

Appendix C: Test Results of Band 5 for eMTC operation

APPENDIX C: TEST RESULTS OF BAND 5 FOR EMTC OPERATION	1
APPENDIX C.1: RF POWER OUTPUT AND EFFECTIVE (ISOTROPIC) RADIATED POWER OUTPUT DATA FOR M1	2
Test Result	2
APPENDIX C.2: PEAK-TO-AVERAGE RATIO (CCDF) FOR M1	3
Test Result	3
Test Graphs.....	3
APPENDIX C.3: 26dB BANDWIDTH AND OCCUPIED BANDWIDTH FOR M1	8
Test Result	8
Test Graphs.....	8
APPENDIX C.4: BAND EDGE FOR M1	13
Test Result	13
Test Graphs.....	13
APPENDIX C.5: CONDUCTED SPURIOUS EMISSION FOR M1.....	18
Test Result	18
Test Graphs.....	18
APPENDIX C.6: FREQUENCY STABILITY FOR M1	43
Test Result	43

Appendix C.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)	ERP		Limit (watts)		Verdict
								dBm	Watts	FCC	ISED	
Band5	1.4MHz	QPSK	20407	1	0	Low	20.95	20.94	0.124	7	11.5	PASS
Band5	1.4MHz	QPSK	20525	1	0	Low	21.31	21.3	0.135	7	11.5	PASS
Band5	1.4MHz	QPSK	20643	1	5	Low	21.4	21.39	0.138	7	11.5	PASS
Band5	1.4MHz	QPSK	20407	6	0	Low	18.74	18.73	0.075	7	11.5	PASS
Band5	1.4MHz	QPSK	20525	6	0	Low	18.96	18.95	0.079	7	11.5	PASS
Band5	1.4MHz	QPSK	20643	6	0	Low	19.13	19.12	0.082	7	11.5	PASS
Band5	1.4MHz	16QAM	20407	1	0	Low	19.52	19.51	0.089	7	11.5	PASS
Band5	1.4MHz	16QAM	20525	1	0	Low	20.23	20.22	0.105	7	11.5	PASS
Band5	1.4MHz	16QAM	20643	1	5	Low	19.87	19.86	0.097	7	11.5	PASS
Band5	1.4MHz	16QAM	20407	6	0	Low	18.56	18.55	0.072	7	11.5	PASS
Band5	1.4MHz	16QAM	20525	6	0	Low	18.85	18.84	0.077	7	11.5	PASS
Band5	1.4MHz	16QAM	20643	6	0	Low	19.11	19.1	0.081	7	11.5	PASS
Band5	3MHz	QPSK	20415	1	0	Low	20.86	20.85	0.122	7	11.5	PASS
Band5	3MHz	QPSK	20525	1	0	Low	21.24	21.23	0.133	7	11.5	PASS
Band5	3MHz	QPSK	20635	1	5	High	21	20.99	0.126	7	11.5	PASS
Band5	3MHz	QPSK	20415	6	0	Low	18.61	18.6	0.072	7	11.5	PASS
Band5	3MHz	QPSK	20525	6	0	Low	18.84	18.83	0.076	7	11.5	PASS
Band5	3MHz	QPSK	20635	6	0	High	18.77	18.76	0.075	7	11.5	PASS
Band5	3MHz	16QAM	20415	1	0	Low	20.09	20.08	0.102	7	11.5	PASS
Band5	3MHz	16QAM	20525	1	0	Low	20.42	20.41	0.110	7	11.5	PASS
Band5	3MHz	16QAM	20635	1	5	High	20.43	20.42	0.110	7	11.5	PASS
Band5	3MHz	16QAM	20415	6	0	Low	18.58	18.57	0.072	7	11.5	PASS
Band5	3MHz	16QAM	20525	6	0	Low	18.75	18.74	0.075	7	11.5	PASS
Band5	3MHz	16QAM	20635	6	0	High	19.06	19.05	0.080	7	11.5	PASS
Band5	5MHz	QPSK	20425	1	0	Low	20.65	20.64	0.116	7	11.5	PASS
Band5	5MHz	QPSK	20525	1	0	Low	21.11	21.1	0.129	7	11.5	PASS
Band5	5MHz	QPSK	20625	1	5	High	20.73	20.72	0.118	7	11.5	PASS
Band5	5MHz	QPSK	20625	3	3	High	20.76	20.75	0.119	7	11.5	PASS
Band5	5MHz	QPSK	20425	6	0	Low	19.72	19.71	0.094	7	11.5	PASS
Band5	5MHz	QPSK	20525	6	0	Low	19.93	19.92	0.098	7	11.5	PASS
Band5	5MHz	16QAM	20425	1	0	Low	20.01	20	0.100	7	11.5	PASS
Band5	5MHz	16QAM	20525	1	0	Low	20.69	20.68	0.117	7	11.5	PASS
Band5	5MHz	16QAM	20625	1	5	High	20.26	20.25	0.106	7	11.5	PASS
Band5	5MHz	16QAM	20625	3	3	High	20.98	20.97	0.125	7	11.5	PASS
Band5	5MHz	16QAM	20425	6	0	Low	19.9	19.89	0.097	7	11.5	PASS
Band5	5MHz	16QAM	20525	6	0	Low	19.93	19.92	0.098	7	11.5	PASS
Band5	10MHz	QPSK	20450	1	0	Low	20.46	20.45	0.111	7	11.5	PASS
Band5	10MHz	QPSK	20525	1	0	Low	20.93	20.92	0.124	7	11.5	PASS
Band5	10MHz	QPSK	20600	1	5	High	21	20.99	0.126	7	11.5	PASS
Band5	10MHz	QPSK	20450	5	0	Low	20.53	20.52	0.113	7	11.5	PASS
Band5	10MHz	QPSK	20525	5	0	Low	21.2	21.19	0.132	7	11.5	PASS
Band5	10MHz	QPSK	20600	5	1	High	20.99	20.98	0.125	7	11.5	PASS
Band5	10MHz	16QAM	20450	1	0	Low	19.98	19.97	0.099	7	11.5	PASS
Band5	10MHz	16QAM	20525	1	0	Low	20.58	20.57	0.114	7	11.5	PASS
Band5	10MHz	16QAM	20600	1	5	High	20.56	20.55	0.114	7	11.5	PASS
Band5	10MHz	16QAM	20450	5	0	Low	20.85	20.84	0.121	7	11.5	PASS
Band5	10MHz	16QAM	20525	5	0	Low	20.66	20.65	0.116	7	11.5	PASS
Band5	10MHz	16QAM	20600	5	1	High	20.89	20.88	0.122	7	11.5	PASS

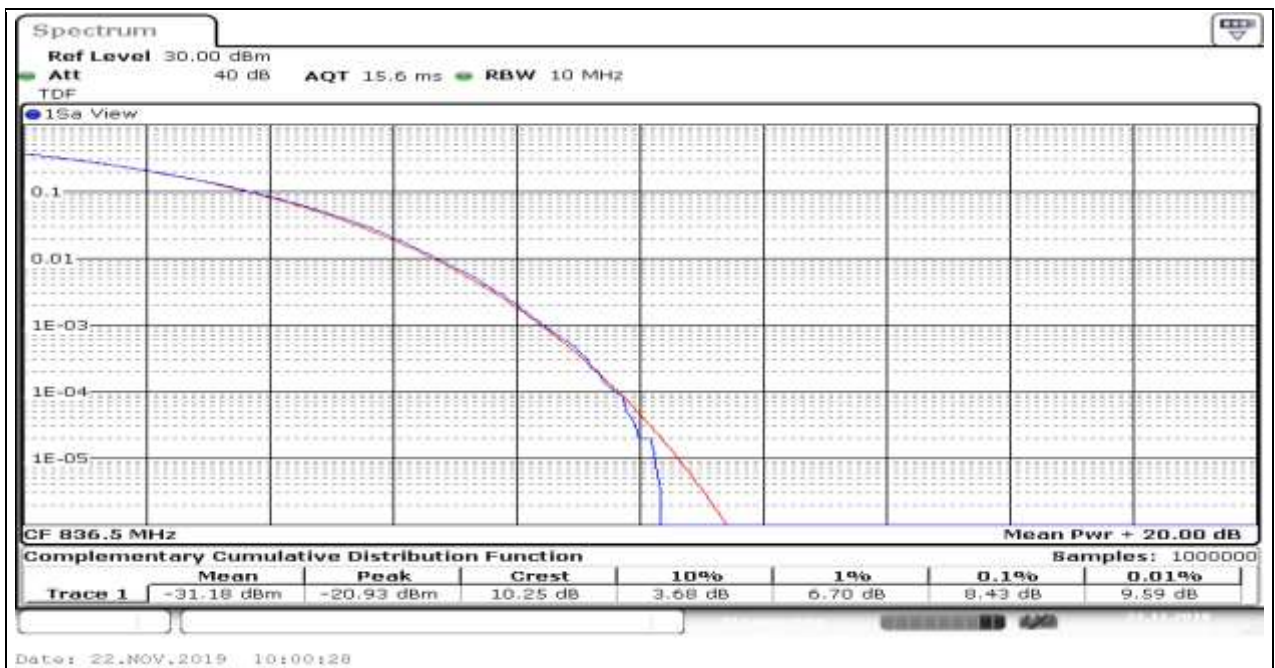
Appendix C.2: Peak-to-Average Ratio (CCDF) for M1

Test Result

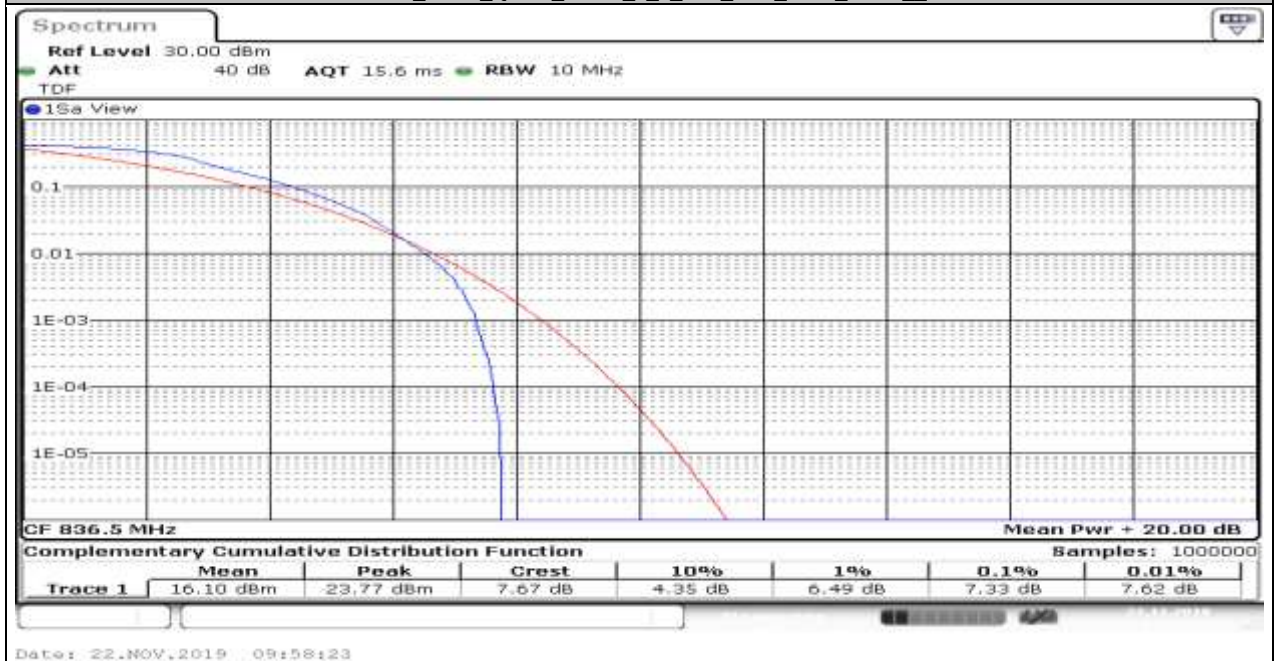
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result(dB)	Limit(dB)	Verdict
Band5	10MHz	QPSK	20525	6	0	Low	4.78	<=13	PASS
Band5	5MHz	QPSK	20525	6	0	Low	8.43	<=13	PASS
Band5	3MHz	QPSK	20525	6	0	Low	7.33	<=13	PASS
Band5	1.4MHz	QPSK	20525	6	0	Low	8.20	<=13	PASS
Band5	10MHz	16QAM	20525	6	0	Low	8.81	<=13	PASS
Band5	5MHz	16QAM	20525	6	0	Low	8.81	<=13	PASS
Band5	3MHz	16QAM	20525	6	0	Low	10.93	<=13	PASS
Band5	1.4MHz	16QAM	20525	6	0	Low	8.93	<=13	PASS

Test Graphs

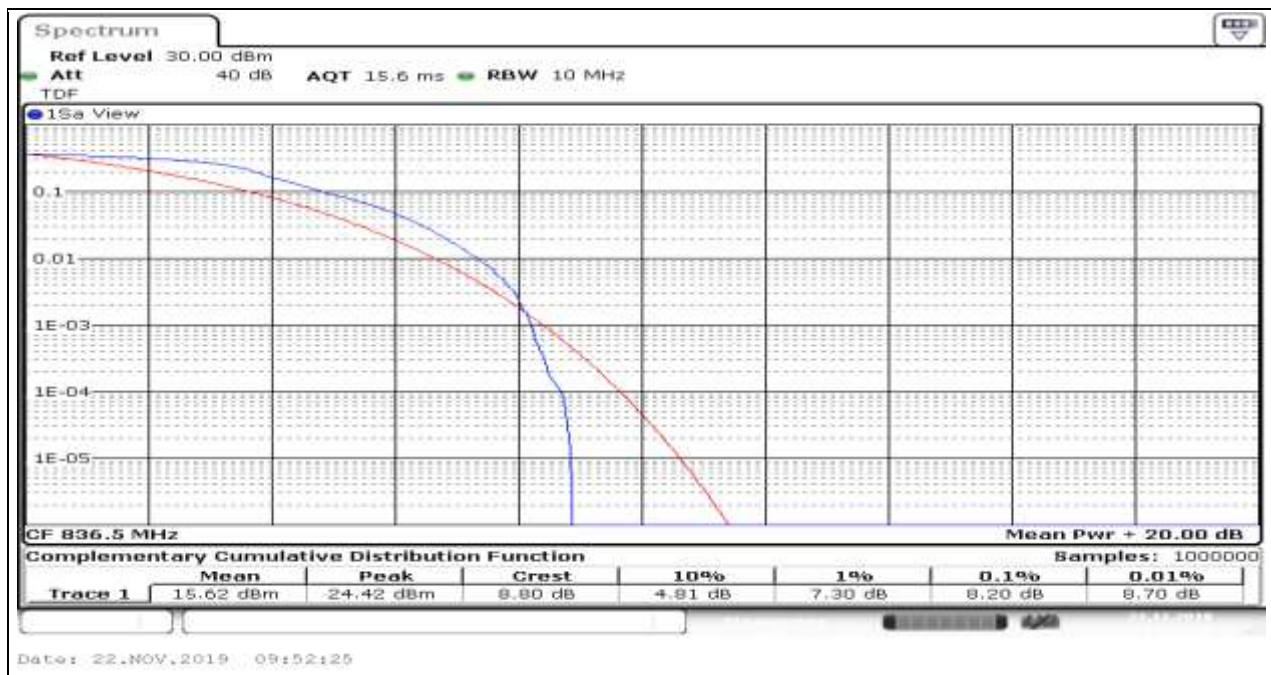




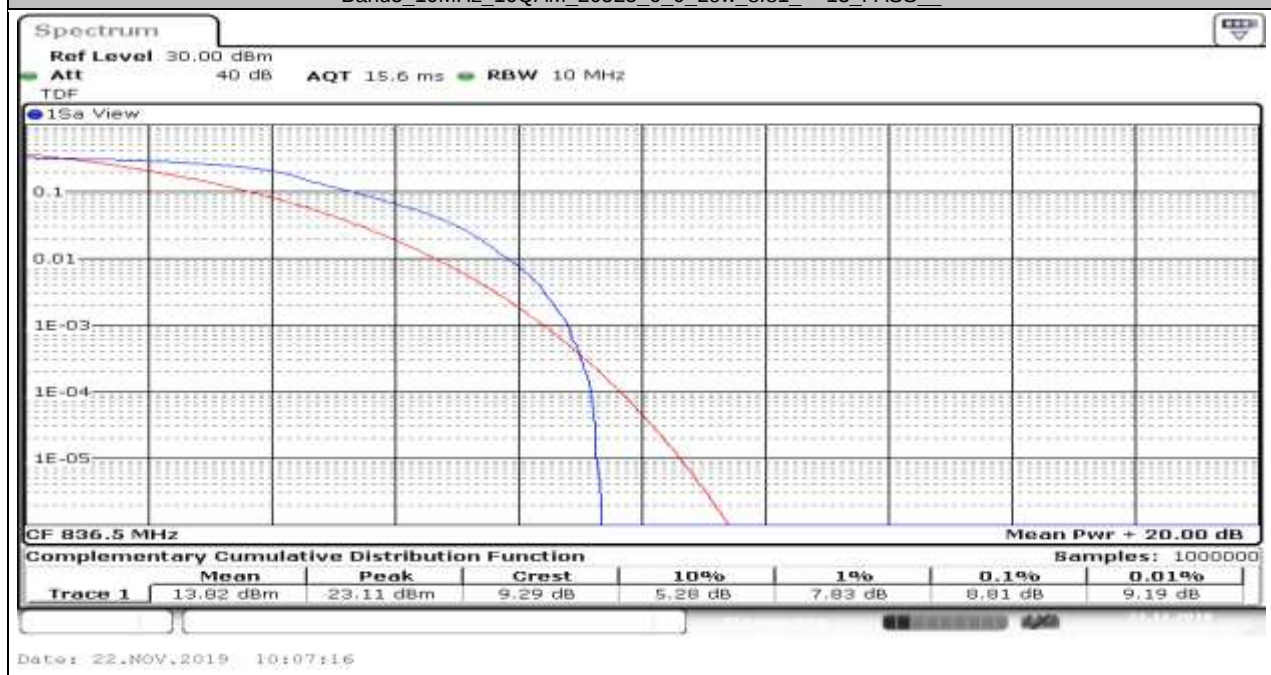
Band5_3MHz_QPSK_20525_6_0_Low_7.33_<=13_PASS



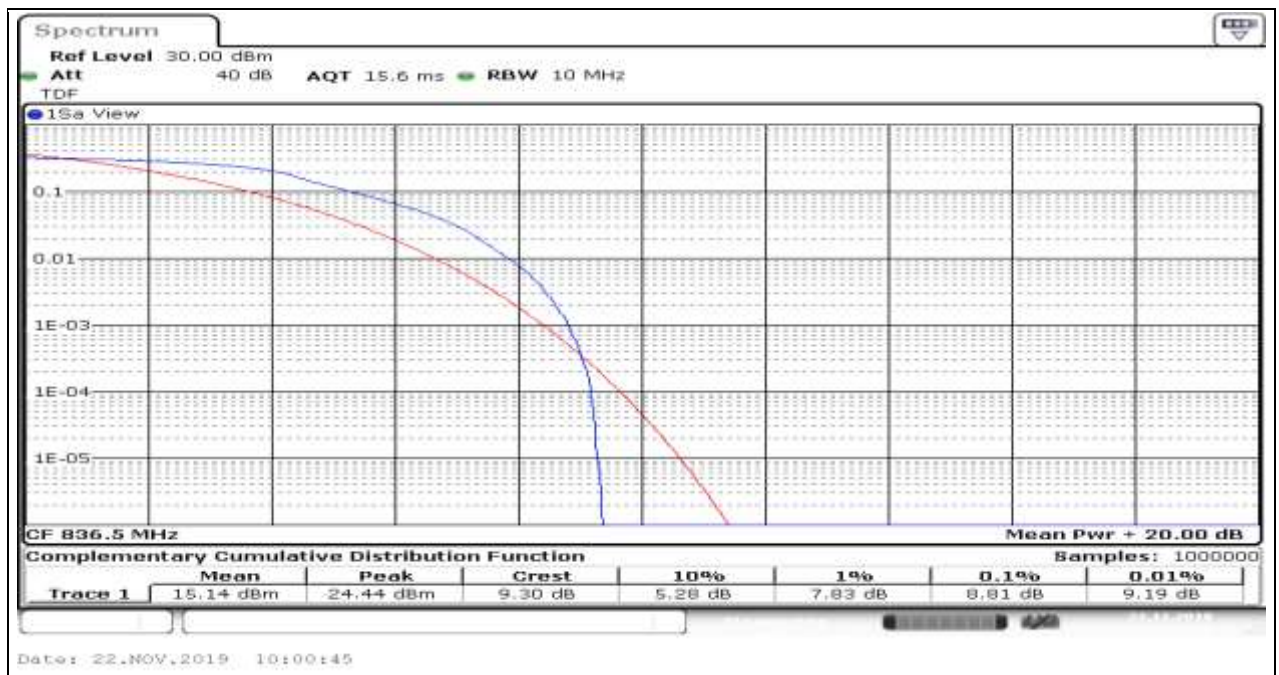
Band5_1.4MHz_QPSK_20525_6_0_Low_8.20_<=13_PASS



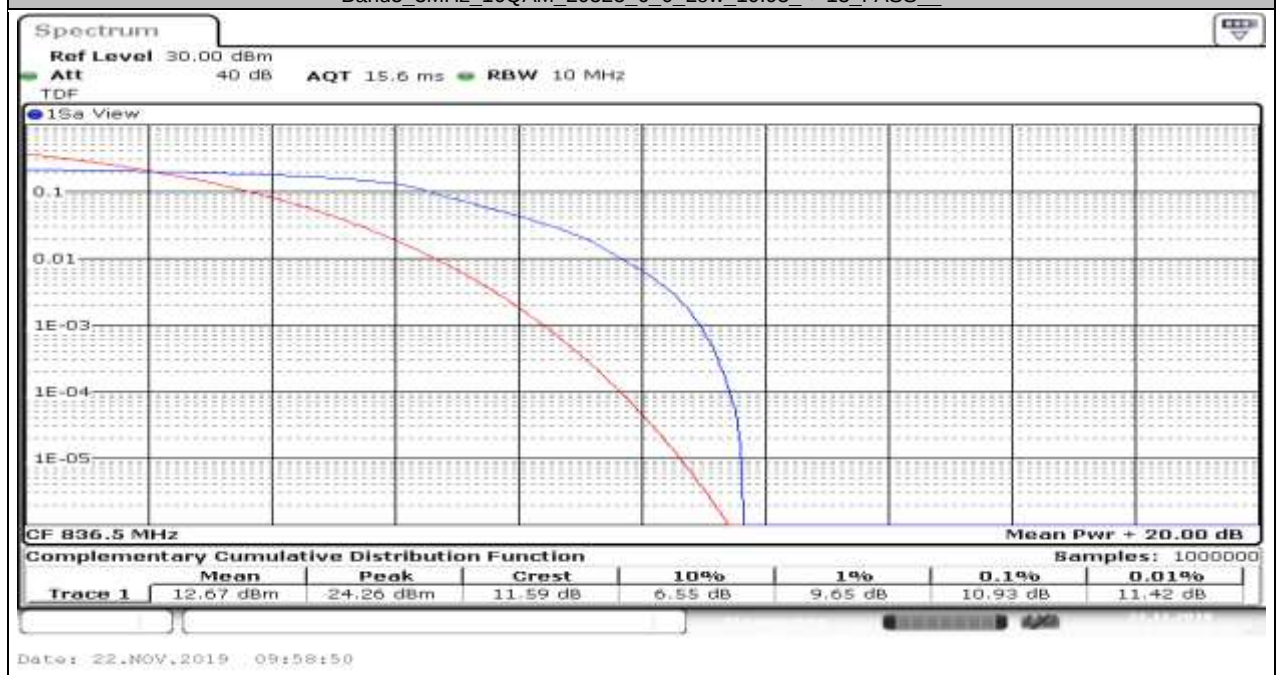
Band5_10MHz_16QAM_20525_6_0_Low_8.81_<=13_PASS



Band5_5MHz_16QAM_20525_6_0_Low_8.81_<=13_PASS

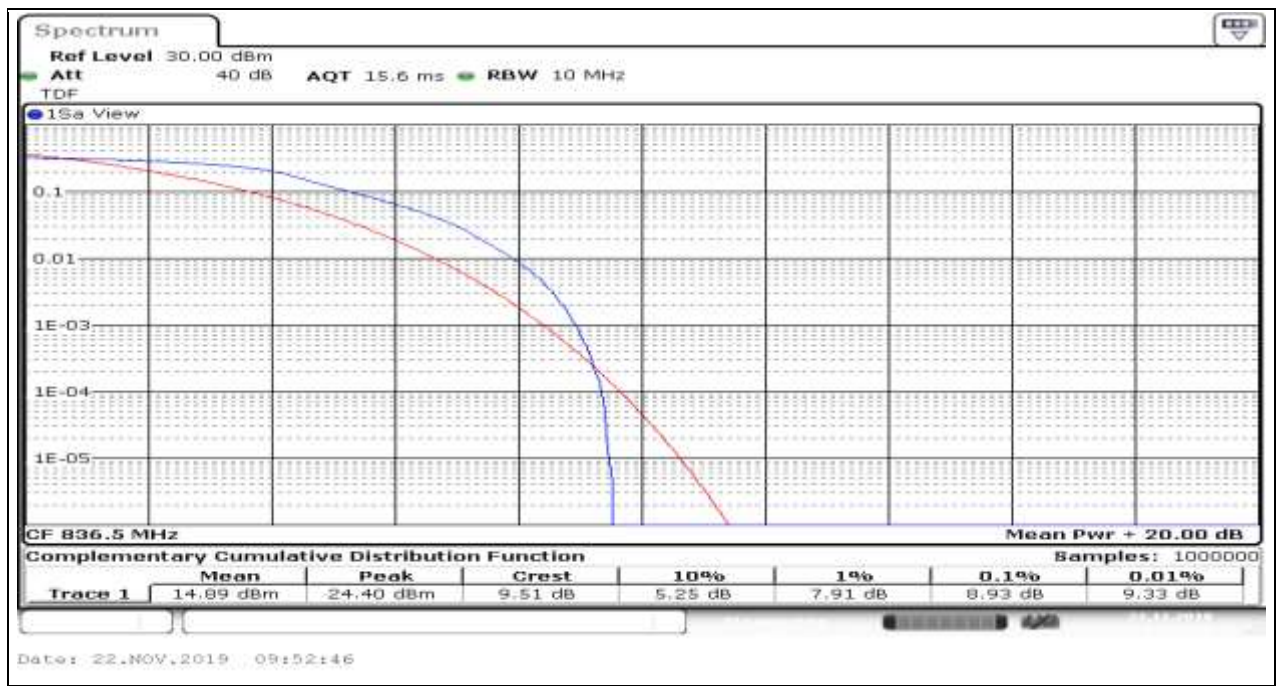


Band5_3MHz_16QAM_20525_6_0_Low_10.93_<=13_PASS



Band5_1.4MHz_16QAM_20525_6_0_Low_8.93_<=13_PASS

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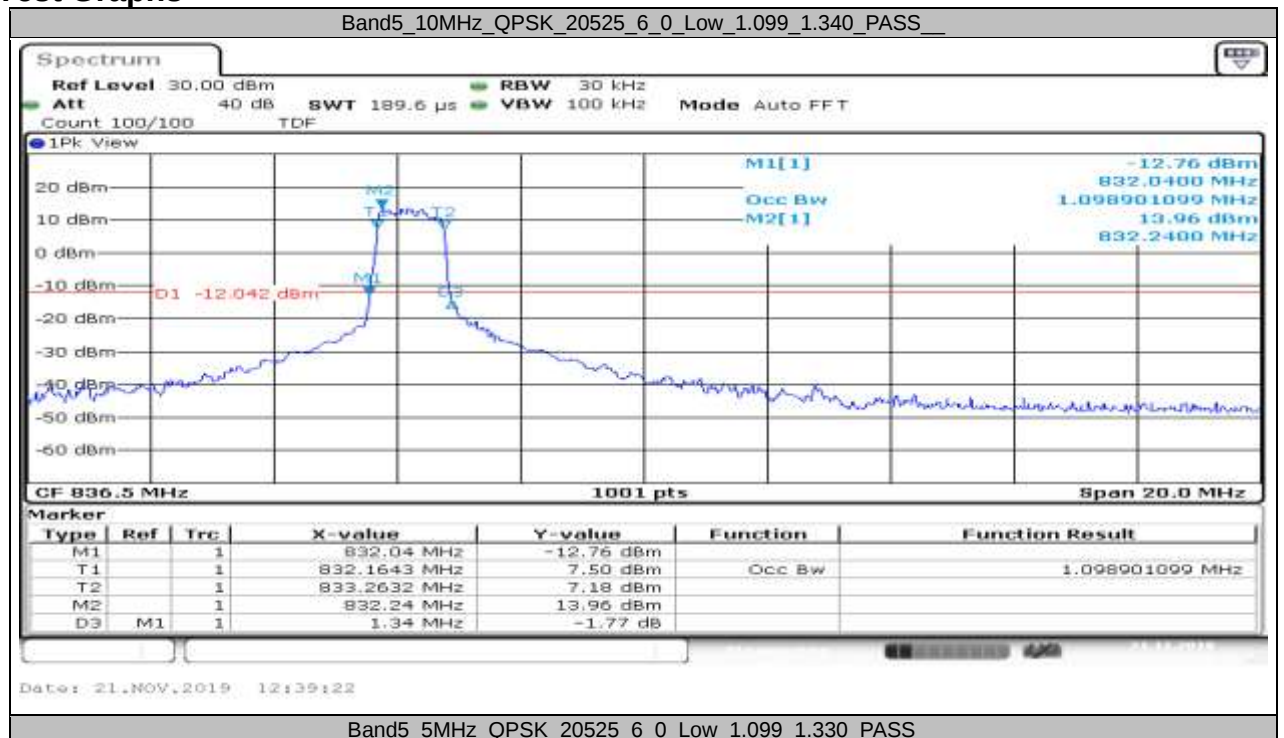


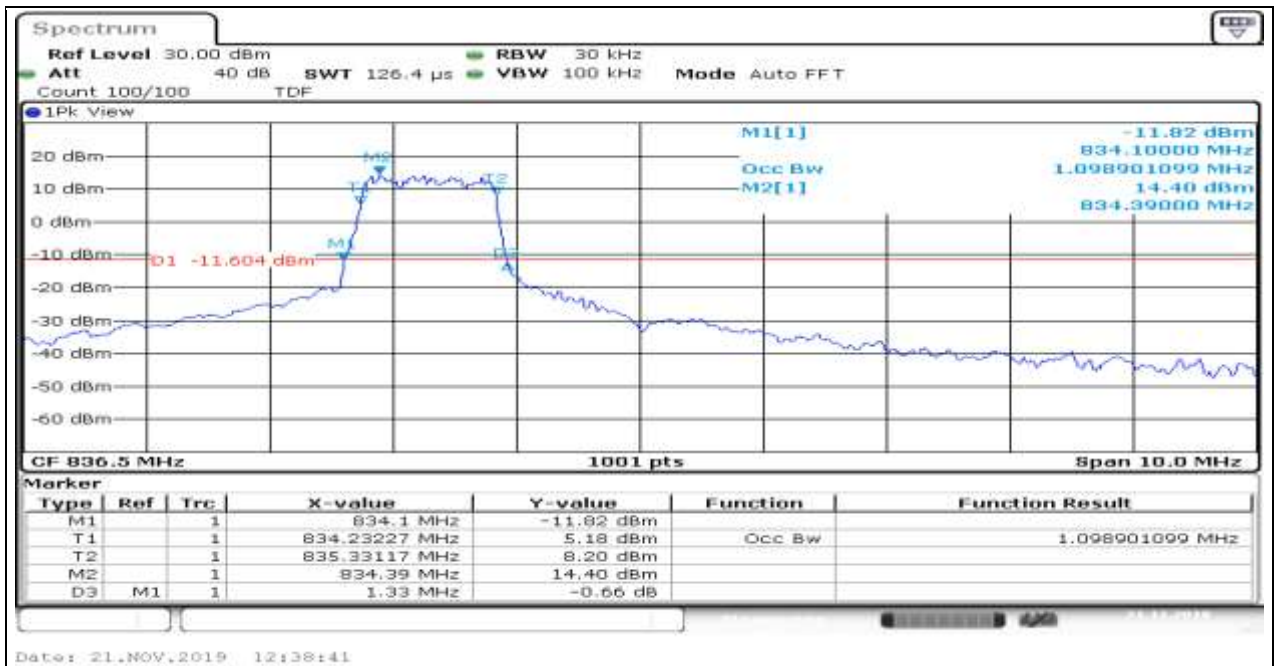
Appendix C.3: 26dB Bandwidth and Occupied Bandwidth for M1

Test Result

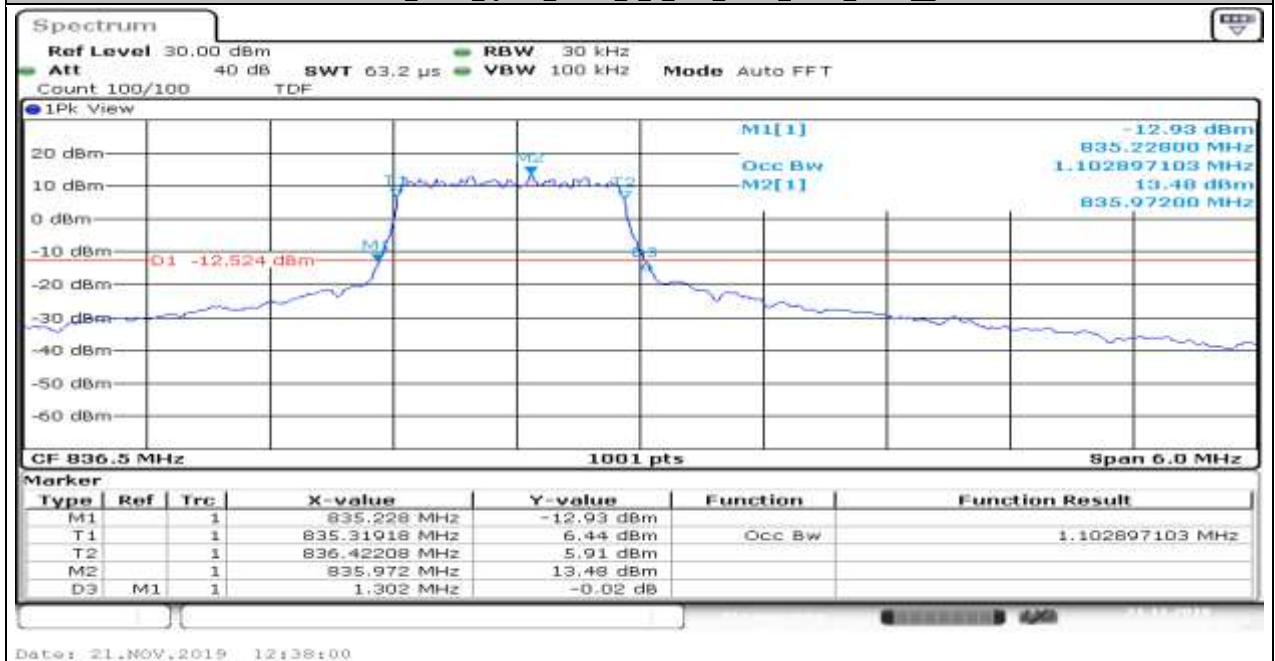
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band5	10MHz	QPSK	20525	6	0	Low	1.099	1.340	PASS
Band5	5MHz	QPSK	20525	6	0	Low	1.099	1.330	PASS
Band5	3MHz	QPSK	20525	6	0	Low	1.103	1.302	PASS
Band5	1.4MHz	QPSK	20525	6	0	Low	1.097	1.287	PASS
Band5	10MHz	16QAM	20525	6	0	Low	1.099	1.320	PASS
Band5	5MHz	16QAM	20525	6	0	Low	1.099	1.330	PASS
Band5	3MHz	16QAM	20525	6	0	Low	1.103	1.332	PASS
Band5	1.4MHz	16QAM	20525	6	0	Low	1.1	1.326	PASS

Test Graphs

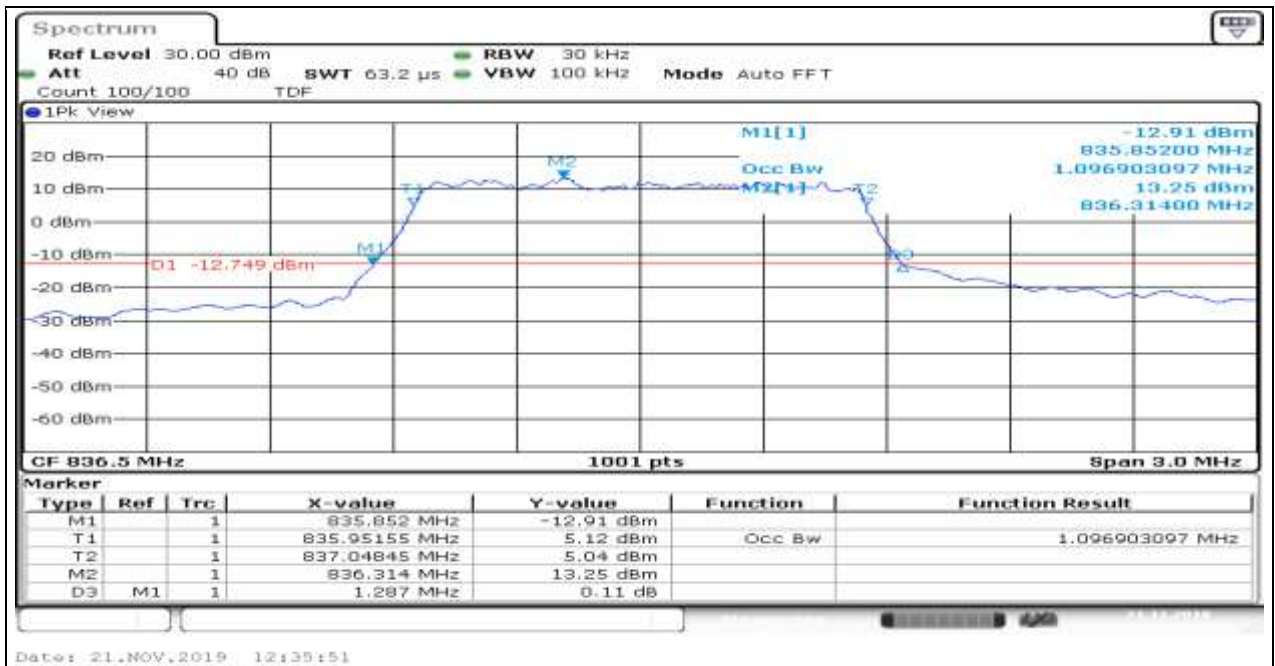




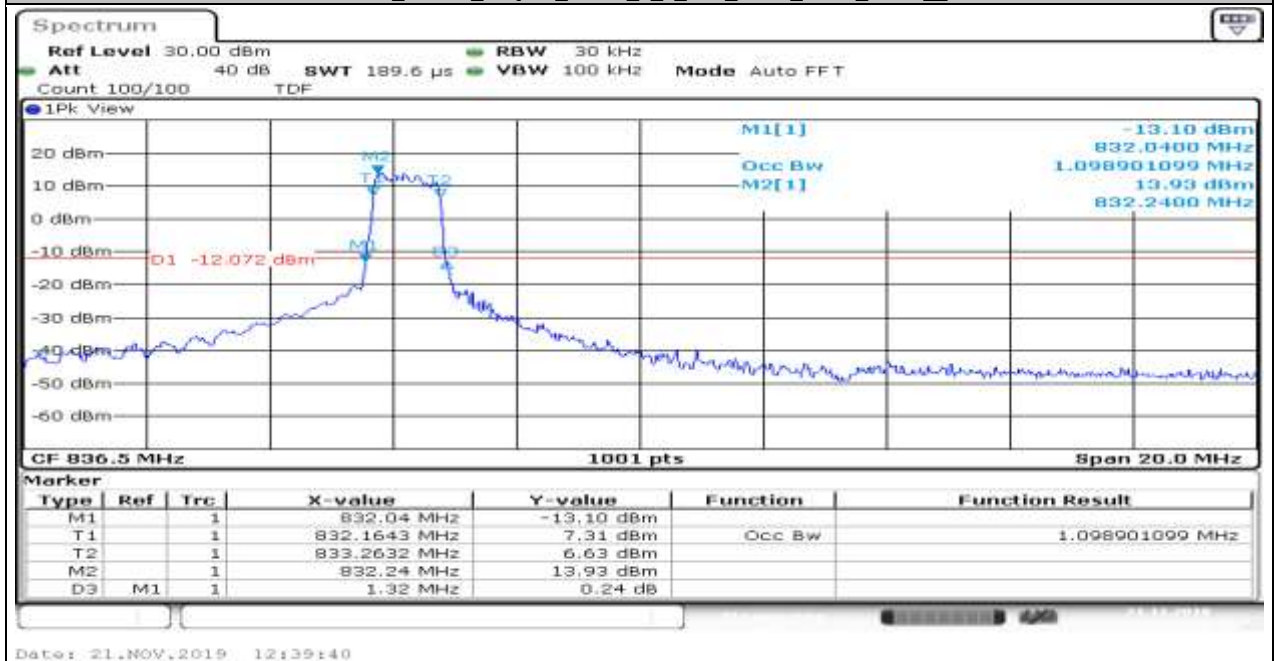
Band5_3MHz_QPSK_20525_6_0_Low_1.103_1.302_PASS



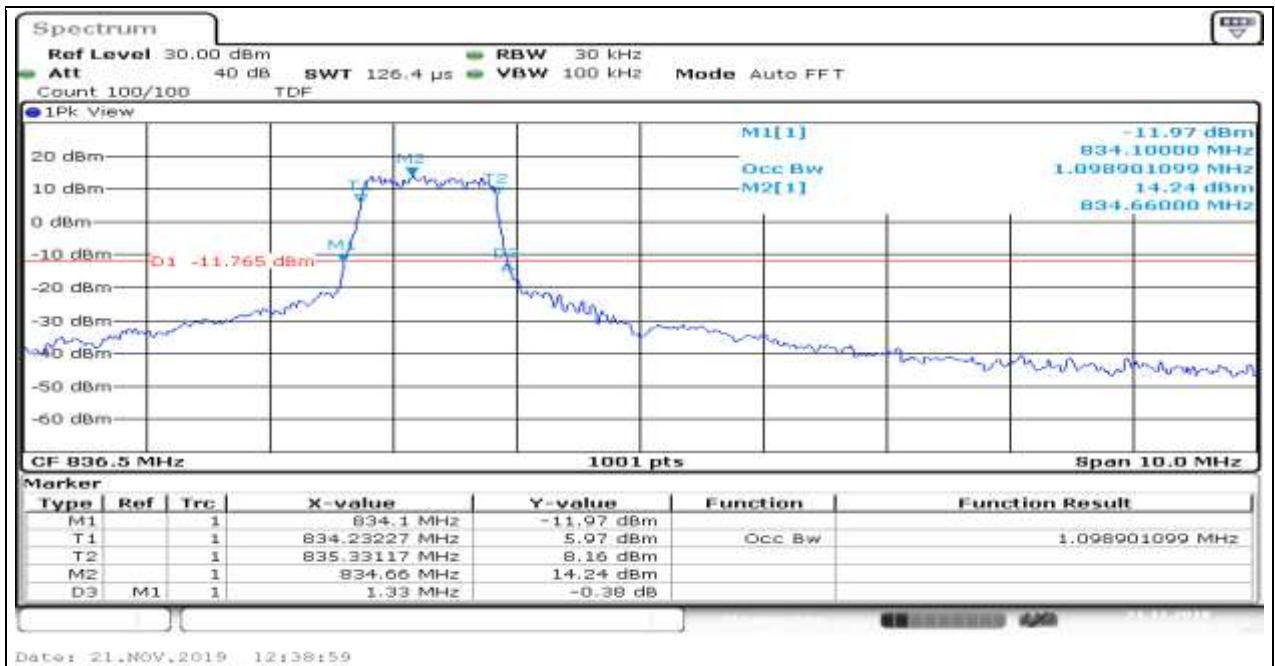
Band5_1.4MHz_QPSK_20525_6_0_Low_1.097_1.287_PASS



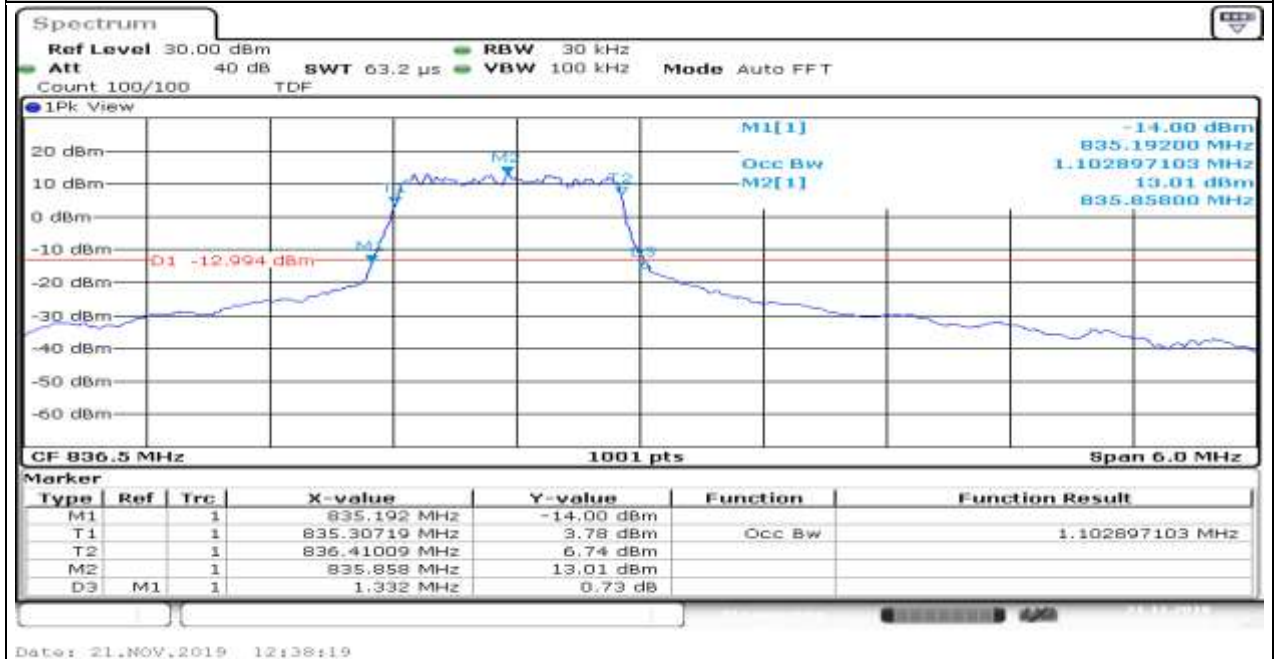
Band5_10MHz_16QAM_20525_6_0_Low_1.099_1.320_PASS



Band5_5MHz_16QAM_20525_6_0_Low_1.099_1.330_PASS

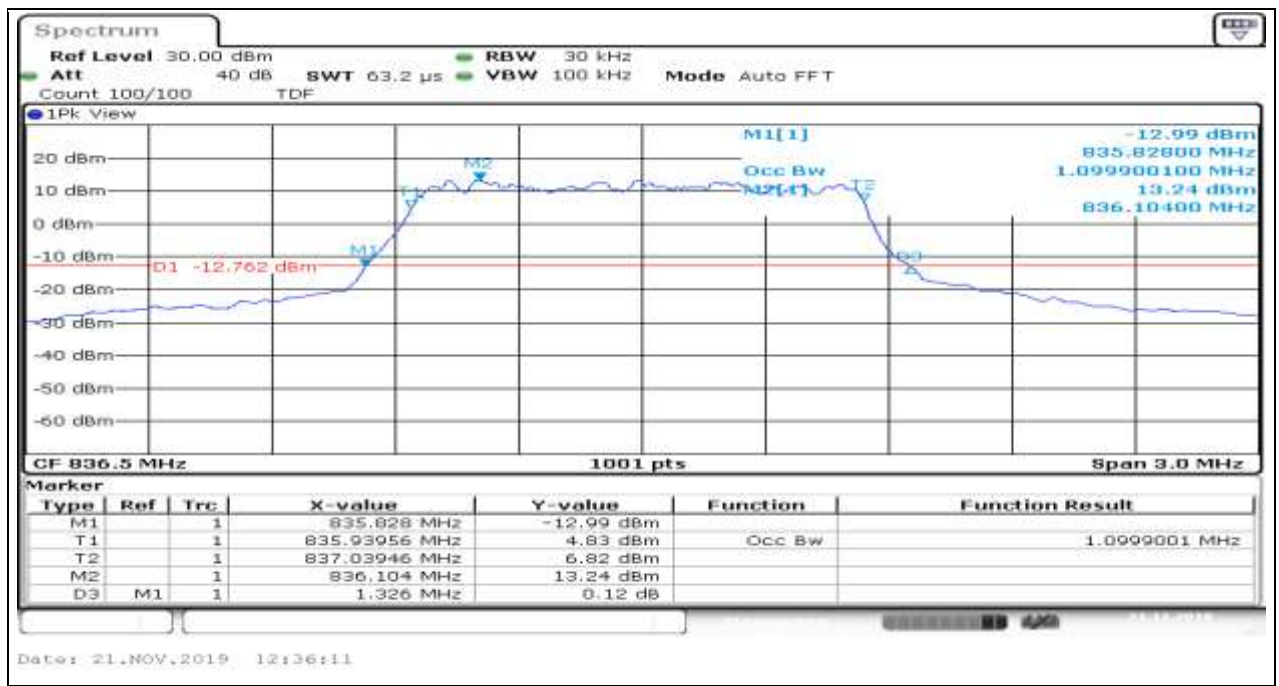


Band5_3MHz_16QAM_20525_6_0_Low_1.103_1.332_PASS



Band5_1.4MHz_16QAM_20525_6_0_Low_1.1_1.326_PASS

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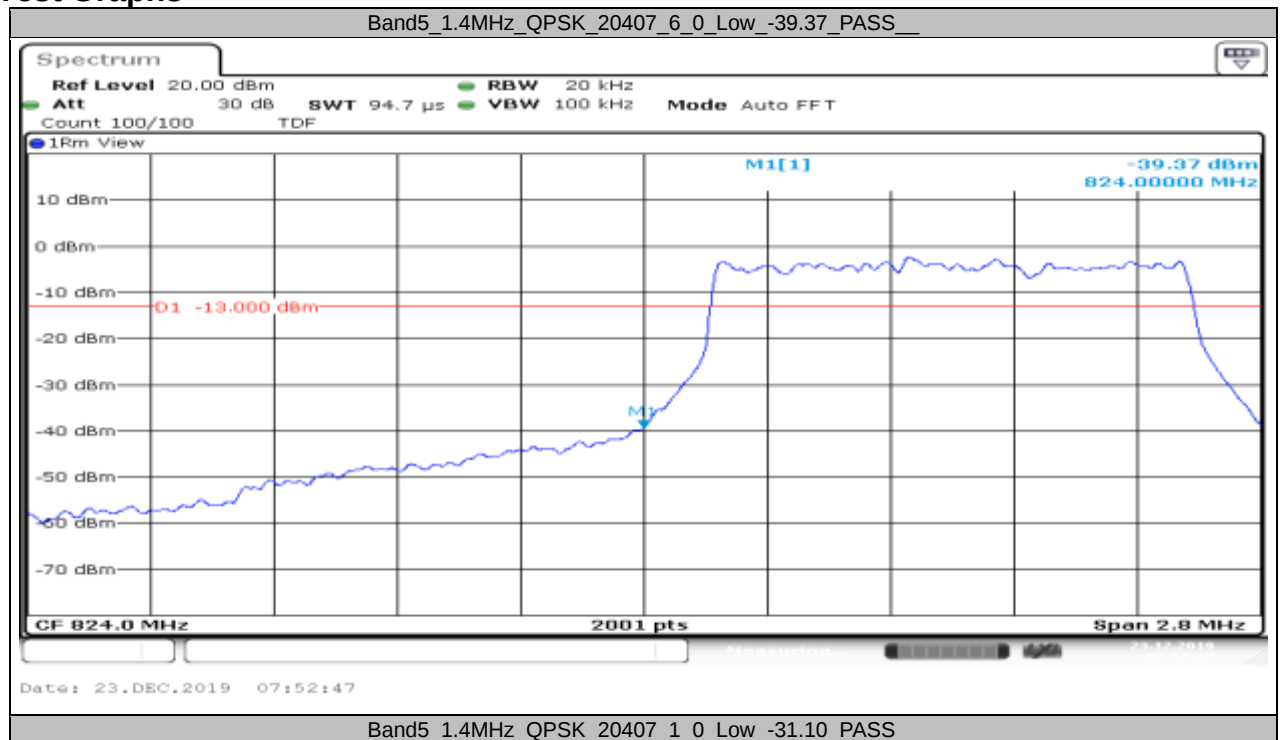


Appendix C.4: Band Edge for M1

Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Result (dBm)	Verdict
Band5	1.4MHz	QPSK	20407	6	0	Low	-39.37	PASS
Band5	1.4MHz	QPSK	20407	1	0	Low	-31.10	PASS
Band5	1.4MHz	QPSK	20643	6	0	Low	-38.57	PASS
Band5	1.4MHz	QPSK	20643	1	5	Low	-47.72	PASS
Band5	1.4MHz	16QAM	20407	6	0	Low	-36.65	PASS
Band5	1.4MHz	16QAM	20407	1	0	Low	-33.98	PASS
Band5	1.4MHz	16QAM	20643	6	0	Low	-38.78	PASS
Band5	1.4MHz	16QAM	20643	1	5	Low	-50.00	PASS

Test Graphs



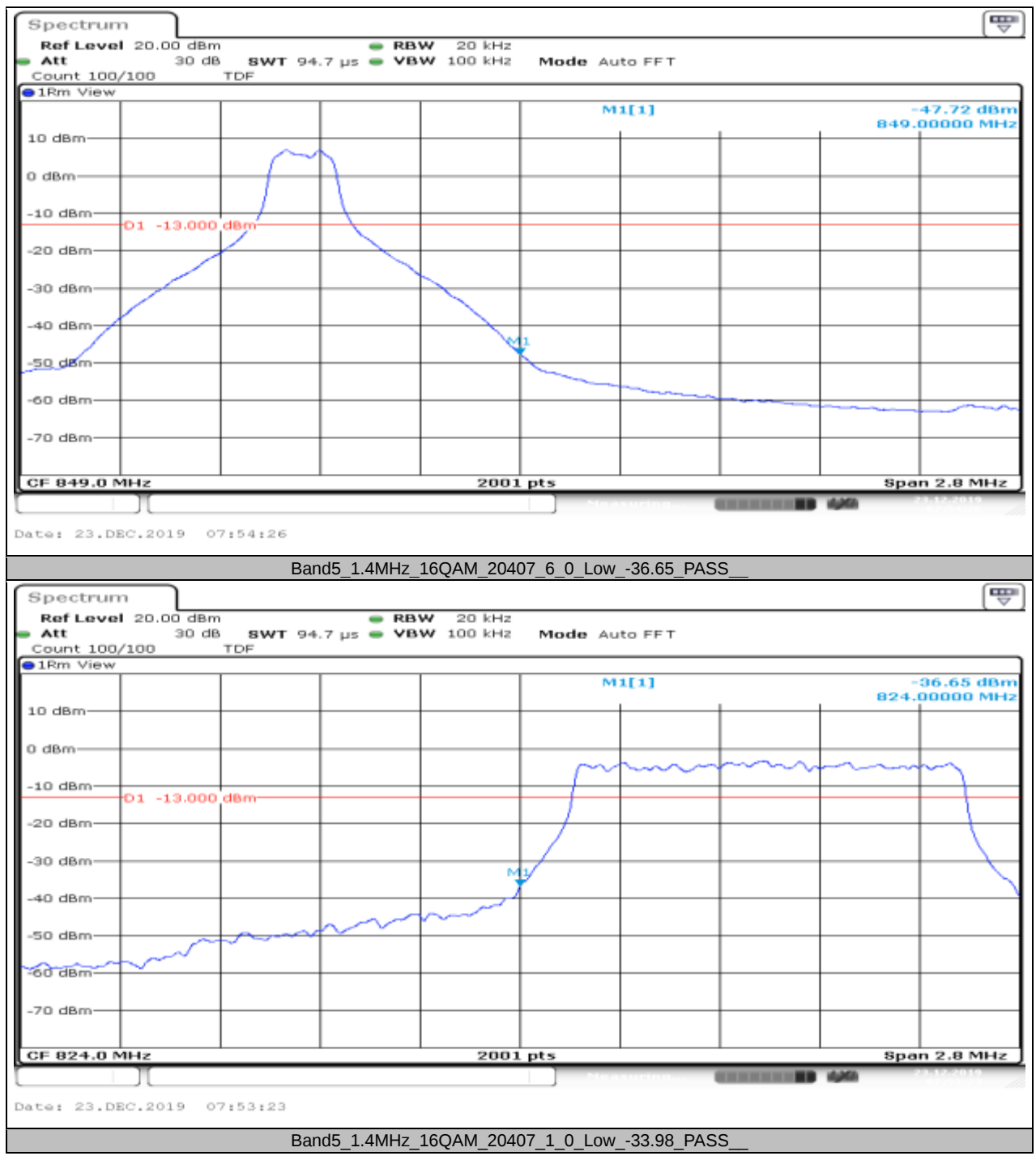
Produkte
Products

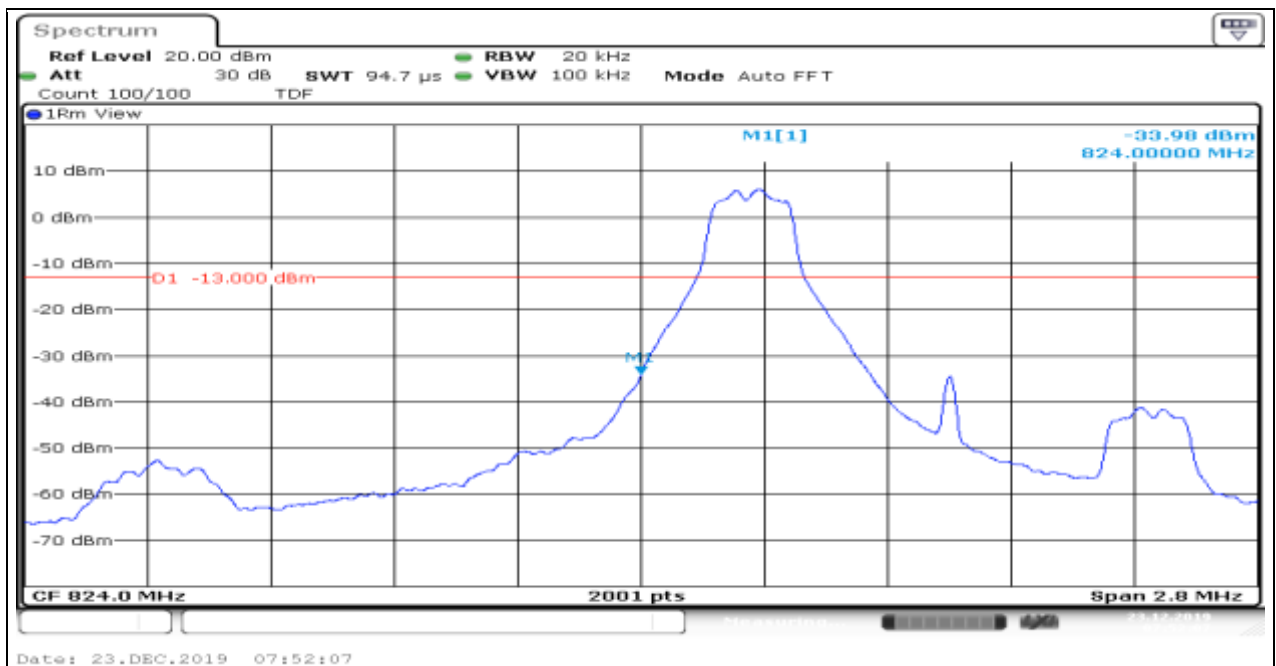


Band5_1.4MHz_QPSK_20643_6_0_Low_-38.57_PASS

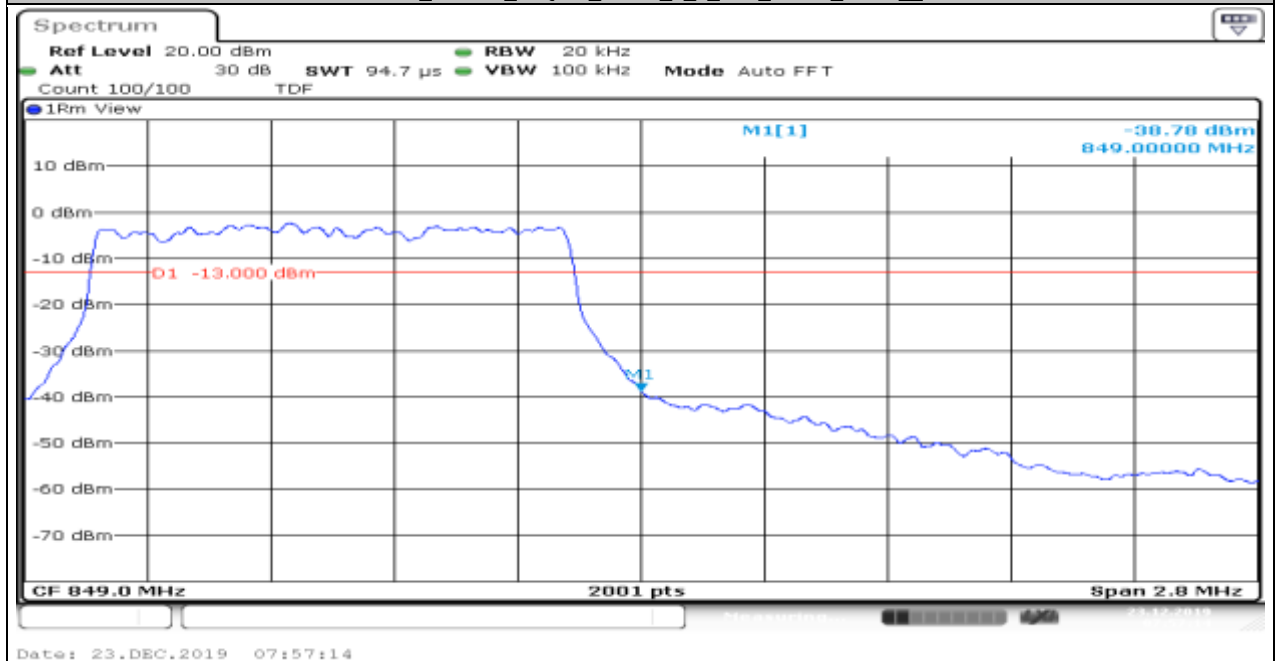


Band5_1.4MHz_QPSK_20643_1_5_Low_-47.72_PASS

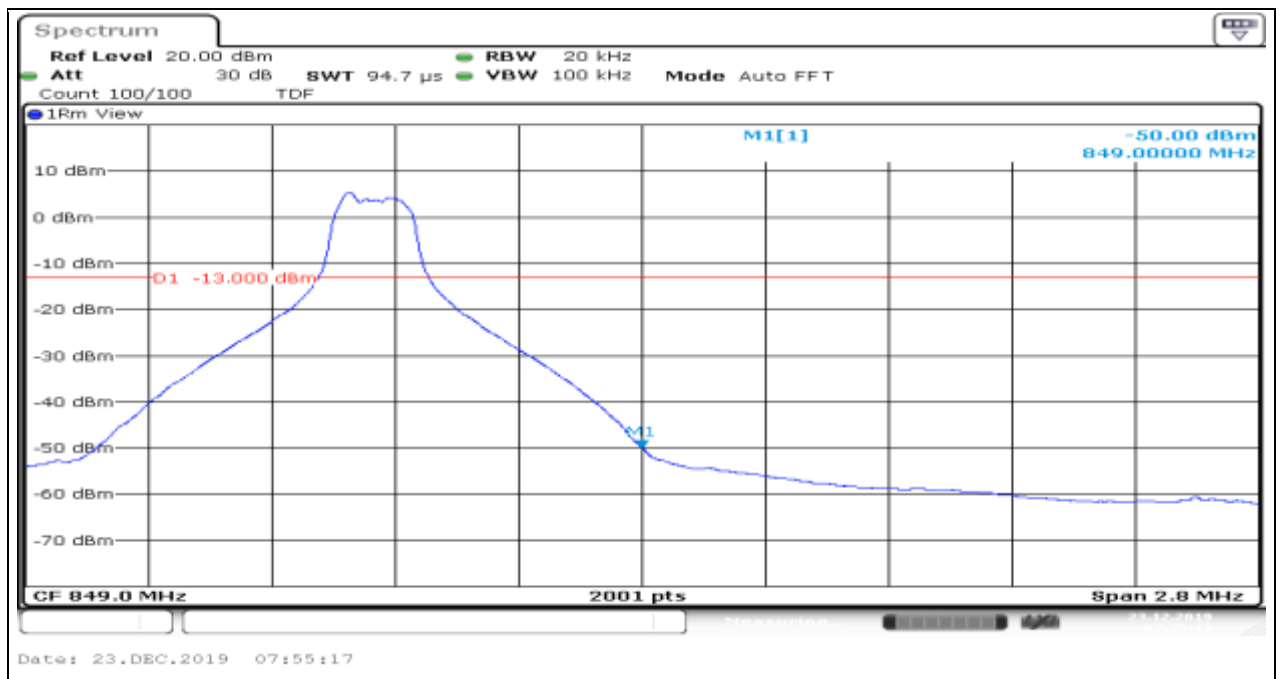




Band5 1.4MHz 16QAM 20643 6 0 Low -38.78 PASS



Band5 1.4MHz 16QAM 20643 1 5 Low -50.00 PASS



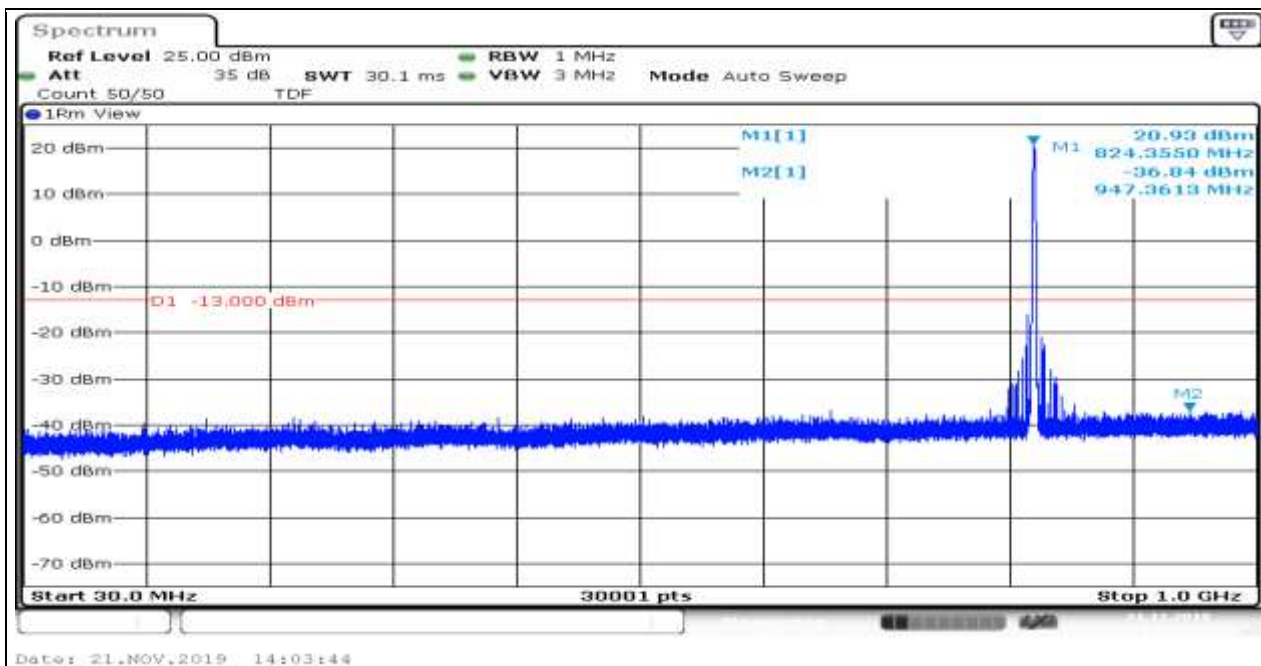
Appendix C.5: Conducted Spurious Emission for M1

Test Result

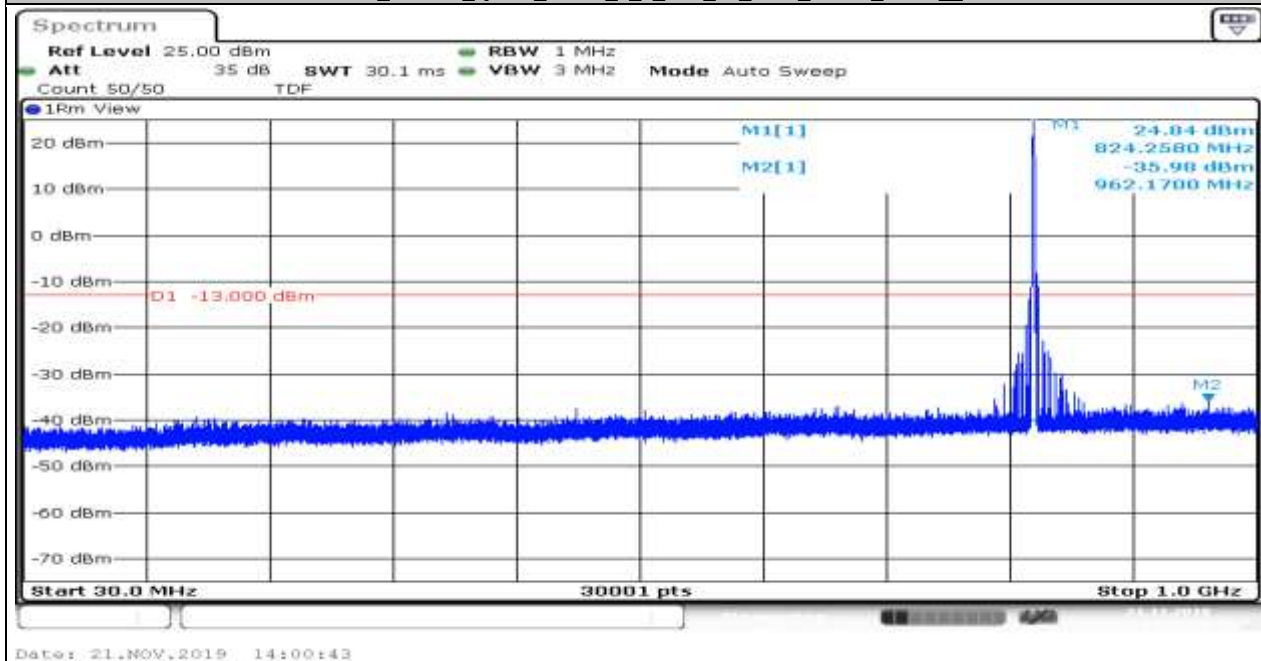
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Start Freq	Stop Freq	Result (dBm)	Verdict
Band5	1.4MHz	QPSK	20407	6	0	Low	30	1000	-36.84	PASS
Band5	1.4MHz	QPSK	20407	1	0	Low	30	1000	-35.98	PASS
Band5	1.4MHz	QPSK	20407	6	0	Low	12000	26500	-42.22	PASS
Band5	1.4MHz	QPSK	20407	6	0	Low	5000	12000	-48.26	PASS
Band5	1.4MHz	QPSK	20407	6	0	Low	1000	5000	-38.64	PASS
Band5	1.4MHz	QPSK	20407	1	0	Low	12000	26500	-42.34	PASS
Band5	1.4MHz	QPSK	20407	1	0	Low	1000	5000	-38.79	PASS
Band5	1.4MHz	QPSK	20407	1	0	Low	5000	12000	-48.01	PASS
Band5	1.4MHz	QPSK	20525	6	0	Low	12000	26500	-42.2	PASS
Band5	1.4MHz	QPSK	20525	1	0	Low	1000	5000	-38.8	PASS
Band5	1.4MHz	QPSK	20525	1	0	Low	5000	12000	-47.97	PASS
Band5	1.4MHz	QPSK	20525	1	0	Low	12000	26500	-41.98	PASS
Band5	1.4MHz	QPSK	20525	6	0	Low	1000	5000	-38.94	PASS
Band5	1.4MHz	QPSK	20525	1	0	Low	30	1000	-36.37	PASS
Band5	1.4MHz	QPSK	20525	6	0	Low	5000	12000	-48.06	PASS
Band5	1.4MHz	QPSK	20525	6	0	Low	30	1000	-36.78	PASS
Band5	1.4MHz	QPSK	20643	1	5	Low	12000	26500	-42.04	PASS
Band5	1.4MHz	QPSK	20643	6	0	Low	12000	26500	-42.01	PASS
Band5	1.4MHz	QPSK	20643	6	0	Low	5000	12000	-48.08	PASS
Band5	1.4MHz	QPSK	20643	6	0	Low	30	1000	-37	PASS
Band5	1.4MHz	QPSK	20643	1	5	Low	1000	5000	-38.85	PASS
Band5	1.4MHz	QPSK	20643	1	5	Low	5000	12000	-48.16	PASS
Band5	1.4MHz	QPSK	20643	1	5	Low	30	1000	-36.44	PASS
Band5	1.4MHz	QPSK	20643	6	0	Low	1000	5000	-38.77	PASS
Band5	1.4MHz	16QAM	20407	1	0	Low	1000	5000	-38.85	PASS
Band5	1.4MHz	16QAM	20407	1	0	Low	5000	12000	-48.34	PASS
Band5	1.4MHz	16QAM	20407	1	0	Low	12000	26500	-42.24	PASS
Band5	1.4MHz	16QAM	20407	6	0	Low	12000	26500	-42.1	PASS
Band5	1.4MHz	16QAM	20407	6	0	Low	5000	12000	-48.2	PASS
Band5	1.4MHz	16QAM	20407	6	0	Low	30	1000	-36.69	PASS
Band5	1.4MHz	16QAM	20407	1	0	Low	30	1000	-36.63	PASS
Band5	1.4MHz	16QAM	20407	6	0	Low	1000	5000	-38.84	PASS
Band5	1.4MHz	16QAM	20525	6	0	Low	12000	26500	-42.15	PASS
Band5	1.4MHz	16QAM	20525	1	0	Low	1000	5000	-38.81	PASS
Band5	1.4MHz	16QAM	20525	1	0	Low	12000	26500	-42.03	PASS
Band5	1.4MHz	16QAM	20525	6	0	Low	30	1000	-37.1	PASS
Band5	1.4MHz	16QAM	20525	6	0	Low	1000	5000	-38.71	PASS
Band5	1.4MHz	16QAM	20525	6	0	Low	5000	12000	-48.24	PASS
Band5	1.4MHz	16QAM	20525	1	0	Low	30	1000	-36.25	PASS
Band5	1.4MHz	16QAM	20525	1	0	Low	5000	12000	-48.28	PASS
Band5	1.4MHz	16QAM	20643	6	0	Low	5000	12000	-48.06	PASS
Band5	1.4MHz	16QAM	20643	6	0	Low	1000	5000	-38.65	PASS
Band5	1.4MHz	16QAM	20643	6	0	Low	30	1000	-36.77	PASS
Band5	1.4MHz	16QAM	20643	1	5	Low	12000	26500	-41.98	PASS
Band5	1.4MHz	16QAM	20643	1	5	Low	5000	12000	-48.1	PASS
Band5	1.4MHz	16QAM	20643	1	5	Low	30	1000	-34.53	PASS
Band5	1.4MHz	16QAM	20643	6	0	Low	12000	26500	-41.96	PASS
Band5	1.4MHz	16QAM	20643	1	5	Low	1000	5000	-38.67	PASS

Test Graphs

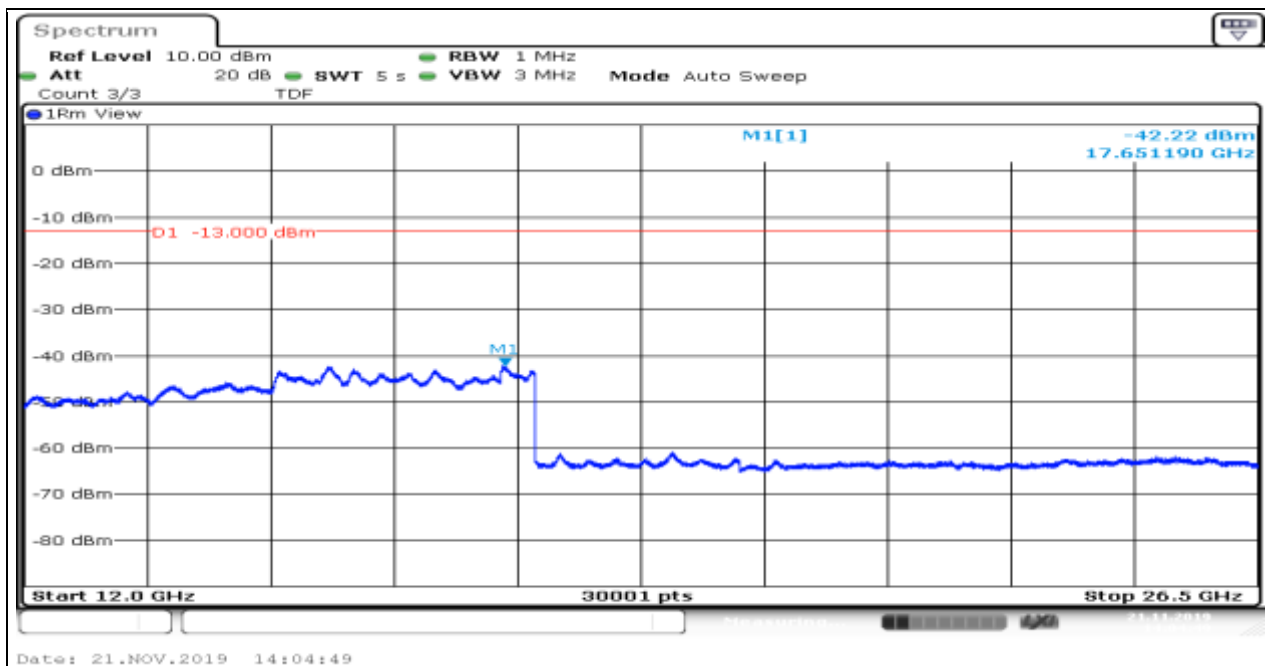
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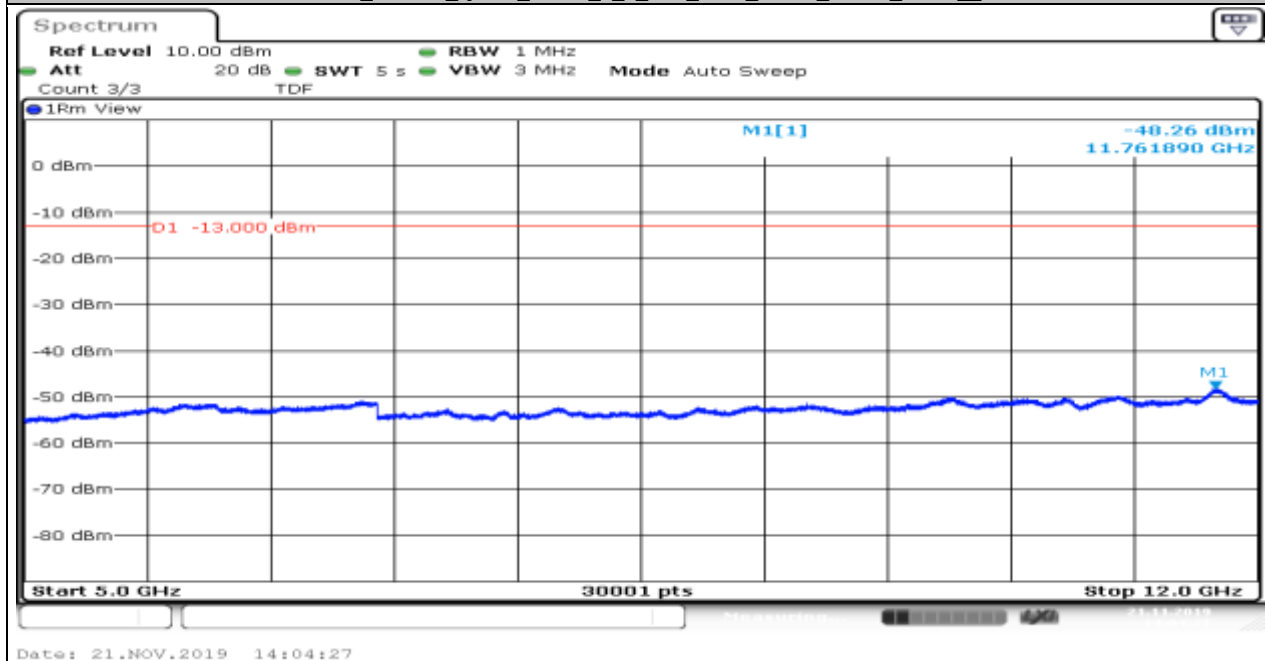
Band5_1.4MHz_QPSK_20407_1_0_Low_30_1000_-35.98_PASS



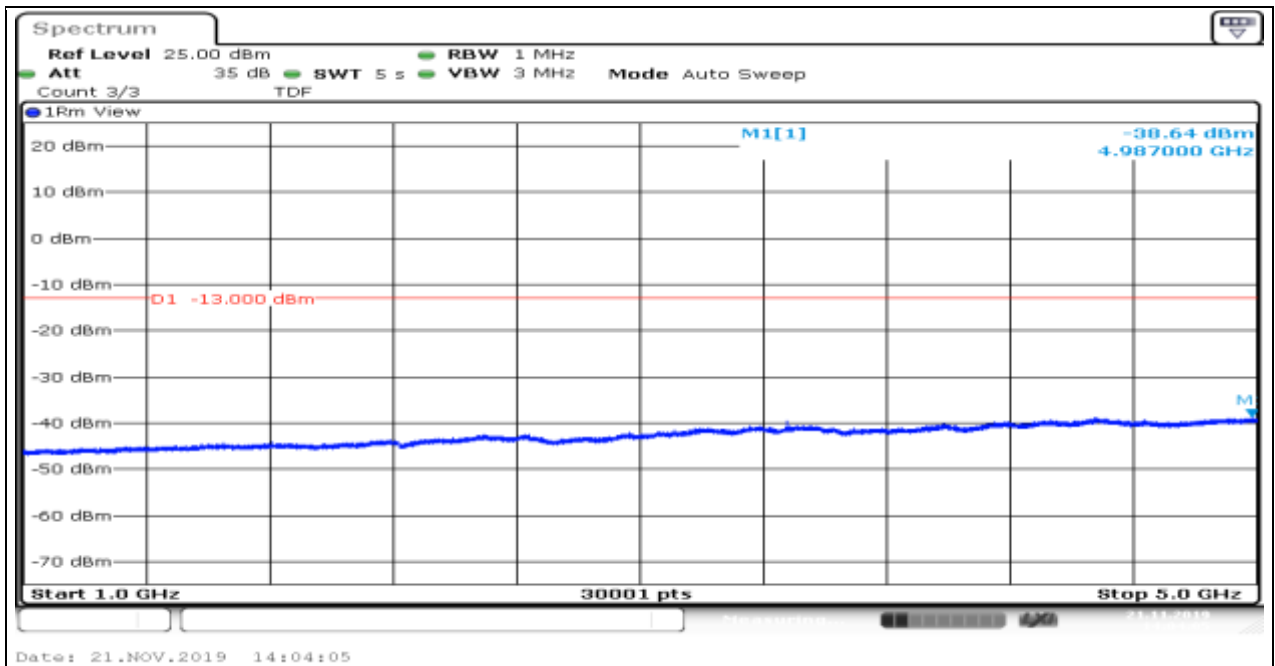
Band5_1.4MHz_QPSK_20407_6_0_Low_12000_26500_-42.22_PASS



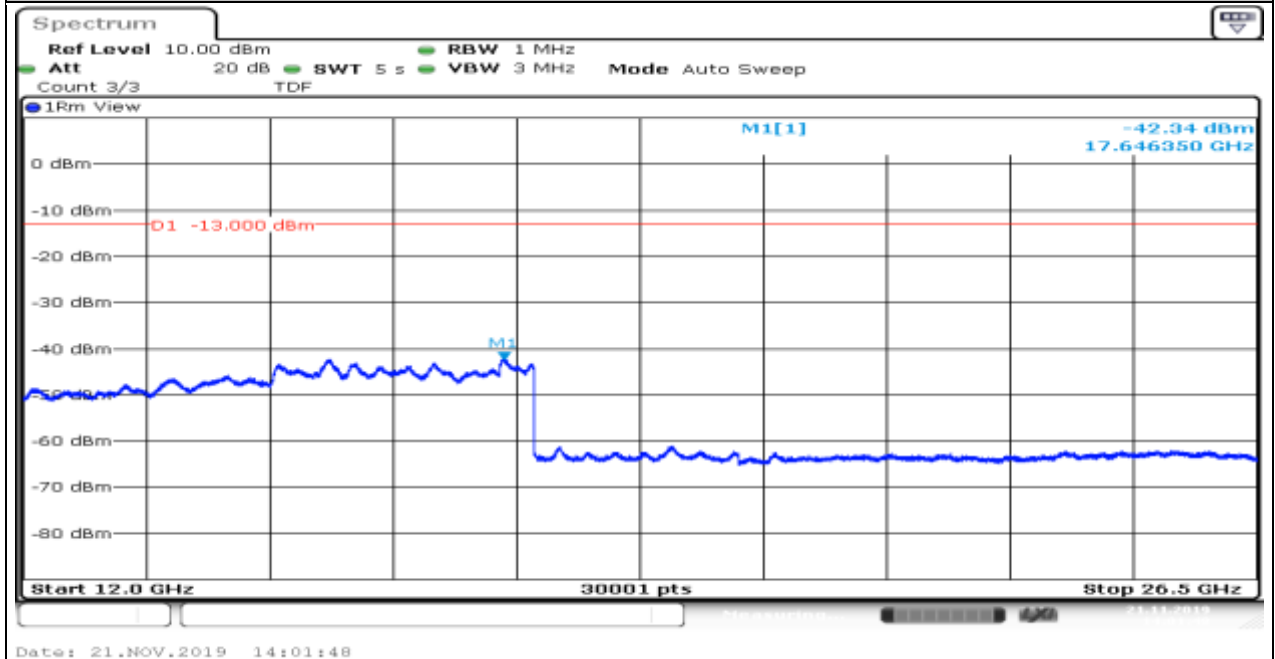
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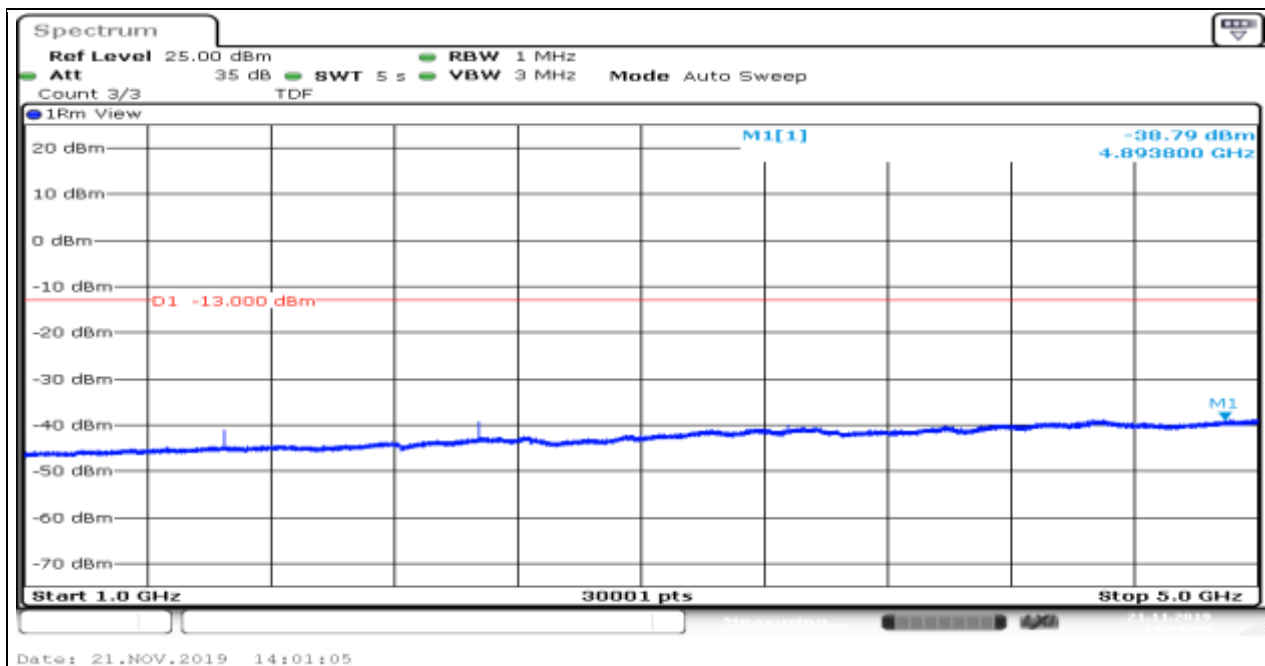
Band5_1.4MHz_QPSK_20407_6_0_Low_1000_5000_-38.64_PASS



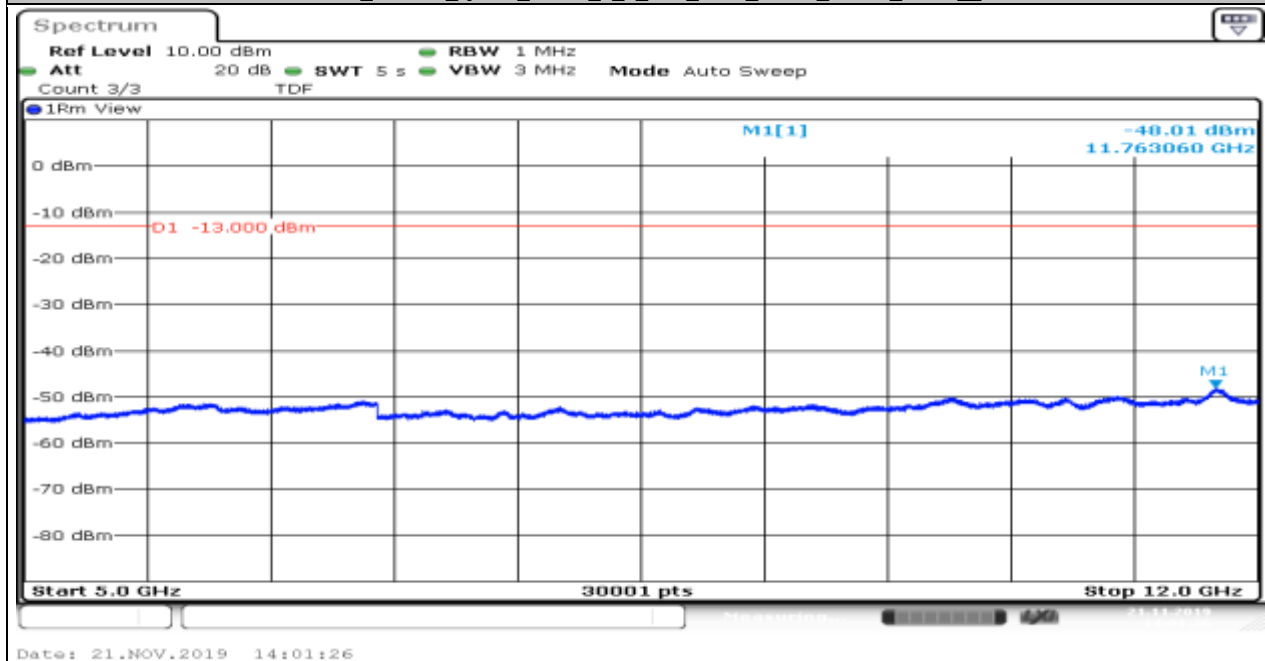
Band5_1.4MHz_QPSK_20407_1_0_Low_12000_26500_-42.34_PASS



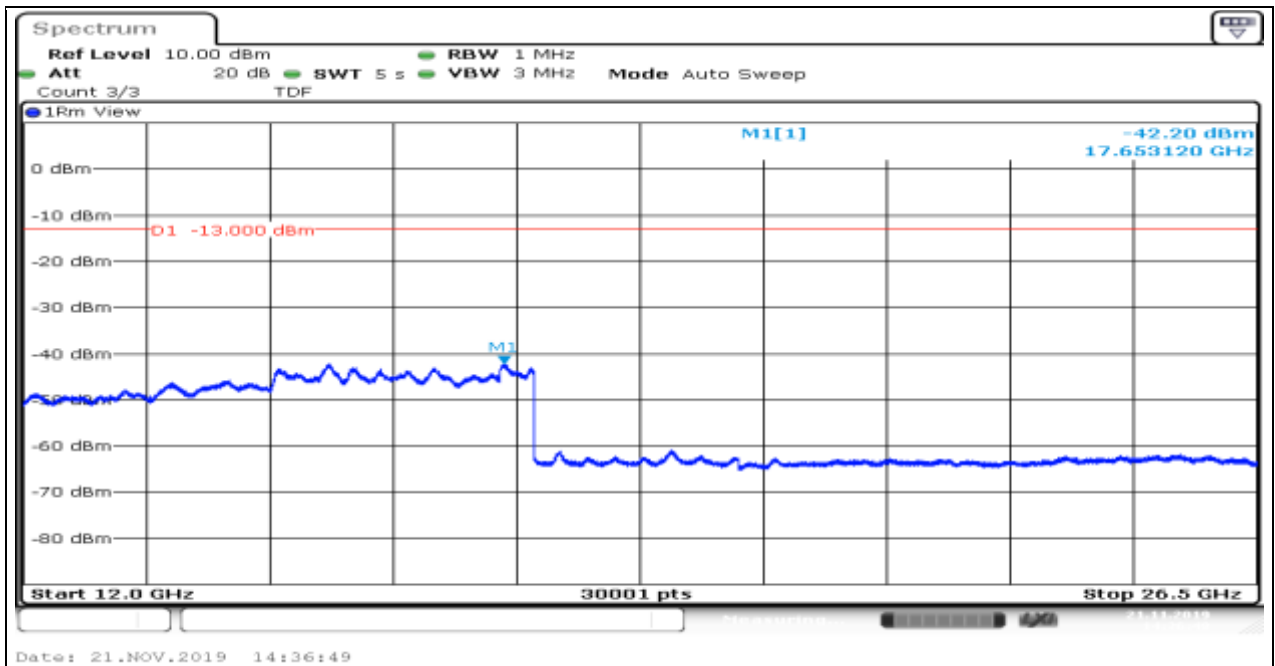
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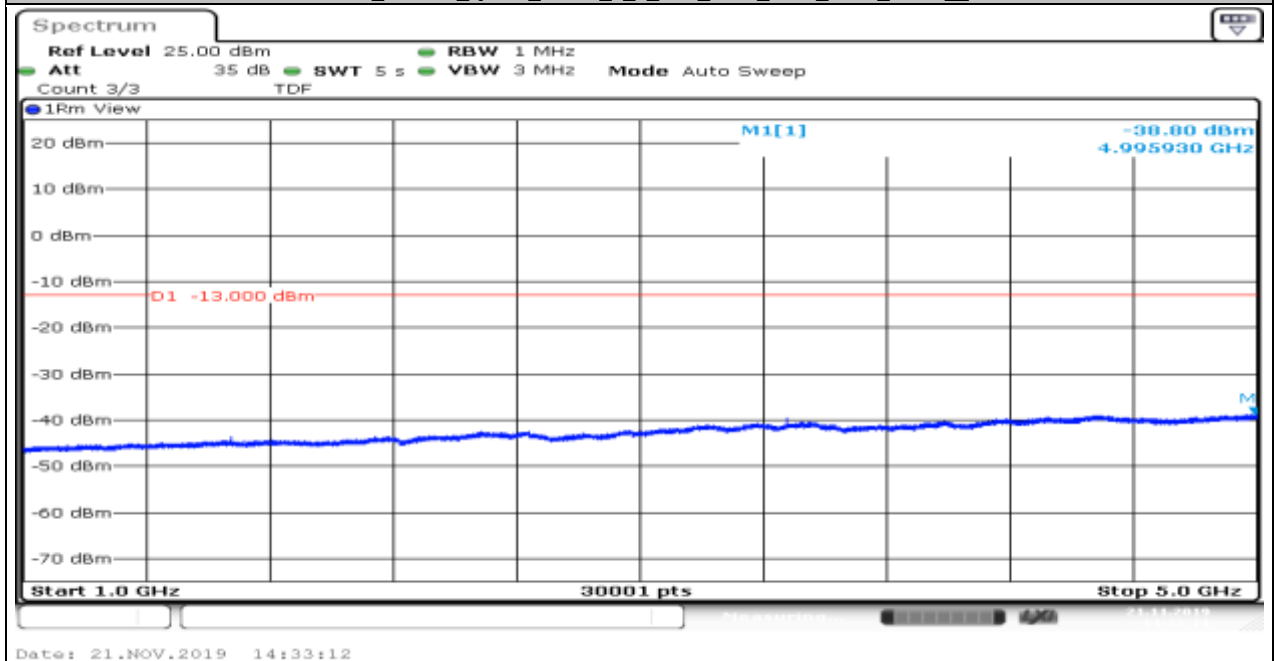
Band5_1.4MHz_QPSK_20407_1_0_Low_5000_12000_-48.01_PASS



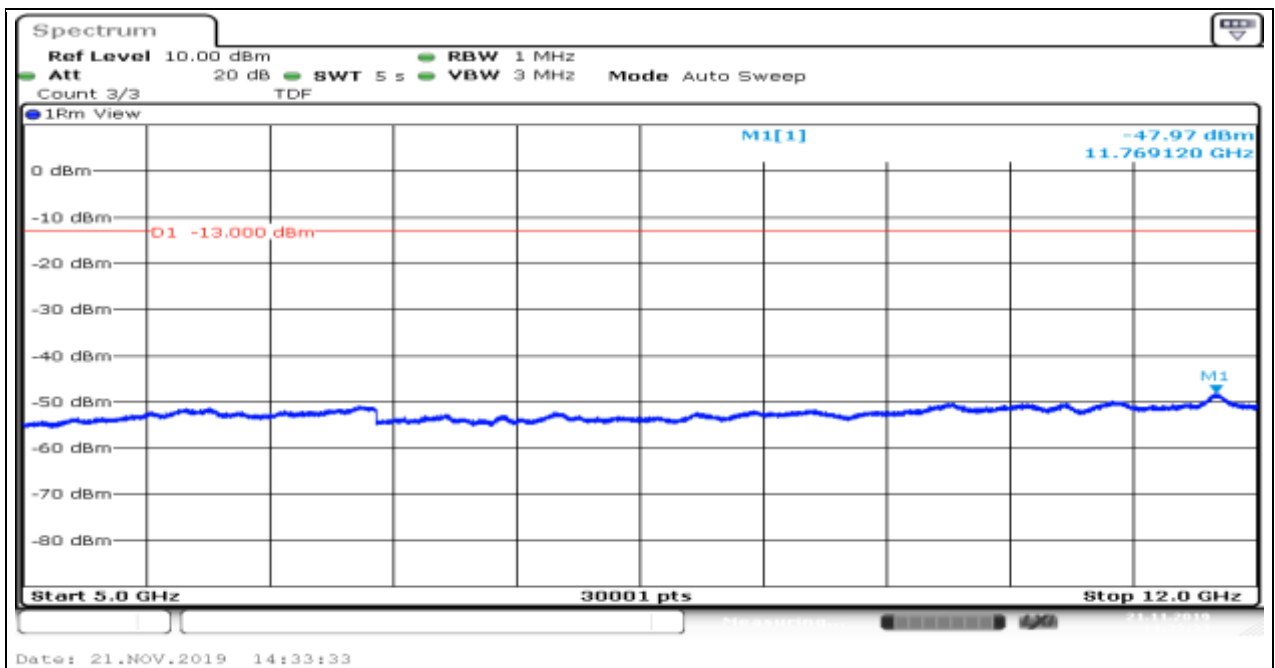
Band5_1.4MHz_QPSK_20525_6_0_Low_12000_26500_-42.2_PASS



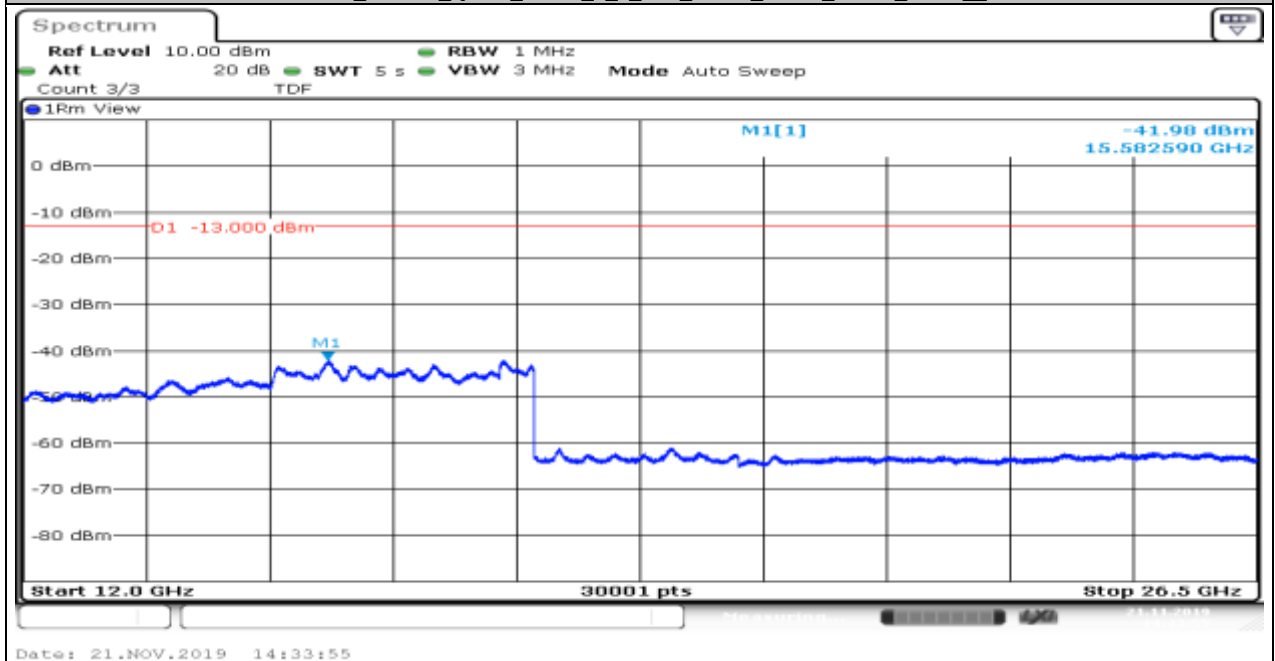
Band5_1.4MHz_QPSK_20525_1_0_Low_1000_5000_-38.8_PASS



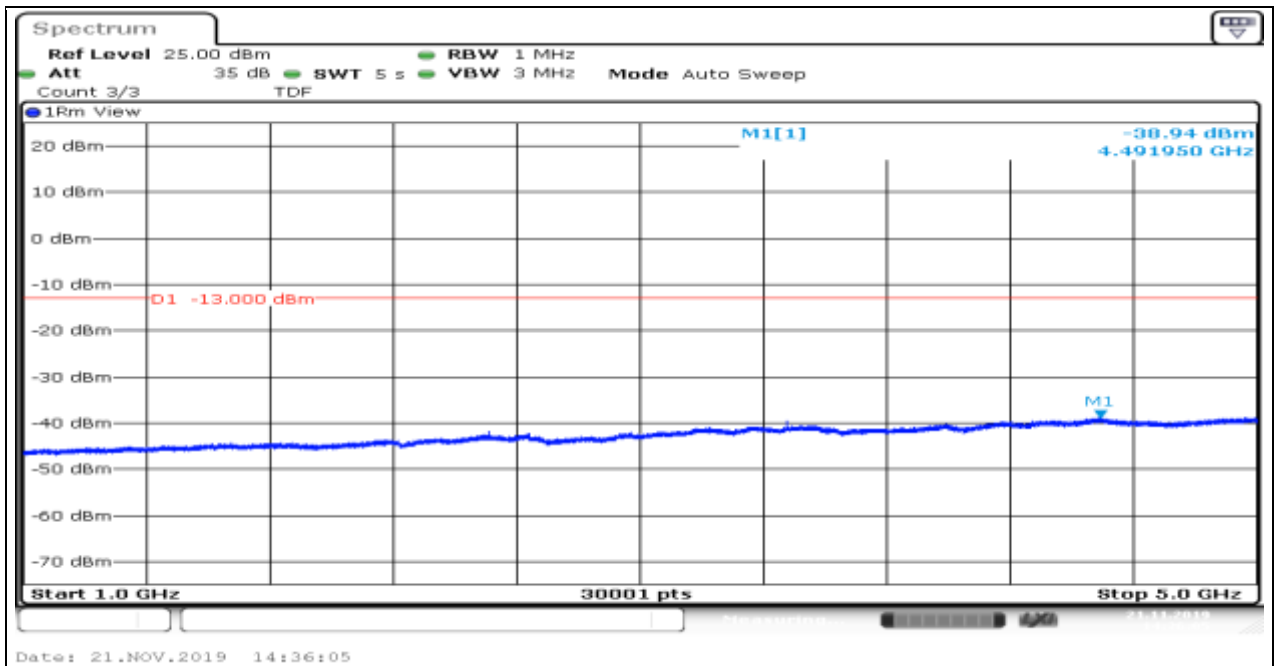
Band5_1.4MHz_QPSK_20525_1_0_Low_5000_12000_-47.97_PASS



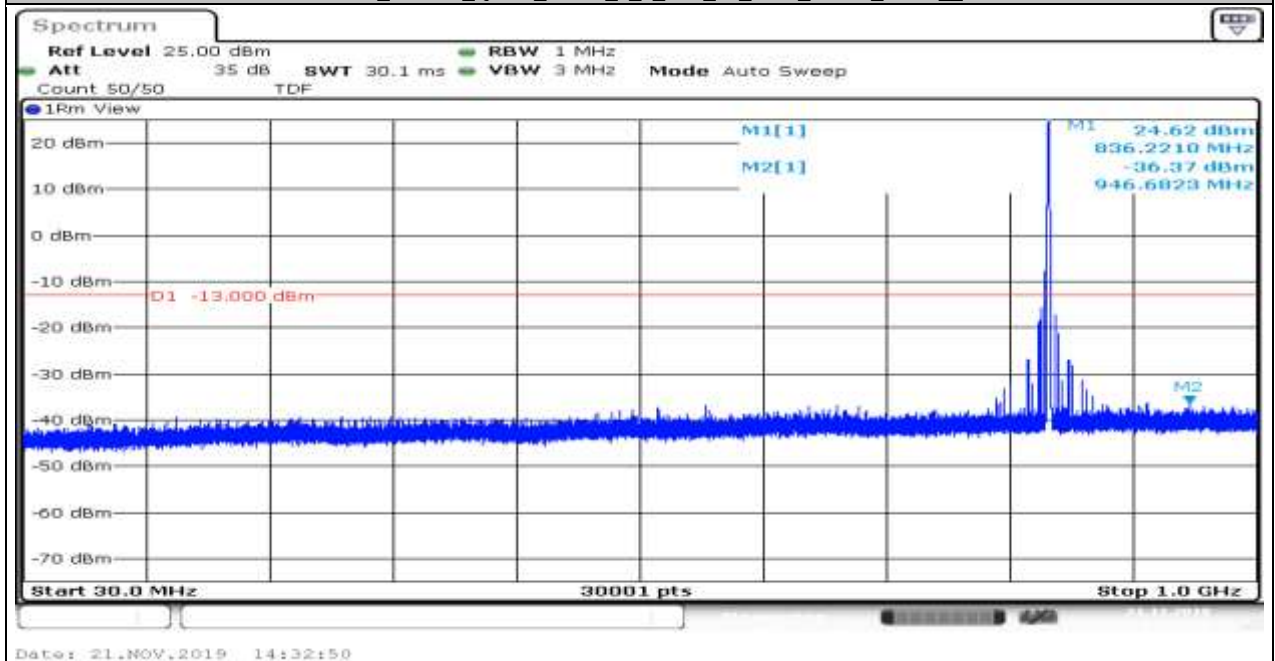
Band5_1.4MHz_QPSK_20525_1_0_Low_12000_26500_-41.98_PASS



Band5_1.4MHz_QPSK_20525_6_0_Low_1000_5000_-38.94_PASS

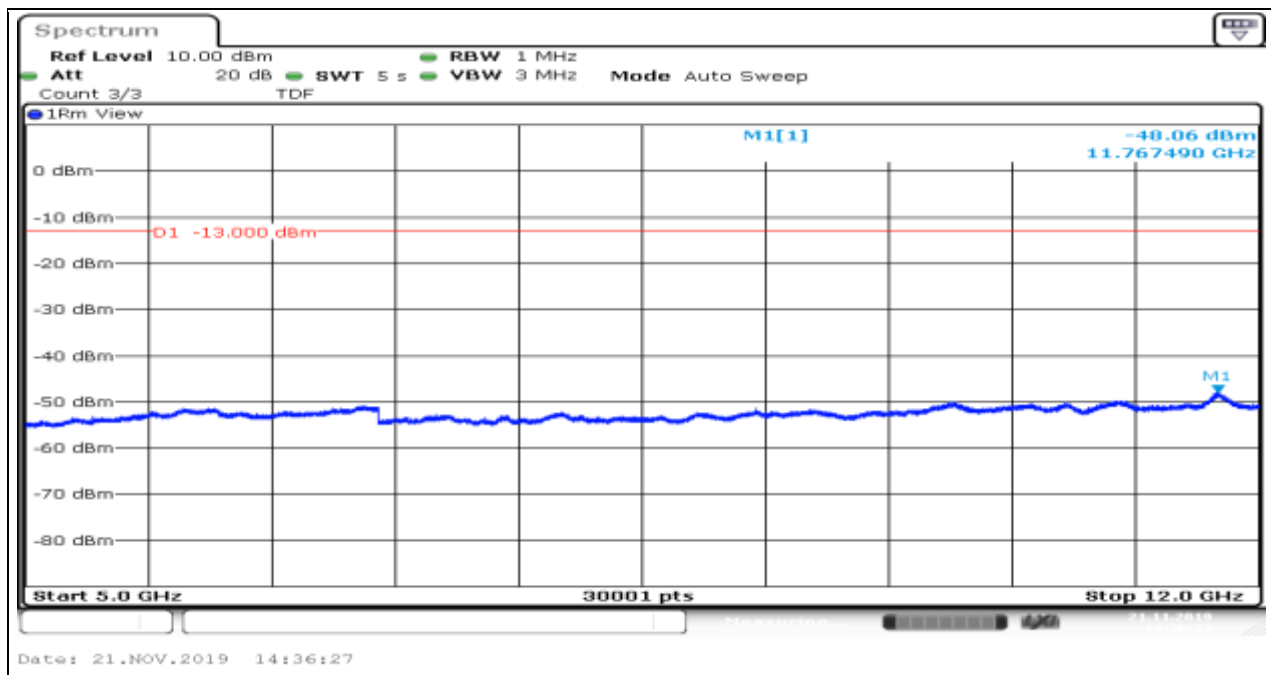


Band5_1.4MHz_QPSK_20525_1_0_Low_30_1000_-36.37_PASS

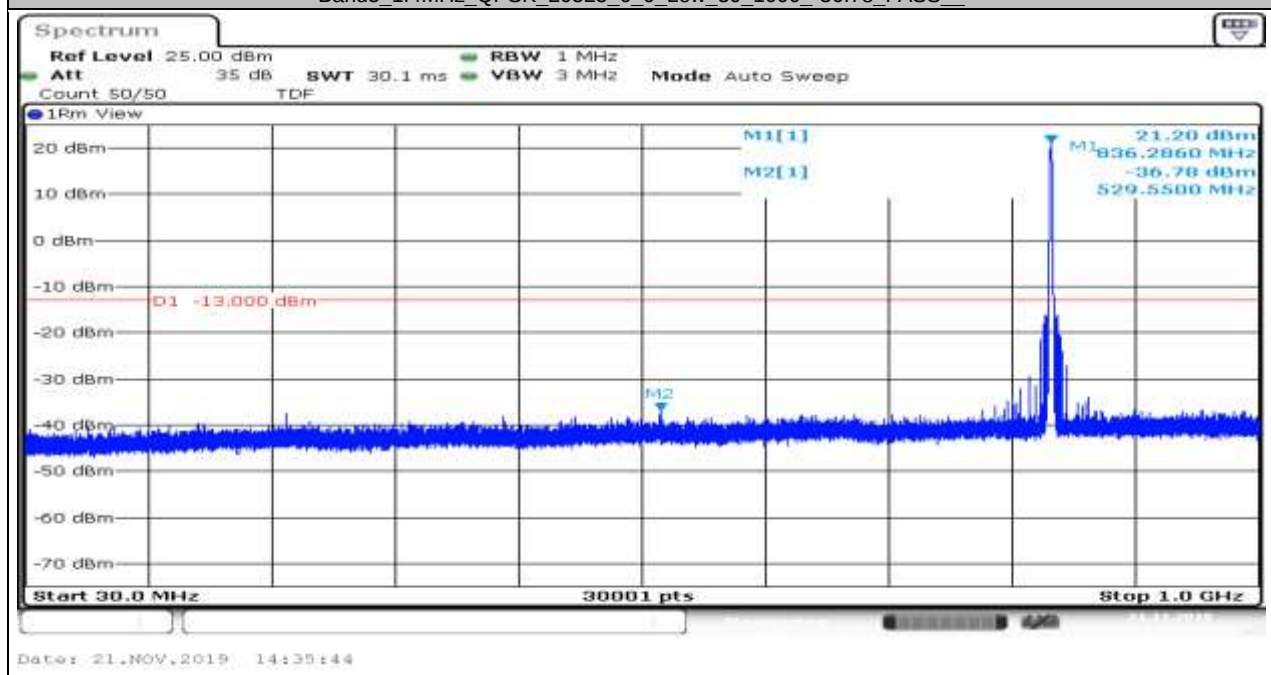


Band5_1.4MHz_QPSK_20525_6_0_Low_5000_12000_-48.06_PASS

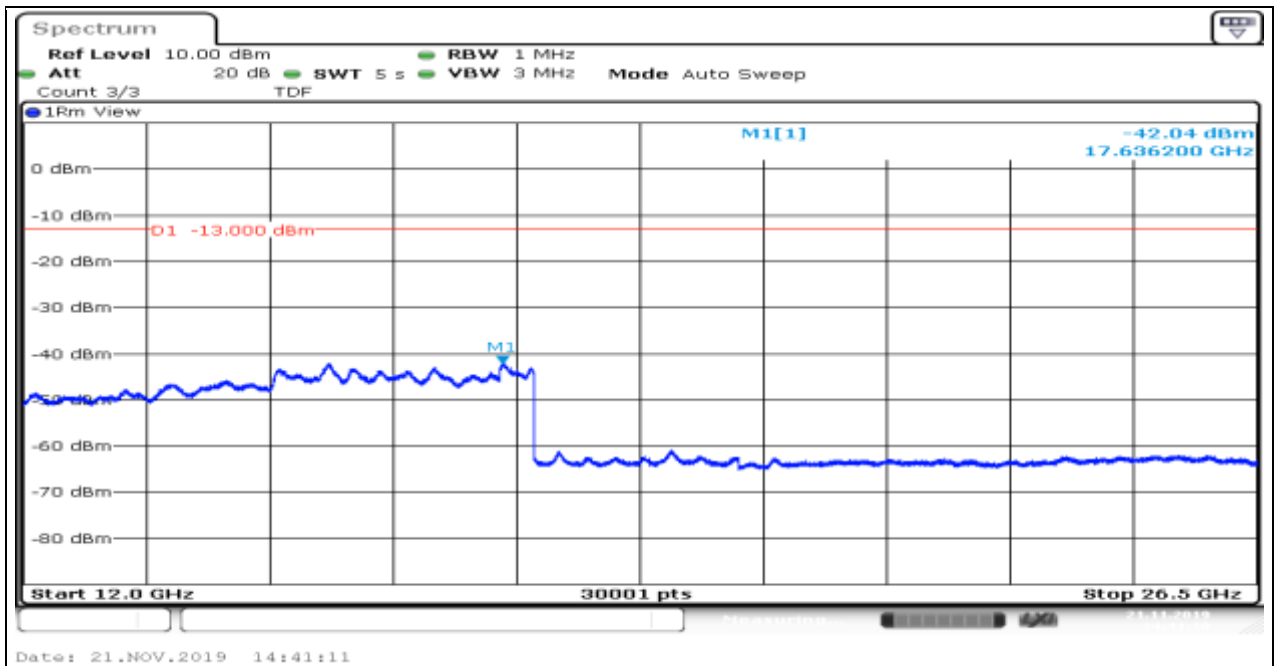
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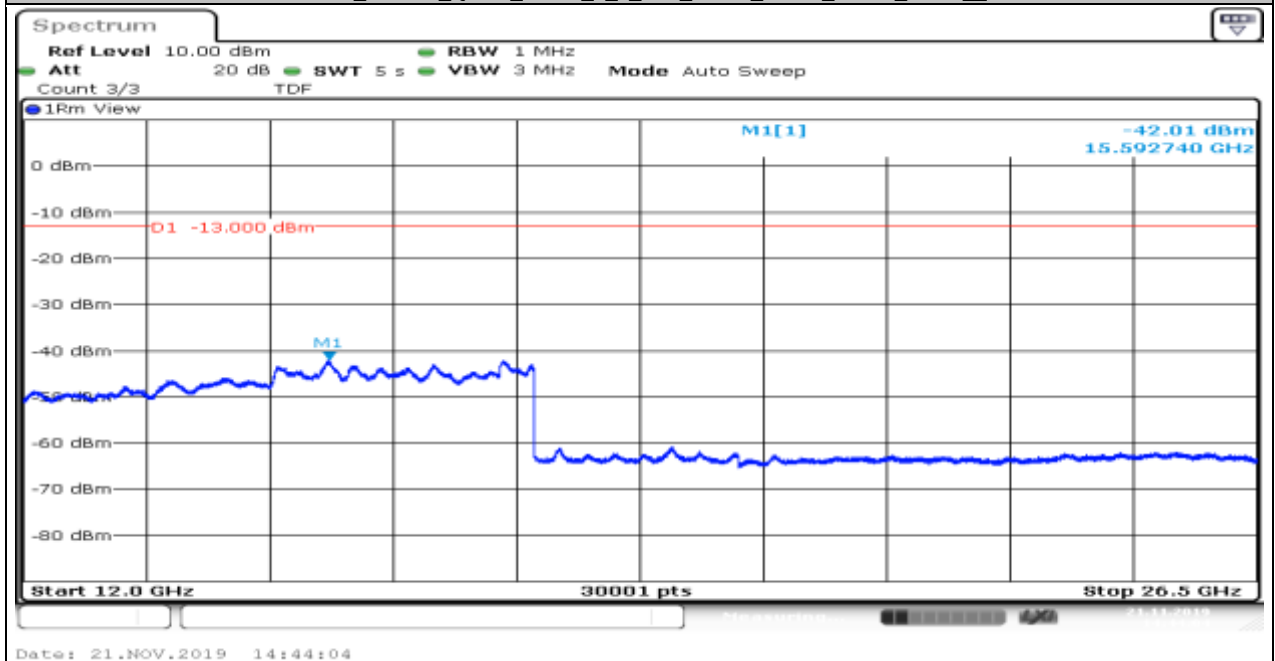
Band5_1.4MHz_QPSK_20525_6_0_Low_30_1000_-36.78_PASS



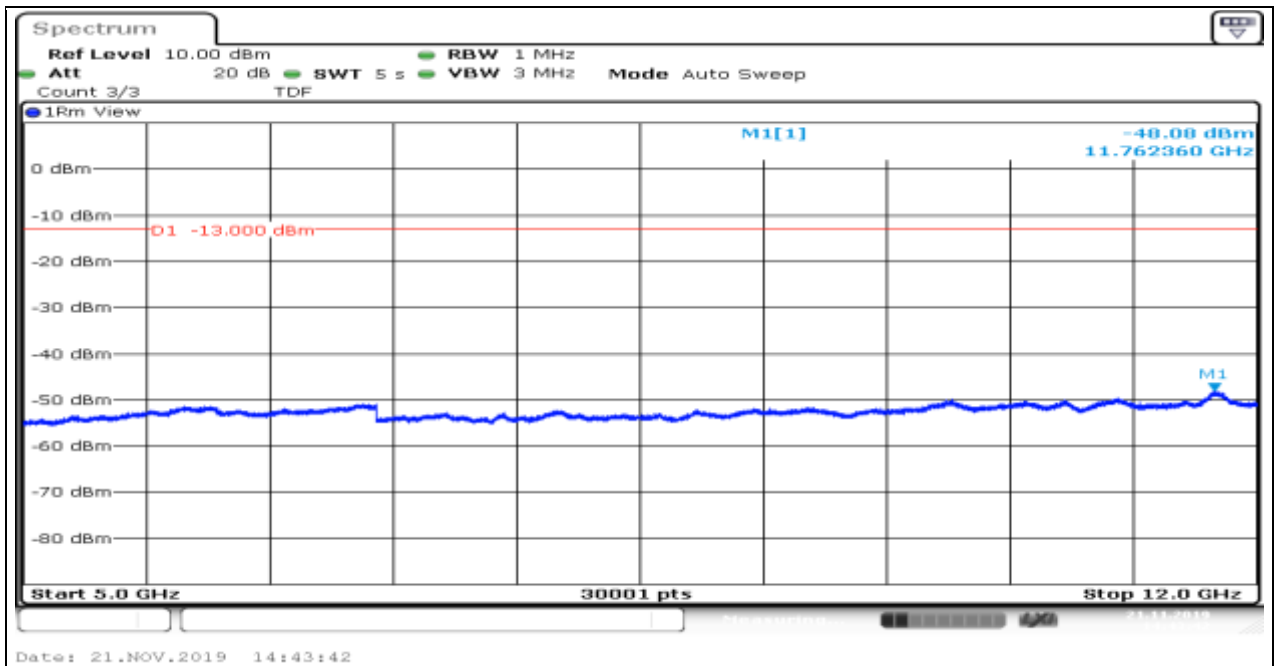
Band5_1.4MHz_QPSK_20643_1_5_Low_12000_26500_-42.04_PASS



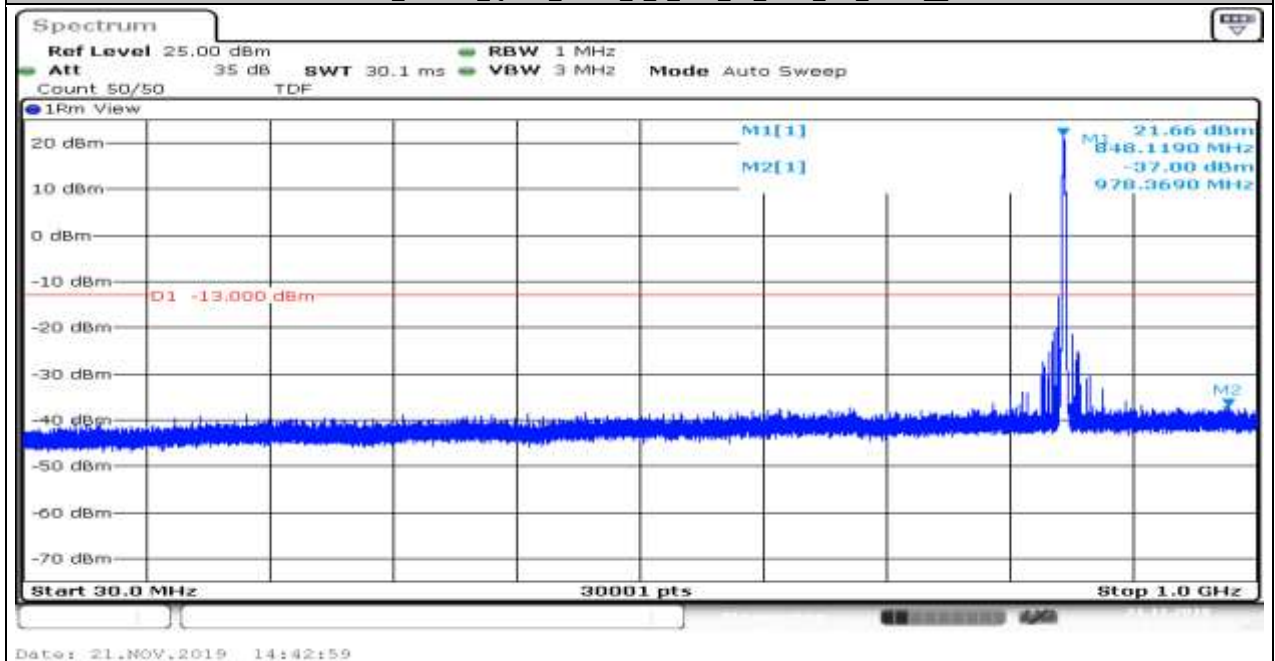
Band5_1.4MHz_QPSK_20643_6_0_Low_12000_26500_-42.01_PASS



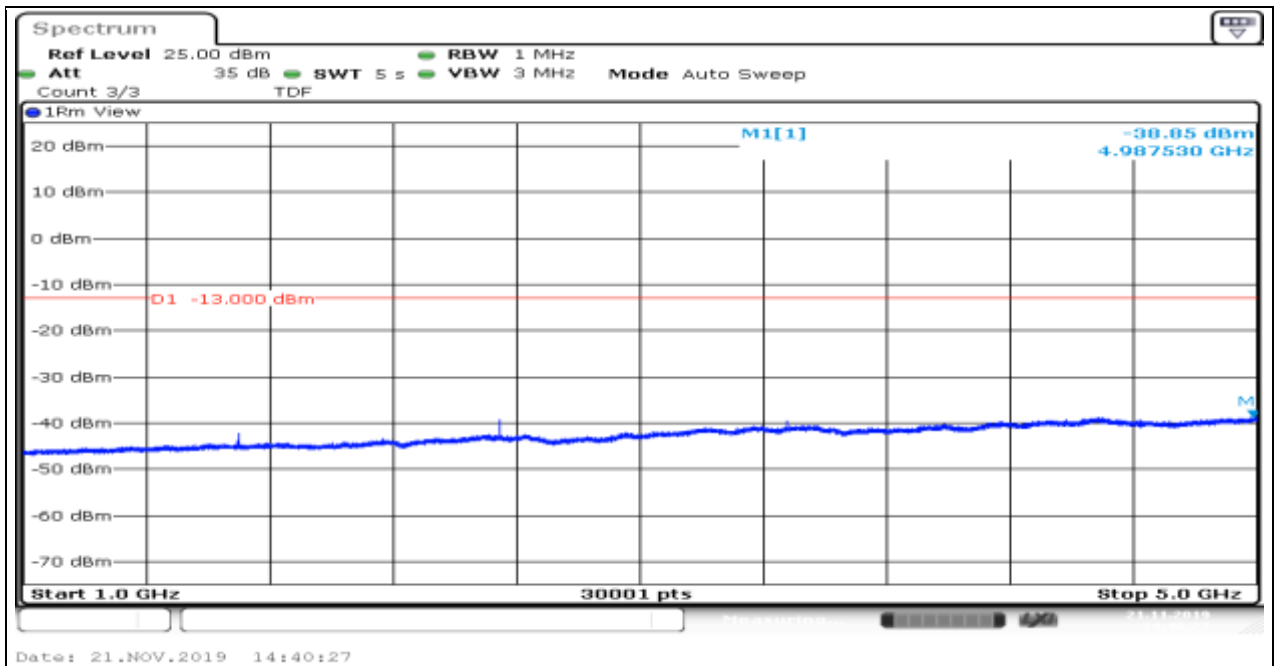
Band5_1.4MHz_QPSK_20643_6_0_Low_5000_12000_-48.08_PASS



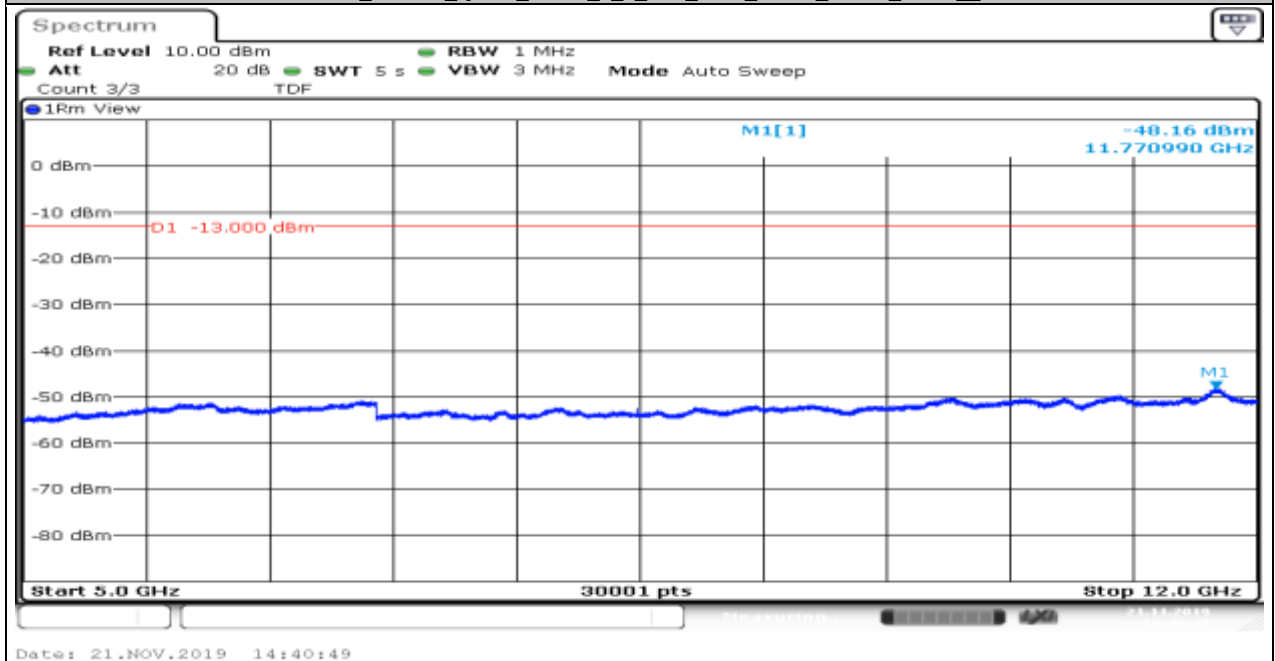
Band5_1.4MHz_QPSK_20643_6_0_Low_30_1000_-37_PASS



Band5_1.4MHz_QPSK_20643_1_5_Low_1000_5000_-38.85_PASS

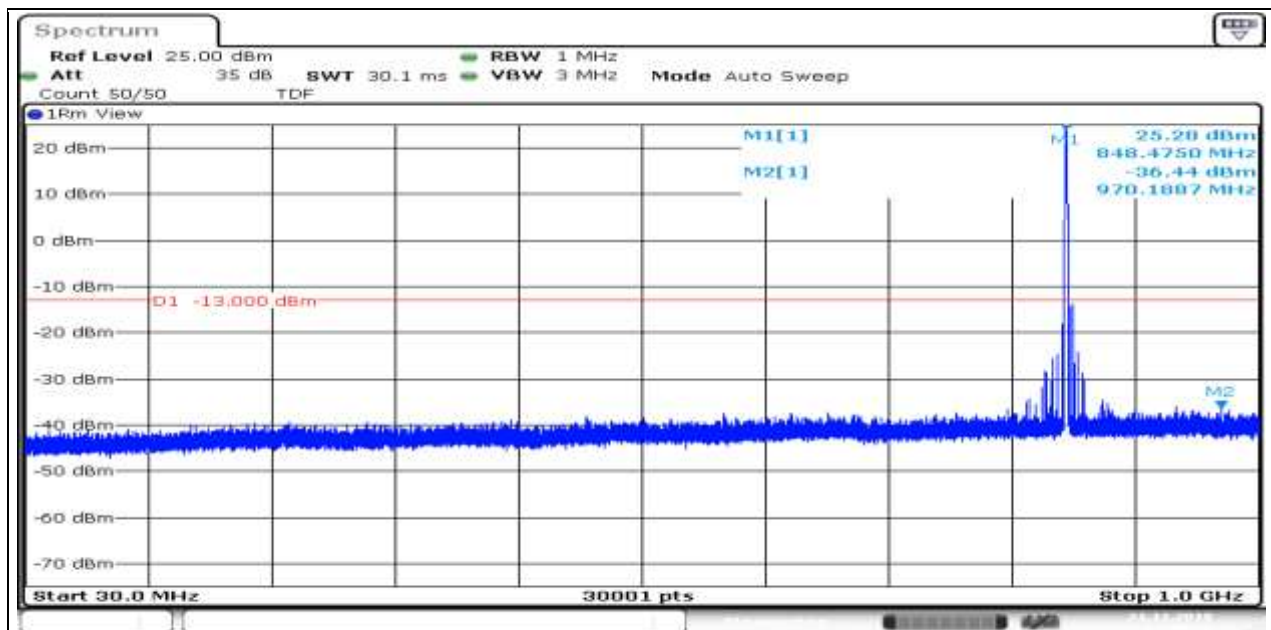


Band5_1.4MHz_QPSK_20643_1_5_Low_5000_12000_-48.16_PASS



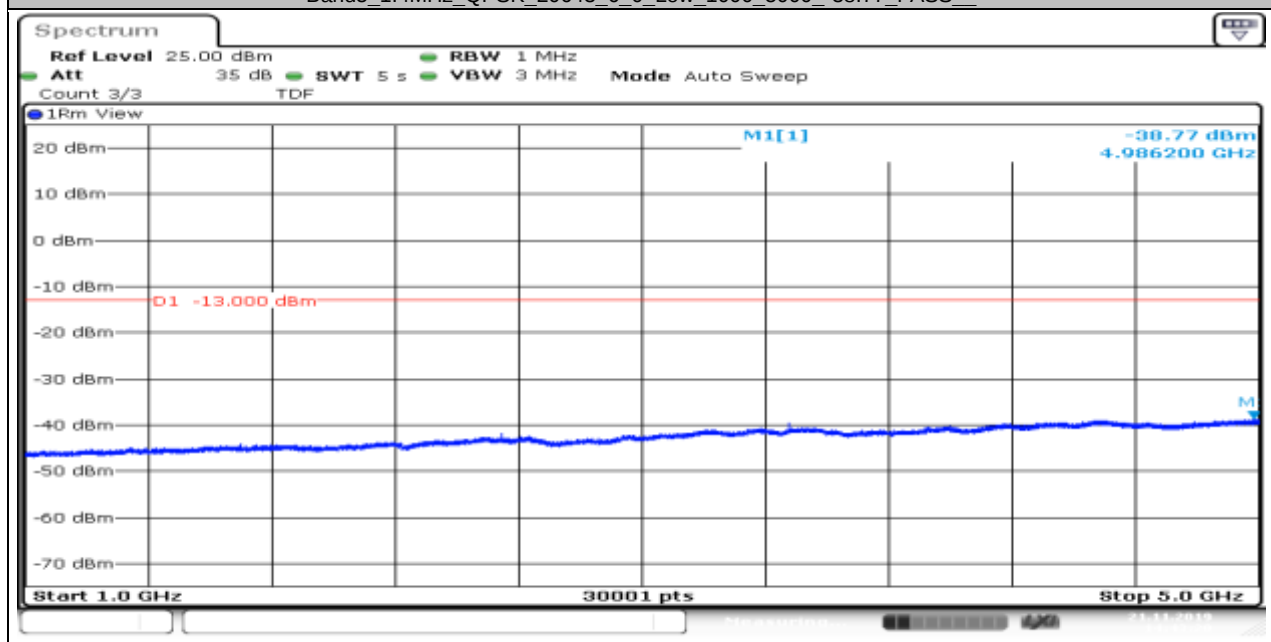
Band5_1.4MHz_QPSK_20643_1_5_Low_30_1000_-36.44_PASS

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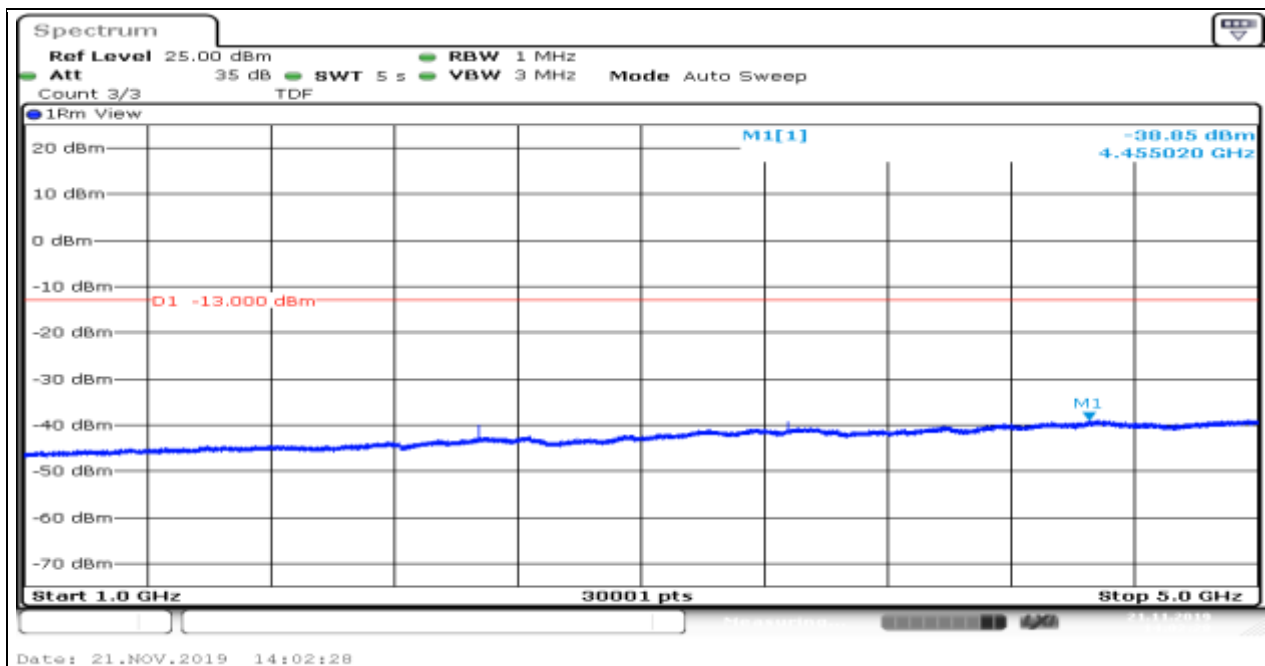
Date: 21.NOV.2019 14:40:05

Band5_1.4MHz_QPSK_20643_6_0_Low_1000_5000_-38.77_PASS

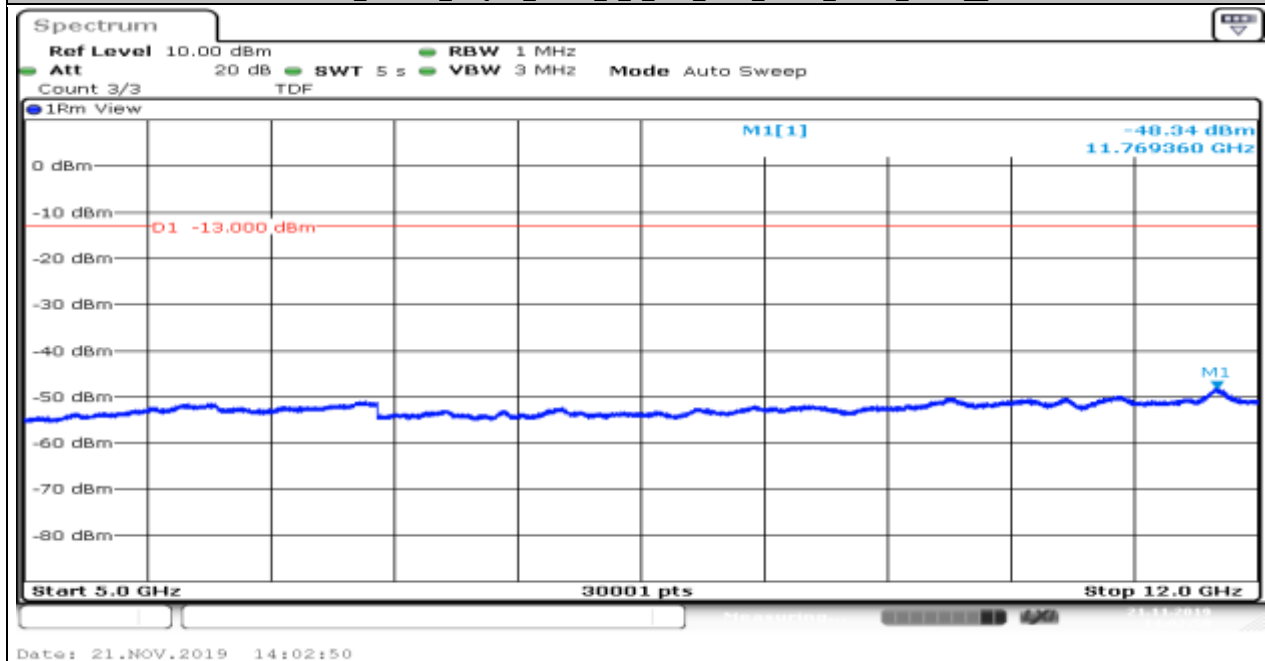


Date: 21.NOV.2019 14:43:21

Band5_1.4MHz_16QAM_20407_1_0_Low_1000_5000_-38.85_PASS

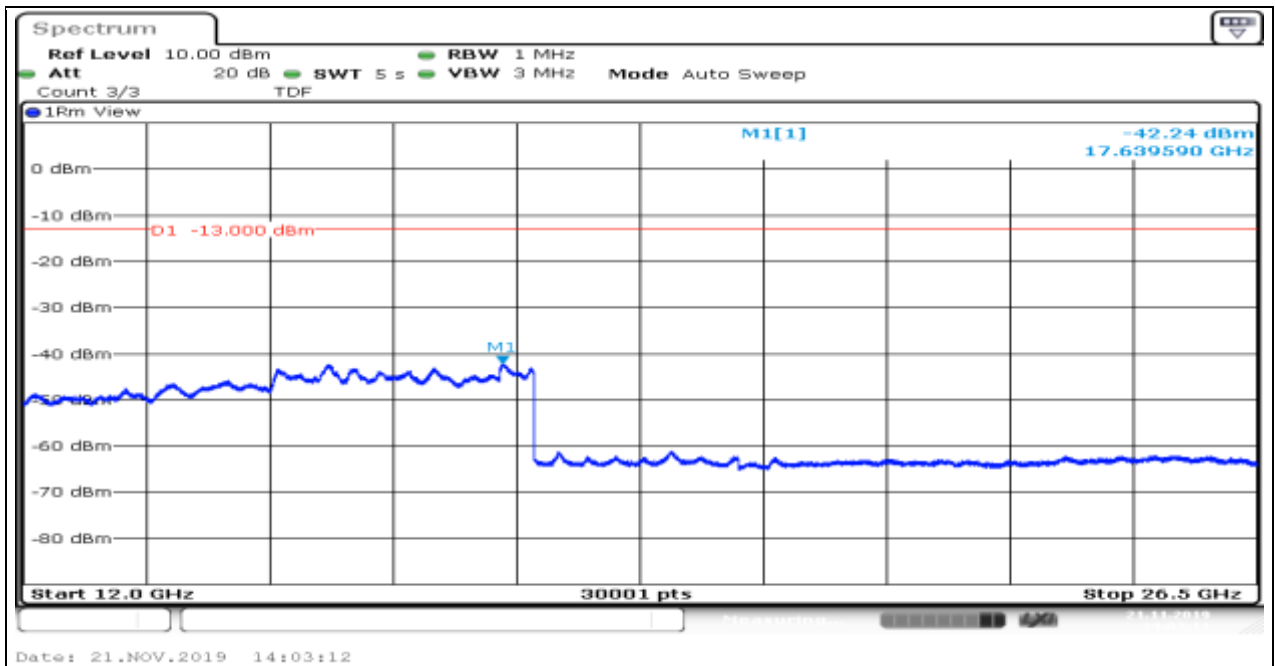


Band5_1.4MHz_16QAM_20407_1_0_Low_5000_12000_-48.34_PASS

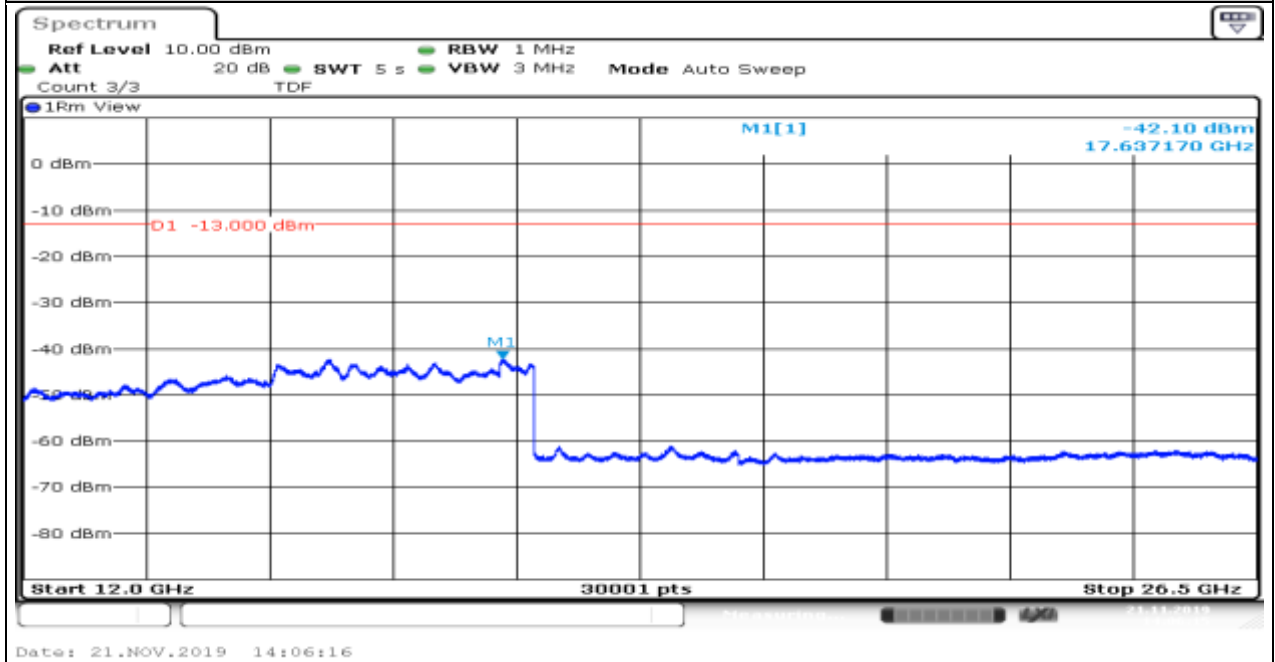


Band5_1.4MHz_16QAM_20407_1_0_Low_12000_26500_-42.24_PASS

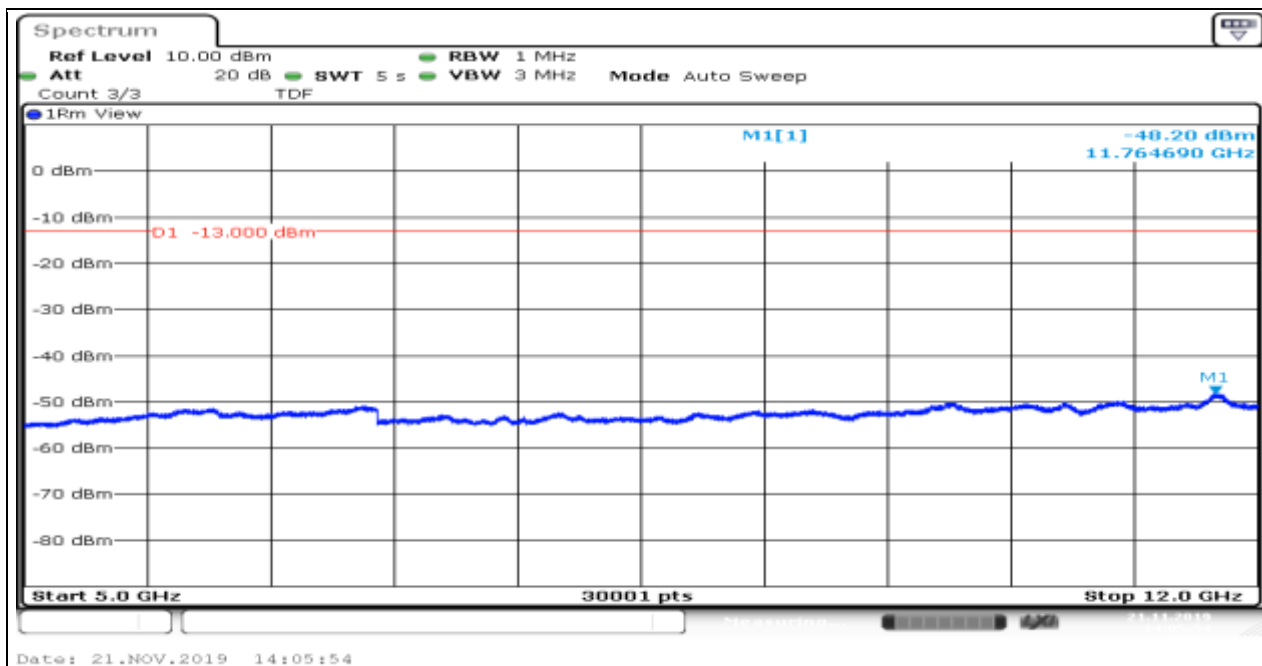
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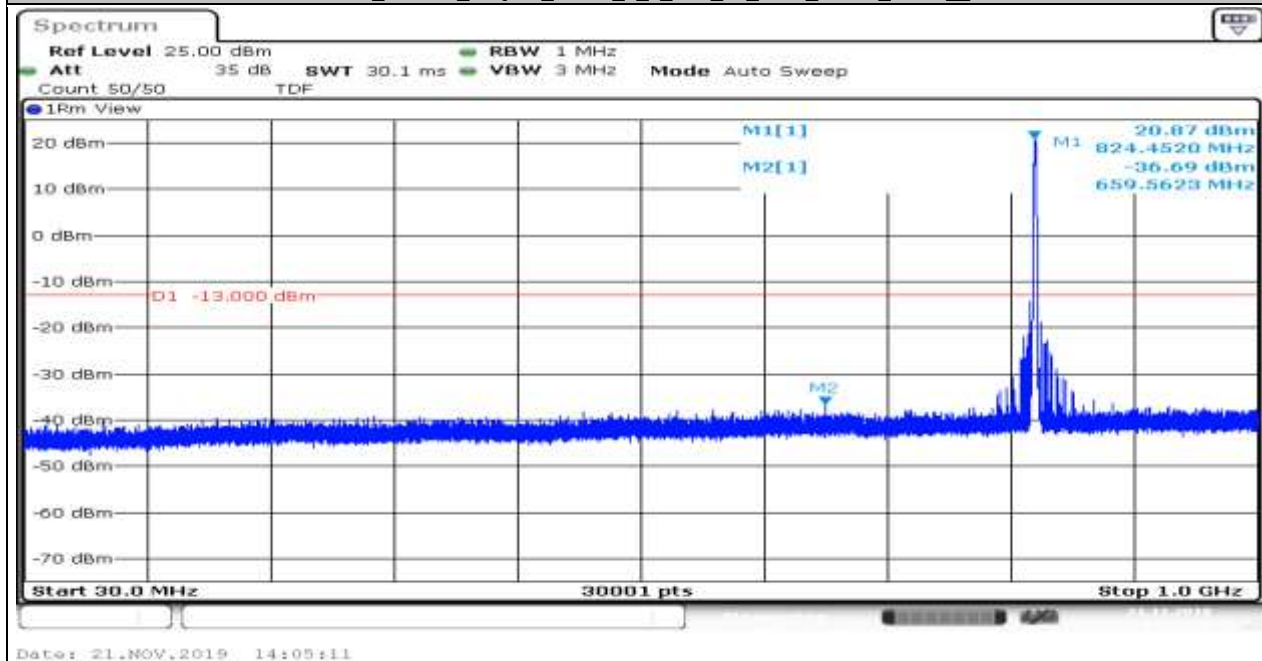
Band5_1.4MHz_16QAM_20407_6_0_Low_12000_26500_-42.1_PASS



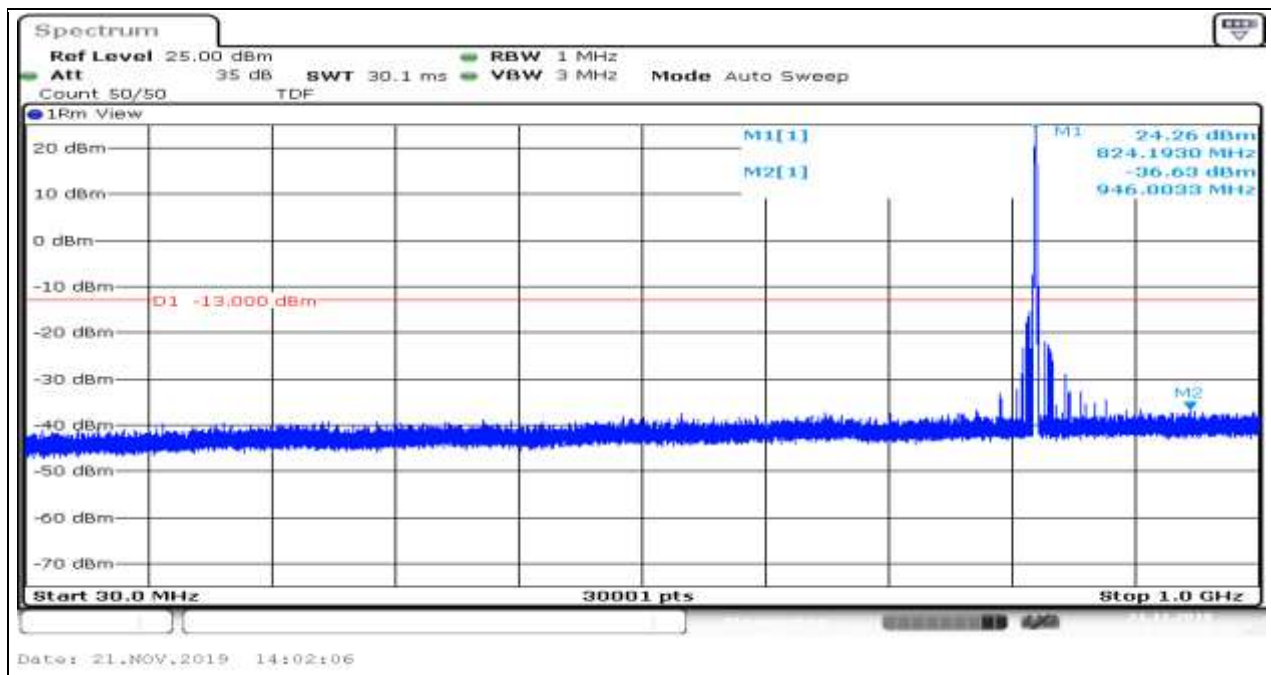
Band5_1.4MHz_16QAM_20407_6_0_Low_5000_12000_-48.2_PASS



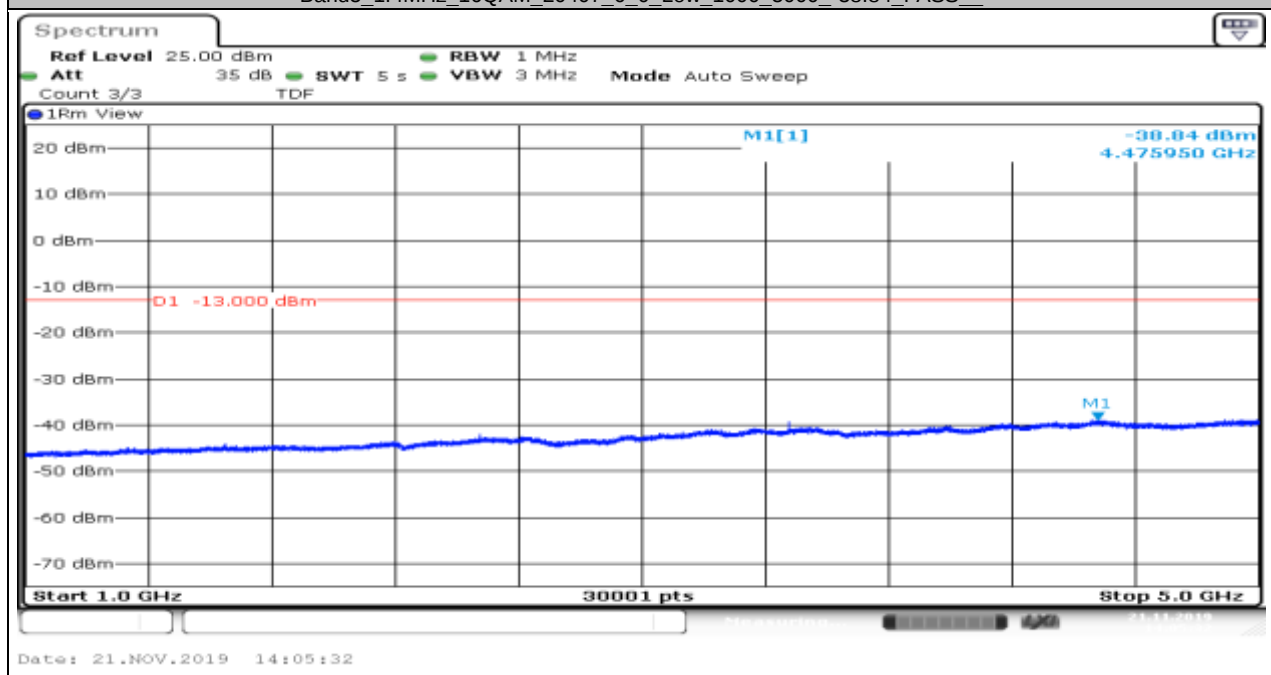
Band5_1.4MHz_16QAM_20407_6_0_Low_30_1000_-36.69_PASS



Band5_1.4MHz_16QAM_20407_1_0_Low_30_1000_-36.63_PASS

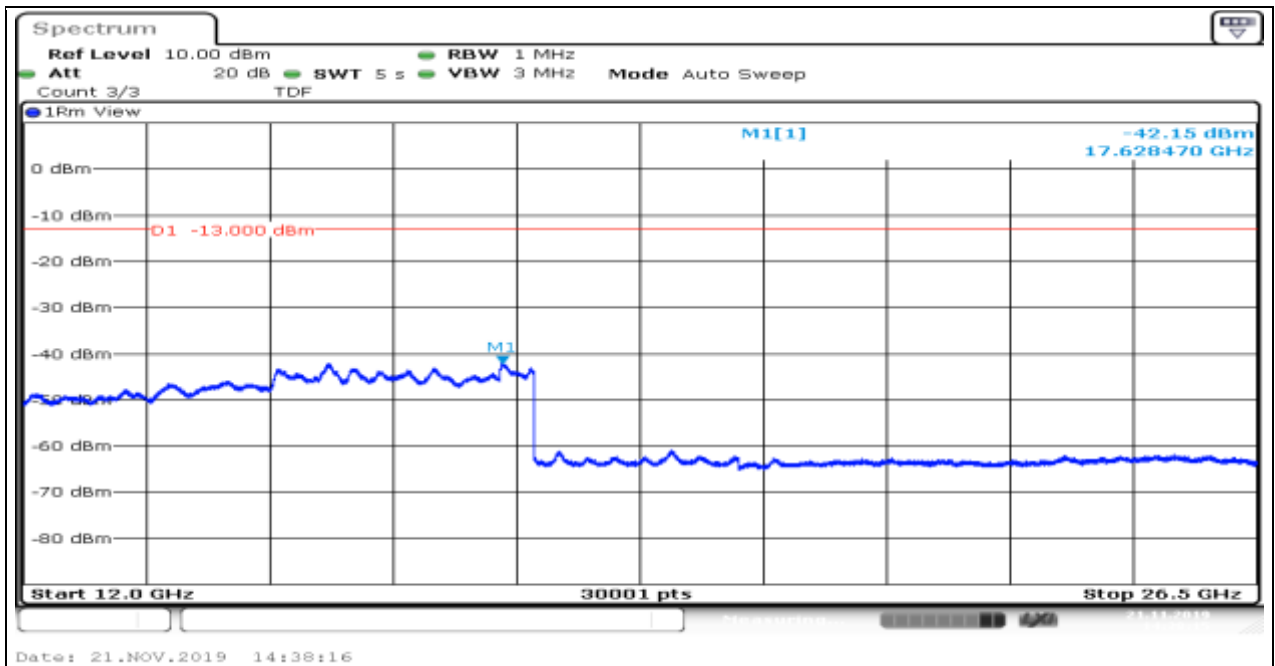


Band5 1.4MHz 16QAM 20407 6 0 Low 1000 5000 -38.84_PASS

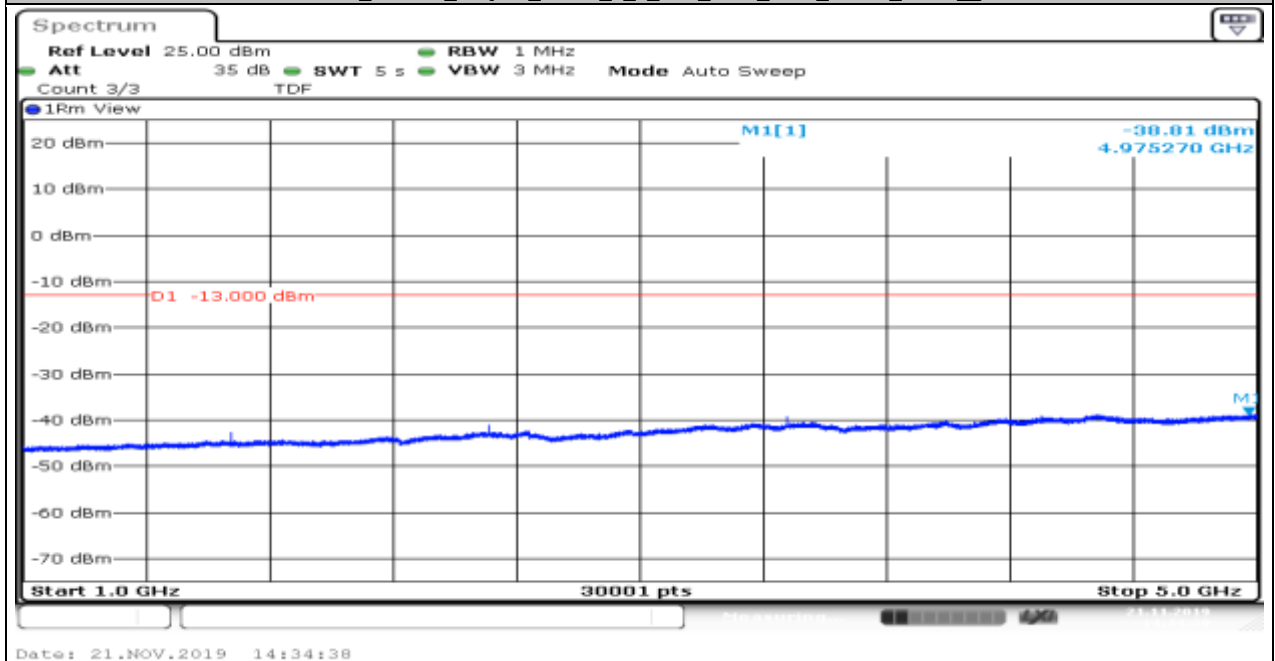


Band5 1.4MHz 16QAM 20525 6 0 Low 12000 26500 -42.15_PASS

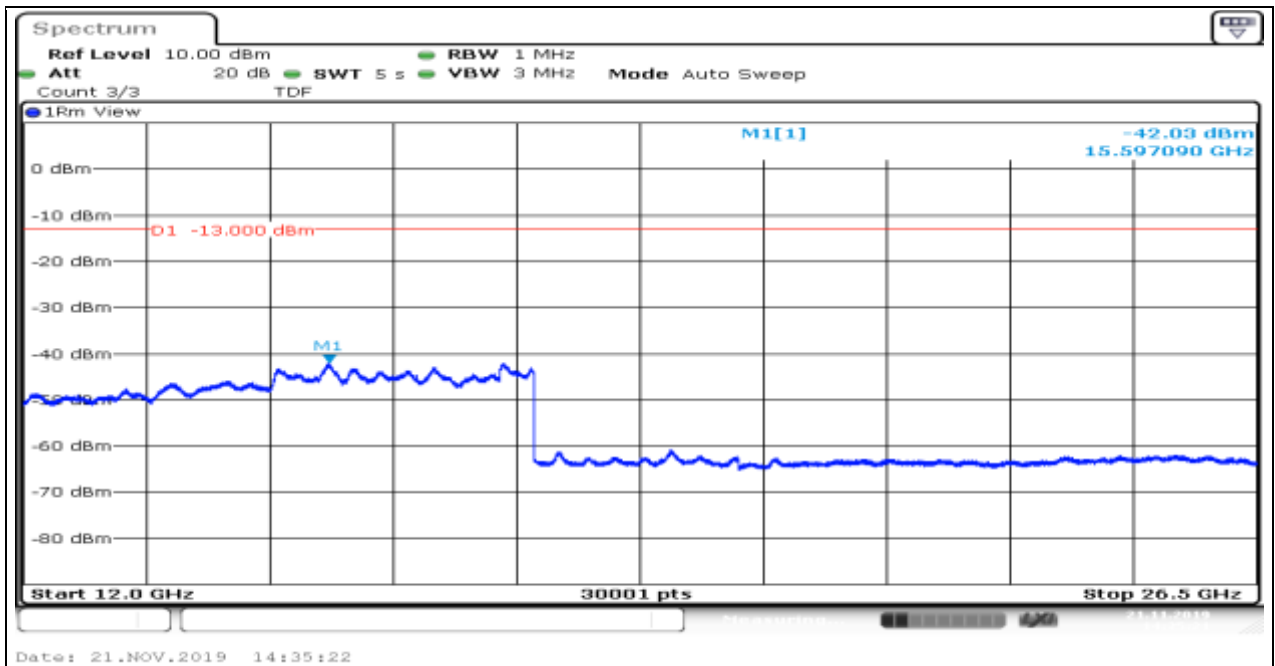
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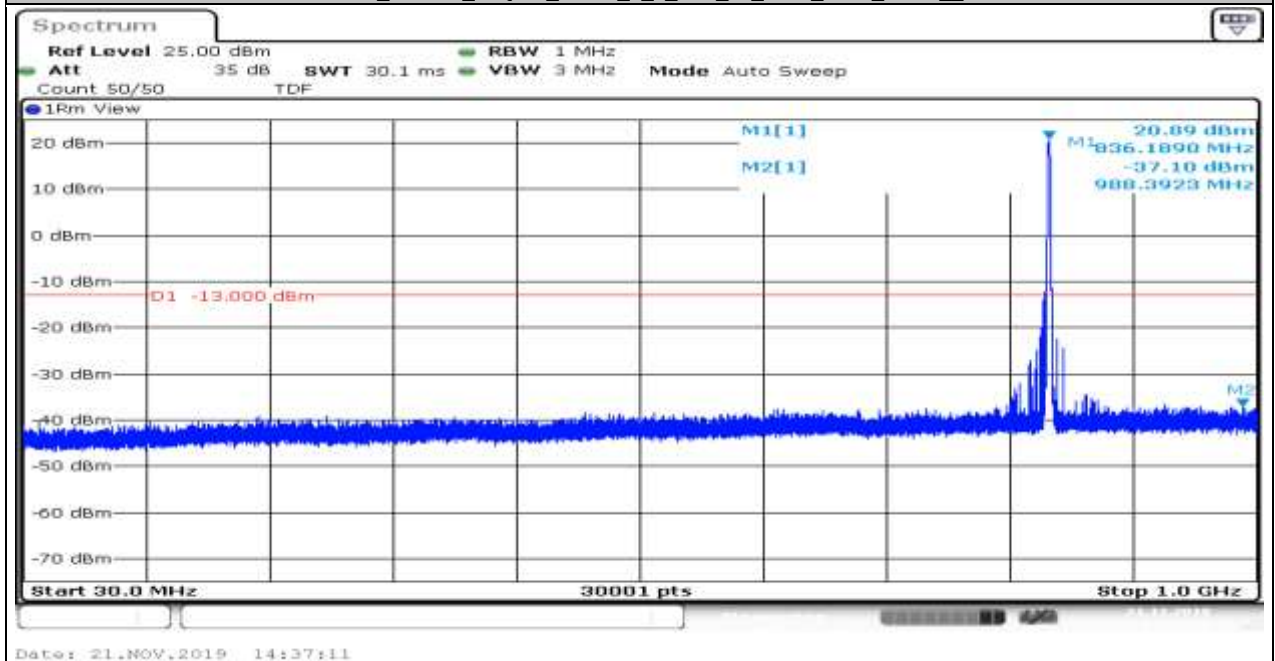
Band5 1.4MHz 16QAM 20525 1 0 Low 1000 5000 -38.81_PASS



Band5_1.4MHz_16QAM_20525_1_0_Low_12000_26500_-42.03_PASS

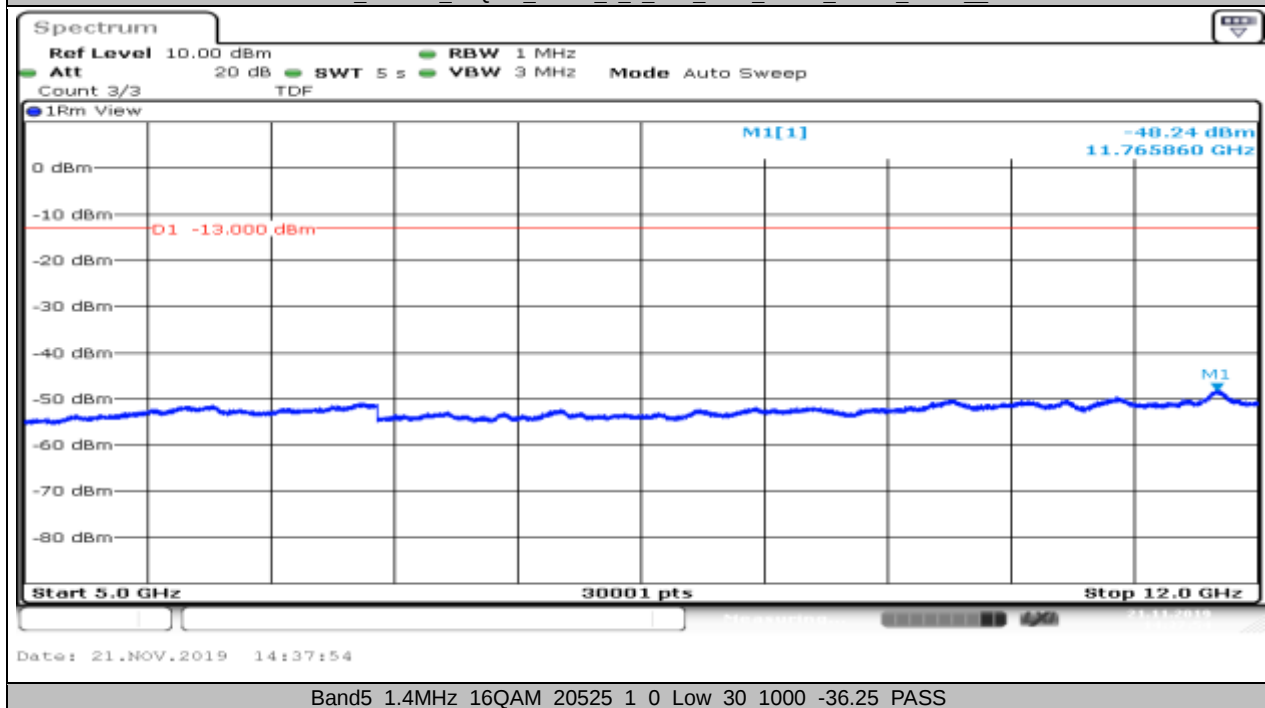
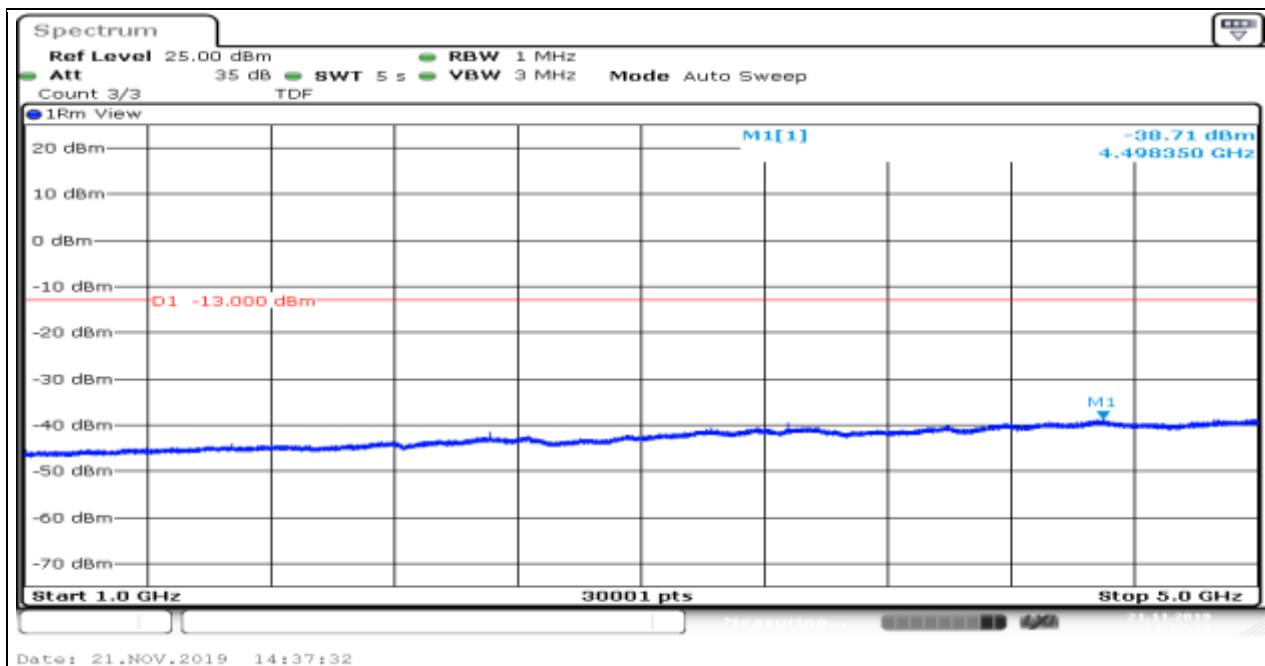


Band5_1.4MHz_16QAM_20525_6_0_Low_30_1000_-37.1_PASS

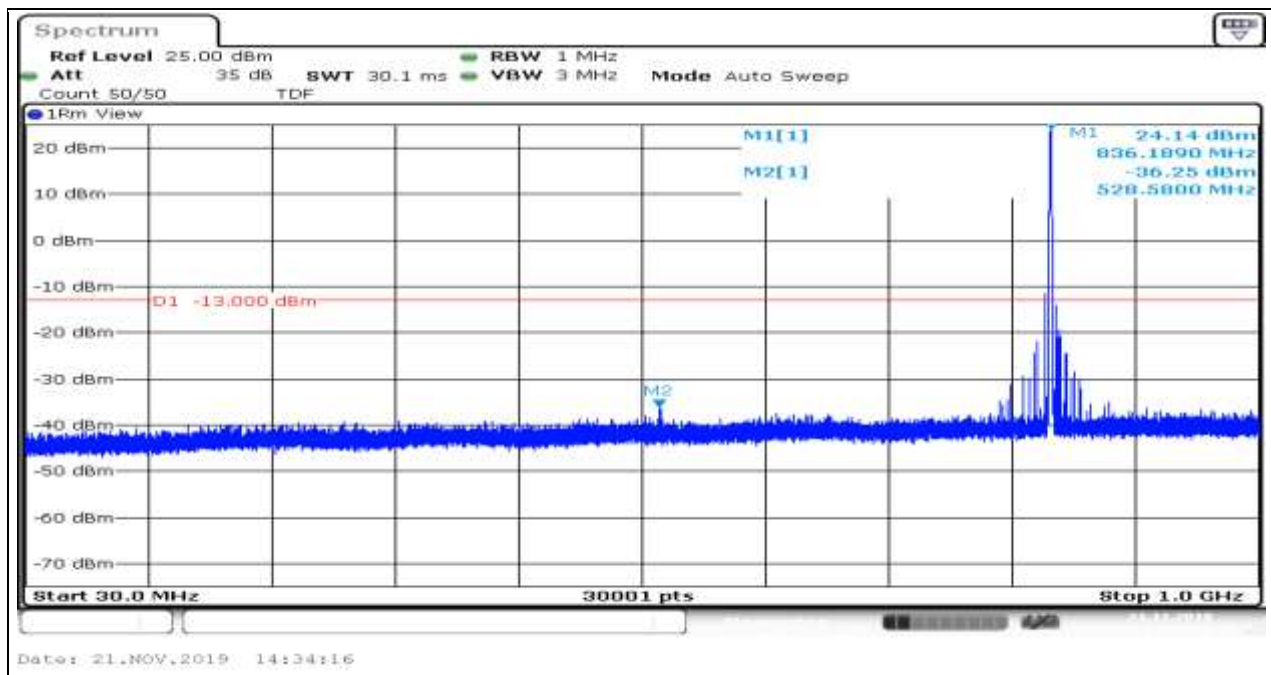


Band5_1.4MHz_16QAM_20525_6_0_Low_1000_5000_-38.71_PASS

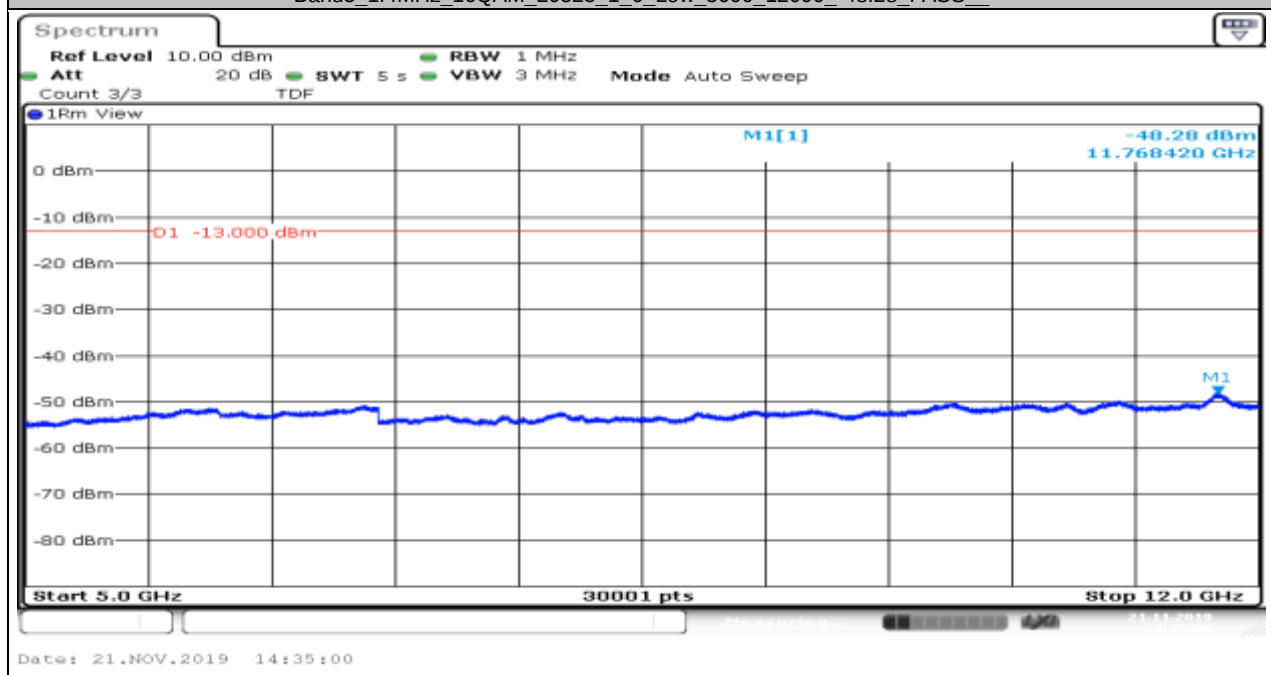
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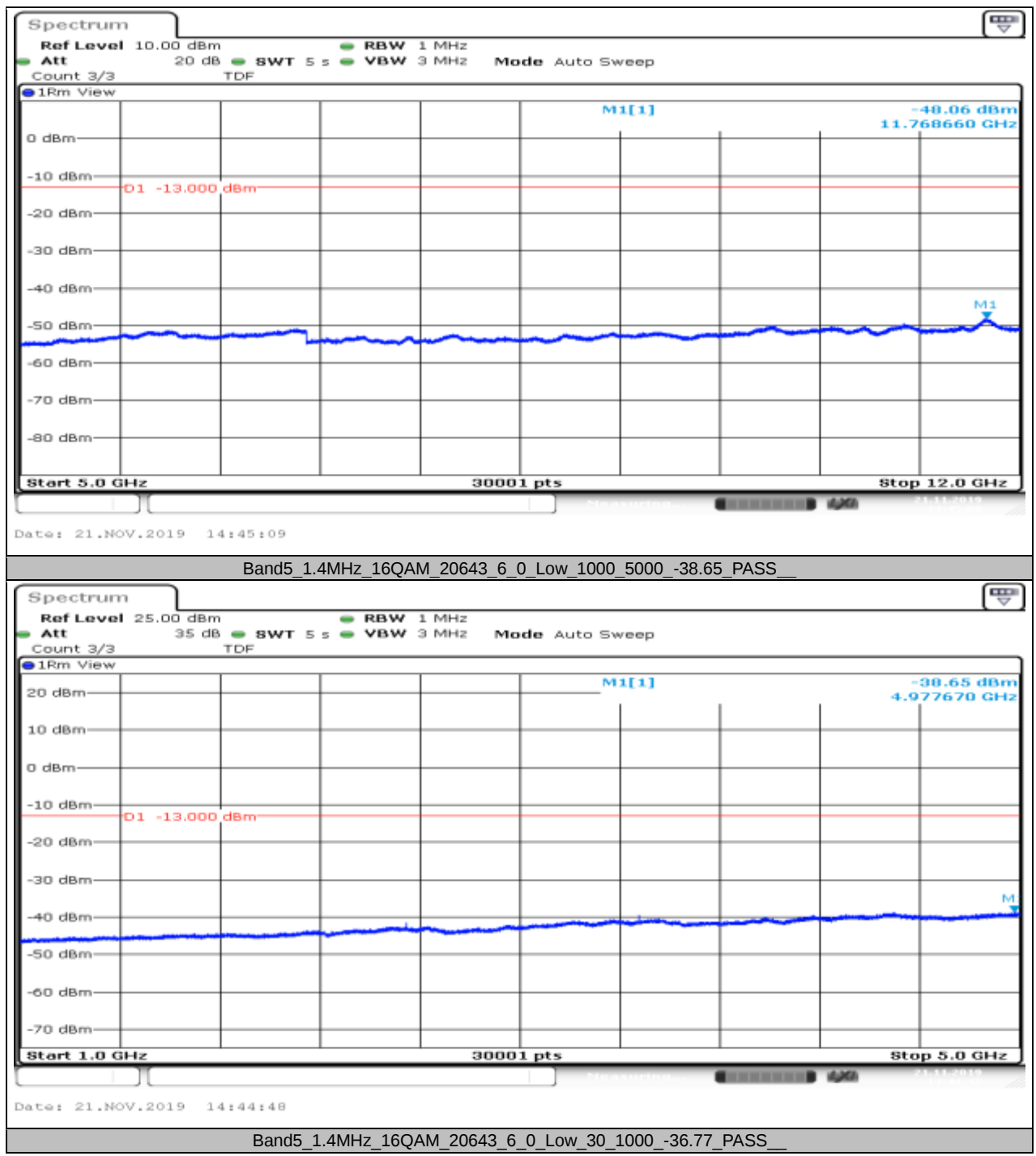


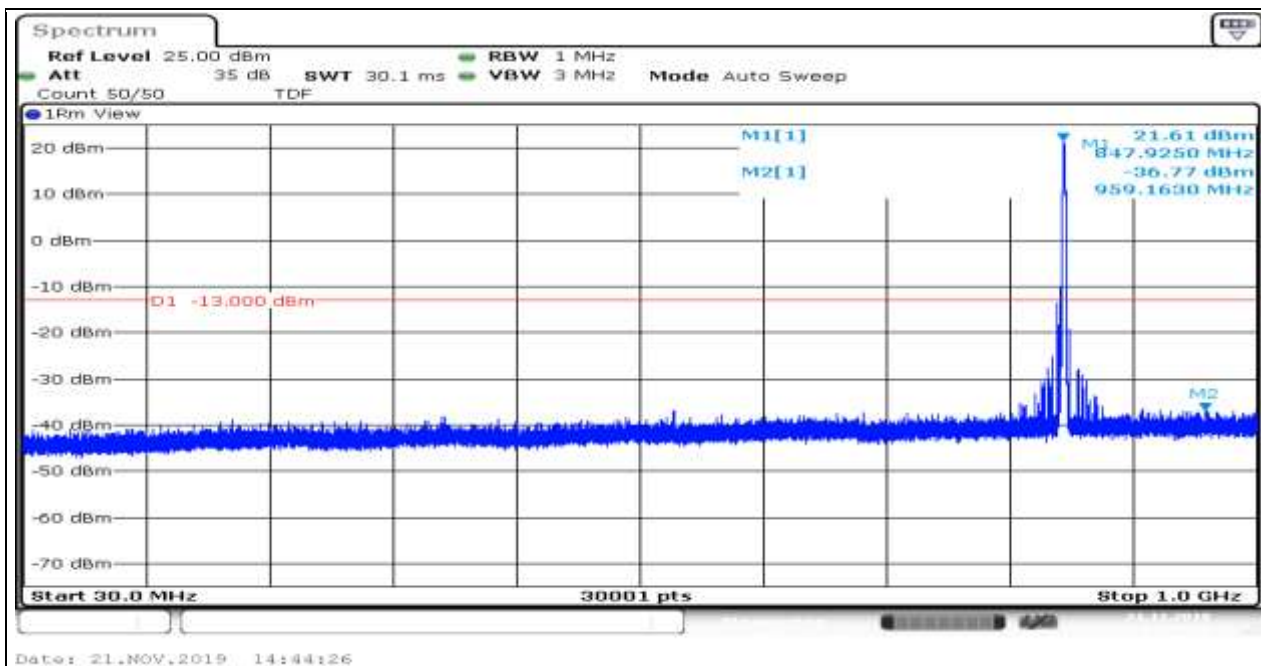
Band5_1.4MHz_16QAM_20525_1_0_Low_5000_12000_-48.28_PASS



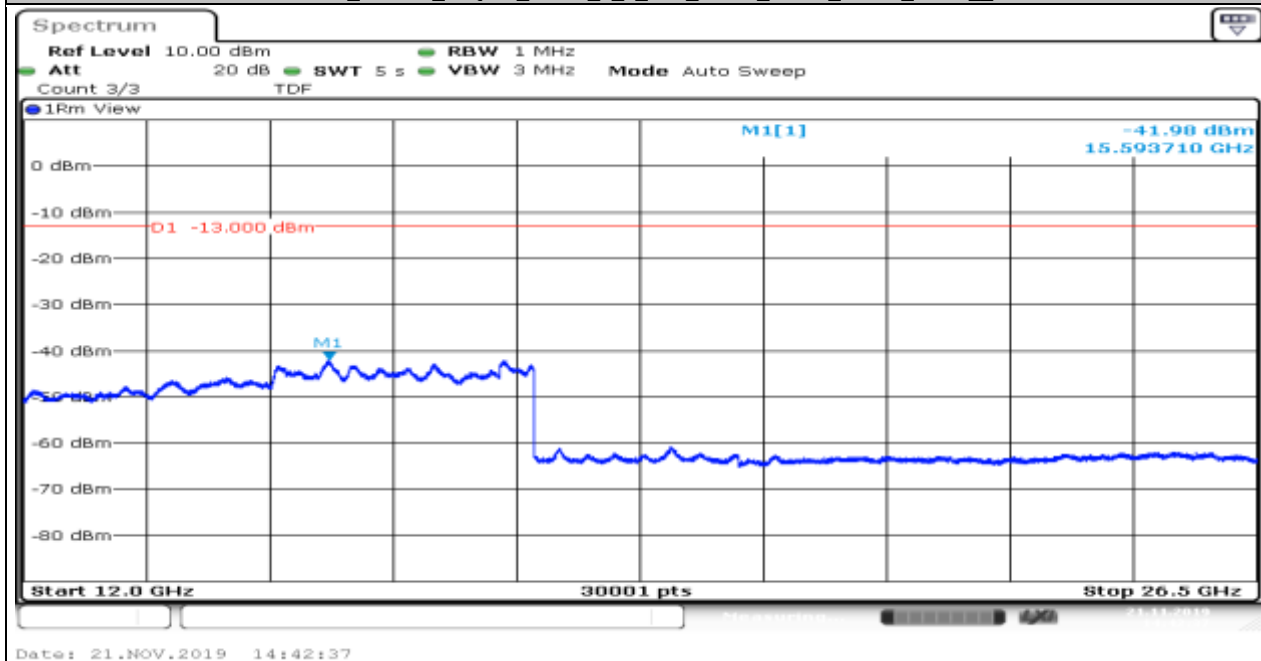
Band5_1.4MHz_16QAM_20643_6_0_Low_5000_12000_-48.06_PASS

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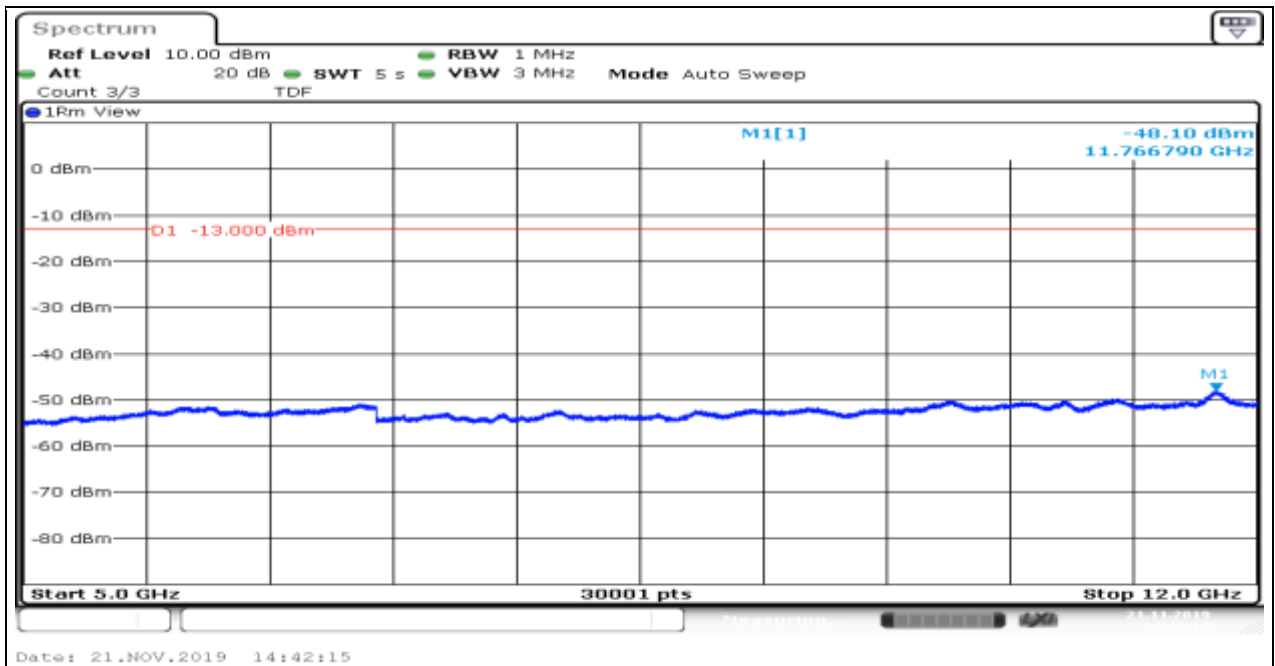


Band5_1.4MHz_16QAM_20643_1_5_Low_12000_26500_-41.98_PASS

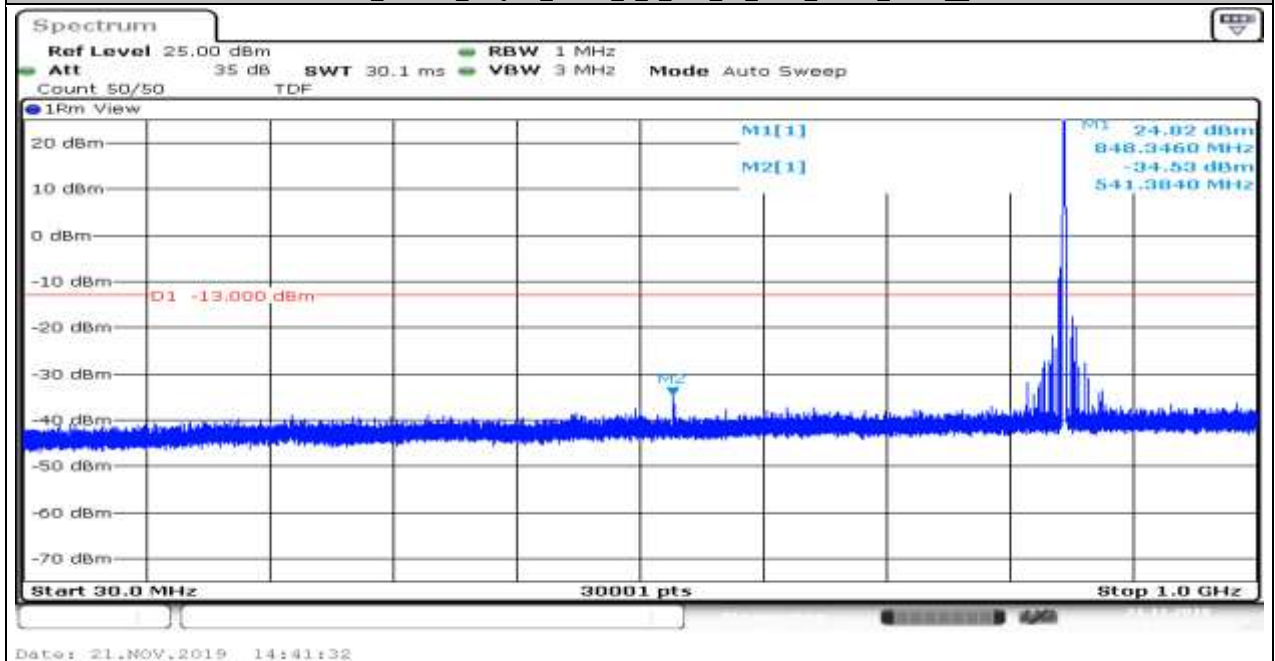


Band5_1.4MHz_16QAM_20643_1_5_Low_5000_12000_-48.1_PASS

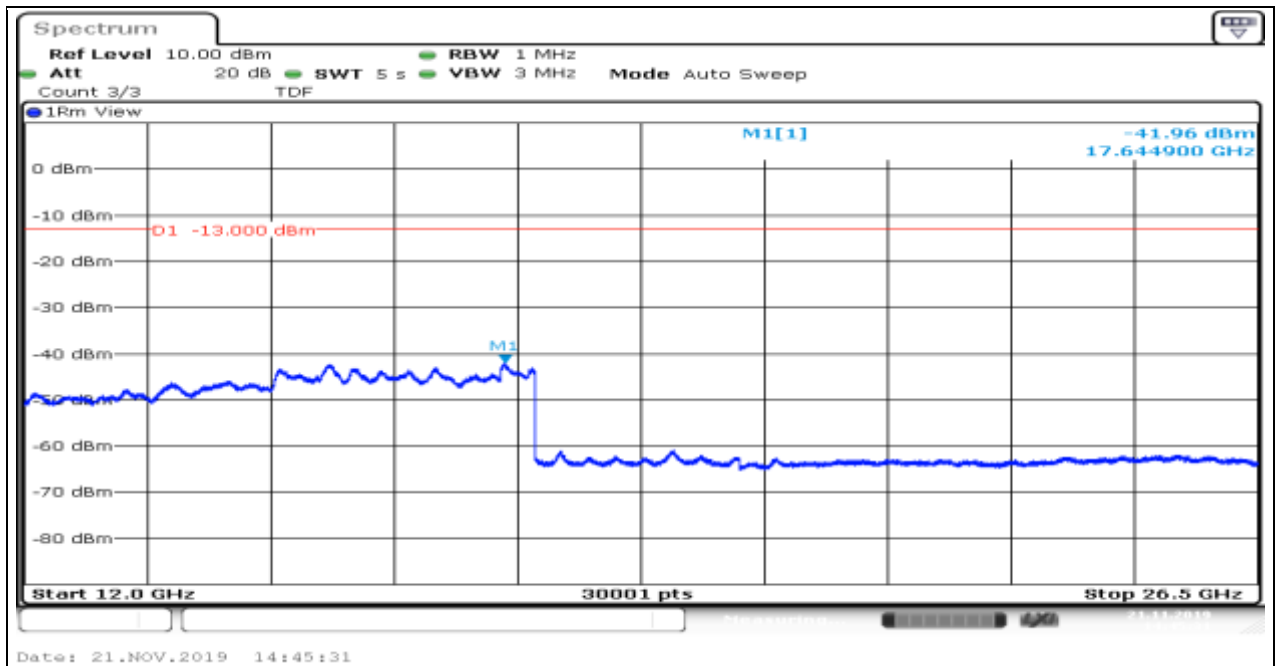
Produkte
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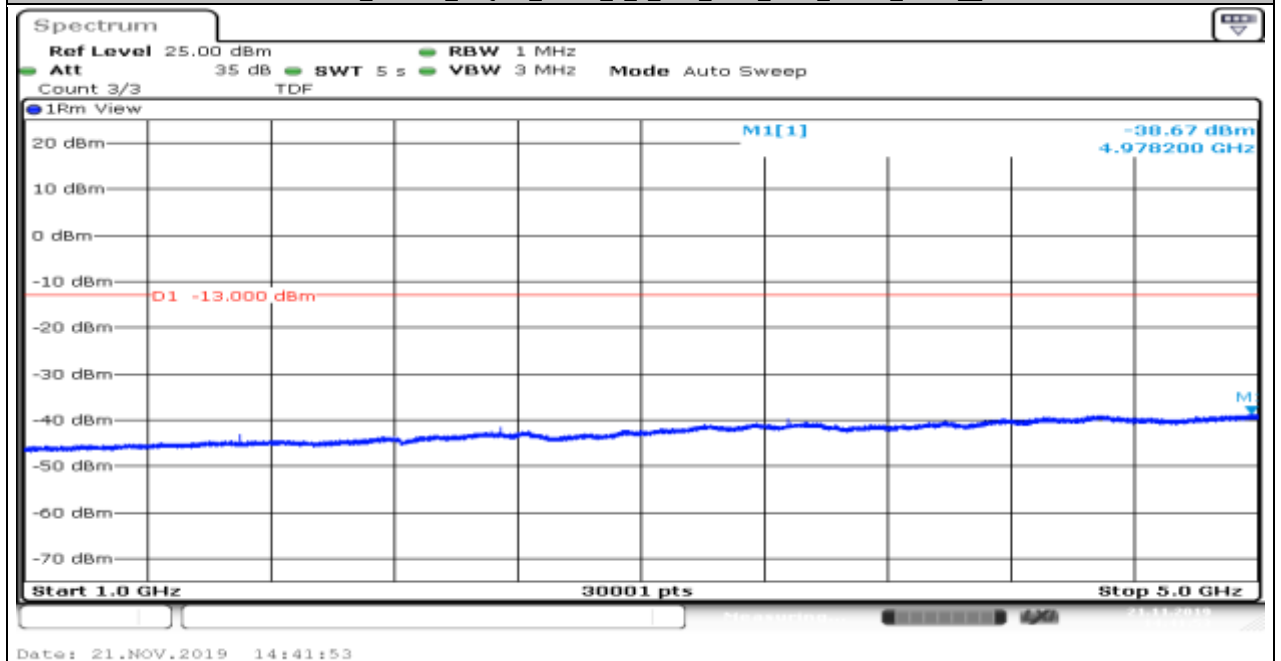
Band5 1.4MHz 16QAM 20643 1 5 Low 30 1000 -34.53 PASS



Band5 1.4MHz 16QAM 20643 6 0 Low 12000 26500 -41.96 PASS



Band5 1.4MHz 16QAM 20643 1 5 Low 1000 5000 -38.67 PASS



Appendix C.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
Band5	1.4MHz	QPSK	20525	1	0	Low	HV	NT	-22.24	-0.02659	±2.5	PASS
Band5	1.4MHz	QPSK	20525	1	0	Low	NV	NT	-13.19	-0.01577	±2.5	PASS
Band5	1.4MHz	QPSK	20525	1	0	Low	LV	NT	-23.02	-0.02752	±2.5	PASS
Band5	1.4MHz	16QAM	20525	1	0	Low	HV	NT	78.21	0.093497	±2.5	PASS
Band5	1.4MHz	16QAM	20525	1	0	Low	NV	NT	81.08	0.096928	±2.5	PASS
Band5	1.4MHz	16QAM	20525	1	0	Low	LV	NT	82.04	0.098075	±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
Band5	1.4MHz	QPSK	20525	1	0	Low	NV	-20	-23.92	-0.0286	±2.5	PASS
Band5	1.4MHz	QPSK	20525	1	0	Low	NV	85	-17.32	-0.02071	±2.5	PASS
Band5	1.4MHz	QPSK	20525	1	0	Low	NV	70	-15.46	-0.01848	±2.5	PASS
Band5	1.4MHz	QPSK	20525	1	0	Low	NV	60	-23.16	-0.02769	±2.5	PASS
Band5	1.4MHz	QPSK	20525	1	0	Low	NV	50	-23.5	-0.02809	±2.5	PASS
Band5	1.4MHz	QPSK	20525	1	0	Low	NV	40	-15.36	-0.01836	±2.5	PASS
Band5	1.4MHz	QPSK	20525	1	0	Low	NV	30	-22.5	-0.0269	±2.5	PASS
Band5	1.4MHz	QPSK	20525	1	0	Low	NV	20	-21.67	-0.02591	±2.5	PASS
Band5	1.4MHz	QPSK	20525	1	0	Low	NV	10	-15.98	-0.0191	±2.5	PASS
Band5	1.4MHz	QPSK	20525	1	0	Low	NV	-10	-13.02	-0.01557	±2.5	PASS
Band5	1.4MHz	QPSK	20525	1	0	Low	NV	-30	-22.59	-0.02701	±2.5	PASS
Band5	1.4MHz	QPSK	20525	1	0	Low	NV	-40	-22.7	-0.02714	±2.5	PASS
Band5	1.4MHz	QPSK	20525	1	0	Low	NV	80	-23.73	-0.02837	±2.5	PASS
Band5	1.4MHz	QPSK	20525	1	0	Low	NV	0	-15.25	-0.01823	±2.5	PASS
Band5	1.4MHz	16QAM	20525	1	0	Low	NV	30	85.07	0.101698	±2.5	PASS
Band5	1.4MHz	16QAM	20525	1	0	Low	NV	85	81.18	0.097047	±2.5	PASS
Band5	1.4MHz	16QAM	20525	1	0	Low	NV	80	78.96	0.094393	±2.5	PASS
Band5	1.4MHz	16QAM	20525	1	0	Low	NV	70	78.25	0.093545	±2.5	PASS
Band5	1.4MHz	16QAM	20525	1	0	Low	NV	60	75.97	0.090819	±2.5	PASS
Band5	1.4MHz	16QAM	20525	1	0	Low	NV	40	80.62	0.096378	±2.5	PASS
Band5	1.4MHz	16QAM	20525	1	0	Low	NV	20	81.78	0.097764	±2.5	PASS
Band5	1.4MHz	16QAM	20525	1	0	Low	NV	10	82.04	0.098075	±2.5	PASS
Band5	1.4MHz	16QAM	20525	1	0	Low	NV	0	77.48	0.092624	±2.5	PASS
Band5	1.4MHz	16QAM	20525	1	0	Low	NV	-10	77.28	0.092385	±2.5	PASS
Band5	1.4MHz	16QAM	20525	1	0	Low	NV	-20	82.08	0.098123	±2.5	PASS
Band5	1.4MHz	16QAM	20525	1	0	Low	NV	-30	81.85	0.097848	±2.5	PASS
Band5	1.4MHz	16QAM	20525	1	0	Low	NV	-40	81.25	0.097131	±2.5	PASS
Band5	1.4MHz	16QAM	20525	1	0	Low	NV	50	77.38	0.092504	±2.5	PASS

Appendix D: Test Results of Band 12 for eMTC operation

APPENDIX D: TEST RESULTS OF BAND 12 FOR EMTC OPERATION	1
APPENDIX D.1: RF POWER OUTPUT AND EFFECTIVE (ISOTROPIC) RADIATED POWER OUTPUT DATA FOR M1	2
Test Result	2
APPENDIX D.2: PEAK-TO-AVERAGE RATIO (CCDF) FOR M1	3
Test Result	3
Test Graphs.....	3
APPENDIX D.3: 26dB BANDWIDTH AND OCCUPIED BANDWIDTH FOR M1	8
Test Result	8
Test Graphs.....	8
APPENDIX D.4: BAND EDGE FOR M1	13
Test Result	13
Test Graphs.....	13
APPENDIX D.5: CONDUCTED SPURIOUS EMISSION FOR M1.....	18
Test Result	18
Test Graphs.....	19
APPENDIX D.6: FREQUENCY STABILITY FOR M1	43
Test Result	43

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

Test Result

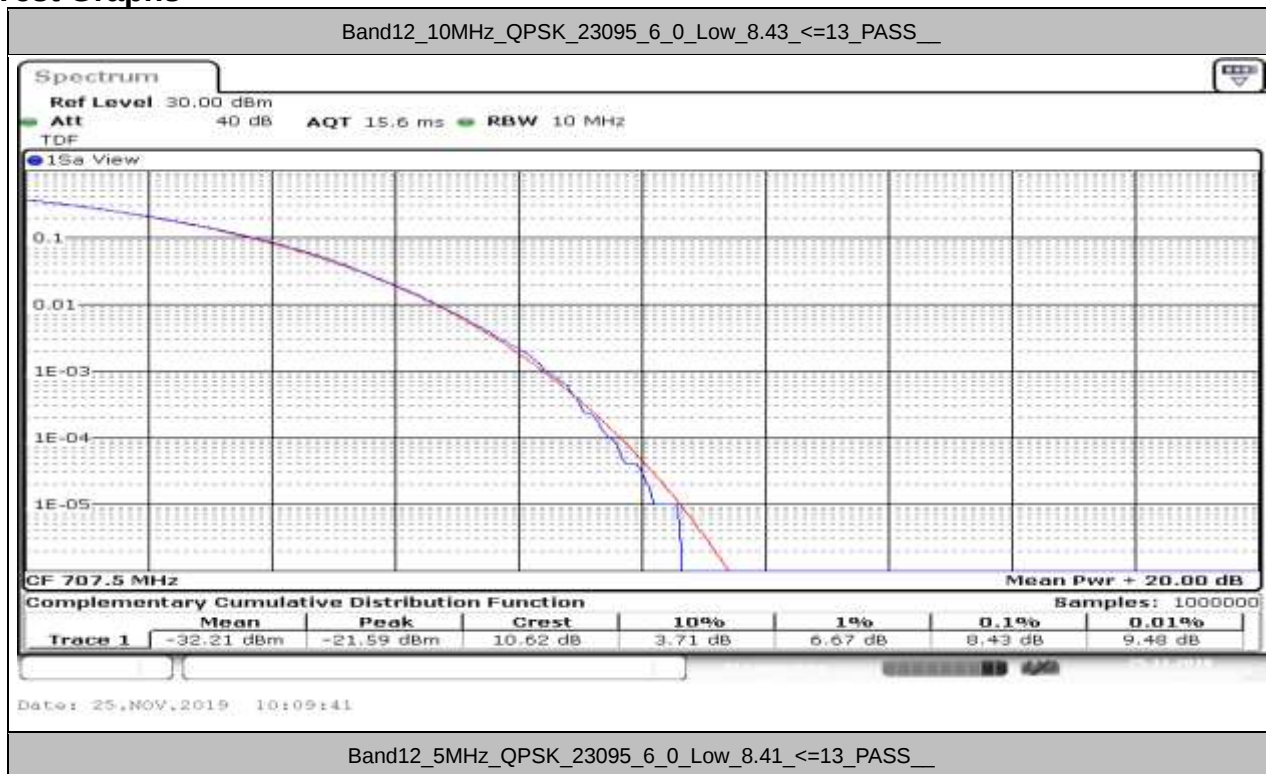
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result (dBm)	ERP		Limit (watts)	Verdict
								dBm	Watts		
Band12	1.4MHz	QPSK	23017	1	0	Low	21.97	21.96	0.157	3	PASS
Band12	1.4MHz	QPSK	23095	1	0	Low	21.54	21.53	0.142	3	PASS
Band12	1.4MHz	QPSK	23173	1	5	Low	21.4	21.39	0.138	3	PASS
Band12	1.4MHz	QPSK	23017	6	0	Low	19.58	19.57	0.091	3	PASS
Band12	1.4MHz	QPSK	23095	6	0	Low	19.29	19.28	0.085	3	PASS
Band12	1.4MHz	QPSK	23173	6	0	Low	19.43	19.42	0.087	3	PASS
Band12	1.4MHz	16QAM	23017	1	0	Low	21.25	21.24	0.133	3	PASS
Band12	1.4MHz	16QAM	23095	1	0	Low	20.62	20.61	0.115	3	PASS
Band12	1.4MHz	16QAM	23173	1	5	Low	20.15	20.14	0.103	3	PASS
Band12	1.4MHz	16QAM	23017	6	0	Low	19.48	19.47	0.089	3	PASS
Band12	1.4MHz	16QAM	23095	6	0	Low	19.51	19.5	0.089	3	PASS
Band12	1.4MHz	16QAM	23173	6	0	Low	19.32	19.31	0.085	3	PASS
Band12	3MHz	QPSK	23025	1	0	Low	21.9	21.89	0.155	3	PASS
Band12	3MHz	QPSK	23095	1	0	Low	21.68	21.67	0.147	3	PASS
Band12	3MHz	QPSK	23165	1	5	High	21.51	21.5	0.141	3	PASS
Band12	3MHz	QPSK	23025	6	0	Low	19.49	19.48	0.089	3	PASS
Band12	3MHz	QPSK	23095	6	0	Low	19.25	19.24	0.084	3	PASS
Band12	3MHz	QPSK	23165	6	0	High	19.17	19.16	0.082	3	PASS
Band12	3MHz	16QAM	23025	1	0	Low	20.98	20.97	0.125	3	PASS
Band12	3MHz	16QAM	23095	1	0	Low	20.79	20.78	0.120	3	PASS
Band12	3MHz	16QAM	23165	1	5	High	20.48	20.47	0.111	3	PASS
Band12	3MHz	16QAM	23025	6	0	Low	19.49	19.48	0.089	3	PASS
Band12	3MHz	16QAM	23095	6	0	Low	19.28	19.27	0.085	3	PASS
Band12	3MHz	16QAM	23165	6	0	High	19.34	19.33	0.086	3	PASS
Band12	5MHz	QPSK	23035	1	0	Low	21.43	21.42	0.139	3	PASS
Band12	5MHz	QPSK	23095	1	0	Low	21.67	21.66	0.147	3	PASS
Band12	5MHz	QPSK	23155	1	5	High	21.35	21.34	0.136	3	PASS
Band12	5MHz	QPSK	23155	3	3	High	21.55	21.54	0.143	3	PASS
Band12	5MHz	QPSK	23035	6	0	Low	20.58	20.57	0.114	3	PASS
Band12	5MHz	QPSK	23095	6	0	Low	20.36	20.35	0.108	3	PASS
Band12	5MHz	16QAM	23035	1	0	Low	21.33	21.32	0.136	3	PASS
Band12	5MHz	16QAM	23095	1	0	Low	20.83	20.82	0.121	3	PASS
Band12	5MHz	16QAM	23155	1	5	High	20.79	20.78	0.120	3	PASS
Band12	5MHz	16QAM	23155	3	3	High	21.05	21.04	0.127	3	PASS
Band12	5MHz	16QAM	23035	6	0	Low	20.58	20.57	0.114	3	PASS
Band12	5MHz	16QAM	23095	6	0	Low	20.36	20.35	0.108	3	PASS
Band12	10MHz	QPSK	23060	1	0	Low	21.77	21.76	0.150	3	PASS
Band12	10MHz	QPSK	23095	1	0	Low	21.49	21.48	0.141	3	PASS
Band12	10MHz	QPSK	23130	1	5	High	21.24	21.23	0.133	3	PASS
Band12	10MHz	QPSK	23060	5	0	Low	21.6	21.59	0.144	3	PASS
Band12	10MHz	QPSK	23095	5	0	Low	21.46	21.45	0.140	3	PASS
Band12	10MHz	QPSK	23130	5	1	High	21.35	21.34	0.136	3	PASS
Band12	10MHz	16QAM	23060	1	0	Low	21.23	21.22	0.132	3	PASS
Band12	10MHz	16QAM	23095	1	0	Low	20.99	20.98	0.125	3	PASS
Band12	10MHz	16QAM	23130	1	5	High	21.29	21.28	0.134	3	PASS
Band12	10MHz	16QAM	23060	5	0	Low	21.29	21.28	0.134	3	PASS
Band12	10MHz	16QAM	23095	5	0	Low	21.26	21.25	0.133	3	PASS
Band12	10MHz	16QAM	23130	5	1	High	21.31	21.3	0.135	3	PASS

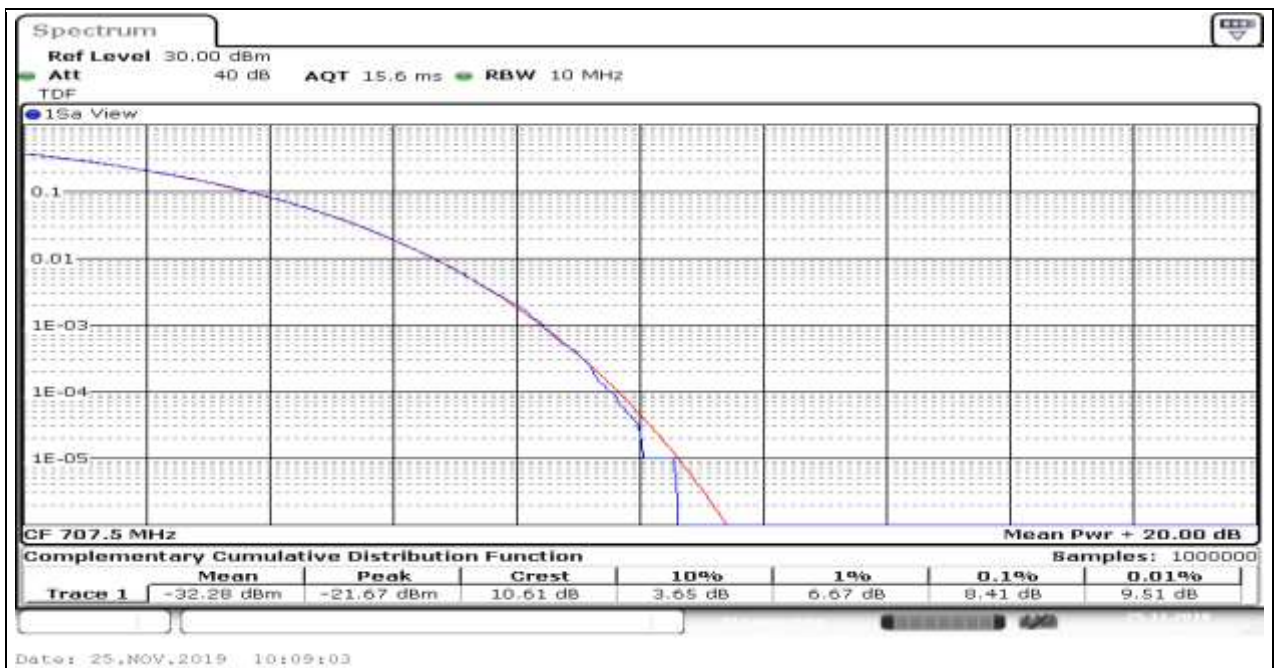
Appendix D.2: Peak-to-Average Ratio (CCDF) for M1

Test Result

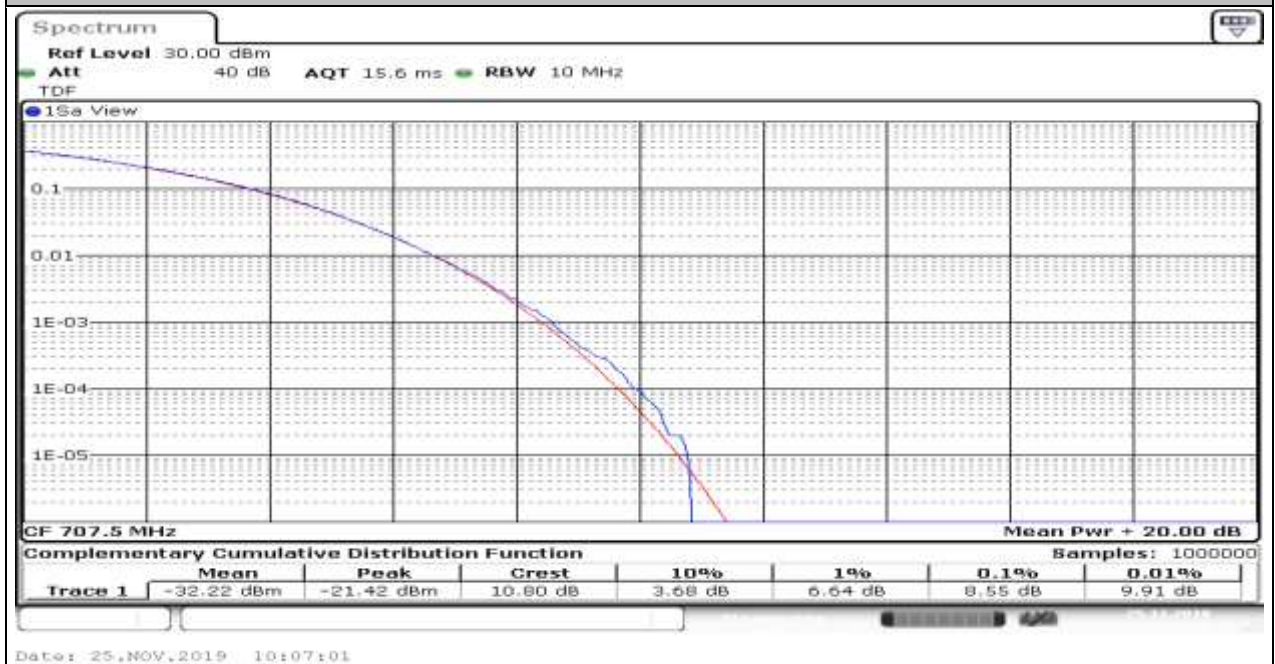
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result(dB)	Limit(dB)	Verdict
Band12	10MHz	QPSK	23095	6	0	Low	8.43	<=13	PASS
Band12	5MHz	QPSK	23095	6	0	Low	8.41	<=13	PASS
Band12	3MHz	QPSK	23095	6	0	Low	8.55	<=13	PASS
Band12	1.4MHz	QPSK	23095	6	0	Low	8.58	<=13	PASS
Band12	10MHz	16QAM	23095	6	0	Low	9.25	<=13	PASS
Band12	5MHz	16QAM	23095	6	0	Low	10.41	<=13	PASS
Band12	3MHz	16QAM	23095	6	0	Low	10.38	<=13	PASS
Band12	1.4MHz	16QAM	23095	6	0	Low	10.81	<=13	PASS

Test Graphs





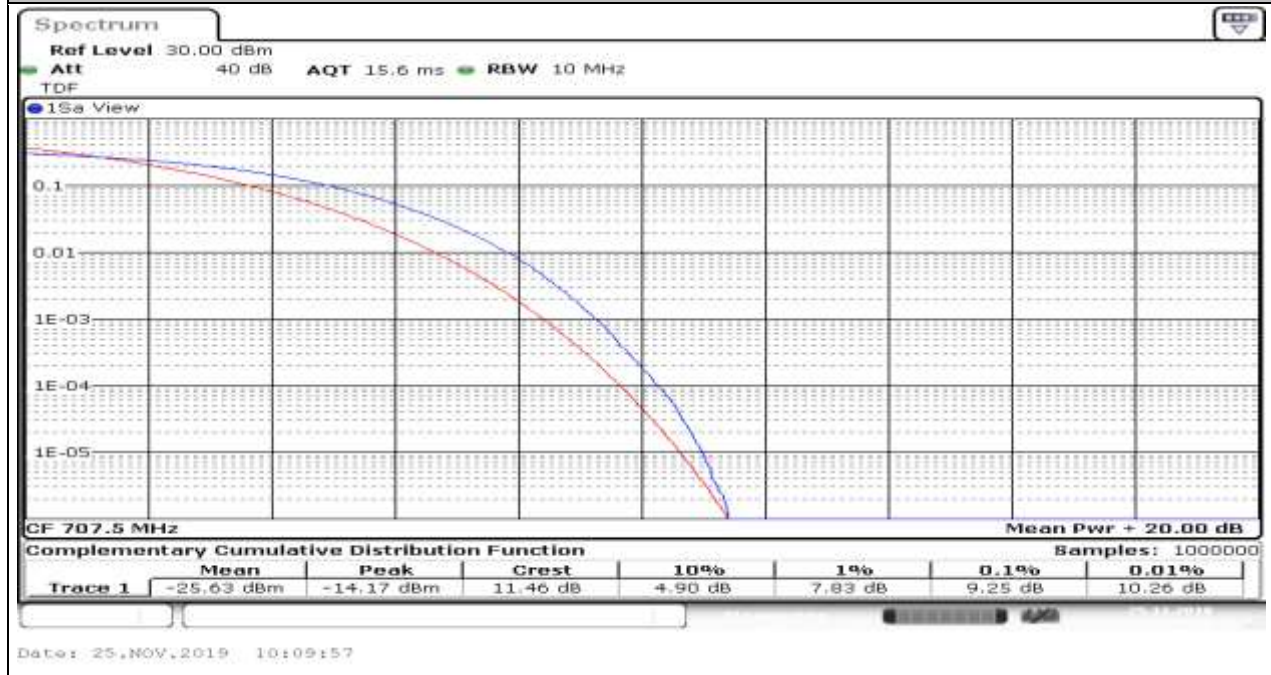
Band12_3MHz_QPSK_23095_6_0_Low_8.55_<=13_PASS__



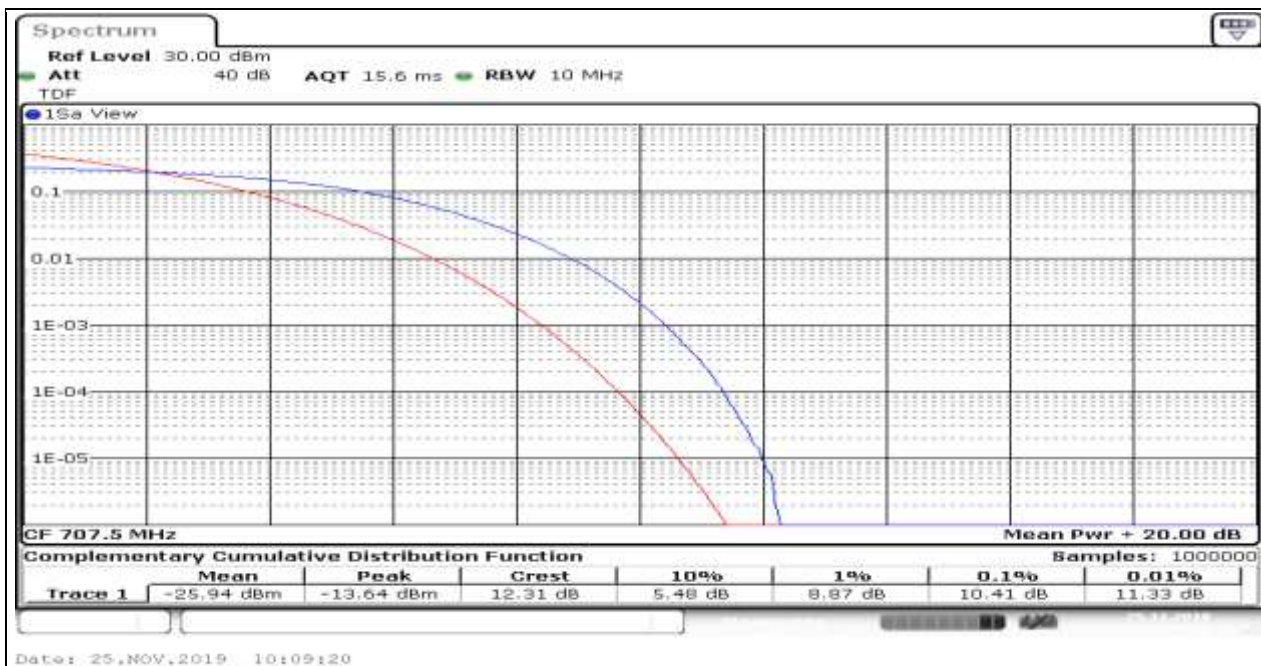
Band12_1.4MHz_QPSK_23095_6_0_Low_8.58_<=13_PASS__



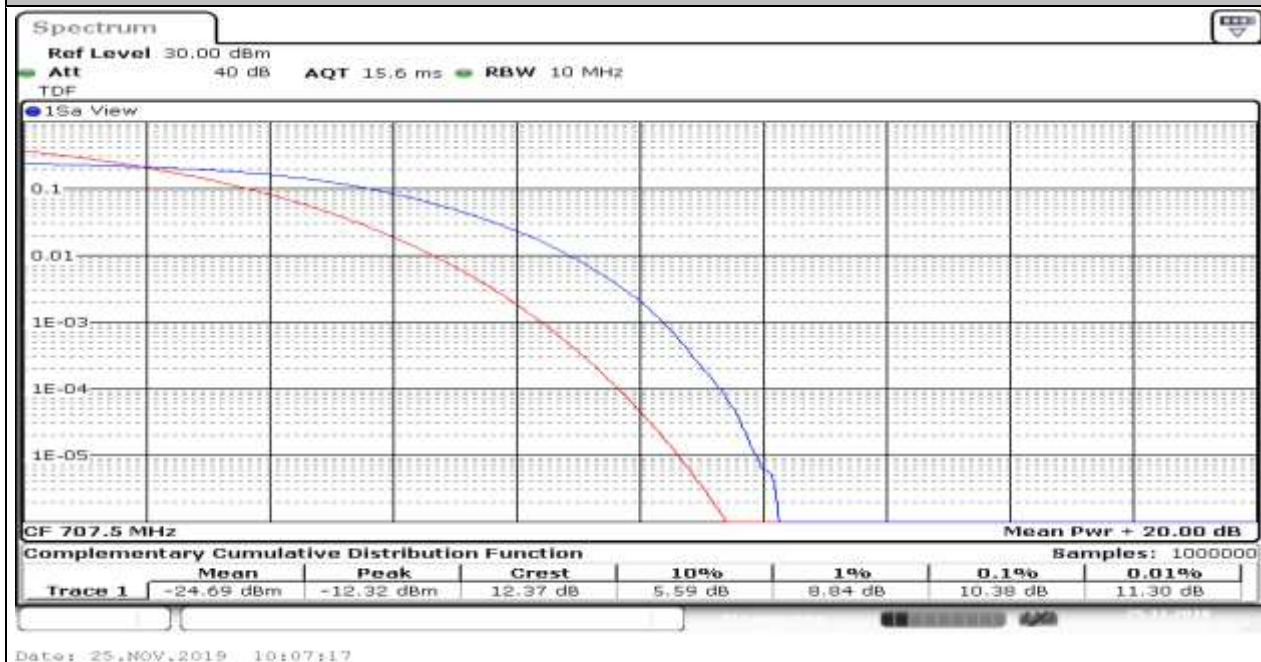
Band12_10MHz_16QAM_23095_6_0_Low_9.25_<=13_PASS__



Band12_5MHz_16QAM_23095_6_0_Low_10.41_<=13_PASS__



Band12_3MHz_16QAM_23095_6_0_Low_10.38_<=13_PASS__



Band12_1.4MHz_16QAM_23095_6_0_Low_10.81_<=13_PASS__

Produkte
Products

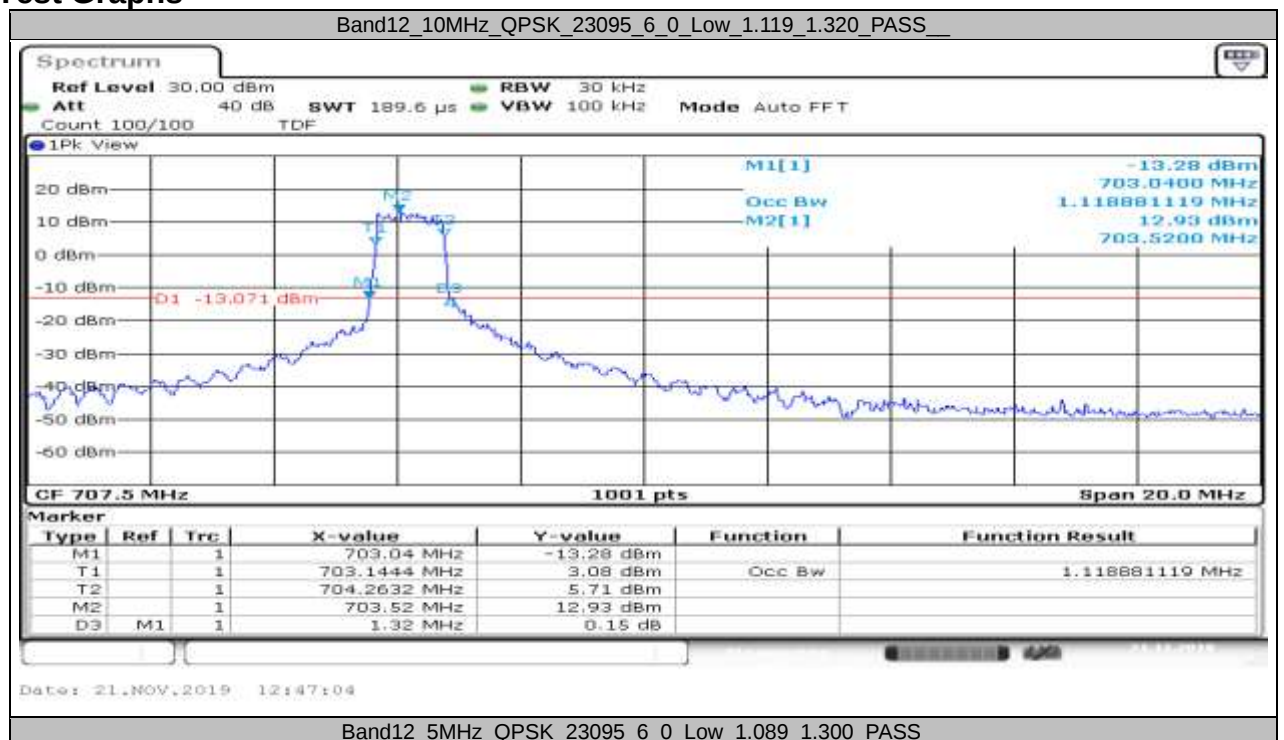


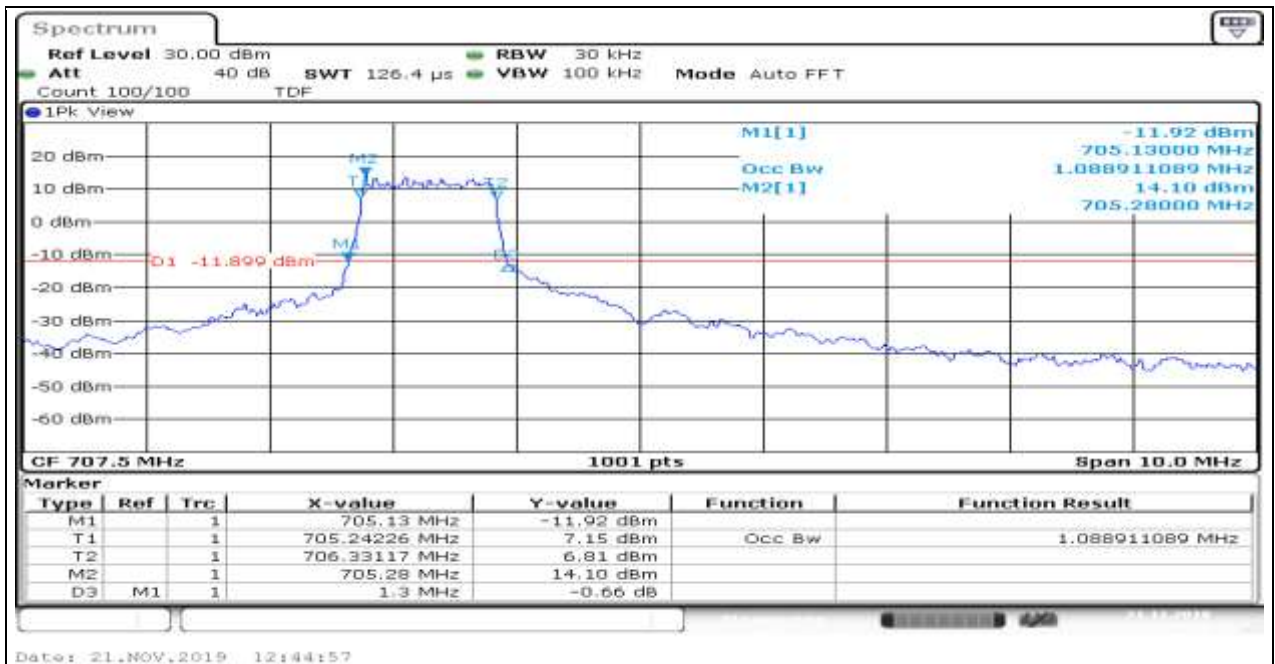
Appendix D.3: 26dB Bandwidth and Occupied Bandwidth for M1

Test Result

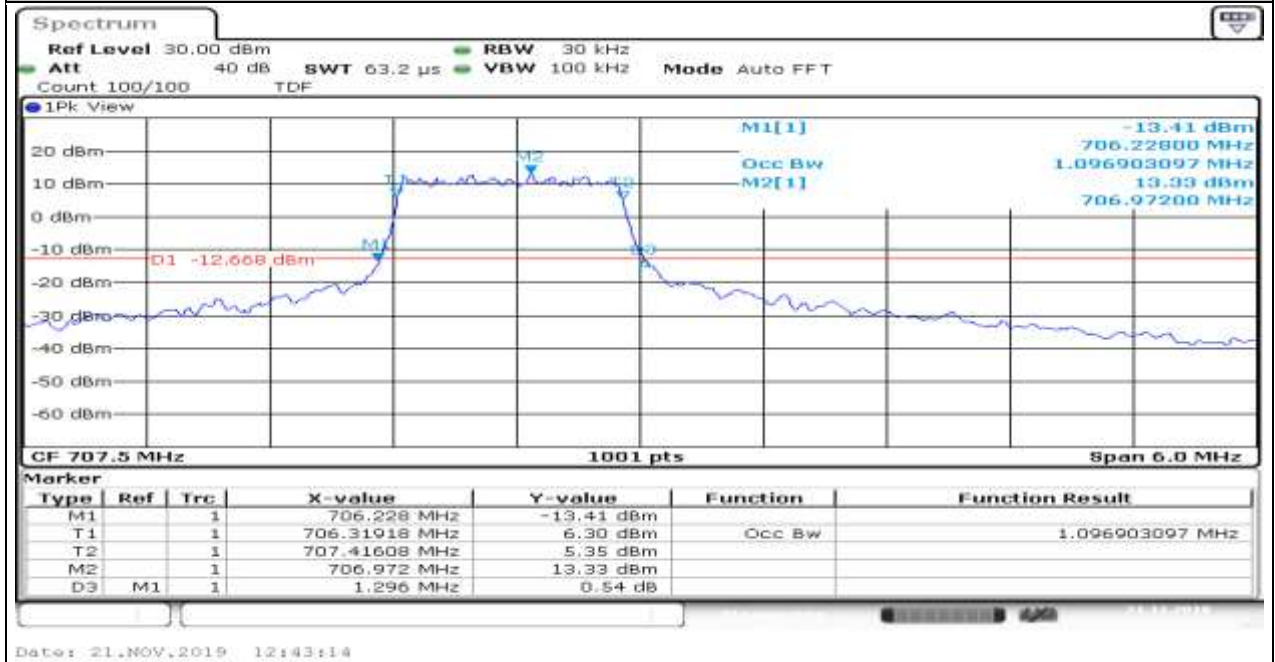
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band12	10MHz	QPSK	23095	6	0	Low	1.119	1.320	PASS
Band12	5MHz	QPSK	23095	6	0	Low	1.089	1.300	PASS
Band12	3MHz	QPSK	23095	6	0	Low	1.097	1.296	PASS
Band12	1.4MHz	QPSK	23095	6	0	Low	1.091	1.269	PASS
Band12	10MHz	16QAM	23095	6	0	Low	1.099	1.320	PASS
Band12	5MHz	16QAM	23095	6	0	Low	1.099	1.330	PASS
Band12	3MHz	16QAM	23095	6	0	Low	1.103	1.344	PASS
Band12	1.4MHz	16QAM	23095	6	0	Low	1.097	1.296	PASS

Test Graphs

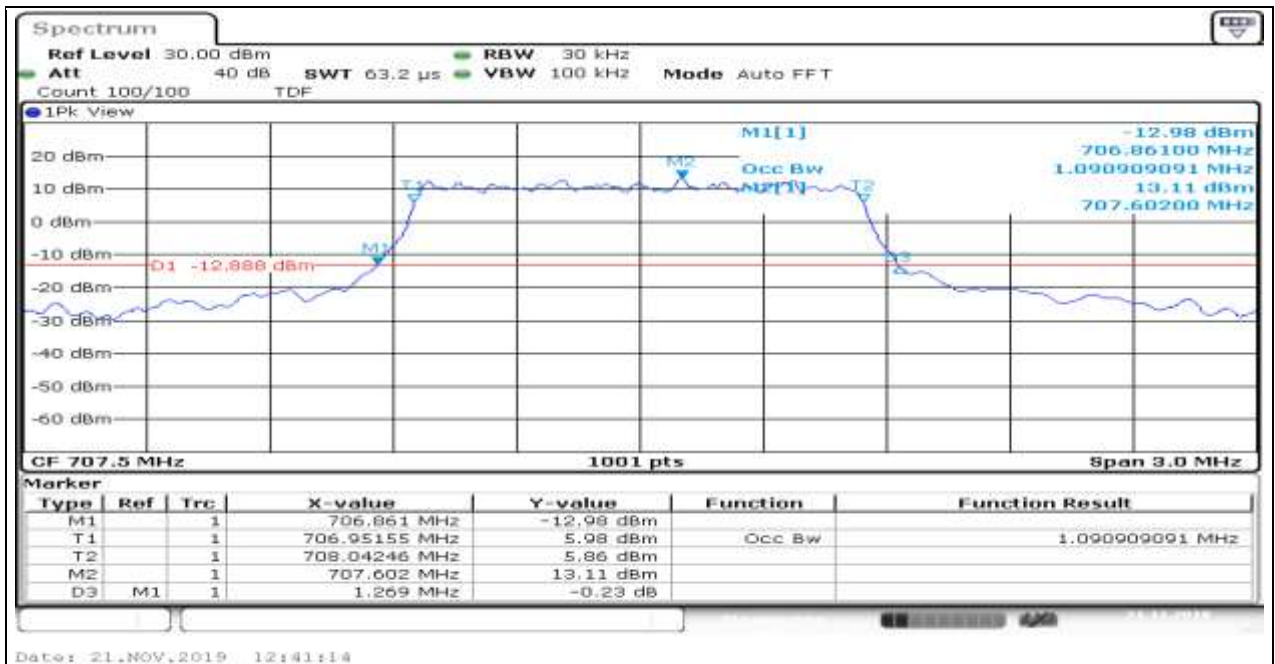




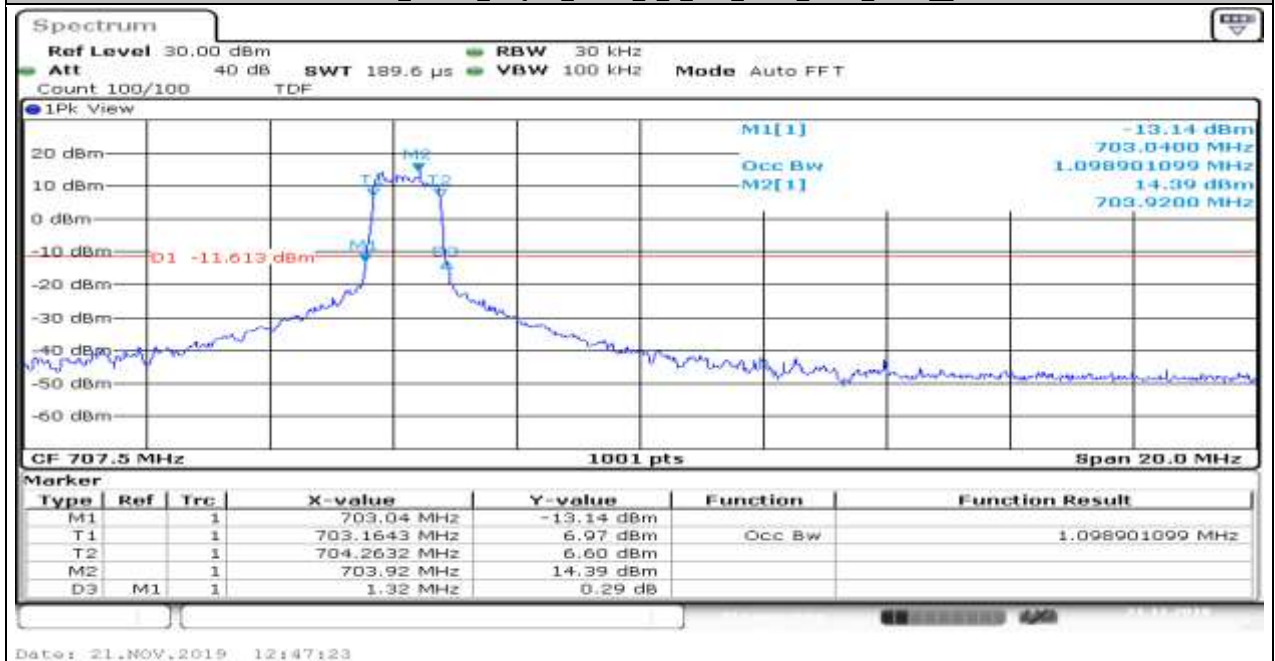
Band12_3MHz_QPSK_23095_6_0_Low_1.097_1.296_PASS



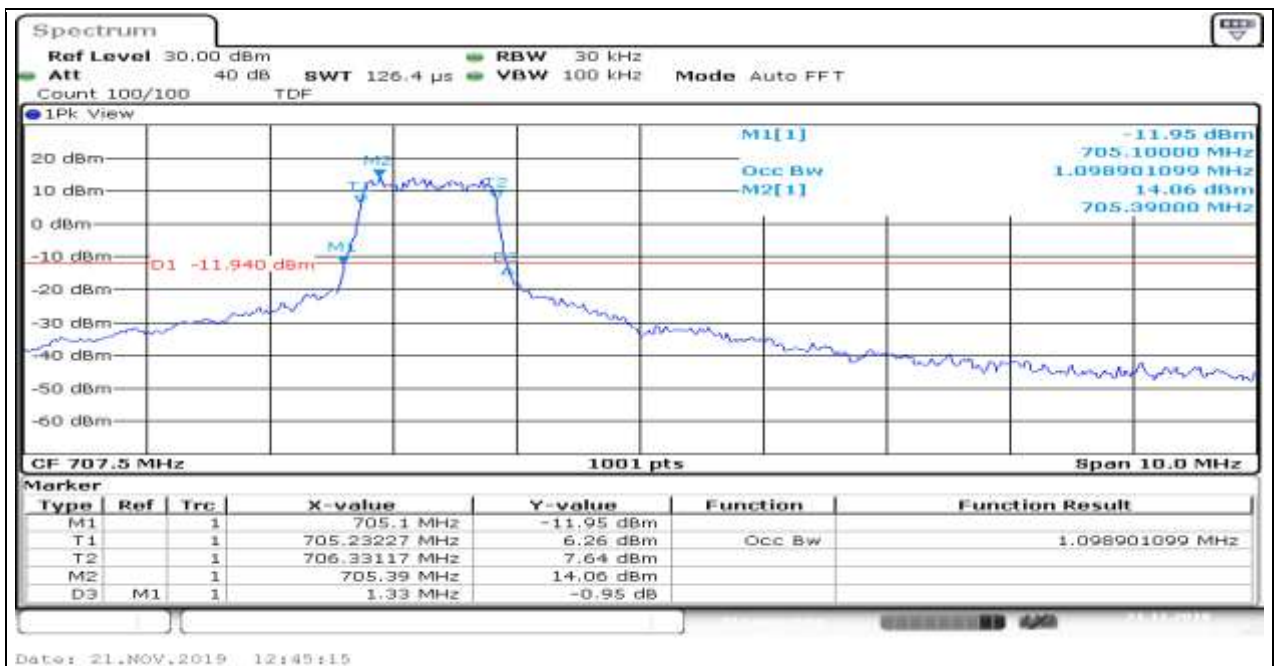
Band12_1.4MHz_QPSK_23095_6_0_Low_1.091_1.269_PASS



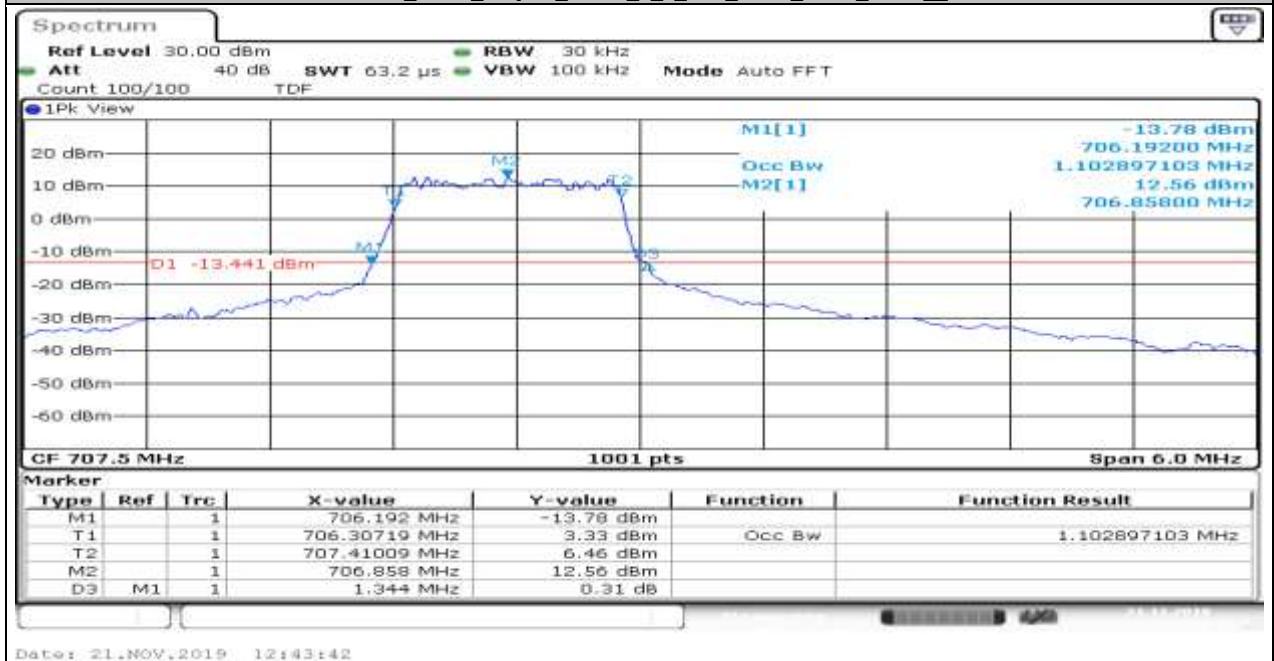
Band12_10MHz_16QAM_23095_6_0_Low_1.099_1.320_PASS



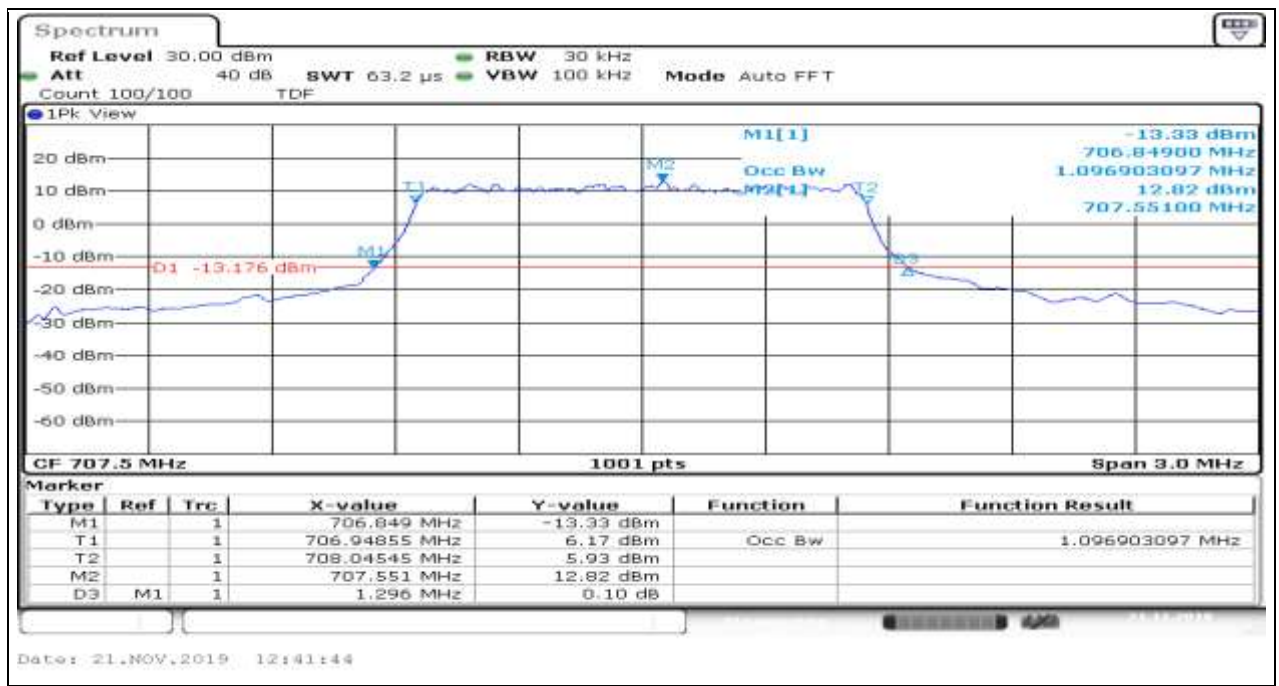
Band12_5MHz_16QAM_23095_6_0_Low_1.099_1.330_PASS



Band12 3MHz 16QAM 23095 6 0 Low 1.103 1.344 PASS



Band12 1.4MHz 16QAM 23095 6 0 Low 1.097 1.296 PASS

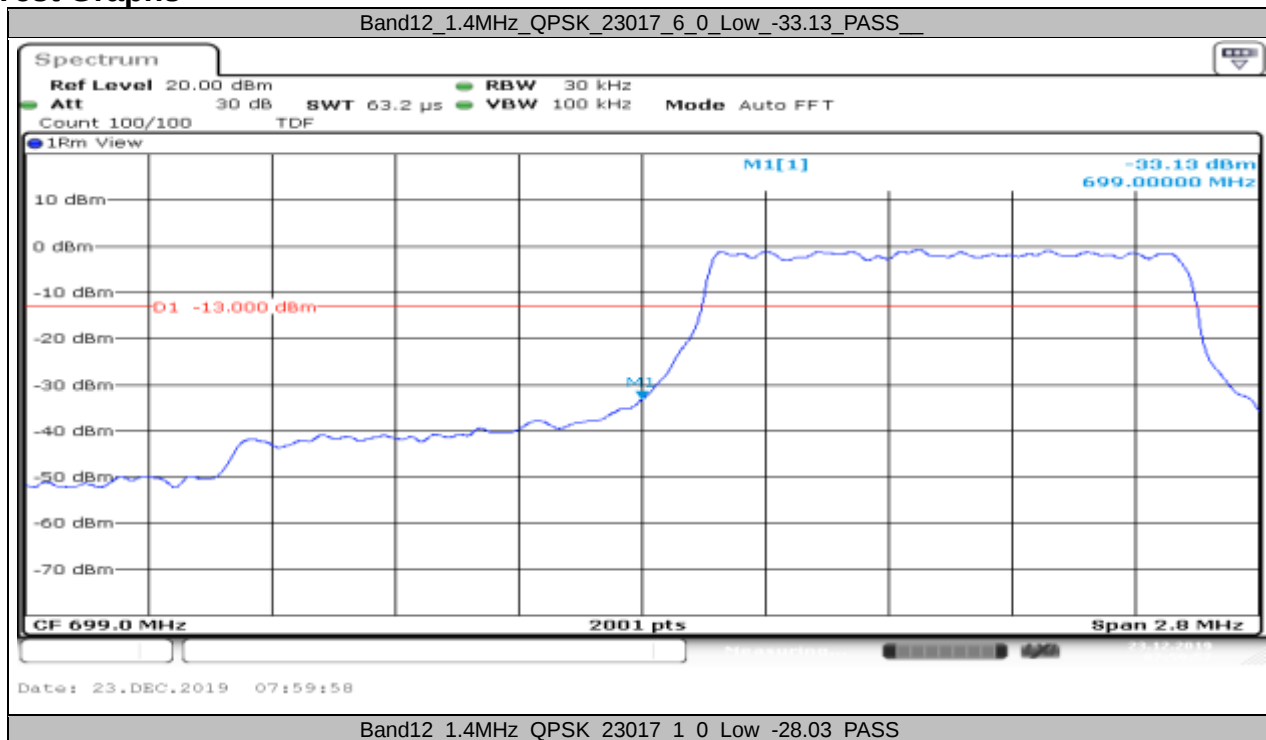


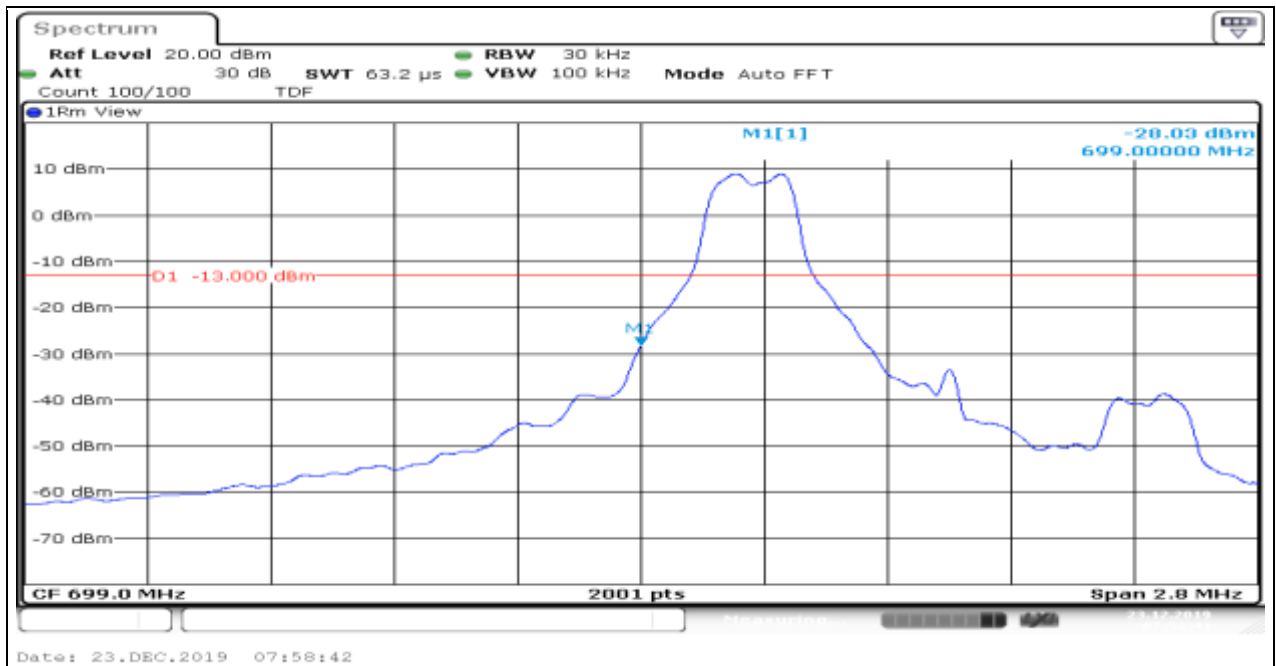
Appendix D.4: Band Edge for M1

Test Result

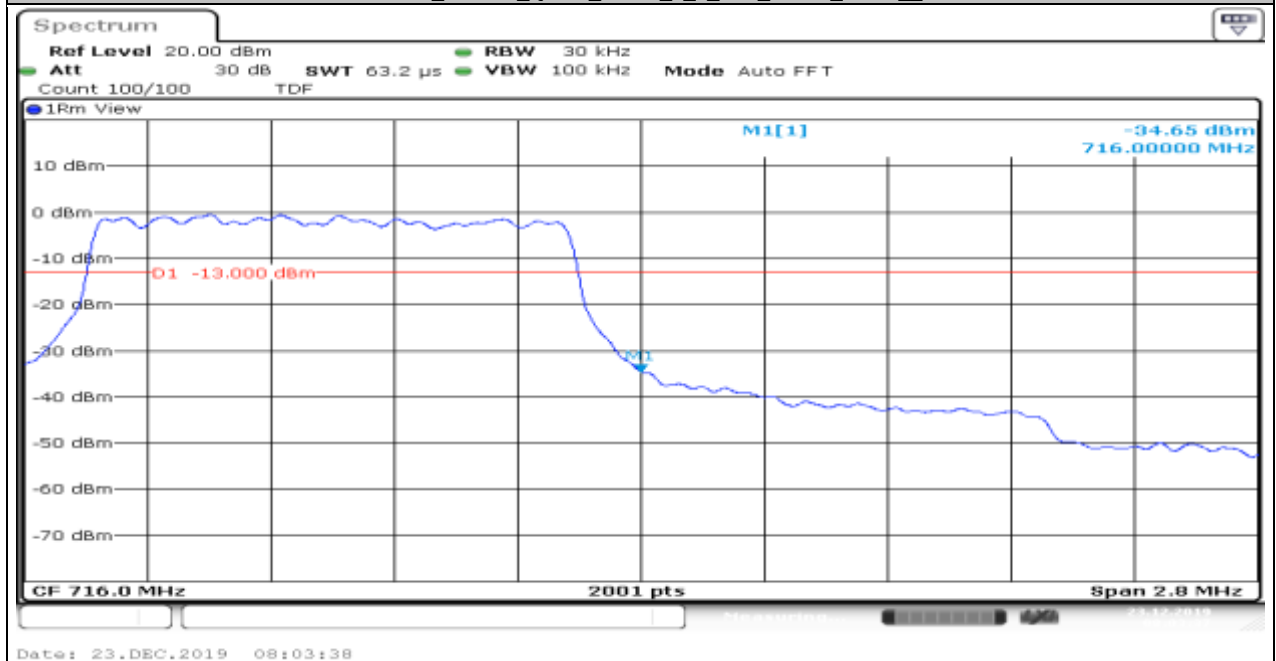
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Result (dBm)	Verdict
Band12	1.4MHz	QPSK	23017	6	0	Low	-33.13	PASS
Band12	1.4MHz	QPSK	23017	1	0	Low	-28.03	PASS
Band12	1.4MHz	QPSK	23173	6	0	Low	-34.65	PASS
Band12	1.4MHz	QPSK	23173	1	5	Low	-42.37	PASS
Band12	1.4MHz	16QAM	23017	6	0	Low	-33.94	PASS
Band12	1.4MHz	16QAM	23017	1	0	Low	-32.88	PASS
Band12	1.4MHz	16QAM	23173	6	0	Low	-34.77	PASS
Band12	1.4MHz	16QAM	23173	1	5	Low	-41.71	PASS

Test Graphs

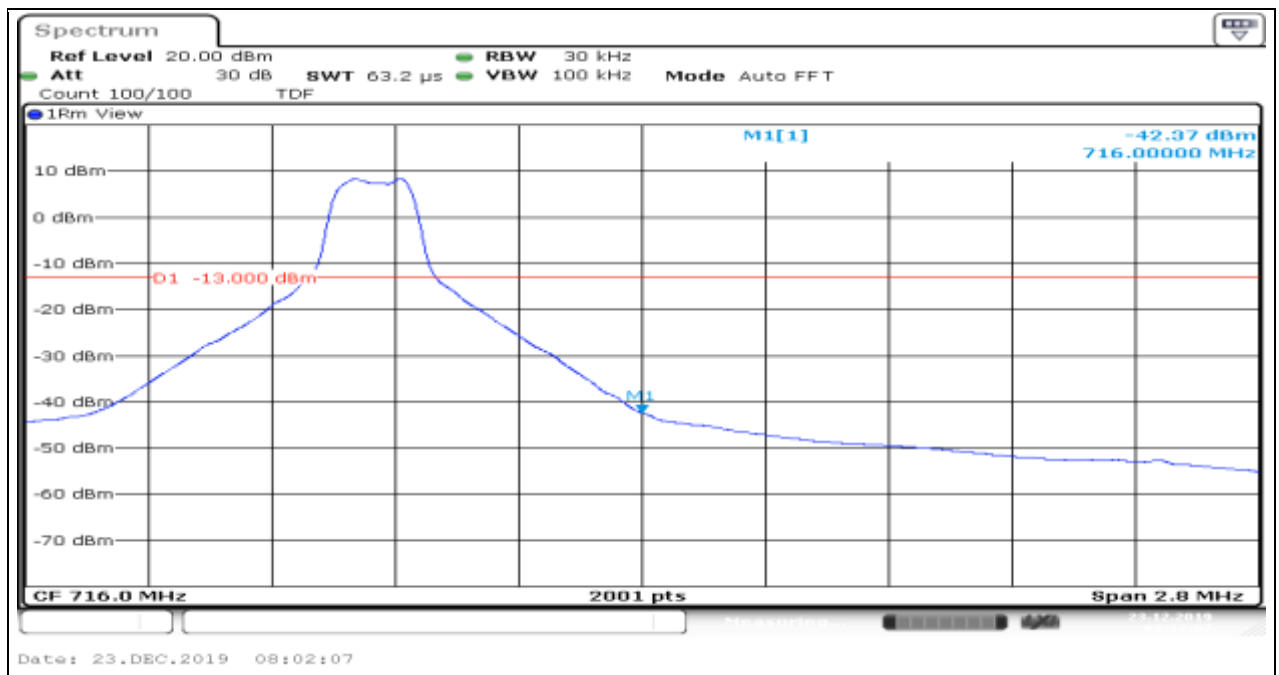




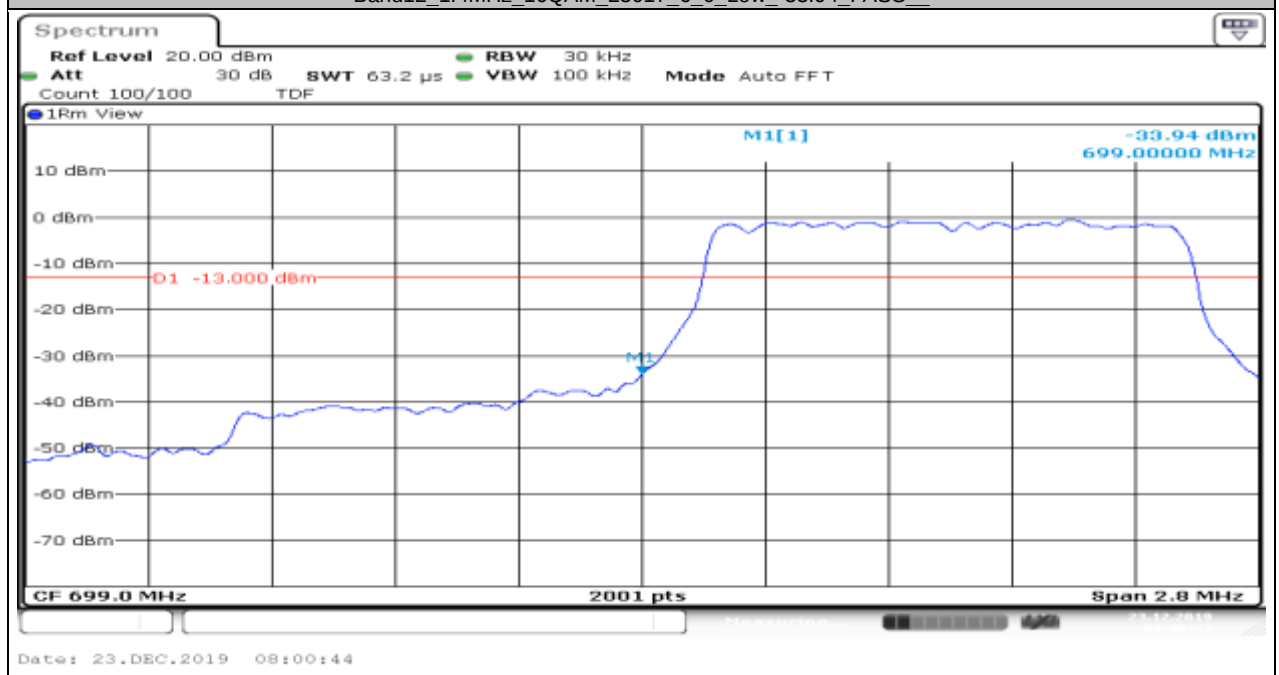
Band12_1.4MHz_QPSK_23173_6_0_Low_-34.65_PASS



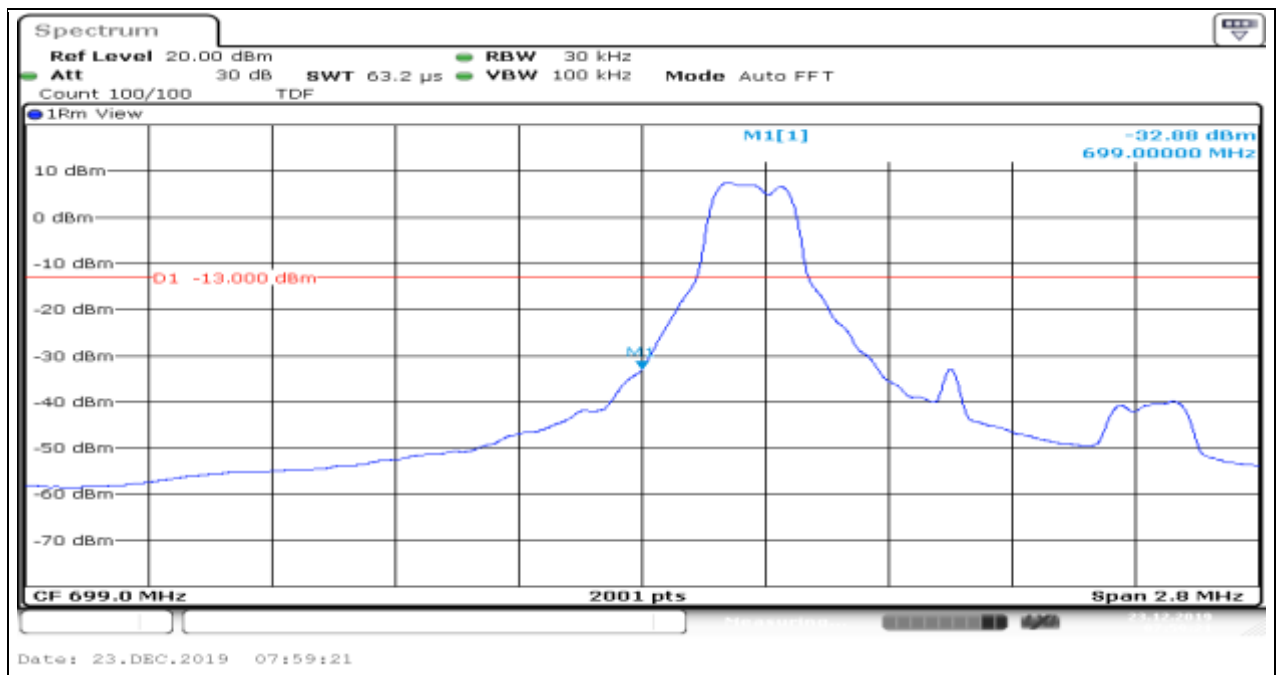
Band12_1.4MHz_QPSK_23173_1_5_Low_-42.37_PASS



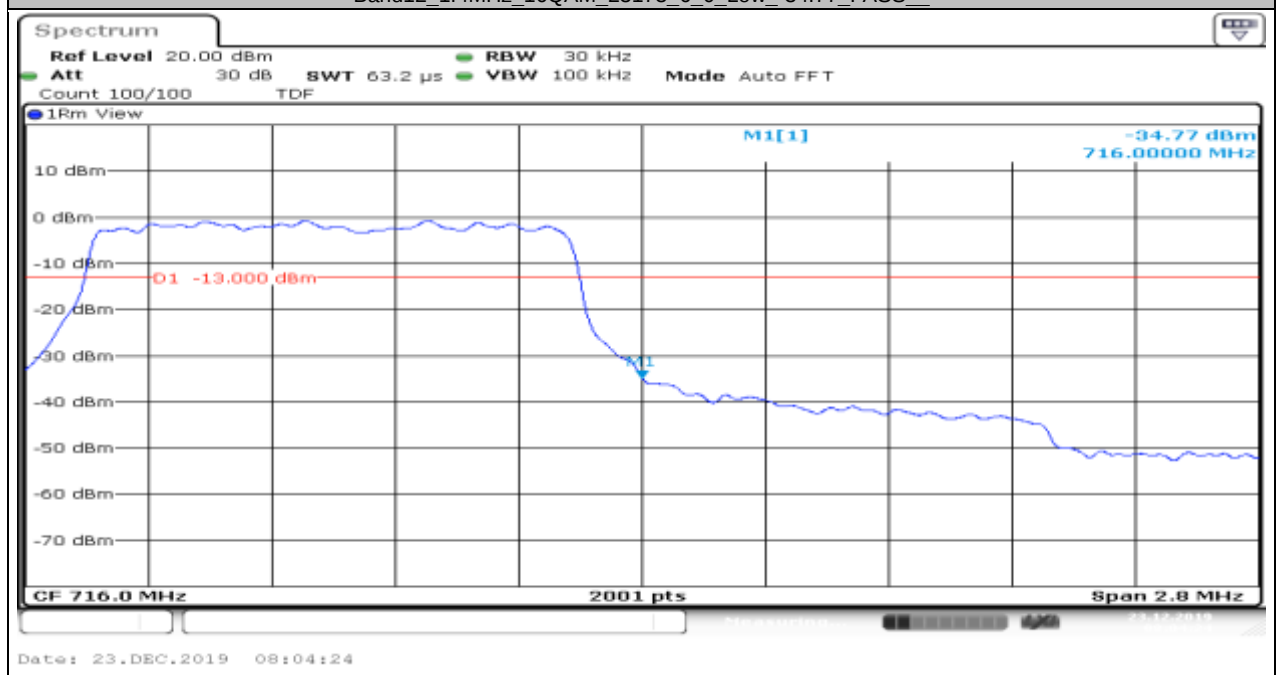
Band12_1.4MHz_16QAM_23017_6_0_Low_-33.94_PASS



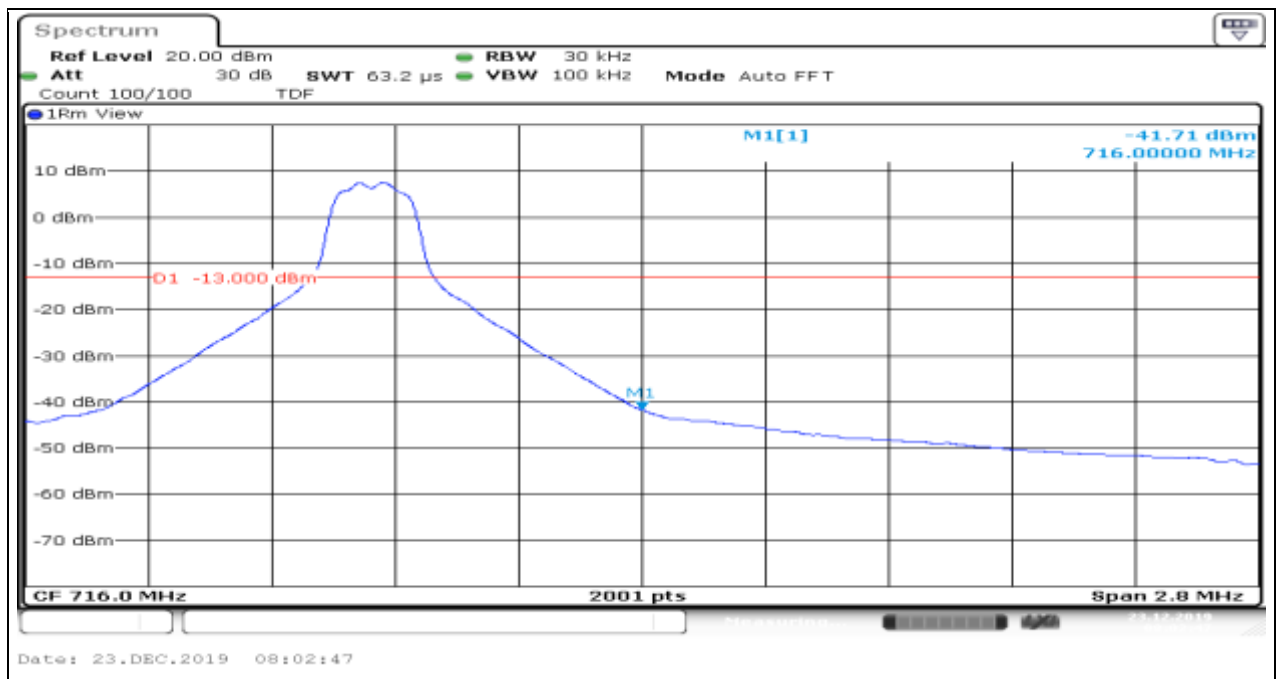
Band12_1.4MHz_16QAM_23017_1_0_Low_-32.88_PASS



Band12 1.4MHz 16QAM 23173 6 0 Low -34.77 PASS



Band12 1.4MHz 16QAM 23173 1 5 Low -41.71 PASS



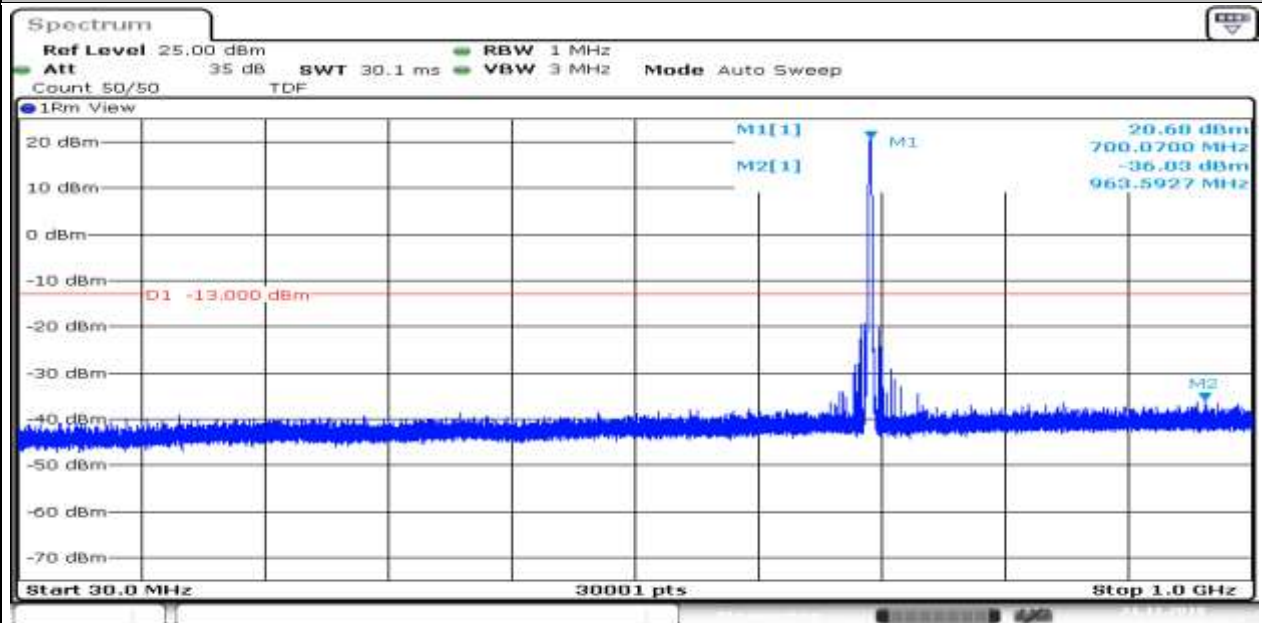
Appendix D.5: Conducted Spurious Emission for M1

Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Start Freq	Stop Freq	Result (dBm)	Verdict
Band12	1.4MHz	QPSK	23017	6	0	Low	30	1000	-36.03	PASS
Band12	1.4MHz	QPSK	23017	1	0	Low	30	1000	-36.39	PASS
Band12	1.4MHz	QPSK	23017	6	0	Low	12000	26500	-42.14	PASS
Band12	1.4MHz	QPSK	23017	6	0	Low	5000	12000	-48.09	PASS
Band12	1.4MHz	QPSK	23017	6	0	Low	1000	5000	-38.81	PASS
Band12	1.4MHz	QPSK	23017	1	0	Low	12000	26500	-42.1	PASS
Band12	1.4MHz	QPSK	23017	1	0	Low	1000	5000	-38.78	PASS
Band12	1.4MHz	QPSK	23017	1	0	Low	5000	12000	-48.04	PASS
Band12	1.4MHz	QPSK	23095	6	0	Low	12000	26500	-42.18	PASS
Band12	1.4MHz	QPSK	23095	1	0	Low	1000	5000	-38.91	PASS
Band12	1.4MHz	QPSK	23095	1	0	Low	5000	12000	-48.17	PASS
Band12	1.4MHz	QPSK	23095	1	0	Low	12000	26500	-42.11	PASS
Band12	1.4MHz	QPSK	23095	6	0	Low	1000	5000	-38.77	PASS
Band12	1.4MHz	QPSK	23095	1	0	Low	30	1000	-36.04	PASS
Band12	1.4MHz	QPSK	23095	6	0	Low	5000	12000	-48.24	PASS
Band12	1.4MHz	QPSK	23095	6	0	Low	30	1000	-36.84	PASS
Band12	1.4MHz	QPSK	23173	1	5	Low	12000	26500	-42.15	PASS
Band12	1.4MHz	QPSK	23173	6	0	Low	12000	26500	-42.11	PASS
Band12	1.4MHz	QPSK	23173	6	0	Low	5000	12000	-48.04	PASS
Band12	1.4MHz	QPSK	23173	6	0	Low	30	1000	-36.37	PASS
Band12	1.4MHz	QPSK	23173	1	5	Low	1000	5000	-38.85	PASS
Band12	1.4MHz	QPSK	23173	1	5	Low	5000	12000	-48.2	PASS
Band12	1.4MHz	QPSK	23173	1	5	Low	30	1000	-35.88	PASS
Band12	1.4MHz	QPSK	23173	6	0	Low	1000	5000	-38.97	PASS
Band12	1.4MHz	16QAM	23017	1	0	Low	1000	5000	-38.74	PASS
Band12	1.4MHz	16QAM	23017	1	0	Low	5000	12000	-48.23	PASS
Band12	1.4MHz	16QAM	23017	1	0	Low	12000	26500	-42.1	PASS
Band12	1.4MHz	16QAM	23017	6	0	Low	12000	26500	-42.09	PASS
Band12	1.4MHz	16QAM	23017	6	0	Low	5000	12000	-47.96	PASS
Band12	1.4MHz	16QAM	23017	6	0	Low	30	1000	-36.37	PASS
Band12	1.4MHz	16QAM	23017	1	0	Low	30	1000	-36.35	PASS
Band12	1.4MHz	16QAM	23017	6	0	Low	1000	5000	-38.8	PASS
Band12	1.4MHz	16QAM	23095	6	0	Low	12000	26500	-42.13	PASS
Band12	1.4MHz	16QAM	23095	1	0	Low	1000	5000	-38.66	PASS
Band12	1.4MHz	16QAM	23095	1	0	Low	12000	26500	-42.16	PASS
Band12	1.4MHz	16QAM	23095	6	0	Low	30	1000	-36.45	PASS
Band12	1.4MHz	16QAM	23095	6	0	Low	1000	5000	-38.89	PASS
Band12	1.4MHz	16QAM	23095	6	0	Low	5000	12000	-48.16	PASS
Band12	1.4MHz	16QAM	23095	1	0	Low	30	1000	-36.58	PASS
Band12	1.4MHz	16QAM	23095	1	0	Low	5000	12000	-48.1	PASS
Band12	1.4MHz	16QAM	23173	6	0	Low	5000	12000	-48.27	PASS
Band12	1.4MHz	16QAM	23173	6	0	Low	1000	5000	-38.84	PASS
Band12	1.4MHz	16QAM	23173	6	0	Low	30	1000	-36.68	PASS
Band12	1.4MHz	16QAM	23173	1	5	Low	12000	26500	-42.02	PASS
Band12	1.4MHz	16QAM	23173	1	5	Low	5000	12000	-48.31	PASS
Band12	1.4MHz	16QAM	23173	1	5	Low	30	1000	-36.85	PASS
Band12	1.4MHz	16QAM	23173	6	0	Low	12000	26500	-42.1	PASS
Band12	1.4MHz	16QAM	23173	1	5	Low	1000	5000	-38.85	PASS

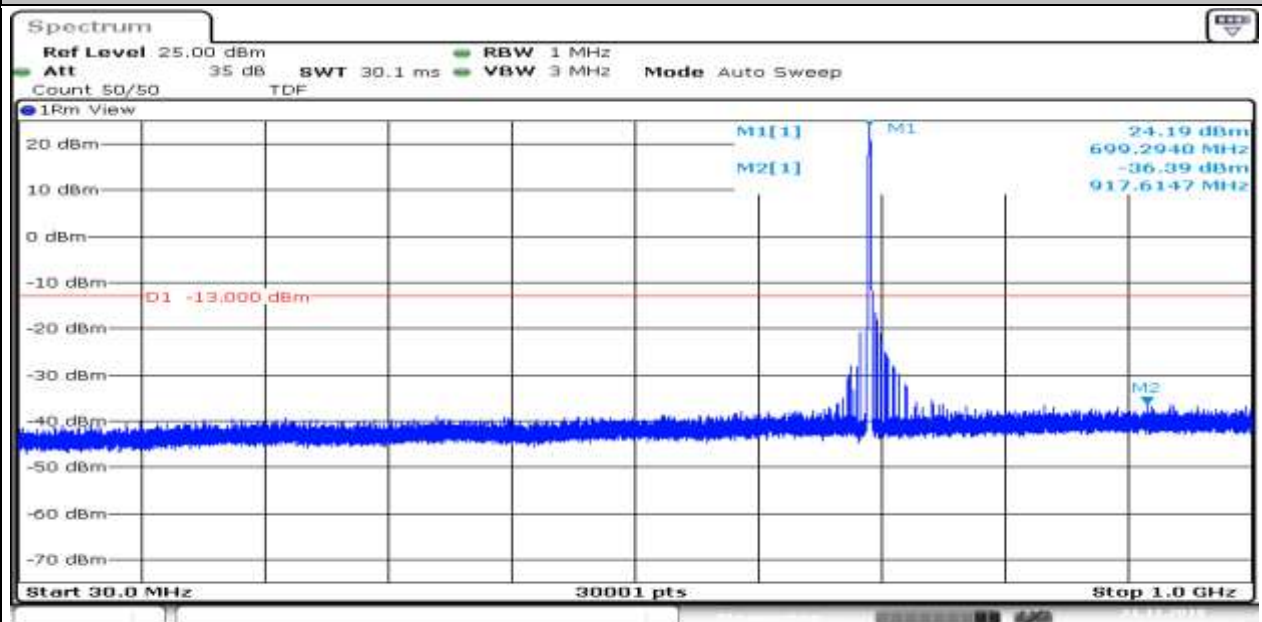
Test Graphs

Band12_1.4MHz_QPSK_23017_6_0_Low_30_1000_-36.03_PASS__



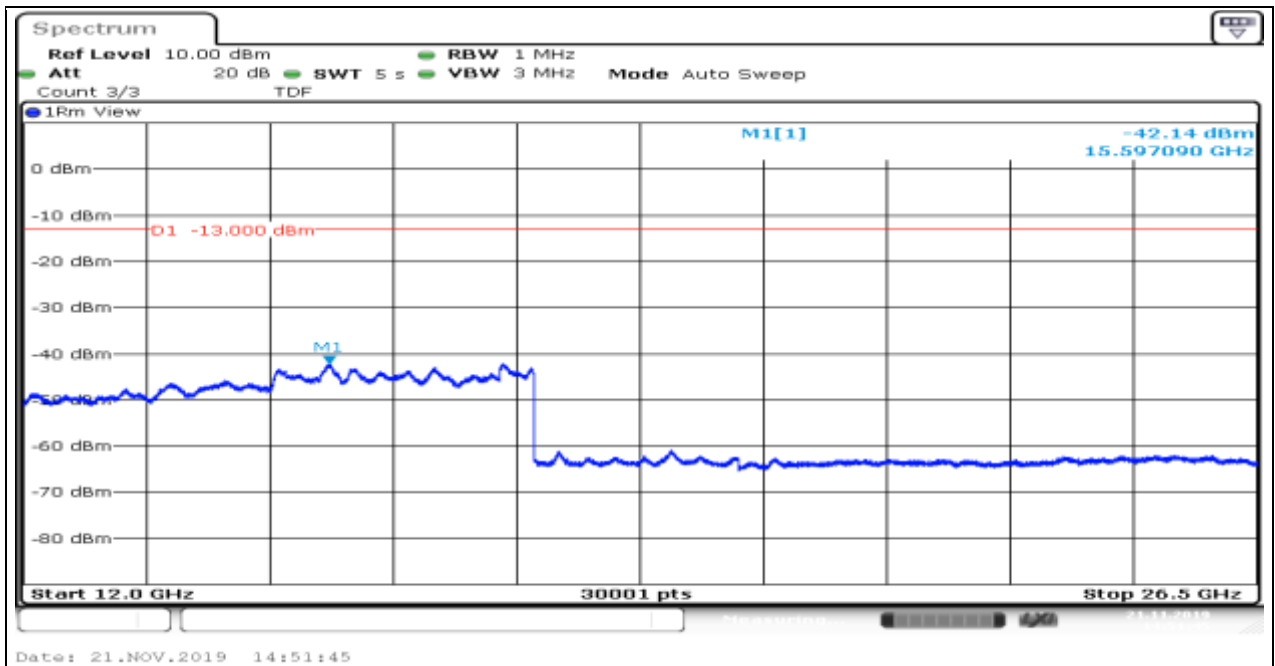
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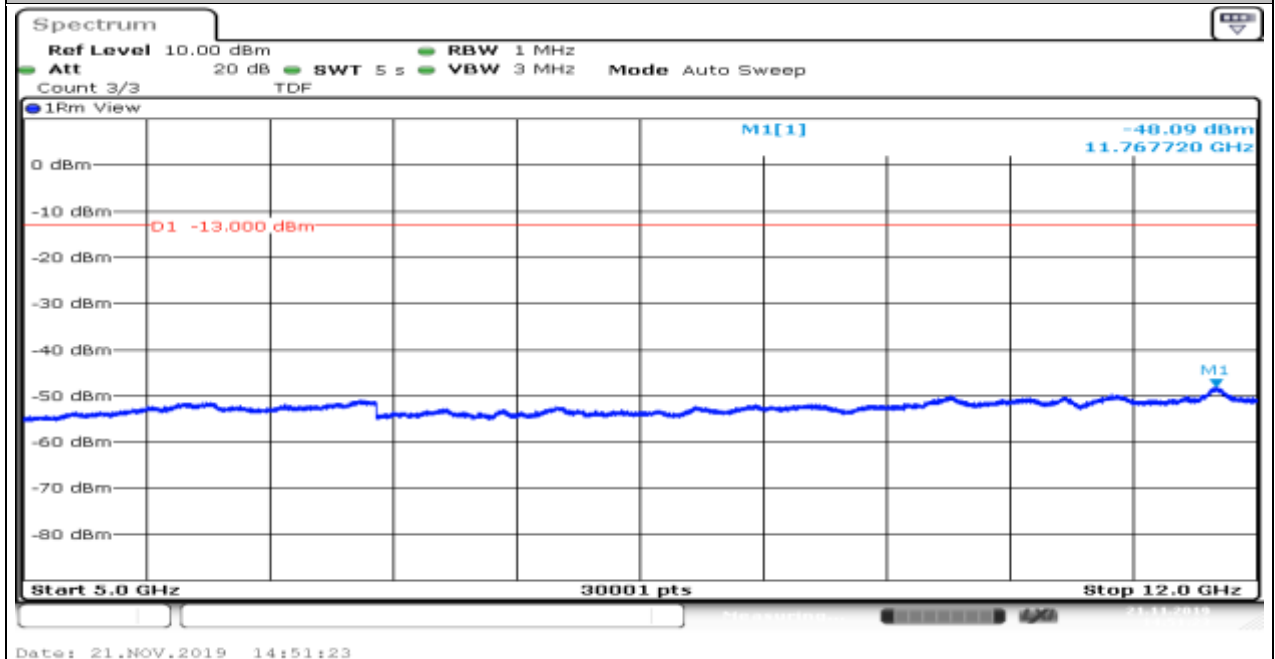


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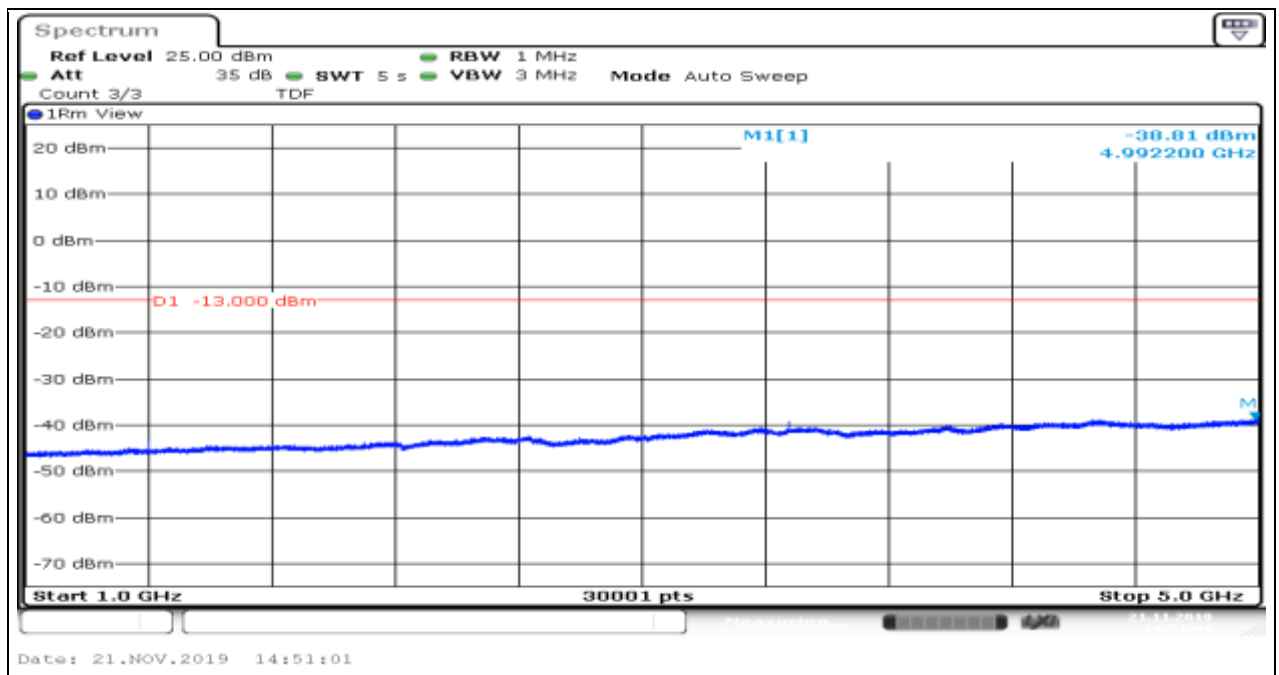
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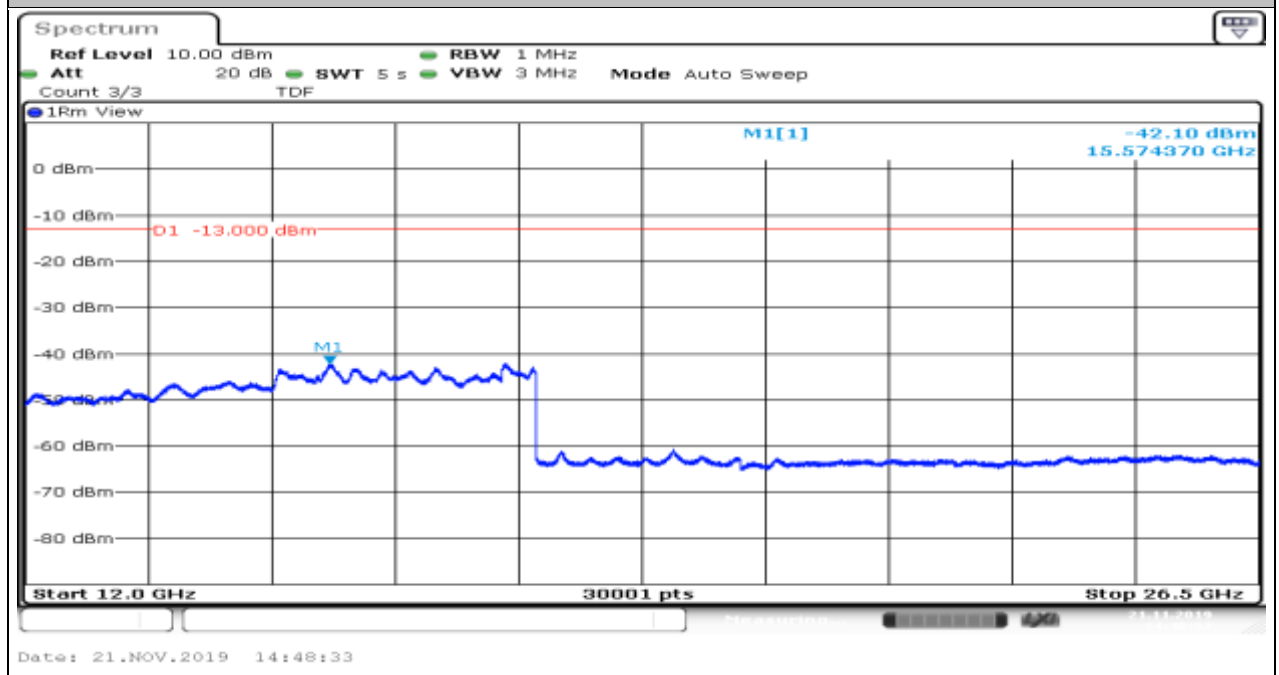
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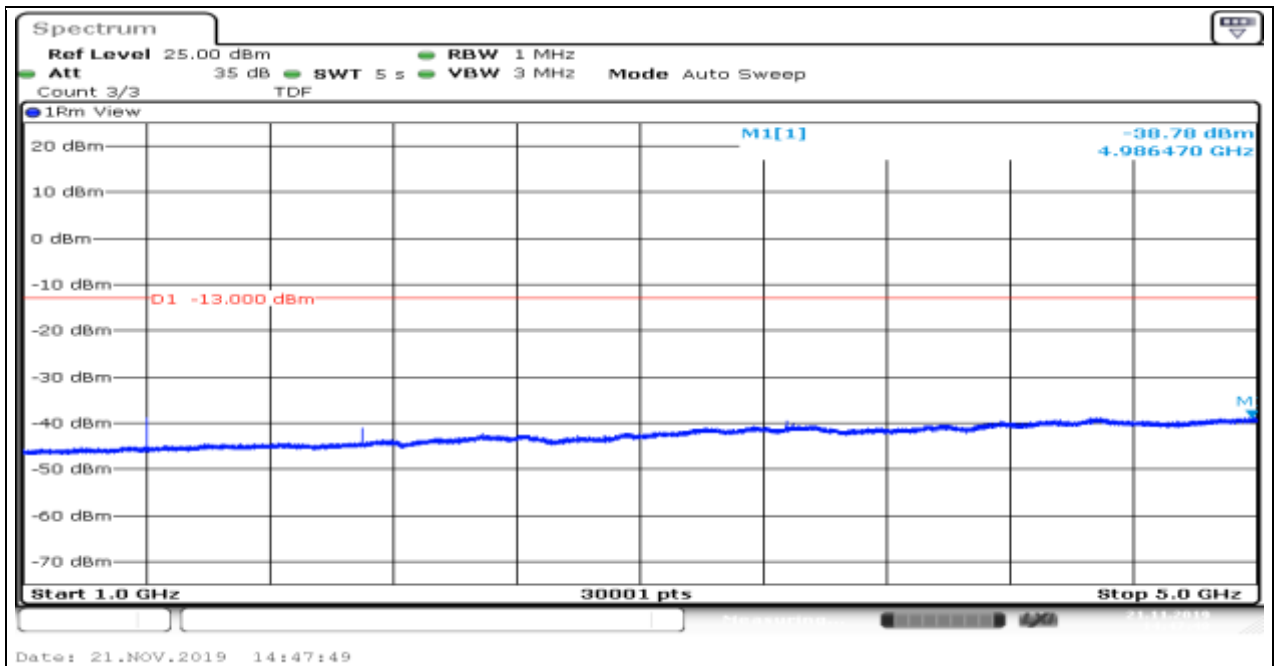
Band12_1.4MHz_QPSK_23017_6_0_Low_1000_5000_-38.81_PASS__



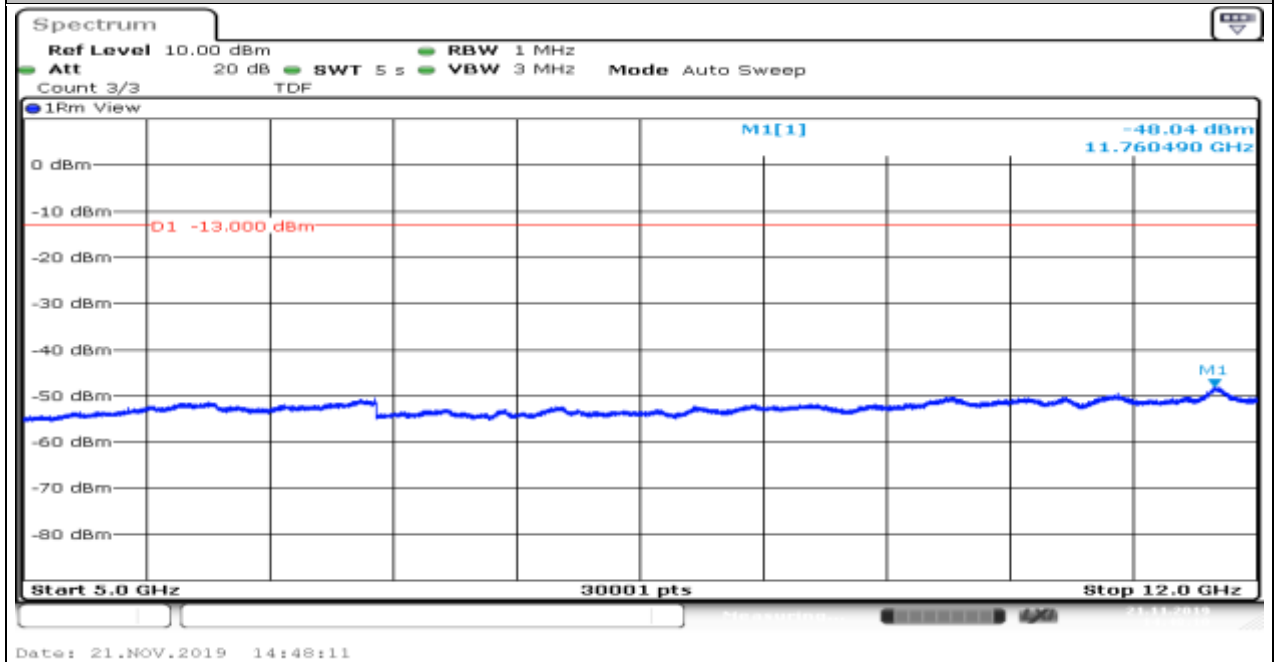
Band12_1.4MHz_QPSK_23017_1_0_Low_12000_26500_-42.1_PASS__



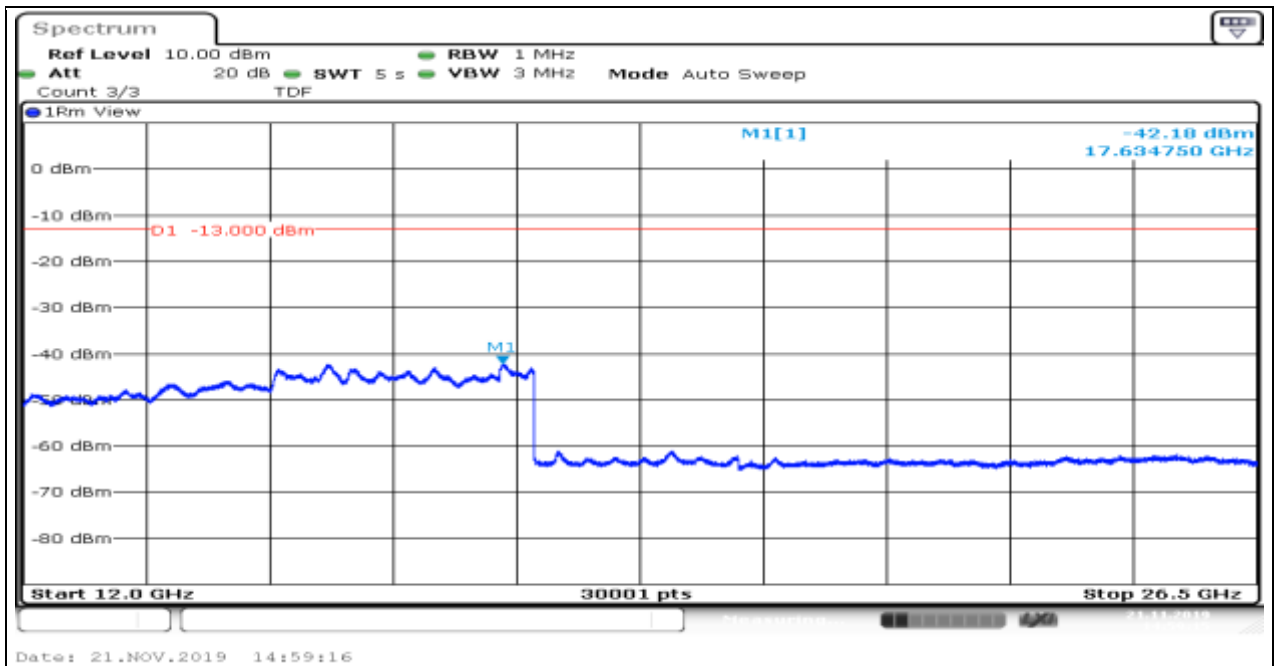
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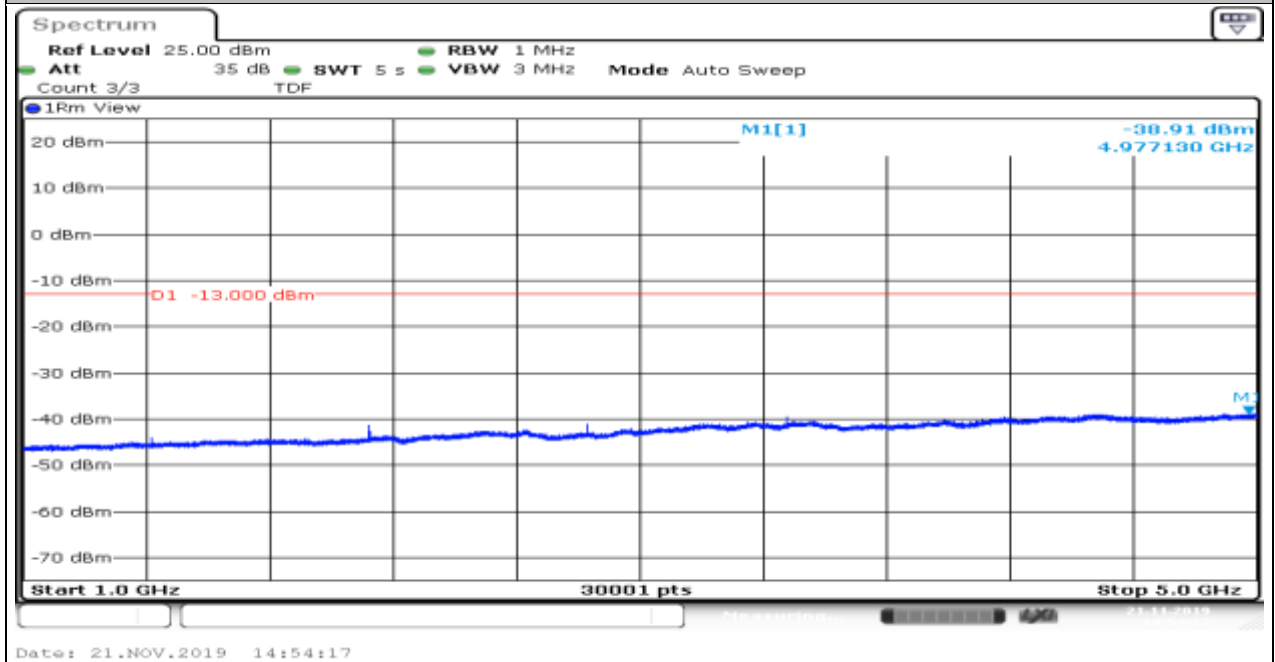
Band12_1.4MHz_QPSK_23017_1_0_Low_5000_12000_-48.04_PASS__



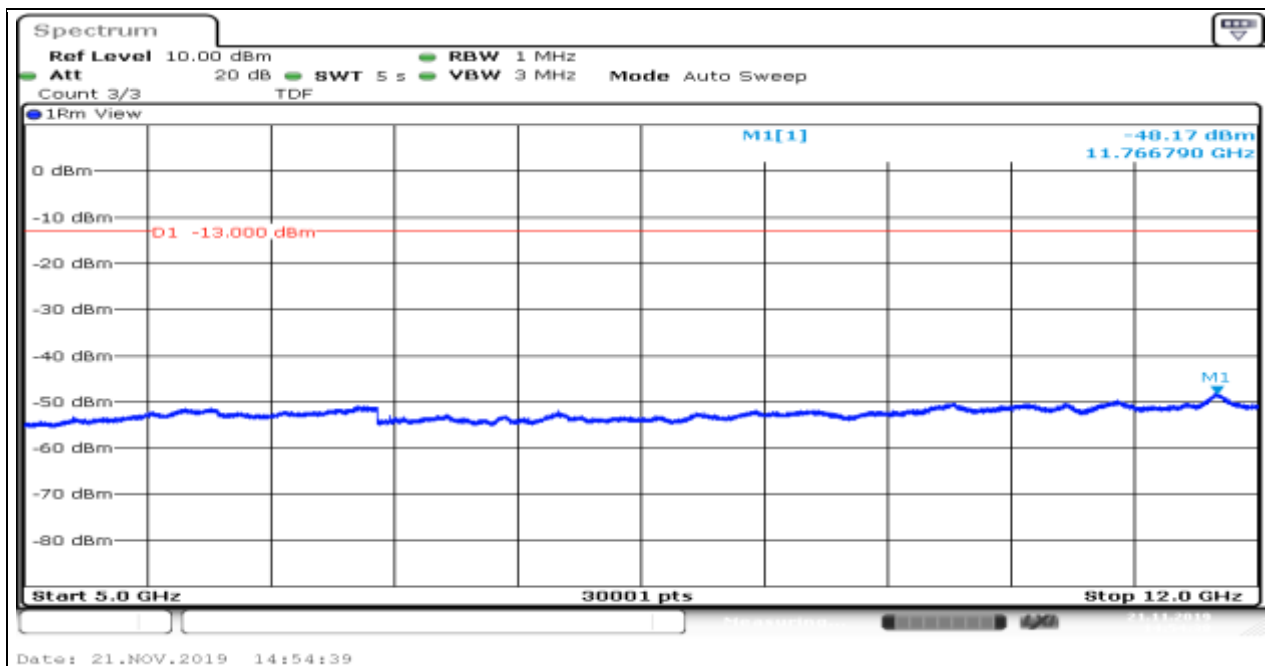
Band12_1.4MHz_QPSK_23095_6_0_Low_12000_26500_-42.18_PASS__



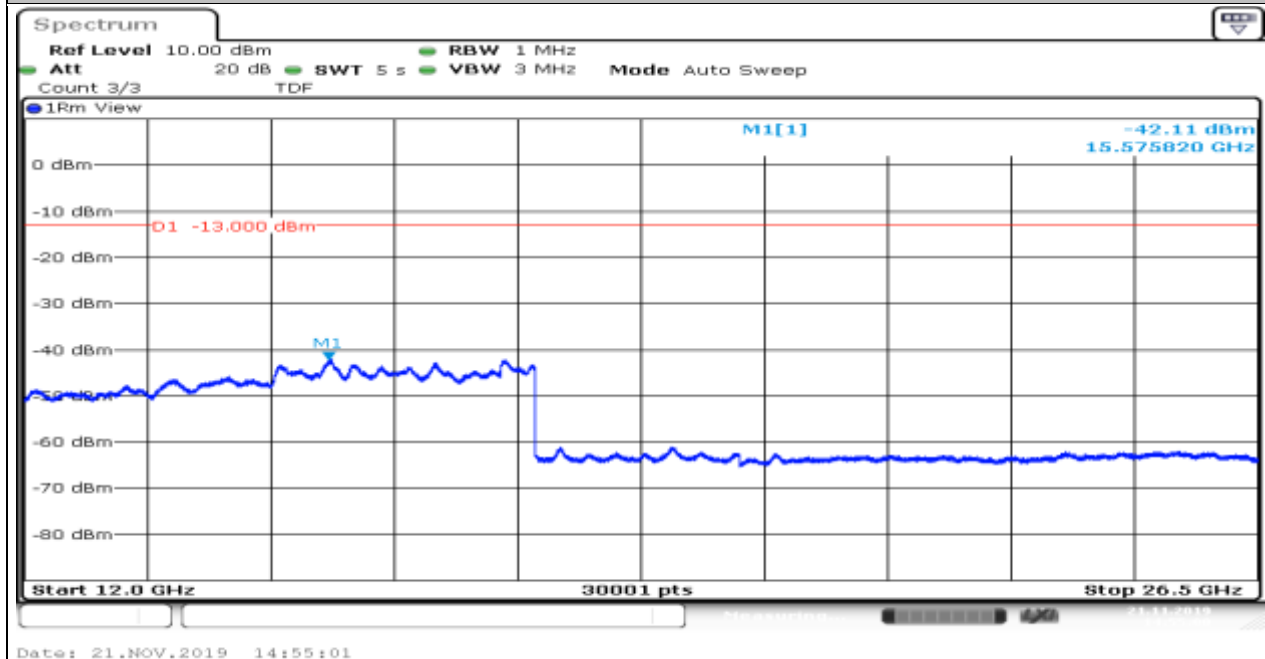
Band12_1.4MHz_QPSK_23095_1_0_Low_1000_5000_-38.91_PASS__



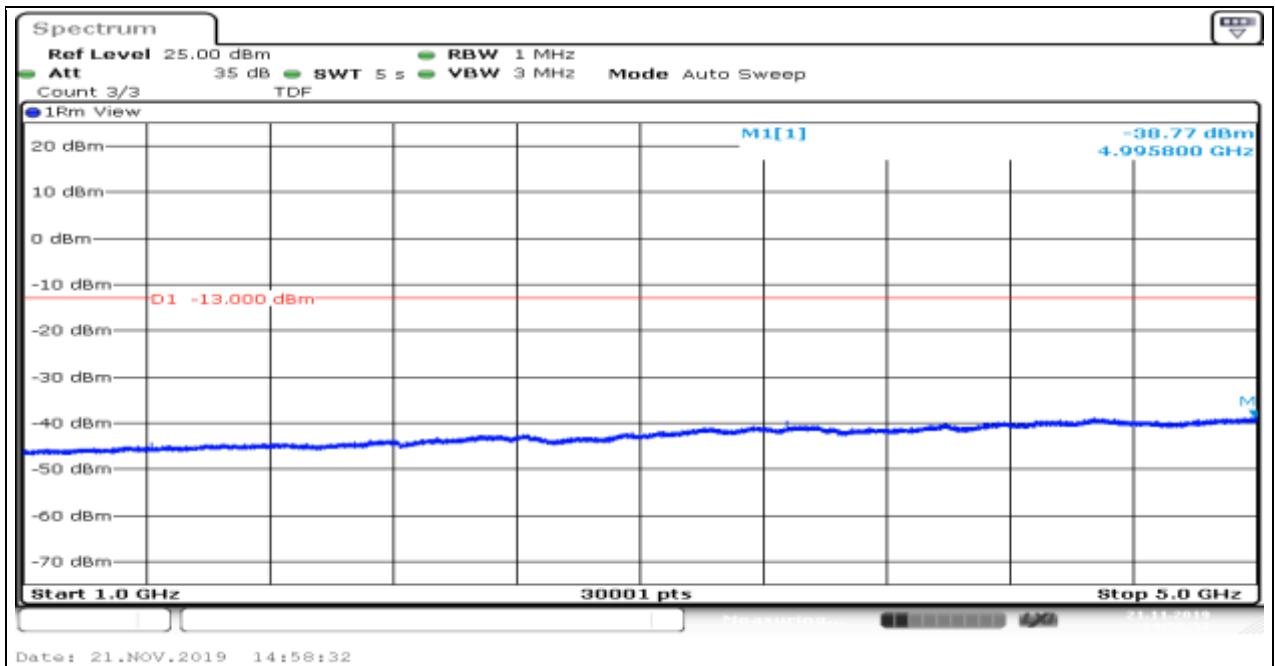
Band12_1.4MHz_QPSK_23095_1_0_Low_5000_12000_-48.17_PASS__



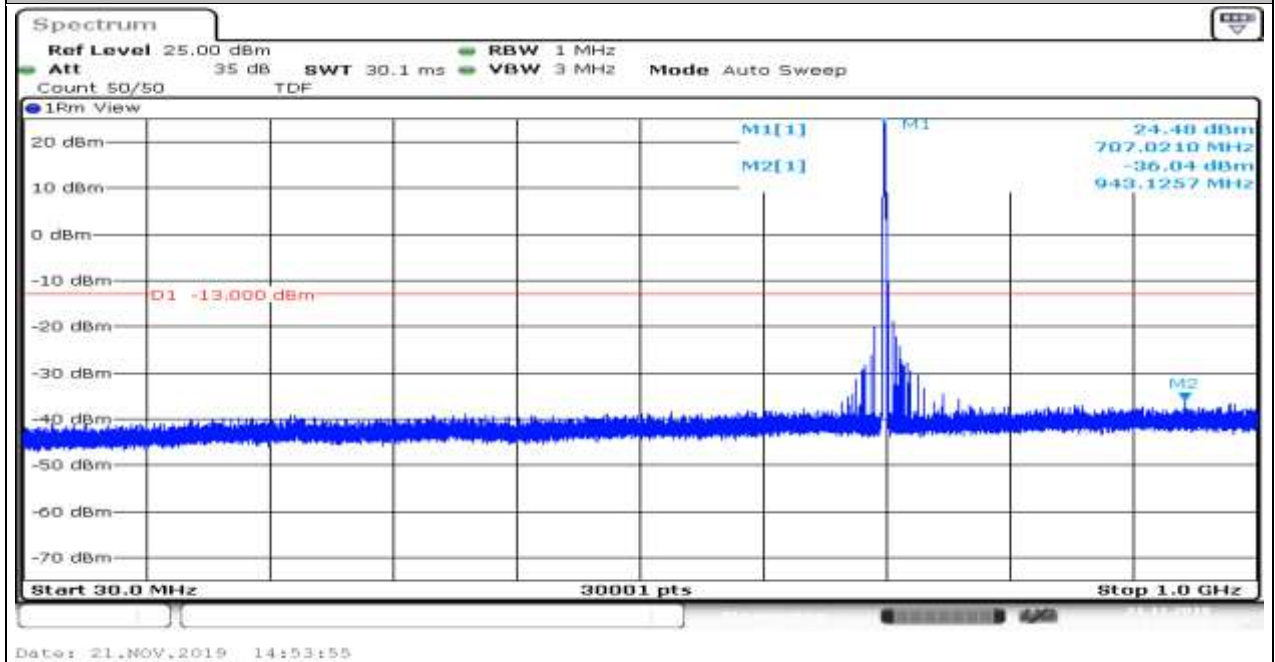
Band12_1.4MHz_QPSK_23095_1_0_Low_12000_26500_-42.11_PASS__



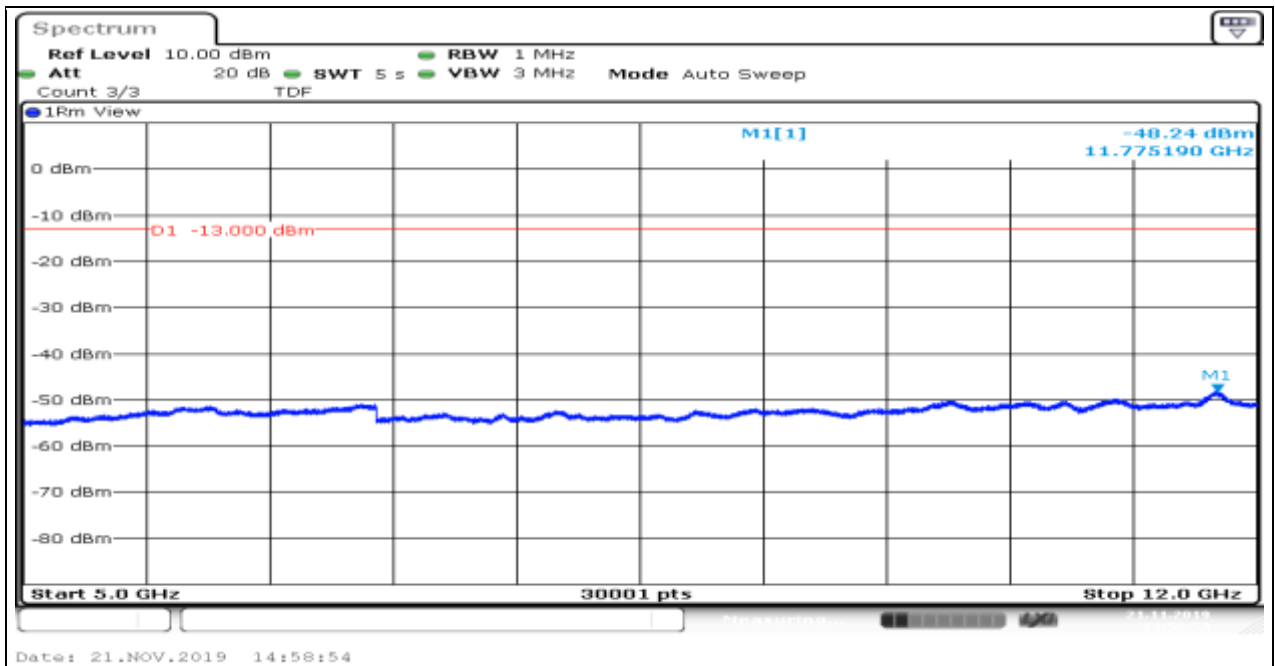
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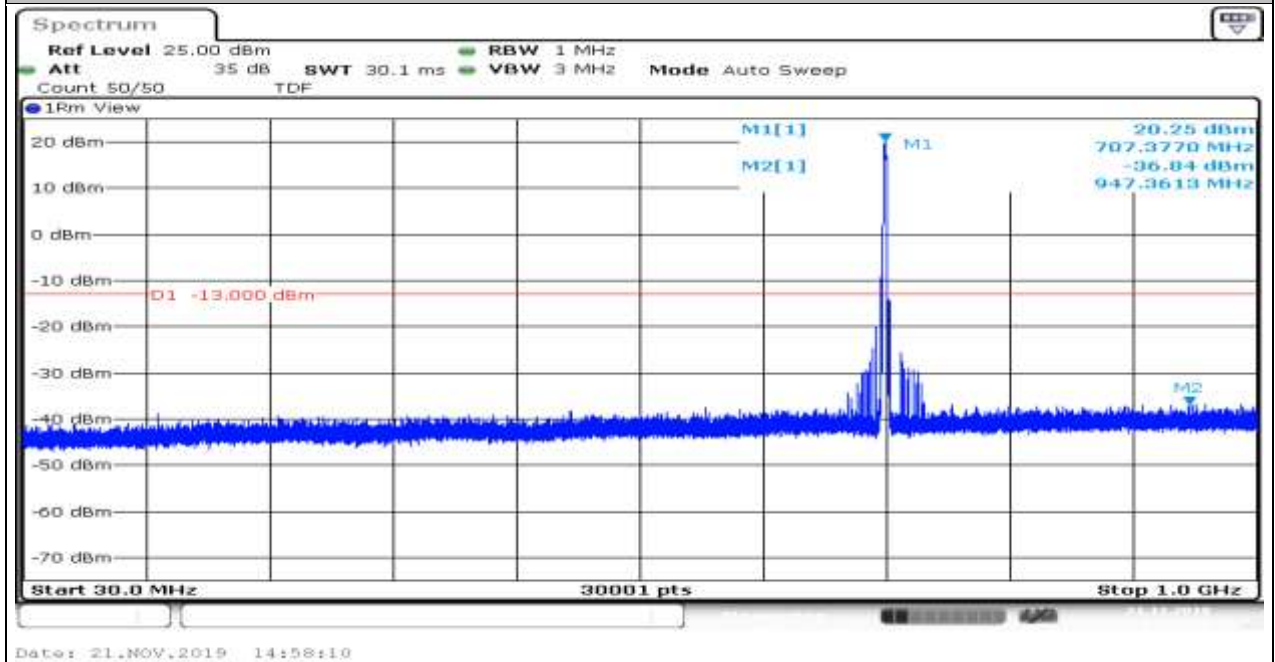
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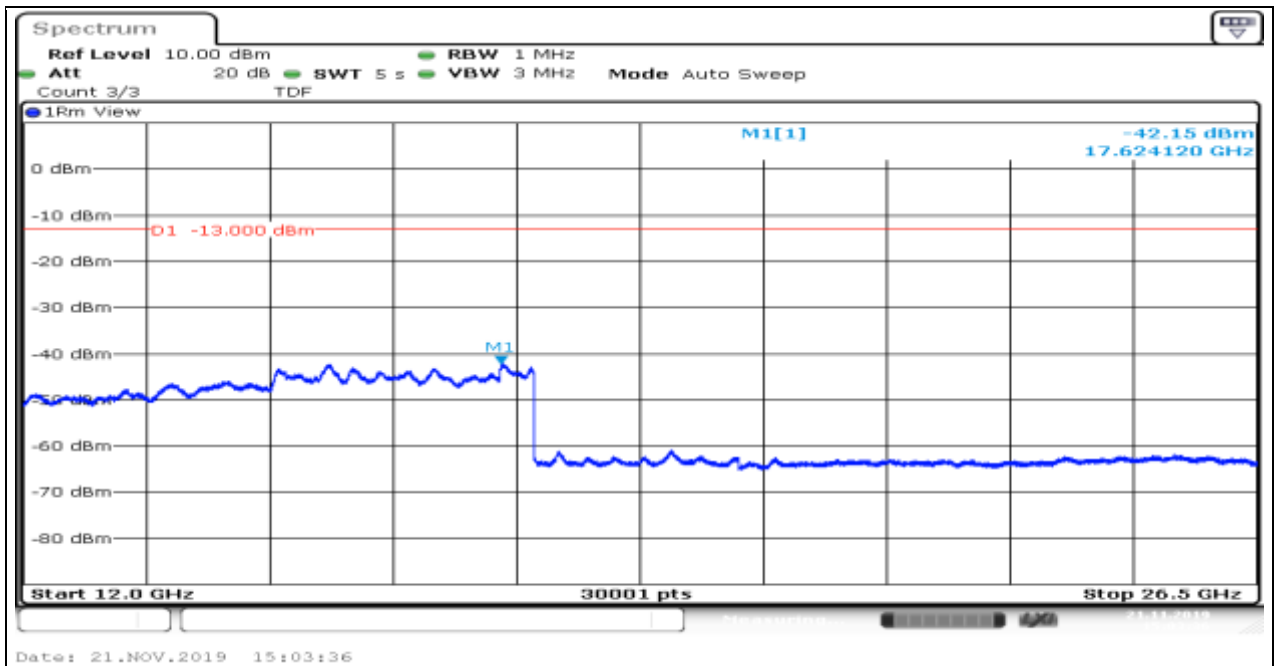
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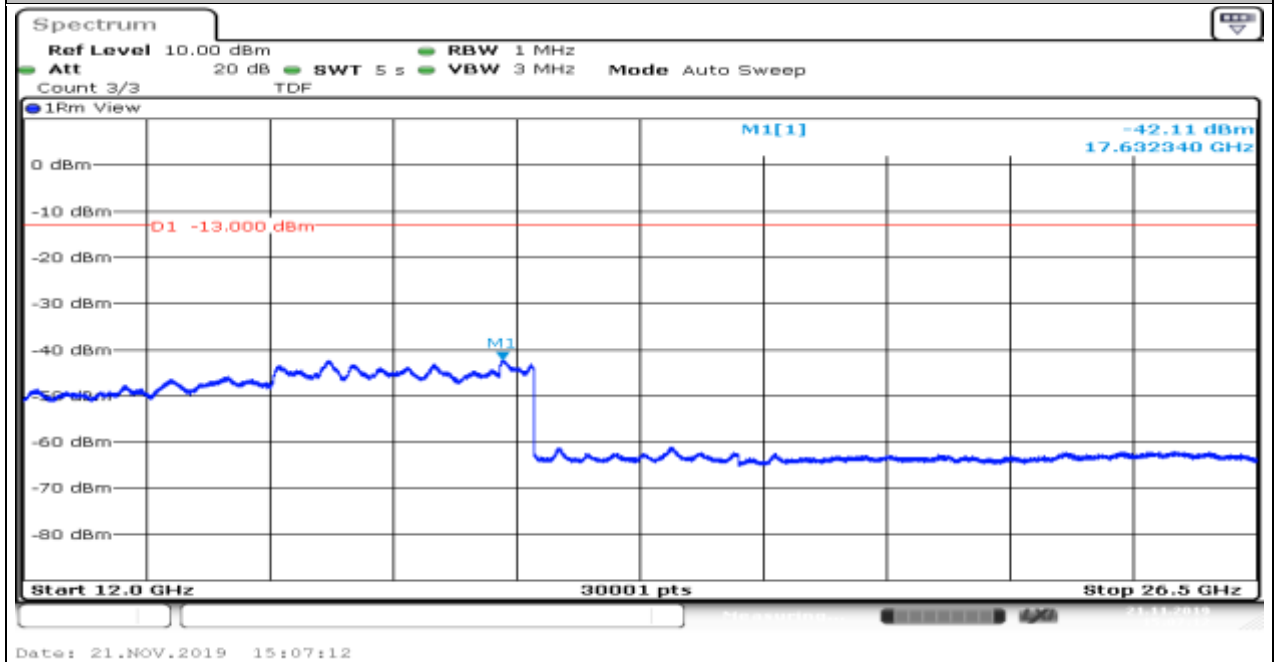
Band12_1.4MHz_QPSK_23095_6_0_Low_30_1000_-36.84_PASS_



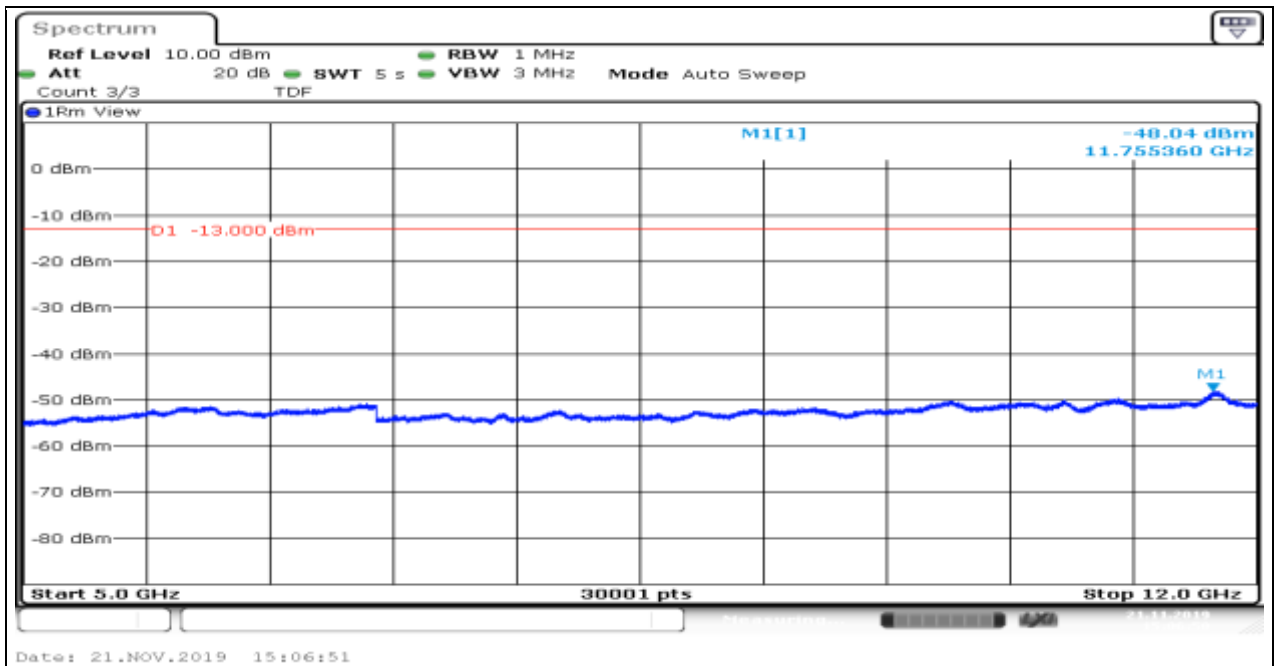
Band12_1.4MHz_QPSK_23173_1_5_Low_12000_26500_-42.15_PASS_



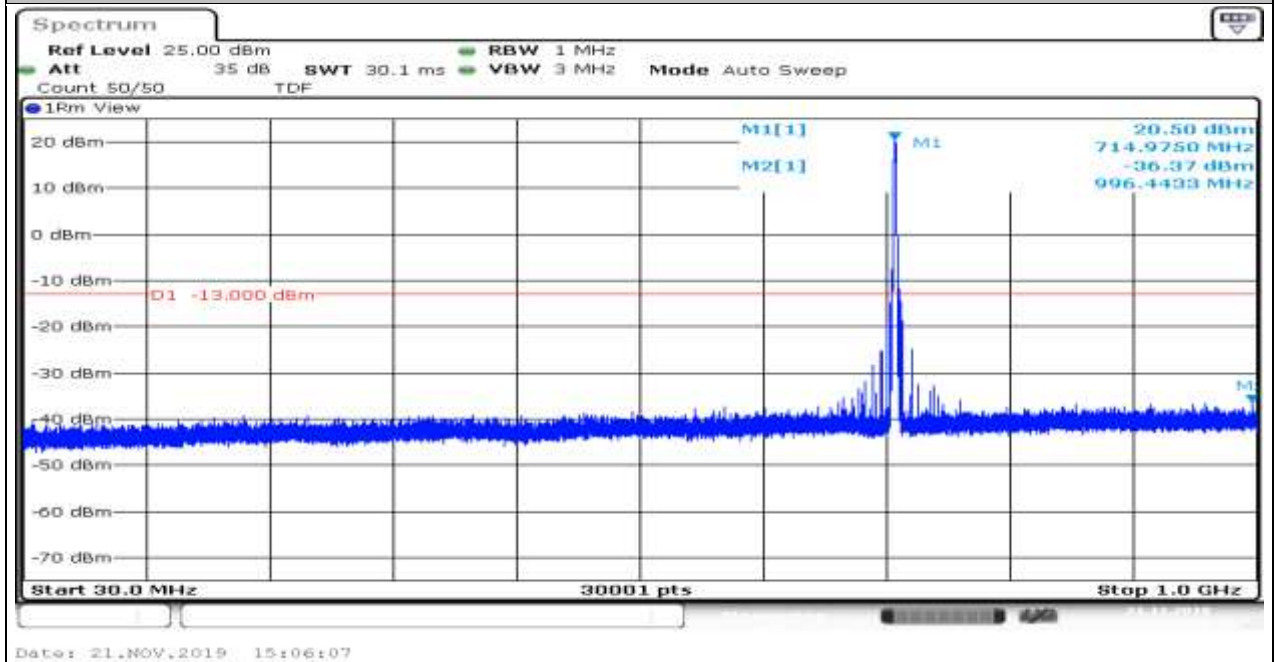
Band12_1.4MHz_QPSK_23173_6_0_Low_12000_26500_-42.11_PASS__



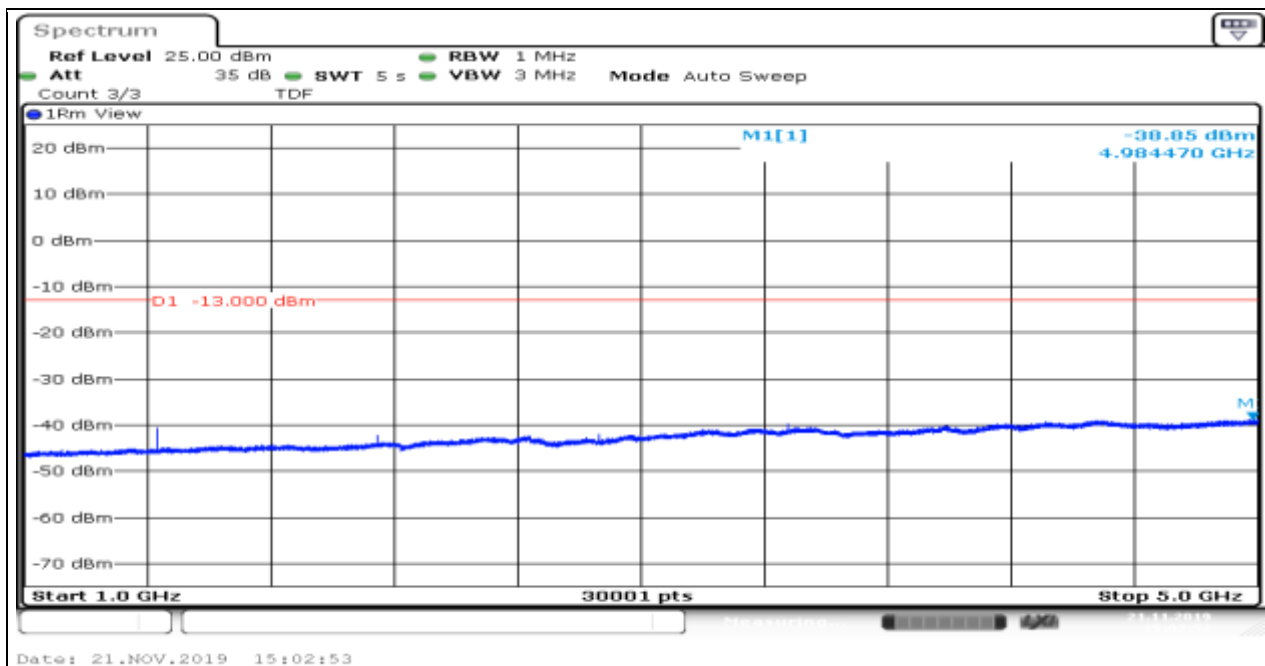
Band12_1.4MHz_QPSK_23173_6_0_Low_5000_12000_-48.04_PASS__



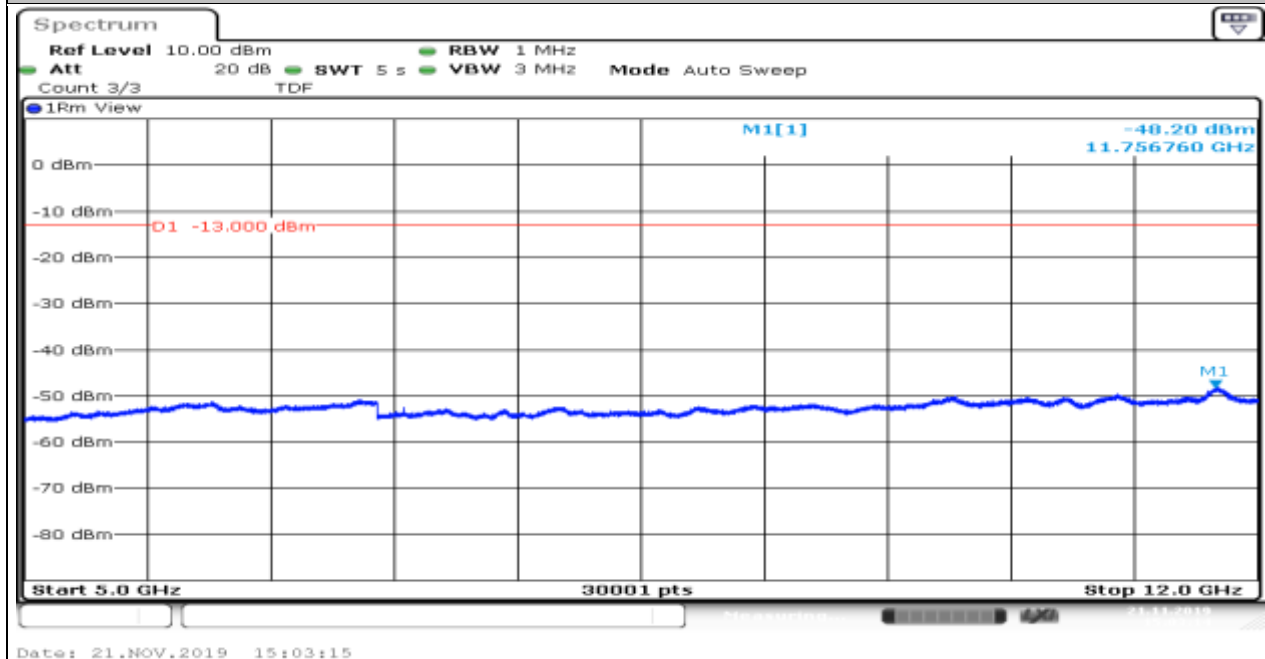
Band12_1.4MHz_QPSK_23173_6_0_Low_30_1000_-36.37_PASS__



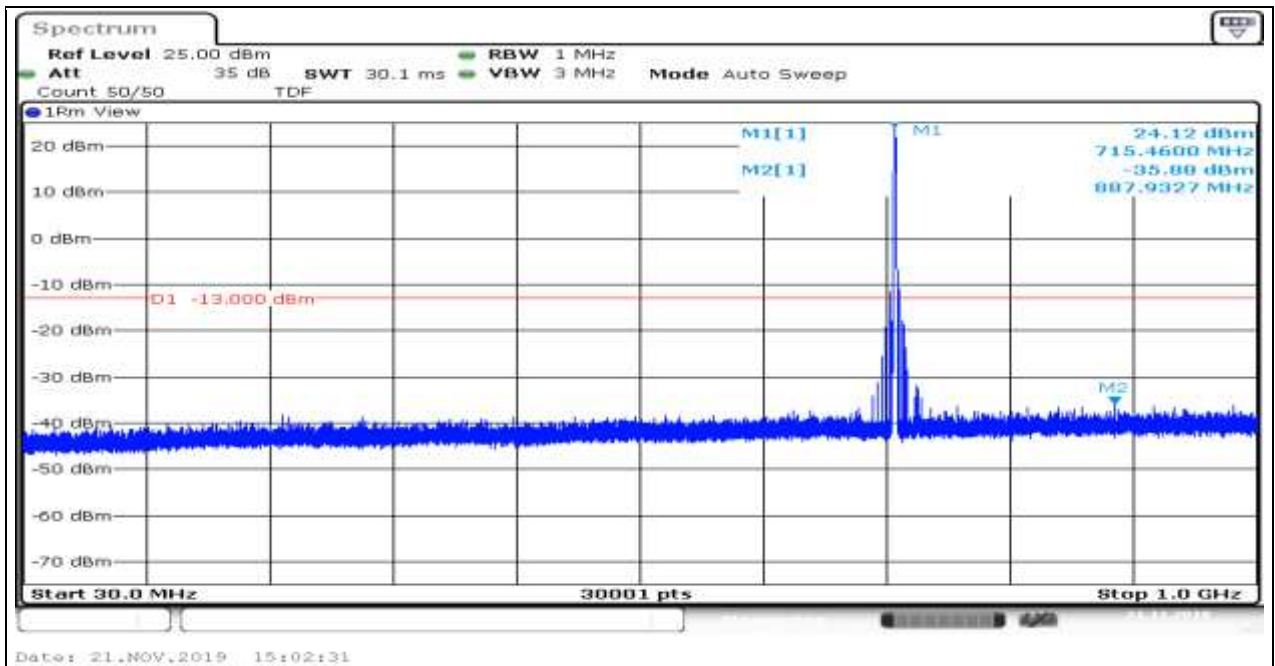
Band12_1.4MHz_QPSK_23173_1_5_Low_1000_5000_-38.85_PASS__



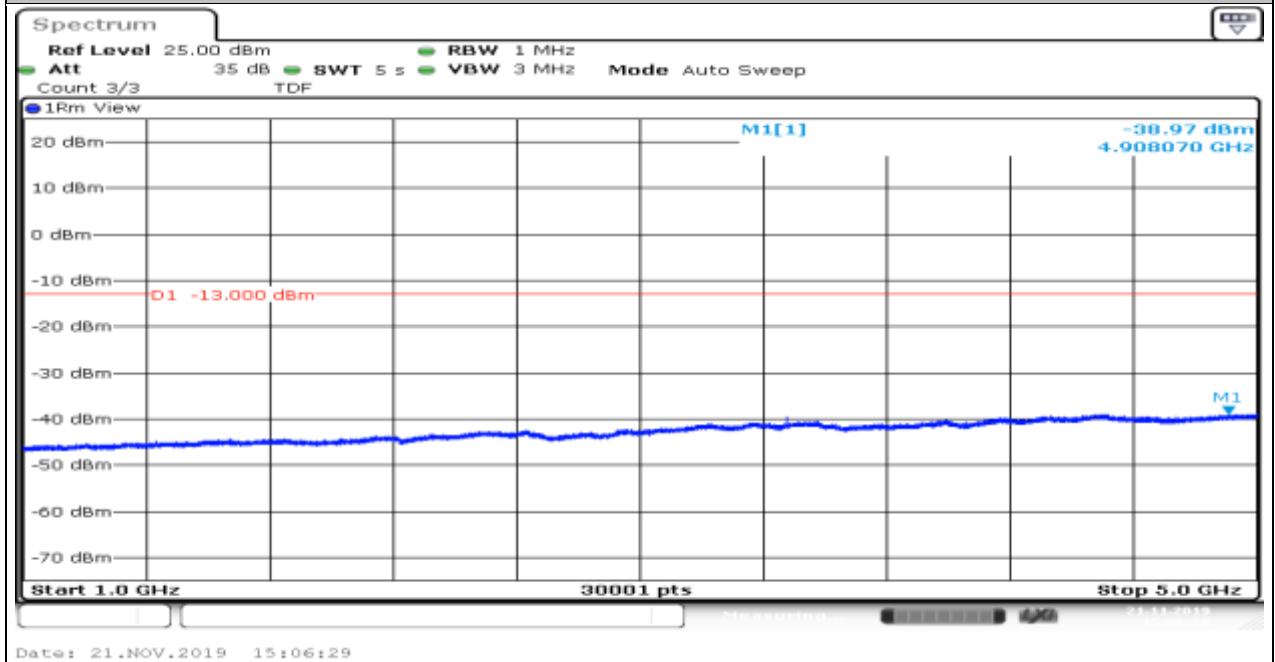
Band12_1.4MHz_QPSK_23173_1_5_Low_5000_12000_-48.2_PASS__



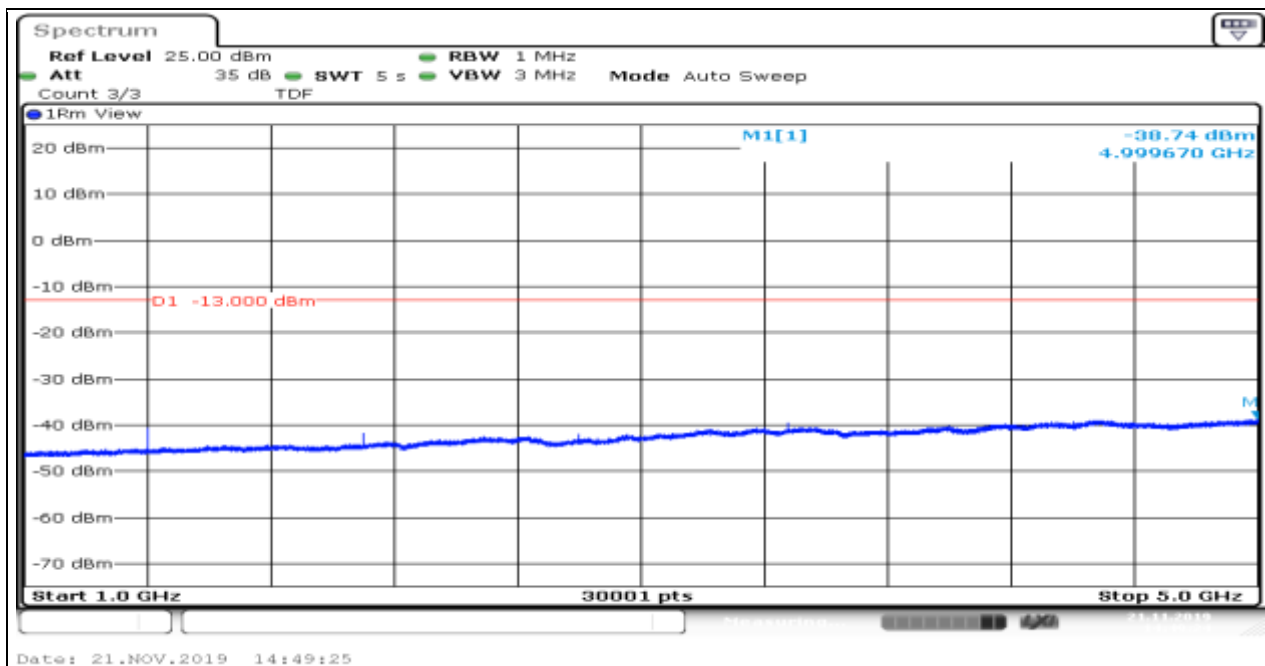
Band12_1.4MHz_QPSK_23173_1_5_Low_30_1000_-35.88_PASS__



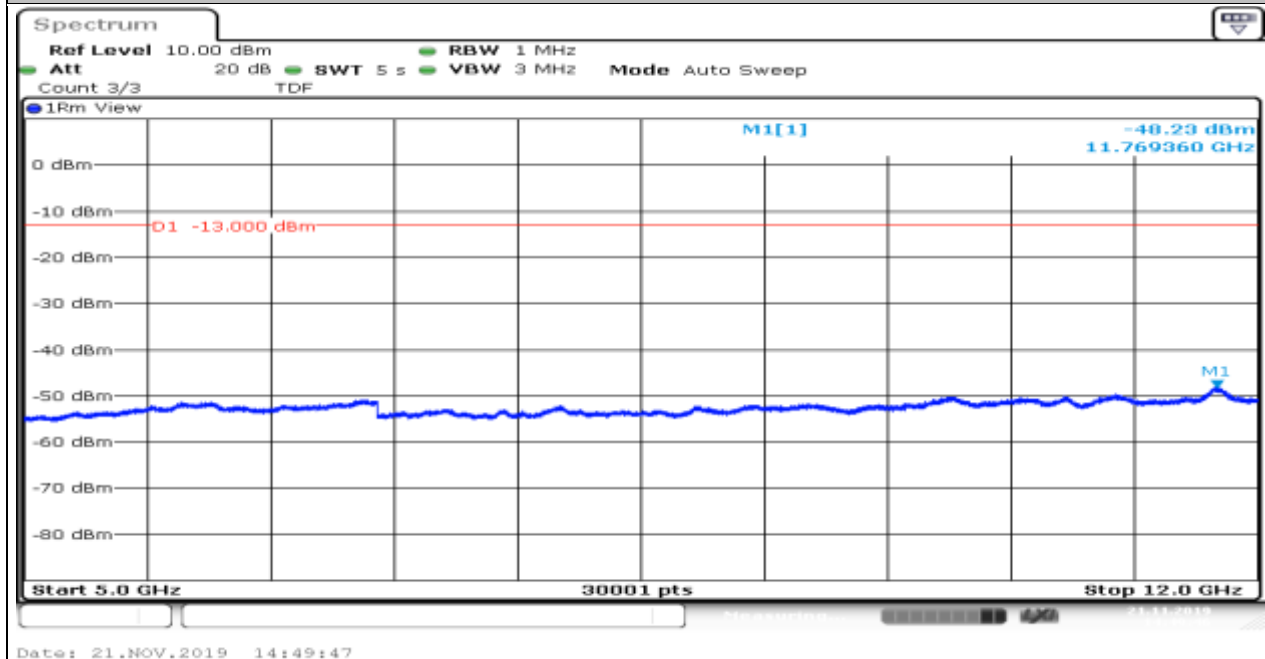
Band12_1.4MHz_QPSK_23173_6_0_Low_1000_5000_-38.97_PASS__



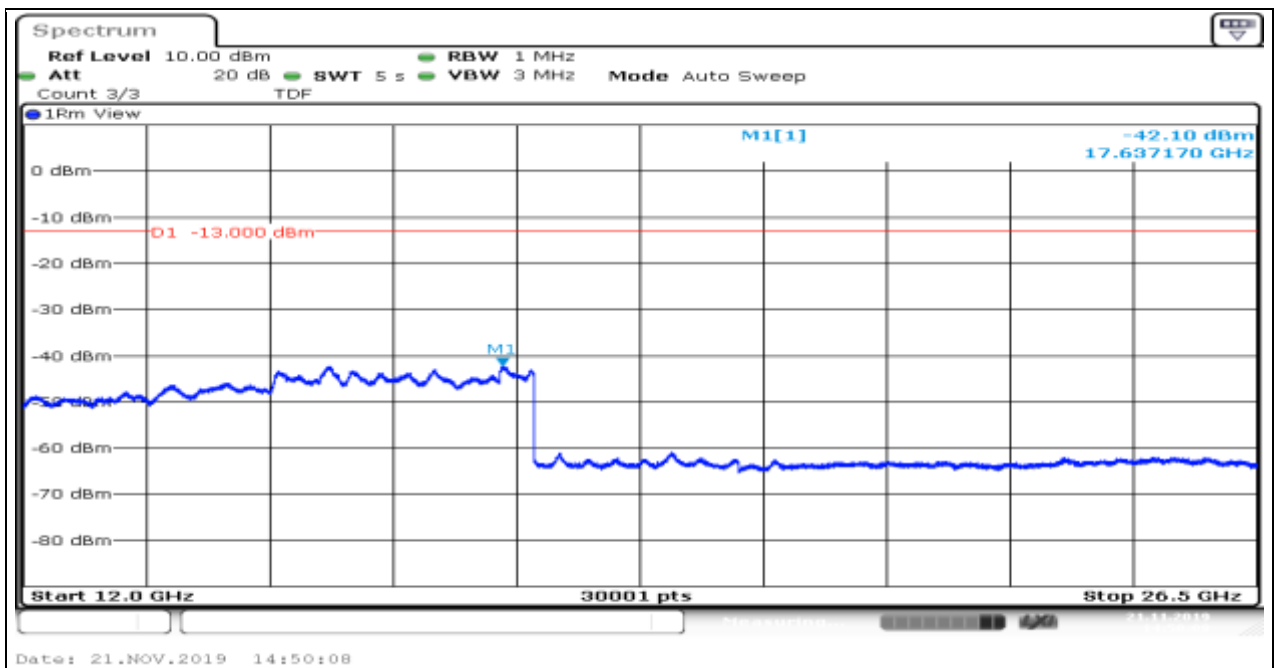
Band12_1.4MHz_16QAM_23017_1_0_Low_1000_5000_-38.74_PASS__



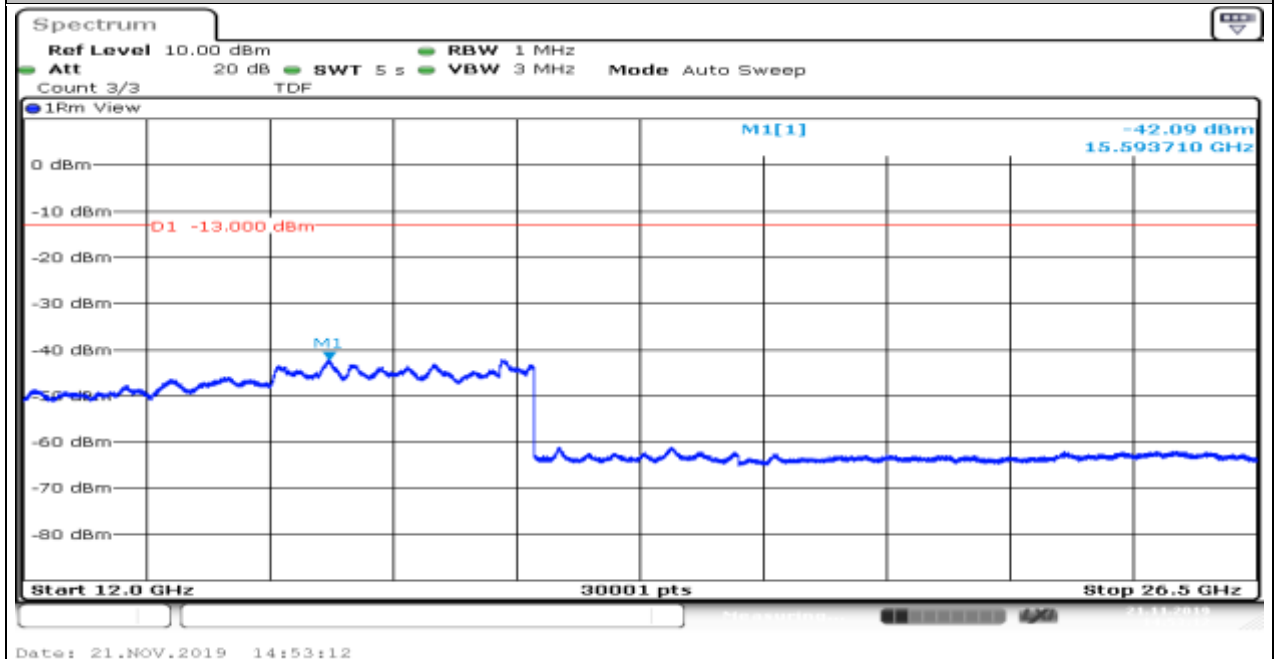
Band12_1.4MHz_16QAM_23017_1_0_Low_5000_12000_-48.23_PASS__



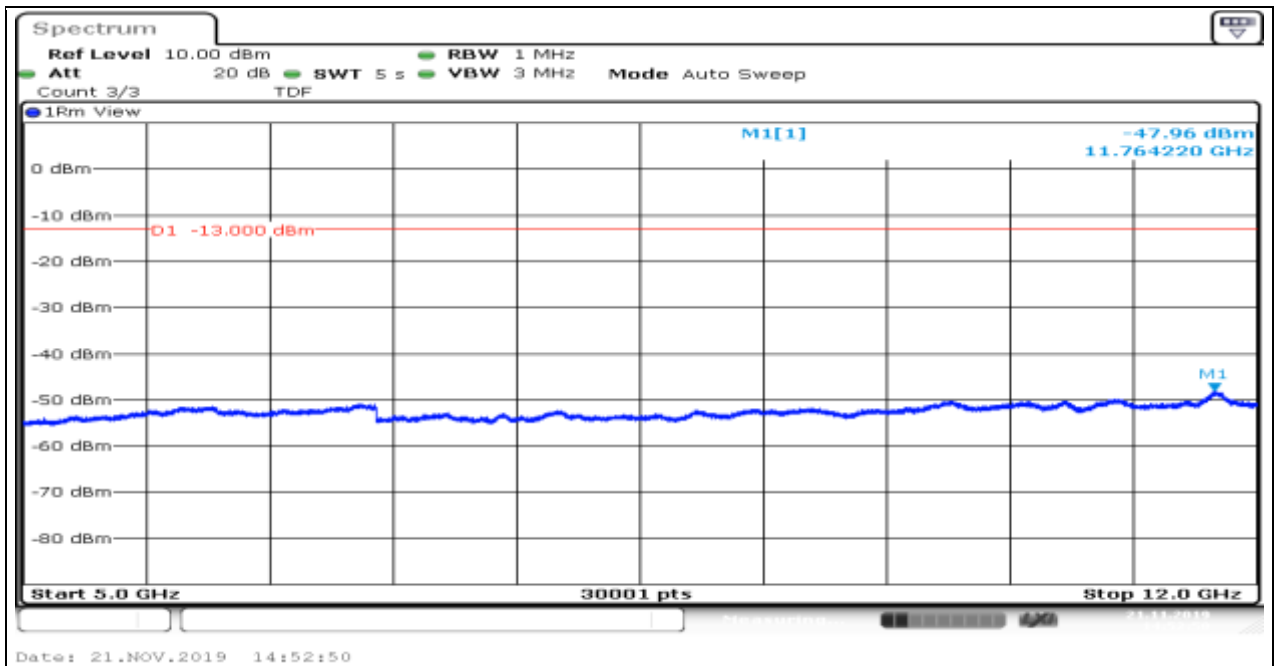
Band12_1.4MHz_16QAM_23017_1_0_Low_12000_26500_-42.1_PASS__



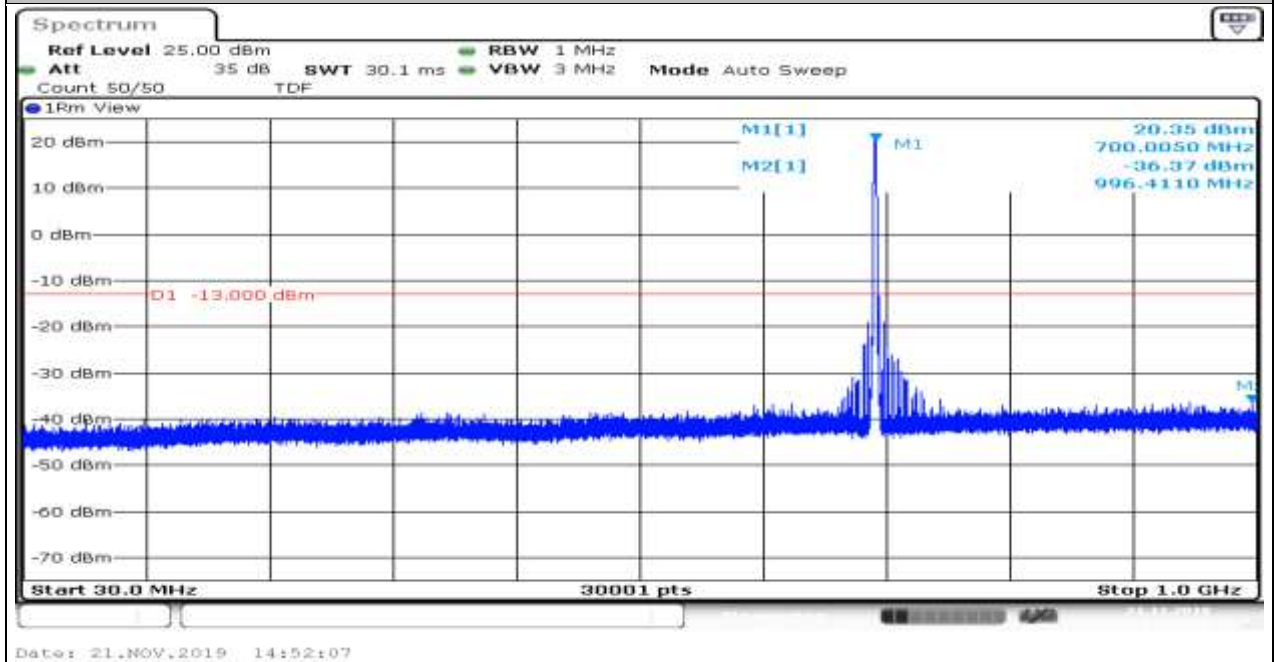
Band12_1.4MHz_16QAM_23017_6_0_Low_12000_26500_-42.09_PASS__



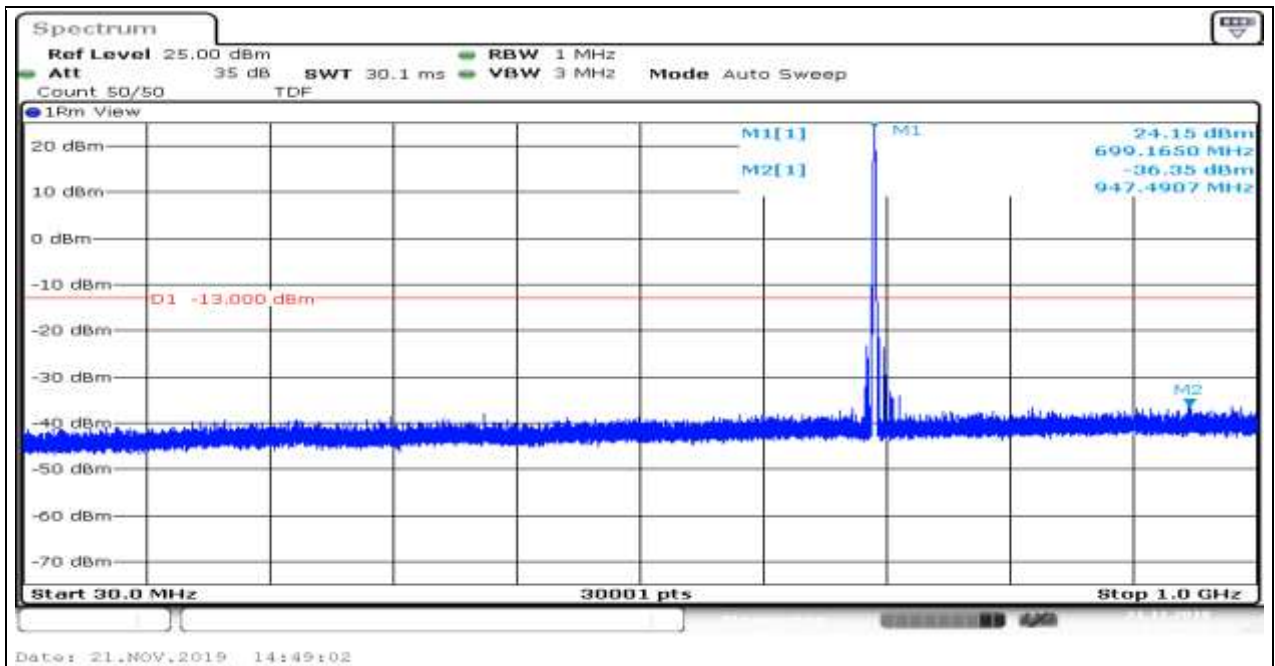
Band12_1.4MHz_16QAM_23017_6_0_Low_5000_12000_-47.96_PASS__



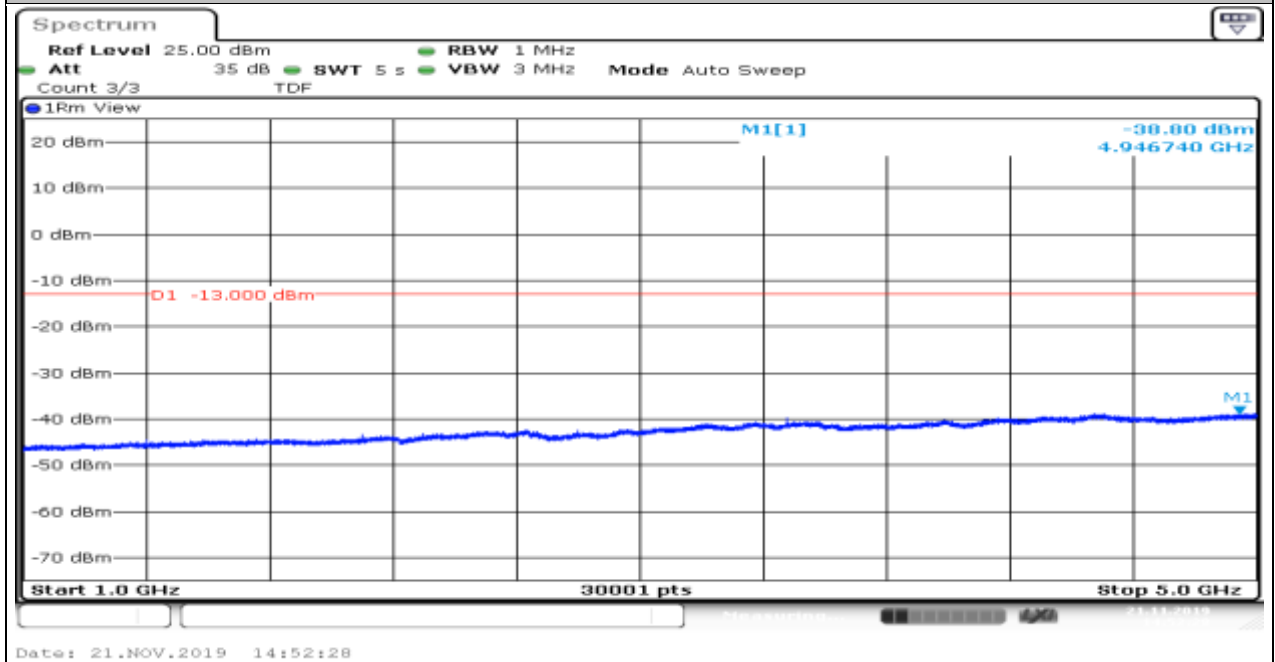
Band12_1.4MHz_16QAM_23017_6_0_Low_30_1000_-36.37_PASS__



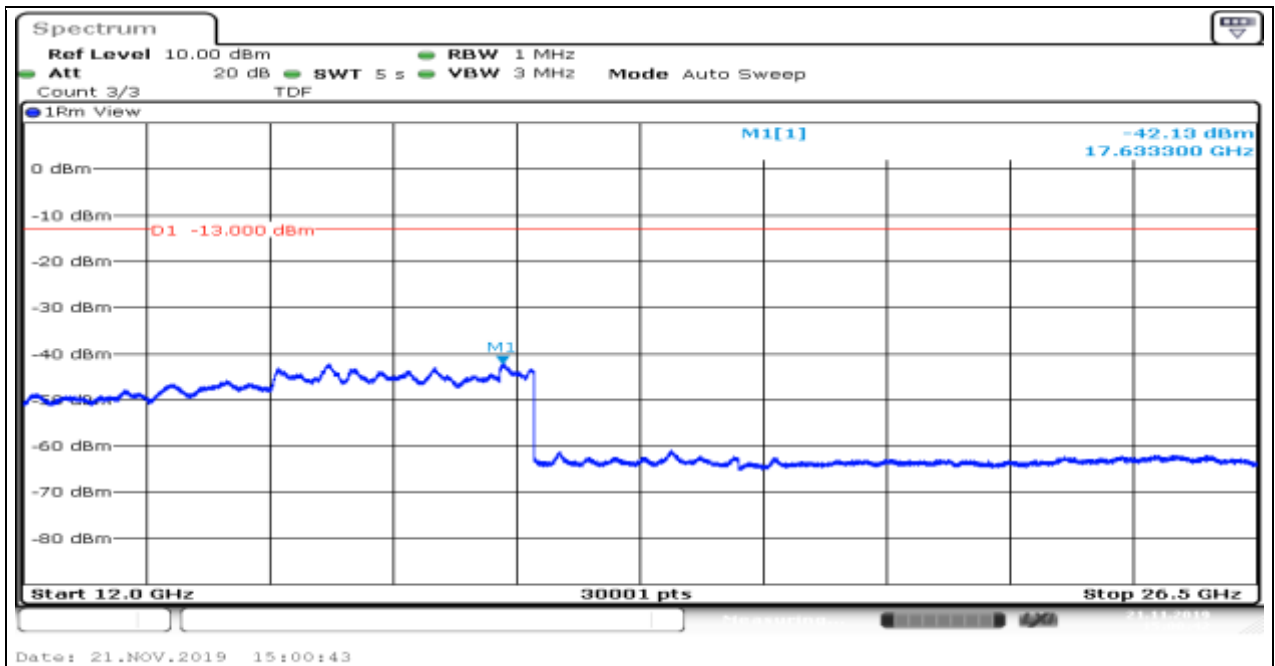
Band12_1.4MHz_16QAM_23017_1_0_Low_30_1000_-36.35_PASS__



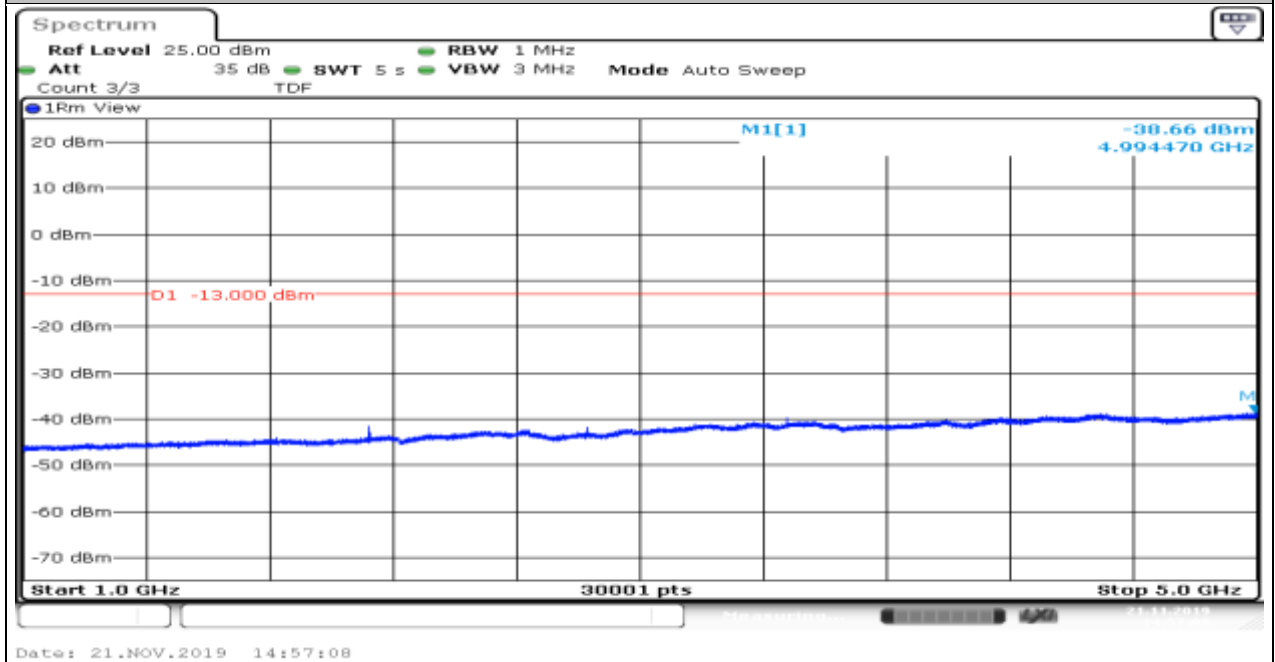
Band12_1.4MHz_16QAM_23017_6_0_Low_1000_5000_-38.8_PASS__



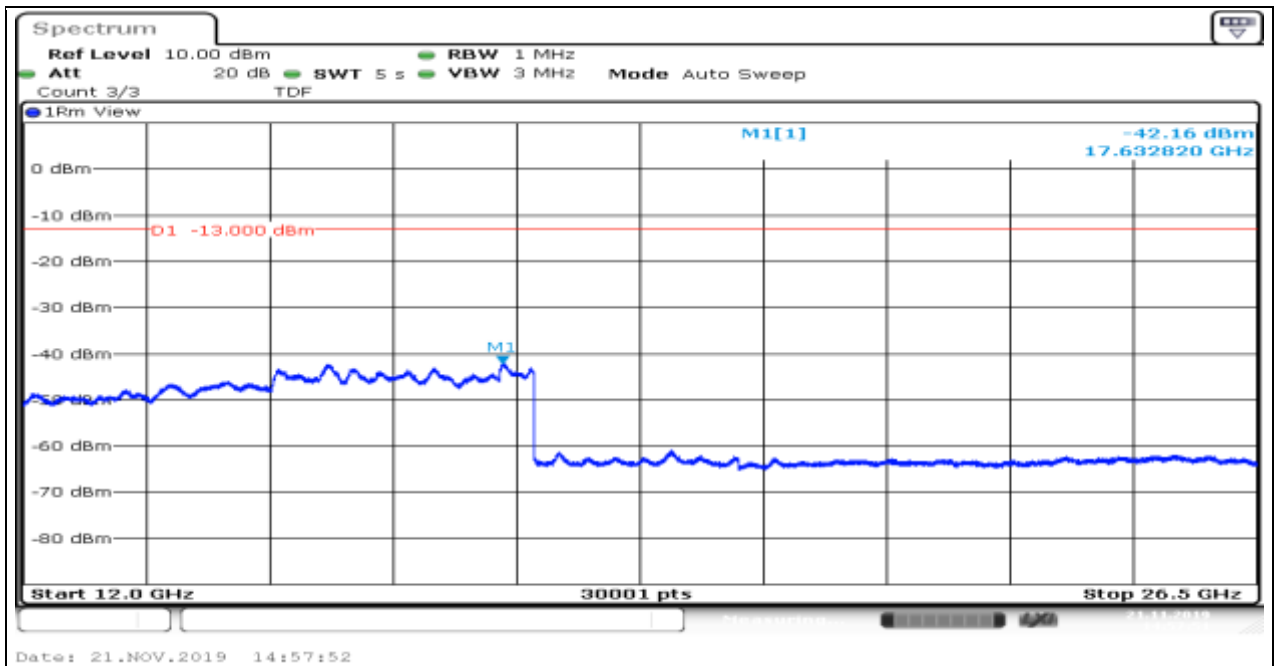
Band12_1.4MHz_16QAM_23095_6_0_Low_12000_26500_-42.13_PASS__



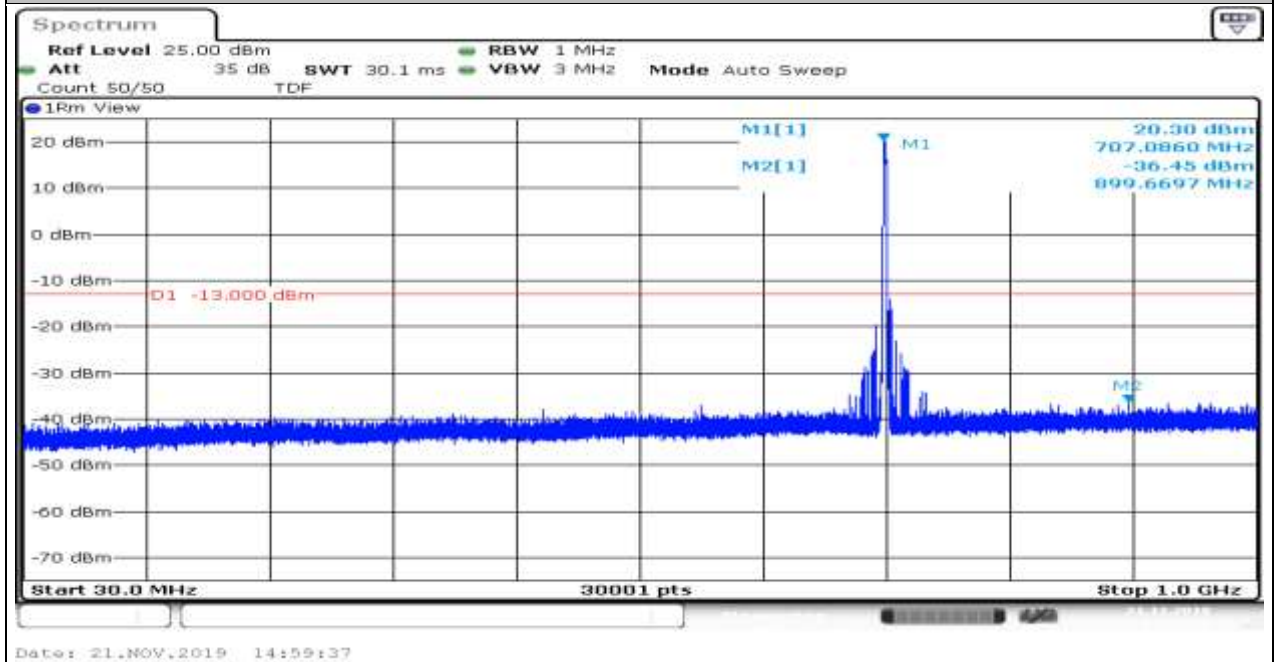
Band12_1.4MHz_16QAM_23095_1_0_Low_1000_5000_-38.66_PASS__



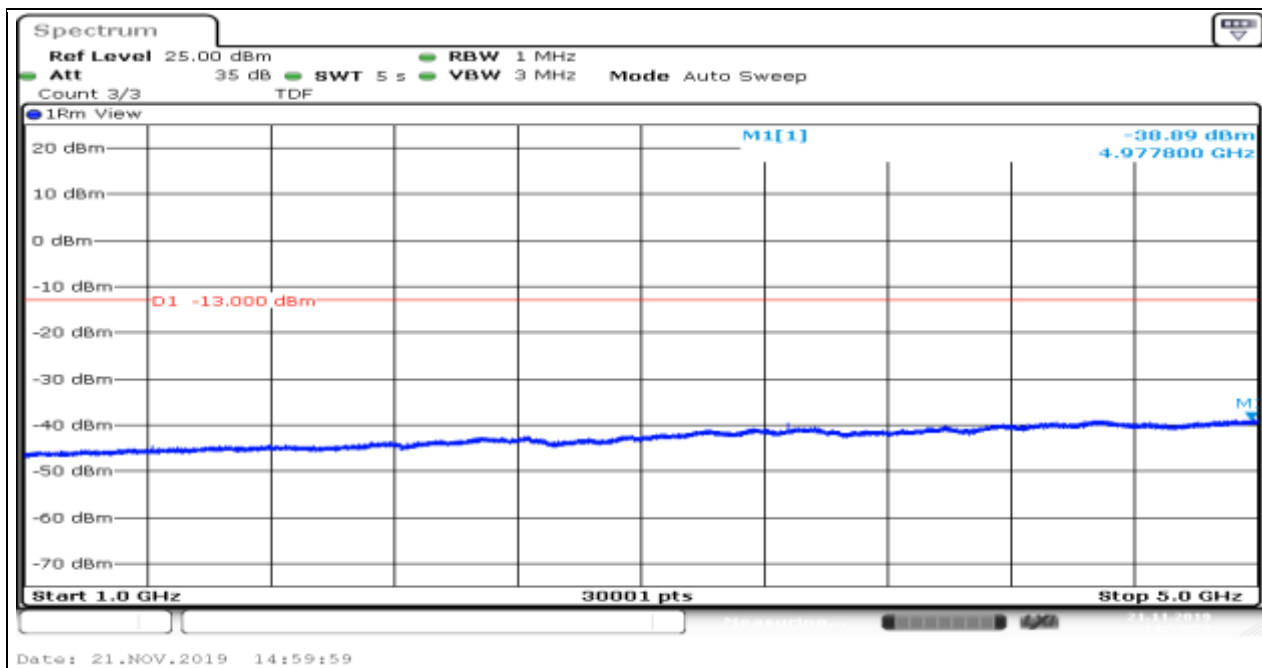
Band12_1.4MHz_16QAM_23095_1_0_Low_12000_26500_-42.16_PASS__



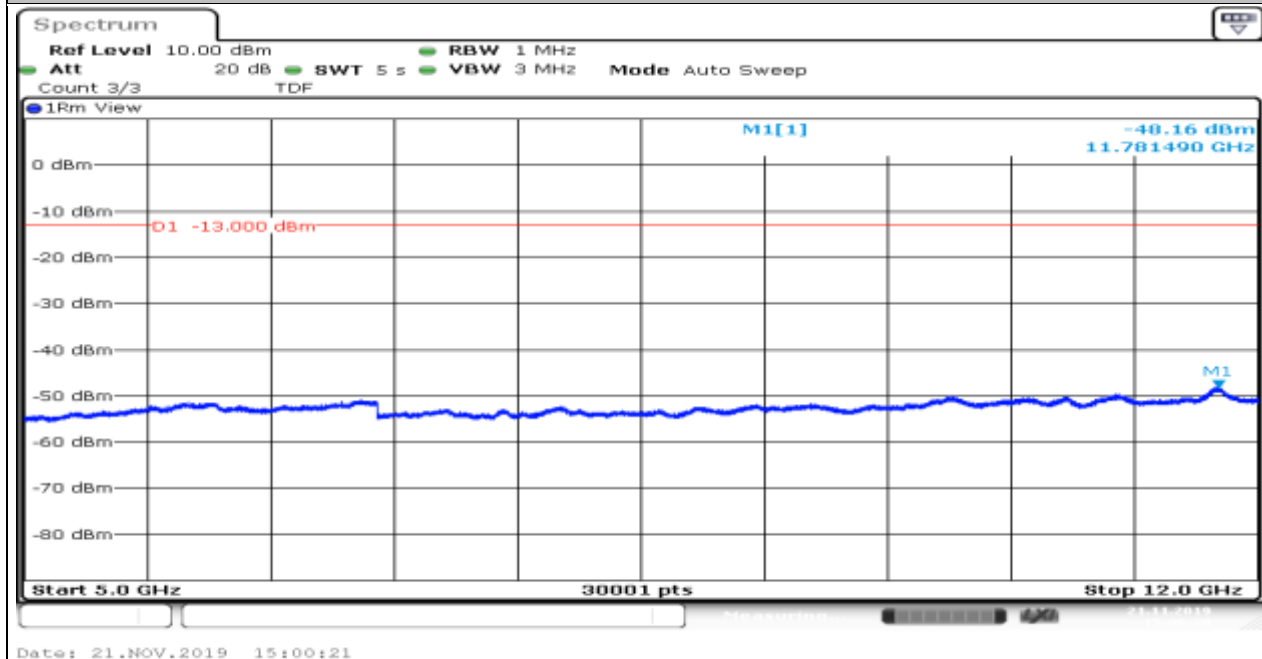
Band12_1.4MHz_16QAM_23095_6_0_Low_30_1000_-36.45_PASS__



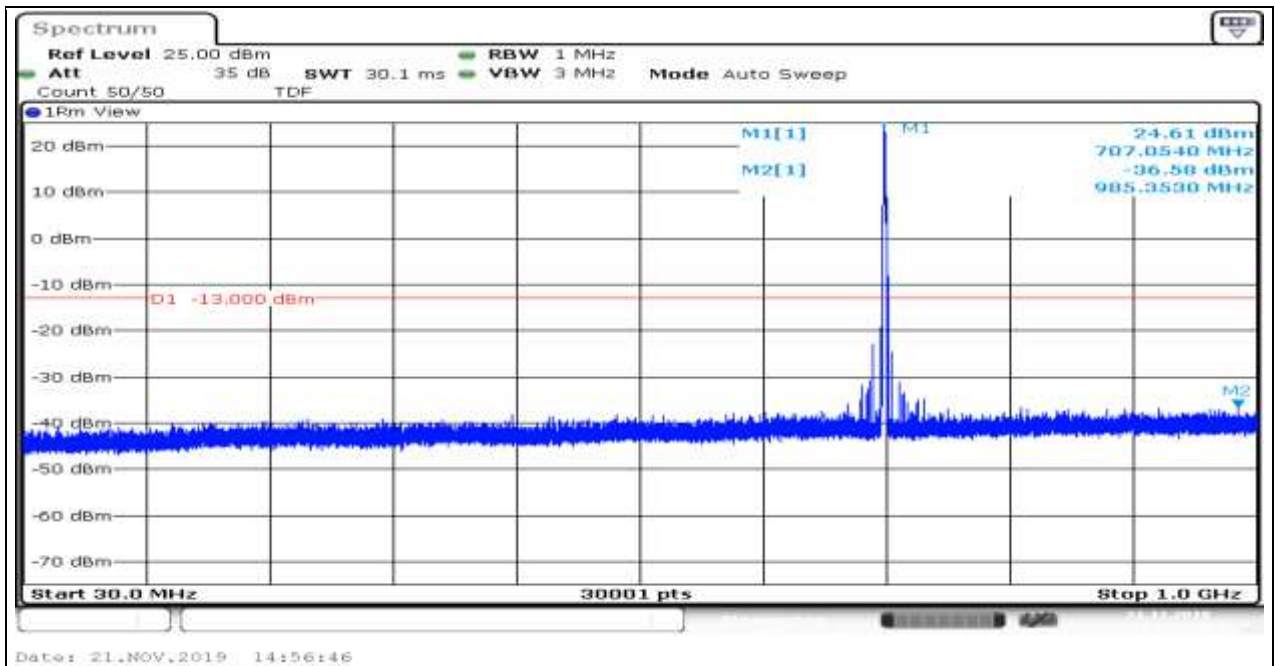
Band12_1.4MHz_16QAM_23095_6_0_Low_1000_5000_-38.89_PASS__



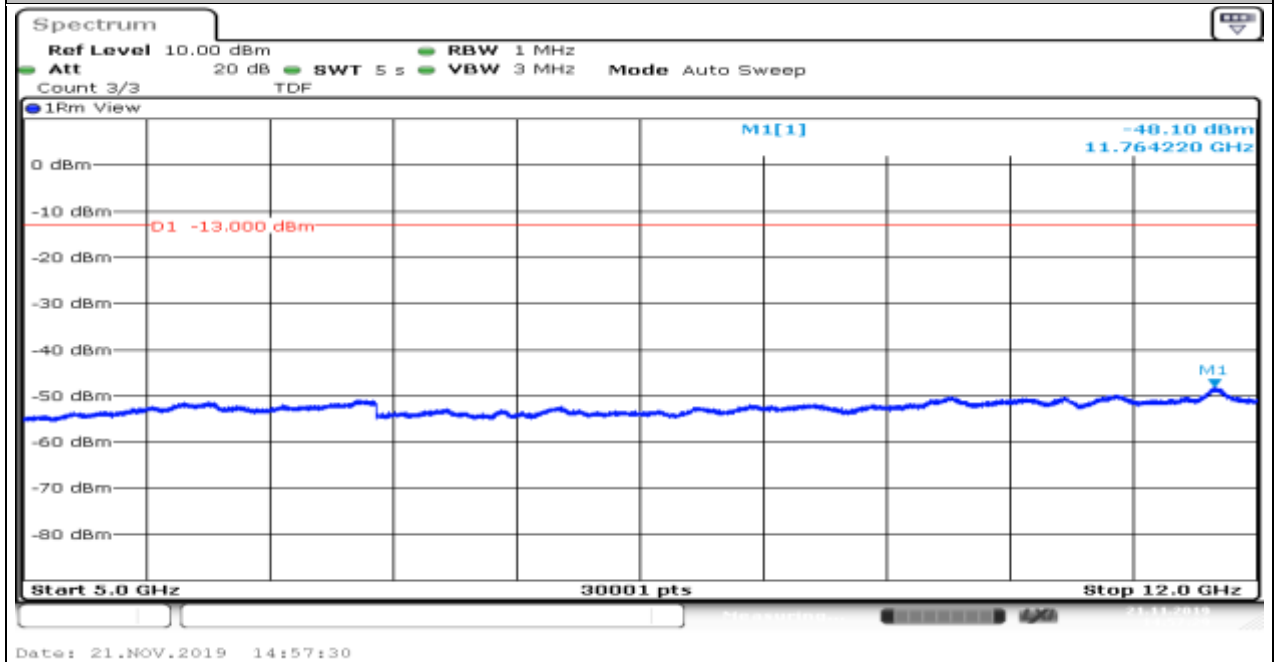
Band12_1.4MHz_16QAM_23095_6_0_Low_5000_12000_-48.16_PASS__



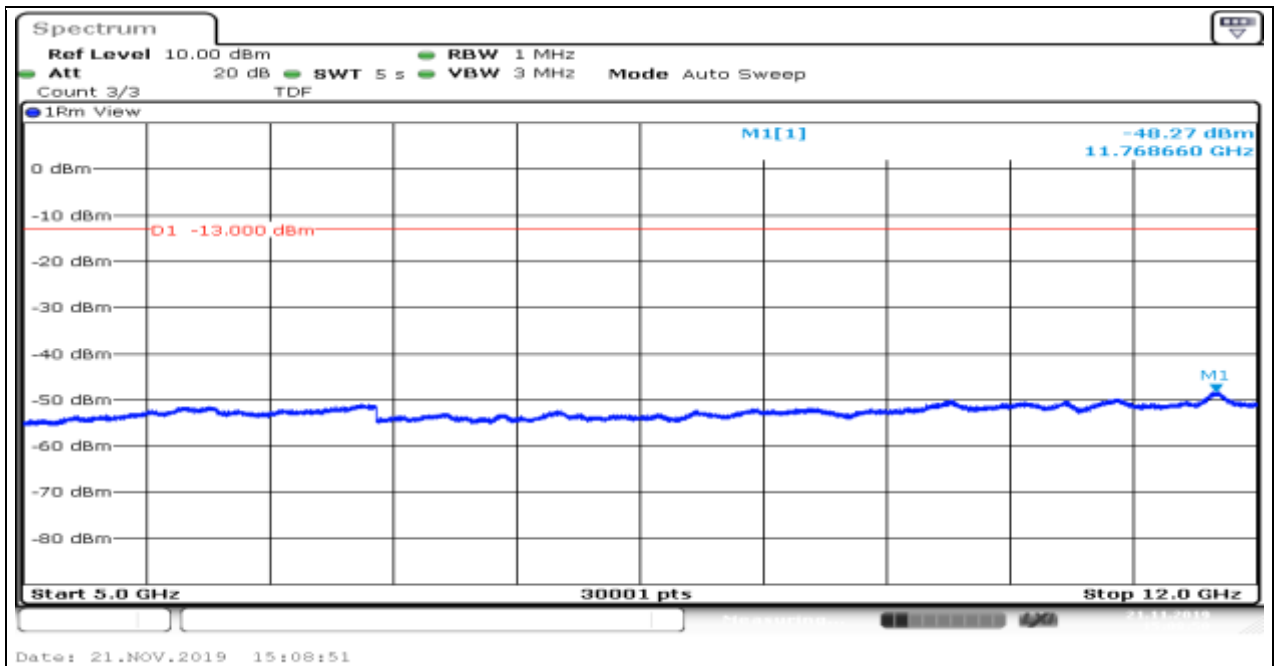
Band12_1.4MHz_16QAM_23095_1_0_Low_30_1000_-36.58_PASS__



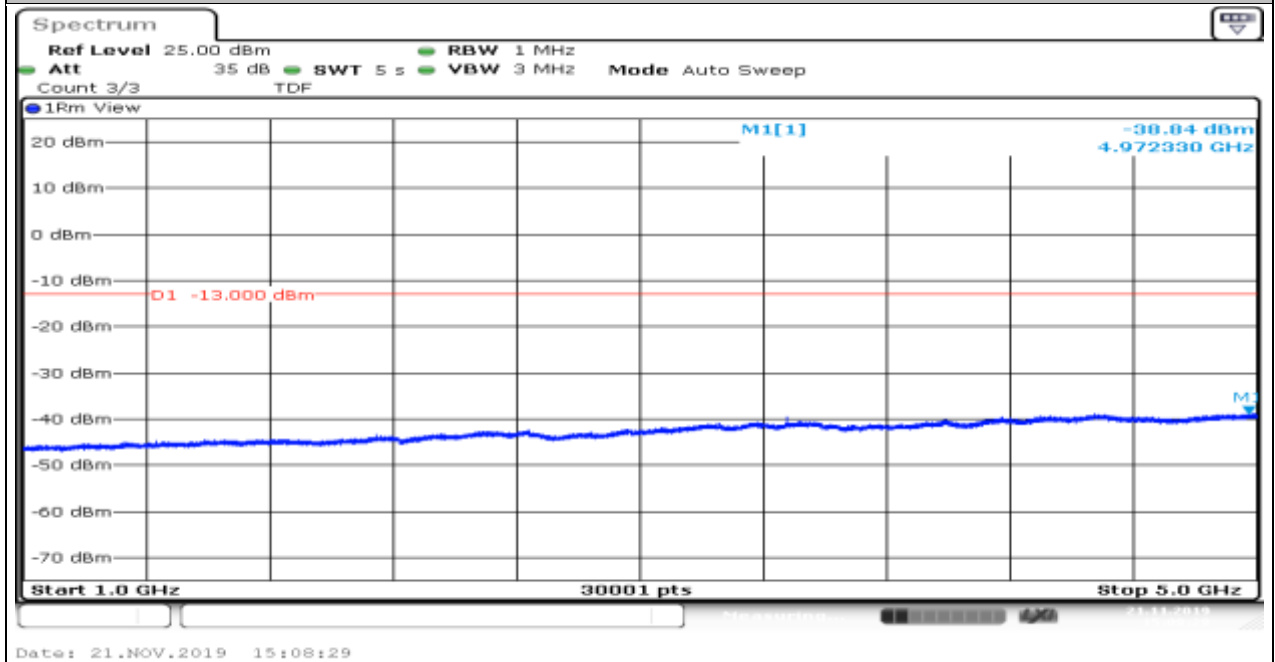
Band12_1.4MHz_16QAM_23095_1_0_Low_5000_12000_-48.1_PASS__



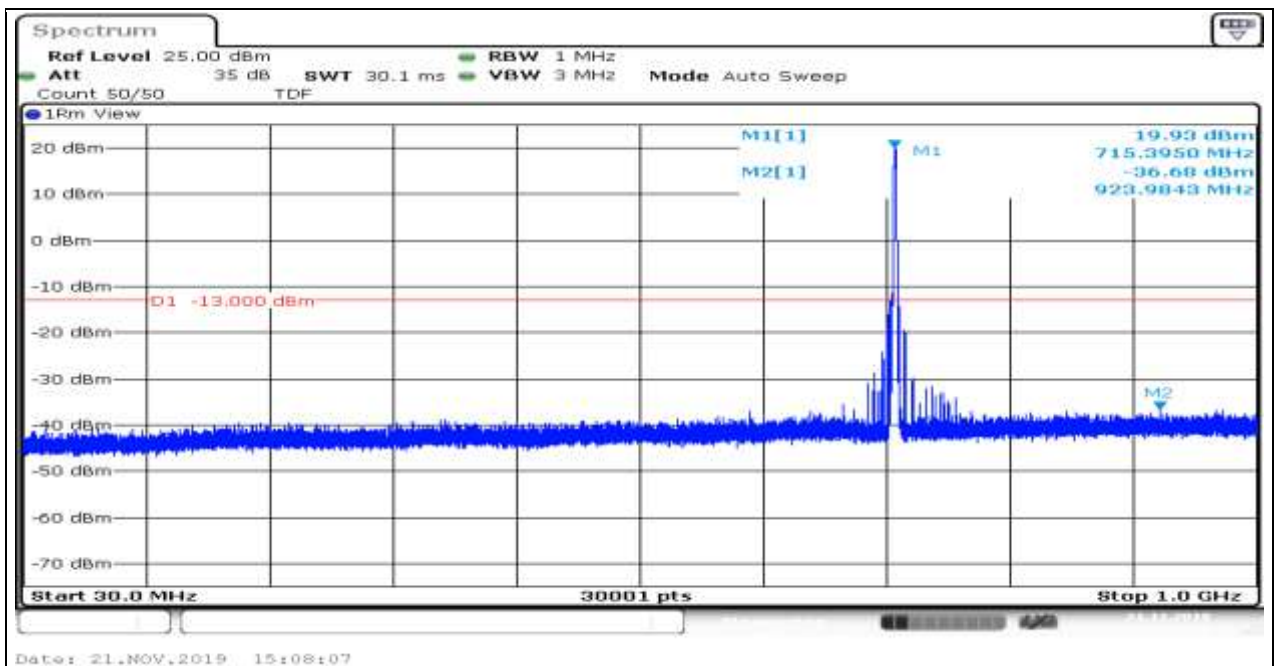
Band12_1.4MHz_16QAM_23173_6_0_Low_5000_12000_-48.27_PASS__



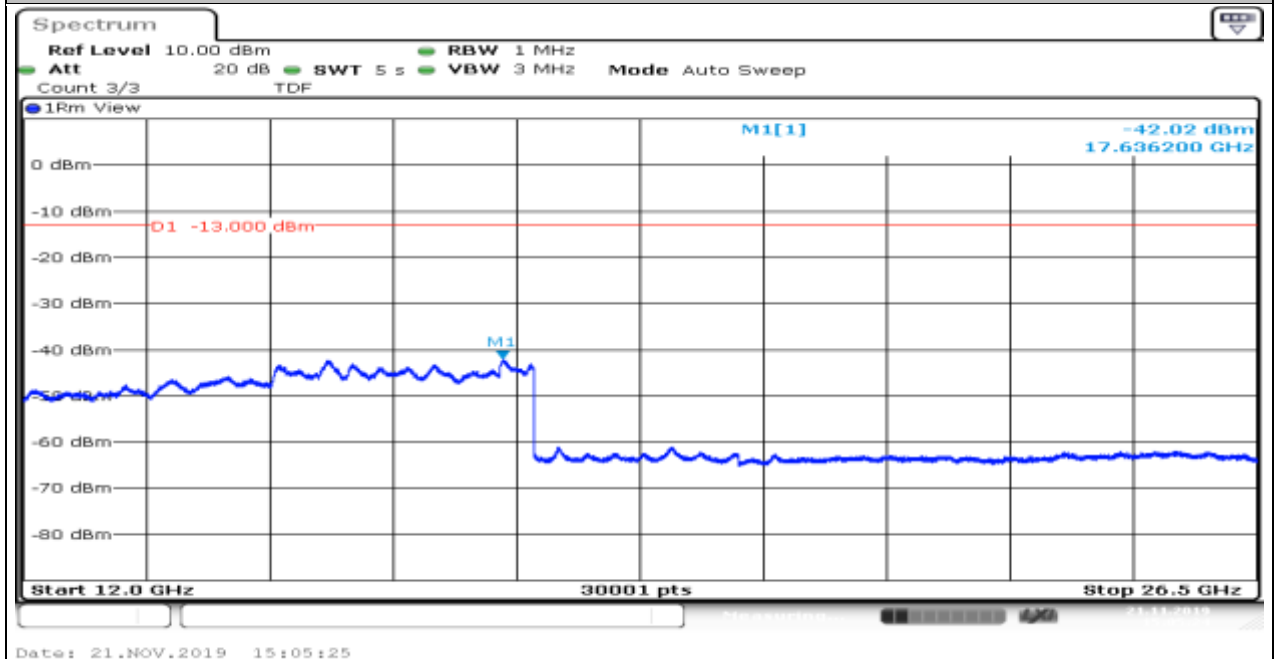
Band12_1.4MHz_16QAM_23173_6_0_Low_1000_5000_-38.84_PASS__



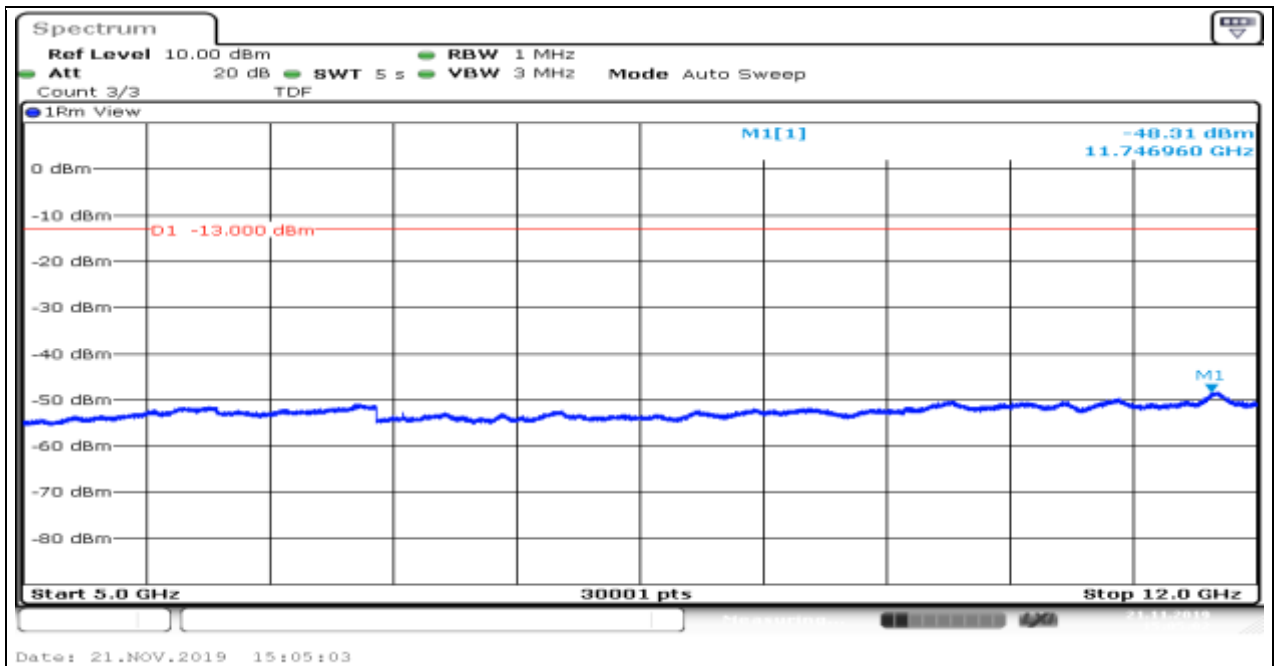
Band12_1.4MHz_16QAM_23173_6_0_Low_30_1000_-36.68_PASS__



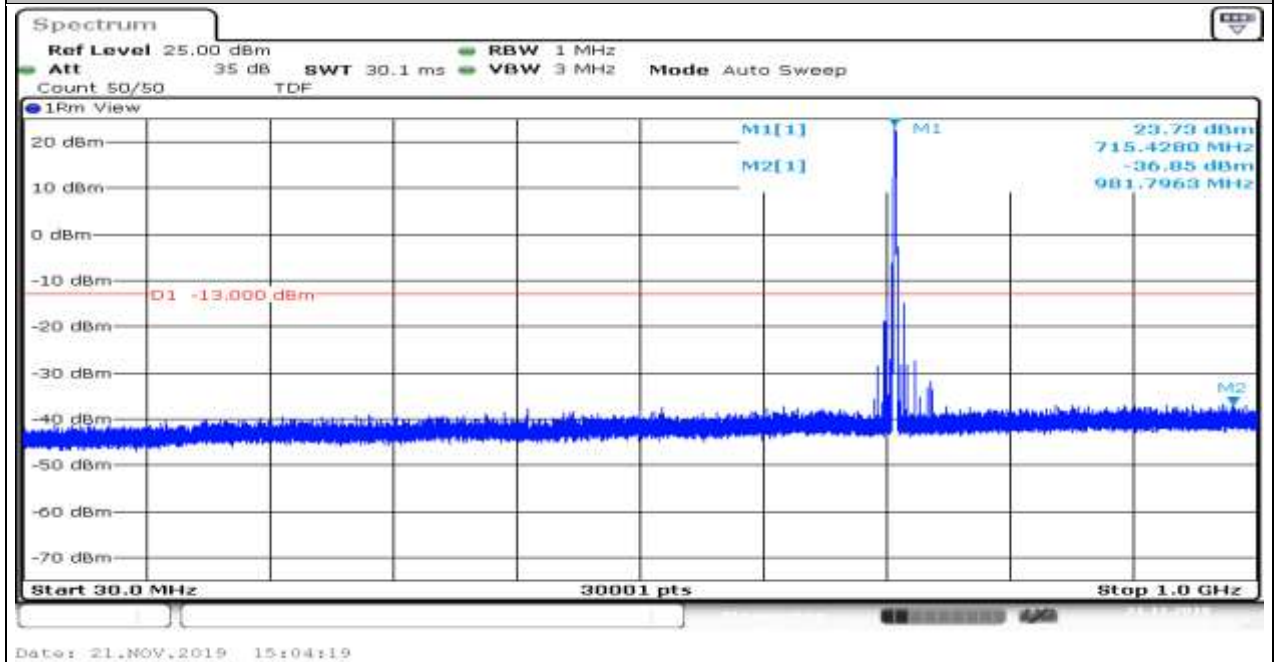
Band12_1.4MHz_16QAM_23173_1_5_Low_12000_26500_-42.02_PASS__



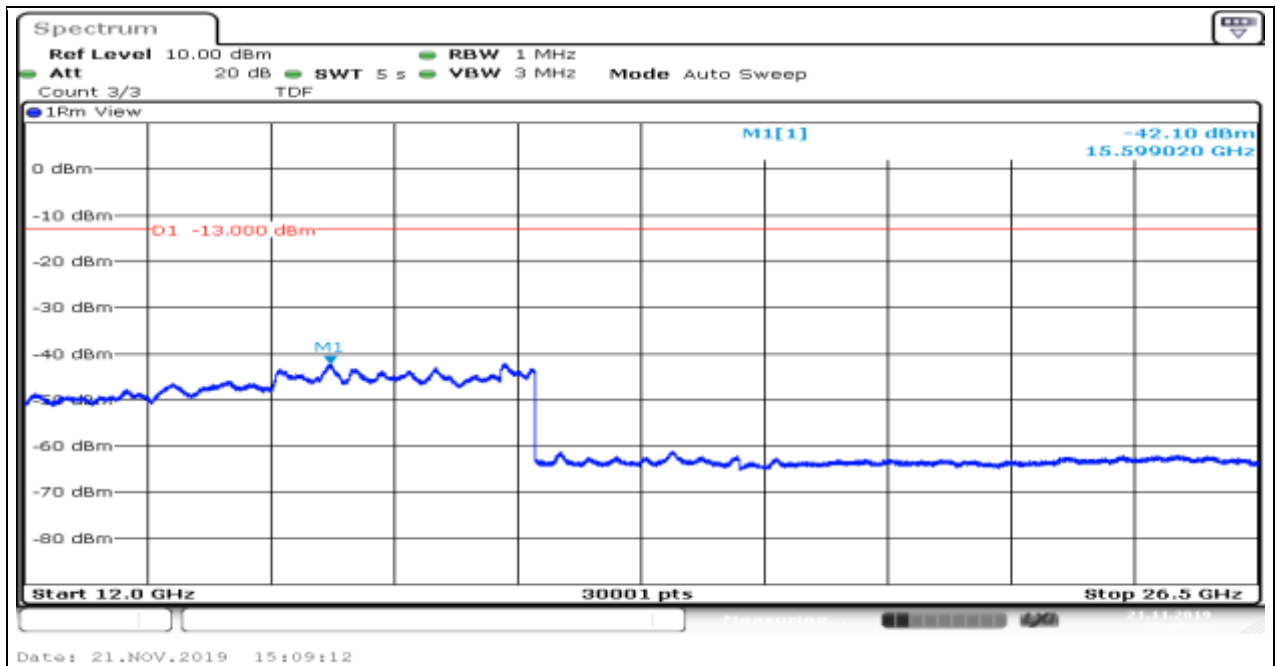
Band12_1.4MHz_16QAM_23173_1_5_Low_5000_12000_-48.31_PASS__



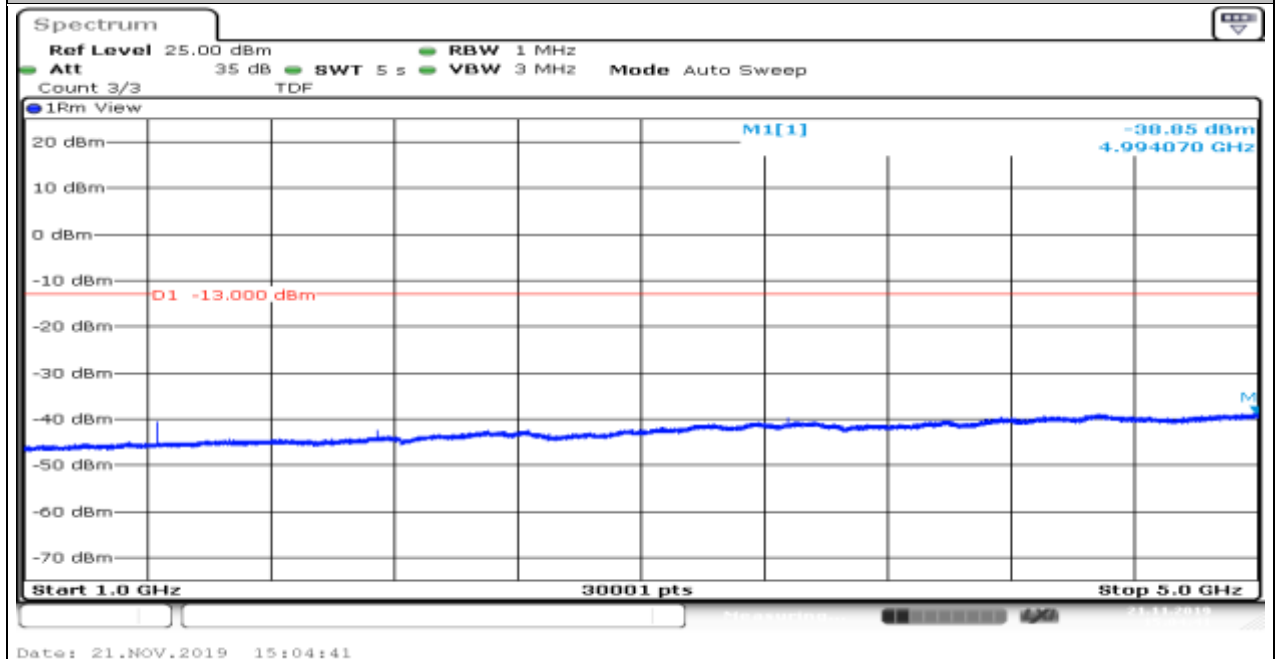
Band12_1.4MHz_16QAM_23173_1_5_Low_30_1000_-36.85_PASS__



Band12_1.4MHz_16QAM_23173_6_0_Low_12000_26500_-42.1_PASS__



Band12_1.4MHz_16QAM_23173_1_5_Low_1000_5000_-38.85_PASS_



Appendix D.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
Band12	1.4MHz	QPSK	23095	1	0	Low	NV	NT	-8	-0.01131	±2.5	PASS
Band12	1.4MHz	QPSK	23095	1	0	Low	LV	NT	-8.85	-0.01251	±2.5	PASS
Band12	1.4MHz	QPSK	23095	1	0	Low	HV	NT	-7.27	-0.01028	±2.5	PASS
Band12	1.4MHz	16QAM	23095	1	0	Low	NV	NT	77.71	0.109837	±2.5	PASS
Band12	1.4MHz	16QAM	23095	1	0	Low	HV	NT	77.66	0.109767	±2.5	PASS
Band12	1.4MHz	16QAM	23095	1	0	Low	LV	NT	77.93	0.110148	±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
Band12	1.4MHz	QPSK	23095	1	0	Low	NV	-30	-6.77	-0.00957	±2.5	PASS
Band12	1.4MHz	QPSK	23095	1	0	Low	NV	30	-6.39	-0.00903	±2.5	PASS
Band12	1.4MHz	QPSK	23095	1	0	Low	NV	80	-6.87	-0.00971	±2.5	PASS
Band12	1.4MHz	QPSK	23095	1	0	Low	NV	85	-7.31	-0.01033	±2.5	PASS
Band12	1.4MHz	QPSK	23095	1	0	Low	NV	70	-6.85	-0.00968	±2.5	PASS
Band12	1.4MHz	QPSK	23095	1	0	Low	NV	60	-6.52	-0.00922	±2.5	PASS
Band12	1.4MHz	QPSK	23095	1	0	Low	NV	50	-6.9	-0.00975	±2.5	PASS
Band12	1.4MHz	QPSK	23095	1	0	Low	NV	40	-6.68	-0.00944	±2.5	PASS
Band12	1.4MHz	QPSK	23095	1	0	Low	NV	20	-5.19	-0.00734	±2.5	PASS
Band12	1.4MHz	QPSK	23095	1	0	Low	NV	10	-8.78	-0.01241	±2.5	PASS
Band12	1.4MHz	QPSK	23095	1	0	Low	NV	0	-5.98	-0.00845	±2.5	PASS
Band12	1.4MHz	QPSK	23095	1	0	Low	NV	-20	-10.2	-0.01442	±2.5	PASS
Band12	1.4MHz	QPSK	23095	1	0	Low	NV	-40	-7.74	-0.01094	±2.5	PASS
Band12	1.4MHz	QPSK	23095	1	0	Low	NV	-10	-6.29	-0.00889	±2.5	PASS
Band12	1.4MHz	16QAM	23095	1	0	Low	NV	30	79.38	0.112198	±2.5	PASS
Band12	1.4MHz	16QAM	23095	1	0	Low	NV	40	77.42	0.109428	±2.5	PASS
Band12	1.4MHz	16QAM	23095	1	0	Low	NV	-40	77.22	0.109145	±2.5	PASS
Band12	1.4MHz	16QAM	23095	1	0	Low	NV	-30	75.14	0.106205	±2.5	PASS
Band12	1.4MHz	16QAM	23095	1	0	Low	NV	-20	76.75	0.108481	±2.5	PASS
Band12	1.4MHz	16QAM	23095	1	0	Low	NV	-10	75.57	0.106813	±2.5	PASS
Band12	1.4MHz	16QAM	23095	1	0	Low	NV	0	76.62	0.108297	±2.5	PASS
Band12	1.4MHz	16QAM	23095	1	0	Low	NV	10	78.64	0.111152	±2.5	PASS
Band12	1.4MHz	16QAM	23095	1	0	Low	NV	50	75.77	0.107095	±2.5	PASS
Band12	1.4MHz	16QAM	23095	1	0	Low	NV	60	76.83	0.108594	±2.5	PASS
Band12	1.4MHz	16QAM	23095	1	0	Low	NV	70	76.79	0.108537	±2.5	PASS
Band12	1.4MHz	16QAM	23095	1	0	Low	NV	80	78.98	0.111633	±2.5	PASS
Band12	1.4MHz	16QAM	23095	1	0	Low	NV	85	76.72	0.108438	±2.5	PASS
Band12	1.4MHz	16QAM	23095	1	0	Low	NV	20	76.15	0.107633	±2.5	PASS