



# Appendix B

## E-UTRA BAND 7



## **CONTENT**

	Page
<b>1 EFFECTIVE (ISOTROPIC) RADIATED POWER OUTPUT DATA .....</b>	<b>3</b>
<b>2 PEAK-TO-AVERAGE RATIO.....</b>	<b>15</b>
2.1 FOR LTE .....	15
2.1.1 <i>Test Band = LTE BAND 7</i> .....	15
<b>3 MODULATION CHARACTERISTICS.....</b>	<b>22</b>
3.1 FOR LTE .....	22
3.1.1 <i>Test Band = LTE BAND 7</i> .....	22
<b>4 BANDWIDTH .....</b>	<b>24</b>
4.1 FOR LTE .....	25
4.1.1 <i>Test Band = LTE BAND 7</i> .....	25
<b>5 BAND EDGES COMPLIANCE.....</b>	<b>49</b>
5.1 FOR LTE .....	49
5.1.1 <i>Test Band = LTE BAND 7</i> .....	49
<b>6 SPURIOUS EMISSION AT ANTENNA TERMINAL.....</b>	<b>74</b>
6.1 FOR LTE .....	74
6.1.1 <i>Test Band = LTE BAND 7</i> .....	74
<b>7 FIELD STRENGTH OF SPURIOUS RADIATION .....</b>	<b>81</b>
7.1 FOR LTE .....	81
7.1.1 <i>Test Band = LTE BAND 7</i> .....	81
<b>8 FREQUENCY STABILITY .....</b>	<b>83</b>
8.1 FREQUENCY ERROR VS. VOLTAGE.....	83
8.2 FREQUENCY ERROR VS. TEMPERATURE.....	84



# 1 Effective (Isotropic) Radiated Power Output Data

## Effective Isotropic Radiated Power of Transmitter (EIRP) for LTE BAND 7

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 7	LTE/TM1	5M	LCH	RB1#0	23.14	25.14	33.00	PASS
				RB1#13	23.25	25.25	33.00	PASS
				RB1#24	23.06	25.06	33.00	PASS
				RB12#0	22.36	24.36	33.00	PASS
				RB12#6	22.3	24.3	33.00	PASS
				RB12#13	22.25	24.25	33.00	PASS
				RB25#0	22.3	24.3	33.00	PASS
			MCH	RB1#0	23.26	25.26	33.00	PASS
				RB1#13	23.28	25.28	33.00	PASS
				RB1#24	23.27	25.27	33.00	PASS
				RB12#0	22.52	24.52	33.00	PASS
				RB12#6	22.5	24.5	33.00	PASS
				RB12#13	22.47	24.47	33.00	PASS
				RB25#0	22.44	24.44	33.00	PASS
			HCH	RB1#0	23.44	25.44	33.00	PASS
				RB1#13	23.19	25.19	33.00	PASS
				RB1#24	23.09	25.09	33.00	PASS
				RB12#0	22.85	24.85	33.00	PASS
				RB12#6	22.72	24.72	33.00	PASS
				RB12#13	22.64	24.64	33.00	PASS
				RB25#0	22.63	24.63	33.00	PASS



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

Report No.: SZEM180500453501  
Page: 4 of 86

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 7	LTE/TM2	5M	LCH	RB1#0	22.53	24.53	33.00	PASS
				RB1#13	22.57	24.57	33.00	PASS
				RB1#24	22.27	24.27	33.00	PASS
				RB12#0	21.36	23.36	33.00	PASS
				RB12#6	21.22	23.22	33.00	PASS
				RB12#13	21.27	23.27	33.00	PASS
				RB25#0	21.27	23.27	33.00	PASS
			MCH	RB1#0	22.35	24.35	33.00	PASS
				RB1#13	22.66	24.66	33.00	PASS
				RB1#24	22.48	24.48	33.00	PASS
				RB12#0	21.56	23.56	33.00	PASS
				RB12#6	21.52	23.52	33.00	PASS
				RB12#13	21.52	23.52	33.00	PASS
				RB25#0	21.48	23.48	33.00	PASS
			HCH	RB1#0	23.35	25.35	33.00	PASS
				RB1#13	22.43	24.43	33.00	PASS
				RB1#24	22.78	24.78	33.00	PASS
				RB12#0	21.98	23.98	33.00	PASS
				RB12#6	21.52	23.52	33.00	PASS
				RB12#13	21.71	23.71	33.00	PASS
				RB25#0	21.84	23.84	33.00	PASS



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

Report No.: SZEM180500453501  
Page: 5 of 86

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 7	LTE/TM3	5M	LCH	RB1#0	21.89	23.89	33.00	PASS
				RB1#13	21.9	23.9	33.00	PASS
				RB1#24	21.77	23.77	33.00	PASS
				RB12#0	20.97	22.97	33.00	PASS
				RB12#6	20.85	22.85	33.00	PASS
				RB12#13	20.82	22.82	33.00	PASS
				RB25#0	20.87	22.87	33.00	PASS
			MCH	RB1#0	22.2	24.2	33.00	PASS
				RB1#13	22.22	24.22	33.00	PASS
				RB1#24	22.02	24.02	33.00	PASS
				RB12#0	21.01	23.01	33.00	PASS
				RB12#6	21.06	23.06	33.00	PASS
				RB12#13	21.06	23.06	33.00	PASS
				RB25#0	21.1	23.1	33.00	PASS
			HCH	RB1#0	22.38	24.38	33.00	PASS
				RB1#13	22.14	24.14	33.00	PASS
				RB1#24	22.11	24.11	33.00	PASS
				RB12#0	21.29	23.29	33.00	PASS
				RB12#6	21.27	23.27	33.00	PASS
				RB12#13	21.12	23.12	33.00	PASS
				RB25#0	21.32	23.32	33.00	PASS



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

Report No.: SZEM180500453501  
Page: 6 of 86

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 7	LTE/TM1	10M	LCH	RB1#0	23.25	25.25	33.00	PASS
				RB1#25	23.08	25.08	33.00	PASS
				RB1#49	23.14	25.14	33.00	PASS
				RB25#0	22.43	24.43	33.00	PASS
				RB25#13	22.37	24.37	33.00	PASS
				RB25#25	22.26	24.26	33.00	PASS
				RB50#0	22.43	24.43	33.00	PASS
			MCH	RB1#0	23.59	25.59	33.00	PASS
				RB1#25	23.29	25.29	33.00	PASS
				RB1#49	23.26	25.26	33.00	PASS
				RB25#0	22.64	24.64	33.00	PASS
				RB25#13	22.55	24.55	33.00	PASS
				RB25#25	22.5	24.5	33.00	PASS
				RB50#0	22.46	24.46	33.00	PASS
			HCH	RB1#0	23.8	25.8	33.00	PASS
				RB1#25	23.4	25.4	33.00	PASS
				RB1#49	23.17	25.17	33.00	PASS
				RB25#0	22.73	24.73	33.00	PASS
				RB25#13	22.67	24.67	33.00	PASS
				RB25#25	22.41	24.41	33.00	PASS
				RB50#0	22.95	24.95	33.00	PASS



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

Report No.: SZEM180500453501  
Page: 7 of 86

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 7	LTE/TM2	10M	LCH	RB1#0	22.9	24.9	33.00	PASS
				RB1#25	23.15	25.15	33.00	PASS
				RB1#49	22.54	24.54	33.00	PASS
				RB25#0	21.53	23.53	33.00	PASS
				RB25#13	21.47	23.47	33.00	PASS
				RB25#25	21.33	23.33	33.00	PASS
				RB50#0	21.36	23.36	33.00	PASS
			MCH	RB1#0	22.57	24.57	33.00	PASS
				RB1#25	22.92	24.92	33.00	PASS
				RB1#49	22.53	24.53	33.00	PASS
				RB25#0	21.64	23.64	33.00	PASS
				RB25#13	21.48	23.48	33.00	PASS
				RB25#25	21.57	23.57	33.00	PASS
				RB50#0	21.56	23.56	33.00	PASS
			HCH	RB1#0	22.67	24.67	33.00	PASS
				RB1#25	22.58	24.58	33.00	PASS
				RB1#49	22.73	24.73	33.00	PASS
				RB25#0	21.72	23.72	33.00	PASS
				RB25#13	21.72	23.72	33.00	PASS
				RB25#25	21.51	23.51	33.00	PASS
				RB50#0	21.84	23.84	33.00	PASS



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

Report No.: SZEM180500453501

Page: 8 of 86

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 7	LTE/TM3	10M	LCH	RB1#0	22.01	24.01	33.00	PASS
				RB1#13	21.88	23.88	33.00	PASS
				RB1#24	21.96	23.96	33.00	PASS
				RB12#0	20.98	22.98	33.00	PASS
				RB12#6	20.9	22.9	33.00	PASS
				RB12#13	20.89	22.89	33.00	PASS
				RB25#0	21.01	23.01	33.00	PASS
			MCH	RB1#0	22.28	24.28	33.00	PASS
				RB1#13	21.97	23.97	33.00	PASS
				RB1#24	21.88	23.88	33.00	PASS
				RB12#0	21.11	23.11	33.00	PASS
				RB12#6	20.95	22.95	33.00	PASS
				RB12#13	21.07	23.07	33.00	PASS
				RB25#0	20.9	22.9	33.00	PASS
			HCH	RB1#0	22.28	24.28	33.00	PASS
				RB1#13	22.01	24.01	33.00	PASS
				RB1#24	22.04	24.04	33.00	PASS
				RB12#0	21.02	23.02	33.00	PASS
				RB12#6	20.96	22.96	33.00	PASS
				RB12#13	20.94	22.94	33.00	PASS
				RB25#0	20.93	22.93	33.00	PASS





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

Report No.: SZEM180500453501

Page: 9 of 86

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 7	LTE/TM1	15M	LCH	RB1#0	23.69	25.69	33.00	PASS
				RB1#38	23.13	25.13	33.00	PASS
				RB1#74	23.28	25.28	33.00	PASS
				RB36#0	22.71	24.71	33.00	PASS
				RB36#18	22.48	24.48	33.00	PASS
				RB36#39	22.44	24.44	33.00	PASS
				RB75#0	22.57	24.57	33.00	PASS
			MCH	RB1#0	23.72	25.72	33.00	PASS
				RB1#38	23.41	25.41	33.00	PASS
				RB1#74	23.63	25.63	33.00	PASS
				RB36#0	22.78	24.78	33.00	PASS
				RB36#18	22.48	24.48	33.00	PASS
				RB36#39	22.57	24.57	33.00	PASS
				RB75#0	22.7	24.7	33.00	PASS
			HCH	RB1#0	23.6	25.6	33.00	PASS
				RB1#38	23.42	25.42	33.00	PASS
				RB1#74	23.57	25.57	33.00	PASS
				RB36#0	22.97	24.97	33.00	PASS
				RB36#18	22.68	24.68	33.00	PASS
				RB36#39	22.9	24.9	33.00	PASS
				RB75#0	22.64	24.64	33.00	PASS



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

Report No.: SZEM180500453501  
Page: 10 of 86

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 7	LTE/TM2	15M	LCH	RB1#0	23.35	25.35	33.00	PASS
				RB1#38	22.33	24.33	33.00	PASS
				RB1#74	22.51	24.51	33.00	PASS
				RB36#0	21.7	23.7	33.00	PASS
				RB36#18	21.6	23.6	33.00	PASS
				RB36#39	21.46	23.46	33.00	PASS
				RB75#0	21.43	23.43	33.00	PASS
			MCH	RB1#0	23.1	25.1	33.00	PASS
				RB1#38	22.7	24.7	33.00	PASS
				RB1#74	22.69	24.69	33.00	PASS
				RB36#0	21.72	23.72	33.00	PASS
				RB36#18	21.51	23.51	33.00	PASS
				RB36#39	21.53	23.53	33.00	PASS
				RB75#0	21.66	23.66	33.00	PASS
			HCH	RB1#0	23.45	25.45	33.00	PASS
				RB1#38	22.78	24.78	33.00	PASS
				RB1#74	22.9	24.9	33.00	PASS
				RB36#0	21.9	23.9	33.00	PASS
				RB36#18	21.65	23.65	33.00	PASS
				RB36#39	21.68	23.68	33.00	PASS
				RB75#0	21.76	23.76	33.00	PASS



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

Report No.: SZEM180500453501  
Page: 11 of 86

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 7	LTE/TM3	15M	LCH	RB1#0	22.07	24.07	33.00	PASS
				RB1#13	21.14	23.14	33.00	PASS
				RB1#24	21.36	23.36	33.00	PASS
				RB12#0	20.31	22.31	33.00	PASS
				RB12#6	20.19	22.19	33.00	PASS
				RB12#13	20.21	22.21	33.00	PASS
				RB25#0	20.32	22.32	33.00	PASS
			MCH	RB1#0	22.07	24.07	33.00	PASS
				RB1#13	21.45	23.45	33.00	PASS
				RB1#24	21.64	23.64	33.00	PASS
				RB12#0	20.49	22.49	33.00	PASS
				RB12#6	20.5	22.5	33.00	PASS
				RB12#13	20.47	22.47	33.00	PASS
				RB25#0	20.47	22.47	33.00	PASS
			HCH	RB1#0	21.95	23.95	33.00	PASS
				RB1#13	21.7	23.7	33.00	PASS
				RB1#24	21.45	23.45	33.00	PASS
				RB12#0	20.43	22.43	33.00	PASS
				RB12#6	20.28	22.28	33.00	PASS
				RB12#13	20.3	22.3	33.00	PASS
				RB25#0	20.33	22.33	33.00	PASS



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

Report No.: SZEM180500453501  
Page: 12 of 86

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 7	LTE/TM1	20M	LCH	RB1#0	23.77	25.77	33.00	PASS
				RB1#50	23.12	25.12	33.00	PASS
				RB1#99	23.54	25.54	33.00	PASS
				RB50#0	22.91	24.91	33.00	PASS
				RB50#25	22.51	24.51	33.00	PASS
				RB50#50	22.7	24.7	33.00	PASS
				RB100#0	22.85	24.85	33.00	PASS
			MCH	RB1#0	23.73	25.73	33.00	PASS
				RB1#50	23.32	25.32	33.00	PASS
				RB1#99	23.62	25.62	33.00	PASS
				RB50#0	22.76	24.76	33.00	PASS
				RB50#25	22.59	24.59	33.00	PASS
				RB50#50	22.71	24.71	33.00	PASS
				RB100#0	22.88	24.88	33.00	PASS
			HCH	RB1#0	23.73	25.73	33.00	PASS
				RB1#50	23.4	25.4	33.00	PASS
				RB1#99	23.37	25.37	33.00	PASS
				RB50#0	22.96	24.96	33.00	PASS
				RB50#25	22.81	24.81	33.00	PASS
				RB50#50	23.12	25.12	33.00	PASS
				RB100#0	23.07	25.07	33.00	PASS



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

Report No.: SZEM180500453501  
Page: 13 of 86

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 7	LTE/TM2	20M	LCH	RB1#0	23.17	25.17	33.00	PASS
				RB1#50	22.24	24.24	33.00	PASS
				RB1#99	22.29	24.29	33.00	PASS
				RB50#0	21.35	23.35	33.00	PASS
				RB50#25	21.21	23.21	33.00	PASS
				RB50#50	21.24	23.24	33.00	PASS
				RB100#0	21.14	23.14	33.00	PASS
			MCH	RB1#0	23.54	25.54	33.00	PASS
				RB1#50	22.46	24.46	33.00	PASS
				RB1#99	22.82	24.82	33.00	PASS
				RB50#0	21.35	23.35	33.00	PASS
				RB50#25	21.47	23.47	33.00	PASS
				RB50#50	21.41	23.41	33.00	PASS
				RB100#0	21.47	23.47	33.00	PASS
			HCH	RB1#0	23.57	25.57	33.00	PASS
				RB1#50	22.64	24.64	33.00	PASS
				RB1#99	23.11	25.11	33.00	PASS
				RB50#0	21.73	23.73	33.00	PASS
				RB50#25	21.69	23.69	33.00	PASS
				RB50#50	21.53	23.53	33.00	PASS
				RB100#0	21.74	23.74	33.00	PASS



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

Report No.: SZEM180500453501  
Page: 14 of 86

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 7	LTE/TM3	20M	LCH	RB1#0	21.62	23.62	33.00	PASS
				RB1#13	20.85	22.85	33.00	PASS
				RB1#24	21.14	23.14	33.00	PASS
				RB12#0	20.15	22.15	33.00	PASS
				RB12#6	20.04	22.04	33.00	PASS
				RB12#13	19.99	21.99	33.00	PASS
				RB25#0	20.17	22.17	33.00	PASS
			MCH	RB1#0	22.23	24.23	33.00	PASS
				RB1#13	21.1	23.1	33.00	PASS
				RB1#24	21.58	23.58	33.00	PASS
				RB12#0	20.53	22.53	33.00	PASS
				RB12#6	20.35	22.35	33.00	PASS
				RB12#13	20.34	22.34	33.00	PASS
				RB25#0	20.38	22.38	33.00	PASS
			HCH	RB1#0	21.93	23.93	33.00	PASS
				RB1#13	21.59	23.59	33.00	PASS
				RB1#24	21.39	23.39	33.00	PASS
				RB12#0	20.46	22.46	33.00	PASS
				RB12#6	20.28	22.28	33.00	PASS
				RB12#13	20.19	22.19	33.00	PASS
				RB25#0	20.48	22.48	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,

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

b: SGP=Signal Generator Level



## 2 Peak-to-Average Ratio

### Part I - Test Results

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
Band 7	TM1/20M	LCH	3.91	13	PASS
		MCH	4.29	13	PASS
		HCH	4.23	13	PASS
	TM2/20M	LCH	4.99	13	PASS
		MCH	5.30	13	PASS
		HCH	5.13	13	PASS
	TM3/20M	LCH	5.54	13	PASS
		MCH	5.83	13	PASS
		HCH	5.77	13	PASS

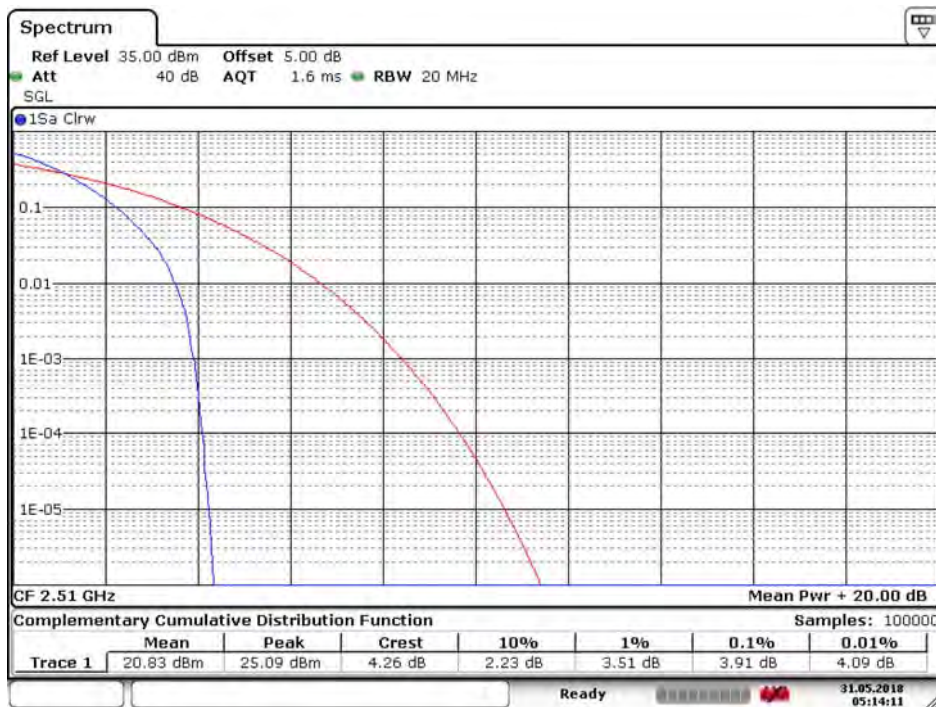
### Part II - Test Plots

#### 2.1 For LTE

##### 2.1.1 Test Band = LTE BAND 7

##### 2.1.1.1 Test Mode = LTE/TM1.Bandwidth=20MHz

##### 2.1.1.1.1 Test Channel = LCH



Date: 31.MAY.2018 05:14:12

**2.1.1.1.2 Test Channel = MCH**



Date: 31.MAY.2018 05:14:46

**2.1.1.1.1 Test Channel = HCH**



Date: 31.MAY.2018 05:16:35





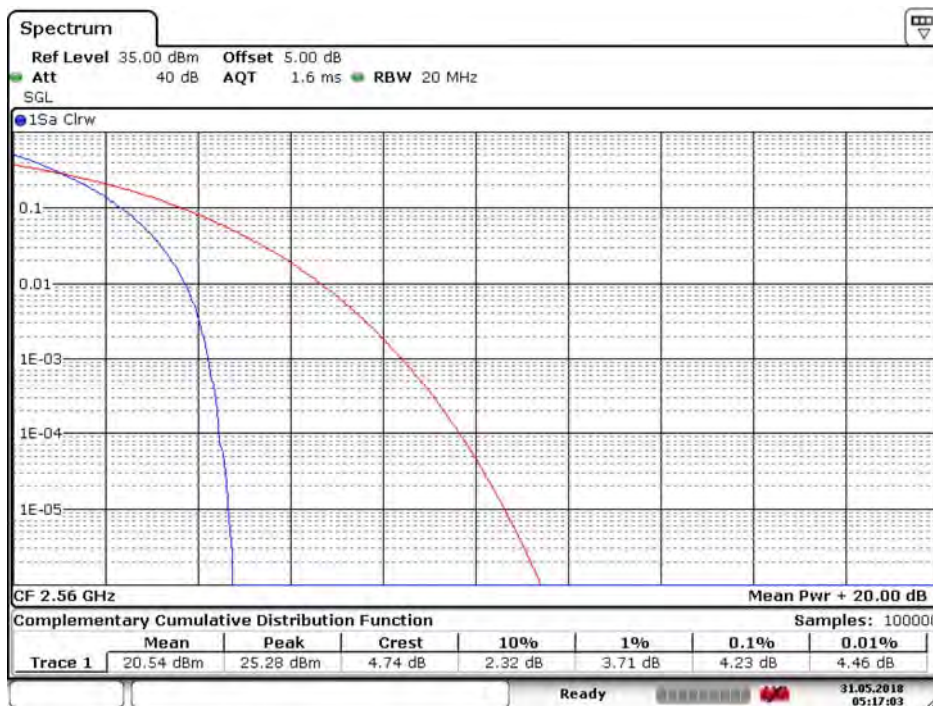
2.1.1.2 Test Mode = LTE/TM2.Bandwidth=20MHz

2.1.1.2.1 Test Channel = LCH



Date: 31.MAY.2018 05:15:15

2.1.1.2.2 Test Channel = MCH



Date: 31.MAY.2018 05:17:03



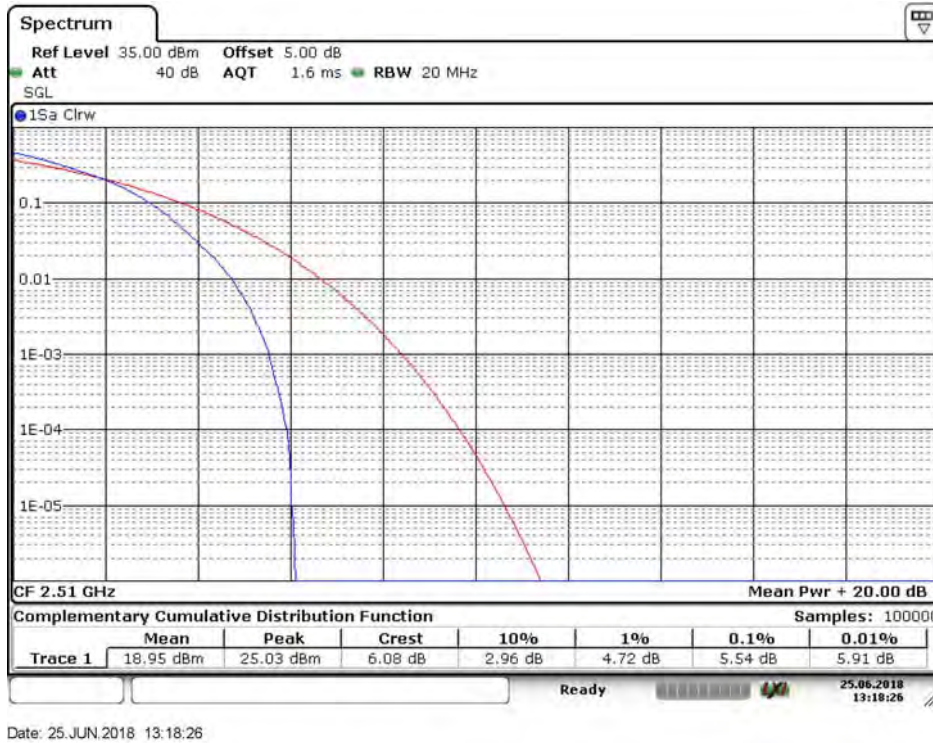
2.1.1.2.3 Test Channel = HCH



Date: 31.MAY.2018 05:17:21

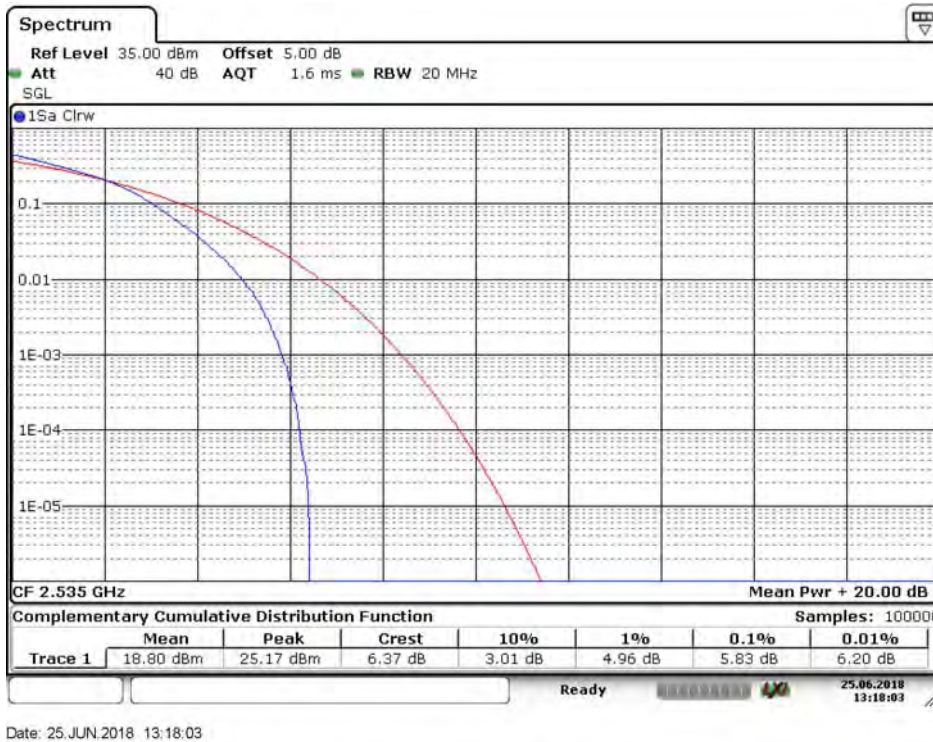
### 2.1.1.3 Test Mode = LTE/TM3.Bandwidth=20MHz

#### 2.1.1.3.1 Test Channel = LCH



Date: 25 JUN.2018 13:18:26

#### 2.1.1.3.2 Test Channel = MCH



Date: 25 JUN.2018 13:18:03



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

Report No.: SZEM180500453501

Page: 20 of 86



2.1.1.3.3 Test Channel = HCH



Date: 25.JUN.2018 13:17:40

### 3 Modulation Characteristics

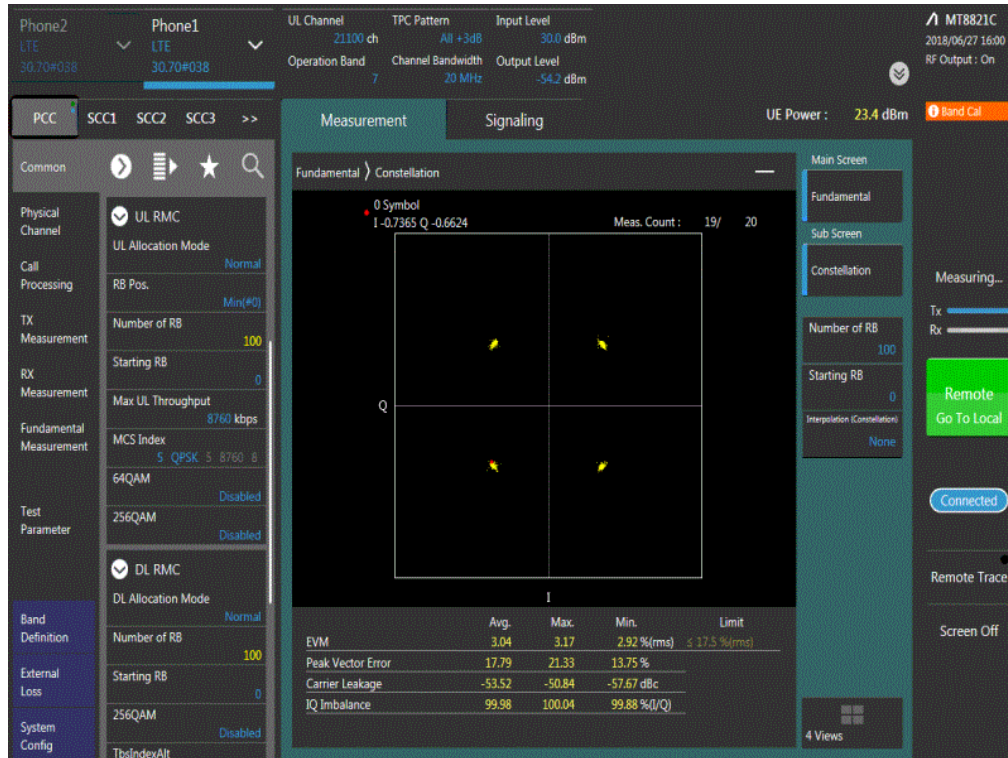
Part I - Test Plots

#### 3.1 For LTE

##### 3.1.1 Test Band = LTE BAND 7

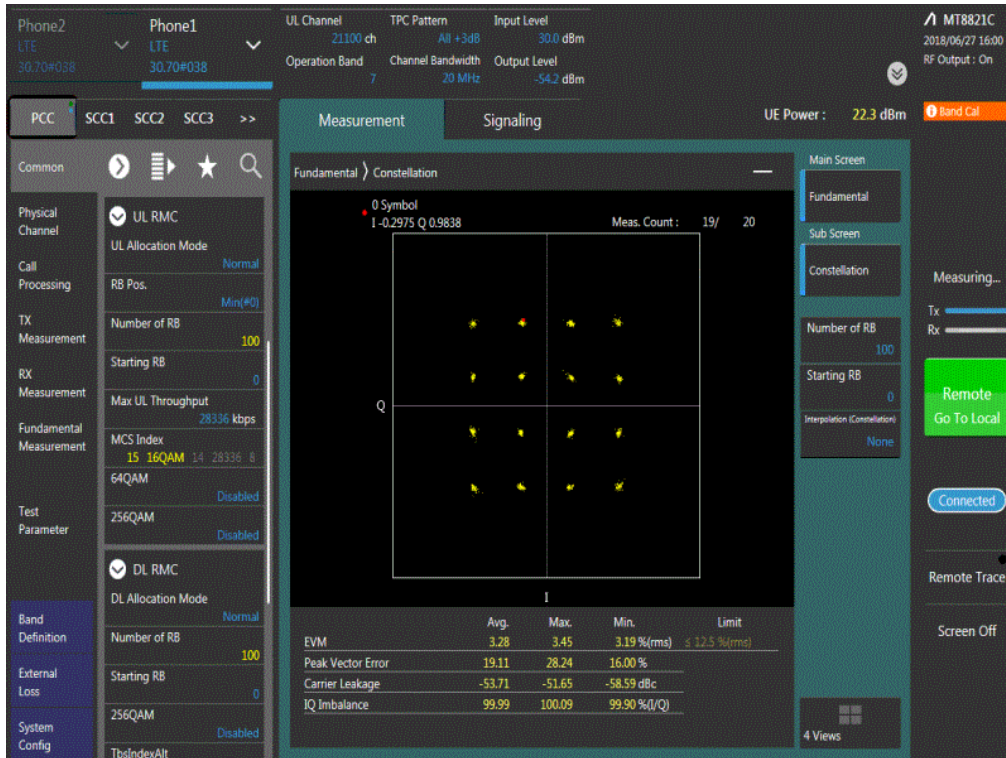
##### 3.1.1.1 Test Mode = LTE /TM1 20MHz

##### 3.1.1.1.1 Test Channel = MCH



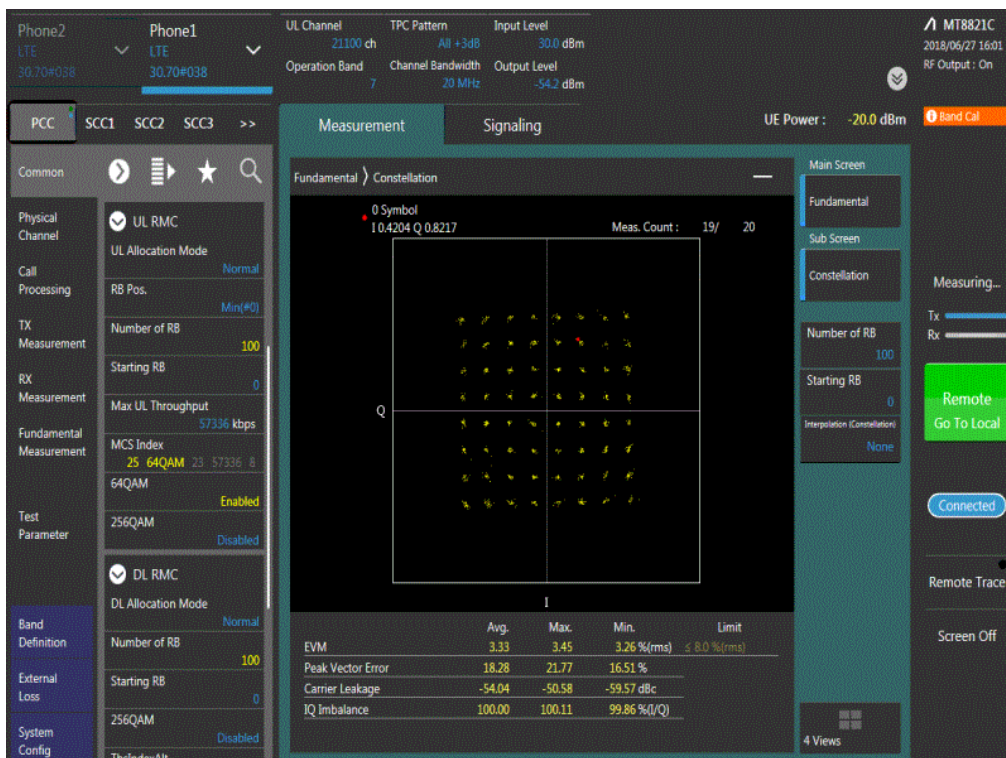
**3.1.1.2 Test Mode = LTE /TM2 20MHz**

**3.1.1.2.1 Test Channel = MCH**



**3.1.1.3 Test Mode = LTE /TM3 20MHz**

**3.1.1.3.1 Test Channel = MCH**





## 4 Bandwidth

### Part I - Test Results

Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
Band 7	TM1/ 5MHz	LCH	4.49	4.93	PASS
		MCH	4.47	4.89	PASS
		HCH	4.49	4.91	PASS
	TM2/ 5MHz	LCH	4.48	4.90	PASS
		MCH	4.48	4.89	PASS
		HCH	4.48	4.91	PASS
	TM3/ 5MHz	LCH	4.46	4.86	PASS
		MCH	4.47	4.88	PASS
		HCH	4.47	4.89	PASS
	TM1/10MHz	LCH	8.95	9.69	PASS
		MCH	8.95	9.73	PASS
		HCH	8.95	9.75	PASS
	TM2/ 10MHz	LCH	8.95	9.67	PASS
		MCH	8.93	9.67	PASS
		HCH	8.95	9.59	PASS
	TM3/ 10MHz	LCH	8.95	9.65	PASS
		MCH	8.95	9.63	PASS
		HCH	8.95	9.71	PASS
	TM1/ 15MHz	LCH	13.49	14.87	PASS
		MCH	13.49	14.72	PASS
		HCH	13.46	14.75	PASS
	TM2/ 15MHz	LCH	13.49	14.78	PASS
		MCH	13.52	14.81	PASS
		HCH	13.52	14.72	PASS
	TM3/ 15MHz	LCH	13.45	14.74	PASS
		MCH	13.45	14.71	PASS
		HCH	13.48	14.8	PASS
TM1/ 20MHz	LCH	17.90	19.54	PASS	
	MCH	17.94	19.34	PASS	
	HCH	17.94	19.38	PASS	
TM2/ 20MHz	LCH	17.90	19.442	PASS	
	MCH	17.94	19.38	PASS	
	HCH	17.90	19.46	PASS	
TM3/ 20MHz	LCH	17.9	19.38	PASS	
	MCH	17.9	19.34	PASS	
	HCH	17.9	19.38	PASS	

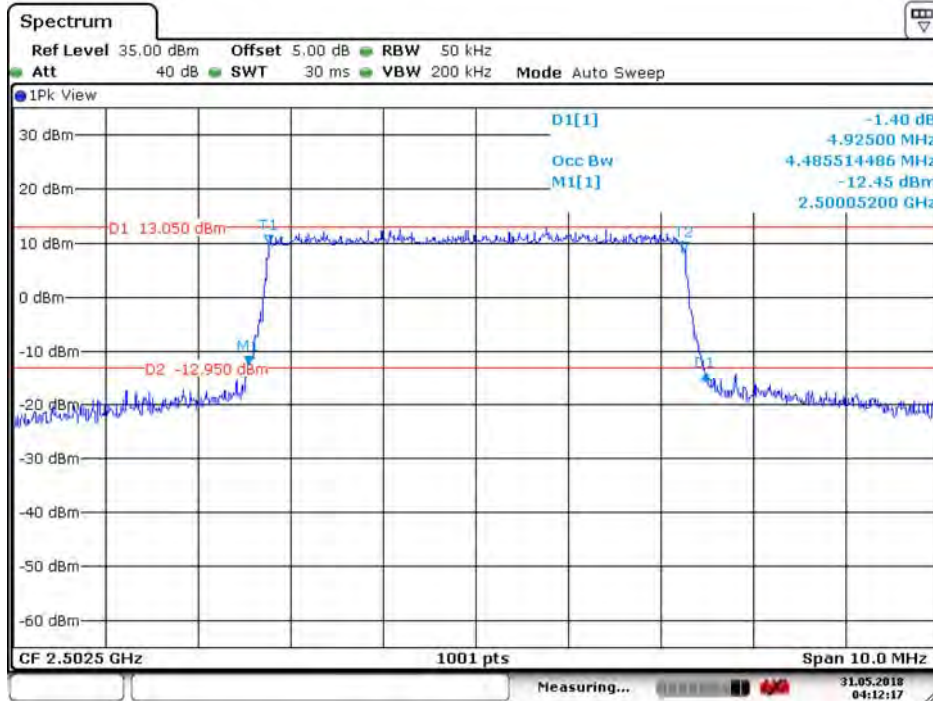


## 4.1 For LTE

### 4.1.1 Test Band = LTE BAND 7

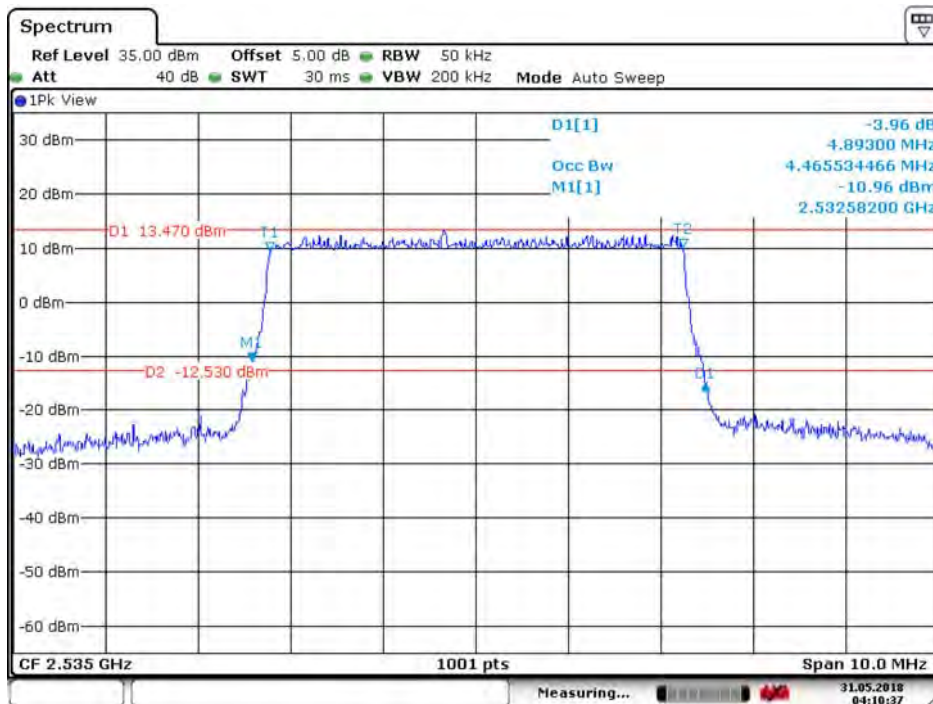
#### 4.1.1.1 Test Mode = LTE/TM1 5MHz

##### 4.1.1.1.1 Test Channel = LCH



Date: 31.MAY.2018 04:12:17

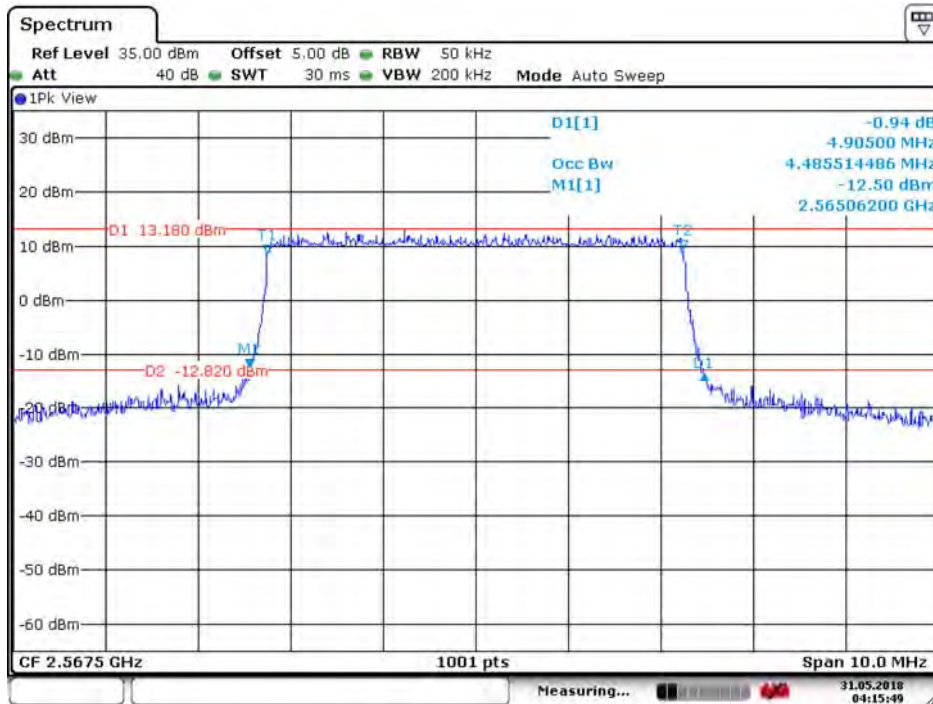
##### 4.1.1.1.2 Test Channel = MCH



Date: 31.MAY.2018 04:10:37



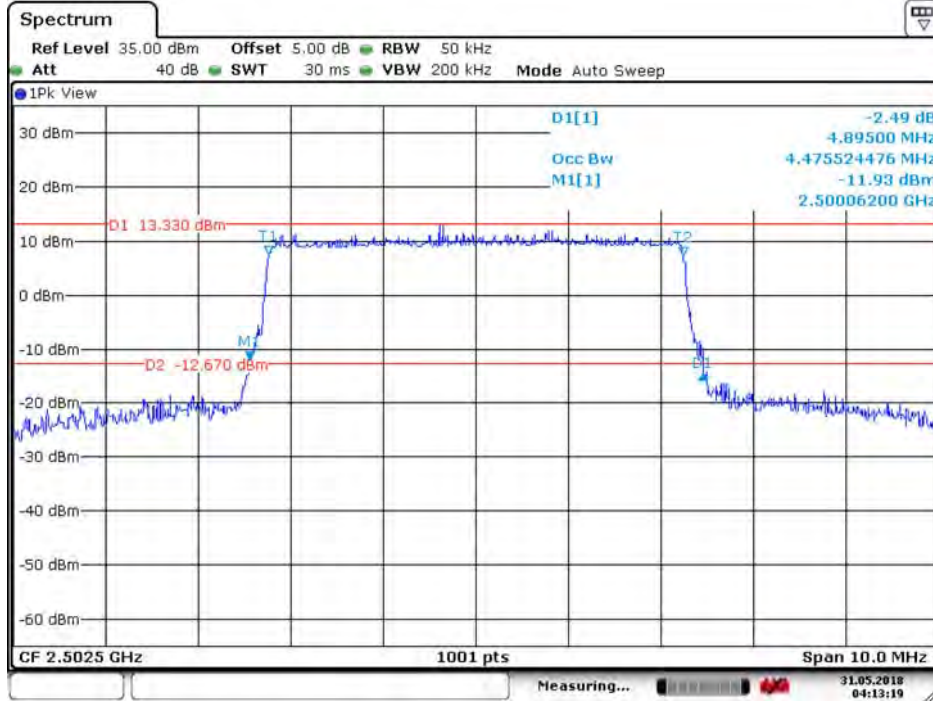
4.1.1.1.3 Test Channel = HCH



Date: 31.MAY.2018 04:15:50

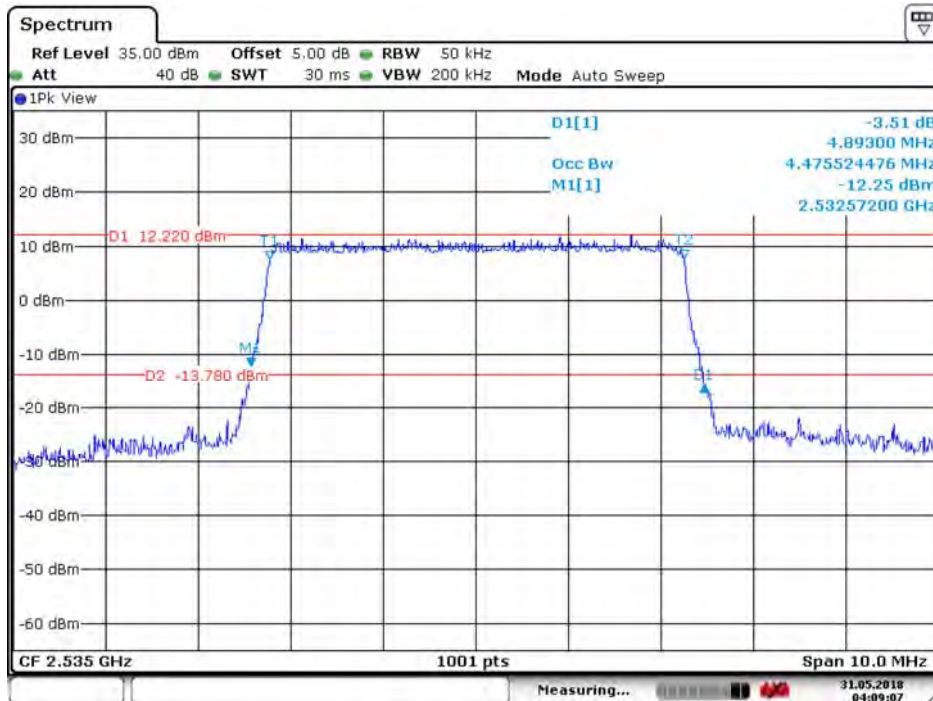
**4.1.1.2 Test Mode = LTE/TM2 5MHz**

**4.1.1.2.1 Test Channel = LCH**



Date: 31.MAY.2018 04:13:19

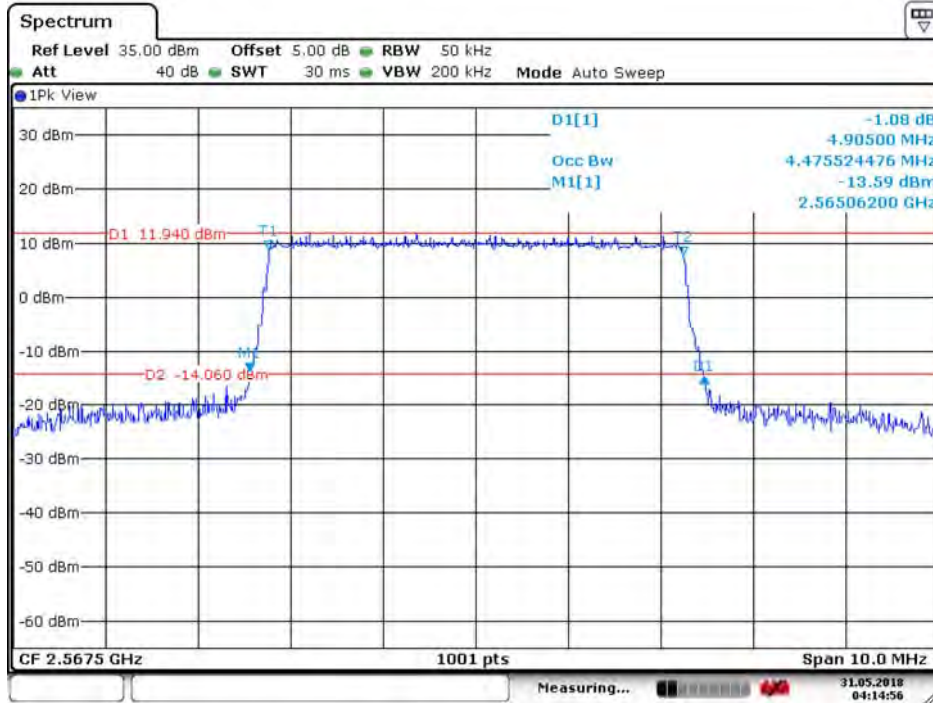
**4.1.1.2.2 Test Channel = MCH**



Date: 31.MAY.2018 04:09:07



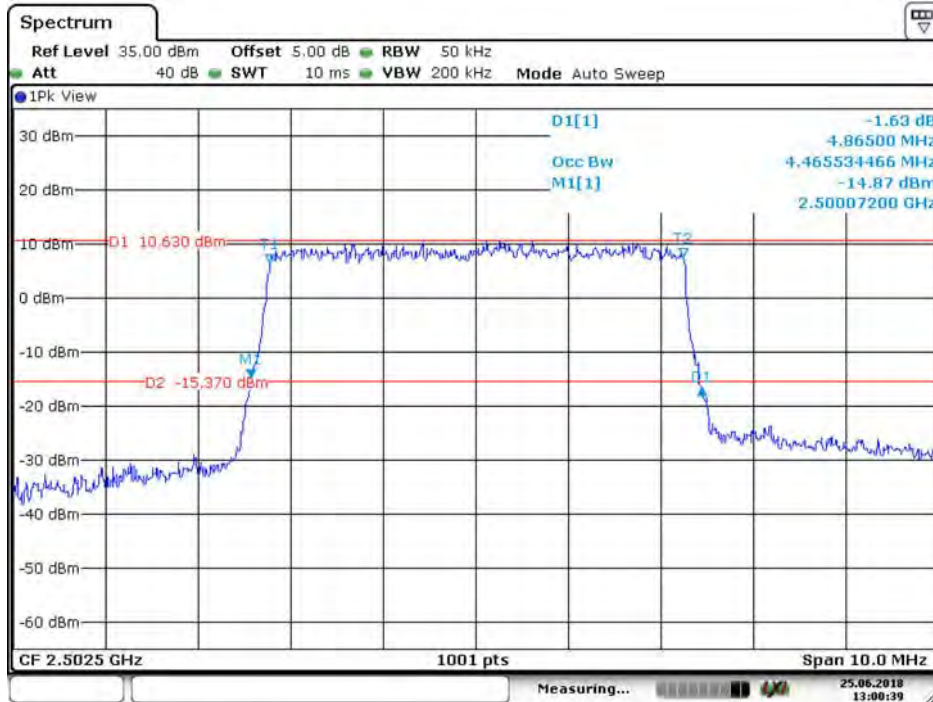
4.1.1.2.3 Test Channel = HCH



Date: 31.MAY.2018 04:14:57

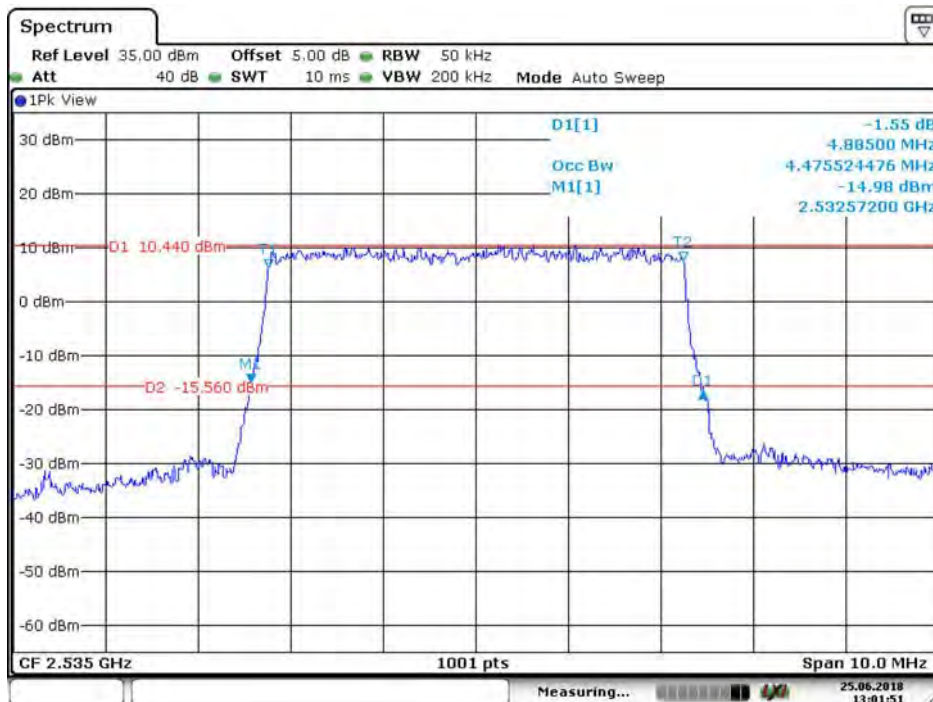
**4.1.1.3 Test Mode = LTE/TM3 5MHz**

**4.1.1.3.1 Test Channel = LCH**



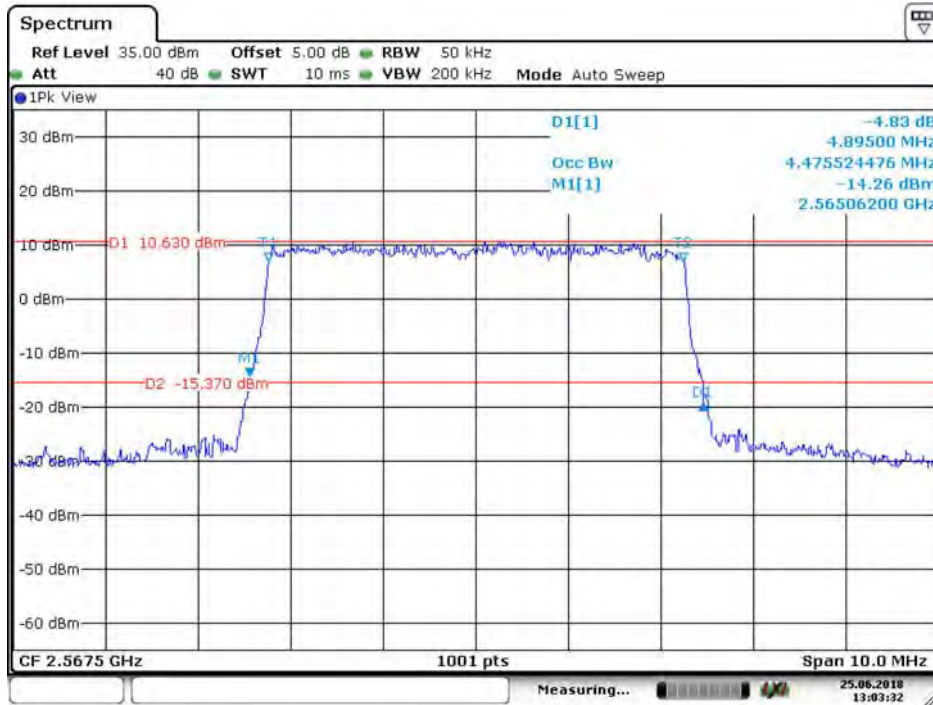
Date: 25.JUN.2018 13:00:39

**4.1.1.3.2 Test Channel = MCH**



Date: 25.JUN.2018 13:01:51

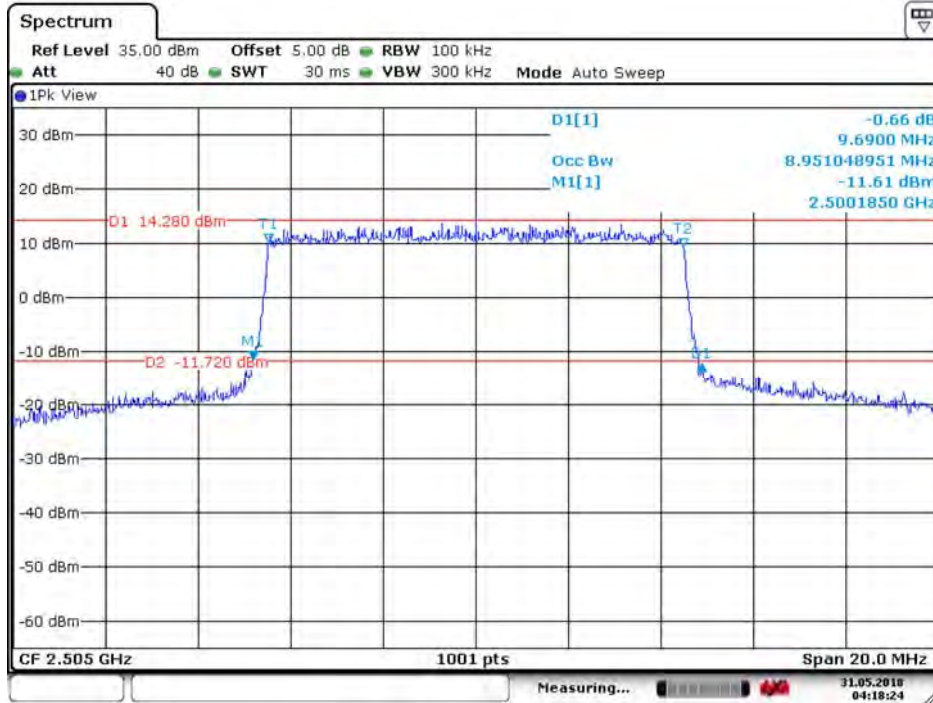
**4.1.1.3.3 Test Channel = HCH**



Date: 25 JUN 2018 13:03:33

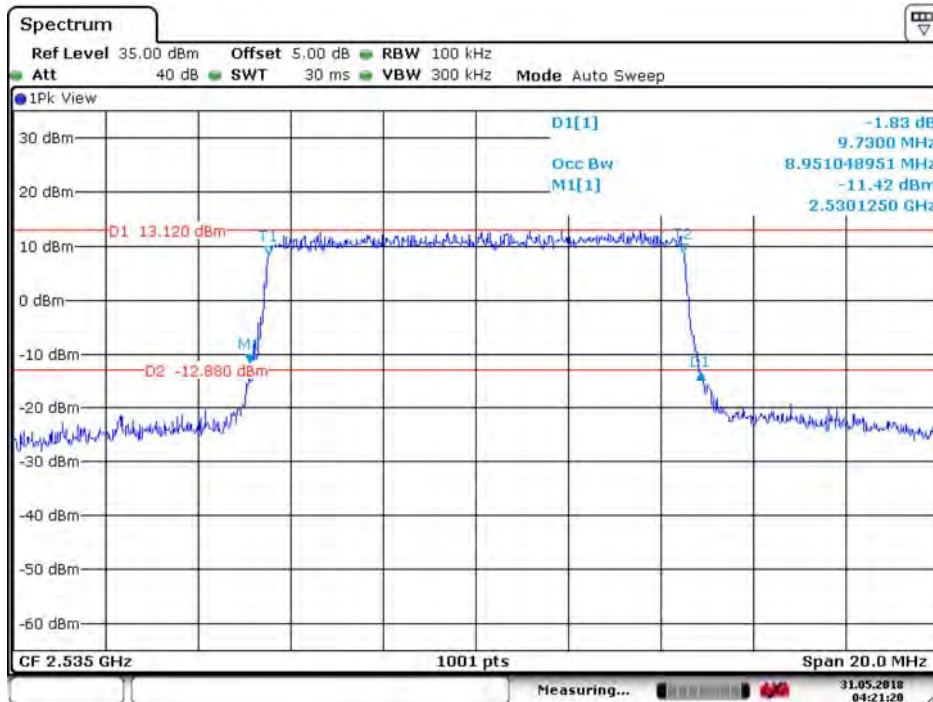
4.1.1.4 Test Mode = LTE/TM1 10MHz

4.1.1.4.1 Test Channel = LCH



Date: 31.MAY.2018 04:18:25

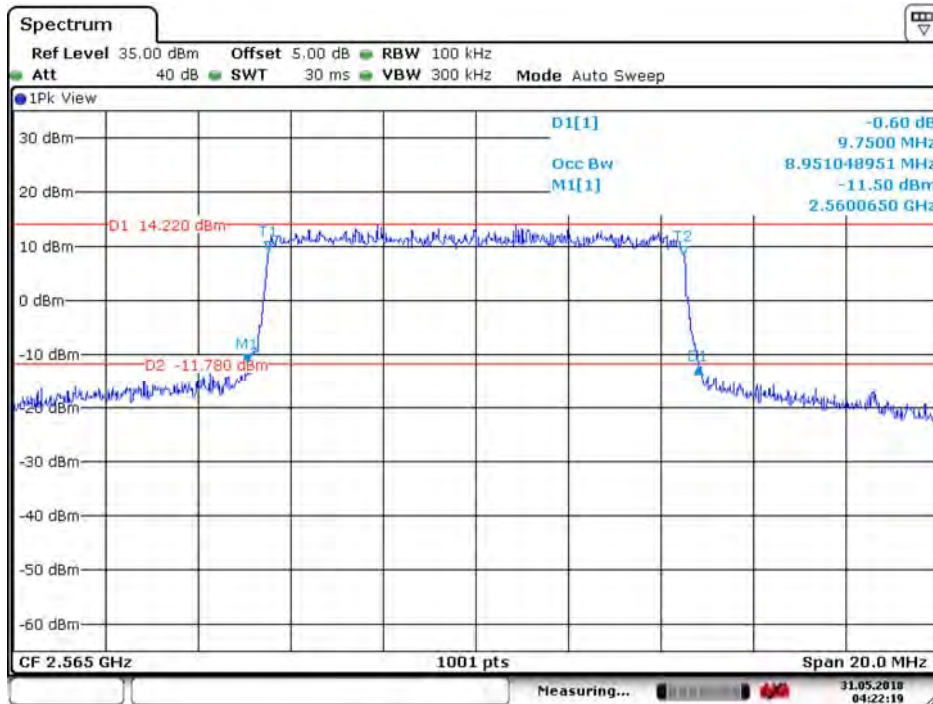
4.1.1.4.2 Test Channel = MCH



Date: 31.MAY.2018 04:21:20



4.1.1.4.3 Test Channel = HCH

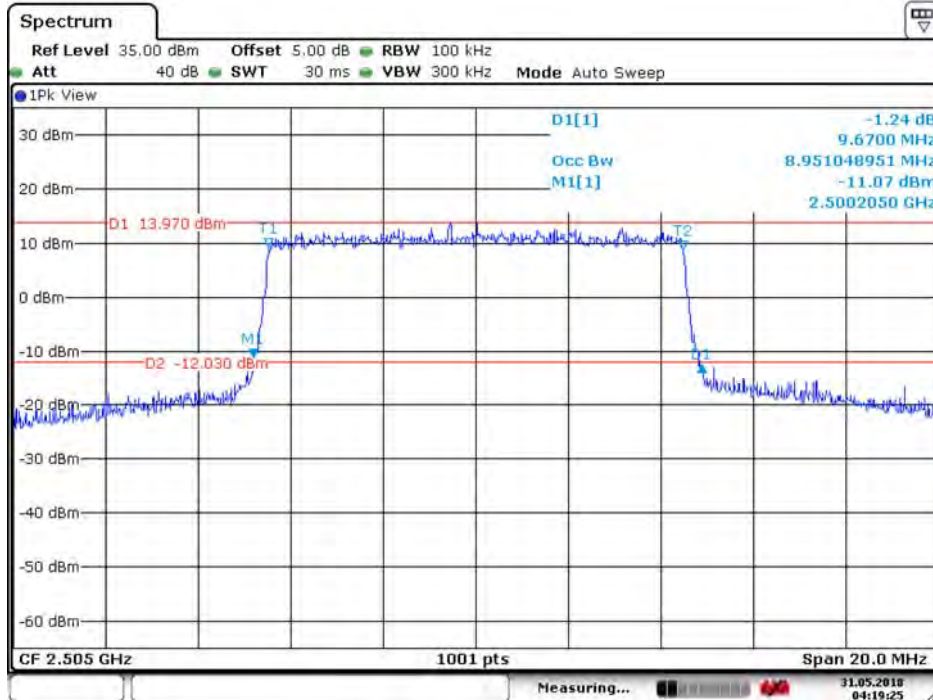


Date: 31.MAY.2018 04:22:19



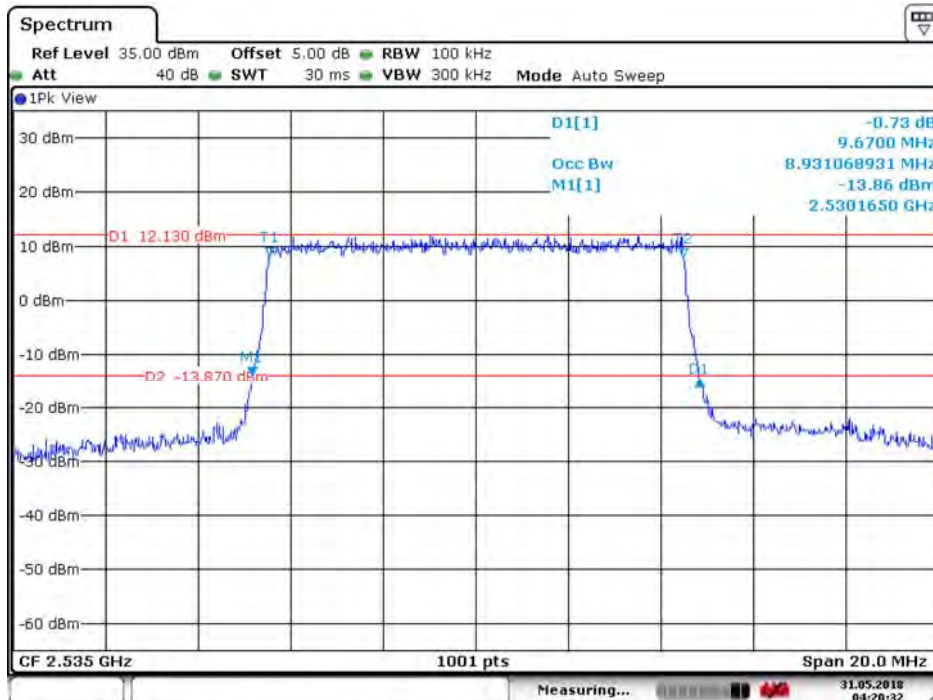
**4.1.1.5 Test Mode = LTE/TM2 10MHz**

**4.1.1.5.1 Test Channel = LCH**



Date: 31.MAY.2018 04:19:25

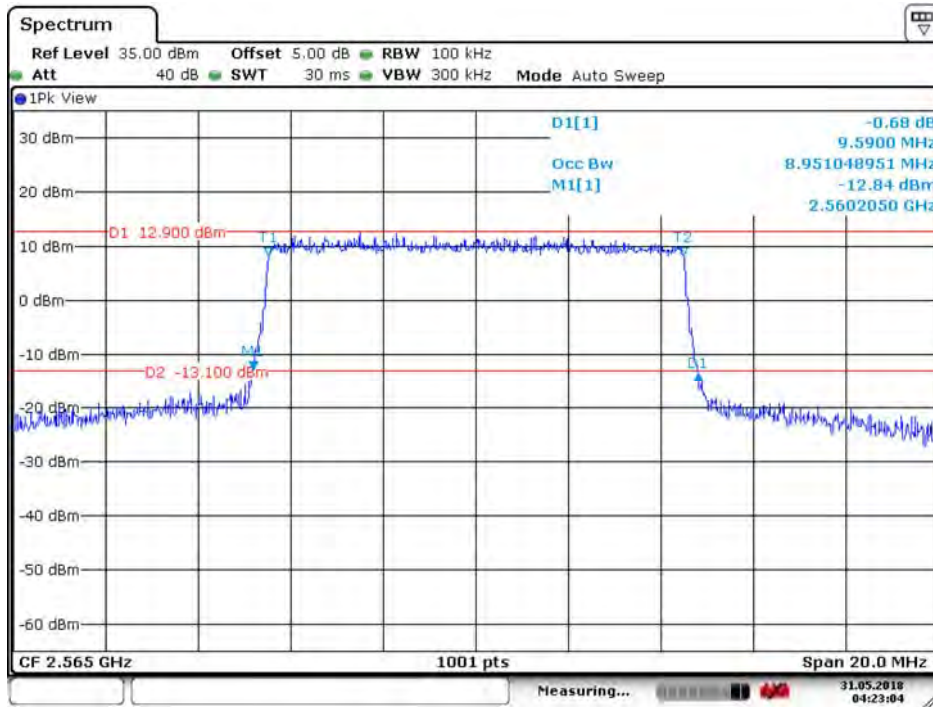
**4.1.1.5.2 Test Channel = MCH**



Date: 31.MAY.2018 04:20:32



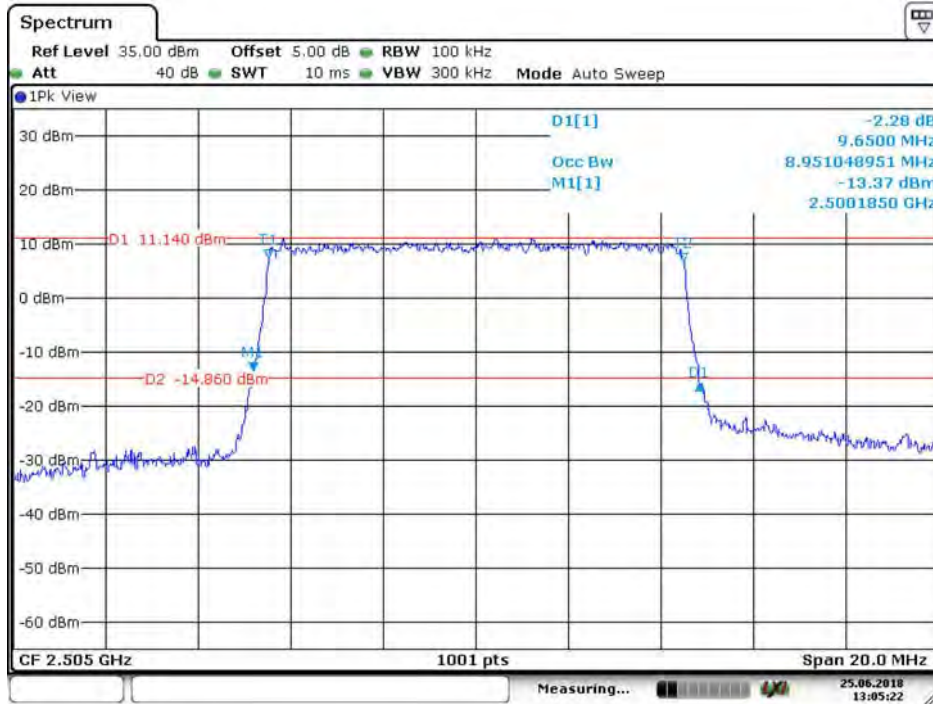
4.1.1.5.3 Test Channel = HCH



Date: 31.MAY.2018 04:23:05

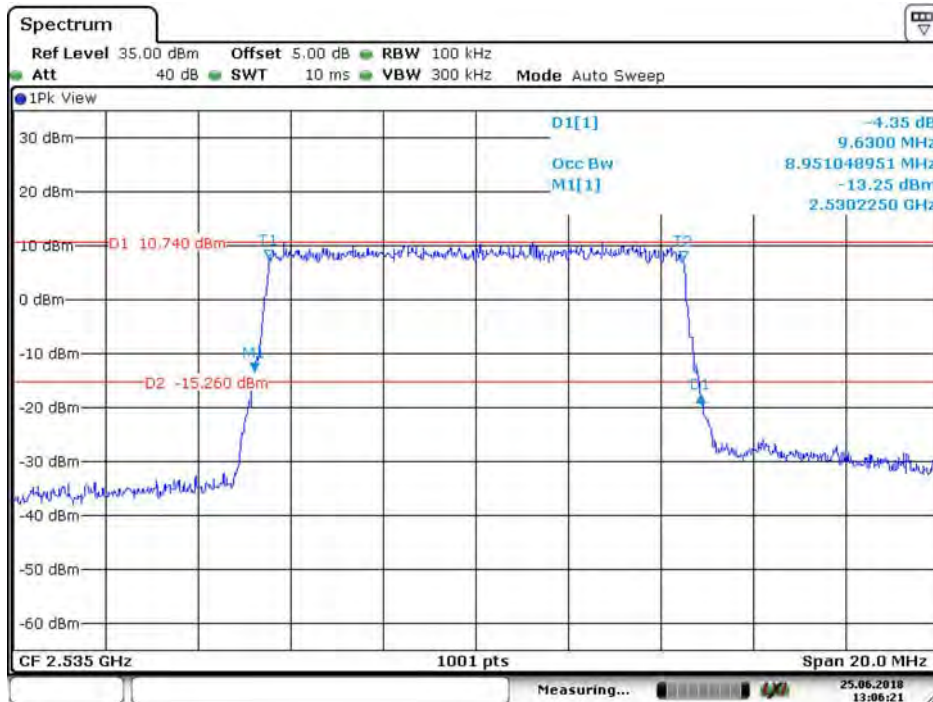
**4.1.1.6 Test Mode = LTE/TM3 10MHz**

**4.1.1.6.1 Test Channel = LCH**



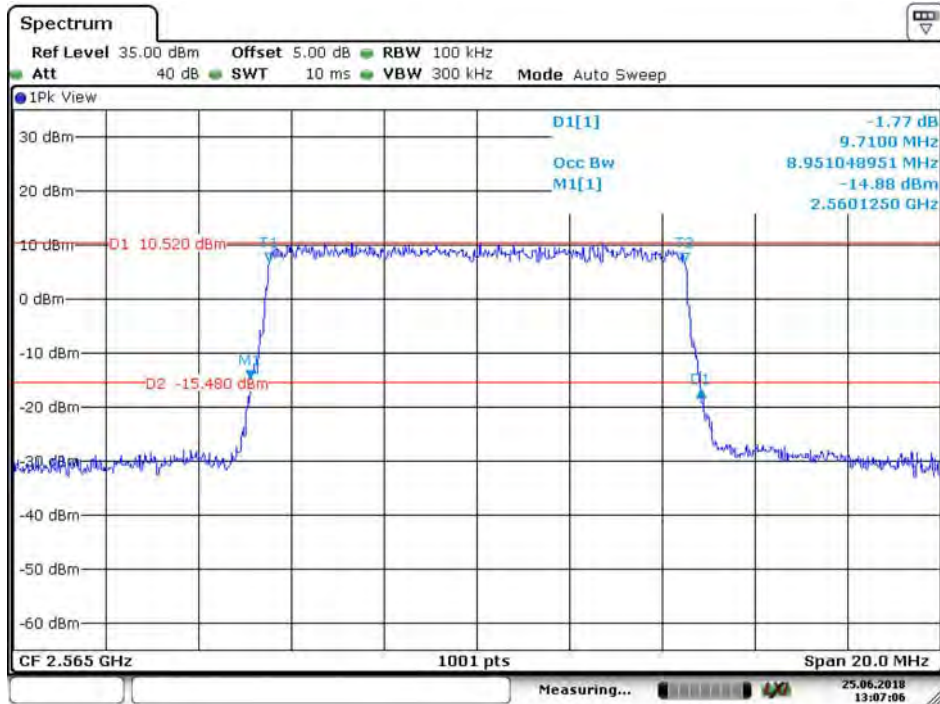
Date: 25 JUN 2018 13:05:23

**4.1.1.6.2 Test Channel = MCH**



Date: 25 JUN 2018 13:06:21

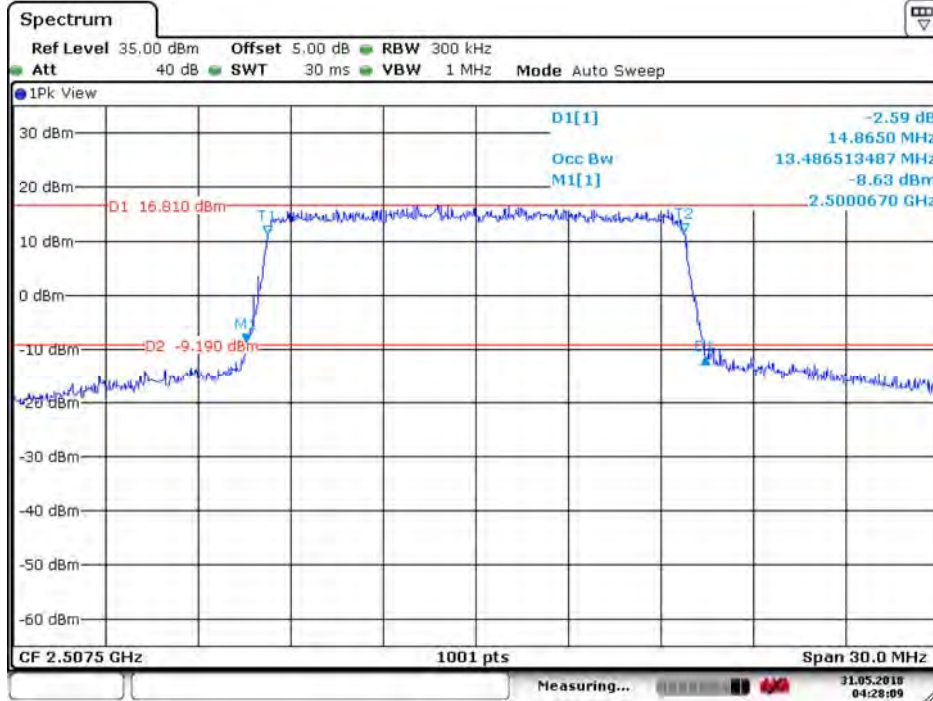
**4.1.1.6.3 Test Channel = HCH**



Date: 25 JUN 2018 13:07:07

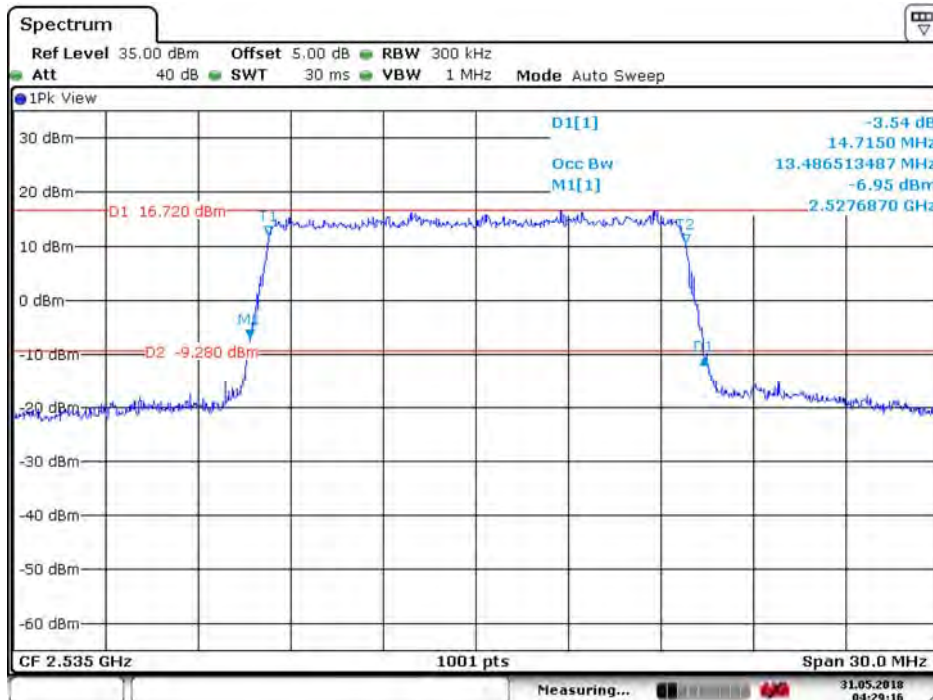
**4.1.1.7 Test Mode = LTE/TM1 15MHz**

**4.1.1.7.1 Test Channel = LCH**



Date: 31.MAY.2018 04:28:10

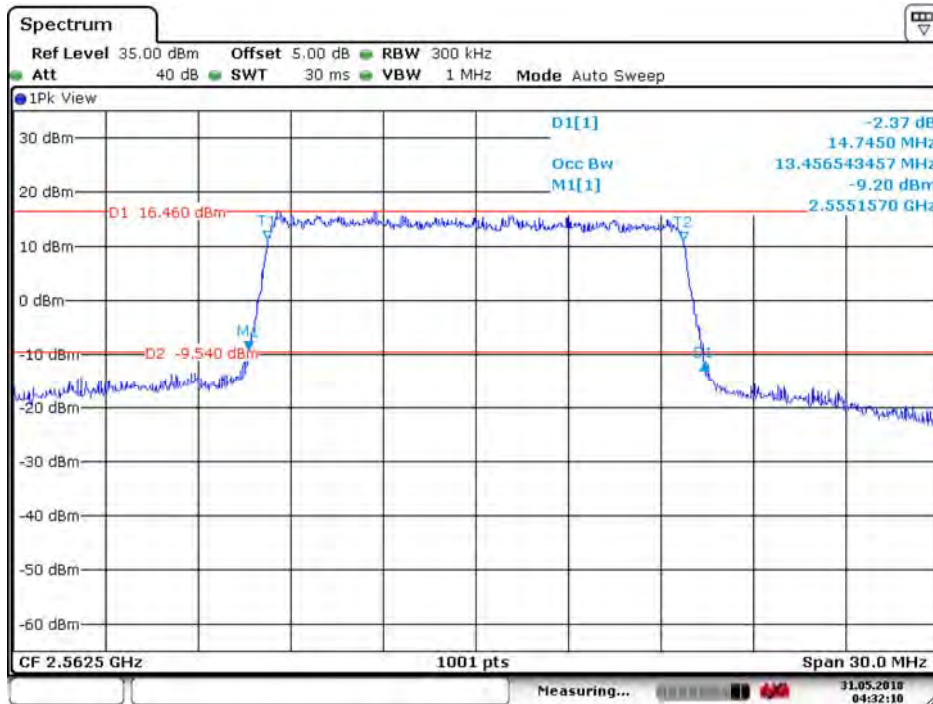
**4.1.1.7.2 Test Channel = MCH**



Date: 31.MAY.2018 04:29:17



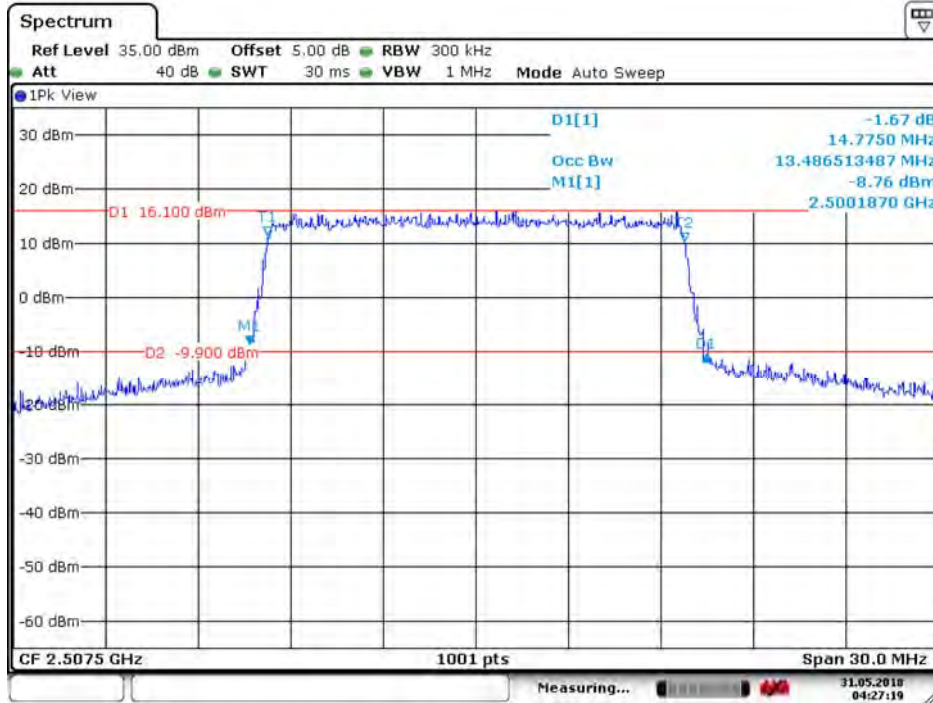
4.1.1.7.3 Test Channel = HCH



Date: 31.MAY.2018 04:32:10

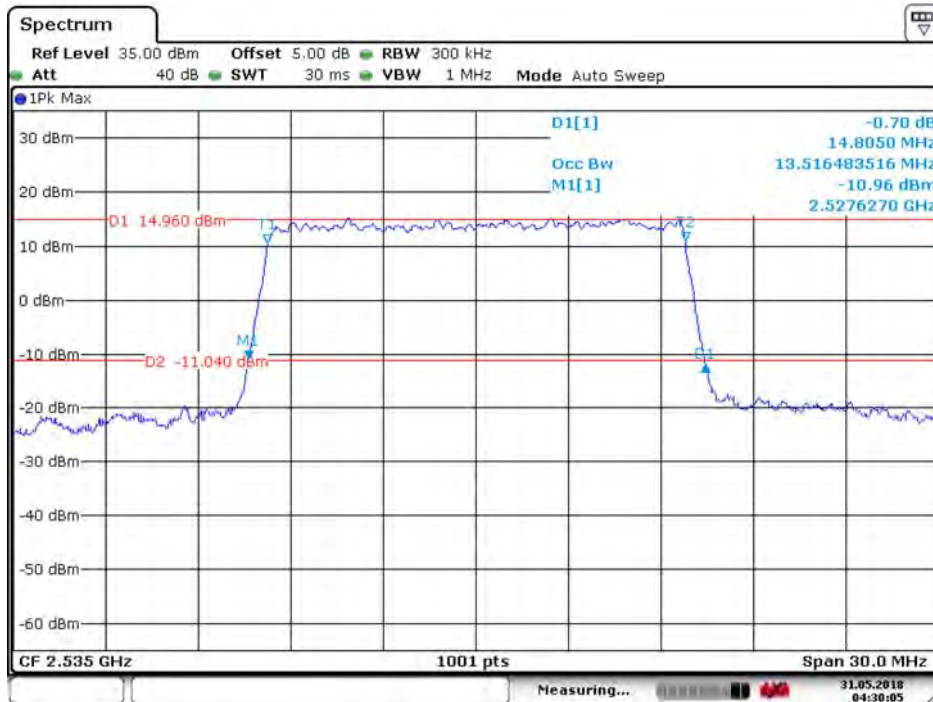
**4.1.1.8 Test Mode = LTE/TM2 15MHz**

**4.1.1.8.1 Test Channel = LCH**



Date: 31.MAY.2018 04:27:19

**4.1.1.8.2 Test Channel = MCH**



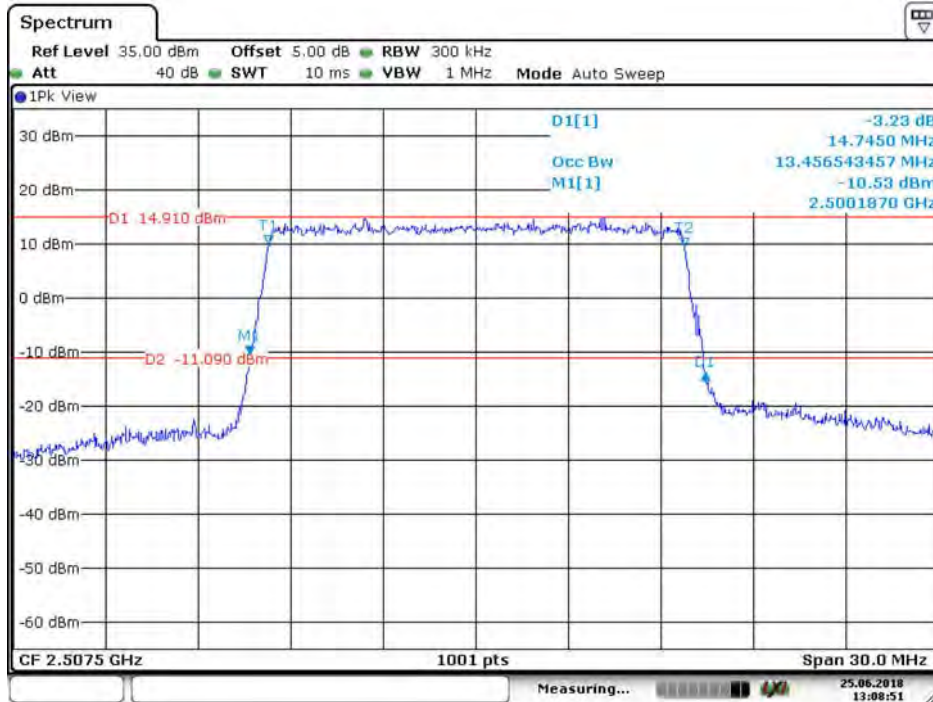
Date: 31.MAY.2018 04:30:05





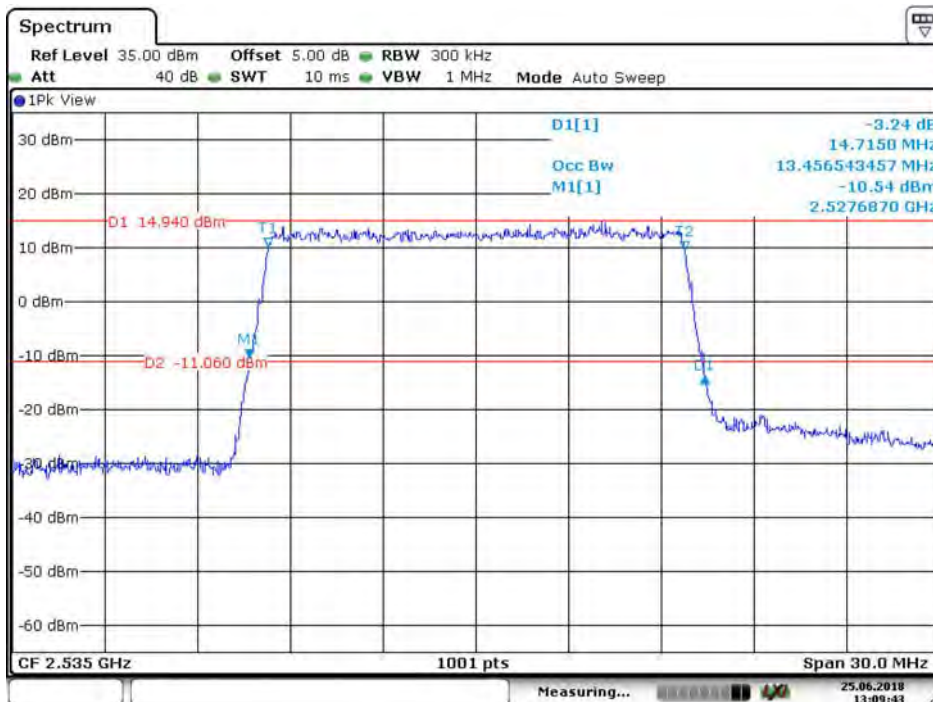
**4.1.1.9 Test Mode = LTE/TM3 15MHz**

**4.1.1.9.1 Test Channel = LCH**



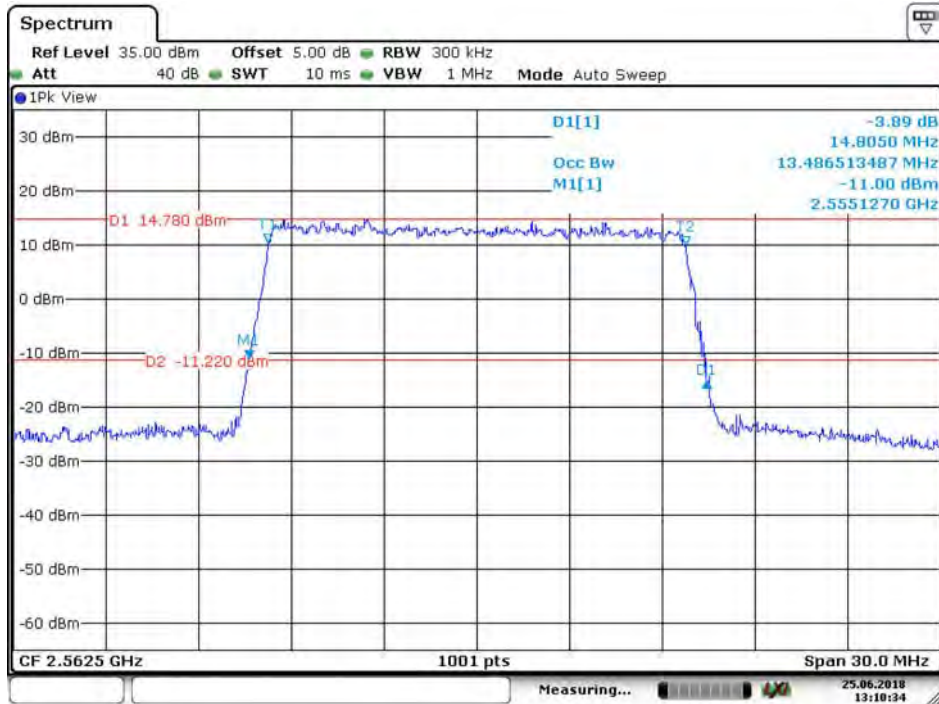
Date: 25 JUN.2018 13:08:51

**4.1.1.9.2 Test Channel = MCH**



Date: 25 JUN.2018 13:09:44

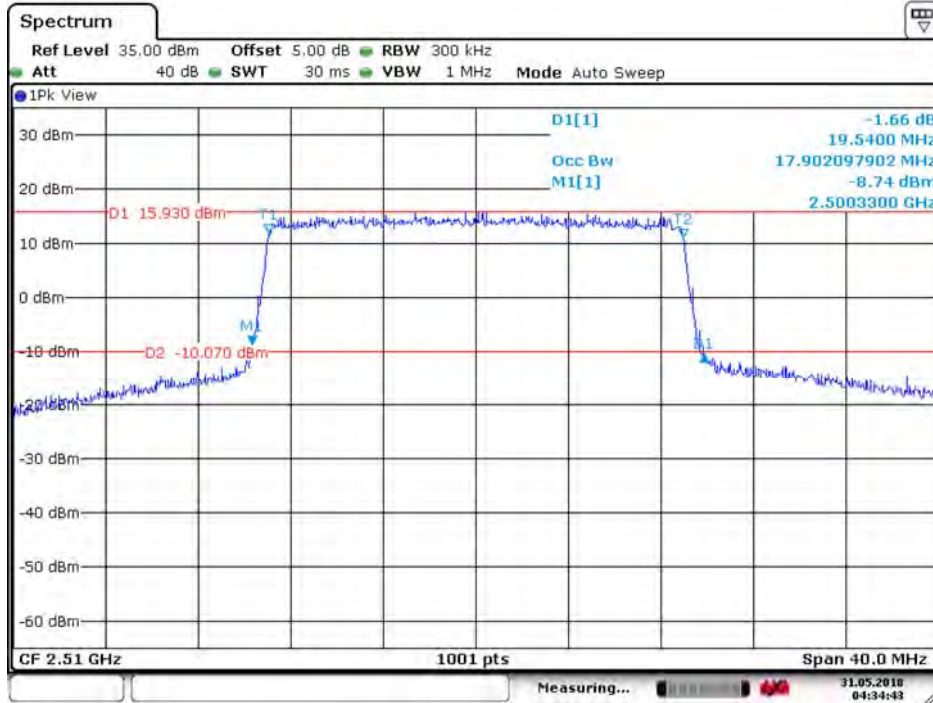
**4.1.1.9.3 Test Channel = HCH**



Date: 25 JUN 2018 13:10:35

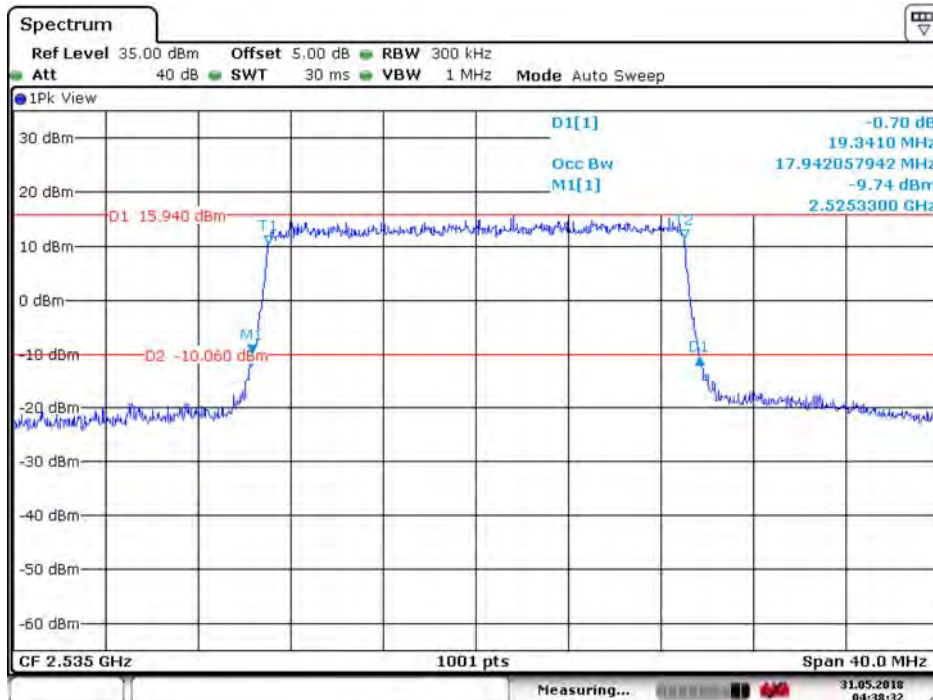
**4.1.1.10 Test Mode = LTE/TM1 20MHz**

**4.1.1.10.1 Test Channel = LCH**



Date: 31.MAY.2018 04:34:43

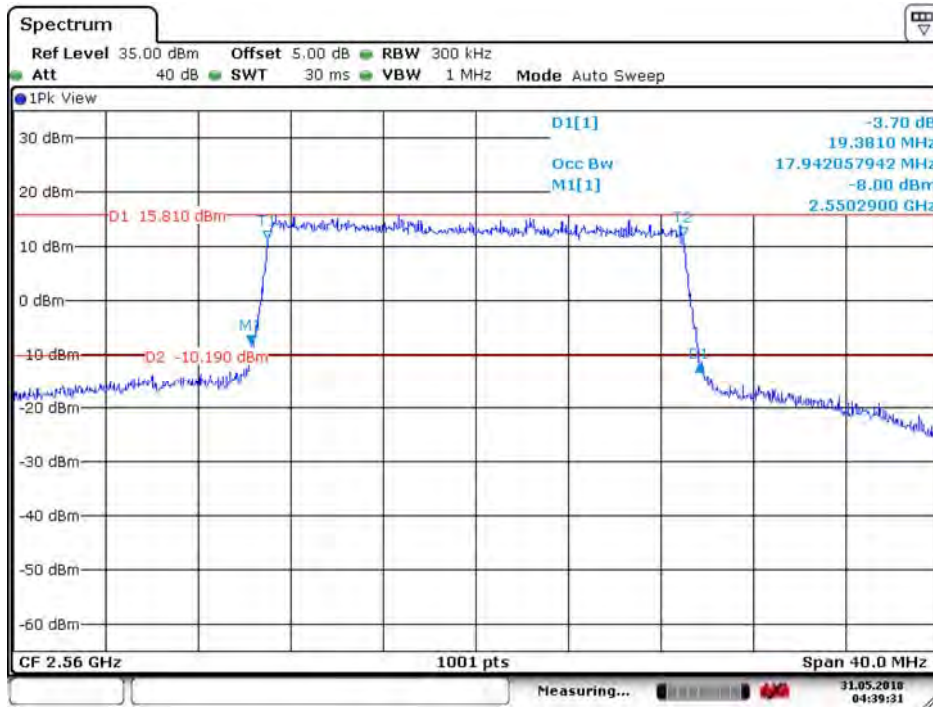
**4.1.1.10.2 Test Channel = MCH**



Date: 31.MAY.2018 04:38:33



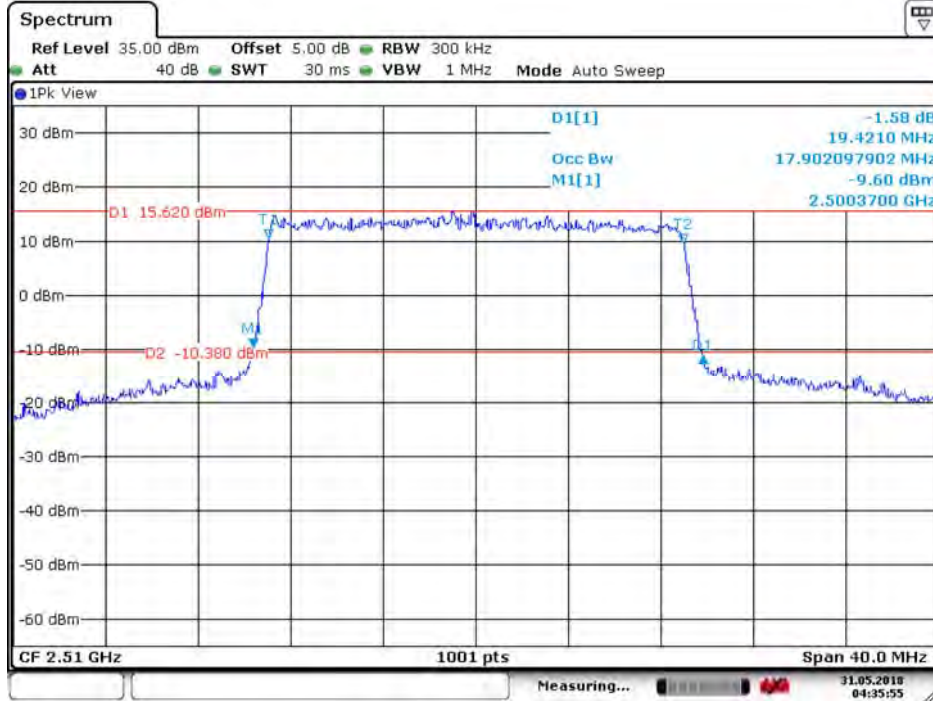
4.1.1.10.3 Test Channel = HCH



Date: 31.MAY.2018 04:39:31

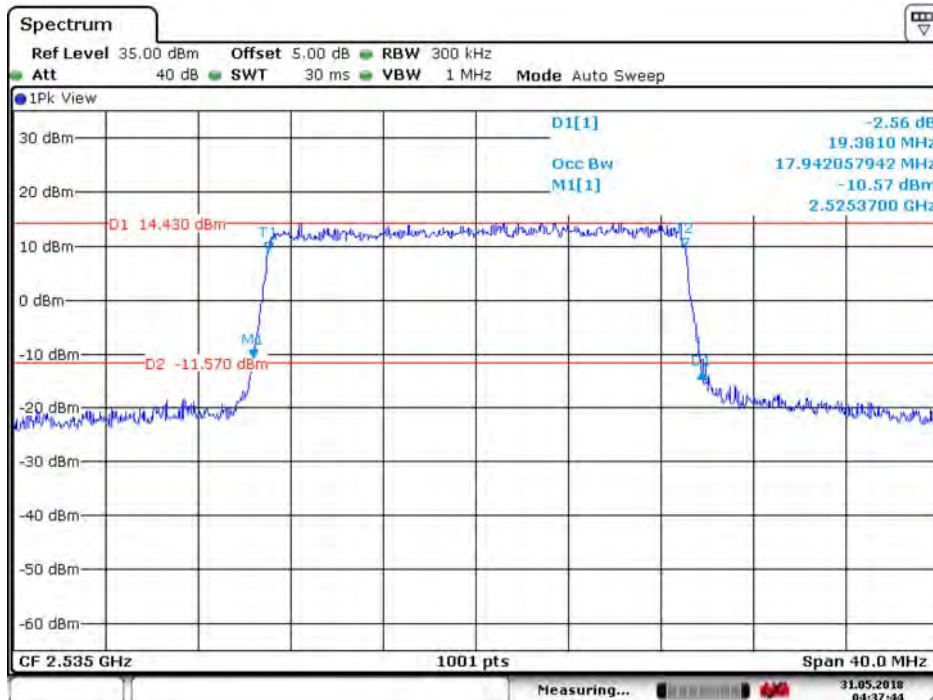
**4.1.1.11 Test Mode = LTE/TM2 20MHz**

**4.1.1.11.1 Test Channel = LCH**



Date: 31.MAY.2018 04:35:55

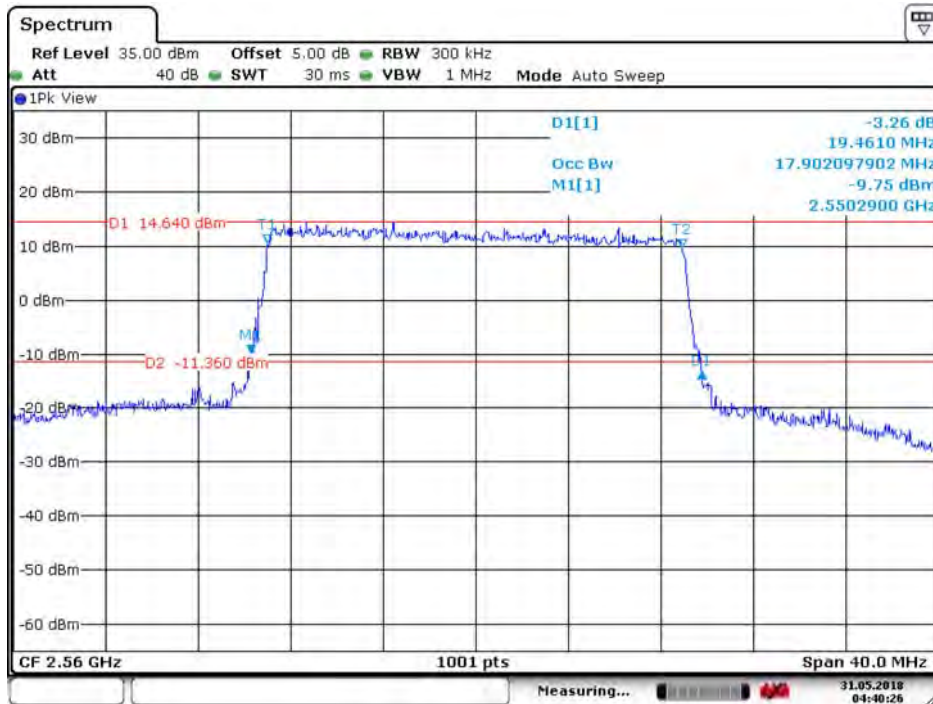
**4.1.1.11.2 Test Channel = MCH**



Date: 31.MAY.2018 04:37:44



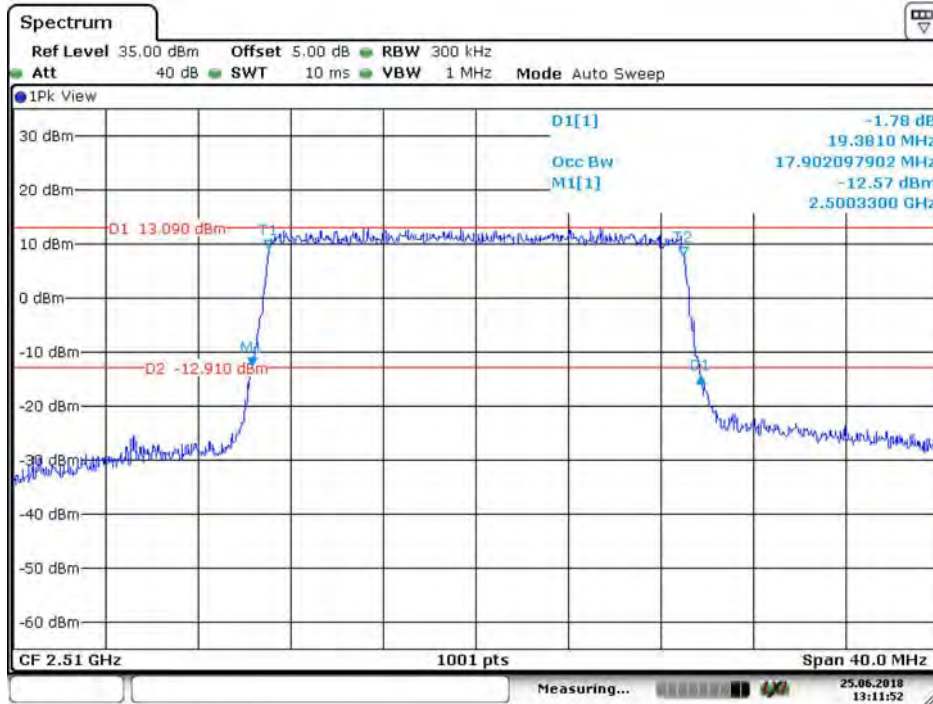
4.1.1.11.3 Test Channel = HCH



Date: 31.MAY.2018 04:40:26

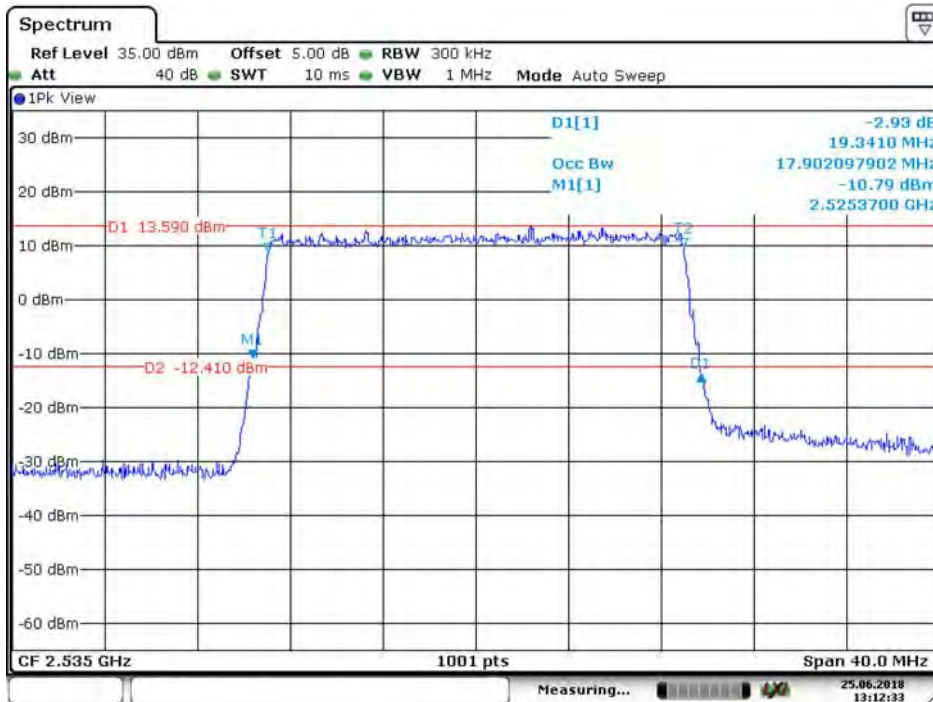
**4.1.1.12 Test Mode = LTE/TM3 20MHz**

**4.1.1.12.1 Test Channel = LCH**



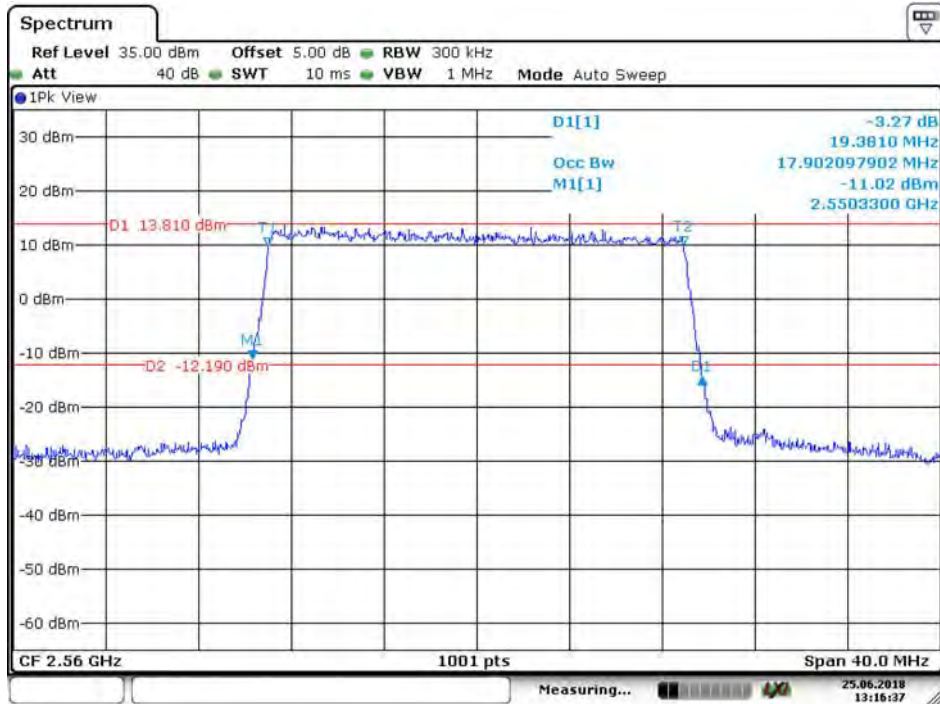
Date: 25 JUN.2018 13:11:53

**4.1.1.12.2 Test Channel = LCH**



Date: 25 JUN.2018 13:12:33

4.1.1.12.3 Test Channel = LCH



Date: 25 JUN 2018 13:16:38



## 5 Band Edges Compliance

Part I –

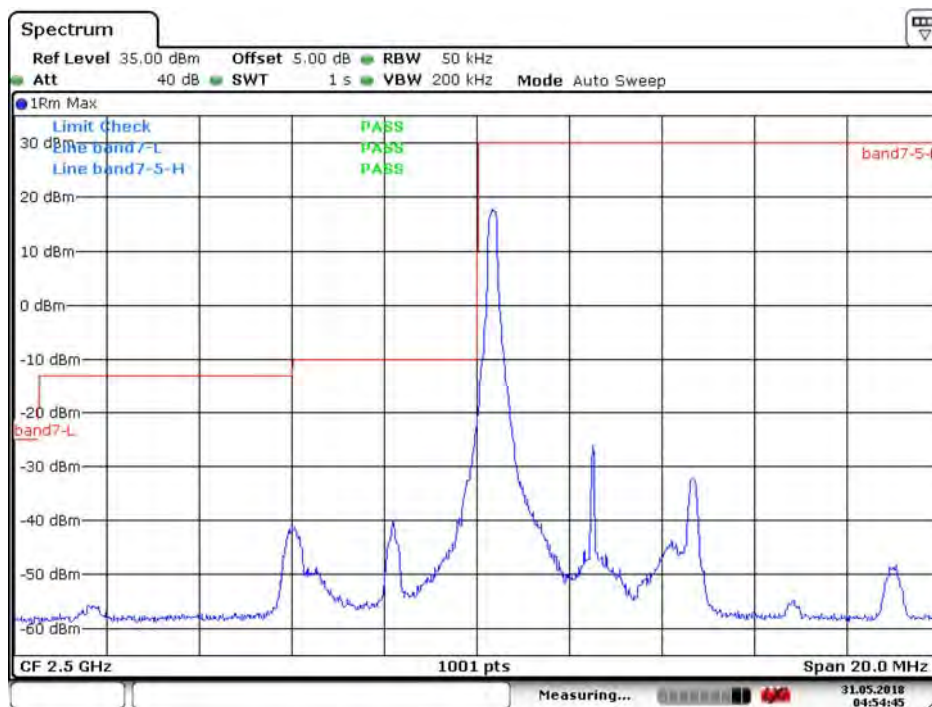
### 5.1 For LTE

#### 5.1.1 Test Band = LTE BAND 7

##### 5.1.1.1 Test Mode = LTE/TM1 5MHz

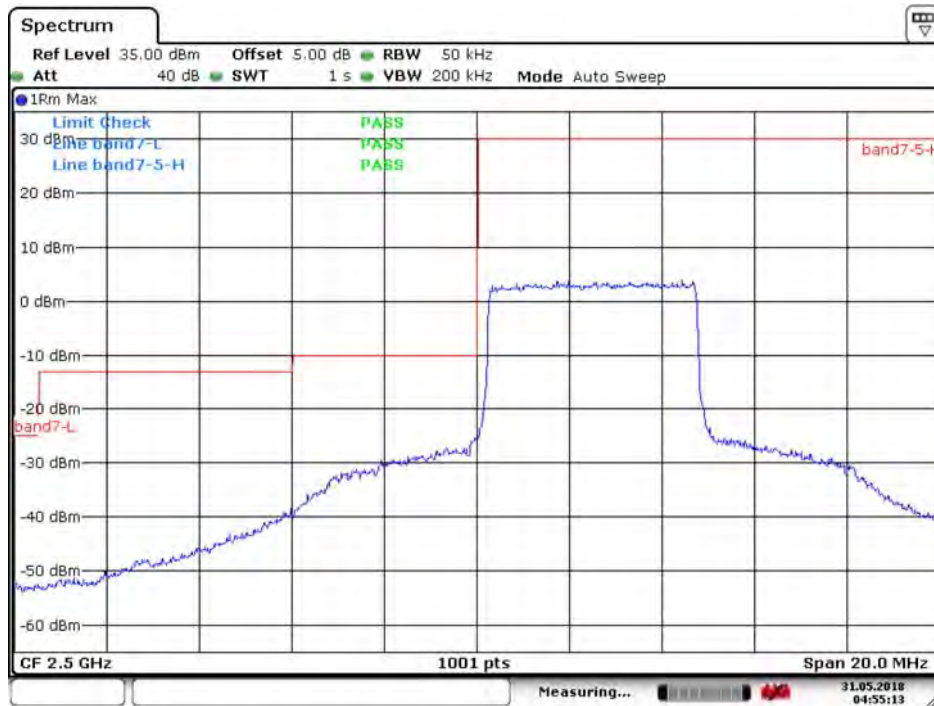
##### 5.1.1.1.1 Test Channel = LCH

##### 5.1.1.1.1.1 Test RB=1RB



Date: 31.MAY.2018 04:54:46

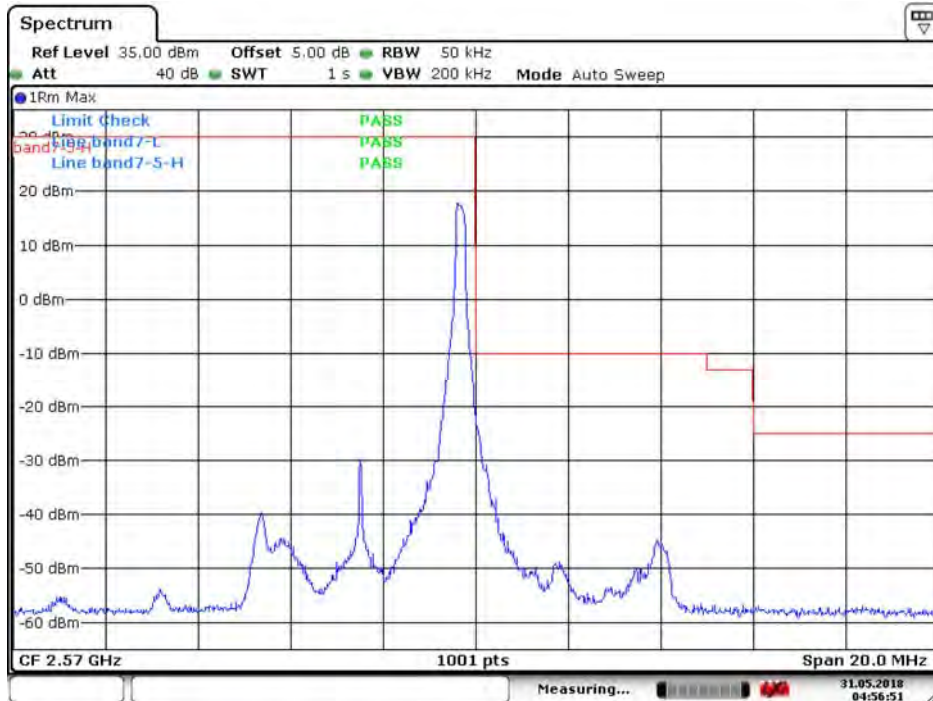
5.1.1.1.2 Test RB=25RB



Date: 31.MAY.2018 04:55:13

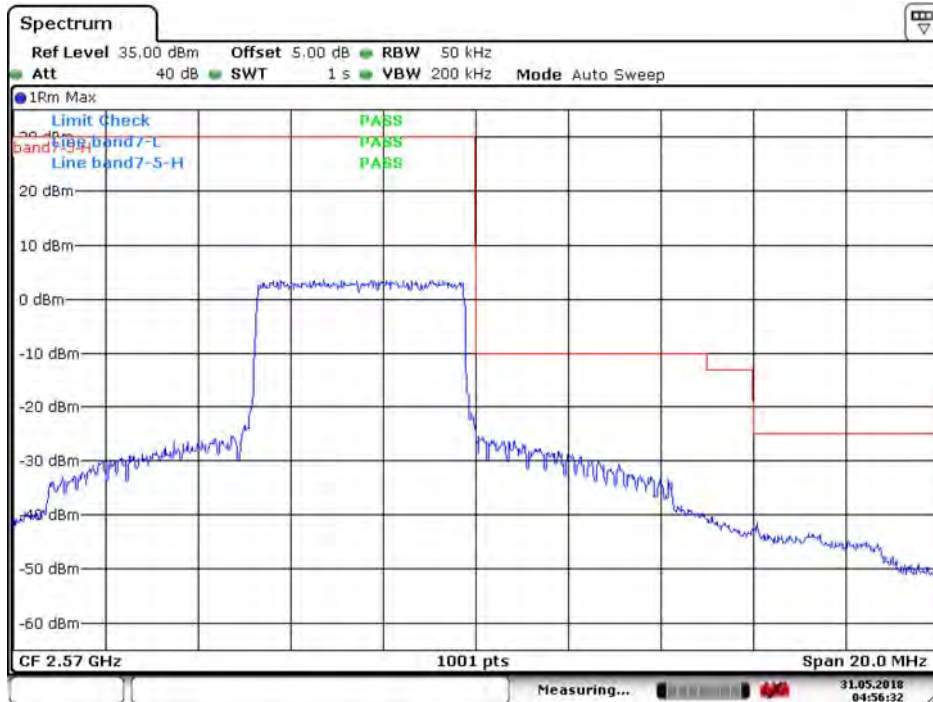
**5.1.1.1.2 Test Channel = HCH**

**5.1.1.1.2.1 Test RB=1RB**



Date: 31.MAY.2018 04:56:51

**5.1.1.1.2.2 Test RB=25RB**

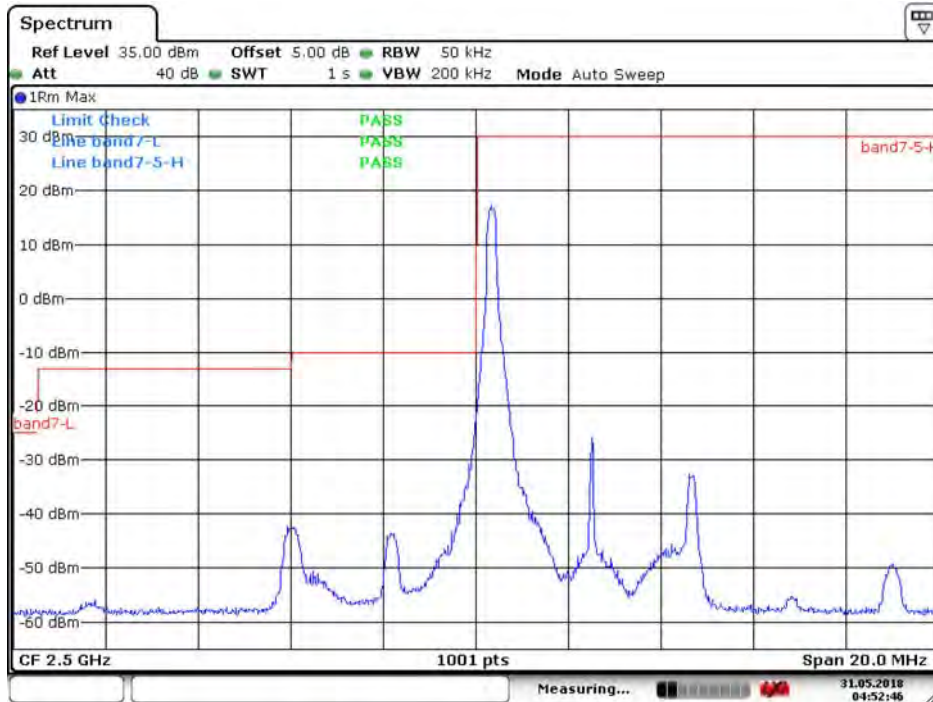


Date: 31.MAY.2018 04:56:33

**5.1.1.2 Test Mode = LTE/TM2 5MHz**

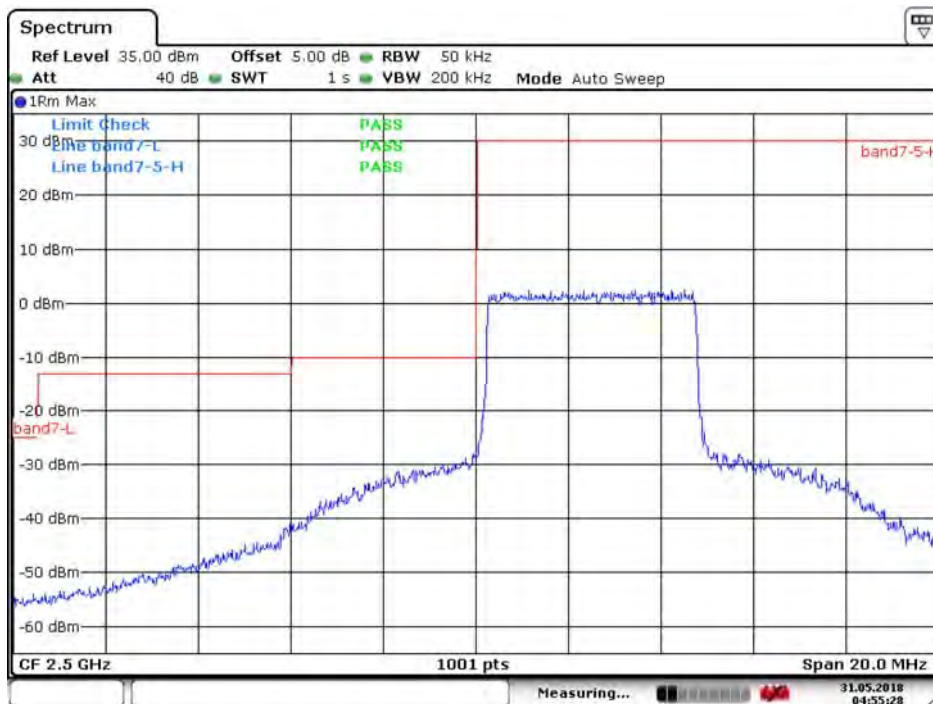
**5.1.1.2.1 Test Channel = LCH**

**5.1.1.2.1.1 Test RB=1RB**



Date: 31.MAY.2018 04:52:46

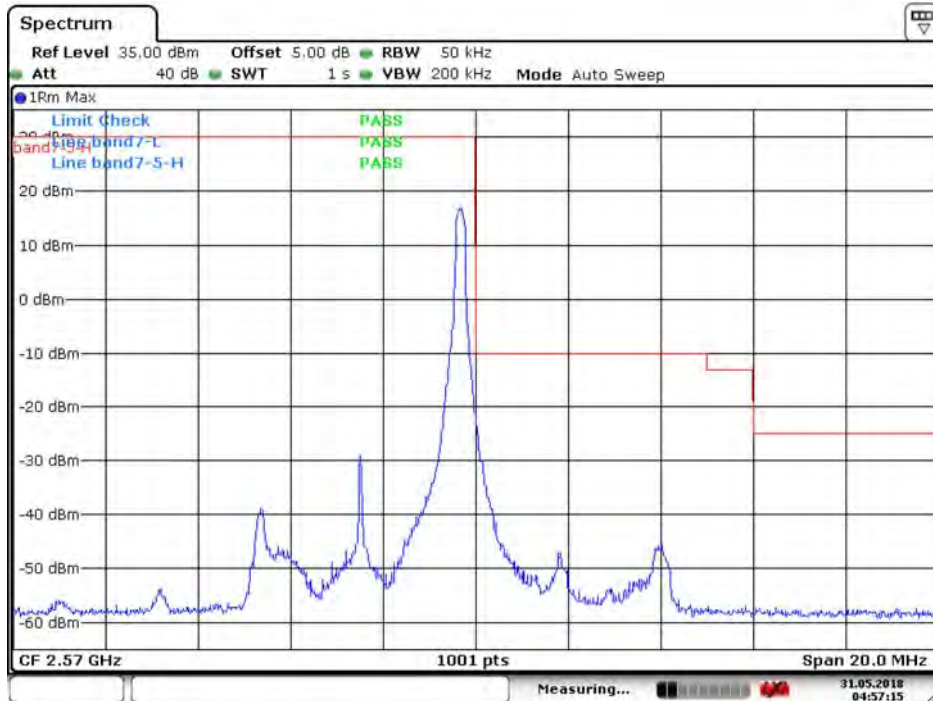
**5.1.1.2.1.2 Test RB=25RB**



Date: 31.MAY.2018 04:55:28

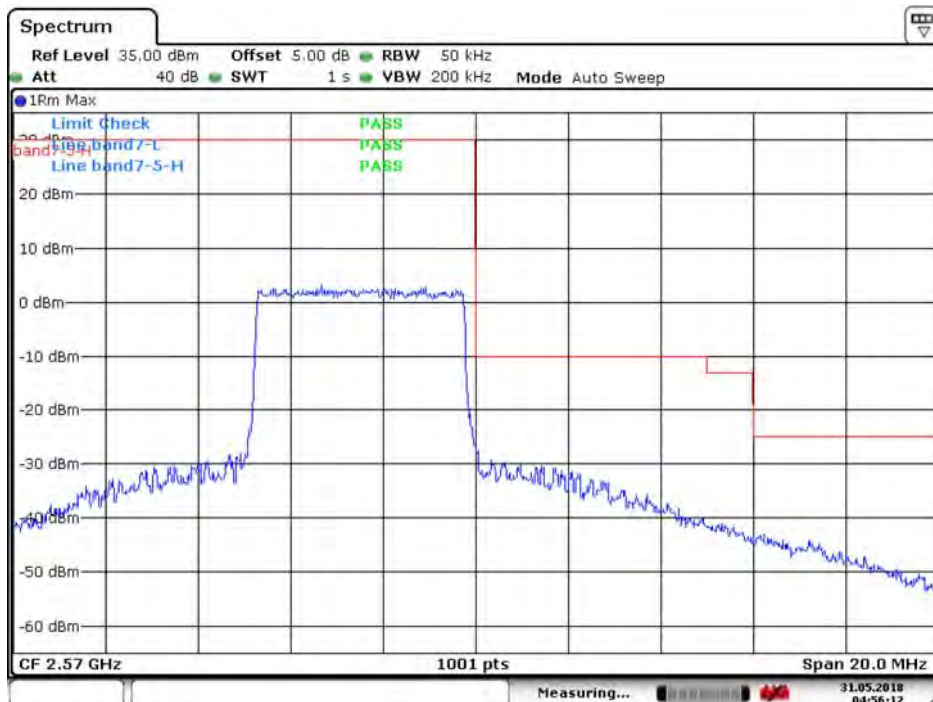
**5.1.1.2.2 Test Channel = HCH**

**5.1.1.2.2.1 Test RB=1RB**



Date: 31.MAY.2018 04:57:16

**5.1.1.2.2.2 Test RB=25RB**

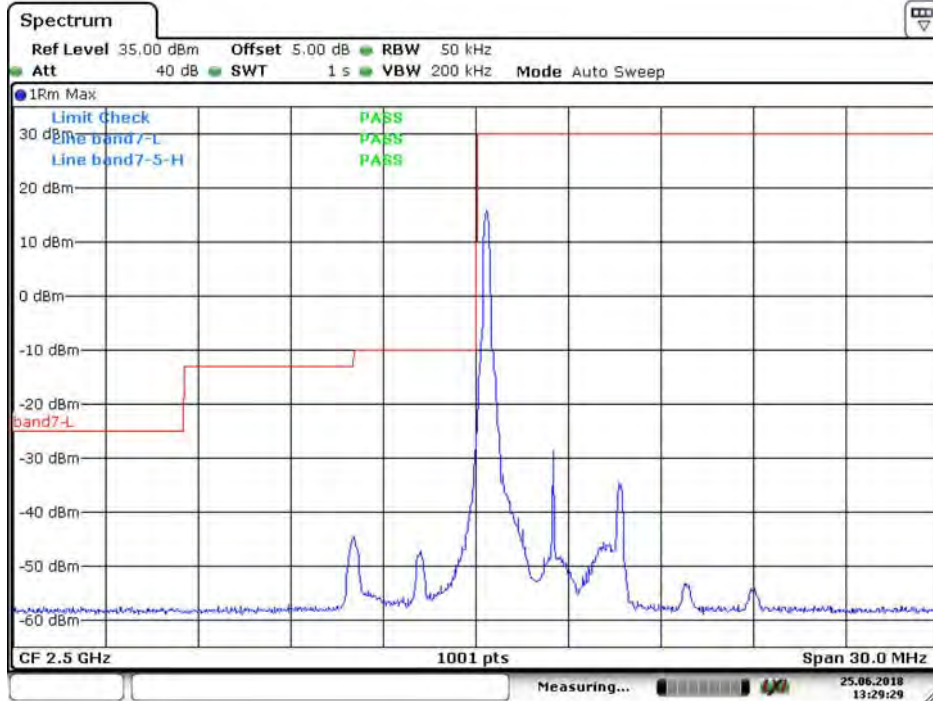


Date: 31.MAY.2018 04:56:12

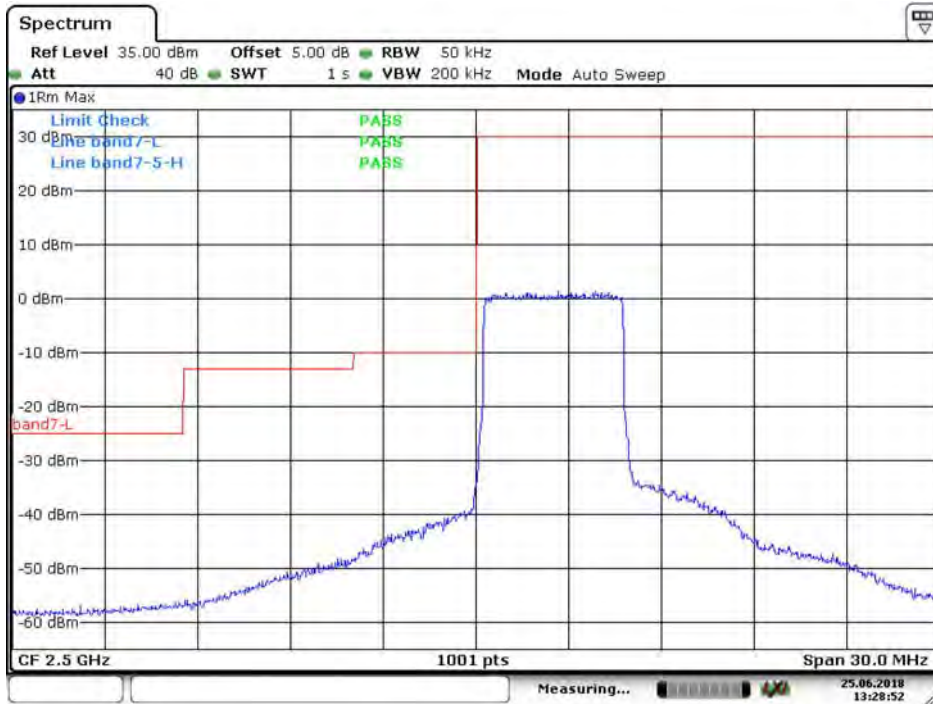
**5.1.1.3 Test Mode = LTE/TM3 5MHz**

**5.1.1.3.1 Test Channel = LCH**

**5.1.1.3.1.1 Test RB=1RB**

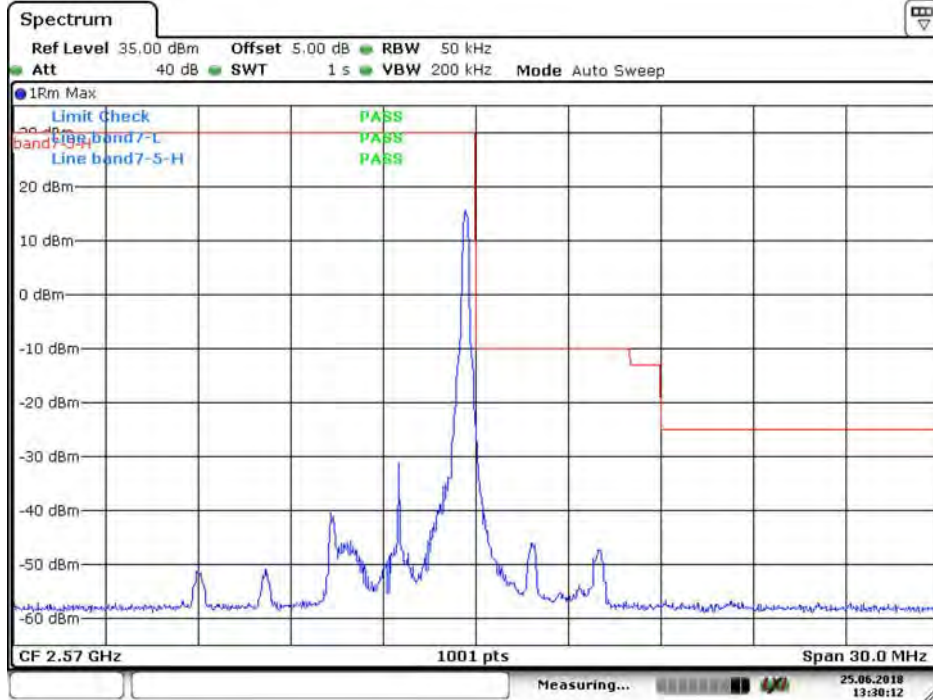


**5.1.1.3.1.2 Test RB=25RB**



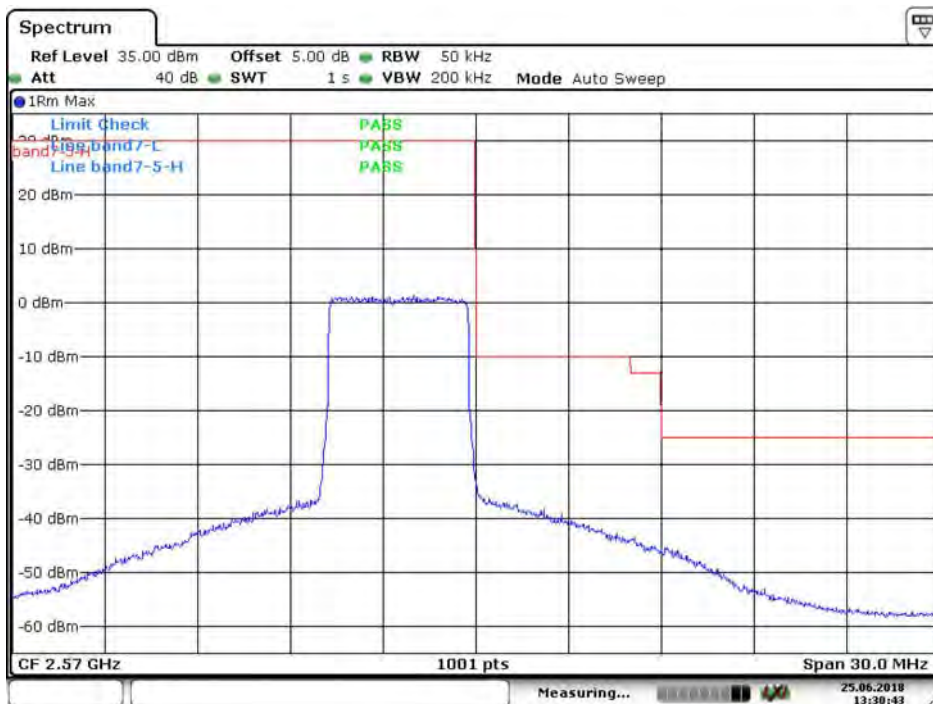
**5.1.1.3.2 Test Channel = HCH**

**5.1.1.3.2.1 Test RB=1RB**



Date: 25 JUN 2018 13:30:13

**5.1.1.3.2.2 Test RB=25RB**

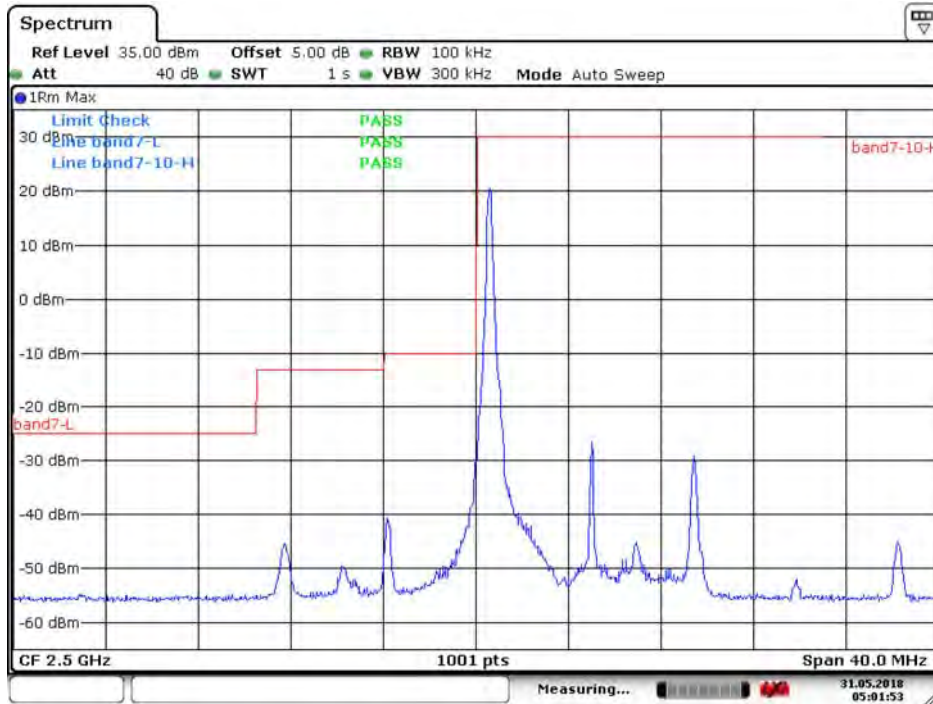


Date: 25 JUN 2018 13:30:43

**5.1.1.4 Test Mode = LTE/TM1 10MHz**

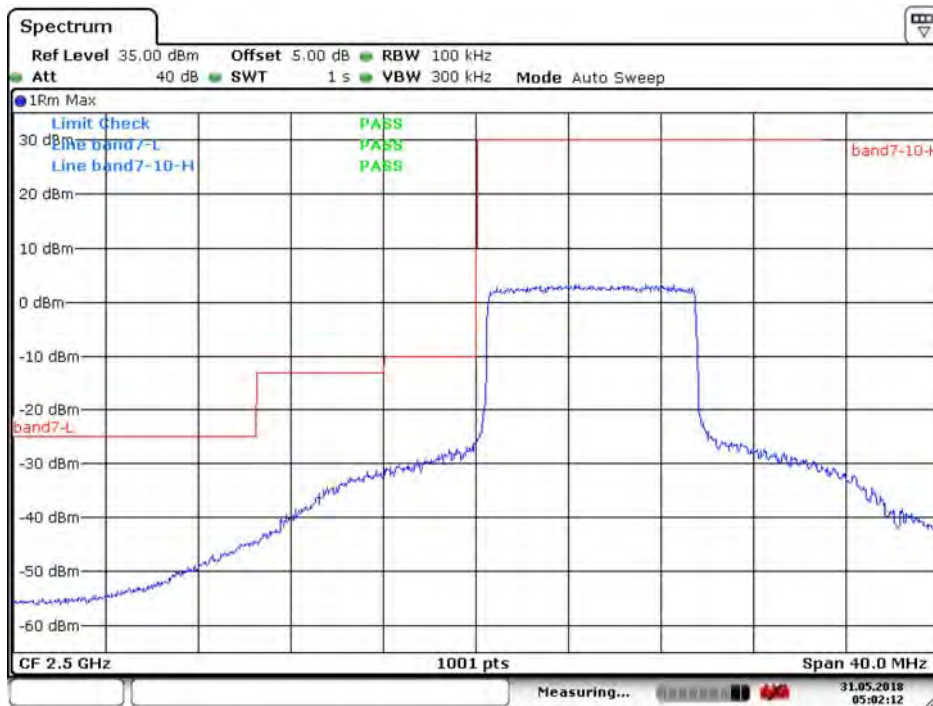
**5.1.1.4.1 Test Channel = LCH**

**5.1.1.4.1.1 Test RB=1RB**



Date: 31.MAY.2018 05:01:54

**5.1.1.4.1.2 Test RB=50RB**

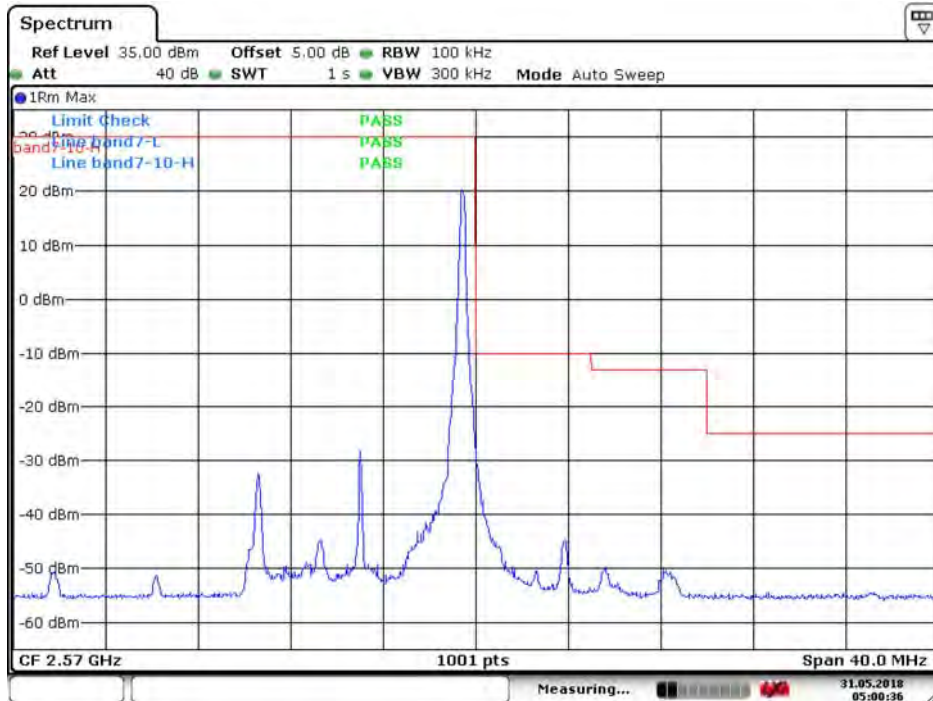


Date: 31.MAY.2018 05:02:12



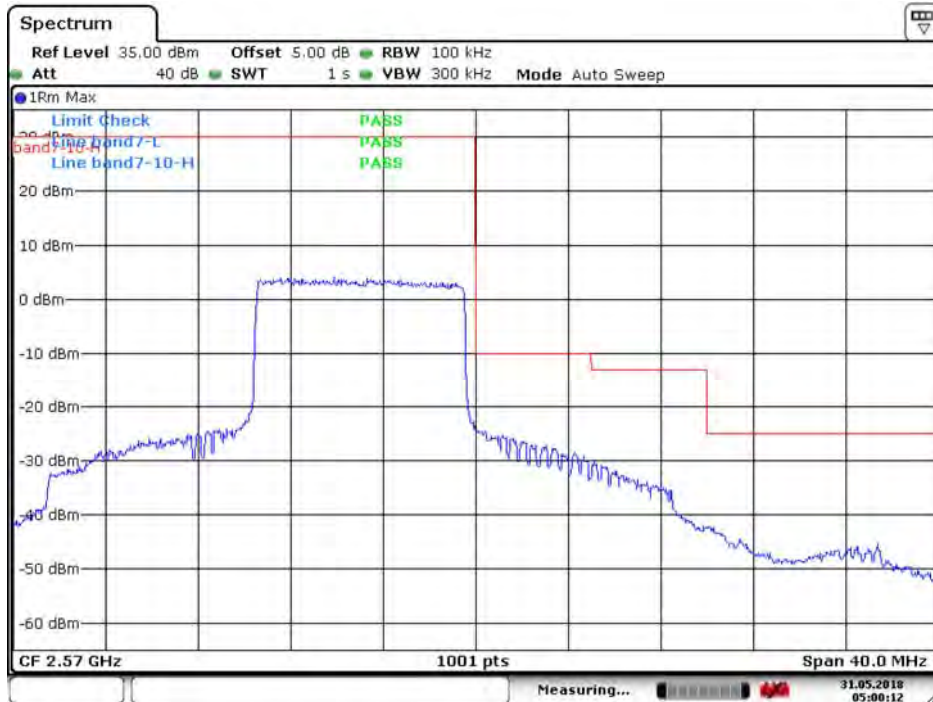
**5.1.1.4.2 Test Channel = HCH**

**5.1.1.4.2.1 Test RB=1RB**



Date: 31.MAY.2018 05:00:36

**5.1.1.4.2.2 Test RB=50RB**

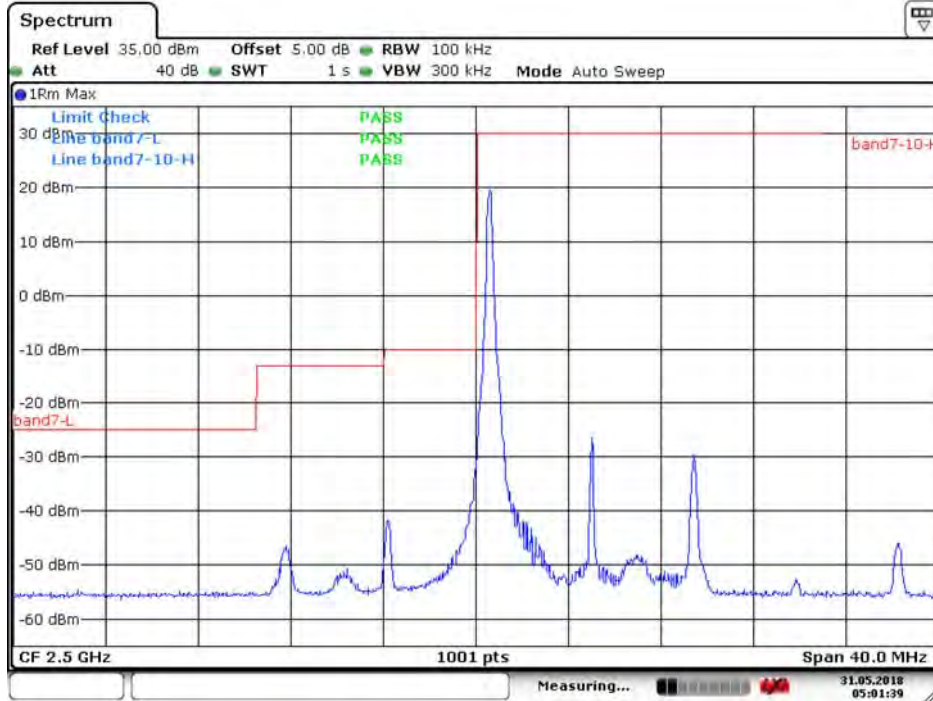


Date: 31.MAY.2018 05:00:12

**5.1.1.5 Test Mode = LTE/TM2 10MHz**

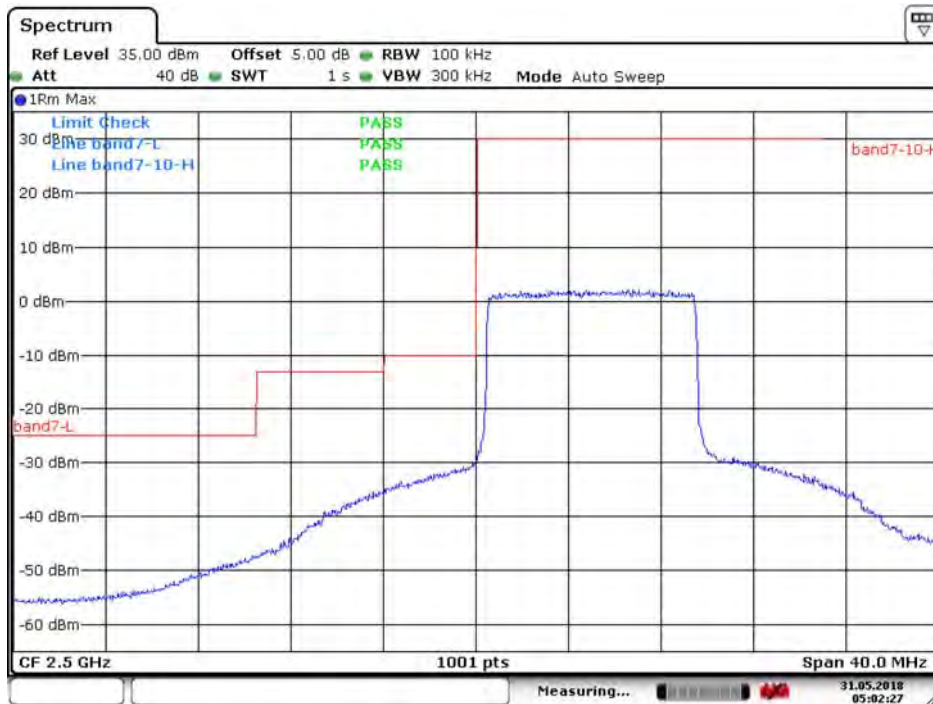
**5.1.1.5.1 Test Channel = LCH**

**5.1.1.5.1.1 Test RB=1RB**



Date: 31.MAY.2018 05:01:39

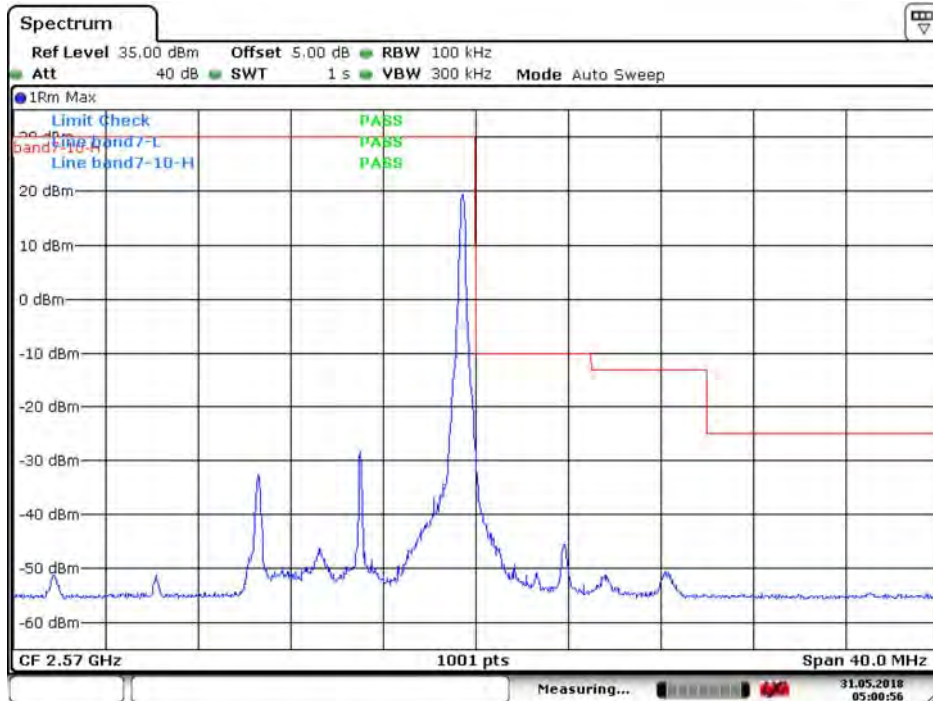
**5.1.1.5.1.2 Test RB=50RB**



Date: 31.MAY.2018 05:02:27

**5.1.1.5.2 Test Channel = HCH**

**5.1.1.5.2.1 Test RB=1RB**



Date: 31.MAY.2018 05:00:57

**5.1.1.5.2.2 Test RB=50RB**

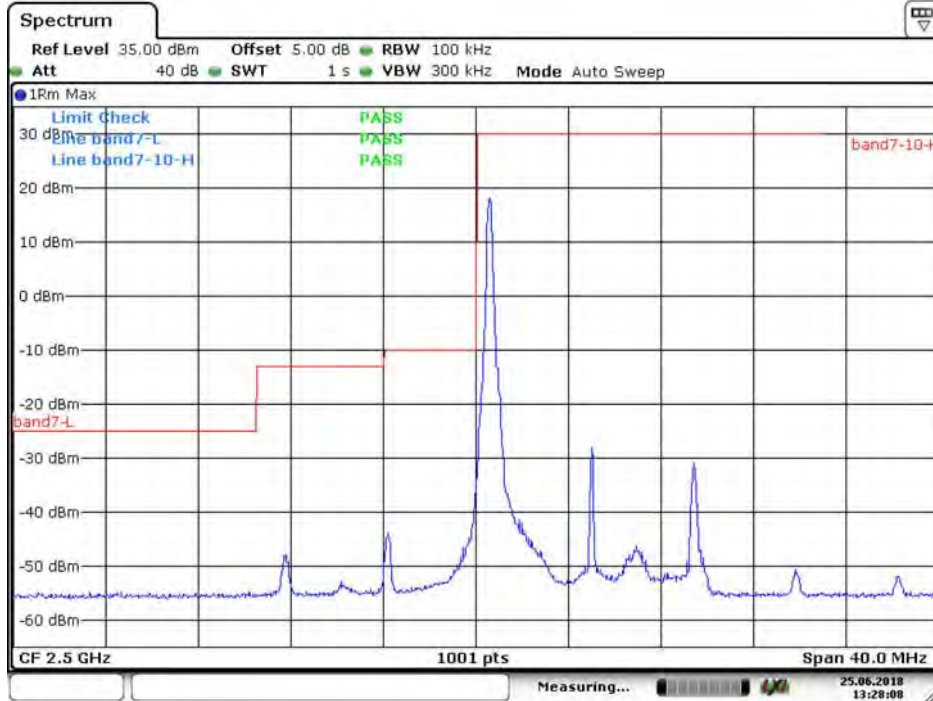


Date: 31.MAY.2018 04:59:42

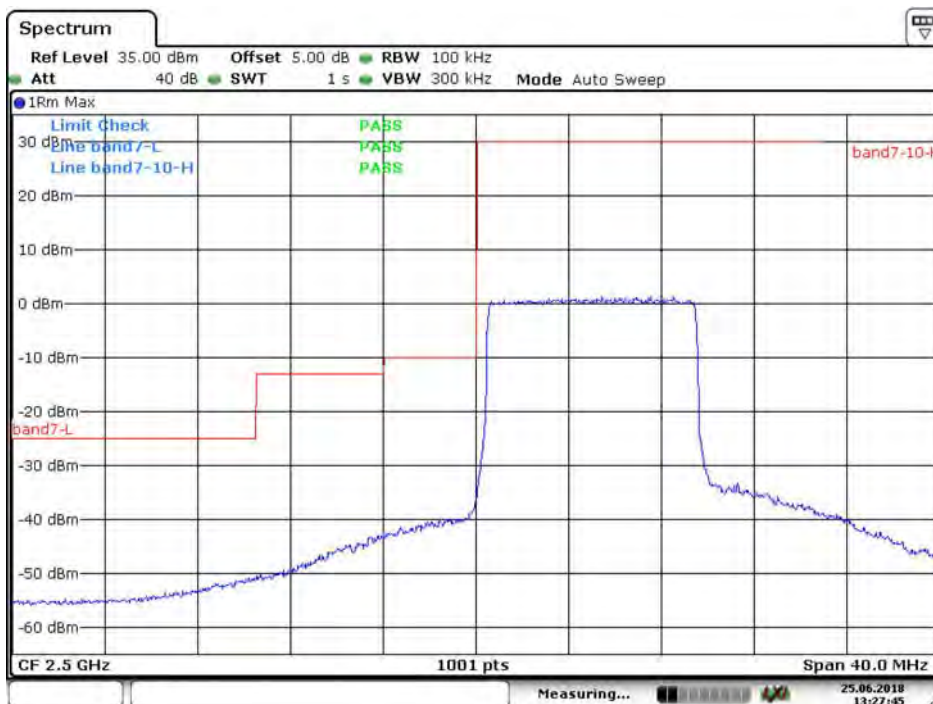
**5.1.1.6 Test Mode = LTE/TM3 10MHz**

**5.1.1.6.1 Test Channel = LCH**

**5.1.1.6.1.1 Test RB=1RB**

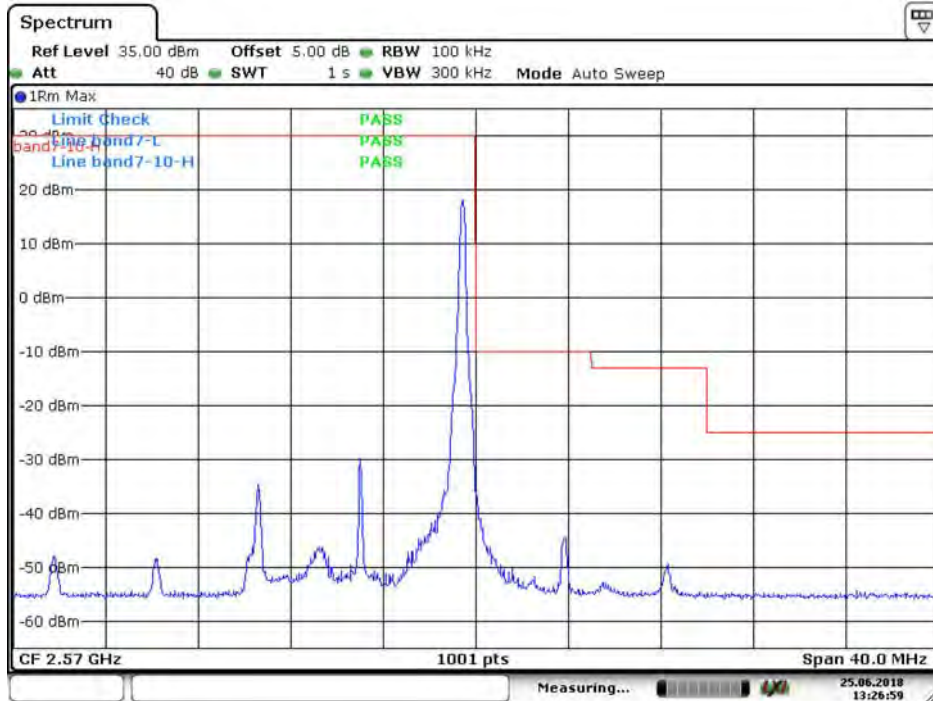


**5.1.1.6.1.2 Test RB=50RB**



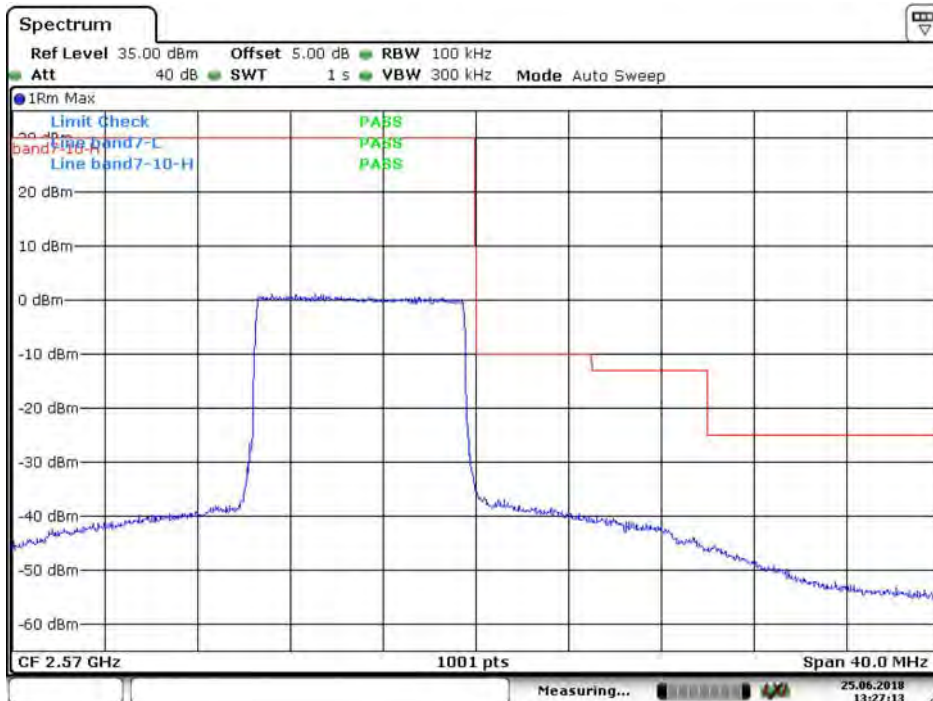
**5.1.1.6.2 Test Channel = HCH**

**5.1.1.6.2.1 Test RB=1RB**



Date: 25 JUN 2018 13:26:59

**5.1.1.6.2.2 Test RB=50RB**

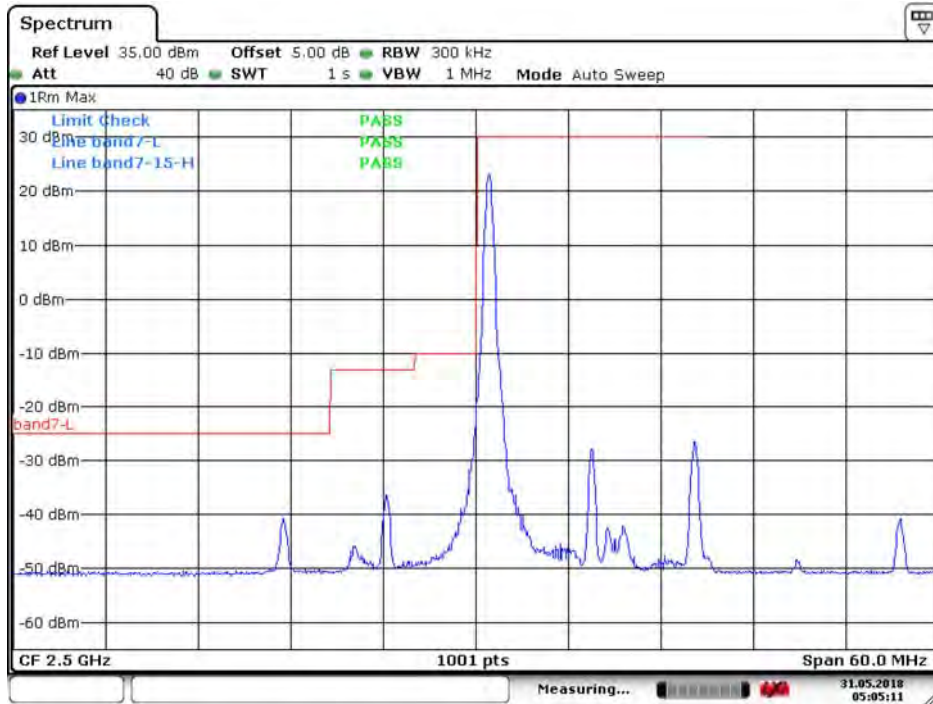


Date: 25 JUN 2018 13:27:14

**5.1.1.7 Test Mode = LTE/TM1 15MHz**

**5.1.1.7.1 Test Channel = LCH**

**5.1.1.7.1.1 Test RB=1RB**



Date: 31.MAY.2018 05:05:12

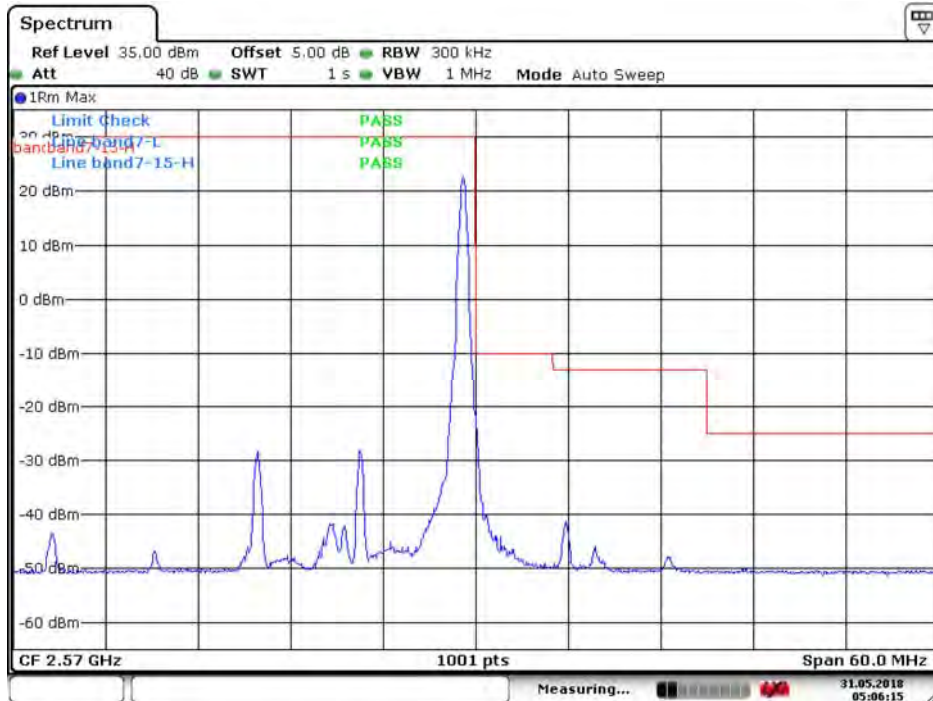
**5.1.1.7.1.2 Test RB=75RB**



Date: 31.MAY.2018 05:04:15

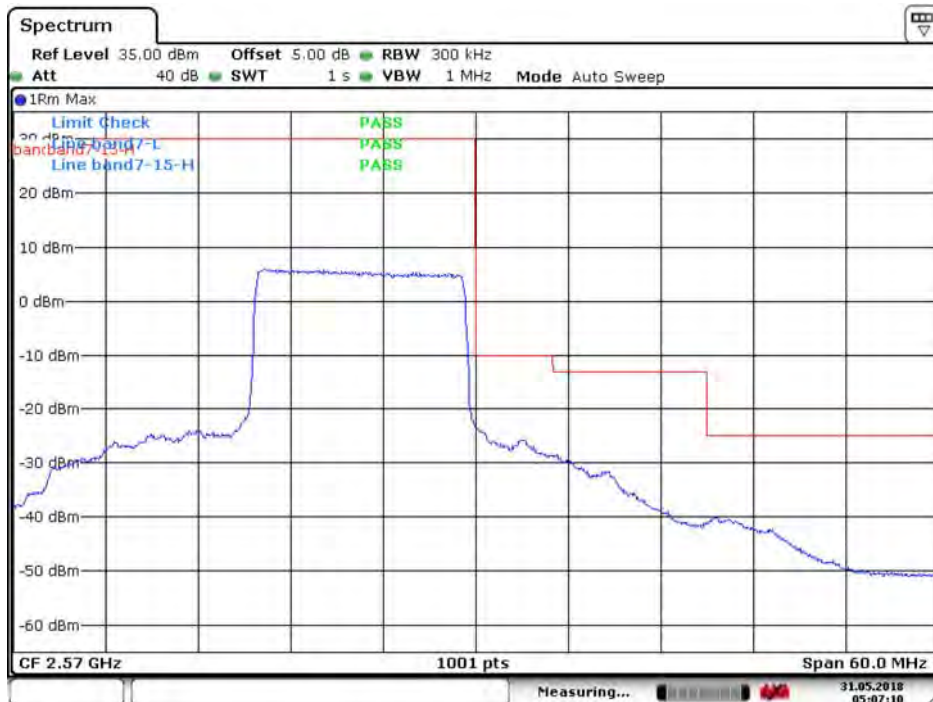
**5.1.1.7.2 Test Channel = HCH**

**5.1.1.7.2.1 Test RB=1RB**



Date: 31.MAY.2018 05:06:16

**5.1.1.7.2.2 Test RB=75RB**

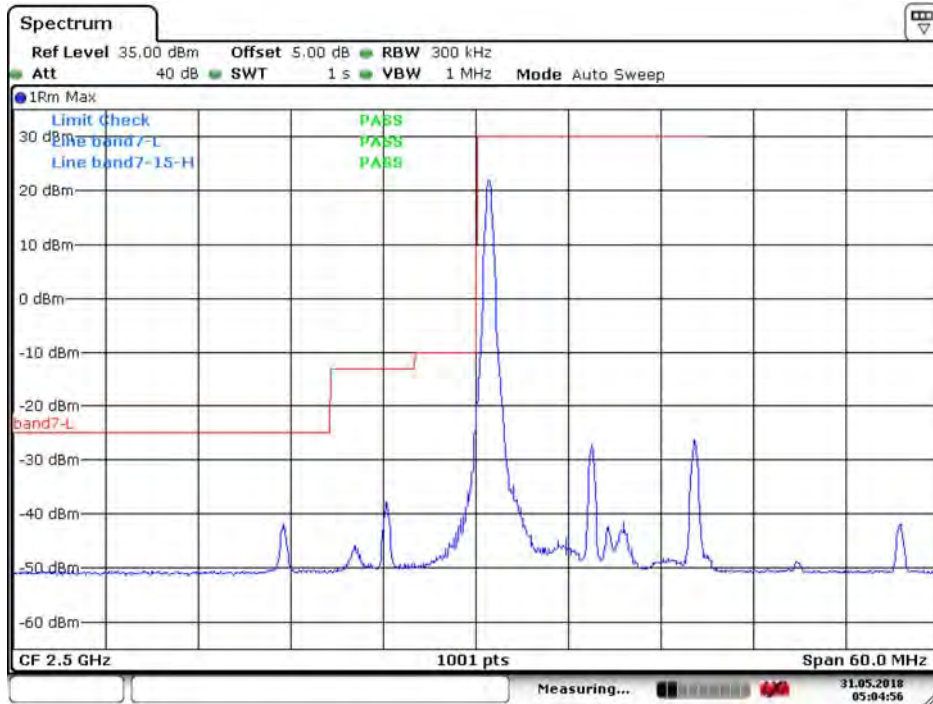


Date: 31.MAY.2018 05:07:10

**5.1.1.8 Test Mode = LTE/TM2 15MHz**

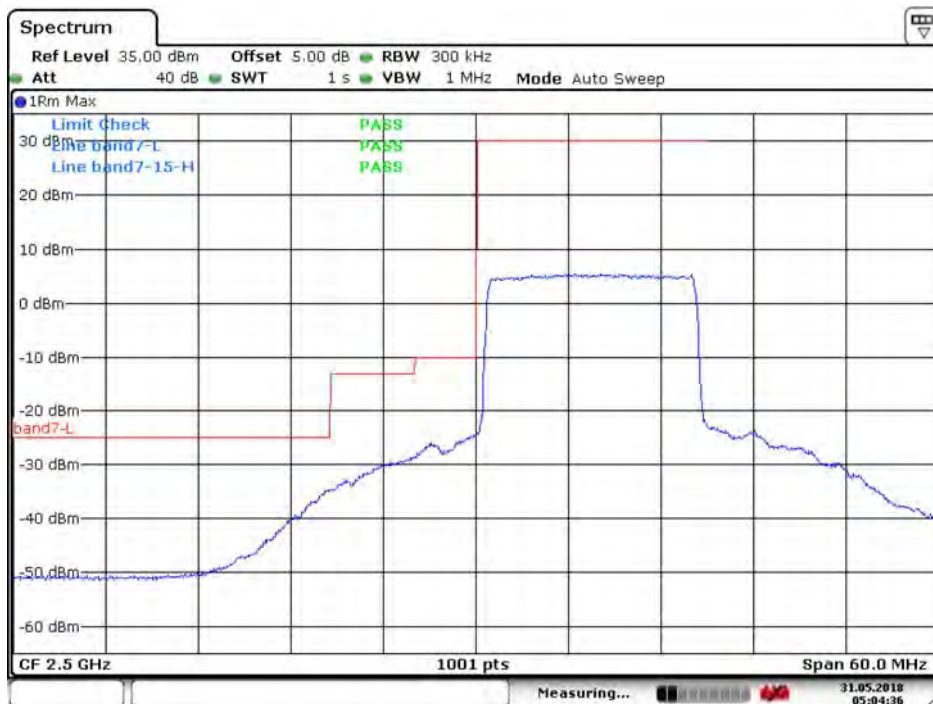
**5.1.1.8.1 Test Channel = LCH**

**5.1.1.8.1.1 Test RB=1RB**



Date: 31.MAY.2018 05:04:56

**5.1.1.8.1.2 Test RB=75RB**

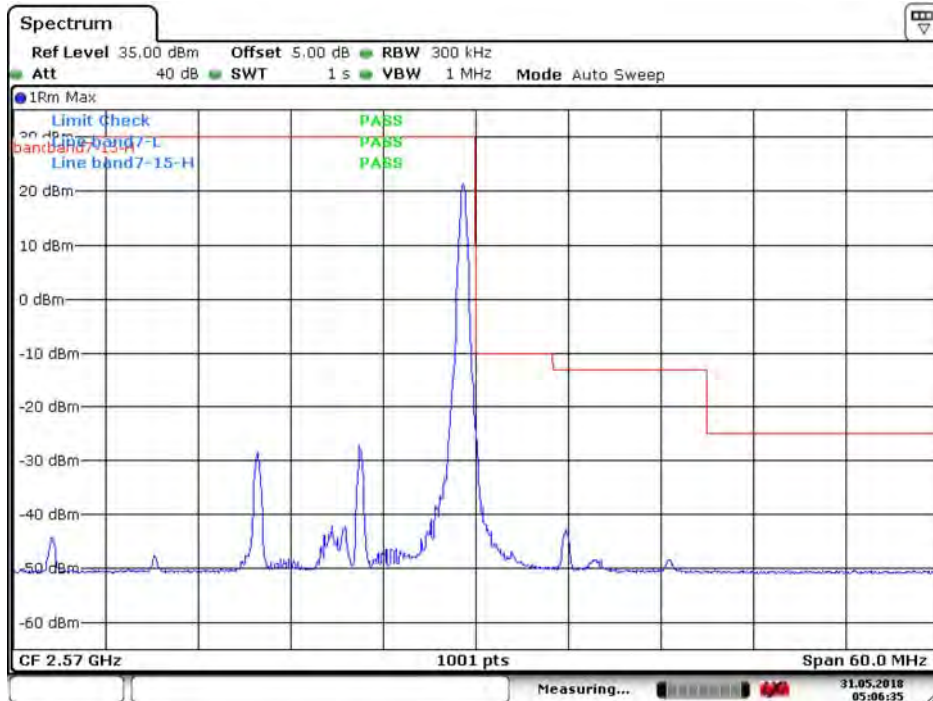


Date: 31.MAY.2018 05:04:36



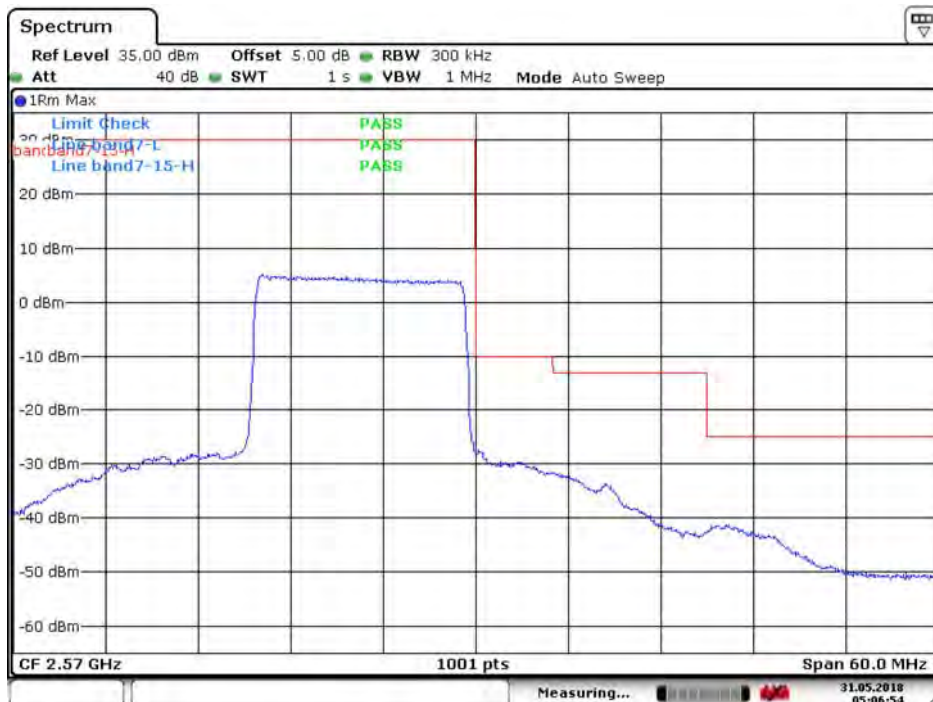
**5.1.1.8.2 Test Channel = HCH**

**5.1.1.8.2.1 Test RB=1RB**



Date: 31.MAY.2018 05:06:35

**5.1.1.8.2.2 Test RB=75RB**

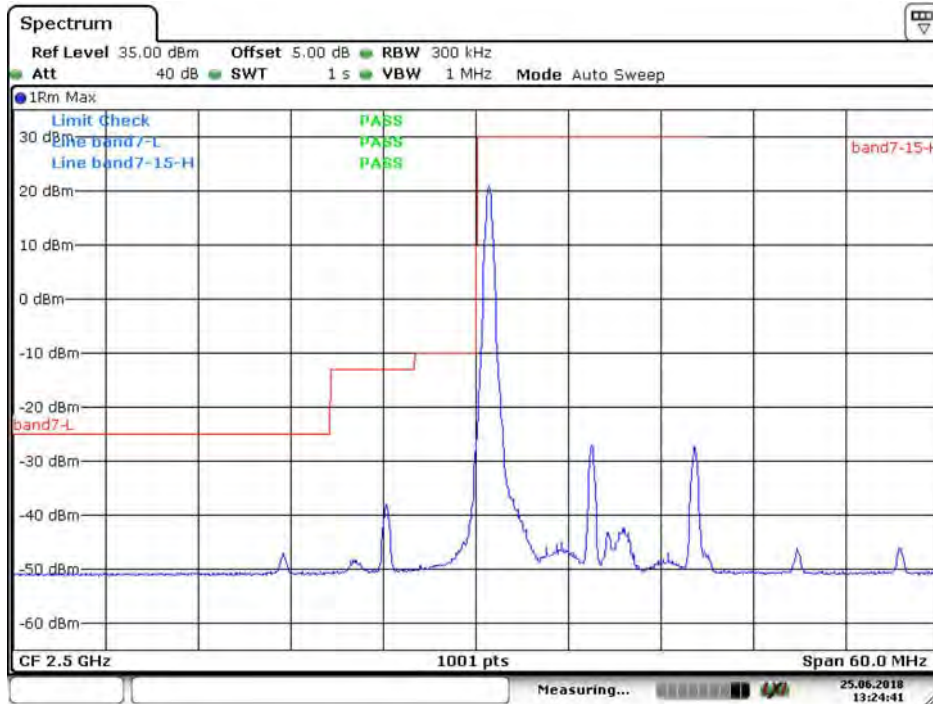


Date: 31.MAY.2018 05:06:54

**5.1.1.9 Test Mode = LTE/TM3 15MHz**

**5.1.1.9.1 Test Channel = LCH**

**5.1.1.9.1.1 Test RB=1RB**



Date: 25 JUN 2018 13:24:41

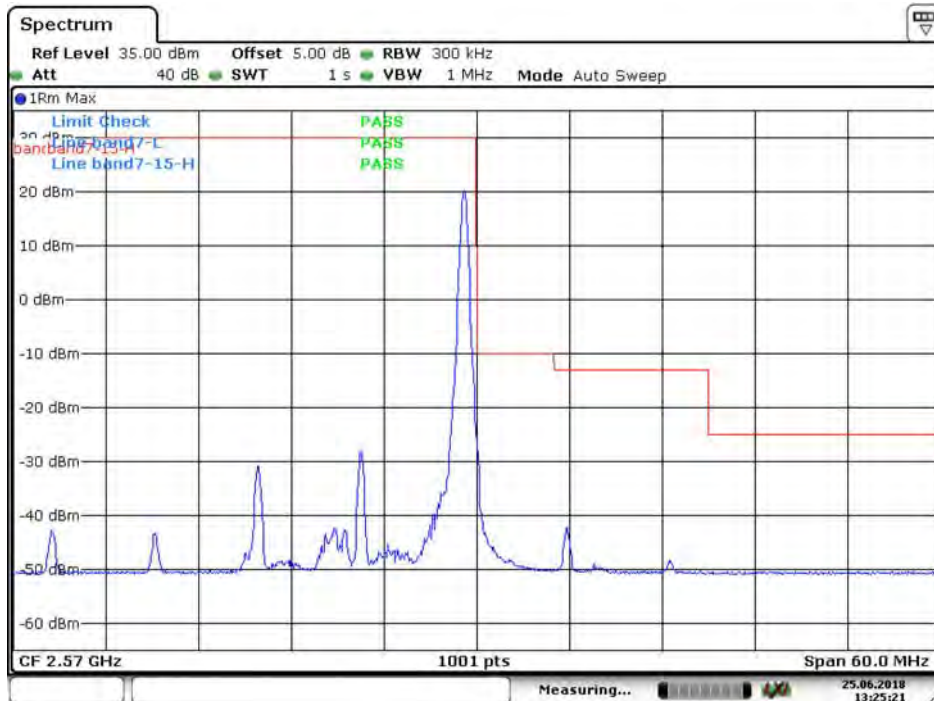
**5.1.1.9.1.2 Test RB=75RB**



Date: 25 JUN 2018 13:24:20

**5.1.1.9.2 Test Channel = HCH**

**5.1.1.9.2.1 Test RB=1RB**



Date: 25 JUN 2018 13:25:22

**5.1.1.9.2.2 Test RB=75RB**

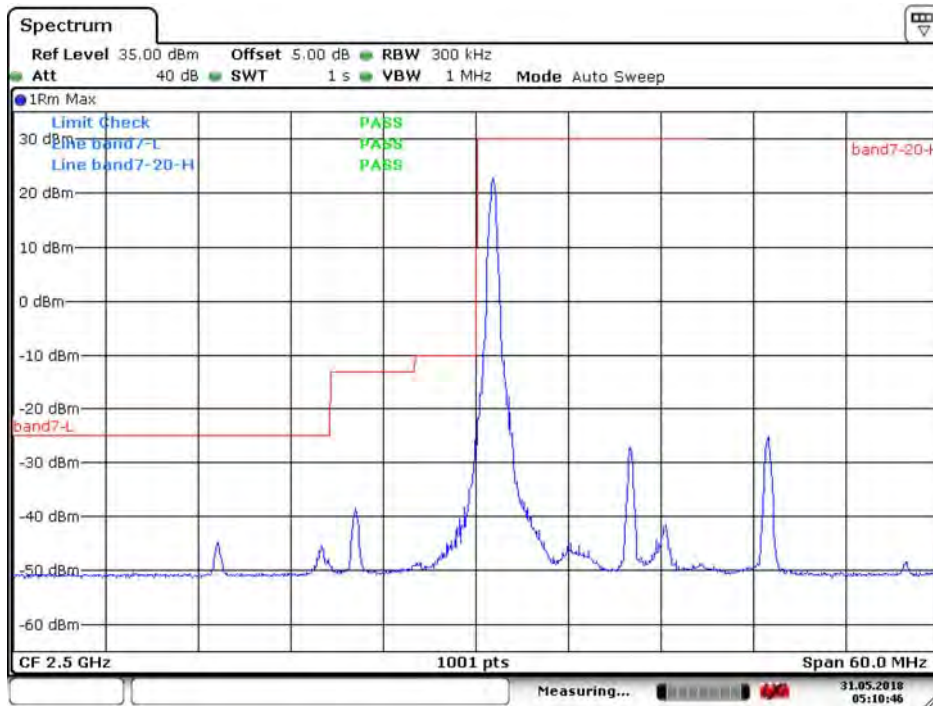


Date: 25 JUN 2018 13:25:36

**5.1.1.10 Test Mode = LTE/TM1 20MHz**

**5.1.1.10.1 Test Channel = LCH**

**5.1.1.10.1.1 Test RB=1RB**



Date: 31.MAY.2018 05:10:46

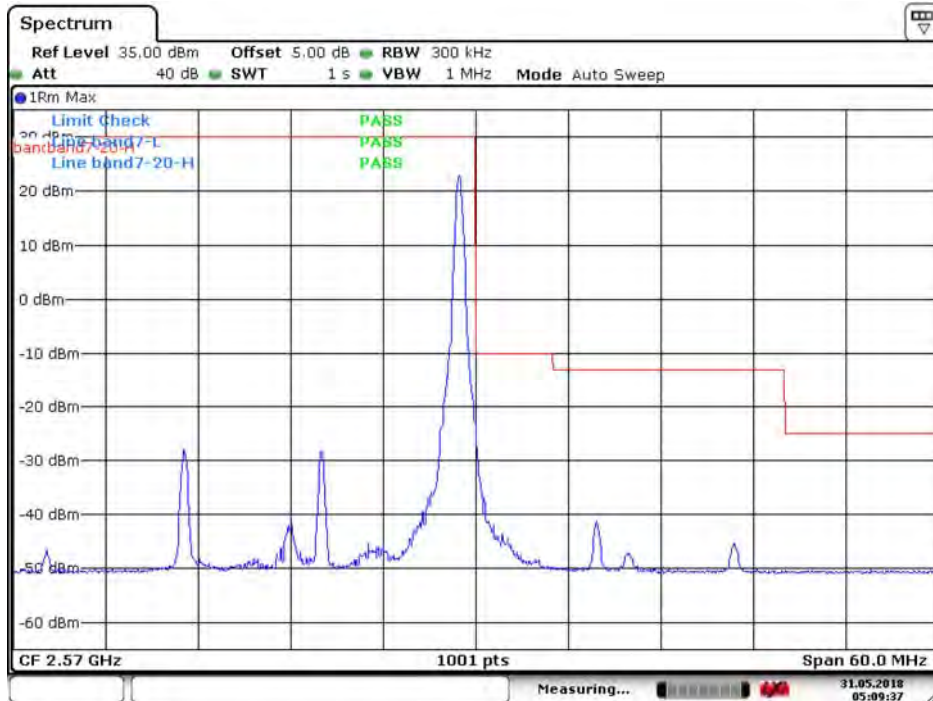
**5.1.1.10.1.2 Test RB=100RB**



Date: 31.MAY.2018 05:11:00

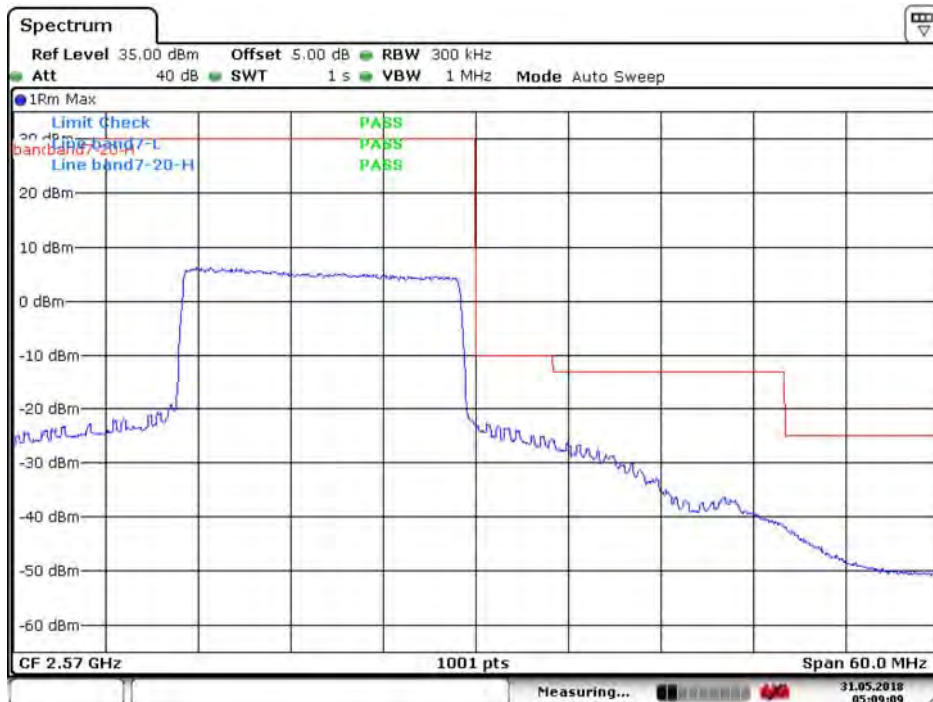
**5.1.1.10.2 Test Channel = HCH**

**5.1.1.10.2.1 Test RB=1RB**



Date: 31.MAY.2018 05:09:37

**5.1.1.10.2.2 Test RB=100RB**

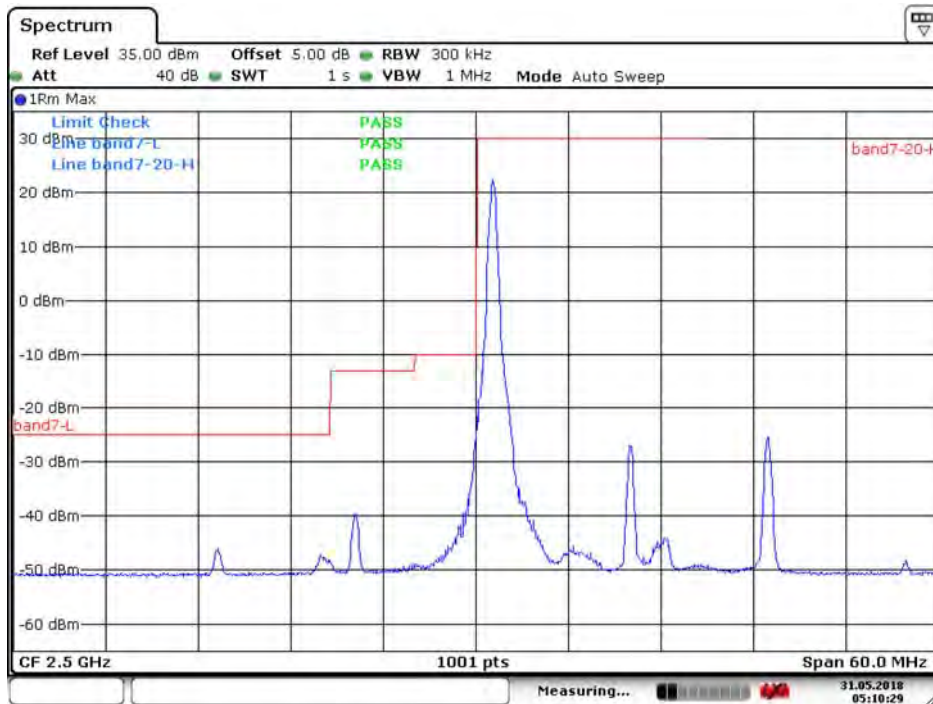


Date: 31.MAY.2018 05:09:09

**5.1.1.11 Test Mode = LTE/TM2 20MHz**

**5.1.1.11.1 Test Channel = LCH**

**5.1.1.11.1.1 Test RB=1RB**



Date: 31.MAY.2018 05:10:30

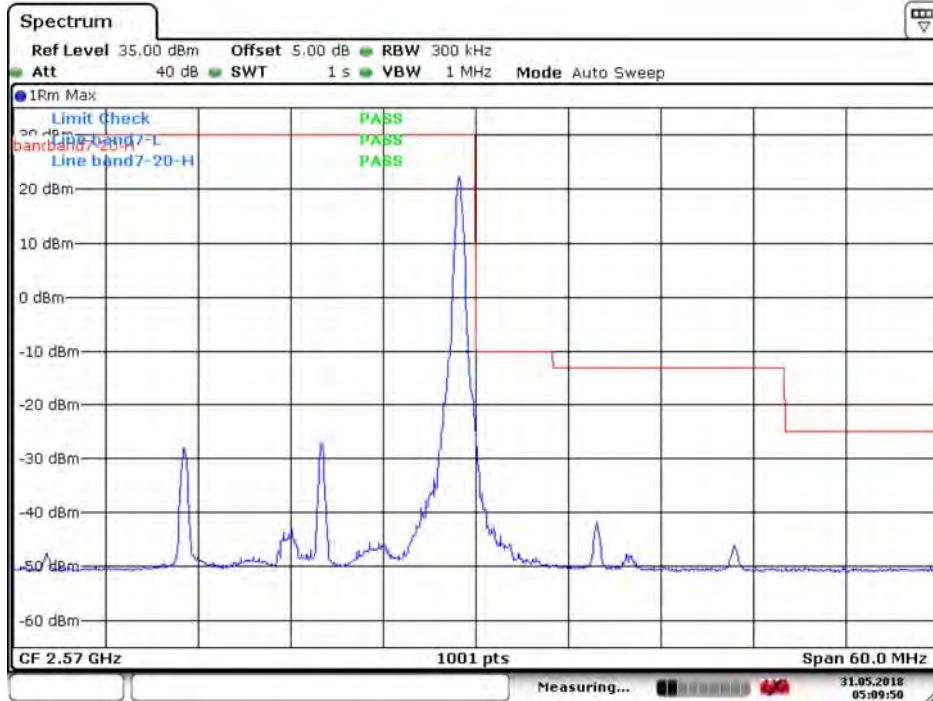
**5.1.1.11.1.2 Test RB=100RB**



Date: 31.MAY.2018 05:11:17

**5.1.1.11.2 Test Channel = HCH**

**5.1.1.11.2.1 Test RB=1RB**



Date: 31.MAY.2018 05:09:50

**5.1.1.11.2.2 Test RB=100RB**

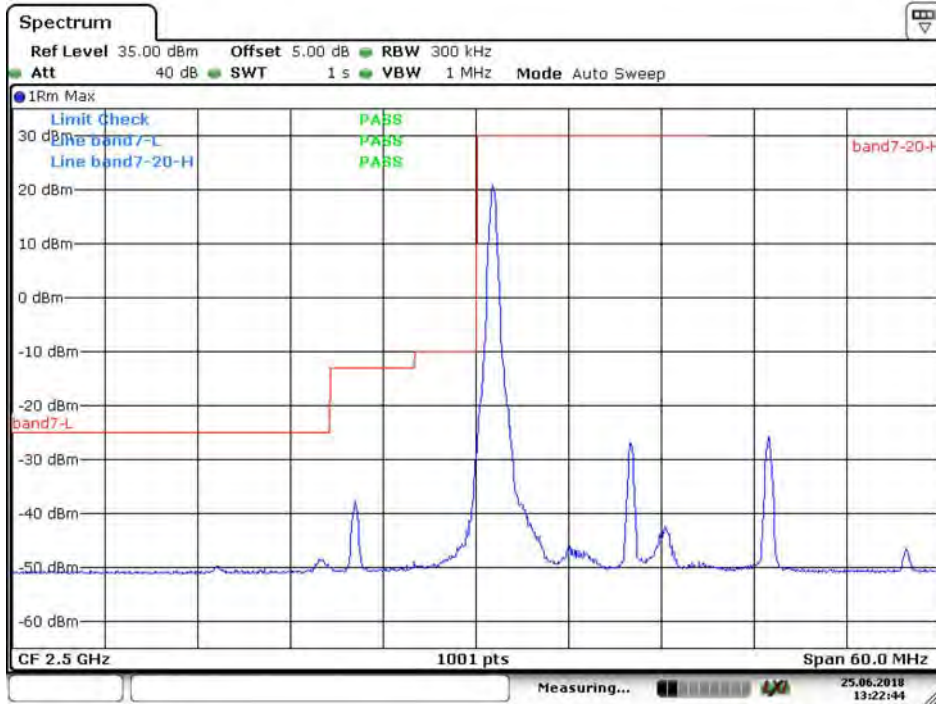


Date: 31.MAY.2018 05:08:44

**5.1.1.12 Test Mode = LTE/TM3 20MHz**

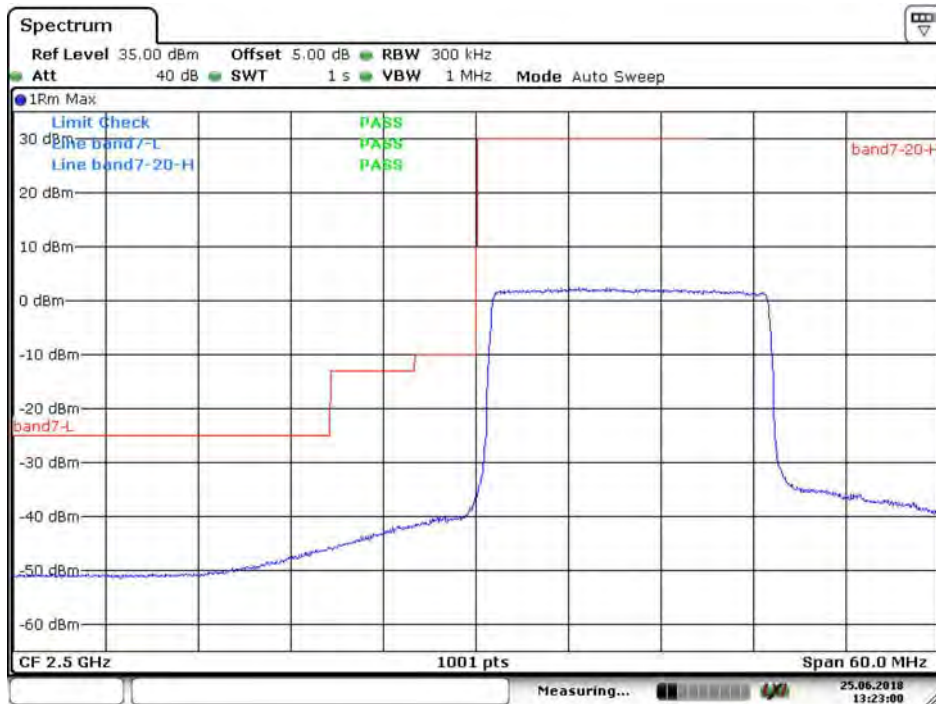
**5.1.1.12.1 Test Channel = LCH**

**5.1.1.12.1.1 Test RB=1RB**



Date: 25 JUN 2018 13:22:44

**5.1.1.12.1.2 Test RB=100RB**

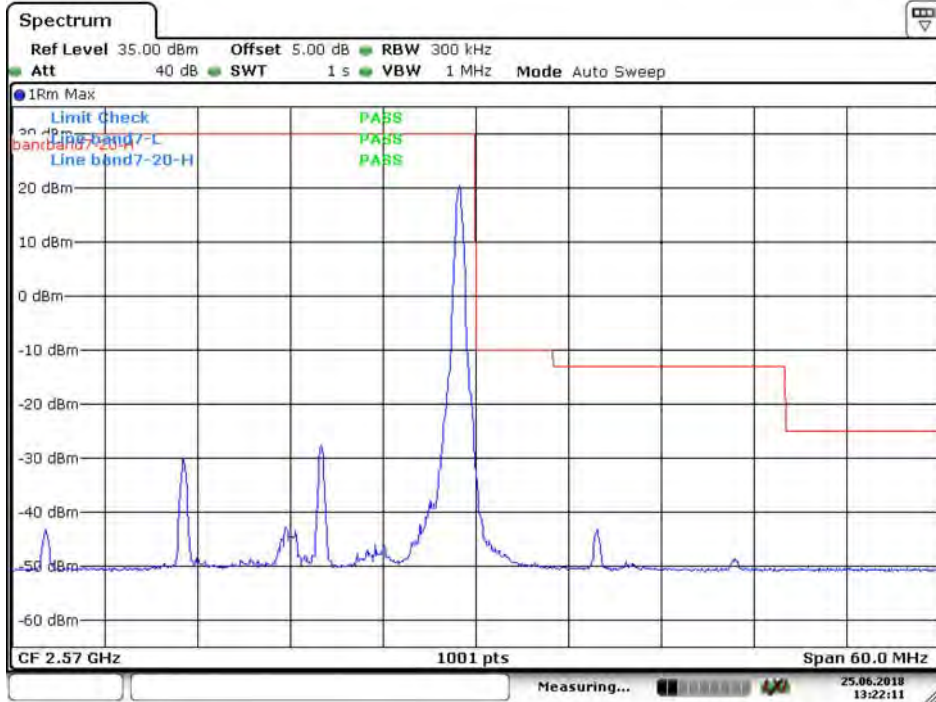


Date: 25 JUN 2018 13:23:01



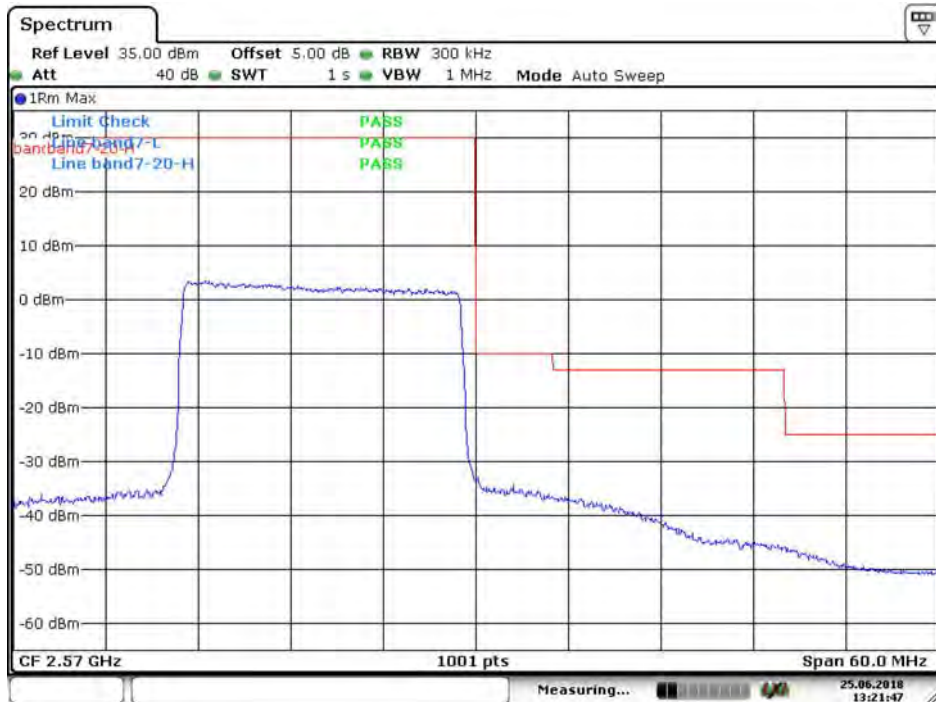
**5.1.1.12.2 Test Channel = HCH**

**5.1.1.12.2.1 Test RB=1RB**



Date: 25 JUN 2018 13:22:11

**5.1.1.12.2.2 Test RB=100RB**



Date: 25 JUN 2018 13:21:48

## 6 Spurious Emission at Antenna Terminal

NOTE: 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.

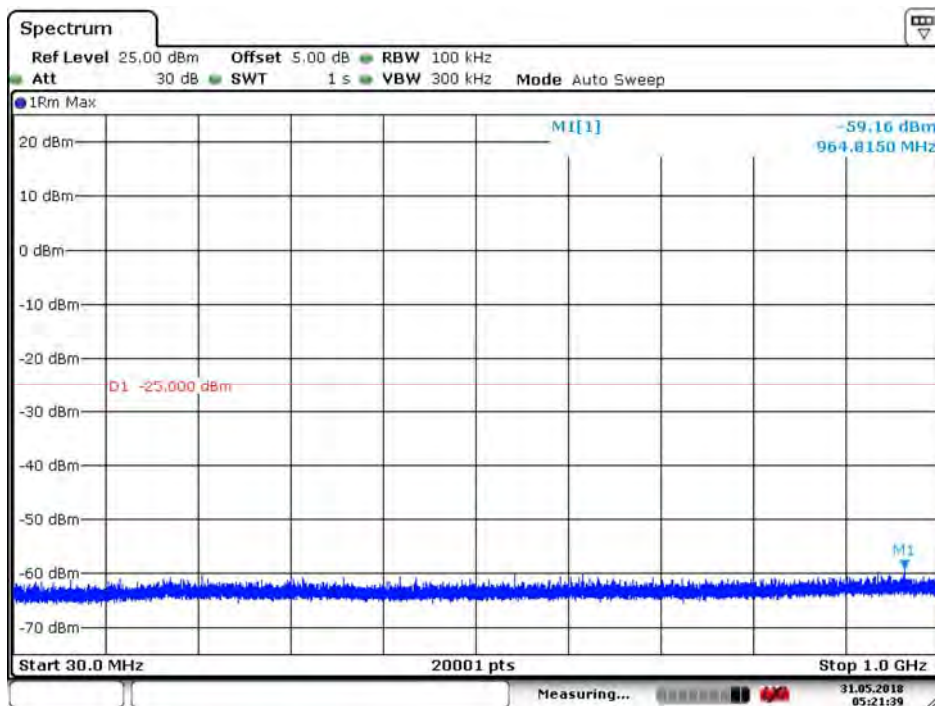
Part I - Test Plots

### 6.1 For LTE

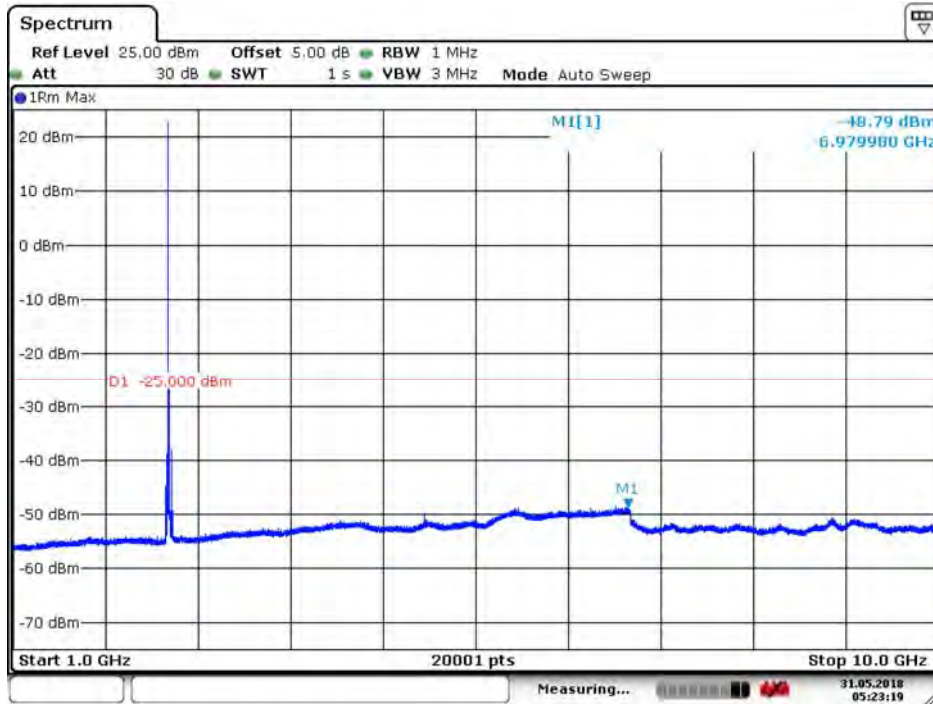
#### 6.1.1 Test Band = LTE BAND 7

##### 6.1.1.1 Test Mode = LTE / TM1 20MHz RB1#0

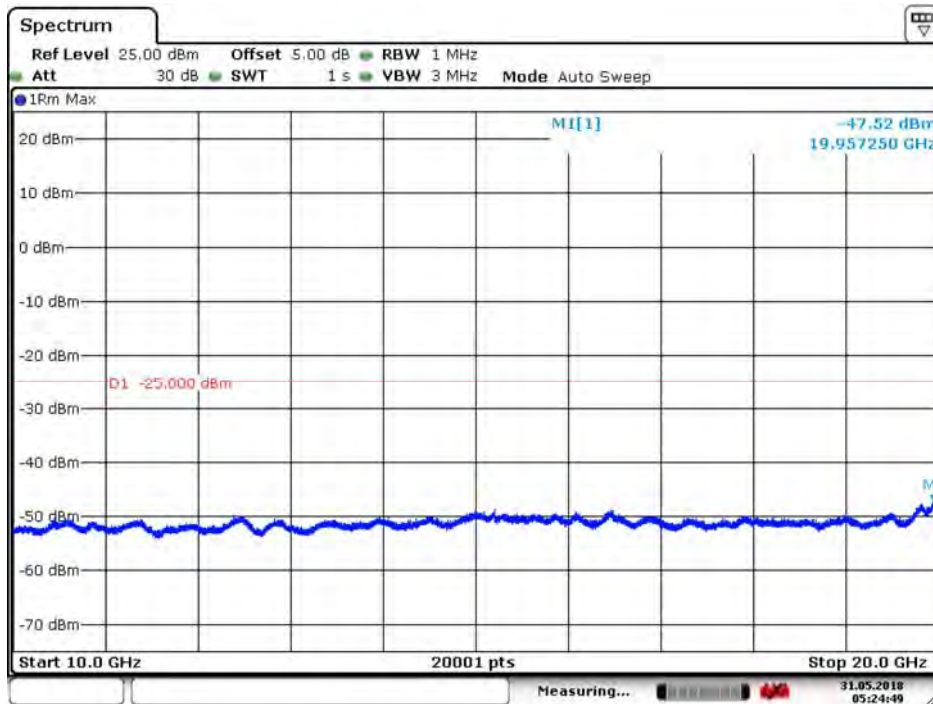
##### 6.1.1.1.1 Test Channel = LCH



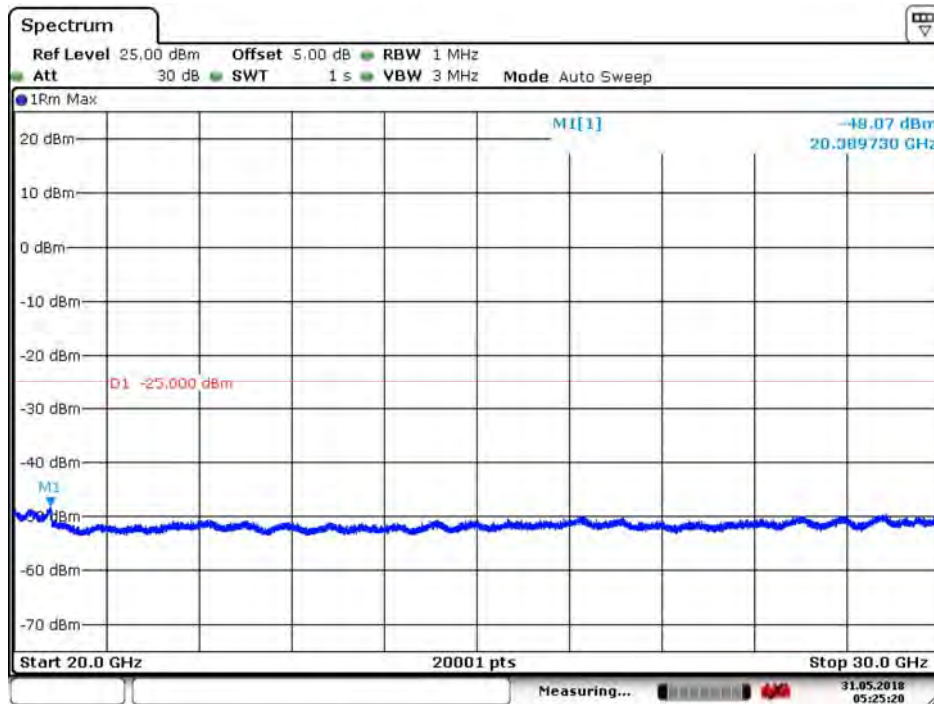
Date: 31.MAY.2018 05:21:38



Date: 31.MAY.2018 05:23:20

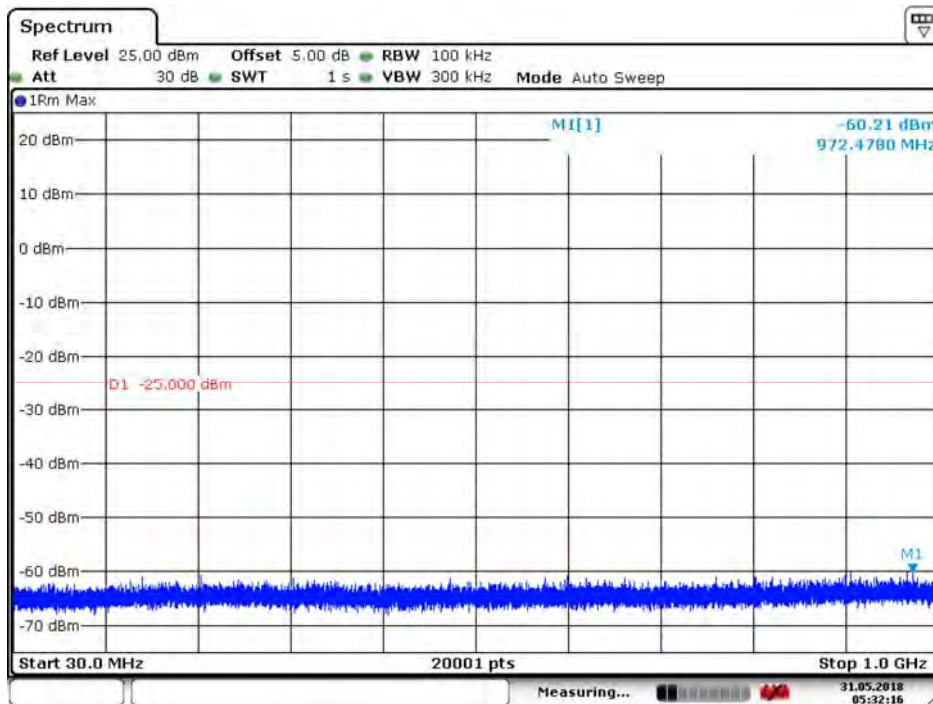


Date: 31.MAY.2018 05:24:50

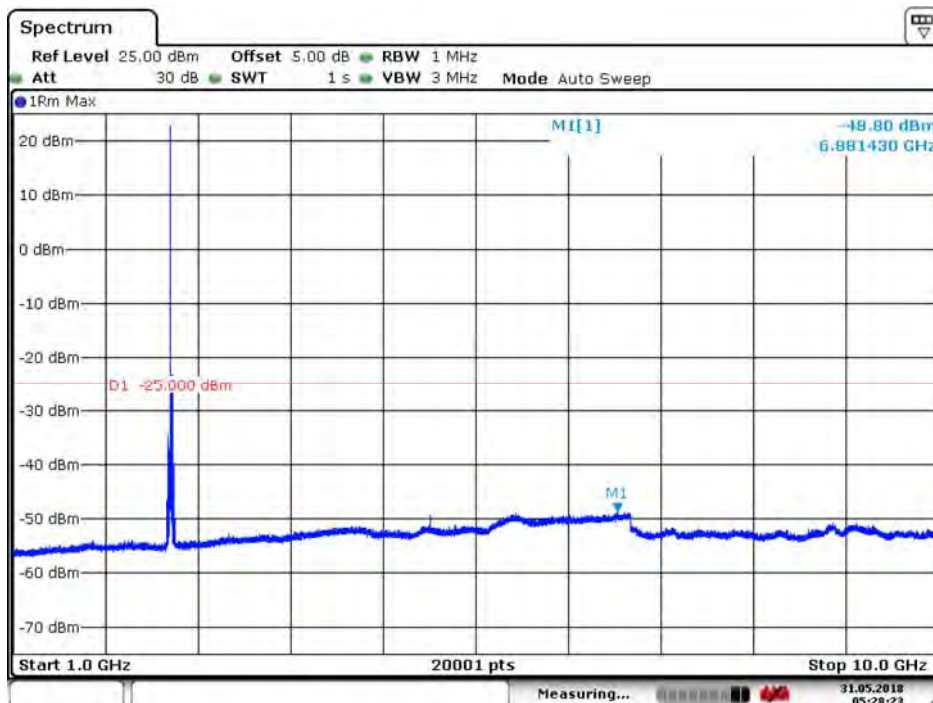


Date: 31.MAY.2018 05:25:20

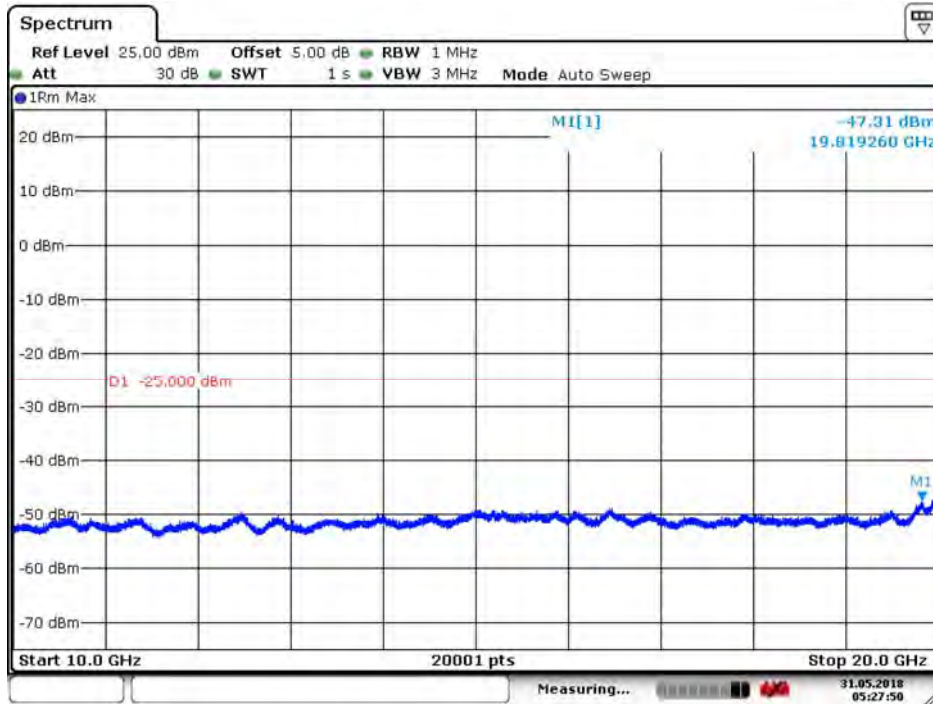
**6.1.1.1.2 Test Channel = MCH**



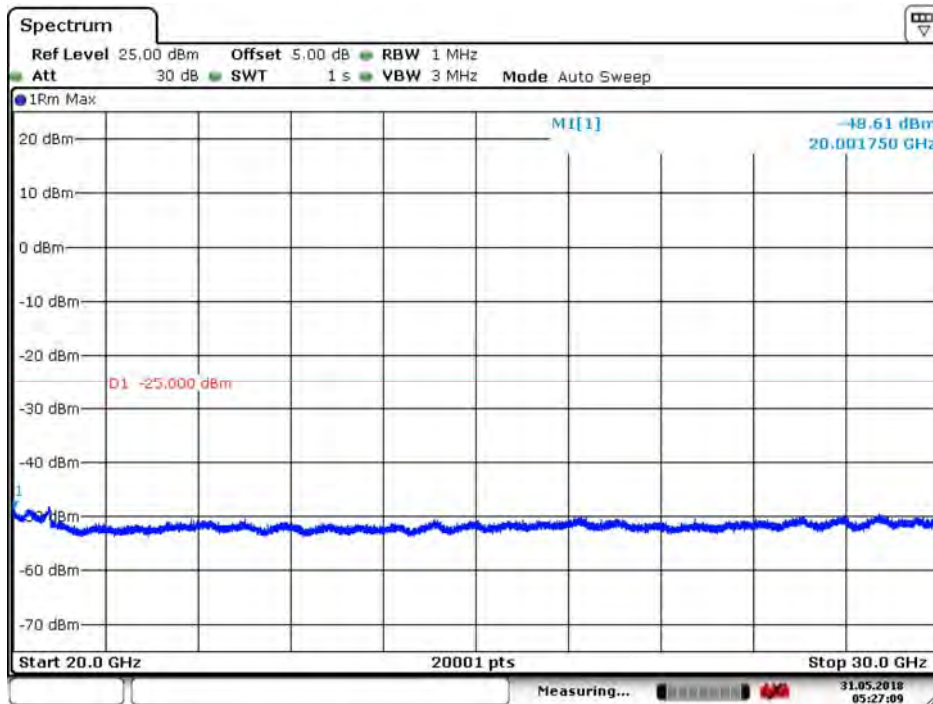
Date: 31.MAY.2018 05:32:17



Date: 31.MAY.2018 05:28:24

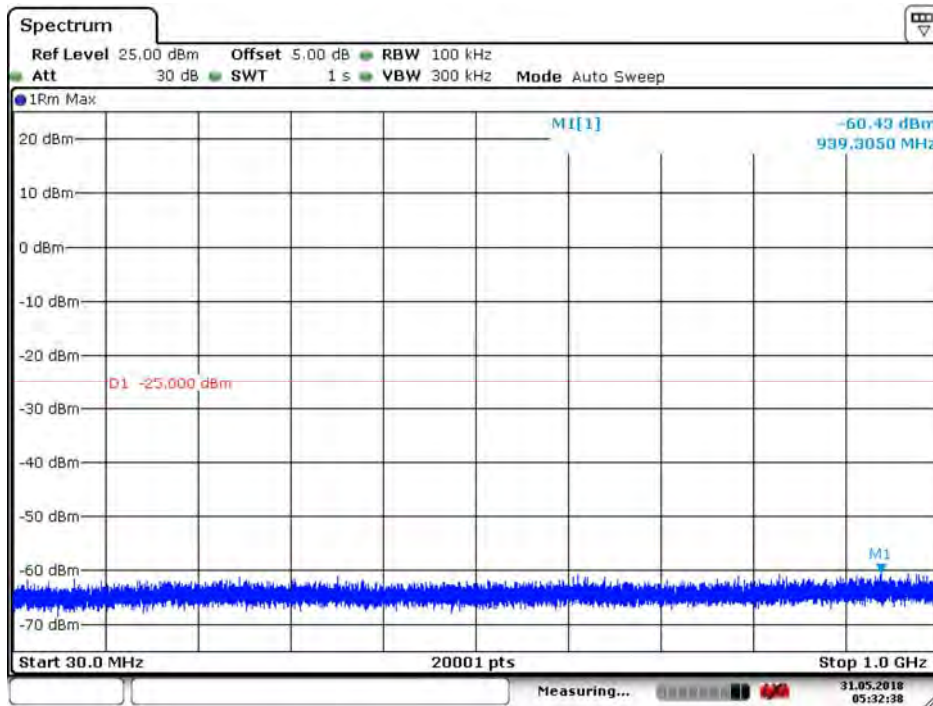


Date: 31.MAY.2018 05:27:50

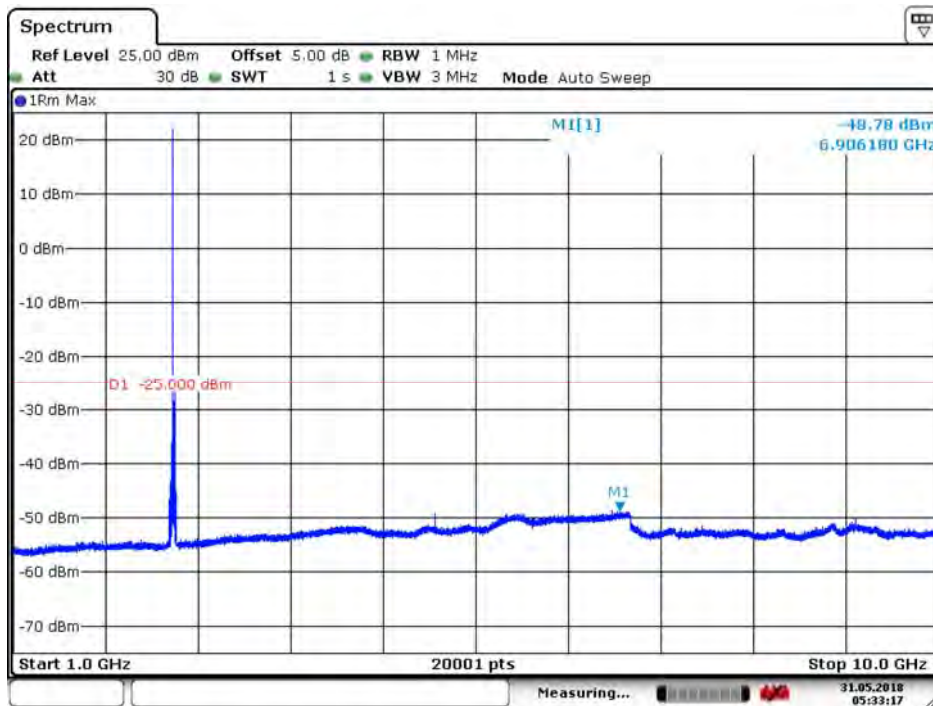


Date: 31.MAY.2018 05:27:09

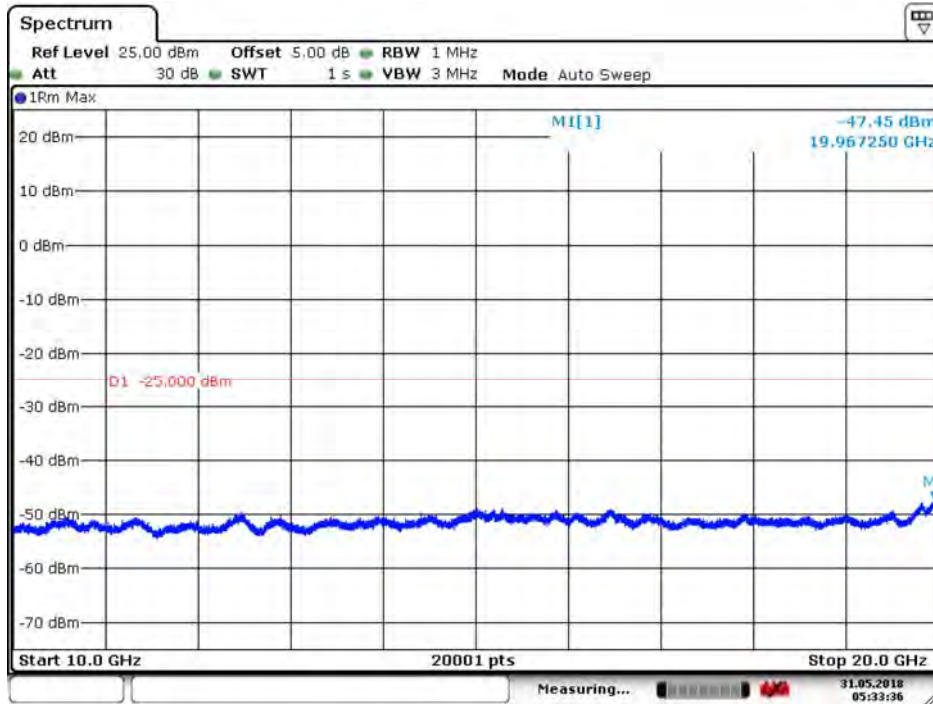
**6.1.1.1.3 Test Channel = HCH**



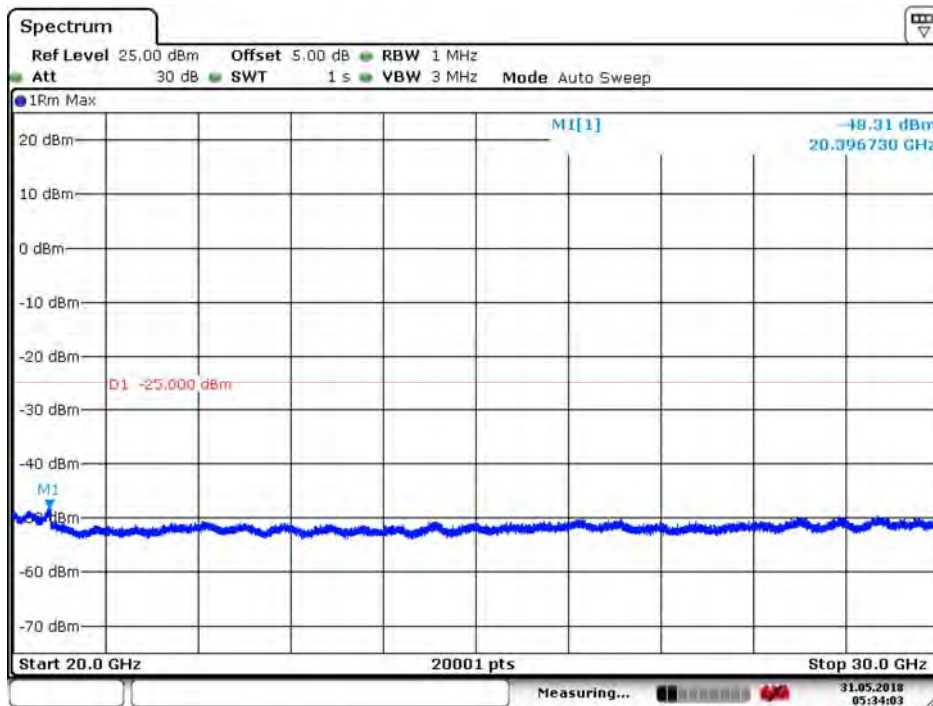
Date: 31.MAY.2018 05:32:38



Date: 31.MAY.2018 05:33:17



Date: 31.MAY.2018 05:33:36



Date: 31.MAY.2018 05:34:03





## 7 Field Strength of Spurious Radiation

### 7.1 For LTE

#### 7.1.1 Test Band = LTE BAND 7

##### 7.1.1.1 Test Mode =LTE/TM1 20MHz RB1#0

###### 7.1.1.1.1 Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
74.600000	-79.78	-25.00	54.78	Vertical
182.200000	-79.66	-25.00	54.66	Vertical
513.616667	-81.64	-25.00	56.64	Vertical
1980.500000	-51.86	-25.00	26.86	Vertical
5001.675000	-66.04	-25.00	41.04	Vertical
10004.400000	-61.90	-25.00	36.90	Vertical
63.300000	-77.76	-25.00	52.76	Horizontal
182.250000	-71.07	-25.00	46.07	Horizontal
623.112500	-80.12	-25.00	55.12	Horizontal
1980.500000	-47.26	-25.00	22.26	Horizontal
5001.675000	-65.85	-25.00	40.85	Horizontal
7865.250000	-63.72	-25.00	38.72	Horizontal

###### 7.1.1.1.1 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
74.650000	-78.89	-25.00	53.89	Vertical
181.450000	-79.51	-25.00	54.51	Vertical
513.112500	-81.80	-25.00	56.80	Vertical
2005.500000	-54.49	-25.00	29.49	Vertical
5052.050000	-65.41	-25.00	40.41	Vertical
10104.500000	-61.02	-25.00	36.02	Vertical
55.850000	55.850000	55.850000	55.850000	Horizontal
182.200000	182.200000	182.200000	182.200000	Horizontal
623.112500	623.112500	623.112500	623.112500	Horizontal
2005.500000	2005.500000	2005.500000	2005.500000	Horizontal
5052.050000	5052.050000	5052.050000	5052.050000	Horizontal
7875.975000	7875.975000	7875.975000	7875.975000	Horizontal



**7.1.1.1.1 Test Channel = HCH**

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
73.650000	-79.48	-25.00	54.48	Vertical
179.450000	-80.14	-25.00	55.14	Vertical
514.670833	-81.44	-25.00	56.44	Vertical
2030.500000	-56.70	-25.00	31.70	Vertical
5101.775000	-65.70	-25.00	40.70	Vertical
10204.275000	-62.89	-25.00	37.89	Vertical
63.300000	-77.87	-25.00	52.87	Horizontal
184.200000	-70.60	-25.00	45.60	Horizontal
622.470833	-80.40	-25.00	55.40	Horizontal
2030.500000	-48.97	-25.00	23.97	Horizontal
5102.100000	-65.63	-25.00	40.63	Horizontal
8658.575000	-63.83	-25.00	38.83	Horizontal

**NOTE:**

- 1) 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 Error VS. Voltage

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEBAND 7	LTE/TM1 20MHz	LCH	TN	VL	4.77	0.00190	PASS
				VN	-2.54	-0.00101	PASS
				VH	-5.27	-0.00210	PASS
		MCH	TN	VL	-0.15	-0.00006	PASS
				VN	7.38	0.00291	PASS
				VH	2.82	0.00111	PASS
		HCH	TN	VL	-4.73	-0.00185	PASS
				VN	9.40	0.00367	PASS
				VH	-2.24	-0.00088	PASS
	LTE/TM2 20MHz	LCH	TN	VL	1.42	0.00057	PASS
				VN	6.00	0.00239	PASS
				VH	-2.11	-0.00084	PASS
		MCH	TN	VL	-9.74	-0.00384	PASS
				VN	-4.41	-0.00174	PASS
				VH	-5.71	-0.00225	PASS
		HCH	TN	VL	-4.38	-0.00171	PASS
				VN	8.05	0.00314	PASS
				VH	4.35	0.00170	PASS
	LTE/TM3 20MHz	LCH	TN	VL	-4.93	-0.001963	PASS
				VN	5.20	0.002072	PASS
				VH	8.97	0.003573	PASS
		MCH	TN	VL	-5.32	-0.002100	PASS
				VN	-6.78	-0.002673	PASS
				VH	-2.92	-0.001154	PASS
		HCH	TN	VL	-6.86	-0.002679	PASS
				VN	3.53	0.001378	PASS
				VH	8.28	0.003234	PASS



### 8.2 Frequency Error VS. Temperature

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEBAND 7	LTE/TM1 20MHz	LCH	VN	-30	-0.32	-0.00013	PASS
				-20	-8.57	-0.00342	PASS
				-10	9.39	0.00374	PASS
				0	9.54	0.00380	PASS
				10	-1.40	-0.00056	PASS
				20	1.60	0.00064	PASS
				30	1.05	0.00042	PASS
				40	-0.04	-0.00001	PASS
				50	-0.06	-0.00002	PASS
		MCH	VN	-30	-6.35	-0.00250	PASS
				-20	8.93	0.00352	PASS
				-10	7.93	0.00313	PASS
				0	0.81	0.00032	PASS
				10	-6.59	-0.00260	PASS
				20	6.46	0.00255	PASS
				30	-0.45	-0.00018	PASS
				40	-6.47	-0.00255	PASS
				50	7.68	0.00303	PASS
		HCH	VN	-30	-9.35	-0.00365	PASS
				-20	-3.64	-0.00142	PASS
				-10	-8.73	-0.00341	PASS
				0	-8.23	-0.00322	PASS
				10	7.72	0.00301	PASS
				20	6.32	0.00247	PASS
				30	6.94	0.00271	PASS
				40	-1.83	-0.00071	PASS
				50	-5.12	-0.00200	PASS



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

Report No.: SZEM180500453501

Page: 85 of 86

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEBAND 7	LTE/TM2 20MHz	LCH	VN	-30	5.65	0.00225	PASS
				-20	9.01	0.00359	PASS
				-10	-9.84	-0.00392	PASS
				0	6.22	0.00248	PASS
				10	5.87	0.00234	PASS
				20	-9.50	-0.00378	PASS
				30	-6.64	-0.00265	PASS
				40	9.05	0.00360	PASS
				50	-1.10	-0.00044	PASS
		MCH	VN	-30	8.70	0.00343	PASS
				-20	-4.42	-0.00174	PASS
				-10	-0.22	-0.00009	PASS
				0	-2.61	-0.00103	PASS
				10	-5.74	-0.00226	PASS
				20	0.08	0.00003	PASS
				30	8.85	0.00349	PASS
				40	-5.41	-0.00214	PASS
				50	4.48	0.00177	PASS
		HCH	VN	-30	6.58	0.00257	PASS
				-20	5.84	0.00228	PASS
				-10	2.28	0.00089	PASS
				0	0.77	0.00030	PASS
				10	-5.54	-0.00216	PASS
				20	7.45	0.00291	PASS
30	-2.18			-0.00085	PASS		
40	0.19			0.00007	PASS		
50	9.00			0.00352	PASS		



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

Report No.: SZEM180500453501  
Page: 86 of 86

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEBAND 7	LTE/TM3 20MHz	LCH	VN	-30	-3.08	-0.001228	PASS
				-20	-9.40	-0.003744	PASS
				-10	6.74	0.002685	PASS
				0	0.05	0.000021	PASS
				10	-6.39	-0.002546	PASS
				20	-0.39	-0.000156	PASS
				30	-4.05	-0.001615	PASS
				40	4.64	0.001851	PASS
				50	-9.22	-0.003672	PASS
		MCH	VN	-30	8.38	0.003304	PASS
				-20	-1.01	-0.000400	PASS
				-10	0.04	0.000017	PASS
				0	5.41	0.002134	PASS
				10	-5.10	-0.002012	PASS
				20	-6.00	-0.002366	PASS
				30	3.43	0.001352	PASS
				40	-0.52	-0.000205	PASS
				50	-1.24	-0.000488	PASS
		HCH	VN	-30	-9.44	-0.003687	PASS
				-20	6.09	0.002380	PASS
				-10	-2.93	-0.001144	PASS
				0	-3.49	-0.001364	PASS
				10	0.63	0.000245	PASS
				20	-5.47	-0.002136	PASS
				30	-6.73	-0.002628	PASS
				40	-1.03	-0.000401	PASS
				50	-4.52	-0.001765	PASS

The End