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@11	15kHz	21.23	23.37	0.217	1	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	15kHz	21.27	23.41	0.219	1	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	3.75kHz	20.9	23.04	0.201	1	PASS
Band66	Stand-Alone	NaN	QPSK	132671	1@0	15kHz	11.32	13.46	0.022	1	PASS
Band66	Stand-Alone	NaN	QPSK	132671	1@0	3.75kHz	12.42	14.56	0.029	1	PASS
Band66	Stand-Alone	NaN	QPSK	132671	3@3	15kHz	11.78	13.92	0.025	1	PASS
Band66	Stand-Alone	NaN	QPSK	132671	1@47	3.75kHz	12.37	14.51	0.028	1	PASS
Band66	Stand-Alone	NaN	QPSK	132671	1@11	15kHz	11.35	13.49	0.022	1	PASS
Band66	Stand-Alone	NaN	BPSK	131973	3@3	15kHz	12.12	14.26	0.027	1	PASS
Band66	Stand-Alone	NaN	BPSK	131973	1@11	15kHz	12.22	14.36	0.027	1	PASS
Band66	Stand-Alone	NaN	BPSK	131973	1@0	15kHz	12.01	14.15	0.026	1	PASS
Band66	Stand-Alone	NaN	BPSK	131973	1@47	3.75kHz	12.36	14.5	0.028	1	PASS
Band66	Stand-Alone	NaN	BPSK	131973	1@0	3.75kHz	12.4	14.54	0.028	1	PASS
Band66	Stand-Alone	NaN	BPSK	132322	3@3	15kHz	21.13	23.27	0.212	1	PASS

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Band66	Stand-Alone	NaN	BPSK	132322	1@11	15kHz	21.13	23.27	0.212	1	PASS
Band66	Stand-Alone	NaN	BPSK	132322	1@0	15kHz	21.07	23.21	0.209	1	PASS
Band66	Stand-Alone	NaN	BPSK	132322	1@47	3.75kHz	20.96	23.1	0.204	1	PASS
Band66	Stand-Alone	NaN	BPSK	132322	1@0	3.75kHz	20.95	23.09	0.204	1	PASS
Band66	Stand-Alone	NaN	BPSK	132671	3@3	15kHz	11.17	13.31	0.021	1	PASS
Band66	Stand-Alone	NaN	BPSK	132671	1@11	15kHz	11.84	13.98	0.025	1	PASS
Band66	Stand-Alone	NaN	BPSK	132671	1@0	15kHz	11.97	14.11	0.026	1	PASS
Band66	Stand-Alone	NaN	BPSK	132671	1@0	3.75kHz	12.44	14.58	0.029	1	PASS
Band66	Stand-Alone	NaN	BPSK	132671	1@47	3.75kHz	12.41	14.55	0.029	1	PASS

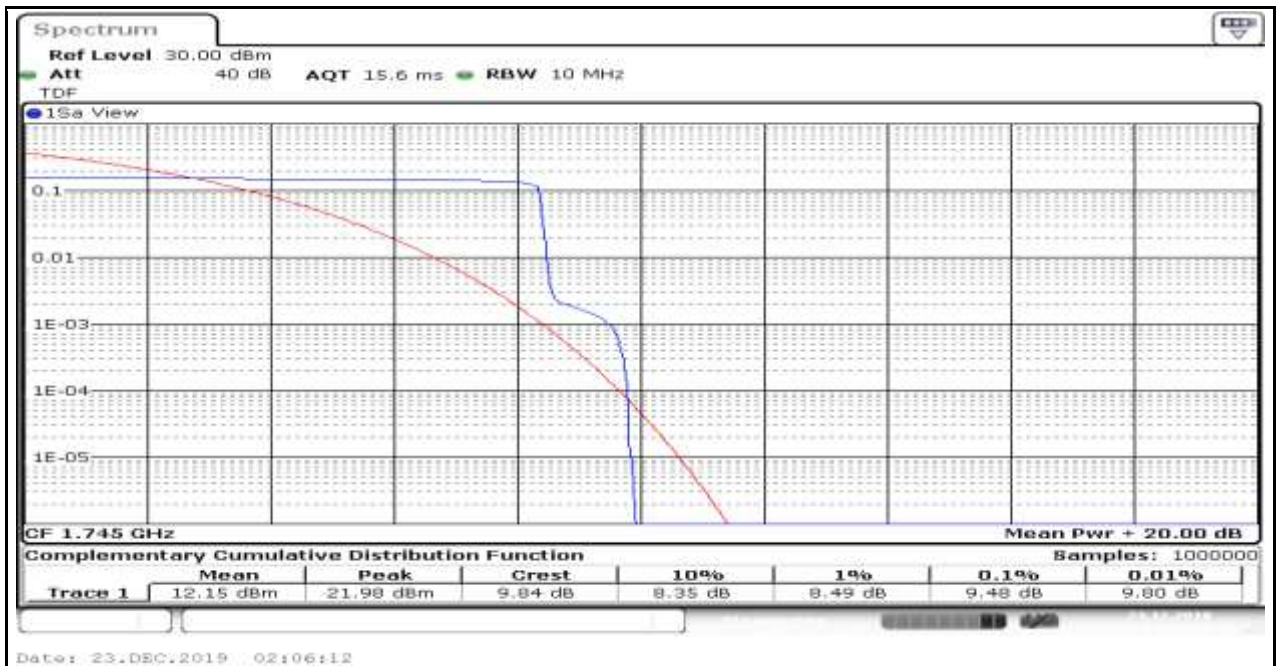
Appendix I.2: Peak-to-Average Ratio (CCDF) for NB

Test Result

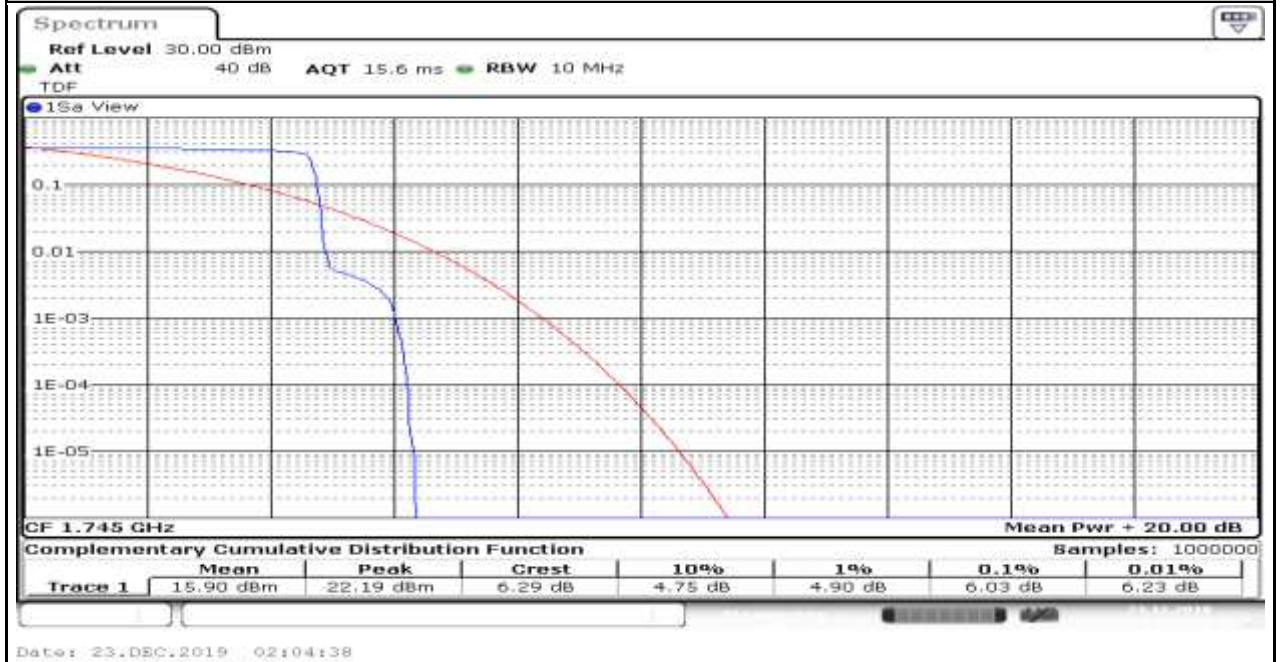
Band	OpMode	Bandwidth	Modulation	Channel	Tones	SCS	Result (dB)	Limit (dB)	Verdict
Band66	Stand-Alone	NaN	QPSK	132322	3@3	15kHz	9.71	<=13	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@11	15kHz	9.48	<=13	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	15kHz	6.03	<=13	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@47	3.75kHz	3.77	<=13	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	3.75kHz	8.99	<=13	PASS
Band66	Stand-Alone	NaN	BPSK	132322	3@3	15kHz	8.52	<=13	PASS
Band66	Stand-Alone	NaN	BPSK	132322	1@11	15kHz	2.87	<=13	PASS
Band66	Stand-Alone	NaN	BPSK	132322	1@0	15kHz	8.49	<=13	PASS
Band66	Stand-Alone	NaN	BPSK	132322	1@47	3.75kHz	2.06	<=13	PASS
Band66	Stand-Alone	NaN	BPSK	132322	1@0	3.75kHz	1.86	<=13	PASS

Test Graphs

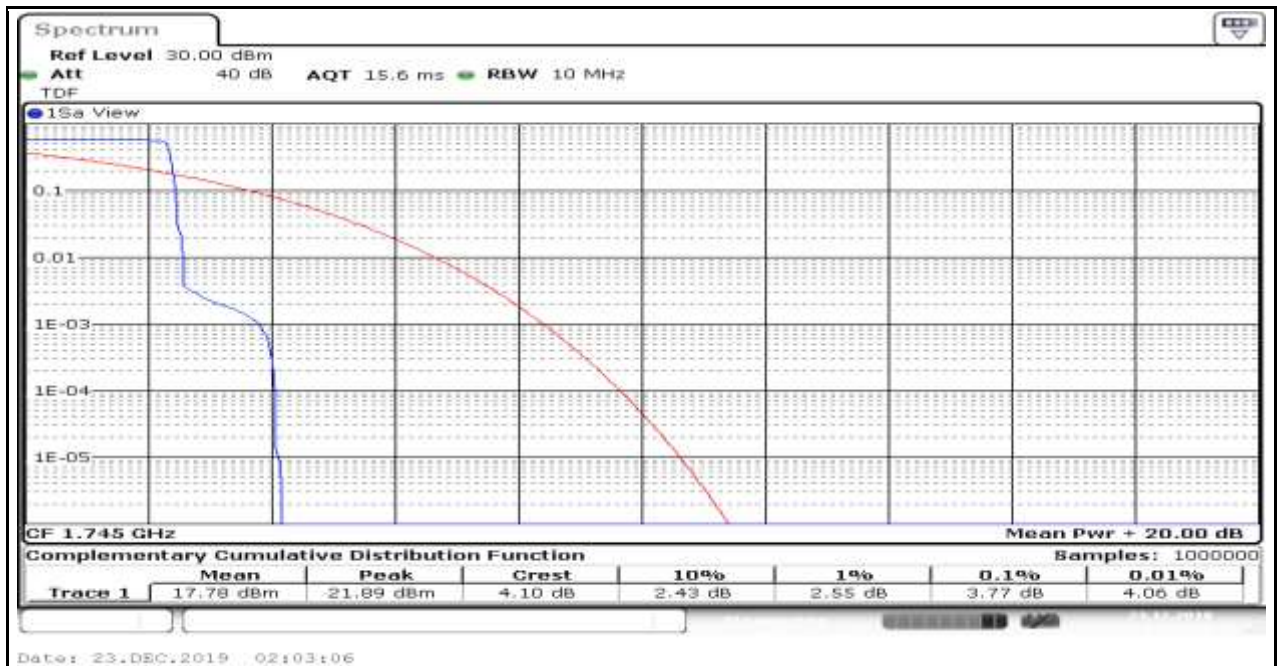




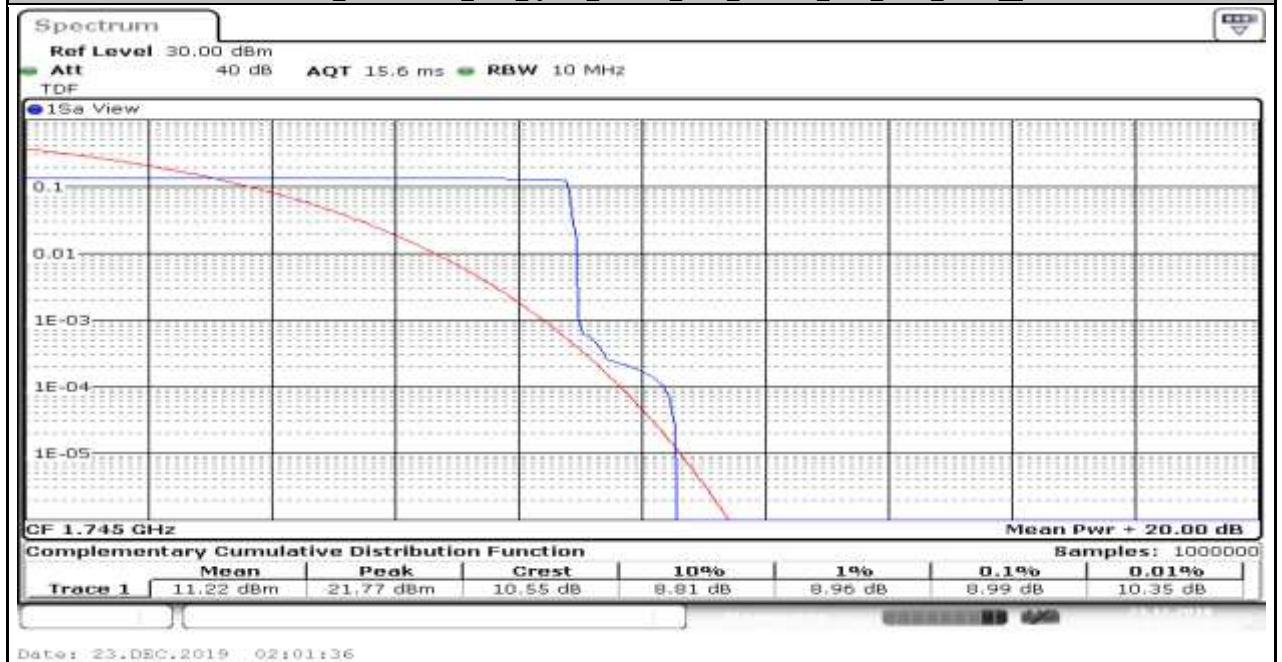
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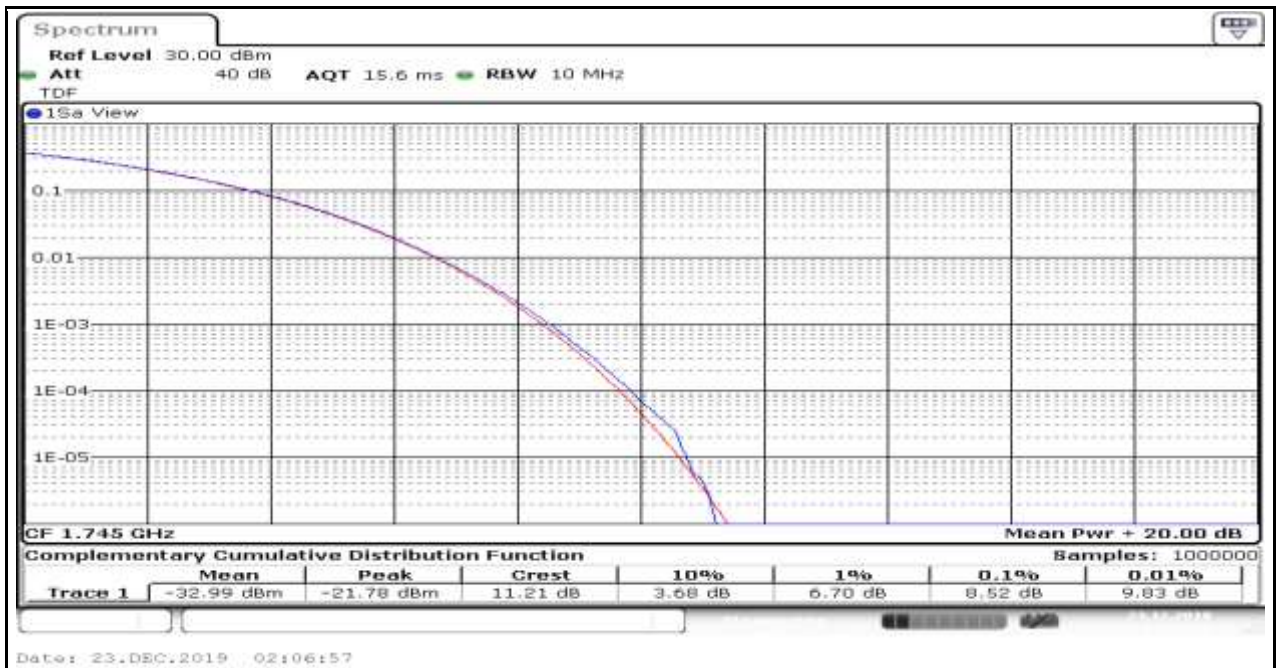
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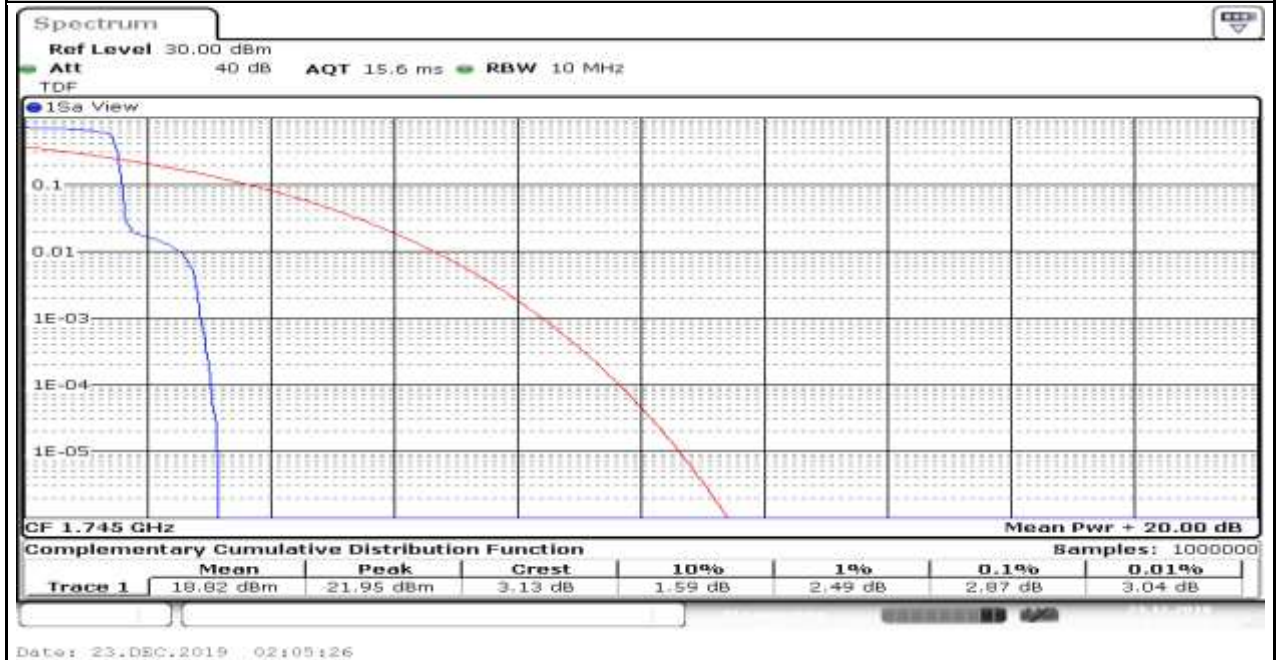
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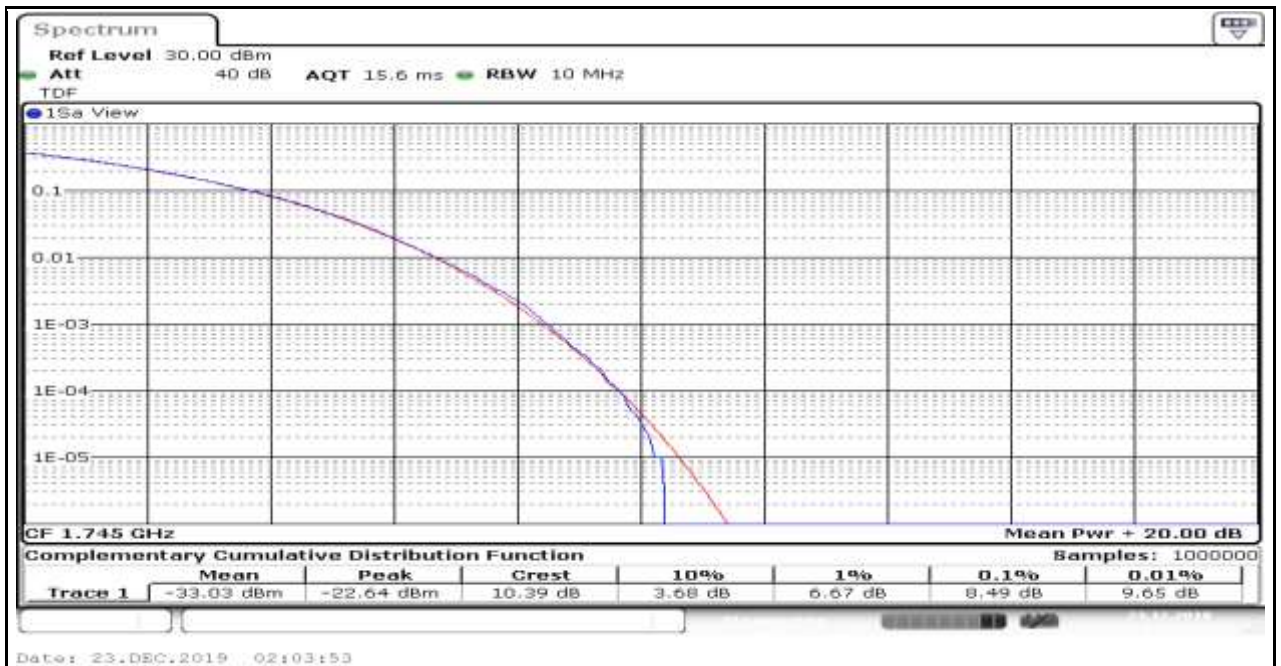
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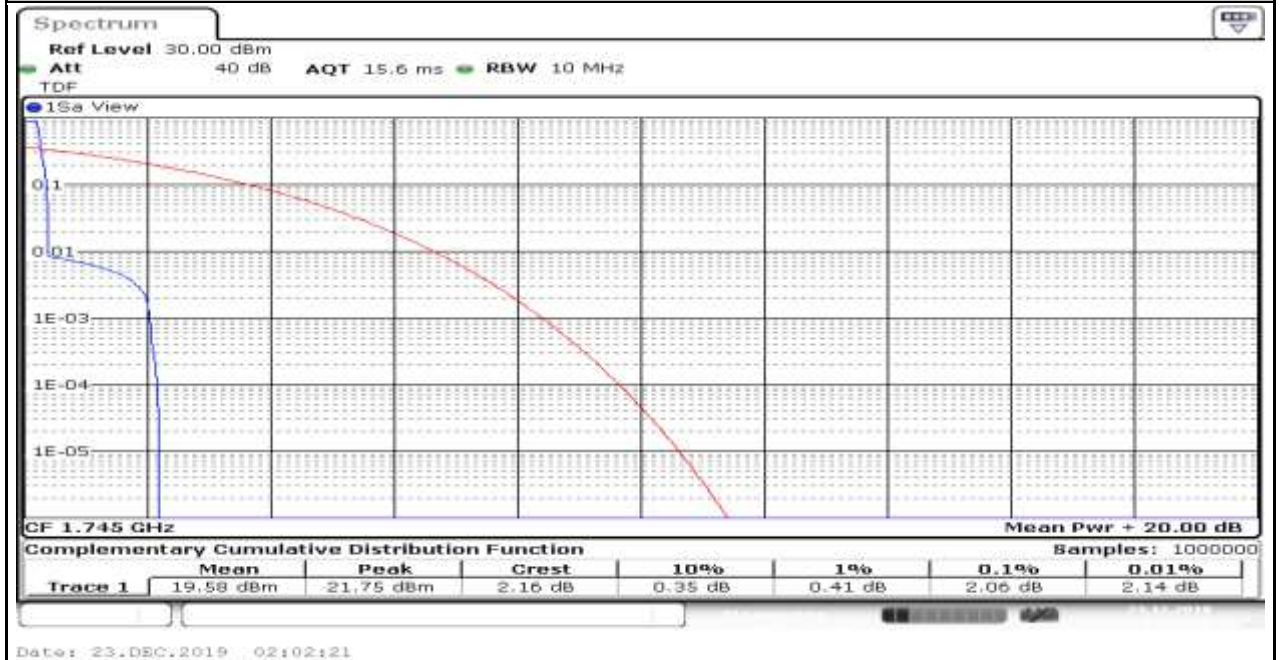
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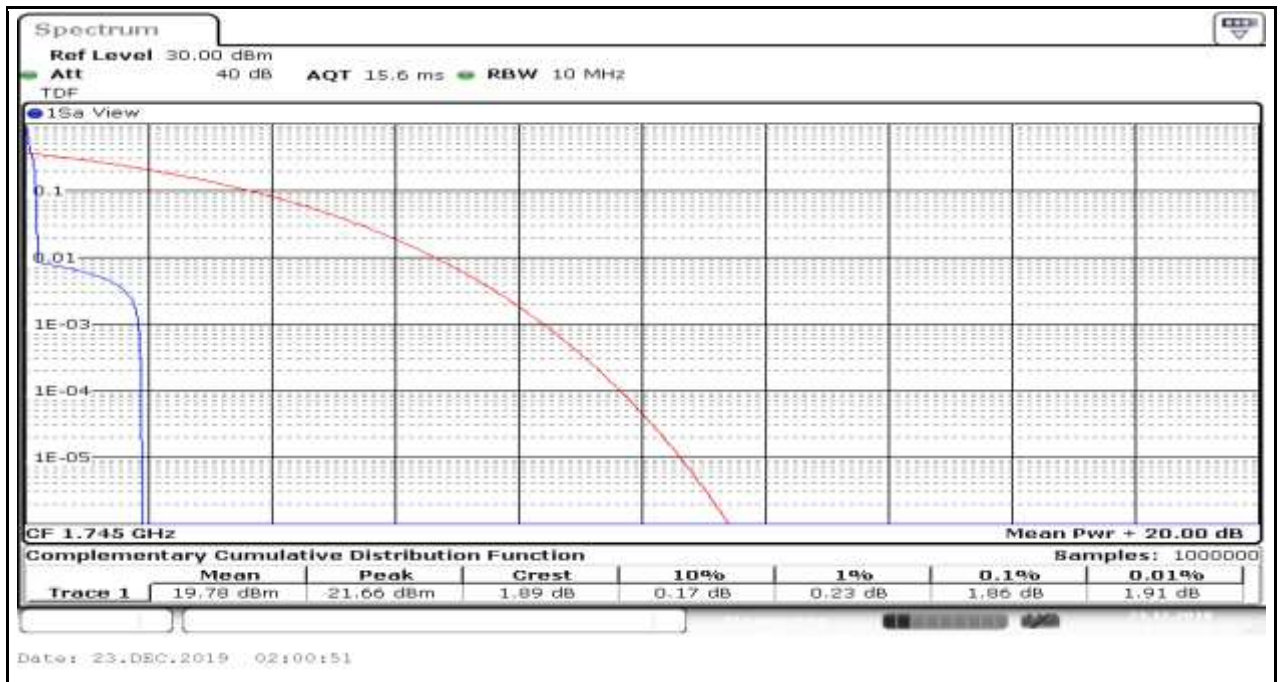


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Band66_Stand-Alone_NaN_BPSK_132322_1@0_3.75kHz_1.86_<=13_PASS_

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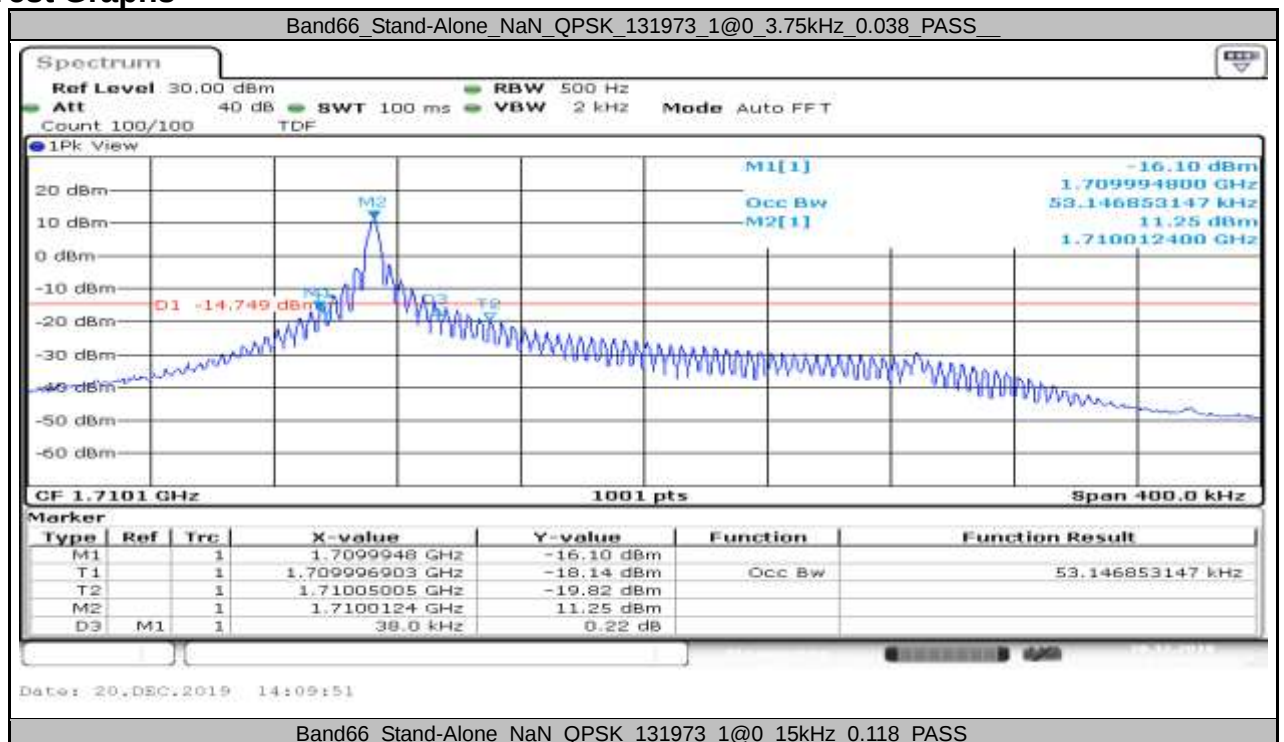


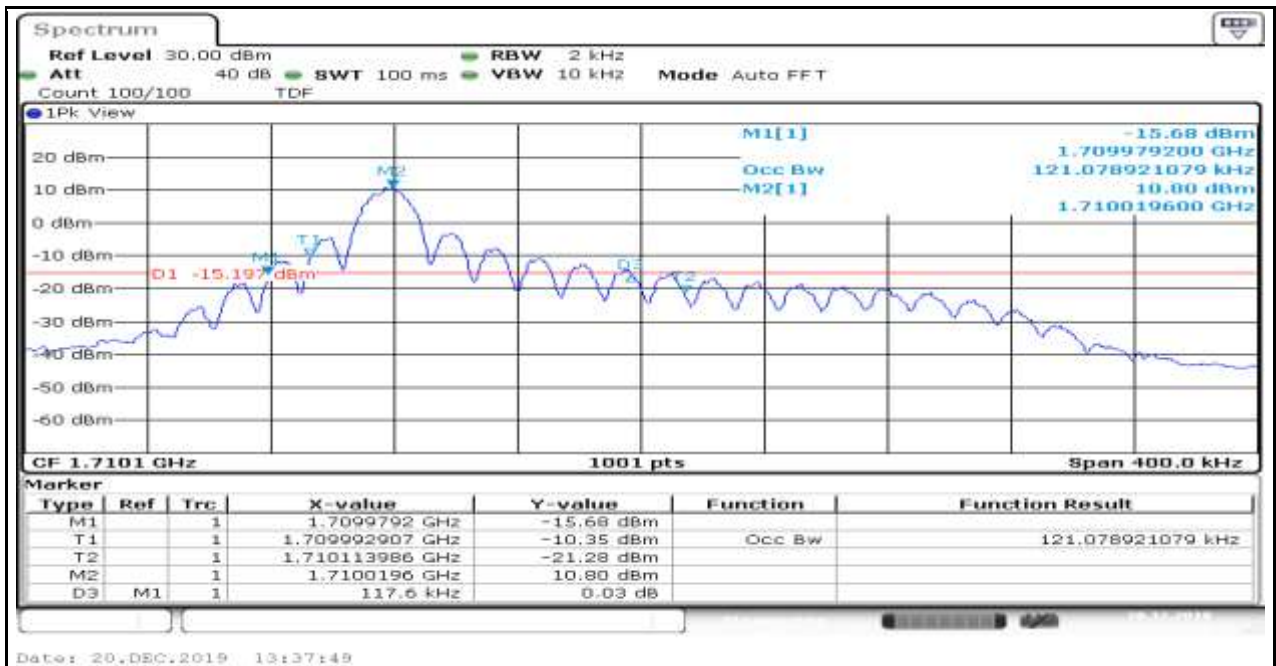
Appendix I.3: 26dB Emission Bandwidth and Occupied Bandwidth for NB

Test Result

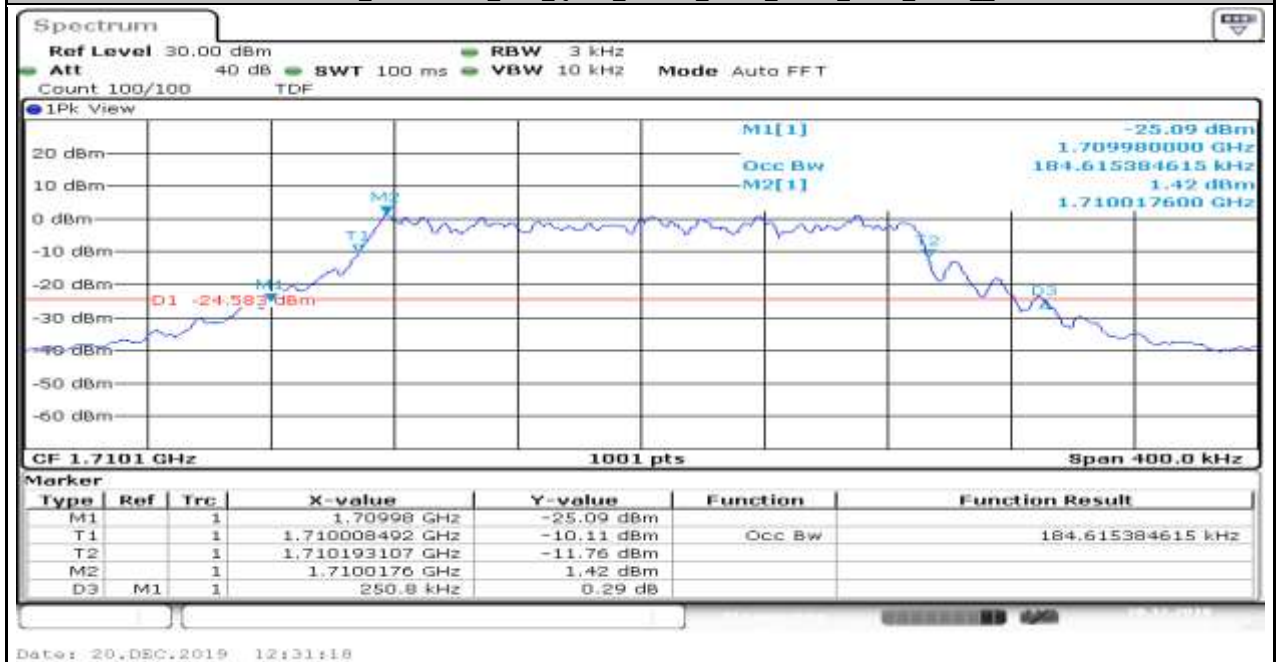
Band	OpMode	Bandwidth	Modulation	Channel	Tones	SCS	26dB Bandwidth (MHz)	Occupied Bandwidth (MHz)	Verdict
Band66	Stand-Alone	NaN	QPSK	131973	1@0	3.75kHz	0.038	0.053	PASS
Band66	Stand-Alone	NaN	QPSK	131973	1@0	15kHz	0.118	0.121	PASS
Band66	Stand-Alone	NaN	QPSK	131973	12@0	15kHz	0.251	0.184	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	3.75kHz	0.038	0.053	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	15kHz	0.118	0.120	PASS
Band66	Stand-Alone	NaN	QPSK	132322	12@0	15kHz	0.250	0.185	PASS
Band66	Stand-Alone	NaN	QPSK	132671	1@0	3.75kHz	0.038	0.053	PASS
Band66	Stand-Alone	NaN	QPSK	132671	1@0	15kHz	0.118	0.121	PASS
Band66	Stand-Alone	NaN	QPSK	132671	12@0	15kHz	0.251	0.185	PASS
Band66	Stand-Alone	NaN	BPSK	131973	1@0	3.75kHz	0.032	0.057	PASS
Band66	Stand-Alone	NaN	BPSK	131973	1@0	15kHz	0.106	0.129	PASS
Band66	Stand-Alone	NaN	BPSK	132322	1@0	3.75kHz	0.034	0.057	PASS
Band66	Stand-Alone	NaN	BPSK	132322	1@0	15kHz	0.106	0.129	PASS
Band66	Stand-Alone	NaN	BPSK	132671	1@0	3.75kHz	0.032	0.057	PASS
Band66	Stand-Alone	NaN	BPSK	132671	1@0	15kHz	0.106	0.130	PASS

Test Graphs

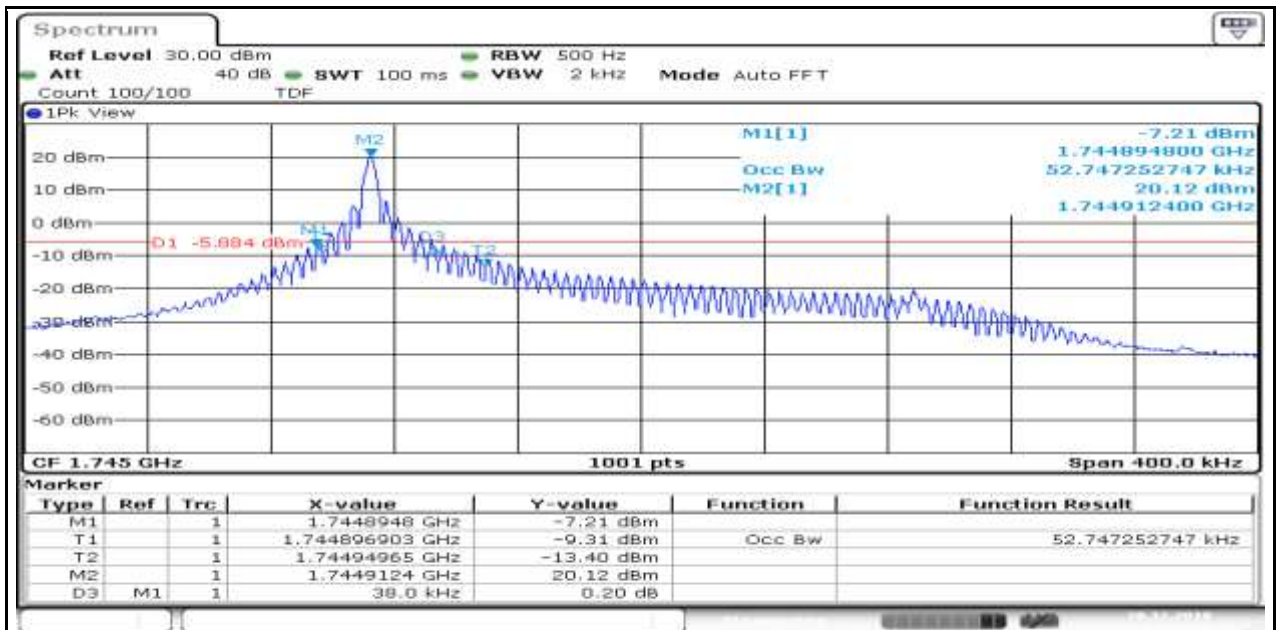




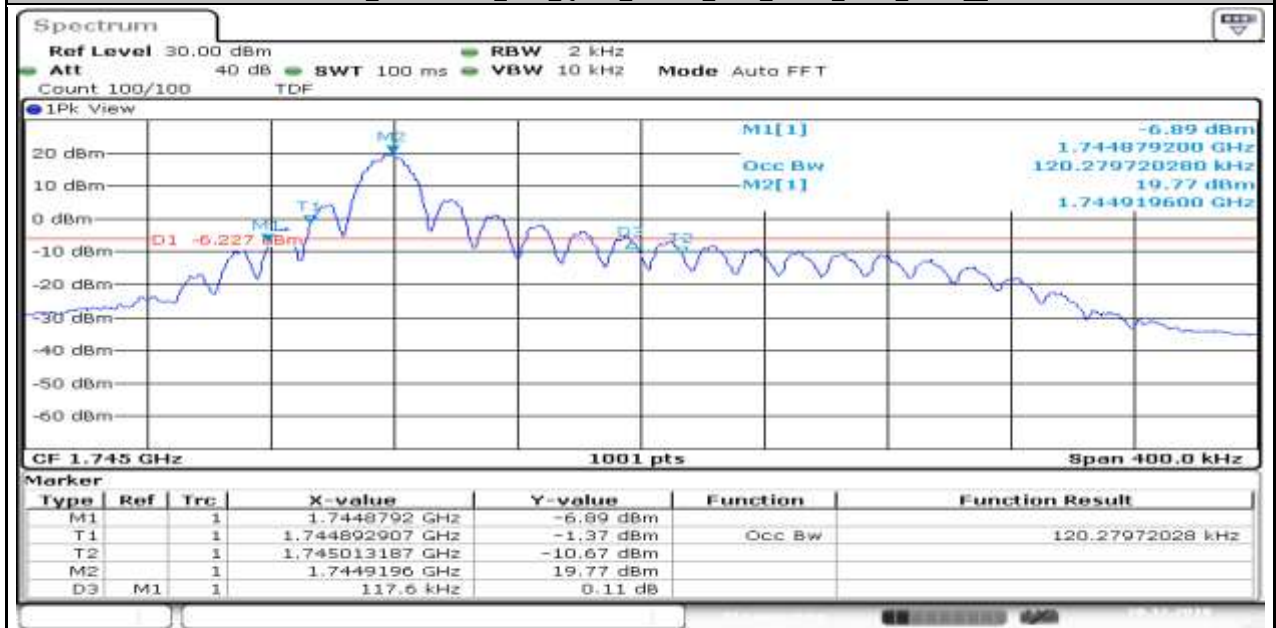
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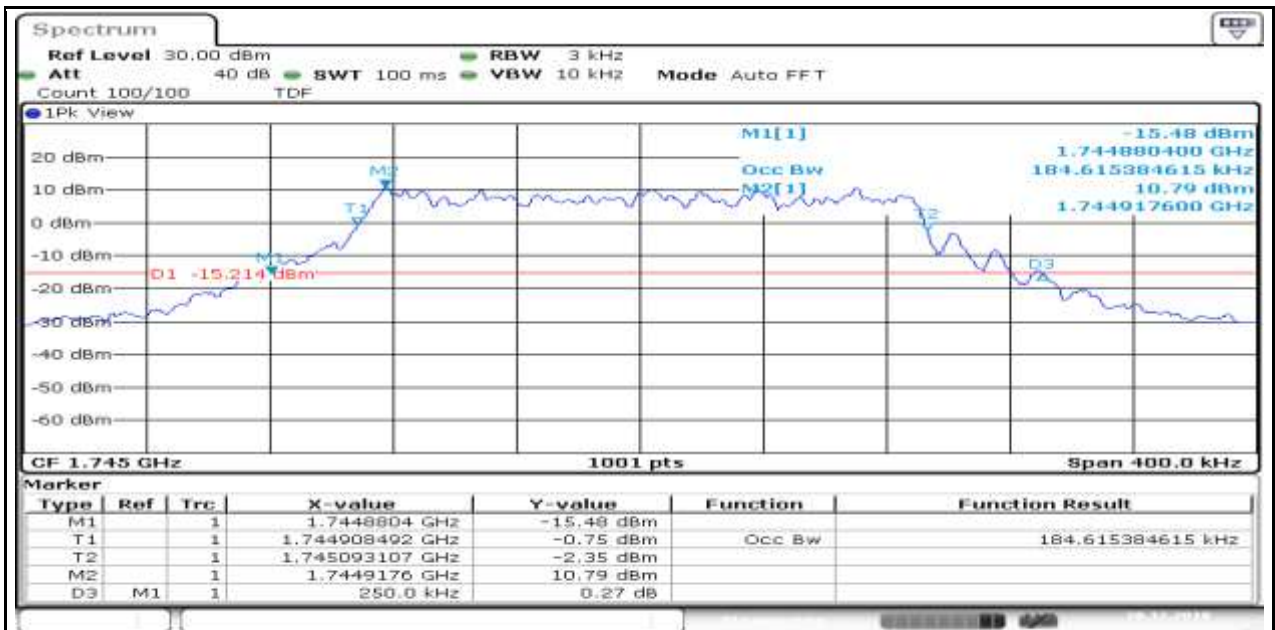
Band66_Stand-Alone_NaN_QPSK_132322_1@0_3.75kHz_0.038_PASS_



Band66_Stand-Alone_NaN_QPSK_132322_1@0_15kHz_0.118_PASS_

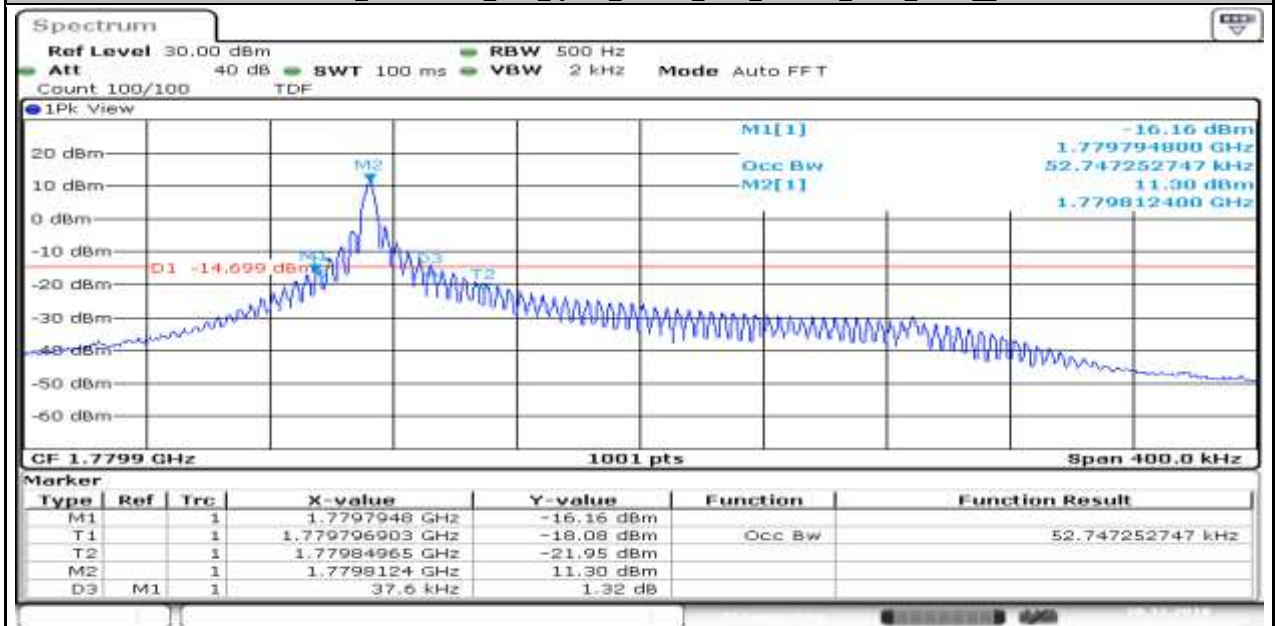


Band66_Stand-Alone_NaN_QPSK_132322_12@0_15kHz_0.250_PASS_



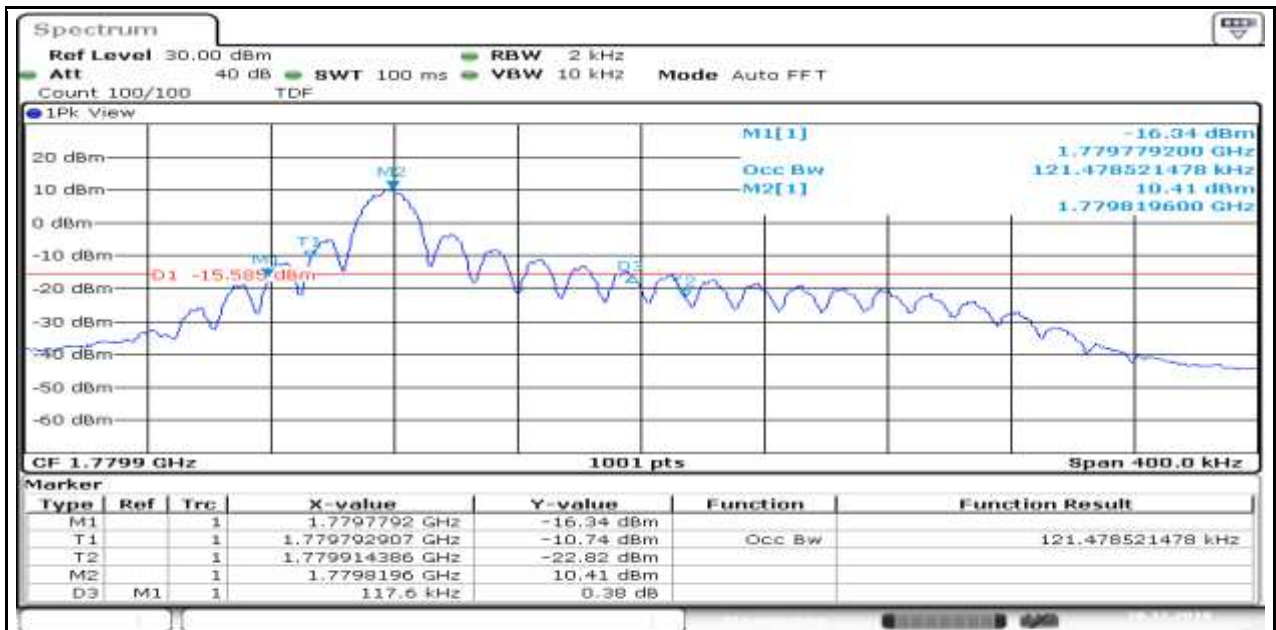
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Band66_Stand-Alone_NaN_QPSK_132671_1@0_3.75kHz_0.038_PASS_



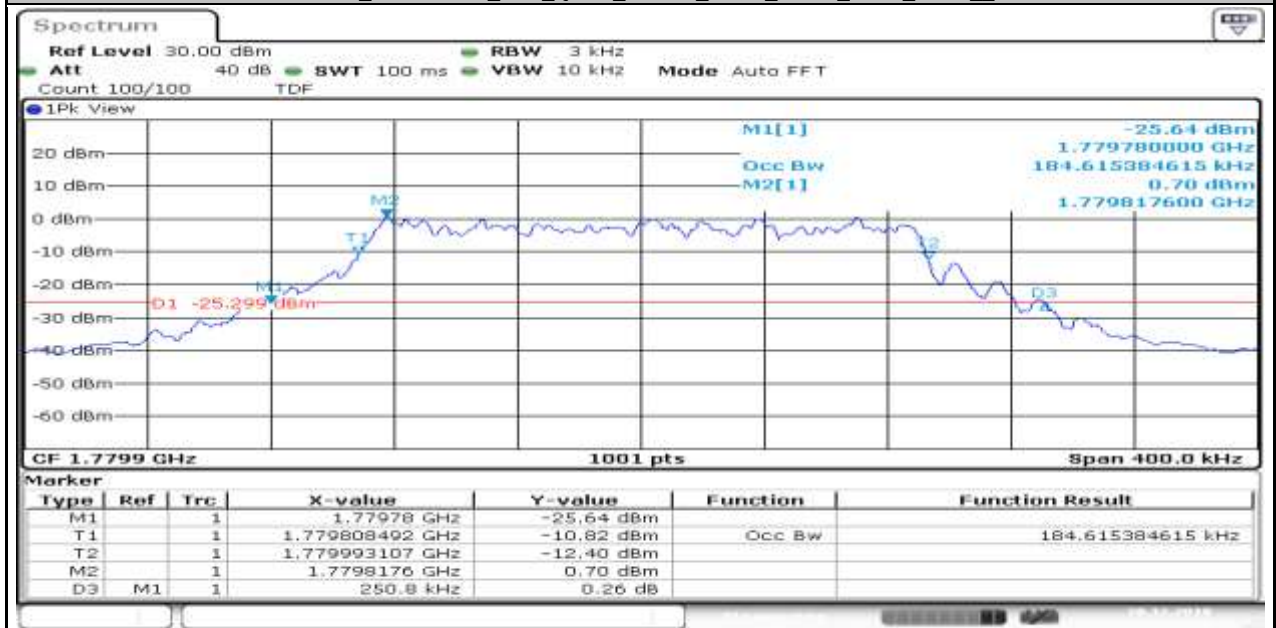
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Band66_Stand-Alone_NaN_QPSK_132671_1@0_15kHz_0.118_PASS_



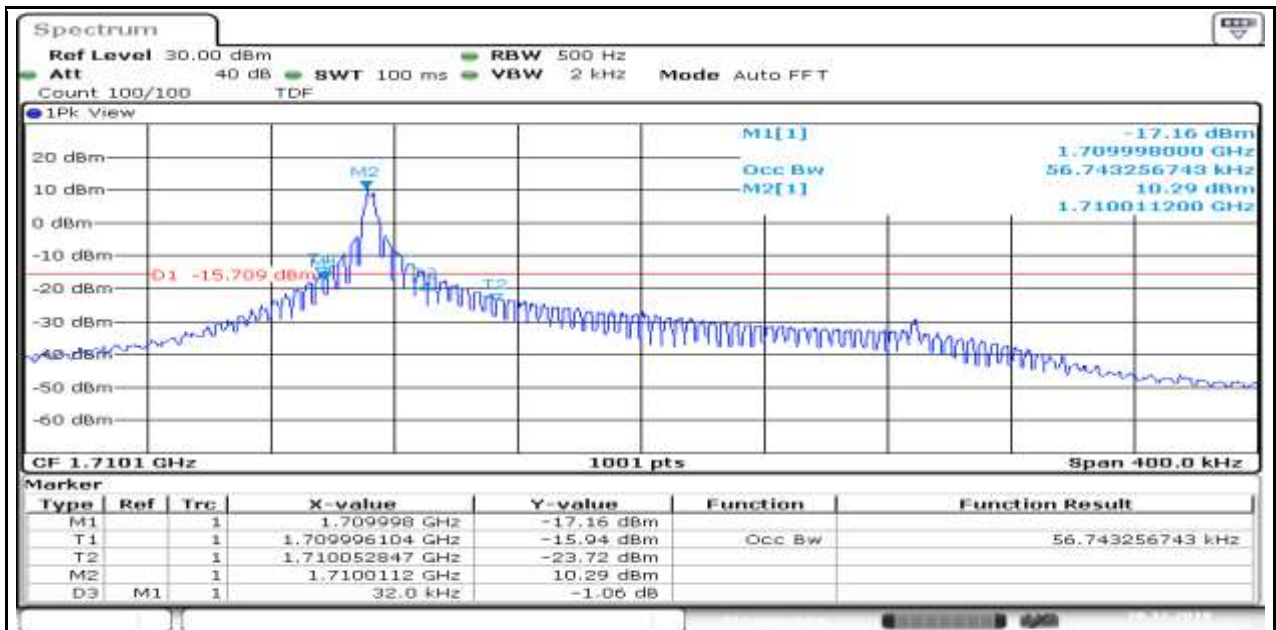
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Band66_Stand-Alone_NaN_QPSK_132671_12@0_15kHz_0.251_PASS_



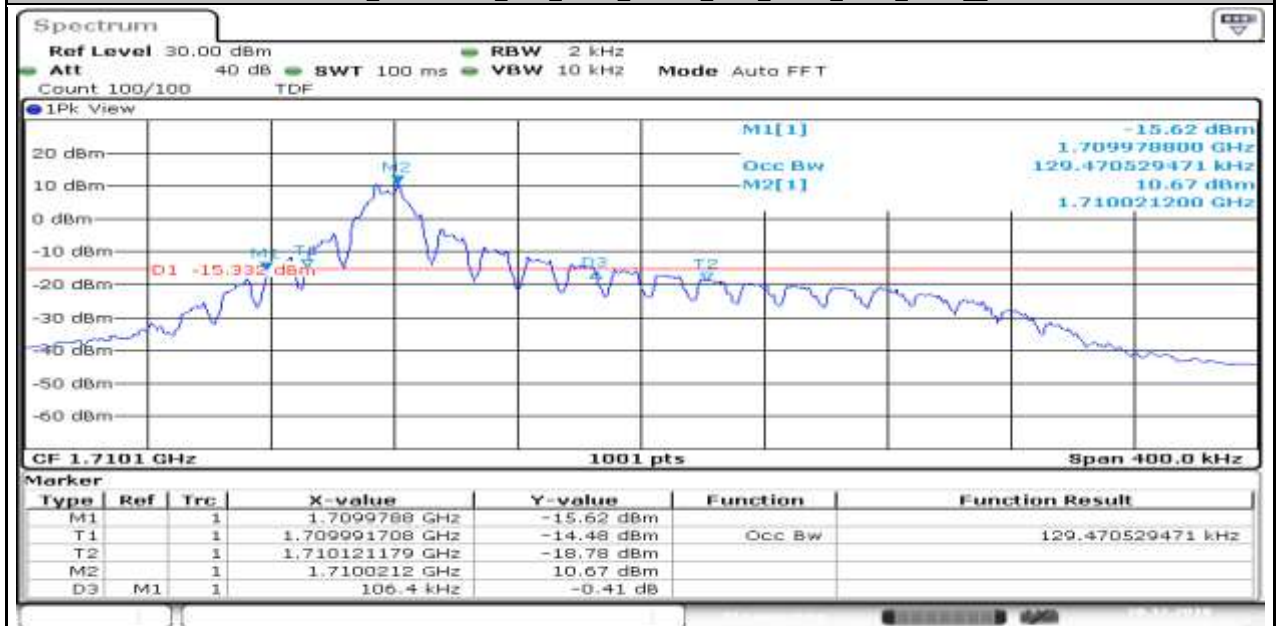
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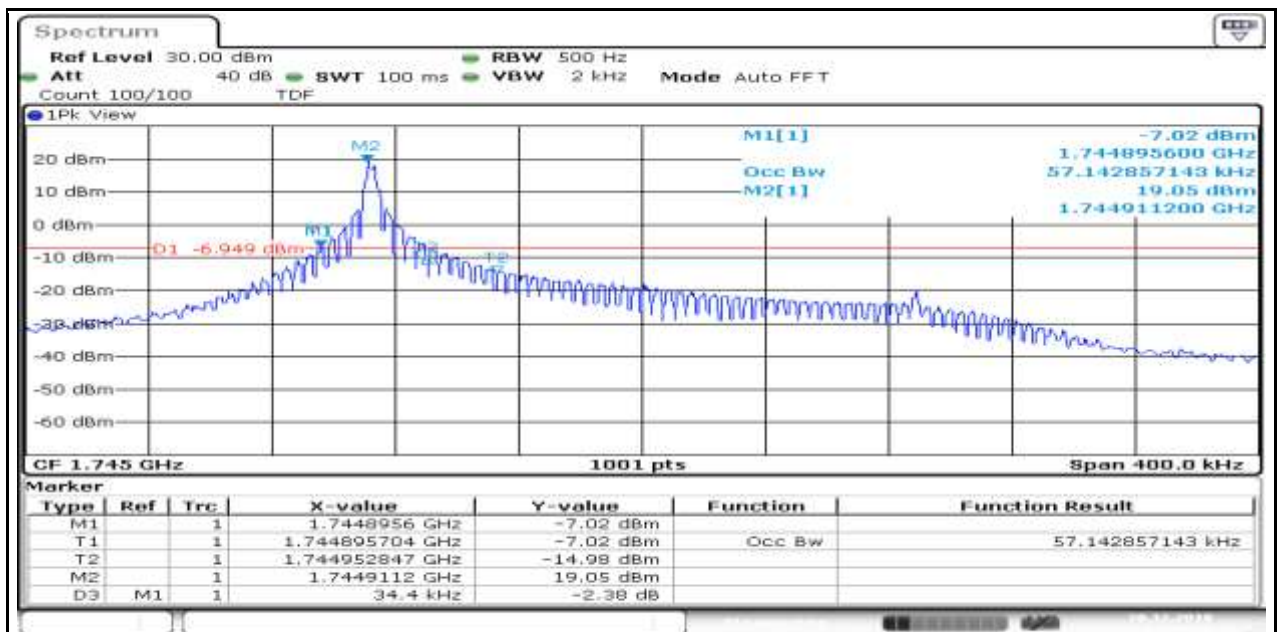
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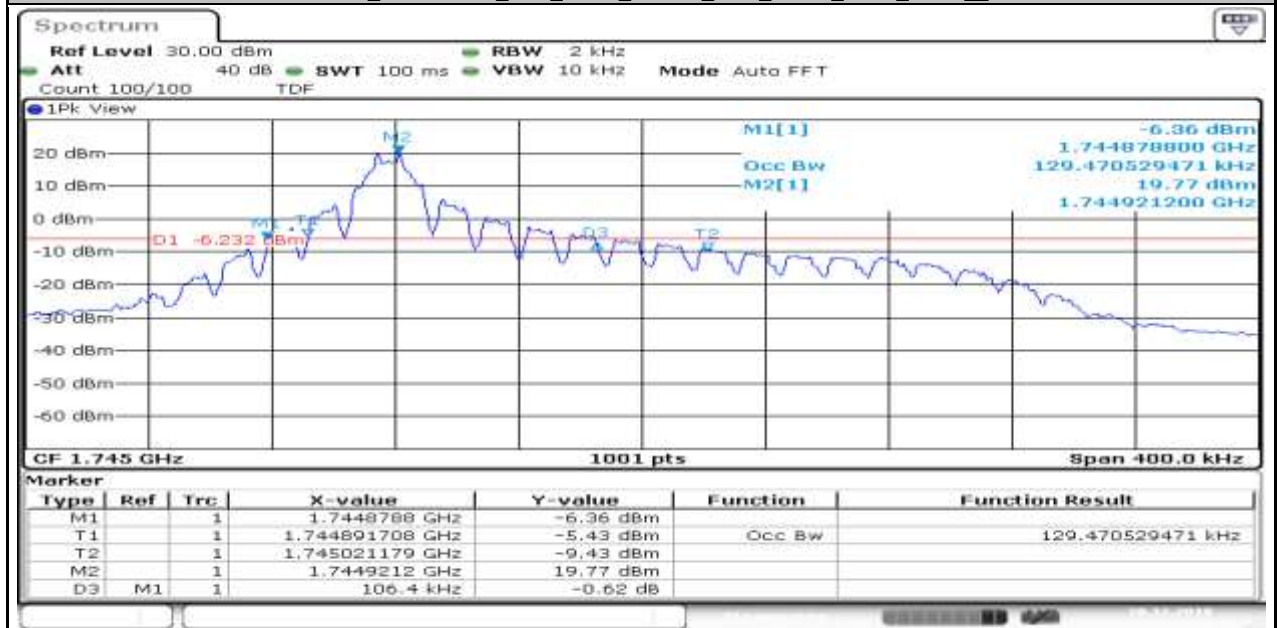


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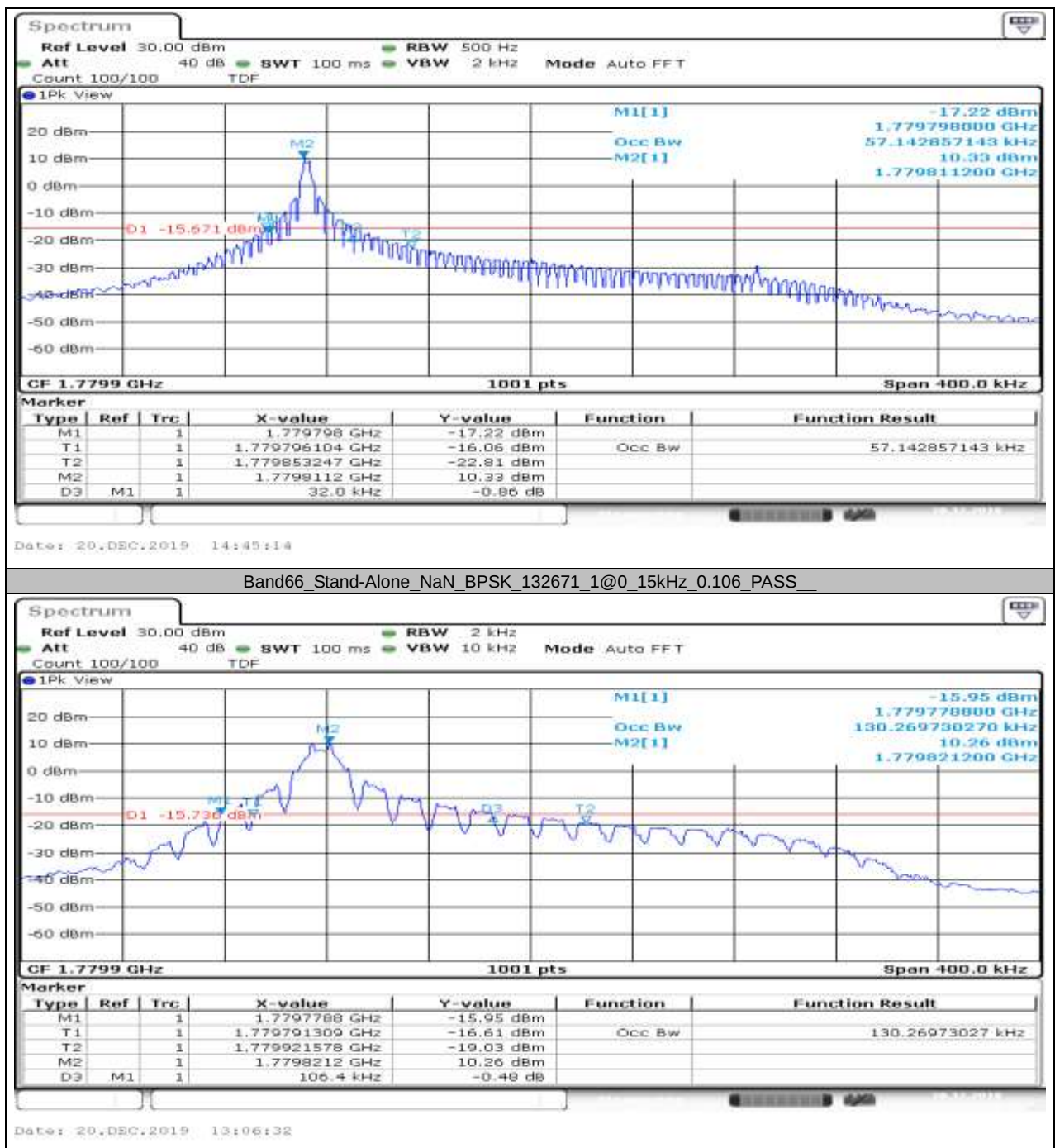
Band66_Stand-Alone_NaN_BPSK_132322_1@0_3.75kHz_0.034_PASS_



Band66_Stand-Alone_NaN_BPSK_132322_1@0_15kHz_0.106_PASS_



Band66_Stand-Alone_NaN_BPSK_132671_1@0_3.75kHz_0.032_PASS_

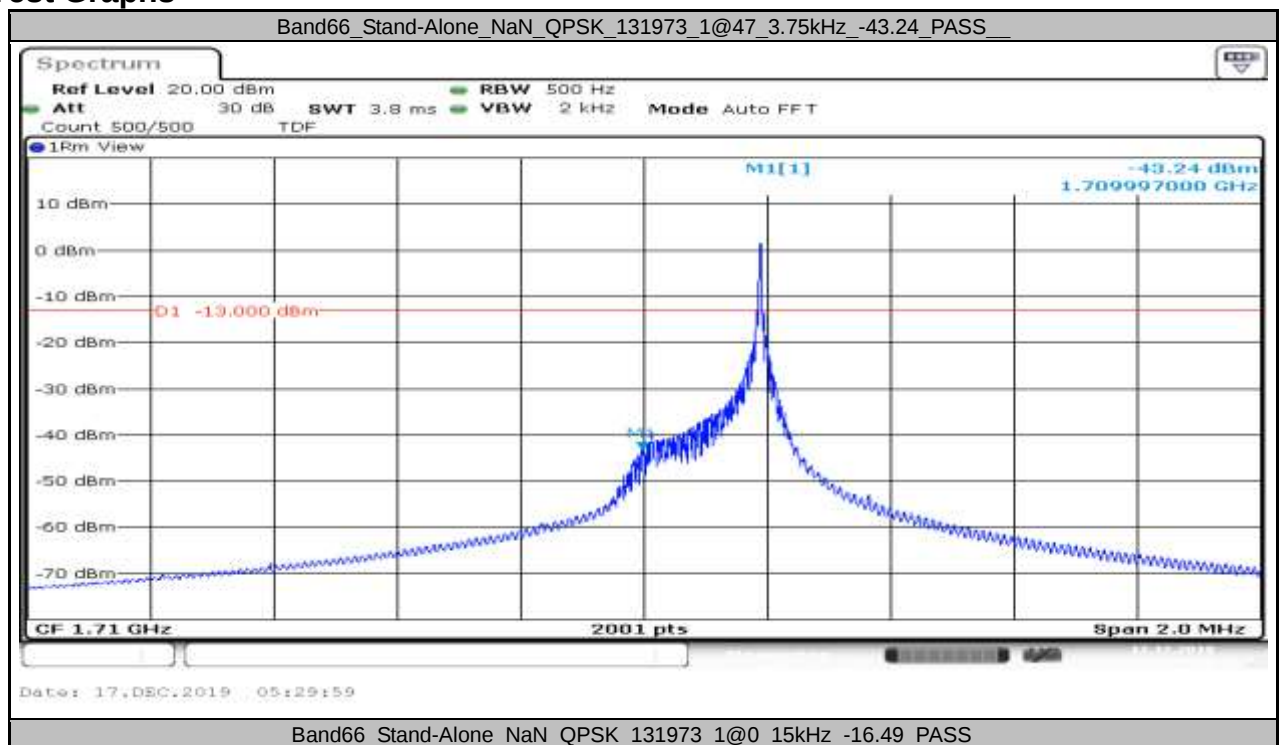


Appendix I.4: Band Edge for NB

Test Result

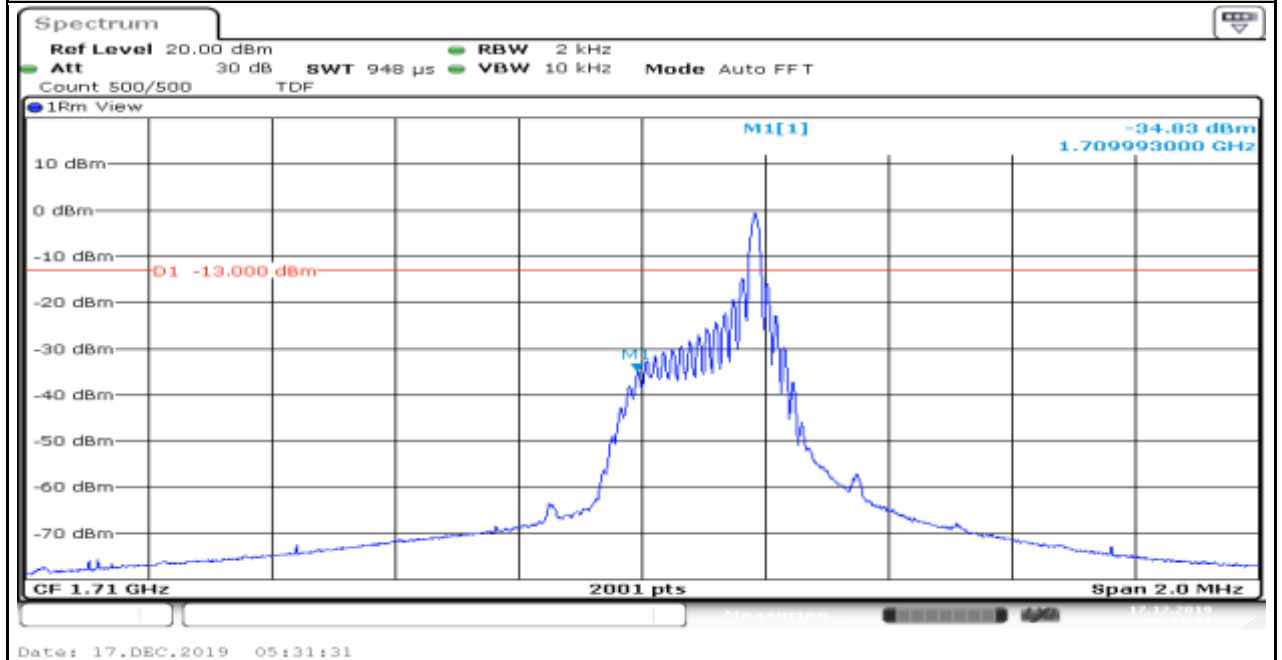
Band	OpMode	Bandwidth	Modulation	Channel	Tones	SCS	Result (dBm)	Verdict
Band66	Stand-Alone	NaN	QPSK	131973	1@47	3.75kHz	-43.24	PASS
Band66	Stand-Alone	NaN	QPSK	131973	1@0	15kHz	-16.49	PASS
Band66	Stand-Alone	NaN	QPSK	131973	1@11	15kHz	-34.83	PASS
Band66	Stand-Alone	NaN	QPSK	131973	12@0	15kHz	-33.79	PASS
Band66	Stand-Alone	NaN	QPSK	131973	1@0	3.75kHz	-21.99	PASS
Band66	Stand-Alone	NaN	QPSK	132671	12@0	15kHz	-29.36	PASS
Band66	Stand-Alone	NaN	QPSK	132671	1@0	3.75kHz	-42.64	PASS
Band66	Stand-Alone	NaN	QPSK	132671	1@47	3.75kHz	-20.80	PASS
Band66	Stand-Alone	NaN	QPSK	132671	1@11	15kHz	-15.48	PASS
Band66	Stand-Alone	NaN	QPSK	132671	1@0	15kHz	-34.51	PASS
Band66	Stand-Alone	NaN	BPSK	131973	1@0	3.75kHz	-20.27	PASS
Band66	Stand-Alone	NaN	BPSK	131973	1@47	3.75kHz	-41.99	PASS
Band66	Stand-Alone	NaN	BPSK	131973	1@0	15kHz	-14.54	PASS
Band66	Stand-Alone	NaN	BPSK	131973	1@11	15kHz	-33.63	PASS
Band66	Stand-Alone	NaN	BPSK	132671	1@11	15kHz	-14.66	PASS
Band66	Stand-Alone	NaN	BPSK	132671	1@0	3.75kHz	-41.67	PASS
Band66	Stand-Alone	NaN	BPSK	132671	1@47	3.75kHz	-20.06	PASS
Band66	Stand-Alone	NaN	BPSK	132671	1@0	15kHz	-33.65	PASS

Test Graphs

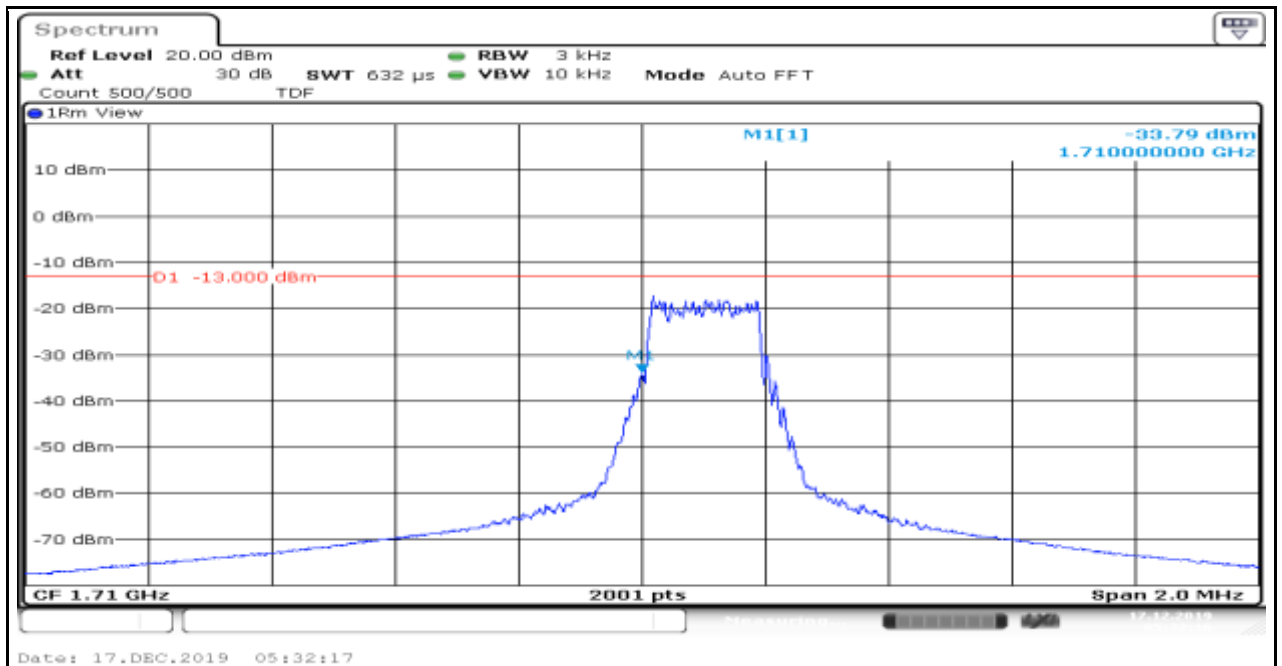




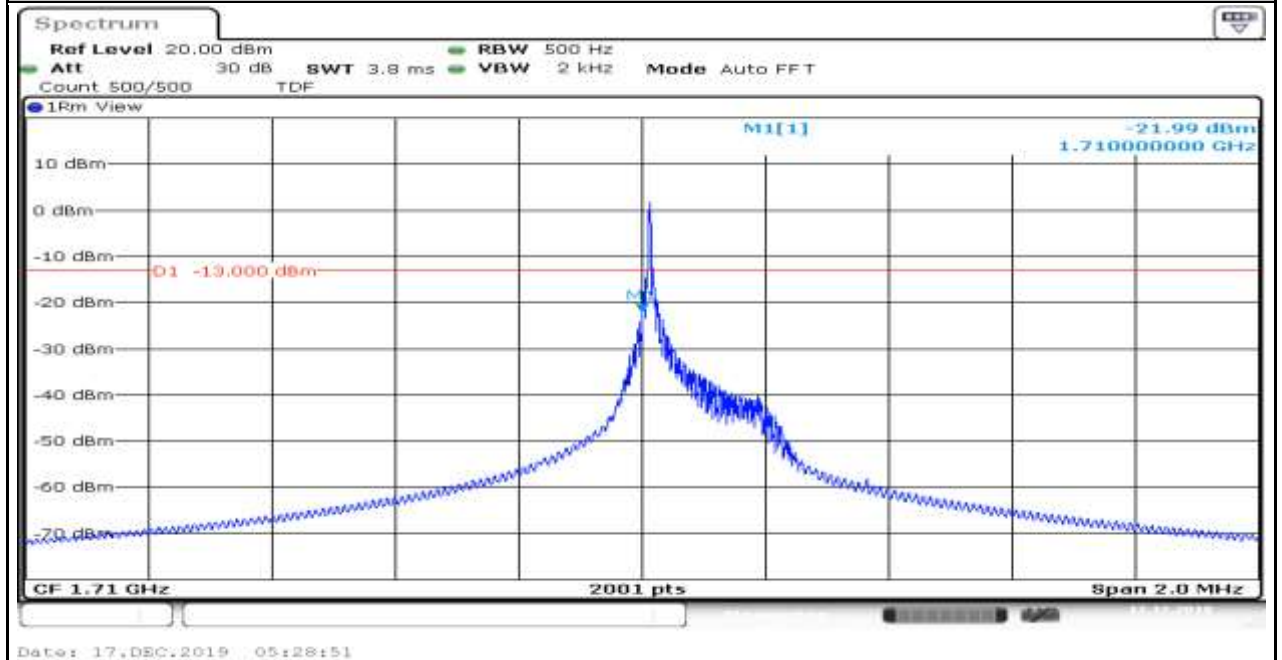
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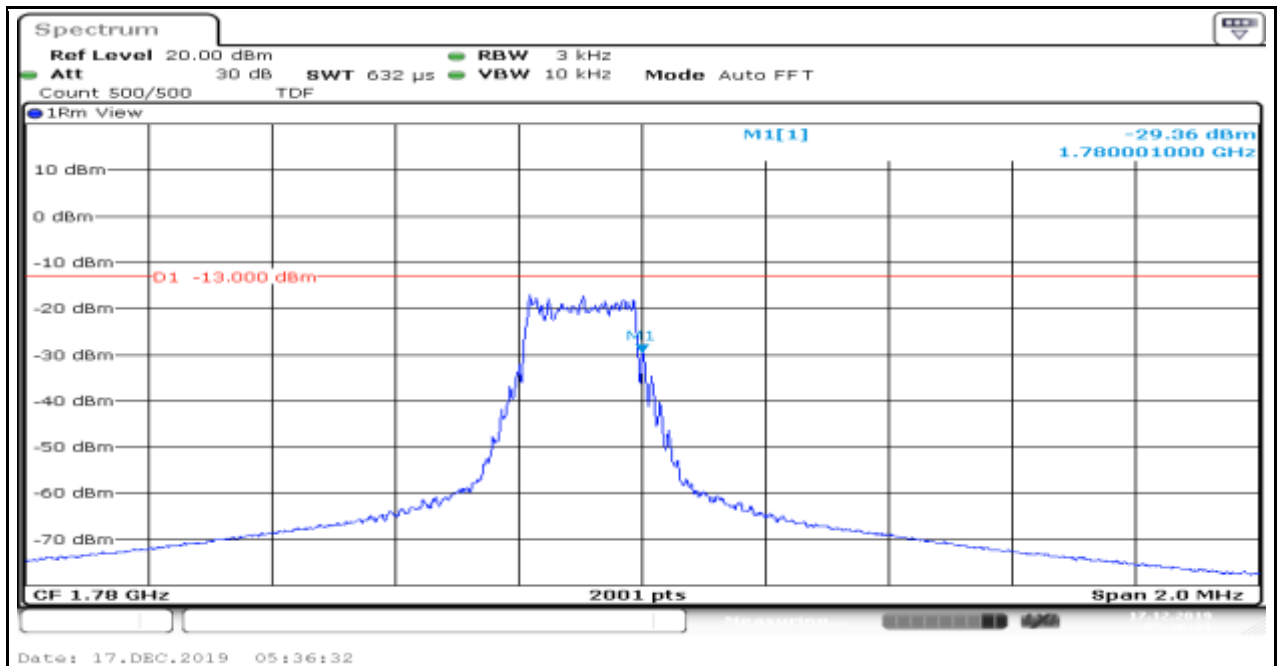
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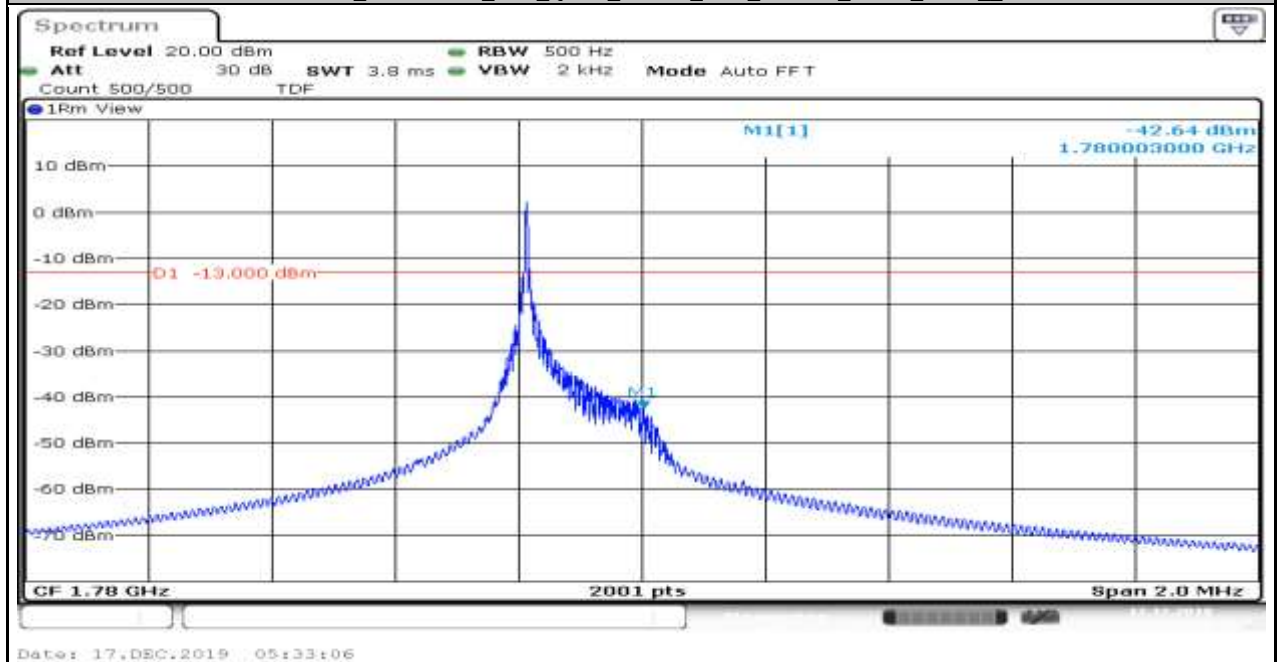
Band66_Stand-Alone_NaN_QPSK_131973_1@0_3.75kHz_-21.99_PASS_



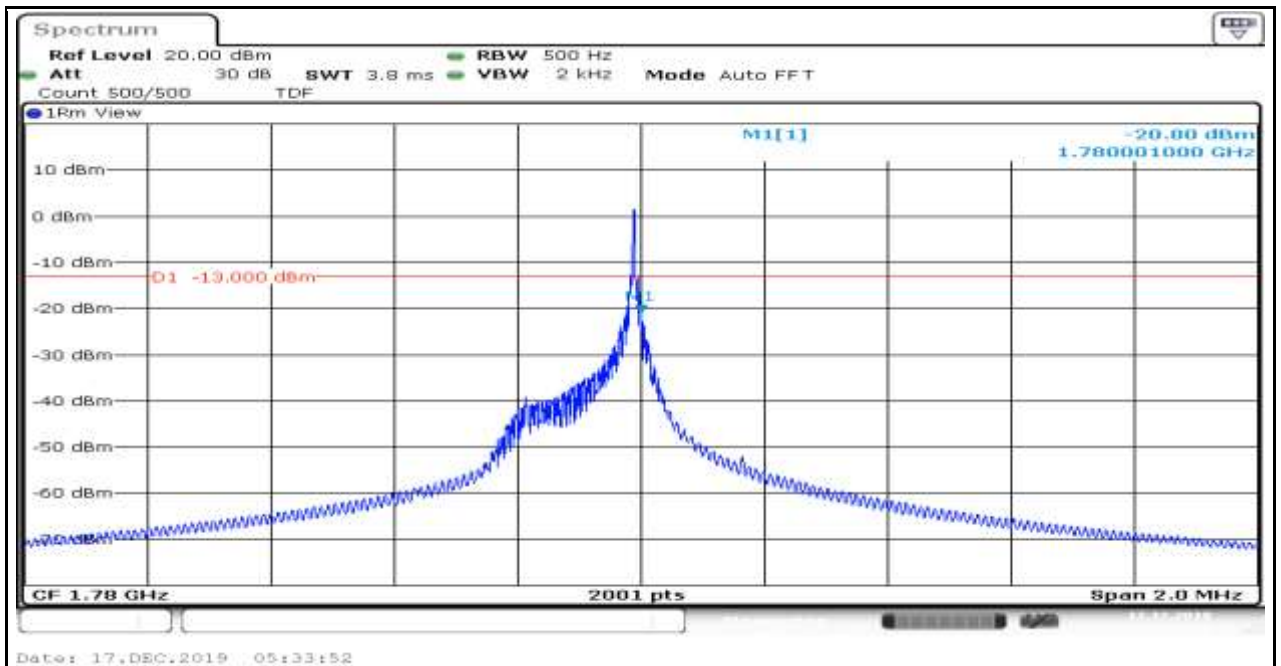
Band66_Stand-Alone_NaN_QPSK_132671_12@0_15kHz_-29.36_PASS_



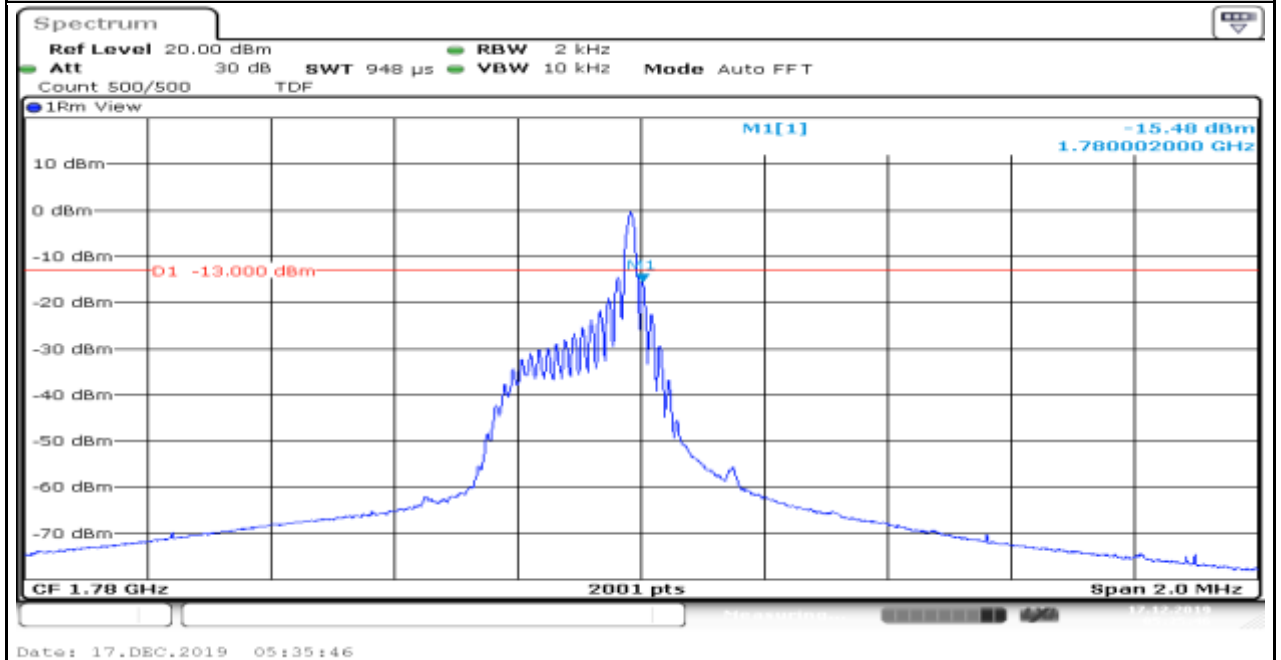
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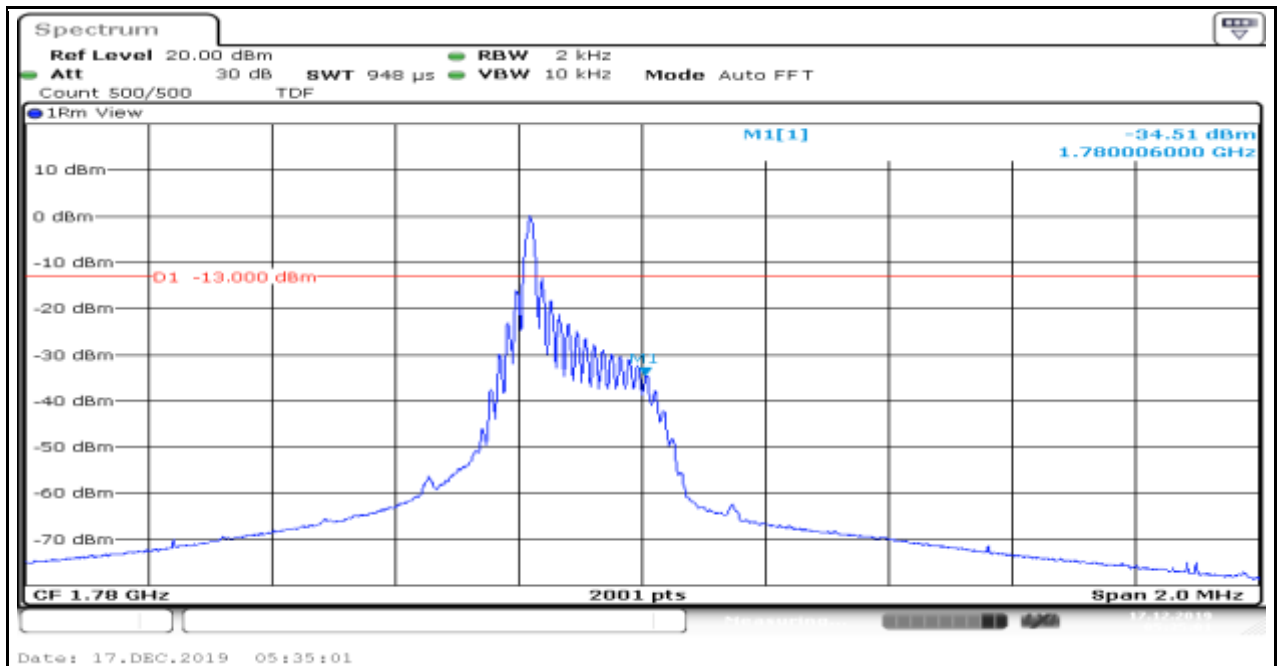
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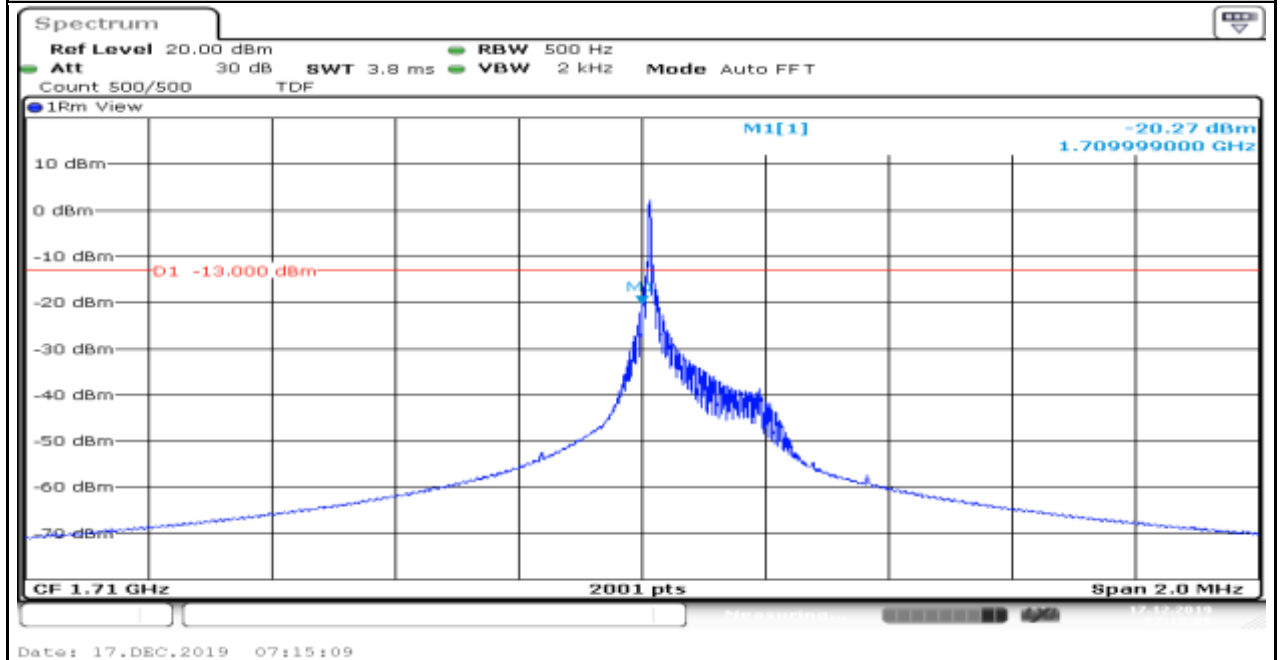
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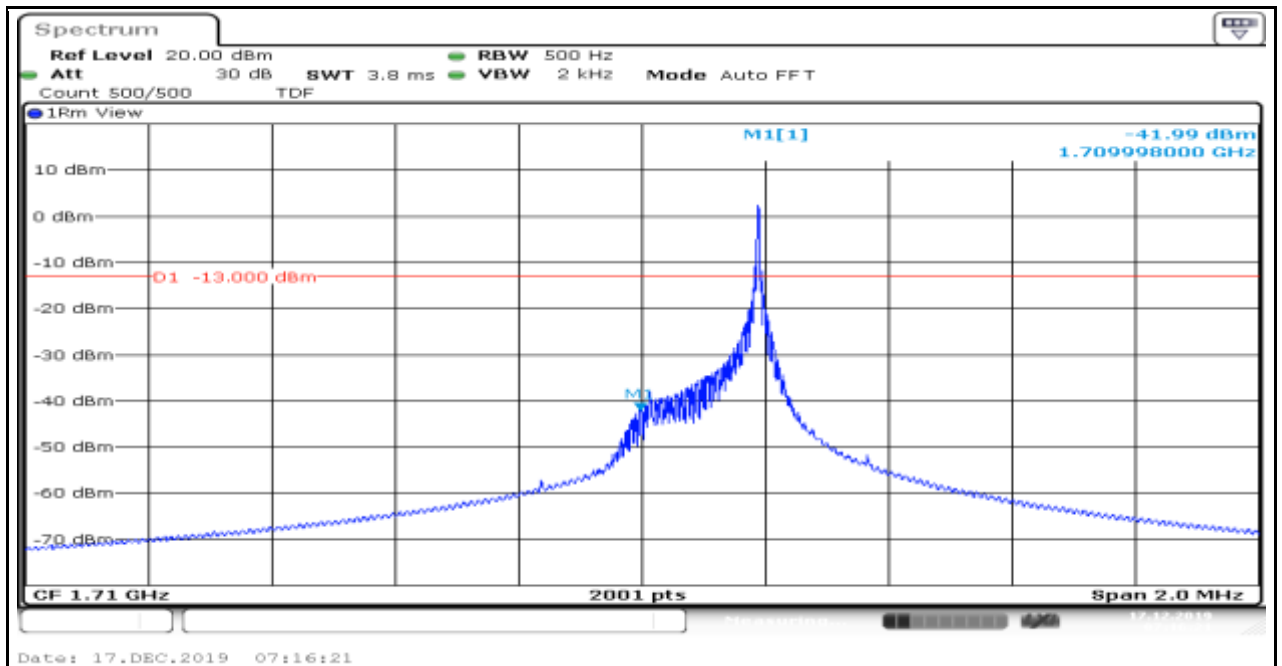
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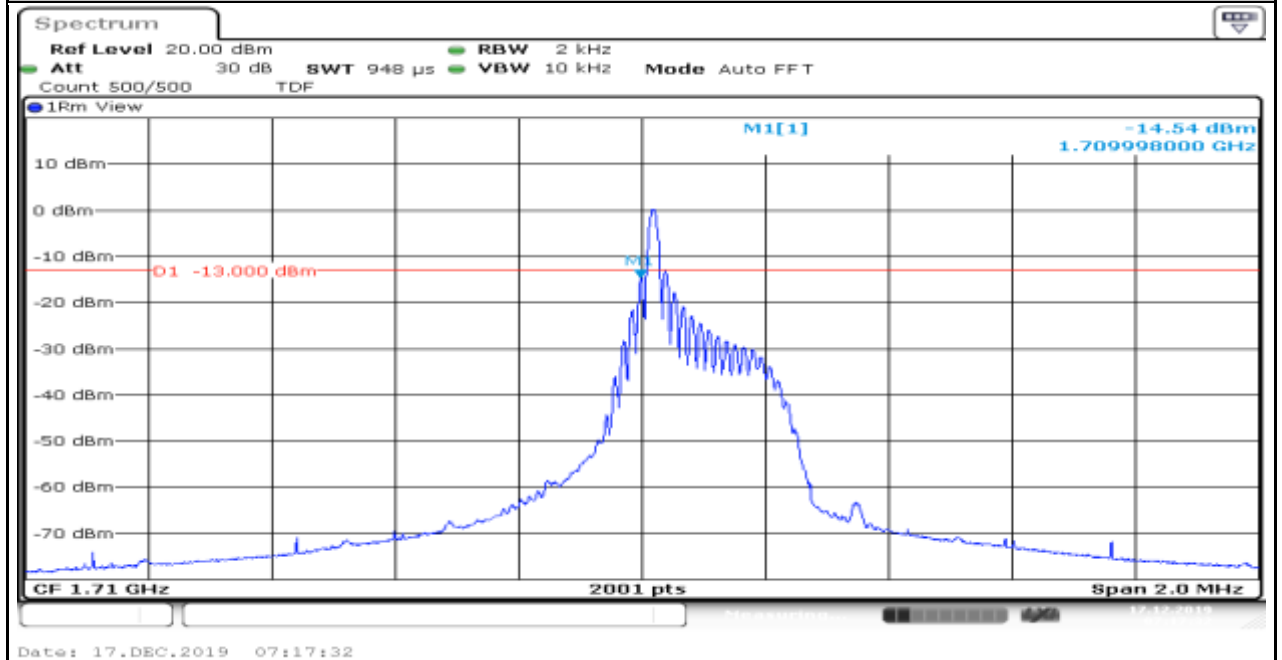
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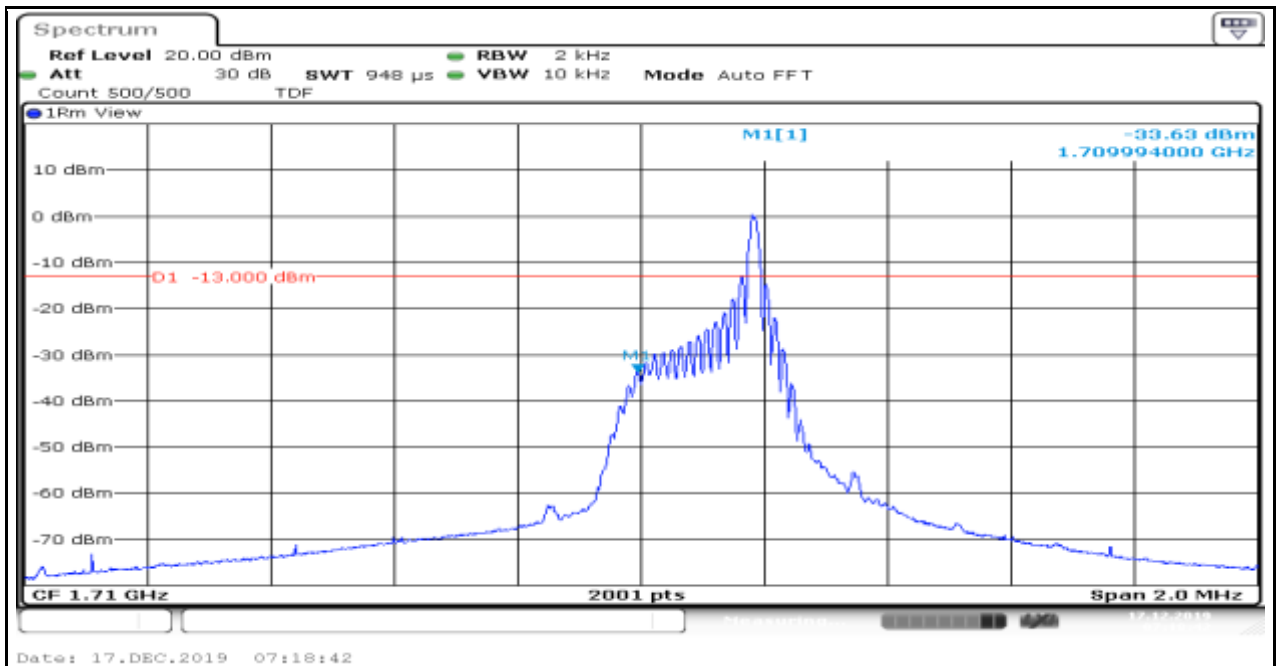
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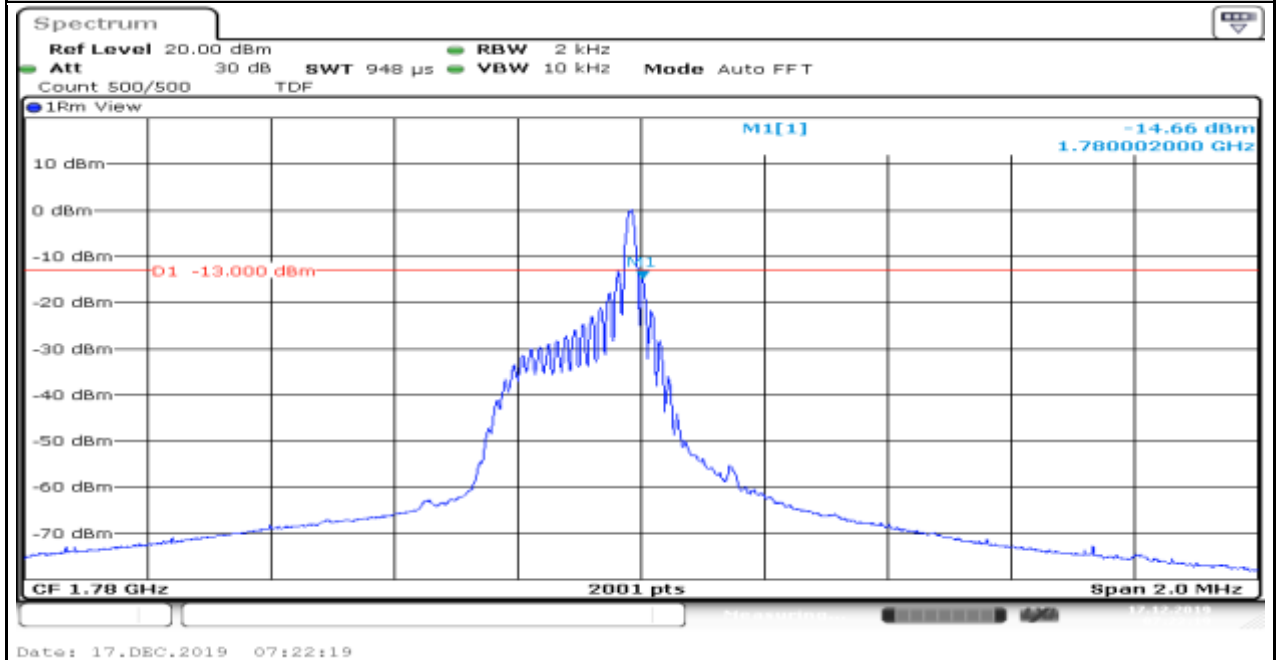
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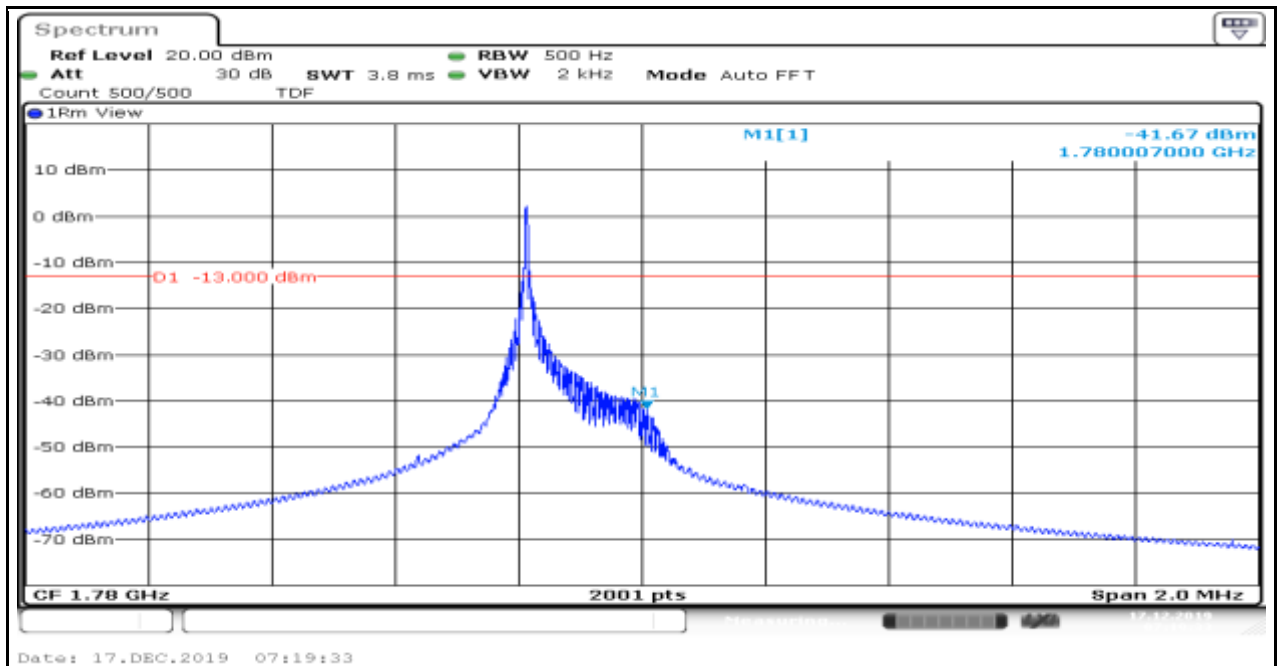
Band66_Stand-Alone_NaN_BPSK_131973_1@11_15kHz_-33.63_PASS_



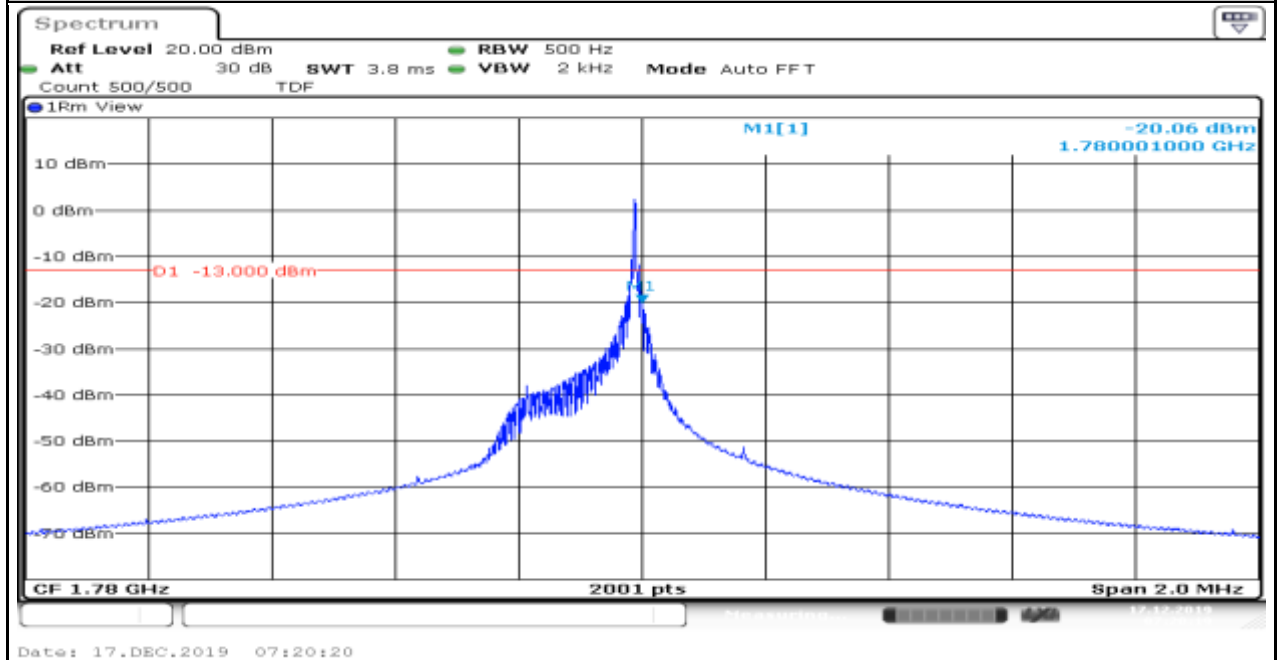
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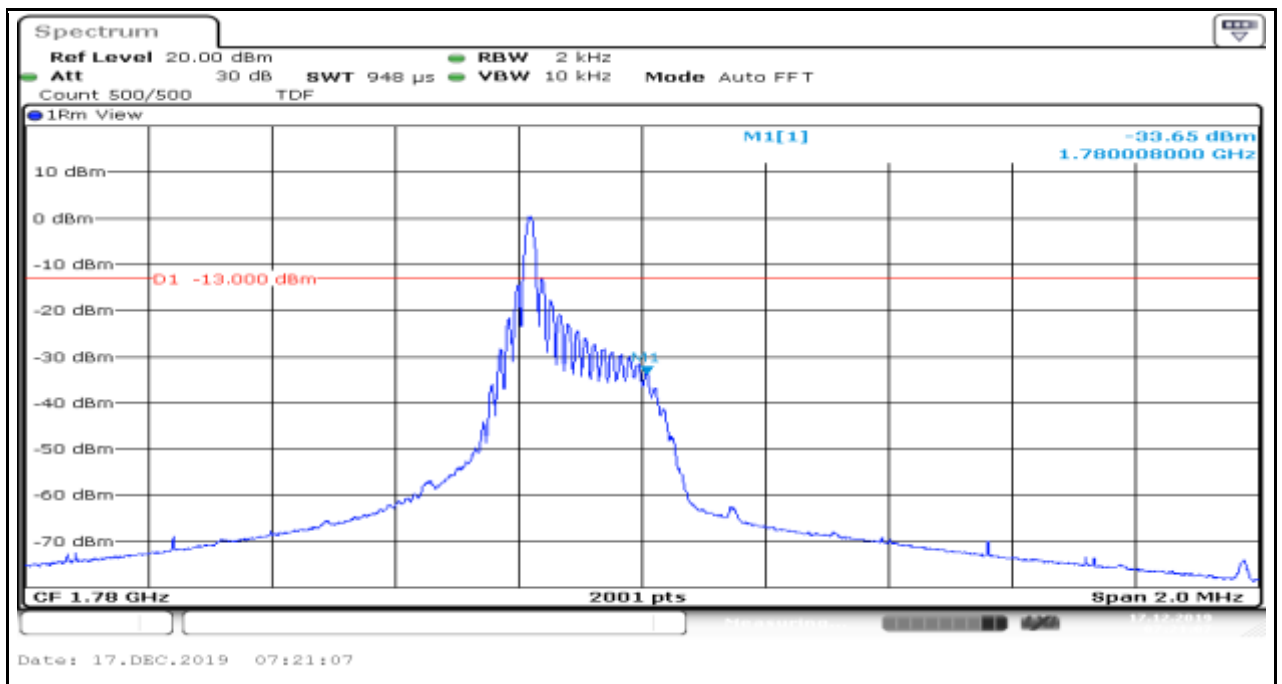
Band66_Stand-Alone_NaN_BPSK_132671_1@0_3.75kHz_-41.67_PASS_



Band66_Stand-Alone_NaN_BPSK_132671_1@47_3.75kHz_-20.06_PASS_



Band66_Stand-Alone_NaN_BPSK_132671_1@0_15kHz_-33.65_PASS_



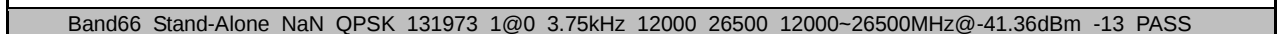
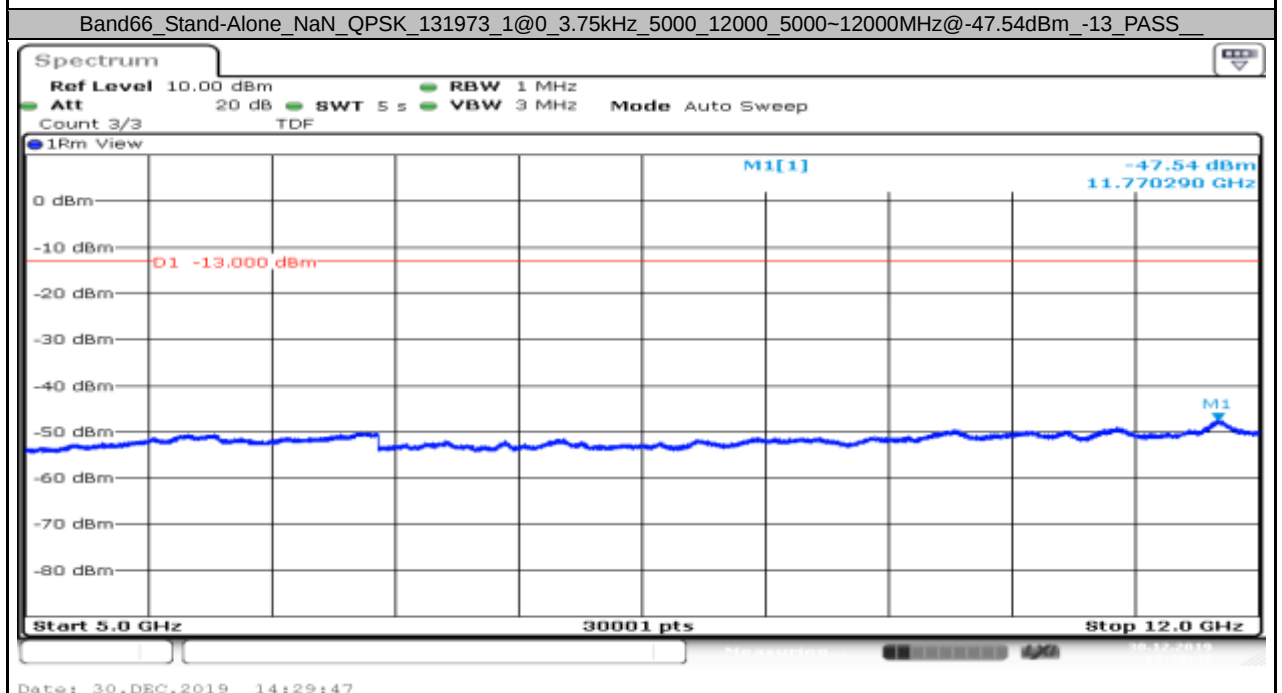
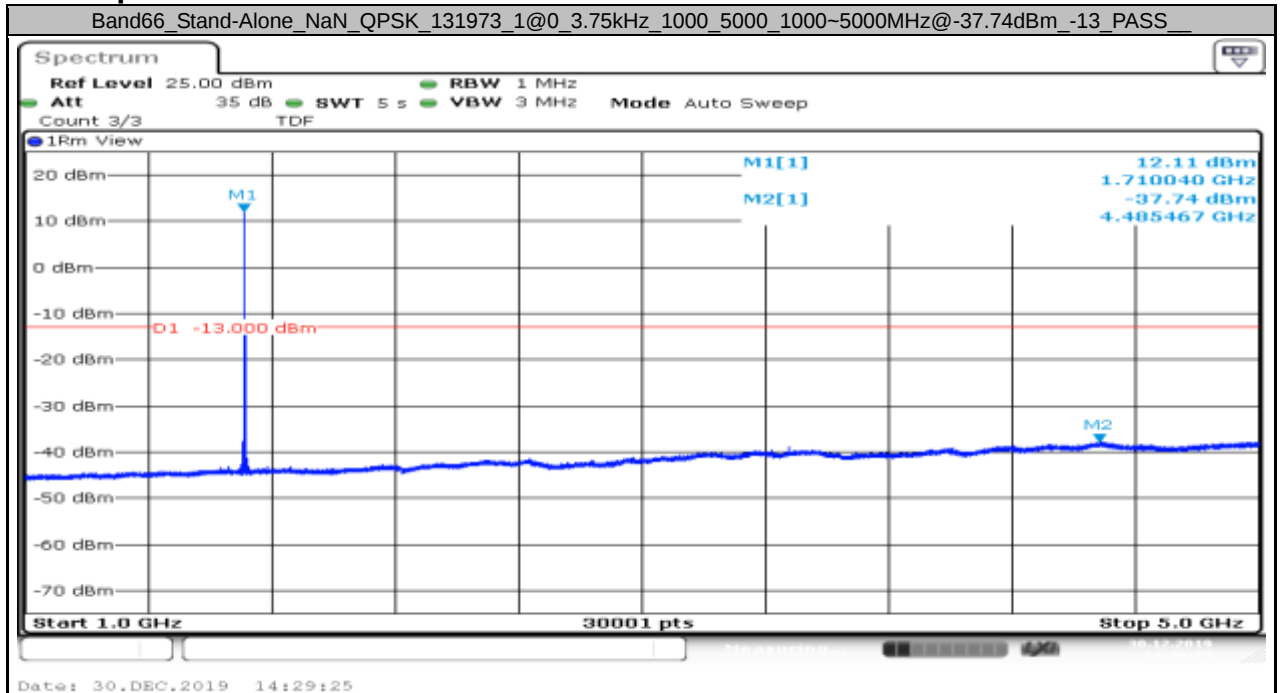
Appendix I.5: Conducted Spurious Emission for NB

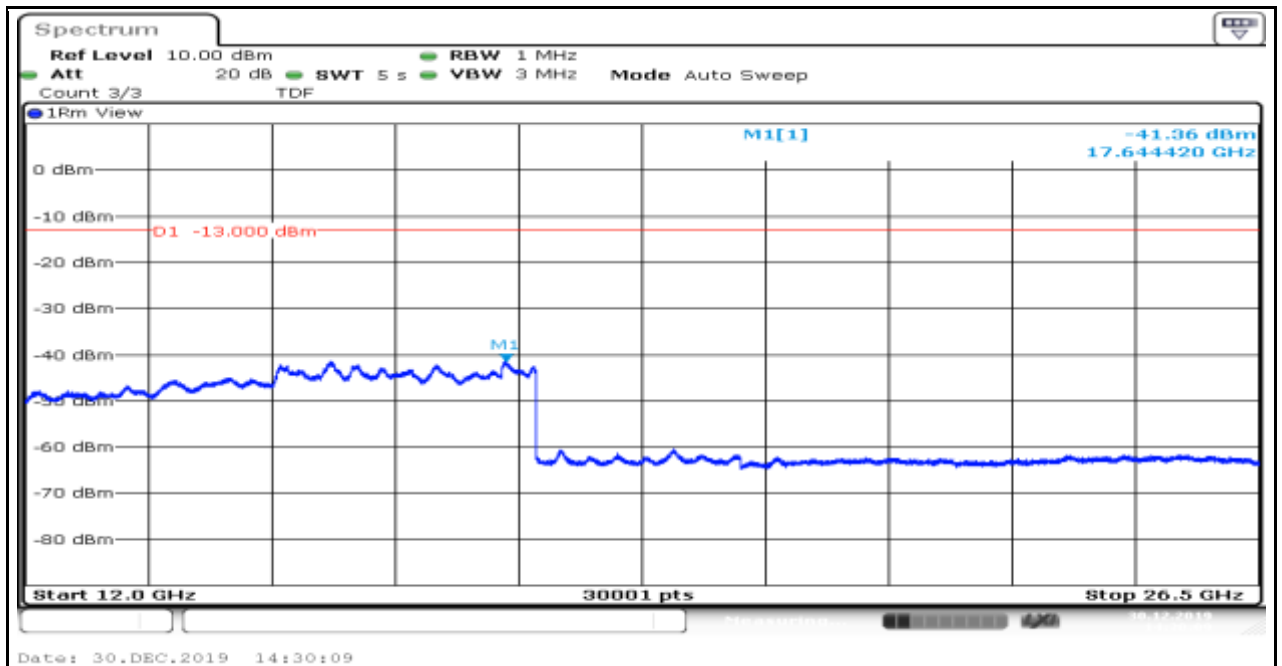
Test Result

Band	OpMode	Bandwidth	Modulation	Channel	Tones	SCS	StartFreq (MHz)	StopFreq (MHz)	Result (dBm)	Limit (dBm)	Verdict
Band66	Stand-Alone	NaN	QPSK	131973	1@0	3.75kHz	1000	5000	1000-5000MHz@-37.74dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	131973	1@0	3.75kHz	5000	12000	5000-12000MHz@-47.54dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	131973	1@0	3.75kHz	12000	26500	12000-26500MHz@-41.36dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	131973	1@47	3.75kHz	30	1000	30-1000MHz@-36.04dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	131973	1@47	3.75kHz	1000	5000	1000-5000MHz@-37.86dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	131973	1@47	3.75kHz	5000	12000	5000-12000MHz@-47.4dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	131973	1@47	3.75kHz	12000	26500	12000-26500MHz@-41.26dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	131973	1@0	3.75kHz	30	1000	30-1000MHz@-36.04dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	131973	12@0	15kHz	12000	26500	12000-26500MHz@-41.37dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	131973	12@0	15kHz	5000	12000	5000-12000MHz@-47.53dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	131973	12@0	15kHz	1000	5000	1000-5000MHz@-37.7dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	131973	12@0	15kHz	30	1000	30-1000MHz@-35.7dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	3.75kHz	5000	12000	5000-12000MHz@-44.12dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	132322	12@0	15kHz	1000	5000	1000-5000MHz@-37.86dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@47	3.75kHz	12000	26500	12000-26500MHz@-41.42dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@47	3.75kHz	5000	12000	5000-12000MHz@-44.66dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@47	3.75kHz	1000	5000	1000-5000MHz@-37.78dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	132322	12@0	15kHz	12000	26500	12000-26500MHz@-41.43dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	3.75kHz	12000	26500	12000-26500MHz@-41.51dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	132322	12@0	15kHz	5000	12000	5000-12000MHz@-47.36dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	3.75kHz	1000	5000	1000-5000MHz@-37.71dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	3.75kHz	30	1000	30-1000MHz@-35.79dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@47	3.75kHz	30	1000	30-1000MHz@-35.87dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	132322	12@0	15kHz	30	1000	30-1000MHz@-36.16dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	132671	1@0	3.75kHz	12000	26500	12000-26500MHz@-41.37dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	132671	1@0	3.75kHz	30	1000	30-1000MHz@-35.73dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	132671	1@0	3.75kHz	5000	12000	5000-12000MHz@-47.25dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	132671	1@47	3.75kHz	30	1000	30-1000MHz@-35.62dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	132671	1@47	3.75kHz	1000	5000	1000-5000MHz@-37.92dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	132671	1@47	3.75kHz	5000	12000	5000-12000MHz@-47.55dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	132671	1@47	3.75kHz	12000	26500	12000-26500MHz@-41.25dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	132671	12@0	15kHz	30	1000	30-1000MHz@-35.49dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	132671	1@0	3.75kHz	1000	5000	1000-5000MHz@-37.76dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	132671	12@0	15kHz	12000	26500	12000-26500MHz@-41.54dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	132671	12@0	15kHz	5000	12000	5000-12000MHz@-47.35dBm	-13	PASS
Band66	Stand-Alone	NaN	QPSK	132671	12@0	15kHz	1000	5000	1000-5000MHz@-37.75dBm	-13	PASS
Band66	Stand-Alone	NaN	BPSK	131973	1@0	15kHz	12000	26500	12000-26500MHz@-41.38dBm	-13	PASS
Band66	Stand-Alone	NaN	BPSK	131973	1@0	15kHz	1000	5000	1000-5000MHz@-37.88dBm	-13	PASS
Band66	Stand-Alone	NaN	BPSK	131973	1@0	15kHz	5000	12000	5000-12000MHz@-47.28dBm	-13	PASS
Band66	Stand-Alone	NaN	BPSK	131973	1@11	15kHz	12000	26500	12000-26500MHz@-41.34dBm	-13	PASS
Band66	Stand-Alone	NaN	BPSK	131973	1@11	15kHz	5000	12000	5000-12000MHz@-47.45dBm	-13	PASS
Band66	Stand-Alone	NaN	BPSK	131973	1@11	15kHz	1000	5000	1000-5000MHz@-37.86dBm	-13	PASS
Band66	Stand-Alone	NaN	BPSK	131973	1@11	15kHz	30	1000	30-1000MHz@-35.77dBm	-13	PASS
Band66	Stand-Alone	NaN	BPSK	131973	1@0	15kHz	30	1000	30-1000MHz@-35.12dBm	-13	PASS
Band66	Stand-Alone	NaN	BPSK	132322	1@0	15kHz	30	1000	30-1000MHz@-35.48dBm	-13	PASS
Band66	Stand-Alone	NaN	BPSK	132322	1@11	15kHz	12000	26500	12000-26500MHz@-41.27dBm	-13	PASS
Band66	Stand-Alone	NaN	BPSK	132322	1@11	15kHz	1000	5000	1000-5000MHz@-37.69dBm	-13	PASS
Band66	Stand-Alone	NaN	BPSK	132322	1@11	15kHz	5000	12000	5000-12000MHz@-44.54dBm	-13	PASS
Band66	Stand-Alone	NaN	BPSK	132322	1@11	15kHz	30	1000	30-1000MHz@-36.02dBm	-13	PASS
Band66	Stand-Alone	NaN	BPSK	132322	1@0	15kHz	12000	26500	12000-26500MHz@-41.36dBm	-13	PASS
Band66	Stand-Alone	NaN	BPSK	132322	1@0	15kHz	1000	5000	1000-5000MHz@-37.62dBm	-13	PASS
Band66	Stand-Alone	NaN	BPSK	132322	1@0	15kHz	5000	12000	5000-12000MHz@-44.2dBm	-13	PASS
Band66	Stand-Alone	NaN	BPSK	132671	1@11	15kHz	12000	26500	12000-26500MHz@-41.08dBm	-13	PASS
Band66	Stand-Alone	NaN	BPSK	132671	1@0	15kHz	30	1000	30-1000MHz@-36.06dBm	-13	PASS
Band66	Stand-Alone	NaN	BPSK	132671	1@0	15kHz	1000	5000	1000-5000MHz@-37.86dBm	-13	PASS
Band66	Stand-Alone	NaN	BPSK	132671	1@0	15kHz	5000	12000	5000-12000MHz@-47.43dBm	-13	PASS
Band66	Stand-Alone	NaN	BPSK	132671	1@0	15kHz	12000	26500	12000-26500MHz@-41.51dBm	-13	PASS
Band66	Stand-Alone	NaN	BPSK	132671	1@11	15kHz	30	1000	30-1000MHz@-36.27dBm	-13	PASS

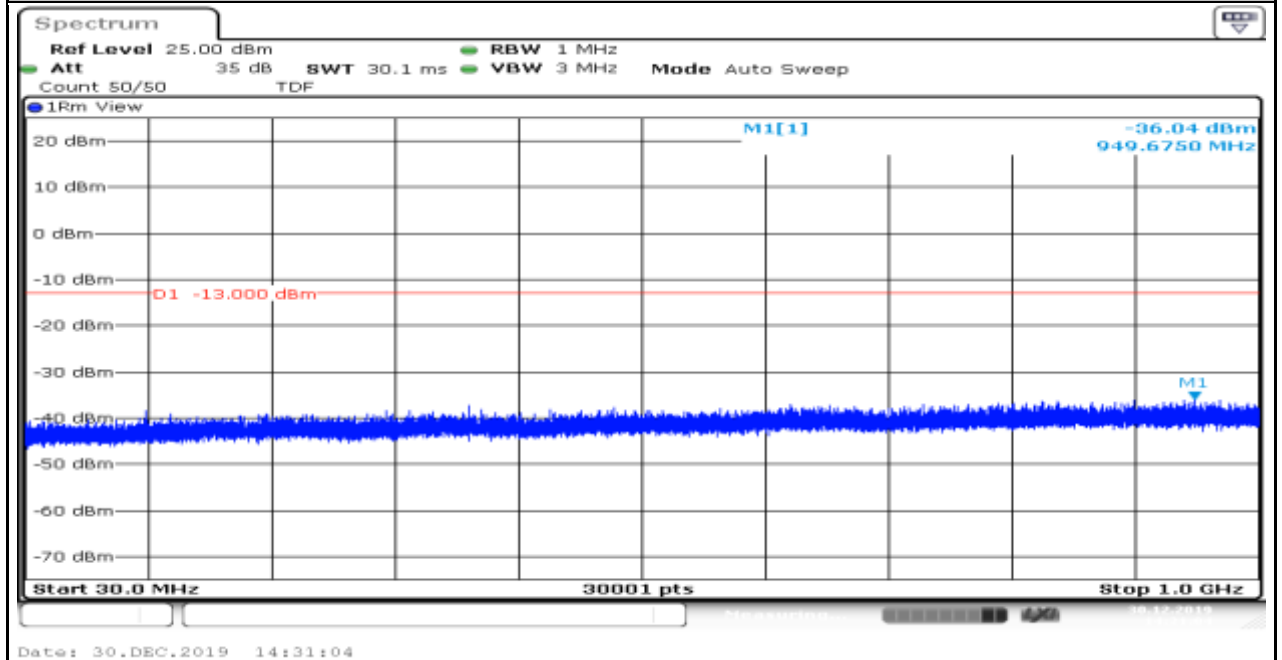
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Band66	Stand-Alone	NaN	BPSK	132671	1@11	15kHz	5000	12000	5000-12000MHz@-47.51dBm	-13	PASS

Test Graphs

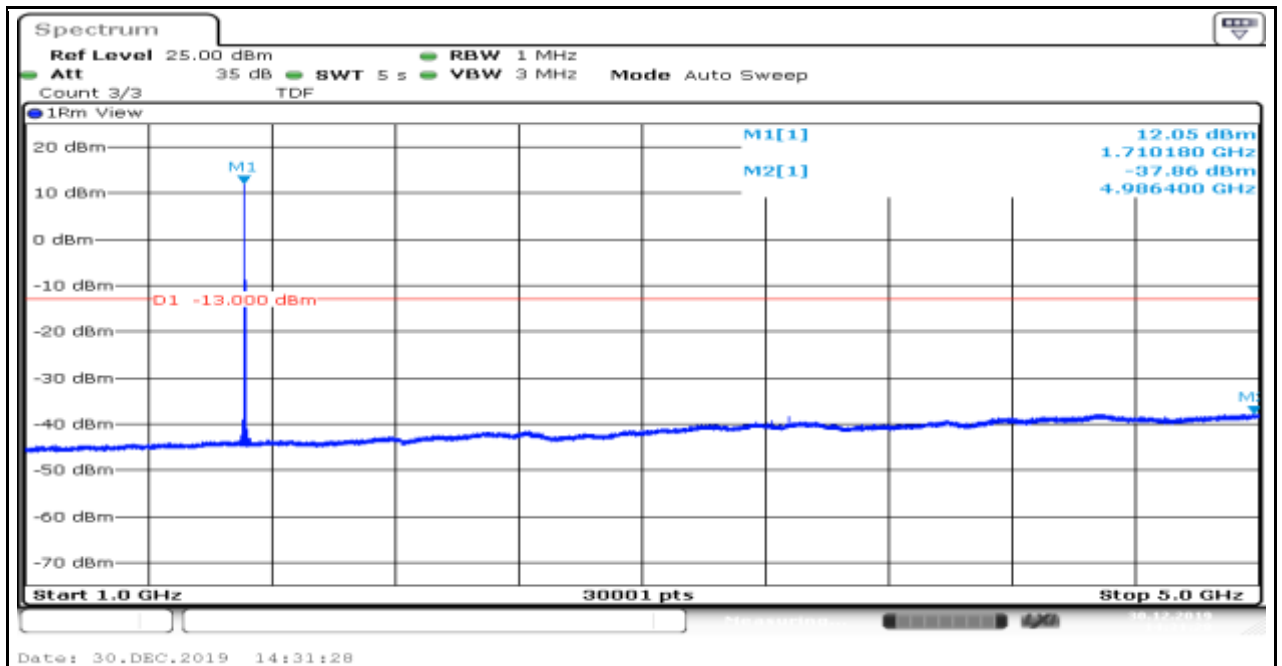




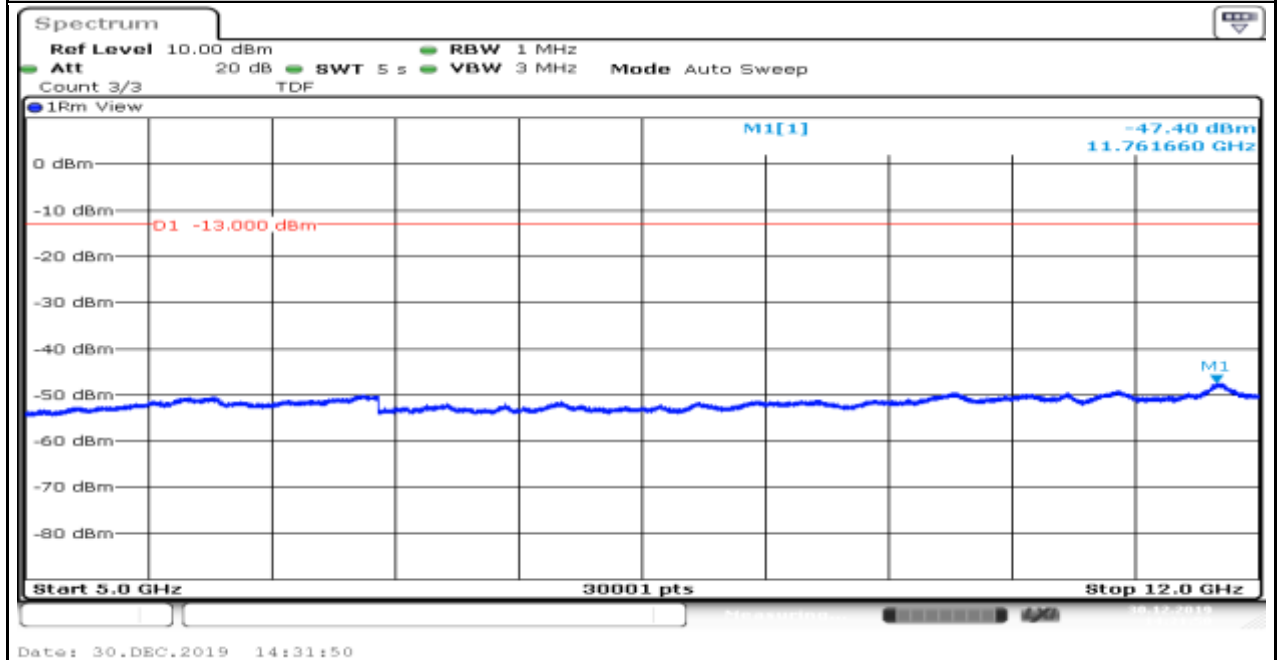
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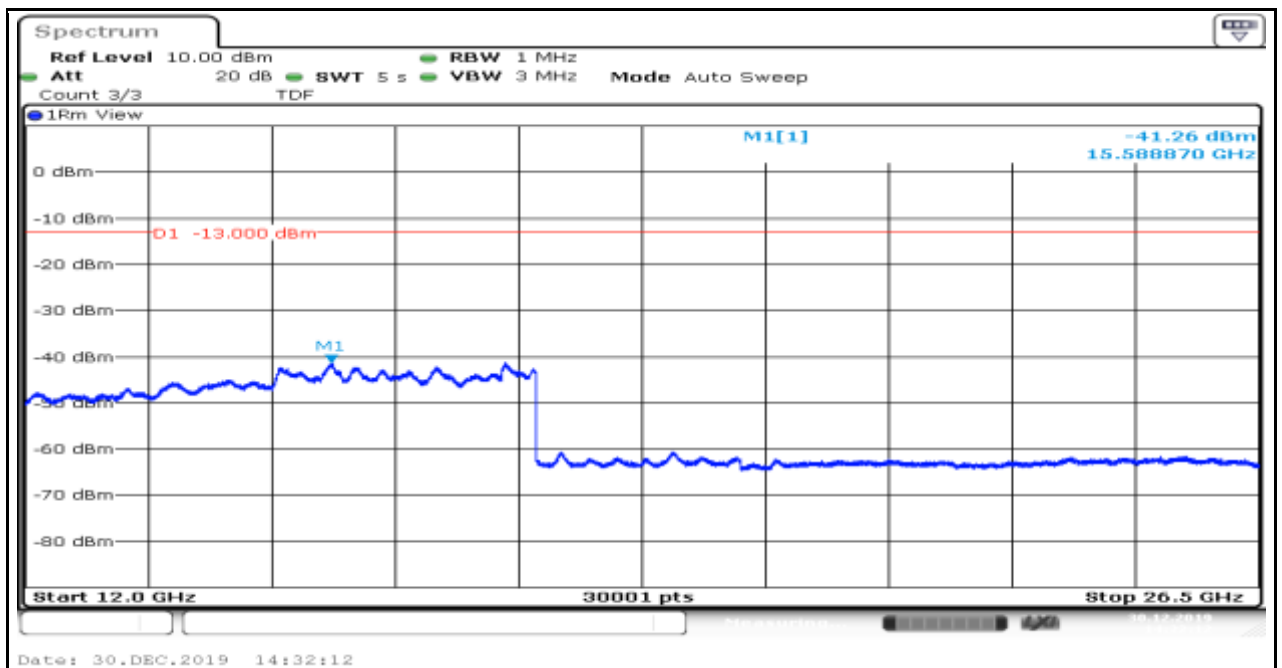
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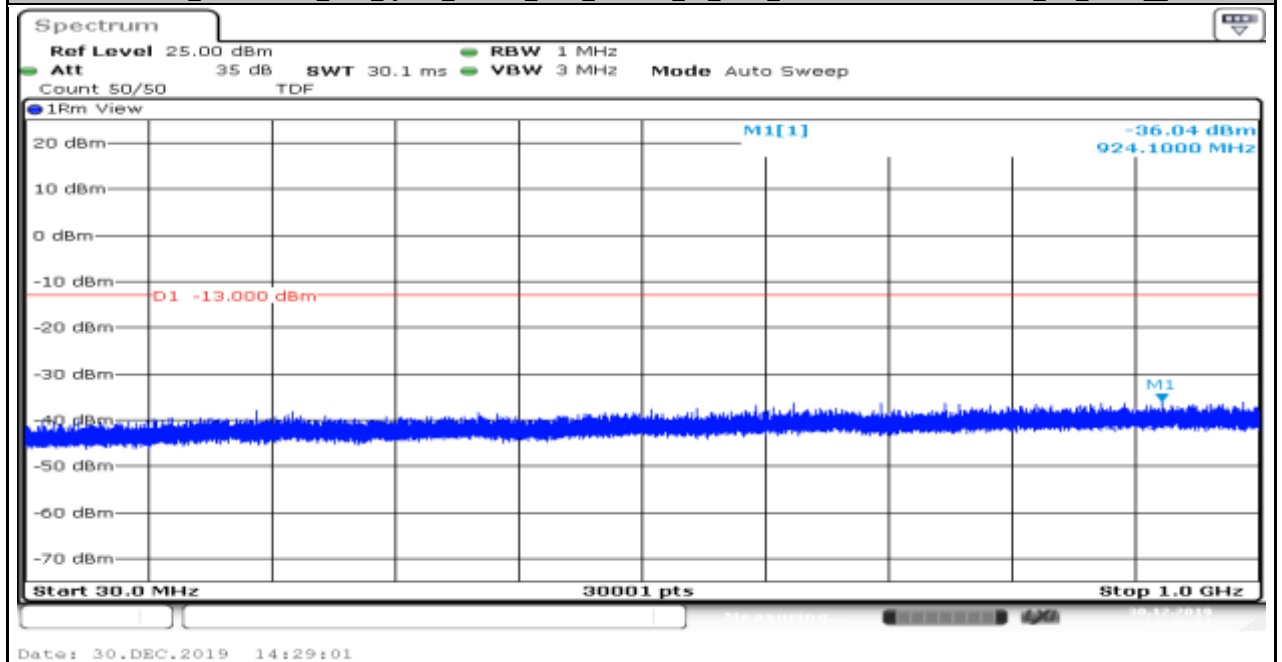
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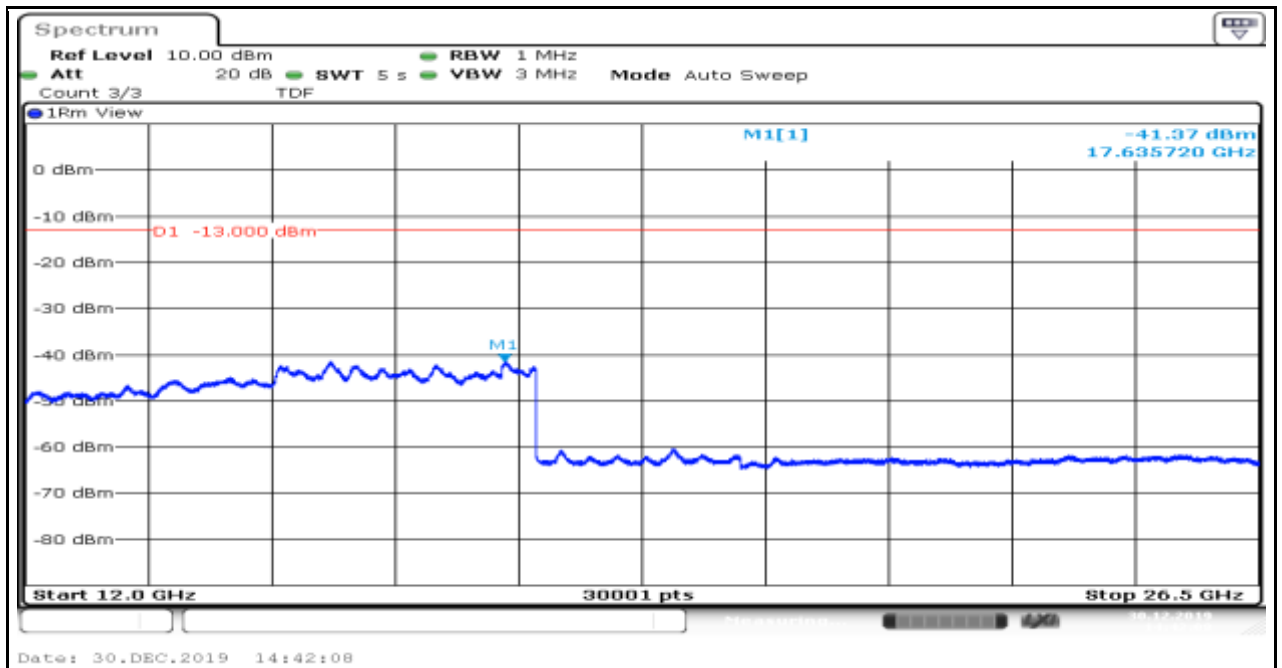
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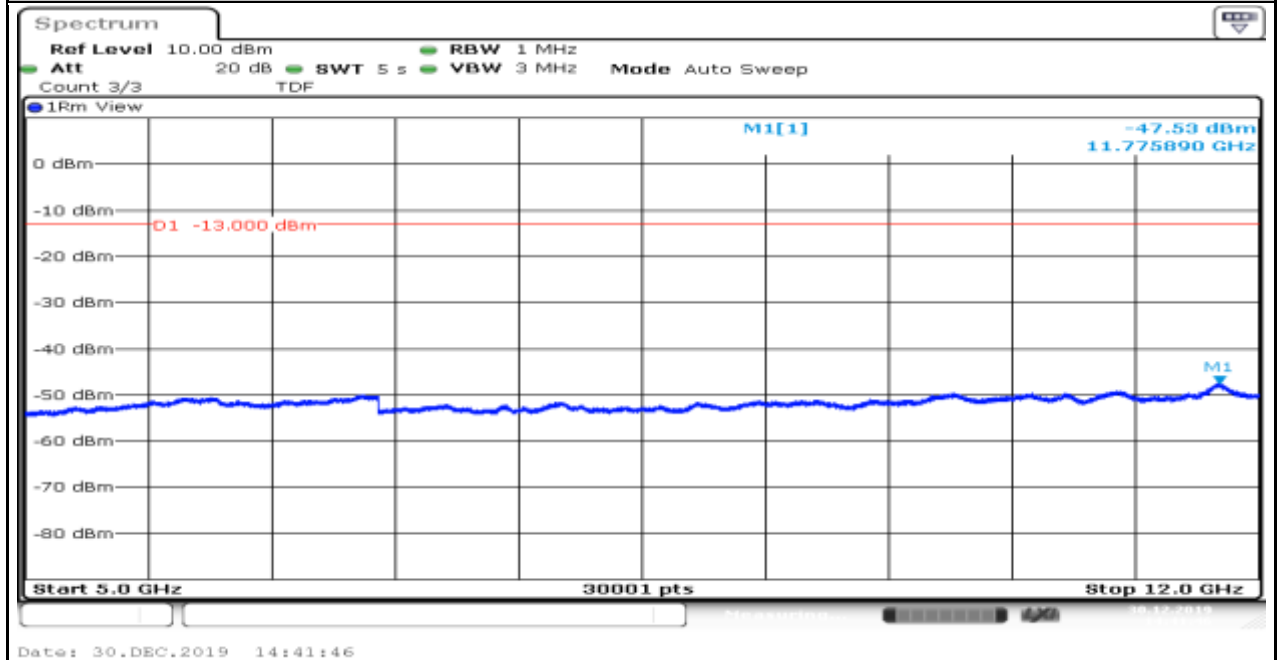
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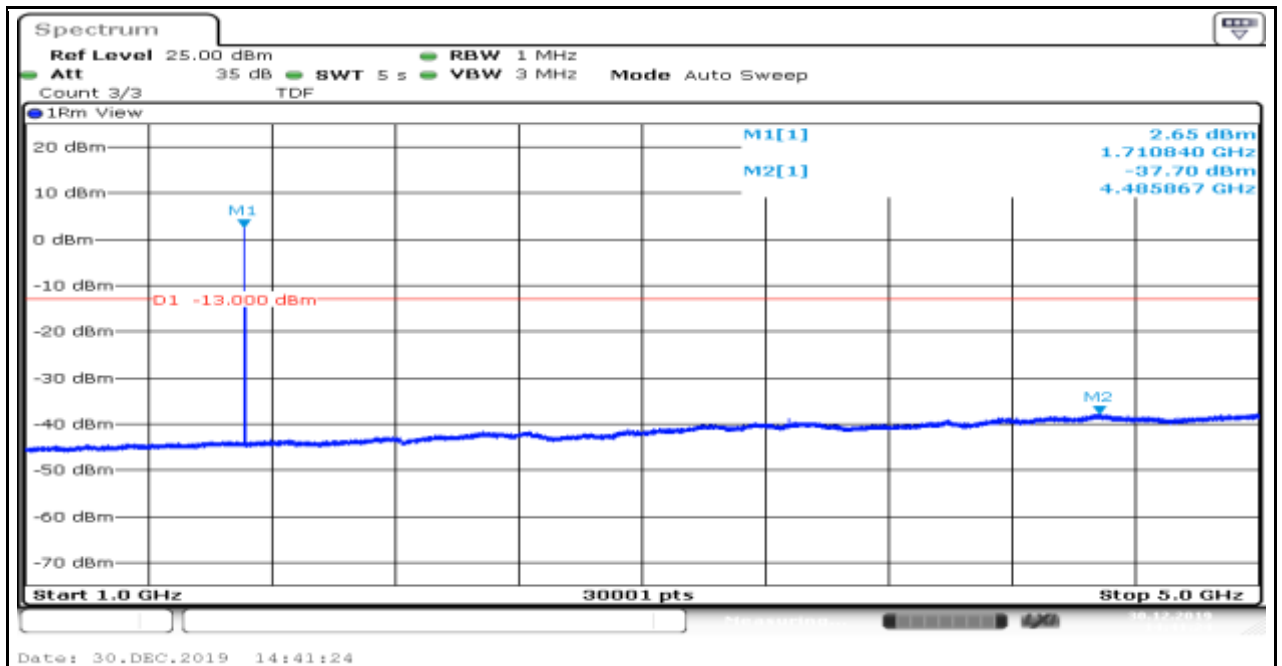
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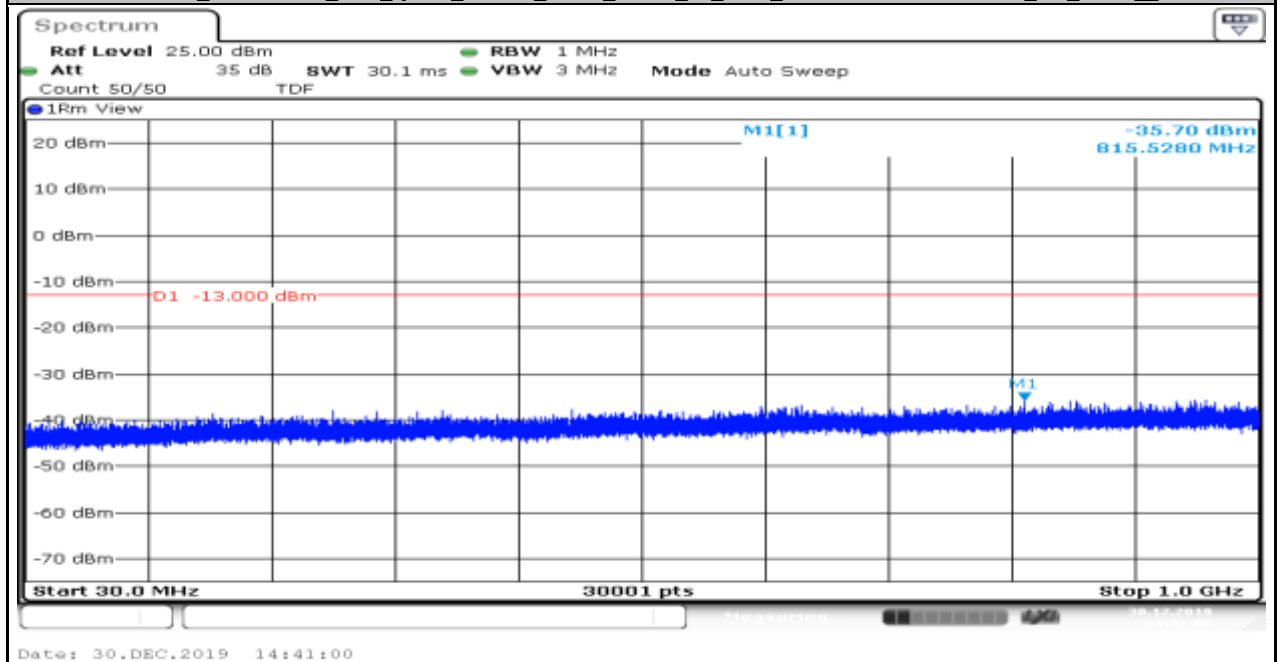
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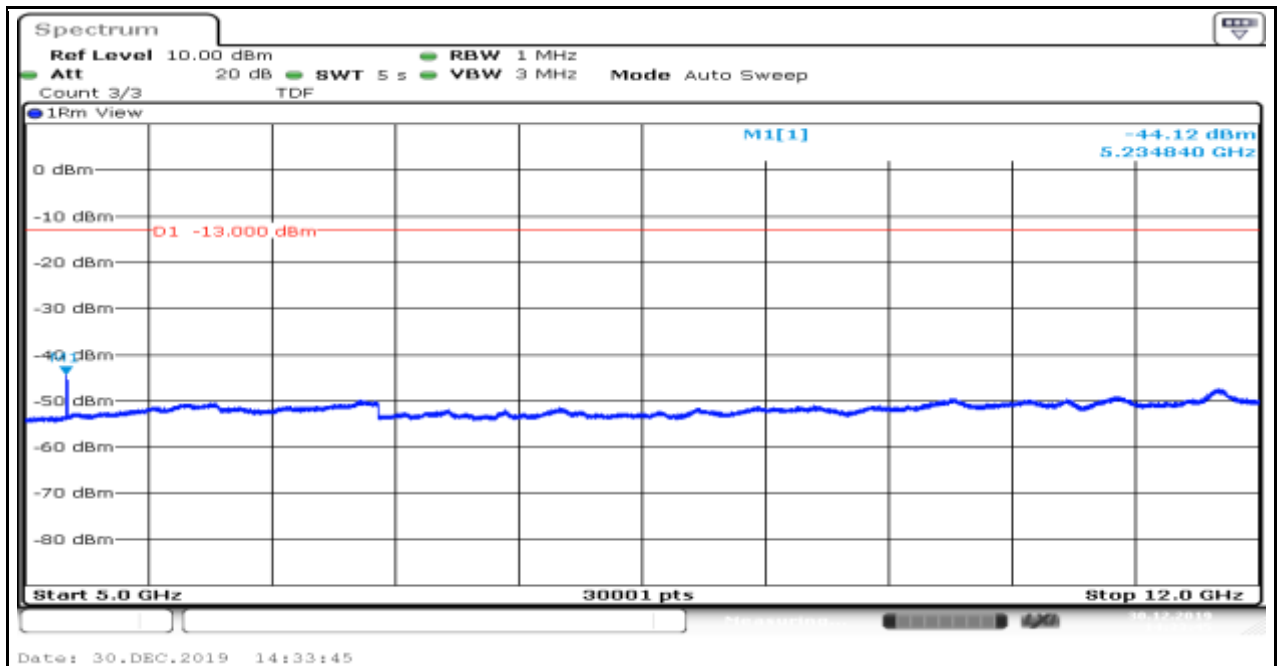
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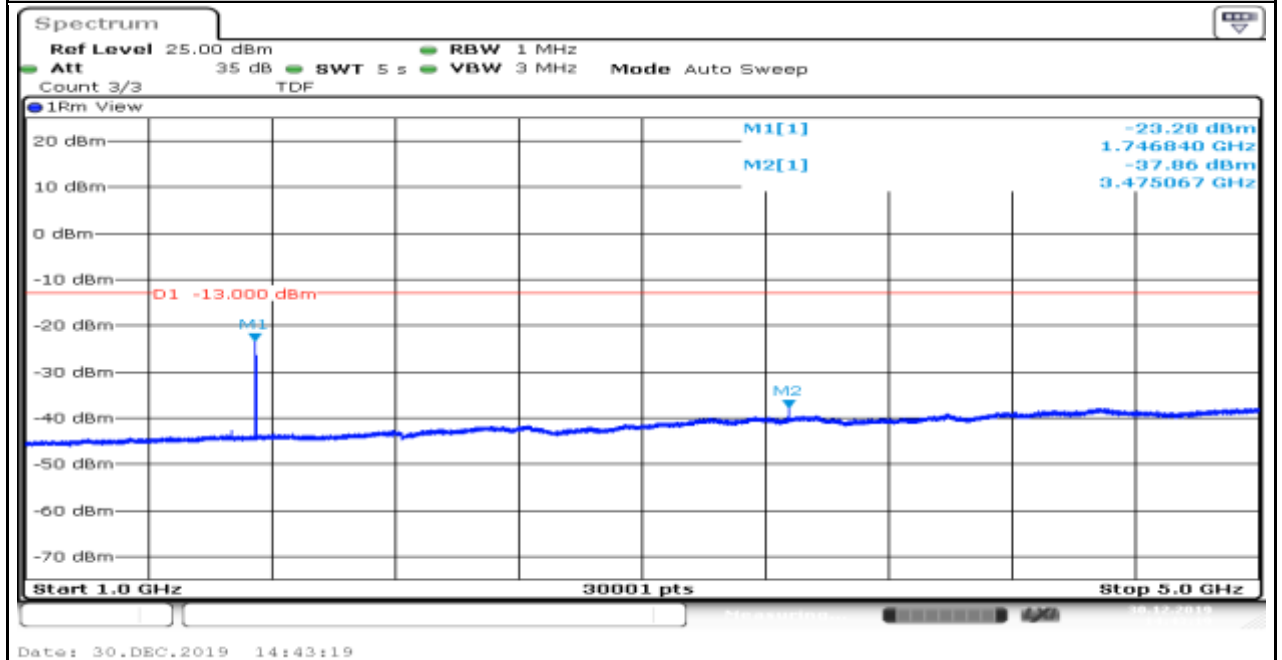
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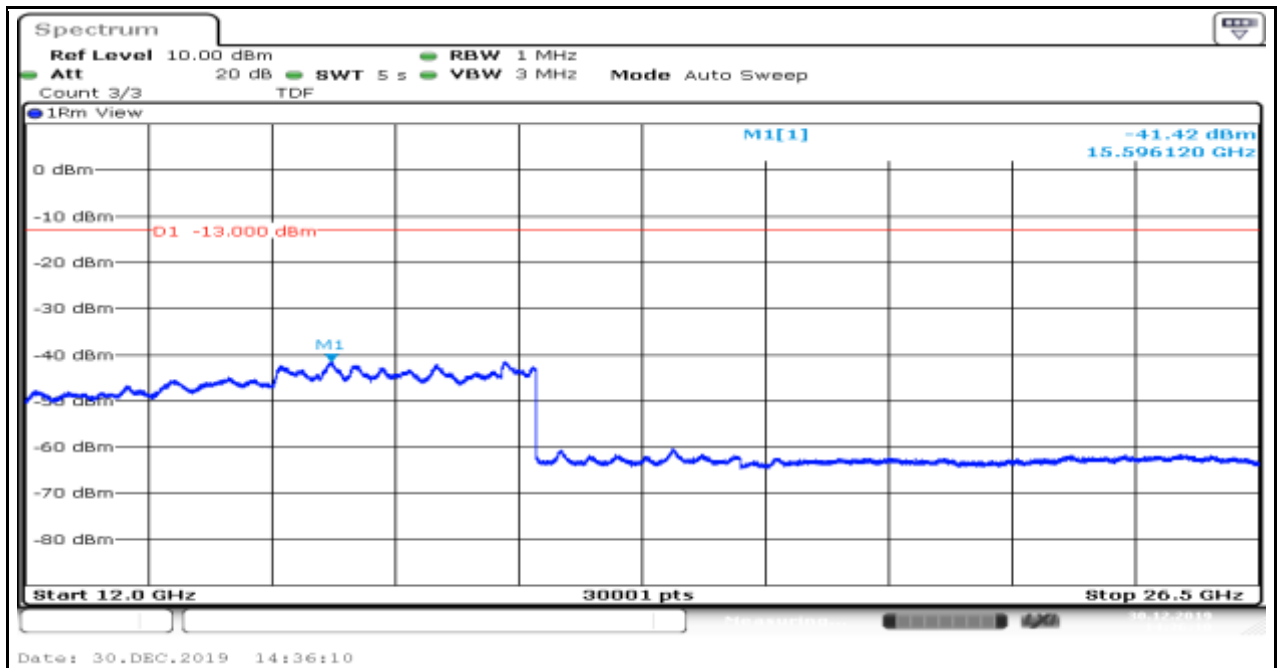
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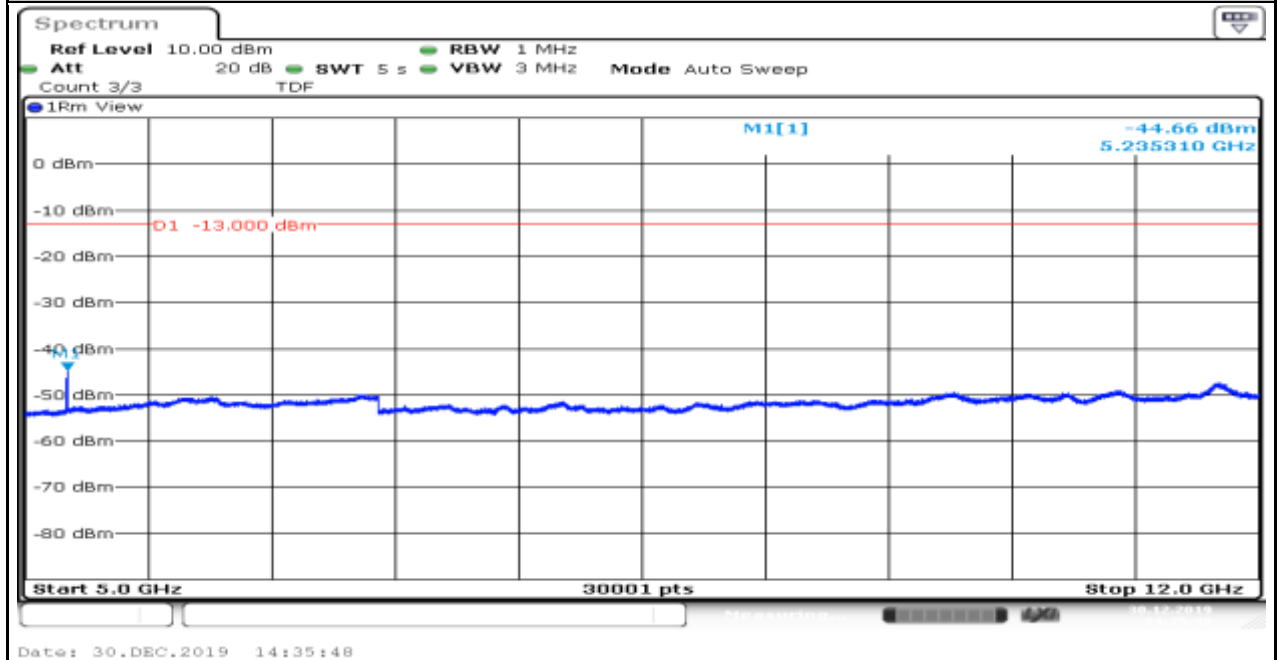
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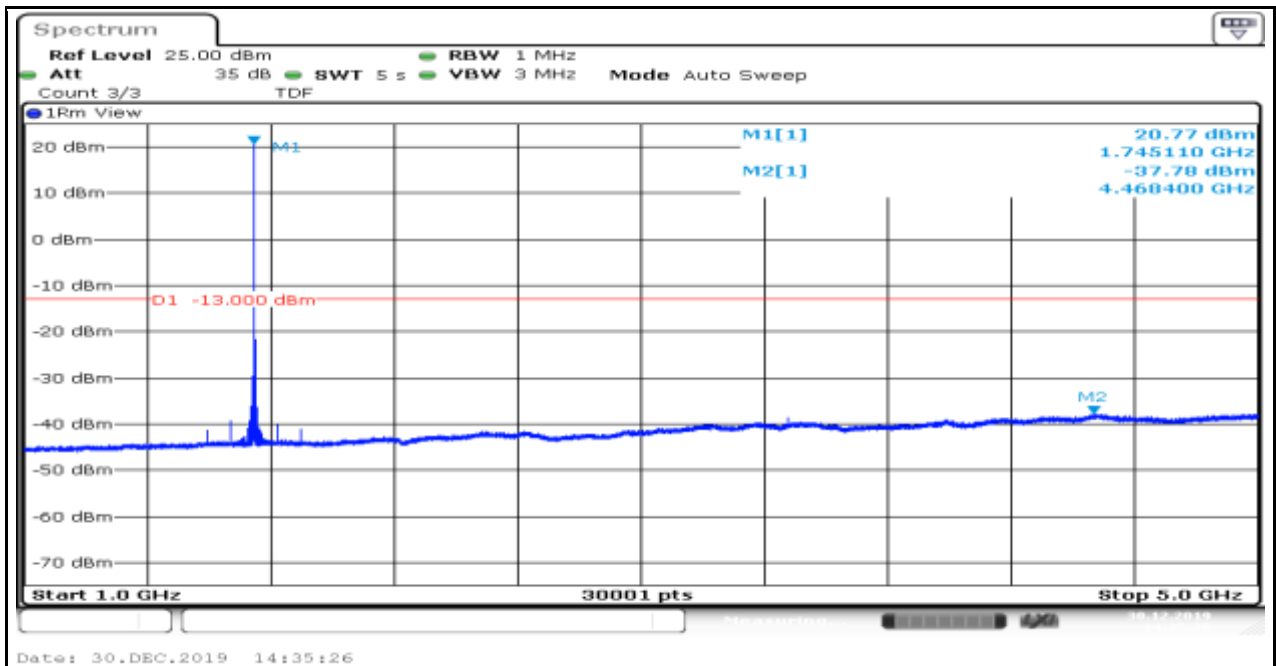
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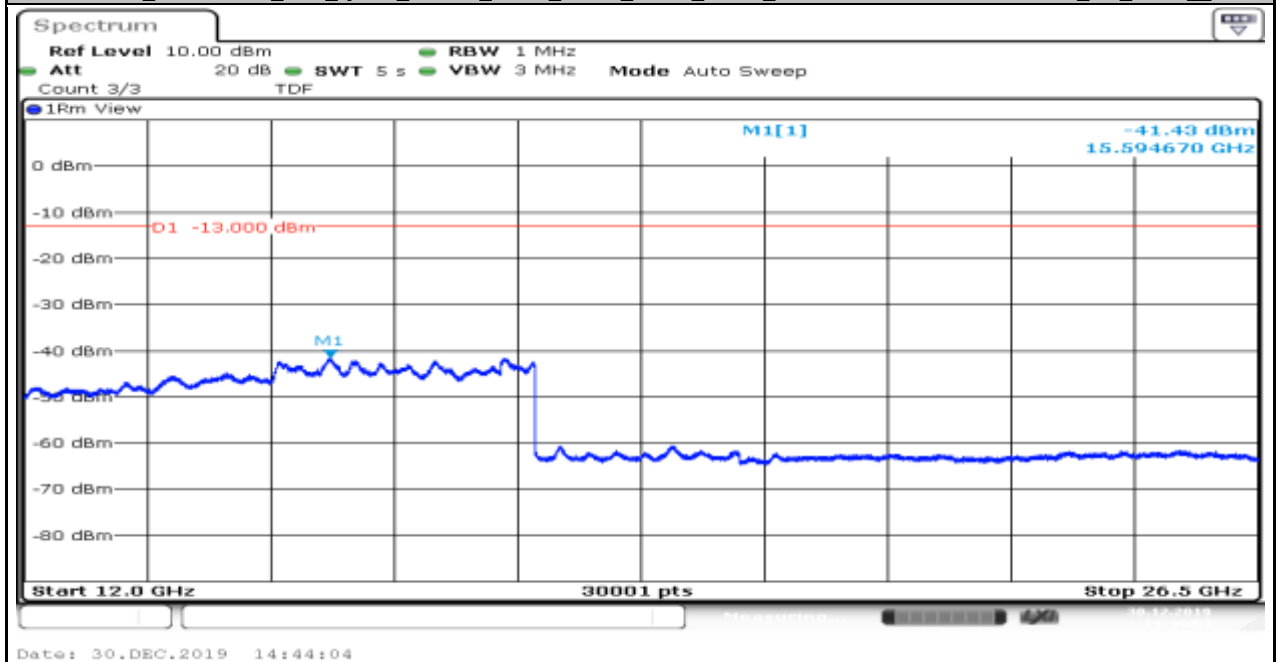
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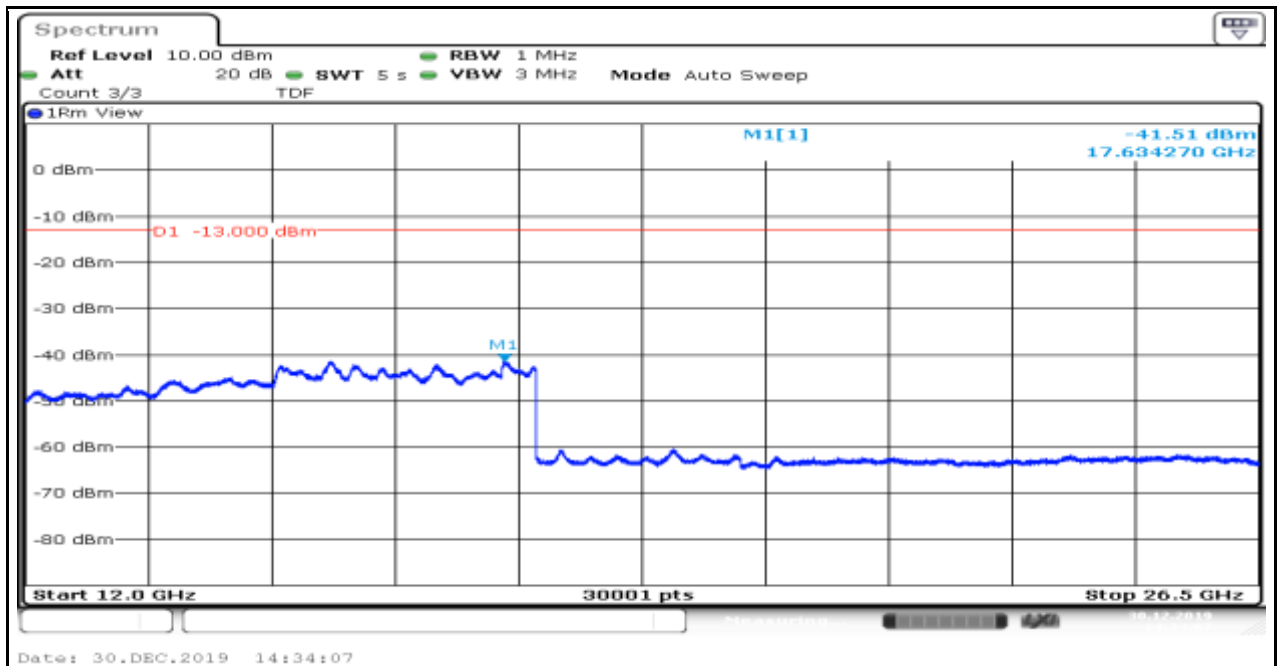
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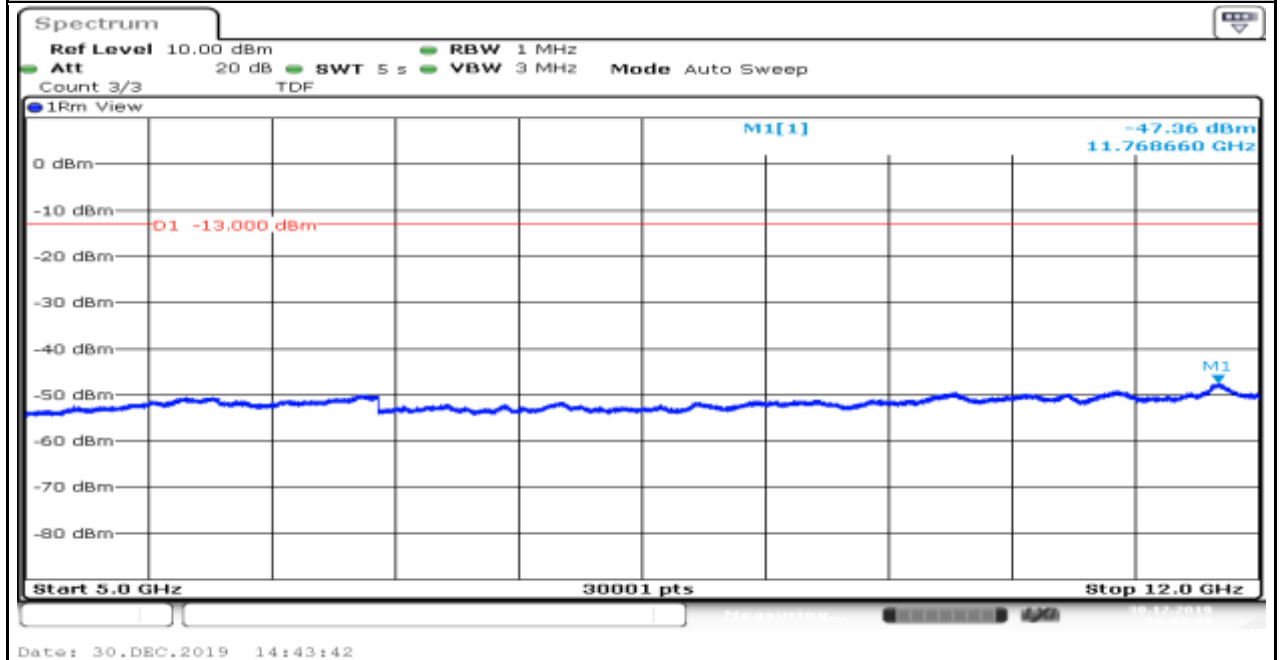
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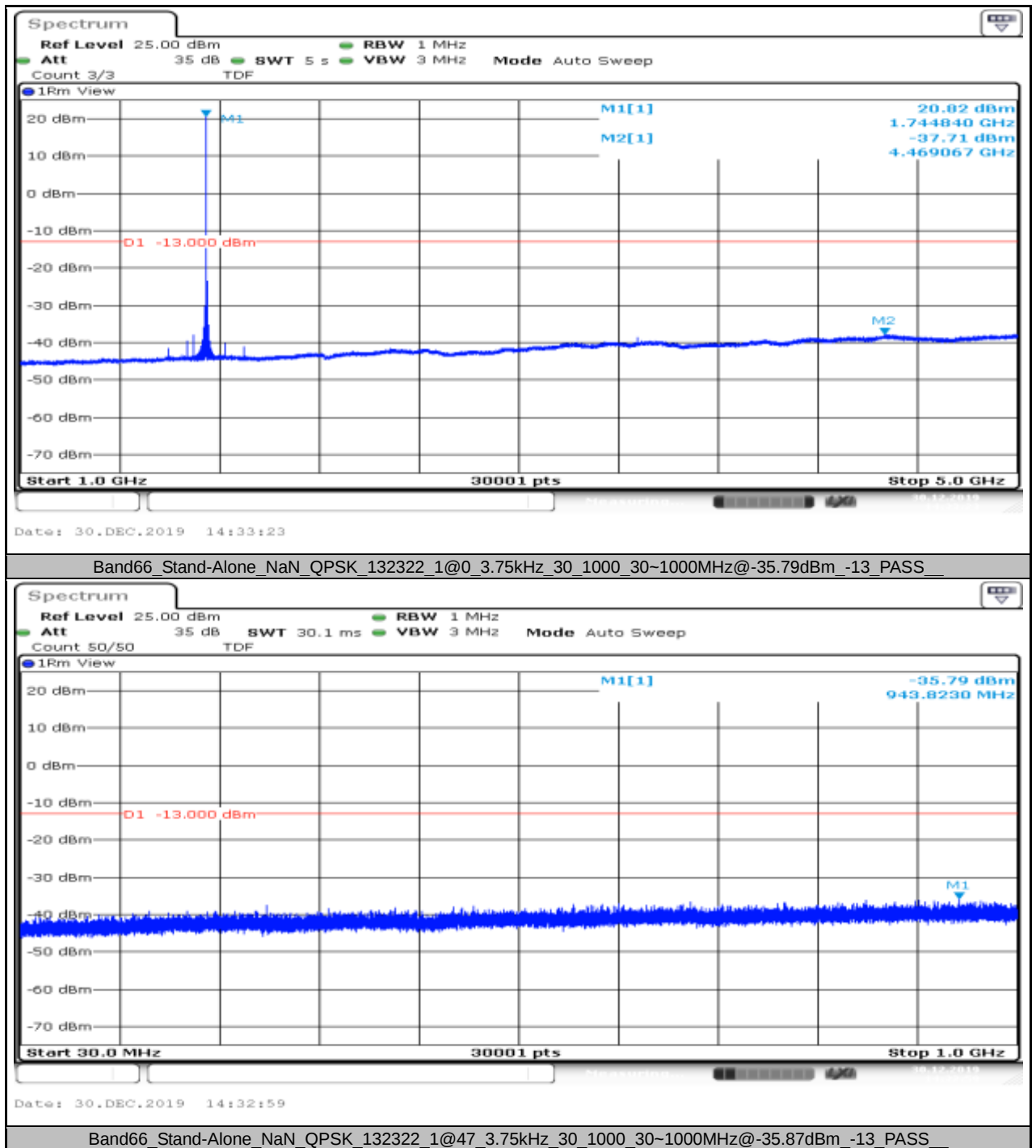
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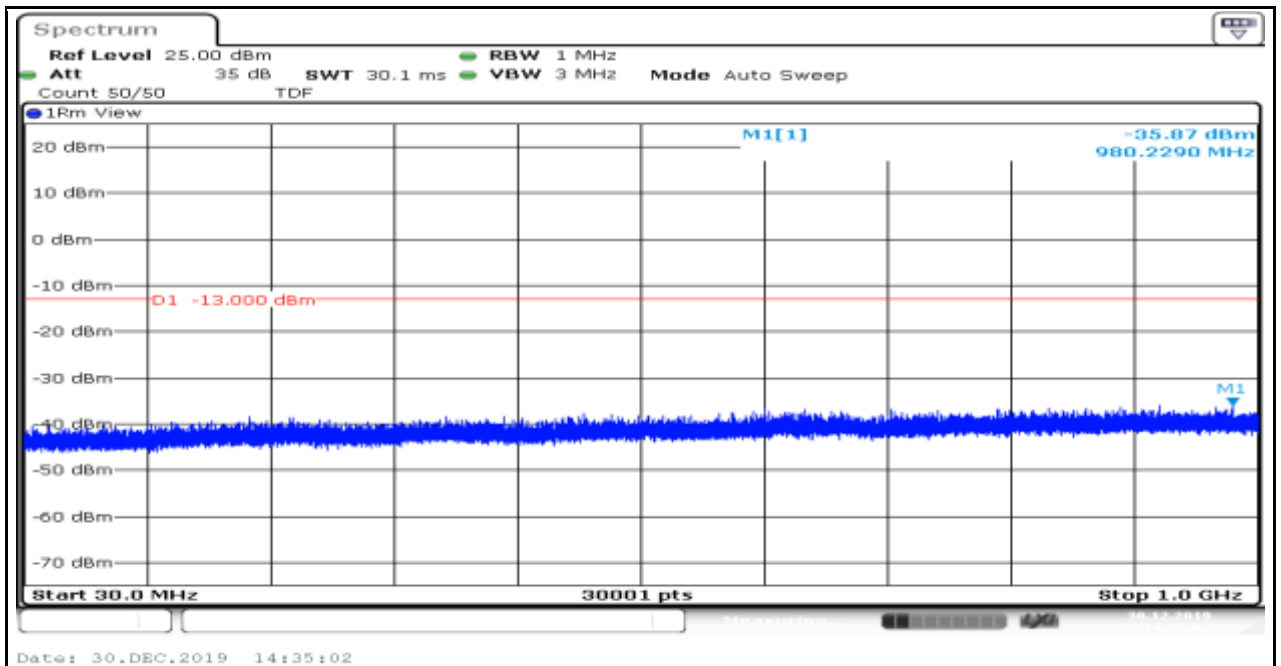


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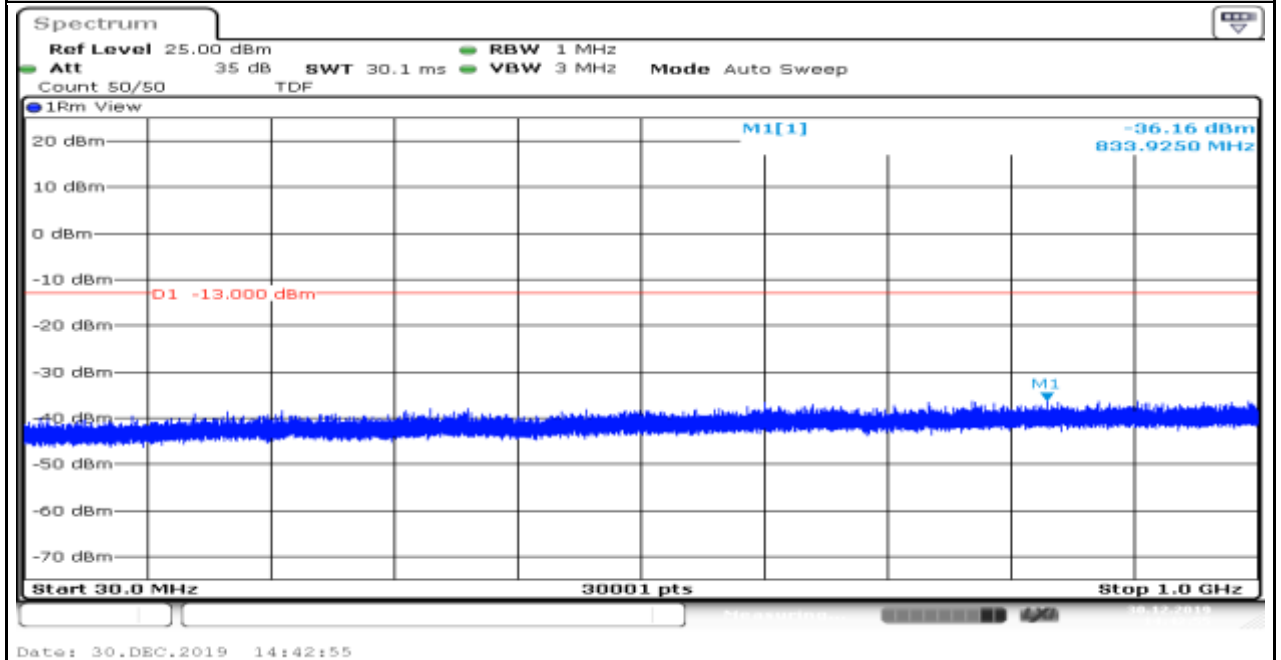


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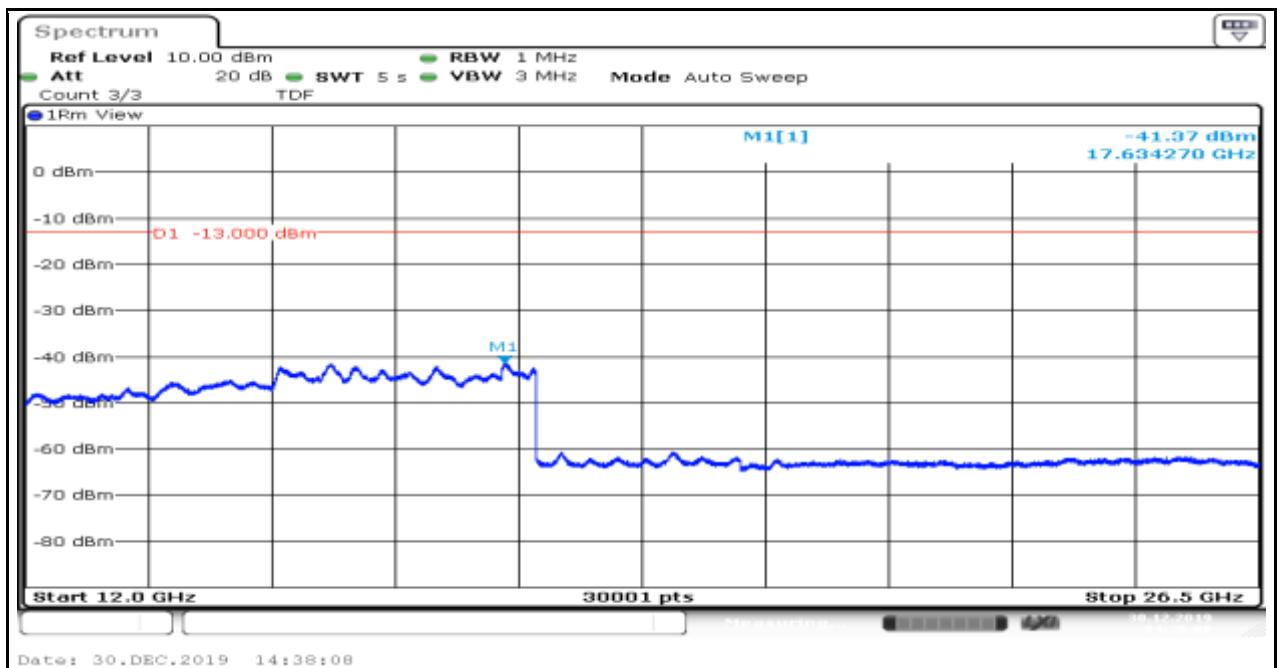




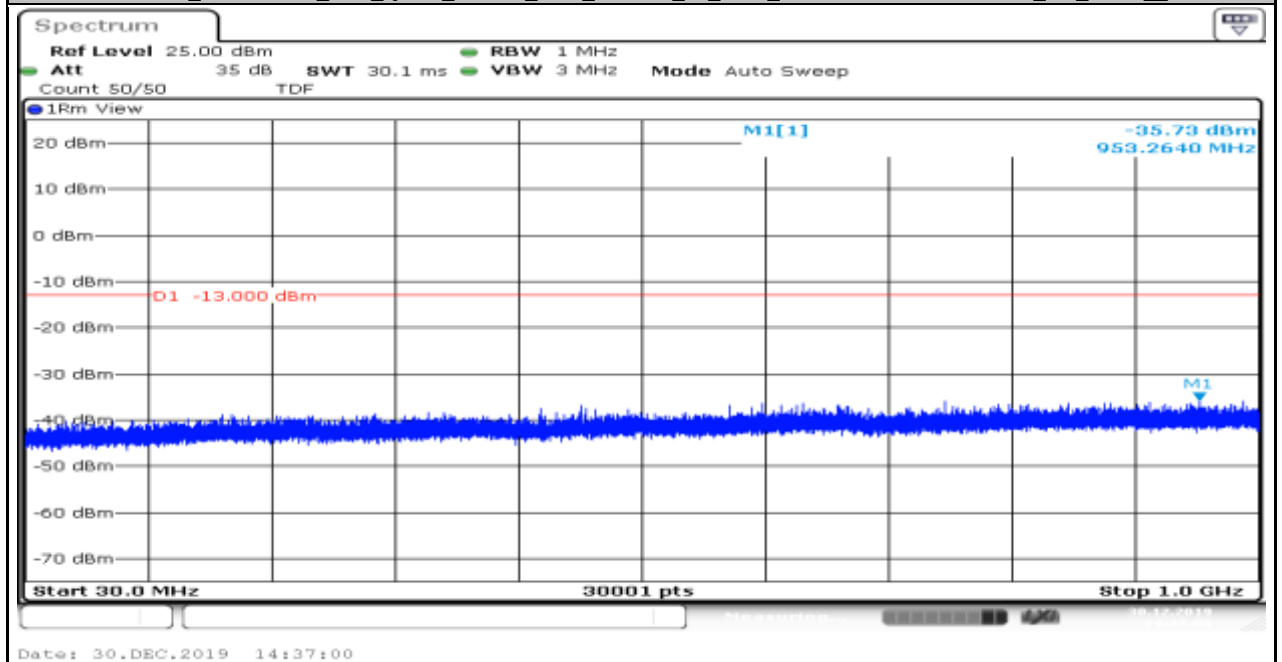
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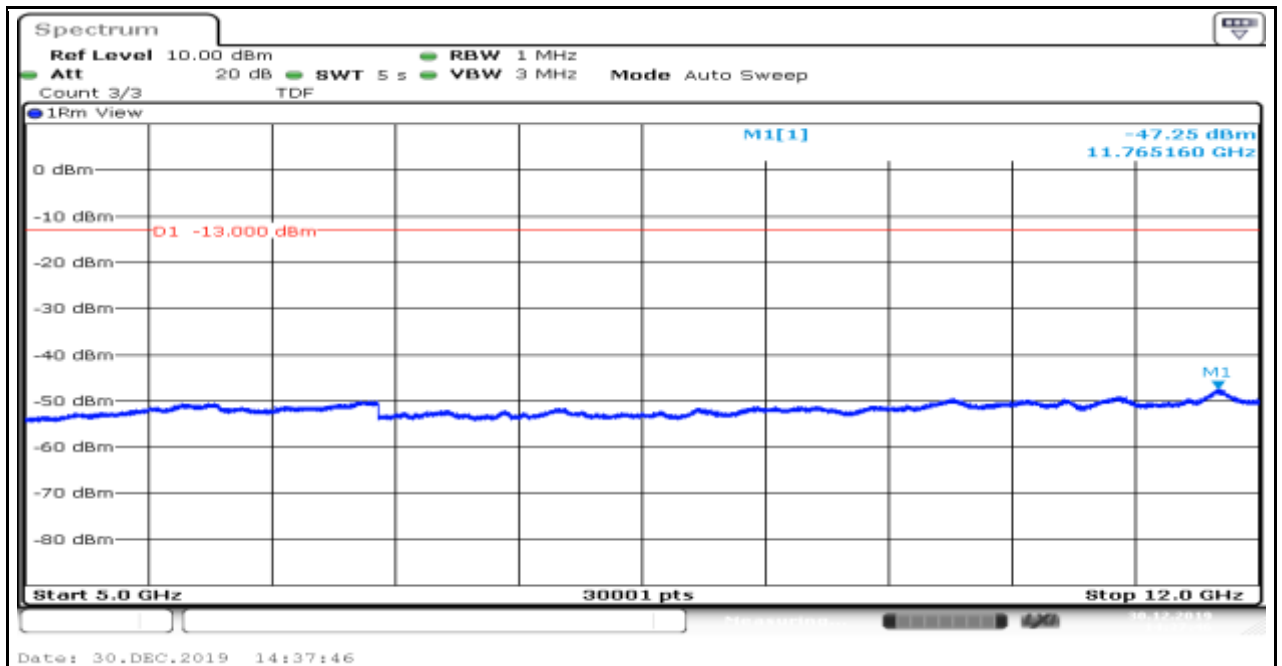
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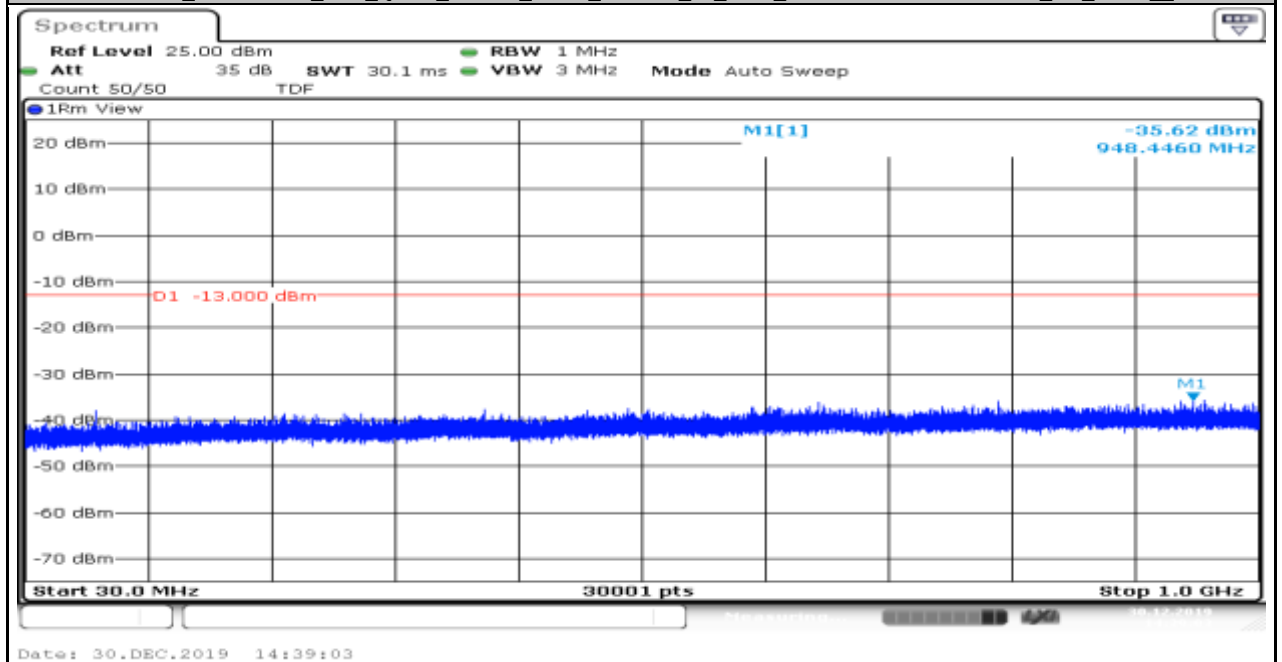
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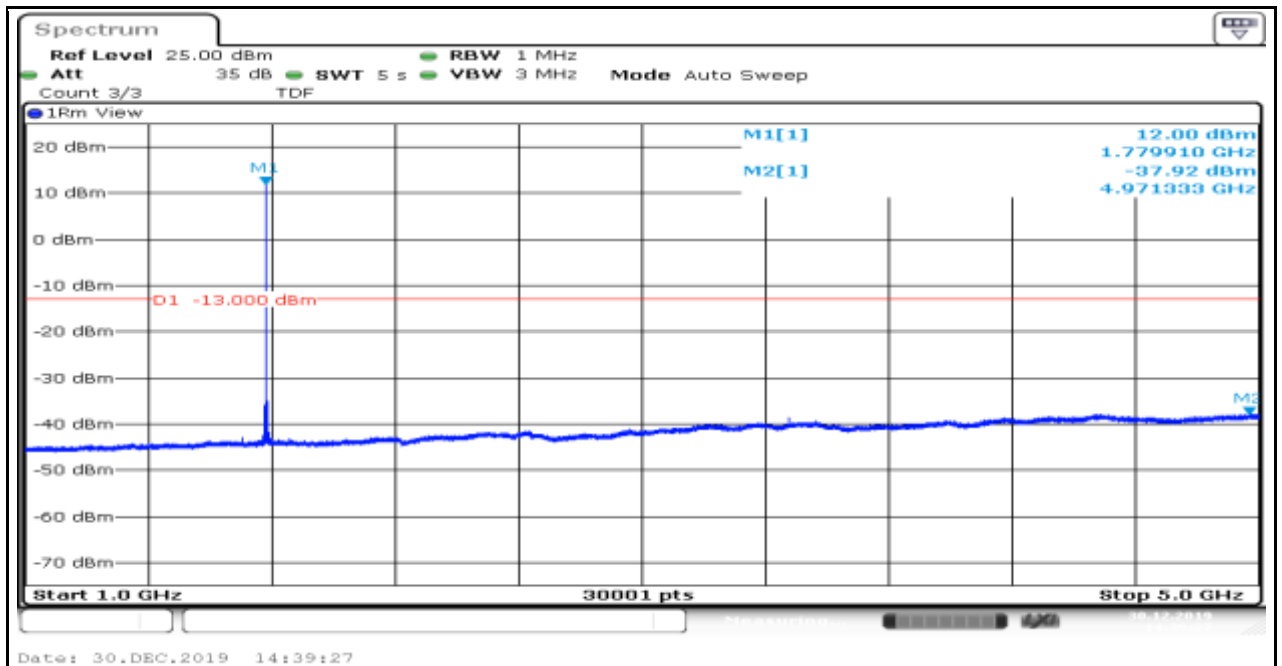
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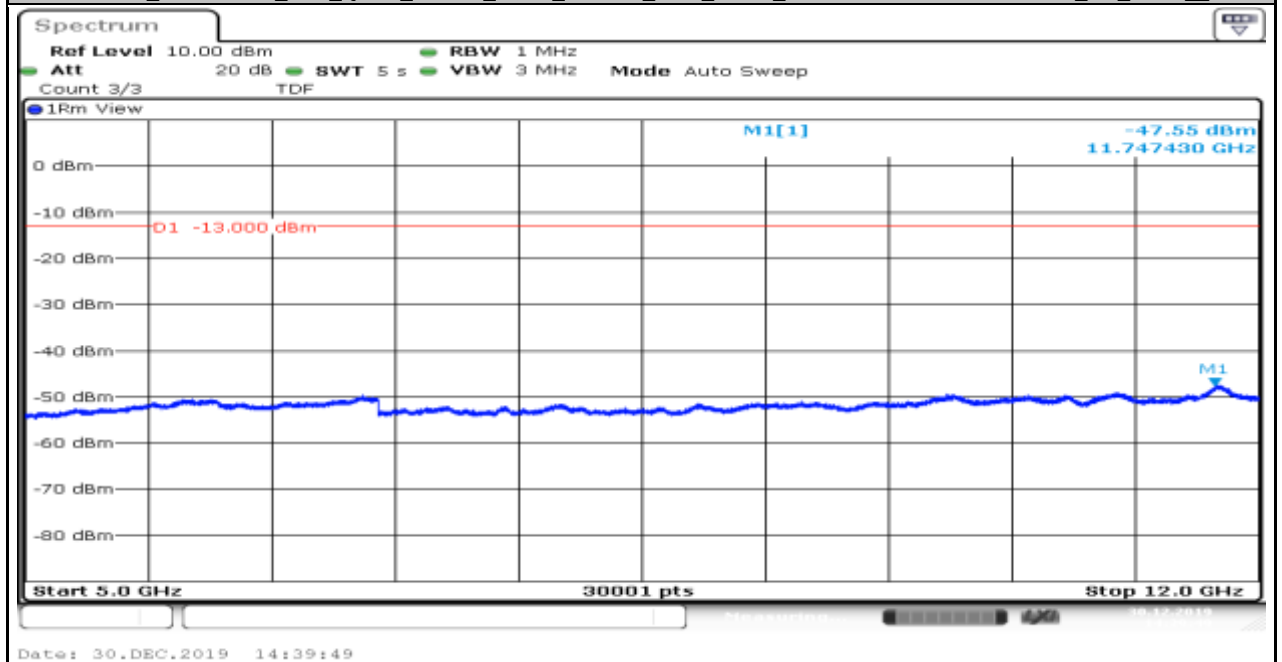
Band66_Stand-Alone_NaN_QPSK_132671_1@47_3.75kHz_30_1000_30~1000MHz@-35.62dBm_-13_PASS_



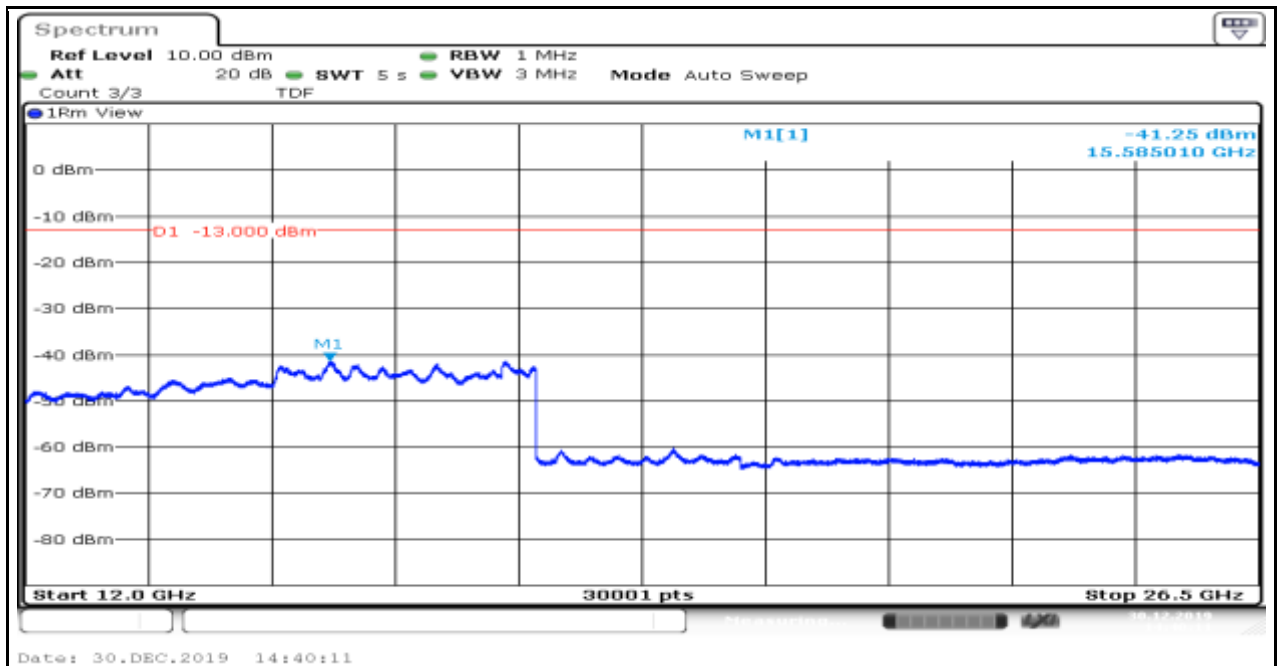
Band66_Stand-Alone_NaN_QPSK_132671_1@47_3.75kHz_1000_5000_1000~5000MHz@-37.92dBm_-13_PASS_



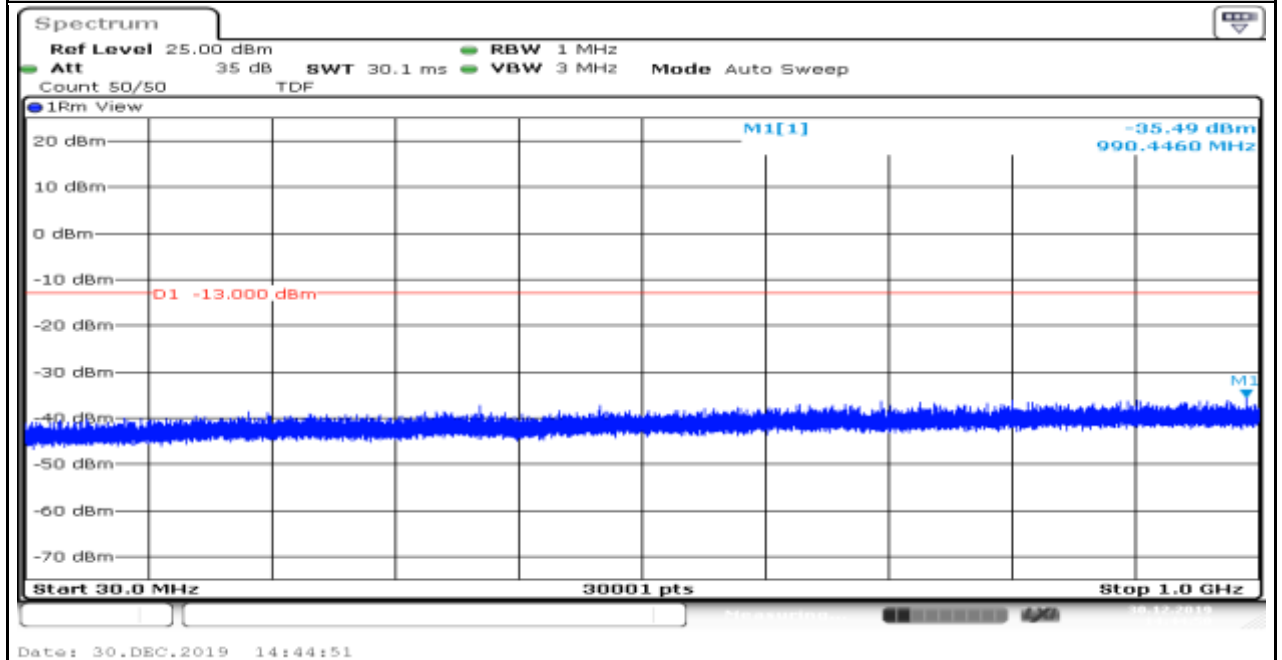
Band66_Stand-Alone_NaN_QPSK_132671_1@47_3.75kHz_5000_12000_5000~12000MHz@-47.55dBm_-13_PASS



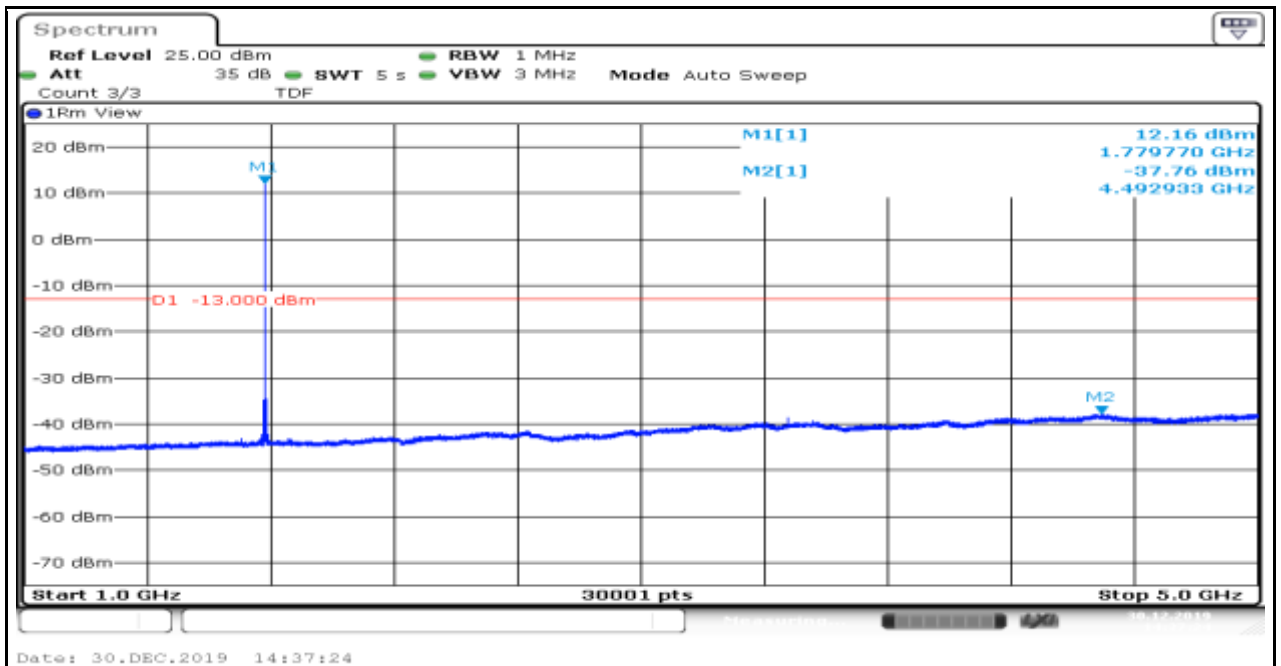
Band66_Stand-Alone_NaN_QPSK_132671_1@47_3.75kHz_12000_26500_12000~26500MHz@-41.25dBm_-13_PASS



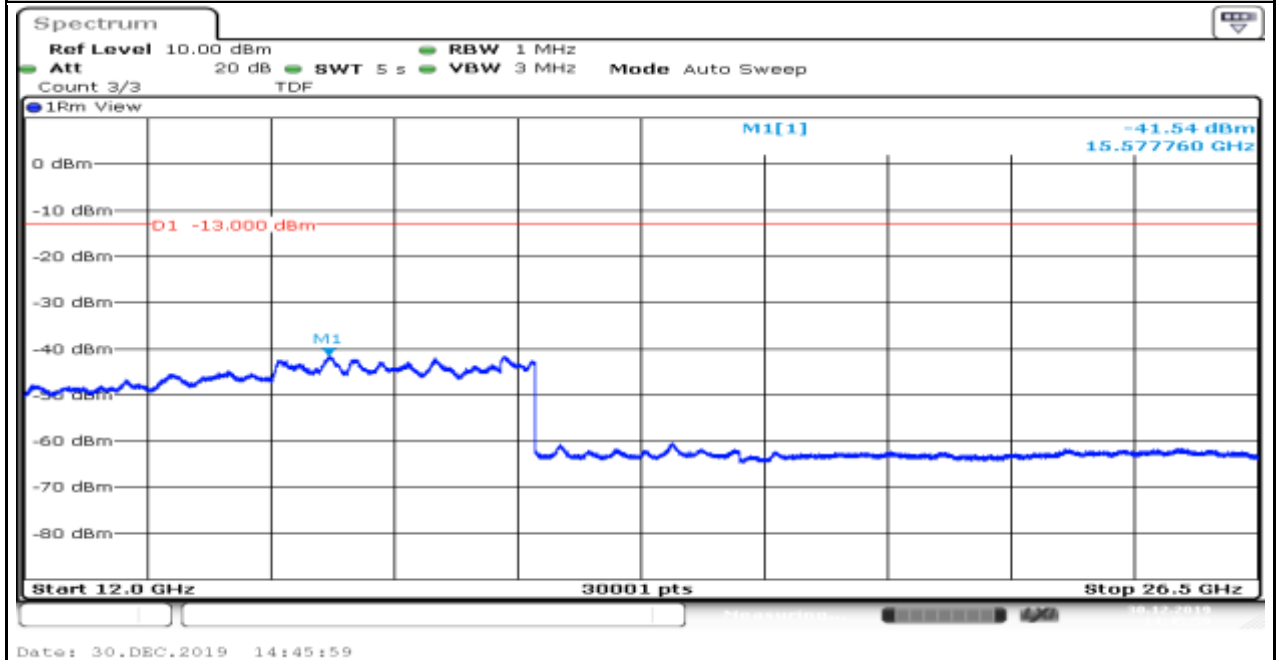
Band66_Stand-Alone_NaN_QPSK_132671_12@0_15kHz_30_1000_30~1000MHz@-35.49dBm_-13_PASS



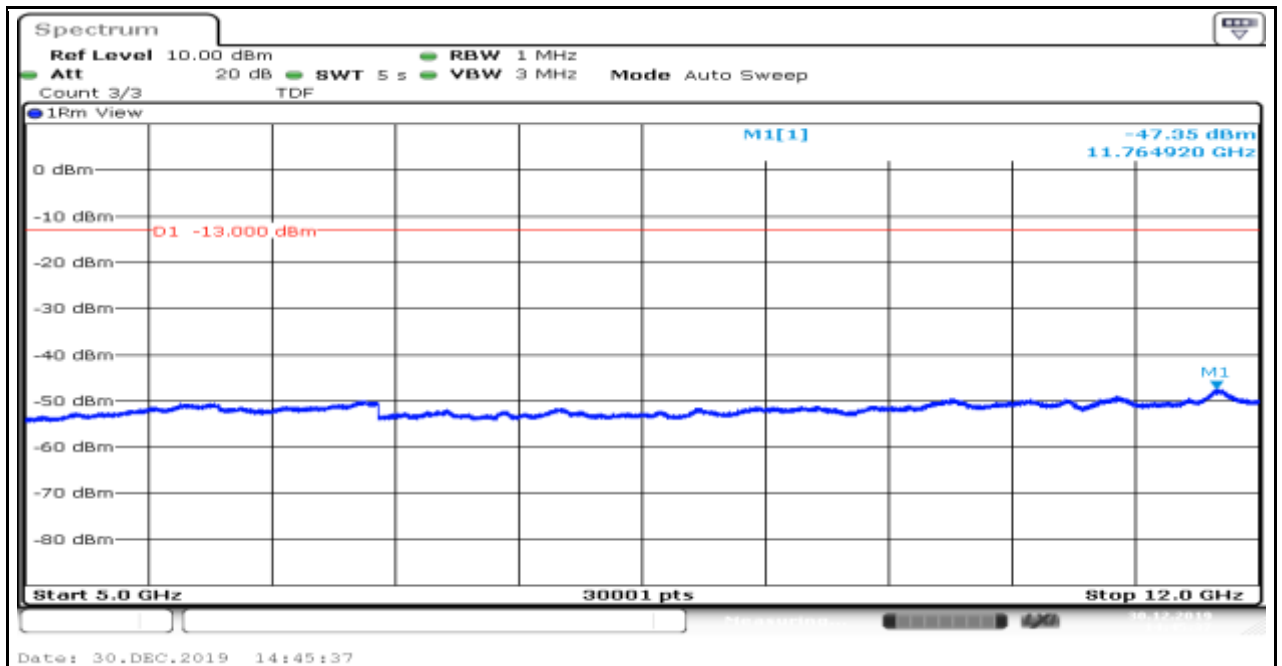
Band66_Stand-Alone_NaN_QPSK_132671_1@0_3.75kHz_1000_5000_1000~5000MHz@-37.76dBm_-13_PASS



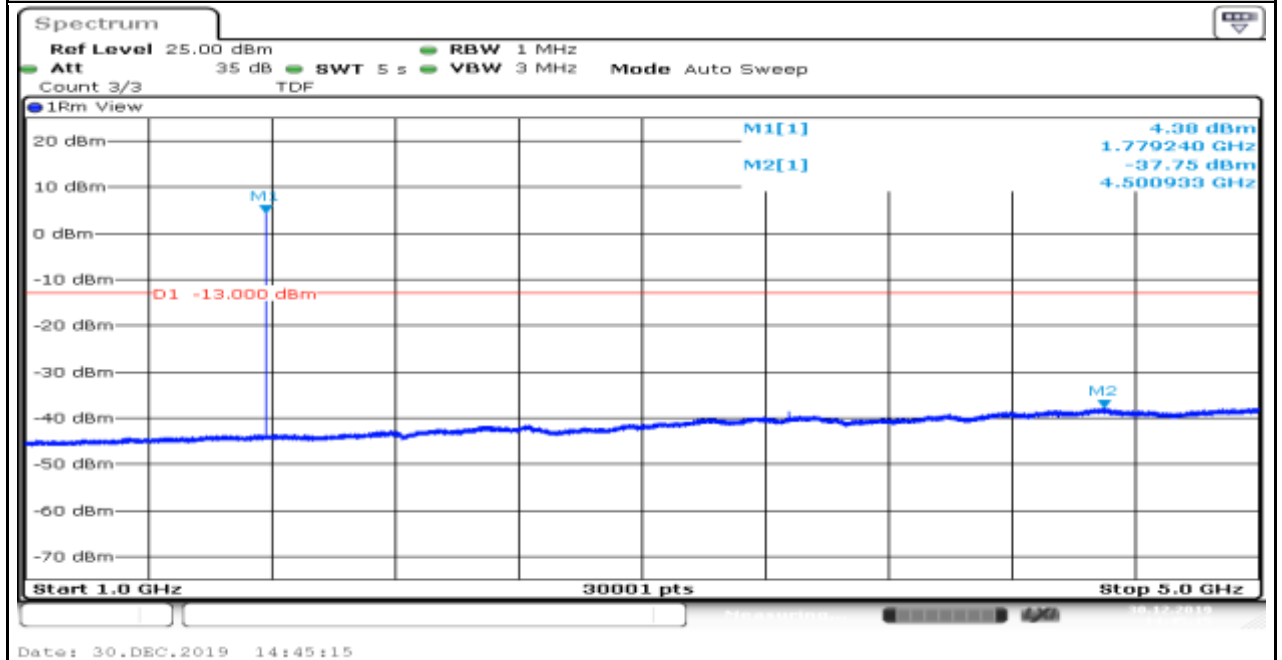
Band66_Stand-Alone_NaN_QPSK_132671_12@0_15kHz_12000_26500_12000~26500MHz@-41.54dBm_-13_PASS



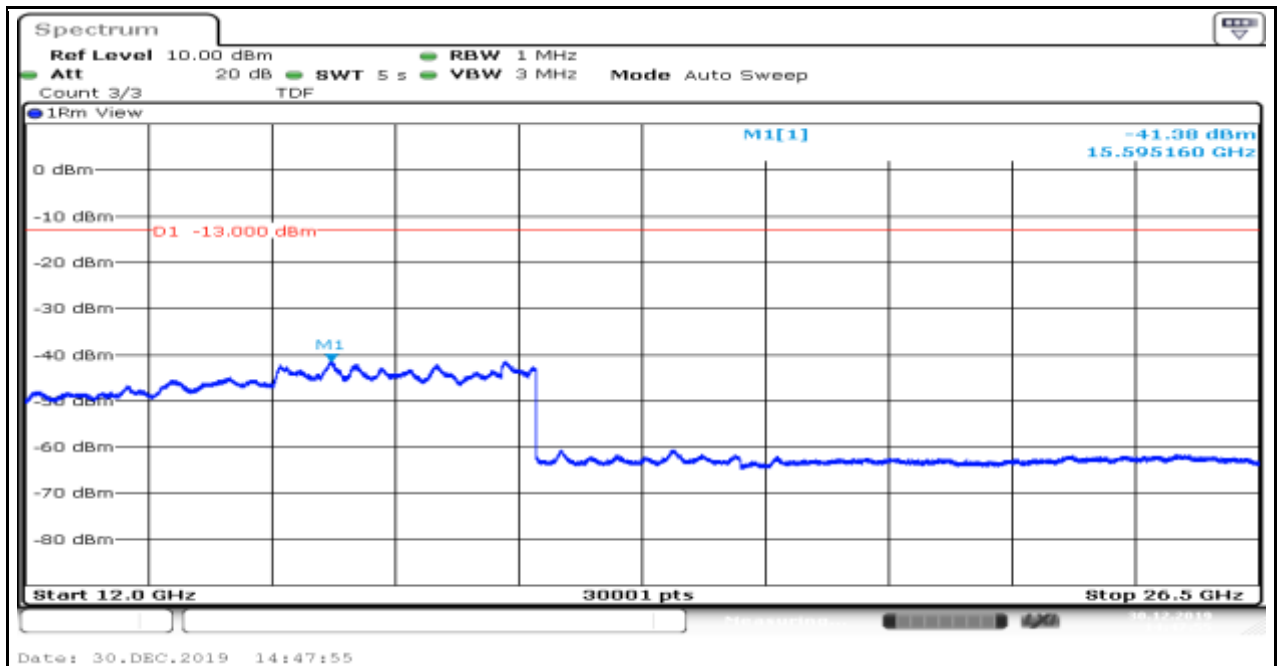
Band66_Stand-Alone_NaN_QPSK_132671_12@0_15kHz_5000_12000_5000~12000MHz@-47.35dBm_-13_PASS



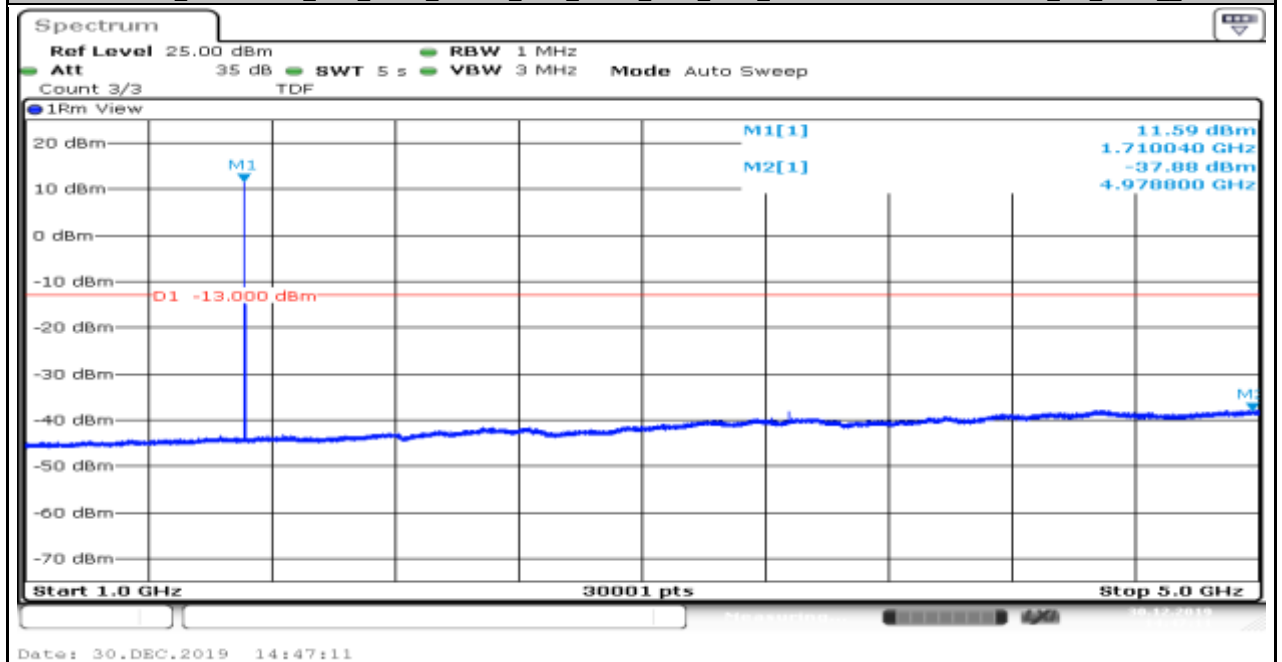
Band66_Stand-Alone_NaN_QPSK_132671_12@0_15kHz_1000_5000_1000-5000MHz@-37.75dBm_-13_PASS_



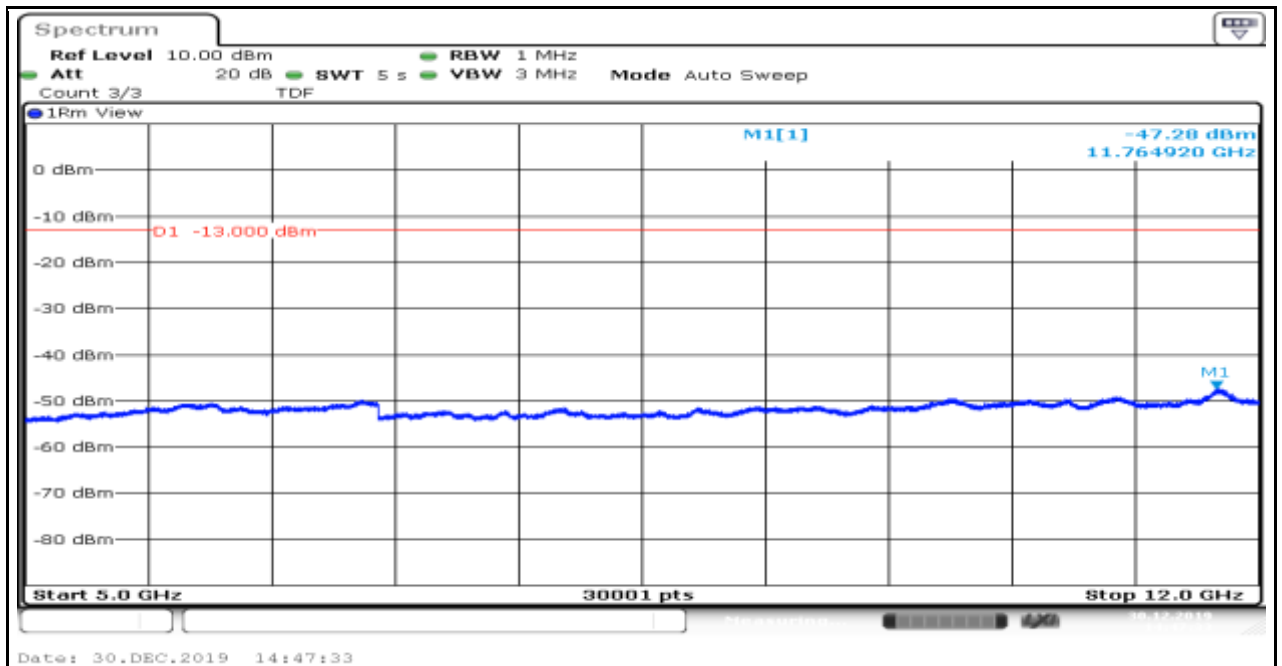
Band66_Stand-Alone_NaN_BPSK_131973_1@0_15kHz_12000_26500_12000-26500MHz@-41.38dBm_-13_PASS_



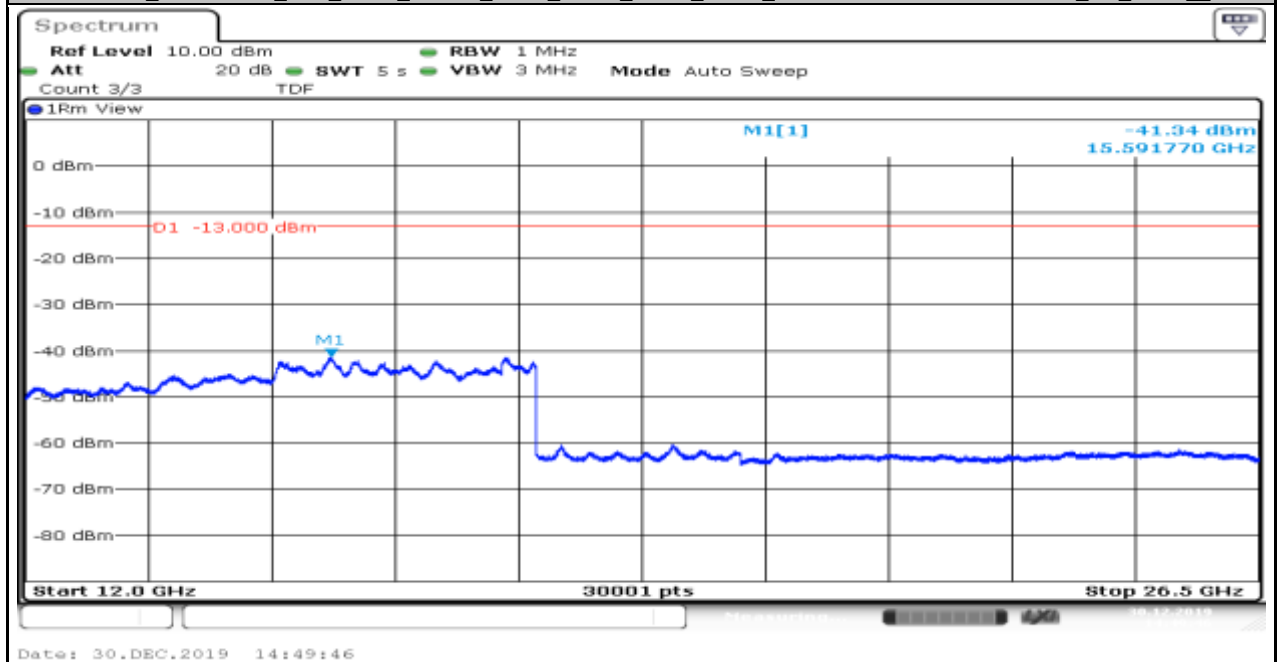
Band66_Stand-Alone_NaN_BPSK_131973_1@0_15kHz_1000_5000_1000~5000MHz@-37.88dBm_-13_PASS_



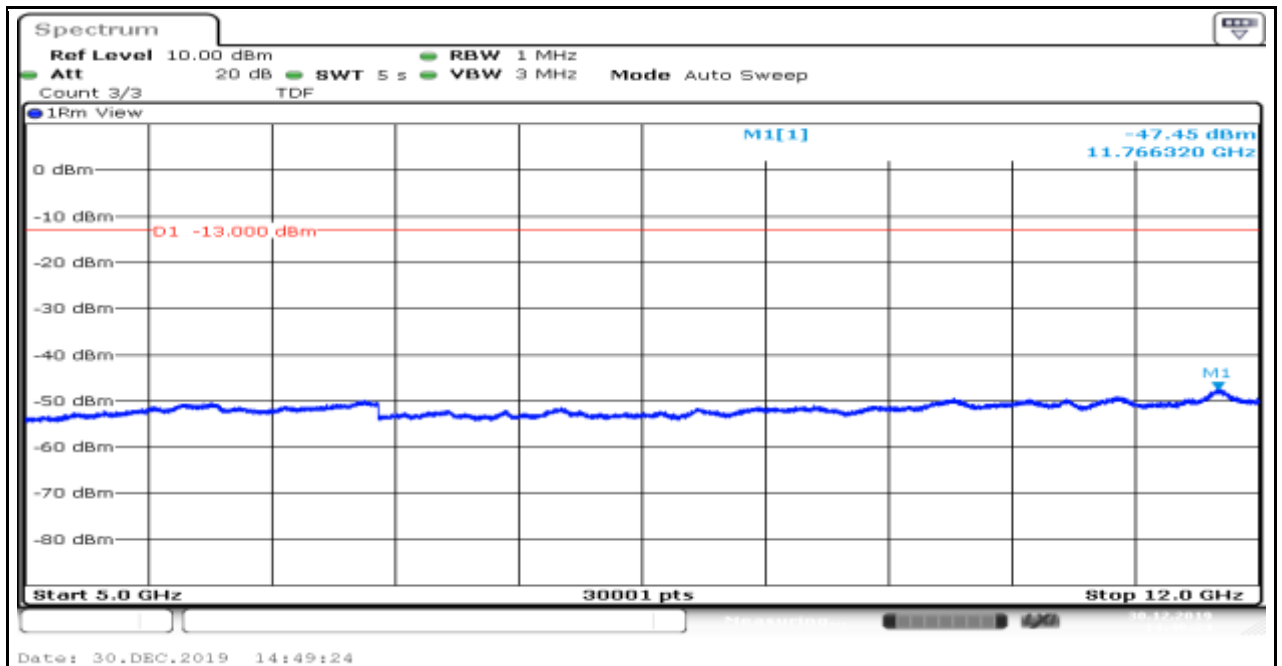
Band66_Stand-Alone_NaN_BPSK_131973_1@0_15kHz_5000_12000_5000~12000MHz@-47.28dBm_-13_PASS_



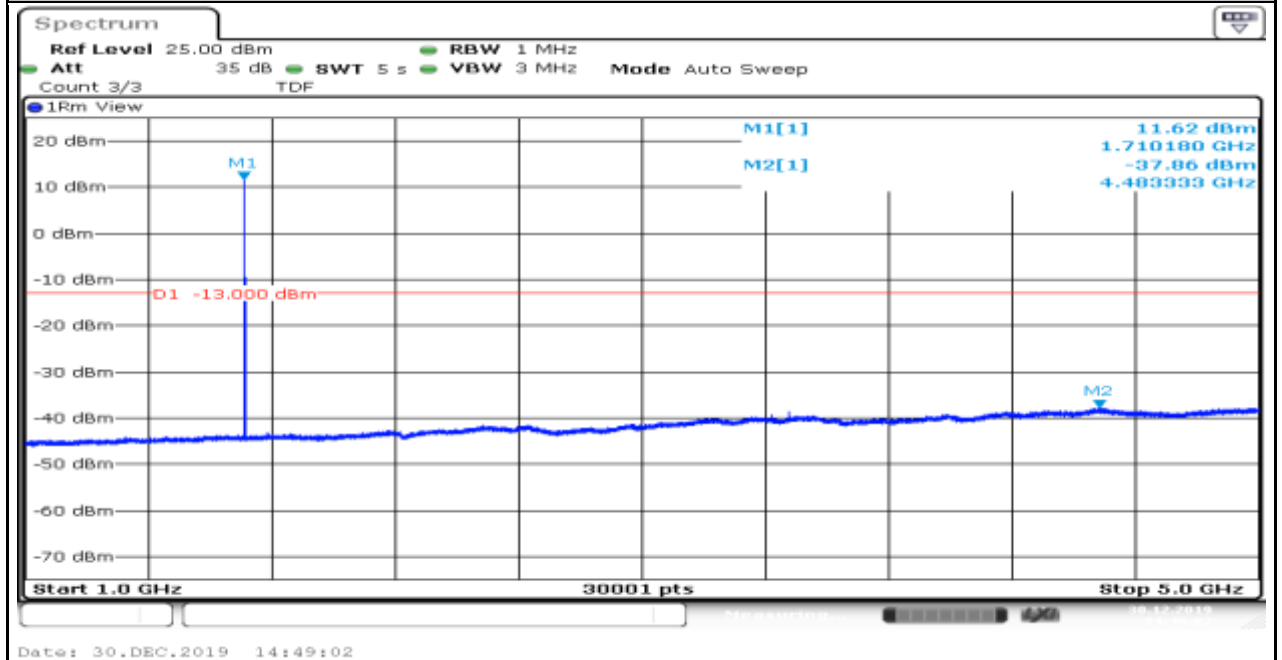
Band66_Stand-Alone_NaN_BPSK_131973_1@11_15kHz_12000_26500_12000~26500MHz@-41.34dBm_-13_PASS



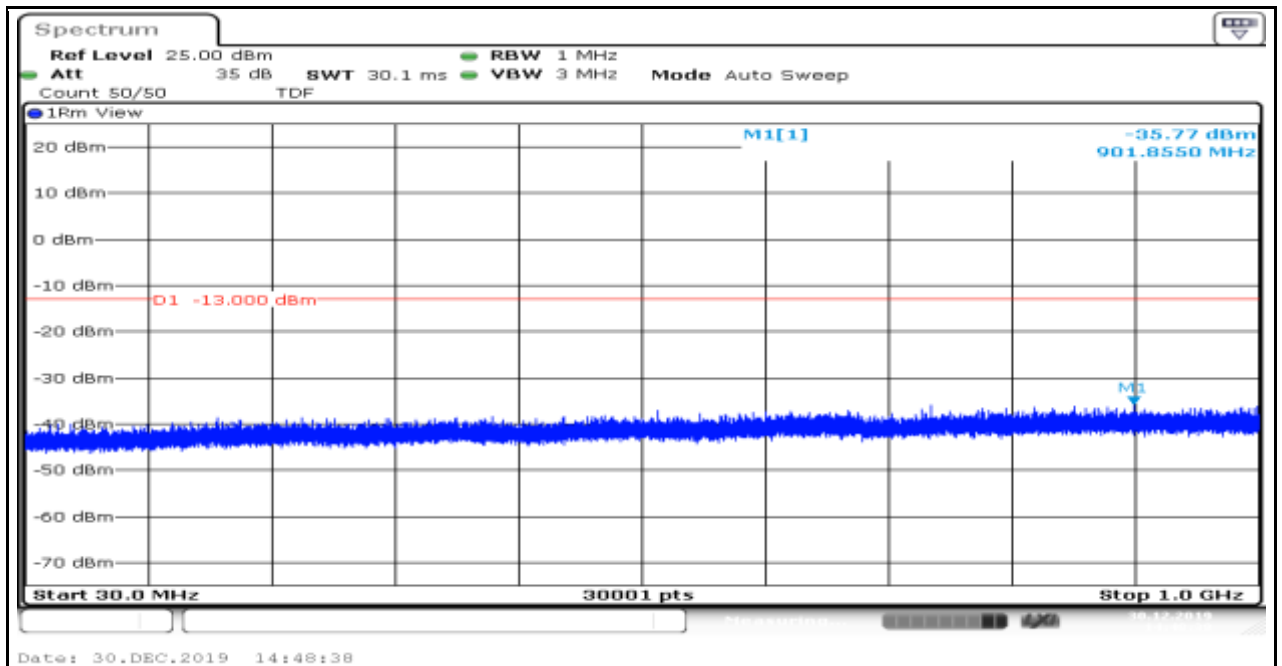
Band66_Stand-Alone_NaN_BPSK_131973_1@11_15kHz_5000_12000_5000~12000MHz@-47.45dBm_-13_PASS



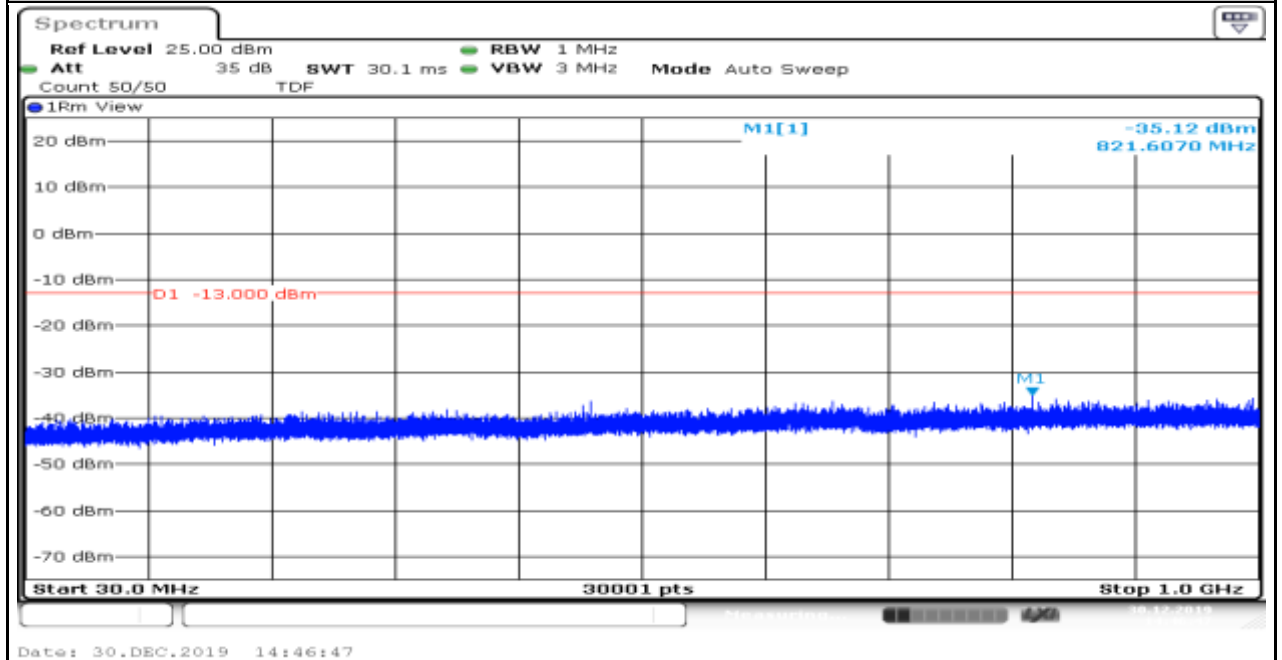
Band66_Stand-Alone_NaN_BPSK_131973_1@11_15kHz_1000_5000_1000~5000MHz@-37.86dBm_-13_PASS_



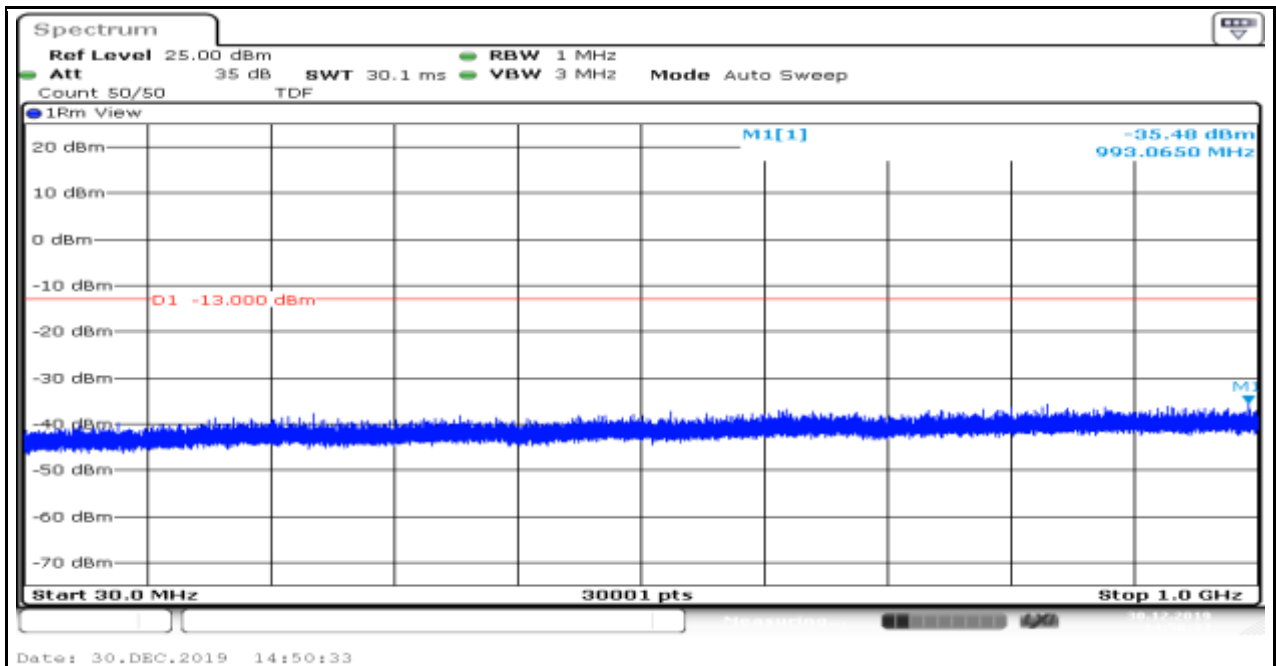
Band66_Stand-Alone_NaN_BPSK_131973_1@11_15kHz_30_1000_30~1000MHz@-35.77dBm_-13_PASS_



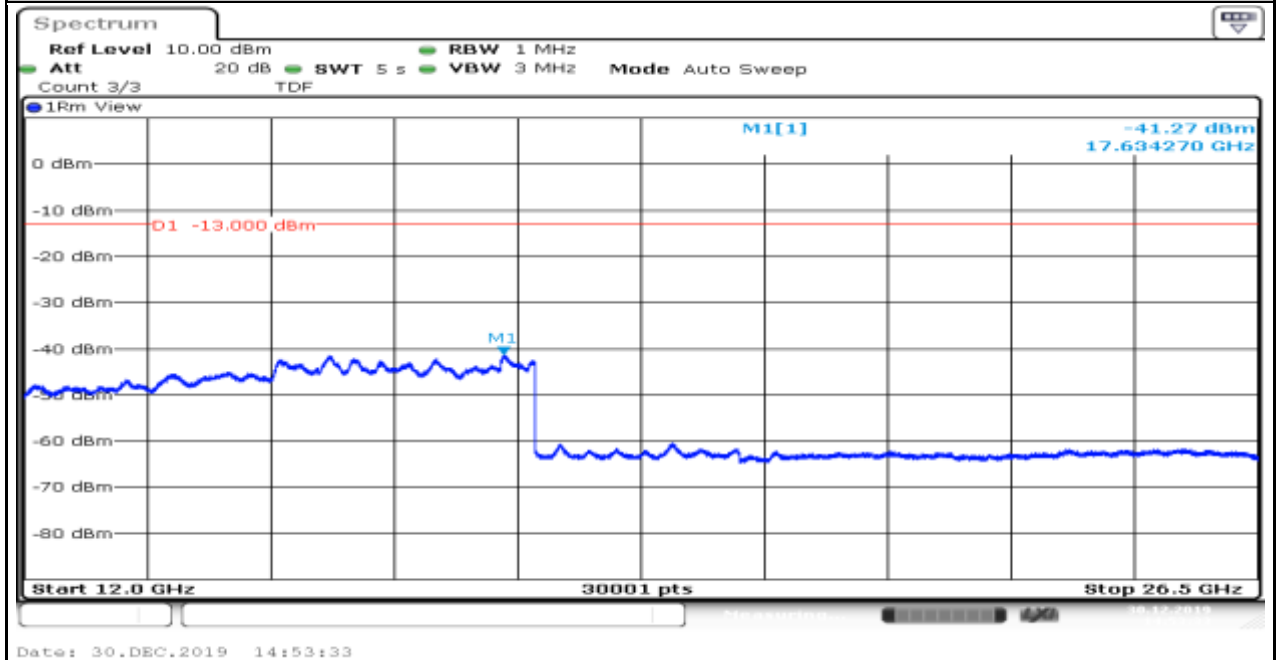
Band66_Stand-Alone_NaN_BPSK_131973_1@0_15kHz_30_1000_30-1000MHz@-35.12dBm_-13_PASS_



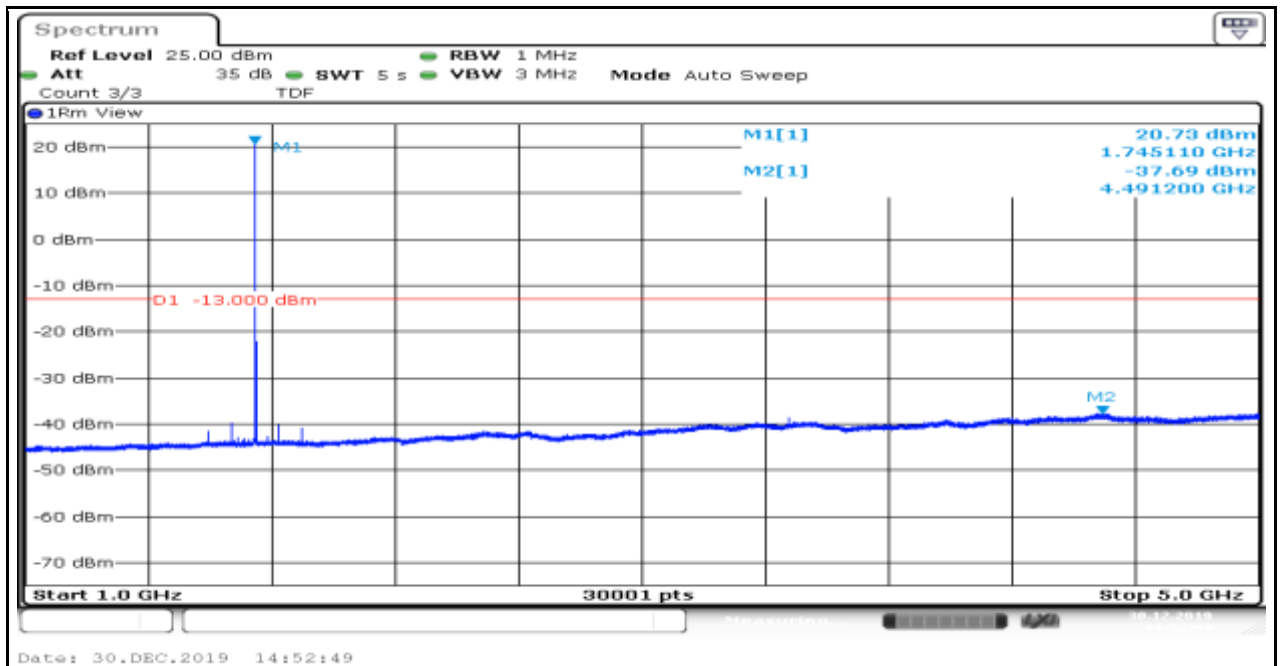
Band66_Stand-Alone_NaN_BPSK_132322_1@0_15kHz_30_1000_30-1000MHz@-35.48dBm_-13_PASS_



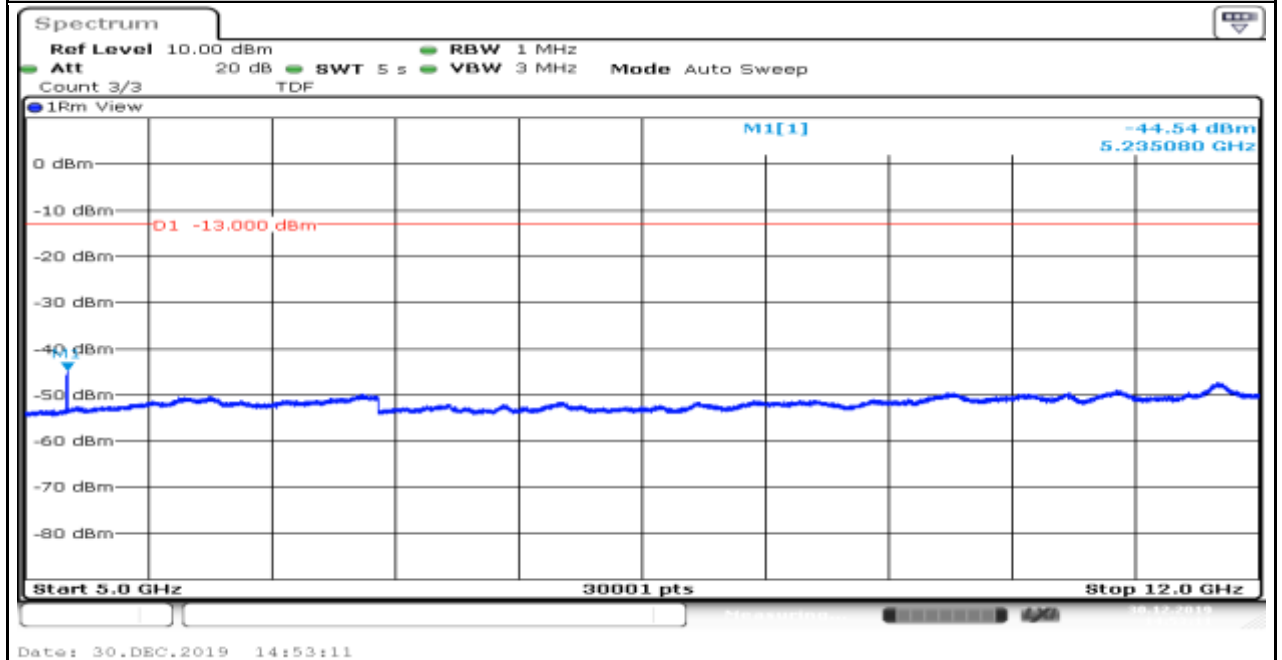
Band66_Stand-Alone_NaN_BPSK_132322_1@11_15kHz_12000_26500_12000~26500MHz@-41.27dBm_-13_PASS_



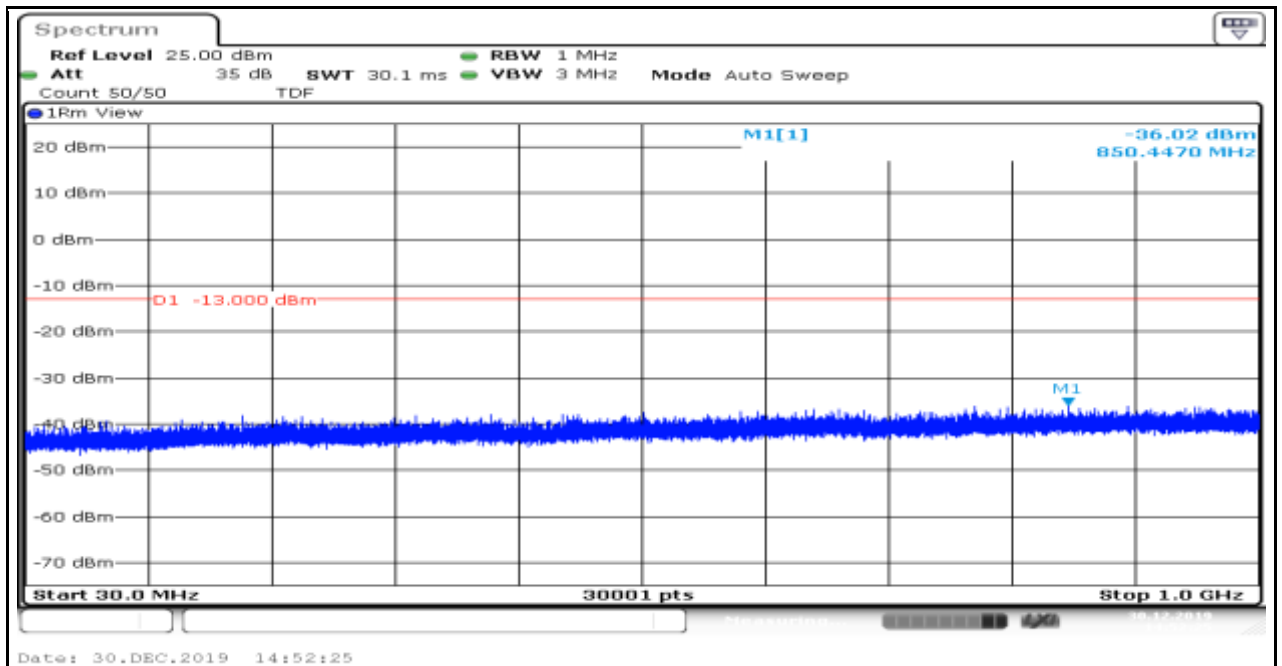
Band66_Stand-Alone_NaN_BPSK_132322_1@11_15kHz_1000_5000_1000~5000MHz@-37.69dBm_-13_PASS_



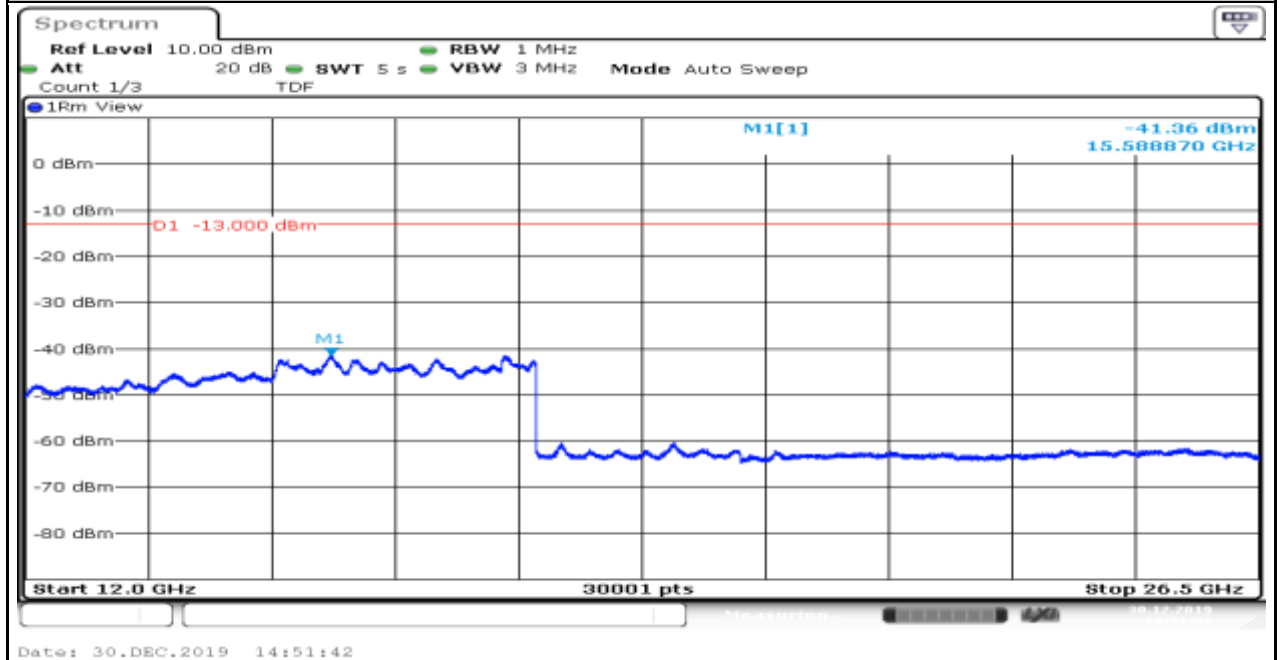
Band66_Stand-Alone_NaN_BPSK_132322_1@11_15kHz_5000_12000_5000~12000MHz@-44.54dBm_-13_PASS



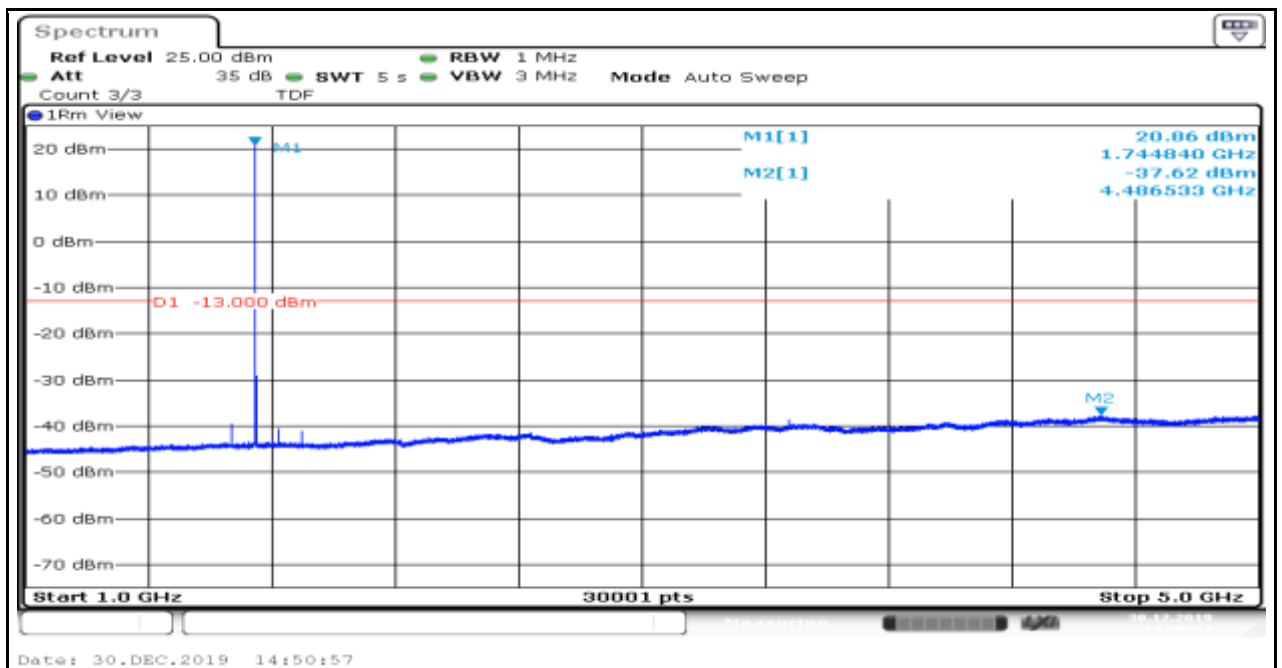
Band66_Stand-Alone_NaN_BPSK_132322_1@11_15kHz_30_1000_30~1000MHz@-36.02dBm_-13_PASS



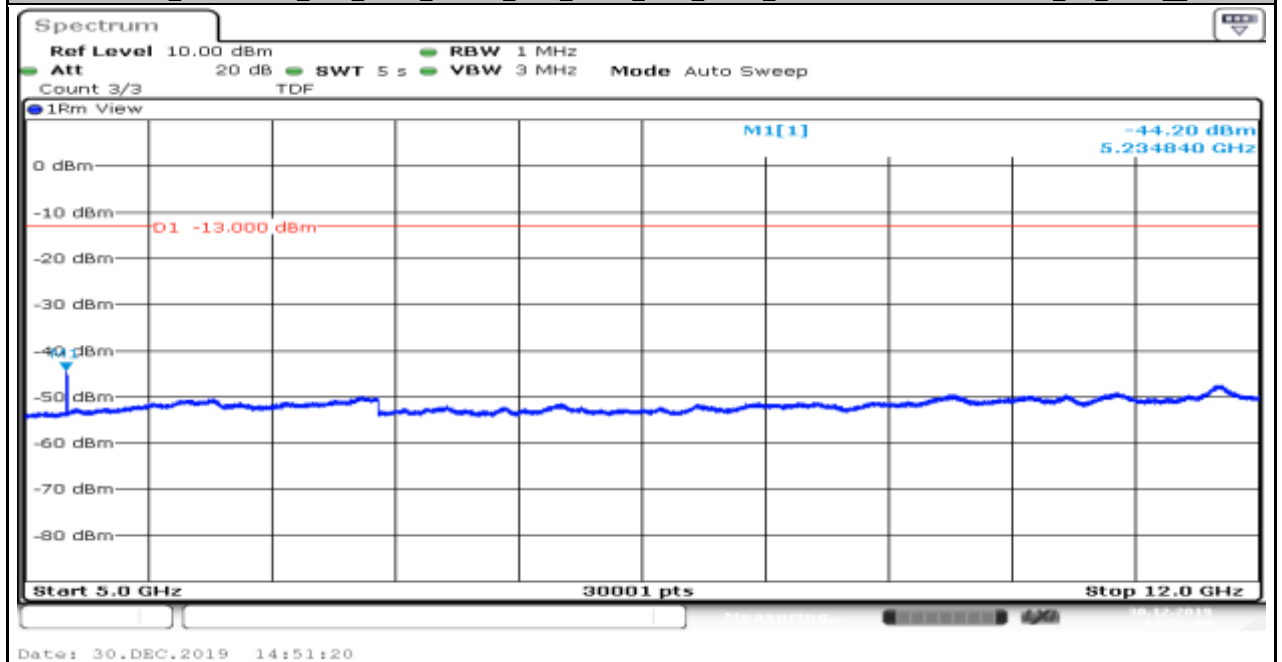
Band66_Stand-Alone_NaN_BPSK_132322_1@0_15kHz_12000_26500_12000-26500MHz@-41.36dBm_-13_PASS_



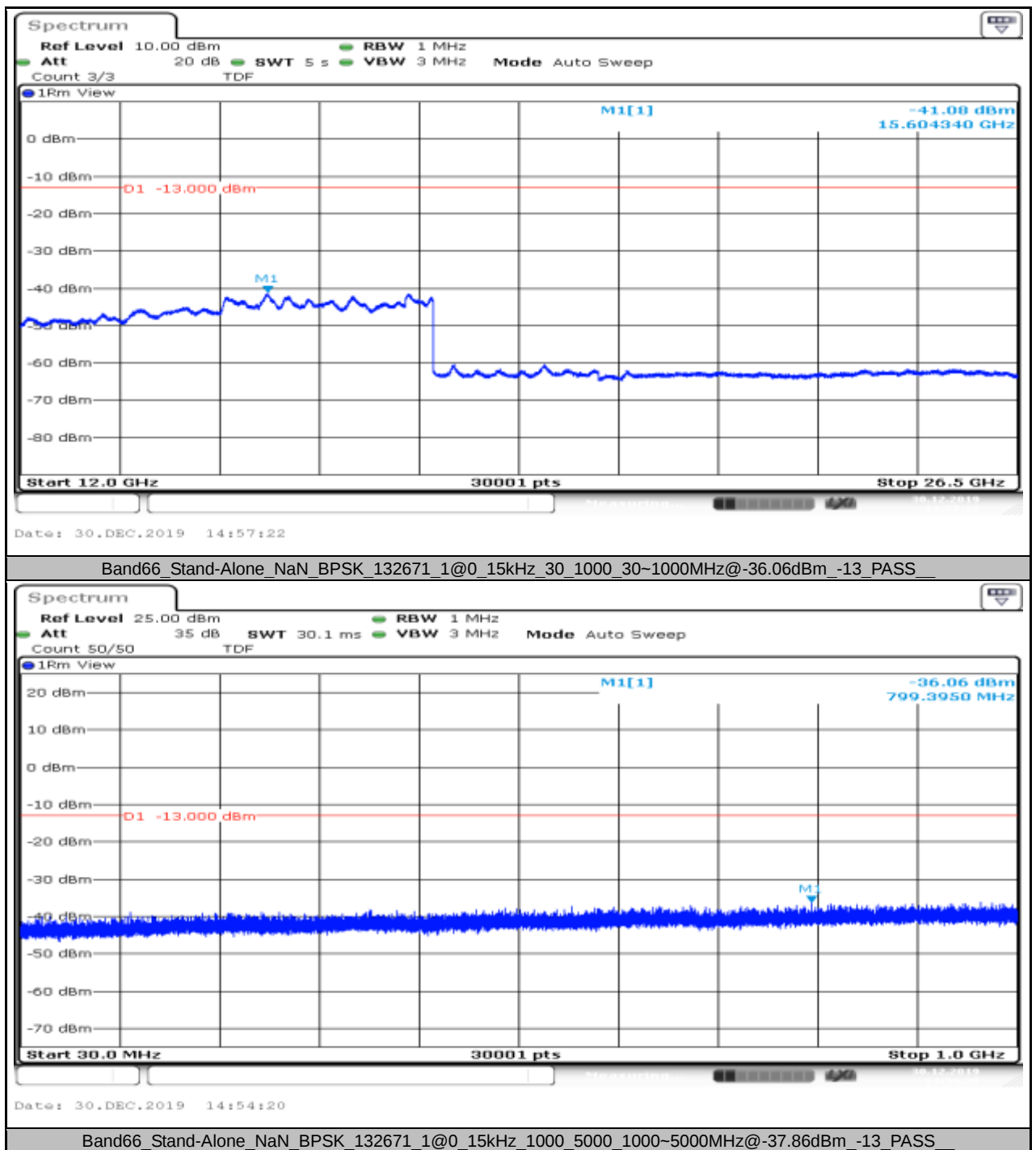
Band66_Stand-Alone_NaN_BPSK_132322_1@0_15kHz_1000_5000_1000-5000MHz@-37.62dBm_-13_PASS_

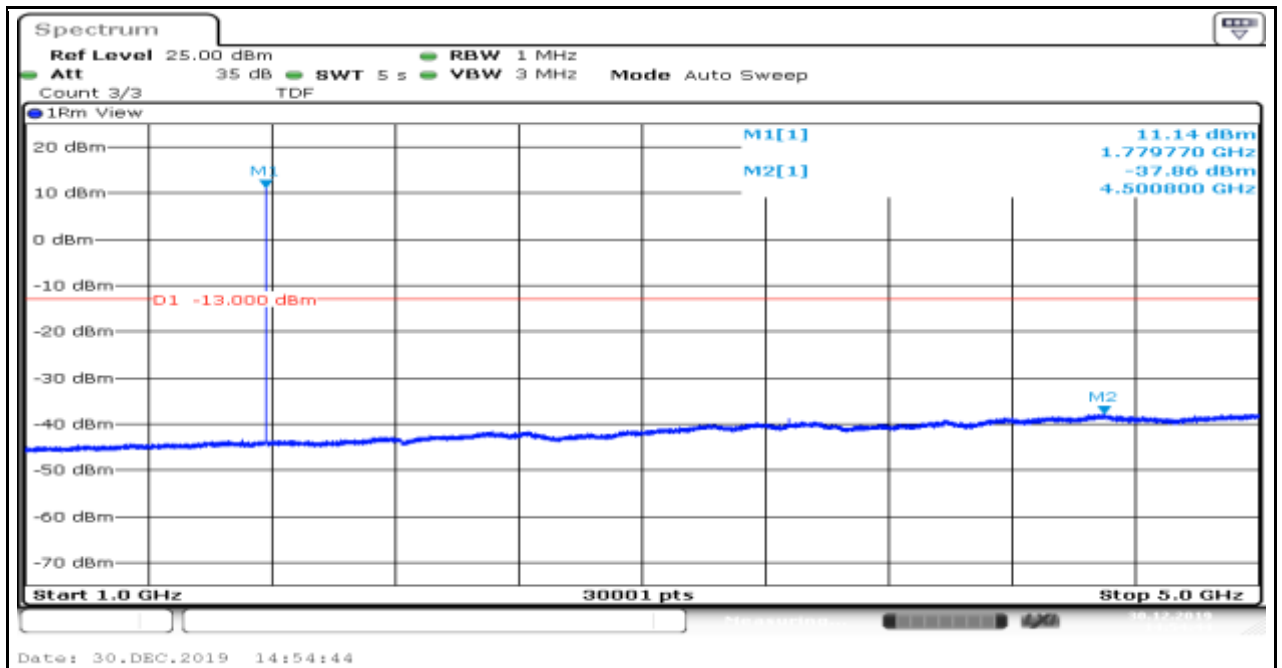


Band66_Stand-Alone_NaN_BPSK_132322_1@0_15kHz_5000_12000_5000~12000MHz@-44.2dBm_-13_PASS_

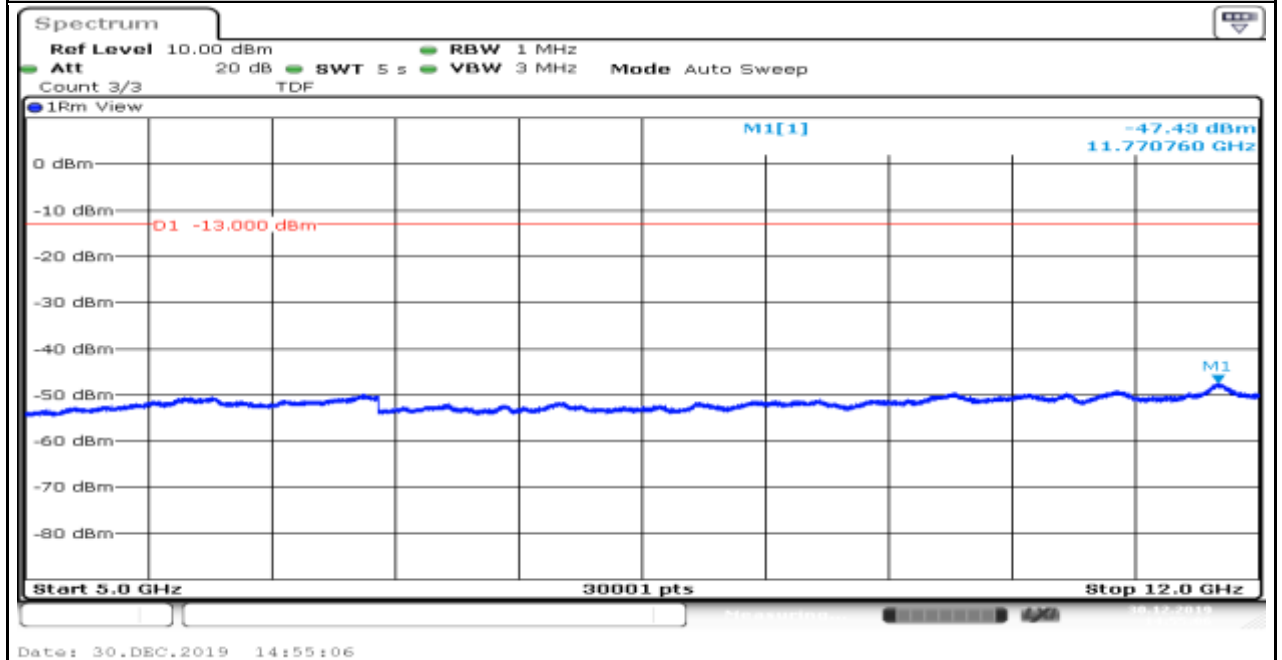


Band66_Stand-Alone_NaN_BPSK_132671_1@11_15kHz_12000_26500_12000~26500MHz@-41.08dBm_-13_PASS_

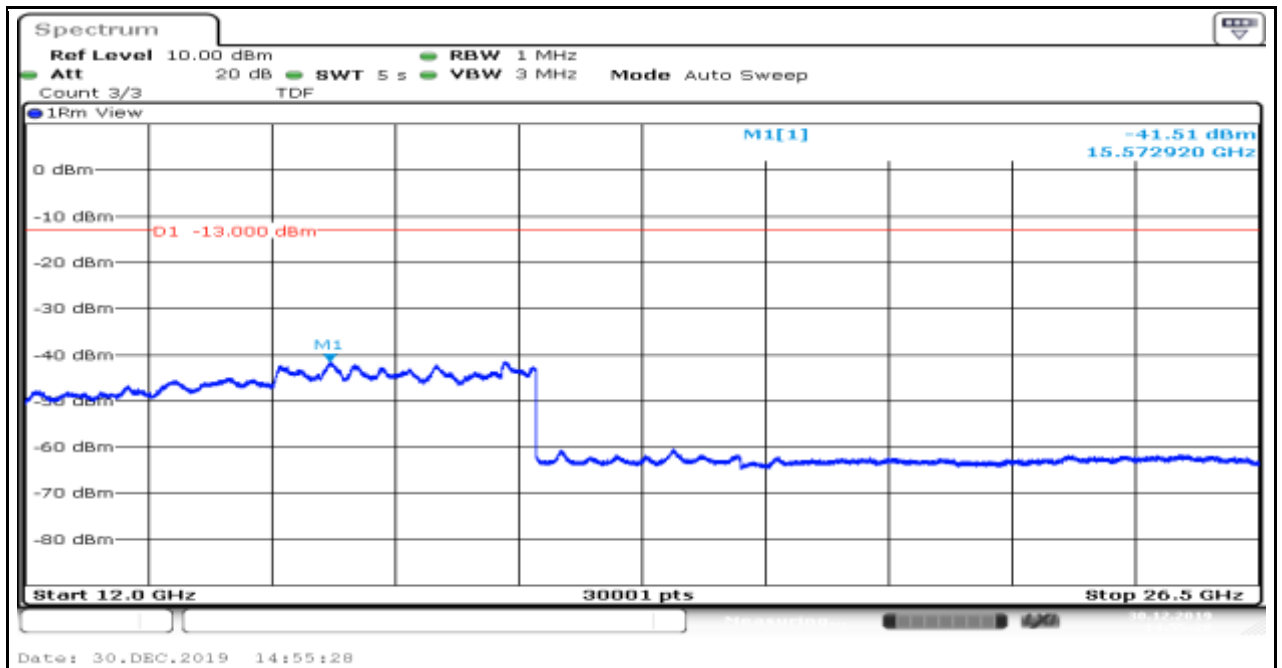




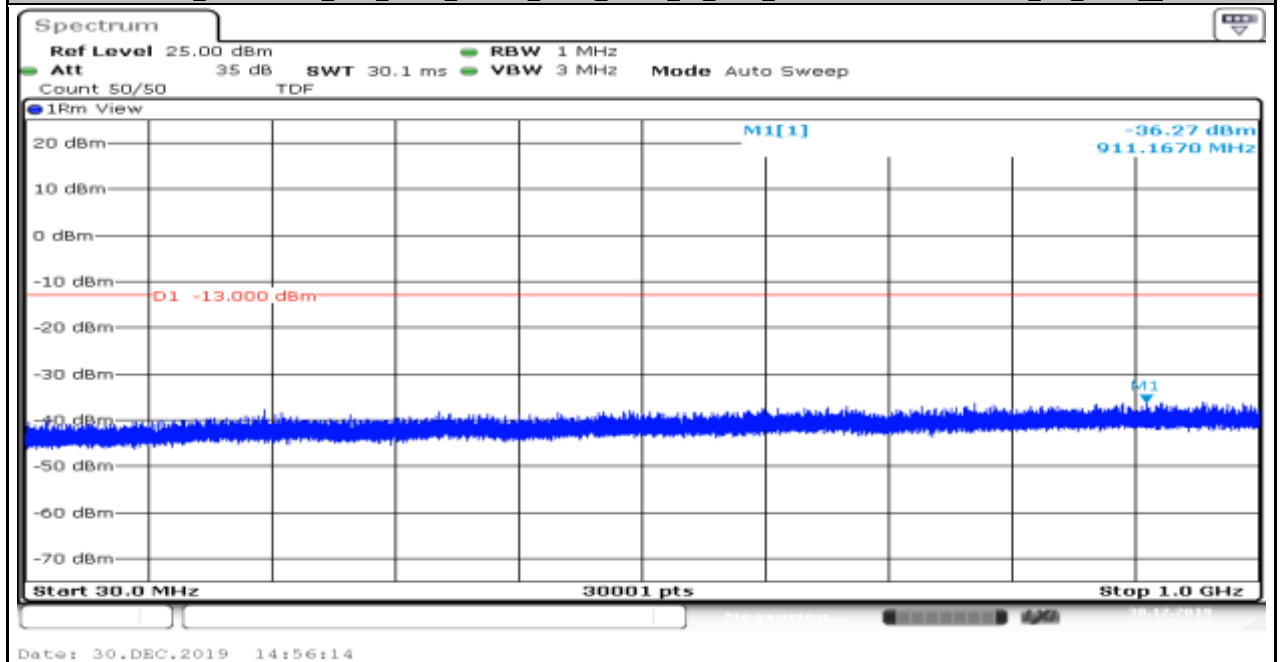
Band66_Stand-Alone_NaN_BPSK_132671_1@0_15kHz_5000_12000_5000-12000MHz@-47.43dBm_-13_PASS



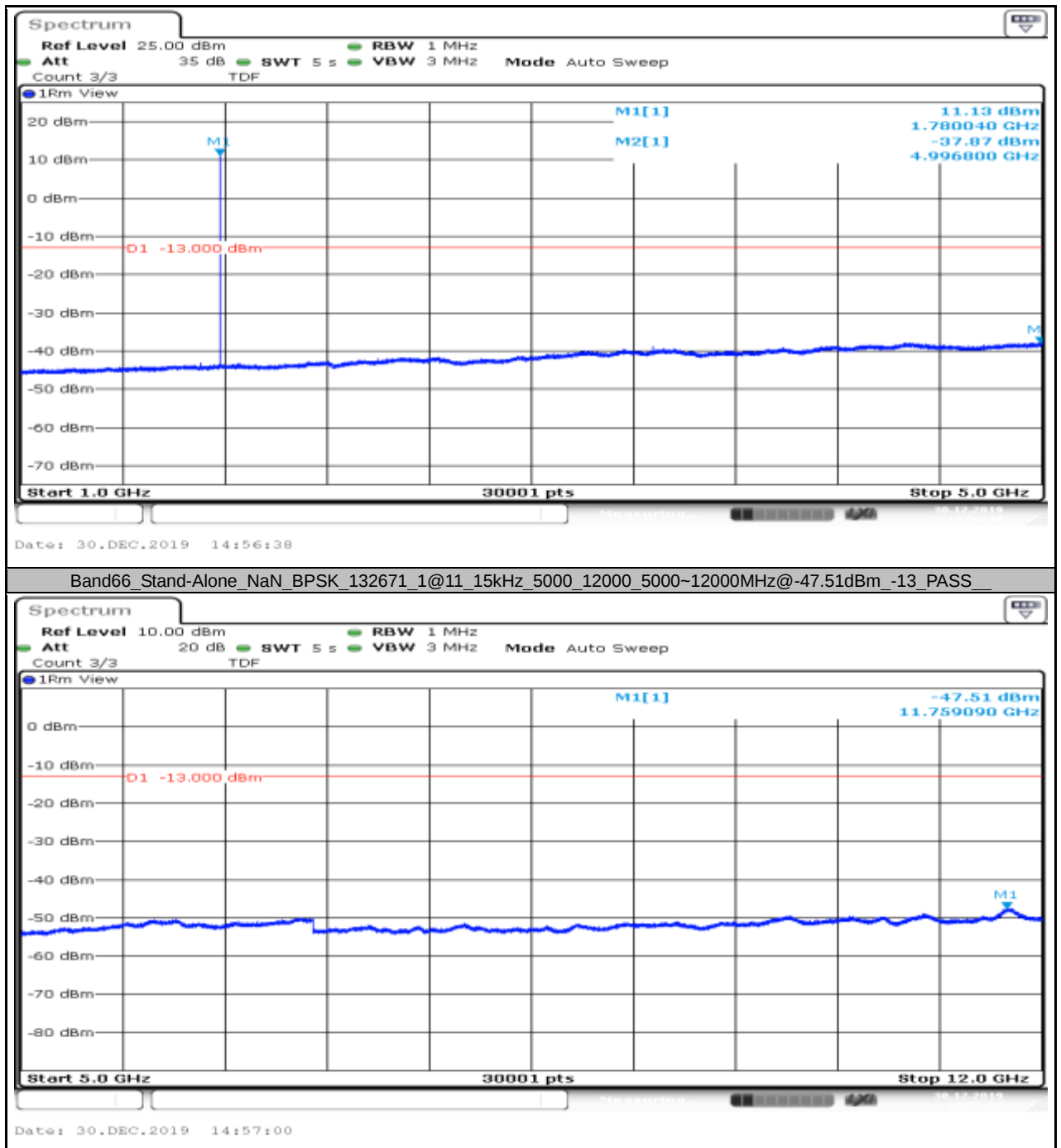
Band66_Stand-Alone_NaN_BPSK_132671_1@0_15kHz_12000_26500_12000-26500MHz@-41.51dBm_-13_PASS



Band66_Stand-Alone_NaN_BPSK_132671_1@11_15kHz_30_1000_30~1000MHz@-36.27dBm_-13_PASS_



Band66_Stand-Alone_NaN_BPSK_132671_1@11_15kHz_1000_5000_1000~5000MHz@-37.87dBm_-13_PASS_



Appendix I.6: Frequency Stability for NB

Test Result

Voltage												
Band	OpMode	Bandwidth	Modulation	Channel	Tones	SCS	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band66	Stand-Alone	NaN	QPSK	132322	1@0	15kHz	LV	NT	-11.12	-0.006372	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@11	15kHz	HV	NT	-13.52	-0.007748	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@11	15kHz	LV	NT	-10.79	-0.006183	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@11	15kHz	NV	NT	-10.86	-0.006223	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	15kHz	HV	NT	-9.84	-0.005639	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	3.75kHz	HV	NT	-9.76	-0.005593	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@47	3.75kHz	HV	NT	-11	-0.006304	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@47	3.75kHz	NV	NT	-15.85	-0.009083	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	3.75kHz	LV	NT	-12.25	-0.00702	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	3.75kHz	NV	NT	-16.61	-0.009519	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@47	3.75kHz	LV	NT	-12.03	-0.006894	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	15kHz	NV	NT	-14.63	-0.008384	±2.5	PASS

Temperature												
Band	OpMode	Bandwidth	Modulation	Channel	Tones	SCS	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band66	Stand-Alone	NaN	QPSK	132322	1@0	3.75kHz	NV	85	-8.05	-0.004613	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	15kHz	NV	40	-11.82	-0.006774	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	15kHz	NV	80	-12.6	-0.007221	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	15kHz	NV	70	11.44	0.006556	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	15kHz	NV	60	9.53	0.005461	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	15kHz	NV	50	-13.03	-0.007467	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	15kHz	NV	30	-11.57	-0.00663	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	15kHz	NV	20	-13.39	-0.007673	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	15kHz	NV	10	-9.78	-0.005605	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	15kHz	NV	0	-11.63	-0.006665	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	15kHz	NV	-20	-10.66	-0.006109	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	15kHz	NV	85	-10.54	-0.00604	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	15kHz	NV	-10	-11.96	-0.006854	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@11	15kHz	NV	-40	-13.58	-0.007782	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@11	15kHz	NV	-30	-10.97	-0.006287	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@11	15kHz	NV	-20	-11.87	-0.006802	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@11	15kHz	NV	-10	-9.48	-0.005433	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@11	15kHz	NV	0	-10.39	-0.005954	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@11	15kHz	NV	10	8.25	0.004728	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@11	15kHz	NV	20	-8.1	-0.004642	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@11	15kHz	NV	30	-10.77	-0.006172	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@11	15kHz	NV	40	-10.07	-0.005771	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@11	15kHz	NV	50	-8.63	-0.004946	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@11	15kHz	NV	60	10.59	0.006069	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@11	15kHz	NV	70	-10.9	-0.006246	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@11	15kHz	NV	85	-11.44	-0.006556	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	15kHz	NV	-30	-13.2	-0.007564	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@11	15kHz	NV	80	-10.86	-0.006223	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	3.75kHz	NV	-30	-10.2	-0.005845	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	15kHz	NV	-40	-10.61	-0.00608	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@47	3.75kHz	NV	-30	-6.25	-0.003582	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	3.75kHz	NV	-40	-10.21	-0.005851	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	3.75kHz	NV	-20	-8.28	-0.004745	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	3.75kHz	NV	-10	-10.21	-0.005851	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	3.75kHz	NV	0	-10.14	-0.005811	±2.5	PASS

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Band66	Stand-Alone	NaN	QPSK	132322	1@0	3.75kHz	NV	10	-10.2	-0.005845	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	3.75kHz	NV	20	-9.57	-0.005484	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	3.75kHz	NV	30	-9.36	-0.005364	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	3.75kHz	NV	40	-8	-0.004585	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	3.75kHz	NV	50	-10.43	-0.005977	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	3.75kHz	NV	60	-9.61	-0.005507	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	3.75kHz	NV	70	-8.25	-0.004728	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@0	3.75kHz	NV	80	-10.97	-0.006287	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@47	3.75kHz	NV	40	-11.74	-0.006728	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@47	3.75kHz	NV	85	-7.05	-0.00404	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@47	3.75kHz	NV	80	-8.21	-0.004705	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@47	3.75kHz	NV	50	-6.94	-0.003977	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@47	3.75kHz	NV	70	-6.64	-0.003805	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@47	3.75kHz	NV	30	-10.51	-0.006023	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@47	3.75kHz	NV	20	-7.27	-0.004166	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@47	3.75kHz	NV	10	-8.57	-0.004911	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@47	3.75kHz	NV	0	-11.36	-0.00651	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@47	3.75kHz	NV	-10	-10.47	-0.006	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@47	3.75kHz	NV	-20	-13.89	-0.00796	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@47	3.75kHz	NV	-40	-12.15	-0.006963	±2.5	PASS
Band66	Stand-Alone	NaN	QPSK	132322	1@47	3.75kHz	NV	60	-7.97	-0.004567	±2.5	PASS