



# Appendix B

## E-UTRA Band 7



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# 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
BAND7	LTE/TM1	5M	LCH	RB1#0	21.23	24.83	33.00	PASS
				RB1#13	21.97	25.57	33.00	PASS
				RB1#24	21.33	24.93	33.00	PASS
				RB12#0	20.20	23.80	33.00	PASS
				RB12#6	21.24	24.84	33.00	PASS
				RB12#13	20.85	24.45	33.00	PASS
				RB25#0	21.14	24.74	33.00	PASS
			MCH	RB1#0	21.04	24.64	33.00	PASS
				RB1#13	21.89	25.49	33.00	PASS
				RB1#24	21.29	24.89	33.00	PASS
				RB12#0	20.66	24.26	33.00	PASS
				RB12#6	20.92	24.52	33.00	PASS
				RB12#13	20.85	24.45	33.00	PASS
				RB25#0	20.83	24.43	33.00	PASS
			HCH	RB1#0	21.15	24.75	33.00	PASS
				RB1#13	21.66	25.26	33.00	PASS
				RB1#24	20.76	24.36	33.00	PASS
				RB12#0	20.52	24.12	33.00	PASS
				RB12#6	20.64	24.24	33.00	PASS
				RB12#13	20.40	24.00	33.00	PASS
				RB25#0	20.54	24.14	33.00	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND7	LTE/TM2	5M	LCH	RB1#0	20.95	24.55	33.00	PASS
				RB1#13	21.54	25.14	33.00	PASS
				RB1#24	20.91	24.51	33.00	PASS
				RB12#0	20.77	24.37	33.00	PASS
				RB12#6	20.97	24.57	33.00	PASS
				RB12#13	20.77	24.37	33.00	PASS
				RB25#0	20.79	24.39	33.00	PASS
			MCH	RB1#0	20.49	24.09	33.00	PASS
				RB1#13	21.29	24.89	33.00	PASS
				RB1#24	20.71	24.31	33.00	PASS
				RB12#0	20.42	24.02	33.00	PASS
				RB12#6	20.65	24.25	33.00	PASS
				RB12#13	20.52	24.12	33.00	PASS
				RB25#0	20.54	24.14	33.00	PASS
			HCH	RB1#0	20.42	24.02	33.00	PASS
				RB1#13	20.98	24.58	33.00	PASS
				RB1#24	20.03	23.63	33.00	PASS
				RB12#0	20.48	24.08	33.00	PASS
				RB12#6	20.61	24.21	33.00	PASS
				RB12#13	20.36	23.96	33.00	PASS
				RB25#0	20.45	24.05	33.00	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND7	LTE/TM1	10M	LCH	RB1#0	21.15	24.75	33.00	PASS
				RB1#25	21.85	25.45	33.00	PASS
				RB1#49	21.55	25.15	33.00	PASS
				RB25#0	20.54	24.14	33.00	PASS
				RB25#13	20.86	24.46	33.00	PASS
				RB25#25	20.78	24.38	33.00	PASS
				RB50#0	20.68	24.28	33.00	PASS
			MCH	RB1#0	21.26	24.86	33.00	PASS
				RB1#25	21.67	25.27	33.00	PASS
				RB1#49	20.94	24.54	33.00	PASS
				RB25#0	20.20	23.80	33.00	PASS
				RB25#13	20.50	24.10	33.00	PASS
				RB25#25	20.32	23.92	33.00	PASS
				RB50#0	20.35	23.95	33.00	PASS
			HCH	RB1#0	21.50	25.10	33.00	PASS
				RB1#25	21.67	25.27	33.00	PASS
				RB1#49	20.22	23.82	33.00	PASS
				RB25#0	20.53	24.13	33.00	PASS
				RB25#13	20.59	24.19	33.00	PASS
				RB25#25	20.09	23.69	33.00	PASS
				RB50#0	20.44	24.04	33.00	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND7	LTE/TM2	10M	LCH	RB1#0	20.54	24.14	33.00	PASS
				RB1#25	21.32	24.92	33.00	PASS
				RB1#49	20.78	24.38	33.00	PASS
				RB25#0	20.43	24.03	33.00	PASS
				RB25#13	20.82	24.42	33.00	PASS
				RB25#25	20.75	24.35	33.00	PASS
				RB50#0	20.63	24.23	33.00	PASS
			MCH	RB1#0	20.29	23.89	33.00	PASS
				RB1#25	20.86	24.46	33.00	PASS
				RB1#49	20.19	23.79	33.00	PASS
				RB25#0	20.27	23.87	33.00	PASS
				RB25#13	20.54	24.14	33.00	PASS
				RB25#25	20.38	23.98	33.00	PASS
				RB50#0	20.32	23.92	33.00	PASS
			HCH	RB1#0	20.94	24.54	33.00	PASS
				RB1#25	21.05	24.65	33.00	PASS
				RB1#49	19.73	23.33	33.00	PASS
				RB25#0	20.57	24.17	33.00	PASS
				RB25#13	20.63	24.23	33.00	PASS
				RB25#25	20.13	23.73	33.00	PASS
				RB50#0	20.37	23.97	33.00	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND7	LTE/TM1	15M	LCH	RB1#0	21.15	24.75	33.00	PASS
				RB1#38	21.60	25.20	33.00	PASS
				RB1#74	21.07	24.67	33.00	PASS
				RB36#0	20.41	24.01	33.00	PASS
				RB36#18	21.01	24.61	33.00	PASS
				RB36#39	20.53	24.13	33.00	PASS
				RB75#0	20.77	24.37	33.00	PASS
			MCH	RB1#0	21.60	25.20	33.00	PASS
				RB1#38	21.64	25.24	33.00	PASS
				RB1#74	20.82	24.42	33.00	PASS
				RB36#0	20.64	24.24	33.00	PASS
				RB36#18	20.51	24.11	33.00	PASS
				RB36#39	20.41	24.01	33.00	PASS
				RB75#0	20.37	23.97	33.00	PASS
			HCH	RB1#0	21.73	25.33	33.00	PASS
				RB1#38	21.54	25.14	33.00	PASS
				RB1#74	19.76	23.36	33.00	PASS
				RB36#0	20.66	24.26	33.00	PASS
				RB36#18	20.50	24.10	33.00	PASS
				RB36#39	19.75	23.35	33.00	PASS
				RB75#0	20.38	23.98	33.00	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND7	LTE/TM2	15M	LCH	RB1#0	21.15	24.75	33.00	PASS
				RB1#38	21.77	25.37	33.00	PASS
				RB1#74	21.23	24.83	33.00	PASS
				RB36#0	20.66	24.26	33.00	PASS
				RB36#18	21.00	24.60	33.00	PASS
				RB36#39	21.16	24.76	33.00	PASS
				RB75#0	20.98	24.58	33.00	PASS
			MCH	RB1#0	20.83	24.43	33.00	PASS
				RB1#38	21.02	24.62	33.00	PASS
				RB1#74	20.25	23.85	33.00	PASS
				RB36#0	20.59	24.19	33.00	PASS
				RB36#18	20.60	24.20	33.00	PASS
				RB36#39	20.51	24.11	33.00	PASS
				RB75#0	20.22	23.82	33.00	PASS
			HCH	RB1#0	21.31	24.91	33.00	PASS
				RB1#38	21.15	24.75	33.00	PASS
				RB1#74	19.57	23.17	33.00	PASS
				RB36#0	20.75	24.35	33.00	PASS
				RB36#18	20.48	24.08	33.00	PASS
				RB36#39	19.84	23.44	33.00	PASS
				RB75#0	20.33	23.93	33.00	PASS





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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND7	LTE/TM1	20M	LCH	RB1#0	20.91	24.51	33.00	PASS
				RB1#50	21.77	25.37	33.00	PASS
				RB1#99	21.66	25.26	33.00	PASS
				RB50#0	20.47	24.07	33.00	PASS
				RB50#25	20.55	24.15	33.00	PASS
				RB50#50	20.60	24.20	33.00	PASS
				RB100#0	20.44	24.04	33.00	PASS
			MCH	RB1#0	21.12	24.72	33.00	PASS
				RB1#50	21.01	24.61	33.00	PASS
				RB1#99	20.99	24.59	33.00	PASS
				RB50#0	20.09	23.69	33.00	PASS
				RB50#25	19.96	23.56	33.00	PASS
				RB50#50	20.00	23.60	33.00	PASS
				RB100#0	19.95	23.55	33.00	PASS
			HCH	RB1#0	21.60	25.20	33.00	PASS
				RB1#50	21.61	25.21	33.00	PASS
				RB1#99	20.23	23.83	33.00	PASS
				RB50#0	20.83	24.43	33.00	PASS
				RB50#25	20.61	24.21	33.00	PASS
				RB50#50	19.94	23.54	33.00	PASS
				RB100#0	20.48	24.08	33.00	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND7	LTE/TM2	20M	LCH	RB1#0	20.23	23.83	33.00	PASS
				RB1#50	21.15	24.75	33.00	PASS
				RB1#99	20.95	24.55	33.00	PASS
				RB50#0	20.34	23.94	33.00	PASS
				RB50#25	20.71	24.31	33.00	PASS
				RB50#50	20.74	24.34	33.00	PASS
				RB100#0	20.55	24.15	33.00	PASS
			MCH	RB1#0	20.64	24.24	33.00	PASS
				RB1#50	20.65	24.25	33.00	PASS
				RB1#99	20.72	24.32	33.00	PASS
				RB50#0	20.15	23.75	33.00	PASS
				RB50#25	20.02	23.62	33.00	PASS
				RB50#50	19.98	23.58	33.00	PASS
				RB100#0	20.02	23.62	33.00	PASS
			HCH	RB1#0	21.15	24.75	33.00	PASS
				RB1#50	21.15	24.75	33.00	PASS
				RB1#99	19.81	23.41	33.00	PASS
				RB50#0	20.85	24.45	33.00	PASS
				RB50#25	20.62	24.22	33.00	PASS
				RB50#50	19.98	23.58	33.00	PASS
				RB100#0	20.41	24.01	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

c: RBW > emission bandwidth, VBW > 3 x RBW.

Detector: RMS



## 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	5.07	13	PASS
		MCH	5.33	13	PASS
		HCH	5.16	13	PASS
	TM2/20M	LCH	5.77	13	PASS
		MCH	5.97	13	PASS
		HCH	5.77	13	PASS



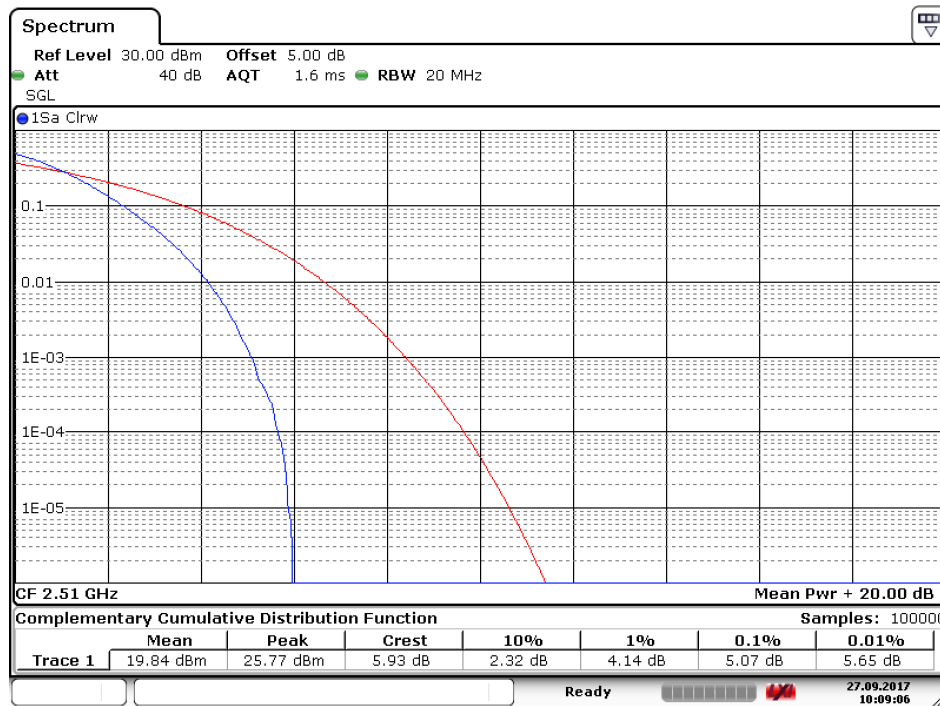
Part II - Test Plots

2.1 For LTE

2.1.1 Test Band = LTE band7

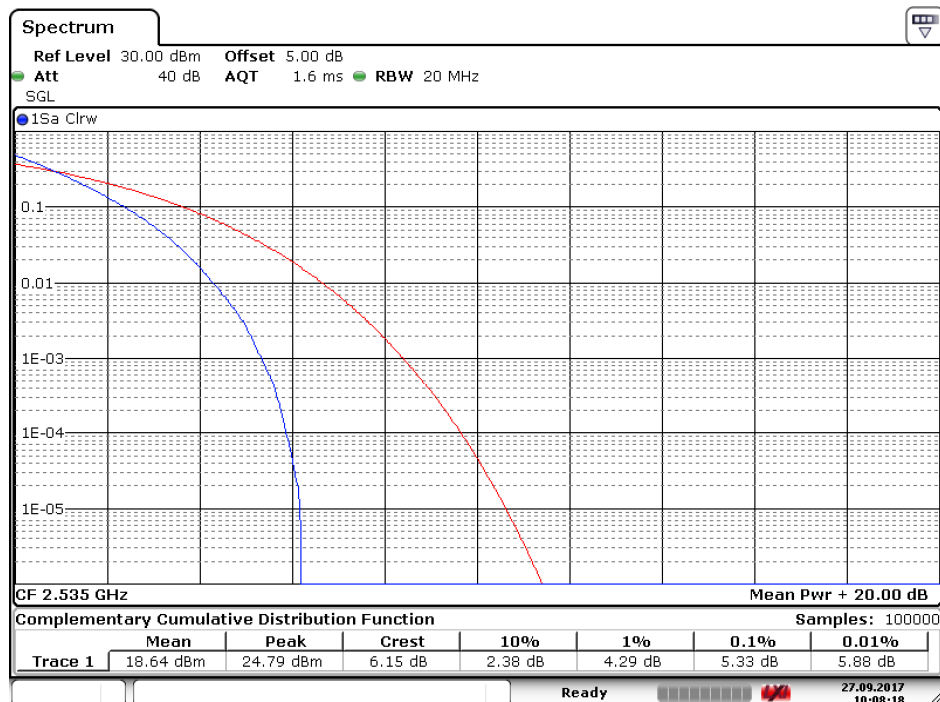
2.1.1.1 Test Mode = LTE/TM1.Bandwidth=20MHz

2.1.1.1.1 Test Channel = LCH



Date: 27.SEP.2017 10:09:07

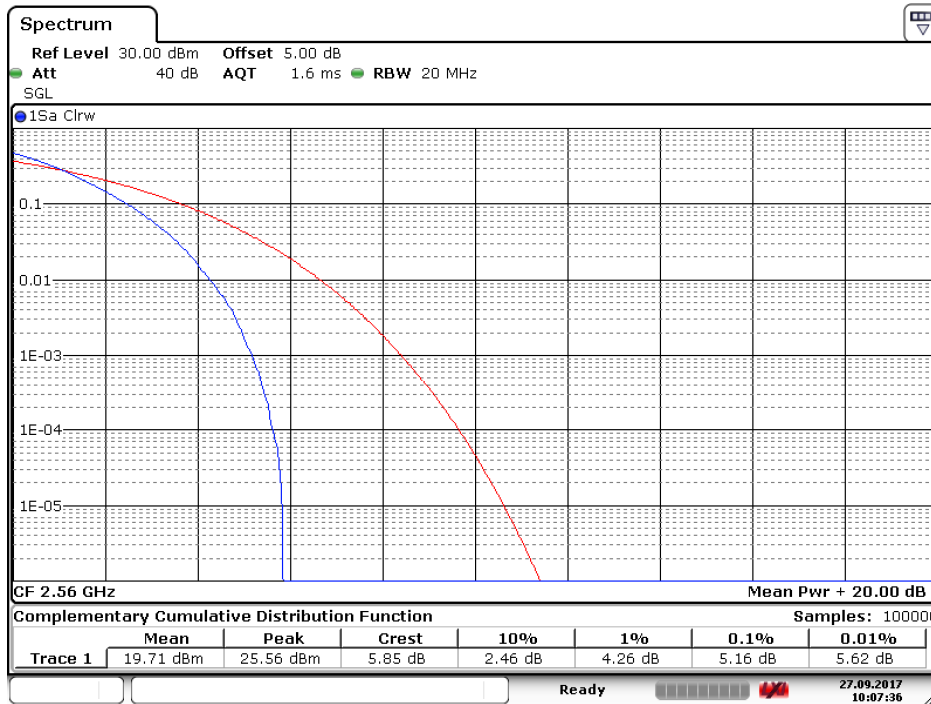
2.1.1.1.2 Test Channel = MCH



Date: 27.SEP.2017 10:08:18



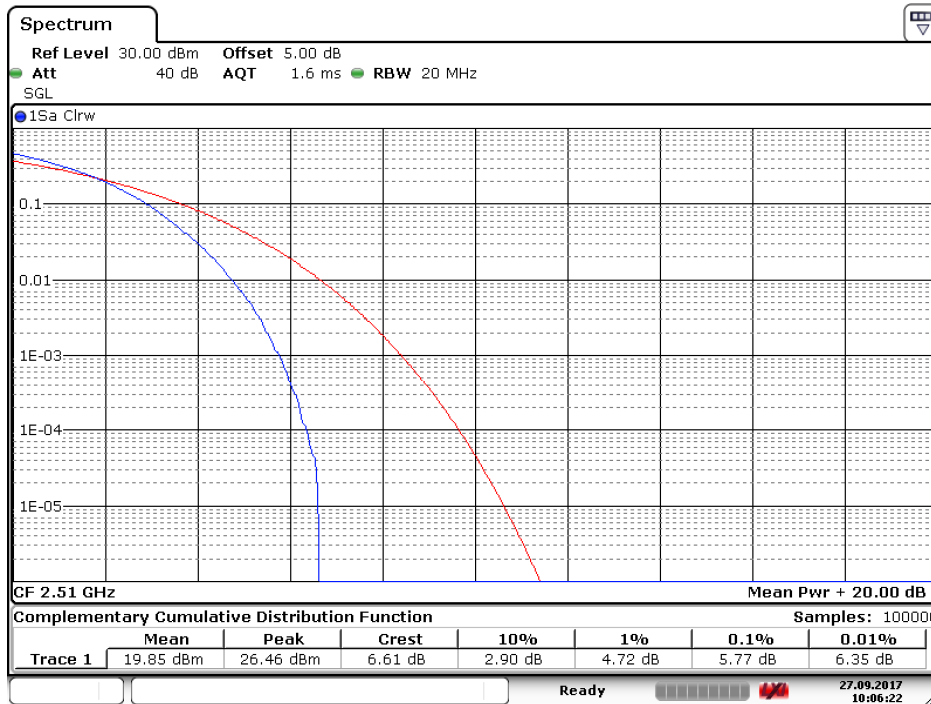
Test Channel = HCH



Date: 27.SEP.2017 10:07:36

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

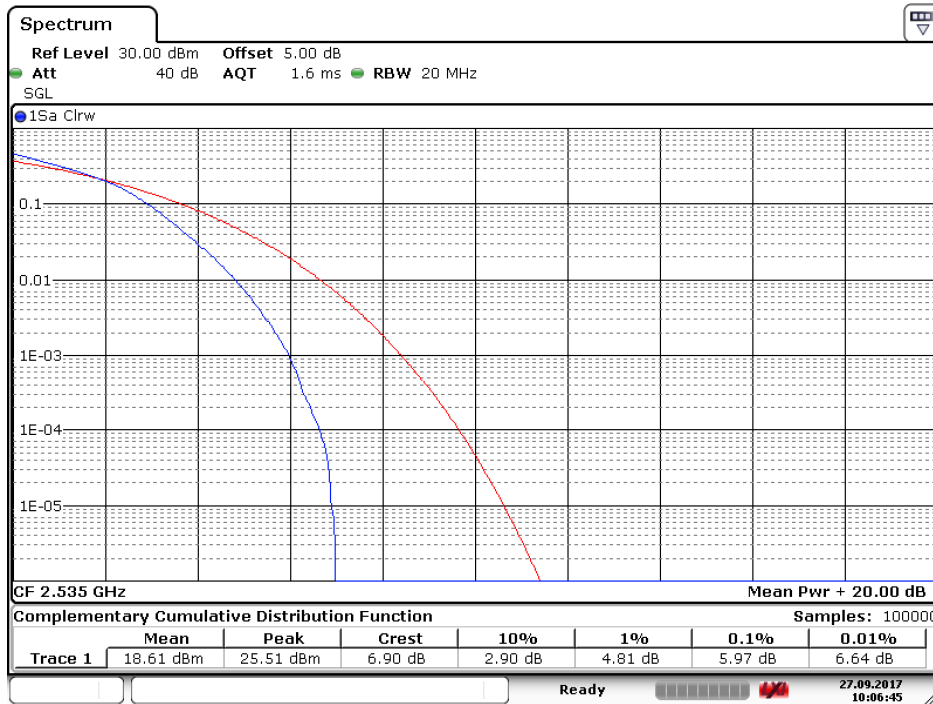
2.1.1.2.1 Test Channel = LCH



Date: 27.SEP.2017 10:06:23

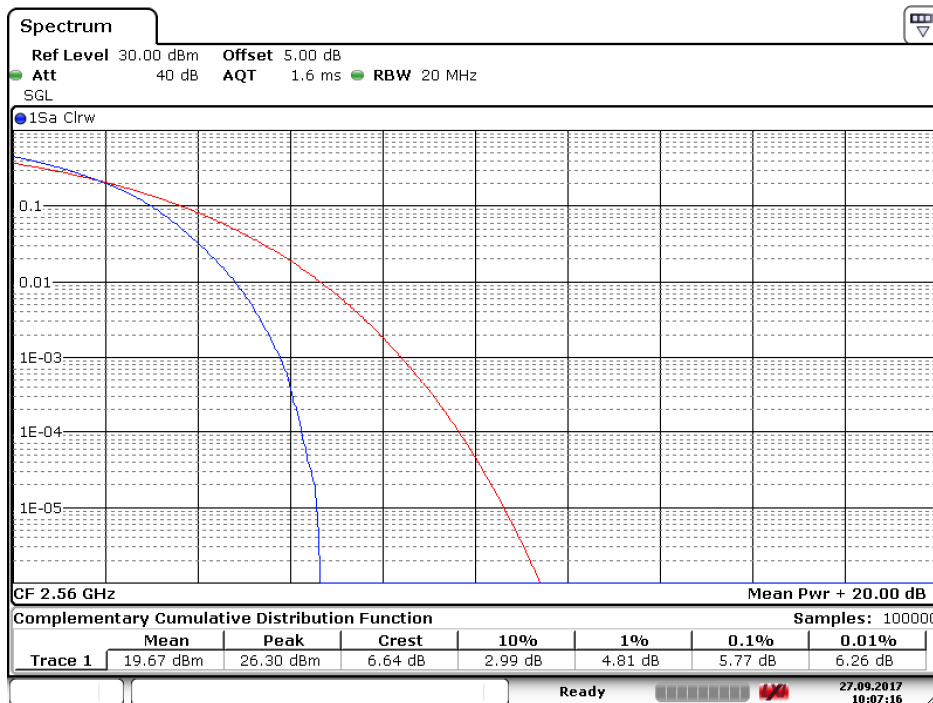


2.1.1.2.2 Test Channel = MCH



Date: 27.SEP.2017 10:06:46

2.1.1.2.3 Test Channel = HCH



Date: 27.SEP.2017 10:07:16

### 3 Modulation Characteristics

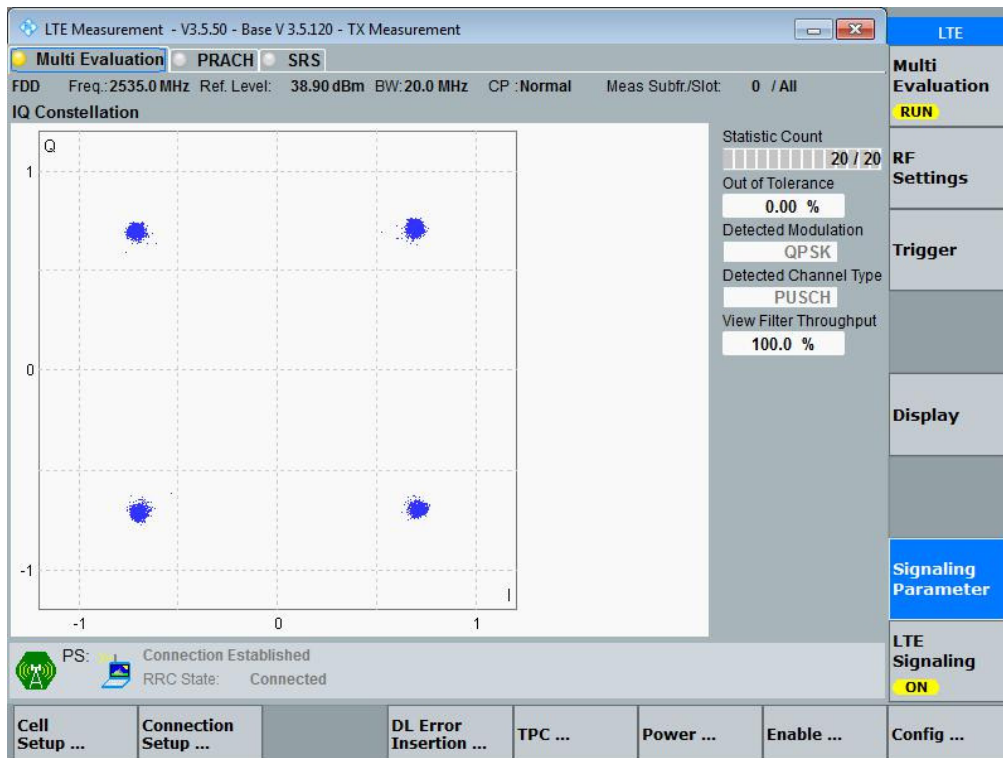
#### Part I - Test Plots

#### 3.1 For LTE

##### 3.1.1 Test Band = LTE band7

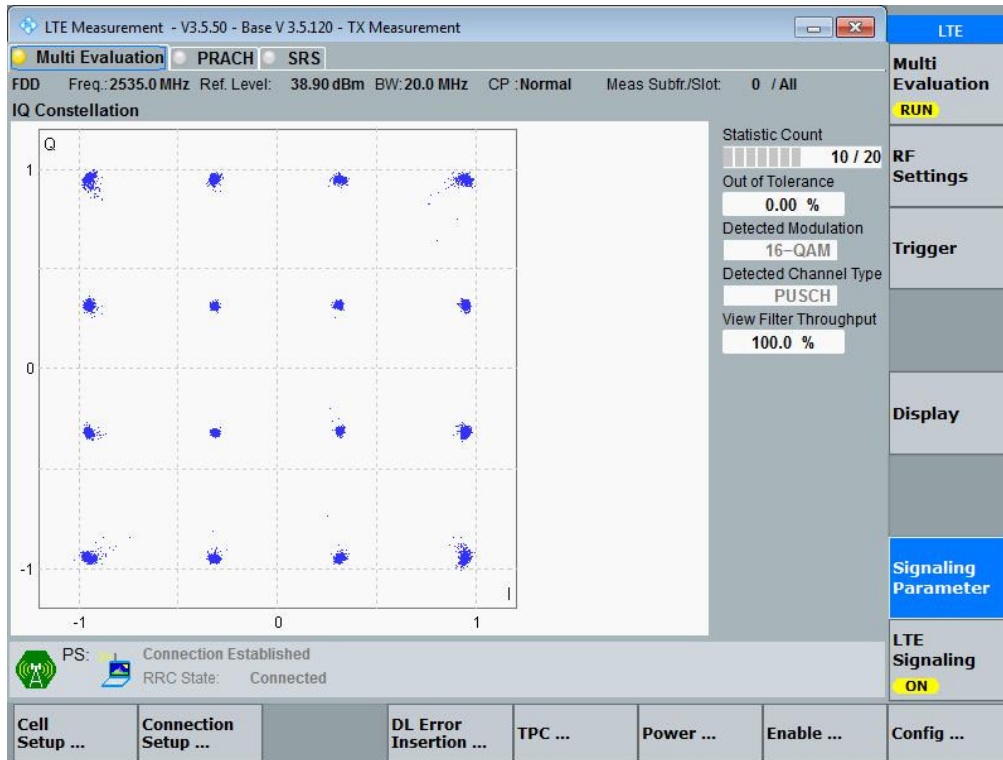
##### 3.1.1.1 Test Mode = LTE /TM1 20MHz

##### 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**







## 4 Bandwidth

### Part I - Test Results

Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
Band 7	TM1/ 5MHz	LCH	4.48	4.90	PASS
		MCH	4.48	4.90	PASS
		HCH	4.48	4.91	PASS
	TM2/ 5MHz	LCH	4.48	4.92	PASS
		MCH	4.48	4.91	PASS
		HCH	4.48	4.90	PASS
	TM1/10MHz	LCH	8.95	9.81	PASS
		MCH	8.97	9.81	PASS
		HCH	8.95	9.79	PASS
	TM2/ 10MHz	LCH	8.95	9.81	PASS
		MCH	8.95	9.81	PASS
		HCH	8.95	9.81	PASS
	TM1/ 15MHz	LCH	13.55	15.11	PASS
		MCH	13.58	15.11	PASS
		HCH	13.52	15.11	PASS
	TM2/ 15MHz	LCH	13.55	15.11	PASS
		MCH	13.55	15.08	PASS
		HCH	13.52	15.08	PASS
	TM1/ 20MHz	LCH	17.98	19.70	PASS
		MCH	17.98	19.66	PASS
		HCH	17.90	19.70	PASS
TM2/ 20MHz	LCH	17.98	19.70	PASS	
	MCH	18.02	19.74	PASS	
	HCH	17.94	19.66	PASS	

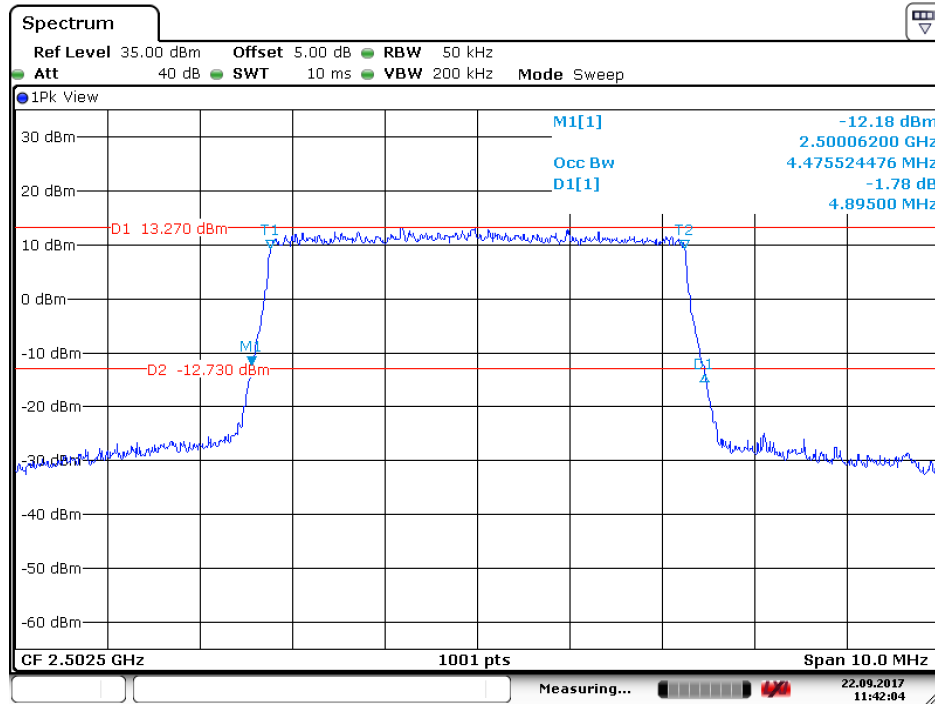


## 4.1 For LTE

### 4.1.1 Test Band = LTE band7

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

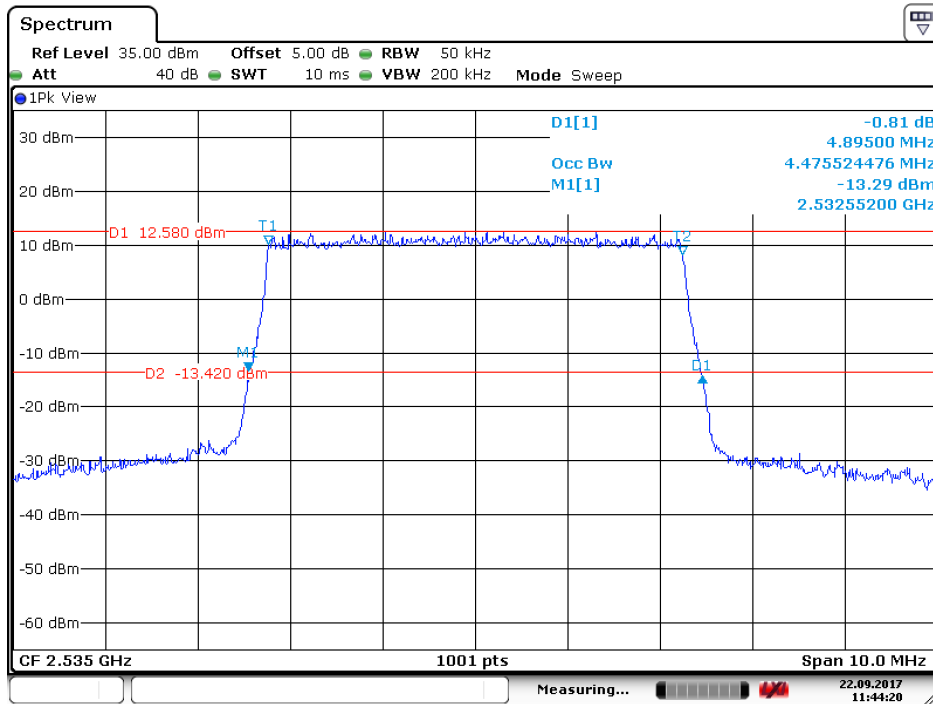
##### 4.1.1.1.1 Test Channel = LCH



Date: 22.SEP.2017 11:42:04

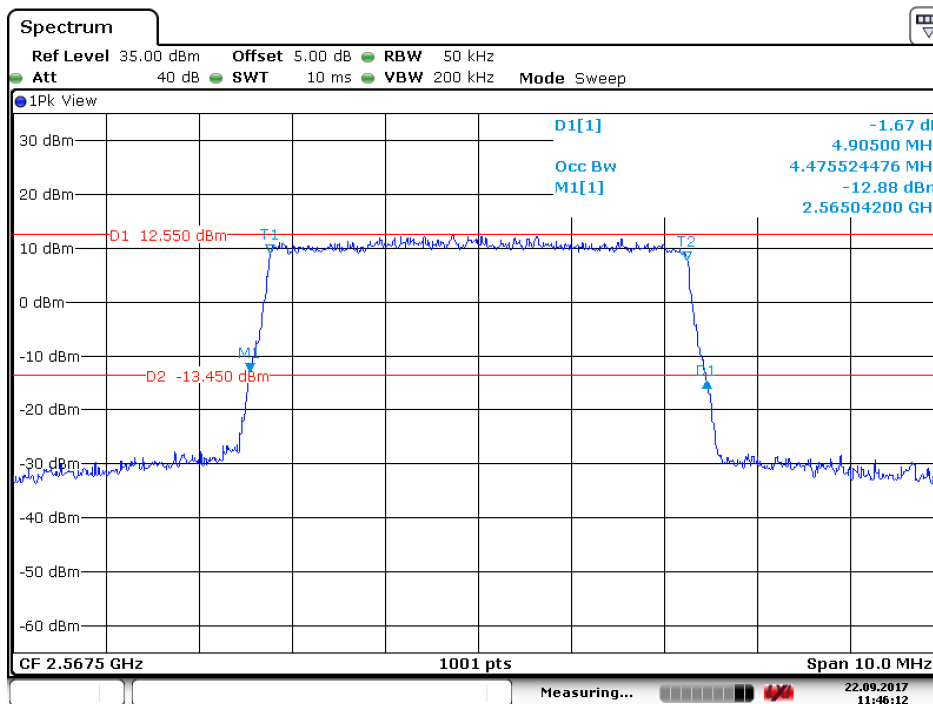


4.1.1.1.2 Test Channel = MCH



Date: 22.SEP.2017 11:44:20

4.1.1.1.3 Test Channel = HCH

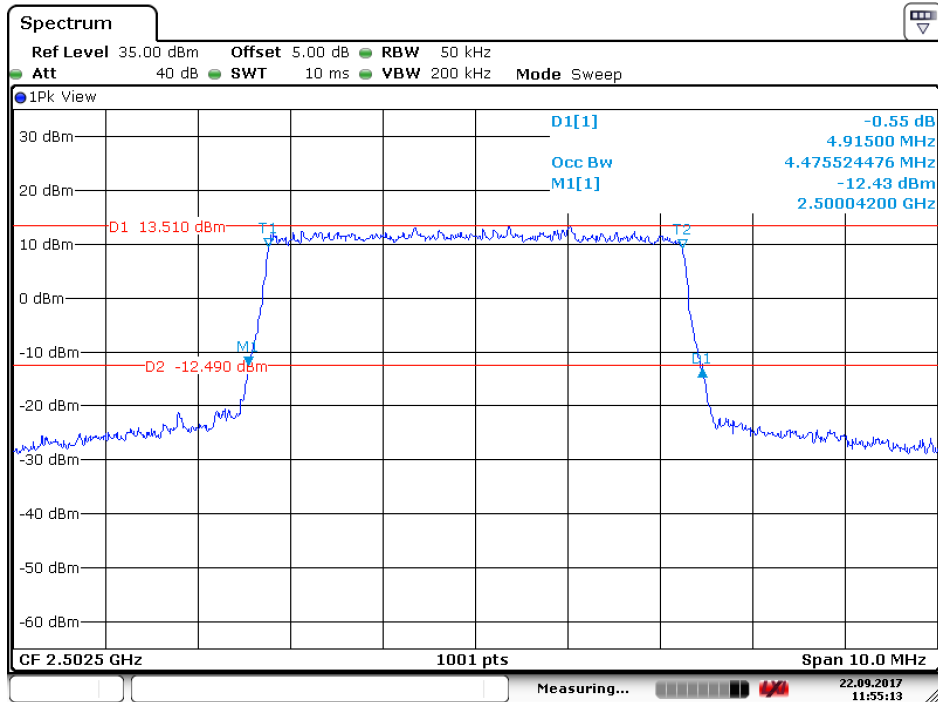


Date: 22.SEP.2017 11:46:13



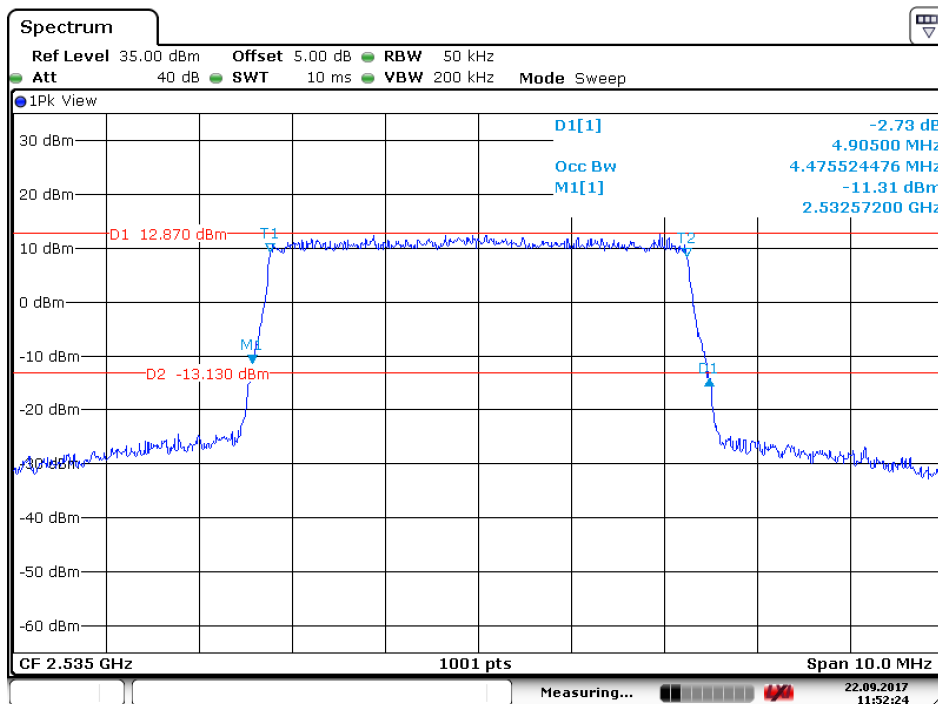
4.1.1.2 Test Mode = LTE/TM2 5MHz

4.1.1.2.1 Test Channel = LCH



Date: 22.SEP.2017 11:55:13

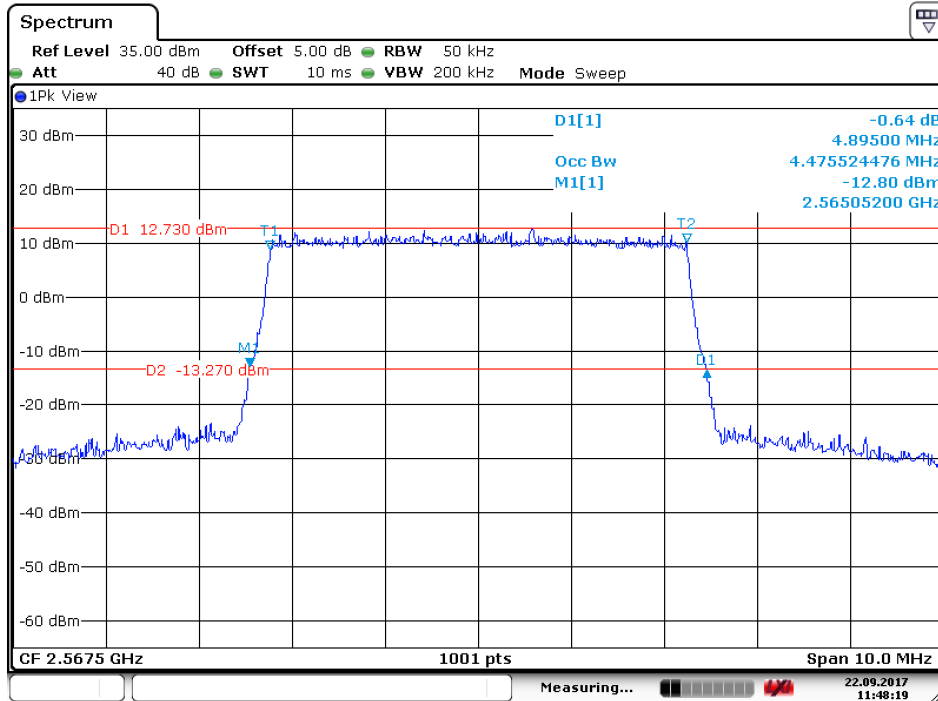
4.1.1.2.2 Test Channel = MCH



Date: 22.SEP.2017 11:52:24



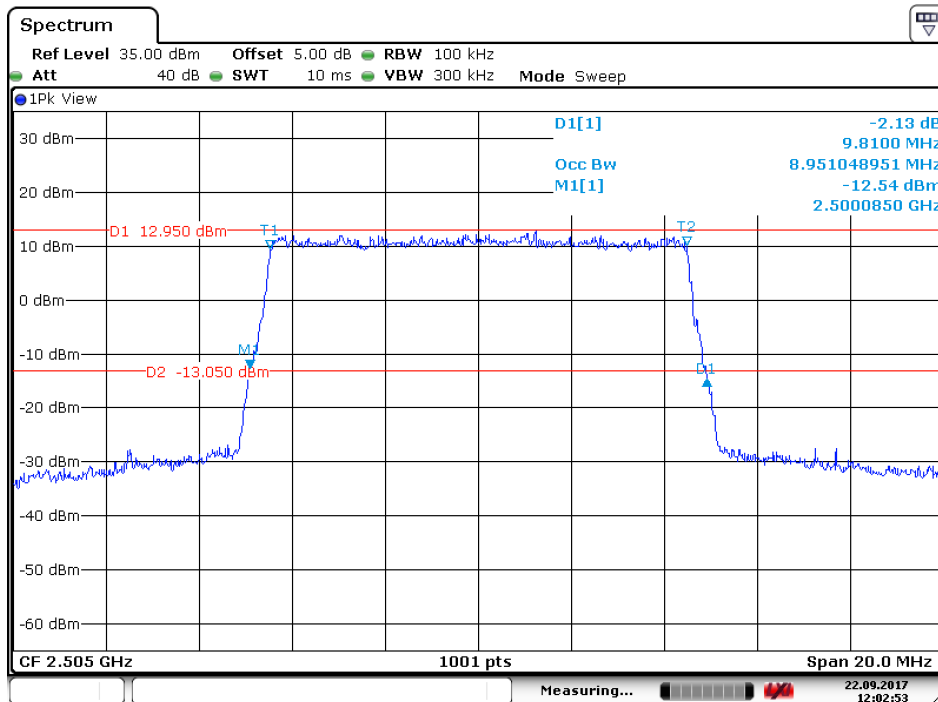
#### 4.1.1.2.3 Test Channel = HCH



Date: 22.SEP.2017 11:48:19

#### 4.1.1.3 Test Mode = LTE/TM1 10MHz

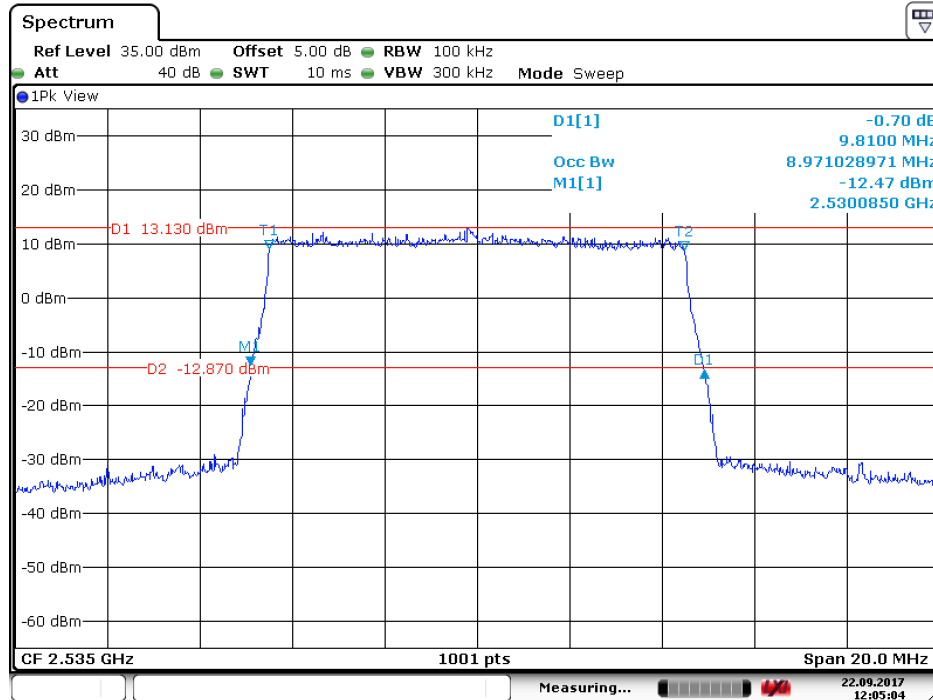
##### 4.1.1.3.1 Test Channel = LCH



Date: 22.SEP.2017 12:02:54

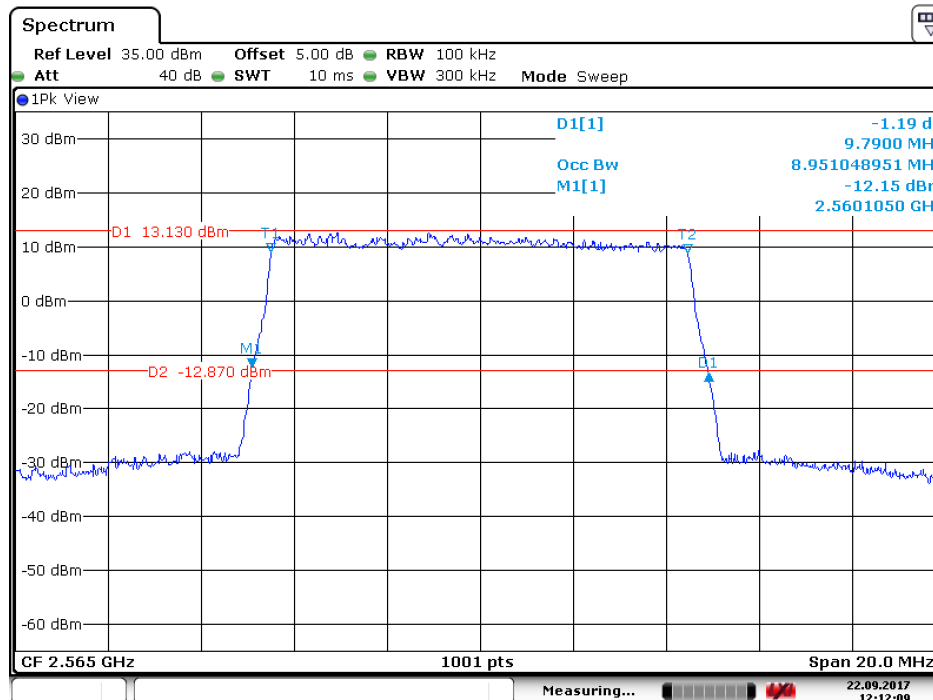


#### 4.1.1.3.2 Test Channel = MCH



Date: 22.SEP.2017 12:05:05

#### 4.1.1.3.3 Test Channel = HCH

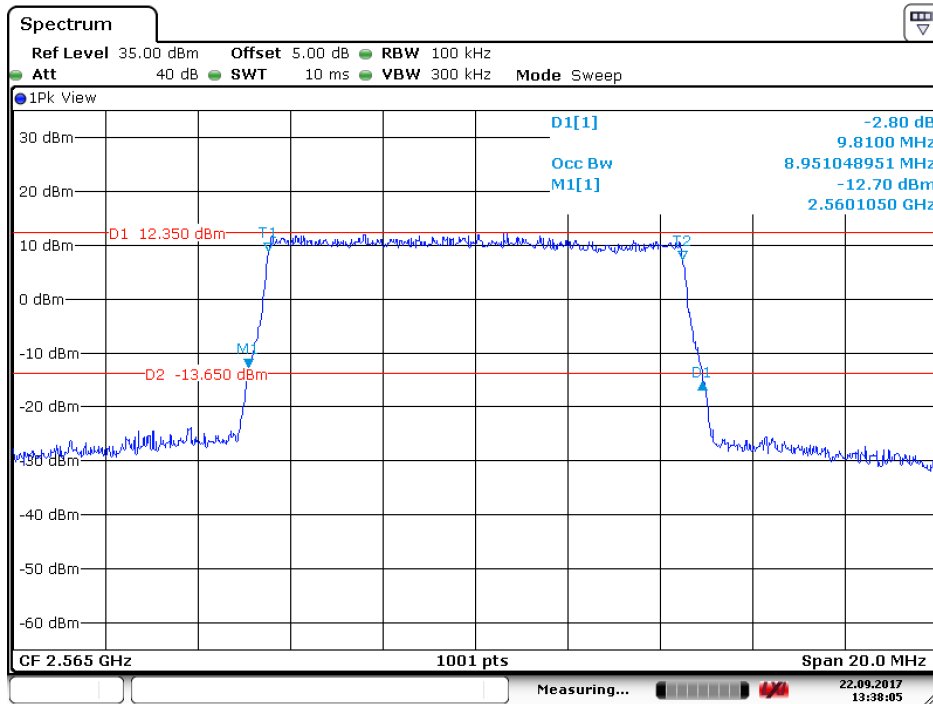


Date: 22.SEP.2017 12:12:09





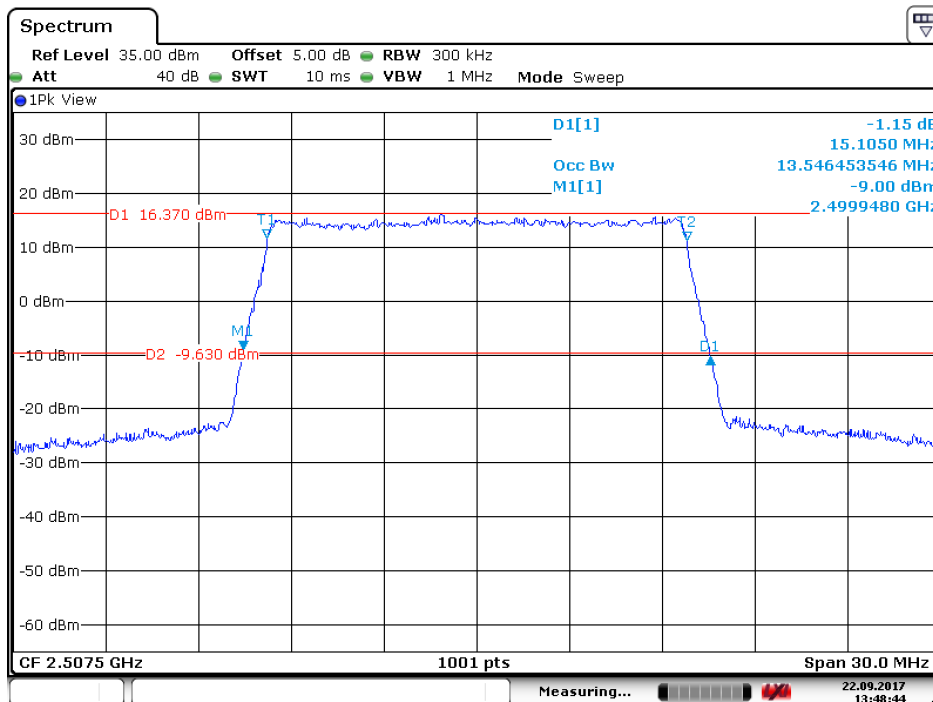
#### 4.1.1.4.3 Test Channel = HCH



Date: 22.SEP.2017 13:38:05

#### 4.1.1.5 Test Mode = LTE/TM1 15MHz

##### 4.1.1.5.1 Test Channel = LCH

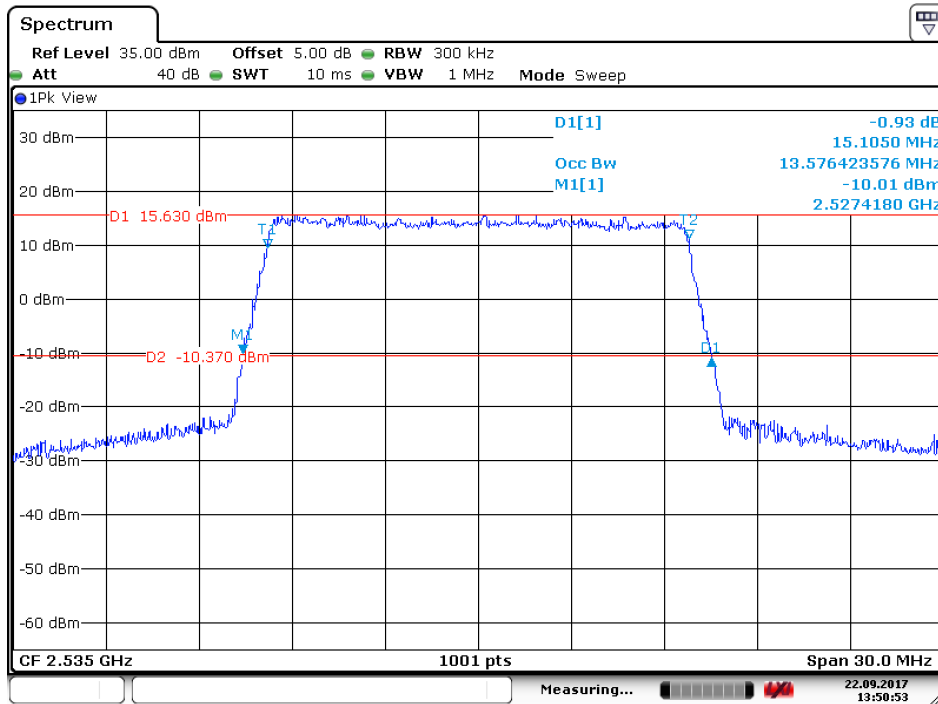


Date: 22.SEP.2017 13:48:44



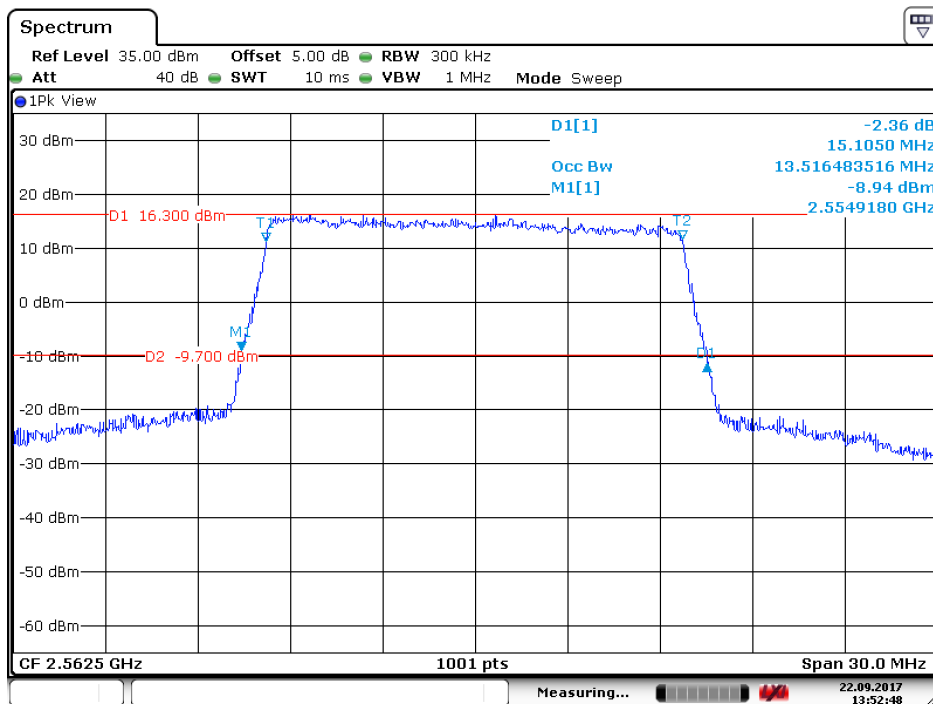


4.1.1.5.2 Test Channel = MCH



Date: 22.SEP.2017 13:50:53

4.1.1.5.3 Test Channel = HCH

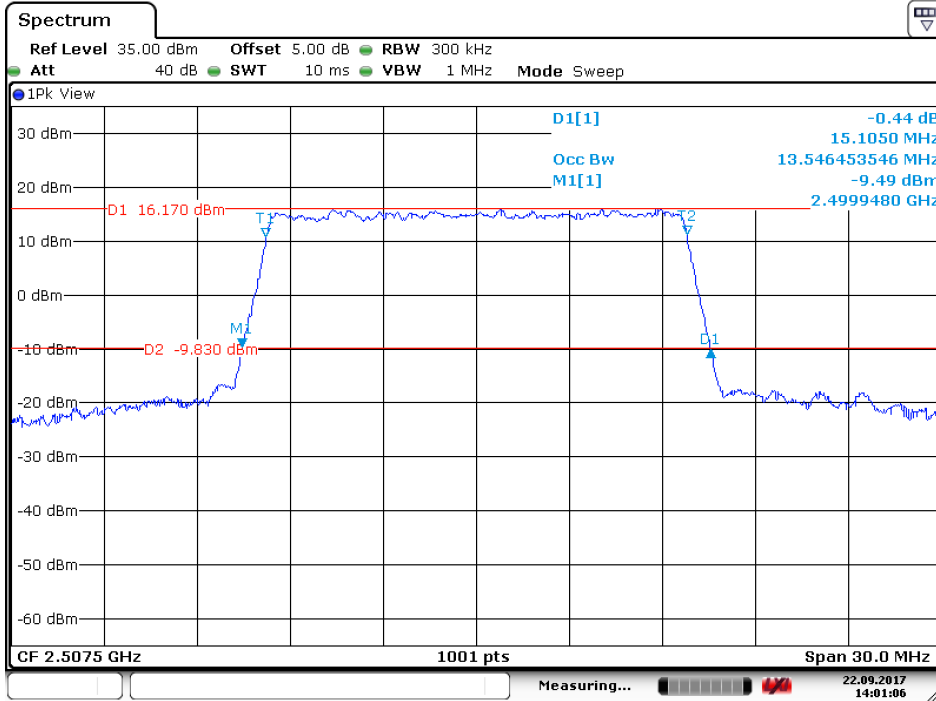


Date: 22.SEP.2017 13:52:47



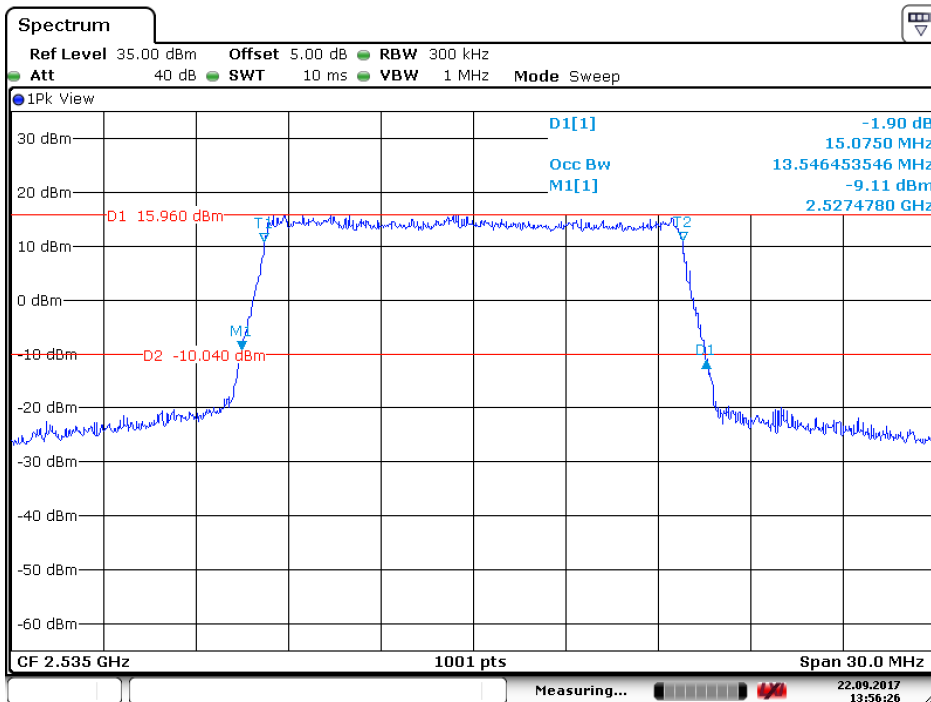
4.1.1.6 Test Mode = LTE/TM2 15MHz

4.1.1.6.1 Test Channel = LCH



Date: 22.SEP.2017 14:01:06

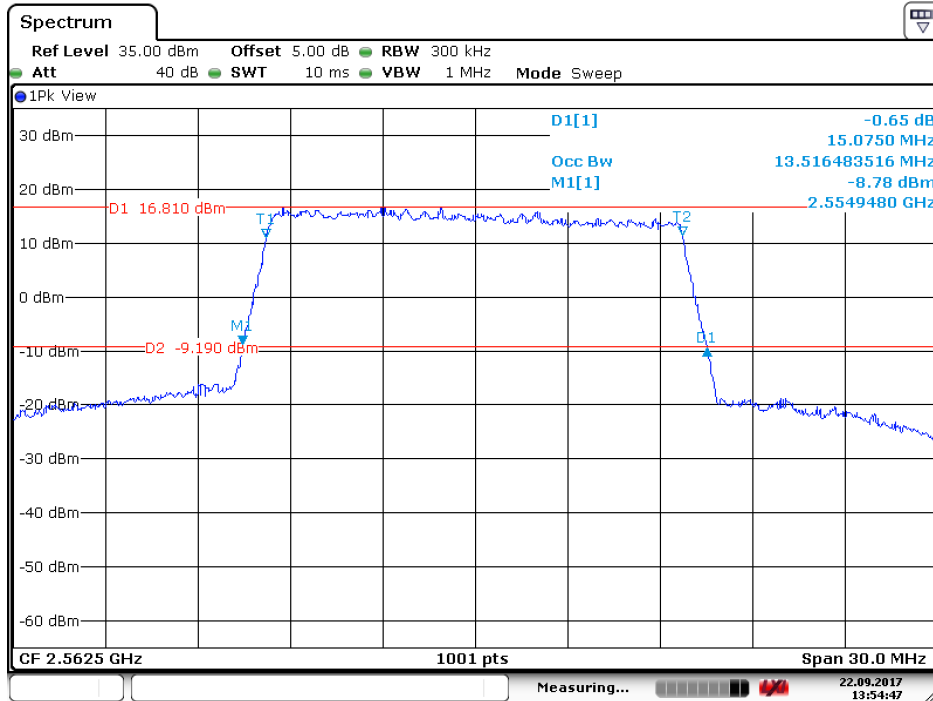
4.1.1.6.2 Test Channel = MCH



Date: 22.SEP.2017 13:56:26



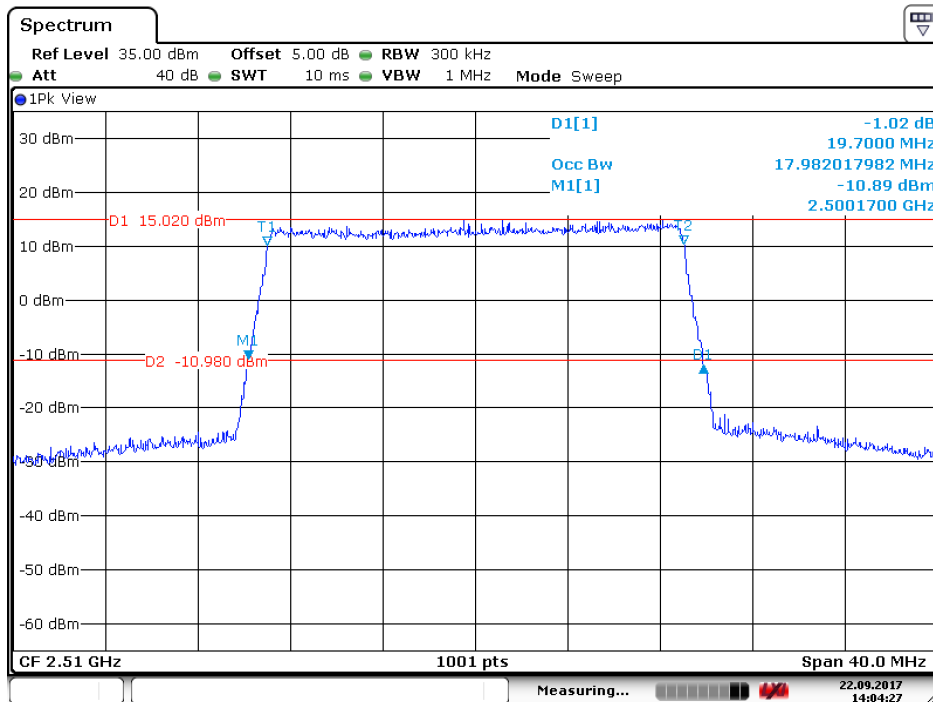
#### 4.1.1.6.3 Test Channel = HCH



Date: 22.SEP.2017 13:54:47

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

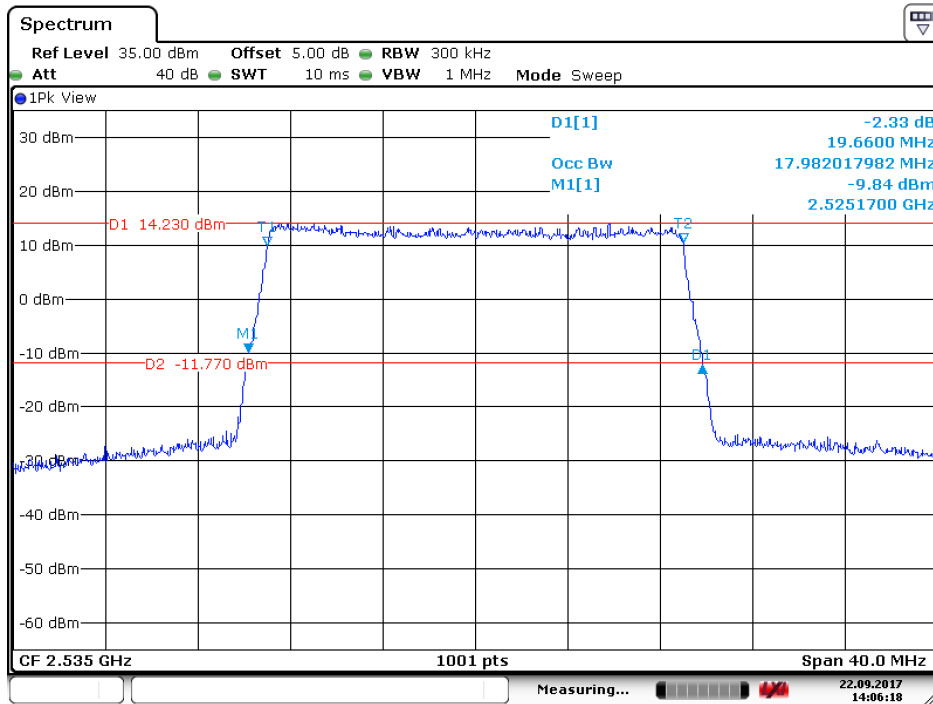
##### 4.1.1.7.1 Test Channel = LCH



Date: 22.SEP.2017 14:04:28

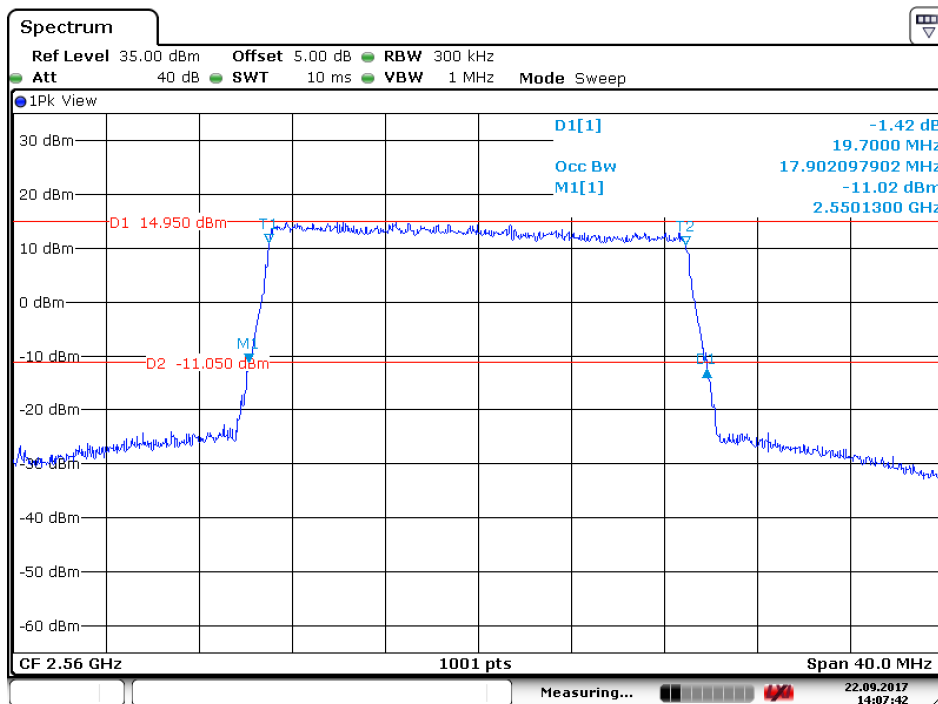


4.1.1.7.2 Test Channel = MCH



Date: 22.SEP.2017 14:06:18

4.1.1.7.3 Test Channel = HCH

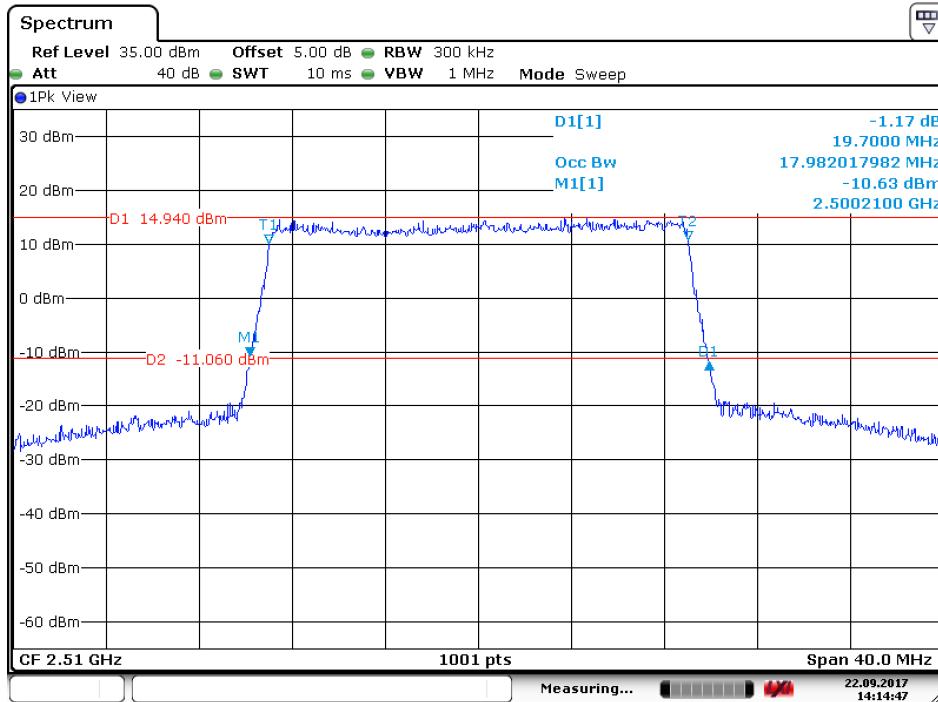


Date: 22.SEP.2017 14:07:43



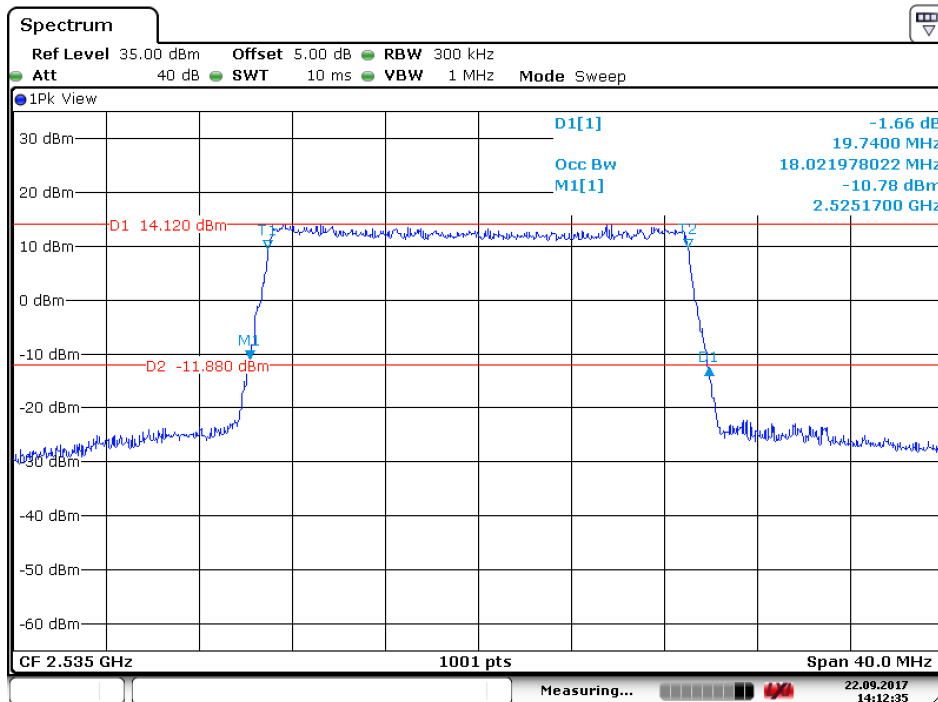
4.1.1.8 Test Mode = LTE/TM2 20MHz

4.1.1.8.1 Test Channel = LCH



Date: 22.SEP.2017 14:14:47

4.1.1.8.2 Test Channel = MCH



Date: 22.SEP.2017 14:12:35



## 5 Band Edges Compliance

Part I –

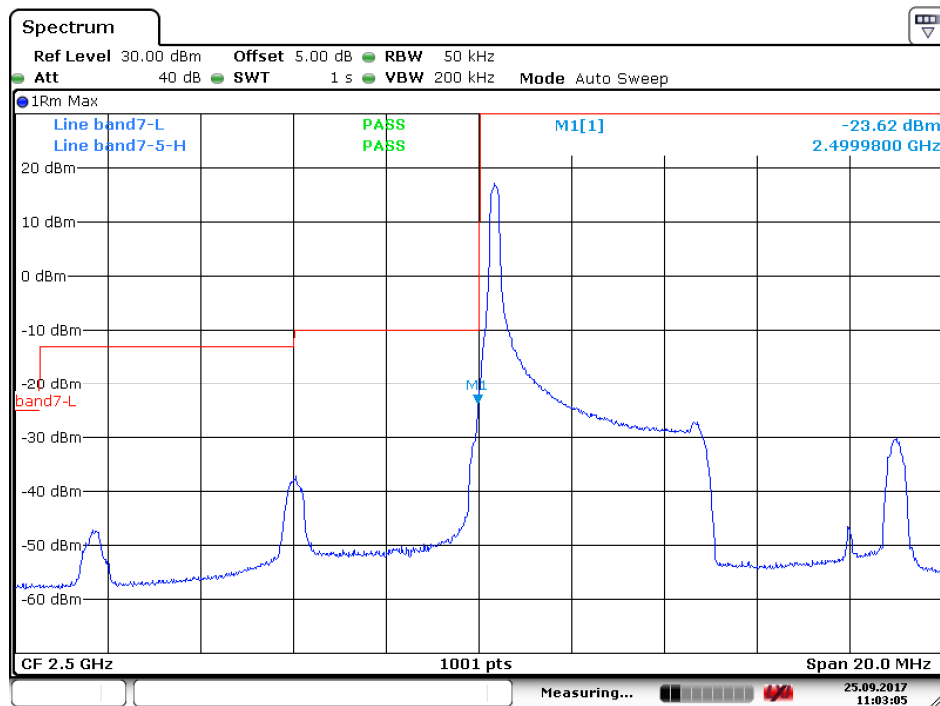
### 5.1 For LTE

#### 5.1.1 Test Band = LTE band7

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

##### 5.1.1.1.1 Test Channel = LCH

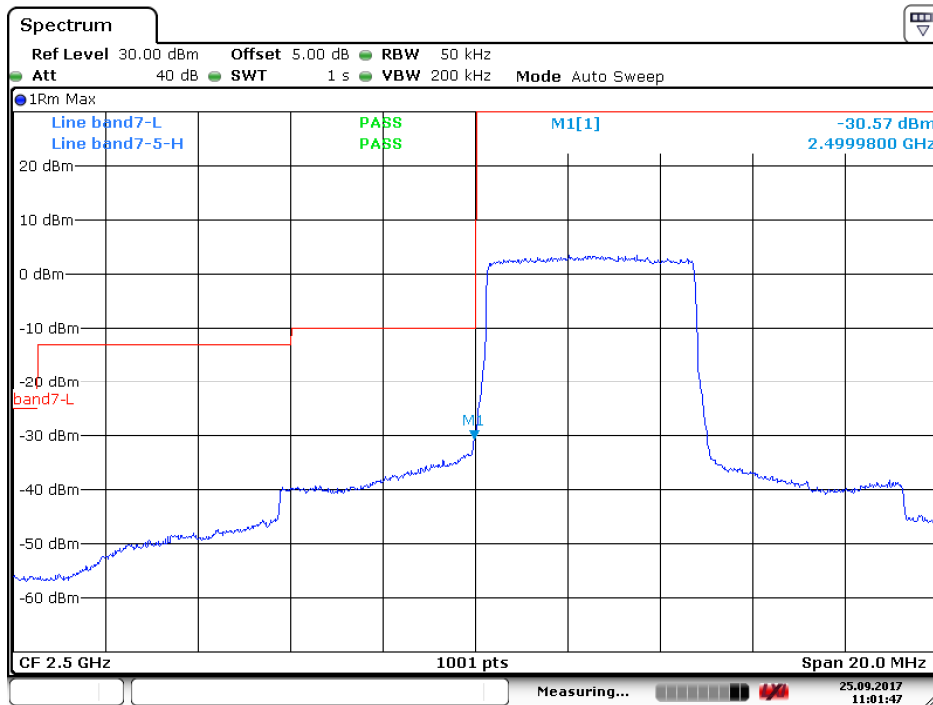
##### 5.1.1.1.1.1 Test RB=1RB



Date: 25.SEP.2017 11:03:04



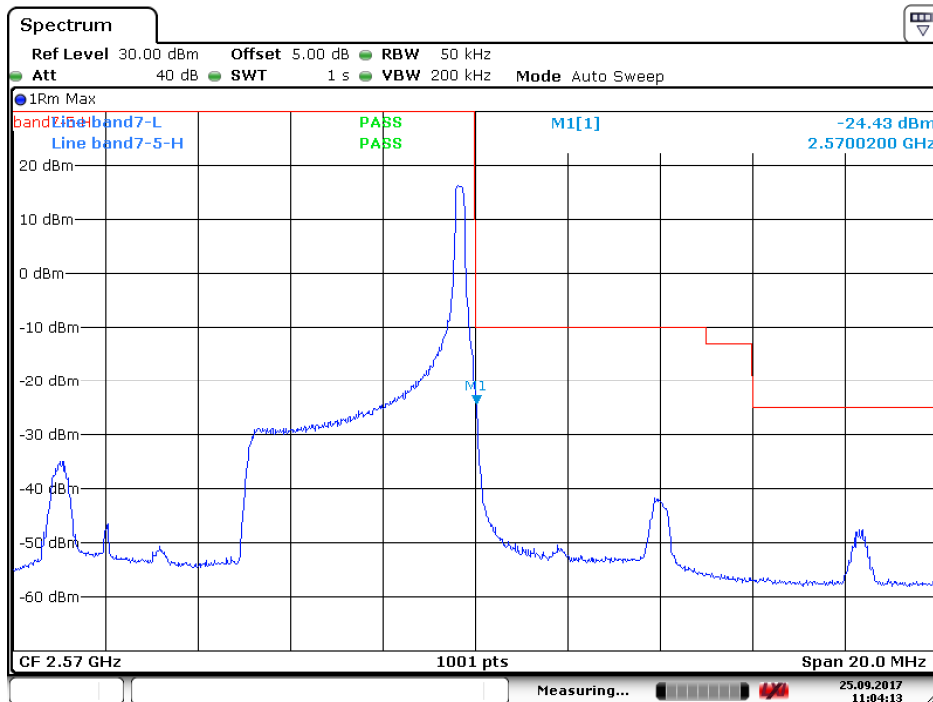
### 5.1.1.1.2 Test RB=25RB



Date: 25.SEP.2017 11:01:47

### 5.1.1.1.2 Test Channel = HCH

#### 5.1.1.1.2.1 Test RB=1RB

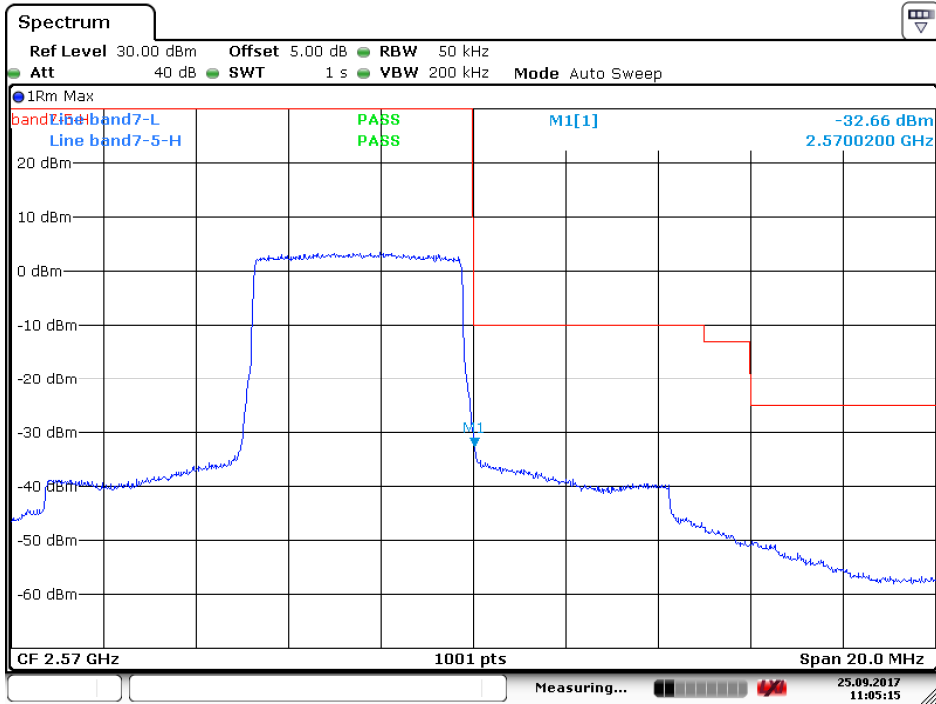


Date: 25.SEP.2017 11:04:13





5.1.1.1.2.2 Test RB=25RB

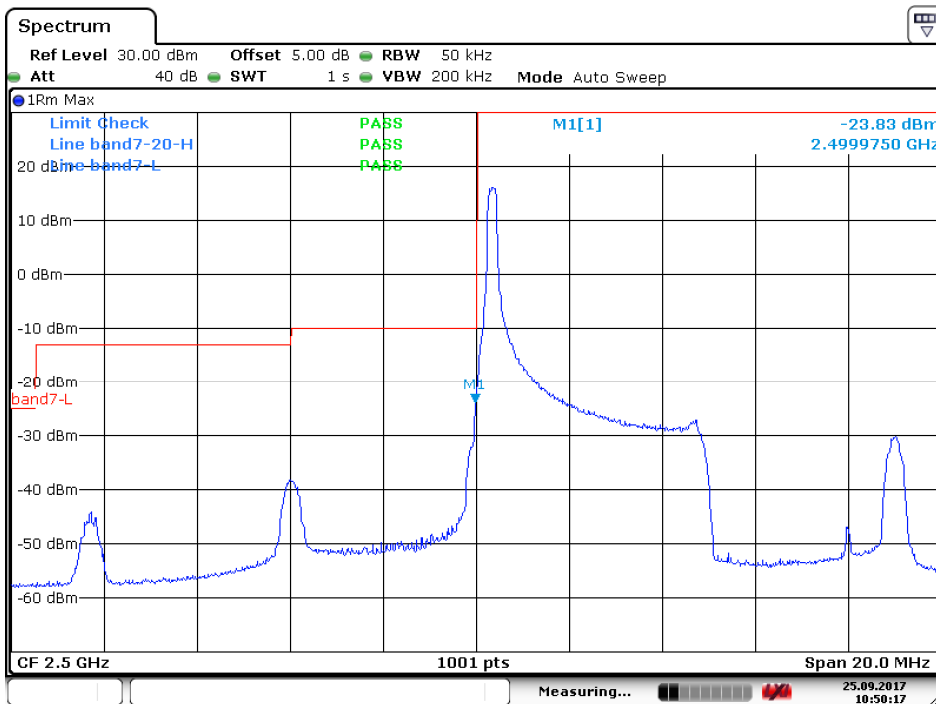


Date: 25.SEP.2017 11:05:16

5.1.1.2 Test Mode = LTE/TM2 5MHz

5.1.1.2.1 Test Channel = LCH

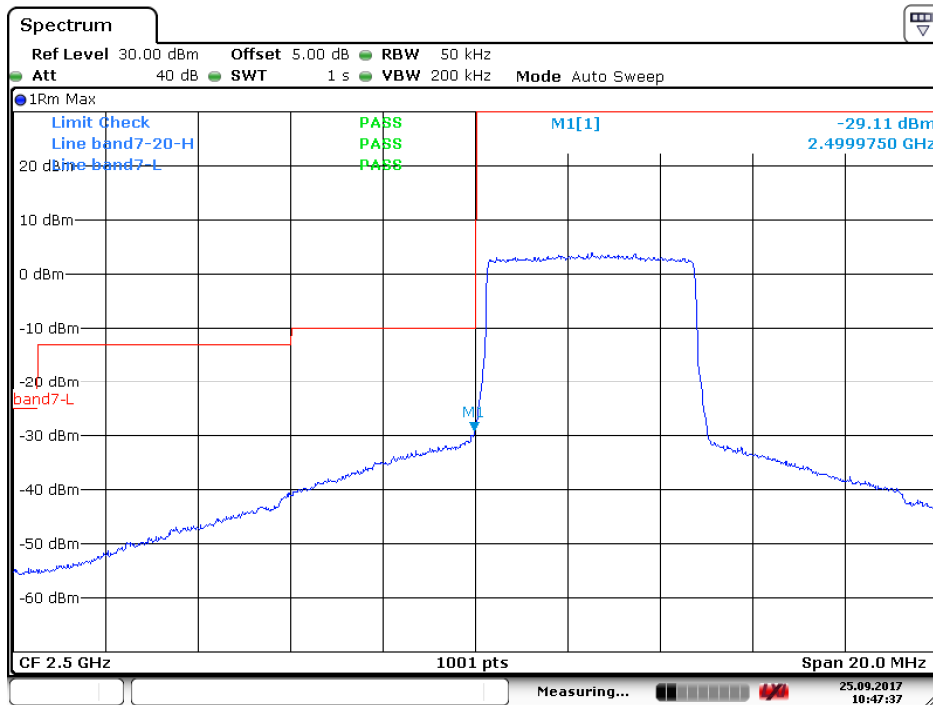
5.1.1.2.1.1 Test RB=1RB



Date: 25.SEP.2017 10:50:17



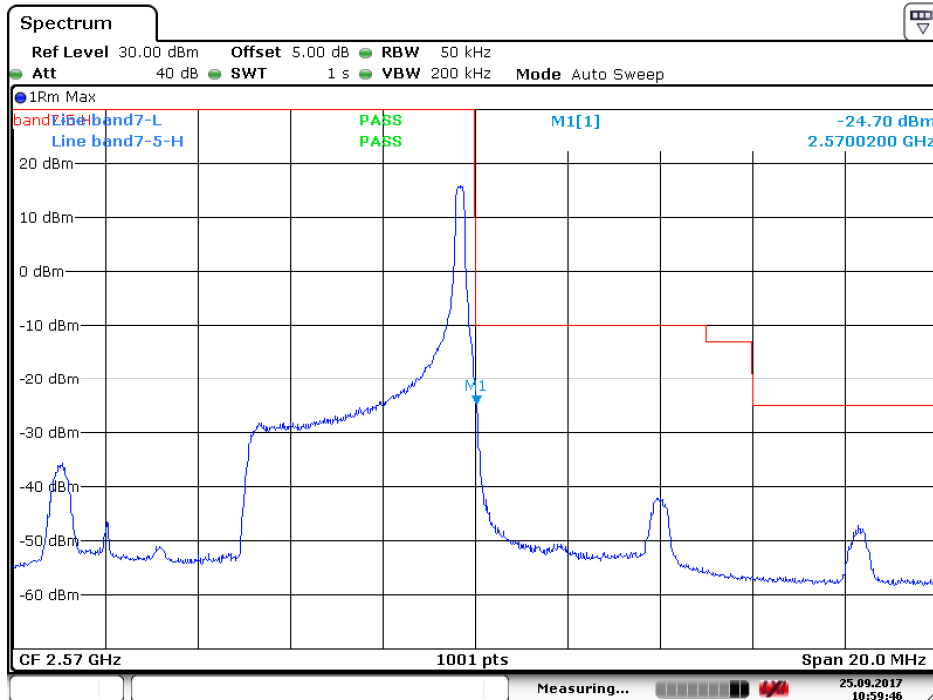
### 5.1.1.2.1.2 Test RB=25RB



Date: 25.SEP.2017 10:47:37

### 5.1.1.2.2 Test Channel = HCH

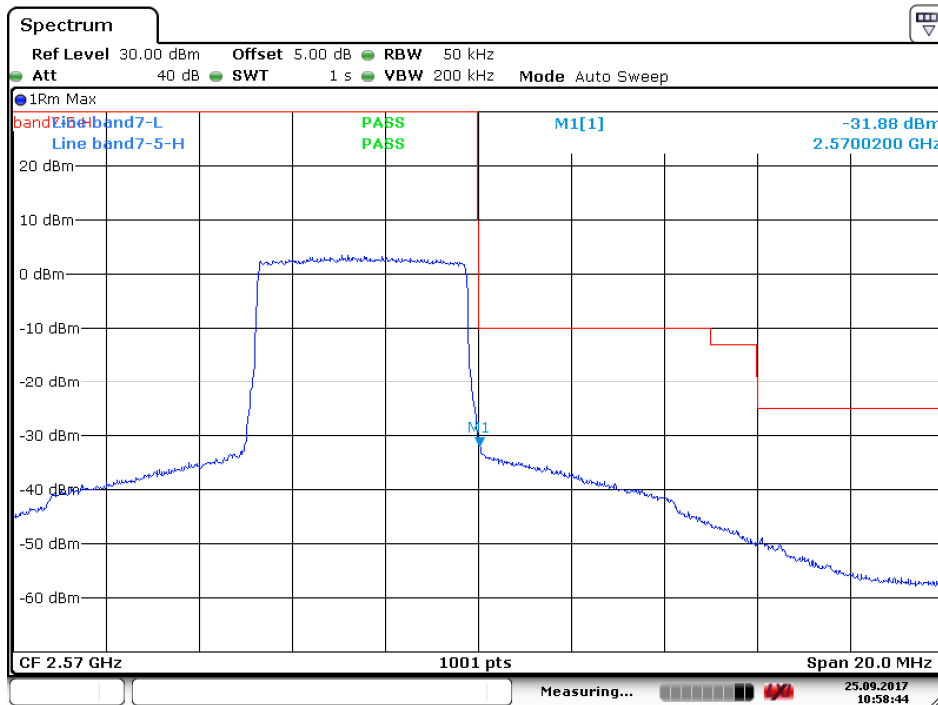
#### 5.1.1.2.2.1 Test RB=1RB



Date: 25.SEP.2017 10:59:47



### 5.1.1.2.2 Test RB=25RB

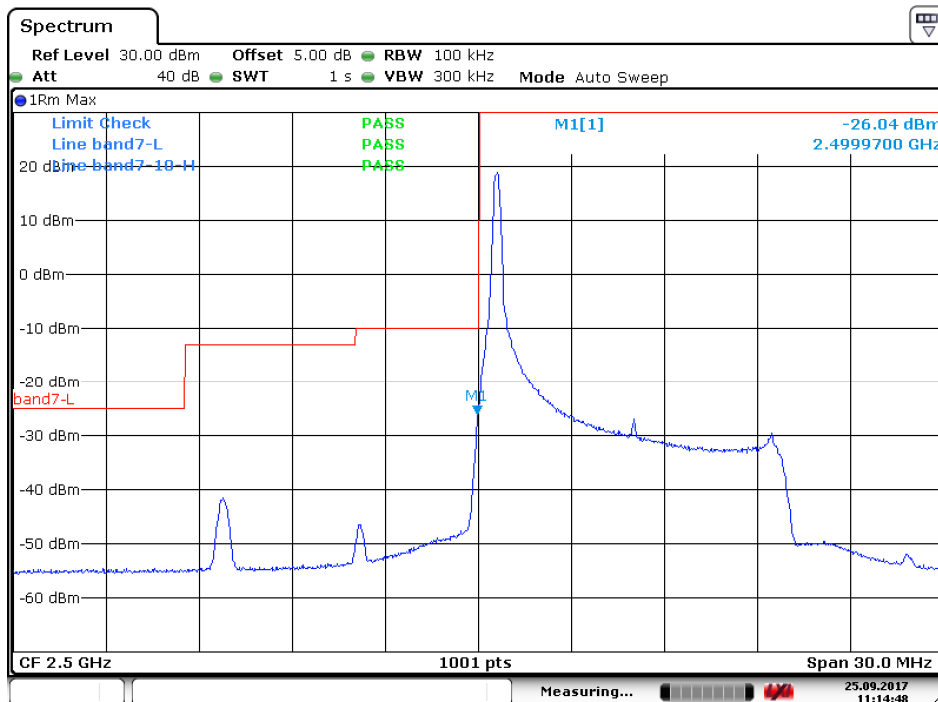


Date: 25.SEP.2017 10:58:44

### 5.1.1.3 Test Mode = LTE/TM1 10MHz

#### 5.1.1.3.1 Test Channel = LCH

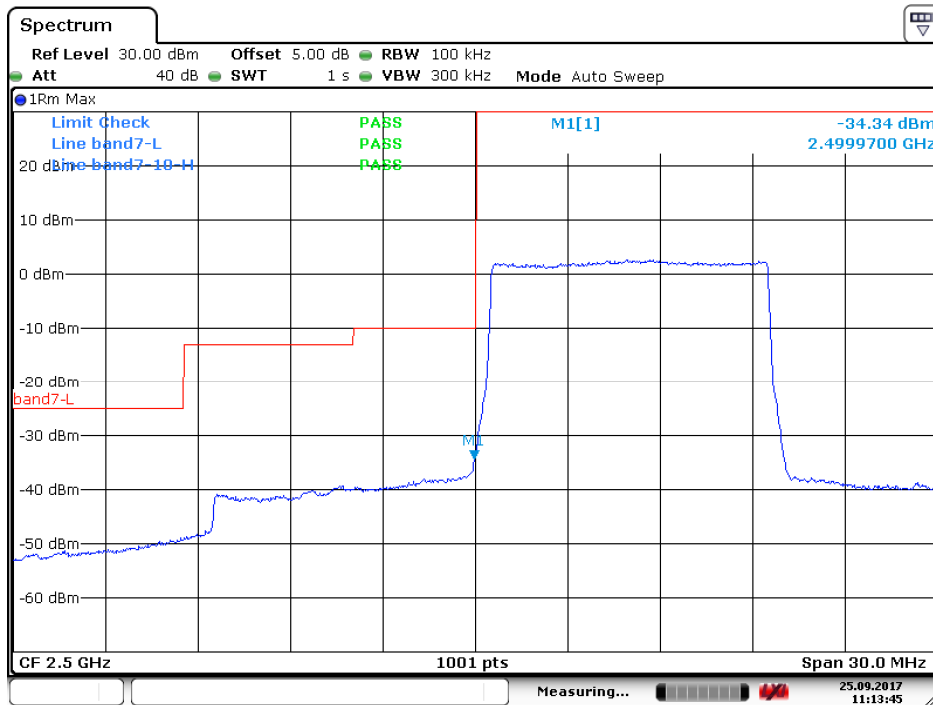
##### 5.1.1.3.1.1 Test RB=1RB



Date: 25.SEP.2017 11:14:48



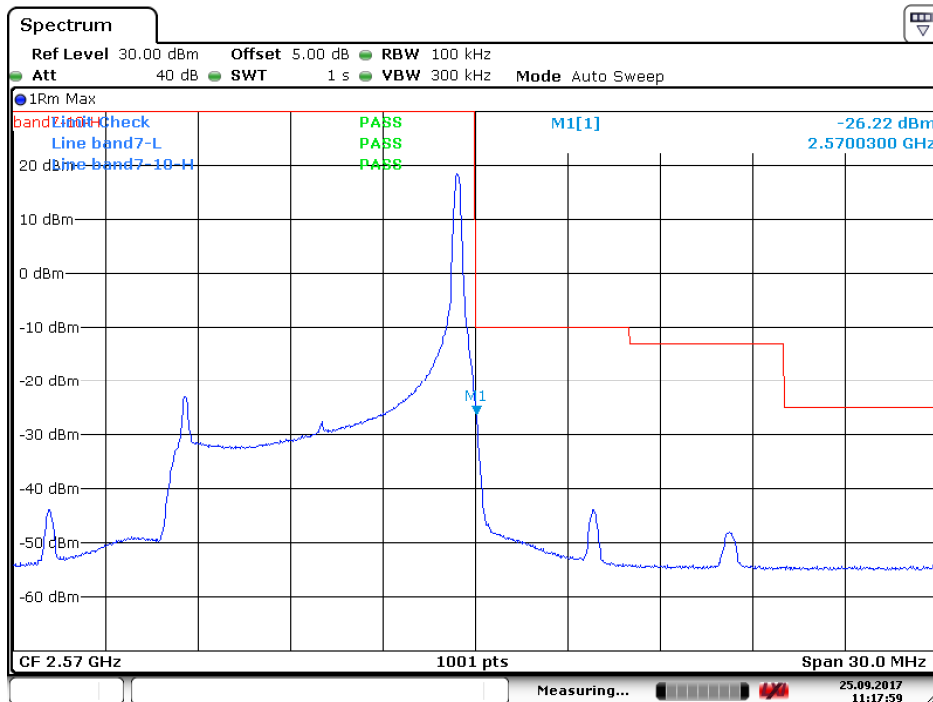
### 5.1.1.3.1.2 Test RB=50RB



Date: 25.SEP.2017 11:13:46

### 5.1.1.3.2 Test Channel = HCH

#### 5.1.1.3.2.1 Test RB=1RB

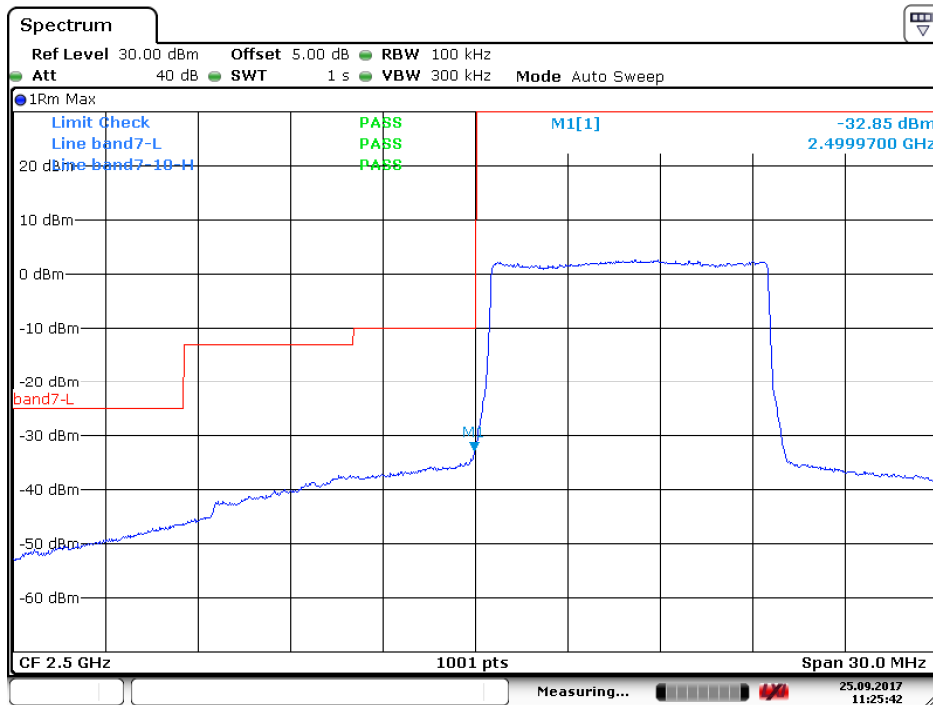


Date: 25.SEP.2017 11:17:59





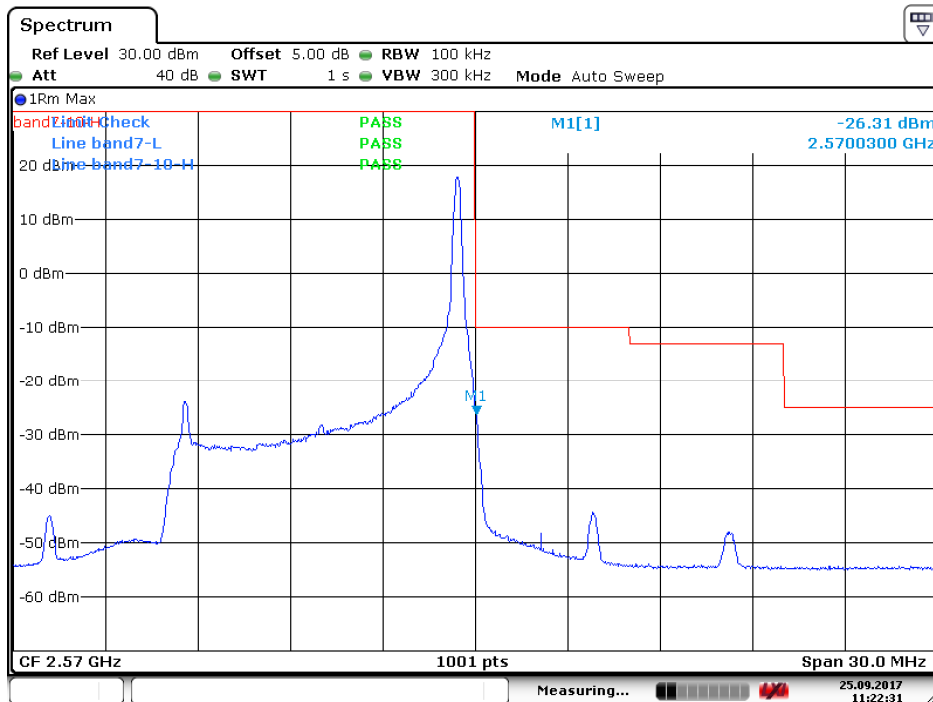
### 5.1.1.4.1.2 Test RB=50RB



Date: 25.SEP.2017 11:25:43

### 5.1.1.4.2 Test Channel = HCH

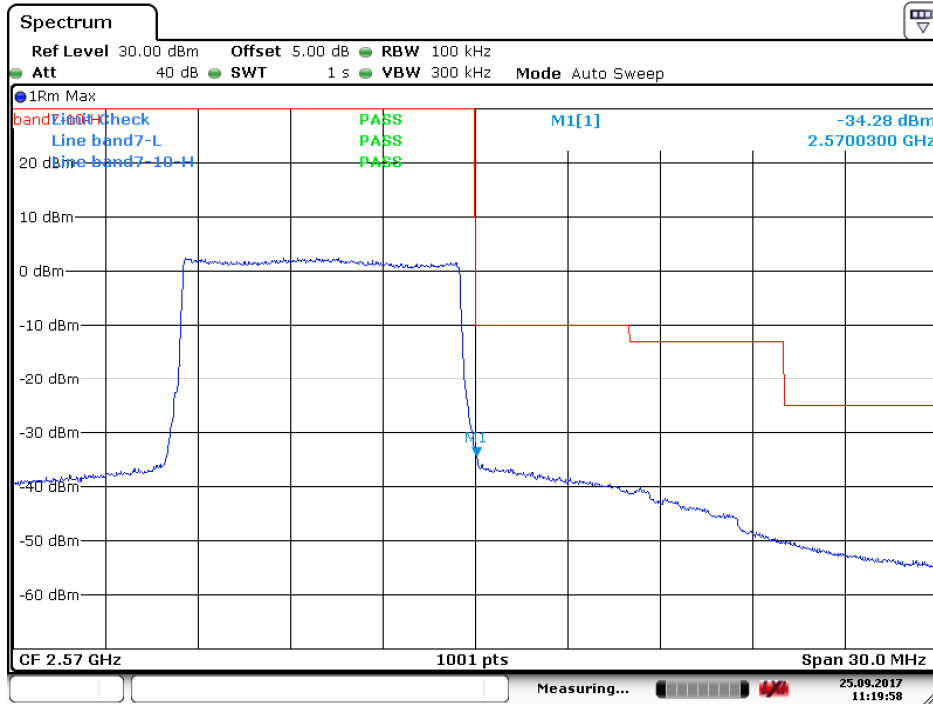
#### 5.1.1.4.2.1 Test RB=1RB



Date: 25.SEP.2017 11:22:31



5.1.1.4.2.2 Test RB=50RB

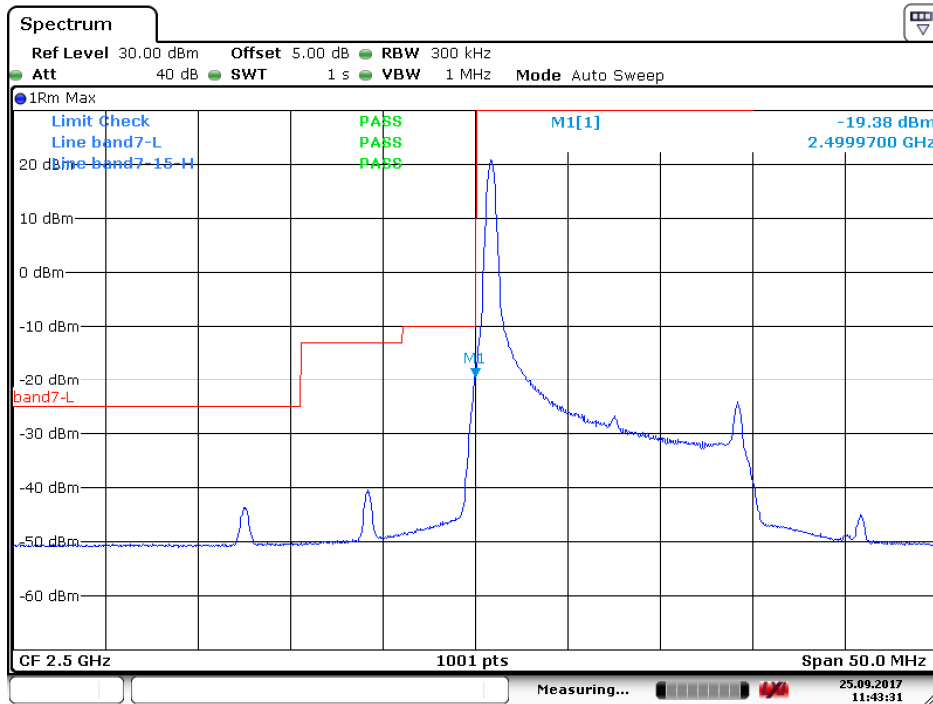


Date: 25.SEP.2017 11:19:58

5.1.1.5 Test Mode = LTE/TM1 15MHz

5.1.1.5.1 Test Channel = LCH

5.1.1.5.1.1 Test RB=1RB



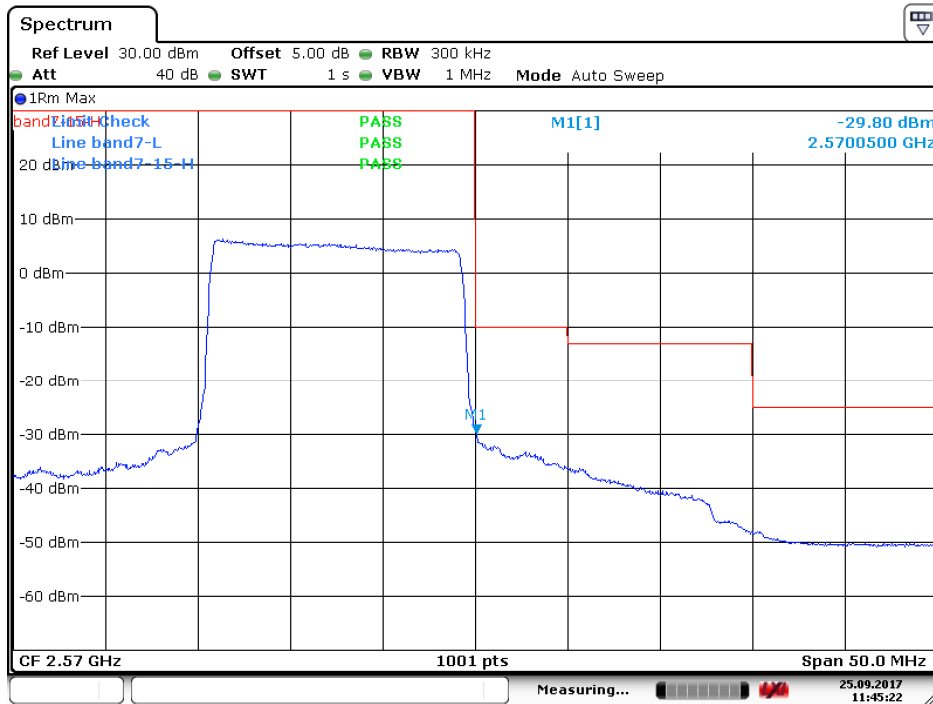
Date: 25.SEP.2017 11:43:32







### 5.1.1.5.2.2 Test RB=75RB

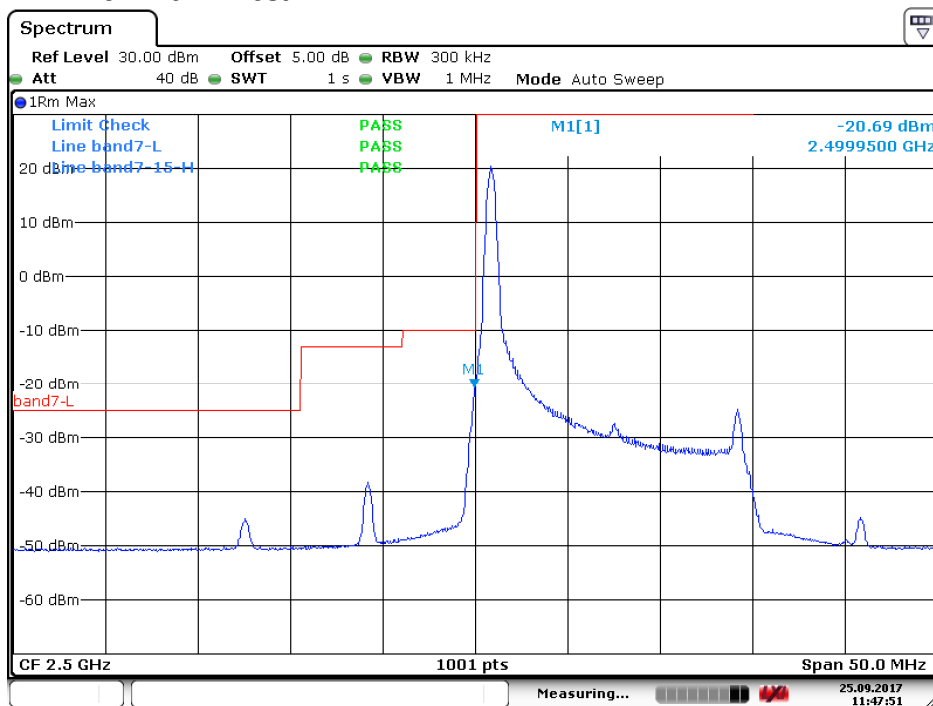


Date: 25.SEP.2017 11:45:22

### 5.1.1.6 Test Mode = LTE/TM2 15MHz

#### 5.1.1.6.1 Test Channel = LCH

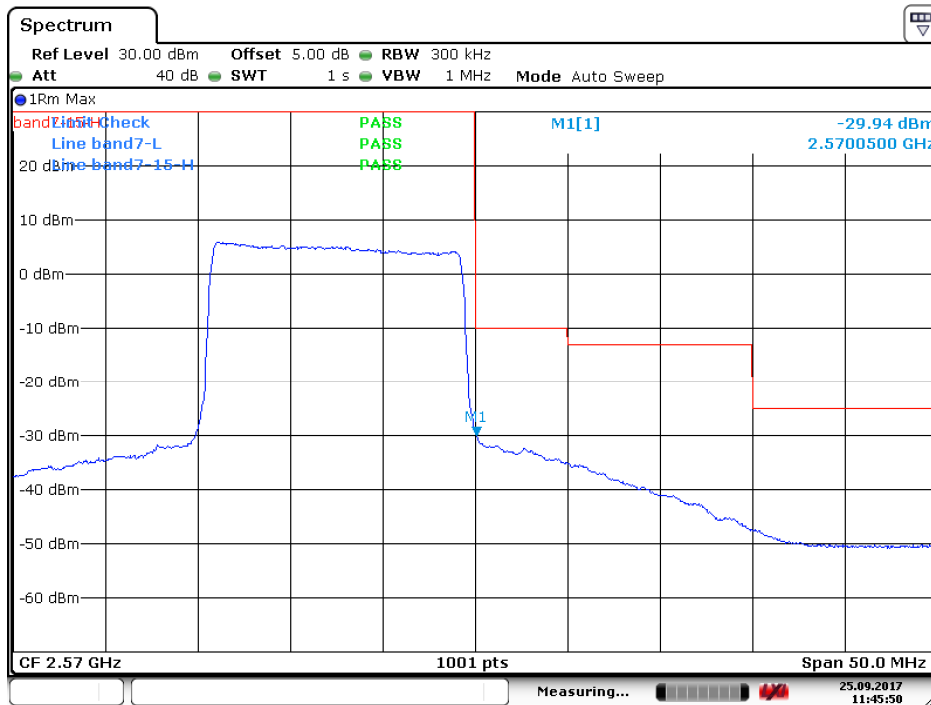
##### 5.1.1.6.1.1 Test RB=1RB



Date: 25.SEP.2017 11:47:51



**5.1.1.6.2.2 Test RB=75RB**

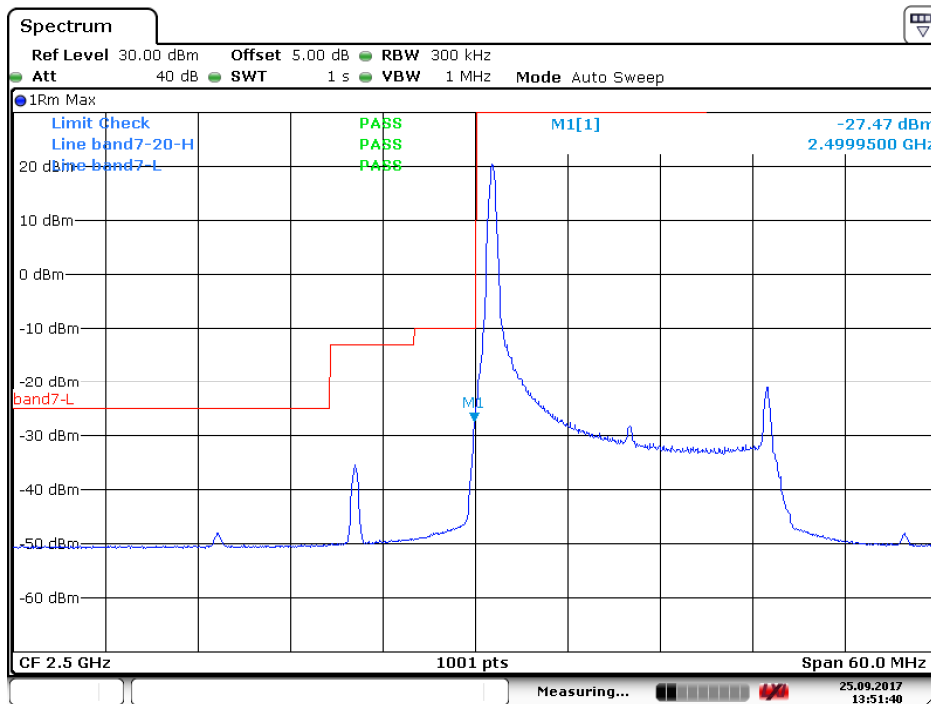


Date: 25.SEP.2017 11:45:50

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

**5.1.1.7.1 Test Channel = LCH**

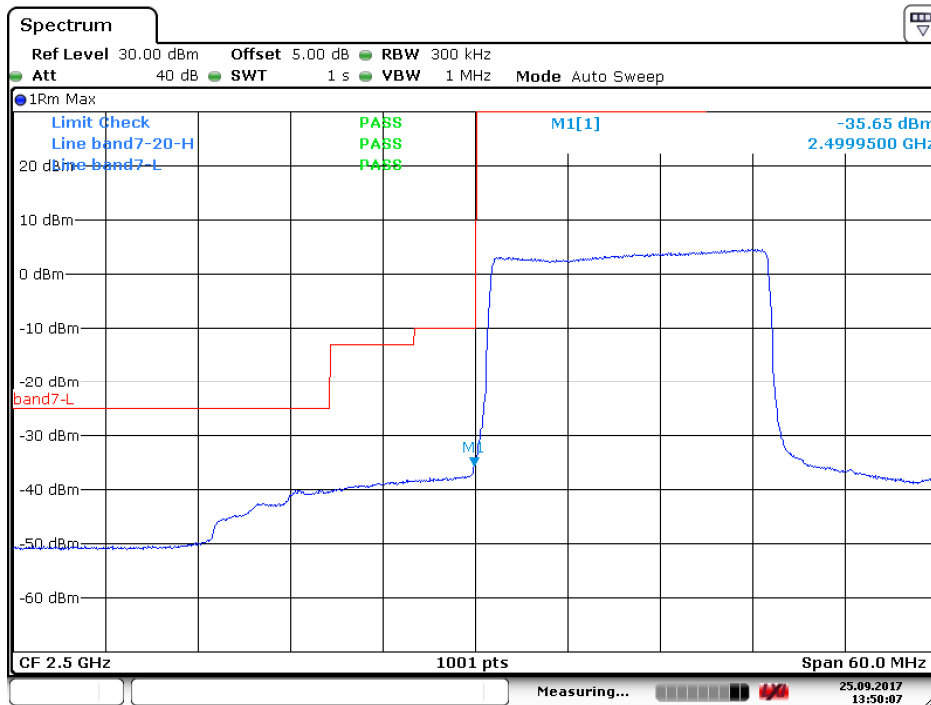
**5.1.1.7.1.1 Test RB=1RB**



Date: 25.SEP.2017 13:51:41



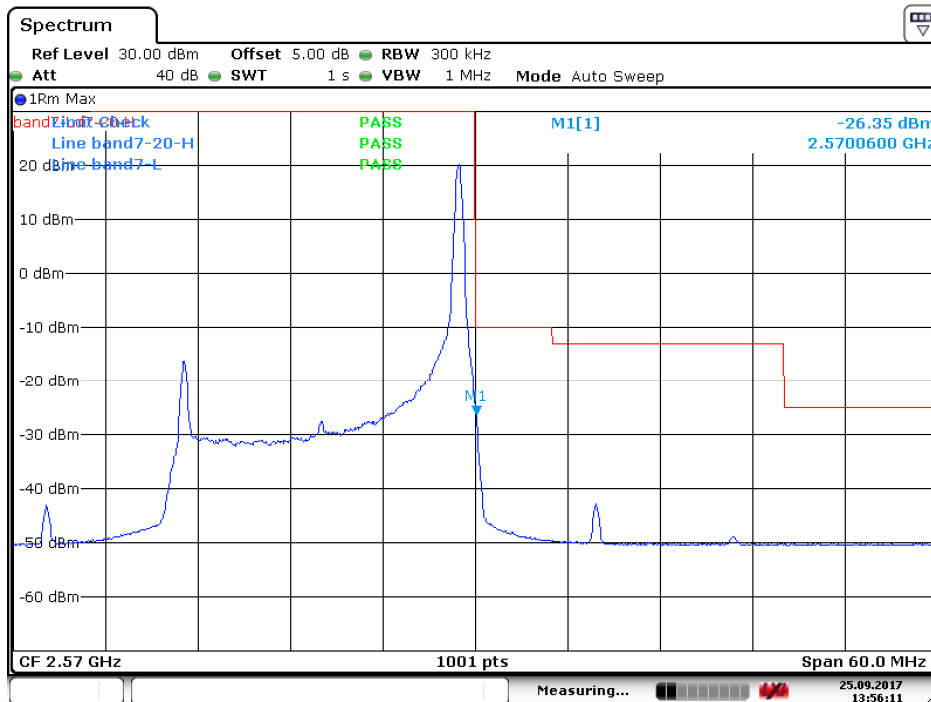
5.1.1.7.1.2 Test RB=100RB



Date: 25.SEP.2017 13:50:07

5.1.1.7.2 Test Channel = HCH

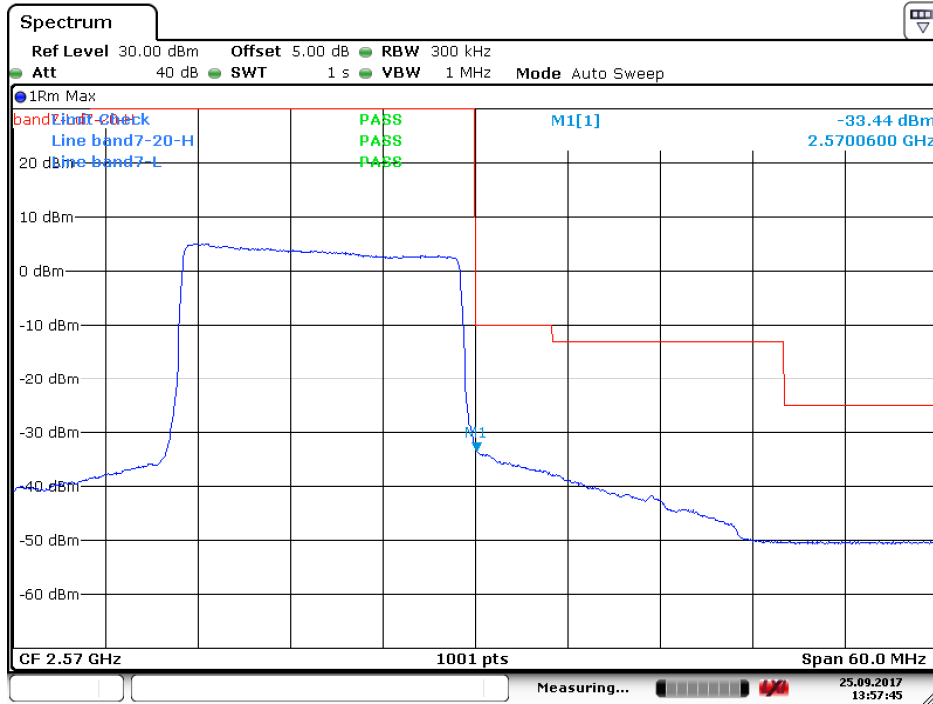
5.1.1.7.2.1 Test RB=1RB



Date: 25.SEP.2017 13:56:11



5.1.1.7.2.2 Test RB=100RB

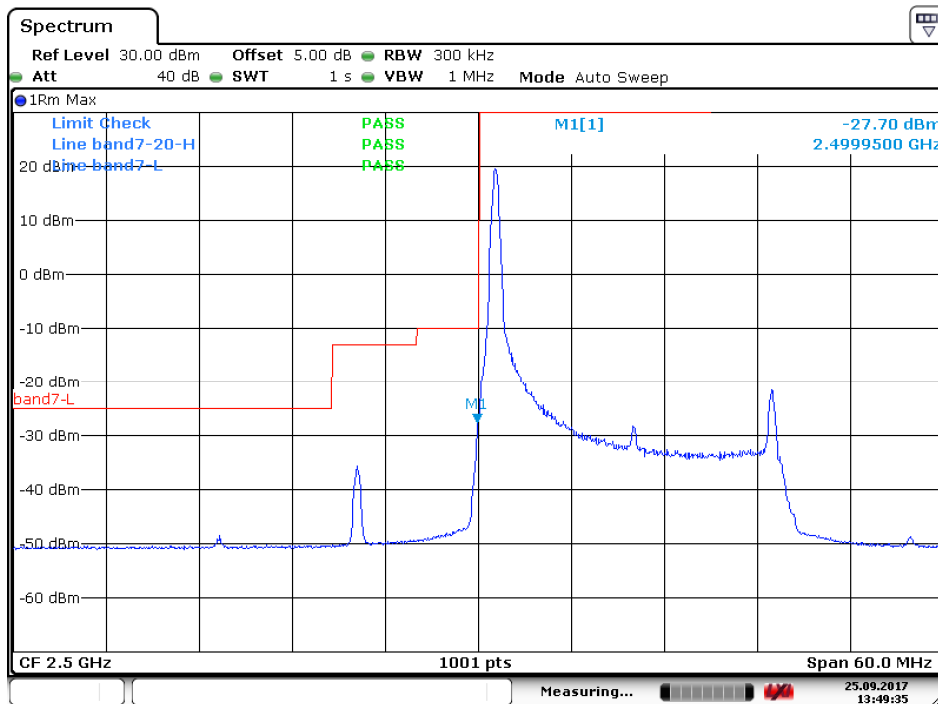


Date: 25.SEP.2017 13:57:45

5.1.1.8 Test Mode = LTE/TM2 20MHz

5.1.1.8.1 Test Channel = LCH

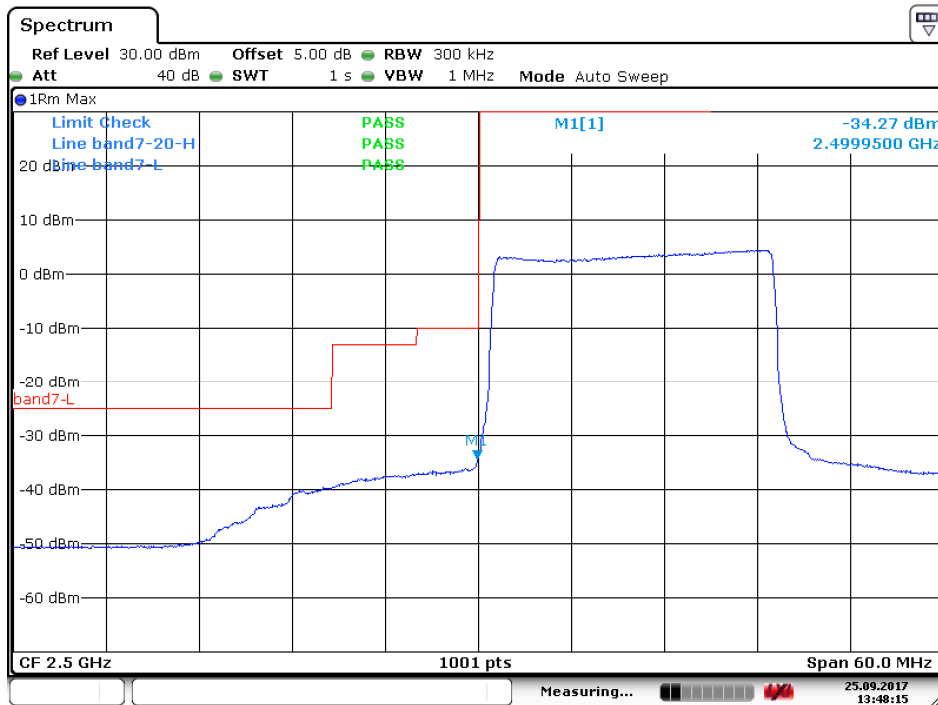
5.1.1.8.1.1 Test RB=1RB



Date: 25.SEP.2017 13:49:36



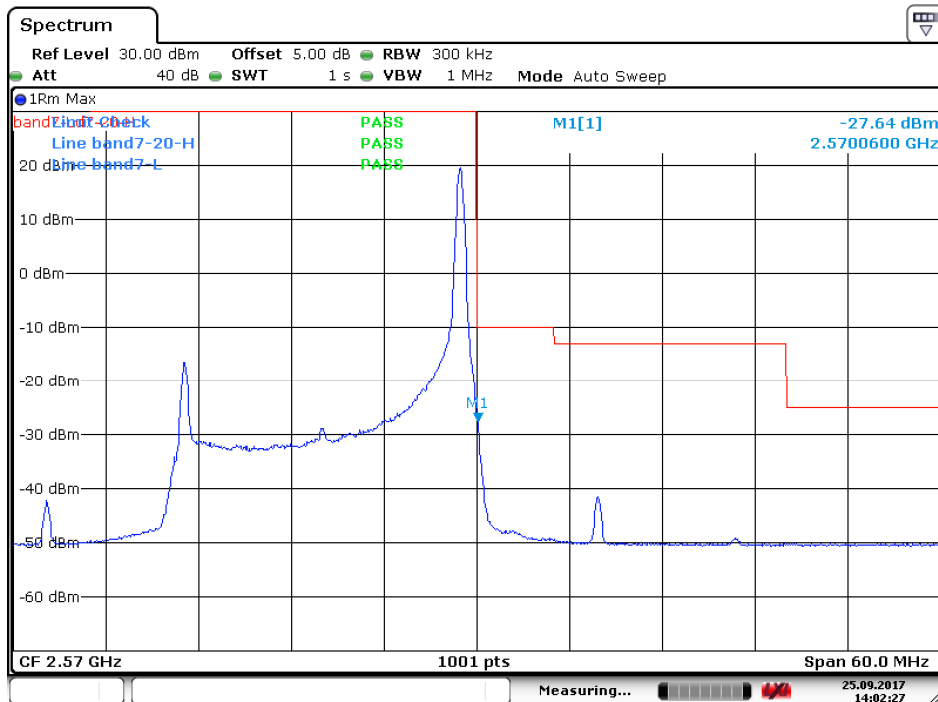
5.1.1.8.1.2 Test RB=100RB



Date: 25.SEP.2017 13:48:16

5.1.1.8.2 Test Channel = HCH

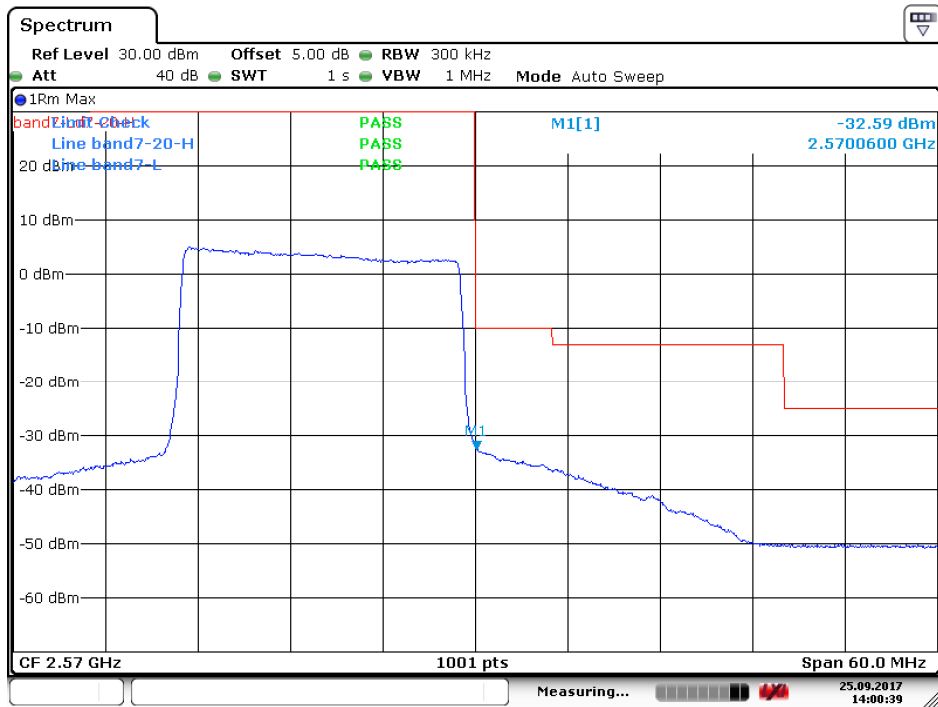
5.1.1.8.2.1 Test RB=1RB



Date: 25.SEP.2017 14:02:27



5.1.1.8.2.2 Test RB=100RB



Date: 25.SEP.2017 14:00:40

## 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.

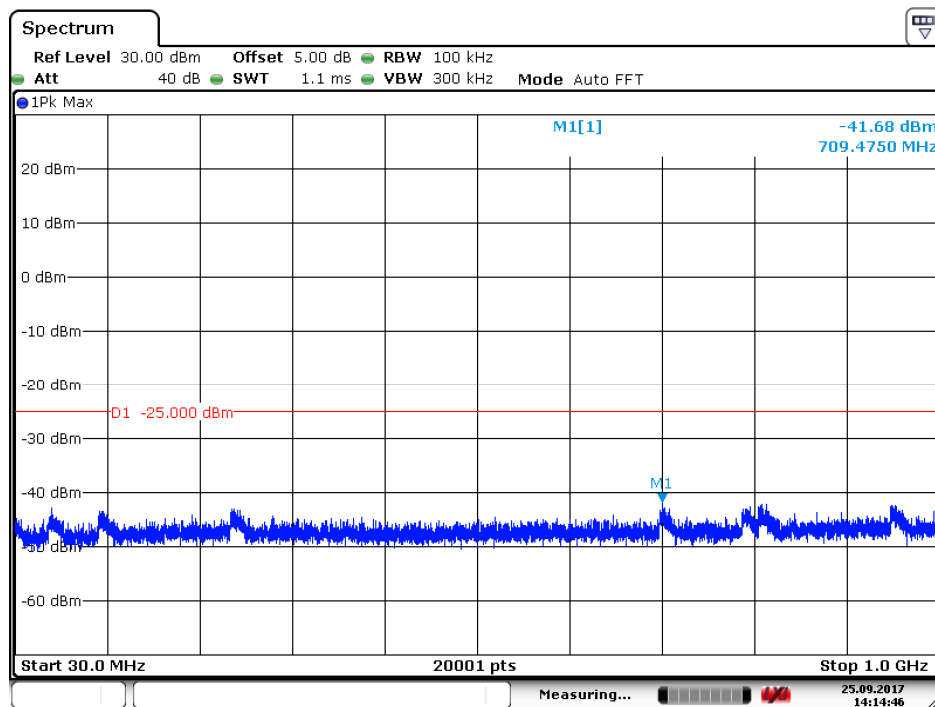
Part I - Test Plots

### 6.1 For LTE

#### 6.1.1 Test Band = LTE band7

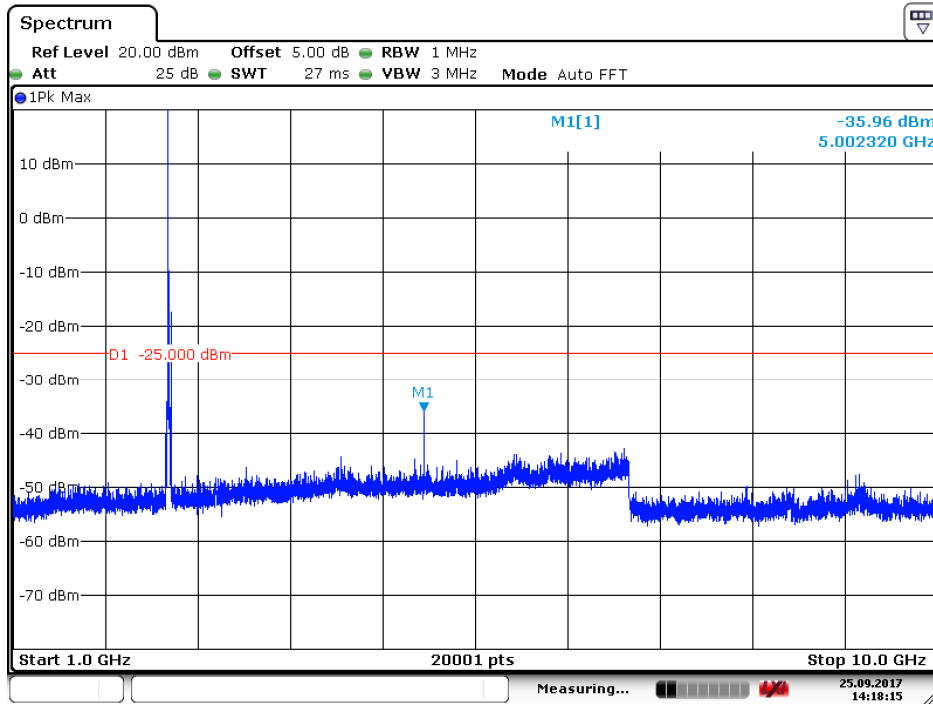
##### 6.1.1.1 Test Mode = LTE / TM1 20MHz RB1#0

##### 6.1.1.1.1 Test Channel = LCH

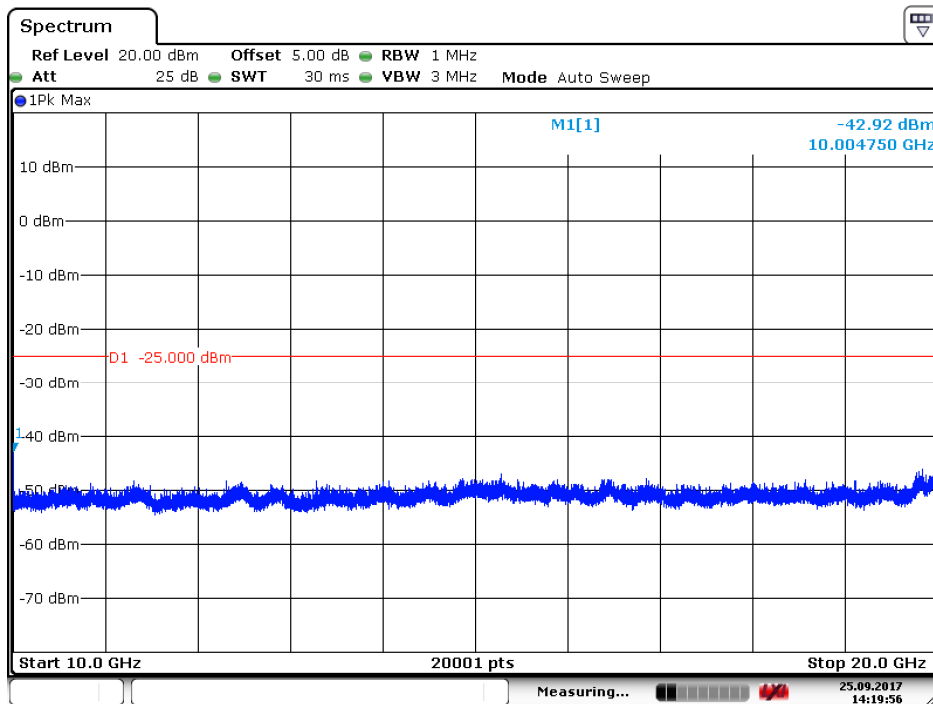


Date: 25.SEP.2017 14:14:46

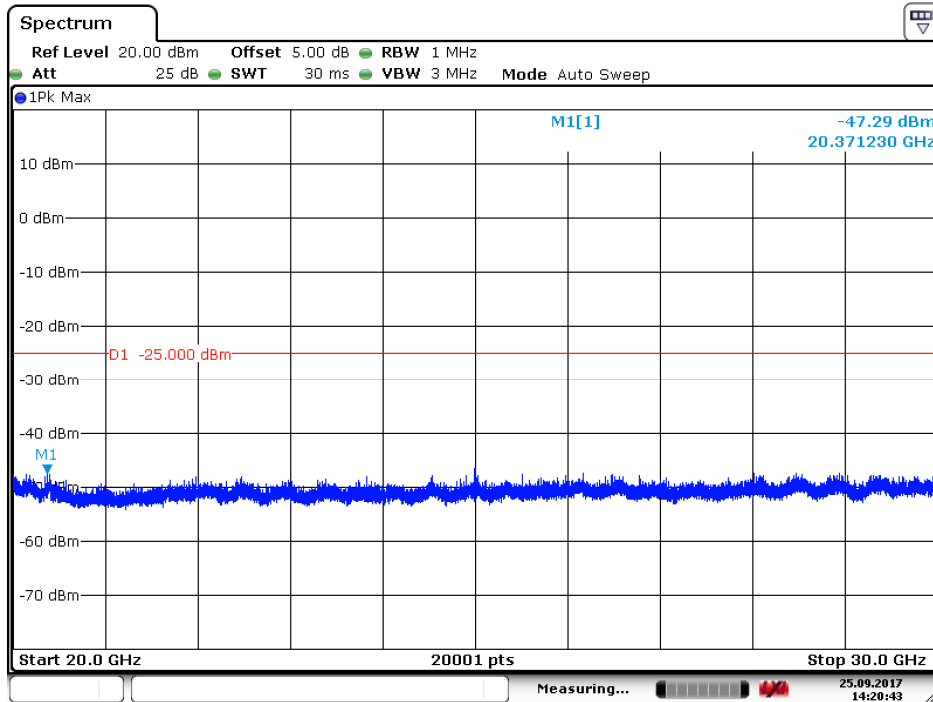




Date: 25.SEP.2017 14:18:15

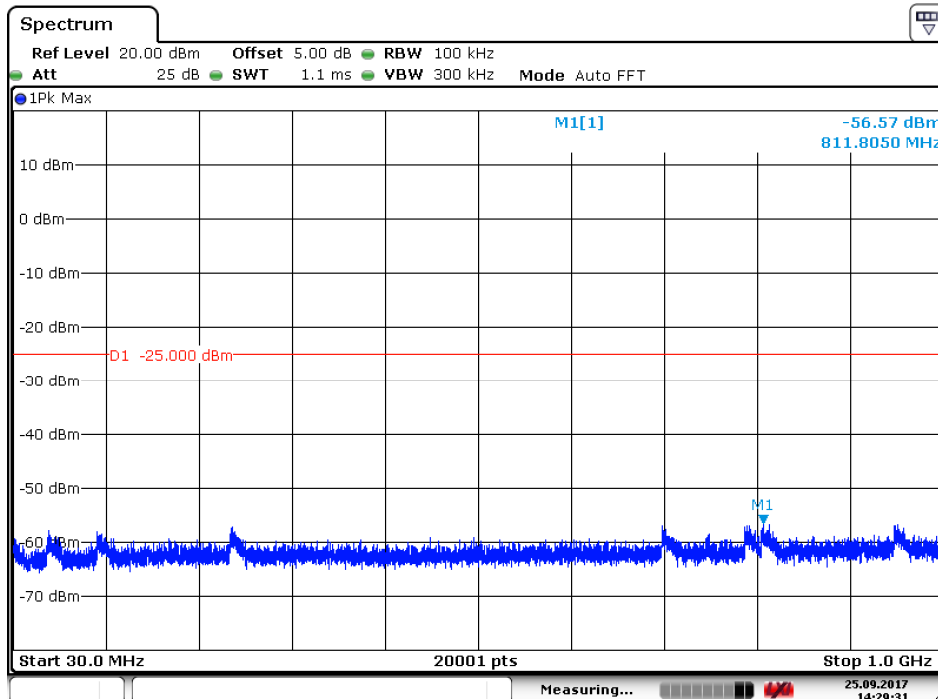


Date: 25.SEP.2017 14:19:57

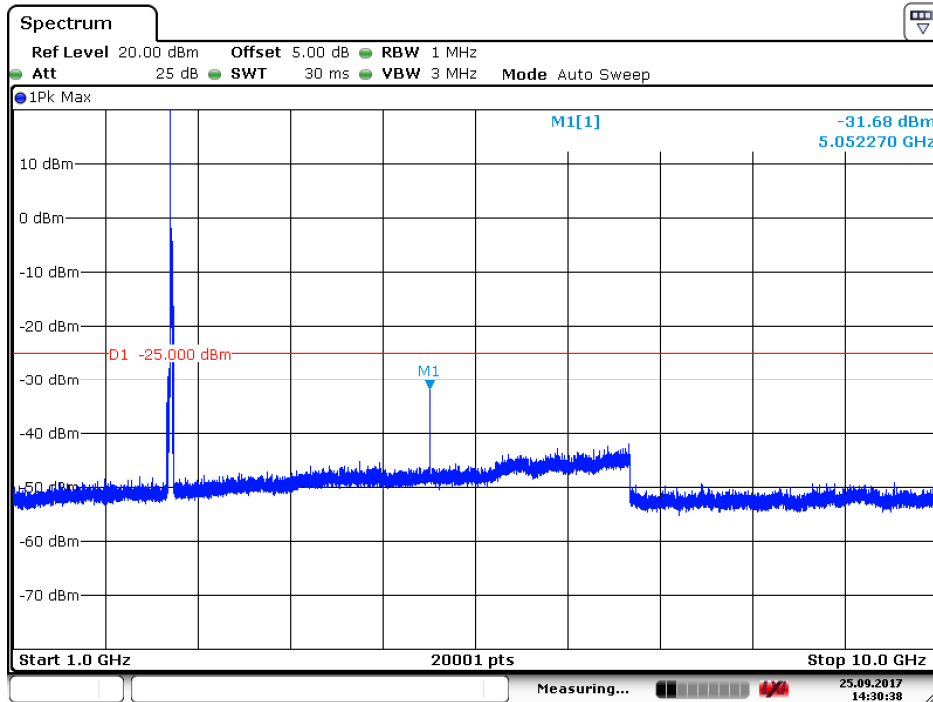


Date: 25.SEP.2017 14:20:43

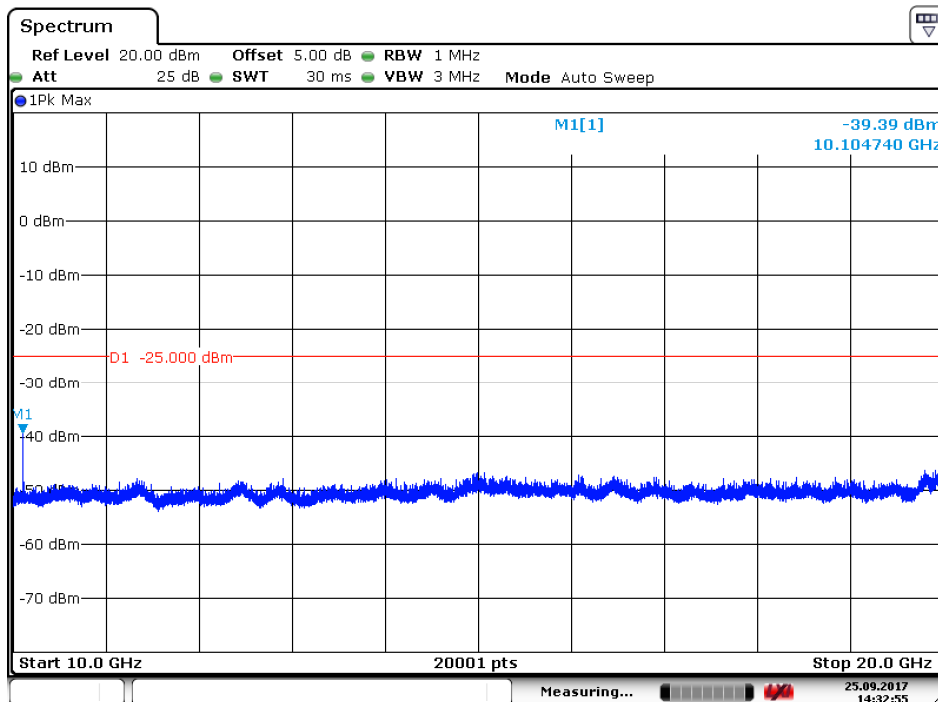
### 6.1.1.1.2 Test Channel = MCH



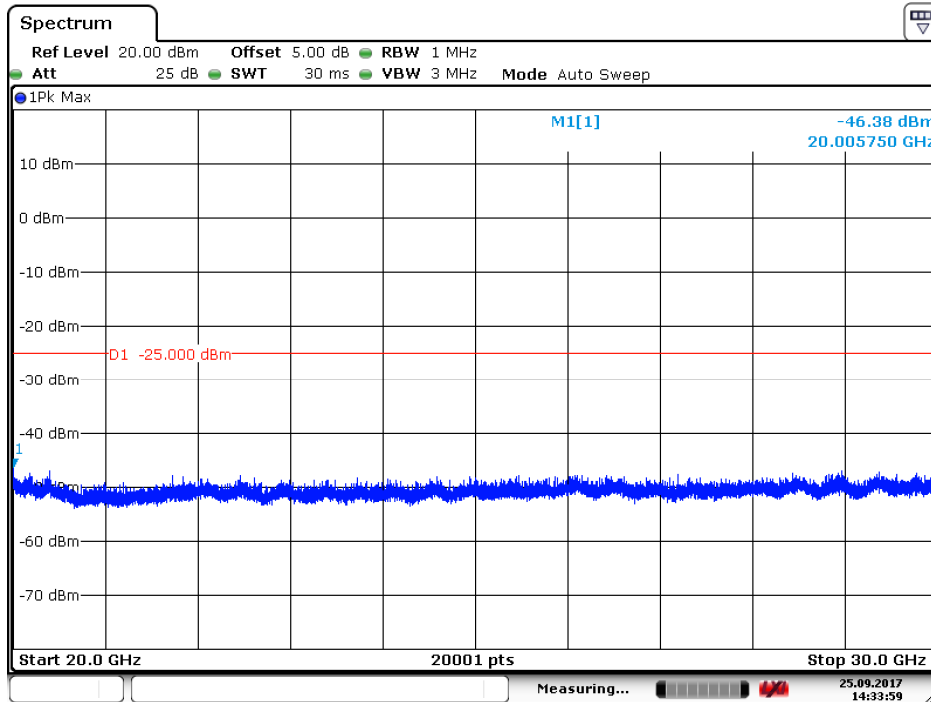
Date: 25.SEP.2017 14:29:32



Date: 25.SEP.2017 14:30:39

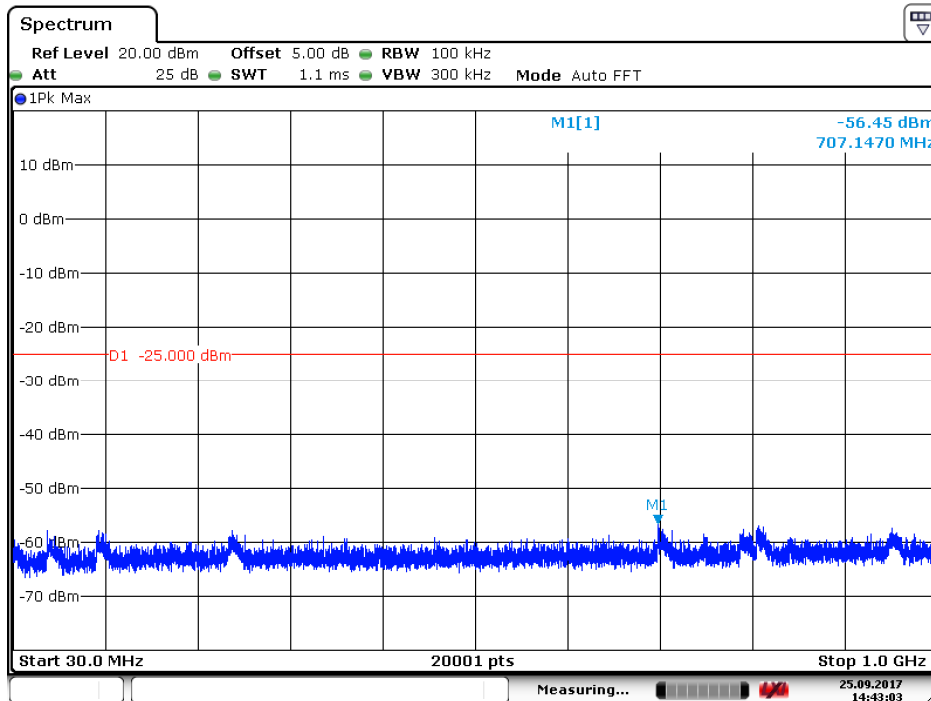


Date: 25.SEP.2017 14:32:55

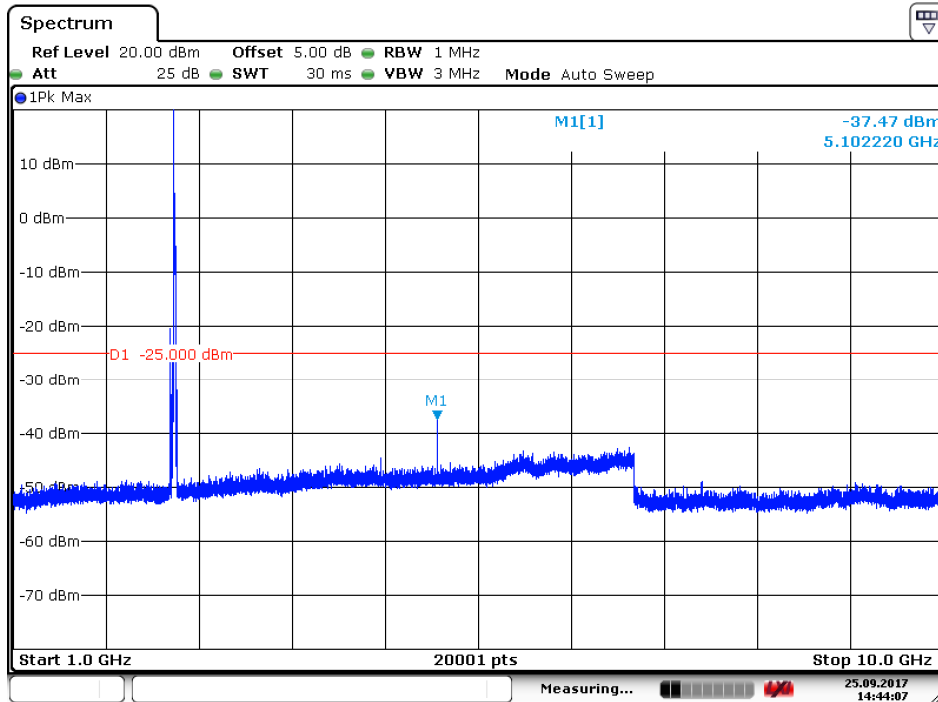


Date: 25.SEP.2017 14:34:00

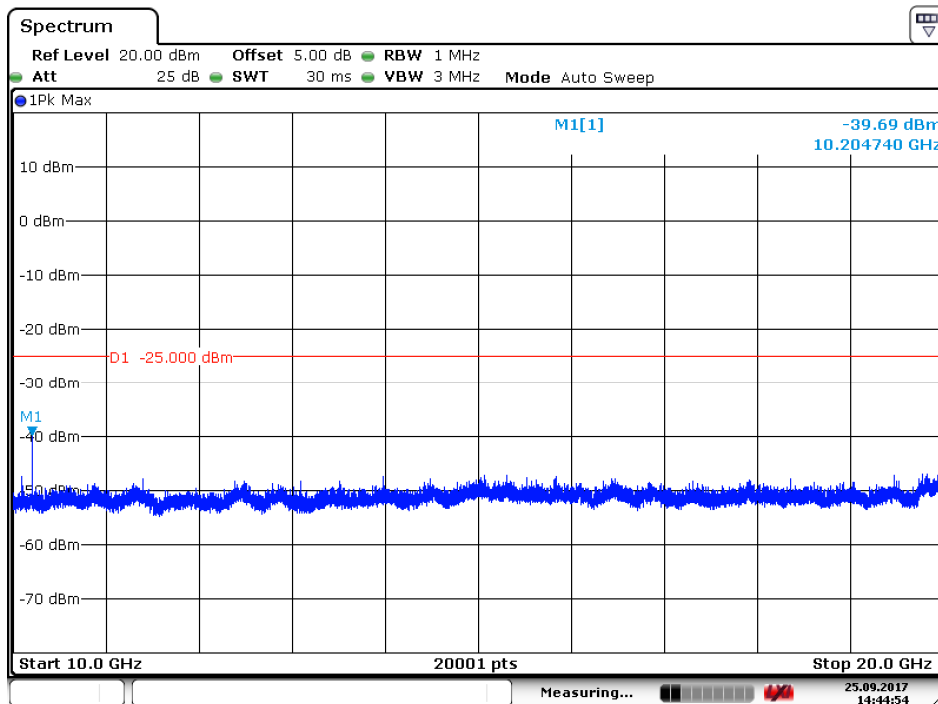
### 6.1.1.1.3 Test Channel = HCH



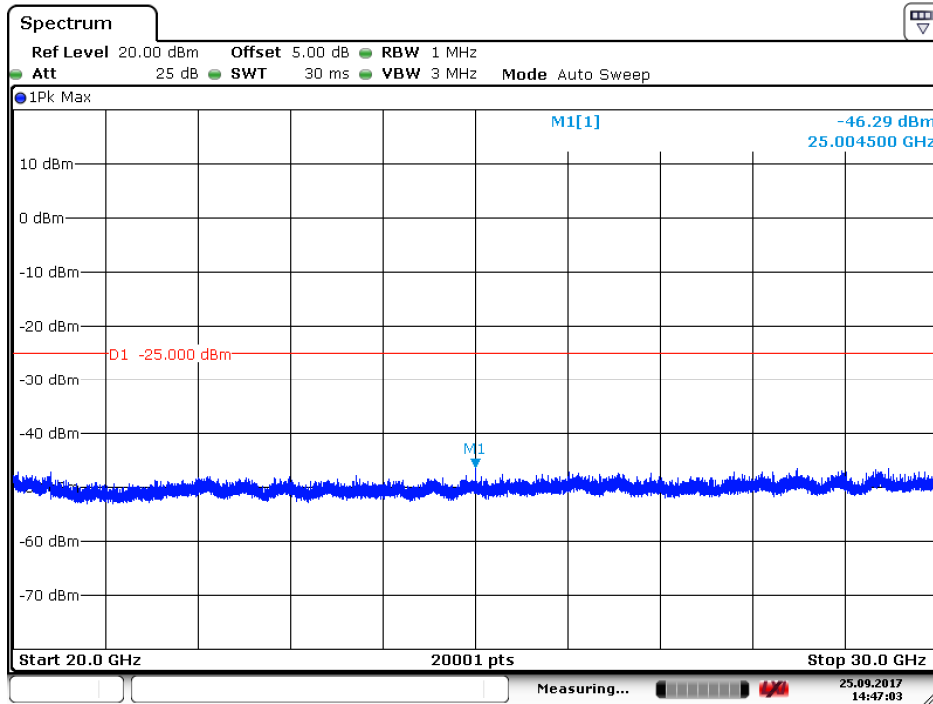
Date: 25.SEP.2017 14:43:04



Date: 25.SEP.2017 14:44:08



Date: 25.SEP.2017 14:44:55



Date: 25.SEP.2017 14:47:03



## 7 Field Strength of Spurious Radiation

### 7.1 For LTE

#### 7.1.1 Test Band = LTE band7

##### 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
1177.000	-66.71	-25.00	-41.71	Vertical
2800.000	-57.29	-25.00	-32.29	Vertical
4267.500	-67.07	-25.00	-42.07	Vertical
1870.000	-62.82	-25.00	-37.82	Horizontal
4170.000	-67.46	-25.00	-42.46	Horizontal
6607.500	-65.59	-25.00	-40.59	Horizontal

###### 7.1.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
2800.000	-57.36	-25.00	-32.36	Vertical
3975.000	-67.78	-25.00	-42.78	Vertical
6607.500	-65.24	-25.00	-40.24	Vertical
1144.000	-67.26	-25.00	-42.26	Horizontal
4267.500	-67.18	-25.00	-42.18	Horizontal
6120.000	-65.57	-25.00	-40.57	Horizontal

###### 7.1.1.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
1243.000	-66.18	-25.00	-41.18	Vertical
2800.000	-57.35	-25.00	-32.35	Vertical
6217.500	-65.19	-25.00	-40.19	Vertical
1694.000	-64.37	-25.00	-39.37	Horizontal
2336.000	-59.10	-25.00	-34.10	Horizontal
6120.000	-65.57	-25.00	-40.57	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.



## 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
LTEband7	LTE/TM1 20MHz	LCH	TN	VL	-4.03	-0.00161	PASS
				VN	2.46	0.00098	PASS
				VH	-5.73	-0.00228	PASS
		MCH	TN	VL	1.49	0.00059	PASS
				VN	-2.84	-0.00112	PASS
				VH	2.63	0.00104	PASS
		HCH	TN	VL	-6.56	-0.00256	PASS
				VN	-5.15	-0.00201	PASS
				VH	-2.79	-0.00109	PASS
	LTE/TM2 20MHz	LCH	TN	VL	-4.28	-0.00171	PASS
				VN	-2.95	-0.00118	PASS
				VH	-5.16	-0.00206	PASS
		MCH	TN	VL	1.53	0.00060	PASS
				VN	-2.82	-0.00111	PASS
				VH	2.59	0.00102	PASS
		HCH	TN	VL	-3.08	-0.00120	PASS
				VN	-4.04	-0.00158	PASS
				VH	1.44	0.00056	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
LTEband7	LTE/TM1 20MHz	LCH	VN	-30	-5.40	-0.00215	PASS
				-20	-1.34	-0.00053	PASS
				-10	2.38	0.00095	PASS
				0	4.75	0.00189	PASS
				10	1.65	0.00066	PASS
				20	2.11	0.00084	PASS
				30	-4.31	-0.00172	PASS
				40	-0.14	-0.00006	PASS
				50	5.59	0.00223	PASS
		MCH	VN	-30	-7.80	-0.00308	PASS
				-20	-3.95	-0.00156	PASS
				-10	-7.49	-0.00295	PASS
				0	-5.62	-0.00222	PASS
				10	-4.14	-0.00163	PASS
				20	-7.94	-0.00313	PASS
				30	-5.66	-0.00223	PASS
				40	-4.62	-0.00182	PASS
				50	-2.92	-0.00115	PASS
		HCH	VN	-30	3.54	0.00138	PASS
				-20	-4.49	-0.00175	PASS
				-10	1.53	0.00060	PASS
				0	-2.83	-0.00111	PASS
				10	2.60	0.00102	PASS
				20	-1.57	-0.00061	PASS
				30	-2.46	-0.00096	PASS
				40	-5.43	-0.00212	PASS
				50	-7.10	-0.00277	PASS



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

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Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband7	LTE/TM2 20MHz	LCH	VN	-30	-3.50	-0.00139	PASS
				-20	-1.45	-0.00058	PASS
				-10	3.38	0.00135	PASS
				0	2.64	0.00105	PASS
				10	1.60	0.00064	PASS
				20	-4.23	-0.00169	PASS
				30	-2.44	-0.00097	PASS
				40	5.32	0.00212	PASS
		MCH	VN	-30	-4.80	-0.00189	PASS
				-20	-5.38	-0.00212	PASS
				-10	-7.19	-0.00284	PASS
				0	-4.32	-0.00170	PASS
				10	-2.34	-0.00092	PASS
				20	1.72	0.00068	PASS
				30	-3.64	-0.00144	PASS
				40	-2.62	-0.00103	PASS
		HCH	VN	-30	1.34	0.00052	PASS
				-20	-2.51	-0.00098	PASS
				-10	1.59	0.00062	PASS
				0	-3.73	-0.00146	PASS
				10	2.88	0.00113	PASS
				20	-1.47	-0.00057	PASS
				30	-2.59	-0.00101	PASS
				40	-4.30	-0.00168	PASS
			50	-4.74	-0.00185	PASS	

The End