

Appendix B

E-UTRA Band 7





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1 Effective (Isotropic) Radiated Power

1.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted Power(dBm)	EIRP (dBm)	Limit (dBm)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	22.80	22.57	30.00	PASS
Band7	5MHz	QPSK	20775	1RB#13	23.07	22.84	30.00	PASS
Band7	5MHz	QPSK	20775	1RB#24	22.82	22.59	30.00	PASS
Band7	5MHz	QPSK	20775	12RB#0	22.08	21.85	30.00	PASS
Band7	5MHz	QPSK	20775	12RB#6	22.18	21.95	30.00	PASS
Band7	5MHz	QPSK	20775	12RB#13	22.10	21.87	30.00	PASS
Band7	5MHz	QPSK	20775	25RB#0	22.08	21.85	30.00	PASS
Band7	5MHz	QPSK	21100	1RB#0	22.92	22.69	30.00	PASS
Band7	5MHz	QPSK	21100	1RB#13	23.04	22.81	30.00	PASS
Band7	5MHz	QPSK	21100	1RB#24	22.95	22.72	30.00	PASS
Band7	5MHz	QPSK	21100	12RB#0	21.94	21.71	30.00	PASS
Band7	5MHz	QPSK	21100	12RB#6	22.12	21.89	30.00	PASS
Band7	5MHz	QPSK	21100	12RB#13	22.08	21.85	30.00	PASS
Band7	5MHz	QPSK	21100	25RB#0	22.06	21.83	30.00	PASS
Band7	5MHz	QPSK	21425	1RB#0	22.92	22.69	30.00	PASS
Band7	5MHz	QPSK	21425	1RB#13	23.06	22.83	30.00	PASS
Band7	5MHz	QPSK	21425	1RB#24	23.00	22.77	30.00	PASS
Band7	5MHz	QPSK	21425	12RB#0	21.99	21.76	30.00	PASS
Band7	5MHz	QPSK	21425	12RB#6	22.08	21.85	30.00	PASS
Band7	5MHz	QPSK	21425	12RB#13	22.05	21.82	30.00	PASS
Band7	5MHz	QPSK	21425	25RB#0	22.04	21.81	30.00	PASS
Band7	5MHz	16QAM	20775	1RB#0	22.01	21.78	30.00	PASS
Band7	5MHz	16QAM	20775	1RB#13	22.19	21.96	30.00	PASS
Band7	5MHz	16QAM	20775	1RB#24	22.16	21.93	30.00	PASS
Band7	5MHz	16QAM	20775	12RB#0	21.18	20.95	30.00	PASS
Band7	5MHz	16QAM	20775	12RB#6	21.21	20.98	30.00	PASS
Band7	5MHz	16QAM	20775	12RB#13	21.13	20.90	30.00	PASS
Band7	5MHz	16QAM	20775	25RB#0	21.26	21.03	30.00	PASS
Band7	5MHz	16QAM	21100	1RB#0	22.32	22.09	30.00	PASS
Band7	5MHz	16QAM	21100	1RB#13	22.27	22.04	30.00	PASS
Band7	5MHz	16QAM	21100	1RB#24	22.28	22.05	30.00	PASS
Band7	5MHz	16QAM	21100	12RB#0	21.14	20.91	30.00	PASS
Band7	5MHz	16QAM	21100	12RB#6	21.28	21.05	30.00	PASS
Band7	5MHz	16QAM	21100	12RB#13	21.15	20.92	30.00	PASS
Band7	5MHz	16QAM	21100	25RB#0	21.18	20.95	30.00	PASS
Band7	5MHz	16QAM	21425	1RB#0	22.35	22.12	30.00	PASS
Band7	5MHz	16QAM	21425	1RB#13	22.31	22.08	30.00	PASS
Band7	5MHz	16QAM	21425	1RB#24	22.30	22.07	30.00	PASS



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Band7	5MHz	16QAM	21425	12RB#0	21.19	20.96	30.00	PASS
Band7	5MHz	16QAM	21425	12RB#6	21.32	21.09	30.00	PASS
Band7	5MHz	16QAM	21425	12RB#13	21.19	20.96	30.00	PASS
Band7	5MHz	16QAM	21425	25RB#0	21.16	20.93	30.00	PASS
Band7	10MHz	QPSK	20800	1RB#0	23.05	22.82	30.00	PASS
Band7	10MHz	QPSK	20800	1RB#25	23.20	22.97	30.00	PASS
Band7	10MHz	QPSK	20800	1RB#49	23.01	22.78	30.00	PASS
Band7	10MHz	QPSK	20800	25RB#0	22.13	21.90	30.00	PASS
Band7	10MHz	QPSK	20800	25RB#13	22.21	21.98	30.00	PASS
Band7	10MHz	QPSK	20800	25RB#25	22.17	21.94	30.00	PASS
Band7	10MHz	QPSK	20800	50RB#0	22.09	21.86	30.00	PASS
Band7	10MHz	QPSK	21100	1RB#0	22.92	22.69	30.00	PASS
Band7	10MHz	QPSK	21100	1RB#25	23.04	22.81	30.00	PASS
Band7	10MHz	QPSK	21100	1RB#49	23.07	22.84	30.00	PASS
Band7	10MHz	QPSK	21100	25RB#0	22.04	21.81	30.00	PASS
Band7	10MHz	QPSK	21100	25RB#13	22.07	21.84	30.00	PASS
Band7	10MHz	QPSK	21100	25RB#25	22.11	21.88	30.00	PASS
Band7	10MHz	QPSK	21100	50RB#0	22.17	21.94	30.00	PASS
Band7	10MHz	QPSK	21400	1RB#0	22.90	22.67	30.00	PASS
Band7	10MHz	QPSK	21400	1RB#25	23.02	22.79	30.00	PASS
Band7	10MHz	QPSK	21400	1RB#49	22.80	22.57	30.00	PASS
Band7	10MHz	QPSK	21400	25RB#0	21.95	21.72	30.00	PASS
Band7	10MHz	QPSK	21400	25RB#13	21.99	21.76	30.00	PASS
Band7	10MHz	QPSK	21400	25RB#25	21.92	21.69	30.00	PASS
Band7	10MHz	QPSK	21400	50RB#0	21.99	21.76	30.00	PASS
Band7	10MHz	16QAM	20800	1RB#0	22.21	21.98	30.00	PASS
Band7	10MHz	16QAM	20800	1RB#25	22.32	22.09	30.00	PASS
Band7	10MHz	16QAM	20800	1RB#49	22.30	22.07	30.00	PASS
Band7	10MHz	16QAM	20800	25RB#0	21.04	20.81	30.00	PASS
Band7	10MHz	16QAM	20800	25RB#13	21.34	21.11	30.00	PASS
Band7	10MHz	16QAM	20800	25RB#25	21.25	21.02	30.00	PASS
Band7	10MHz	16QAM	20800	50RB#0	21.27	21.04	30.00	PASS
Band7	10MHz	16QAM	21100	1RB#0	22.21	21.98	30.00	PASS
Band7	10MHz	16QAM	21100	1RB#25	22.45	22.22	30.00	PASS
Band7	10MHz	16QAM	21100	1RB#49	22.32	22.09	30.00	PASS
Band7	10MHz	16QAM	21100	25RB#0	21.31	21.08	30.00	PASS
Band7	10MHz	16QAM	21100	25RB#13	21.23	21.00	30.00	PASS
Band7	10MHz	16QAM	21100	25RB#25	21.16	20.93	30.00	PASS
Band7	10MHz	16QAM	21100	50RB#0	21.16	20.93	30.00	PASS
Band7	10MHz	16QAM	21400	1RB#0	22.10	21.87	30.00	PASS
Band7	10MHz	16QAM	21400	1RB#25	22.03	21.80	30.00	PASS
Band7	10MHz	16QAM	21400	1RB#49	21.83	21.60	30.00	PASS
Band7	10MHz	16QAM	21400	25RB#0	21.04	20.81	30.00	PASS
Band7	10MHz	16QAM	21400	25RB#13	20.97	20.74	30.00	PASS
Band7	10MHz	16QAM	21400	25RB#25	20.98	20.75	30.00	PASS
Band7	10MHz	16QAM	21400	50RB#0	20.95	20.72	30.00	PASS
Band7	15MHz	QPSK	20825	1RB#0	22.82	22.59	30.00	PASS



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Band7	15MHz	QPSK	20825	1RB#38	23.11	22.88	30.00	PASS
Band7	15MHz	QPSK	20825	1RB#74	22.98	22.75	30.00	PASS
Band7	15MHz	QPSK	20825	36RB#0	22.01	21.78	30.00	PASS
Band7	15MHz	QPSK	20825	36RB#18	22.11	21.88	30.00	PASS
Band7	15MHz	QPSK	20825	36RB#39	22.21	21.98	30.00	PASS
Band7	15MHz	QPSK	20825	75RB#0	22.14	21.91	30.00	PASS
Band7	15MHz	QPSK	21100	1RB#0	22.78	22.55	30.00	PASS
Band7	15MHz	QPSK	21100	1RB#38	22.99	22.76	30.00	PASS
Band7	15MHz	QPSK	21100	1RB#74	22.92	22.69	30.00	PASS
Band7	15MHz	QPSK	21100	36RB#0	22.12	21.89	30.00	PASS
Band7	15MHz	QPSK	21100	36RB#18	22.17	21.94	30.00	PASS
Band7	15MHz	QPSK	21100	36RB#39	22.10	21.87	30.00	PASS
Band7	15MHz	QPSK	21100	75RB#0	22.01	21.78	30.00	PASS
Band7	15MHz	QPSK	21375	1RB#0	22.78	22.55	30.00	PASS
Band7	15MHz	QPSK	21375	1RB#38	22.84	22.61	30.00	PASS
Band7	15MHz	QPSK	21375	1RB#74	22.91	22.68	30.00	PASS
Band7	15MHz	QPSK	21375	36RB#0	22.04	21.81	30.00	PASS
Band7	15MHz	QPSK	21375	36RB#18	22.02	21.79	30.00	PASS
Band7	15MHz	QPSK	21375	36RB#39	21.88	21.65	30.00	PASS
Band7	15MHz	QPSK	21375	75RB#0	21.95	21.72	30.00	PASS
Band7	15MHz	16QAM	20825	1RB#0	22.06	21.83	30.00	PASS
Band7	15MHz	16QAM	20825	1RB#38	22.27	22.04	30.00	PASS
Band7	15MHz	16QAM	20825	1RB#74	22.12	21.89	30.00	PASS
Band7	15MHz	16QAM	20825	36RB#0	21.19	20.96	30.00	PASS
Band7	15MHz	16QAM	20825	36RB#18	21.29	21.06	30.00	PASS
Band7	15MHz	16QAM	20825	36RB#39	21.30	21.07	30.00	PASS
Band7	15MHz	16QAM	20825	75RB#0	21.20	20.97	30.00	PASS
Band7	15MHz	16QAM	21100	1RB#0	22.08	21.85	30.00	PASS
Band7	15MHz	16QAM	21100	1RB#38	22.26	22.03	30.00	PASS
Band7	15MHz	16QAM	21100	1RB#74	22.46	22.23	30.00	PASS
Band7	15MHz	16QAM	21100	36RB#0	21.15	20.92	30.00	PASS
Band7	15MHz	16QAM	21100	36RB#18	21.16	20.93	30.00	PASS
Band7	15MHz	16QAM	21100	36RB#39	21.19	20.96	30.00	PASS
Band7	15MHz	16QAM	21100	75RB#0	21.16	20.93	30.00	PASS
Band7	15MHz	16QAM	21375	1RB#0	22.07	21.84	30.00	PASS
Band7	15MHz	16QAM	21375	1RB#38	22.05	21.82	30.00	PASS
Band7	15MHz	16QAM	21375	1RB#74	22.06	21.83	30.00	PASS
Band7	15MHz	16QAM	21375	36RB#0	20.99	20.76	30.00	PASS
Band7	15MHz	16QAM	21375	36RB#18	21.06	20.83	30.00	PASS
Band7	15MHz	16QAM	21375	36RB#39	20.96	20.73	30.00	PASS
Band7	15MHz	16QAM	21375	75RB#0	21.01	20.78	30.00	PASS
Band7	20MHz	QPSK	20850	1RB#0	22.86	22.63	30.00	PASS
Band7	20MHz	QPSK	20850	1RB#50	23.05	22.82	30.00	PASS
Band7	20MHz	QPSK	20850	1RB#99	22.83	22.60	30.00	PASS
Band7	20MHz	QPSK	20850	50RB#0	22.10	21.87	30.00	PASS
Band7	20MHz	QPSK	20850	50RB#25	22.16	21.93	30.00	PASS
Band7	20MHz	QPSK	20850	50RB#50	22.22	21.99	30.00	PASS



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Band7	20MHz	QPSK	20850	100RB#0	22.24	22.01	30.00	PASS
Band7	20MHz	QPSK	21100	1RB#0	22.83	22.60	30.00	PASS
Band7	20MHz	QPSK	21100	1RB#50	23.32	23.09	30.00	PASS
Band7	20MHz	QPSK	21100	1RB#99	22.75	22.52	30.00	PASS
Band7	20MHz	QPSK	21100	50RB#0	22.04	21.81	30.00	PASS
Band7	20MHz	QPSK	21100	50RB#25	22.12	21.89	30.00	PASS
Band7	20MHz	QPSK	21100	50RB#50	22.07	21.84	30.00	PASS
Band7	20MHz	QPSK	21100	100RB#0	22.15	21.92	30.00	PASS
Band7	20MHz	QPSK	21350	1RB#0	22.78	22.55	30.00	PASS
Band7	20MHz	QPSK	21350	1RB#50	23.12	22.89	30.00	PASS
Band7	20MHz	QPSK	21350	1RB#99	22.79	22.56	30.00	PASS
Band7	20MHz	QPSK	21350	50RB#0	21.97	21.74	30.00	PASS
Band7	20MHz	QPSK	21350	50RB#25	22.05	21.82	30.00	PASS
Band7	20MHz	QPSK	21350	50RB#50	21.96	21.73	30.00	PASS
Band7	20MHz	QPSK	21350	100RB#0	21.93	21.70	30.00	PASS
Band7	20MHz	16QAM	20850	1RB#0	21.85	21.62	30.00	PASS
Band7	20MHz	16QAM	20850	1RB#50	22.42	22.19	30.00	PASS
Band7	20MHz	16QAM	20850	1RB#99	22.38	22.15	30.00	PASS
Band7	20MHz	16QAM	20850	50RB#0	21.16	20.93	30.00	PASS
Band7	20MHz	16QAM	20850	50RB#25	21.26	21.03	30.00	PASS
Band7	20MHz	16QAM	20850	50RB#50	21.32	21.09	30.00	PASS
Band7	20MHz	16QAM	20850	100RB#0	21.24	21.01	30.00	PASS
Band7	20MHz	16QAM	21100	1RB#0	22.32	22.09	30.00	PASS
Band7	20MHz	16QAM	21100	1RB#50	22.47	22.24	30.00	PASS
Band7	20MHz	16QAM	21100	1RB#99	22.41	22.18	30.00	PASS
Band7	20MHz	16QAM	21100	50RB#0	21.20	20.97	30.00	PASS
Band7	20MHz	16QAM	21100	50RB#25	21.24	21.01	30.00	PASS
Band7	20MHz	16QAM	21100	50RB#50	21.24	21.01	30.00	PASS
Band7	20MHz	16QAM	21100	100RB#0	21.21	20.98	30.00	PASS
Band7	20MHz	16QAM	21350	1RB#0	21.98	21.75	30.00	PASS
Band7	20MHz	16QAM	21350	1RB#50	22.48	22.25	30.00	PASS
Band7	20MHz	16QAM	21350	1RB#99	21.64	21.41	30.00	PASS
Band7	20MHz	16QAM	21350	50RB#0	21.04	20.81	30.00	PASS
Band7	20MHz	16QAM	21350	50RB#25	21.03	20.80	30.00	PASS
Band7	20MHz	16QAM	21350	50RB#50	20.81	20.58	30.00	PASS
Band7	20MHz	16QAM	21350	100RB#0	20.85	20.62	30.00	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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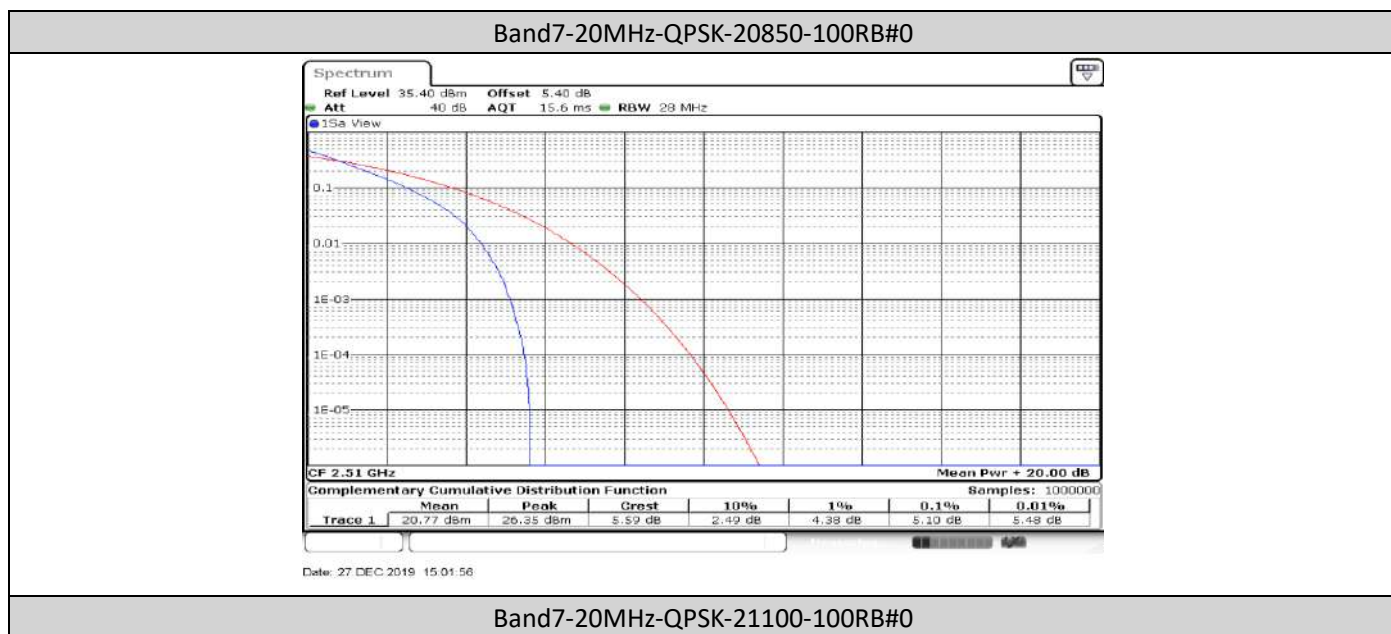


2. Peak-to-Average Ratio (CCDF)

2.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band7	20MHz	QPSK	20850	100RB#0	5.10	13	PASS
Band7	20MHz	QPSK	21100	100RB#0	5.59	13	PASS
Band7	20MHz	QPSK	21350	100RB#0	5.16	13	PASS
Band7	20MHz	16QAM	20850	100RB#0	5.97	13	PASS
Band7	20MHz	16QAM	21100	100RB#0	6.43	13	PASS
Band7	20MHz	16QAM	21350	100RB#0	6.03	13	PASS

2.2. Test Plots





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



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



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Date: 27 DEC 2019 15:02:08

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



Date: 27 DEC 2019 15:02:31

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

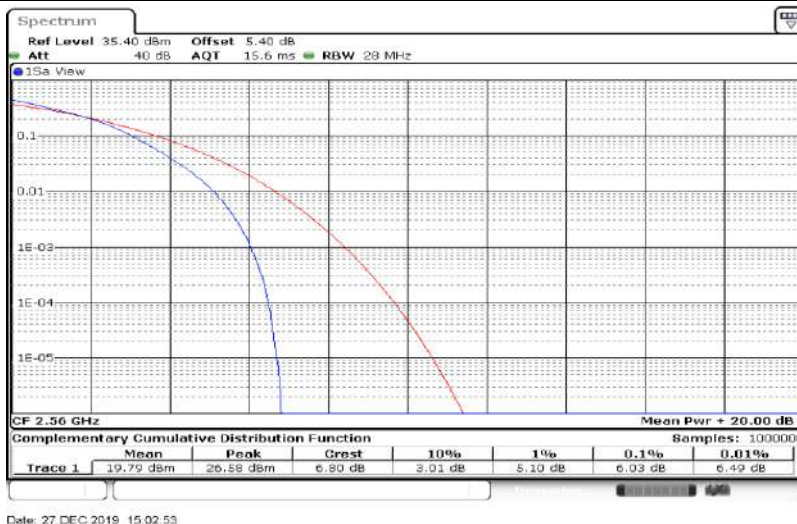


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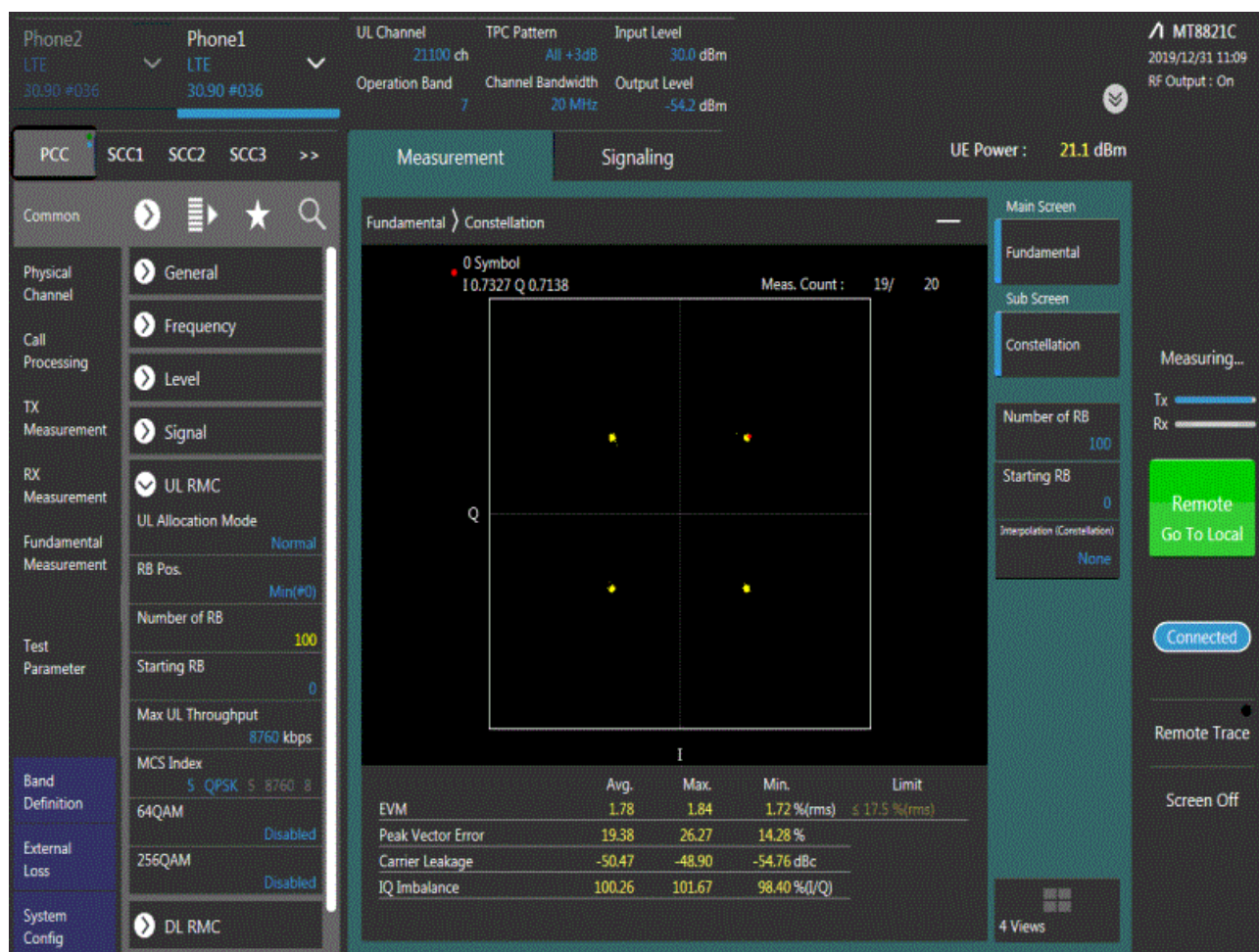
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3. Modulation Characteristics

3.1. Test Band = LTE Band 7

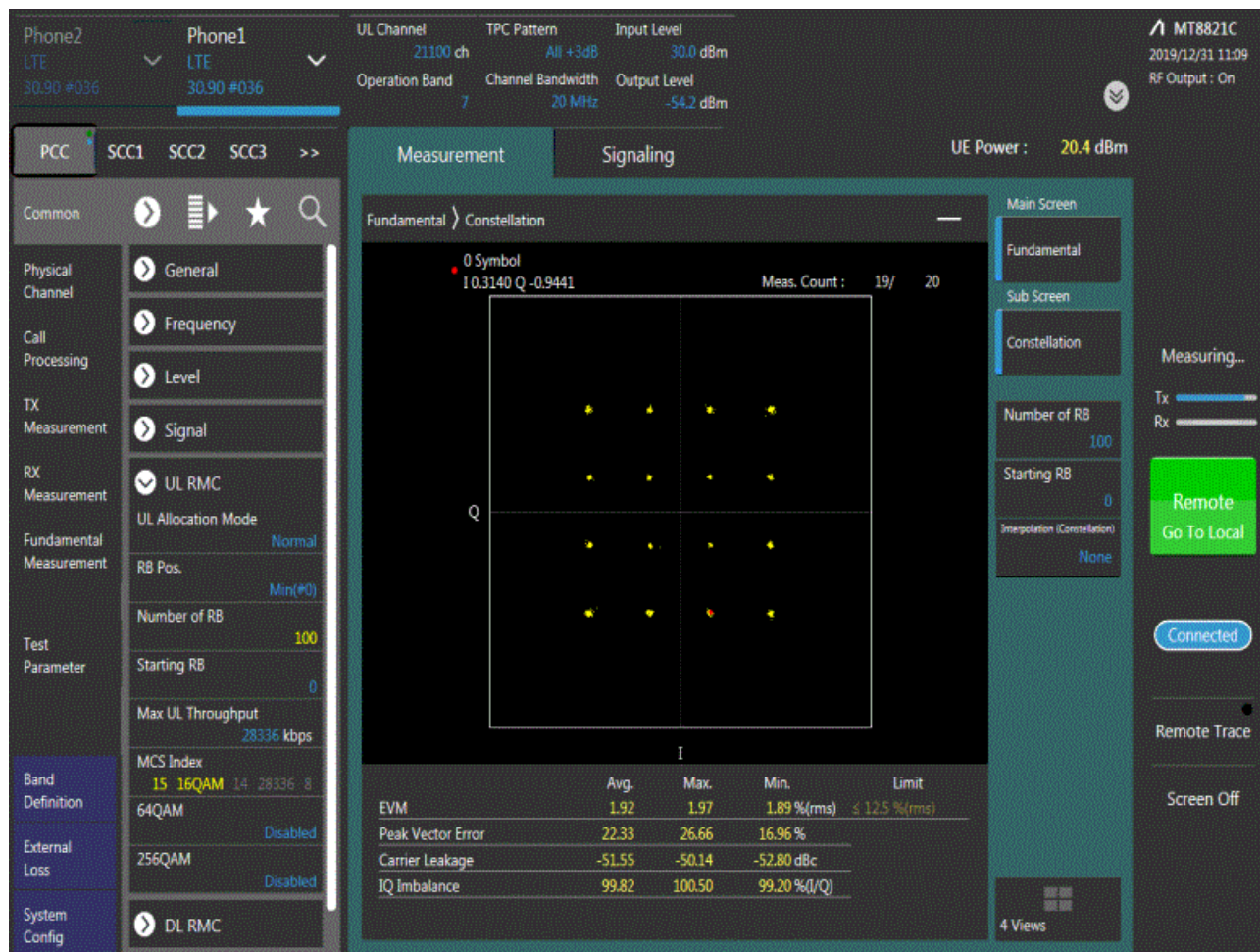
3.1.1. Test Mode = LTE /TM1 20MHz

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

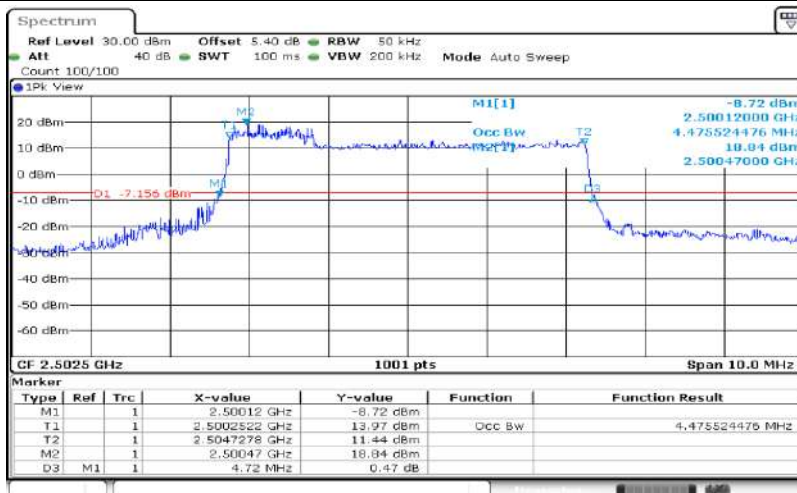
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	4.476	4.720	PASS
Band7	5MHz	QPSK	21100	25RB#0	4.486	4.790	PASS
Band7	5MHz	QPSK	21425	25RB#0	4.476	4.750	PASS
Band7	5MHz	16QAM	20775	25RB#0	4.476	4.770	PASS
Band7	5MHz	16QAM	21100	25RB#0	4.476	4.800	PASS
Band7	5MHz	16QAM	21425	25RB#0	4.496	4.750	PASS
Band7	10MHz	QPSK	20800	50RB#0	8.931	9.620	PASS
Band7	10MHz	QPSK	21100	50RB#0	8.991	9.420	PASS
Band7	10MHz	QPSK	21400	50RB#0	8.991	9.440	PASS
Band7	10MHz	16QAM	20800	50RB#0	8.991	9.440	PASS
Band7	10MHz	16QAM	21100	50RB#0	8.931	9.340	PASS
Band7	10MHz	16QAM	21400	50RB#0	8.931	10.380	PASS
Band7	15MHz	QPSK	20825	75RB#0	13.576	14.640	PASS
Band7	15MHz	QPSK	21100	75RB#0	13.606	14.520	PASS
Band7	15MHz	QPSK	21375	75RB#0	13.576	14.490	PASS
Band7	15MHz	16QAM	20825	75RB#0	13.606	14.550	PASS
Band7	15MHz	16QAM	21100	75RB#0	13.606	14.490	PASS
Band7	15MHz	16QAM	21375	75RB#0	13.546	14.460	PASS
Band7	20MHz	QPSK	20850	100RB#0	18.062	19.120	PASS
Band7	20MHz	QPSK	21100	100RB#0	18.062	19.120	PASS
Band7	20MHz	QPSK	21350	100RB#0	18.022	19.160	PASS
Band7	20MHz	16QAM	20850	100RB#0	18.062	19.080	PASS
Band7	20MHz	16QAM	21100	100RB#0	18.102	19.040	PASS
Band7	20MHz	16QAM	21350	100RB#0	18.022	19.120	PASS

4.2. Test Plots

Band7-5MHz-QPSK-20775-25RB#0-4.476

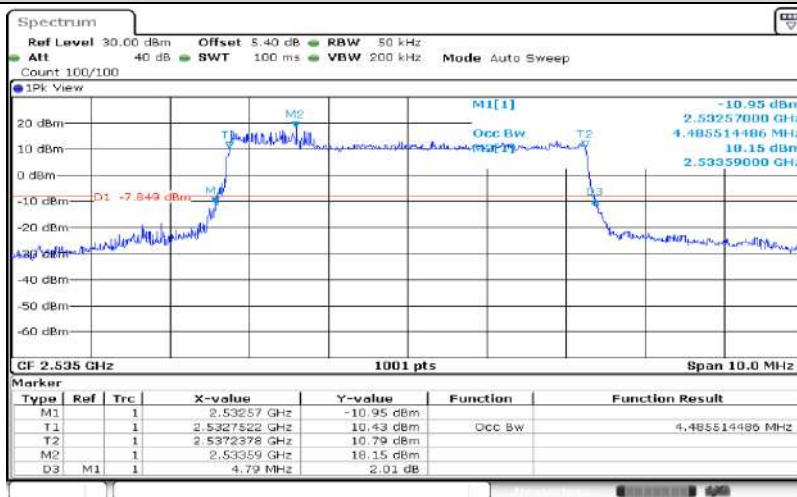


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Date: 27 DEC 2019 14:40:32

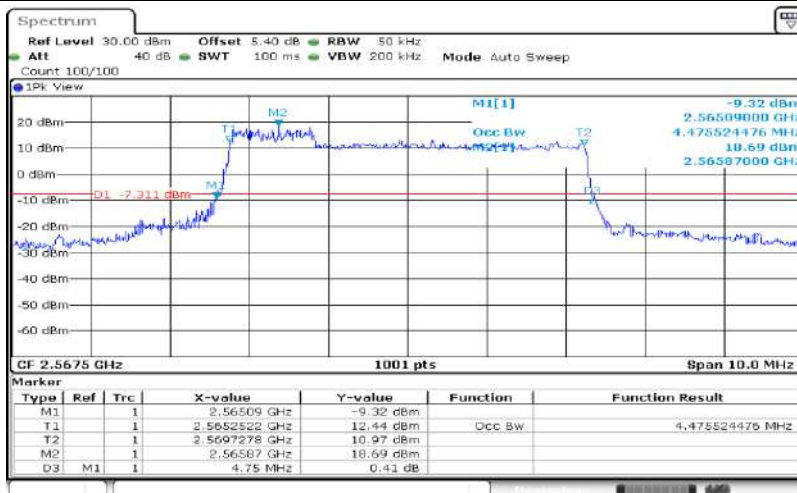
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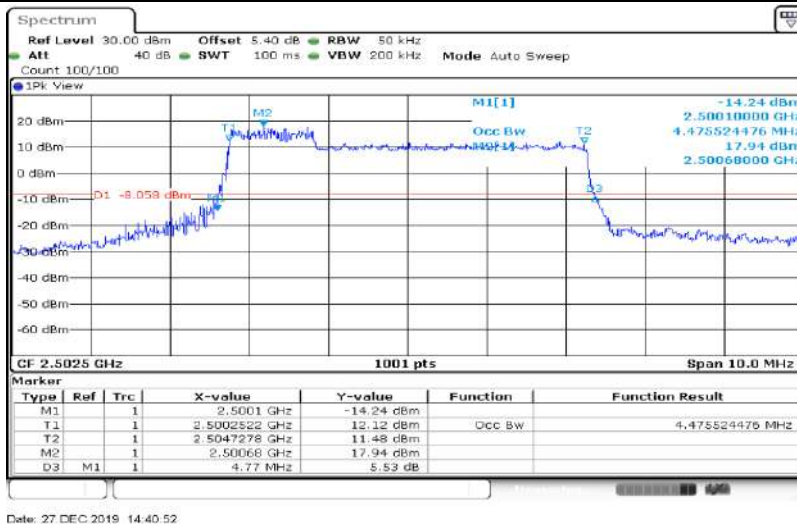
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Band7-5MHz-QPSK-21425-25RB#0-4.476



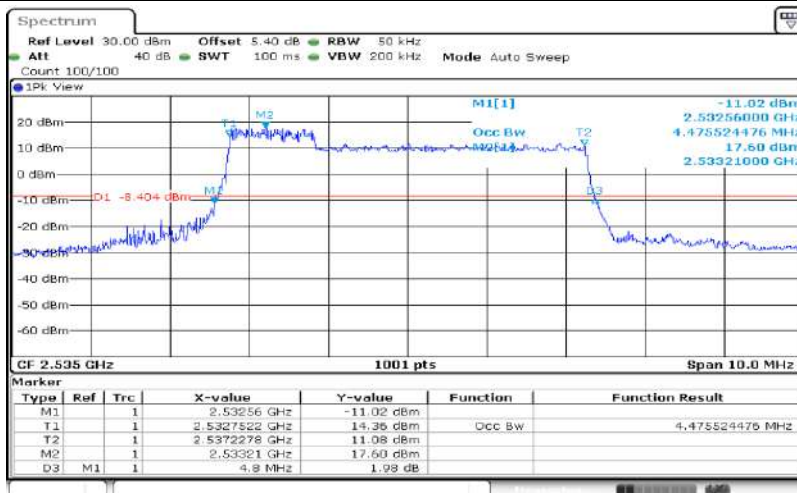


Band7-5MHz-16QAM-20775-25RB#0-4.476



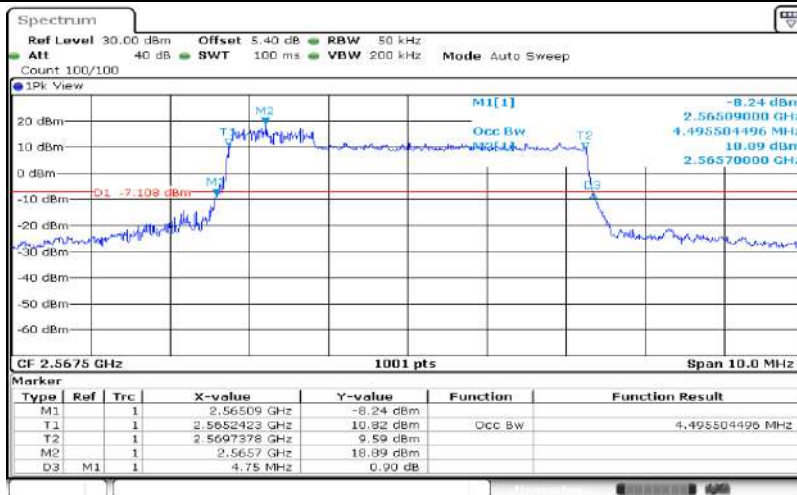
Band7-5MHz-16QAM-21100-25RB#0-4.476





Date: 27 DEC 2019 14:41:32

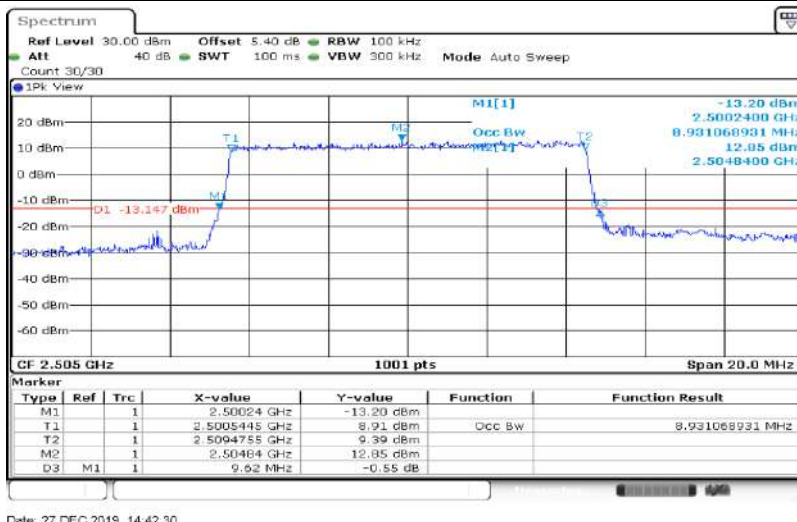
Band7-5MHz-16QAM-21425-25RB#0-4.496



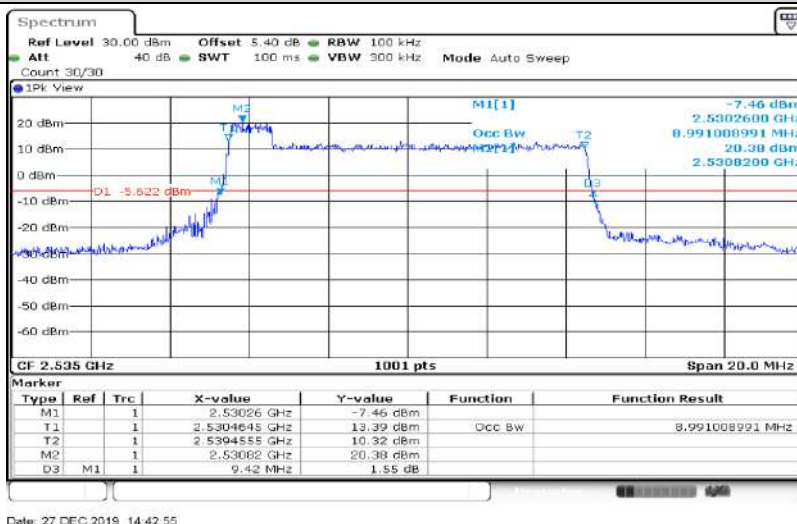
Date: 27 DEC 2019 14:42:12

Band7-10MHz-QPSK-20800-50RB#0-8.931





Band7-10MHz-QPSK-21100-50RB#0-8.991



Band7-10MHz-QPSK-21400-50RB#0-8.991





Band7-10MHz-16QAM-20800-50RB#0-8.991



Band7-10MHz-16QAM-21100-50RB#0-8.931





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



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



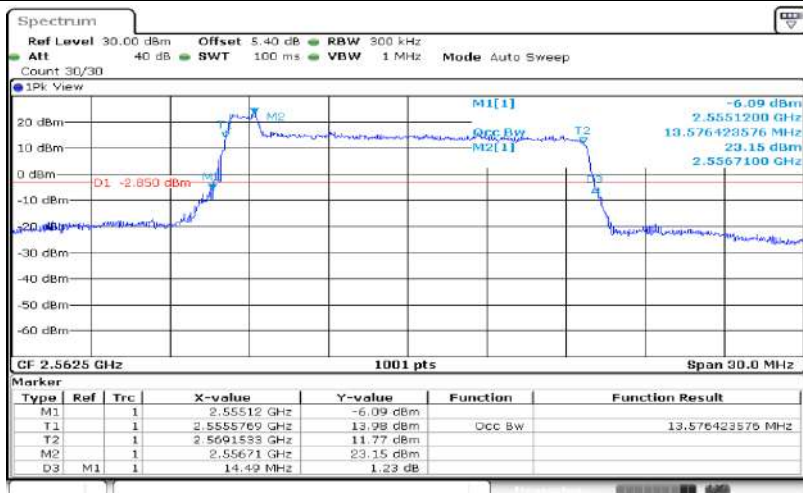


Band7-15MHz-QPSK-21100-75RB#0-13.606



Band7-15MHz-QPSK-21375-75RB#0-13.576





Date: 27 DEC 2019 14:44:43

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



Date: 27 DEC 2019 14:44:05

Band7-15MHz-16QAM-21100-75RB#0-13.606



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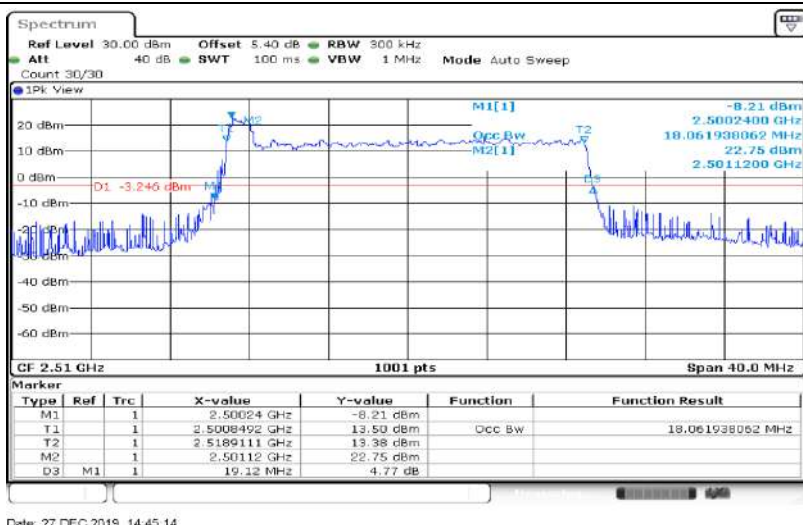


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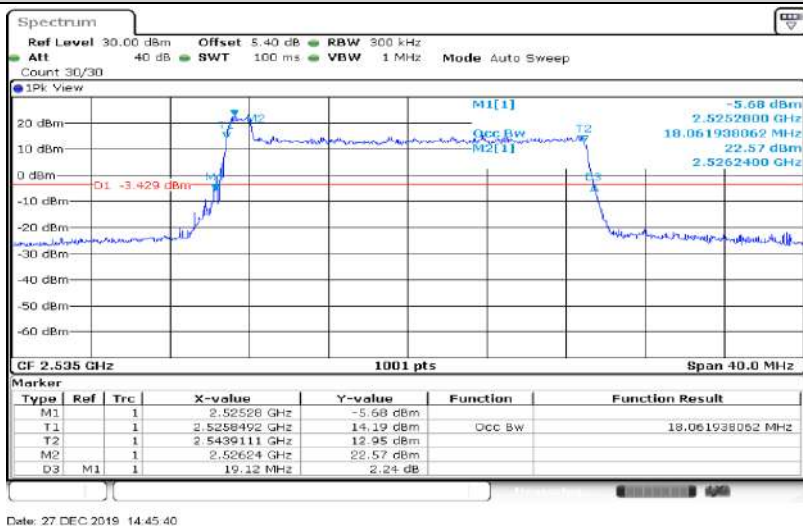


Band7-20MHz-QPSK-20850-100RB#0-18.062





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

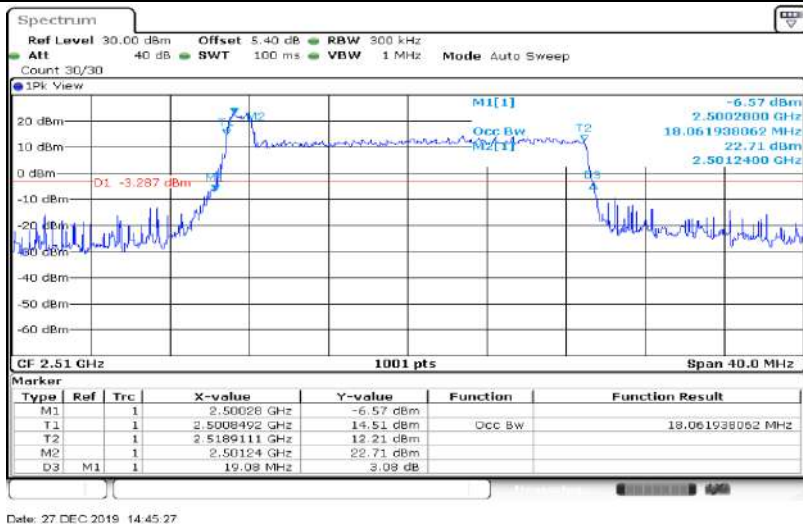


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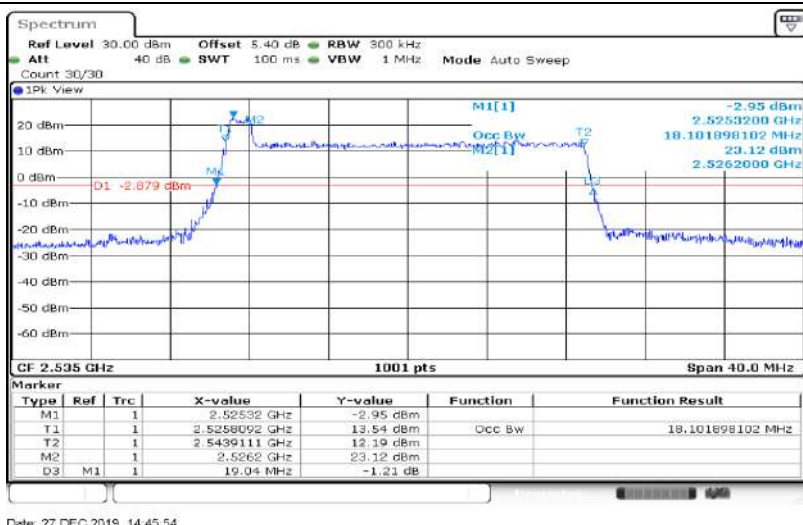


Band7-20MHz-16QAM-20850-100RB#0-18.062



Band7-20MHz-16QAM-21100-100RB#0-18.102





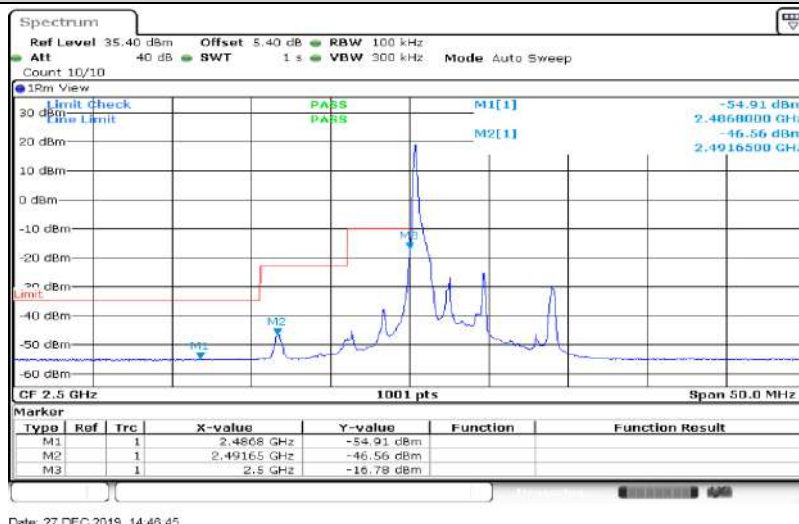
Band7-20MHz-16QAM-21350-100RB#0-18.022



5. Band Edge Compliance

5.1. Test Plots

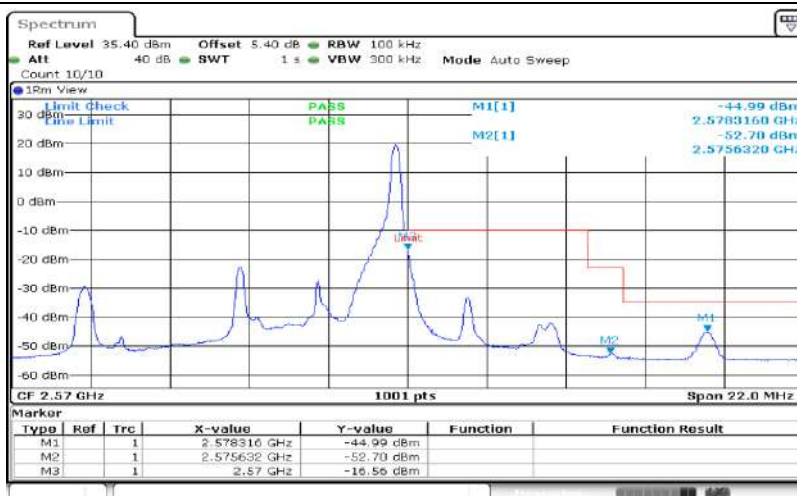
Band7-5MHz-QPSK-20775-1RB#0



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



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

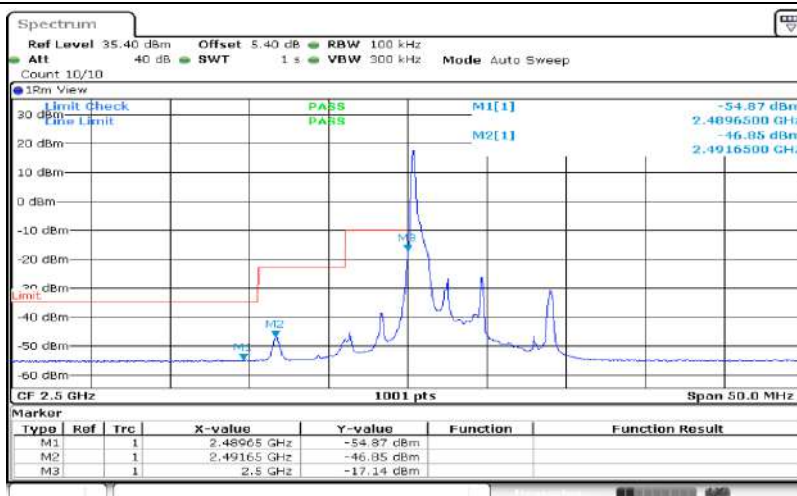


Band7-5MHz-QPSK-21425-25RB#0



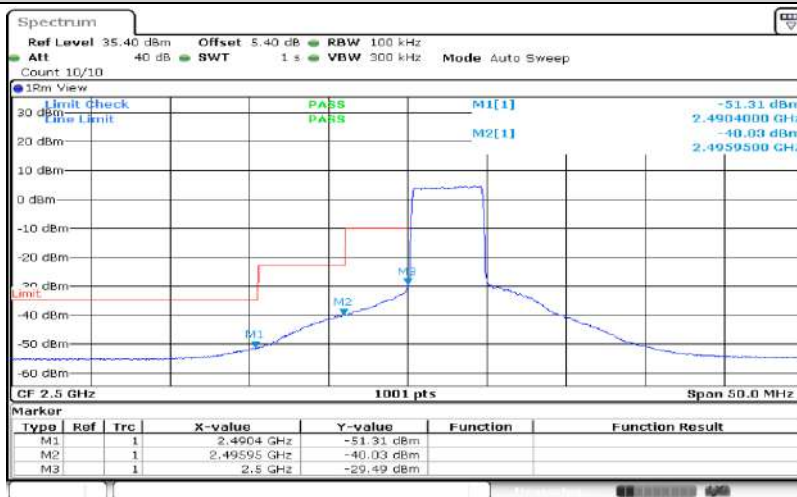
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Date: 27 DEC 2019 14:47:05

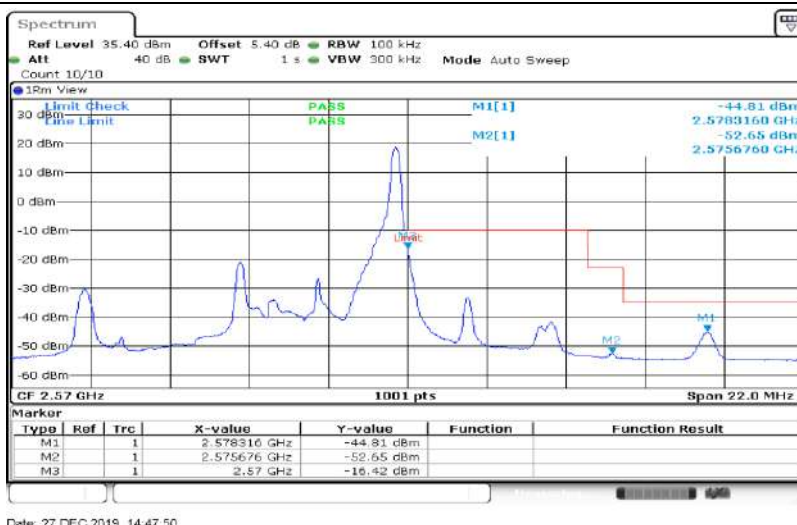
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Date: 27 DEC 2019 14:48:36

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



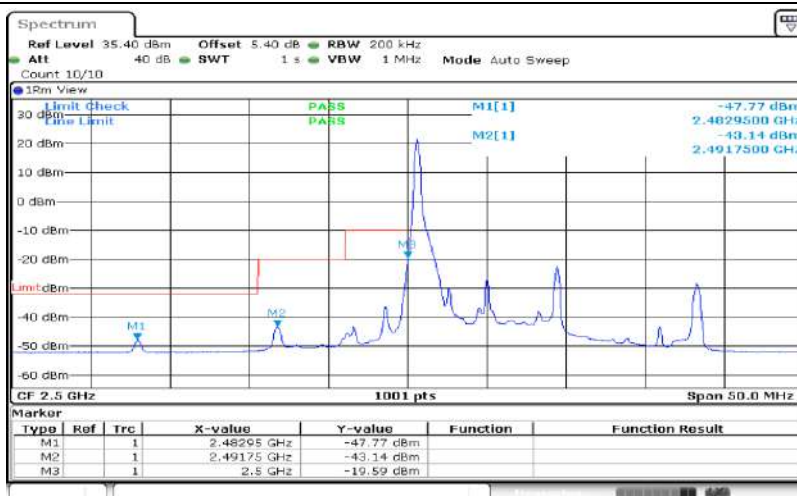


Band7-5MHz-16QAM-21425-25RB#0



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





Date: 27 DEC 2019 14:49:42

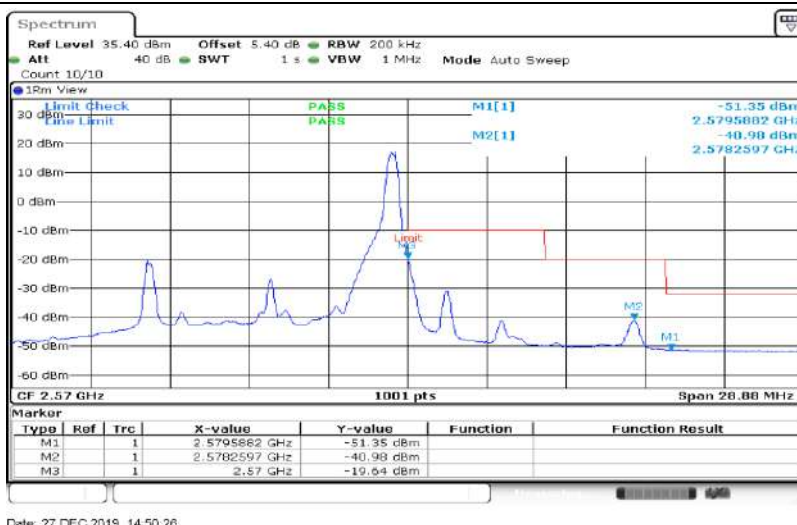
Band7-10MHz-QPSK-20800-50RB#0



Date: 27 DEC 2019 14:51:11

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





Date: 27 DEC 2019 14:50:26

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

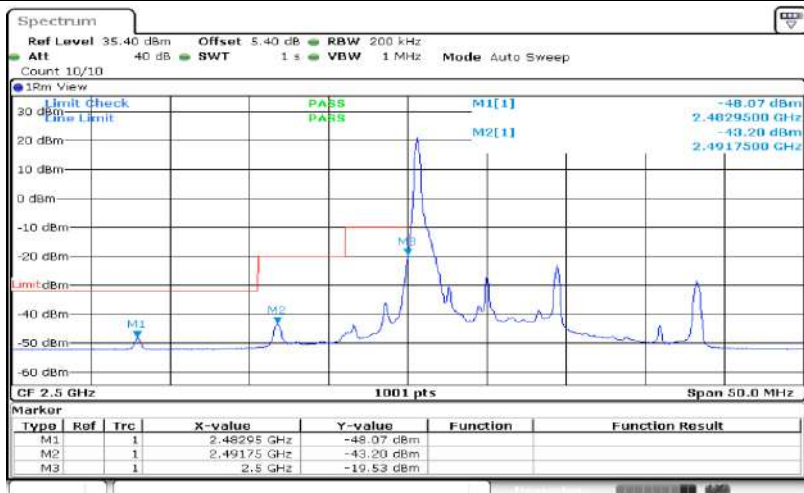


Date: 27 DEC 2019 14:51:52

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



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Date: 27 DEC 2019 14:50:02

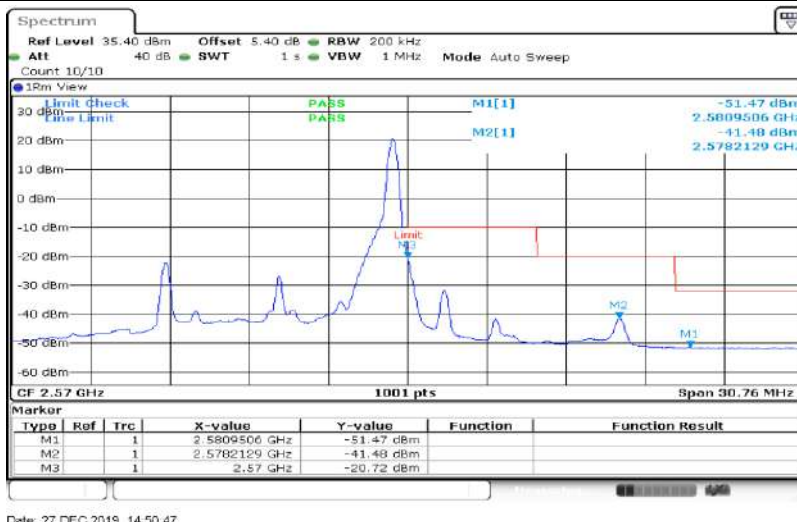
Band7-10MHz-16QAM-20800-50RB#0



Date: 27 DEC 2019 14:51:32

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



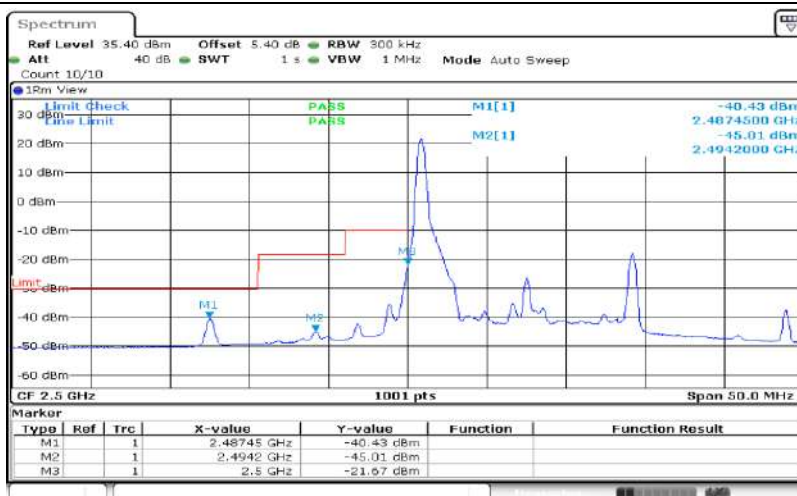


Band7-10MHz-16QAM-21400-50RB#0



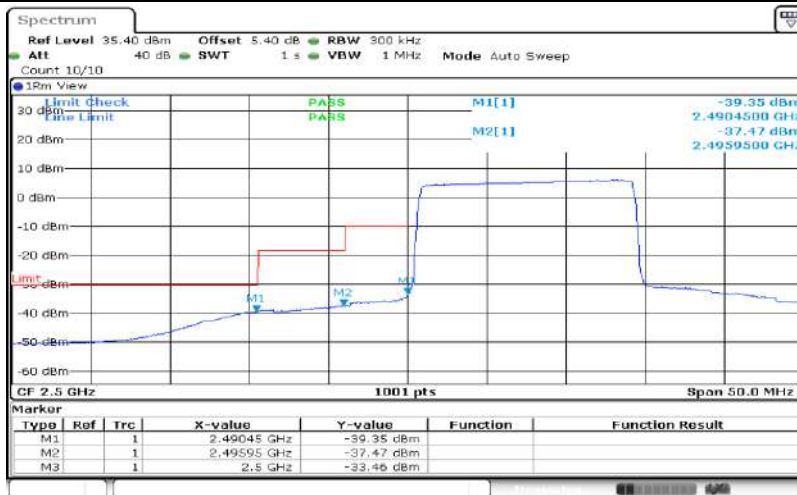
Band7-15MHz-QPSK-20825-1RB#0





Date: 27 DEC 2019 14:52:38

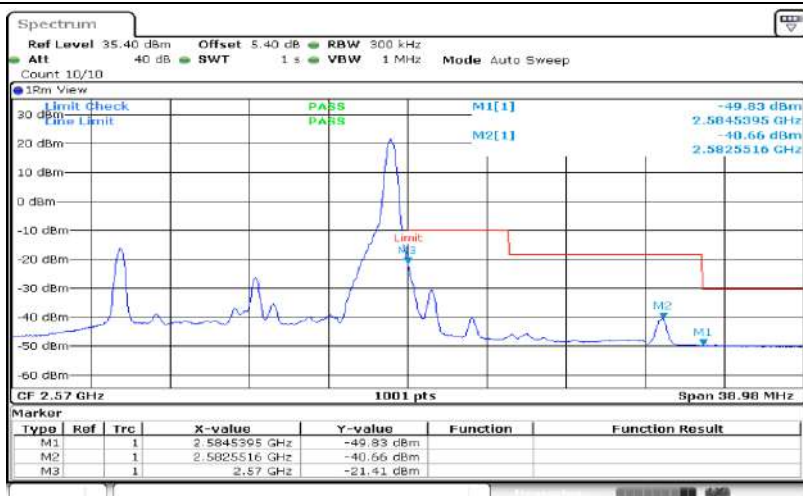
Band7-15MHz-QPSK-20825-75RB#0



Date: 27 DEC 2019 14:54:08

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



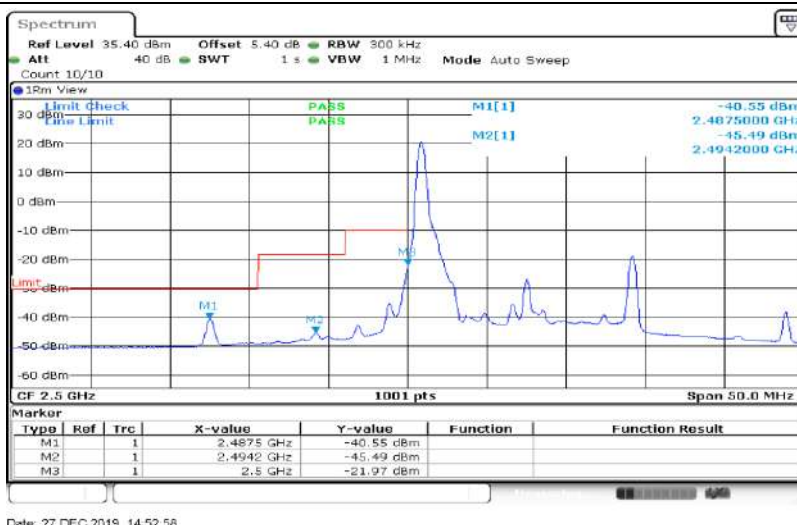


Band7-15MHz-QPSK-21375-75RB#0



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



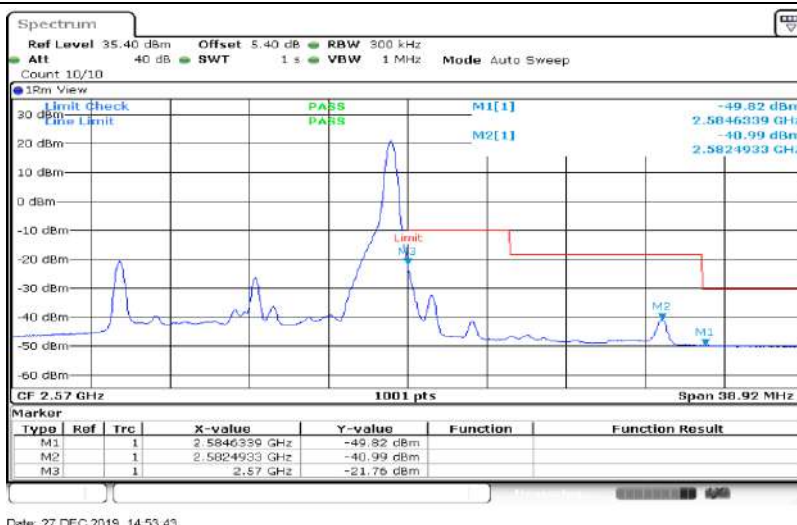


Band7-15MHz-16QAM-20825-75RB#0



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



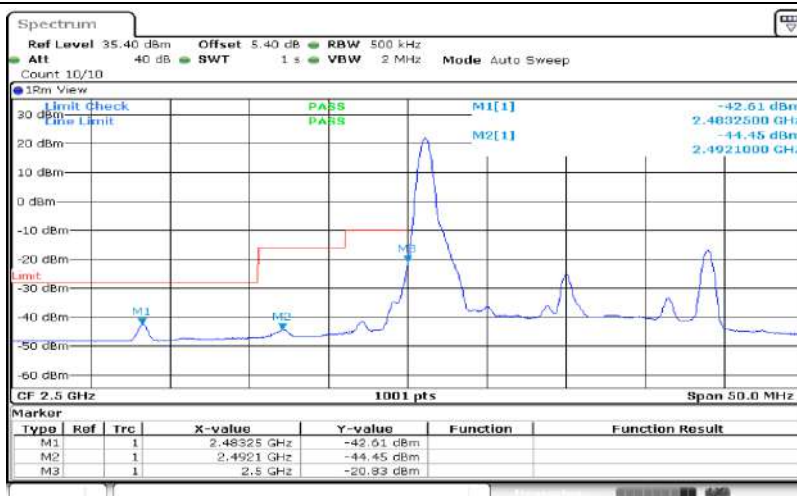


Band7-15MHz-16QAM-21375-75RB#0



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



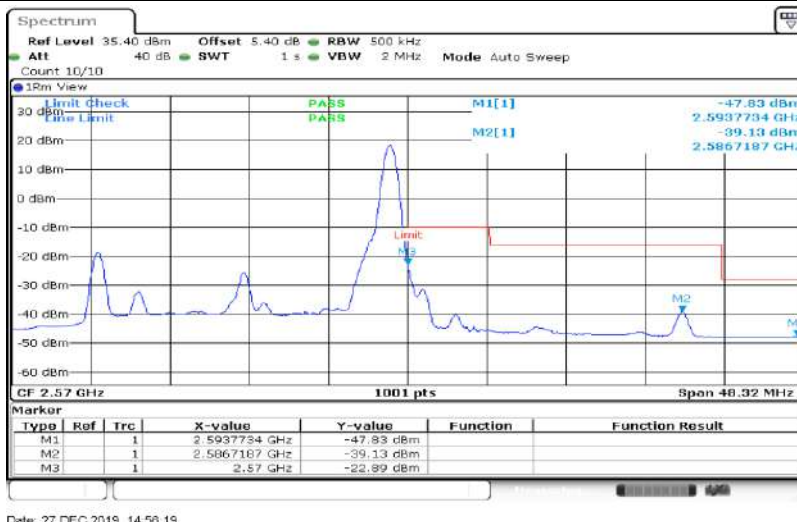


Band7-20MHz-QPSK-20850-100RB#0



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





Date: 27 DEC 2019 14:58:19

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



Date: 27 DEC 2019 14:57:45

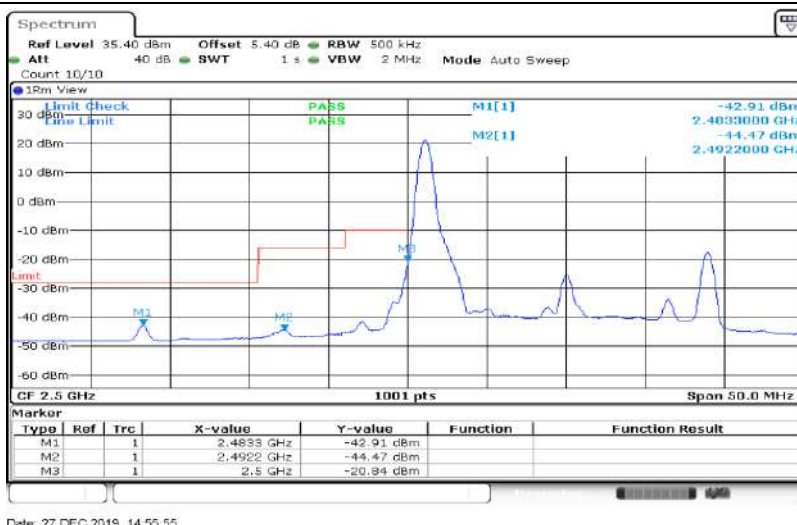
Band7-20MHz-16QAM-20850-1RB#0



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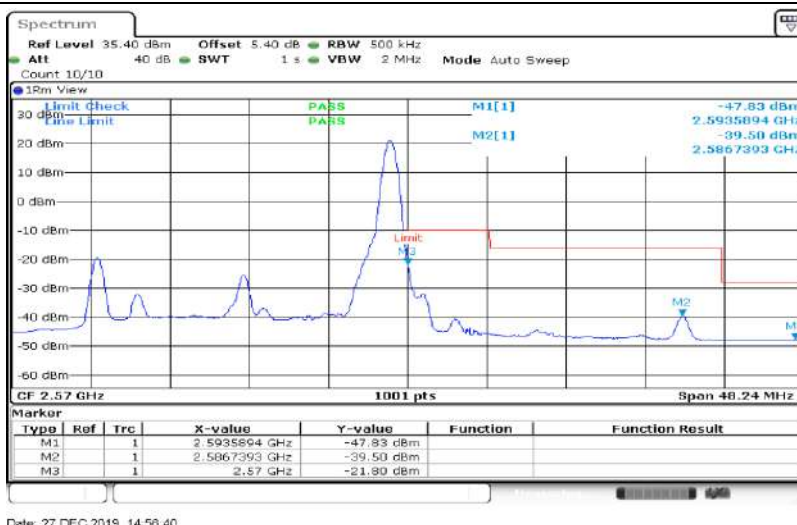


Band7-20MHz-16QAM-20850-100RB#0



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





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



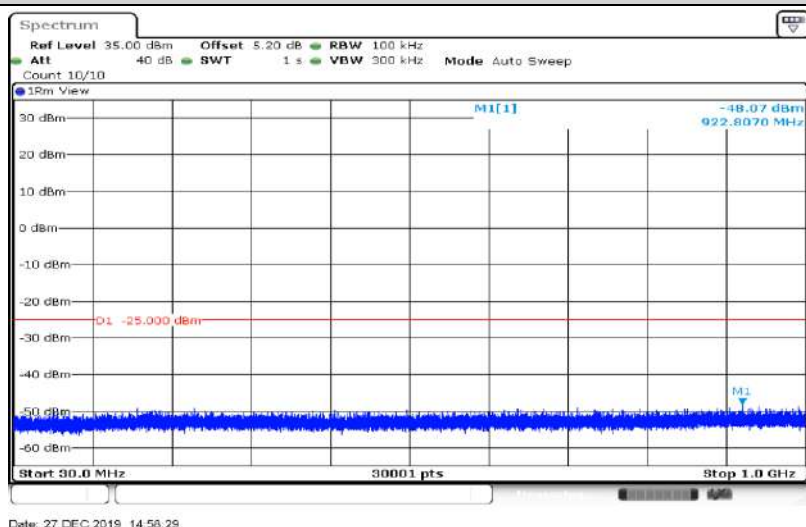
6. Spurious Emission at Antenna Terminal

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.

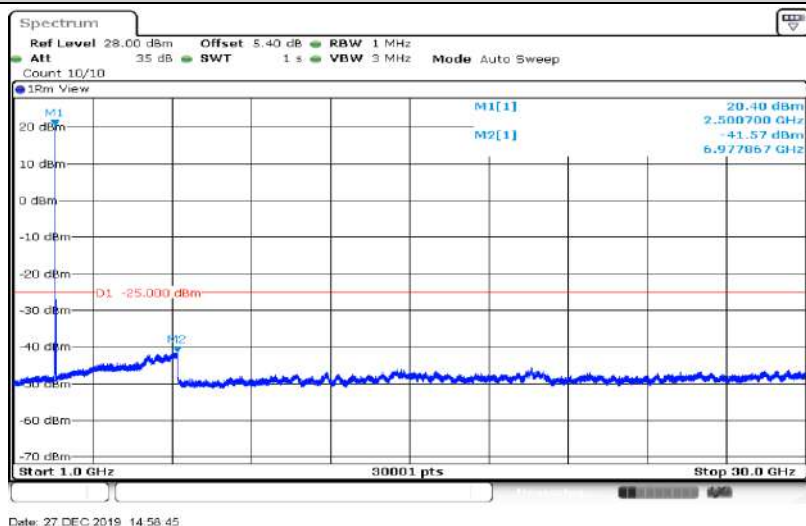
Remark2: only the worst case data displayed in this report.

6.1. Test Plots

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

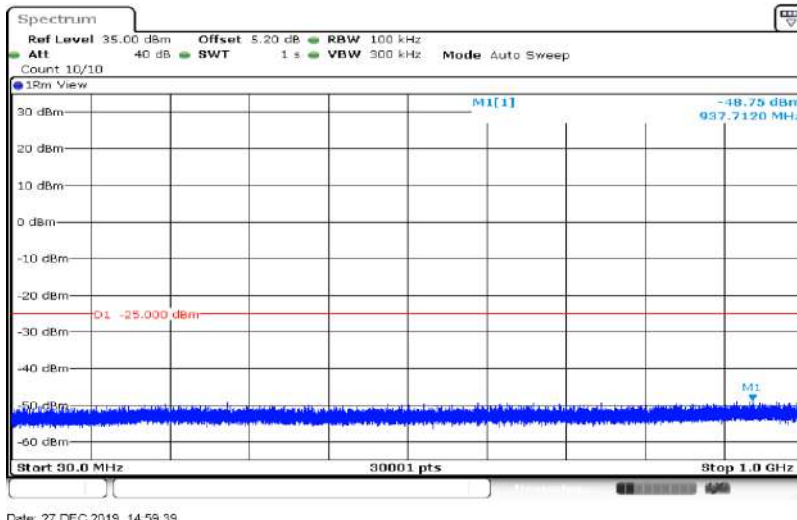


Band7-20MHz-QPSK-20850-1RB#0-Range2:1000~30000MHz

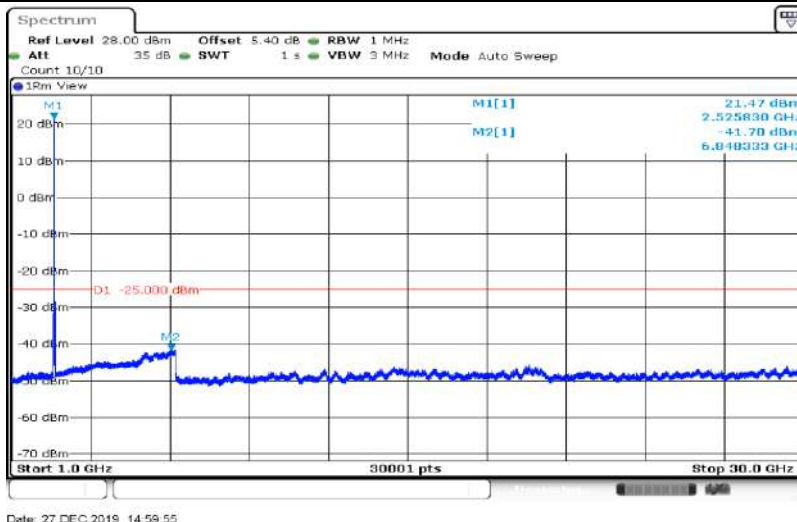


Band7-20MHz-QPSK-21100-1RB#0-Range1:30~1000MHz





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

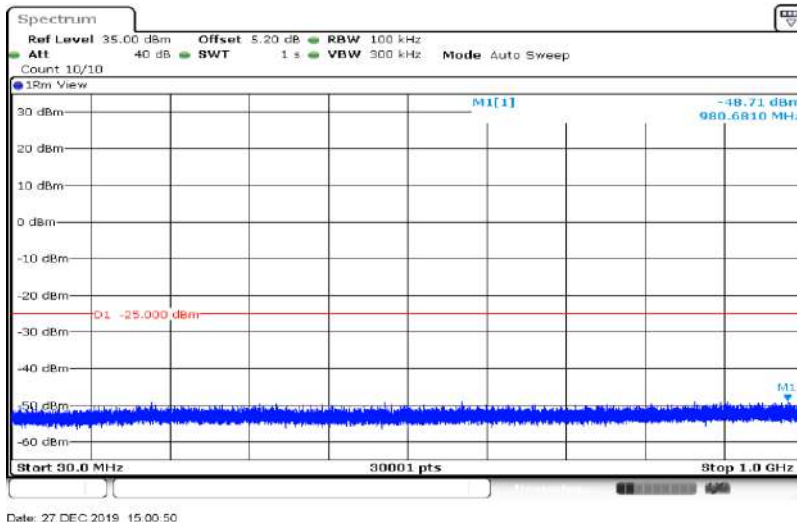


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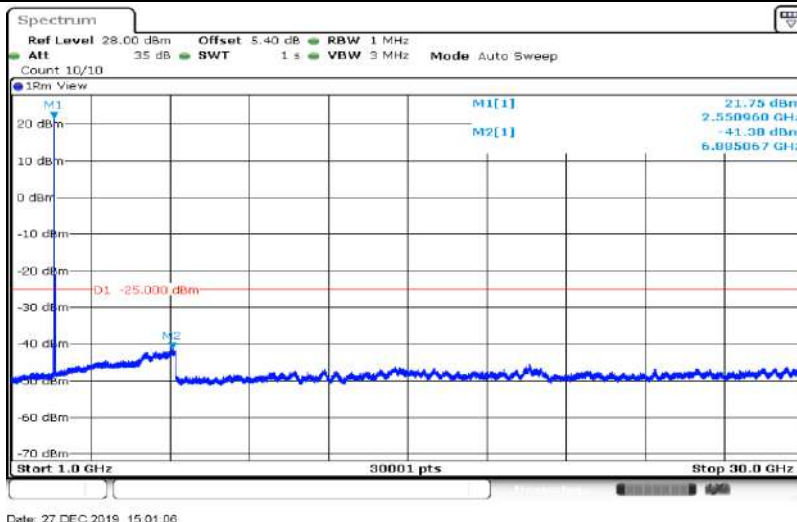


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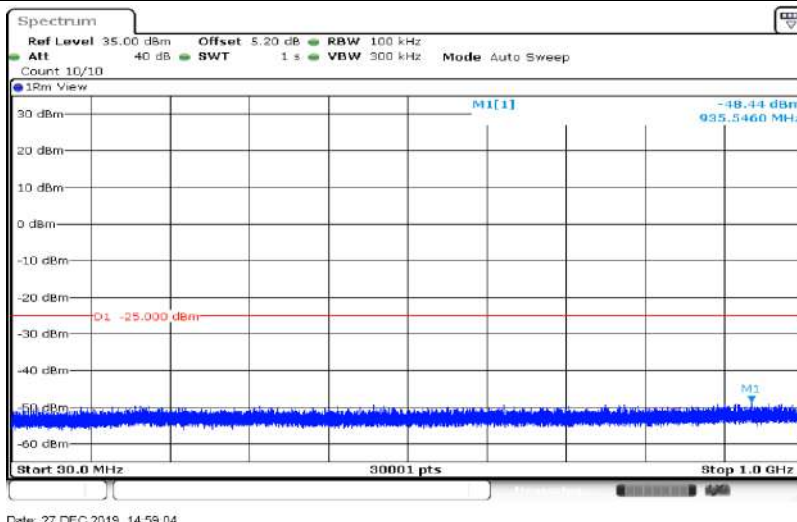
Band7-20MHz-QPSK-21350-1RB#0-Range2:1000~30000MHz



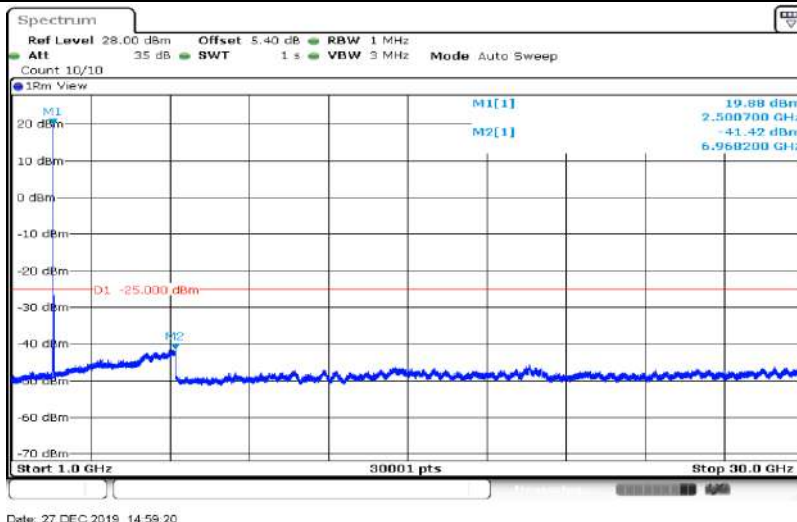
Band7-20MHz-16QAM-20850-1RB#0-Range1:30~1000MHz



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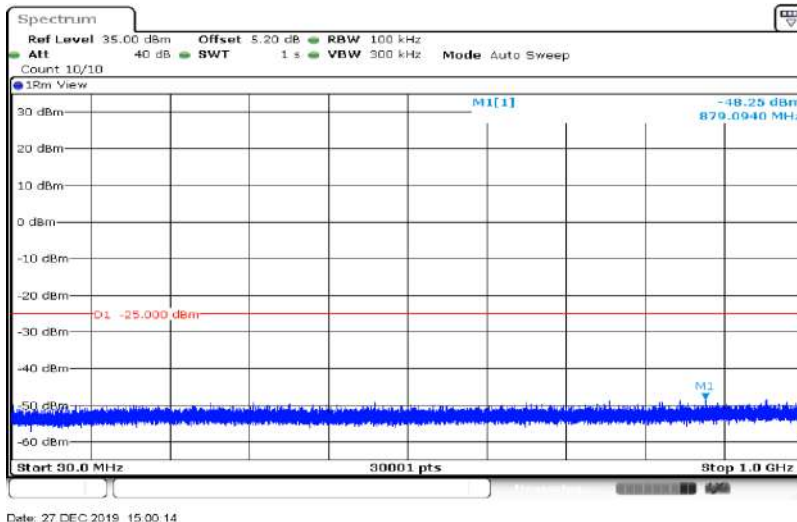


Band7-20MHz-16QAM-20850-1RB#0-Range2:1000~30000MHz

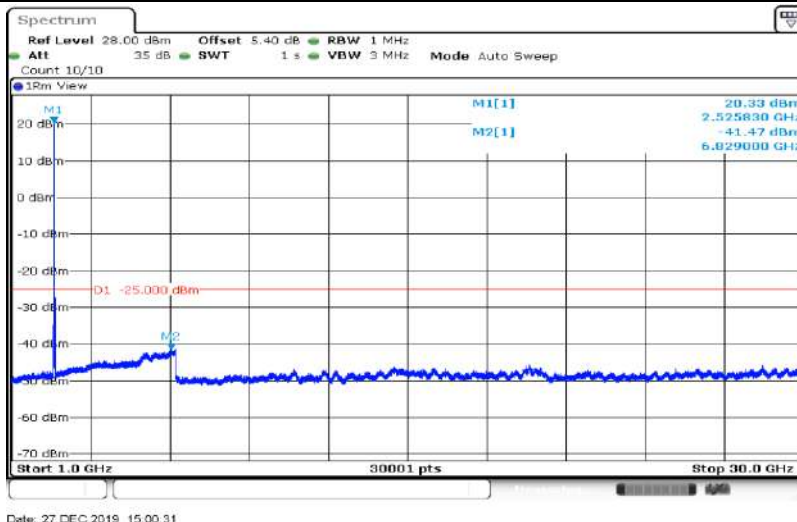


Band7-20MHz-16QAM-21100-1RB#0-Range1:30~1000MHz





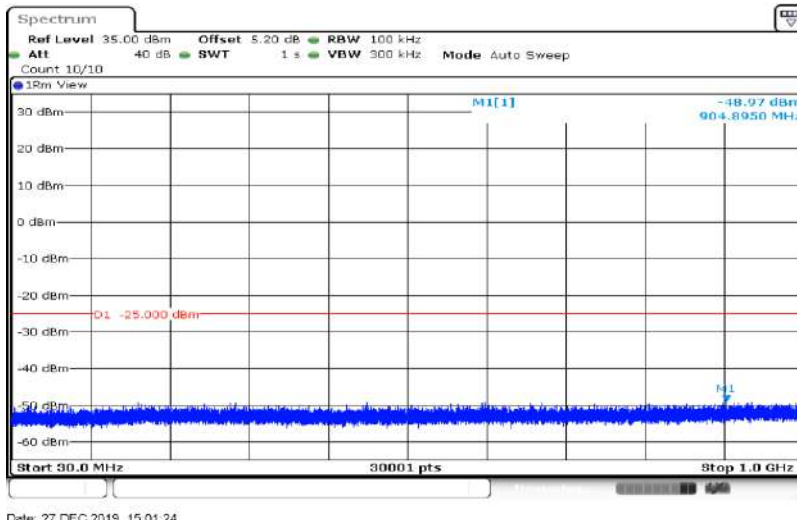
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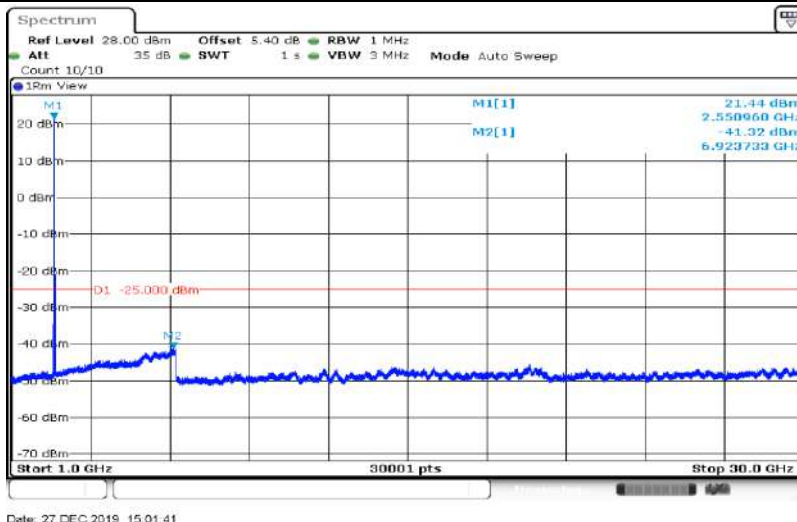
Band7-20MHz-16QAM-21350-1RB#0-Range1:30~1000MHz



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7. Field Strength of Spurious Radiation

7.1. Test Band = LTE Band 7

7.1.1. Test Mode = LTE/TM1

7.1.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
110.4170	-65.39	-25.00	40.39	Vertical
5002.2801	-49.45	-25.00	24.45	Vertical
7503.1801	-43.34	-25.00	18.34	Vertical
10004.0802	-39.51	-25.00	14.51	Vertical
14360.2544	-52.74	-25.00	27.74	Vertical
17998.8000	-46.27	-25.00	21.27	Vertical
42.5621	-64.89	-25.00	39.89	Horizontal
5002.2801	-50.60	-25.00	25.60	Horizontal
7503.1801	-39.65	-25.00	14.65	Horizontal
10004.6802	-35.69	-25.00	10.69	Horizontal
12505.5802	-53.51	-25.00	28.51	Horizontal
16394.3358	-49.07	-25.00	24.07	Horizontal

7.1.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
109.6895	-65.72	-25.00	40.72	Vertical
5052.0821	-50.64	-25.00	25.64	Vertical
7578.1831	-45.80	-25.00	20.80	Vertical
10104.2842	-42.08	-25.00	17.08	Vertical
14522.2609	-52.01	-25.00	27.01	Vertical
17794.1918	-48.77	-25.00	23.77	Vertical
42.9987	-65.19	-25.00	40.19	Horizontal
5052.0821	-49.68	-25.00	24.68	Horizontal
7578.1831	-41.28	-25.00	16.28	Horizontal
10104.2842	-38.37	-25.00	13.37	Horizontal
12630.3852	-53.91	-25.00	28.91	Horizontal
16837.1535	-50.17	-25.00	25.17	Horizontal



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7.1.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
111.4841	-65.52	-25.00	40.52	Vertical
748.4179	-63.34	-25.00	38.34	Vertical
5102.4841	-49.28	-25.00	24.28	Vertical
7653.1861	-46.34	-25.00	21.34	Vertical
10204.4882	-43.75	-25.00	18.75	Vertical
17996.9999	-45.77	-25.00	20.77	Vertical
44.5507	-63.97	-25.00	38.97	Horizontal
829.6595	-62.29	-25.00	37.29	Horizontal
5101.8841	-49.43	-25.00	24.43	Horizontal
7653.1861	-41.04	-25.00	16.04	Horizontal
10204.4882	-41.71	-25.00	16.71	Horizontal
16374.5350	-49.18	-25.00	24.18	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.





8. Frequency Stability

8.1. Frequency Vs Voltage

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band7	20MHz	QPSK	20850	100RB#0	VL	NT	-18.50	-0.007371	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	VN	NT	9.80	0.003904	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	VH	NT	-3.70	-0.001474	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VL	NT	7.50	0.002959	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VN	NT	6.60	0.002629	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VH	NT	-5.90	-0.002327	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VL	NT	0.10	0.000039	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VN	NT	-14.80	-0.005781	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VH	NT	-14.90	-0.005820	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VL	NT	6.60	0.002629	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VN	NT	-5.40	-0.002151	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VH	NT	1.00	0.000398	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VL	NT	1.40	0.000552	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VN	NT	-17.80	-0.007022	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VH	NT	-0.80	-0.000316	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VL	NT	-2.50	-0.000977	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VN	NT	-17.80	-0.006953	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VH	NT	2.80	0.001094	±2.5	PASS

8.2. Frequency Vs Temperature

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band7	20MHz	QPSK	20850	100RB#0	NV	-30	-3.60	-0.001434	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	-20	8.40	0.003347	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	0	-5.50	-0.002191	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	10	6.90	0.002749	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	20	13.10	0.005219	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	30	6.00	0.002390	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	40	8.50	0.003386	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	50	-3.60	-0.001434	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-30	-6.80	-0.002682	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-20	-13.50	-0.005325	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	0	-16.00	-0.006312	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	10	-4.00	-0.001578	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	20	-4.40	-0.001736	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	30	1.00	0.000394	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	40	9.00	0.003550	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	50	-5.20	-0.002051	±2.5	PASS



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Band7	20MHz	QPSK	21350	100RB#0	NV	-30	2.30	0.000898	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	-20	-11.00	-0.004297	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	0	-6.20	-0.002422	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	10	-10.90	-0.004258	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	20	0.30	0.000117	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	30	7.70	0.003008	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	40	-9.10	-0.003555	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	50	-11.20	-0.004375	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	-30	-12.80	-0.005100	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	-20	-13.50	-0.005378	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	0	-13.10	-0.005219	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	10	1.40	0.000558	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	20	-12.60	-0.005020	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	30	1.70	0.000677	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	40	-11.60	-0.004622	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	50	0.50	0.000199	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	-30	-13.60	-0.005365	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	-20	-1.90	-0.000750	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	0	-0.80	-0.000316	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	10	-13.90	-0.005483	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	20	3.00	0.001183	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	30	-8.40	-0.003314	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	40	-3.40	-0.001341	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	50	-4.80	-0.001893	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	-30	4.70	0.001836	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	-20	-19.40	-0.007578	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	0	-3.40	-0.001328	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	10	-20.70	-0.008086	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	20	-5.00	-0.001953	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	30	-2.70	-0.001055	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	40	1.30	0.000508	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	50	-15.40	-0.006016	±2.5	PASS



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