



# Appendix B

## E-UTRA Band 38



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## 1. Effective (Isotropic) Radiated Power

### 1.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Conducted Power(dBm)	EIRP (dBm)	limit (dBm)	Verdict
Band38	5MHz	QPSK	37775	1RB#0	22.85	24.85	33.00	PASS
Band38	5MHz	QPSK	37775	1RB#12	23.09	25.09	33.00	PASS
Band38	5MHz	QPSK	37775	1RB#24	22.78	24.78	33.00	PASS
Band38	5MHz	QPSK	37775	12RB#0	21.91	23.91	33.00	PASS
Band38	5MHz	QPSK	37775	12RB#6	22.03	24.03	33.00	PASS
Band38	5MHz	QPSK	37775	12RB#13	21.96	23.96	33.00	PASS
Band38	5MHz	QPSK	37775	25RB#0	21.89	23.89	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#0	22.62	24.62	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#12	22.95	24.95	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#24	22.64	24.64	33.00	PASS
Band38	5MHz	QPSK	38000	12RB#0	21.76	23.76	33.00	PASS
Band38	5MHz	QPSK	38000	12RB#6	21.87	23.87	33.00	PASS
Band38	5MHz	QPSK	38000	12RB#13	21.77	23.77	33.00	PASS
Band38	5MHz	QPSK	38000	25RB#0	21.77	23.77	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#0	22.68	24.68	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#12	22.92	24.92	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#24	22.71	24.71	33.00	PASS
Band38	5MHz	QPSK	38225	12RB#0	21.86	23.86	33.00	PASS
Band38	5MHz	QPSK	38225	12RB#6	21.83	23.83	33.00	PASS
Band38	5MHz	QPSK	38225	12RB#13	21.86	23.86	33.00	PASS
Band38	5MHz	QPSK	38225	25RB#0	21.78	23.78	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#0	21.51	23.51	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#12	21.66	23.66	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#24	21.44	23.44	33.00	PASS
Band38	5MHz	16QAM	37775	12RB#0	20.85	22.85	33.00	PASS
Band38	5MHz	16QAM	37775	12RB#6	20.97	22.97	33.00	PASS
Band38	5MHz	16QAM	37775	12RB#13	20.94	22.94	33.00	PASS
Band38	5MHz	16QAM	37775	25RB#0	21.14	23.14	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#0	21.31	23.31	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#12	21.43	23.43	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#24	21.25	23.25	33.00	PASS
Band38	5MHz	16QAM	38000	12RB#0	20.77	22.77	33.00	PASS



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Band38	5MHz	16QAM	38000	12RB#6	20.86	22.86	33.00	PASS
Band38	5MHz	16QAM	38000	12RB#13	20.81	22.81	33.00	PASS
Band38	5MHz	16QAM	38000	25RB#0	20.90	22.90	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#0	21.35	23.35	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#12	21.52	23.52	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#24	21.40	23.40	33.00	PASS
Band38	5MHz	16QAM	38225	12RB#0	20.78	22.78	33.00	PASS
Band38	5MHz	16QAM	38225	12RB#6	20.87	22.87	33.00	PASS
Band38	5MHz	16QAM	38225	12RB#13	20.77	22.77	33.00	PASS
Band38	5MHz	16QAM	38225	25RB#0	20.87	22.87	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#0	22.92	24.92	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#24	23.08	25.08	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#49	22.69	24.69	33.00	PASS
Band38	10MHz	QPSK	37800	25RB#0	22.03	24.03	33.00	PASS
Band38	10MHz	QPSK	37800	25RB#12	21.88	23.88	33.00	PASS
Band38	10MHz	QPSK	37800	25RB#25	21.82	23.82	33.00	PASS
Band38	10MHz	QPSK	37800	50RB#0	21.94	23.94	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#0	22.64	24.64	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#24	22.94	24.94	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#49	22.57	24.57	33.00	PASS
Band38	10MHz	QPSK	38000	25RB#0	21.86	23.86	33.00	PASS
Band38	10MHz	QPSK	38000	25RB#12	21.89	23.89	33.00	PASS
Band38	10MHz	QPSK	38000	25RB#25	21.76	23.76	33.00	PASS
Band38	10MHz	QPSK	38000	50RB#0	21.83	23.83	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#0	22.67	24.67	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#24	22.97	24.97	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#49	22.62	24.62	33.00	PASS
Band38	10MHz	QPSK	38200	25RB#0	21.88	23.88	33.00	PASS
Band38	10MHz	QPSK	38200	25RB#12	21.96	23.96	33.00	PASS
Band38	10MHz	QPSK	38200	25RB#25	21.81	23.81	33.00	PASS
Band38	10MHz	QPSK	38200	50RB#0	21.86	23.86	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#0	21.40	23.40	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#24	21.58	23.58	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#49	21.39	23.39	33.00	PASS
Band38	10MHz	16QAM	37800	25RB#0	20.77	22.77	33.00	PASS
Band38	10MHz	16QAM	37800	25RB#12	20.82	22.82	33.00	PASS
Band38	10MHz	16QAM	37800	25RB#25	21.07	23.07	33.00	PASS
Band38	10MHz	16QAM	37800	50RB#0	20.94	22.94	33.00	PASS



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Band38	10MHz	16QAM	38000	1RB#0	21.35	23.35	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#24	21.56	23.56	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#49	21.40	23.40	33.00	PASS
Band38	10MHz	16QAM	38000	25RB#0	20.82	22.82	33.00	PASS
Band38	10MHz	16QAM	38000	25RB#12	21.00	23.00	33.00	PASS
Band38	10MHz	16QAM	38000	25RB#25	20.93	22.93	33.00	PASS
Band38	10MHz	16QAM	38000	50RB#0	20.83	22.83	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#0	21.40	23.40	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#24	21.61	23.61	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#49	21.39	23.39	33.00	PASS
Band38	10MHz	16QAM	38200	25RB#0	20.91	22.91	33.00	PASS
Band38	10MHz	16QAM	38200	25RB#12	20.92	22.92	33.00	PASS
Band38	10MHz	16QAM	38200	25RB#25	20.91	22.91	33.00	PASS
Band38	10MHz	16QAM	38200	50RB#0	20.83	22.83	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#0	22.71	24.71	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#38	22.66	24.66	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#74	22.75	24.75	33.00	PASS
Band38	15MHz	QPSK	37825	36RB#0	21.96	23.96	33.00	PASS
Band38	15MHz	QPSK	37825	36RB#18	21.91	23.91	33.00	PASS
Band38	15MHz	QPSK	37825	36RB#39	21.87	23.87	33.00	PASS
Band38	15MHz	QPSK	37825	75RB#0	21.90	23.90	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#0	22.73	24.73	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#38	22.67	24.67	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#74	22.61	24.61	33.00	PASS
Band38	15MHz	QPSK	38000	36RB#0	21.82	23.82	33.00	PASS
Band38	15MHz	QPSK	38000	36RB#18	21.83	23.83	33.00	PASS
Band38	15MHz	QPSK	38000	36RB#39	21.77	23.77	33.00	PASS
Band38	15MHz	QPSK	38000	75RB#0	21.82	23.82	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#0	22.67	24.67	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#38	22.77	24.77	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#74	22.62	24.62	33.00	PASS
Band38	15MHz	QPSK	38175	36RB#0	21.81	23.81	33.00	PASS
Band38	15MHz	QPSK	38175	36RB#18	21.88	23.88	33.00	PASS
Band38	15MHz	QPSK	38175	36RB#39	21.87	23.87	33.00	PASS
Band38	15MHz	QPSK	38175	75RB#0	21.88	23.88	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#0	21.53	23.53	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#38	21.36	23.36	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#74	21.42	23.42	33.00	PASS



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Band38	15MHz	16QAM	37825	36RB#0	20.86	22.86	33.00	PASS
Band38	15MHz	16QAM	37825	36RB#18	20.90	22.90	33.00	PASS
Band38	15MHz	16QAM	37825	36RB#39	20.89	22.89	33.00	PASS
Band38	15MHz	16QAM	37825	75RB#0	20.89	22.89	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#0	21.41	23.41	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#38	21.36	23.36	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#74	21.47	23.47	33.00	PASS
Band38	15MHz	16QAM	38000	36RB#0	20.81	22.81	33.00	PASS
Band38	15MHz	16QAM	38000	36RB#18	20.92	22.92	33.00	PASS
Band38	15MHz	16QAM	38000	36RB#39	20.79	22.79	33.00	PASS
Band38	15MHz	16QAM	38000	75RB#0	20.82	22.82	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#0	21.51	23.51	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#38	21.48	23.48	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#74	21.30	23.30	33.00	PASS
Band38	15MHz	16QAM	38175	36RB#0	20.68	22.68	33.00	PASS
Band38	15MHz	16QAM	38175	36RB#18	20.78	22.78	33.00	PASS
Band38	15MHz	16QAM	38175	36RB#39	20.79	22.79	33.00	PASS
Band38	15MHz	16QAM	38175	75RB#0	20.75	22.75	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#0	22.64	24.64	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#49	22.99	24.99	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#99	22.58	24.58	33.00	PASS
Band38	20MHz	QPSK	37850	50RB#0	21.93	23.93	33.00	PASS
Band38	20MHz	QPSK	37850	50RB#25	21.99	23.99	33.00	PASS
Band38	20MHz	QPSK	37850	50RB#50	21.83	23.83	33.00	PASS
Band38	20MHz	QPSK	37850	100RB#0	21.91	23.91	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#0	22.56	24.56	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#49	22.97	24.97	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#99	22.61	24.61	33.00	PASS
Band38	20MHz	QPSK	38000	50RB#0	21.83	23.83	33.00	PASS
Band38	20MHz	QPSK	38000	50RB#25	21.92	23.92	33.00	PASS
Band38	20MHz	QPSK	38000	50RB#50	21.75	23.75	33.00	PASS
Band38	20MHz	QPSK	38000	100RB#0	21.79	23.79	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#0	22.58	24.58	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#49	22.90	24.90	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#99	22.55	24.55	33.00	PASS
Band38	20MHz	QPSK	38150	50RB#0	21.87	23.87	33.00	PASS
Band38	20MHz	QPSK	38150	50RB#25	21.86	23.86	33.00	PASS
Band38	20MHz	QPSK	38150	50RB#50	21.82	23.82	33.00	PASS



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Band38	20MHz	QPSK	38150	100RB#0	21.87	23.87	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#0	21.23	23.23	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#49	21.55	23.55	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#99	21.35	23.35	33.00	PASS
Band38	20MHz	16QAM	37850	50RB#0	20.85	22.85	33.00	PASS
Band38	20MHz	16QAM	37850	50RB#25	20.87	22.87	33.00	PASS
Band38	20MHz	16QAM	37850	50RB#50	20.84	22.84	33.00	PASS
Band38	20MHz	16QAM	37850	100RB#0	20.95	22.95	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#0	21.32	23.32	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#49	21.56	23.56	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#99	21.26	23.26	33.00	PASS
Band38	20MHz	16QAM	38000	50RB#0	20.73	22.73	33.00	PASS
Band38	20MHz	16QAM	38000	50RB#25	20.82	22.82	33.00	PASS
Band38	20MHz	16QAM	38000	50RB#50	20.76	22.76	33.00	PASS
Band38	20MHz	16QAM	38000	100RB#0	20.83	22.83	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#0	21.23	23.23	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#49	21.52	23.52	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#99	21.35	23.35	33.00	PASS
Band38	20MHz	16QAM	38150	50RB#0	20.75	22.75	33.00	PASS
Band38	20MHz	16QAM	38150	50RB#25	20.76	22.76	33.00	PASS
Band38	20MHz	16QAM	38150	50RB#50	20.83	22.83	33.00	PASS
Band38	20MHz	16QAM	38150	100RB#0	20.89	22.89	33.00	PASS

**Remark:**

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

ERP [dBm] = Conducted Power [dBm] + Gain [dBd]

EIRP [dBm] = Conducted Power [dBm] + Gain [dBi]



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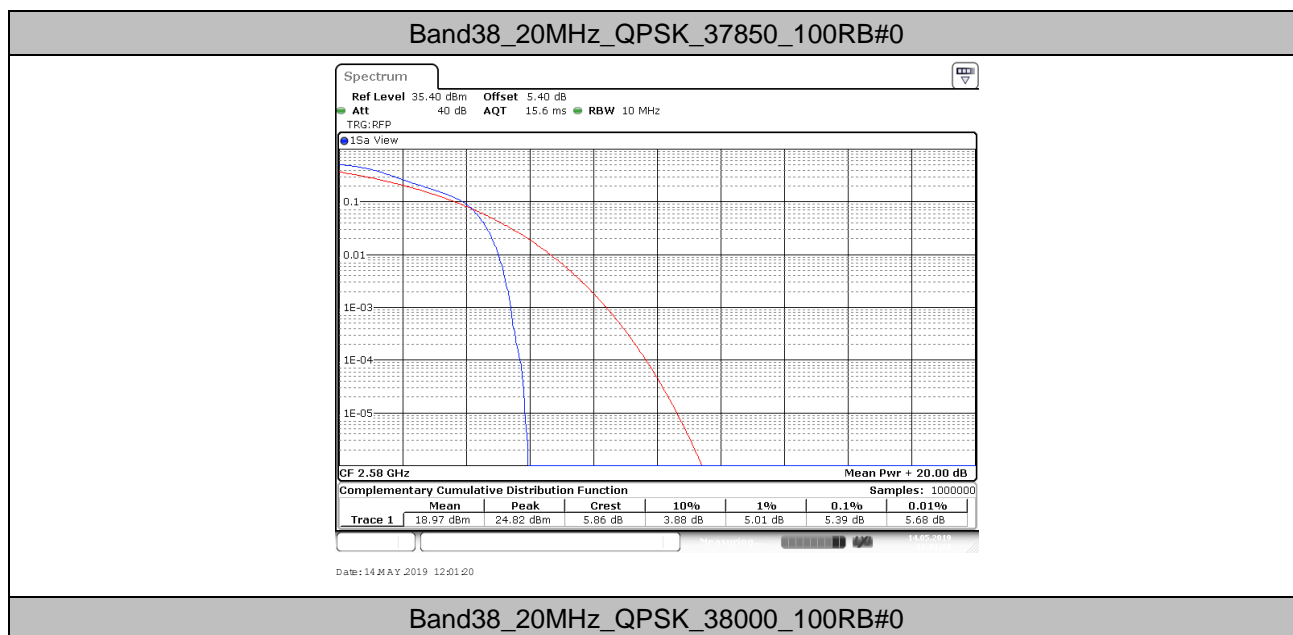
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中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

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

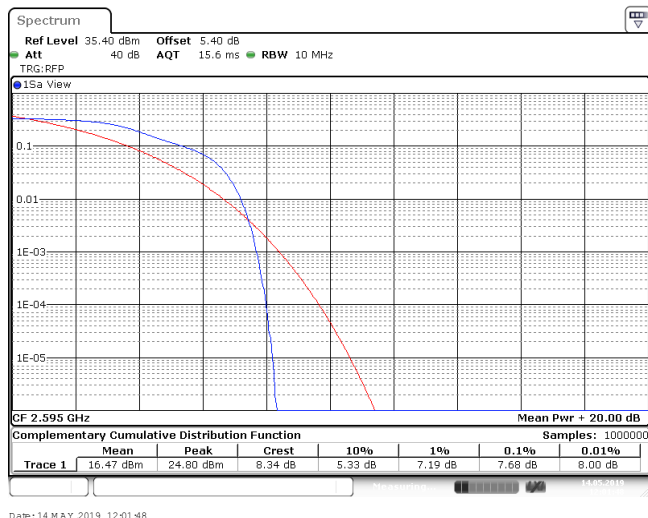
### 2.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band38	20MHz	QPSK	37850	100RB#0	5.39	13	PASS
Band38	20MHz	QPSK	38000	100RB#0	7.68	13	PASS
Band38	20MHz	QPSK	38150	100RB#0	7.68	13	PASS
Band38	20MHz	16QAM	37850	100RB#0	9.48	13	PASS
Band38	20MHz	16QAM	38000	100RB#0	9.39	13	PASS
Band38	20MHz	16QAM	38150	100RB#0	9.71	13	PASS

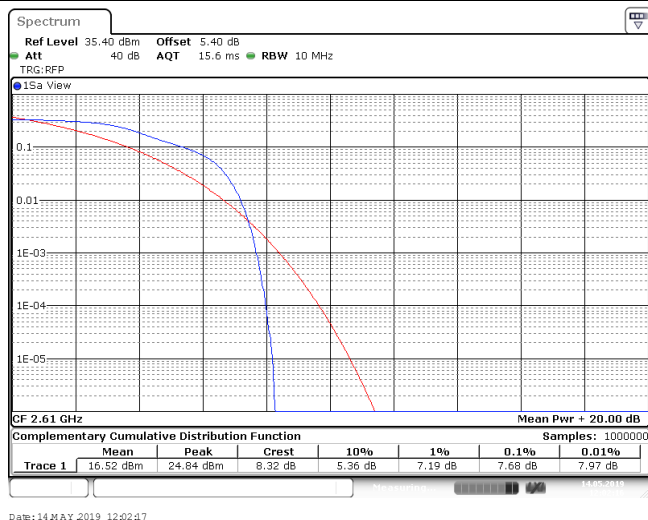
### 2.2. Test Plots





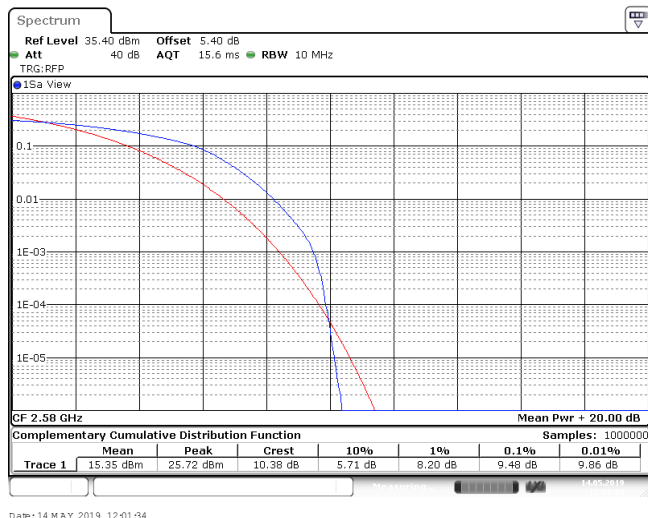


**Band38\_20MHz\_QPSK\_38150\_100RB#0**

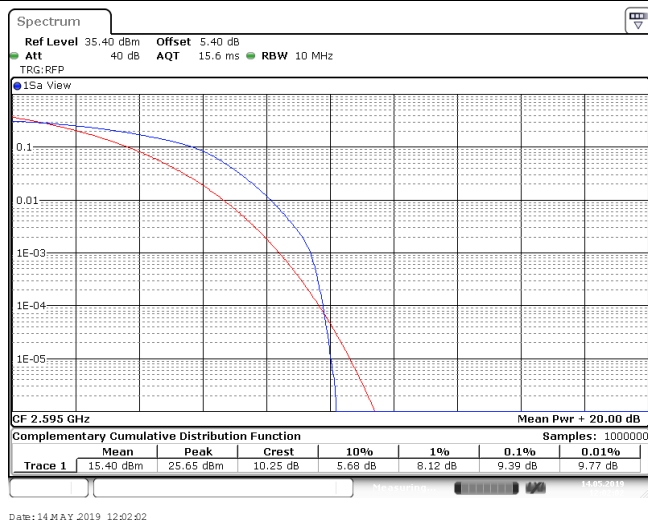


**Band38\_20MHz\_16QAM\_37850\_100RB#0**



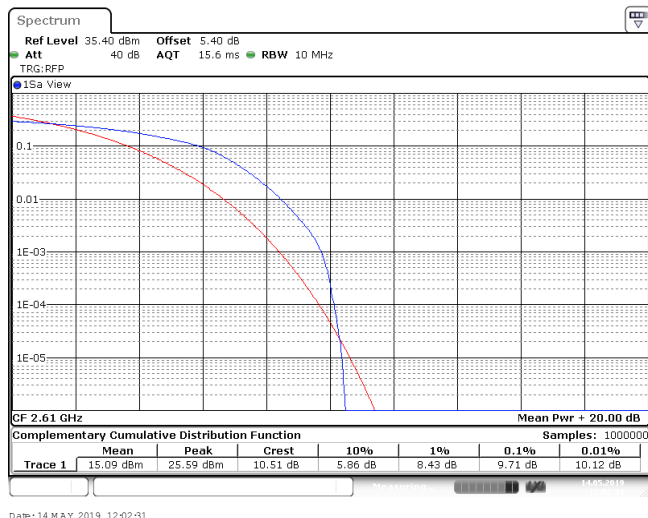


Band38\_20MHz\_16QAM\_38000\_100RB#0



Band38\_20MHz\_16QAM\_38150\_100RB#0





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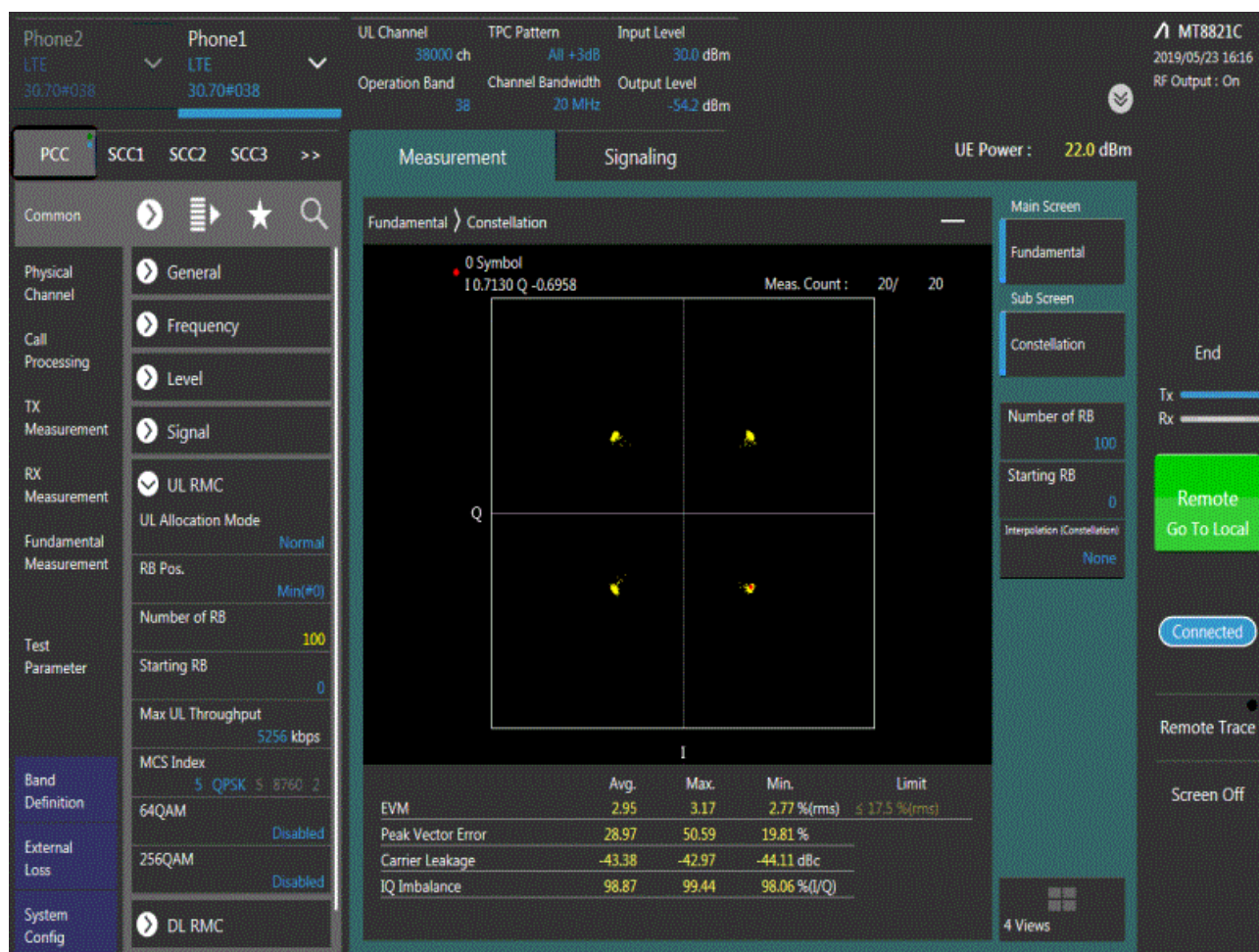
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### 3. Modulation Characteristics

#### 3.1. Test BAND = LTE Band 38

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

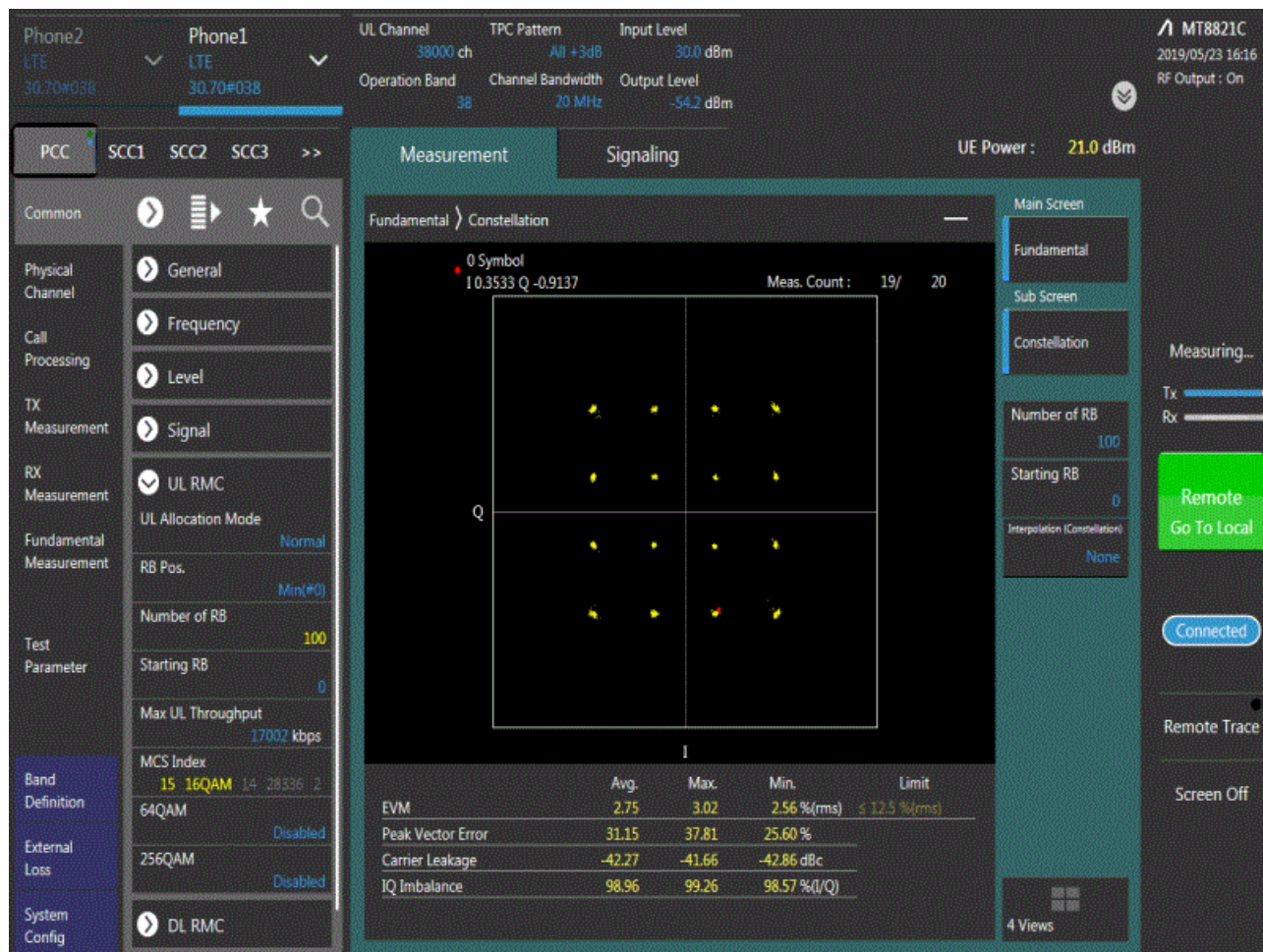
##### 3.2.1. Test Channel = MCH





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

#### 3.3.1. 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	4.960	PASS
Band38	5MHz	QPSK	38000	25RB#0	4.476	4.960	PASS
Band38	5MHz	QPSK	38225	25RB#0	4.476	4.980	PASS
Band38	5MHz	16QAM	37775	25RB#0	4.496	4.930	PASS
Band38	5MHz	16QAM	38000	25RB#0	4.496	4.940	PASS
Band38	5MHz	16QAM	38225	25RB#0	4.496	4.920	PASS
Band38	10MHz	QPSK	37800	50RB#0	8.891	9.820	PASS
Band38	10MHz	QPSK	38000	50RB#0	8.891	9.920	PASS
Band38	10MHz	QPSK	38200	50RB#0	8.911	9.860	PASS
Band38	10MHz	16QAM	37800	50RB#0	8.891	9.620	PASS
Band38	10MHz	16QAM	38000	50RB#0	8.911	9.580	PASS
Band38	10MHz	16QAM	38200	50RB#0	8.891	9.620	PASS
Band38	15MHz	QPSK	37825	75RB#0	13.457	15.240	PASS
Band38	15MHz	QPSK	38000	75RB#0	13.487	15.240	PASS
Band38	15MHz	QPSK	38175	75RB#0	13.487	15.210	PASS
Band38	15MHz	16QAM	37825	75RB#0	13.427	16.110	PASS
Band38	15MHz	16QAM	38000	75RB#0	13.427	16.080	PASS
Band38	15MHz	16QAM	38175	75RB#0	13.427	15.780	PASS
Band38	20MHz	QPSK	37850	100RB#0	17.862	19.840	PASS
Band38	20MHz	QPSK	38000	100RB#0	17.862	19.960	PASS
Band38	20MHz	QPSK	38150	100RB#0	17.862	19.720	PASS
Band38	20MHz	16QAM	37850	100RB#0	17.822	19.280	PASS
Band38	20MHz	16QAM	38000	100RB#0	17.862	19.240	PASS
Band38	20MHz	16QAM	38150	100RB#0	17.862	19.280	PASS



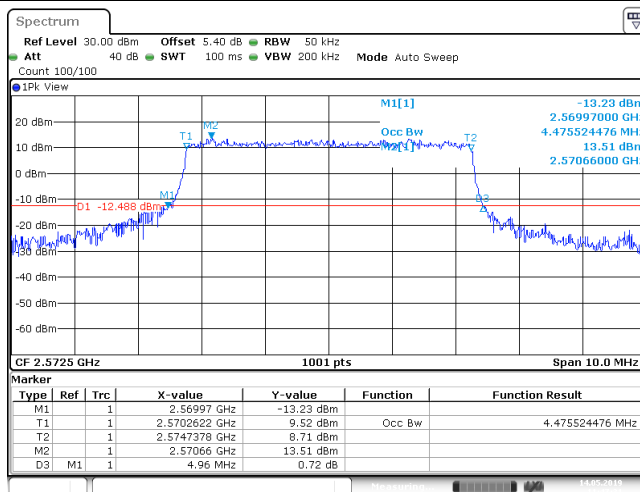
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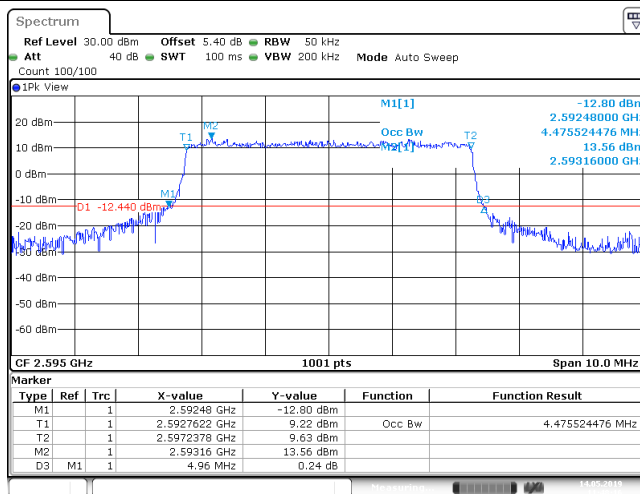
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## 4.2. Test Plots

Band38\_5MHz\_QPSK\_37775\_25RB#0

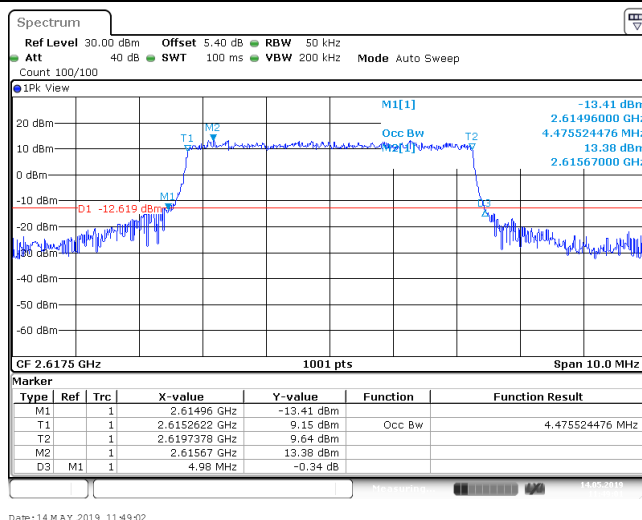


Band38\_5MHz\_QPSK\_38000\_25RB#0

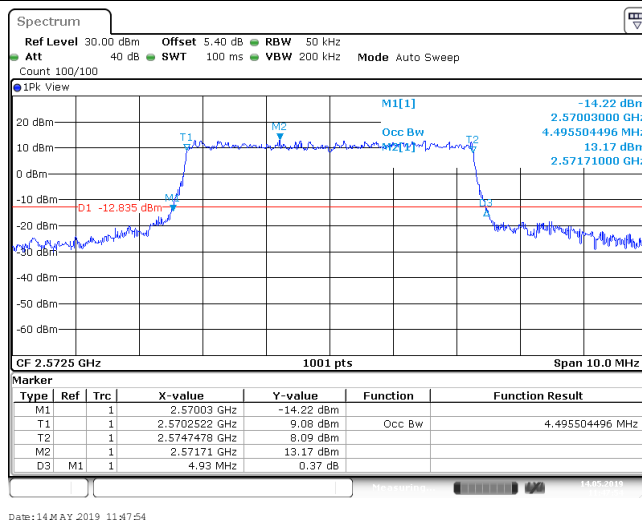


Band38\_5MHz\_QPSK\_38225\_25RB#0





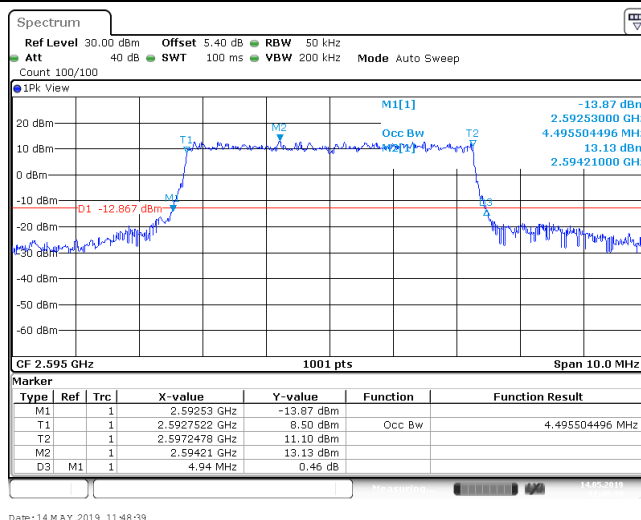
## Band38\_5MHz\_16QAM\_37775\_25RB#0



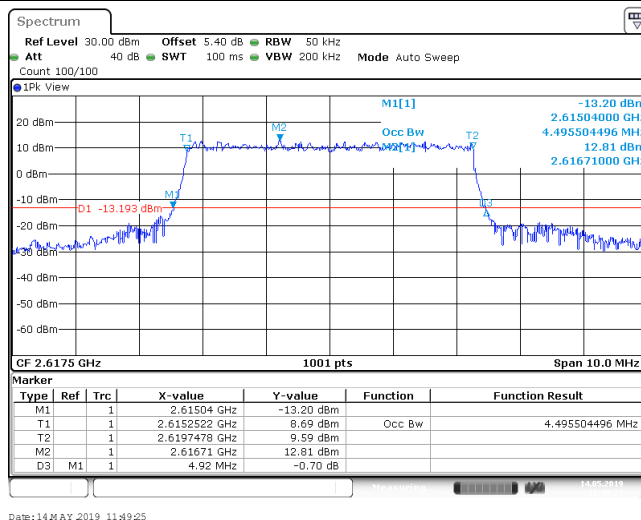
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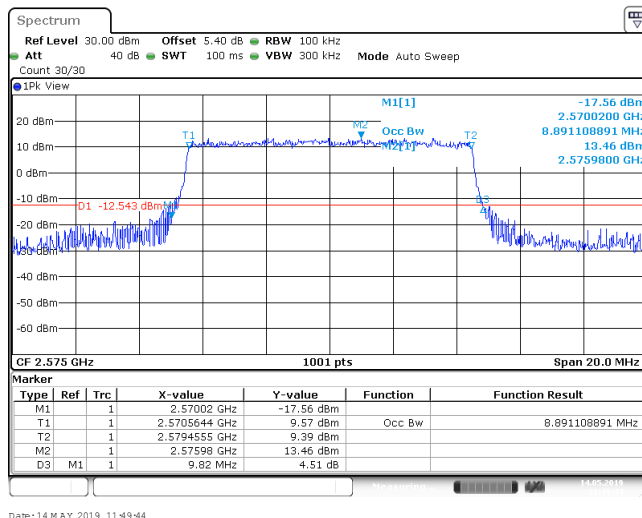


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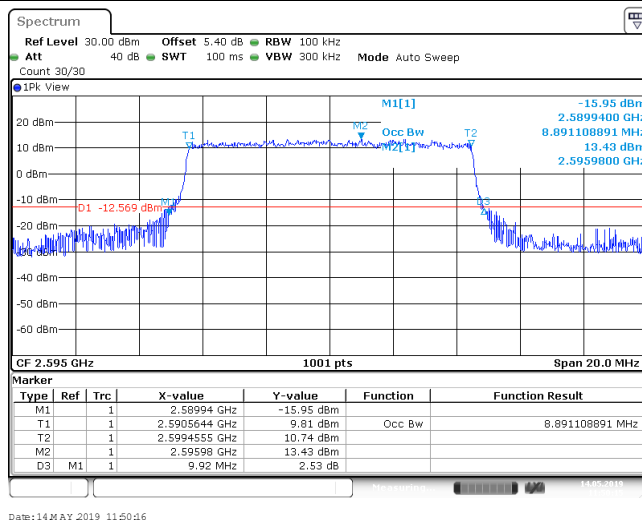


## Band38\_10MHz\_QPSK\_37800\_50RB#0



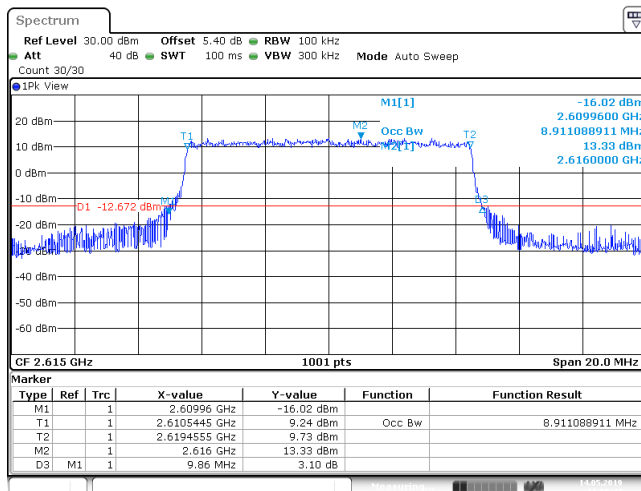


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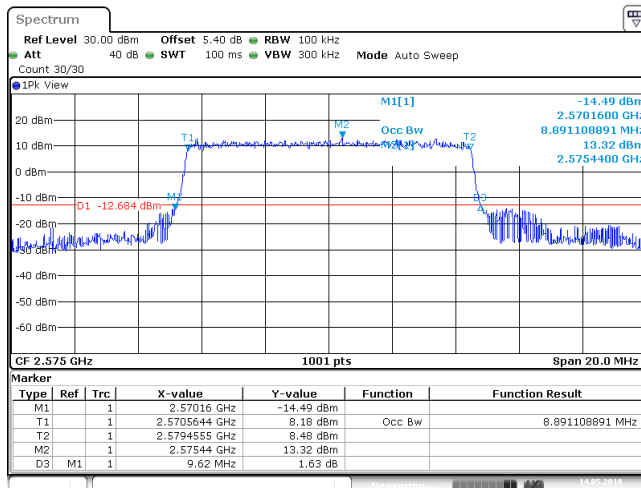
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Date: 14 MAY 2019 11:50:47

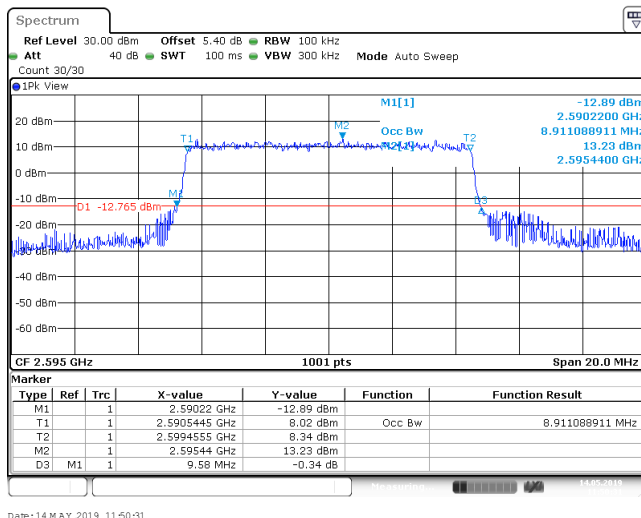
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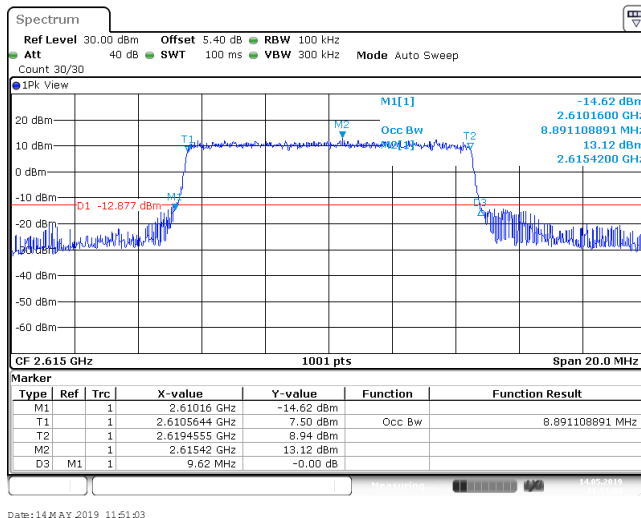
Date: 14 MAY 2019 11:50:00

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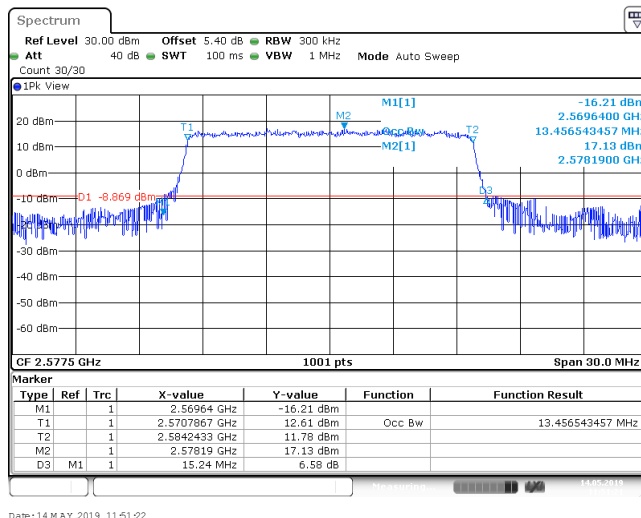
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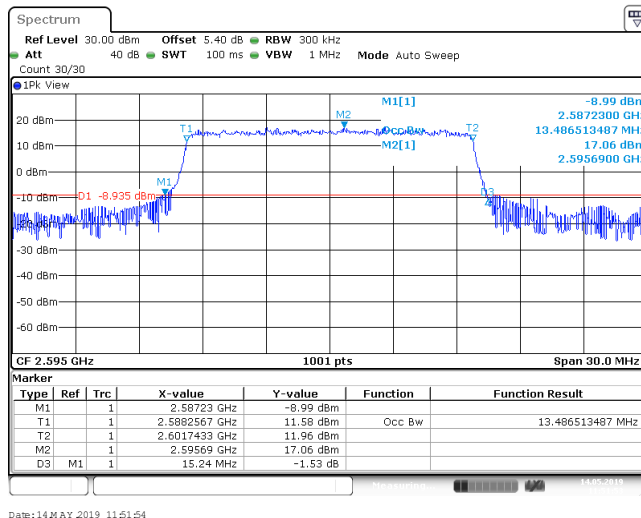
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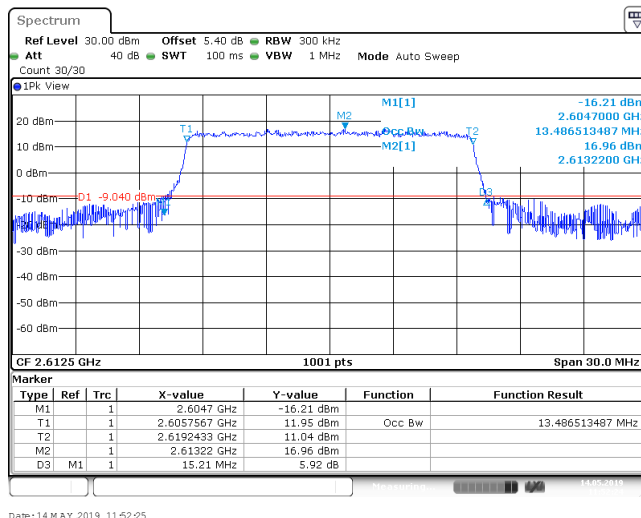


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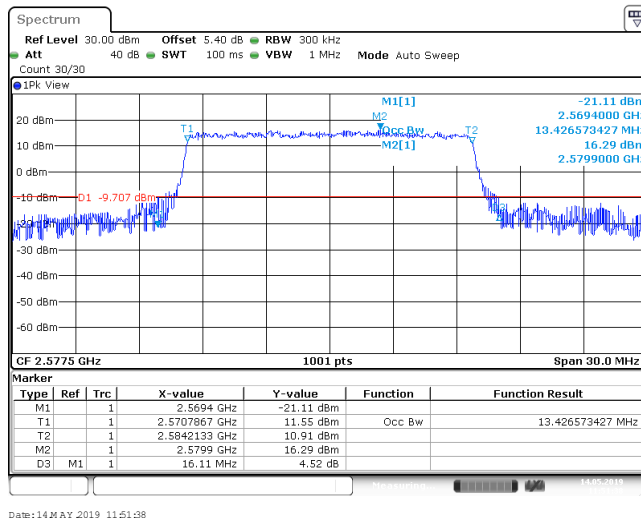
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Date: 14 MAY 2019 11:52:25

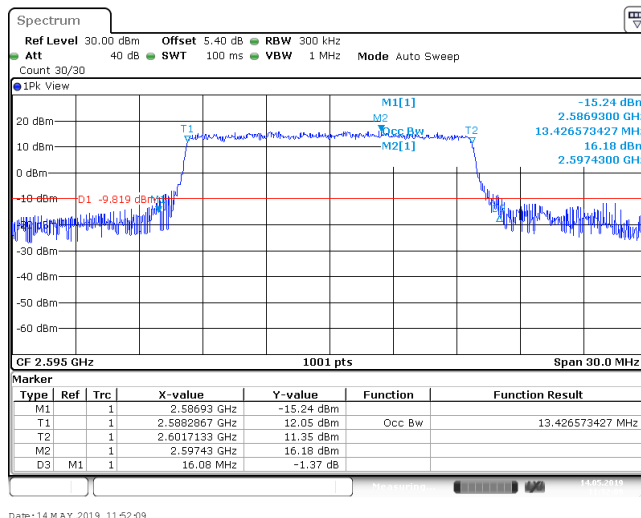
## Band38\_15MHz\_16QAM\_37825\_75RB#0



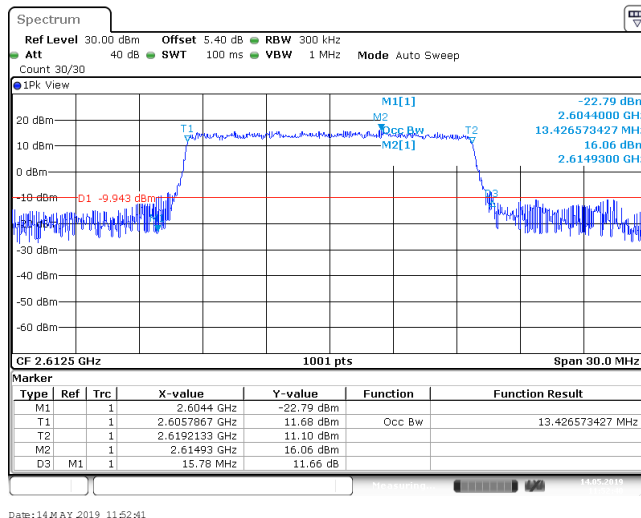
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## Band38\_15MHz\_16QAM\_38000\_75RB#0



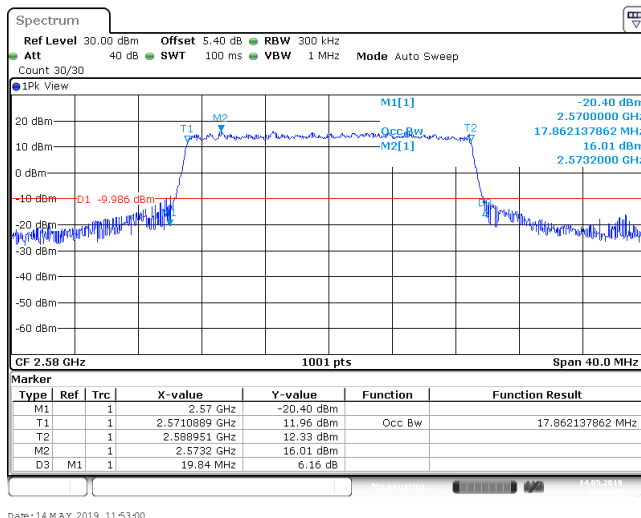


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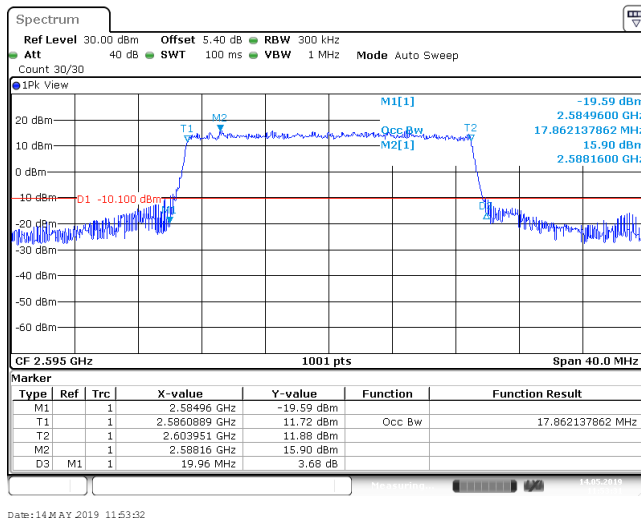


## Band38\_20MHz\_QPSK\_37850\_100RB#0





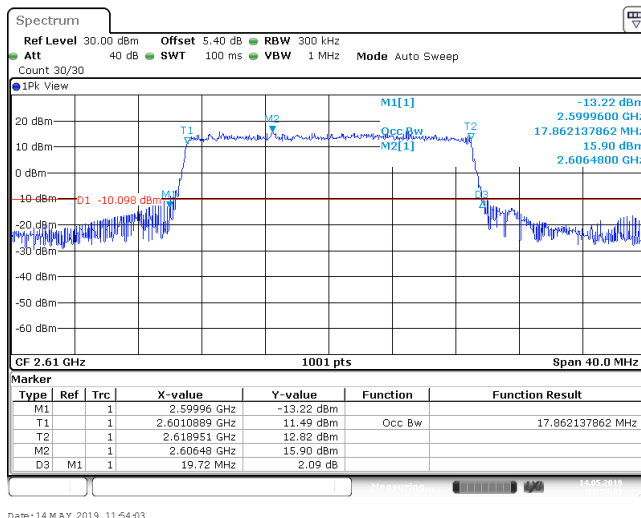
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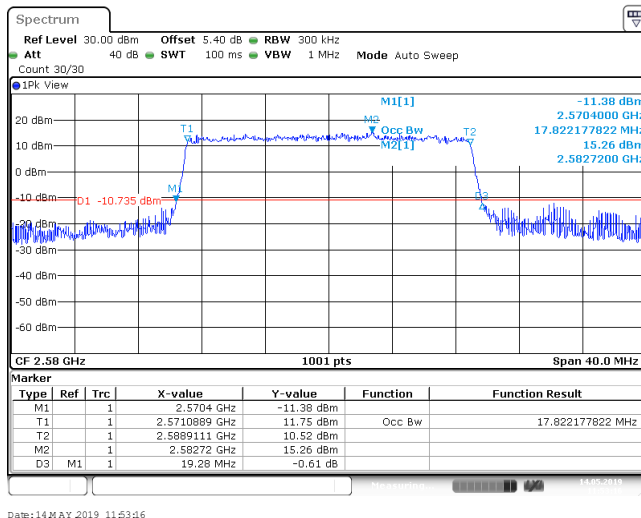
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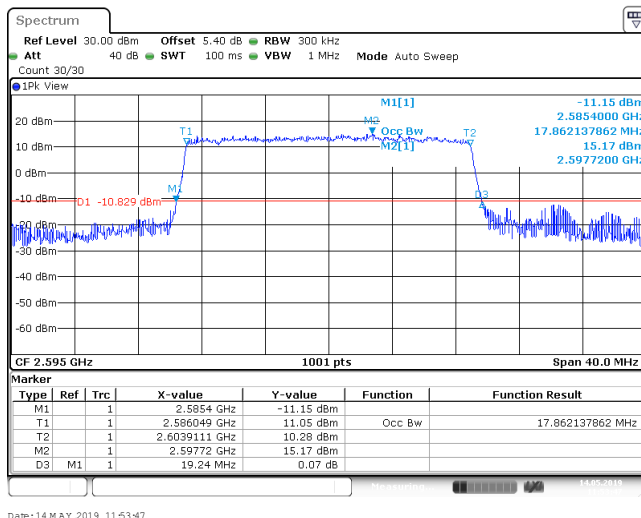


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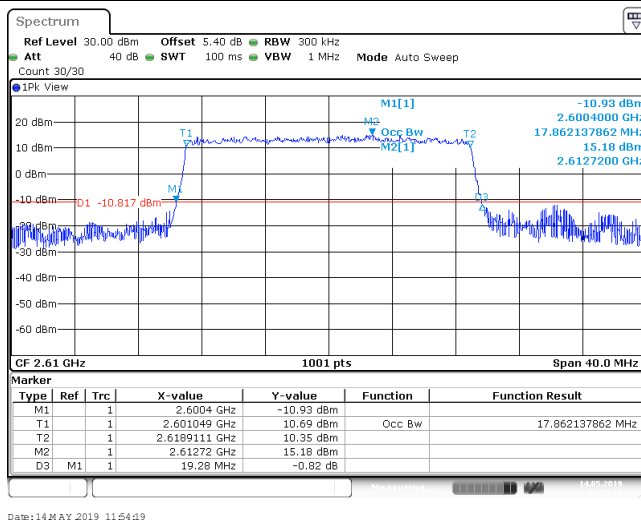


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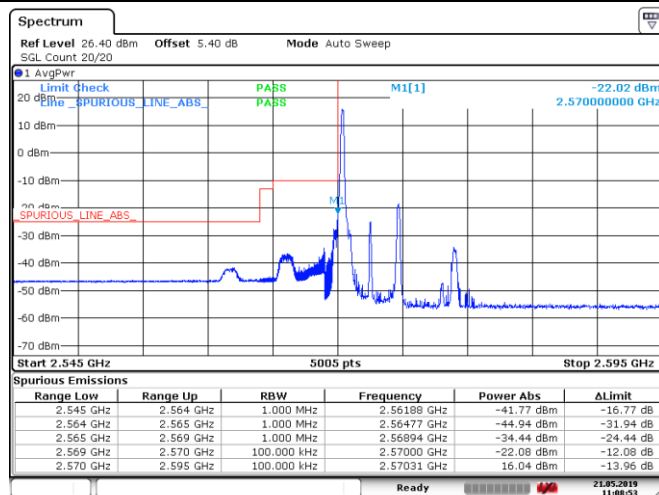
## Band38\_20MHz\_16QAM\_38150\_100RB#0



## 5. Band Edge Compliance

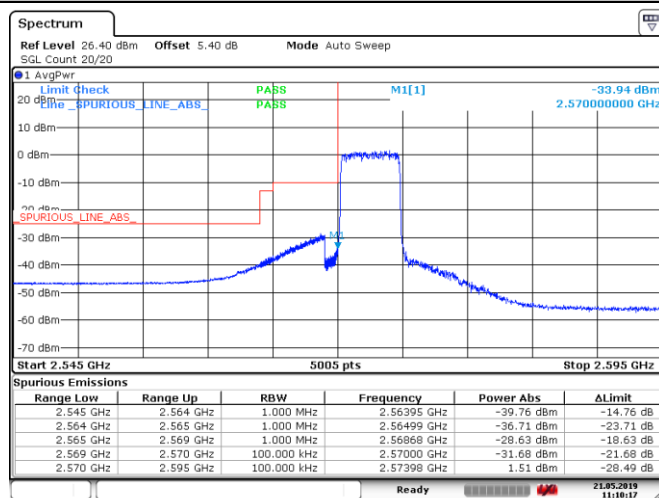
### 5.1. Test Plots

BAND38\_5MHz\_QPSK\_37775\_1RB#0



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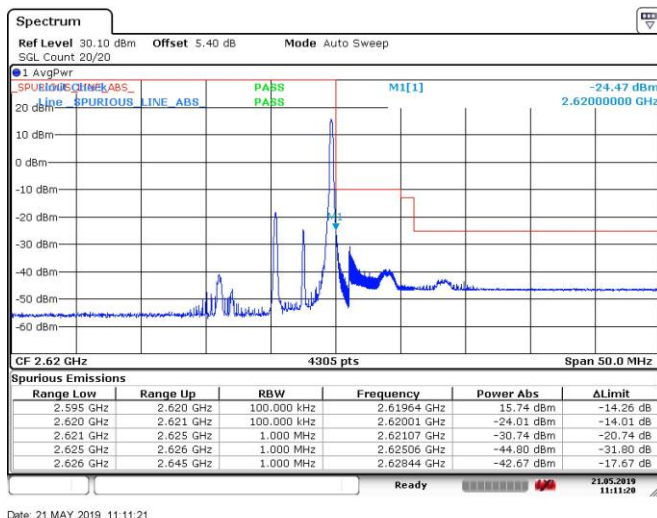
BAND38\_5MHz\_QPSK\_37775\_25RB#0



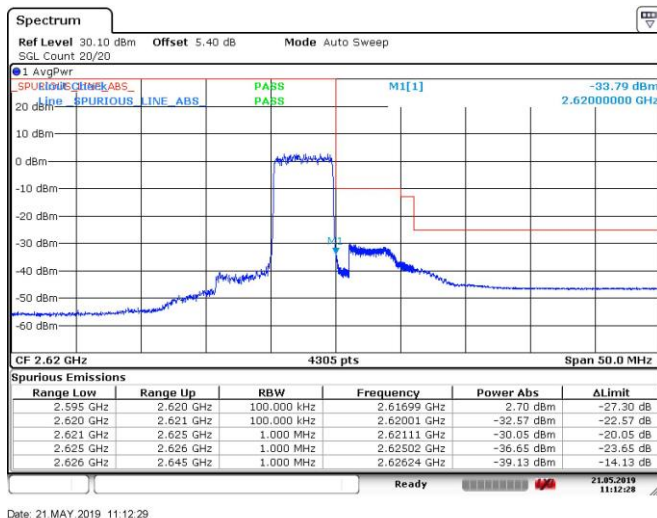
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BAND38\_5MHz\_QPSK\_38225\_1RB#24





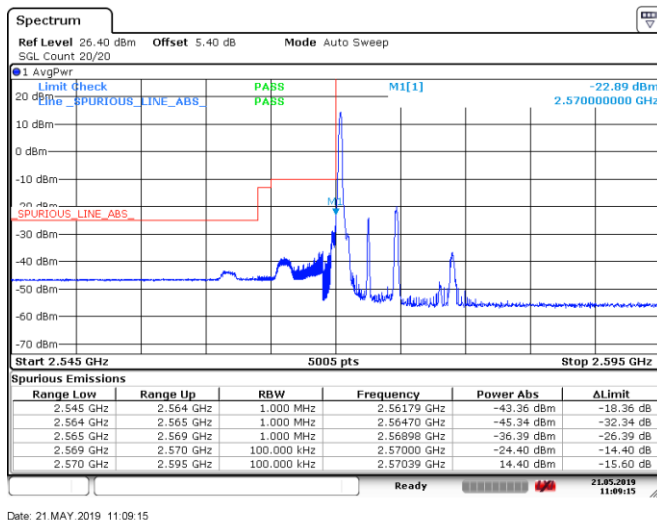
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## BAND38\_5MHz\_16QAM\_37775\_1RB#0

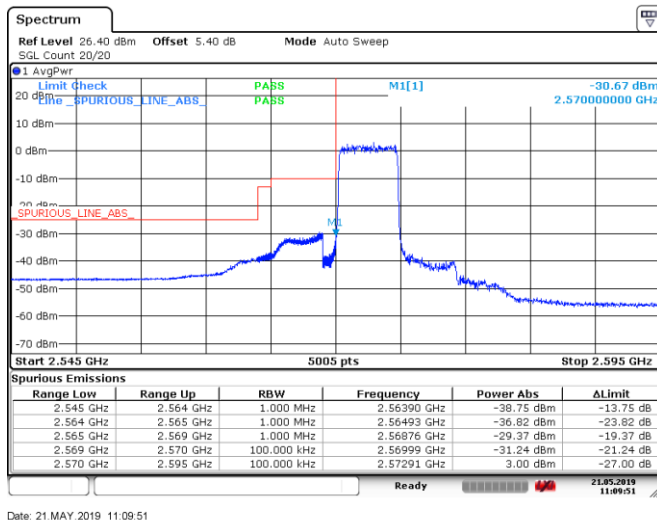






Date: 21 MAY 2019 11:09:15

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



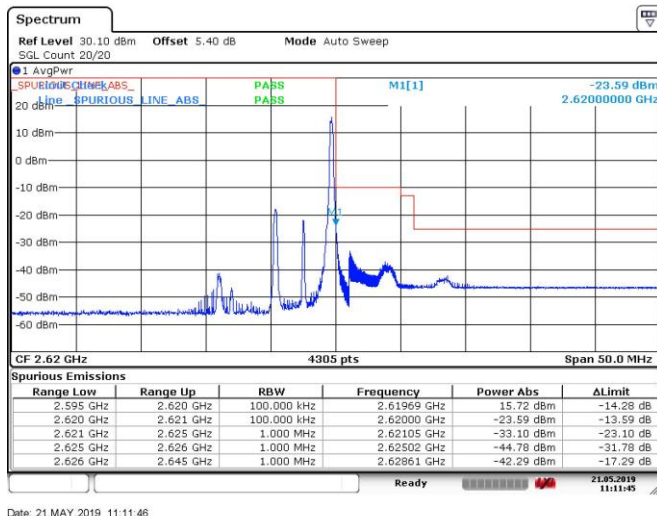
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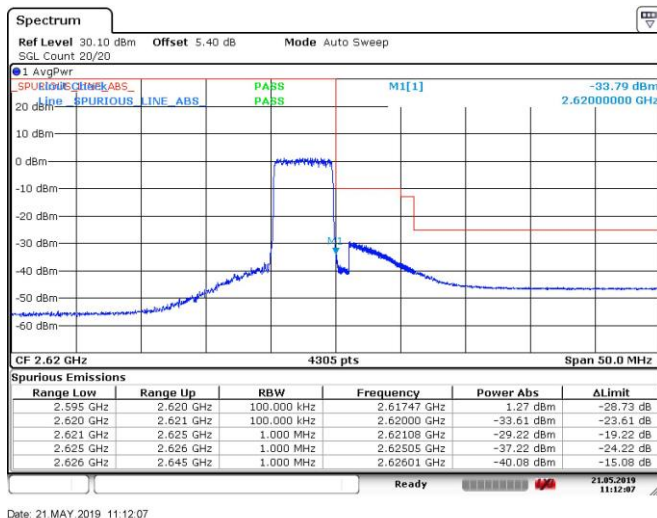


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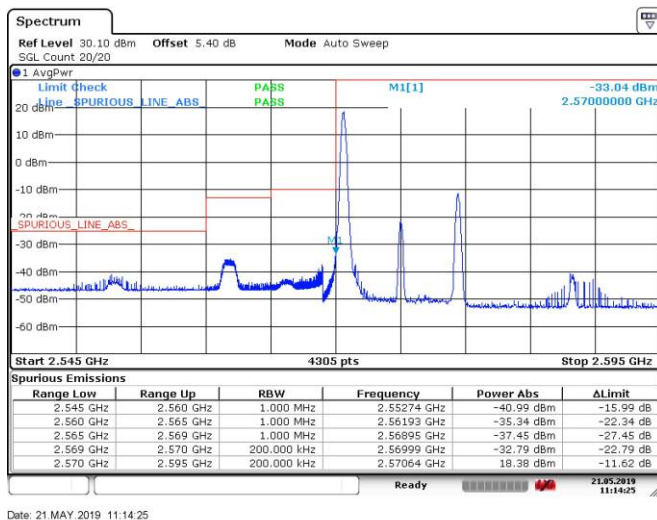


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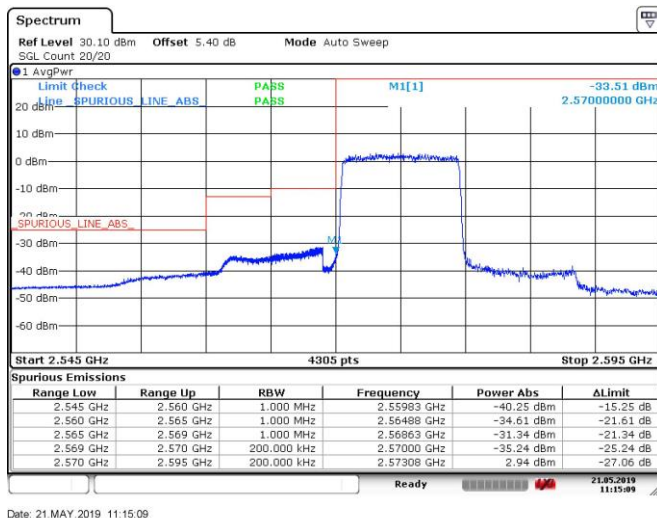


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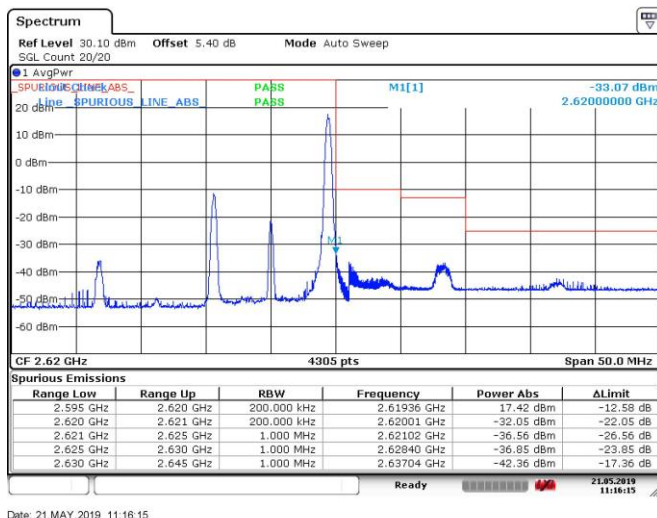


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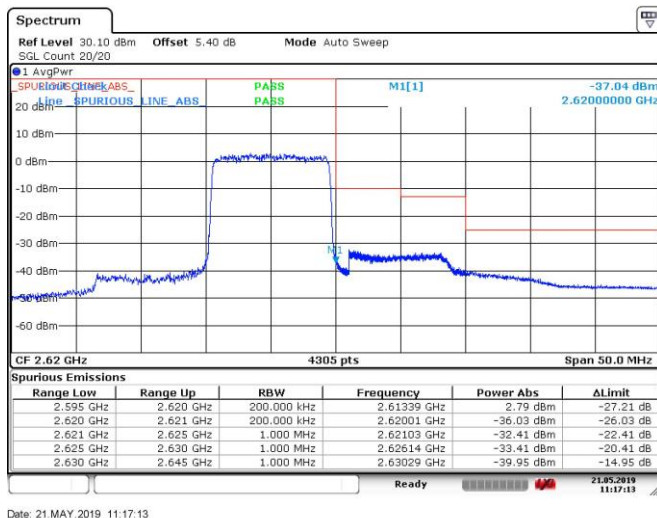


## BAND38\_10MHz\_QPSK\_38200\_1RB#49





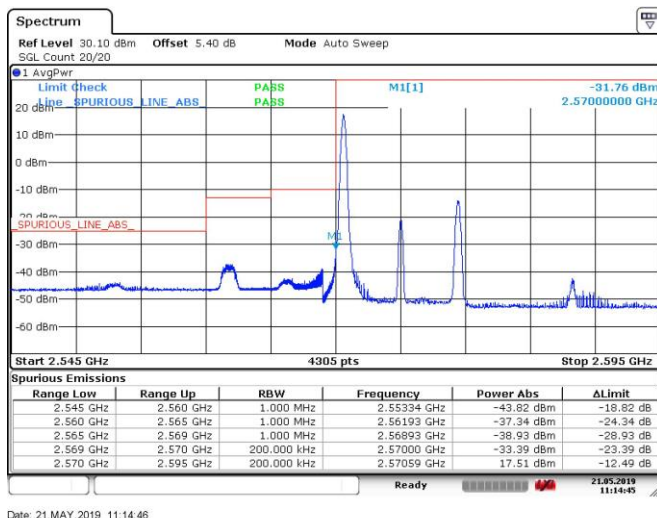
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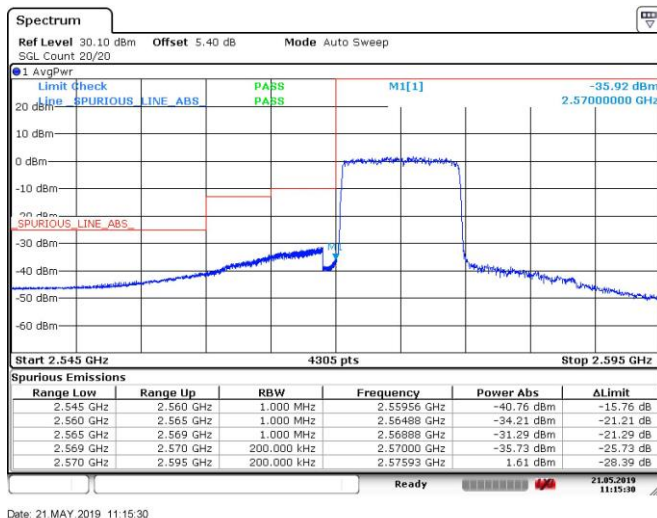
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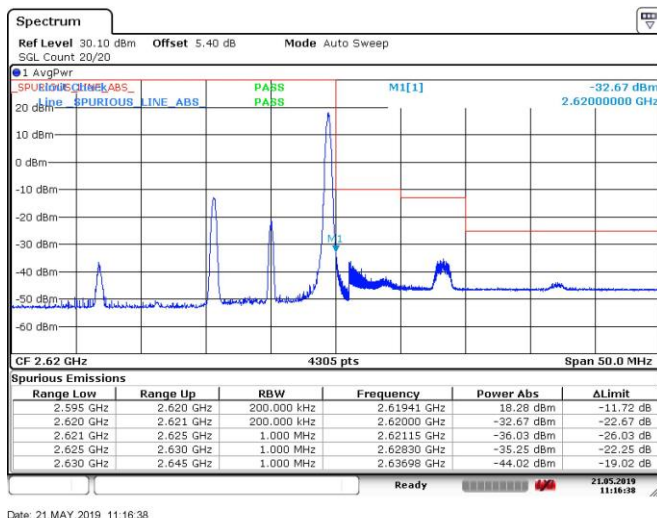


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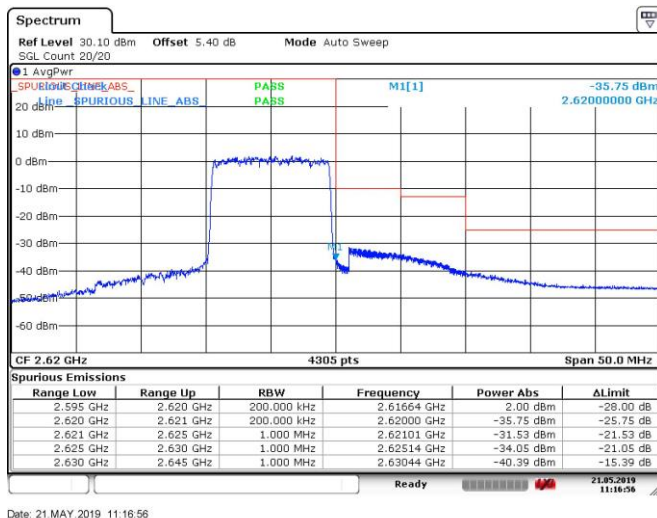


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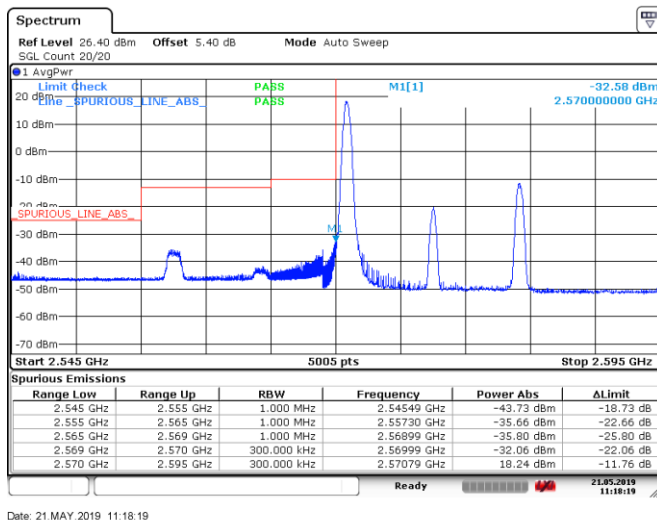


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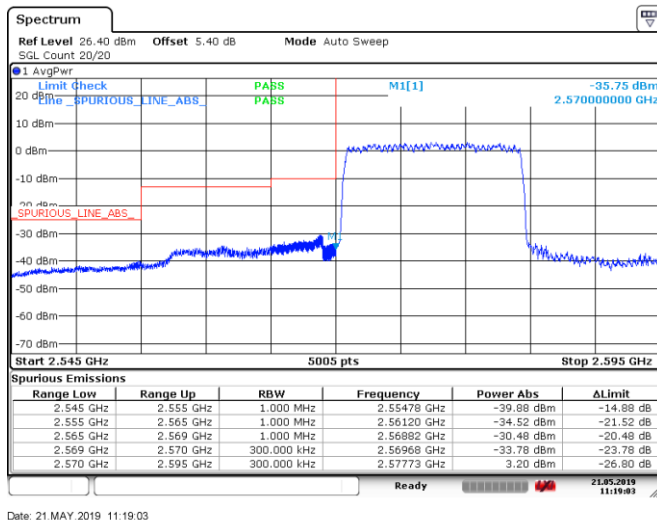


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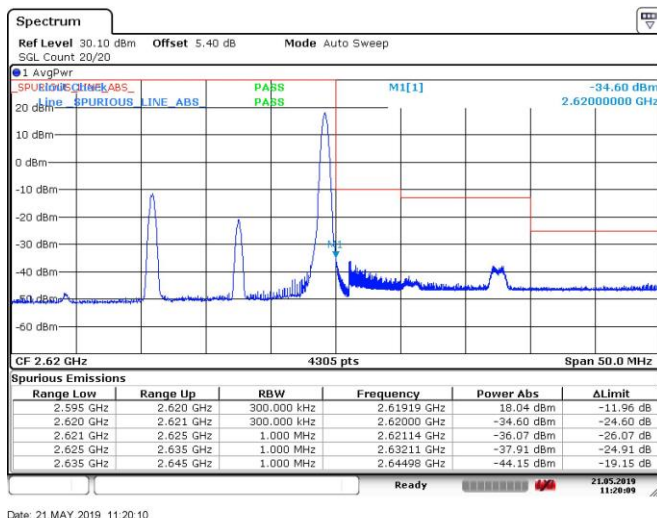


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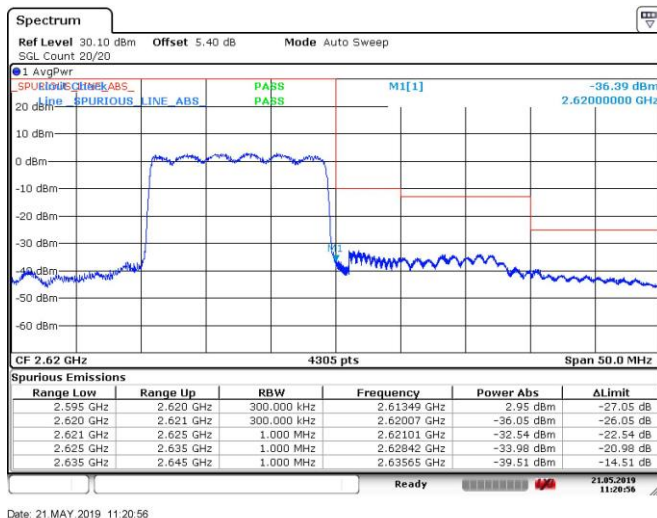


## BAND38\_15MHz\_QPSK\_38175\_1RB#74





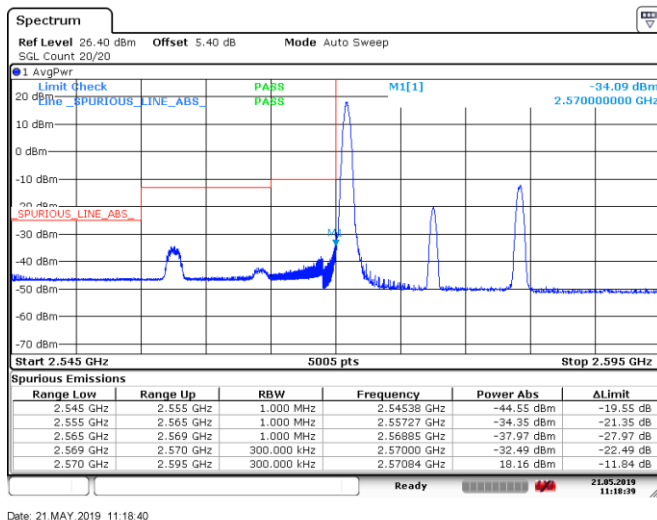
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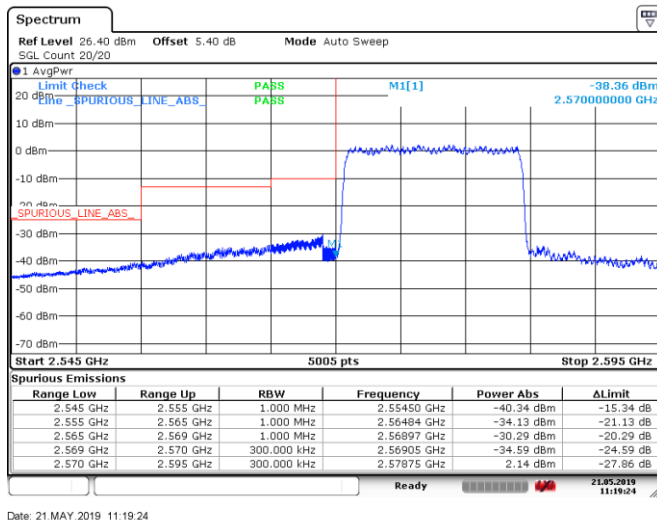






Date: 21 MAY 2019 11:18:40

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



Date: 21 MAY 2019 11:19:24

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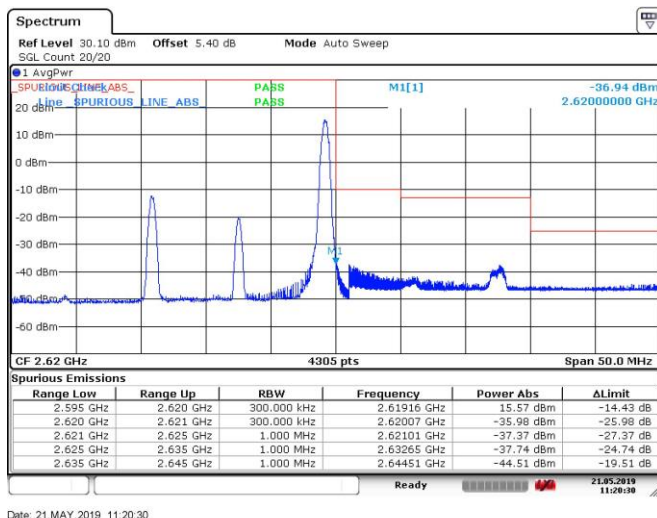


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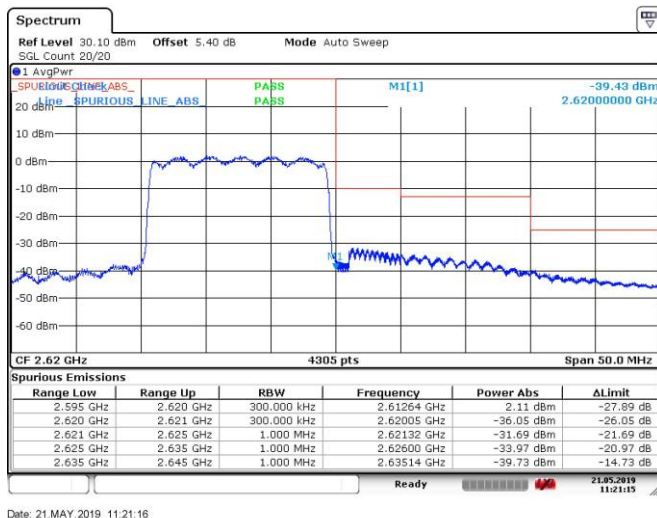
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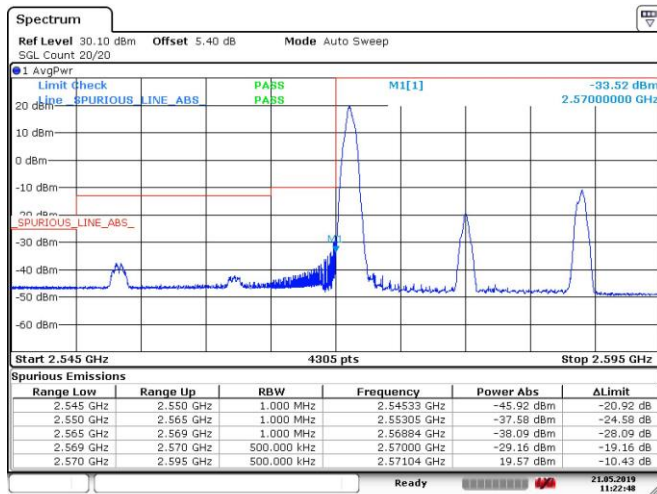


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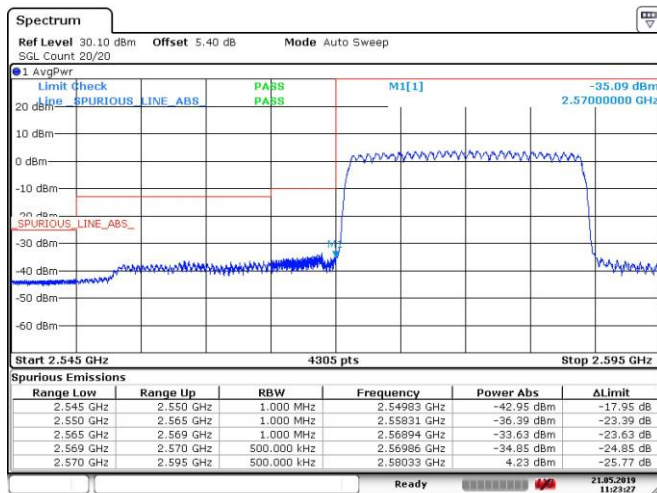
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Date: 21 MAY 2019 11:22:48

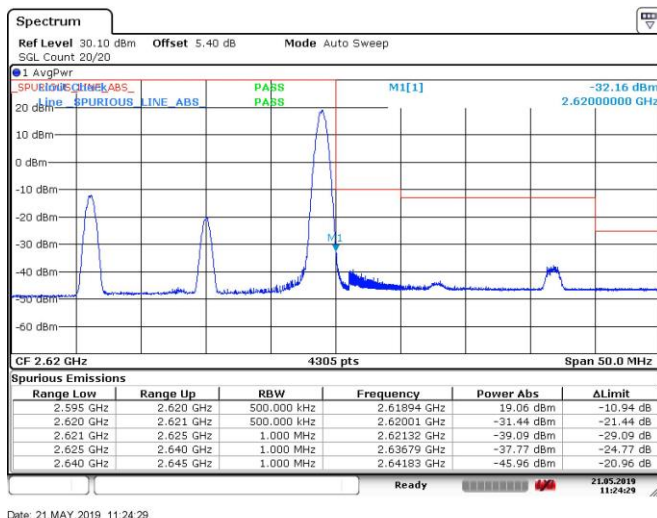
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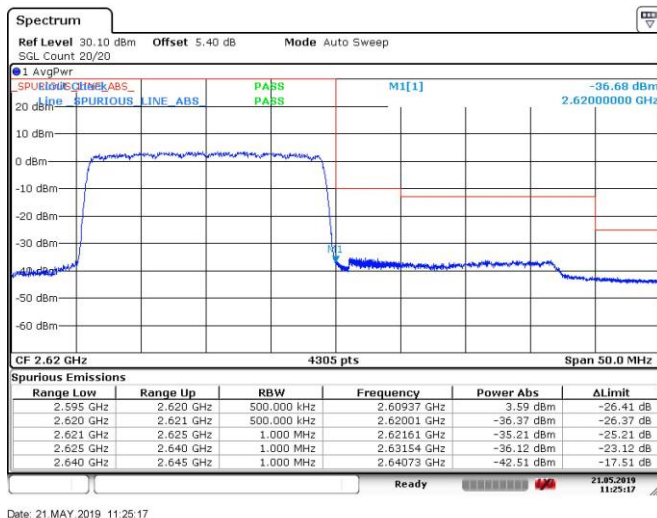
Date: 21 MAY 2019 11:23:28

## BAND38\_20MHz\_QPSK\_38150\_1RB#99





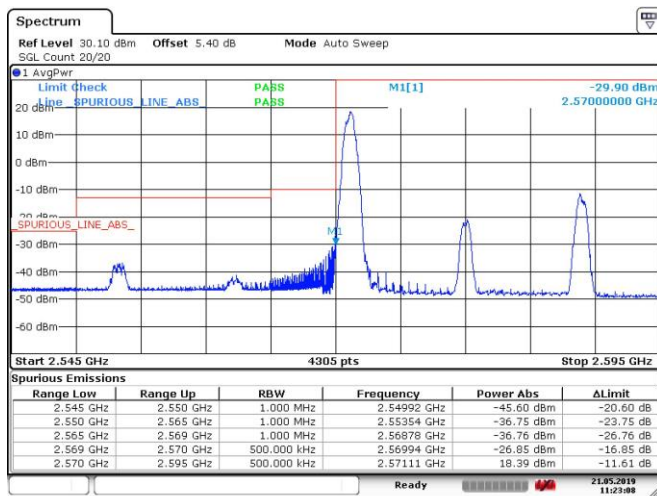
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## BAND38\_20MHz\_16QAM\_37850\_1RB#0

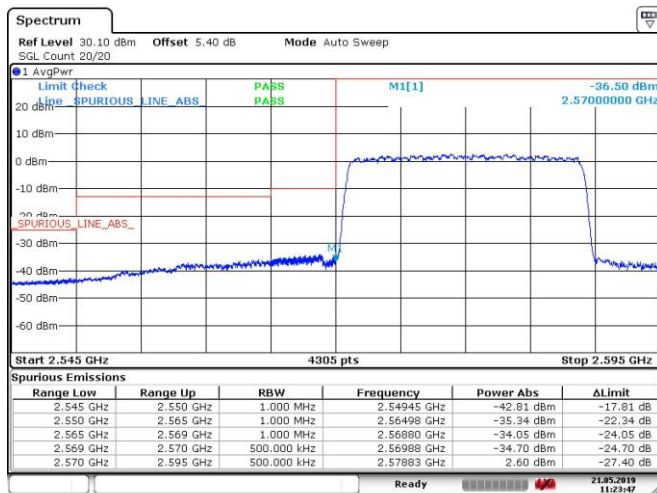






Date: 21 MAY 2019 11:23:09

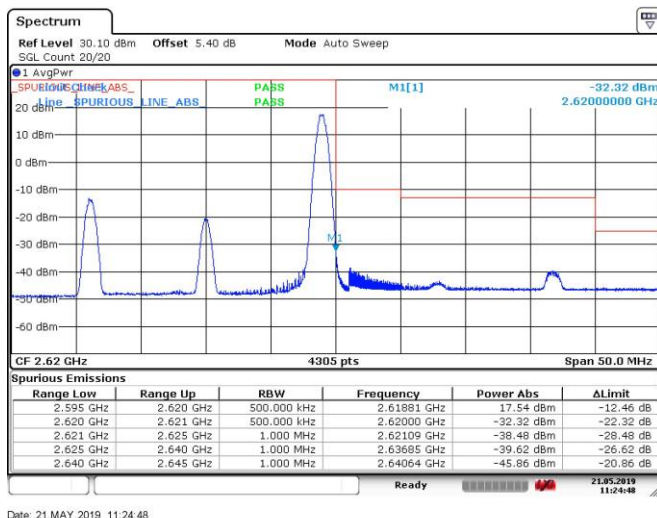
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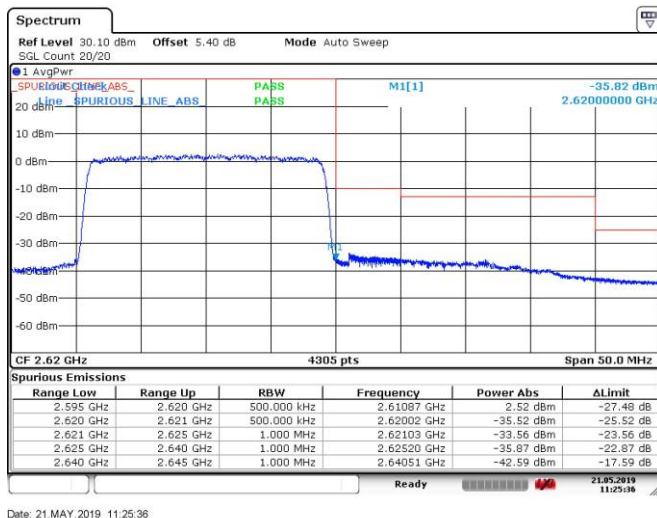
Date: 21 MAY 2019 11:23:47

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





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



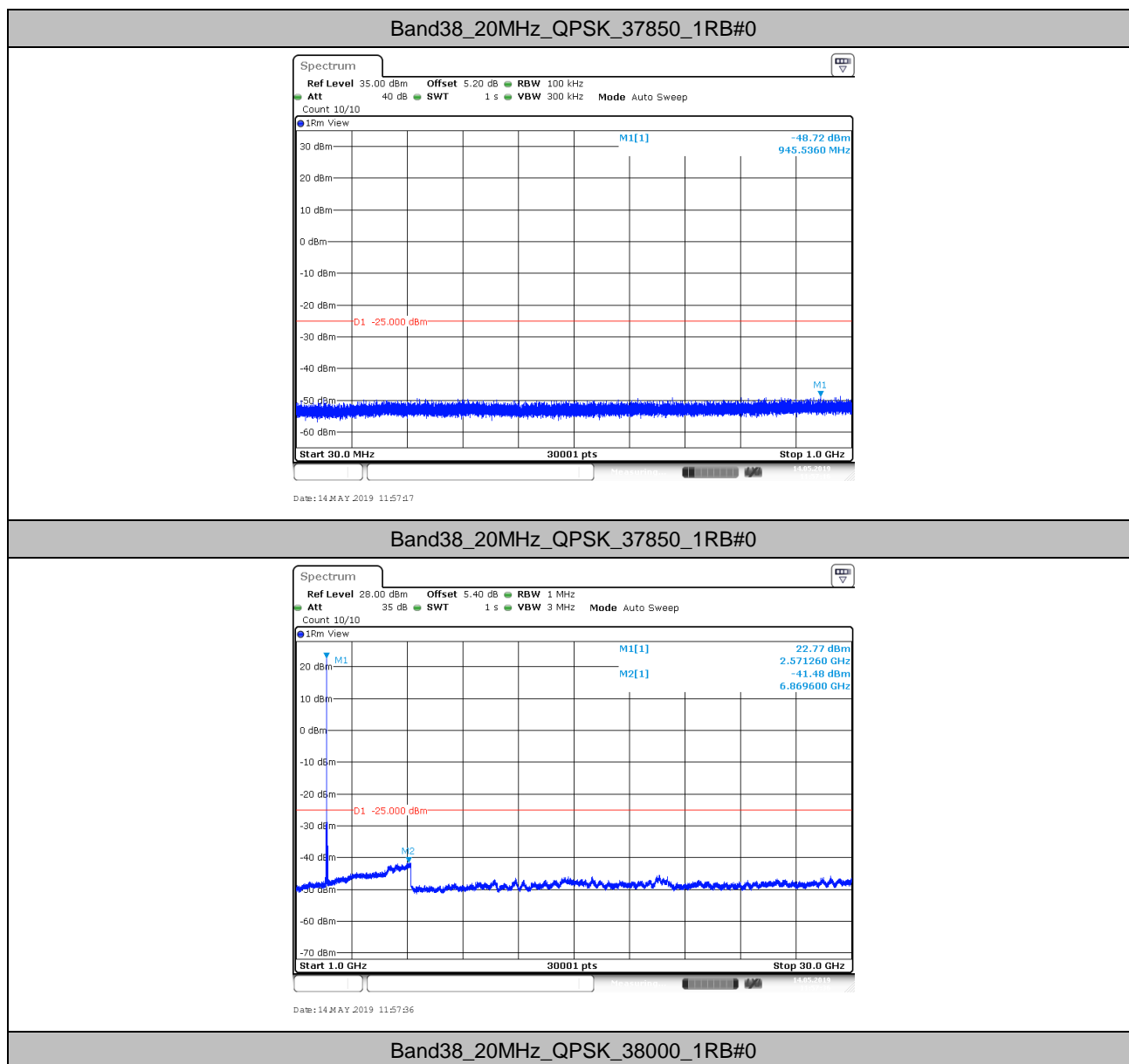


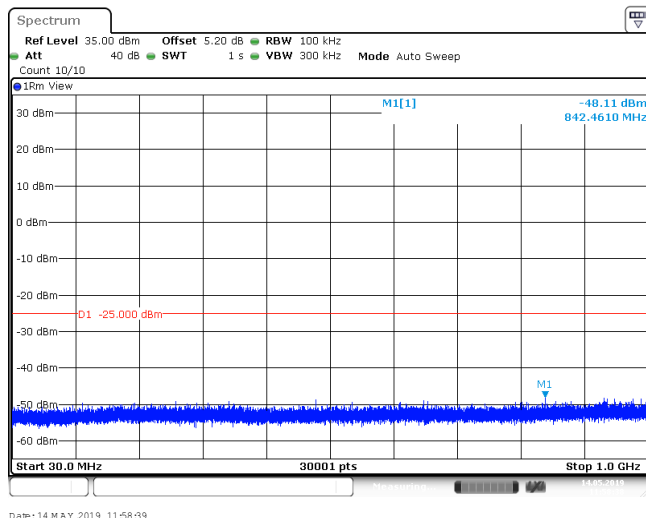
## 6. Spurious Emission at Antenna Terminal

Remark1: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of  $< RBW/2$  so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points =  $k * (\text{Span} / RBW)$ " with  $k$  between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

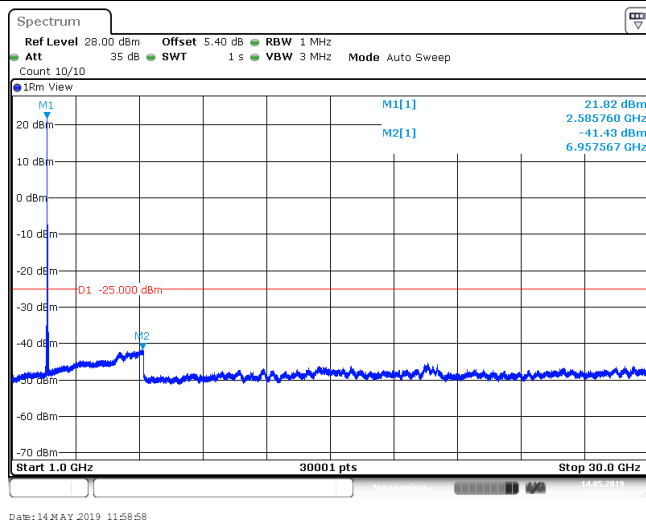
Remark2: only the worst case data displayed in this report.

### 6.1. Test Plots





**Band38\_20MHz\_QPSK\_38000\_1RB#0**



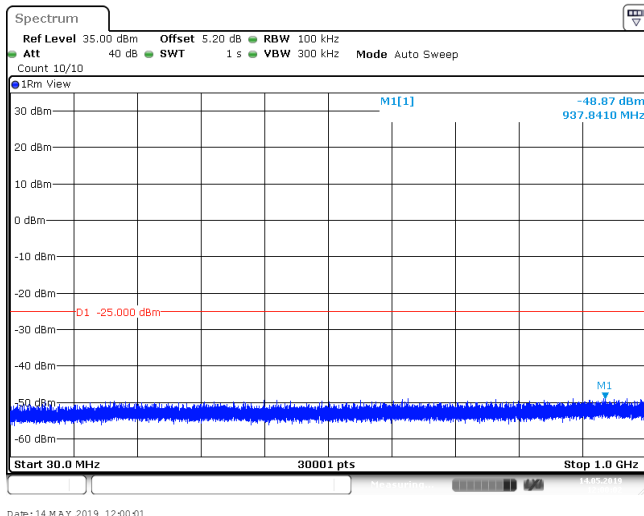
**Band38\_20MHz\_QPSK\_38150\_1RB#0**



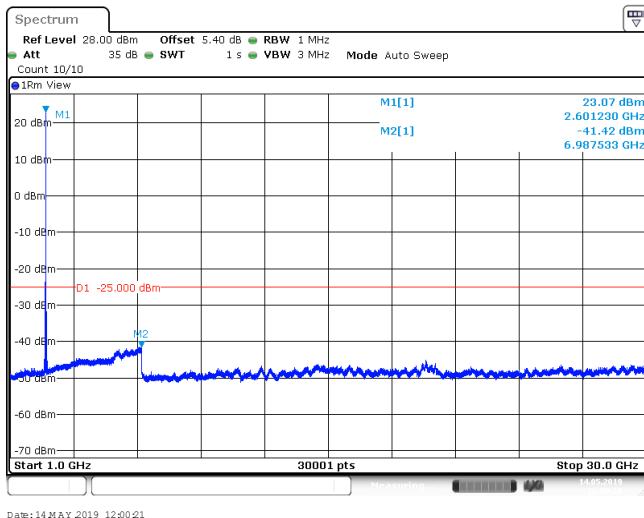
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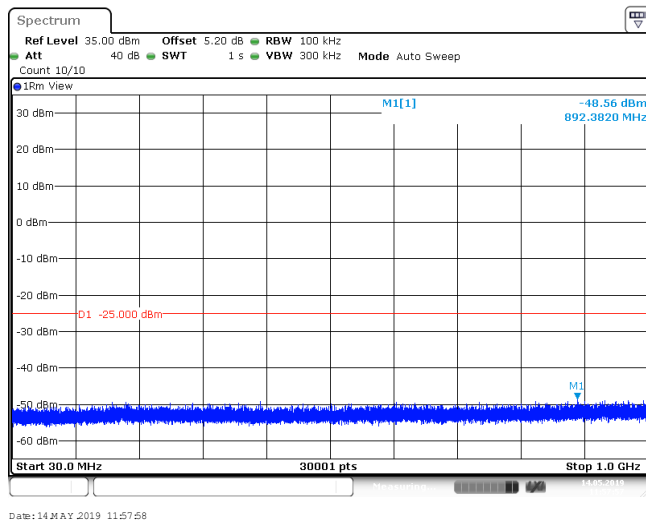


Band38\_20MHz\_16QAM\_37850\_1RB#0

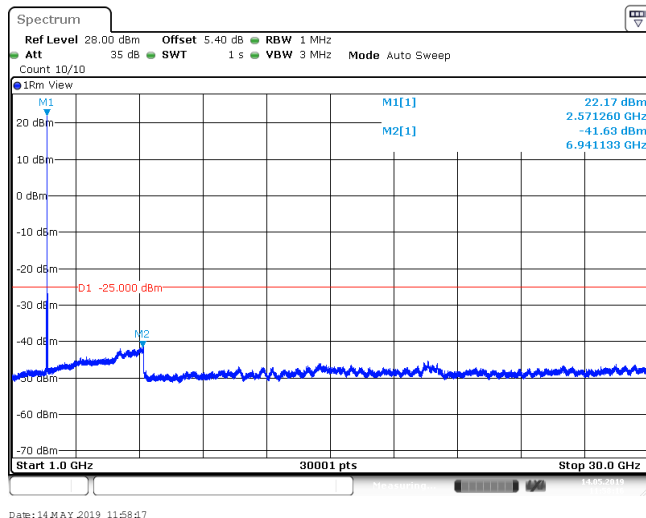


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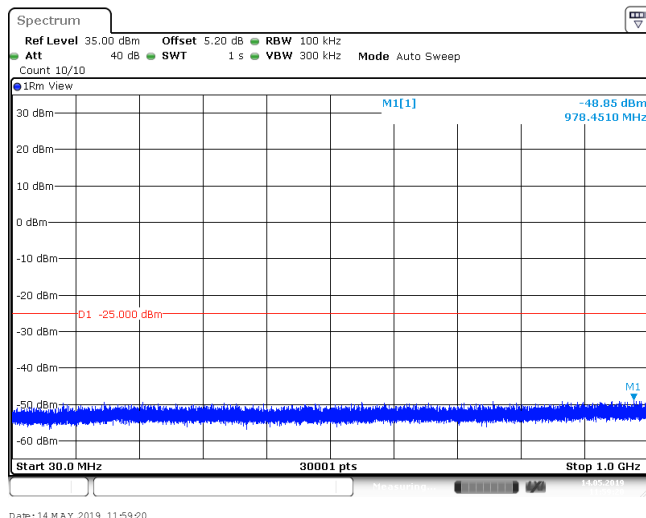
Band38\_20MHz\_16QAM\_37850\_1RB#0



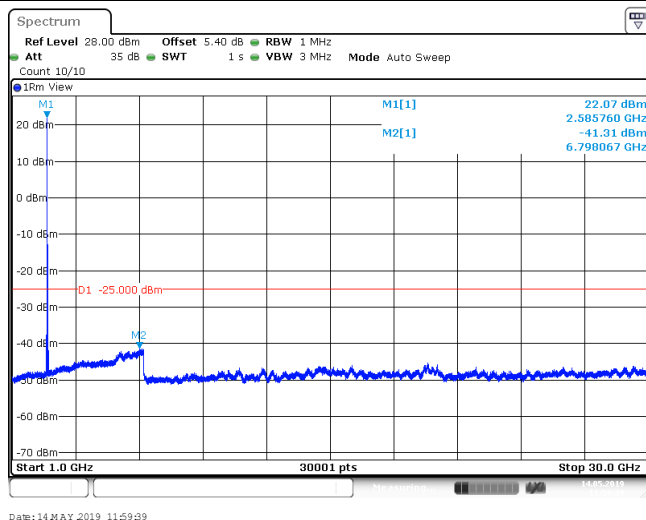
Band38\_20MHz\_16QAM\_38000\_1RB#0



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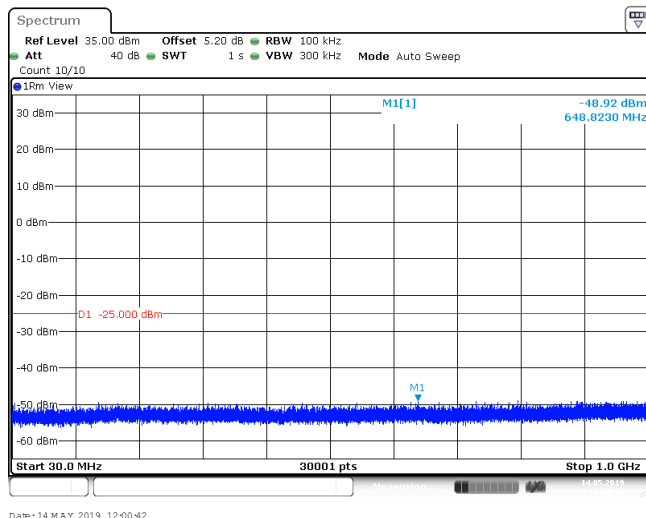
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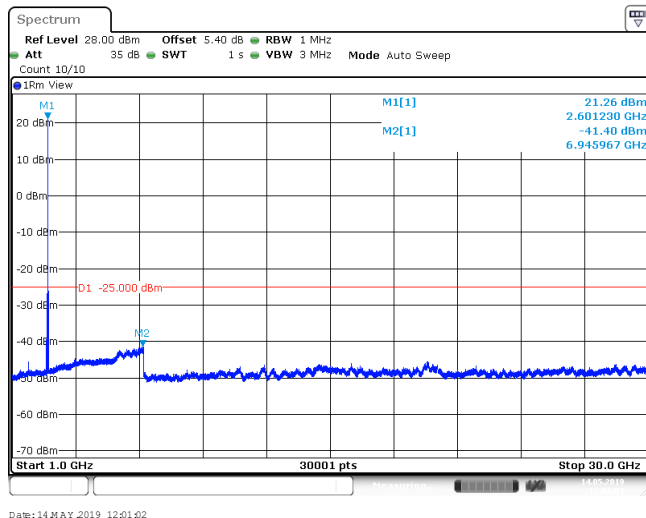
Band38\_20MHz\_16QAM\_38150\_1RB#0



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## Band38\_20MHz\_16QAM\_38150\_1RB#0



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## 7. Field Strength of Spurious Radiation

### 7.1. Test BAND = LTE Band 38

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

##### 7.1.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
64.100000	-81.73	-25.00	56.73	Vertical
110.400000	-78.80	-25.00	53.80	Vertical
575.995833	-77.00	-25.00	52.00	Vertical
5142.075000	-60.15	-25.00	35.15	Vertical
7971.850000	-63.64	-25.00	38.64	Vertical
10284.875000	-50.57	-25.00	25.57	Vertical
63.450000	-77.67	-25.00	52.67	Horizontal
575.995833	-76.41	-25.00	51.41	Horizontal
691.175000	-75.78	-25.00	50.78	Horizontal
5142.075000	-63.66	-25.00	38.66	Horizontal
7713.475000	-59.89	-25.00	34.89	Horizontal
10612.800000	-62.89	-25.00	37.89	Horizontal

##### 7.1.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
64.100000	-81.71	-25.00	56.71	Vertical
104.250000	-85.75	-25.00	60.75	Vertical
949.216667	-78.02	-25.00	53.02	Vertical
5172.300000	-59.31	-25.00	34.31	Vertical
7922.125000	-63.97	-25.00	38.97	Vertical
10344.675000	-49.48	-25.00	24.48	Vertical
62.500000	-77.02	-25.00	52.02	Horizontal
575.995833	-75.68	-25.00	50.68	Horizontal
691.175000	-75.32	-25.00	50.32	Horizontal
5171.975000	-62.60	-25.00	37.60	Horizontal
7758.325000	-60.52	-25.00	35.52	Horizontal
10644.975000	-62.91	-25.00	37.91	Horizontal



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### 7.1.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
62.500000	-77.02	-25.00	52.02	Vertical
575.995833	-75.68	-25.00	50.68	Vertical
691.175000	-75.32	-25.00	50.32	Vertical
5171.975000	-62.60	-25.00	37.60	Vertical
7758.325000	-60.52	-25.00	35.52	Vertical
10644.975000	-62.91	-25.00	37.91	Vertical
62.900000	-77.71	-25.00	52.71	Horizontal
575.950000	-76.21	-25.00	51.21	Horizontal
691.175000	-75.32	-25.00	50.32	Horizontal
5202.200000	-60.66	-25.00	35.66	Horizontal
7802.525000	-62.95	-25.00	37.95	Horizontal
10404.150000	-62.45	-25.00	37.45	Horizontal

#### Remark:

The disturbance below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the worst case data had been displayed.

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	8.80	0.003411	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	VN	NT	8.10	0.003140	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	VH	NT	3.30	0.001279	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	VL	NT	6.50	0.002505	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	VN	NT	7.80	0.003006	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	VH	NT	-0.50	-0.000193	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	VL	NT	6.30	0.002414	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	VN	NT	5.10	0.001954	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	VH	NT	2.00	0.000766	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	VL	NT	5.30	0.002054	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	VN	NT	7.20	0.002791	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	VH	NT	6.50	0.002519	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	VL	NT	1.40	0.000539	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	VN	NT	9.70	0.003738	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	VH	NT	6.10	0.002351	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	VL	NT	7.20	0.002759	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	VN	NT	0.60	0.000230	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	VH	NT	-1.10	-0.000421	±2.5	PASS

### 8.2. Frequency Vs Temperature

Temperature										
BAND	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band38	20MHz	QPSK	37850	100RB#0	NV	-30	7.80	0.003023	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	-20	7.60	0.002946	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	0	5.00	0.001938	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	10	3.00	0.001163	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	20	3.00	0.001163	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	30	3.30	0.001279	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	40	6.70	0.002597	±2.5	PASS
Band38	20MHz	QPSK	37850	100RB#0	NV	50	2.40	0.000930	±2.5	PASS



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Band38	20MHz	QPSK	38000	100RB#0	NV	-30	5.90	0.002274	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	-20	5.20	0.002004	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	0	0.40	0.000154	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	10	5.70	0.002197	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	20	3.50	0.001349	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	30	1.10	0.000424	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	40	-2.10	-0.000809	±2.5	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	50	9.60	0.003699	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	-30	7.10	0.002720	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	-20	5.40	0.002069	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	0	7.10	0.002720	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	10	6.60	0.002529	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	20	-0.90	-0.000345	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	30	1.70	0.000651	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	40	8.50	0.003257	±2.5	PASS
Band38	20MHz	QPSK	38150	100RB#0	NV	50	7.60	0.002912	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	-30	7.30	0.002829	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	-20	3.20	0.001240	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	0	9.00	0.003488	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	10	7.30	0.002829	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	20	5.80	0.002248	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	30	8.80	0.003411	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	40	1.70	0.000659	±2.5	PASS
Band38	20MHz	16QAM	37850	100RB#0	NV	50	7.10	0.002752	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	-30	4.80	0.001850	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	-20	8.20	0.003160	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	0	1.40	0.000539	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	10	8.00	0.003083	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	20	3.20	0.001233	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	30	8.50	0.003276	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	40	6.70	0.002582	±2.5	PASS
Band38	20MHz	16QAM	38000	100RB#0	NV	50	3.40	0.001310	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	-30	1.40	0.000536	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	-20	5.30	0.002031	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	0	4.70	0.001801	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	10	1.90	0.000728	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	20	5.30	0.002031	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	30	2.20	0.000843	±2.5	PASS



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Band38	20MHz	16QAM	38150	100RB#0	NV	40	4.40	0.001686	±2.5	PASS
Band38	20MHz	16QAM	38150	100RB#0	NV	50	5.00	0.001916	±2.5	PASS

The End

