



# 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	Result (dBm)	EIRP (dBm)	Limit (dBm)	Verdict
BAND38	5MHz	QPSK	37775	1RB#0	22.69	26.69	33.00	PASS
BAND38	5MHz	QPSK	37775	1RB#12	22.67	26.67	33.00	PASS
BAND38	5MHz	QPSK	37775	1RB#24	22.65	26.65	33.00	PASS
BAND38	5MHz	QPSK	37775	12RB#0	21.74	25.74	33.00	PASS
BAND38	5MHz	QPSK	37775	12RB#6	21.72	25.72	33.00	PASS
BAND38	5MHz	QPSK	37775	12RB#13	21.70	25.70	33.00	PASS
BAND38	5MHz	QPSK	37775	25RB#0	21.73	25.73	33.00	PASS
BAND38	5MHz	QPSK	38000	1RB#0	22.84	26.84	33.00	PASS
BAND38	5MHz	QPSK	38000	1RB#12	22.83	26.83	33.00	PASS
BAND38	5MHz	QPSK	38000	1RB#24	22.87	26.87	33.00	PASS
BAND38	5MHz	QPSK	38000	12RB#0	21.87	25.87	33.00	PASS
BAND38	5MHz	QPSK	38000	12RB#6	21.90	25.90	33.00	PASS
BAND38	5MHz	QPSK	38000	12RB#13	21.90	25.90	33.00	PASS
BAND38	5MHz	QPSK	38000	25RB#0	21.91	25.91	33.00	PASS
BAND38	5MHz	QPSK	38225	1RB#0	23.25	27.25	33.00	PASS
BAND38	5MHz	QPSK	38225	1RB#12	23.31	27.31	33.00	PASS
BAND38	5MHz	QPSK	38225	1RB#24	23.40	27.40	33.00	PASS
BAND38	5MHz	QPSK	38225	12RB#0	22.41	26.41	33.00	PASS
BAND38	5MHz	QPSK	38225	12RB#6	22.38	26.38	33.00	PASS
BAND38	5MHz	QPSK	38225	12RB#13	22.39	26.39	33.00	PASS
BAND38	5MHz	QPSK	38225	25RB#0	22.37	26.37	33.00	PASS
BAND38	5MHz	16QAM	37775	1RB#0	21.67	25.67	33.00	PASS
BAND38	5MHz	16QAM	37775	1RB#12	21.35	25.35	33.00	PASS
BAND38	5MHz	16QAM	37775	1RB#24	21.50	25.50	33.00	PASS
BAND38	5MHz	16QAM	37775	12RB#0	20.71	24.71	33.00	PASS
BAND38	5MHz	16QAM	37775	12RB#6	20.68	24.68	33.00	PASS
BAND38	5MHz	16QAM	37775	12RB#13	20.68	24.68	33.00	PASS
BAND38	5MHz	16QAM	37775	25RB#0	20.67	24.67	33.00	PASS
BAND38	5MHz	16QAM	38000	1RB#0	21.67	25.67	33.00	PASS
BAND38	5MHz	16QAM	38000	1RB#12	21.73	25.73	33.00	PASS
BAND38	5MHz	16QAM	38000	1RB#24	21.77	25.77	33.00	PASS
BAND38	5MHz	16QAM	38000	12RB#0	20.83	24.83	33.00	PASS
BAND38	5MHz	16QAM	38000	12RB#6	20.86	24.86	33.00	PASS
BAND38	5MHz	16QAM	38000	12RB#13	20.79	24.79	33.00	PASS



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BAND38	5MHz	16QAM	38000	25RB#0	20.82	24.82	33.00	PASS
BAND38	5MHz	16QAM	38225	1RB#0	22.00	26.00	33.00	PASS
BAND38	5MHz	16QAM	38225	1RB#12	22.17	26.17	33.00	PASS
BAND38	5MHz	16QAM	38225	1RB#24	22.34	26.34	33.00	PASS
BAND38	5MHz	16QAM	38225	12RB#0	21.20	25.20	33.00	PASS
BAND38	5MHz	16QAM	38225	12RB#6	21.27	25.27	33.00	PASS
BAND38	5MHz	16QAM	38225	12RB#13	21.24	25.24	33.00	PASS
BAND38	5MHz	16QAM	38225	25RB#0	21.29	25.29	33.00	PASS
BAND38	5MHz	64QAM	37775	1RB#0	20.79	24.79	33.00	PASS
BAND38	5MHz	64QAM	37775	1RB#12	20.47	24.47	33.00	PASS
BAND38	5MHz	64QAM	37775	1RB#24	20.66	24.66	33.00	PASS
BAND38	5MHz	64QAM	37775	12RB#0	19.88	23.88	33.00	PASS
BAND38	5MHz	64QAM	37775	12RB#6	19.84	23.84	33.00	PASS
BAND38	5MHz	64QAM	37775	12RB#13	19.84	23.84	33.00	PASS
BAND38	5MHz	64QAM	37775	25RB#0	19.81	23.81	33.00	PASS
BAND38	5MHz	64QAM	38000	1RB#0	20.85	24.85	33.00	PASS
BAND38	5MHz	64QAM	38000	1RB#12	20.85	24.85	33.00	PASS
BAND38	5MHz	64QAM	38000	1RB#24	20.89	24.89	33.00	PASS
BAND38	5MHz	64QAM	38000	12RB#0	19.98	23.98	33.00	PASS
BAND38	5MHz	64QAM	38000	12RB#6	19.96	23.96	33.00	PASS
BAND38	5MHz	64QAM	38000	12RB#13	19.93	23.93	33.00	PASS
BAND38	5MHz	64QAM	38000	25RB#0	19.92	23.92	33.00	PASS
BAND38	5MHz	64QAM	38225	1RB#0	21.18	25.18	33.00	PASS
BAND38	5MHz	64QAM	38225	1RB#12	21.30	25.30	33.00	PASS
BAND38	5MHz	64QAM	38225	1RB#24	21.51	25.51	33.00	PASS
BAND38	5MHz	64QAM	38225	12RB#0	20.37	24.37	33.00	PASS
BAND38	5MHz	64QAM	38225	12RB#6	20.45	24.45	33.00	PASS
BAND38	5MHz	64QAM	38225	12RB#13	20.41	24.41	33.00	PASS
BAND38	5MHz	64QAM	38225	25RB#0	20.48	24.48	33.00	PASS
BAND38	10MHz	QPSK	37800	1RB#0	22.81	26.81	33.00	PASS
BAND38	10MHz	QPSK	37800	1RB#24	22.74	26.74	33.00	PASS
BAND38	10MHz	QPSK	37800	1RB#49	22.73	26.73	33.00	PASS
BAND38	10MHz	QPSK	37800	25RB#0	21.82	25.82	33.00	PASS
BAND38	10MHz	QPSK	37800	25RB#12	21.79	25.79	33.00	PASS
BAND38	10MHz	QPSK	37800	25RB#25	21.76	25.76	33.00	PASS
BAND38	10MHz	QPSK	37800	50RB#0	21.72	25.72	33.00	PASS
BAND38	10MHz	QPSK	38000	1RB#0	22.85	26.85	33.00	PASS
BAND38	10MHz	QPSK	38000	1RB#24	22.90	26.90	33.00	PASS
BAND38	10MHz	QPSK	38000	1RB#49	22.96	26.96	33.00	PASS
BAND38	10MHz	QPSK	38000	25RB#0	21.95	25.95	33.00	PASS
BAND38	10MHz	QPSK	38000	25RB#12	21.97	25.97	33.00	PASS

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BAND38	10MHz	QPSK	38000	25RB#25	21.97	25.97	33.00	PASS
BAND38	10MHz	QPSK	38000	50RB#0	21.92	25.92	33.00	PASS
BAND38	10MHz	QPSK	38200	1RB#0	23.26	27.26	33.00	PASS
BAND38	10MHz	QPSK	38200	1RB#24	23.28	27.28	33.00	PASS
BAND38	10MHz	QPSK	38200	1RB#49	23.45	27.45	33.00	PASS
BAND38	10MHz	QPSK	38200	25RB#0	22.37	26.37	33.00	PASS
BAND38	10MHz	QPSK	38200	25RB#12	22.36	26.36	33.00	PASS
BAND38	10MHz	QPSK	38200	25RB#25	22.42	26.42	33.00	PASS
BAND38	10MHz	QPSK	38200	50RB#0	22.30	26.30	33.00	PASS
BAND38	10MHz	16QAM	37800	1RB#0	21.72	25.72	33.00	PASS
BAND38	10MHz	16QAM	37800	1RB#24	21.68	25.68	33.00	PASS
BAND38	10MHz	16QAM	37800	1RB#49	21.68	25.68	33.00	PASS
BAND38	10MHz	16QAM	37800	25RB#0	20.77	24.77	33.00	PASS
BAND38	10MHz	16QAM	37800	25RB#12	20.76	24.76	33.00	PASS
BAND38	10MHz	16QAM	37800	25RB#25	20.75	24.75	33.00	PASS
BAND38	10MHz	16QAM	37800	50RB#0	20.73	24.73	33.00	PASS
BAND38	10MHz	16QAM	38000	1RB#0	21.56	25.56	33.00	PASS
BAND38	10MHz	16QAM	38000	1RB#24	21.84	25.84	33.00	PASS
BAND38	10MHz	16QAM	38000	1RB#49	21.79	25.79	33.00	PASS
BAND38	10MHz	16QAM	38000	25RB#0	20.91	24.91	33.00	PASS
BAND38	10MHz	16QAM	38000	25RB#12	20.92	24.92	33.00	PASS
BAND38	10MHz	16QAM	38000	25RB#25	20.95	24.95	33.00	PASS
BAND38	10MHz	16QAM	38000	50RB#0	20.90	24.90	33.00	PASS
BAND38	10MHz	16QAM	38200	1RB#0	21.97	25.97	33.00	PASS
BAND38	10MHz	16QAM	38200	1RB#24	22.18	26.18	33.00	PASS
BAND38	10MHz	16QAM	38200	1RB#49	22.43	26.43	33.00	PASS
BAND38	10MHz	16QAM	38200	25RB#0	21.29	25.29	33.00	PASS
BAND38	10MHz	16QAM	38200	25RB#12	21.24	25.24	33.00	PASS
BAND38	10MHz	16QAM	38200	25RB#25	21.31	25.31	33.00	PASS
BAND38	10MHz	16QAM	38200	50RB#0	21.24	25.24	33.00	PASS
BAND38	10MHz	64QAM	37800	1RB#0	20.91	24.91	33.00	PASS
BAND38	10MHz	64QAM	37800	1RB#24	20.78	24.78	33.00	PASS
BAND38	10MHz	64QAM	37800	1RB#49	20.80	24.80	33.00	PASS
BAND38	10MHz	64QAM	37800	25RB#0	19.93	23.93	33.00	PASS
BAND38	10MHz	64QAM	37800	25RB#12	19.92	23.92	33.00	PASS
BAND38	10MHz	64QAM	37800	25RB#25	19.93	23.93	33.00	PASS
BAND38	10MHz	64QAM	37800	50RB#0	19.87	23.87	33.00	PASS
BAND38	10MHz	64QAM	38000	1RB#0	20.73	24.73	33.00	PASS
BAND38	10MHz	64QAM	38000	1RB#24	21.03	25.03	33.00	PASS
BAND38	10MHz	64QAM	38000	1RB#49	20.94	24.94	33.00	PASS
BAND38	10MHz	64QAM	38000	25RB#0	20.10	24.10	33.00	PASS

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BAND38	10MHz	64QAM	38000	25RB#12	20.03	24.03	33.00	PASS
BAND38	10MHz	64QAM	38000	25RB#25	20.07	24.07	33.00	PASS
BAND38	10MHz	64QAM	38000	50RB#0	20.00	24.00	33.00	PASS
BAND38	10MHz	64QAM	38200	1RB#0	21.07	25.07	33.00	PASS
BAND38	10MHz	64QAM	38200	1RB#24	21.37	25.37	33.00	PASS
BAND38	10MHz	64QAM	38200	1RB#49	21.58	25.58	33.00	PASS
BAND38	10MHz	64QAM	38200	25RB#0	20.47	24.47	33.00	PASS
BAND38	10MHz	64QAM	38200	25RB#12	20.34	24.34	33.00	PASS
BAND38	10MHz	64QAM	38200	25RB#25	20.47	24.47	33.00	PASS
BAND38	10MHz	64QAM	38200	50RB#0	20.39	24.39	33.00	PASS
BAND38	15MHz	QPSK	37825	1RB#0	22.80	26.80	33.00	PASS
BAND38	15MHz	QPSK	37825	1RB#38	22.73	26.73	33.00	PASS
BAND38	15MHz	QPSK	37825	1RB#74	22.70	26.70	33.00	PASS
BAND38	15MHz	QPSK	37825	36RB#0	21.76	25.76	33.00	PASS
BAND38	15MHz	QPSK	37825	36RB#18	21.74	25.74	33.00	PASS
BAND38	15MHz	QPSK	37825	36RB#39	21.69	25.69	33.00	PASS
BAND38	15MHz	QPSK	37825	75RB#0	21.72	25.72	33.00	PASS
BAND38	15MHz	QPSK	38000	1RB#0	22.84	26.84	33.00	PASS
BAND38	15MHz	QPSK	38000	1RB#38	22.92	26.92	33.00	PASS
BAND38	15MHz	QPSK	38000	1RB#74	23.04	27.04	33.00	PASS
BAND38	15MHz	QPSK	38000	36RB#0	21.91	25.91	33.00	PASS
BAND38	15MHz	QPSK	38000	36RB#18	21.93	25.93	33.00	PASS
BAND38	15MHz	QPSK	38000	36RB#39	21.98	25.98	33.00	PASS
BAND38	15MHz	QPSK	38000	75RB#0	21.91	25.91	33.00	PASS
BAND38	15MHz	QPSK	38175	1RB#0	23.15	27.15	33.00	PASS
BAND38	15MHz	QPSK	38175	1RB#38	23.26	27.26	33.00	PASS
BAND38	15MHz	QPSK	38175	1RB#74	23.42	27.42	33.00	PASS
BAND38	15MHz	QPSK	38175	36RB#0	22.27	26.27	33.00	PASS
BAND38	15MHz	QPSK	38175	36RB#18	22.31	26.31	33.00	PASS
BAND38	15MHz	QPSK	38175	36RB#39	22.36	26.36	33.00	PASS
BAND38	15MHz	QPSK	38175	75RB#0	22.28	26.28	33.00	PASS
BAND38	15MHz	16QAM	37825	1RB#0	21.97	25.97	33.00	PASS
BAND38	15MHz	16QAM	37825	1RB#38	21.46	25.46	33.00	PASS
BAND38	15MHz	16QAM	37825	1RB#74	21.62	25.62	33.00	PASS
BAND38	15MHz	16QAM	37825	36RB#0	20.78	24.78	33.00	PASS
BAND38	15MHz	16QAM	37825	36RB#18	20.73	24.73	33.00	PASS
BAND38	15MHz	16QAM	37825	36RB#39	20.73	24.73	33.00	PASS
BAND38	15MHz	16QAM	37825	75RB#0	20.65	24.65	33.00	PASS
BAND38	15MHz	16QAM	38000	1RB#0	21.70	25.70	33.00	PASS
BAND38	15MHz	16QAM	38000	1RB#38	22.03	26.03	33.00	PASS
BAND38	15MHz	16QAM	38000	1RB#74	21.82	25.82	33.00	PASS

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BAND38	15MHz	16QAM	38000	36RB#0	20.90	24.90	33.00	PASS
BAND38	15MHz	16QAM	38000	36RB#18	20.94	24.94	33.00	PASS
BAND38	15MHz	16QAM	38000	36RB#39	20.96	24.96	33.00	PASS
BAND38	15MHz	16QAM	38000	75RB#0	20.85	24.85	33.00	PASS
BAND38	15MHz	16QAM	38175	1RB#0	22.11	26.11	33.00	PASS
BAND38	15MHz	16QAM	38175	1RB#38	22.03	26.03	33.00	PASS
BAND38	15MHz	16QAM	38175	1RB#74	22.37	26.37	33.00	PASS
BAND38	15MHz	16QAM	38175	36RB#0	21.23	25.23	33.00	PASS
BAND38	15MHz	16QAM	38175	36RB#18	21.25	25.25	33.00	PASS
BAND38	15MHz	16QAM	38175	36RB#39	21.31	25.31	33.00	PASS
BAND38	15MHz	16QAM	38175	75RB#0	21.17	25.17	33.00	PASS
BAND38	15MHz	64QAM	37825	1RB#0	21.14	25.14	33.00	PASS
BAND38	15MHz	64QAM	37825	1RB#38	20.60	24.60	33.00	PASS
BAND38	15MHz	64QAM	37825	1RB#74	20.73	24.73	33.00	PASS
BAND38	15MHz	64QAM	37825	36RB#0	19.93	23.93	33.00	PASS
BAND38	15MHz	64QAM	37825	36RB#18	19.85	23.85	33.00	PASS
BAND38	15MHz	64QAM	37825	36RB#39	19.88	23.88	33.00	PASS
BAND38	15MHz	64QAM	37825	75RB#0	19.76	23.76	33.00	PASS
BAND38	15MHz	64QAM	38000	1RB#0	20.80	24.80	33.00	PASS
BAND38	15MHz	64QAM	38000	1RB#38	21.20	25.20	33.00	PASS
BAND38	15MHz	64QAM	38000	1RB#74	20.95	24.95	33.00	PASS
BAND38	15MHz	64QAM	38000	36RB#0	20.09	24.09	33.00	PASS
BAND38	15MHz	64QAM	38000	36RB#18	20.11	24.11	33.00	PASS
BAND38	15MHz	64QAM	38000	36RB#39	20.12	24.12	33.00	PASS
BAND38	15MHz	64QAM	38000	75RB#0	20.04	24.04	33.00	PASS
BAND38	15MHz	64QAM	38175	1RB#0	21.31	25.31	33.00	PASS
BAND38	15MHz	64QAM	38175	1RB#38	21.15	25.15	33.00	PASS
BAND38	15MHz	64QAM	38175	1RB#74	21.49	25.49	33.00	PASS
BAND38	15MHz	64QAM	38175	36RB#0	20.41	24.41	33.00	PASS
BAND38	15MHz	64QAM	38175	36RB#18	20.39	24.39	33.00	PASS
BAND38	15MHz	64QAM	38175	36RB#39	20.47	24.47	33.00	PASS
BAND38	15MHz	64QAM	38175	75RB#0	20.28	24.28	33.00	PASS
BAND38	20MHz	QPSK	37850	1RB#0	22.85	26.85	33.00	PASS
BAND38	20MHz	QPSK	37850	1RB#49	22.71	26.71	33.00	PASS
BAND38	20MHz	QPSK	37850	1RB#99	22.75	26.75	33.00	PASS
BAND38	20MHz	QPSK	37850	50RB#0	21.76	25.76	33.00	PASS
BAND38	20MHz	QPSK	37850	50RB#25	21.71	25.71	33.00	PASS
BAND38	20MHz	QPSK	37850	50RB#50	21.71	25.71	33.00	PASS
BAND38	20MHz	QPSK	37850	100RB#0	21.72	25.72	33.00	PASS
BAND38	20MHz	QPSK	38000	1RB#0	22.83	26.83	33.00	PASS
BAND38	20MHz	QPSK	38000	1RB#49	22.91	26.91	33.00	PASS

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BAND38	20MHz	QPSK	38000	1RB#99	23.07	27.07	33.00	PASS
BAND38	20MHz	QPSK	38000	50RB#0	21.85	25.85	33.00	PASS
BAND38	20MHz	QPSK	38000	50RB#25	21.92	25.92	33.00	PASS
BAND38	20MHz	QPSK	38000	50RB#50	21.98	25.98	33.00	PASS
BAND38	20MHz	QPSK	38000	100RB#0	21.93	25.93	33.00	PASS
BAND38	20MHz	QPSK	38150	1RB#0	23.13	27.13	33.00	PASS
BAND38	20MHz	QPSK	38150	1RB#49	23.20	27.20	33.00	PASS
BAND38	20MHz	QPSK	38150	1RB#99	23.34	27.34	33.00	PASS
BAND38	20MHz	QPSK	38150	50RB#0	22.20	26.20	33.00	PASS
BAND38	20MHz	QPSK	38150	50RB#25	22.22	26.22	33.00	PASS
BAND38	20MHz	QPSK	38150	50RB#50	22.28	26.28	33.00	PASS
BAND38	20MHz	QPSK	38150	100RB#0	22.26	26.26	33.00	PASS
BAND38	20MHz	16QAM	37850	1RB#0	21.67	25.67	33.00	PASS
BAND38	20MHz	16QAM	37850	1RB#49	21.73	25.73	33.00	PASS
BAND38	20MHz	16QAM	37850	1RB#99	21.72	25.72	33.00	PASS
BAND38	20MHz	16QAM	37850	50RB#0	20.73	24.73	33.00	PASS
BAND38	20MHz	16QAM	37850	50RB#25	20.69	24.69	33.00	PASS
BAND38	20MHz	16QAM	37850	50RB#50	20.74	24.74	33.00	PASS
BAND38	20MHz	16QAM	37850	100RB#0	20.69	24.69	33.00	PASS
BAND38	20MHz	16QAM	38000	1RB#0	21.62	25.62	33.00	PASS
BAND38	20MHz	16QAM	38000	1RB#49	21.78	25.78	33.00	PASS
BAND38	20MHz	16QAM	38000	1RB#99	21.91	25.91	33.00	PASS
BAND38	20MHz	16QAM	38000	50RB#0	20.80	24.80	33.00	PASS
BAND38	20MHz	16QAM	38000	50RB#25	20.88	24.88	33.00	PASS
BAND38	20MHz	16QAM	38000	50RB#50	20.92	24.92	33.00	PASS
BAND38	20MHz	16QAM	38000	100RB#0	20.90	24.90	33.00	PASS
BAND38	20MHz	16QAM	38150	1RB#0	22.13	26.13	33.00	PASS
BAND38	20MHz	16QAM	38150	1RB#49	21.98	25.98	33.00	PASS
BAND38	20MHz	16QAM	38150	1RB#99	22.32	26.32	33.00	PASS
BAND38	20MHz	16QAM	38150	50RB#0	21.15	25.15	33.00	PASS
BAND38	20MHz	16QAM	38150	50RB#25	21.19	25.19	33.00	PASS
BAND38	20MHz	16QAM	38150	50RB#50	21.20	25.20	33.00	PASS
BAND38	20MHz	16QAM	38150	100RB#0	21.18	25.18	33.00	PASS
BAND38	20MHz	64QAM	37850	1RB#0	20.79	24.79	33.00	PASS
BAND38	20MHz	64QAM	37850	1RB#49	20.90	24.90	33.00	PASS
BAND38	20MHz	64QAM	37850	1RB#99	20.91	24.91	33.00	PASS
BAND38	20MHz	64QAM	37850	50RB#0	19.84	23.84	33.00	PASS
BAND38	20MHz	64QAM	37850	50RB#25	19.82	23.82	33.00	PASS
BAND38	20MHz	64QAM	37850	50RB#50	19.90	23.90	33.00	PASS
BAND38	20MHz	64QAM	37850	100RB#0	19.83	23.83	33.00	PASS
BAND38	20MHz	64QAM	38000	1RB#0	20.72	24.72	33.00	PASS

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BAND38	20MHz	64QAM	38000	1RB#49	20.89	24.89	33.00	PASS
BAND38	20MHz	64QAM	38000	1RB#99	21.02	25.02	33.00	PASS
BAND38	20MHz	64QAM	38000	50RB#0	19.91	23.91	33.00	PASS
BAND38	20MHz	64QAM	38000	50RB#25	20.07	24.07	33.00	PASS
BAND38	20MHz	64QAM	38000	50RB#50	20.10	24.10	33.00	PASS
BAND38	20MHz	64QAM	38000	100RB#0	20.08	24.08	33.00	PASS
BAND38	20MHz	64QAM	38150	1RB#0	21.31	25.31	33.00	PASS
BAND38	20MHz	64QAM	38150	1RB#49	21.17	25.17	33.00	PASS
BAND38	20MHz	64QAM	38150	1RB#99	21.46	25.46	33.00	PASS
BAND38	20MHz	64QAM	38150	50RB#0	20.33	24.33	33.00	PASS
BAND38	20MHz	64QAM	38150	50RB#25	20.34	24.34	33.00	PASS
BAND38	20MHz	64QAM	38150	50RB#50	20.34	24.34	33.00	PASS
BAND38	20MHz	64QAM	38150	100RB#0	20.30	24.30	33.00	PASS

Note:

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

$$\text{ERP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBd]}$$

$$\text{EIRP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBi]}$$

b: SGP=Signal Generator Level

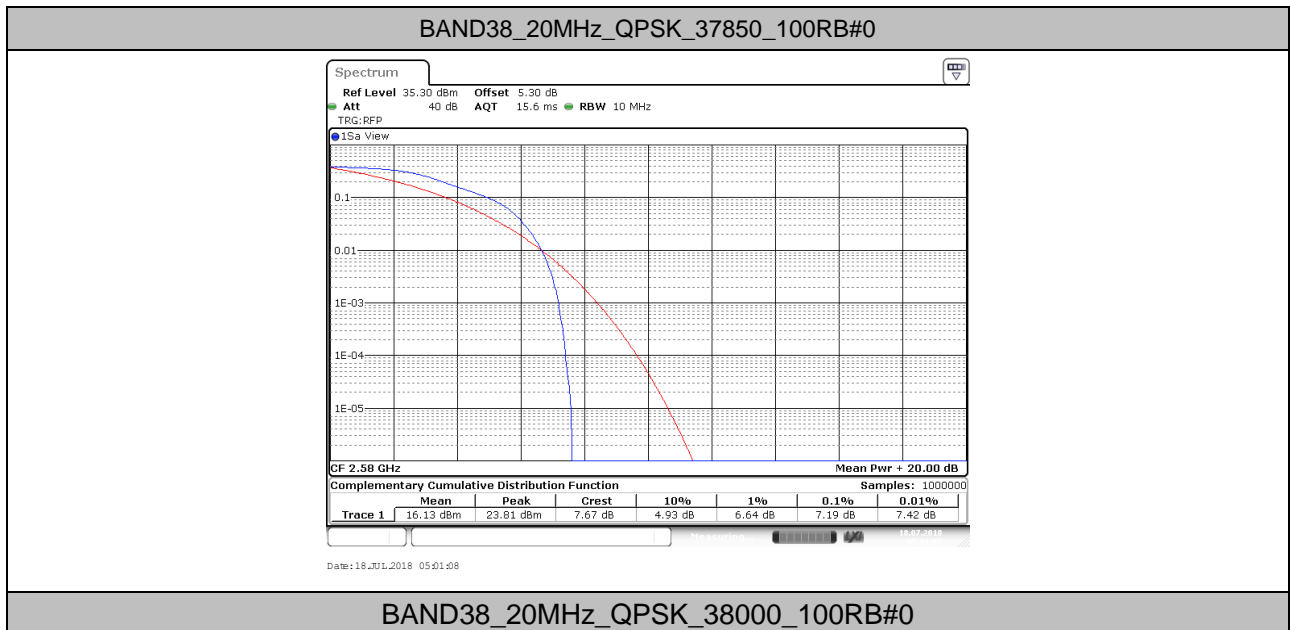


## 2. Peak-to-Average Ratio(CCDF)

### 2.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
BAND38	20MHz	QPSK	37850	100RB#0	7.19	13	PASS
			38000	100RB#0	6.49	13	PASS
			38150	100RB#0	6.84	13	PASS
		16QAM	37850	100RB#0	7.88	13	PASS
			38000	100RB#0	7.22	13	PASS
			38150	100RB#0	6.99	13	PASS
		64QAM	37850	100RB#0	7.19	13	PASS
			38000	100RB#0	7.54	13	PASS
			38150	100RB#0	7.30	13	PASS

### 2.2. Test Plots

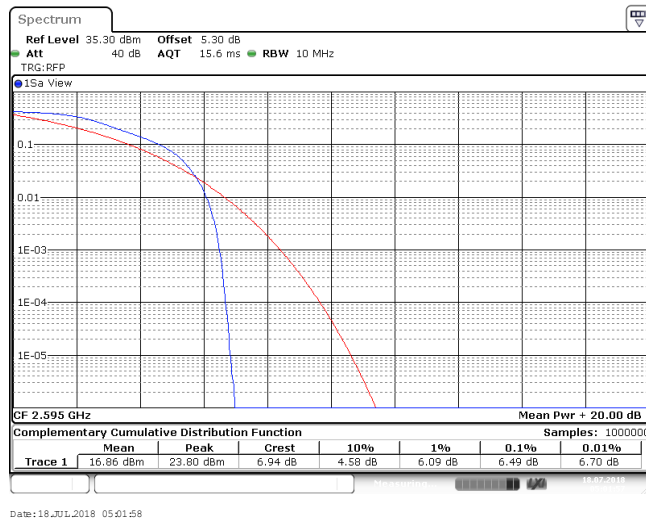




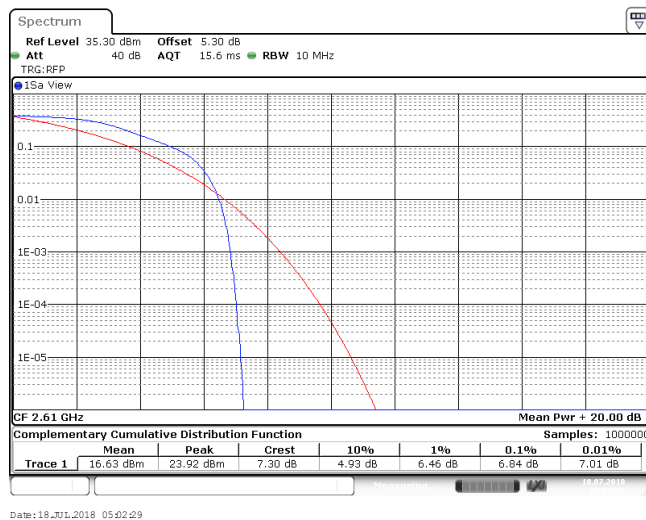
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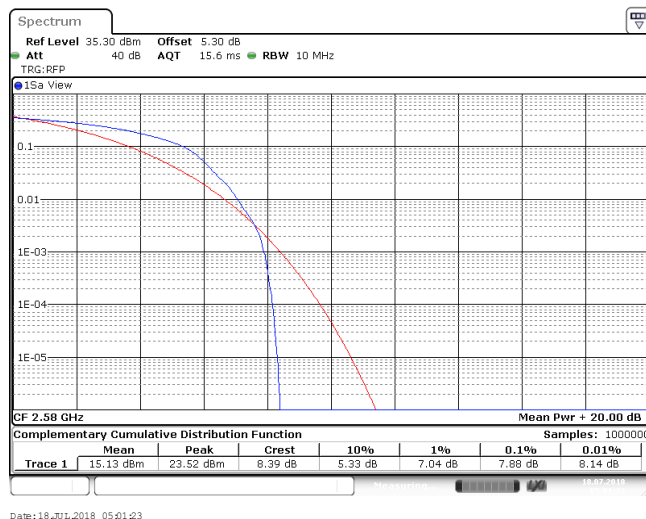
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## BAND38\_20MHz\_QPSK\_38150\_100RB#0



## BAND38\_20MHz\_16QAM\_37850\_100RB#0



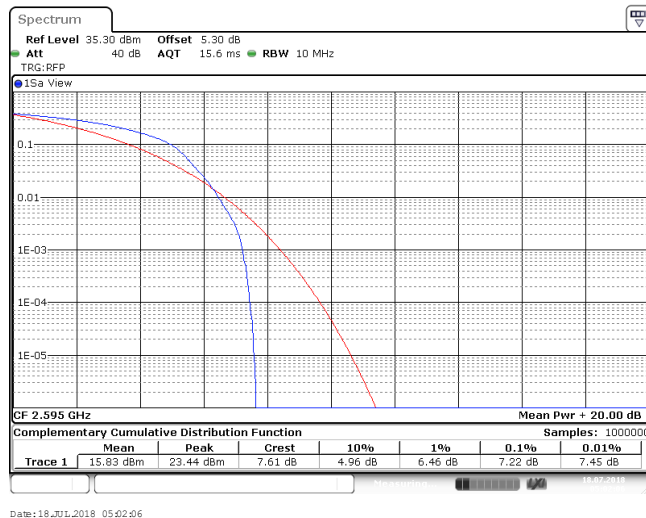
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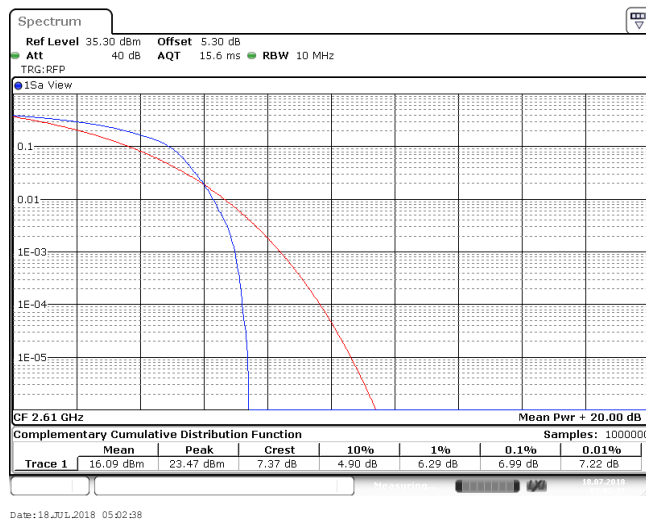
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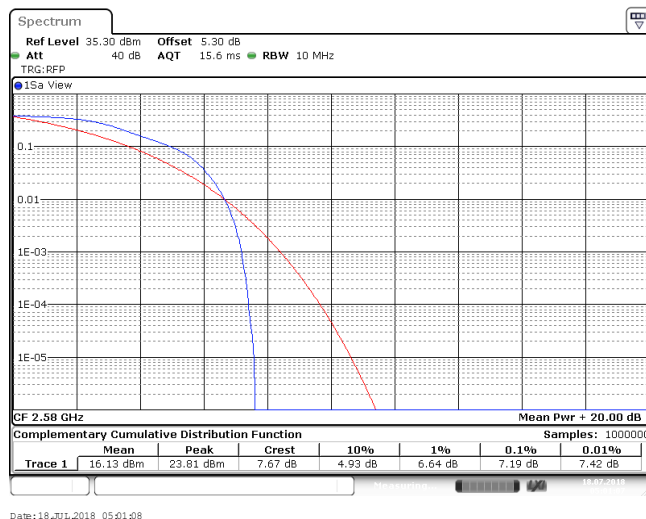
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## BAND38\_20MHz\_16QAM\_38150\_100RB#0



## BAND38\_20MHz\_64QAM\_37850\_100RB#0



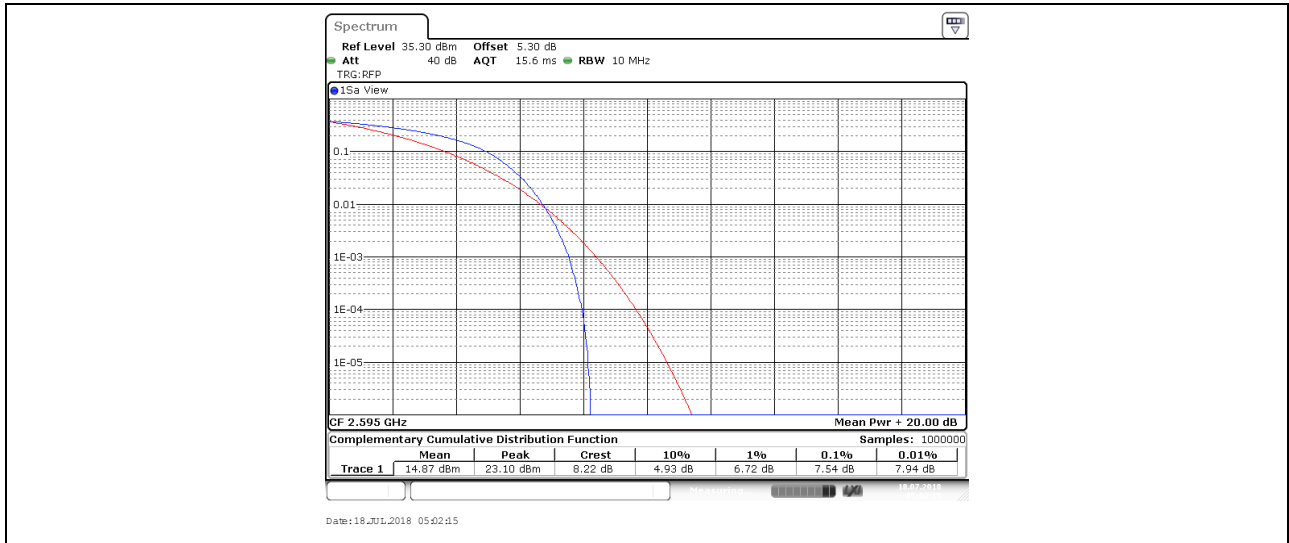
## BAND38\_20MHz\_64QAM\_38000\_100RB#0



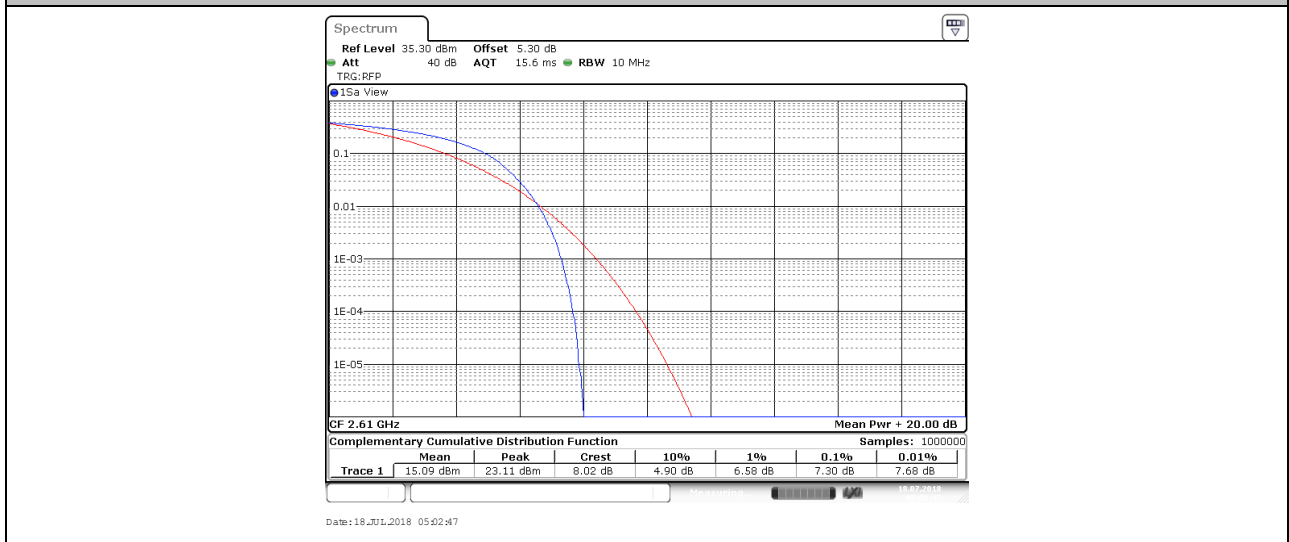
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## BAND38\_20MHz\_64QAM\_38150\_100RB#0



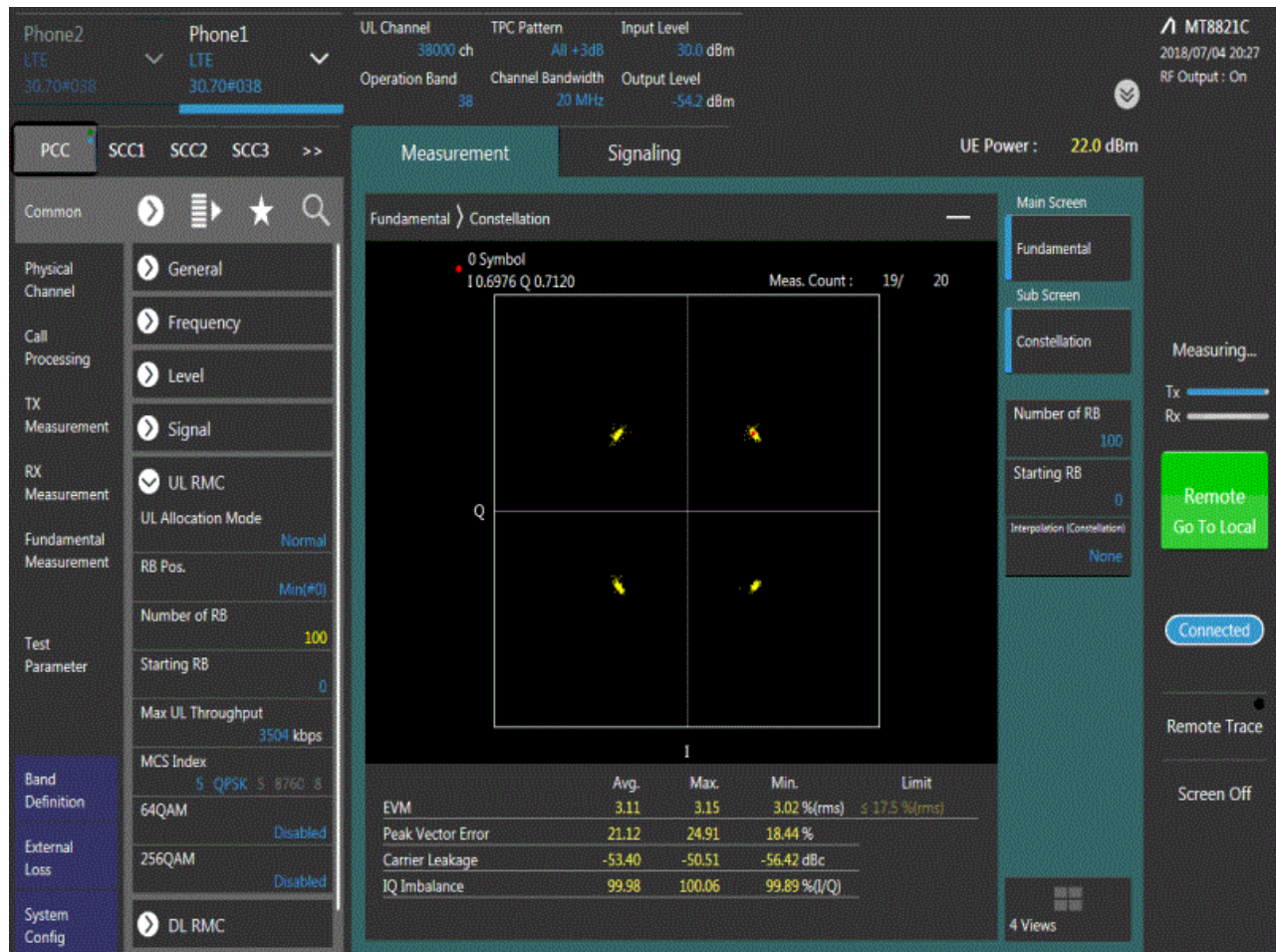


### 3. Modulation Characteristics

#### 3.1. Test BAND = LTE BAND38

##### 3.1.1. Test Mode = LTE /TM1 20MHz

##### 3.1.1.1. Test Channel = MCH

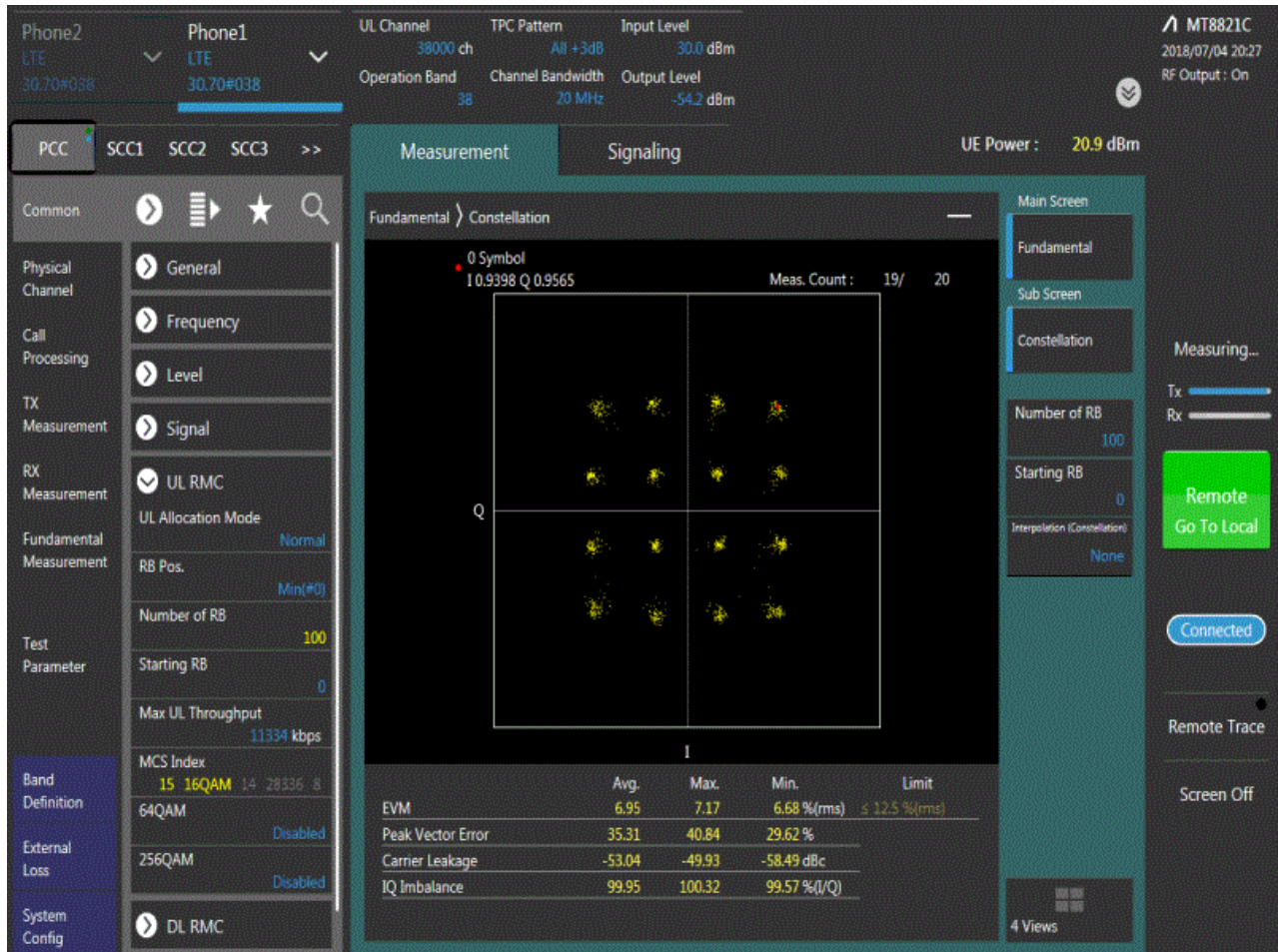






### 3.1.2. Test Mode = LTE /TM2 20MHz

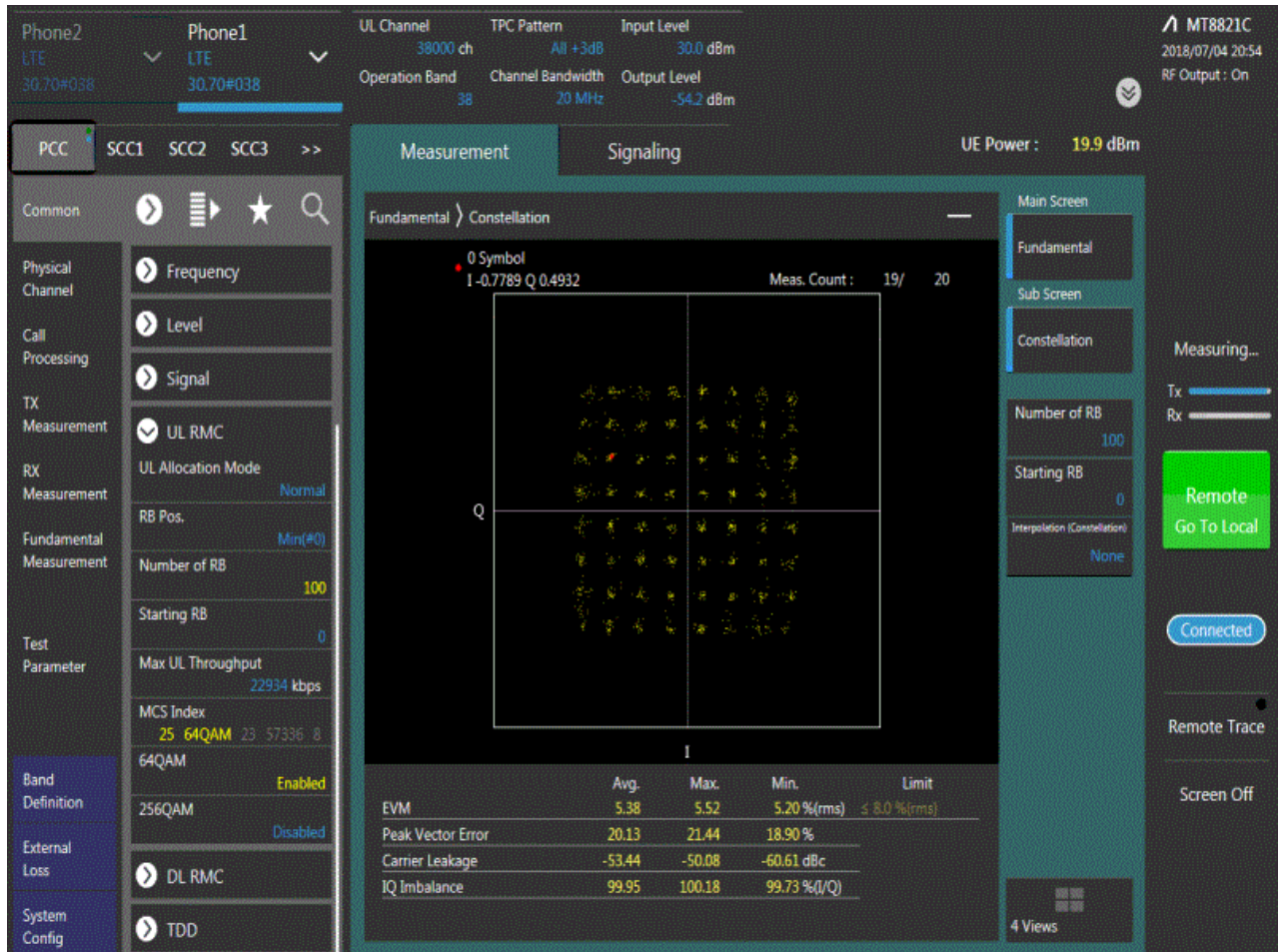
#### 3.1.2.1. Test Channel = MCH





### 3.1.1. Test Mode = LTE /TM3 20MHz

#### 3.1.1.1. Test Channel = MCH





## 4. 26dB Bandwidth and Occupied Bandwidth

### 4.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
BAND38	5MHz	QPSK	37775	25RB#0	4.476	4.890	PASS
			38000	25RB#0	4.476	4.900	PASS
			38225	25RB#0	4.476	4.920	PASS
		64QAM	37775	25RB#0	4.476	5.010	PASS
			38000	25RB#0	4.486	5.140	PASS
			38225	25RB#0	4.486	5.010	PASS
		16QAM	37775	25RB#0	4.496	5.050	PASS
			38000	25RB#0	4.476	5.200	PASS
			38225	25RB#0	4.476	5.230	PASS
	10MHz	QPSK	37800	50RB#0	8.951	10.280	PASS
			38000	50RB#0	8.971	10.300	PASS
			38200	50RB#0	8.971	10.340	PASS
		64QAM	37800	50RB#0	8.971	10.360	PASS
			38000	50RB#0	8.991	10.440	PASS
			38200	50RB#0	8.991	10.420	PASS
		16QAM	37800	50RB#0	8.991	10.340	PASS
			38000	50RB#0	8.971	10.360	PASS
			38200	50RB#0	8.971	10.320	PASS
	15MHz	QPSK	37825	75RB#0	13.516	16.290	PASS
			38000	75RB#0	13.546	16.020	PASS
			38175	75RB#0	13.516	15.900	PASS
		64QAM	37825	75RB#0	13.546	16.620	PASS
			38000	75RB#0	13.546	15.870	PASS
			38175	75RB#0	13.516	17.820	PASS
		16QAM	37825	75RB#0	13.516	18.780	PASS
			38000	75RB#0	13.516	16.350	PASS
			38175	75RB#0	13.546	18.780	PASS
	20MHz	QPSK	37850	100RB#0	17.982	20.640	PASS
			38000	100RB#0	17.982	20.240	PASS
			38150	100RB#0	17.942	20.560	PASS
		64QAM	37850	100RB#0	17.942	24.240	PASS
			38000	100RB#0	17.982	24.040	PASS
			38150	100RB#0	17.942	23.360	PASS



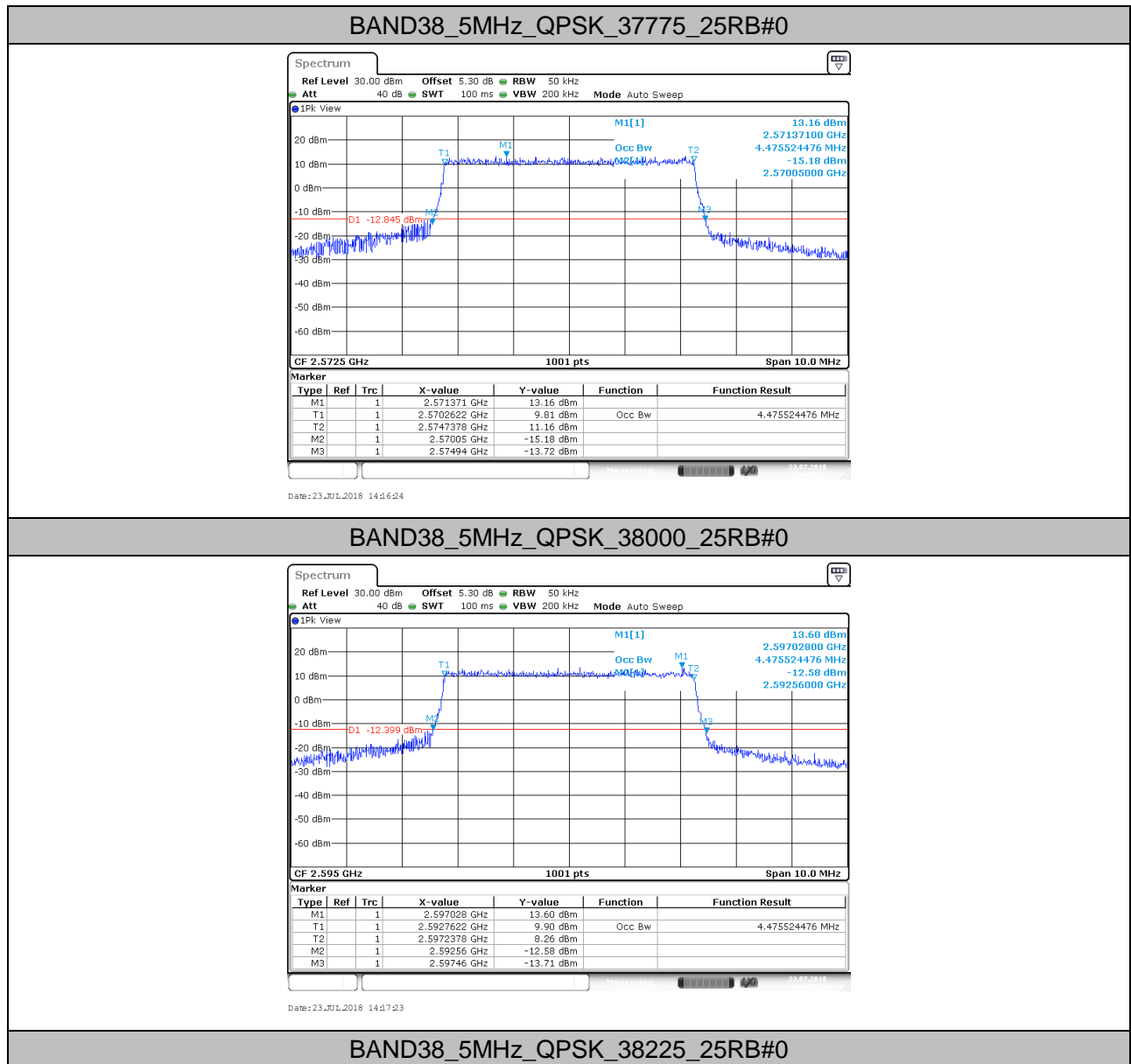
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		16QAM	37850	100RB#0	17.942	20.480	PASS
			38000	100RB#0	17.942	20.040	PASS
			38150	100RB#0	17.942	20.400	PASS

## 4.2. Test Plots

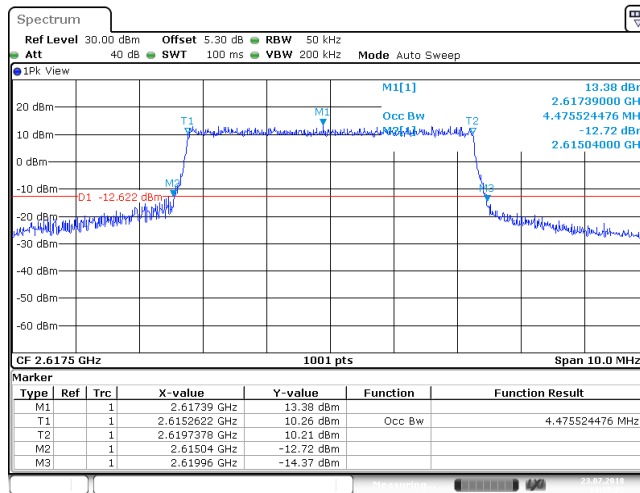




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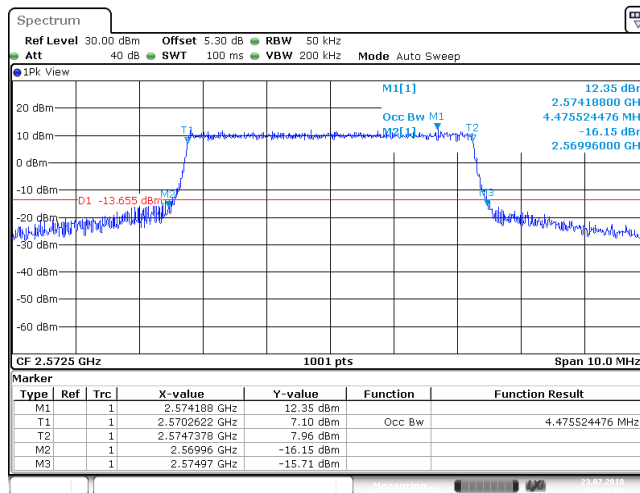
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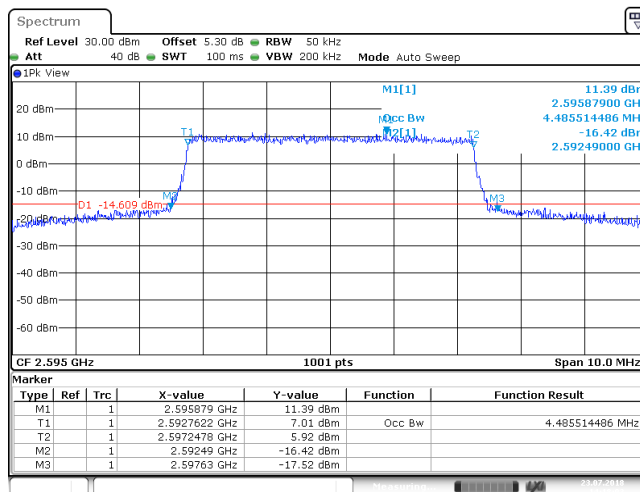
Date: 23 JUL 2018 14:18:23

## BAND38\_5MHz\_64QAM\_37775\_25RB#0



Date: 23 JUL 2018 14:17:03

## BAND38\_5MHz\_64QAM\_38000\_25RB#0



Date: 23 JUL 2018 14:18:03

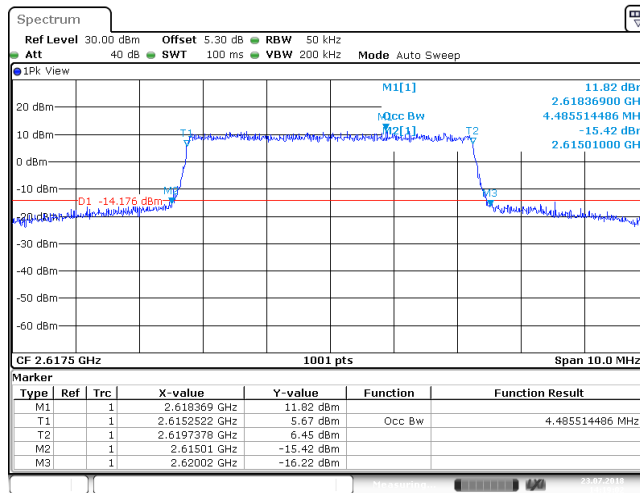
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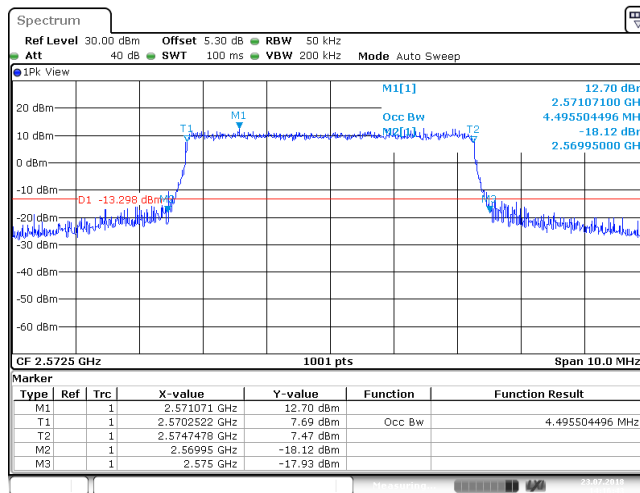
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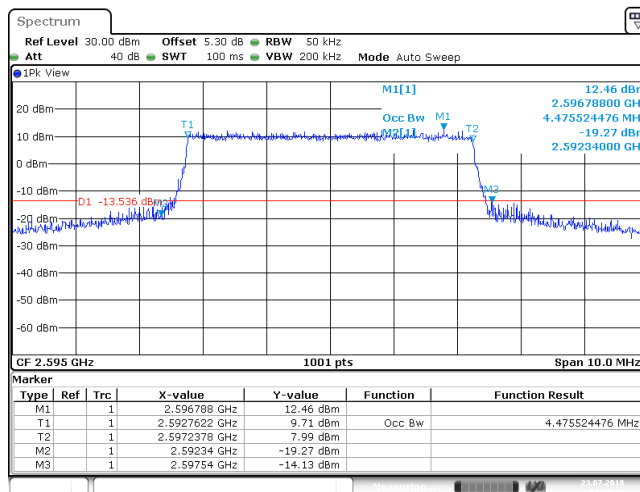
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## BAND38\_5MHz\_16QAM\_37775\_25RB#0



## BAND38\_5MHz\_16QAM\_38000\_25RB#0



## BAND38\_5MHz\_16QAM\_38225\_25RB#0

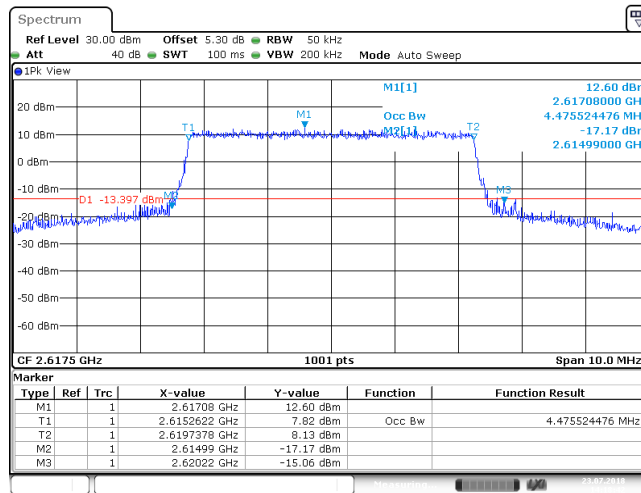




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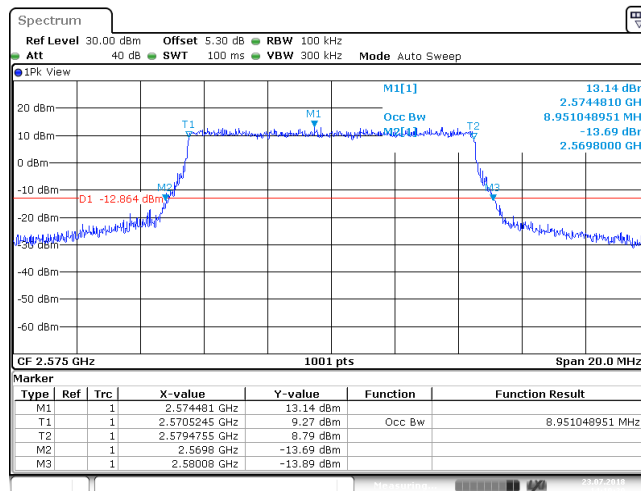
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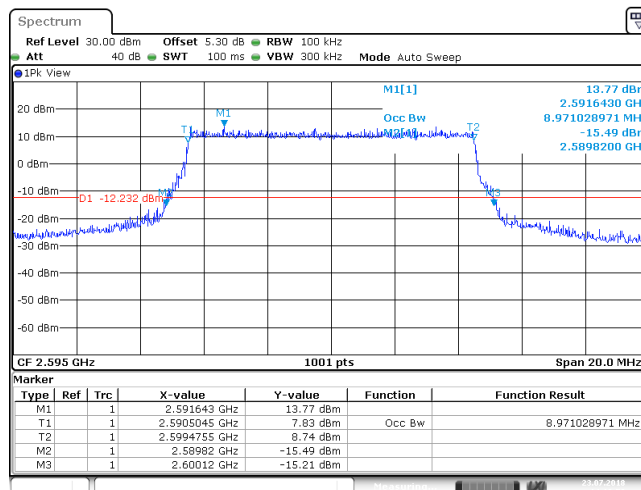
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## BAND38\_10MHz\_QPSK\_37800\_50RB#0



Date: 23 JUL 2018 14:19:20

## BAND38\_10MHz\_QPSK\_38000\_50RB#0



Date: 23 JUL 2018 14:19:59

## BAND38\_10MHz\_QPSK\_38200\_50RB#0

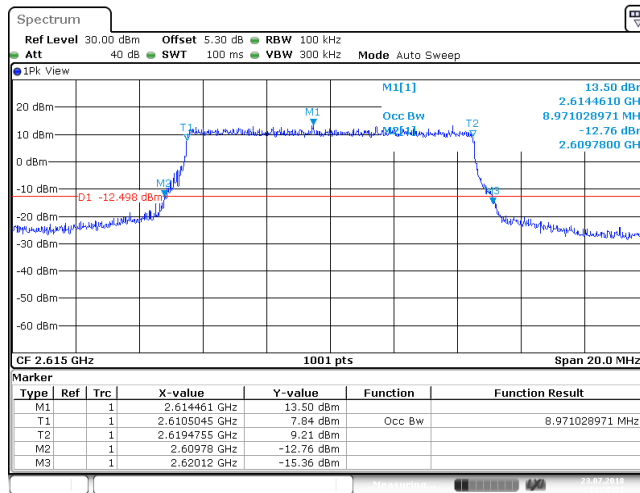
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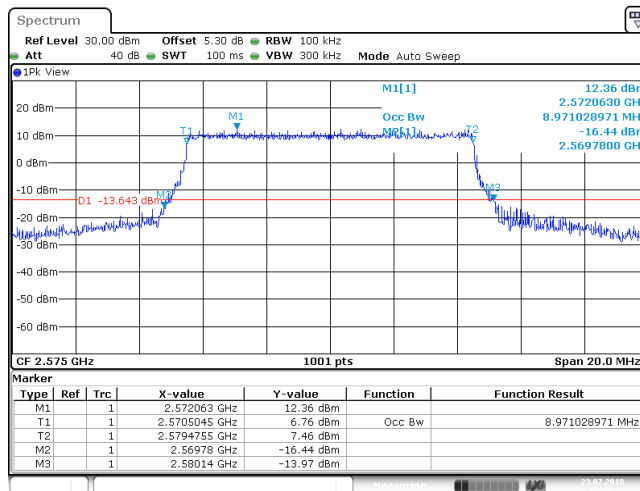
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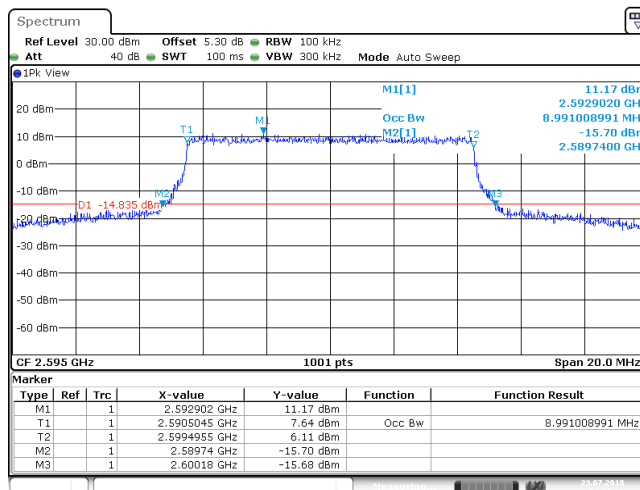
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## BAND38\_10MHz\_64QAM\_37800\_50RB#0



Date: 23 JUL 2018 14:19:46

## BAND38\_10MHz\_64QAM\_38000\_50RB#0



Date: 23 JUL 2018 14:20:25

## BAND38\_10MHz\_64QAM\_38200\_50RB#0

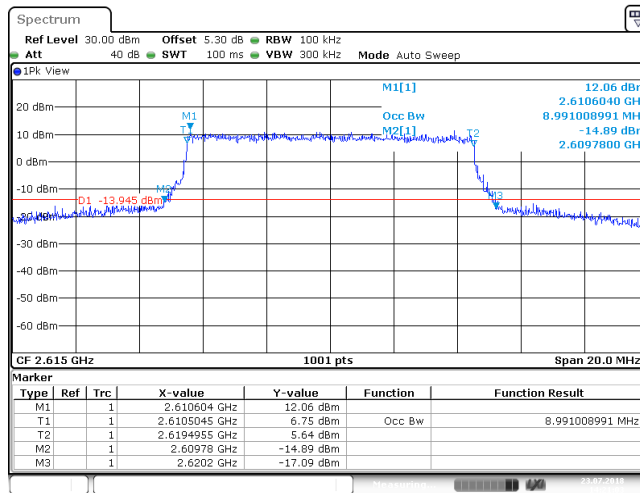
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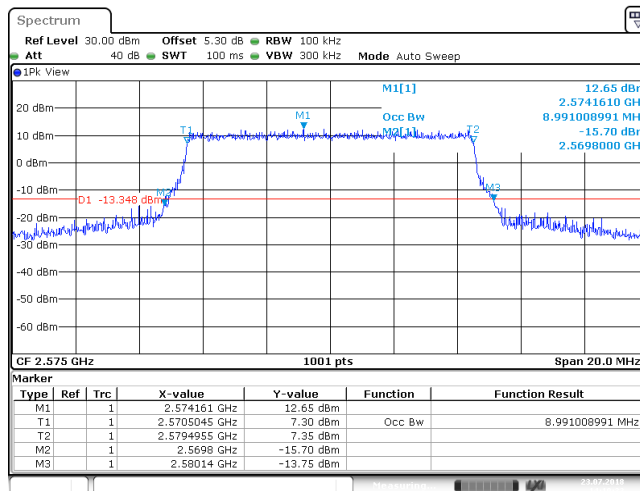
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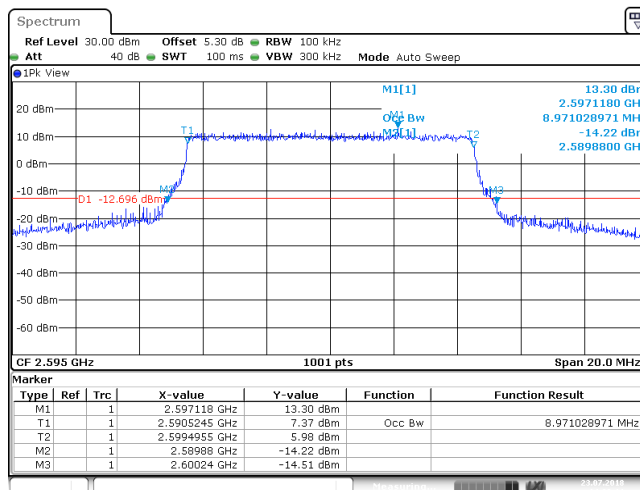
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Date: 23 JUL 2018 14:49:33

## BAND38\_10MHz\_16QAM\_38000\_50RB#0



Date: 23 JUL 2018 14:20:12

## BAND38\_10MHz\_16QAM\_38200\_50RB#0

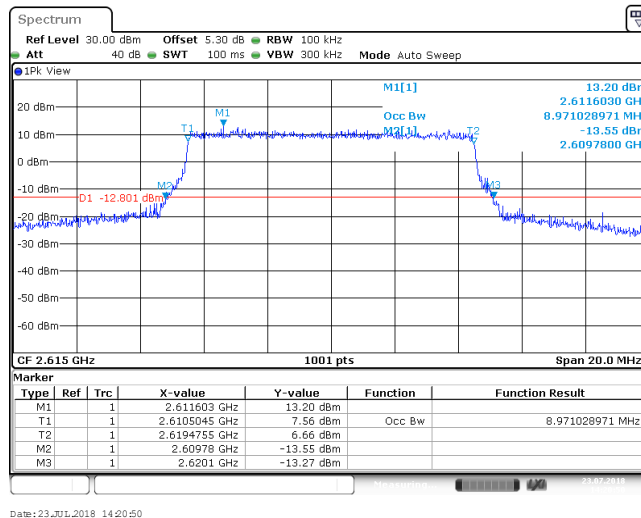
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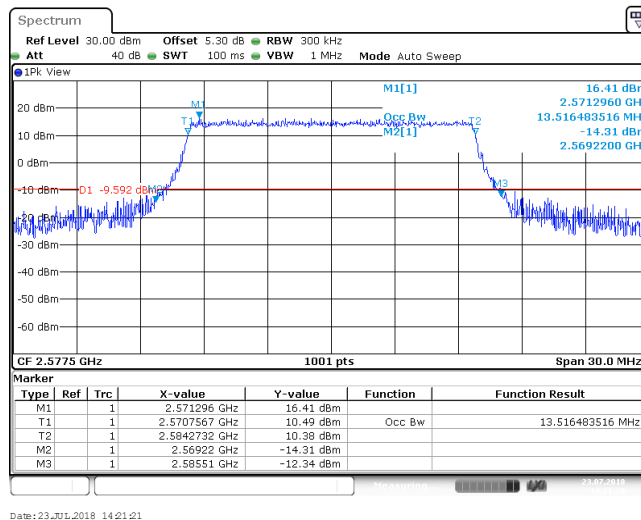
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZEM180500437001

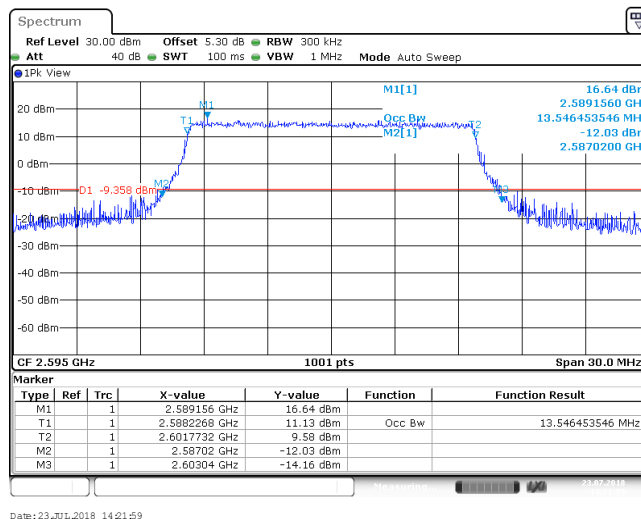
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## BAND38\_15MHz\_QPSK\_37825\_75RB#0



## BAND38\_15MHz\_QPSK\_38000\_75RB#0



## BAND38\_15MHz\_QPSK\_38175\_75RB#0

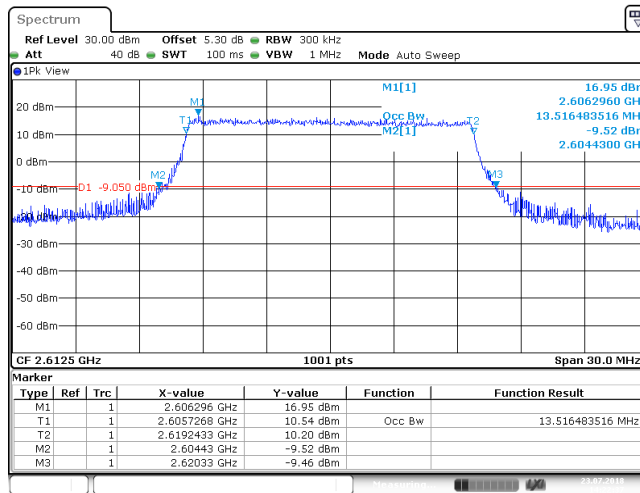
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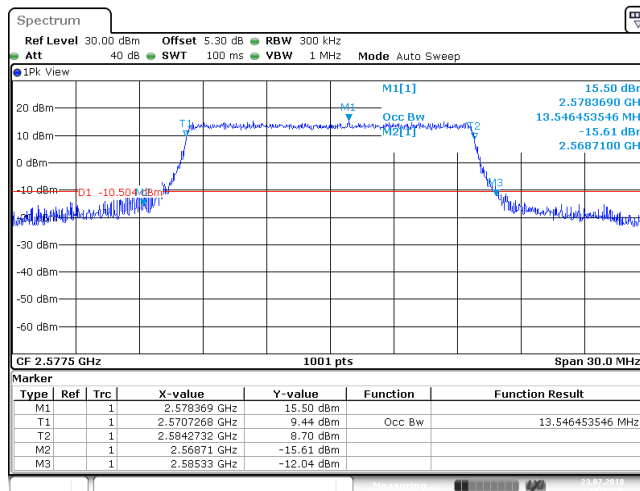
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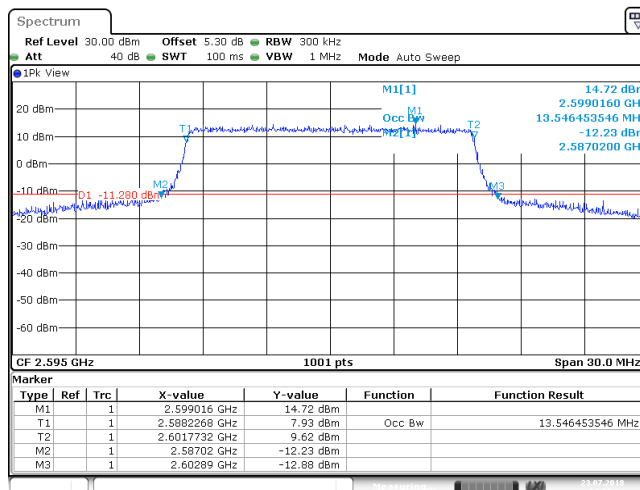
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Date: 23 JUL 2018 14:22:25

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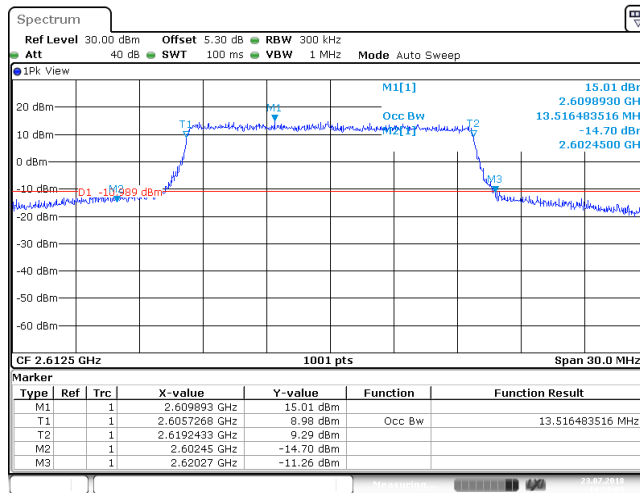
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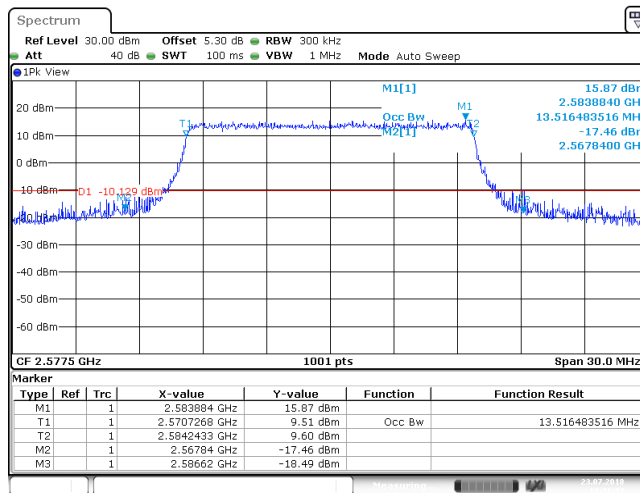
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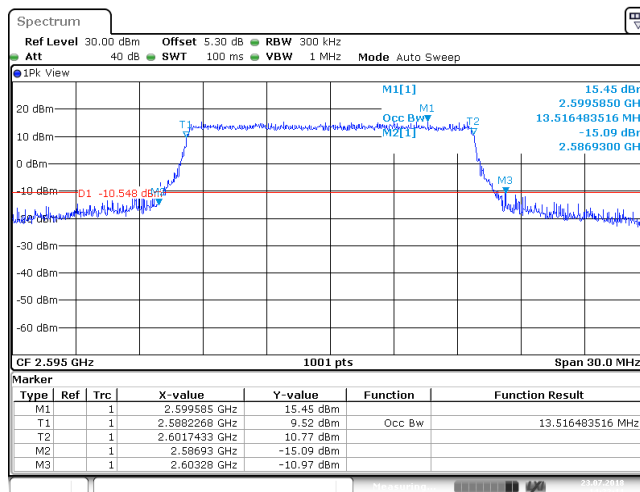
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## BAND38\_15MHz\_16QAM\_37825\_75RB#0



## BAND38\_15MHz\_16QAM\_38000\_75RB#0



## BAND38\_15MHz\_16QAM\_38175\_75RB#0

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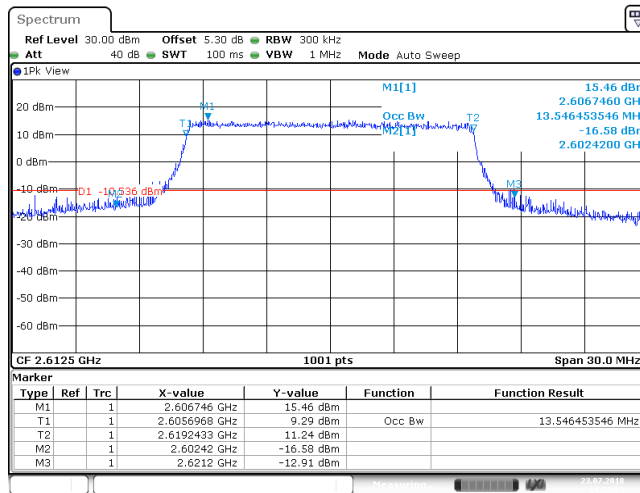




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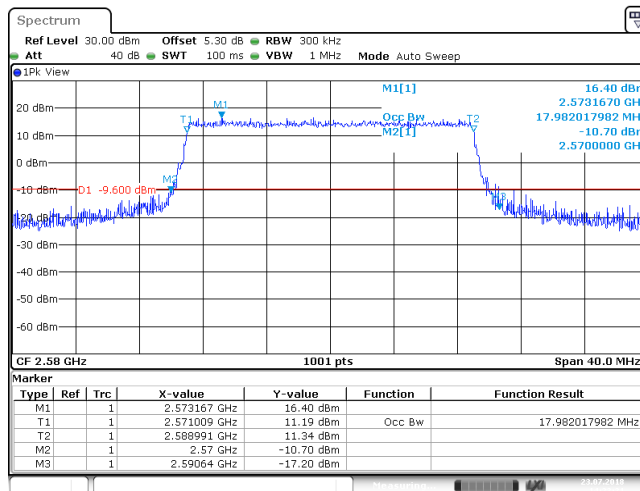
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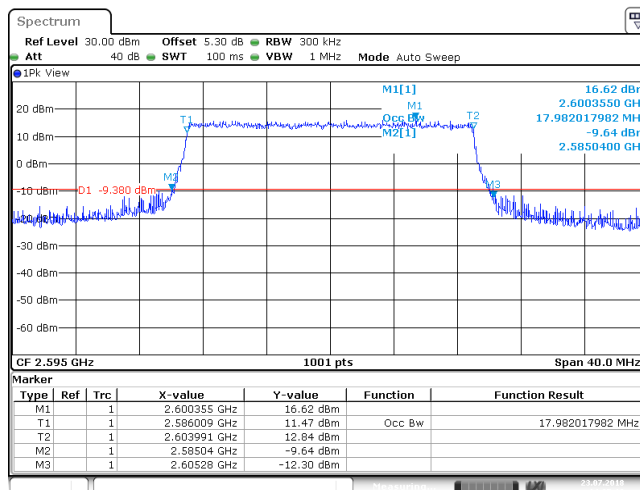
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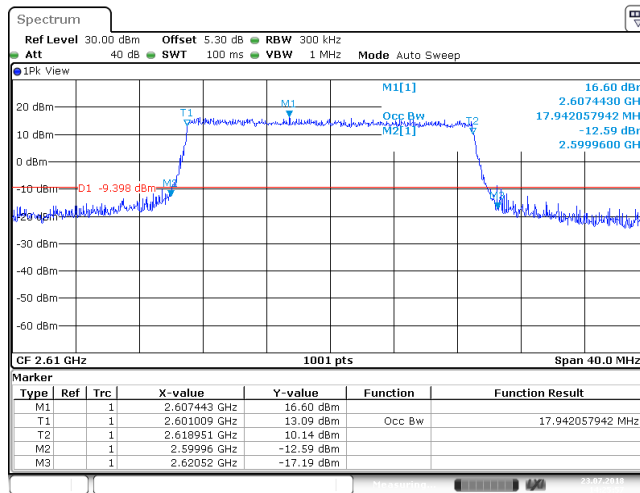
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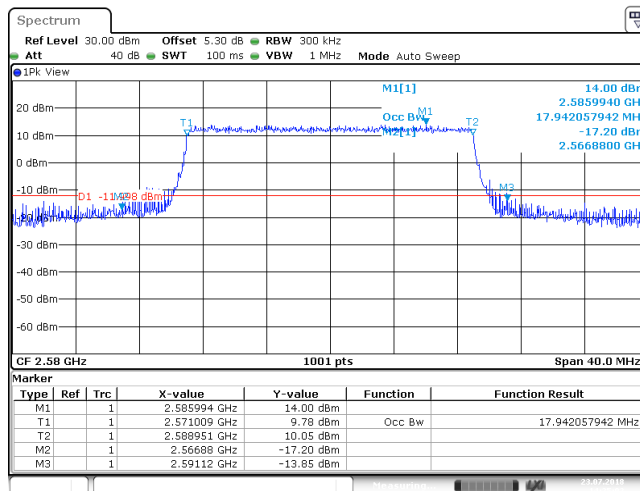
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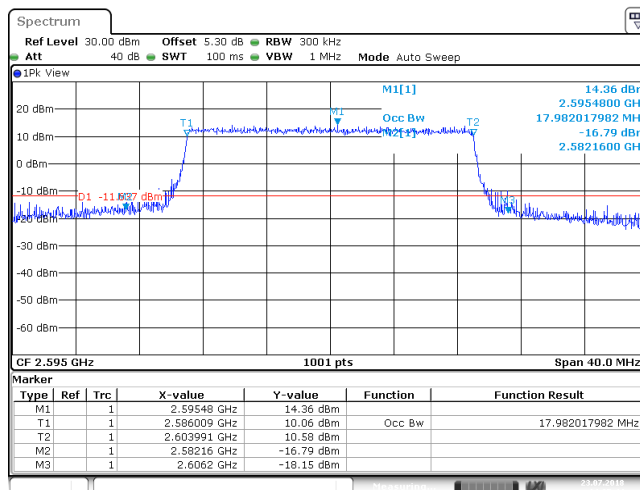
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Date: 23 JUL 2018 14:25:03

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Date: 23 JUL 2018 14:25:44

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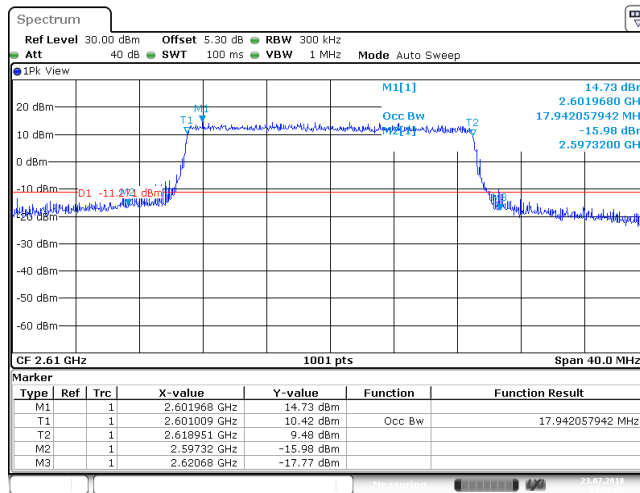
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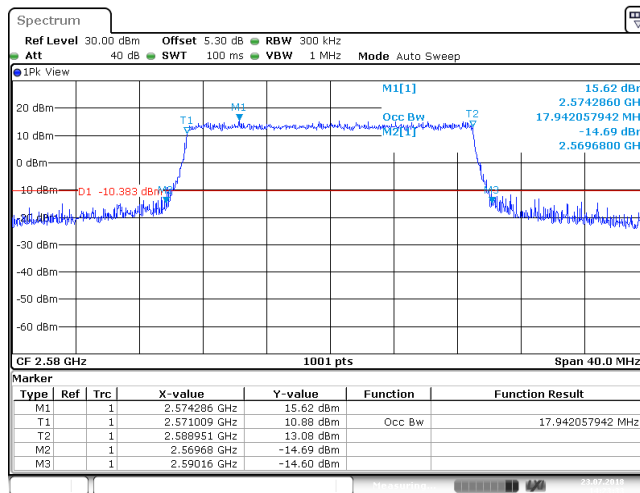
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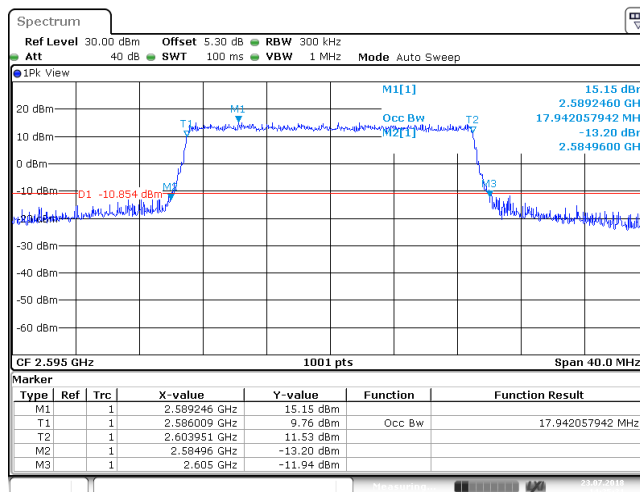
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Date: 23 JUL 2018 14:23:34

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Date: 23 JUL 2018 14:25:31

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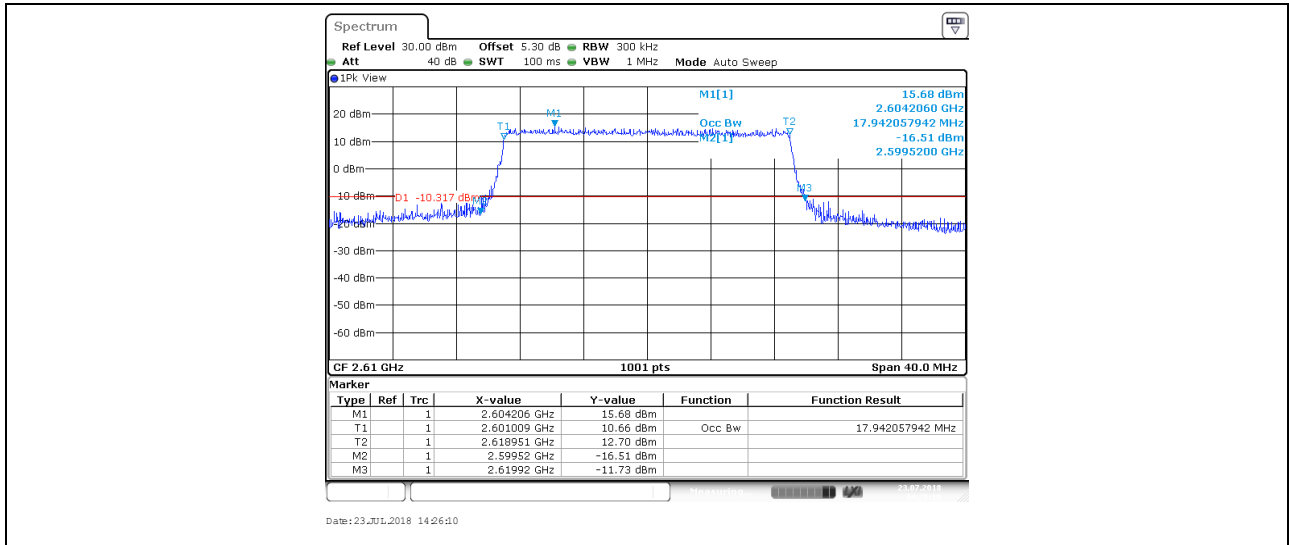
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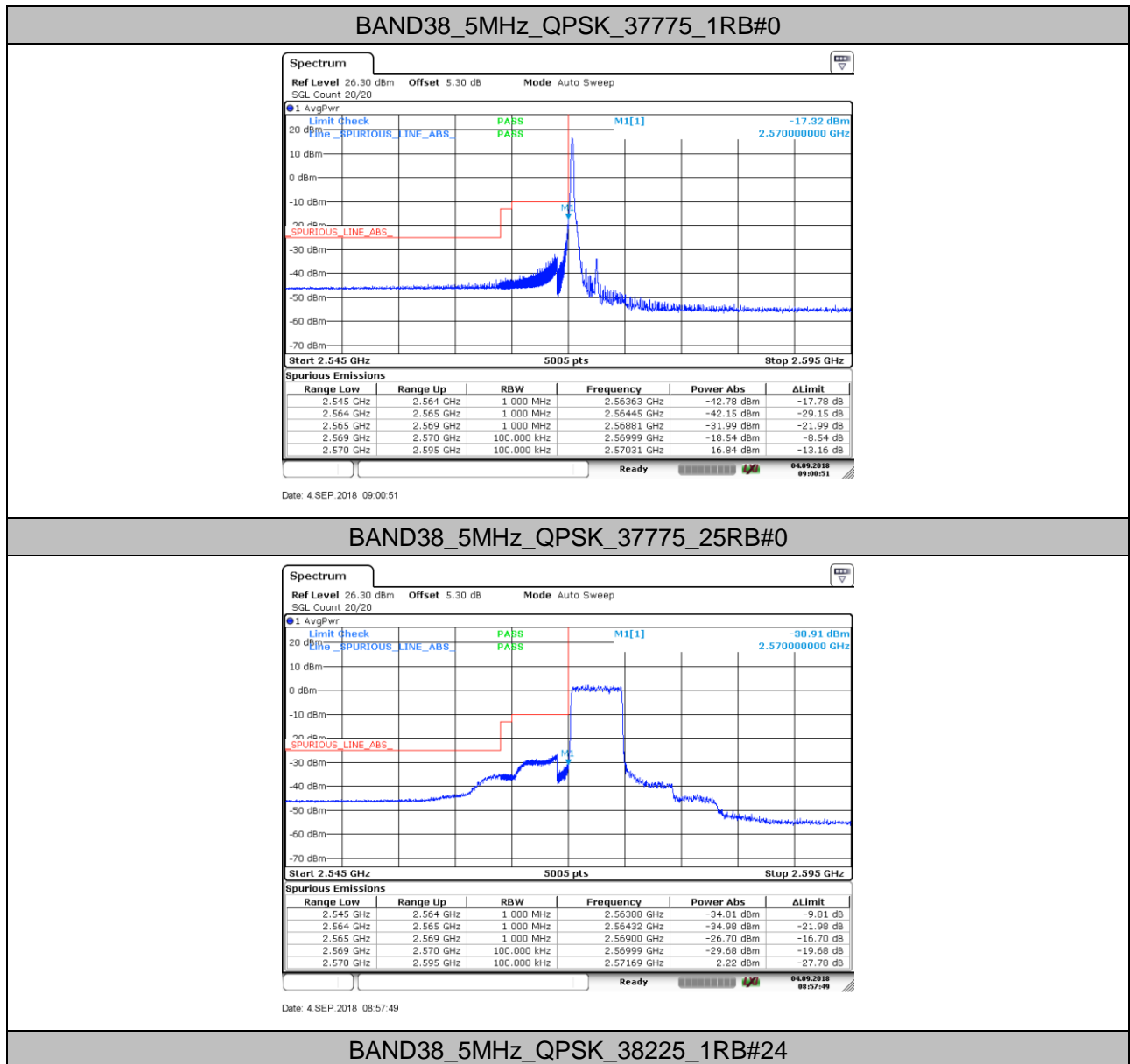
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## 5. Band Edge Compliance

### 5.1. Test Plots

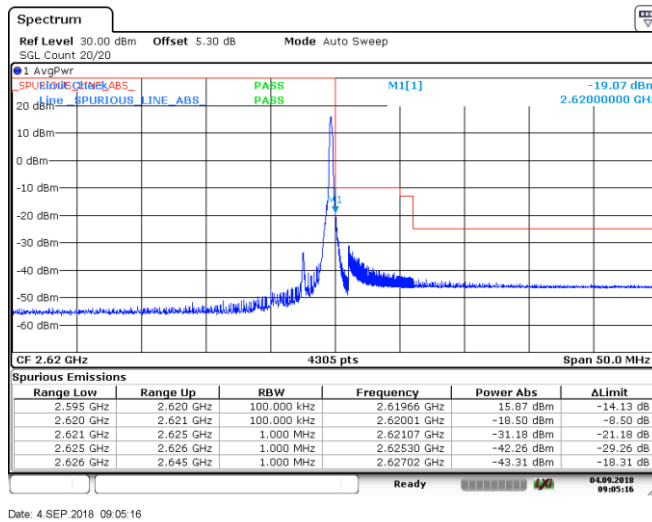




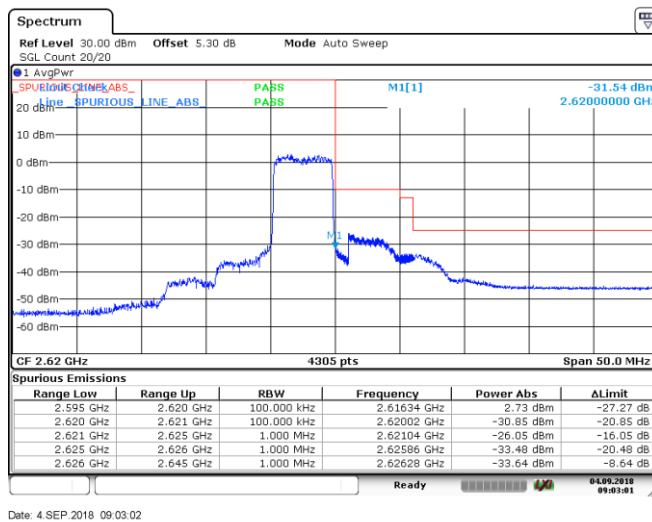
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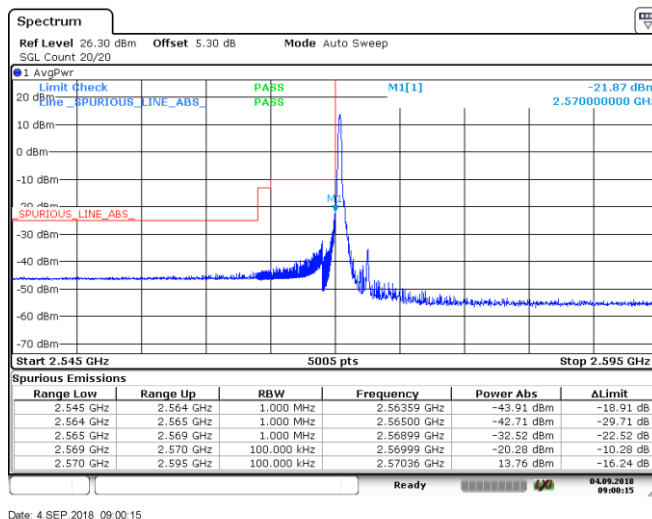
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## BAND38\_5MHz\_QPSK\_38225\_25RB#0



## BAND38\_5MHz\_64QAM\_37775\_1RB#0



## BAND38\_5MHz\_64QAM\_37775\_25RB#0

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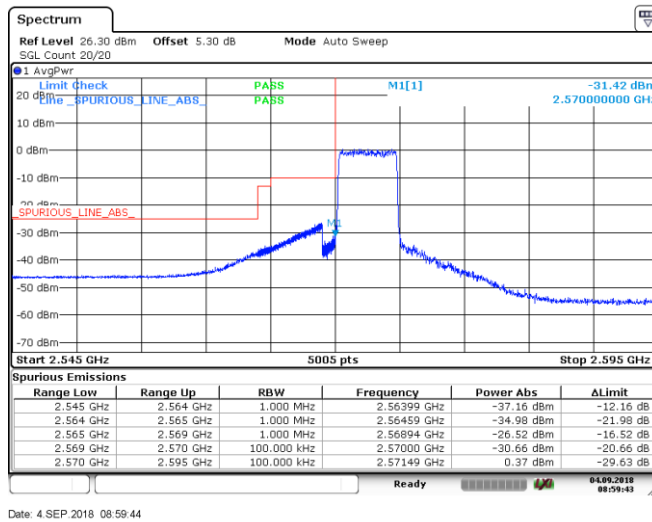




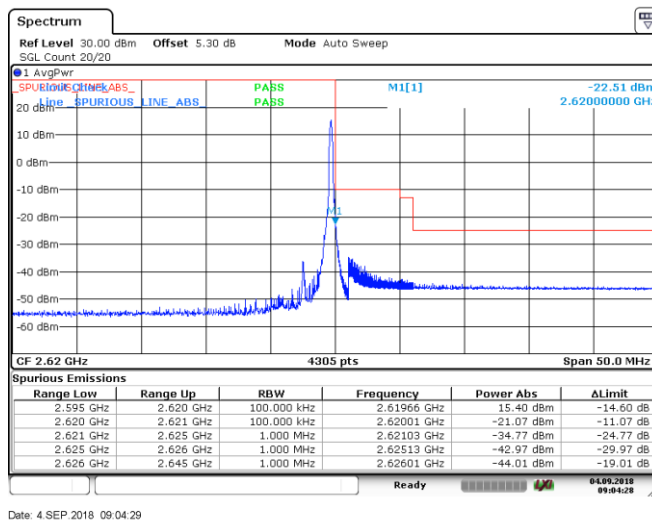
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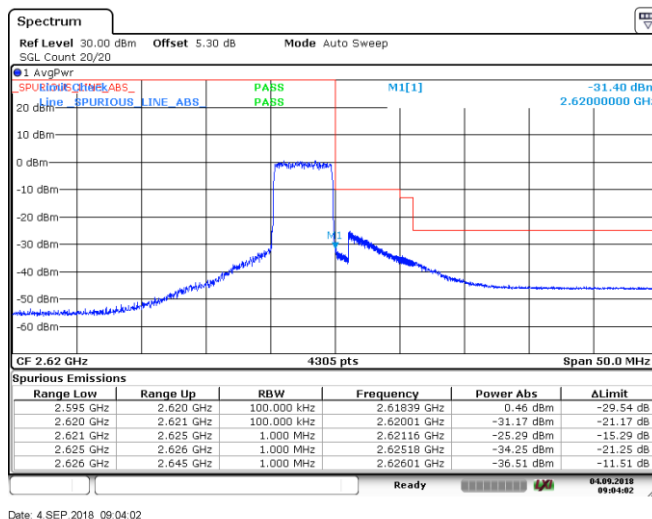
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## BAND38\_5MHz\_64QAM\_38225\_1RB#24



## BAND38\_5MHz\_64QAM\_38225\_25RB#0



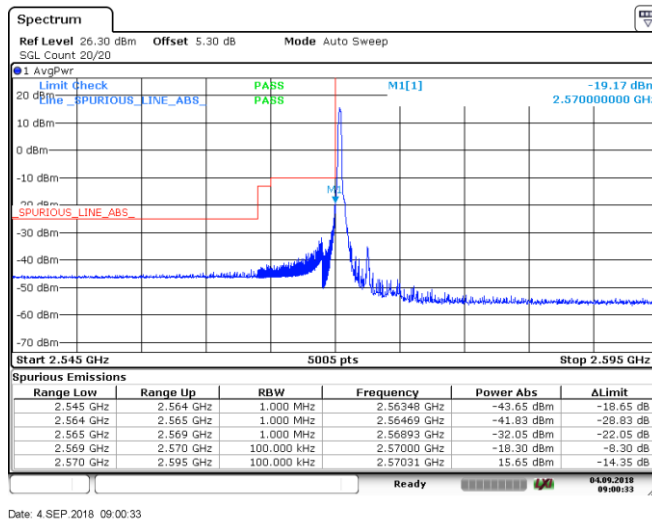
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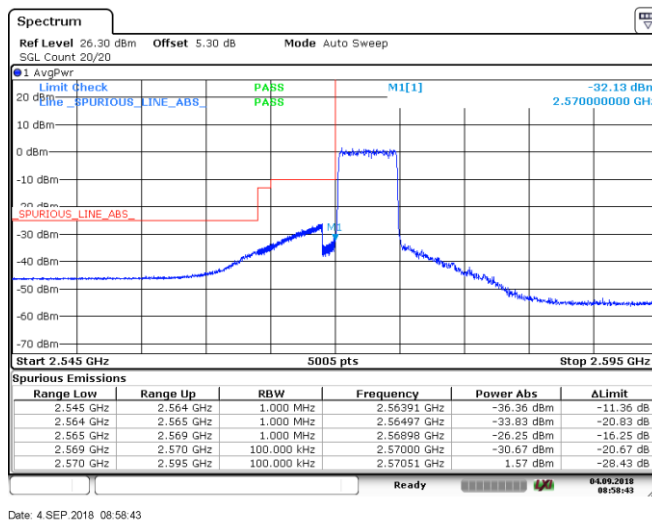
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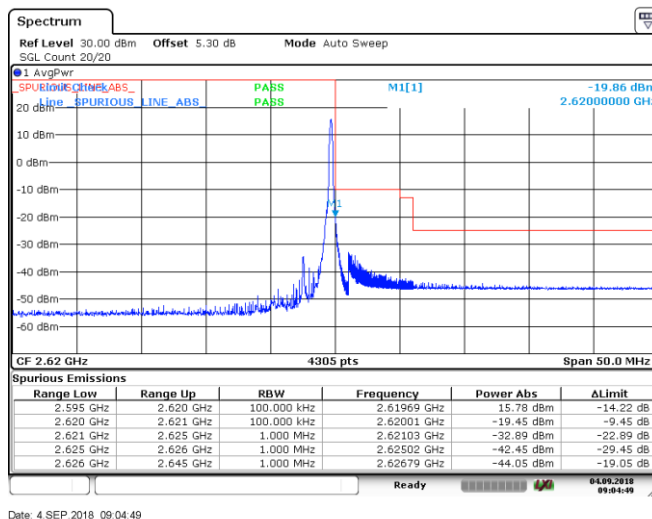
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## BAND38\_5MHz\_16QAM\_37775\_25RB#0



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## BAND38\_5MHz\_16QAM\_38225\_25RB#0

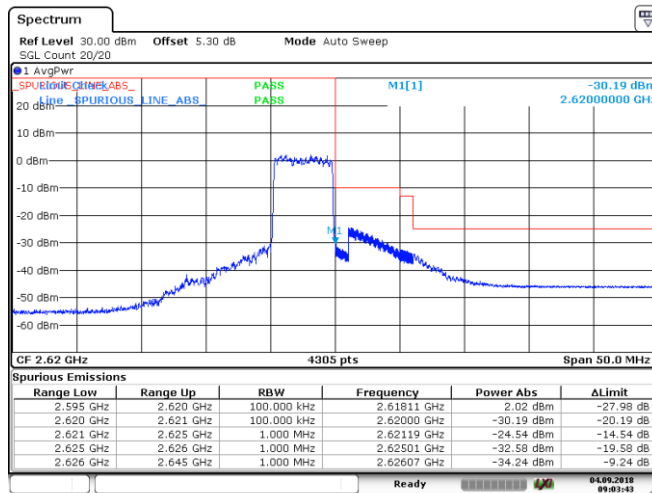
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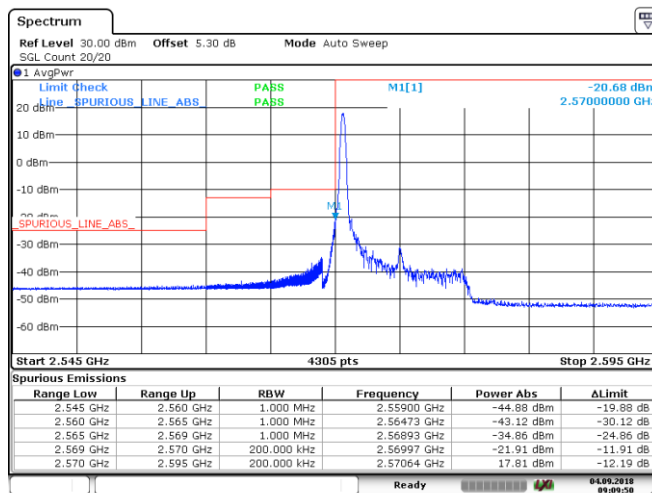
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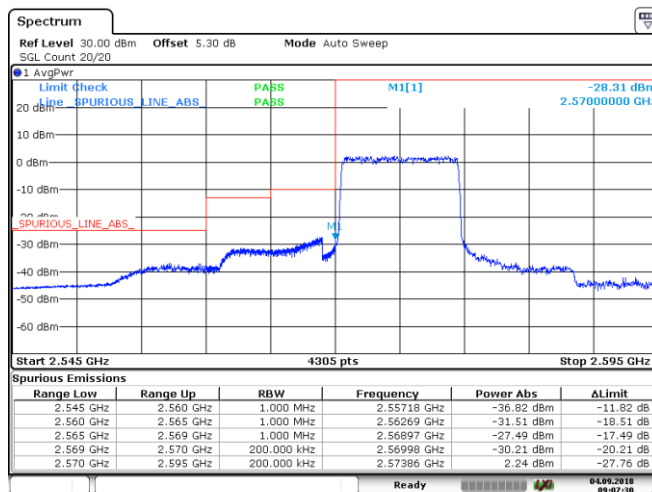
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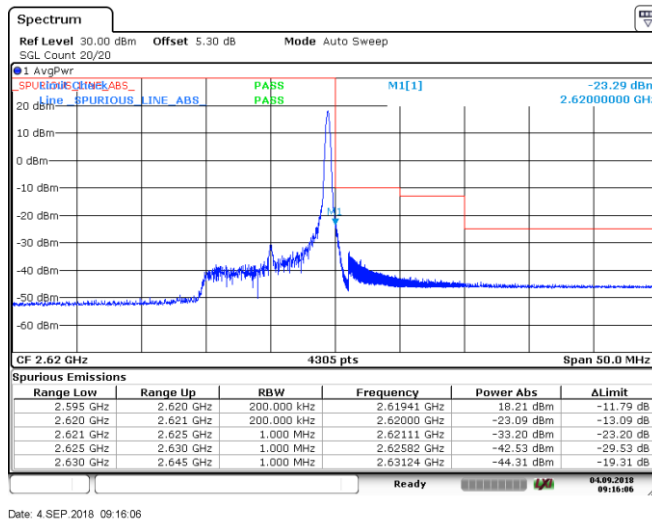
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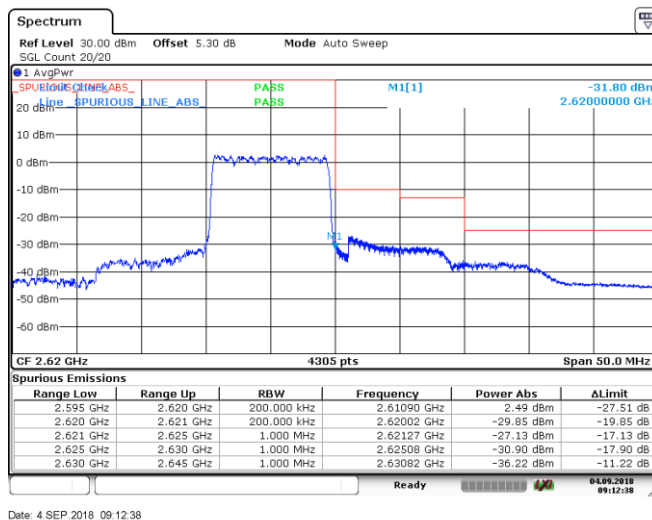
Report No.: SZEM180500437001

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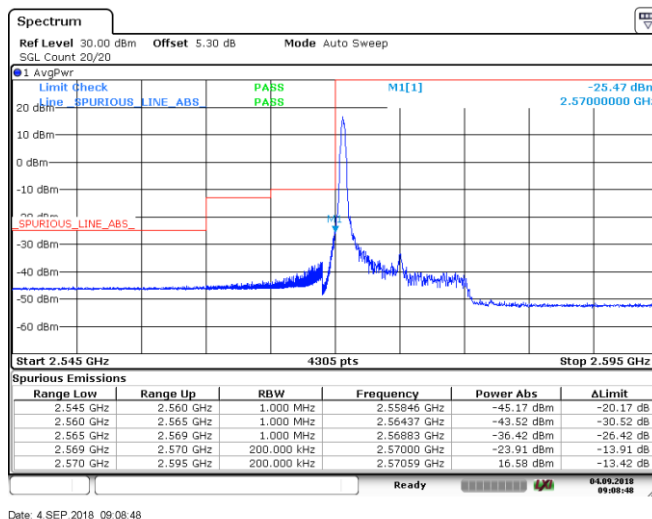
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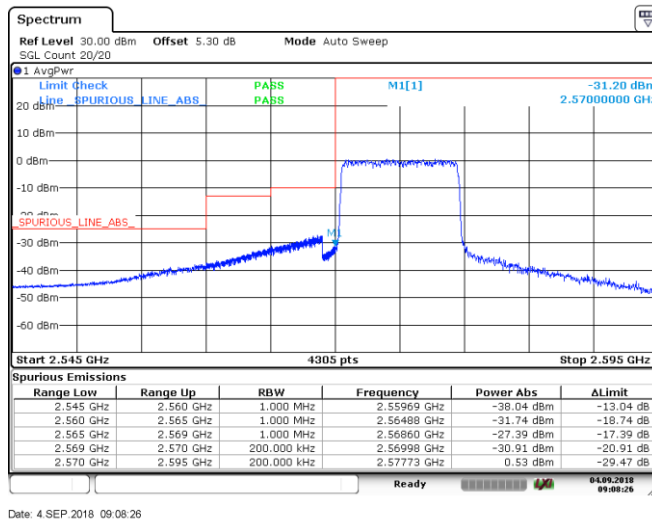
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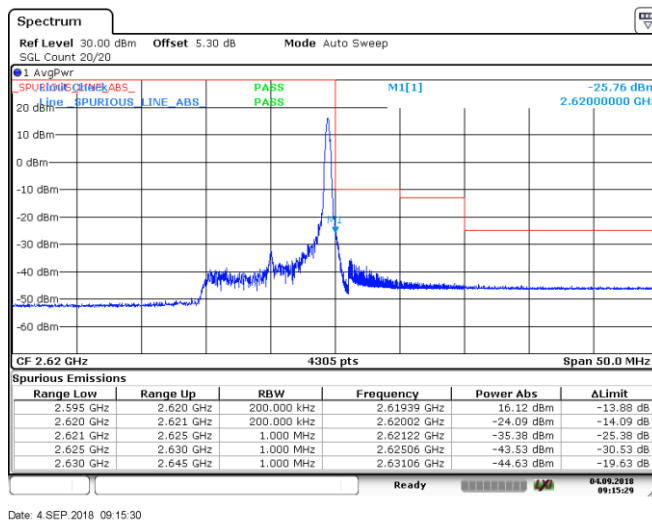
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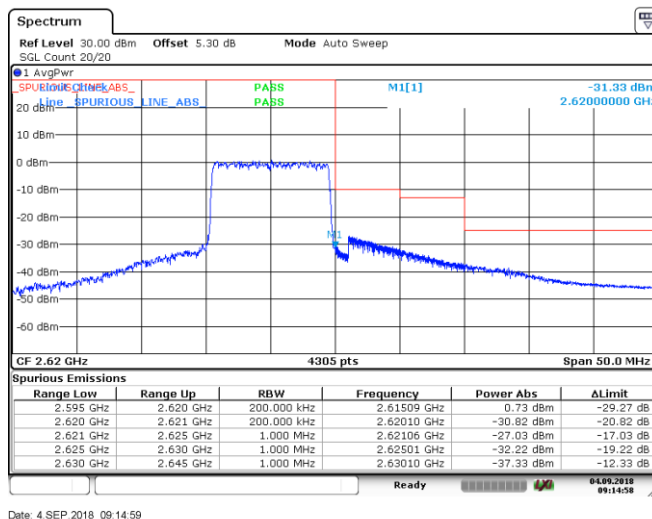
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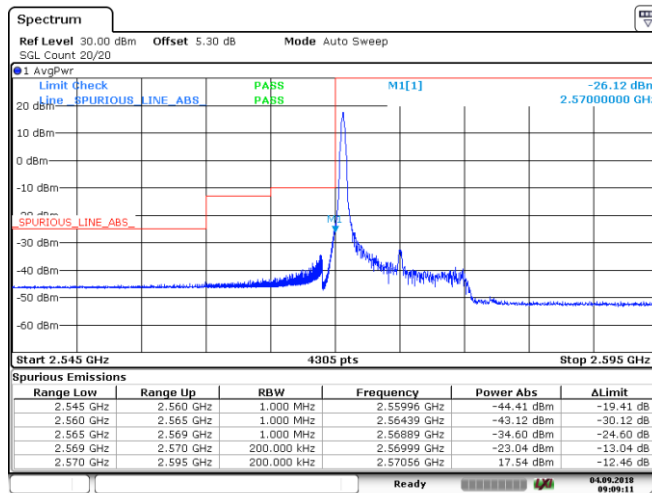
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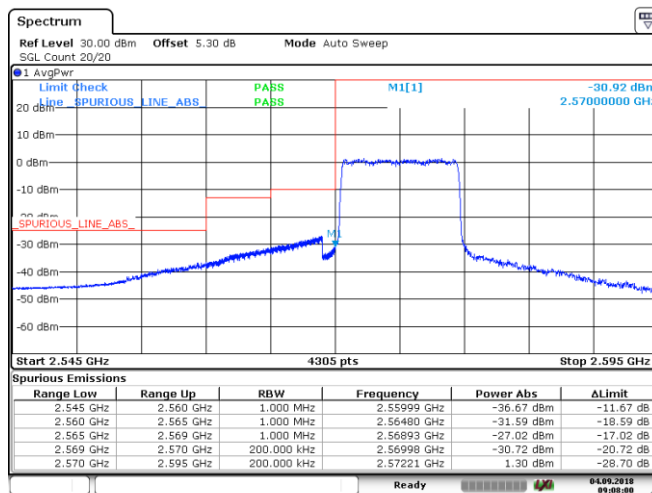
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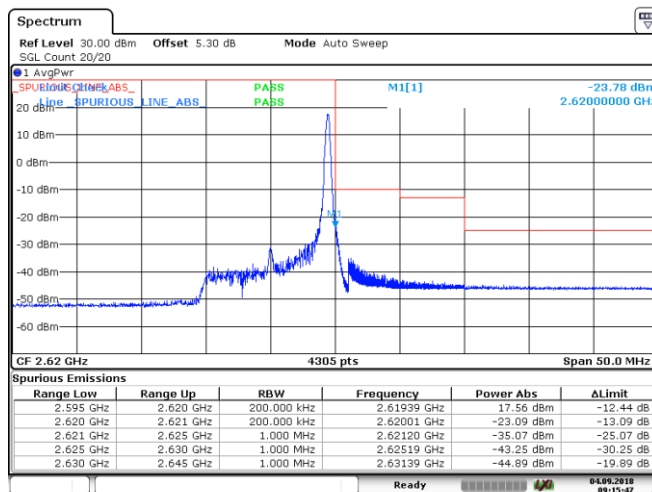
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Date: 4 SEP 2018 09:08:00

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Date: 4 SEP 2018 09:15:47

## BAND38\_10MHz\_16QAM\_38200\_50RB#0

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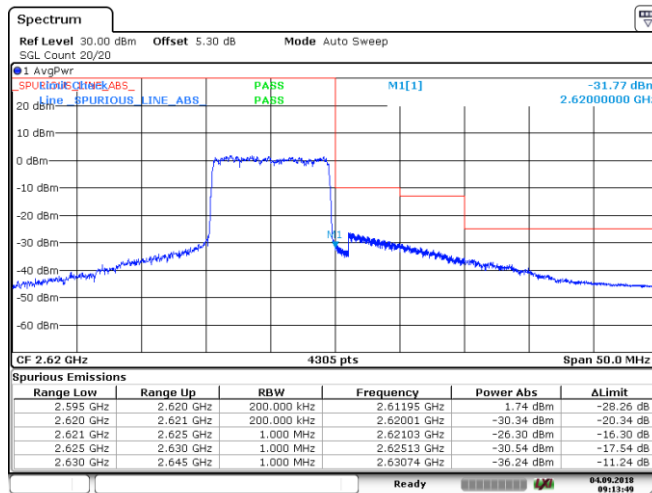




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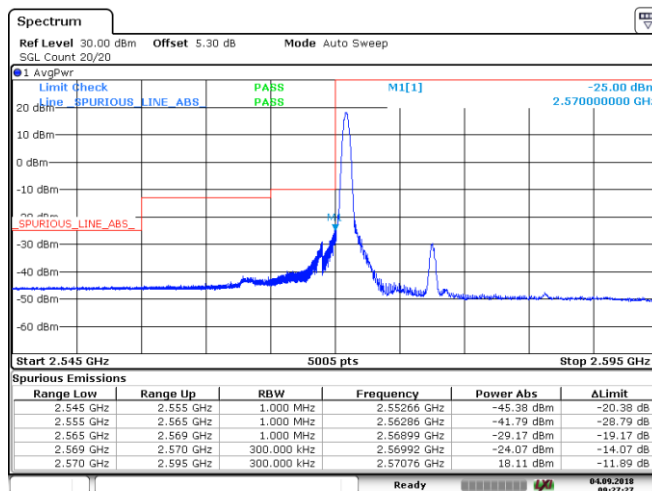
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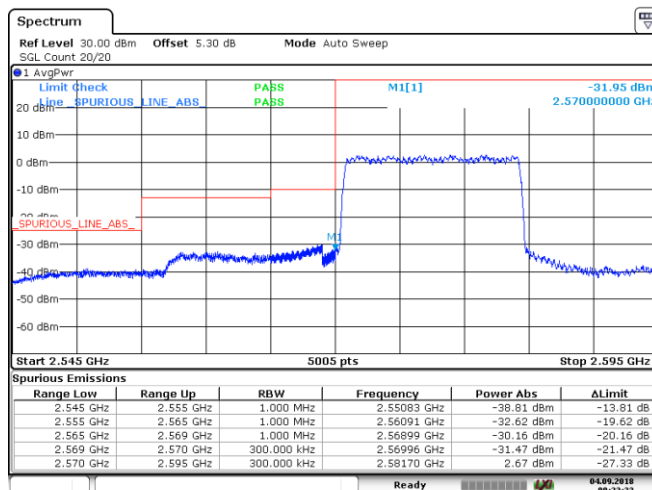
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Date: 4 SEP 2018 09:23:23

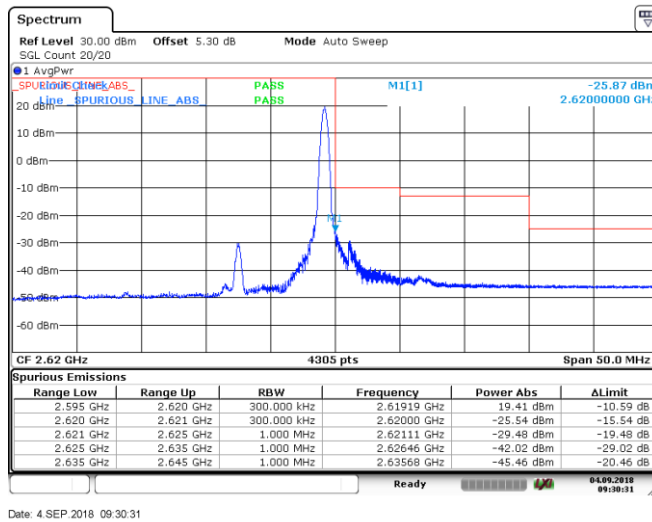
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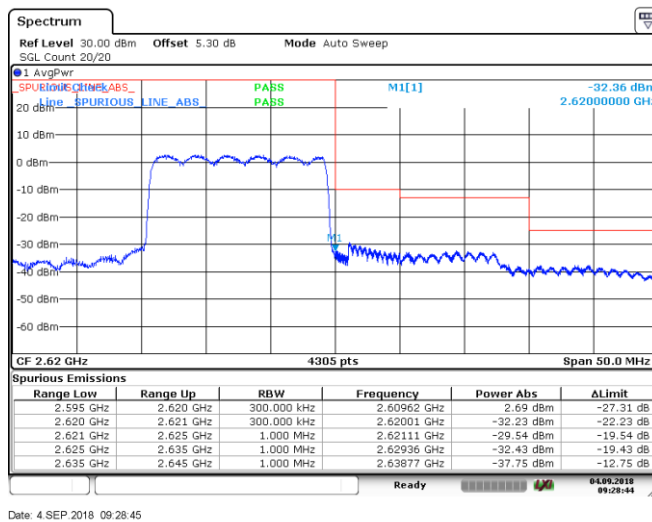
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Report No.: SZEM180500437001

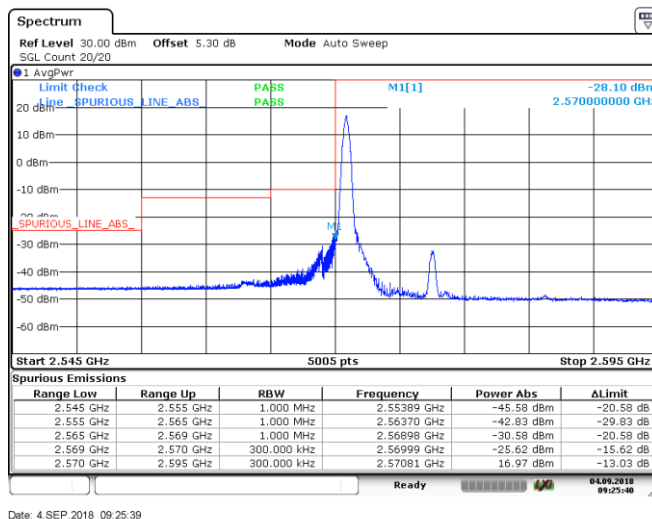
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## BAND38\_15MHz\_QPSK\_38175\_75RB#0



## BAND38\_15MHz\_64QAM\_37825\_1RB#0



## BAND38\_15MHz\_64QAM\_37825\_75RB#0

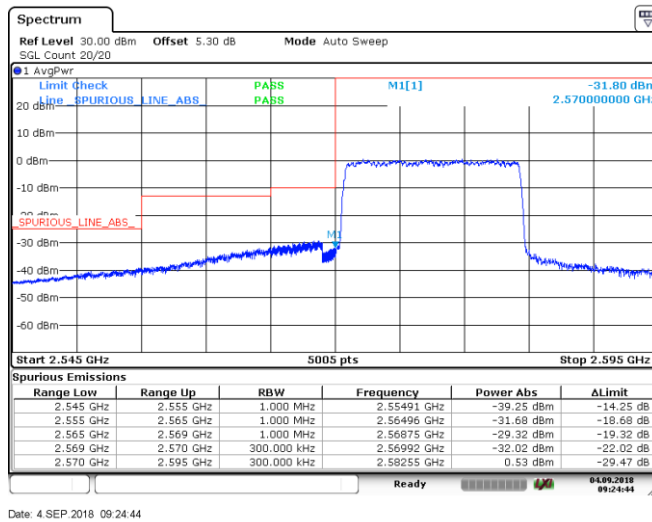
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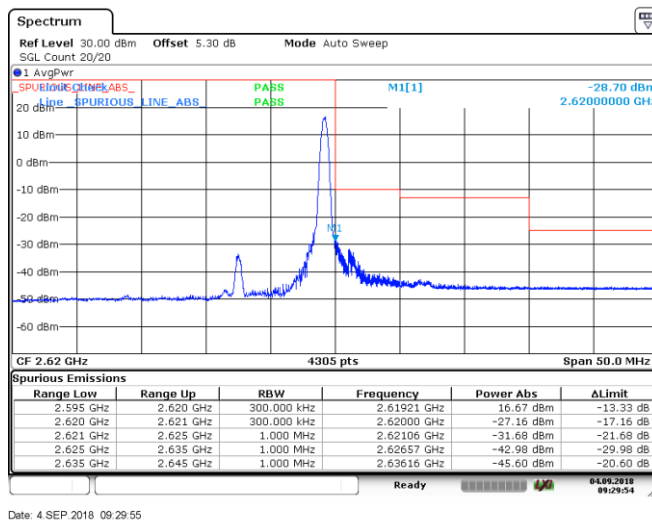
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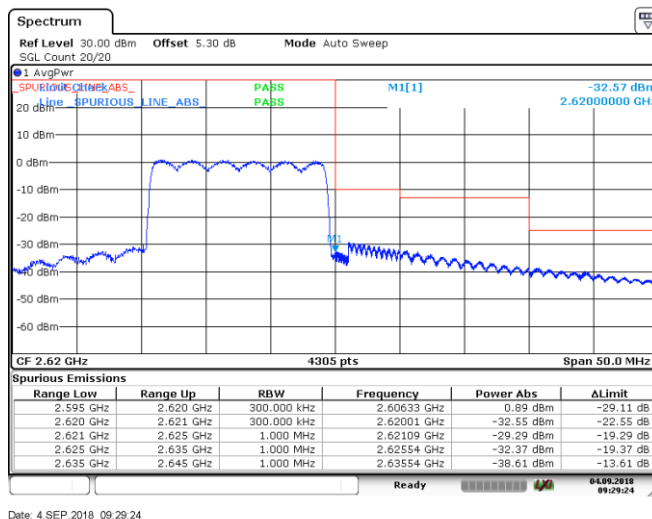
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## BAND38\_15MHz\_64QAM\_38175\_1RB#74



## BAND38\_15MHz\_64QAM\_38175\_75RB#0



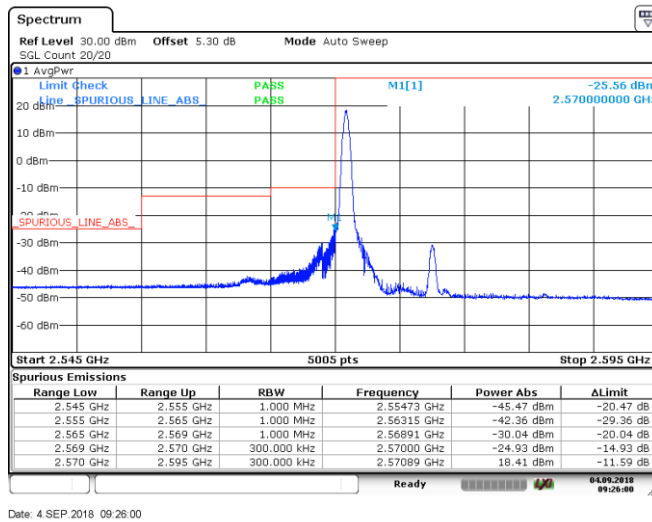
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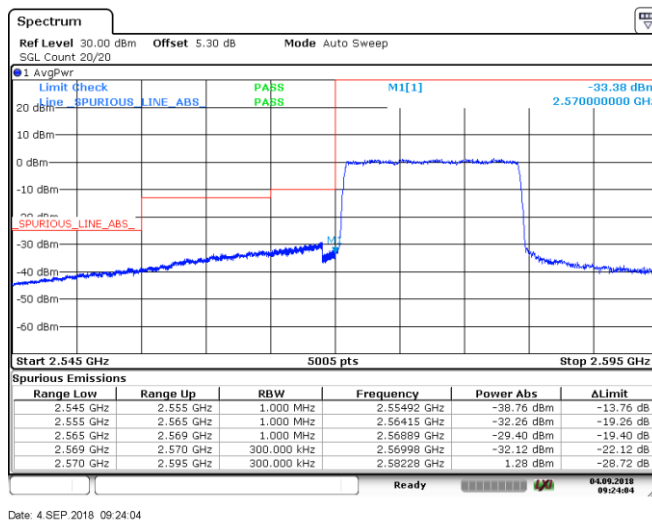
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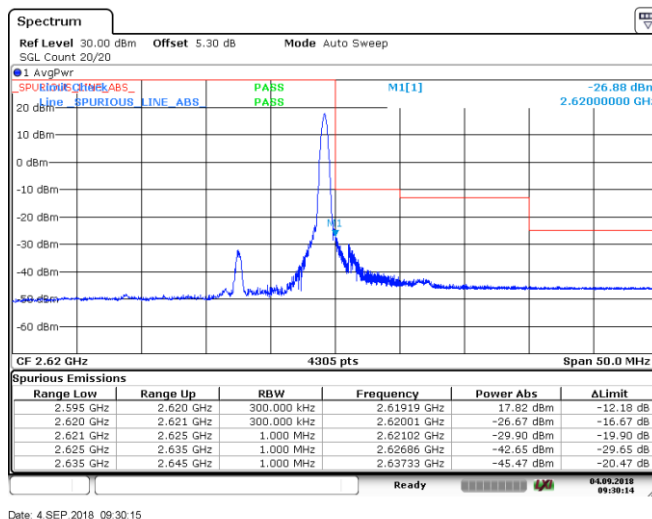
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## BAND38\_15MHz\_16QAM\_37825\_75RB#0



## BAND38\_15MHz\_16QAM\_38175\_1RB#74



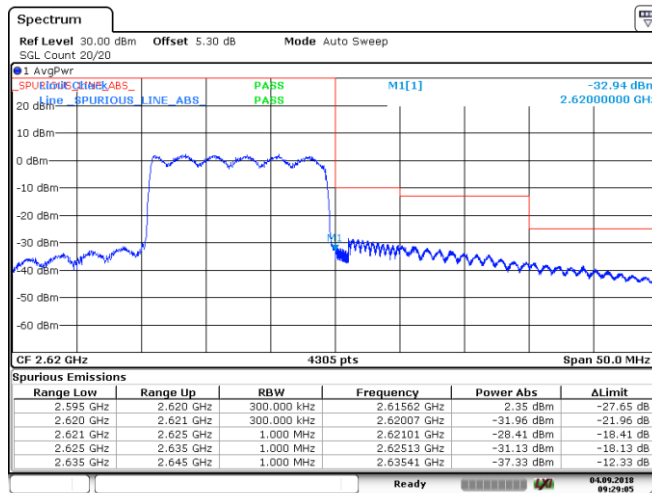
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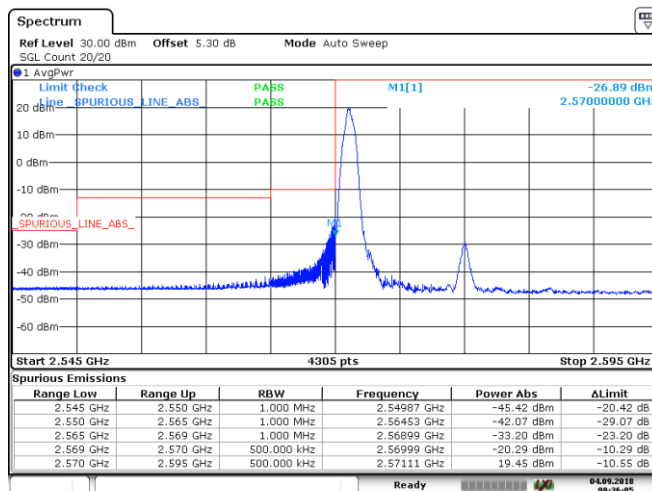
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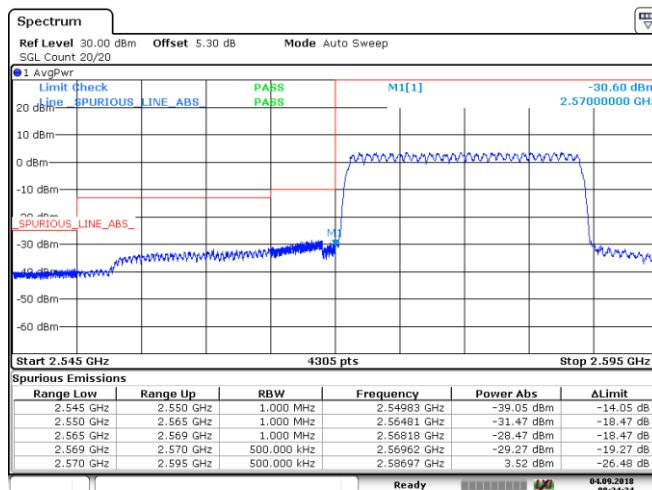
Date: 4 SEP 2018 09:29:05

## BAND38\_20MHz\_QPSK\_37850\_1RB#0



Date: 4 SEP 2018 09:36:05

## BAND38\_20MHz\_QPSK\_37850\_100RB#0



Date: 4 SEP 2018 09:34:24

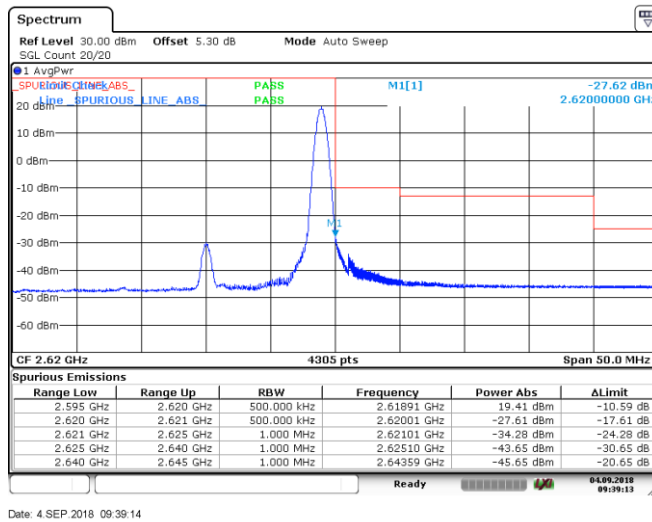
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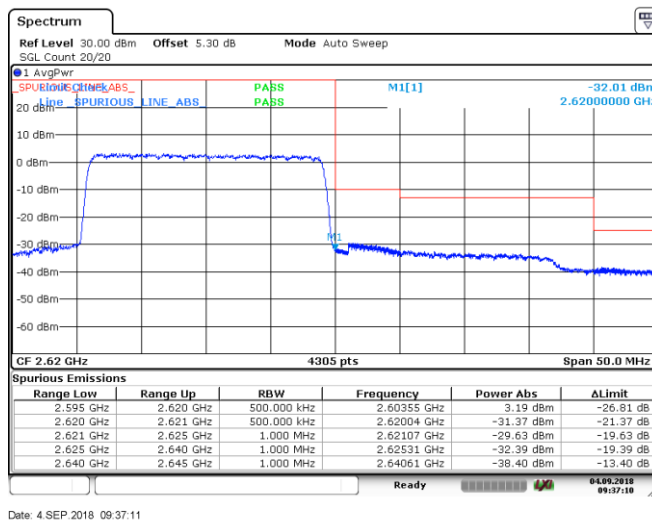
# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZEM180500437001

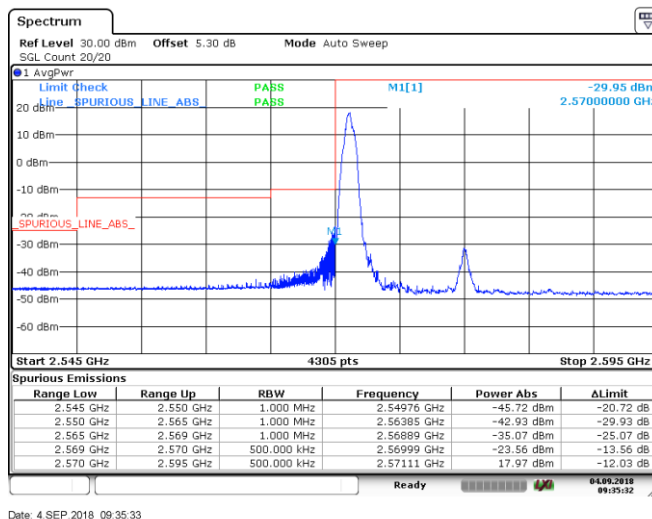
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## BAND38\_20MHz\_QPSK\_38150\_100RB#0



## BAND38\_20MHz\_64QAM\_37850\_1RB#0



## BAND38\_20MHz\_64QAM\_37850\_100RB#0

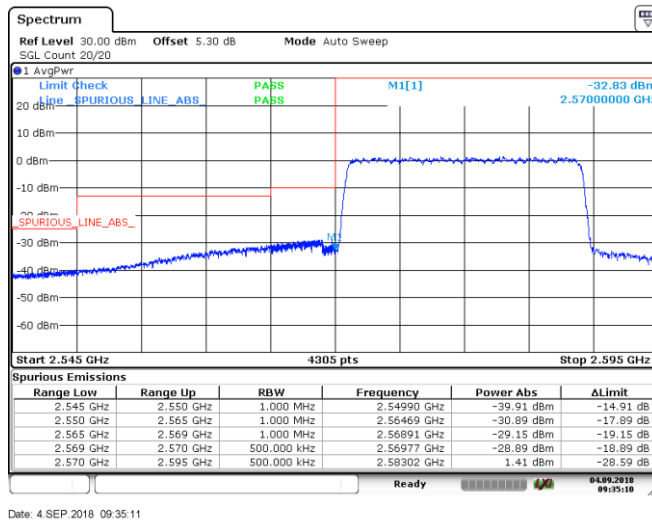
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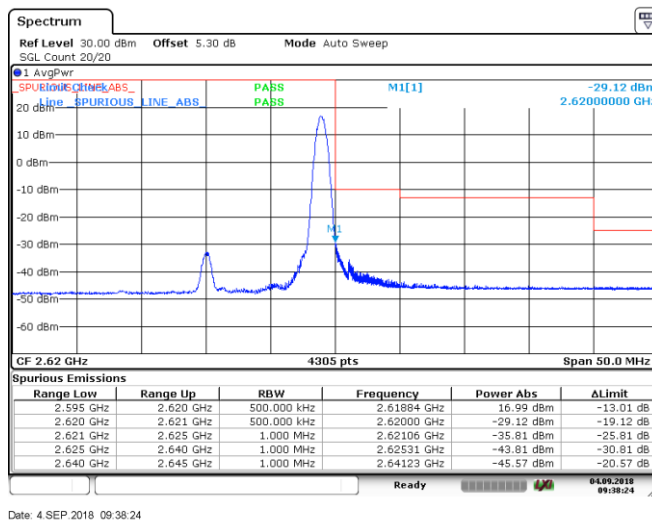
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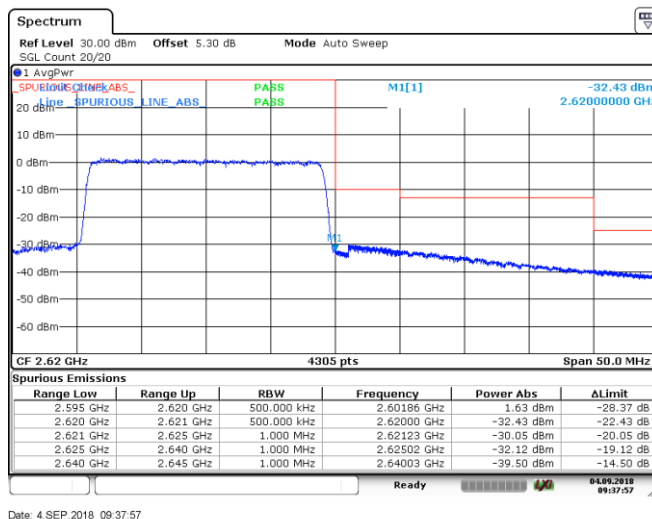
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## BAND38\_20MHz\_64QAM\_38150\_1RB#99



## BAND38\_20MHz\_64QAM\_38150\_100RB#0



## BAND38\_20MHz\_16QAM\_37850\_1RB#0

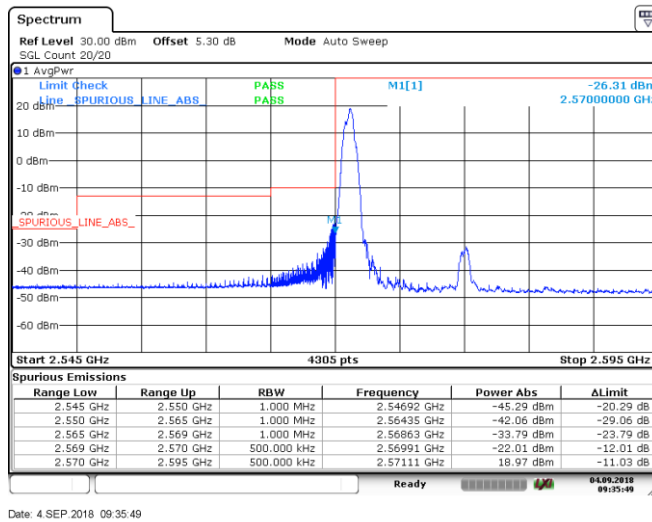




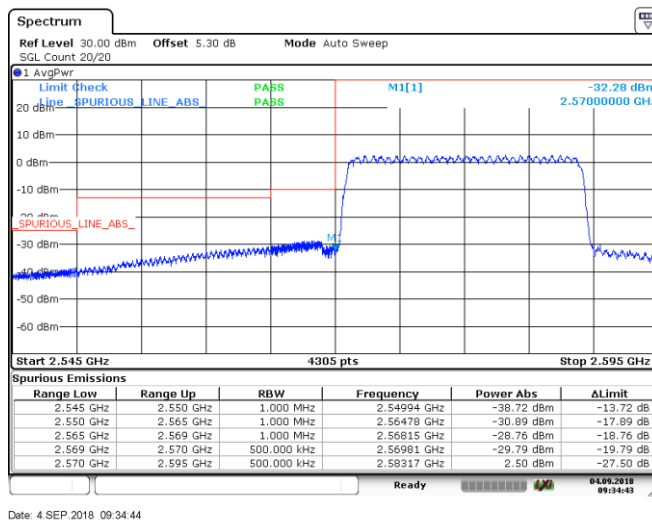
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Report No.: SZEM180500437001

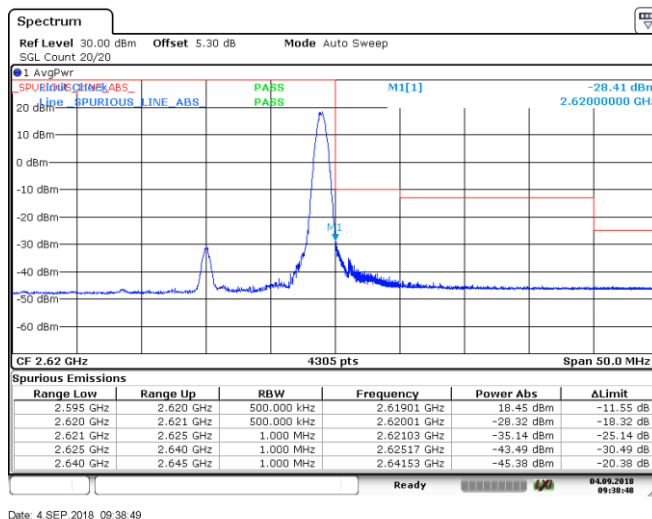
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## BAND38\_20MHz\_16QAM\_37850\_100RB#0



## BAND38\_20MHz\_16QAM\_38150\_1RB#99



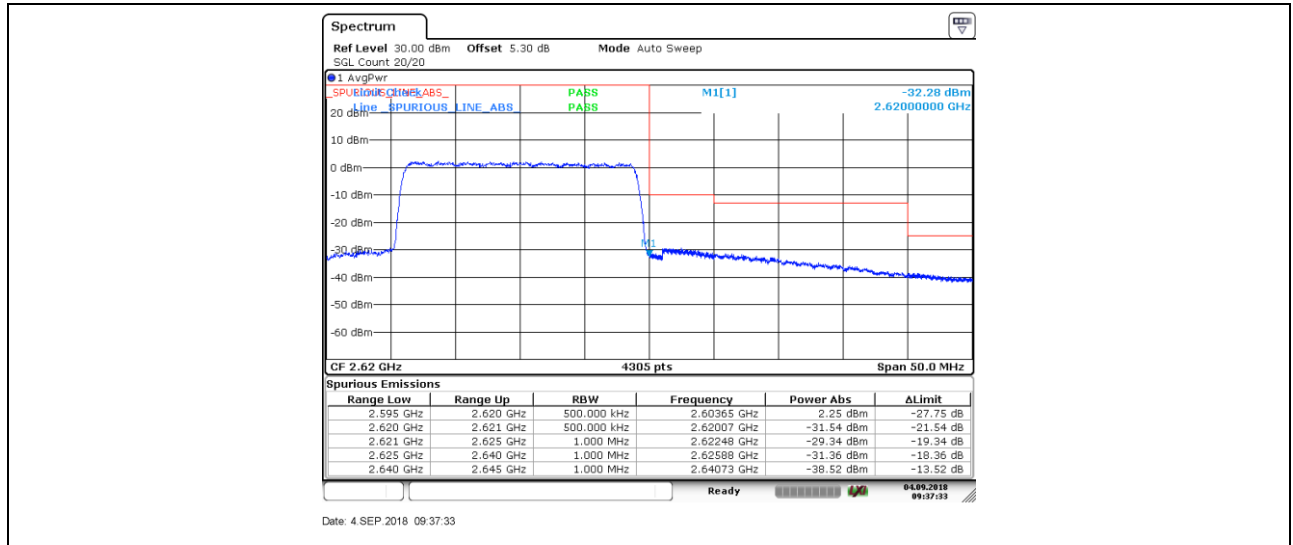
## BAND38\_20MHz\_16QAM\_38150\_100RB#0



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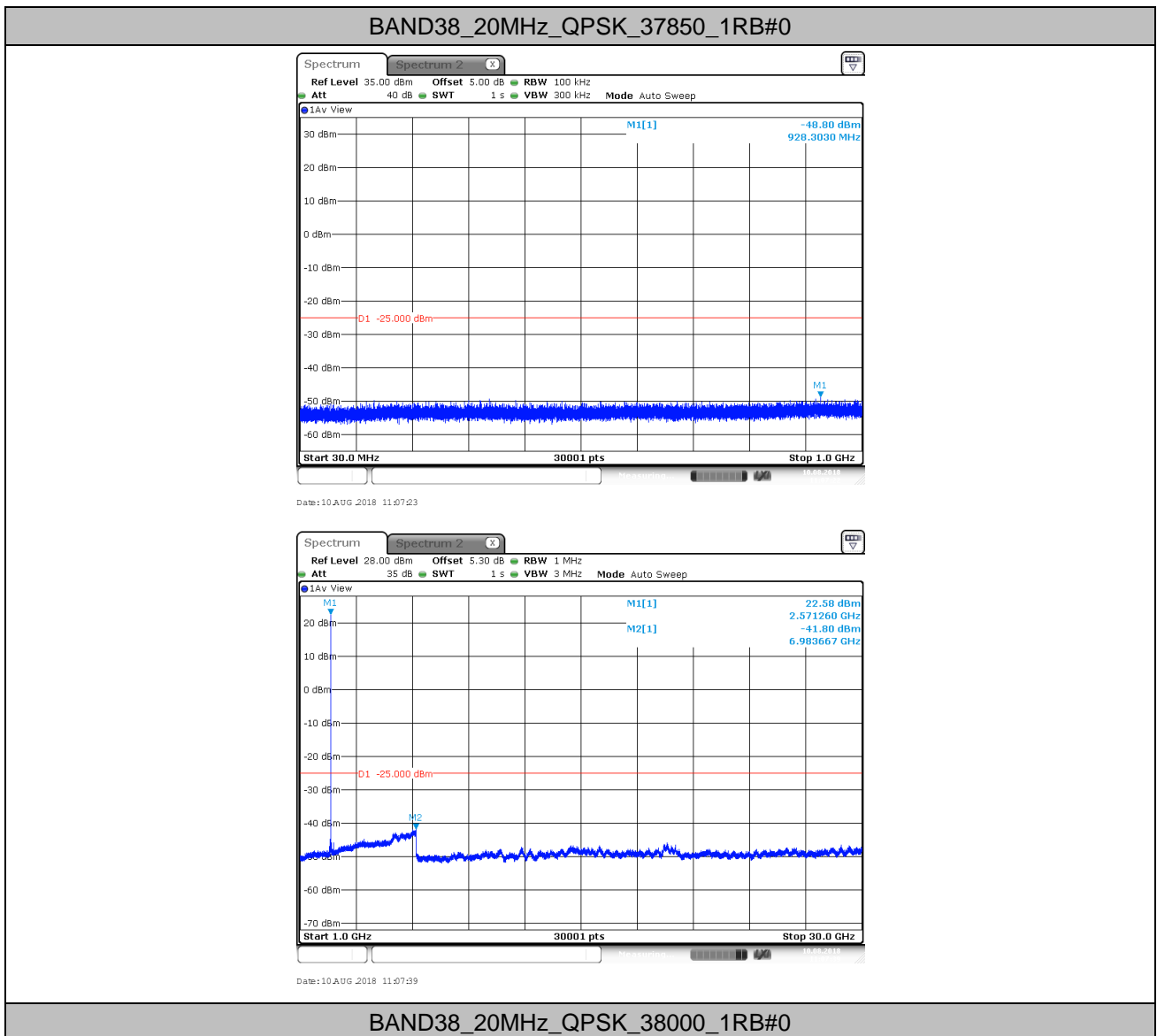


## 6. Spurious Emission at Antenna Terminal

NOTE1: 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.

NOTE2: only the worst case data displayed in this report.

### 6.1. Test Plots

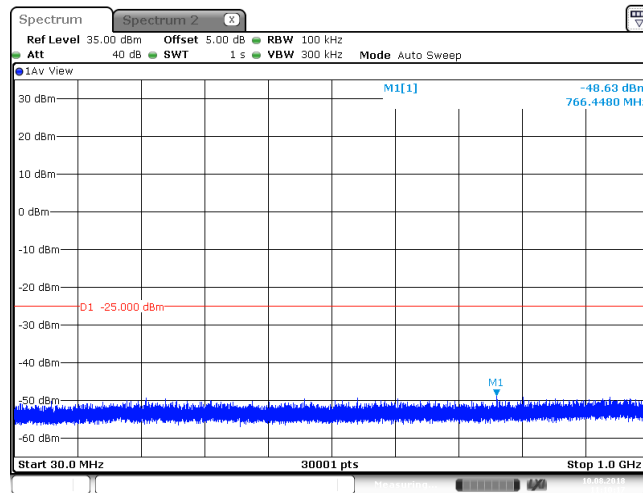




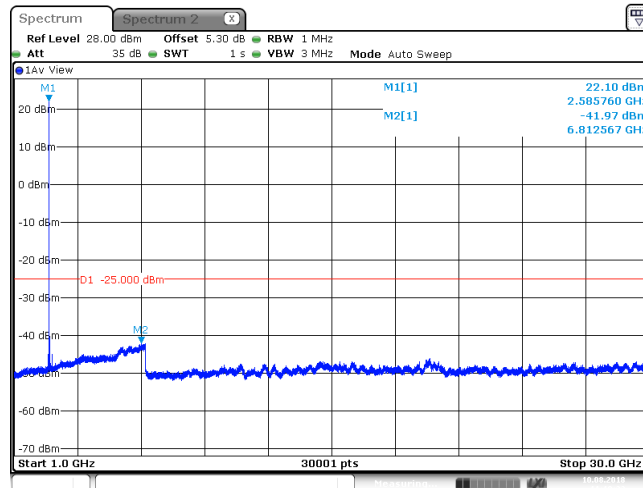
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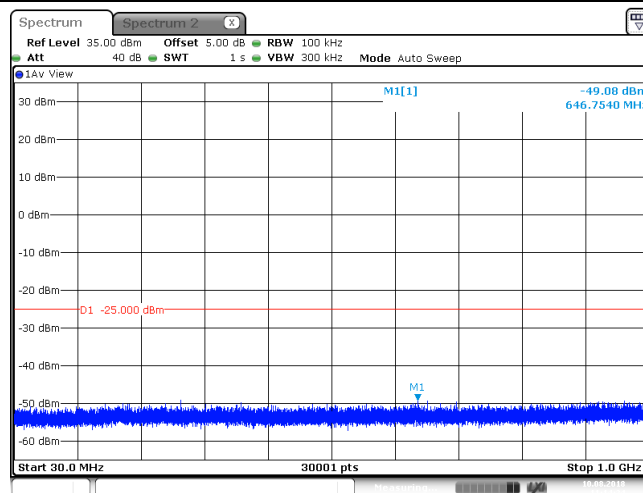


Date: 10 AUG 2018 11:10:17



Date: 10 AUG 2018 11:10:33

## BAND38\_20MHz\_QPSK\_38150\_1RB#0



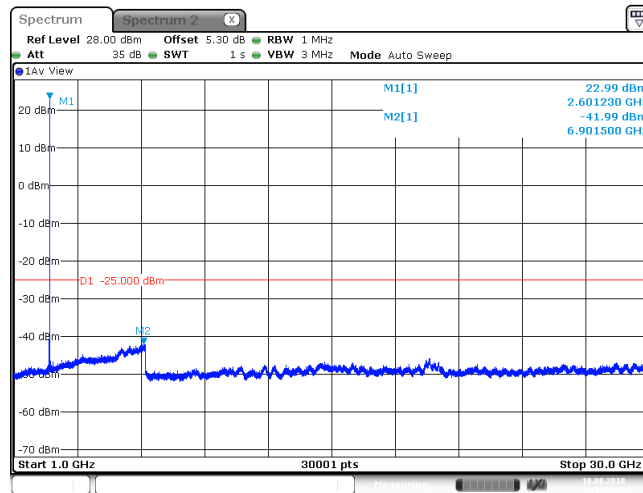
Date: 10 AUG 2018 11:14:25



# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

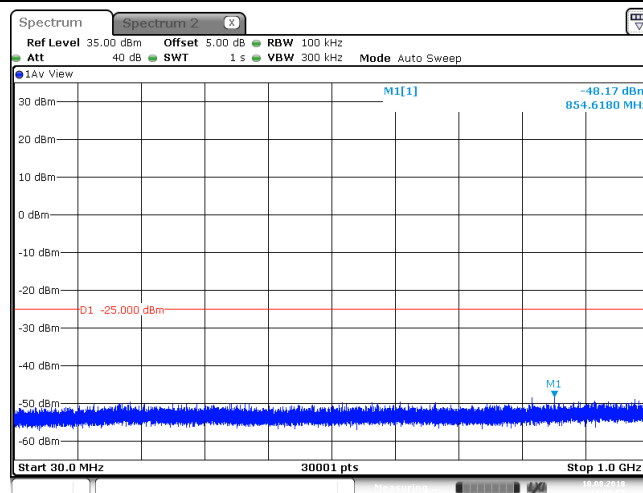
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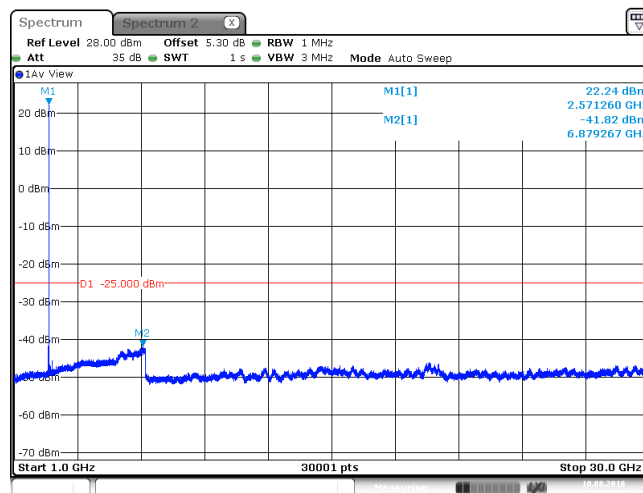


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## BAND38\_20MHz\_16QAM\_37850\_1RB#0



Date: 10 AUG 2018 11:07:58



Date: 10 AUG 2018 11:08:14

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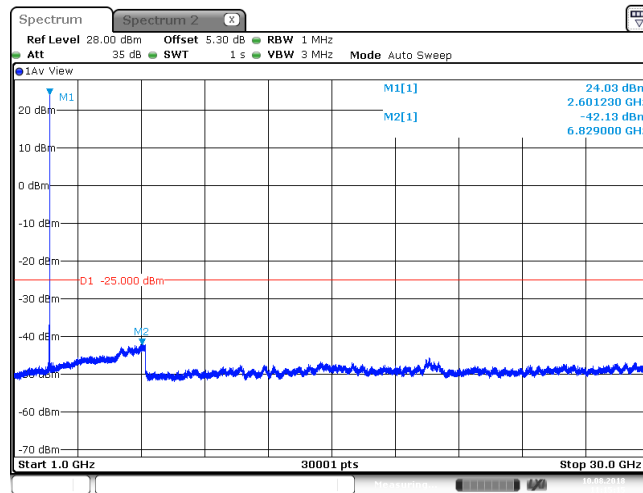




# SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

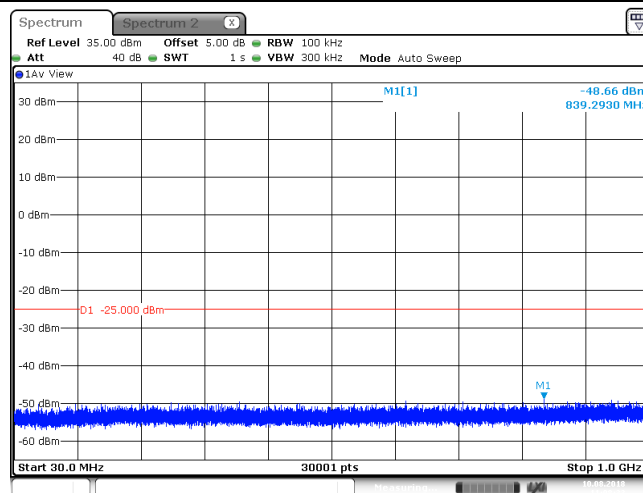
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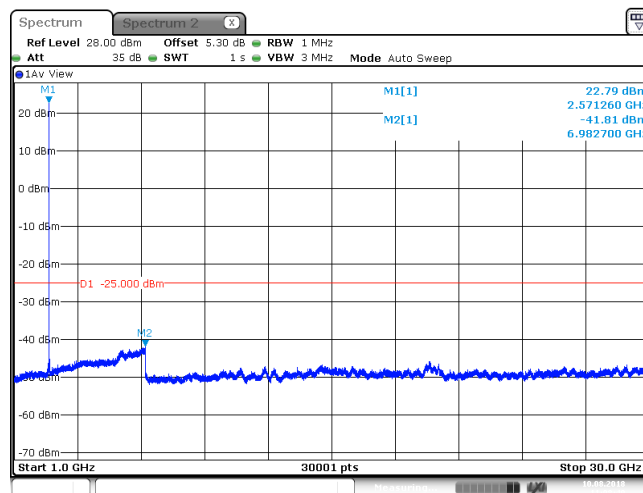


Date: 10 AUG 2018 11:55:16

## BAND38\_20MHz\_64QAM\_37850\_1RB#0



Date: 10 AUG 2018 11:58:33



Date: 10 AUG 2018 11:58:49

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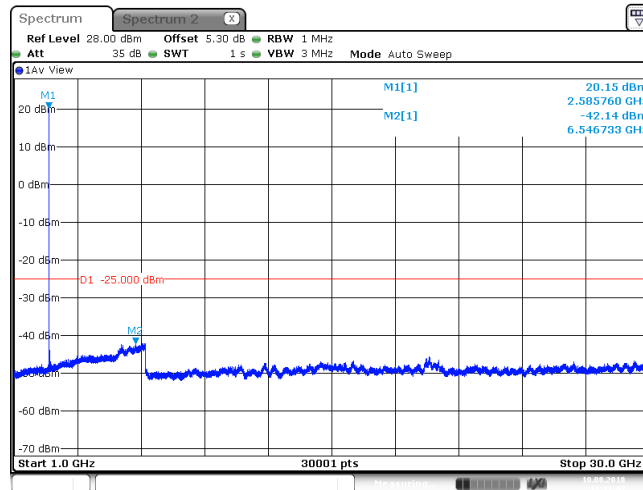
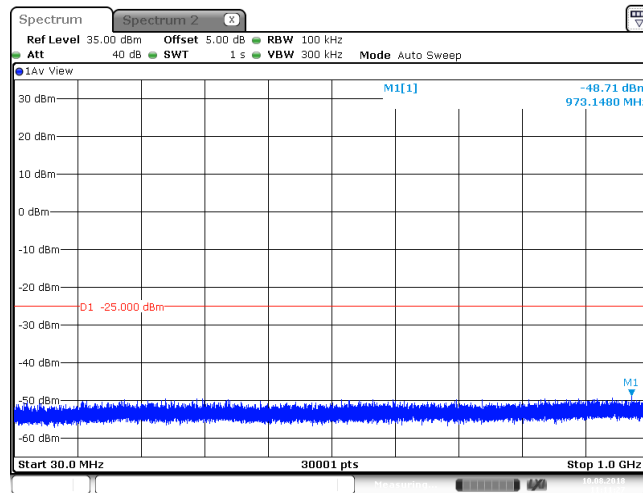




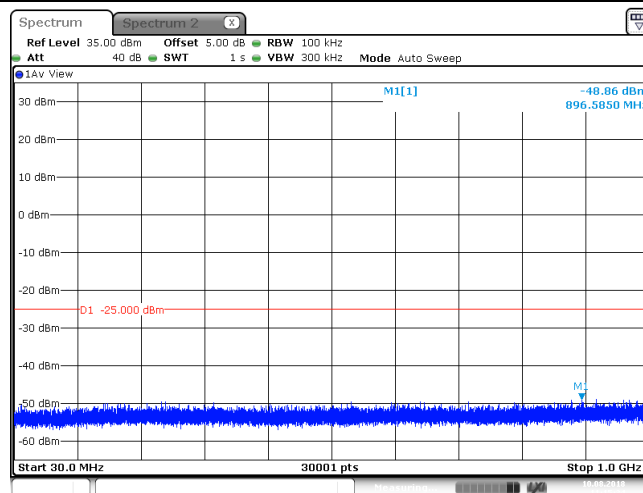
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## BAND38\_20MHz\_64QAM\_38150\_1RB#0

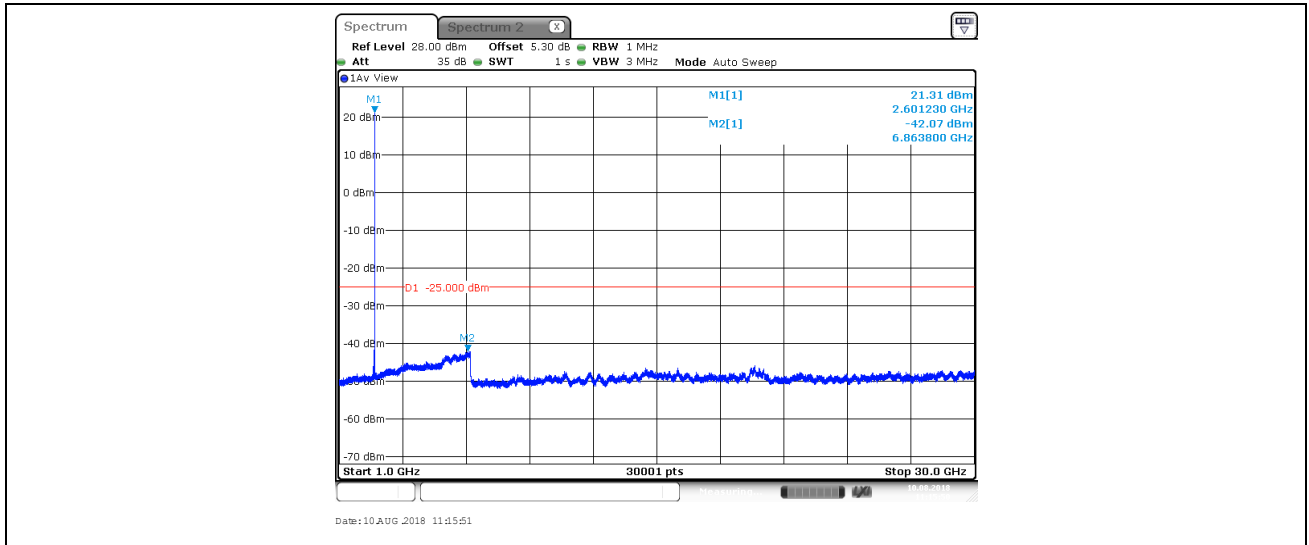




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## 7. Field Strength of Spurious Radiation

### 7.1. Test BAND = LTE BAND38

#### 7.1.1. Test Mode = LTE/TM1 20MHz

##### 7.1.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
64.300000	-81.88	-25.00	56.88	Vertical
104.250000	-68.90	-25.00	43.90	Vertical
877.258333	-78.32	-25.00	53.32	Vertical
2050.000000	-55.51	-25.00	30.51	Vertical
4290.900000	-67.08	-25.00	42.08	Vertical
7875.975000	-64.07	-25.00	39.07	Vertical
62.000000	-78.96	-25.00	53.96	Horizontal
104.300000	-79.74	-25.00	54.74	Horizontal
2050.500000	-48.84	-25.00	23.84	Horizontal
4271.075000	-67.07	-25.00	42.07	Horizontal
6055.325000	-65.22	-25.00	40.22	Horizontal
8730.725000	-64.80	-25.00	39.80	Horizontal

##### 7.1.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
63.750000	-81.92	-25.00	56.92	Vertical
104.250000	-68.56	-25.00	43.56	Vertical
2065.500000	-54.55	-25.00	29.55	Vertical
5172.300000	-65.81	-25.00	40.81	Vertical
7799.925000	-64.10	-25.00	39.10	Vertical
10612.150000	-63.36	-25.00	38.36	Vertical
62.700000	-78.30	-25.00	53.30	Horizontal
104.300000	-79.95	-25.00	54.95	Horizontal
2065.500000	-49.54	-25.00	24.54	Horizontal
4293.825000	-67.03	-25.00	42.03	Horizontal
6485.950000	-65.11	-25.00	40.11	Horizontal
9710.925000	-64.37	-25.00	39.37	Horizontal



### 7.1.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
64.500000	-82.02	-25.00	57.02	Vertical
104.250000	-73.89	-25.00	48.89	Vertical
2080.500000	-52.89	-25.00	27.89	Vertical
4756.950000	-67.09	-25.00	42.09	Vertical
6047.525000	-65.20	-25.00	40.20	Vertical
10618.325000	-63.36	-25.00	38.36	Vertical
62.600000	-78.21	-25.00	53.21	Horizontal
104.300000	-83.99	-25.00	58.99	Horizontal
2080.500000	-49.09	-25.00	24.09	Horizontal
4010.750000	-68.20	-25.00	43.20	Horizontal
5947.100000	-65.87	-25.00	40.87	Horizontal
7961.125000	-63.72	-25.00	38.72	Horizontal

**NOTE:**

- 1) All modes are tested, but the data presented above is the worst case. the disturbance above 13GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.
- 2) We have tested all modulation and all Bandwidth, but only the worst case data presented in this report.



## 8. Frequency Stability

### 8.1. Frequency Vs Voltage

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	0.80	0.000310	±2.5	PASS
				100RB#0	VN	NT	0.60	0.000233	±2.5	PASS
				100RB#0	VH	NT	1.80	0.000698	±2.5	PASS
			38000	100RB#0	VL	NT	3.10	0.001195	±2.5	PASS
				100RB#0	VN	NT	-0.10	-0.000039	±2.5	PASS
				100RB#0	VH	NT	-1.20	-0.000462	±2.5	PASS
			38150	100RB#0	VL	NT	-0.50	-0.000192	±2.5	PASS
				100RB#0	VN	NT	-1.40	-0.000536	±2.5	PASS
				100RB#0	VH	NT	1.80	0.000690	±2.5	PASS
		16QAM	37850	100RB#0	VL	NT	0.20	0.000078	±2.5	PASS
				100RB#0	VN	NT	2.00	0.000775	±2.5	PASS
				100RB#0	VH	NT	1.00	0.000388	±2.5	PASS
			38000	100RB#0	VL	NT	2.90	0.001118	±2.5	PASS
				100RB#0	VN	NT	3.30	0.001272	±2.5	PASS
				100RB#0	VH	NT	4.00	0.001541	±2.5	PASS
			38150	100RB#0	VL	NT	1.30	0.000498	±2.5	PASS
				100RB#0	VN	NT	-0.80	-0.000307	±2.5	PASS
				100RB#0	VH	NT	0.60	0.000230	±2.5	PASS
		64QAM	37850	100RB#0	VL	NT	-0.80	-0.000307	±2.5	PASS
				100RB#0	VN	NT	-1.90	-0.000728	±2.5	PASS
				100RB#0	VH	NT	-2.20	-0.000853	±2.5	PASS
			38000	100RB#0	VL	NT	1.30	0.000501	±2.5	PASS
				100RB#0	VN	NT	0.10	0.000039	±2.5	PASS
				100RB#0	VH	NT	3.00	0.001156	±2.5	PASS
			38150	100RB#0	VL	NT	-0.60	-0.000230	±2.5	PASS
				100RB#0	VN	NT	-1.90	-0.000728	±2.5	PASS
				100RB#0	VH	NT	4.50	0.001724	±2.5	PASS



## 8.2.Frequency Vs Temperature

BAND	Bandwidth	Modulation	Channel	Temperature						
				RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
BAND38	20MHz	QPSK	37850	100RB#0	NV	-30	1.50	0.000581	±2.5	PASS
				100RB#0	NV	-20	0.70	0.000271	±2.5	PASS
				100RB#0	NV	0	-0.90	-0.000349	±2.5	PASS
				100RB#0	NV	10	-2.90	-0.001124	±2.5	PASS
				100RB#0	NV	20	0.40	0.000155	±2.5	PASS
			38000	100RB#0	NV	-30	0.10	0.000039	±2.5	PASS
				100RB#0	NV	-20	-3.00	-0.001156	±2.5	PASS
				100RB#0	NV	0	-3.00	-0.001156	±2.5	PASS
				100RB#0	NV	10	0.80	0.000308	±2.5	PASS
				100RB#0	NV	20	-0.80	-0.000308	±2.5	PASS
			38150	100RB#0	NV	-30	3.00	0.001149	±2.5	PASS
				100RB#0	NV	-20	-1.00	-0.000383	±2.5	PASS
				100RB#0	NV	0	-0.90	-0.000345	±2.5	PASS
				100RB#0	NV	10	0.20	0.000077	±2.5	PASS
				100RB#0	NV	20	0.90	0.000345	±2.5	PASS
		16QAM	37850	100RB#0	NV	-30	2.00	0.000775	±2.5	PASS
				100RB#0	NV	-20	2.20	0.000853	±2.5	PASS
				100RB#0	NV	0	0.60	0.000233	±2.5	PASS
				100RB#0	NV	10	1.50	0.000581	±2.5	PASS
				100RB#0	NV	20	1.90	0.000736	±2.5	PASS
			38000	100RB#0	NV	-30	0.60	0.000231	±2.5	PASS
				100RB#0	NV	-20	-0.30	-0.000116	±2.5	PASS
				100RB#0	NV	0	-0.10	-0.000039	±2.5	PASS
				100RB#0	NV	10	-0.40	-0.000154	±2.5	PASS
				100RB#0	NV	20	2.30	0.000886	±2.5	PASS
			38150	100RB#0	NV	-30	0.20	0.000077	±2.5	PASS
				100RB#0	NV	-20	0.10	0.000038	±2.5	PASS
				100RB#0	NV	0	-0.30	-0.000115	±2.5	PASS
				100RB#0	NV	10	0.70	0.000268	±2.5	PASS
				100RB#0	NV	20	-0.10	-0.000038	±2.5	PASS
		64QAM	37850	100RB#0	NV	-30	1.20	0.000465	±2.5	PASS
				100RB#0	NV	-20	-1.20	-0.000465	±2.5	PASS
				100RB#0	NV	0	-0.60	-0.000233	±2.5	PASS
				100RB#0	NV	10	1.00	0.000388	±2.5	PASS
				100RB#0	NV	20	0.60	0.000233	±2.5	PASS
			38000	100RB#0	NV	-30	2.20	0.000848	±2.5	PASS



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				100RB#0	NV	-20	3.40	0.001310	±2.5	PASS
				100RB#0	NV	0	4.00	0.001541	±2.5	PASS
				100RB#0	NV	10	0.60	0.000231	±2.5	PASS
				100RB#0	NV	20	-1.10	-0.000424	±2.5	PASS
			38150	100RB#0	NV	-30	5.50	0.002107	±2.5	PASS
				100RB#0	NV	-20	1.80	0.000690	±2.5	PASS
				100RB#0	NV	0	3.30	0.001264	±2.5	PASS
				100RB#0	NV	10	3.30	0.001264	±2.5	PASS
				100RB#0	NV	20	2.10	0.000805	±2.5	PASS

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The End