



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	22.32	21.22	33.00	PASS
Band38	5MHz	QPSK	37775	1RB#12	22.53	21.43	33.00	PASS
Band38	5MHz	QPSK	37775	1RB#24	22.33	21.23	33.00	PASS
Band38	5MHz	QPSK	37775	12RB#0	21.64	20.54	33.00	PASS
Band38	5MHz	QPSK	37775	12RB#6	21.61	20.51	33.00	PASS
Band38	5MHz	QPSK	37775	12RB#13	21.58	20.48	33.00	PASS
Band38	5MHz	QPSK	37775	25RB#0	21.53	20.43	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#0	22.17	21.07	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#12	22.26	21.16	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#24	22.06	20.96	33.00	PASS
Band38	5MHz	QPSK	38000	12RB#0	21.39	20.29	33.00	PASS
Band38	5MHz	QPSK	38000	12RB#6	21.43	20.33	33.00	PASS
Band38	5MHz	QPSK	38000	12RB#13	21.29	20.19	33.00	PASS
Band38	5MHz	QPSK	38000	25RB#0	21.31	20.21	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#0	22.00	20.90	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#12	22.08	20.98	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#24	22.00	20.90	33.00	PASS
Band38	5MHz	QPSK	38225	12RB#0	21.24	20.14	33.00	PASS
Band38	5MHz	QPSK	38225	12RB#6	21.22	20.12	33.00	PASS
Band38	5MHz	QPSK	38225	12RB#13	21.14	20.04	33.00	PASS
Band38	5MHz	QPSK	38225	25RB#0	21.07	19.97	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#0	21.51	20.41	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#12	21.62	20.52	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#24	21.38	20.28	33.00	PASS
Band38	5MHz	16QAM	37775	12RB#0	20.51	19.41	33.00	PASS
Band38	5MHz	16QAM	37775	12RB#6	20.56	19.46	33.00	PASS
Band38	5MHz	16QAM	37775	12RB#13	20.47	19.37	33.00	PASS
Band38	5MHz	16QAM	37775	25RB#0	20.55	19.45	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#0	21.31	20.21	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#12	21.33	20.23	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#24	21.19	20.09	33.00	PASS
Band38	5MHz	16QAM	38000	12RB#0	20.37	19.27	33.00	PASS
Band38	5MHz	16QAM	38000	12RB#6	20.34	19.24	33.00	PASS
Band38	5MHz	16QAM	38000	12RB#13	20.22	19.12	33.00	PASS
Band38	5MHz	16QAM	38000	25RB#0	20.33	19.23	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#0	21.13	20.03	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#12	21.16	20.06	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#24	21.07	19.97	33.00	PASS



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Band38	5MHz	16QAM	38225	12RB#0	20.11	19.01	33.00	PASS
Band38	5MHz	16QAM	38225	12RB#6	20.11	19.01	33.00	PASS
Band38	5MHz	16QAM	38225	12RB#13	20.05	18.95	33.00	PASS
Band38	5MHz	16QAM	38225	25RB#0	20.10	19.00	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#0	22.53	21.43	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#24	22.33	21.23	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#49	22.41	21.31	33.00	PASS
Band38	10MHz	QPSK	37800	25RB#0	21.59	20.49	33.00	PASS
Band38	10MHz	QPSK	37800	25RB#12	21.57	20.47	33.00	PASS
Band38	10MHz	QPSK	37800	25RB#25	21.58	20.48	33.00	PASS
Band38	10MHz	QPSK	37800	50RB#0	21.51	20.41	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#0	22.36	21.26	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#24	22.20	21.10	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#49	22.14	21.04	33.00	PASS
Band38	10MHz	QPSK	38000	25RB#0	21.40	20.30	33.00	PASS
Band38	10MHz	QPSK	38000	25RB#12	21.31	20.21	33.00	PASS
Band38	10MHz	QPSK	38000	25RB#25	21.33	20.23	33.00	PASS
Band38	10MHz	QPSK	38000	50RB#0	21.30	20.20	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#0	22.17	21.07	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#24	21.96	20.86	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#49	22.07	20.97	33.00	PASS
Band38	10MHz	QPSK	38200	25RB#0	21.29	20.19	33.00	PASS
Band38	10MHz	QPSK	38200	25RB#12	21.24	20.14	33.00	PASS
Band38	10MHz	QPSK	38200	25RB#25	21.18	20.08	33.00	PASS
Band38	10MHz	QPSK	38200	50RB#0	21.13	20.03	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#0	21.65	20.55	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#24	21.52	20.42	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#49	21.56	20.46	33.00	PASS
Band38	10MHz	16QAM	37800	25RB#0	20.58	19.48	33.00	PASS
Band38	10MHz	16QAM	37800	25RB#12	20.60	19.50	33.00	PASS
Band38	10MHz	16QAM	37800	25RB#25	20.58	19.48	33.00	PASS
Band38	10MHz	16QAM	37800	50RB#0	20.60	19.50	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#0	21.48	20.38	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#24	21.29	20.19	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#49	21.25	20.15	33.00	PASS
Band38	10MHz	16QAM	38000	25RB#0	20.42	19.32	33.00	PASS
Band38	10MHz	16QAM	38000	25RB#12	20.35	19.25	33.00	PASS
Band38	10MHz	16QAM	38000	25RB#25	20.34	19.24	33.00	PASS
Band38	10MHz	16QAM	38000	50RB#0	20.40	19.30	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#0	21.32	20.22	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#24	21.14	20.04	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#49	21.17	20.07	33.00	PASS
Band38	10MHz	16QAM	38200	25RB#0	20.24	19.14	33.00	PASS
Band38	10MHz	16QAM	38200	25RB#12	20.21	19.11	33.00	PASS
Band38	10MHz	16QAM	38200	25RB#25	20.15	19.05	33.00	PASS
Band38	10MHz	16QAM	38200	50RB#0	20.24	19.14	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#0	22.42	21.32	33.00	PASS



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Band38	15MHz	QPSK	37825	1RB#38	22.52	21.42	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#74	22.31	21.21	33.00	PASS
Band38	15MHz	QPSK	37825	36RB#0	21.61	20.51	33.00	PASS
Band38	15MHz	QPSK	37825	36RB#18	21.67	20.57	33.00	PASS
Band38	15MHz	QPSK	37825	36RB#39	21.61	20.51	33.00	PASS
Band38	15MHz	QPSK	37825	75RB#0	21.50	20.40	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#0	22.31	21.21	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#38	22.23	21.13	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#74	22.03	20.93	33.00	PASS
Band38	15MHz	QPSK	38000	36RB#0	21.43	20.33	33.00	PASS
Band38	15MHz	QPSK	38000	36RB#18	21.33	20.23	33.00	PASS
Band38	15MHz	QPSK	38000	36RB#39	21.29	20.19	33.00	PASS
Band38	15MHz	QPSK	38000	75RB#0	21.27	20.17	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#0	22.13	21.03	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#38	22.10	21.00	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#74	21.98	20.88	33.00	PASS
Band38	15MHz	QPSK	38175	36RB#0	21.22	20.12	33.00	PASS
Band38	15MHz	QPSK	38175	36RB#18	21.23	20.13	33.00	PASS
Band38	15MHz	QPSK	38175	36RB#39	21.20	20.10	33.00	PASS
Band38	15MHz	QPSK	38175	75RB#0	21.12	20.02	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#0	21.47	20.37	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#38	21.51	20.41	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#74	21.33	20.23	33.00	PASS
Band38	15MHz	16QAM	37825	36RB#0	20.54	19.44	33.00	PASS
Band38	15MHz	16QAM	37825	36RB#18	20.63	19.53	33.00	PASS
Band38	15MHz	16QAM	37825	36RB#39	20.47	19.37	33.00	PASS
Band38	15MHz	16QAM	37825	75RB#0	20.56	19.46	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#0	21.38	20.28	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#38	21.34	20.24	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#74	21.12	20.02	33.00	PASS
Band38	15MHz	16QAM	38000	36RB#0	20.43	19.33	33.00	PASS
Band38	15MHz	16QAM	38000	36RB#18	20.34	19.24	33.00	PASS
Band38	15MHz	16QAM	38000	36RB#39	20.21	19.11	33.00	PASS
Band38	15MHz	16QAM	38000	75RB#0	20.34	19.24	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#0	21.22	20.12	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#38	21.18	20.08	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#74	21.03	19.93	33.00	PASS
Band38	15MHz	16QAM	38175	36RB#0	20.17	19.07	33.00	PASS
Band38	15MHz	16QAM	38175	36RB#18	20.13	19.03	33.00	PASS
Band38	15MHz	16QAM	38175	36RB#39	20.09	18.99	33.00	PASS
Band38	15MHz	16QAM	38175	75RB#0	20.18	19.08	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#0	22.26	21.16	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#49	22.51	21.41	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#99	22.03	20.93	33.00	PASS
Band38	20MHz	QPSK	37850	50RB#0	21.47	20.37	33.00	PASS
Band38	20MHz	QPSK	37850	50RB#25	21.43	20.33	33.00	PASS
Band38	20MHz	QPSK	37850	50RB#50	21.37	20.27	33.00	PASS



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Band38	20MHz	QPSK	37850	100RB#0	21.42	20.32	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#0	22.17	21.07	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#49	22.27	21.17	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#99	21.82	20.72	33.00	PASS
Band38	20MHz	QPSK	38000	50RB#0	21.25	20.15	33.00	PASS
Band38	20MHz	QPSK	38000	50RB#25	21.23	20.13	33.00	PASS
Band38	20MHz	QPSK	38000	50RB#50	21.18	20.08	33.00	PASS
Band38	20MHz	QPSK	38000	100RB#0	21.30	20.20	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#0	21.95	20.85	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#49	22.21	21.11	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#99	21.76	20.66	33.00	PASS
Band38	20MHz	QPSK	38150	50RB#0	21.12	20.02	33.00	PASS
Band38	20MHz	QPSK	38150	50RB#25	21.04	19.94	33.00	PASS
Band38	20MHz	QPSK	38150	50RB#50	20.95	19.85	33.00	PASS
Band38	20MHz	QPSK	38150	100RB#0	21.12	20.02	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#0	21.33	20.23	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#49	21.60	20.50	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#99	21.11	20.01	33.00	PASS
Band38	20MHz	16QAM	37850	50RB#0	20.53	19.43	33.00	PASS
Band38	20MHz	16QAM	37850	50RB#25	20.51	19.41	33.00	PASS
Band38	20MHz	16QAM	37850	50RB#50	20.46	19.36	33.00	PASS
Band38	20MHz	16QAM	37850	100RB#0	20.59	19.49	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#0	21.23	20.13	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#49	21.41	20.31	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#99	20.93	19.83	33.00	PASS
Band38	20MHz	16QAM	38000	50RB#0	20.46	19.36	33.00	PASS
Band38	20MHz	16QAM	38000	50RB#25	20.35	19.25	33.00	PASS
Band38	20MHz	16QAM	38000	50RB#50	20.27	19.17	33.00	PASS
Band38	20MHz	16QAM	38000	100RB#0	20.36	19.26	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#0	21.10	20.00	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#49	21.29	20.19	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#99	20.86	19.76	33.00	PASS
Band38	20MHz	16QAM	38150	50RB#0	20.24	19.14	33.00	PASS
Band38	20MHz	16QAM	38150	50RB#25	20.25	19.15	33.00	PASS
Band38	20MHz	16QAM	38150	50RB#50	20.08	18.98	33.00	PASS
Band38	20MHz	16QAM	38150	100RB#0	20.16	19.06	33.00	PASS

Remark:

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

$$ERP [dBm] = \text{Conducted Power [dBm]} + \text{Gain [dBd]}$$

$$EIRP [dBm] = \text{Conducted Power [dBm]} + \text{Gain [dBi]}$$



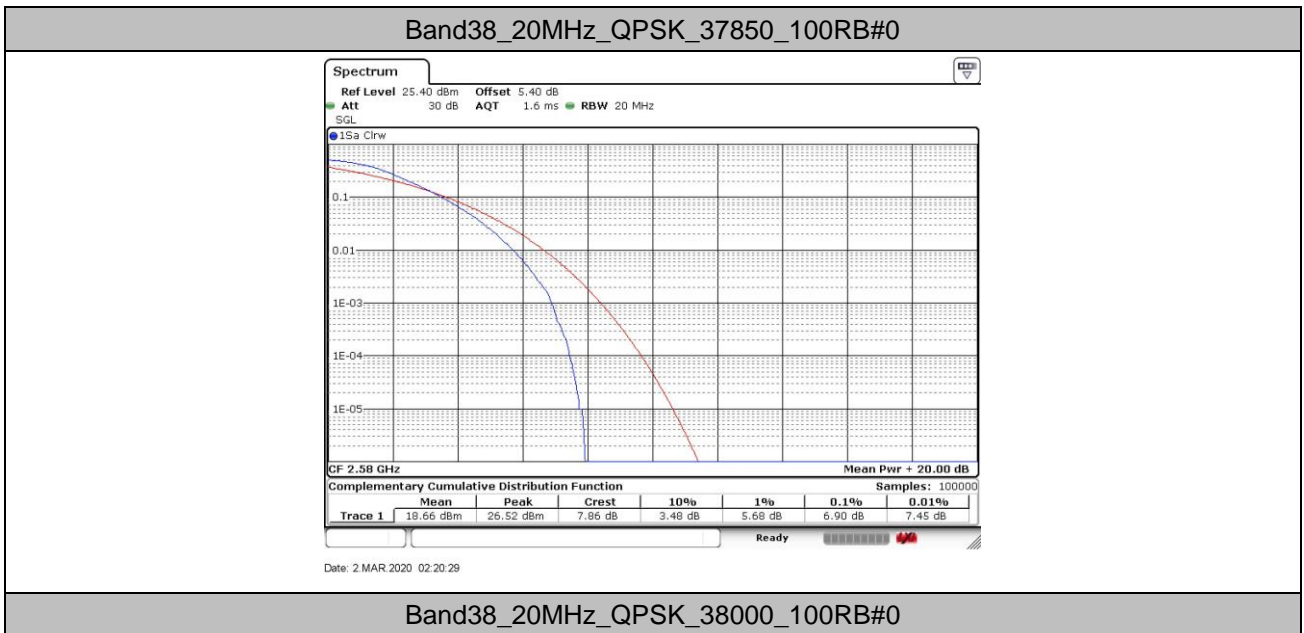
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2. Peak-to-Average Ratio(CCDF)

2.1. Test Result

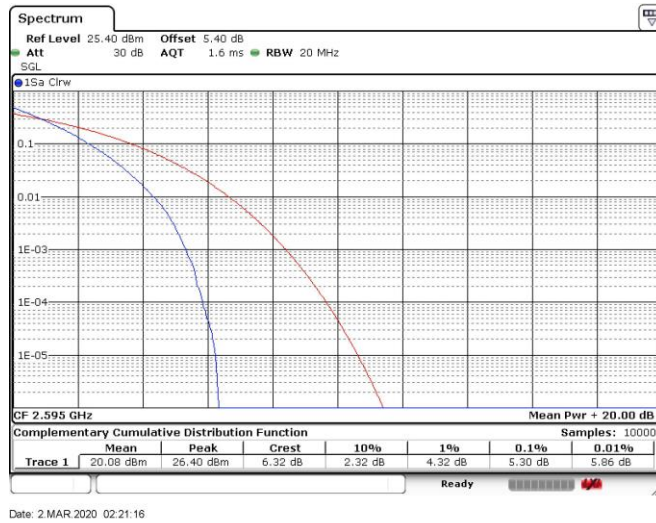
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band38	20MHz	QPSK	37850	100RB#0	6.90	13	PASS
Band38	20MHz	QPSK	38000	100RB#0	5.30	13	PASS
Band38	20MHz	QPSK	38150	100RB#0	5.28	13	PASS
Band38	20MHz	16QAM	37850	100RB#0	5.91	13	PASS
Band38	20MHz	16QAM	38000	100RB#0	6.32	13	PASS
Band38	20MHz	16QAM	38150	100RB#0	6.87	13	PASS

2.2. Test Plots



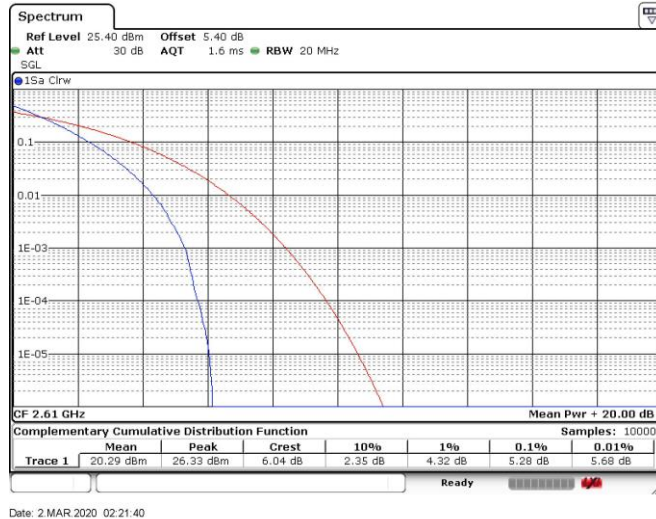
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Date: 2 MAR 2020 02:21:16

Band38_20MHz_QPSK_38150_100RB#0

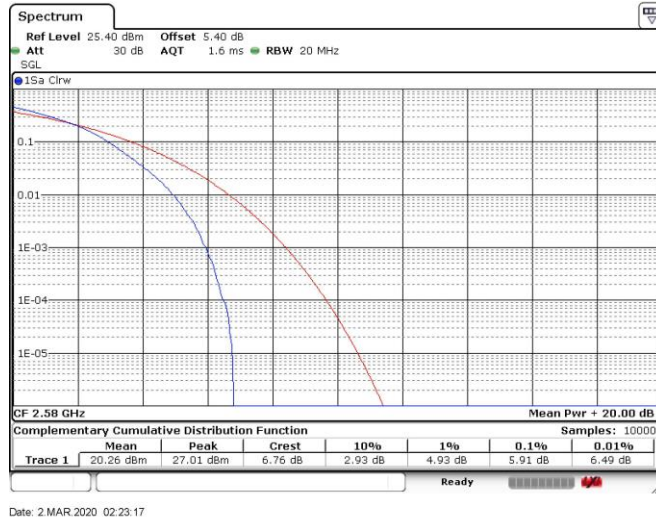


Date: 2 MAR 2020 02:21:40

Band38_20MHz_16QAM_37850_100RB#0

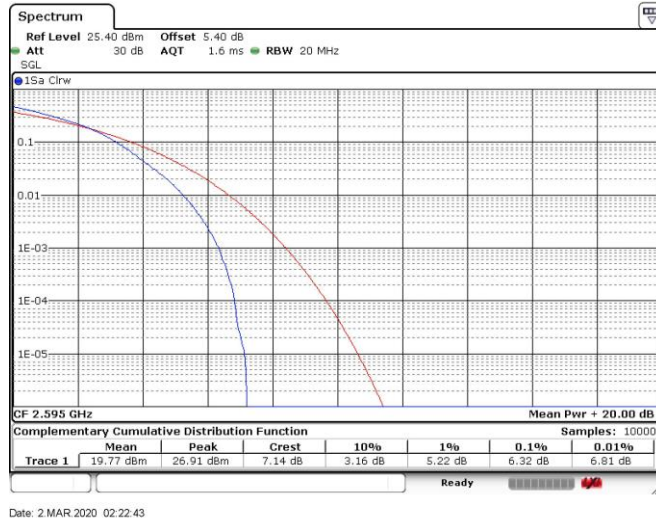


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Date: 2 MAR 2020 02:23:17

Band38_20MHz_16QAM_38000_100RB#0



Date: 2 MAR 2020 02:22:43

Band38_20MHz_16QAM_38150_100RB#0



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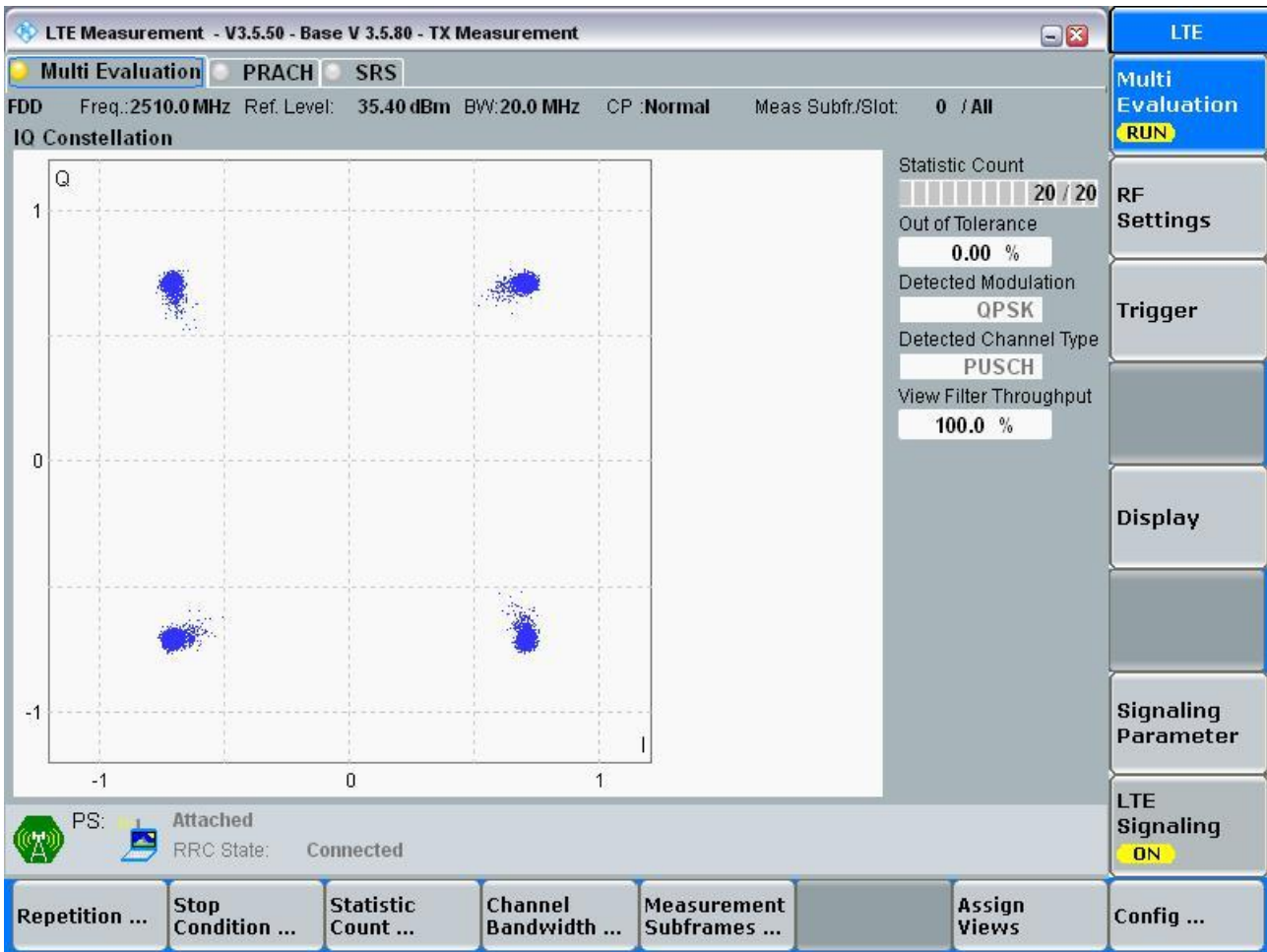
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3. Modulation Characteristics

3.1. Test Band = LTE Band 38

3.2. Test Mode = LTE /TM1 20MHz

3.2.1. Test Channel = LCH

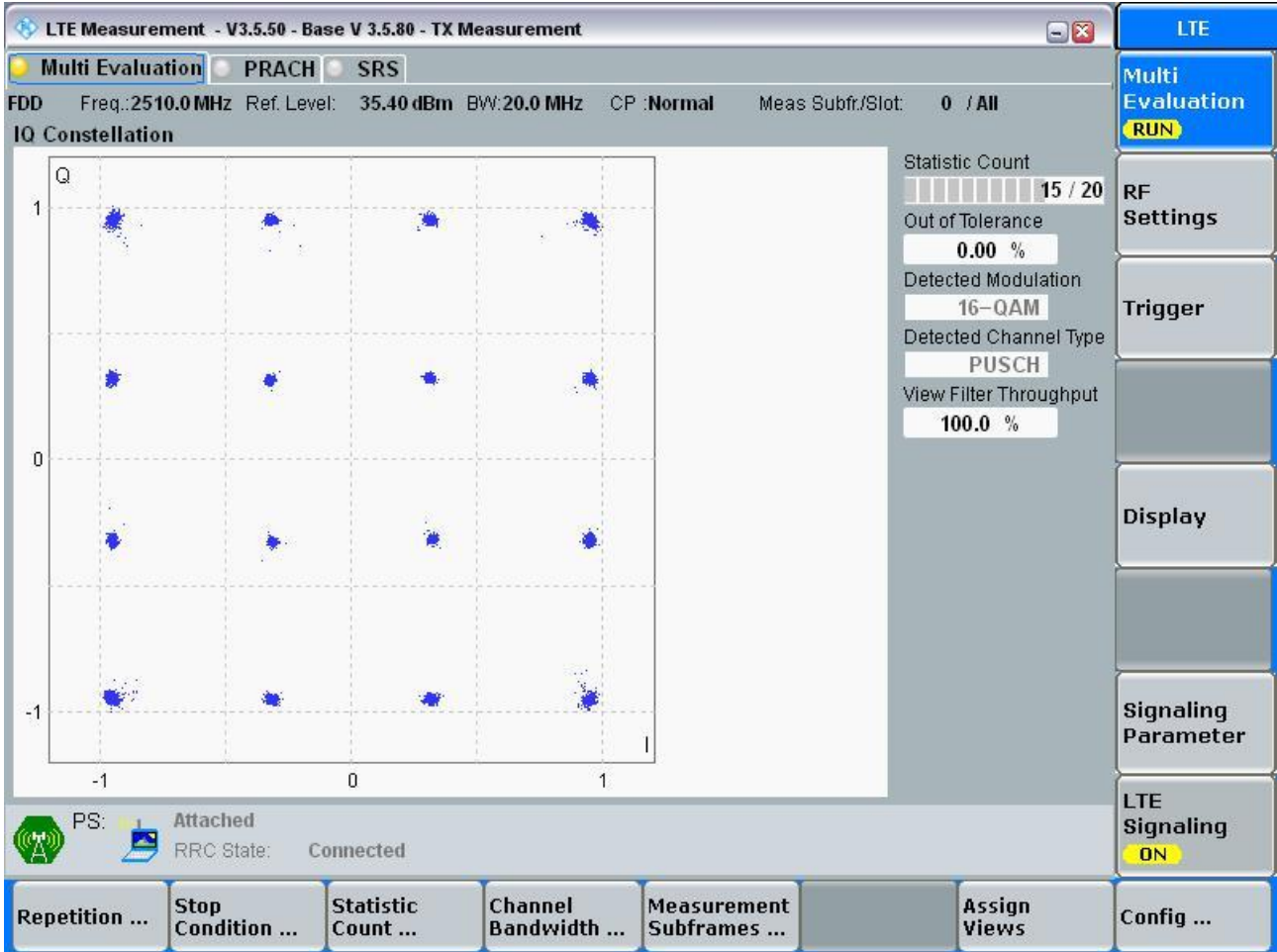


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3.3. Test Mode = LTE /TM2 20MHz

3.3.1. Test Channel = LCH



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4. 26dB Bandwidth and Occupied Bandwidth

4.1. Test Result

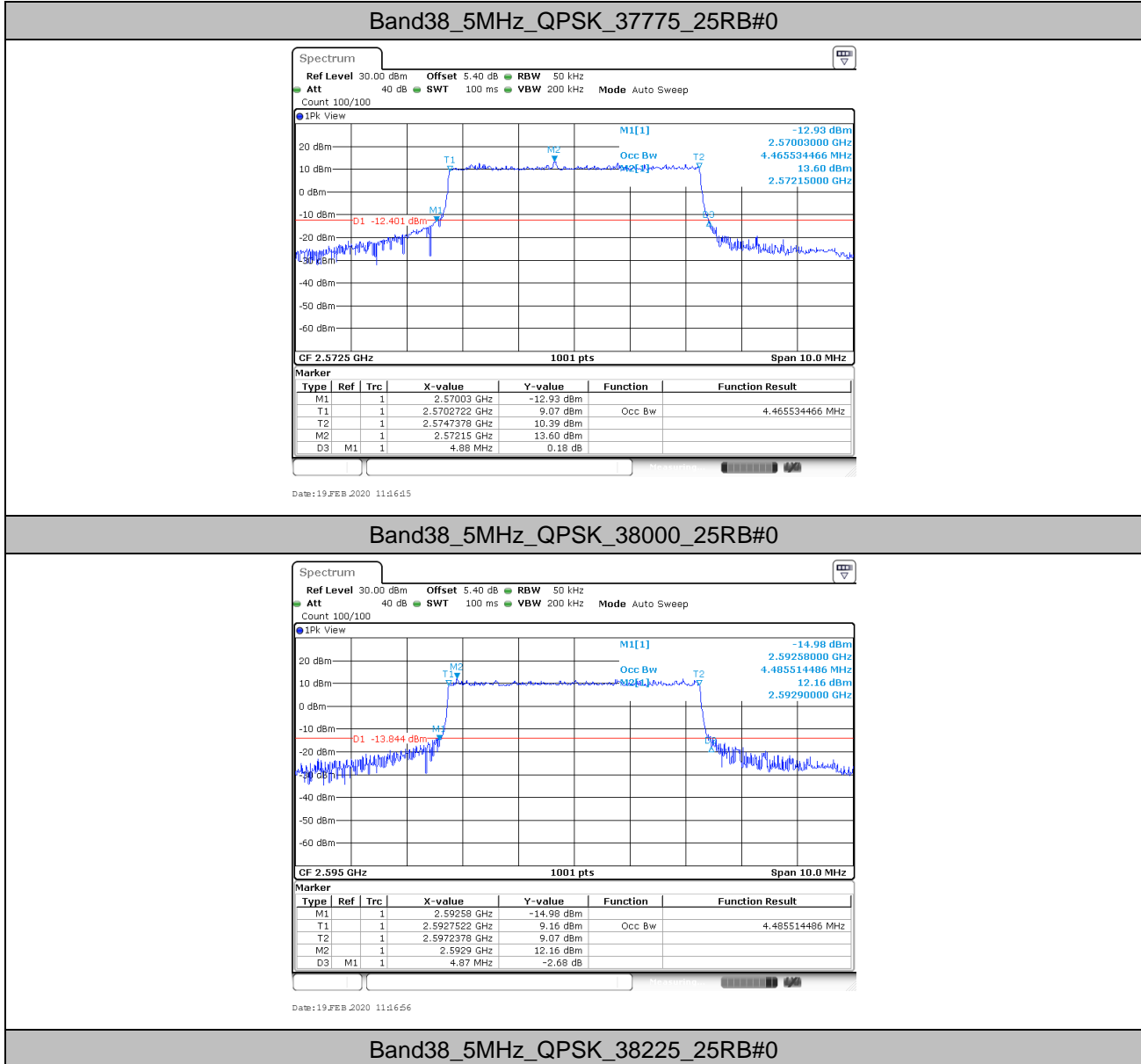
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band38	5MHz	QPSK	37775	25RB#0	4.466	4.880	PASS
Band38	5MHz	QPSK	38000	25RB#0	4.486	4.870	PASS
Band38	5MHz	QPSK	38225	25RB#0	4.456	4.860	PASS
Band38	5MHz	16QAM	37775	25RB#0	4.466	4.820	PASS
Band38	5MHz	16QAM	38000	25RB#0	4.466	4.910	PASS
Band38	5MHz	16QAM	38225	25RB#0	4.466	4.850	PASS
Band38	10MHz	QPSK	37800	50RB#0	8.951	9.560	PASS
Band38	10MHz	QPSK	38000	50RB#0	8.951	9.620	PASS
Band38	10MHz	QPSK	38200	50RB#0	8.951	9.840	PASS
Band38	10MHz	16QAM	37800	50RB#0	8.931	10.380	PASS
Band38	10MHz	16QAM	38000	50RB#0	8.931	9.620	PASS
Band38	10MHz	16QAM	38200	50RB#0	8.931	9.480	PASS
Band38	15MHz	QPSK	37825	75RB#0	13.427	15.660	PASS
Band38	15MHz	QPSK	38000	75RB#0	13.457	15.510	PASS
Band38	15MHz	QPSK	38175	75RB#0	13.516	16.050	PASS
Band38	15MHz	16QAM	37825	75RB#0	13.516	17.340	PASS
Band38	15MHz	16QAM	38000	75RB#0	13.487	15.840	PASS
Band38	15MHz	16QAM	38175	75RB#0	13.487	16.140	PASS
Band38	20MHz	QPSK	37850	100RB#0	17.902	20.400	PASS
Band38	20MHz	QPSK	38000	100RB#0	17.902	19.760	PASS
Band38	20MHz	QPSK	38150	100RB#0	17.942	19.880	PASS
Band38	20MHz	16QAM	37850	100RB#0	17.862	19.320	PASS
Band38	20MHz	16QAM	38000	100RB#0	17.902	20.960	PASS
Band38	20MHz	16QAM	38150	100RB#0	17.902	19.880	PASS



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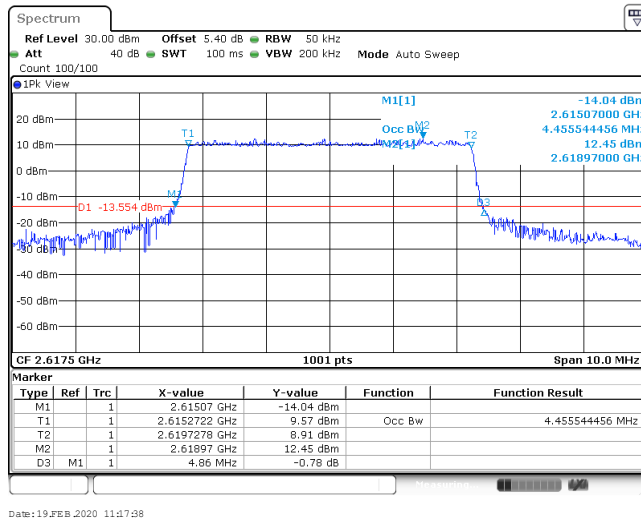
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4.2. Test Plots

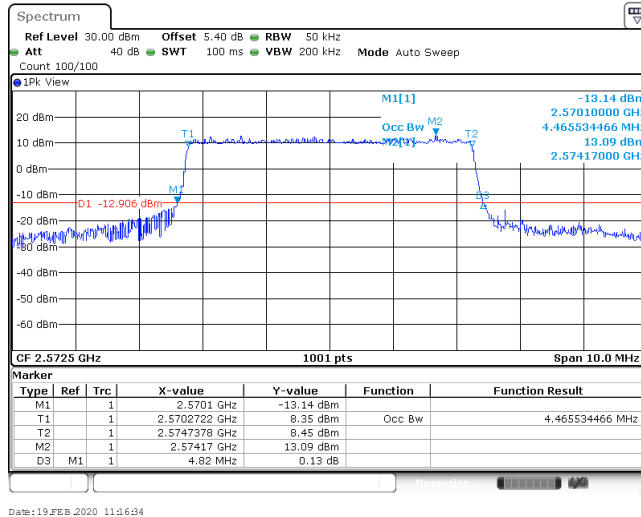


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Band38_5MHz_16QAM_3775_25RB#



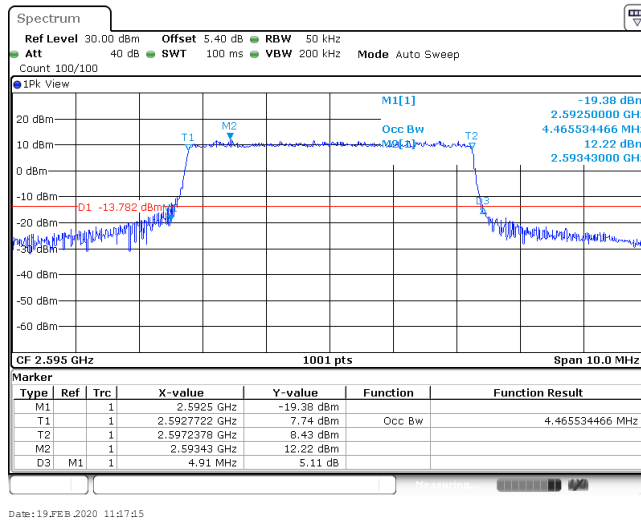
Band38_5MHz_16QAM_3800_25RB#



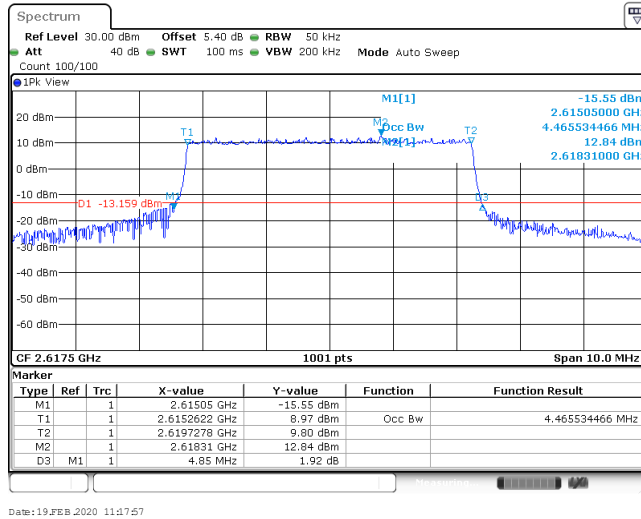
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Band38_5MHz_16QAM_38225_25RB#

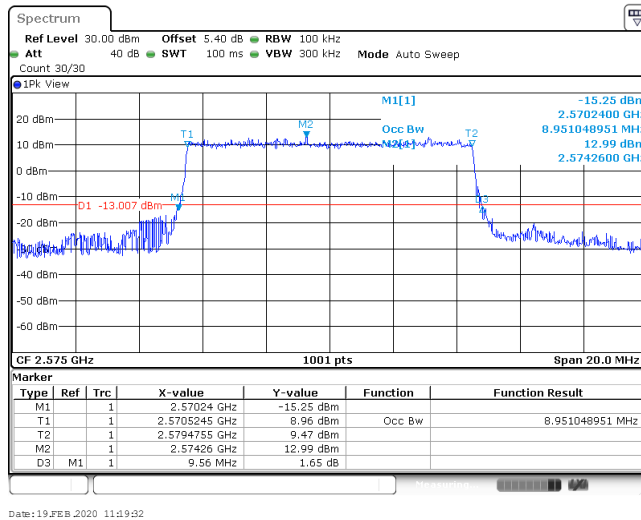


Band38_10MHz_QPSK_37800_50RB#



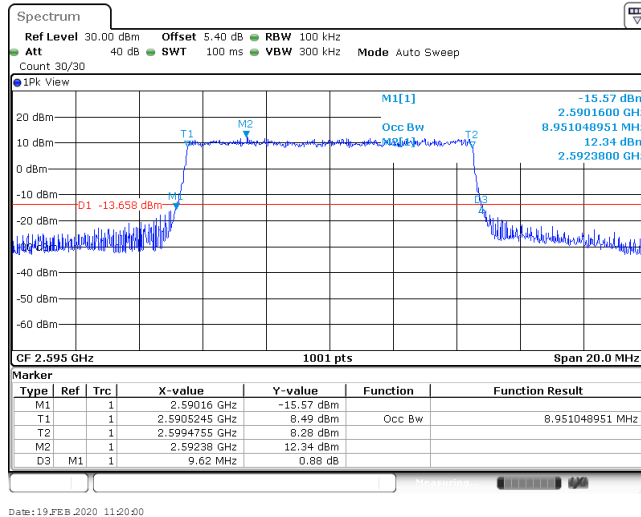
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Date: 19 FEB 2020 11:19:32

Band38_10MHz_QPSK_38000_50RB#0

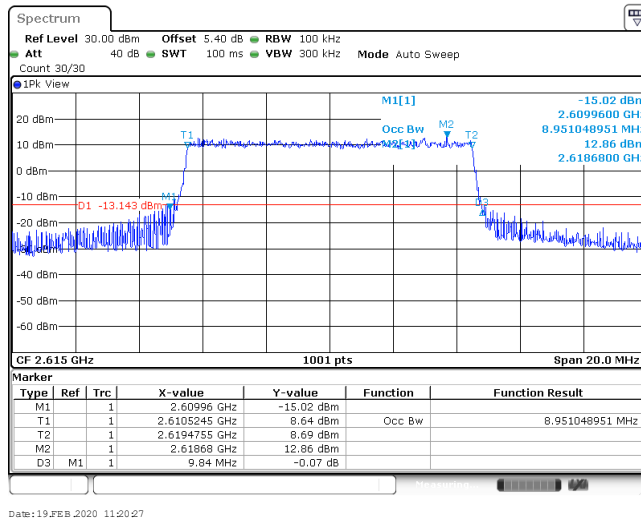


Date: 19 FEB 2020 11:20:00

Band38_10MHz_QPSK_38200_50RB#0

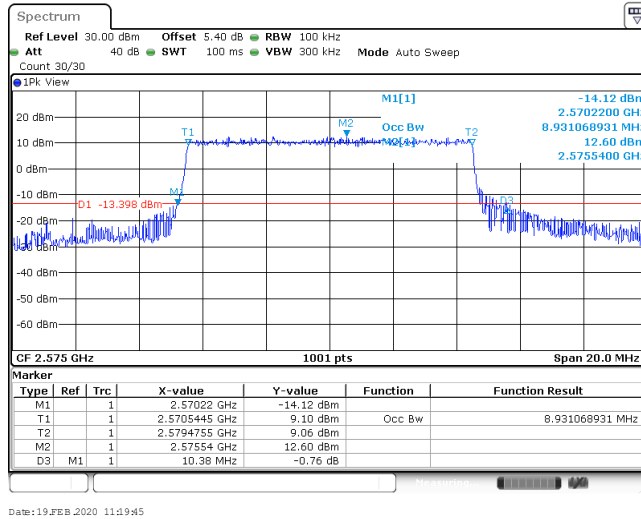


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Date: 19 FEB 2020 11:20:27

Band38_10MHz_16QAM_37800_50RB#0

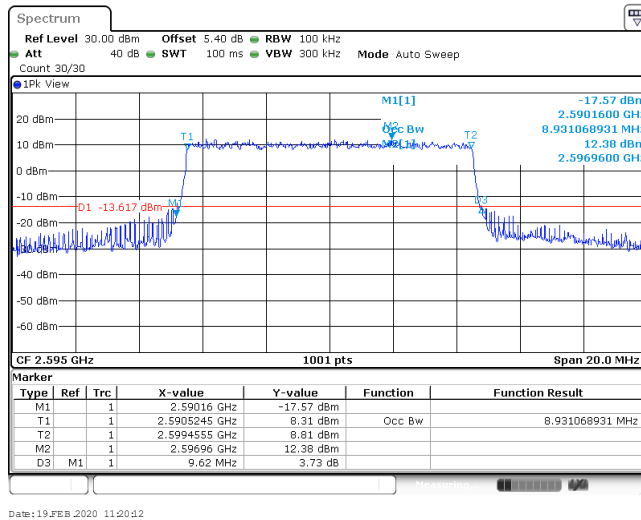


Date: 19 FEB 2020 11:19:45

Band38_10MHz_16QAM_38000_50RB#0

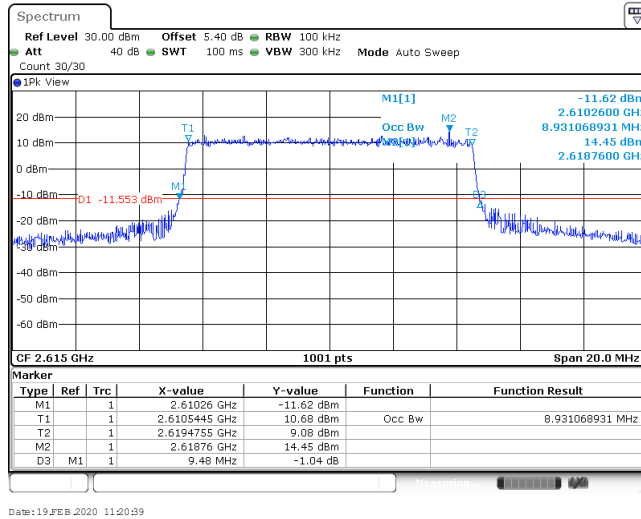


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Band38_10MHz_16QAM_38200_50RB#0

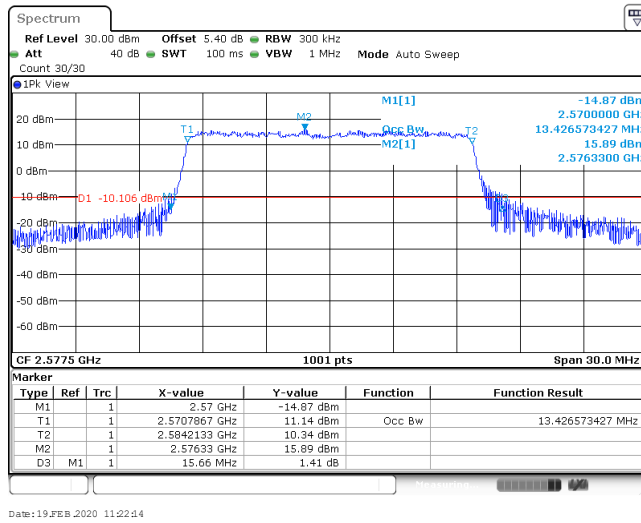


Date: 19 FEB 2020 11:20:39

Band38_15MHz_QPSK_37825_75RB#0

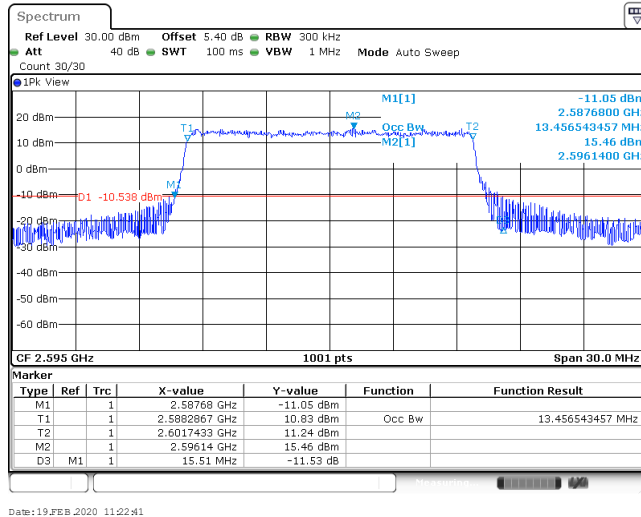


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Date: 19.FEB.2020 11:22:14

Band38_15MHz_QPSK_38000_75RB#0



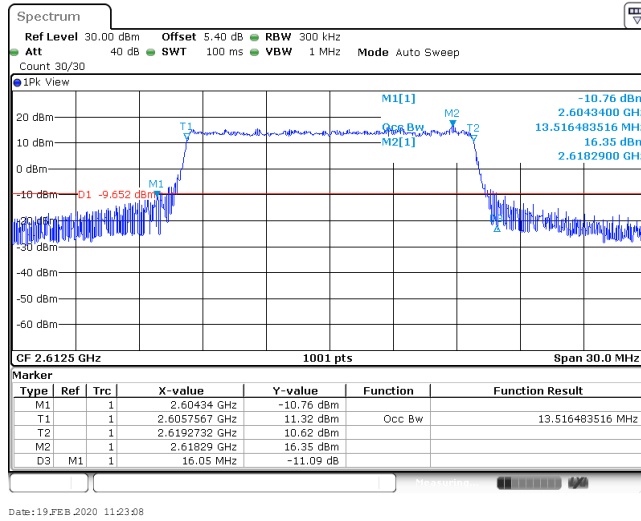
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Band38_15MHz_QPSK_38175_75RB#0



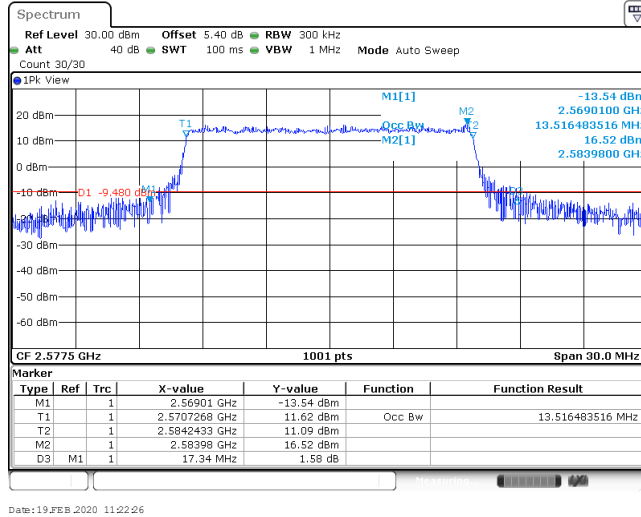
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Band38_15MHz_16QAM_37825_75RB#0

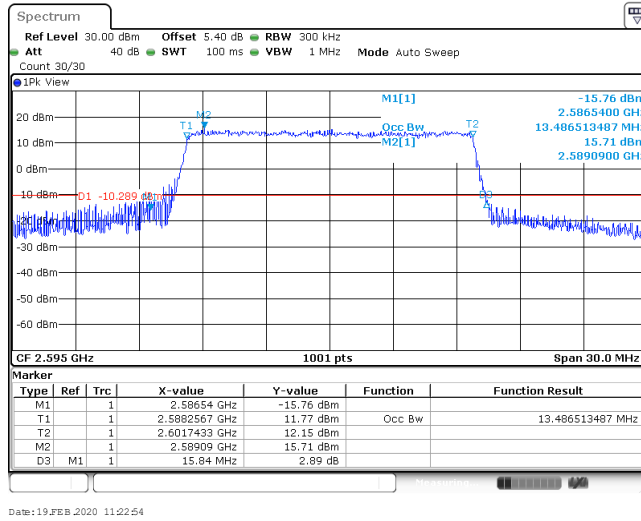


Date: 19 FEB 2020 11:22:26

Band38_15MHz_16QAM_38000_75RB#0

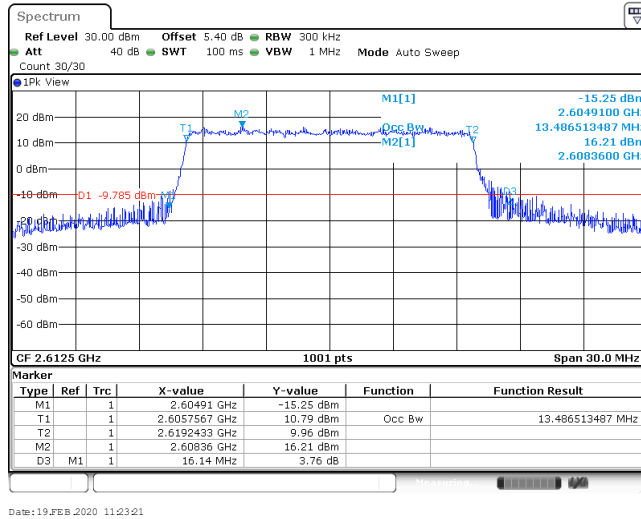


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Date: 19.FEB.2020 11:22:54

Band38_15MHz_16QAM_38175_75RB#0

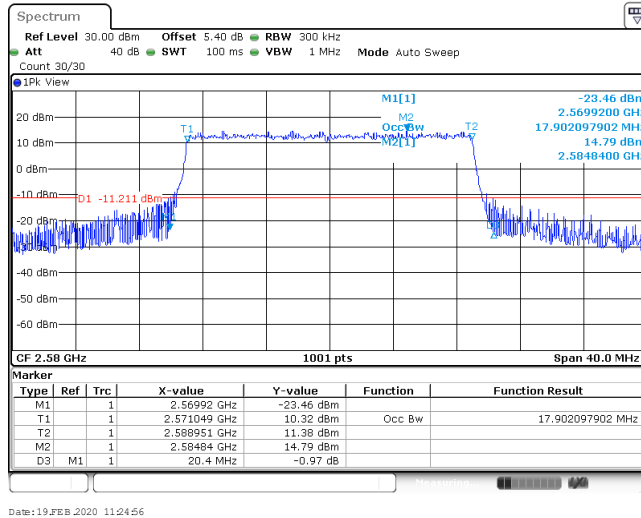


Date: 19.FEB.2020 11:23:21

Band38_20MHz_QPSK_37850_100RB#0

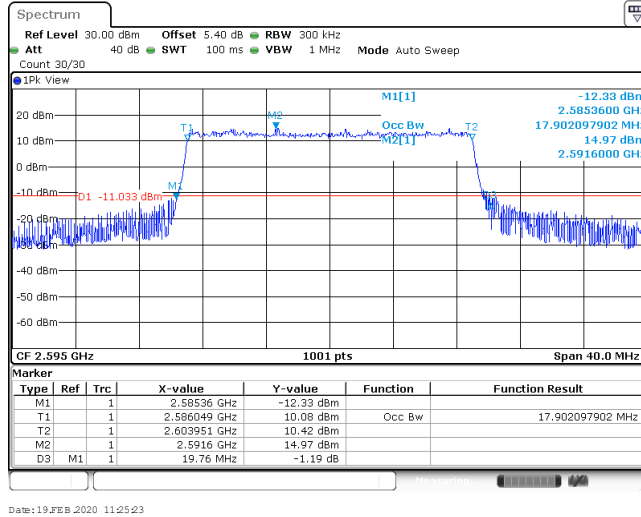


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Date: 19 FEB 2020 11:24:56

Band38_20MHz_QPSK_38000_100RB#0

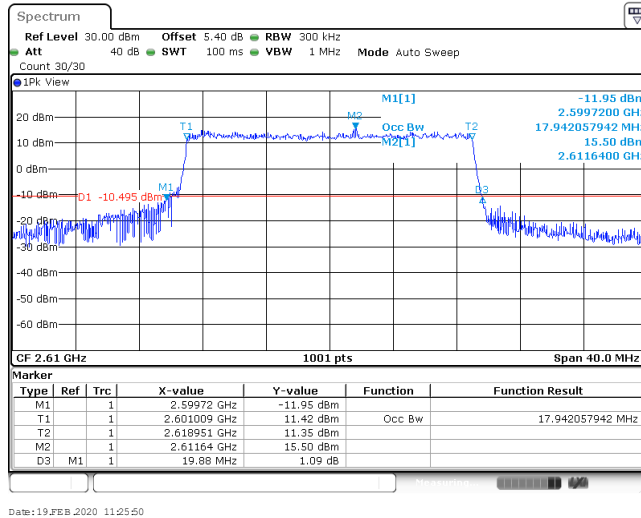


Date: 19 FEB 2020 11:25:23

Band38_20MHz_QPSK_38150_100RB#0

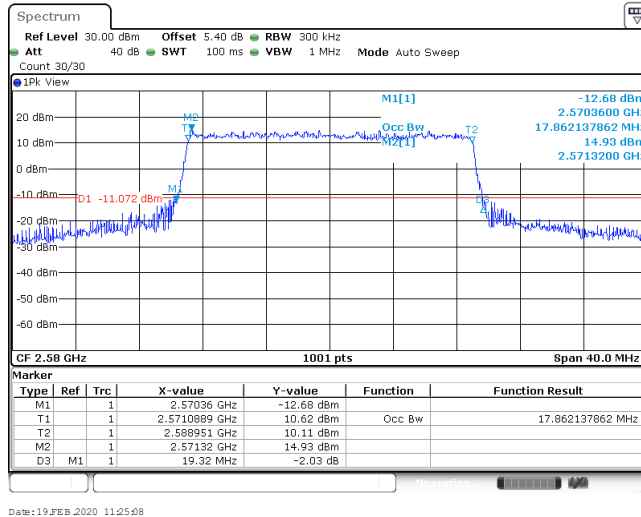


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Date: 19 FEB 2020 11:25:50

Band38_20MHz_16QAM_37850_100RB#0

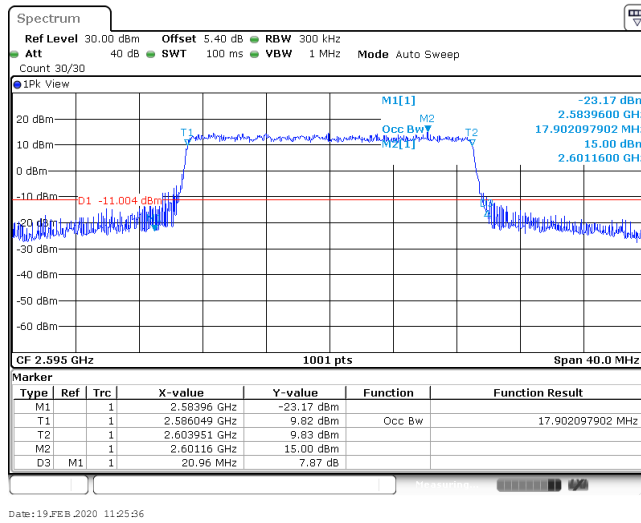


Date: 19 FEB 2020 11:25:08

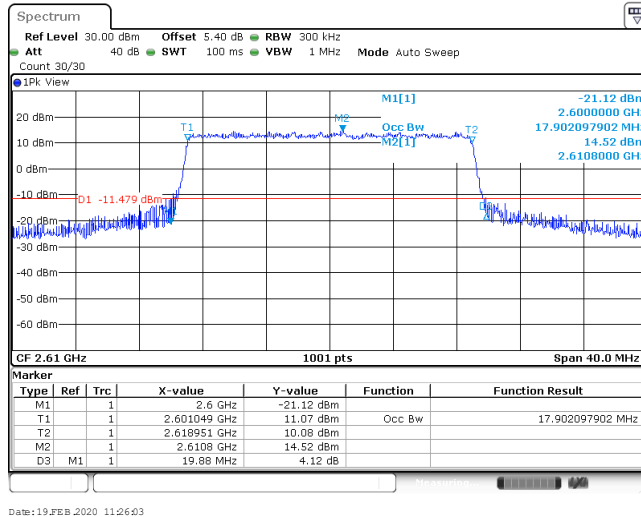
Band38_20MHz_16QAM_38000_100RB#0



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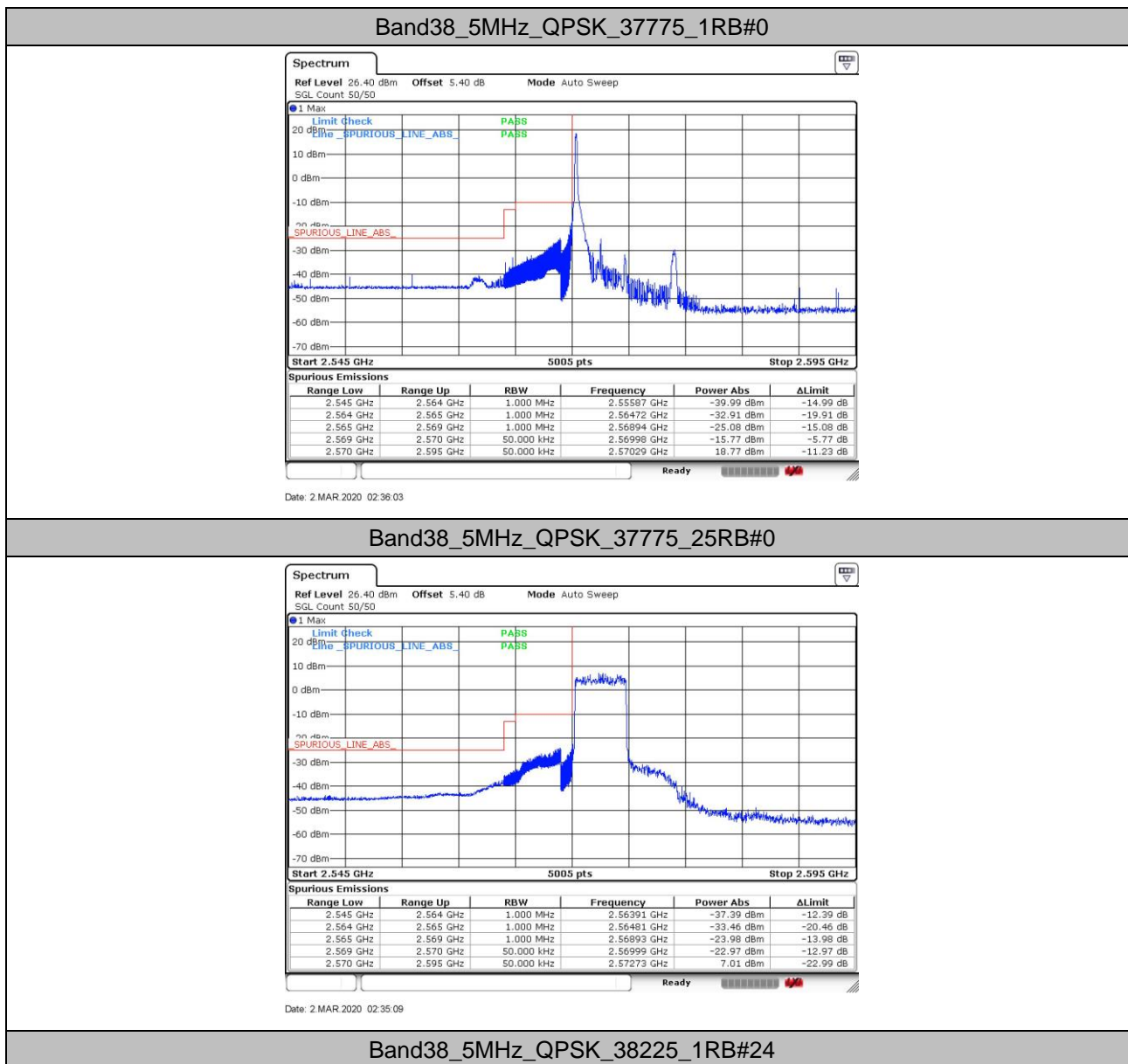
Band38_20MHz_16QAM_38150_100RB#0



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5. Band Edge Compliance

5.1. Test Plots

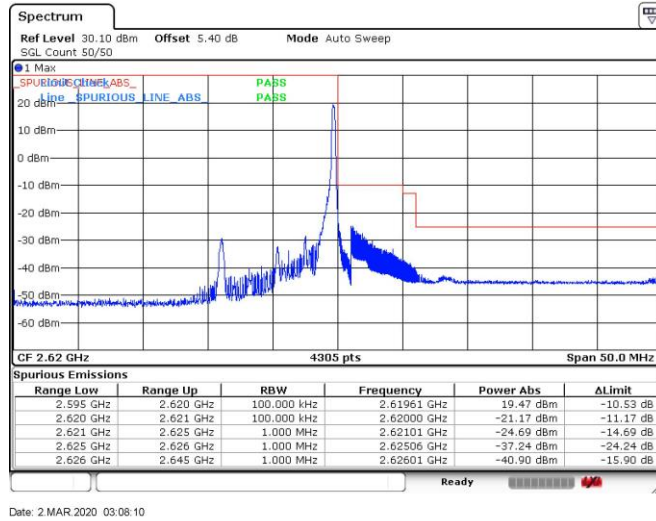


Band38_5MHz_QPSK_38225_1RB#24

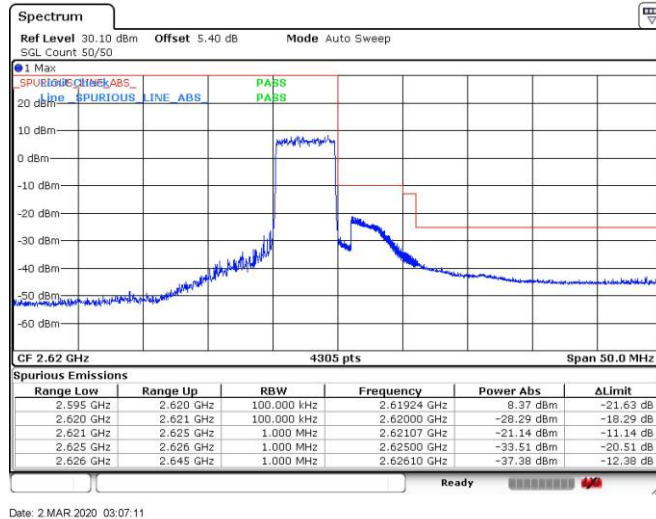


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Band38_5MHz_QPSK_38225_25RB#



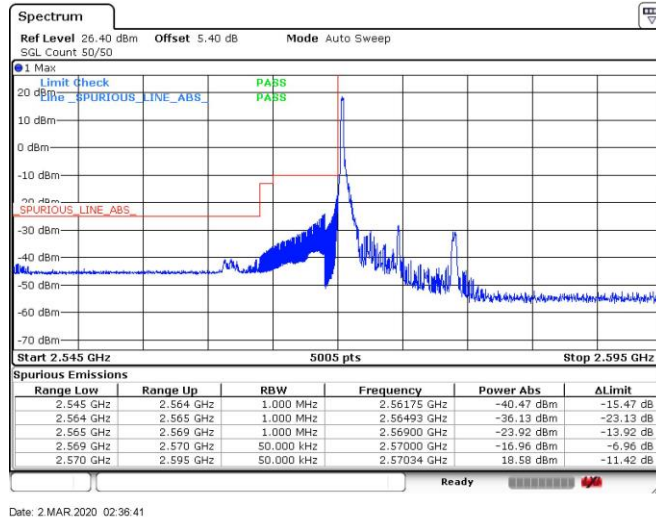
Band38_5MHz_16QAM_37775_1RB#



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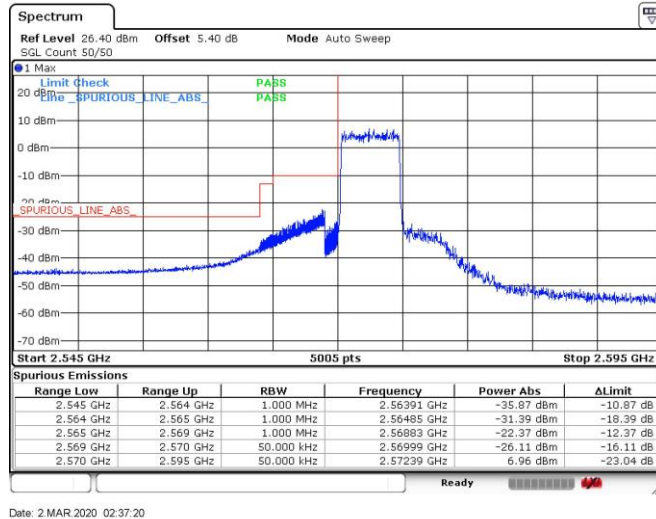
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Date: 2 MAR 2020 02:36:41

Band38_5MHz_16QAM_3775_25RB#0

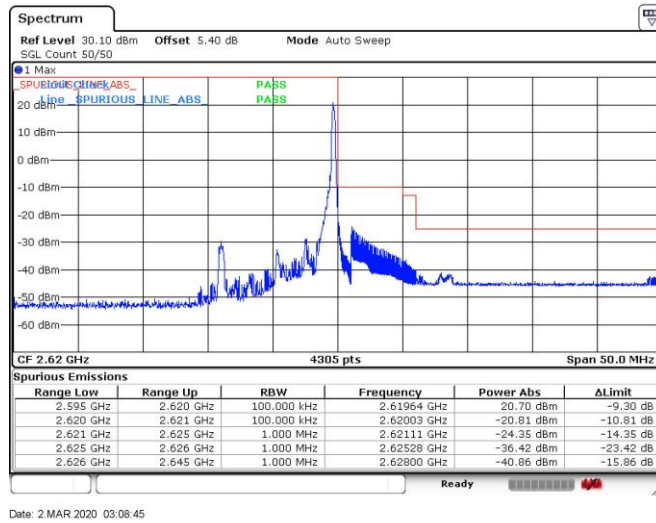


Date: 2 MAR 2020 02:37:20

Band38_5MHz_16QAM_38225_1RB#24

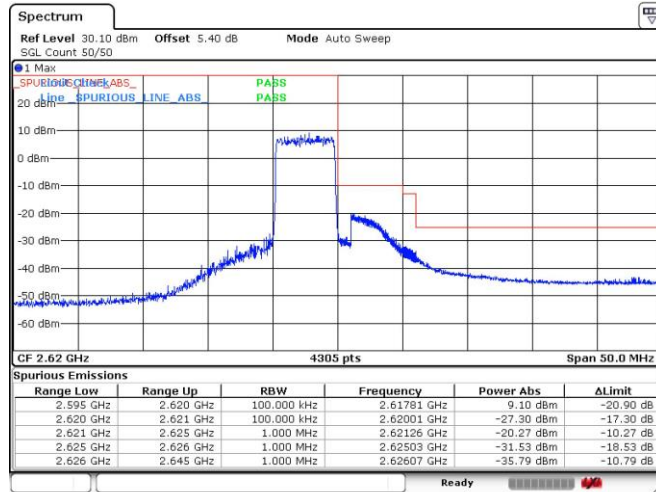


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Date: 2 MAR 2020 03:08:45

Band38_5MHz_16QAM_38225_25RB#0

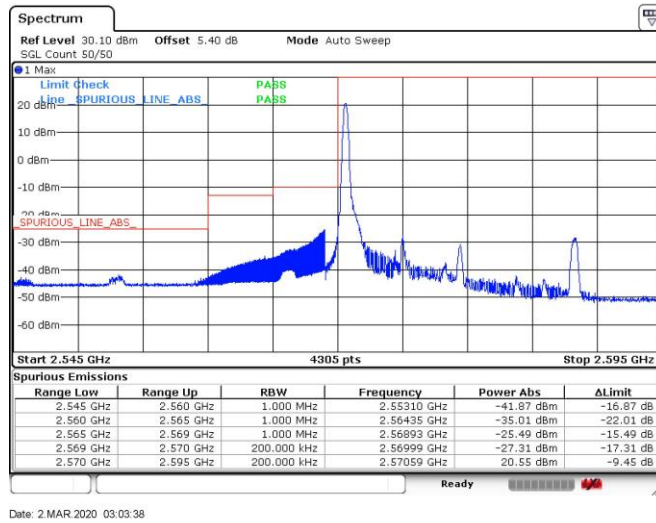


Date: 2 MAR 2020 03:09:49

Band38_10MHz_QPSK_37800_1RB#0

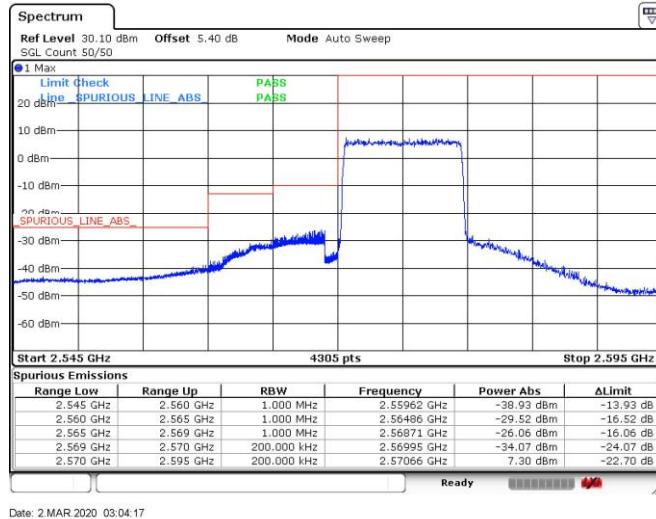


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Date: 2 MAR 2020 03:03:38

Band38_10MHz_QPSK_37800_50RB#0

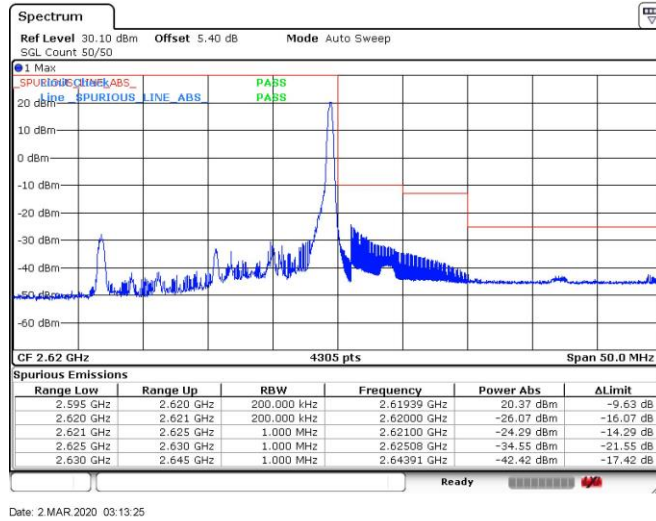


Date: 2 MAR 2020 03:04:17

Band38_10MHz_QPSK_38200_1RB#49

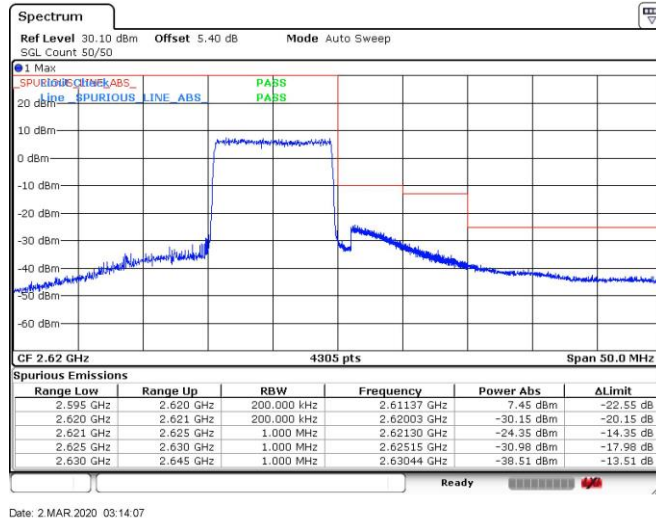


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Date: 2 MAR 2020 03:13:25

Band38_10MHz_QPSK_38200_50RB#0

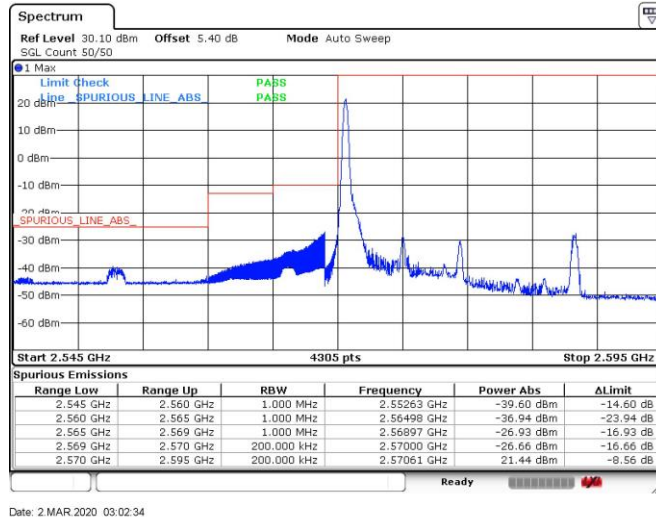


Date: 2 MAR 2020 03:14:07

Band38_10MHz_16QAM_37800_1RB#0

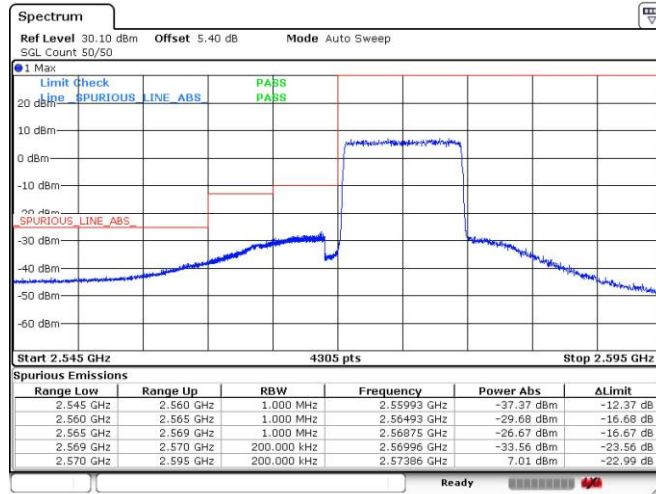


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Date: 2 MAR 2020 03:02:34

Band38_10MHz_16QAM_37800_50RB#0

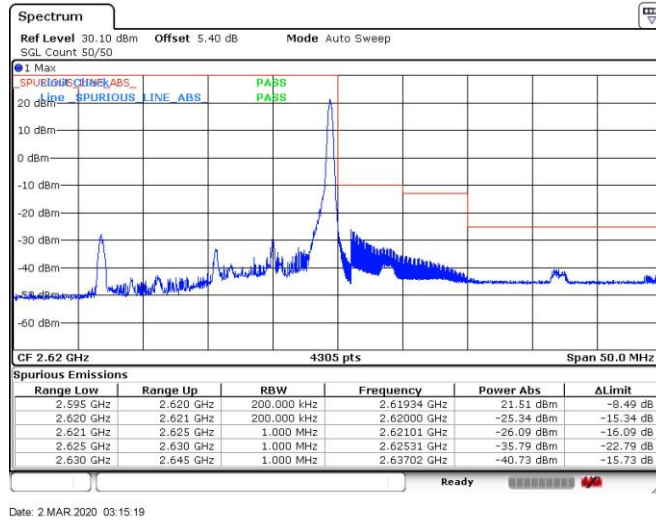


Date: 2 MAR 2020 02:59:42

Band38_10MHz_16QAM_38200_1RB#49

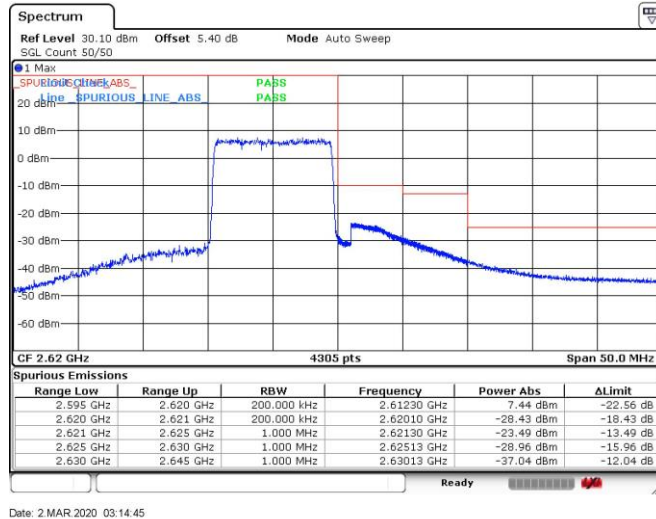


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Date: 2 MAR 2020 03:15:19

Band38_10MHz_16QAM_38200_50RB#0

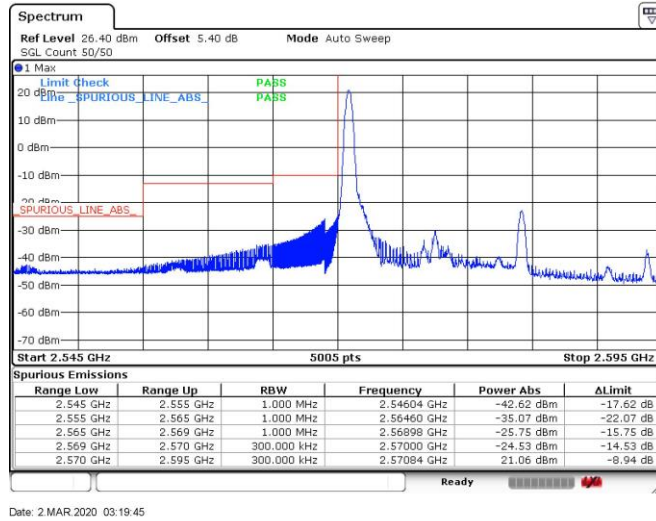


Date: 2 MAR 2020 03:14:45

Band38_15MHz_QPSK_37825_1RB#0

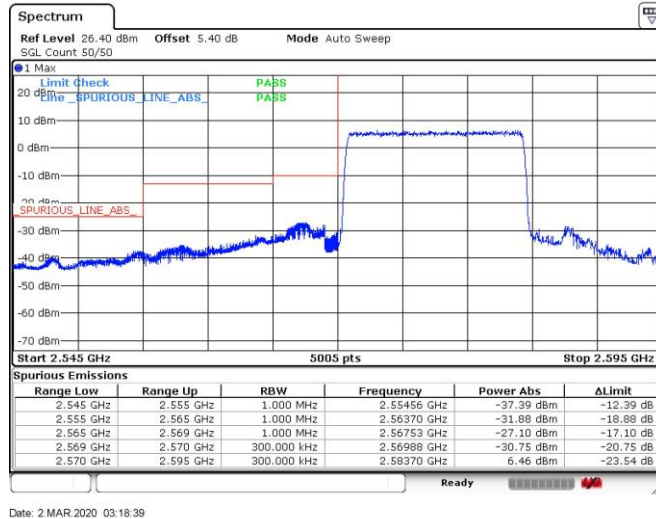


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Date: 2 MAR 2020 03:19:45

Band38_15MHz_QPSK_37825_75RB#0

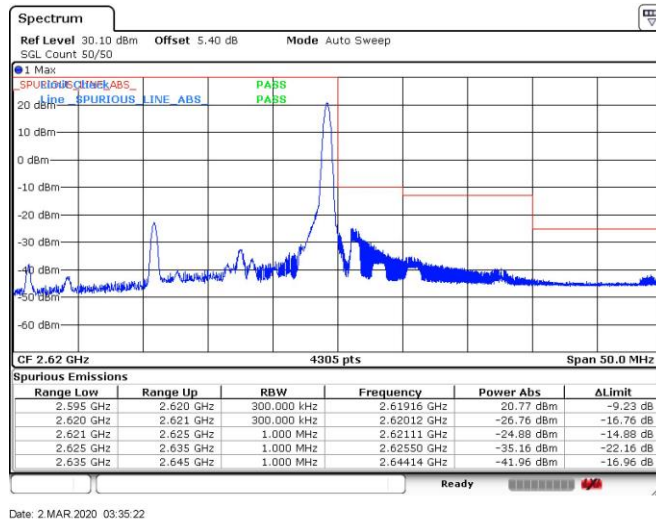


Date: 2 MAR 2020 03:18:39

Band38_15MHz_QPSK_38175_1RB#74

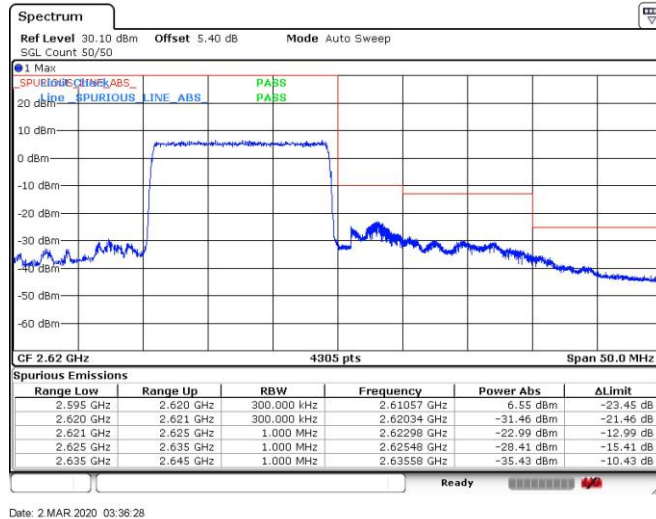


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Date: 2 MAR 2020 03:35:22

Band38_15MHz_QPSK_38175_75RB#0



Date: 2 MAR 2020 03:36:28

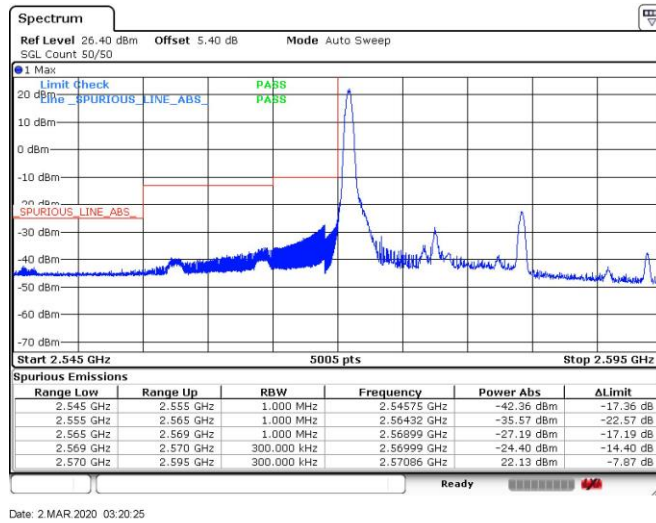
Band38_15MHz_16QAM_37825_1RB#0



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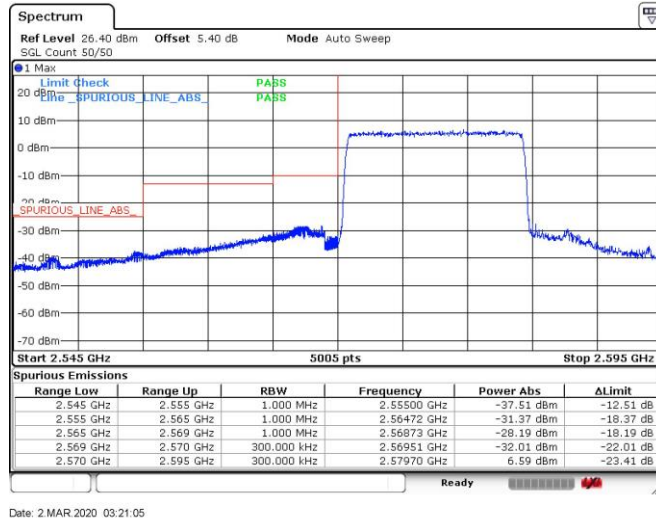
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Date: 2 MAR 2020 03:20:25

Band38_15MHz_16QAM_37825_75RB#0

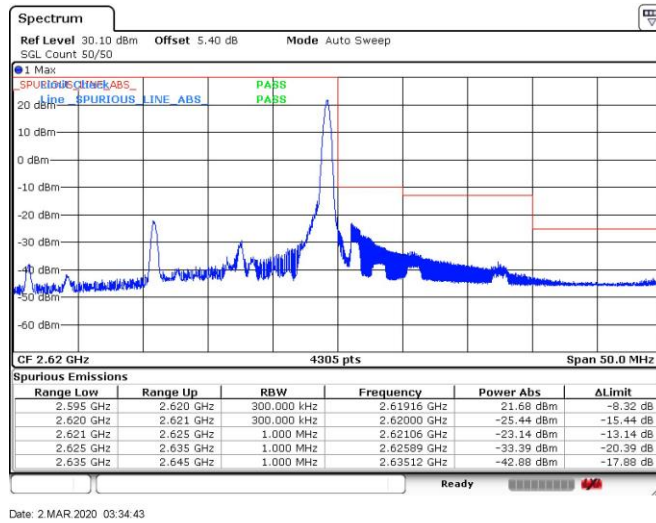


Date: 2 MAR 2020 03:21:05

Band38_15MHz_16QAM_38175_1RB#74

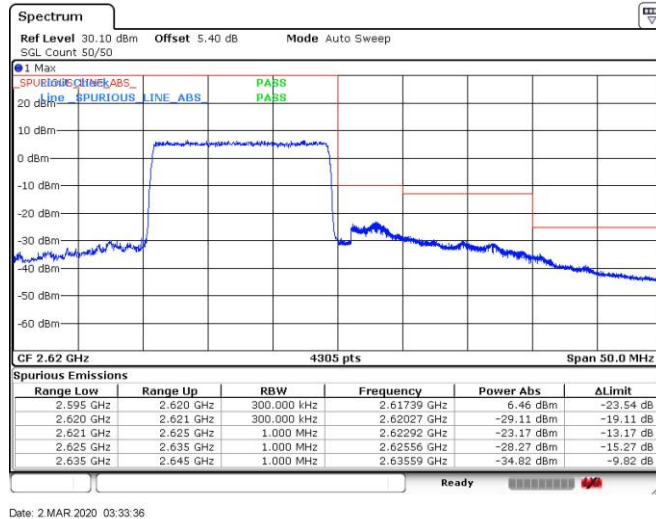


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Date: 2 MAR 2020 03:34:43

Band38_15MHz_16QAM_38175_75RB#0

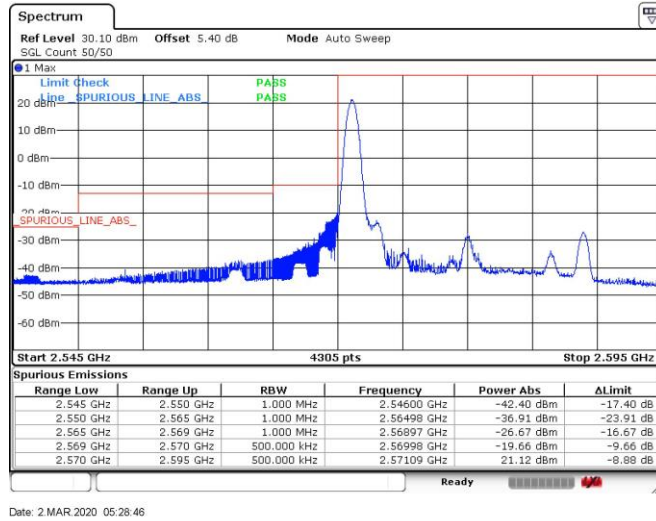


Date: 2 MAR 2020 03:33:36

Band38_20MHz_QPSK_37850_1RB#0

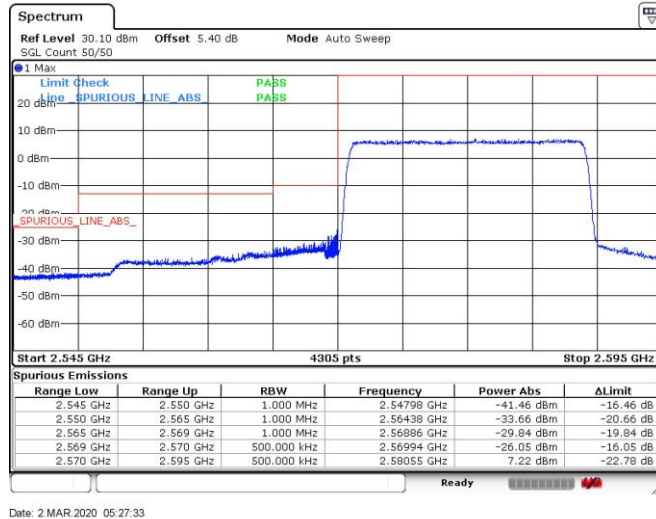


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Date: 2 MAR 2020 05:28:46

Band38_20MHz_QPSK_37850_100RB#0

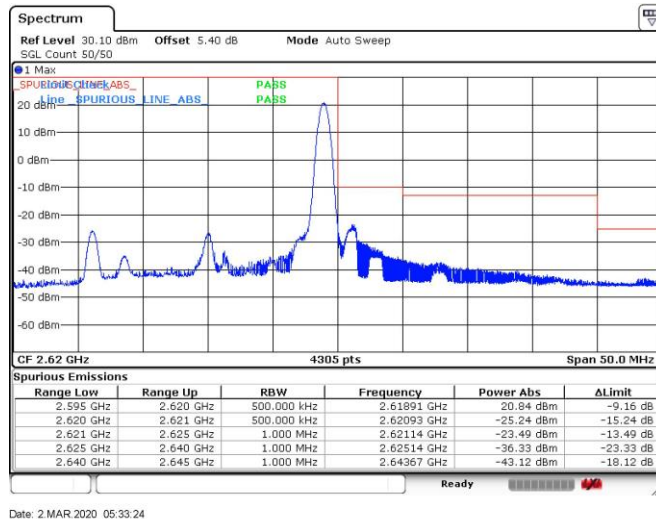


Date: 2 MAR 2020 05:27:33

Band38_20MHz_QPSK_38150_1RB#99

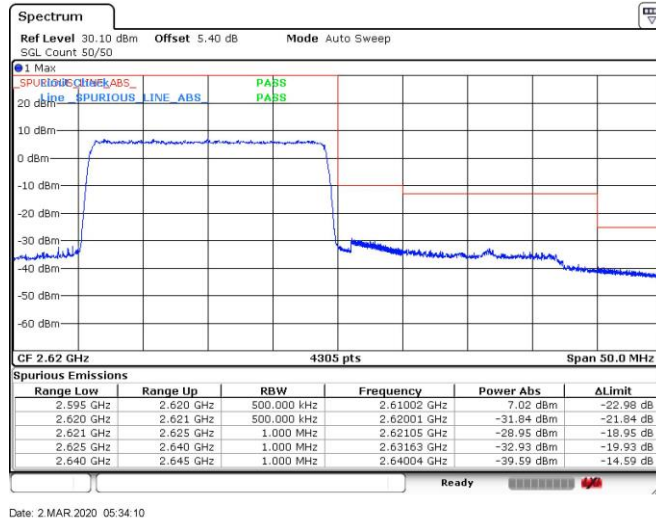


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Date: 2 MAR 2020 05:33:24

Band38_20MHz_QPSK_38150_100RB#0

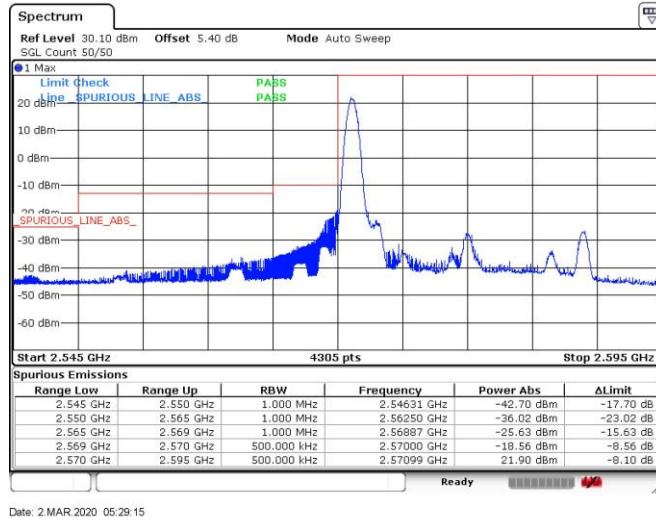


Date: 2 MAR 2020 05:34:10

Band38_20MHz_16QAM_37850_1RB#0

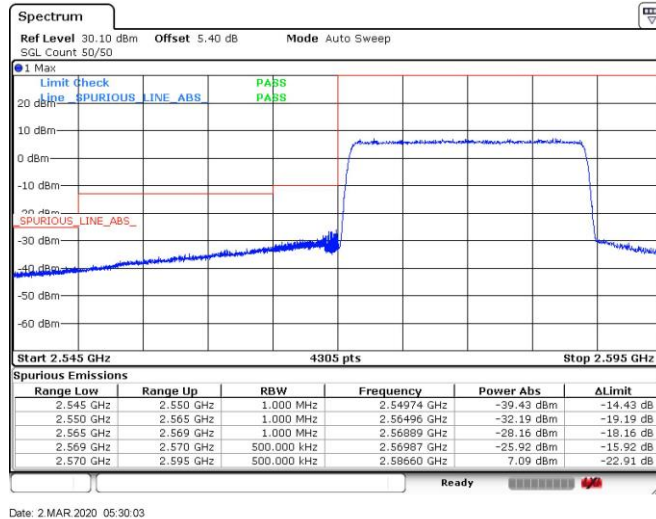


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Date: 2 MAR 2020 05:29:15

Band38_20MHz_16QAM_37850_100RB#0

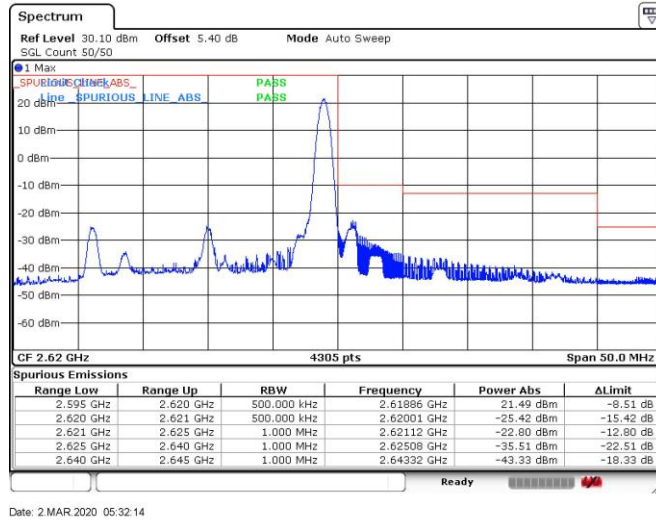


Date: 2 MAR 2020 05:30:03

Band38_20MHz_16QAM_38150_1RB#99

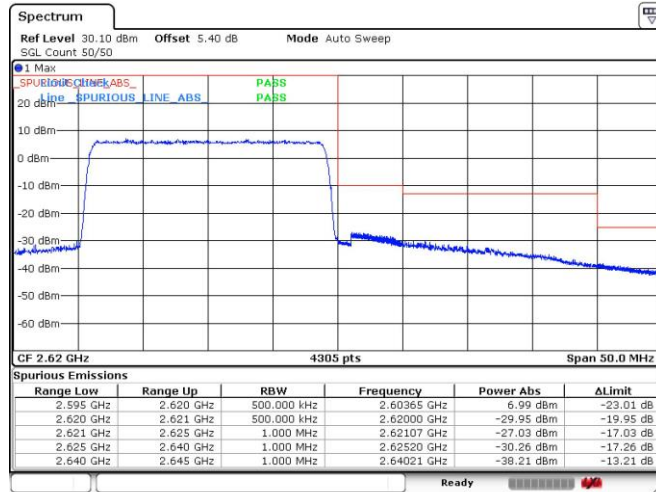


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Date: 2 MAR 2020 05:32:14

Band38_20MHz_16QAM_38150_100RB#0



Date: 2 MAR 2020 05:31:14



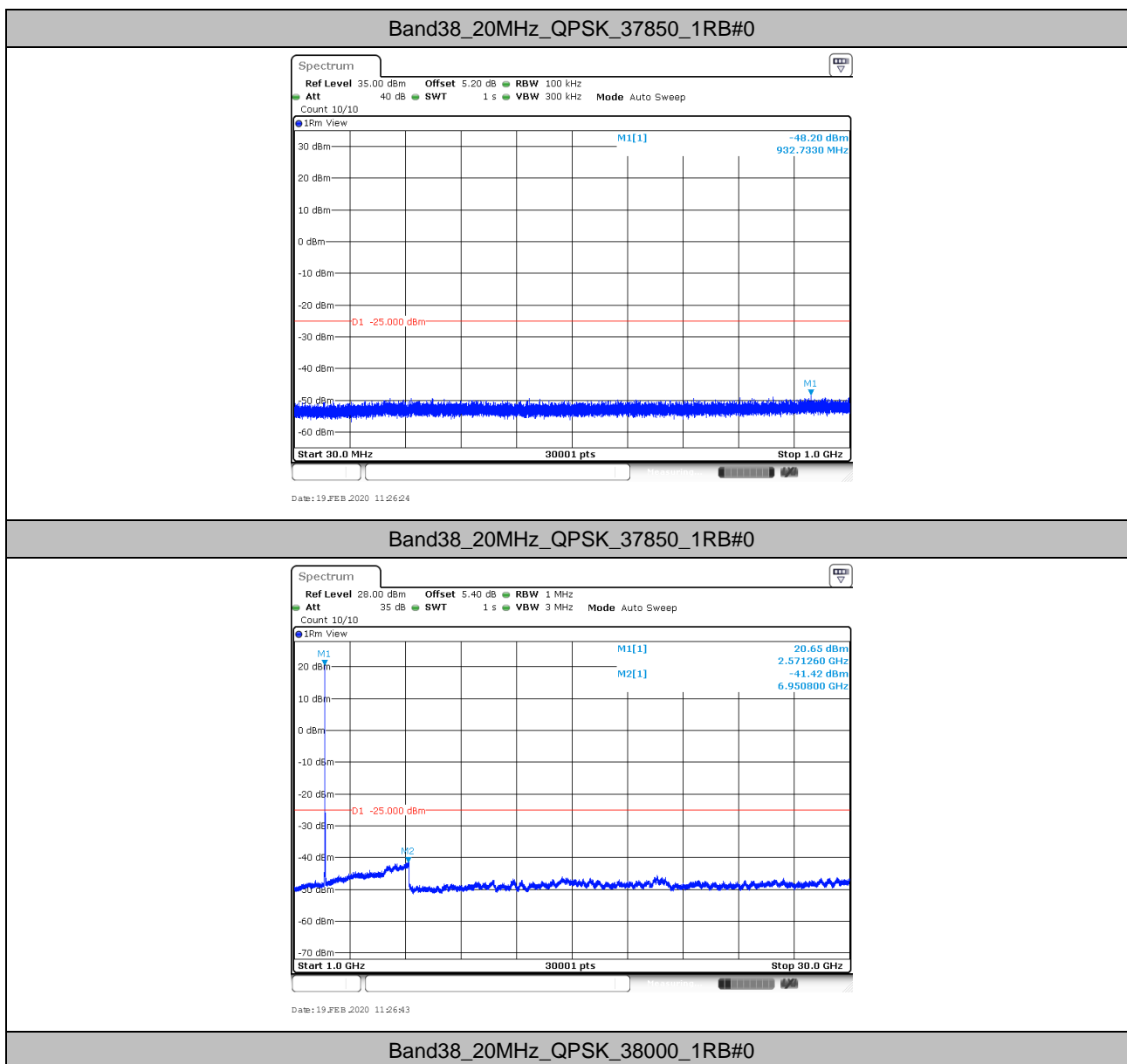
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6. Spurious Emission at Antenna Terminal

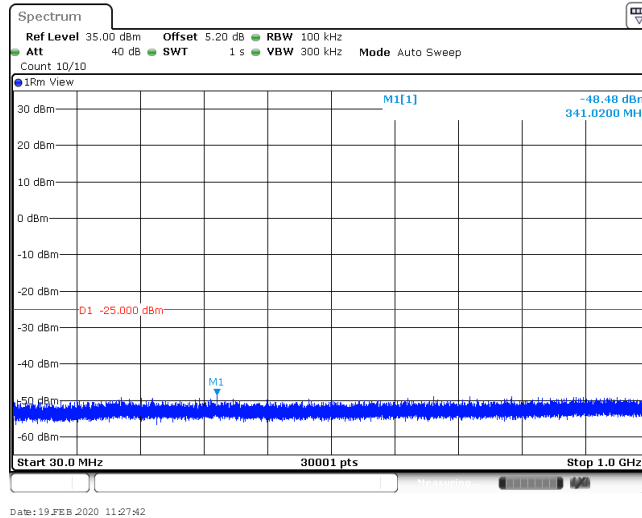
Remark1: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = $k * (Span / RBW)$ " 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.

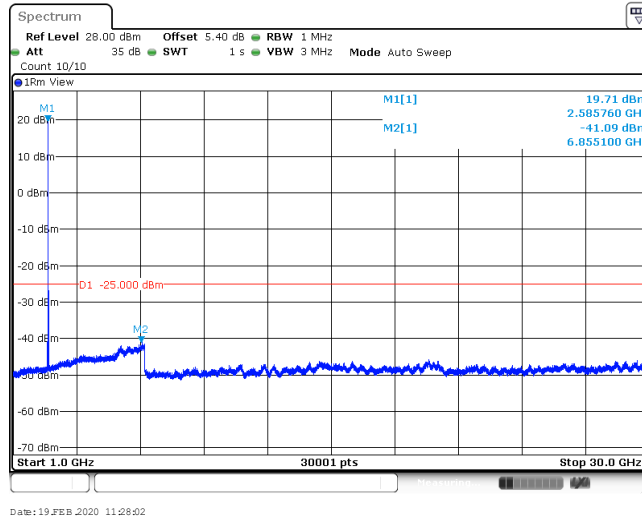
6.1. Test Plots



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Band38_20MHz_QPSK_38000_1RB#0

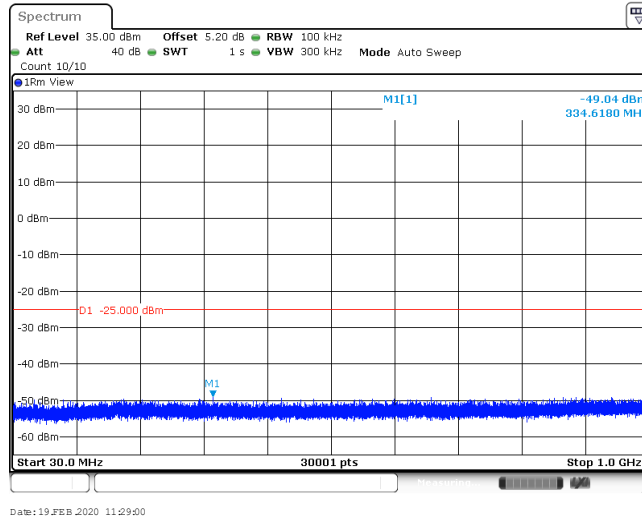


Band38_20MHz_QPSK_38150_1RB#0

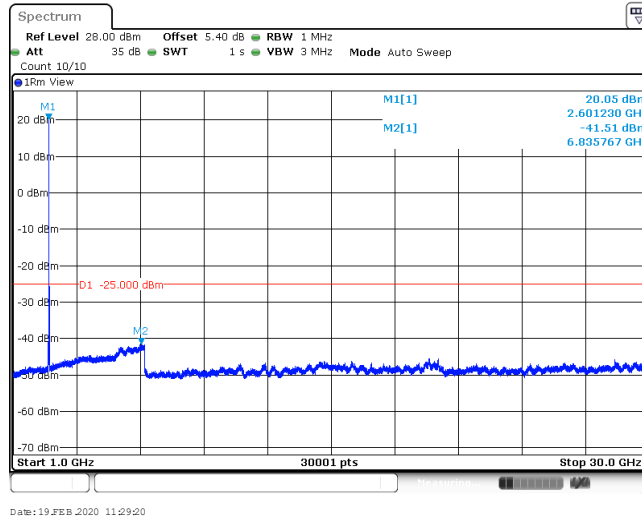


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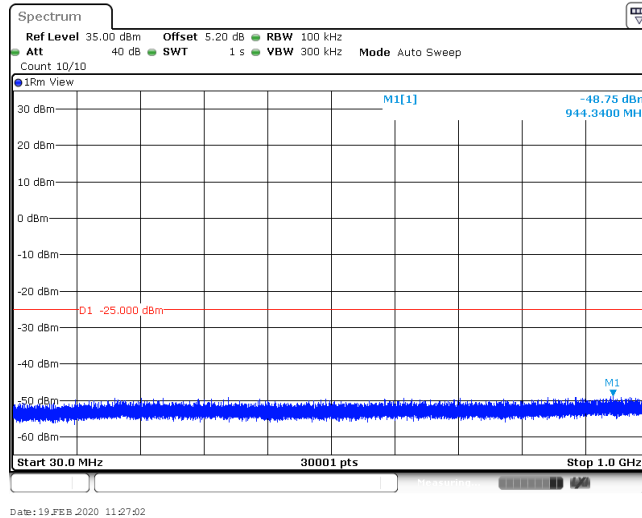
Band38_20MHz_QPSK_38150_1RB#0



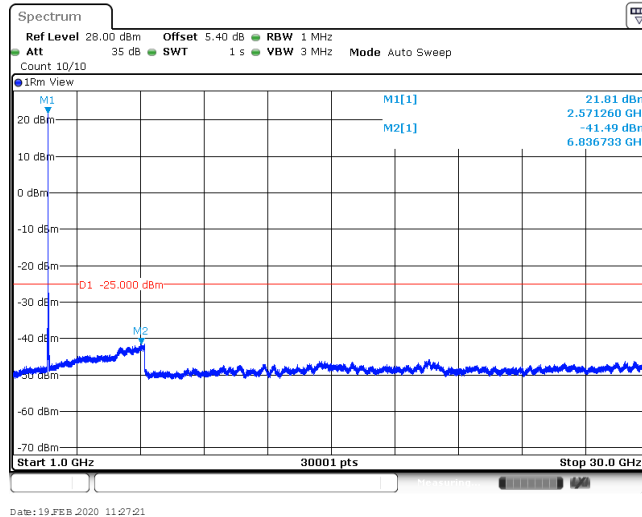
Band38_20MHz_16QAM_37850_1RB#0



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Band38_20MHz_16QAM_37850_1RB#0

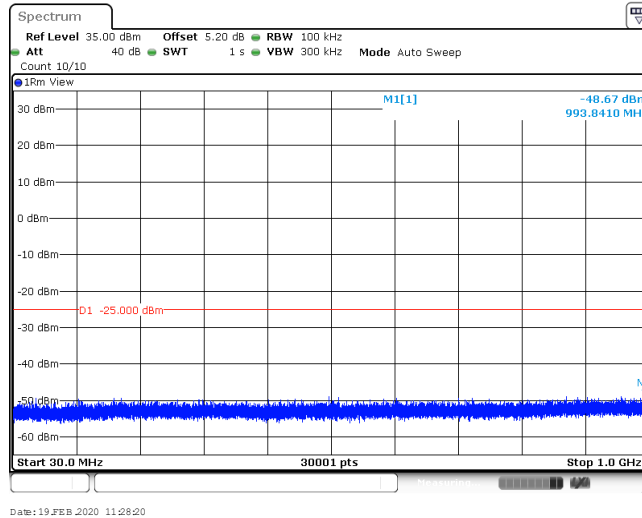


Band38_20MHz_16QAM_38000_1RB#0

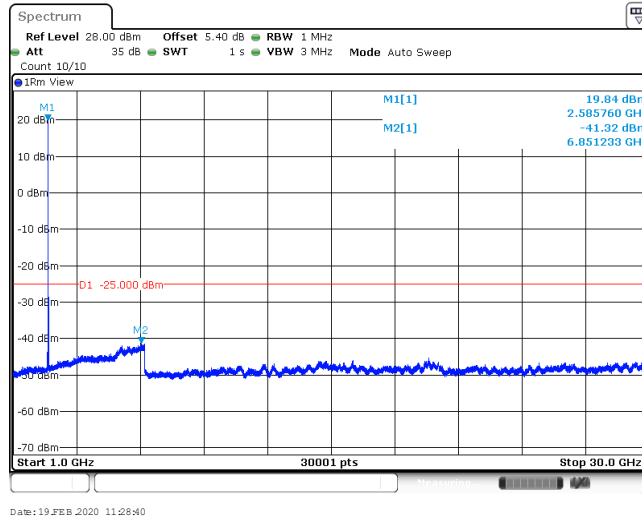


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Band38_20MHz_16QAM_38000_1RB#0

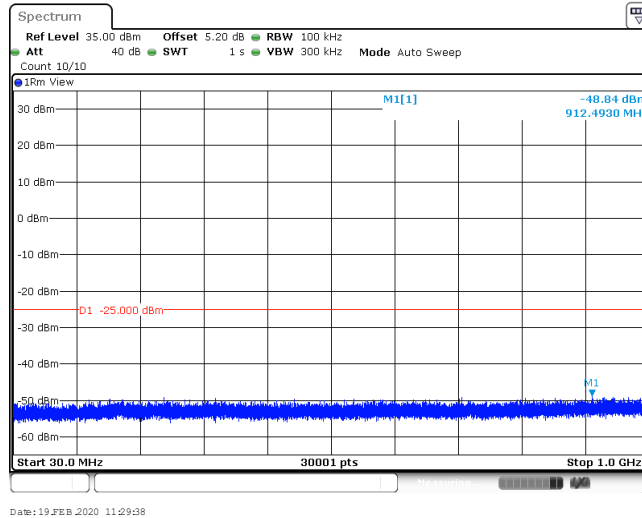


Band38_20MHz_16QAM_38150_1RB#0

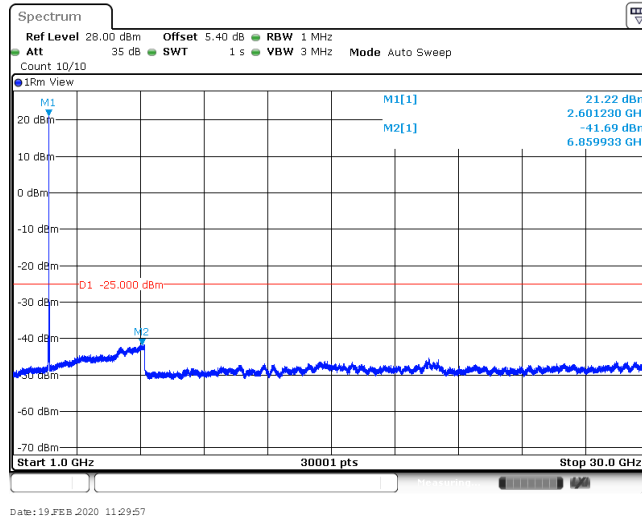


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Band38_20MHz_16QAM_38150_1RB#0



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7. Field Strength of Spurious Radiation

7.1. Test Band = LTE Band 38

7.1.1. Test Mode = LTE/TM1

7.1.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
65.7463	-67.52	-25.00	42.52	Vertical
113.0847	-64.18	-25.00	39.18	Vertical
612.7081	-63.45	-25.00	38.45	Vertical
2997.1994	-38.14	-25.00	13.14	Vertical
5172.0724	-52.52	-25.00	27.52	Vertical
7758.1586	-42.16	-25.00	17.16	Vertical
45.6663	-63.29	-25.00	38.29	Horizontal
251.0256	-67.11	-25.00	42.11	Horizontal
580.5025	-63.74	-25.00	38.74	Horizontal
2987.9976	-38.35	-25.00	13.35	Horizontal
5172.0724	-54.97	-25.00	29.97	Horizontal
7758.1586	-47.39	-25.00	22.39	Horizontal

7.1.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
113.9092	-64.42	-25.00	39.42	Vertical
388.5299	-68.12	-25.00	43.12	Vertical
2991.5983	-38.18	-25.00	13.18	Vertical
5142.5714	-54.18	-25.00	29.18	Vertical
7713.6571	-43.79	-25.00	18.79	Vertical
10284.2428	-48.08	-25.00	23.08	Vertical
43.7747	-63.84	-25.00	38.84	Horizontal
242.0526	-68.28	-25.00	43.28	Horizontal
592.5311	-63.91	-25.00	38.91	Horizontal
2997.5995	-38.38	-25.00	13.38	Horizontal
7713.1571	-44.97	-25.00	19.97	Horizontal
16395.4465	-44.37	-25.00	19.37	Horizontal



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7.1.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
107.2644	-64.59	-25.00	39.59	Vertical
294.9687	-68.60	-25.00	43.60	Vertical
2991.5983	-38.30	-25.00	13.30	Vertical
5202.0734	-52.85	-25.00	27.85	Vertical
7803.1601	-43.54	-25.00	18.54	Vertical
10404.2468	-48.00	-25.00	23.00	Vertical
44.4052	-63.70	-25.00	38.70	Horizontal
236.7173	-67.14	-25.00	42.14	Horizontal
540.3425	-64.79	-25.00	39.79	Horizontal
2986.3973	-38.39	-25.00	13.39	Horizontal
7803.1601	-47.06	-25.00	22.06	Horizontal
16376.4459	-44.16	-25.00	19.16	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
Band38	20MHz	QPSK	37850	100RB#0	VL	NT	-22.20	-0.008605	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	VN	NT	-26.68	-0.010341	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	VH	NT	-22.30	-0.008643	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	VL	NT	-20.81	-0.008019	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	VN	NT	-22.87	-0.008813	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	VH	NT	-19.45	-0.007495	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	VL	NT	-19.96	-0.007648	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	VN	NT	-25.82	-0.009893	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	VH	NT	-23.82	-0.009126	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	VL	NT	-23.76	-0.009209	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	VN	NT	-21.87	-0.008477	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	VH	NT	-18.25	-0.007074	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	VL	NT	-23.45	-0.009037	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	VN	NT	-21.29	-0.008204	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	VH	NT	-20.13	-0.007757	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	VL	NT	-21.69	-0.008310	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	VN	NT	-21.70	-0.008314	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	VH	NT	-25.22	-0.009663	±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
Band38	20MHz	QPSK	37850	100RB#0	NV	-30	-22.69	-0.008795	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	-20	-20.70	-0.008023	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	0	-21.89	-0.008484	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	10	-22.60	-0.008760	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	20	-23.67	-0.009174	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	30	-21.04	-0.008155	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	40	-26.14	-0.010132	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	50	-20.73	-0.008035	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	-30	-17.95	-0.006917	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	-20	-23.26	-0.008963	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	0	-18.73	-0.007218	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	10	-23.20	-0.008940	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	20	-21.62	-0.008331	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	30	-21.11	-0.008135	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	40	-19.47	-0.007503	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	50	-20.59	-0.007934	±2.5	PASS



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Band38	20MHz	QPSK	38150	100RB#0	NV	-30	-25.56	-0.009793	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	-20	-20.89	-0.008004	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	0	-24.62	-0.009433	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	10	-24.58	-0.009418	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	20	-23.12	-0.008858	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	30	-19.10	-0.007318	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	40	-20.08	-0.007693	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	50	-23.50	-0.009004	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	-30	-17.84	-0.006915	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	-20	-20.63	-0.007996	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	0	-21.44	-0.008310	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	10	-16.88	-0.006543	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	20	-23.32	-0.009039	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	30	-30.66	-0.011884	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	40	-25.39	-0.009841	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	50	-20.69	-0.008019	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	-30	-24.88	-0.009588	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	-20	-20.86	-0.008039	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	0	-25.33	-0.009761	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	10	-18.32	-0.007060	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	20	-21.49	-0.008281	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	30	-18.84	-0.007260	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	40	-22.29	-0.008590	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	50	-16.44	-0.006335	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	-30	-19.53	-0.007483	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	-20	-23.82	-0.009126	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	0	-20.17	-0.007728	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	10	-26.35	-0.010096	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	20	-20.84	-0.007985	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	30	-20.04	-0.007678	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	40	-26.97	-0.010333	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	50	-26.02	-0.009969	±2.5	PASS

The End



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