



Appendix B

E-UTRA Band 38



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1 Effective (Isotropic) Radiated Power

1.1. Test Result

Band	Bandwidth h	Modulation	Channel	RB Configuration	Conducted Power(dBm)	EIRP(dBm)	limit (dBm)	Verdict
Band38	5MHz	QPSK	37775	1RB#0	23.53	23.53	33.00	PASS
Band38	5MHz	QPSK	37775	1RB#12	23.6	23.6	33.00	PASS
Band38	5MHz	QPSK	37775	1RB#24	23.49	23.49	33.00	PASS
Band38	5MHz	QPSK	37775	12RB#6	22.64	22.64	33.00	PASS
Band38	5MHz	QPSK	37775	12RB#0	22.71	22.71	33.00	PASS
Band38	5MHz	QPSK	37775	12RB#13	22.61	22.61	33.00	PASS
Band38	5MHz	QPSK	37775	25RB#0	22.59	22.59	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#24	23.54	23.54	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#0	23.66	23.66	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#12	23.58	23.58	33.00	PASS
Band38	5MHz	QPSK	38000	12RB#0	22.71	22.71	33.00	PASS
Band38	5MHz	QPSK	38000	12RB#6	22.74	22.74	33.00	PASS
Band38	5MHz	QPSK	38000	12RB#13	22.75	22.75	33.00	PASS
Band38	5MHz	QPSK	38000	25RB#0	22.69	22.69	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#12	23.54	23.54	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#0	23.67	23.67	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#24	23.52	23.52	33.00	PASS
Band38	5MHz	QPSK	38225	12RB#13	22.79	22.79	33.00	PASS
Band38	5MHz	QPSK	38225	12RB#6	22.83	22.83	33.00	PASS
Band38	5MHz	QPSK	38225	12RB#0	22.76	22.76	33.00	PASS
Band38	5MHz	QPSK	38225	25RB#0	22.64	22.64	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#0	22.56	22.56	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#24	22.63	22.63	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#12	22.52	22.52	33.00	PASS
Band38	5MHz	16QAM	37775	12RB#13	21.58	21.58	33.00	PASS
Band38	5MHz	16QAM	37775	12RB#6	21.58	21.58	33.00	PASS
Band38	5MHz	16QAM	37775	12RB#0	21.54	21.54	33.00	PASS



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Band38	5MHz	16QAM	37775	25RB#0	21.65	21.65	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#0	22.64	22.64	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#12	22.68	22.68	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#24	22.54	22.54	33.00	PASS
Band38	5MHz	16QAM	38000	12RB#0	21.58	21.58	33.00	PASS
Band38	5MHz	16QAM	38000	12RB#6	21.7	21.7	33.00	PASS
Band38	5MHz	16QAM	38000	12RB#13	21.63	21.63	33.00	PASS
Band38	5MHz	16QAM	38000	25RB#0	21.69	21.69	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#0	22.63	22.63	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#24	22.67	22.67	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#12	22.59	22.59	33.00	PASS
Band38	5MHz	16QAM	38225	12RB#0	21.61	21.61	33.00	PASS
Band38	5MHz	16QAM	38225	12RB#6	21.68	21.68	33.00	PASS
Band38	5MHz	16QAM	38225	12RB#13	21.59	21.59	33.00	PASS
Band38	5MHz	16QAM	38225	25RB#0	21.72	21.72	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#49	23.66	23.66	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#24	23.61	23.61	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#0	23.61	23.61	33.00	PASS
Band38	10MHz	QPSK	37800	25RB#12	22.65	22.65	33.00	PASS
Band38	10MHz	QPSK	37800	25RB#0	22.67	22.67	33.00	PASS
Band38	10MHz	QPSK	37800	25RB#25	22.72	22.72	33.00	PASS
Band38	10MHz	QPSK	37800	50RB#0	22.58	22.58	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#24	23.68	23.68	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#49	23.64	23.64	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#0	23.64	23.64	33.00	PASS
Band38	10MHz	QPSK	38000	25RB#25	22.71	22.71	33.00	PASS
Band38	10MHz	QPSK	38000	25RB#0	22.75	22.75	33.00	PASS
Band38	10MHz	QPSK	38000	25RB#12	22.73	22.73	33.00	PASS
Band38	10MHz	QPSK	38000	50RB#0	22.57	22.57	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#49	23.72	23.72	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#24	23.65	23.65	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#0	23.68	23.68	33.00	PASS
Band38	10MHz	QPSK	38200	25RB#25	22.8	22.8	33.00	PASS



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Band38	10MHz	QPSK	38200	25RB#0	22.69	22.69	33.00	PASS
Band38	10MHz	QPSK	38200	25RB#12	22.73	22.73	33.00	PASS
Band38	10MHz	QPSK	38200	50RB#0	22.64	22.64	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#0	22.64	22.64	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#24	22.59	22.59	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#49	22.7	22.7	33.00	PASS
Band38	10MHz	16QAM	37800	25RB#12	21.66	21.66	33.00	PASS
Band38	10MHz	16QAM	37800	25RB#0	21.63	21.63	33.00	PASS
Band38	10MHz	16QAM	37800	25RB#25	21.72	21.72	33.00	PASS
Band38	10MHz	16QAM	37800	50RB#0	21.55	21.55	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#0	22.73	22.73	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#49	22.62	22.62	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#24	22.7	22.7	33.00	PASS
Band38	10MHz	16QAM	38000	25RB#0	21.74	21.74	33.00	PASS
Band38	10MHz	16QAM	38000	25RB#25	21.69	21.69	33.00	PASS
Band38	10MHz	16QAM	38000	25RB#12	21.69	21.69	33.00	PASS
Band38	10MHz	16QAM	38000	50RB#0	21.66	21.66	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#0	22.73	22.73	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#49	22.64	22.64	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#24	22.69	22.69	33.00	PASS
Band38	10MHz	16QAM	38200	25RB#0	21.78	21.78	33.00	PASS
Band38	10MHz	16QAM	38200	25RB#12	21.7	21.7	33.00	PASS
Band38	10MHz	16QAM	38200	25RB#25	21.72	21.72	33.00	PASS
Band38	10MHz	16QAM	38200	50RB#0	21.68	21.68	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#74	23.57	23.57	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#38	23.65	23.65	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#0	23.59	23.59	33.00	PASS
Band38	15MHz	QPSK	37825	36RB#39	22.68	22.68	33.00	PASS
Band38	15MHz	QPSK	37825	36RB#18	22.69	22.69	33.00	PASS
Band38	15MHz	QPSK	37825	36RB#0	22.72	22.72	33.00	PASS
Band38	15MHz	QPSK	37825	75RB#0	22.67	22.67	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#0	23.6	23.6	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#38	23.66	23.66	33.00	PASS



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Band38	15MHz	QPSK	38000	1RB#74	23.53	23.53	33.00	PASS
Band38	15MHz	QPSK	38000	36RB#0	22.74	22.74	33.00	PASS
Band38	15MHz	QPSK	38000	36RB#18	22.76	22.76	33.00	PASS
Band38	15MHz	QPSK	38000	36RB#39	22.73	22.73	33.00	PASS
Band38	15MHz	QPSK	38000	75RB#0	22.62	22.62	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#0	23.56	23.56	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#38	23.68	23.68	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#74	23.55	23.55	33.00	PASS
Band38	15MHz	QPSK	38175	36RB#0	22.74	22.74	33.00	PASS
Band38	15MHz	QPSK	38175	36RB#18	22.82	22.82	33.00	PASS
Band38	15MHz	QPSK	38175	36RB#39	22.74	22.74	33.00	PASS
Band38	15MHz	QPSK	38175	75RB#0	22.64	22.64	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#38	22.59	22.59	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#0	22.68	22.68	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#74	22.61	22.61	33.00	PASS
Band38	15MHz	16QAM	37825	36RB#0	21.56	21.56	33.00	PASS
Band38	15MHz	16QAM	37825	36RB#39	21.68	21.68	33.00	PASS
Band38	15MHz	16QAM	37825	36RB#18	21.61	21.61	33.00	PASS
Band38	15MHz	16QAM	37825	75RB#0	21.66	21.66	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#38	22.61	22.61	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#74	22.74	22.74	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#0	22.62	22.62	33.00	PASS
Band38	15MHz	16QAM	38000	36RB#0	21.69	21.69	33.00	PASS
Band38	15MHz	16QAM	38000	36RB#18	21.7	21.7	33.00	PASS
Band38	15MHz	16QAM	38000	36RB#39	21.64	21.64	33.00	PASS
Band38	15MHz	16QAM	38000	75RB#0	21.64	21.64	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#0	22.56	22.56	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#38	22.6	22.6	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#74	22.61	22.61	33.00	PASS
Band38	15MHz	16QAM	38175	36RB#0	21.62	21.62	33.00	PASS
Band38	15MHz	16QAM	38175	36RB#18	21.69	21.69	33.00	PASS
Band38	15MHz	16QAM	38175	36RB#39	21.61	21.61	33.00	PASS
Band38	15MHz	16QAM	38175	75RB#0	21.58	21.58	33.00	PASS



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Band38	20MHz	QPSK	37850	1RB#0	23.44	23.44	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#49	23.76	23.76	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#99	23.34	23.34	33.00	PASS
Band38	20MHz	QPSK	37850	50RB#25	22.57	22.57	33.00	PASS
Band38	20MHz	QPSK	37850	50RB#0	22.63	22.63	33.00	PASS
Band38	20MHz	QPSK	37850	50RB#50	22.65	22.65	33.00	PASS
Band38	20MHz	QPSK	37850	100RB#0	22.68	22.68	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#99	23.44	23.44	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#0	23.76	23.76	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#49	23.36	23.36	33.00	PASS
Band38	20MHz	QPSK	38000	50RB#0	22.6	22.6	33.00	PASS
Band38	20MHz	QPSK	38000	50RB#25	22.6	22.6	33.00	PASS
Band38	20MHz	QPSK	38000	50RB#50	22.63	22.63	33.00	PASS
Band38	20MHz	QPSK	38000	100RB#0	22.71	22.71	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#49	23.36	23.36	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#0	23.78	23.78	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#99	23.36	23.36	33.00	PASS
Band38	20MHz	QPSK	38150	50RB#25	22.54	22.54	33.00	PASS
Band38	20MHz	QPSK	38150	50RB#0	22.68	22.68	33.00	PASS
Band38	20MHz	QPSK	38150	50RB#50	22.62	22.62	33.00	PASS
Band38	20MHz	QPSK	38150	100RB#0	22.69	22.69	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#0	22.48	22.48	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#49	22.8	22.8	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#99	22.43	22.43	33.00	PASS
Band38	20MHz	16QAM	37850	50RB#0	21.52	21.52	33.00	PASS
Band38	20MHz	16QAM	37850	50RB#25	21.62	21.62	33.00	PASS
Band38	20MHz	16QAM	37850	50RB#50	21.65	21.65	33.00	PASS
Band38	20MHz	16QAM	37850	100RB#0	21.67	21.67	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#0	22.46	22.46	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#99	22.71	22.71	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#49	22.41	22.41	33.00	PASS
Band38	20MHz	16QAM	38000	50RB#0	21.6	21.6	33.00	PASS
Band38	20MHz	16QAM	38000	50RB#25	21.63	21.63	33.00	PASS



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Band38	20MHz	16QAM	38000	50RB#50	21.66	21.66	33.00	PASS
Band38	20MHz	16QAM	38000	100RB#0	21.68	21.68	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#0	22.46	22.46	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#99	22.71	22.71	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#49	22.38	22.38	33.00	PASS
Band38	20MHz	16QAM	38150	50RB#50	21.61	21.61	33.00	PASS
Band38	20MHz	16QAM	38150	50RB#25	21.65	21.65	33.00	PASS
Band38	20MHz	16QAM	38150	50RB#0	21.53	21.53	33.00	PASS
Band38	20MHz	16QAM	38150	100RB#0	21.62	21.62	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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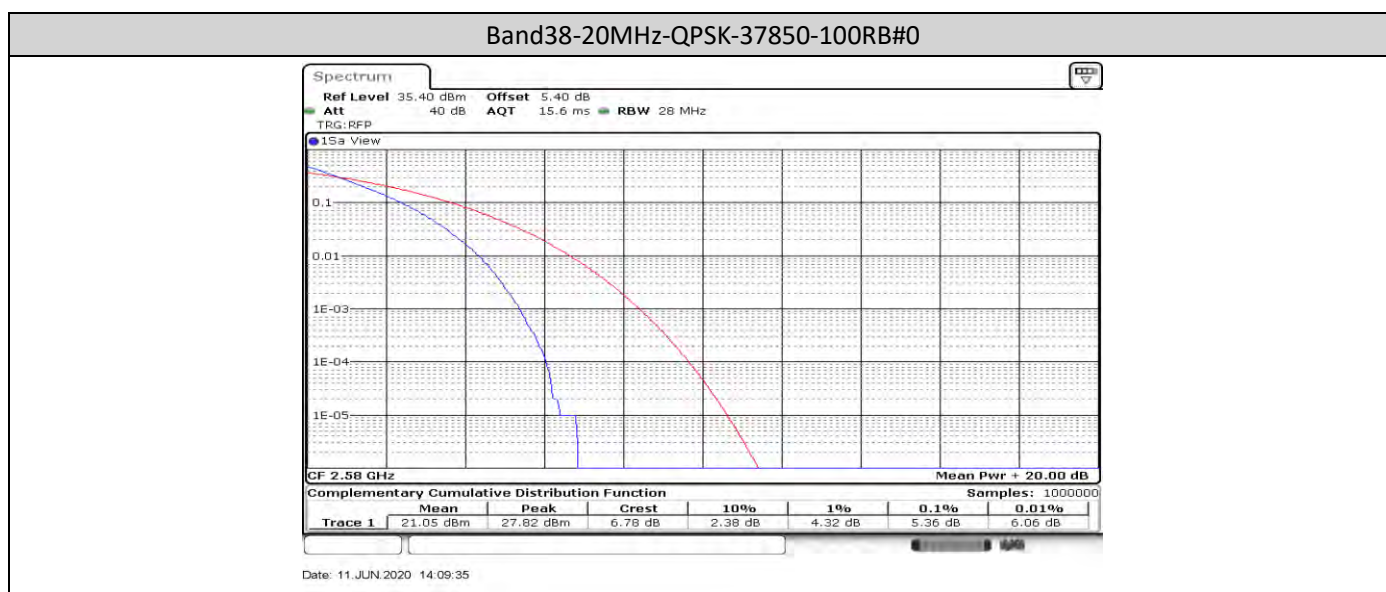


2. Peak-to-Average Ratio (CCDF)

2.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band38	20MHz	QPSK	37850	100RB#0	5.36	13	PASS
Band38	20MHz	QPSK	38000	100RB#0	7.42	13	PASS
Band38	20MHz	QPSK	38150	100RB#0	7.42	13	PASS
Band38	20MHz	16QAM	37850	100RB#0	8.12	13	PASS
Band38	20MHz	16QAM	38000	100RB#0	8.14	13	PASS
Band38	20MHz	16QAM	38150	100RB#0	8.14	13	PASS

2.2. Test Plots





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

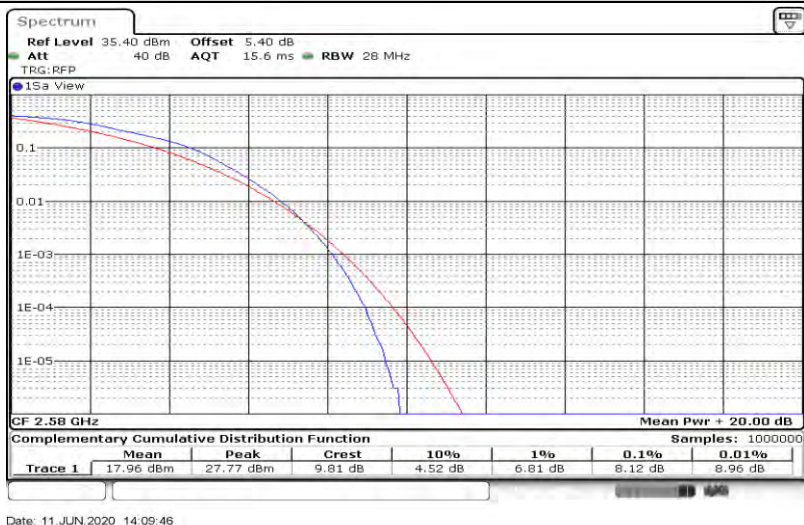


Band38-20MHz-QPSK-38150-100RB#0





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

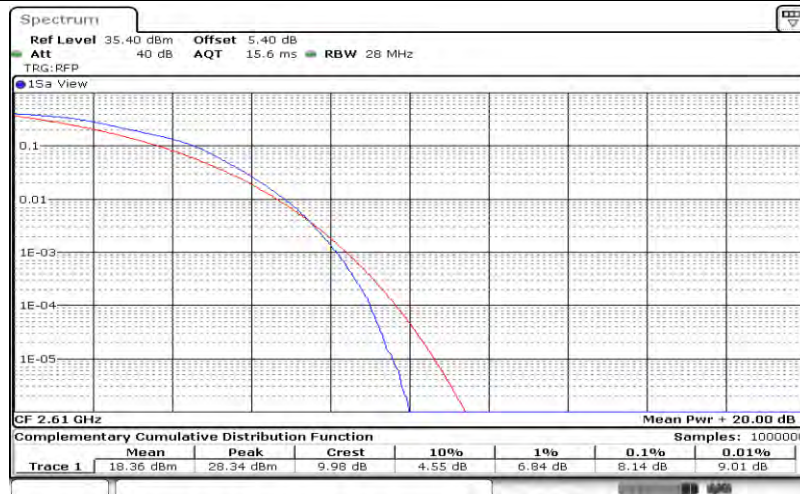


Band38-20MHz-16QAM-38000-100RB#0





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



Date: 11 JUN 2020 14:10:31

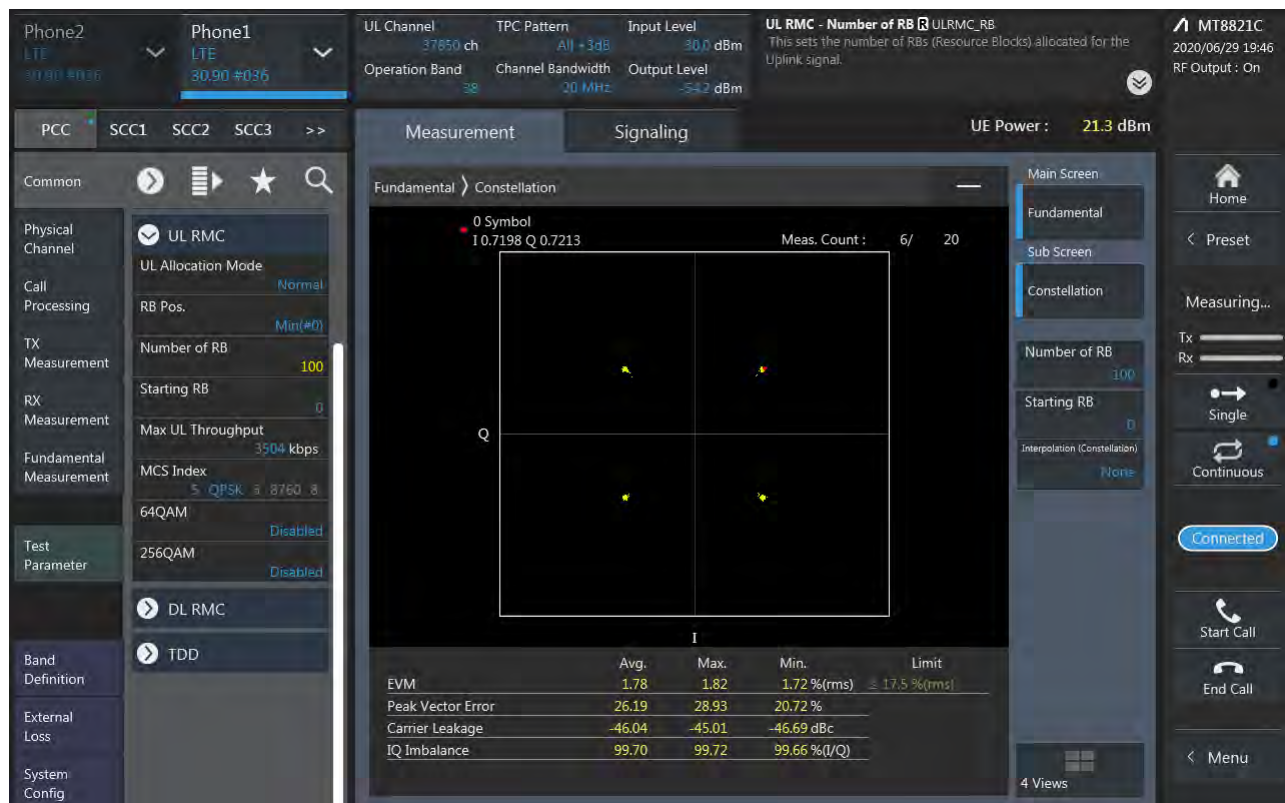




3. Modulation Characteristics

3.1. Test Mode = LTE /TM1 20MHz

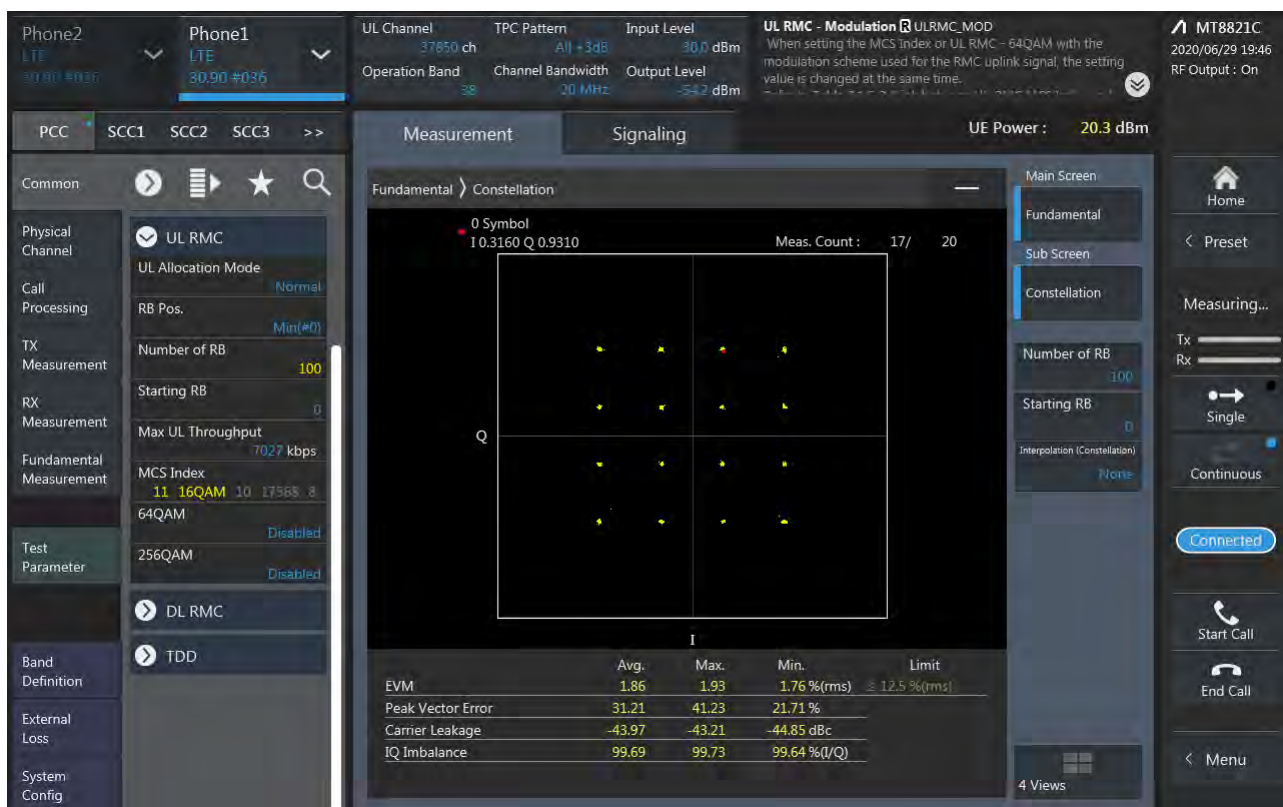
3.1.1. Test Channel = MCH





3.2. Test Mode = LTE /TM2 20MHz

3.2.1. Test Channel = MCH





4. 26dB Bandwidth and Occupied Bandwidth

4.1. Test Result

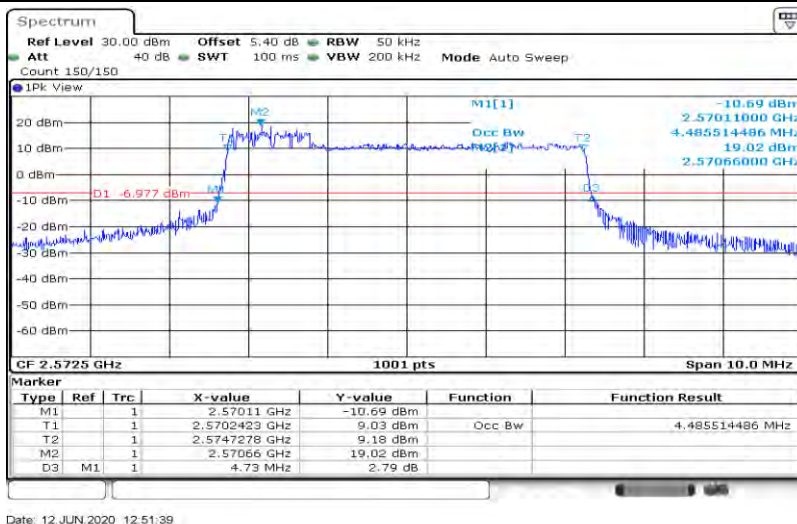
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band38	5MHz	QPSK	37775	25RB#0	4.486	4.730	PASS
Band38	5MHz	QPSK	38000	25RB#0	4.486	4.700	PASS
Band38	5MHz	QPSK	38225	25RB#0	4.466	4.720	PASS
Band38	5MHz	16QAM	37775	25RB#0	4.486	4.810	PASS
Band38	5MHz	16QAM	38000	25RB#0	4.486	4.780	PASS
Band38	5MHz	16QAM	38225	25RB#0	4.486	4.730	PASS
Band38	10MHz	QPSK	37800	50RB#0	8.951	9.400	PASS
Band38	10MHz	QPSK	38000	50RB#0	8.951	9.440	PASS
Band38	10MHz	QPSK	38200	50RB#0	8.971	9.480	PASS
Band38	10MHz	16QAM	37800	50RB#0	8.951	9.440	PASS
Band38	10MHz	16QAM	38000	50RB#0	8.971	9.460	PASS
Band38	10MHz	16QAM	38200	50RB#0	8.971	9.500	PASS
Band38	15MHz	QPSK	37825	75RB#0	13.606	14.490	PASS
Band38	15MHz	QPSK	38000	75RB#0	13.576	14.880	PASS
Band38	15MHz	QPSK	38175	75RB#0	13.636	14.520	PASS
Band38	15MHz	16QAM	37825	75RB#0	13.576	14.490	PASS
Band38	15MHz	16QAM	38000	75RB#0	13.576	14.970	PASS
Band38	15MHz	16QAM	38175	75RB#0	13.576	14.700	PASS
Band38	20MHz	QPSK	37850	100RB#0	18.142	19.200	PASS
Band38	20MHz	QPSK	38000	100RB#0	18.102	19.200	PASS
Band38	20MHz	QPSK	38150	100RB#0	17.862	19.080	PASS
Band38	20MHz	16QAM	37850	100RB#0	18.142	19.120	PASS
Band38	20MHz	16QAM	38000	100RB#0	17.902	18.640	PASS
Band38	20MHz	16QAM	38150	100RB#0	18.062	18.800	PASS



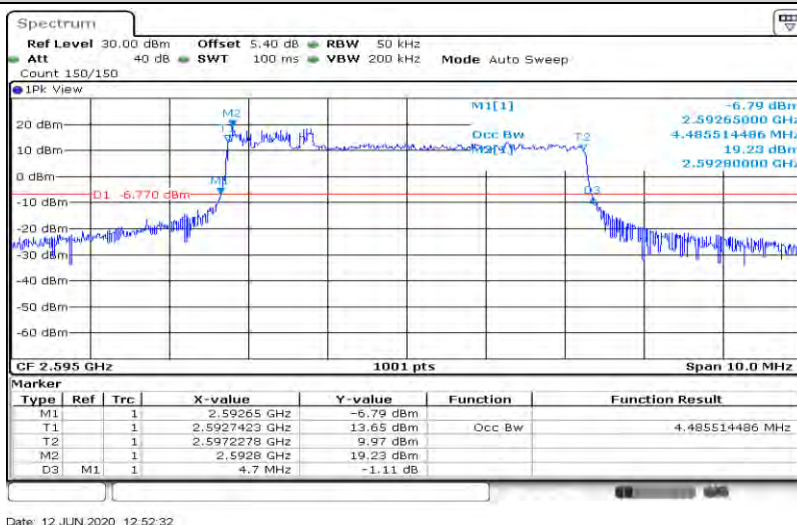


4.2. Test Plots

Band38-5MHz-QPSK-37775-25RB#0-4.486

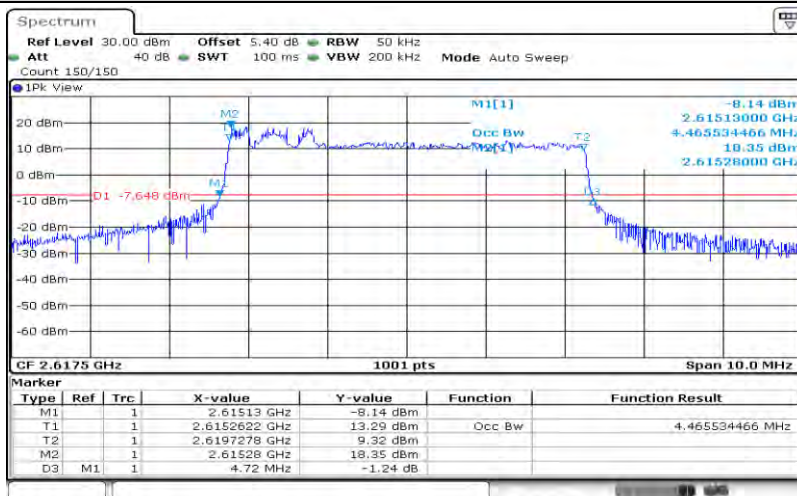


Band38-5MHz-QPSK-38000-25RB#0-4.486



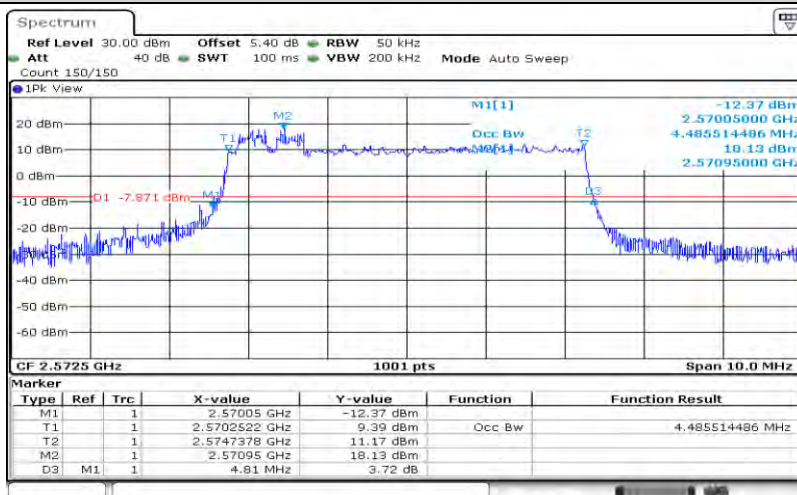


Band38-5MHz-QPSK-38225-25RB#0-4.466



Date: 12 JUN 2020 12:53:25

Band38-5MHz-16QAM-37775-25RB#0-4.486



Date: 12 JUN 2020 12:52:06

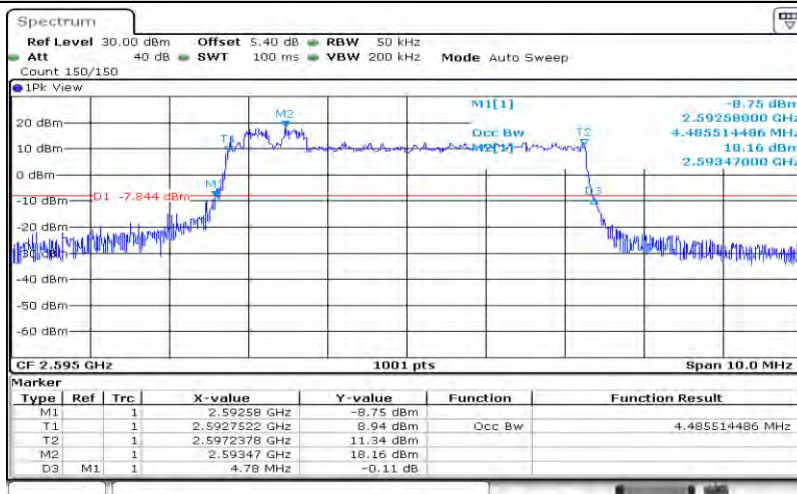


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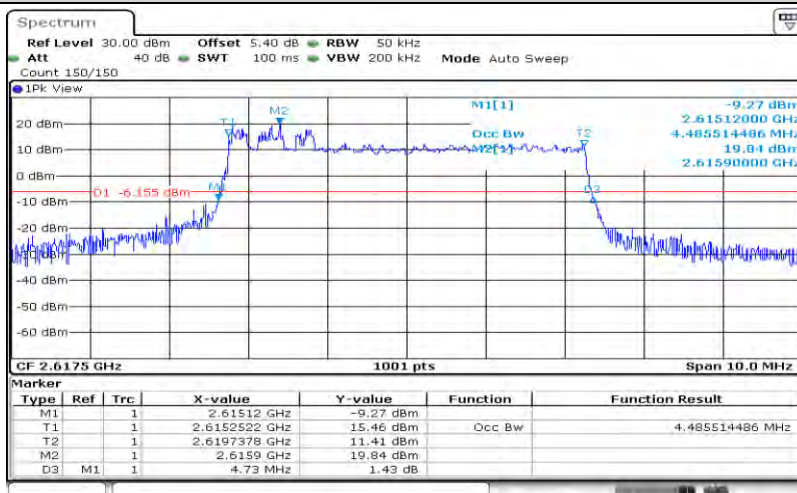


Band38-5MHz-16QAM-38000-25RB#0-4.486



Date: 12 JUN 2020 12:52:58

Band38-5MHz-16QAM-38225-25RB#0-4.486

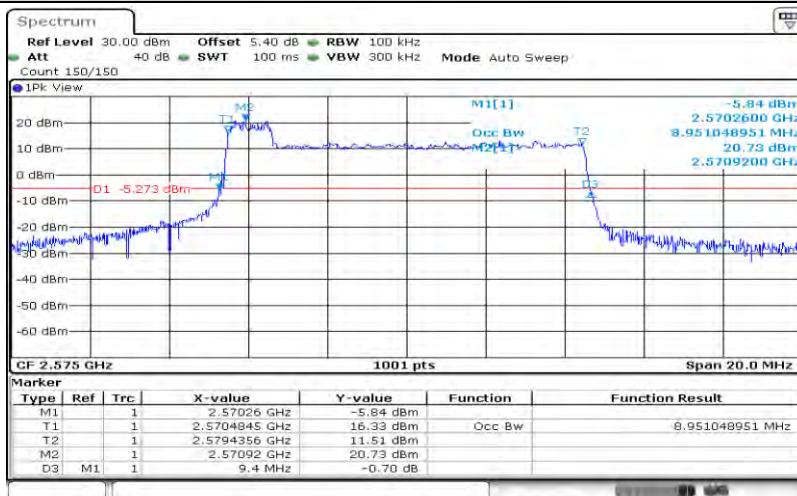


Date: 12 JUN 2020 12:53:51



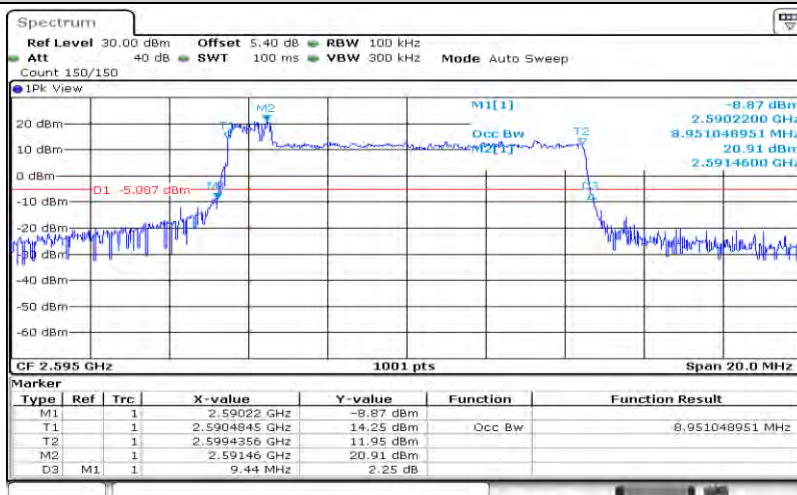


Band38-10MHz-QPSK-37800-50RB#0-8.951



Date: 12 JUN 2020 12:54:22

Band38-10MHz-QPSK-38000-50RB#0-8.951

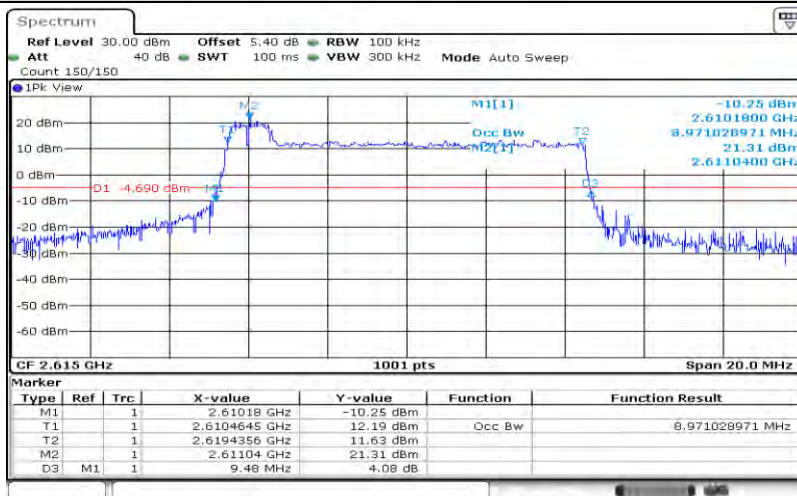


Date: 12 JUN 2020 12:55:15



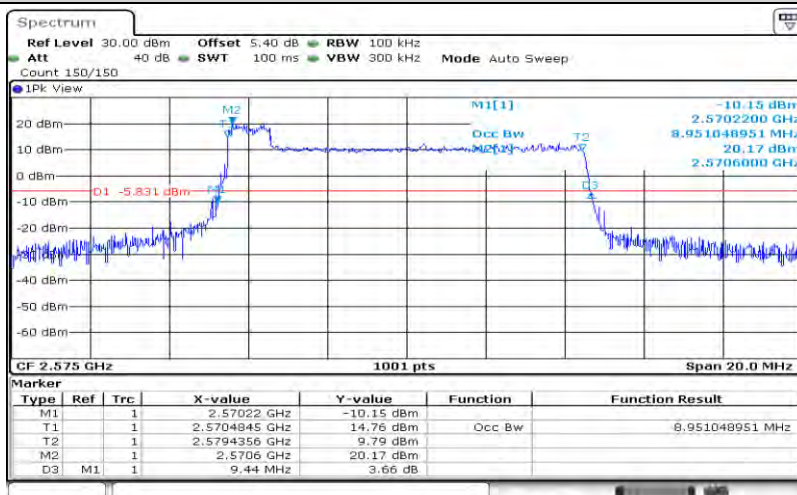


Band38-10MHz-QPSK-38200-50RB#0-8.971



Date: 12 JUN 2020 12:56:07

Band38-10MHz-16QAM-37800-50RB#0-8.951

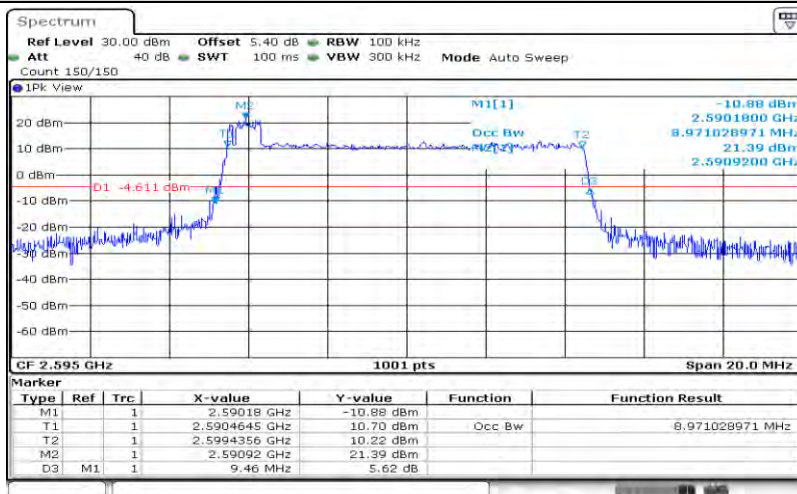


Date: 12 JUN 2020 12:54:48



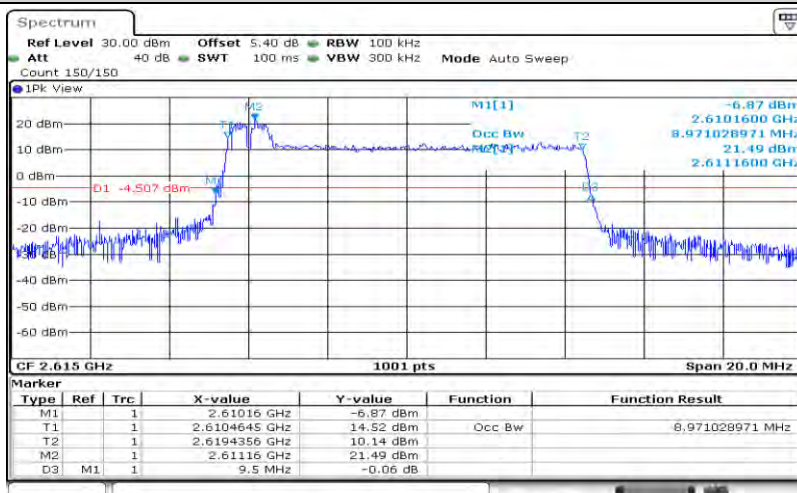


Band38-10MHz-16QAM-38000-50RB#0-8.971



Date: 12 JUN 2020 12:55:41

Band38-10MHz-16QAM-38200-50RB#0-8.971



Date: 12 JUN 2020 12:56:34

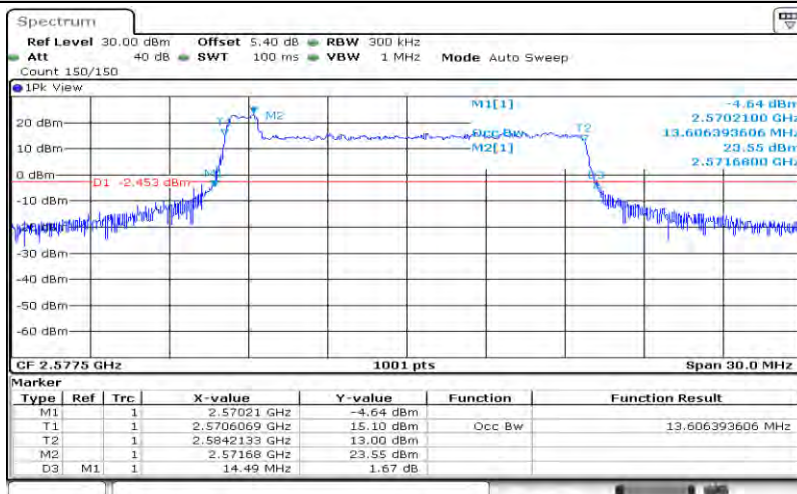


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Band38-15MHz-QPSK-37825-75RB#0-13.606



Date: 12 JUN 2020 12:57:04

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



Date: 12 JUN 2020 12:57:57





Band38-15MHz-QPSK-38175-75RB#0-13.636



Date: 12 JUN 2020 12:58:50

Band38-15MHz-16QAM-37825-75RB#0-13.576

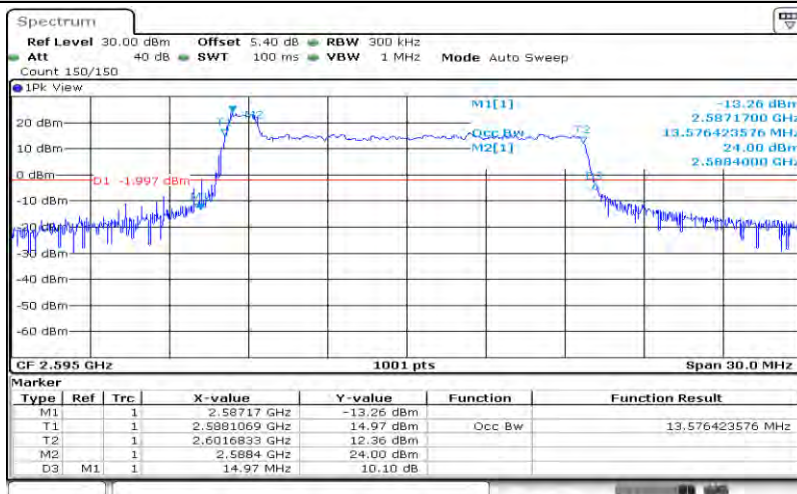


Date: 12 JUN 2020 12:57:31



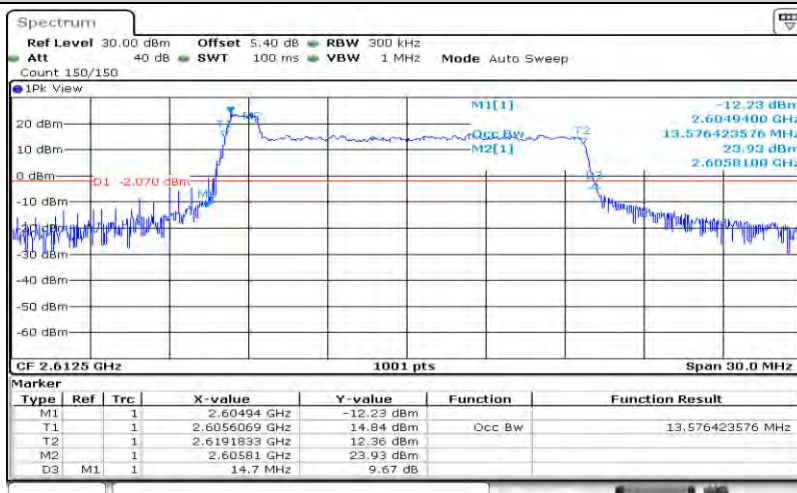


Band38-15MHz-16QAM-38000-75RB#0-13.576



Date: 12 JUN 2020 12:58:23

Band38-15MHz-16QAM-38175-75RB#0-13.576

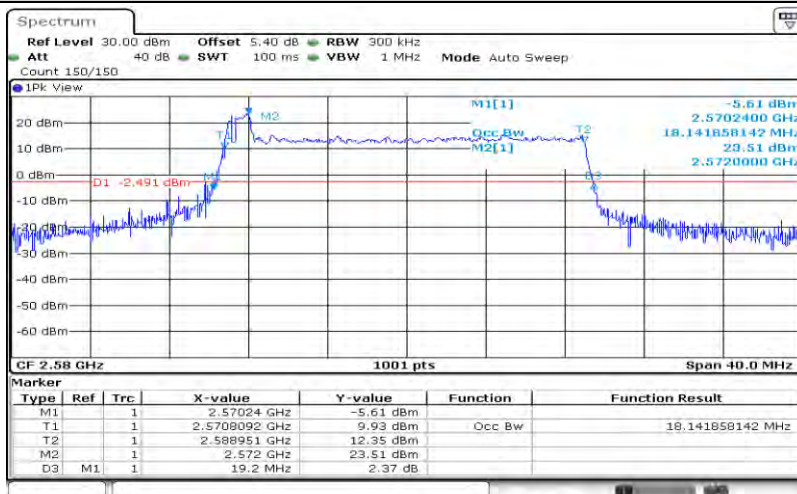


Date: 12 JUN 2020 12:59:16



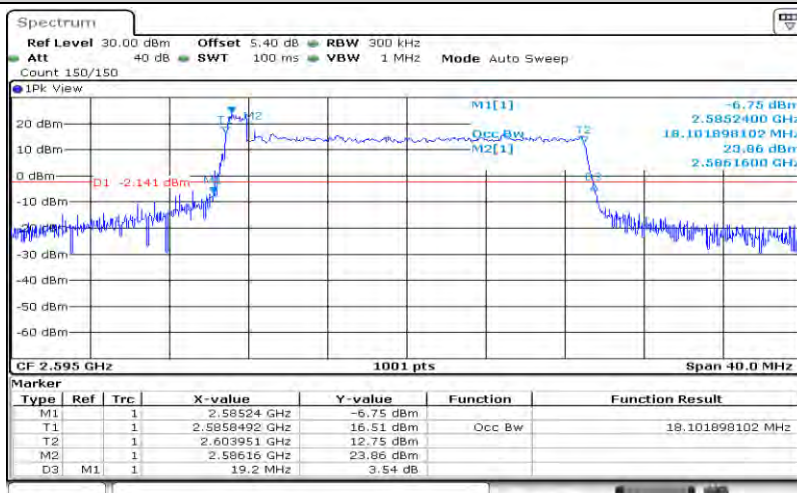


Band38-20MHz-QPSK-37850-100RB#0-18.142



Date: 12 JUN 2020 12:59:47

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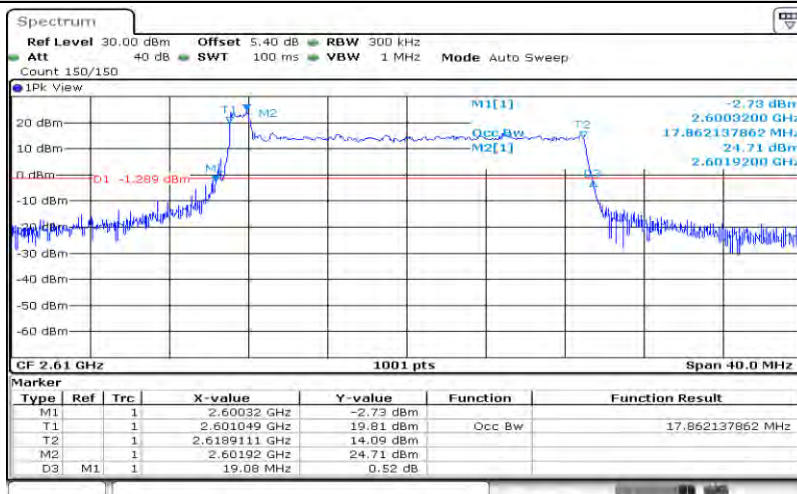


Date: 12 JUN 2020 13:00:40



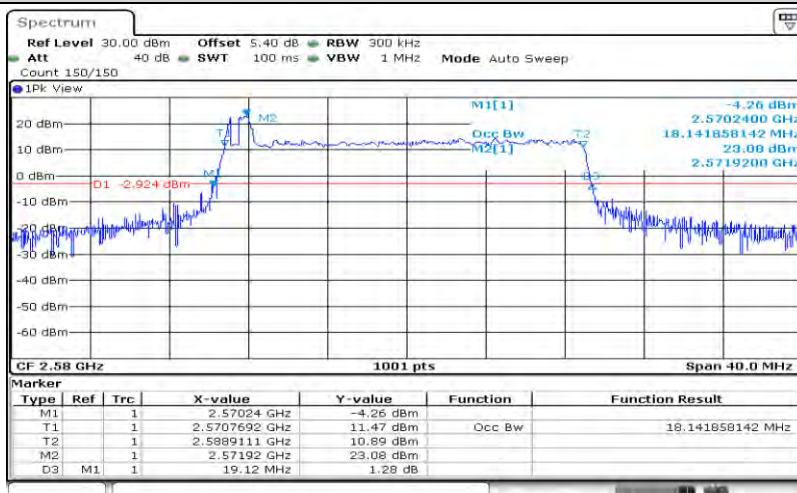


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Date: 12 JUN 2020 13:01:32

Band38-20MHz-16QAM-37850-100RB#0-18.142

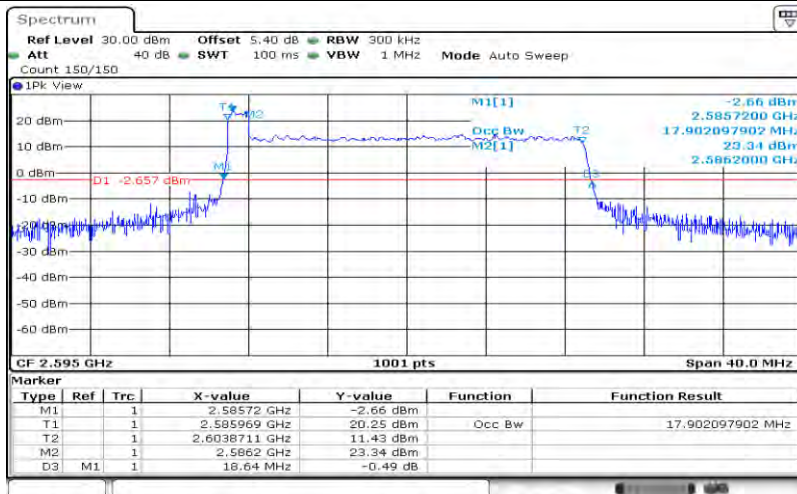


Date: 12 JUN 2020 13:00:13

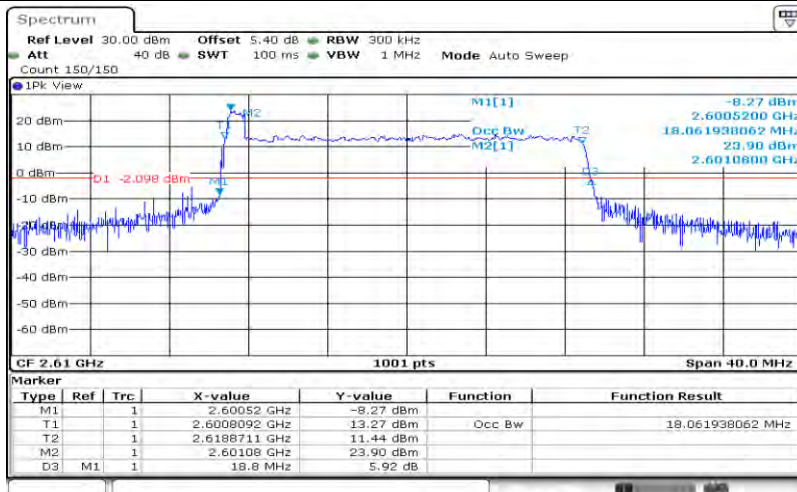




Band38-20MHz-16QAM-38000-100RB#0-17.902



Band38-20MHz-16QAM-38150-100RB#0-18.062

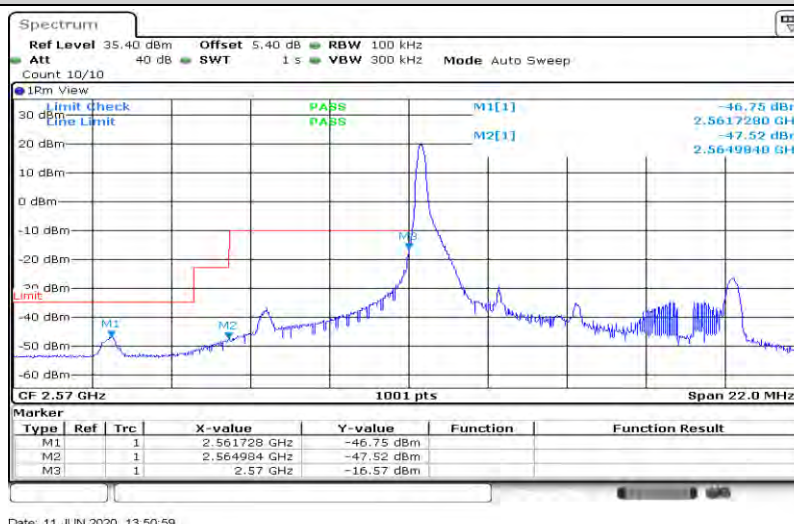




5. Band Edge Compliance

5.1. Test Plots

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

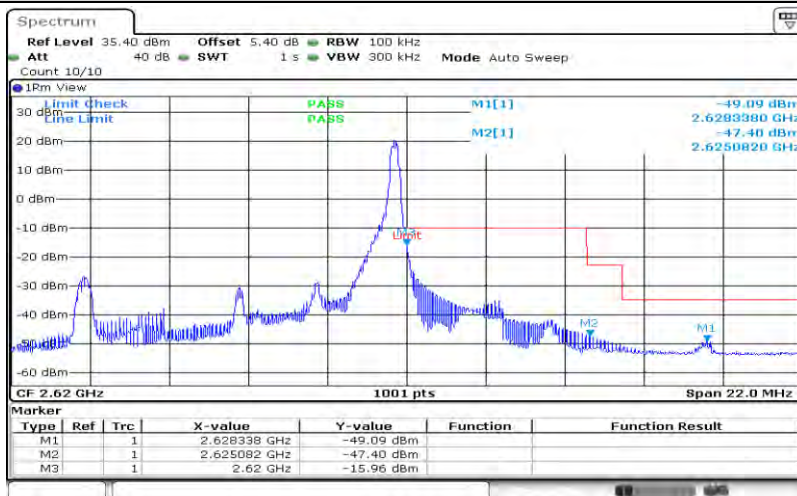


Band38-5MHz-QPSK-37775-25RB#0



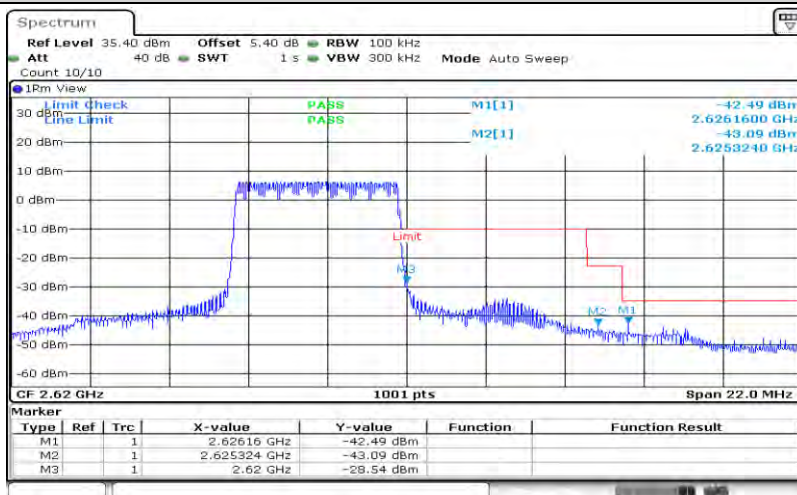


Band38-5MHz-QPSK-38225-1RB#24



Date: 11 JUN 2020 13:52:36

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

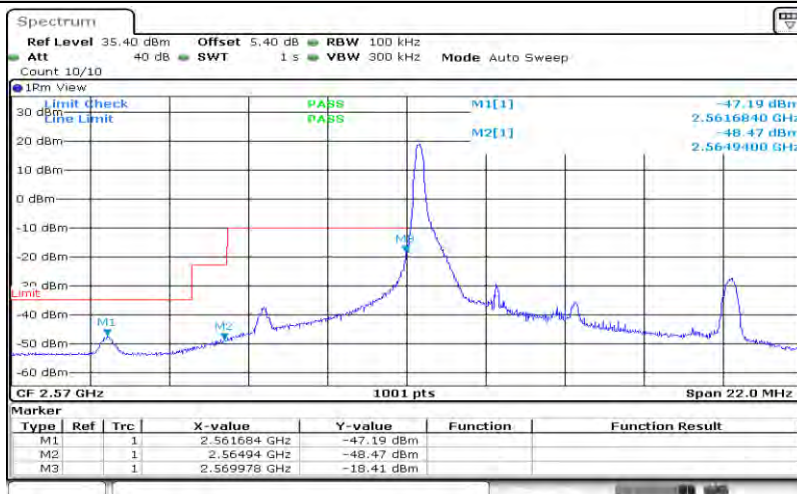


Date: 11 JUN 2020 13:55:13



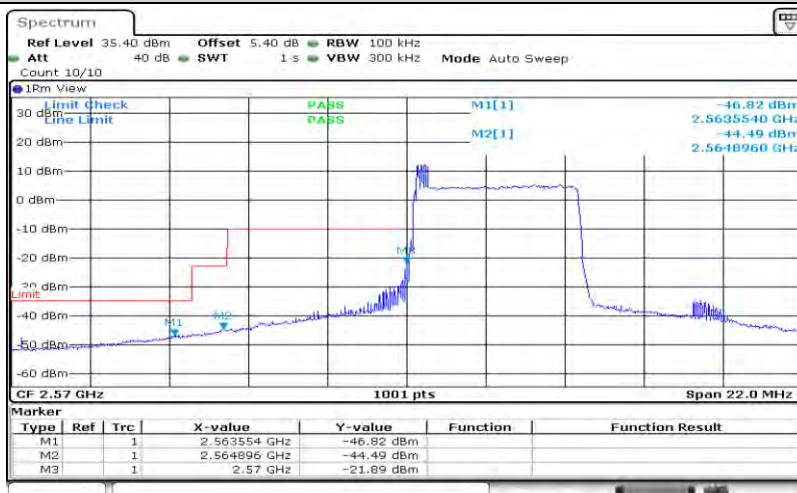


Band38-5MHz-16QAM-37775-1RB#0



Date: 11 JUN 2020 13:51:28

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



Date: 11 JUN 2020 13:54:39



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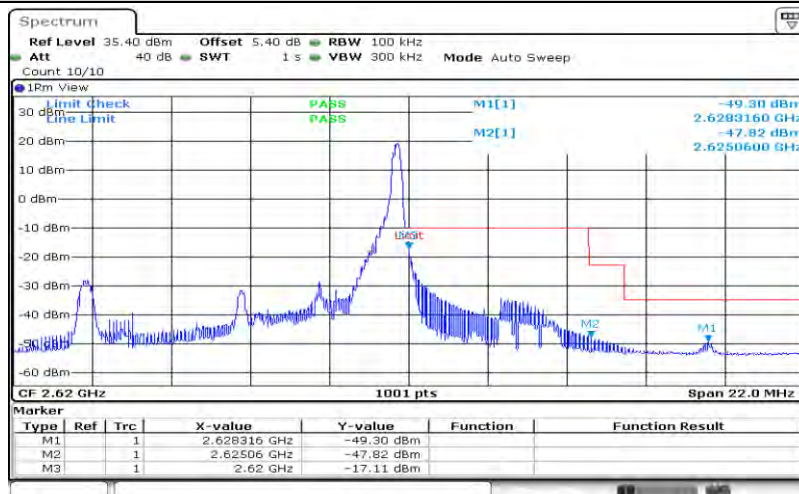
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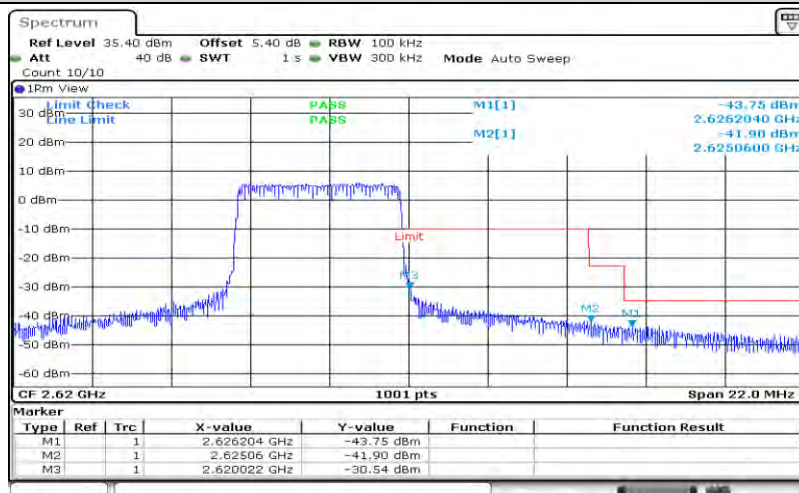


Band38-5MHz-16QAM-38225-1RB#24



Date: 11 JUN 2020 13:53:48

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

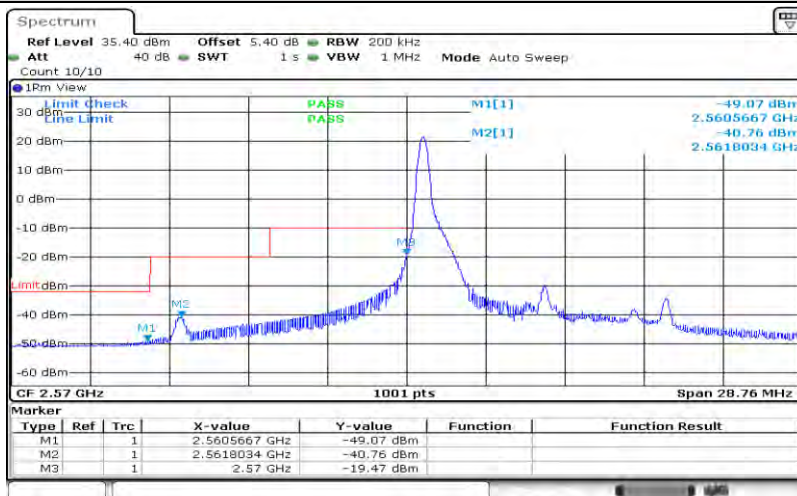


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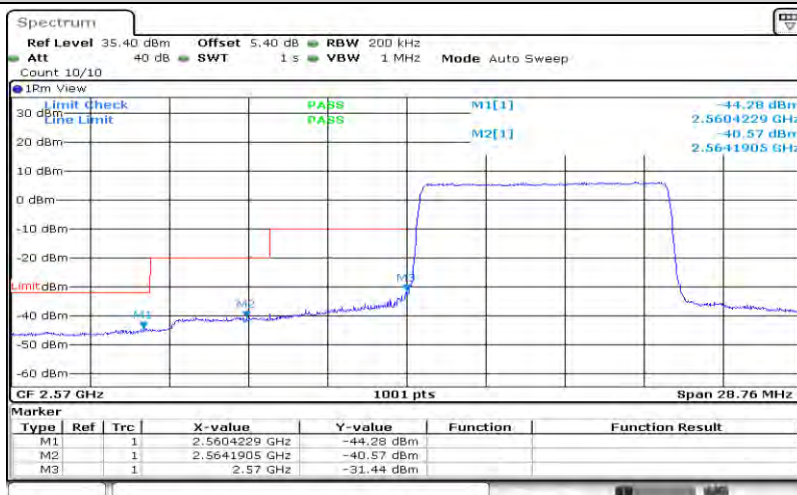


Band38-10MHz-QPSK-37800-1RB#0



Date: 11 JUN 2020 13:58:14

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

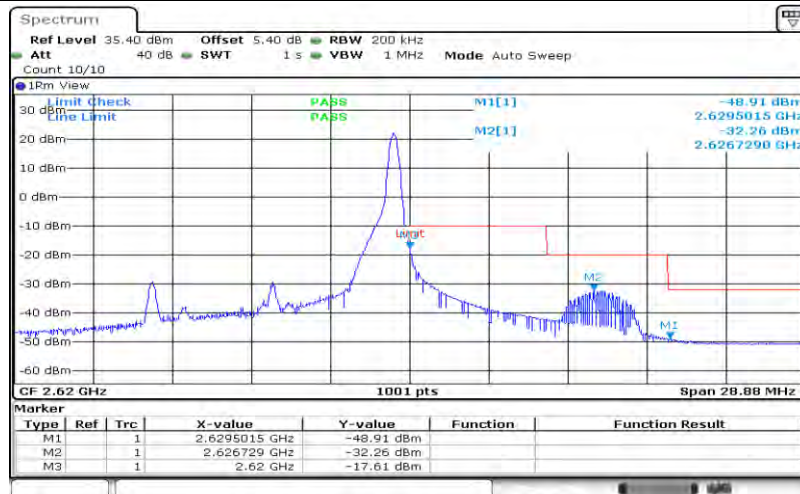


Date: 11 JUN 2020 13:58:22



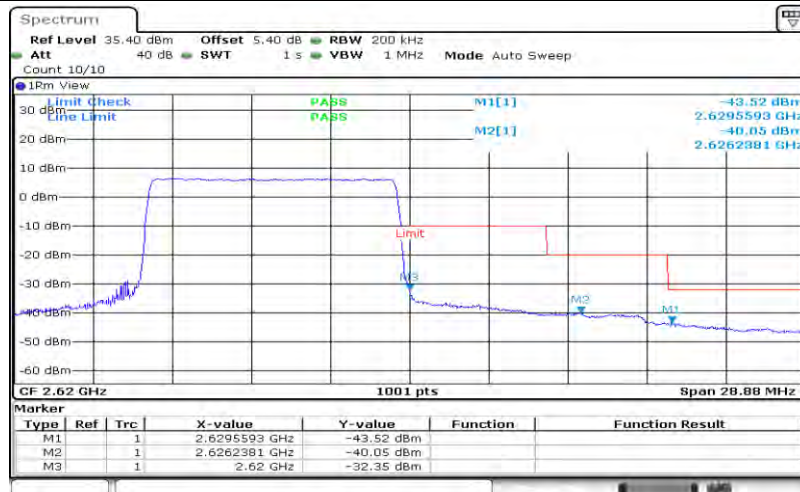


Band38-10MHz-QPSK-38200-1RB#49



Date: 11 JUN 2020 13:57:35

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



Date: 11 JUN 2020 13:59:06

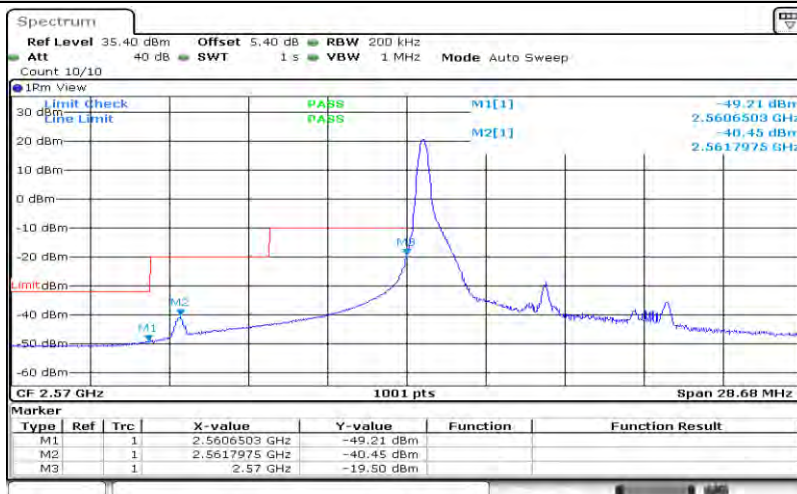


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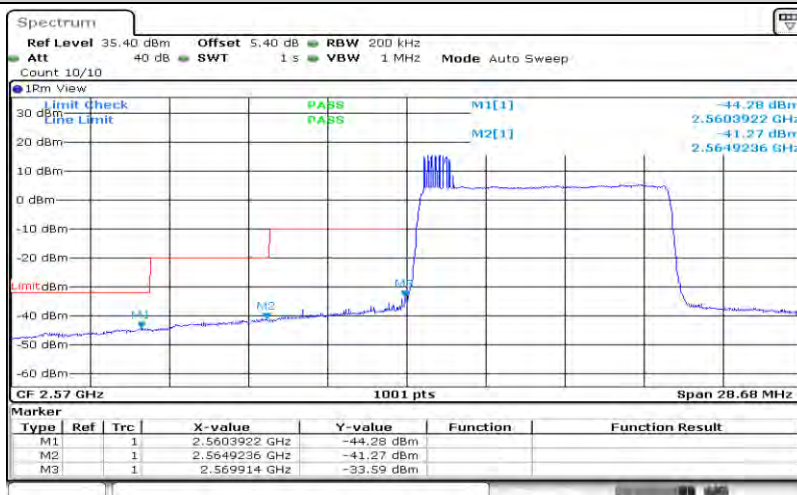


Band38-10MHz-16QAM-37800-1RB#0



Date: 11 JUN 2020 13:56:36

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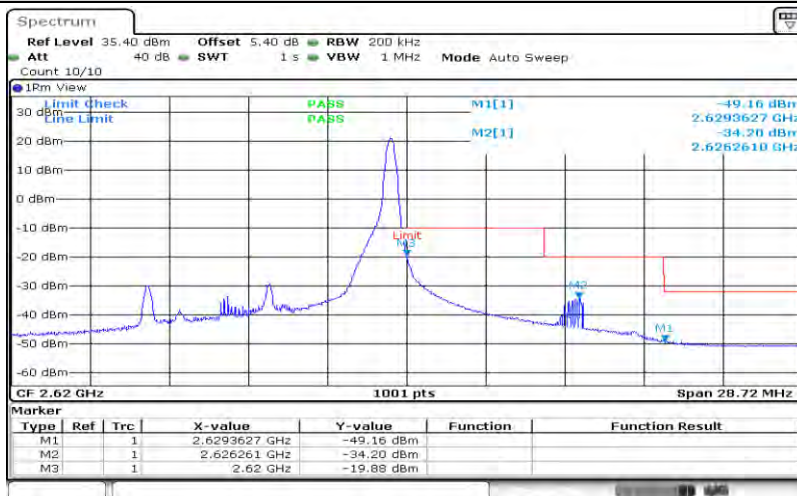


Date: 11 JUN 2020 13:58:44



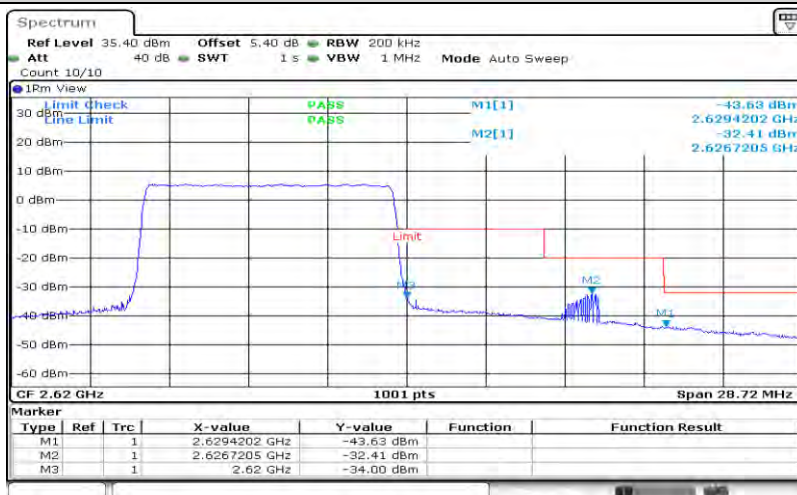


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Date: 11 JUN 2020 13:57:56

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

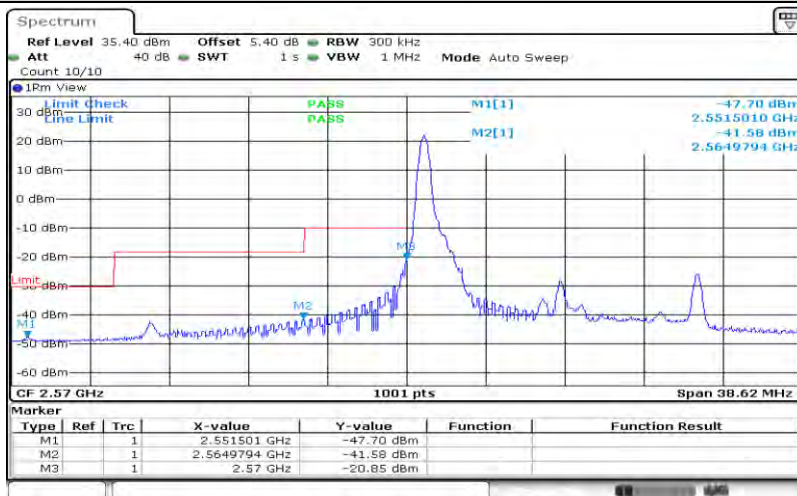


Date: 11 JUN 2020 13:59:28



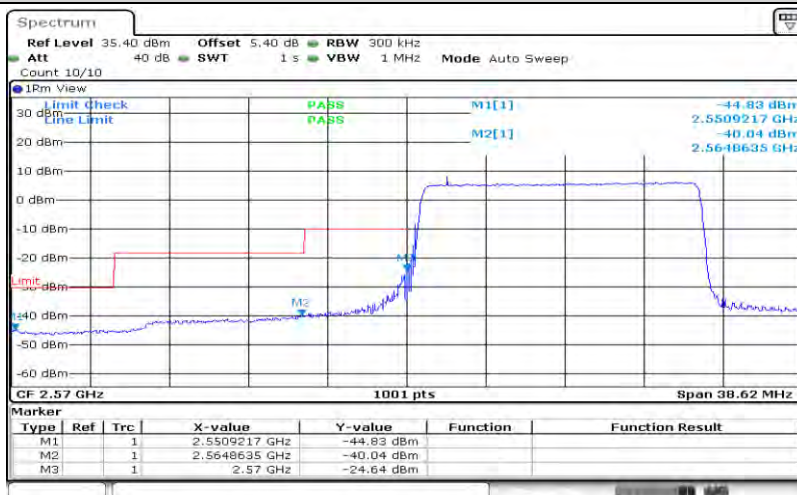


Band38-15MHz-QPSK-37825-1RB#0



Date: 11 JUN 2020 13:59:55

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



Date: 11 JUN 2020 14:01:30

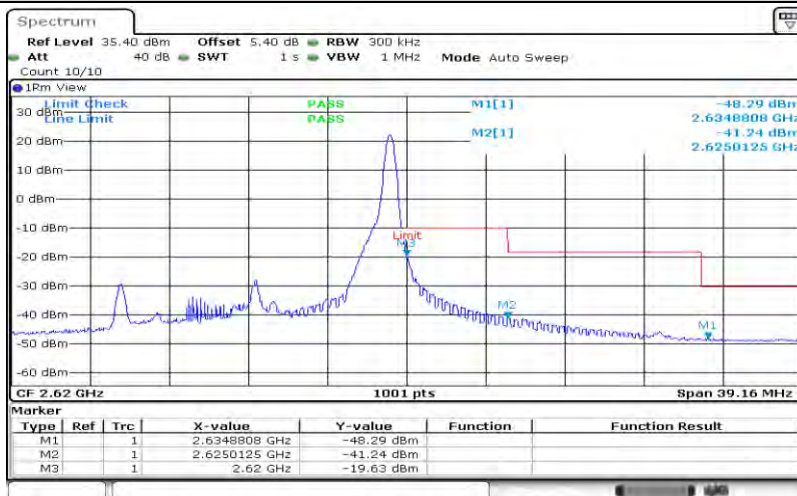


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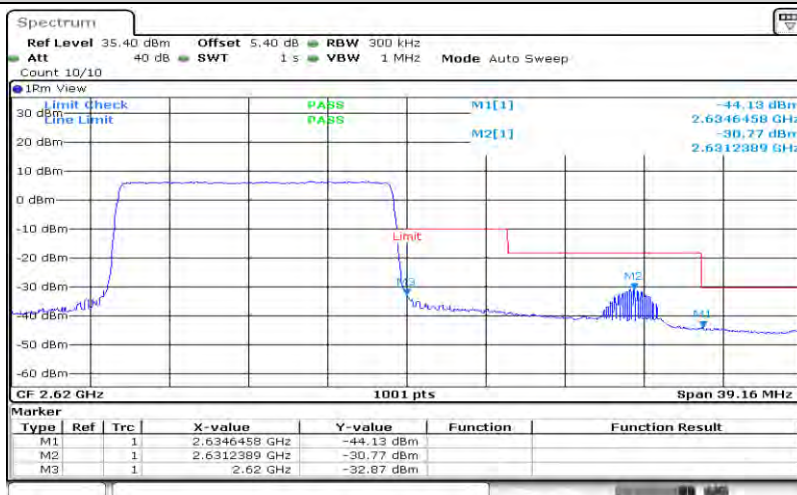


Band38-15MHz-QPSK-38175-1RB#74



Date: 11 JUN 2020 14:00:42

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



Date: 11 JUN 2020 14:02:14

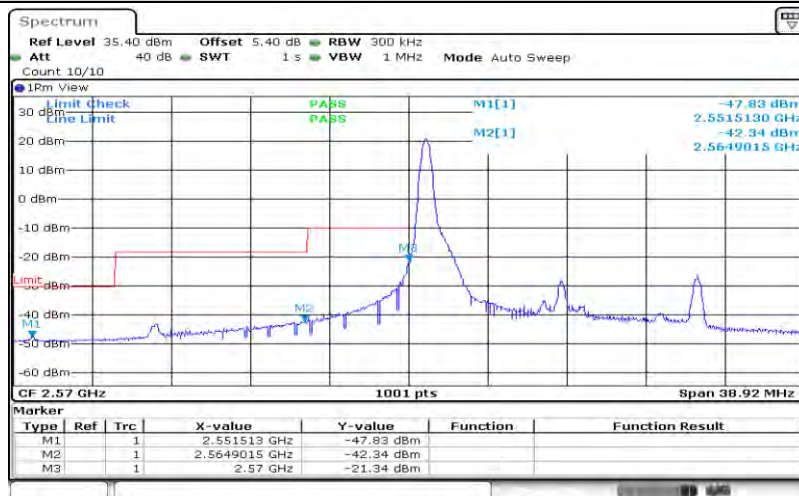


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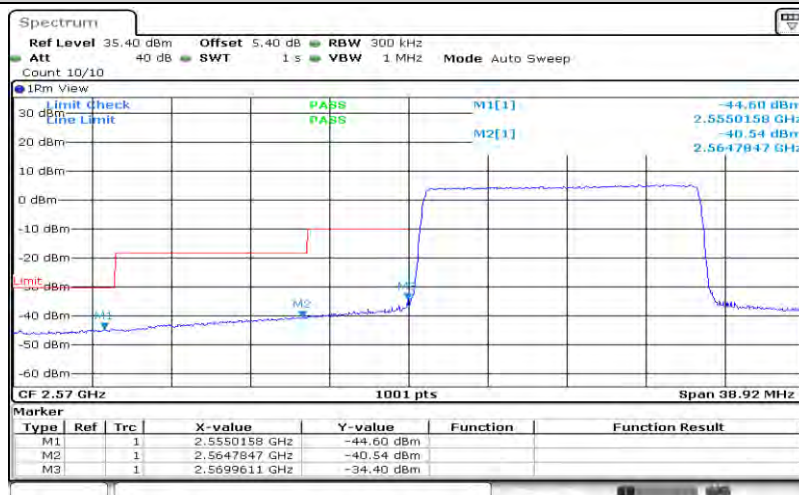


Band38-15MHz-16QAM-37825-1RB#0



Date: 11 JUN 2020 14:00:16

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

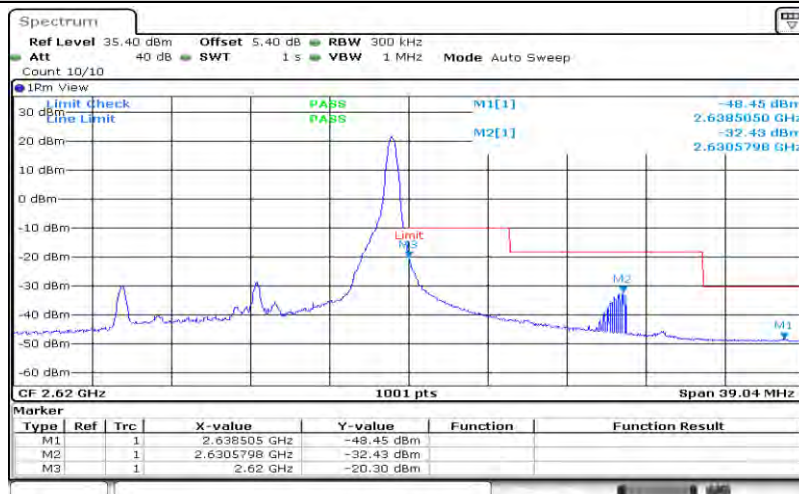


Date: 11 JUN 2020 14:01:52



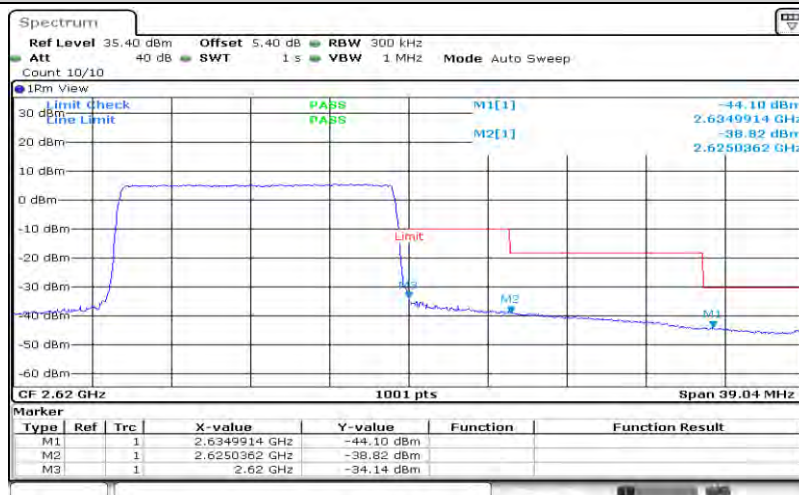


Band38-15MHz-16QAM-38175-1RB#74



Date: 11 JUN 2020 14:01:04

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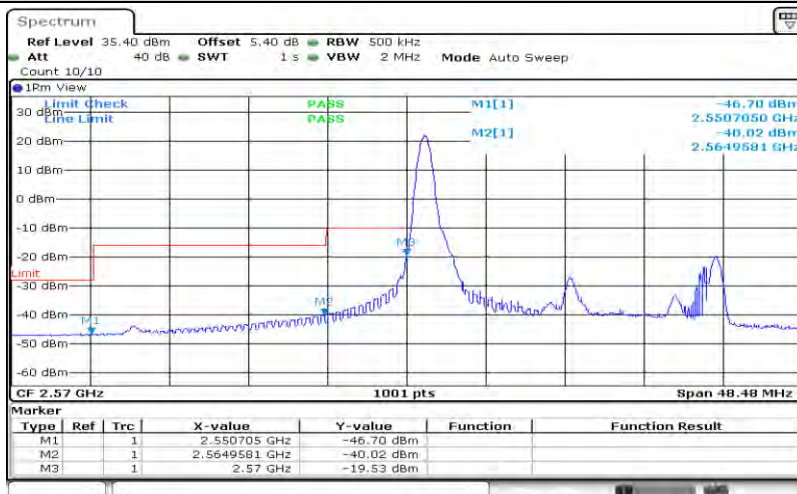


Date: 11 JUN 2020 14:02:35



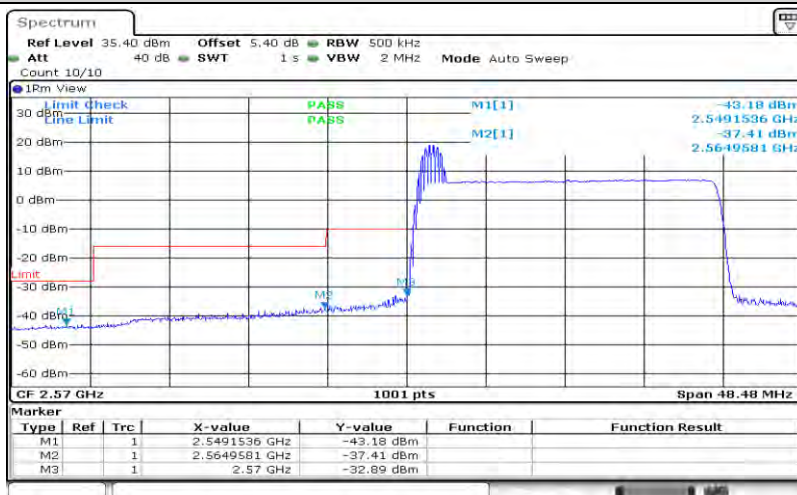


Band38-20MHz-QPSK-37850-1RB#0



Date: 11 JUN 2020 14:03:02

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

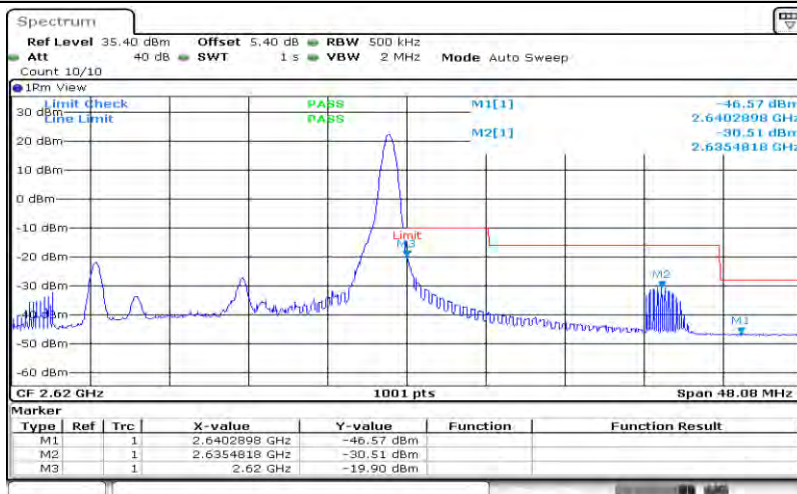


Date: 11 JUN 2020 14:04:38



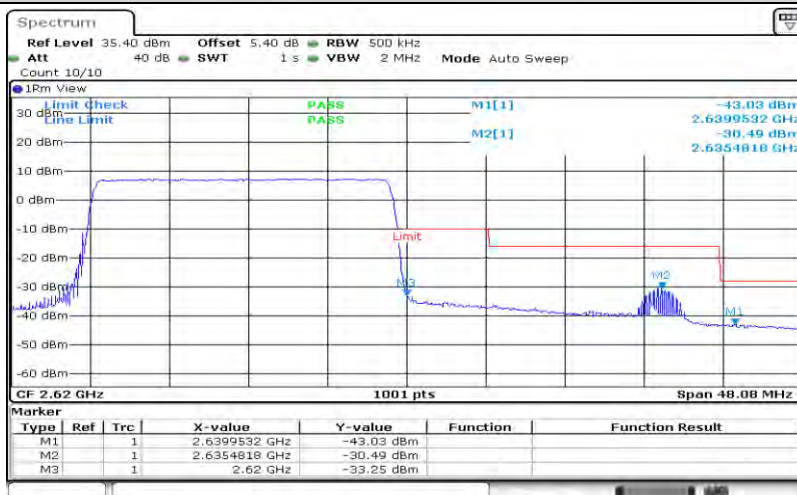


Band38-20MHz-QPSK-38150-1RB#99



Date: 11 JUN 2020 14:03:50

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



Date: 11 JUN 2020 14:05:22

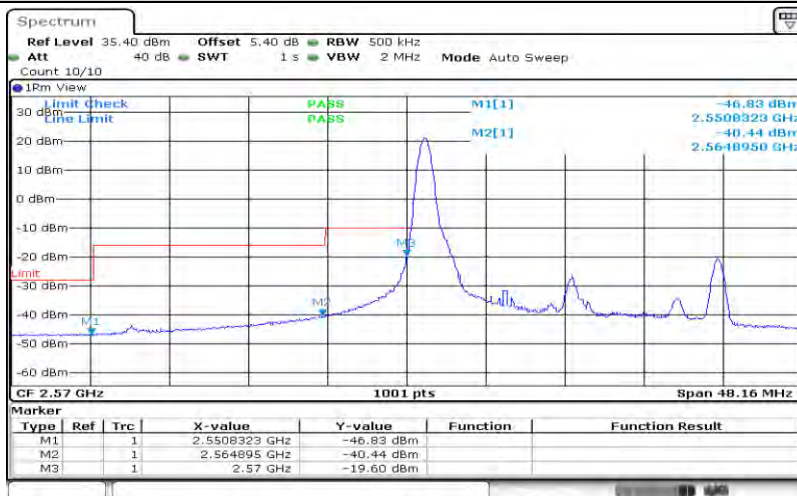


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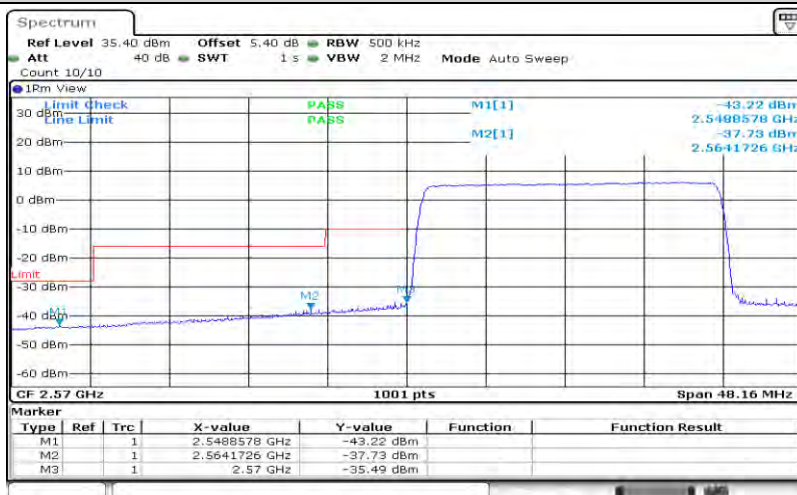


Band38-20MHz-16QAM-37850-1RB#0



Date: 11 JUN 2020 14:03:24

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



Date: 11 JUN 2020 14:05:00

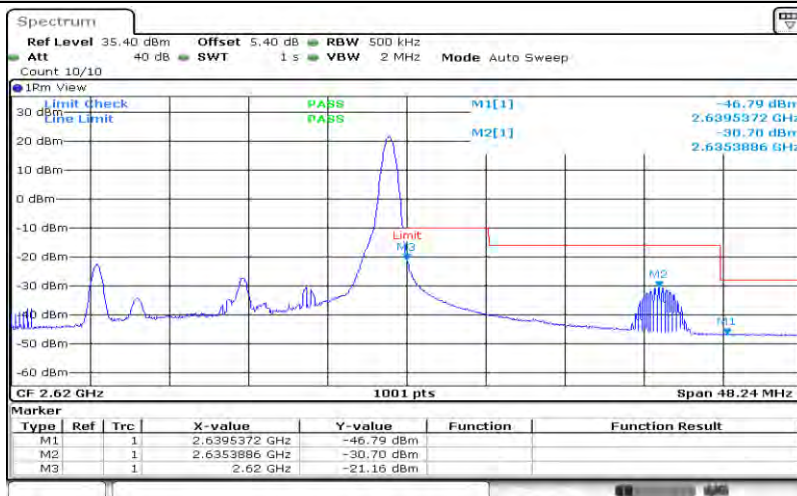


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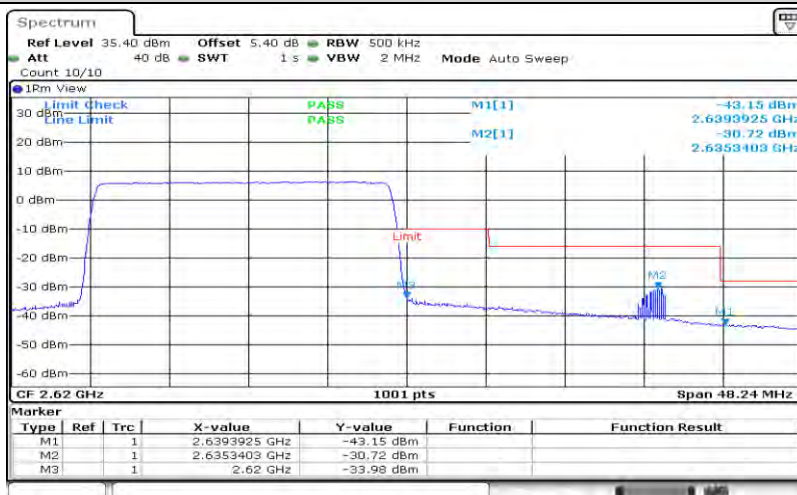


Band38-20MHz-16QAM-38150-1RB#99



Date: 11 JUN 2020 14:04:12

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



Date: 11 JUN 2020 14:05:43



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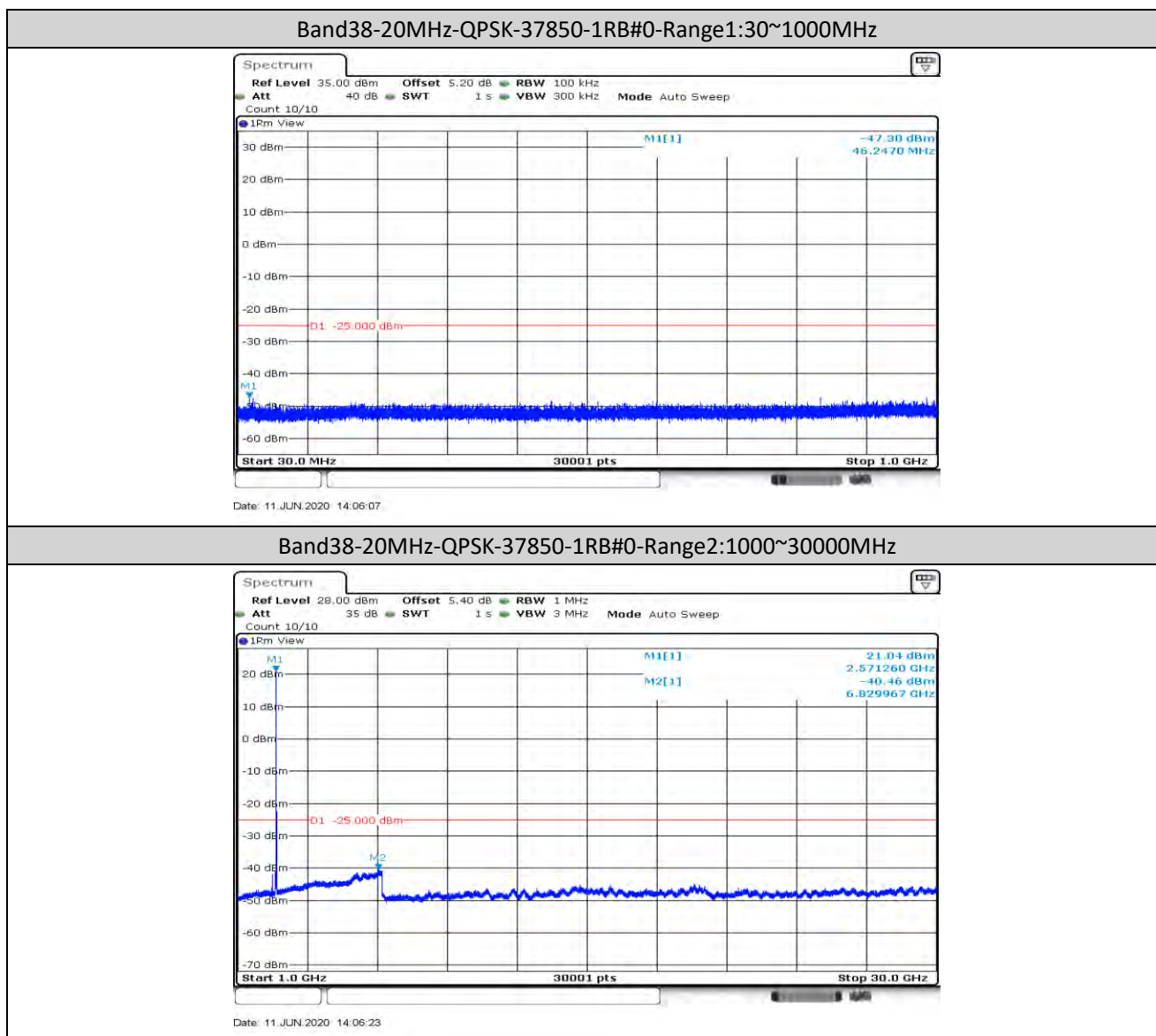
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6. Spurious Emission at Antenna Terminal

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



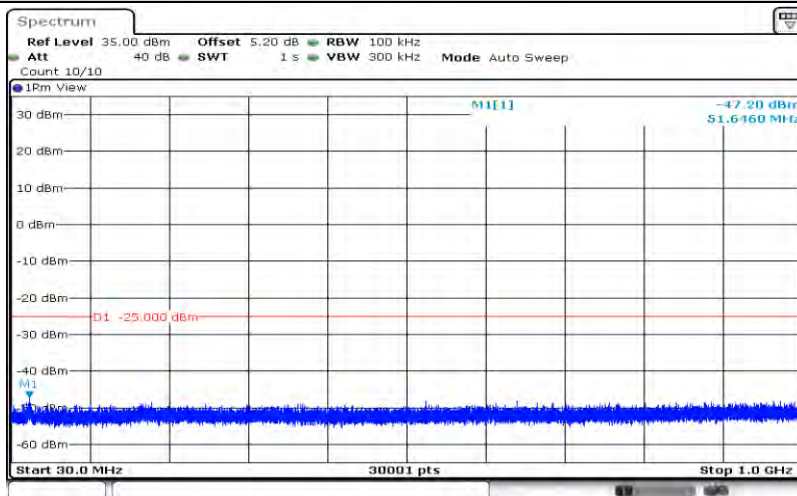
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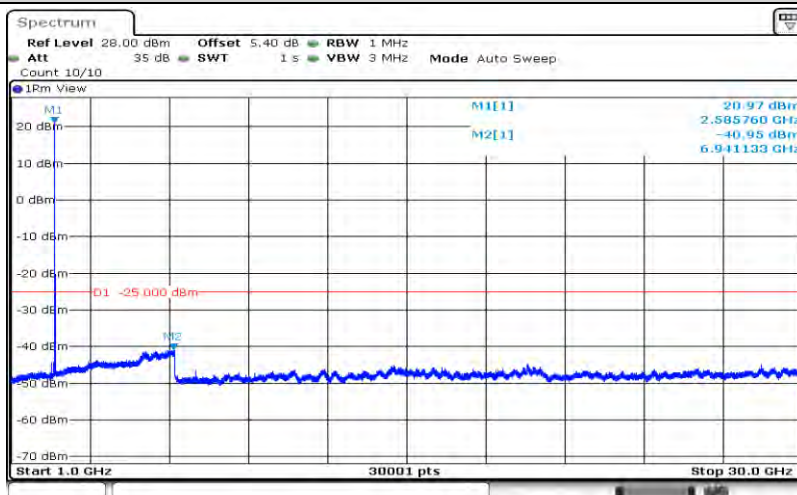


Band38-20MHz-QPSK-38000-1RB#0-Range1:30~1000MHz



Date: 11 JUN 2020 14:07:17

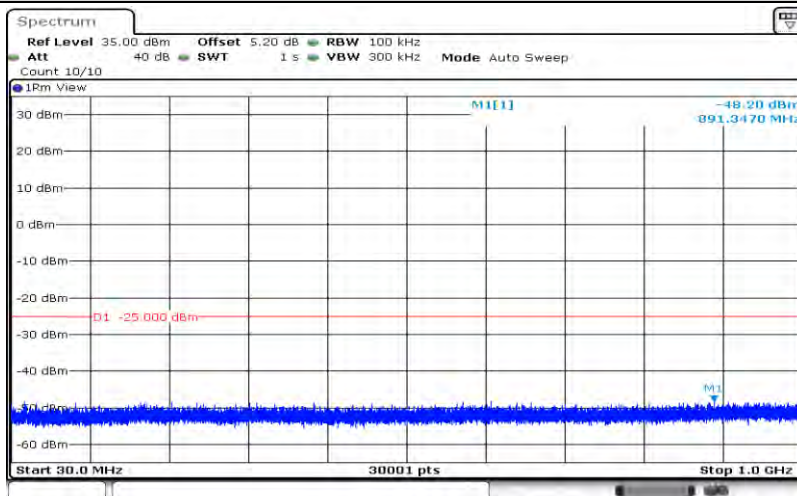
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Date: 11 JUN 2020 14:07:34

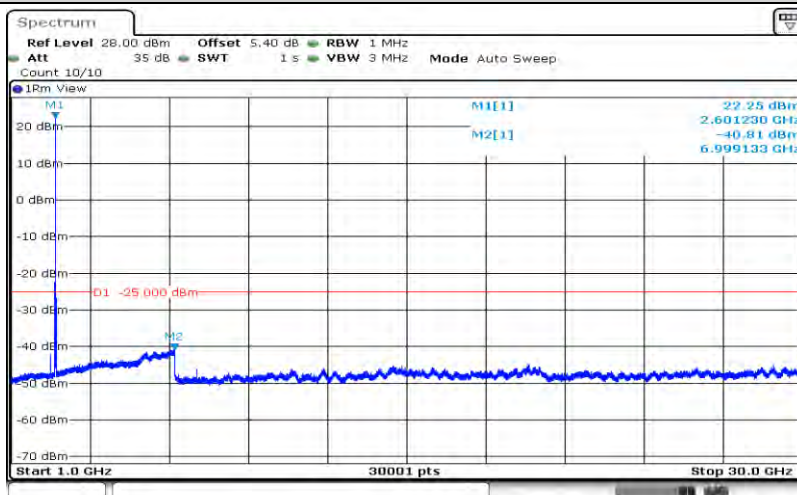


Band38-20MHz-QPSK-38150-1RB#0-Range1:30~1000MHz



Date: 11 JUN 2020 14:08:28

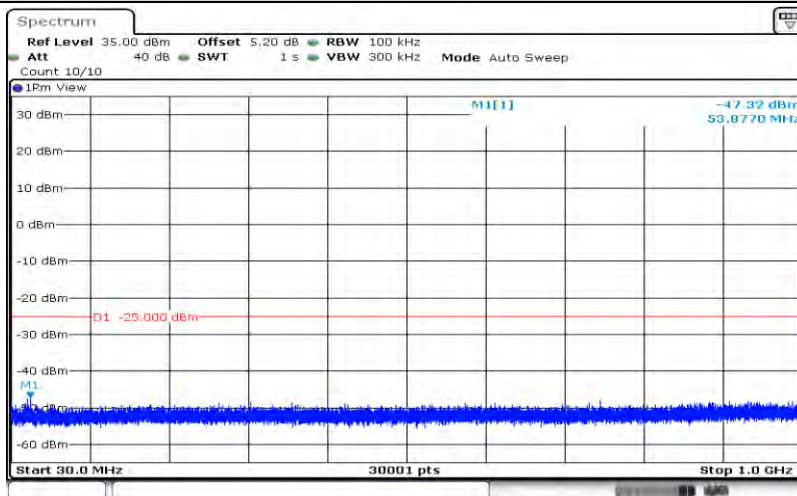
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Date: 11 JUN 2020 14:08:44

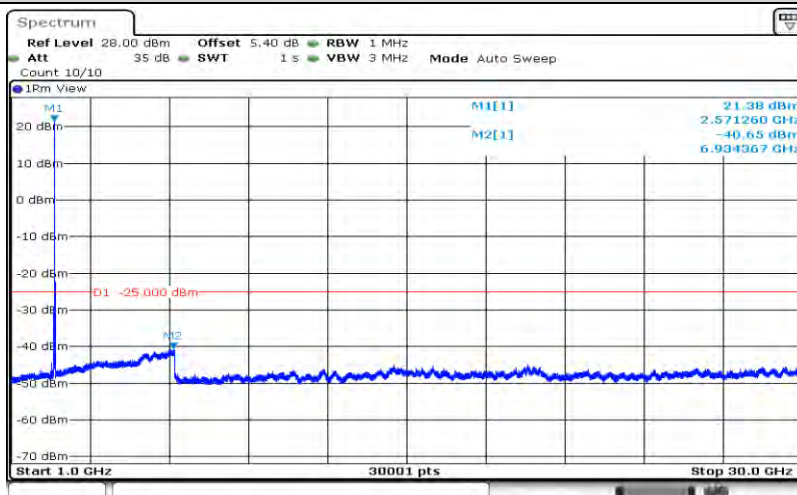


Band38-20MHz-16QAM-37850-1RB#0-Range1:30~1000MHz



Date: 11 JUN 2020 14:06:42

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

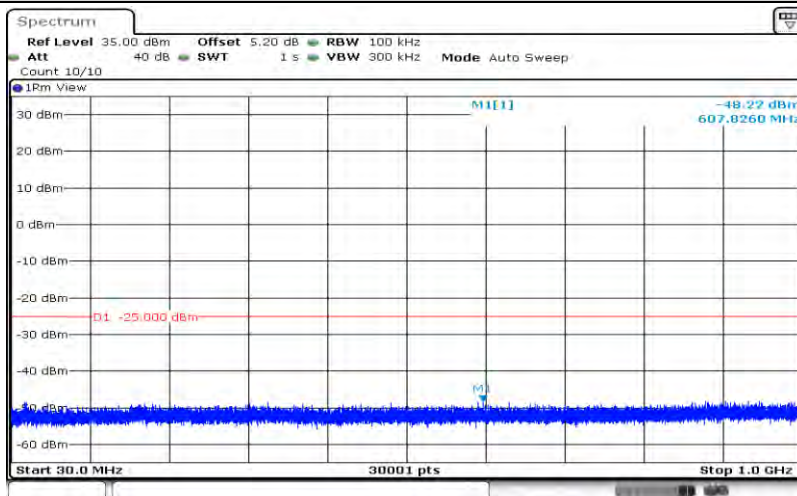


Date: 11 JUN 2020 14:06:58



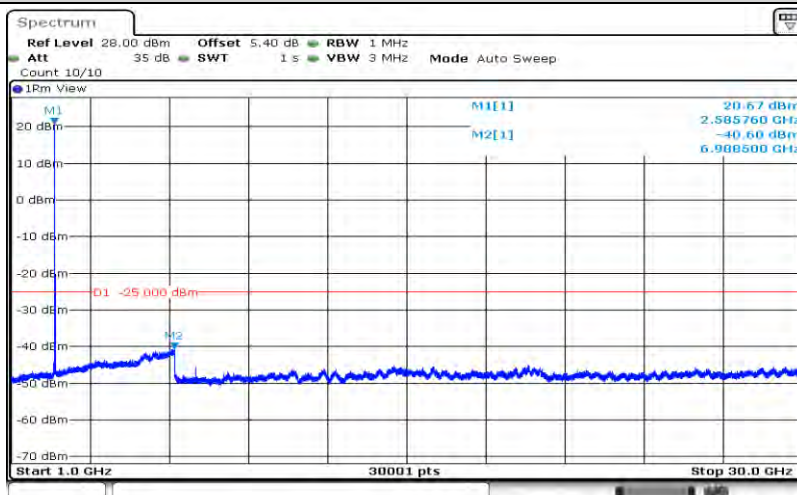


Band38-20MHz-16QAM-38000-1RB#0-Range1:30~1000MHz



Date: 11 JUN 2020 14:07:52

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

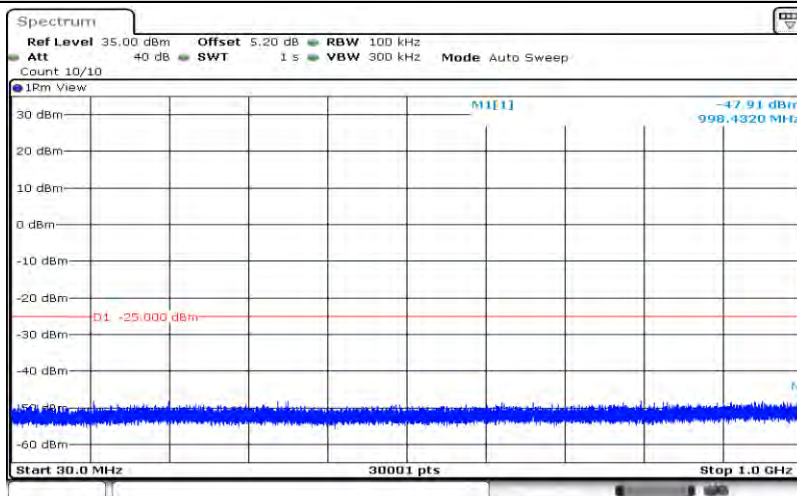


Date: 11 JUN 2020 14:08:09



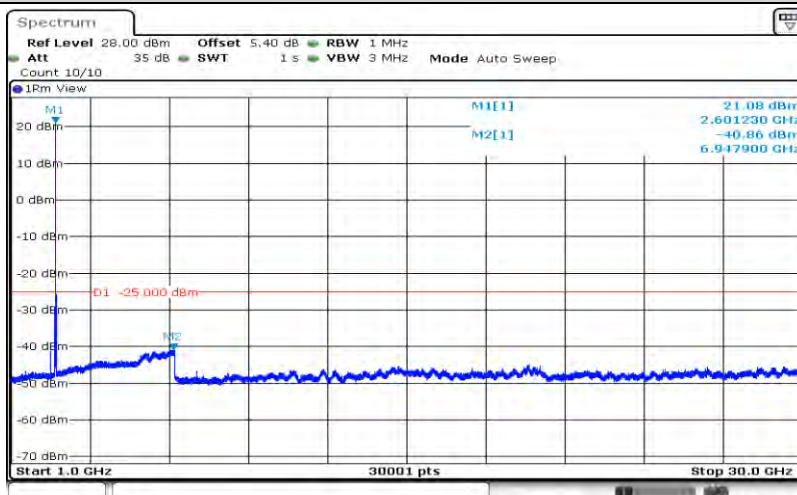


Band38-20MHz-16QAM-38150-1RB#0-Range1:30~1000MHz



Date: 11 JUN 2020 14:09:03

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



Date: 11 JUN 2020 14:09:19





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
49.4980	-71.75	-25.00	46.75	Vertical
115.8493	-64.49	-25.00	39.49	Vertical
615.1818	-63.64	-25.00	38.64	Vertical
1746.1492	-42.41	-25.00	17.41	Vertical
7358.1453	-55.57	-25.00	30.57	Vertical
17994.9998	-38.71	-25.00	13.71	Vertical
42.7076	-63.76	-25.00	38.76	Horizontal
245.2538	-68.03	-25.00	43.03	Horizontal
526.1798	-65.20	-25.00	40.20	Horizontal
2036.2072	-42.56	-25.00	17.56	Horizontal
7482.1494	-56.08	-25.00	31.08	Horizontal
16391.9464	-42.59	-25.00	17.59	Horizontal

7.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
49.4010	-71.57	-25.00	46.57	Vertical
113.2787	-63.99	-25.00	38.99	Vertical
433.9282	-67.22	-25.00	42.22	Vertical
2979.9960	-38.35	-25.00	13.35	Vertical
7497.1499	-55.61	-25.00	30.61	Vertical
17999.0000	-38.30	-25.00	13.30	Vertical
44.3567	-63.41	-25.00	38.41	Horizontal
242.1496	-67.57	-25.00	42.57	Horizontal
608.8279	-63.29	-25.00	38.29	Horizontal
3000.0000	-38.22	-25.00	13.22	Horizontal
7351.1450	-56.08	-25.00	31.08	Horizontal
16395.9465	-42.18	-25.00	17.18	Horizontal





7.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
47.5579	-72.93	-25.00	47.93	Vertical
110.4170	-64.54	-25.00	39.54	Vertical
465.6488	-67.10	-25.00	42.10	Vertical
2983.9968	-38.43	-25.00	13.43	Vertical
7357.1452	-55.59	-25.00	30.59	Vertical
17995.9999	-38.66	-25.00	13.66	Vertical
44.1142	-64.18	-25.00	39.18	Horizontal
234.1952	-68.36	-25.00	43.36	Horizontal
726.3493	-62.13	-25.00	37.13	Horizontal
2946.3893	-38.37	-25.00	13.37	Horizontal
7456.1485	-56.18	-25.00	31.18	Horizontal
16399.9467	-42.26	-25.00	17.26	Horizontal

Remark:

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





8. Frequency Stability

8.1. Frequency Vs Voltage

Band	Bandwidth h	Modulation	Channel l	RB Configur e	Voltage [Vdc]	Tempe rature (°C)	Deviation n (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band38	20MHz	QPSK	37850	100RB#0	VL	NT	-6.60	-0.002558	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	VN	NT	-4.10	-0.001589	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	VH	NT	-4.90	-0.001899	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	VL	NT	-6.20	-0.002389	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	VN	NT	-12.60	-0.004855	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	VH	NT	-4.50	-0.001734	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	VL	NT	-3.80	-0.001456	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	VN	NT	-6.00	-0.002299	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	VH	NT	-3.80	-0.001456	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	VL	NT	0.50	0.000194	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	VN	NT	-4.10	-0.001589	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	VH	NT	-6.40	-0.002481	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	VL	NT	-10.70	-0.004123	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	VN	NT	-10.80	-0.004162	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	VH	NT	-8.10	-0.003121	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	VL	NT	-5.00	-0.001916	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	VN	NT	0.00	0.000000	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	VH	NT	-10.80	-0.004138	±2.5	PASS

8.2. Frequency Vs Temperature

Band	Bandwidth h	Modulation	Channel l	RB Configur e	Voltage [Vdc]	Tempe rature (°C)	Deviation n (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band38	20MHz	QPSK	37850	100RB#0	NV	-30	-2.70	-0.001047	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	-20	-6.00	-0.002326	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	0	-7.00	-0.002713	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	10	-6.90	-0.002674	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	20	1.80	0.000698	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	30	-5.80	-0.002248	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	40	2.10	0.000814	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	50	2.30	0.000891	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	-30	-7.70	-0.002967	±2.5	PASS



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Band38	20MHz	QPSK	38000	100RB#0	NV	-20	-4.70	-0.001811	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	0	-3.30	-0.001272	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	10	-7.80	-0.003006	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	20	-6.90	-0.002659	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	30	-13.20	-0.005087	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	40	-10.00	-0.003854	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	50	-9.60	-0.003699	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	-30	-4.90	-0.001877	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	-20	-3.50	-0.001341	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	0	-6.10	-0.002337	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	10	0.30	0.000115	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	20	-1.90	-0.000728	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	30	0.10	0.000038	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	40	-1.20	-0.000460	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	50	-9.70	-0.003716	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	-30	-5.30	-0.002054	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	-20	-3.90	-0.001512	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	0	-2.10	-0.000814	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	10	1.80	0.000698	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	20	0.40	0.000155	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	30	-5.40	-0.002093	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	40	-6.90	-0.002674	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	50	-6.40	-0.002481	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	-30	-8.70	-0.003353	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	-20	-9.10	-0.003507	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	0	-10.10	-0.003892	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	10	-6.30	-0.002428	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	20	-8.30	-0.003198	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	30	-12.60	-0.004855	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	40	-9.10	-0.003507	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	50	-7.20	-0.002775	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	-30	-1.80	-0.000690	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	-20	-9.10	-0.003487	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	0	-3.80	-0.001456	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	10	-9.80	-0.003755	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	20	-4.50	-0.001724	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	30	-2.90	-0.001111	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	40	-7.30	-0.002797	±2.5	PASS



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Band38	20MHz	16QAM	38150	100RB#0	NV	50	-1.60	-0.000613	±2.5	PASS
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