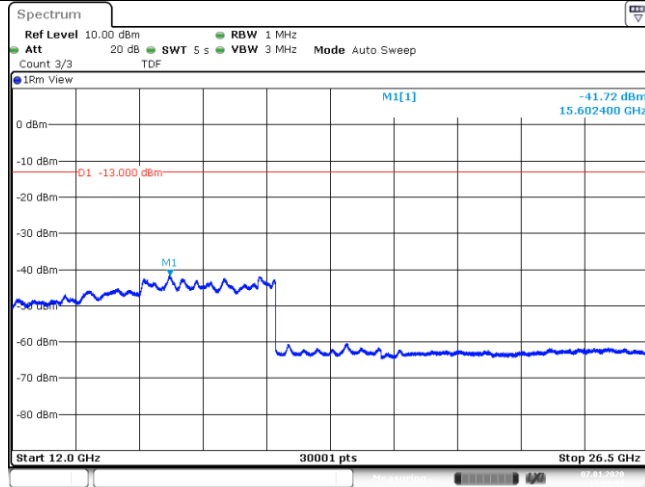
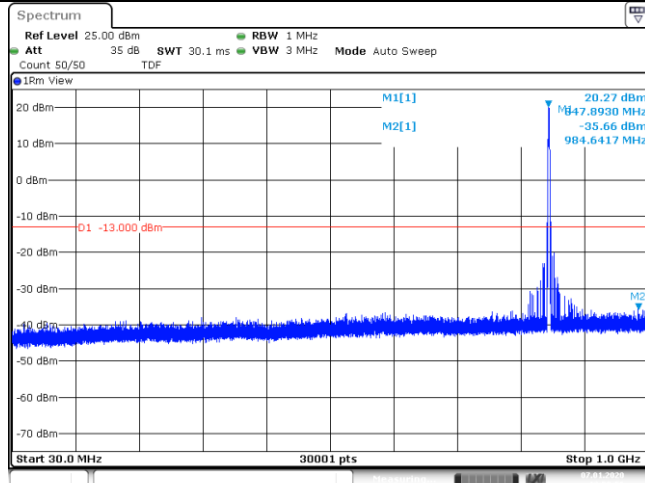


Band26_1.4MHz_16QAM_27033_6_0_Low_12000_26500_-41.72_PASS__



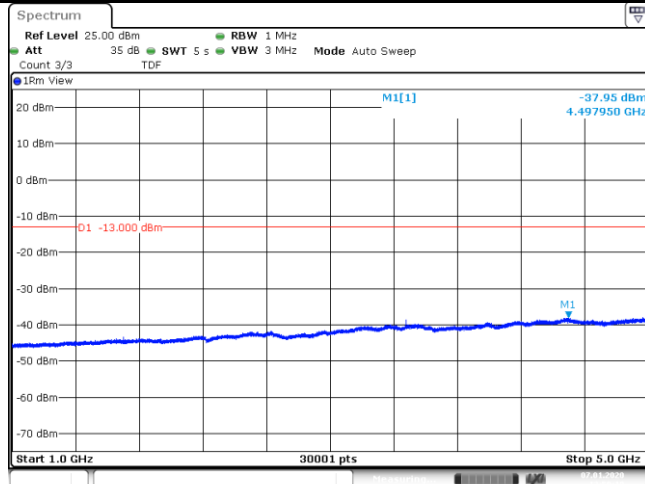
Date: 7.JAN.2020 14:00:02

Band26_1.4MHz_16QAM_27033_6_0_Low_30_1000_-35.66_PASS__

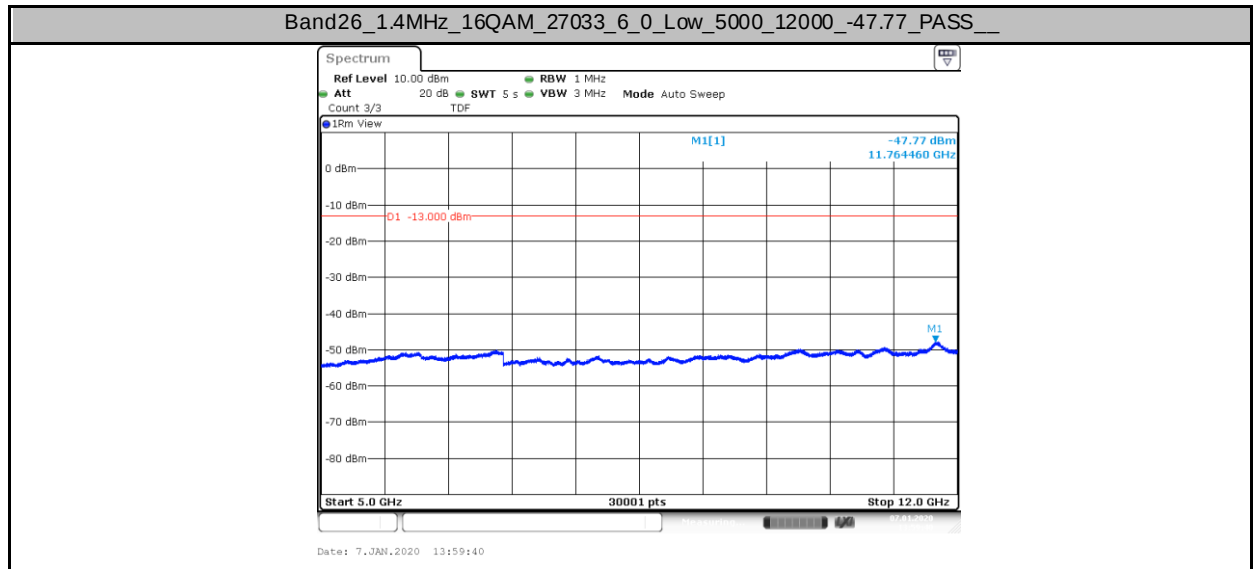


Date: 7.JAN.2020 13:58:56

Band26_1.4MHz_16QAM_27033_6_0_Low_1000_5000_-37.95_PASS__



Date: 7.JAN.2020 13:59:18



Appendix H.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
Band26	1.4MHz	QPSK	26915	1	0	Low	HV	NT	-14.38	-0.017191	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	LV	NT	-15.71	-0.018781	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	NT	-16.09	-0.019235	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	HV	NT	-14.29	-0.017083	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	LV	NT	-14.38	-0.017191	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	NT	-14.02	-0.016760	±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
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	70	-13.05	-0.015601	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	20	-14.93	-0.017848	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	-30	-14.26	-0.017047	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	-20	-13.72	-0.016402	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	-10	-13.96	-0.016689	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	0	-16.22	-0.019390	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	10	-13.90	-0.016617	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	30	-13.48	-0.016115	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	40	-12.66	-0.015134	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	60	-12.43	-0.014860	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	-40	-14.95	-0.017872	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	80	-15.05	-0.017992	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	85	-15.66	-0.018721	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	50	-15.65	-0.018709	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	-20	-14.76	-0.017645	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	80	-11.80	-0.014106	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	70	-15.02	-0.017956	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	60	-13.33	-0.015935	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	50	-14.86	-0.017764	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	40	-12.52	-0.014967	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	30	-13.15	-0.015720	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	20	-14.78	-0.017669	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	10	-12.43	-0.014860	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	-10	-13.72	-0.016402	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	-30	-13.63	-0.016294	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	-40	-13.92	-0.016641	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	85	-15.61	-0.018661	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	0	-14.56	-0.017406	±2.5	PASS

Appendix I: Test Results of Band 66 for eMTC operation

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

Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB	NBIndex	Result (dBm)	EIRP		Limit (watts)	Verdict
					Start			dBm	Watts		
Band66	1.4MHz	QPSK	131979	1	0	Low	23.44	25.58	0.361	1	PASS
Band66	1.4MHz	QPSK	132322	1	0	Low	23.28	25.42	0.348	1	PASS
Band66	1.4MHz	QPSK	132665	1	5	Low	23.13	25.27	0.337	1	PASS
Band66	1.4MHz	QPSK	131979	6	0	Low	21.23	23.37	0.217	1	PASS
Band66	1.4MHz	QPSK	132322	6	0	Low	21.13	23.27	0.212	1	PASS
Band66	1.4MHz	QPSK	132665	6	0	Low	21.10	23.24	0.211	1	PASS
Band66	1.4MHz	16QAM	131979	1	0	Low	22.43	24.57	0.286	1	PASS
Band66	1.4MHz	16QAM	132322	1	0	Low	22.37	24.51	0.282	1	PASS
Band66	1.4MHz	16QAM	132665	1	5	Low	22.61	24.75	0.299	1	PASS
Band66	1.4MHz	16QAM	131979	6	0	Low	21.24	23.38	0.218	1	PASS
Band66	1.4MHz	16QAM	132322	6	0	Low	21.13	23.27	0.212	1	PASS
Band66	1.4MHz	16QAM	132665	6	0	Low	21.09	23.23	0.210	1	PASS
Band66	3MHz	QPSK	131987	1	0	Low	23.43	25.57	0.361	1	PASS
Band66	3MHz	QPSK	132322	1	0	Low	23.31	25.45	0.351	1	PASS
Band66	3MHz	QPSK	132657	1	5	High	23.18	25.32	0.340	1	PASS
Band66	3MHz	QPSK	131987	6	0	Low	21.19	23.33	0.215	1	PASS
Band66	3MHz	QPSK	132322	6	0	Low	21.12	23.26	0.212	1	PASS
Band66	3MHz	QPSK	132657	6	0	High	21.13	23.27	0.212	1	PASS
Band66	3MHz	16QAM	131987	1	0	Low	22.47	24.61	0.289	1	PASS
Band66	3MHz	16QAM	132322	1	0	Low	22.35	24.49	0.281	1	PASS
Band66	3MHz	16QAM	132657	1	5	High	22.23	24.37	0.274	1	PASS
Band66	3MHz	16QAM	131987	6	0	Low	21.26	23.4	0.219	1	PASS
Band66	3MHz	16QAM	132322	6	0	Low	21.21	23.35	0.216	1	PASS
Band66	3MHz	16QAM	132657	6	0	High	21.12	23.26	0.212	1	PASS
Band66	5MHz	QPSK	131997	1	0	Low	23.35	25.49	0.354	1	PASS
Band66	5MHz	QPSK	132322	1	0	Low	23.11	25.25	0.335	1	PASS
Band66	5MHz	QPSK	132647	1	5	High	23.07	25.21	0.332	1	PASS
Band66	5MHz	QPSK	132647	3	3	High	22.07	24.21	0.264	1	PASS
Band66	5MHz	QPSK	131997	6	0	Low	22.25	24.39	0.275	1	PASS
Band66	5MHz	QPSK	132322	6	0	Low	22.00	24.14	0.259	1	PASS
Band66	5MHz	16QAM	131997	1	0	Low	23.49	25.63	0.366	1	PASS
Band66	5MHz	16QAM	132322	1	0	Low	23.07	25.21	0.332	1	PASS
Band66	5MHz	16QAM	132647	1	5	High	23.31	25.45	0.351	1	PASS
Band66	5MHz	16QAM	132647	3	3	High	22.26	24.4	0.275	1	PASS
Band66	5MHz	16QAM	131997	6	0	Low	22.25	24.39	0.275	1	PASS
Band66	5MHz	16QAM	132322	6	0	Low	21.99	24.13	0.259	1	PASS
Band66	10MHz	QPSK	132022	1	0	Low	23.33	25.47	0.352	1	PASS
Band66	10MHz	QPSK	132322	1	0	Low	23.07	25.21	0.332	1	PASS
Band66	10MHz	QPSK	132622	1	5	High	23.07	25.21	0.332	1	PASS
Band66	10MHz	QPSK	132022	5	0	Low	22.26	24.4	0.275	1	PASS
Band66	10MHz	QPSK	132322	5	0	Low	21.97	24.11	0.258	1	PASS
Band66	10MHz	QPSK	132622	5	1	High	22.13	24.27	0.267	1	PASS
Band66	10MHz	16QAM	132022	1	0	Low	23.44	25.58	0.361	1	PASS
Band66	10MHz	16QAM	132322	1	0	Low	23.20	25.34	0.342	1	PASS
Band66	10MHz	16QAM	132622	1	5	High	23.39	25.53	0.357	1	PASS
Band66	10MHz	16QAM	132022	5	0	Low	22.32	24.46	0.279	1	PASS
Band66	10MHz	16QAM	132322	5	0	Low	22.07	24.21	0.264	1	PASS
Band66	10MHz	16QAM	132622	5	1	High	22.16	24.3	0.269	1	PASS
Band66	15MHz	QPSK	132047	1	0	Low	23.33	25.47	0.352	1	PASS
Band66	15MHz	QPSK	132322	1	0	Low	23.09	25.23	0.333	1	PASS
Band66	15MHz	QPSK	132597	1	5	High	23.15	25.29	0.338	1	PASS

Produkte
Products

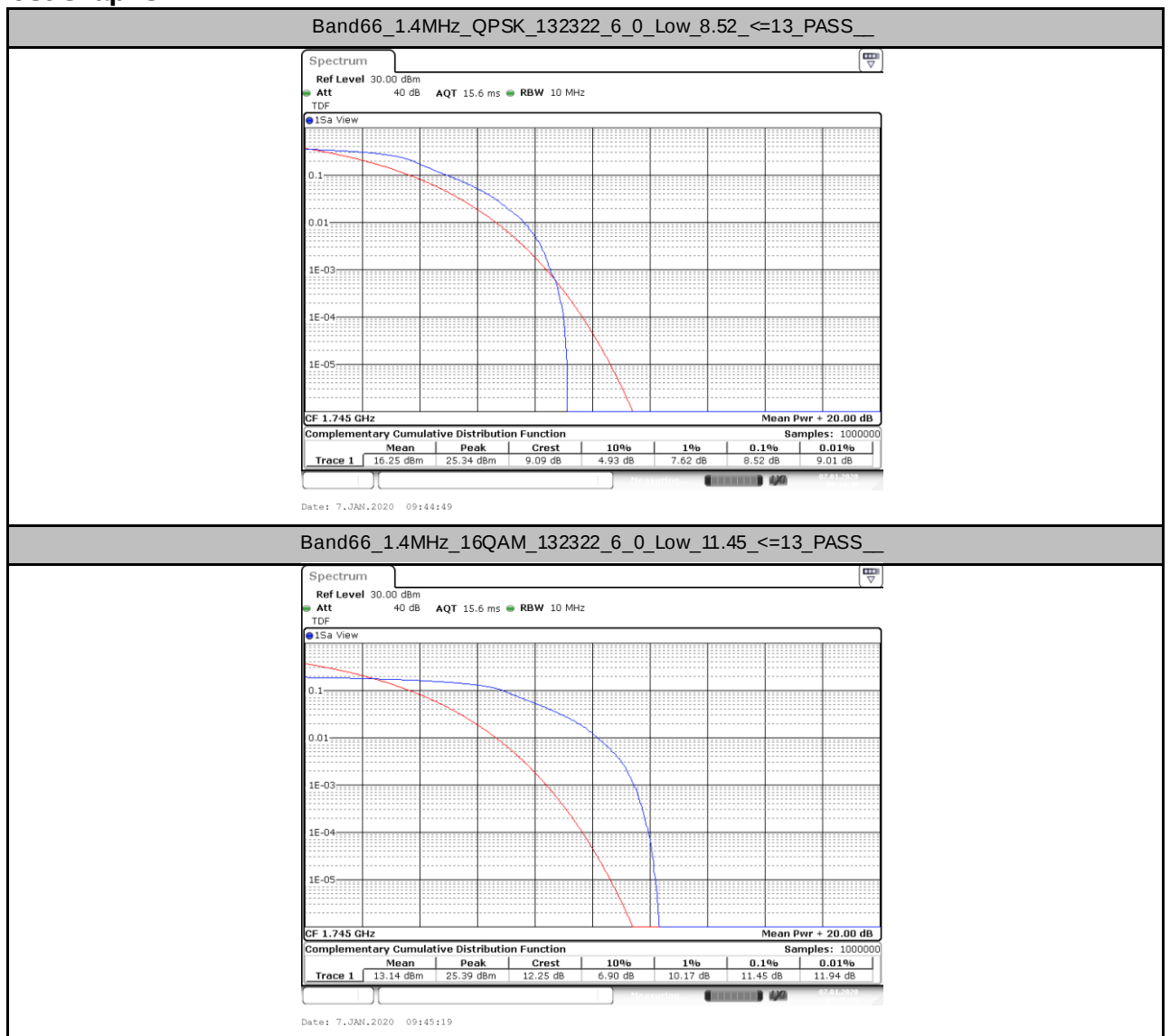
Band66	15MHz	QPSK	132047	6	0	Low	23.14	25.28	0.337	1	PASS
Band66	15MHz	QPSK	132322	6	0	Low	22.90	25.04	0.319	1	PASS
Band66	15MHz	QPSK	132597	6	0	High	23.00	25.14	0.327	1	PASS
Band66	15MHz	16QAM	132047	1	0	Low	23.47	25.61	0.364	1	PASS
Band66	15MHz	16QAM	132322	1	0	Low	23.24	25.38	0.345	1	PASS
Band66	15MHz	16QAM	132597	1	5	High	23.39	25.53	0.357	1	PASS
Band66	15MHz	16QAM	132047	6	0	Low	23.14	25.28	0.337	1	PASS
Band66	15MHz	16QAM	132322	6	0	Low	22.95	25.09	0.323	1	PASS
Band66	15MHz	16QAM	132597	6	0	High	23.00	25.14	0.327	1	PASS
Band66	20MHz	QPSK	132072	1	0	Low	23.20	25.34	0.342	1	PASS
Band66	20MHz	QPSK	132322	1	0	Low	23.07	25.21	0.332	1	PASS
Band66	20MHz	QPSK	132572	1	5	High	23.08	25.22	0.333	1	PASS
Band66	20MHz	QPSK	132072	6	0	Low	23.12	25.26	0.336	1	PASS
Band66	20MHz	QPSK	132322	6	0	Low	22.89	25.03	0.318	1	PASS
Band66	20MHz	QPSK	132572	6	0	High	22.98	25.12	0.325	1	PASS
Band66	20MHz	16QAM	132072	1	0	Low	23.34	25.48	0.353	1	PASS
Band66	20MHz	16QAM	132322	1	0	Low	23.18	25.32	0.340	1	PASS
Band66	20MHz	16QAM	132572	1	5	High	23.36	25.5	0.355	1	PASS
Band66	20MHz	16QAM	132072	6	0	Low	23.12	25.26	0.336	1	PASS
Band66	20MHz	16QAM	132322	6	0	Low	22.88	25.02	0.318	1	PASS
Band66	20MHz	16QAM	132572	6	0	High	22.97	25.11	0.324	1	PASS

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

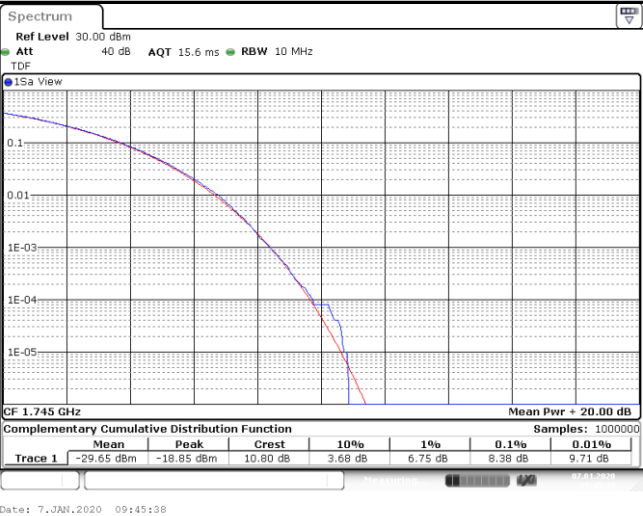
Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result(dB)	Limit(dB)	Verdict
Band66	1.4MHz	QPSK	132322	6	0	Low	8.52	<=13	PASS
Band66	1.4MHz	16QAM	132322	6	0	Low	11.45	<=13	PASS
Band66	3MHz	QPSK	132322	6	0	Low	8.38	<=13	PASS
Band66	3MHz	16QAM	132322	6	0	Low	8.99	<=13	PASS
Band66	5MHz	QPSK	132322	6	0	Low	8.41	<=13	PASS
Band66	5MHz	16QAM	132322	6	0	Low	9.04	<=13	PASS
Band66	10MHz	QPSK	132322	6	0	Low	4.93	<=13	PASS
Band66	10MHz	16QAM	132322	6	0	Low	11.68	<=13	PASS
Band66	15MHz	QPSK	132322	6	0	Low	8.52	<=13	PASS
Band66	15MHz	16QAM	132322	6	0	Low	11.71	<=13	PASS
Band66	20MHz	QPSK	132322	6	0	Low	9.62	<=13	PASS
Band66	20MHz	16QAM	132322	6	0	Low	11.71	<=13	PASS

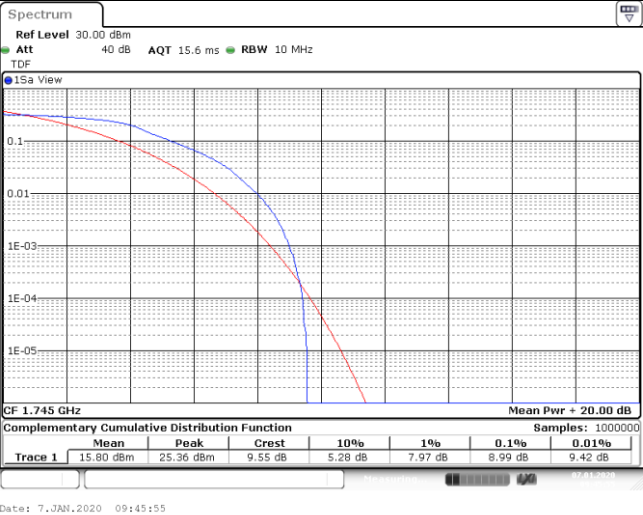
Test Graphs



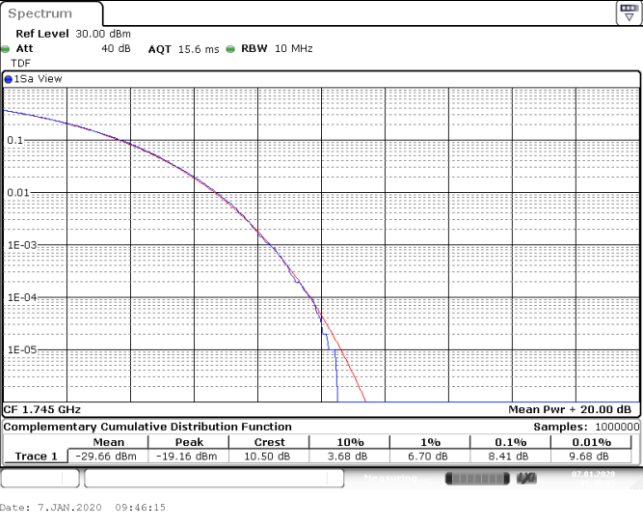
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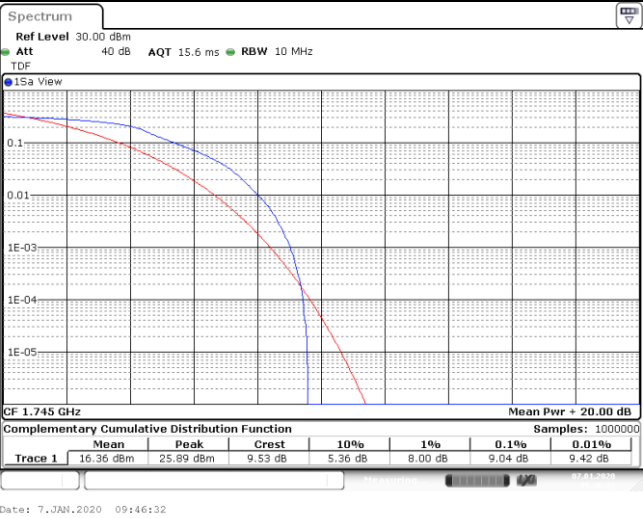
Band66_3MHz_16QAM_132322_6_0_Low_8.99_<=13_PASS_



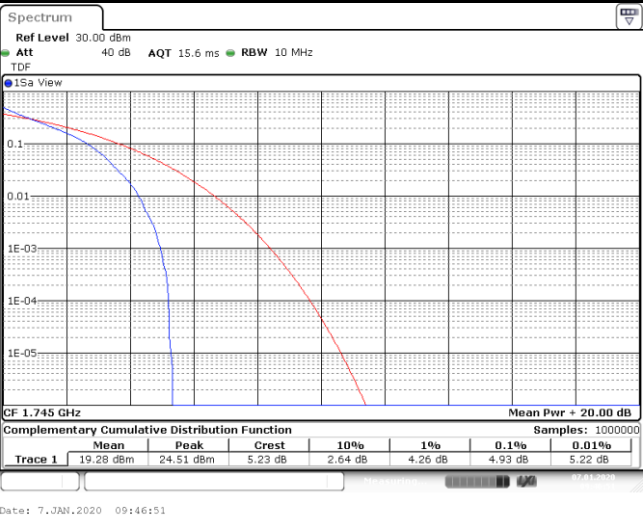
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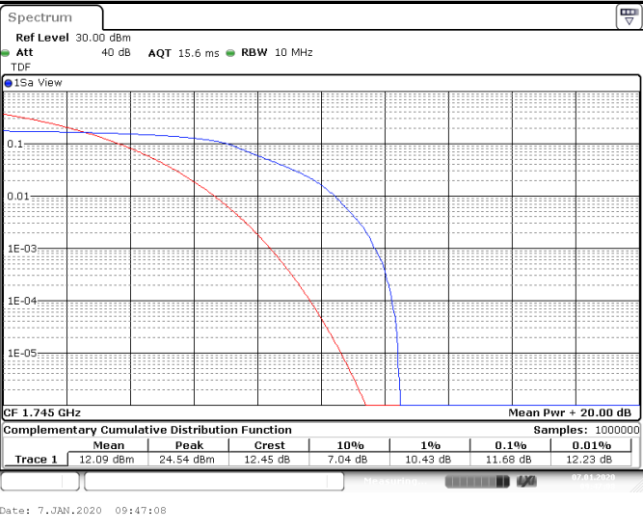
Band66_5MHz_16QAM_132322_6_0_Low_9.04_<=13_PASS__



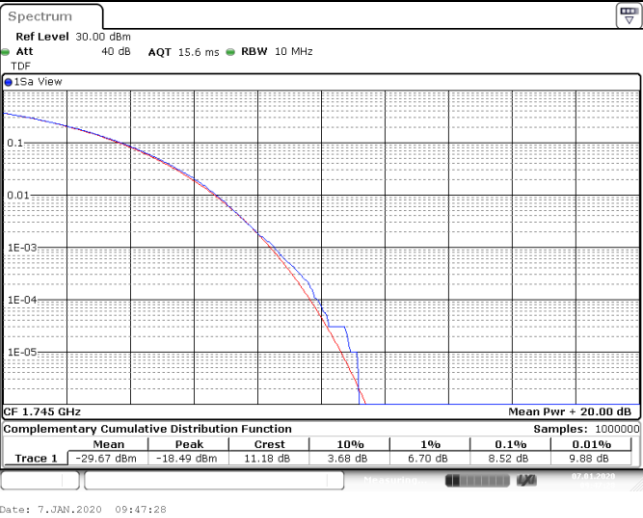
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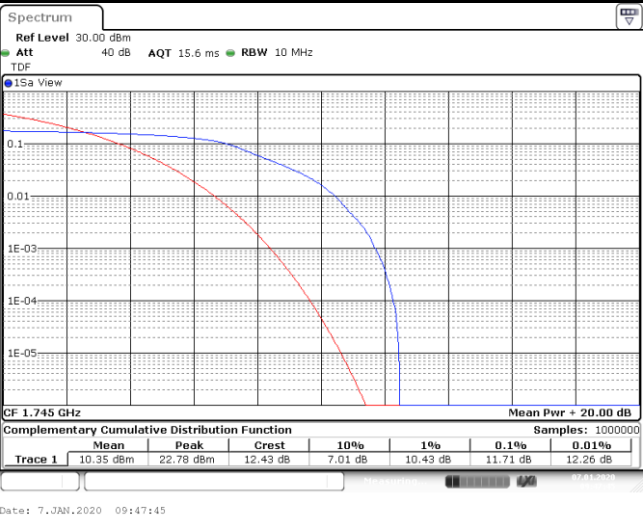
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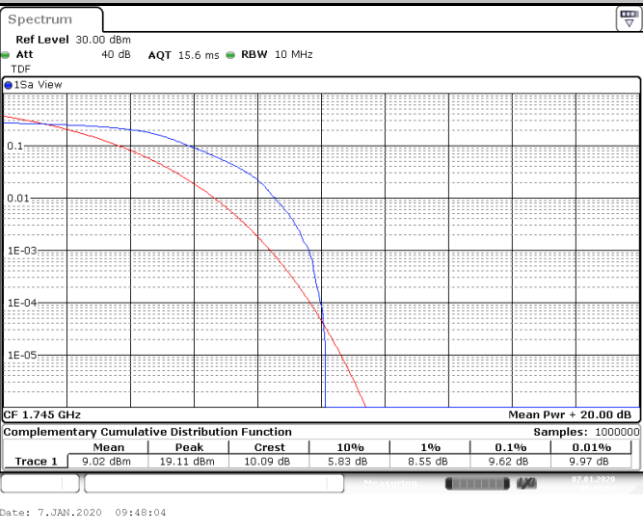
Band66_15MHz_QPSK_132322_6_0_Low_8.52_<=13_PASS__

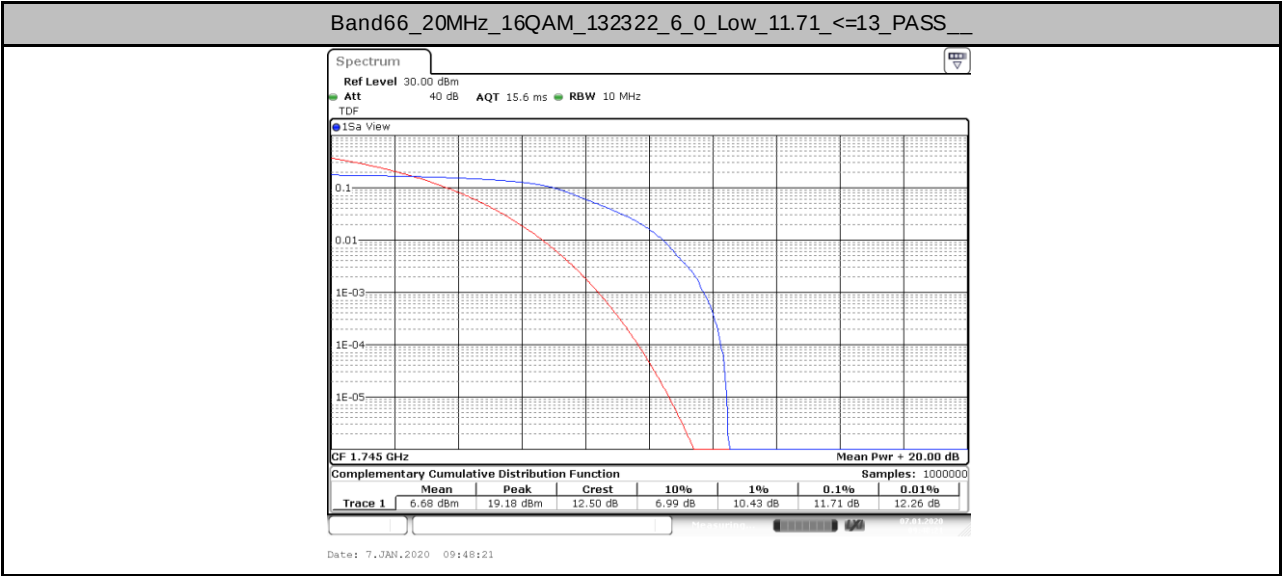


Band66_15MHz_16QAM_132322_6_0_Low_11.71_<=13_PASS__



Band66_20MHz_QPSK_132322_6_0_Low_9.62_<=13_PASS__



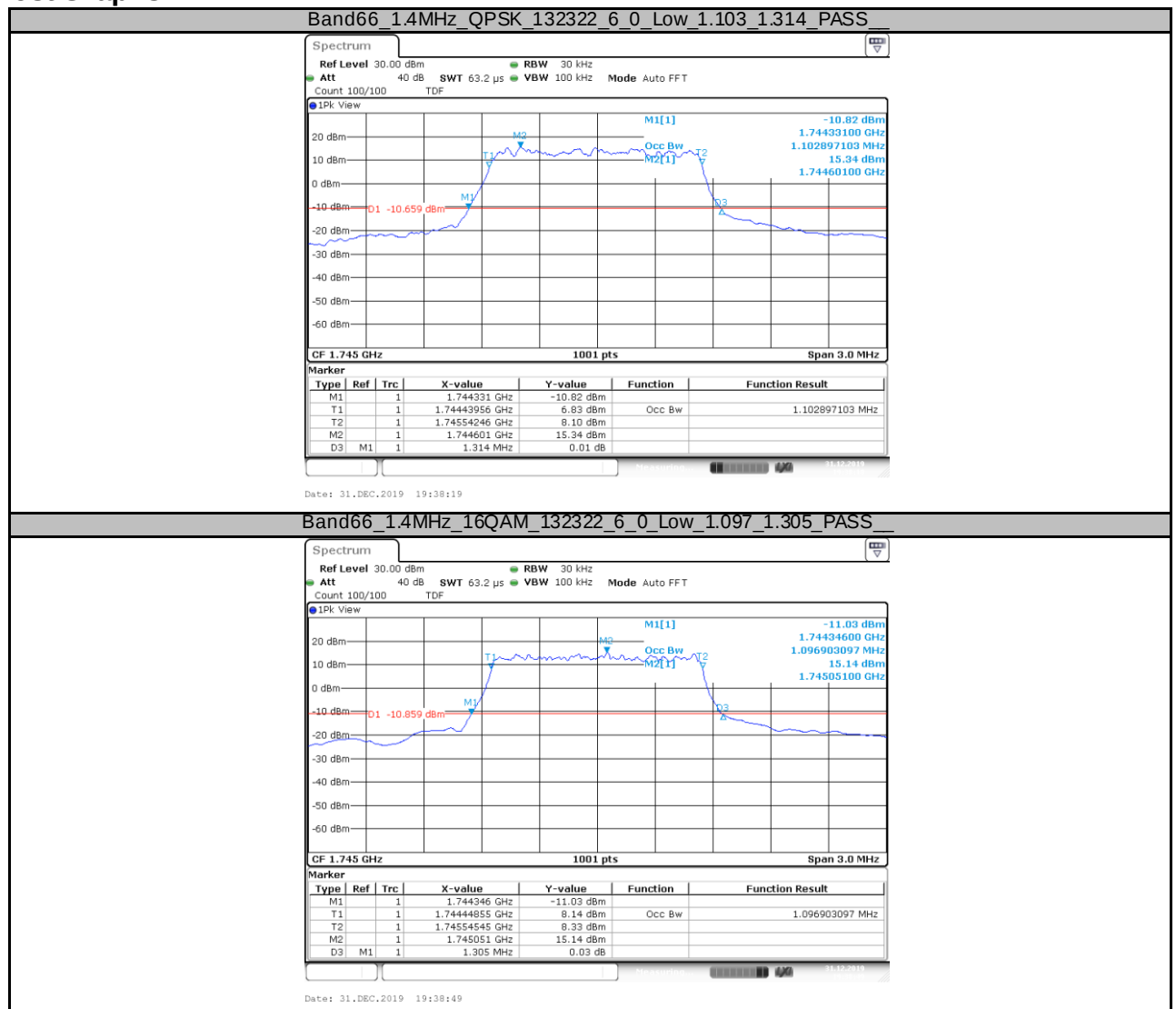


Appendix I.3: 26dB Bandwidth and Occupied Bandwidth for M1

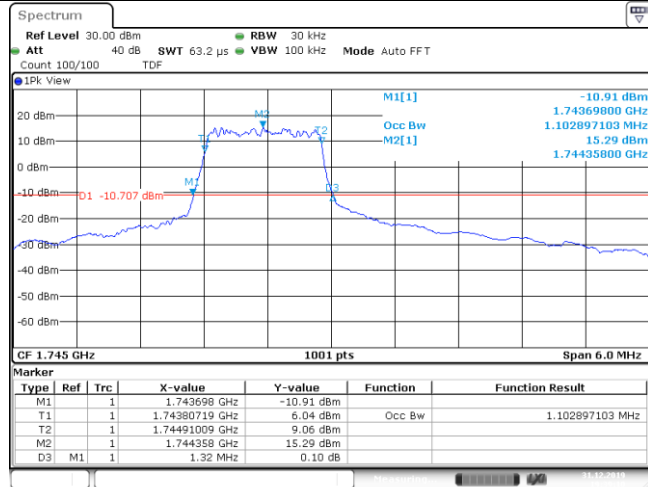
Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band66	1.4MHz	QPSK	132322	6	0	Low	1.103	1.314	PASS
Band66	1.4MHz	16QAM	132322	6	0	Low	1.097	1.305	PASS
Band66	3MHz	QPSK	132322	6	0	Low	1.103	1.320	PASS
Band66	3MHz	16QAM	132322	6	0	Low	1.097	1.320	PASS
Band66	5MHz	QPSK	132322	6	0	Low	1.099	1.330	PASS
Band66	5MHz	16QAM	132322	6	0	Low	1.099	1.330	PASS
Band66	10MHz	QPSK	132322	6	0	Low	1.099	1.320	PASS
Band66	10MHz	16QAM	132322	6	0	Low	1.099	1.320	PASS
Band66	15MHz	QPSK	132322	6	0	Low	1.109	1.350	PASS
Band66	15MHz	16QAM	132322	6	0	Low	1.109	1.350	PASS
Band66	20MHz	QPSK	132322	6	0	Low	1.119	1.400	PASS
Band66	20MHz	16QAM	132322	6	0	Low	1.119	1.400	PASS

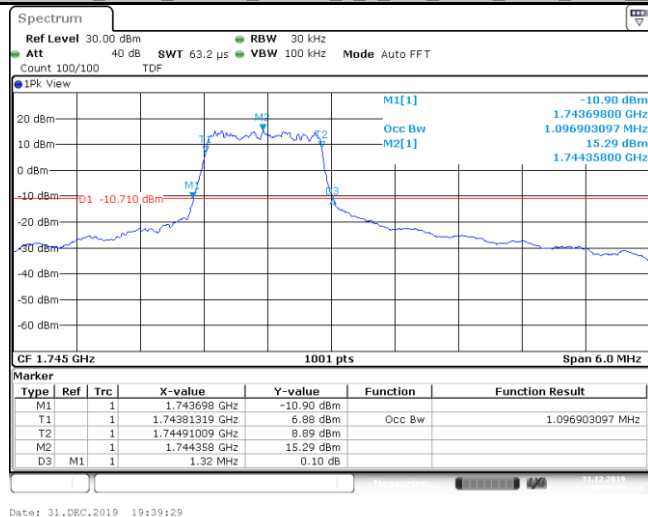
Test Graphs



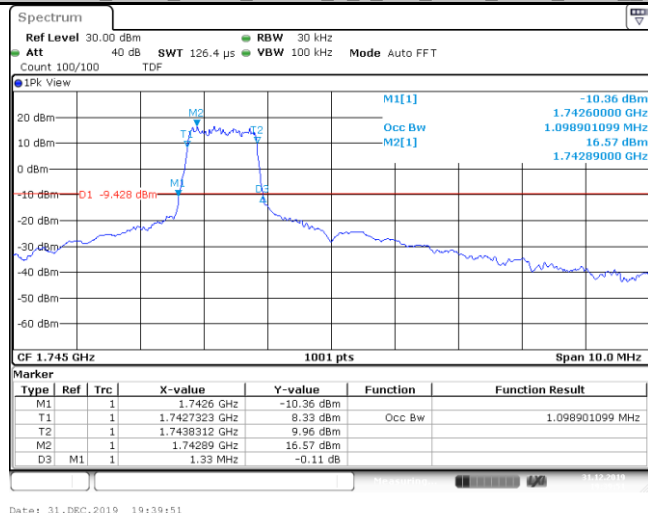
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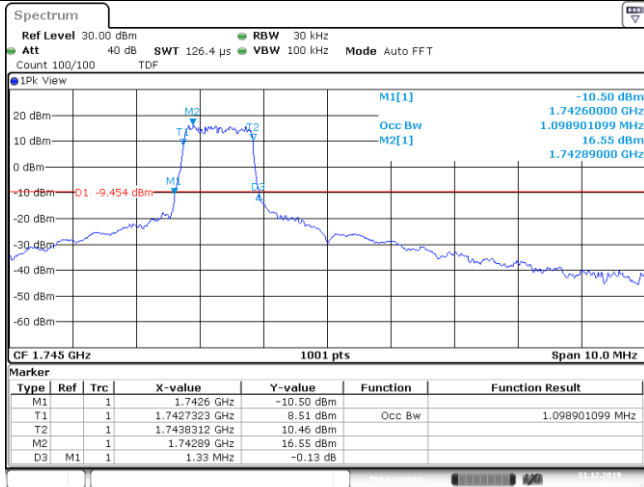
Band66_3MHz_16QAM_132322_6_0_Low_1.097_1.320_PASS



Band66_5MHz_QPSK_132322_6_0_Low_1.099_1.330_PASS

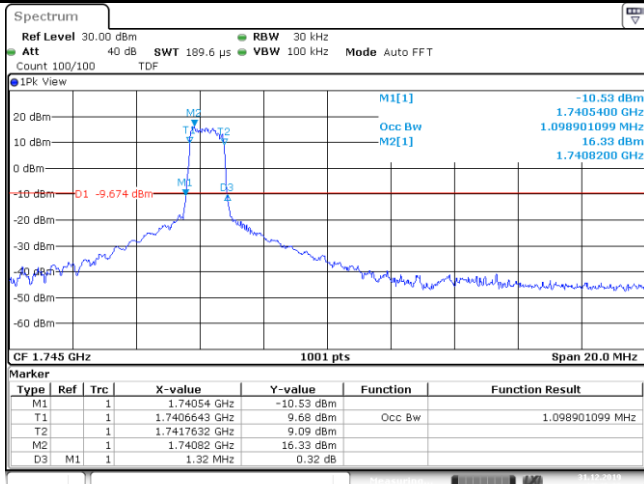


Band66_5MHz_16QAM_132322_6_0_Low_1.099_1.330_PASS



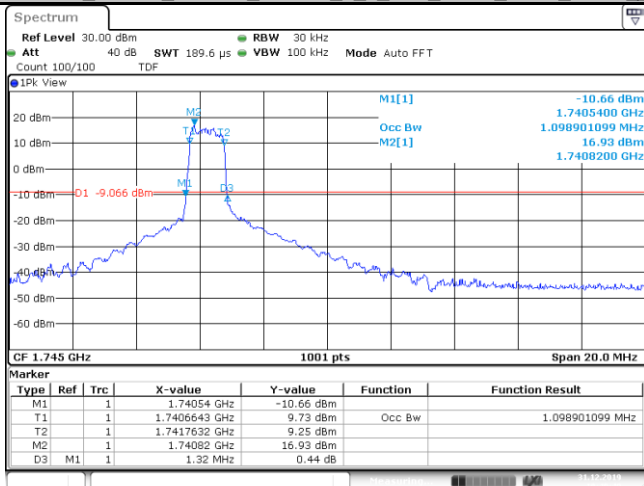
Date: 31.DEC.2019 19:40:10

Band66_10MHz_QPSK_132322_6_0_Low_1.099_1.320_PASS



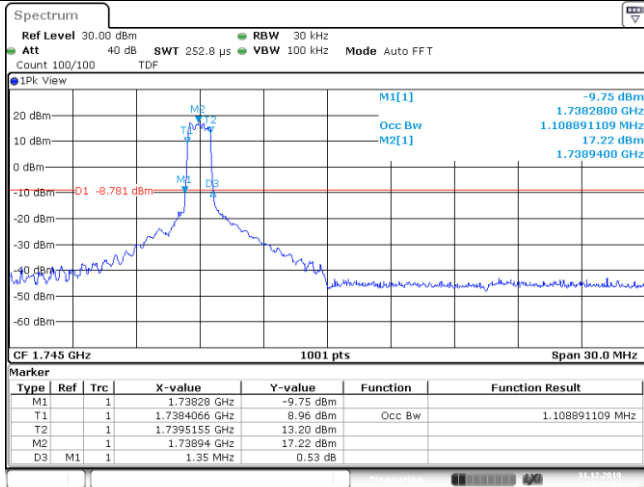
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Band66_10MHz_16QAM_132322_6_0_Low_1.099_1.320_PASS



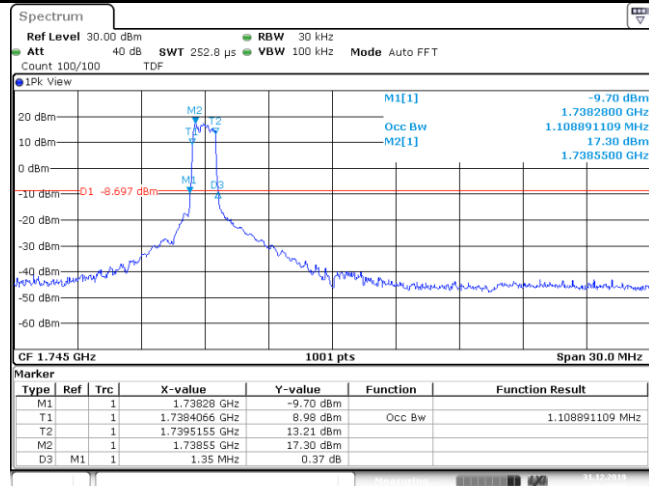
Date: 31.DEC.2019 19:40:49

Band66_15MHz_QPSK_132322_6_0_Low_1.109_1.350_PASS



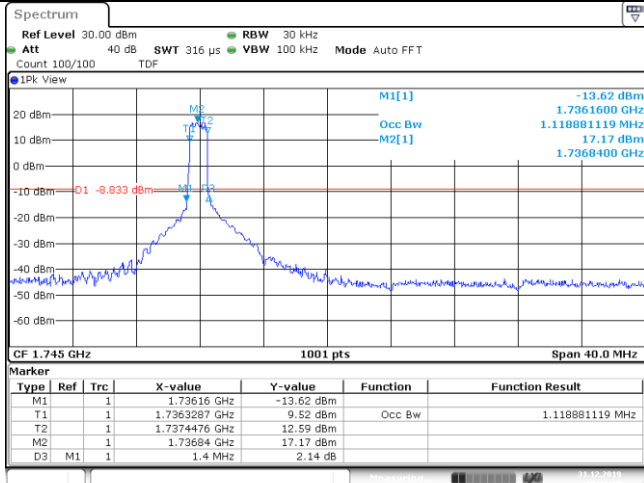
Date: 31.DEC.2019 19:41:11

Band66_15MHz_16QAM_132322_6_0_Low_1.109_1.350_PASS

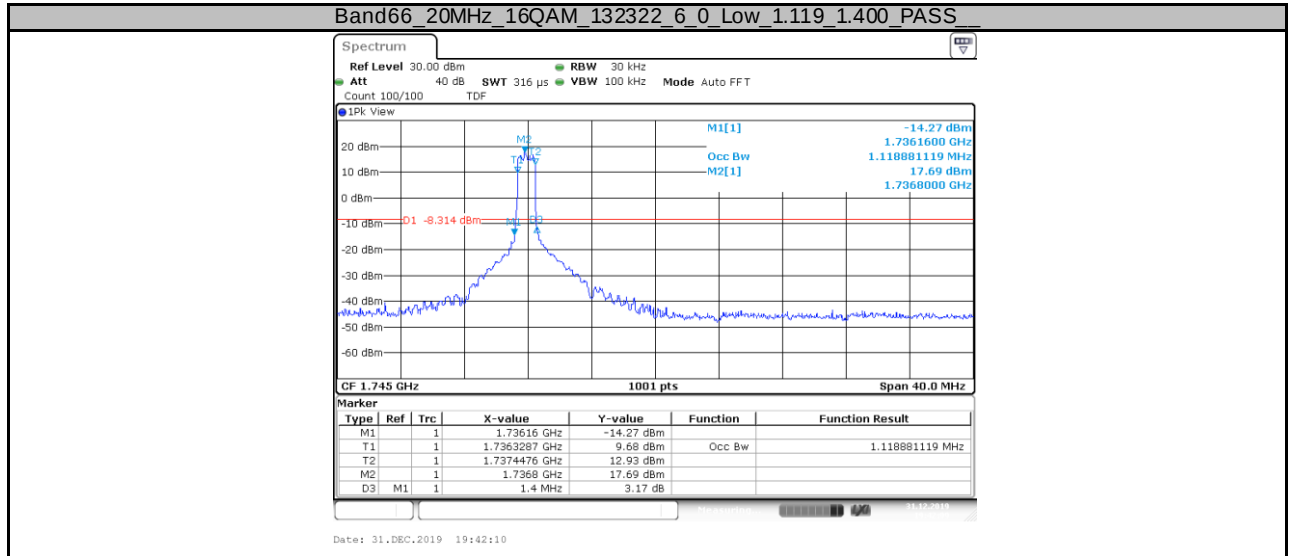


Date: 31.DEC.2019 19:41:30

Band66_20MHz_QPSK_132322_6_0_Low_1.119_1.400_PASS



Date: 31.DEC.2019 19:41:51

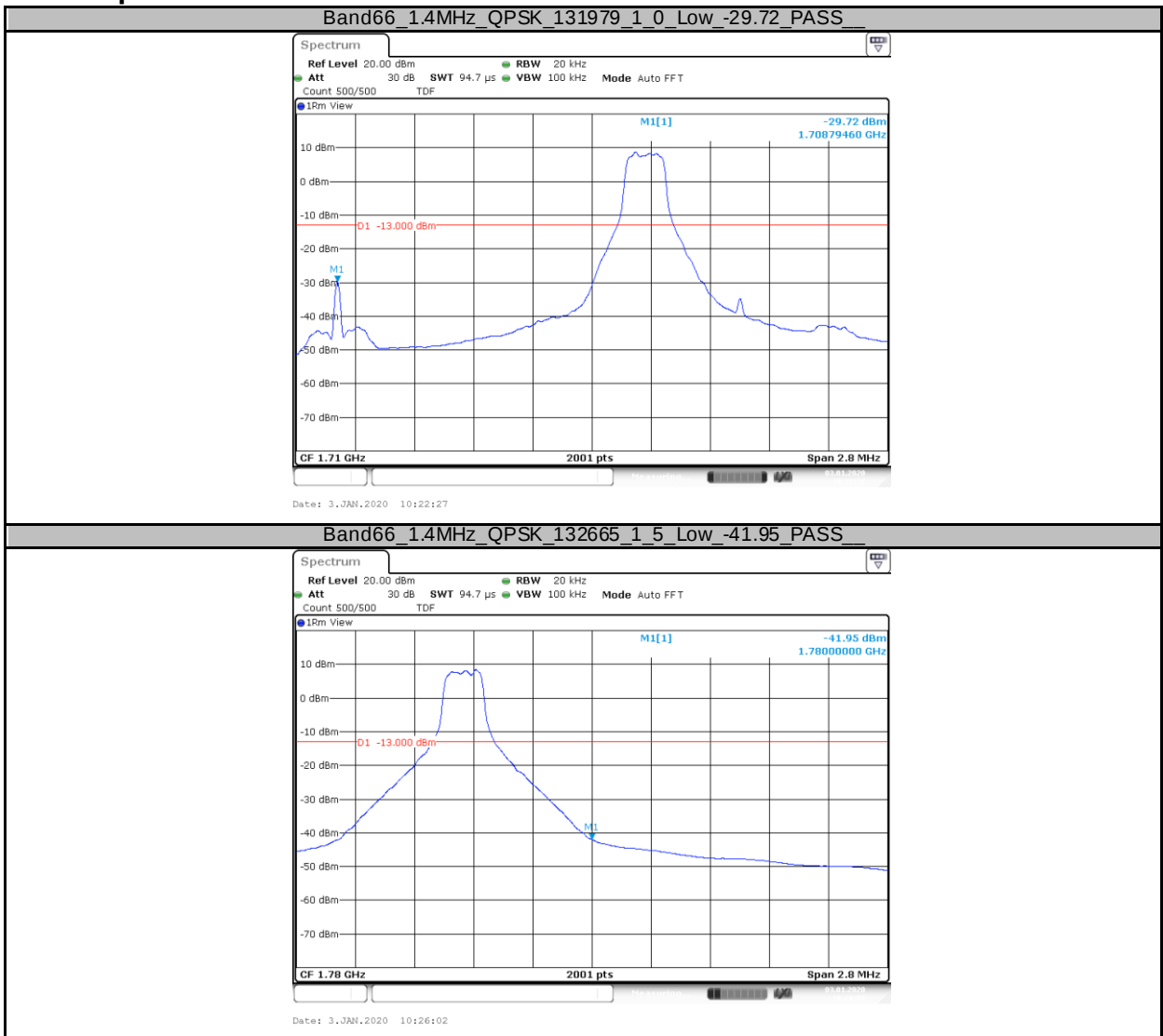


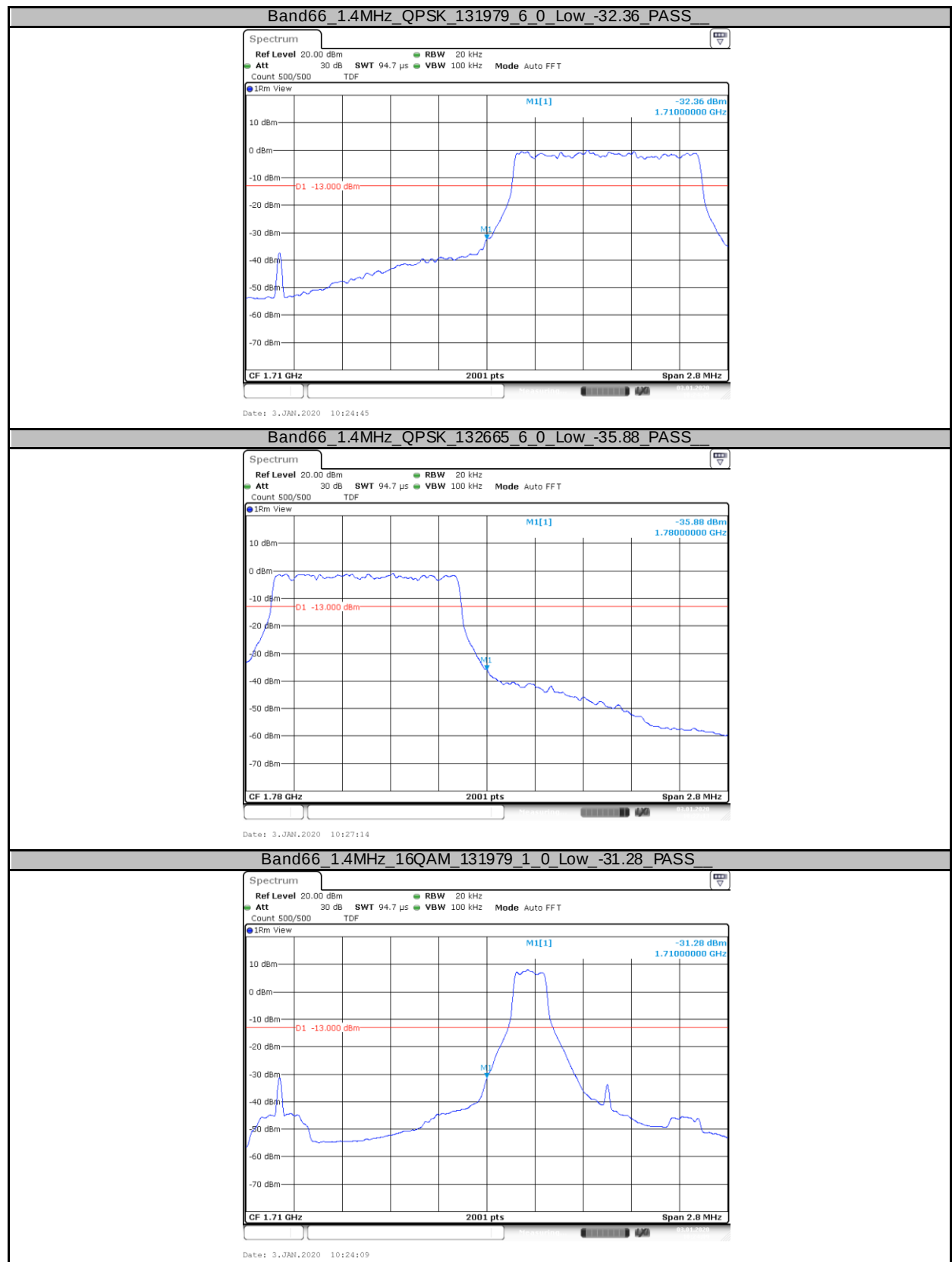
Appendix I.4: Band Edge for M1

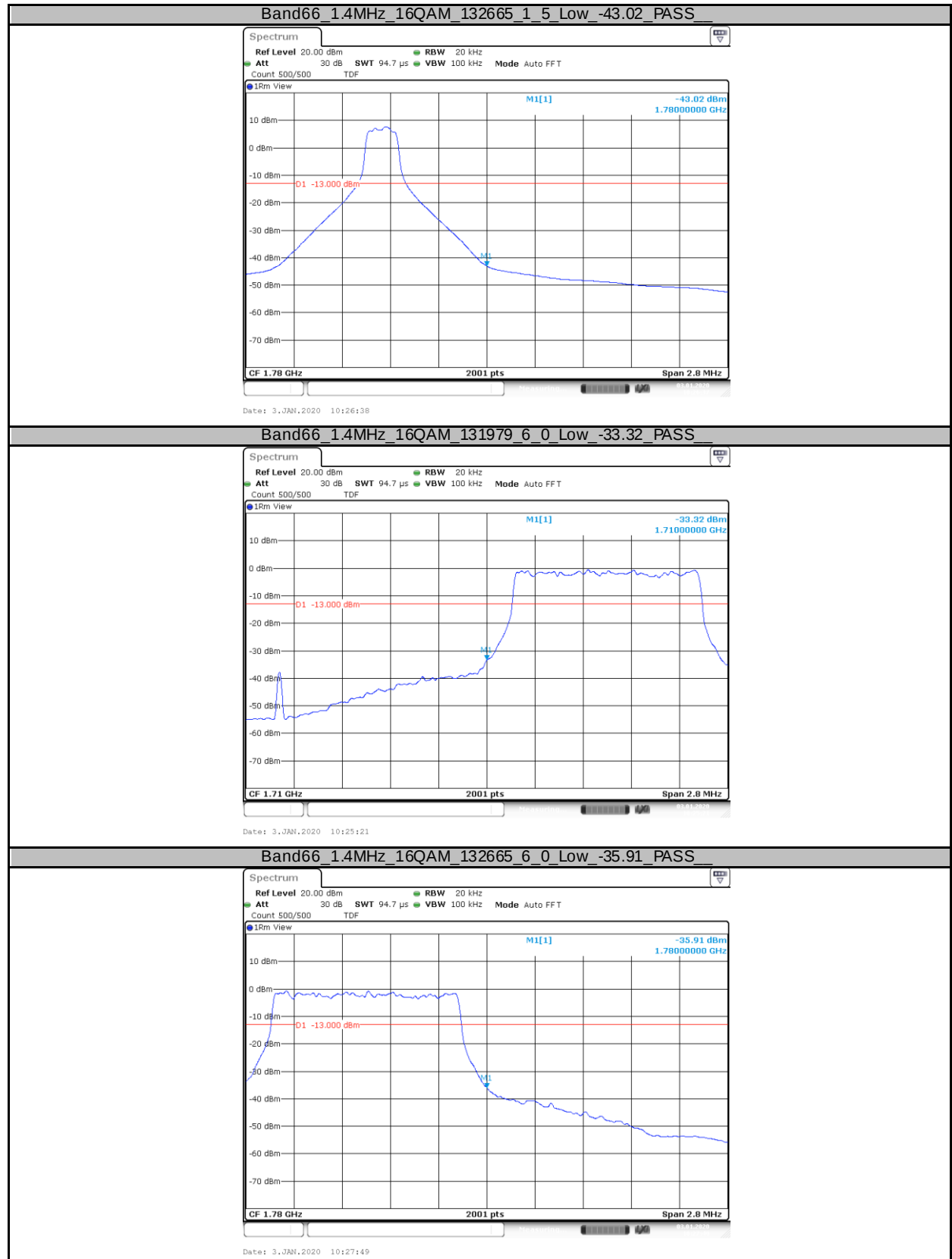
Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Result (dBm)	Verdict
Band66	1.4MHz	QPSK	131979	1	0	Low	-29.72	PASS
Band66	1.4MHz	QPSK	132665	1	5	Low	-41.95	PASS
Band66	1.4MHz	QPSK	131979	6	0	Low	-32.36	PASS
Band66	1.4MHz	QPSK	132665	6	0	Low	-35.88	PASS
Band66	1.4MHz	16QAM	131979	1	0	Low	-31.28	PASS
Band66	1.4MHz	16QAM	132665	1	5	Low	-43.02	PASS
Band66	1.4MHz	16QAM	131979	6	0	Low	-33.32	PASS
Band66	1.4MHz	16QAM	132665	6	0	Low	-35.91	PASS

Test Graphs







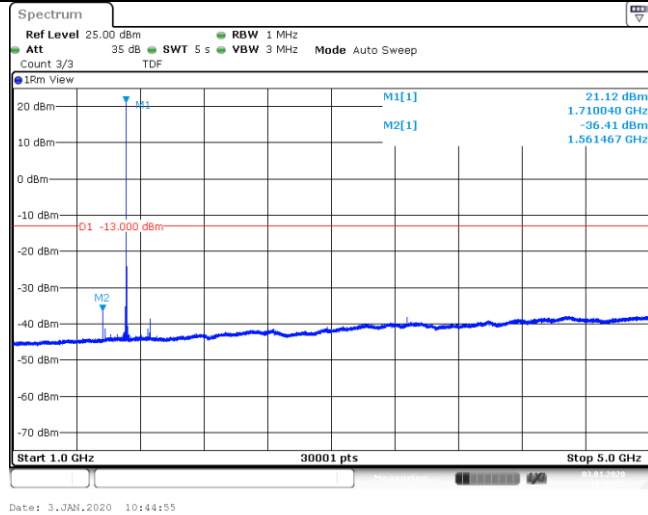
Appendix I.5: Conducted Spurious Emission for M1

Test Result

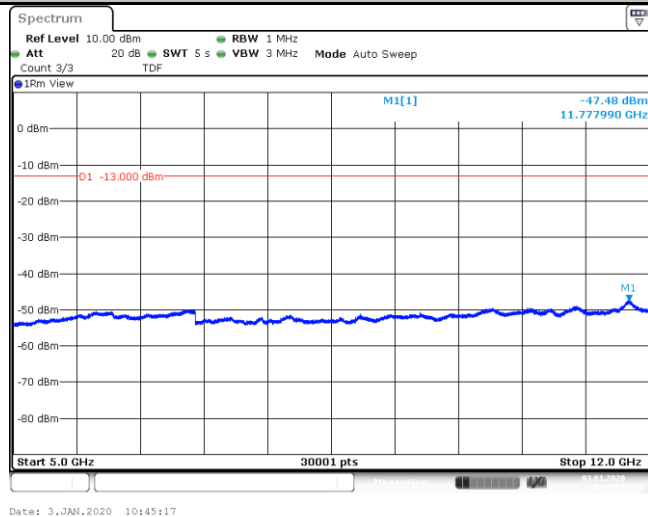
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Start Freq	Stop Freq	Result (dBm)	Verdict
Band66	1.4MHz	QPSK	131979	1	0	Low	1000	5000	-36.41	PASS
Band66	1.4MHz	QPSK	131979	1	0	Low	5000	12000	-47.48	PASS
Band66	1.4MHz	QPSK	131979	1	0	Low	12000	26500	-41.44	PASS
Band66	1.4MHz	QPSK	131979	1	0	Low	30	1000	-35.07	PASS
Band66	1.4MHz	QPSK	132322	1	0	Low	5000	12000	-47.54	PASS
Band66	1.4MHz	QPSK	132322	1	0	Low	1000	5000	-37.56	PASS
Band66	1.4MHz	QPSK	132322	1	0	Low	30	1000	-35.49	PASS
Band66	1.4MHz	QPSK	132322	1	0	Low	12000	26500	-41.46	PASS
Band66	1.4MHz	QPSK	132665	1	5	Low	5000	12000	-47.39	PASS
Band66	1.4MHz	QPSK	132665	1	5	Low	1000	5000	-37.82	PASS
Band66	1.4MHz	QPSK	132665	1	5	Low	12000	26500	-41.4	PASS
Band66	1.4MHz	QPSK	132665	1	5	Low	30	1000	-35.65	PASS
Band66	1.4MHz	QPSK	131979	6	0	Low	5000	12000	-47.41	PASS
Band66	1.4MHz	QPSK	131979	6	0	Low	12000	26500	-41.3	PASS
Band66	1.4MHz	QPSK	131979	6	0	Low	1000	5000	-37.73	PASS
Band66	1.4MHz	QPSK	131979	6	0	Low	30	1000	-35.39	PASS
Band66	1.4MHz	QPSK	132322	6	0	Low	30	1000	-35.38	PASS
Band66	1.4MHz	QPSK	132322	6	0	Low	5000	12000	-47.38	PASS
Band66	1.4MHz	QPSK	132322	6	0	Low	1000	5000	-37.83	PASS
Band66	1.4MHz	QPSK	132322	6	0	Low	12000	26500	-41.39	PASS
Band66	1.4MHz	QPSK	132665	6	0	Low	30	1000	-35.74	PASS
Band66	1.4MHz	QPSK	132665	6	0	Low	1000	5000	-37.87	PASS
Band66	1.4MHz	QPSK	132665	6	0	Low	5000	12000	-47.53	PASS
Band66	1.4MHz	QPSK	132665	6	0	Low	12000	26500	-41.26	PASS
Band66	1.4MHz	16QAM	131979	1	0	Low	30	1000	-35.5	PASS
Band66	1.4MHz	16QAM	131979	1	0	Low	1000	5000	-37.61	PASS
Band66	1.4MHz	16QAM	131979	1	0	Low	12000	26500	-41.3	PASS
Band66	1.4MHz	16QAM	131979	1	0	Low	5000	12000	-47.44	PASS
Band66	1.4MHz	16QAM	132322	1	0	Low	1000	5000	-37.03	PASS
Band66	1.4MHz	16QAM	132322	1	0	Low	12000	26500	-41.37	PASS
Band66	1.4MHz	16QAM	132322	1	0	Low	30	1000	-35.39	PASS
Band66	1.4MHz	16QAM	132322	1	0	Low	5000	12000	-47.38	PASS
Band66	1.4MHz	16QAM	132665	1	5	Low	12000	26500	-41.44	PASS
Band66	1.4MHz	16QAM	132665	1	5	Low	5000	12000	-47.45	PASS
Band66	1.4MHz	16QAM	132665	1	5	Low	1000	5000	-37.69	PASS
Band66	1.4MHz	16QAM	132665	1	5	Low	30	1000	-35.28	PASS
Band66	1.4MHz	16QAM	131979	6	0	Low	12000	26500	-41.35	PASS
Band66	1.4MHz	16QAM	131979	6	0	Low	5000	12000	-47.51	PASS
Band66	1.4MHz	16QAM	131979	6	0	Low	1000	5000	-37.82	PASS
Band66	1.4MHz	16QAM	131979	6	0	Low	30	1000	-35.52	PASS
Band66	1.4MHz	16QAM	132322	6	0	Low	1000	5000	-37.71	PASS
Band66	1.4MHz	16QAM	132322	6	0	Low	5000	12000	-47.5	PASS
Band66	1.4MHz	16QAM	132322	6	0	Low	30	1000	-35.12	PASS
Band66	1.4MHz	16QAM	132322	6	0	Low	12000	26500	-41.4	PASS
Band66	1.4MHz	16QAM	132665	6	0	Low	12000	26500	-41.49	PASS
Band66	1.4MHz	16QAM	132665	6	0	Low	30	1000	-35.86	PASS
Band66	1.4MHz	16QAM	132665	6	0	Low	1000	5000	-37.76	PASS
Band66	1.4MHz	16QAM	132665	6	0	Low	5000	12000	-47.29	PASS

Test Graphs

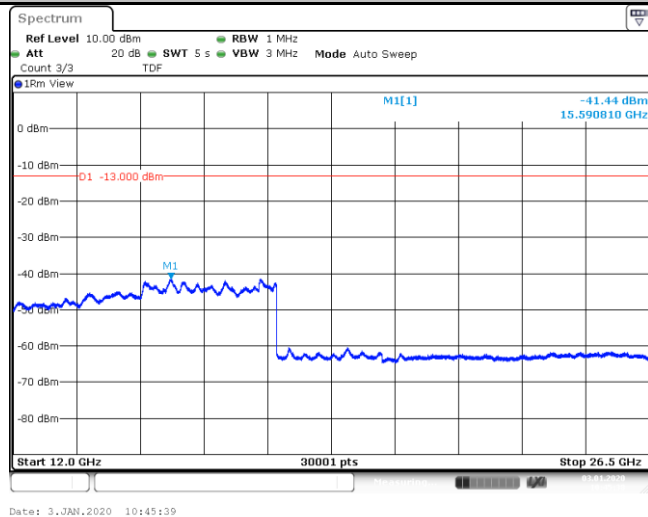
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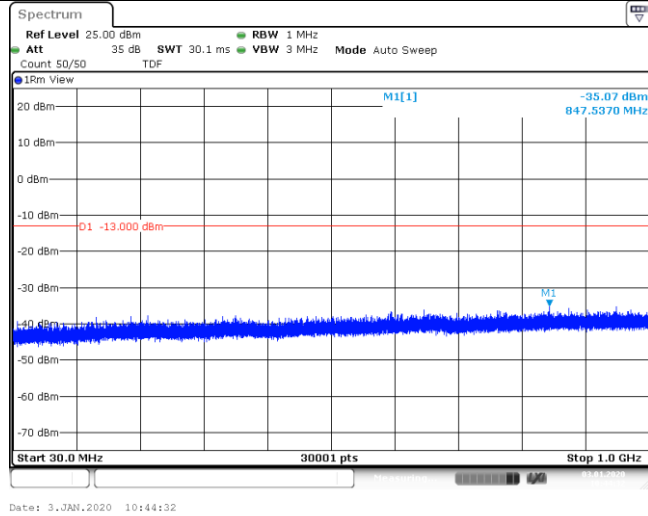
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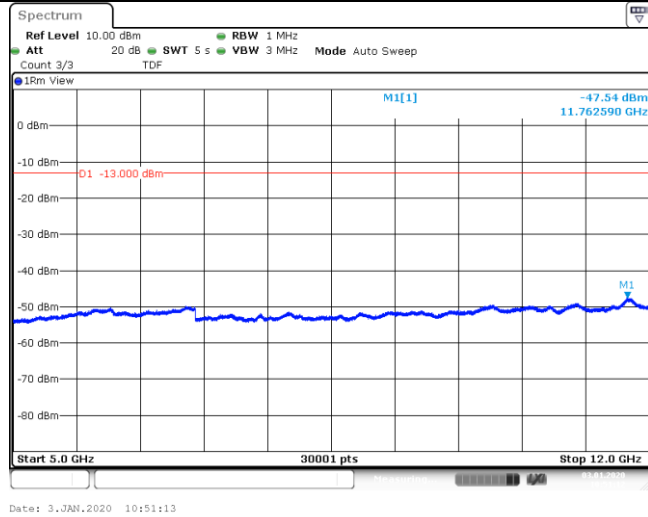
Band66_1.4MHz_QPSK_131979_1_0_Low_12000_26500_-41.44_PASS__



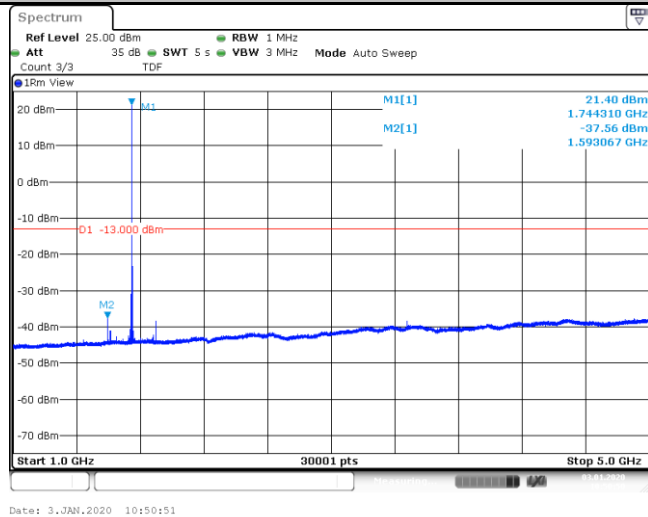
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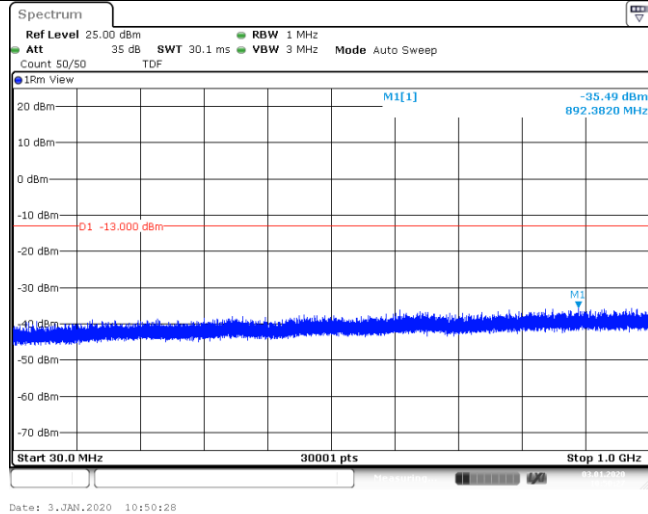
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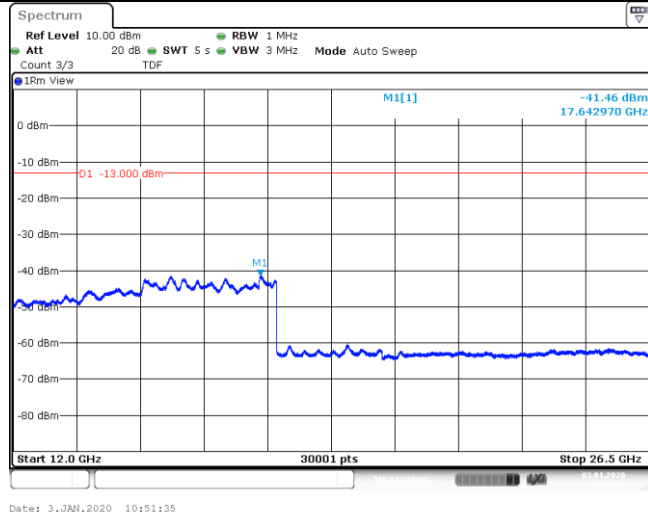
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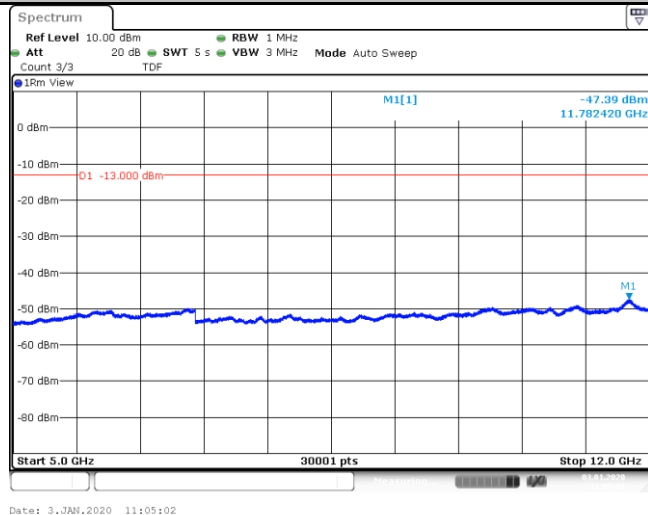
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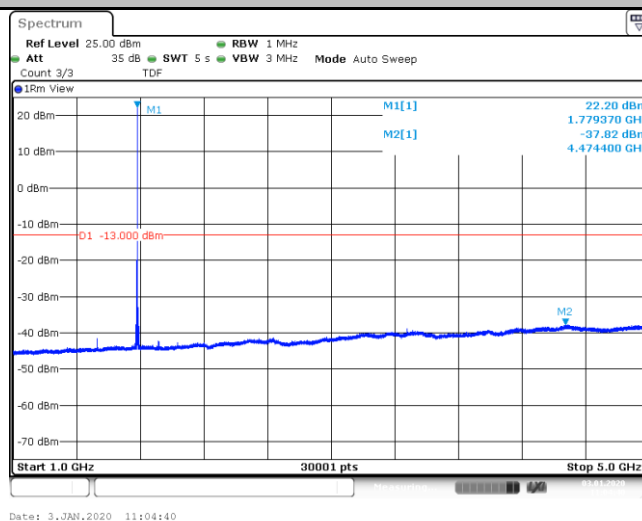
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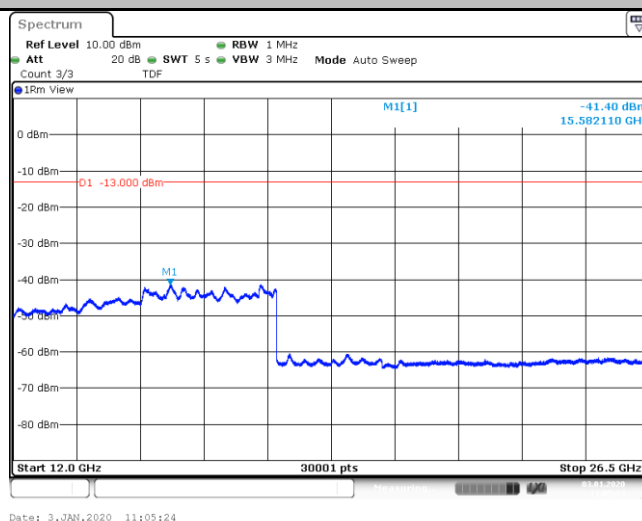
Band66_1.4MHz_QPSK_132665_1_5_Low_5000_12000_-47.39_PASS__



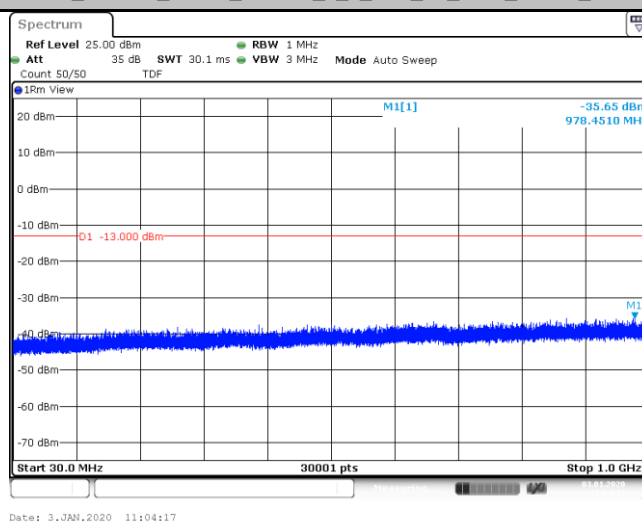
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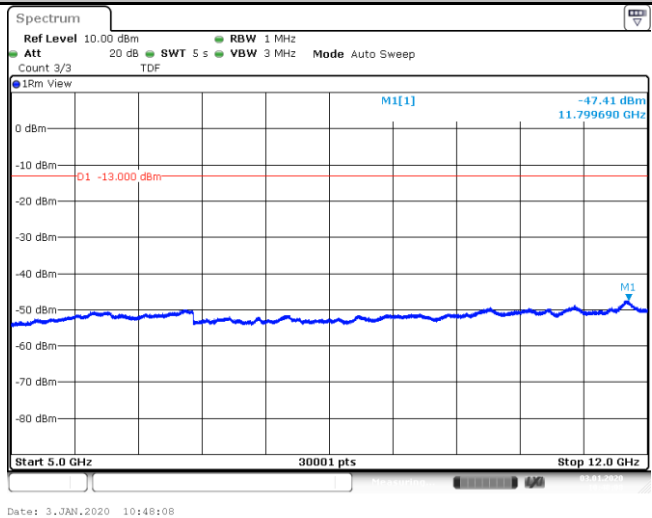
Band66_1.4MHz_QPSK_132665_1_5_Low_12000_26500_-41.4_PASS__



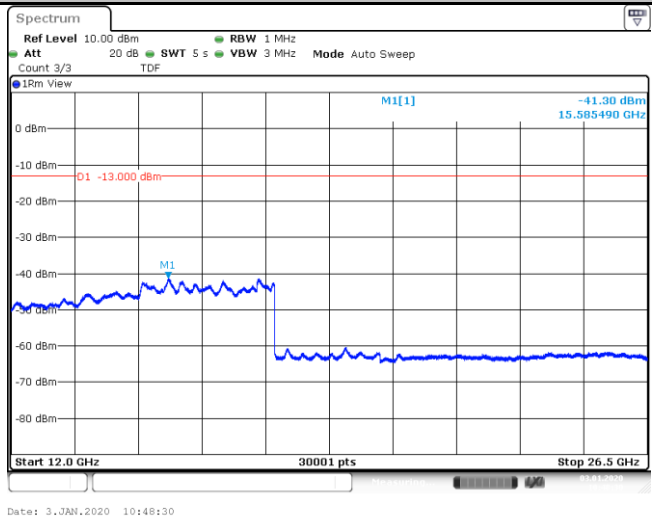
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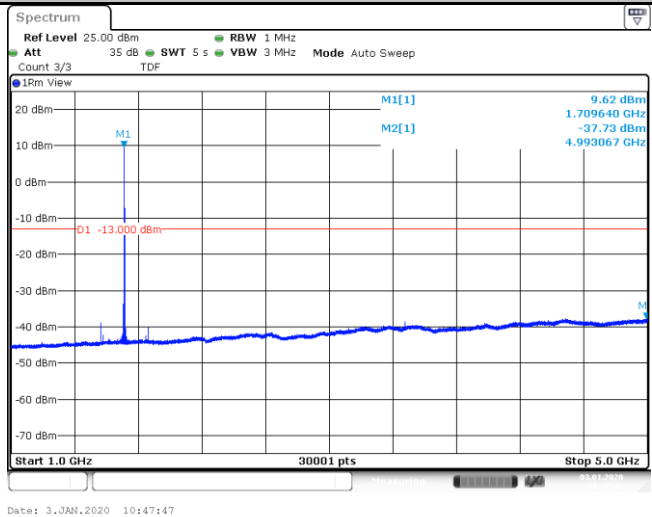
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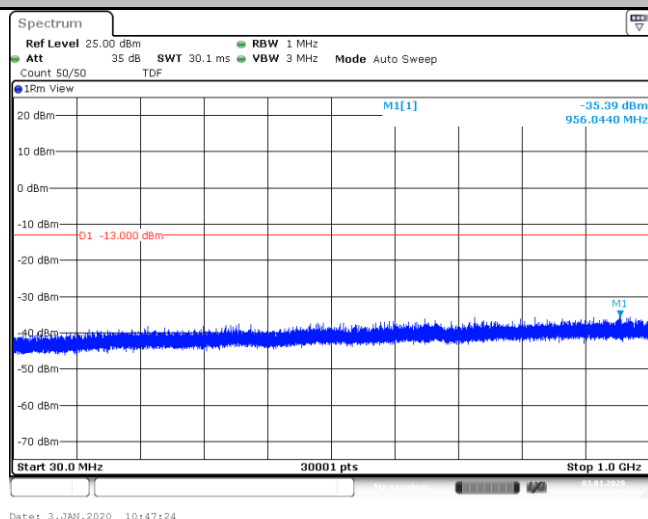
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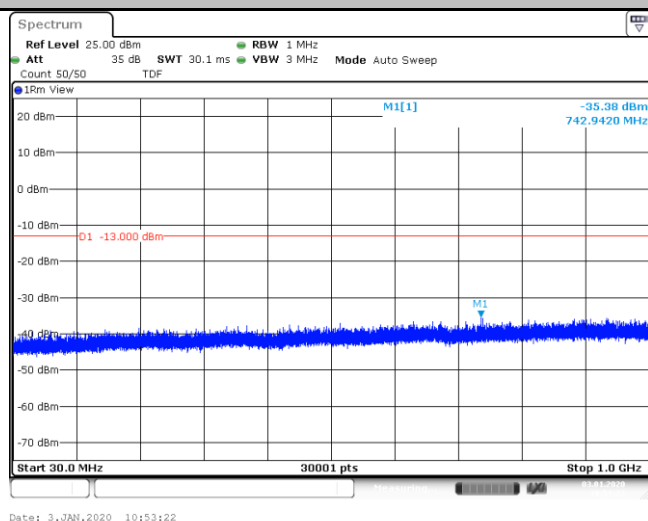
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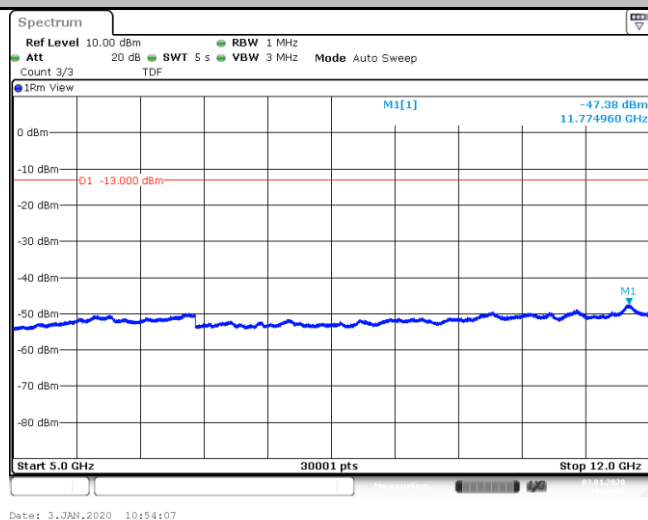
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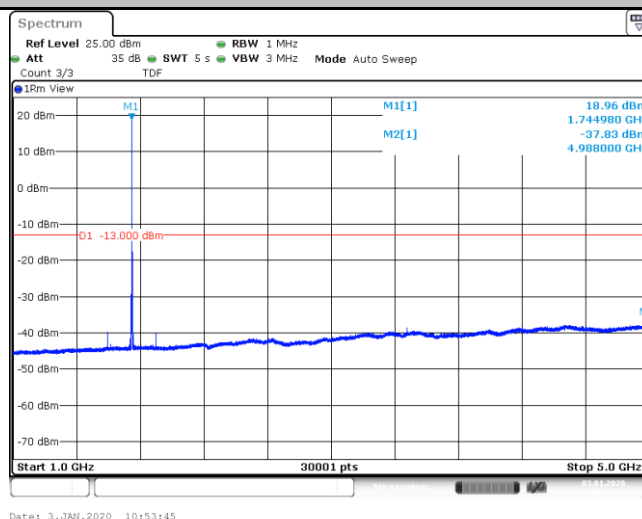
Band66_1.4MHz_QPSK_132322_6_0_Low_30_1000_-35.38_PASS__



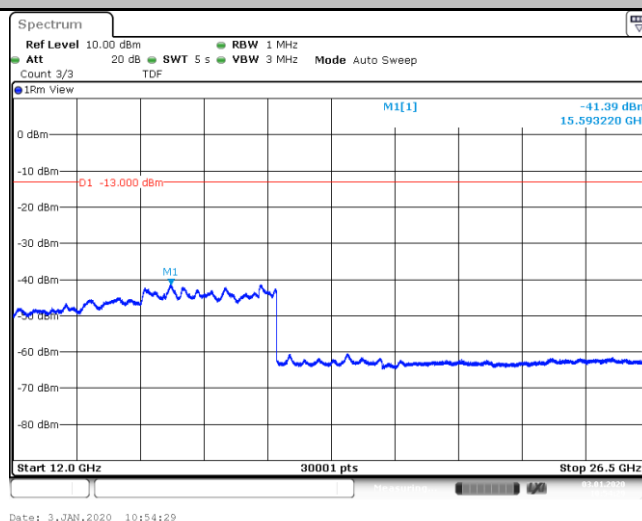
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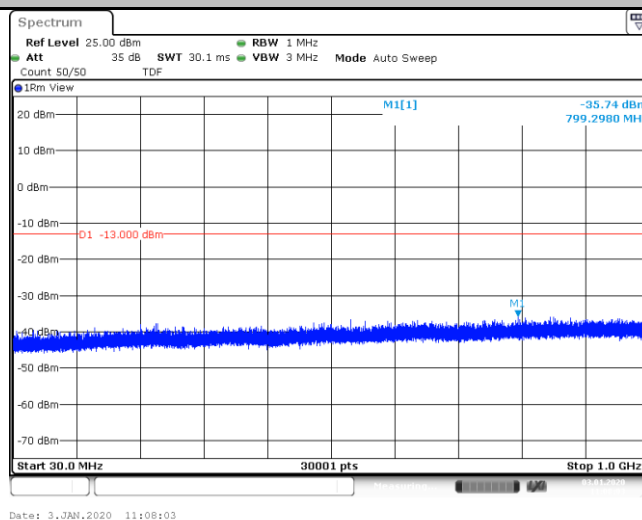
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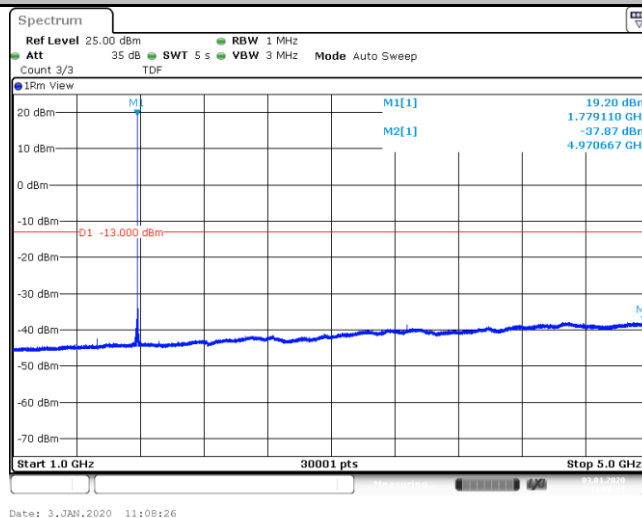
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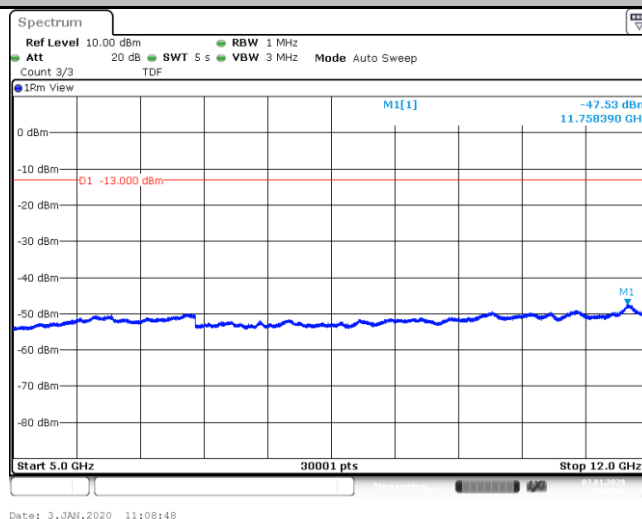
Band66_1.4MHz_QPSK_132665_6_0_Low_30_1000_-35.74_PASS__



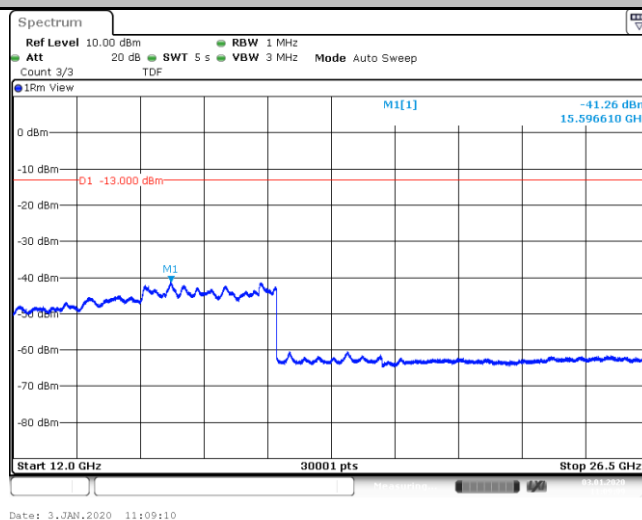
Band66_1.4MHz_QPSK_132665_6_0_Low_1000_5000_-37.87_PASS__



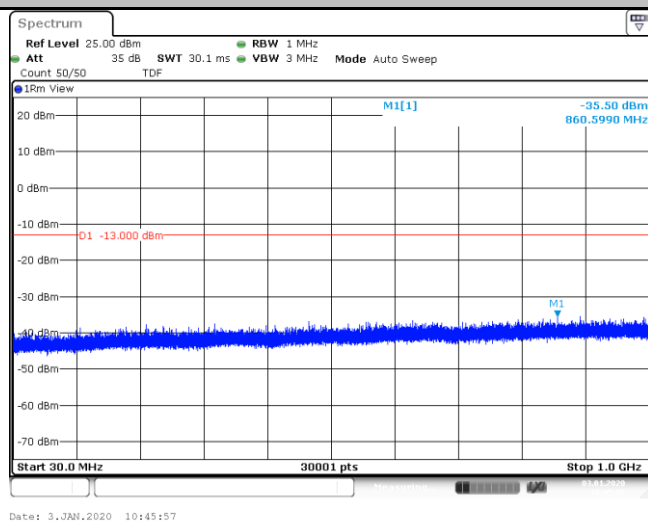
Band66_1.4MHz_QPSK_132665_6_0_Low_5000_12000_-47.53_PASS__



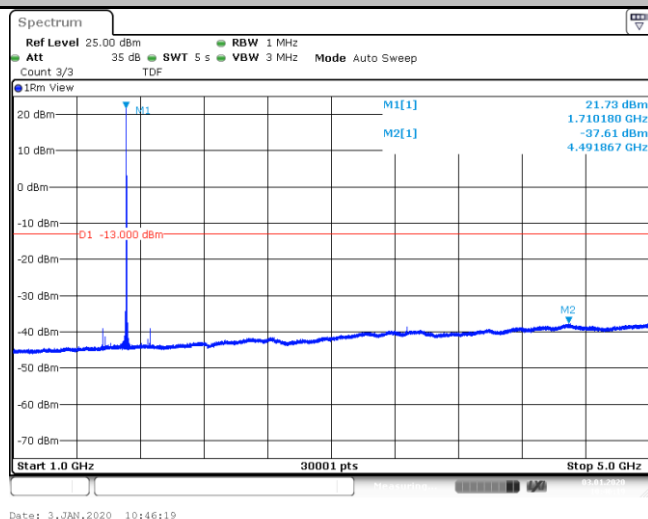
Band66_1.4MHz_QPSK_132665_6_0_Low_12000_26500_-41.26_PASS__



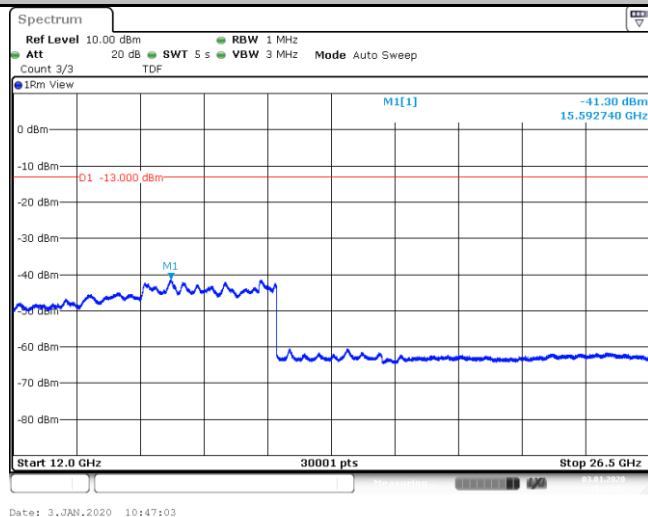
Band66_1.4MHz_16QAM_131979_1_0_Low_30_1000_-35.5_PASS__



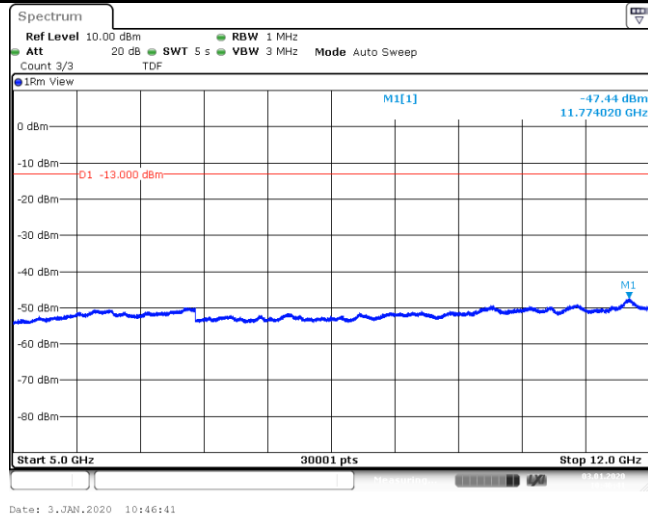
Band66_1.4MHz_16QAM_131979_1_0_Low_1000_5000_-37.61_PASS__



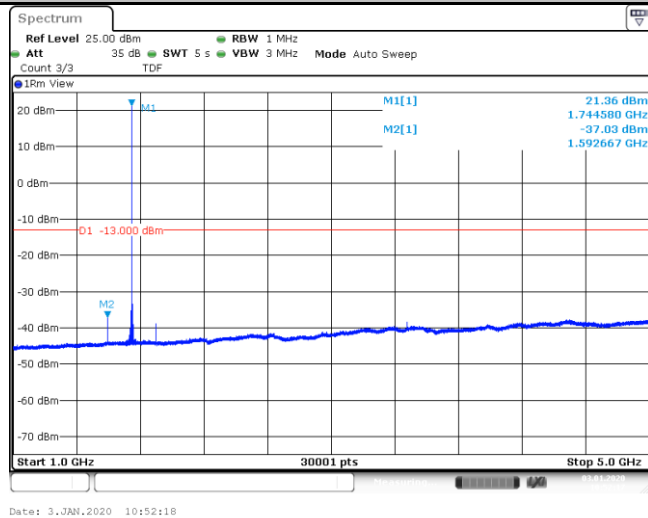
Band66_1.4MHz_16QAM_131979_1_0_Low_12000_26500_-41.3_PASS__



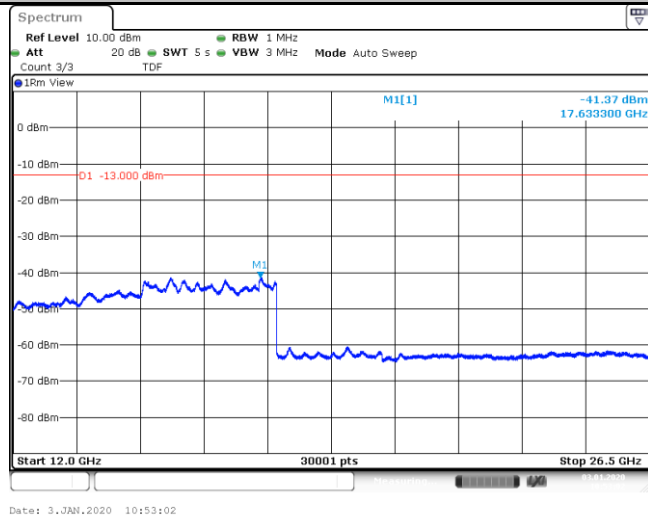
Band66_1.4MHz_16QAM_131979_1_0_Low_5000_12000_-47.44_PASS__



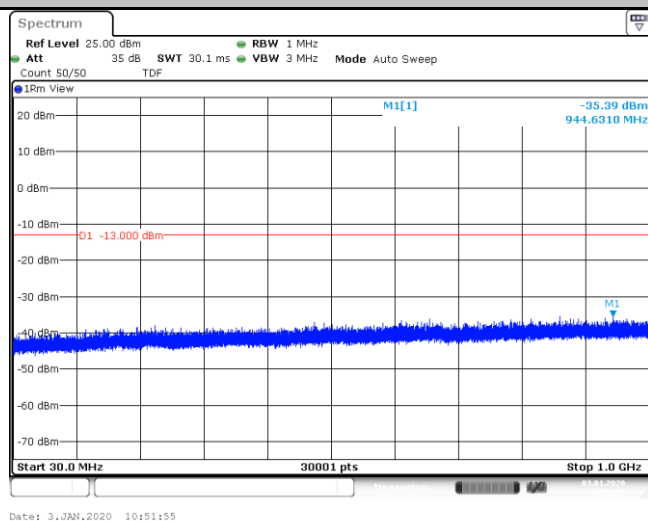
Band66_1.4MHz_16QAM_132322_1_0_Low_1000_5000_-37.03_PASS__



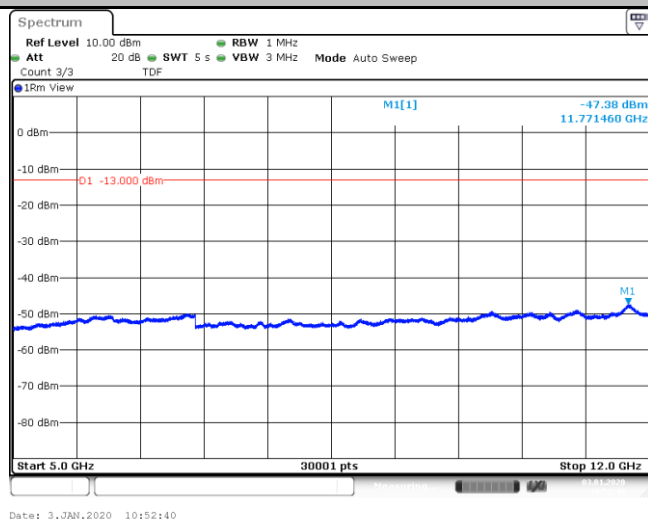
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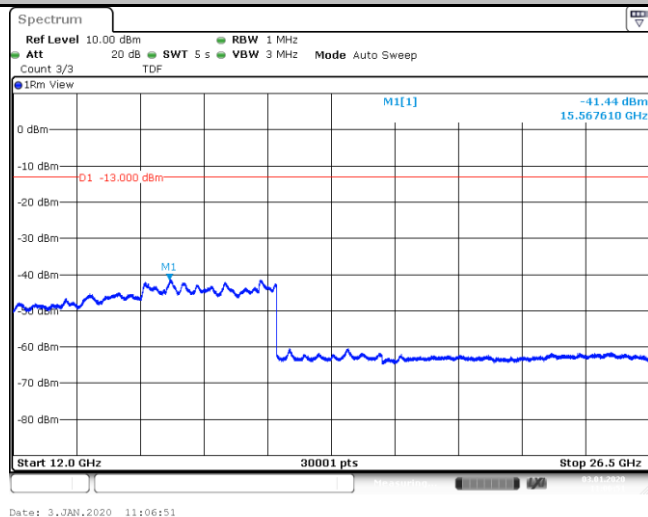
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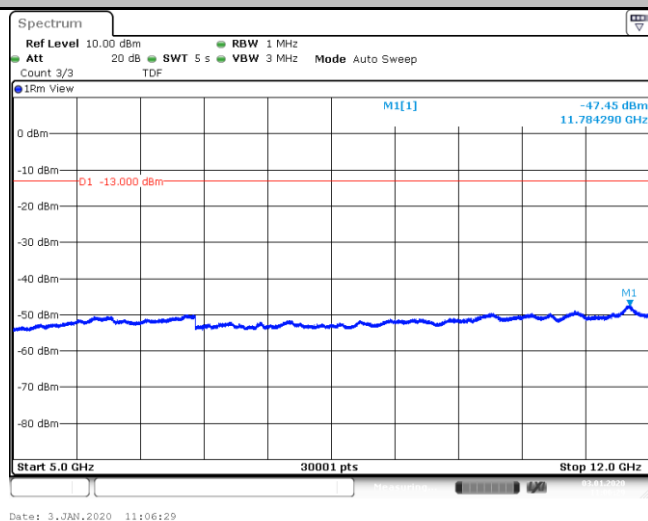
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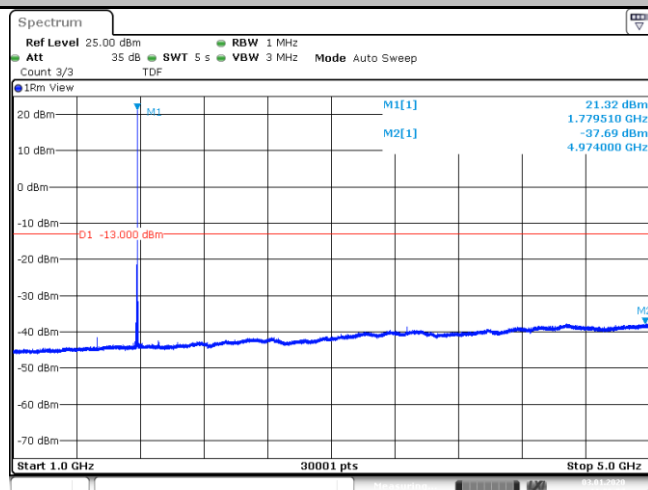


Band66_1.4MHz_16QAM_132665_1_5_Low_5000_12000_-47.45_PASS__



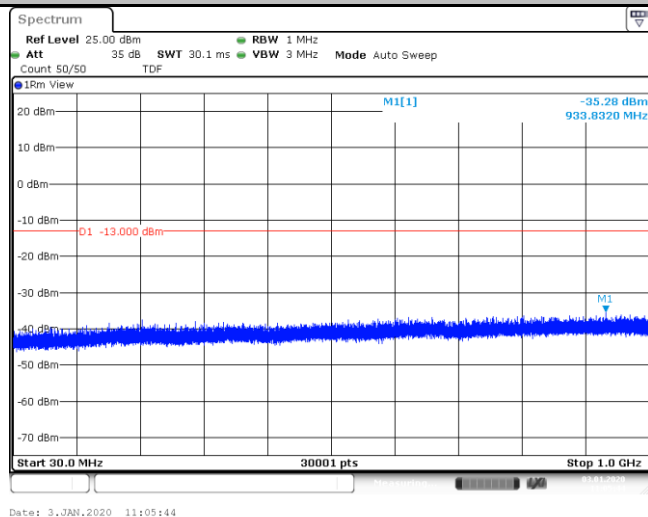
Date: 3.JAN.2020 11:06:29

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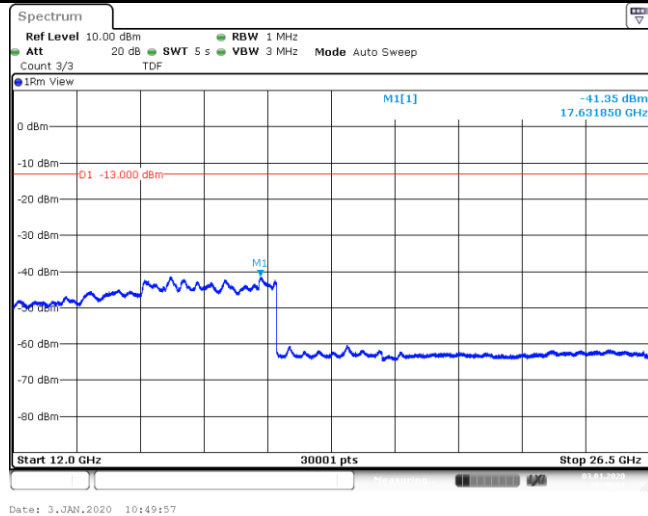
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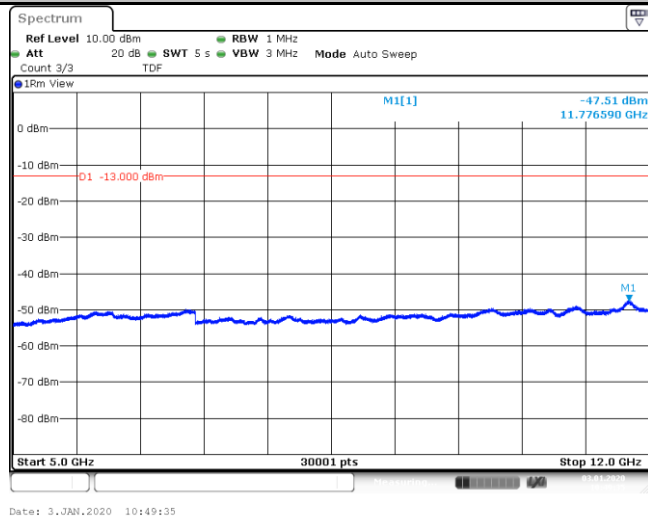


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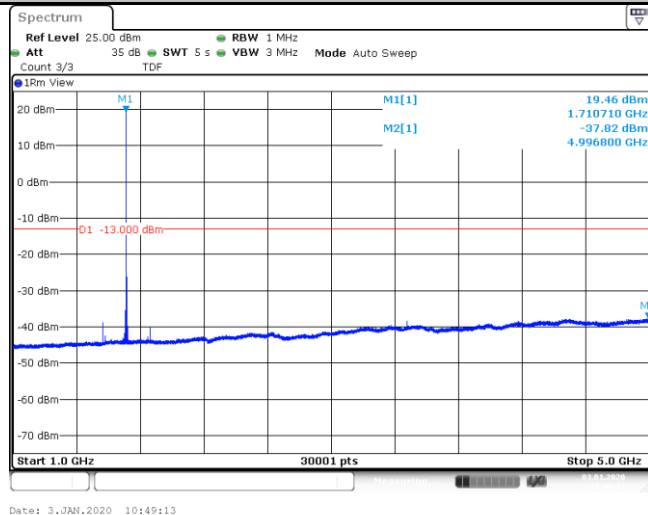
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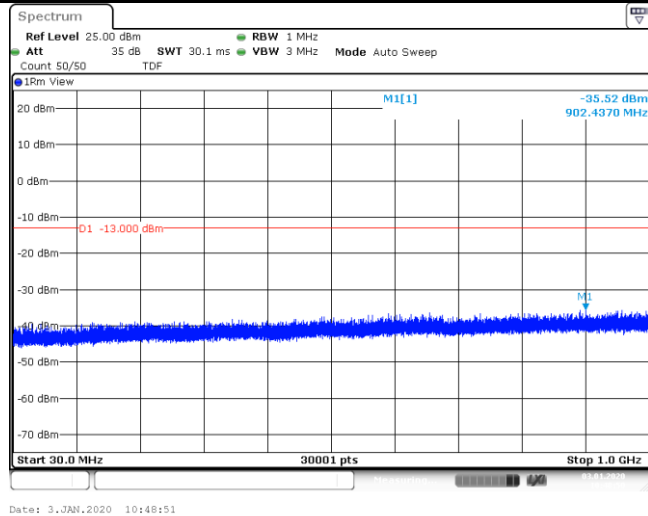
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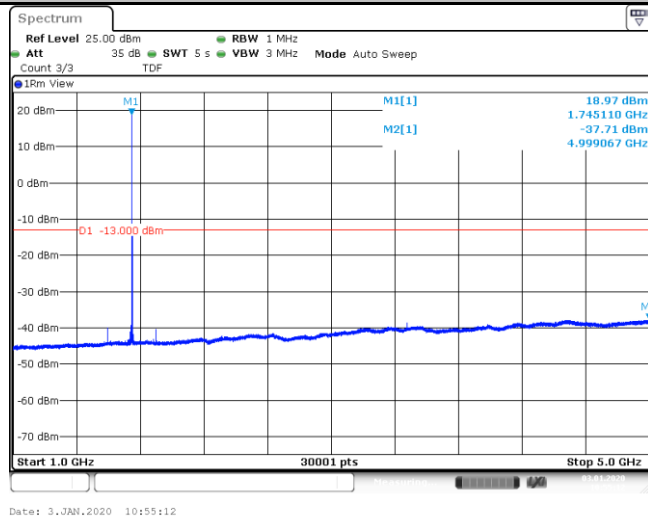
Band66_1.4MHz_16QAM_131979_6_0_Low_1000_5000_-37.82_PASS__



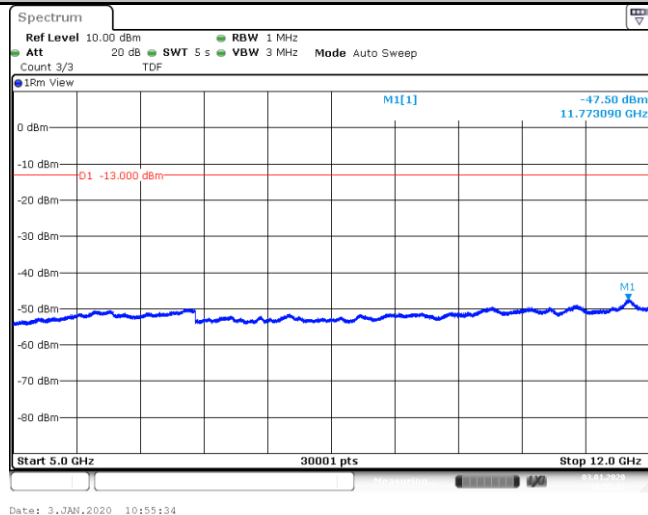
Band66_1.4MHz_16QAM_131979_6_0_Low_30_1000_-35.52_PASS__



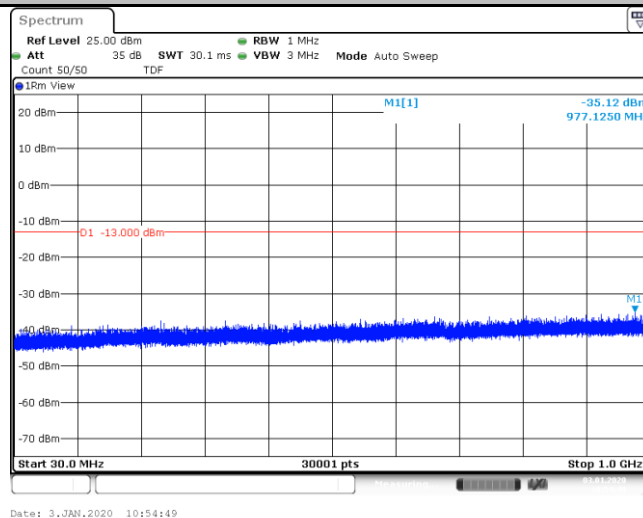
Band66_1.4MHz_16QAM_132322_6_0_Low_1000_5000_-37.71_PASS__



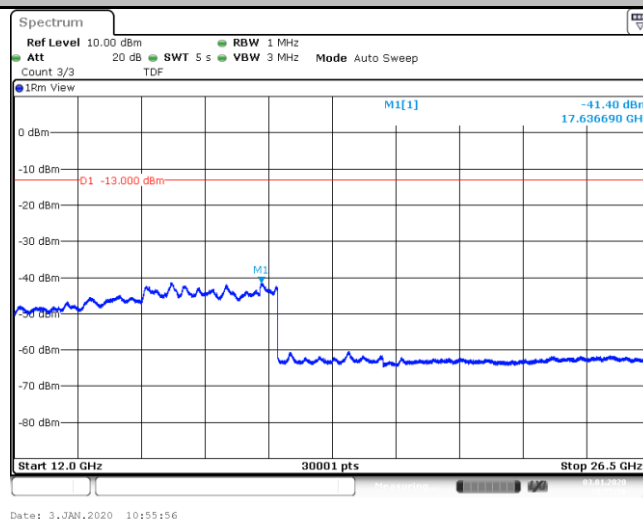
Band66_1.4MHz_16QAM_132322_6_0_Low_5000_12000_-47.5_PASS__



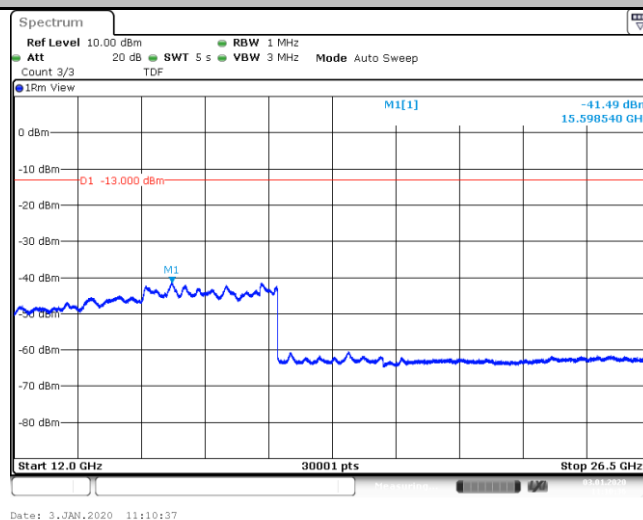
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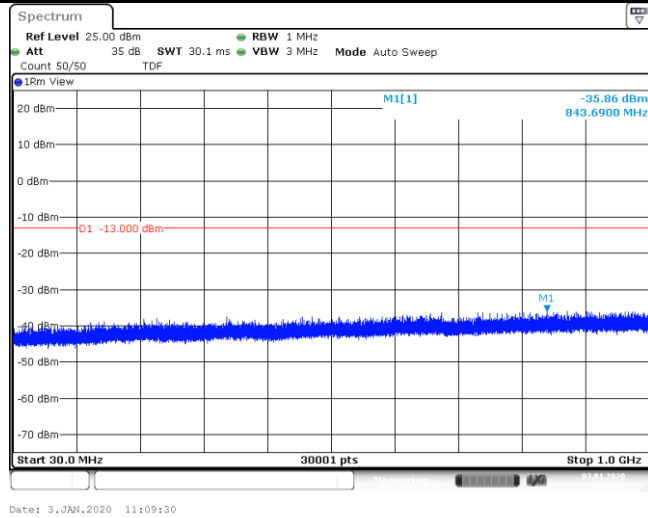
Band66_1.4MHz_16QAM_132322_6_0_Low_12000_26500_-41.4_PASS__



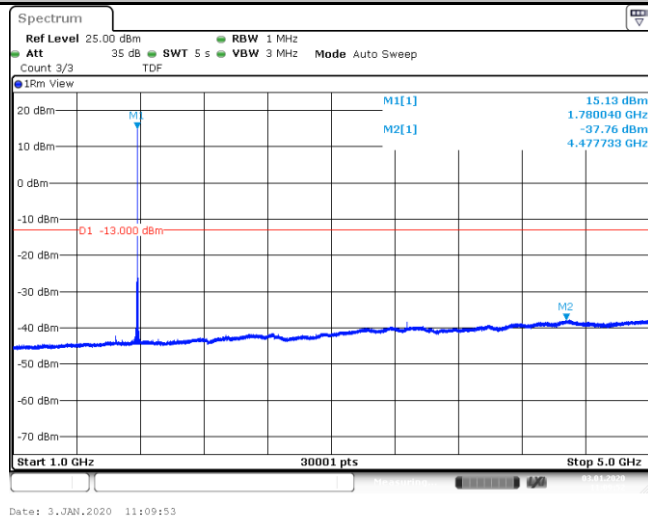
Band66_1.4MHz_16QAM_132665_6_0_Low_12000_26500_-41.49_PASS__



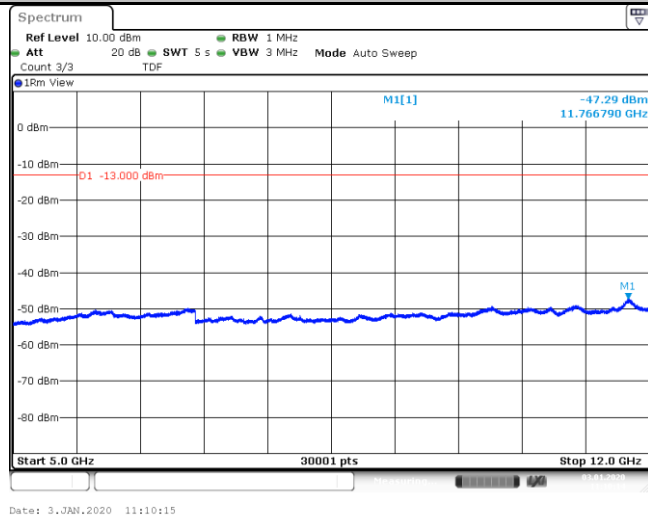
Band66_1.4MHz_16QAM_132665_6_0_Low_30_1000_-35.86_PASS__



Band66_1.4MHz_16QAM_132665_6_0_Low_1000_5000_-37.76_PASS__



Band66_1.4MHz_16QAM_132665_6_0_Low_5000_12000_-47.29_PASS__



Appendix I.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
Band66	1.4MHz	QPSK	132322	1	0	Low	HV	NT	-23.46	-0.013444	±2.5	PASS
Band66	1.4MHz	QPSK	132322	1	0	Low	LV	NT	-28.78	-0.016493	±2.5	PASS
Band66	1.4MHz	QPSK	132322	1	0	Low	NV	NT	-14.55	-0.008338	±2.5	PASS
Band66	1.4MHz	16QAM	132322	1	0	Low	HV	NT	-11.33	-0.006493	±2.5	PASS
Band66	1.4MHz	16QAM	132322	1	0	Low	LV	NT	-12.27	-0.007032	±2.5	PASS
Band66	1.4MHz	16QAM	132322	1	0	Low	NV	NT	-10.67	-0.006115	±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
Band66	1.4MHz	QPSK	132322	1	0	Low	NV	85	-16.29	-0.009335	±2.5	PASS
Band66	1.4MHz	QPSK	132322	1	0	Low	NV	-30	-25.41	-0.014562	±2.5	PASS
Band66	1.4MHz	QPSK	132322	1	0	Low	NV	-20	-15.89	-0.009106	±2.5	PASS
Band66	1.4MHz	QPSK	132322	1	0	Low	NV	-10	-17.14	-0.009822	±2.5	PASS
Band66	1.4MHz	QPSK	132322	1	0	Low	NV	0	-23.73	-0.013599	±2.5	PASS
Band66	1.4MHz	QPSK	132322	1	0	Low	NV	10	-19.23	-0.011020	±2.5	PASS
Band66	1.4MHz	QPSK	132322	1	0	Low	NV	20	-15.86	-0.009089	±2.5	PASS
Band66	1.4MHz	QPSK	132322	1	0	Low	NV	30	-19.17	-0.010986	±2.5	PASS
Band66	1.4MHz	QPSK	132322	1	0	Low	NV	40	-27.75	-0.015903	±2.5	PASS
Band66	1.4MHz	QPSK	132322	1	0	Low	NV	50	-16.41	-0.009404	±2.5	PASS
Band66	1.4MHz	QPSK	132322	1	0	Low	NV	60	-15.98	-0.009158	±2.5	PASS
Band66	1.4MHz	QPSK	132322	1	0	Low	NV	70	-24.16	-0.013845	±2.5	PASS
Band66	1.4MHz	QPSK	132322	1	0	Low	NV	-40	-16.55	-0.009484	±2.5	PASS
Band66	1.4MHz	QPSK	132322	1	0	Low	NV	80	-23.59	-0.013519	±2.5	PASS
Band66	1.4MHz	16QAM	132322	1	0	Low	NV	85	-10.87	-0.006229	±2.5	PASS
Band66	1.4MHz	16QAM	132322	1	0	Low	NV	-30	-12.77	-0.007318	±2.5	PASS
Band66	1.4MHz	16QAM	132322	1	0	Low	NV	-20	-12.77	-0.007318	±2.5	PASS
Band66	1.4MHz	16QAM	132322	1	0	Low	NV	-10	-10.89	-0.006241	±2.5	PASS
Band66	1.4MHz	16QAM	132322	1	0	Low	NV	0	-13.38	-0.007668	±2.5	PASS
Band66	1.4MHz	16QAM	132322	1	0	Low	NV	10	-11.50	-0.006590	±2.5	PASS
Band66	1.4MHz	16QAM	132322	1	0	Low	NV	20	-11.59	-0.006642	±2.5	PASS
Band66	1.4MHz	16QAM	132322	1	0	Low	NV	30	-11.86	-0.006797	±2.5	PASS
Band66	1.4MHz	16QAM	132322	1	0	Low	NV	40	-11.43	-0.006550	±2.5	PASS
Band66	1.4MHz	16QAM	132322	1	0	Low	NV	50	-9.87	-0.005656	±2.5	PASS
Band66	1.4MHz	16QAM	132322	1	0	Low	NV	60	-11.52	-0.006602	±2.5	PASS
Band66	1.4MHz	16QAM	132322	1	0	Low	NV	70	-12.23	-0.007009	±2.5	PASS
Band66	1.4MHz	16QAM	132322	1	0	Low	NV	80	-10.90	-0.006246	±2.5	PASS
Band66	1.4MHz	16QAM	132322	1	0	Low	NV	-40	-10.97	-0.006287	±2.5	PASS

Appendix J: Test Results of Band 85 for eMTC operation

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

Test Result

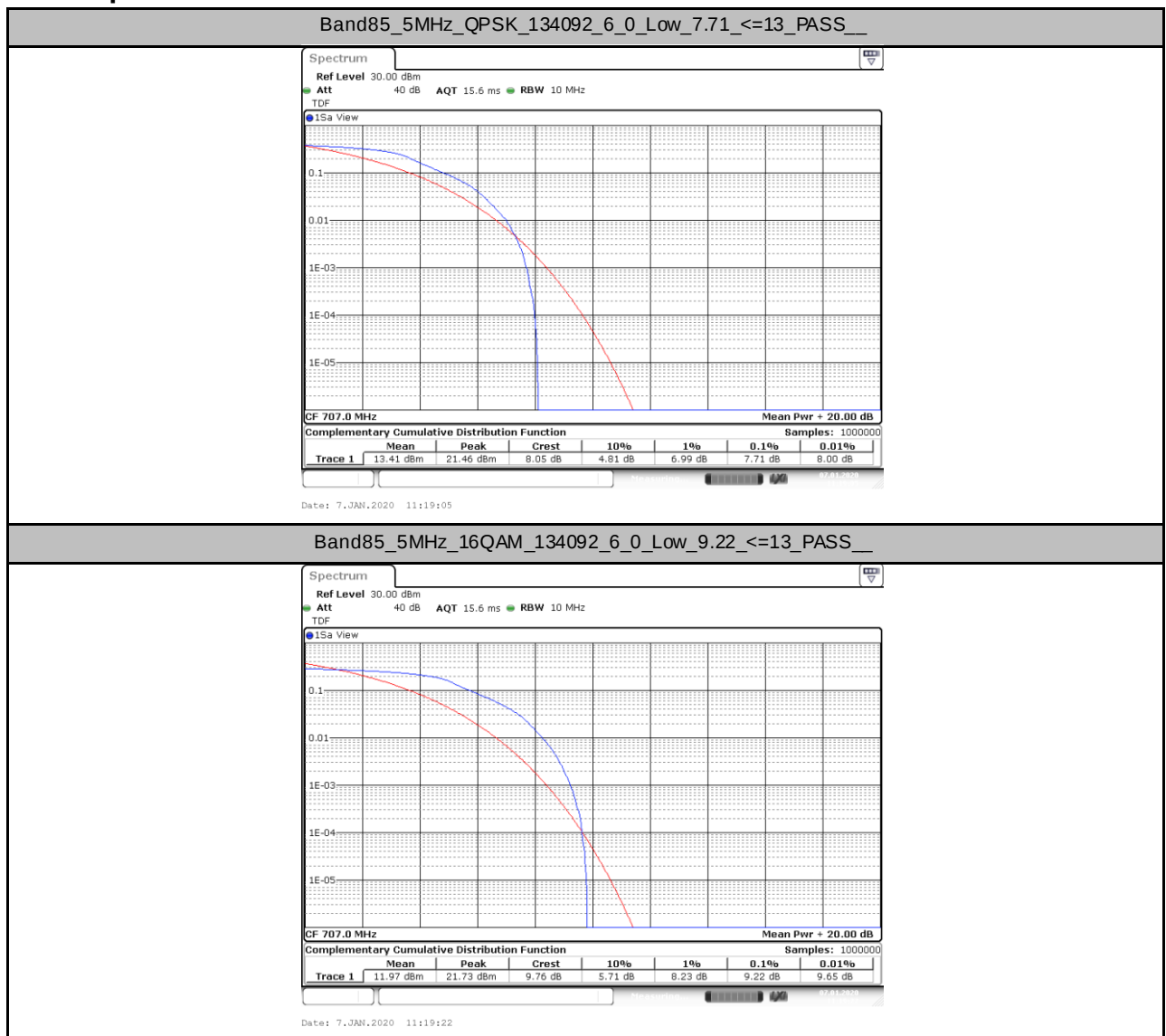
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result (dBm)	ERP		Limit (watts)	Verdict
								dBm	Watts		
Band85	5MHz	QPSK	134027	1	0	Low	22.89	22.88	0.194	3	PASS
Band85	5MHz	QPSK	134092	1	0	Low	22.71	22.7	0.186	3	PASS
Band85	5MHz	QPSK	134157	1	5	High	22.71	22.7	0.186	3	PASS
Band85	5MHz	QPSK	134157	3	3	High	21.70	21.69	0.148	3	PASS
Band85	5MHz	QPSK	134027	6	0	Low	21.83	21.82	0.152	3	PASS
Band85	5MHz	QPSK	134092	6	0	Low	21.60	21.59	0.144	3	PASS
Band85	5MHz	16QAM	134027	1	0	Low	23.21	23.2	0.209	3	PASS
Band85	5MHz	16QAM	134092	1	0	Low	22.95	22.94	0.197	3	PASS
Band85	5MHz	16QAM	134157	1	5	High	22.92	22.91	0.195	3	PASS
Band85	5MHz	16QAM	134157	3	3	High	21.85	21.84	0.153	3	PASS
Band85	5MHz	16QAM	134027	6	0	Low	21.82	21.81	0.152	3	PASS
Band85	5MHz	16QAM	134092	6	0	Low	21.60	21.59	0.144	3	PASS
Band85	10MHz	QPSK	134092	1	0	Low	22.81	22.8	0.191	3	PASS
Band85	10MHz	QPSK	134092	1	5	High	22.60	22.59	0.182	3	PASS
Band85	10MHz	QPSK	134092	5	0	Low	21.71	21.7	0.148	3	PASS
Band85	10MHz	QPSK	134092	5	1	High	21.58	21.57	0.144	3	PASS
Band85	10MHz	16QAM	134092	1	0	Low	23.01	23	0.200	3	PASS
Band85	10MHz	16QAM	134092	1	5	High	22.83	22.82	0.191	3	PASS
Band85	10MHz	16QAM	134092	5	0	Low	21.81	21.8	0.151	3	PASS
Band85	10MHz	16QAM	134092	5	1	High	21.68	21.67	0.147	3	PASS

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

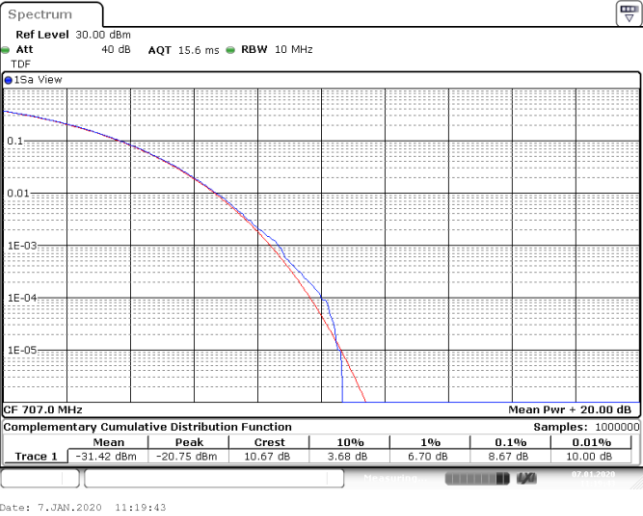
Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result(dB)	Limit(dB)	Verdict
Band85	5MHz	QPSK	134092	6	0	Low	7.71	<=13	PASS
Band85	5MHz	16QAM	134092	6	0	Low	9.22	<=13	PASS
Band85	10MHz	QPSK	134092	6	0	Low	8.67	<=13	PASS
Band85	10MHz	16QAM	134092	6	0	Low	8.96	<=13	PASS

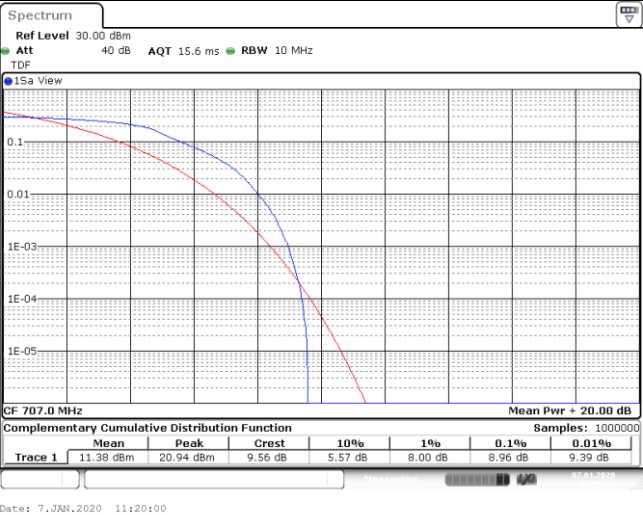
Test Graphs



Band85_10MHz_QPSK_134092_6_0_Low_8.67_<=13_PASS__



Band85_10MHz_16QAM_134092_6_0_Low_8.96_<=13_PASS__



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

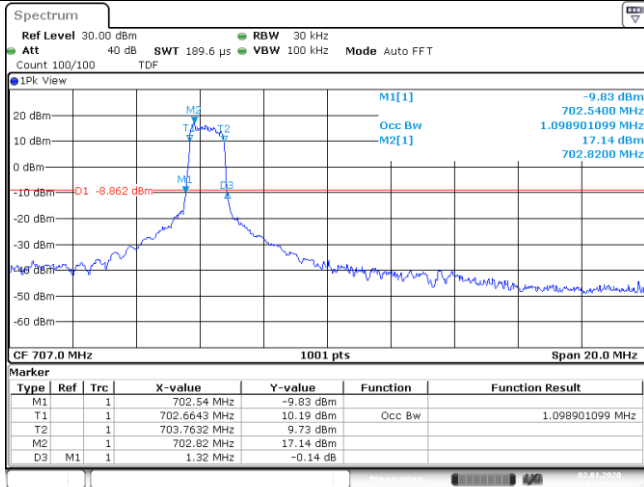
Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band85	5MHz	QPSK	134092	6	0	Low	1.089	1.290	PASS
Band85	5MHz	16QAM	134092	6	0	Low	1.099	1.340	PASS
Band85	10MHz	QPSK	134092	6	0	Low	1.099	1.320	PASS
Band85	10MHz	16QAM	134092	6	0	Low	1.099	1.320	PASS

Test Graphs

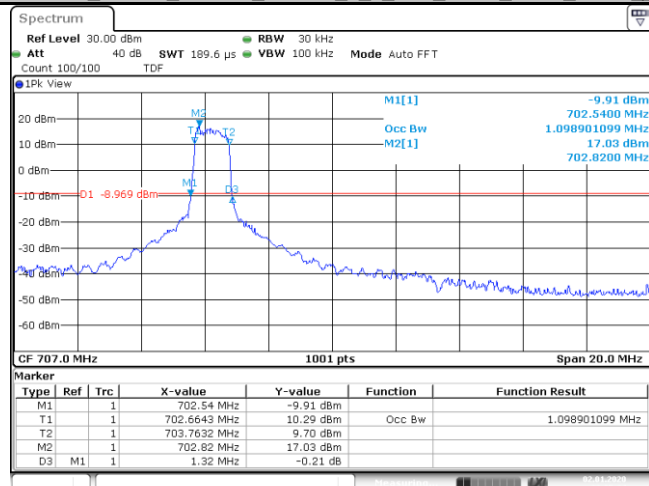


Band85_10MHz_QPSK_134092_6_0_Low_1.099_1.320_PASS



Date: 2.JAN.2020 09:25:16

Band85_10MHz_16QAM_134092_6_0_Low_1.099_1.320_PASS



Date: 2.JAN.2020 09:25:35

Appendix J.4: Band Edge for M1

Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Result (dBm)	Verdict
Band85	5MHz	QPSK	134027	1	0	Low	-39.38	PASS
Band85	5MHz	QPSK	134157	1	5	High	-49.70	PASS
Band85	5MHz	QPSK	134157	3	3	High	-49.25	PASS
Band85	5MHz	QPSK	134027	6	0	Low	-34.98	PASS
Band85	5MHz	16QAM	134027	1	0	Low	-39.61	PASS
Band85	5MHz	16QAM	134157	1	5	High	-50.85	PASS
Band85	5MHz	16QAM	134157	3	3	High	-55.70	PASS
Band85	5MHz	16QAM	134027	6	0	Low	-36.00	PASS

Test Graphs

