



Appendix B

E-UTRA Band 38



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1 Effective (Isotropic) Radiated Power

1.1 Test Result

Band	Bandwidth	Modulation	Channel	RB Config.	Result (dBm)	EIRP (dBm)	Limit (dBm)	Verdict
Band38	5MHz	QPSK	37775	1RB#0	23.35	18.35	33.00	PASS
Band38	5MHz	QPSK	37775	1RB#12	23.35	18.35	33.00	PASS
Band38	5MHz	QPSK	37775	1RB#24	23.11	18.11	33.00	PASS
Band38	5MHz	QPSK	37775	12RB#0	22.44	17.44	33.00	PASS
Band38	5MHz	QPSK	37775	12RB#6	22.22	17.22	33.00	PASS
Band38	5MHz	QPSK	37775	12RB#13	22.42	17.42	33.00	PASS
Band38	5MHz	QPSK	37775	25RB#0	22.37	17.37	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#0	23.33	18.33	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#12	23.4	18.4	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#24	23.37	18.37	33.00	PASS
Band38	5MHz	QPSK	38000	12RB#0	22.59	17.59	33.00	PASS
Band38	5MHz	QPSK	38000	12RB#6	22.43	17.43	33.00	PASS
Band38	5MHz	QPSK	38000	12RB#13	22.41	17.41	33.00	PASS
Band38	5MHz	QPSK	38000	25RB#0	22.51	17.51	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#0	23.26	18.26	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#12	23.42	18.42	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#24	23.06	18.06	33.00	PASS
Band38	5MHz	QPSK	38225	12RB#0	22.56	17.56	33.00	PASS
Band38	5MHz	QPSK	38225	12RB#6	22.29	17.29	33.00	PASS
Band38	5MHz	QPSK	38225	12RB#13	22.24	17.24	33.00	PASS
Band38	5MHz	QPSK	38225	25RB#0	22.35	17.35	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#0	22.19	17.19	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#12	22.45	17.45	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#24	22.03	17.03	33.00	PASS
Band38	5MHz	16QAM	37775	12RB#0	21.36	16.36	33.00	PASS
Band38	5MHz	16QAM	37775	12RB#6	21.34	16.34	33.00	PASS
Band38	5MHz	16QAM	37775	12RB#13	21.47	16.47	33.00	PASS
Band38	5MHz	16QAM	37775	25RB#0	21.54	16.54	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#0	22.26	17.26	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#12	22.52	17.52	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#24	22.1	17.1	33.00	PASS
Band38	5MHz	16QAM	38000	12RB#0	21.59	16.59	33.00	PASS



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Band38	5MHz	16QAM	38000	12RB#6	21.48	16.48	33.00	PASS
Band38	5MHz	16QAM	38000	12RB#13	21.54	16.54	33.00	PASS
Band38	5MHz	16QAM	38000	25RB#0	21.81	16.81	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#0	22.09	17.09	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#12	22.11	17.11	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#24	22.24	17.24	33.00	PASS
Band38	5MHz	16QAM	38225	12RB#0	21.49	16.49	33.00	PASS
Band38	5MHz	16QAM	38225	12RB#6	21.45	16.45	33.00	PASS
Band38	5MHz	16QAM	38225	12RB#13	21.3	16.3	33.00	PASS
Band38	5MHz	16QAM	38225	25RB#0	21.62	16.62	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#0	23.47	18.47	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#24	23.54	18.54	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#49	23.24	18.24	33.00	PASS
Band38	10MHz	QPSK	37800	25RB#0	22.38	17.38	33.00	PASS
Band38	10MHz	QPSK	37800	25RB#12	22.45	17.45	33.00	PASS
Band38	10MHz	QPSK	37800	25RB#25	22.42	17.42	33.00	PASS
Band38	10MHz	QPSK	37800	50RB#0	22.43	17.43	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#0	23.29	18.29	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#24	23.58	18.58	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#49	23.45	18.45	33.00	PASS
Band38	10MHz	QPSK	38000	25RB#0	22.57	17.57	33.00	PASS
Band38	10MHz	QPSK	38000	25RB#12	22.58	17.58	33.00	PASS
Band38	10MHz	QPSK	38000	25RB#25	22.52	17.52	33.00	PASS
Band38	10MHz	QPSK	38000	50RB#0	22.45	17.45	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#0	23.38	18.38	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#24	23.5	18.5	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#49	23.2	18.2	33.00	PASS
Band38	10MHz	QPSK	38200	25RB#0	22.62	17.62	33.00	PASS
Band38	10MHz	QPSK	38200	25RB#12	22.46	17.46	33.00	PASS
Band38	10MHz	QPSK	38200	25RB#25	22.45	17.45	33.00	PASS
Band38	10MHz	QPSK	38200	50RB#0	22.42	17.42	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#0	22.28	17.28	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#24	22.3	17.3	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#49	22.11	17.11	33.00	PASS
Band38	10MHz	16QAM	37800	25RB#0	21.51	16.51	33.00	PASS
Band38	10MHz	16QAM	37800	25RB#12	21.67	16.67	33.00	PASS
Band38	10MHz	16QAM	37800	25RB#25	21.59	16.59	33.00	PASS
Band38	10MHz	16QAM	37800	50RB#0	21.44	16.44	33.00	PASS



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Band38	10MHz	16QAM	38000	1RB#0	22.26	17.26	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#24	22.23	17.23	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#49	22.07	17.07	33.00	PASS
Band38	10MHz	16QAM	38000	25RB#0	21.66	16.66	33.00	PASS
Band38	10MHz	16QAM	38000	25RB#12	21.66	16.66	33.00	PASS
Band38	10MHz	16QAM	38000	25RB#25	21.42	16.42	33.00	PASS
Band38	10MHz	16QAM	38000	50RB#0	21.58	16.58	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#0	22.23	17.23	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#24	22.17	17.17	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#49	22.05	17.05	33.00	PASS
Band38	10MHz	16QAM	38200	25RB#0	21.45	16.45	33.00	PASS
Band38	10MHz	16QAM	38200	25RB#12	21.87	16.87	33.00	PASS
Band38	10MHz	16QAM	38200	25RB#25	21.88	16.88	33.00	PASS
Band38	10MHz	16QAM	38200	50RB#0	21.69	16.69	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#0	23.41	18.41	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#38	23.55	18.55	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#74	23.46	18.46	33.00	PASS
Band38	15MHz	QPSK	37825	38RB#0	22.58	17.58	33.00	PASS
Band38	15MHz	QPSK	37825	38RB#18	22.43	17.43	33.00	PASS
Band38	15MHz	QPSK	37825	38RB#37	22.48	17.48	33.00	PASS
Band38	15MHz	QPSK	37825	75RB#0	22.55	17.55	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#0	23.35	18.35	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#38	23.38	18.38	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#74	23.46	18.46	33.00	PASS
Band38	15MHz	QPSK	38000	38RB#0	22.63	17.63	33.00	PASS
Band38	15MHz	QPSK	38000	38RB#18	22.58	17.58	33.00	PASS
Band38	15MHz	QPSK	38000	38RB#37	22.51	17.51	33.00	PASS
Band38	15MHz	QPSK	38000	75RB#0	22.45	17.45	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#0	23.26	18.26	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#38	23.21	18.21	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#74	23.17	18.17	33.00	PASS
Band38	15MHz	QPSK	38175	38RB#0	22.53	17.53	33.00	PASS
Band38	15MHz	QPSK	38175	38RB#18	22.46	17.46	33.00	PASS
Band38	15MHz	QPSK	38175	38RB#37	22.42	17.42	33.00	PASS
Band38	15MHz	QPSK	38175	75RB#0	22.49	17.49	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#0	22.12	17.12	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#38	22.17	17.17	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#74	22.1	17.1	33.00	PASS



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Band38	15MHz	16QAM	37825	38RB#0	21.5	16.5	33.00	PASS
Band38	15MHz	16QAM	37825	38RB#18	21.55	16.55	33.00	PASS
Band38	15MHz	16QAM	37825	38RB#37	21.56	16.56	33.00	PASS
Band38	15MHz	16QAM	37825	75RB#0	21.42	16.42	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#0	22.25	17.25	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#38	22.09	17.09	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#74	22.07	17.07	33.00	PASS
Band38	15MHz	16QAM	38000	38RB#0	21.47	16.47	33.00	PASS
Band38	15MHz	16QAM	38000	38RB#18	21.66	16.66	33.00	PASS
Band38	15MHz	16QAM	38000	38RB#37	21.61	16.61	33.00	PASS
Band38	15MHz	16QAM	38000	75RB#0	21.44	16.44	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#0	22.13	17.13	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#38	22.09	17.09	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#74	22.07	17.07	33.00	PASS
Band38	15MHz	16QAM	38175	38RB#0	21.53	16.53	33.00	PASS
Band38	15MHz	16QAM	38175	38RB#18	21.52	16.52	33.00	PASS
Band38	15MHz	16QAM	38175	38RB#37	21.61	16.61	33.00	PASS
Band38	15MHz	16QAM	38175	75RB#0	21.55	16.55	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#0	23.35	18.35	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#49	23.5	18.5	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#99	23.75	18.75	33.00	PASS
Band38	20MHz	QPSK	37850	50RB#0	22.59	17.59	33.00	PASS
Band38	20MHz	QPSK	37850	50RB#25	22.62	17.62	33.00	PASS
Band38	20MHz	QPSK	37850	50RB#50	22.53	17.53	33.00	PASS
Band38	20MHz	QPSK	37850	100RB#0	22.38	17.38	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#0	23.23	18.23	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#49	23.48	18.48	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#99	23.8	18.8	33.00	PASS
Band38	20MHz	QPSK	38000	50RB#0	22.6	17.6	33.00	PASS
Band38	20MHz	QPSK	38000	50RB#25	22.46	17.46	33.00	PASS
Band38	20MHz	QPSK	38000	50RB#50	22.72	17.72	33.00	PASS
Band38	20MHz	QPSK	38000	100RB#0	22.45	17.45	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#0	23.18	18.18	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#49	23.52	18.52	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#99	23.45	18.45	33.00	PASS
Band38	20MHz	QPSK	38150	50RB#0	22.68	17.68	33.00	PASS
Band38	20MHz	QPSK	38150	50RB#25	22.61	17.61	33.00	PASS
Band38	20MHz	QPSK	38150	50RB#50	22.53	17.53	33.00	PASS



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Band38	20MHz	QPSK	38150	100RB#0	22.42	17.42	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#0	22.03	17.03	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#49	22.2	17.2	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#99	22.06	17.06	33.00	PASS
Band38	20MHz	16QAM	37850	50RB#0	21.49	16.49	33.00	PASS
Band38	20MHz	16QAM	37850	50RB#25	21.62	16.62	33.00	PASS
Band38	20MHz	16QAM	37850	50RB#50	21.38	16.38	33.00	PASS
Band38	20MHz	16QAM	37850	100RB#0	21.46	16.46	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#0	22.18	17.18	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#49	22.04	17.04	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#99	22.11	17.11	33.00	PASS
Band38	20MHz	16QAM	38000	50RB#0	21.58	16.58	33.00	PASS
Band38	20MHz	16QAM	38000	50RB#25	21.74	16.74	33.00	PASS
Band38	20MHz	16QAM	38000	50RB#50	21.5	16.5	33.00	PASS
Band38	20MHz	16QAM	38000	100RB#0	21.41	16.41	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#0	22.11	17.11	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#49	22.14	17.14	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#99	22.07	17.07	33.00	PASS
Band38	20MHz	16QAM	38150	50RB#0	21.75	16.75	33.00	PASS
Band38	20MHz	16QAM	38150	50RB#25	21.46	16.46	33.00	PASS
Band38	20MHz	16QAM	38150	50RB#50	21.53	16.53	33.00	PASS
Band38	20MHz	16QAM	38150	100RB#0	21.47	16.47	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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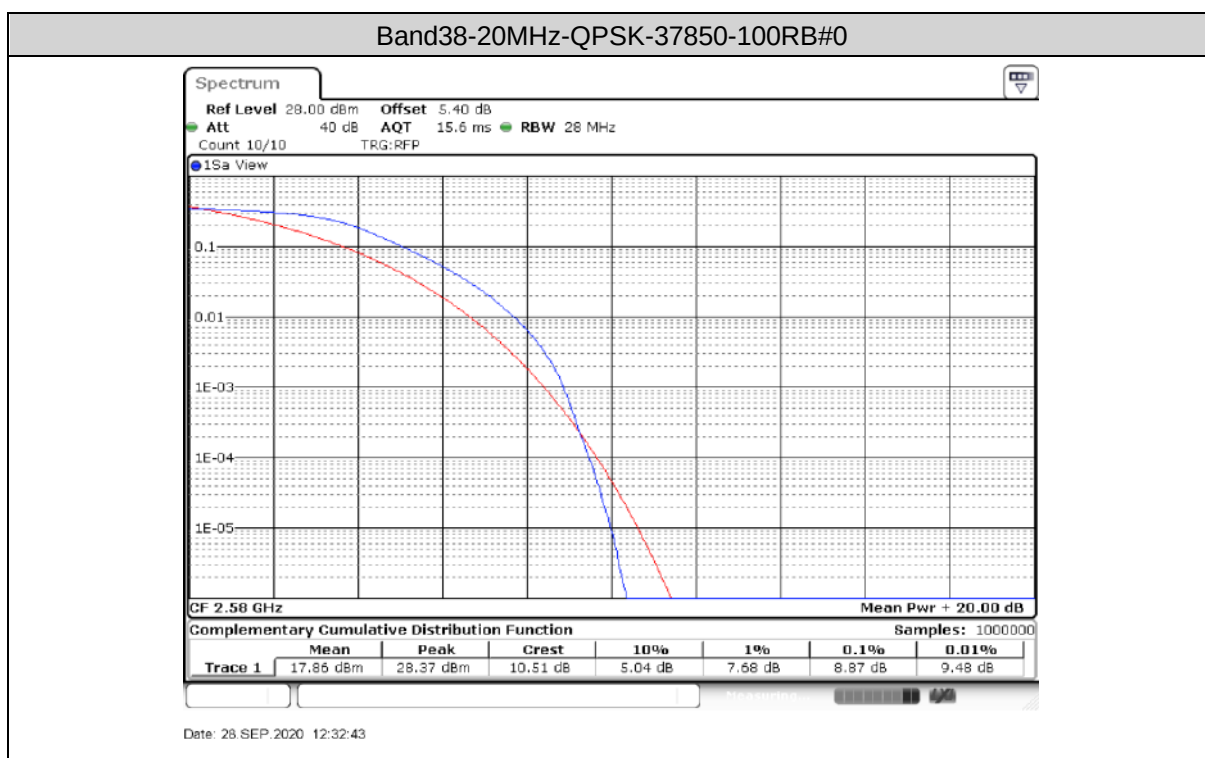
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2 Peak-to-Average Ratio (CCDF)

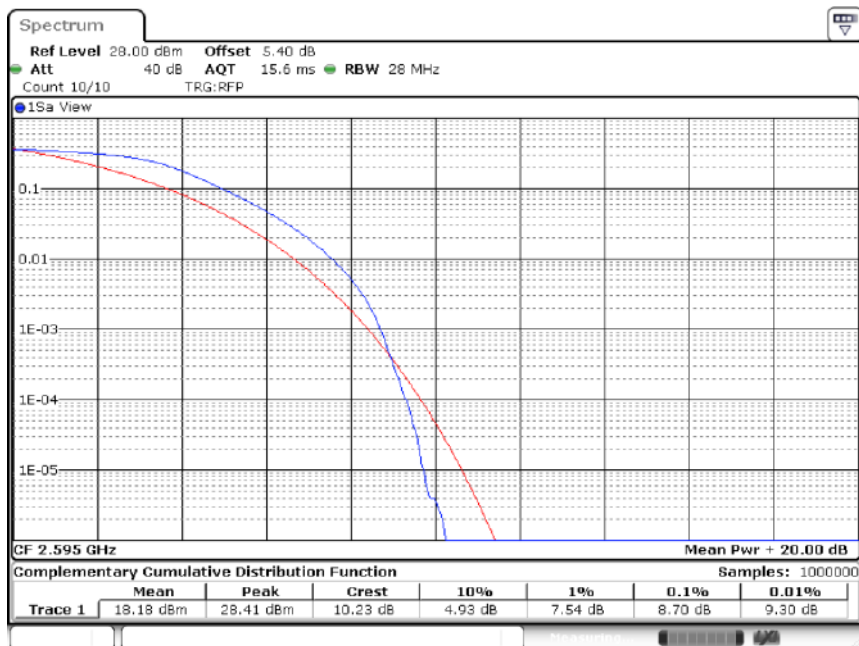
2.1 Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band38	20MHz	QPSK	37850	100RB#0	8.87	13	PASS
Band38	20MHz	QPSK	38000	100RB#0	8.70	13	PASS
Band38	20MHz	QPSK	38150	100RB#0	8.58	13	PASS
Band38	20MHz	16QAM	37850	100RB#0	9.48	13	PASS
Band38	20MHz	16QAM	38000	100RB#0	9.57	13	PASS
Band38	20MHz	16QAM	38150	100RB#0	9.36	13	PASS

2.3 Test Plots

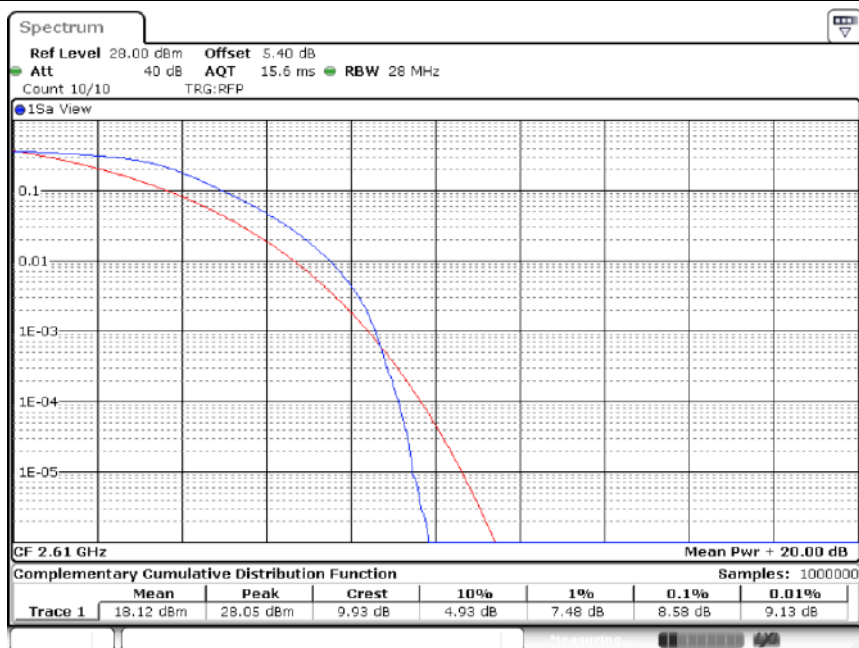


Band38-20MHz-QPSK-38000-100RB#0



Date: 28.SEP.2020 12:33:11

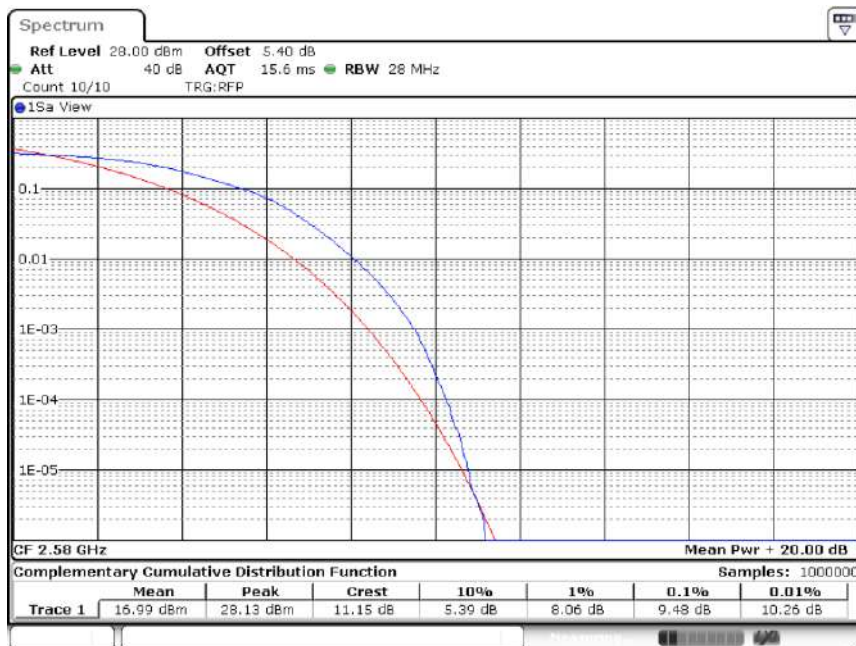
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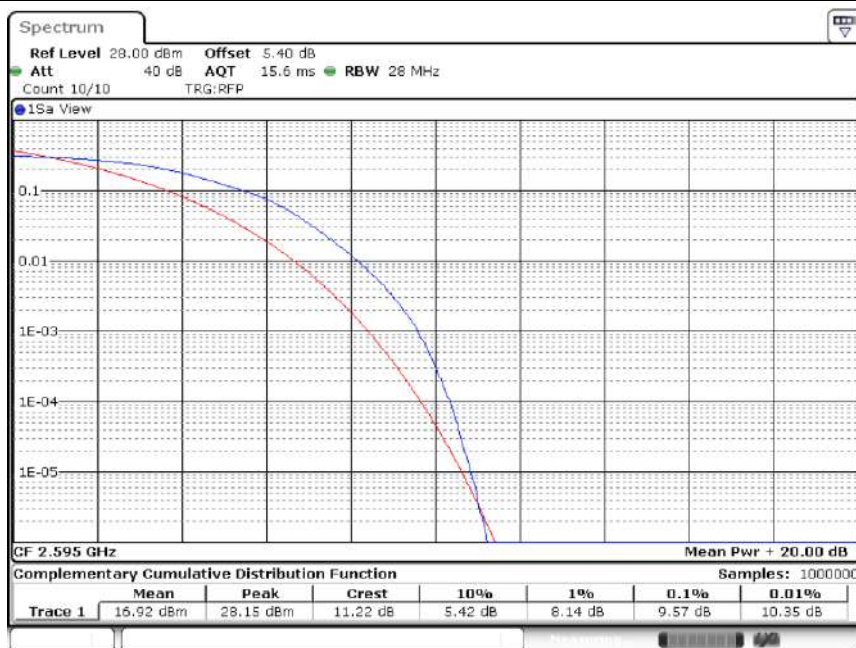


Band38-20MHz-16QAM-37850-100RB#0



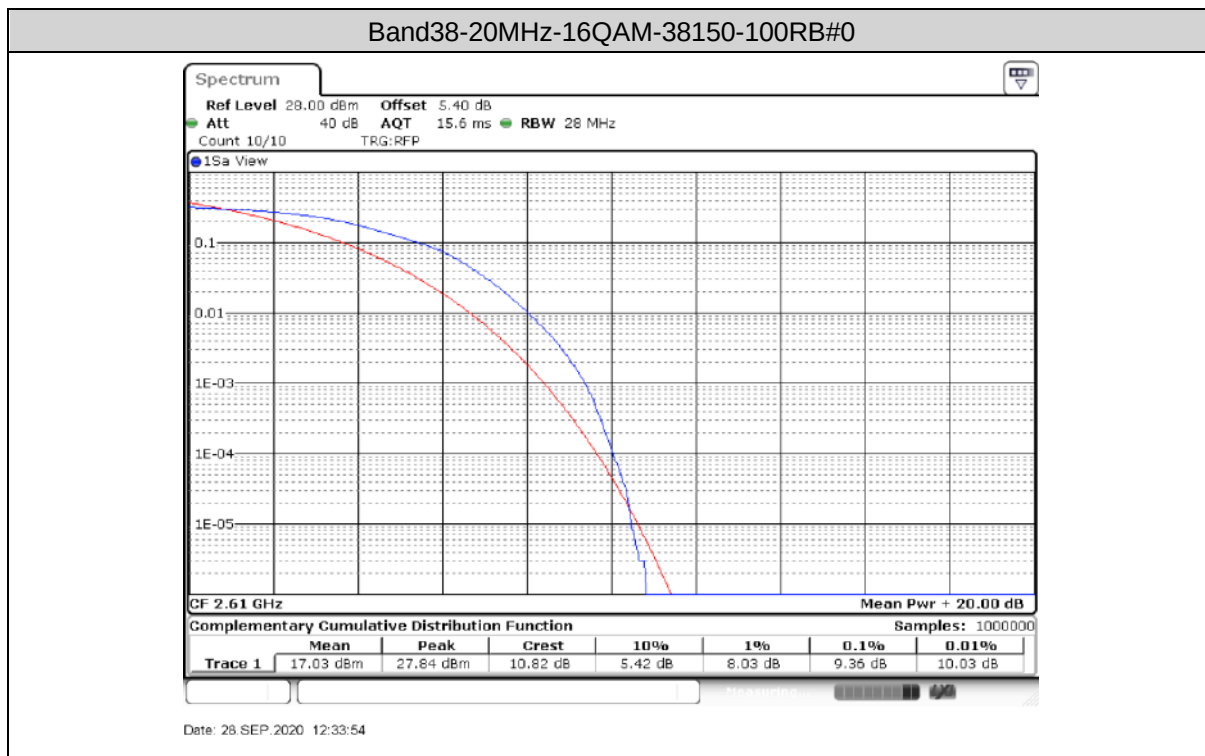
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Band38-20MHz-16QAM-38000-100RB#0



Date: 28.SEP.2020 12:33:25





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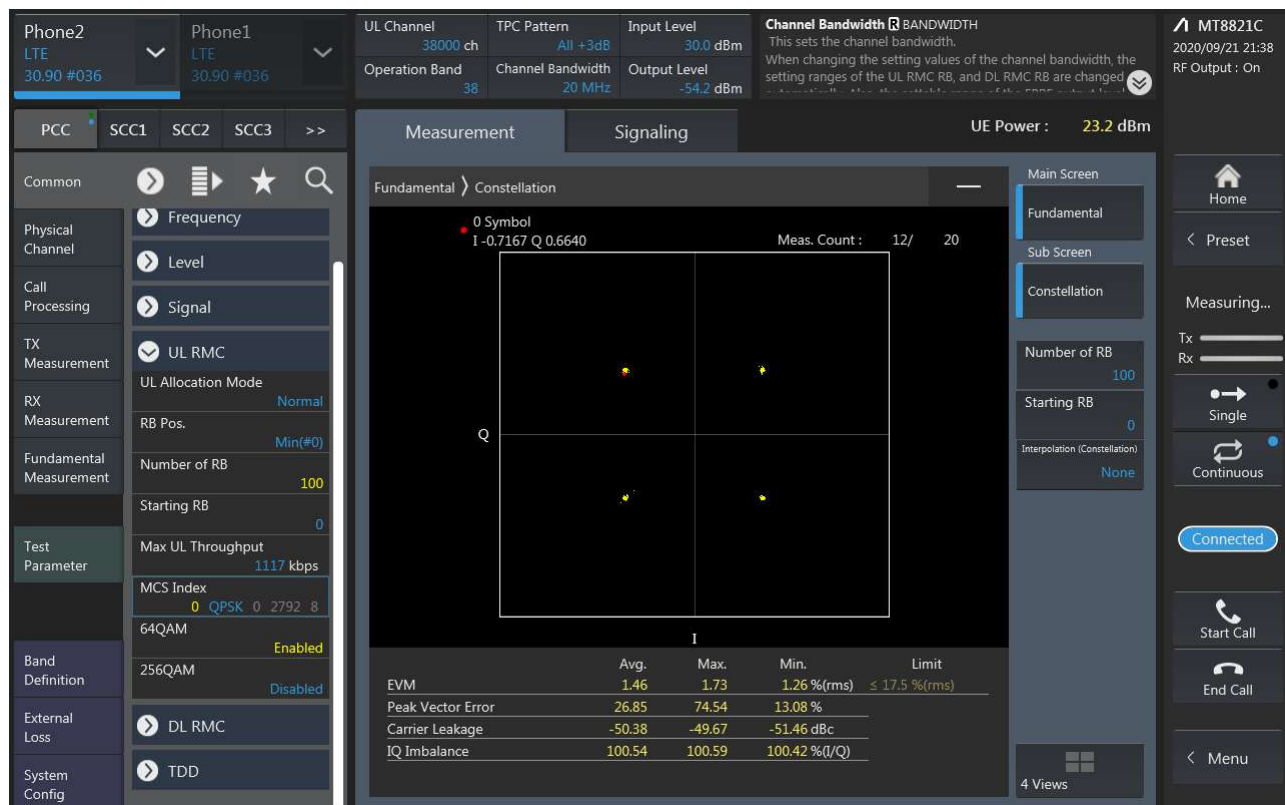
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3 Modulation Characteristics

3.1 Test Mode = LTE /TM1 20MHz

3.1.1. Test Channel = MCH



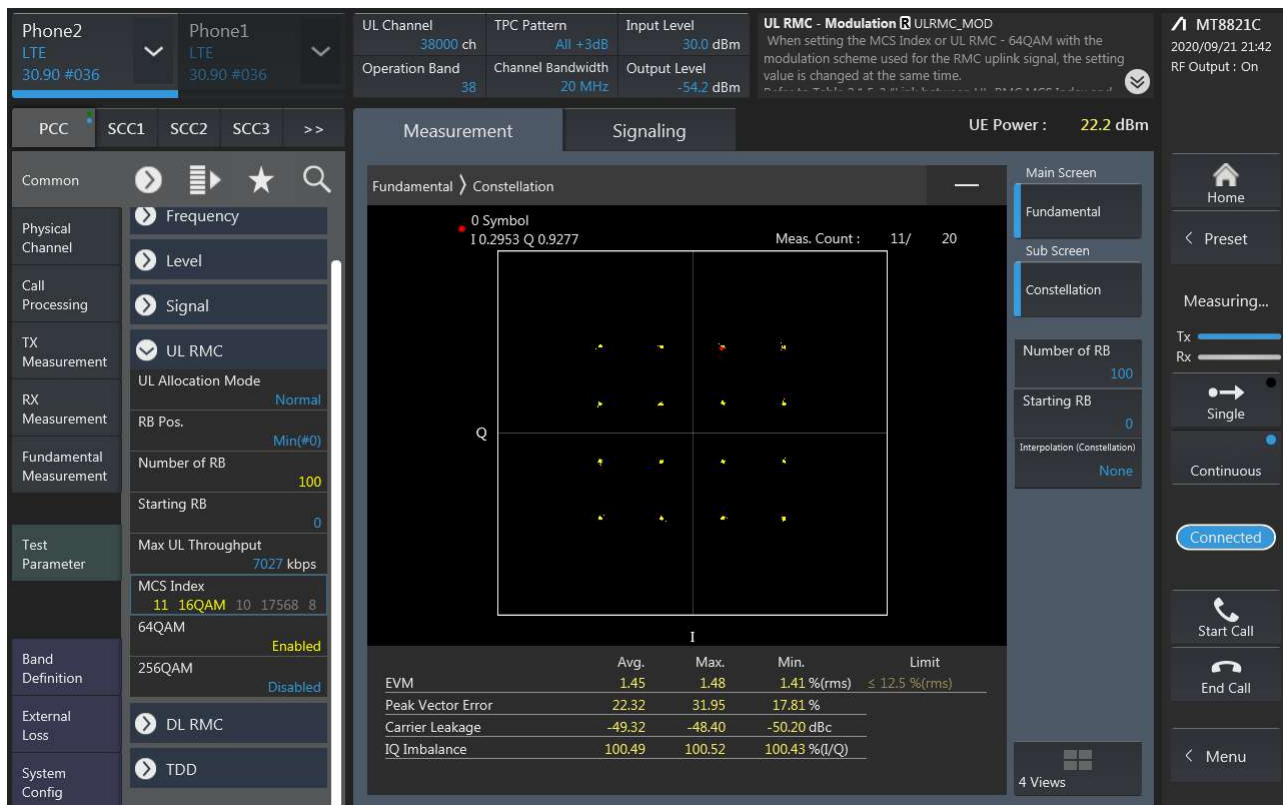
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3.2 Test Mode = LTE /TM2 20MHz

3.2.1 Test Channel = MCH





4 26dB Bandwidth and Occupied Bandwidth

4.1 Test Result

Band	Bandwidth h	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band38	5MHz	QPSK	37775	25RB#0	4.476	5.170	PASS
Band38	5MHz	QPSK	38000	25RB#0	4.466	5.170	PASS
Band38	5MHz	QPSK	38225	25RB#0	4.466	5.180	PASS
Band38	5MHz	16QAM	37775	25RB#0	4.496	4.940	PASS
Band38	5MHz	16QAM	38000	25RB#0	4.496	4.930	PASS
Band38	5MHz	16QAM	38225	25RB#0	4.496	4.940	PASS
Band38	10MHz	QPSK	37800	50RB#0	8.911	9.720	PASS
Band38	10MHz	QPSK	38000	50RB#0	8.911	9.720	PASS
Band38	10MHz	QPSK	38200	50RB#0	8.911	9.740	PASS
Band38	10MHz	16QAM	37800	50RB#0	8.911	9.620	PASS
Band38	10MHz	16QAM	38000	50RB#0	8.911	9.620	PASS
Band38	10MHz	16QAM	38200	50RB#0	8.911	9.620	PASS
Band38	15MHz	QPSK	37825	75RB#0	13.487	16.110	PASS
Band38	15MHz	QPSK	38000	75RB#0	13.487	16.110	PASS
Band38	15MHz	QPSK	38175	75RB#0	13.457	15.960	PASS
Band38	15MHz	16QAM	37825	75RB#0	13.427	15.210	PASS
Band38	15MHz	16QAM	38000	75RB#0	13.427	15.150	PASS
Band38	15MHz	16QAM	38175	75RB#0	13.427	15.210	PASS
Band38	20MHz	QPSK	37850	100RB#0	17.902	19.640	PASS
Band38	20MHz	QPSK	38000	100RB#0	17.902	19.640	PASS
Band38	20MHz	QPSK	38150	100RB#0	17.862	19.600	PASS
Band38	20MHz	16QAM	37850	100RB#0	17.862	19.880	PASS
Band38	20MHz	16QAM	38000	100RB#0	17.862	19.920	PASS
Band38	20MHz	16QAM	38150	100RB#0	17.862	19.880	PASS

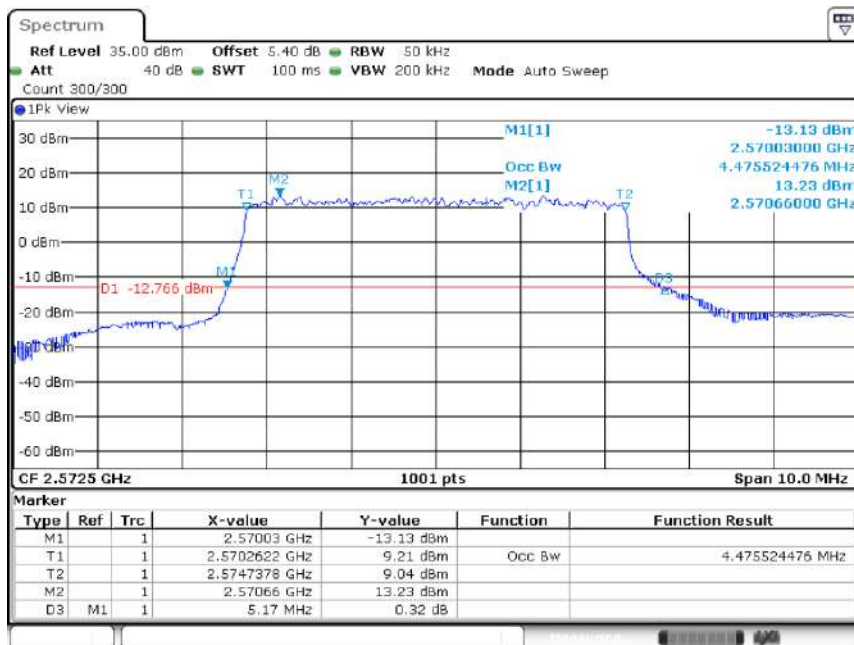


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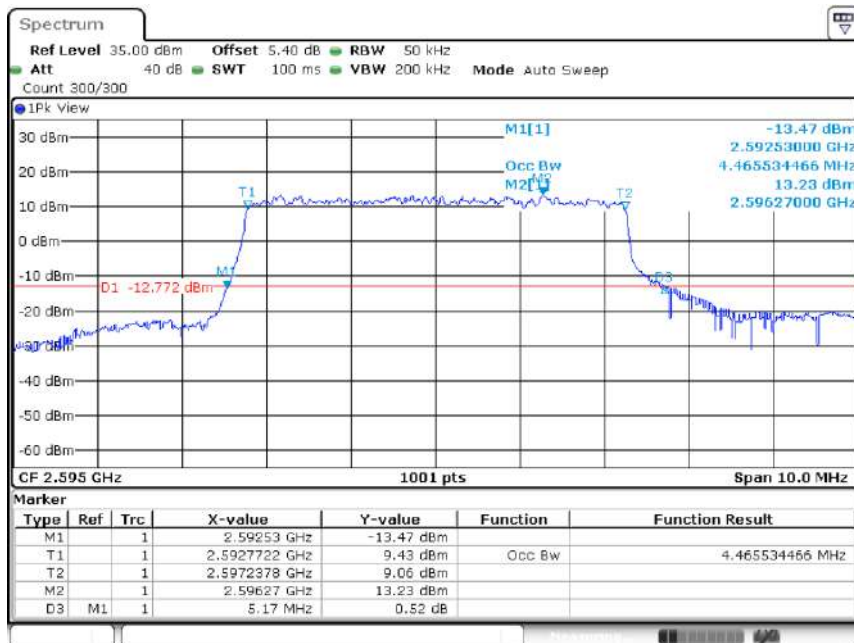
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Band38-5MHz-QPSK-37775-25RB#0-4.476



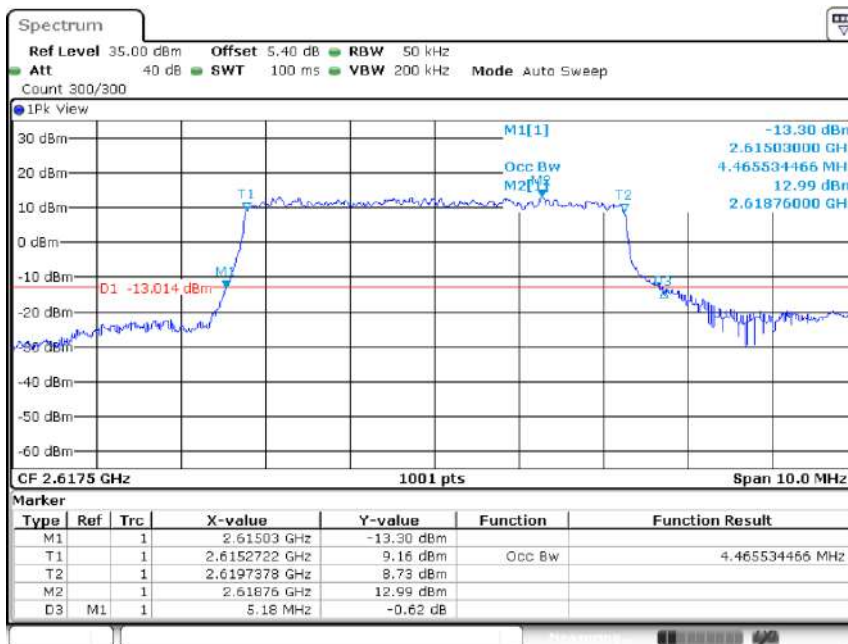
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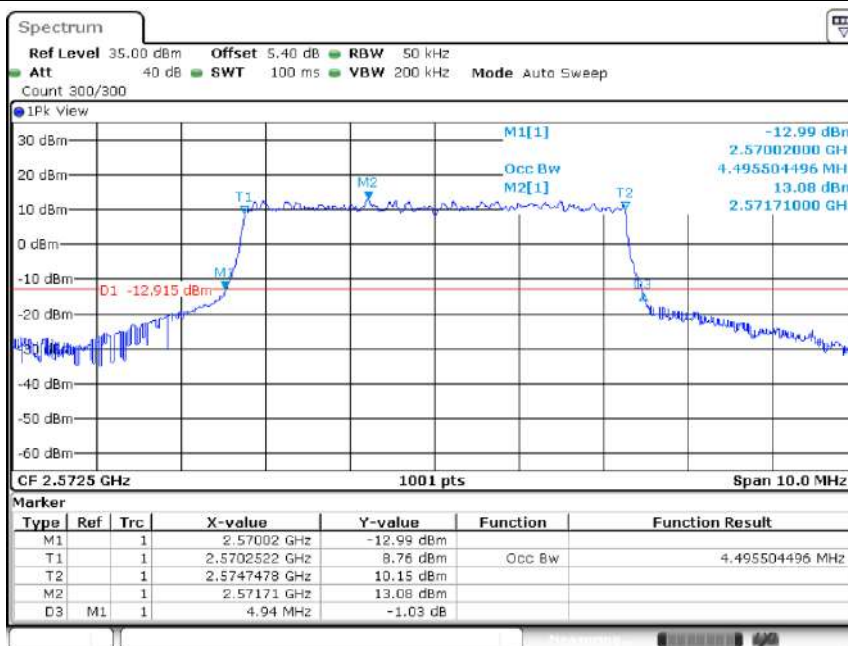
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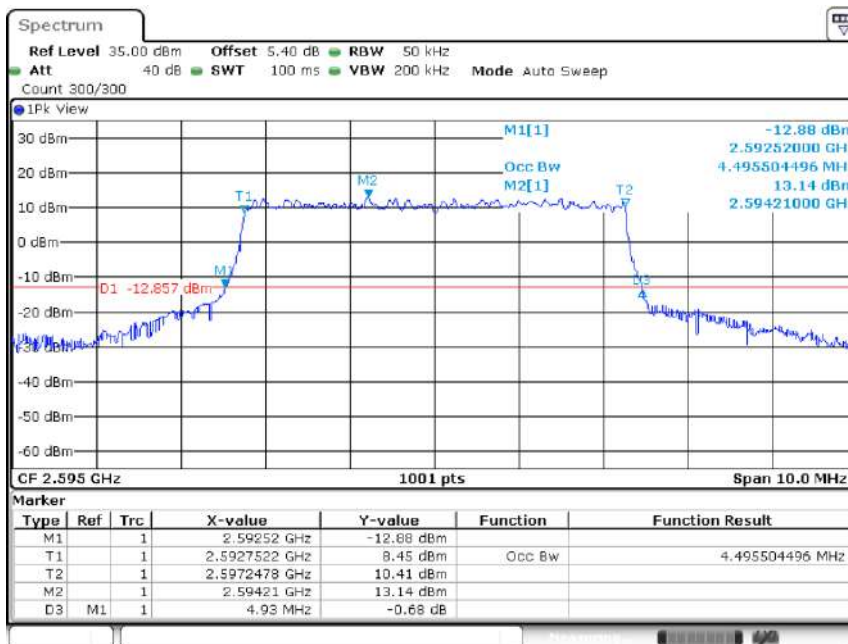
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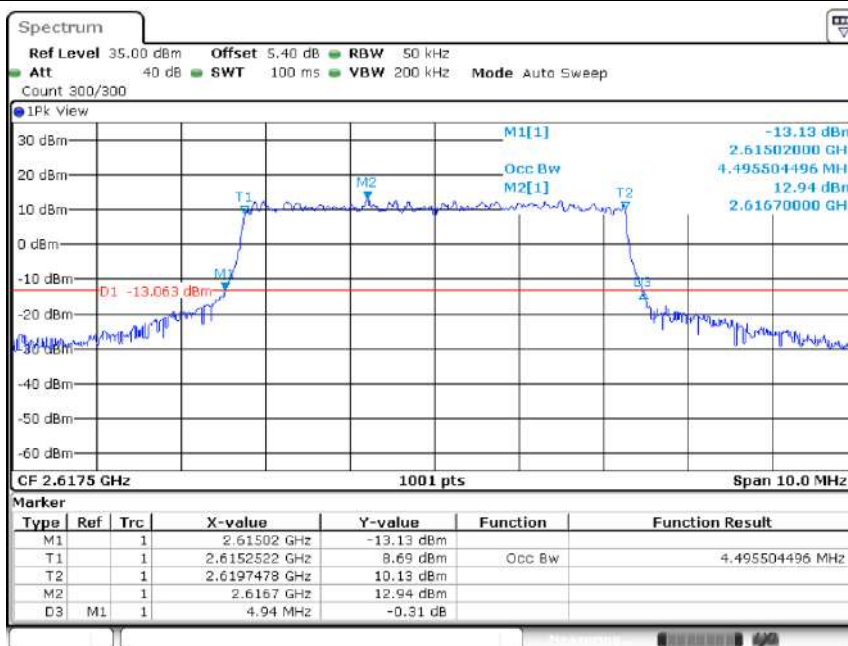


Band38-5MHz-16QAM-38000-25RB#0-4.496



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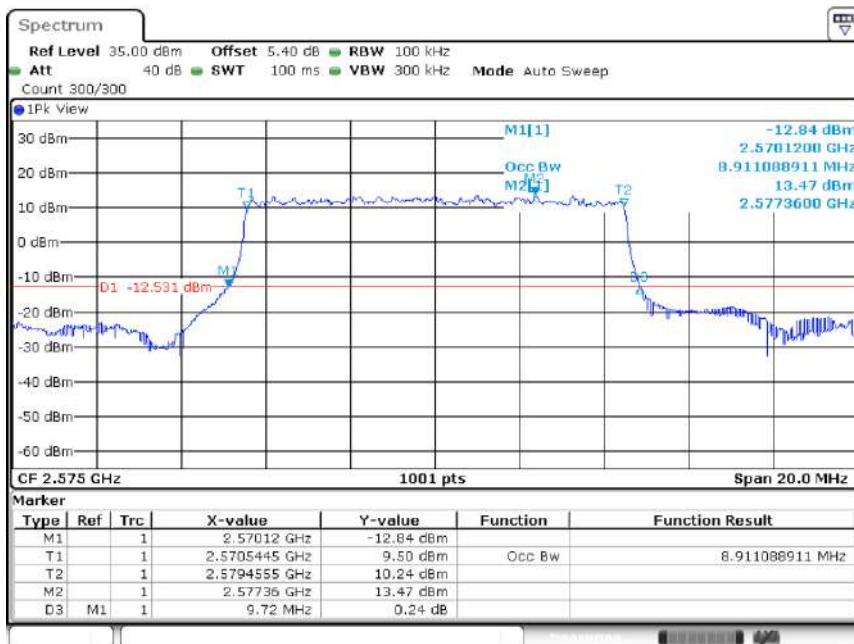
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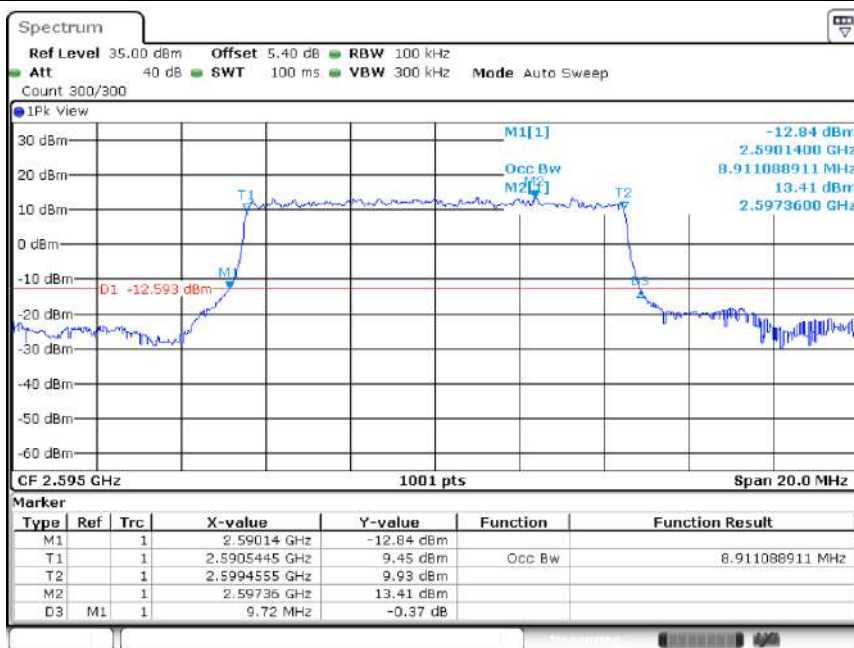


Band38-10MHz-QPSK-37800-50RB#0-8.911



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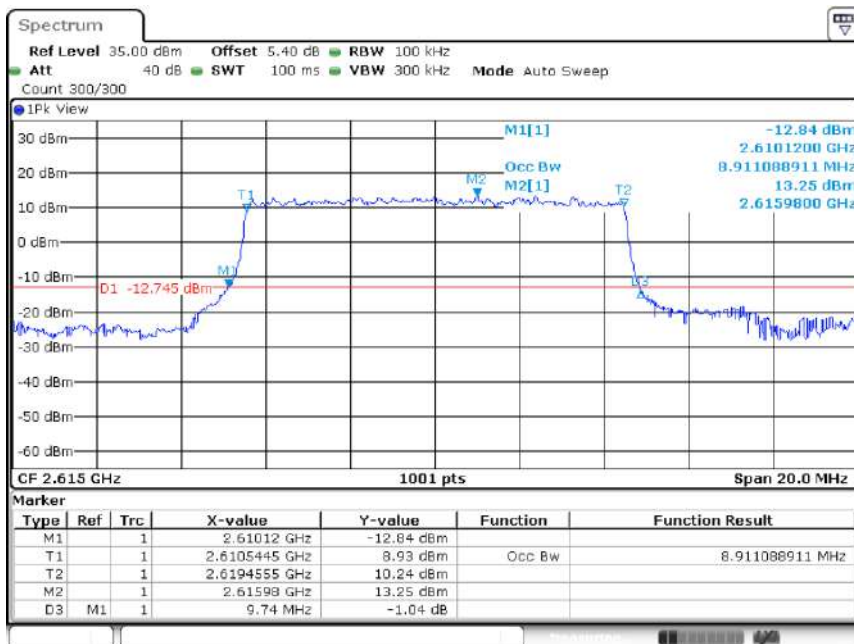
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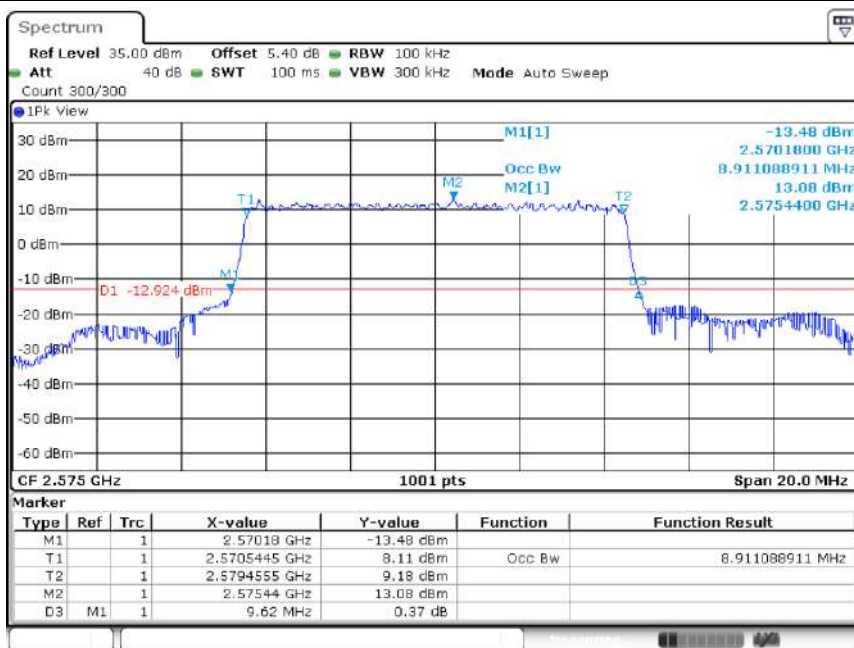


Band38-10MHz-QPSK-38200-50RB#0-8.911



Date: 28 SEP. 2020 12:06:37

Band38-10MHz-16QAM-37800-50RB#0-8.911



Date: 28 SEP. 2020 12:04:10



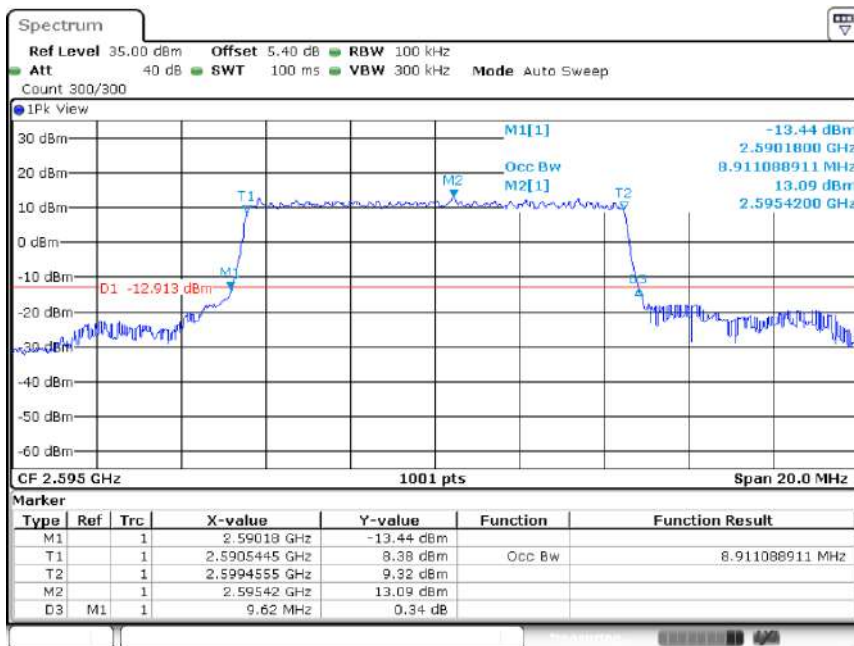
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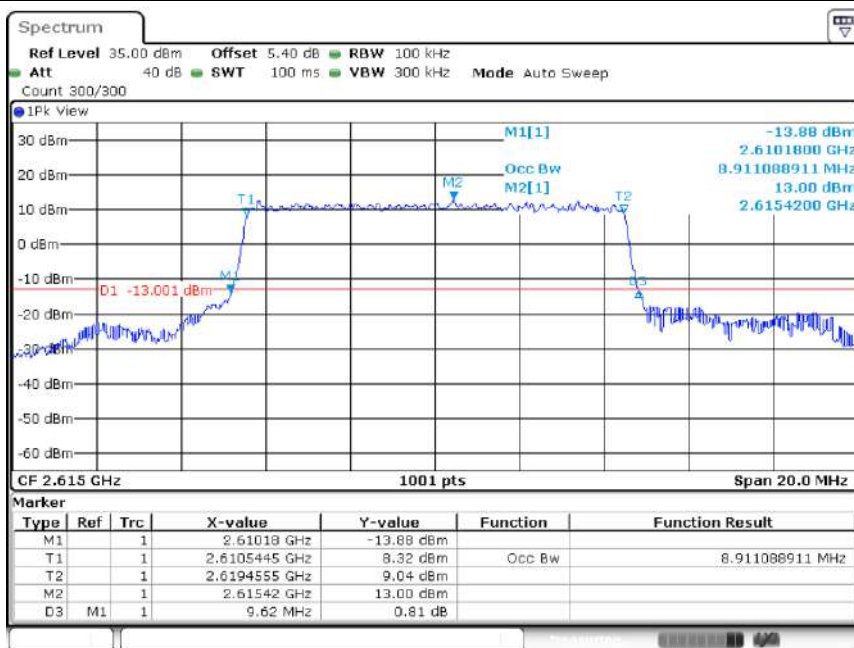
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Band38-10MHz-16QAM-38000-50RB#0-8.911



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Band38-10MHz-16QAM-38200-50RB#0-8.911



Date: 28 SEP. 2020 12:07:26



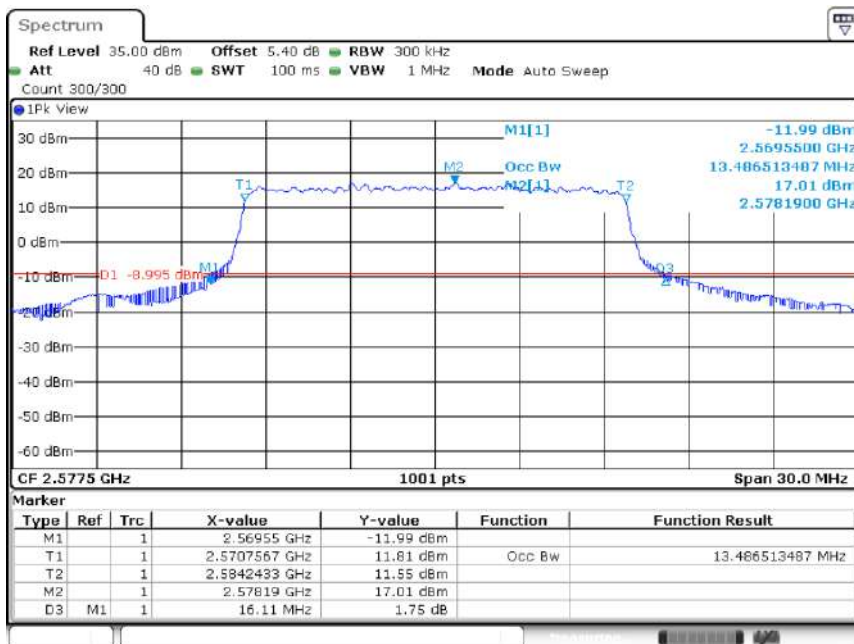
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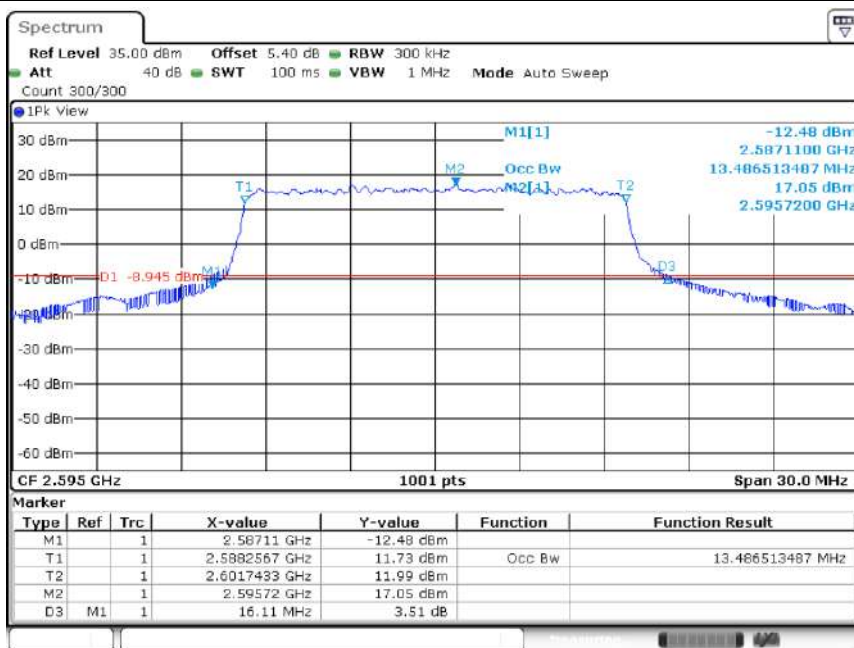
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Band38-15MHz-QPSK-37825-75RB#0-13.487



Date: 28 SEP. 2020 12:08:20

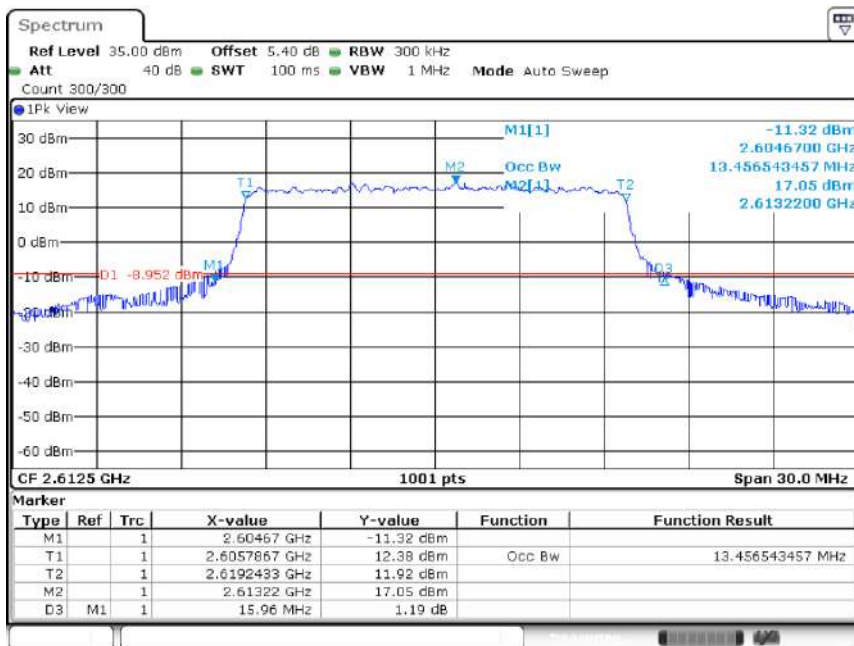
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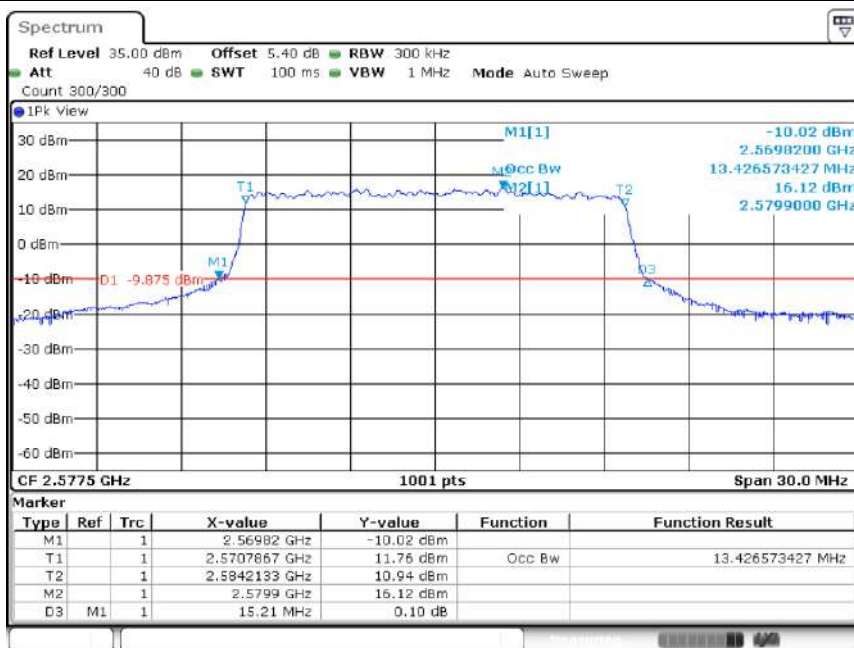


Band38-15MHz-QPSK-38175-75RB#0-13.457



Date: 28 SEP. 2020 12:11:36

Band38-15MHz-16QAM-37825-75RB#0-13.427



Date: 28 SEP. 2020 12:09:09



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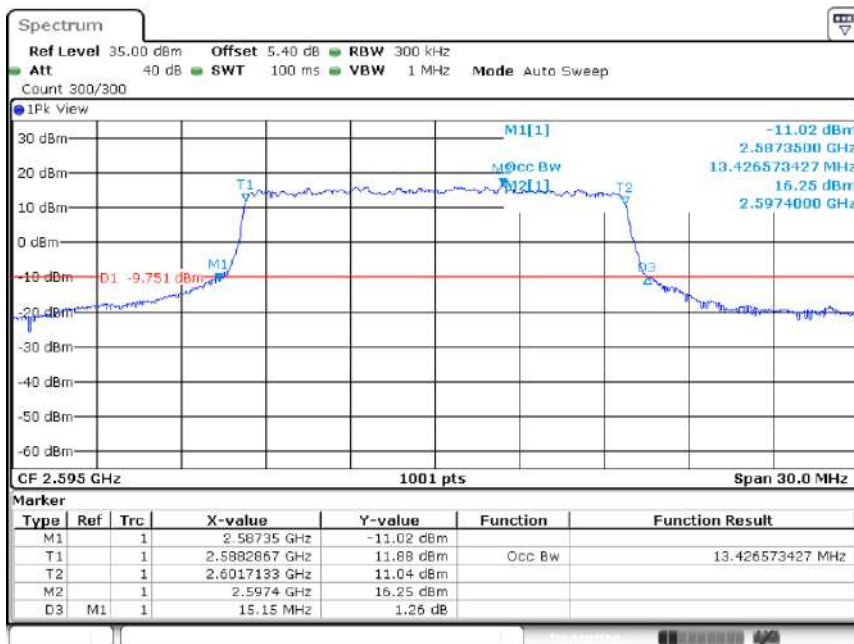
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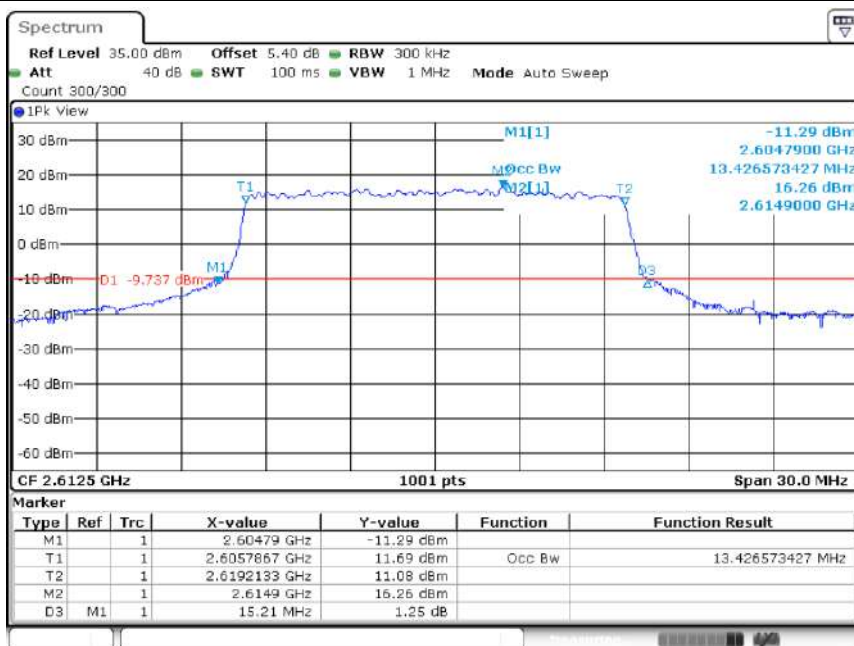
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Band38-15MHz-16QAM-38000-75RB#0-13.427



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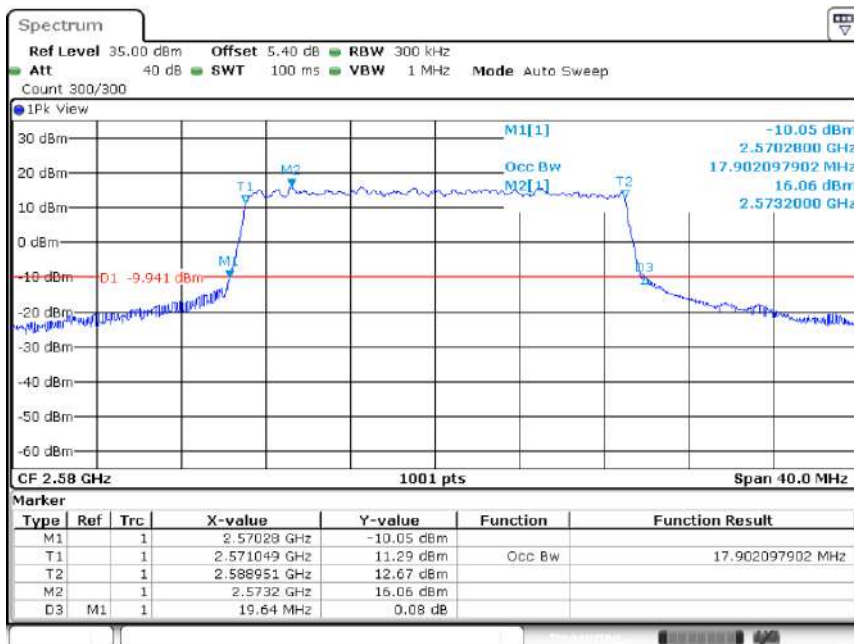
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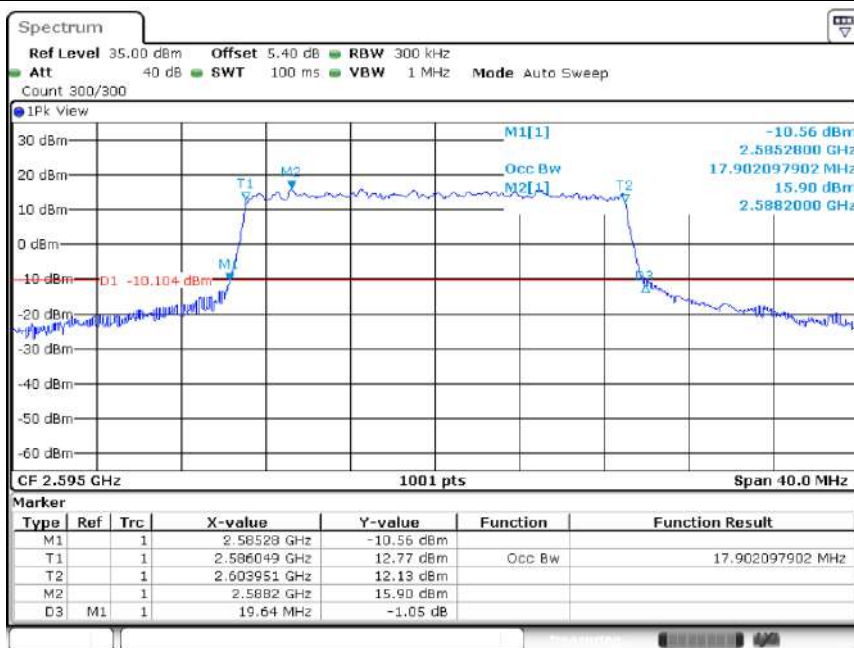


Band38-20MHz-QPSK-37850-100RB#0-17.902



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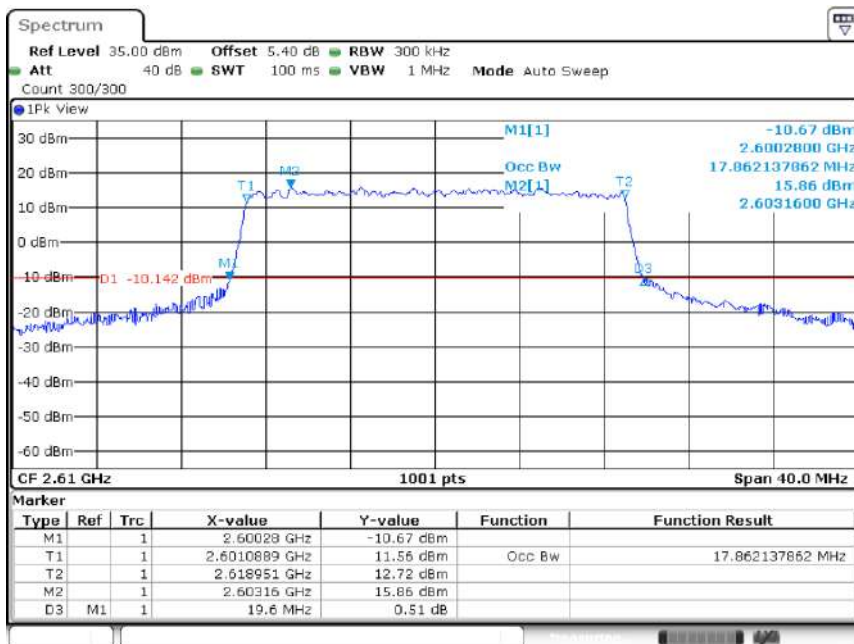
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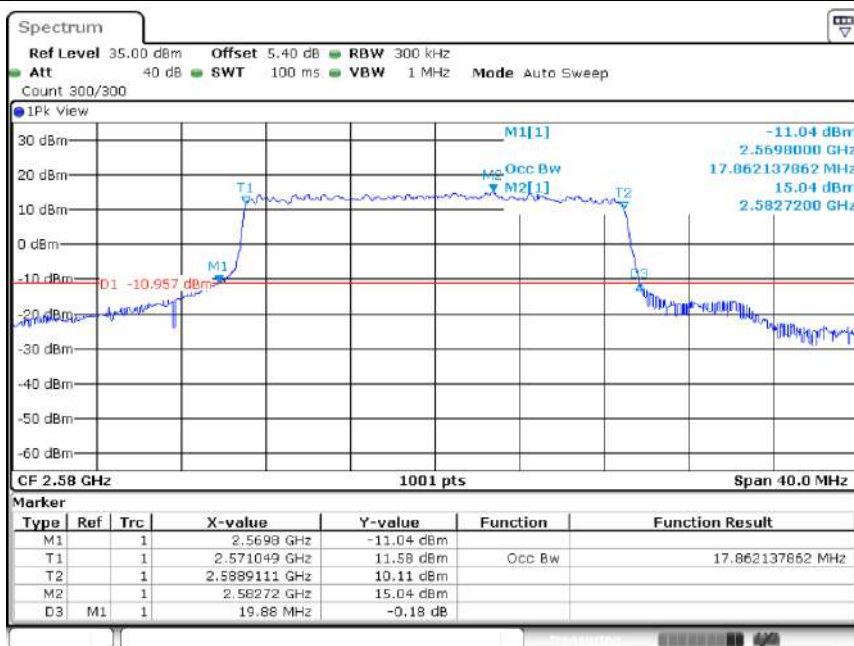


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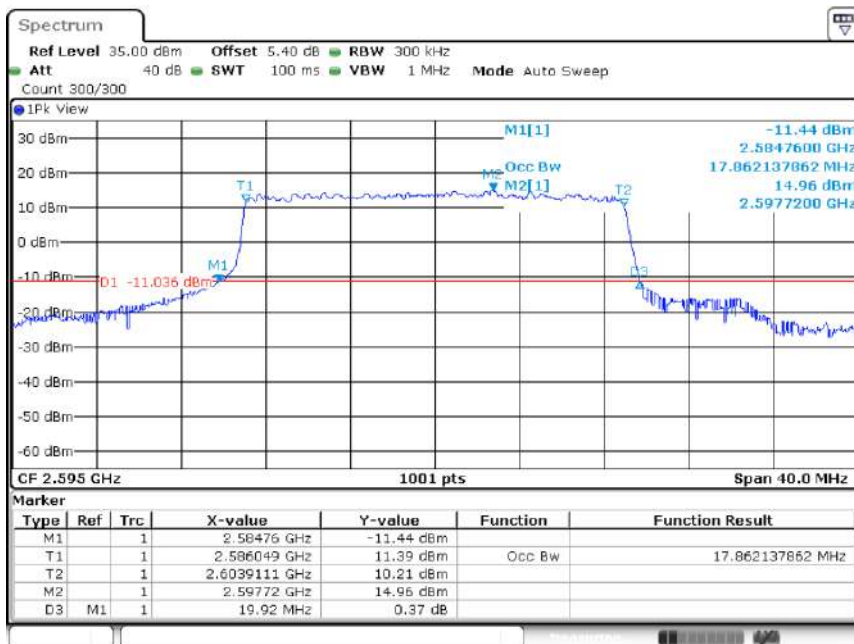
Band38-20MHz-16QAM-37850-100RB#0-17.862



Date: 28 SEP. 2020 12:14:07

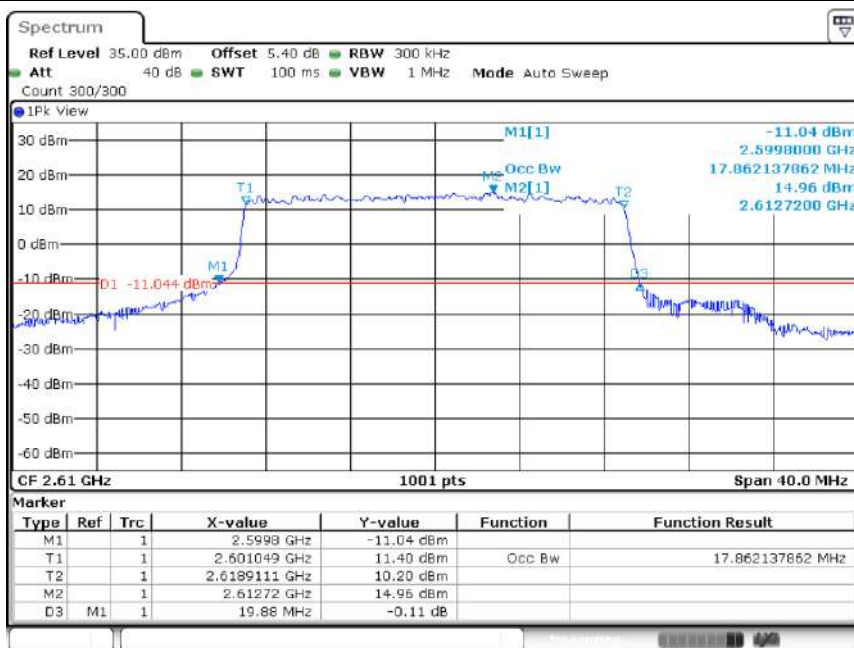


Band38-20MHz-16QAM-38000-100RB#0-17.862



Date: 28 SEP. 2020 12:15:45

Band38-20MHz-16QAM-38150-100RB#0-17.862

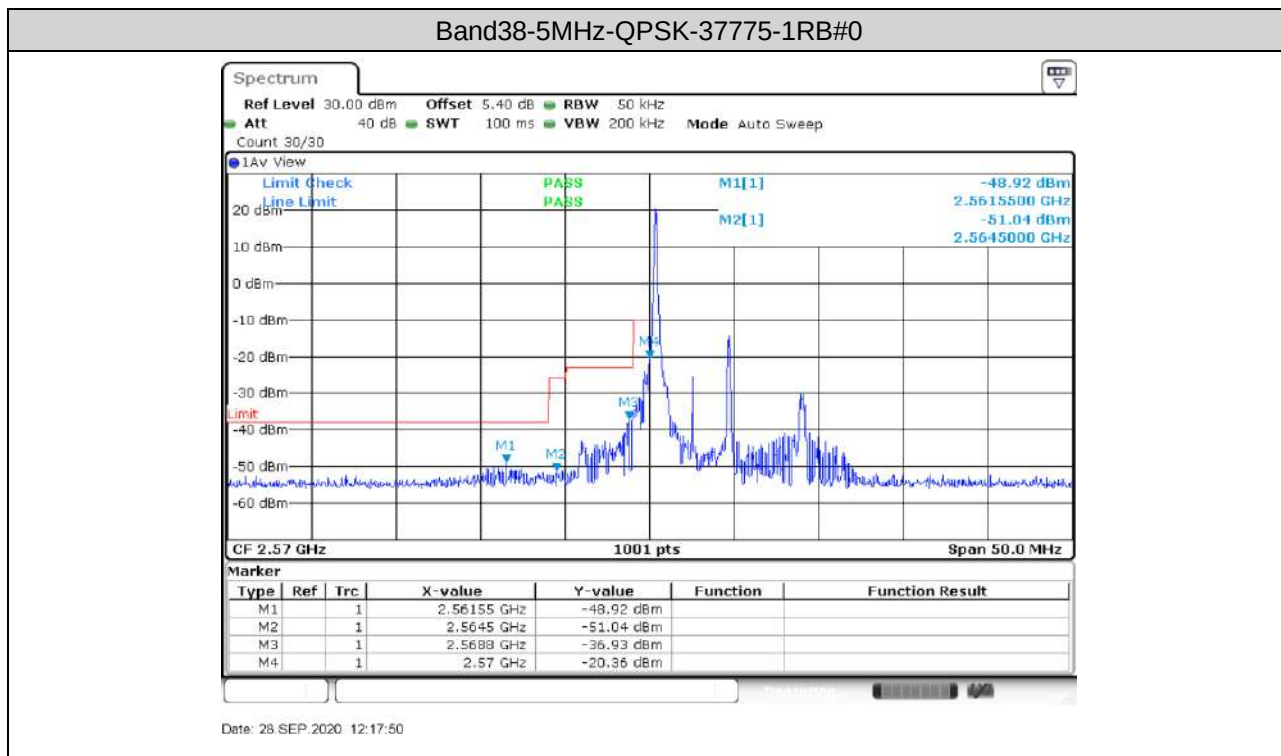


Date: 28 SEP. 2020 12:17:23

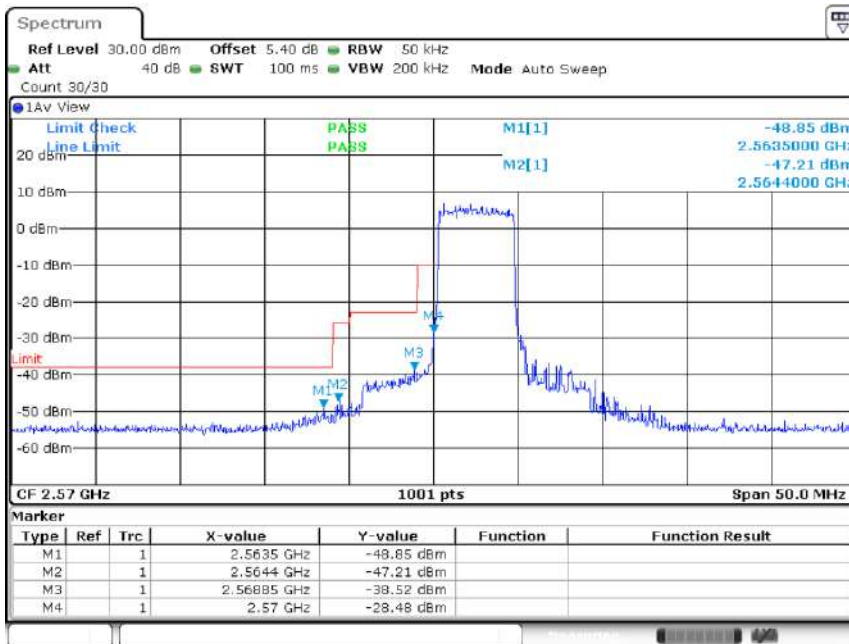


5 Band Edge Compliance

5.1 Test Plots

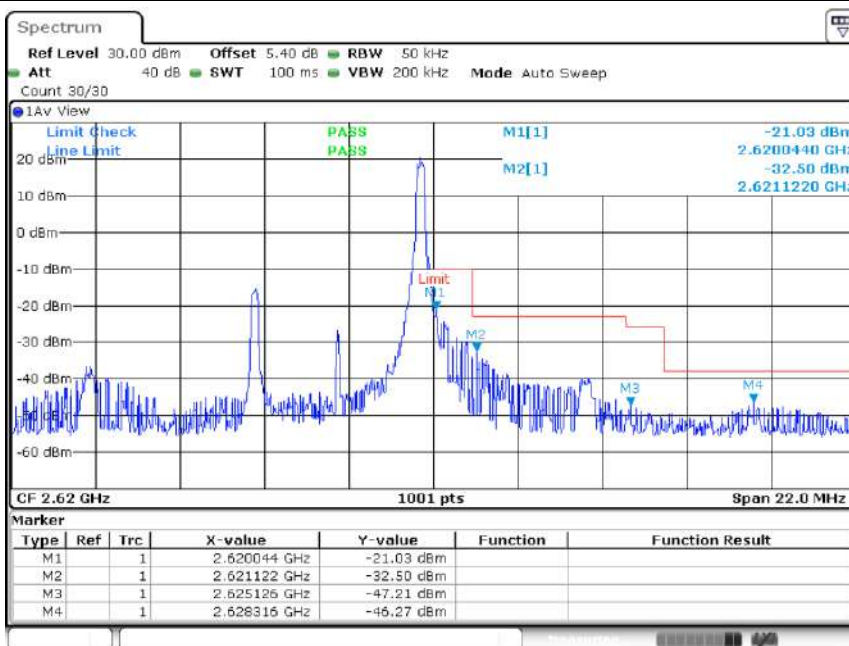


Band38-5MHz-QPSK-37775-25RB#0



Date: 28 SEP.2020 12:18:27

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



Date: 28 SEP.2020 12:19:12



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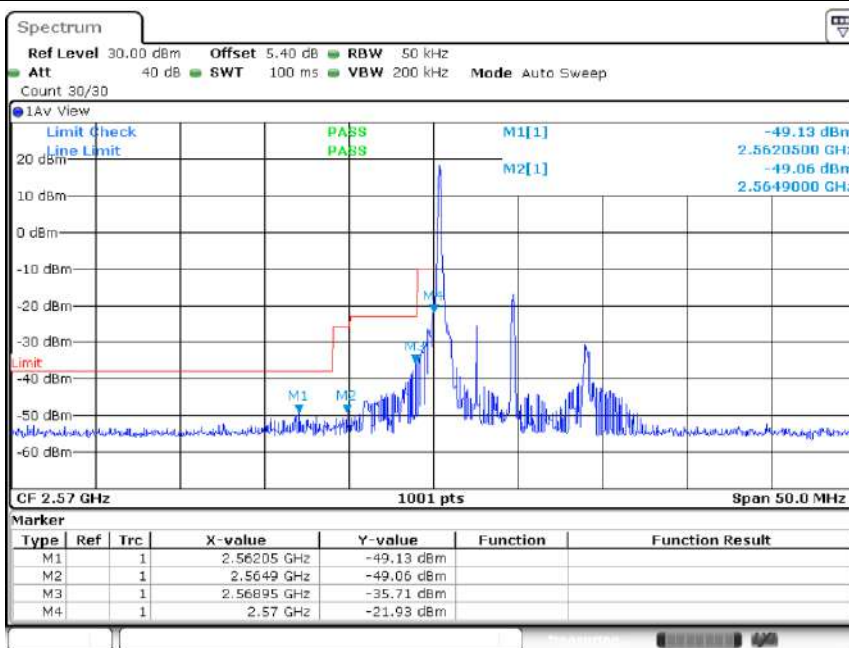
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Band38-5MHz-QPSK-38225-25RB#0



Date: 28 SEP.2020 12:19:50

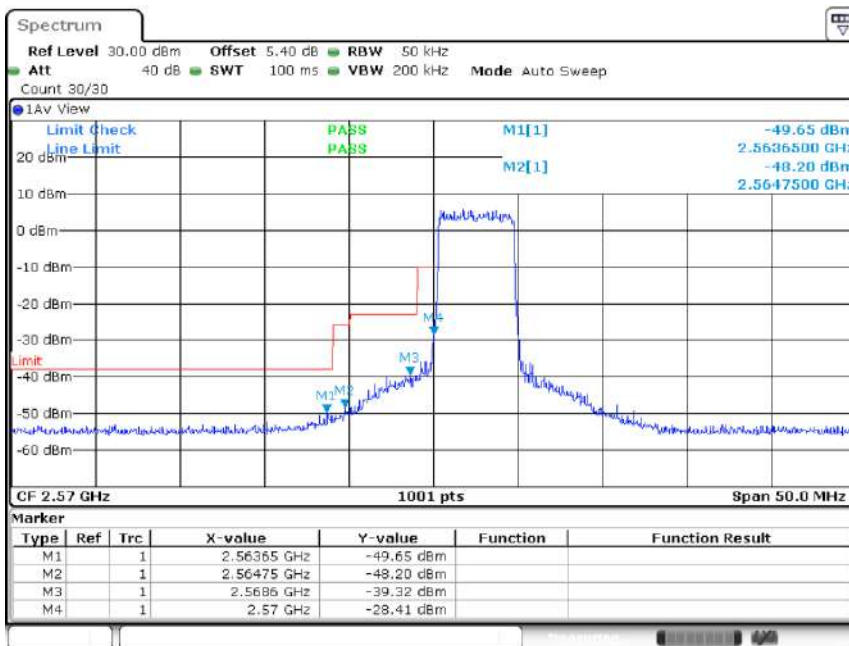
Band38-5MHz-16QAM-37775-1RB#0



Date: 28 SEP.2020 12:18:08

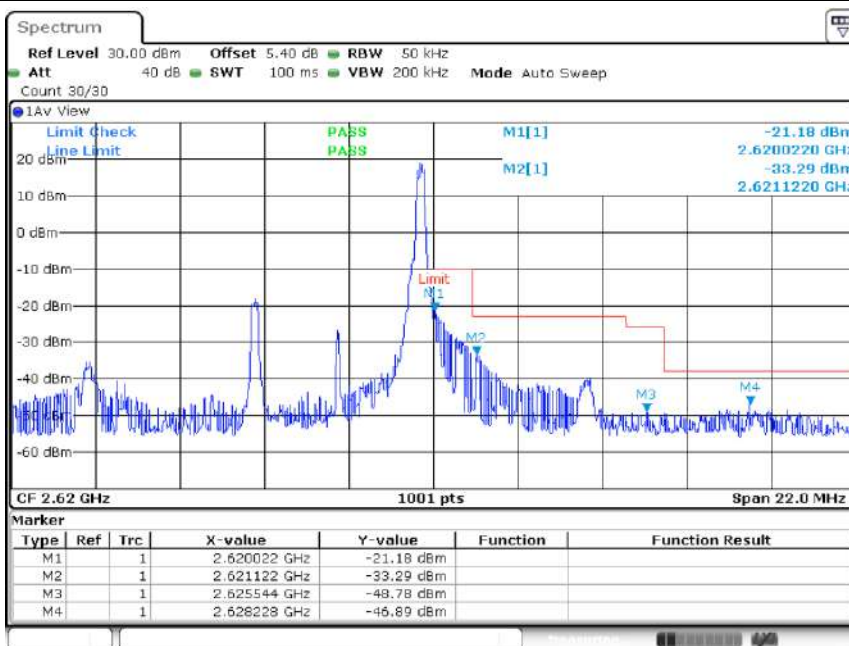


Band38-5MHz-16QAM-37775-25RB#0



Date: 28 SEP.2020 12:18:46

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



Date: 28 SEP.2020 12:19:31



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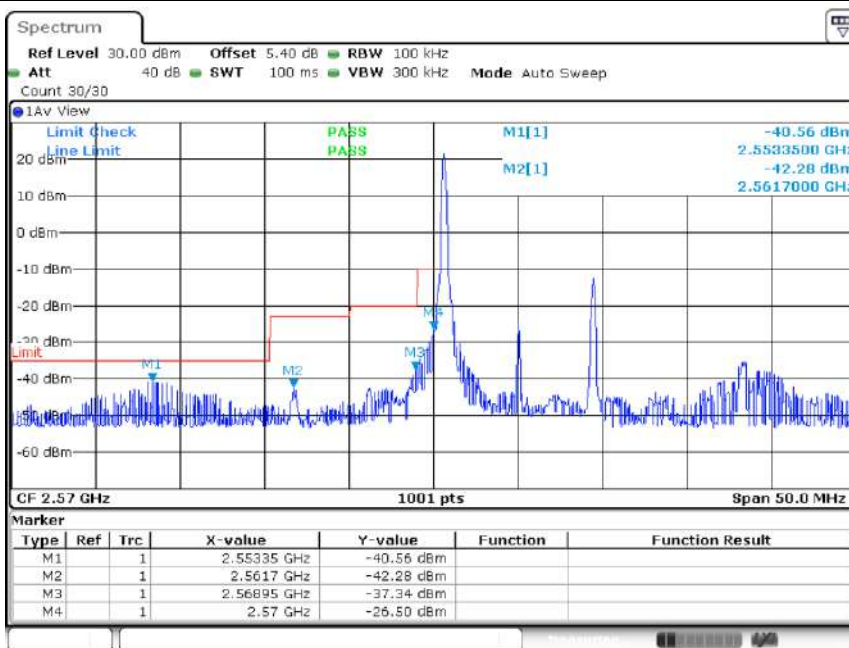
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Band38-5MHz-16QAM-38225-25RB#0



Date: 28 SEP.2020 12:20:08

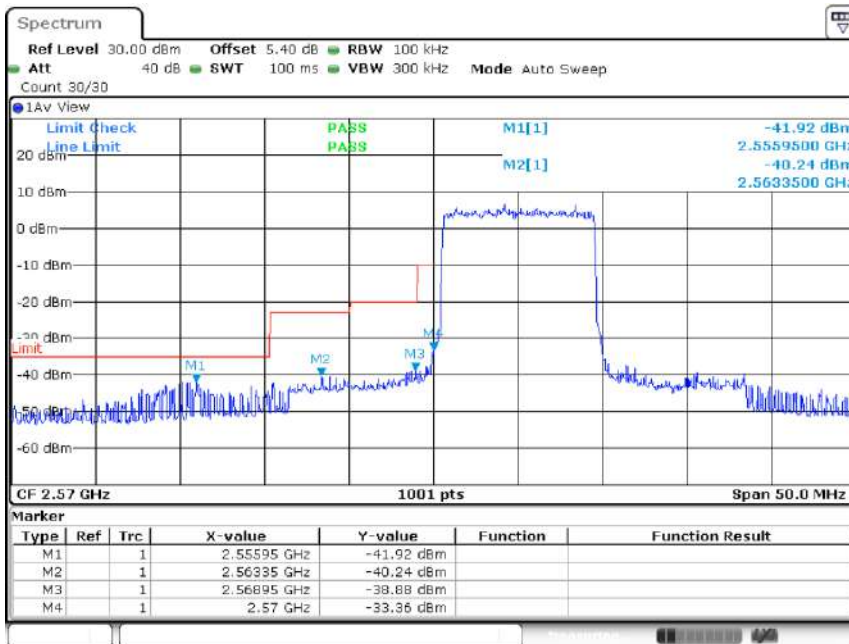
Band38-10MHz-QPSK-37800-1RB#0



Date: 28 SEP.2020 12:20:35

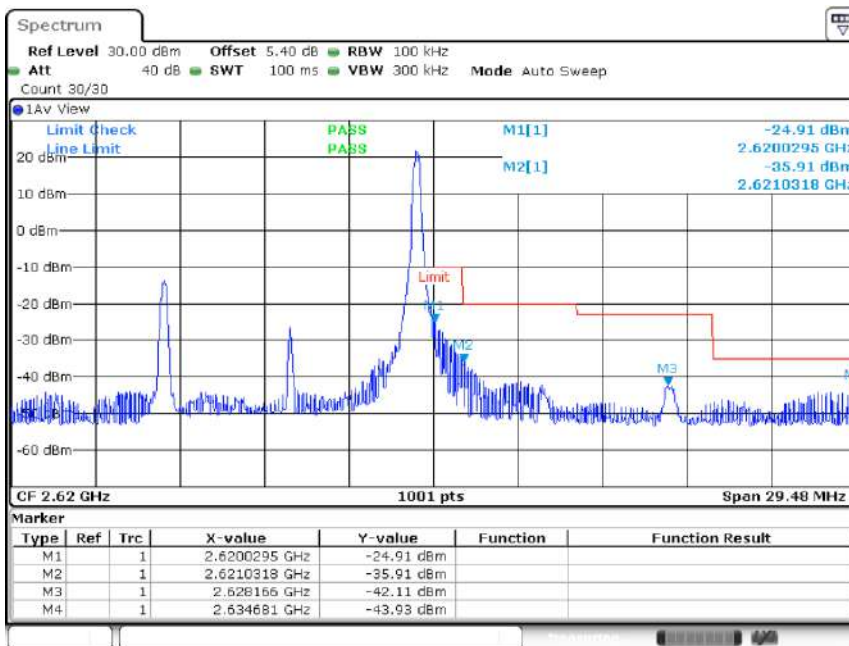


Band38-10MHz-QPSK-37800-50RB#0



Date: 28 SEP.2020 12:21:13

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



Date: 28 SEP.2020 12:21:58

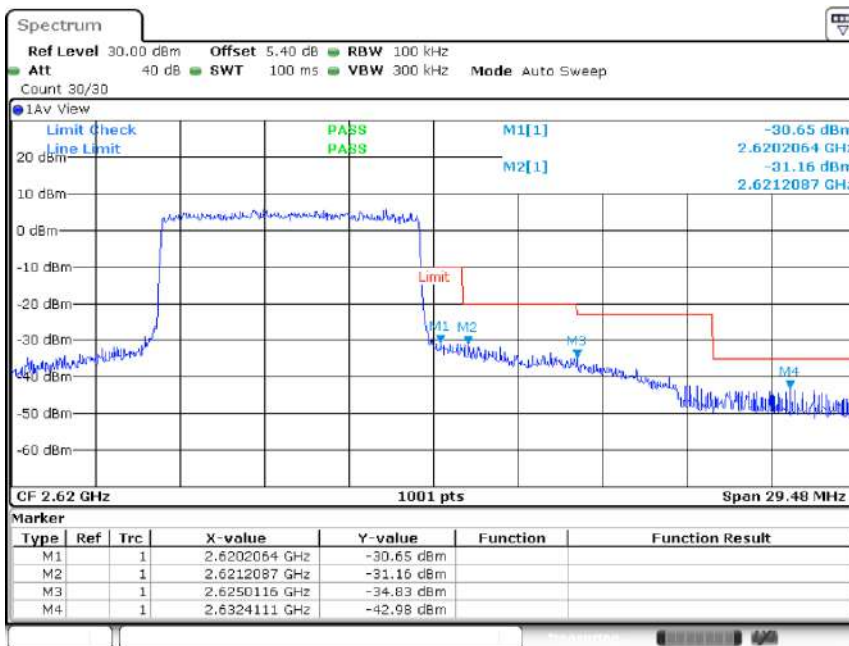


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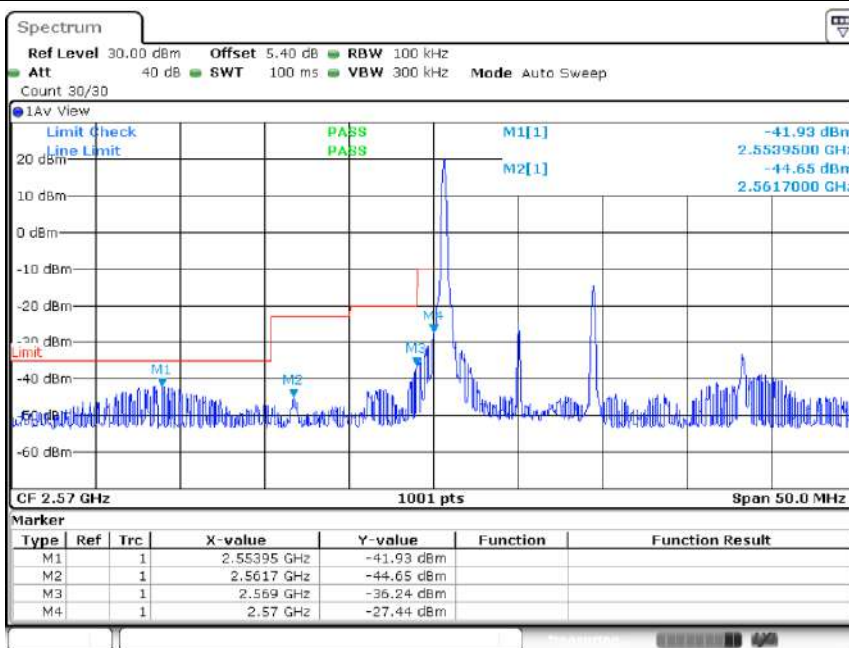
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Band38-10MHz-QPSK-38200-50RB#0



Date: 28 SEP.2020 12:22:35

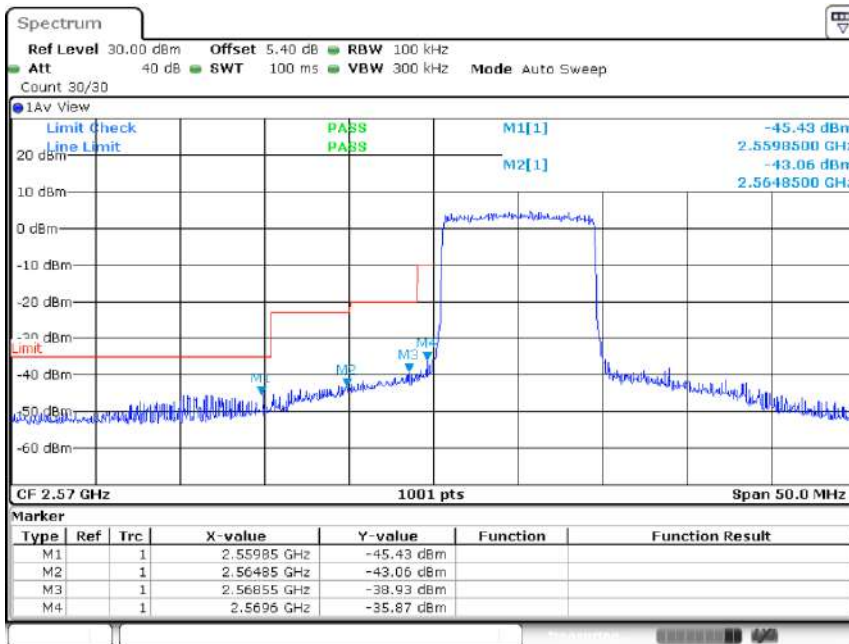
Band38-10MHz-16QAM-37800-1RB#0



Date: 28 SEP.2020 12:20:54

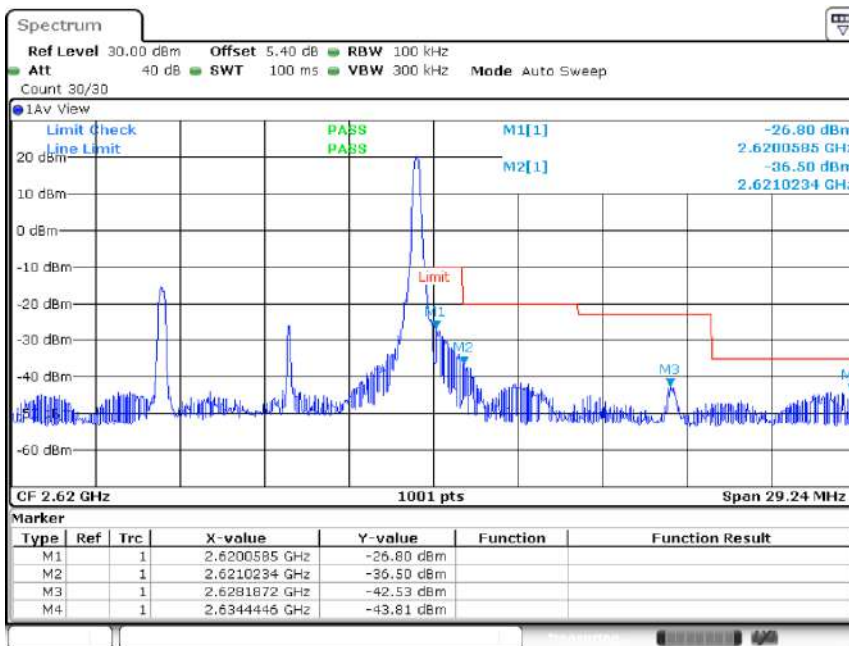


Band38-10MHz-16QAM-37800-50RB#0



Date: 28 SEP.2020 12:21:31

Band38-10MHz-16QAM-38200-1RB#49



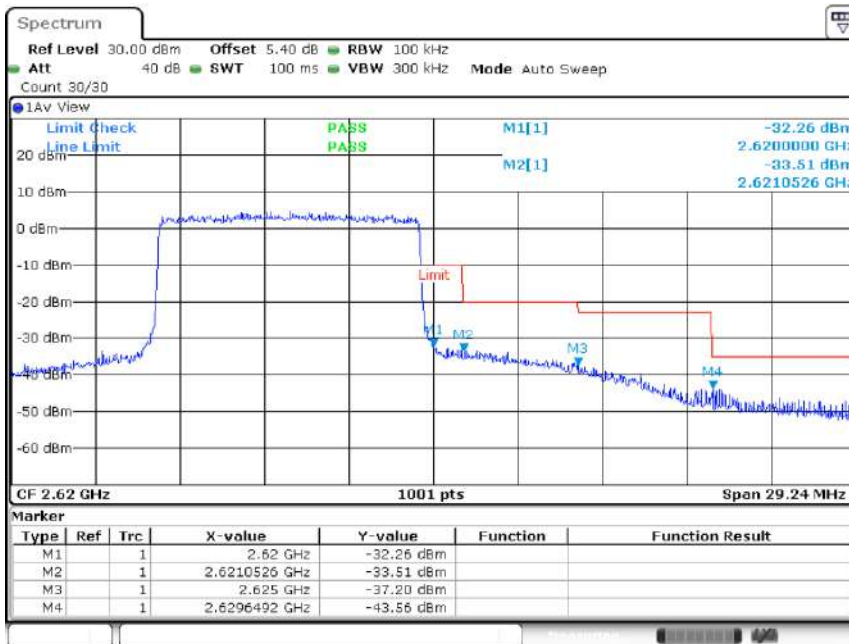
Date: 28 SEP.2020 12:22:16



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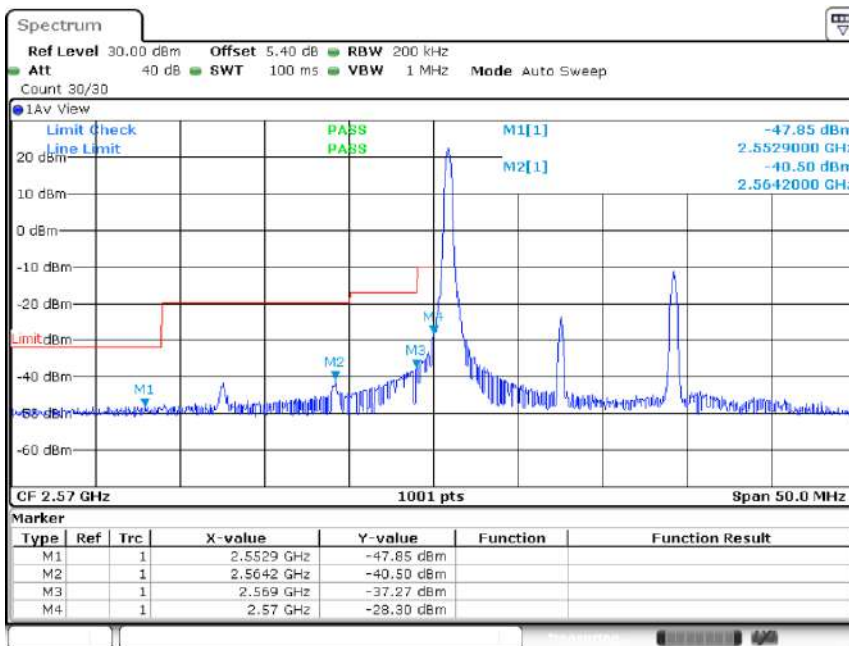
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Band38-10MHz-16QAM-38200-50RB#0



Date: 28 SEP.2020 12:22:54

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



Date: 28 SEP.2020 12:23:21

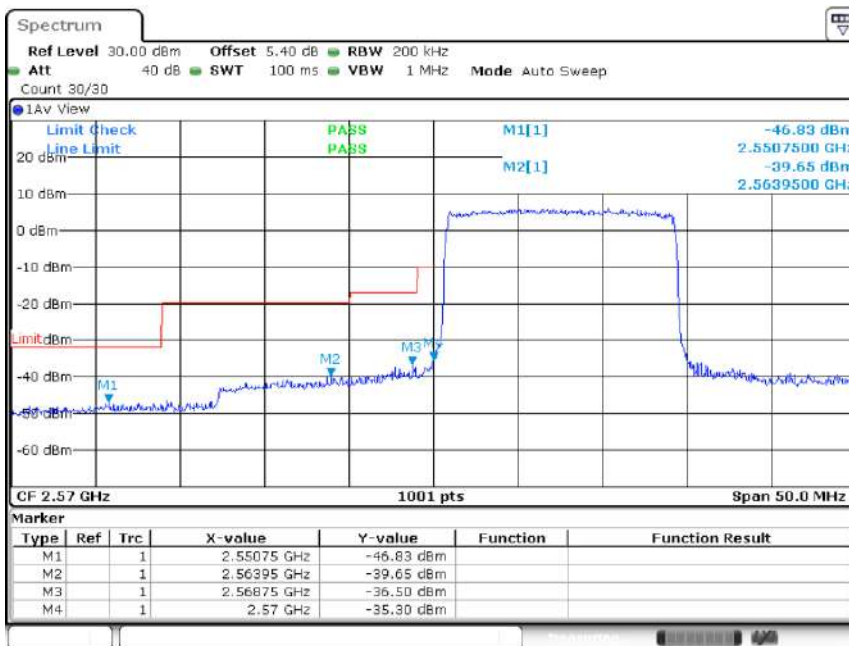


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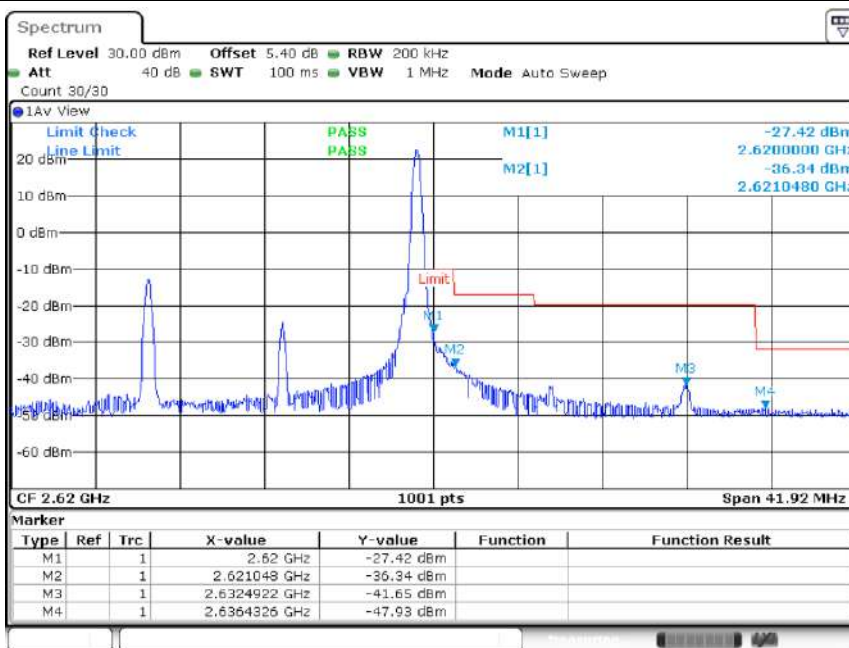
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Band38-15MHz-QPSK-37825-75RB#0



Date: 28 SEP.2020 12:23:58

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



Date: 28 SEP.2020 12:24:43

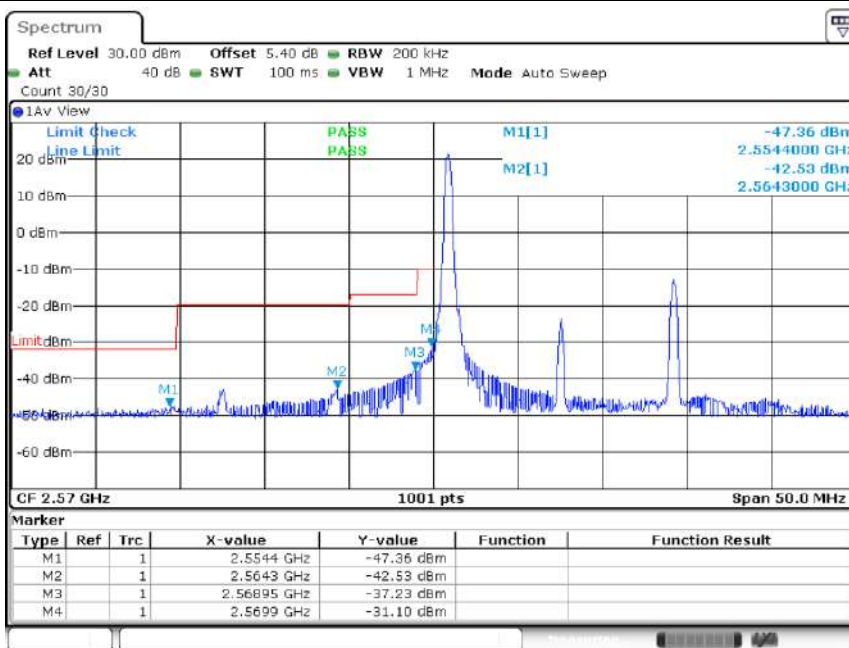


Band38-15MHz-QPSK-38175-75RB#0



Date: 28 SEP.2020 12:25:21

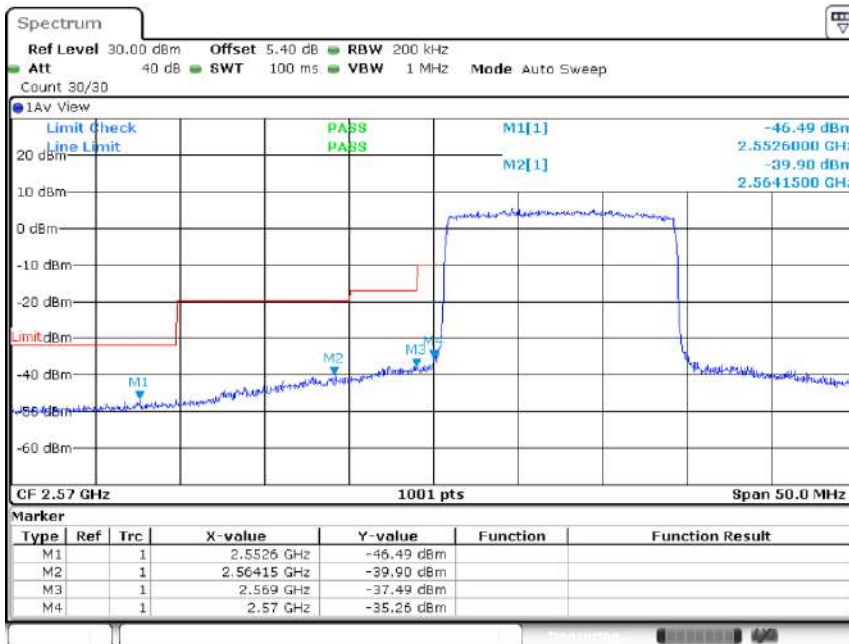
Band38-15MHz-16QAM-37825-1RB#0



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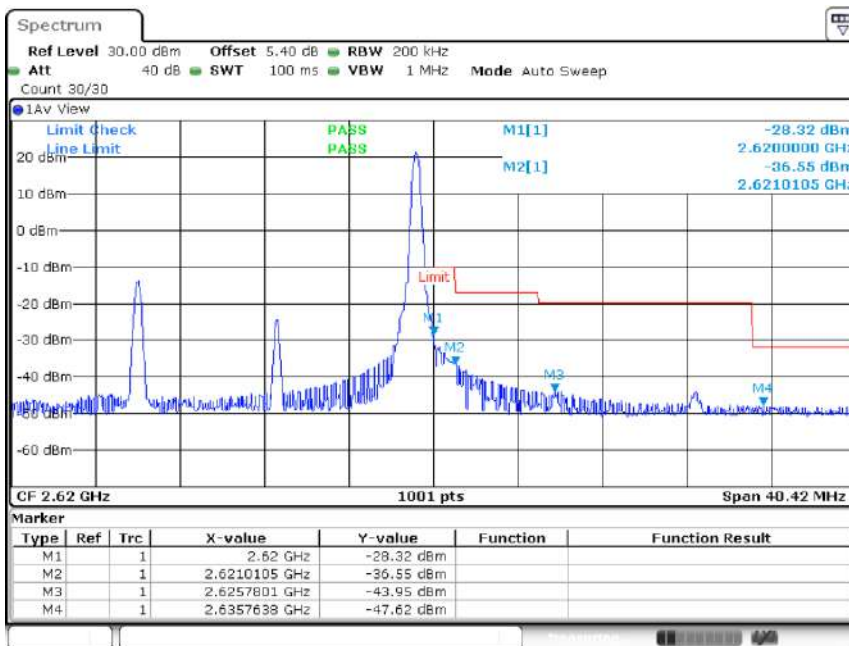


Band38-15MHz-16QAM-37825-75RB#0



Date: 28 SEP.2020 12:24:17

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



Date: 28 SEP.2020 12:25:02

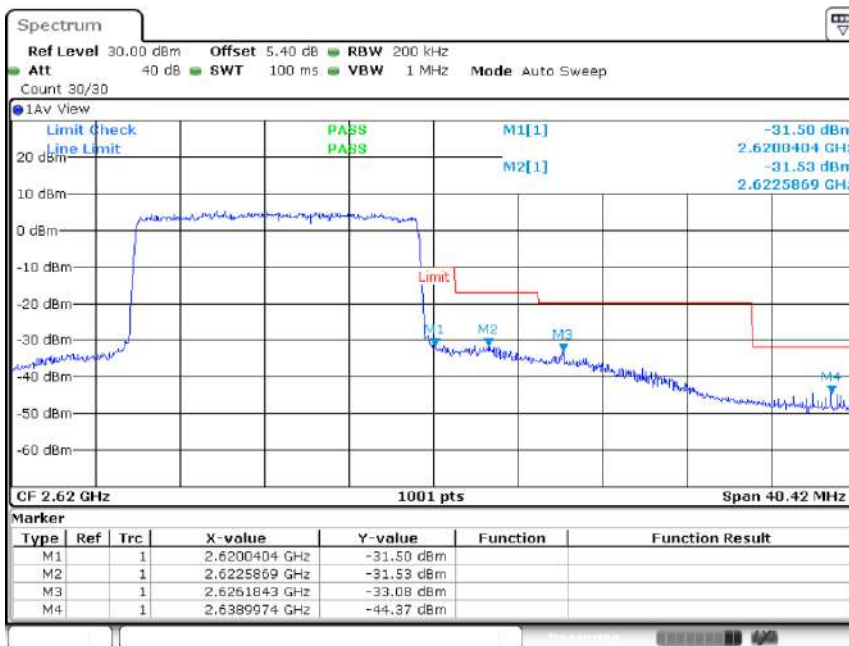


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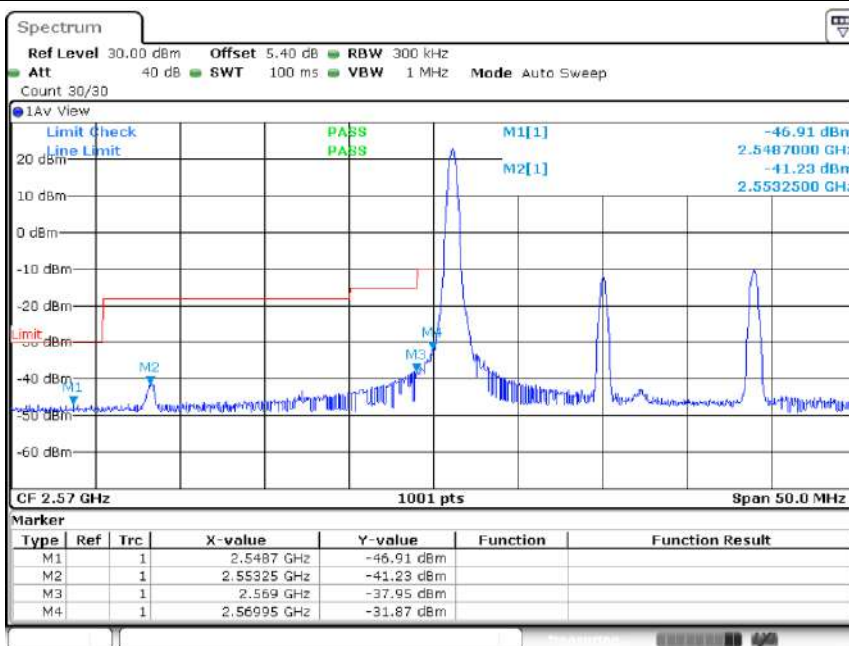
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Band38-15MHz-16QAM-38175-75RB#0



Date: 28 SEP.2020 12:25:40

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



Date: 28 SEP.2020 12:26:06

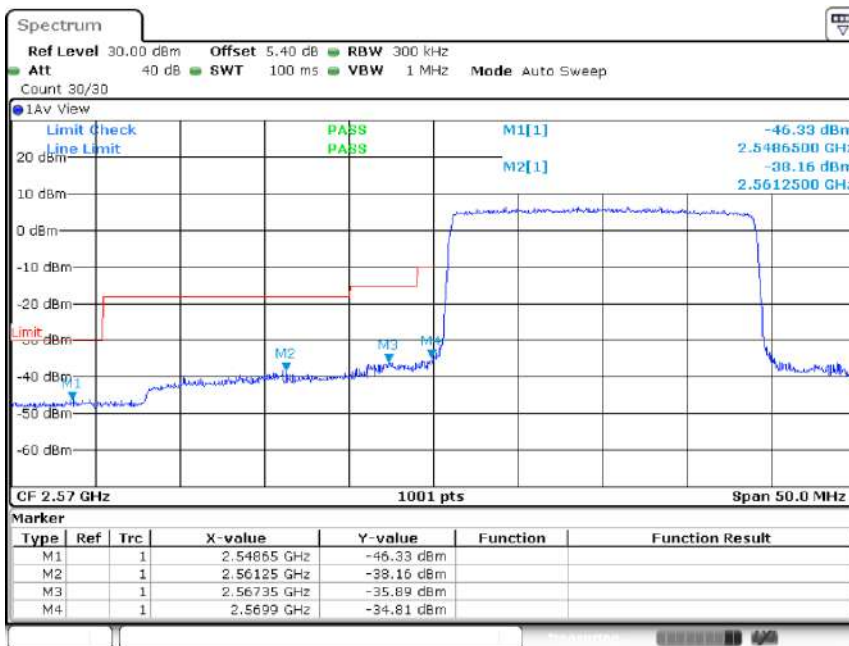


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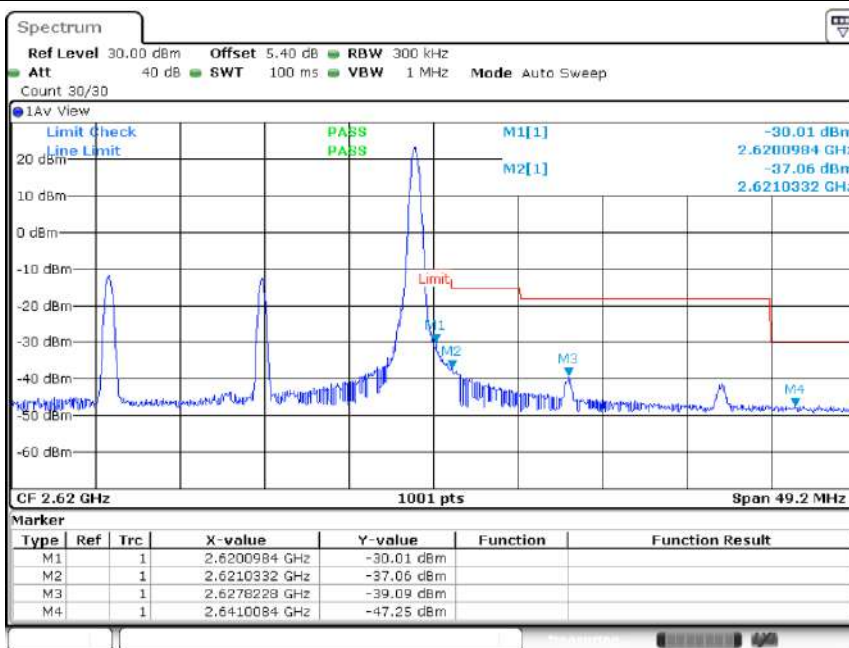
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Band38-20MHz-QPSK-37850-100RB#0



Date: 28 SEP.2020 12:26:44

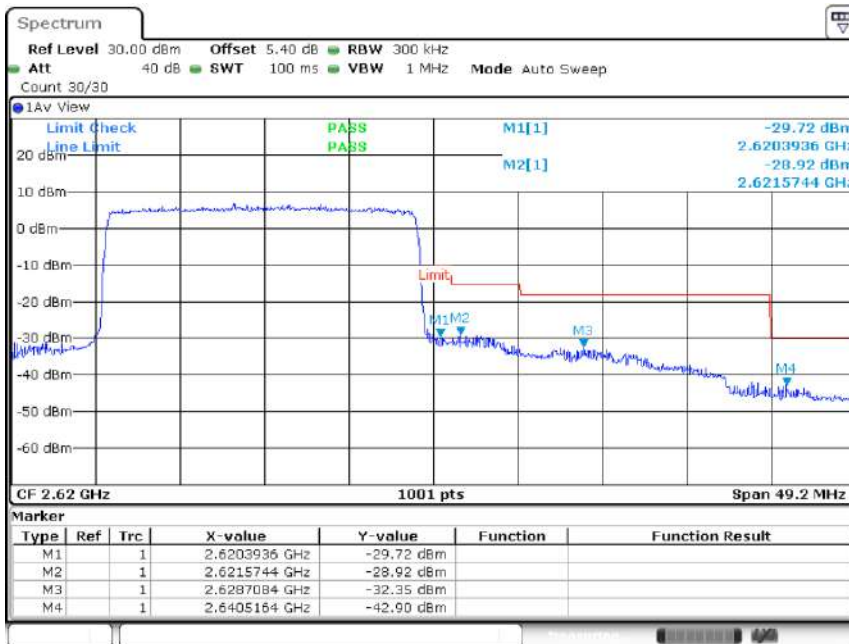
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Date: 28 SEP.2020 12:27:29

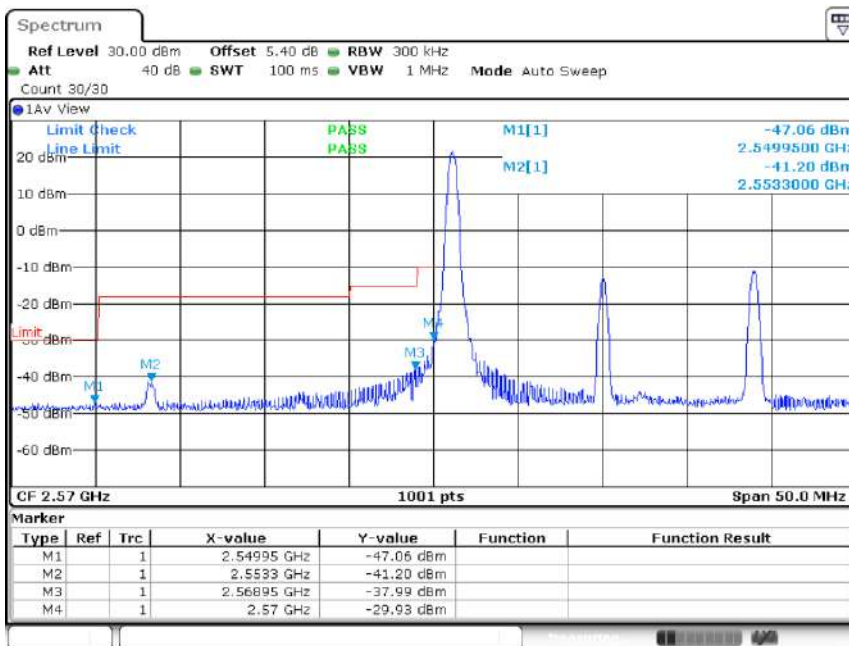


Band38-20MHz-QPSK-38150-100RB#0



Date: 28 SEP.2020 12:28:06

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



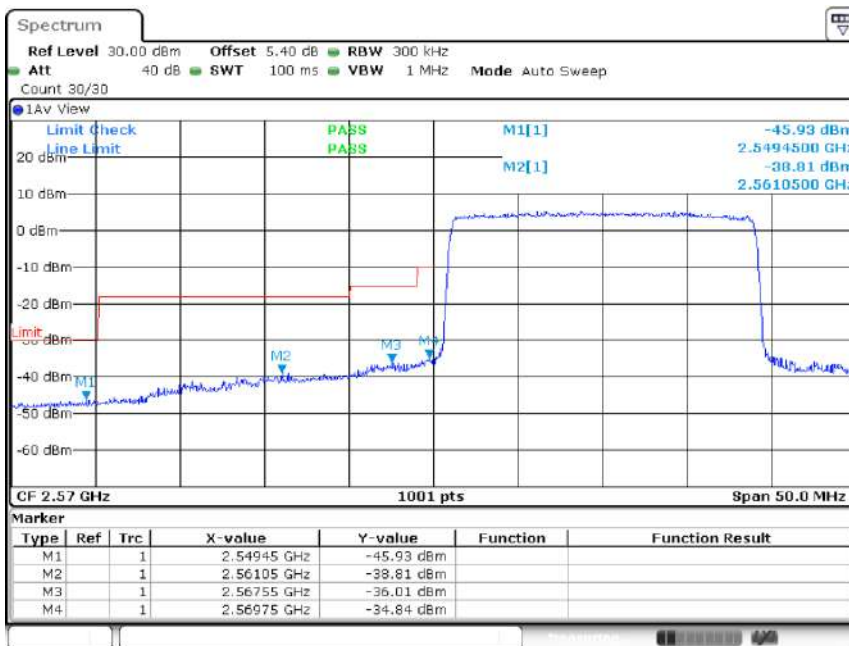
Date: 28 SEP.2020 12:26:25



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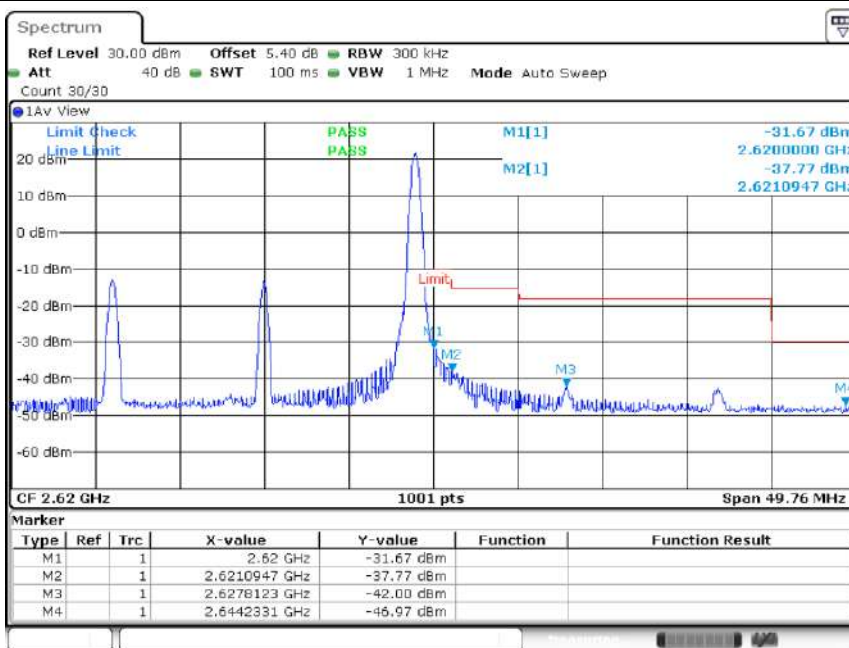
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Band38-20MHz-16QAM-37850-100RB#0



Date: 28 SEP.2020 12:27:03

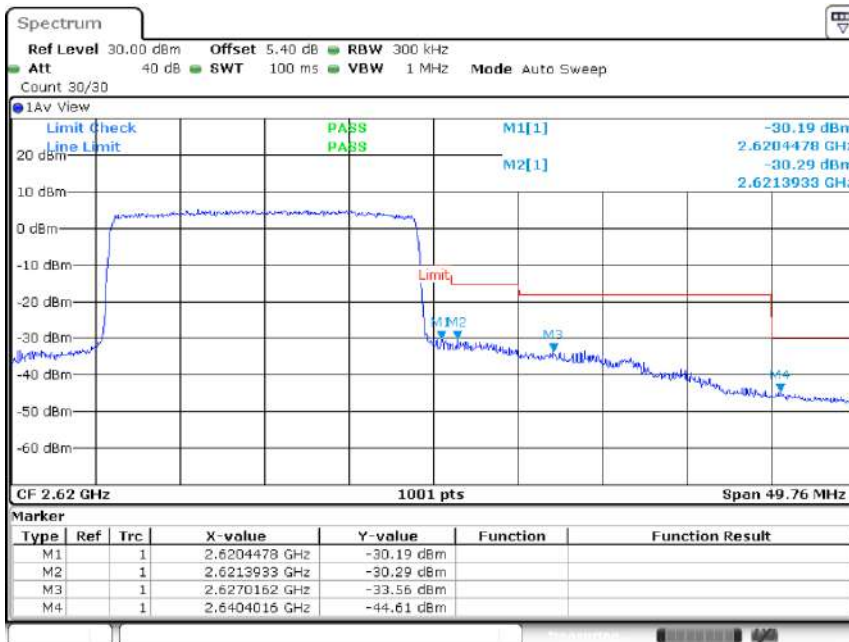
Band38-20MHz-16QAM-38150-1RB#99



Date: 28 SEP.2020 12:27:48



Band38-20MHz-16QAM-38150-100RB#0



Date: 28 SEP.2020 12:28:25

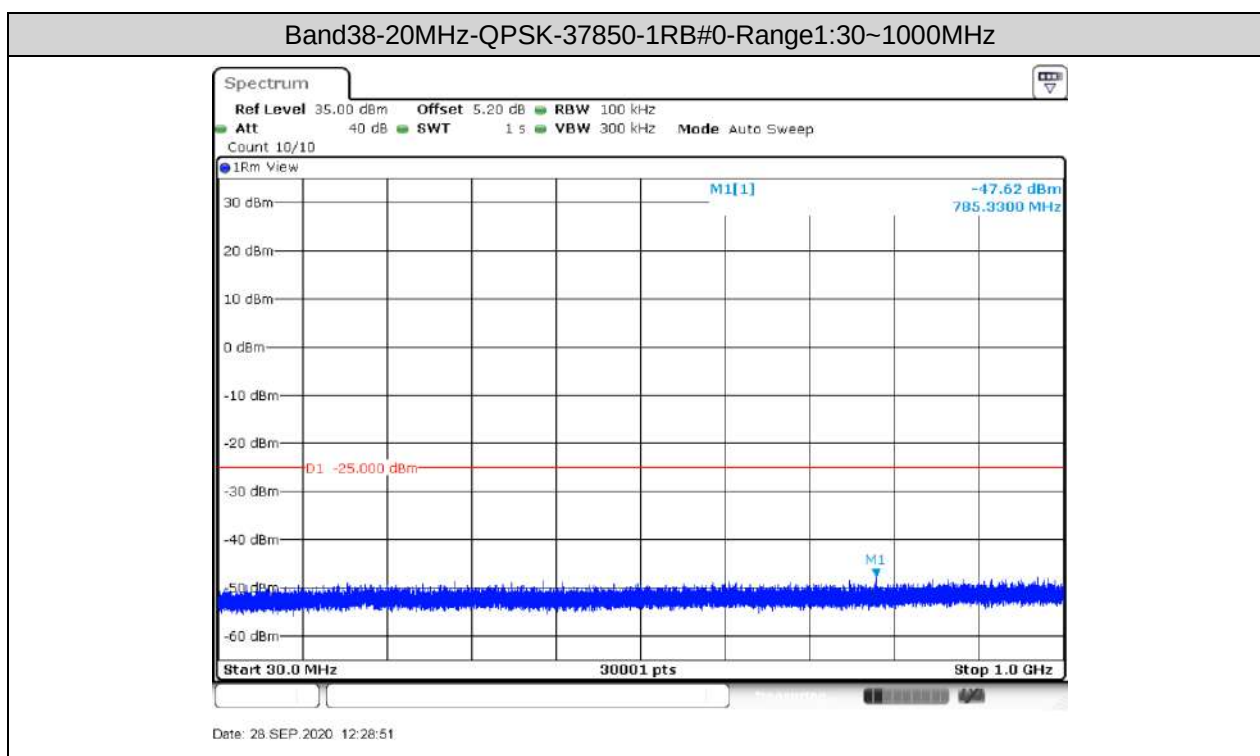


6 Spurious Emission at Antenna Terminal

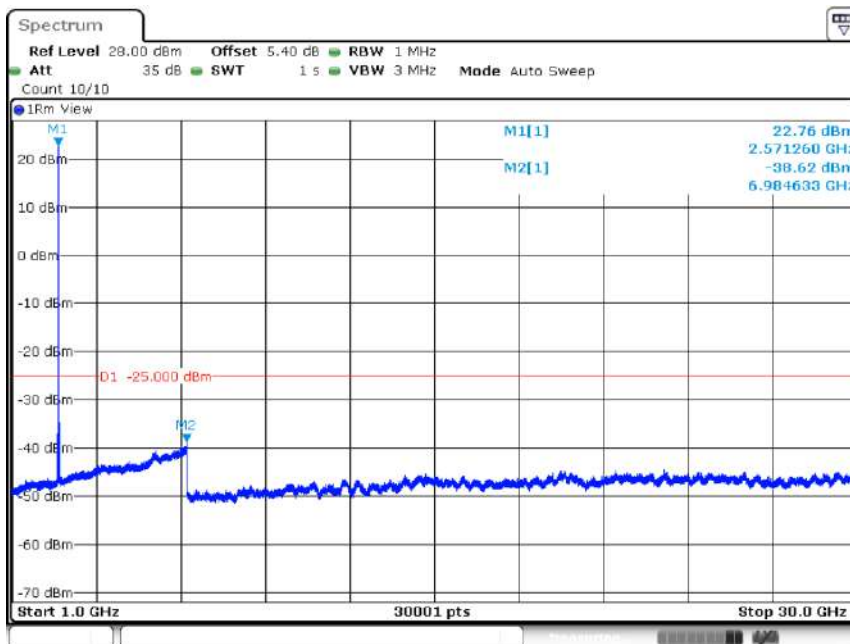
Remark1: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points =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

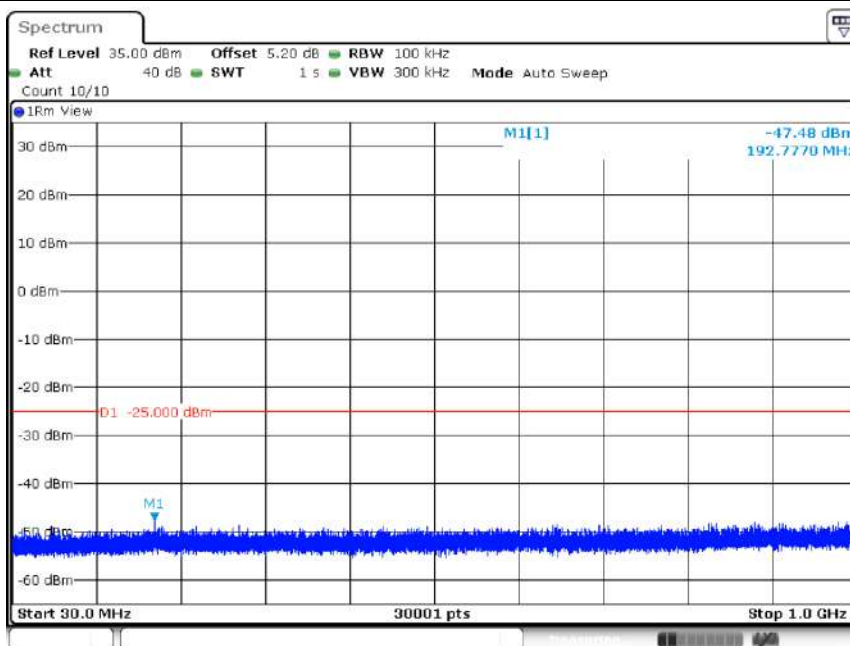


Band38-20MHz-QPSK-37850-1RB#0-Range2:1000~30000MHz



Date: 28 SEP.2020 12:29:09

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



Date: 28 SEP.2020 12:30:10

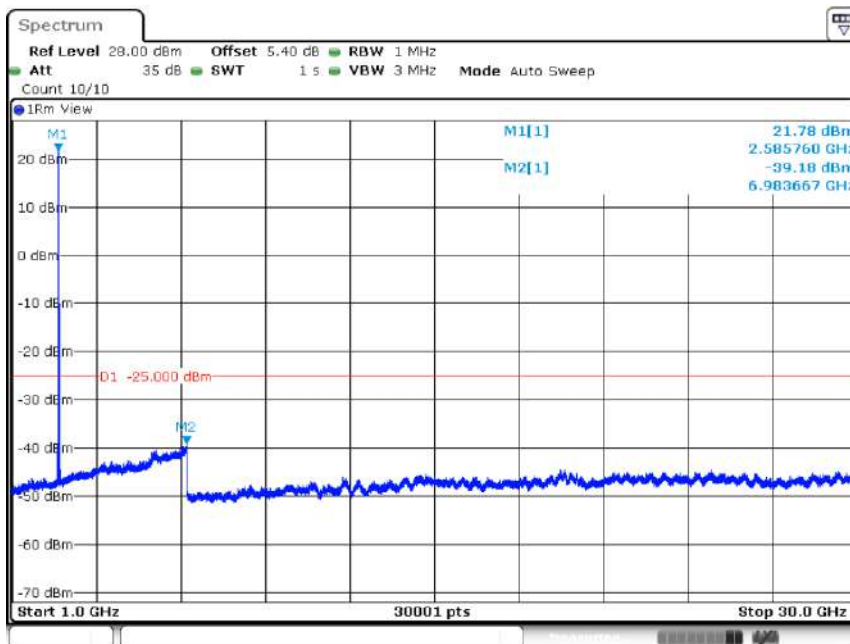


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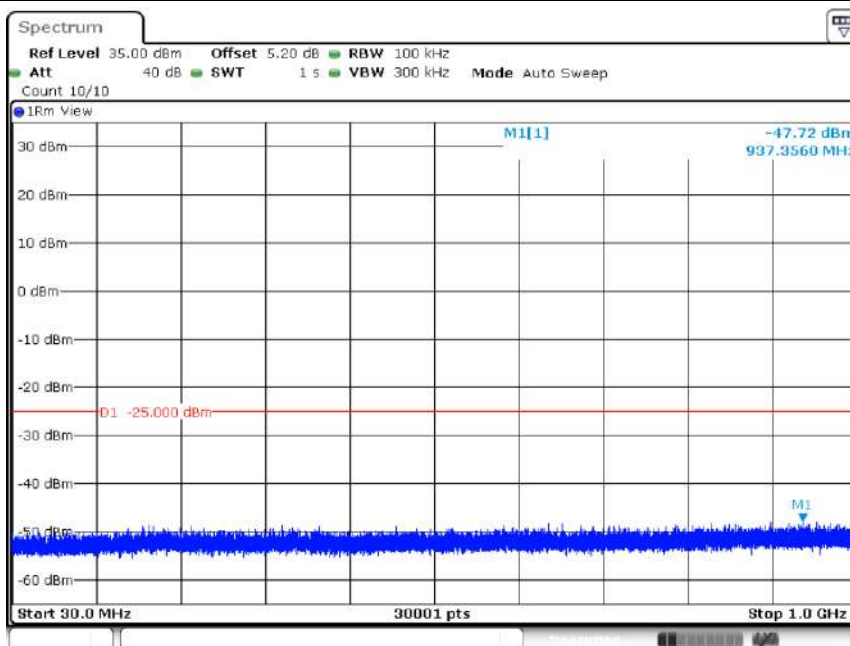
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Band38-20MHz-QPSK-38000-1RB#0-Range2:1000~30000MHz



Date: 28 SEP.2020 12:30:27

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



Date: 28 SEP.2020 12:31:28

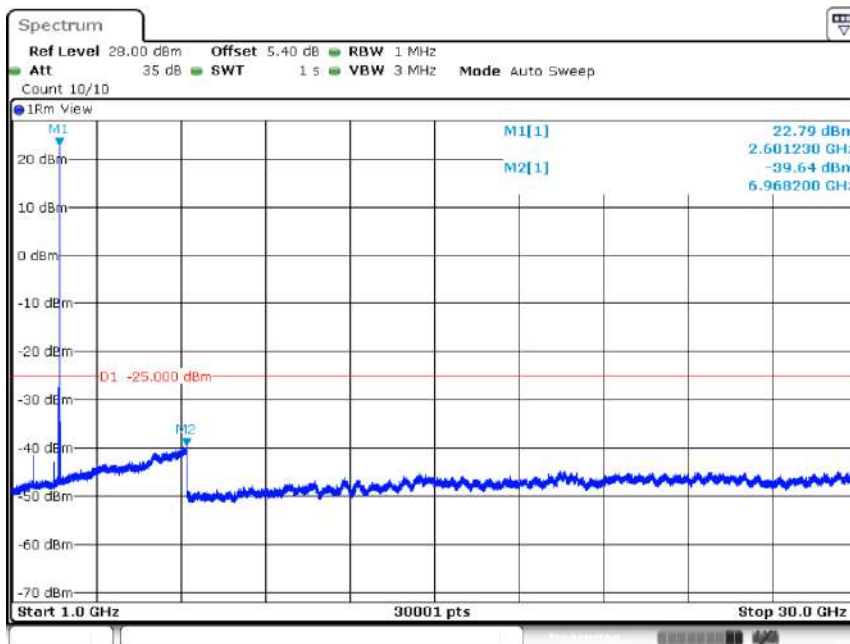


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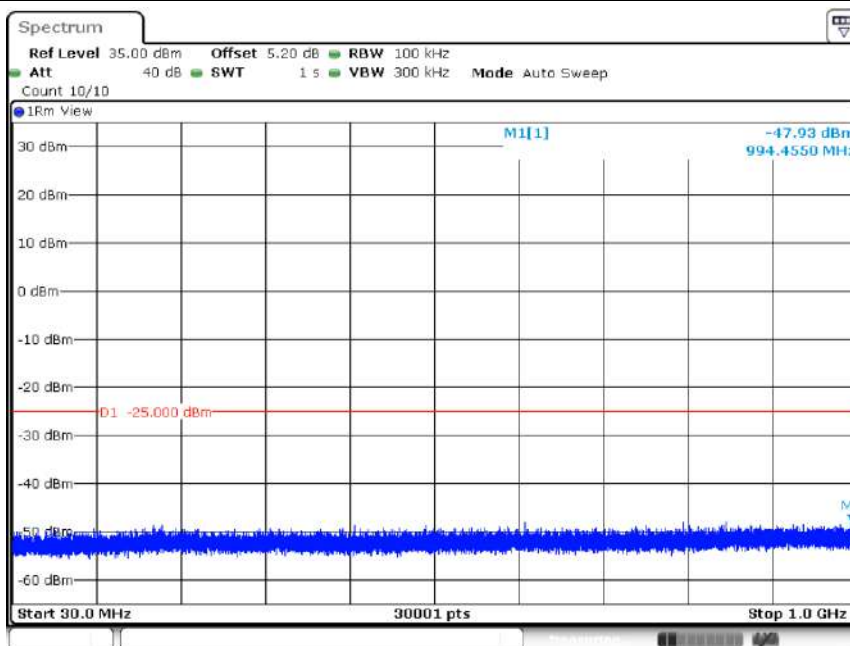
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Band38-20MHz-QPSK-38150-1RB#0-Range2:1000~30000MHz



Date: 28 SEP.2020 12:31:45

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



Date: 28 SEP.2020 12:29:30

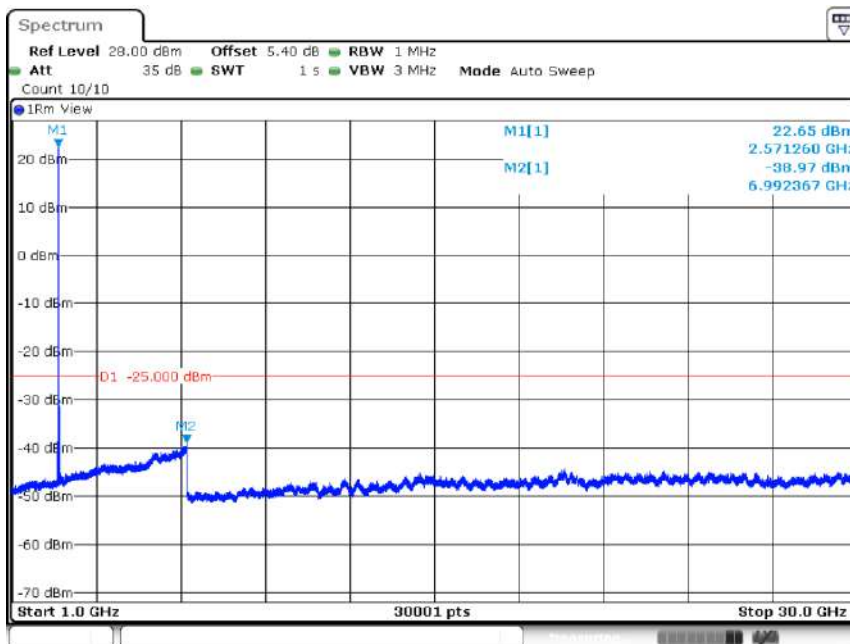
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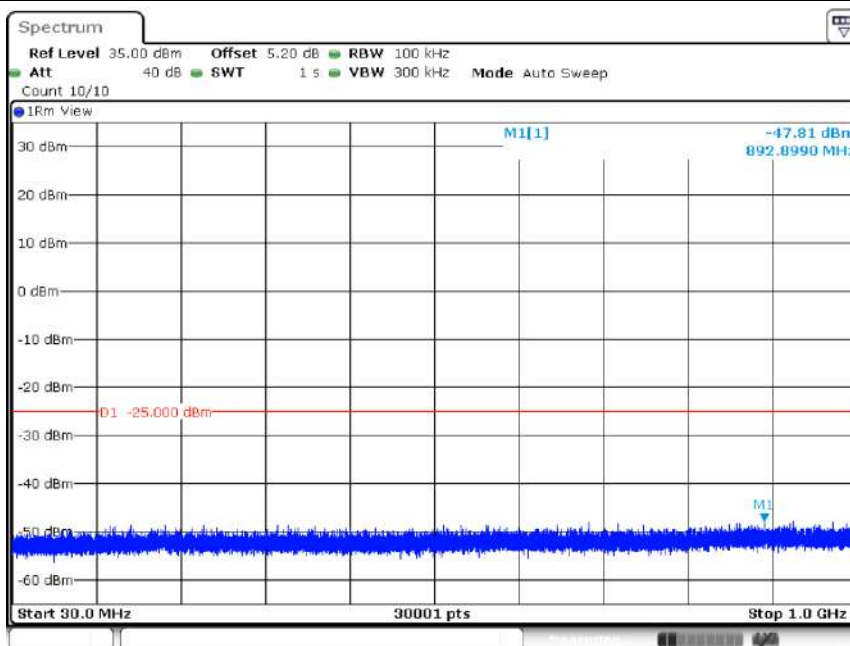
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Band38-20MHz-16QAM-37850-1RB#0-Range2:1000~30000MHz



Date: 28 SEP.2020 12:29:47

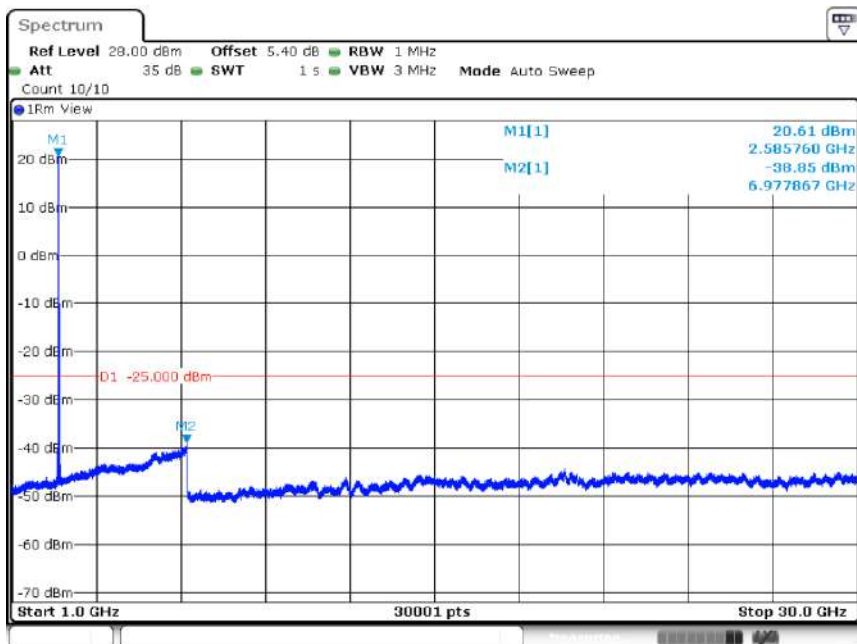
Band38-20MHz-16QAM-38000-1RB#0-Range1:30~1000MHz



Date: 28 SEP.2020 12:30:48

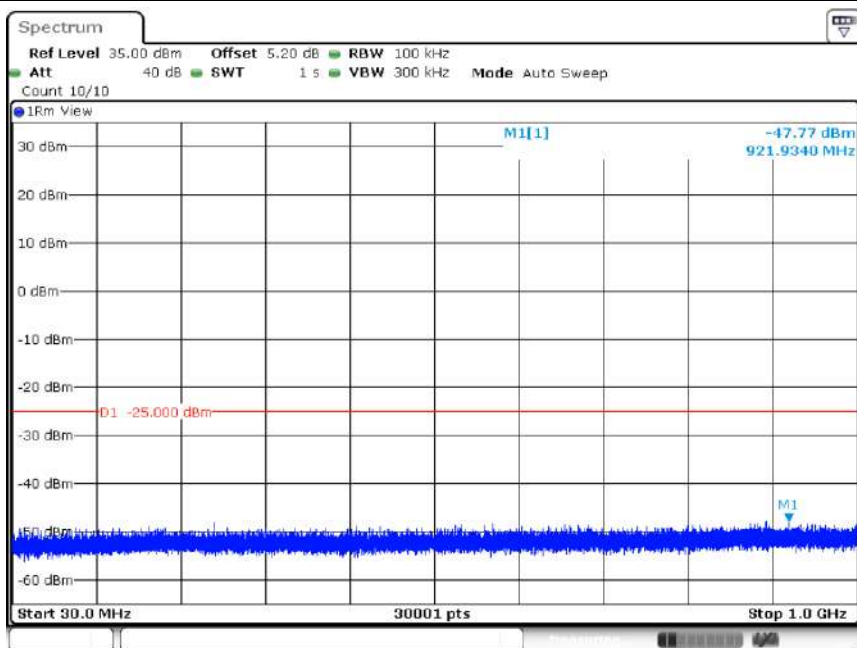


Band38-20MHz-16QAM-38000-1RB#0-Range2:1000~30000MHz



Date: 28 SEP.2020 12:31:06

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



Date: 28 SEP.2020 12:32:07



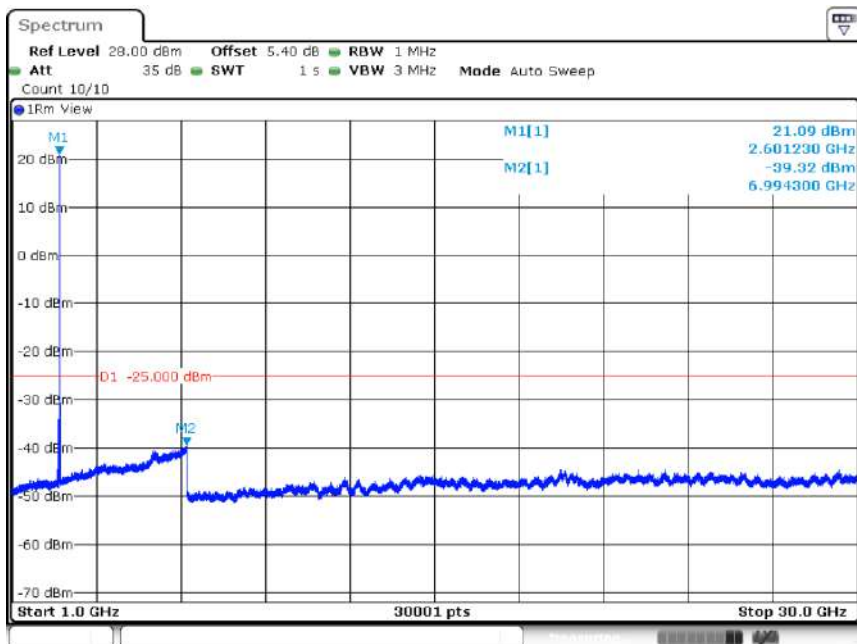
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Band38-20MHz-16QAM-38150-1RB#0-Range2:1000~30000MHz



Date: 28 SEP.2020 12:32:24



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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)	Height [cm]	Angle [°]	Polarization
31.1641	-73.59	-25.00	48.59	161	4	Vertical
118.4199	-63.37	-25.00	38.37	252	178	Vertical
383.0492	-67.84	-25.00	42.84	211	227	Vertical
3635.5212	-61.54	-25.00	36.54	294	276	Vertical
7363.6455	-56.06	-25.00	31.06	263	4	Vertical
17999.0000	-40.10	-25.00	15.10	284	202	Vertical
42.1741	-63.91	-25.00	38.91	184	351	Horizontal
86.9904	-75.44	-25.00	50.44	166	252	Horizontal
249.5220	-67.83	-25.00	42.83	127	351	Horizontal
3717.0239	-61.11	-25.00	36.11	154	153	Horizontal
7384.1461	-56.40	-25.00	31.40	138	228	Horizontal
16400.4467	-43.73	-25.00	18.73	194	351	Horizontal

7.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height [cm]	Angle [°]	Polarization
31.2611	-71.57	-25.00	46.57	196	79	Vertical
109.1075	-64.41	-25.00	39.41	256	153	Vertical
604.2202	-63.81	-25.00	38.81	222	178	Vertical
3732.5244	-62.11	-25.00	37.11	278	251	Vertical
7485.1495	-56.12	-25.00	31.12	263	202	Vertical
17993.4998	-39.65	-25.00	14.65	221	326	Vertical
40.0885	-63.79	-25.00	38.79	263	78	Horizontal
96.5453	-75.75	-25.00	50.75	211	277	Horizontal
243.5077	-67.98	-25.00	42.98	109	53	Horizontal
5117.5706	-61.11	-25.00	36.11	216	178	Horizontal
7488.1496	-56.63	-25.00	31.63	218	29	Horizontal
16388.4463	-43.24	-25.00	18.24	222	350	Horizontal

7.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height [cm]	Angle [°]	Polarization
31.5036	-73.99	-25.00	48.99	163	350	Vertical
113.7637	-64.82	-25.00	39.82	185	277	Vertical
294.5322	-69.01	-25.00	44.01	141	178	Vertical
3648.5216	-62.25	-25.00	37.25	202	103	Vertical
7337.1446	-55.54	-25.00	30.54	296	178	Vertical
17995.9999	-39.73	-25.00	14.73	246	29	Vertical
45.3753	-63.35	-25.00	38.35	198	228	Horizontal
100.5225	-75.57	-25.00	50.57	163	128	Horizontal
250.0555	-68.05	-25.00	43.05	174	327	Horizontal
3752.0251	-61.28	-25.00	36.28	122	301	Horizontal
7453.1484	-56.50	-25.00	31.50	185	351	Horizontal
16404.4468	-43.65	-25.00	18.65	176	178	Horizontal

Remark:

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



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8 Frequency Stability

8.1 Frequency Vs Voltage

Band	Bandwidth	Modulation	Channel	RB Configuration	Voltage		Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
					Voltage [Vdc]	Temperature (°C)				
Band38	20MHz	QPSK	37850	100RB#0	VL	NT	50.50	0.019574	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	VN	NT	116.20	0.045039	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	VH	NT	52.80	0.020465	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	VL	NT	-79.30	-0.030559	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	VN	NT	-74.40	-0.028671	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	VH	NT	-64.10	-0.024701	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	VL	NT	15.60	0.005977	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	VN	NT	-1.20	-0.000460	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	VH	NT	21.70	0.008314	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	VL	NT	48.20	0.018682	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	VN	NT	89.40	0.034651	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	VH	NT	52.20	0.020233	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	VL	NT	-7.20	-0.002775	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	VN	NT	-3.80	-0.001464	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	VH	NT	-9.10	-0.003507	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	VL	NT	9.90	0.003793	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	VN	NT	10.10	0.003870	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	VH	NT	-22.60	-0.008659	±2.5	PASS



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8.2 Frequency Vs Temperature

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	46.30	0.017946	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	-20	63.80	0.024729	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	-10	86.80	0.033643	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	0	45.70	0.017713	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	10	50.00	0.019380	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	20	50.40	0.019535	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	30	57.20	0.022171	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	40	64.80	0.025116	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	50	51.90	0.020116	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	-30	-62.60	-0.024123	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	-20	-9.50	-0.003661	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	-10	-7.50	-0.002890	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	0	-8.90	-0.003430	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	10	-2.40	-0.000925	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	20	-5.50	-0.002119	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	30	-13.90	-0.005356	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	40	-2.10	-0.000809	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	50	-1.50	-0.000578	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	-30	15.80	0.006054	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	-20	26.00	0.009962	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	-10	-0.90	-0.000345	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	0	18.20	0.006973	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	10	-12.30	-0.004713	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	20	7.40	0.002835	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	30	-11.70	-0.004483	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	40	-1.80	-0.000690	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	50	3.70	0.001418	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	-30	74.80	0.028992	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	-20	87.20	0.033798	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	-10	72.70	0.028178	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	0	52.70	0.020426	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	10	27.00	0.010465	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	20	51.30	0.019884	±2.5	PASS



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Band38	20MHz	16QAM	37850	100RB#0	NV	30	62.00	0.024031	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	40	47.00	0.018217	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	50	80.30	0.031124	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	-30	-8.50	-0.003276	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	-20	-6.40	-0.002466	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	-10	-14.60	-0.005626	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	0	-62.50	-0.024085	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	10	-104.80	-0.040385	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	20	-61.20	-0.023584	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	30	-12.70	-0.004894	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	40	-29.80	-0.011484	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	50	-14.80	-0.005703	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	-30	5.50	0.002107	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	-20	7.30	0.002797	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	-10	7.10	0.002720	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	0	-16.50	-0.006322	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	10	-13.80	-0.005287	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	20	15.10	0.005785	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	30	7.10	0.002720	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	40	13.20	0.005057	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	50	-3.20	-0.001226	±2.5	PASS

The End



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