



Appendix B

E-UTRA Band 38



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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
Band38	5MHz	QPSK	37775	1RB#0	23.38	18.18	33.00	PASS
Band38	5MHz	QPSK	37775	1RB#12	23.47	18.27	33.00	PASS
Band38	5MHz	QPSK	37775	1RB#24	23.26	18.06	33.00	PASS
Band38	5MHz	QPSK	37775	12RB#0	22.58	17.38	33.00	PASS
Band38	5MHz	QPSK	37775	12RB#6	22.55	17.35	33.00	PASS
Band38	5MHz	QPSK	37775	12RB#13	22.33	17.13	33.00	PASS
Band38	5MHz	QPSK	37775	25RB#0	22.46	17.26	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#0	23.12	17.92	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#12	23.37	18.17	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#24	23.11	17.91	33.00	PASS
Band38	5MHz	QPSK	38000	12RB#6	22.57	17.37	33.00	PASS
Band38	5MHz	QPSK	38000	12RB#0	22.71	17.51	33.00	PASS
Band38	5MHz	QPSK	38000	12RB#13	22.61	17.41	33.00	PASS
Band38	5MHz	QPSK	38000	25RB#0	22.63	17.43	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#0	23.44	18.24	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#12	23.48	18.28	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#24	23.30	18.1	33.00	PASS
Band38	5MHz	QPSK	38225	12RB#13	22.69	17.49	33.00	PASS
Band38	5MHz	QPSK	38225	12RB#0	22.78	17.58	33.00	PASS
Band38	5MHz	QPSK	38225	12RB#6	22.70	17.5	33.00	PASS
Band38	5MHz	QPSK	38225	25RB#0	22.68	17.48	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#0	22.37	17.17	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#12	22.28	17.08	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#24	22.18	16.98	33.00	PASS
Band38	5MHz	16QAM	37775	12RB#0	21.45	16.25	33.00	PASS
Band38	5MHz	16QAM	37775	12RB#6	21.33	16.13	33.00	PASS



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Band38	5MHz	16QAM	37775	12RB#13	21.20	16	33.00	PASS
Band38	5MHz	16QAM	37775	25RB#0	21.66	16.46	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#12	22.33	17.13	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#24	22.46	17.26	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#0	22.36	17.16	33.00	PASS
Band38	5MHz	16QAM	38000	12RB#6	21.41	16.21	33.00	PASS
Band38	5MHz	16QAM	38000	12RB#0	21.45	16.25	33.00	PASS
Band38	5MHz	16QAM	38000	12RB#13	21.44	16.24	33.00	PASS
Band38	5MHz	16QAM	38000	25RB#0	21.61	16.41	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#24	22.49	17.29	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#0	22.56	17.36	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#12	22.46	17.26	33.00	PASS
Band38	5MHz	16QAM	38225	12RB#13	21.52	16.32	33.00	PASS
Band38	5MHz	16QAM	38225	12RB#0	21.54	16.34	33.00	PASS
Band38	5MHz	16QAM	38225	12RB#6	21.54	16.34	33.00	PASS
Band38	5MHz	16QAM	38225	25RB#0	21.67	16.47	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#24	22.84	17.64	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#49	23.05	17.85	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#0	22.95	17.75	33.00	PASS
Band38	10MHz	QPSK	37800	25RB#0	22.20	17.00	33.00	PASS
Band38	10MHz	QPSK	37800	25RB#12	22.16	16.96	33.00	PASS
Band38	10MHz	QPSK	37800	25RB#25	22.12	16.92	33.00	PASS
Band38	10MHz	QPSK	37800	50RB#0	22.18	16.98	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#49	22.95	17.75	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#24	23.31	18.11	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#0	23.13	17.93	33.00	PASS
Band38	10MHz	QPSK	38000	25RB#0	22.41	17.21	33.00	PASS
Band38	10MHz	QPSK	38000	25RB#25	22.45	17.25	33.00	PASS
Band38	10MHz	QPSK	38000	25RB#12	22.36	17.16	33.00	PASS
Band38	10MHz	QPSK	38000	50RB#0	22.51	17.31	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#0	23.33	18.13	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#24	23.34	18.14	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#49	23.31	18.11	33.00	PASS



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Band38	10MHz	QPSK	38200	25RB#12	22.47	17.27	33.00	PASS
Band38	10MHz	QPSK	38200	25RB#0	22.60	17.4	33.00	PASS
Band38	10MHz	QPSK	38200	25RB#25	22.65	17.45	33.00	PASS
Band38	10MHz	QPSK	38200	50RB#0	22.64	17.44	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#24	21.92	16.72	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#49	21.76	16.56	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#0	21.49	16.29	33.00	PASS
Band38	10MHz	16QAM	37800	25RB#0	21.38	16.18	33.00	PASS
Band38	10MHz	16QAM	37800	25RB#12	21.35	16.15	33.00	PASS
Band38	10MHz	16QAM	37800	25RB#25	21.31	16.11	33.00	PASS
Band38	10MHz	16QAM	37800	50RB#0	21.33	16.13	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#0	22.15	16.95	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#49	22.23	17.03	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#24	21.76	16.56	33.00	PASS
Band38	10MHz	16QAM	38000	25RB#25	21.32	16.12	33.00	PASS
Band38	10MHz	16QAM	38000	25RB#0	21.57	16.37	33.00	PASS
Band38	10MHz	16QAM	38000	25RB#12	21.57	16.37	33.00	PASS
Band38	10MHz	16QAM	38000	50RB#0	21.59	16.39	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#24	22.17	16.97	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#0	22.40	17.2	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#49	21.98	16.78	33.00	PASS
Band38	10MHz	16QAM	38200	25RB#0	21.42	16.22	33.00	PASS
Band38	10MHz	16QAM	38200	25RB#25	21.45	16.25	33.00	PASS
Band38	10MHz	16QAM	38200	25RB#12	21.63	16.43	33.00	PASS
Band38	10MHz	16QAM	38200	50RB#0	21.62	16.42	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#0	22.78	17.58	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#38	22.82	17.62	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#74	22.80	17.6	33.00	PASS
Band38	15MHz	QPSK	37825	36RB#0	22.06	16.86	33.00	PASS
Band38	15MHz	QPSK	37825	36RB#18	22.07	16.87	33.00	PASS
Band38	15MHz	QPSK	37825	36RB#39	22.05	16.85	33.00	PASS
Band38	15MHz	QPSK	37825	75RB#0	22.13	16.93	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#0	22.94	17.74	33.00	PASS



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Band38	15MHz	QPSK	38000	1RB#38	22.95	17.75	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#74	22.99	17.79	33.00	PASS
Band38	15MHz	QPSK	38000	36RB#18	22.22	17.02	33.00	PASS
Band38	15MHz	QPSK	38000	36RB#39	22.23	17.03	33.00	PASS
Band38	15MHz	QPSK	38000	36RB#0	22.02	16.82	33.00	PASS
Band38	15MHz	QPSK	38000	75RB#0	22.14	16.94	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#0	22.95	17.75	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#38	23.08	17.88	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#74	22.97	17.77	33.00	PASS
Band38	15MHz	QPSK	38175	36RB#0	22.30	17.1	33.00	PASS
Band38	15MHz	QPSK	38175	36RB#18	22.37	17.17	33.00	PASS
Band38	15MHz	QPSK	38175	36RB#39	22.31	17.11	33.00	PASS
Band38	15MHz	QPSK	38175	75RB#0	22.31	17.11	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#0	21.65	16.45	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#38	21.74	16.54	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#74	21.50	16.3	33.00	PASS
Band38	15MHz	16QAM	37825	36RB#0	21.43	16.23	33.00	PASS
Band38	15MHz	16QAM	37825	36RB#18	21.39	16.19	33.00	PASS
Band38	15MHz	16QAM	37825	36RB#39	21.32	16.12	33.00	PASS
Band38	15MHz	16QAM	37825	75RB#0	21.35	16.15	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#38	21.53	16.33	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#74	21.96	16.76	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#0	21.54	16.34	33.00	PASS
Band38	15MHz	16QAM	38000	36RB#18	21.34	16.14	33.00	PASS
Band38	15MHz	16QAM	38000	36RB#39	21.62	16.42	33.00	PASS
Band38	15MHz	16QAM	38000	36RB#0	21.59	16.39	33.00	PASS
Band38	15MHz	16QAM	38000	75RB#0	21.59	16.39	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#38	21.84	16.64	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#74	22.00	16.8	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#0	21.56	16.36	33.00	PASS
Band38	15MHz	16QAM	38175	36RB#0	21.43	16.23	33.00	PASS
Band38	15MHz	16QAM	38175	36RB#39	21.47	16.27	33.00	PASS
Band38	15MHz	16QAM	38175	36RB#18	21.64	16.44	33.00	PASS



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Band38	15MHz	16QAM	38175	75RB#0	21.61	16.41	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#99	22.70	17.5	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#49	23.01	17.81	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#0	22.71	17.51	33.00	PASS
Band38	20MHz	QPSK	37850	50RB#0	22.01	16.81	33.00	PASS
Band38	20MHz	QPSK	37850	50RB#25	22.15	16.95	33.00	PASS
Band38	20MHz	QPSK	37850	50RB#50	22.04	16.84	33.00	PASS
Band38	20MHz	QPSK	37850	100RB#0	22.13	16.93	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#99	22.67	17.47	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#49	23.23	18.03	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#0	22.82	17.62	33.00	PASS
Band38	20MHz	QPSK	38000	50RB#0	22.21	17.01	33.00	PASS
Band38	20MHz	QPSK	38000	50RB#50	22.16	16.96	33.00	PASS
Band38	20MHz	QPSK	38000	50RB#25	22.12	16.92	33.00	PASS
Band38	20MHz	QPSK	38000	100RB#0	22.14	16.94	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#0	22.75	17.55	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#49	23.49	18.29	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#99	22.88	17.68	33.00	PASS
Band38	20MHz	QPSK	38150	50RB#25	22.29	17.09	33.00	PASS
Band38	20MHz	QPSK	38150	50RB#0	22.32	17.12	33.00	PASS
Band38	20MHz	QPSK	38150	50RB#50	22.19	16.99	33.00	PASS
Band38	20MHz	QPSK	38150	100RB#0	22.29	17.09	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#49	21.46	16.26	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#99	21.60	16.4	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#0	21.47	16.27	33.00	PASS
Band38	20MHz	16QAM	37850	50RB#0	21.45	16.25	33.00	PASS
Band38	20MHz	16QAM	37850	50RB#25	21.42	16.22	33.00	PASS
Band38	20MHz	16QAM	37850	50RB#50	21.36	16.16	33.00	PASS
Band38	20MHz	16QAM	37850	100RB#0	21.33	16.13	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#0	21.63	16.43	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#99	21.90	16.7	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#49	21.45	16.25	33.00	PASS
Band38	20MHz	16QAM	38000	50RB#50	21.39	16.19	33.00	PASS



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Band38	20MHz	16QAM	38000	50RB#0	21.65	16.45	33.00	PASS
Band38	20MHz	16QAM	38000	50RB#25	21.61	16.41	33.00	PASS
Band38	20MHz	16QAM	38000	100RB#0	21.58	16.38	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#49	21.48	16.28	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#0	21.89	16.69	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#99	21.43	16.23	33.00	PASS
Band38	20MHz	16QAM	38150	50RB#0	21.47	16.27	33.00	PASS
Band38	20MHz	16QAM	38150	50RB#50	21.51	16.31	33.00	PASS
Band38	20MHz	16QAM	38150	50RB#25	21.65	16.45	33.00	PASS
Band38	20MHz	16QAM	38150	100RB#0	21.64	16.44	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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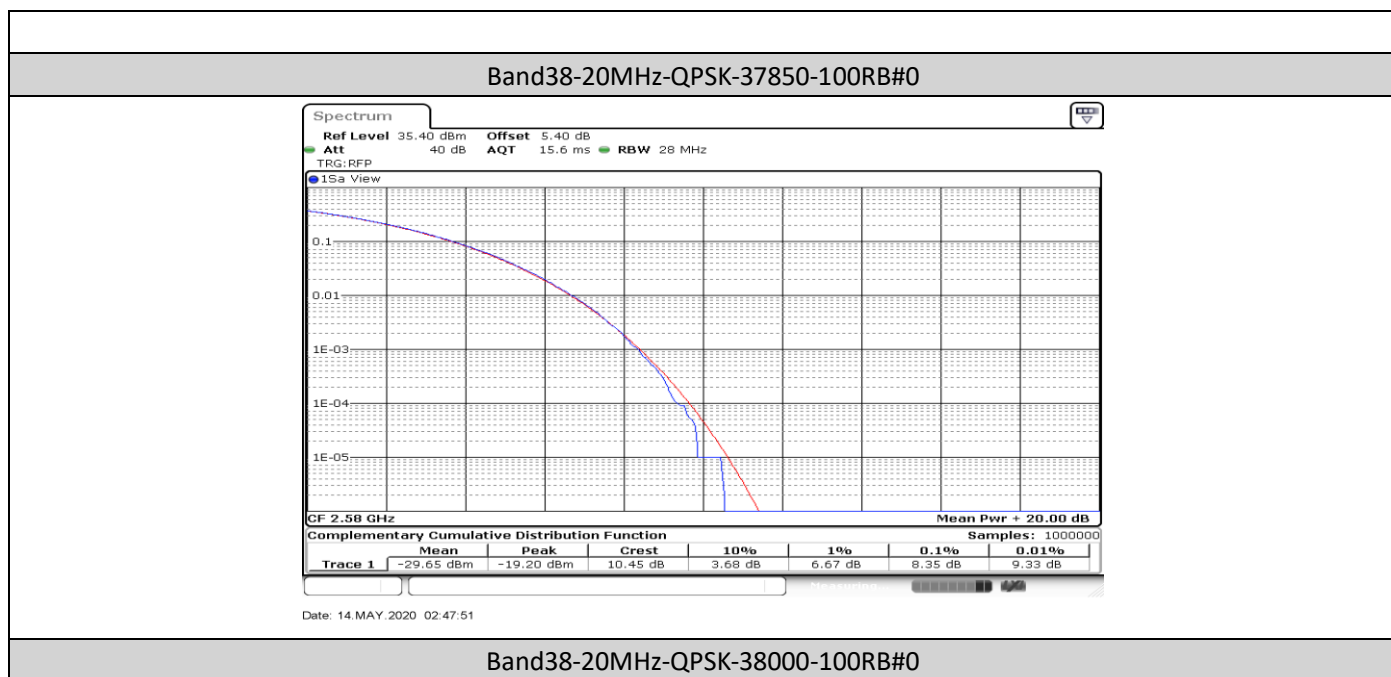


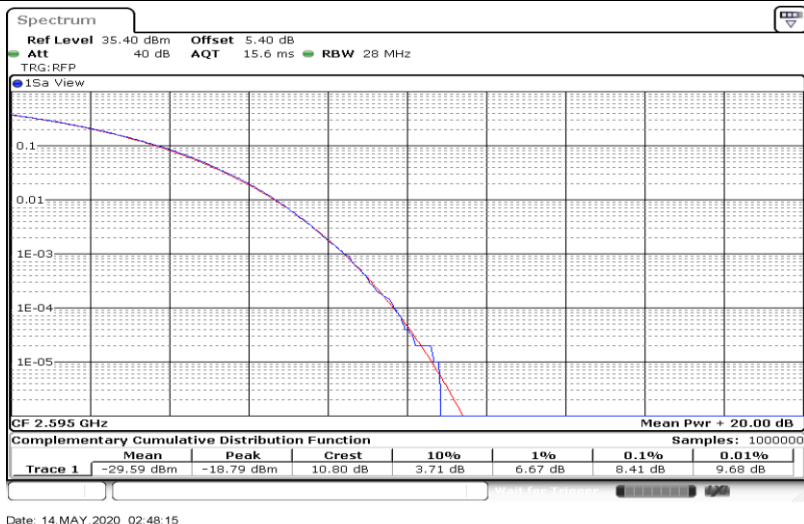
2. Peak-to-Average Ratio (CCDF)

2.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band38	20MHz	QPSK	37850	100RB#0	8.35	13	PASS
Band38	20MHz	QPSK	38000	100RB#0	8.41	13	PASS
Band38	20MHz	QPSK	38150	100RB#0	4.93	13	PASS
Band38	20MHz	16QAM	37850	27RB#0	6.32	13	PASS
Band38	20MHz	16QAM	38000	27RB#0	8.23	13	PASS
Band38	20MHz	16QAM	38150	27RB#0	8.32	13	PASS

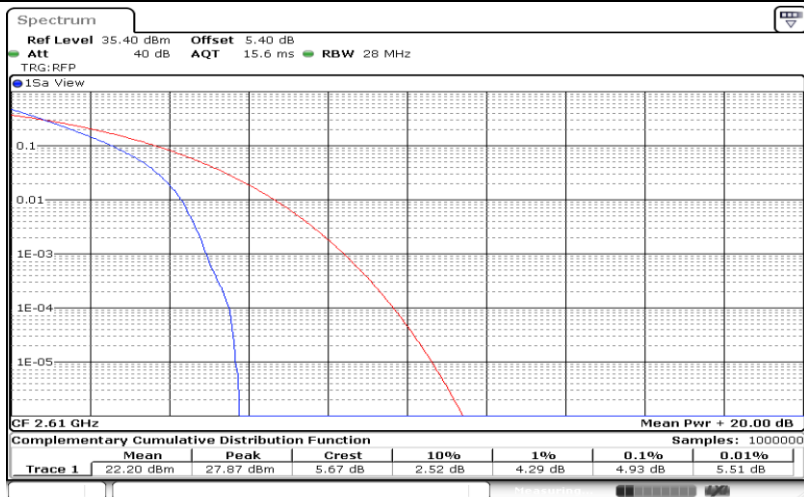
2.2. Test Plots





Date: 14.MAY.2020 02:48:15

Band38-20MHz-QPSK-38150-100RB#0



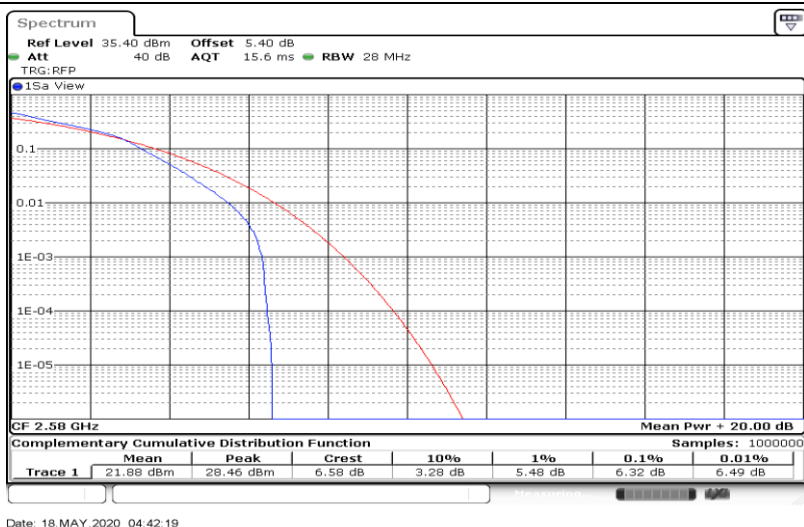
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Band38-20MHz-16QAM-37850-27RB#0

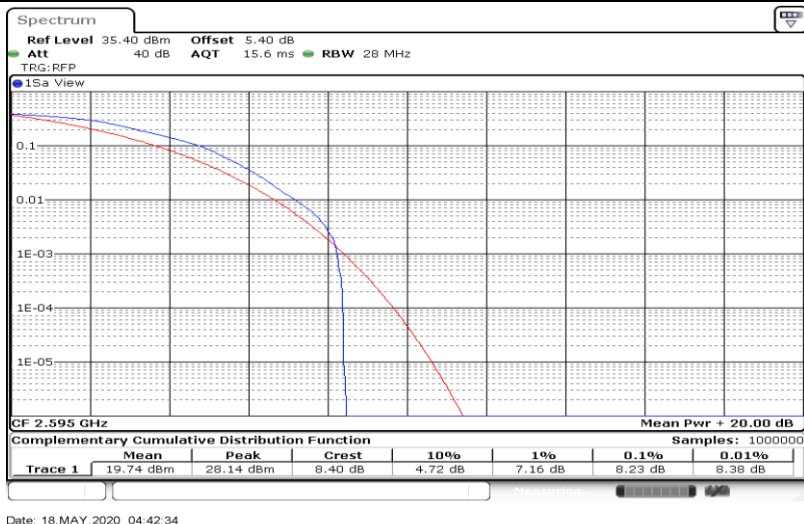


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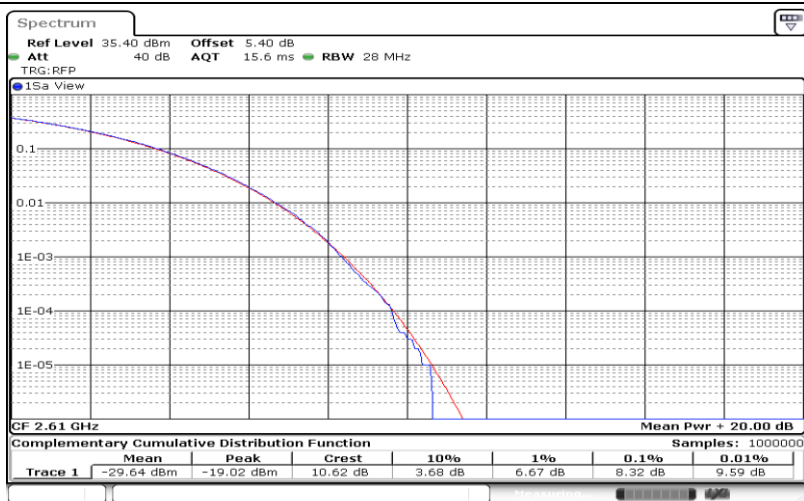


Band38-20MHz-16QAM-38000-27RB#0



Band38-20MHz-16QAM-38150-27RB#0





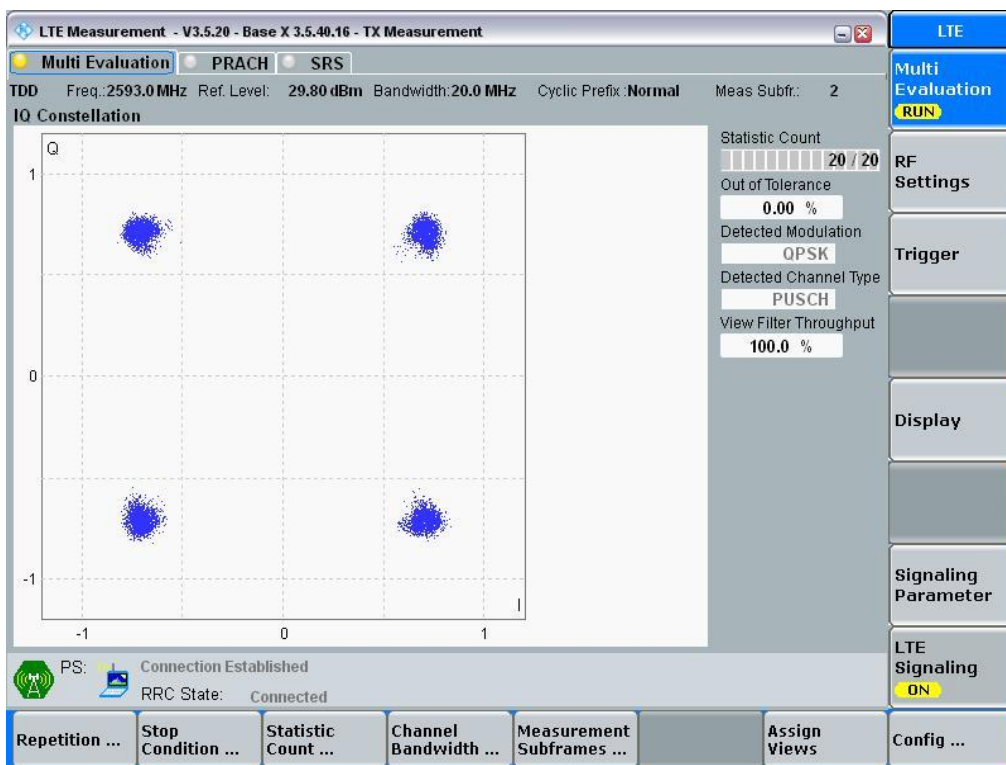
Date: 18.MAY.2020 04:42:49



3. Modulation Characteristics

3.1. Test Mode = LTE /TM1 20MHz

3.1.1. Test Channel = MCH



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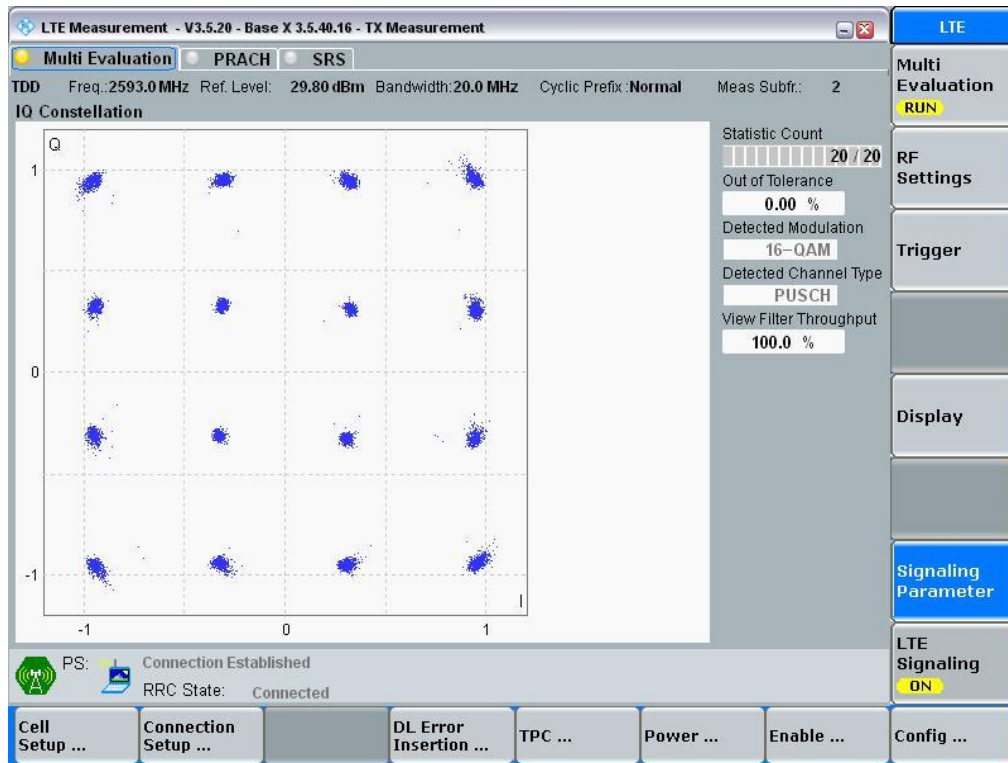
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3.2. Test Mode = LTE /TM2 20MHz

3.2.1. Test Channel = MCH





4. 26dB Bandwidth and Occupied Bandwidth

4.1. Test Result

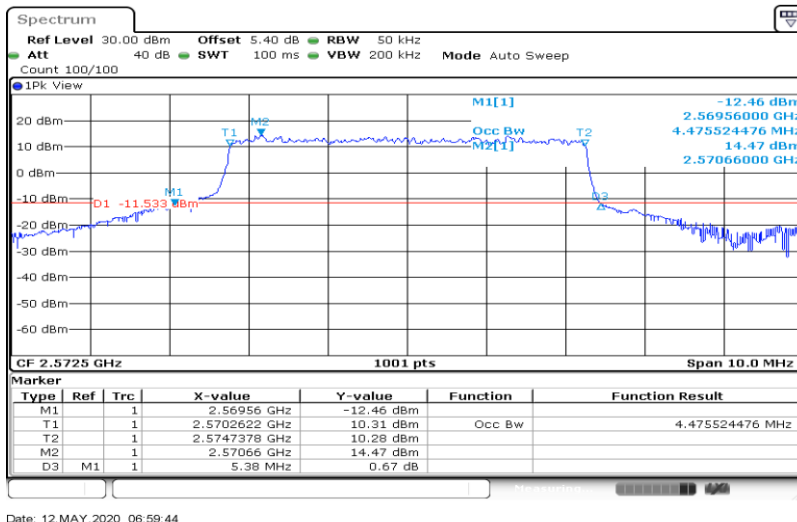
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band38	5MHz	QPSK	37775	25RB#0	4.476	5.380	PASS
Band38	5MHz	QPSK	38000	25RB#0	4.476	5.400	PASS
Band38	5MHz	QPSK	38225	25RB#0	4.476	5.610	PASS
Band38	5MHz	16QAM	37775	25RB#0	4.476	4.980	PASS
Band38	5MHz	16QAM	38000	25RB#0	4.476	5.010	PASS
Band38	5MHz	16QAM	38225	25RB#0	4.476	5.190	PASS
Band38	10MHz	QPSK	37800	50RB#0	8.931	11.280	PASS
Band38	10MHz	QPSK	38000	50RB#0	8.931	11.280	PASS
Band38	10MHz	QPSK	38200	50RB#0	8.931	11.320	PASS
Band38	10MHz	16QAM	37800	27RB#0	4.915	5.880	PASS
Band38	10MHz	16QAM	38000	27RB#0	4.915	6.120	PASS
Band38	10MHz	16QAM	38200	27RB#0	4.935	6.140	PASS
Band38	15MHz	QPSK	37825	75RB#0	13.576	29.310	PASS
Band38	15MHz	QPSK	38000	75RB#0	13.576	16.200	PASS
Band38	15MHz	QPSK	38175	75RB#0	13.546	16.440	PASS
Band38	15MHz	16QAM	37825	27RB#0	7.463	23.640	PASS
Band38	15MHz	16QAM	38000	27RB#0	6.414	23.700	PASS
Band38	15MHz	16QAM	38175	27RB#0	5.904	9.300	PASS
Band38	20MHz	QPSK	37850	100RB#0	17.942	19.560	PASS
Band38	20MHz	QPSK	38000	100RB#0	17.942	19.520	PASS
Band38	20MHz	QPSK	38150	100RB#0	17.942	19.520	PASS
Band38	20MHz	16QAM	37850	27RB#0	5.195	6.120	PASS
Band38	20MHz	16QAM	38000	27RB#0	5.315	6.520	PASS
Band38	20MHz	16QAM	38150	27RB#0	5.725	6.440	PASS





4.2. Test Plots

Band38-5MHz-QPSK-37775-25RB#0-4.476



Band38-5MHz-QPSK-38000-25RB#0-4.476

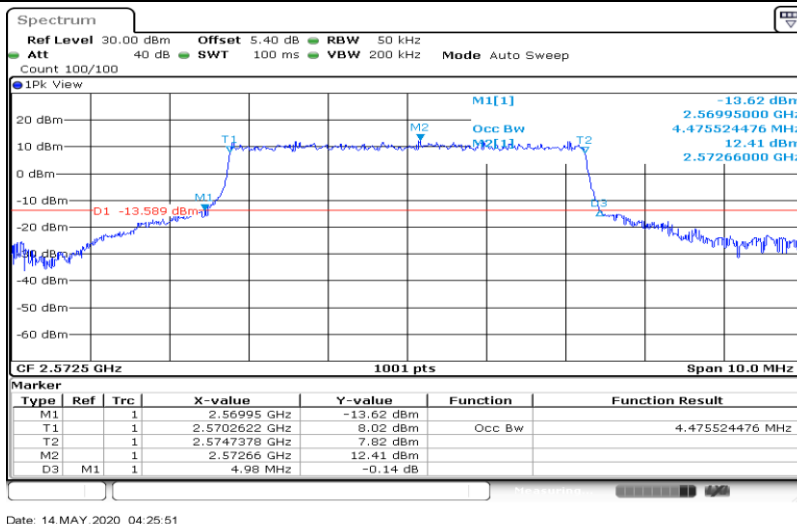


Band38-5MHz-QPSK-38225-25RB#0-4.476



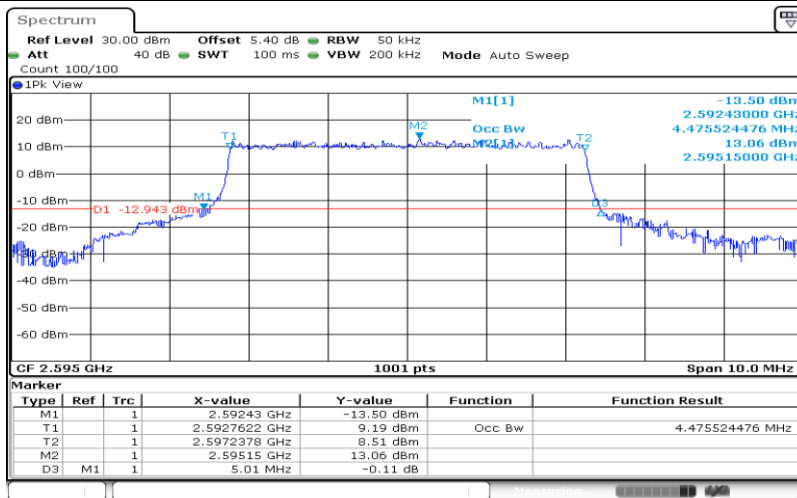


Band38-5MHz-16QAM-3775-25RB#0-4.476

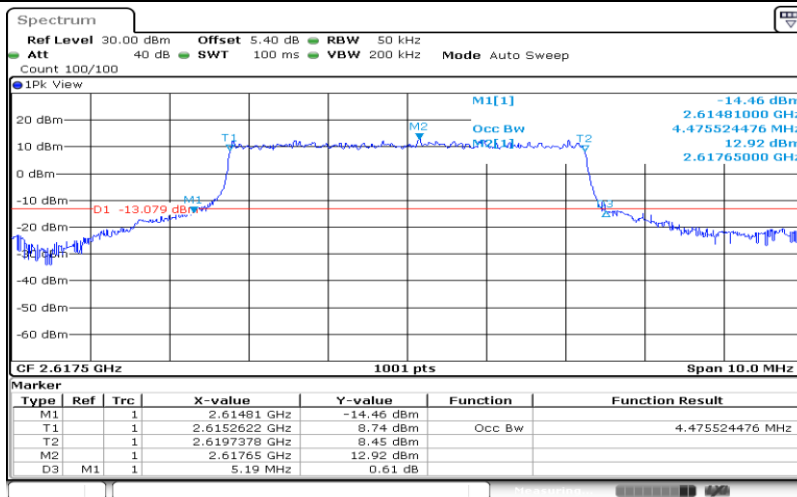


Band38-5MHz-16QAM-38000-25RB#0-4.476





Band38-5MHz-16QAM-38225-25RB#0-4.476

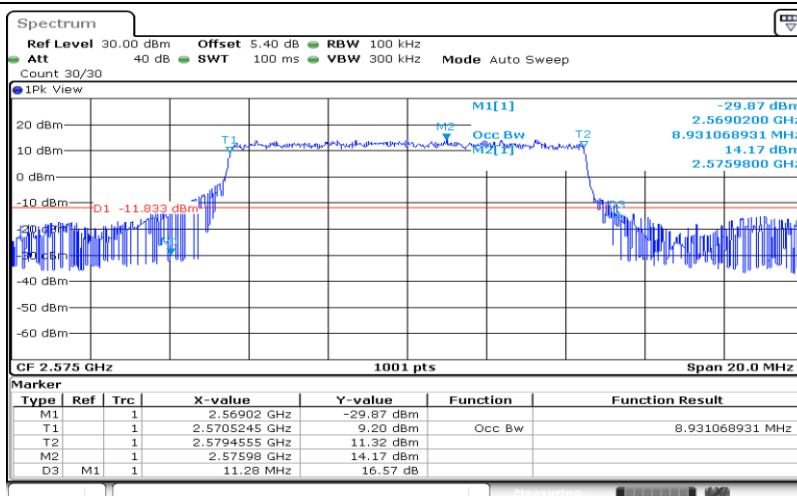


Band38-10MHz-QPSK-37800-50RB#0-8.931



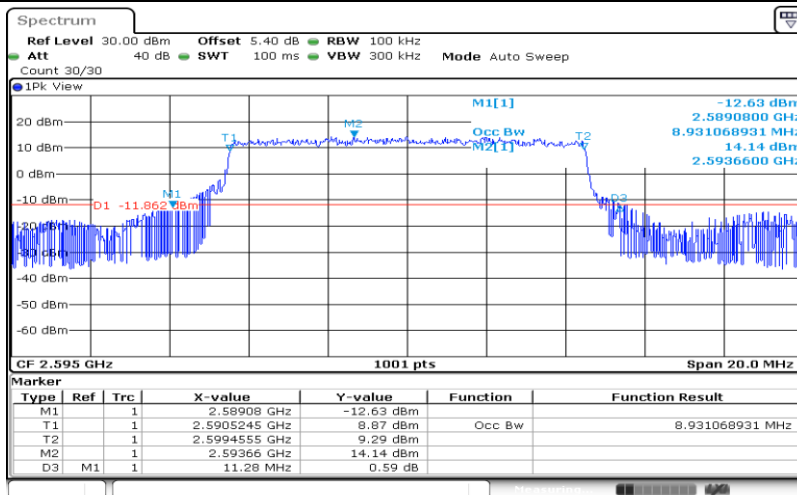
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Date: 12.MAY.2020 07:02:08

Band38-10MHz-QPSK-38000-50RB#0-8.931



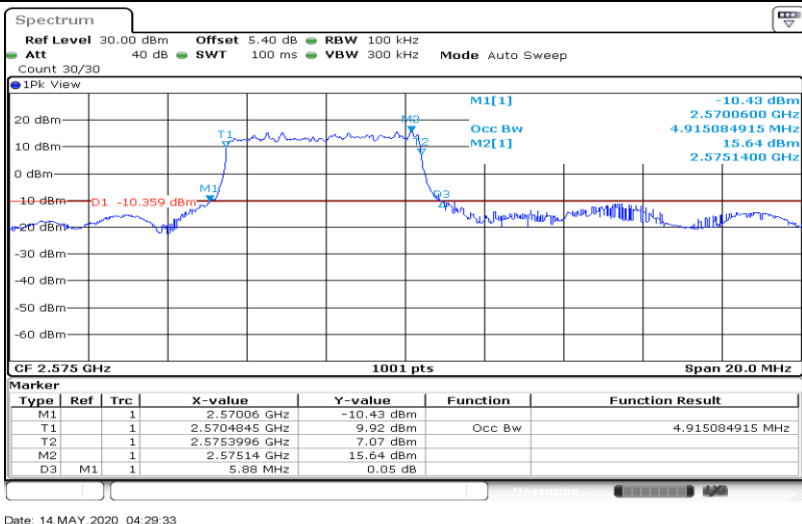
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Band38-10MHz-QPSK-38200-50RB#0-8.931





Band38-10MHz-16QAM-37800-27RB#0-4.915



Band38-10MHz-16QAM-38000-27RB#0-4.915



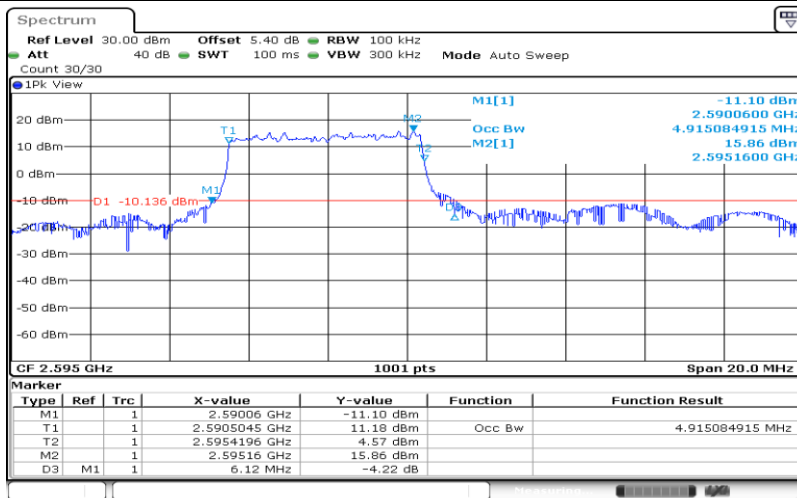
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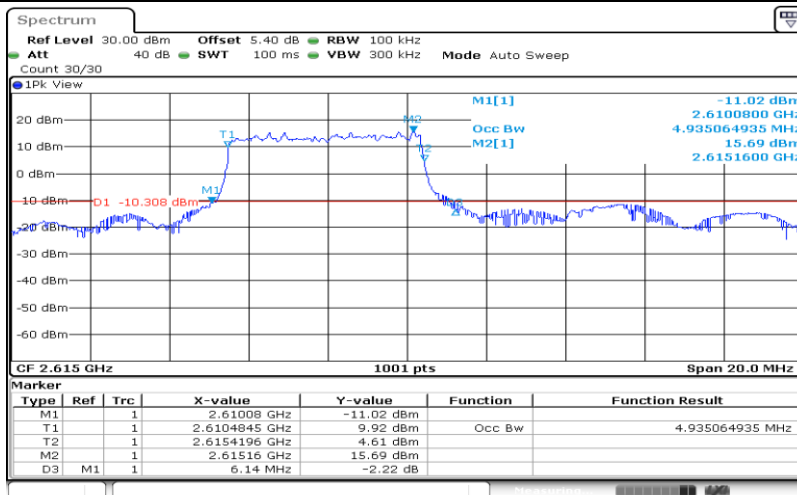
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Date: 14.MAY.2020 04:30:49

Band38-10MHz-16QAM-38200-27RB#0-4.935



Date: 14.MAY.2020 04:32:19

Band38-15MHz-QPSK-37825-75RB#0-13.576

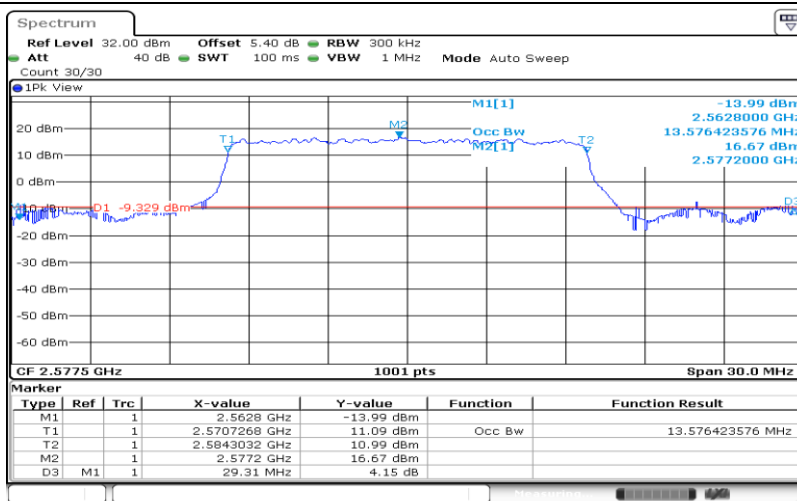


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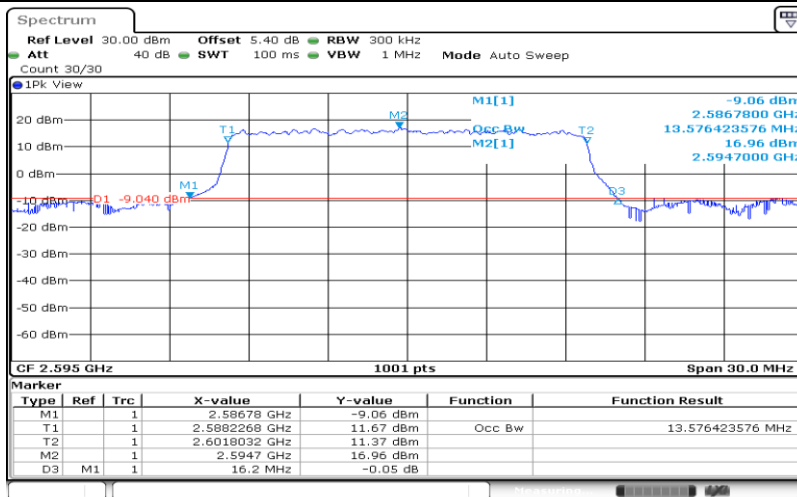
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Date: 14.MAY.2020 02:15:46

Band38-15MHz-QPSK-38000-75RB#0-13.576



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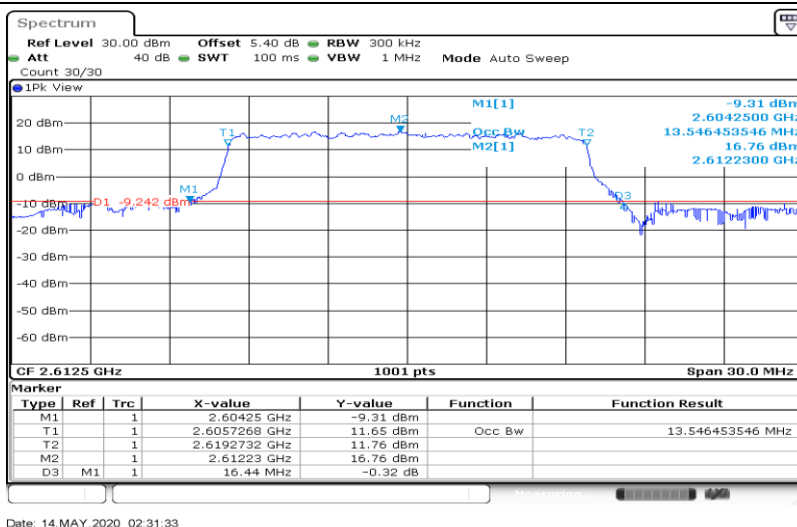


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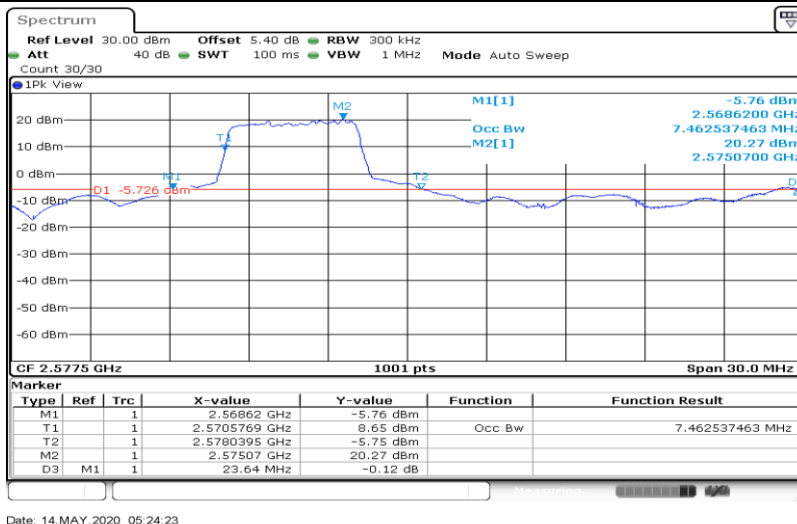
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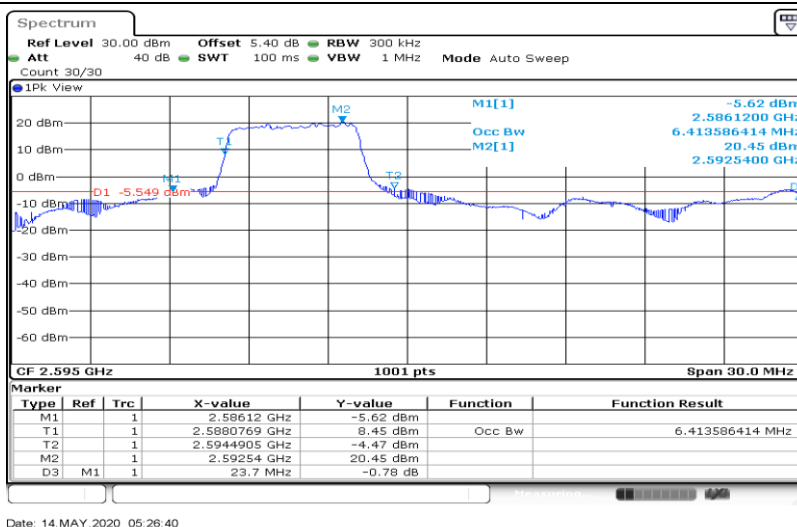


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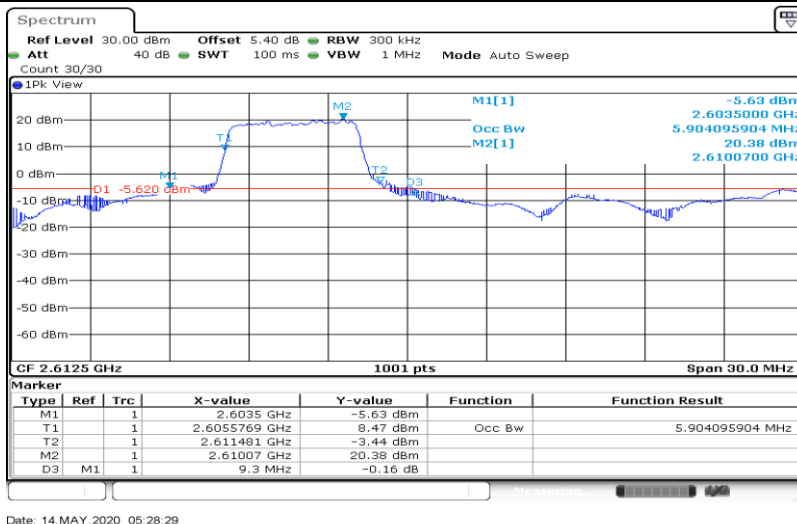


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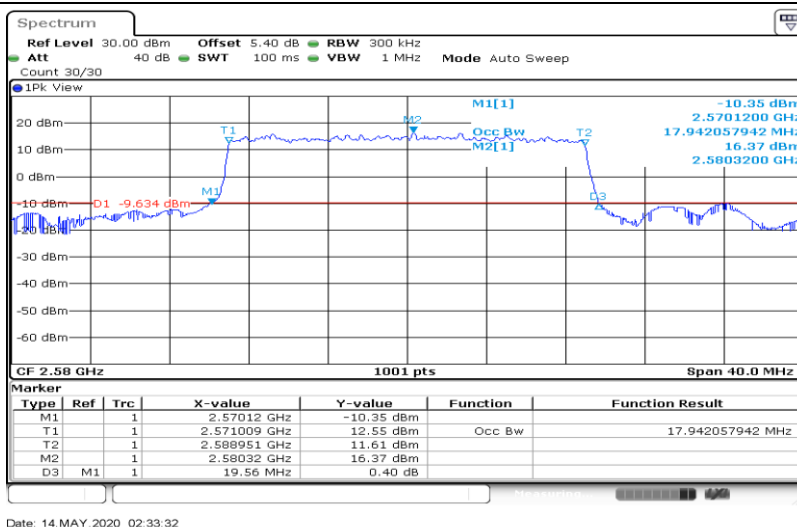


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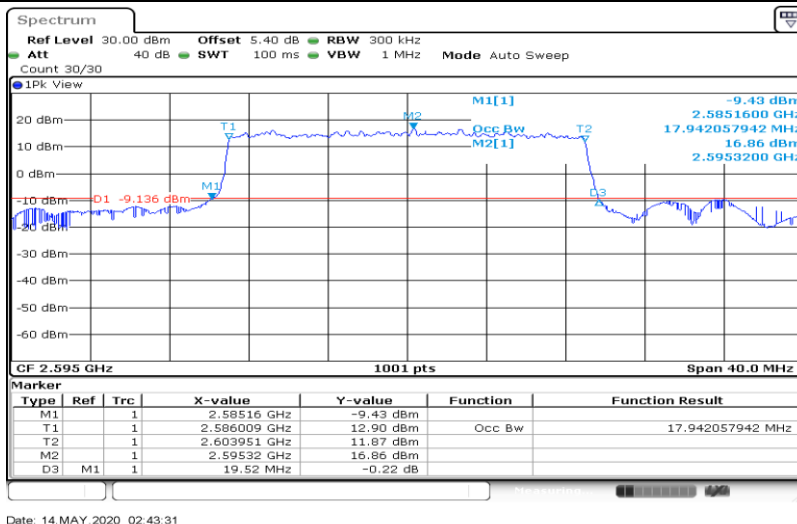


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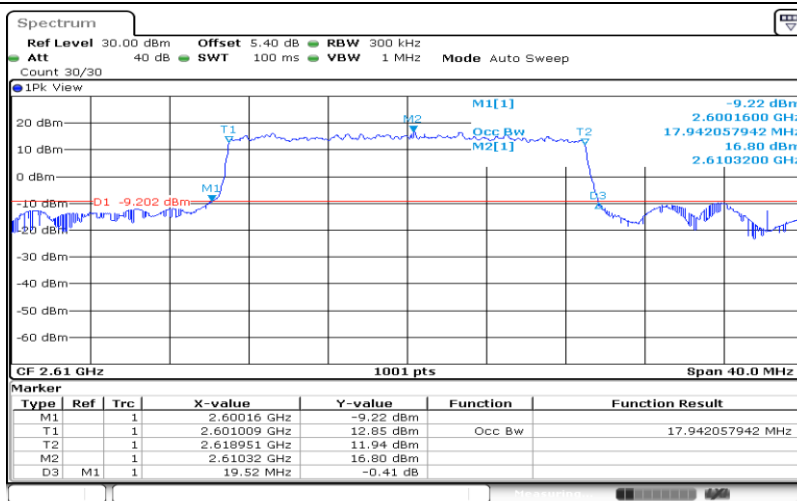


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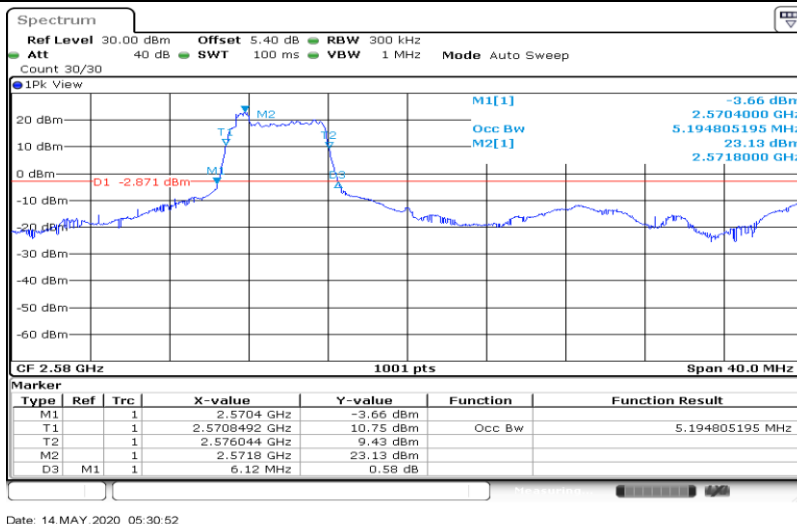


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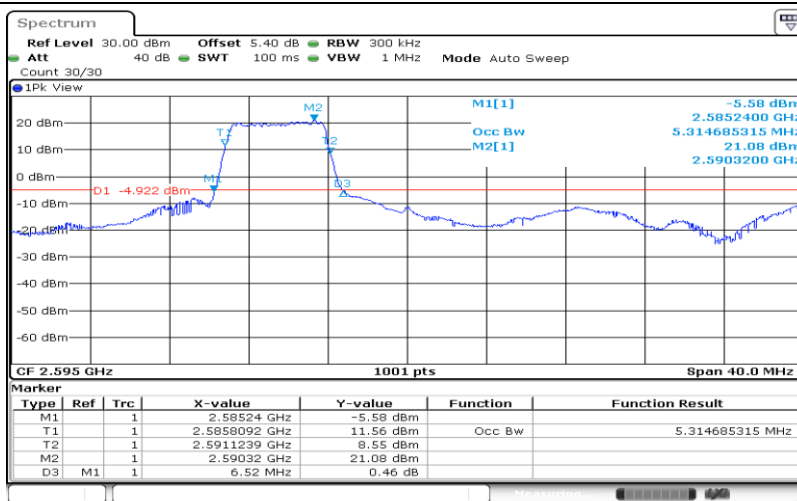


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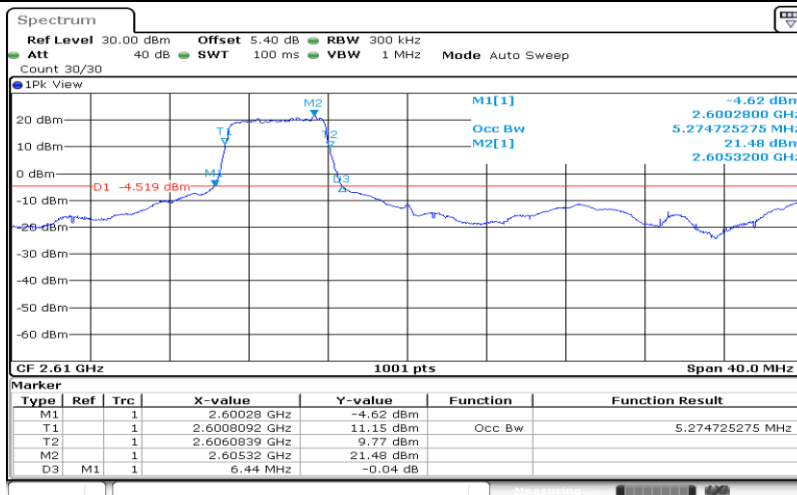
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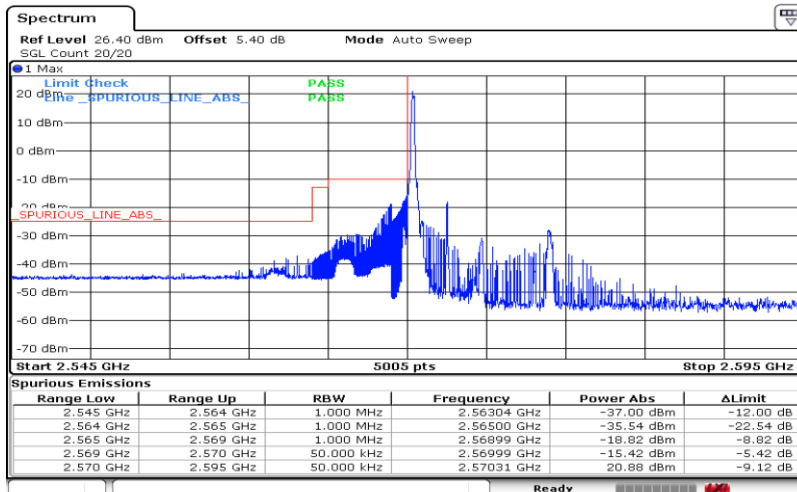
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5. Band Edge Compliance

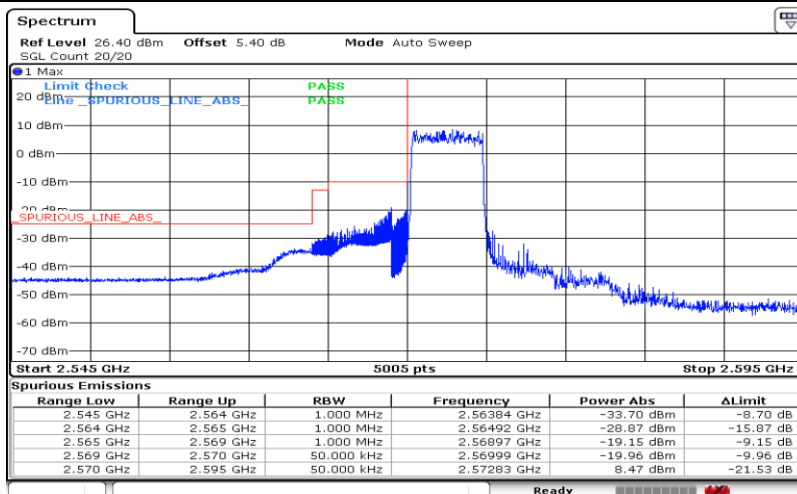
5.1. Test Plots

Band38-5MHz-QPSK-37775-1RB#0



Date: 18.MAY.2020 02:11:29

Band38-5MHz-QPSK-37775-25RB#0

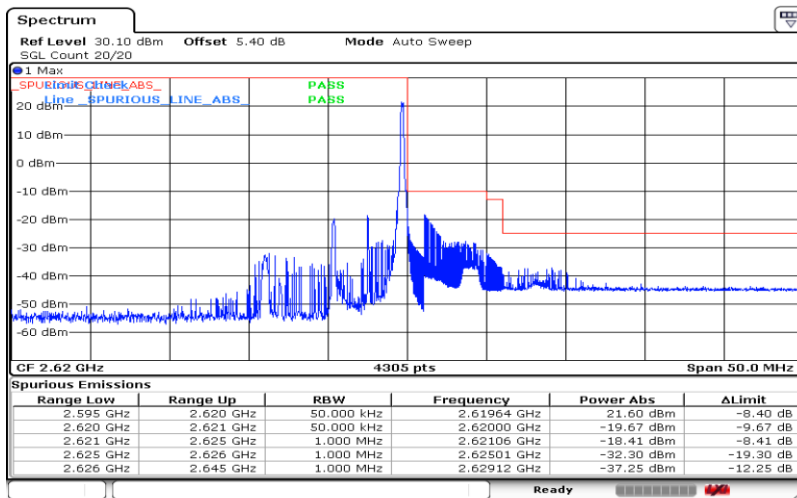


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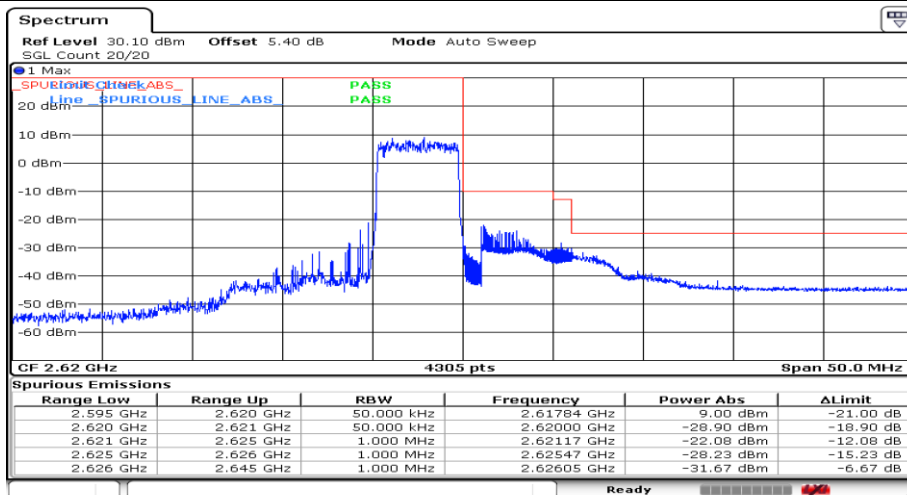


Band38-5MHz-QPSK-38225-1RB#24



Date: 18.MAY.2020 02:17:48

Band38-5MHz-QPSK-38225-25RB#0



Date: 18.MAY.2020 02:18:10



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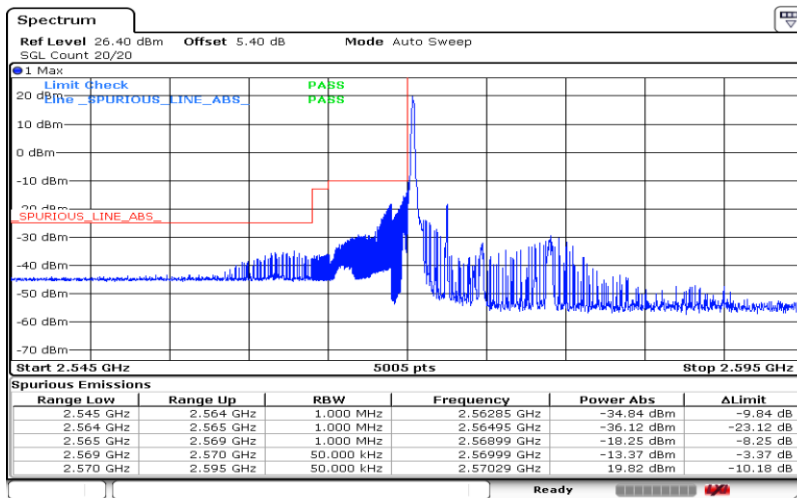
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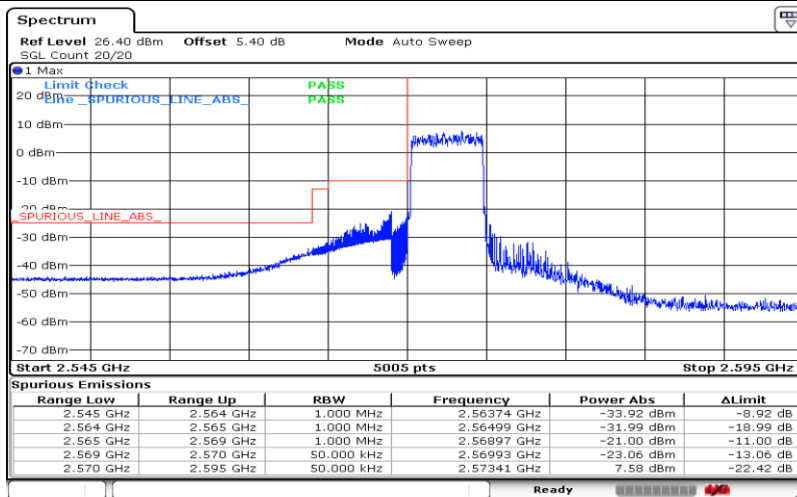


Band38-5MHz-16QAM-37775-1RB#0



Date: 18.MAY.2020 02:13:45

Band38-5MHz-16QAM-37775-25RB#0



Date: 18.MAY.2020 02:14:20



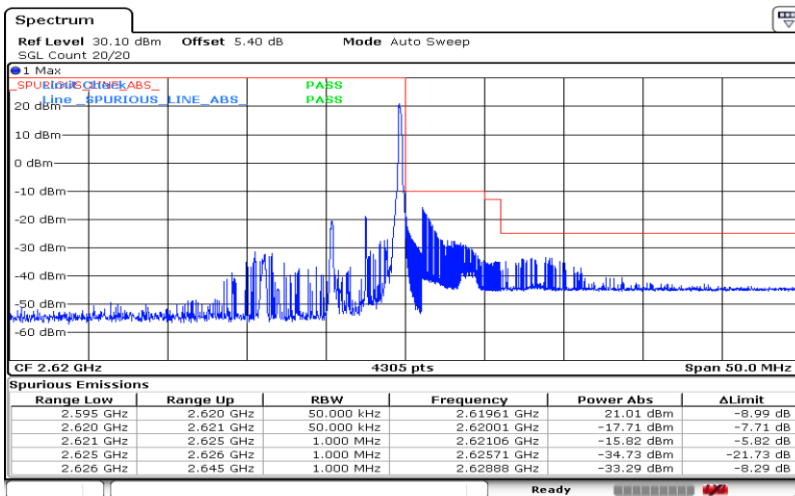
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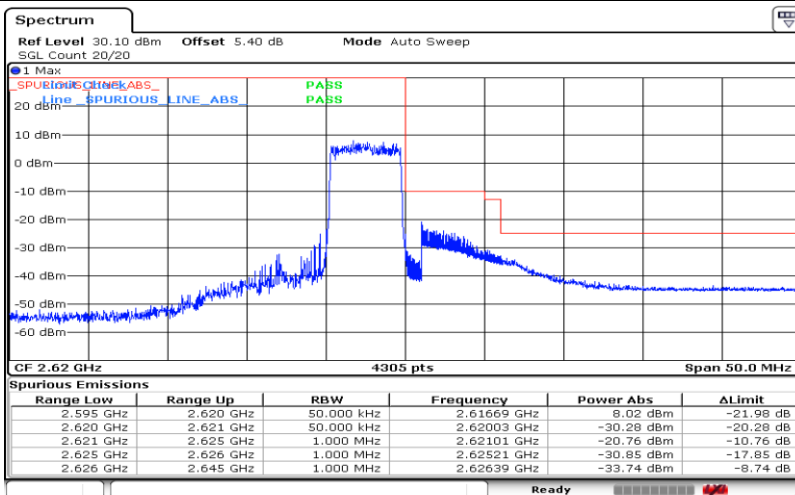
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Band38-5MHz-16QAM-38225-1RB#24



Date: 18.MAY.2020 02:16:53

Band38-5MHz-16QAM-38225-25RB#0



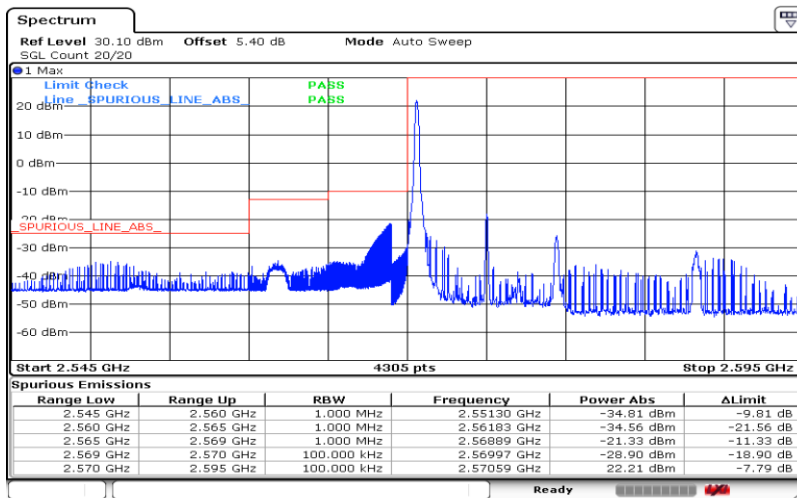
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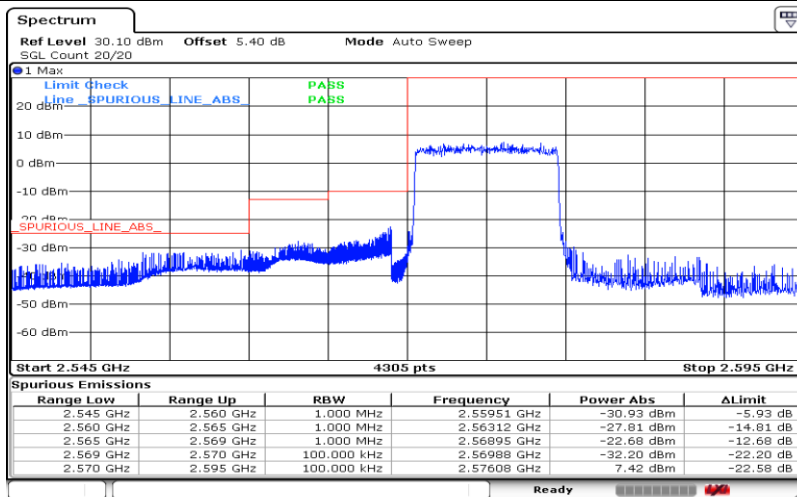
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Band38-10MHz-QPSK-37800-1RB#0



Date: 18.MAY.2020 02:22:28

Band38-10MHz-QPSK-37800-50RB#0

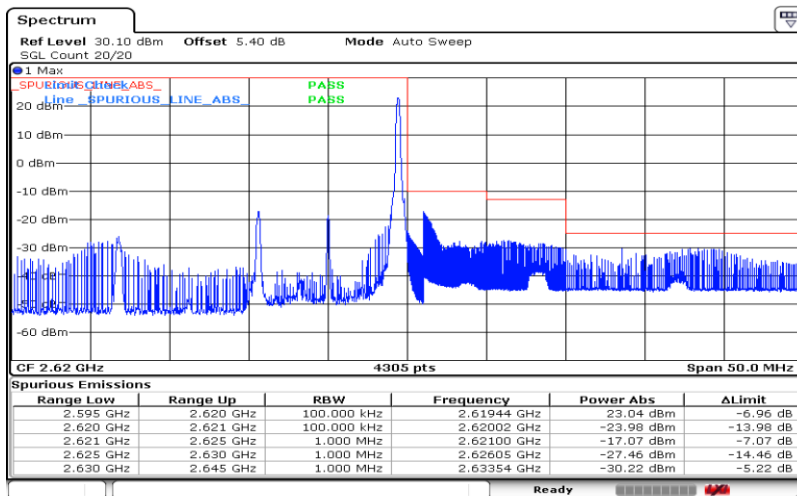


Date: 18.MAY.2020 02:21:49



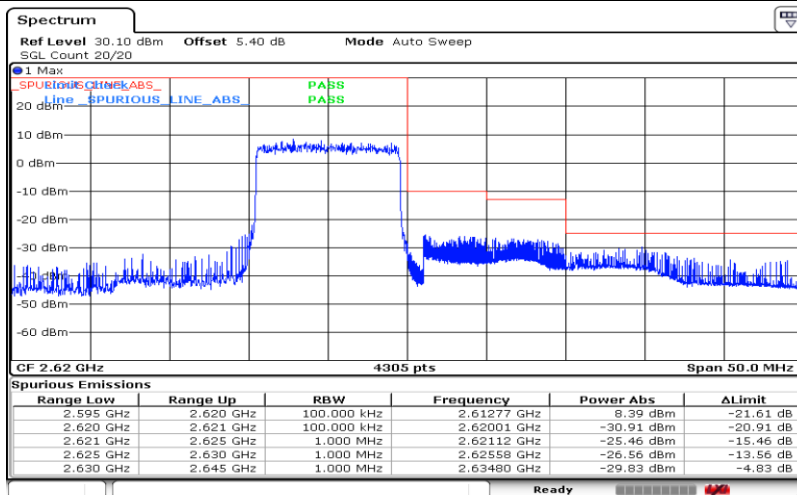


Band38-10MHz-QPSK-38200-1RB#49



Date: 18.MAY.2020 02:28:28

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Date: 18.MAY.2020 02:29:07

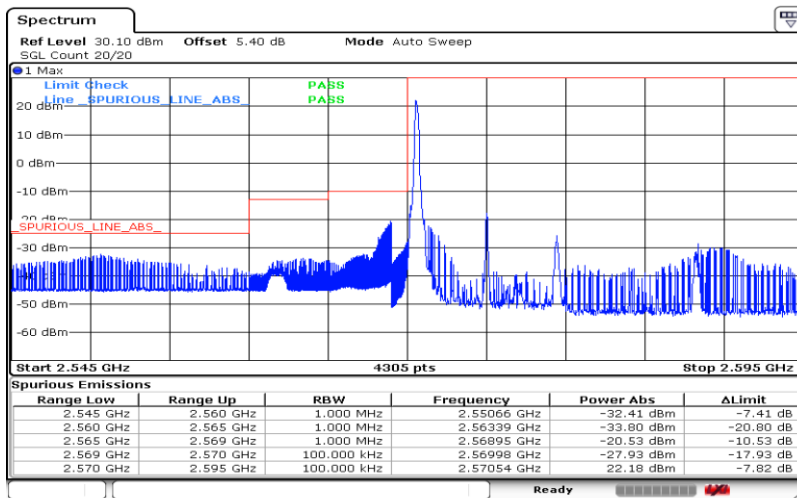


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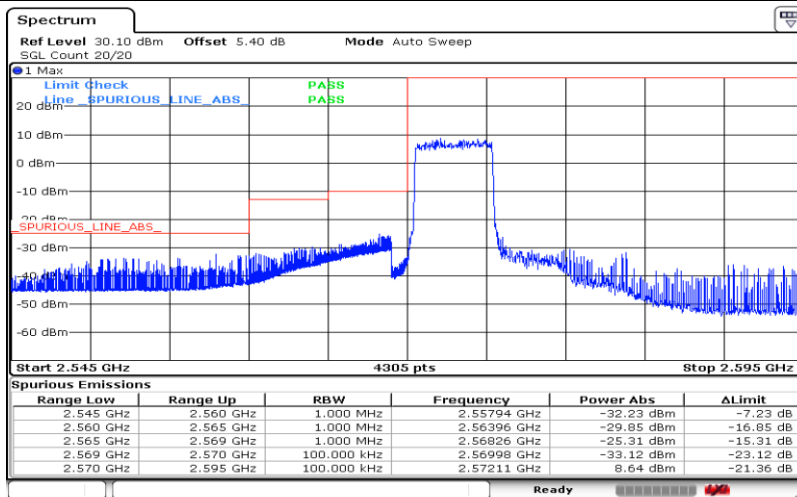
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Band38-10MHz-16QAM-37800-1RB#0



Date: 18.MAY.2020 02:24:03

Band38-10MHz-16QAM-37800-27RB#0



Date: 18.MAY.2020 02:25:16

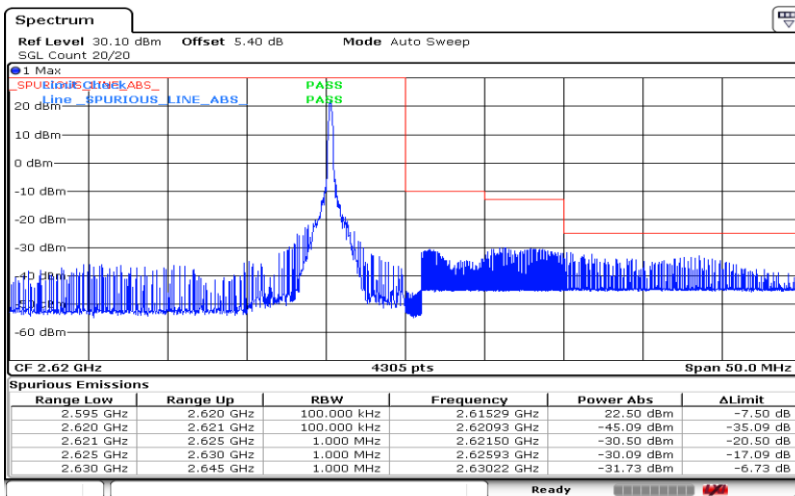


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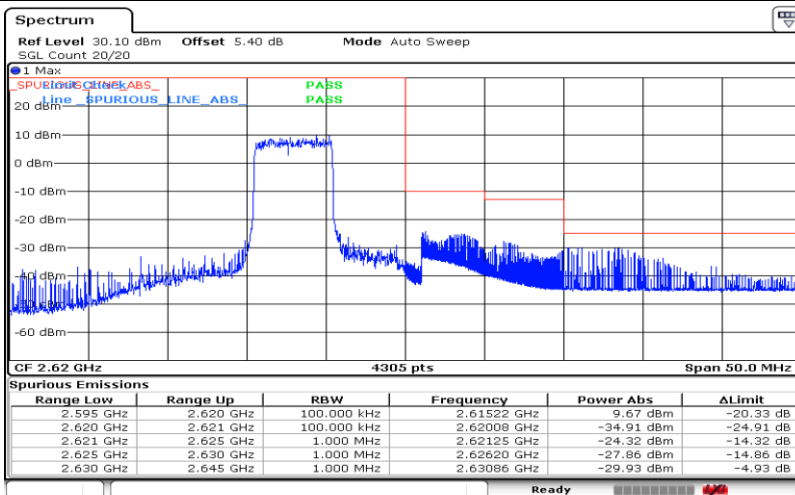


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Date: 18.MAY.2020 02:27:35

Band38-10MHz-16QAM-38200-27RB#0



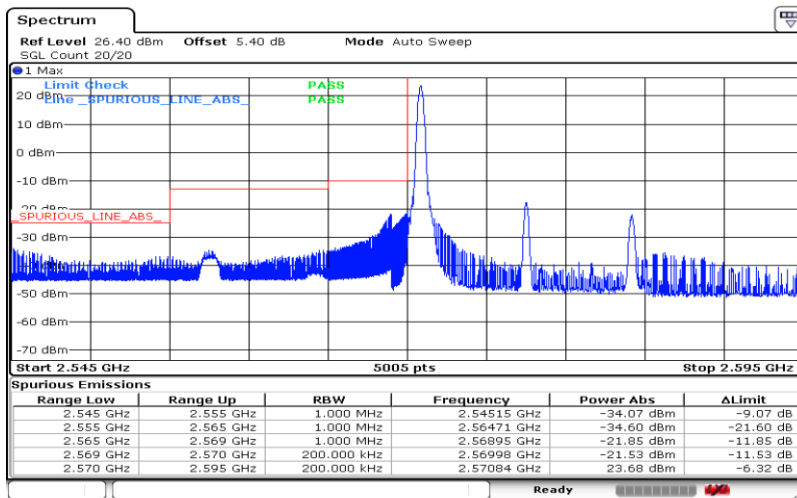
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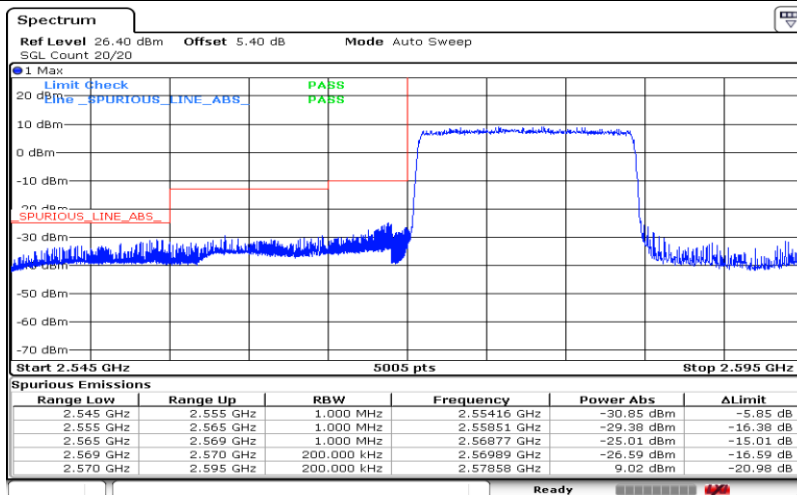
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Band38-15MHz-QPSK-37825-1RB#0



Date: 18.MAY.2020 02:31:30

Band38-15MHz-QPSK-37825-75RB#0

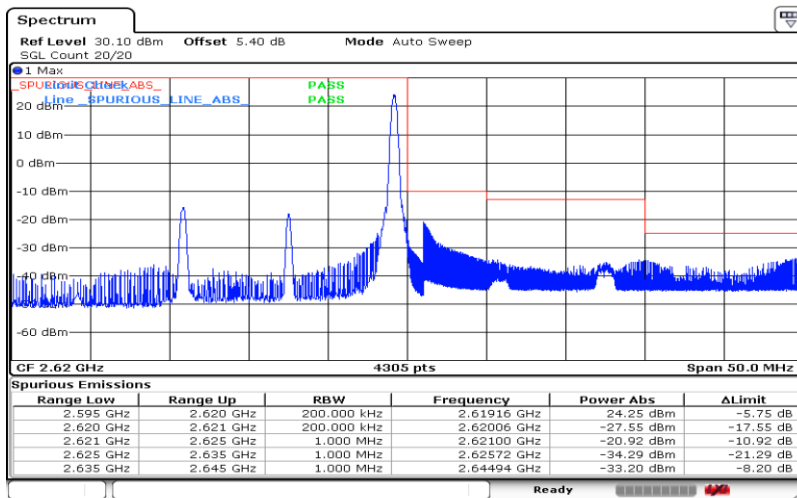


Date: 18.MAY.2020 02:30:24



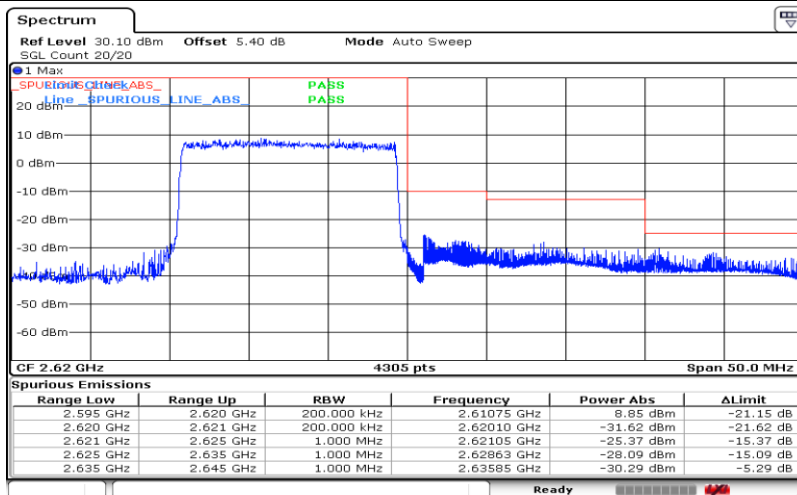
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Band38-15MHz-QPSK-38175-1RB#74



Date: 18.MAY.2020 02:39:20

Band38-15MHz-QPSK-38175-75RB#0



Date: 18.MAY.2020 02:40:12



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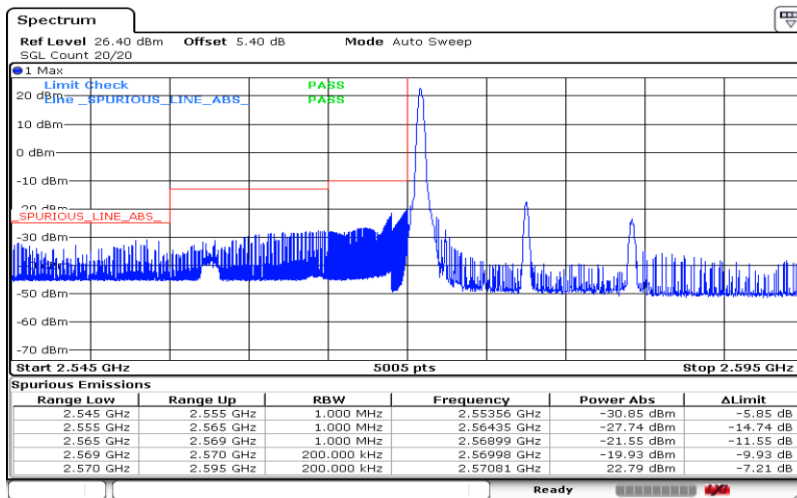
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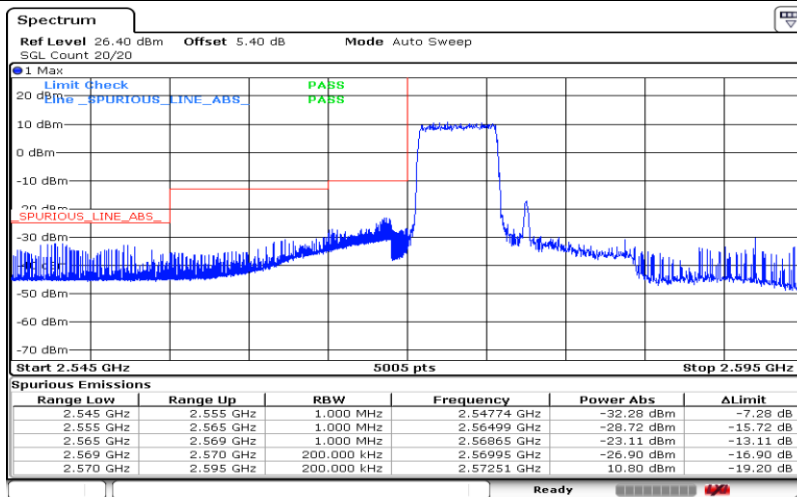


Band38-15MHz-16QAM-37825-1RB#0



Date: 18.MAY.2020 02:33:36

Band38-15MHz-16QAM -37825-75RB#0



Date: 18.MAY.2020 02:34:08



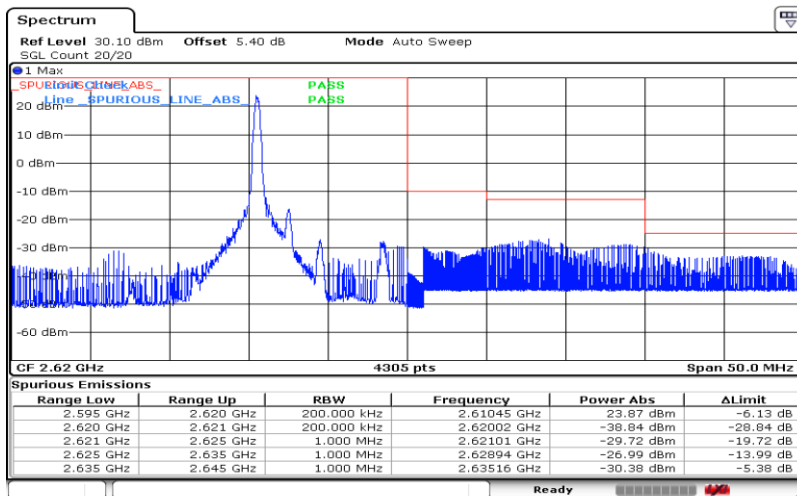
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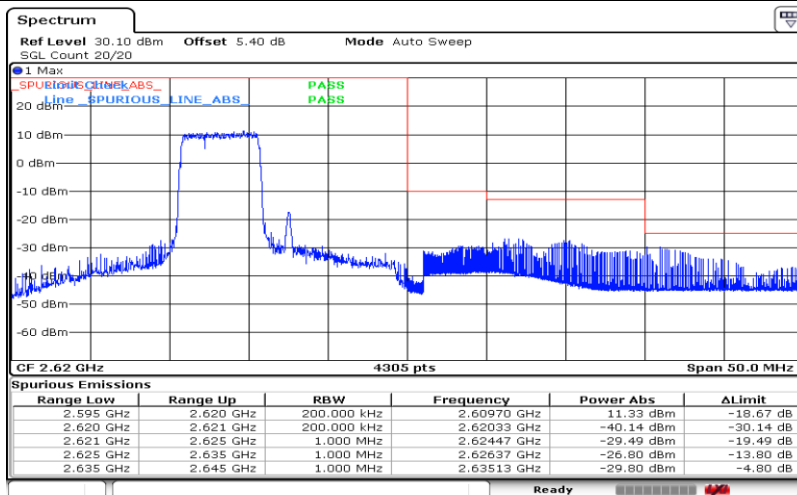


Band38-15MHz-16QAM -38175-1RB#74



Date: 18.MAY.2020 02:38:19

Band38-15MHz-16QAM -38175-75RB#0



Date: 18.MAY.2020 02:35:35



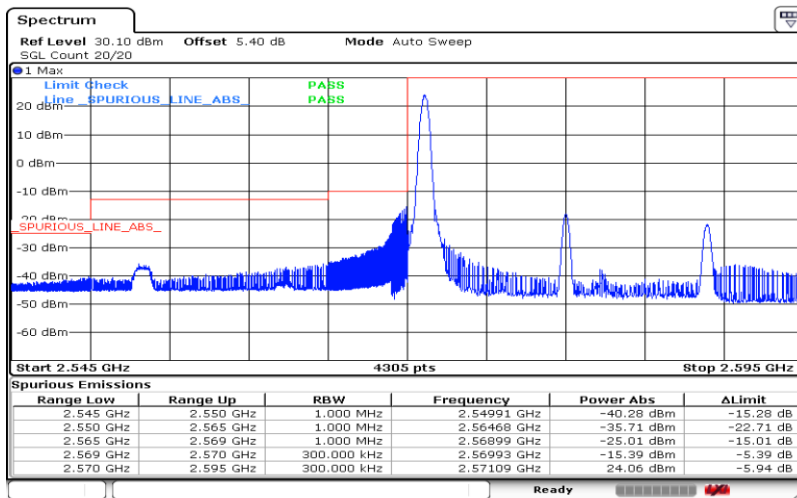
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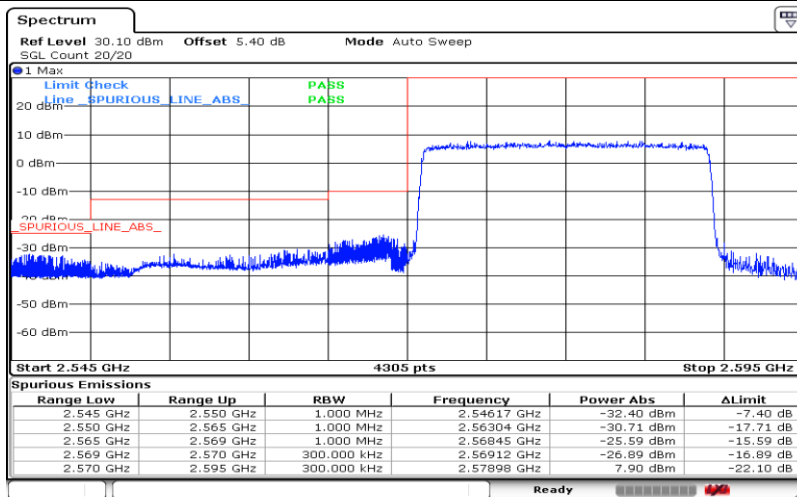


Band38-20MHz-QPSK-37850-1RB#0



Date: 18.MAY.2020 02:43:32

Band38-20MHz-QPSK-37850-100RB#0



Date: 18.MAY.2020 02:42:58

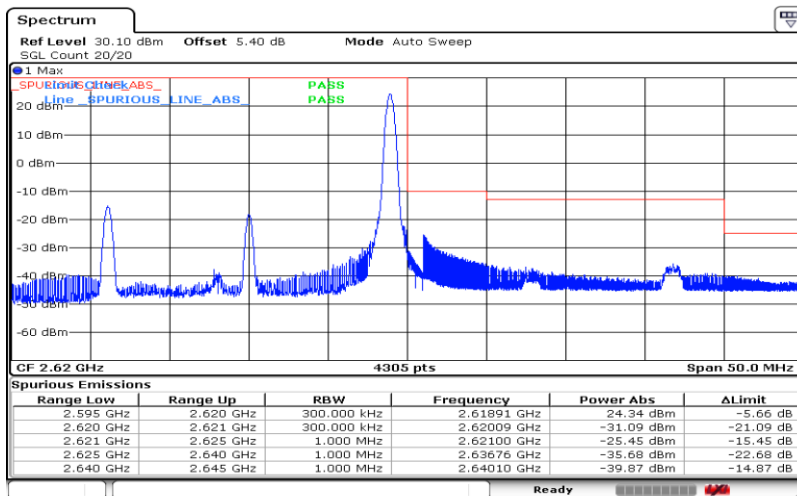


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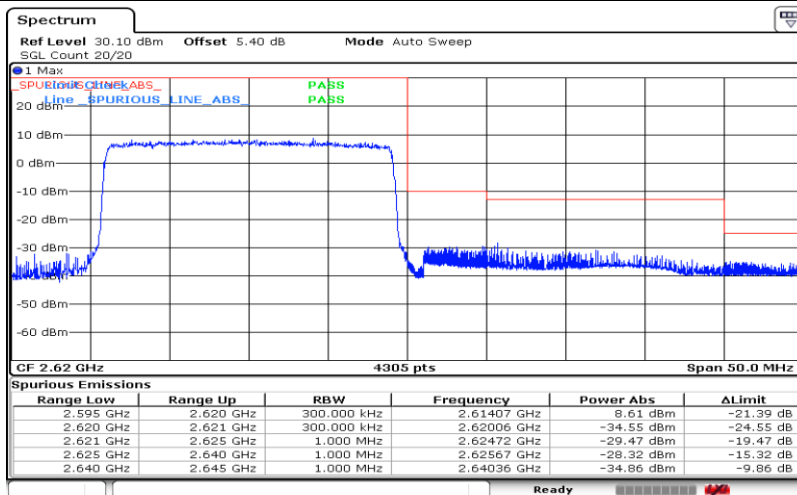
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Band38-20MHz-QPSK-38150-1RB#99



Date: 18.MAY.2020 02:48:16

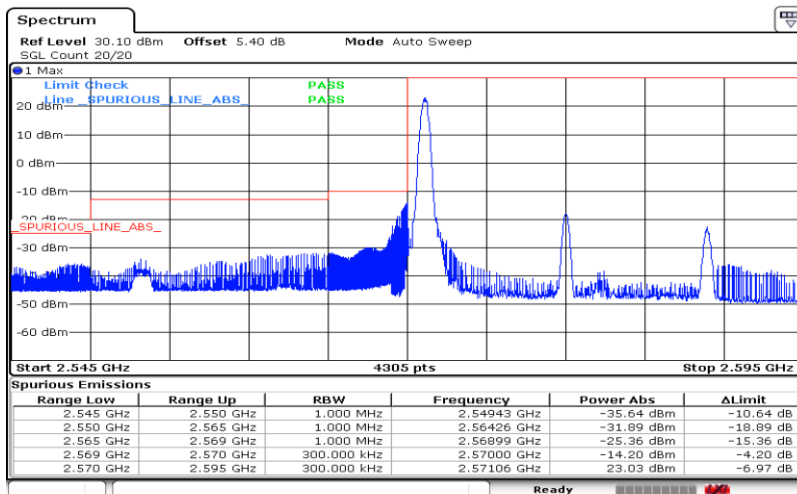
Band38-20MHz-QPSK-38150-100RB#0



Date: 18.MAY.2020 02:48:43

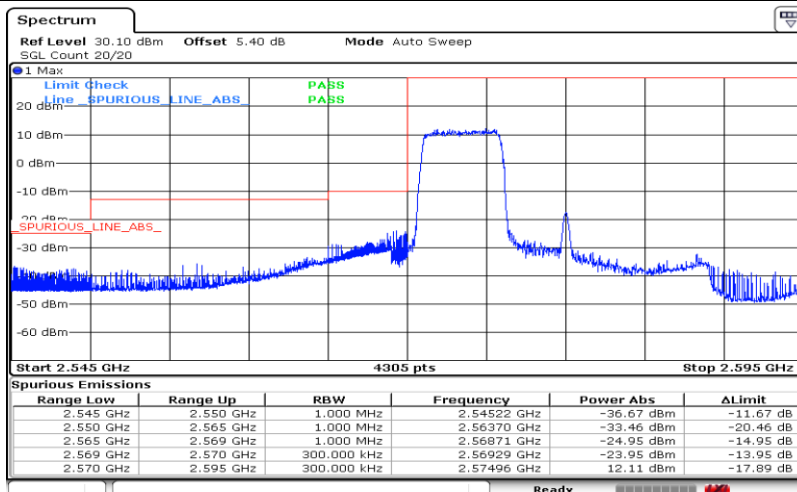


Band38-20MHz-16QAM-37850-1RB#0



Date: 18.MAY.2020 02:43:53

Band38-20MHz-16QAM-37850-27RB#0

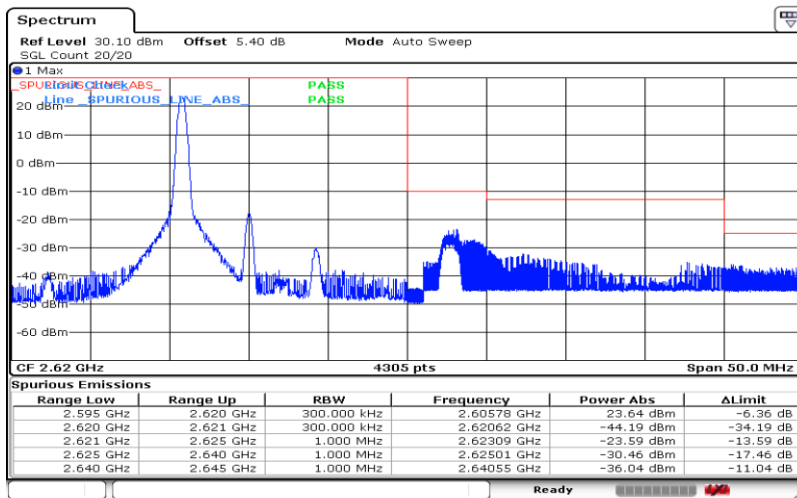


Date: 18.MAY.2020 02:44:23



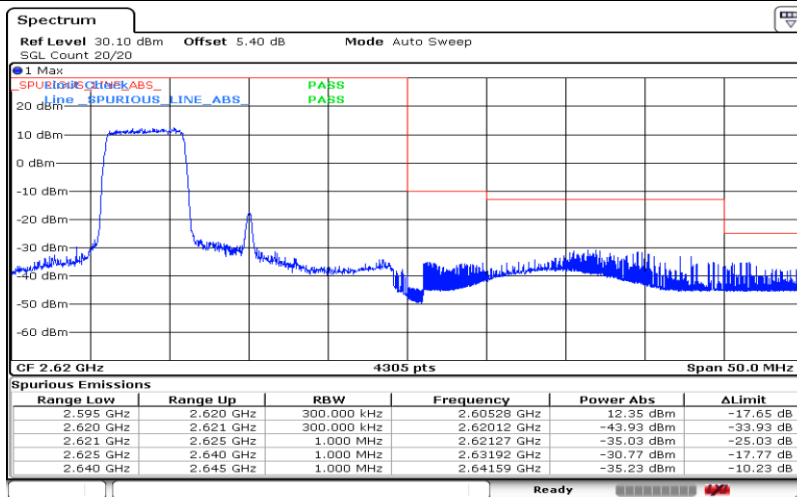


Band38-20MHz-16QAM-38150-1RB#26



Date: 18.MAY.2020 02:47:27

Band38-20MHz-16QAM-38150-27RB#0



Date: 18.MAY.2020 02:46:57



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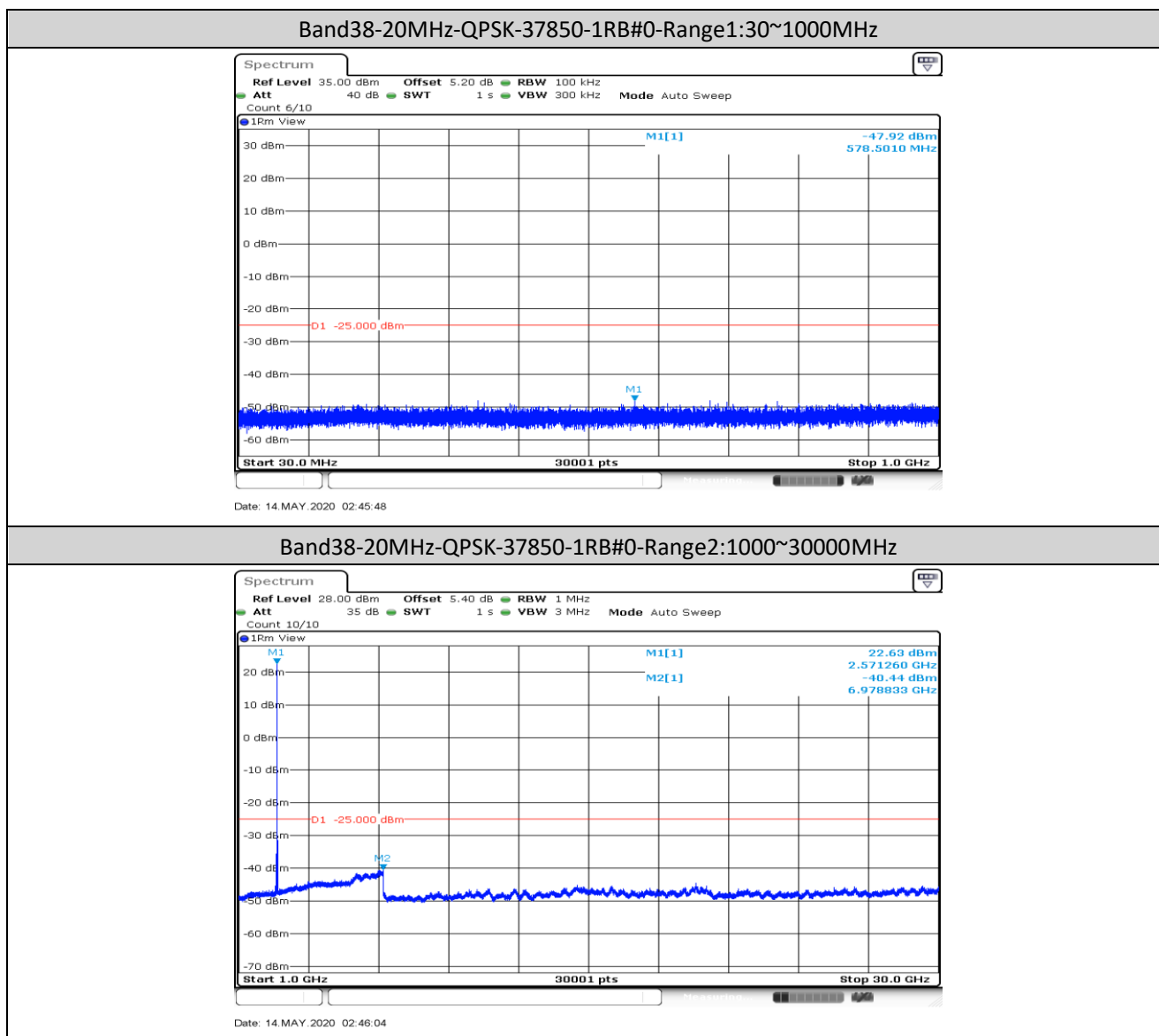
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6. Spurious Emission at Antenna Terminal

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.

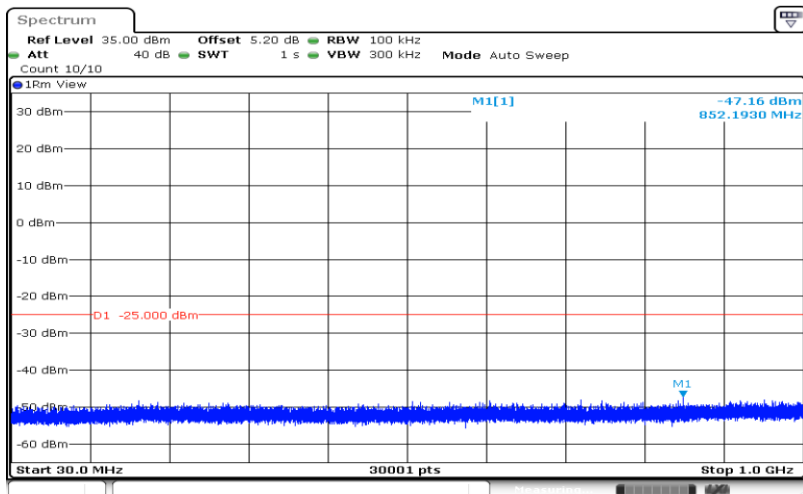
Remark2: only the worst case data displayed in this report.

6.1. Test Plots



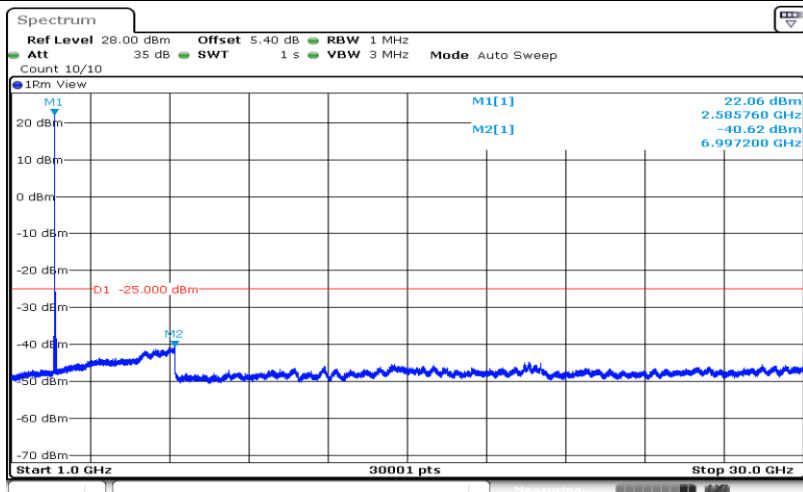
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Band38-20MHz-QPSK-38000-1RB#0-Range1:30~1000MHz



Date: 14.MAY.2020 02:46:29

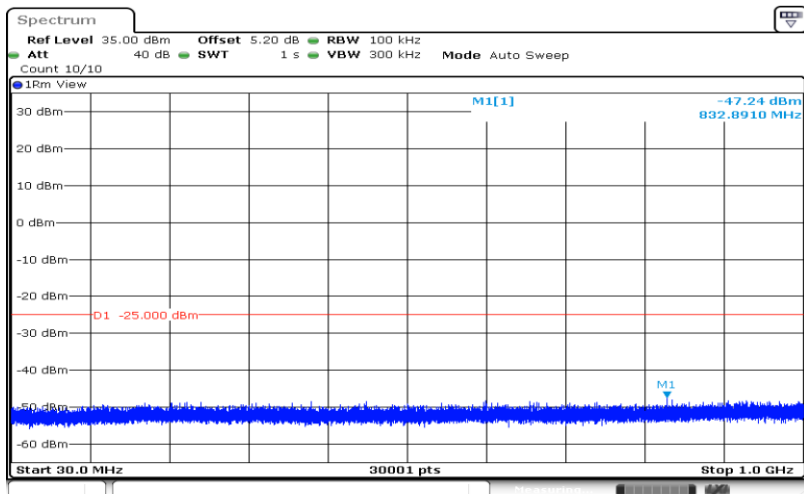
Band38-20MHz-QPSK-38000-1RB#0-Range2:1000~30000MHz



Date: 14.MAY.2020 02:46:45

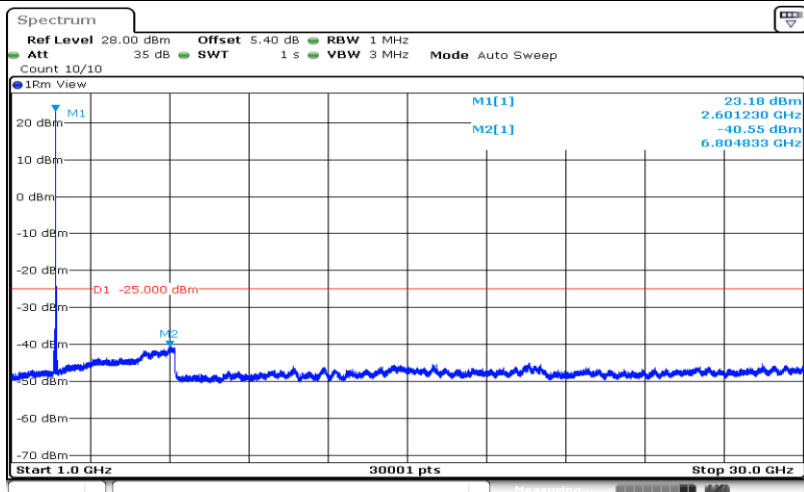


Band38-20MHz-QPSK-38150-1RB#0-Range1:30~1000MHz



Date: 14.MAY.2020 02:47:08

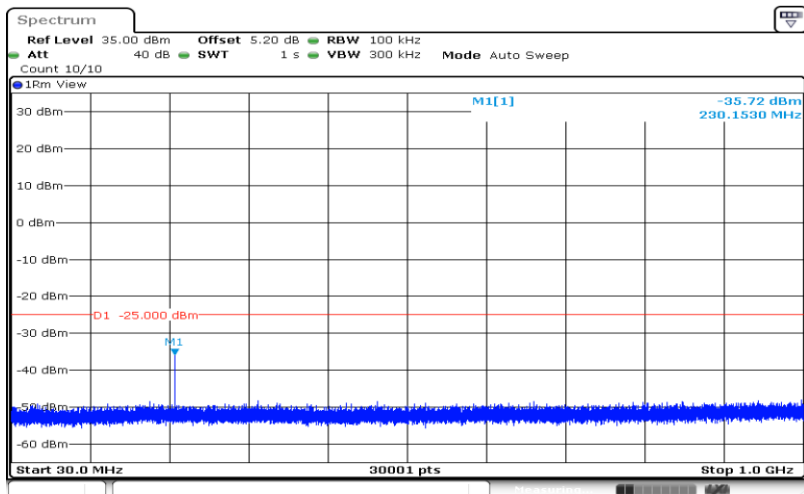
Band38-20MHz-QPSK-38150-1RB#0-Range2:1000~30000MHz



Date: 14.MAY.2020 02:47:24

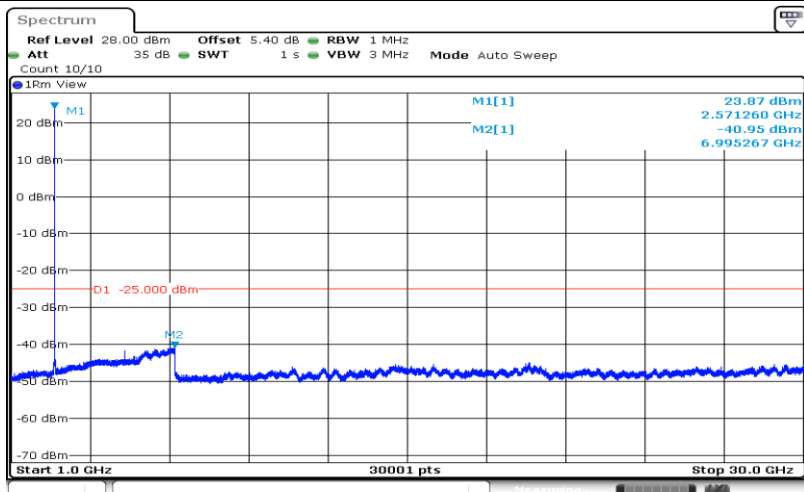


Band38-20MHz-16QAM-37850-1RB#0-Range1:30~1000MHz



Date: 18.MAY.2020 04:40:22

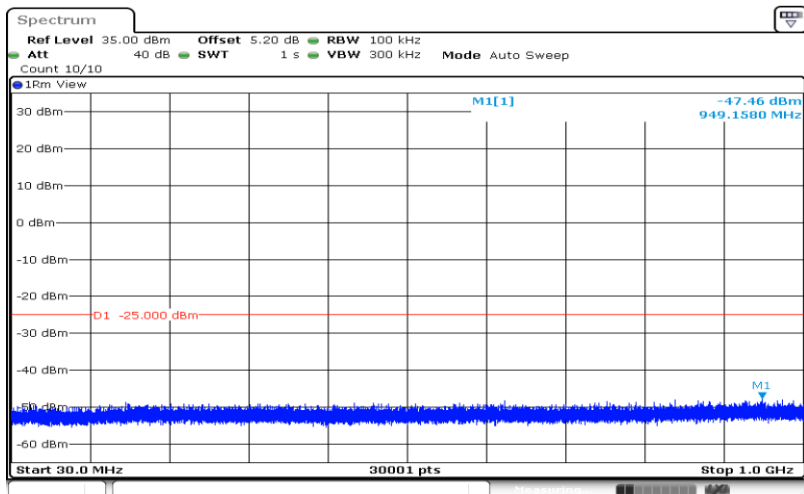
Band38-20MHz-16QAM-37850-1RB#0-Range2:1000~30000MHz



Date: 18.MAY.2020 04:40:39

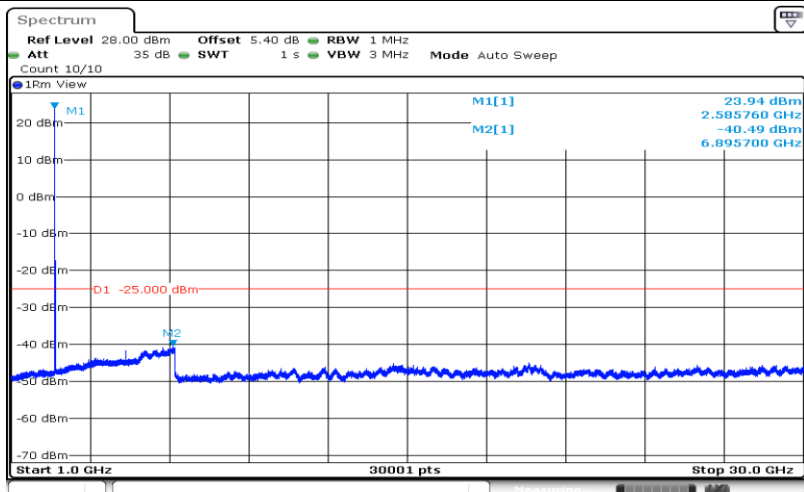


Band38-20MHz-16QAM-38000-1RB#0-Range1:30~1000MHz



Date: 18.MAY.2020 04:41:09

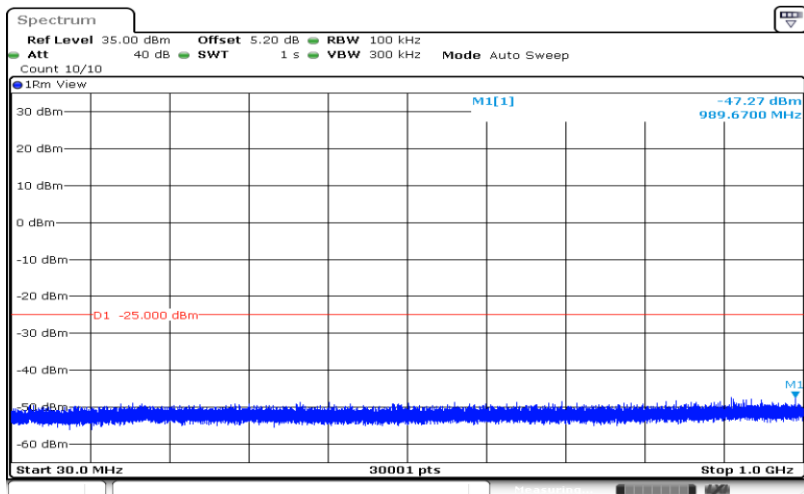
Band38-20MHz-16QAM-38000-1RB#0-Range2:1000~30000MHz



Date: 18.MAY.2020 04:41:25

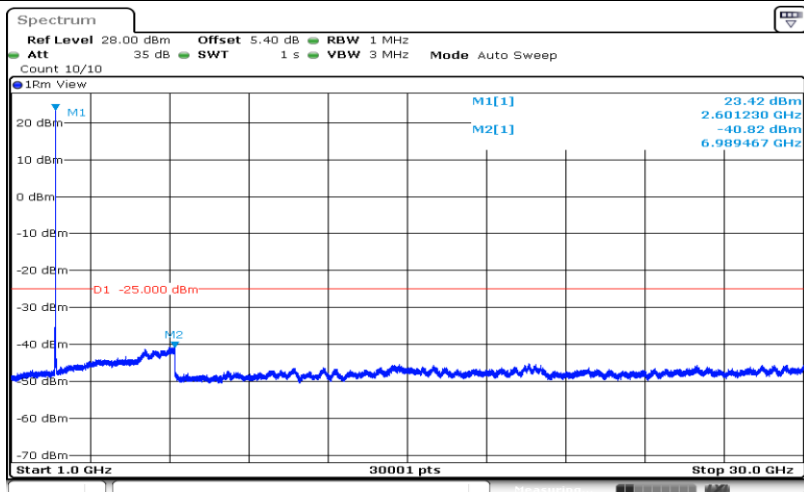


Band38-20MHz-16QAM-38150-1RB#0-Range1:30~1000MHz



Date: 18.MAY.2020 04:41:47

Band38-20MHz-16QAM-38150-1RB#0-Range2:1000~30000MHz



Date: 18.MAY.2020 04:42:04





7. Field Strength of Spurious Radiation

7.1. Test Mode =LTE/TM1 20MHz

7.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
64.650000	-79.41	-25.00	54.41	Vertical
125.000000	-85.62	-25.00	60.62	Vertical
925.245833	-75.73	-25.00	50.73	Vertical
5142.075000	-64.34	-25.00	39.34	Vertical
7713.150000	-50.36	-25.00	25.36	Vertical
10629.050000	-60.51	-25.00	35.51	Vertical
63.050000	-75.32	-25.00	50.32	Horizontal
275.700000	-85.74	-25.00	60.74	Horizontal
950.866667	-75.22	-25.00	50.22	Horizontal
5142.075000	-59.89	-25.00	34.89	Horizontal
7712.825000	-53.19	-25.00	28.19	Horizontal
10461.350000	-61.44	-25.00	36.44	Horizontal

7.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
65.750000	-80.27	-25.00	55.27	Vertical
125.000000	-85.86	-25.00	60.86	Vertical
945.137500	-74.96	-25.00	49.96	Vertical
5172.300000	-61.10	-25.00	36.10	Vertical
7758.325000	-46.80	-25.00	21.80	Vertical
10651.475000	-60.59	-25.00	35.59	Vertical
62.450000	-75.03	-25.00	50.03	Horizontal
484.329167	-82.31	-25.00	57.31	Horizontal
945.962500	-74.18	-25.00	49.18	Horizontal
5171.975000	-60.53	-25.00	35.53	Horizontal
7758.325000	-49.15	-25.00	24.15	Horizontal
10640.750000	-60.51	-25.00	35.51	Horizontal



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7.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
64.800000	-79.44	-25.00	54.44	Vertical
344.600000	-84.61	-25.00	59.61	Vertical
940.325000	-75.38	-25.00	50.38	Vertical
5202.200000	-58.63	-25.00	33.63	Vertical
7803.175000	-47.60	-25.00	22.60	Vertical
10603.700000	-60.78	-25.00	35.78	Vertical
62.050000	-75.51	-25.00	50.51	Horizontal
268.900000	-85.40	-25.00	60.40	Horizontal
950.133333	-74.59	-25.00	49.59	Horizontal
5201.875000	-61.90	-25.00	36.90	Horizontal
7803.175000	-51.07	-25.00	26.07	Horizontal
10615.400000	-60.82	-25.00	35.82	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

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEBAND 38	LTE/TM1 20MHz	LCH	TN	VL	-5.30	-0.00206	PASS
				VN	9.28	0.00360	PASS
				VH	0.47	0.00018	PASS
		MCH	TN	VL	-3.05	-0.00118	PASS
				VN	-0.63	-0.00024	PASS
				VH	-1.12	-0.00043	PASS
		HCH	TN	VL	7.52	0.00288	PASS
				VN	-7.30	-0.00280	PASS
				VH	2.51	0.00096	PASS
	LTE/TM2 20MHz	LCH	TN	VL	4.27	0.00166	PASS
				VN	3.19	0.00124	PASS
				VH	-4.84	-0.00188	PASS
		MCH	TN	VL	-1.95	-0.00075	PASS
				VN	1.10	0.00043	PASS
				VH	-7.34	-0.00283	PASS
		HCH	TN	VL	-9.02	-0.00346	PASS
				VN	-5.91	-0.00226	PASS
				VH	4.69	0.00180	PASS



8.2. Frequency Vs Temperature

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTE BAND 38	LTE/TM1 20MHz	LCH	VN	-30	3.67	0.00142	PASS
				-20	-5.42	-0.00210	PASS
				-10	7.72	0.00299	PASS
				0	-3.56	-0.00138	PASS
				10	3.49	0.00135	PASS
				20	-2.87	-0.00111	PASS
				30	-9.46	-0.00367	PASS
				40	1.79	0.00069	PASS
				50	4.19	0.00162	PASS
		MCH	VN	-30	-4.93	-0.00190	PASS
				-20	5.67	0.00218	PASS
				-10	-6.20	-0.00239	PASS
				0	-4.86	-0.00187	PASS
				10	5.20	0.00200	PASS
				20	8.22	0.00317	PASS
				30	5.18	0.00200	PASS
				40	-0.21	-0.00008	PASS
				50	3.52	0.00136	PASS
		HCH	VN	-30	4.08	0.00156	PASS
				-20	-5.89	-0.00226	PASS
				-10	-1.45	-0.00056	PASS
				0	-7.49	-0.00287	PASS
				10	2.35	0.00090	PASS
				20	-4.76	-0.00183	PASS
				30	-3.18	-0.00122	PASS
				40	8.61	0.00330	PASS
				50	7.39	0.00283	PASS

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTE BAND 38	LTE/TM2 20MHz	LCH	VN	-30	4.02	0.00156	PASS
				-20	-0.17	-0.00006	PASS
				-10	-0.65	-0.00025	PASS



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				0	-0.48	-0.00019	PASS
				10	0.93	0.00036	PASS
				20	8.55	0.00332	PASS
				30	7.60	0.00294	PASS
				40	-3.28	-0.00127	PASS
				50	-2.83	-0.00110	PASS
		MCH	VN	-30	6.35	0.00245	PASS
				-20	-3.87	-0.00149	PASS
				-10	-8.13	-0.00313	PASS
				0	8.74	0.00337	PASS
				10	3.86	0.00149	PASS
				20	9.15	0.00353	PASS
				30	-2.02	-0.00078	PASS
				40	-8.61	-0.00332	PASS
				50	-7.94	-0.00306	PASS
		HCH	VN	-30	-9.15	-0.00351	PASS
				-20	-2.53	-0.00097	PASS
				-10	7.59	0.00291	PASS
				0	2.41	0.00092	PASS
				10	-1.81	-0.00070	PASS
				20	-1.54	-0.00059	PASS
				30	2.09	0.00080	PASS
				40	5.96	0.00229	PASS
				50	-0.11	-0.00004	PASS



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