



Appendix B

E-UTRA Band 7



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1 Effective (Isotropic) Radiated Power

1.1. Test Result

Band	Bandwidth h	Modulation	Channel	RB Configuration	Conducted Power(dBm)	EIRP (dBm)	limit (dBm)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	23.55	24.25	33.00	PASS
Band7	5MHz	QPSK	20775	1RB#12	23.52	24.22	33.00	PASS
Band7	5MHz	QPSK	20775	1RB#24	23.49	24.19	33.00	PASS
Band7	5MHz	QPSK	20775	12RB#6	22.55	23.25	33.00	PASS
Band7	5MHz	QPSK	20775	12RB#0	22.61	23.31	33.00	PASS
Band7	5MHz	QPSK	20775	12RB#13	22.61	23.31	33.00	PASS
Band7	5MHz	QPSK	20775	25RB#0	22.59	23.29	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#24	23.52	24.22	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#0	23.72	24.42	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#12	23.45	24.15	33.00	PASS
Band7	5MHz	QPSK	21100	12RB#0	22.58	23.28	33.00	PASS
Band7	5MHz	QPSK	21100	12RB#6	22.69	23.39	33.00	PASS
Band7	5MHz	QPSK	21100	12RB#13	22.65	23.35	33.00	PASS
Band7	5MHz	QPSK	21100	25RB#0	22.63	23.33	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#12	23.49	24.19	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#0	23.82	24.52	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#24	23.63	24.33	33.00	PASS
Band7	5MHz	QPSK	21425	12RB#13	22.7	23.4	33.00	PASS
Band7	5MHz	QPSK	21425	12RB#6	22.72	23.42	33.00	PASS
Band7	5MHz	QPSK	21425	12RB#0	22.68	23.38	33.00	PASS
Band7	5MHz	QPSK	21425	25RB#0	22.68	23.38	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#0	22.9	23.6	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#24	22.75	23.45	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#12	22.42	23.12	33.00	PASS
Band7	5MHz	16QAM	20775	12RB#13	21.39	22.09	33.00	PASS
Band7	5MHz	16QAM	20775	12RB#6	21.5	22.2	33.00	PASS
Band7	5MHz	16QAM	20775	12RB#0	21.59	22.29	33.00	PASS



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Band7	5MHz	16QAM	20775	25RB#0	21.49	22.19	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#0	22.9	23.6	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#12	22.71	23.41	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#24	22.53	23.23	33.00	PASS
Band7	5MHz	16QAM	21100	12RB#0	21.7	22.4	33.00	PASS
Band7	5MHz	16QAM	21100	12RB#6	21.51	22.21	33.00	PASS
Band7	5MHz	16QAM	21100	12RB#13	21.58	22.28	33.00	PASS
Band7	5MHz	16QAM	21100	25RB#0	21.71	22.41	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#0	22.49	23.19	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#24	23.15	23.85	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#12	22.62	23.32	33.00	PASS
Band7	5MHz	16QAM	21425	12RB#0	21.64	22.34	33.00	PASS
Band7	5MHz	16QAM	21425	12RB#6	21.65	22.35	33.00	PASS
Band7	5MHz	16QAM	21425	12RB#13	21.57	22.27	33.00	PASS
Band7	5MHz	16QAM	21425	25RB#0	21.65	22.35	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#49	23.57	24.27	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#24	23.64	24.34	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#0	23.49	24.19	33.00	PASS
Band7	10MHz	QPSK	20800	25RB#12	22.56	23.26	33.00	PASS
Band7	10MHz	QPSK	20800	25RB#0	22.65	23.35	33.00	PASS
Band7	10MHz	QPSK	20800	25RB#25	22.62	23.32	33.00	PASS
Band7	10MHz	QPSK	20800	50RB#0	22.64	23.34	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#24	23.51	24.21	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#49	23.64	24.34	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#0	23.58	24.28	33.00	PASS
Band7	10MHz	QPSK	21100	25RB#25	22.63	23.33	33.00	PASS
Band7	10MHz	QPSK	21100	25RB#0	22.67	23.37	33.00	PASS
Band7	10MHz	QPSK	21100	25RB#12	22.68	23.38	33.00	PASS
Band7	10MHz	QPSK	21100	50RB#0	22.69	23.39	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#49	23.56	24.26	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#24	23.85	24.55	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#0	23.6	24.3	33.00	PASS
Band7	10MHz	QPSK	21400	25RB#25	22.71	23.41	33.00	PASS



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Band7	10MHz	QPSK	21400	25RB#0	22.79	23.49	33.00	PASS
Band7	10MHz	QPSK	21400	25RB#12	22.74	23.44	33.00	PASS
Band7	10MHz	QPSK	21400	50RB#0	22.85	23.55	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#0	22.87	23.57	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#24	23.02	23.72	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#49	22.92	23.62	33.00	PASS
Band7	10MHz	16QAM	20800	25RB#12	21.64	22.34	33.00	PASS
Band7	10MHz	16QAM	20800	25RB#0	21.53	22.23	33.00	PASS
Band7	10MHz	16QAM	20800	25RB#25	21.62	22.32	33.00	PASS
Band7	10MHz	16QAM	20800	50RB#0	21.69	22.39	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#0	23.05	23.75	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#49	23.16	23.86	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#24	22.91	23.61	33.00	PASS
Band7	10MHz	16QAM	21100	25RB#0	21.64	22.34	33.00	PASS
Band7	10MHz	16QAM	21100	25RB#25	21.76	22.46	33.00	PASS
Band7	10MHz	16QAM	21100	25RB#12	21.67	22.37	33.00	PASS
Band7	10MHz	16QAM	21100	50RB#0	21.66	22.36	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#0	22.66	23.36	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#49	22.95	23.65	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#24	22.57	23.27	33.00	PASS
Band7	10MHz	16QAM	21400	25RB#0	21.78	22.48	33.00	PASS
Band7	10MHz	16QAM	21400	25RB#12	21.7	22.4	33.00	PASS
Band7	10MHz	16QAM	21400	25RB#25	21.66	22.36	33.00	PASS
Band7	10MHz	16QAM	21400	50RB#0	21.66	22.36	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#74	23.45	24.15	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#38	23.71	24.41	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#0	23.47	24.17	33.00	PASS
Band7	15MHz	QPSK	20825	36RB#39	22.61	23.31	33.00	PASS
Band7	15MHz	QPSK	20825	36RB#18	22.65	23.35	33.00	PASS
Band7	15MHz	QPSK	20825	36RB#0	22.66	23.36	33.00	PASS
Band7	15MHz	QPSK	20825	75RB#0	22.6	23.3	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#0	23.45	24.15	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#38	23.66	24.36	33.00	PASS



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Band7	15MHz	QPSK	21100	1RB#74	23.56	24.26	33.00	PASS
Band7	15MHz	QPSK	21100	36RB#0	22.71	23.41	33.00	PASS
Band7	15MHz	QPSK	21100	36RB#18	22.72	23.42	33.00	PASS
Band7	15MHz	QPSK	21100	36RB#39	22.65	23.35	33.00	PASS
Band7	15MHz	QPSK	21100	75RB#0	22.74	23.44	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#0	23.5	24.2	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#38	23.73	24.43	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#74	23.72	24.42	33.00	PASS
Band7	15MHz	QPSK	21375	36RB#0	22.72	23.42	33.00	PASS
Band7	15MHz	QPSK	21375	36RB#18	22.74	23.44	33.00	PASS
Band7	15MHz	QPSK	21375	36RB#39	22.78	23.48	33.00	PASS
Band7	15MHz	QPSK	21375	75RB#0	22.82	23.52	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#38	22.48	23.18	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#0	22.96	23.66	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#74	22.98	23.68	33.00	PASS
Band7	15MHz	16QAM	20825	36RB#0	21.57	22.27	33.00	PASS
Band7	15MHz	16QAM	20825	36RB#39	21.61	22.31	33.00	PASS
Band7	15MHz	16QAM	20825	36RB#18	21.73	22.43	33.00	PASS
Band7	15MHz	16QAM	20825	75RB#0	21.6	22.3	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#38	22.94	23.64	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#74	22.72	23.42	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#0	22.91	23.61	33.00	PASS
Band7	15MHz	16QAM	21100	36RB#0	21.58	22.28	33.00	PASS
Band7	15MHz	16QAM	21100	36RB#18	21.75	22.45	33.00	PASS
Band7	15MHz	16QAM	21100	36RB#39	21.63	22.33	33.00	PASS
Band7	15MHz	16QAM	21100	75RB#0	21.69	22.39	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#0	22.9	23.6	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#38	22.8	23.5	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#74	23.01	23.71	33.00	PASS
Band7	15MHz	16QAM	21375	36RB#0	21.82	22.52	33.00	PASS
Band7	15MHz	16QAM	21375	36RB#18	21.69	22.39	33.00	PASS
Band7	15MHz	16QAM	21375	36RB#39	21.75	22.45	33.00	PASS
Band7	15MHz	16QAM	21375	75RB#0	21.75	22.45	33.00	PASS



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Band7	20MHz	QPSK	20850	1RB#0	23.39	24.09	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#49	23.62	24.32	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#99	23.27	23.97	33.00	PASS
Band7	20MHz	QPSK	20850	50RB#25	22.64	23.34	33.00	PASS
Band7	20MHz	QPSK	20850	50RB#0	22.62	23.32	33.00	PASS
Band7	20MHz	QPSK	20850	50RB#50	22.66	23.36	33.00	PASS
Band7	20MHz	QPSK	20850	100RB#0	22.6	23.3	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#99	23.27	23.97	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#0	23.77	24.47	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#49	23.31	24.01	33.00	PASS
Band7	20MHz	QPSK	21100	50RB#0	22.57	23.27	33.00	PASS
Band7	20MHz	QPSK	21100	50RB#25	22.66	23.36	33.00	PASS
Band7	20MHz	QPSK	21100	50RB#50	22.67	23.37	33.00	PASS
Band7	20MHz	QPSK	21100	100RB#0	22.77	23.47	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#49	23.35	24.05	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#0	23.84	24.54	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#99	23.48	24.18	33.00	PASS
Band7	20MHz	QPSK	21350	50RB#25	22.73	23.43	33.00	PASS
Band7	20MHz	QPSK	21350	50RB#0	22.76	23.46	33.00	PASS
Band7	20MHz	QPSK	21350	50RB#50	22.79	23.49	33.00	PASS
Band7	20MHz	QPSK	21350	100RB#0	22.7	23.4	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#0	22.53	23.23	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#49	23.2	23.9	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#99	22.45	23.15	33.00	PASS
Band7	20MHz	16QAM	20850	50RB#0	21.25	21.95	33.00	PASS
Band7	20MHz	16QAM	20850	50RB#25	21.65	22.35	33.00	PASS
Band7	20MHz	16QAM	20850	50RB#50	21.71	22.41	33.00	PASS
Band7	20MHz	16QAM	20850	100RB#0	21.62	22.32	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#0	22.58	23.28	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#99	22.76	23.46	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#49	22.2	22.9	33.00	PASS
Band7	20MHz	16QAM	21100	50RB#0	21.47	22.17	33.00	PASS
Band7	20MHz	16QAM	21100	50RB#25	21.78	22.48	33.00	PASS



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Band7	20MHz	16QAM	21100	50RB#50	21.72	22.42	33.00	PASS
Band7	20MHz	16QAM	21100	100RB#0	21.65	22.35	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#0	22.39	23.09	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#99	22.88	23.58	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#49	22.75	23.45	33.00	PASS
Band7	20MHz	16QAM	21350	50RB#50	21.77	22.47	33.00	PASS
Band7	20MHz	16QAM	21350	50RB#25	21.72	22.42	33.00	PASS
Band7	20MHz	16QAM	21350	50RB#0	21.6	22.3	33.00	PASS
Band7	20MHz	16QAM	21350	100RB#0	21.74	22.44	33.00	PASS

Remark:

a: For getting the EIRP (Efficient Isotropic Radiated Power), the following formula should be taken to calculate it,

ERP [dBm] = Conducted Power [dBm] + Gain [dBd]

EIRP [dBm] = Conducted Power [dBm] + Gain [dBi]



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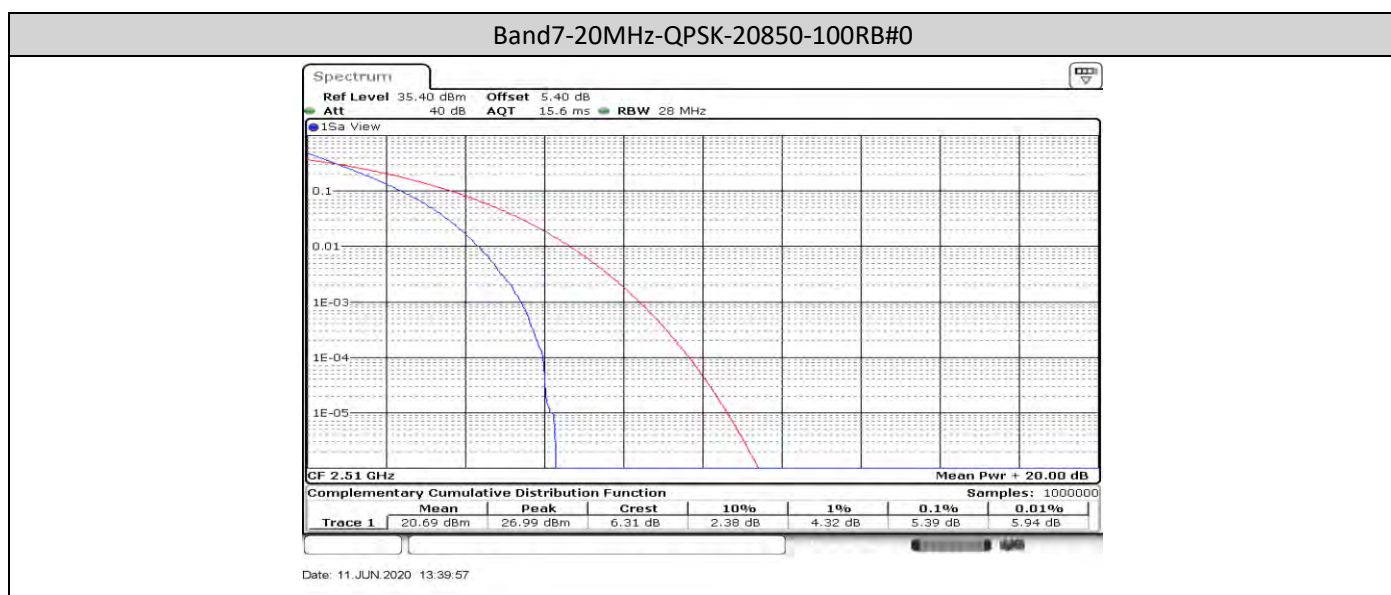


2. Peak-to-Average Ratio (CCDF)

2.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band7	20MHz	QPSK	20850	100RB#0	5.39	13	PASS
Band7	20MHz	QPSK	21100	100RB#0	5.39	13	PASS
Band7	20MHz	QPSK	21350	100RB#0	5.42	13	PASS
Band7	20MHz	16QAM	20850	100RB#0	6.20	13	PASS
Band7	20MHz	16QAM	21100	100RB#0	6.23	13	PASS
Band7	20MHz	16QAM	21350	100RB#0	6.23	13	PASS

2.2. Test Plots





Band7-20MHz-QPSK-21100-100RB#0



Band7-20MHz-QPSK-21350-100RB#0





Band7-20MHz-16QAM-20850-100RB#0



Date: 11 JUN 2020 13:40:08

Band7-20MHz-16QAM-21100-100RB#0



Date: 11 JUN 2020 13:40:31



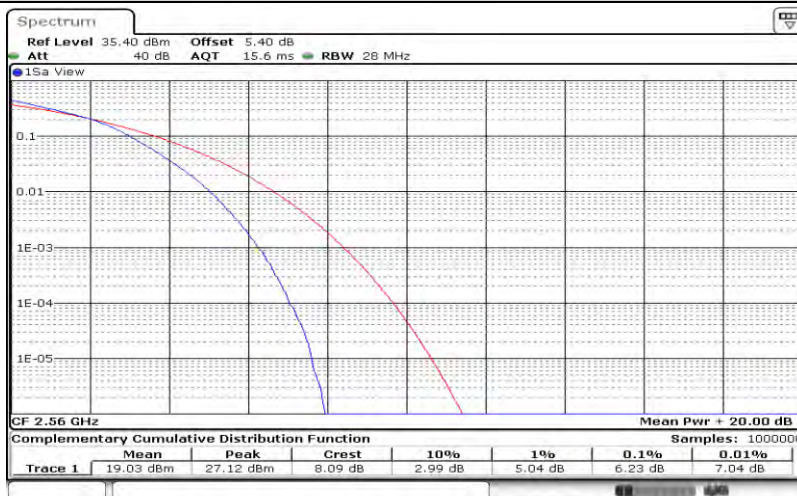
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Band7-20MHz-16QAM-21350-100RB#0



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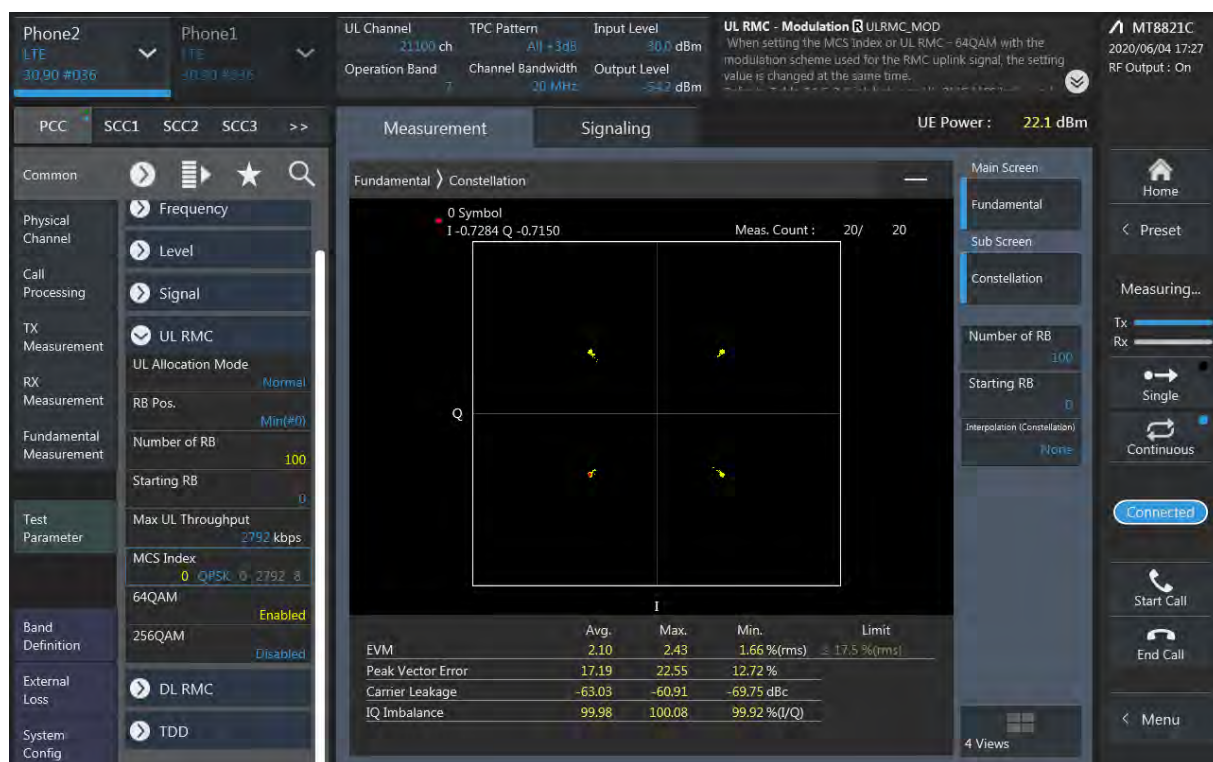


3. Modulation Characteristics

3.1. Test Band = LTE Band 7

3.1.1. Test Mode = LTE /TM1 20MHz

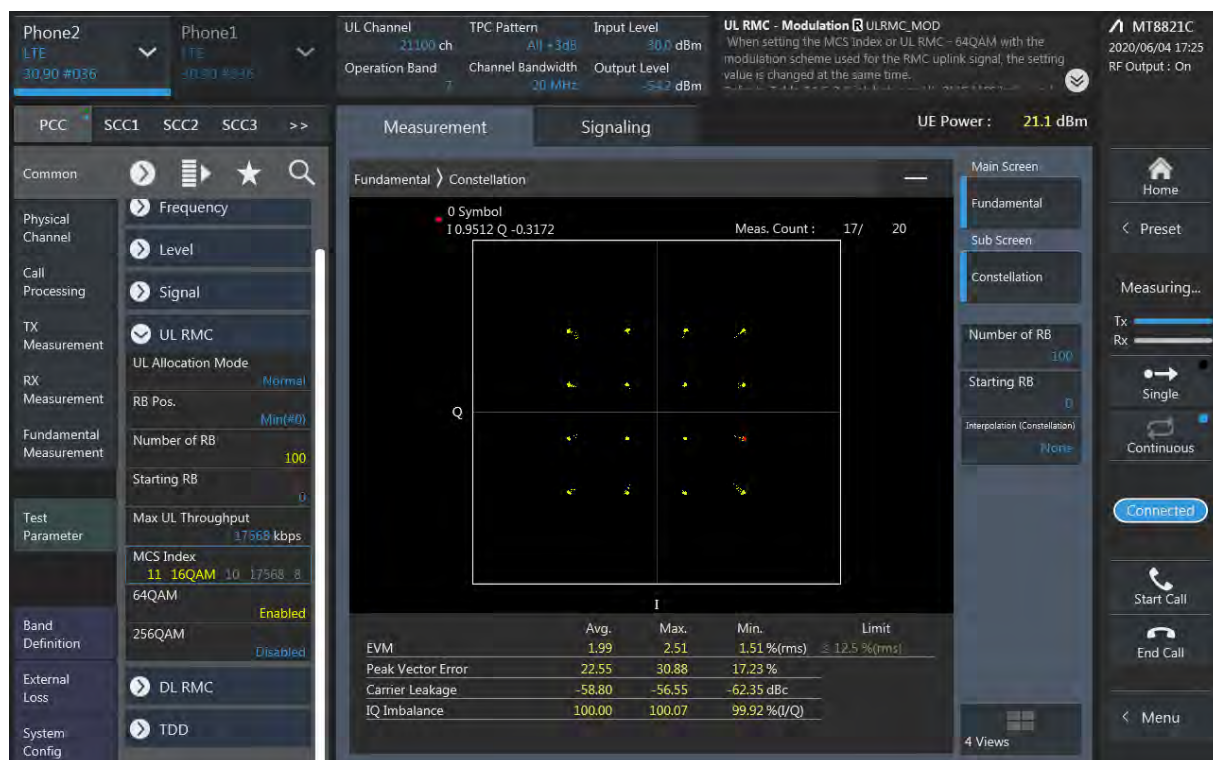
3.1.1.1. Test Channel = MCH





3.1.2. Test Mode = LTE /TM2 20MHz

3.1.2.1. Test Channel = MCH





4. 26dB Bandwidth and Occupied Bandwidth

4.1. Test Result

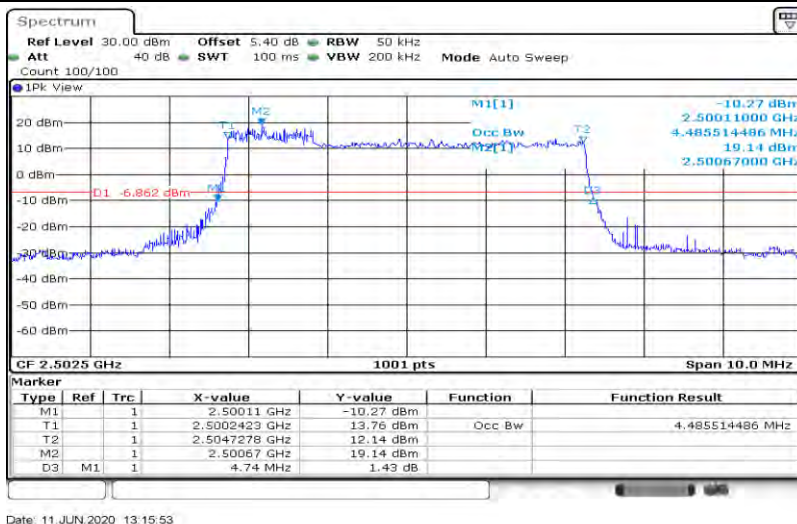
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	4.486	4.740	PASS
Band7	5MHz	QPSK	21100	25RB#0	4.476	4.740	PASS
Band7	5MHz	QPSK	21425	25RB#0	4.486	4.760	PASS
Band7	5MHz	16QAM	20775	25RB#0	4.476	4.790	PASS
Band7	5MHz	16QAM	21100	25RB#0	4.486	4.760	PASS
Band7	5MHz	16QAM	21425	25RB#0	4.486	4.750	PASS
Band7	10MHz	QPSK	20800	50RB#0	8.971	9.460	PASS
Band7	10MHz	QPSK	21100	50RB#0	8.971	9.460	PASS
Band7	10MHz	QPSK	21400	50RB#0	8.971	9.460	PASS
Band7	10MHz	16QAM	20800	50RB#0	8.951	9.480	PASS
Band7	10MHz	16QAM	21100	50RB#0	8.951	9.420	PASS
Band7	10MHz	16QAM	21400	50RB#0	8.931	9.520	PASS
Band7	15MHz	QPSK	20825	75RB#0	13.576	14.550	PASS
Band7	15MHz	QPSK	21100	75RB#0	13.576	14.550	PASS
Band7	15MHz	QPSK	21375	75RB#0	13.546	14.580	PASS
Band7	15MHz	16QAM	20825	75RB#0	13.606	14.310	PASS
Band7	15MHz	16QAM	21100	75RB#0	13.576	14.520	PASS
Band7	15MHz	16QAM	21375	75RB#0	13.576	14.460	PASS
Band7	20MHz	QPSK	20850	100RB#0	18.062	19.120	PASS
Band7	20MHz	QPSK	21100	100RB#0	18.062	19.080	PASS
Band7	20MHz	QPSK	21350	100RB#0	18.102	19.120	PASS
Band7	20MHz	16QAM	20850	100RB#0	18.022	19.000	PASS
Band7	20MHz	16QAM	21100	100RB#0	18.022	18.880	PASS
Band7	20MHz	16QAM	21350	100RB#0	18.062	19.080	PASS



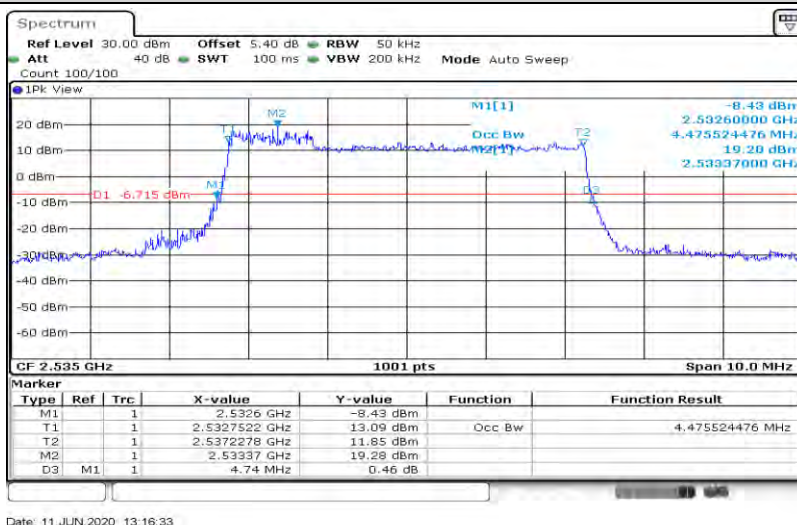


4.2. Test Plots

Band7-5MHz-QPSK-20775-25RB#0-4.486

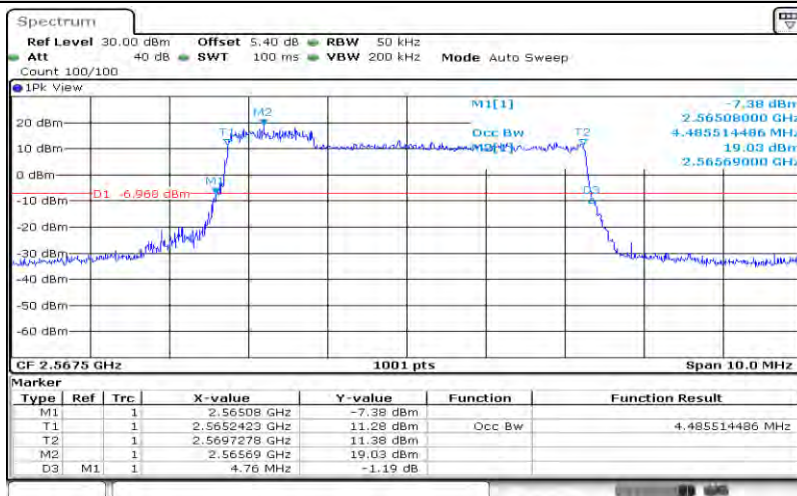


Band7-5MHz-QPSK-21100-25RB#0-4.476



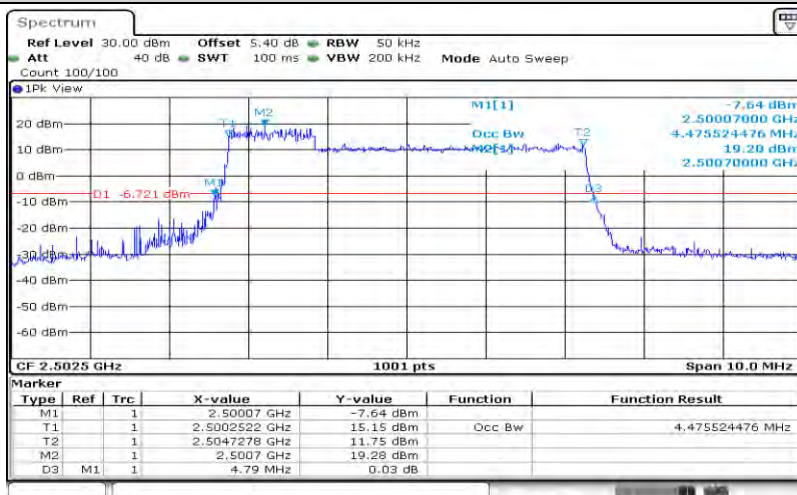


Band7-5MHz-QPSK-21425-25RB#0-4.486



Date: 11 JUN 2020 13:17:13

Band7-5MHz-16QAM-20775-25RB#0-4.476

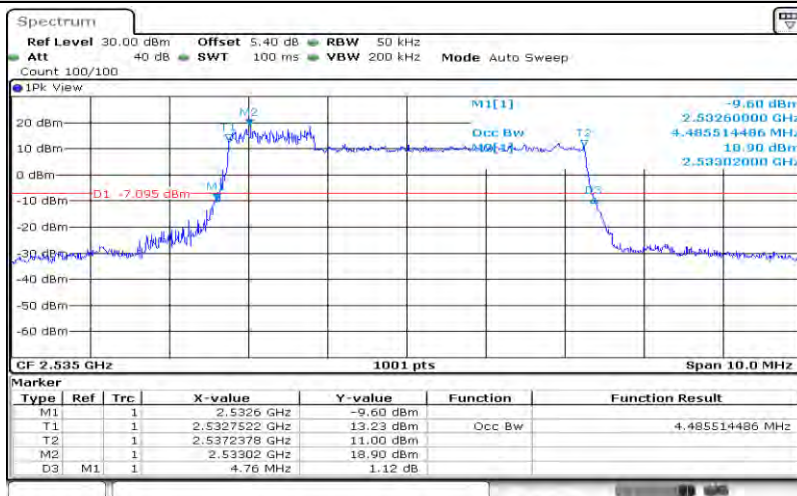


Date: 11 JUN 2020 13:16:13



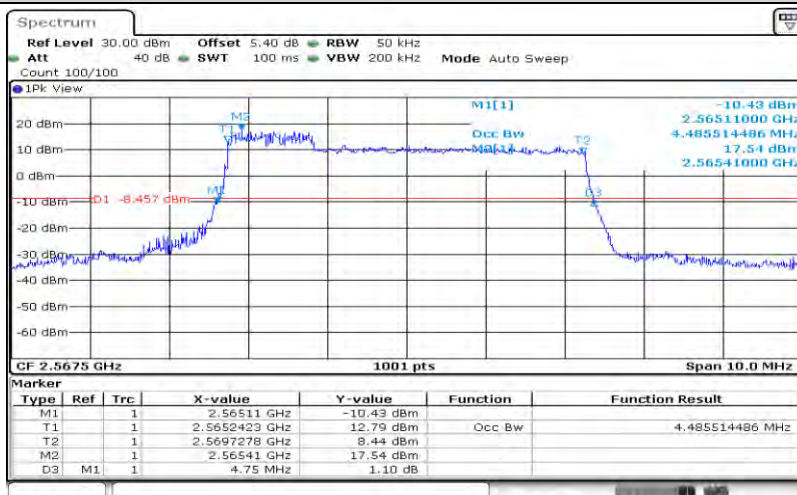


Band7-5MHz-16QAM-21100-25RB#0-4.486



Date: 11 JUN 2020 13:16:53

Band7-5MHz-16QAM-21425-25RB#0-4.486



Date: 11 JUN 2020 13:17:32

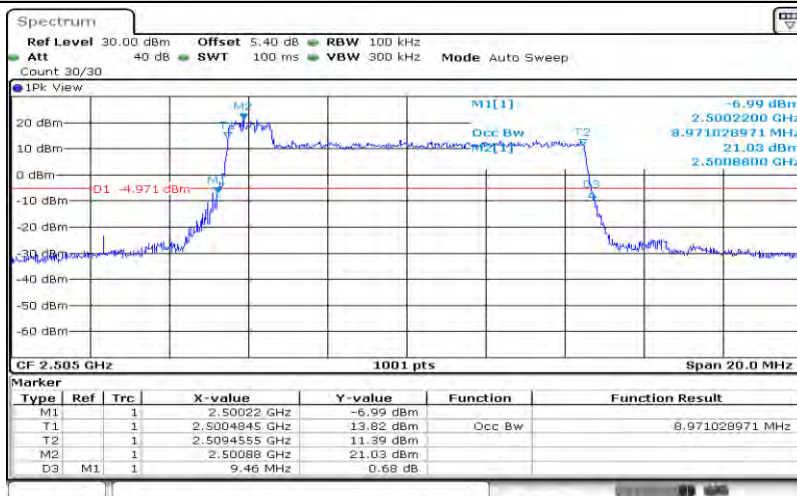


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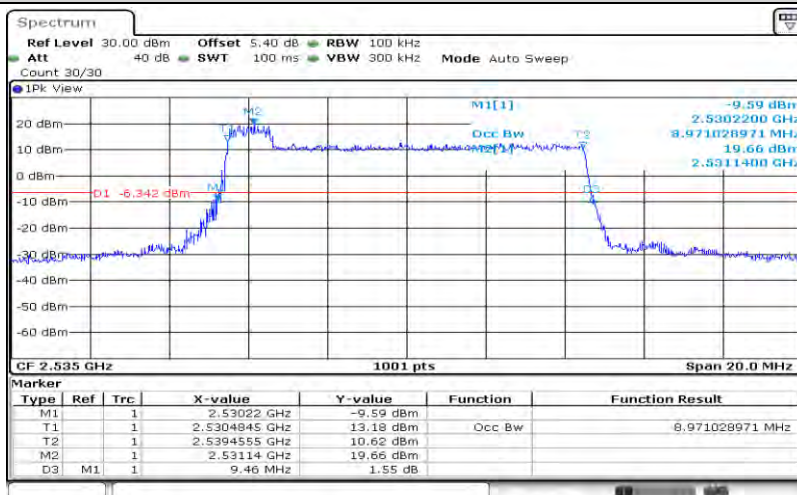


Band7-10MHz-QPSK-20800-50RB#0-8.971



Date: 11 JUN 2020 13:17:50

Band7-10MHz-QPSK-21100-50RB#0-8.971



Date: 11 JUN 2020 13:18:16

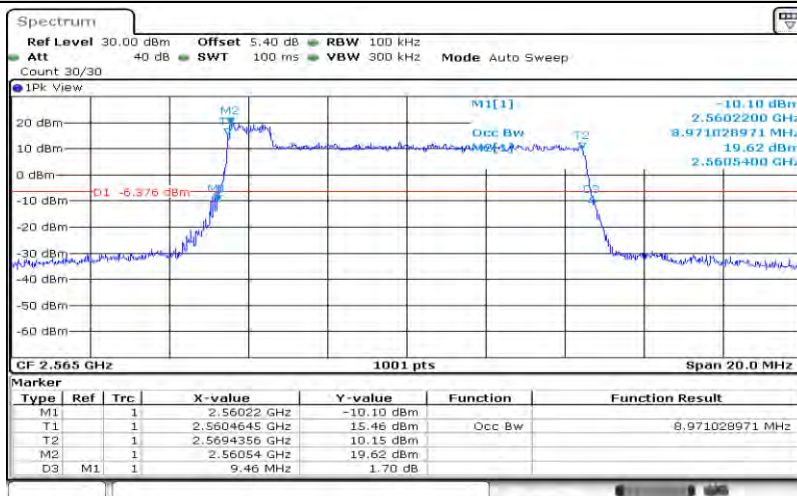


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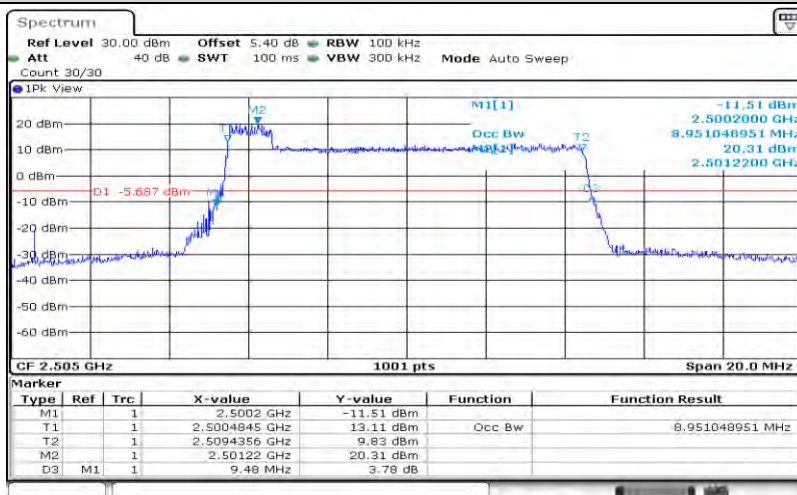


Band7-10MHz-QPSK-21400-50RB#0-8.971



Date: 11 JUN 2020 13:18:42

Band7-10MHz-16QAM-20800-50RB#0-8.951



Date: 11 JUN 2020 13:18:03

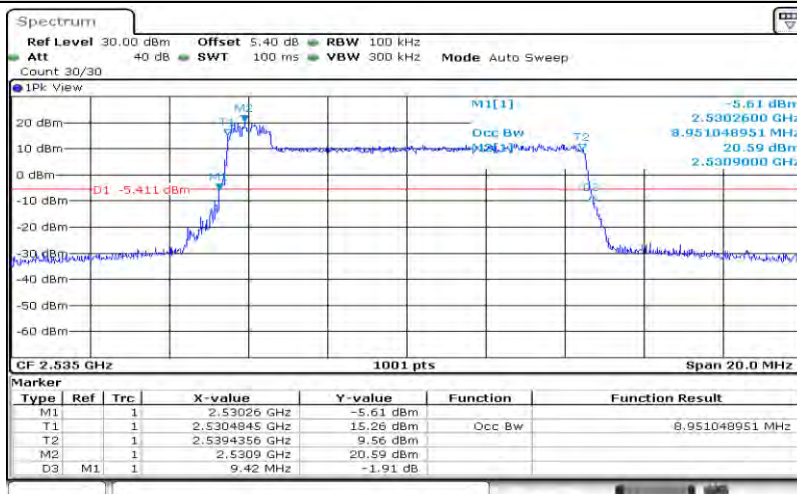


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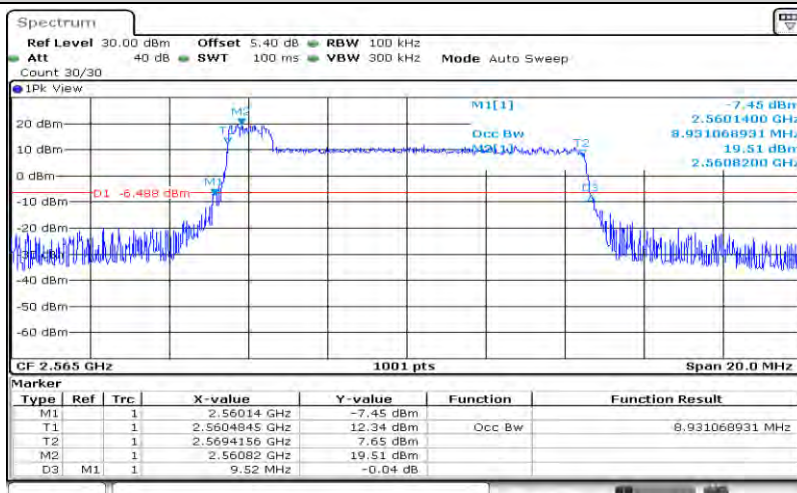


Band7-10MHz-16QAM-21100-50RB#0-8.951



Date: 11 JUN 2020 13:18:28

Band7-10MHz-16QAM-21400-50RB#0-8.931



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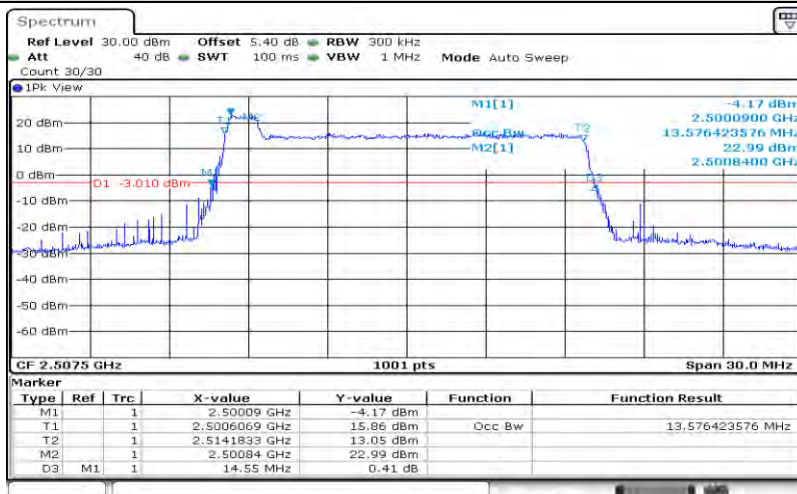


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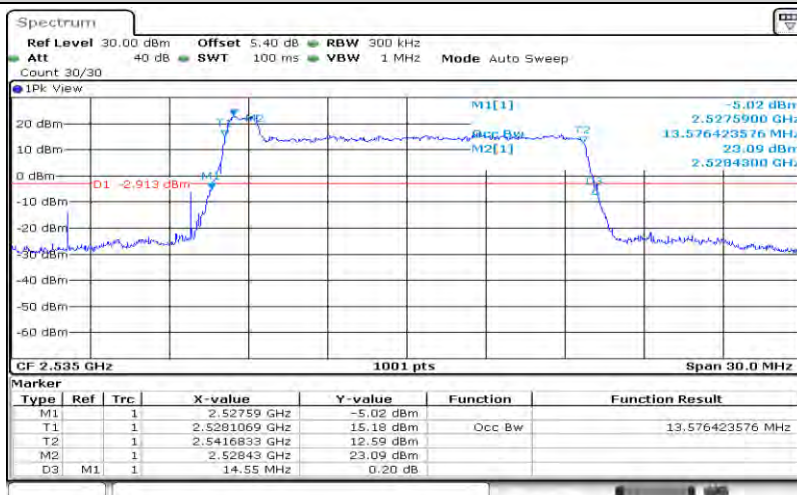


Band7-15MHz-QPSK-20825-75RB#0-13.576



Date: 11 JUN 2020 13:21:01

Band7-15MHz-QPSK-21100-75RB#0-13.576



Date: 11 JUN 2020 13:21:26

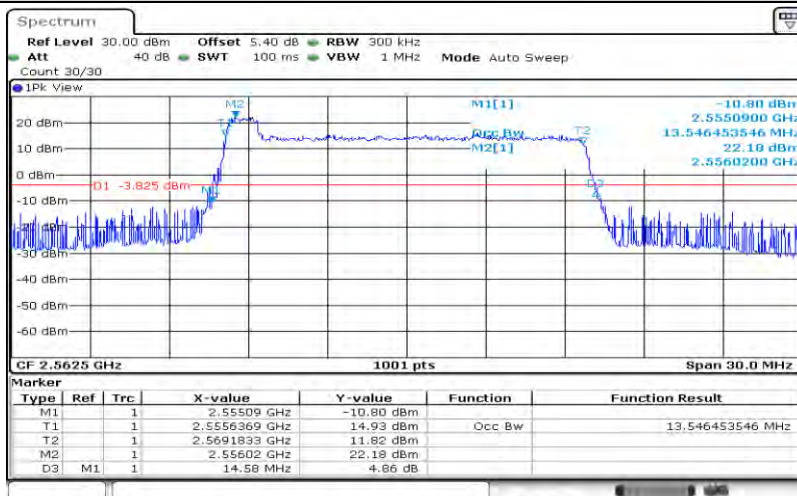


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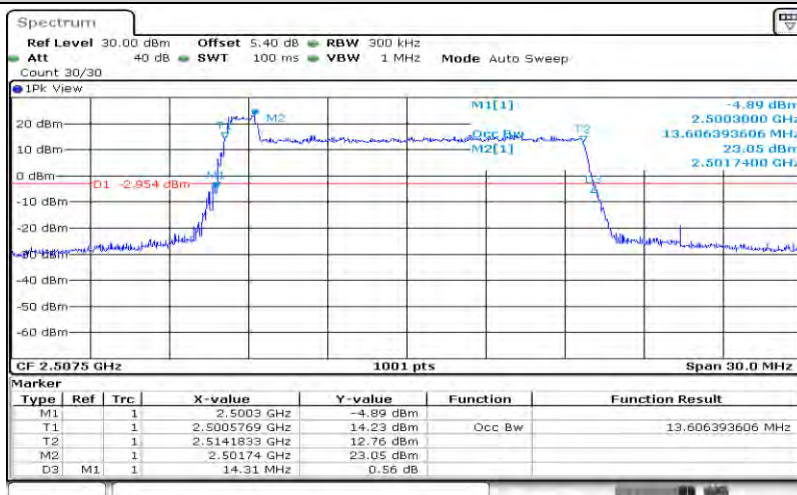


Band7-15MHz-QPSK-21375-75RB#0-13.546



Date: 11 JUN 2020 13:21:52

Band7-15MHz-16QAM-20825-75RB#0-13.606



Date: 11 JUN 2020 13:21:13

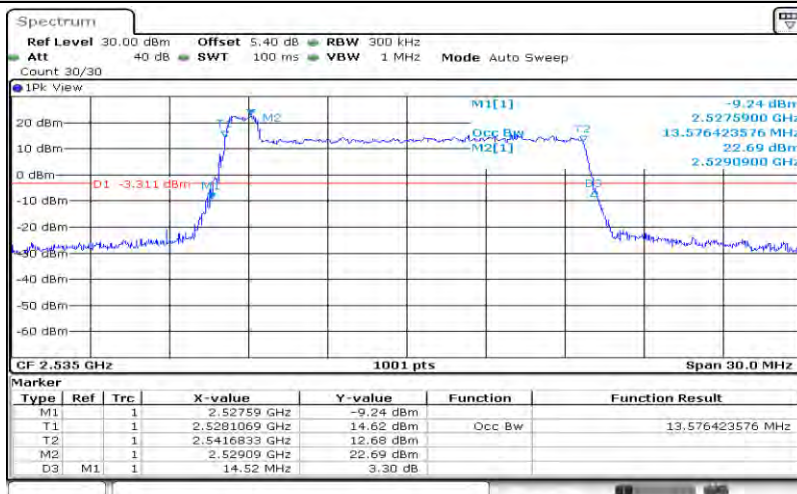


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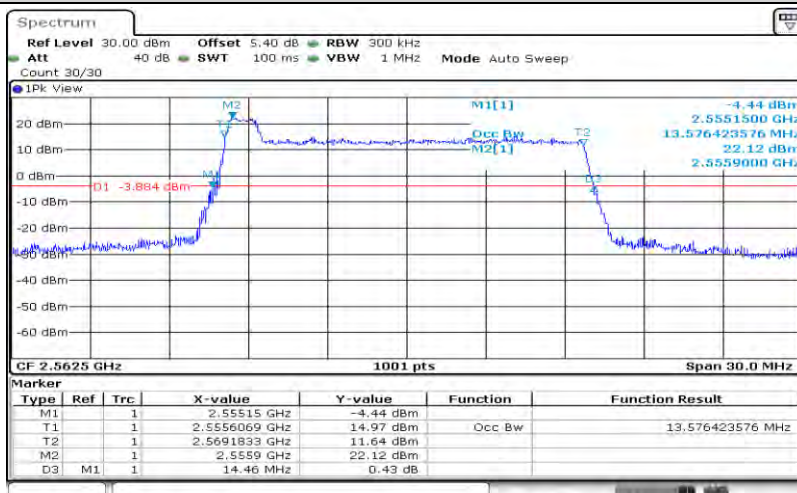


Band7-15MHz-16QAM-21100-75RB#0-13.576



Date: 11 JUN 2020 13:21:39

Band7-15MHz-16QAM-21375-75RB#0-13.576



Date: 11 JUN 2020 13:22:04



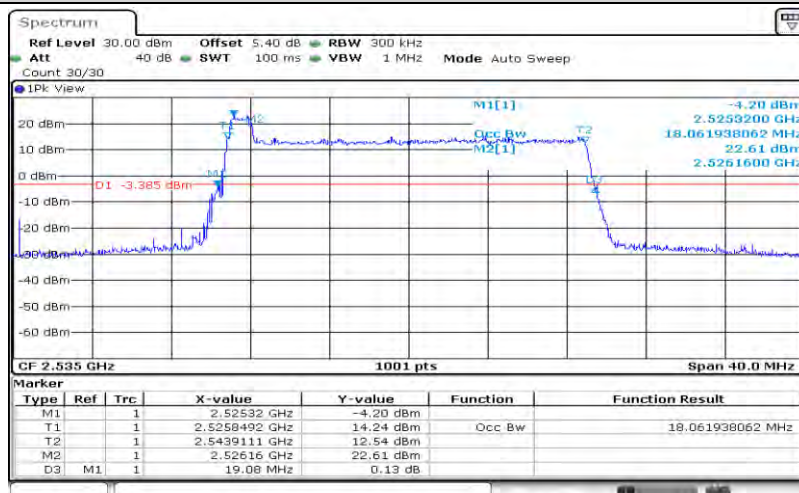


Band7-20MHz-QPSK-20850-100RB#0-18.062



Date: 11 JUN 2020 13:22:22

Band7-20MHz-QPSK-21100-100RB#0-18.062



Date: 11 JUN 2020 13:22:48

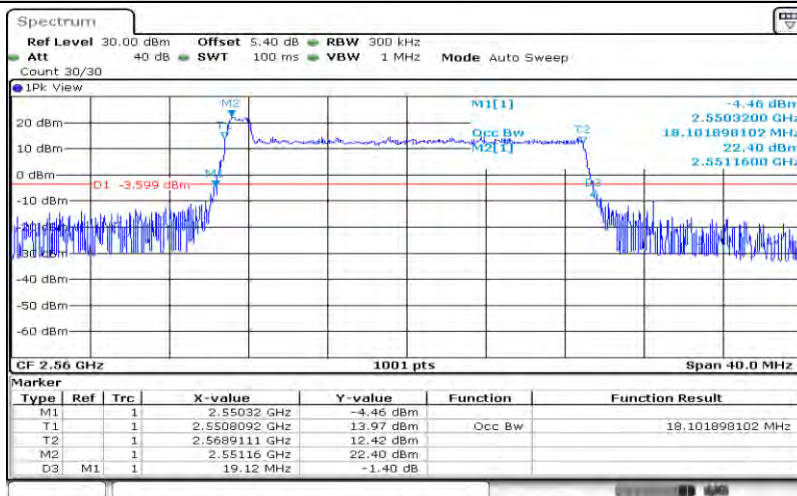


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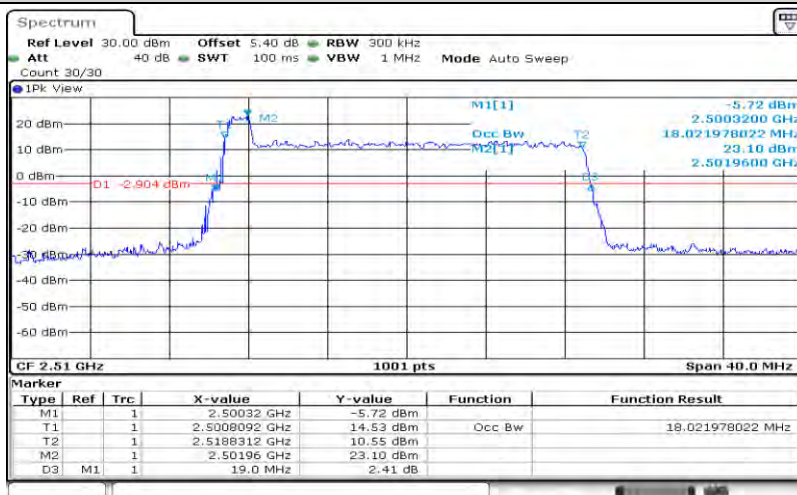


Band7-20MHz-QPSK-21350-100RB#0-18.102



Date: 11 JUN 2020 13:23:13

Band7-20MHz-16QAM-20850-100RB#0-18.022



Date: 11 JUN 2020 13:22:35

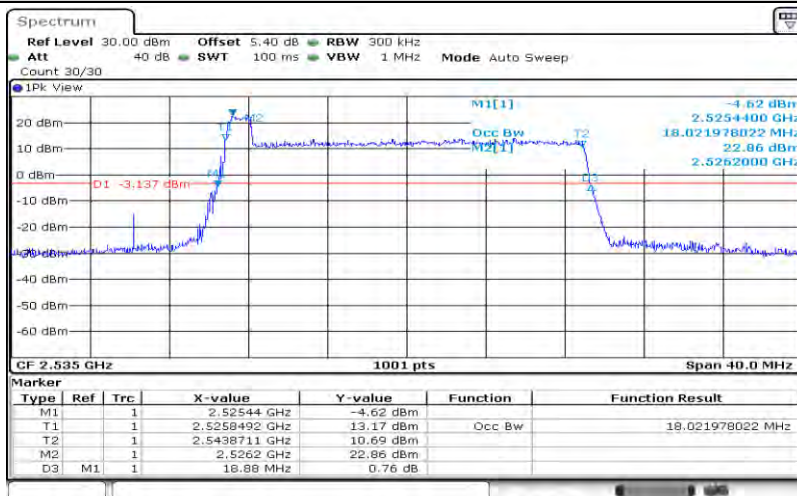


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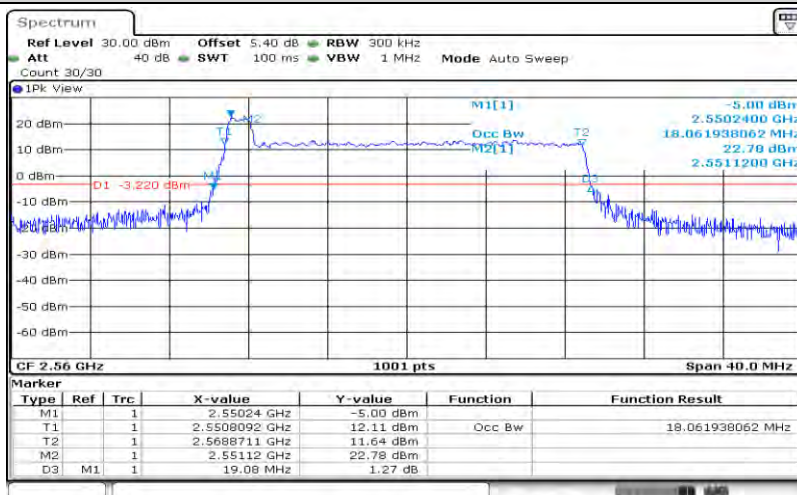


Band7-20MHz-16QAM-21100-100RB#0-18.022



Date: 11 JUN 2020 13:23:00

Band7-20MHz-16QAM-21350-100RB#0-18.062



Date: 11 JUN 2020 13:23:48

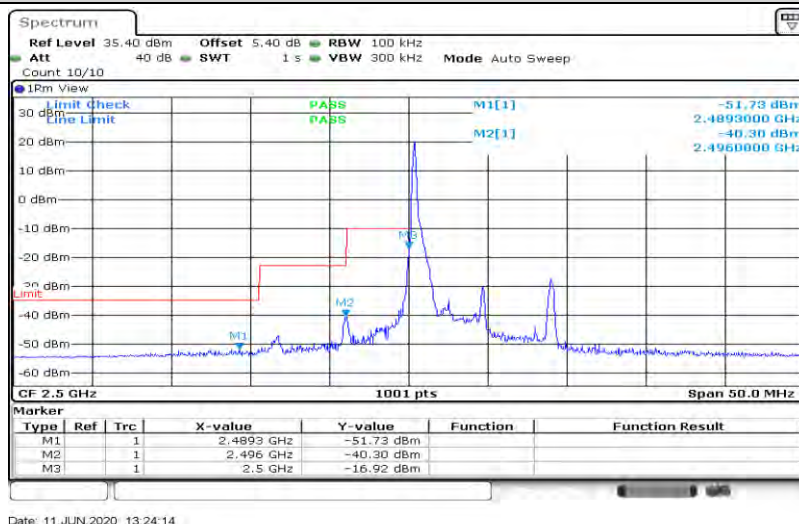




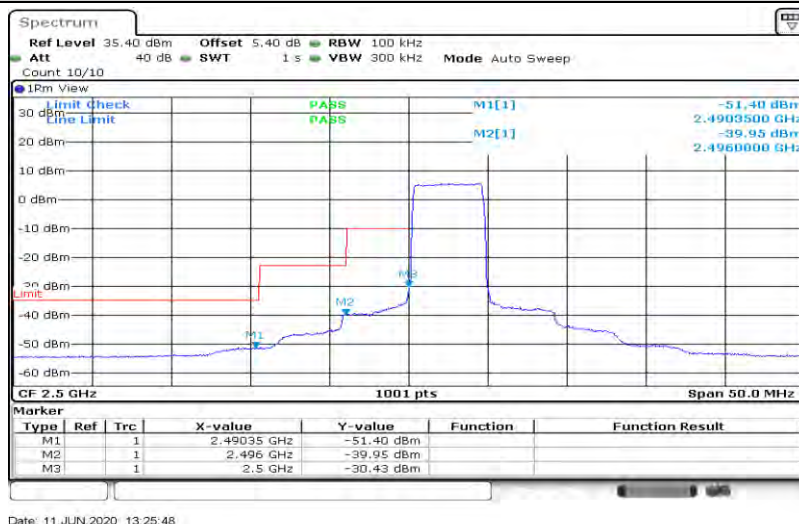
5. Band Edge Compliance

5.1. Test Plots

Band7-5MHz-QPSK-20775-1RB#0

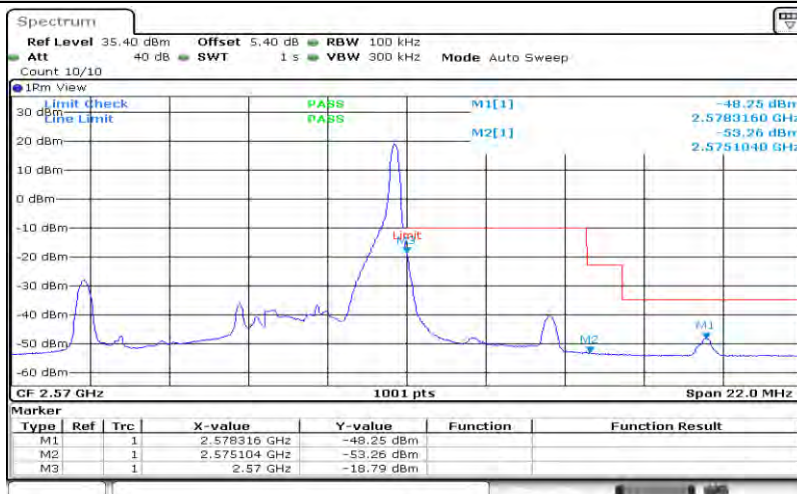


Band7-5MHz-QPSK-20775-25RB#0



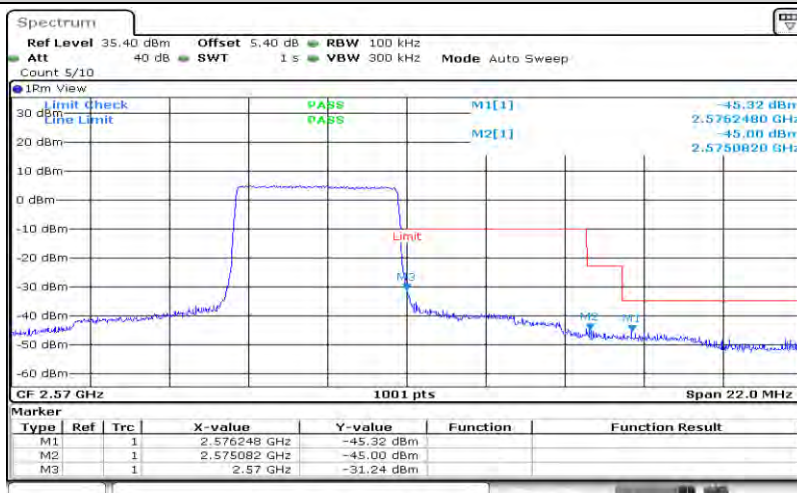


Band7-5MHz-QPSK-21425-1RB#24



Date: 11 JUN 2020 13:25:01

Band7-5MHz-QPSK-21425-25RB#0



Date: 11 JUN 2020 13:26:31

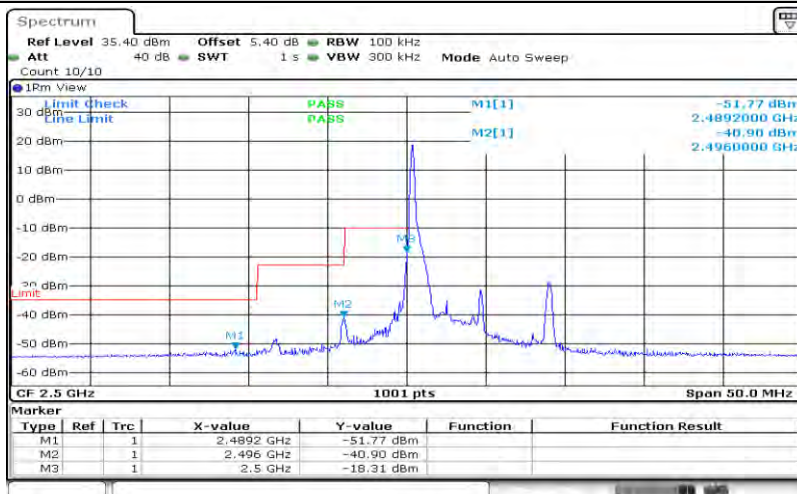


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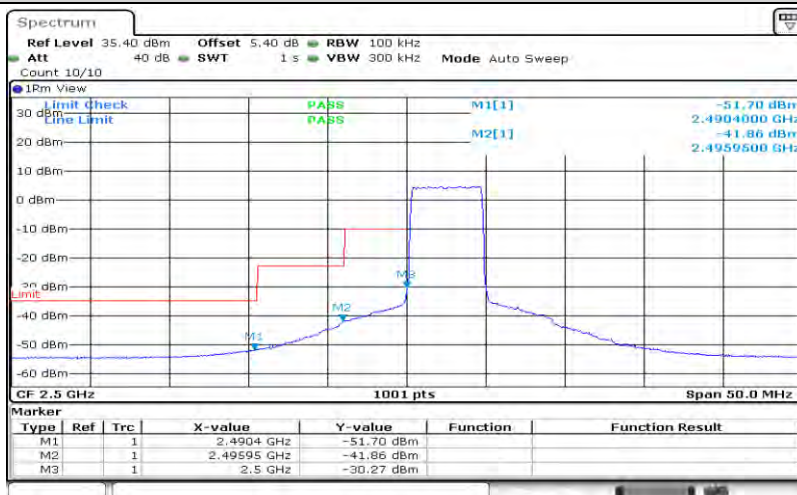


Band7-5MHz-16QAM-20775-1RB#0



Date: 11 JUN 2020 13:24:35

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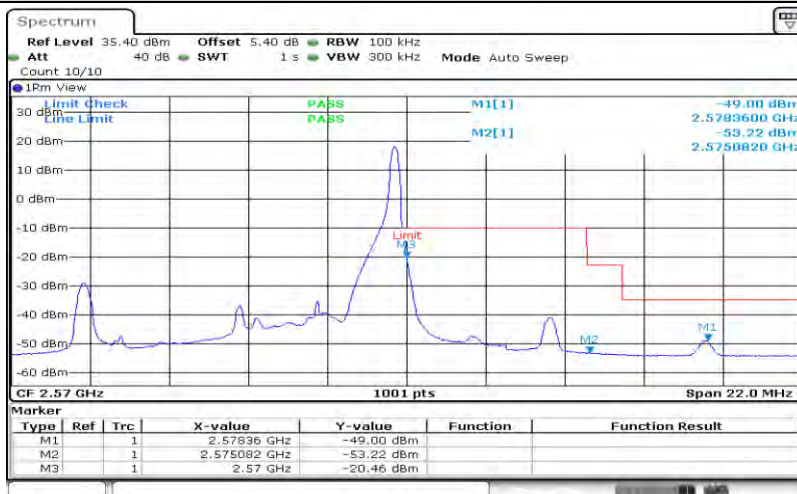


Date: 11 JUN 2020 13:26:09



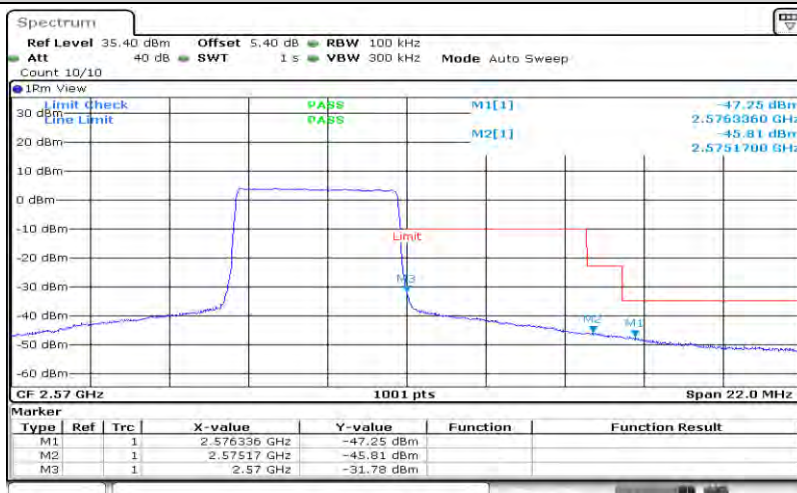


Band7-5MHz-16QAM-21425-1RB#24



Date: 11 JUN 2020 13:25:22

Band7-5MHz-16QAM-21425-25RB#0



Date: 11 JUN 2020 13:26:52

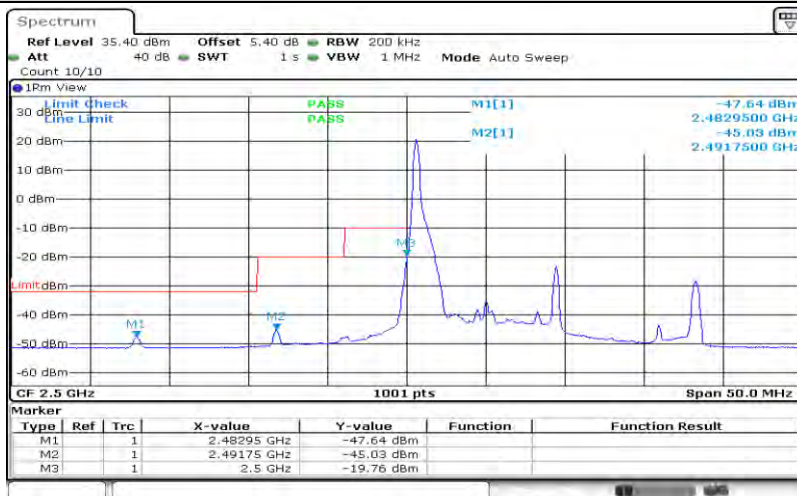


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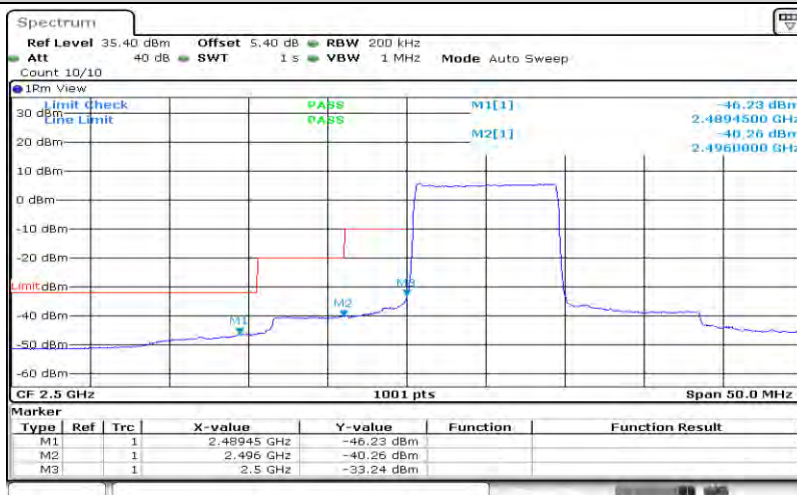


Band7-10MHz-QPSK-20800-1RB#0



Date: 11 JUN 2020 13:27:18

Band7-10MHz-QPSK-20800-50RB#0



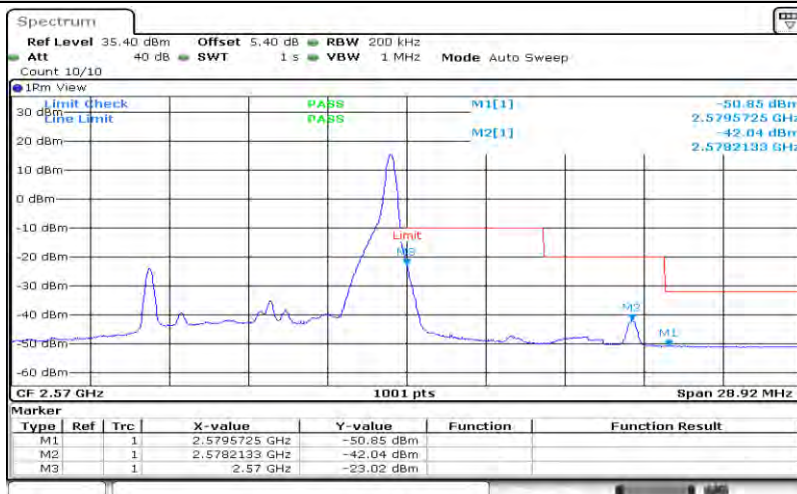
Date: 11 JUN 2020 13:28:52



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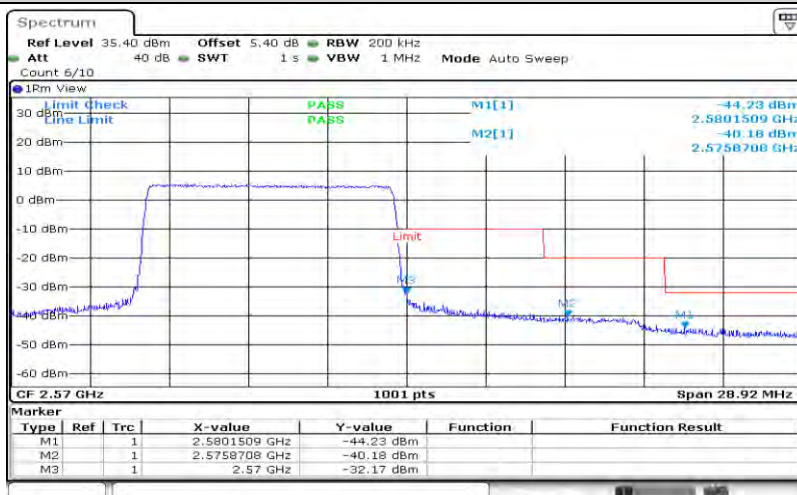
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Band7-10MHz-QPSK-21400-1RB#49



Date: 11 JUN 2020 13:28:05

Band7-10MHz-QPSK-21400-50RB#0



Date: 11 JUN 2020 13:29:35



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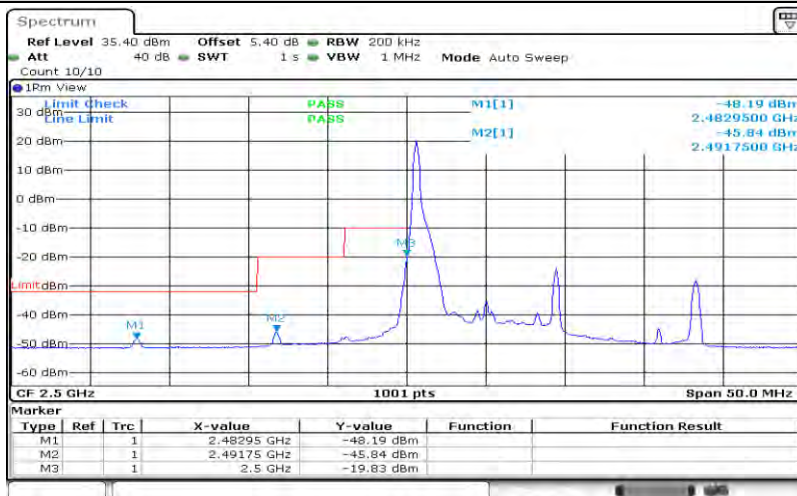
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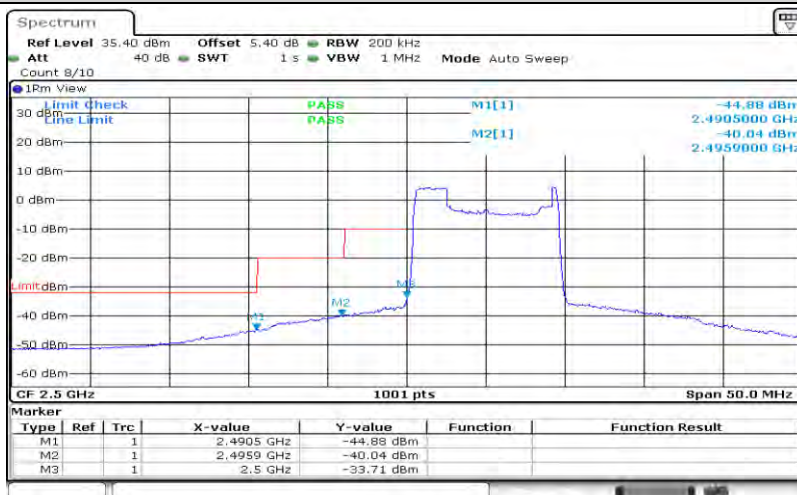


Band7-10MHz-16QAM-20800-1RB#0



Date: 11 JUN 2020 13:27:39

Band7-10MHz-16QAM-20800-50RB#0



Date: 11 JUN 2020 13:29:14

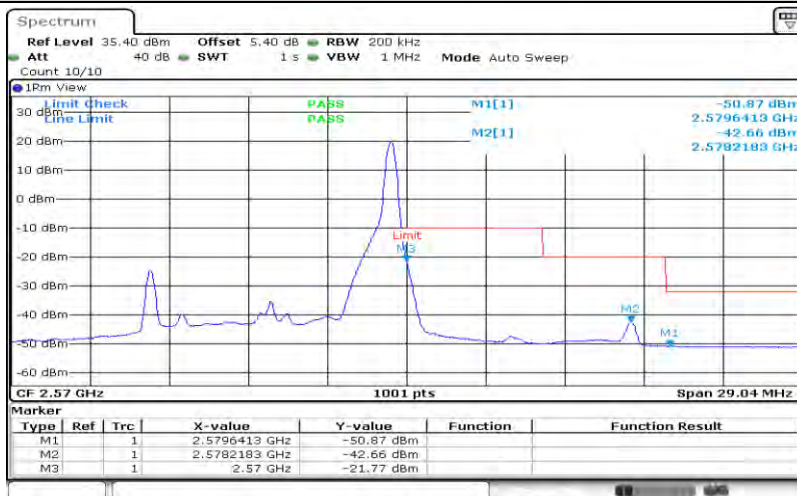


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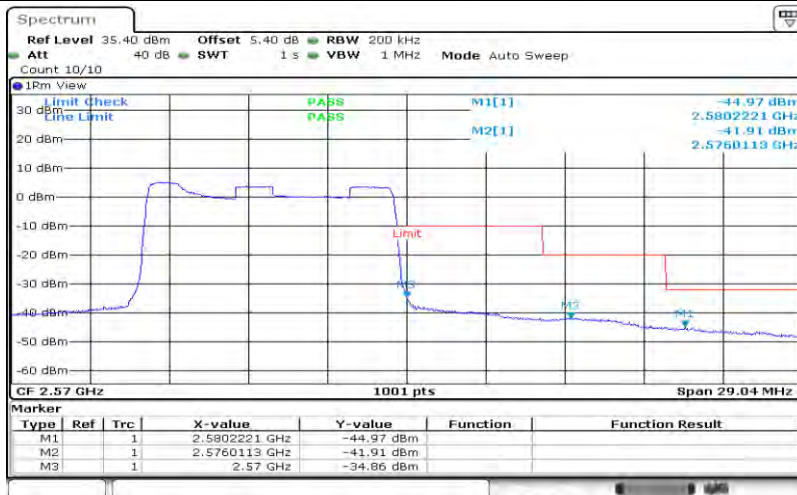


Band7-10MHz-16QAM-21400-1RB#49



Date: 11 JUN 2020 13:28:26

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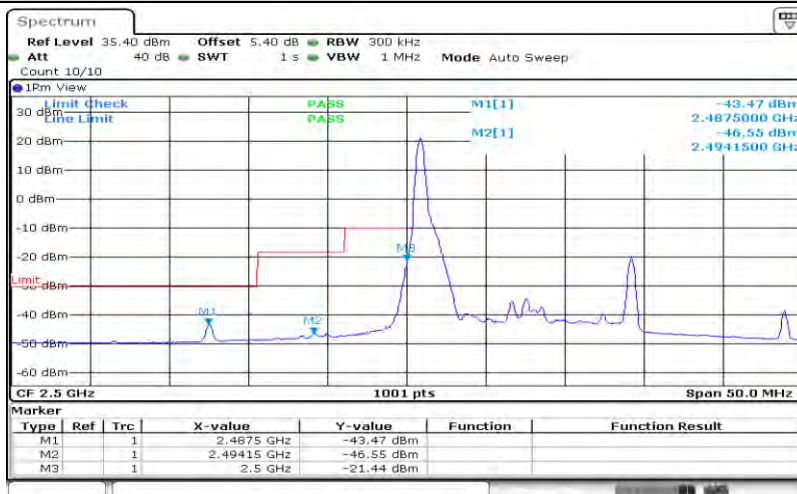


Date: 11 JUN 2020 13:29:56



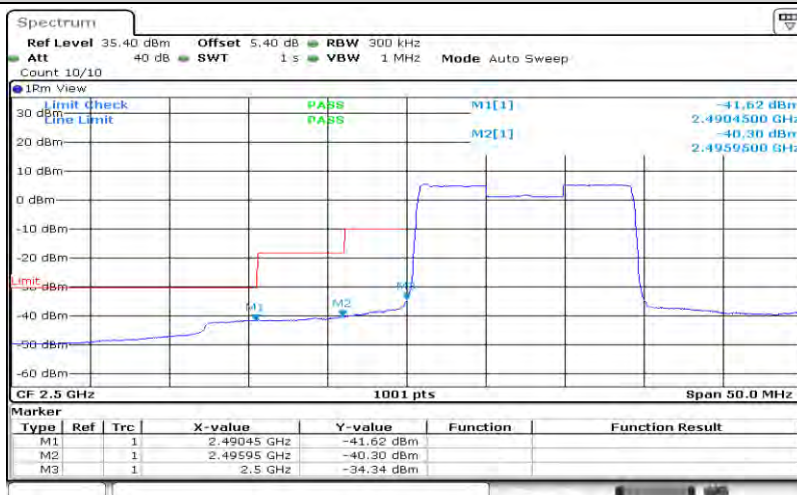


Band7-15MHz-QPSK-20825-1RB#0



Date: 11 JUN 2020 13:30:22

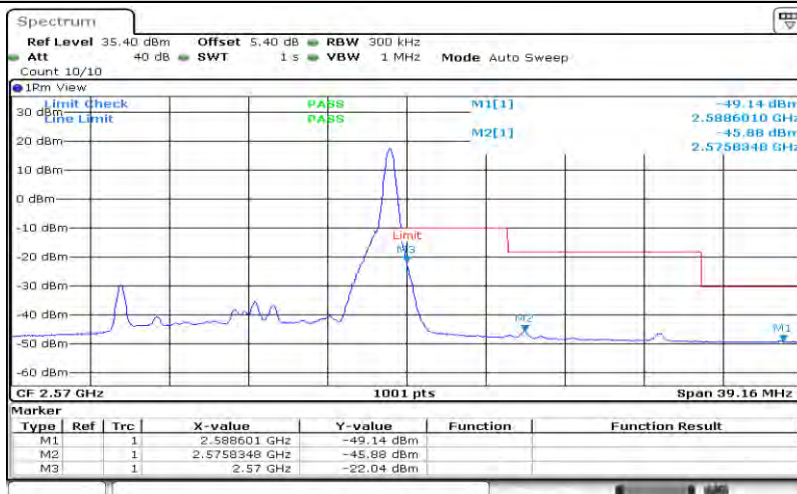
Band7-15MHz-QPSK-20825-75RB#0



Date: 11 JUN 2020 13:31:56

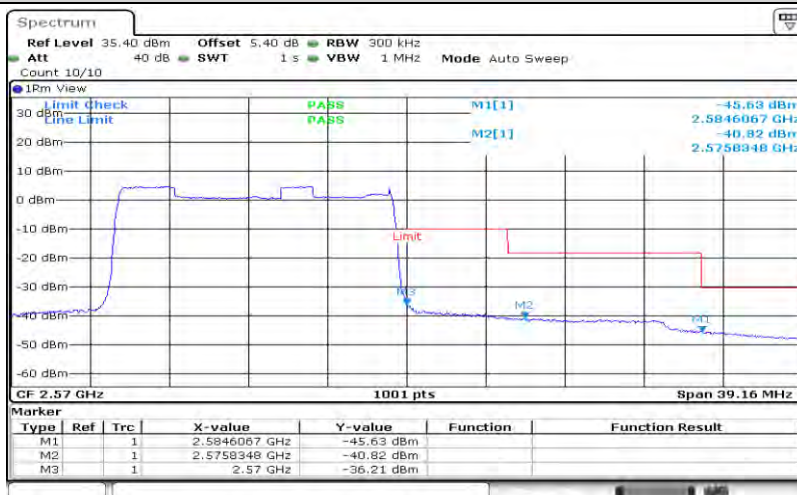


Band7-15MHz-QPSK-21375-1RB#74



Date: 11 JUN 2020 13:31:09

Band7-15MHz-QPSK-21375-75RB#0



Date: 11 JUN 2020 13:32:39



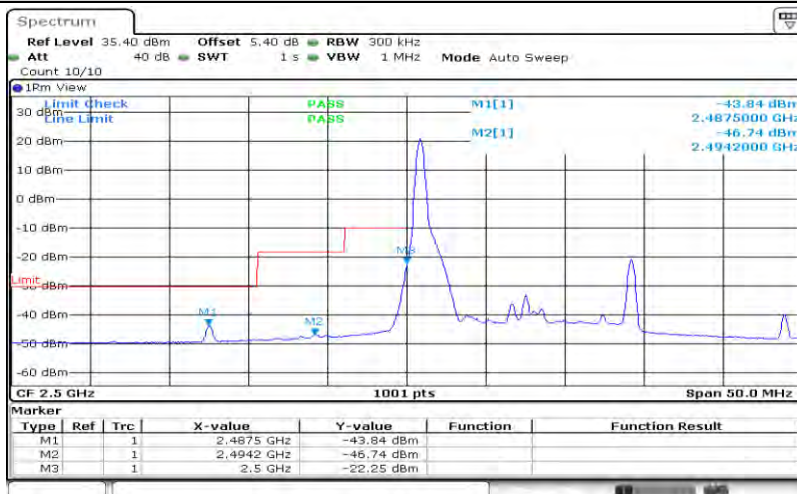
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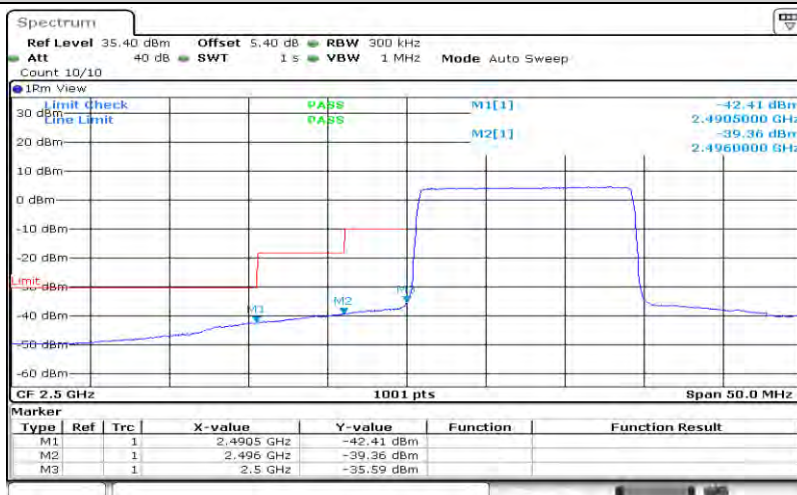


Band7-15MHz-16QAM-20825-1RB#0



Date: 11 JUN 2020 13:30:44

Band7-15MHz-16QAM-20825-75RB#0



Date: 11 JUN 2020 13:32:18

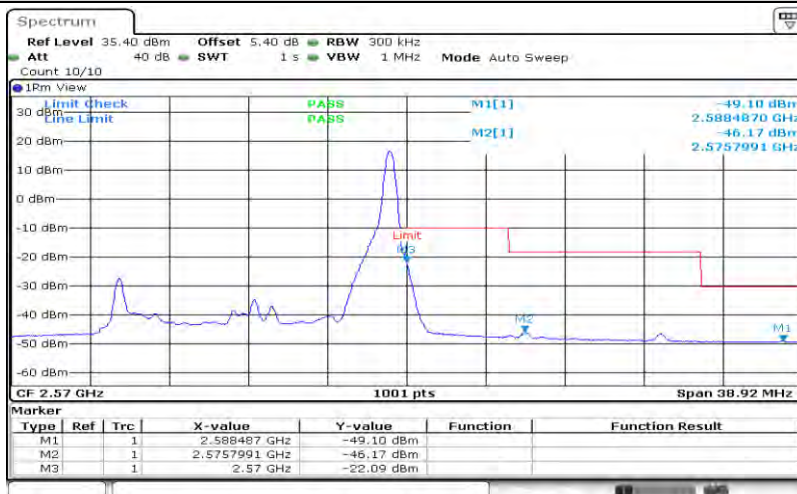


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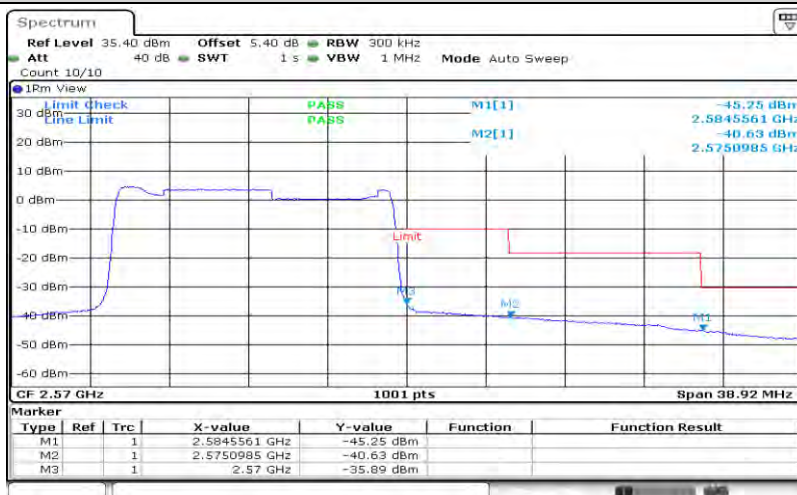


Band7-15MHz-16QAM-21375-1RB#74



Date: 11 JUN 2020 13:31:31

Band7-15MHz-16QAM-21375-75RB#0



Date: 11 JUN 2020 13:33:01



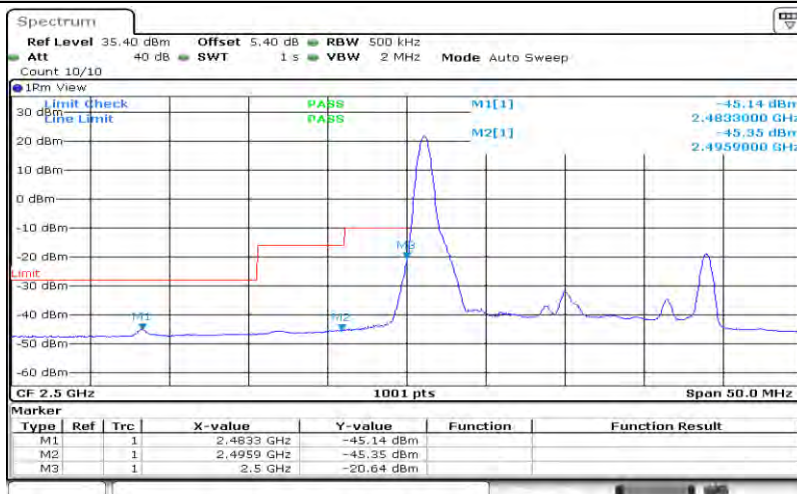
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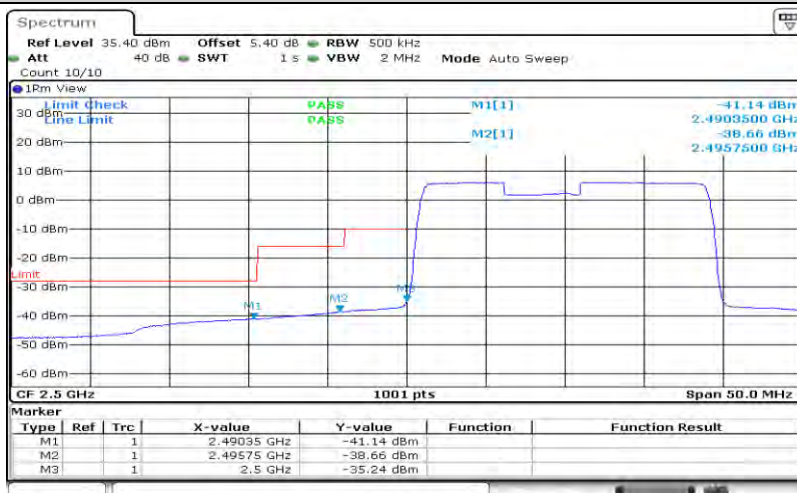


Band7-20MHz-QPSK-20850-1RB#0



Date: 11 JUN 2020 13:33:27

Band7-20MHz-QPSK-20850-100RB#0

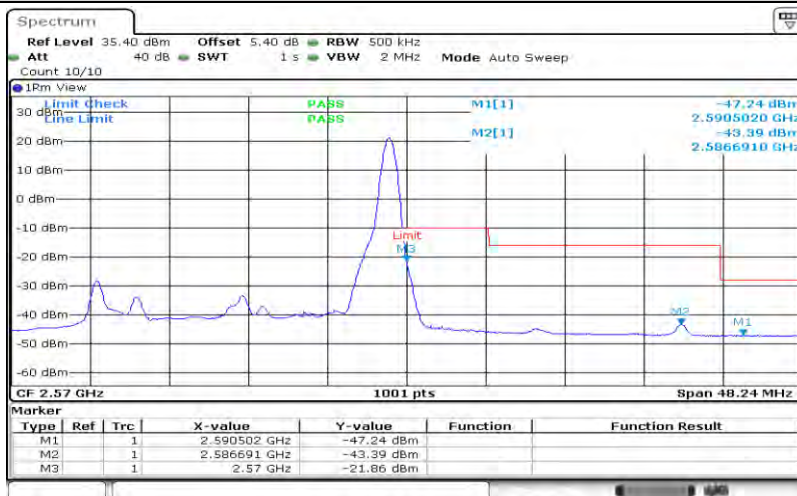


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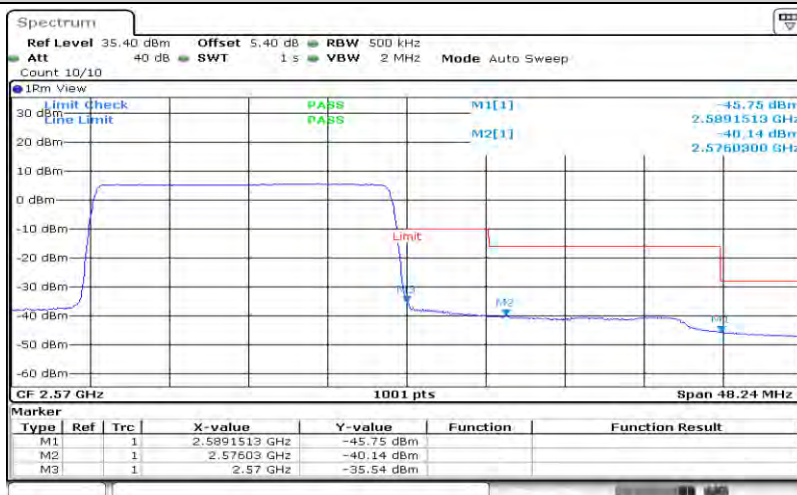




Band7-20MHz-QPSK-21350-1RB#99



Band7-20MHz-QPSK-21350-100RB#0

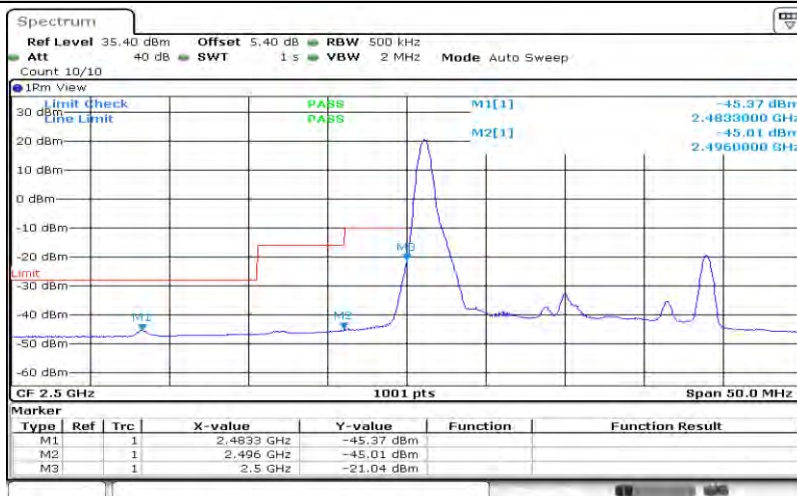


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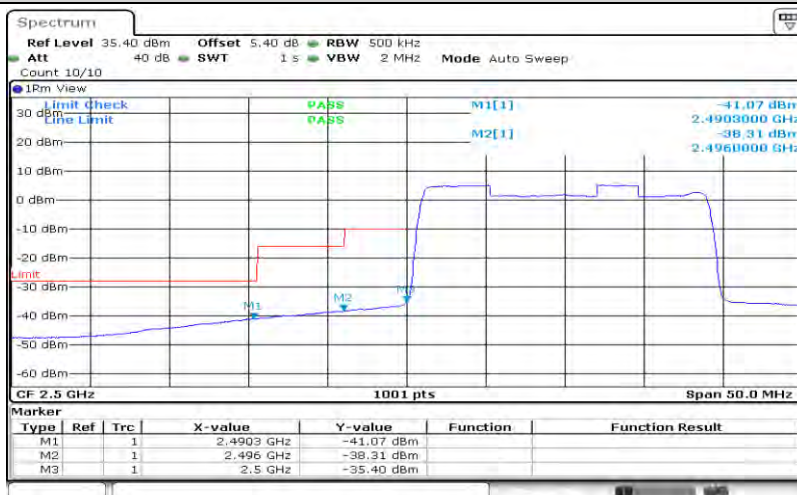


Band7-20MHz-16QAM-20850-1RB#0



Date: 11 JUN 2020 13:33:48

Band7-20MHz-16QAM-20850-100RB#0

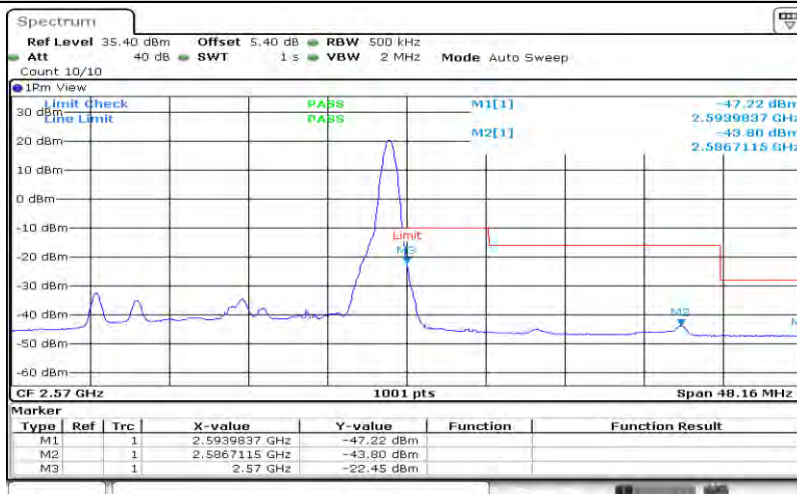


Date: 11 JUN 2020 13:35:22



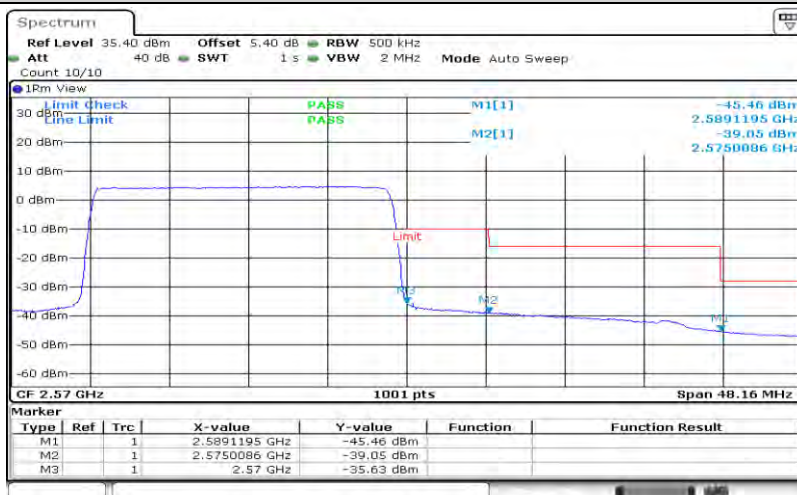


Band7-20MHz-16QAM-21350-1RB#99



Date: 11 JUN 2020 13:34:35

Band7-20MHz-16QAM-21350-100RB#0



Date: 11 JUN 2020 13:36:05



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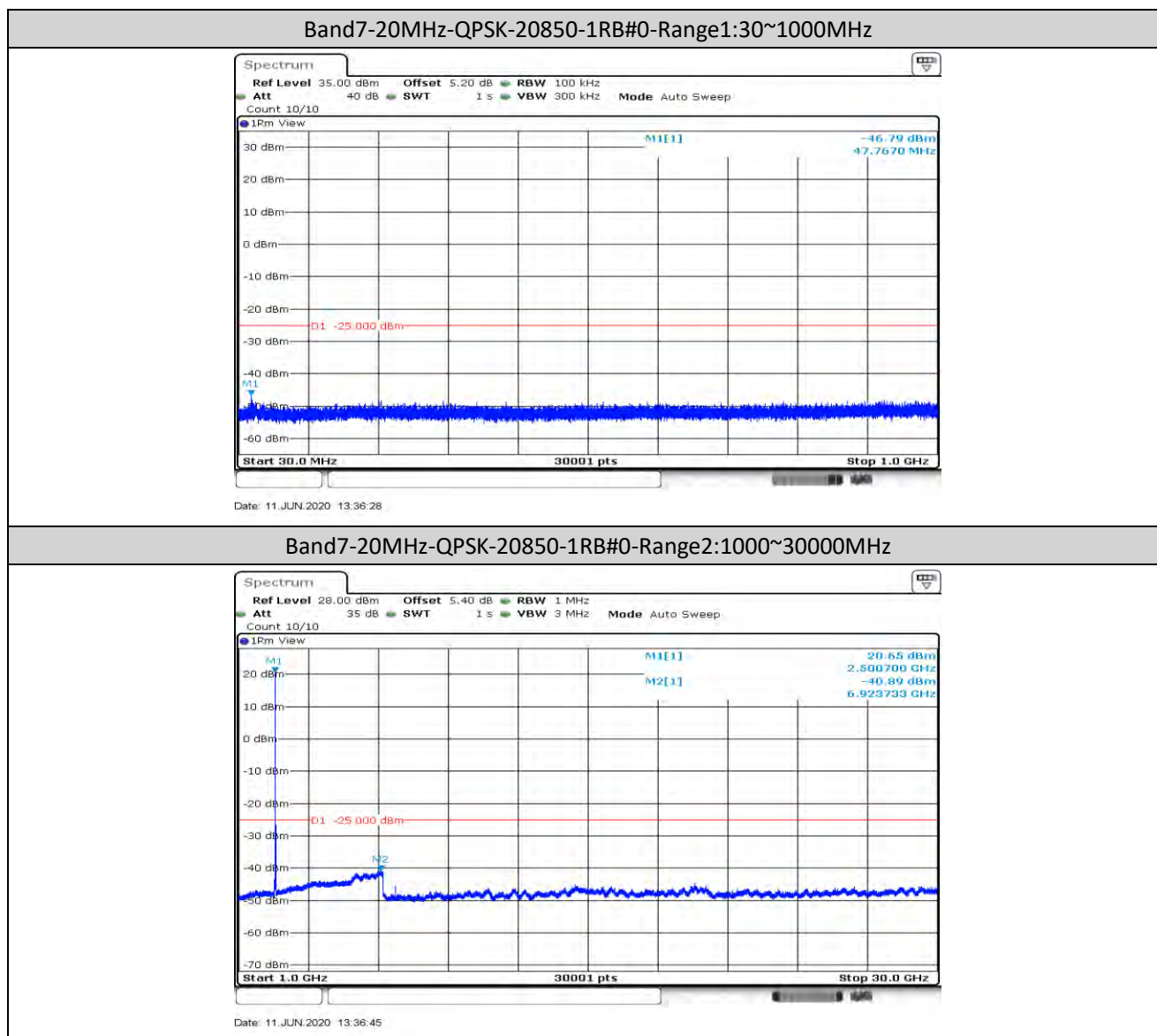


6. Spurious Emission at Antenna Terminal

Remark1: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = $k * (\text{Span} / RBW)$ " with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

Remark2: only the worst case data displayed in this report.

6.1. Test Plots



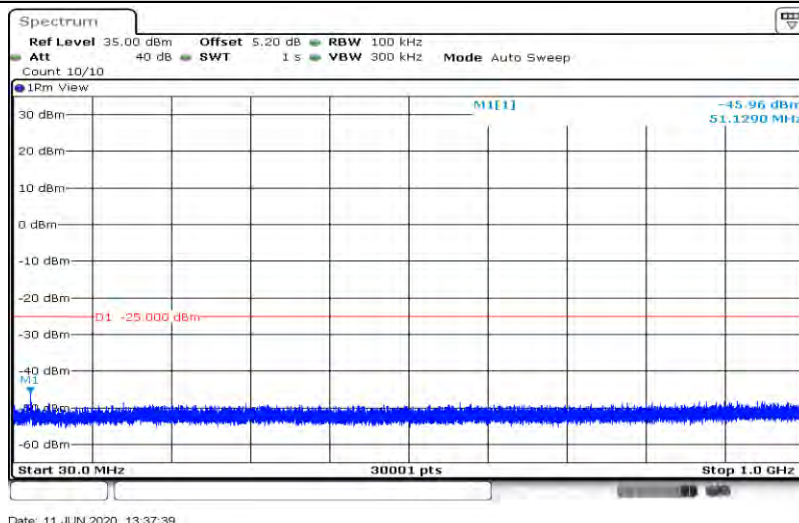
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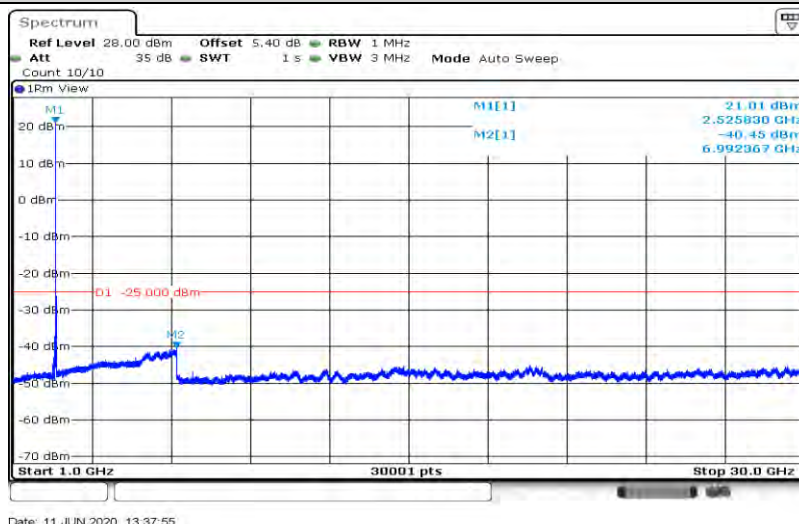
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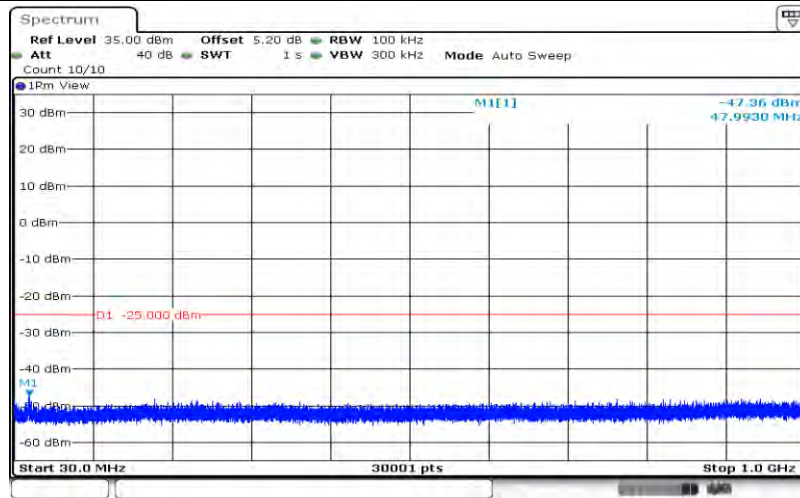
Band7-20MHz-QPSK-21100-1RB#0-Range1:30~1000MHz



Band7-20MHz-QPSK-21100-1RB#0-Range2:1000~30000MHz

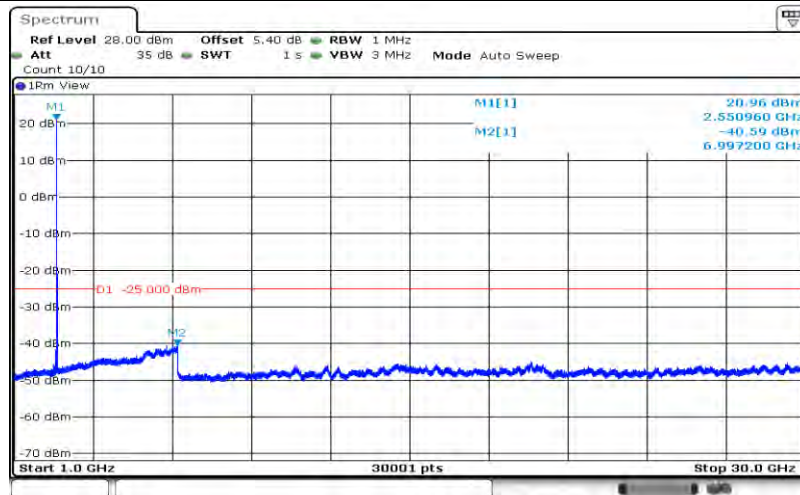


Band7-20MHz-QPSK-21350-1RB#0-Range1:30~1000MHz



Date: 11 JUN 2020 13:38:49

Band7-20MHz-QPSK-21350-1RB#0-Range2:1000~30000MHz



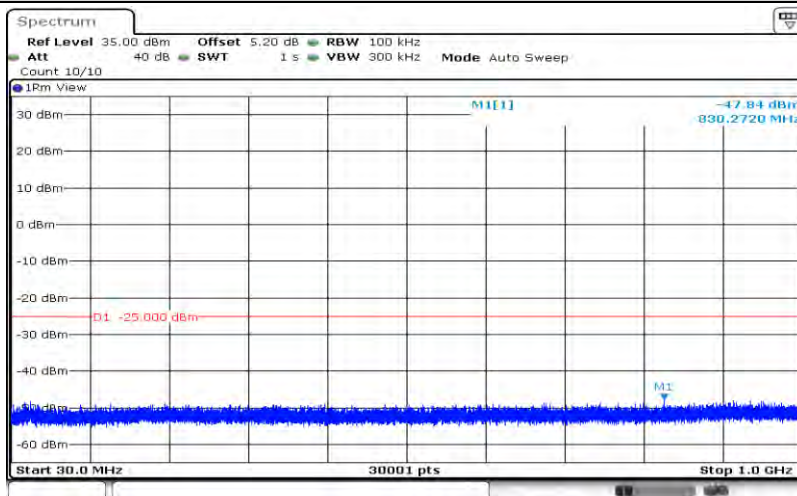
Date: 11 JUN 2020 13:39:06



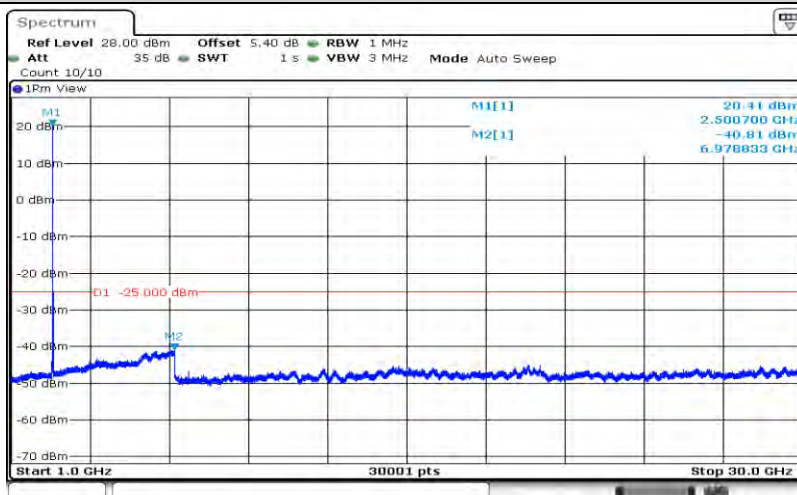
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Band7-20MHz-16QAM-20850-1RB#0-Range1:30~1000MHz

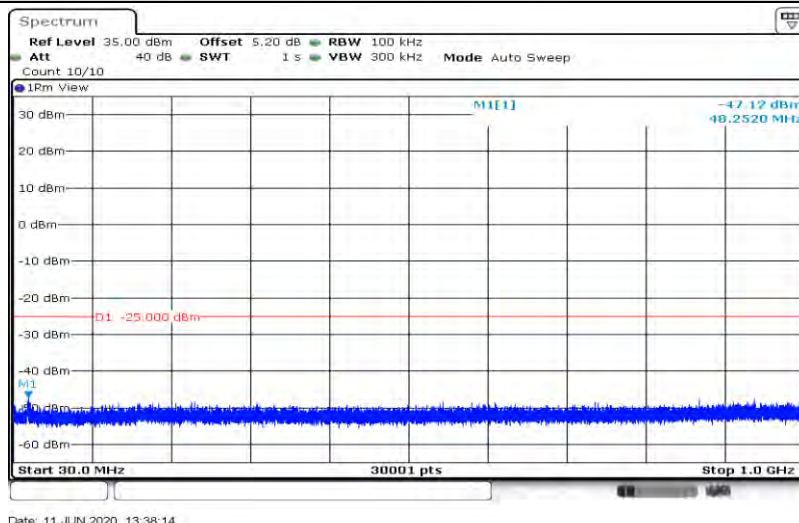


Band7-20MHz-16QAM-20850-1RB#0-Range2:1000~30000MHz



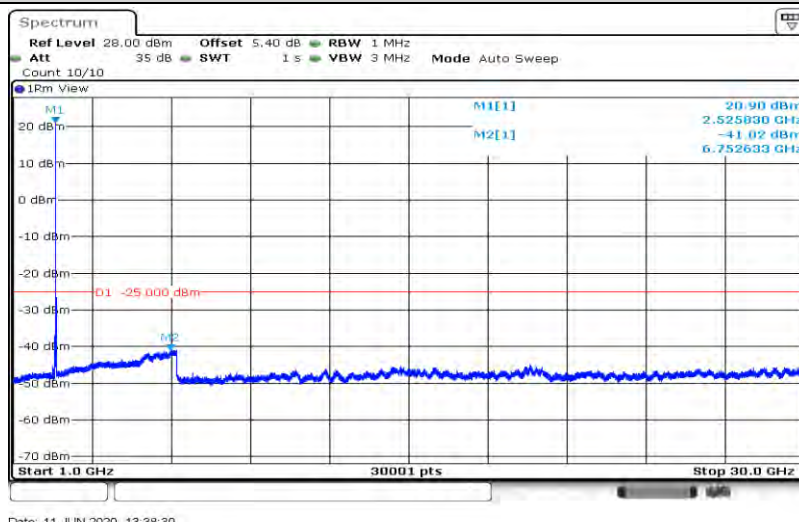


Band7-20MHz-16QAM-21100-1RB#0-Range1:30~1000MHz



Date: 11 JUN 2020 13:38:14

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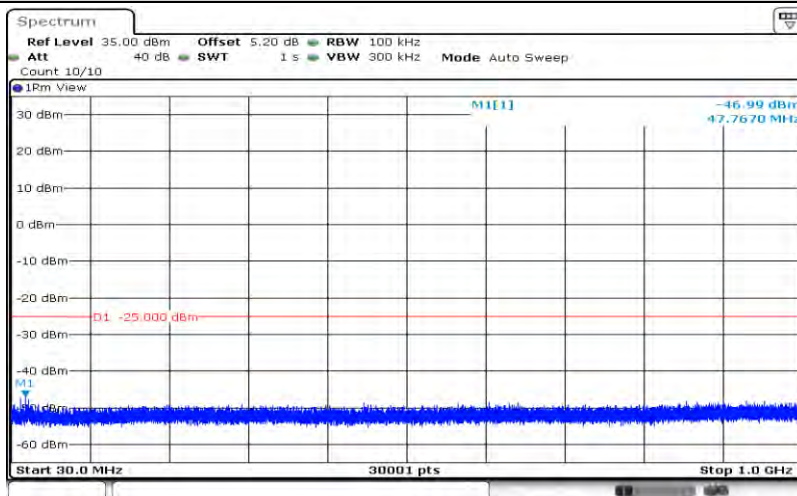


Date: 11 JUN 2020 13:38:30



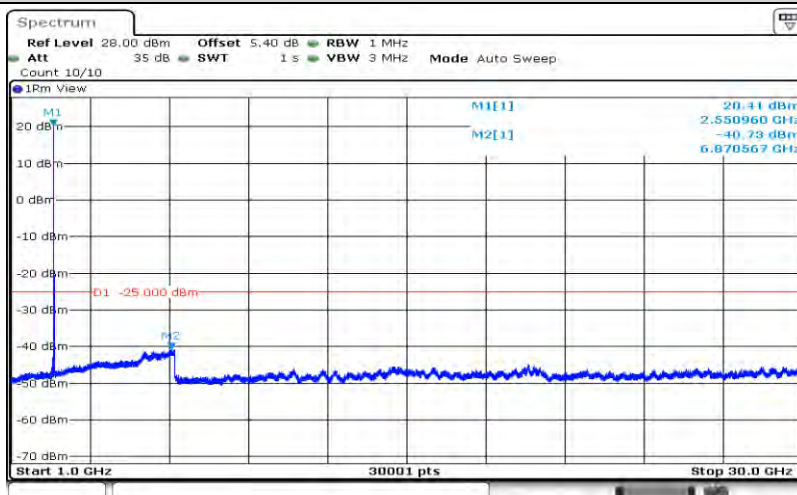


Band7-20MHz-16QAM-21350-1RB#0-Range1:30~1000MHz



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Band7-20MHz-16QAM-21350-1RB#0-Range2:1000~30000MHz



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7. Field Strength of Spurious Radiation

7.1. Test Band = LTE Band 7

7.1.1. Test Mode = LTE/TM1 20MHz

7.1.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
50.7105	-73.28	-25.00	48.28	Vertical
112.3571	-65.27	-25.00	40.27	Vertical
371.8451	-68.07	-25.00	43.07	Vertical
2999.1998	-39.31	-25.00	14.31	Vertical
7356.7743	-57.00	-25.00	32.00	Vertical
17996.9999	-40.31	-25.00	15.31	Vertical
43.7747	-63.60	-25.00	38.60	Horizontal
225.5133	-69.19	-25.00	44.19	Horizontal
395.3688	-68.16	-25.00	43.16	Horizontal
1752.9506	-43.61	-25.00	18.61	Horizontal
7460.5784	-57.91	-25.00	32.91	Horizontal
16360.1344	-44.84	-25.00	19.84	Horizontal

7.1.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
49.8860	-73.22	-25.00	48.22	Vertical
107.3129	-65.19	-25.00	40.19	Vertical
437.2264	-67.42	-25.00	42.42	Vertical
2983.9968	-39.51	-25.00	14.51	Vertical
7349.5740	-57.46	-25.00	32.46	Vertical
17993.9998	-40.64	-25.00	15.64	Vertical
42.0771	-63.70	-25.00	38.70	Horizontal
228.3264	-70.00	-25.00	45.00	Horizontal
581.0846	-63.45	-25.00	38.45	Horizontal
2946.7894	-39.60	-25.00	14.60	Horizontal
7316.5727	-58.48	-25.00	33.48	Horizontal
16406.9363	-44.33	-25.00	19.33	Horizontal



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7.1.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
51.6321	-72.10	-25.00	47.10	Vertical
113.9577	-65.55	-25.00	40.55	Vertical
490.5305	-67.65	-25.00	42.65	Vertical
2991.5983	-39.47	-25.00	14.47	Vertical
8033.0013	-57.32	-25.00	32.32	Vertical
17989.7996	-40.72	-25.00	15.72	Vertical
42.5136	-64.96	-25.00	39.96	Horizontal
243.3137	-68.25	-25.00	43.25	Horizontal
558.6764	-64.28	-25.00	39.28	Horizontal
2993.9988	-39.46	-25.00	14.46	Horizontal
7441.3777	-57.79	-25.00	32.79	Horizontal
16394.9358	-44.15	-25.00	19.15	Horizontal

Remark:

- 1 According to 971168 D01 Power Meas License Digital Systems, The amplitudes of unwanted emissions that are attenuated more than 20 dB below the applicable limit are not required to be reported.
- 2 The disturbance below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the worst case data displayed in this report.
- 3 all modulation and all Bandwidth had been tested, but only the worst case data displayed in this report.



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8. Frequency Stability

8.1. Frequency Vs Voltage

Band	Bandwidth h	Modulation	Channel	RB Configur e	Voltage [Vdc]	Tempe rature (°C)	Deviation n (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band7	20MHz	QPSK	20850	100RB#0	VL	NT	-8.20	-0.003267	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	VN	NT	-3.20	-0.001275	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	VH	NT	-6.70	-0.002669	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VL	NT	-9.90	-0.003905	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VN	NT	-3.80	-0.001499	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VH	NT	-8.70	-0.003432	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VL	NT	1.40	0.000547	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VN	NT	-12.10	-0.004727	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VH	NT	-5.10	-0.001992	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VL	NT	-4.20	-0.002014	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VN	NT	-2.10	-0.000837	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VH	NT	0.20	0.000080	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VL	NT	-2.30	-0.000907	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VN	NT	-4.00	-0.001578	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VH	NT	-3.70	-0.001460	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VL	NT	1.70	0.000664	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VN	NT	0.80	0.000313	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VH	NT	-5.00	-0.001953	±2.5	PASS





8.2. Frequency Vs Temperature

Band	Bandwidth	Modulation	Channel	RB Configuration	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band7	20MHz	QPSK	20850	100RB#0	NV	-30	-8.40	-0.003347	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	-20	-12.70	-0.005060	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	0	-2.50	-0.000996	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	10	-3.70	-0.001474	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	20	0.00	0.000000	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	30	-3.30	-0.001315	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	40	-0.80	-0.000319	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	50	-8.20	-0.003267	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-30	1.40	0.000552	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-20	-8.80	-0.003471	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	0	-7.80	-0.003077	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	10	-9.30	-0.003669	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	20	-4.80	-0.001893	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	30	-4.70	-0.001854	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	40	-3.20	-0.001262	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	50	-9.10	-0.003590	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	-30	-4.50	-0.001758	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	-20	1.30	0.000508	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	0	-6.60	-0.002578	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	10	-4.30	-0.001680	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	20	-6.70	-0.002617	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	30	0.60	0.000234	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	40	-10.10	-0.003945	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	50	-9.10	-0.003555	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	-30	2.10	0.000837	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	-20	-1.90	-0.000757	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	0	3.70	0.001474	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	10	-1.20	-0.000478	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	20	-4.60	-0.001833	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	30	-7.90	-0.003147	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	40	0.00	0.000000	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	50	-3.70	-0.001474	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	-30	-9.90	-0.003905	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	-20	-10.90	-0.004300	±2.5	PASS



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Band7	20MHz	16QAM	21100	100RB#0	NV	0	-9.10	-0.003590	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	10	-0.10	-0.000039	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	20	-9.20	-0.003629	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	30	2.50	0.000986	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	40	-2.80	-0.001105	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	50	-7.30	-0.002880	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	-30	-5.80	-0.002266	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	-20	-4.80	-0.001875	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	0	-16.50	-0.006445	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	10	-4.20	-0.001641	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	20	-2.30	-0.000898	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	30	-5.20	-0.002031	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	40	-0.80	-0.000313	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	50	-5.60	-0.002188	±2.5	PASS



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