

Appendix A: Test Results of Band 2 for eMTC operation

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Appendix A.1: RF Power Output and Effective (Isotropic) Radiated Power Output Data for M1

Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result (dBm)	EIRP		Limit (watts)	Verdict
								dBm	Watts		
Band2	1.4MHz	QPSK	18607	1	0	Low	21.96	24.10	0.257	2	PASS
Band2	1.4MHz	QPSK	18900	1	0	Low	21.98	24.12	0.258	2	PASS
Band2	1.4MHz	QPSK	19193	1	5	Low	21.76	23.90	0.245	2	PASS
Band2	1.4MHz	QPSK	18607	6	0	Low	19.76	21.90	0.155	2	PASS
Band2	1.4MHz	QPSK	18900	6	0	Low	19.83	21.97	0.157	2	PASS
Band2	1.4MHz	QPSK	19193	6	0	Low	19.78	21.92	0.156	2	PASS
Band2	1.4MHz	16QAM	18607	1	0	Low	20.99	23.13	0.206	2	PASS
Band2	1.4MHz	16QAM	18900	1	0	Low	20.92	23.06	0.202	2	PASS
Band2	1.4MHz	16QAM	19193	1	5	Low	20.61	22.75	0.188	2	PASS
Band2	1.4MHz	16QAM	18607	6	0	Low	19.75	21.89	0.155	2	PASS
Band2	1.4MHz	16QAM	18900	6	0	Low	19.71	21.85	0.153	2	PASS
Band2	1.4MHz	16QAM	19193	6	0	Low	19.74	21.88	0.154	2	PASS
Band2	3MHz	QPSK	18615	1	0	Low	21.99	24.13	0.259	2	PASS
Band2	3MHz	QPSK	18900	1	0	Low	21.83	23.97	0.249	2	PASS
Band2	3MHz	QPSK	19185	1	5	High	21.73	23.87	0.244	2	PASS
Band2	3MHz	QPSK	18615	6	0	Low	19.7	21.84	0.153	2	PASS
Band2	3MHz	QPSK	18900	6	0	Low	19.68	21.82	0.152	2	PASS
Band2	3MHz	QPSK	19185	6	0	High	19.6	21.74	0.149	2	PASS
Band2	3MHz	16QAM	18615	1	0	Low	21.09	23.23	0.210	2	PASS
Band2	3MHz	16QAM	18900	1	0	Low	20.99	23.13	0.206	2	PASS
Band2	3MHz	16QAM	19185	1	5	High	20.87	23.01	0.200	2	PASS
Band2	3MHz	16QAM	18615	6	0	Low	19.7	21.84	0.153	2	PASS
Band2	3MHz	16QAM	18900	6	0	Low	19.61	21.75	0.150	2	PASS
Band2	3MHz	16QAM	19185	6	0	High	19.67	21.81	0.152	2	PASS
Band2	5MHz	QPSK	18625	1	0	Low	21.86	24.00	0.251	2	PASS
Band2	5MHz	QPSK	18900	1	0	Low	21.87	24.01	0.252	2	PASS
Band2	5MHz	QPSK	19175	1	5	High	21.63	23.77	0.238	2	PASS
Band2	5MHz	QPSK	19175	3	3	High	21.74	23.88	0.244	2	PASS
Band2	5MHz	QPSK	18625	6	0	Low	20.75	22.89	0.195	2	PASS
Band2	5MHz	QPSK	18900	6	0	Low	20.67	22.81	0.191	2	PASS
Band2	5MHz	16QAM	18625	1	0	Low	21.62	23.76	0.238	2	PASS
Band2	5MHz	16QAM	18900	1	0	Low	21.61	23.75	0.237	2	PASS
Band2	5MHz	16QAM	19175	1	5	High	21.39	23.53	0.225	2	PASS
Band2	5MHz	16QAM	19175	3	3	High	21.63	23.77	0.238	2	PASS
Band2	5MHz	16QAM	18625	6	0	Low	20.66	22.80	0.191	2	PASS
Band2	5MHz	16QAM	18900	6	0	Low	20.79	22.93	0.196	2	PASS
Band2	10MHz	QPSK	18650	1	0	Low	21.82	23.96	0.249	2	PASS
Band2	10MHz	QPSK	18900	1	0	Low	21.91	24.05	0.254	2	PASS
Band2	10MHz	QPSK	19150	1	5	High	21.69	23.83	0.242	2	PASS
Band2	10MHz	QPSK	18650	5	0	Low	21.72	23.86	0.243	2	PASS
Band2	10MHz	QPSK	18900	5	0	Low	21.78	23.92	0.247	2	PASS
Band2	10MHz	QPSK	19150	5	1	High	21.72	23.86	0.243	2	PASS
Band2	10MHz	16QAM	18650	1	0	Low	21.58	23.72	0.236	2	PASS
Band2	10MHz	16QAM	18900	1	0	Low	21.62	23.76	0.238	2	PASS
Band2	10MHz	16QAM	19150	1	5	High	21.39	23.53	0.225	2	PASS
Band2	10MHz	16QAM	18650	5	0	Low	21.63	23.77	0.238	2	PASS
Band2	10MHz	16QAM	18900	5	0	Low	21.6	23.74	0.237	2	PASS
Band2	10MHz	16QAM	19150	5	1	High	21.57	23.71	0.235	2	PASS
Band2	15MHz	QPSK	18675	1	0	Low	21.91	24.05	0.254	2	PASS
Band2	15MHz	QPSK	18900	1	0	Low	21.88	24.02	0.252	2	PASS
Band2	15MHz	QPSK	19125	1	5	High	21.65	23.79	0.239	2	PASS

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Band2	15MHz	QPSK	18675	6	0	Low	21.77	23.91	0.246	2	PASS
Band2	15MHz	QPSK	18900	6	0	Low	21.71	23.85	0.243	2	PASS
Band2	15MHz	QPSK	19125	6	0	High	21.68	23.82	0.241	2	PASS
Band2	15MHz	16QAM	18675	1	0	Low	21.72	23.86	0.243	2	PASS
Band2	15MHz	16QAM	18900	1	0	Low	21.64	23.78	0.239	2	PASS
Band2	15MHz	16QAM	19125	1	5	High	21.39	23.53	0.225	2	PASS
Band2	15MHz	16QAM	18675	6	0	Low	21.79	23.93	0.247	2	PASS
Band2	15MHz	16QAM	18900	6	0	Low	21.7	23.84	0.242	2	PASS
Band2	15MHz	16QAM	19125	6	0	High	21.69	23.83	0.242	2	PASS
Band2	20MHz	QPSK	18700	1	0	Low	21.83	23.97	0.249	2	PASS
Band2	20MHz	QPSK	18900	1	0	Low	21.98	24.12	0.258	2	PASS
Band2	20MHz	QPSK	19100	1	5	High	21.68	23.82	0.241	2	PASS
Band2	20MHz	QPSK	18700	6	0	Low	21.79	23.93	0.247	2	PASS
Band2	20MHz	QPSK	18900	6	0	Low	21.83	23.97	0.249	2	PASS
Band2	20MHz	QPSK	19100	6	0	High	21.71	23.85	0.243	2	PASS
Band2	20MHz	16QAM	18700	1	0	Low	21.61	23.75	0.237	2	PASS
Band2	20MHz	16QAM	18900	1	0	Low	21.64	23.78	0.239	2	PASS
Band2	20MHz	16QAM	19100	1	5	High	21.41	23.55	0.226	2	PASS
Band2	20MHz	16QAM	18700	6	0	Low	21.87	24.01	0.252	2	PASS
Band2	20MHz	16QAM	18900	6	0	Low	21.85	23.99	0.251	2	PASS
Band2	20MHz	16QAM	19100	6	0	High	21.71	23.85	0.243	2	PASS

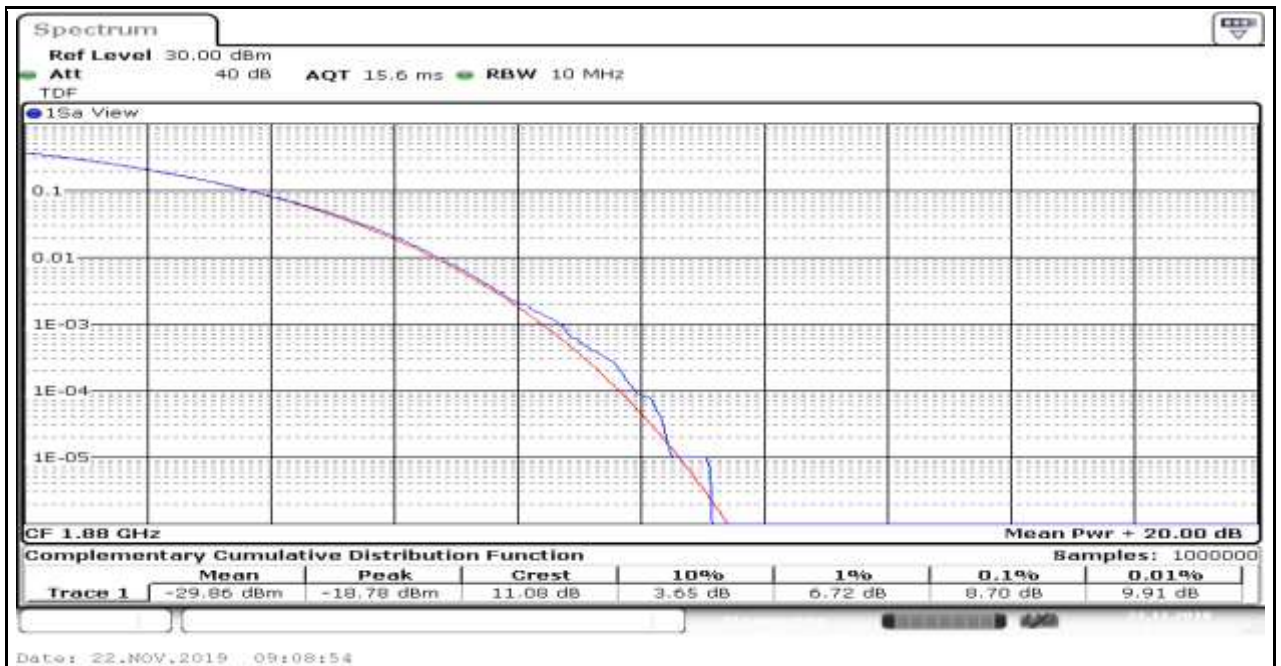
Appendix A.2: Peak-to-Average Ratio (CCDF) for M1

Test Result

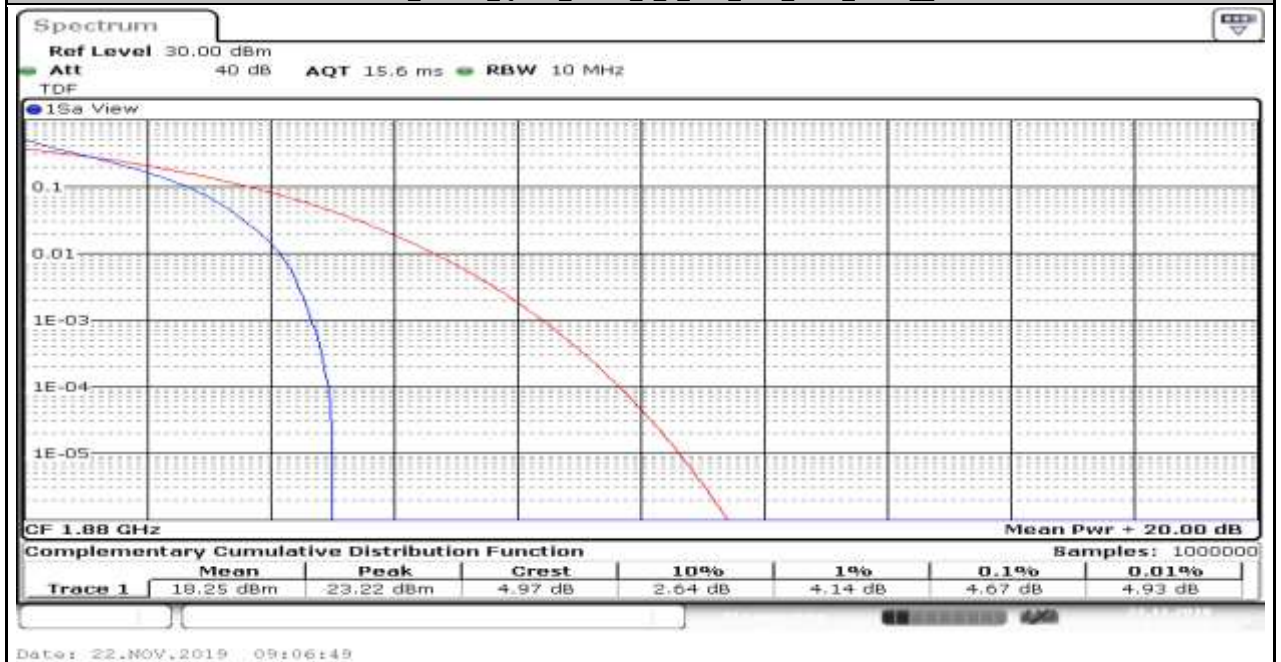
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result(dB)	Limit(dB)	Verdict
Band2	20MHz	QPSK	18900	6	0	Low	11.71	<=13	PASS
Band2	15MHz	QPSK	18900	6	0	Low	8.70	<=13	PASS
Band2	10MHz	QPSK	18900	6	0	Low	4.67	<=13	PASS
Band2	5MHz	QPSK	18900	6	0	Low	9.97	<=13	PASS
Band2	3MHz	QPSK	18900	6	0	Low	12.29	<=13	PASS
Band2	1.4MHz	QPSK	18900	6	0	Low	4.87	<=13	PASS
Band2	20MHz	16QAM	18900	6	0	Low	8.52	<=13	PASS
Band2	15MHz	16QAM	18900	6	0	Low	10.52	<=13	PASS
Band2	10MHz	16QAM	18900	6	0	Low	9.10	<=13	PASS
Band2	5MHz	16QAM	18900	6	0	Low	11.51	<=13	PASS
Band2	3MHz	16QAM	18900	6	0	Low	9.39	<=13	PASS
Band2	1.4MHz	16QAM	18900	6	0	Low	11.71	<=13	PASS

Test Graphs

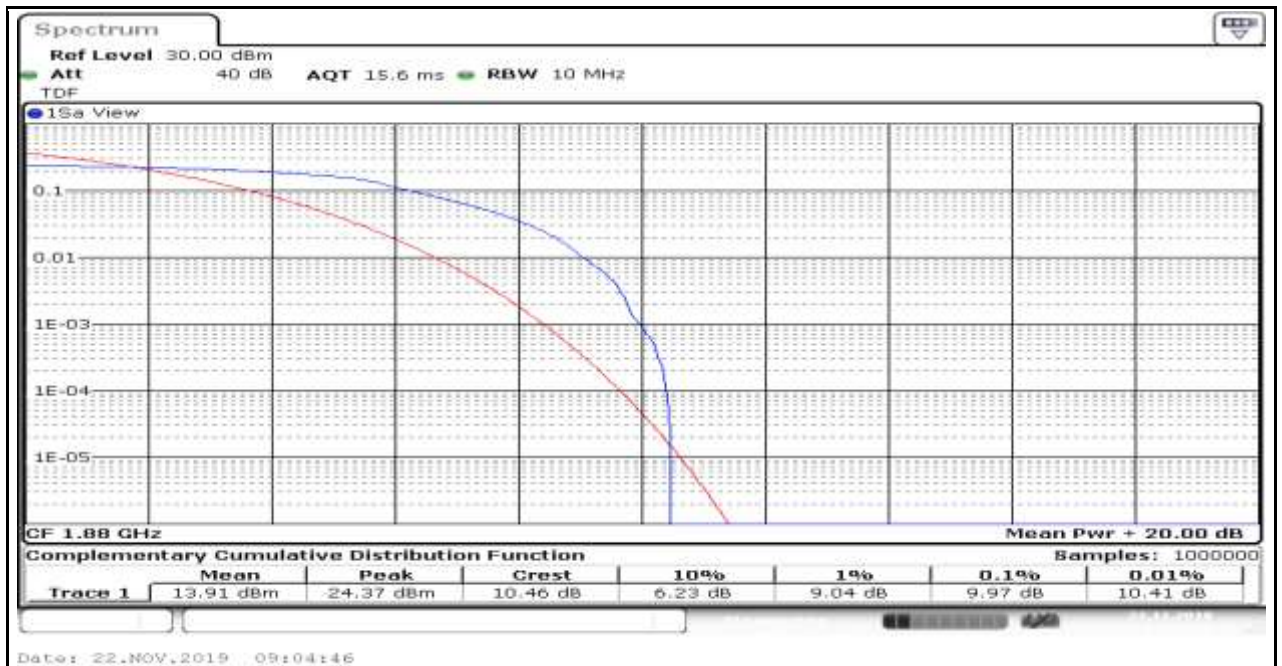




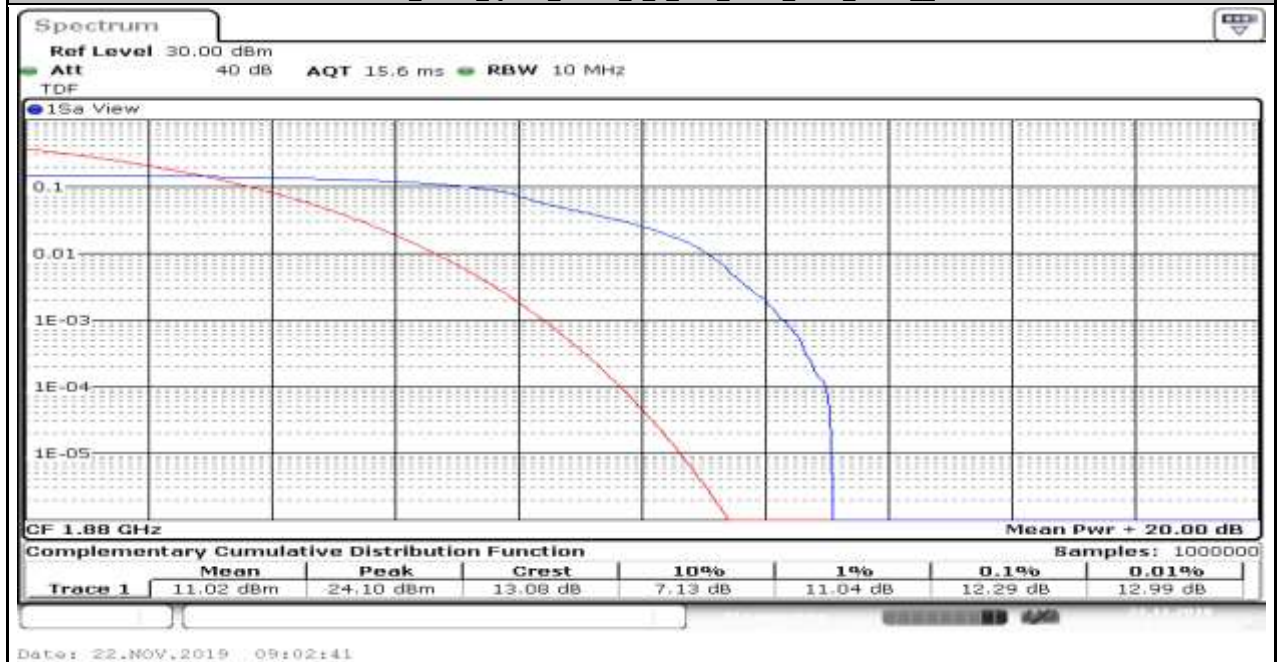
Band2_10MHz_QPSK_18900_6_0_Low_4.67_<=13_PASS_



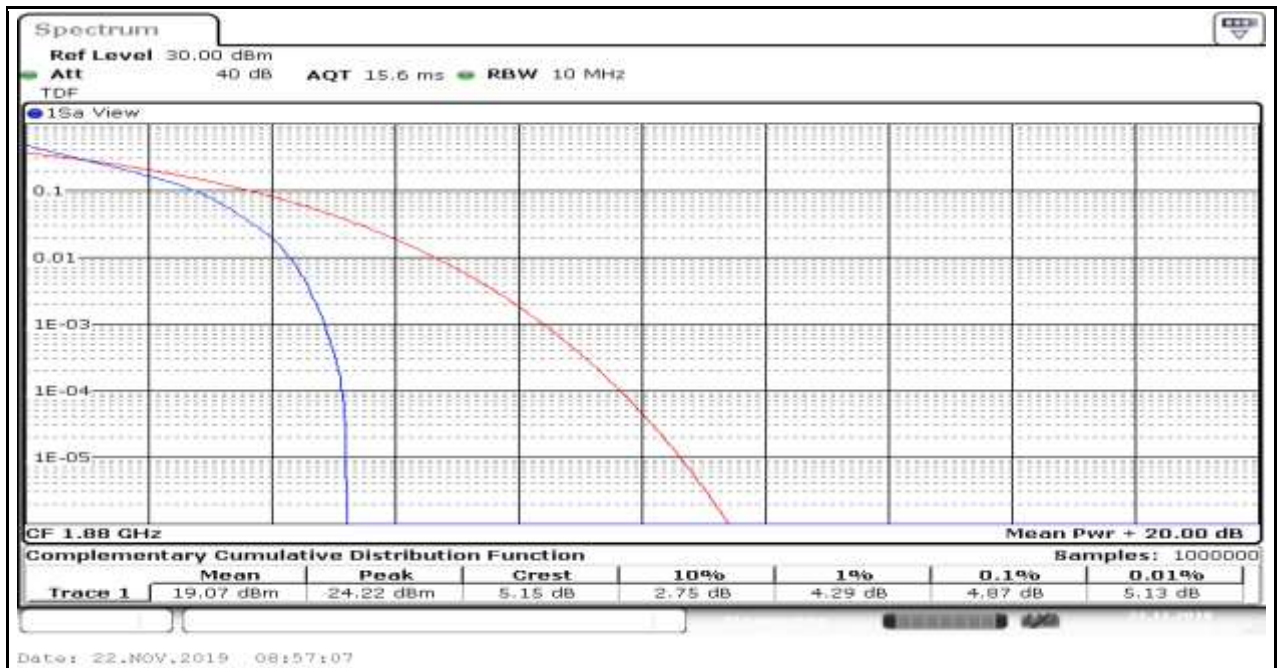
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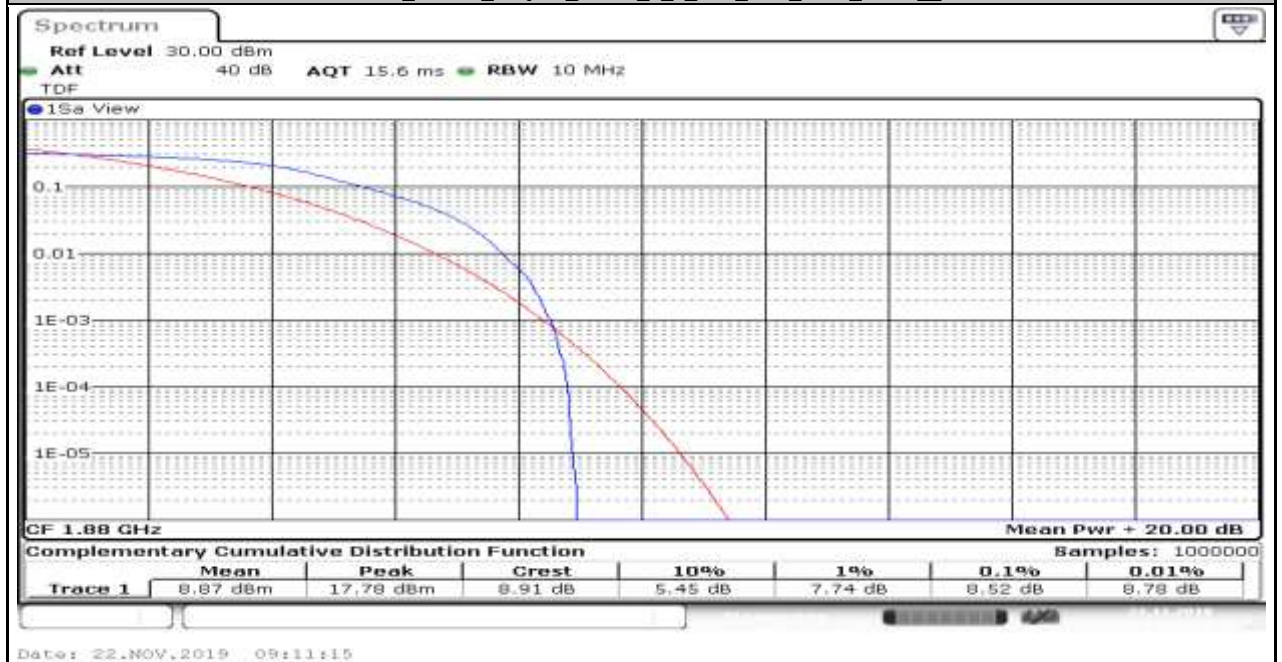
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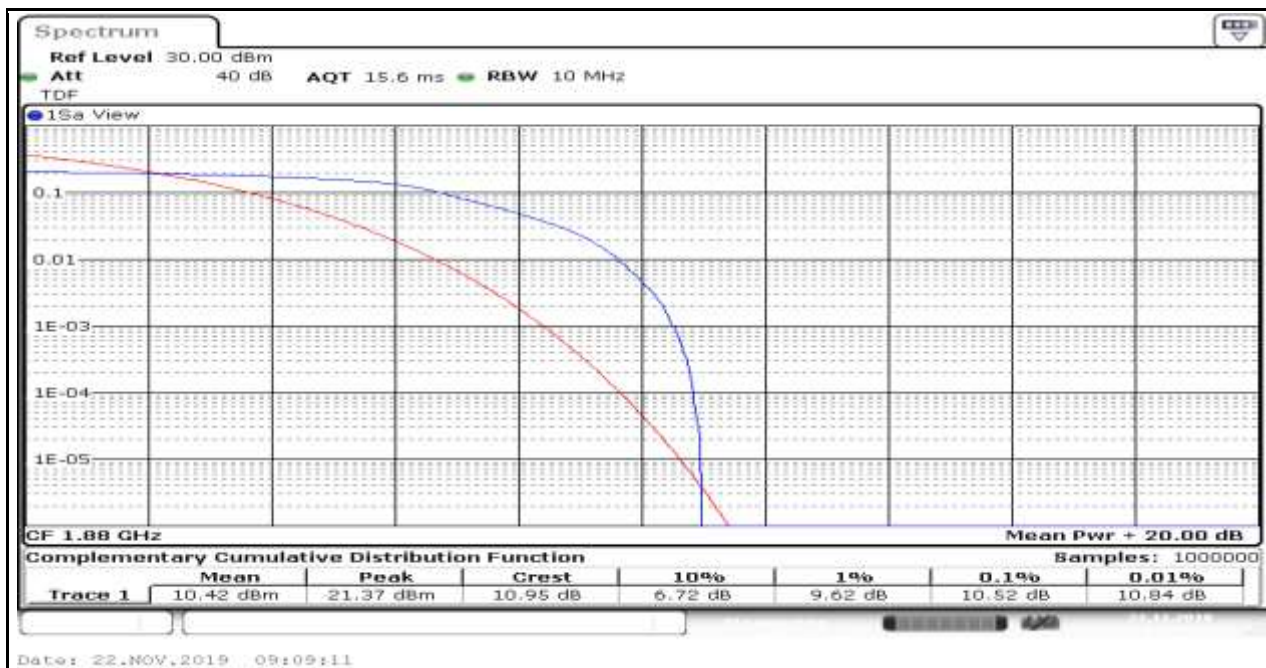
Band2_1.4MHz_QPSK_18900_6_0_Low_4.87_<=13_PASS_



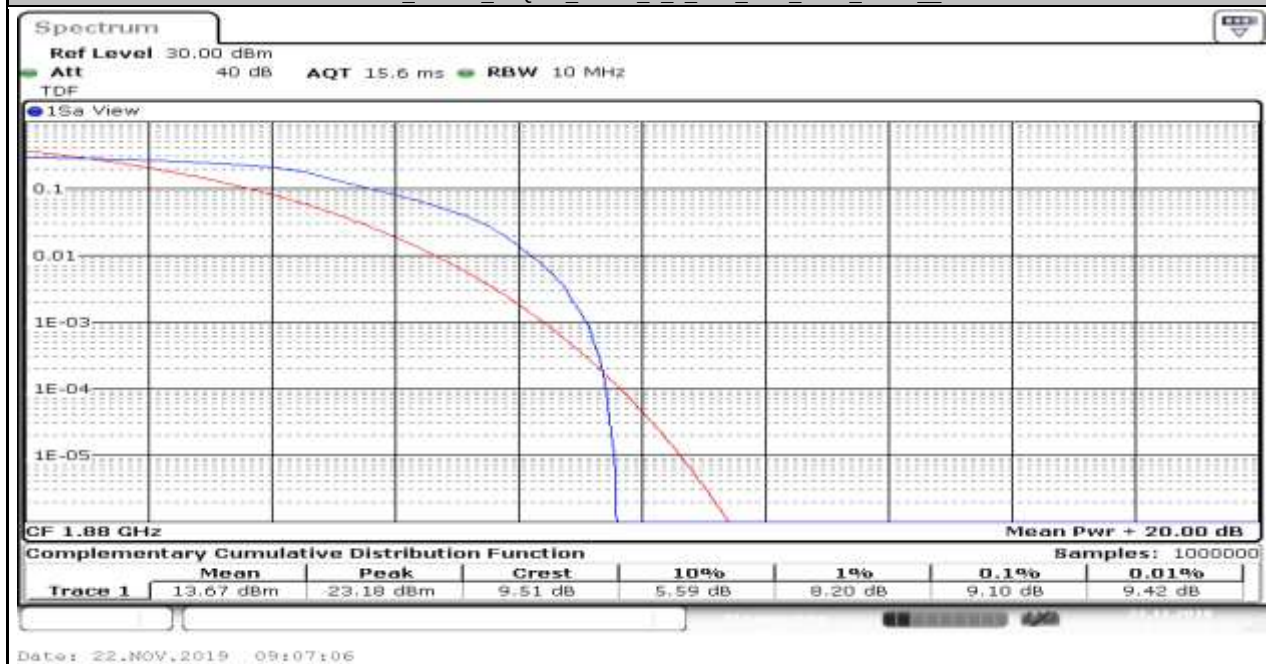
Band2_20MHz_16QAM_18900_6_0_Low_8.52_<=13_PASS



Band2_15MHz_16QAM_18900_6_0_Low_10.52_<=13_PASS



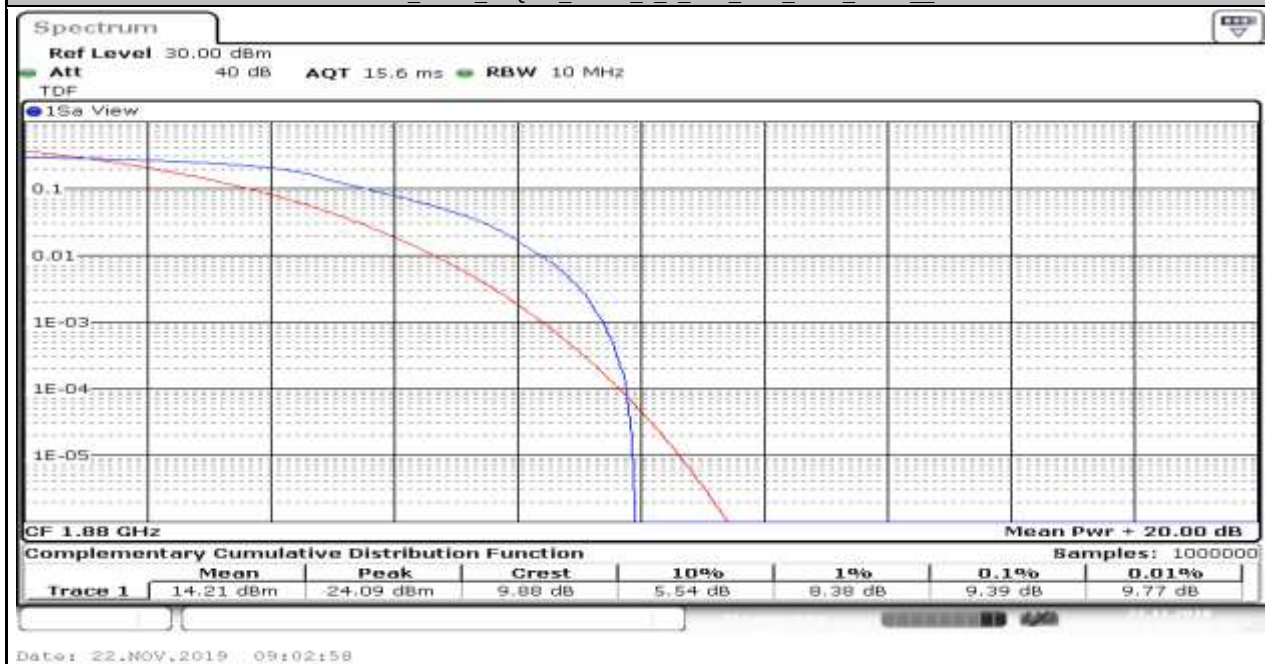
Band2_10MHz_16QAM_18900_6_0_Low_9.10_<=13_PASS_



Band2_5MHz_16QAM_18900_6_0_Low_11.51_<=13_PASS_



Band2_3MHz_16QAM_18900_6_0_Low_9.39_<=13_PASS_



Band2_1.4MHz_16QAM_18900_6_0_Low_11.71_<=13_PASS_

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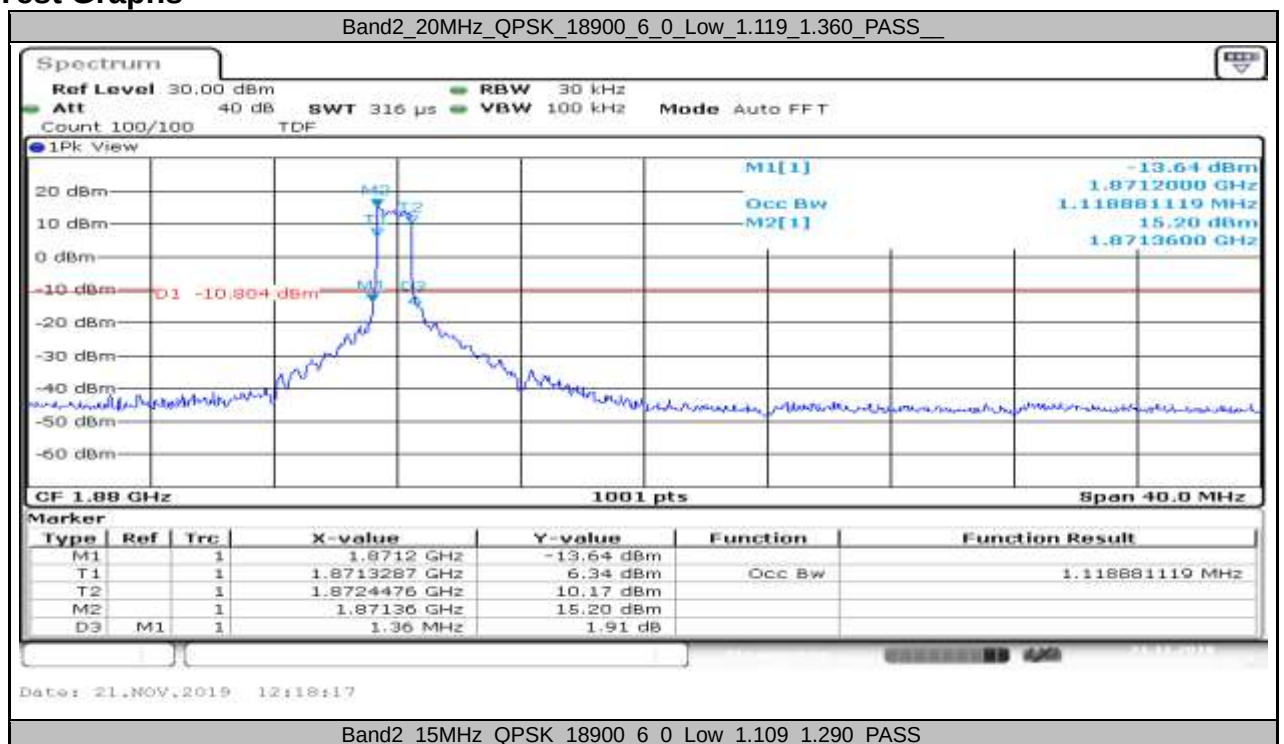


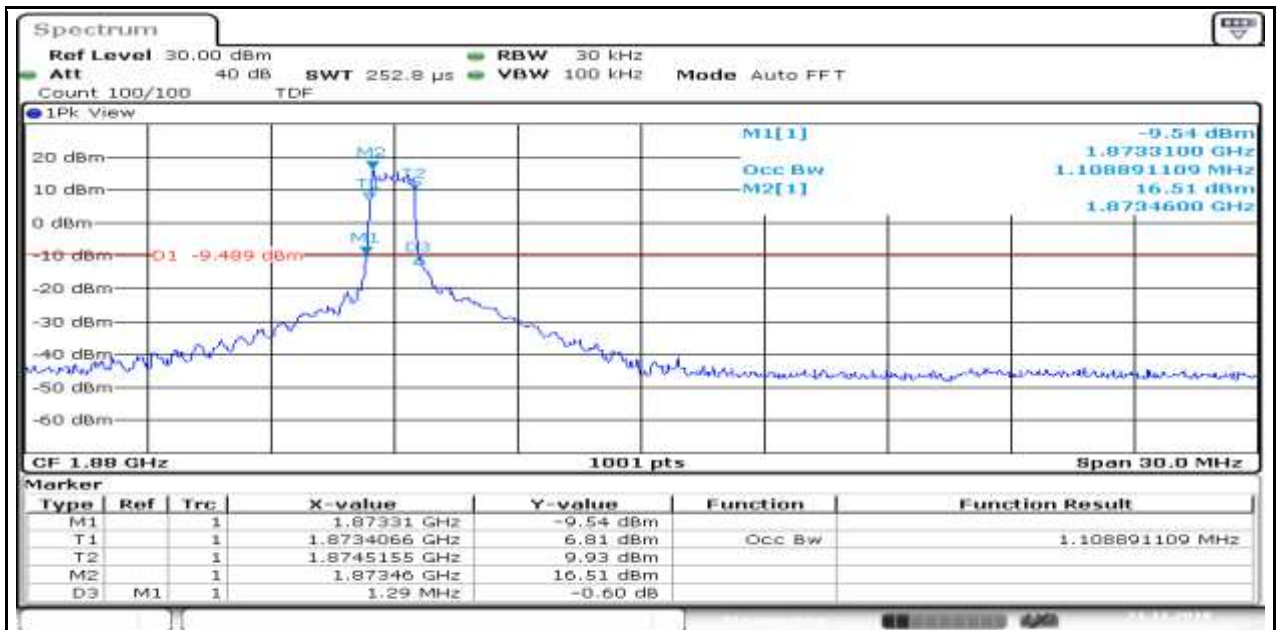
Appendix A.3: 26dB Bandwidth and Occupied Bandwidth for M1

Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band2	20MHz	QPSK	18900	6	0	Low	1.119	1.360	PASS
Band2	15MHz	QPSK	18900	6	0	Low	1.109	1.290	PASS
Band2	10MHz	QPSK	18900	6	0	Low	1.099	1.300	PASS
Band2	5MHz	QPSK	18900	6	0	Low	1.089	1.300	PASS
Band2	3MHz	QPSK	18900	6	0	Low	1.097	1.290	PASS
Band2	1.4MHz	QPSK	18900	6	0	Low	1.091	1.290	PASS
Band2	20MHz	16QAM	18900	6	0	Low	1.119	1.400	PASS
Band2	15MHz	16QAM	18900	6	0	Low	1.109	1.350	PASS
Band2	10MHz	16QAM	18900	6	0	Low	1.099	1.320	PASS
Band2	5MHz	16QAM	18900	6	0	Low	1.099	1.330	PASS
Band2	3MHz	16QAM	18900	6	0	Low	1.097	1.314	PASS
Band2	1.4MHz	16QAM	18900	6	0	Low	1.1	1.293	PASS

Test Graphs

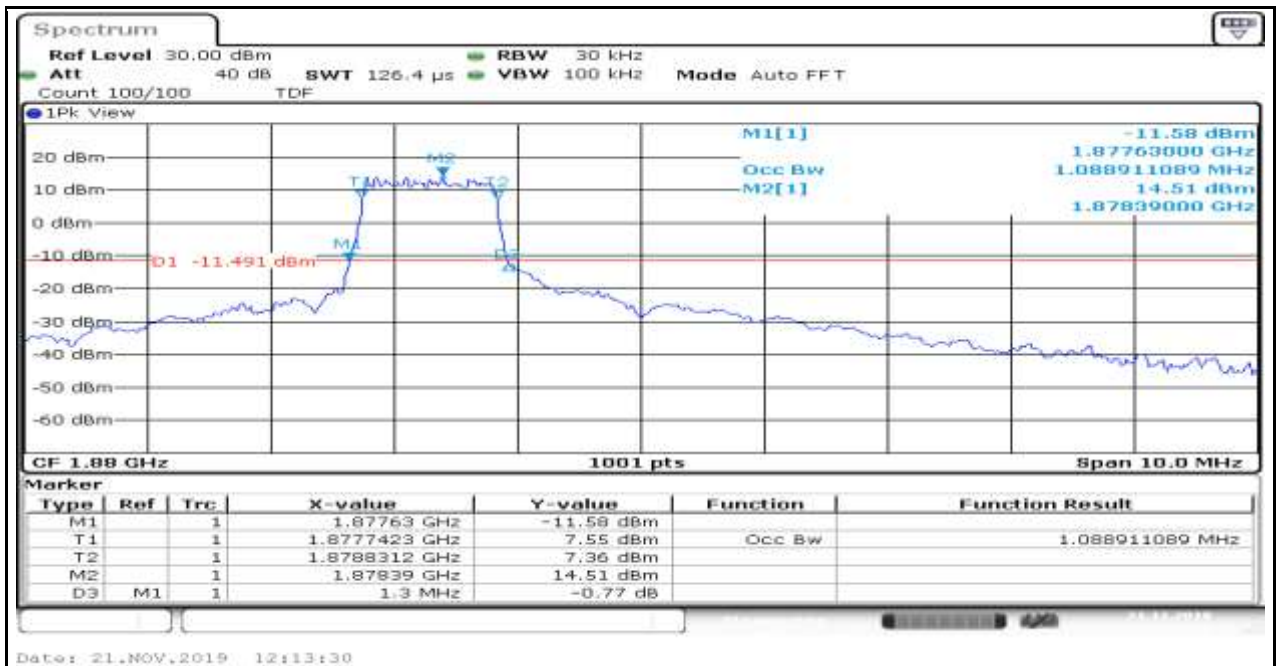




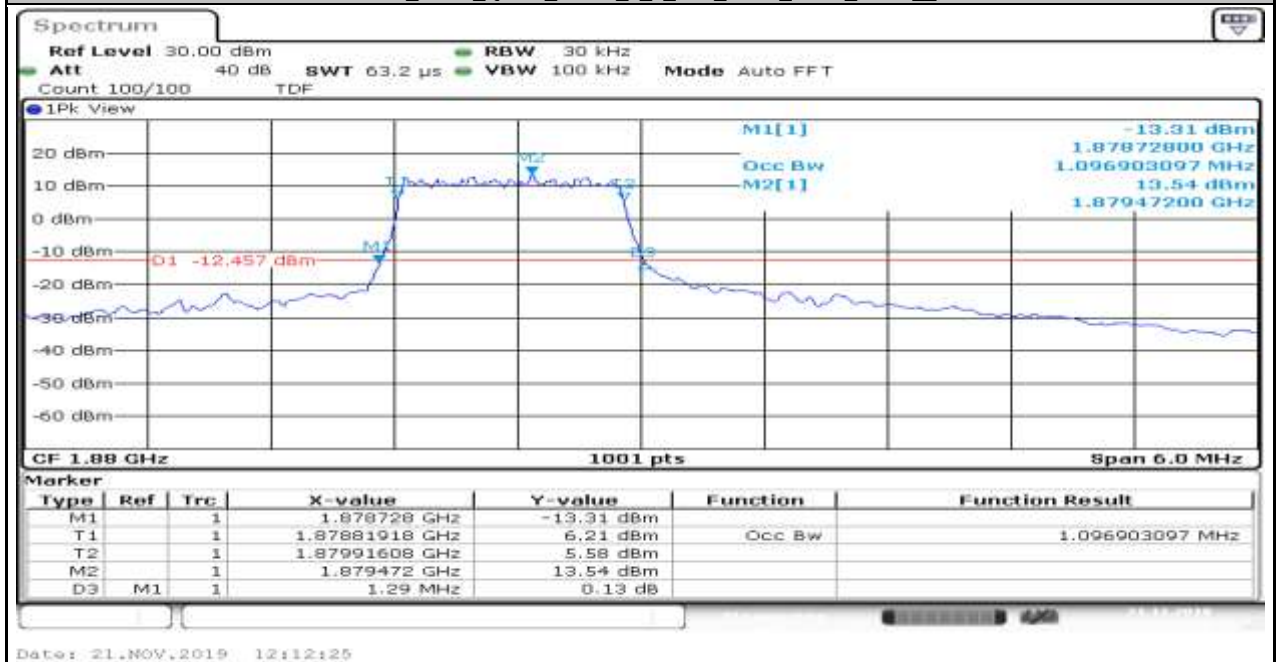
Band2_10MHz_QPSK_18900_6_0_Low_1.099_1.300_PASS



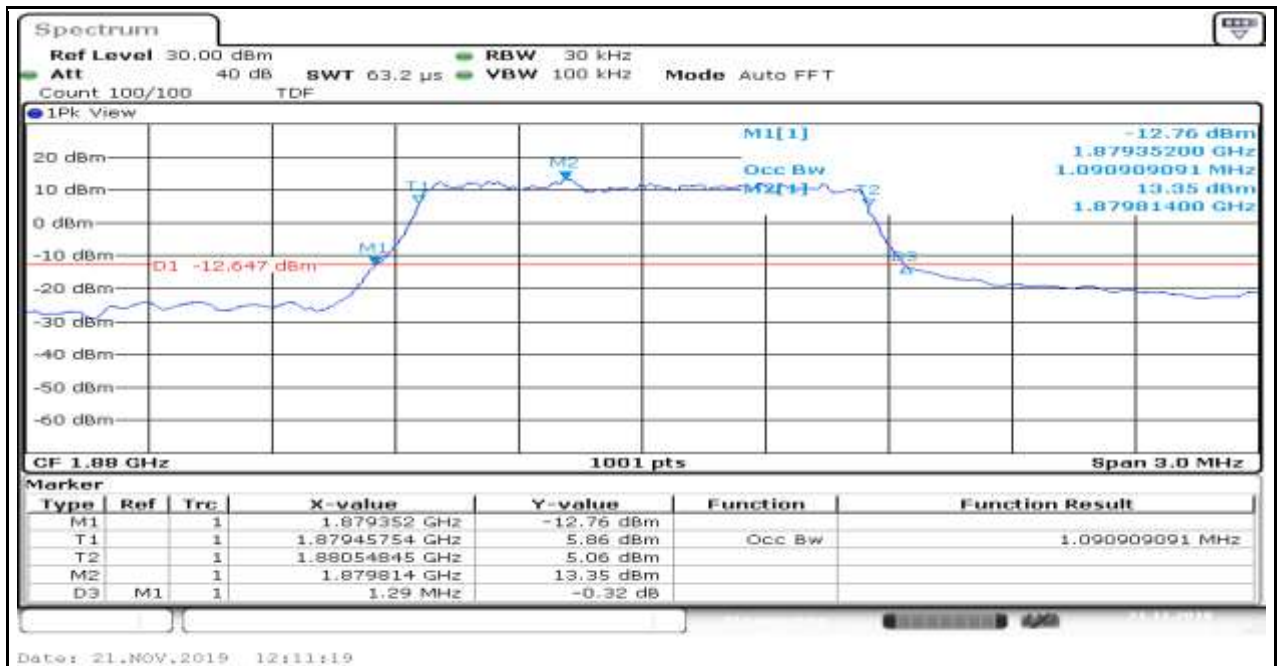
Band2_5MHz_QPSK_18900_6_0_Low_1.089_1.300_PASS



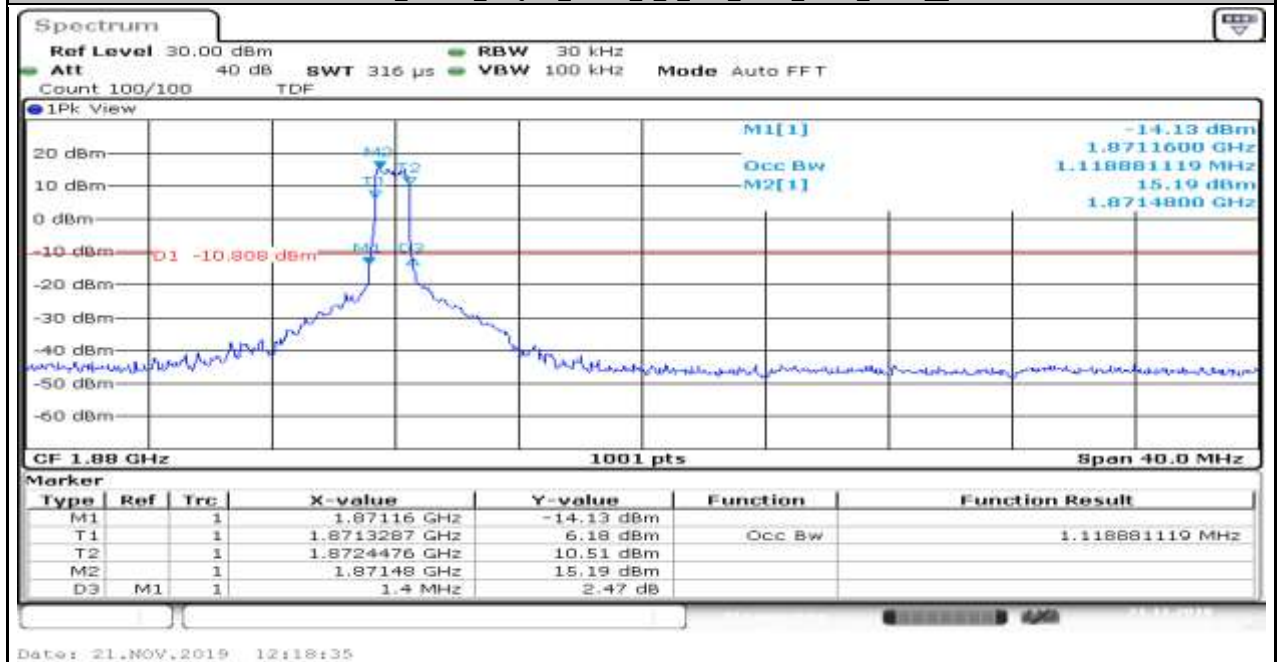
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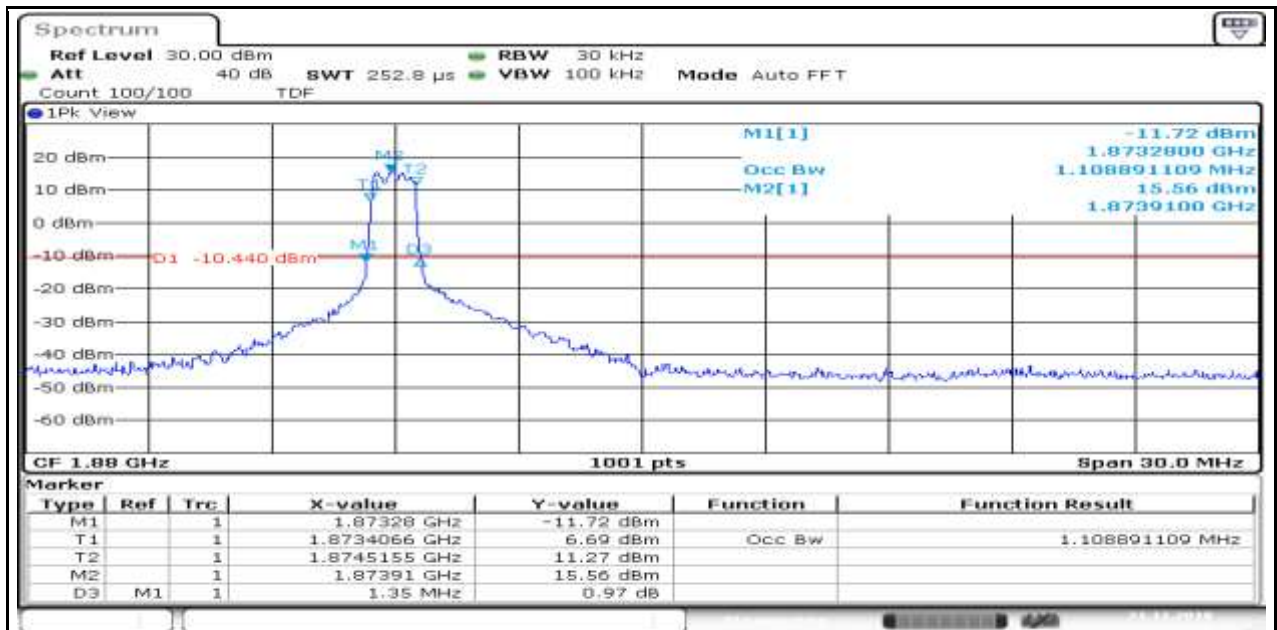
Band2_1.4MHz_QPSK_18900_6_0_Low_1.091_1.290_PASS



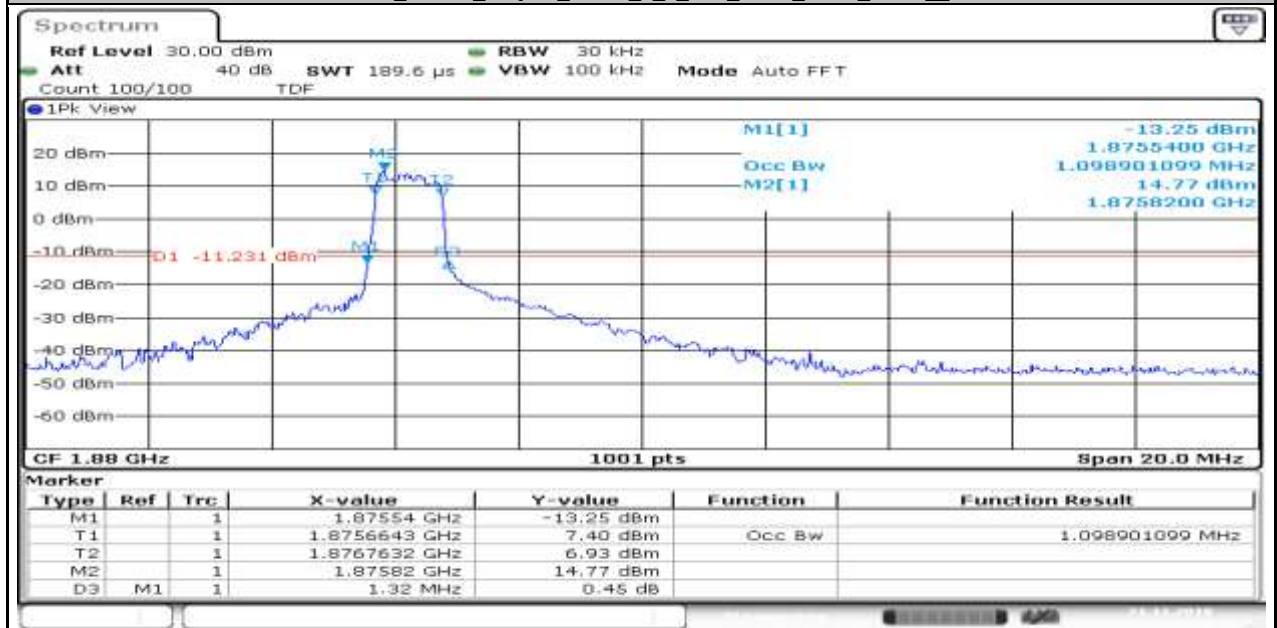
Band2_20MHz_16QAM_18900_6_0_Low_1.119_1.400_PASS



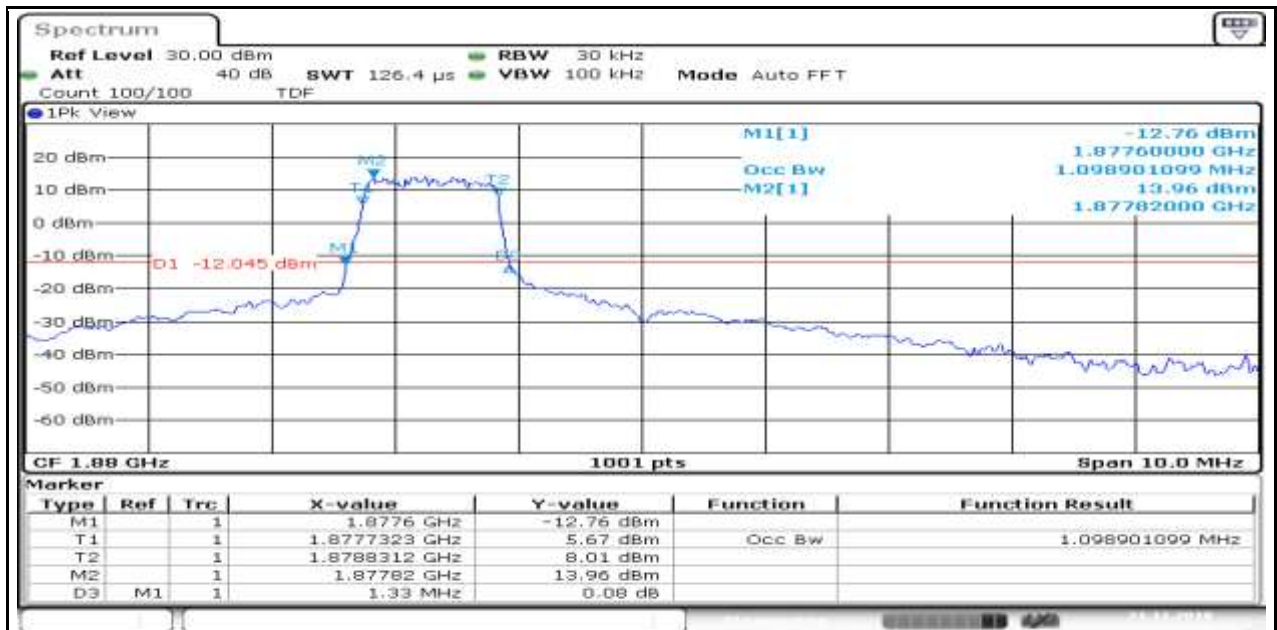
Band2_15MHz_16QAM_18900_6_0_Low_1.109_1.350_PASS



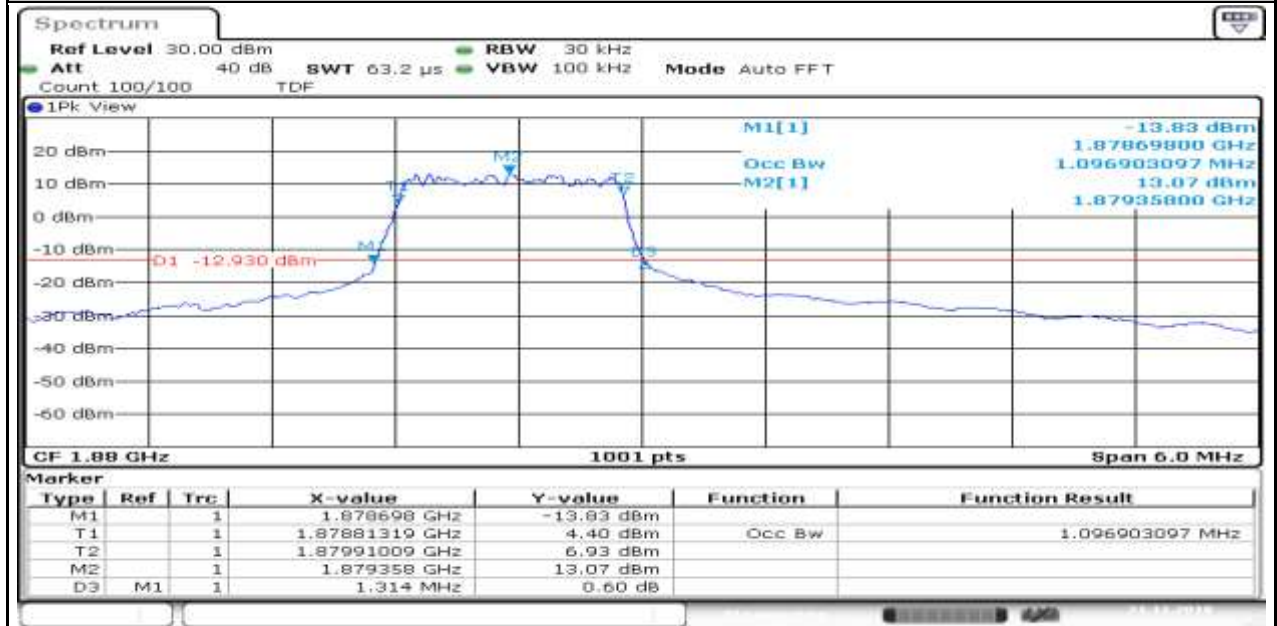
Band2_10MHz_16QAM_18900_6_0_Low_1.099_1.320_PASS



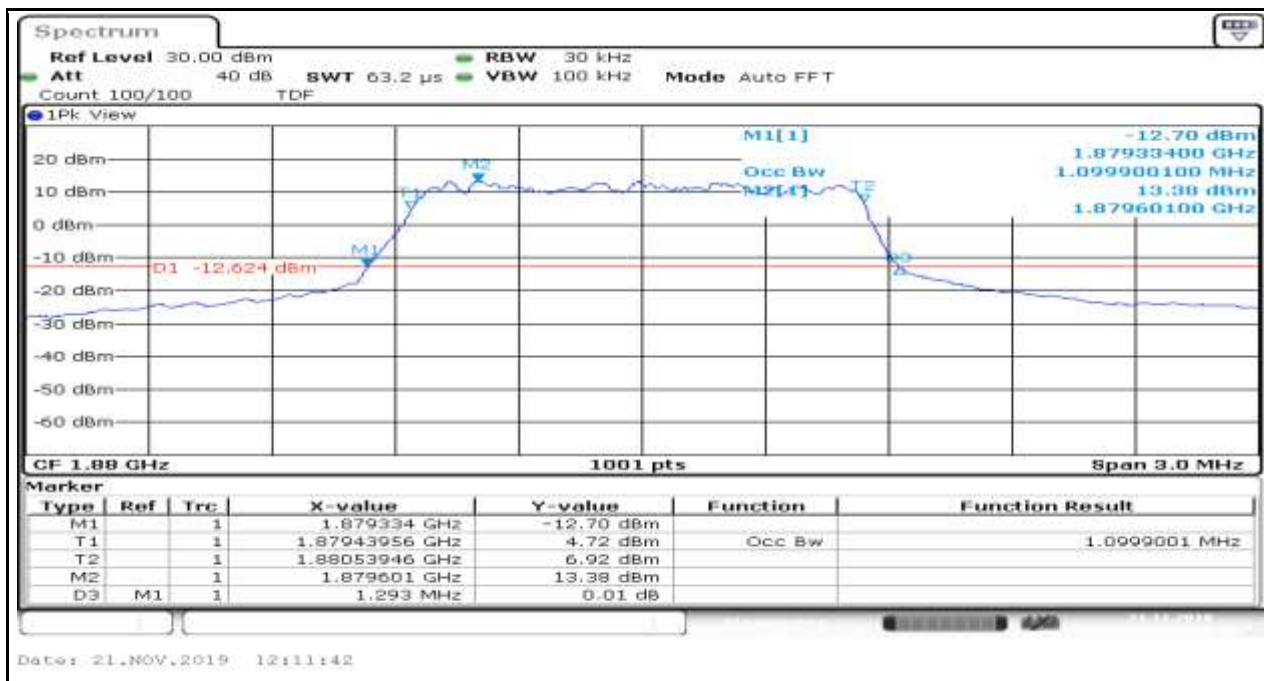
Band2_5MHz_16QAM_18900_6_0_Low_1.099_1.330_PASS



Band2_3MHz_16QAM_18900_6_0_Low_1.097_1.314_PASS



Band2_1.4MHz_16QAM_18900_6_0_Low_1.1_1.293_PASS

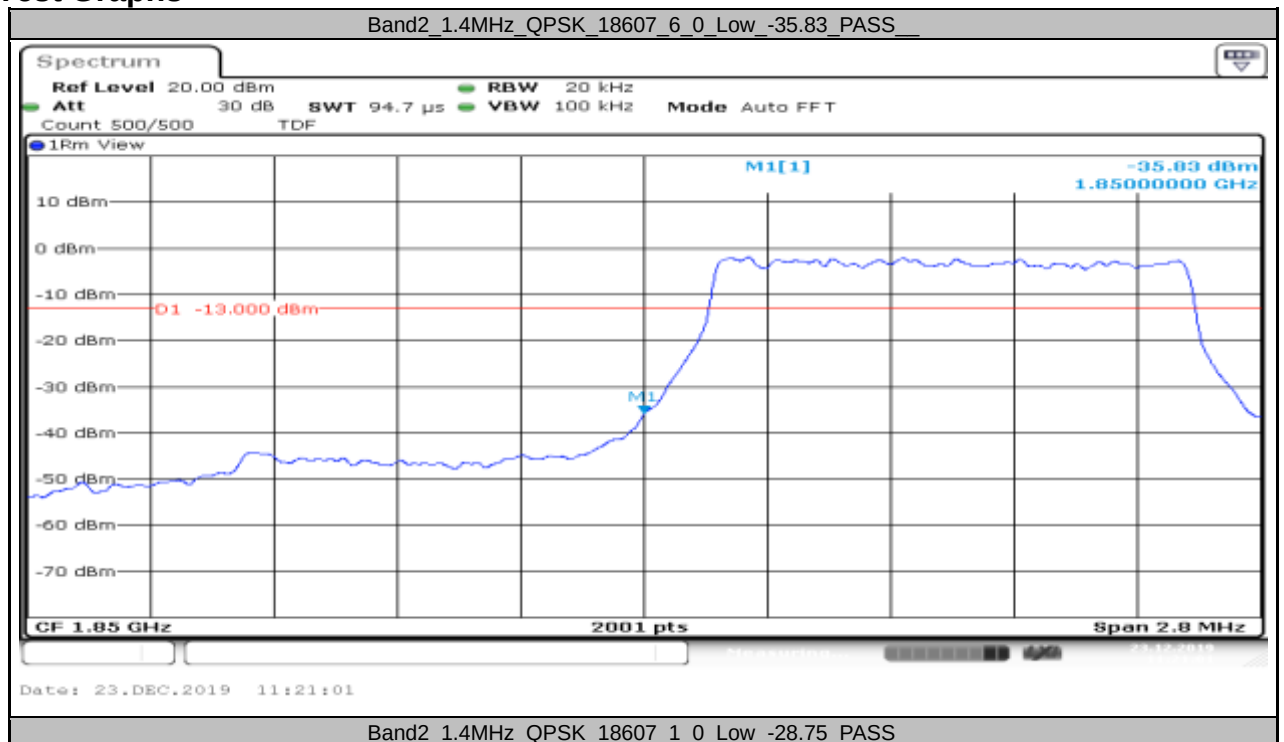


Appendix A.4: Band Edge for M1

Test Result

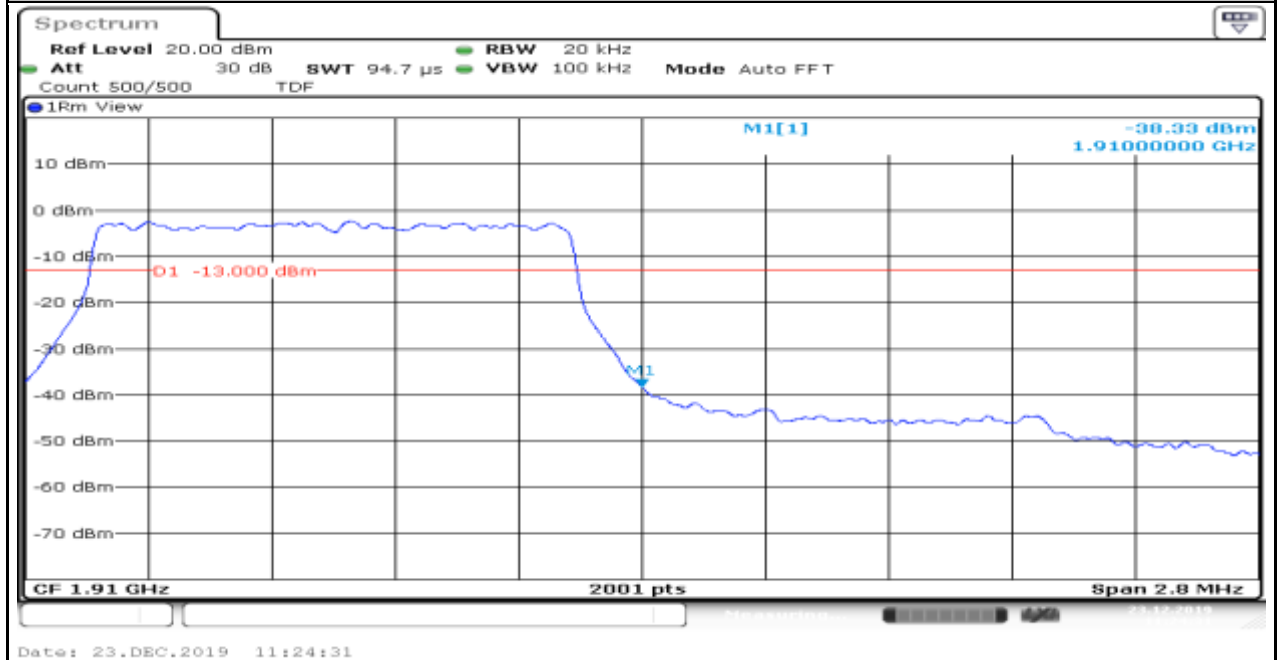
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Result (dBm)	Verdict
Band2	1.4MHz	QPSK	18607	6	0	Low	-35.83	PASS
Band2	1.4MHz	QPSK	18607	1	0	Low	-28.75	PASS
Band2	1.4MHz	QPSK	19193	6	0	Low	-38.33	PASS
Band2	1.4MHz	QPSK	19193	1	5	Low	-46.10	PASS
Band2	1.4MHz	16QAM	18607	6	0	Low	-34.88	PASS
Band2	1.4MHz	16QAM	18607	1	0	Low	-31.79	PASS
Band2	1.4MHz	16QAM	19193	6	0	Low	-38.42	PASS
Band2	1.4MHz	16QAM	19193	1	5	Low	-43.09	PASS

Test Graphs





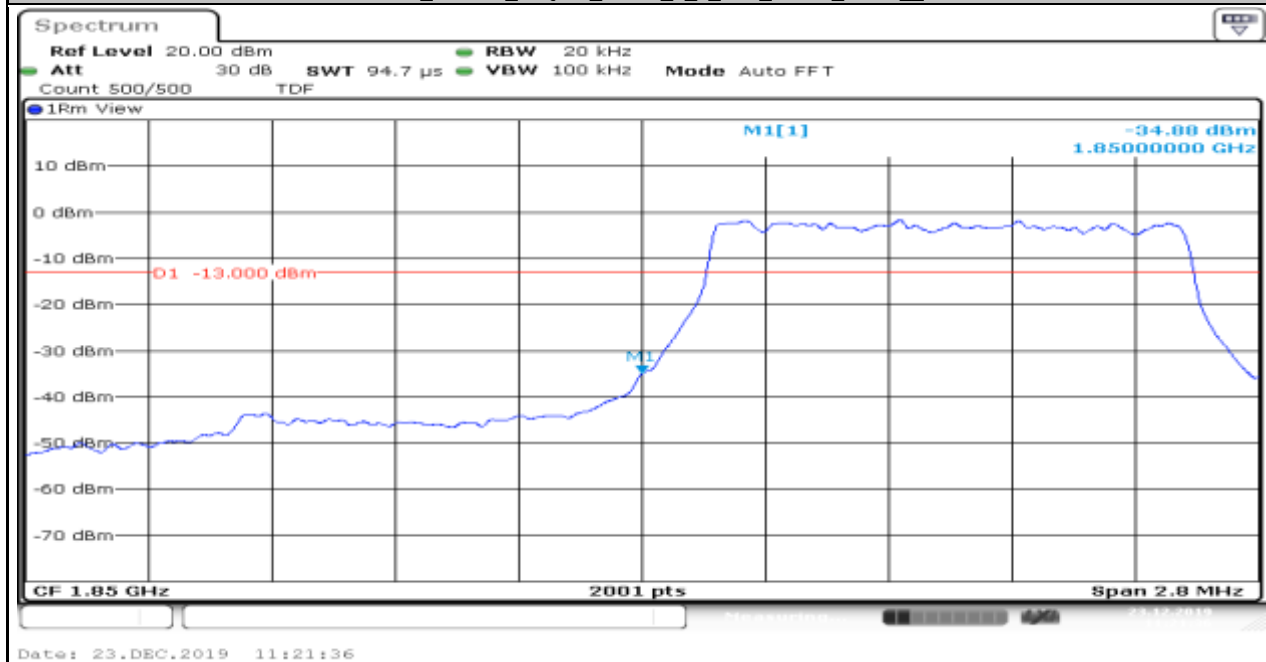
Band2_1.4MHz_QPSK_19193_6_0_Low_-38.33_PASS_



Band2_1.4MHz_QPSK_19193_1_5_Low_-46.10_PASS_



Band2_1.4MHz_16QAM_18607_6_0_Low_-34.88_PASS_

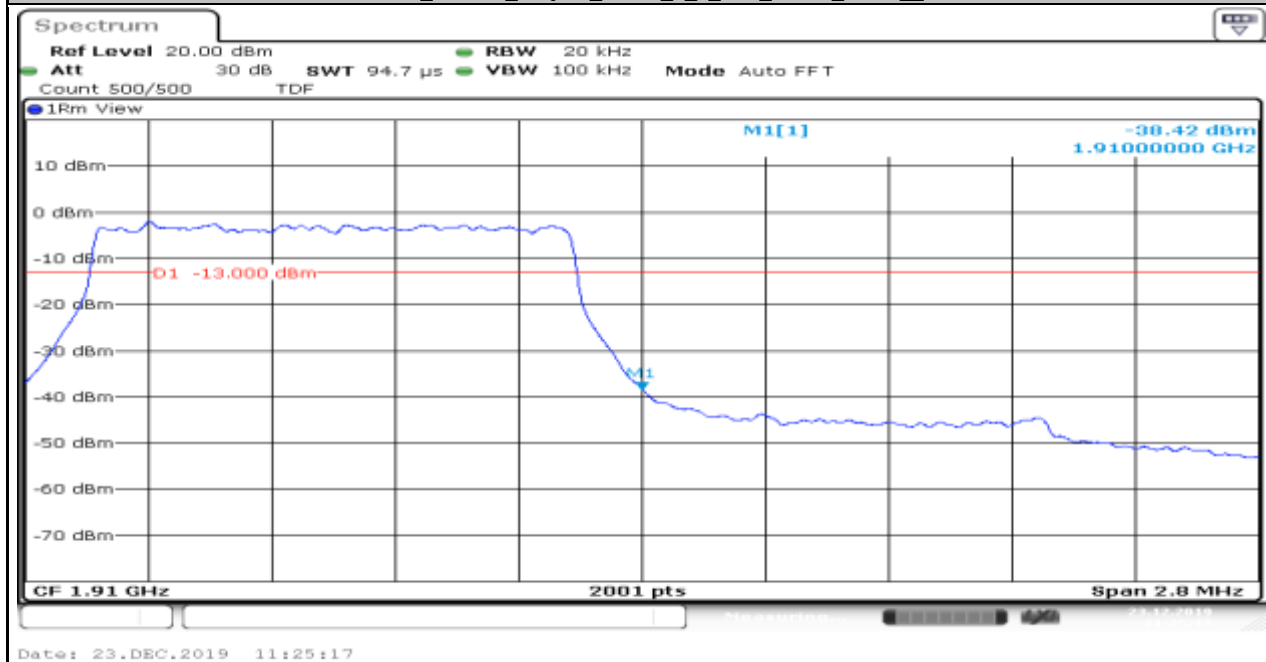


Band2_1.4MHz_16QAM_18607_1_0_Low_-31.79_PASS_

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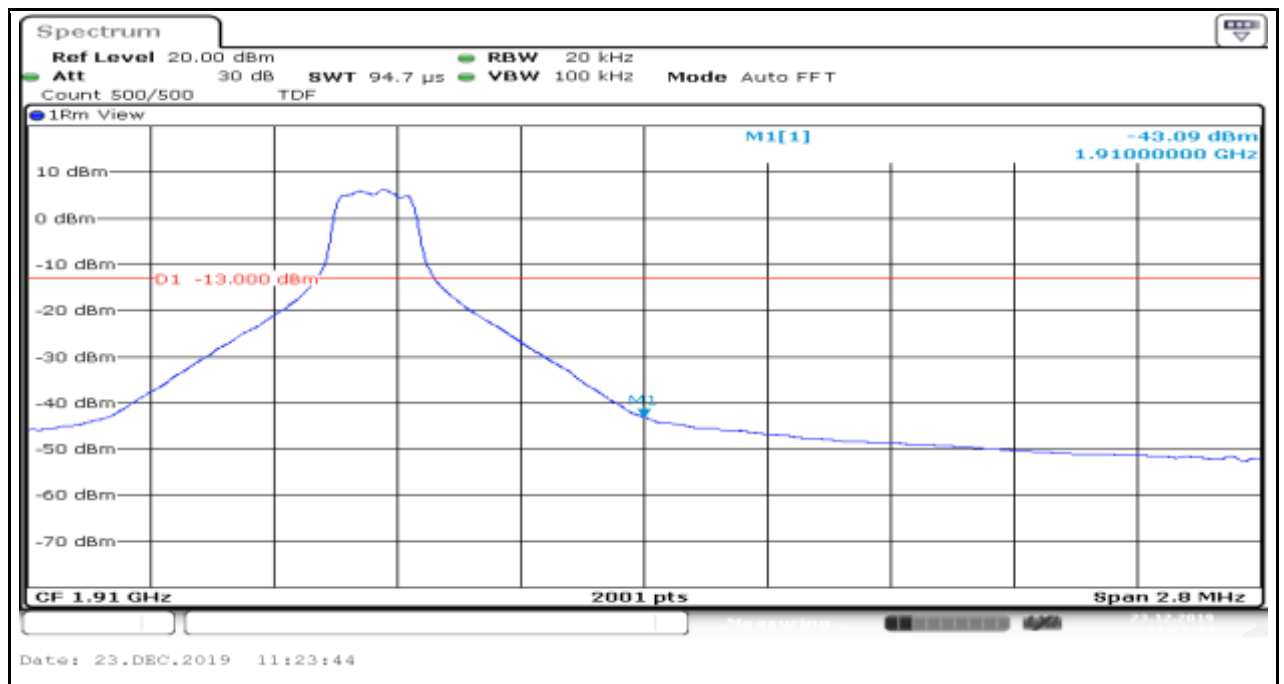


Band2_1.4MHz_16QAM_19193_6_0_Low_-38.42_PASS_



Band2_1.4MHz_16QAM_19193_1_5_Low_-43.09_PASS_

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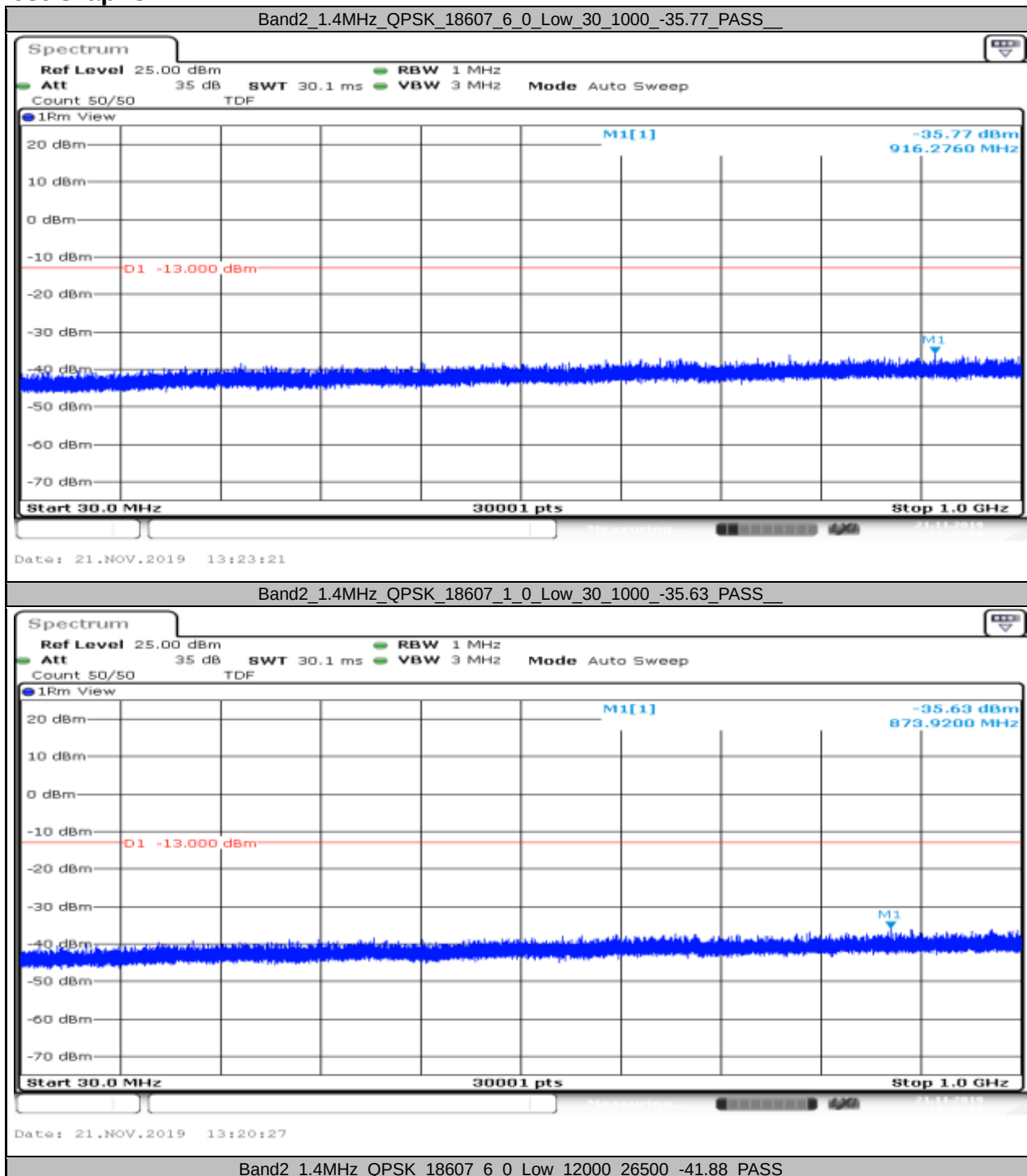


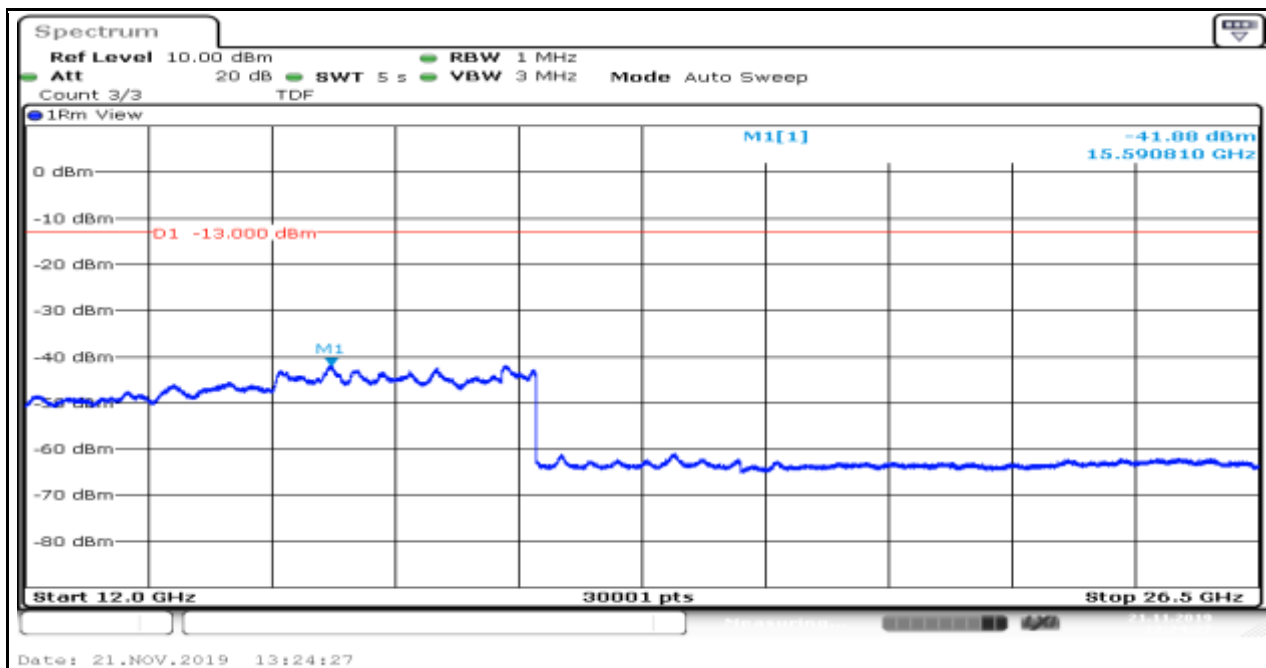
Appendix A.5: Conducted Spurious Emission for M1

Test Result

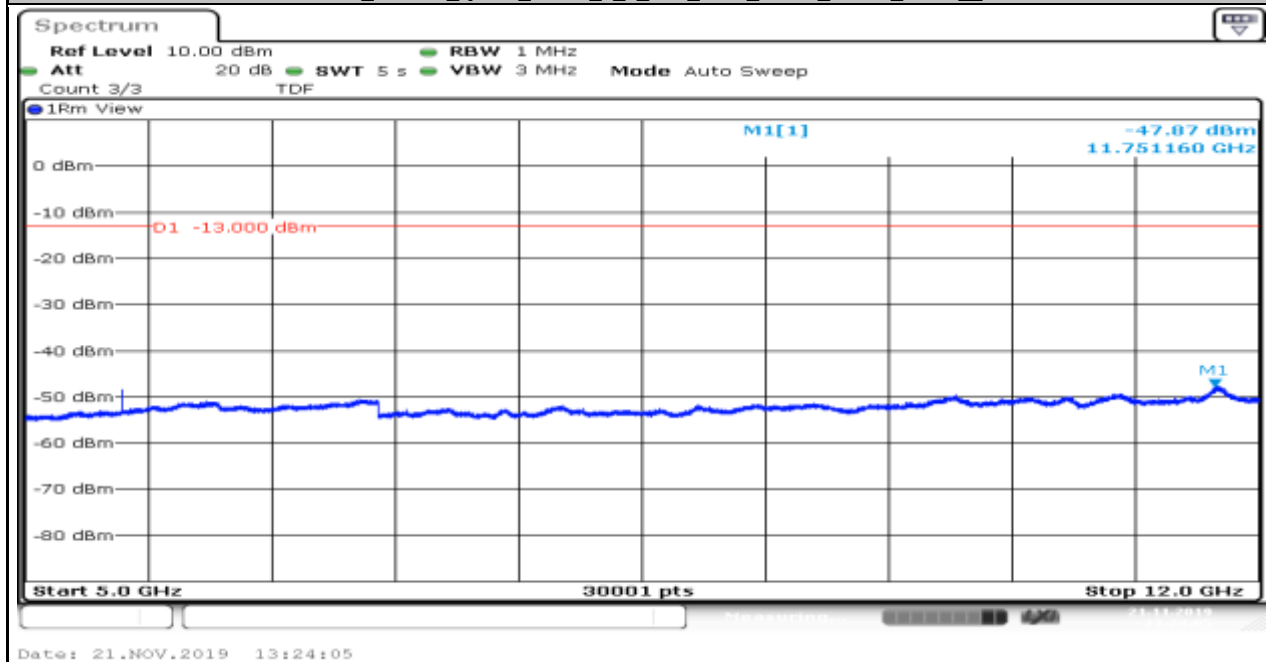
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Start Freq	Stop Freq	Result (dBm)	Verdict
Band2	1.4MHz	QPSK	18607	6	0	Low	30	1000	-35.77	PASS
Band2	1.4MHz	QPSK	18607	1	0	Low	30	1000	-35.63	PASS
Band2	1.4MHz	QPSK	18607	6	0	Low	12000	26500	-41.88	PASS
Band2	1.4MHz	QPSK	18607	6	0	Low	5000	12000	-47.87	PASS
Band2	1.4MHz	QPSK	18607	6	0	Low	1000	5000	-38.38	PASS
Band2	1.4MHz	QPSK	18607	1	0	Low	12000	26500	-41.79	PASS
Band2	1.4MHz	QPSK	18607	1	0	Low	1000	5000	-32.29	PASS
Band2	1.4MHz	QPSK	18607	1	0	Low	5000	12000	-43.1	PASS
Band2	1.4MHz	QPSK	18900	6	0	Low	12000	26500	-41.92	PASS
Band2	1.4MHz	QPSK	18900	1	0	Low	1000	5000	-34.17	PASS
Band2	1.4MHz	QPSK	18900	1	0	Low	5000	12000	-44.36	PASS
Band2	1.4MHz	QPSK	18900	1	0	Low	12000	26500	-41.74	PASS
Band2	1.4MHz	QPSK	18900	6	0	Low	1000	5000	-38.35	PASS
Band2	1.4MHz	QPSK	18900	1	0	Low	30	1000	-36.55	PASS
Band2	1.4MHz	QPSK	18900	6	0	Low	5000	12000	-47.83	PASS
Band2	1.4MHz	QPSK	18900	6	0	Low	30	1000	-35.72	PASS
Band2	1.4MHz	QPSK	19193	1	5	Low	12000	26500	-41.75	PASS
Band2	1.4MHz	QPSK	19193	6	0	Low	12000	26500	-41.76	PASS
Band2	1.4MHz	QPSK	19193	6	0	Low	5000	12000	-47.59	PASS
Band2	1.4MHz	QPSK	19193	6	0	Low	30	1000	-36.52	PASS
Band2	1.4MHz	QPSK	19193	1	5	Low	1000	5000	-33.71	PASS
Band2	1.4MHz	QPSK	19193	1	5	Low	5000	12000	-44.55	PASS
Band2	1.4MHz	QPSK	19193	1	5	Low	30	1000	-35.77	PASS
Band2	1.4MHz	QPSK	19193	6	0	Low	1000	5000	-38.47	PASS
Band2	1.4MHz	16QAM	18607	1	0	Low	1000	5000	-34.75	PASS
Band2	1.4MHz	16QAM	18607	1	0	Low	5000	12000	-44.25	PASS
Band2	1.4MHz	16QAM	18607	1	0	Low	12000	26500	-41.69	PASS
Band2	1.4MHz	16QAM	18607	6	0	Low	12000	26500	-41.64	PASS
Band2	1.4MHz	16QAM	18607	6	0	Low	5000	12000	-47.62	PASS
Band2	1.4MHz	16QAM	18607	6	0	Low	30	1000	-36.41	PASS
Band2	1.4MHz	16QAM	18607	1	0	Low	30	1000	-36.32	PASS
Band2	1.4MHz	16QAM	18607	6	0	Low	1000	5000	-38.38	PASS
Band2	1.4MHz	16QAM	18900	6	0	Low	12000	26500	-41.73	PASS
Band2	1.4MHz	16QAM	18900	1	0	Low	1000	5000	-34.62	PASS
Band2	1.4MHz	16QAM	18900	1	0	Low	12000	26500	-41.66	PASS
Band2	1.4MHz	16QAM	18900	6	0	Low	30	1000	-36.45	PASS
Band2	1.4MHz	16QAM	18900	6	0	Low	1000	5000	-38.48	PASS
Band2	1.4MHz	16QAM	18900	6	0	Low	5000	12000	-47.8	PASS
Band2	1.4MHz	16QAM	18900	1	0	Low	30	1000	-35.15	PASS
Band2	1.4MHz	16QAM	18900	1	0	Low	5000	12000	-45.2	PASS
Band2	1.4MHz	16QAM	19193	6	0	Low	5000	12000	-47.58	PASS
Band2	1.4MHz	16QAM	19193	6	0	Low	1000	5000	-38.48	PASS
Band2	1.4MHz	16QAM	19193	6	0	Low	30	1000	-36.03	PASS
Band2	1.4MHz	16QAM	19193	1	5	Low	12000	26500	-41.77	PASS
Band2	1.4MHz	16QAM	19193	1	5	Low	5000	12000	-45.41	PASS
Band2	1.4MHz	16QAM	19193	1	5	Low	30	1000	-35.38	PASS
Band2	1.4MHz	16QAM	19193	6	0	Low	12000	26500	-41.65	PASS
Band2	1.4MHz	16QAM	19193	1	5	Low	1000	5000	-35.1	PASS

Test Graphs

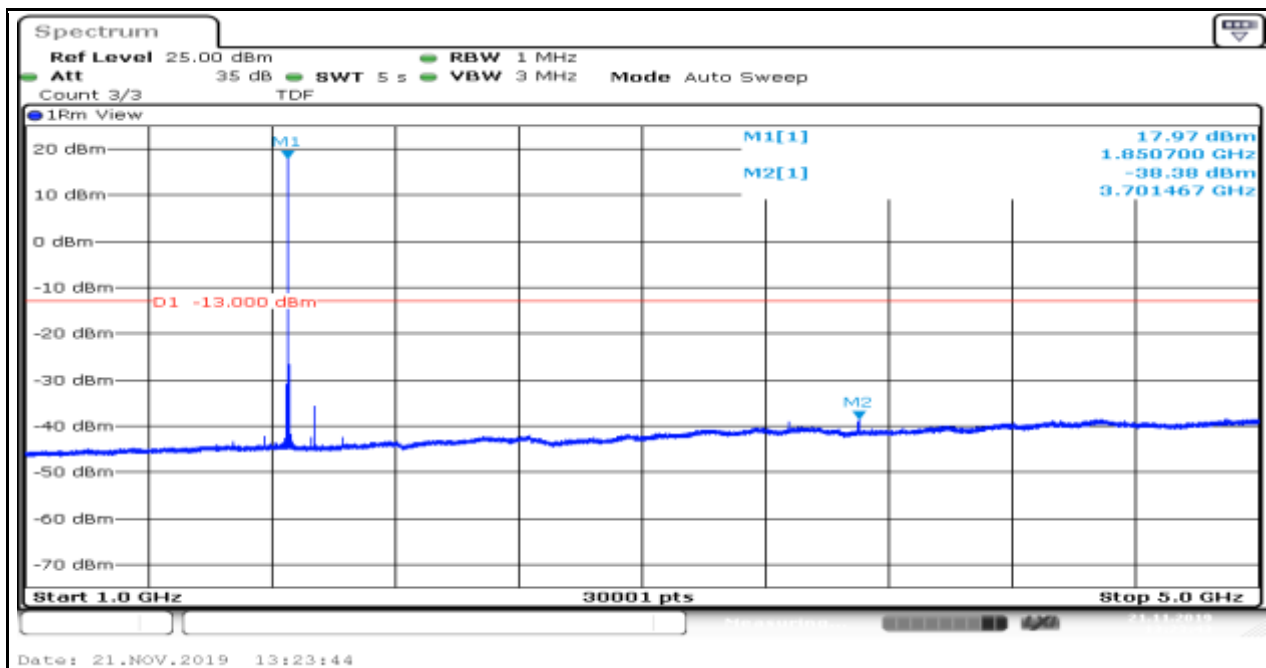




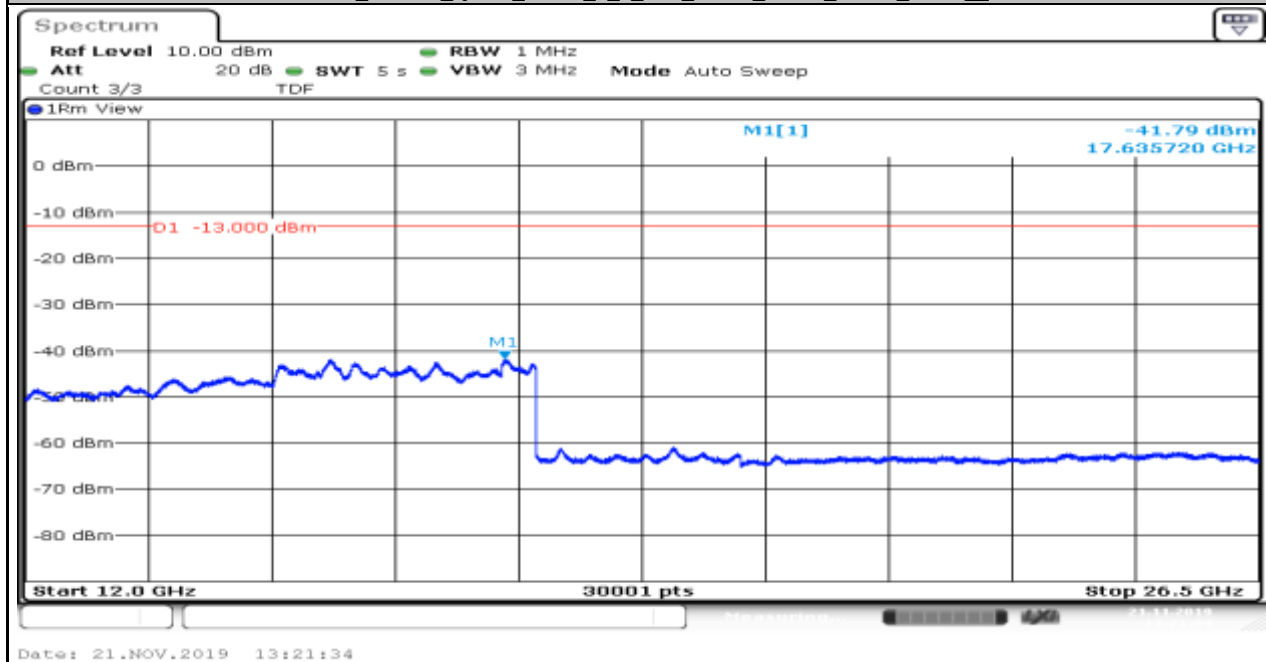
Band2_1.4MHz_QPSK_18607_6_0_Low_5000_12000_-47.87_PASS_



Band2_1.4MHz_QPSK_18607_6_0_Low_1000_5000_-38.38_PASS_

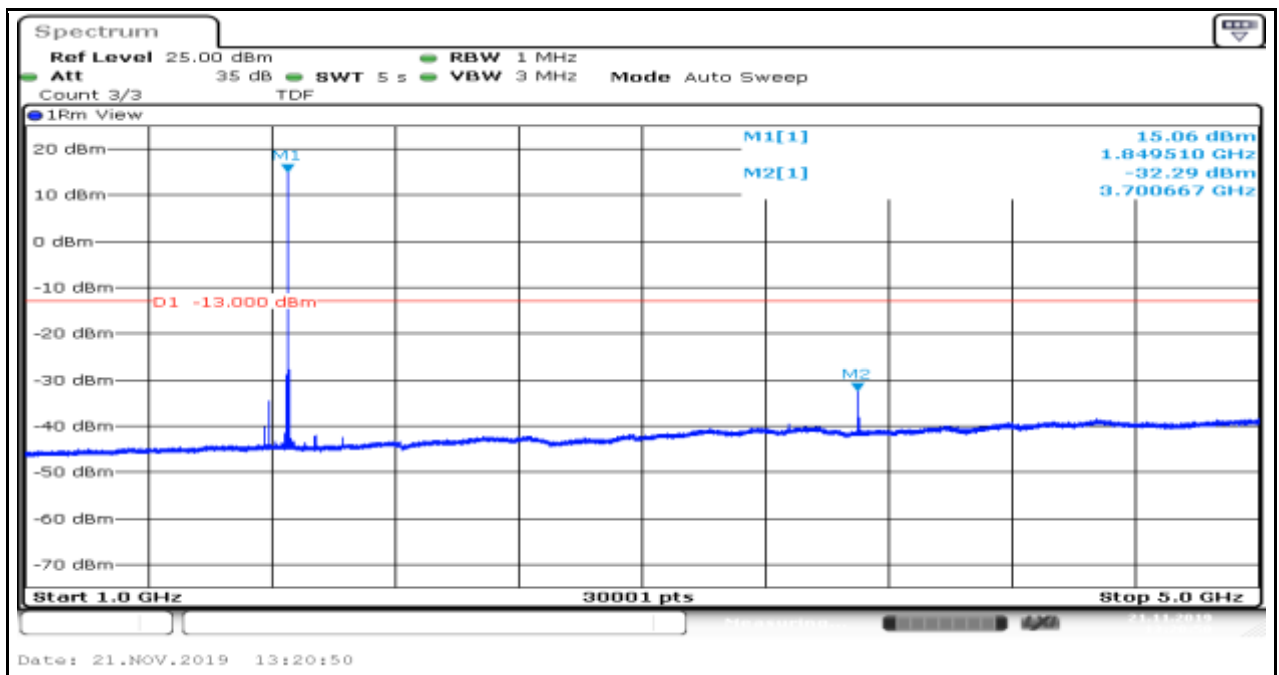


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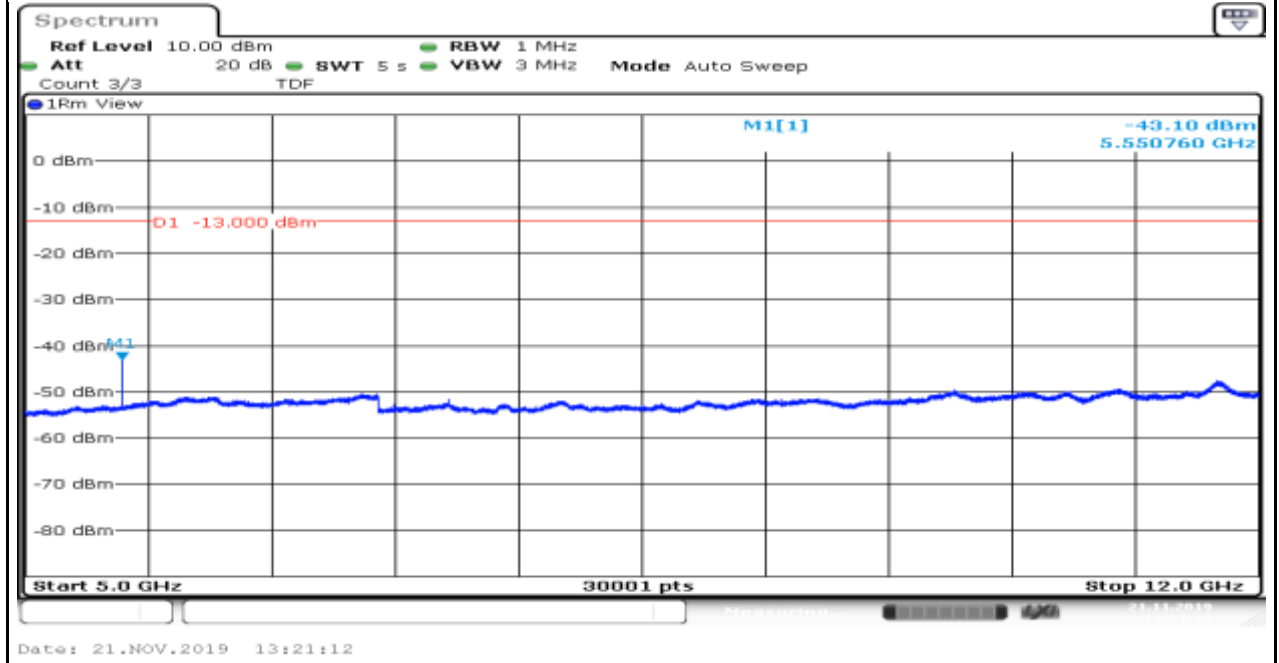


Band2_1.4MHz_QPSK_18607_1_0_Low_1000_5000_-32.29_PASS_

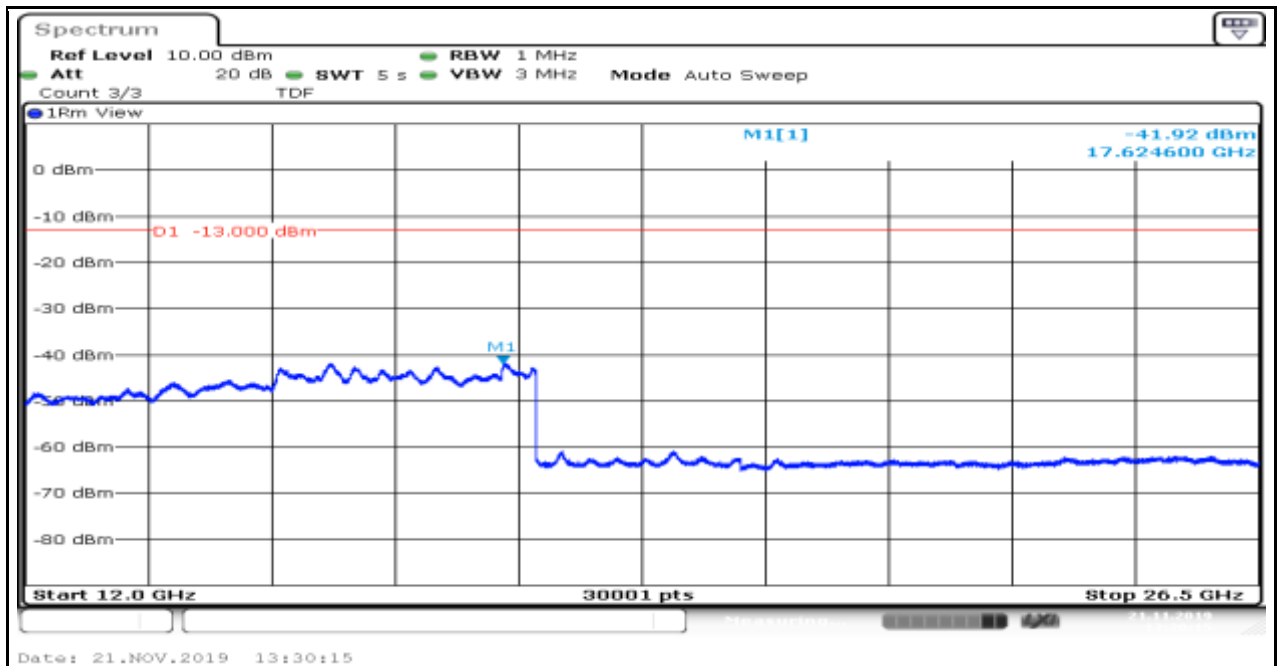
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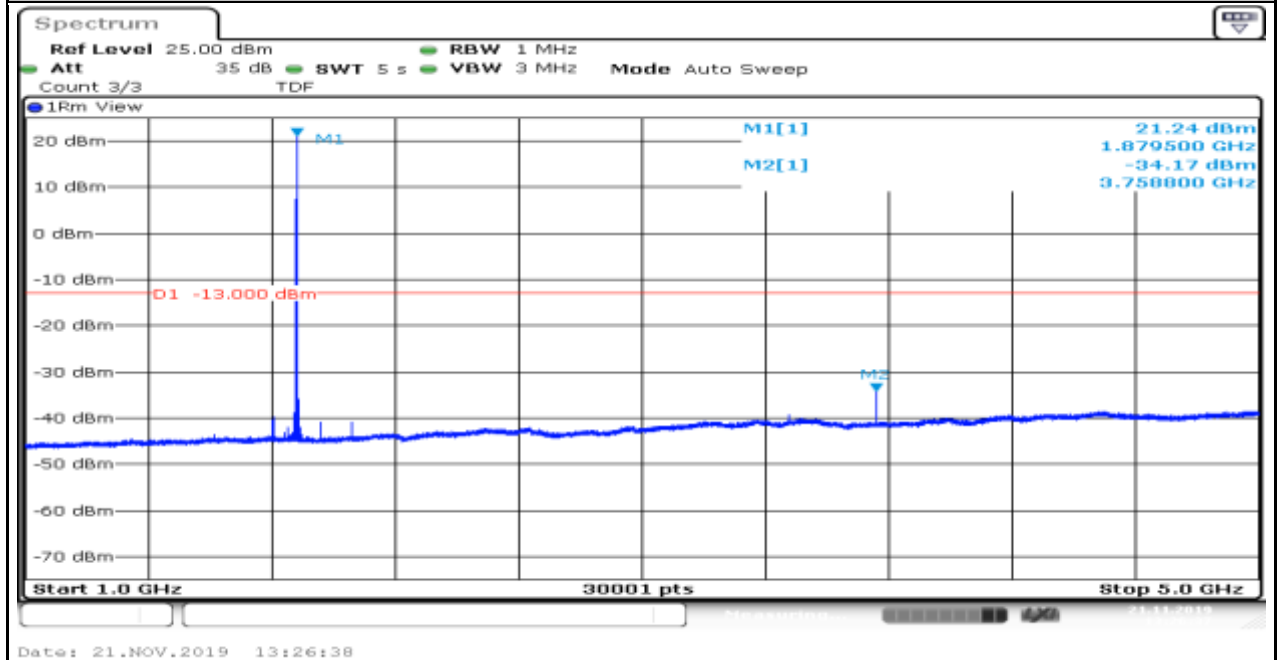
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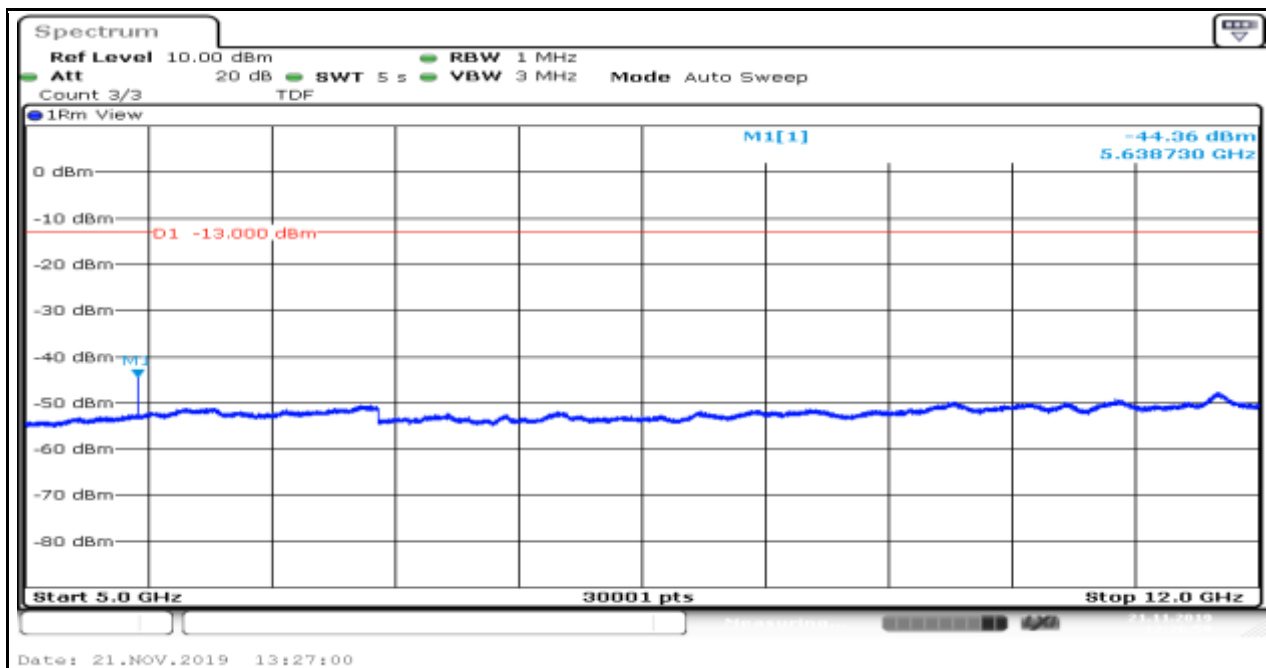
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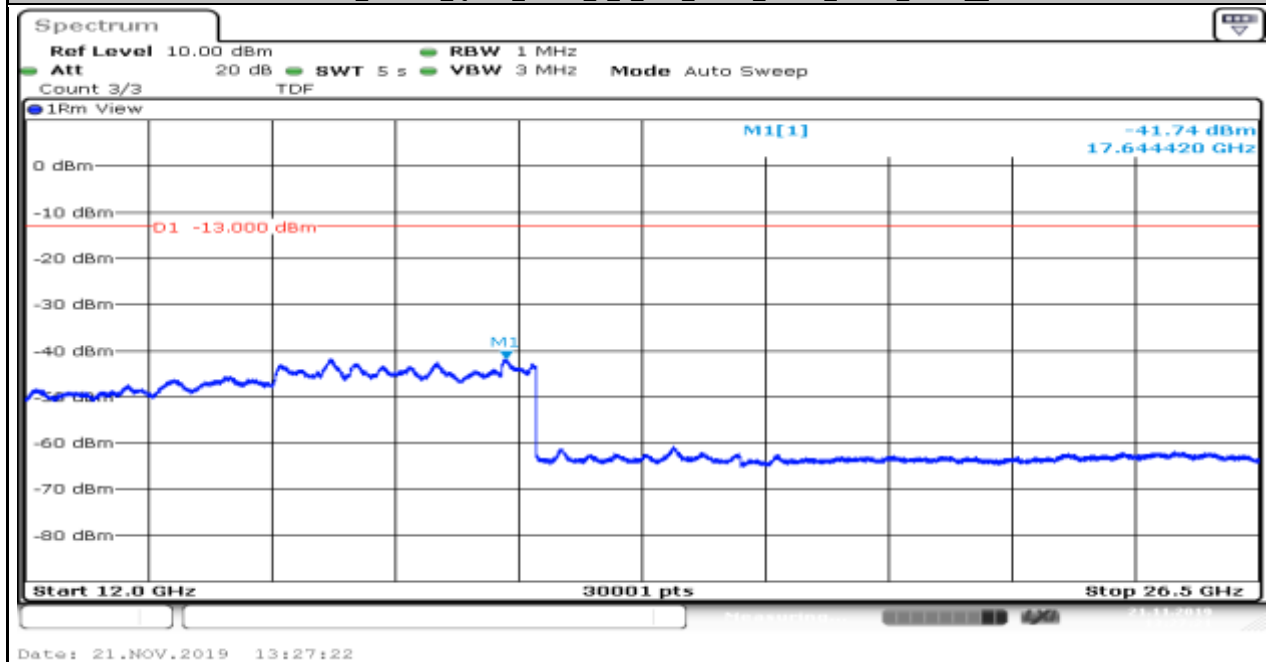
Band2_1.4MHz_QPSK_18900_1_0_Low_1000_5000_-34.17_PASS_



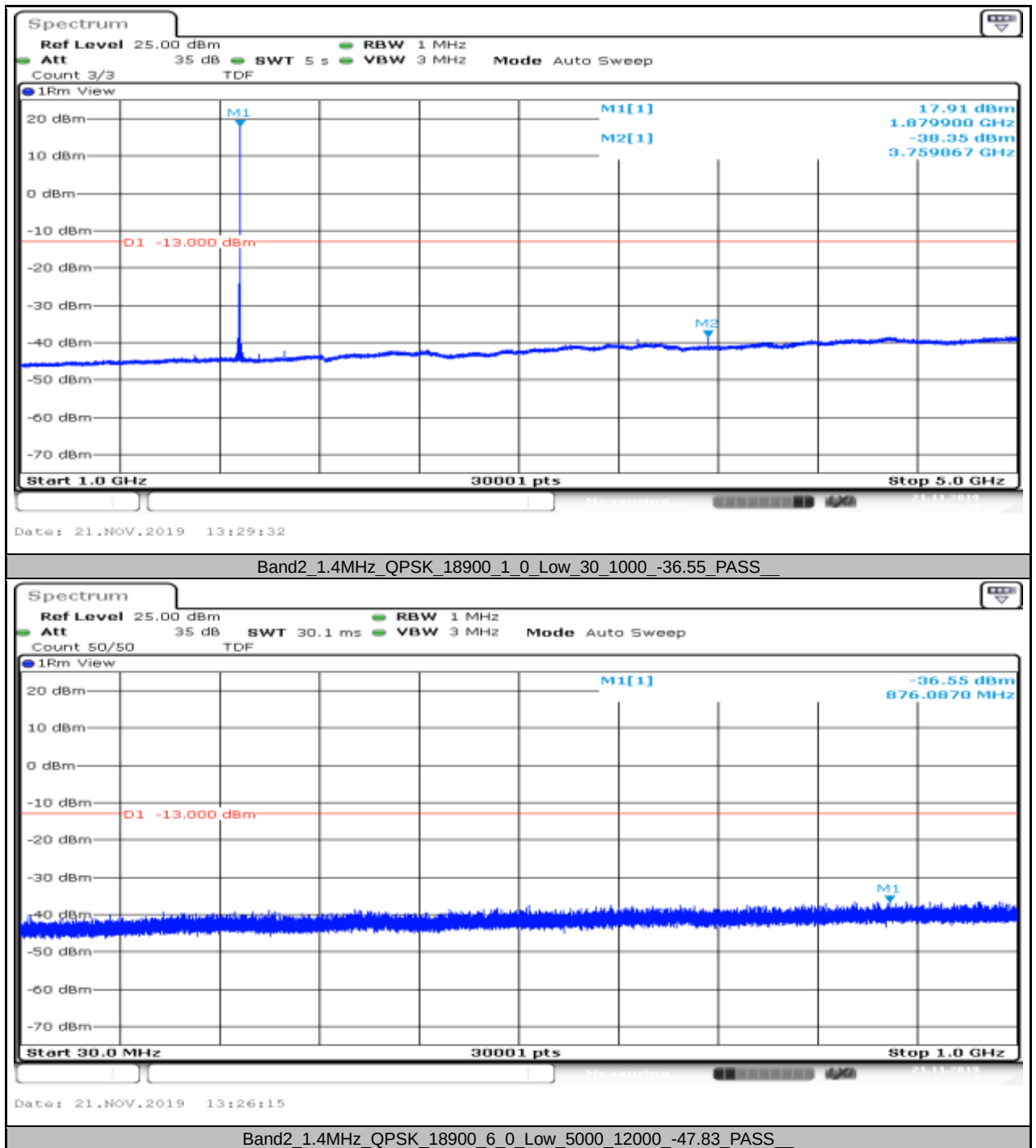
Band2_1.4MHz_QPSK_18900_1_0_Low_5000_12000_-44.36_PASS_

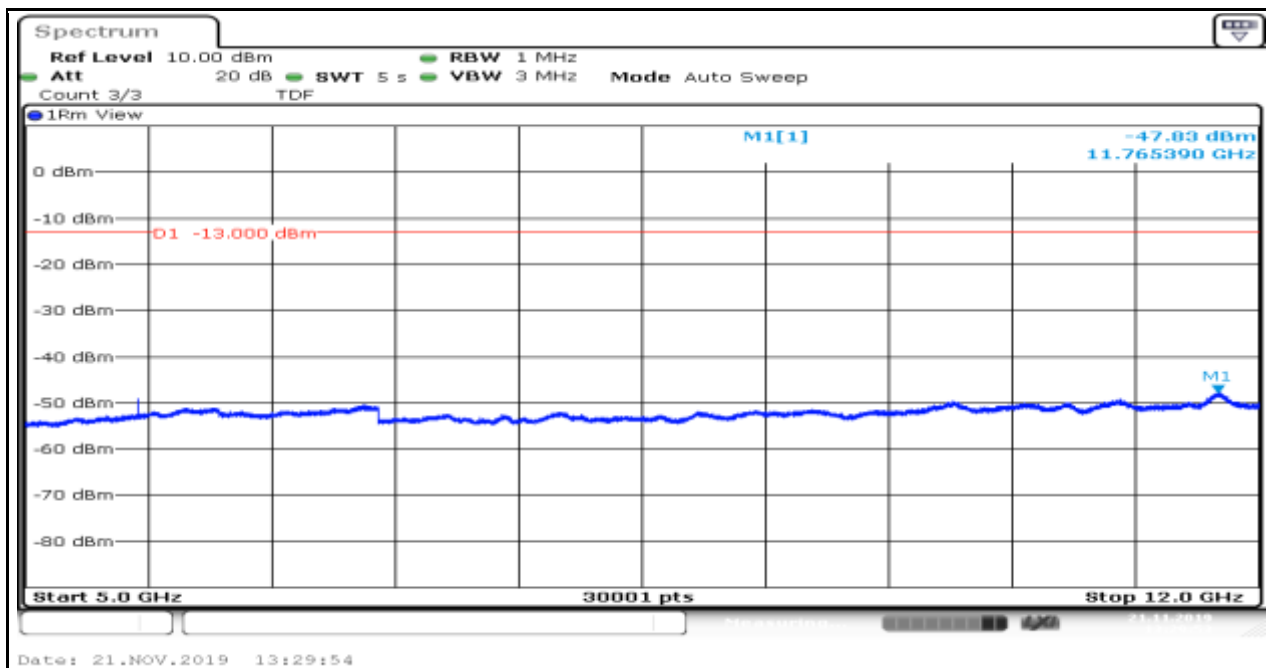


Band2_1.4MHz_QPSK_18900_1_0_Low_12000_26500_-41.74_PASS_

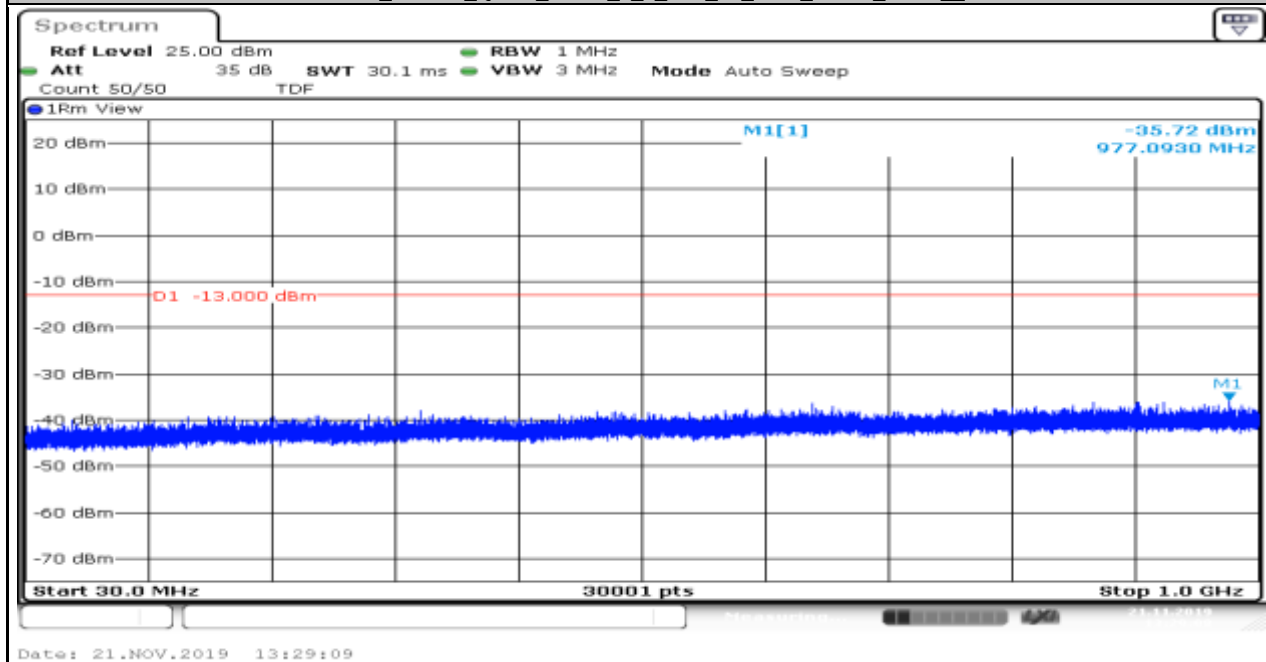


Band2_1.4MHz_QPSK_18900_6_0_Low_1000_5000_-38.35_PASS_



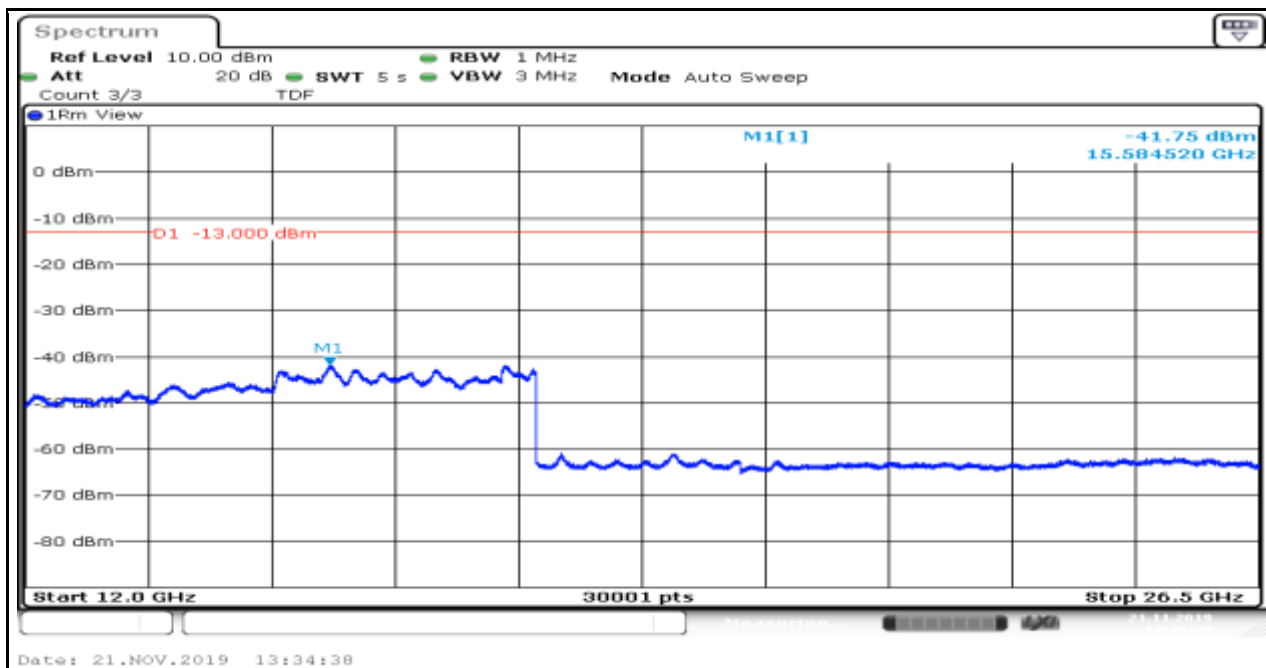


Band2_1.4MHz_QPSK_18900_6_0_Low_30_1000_-35.72_PASS_

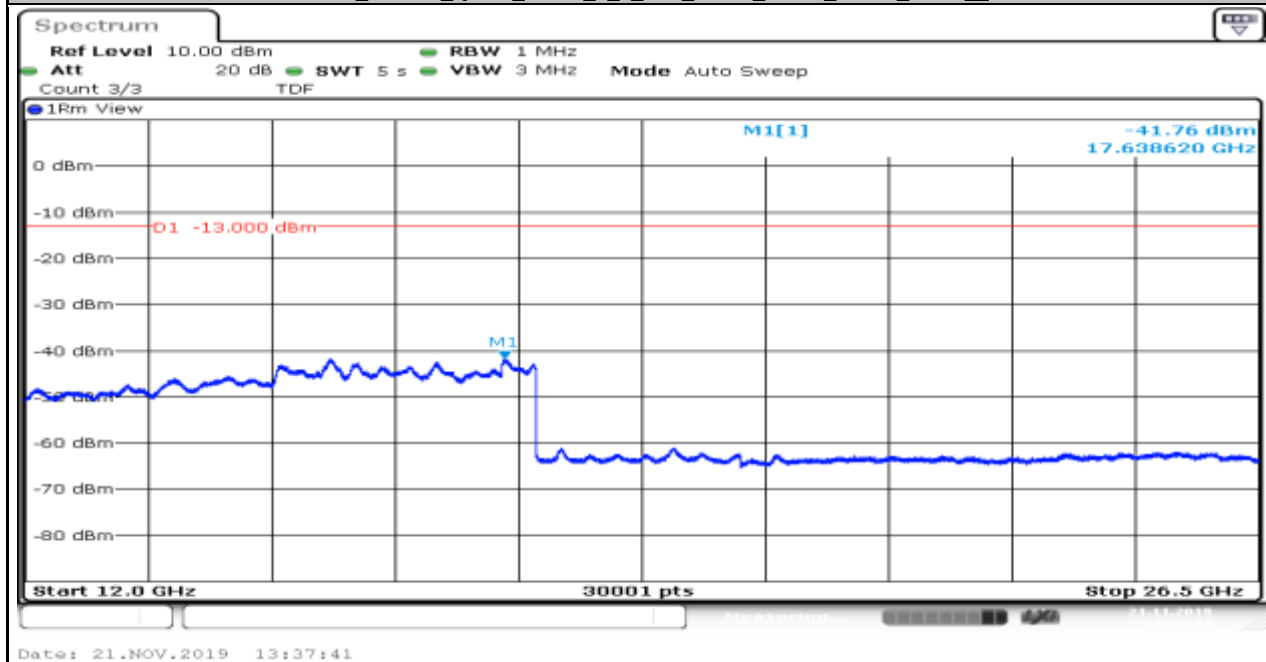


Band2_1.4MHz_QPSK_19193_1_5_Low_12000_26500_-41.75_PASS_

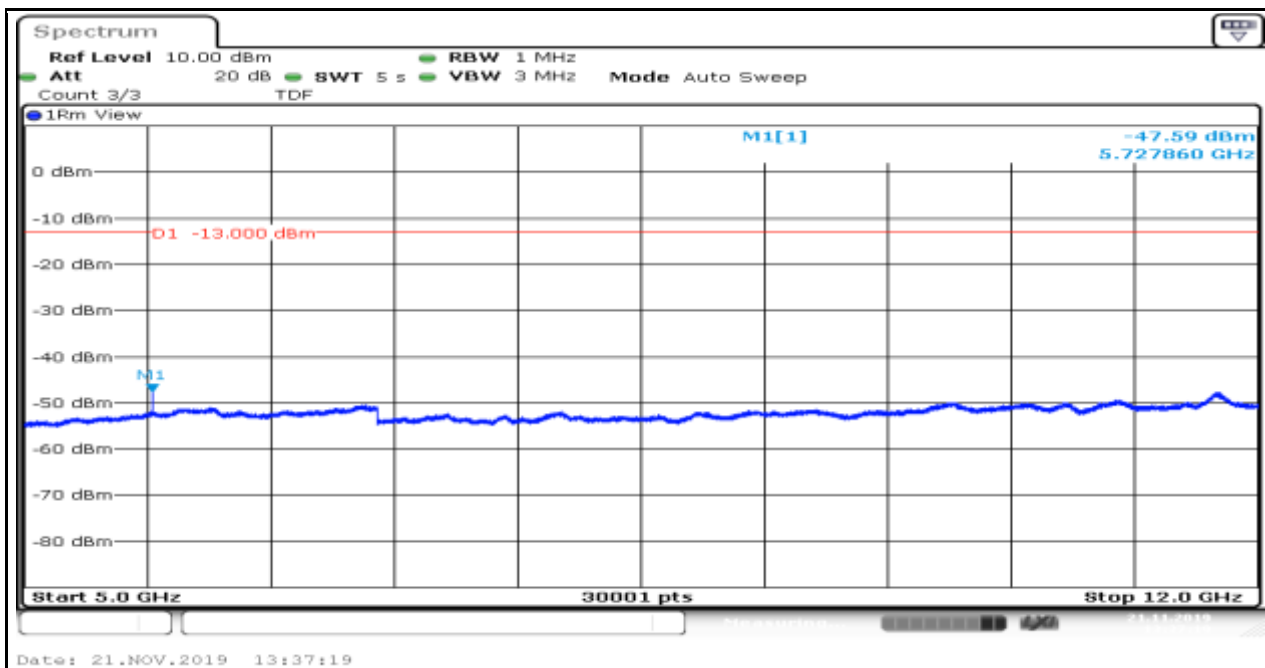
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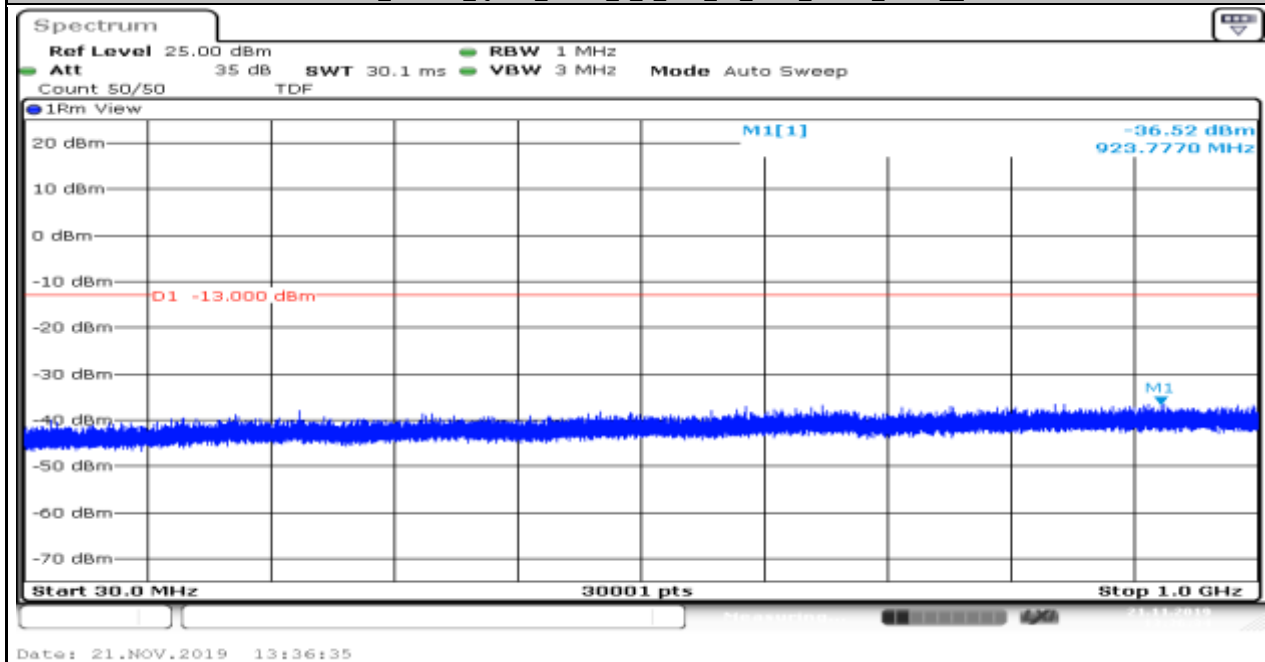
Band2_1.4MHz_QPSK_19193_6_0_Low_12000_26500_-41.76_PASS_



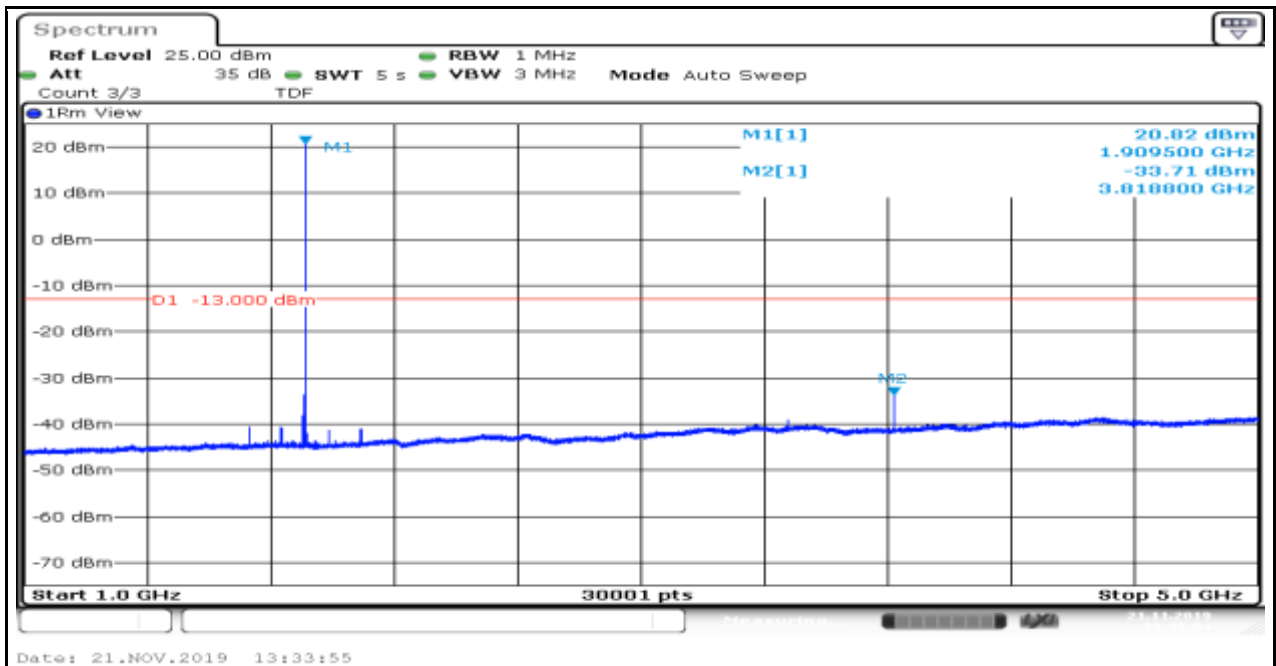
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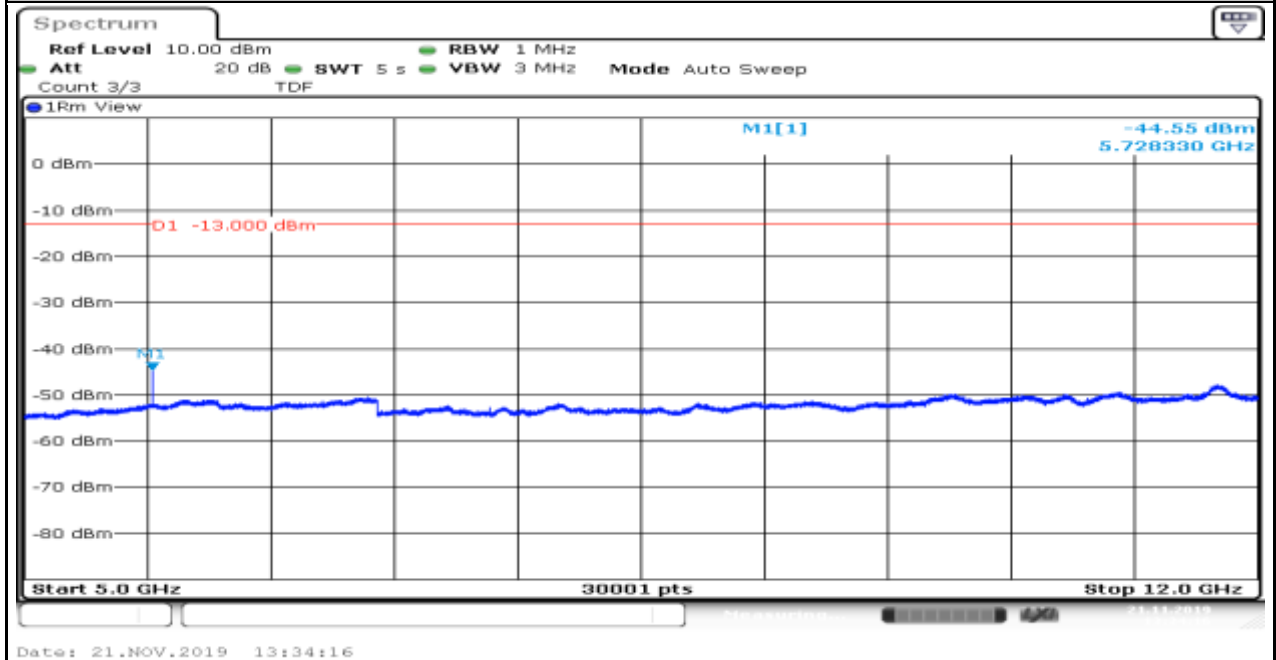
Band2_1.4MHz_QPSK_19193_6_0_Low_30_1000_-36.52_PASS_



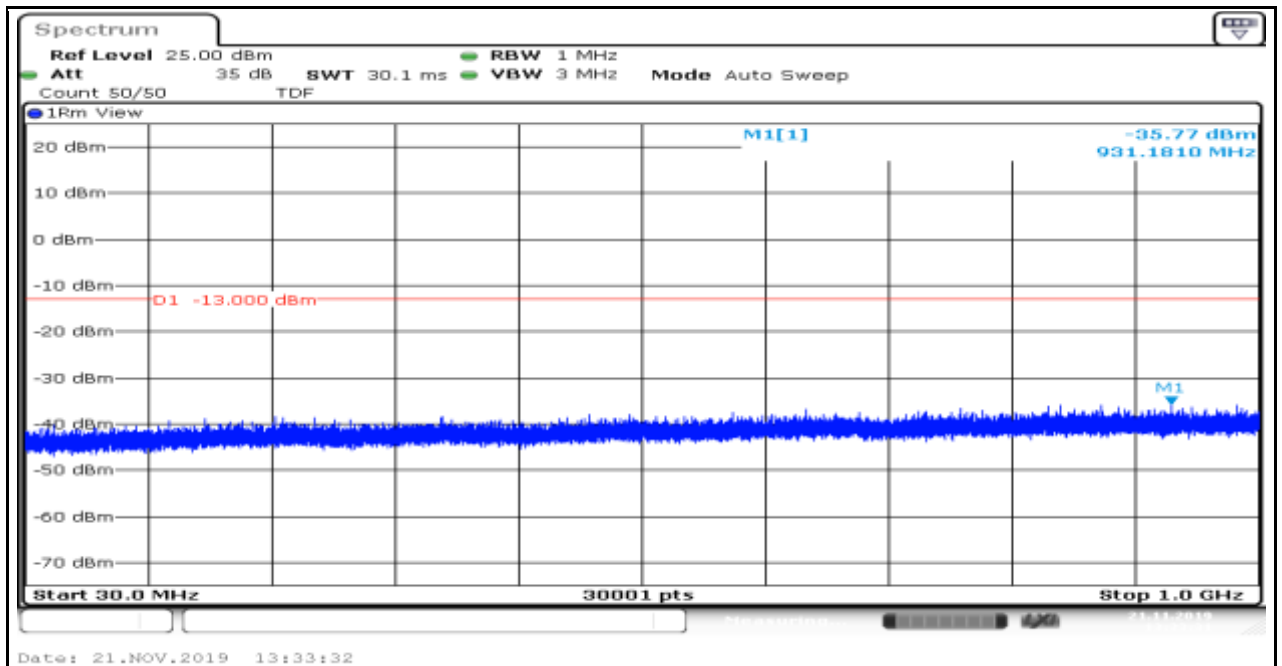
Band2_1.4MHz_QPSK_19193_1_5_Low_1000_5000_-33.71_PASS_



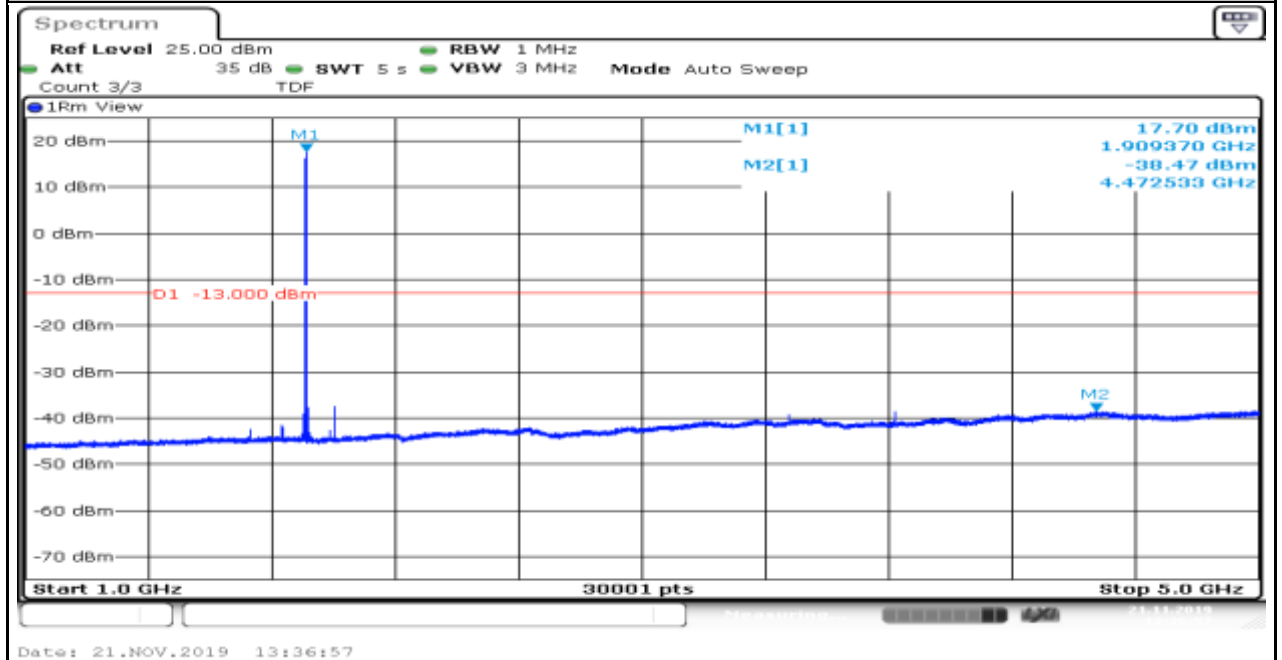
Band2_1.4MHz_QPSK_19193_1_5_Low_5000_12000_-44.55_PASS_



Band2_1.4MHz_QPSK_19193_1_5_Low_30_1000_-35.77_PASS_

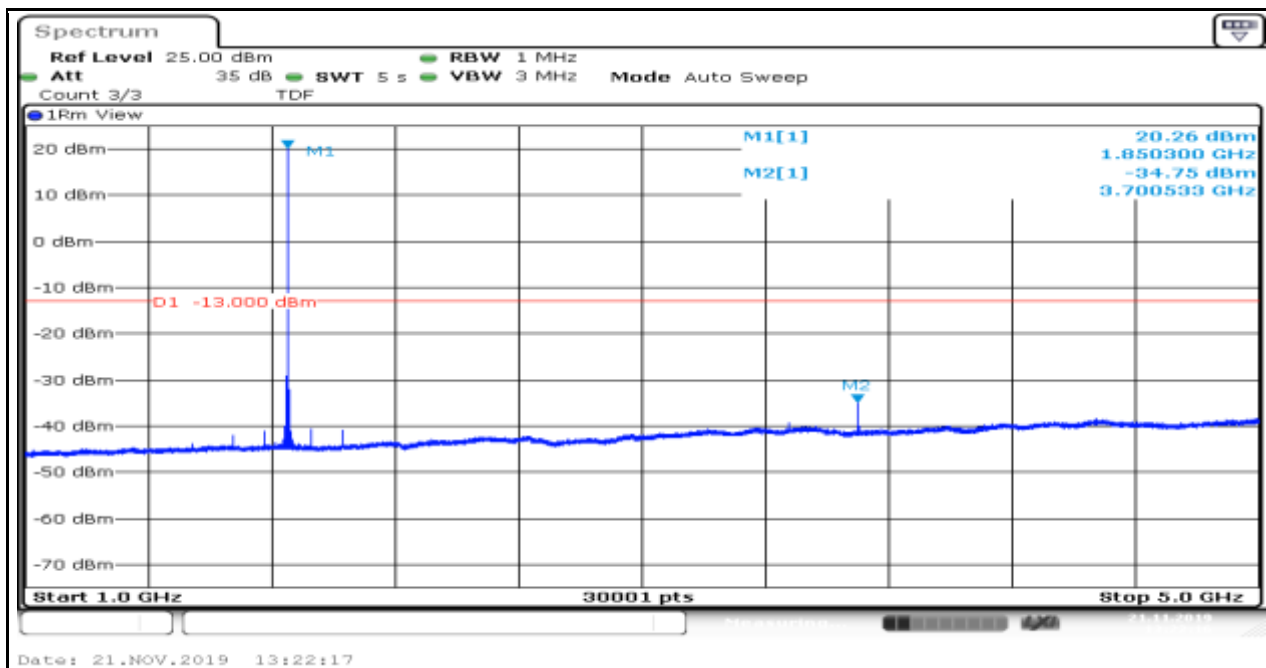


Band2_1.4MHz_QPSK_19193_6_0_Low_1000_5000_-38.47_PASS_

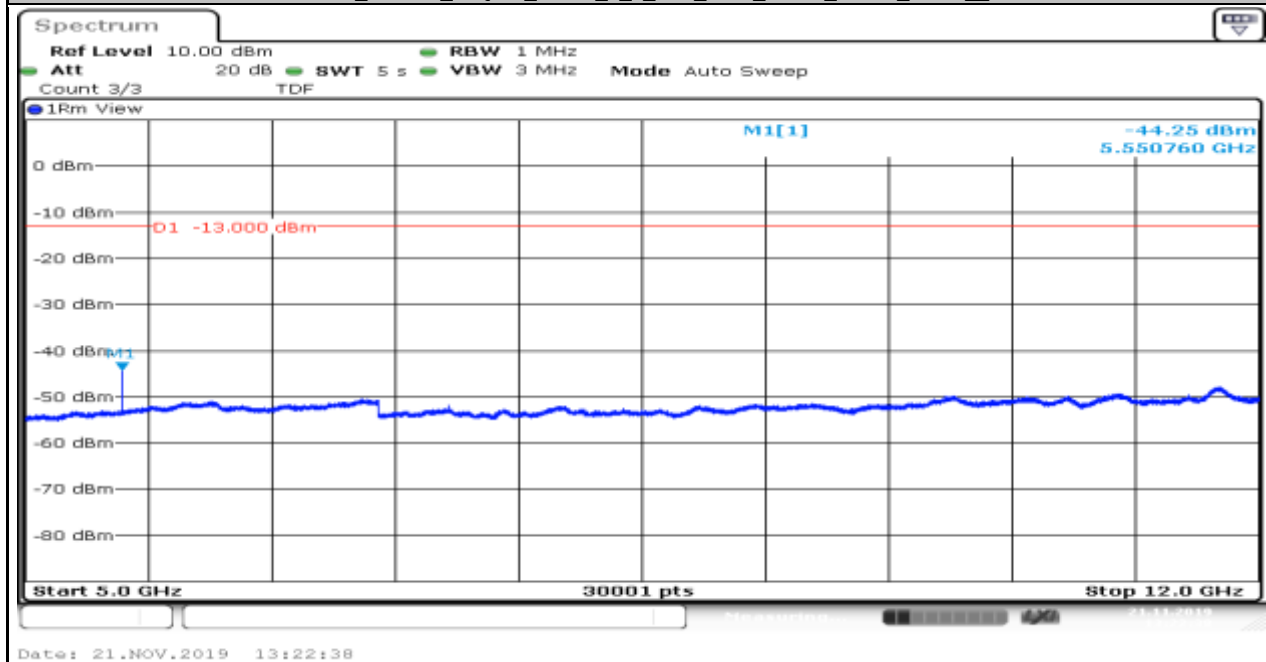


Band2_1.4MHz_16QAM_18607_1_0_Low_1000_5000_-34.75_PASS_

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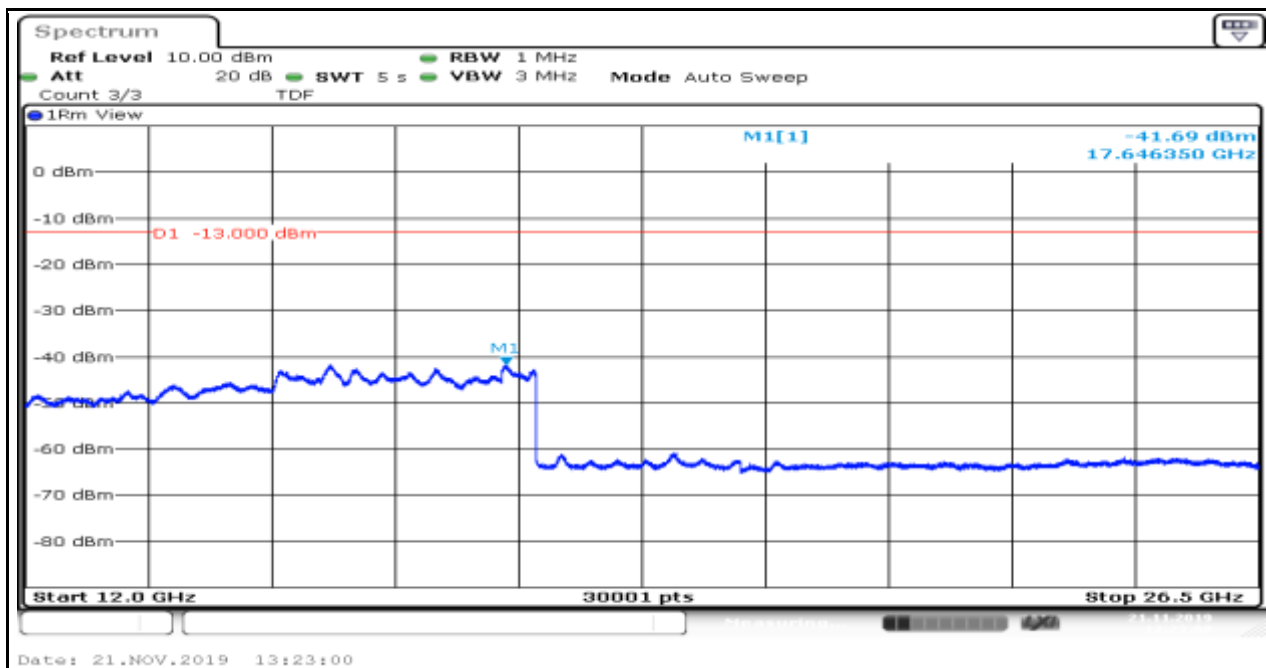


Band2_1.4MHz_16QAM_18607_1_0_Low_5000_12000_-44.25_PASS_

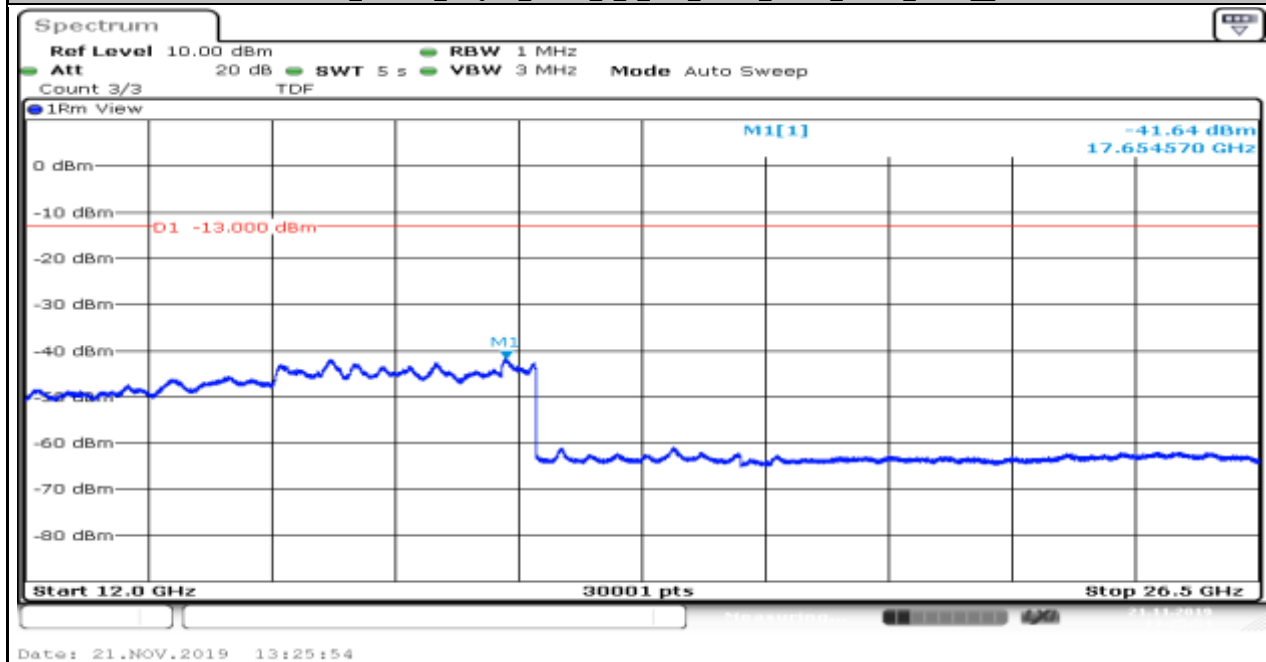


Band2_1.4MHz_16QAM_18607_1_0_Low_12000_26500_-41.69_PASS_

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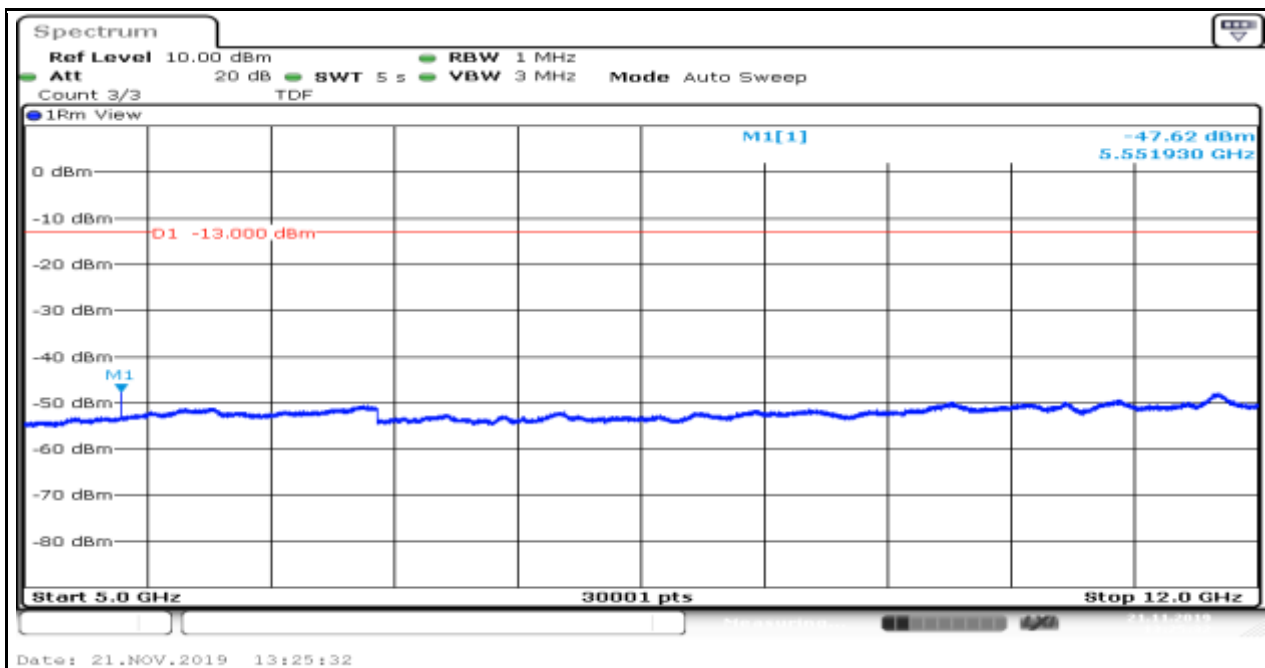


Band2_1.4MHz_16QAM_18607_6_0_Low_12000_26500_-41.64_PASS_

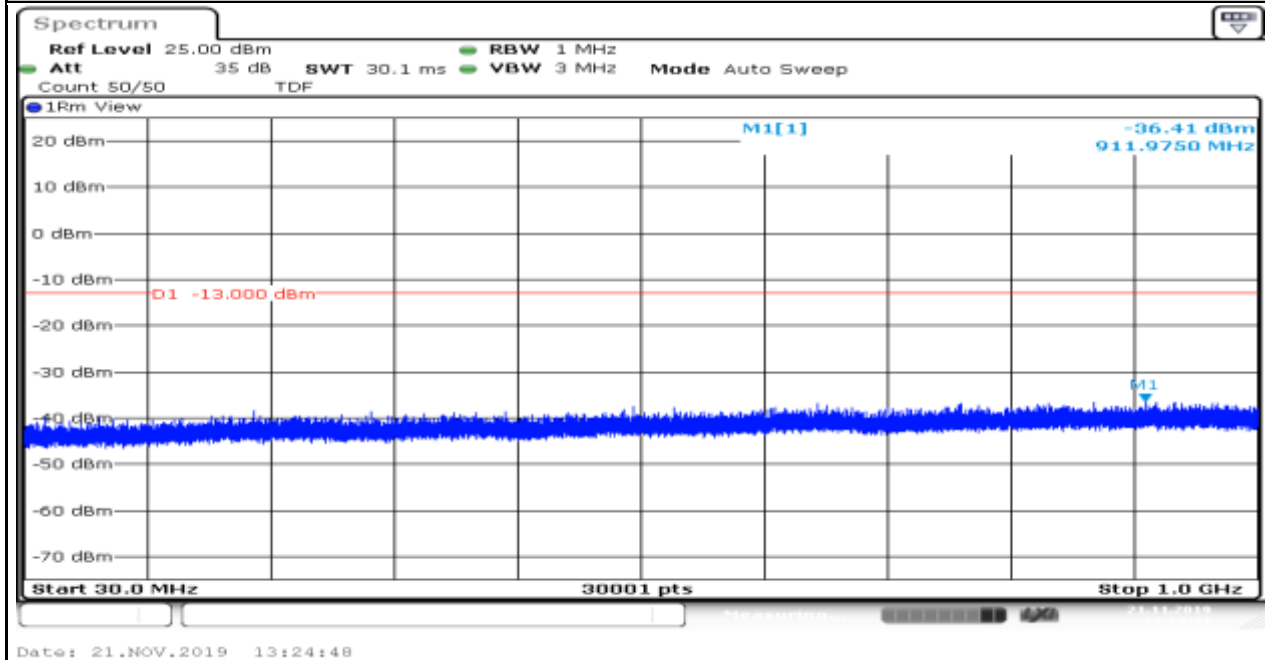


Band2_1.4MHz_16QAM_18607_6_0_Low_5000_12000_-47.62_PASS_

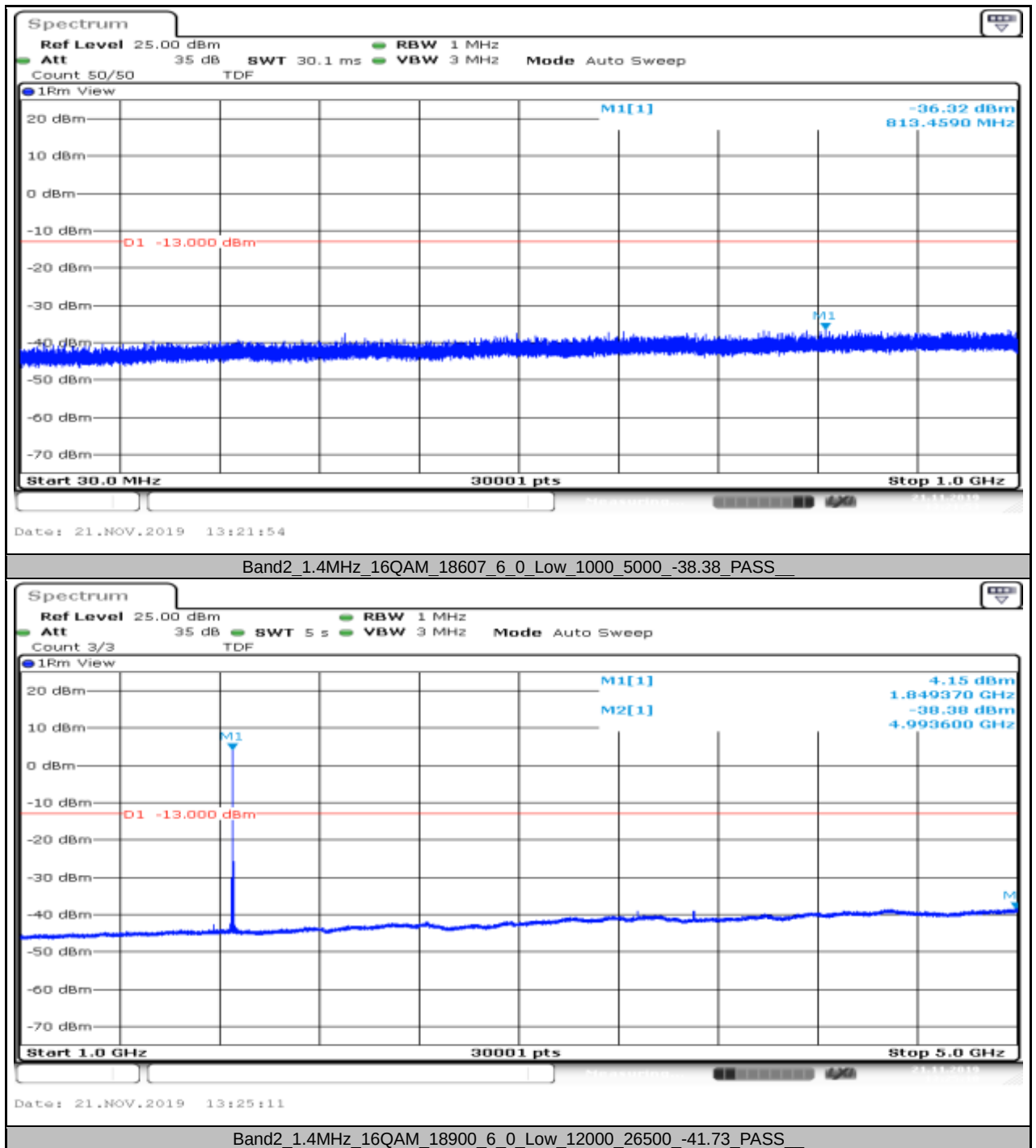
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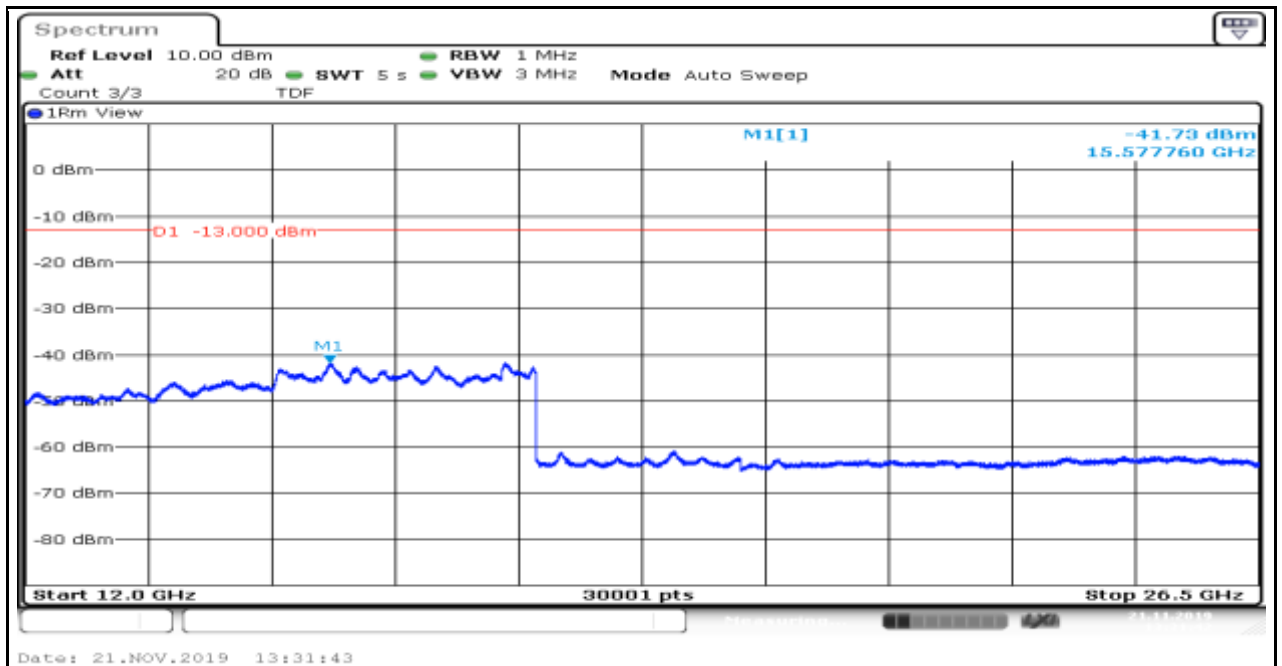


Band2_1.4MHz_16QAM_18607_6_0_Low_30_1000_-36.41_PASS_

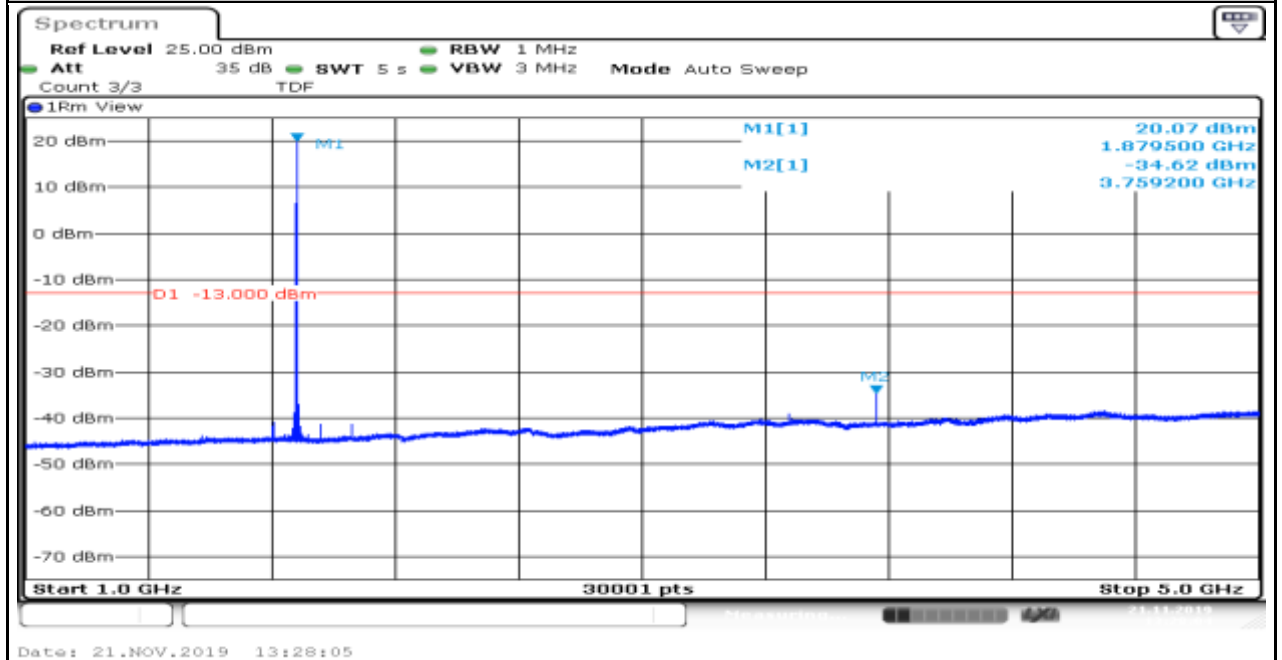


Band2_1.4MHz_16QAM_18607_1_0_Low_30_1000_-36.32_PASS_

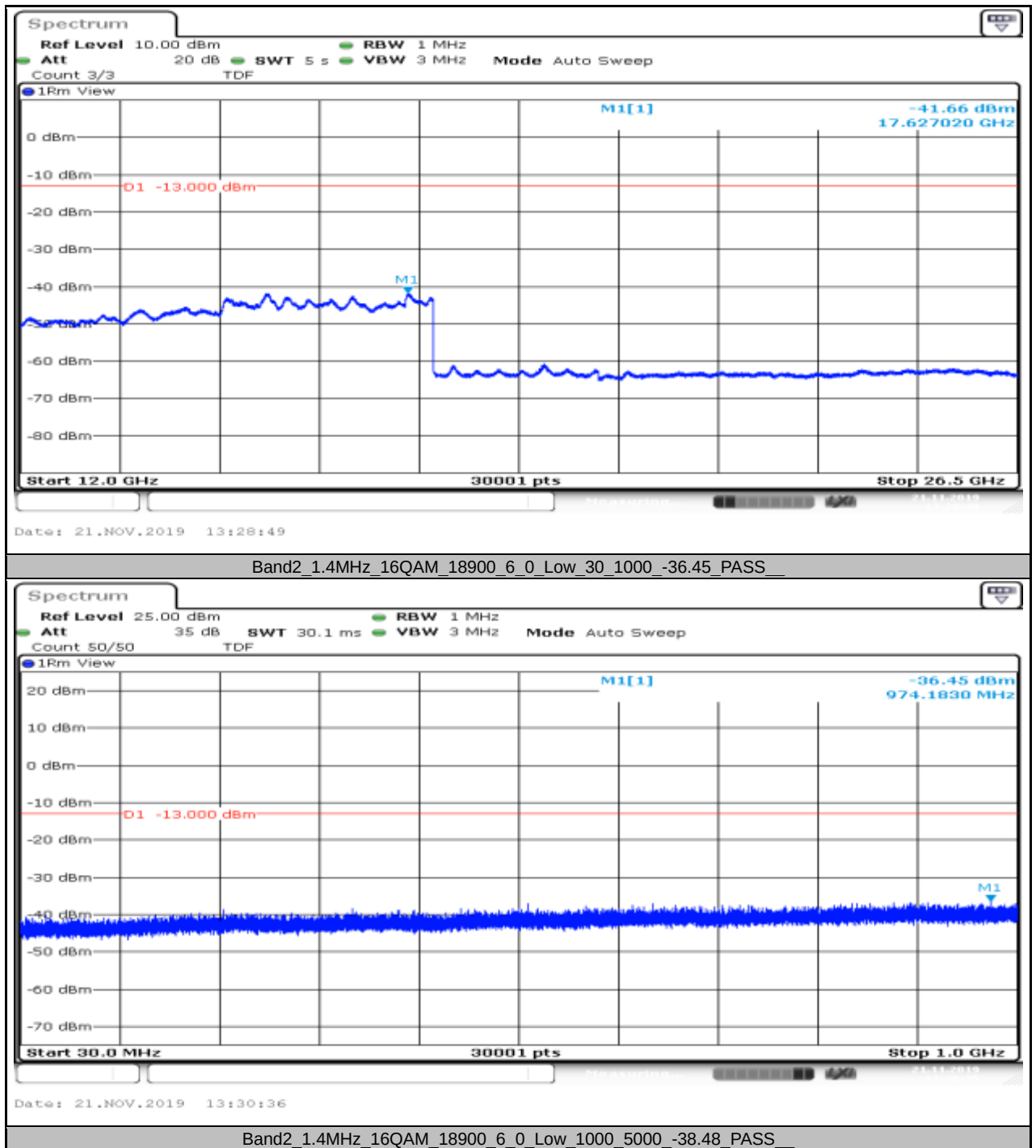




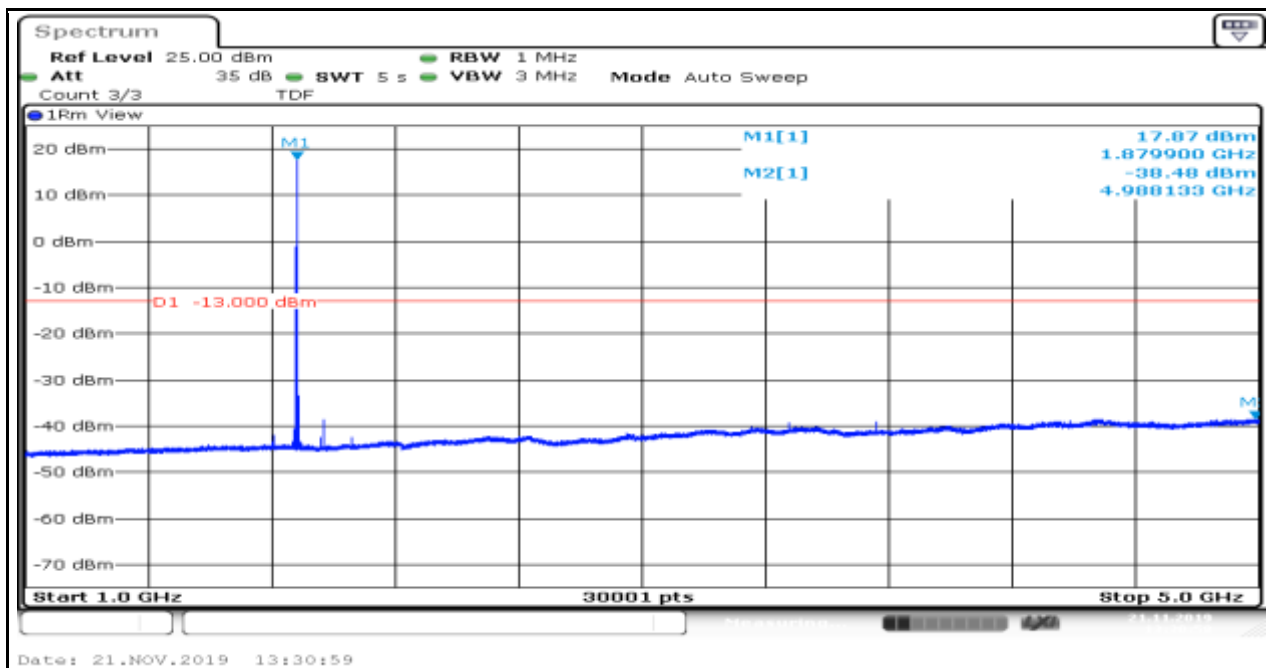
Band2_1.4MHz_16QAM_18900_1_0_Low_1000_5000_-34.62_PASS_



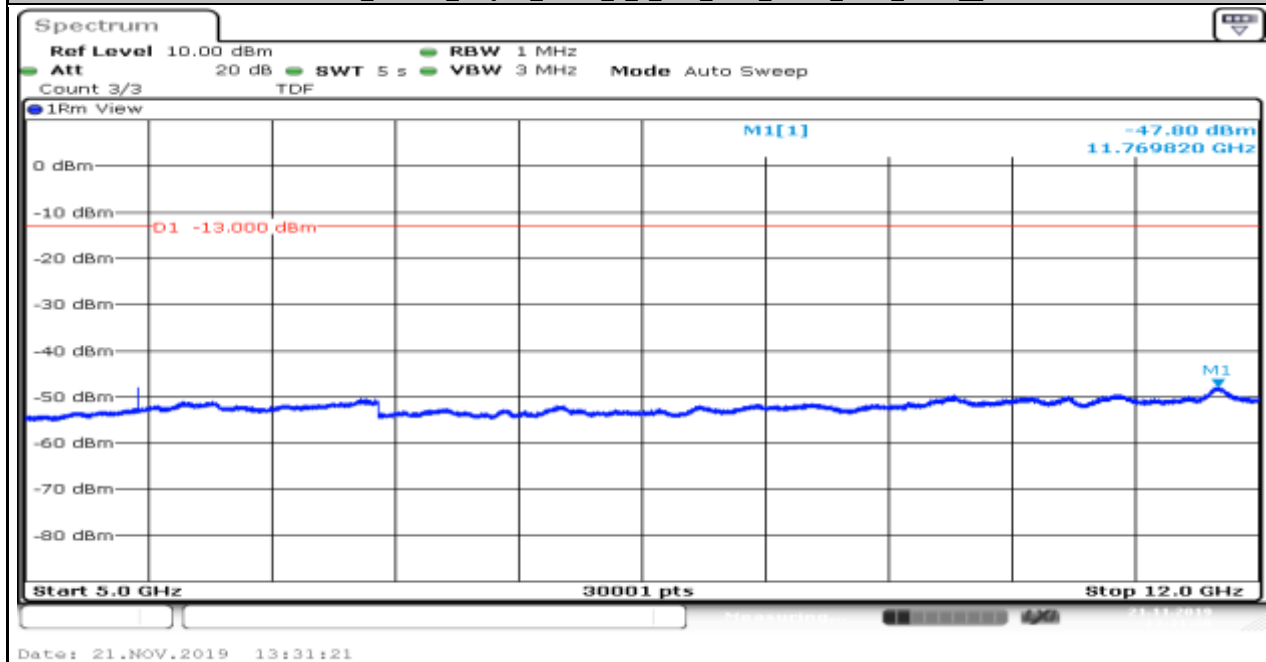
Band2_1.4MHz_16QAM_18900_1_0_Low_12000_26500_-41.66_PASS_



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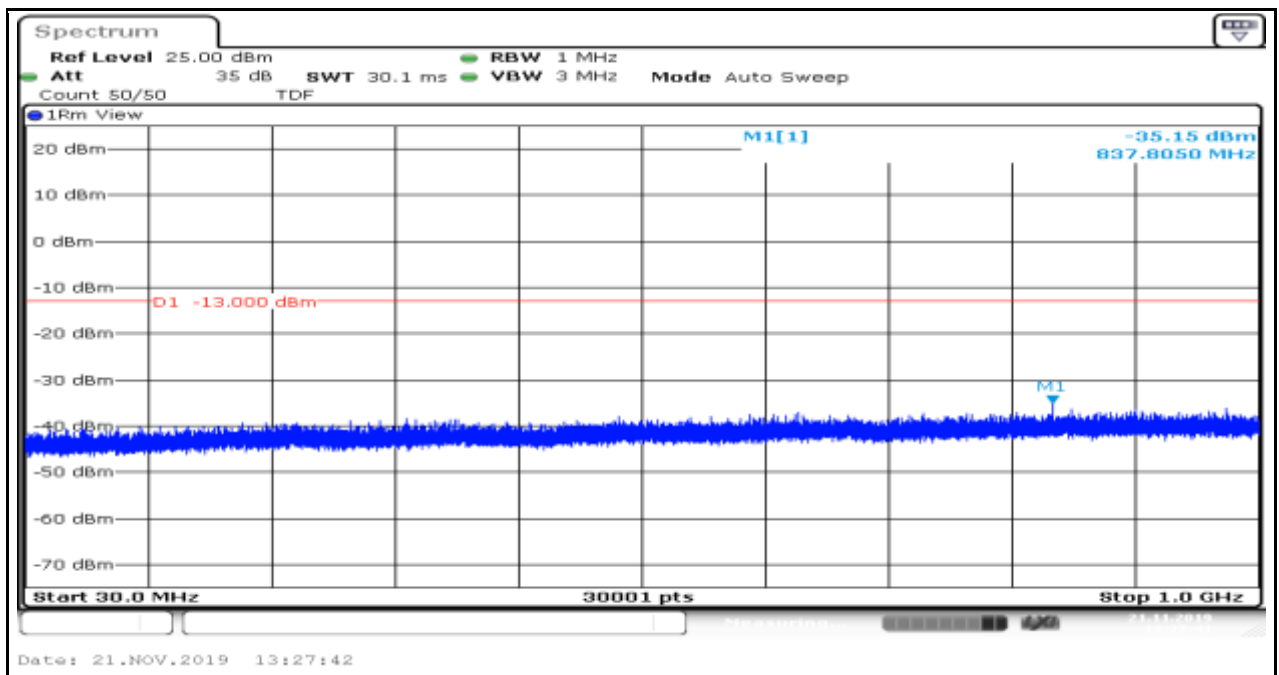


Band2_1.4MHz_16QAM_18900_6_0_Low_5000_12000_-47.8_PASS_

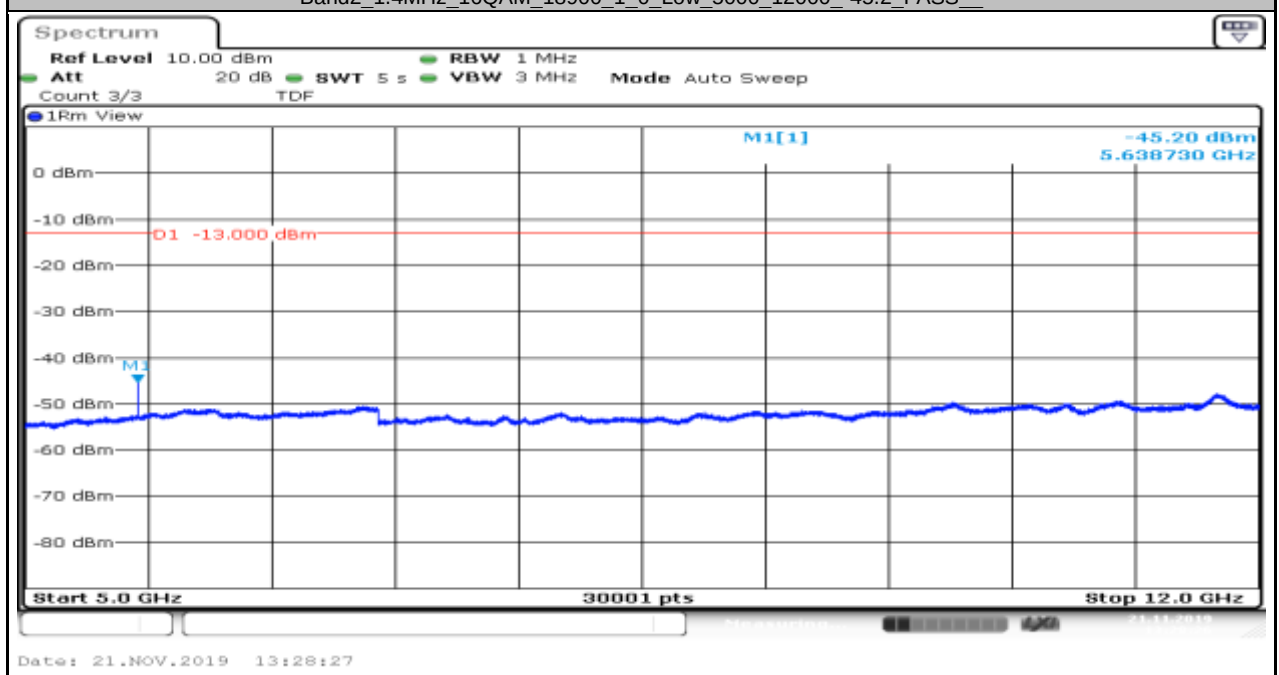


Band2_1.4MHz_16QAM_18900_1_0_Low_30_1000_-35.15_PASS_

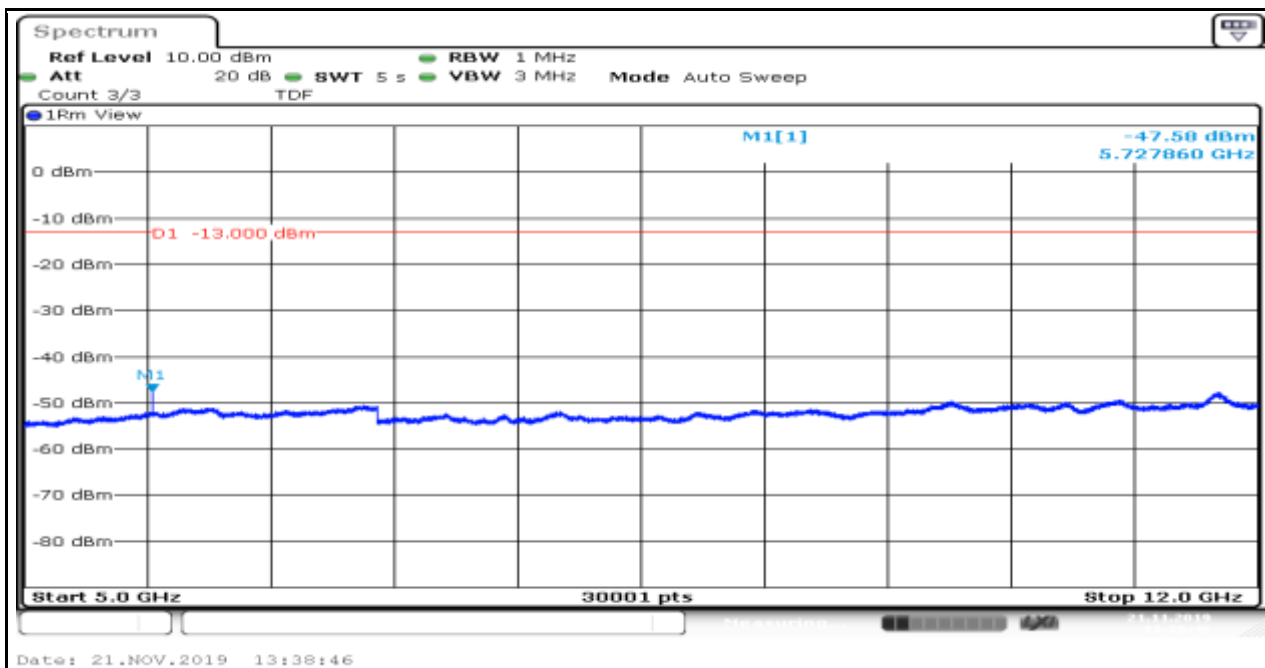
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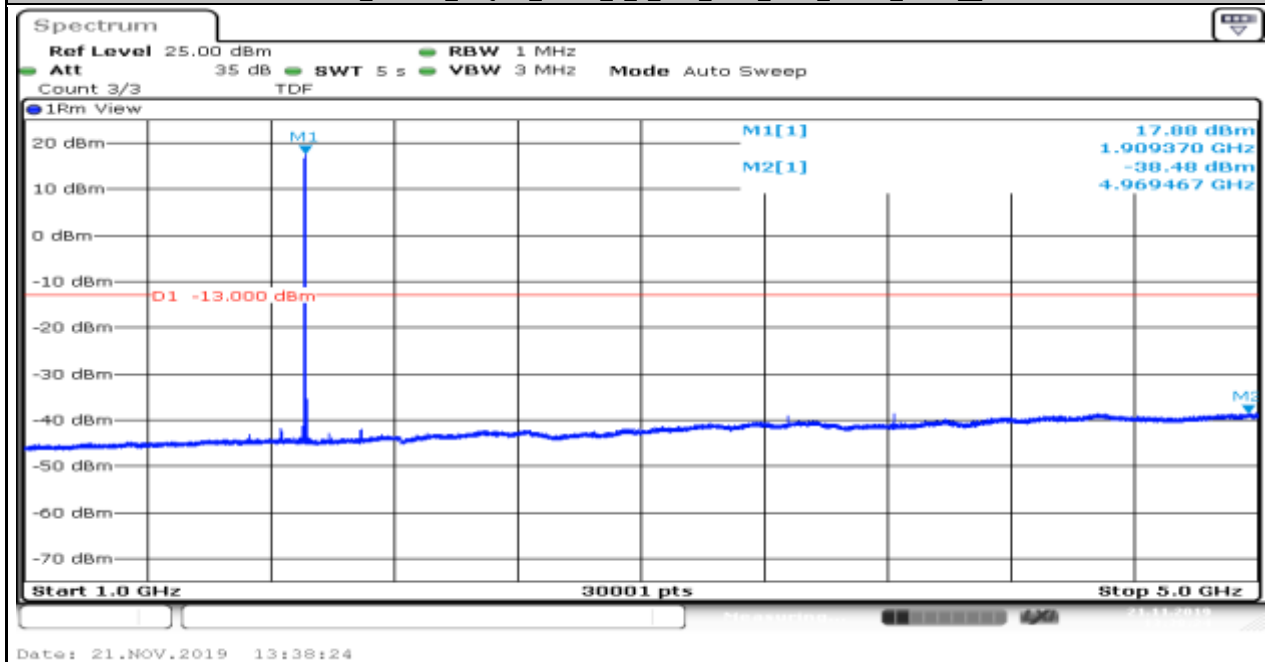
Band2_1.4MHz_16QAM_18900_1_0_Low_5000_12000_-45.2_PASS_



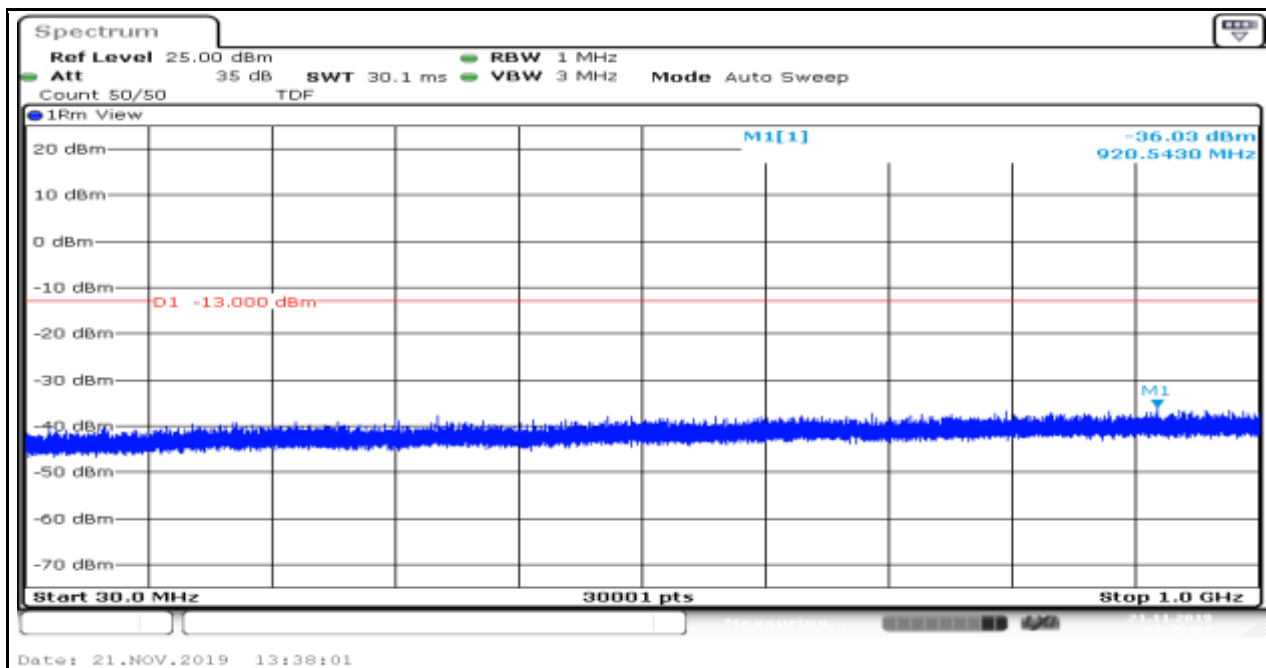
Band2_1.4MHz_16QAM_19193_6_0_Low_5000_12000_-47.58_PASS_



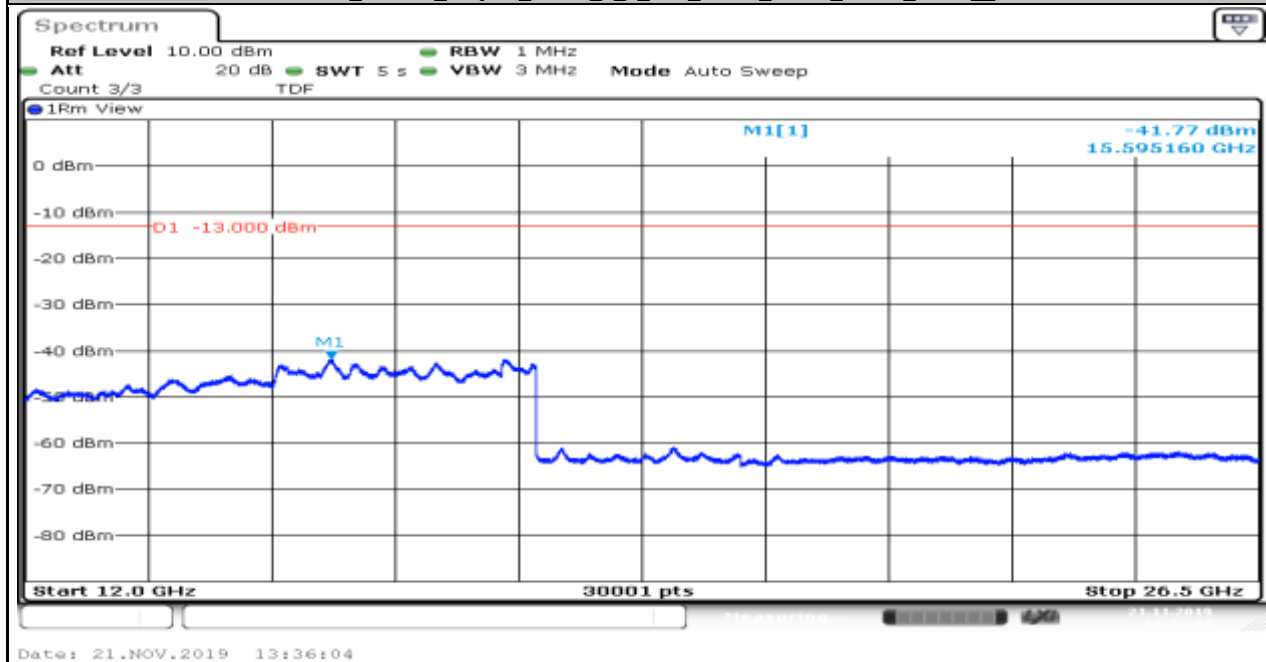
Band2_1.4MHz_16QAM_19193_6_0_Low_1000_5000_-38.48_PASS_



Band2_1.4MHz_16QAM_19193_6_0_Low_30_1000_-36.03_PASS_

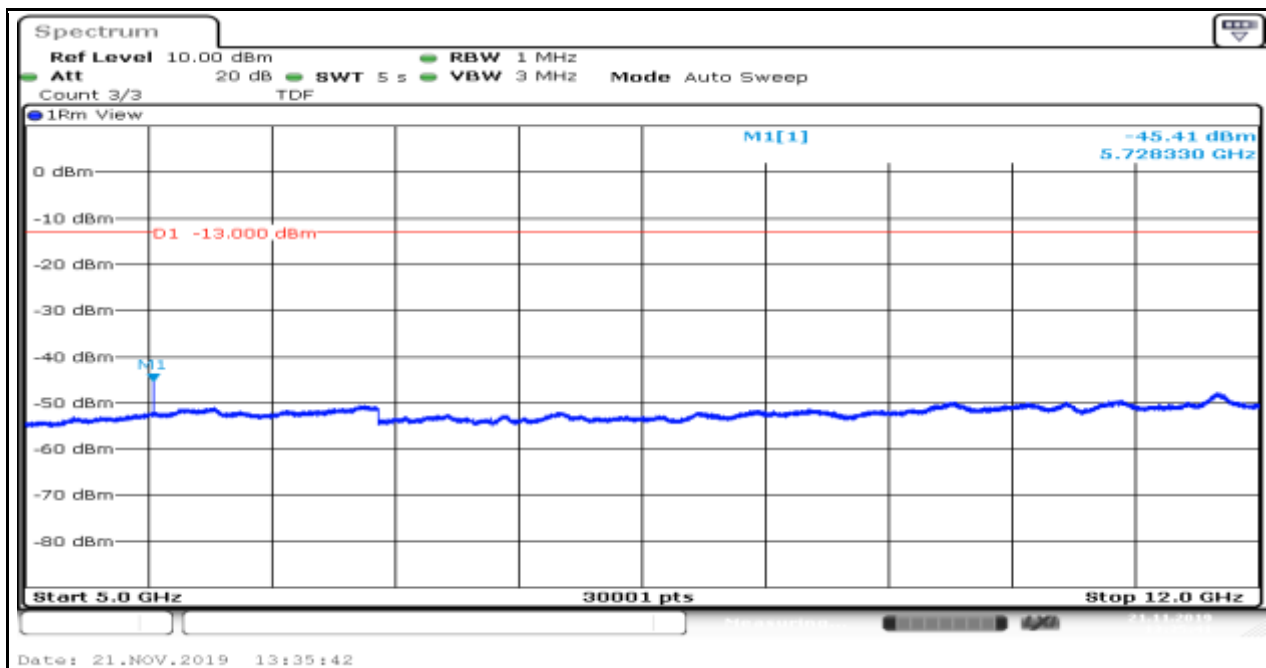


Band2_1.4MHz_16QAM_19193_1_5_Low_12000_26500_-41.77_PASS_

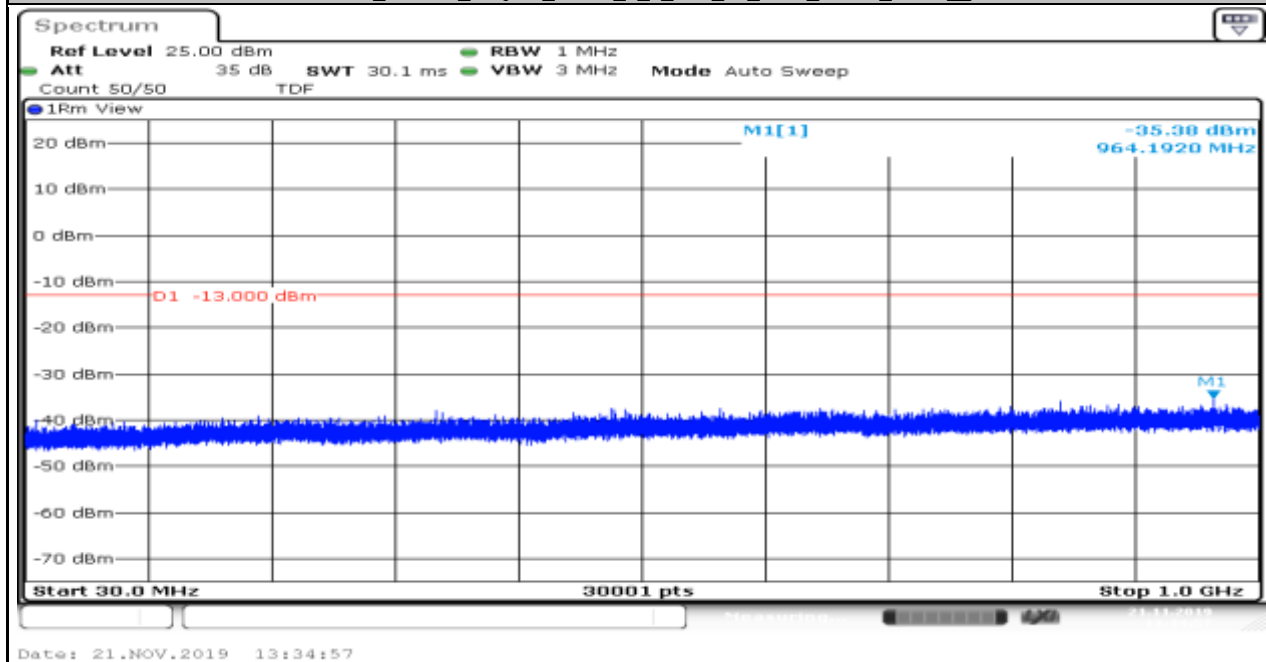


Band2_1.4MHz_16QAM_19193_1_5_Low_5000_12000_-45.41_PASS_

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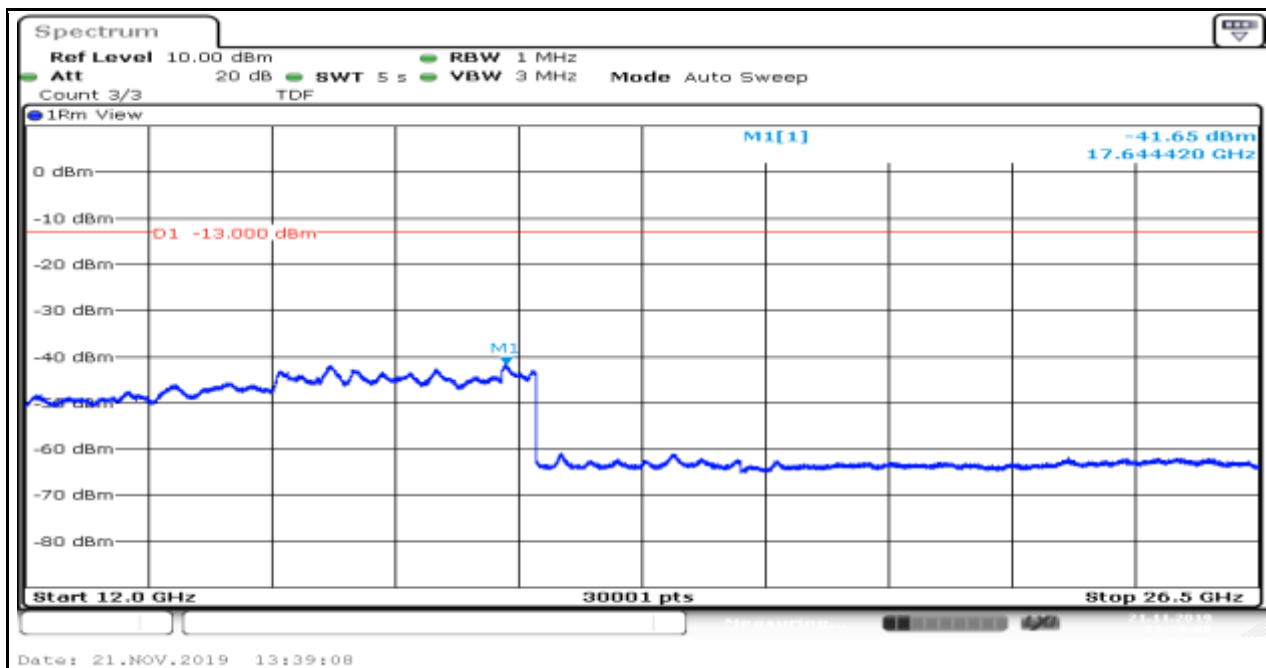


Band2_1.4MHz_16QAM_19193_1_5_Low_30_1000_-35.38_PASS_

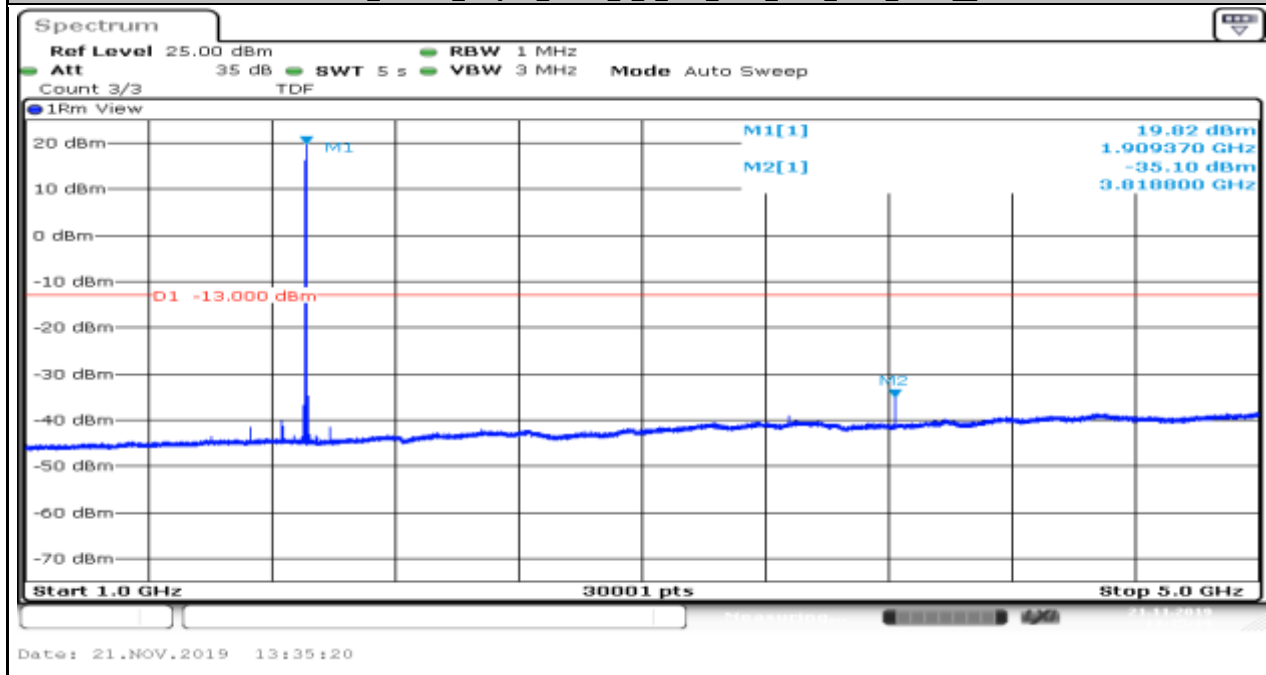


Band2_1.4MHz_16QAM_19193_6_0_Low_12000_26500_-41.65_PASS_

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Band2_1.4MHz_16QAM_19193_1_5_Low_1000_5000_-35.1_PASS



Appendix A.6: Frequency Stability for M1

Test Result

Voltage												
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band2	1.4MHz	QPSK	18900	1	0	Low	LV	NT	10.29	0.005473	±2.5	PASS
Band2	1.4MHz	QPSK	18900	1	0	Low	HV	NT	11.44	0.006085	±2.5	PASS
Band2	1.4MHz	QPSK	18900	1	0	Low	NV	NT	7.4	0.003936	±2.5	PASS
Band2	1.4MHz	16QAM	18900	1	0	Low	HV	NT	72.44	0.038532	±2.5	PASS
Band2	1.4MHz	16QAM	18900	1	0	Low	NV	NT	68.88	0.036638	±2.5	PASS
Band2	1.4MHz	16QAM	18900	1	0	Low	LV	NT	67.08	0.035681	±2.5	PASS

Temperature												
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band2	1.4MHz	QPSK	18900	1	0	Low	NV	20	11.83	0.006293	±2.5	PASS
Band2	1.4MHz	QPSK	18900	1	0	Low	NV	80	-7.25	-0.00386	±2.5	PASS
Band2	1.4MHz	QPSK	18900	1	0	Low	NV	70	9.2	0.004894	±2.5	PASS
Band2	1.4MHz	QPSK	18900	1	0	Low	NV	60	9.5	0.005053	±2.5	PASS
Band2	1.4MHz	QPSK	18900	1	0	Low	NV	50	13.36	0.007106	±2.5	PASS
Band2	1.4MHz	QPSK	18900	1	0	Low	NV	30	8.75	0.004654	±2.5	PASS
Band2	1.4MHz	QPSK	18900	1	0	Low	NV	85	7.88	0.004191	±2.5	PASS
Band2	1.4MHz	QPSK	18900	1	0	Low	NV	10	12.83	0.006824	±2.5	PASS
Band2	1.4MHz	QPSK	18900	1	0	Low	NV	0	11.03	0.005867	±2.5	PASS
Band2	1.4MHz	QPSK	18900	1	0	Low	NV	-10	6.59	0.003505	±2.5	PASS
Band2	1.4MHz	QPSK	18900	1	0	Low	NV	-20	9.13	0.004856	±2.5	PASS
Band2	1.4MHz	QPSK	18900	1	0	Low	NV	-30	7.78	0.004138	±2.5	PASS
Band2	1.4MHz	QPSK	18900	1	0	Low	NV	-40	10.64	0.00566	±2.5	PASS
Band2	1.4MHz	QPSK	18900	1	0	Low	NV	40	12.09	0.006431	±2.5	PASS
Band2	1.4MHz	16QAM	18900	1	0	Low	NV	20	64.89	0.034516	±2.5	PASS
Band2	1.4MHz	16QAM	18900	1	0	Low	NV	70	72.94	0.038798	±2.5	PASS
Band2	1.4MHz	16QAM	18900	1	0	Low	NV	80	71.97	0.038282	±2.5	PASS
Band2	1.4MHz	16QAM	18900	1	0	Low	NV	85	73.56	0.039128	±2.5	PASS
Band2	1.4MHz	16QAM	18900	1	0	Low	NV	60	69.65	0.037048	±2.5	PASS
Band2	1.4MHz	16QAM	18900	1	0	Low	NV	50	65.72	0.034957	±2.5	PASS
Band2	1.4MHz	16QAM	18900	1	0	Low	NV	40	69.94	0.037202	±2.5	PASS
Band2	1.4MHz	16QAM	18900	1	0	Low	NV	30	67.52	0.035915	±2.5	PASS
Band2	1.4MHz	16QAM	18900	1	0	Low	NV	10	68.84	0.036617	±2.5	PASS
Band2	1.4MHz	16QAM	18900	1	0	Low	NV	0	69.57	0.037005	±2.5	PASS
Band2	1.4MHz	16QAM	18900	1	0	Low	NV	-10	68.02	0.036181	±2.5	PASS
Band2	1.4MHz	16QAM	18900	1	0	Low	NV	-30	67.08	0.035681	±2.5	PASS
Band2	1.4MHz	16QAM	18900	1	0	Low	NV	-40	67.99	0.036165	±2.5	PASS
Band2	1.4MHz	16QAM	18900	1	0	Low	NV	-20	71.71	0.038144	±2.5	PASS

Appendix B: Test Results of Band 4 for eMTC operation

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Test Result	48

Appendix B.1: RF Power Output and Effective (Isotropic) Radiated Power Output Data for M1

Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result (dBm)	EIRP		Limit (watts)	Verdict
								dBm	Watts		
Band4	1.4MHz	QPSK	19957	1	0	Low	21.56	23.70	0.234	1	PASS
Band4	1.4MHz	QPSK	20175	1	0	Low	21.86	24.00	0.251	1	PASS
Band4	1.4MHz	QPSK	20393	1	5	Low	21.81	23.95	0.248	1	PASS
Band4	1.4MHz	QPSK	19957	6	0	Low	19.34	21.48	0.141	1	PASS
Band4	1.4MHz	QPSK	20175	6	0	Low	19.43	21.57	0.144	1	PASS
Band4	1.4MHz	QPSK	20393	6	0	Low	19.7	21.84	0.153	1	PASS
Band4	1.4MHz	16QAM	19957	1	0	Low	20.44	22.58	0.181	1	PASS
Band4	1.4MHz	16QAM	20175	1	0	Low	20.53	22.67	0.185	1	PASS
Band4	1.4MHz	16QAM	20393	1	5	Low	20.7	22.84	0.192	1	PASS
Band4	1.4MHz	16QAM	19957	6	0	Low	19.26	21.40	0.138	1	PASS
Band4	1.4MHz	16QAM	20175	6	0	Low	19.34	21.48	0.141	1	PASS
Band4	1.4MHz	16QAM	20393	6	0	Low	19.62	21.76	0.150	1	PASS
Band4	3MHz	QPSK	19965	1	0	Low	21.45	23.59	0.229	1	PASS
Band4	3MHz	QPSK	20175	1	0	Low	21.47	23.61	0.230	1	PASS
Band4	3MHz	QPSK	20385	1	5	High	21.72	23.86	0.243	1	PASS
Band4	3MHz	QPSK	19965	6	0	Low	19.24	21.38	0.137	1	PASS
Band4	3MHz	QPSK	20175	6	0	Low	19.34	21.48	0.141	1	PASS
Band4	3MHz	QPSK	20385	6	0	High	19.62	21.76	0.150	1	PASS
Band4	3MHz	16QAM	19965	1	0	Low	20.67	22.81	0.191	1	PASS
Band4	3MHz	16QAM	20175	1	0	Low	20.54	22.68	0.185	1	PASS
Band4	3MHz	16QAM	20385	1	5	High	20.84	22.98	0.199	1	PASS
Band4	3MHz	16QAM	19965	6	0	Low	19.24	21.38	0.137	1	PASS
Band4	3MHz	16QAM	20175	6	0	Low	19.33	21.47	0.140	1	PASS
Band4	3MHz	16QAM	20385	6	0	High	19.6	21.74	0.149	1	PASS
Band4	5MHz	QPSK	19975	1	0	Low	21.61	23.75	0.237	1	PASS
Band4	5MHz	QPSK	20175	1	0	Low	21.48	23.62	0.230	1	PASS
Band4	5MHz	QPSK	20375	1	5	High	21.66	23.80	0.240	1	PASS
Band4	5MHz	QPSK	20375	3	3	High	21.71	23.85	0.243	1	PASS
Band4	5MHz	QPSK	19975	6	0	Low	20.33	22.47	0.177	1	PASS
Band4	5MHz	QPSK	20175	6	0	Low	20.49	22.63	0.183	1	PASS
Band4	5MHz	16QAM	19975	1	0	Low	21.28	23.42	0.220	1	PASS
Band4	5MHz	16QAM	20175	1	0	Low	21.48	23.62	0.230	1	PASS
Band4	5MHz	16QAM	20375	1	5	High	21.31	23.45	0.221	1	PASS
Band4	5MHz	16QAM	20375	3	3	High	21.54	23.68	0.233	1	PASS
Band4	5MHz	16QAM	19975	6	0	Low	20.33	22.47	0.177	1	PASS
Band4	5MHz	16QAM	20175	6	0	Low	20.49	22.63	0.183	1	PASS
Band4	10MHz	QPSK	20000	1	0	Low	21.41	23.55	0.226	1	PASS
Band4	10MHz	QPSK	20175	1	0	Low	21.55	23.69	0.234	1	PASS
Band4	10MHz	QPSK	20350	1	5	High	21.76	23.90	0.245	1	PASS
Band4	10MHz	QPSK	20000	5	0	Low	21.2	23.34	0.216	1	PASS
Band4	10MHz	QPSK	20175	5	0	Low	21.36	23.50	0.224	1	PASS
Band4	10MHz	QPSK	20350	5	1	High	21.74	23.88	0.244	1	PASS
Band4	10MHz	16QAM	20000	1	0	Low	21.1	23.24	0.211	1	PASS
Band4	10MHz	16QAM	20175	1	0	Low	21.23	23.37	0.217	1	PASS
Band4	10MHz	16QAM	20350	1	5	High	21.39	23.53	0.225	1	PASS
Band4	10MHz	16QAM	20000	5	0	Low	21.23	23.37	0.217	1	PASS
Band4	10MHz	16QAM	20175	5	0	Low	21.27	23.41	0.219	1	PASS
Band4	10MHz	16QAM	20350	5	1	High	21.59	23.73	0.236	1	PASS
Band4	15MHz	QPSK	20025	1	0	Low	21.55	23.69	0.234	1	PASS
Band4	15MHz	QPSK	20175	1	0	Low	21.63	23.77	0.238	1	PASS
Band4	15MHz	QPSK	20325	1	5	High	21.8	23.94	0.248	1	PASS

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Band4	15MHz	QPSK	20025	6	0	Low	21.34	23.48	0.223	1	PASS
Band4	15MHz	QPSK	20175	6	0	Low	21.36	23.50	0.224	1	PASS
Band4	15MHz	QPSK	20325	6	0	High	21.71	23.85	0.243	1	PASS
Band4	15MHz	16QAM	20025	1	0	Low	21.28	23.42	0.220	1	PASS
Band4	15MHz	16QAM	20175	1	0	Low	21.47	23.61	0.230	1	PASS
Band4	15MHz	16QAM	20325	1	5	High	21.4	23.54	0.226	1	PASS
Band4	15MHz	16QAM	20025	6	0	Low	21.34	23.48	0.223	1	PASS
Band4	15MHz	16QAM	20175	6	0	Low	21.36	23.50	0.224	1	PASS
Band4	15MHz	16QAM	20325	6	0	High	21.7	23.84	0.242	1	PASS
Band4	20MHz	QPSK	20050	1	0	Low	21.57	23.71	0.235	1	PASS
Band4	20MHz	QPSK	20175	1	0	Low	21.65	23.79	0.239	1	PASS
Band4	20MHz	QPSK	20300	1	5	High	21.78	23.92	0.247	1	PASS
Band4	20MHz	QPSK	20050	6	0	Low	21.35	23.49	0.223	1	PASS
Band4	20MHz	QPSK	20175	6	0	Low	21.43	23.57	0.228	1	PASS
Band4	20MHz	QPSK	20300	6	0	High	21.73	23.87	0.244	1	PASS
Band4	20MHz	16QAM	20050	1	0	Low	21.19	23.33	0.215	1	PASS
Band4	20MHz	16QAM	20175	1	0	Low	21.47	23.61	0.230	1	PASS
Band4	20MHz	16QAM	20300	1	5	High	21.33	23.47	0.222	1	PASS
Band4	20MHz	16QAM	20050	6	0	Low	21.35	23.49	0.223	1	PASS
Band4	20MHz	16QAM	20175	6	0	Low	21.44	23.58	0.228	1	PASS
Band4	20MHz	16QAM	20300	6	0	High	21.73	23.87	0.244	1	PASS

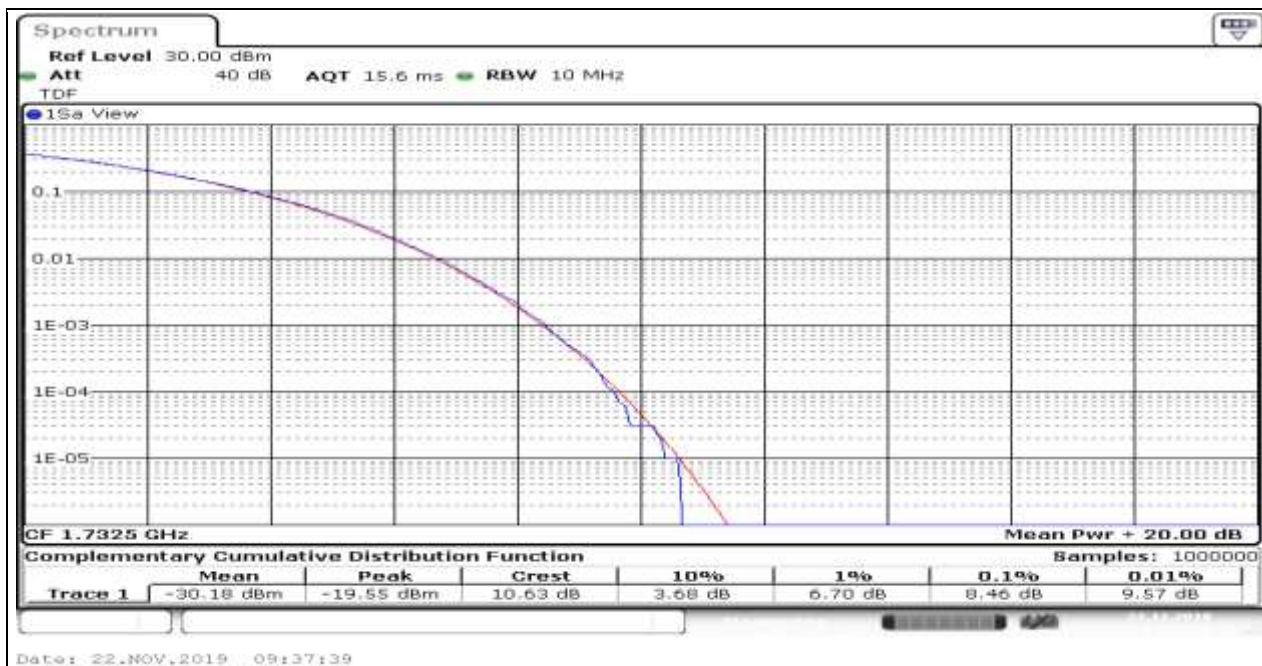
Appendix B.2: Peak-to-Average Ratio (CCDF) for M1

Test Result

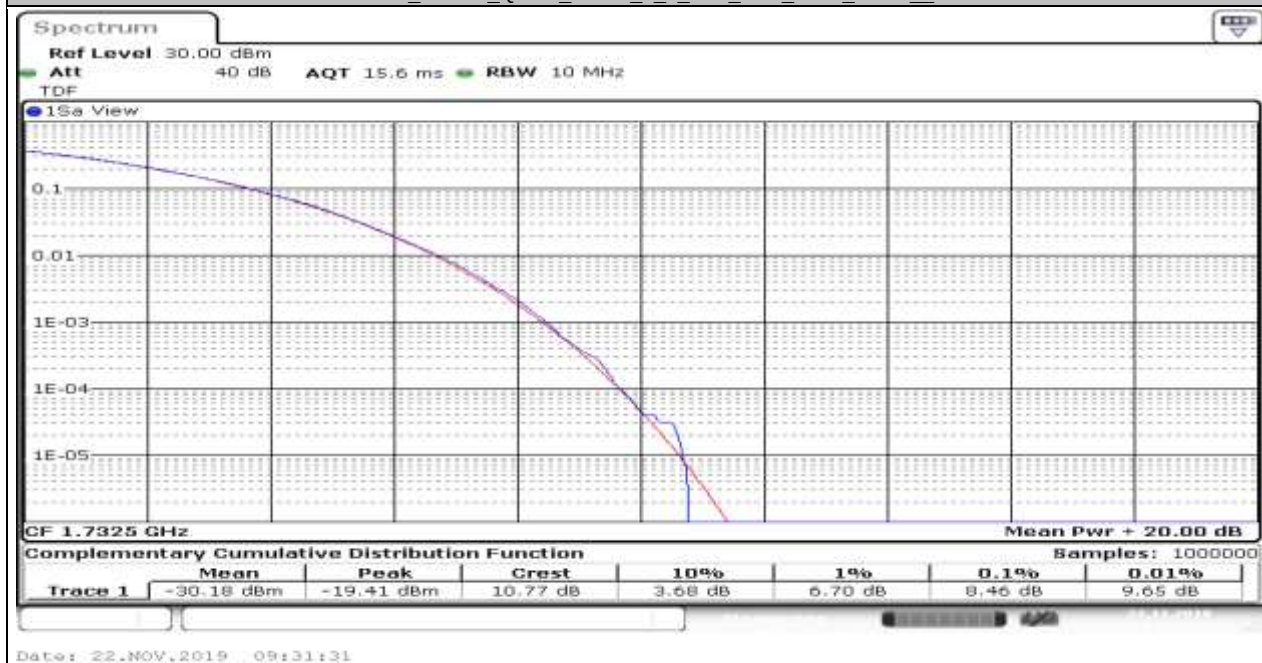
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result(dB)	Limit(dB)	Verdict
Band4	20MHz	QPSK	20175	6	0	Low	8.43	<=13	PASS
Band4	15MHz	QPSK	20175	6	0	Low	8.46	<=13	PASS
Band4	10MHz	QPSK	20175	6	0	Low	8.46	<=13	PASS
Band4	5MHz	QPSK	20175	6	0	Low	8.41	<=13	PASS
Band4	3MHz	QPSK	20175	6	0	Low	8.46	<=13	PASS
Band4	1.4MHz	QPSK	20175	6	0	Low	8.35	<=13	PASS
Band4	20MHz	16QAM	20175	6	0	Low	8.35	<=13	PASS
Band4	15MHz	16QAM	20175	6	0	Low	9.25	<=13	PASS
Band4	10MHz	16QAM	20175	6	0	Low	10.93	<=13	PASS
Band4	5MHz	16QAM	20175	6	0	Low	8.70	<=13	PASS
Band4	3MHz	16QAM	20175	6	0	Low	8.93	<=13	PASS
Band4	1.4MHz	16QAM	20175	6	0	Low	9.88	<=13	PASS

Test Graphs

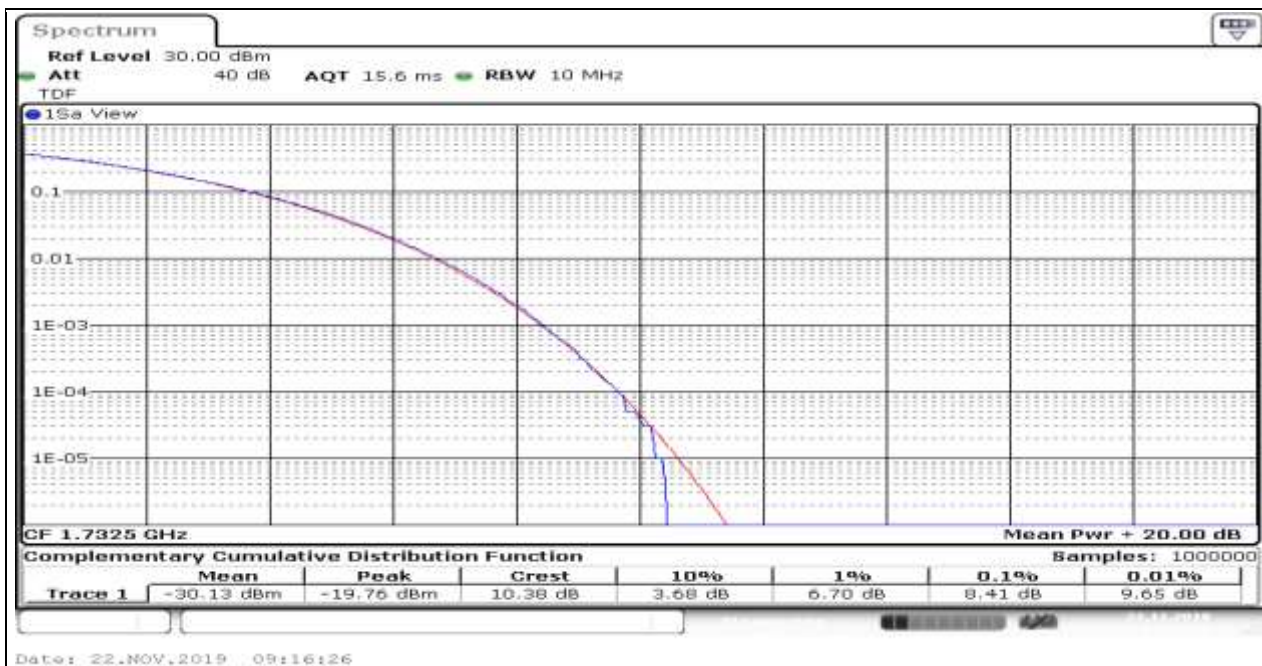




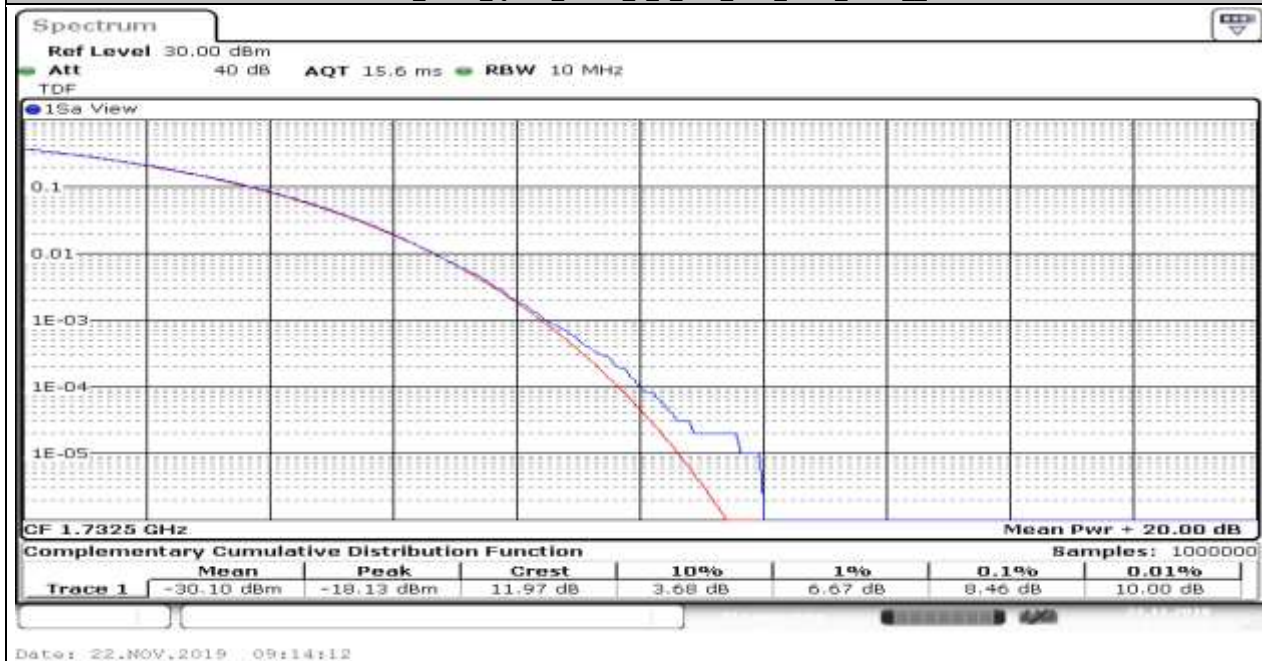
Band4_10MHz_QPSK_20175_6_0_Low_8.46_<=13_PASS



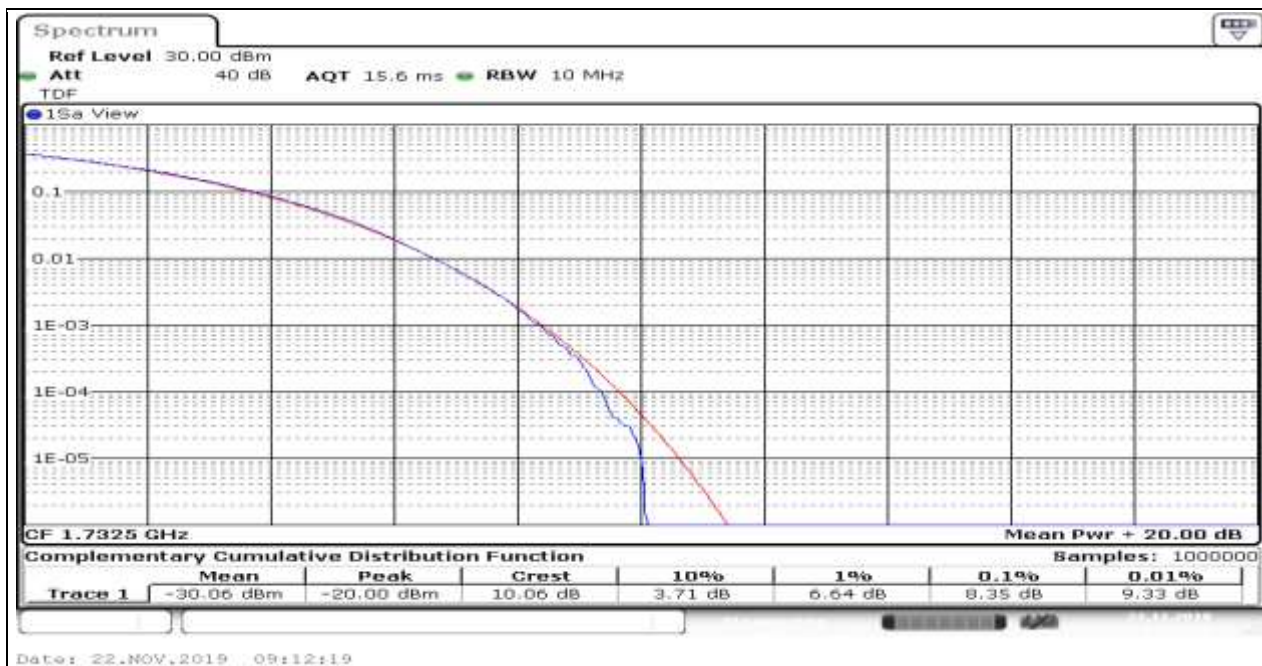
Band4_5MHz_QPSK_20175_6_0_Low_8.41_<=13_PASS



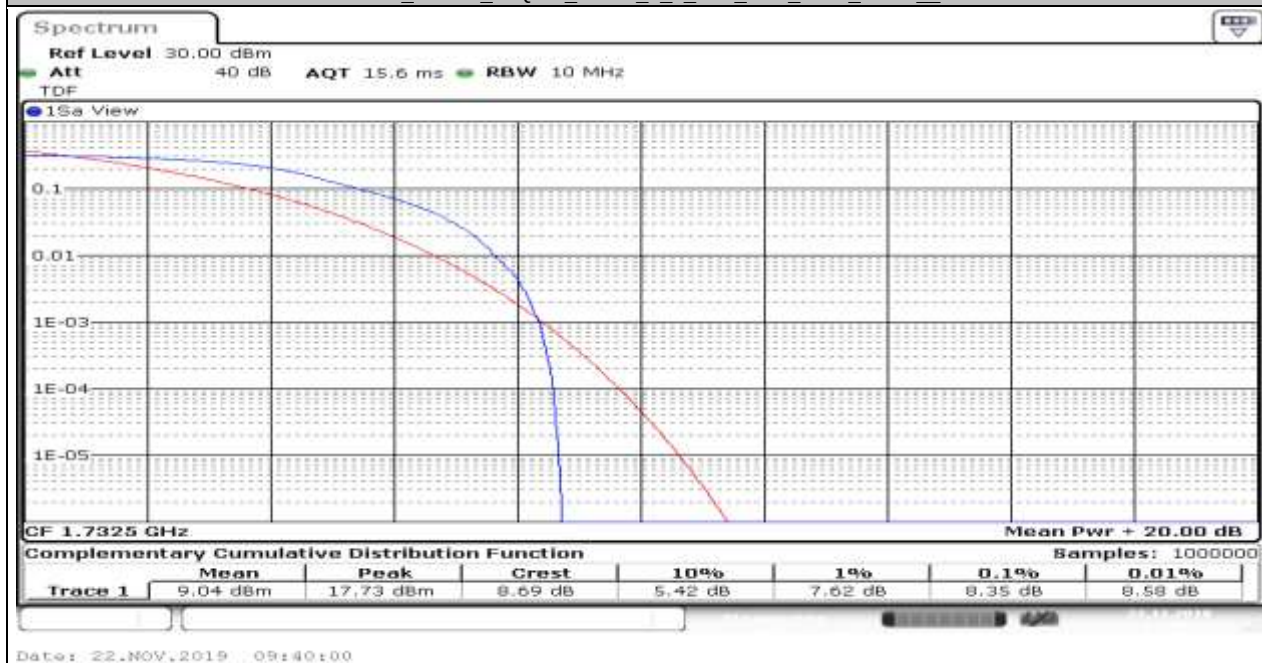
Band4_3MHz_QPSK_20175_6_0_Low_8.46_<=13_PASS



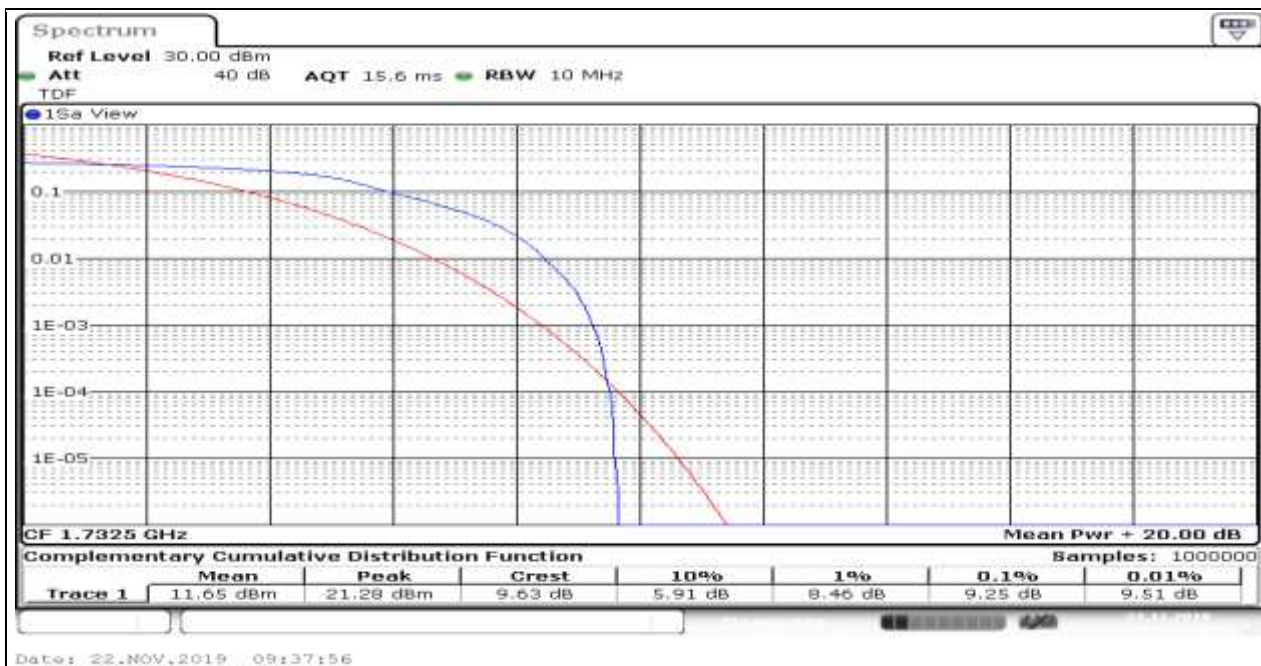
Band4_1.4MHz_QPSK_20175_6_0_Low_8.35_<=13_PASS



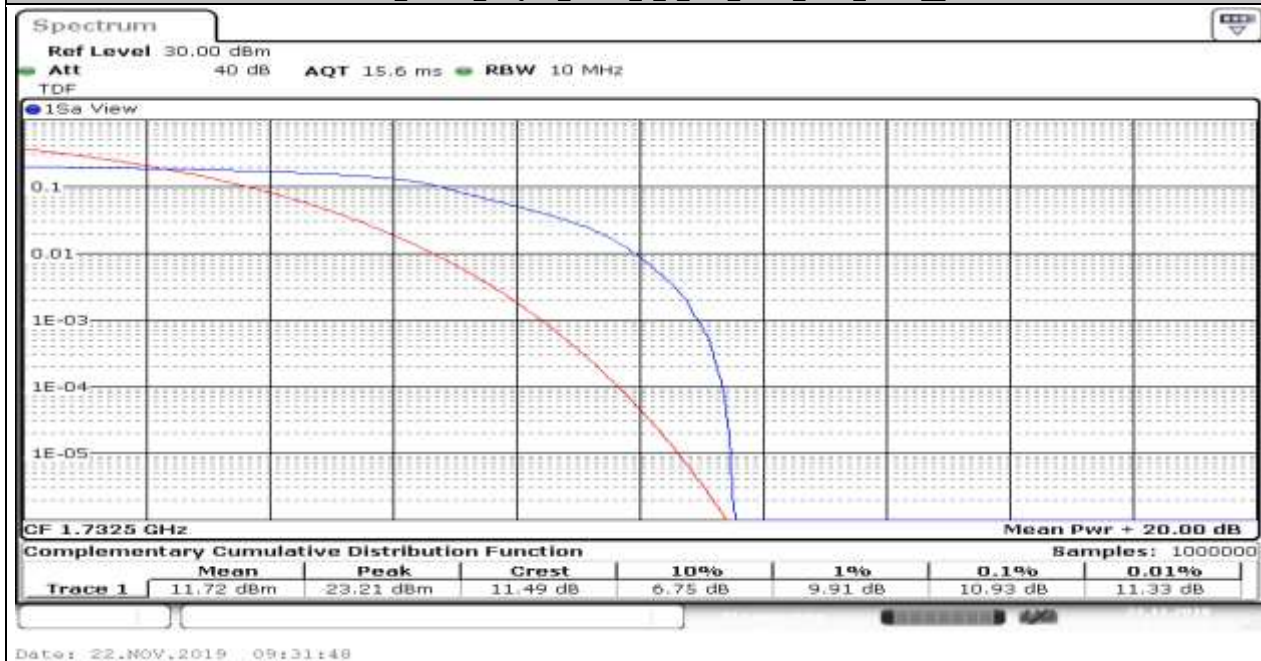
Band4_20MHz_16QAM_20175_6_0_Low_8.35_<=13_PASS



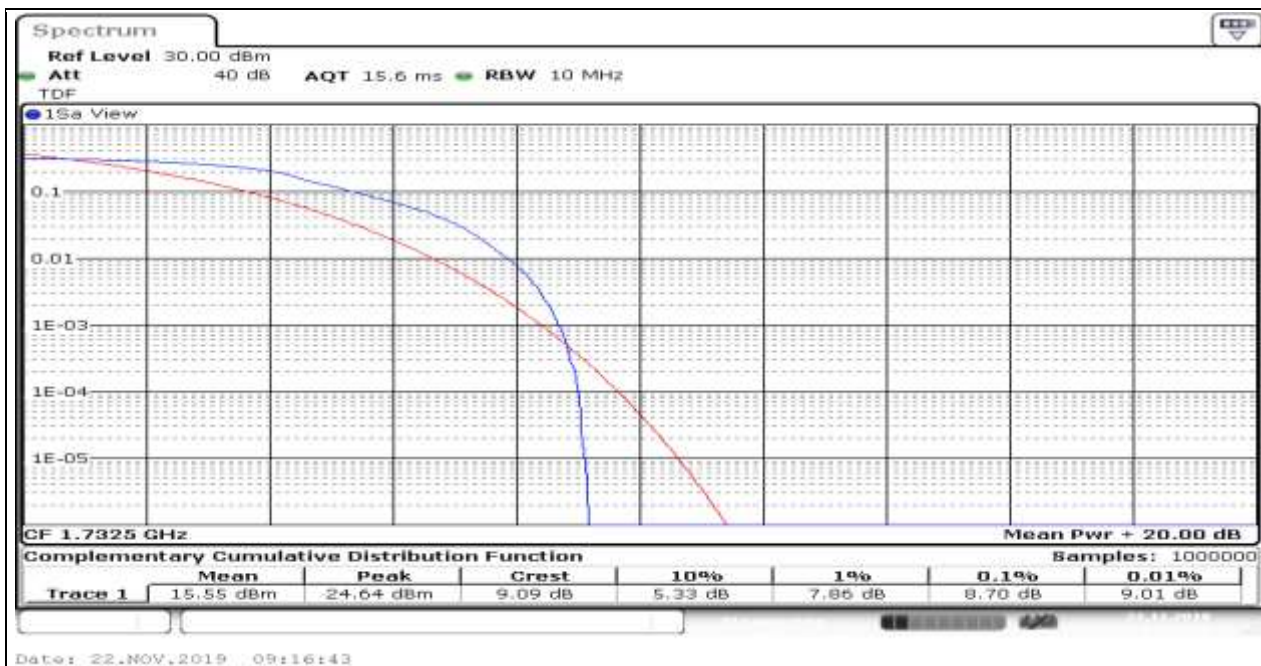
Band4_15MHz_16QAM_20175_6_0_Low_9.25_<=13_PASS



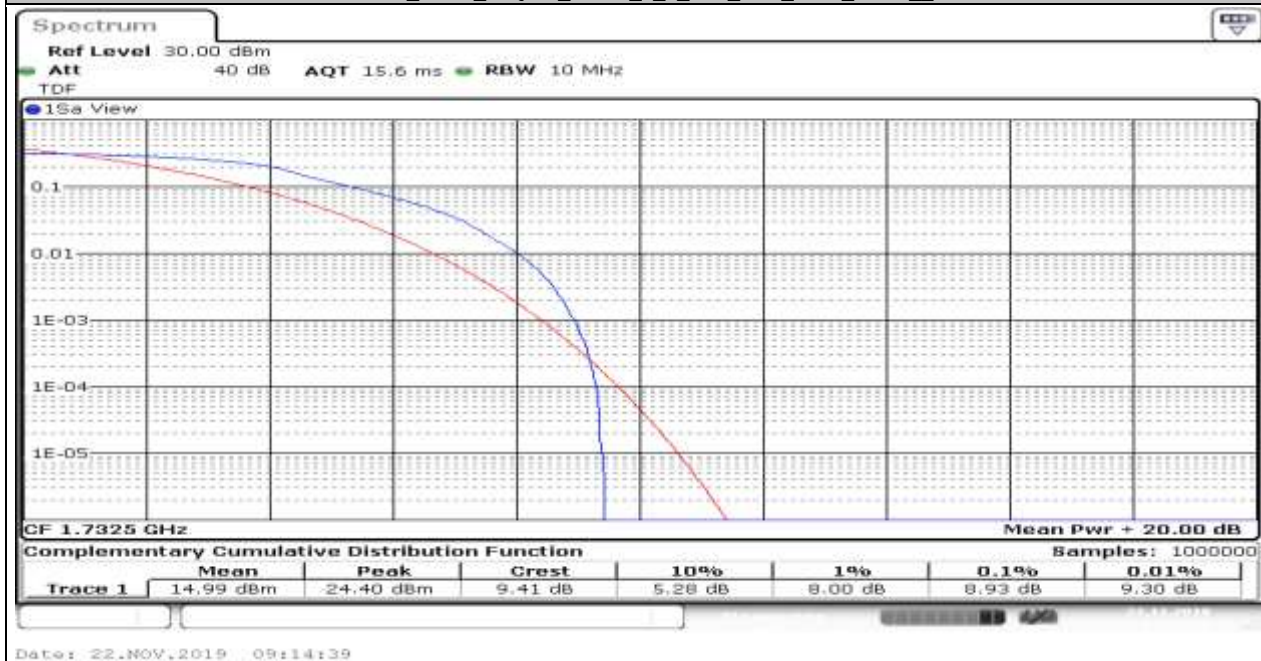
Band4_10MHz_16QAM_20175_6_0_Low_10.93_<=13_PASS



Band4_5MHz_16QAM_20175_6_0_Low_8.70_<=13_PASS

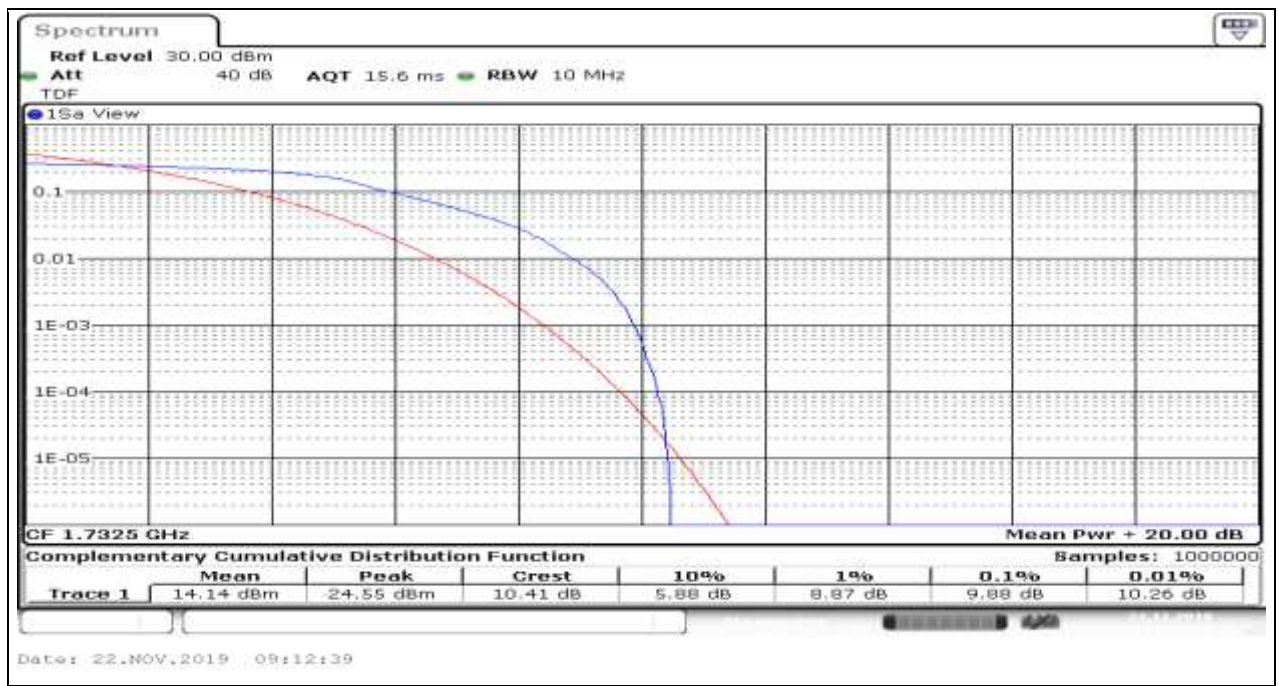


Band4_3MHz_16QAM_20175_6_0_Low_8.93_<=13_PASS



Band4_1.4MHz_16QAM_20175_6_0_Low_9.88_<=13_PASS

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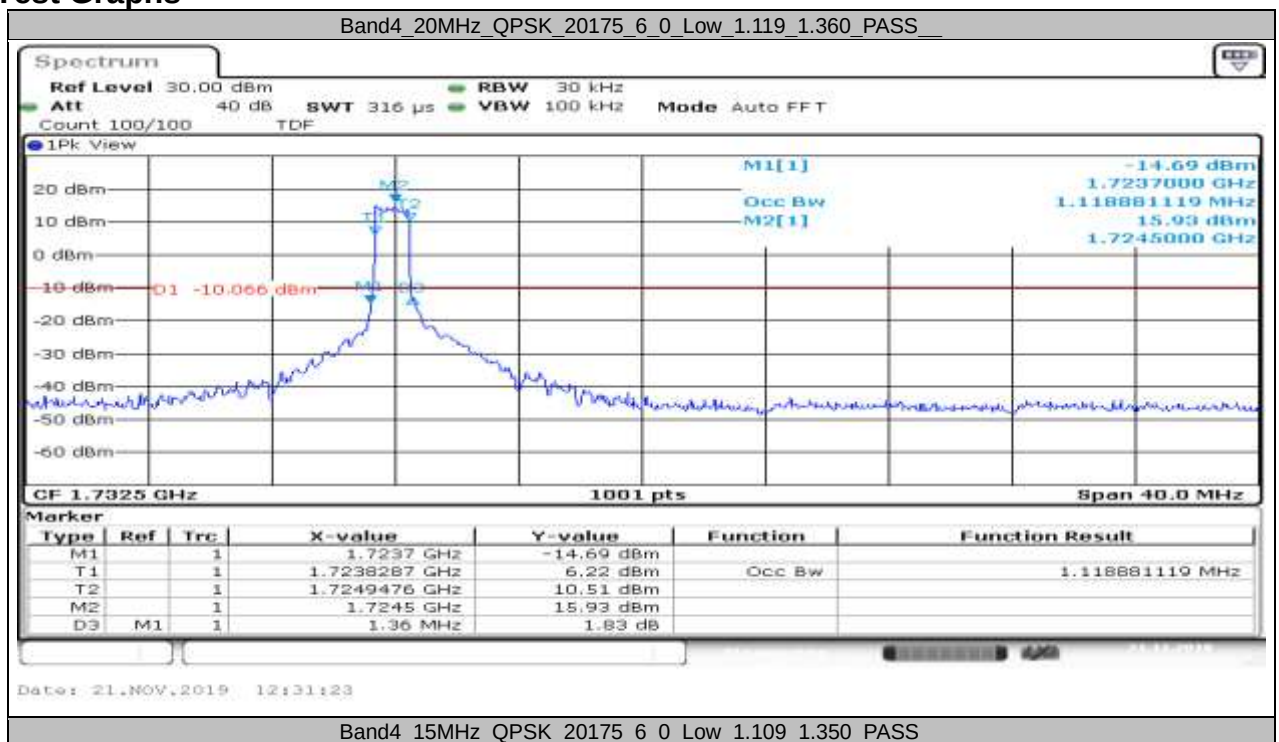


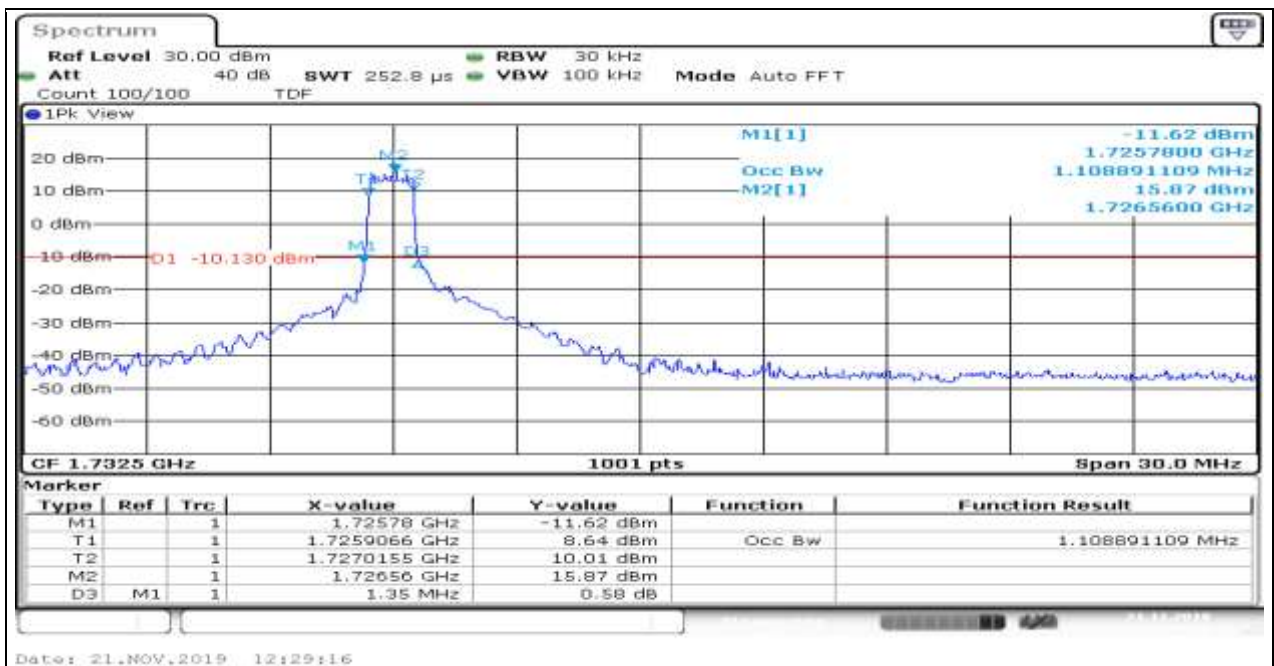
Appendix B.3: 26dB Bandwidth and Occupied Bandwidth for M1

Test Result

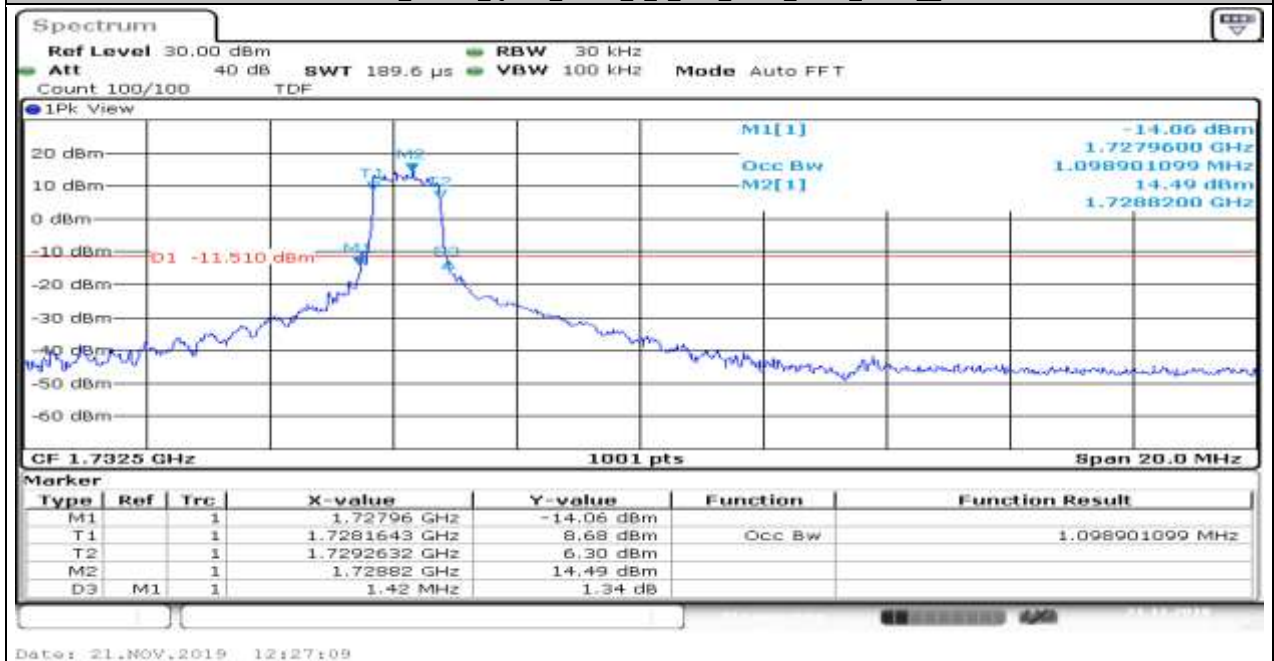
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band4	20MHz	QPSK	20175	6	0	Low	1.119	1.360	PASS
Band4	15MHz	QPSK	20175	6	0	Low	1.109	1.350	PASS
Band4	10MHz	QPSK	20175	6	0	Low	1.099	1.420	PASS
Band4	5MHz	QPSK	20175	6	0	Low	1.089	1.290	PASS
Band4	3MHz	QPSK	20175	6	0	Low	1.103	1.296	PASS
Band4	1.4MHz	QPSK	20175	6	0	Low	1.1	1.314	PASS
Band4	20MHz	16QAM	20175	6	0	Low	1.119	1.400	PASS
Band4	15MHz	16QAM	20175	6	0	Low	1.109	1.410	PASS
Band4	10MHz	16QAM	20175	6	0	Low	1.099	1.420	PASS
Band4	5MHz	16QAM	20175	6	0	Low	1.099	1.320	PASS
Band4	3MHz	16QAM	20175	6	0	Low	1.103	1.314	PASS
Band4	1.4MHz	16QAM	20175	6	0	Low	1.1	1.311	PASS

Test Graphs

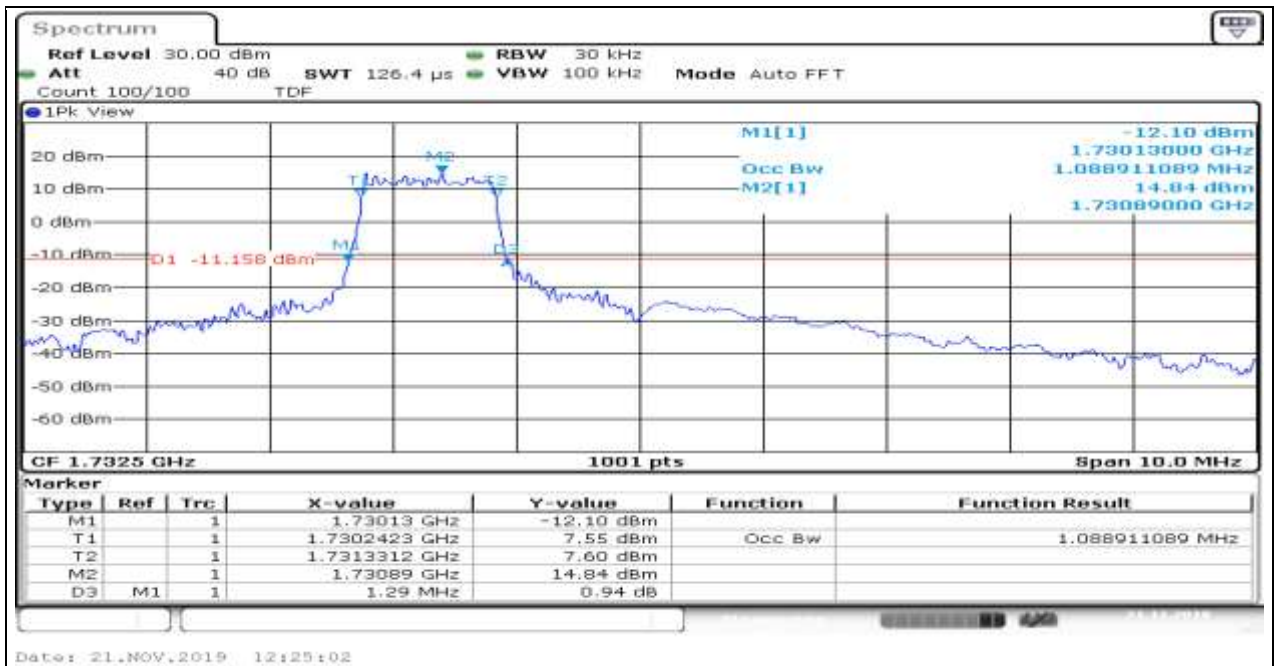




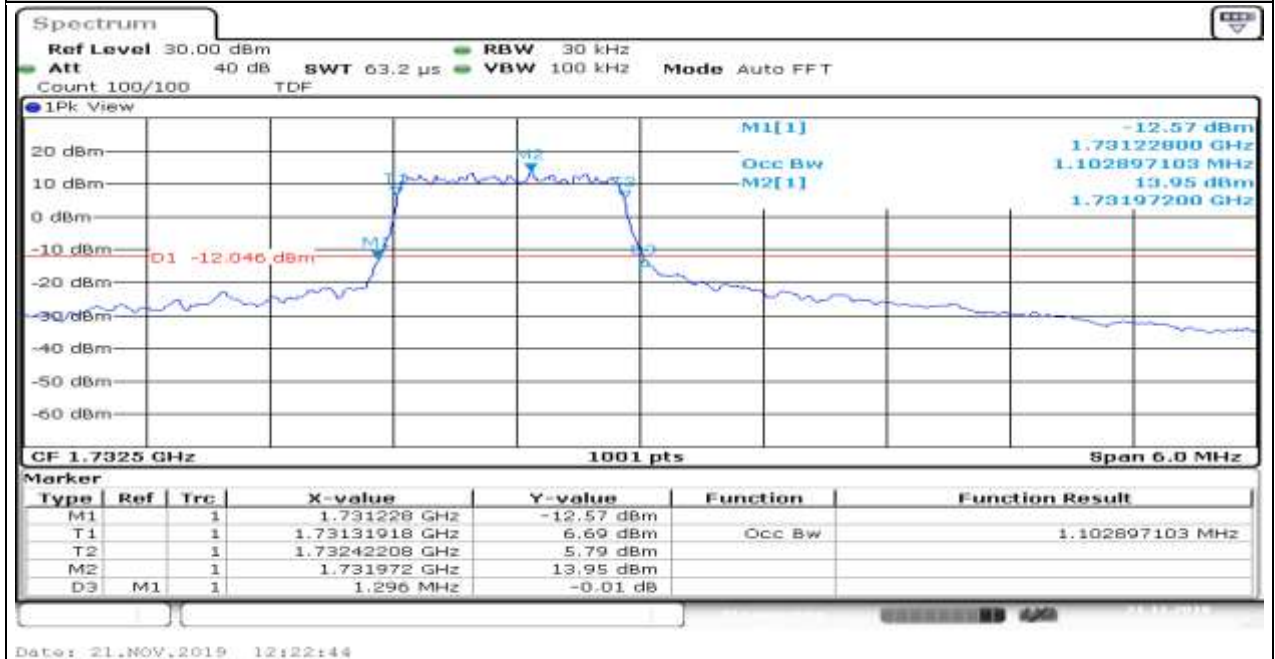
Band4_10MHz_QPSK_20175_6_0_Low_1.099_1.420_PASS



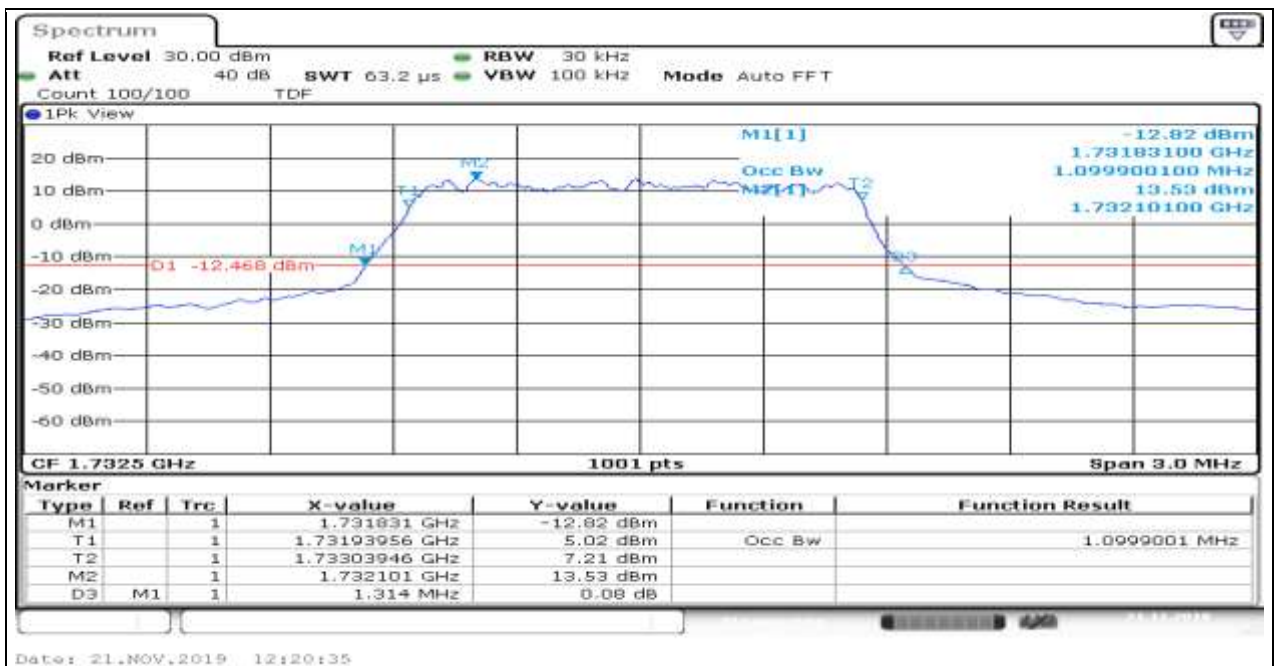
Band4_5MHz_QPSK_20175_6_0_Low_1.089_1.290_PASS



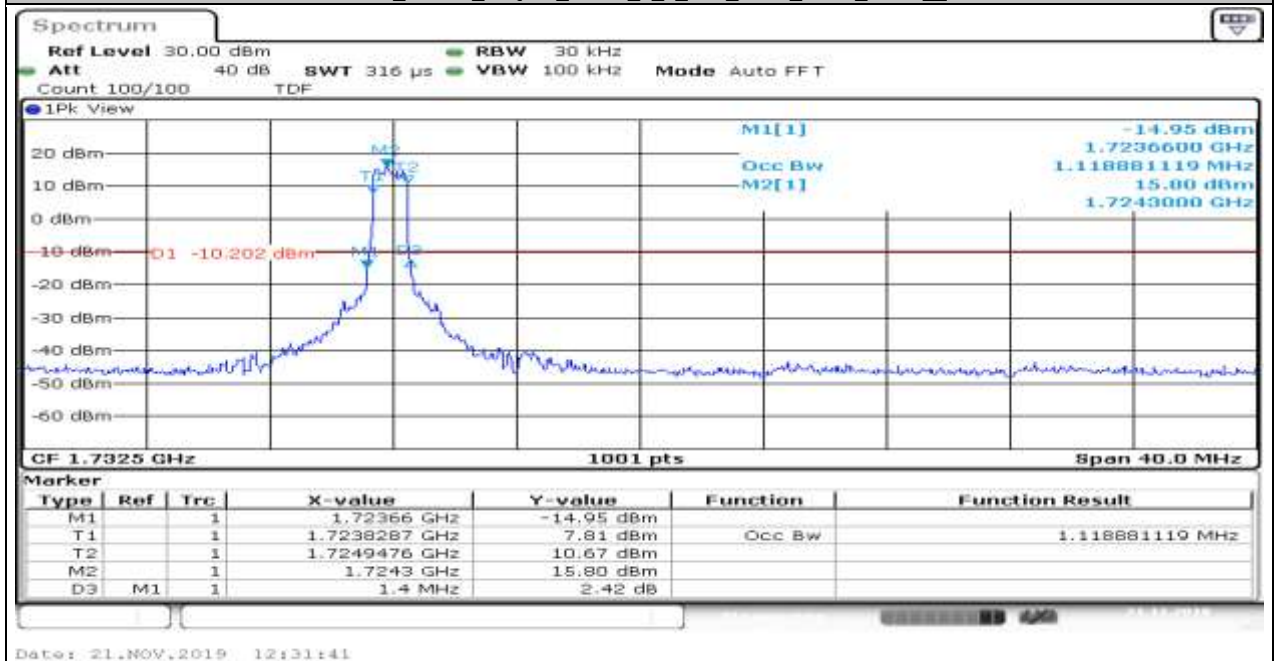
Band4_3MHz_QPSK_20175_6_0_Low_1.103_1.296_PASS



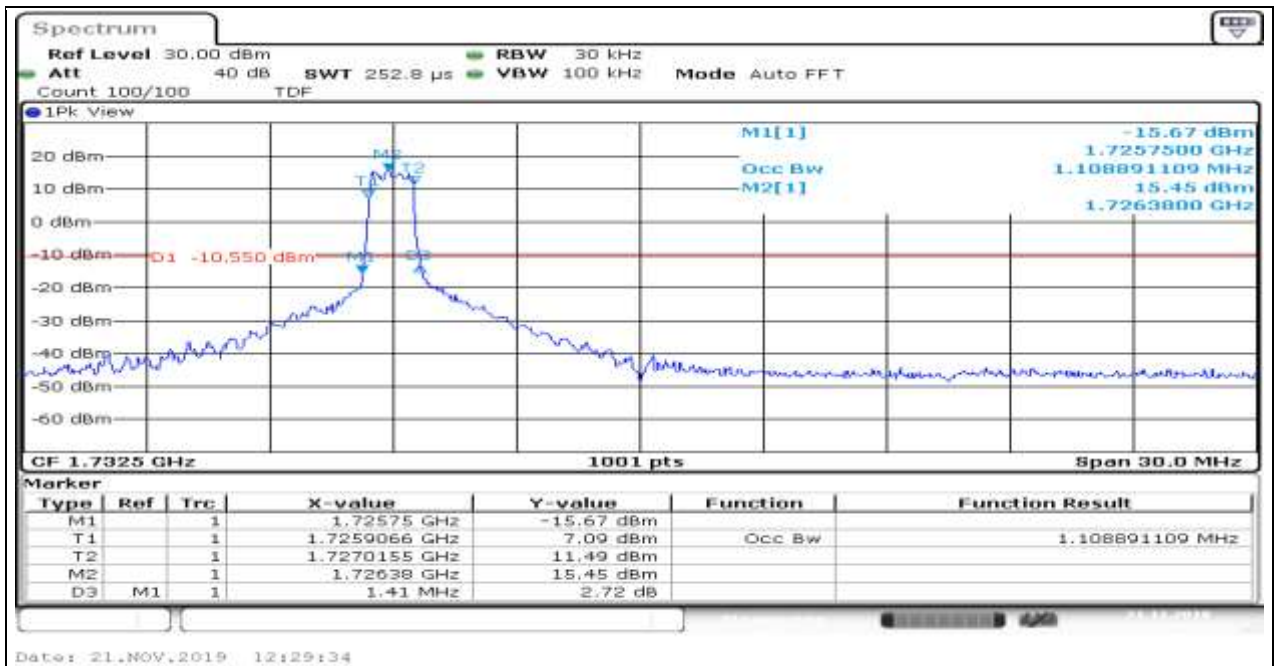
Band4_1.4MHz_QPSK_20175_6_0_Low_1.1_1.314_PASS



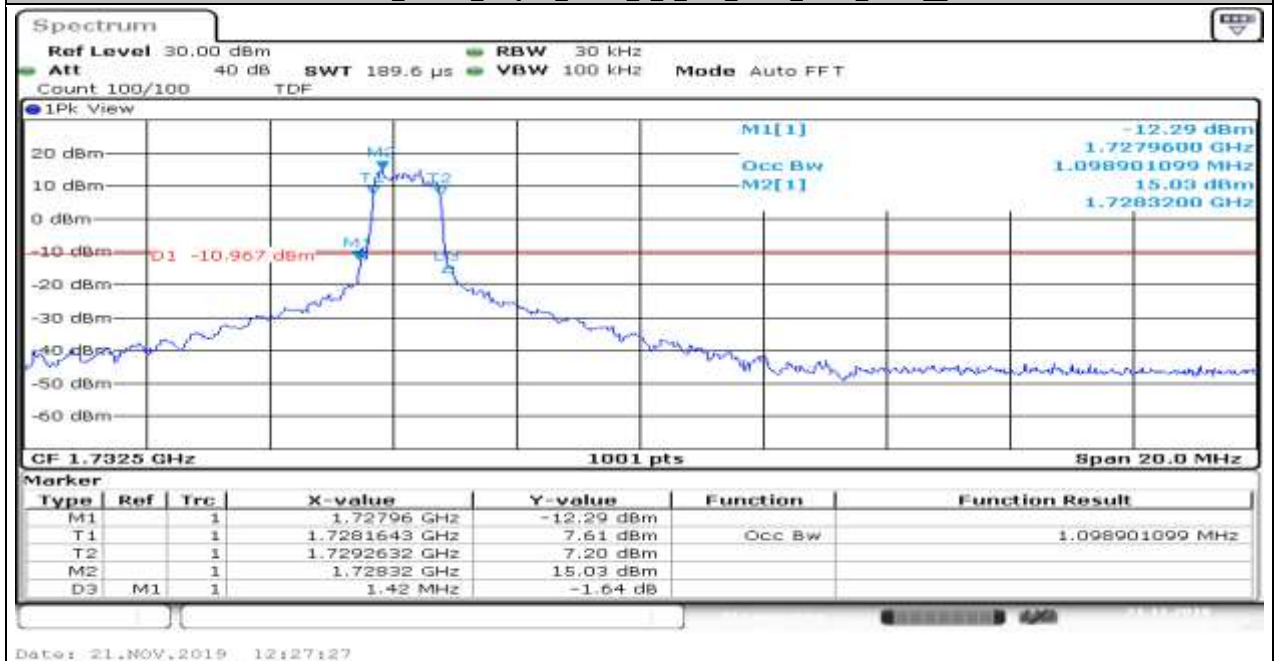
Band4_20MHz_16QAM_20175_6_0_Low_1.119_1.400_PASS



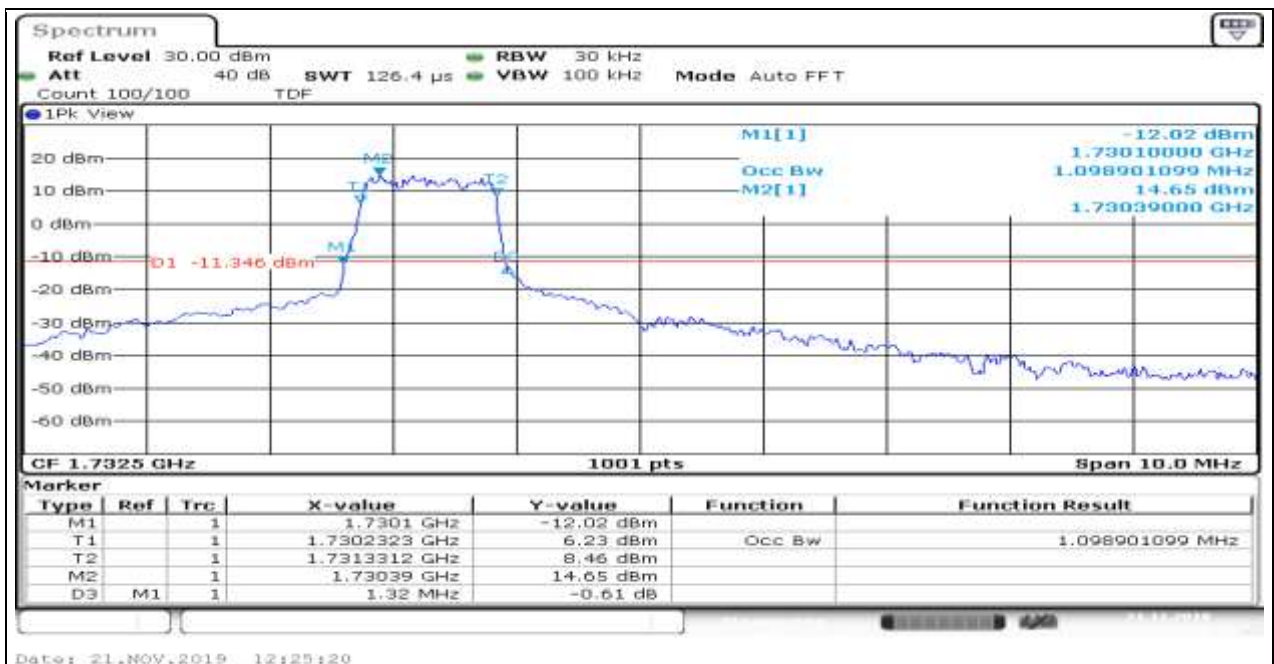
Band4_15MHz_16QAM_20175_6_0_Low_1.109_1.410_PASS



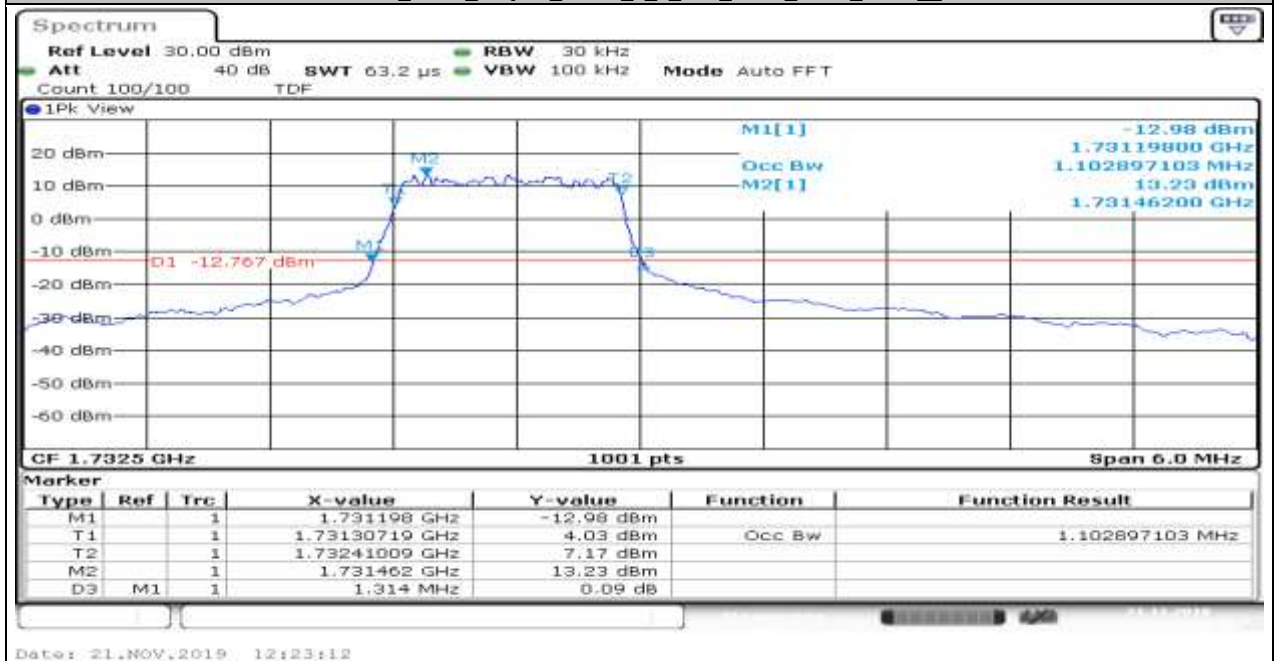
Band4 10MHz 16QAM 20175 6 0 Low 1.099 1.420 PASS



Band4_5MHz_16QAM_20175_6_0_Low_1.099_1.320_PASS

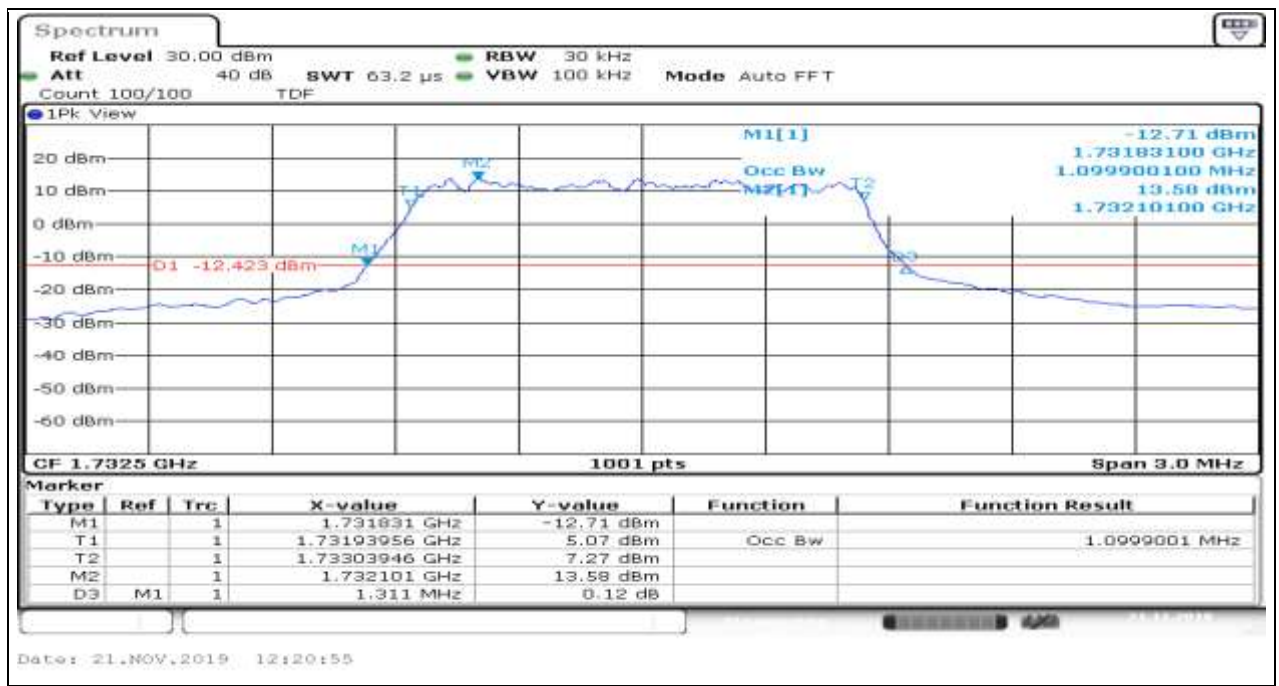


Band4_3MHz_16QAM_20175_6_0_Low_1.103_1.314_PASS



Band4_1.4MHz_16QAM_20175_6_0_Low_1.1_1.311_PASS

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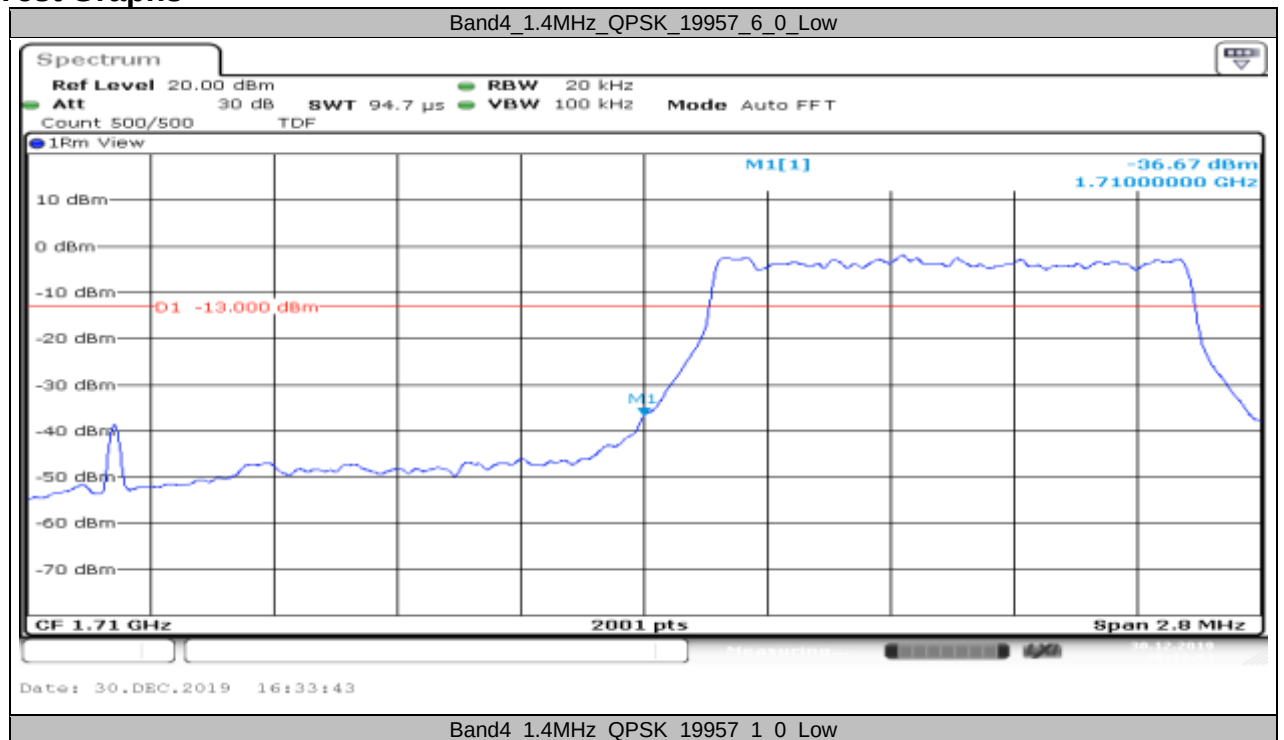


Appendix B.4: Band Edge for M1

Test Result

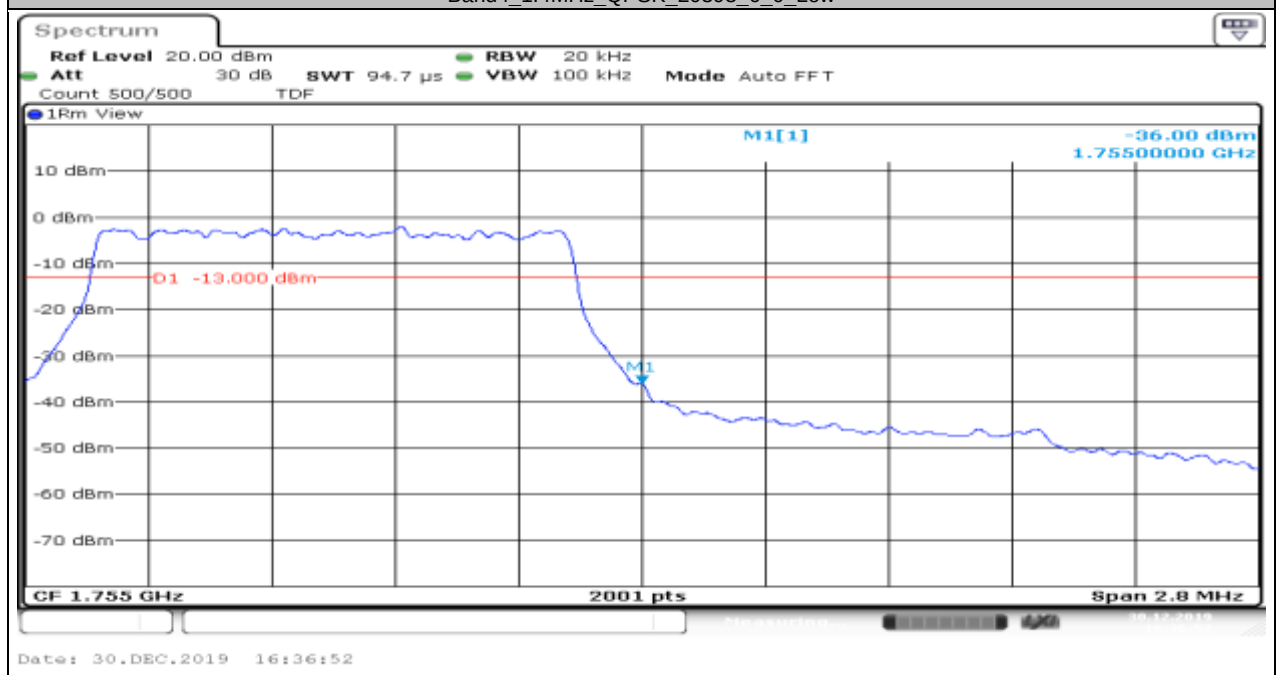
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Result (dBm)	Verdict
Band4	1.4MHz	QPSK	19957	6	0	Low	-36.67	PASS
Band4	1.4MHz	QPSK	19957	1	0	Low	-30.42	PASS
Band4	1.4MHz	QPSK	20393	6	0	Low	-36.00	PASS
Band4	1.4MHz	QPSK	20393	1	5	Low	-44.80	PASS
Band4	1.4MHz	16QAM	19957	6	0	Low	-35.96	PASS
Band4	1.4MHz	16QAM	19957	1	0	Low	-32.80	PASS
Band4	1.4MHz	16QAM	20393	6	0	Low	-36.45	PASS
Band4	1.4MHz	16QAM	20393	1	5	Low	-46.14	PASS

Test Graphs

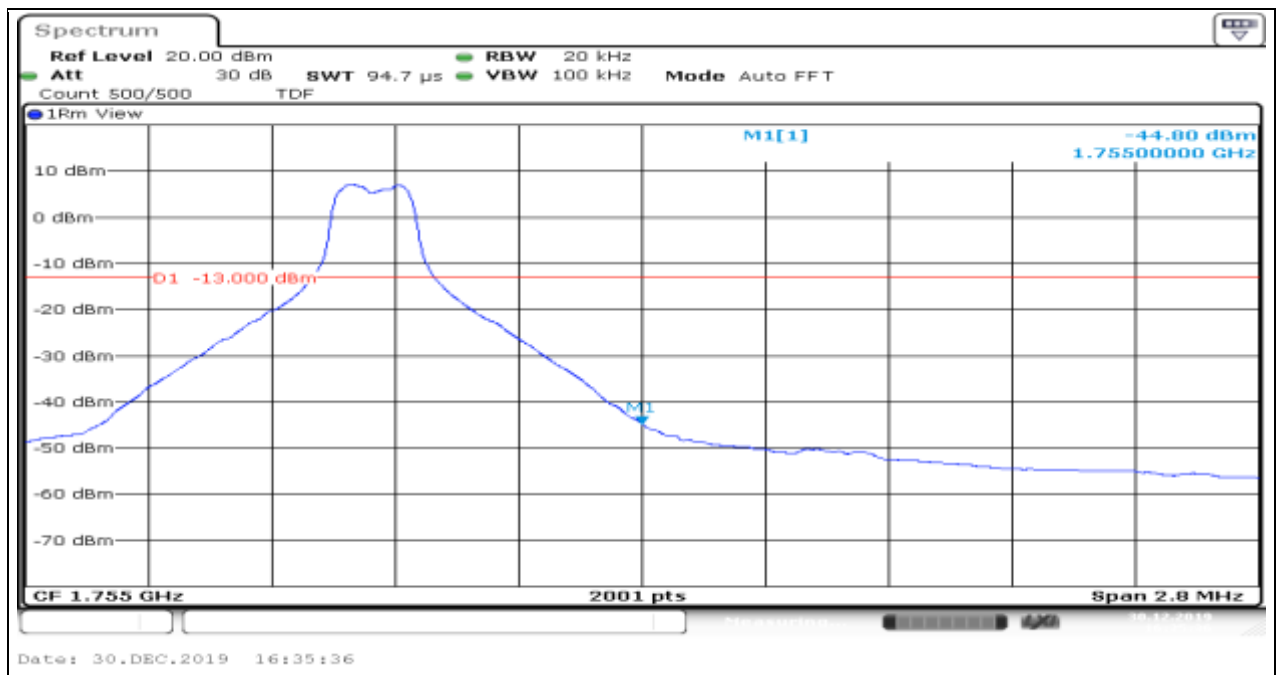




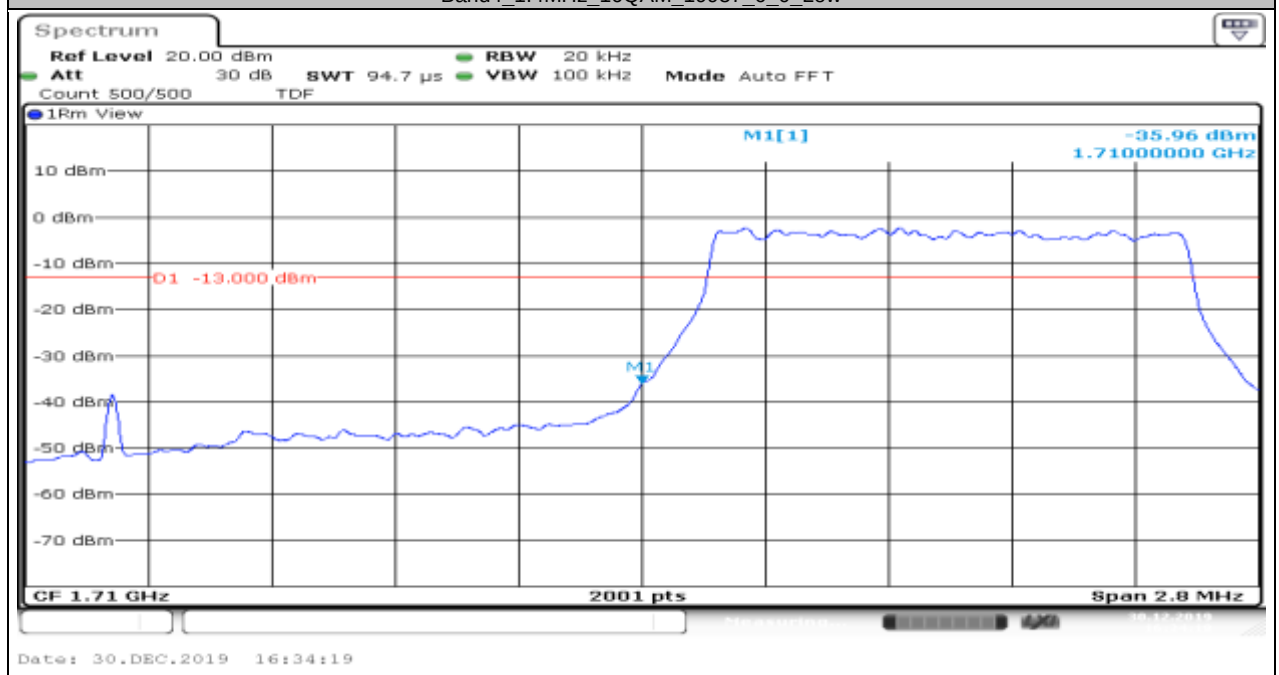
Band4_1.4MHz_QPSK_20393_6_0_Low



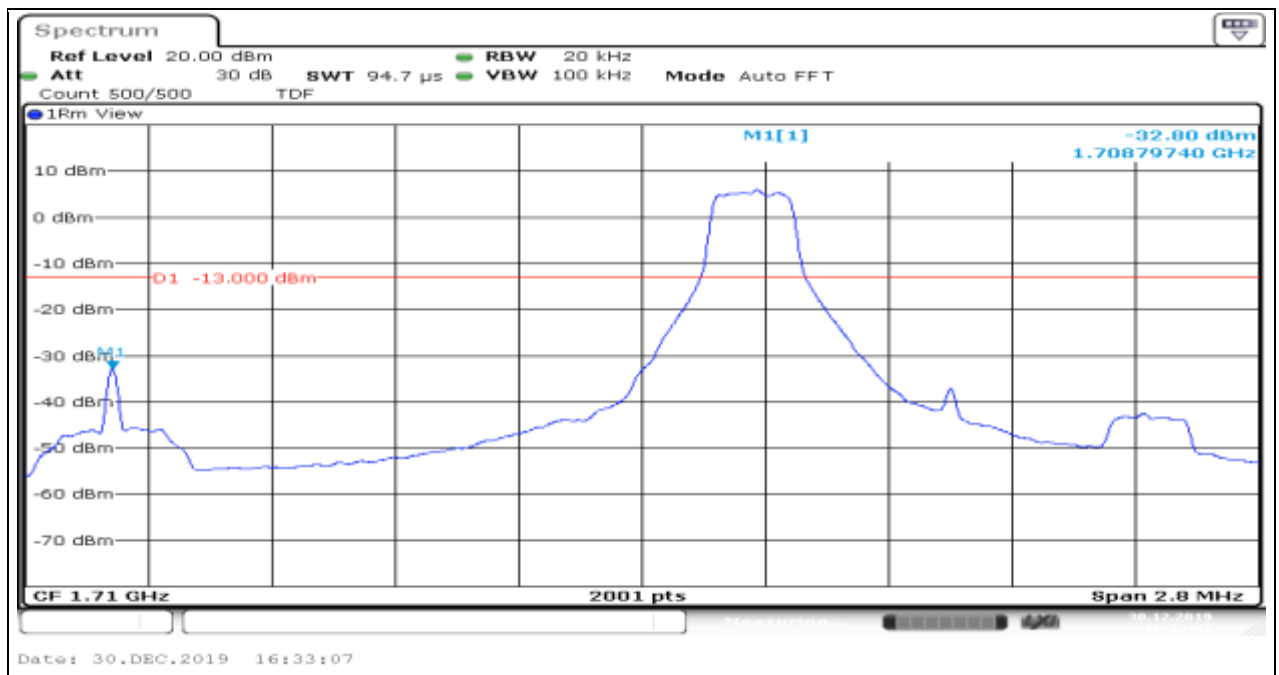
Band4_1.4MHz_QPSK_20393_1_5_Low



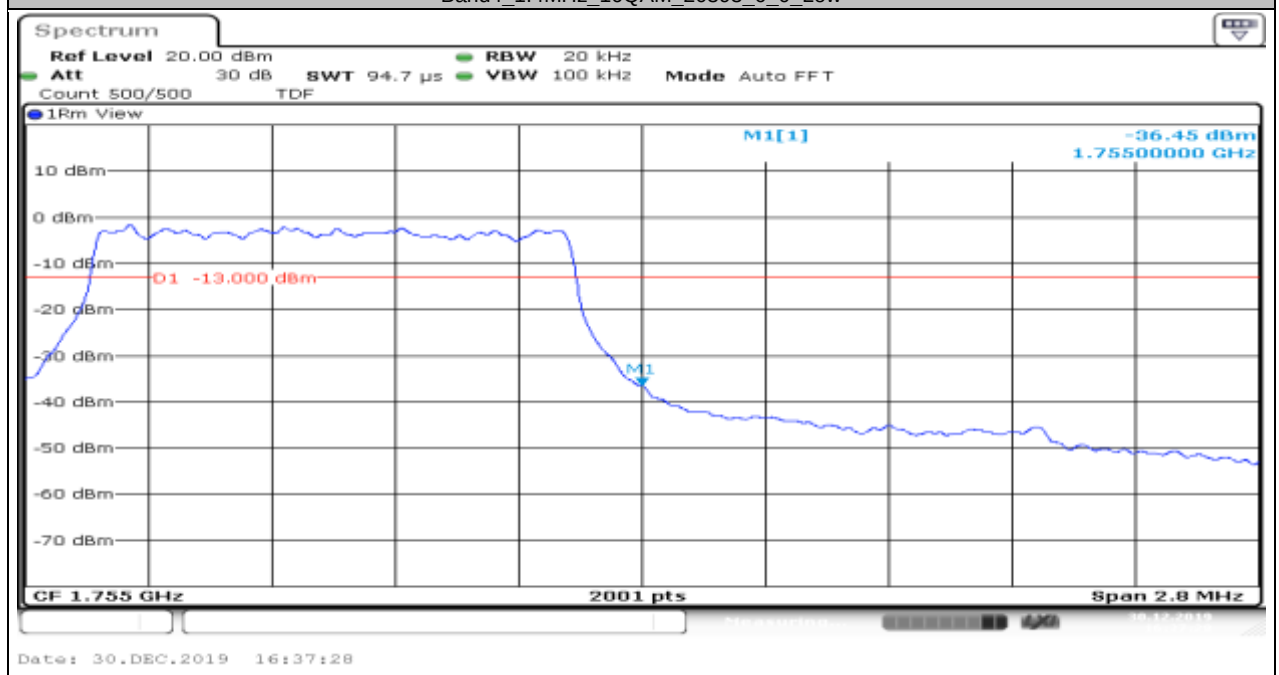
Band4_1.4MHz_16QAM_19957_6_0_Low



Band4_1.4MHz_16QAM_19957_1_0_Low

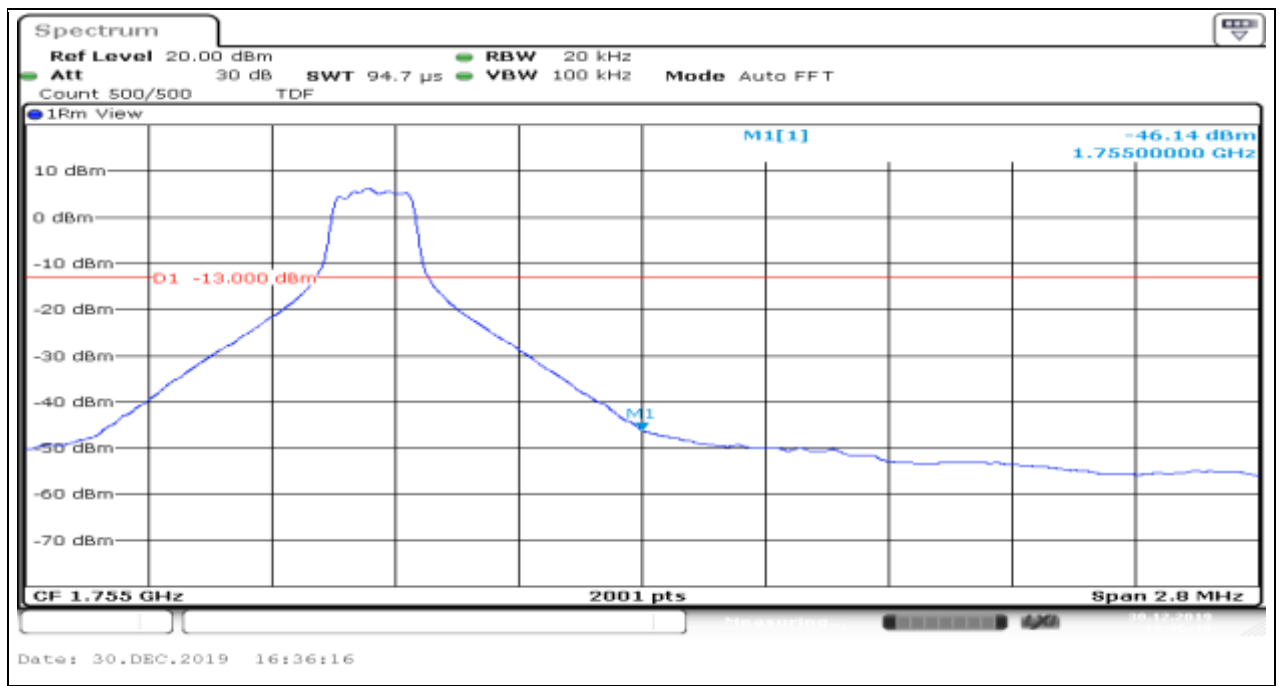


Band4_1.4MHz_16QAM_20393_6_0_Low



Band4_1.4MHz_16QAM_20393_1_5_Low

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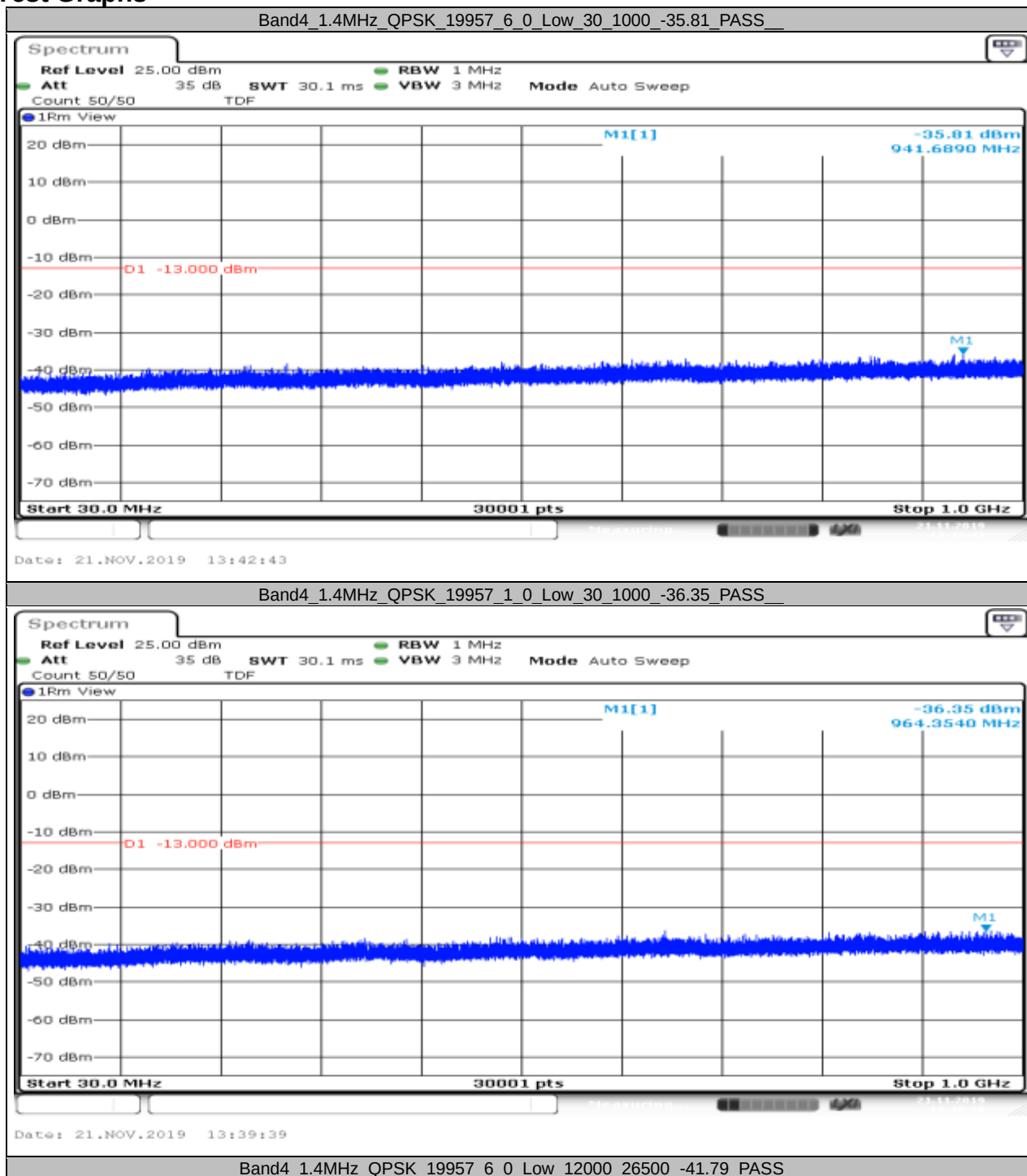


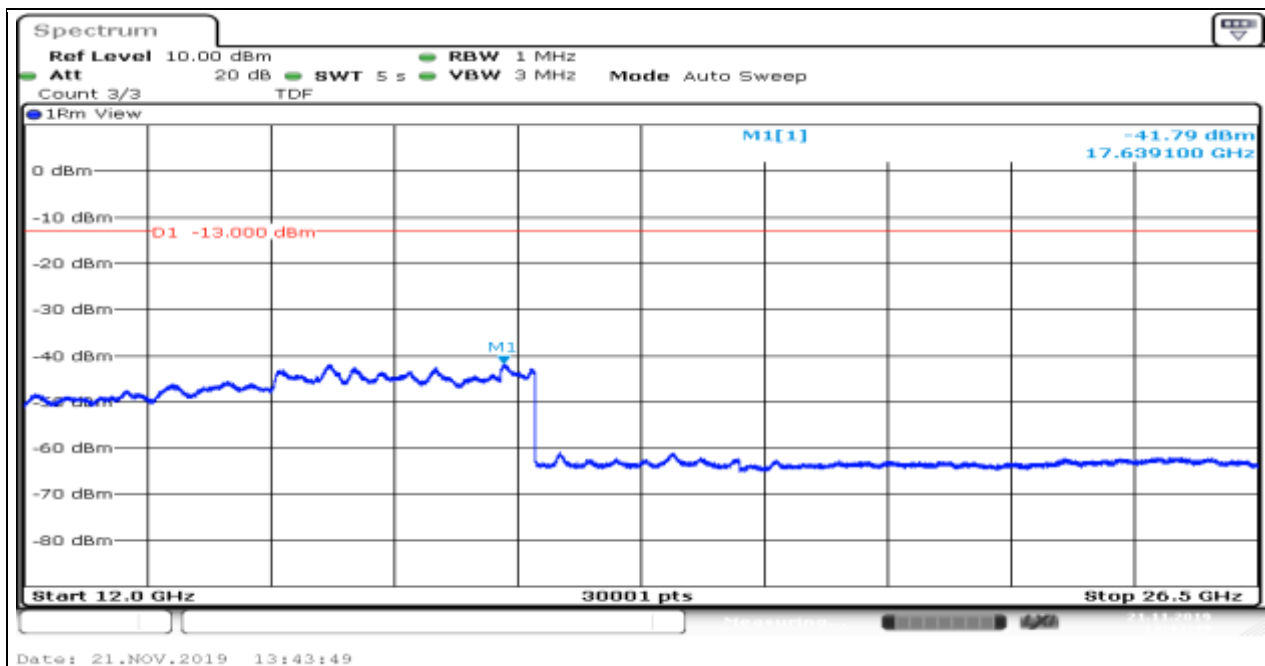
Appendix B.5: Conducted Spurious Emission for M1

Test Result

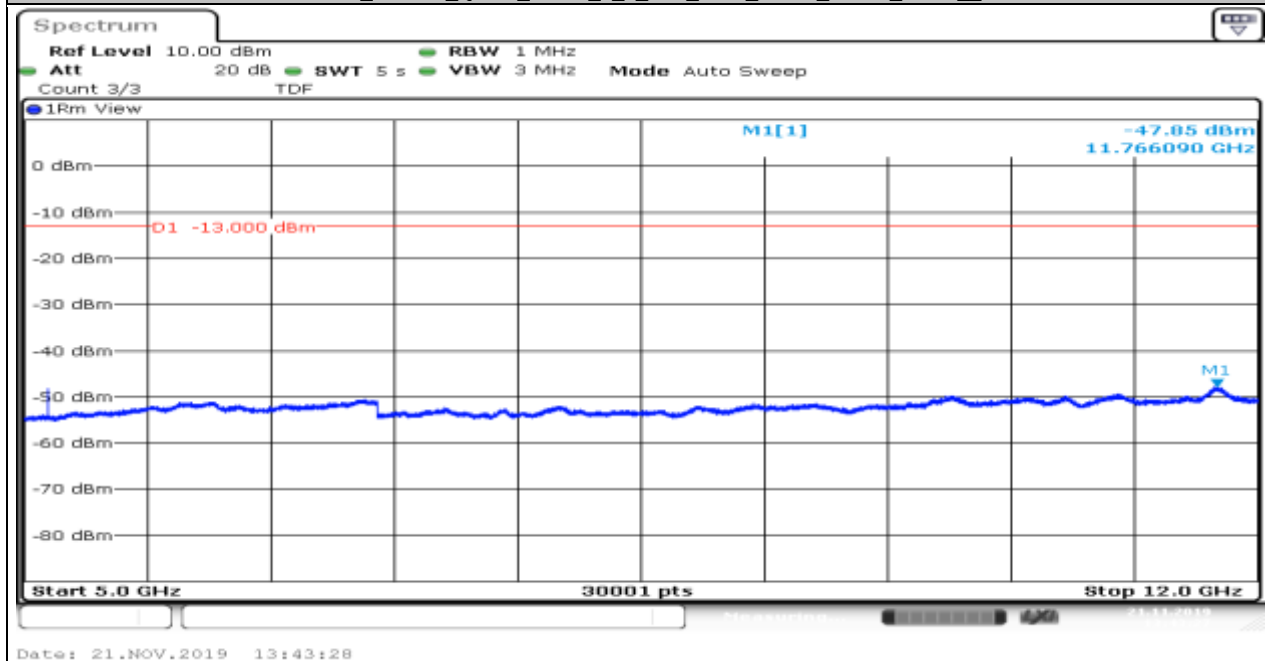
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Start Freq	Stop Freq	Result (dBm)	Verdict
Band4	1.4MHz	QPSK	19957	6	0	Low	30	1000	-35.81	PASS
Band4	1.4MHz	QPSK	19957	1	0	Low	30	1000	-36.35	PASS
Band4	1.4MHz	QPSK	19957	6	0	Low	12000	26500	-41.79	PASS
Band4	1.4MHz	QPSK	19957	6	0	Low	5000	12000	-47.85	PASS
Band4	1.4MHz	QPSK	19957	6	0	Low	1000	5000	-38.57	PASS
Band4	1.4MHz	QPSK	19957	1	0	Low	12000	26500	-41.91	PASS
Band4	1.4MHz	QPSK	19957	1	0	Low	1000	5000	-35.98	PASS
Band4	1.4MHz	QPSK	19957	1	0	Low	5000	12000	-44.39	PASS
Band4	1.4MHz	QPSK	20175	6	0	Low	12000	26500	-41.98	PASS
Band4	1.4MHz	QPSK	20175	1	0	Low	1000	5000	-34.42	PASS
Band4	1.4MHz	QPSK	20175	1	0	Low	5000	12000	-44.06	PASS
Band4	1.4MHz	QPSK	20175	1	0	Low	12000	26500	-41.69	PASS
Band4	1.4MHz	QPSK	20175	6	0	Low	1000	5000	-38.35	PASS
Band4	1.4MHz	QPSK	20175	1	0	Low	30	1000	-36.36	PASS
Band4	1.4MHz	QPSK	20175	6	0	Low	5000	12000	-47.77	PASS
Band4	1.4MHz	QPSK	20175	6	0	Low	30	1000	-36.23	PASS
Band4	1.4MHz	QPSK	20393	1	5	Low	12000	26500	-41.87	PASS
Band4	1.4MHz	QPSK	20393	6	0	Low	12000	26500	-41.87	PASS
Band4	1.4MHz	QPSK	20393	6	0	Low	5000	12000	-47.74	PASS
Band4	1.4MHz	QPSK	20393	6	0	Low	30	1000	-35.32	PASS
Band4	1.4MHz	QPSK	20393	1	5	Low	1000	5000	-34.98	PASS
Band4	1.4MHz	QPSK	20393	1	5	Low	5000	12000	-44.05	PASS
Band4	1.4MHz	QPSK	20393	1	5	Low	30	1000	-36.76	PASS
Band4	1.4MHz	QPSK	20393	6	0	Low	1000	5000	-38.63	PASS
Band4	1.4MHz	16QAM	19957	1	0	Low	1000	5000	-38.36	PASS
Band4	1.4MHz	16QAM	19957	1	0	Low	5000	12000	-44.98	PASS
Band4	1.4MHz	16QAM	19957	1	0	Low	12000	26500	-41.86	PASS
Band4	1.4MHz	16QAM	19957	6	0	Low	12000	26500	-41.81	PASS
Band4	1.4MHz	16QAM	19957	6	0	Low	5000	12000	-47.65	PASS
Band4	1.4MHz	16QAM	19957	6	0	Low	30	1000	-36.55	PASS
Band4	1.4MHz	16QAM	19957	1	0	Low	30	1000	-35.81	PASS
Band4	1.4MHz	16QAM	19957	6	0	Low	1000	5000	-38.5	PASS
Band4	1.4MHz	16QAM	20175	6	0	Low	12000	26500	-41.76	PASS
Band4	1.4MHz	16QAM	20175	1	0	Low	1000	5000	-36.46	PASS
Band4	1.4MHz	16QAM	20175	1	0	Low	12000	26500	-41.63	PASS
Band4	1.4MHz	16QAM	20175	6	0	Low	30	1000	-35.91	PASS
Band4	1.4MHz	16QAM	20175	6	0	Low	1000	5000	-38.36	PASS
Band4	1.4MHz	16QAM	20175	6	0	Low	5000	12000	-47.94	PASS
Band4	1.4MHz	16QAM	20175	1	0	Low	30	1000	-36.04	PASS
Band4	1.4MHz	16QAM	20175	1	0	Low	5000	12000	-45.7	PASS
Band4	1.4MHz	16QAM	20393	6	0	Low	5000	12000	-47.79	PASS
Band4	1.4MHz	16QAM	20393	6	0	Low	1000	5000	-38.43	PASS
Band4	1.4MHz	16QAM	20393	6	0	Low	30	1000	-36.15	PASS
Band4	1.4MHz	16QAM	20393	1	5	Low	12000	26500	-41.54	PASS
Band4	1.4MHz	16QAM	20393	1	5	Low	5000	12000	-44.96	PASS
Band4	1.4MHz	16QAM	20393	1	5	Low	30	1000	-35.95	PASS
Band4	1.4MHz	16QAM	20393	6	0	Low	12000	26500	-41.73	PASS
Band4	1.4MHz	16QAM	20393	1	5	Low	1000	5000	-36.16	PASS

Test Graphs



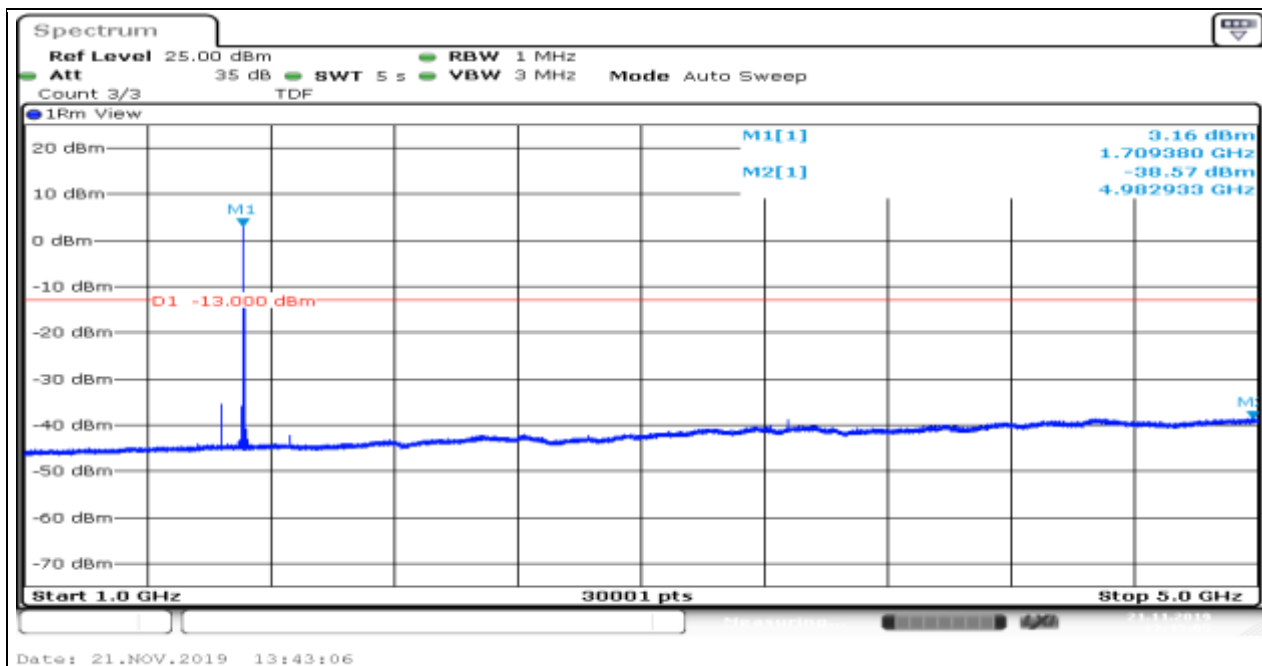


Band4_1.4MHz_QPSK_19957_6_0_Low_5000_12000_-47.85_PASS

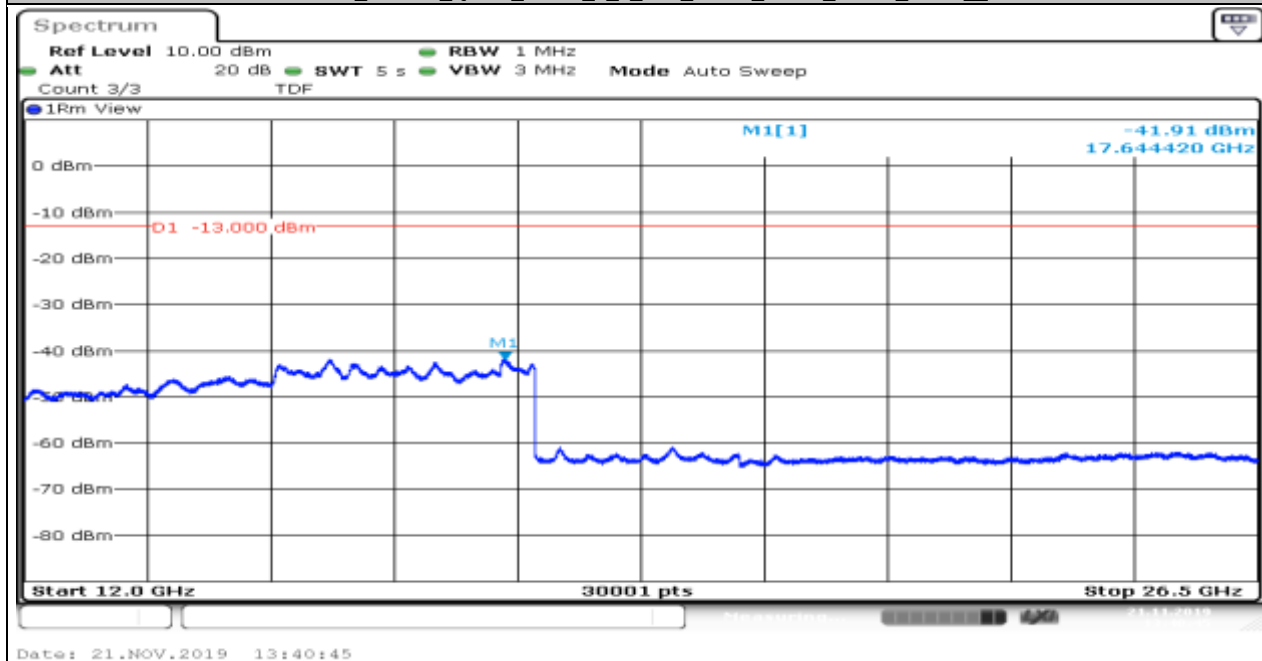


Band4_1.4MHz_QPSK_19957_6_0_Low_1000_5000_-38.57_PASS

Produkte
Products

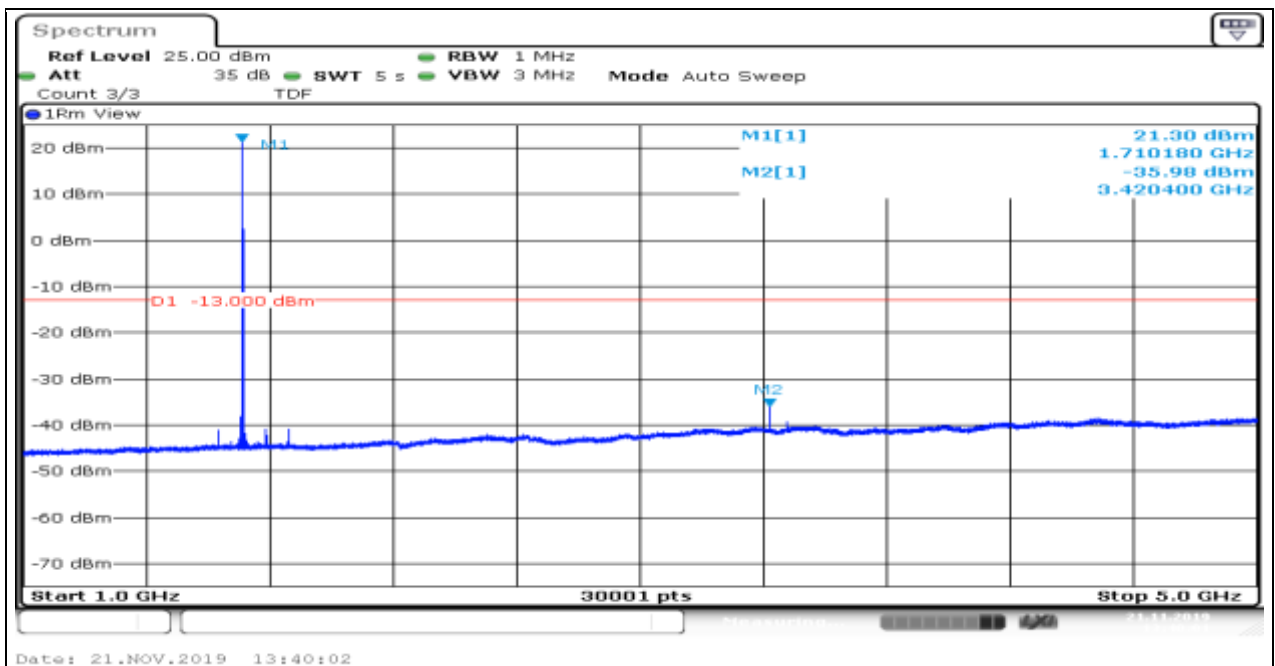


Band4_1.4MHz_QPSK_19957_1_0_Low_12000_26500_-41.91_PASS

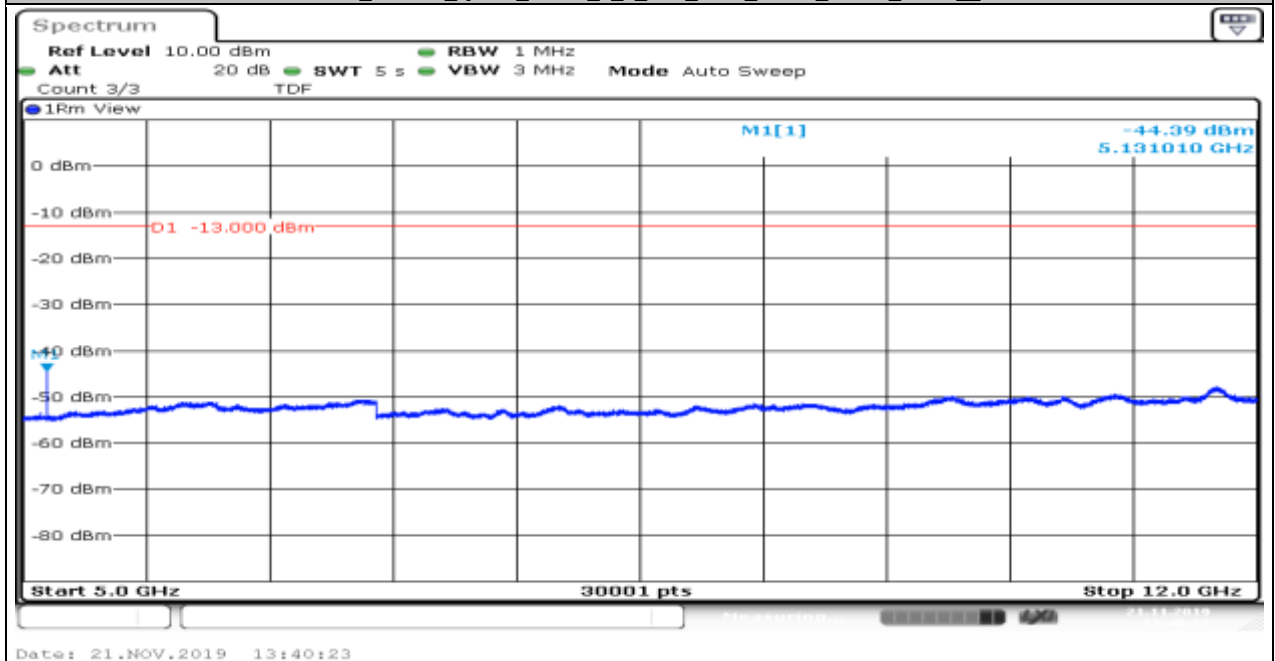


Band4_1.4MHz_QPSK_19957_1_0_Low_1000_5000_-35.98_PASS

Produkte
Products

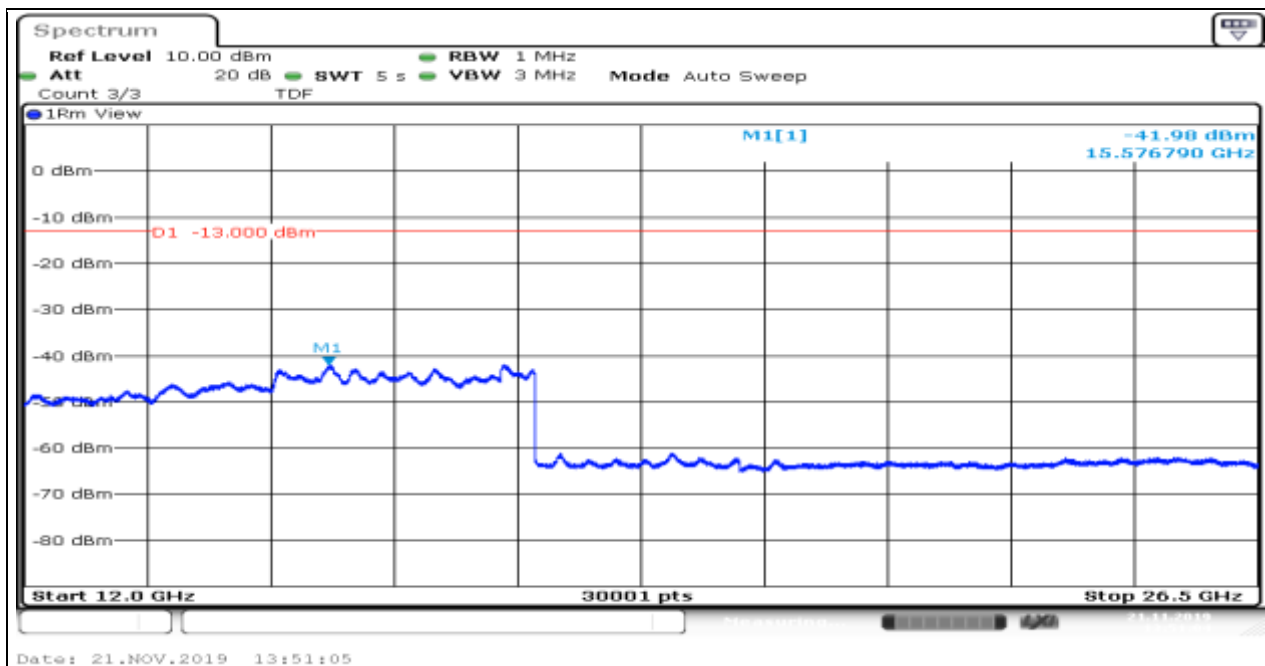


Band4_1.4MHz_QPSK_19957_1_0_Low_5000_12000_-44.39_PASS

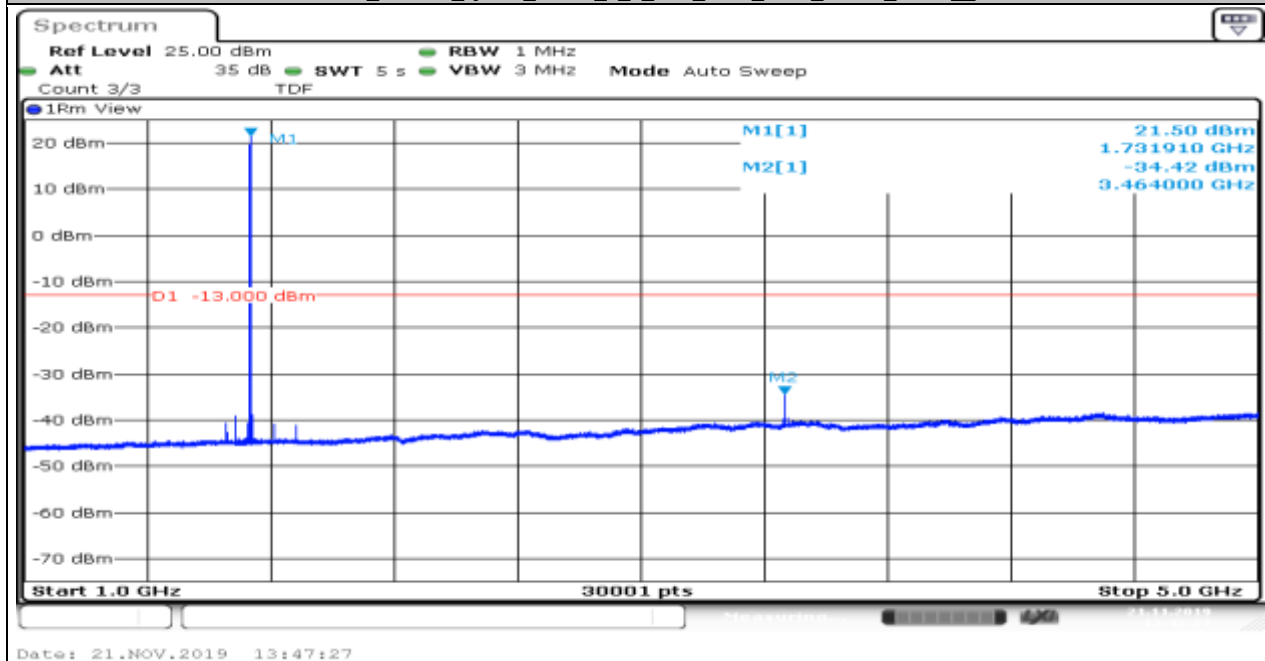


Band4_1.4MHz_QPSK_20175_6_0_Low_12000_26500_-41.98_PASS

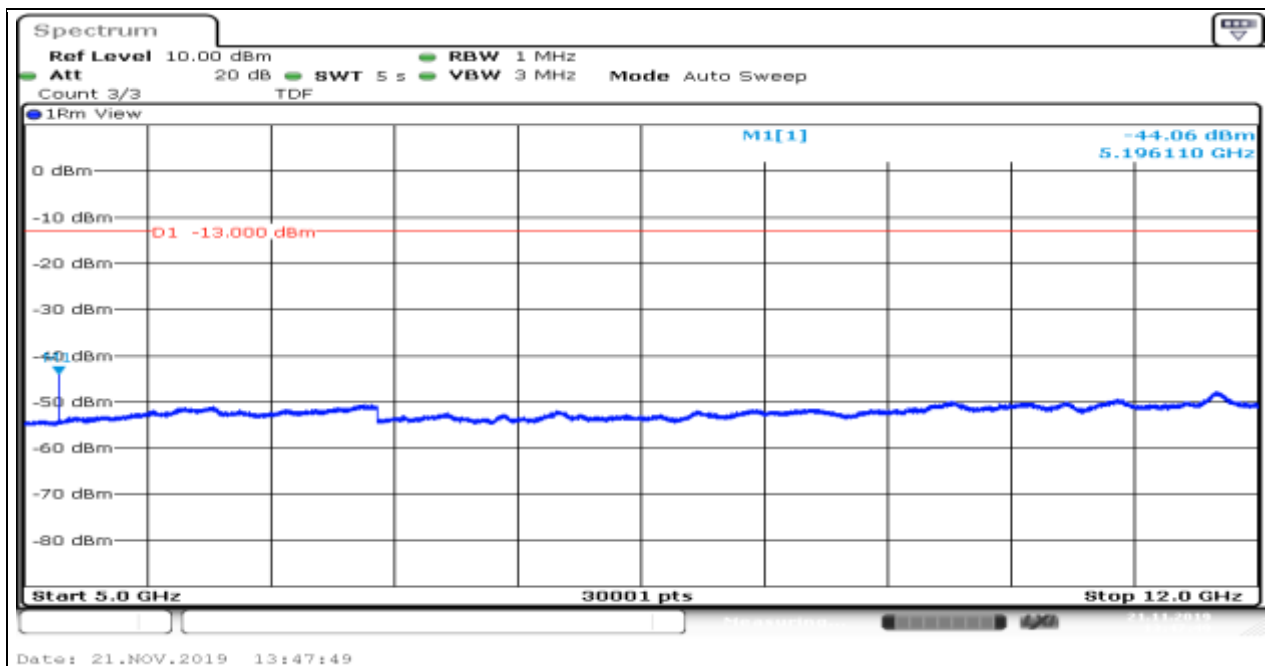
Produkte
Products



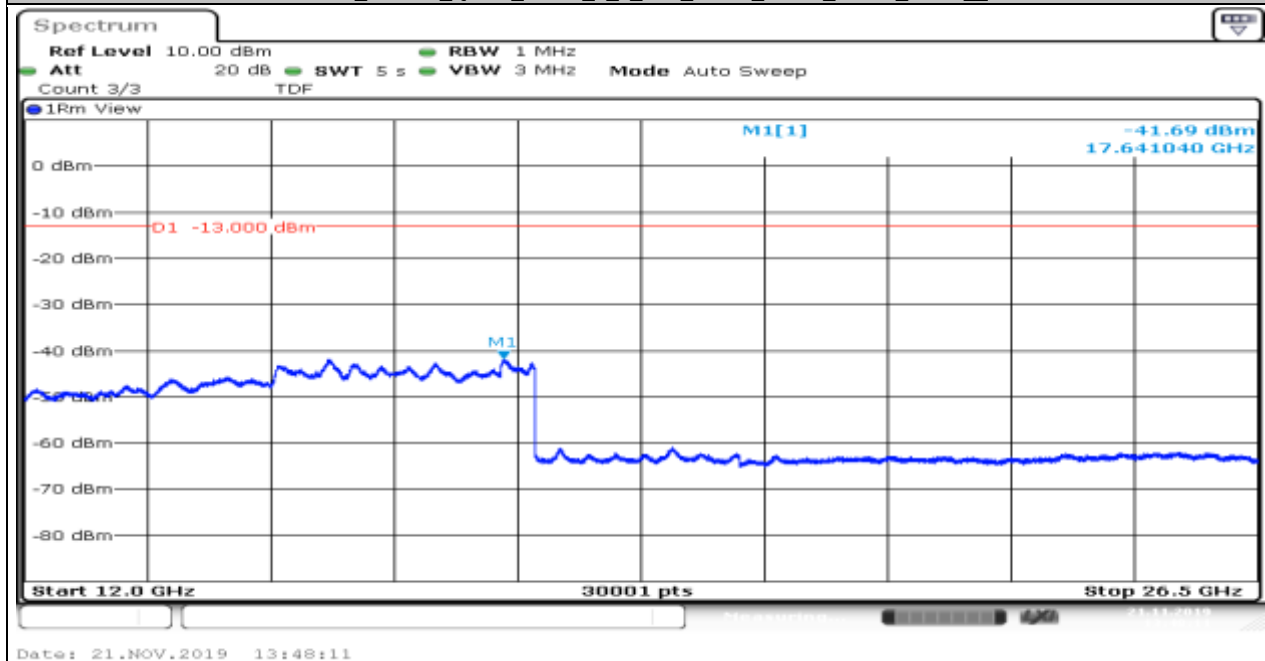
Band4_1.4MHz_QPSK_20175_1_0_Low_1000_5000_-34.42_PASS



Band4_1.4MHz_QPSK_20175_1_0_Low_5000_12000_-44.06_PASS

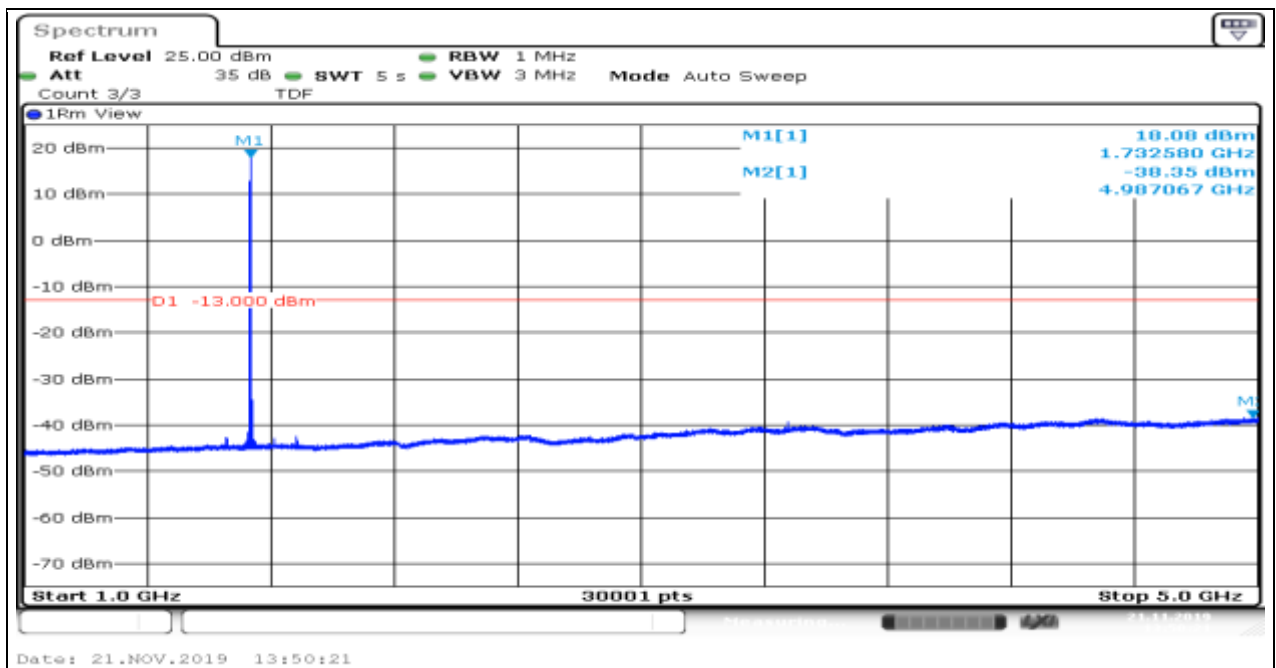


Band4_1.4MHz_QPSK_20175_1_0_Low_12000_26500_-41.69_PASS

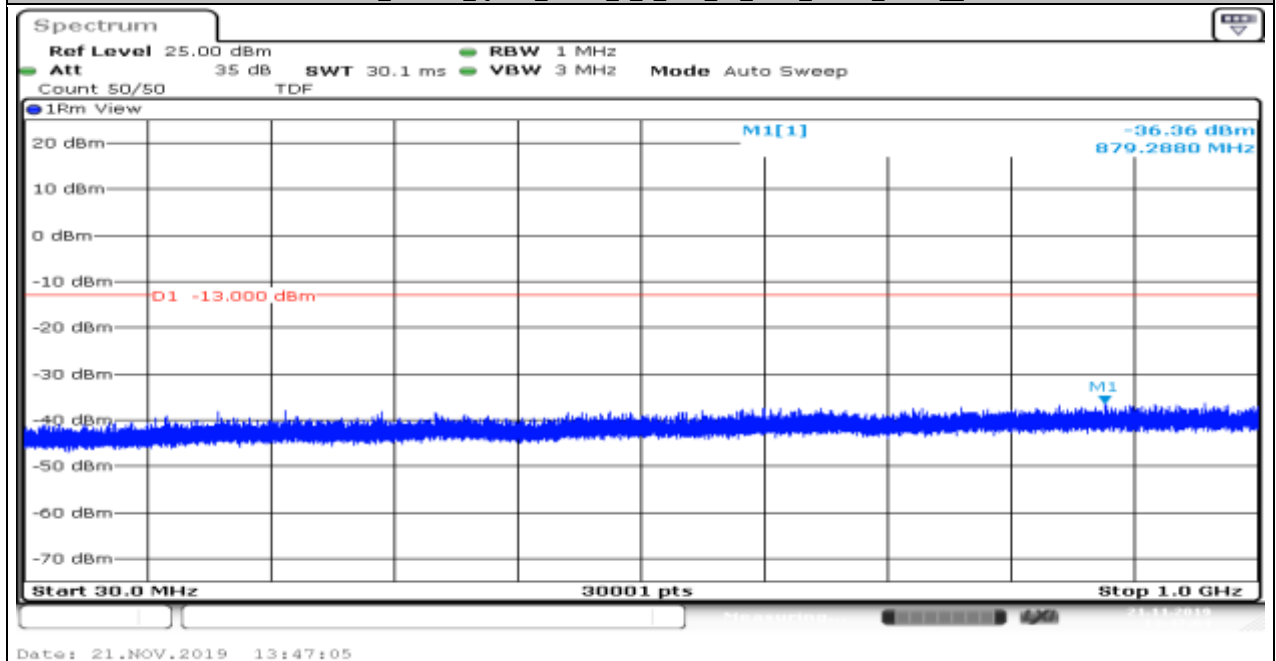


Band4_1.4MHz_QPSK_20175_6_0_Low_1000_5000_-38.35_PASS

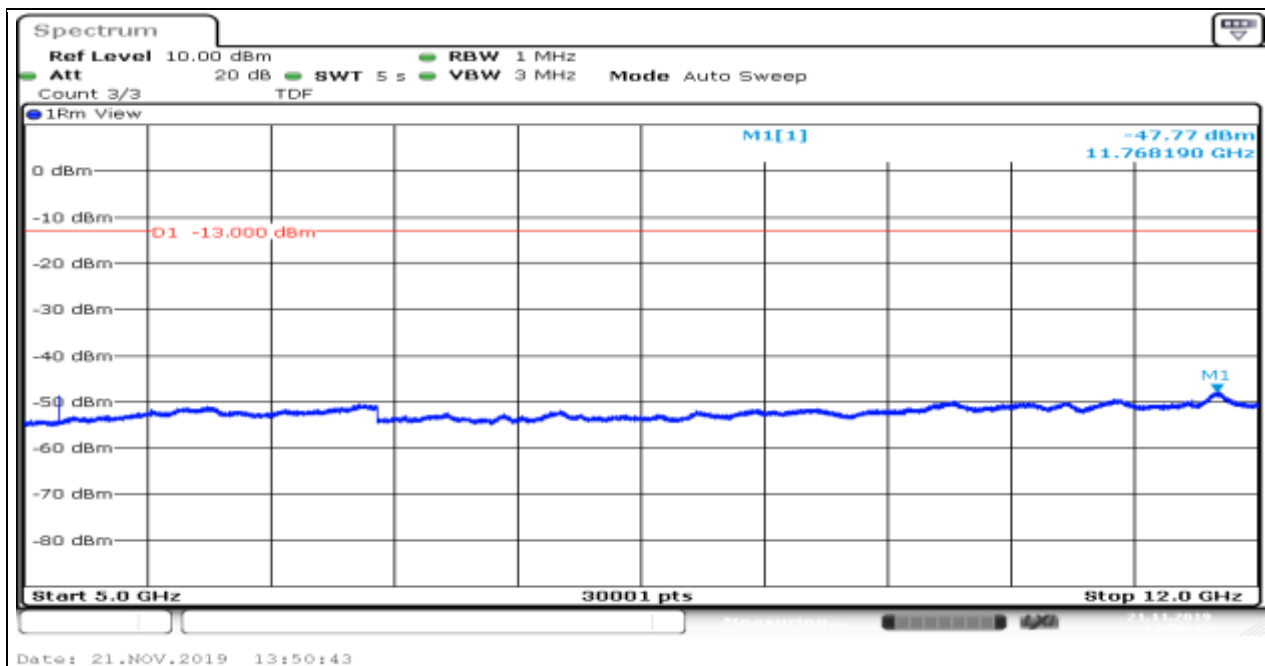
Produkte
Products



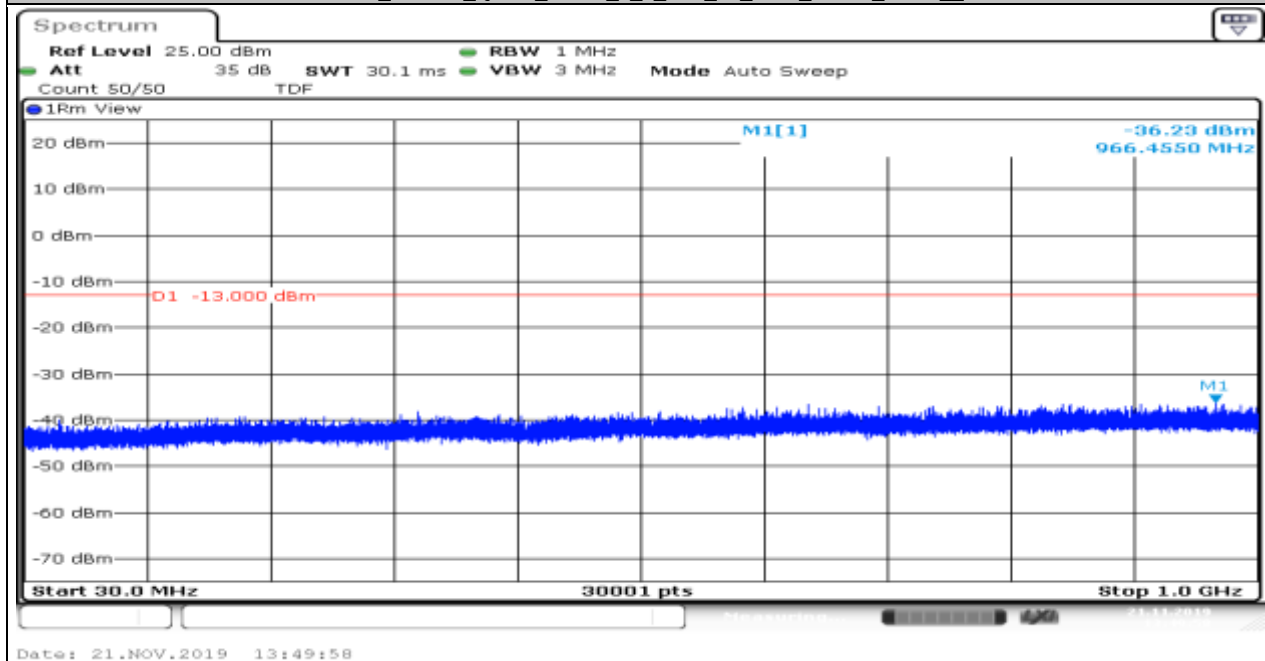
Band4_1.4MHz_QPSK_20175_1_0_Low_30_1000_-36.36_PASS



Band4_1.4MHz_QPSK_20175_6_0_Low_5000_12000_-47.77_PASS

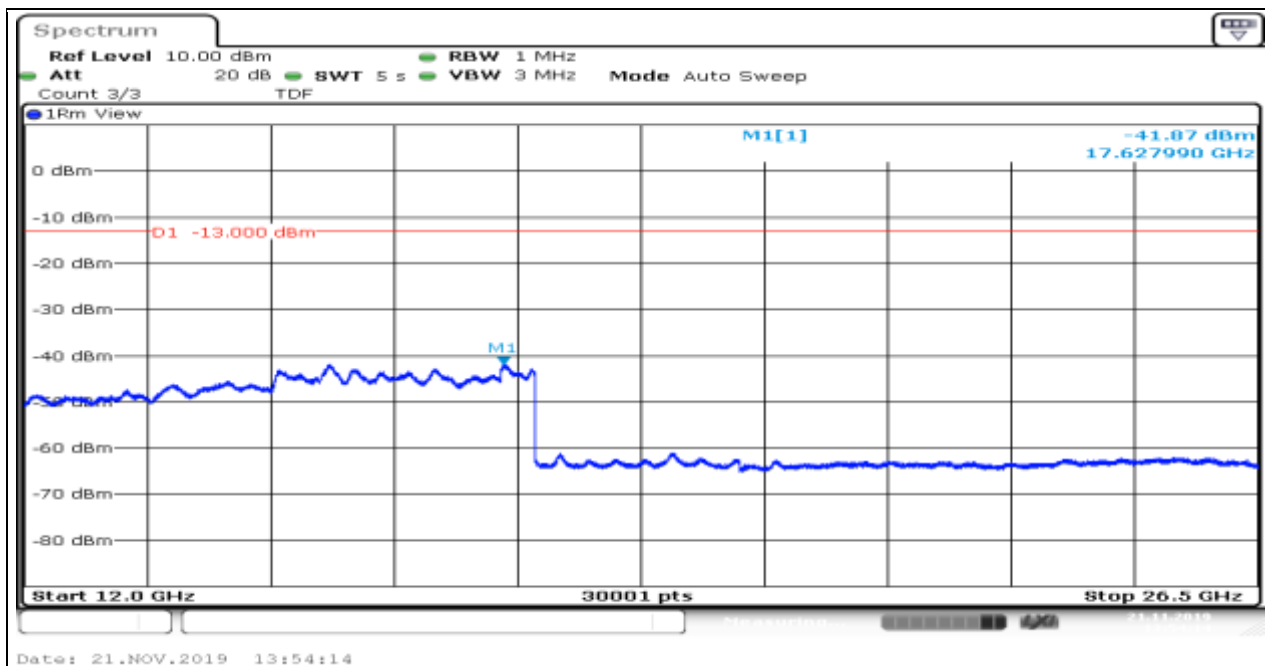


Band4_1.4MHz_QPSK_20175_6_0_Low_30_1000_-36.23_PASS

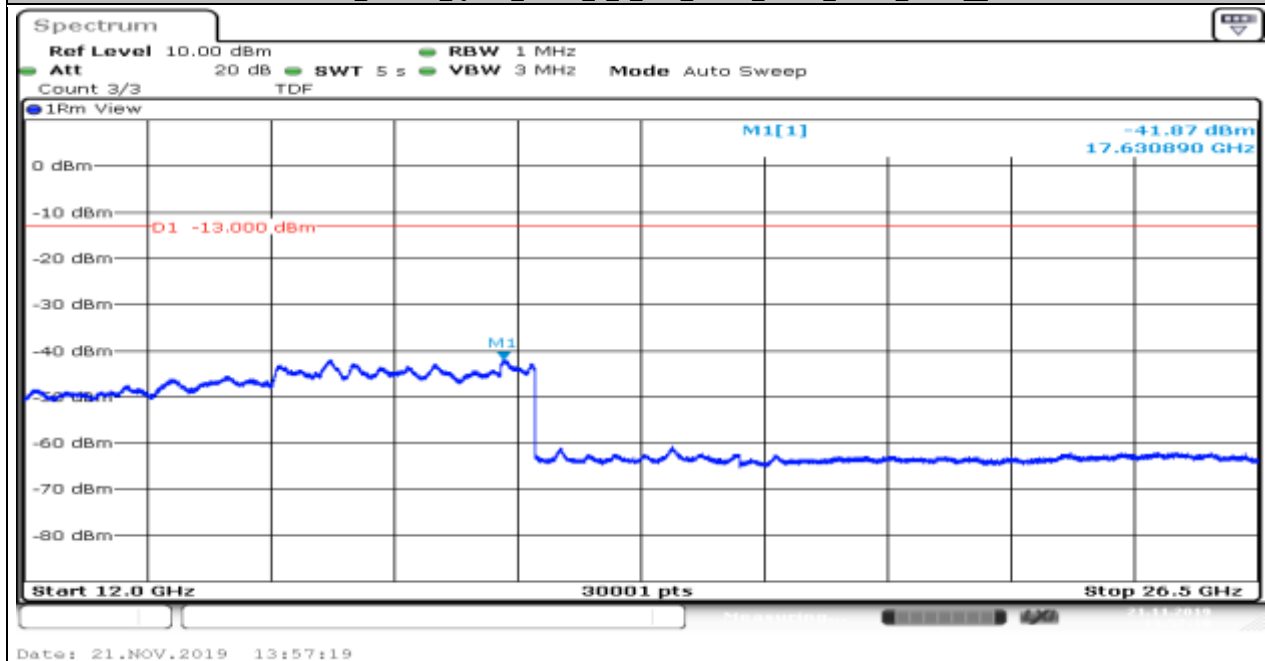


Band4_1.4MHz_QPSK_20393_1_5_Low_12000_26500_-41.87_PASS

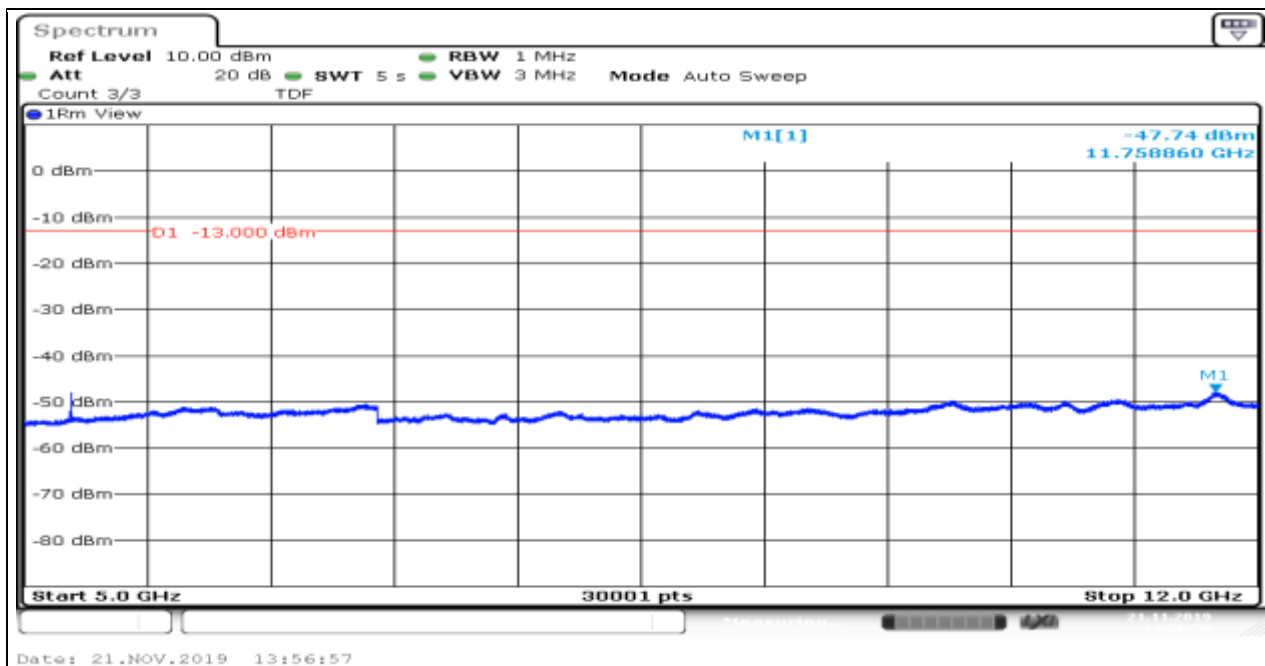
Produkte
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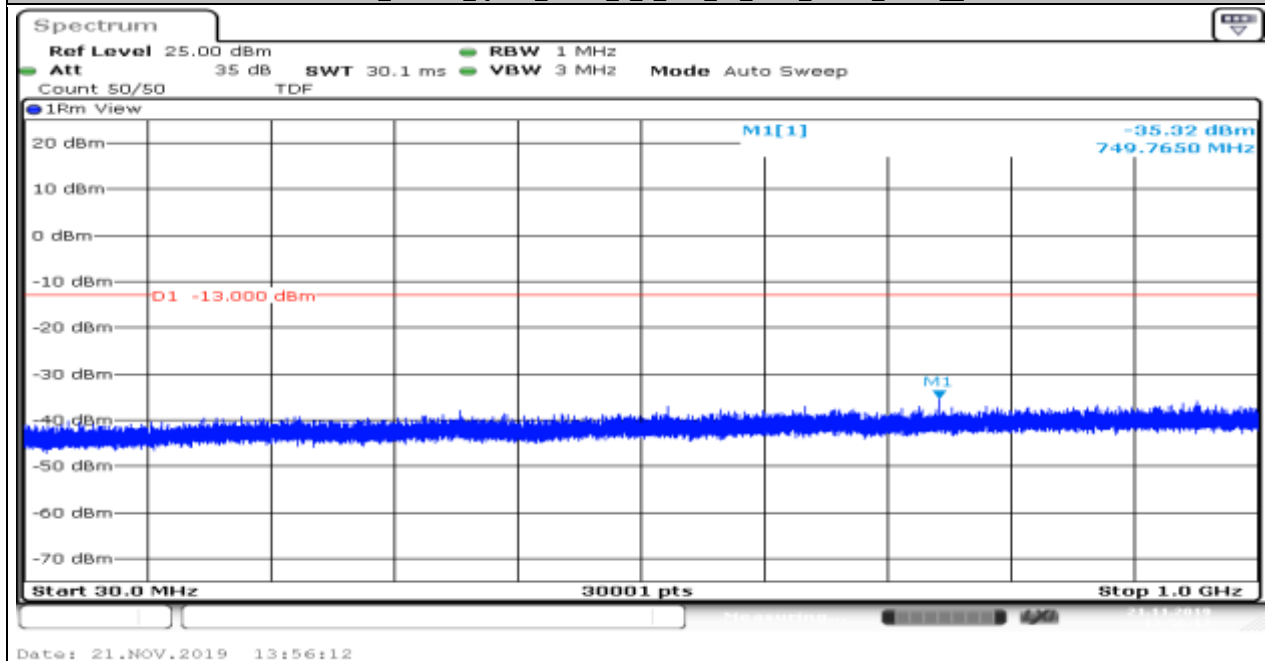
Band4_1.4MHz_QPSK_20393_6_0_Low_12000_26500_-41.87_PASS



Band4_1.4MHz_QPSK_20393_6_0_Low_5000_12000_-47.74_PASS

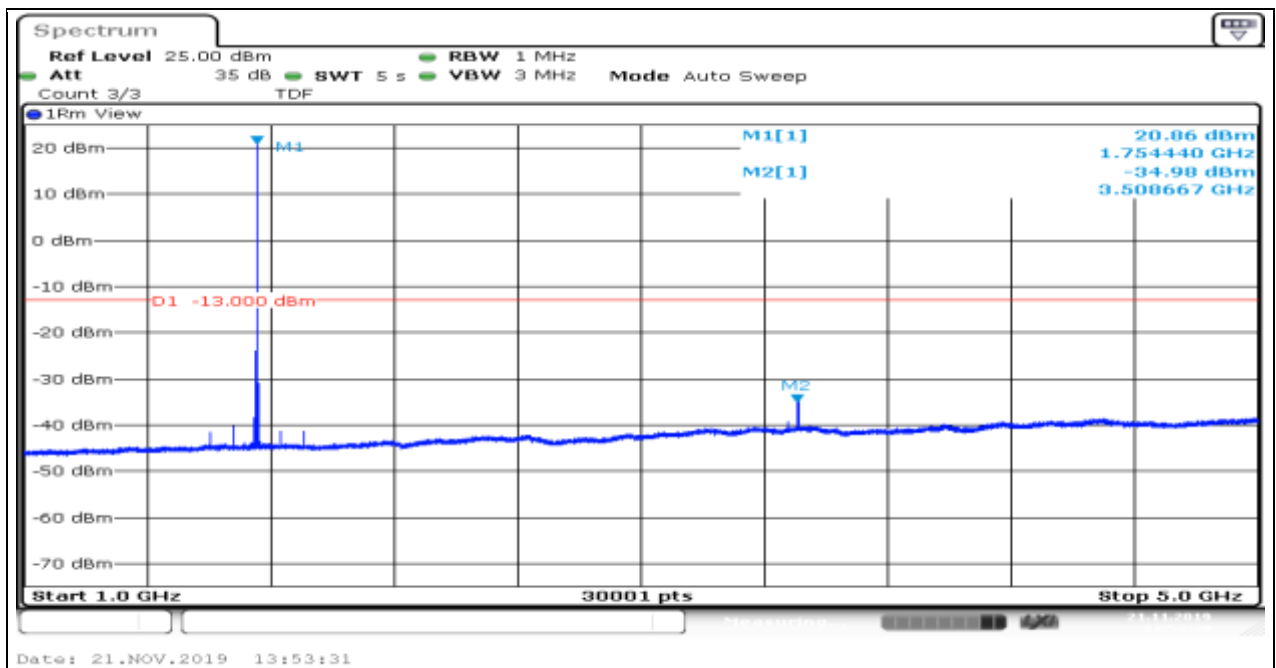


Band4_1.4MHz_QPSK_20393_6_0_Low_30_1000_-35.32_PASS

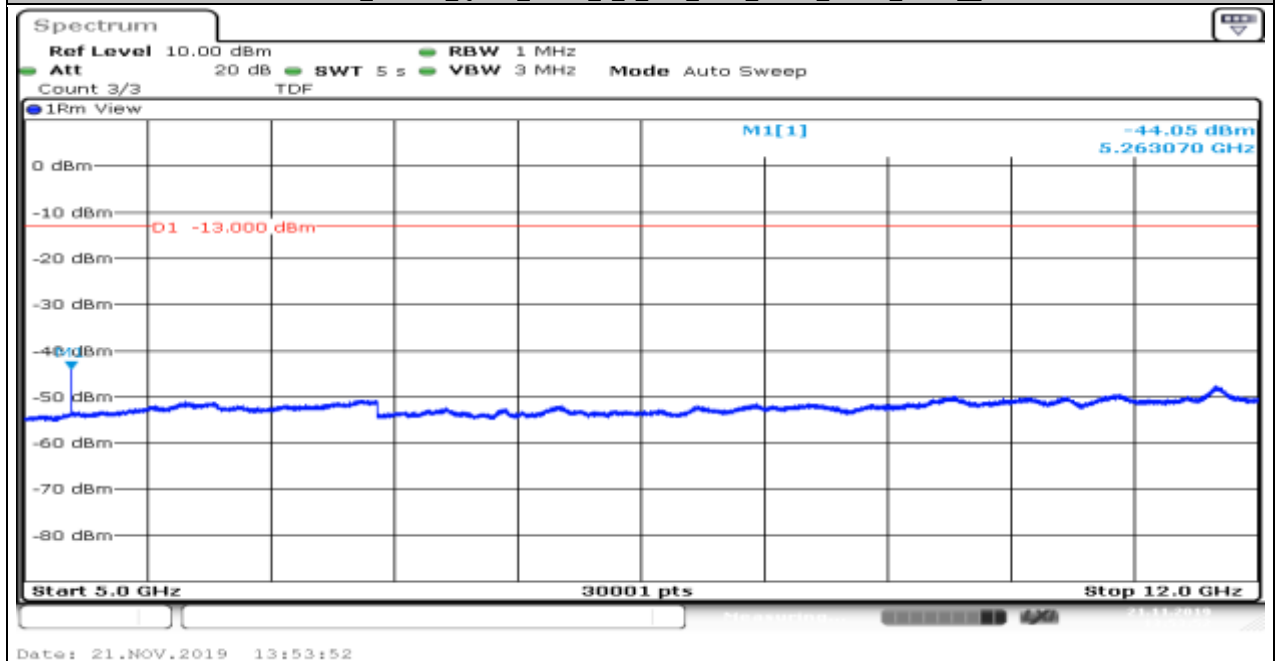


Band4_1.4MHz_QPSK_20393_1_5_Low_1000_5000_-34.98_PASS

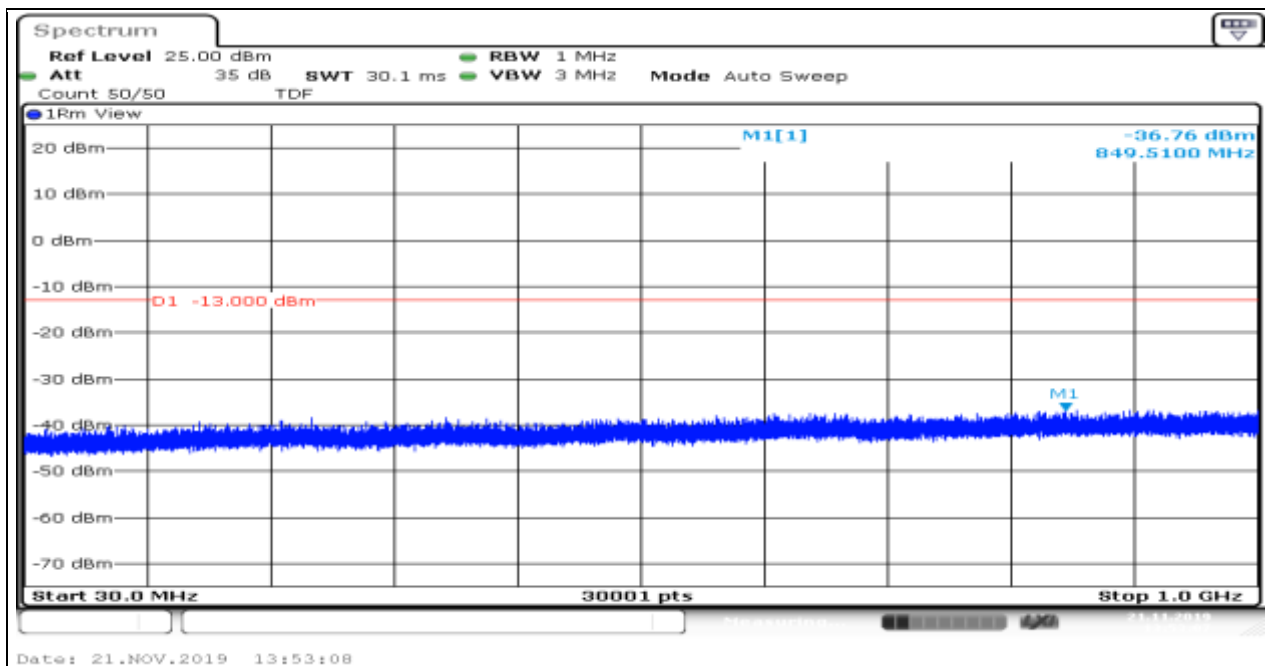
Produkte
Products



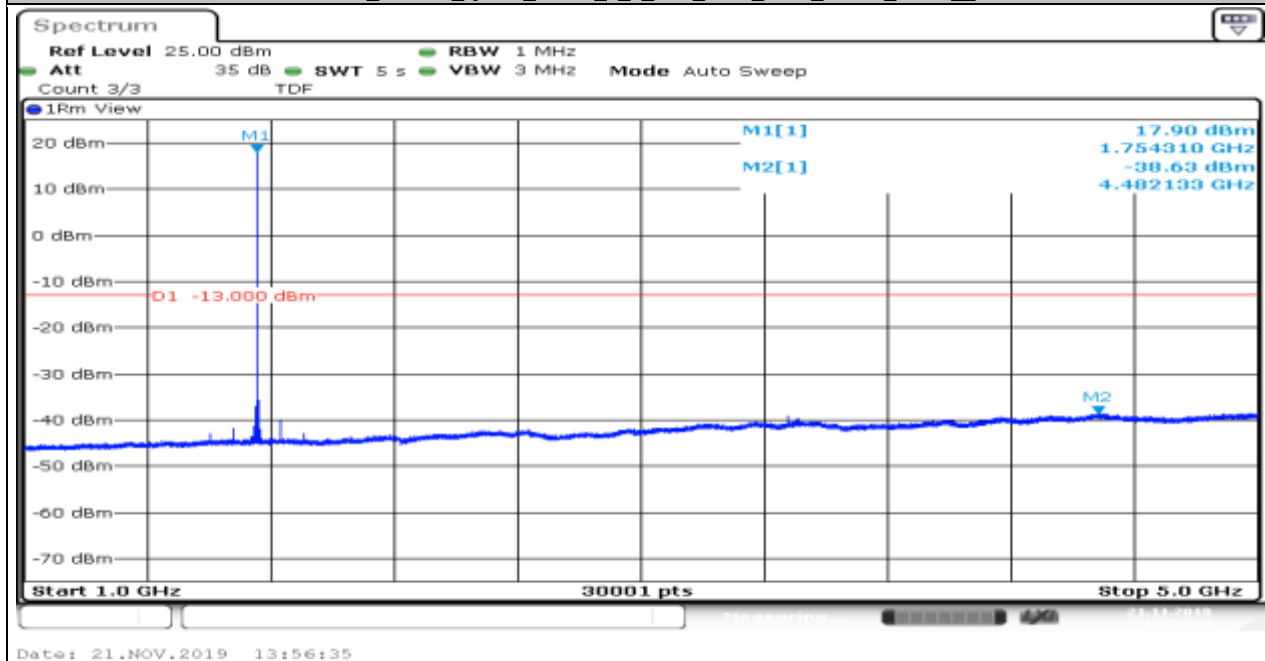
Band4_1.4MHz_QPSK_20393_1_5_Low_5000_12000_-44.05_PASS



Band4_1.4MHz_QPSK_20393_1_5_Low_30_1000_-36.76_PASS

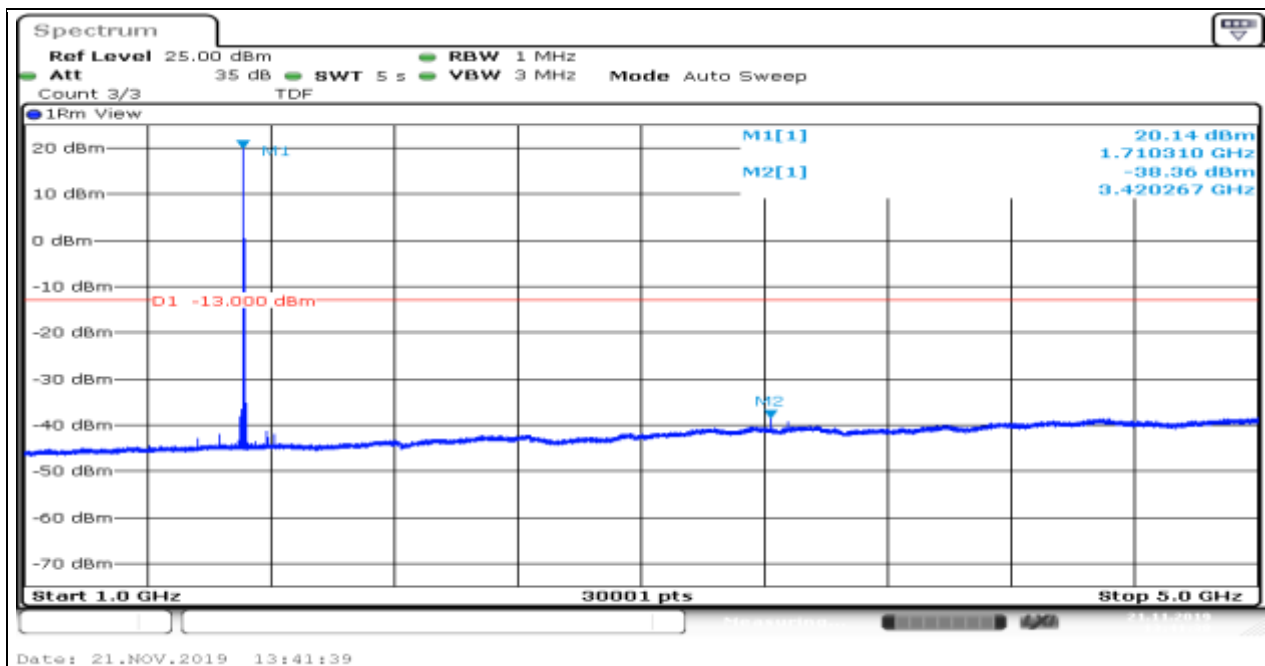


Band4_1.4MHz_QPSK_20393_6_0_Low_1000_5000_-38.63_PASS

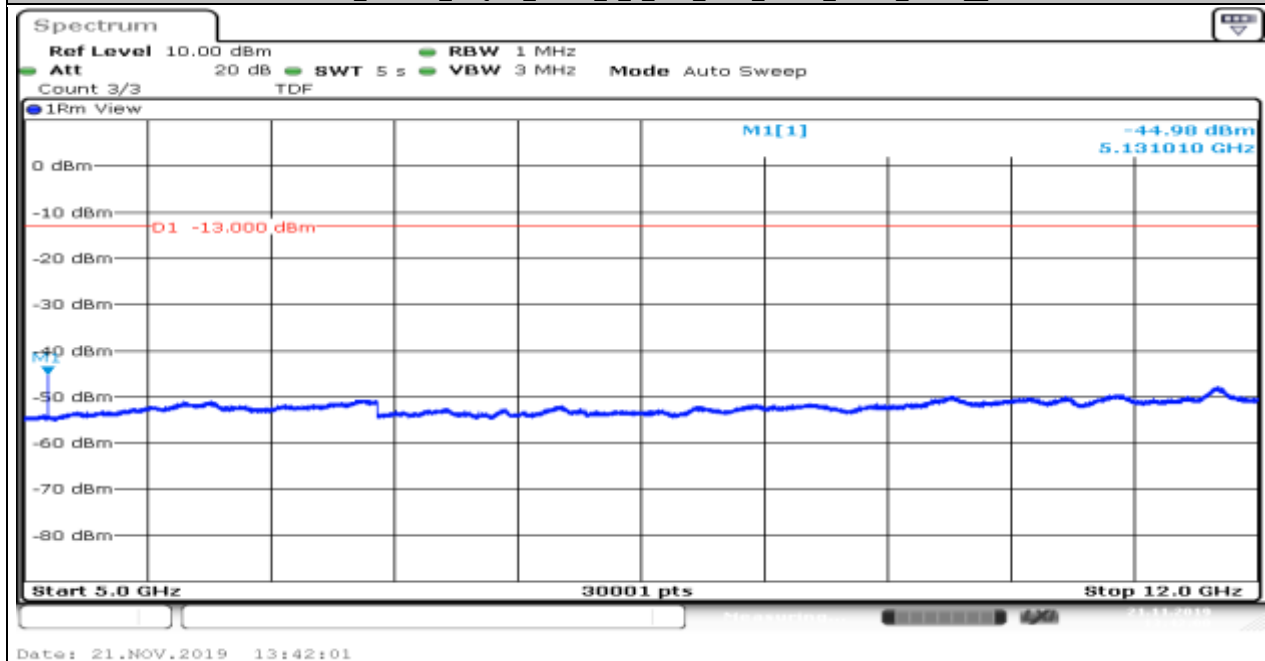


Band4_1.4MHz_16QAM_19957_1_0_Low_1000_5000_-38.36_PASS

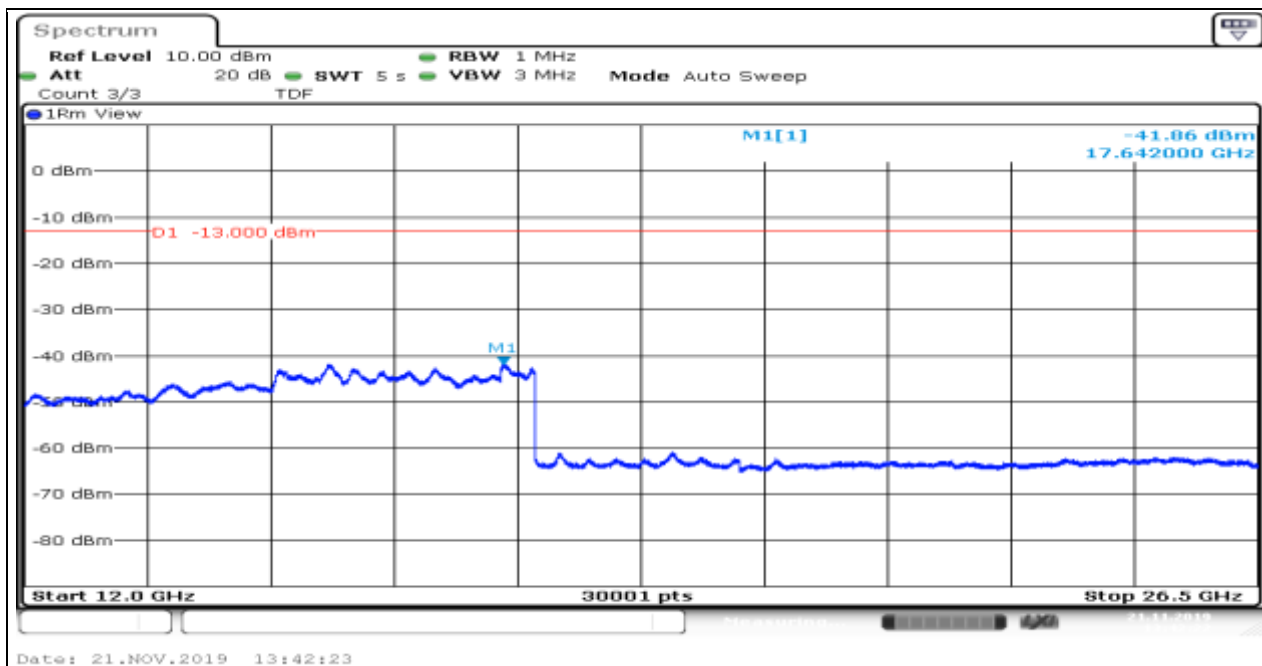
Produkte
Products



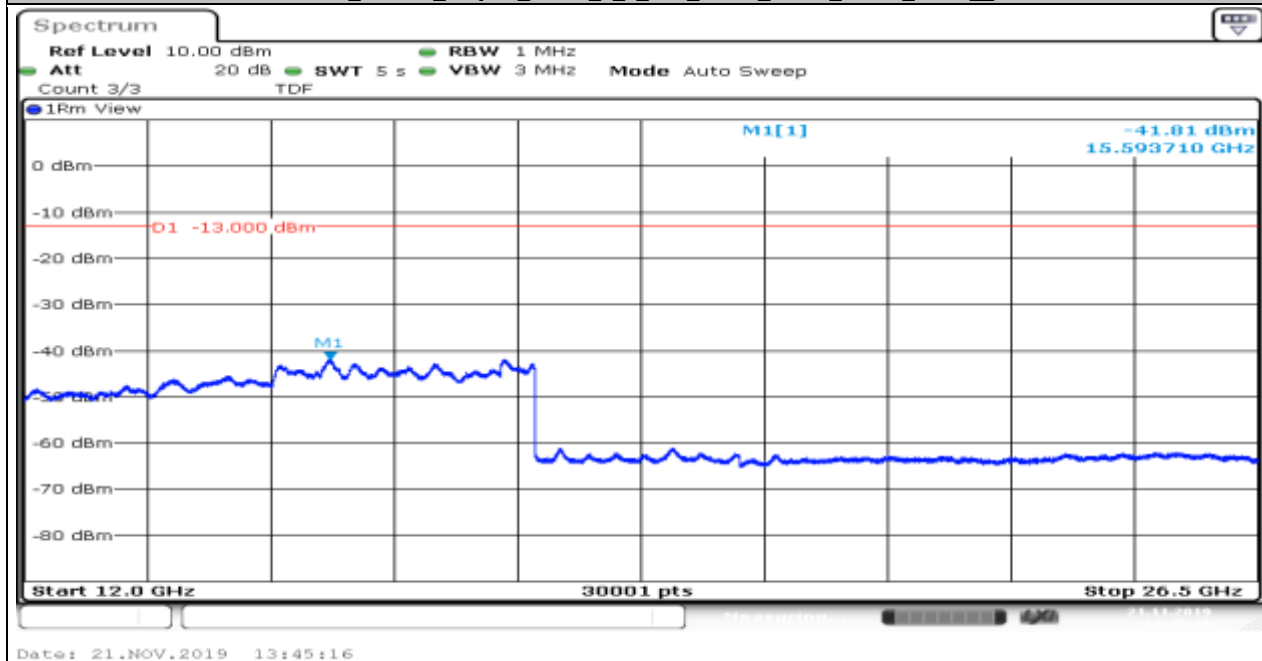
Band4_1.4MHz_16QAM_19957_1_0_Low_5000_12000_-44.98_PASS



Band4_1.4MHz_16QAM_19957_1_0_Low_12000_26500_-41.86_PASS

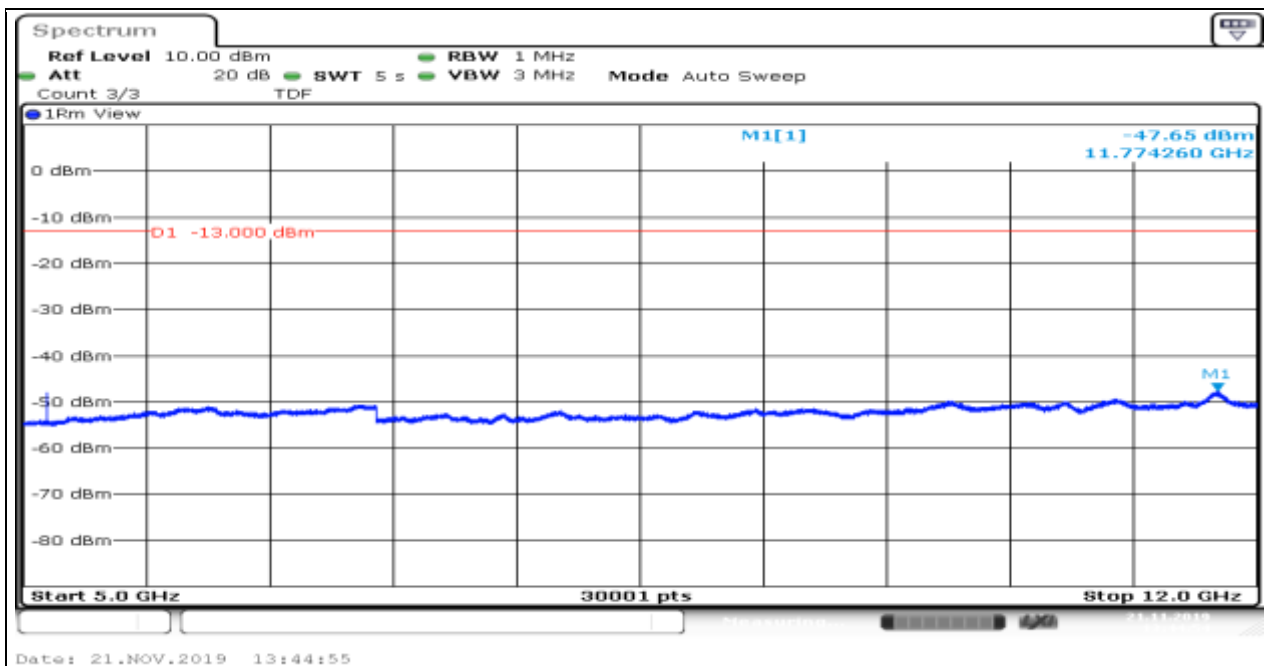


Band4_1.4MHz_16QAM_19957_6_0_Low_12000_26500_-41.81_PASS

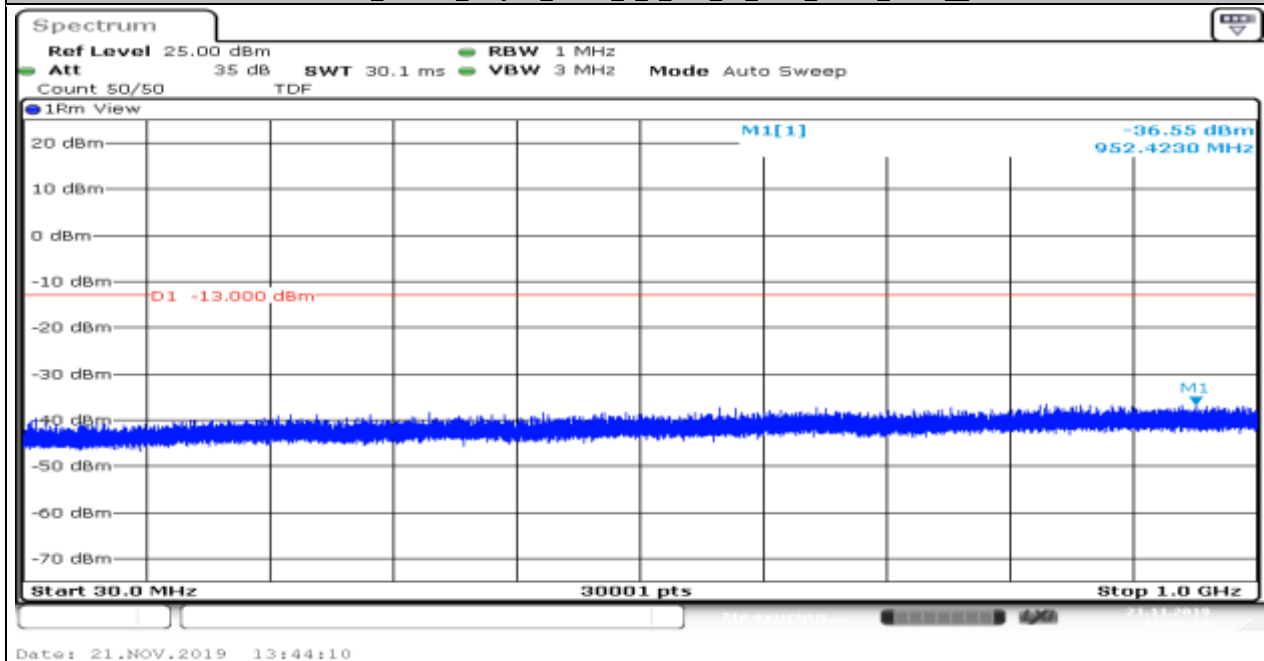


Band4_1.4MHz_16QAM_19957_6_0_Low_5000_12000_-47.65_PASS

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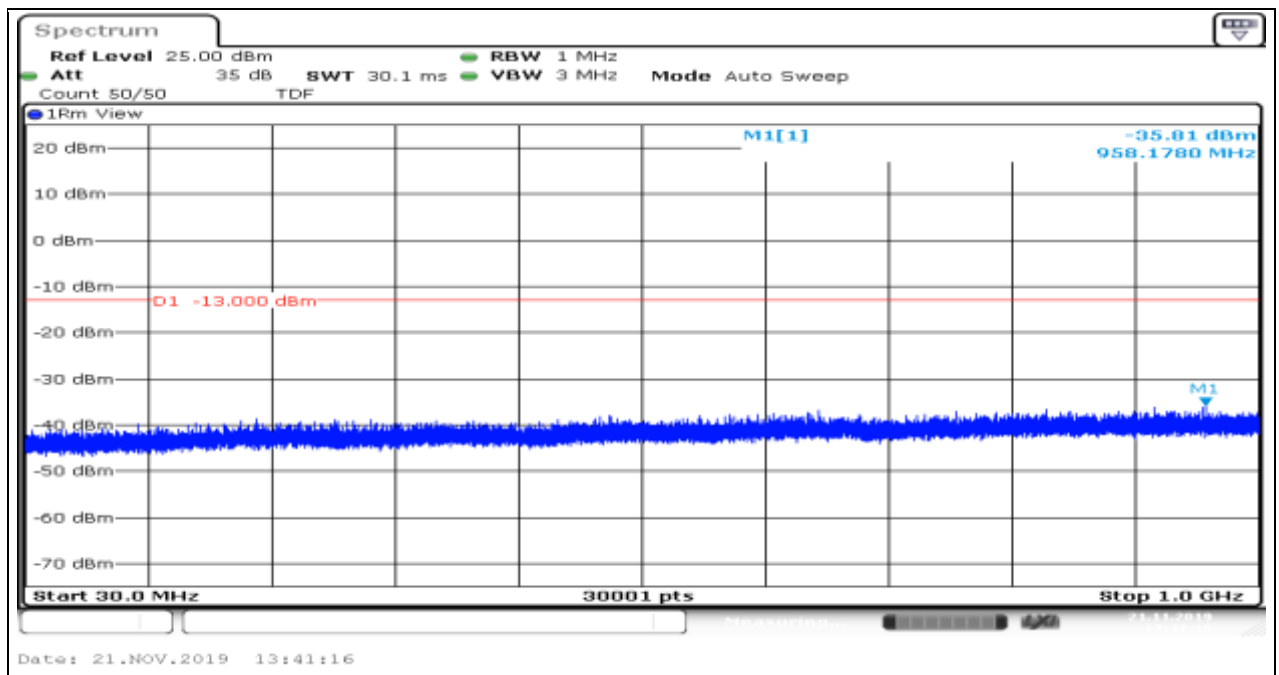


Band4_1.4MHz_16QAM_19957_6_0_Low_30_1000_-36.55_PASS

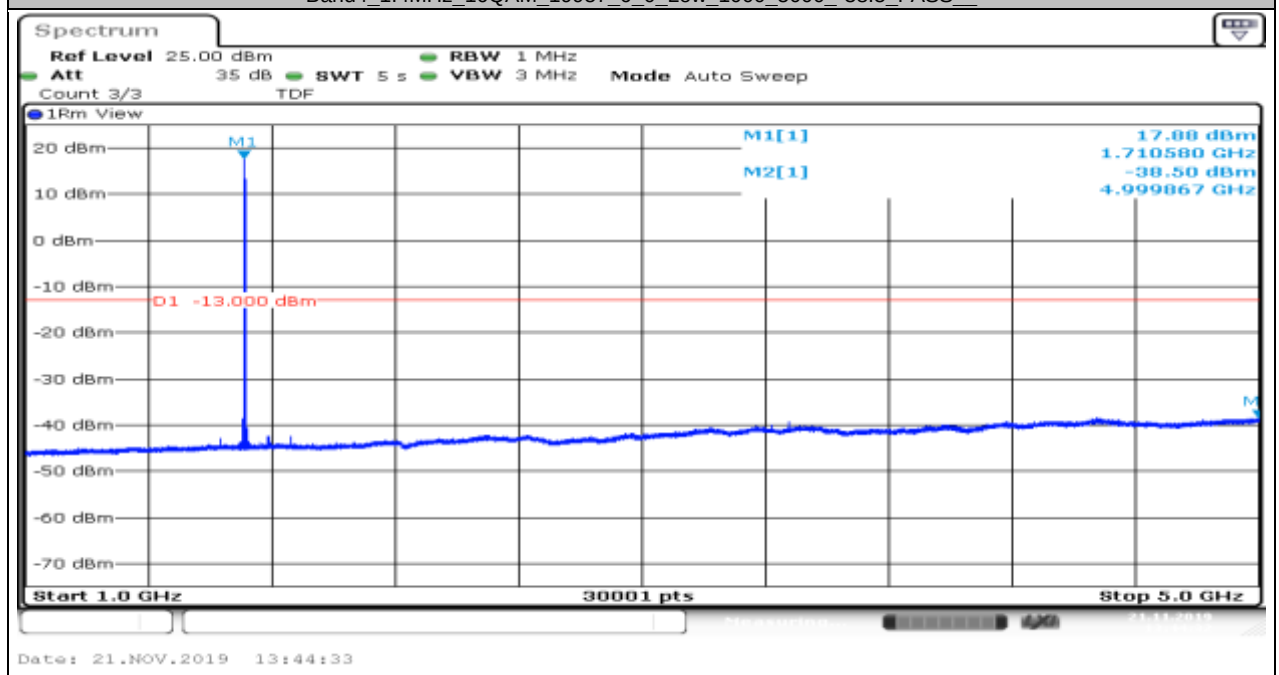


Band4_1.4MHz_16QAM_19957_1_0_Low_30_1000_-35.81_PASS

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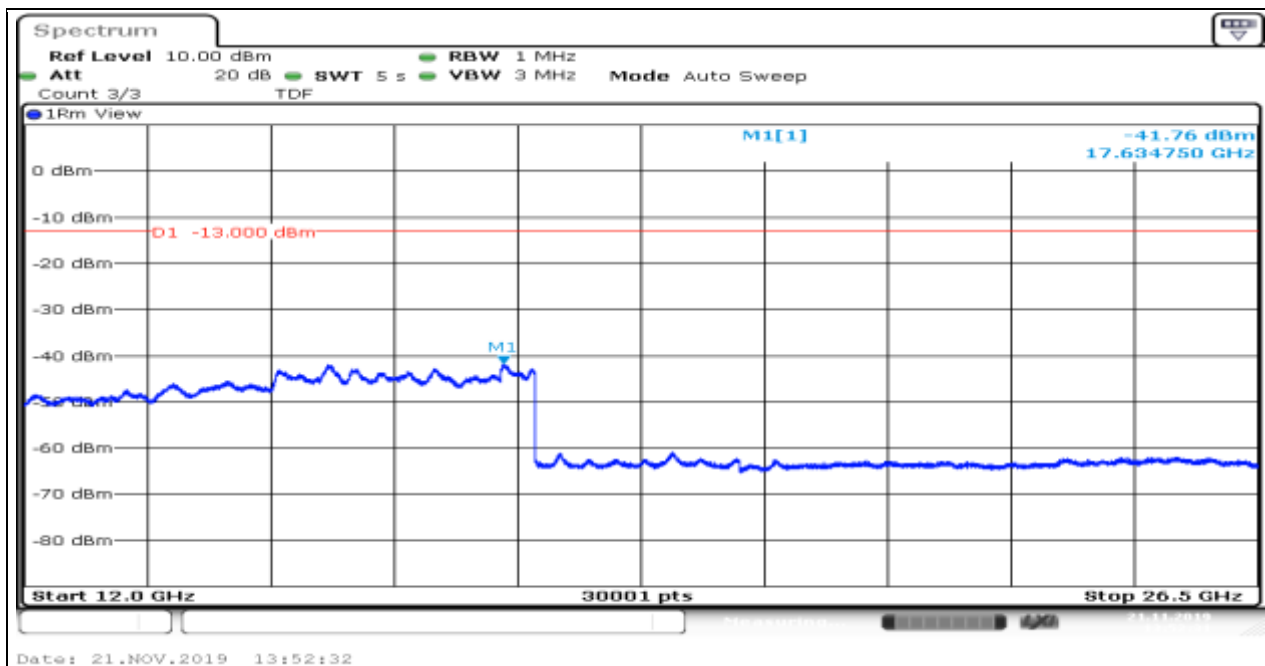


Band4 1.4MHz 16QAM 19957 6 0 Low 1000 5000 -38.5 PASS

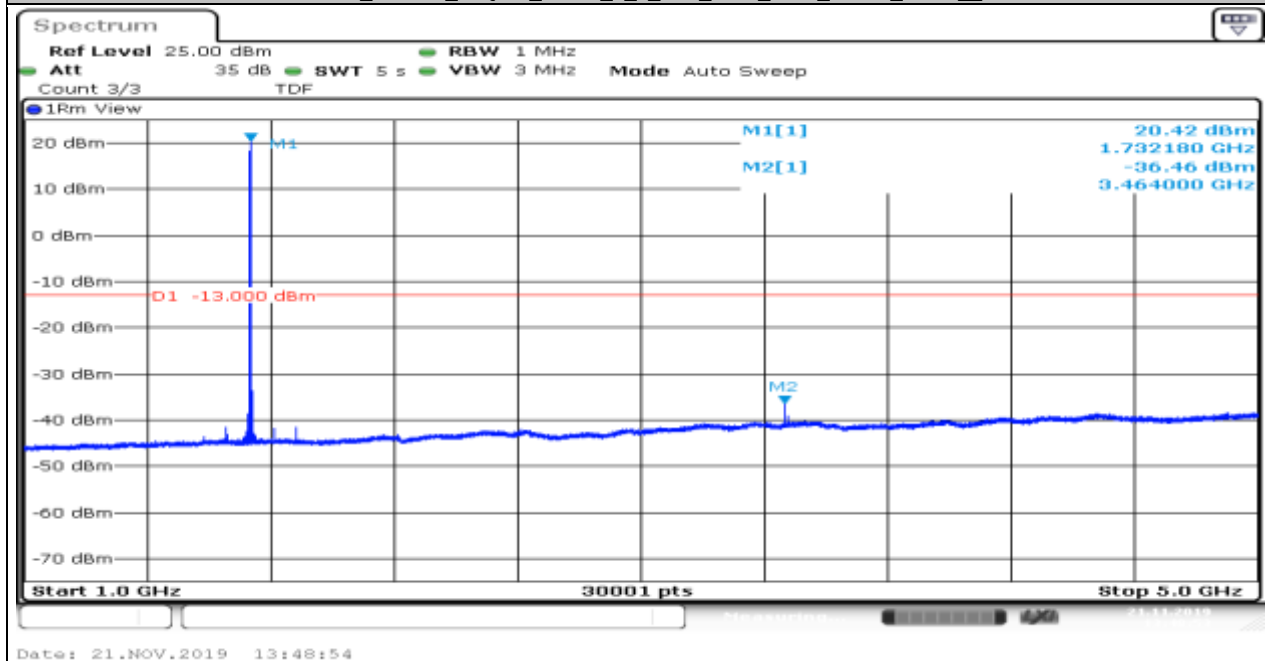


Band4 1.4MHz 16QAM 20175 6 0 Low 12000 26500 -41.76 PASS

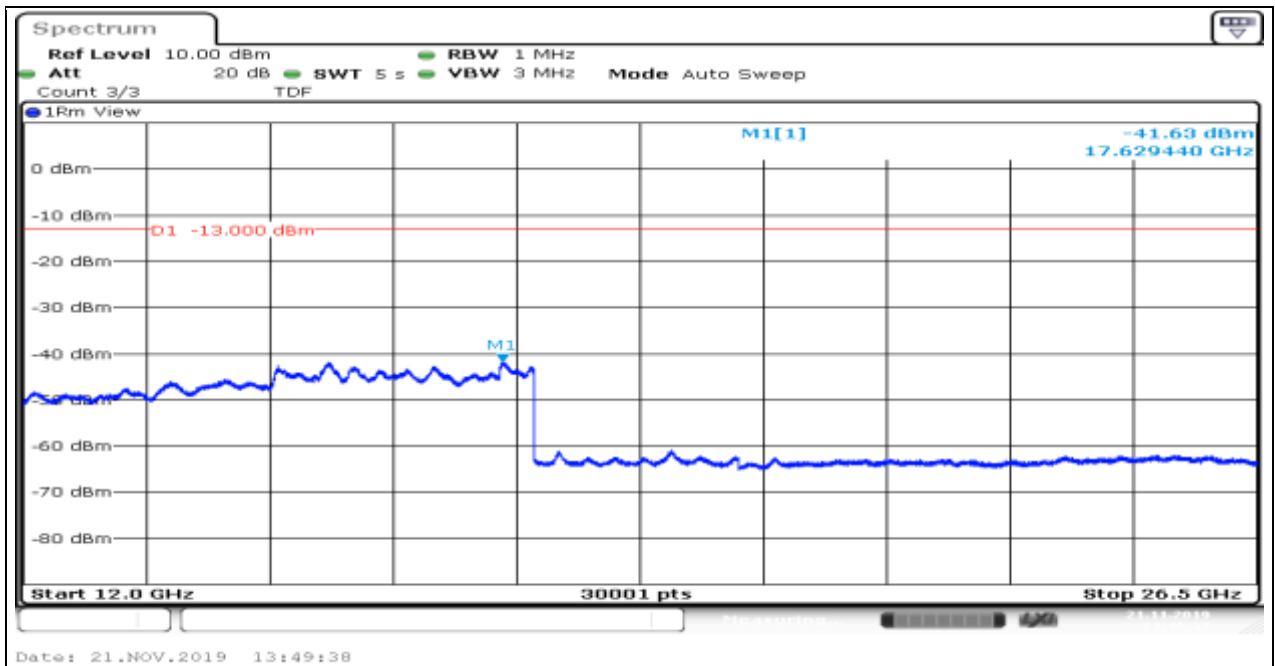
Produkte
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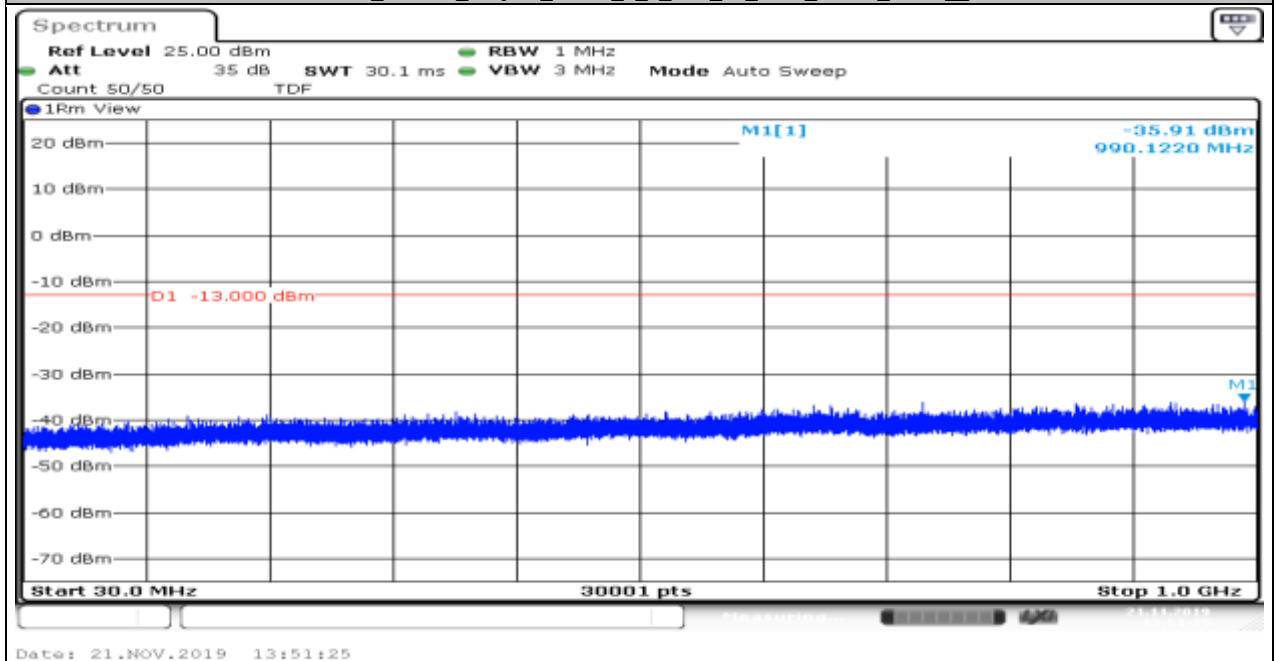
Band4_1.4MHz_16QAM_20175_1_0_Low_1000_5000_-36.46_PASS



Band4_1.4MHz_16QAM_20175_1_0_Low_12000_26500_-41.63_PASS

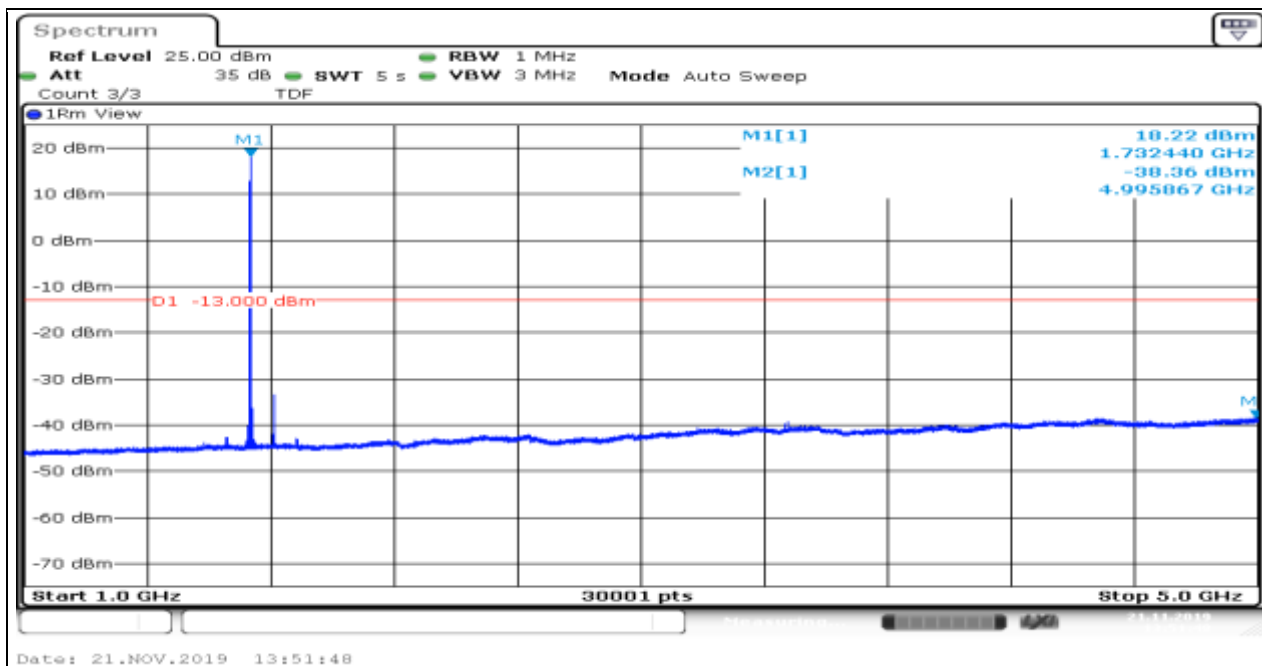


Band4_1.4MHz_16QAM_20175_6_0_Low_30_1000_-35.91_PASS

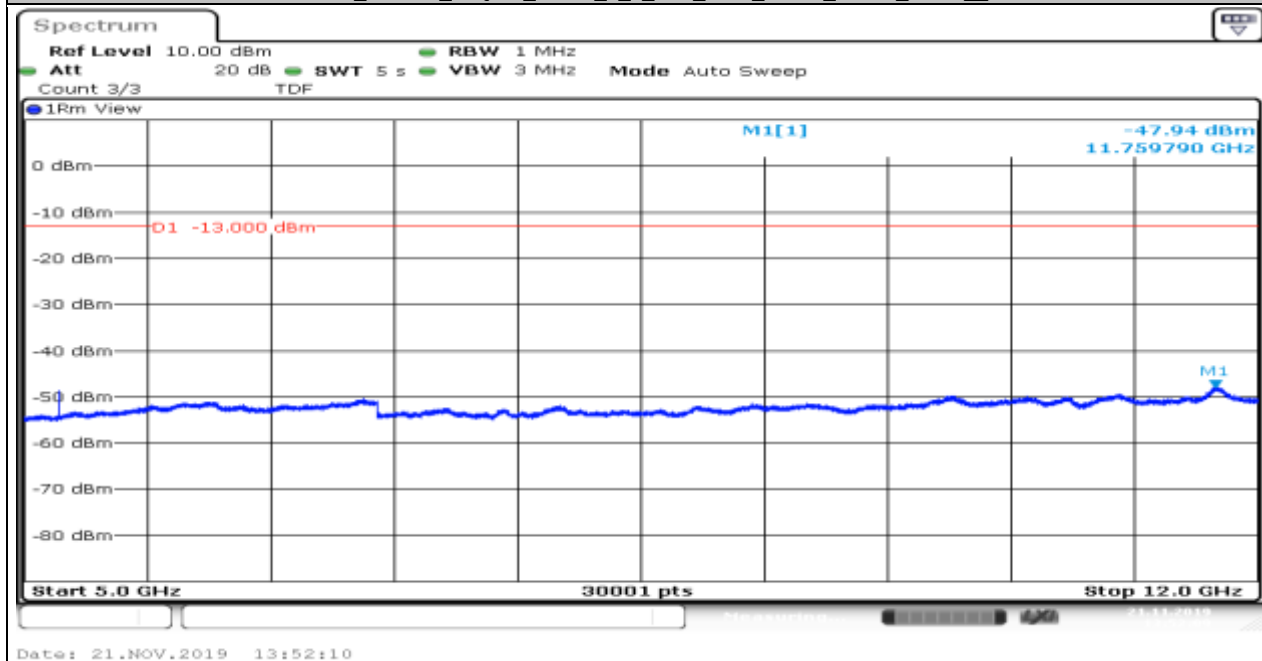


Band4_1.4MHz_16QAM_20175_6_0_Low_1000_5000_-38.36_PASS

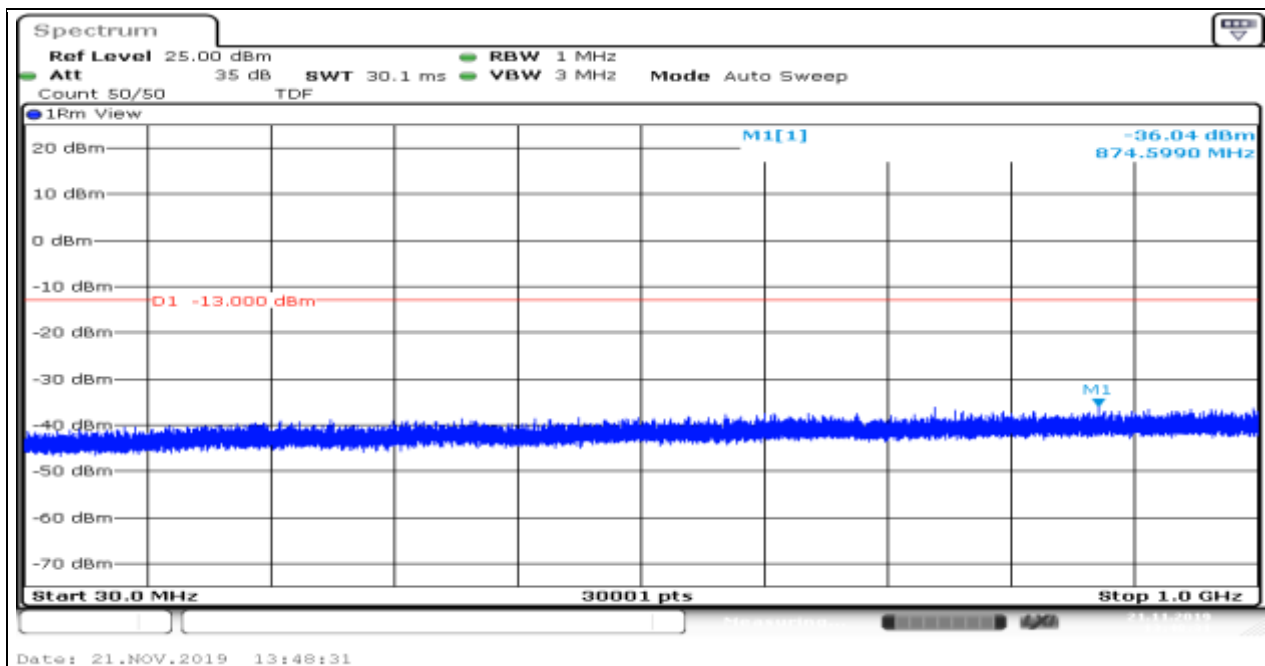
Produkte
Products



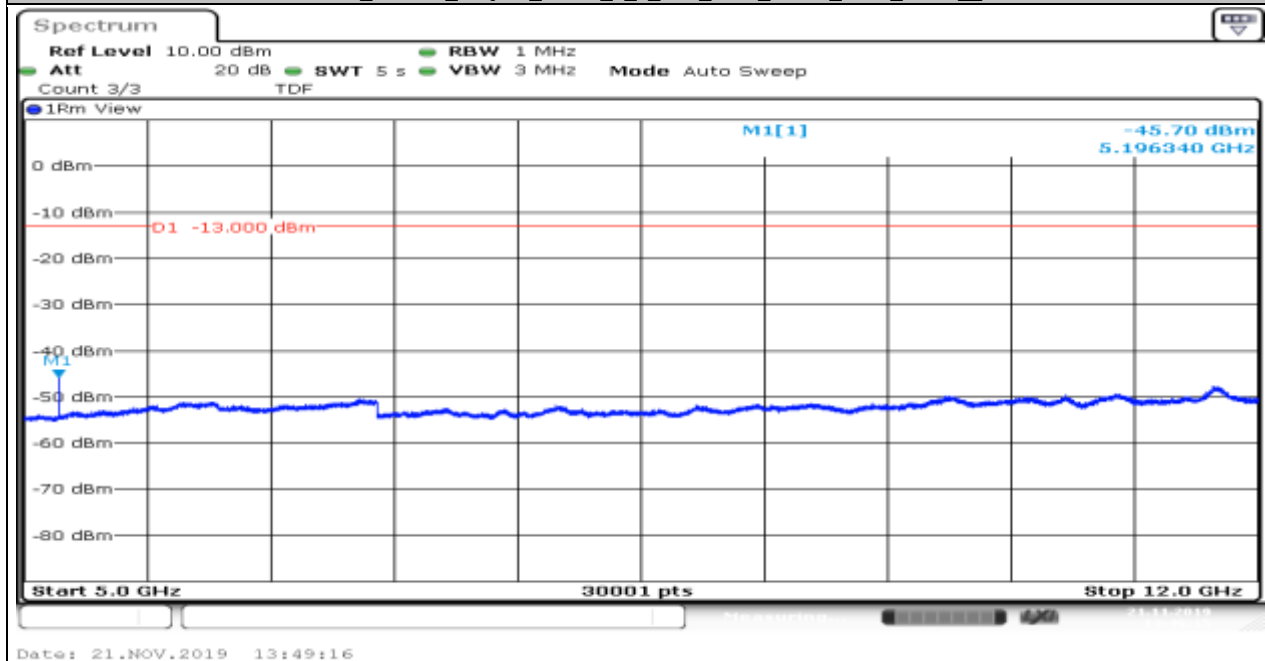
Band4_1.4MHz_16QAM_20175_6_0_Low_5000_12000_-47.94_PASS



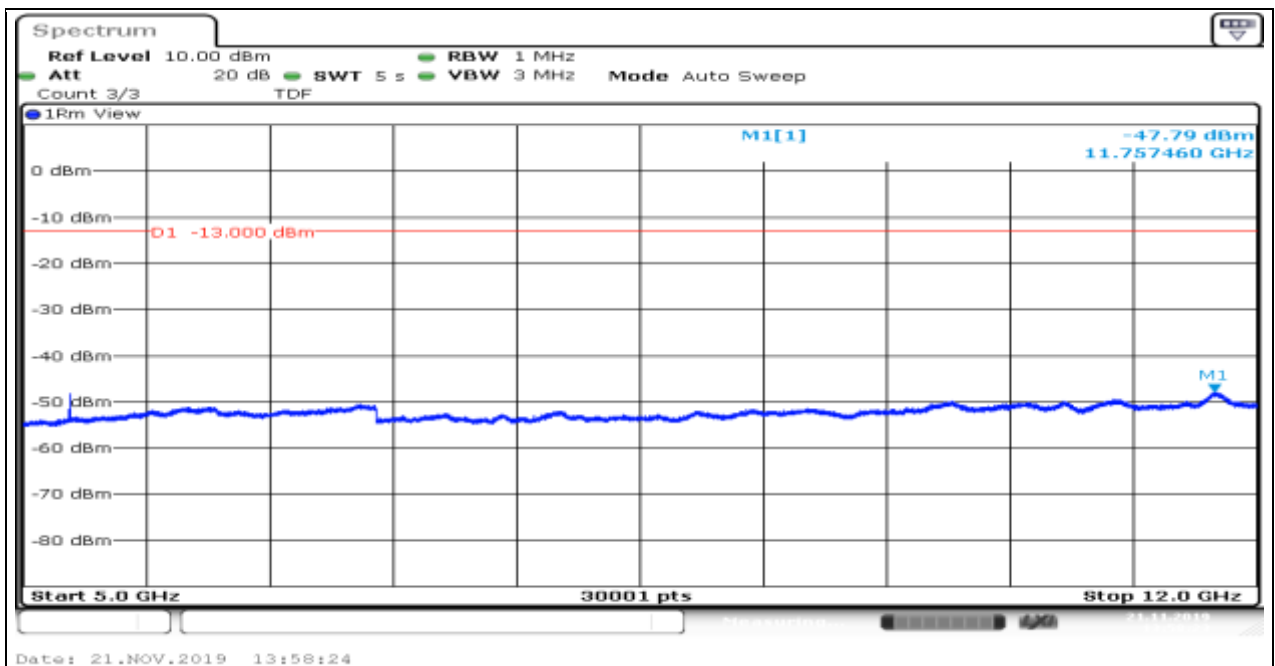
Band4_1.4MHz_16QAM_20175_1_0_Low_30_1000_-36.04_PASS



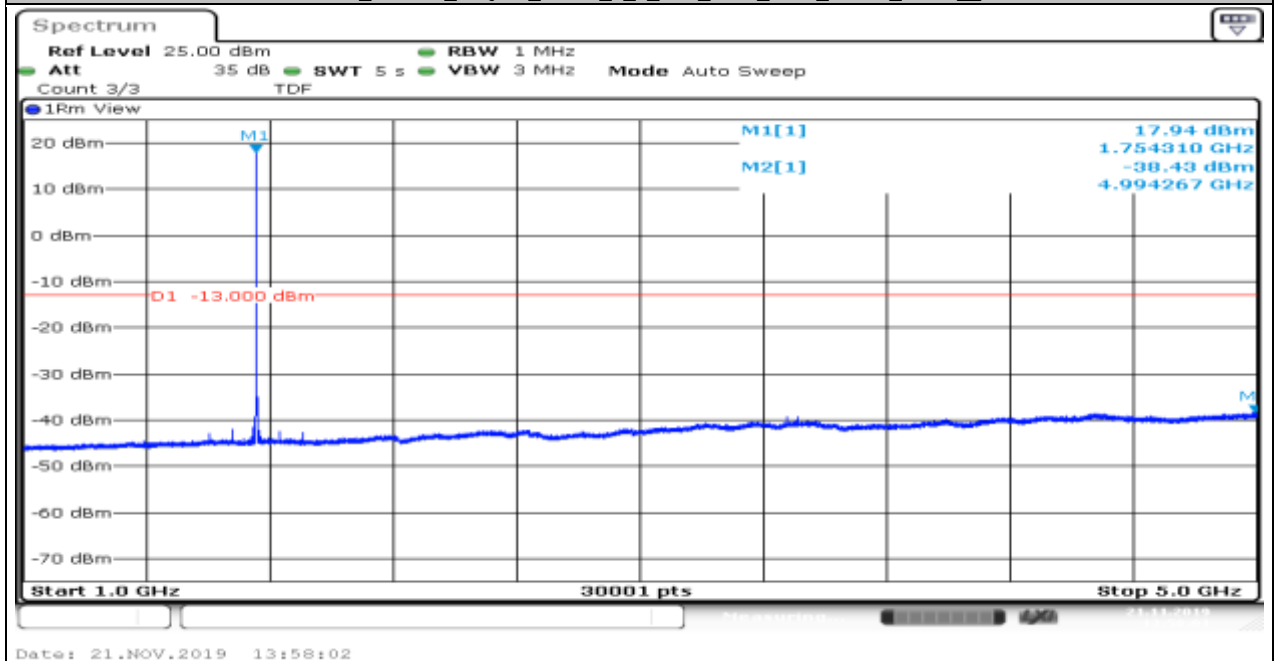
Band4_1.4MHz_16QAM_20175_1_0_Low_5000_12000_-45.7_PASS_



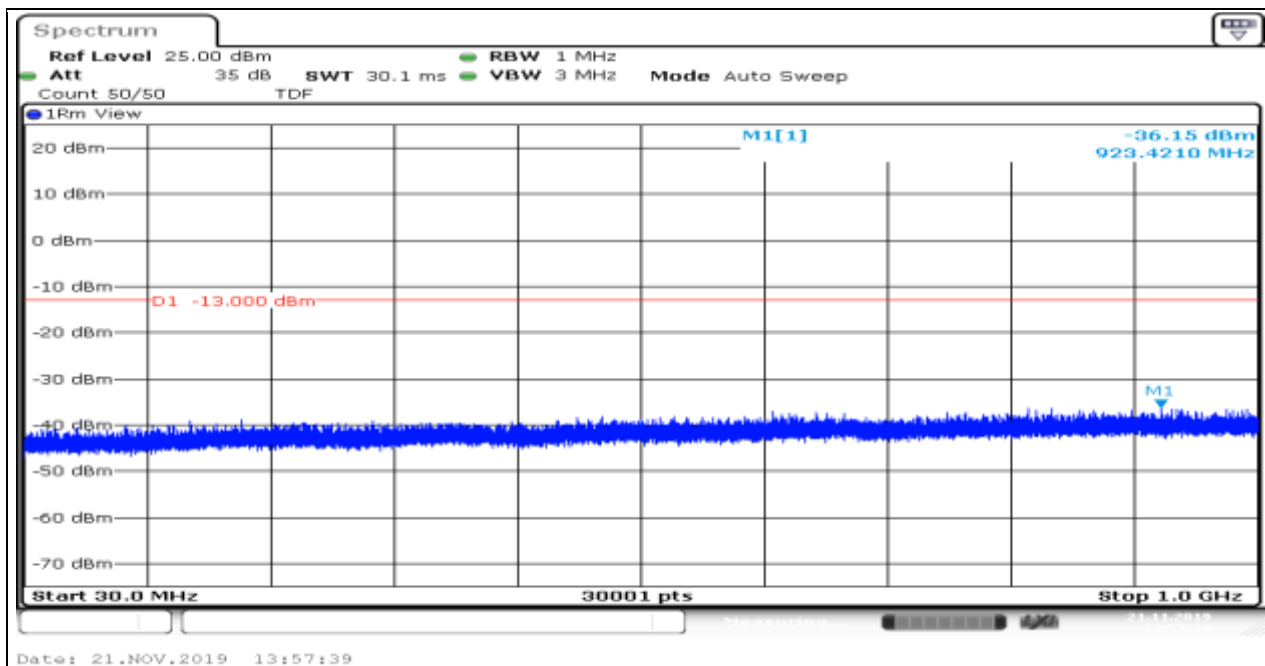
Band4_1.4MHz_16QAM_20393_6_0_Low_5000_12000_-47.79_PASS_



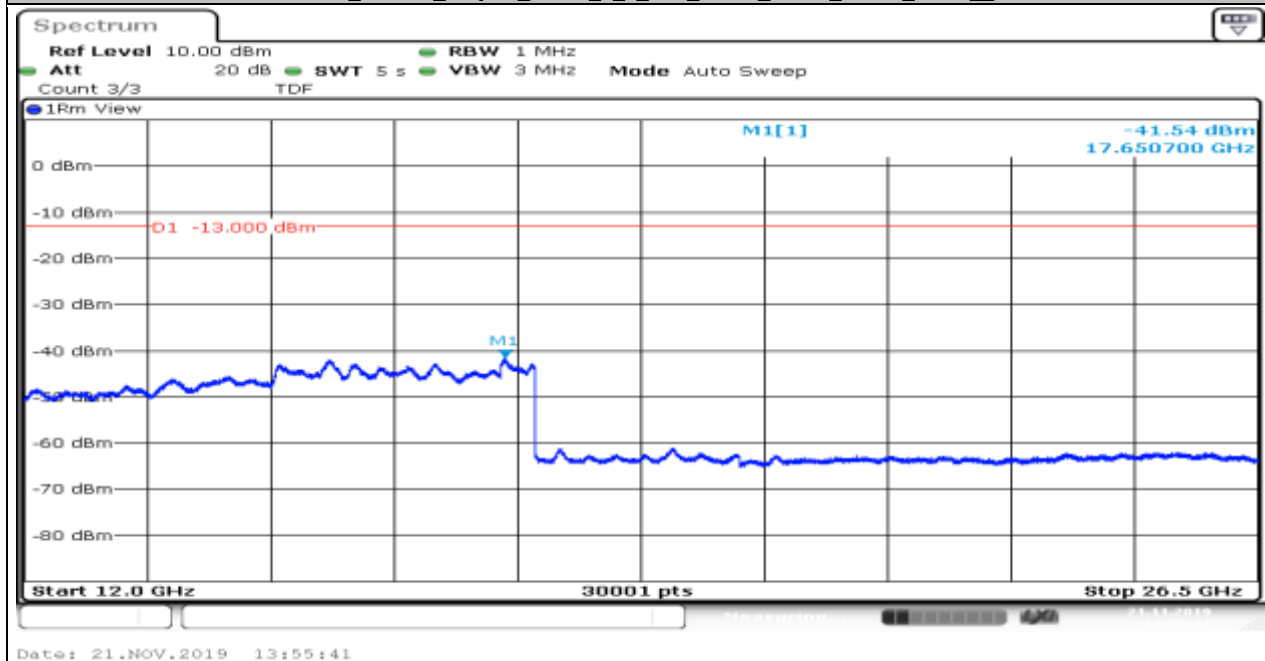
Band4_1.4MHz_16QAM_20393_6_0_Low_1000_5000_-38.43_PASS



Band4_1.4MHz_16QAM_20393_6_0_Low_30_1000_-36.15_PASS

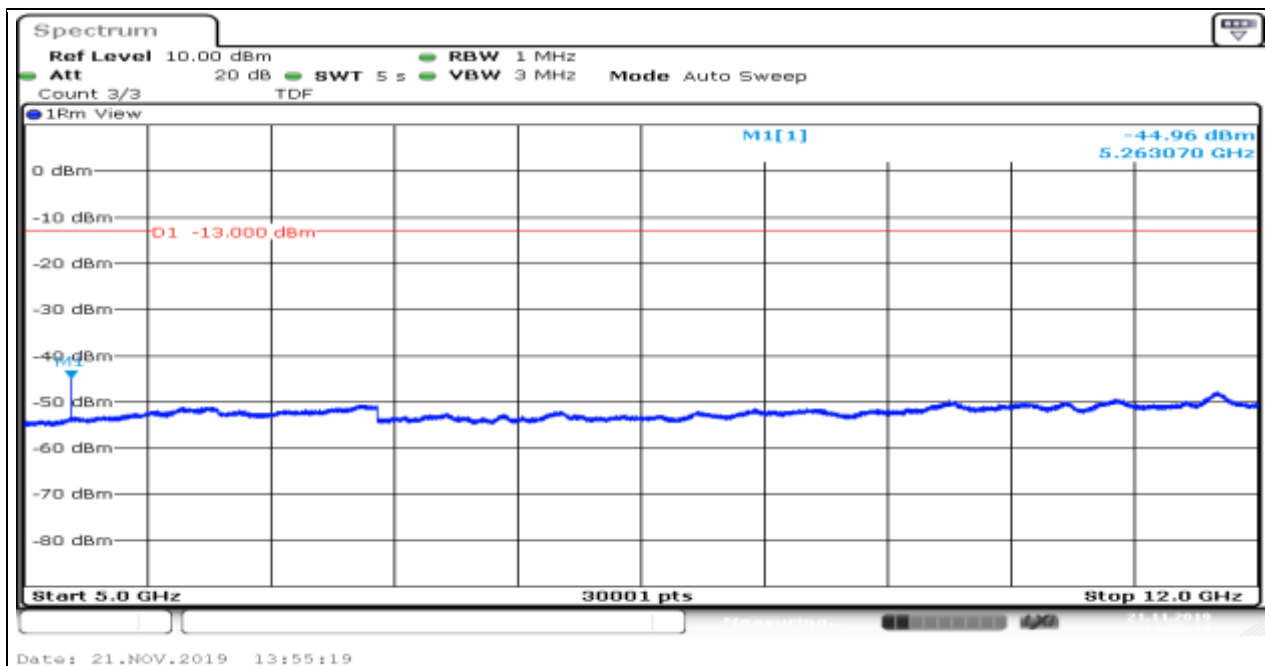


Band4_1.4MHz_16QAM_20393_1_5_Low_12000_26500_-41.54_PASS

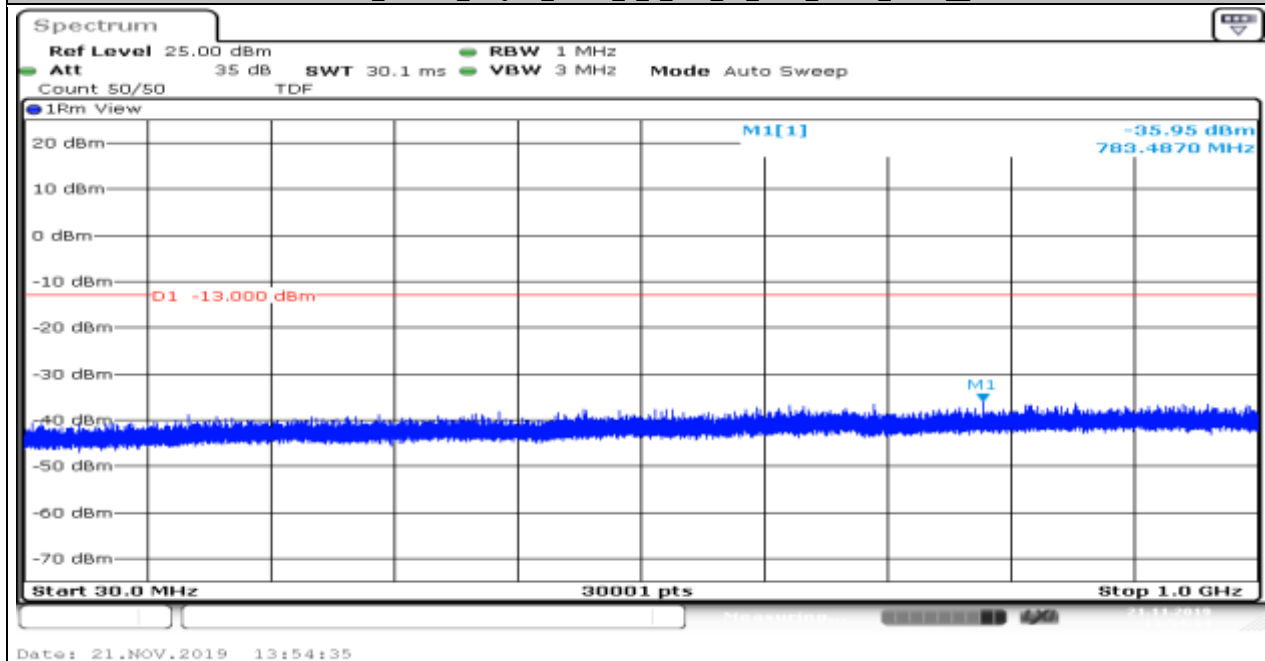


Band4_1.4MHz_16QAM_20393_1_5_Low_5000_12000_-44.96_PASS

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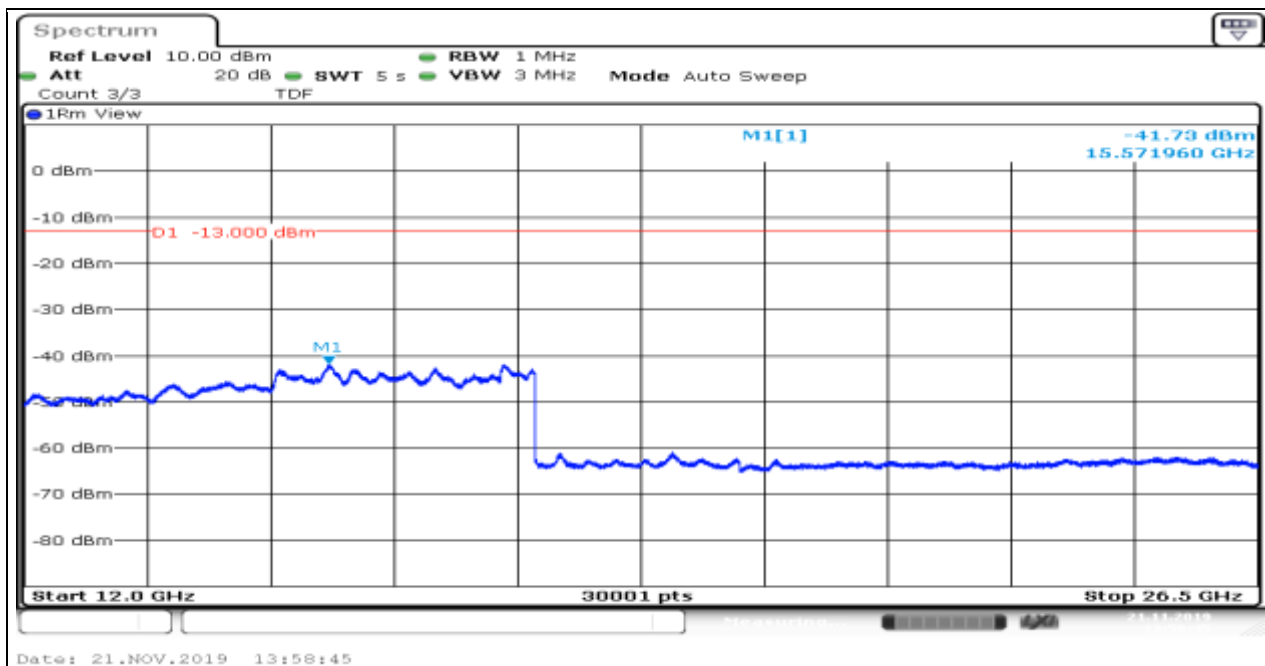


Band4_1.4MHz_16QAM_20393_1_5_Low_30_1000_-35.95_PASS

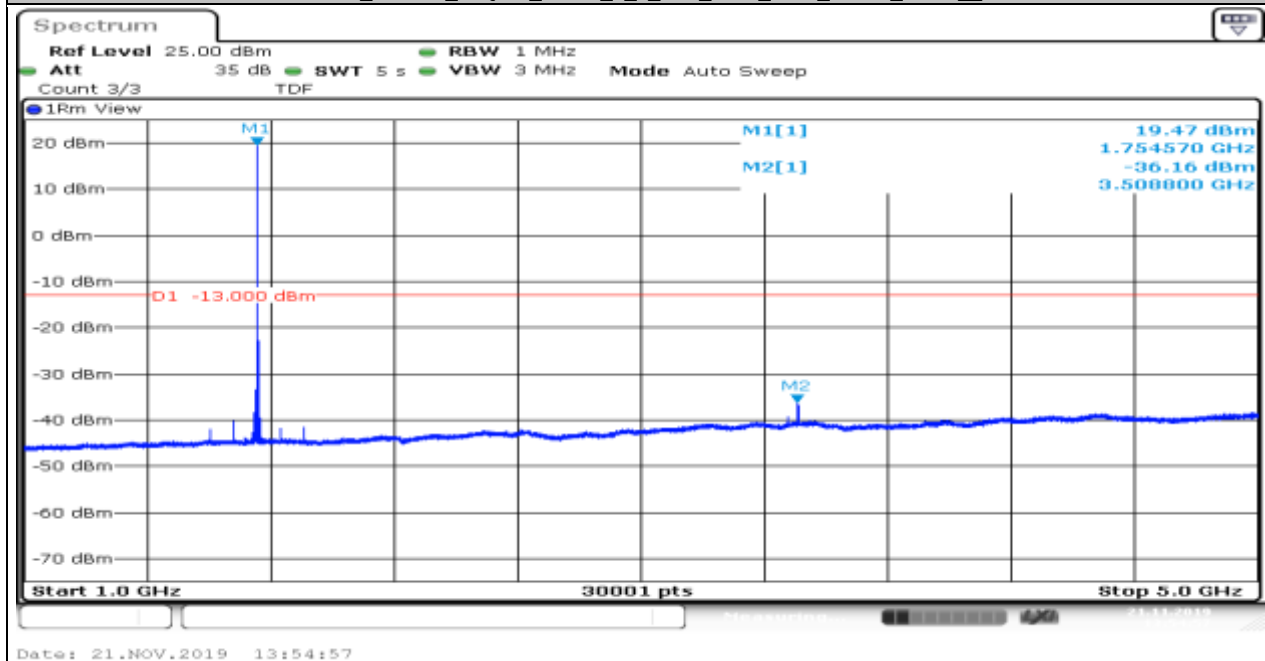


Band4_1.4MHz_16QAM_20393_6_0_Low_12000_26500_-41.73_PASS

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Band4 1.4MHz 16QAM 20393 1 5 Low 1000 5000 -36.16 PASS



Appendix B.6: Frequency Stability for M1

Test Result

Voltage												
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band4	1.4MHz	QPSK	20175	1	0	Low	NV	NT	9.63	0.005558	±2.5	PASS
Band4	1.4MHz	QPSK	20175	1	0	Low	HV	NT	7.48	0.004317	±2.5	PASS
Band4	1.4MHz	QPSK	20175	1	0	Low	LV	NT	11.42	0.006592	±2.5	PASS
Band4	1.4MHz	16QAM	20175	1	0	Low	NV	NT	68.62	0.039608	±2.5	PASS
Band4	1.4MHz	16QAM	20175	1	0	Low	LV	NT	73.06	0.04217	±2.5	PASS
Band4	1.4MHz	16QAM	20175	1	0	Low	HV	NT	73.86	0.042632	±2.5	PASS

Temperature												
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band4	1.4MHz	QPSK	20175	1	0	Low	NV	30	9.78	0.005645	±2.5	PASS
Band4	1.4MHz	QPSK	20175	1	0	Low	NV	0	7.58	0.004375	±2.5	PASS
Band4	1.4MHz	QPSK	20175	1	0	Low	NV	80	11.47	0.00662	±2.5	PASS
Band4	1.4MHz	QPSK	20175	1	0	Low	NV	85	6.34	0.003659	±2.5	PASS
Band4	1.4MHz	QPSK	20175	1	0	Low	NV	70	9.71	0.005605	±2.5	PASS
Band4	1.4MHz	QPSK	20175	1	0	Low	NV	60	6.65	0.003838	±2.5	PASS
Band4	1.4MHz	QPSK	20175	1	0	Low	NV	50	12.56	0.00725	±2.5	PASS
Band4	1.4MHz	QPSK	20175	1	0	Low	NV	40	7.22	0.004167	±2.5	PASS
Band4	1.4MHz	QPSK	20175	1	0	Low	NV	10	4.94	0.002851	±2.5	PASS
Band4	1.4MHz	QPSK	20175	1	0	Low	NV	-40	7.68	0.004433	±2.5	PASS
Band4	1.4MHz	QPSK	20175	1	0	Low	NV	-10	7.81	0.004508	±2.5	PASS
Band4	1.4MHz	QPSK	20175	1	0	Low	NV	-20	4.96	0.002863	±2.5	PASS
Band4	1.4MHz	QPSK	20175	1	0	Low	NV	-30	11.49	0.006632	±2.5	PASS
Band4	1.4MHz	QPSK	20175	1	0	Low	NV	20	6.87	0.003965	±2.5	PASS
Band4	1.4MHz	16QAM	20175	1	0	Low	NV	50	72.41	0.041795	±2.5	PASS
Band4	1.4MHz	16QAM	20175	1	0	Low	NV	85	68.05	0.039278	±2.5	PASS
Band4	1.4MHz	16QAM	20175	1	0	Low	NV	80	65.83	0.037997	±2.5	PASS
Band4	1.4MHz	16QAM	20175	1	0	Low	NV	60	74.87	0.043215	±2.5	PASS
Band4	1.4MHz	16QAM	20175	1	0	Low	NV	40	72.88	0.042066	±2.5	PASS
Band4	1.4MHz	16QAM	20175	1	0	Low	NV	30	64.93	0.037478	±2.5	PASS
Band4	1.4MHz	16QAM	20175	1	0	Low	NV	20	72.17	0.041657	±2.5	PASS
Band4	1.4MHz	16QAM	20175	1	0	Low	NV	0	73.47	0.042407	±2.5	PASS
Band4	1.4MHz	16QAM	20175	1	0	Low	NV	-10	74.03	0.04273	±2.5	PASS
Band4	1.4MHz	16QAM	20175	1	0	Low	NV	-20	66.59	0.038436	±2.5	PASS
Band4	1.4MHz	16QAM	20175	1	0	Low	NV	-30	66.45	0.038355	±2.5	PASS
Band4	1.4MHz	16QAM	20175	1	0	Low	NV	-40	72.78	0.042009	±2.5	PASS
Band4	1.4MHz	16QAM	20175	1	0	Low	NV	10	64.64	0.03731	±2.5	PASS
Band4	1.4MHz	16QAM	20175	1	0	Low	NV	70	72.01	0.041564	±2.5	PASS