



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	22.50	22.60	33.00	PASS
Band7	5MHz	QPSK	20775	1RB#12	22.49	22.59	33.00	PASS
Band7	5MHz	QPSK	20775	1RB#24	22.14	22.24	33.00	PASS
Band7	5MHz	QPSK	20775	12RB#0	21.58	21.68	33.00	PASS
Band7	5MHz	QPSK	20775	12RB#6	21.63	21.73	33.00	PASS
Band7	5MHz	QPSK	20775	12RB#13	21.38	21.48	33.00	PASS
Band7	5MHz	QPSK	20775	25RB#0	21.54	21.64	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#0	22.11	22.21	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#12	22.13	22.23	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#24	22.05	22.15	33.00	PASS
Band7	5MHz	QPSK	21100	12RB#0	21.15	21.25	33.00	PASS
Band7	5MHz	QPSK	21100	12RB#6	21.31	21.41	33.00	PASS
Band7	5MHz	QPSK	21100	12RB#13	21.23	21.33	33.00	PASS
Band7	5MHz	QPSK	21100	25RB#0	21.12	21.22	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#0	22.19	22.29	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#12	22.31	22.41	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#24	22.34	22.44	33.00	PASS
Band7	5MHz	QPSK	21425	12RB#0	21.36	21.46	33.00	PASS
Band7	5MHz	QPSK	21425	12RB#6	21.40	21.50	33.00	PASS
Band7	5MHz	QPSK	21425	12RB#13	21.41	21.51	33.00	PASS
Band7	5MHz	QPSK	21425	25RB#0	21.42	21.52	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#0	22.09	22.19	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#12	21.99	22.09	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#24	21.49	21.59	33.00	PASS
Band7	5MHz	16QAM	20775	12RB#0	20.60	20.70	33.00	PASS
Band7	5MHz	16QAM	20775	12RB#6	20.66	20.76	33.00	PASS
Band7	5MHz	16QAM	20775	12RB#13	20.54	20.64	33.00	PASS
Band7	5MHz	16QAM	20775	25RB#0	20.61	20.71	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#0	21.30	21.40	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#12	21.44	21.54	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#24	21.89	21.99	33.00	PASS
Band7	5MHz	16QAM	21100	12RB#0	20.26	20.36	33.00	PASS
Band7	5MHz	16QAM	21100	12RB#6	20.32	20.42	33.00	PASS
Band7	5MHz	16QAM	21100	12RB#13	20.27	20.37	33.00	PASS
Band7	5MHz	16QAM	21100	25RB#0	20.18	20.28	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#0	21.61	21.71	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#12	21.81	21.91	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#24	21.90	22.00	33.00	PASS





Band7	5MHz	16QAM	21425	12RB#0	20.49	20.59	33.00	PASS
Band7	5MHz	16QAM	21425	12RB#6	20.64	20.74	33.00	PASS
Band7	5MHz	16QAM	21425	12RB#13	20.53	20.63	33.00	PASS
Band7	5MHz	16QAM	21425	25RB#0	20.51	20.61	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#0	22.64	22.74	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#24	22.41	22.51	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#49	22.20	22.30	33.00	PASS
Band7	10MHz	QPSK	20800	25RB#0	21.53	21.63	33.00	PASS
Band7	10MHz	QPSK	20800	25RB#12	21.55	21.65	33.00	PASS
Band7	10MHz	QPSK	20800	25RB#25	21.32	21.42	33.00	PASS
Band7	10MHz	QPSK	20800	50RB#0	21.60	21.70	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#0	22.22	22.32	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#24	22.20	22.30	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#49	22.19	22.29	33.00	PASS
Band7	10MHz	QPSK	21100	25RB#0	21.30	21.40	33.00	PASS
Band7	10MHz	QPSK	21100	25RB#12	21.27	21.37	33.00	PASS
Band7	10MHz	QPSK	21100	25RB#25	21.28	21.38	33.00	PASS
Band7	10MHz	QPSK	21100	50RB#0	21.30	21.40	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#0	22.32	22.42	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#24	22.31	22.41	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#49	22.34	22.44	33.00	PASS
Band7	10MHz	QPSK	21400	25RB#0	21.43	21.53	33.00	PASS
Band7	10MHz	QPSK	21400	25RB#12	21.50	21.60	33.00	PASS
Band7	10MHz	QPSK	21400	25RB#25	21.41	21.51	33.00	PASS
Band7	10MHz	QPSK	21400	50RB#0	21.51	21.61	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#0	21.82	21.92	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#24	22.08	22.18	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#49	21.84	21.94	33.00	PASS
Band7	10MHz	16QAM	20800	25RB#0	20.70	20.80	33.00	PASS
Band7	10MHz	16QAM	20800	25RB#12	20.57	20.67	33.00	PASS
Band7	10MHz	16QAM	20800	25RB#25	20.54	20.64	33.00	PASS
Band7	10MHz	16QAM	20800	50RB#0	20.35	20.45	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#0	21.98	22.08	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#24	21.42	21.52	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#49	21.84	21.94	33.00	PASS
Band7	10MHz	16QAM	21100	25RB#0	20.30	20.40	33.00	PASS
Band7	10MHz	16QAM	21100	25RB#12	20.32	20.42	33.00	PASS
Band7	10MHz	16QAM	21100	25RB#25	20.31	20.41	33.00	PASS
Band7	10MHz	16QAM	21100	50RB#0	20.31	20.41	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#0	22.03	22.13	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#24	21.49	21.59	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#49	21.56	21.66	33.00	PASS
Band7	10MHz	16QAM	21400	25RB#0	20.41	20.51	33.00	PASS
Band7	10MHz	16QAM	21400	25RB#12	20.56	20.66	33.00	PASS
Band7	10MHz	16QAM	21400	25RB#25	20.50	20.60	33.00	PASS
Band7	10MHz	16QAM	21400	50RB#0	20.49	20.59	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#0	22.28	22.38	33.00	PASS



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Band7	15MHz	QPSK	20825	1RB#38	22.40	22.50	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#74	22.11	22.21	33.00	PASS
Band7	15MHz	QPSK	20825	36RB#0	21.49	21.59	33.00	PASS
Band7	15MHz	QPSK	20825	36RB#18	21.43	21.53	33.00	PASS
Band7	15MHz	QPSK	20825	36RB#39	21.26	21.36	33.00	PASS
Band7	15MHz	QPSK	20825	75RB#0	21.43	21.53	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#0	22.14	22.24	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#38	22.18	22.28	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#74	22.13	22.23	33.00	PASS
Band7	15MHz	QPSK	21100	36RB#0	21.19	21.29	33.00	PASS
Band7	15MHz	QPSK	21100	36RB#18	21.24	21.34	33.00	PASS
Band7	15MHz	QPSK	21100	36RB#39	21.26	21.36	33.00	PASS
Band7	15MHz	QPSK	21100	75RB#0	21.17	21.27	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#0	22.19	22.29	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#38	22.21	22.31	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#74	22.37	22.47	33.00	PASS
Band7	15MHz	QPSK	21375	36RB#0	21.36	21.46	33.00	PASS
Band7	15MHz	QPSK	21375	36RB#18	21.34	21.44	33.00	PASS
Band7	15MHz	QPSK	21375	36RB#39	21.37	21.47	33.00	PASS
Band7	15MHz	QPSK	21375	75RB#0	21.45	21.55	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#0	21.58	21.68	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#38	21.40	21.50	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#74	21.40	21.50	33.00	PASS
Band7	15MHz	16QAM	20825	36RB#0	20.45	20.55	33.00	PASS
Band7	15MHz	16QAM	20825	36RB#18	20.44	20.54	33.00	PASS
Band7	15MHz	16QAM	20825	36RB#39	20.29	20.39	33.00	PASS
Band7	15MHz	16QAM	20825	75RB#0	20.41	20.51	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#0	21.19	21.29	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#38	21.20	21.30	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#74	21.24	21.34	33.00	PASS
Band7	15MHz	16QAM	21100	36RB#0	20.23	20.33	33.00	PASS
Band7	15MHz	16QAM	21100	36RB#18	20.28	20.38	33.00	PASS
Band7	15MHz	16QAM	21100	36RB#39	20.28	20.38	33.00	PASS
Band7	15MHz	16QAM	21100	75RB#0	20.32	20.42	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#0	21.45	21.55	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#38	21.83	21.93	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#74	21.48	21.58	33.00	PASS
Band7	15MHz	16QAM	21375	36RB#0	20.35	20.45	33.00	PASS
Band7	15MHz	16QAM	21375	36RB#18	20.46	20.56	33.00	PASS
Band7	15MHz	16QAM	21375	36RB#39	20.45	20.55	33.00	PASS
Band7	15MHz	16QAM	21375	75RB#0	20.53	20.63	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#0	22.30	22.40	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#49	22.34	22.44	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#99	21.92	22.02	33.00	PASS
Band7	20MHz	QPSK	20850	50RB#0	21.43	21.53	33.00	PASS
Band7	20MHz	QPSK	20850	50RB#25	21.48	21.58	33.00	PASS
Band7	20MHz	QPSK	20850	50RB#50	21.39	21.49	33.00	PASS



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Band7	20MHz	QPSK	20850	100RB#0	21.42	21.52	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#0	21.93	22.03	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#49	22.36	22.46	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#99	21.75	21.85	33.00	PASS
Band7	20MHz	QPSK	21100	50RB#0	21.26	21.36	33.00	PASS
Band7	20MHz	QPSK	21100	50RB#25	21.29	21.39	33.00	PASS
Band7	20MHz	QPSK	21100	50RB#50	21.14	21.24	33.00	PASS
Band7	20MHz	QPSK	21100	100RB#0	21.29	21.39	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#0	21.94	22.04	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#49	22.40	22.50	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#99	22.02	22.12	33.00	PASS
Band7	20MHz	QPSK	21350	50RB#0	21.46	21.56	33.00	PASS
Band7	20MHz	QPSK	21350	50RB#25	21.48	21.58	33.00	PASS
Band7	20MHz	QPSK	21350	50RB#50	21.23	21.33	33.00	PASS
Band7	20MHz	QPSK	21350	100RB#0	21.25	21.35	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#0	21.54	21.64	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#49	21.37	21.47	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#99	21.06	21.16	33.00	PASS
Band7	20MHz	16QAM	20850	50RB#0	20.45	20.55	33.00	PASS
Band7	20MHz	16QAM	20850	50RB#25	20.43	20.53	33.00	PASS
Band7	20MHz	16QAM	20850	50RB#50	20.36	20.46	33.00	PASS
Band7	20MHz	16QAM	20850	100RB#0	20.48	20.58	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#0	21.21	21.31	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#49	21.85	21.95	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#99	21.11	21.21	33.00	PASS
Band7	20MHz	16QAM	21100	50RB#0	20.34	20.44	33.00	PASS
Band7	20MHz	16QAM	21100	50RB#25	20.35	20.45	33.00	PASS
Band7	20MHz	16QAM	21100	50RB#50	20.32	20.42	33.00	PASS
Band7	20MHz	16QAM	21100	100RB#0	20.38	20.48	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#0	21.31	21.41	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#49	21.48	21.58	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#99	21.36	21.46	33.00	PASS
Band7	20MHz	16QAM	21350	50RB#0	20.39	20.49	33.00	PASS
Band7	20MHz	16QAM	21350	50RB#25	20.49	20.59	33.00	PASS
Band7	20MHz	16QAM	21350	50RB#50	20.36	20.46	33.00	PASS
Band7	20MHz	16QAM	21350	100RB#0	20.37	20.47	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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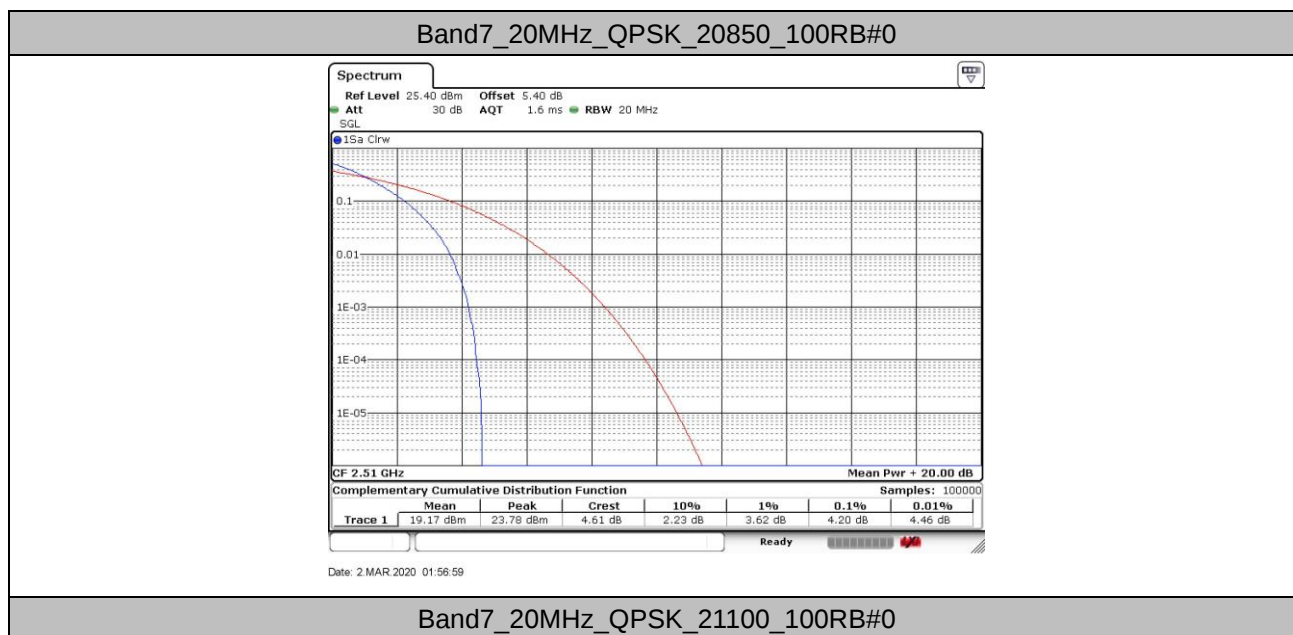
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中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

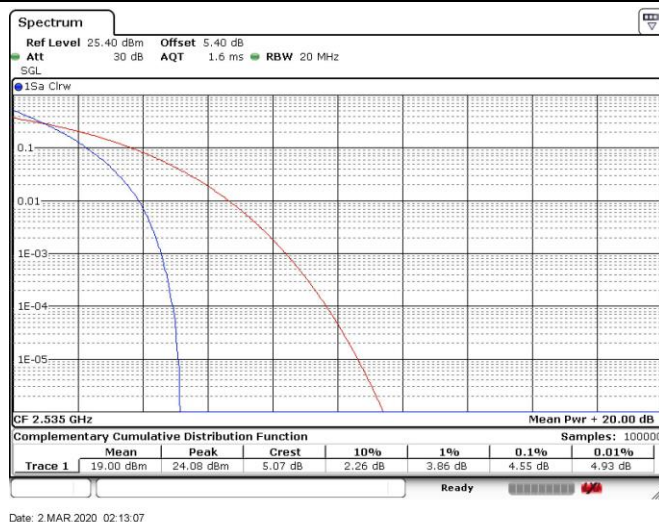
2. Peak-to-Average Ratio(CCDF)

2.1. Test Result

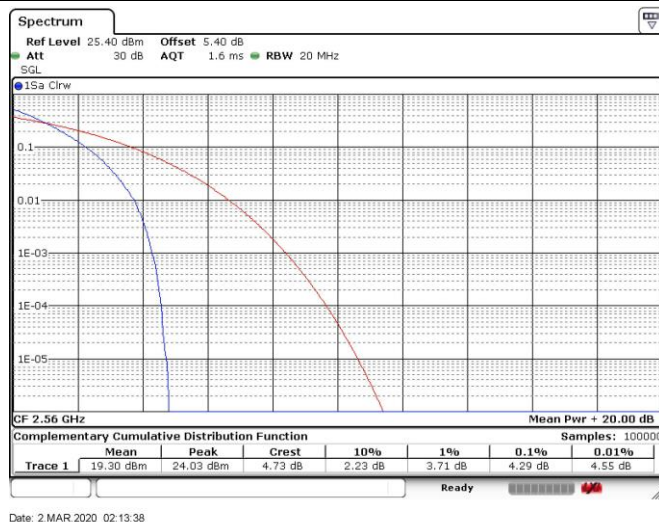
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band7	20MHz	QPSK	20850	100RB#0	4.20	13.00	PASS
Band7	20MHz	QPSK	21100	100RB#0	4.55	13.00	PASS
Band7	20MHz	QPSK	21350	100RB#0	4.29	13.00	PASS
Band7	20MHz	16QAM	20850	100RB#0	5.88	13.00	PASS
Band7	20MHz	16QAM	21100	100RB#0	6.20	13.00	PASS
Band7	20MHz	16QAM	21350	100RB#0	6.00	13.00	PASS

2.2. Test Plots



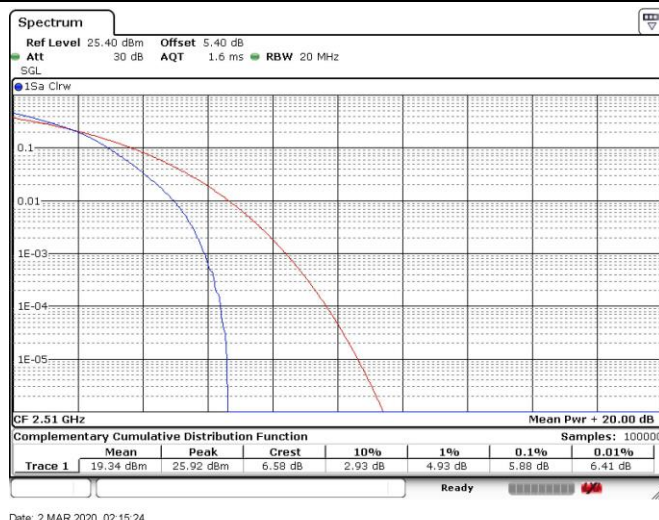


Band7_20MHz_QPSK_21350_100RB#0

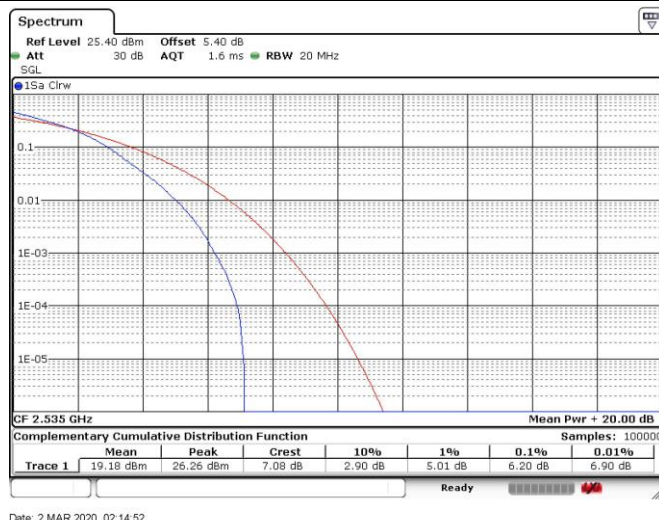


Band7_20MHz_16QAM_20850_100RB#0





Band7_20MHz_16QAM_21100_100RB#0

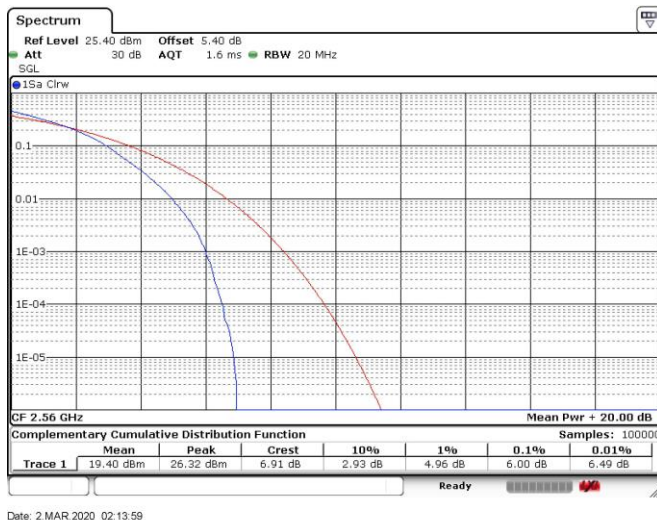


Band7_20MHz_16QAM_21350_100RB#0



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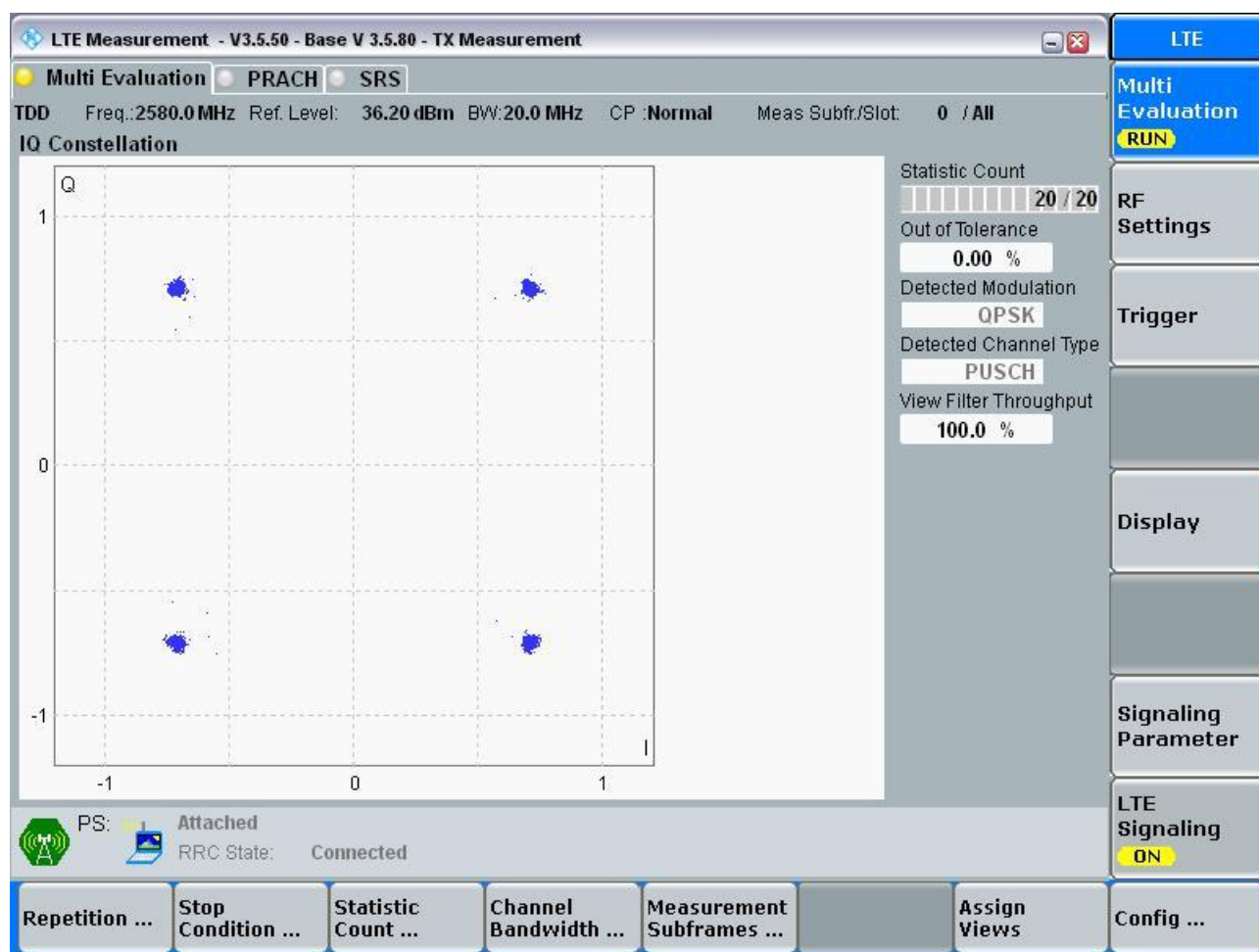
Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

3. Modulation Characteristics

3.1. Test Band = LTE Band 7

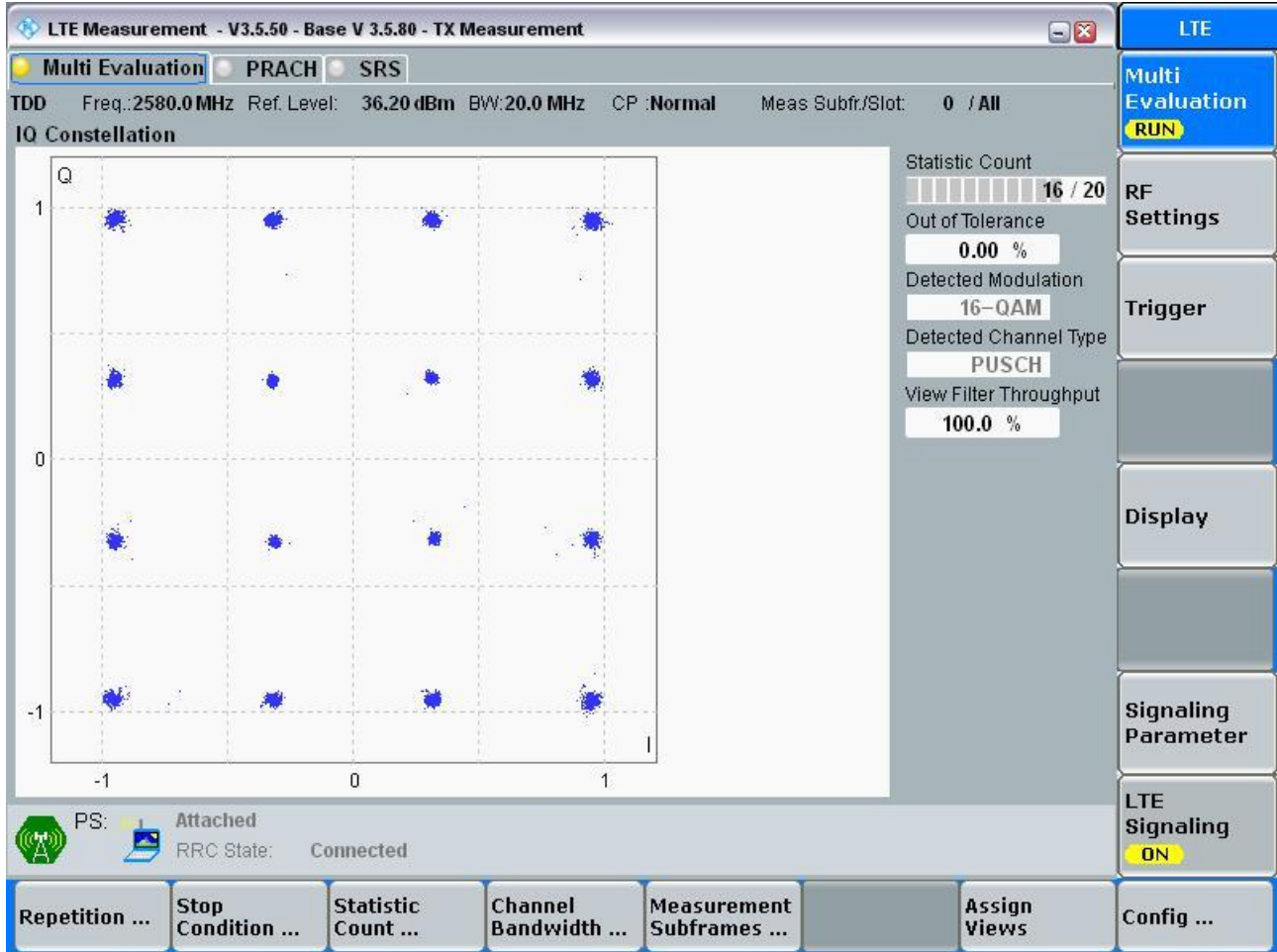
3.2. Test Mode = LTE /TM1 20MHz

3.2.1. Test Channel = LCH



3.3. Test Mode = LTE /TM2 20MHz

3.3.1. Test Channel = LCH





4. 26dB Bandwidth and Occupied Bandwidth

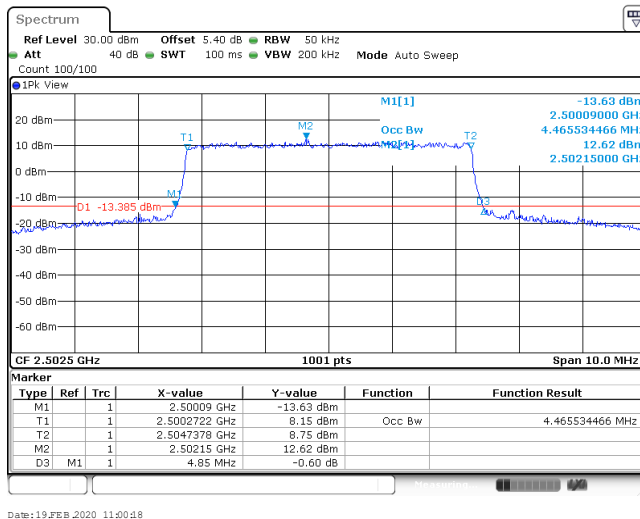
4.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	4.466	4.850	PASS
Band7	5MHz	QPSK	21100	25RB#0	4.476	4.840	PASS
Band7	5MHz	QPSK	21425	25RB#0	4.476	5.270	PASS
Band7	5MHz	16QAM	20775	25RB#0	4.466	4.860	PASS
Band7	5MHz	16QAM	21100	25RB#0	4.466	4.860	PASS
Band7	5MHz	16QAM	21425	25RB#0	4.466	4.810	PASS
Band7	10MHz	QPSK	20800	50RB#0	8.951	9.560	PASS
Band7	10MHz	QPSK	21100	50RB#0	8.911	9.560	PASS
Band7	10MHz	QPSK	21400	50RB#0	8.951	9.880	PASS
Band7	10MHz	16QAM	20800	50RB#0	8.931	9.540	PASS
Band7	10MHz	16QAM	21100	50RB#0	8.931	9.600	PASS
Band7	10MHz	16QAM	21400	50RB#0	8.931	9.600	PASS
Band7	15MHz	QPSK	20825	75RB#0	13.487	15.690	PASS
Band7	15MHz	QPSK	21100	75RB#0	13.427	14.790	PASS
Band7	15MHz	QPSK	21375	75RB#0	13.516	15.420	PASS
Band7	15MHz	16QAM	20825	75RB#0	13.457	14.760	PASS
Band7	15MHz	16QAM	21100	75RB#0	13.457	14.670	PASS
Band7	15MHz	16QAM	21375	75RB#0	13.487	14.670	PASS
Band7	20MHz	QPSK	20850	100RB#0	17.982	19.600	PASS
Band7	20MHz	QPSK	21100	100RB#0	17.902	19.600	PASS
Band7	20MHz	QPSK	21350	100RB#0	17.942	19.240	PASS
Band7	20MHz	16QAM	20850	100RB#0	17.902	20.040	PASS
Band7	20MHz	16QAM	21100	100RB#0	17.902	19.360	PASS
Band7	20MHz	16QAM	21350	100RB#0	17.942	19.240	PASS

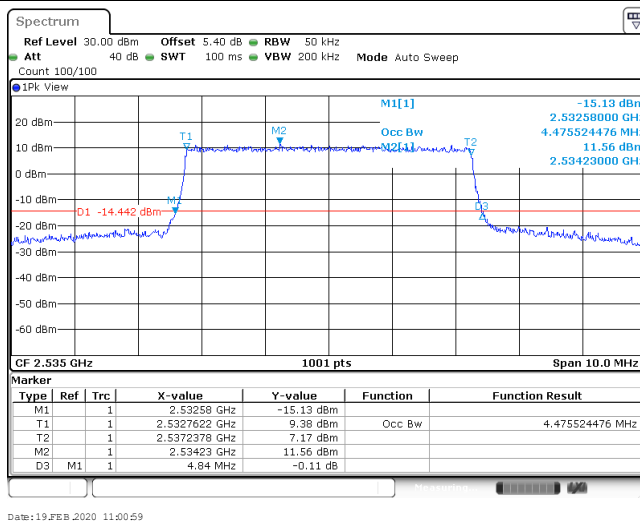


4.2. Test Plots

Band7_5MHz_QPSK_20775_25RB#0

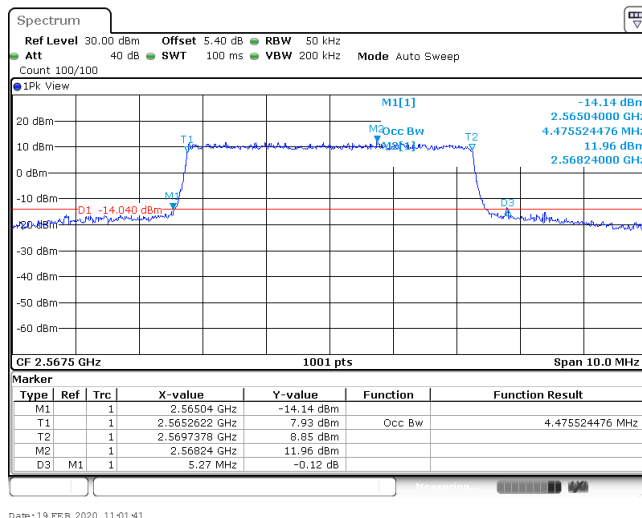


Band7_5MHz_QPSK_21100_25RB#0



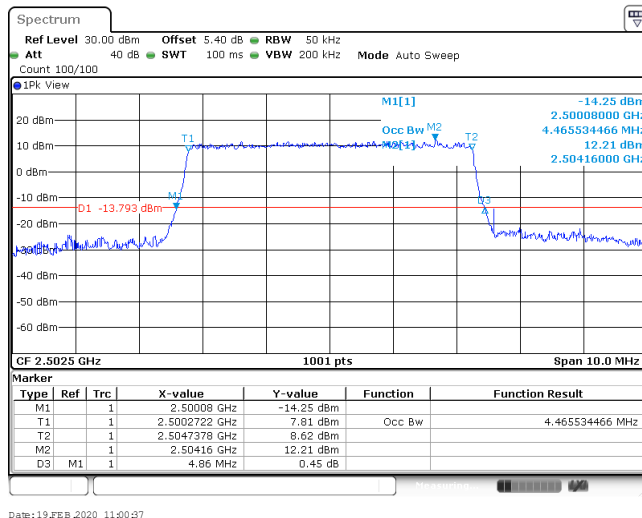
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Date: 19 FEB 2020 11:01:41

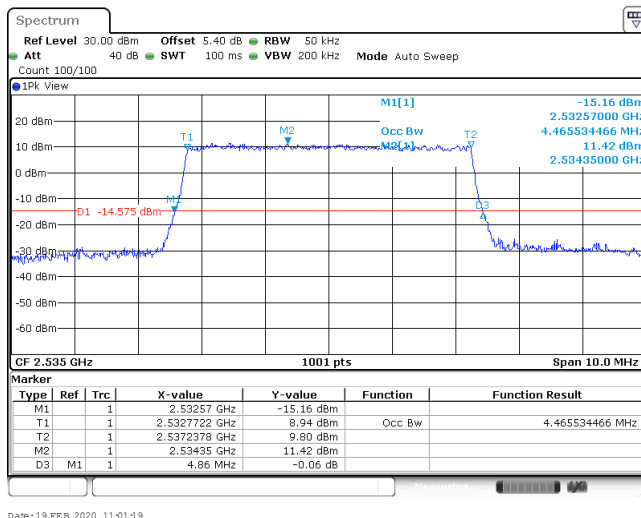
Band7_5MHz_16QAM_20775_25RB#0



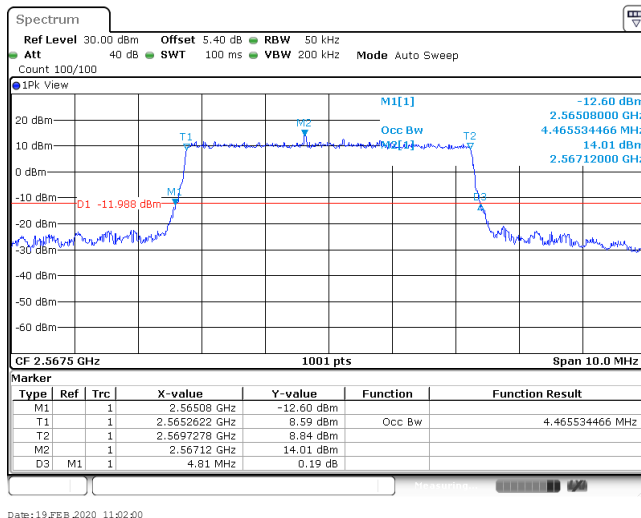
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Band7_5MHz_16QAM_21100_25RB#0



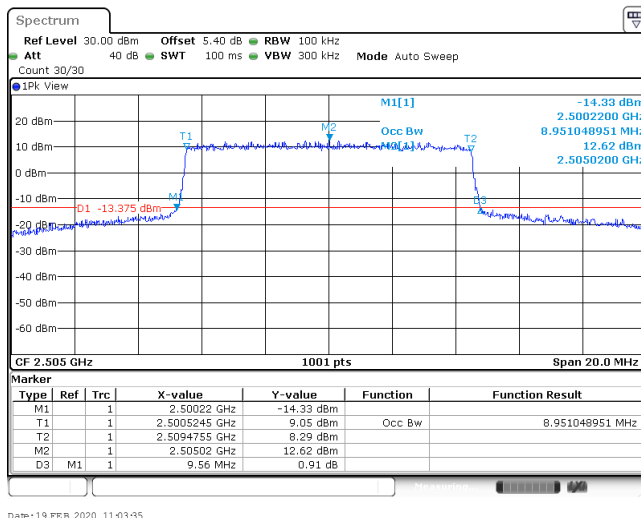


Band7_5MHz_16QAM_21425_25RB#0

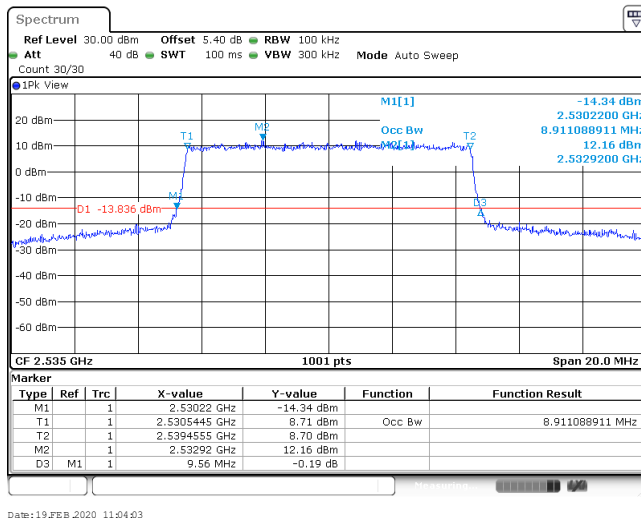


Band7_10MHz_QPSK_20800_50RB#0



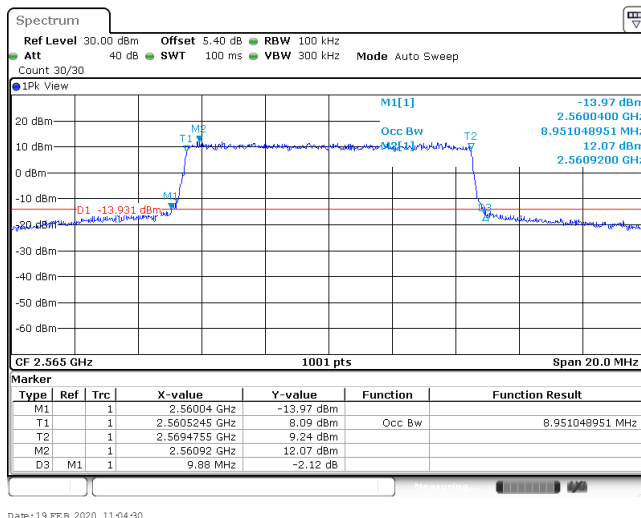


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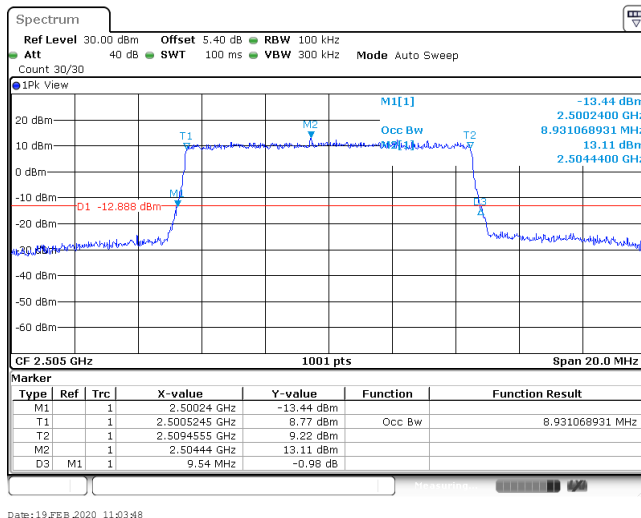


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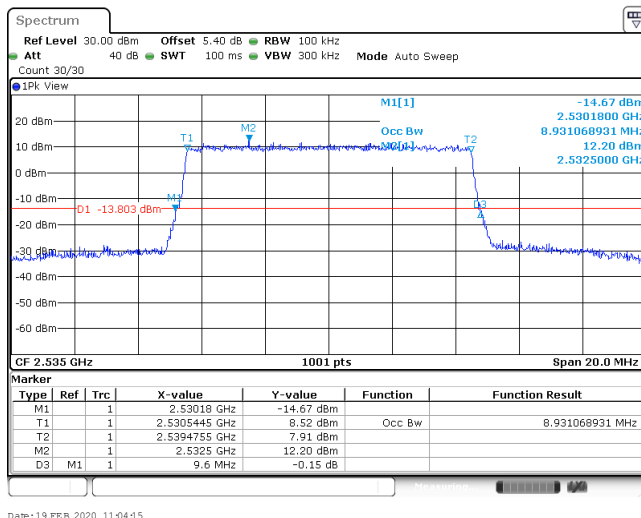


Band7_10MHz_16QAM_20800_50RB#0

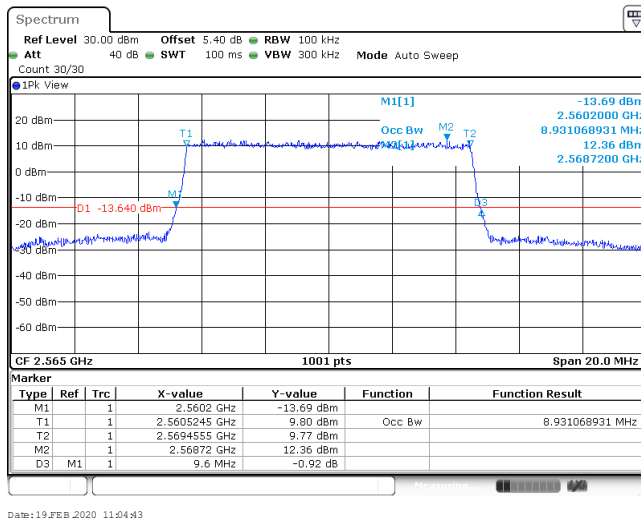


Band7_10MHz_16QAM_21100_50RB#0



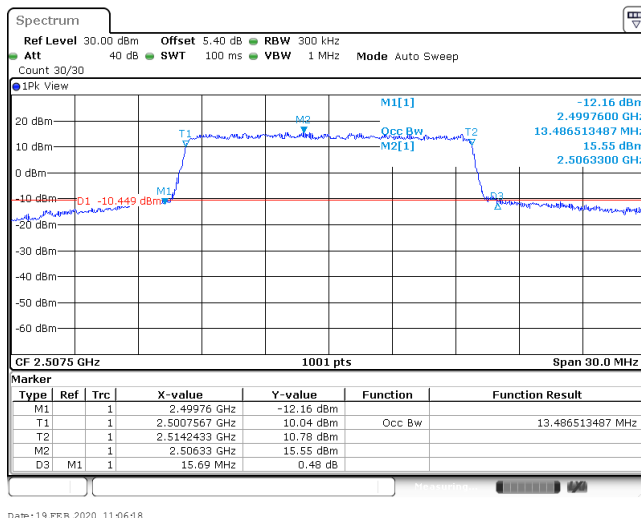


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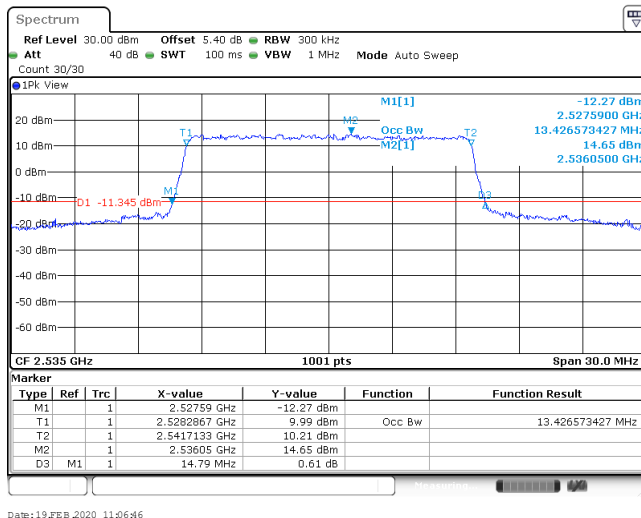


Band7_15MHz_QPSK_20825_75RB#0



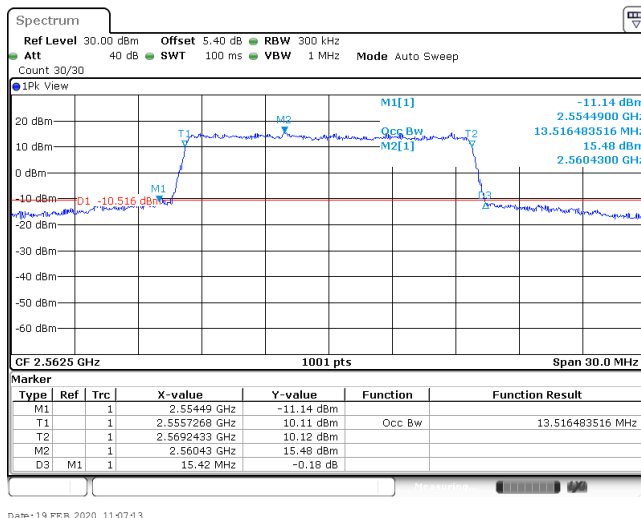


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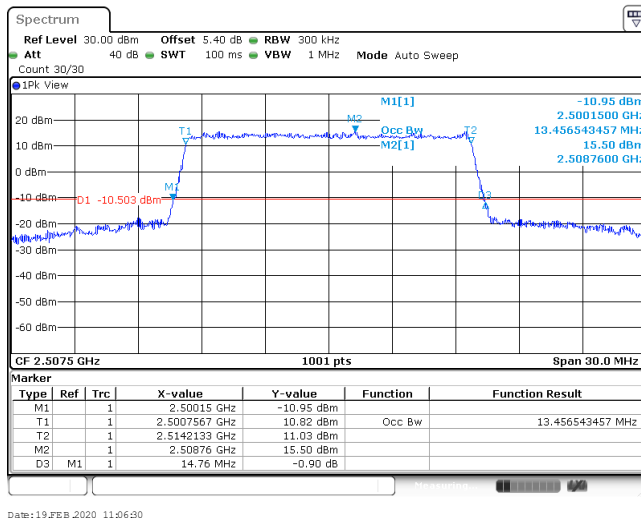


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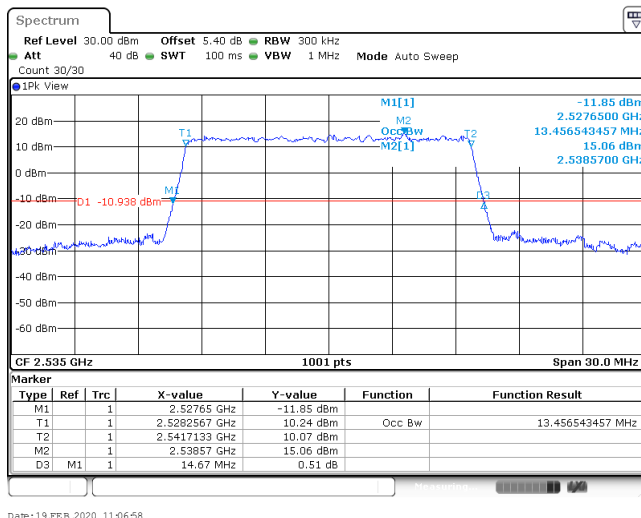


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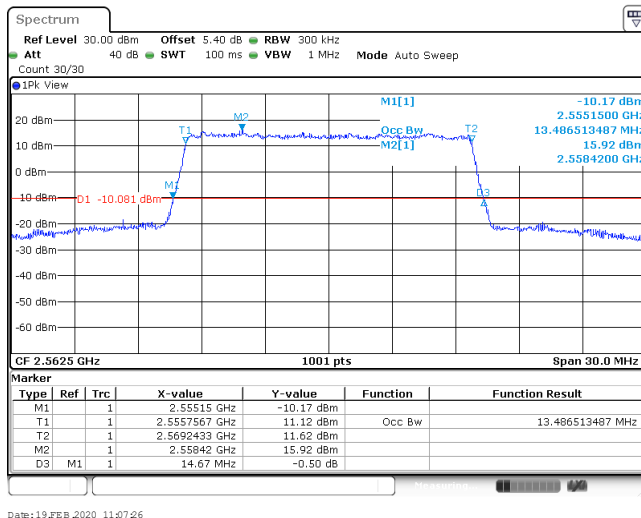


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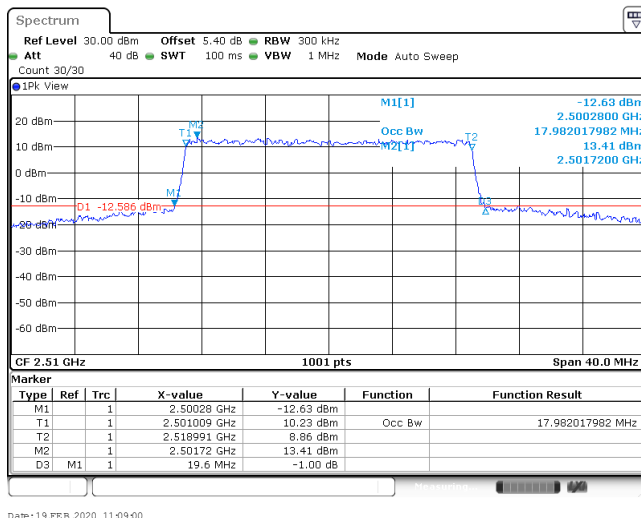


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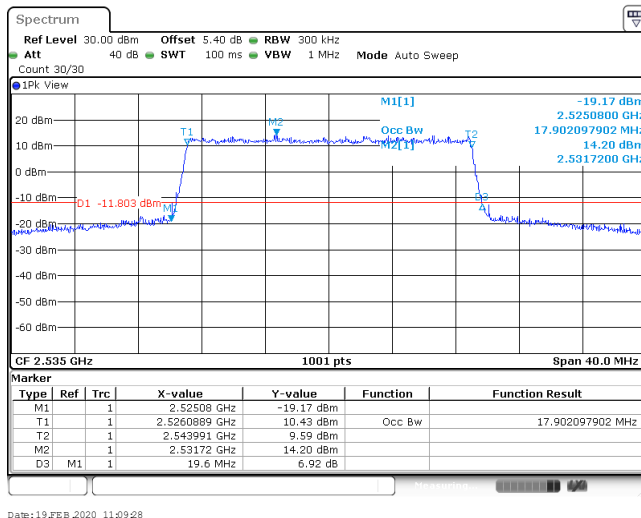


Band7_20MHz_QPSK_20850_100RB#0



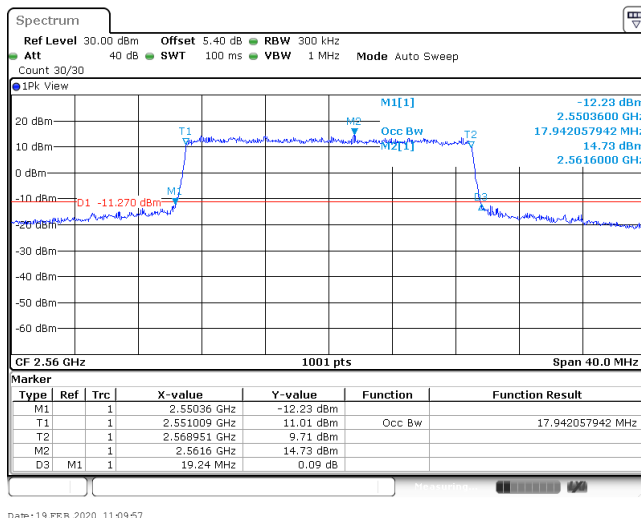


Band7_20MHz_QPSK_21100_100RB#0



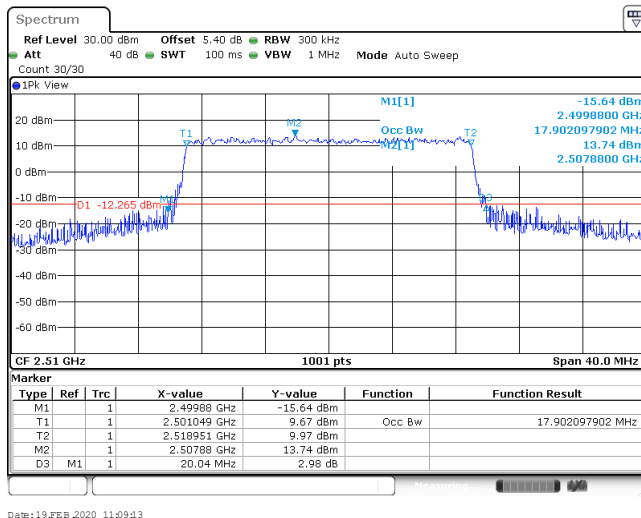
Band7_20MHz_QPSK_21350_100RB#0





Date: 19 FEB 2020 11:09:57

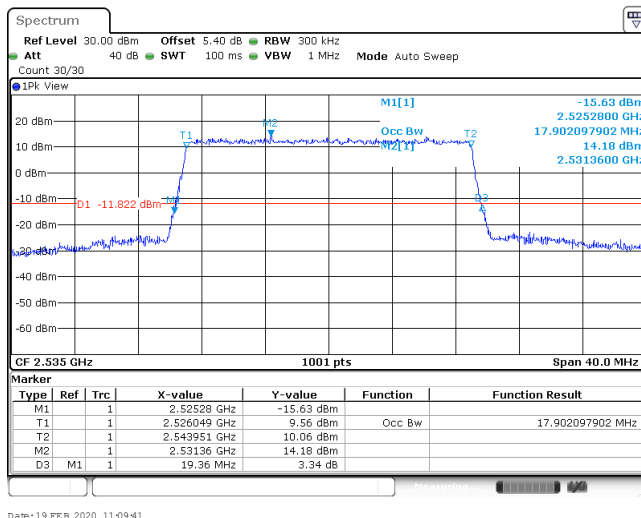
Band7_20MHz_16QAM_20850_100RB#0



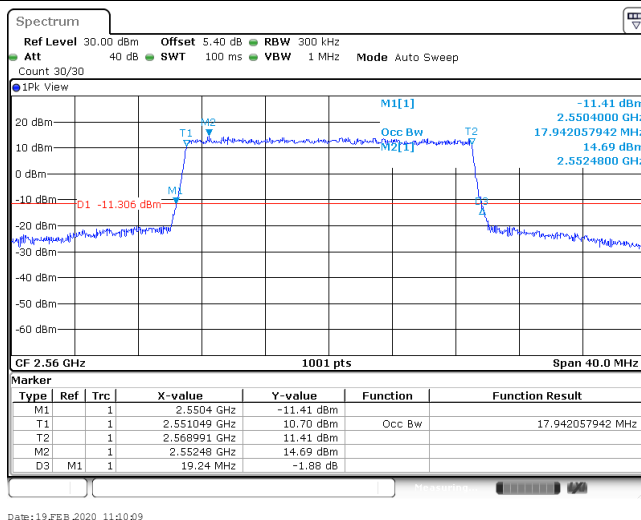
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Band7_20MHz_16QAM_21100_100RB#0





Band7_20MHz_16QAM_21350_100RB#0

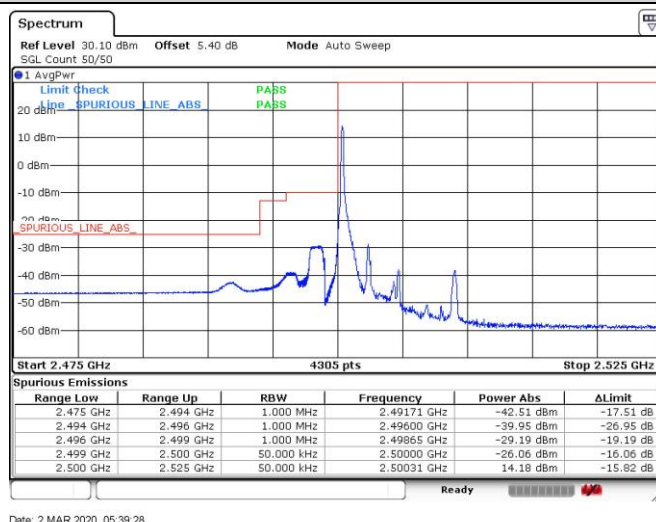




5. Band Edge Compliance

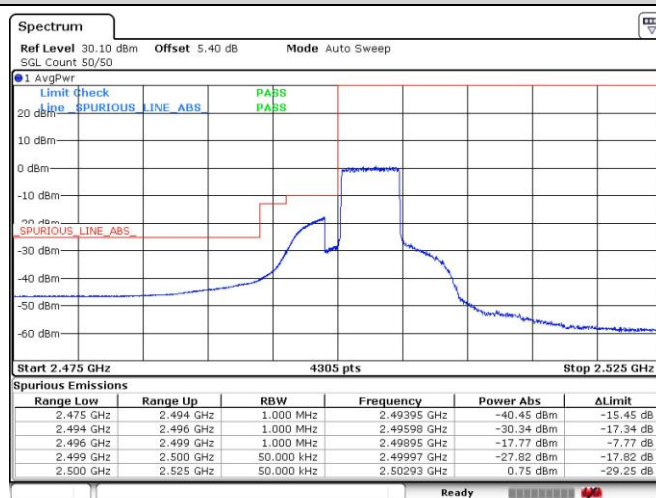
5.1. Test Plots

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



Date: 2 MAR 2020 05:39:28

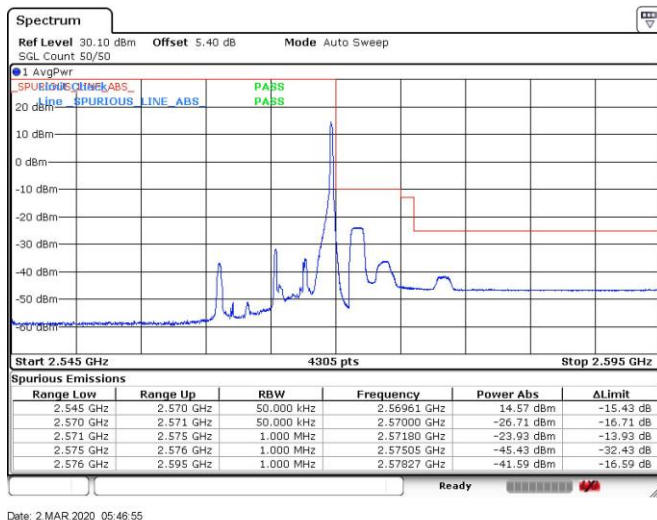
Band7-5MHz-QPSK-20775-25RB#0



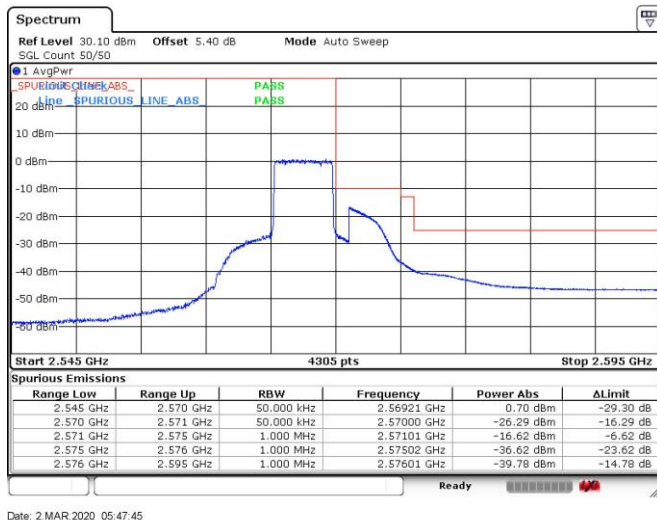
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Band7-5MHz-QPSK-21425-1RB#24



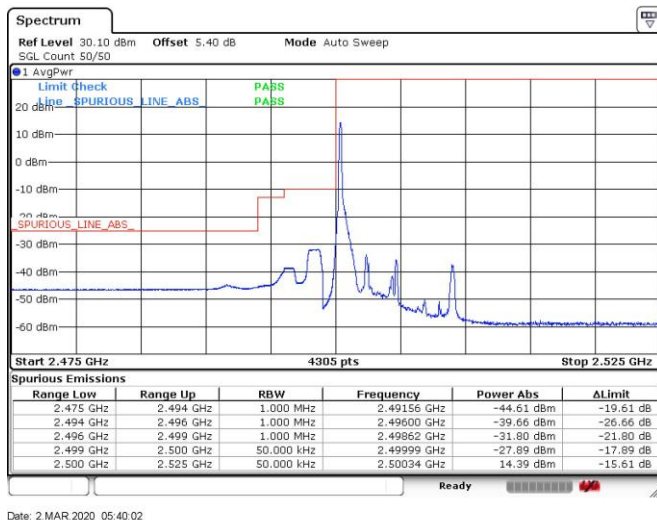


Band7-5MHz-QPSK-21425-25RB#0

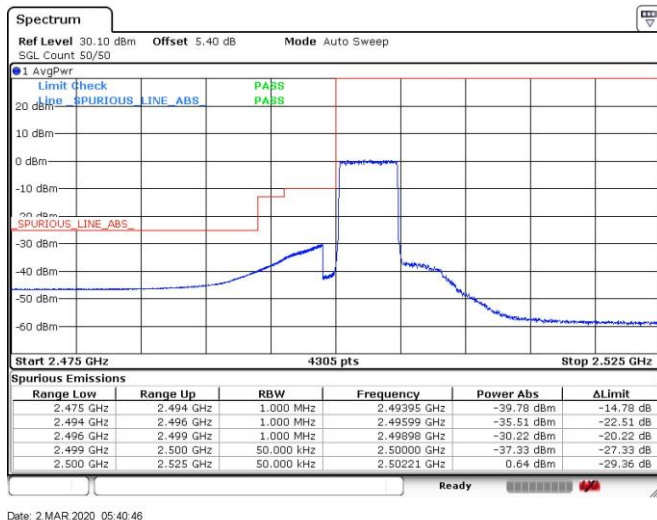


Band7-5MHz-16QAM-20775-1RB#0



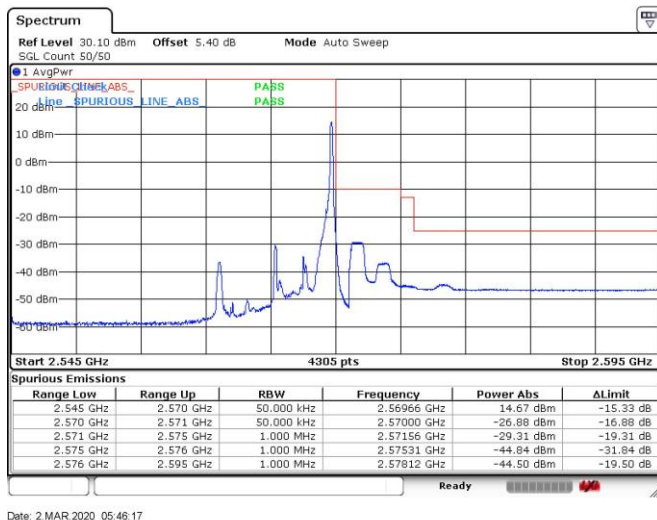


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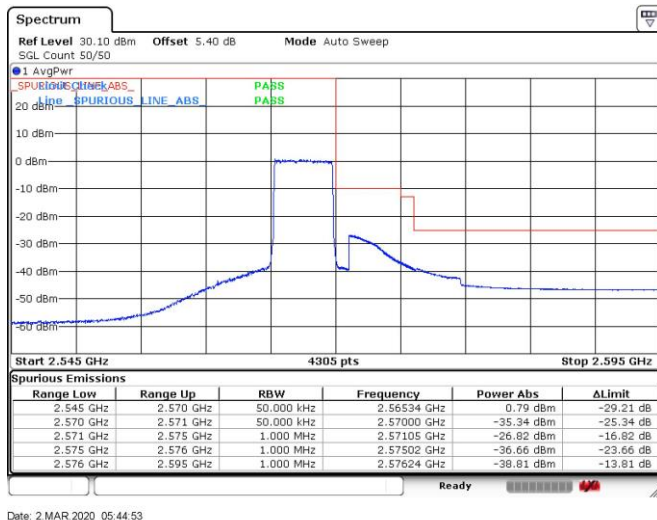


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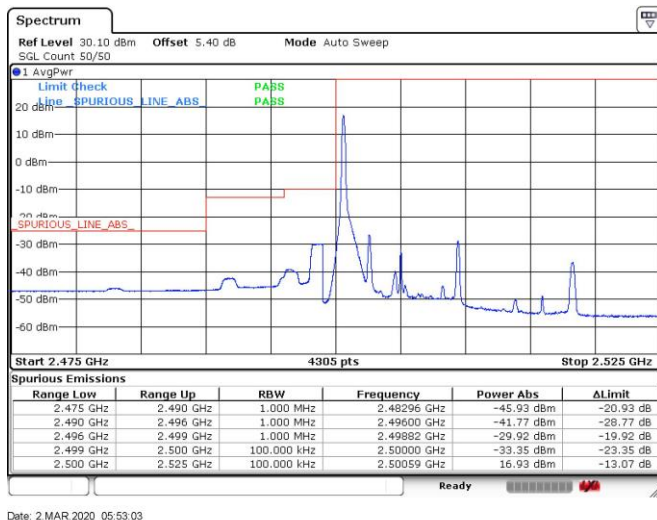


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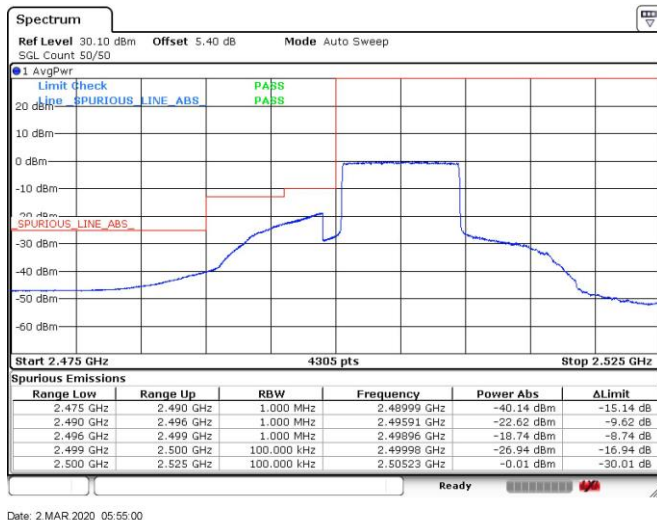


Band7-10MHz-QPSK-20800-1RB#0



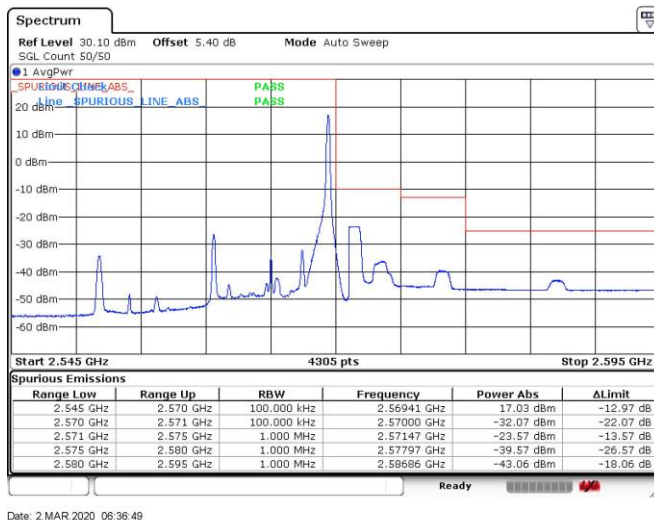


Band7-10MHz-QPSK-20800-50RB#0

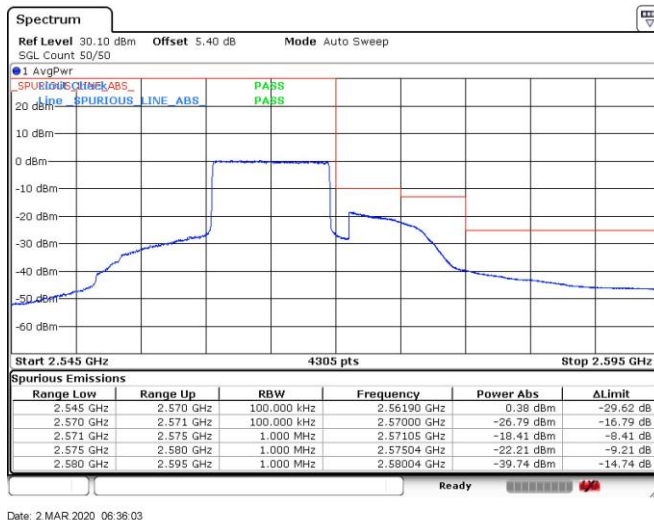


Band7-10MHz-QPSK-21400-1RB#49



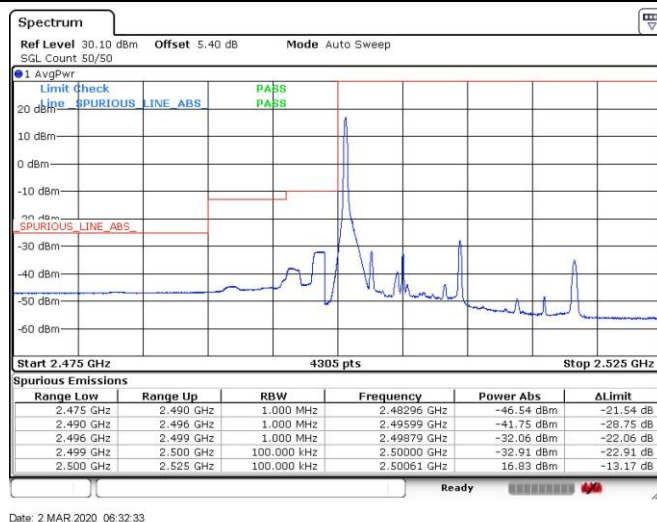


Band7-10MHz-QPSK-21400-50RB#0

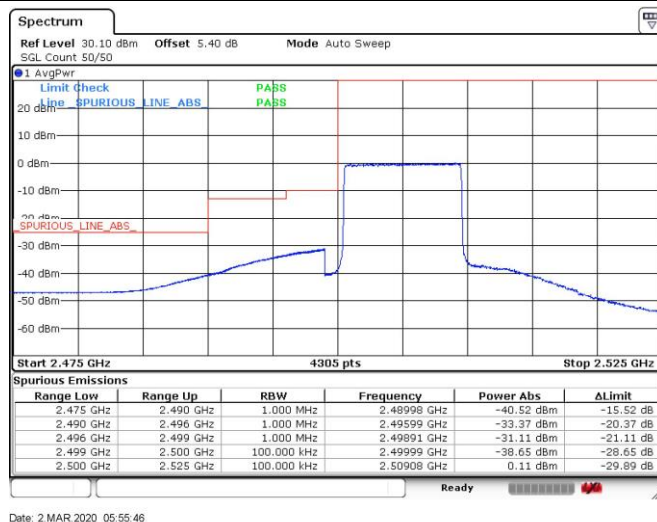


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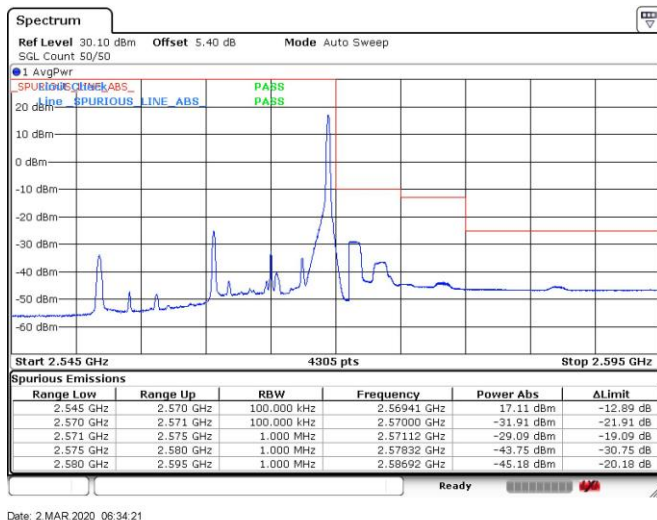


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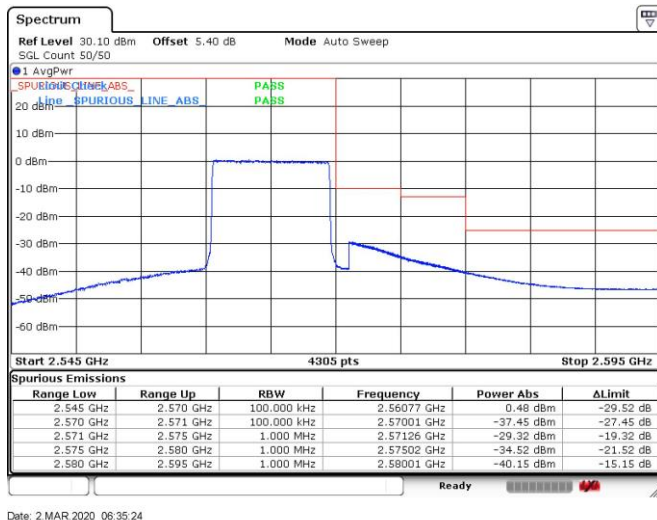


Band7-10MHz-16QAM-21400-1RB#49



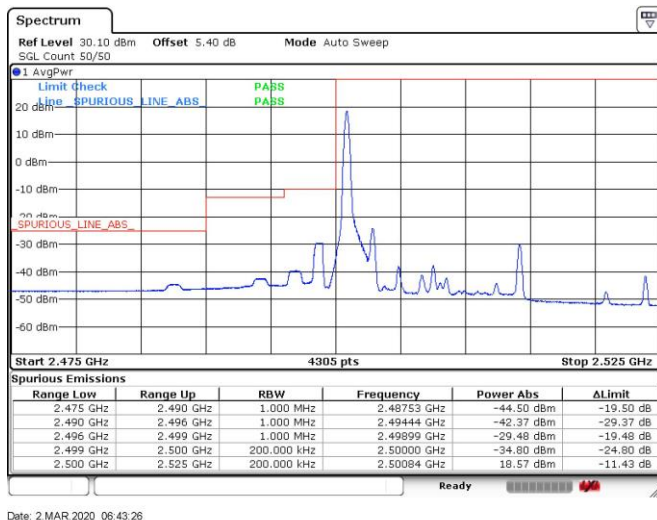


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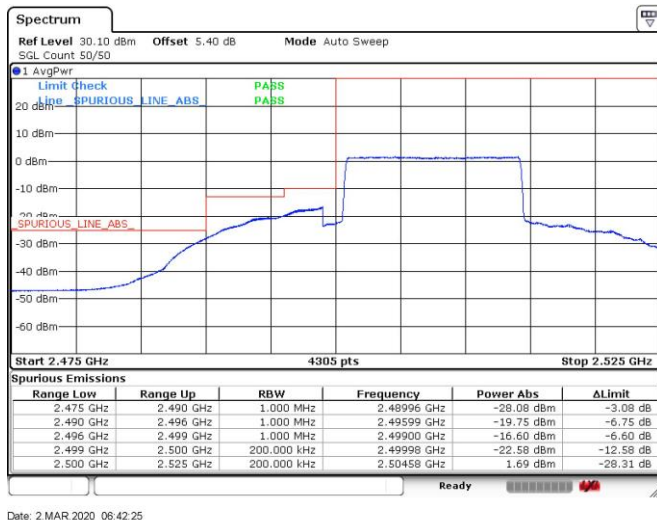


Band7-15MHz-QPSK-20825-1RB#



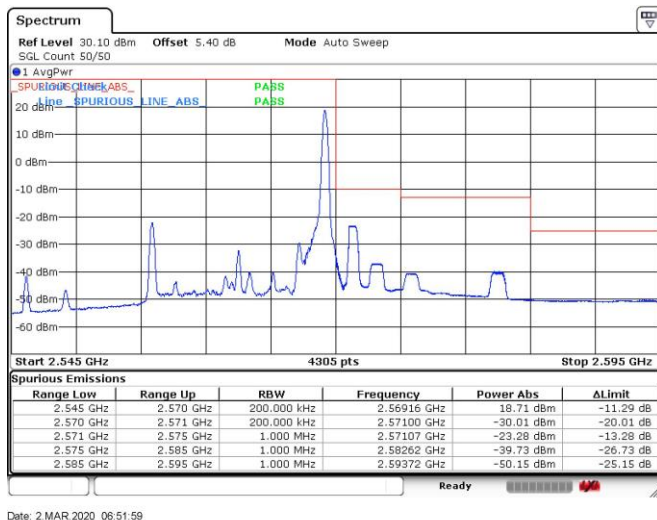


Band7-15MHz-QPSK-20825-75RB#0

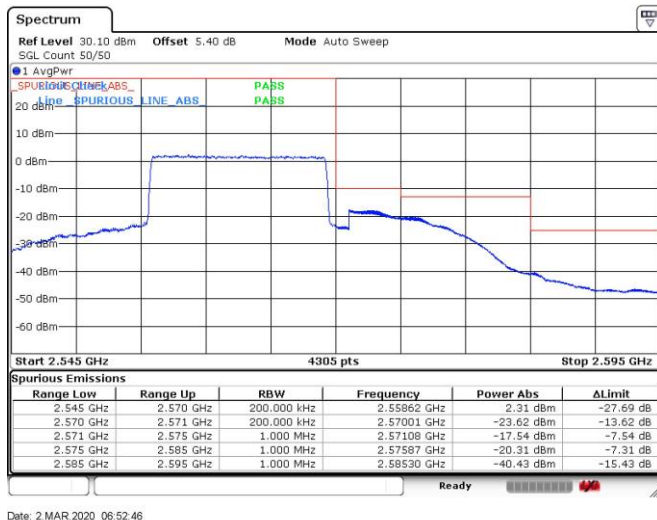


Band7-15MHz-QPSK-21375-1RB#74





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

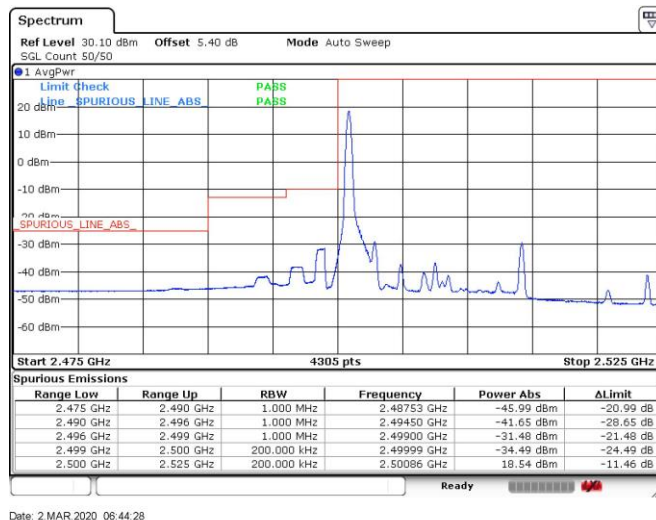


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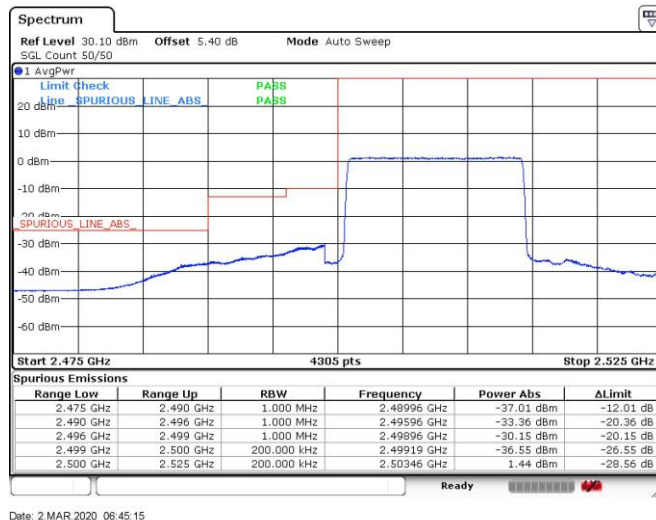


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 中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

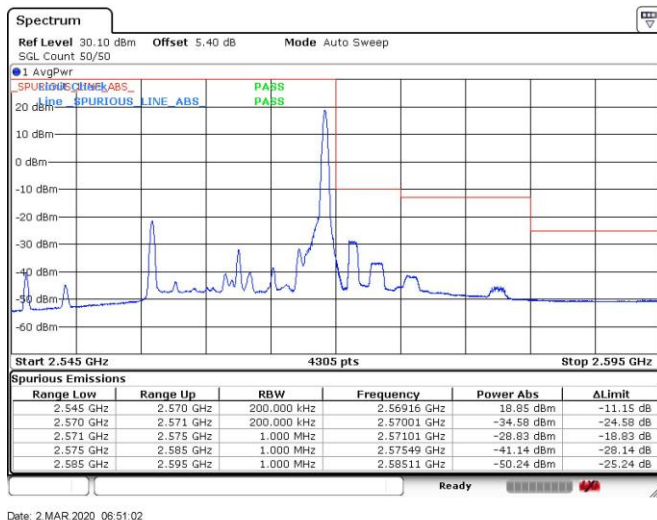


Band7-15MHz-16QAM-20825-75RB#0

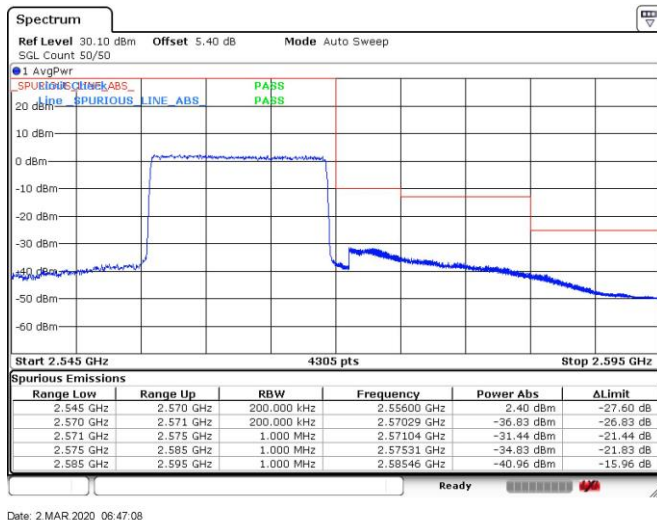


Band7-15MHz-16QAM-21375-1RB#74



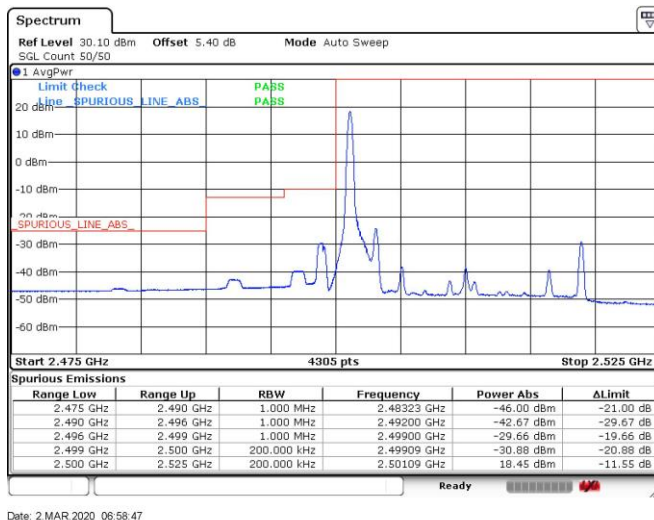


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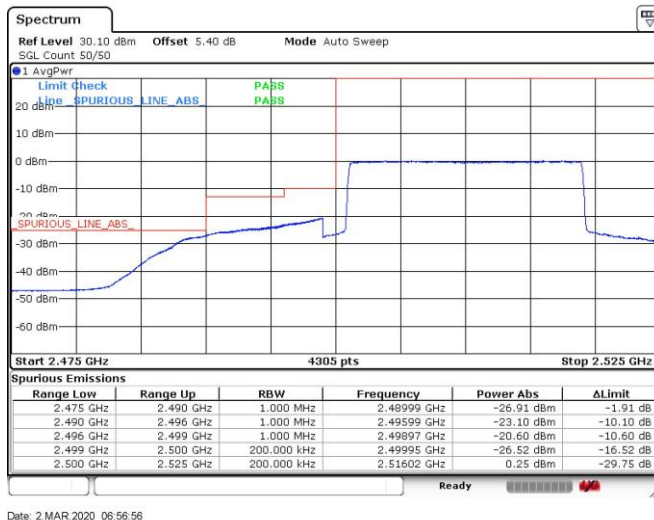


Band7-20MHz-QPSK-20850-1RB#0





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

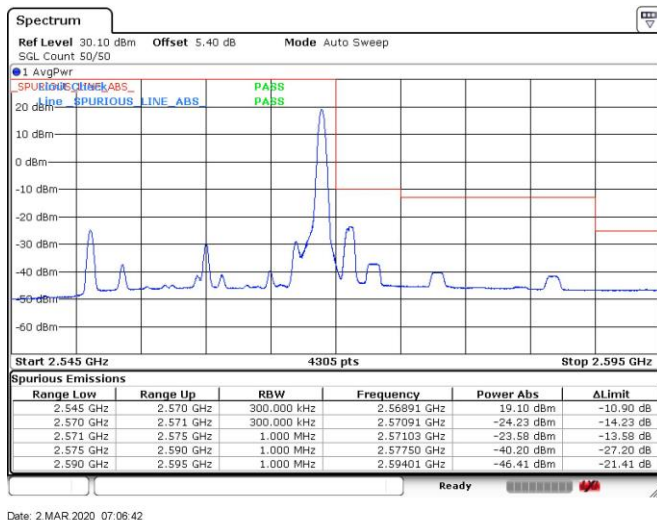


Band7-20MHz-QPSK-21350-1RB#99

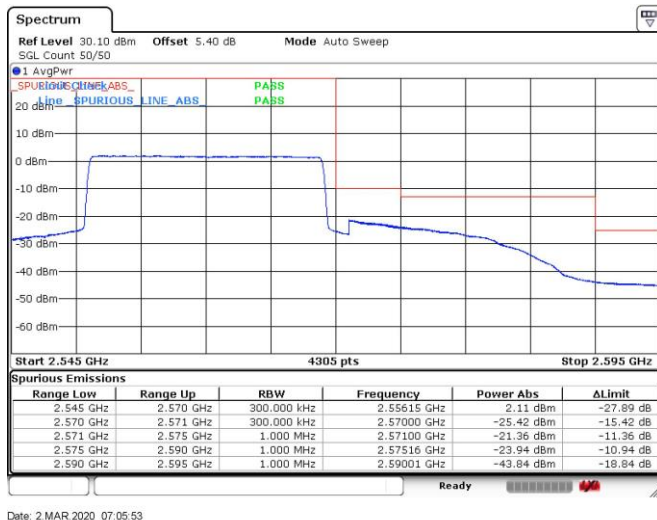


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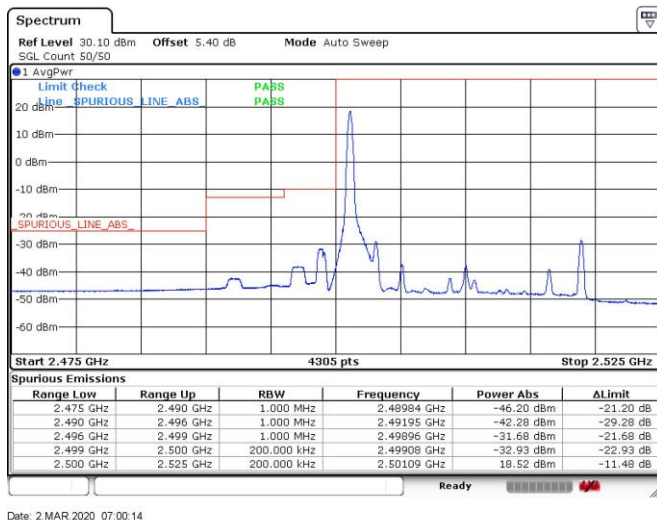


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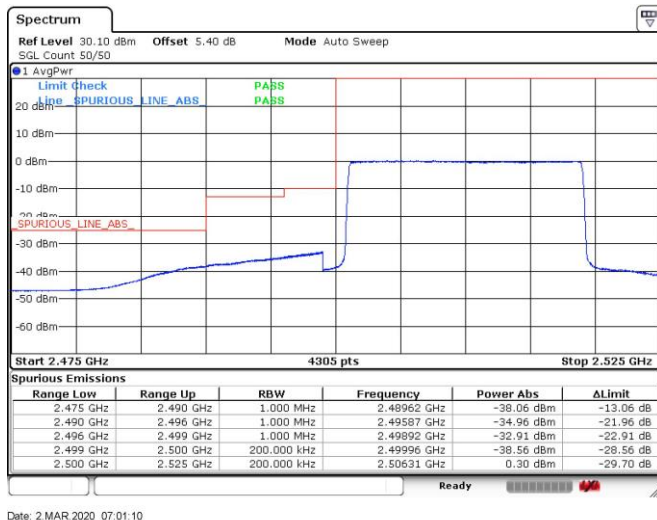
Band7-20MHz-16QAM-20850-1RB#0





Date: 2 MAR 2020 07:00:14

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



Date: 2 MAR 2020 07:01:10

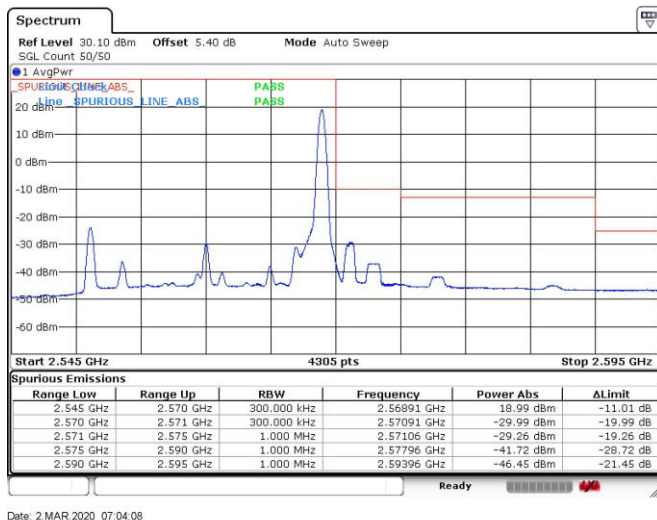
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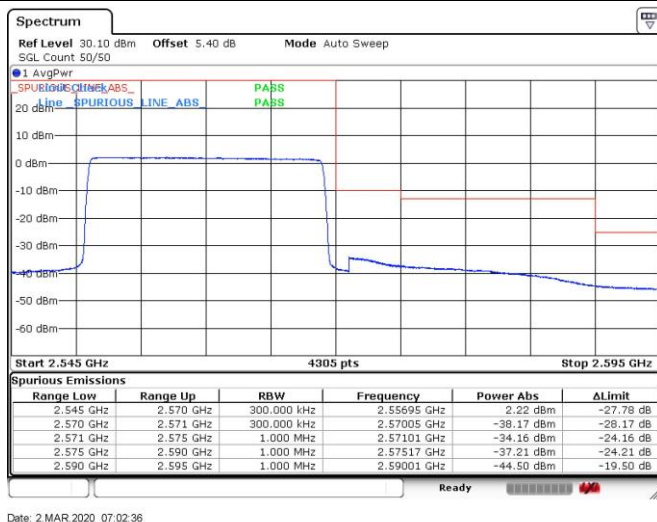
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Band7-20MHz-16QAM-21350-100RB#0



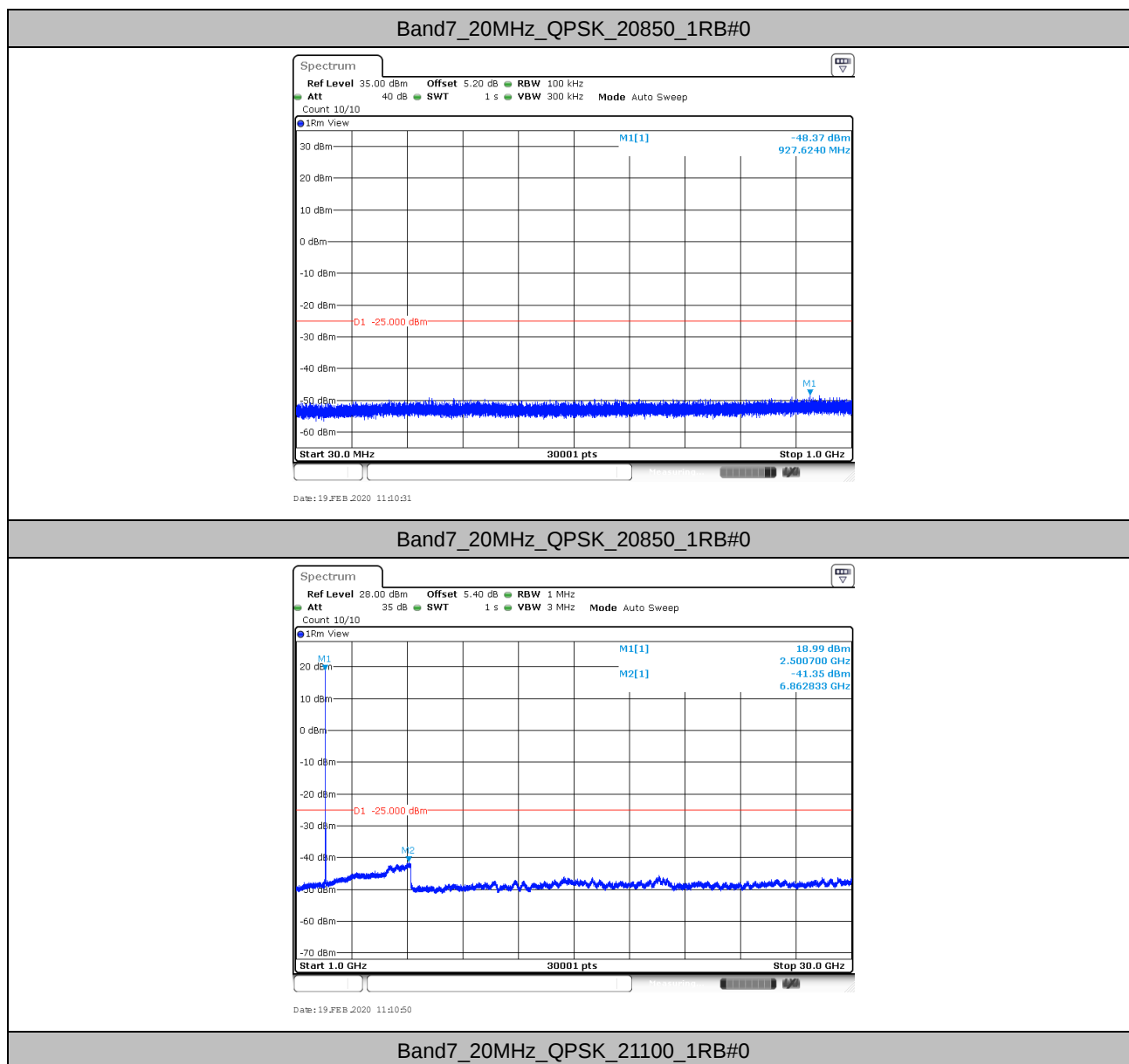


6. Spurious Emission at Antenna Terminal

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

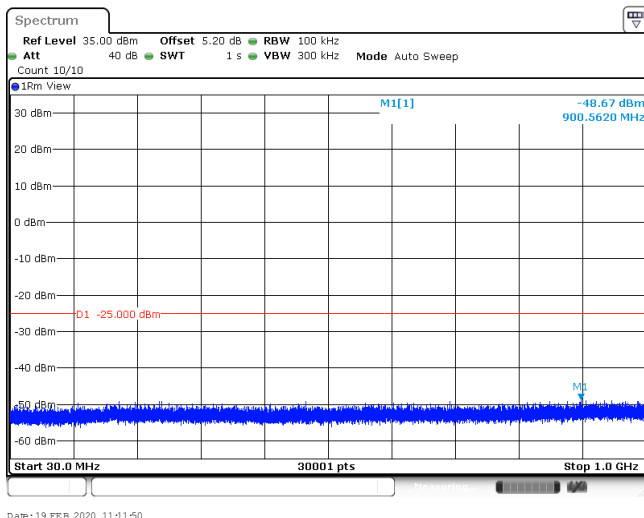


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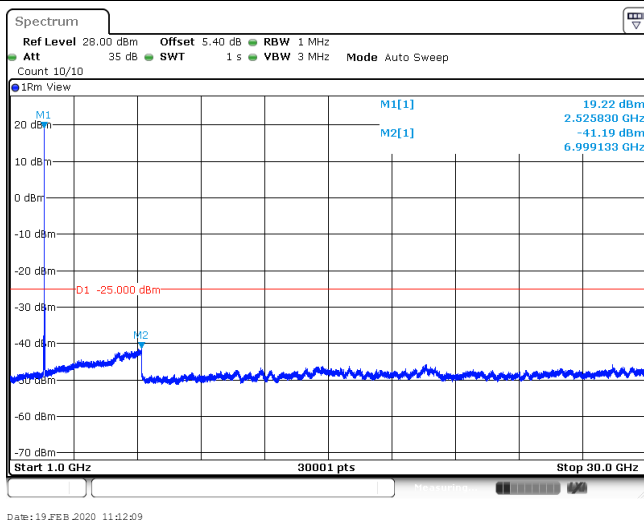
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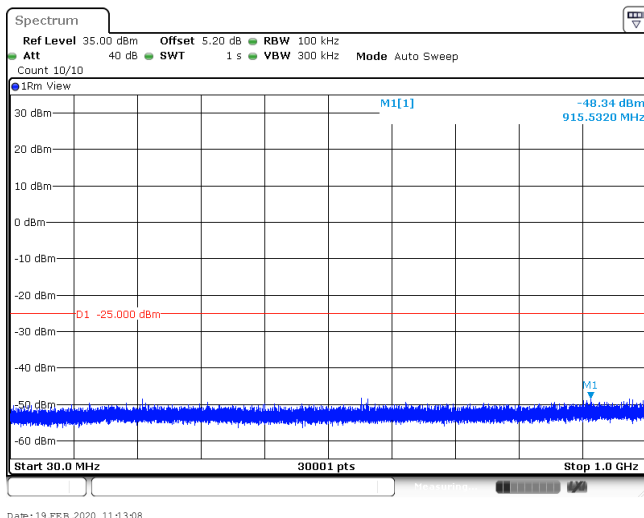


Band7_20MHz_QPSK_21100_1RB#0

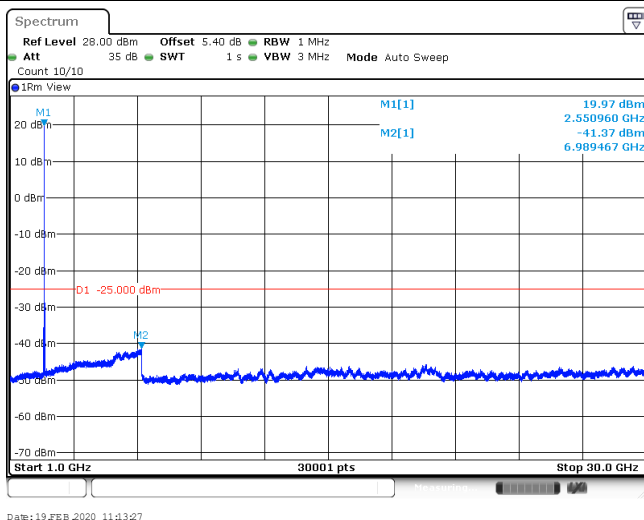


Band7_20MHz_QPSK_21350_1RB#0





Band7_20MHz_QPSK_21350_1RB#0

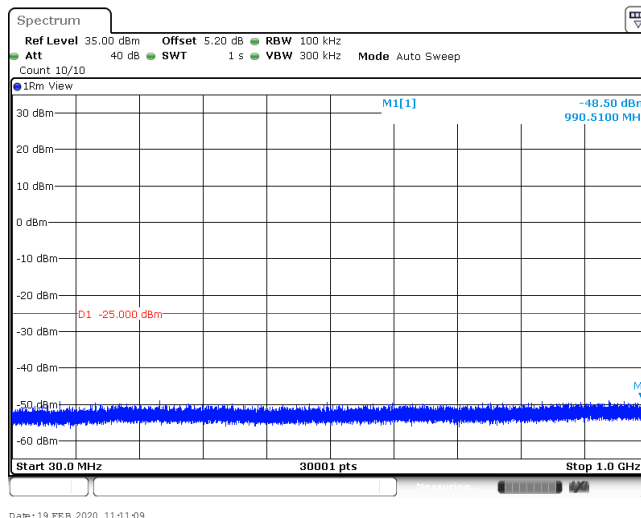


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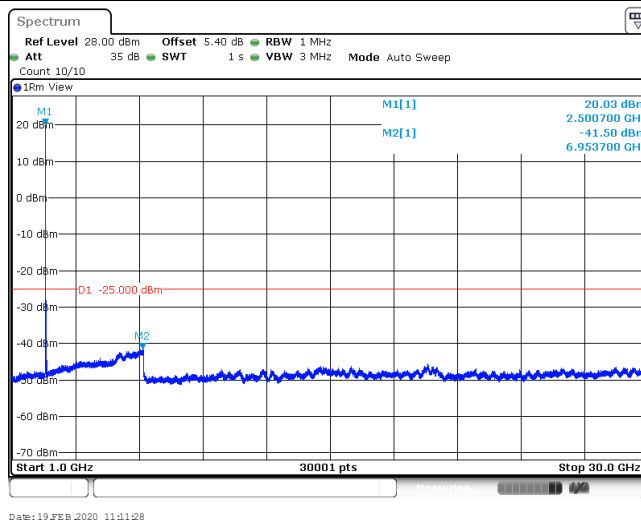


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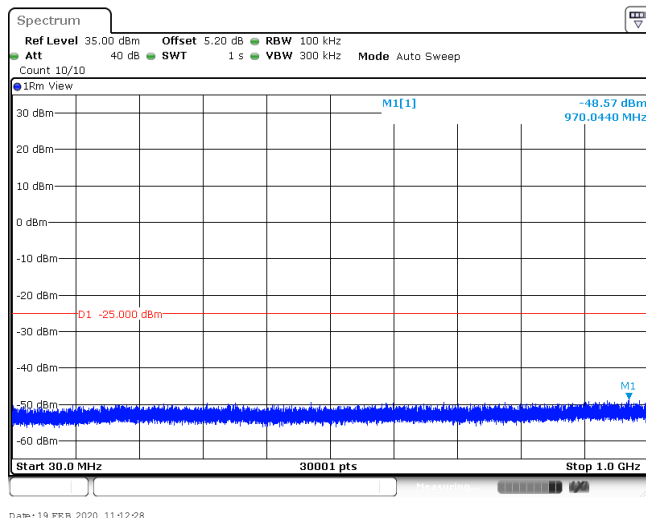


Band7_20MHz_16QAM_21100_1RB#0

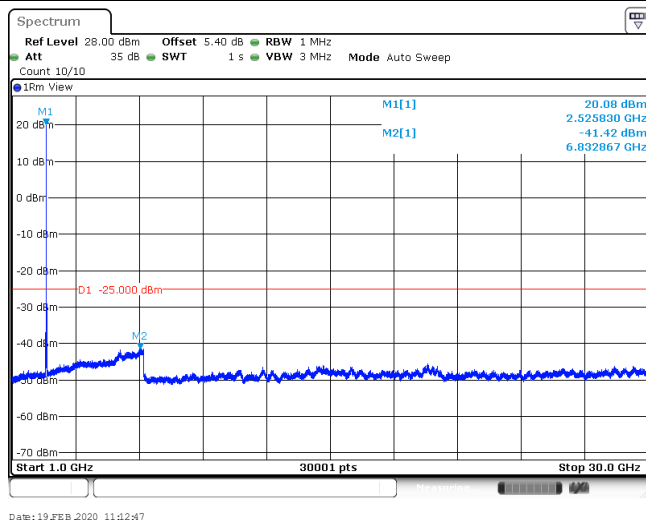


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Band7_20MHz_16QAM_21100_1RB#0

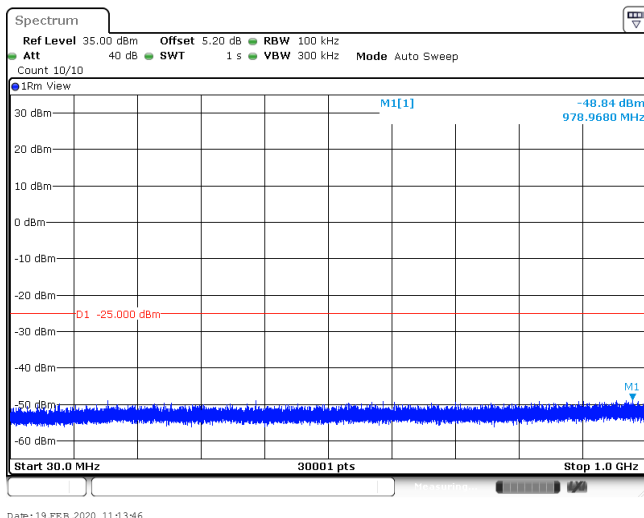


Band7_20MHz_16QAM_21350_1RB#0

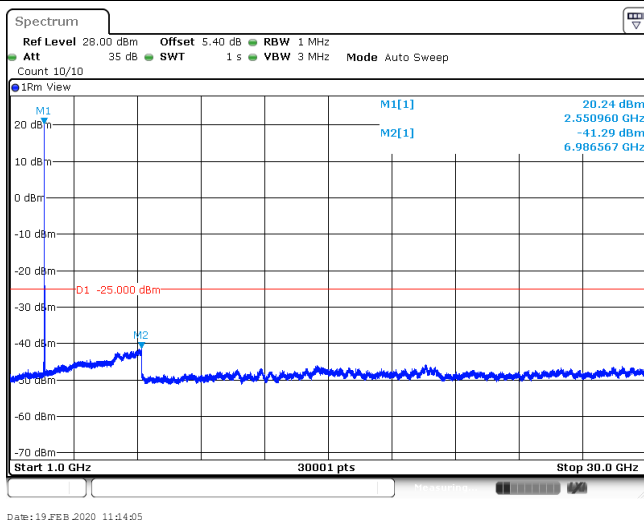


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Band7_20MHz_16QAM_21350_1RB#0



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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
73.7007	-67.47	-25.00	42.47	Vertical
107.5069	-65.49	-25.00	40.49	Vertical
327.2714	-69.18	-25.00	44.18	Vertical
2954.7910	-39.42	-25.00	14.42	Vertical
7503.1801	-50.67	-25.00	25.67	Vertical
17987.9995	-42.85	-25.00	17.85	Vertical
44.6477	-64.43	-25.00	39.43	Horizontal
232.2066	-68.48	-25.00	43.48	Horizontal
531.0301	-66.93	-25.00	41.93	Horizontal
2981.1962	-39.22	-25.00	14.22	Horizontal
7503.1801	-53.81	-25.00	28.81	Horizontal
16392.5357	-47.22	-25.00	22.22	Horizontal

7.1.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
65.8918	-68.12	-25.00	43.12	Vertical
114.4912	-64.90	-25.00	39.90	Vertical
461.9141	-68.00	-25.00	43.00	Vertical
2944.3889	-39.36	-25.00	14.36	Vertical
7578.1831	-51.32	-25.00	26.32	Vertical
10104.2842	-49.99	-25.00	24.99	Vertical
42.5621	-64.86	-25.00	39.86	Horizontal
234.8257	-69.10	-25.00	44.10	Horizontal
601.6981	-64.32	-25.00	39.32	Horizontal
2998.7998	-39.47	-25.00	14.47	Horizontal
7578.1831	-54.88	-25.00	29.88	Horizontal
16366.1346	-47.11	-25.00	22.11	Horizontal



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7.1.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
72.9246	-69.41	-25.00	44.41	Vertical
112.5026	-65.55	-25.00	40.55	Vertical
447.5089	-68.49	-25.00	43.49	Vertical
2991.9984	-39.21	-25.00	14.21	Vertical
7653.1861	-49.39	-25.00	24.39	Vertical
17998.1999	-42.81	-25.00	17.81	Vertical
39.6035	-64.38	-25.00	39.38	Horizontal
228.0354	-69.02	-25.00	44.02	Horizontal
654.0322	-64.13	-25.00	39.13	Horizontal
2943.5887	-39.40	-25.00	14.40	Horizontal
7653.1861	-51.49	-25.00	26.49	Horizontal
16381.7353	-46.77	-25.00	21.77	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 had been displayed.
- 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	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band7	20MHz	QPSK	20850	100RB#0	VL	NT	-13.68	-0.005450	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	VN	NT	-12.53	-0.004992	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	VH	NT	-15.82	-0.006303	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VL	NT	-14.31	-0.005645	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VN	NT	-16.54	-0.006525	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VH	NT	-15.32	-0.006043	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VL	NT	-19.34	-0.007555	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VN	NT	-24.03	-0.009387	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VH	NT	-22.43	-0.008762	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VL	NT	-15.69	-0.006251	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VN	NT	-9.34	-0.003721	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VH	NT	-14.49	-0.005773	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VL	NT	-15.72	-0.006201	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VN	NT	-11.22	-0.004426	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VH	NT	-13.62	-0.005373	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VL	NT	-14.99	-0.005855	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VN	NT	-17.21	-0.006723	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VH	NT	-15.81	-0.006176	±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	-13.35	-0.005319	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	-20	-13.59	-0.005414	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	0	-9.50	-0.003785	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	10	-11.01	-0.004386	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	20	-12.19	-0.004857	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	30	-13.22	-0.005267	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	40	-11.26	-0.004486	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	50	-9.56	-0.003809	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-30	-12.55	-0.004951	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-20	-14.26	-0.005625	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	0	-14.95	-0.005897	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	10	-12.23	-0.004824	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	20	-13.06	-0.005152	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	30	-12.04	-0.004750	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	40	-13.05	-0.005148	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	50	-12.57	-0.004959	±2.5	PASS



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Band7	20MHz	QPSK	21350	100RB#0	NV	-30	-12.43	-0.004855	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	-20	-12.16	-0.004750	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	0	-15.28	-0.005969	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	10	-13.33	-0.005207	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	20	-16.87	-0.006590	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	30	-18.48	-0.007219	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	40	-15.55	-0.006074	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	50	-19.01	-0.007426	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	-30	-11.34	-0.004518	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	-20	-13.70	-0.005458	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	0	-9.17	-0.003653	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	10	-14.36	-0.005721	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	20	-14.46	-0.005761	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	30	-12.12	-0.004829	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	40	-9.53	-0.003797	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	50	-15.19	-0.006052	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	-30	-13.48	-0.005318	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	-20	-14.62	-0.005767	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	0	-17.25	-0.006805	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	10	-17.15	-0.006765	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	20	-12.96	-0.005112	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	30	-9.27	-0.003657	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	40	-11.64	-0.004592	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	50	-10.56	-0.004166	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	-30	-15.25	-0.005957	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	-20	-15.16	-0.005922	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	0	-18.64	-0.007281	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	10	-15.28	-0.005969	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	20	-16.02	-0.006258	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	30	-15.91	-0.006215	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	40	-11.44	-0.004469	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	50	-13.95	-0.005449	±2.5	PASS

The End



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