



# Appendix B

## E-UTRA Band 41



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# 1 Effective (Isotropic) Radiated Power Output Data

Effective Isotropic Radiated Power of Transmitter (EIRP) for LTE BAND 41

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 41	LTE/TM1	5M	LCH	1RB#0	22.2	20.6	33.00	PASS
				1RB#12	22.19	20.59	33.00	PASS
				1RB#24	22.2	20.6	33.00	PASS
				12RB#0	21.17	19.57	33.00	PASS
				12RB#6	21.18	19.58	33.00	PASS
				12RB#13	21.14	19.54	33.00	PASS
				25RB#0	21.15	19.55	33.00	PASS
			MCH	1RB#0	22.36	20.76	33.00	PASS
				1RB#12	22.32	20.72	33.00	PASS
				1RB#24	22.35	20.75	33.00	PASS
				12RB#0	21.39	19.79	33.00	PASS
				12RB#6	21.38	19.78	33.00	PASS
				12RB#13	21.32	19.72	33.00	PASS
				25RB#0	21.33	19.73	33.00	PASS
			HCH	1RB#0	22.51	20.91	33.00	PASS
				1RB#12	22.51	20.91	33.00	PASS
				1RB#24	22.53	20.93	33.00	PASS
				12RB#0	21.54	19.94	33.00	PASS
				12RB#6	21.54	19.94	33.00	PASS
				12RB#13	21.53	19.93	33.00	PASS
				25RB#0	21.54	19.94	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
BAND 41	LTE/TM2	5M	LCH	1RB#0	21.38	19.78	33.00	PASS
				1RB#12	21.37	19.77	33.00	PASS
				1RB#24	21.39	19.79	33.00	PASS
				12RB#0	20.21	18.61	33.00	PASS
				12RB#6	20.21	18.61	33.00	PASS
				12RB#13	20.17	18.57	33.00	PASS
				25RB#0	20.13	18.53	33.00	PASS
			MCH	1RB#0	21.35	19.75	33.00	PASS
				1RB#12	21.34	19.74	33.00	PASS
				1RB#24	21.34	19.74	33.00	PASS
				12RB#0	20.37	18.77	33.00	PASS
				12RB#6	20.37	18.77	33.00	PASS
				12RB#13	20.34	18.74	33.00	PASS
				25RB#0	20.38	18.78	33.00	PASS
			HCH	1RB#0	21.51	19.91	33.00	PASS
				1RB#12	21.45	19.85	33.00	PASS
				1RB#24	21.48	19.88	33.00	PASS
				12RB#0	20.49	18.89	33.00	PASS
				12RB#6	20.49	18.89	33.00	PASS
				12RB#13	20.5	18.9	33.00	PASS
				25RB#0	20.47	18.87	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
BAND 41	LTE/TM1	10M	LCH	1RB#0	22.28	20.68	33.00	PASS
				1RB#24	22.29	20.69	33.00	PASS
				1RB#49	22.34	20.74	33.00	PASS
				25RB#0	21.16	19.56	33.00	PASS
				25RB#12	21.16	19.56	33.00	PASS
				25RB#25	21.15	19.55	33.00	PASS
				50RB#0	21.16	19.56	33.00	PASS
			MCH	1RB#0	22.51	20.91	33.00	PASS
				1RB#24	22.48	20.88	33.00	PASS
				1RB#49	22.57	20.97	33.00	PASS
				25RB#0	21.39	19.79	33.00	PASS
				25RB#12	21.39	19.79	33.00	PASS
				25RB#25	21.34	19.74	33.00	PASS
				50RB#0	21.37	19.77	33.00	PASS
			HCH	1RB#0	22.72	21.12	33.00	PASS
				1RB#24	22.69	21.09	33.00	PASS
				1RB#49	22.79	21.19	33.00	PASS
				25RB#0	21.49	19.89	33.00	PASS
				25RB#12	21.49	19.89	33.00	PASS
				25RB#25	21.57	19.97	33.00	PASS
				50RB#0	21.49	19.89	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
BAND 41	LTE/TM2	10M	LCH	1RB#0	21.31	19.71	33.00	PASS
				1RB#24	21.32	19.72	33.00	PASS
				1RB#49	21.42	19.82	33.00	PASS
				25RB#0	20.17	18.57	33.00	PASS
				25RB#12	20.18	18.58	33.00	PASS
				25RB#25	20.19	18.59	33.00	PASS
				50RB#0	20.17	18.57	33.00	PASS
			MCH	1RB#0	21.51	19.91	33.00	PASS
				1RB#24	21.48	19.88	33.00	PASS
				1RB#49	21.61	20.01	33.00	PASS
				25RB#0	20.41	18.81	33.00	PASS
				25RB#12	20.39	18.79	33.00	PASS
				25RB#25	20.36	18.76	33.00	PASS
				50RB#0	20.36	18.76	33.00	PASS
			HCH	1RB#0	21.71	20.11	33.00	PASS
				1RB#24	21.66	20.06	33.00	PASS
				1RB#49	21.72	20.12	33.00	PASS
				25RB#0	20.45	18.85	33.00	PASS
				25RB#12	20.45	18.85	33.00	PASS
				25RB#25	20.57	18.97	33.00	PASS
				50RB#0	20.48	18.88	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
BAND 41	LTE/TM1	15M	LCH	1RB#0	22.34	20.74	33.00	PASS
				1RB#38	22.2	20.6	33.00	PASS
				1RB#74	22.29	20.69	33.00	PASS
				36RB#0	21.49	19.89	33.00	PASS
				36RB#18	21.39	19.79	33.00	PASS
				36RB#39	21.5	19.9	33.00	PASS
				75RB#0	21.26	19.66	33.00	PASS
			MCH	1RB#0	22.61	21.01	33.00	PASS
				1RB#38	22.44	20.84	33.00	PASS
				1RB#74	22.58	20.98	33.00	PASS
				36RB#0	21.73	20.13	33.00	PASS
				36RB#18	21.58	19.98	33.00	PASS
				36RB#39	21.71	20.11	33.00	PASS
				75RB#0	21.5	19.9	33.00	PASS
			HCH	1RB#0	22.79	21.19	33.00	PASS
				1RB#38	22.59	20.99	33.00	PASS
				1RB#74	22.7	21.1	33.00	PASS
				36RB#0	21.68	20.08	33.00	PASS
				36RB#18	21.47	19.87	33.00	PASS
				36RB#39	21.53	19.93	33.00	PASS
				75RB#0	21.66	20.06	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
BAND 41	LTE/TM2	15M	LCH	1RB#0	21.5	19.9	33.00	PASS
				1RB#38	21.39	19.79	33.00	PASS
				1RB#74	21.5	19.9	33.00	PASS
				36RB#0	21.49	19.89	33.00	PASS
				36RB#18	21.39	19.79	33.00	PASS
				36RB#39	21.5	19.9	33.00	PASS
				75RB#0	20.2	18.6	33.00	PASS
			MCH	1RB#0	21.72	20.12	33.00	PASS
				1RB#38	21.58	19.98	33.00	PASS
				1RB#74	21.73	20.13	33.00	PASS
				36RB#0	21.72	20.12	33.00	PASS
				36RB#18	21.57	19.97	33.00	PASS
				36RB#39	21.72	20.12	33.00	PASS
				75RB#0	20.43	18.83	33.00	PASS
			HCH	1RB#0	21.67	20.07	33.00	PASS
				1RB#38	21.47	19.87	33.00	PASS
				1RB#74	21.5	19.9	33.00	PASS
				36RB#0	21.69	20.09	33.00	PASS
				36RB#18	21.47	19.87	33.00	PASS
				36RB#39	21.52	19.92	33.00	PASS
				75RB#0	20.59	18.99	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
BAND 41	LTE/TM1	20M	LCH	1RB#0	22.47	20.87	33.00	PASS
				1RB#49	22.35	20.75	33.00	PASS
				1RB#99	22.59	20.99	33.00	PASS
				50RB#0	21.32	19.72	33.00	PASS
				50RB#25	21.33	19.73	33.00	PASS
				50RB#50	21.31	19.71	33.00	PASS
				100RB#0	21.32	19.72	33.00	PASS
			MCH	1RB#0	22.66	21.06	33.00	PASS
				1RB#49	22.41	20.81	33.00	PASS
				1RB#99	22.66	21.06	33.00	PASS
				50RB#0	21.46	19.86	33.00	PASS
				50RB#25	21.47	19.87	33.00	PASS
				50RB#50	21.34	19.74	33.00	PASS
				100RB#0	21.43	19.83	33.00	PASS
			HCH	1RB#0	22.91	21.31	33.00	PASS
				1RB#49	22.64	21.04	33.00	PASS
				1RB#99	22.89	21.29	33.00	PASS
				50RB#0	21.56	19.96	33.00	PASS
				50RB#25	21.56	19.96	33.00	PASS
				50RB#50	21.73	20.13	33.00	PASS
				100RB#0	21.66	20.06	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
BAND 41	LTE/TM2	20M	LCH	1RB#0	21.67	20.07	33.00	PASS
				1RB#49	21.56	19.96	33.00	PASS
				1RB#99	21.79	20.19	33.00	PASS
				50RB#0	20.33	18.73	33.00	PASS
				50RB#25	20.33	18.73	33.00	PASS
				50RB#50	20.32	18.72	33.00	PASS
				100RB#0	20.29	18.69	33.00	PASS
			MCH	1RB#0	21.62	20.02	33.00	PASS
				1RB#49	21.37	19.77	33.00	PASS
				1RB#99	21.62	20.02	33.00	PASS
				50RB#0	20.51	18.91	33.00	PASS
				50RB#25	20.52	18.92	33.00	PASS
				50RB#50	20.39	18.79	33.00	PASS
				100RB#0	20.42	18.82	33.00	PASS
			HCH	1RB#0	21.91	20.31	33.00	PASS
				1RB#49	21.65	20.05	33.00	PASS
				1RB#99	21.78	20.18	33.00	PASS
				50RB#0	20.52	18.92	33.00	PASS
				50RB#25	20.52	18.92	33.00	PASS
				50RB#50	20.69	19.09	33.00	PASS
				100RB#0	20.64	19.04	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

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## 2 Peak-to-Average Ratio

### Part I - Test Results

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
BAND 41	TM1/20M	LCH	7.88	13	PASS
		MCH	7.86	13	PASS
		HCH	7.83	13	PASS
	TM2/20M	LCH	9.42	13	PASS
		MCH	9.68	13	PASS
		HCH	9.33	13	PASS

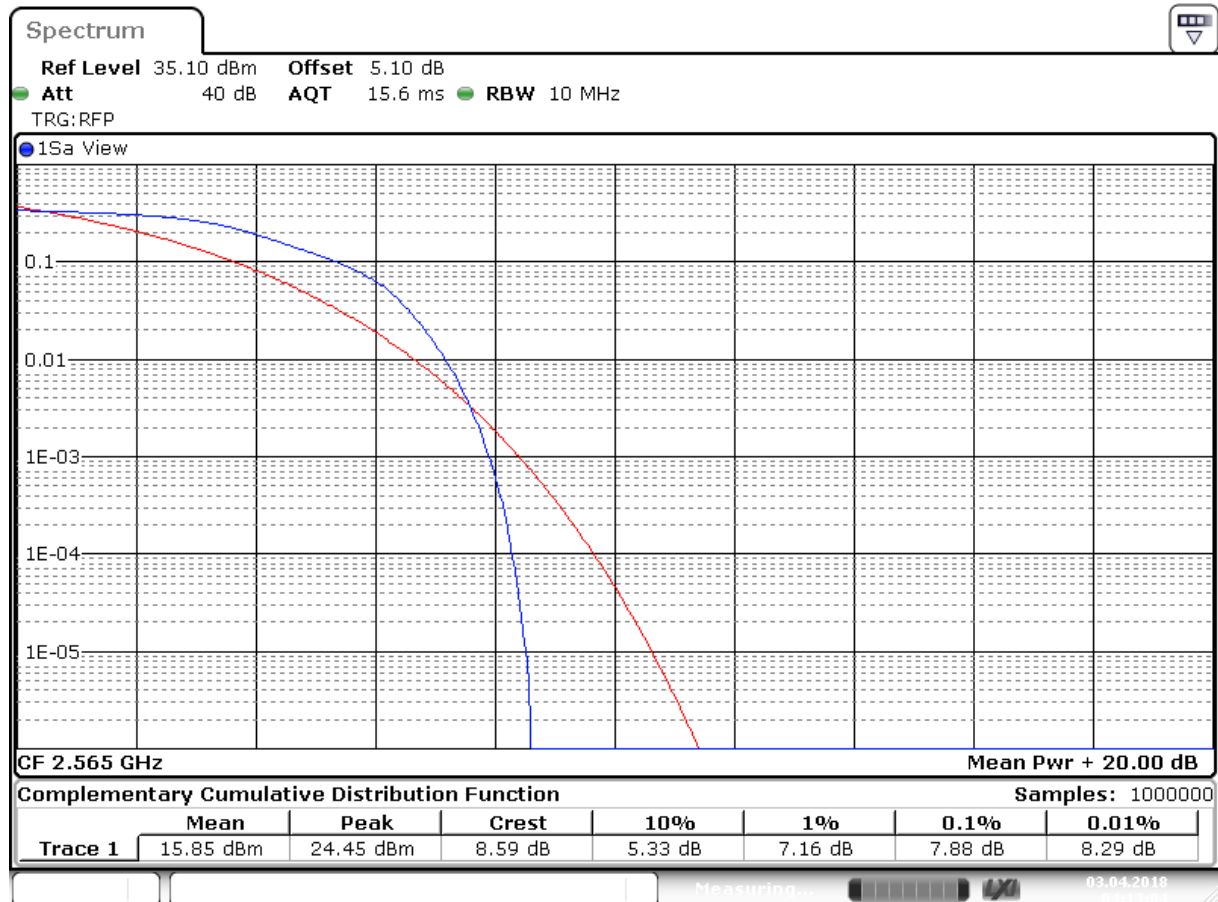
### Part II - Test Plots

#### 2.1 For LTE

##### 2.1.1 Test Band = LTE BAND 41

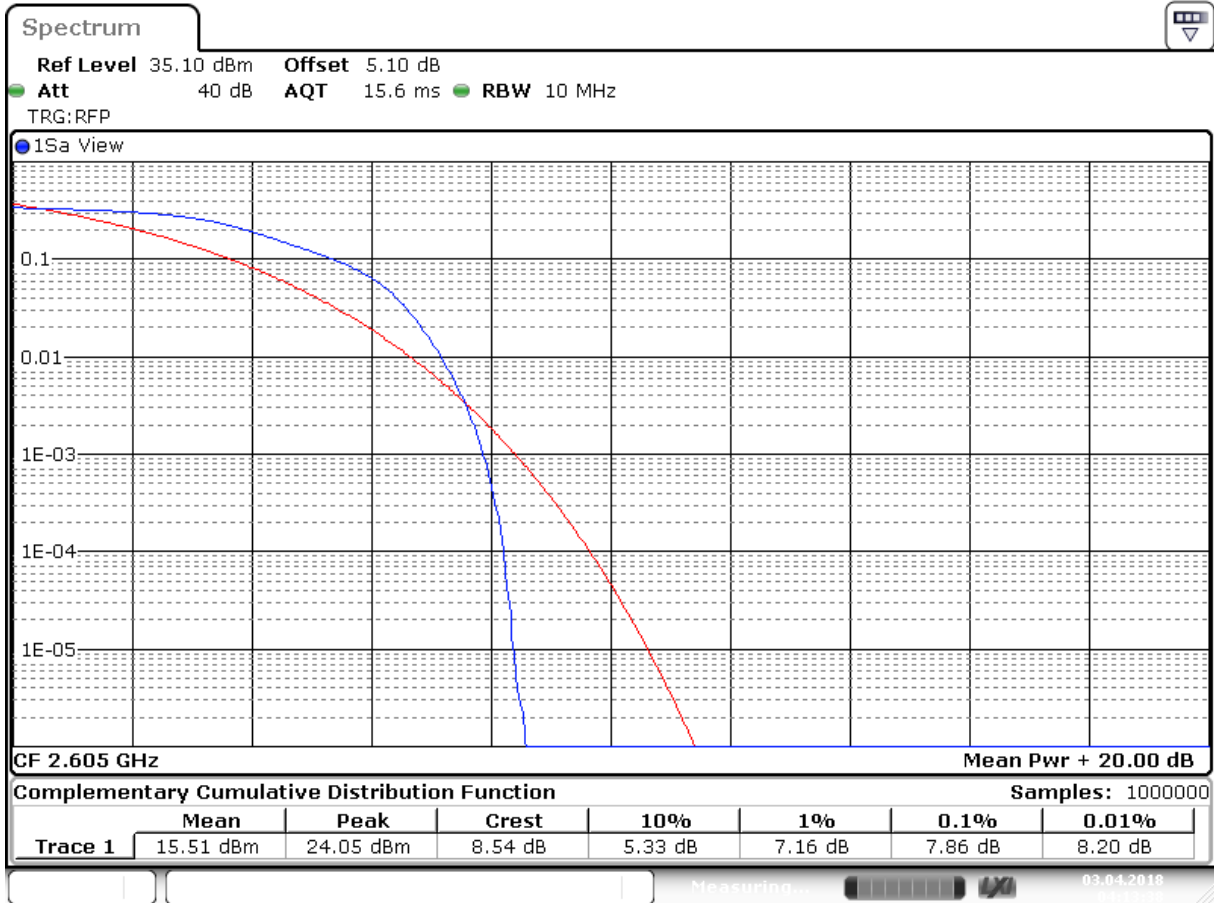
##### 2.1.1.1 Test Mode = LTE/TM1.Bandwidth=20MHz

##### 2.1.1.1.1 Test Channel = LCH



Date: 3.APR.2018 04:13:04

**2.1.1.1.2 Test Channel = MCH**

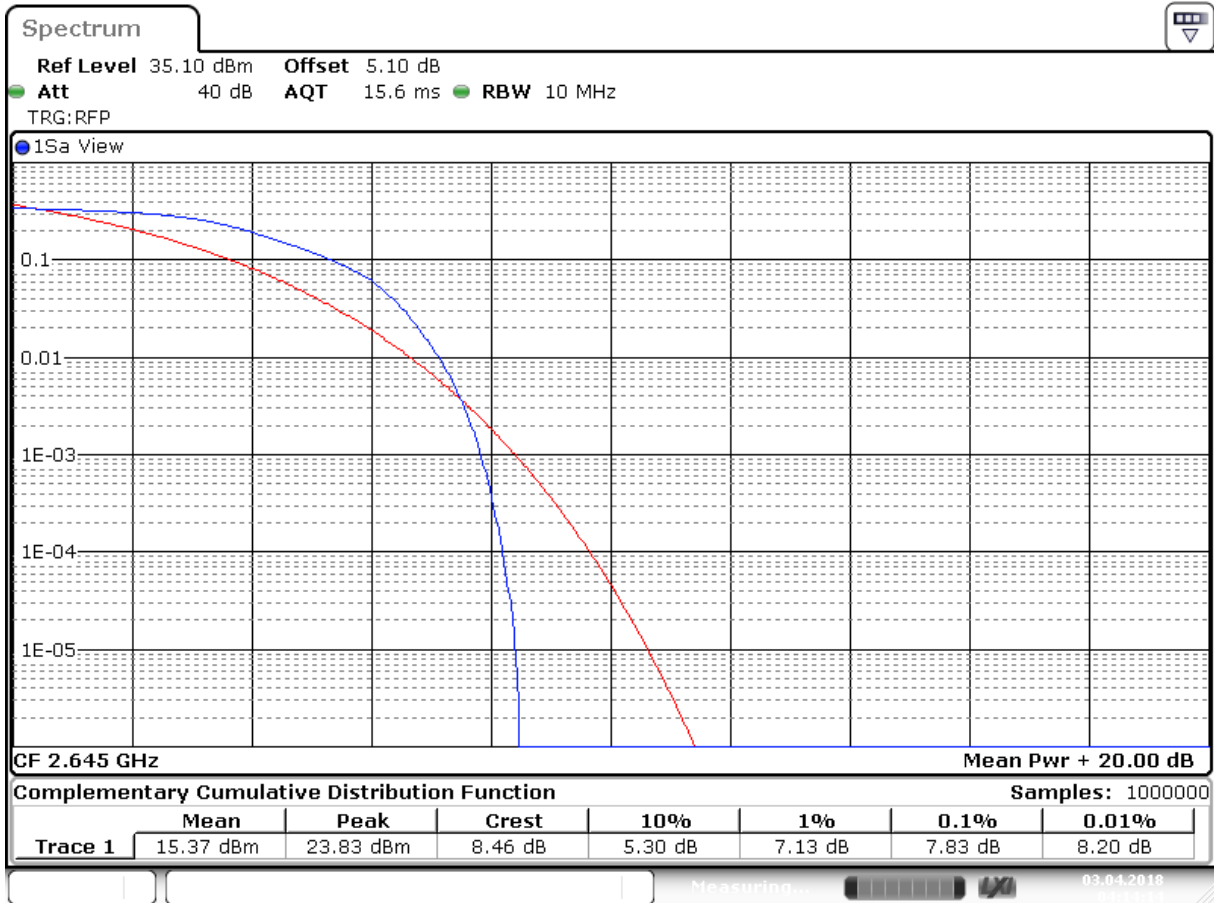


Date: 3 APR 2018 04:13:39

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**2.1.1.1.3 Test Channel = HCH**



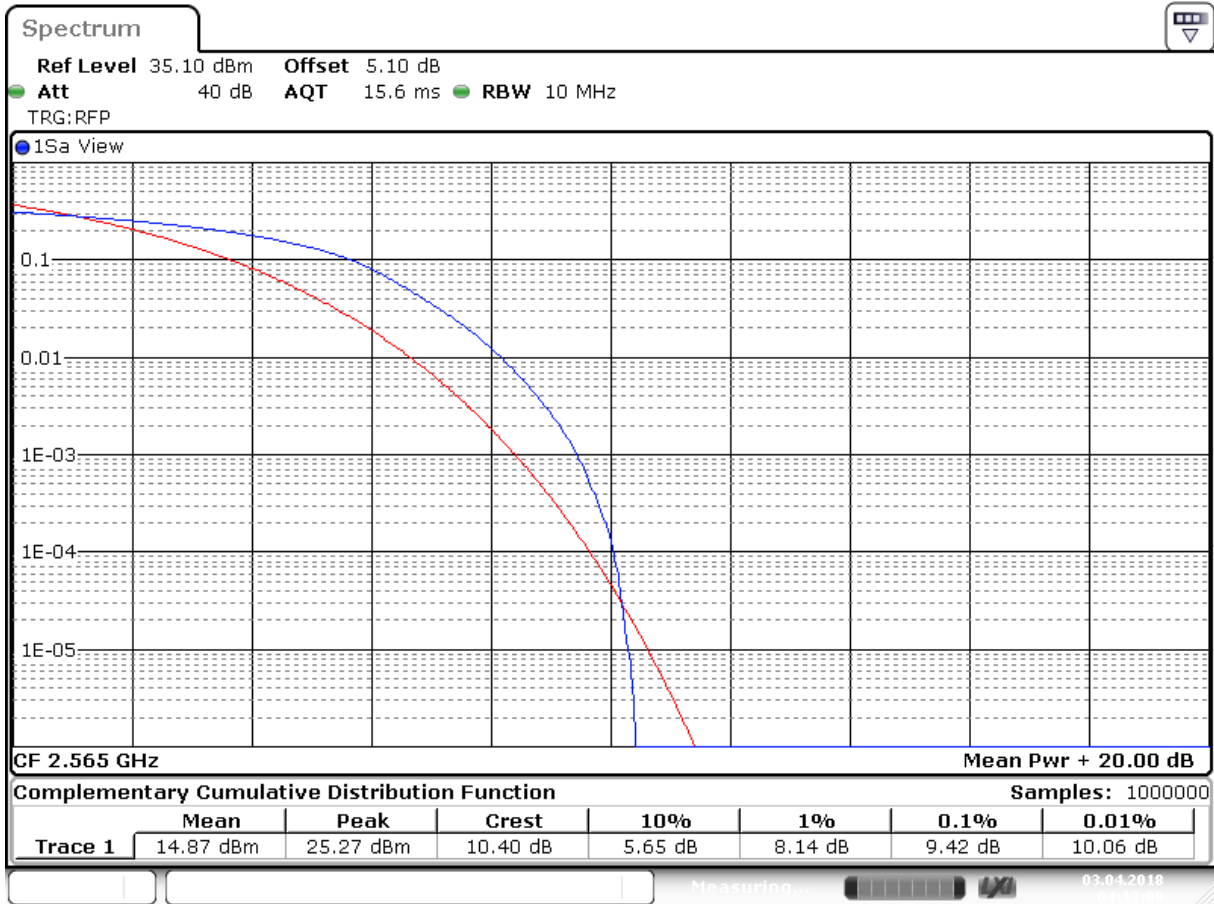
Date: 3 APR 2018 04:14:14

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

**2.1.1.2.1 Test Channel = LCH**

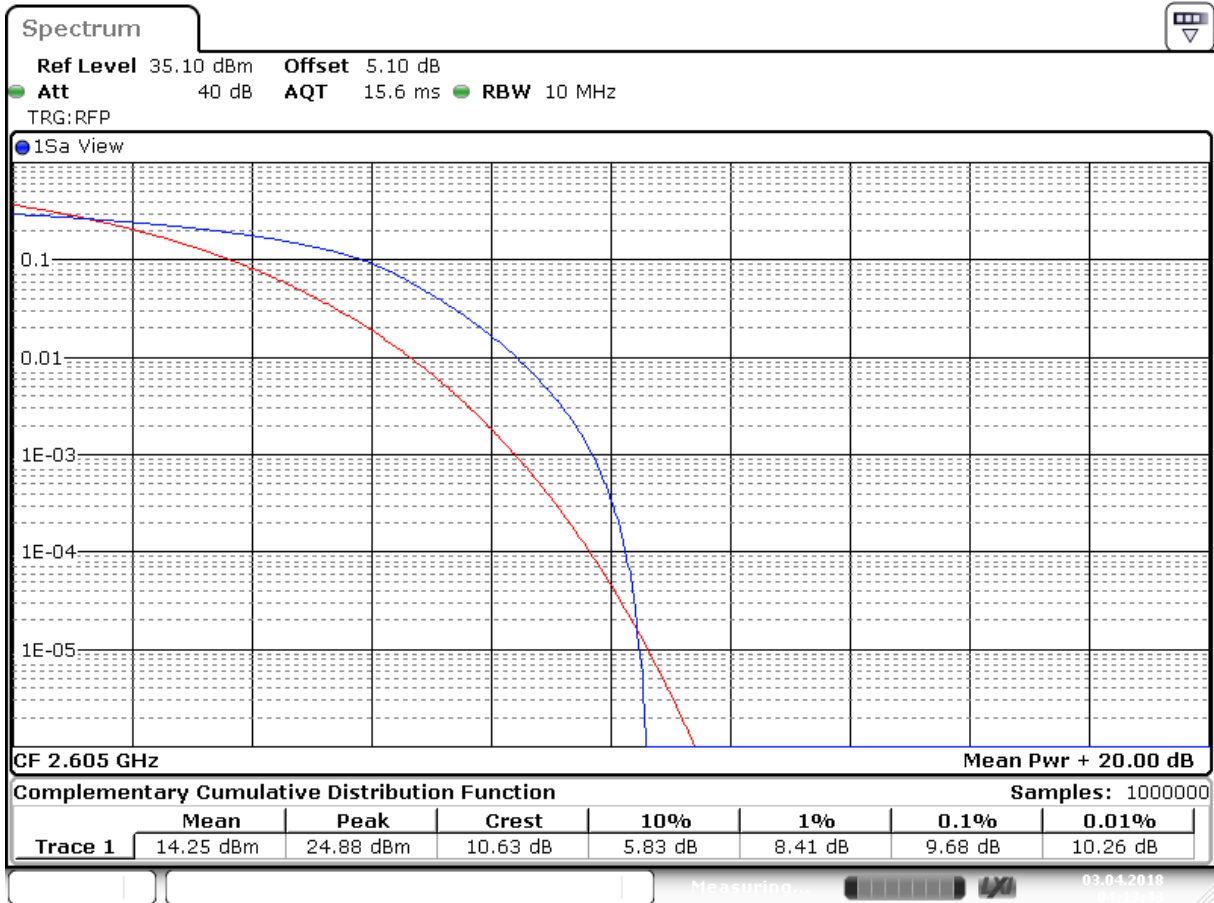


Date: 3 APR 2018 04:13:09

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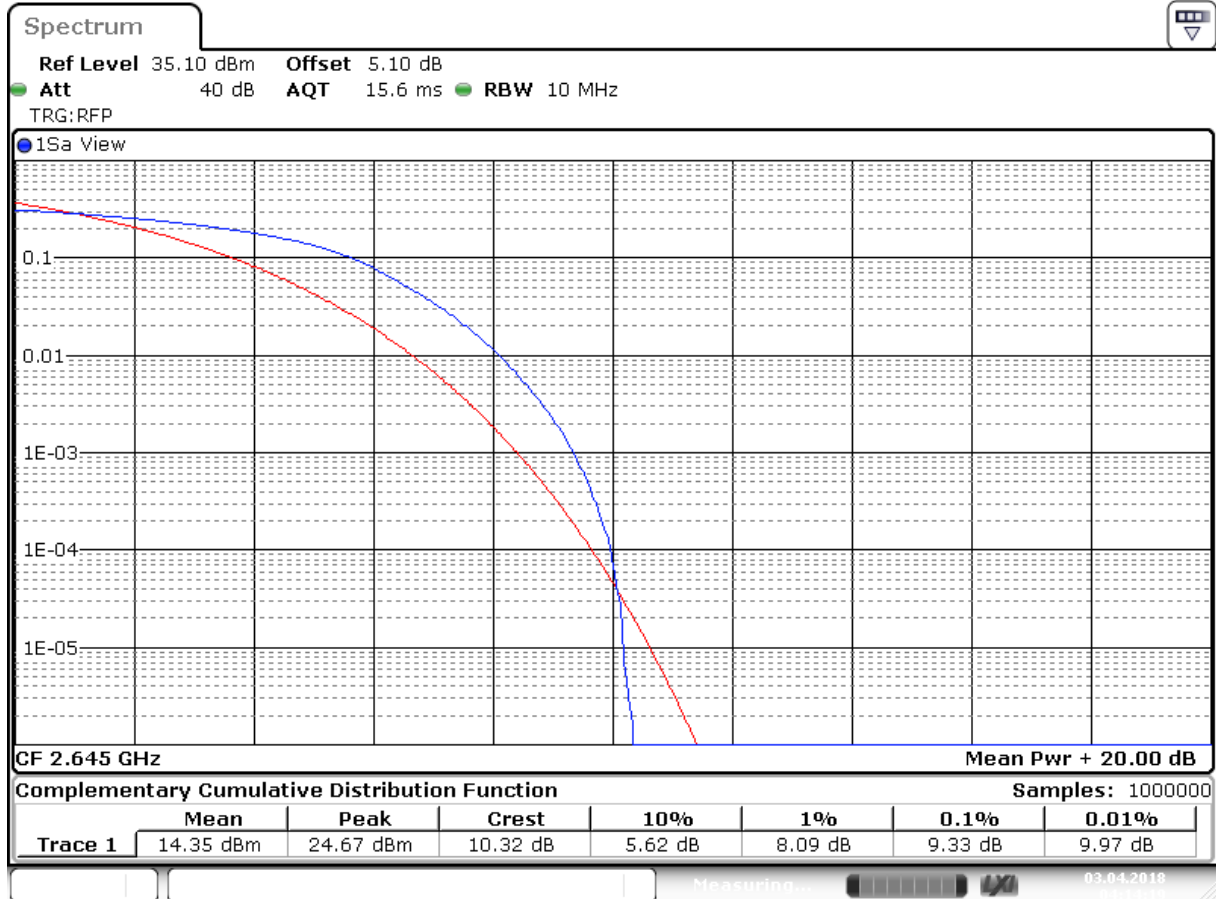
**2.1.1.2.2 Test Channel = MCH**



Date: 3 APR 2018 04:13:44

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**2.1.1.2.3 Test Channel = HCH**



Date: 3.APR.2018 04:14:19

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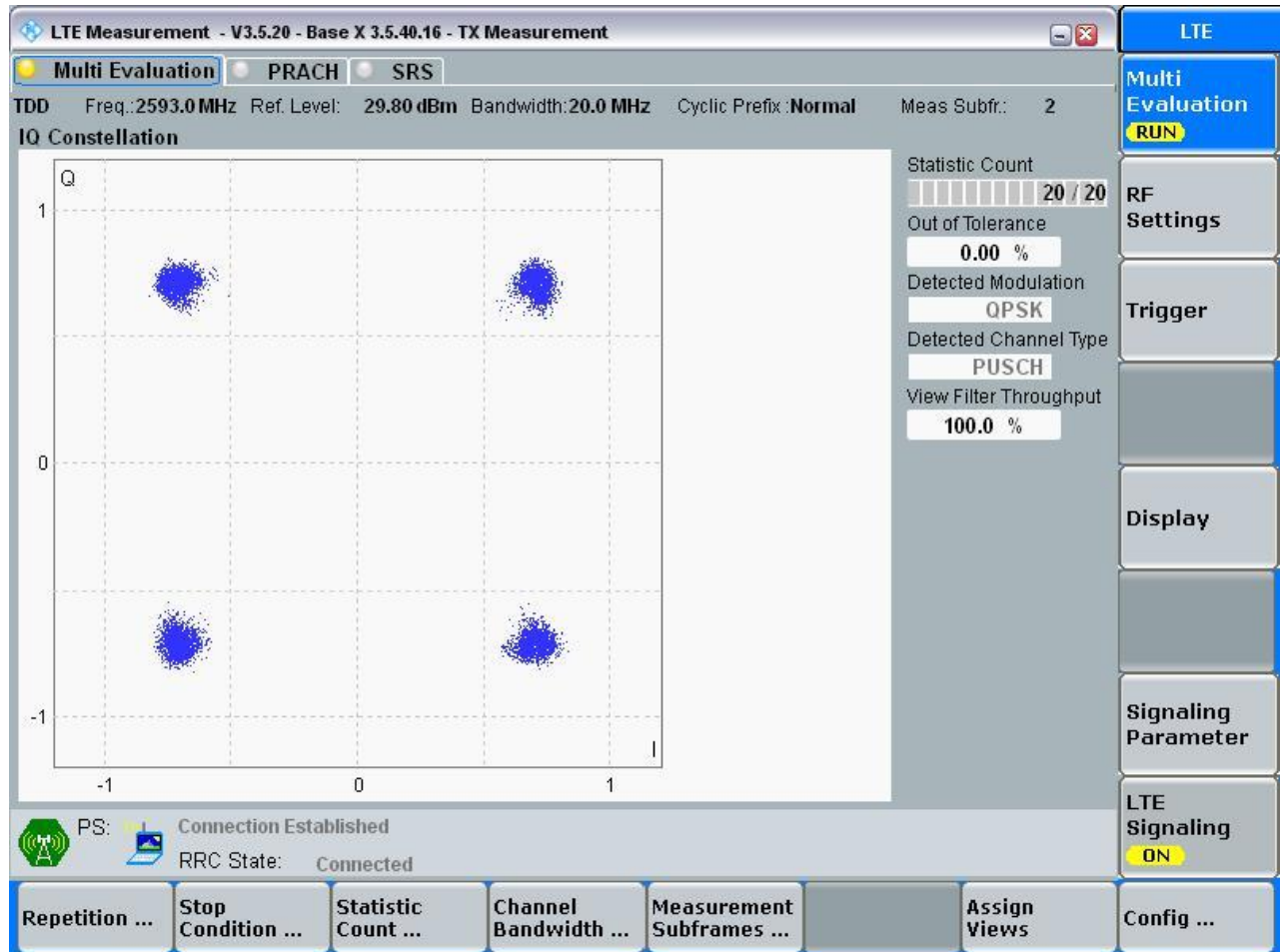
### 3 Modulation Characteristics

#### 3.1 For LTE

##### 3.1.1 Test Band = LTE BAND 41

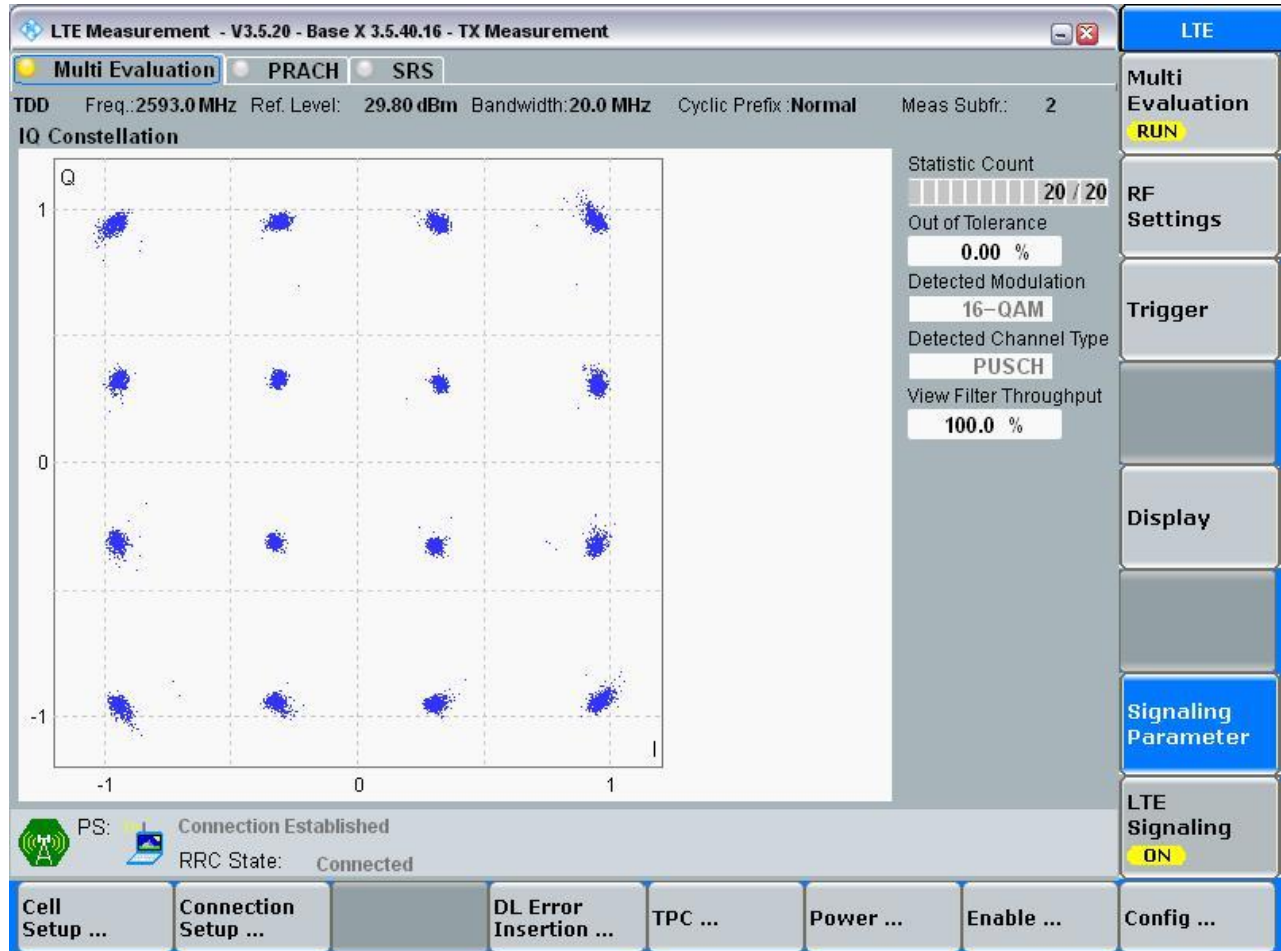
##### 3.1.1.1 Test Mode = LTE /TM1 20MHz

##### 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 41	TM1/5MHz	LCH	4.466	4.750	PASS
		MCH	4.476	4.650	PASS
		HCH	4.476	4.670	PASS
	TM2/ 5MHz	LCH	4.466	4.720	PASS
		MCH	4.466	4.760	PASS
		HCH	4.476	4.720	PASS
	TM1/10MHz	LCH	8.951	9.280	PASS
		MCH	8.951	9.320	PASS
		HCH	8.951	9.280	PASS
	TM2/ 10MHz	LCH	8.931	9.300	PASS
		MCH	8.931	9.300	PASS
		HCH	8.951	9.300	PASS
	TM1/ 15MHz	LCH	13.516	14.280	PASS
		MCH	13.457	14.280	PASS
		HCH	13.457	14.280	PASS
	TM2/ 15MHz	LCH	13.457	14.280	PASS
		MCH	13.487	14.280	PASS
		HCH	13.457	14.280	PASS
	TM1/ 20MHz	LCH	17.942	18.800	PASS
		MCH	17.902	18.800	PASS
		HCH	17.862	18.800	PASS
TM2/ 20MHz	LCH	17.942	18.800	PASS	
	MCH	17.942	18.800	PASS	
	HCH	17.902	18.800	PASS	

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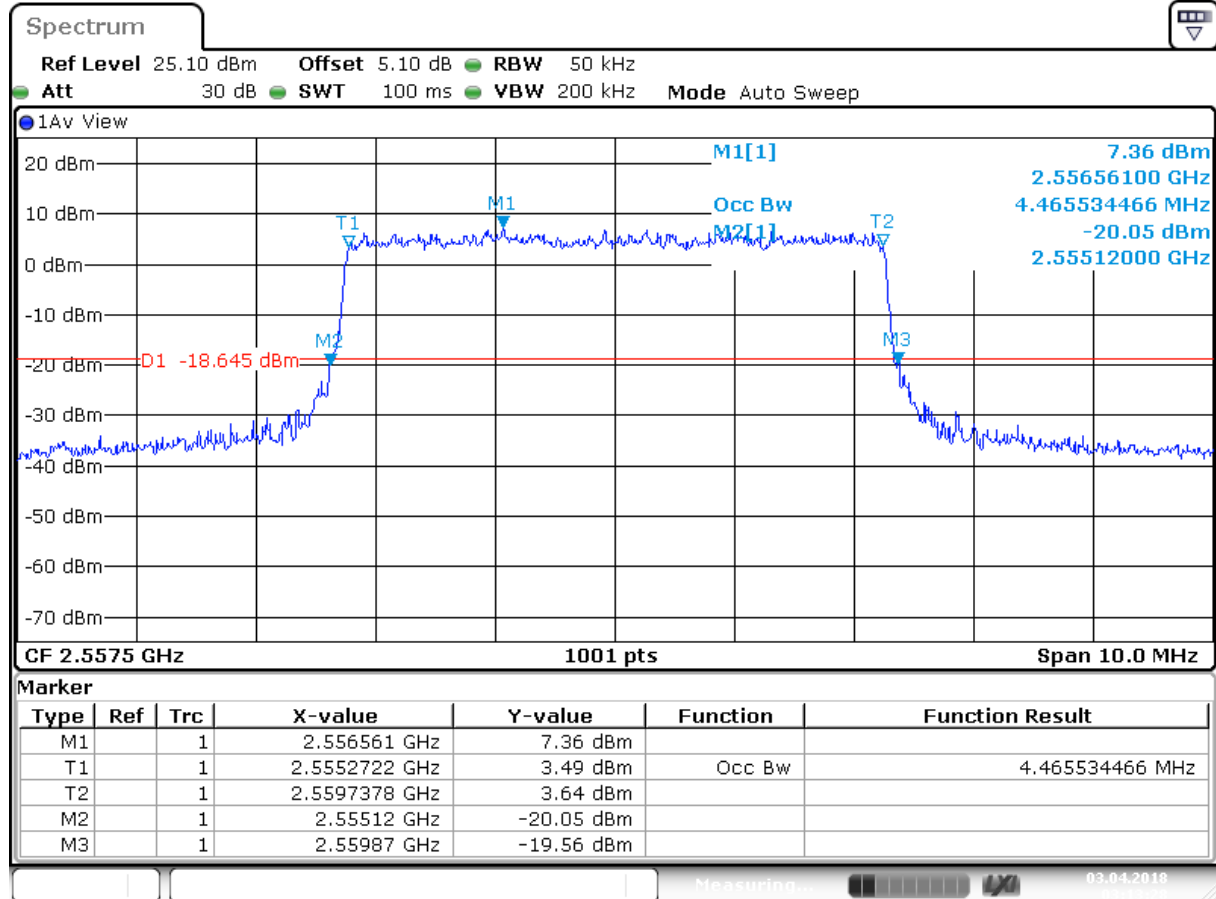


## 4.1 For LTE

### 4.1.1 Test Band = LTE BAND 41

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

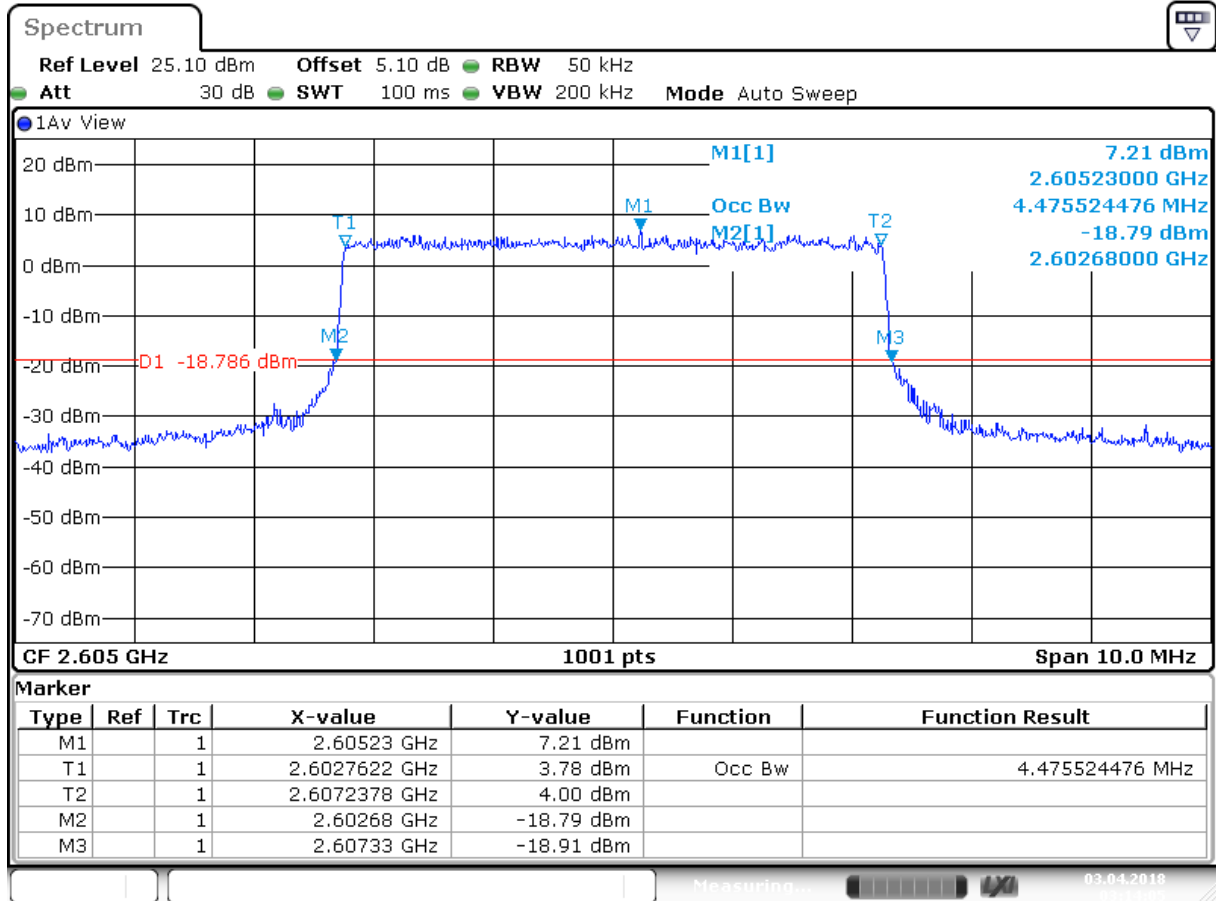
##### 4.1.1.1.1 Test Channel = LCH



Date: 3 APR 2018 03:13:29

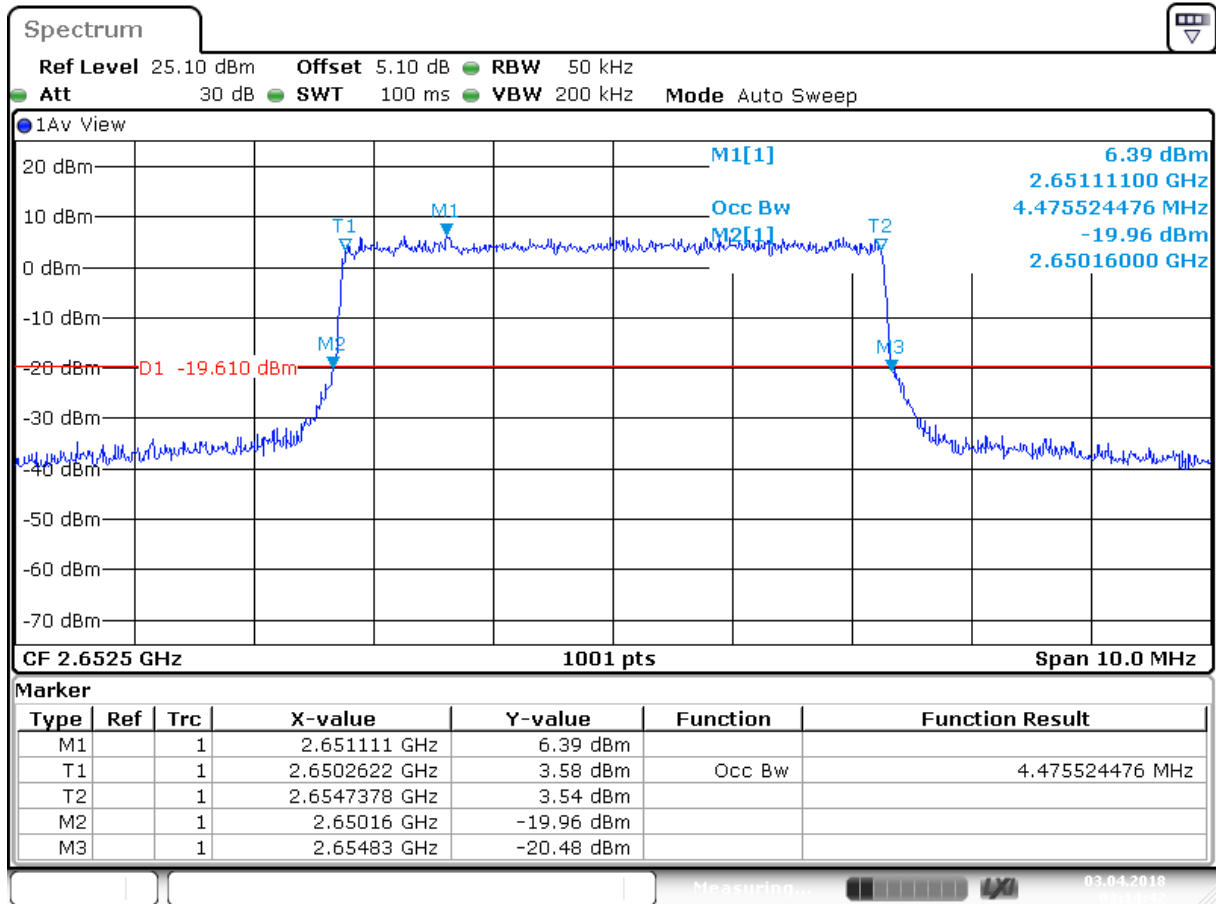


**4.1.1.1.2 Test Channel = MCH**



Date: 3 APR 2018 03:14:05

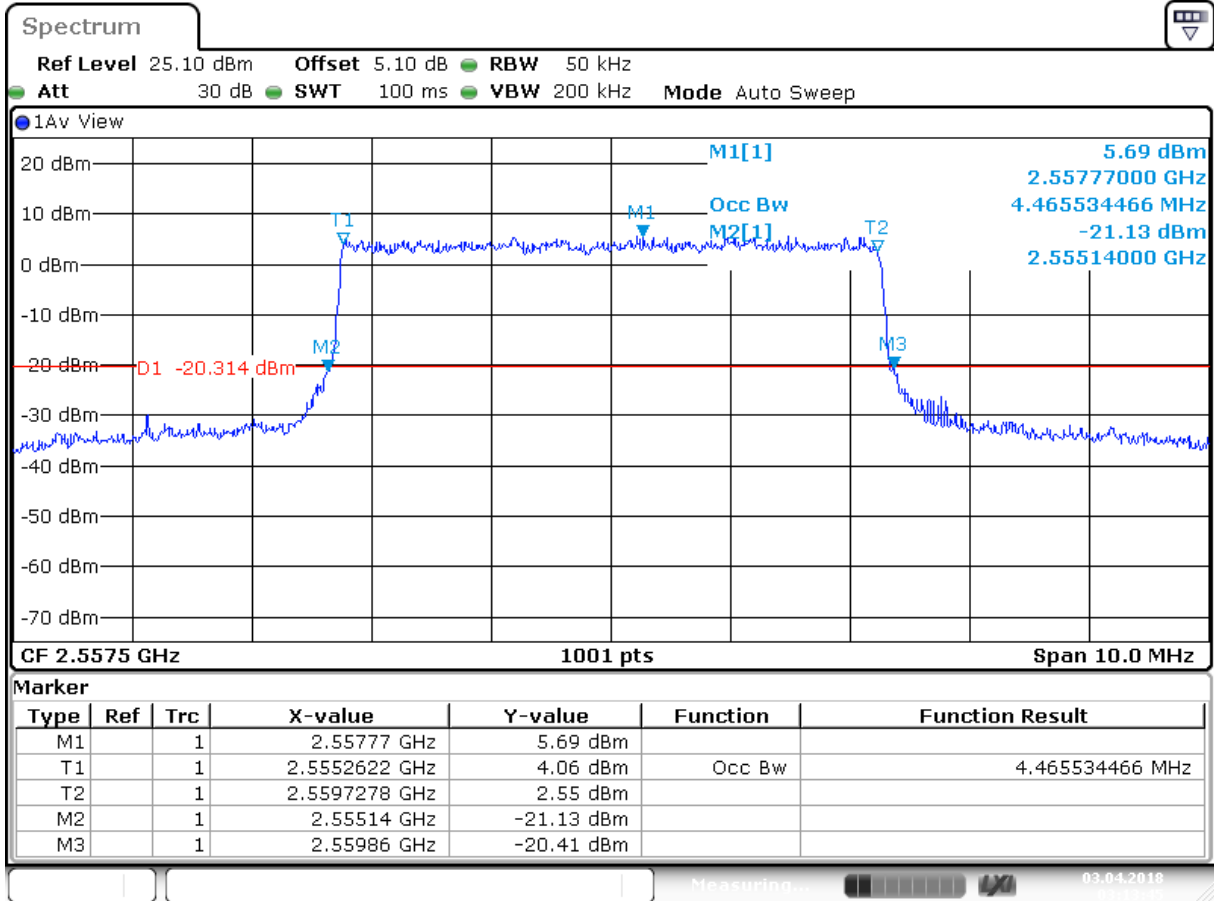
**4.1.1.1.3 Test Channel = HCH**



Date: 3 APR 2018 03:14:42

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

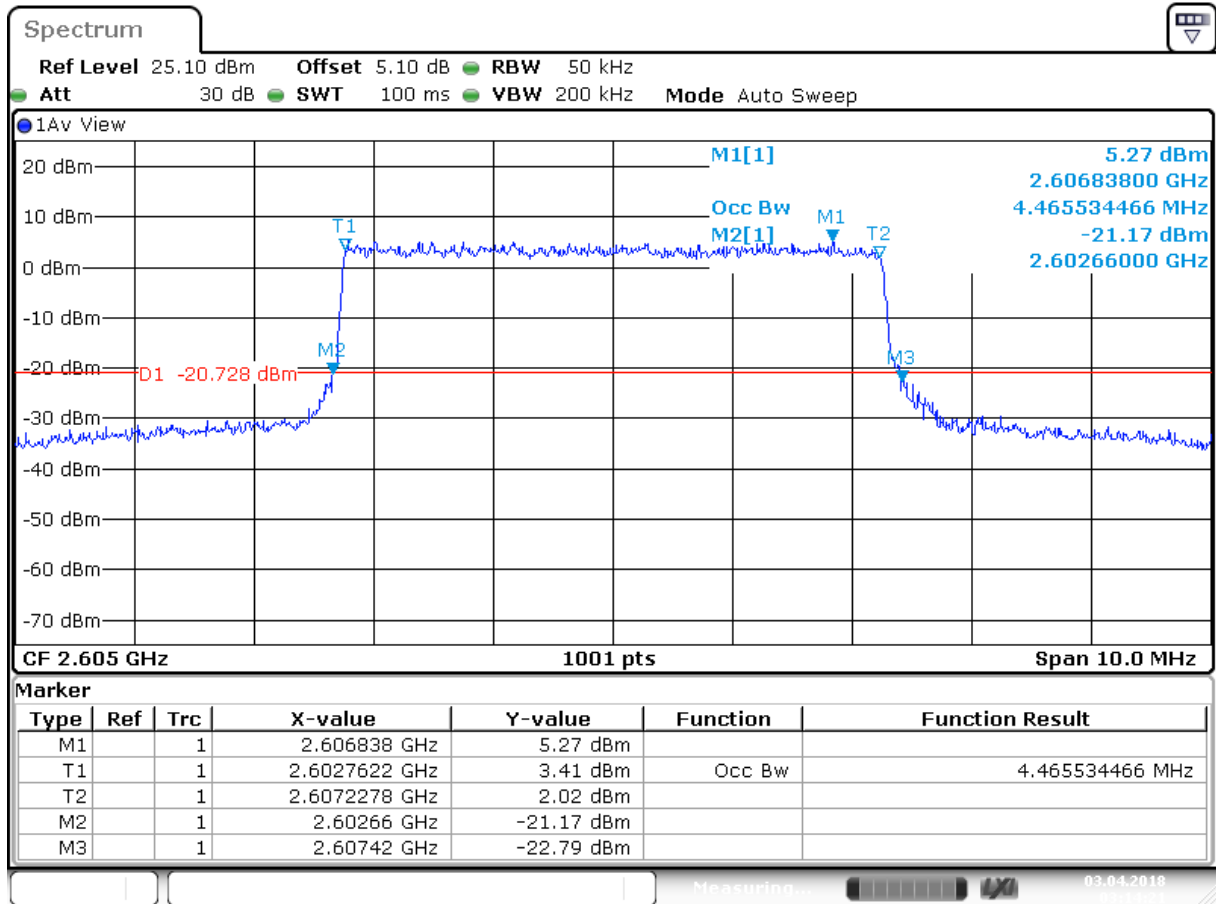
**4.1.1.2.1 Test Channel = LCH**



Date: 3 APR 2018 03:13:45

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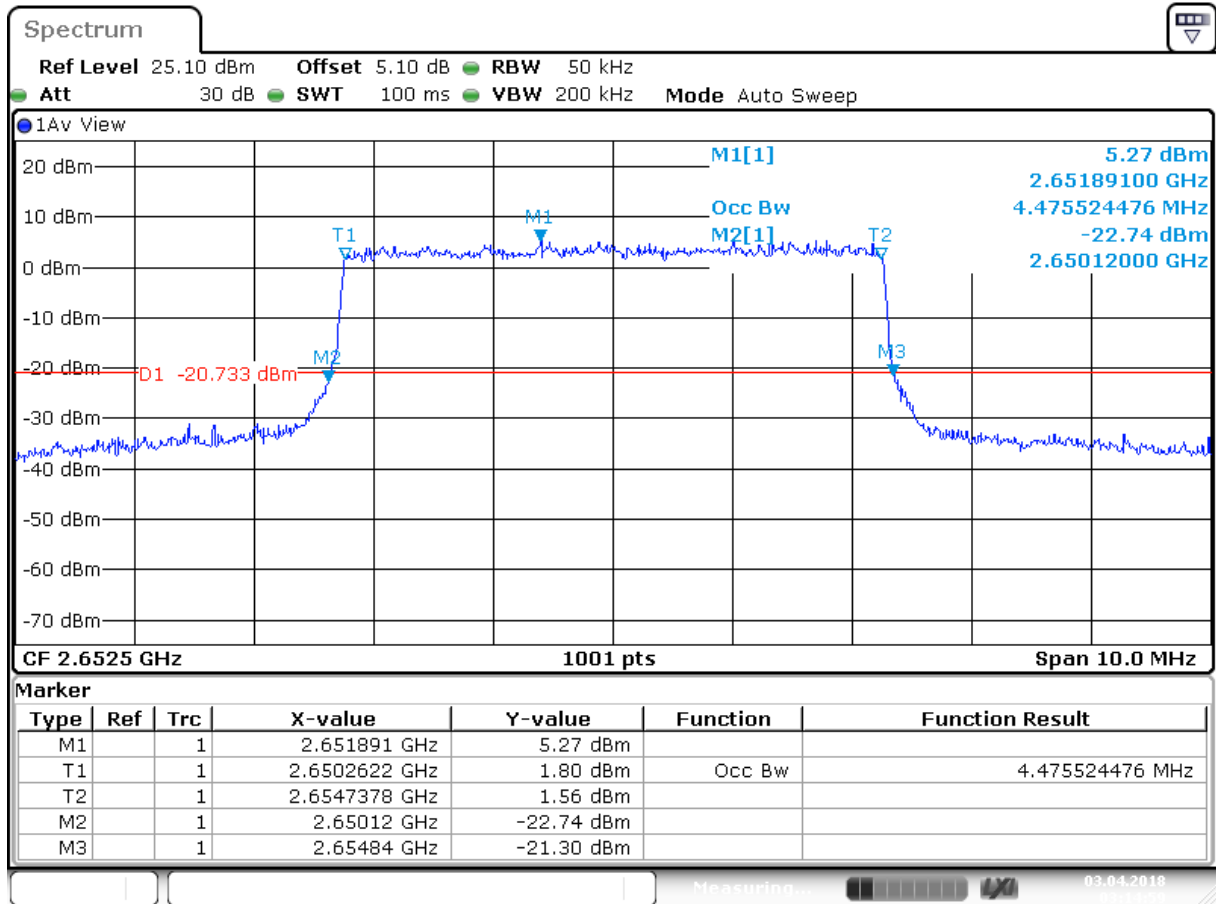
**4.1.1.2.2 Test Channel = MCH**



Date: 3 APR 2018 03:14:21



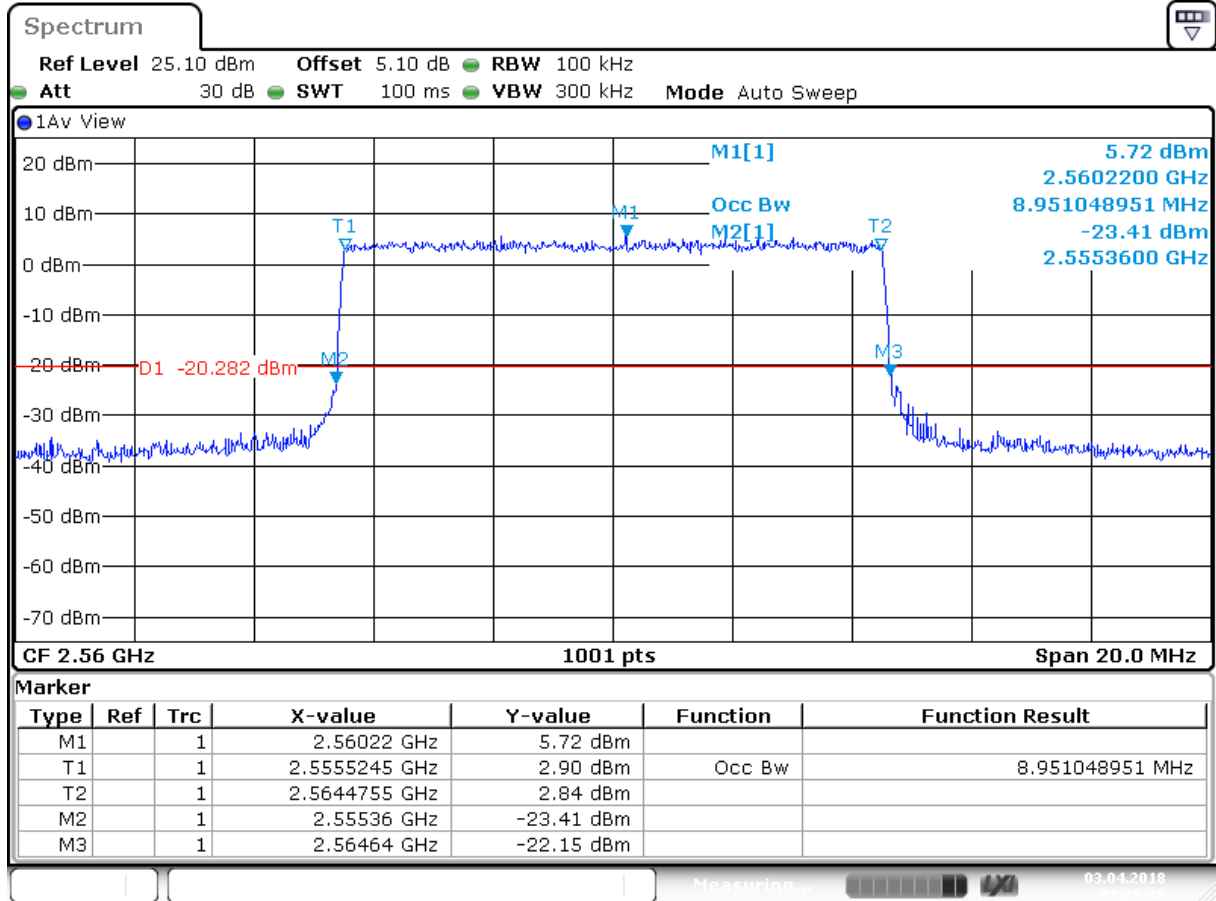
**4.1.1.2.3 Test Channel = HCH**



Date: 3 APR 2018 03:14:59

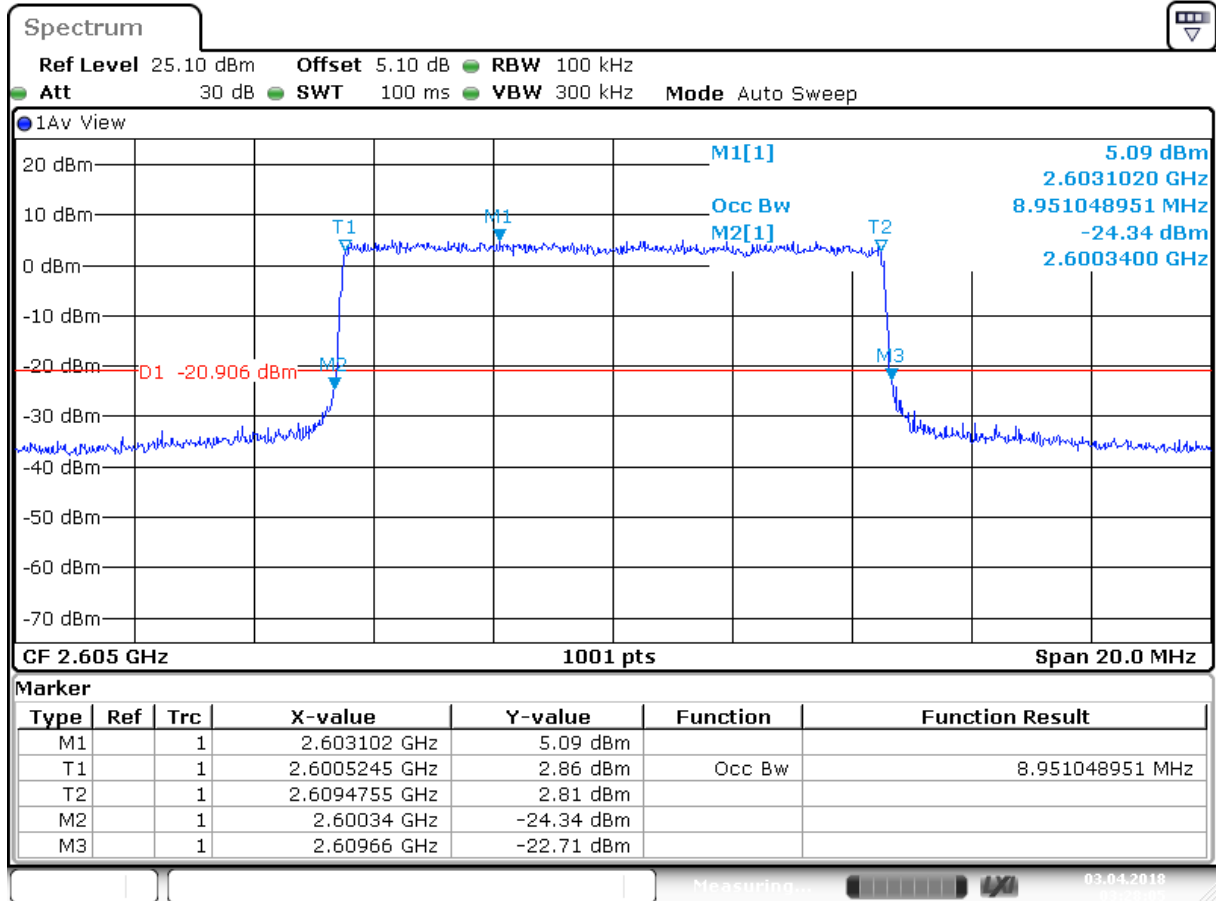
**4.1.1.3 Test Mode = LTE/TM1 10MHz**

**4.1.1.3.1 Test Channel = LCH**



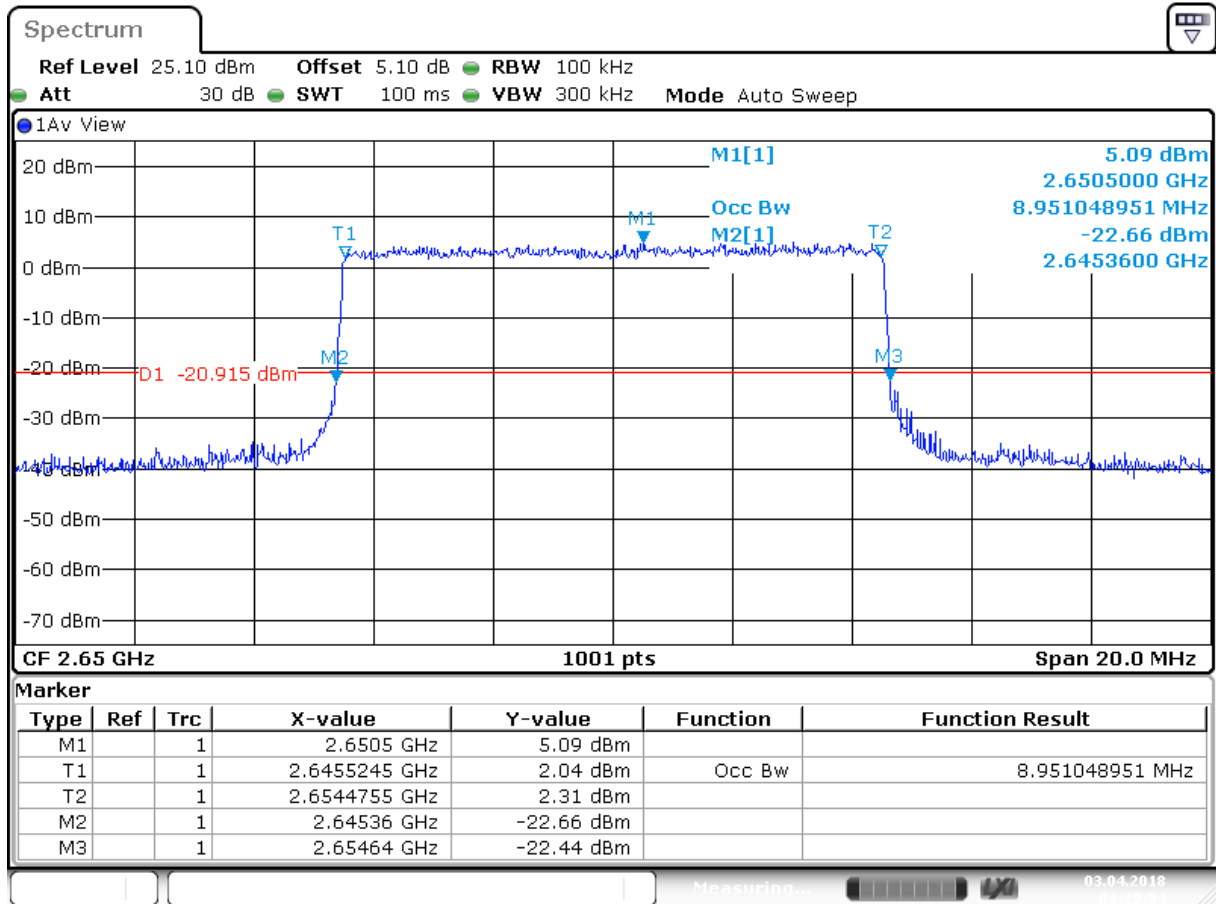
Date: 3 APR 2018 03:26:37

**4.1.1.3.2 Test Channel = MCH**



Date: 3 APR. 2018 03:28:06

**4.1.1.3.3 Test Channel = HCH**

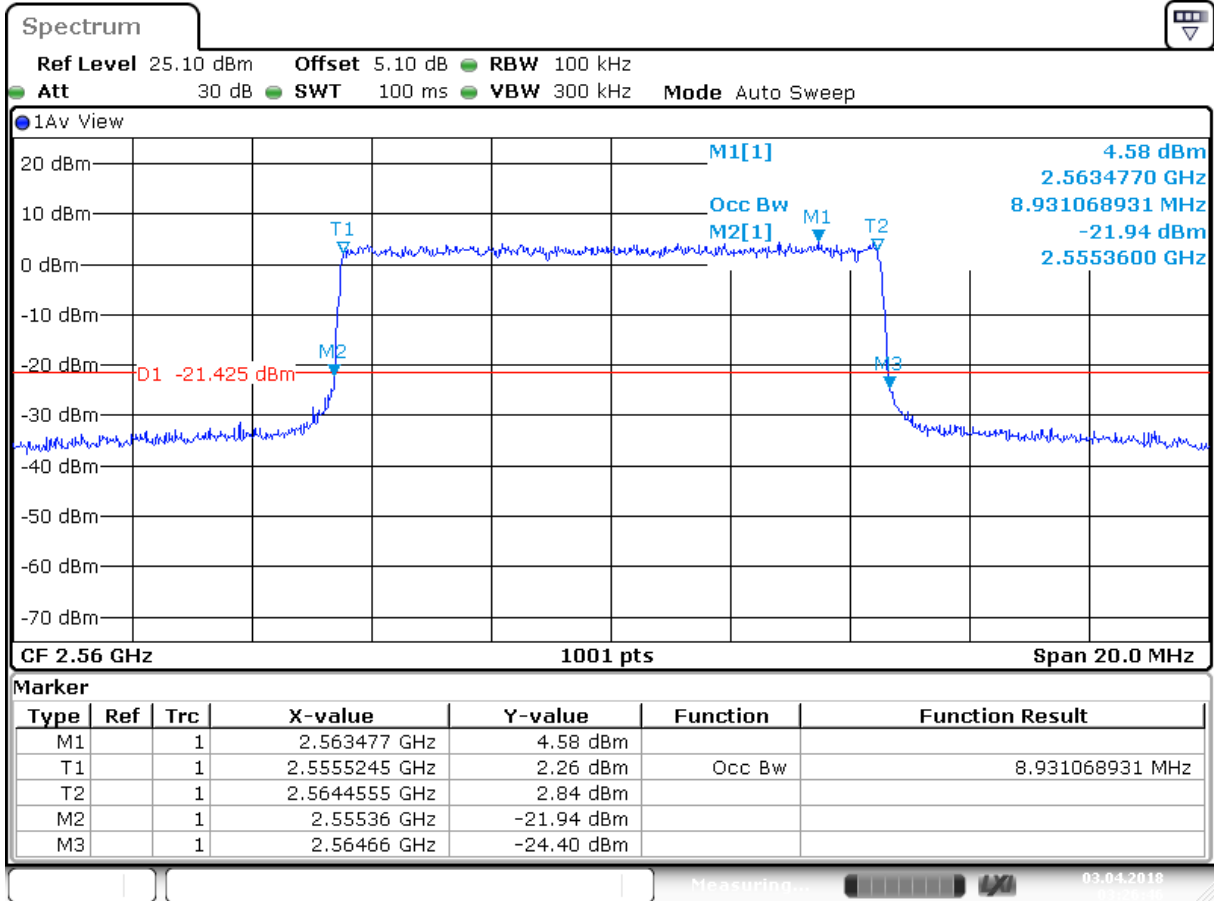


Date: 3 APR 2018 03:29:04



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

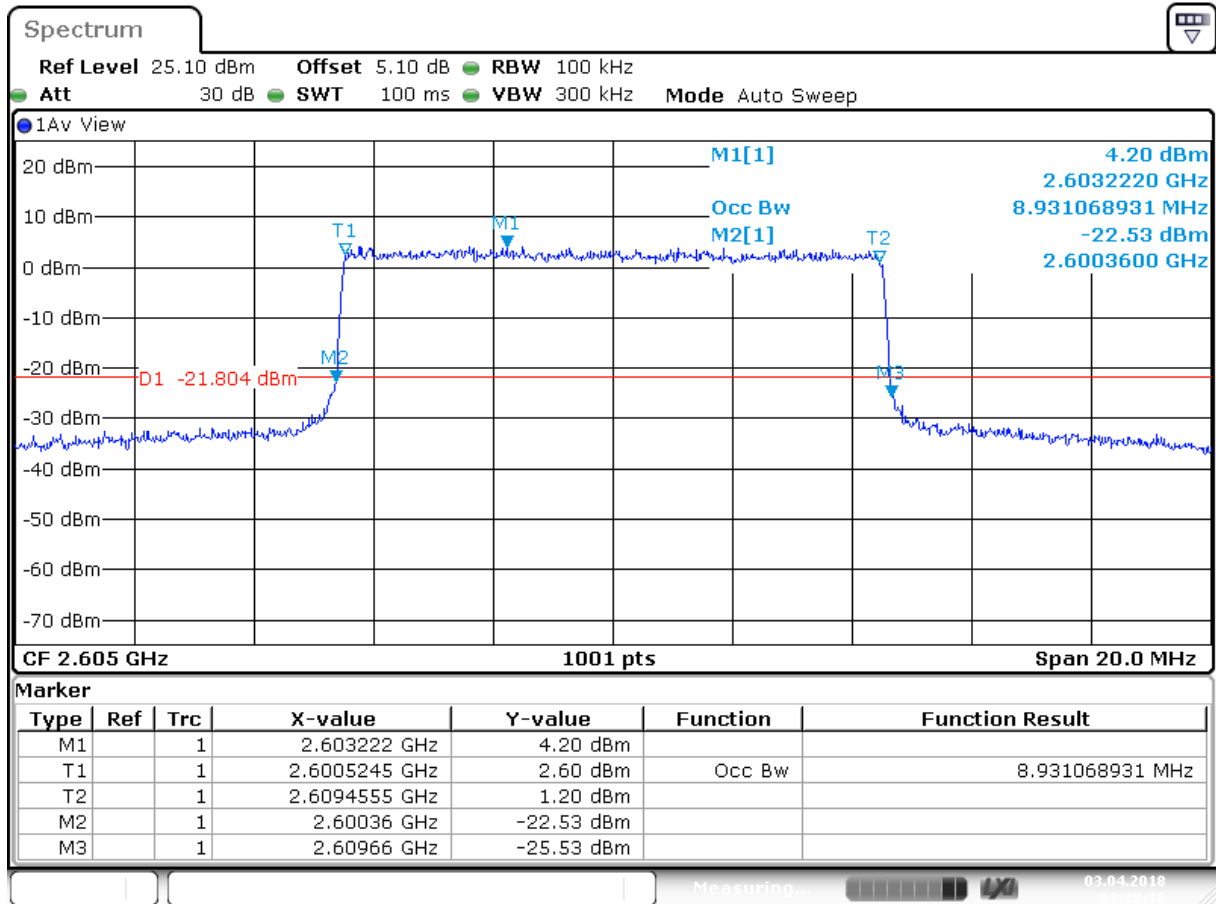
**4.1.1.4.1 Test Channel = LCH**



Date: 3 APR 2018 03:26:47

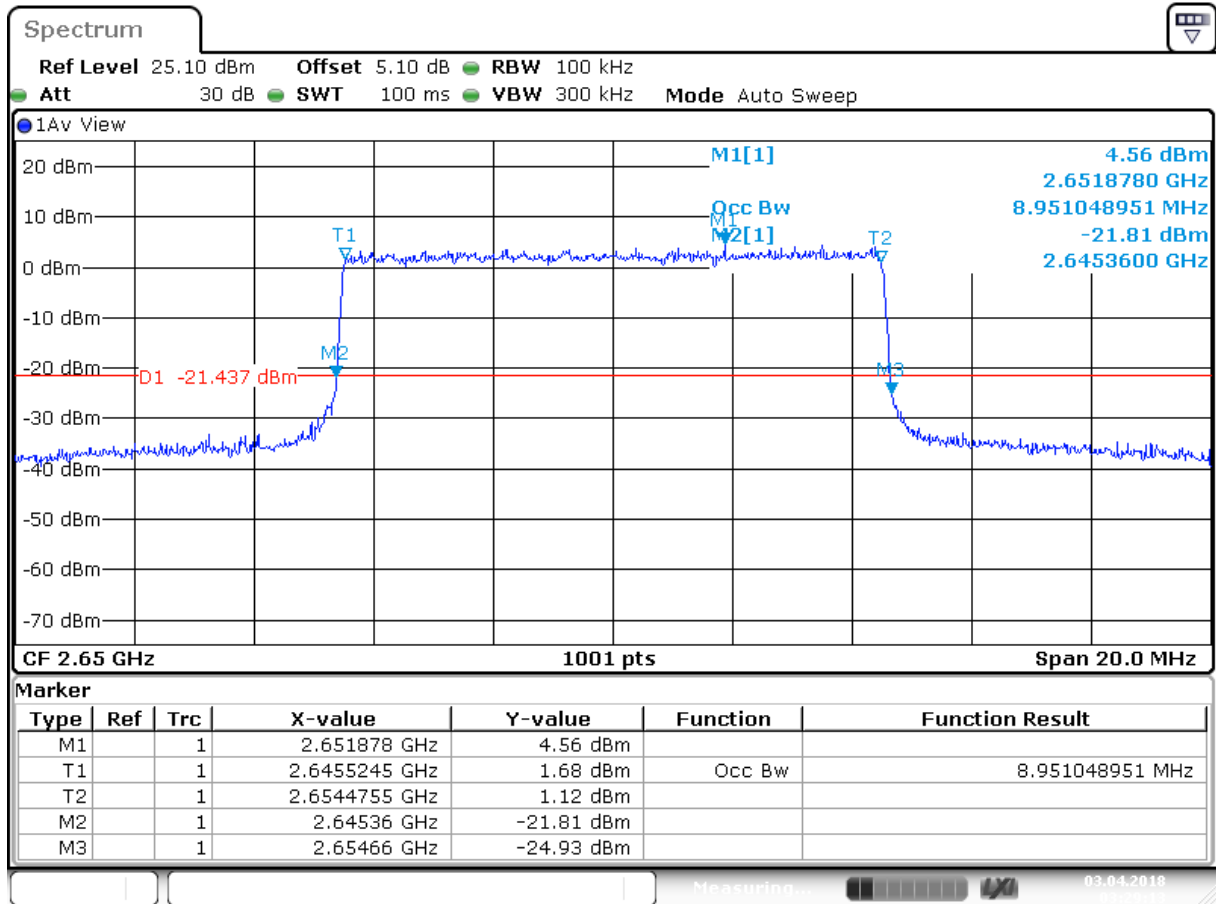
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**4.1.1.4.2 Test Channel = MCH**



Date: 3 APR 2018 03:28:16

**4.1.1.4.3 Test Channel = HCH**

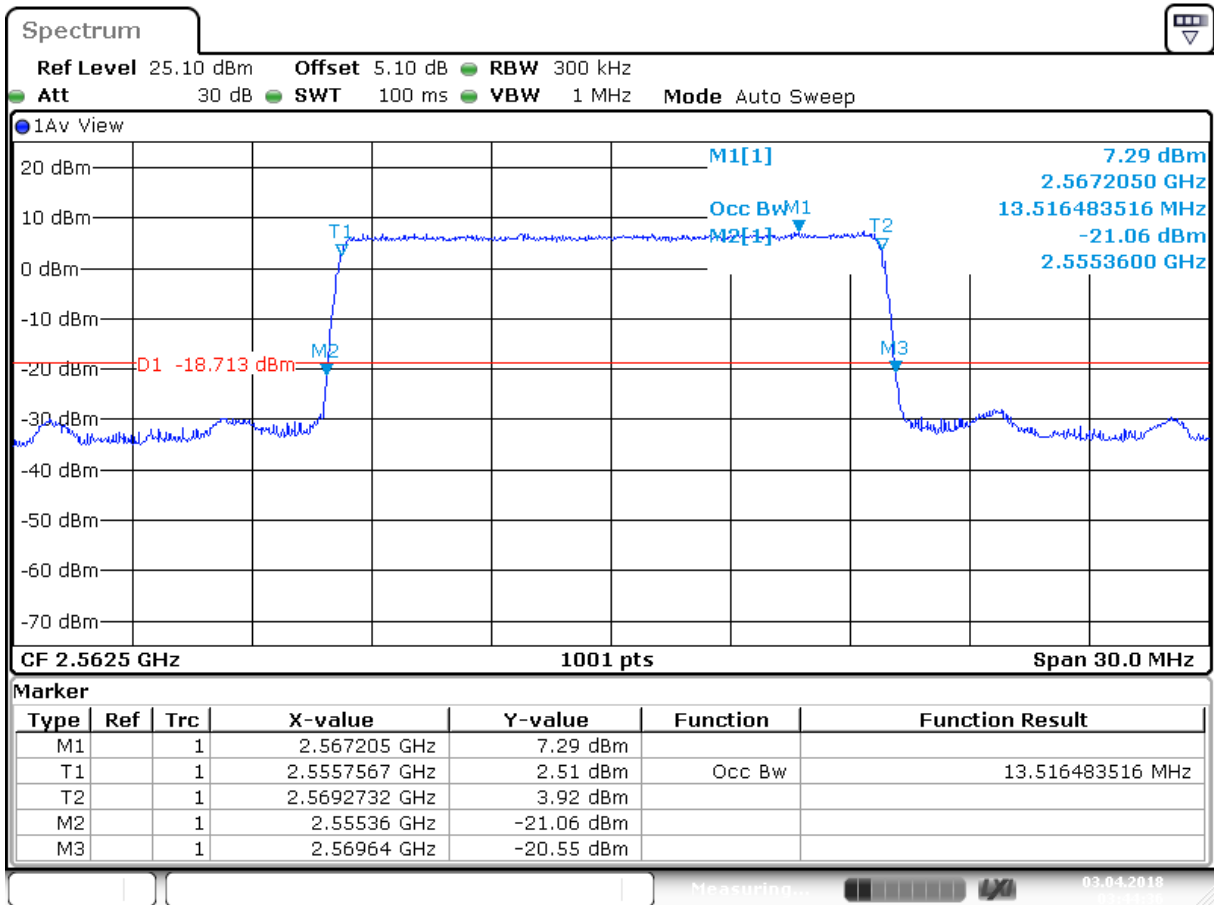


Date: 3 APR 2018 03:29:14



4.1.1.5 Test Mode = LTE/TM1 15MHz

4.1.1.5.1 Test Channel = LCH

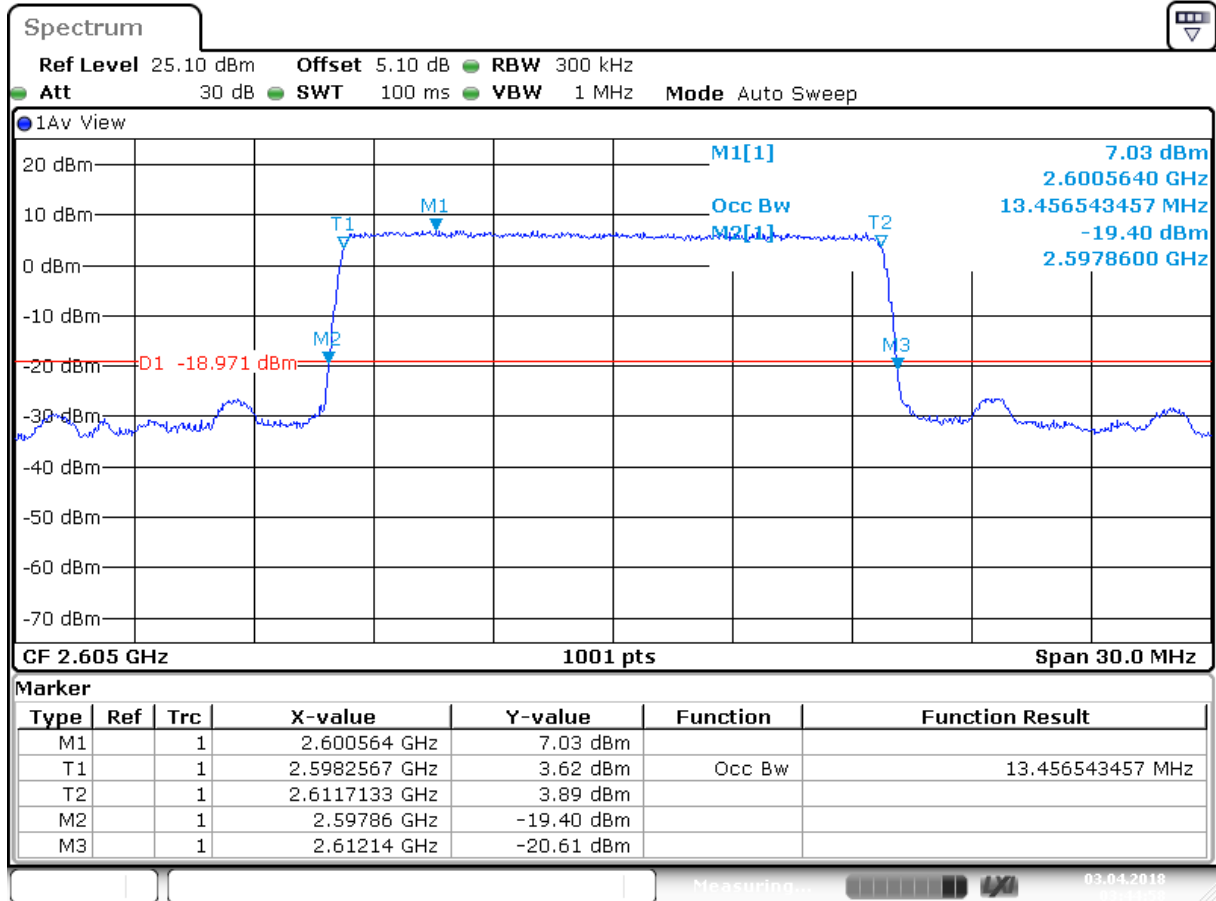


Date: 3 APR 2018 03:44:37

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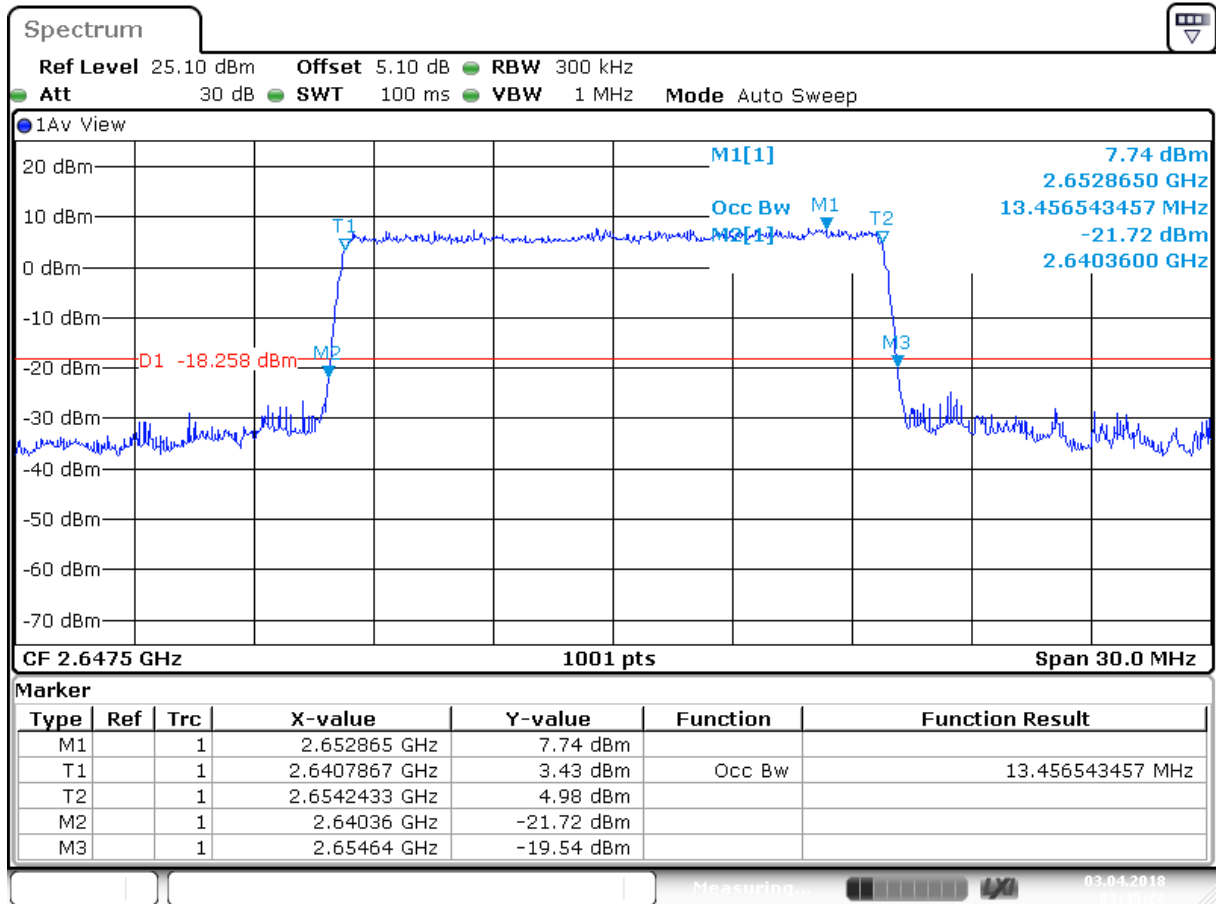


**4.1.1.5.2 Test Channel = MCH**



Date: 3 APR 2018 03:44:59

**4.1.1.5.3 Test Channel = HCH**

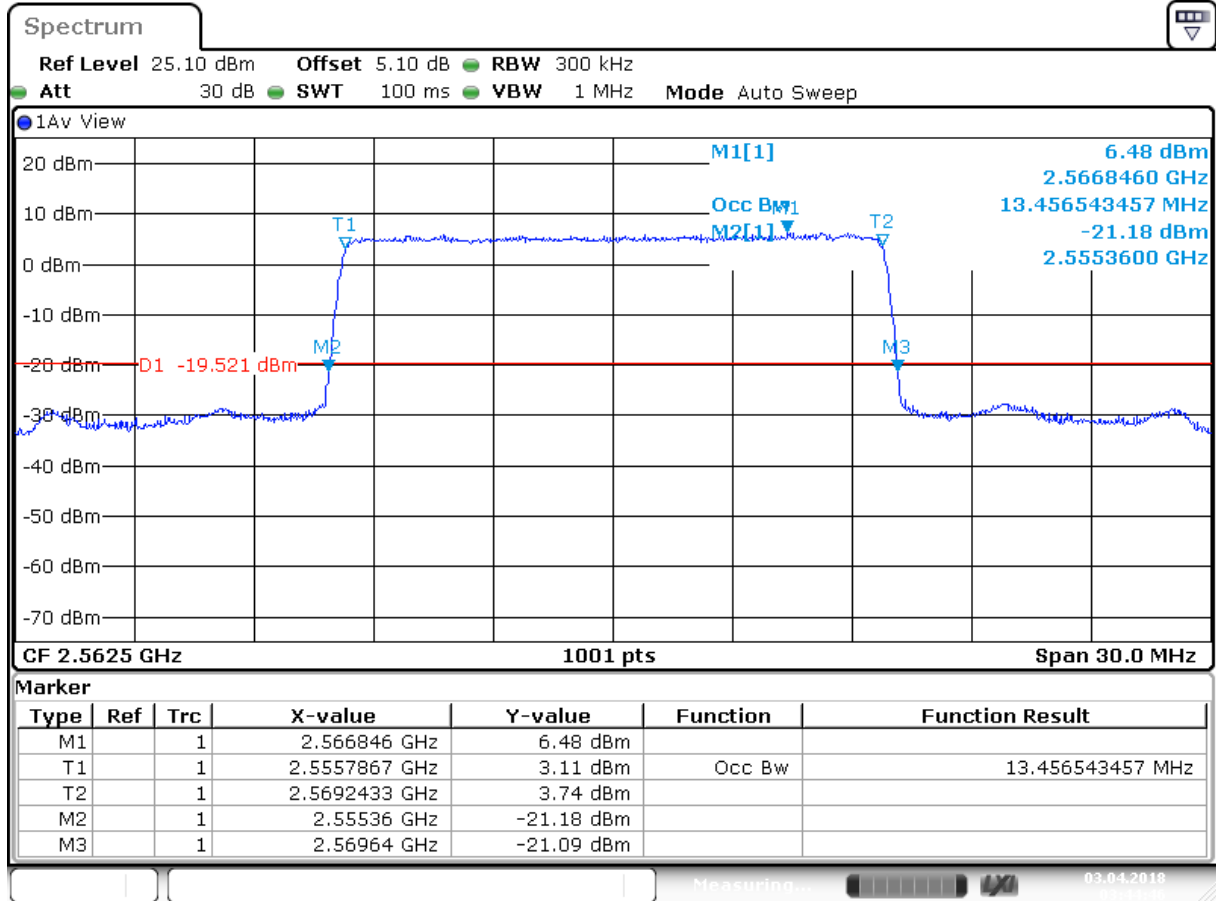


Date: 3 APR 2018 03:45:22



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

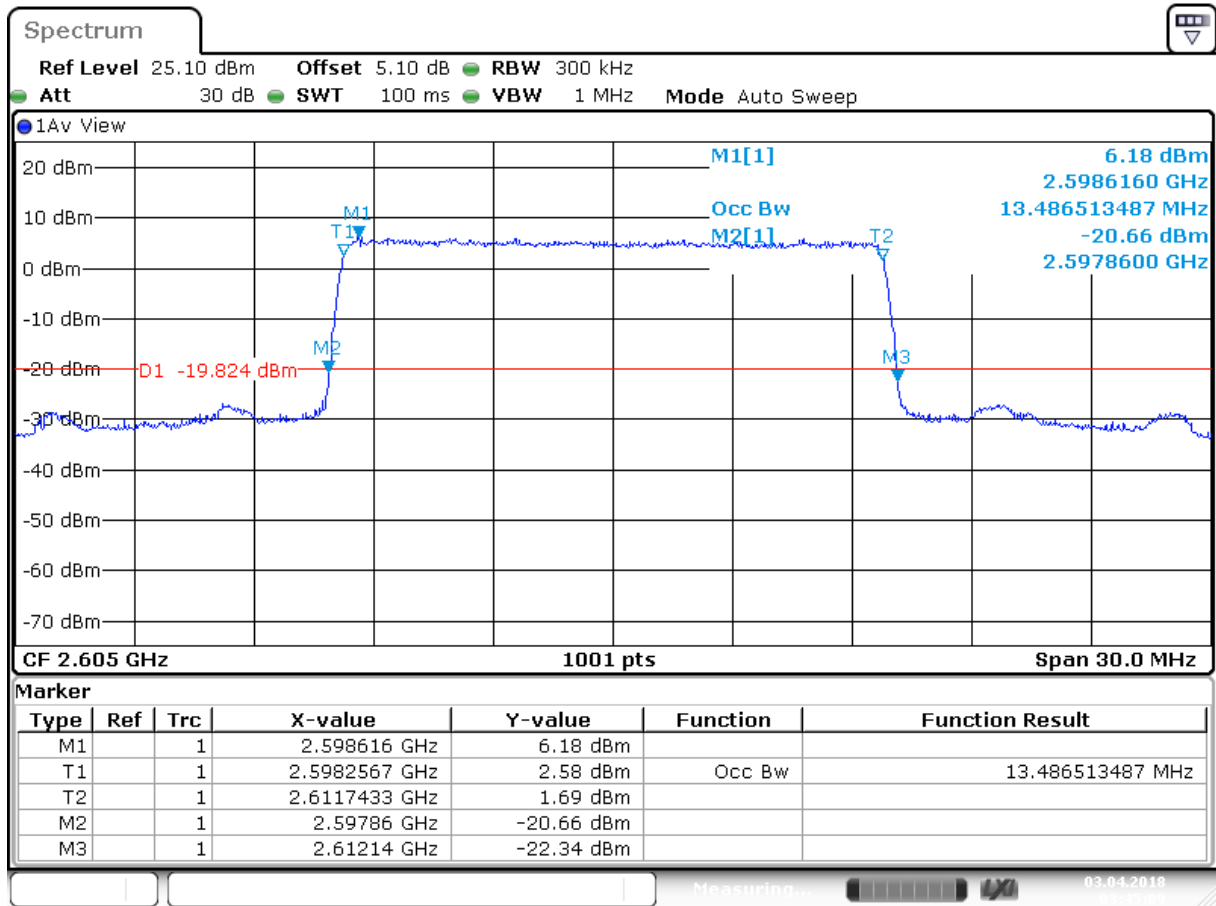
**4.1.1.6.1 Test Channel = LCH**



Date: 3 APR 2018 03:44:46

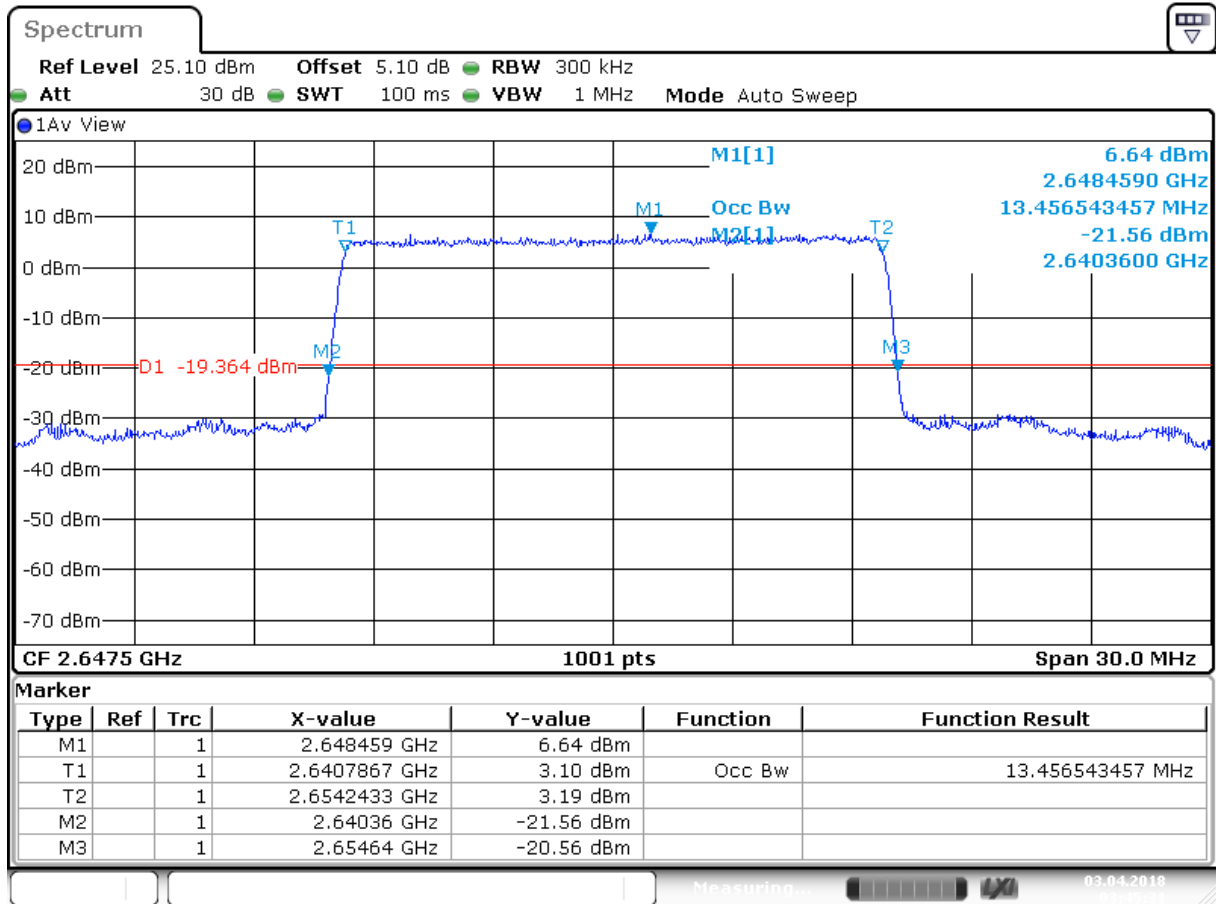
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**4.1.1.6.2 Test Channel = MCH**



Date: 3 APR 2018 03:45:09

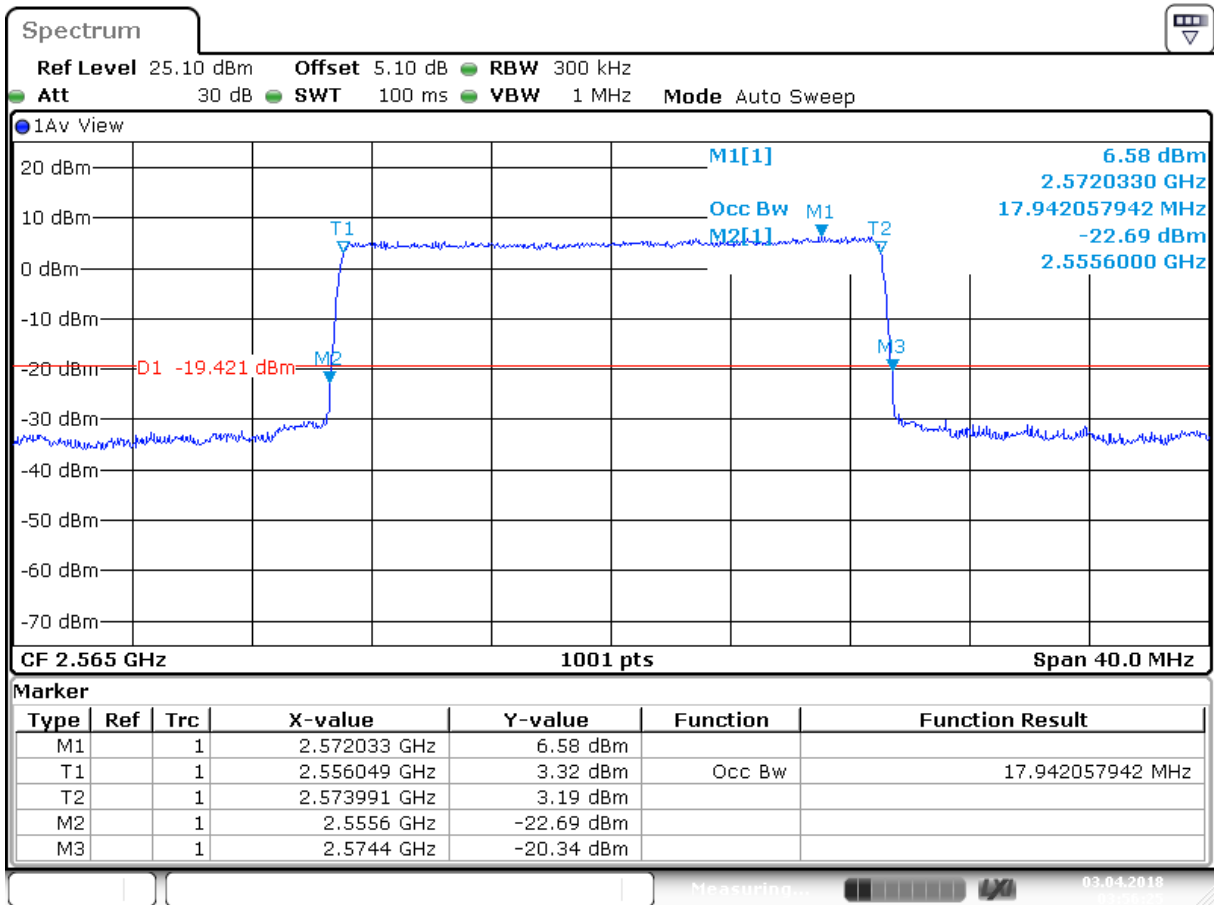
**4.1.1.6.3 Test Channel = HCH**



Date: 3 APR 2018 03:45:31

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

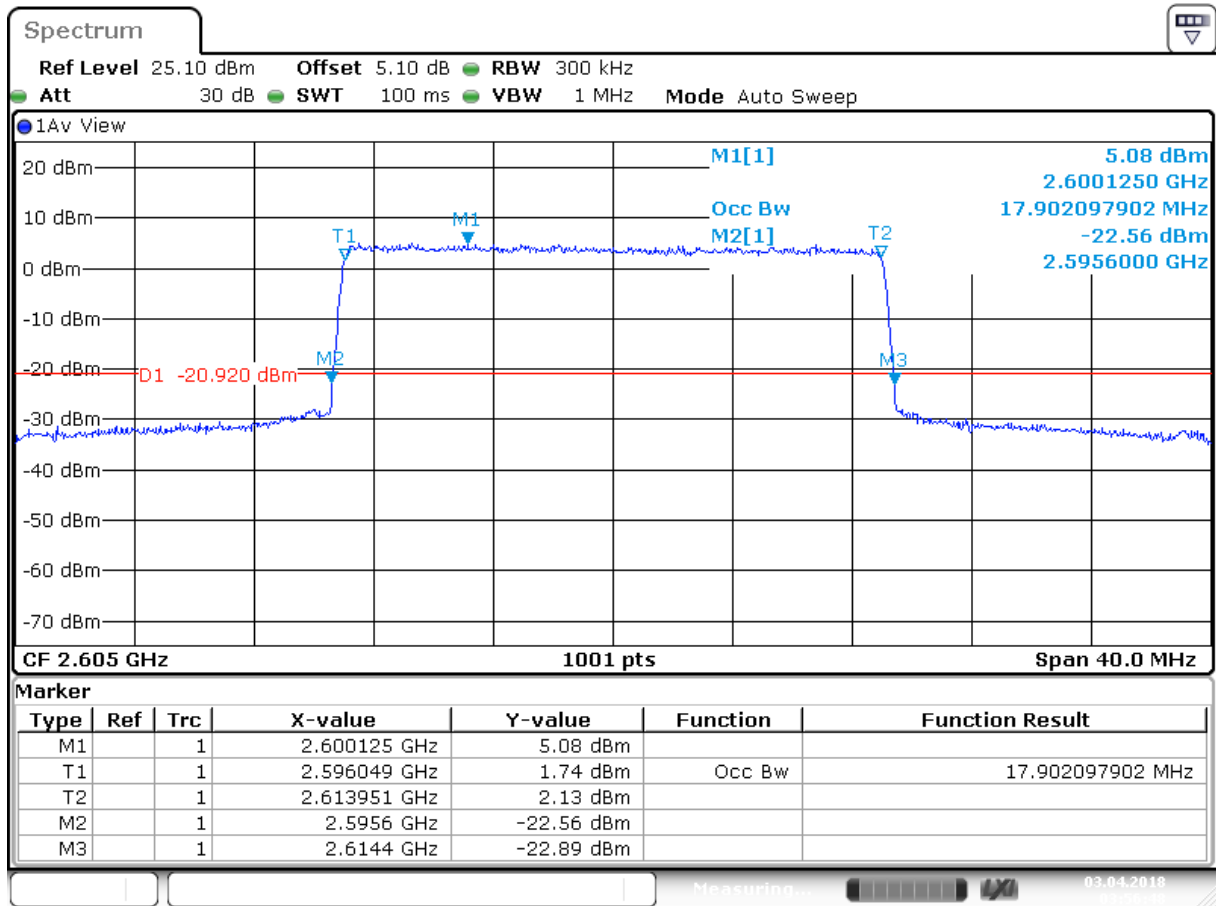
**4.1.1.7.1 Test Channel = LCH**



Date: 3 APR 2018 03:56:25



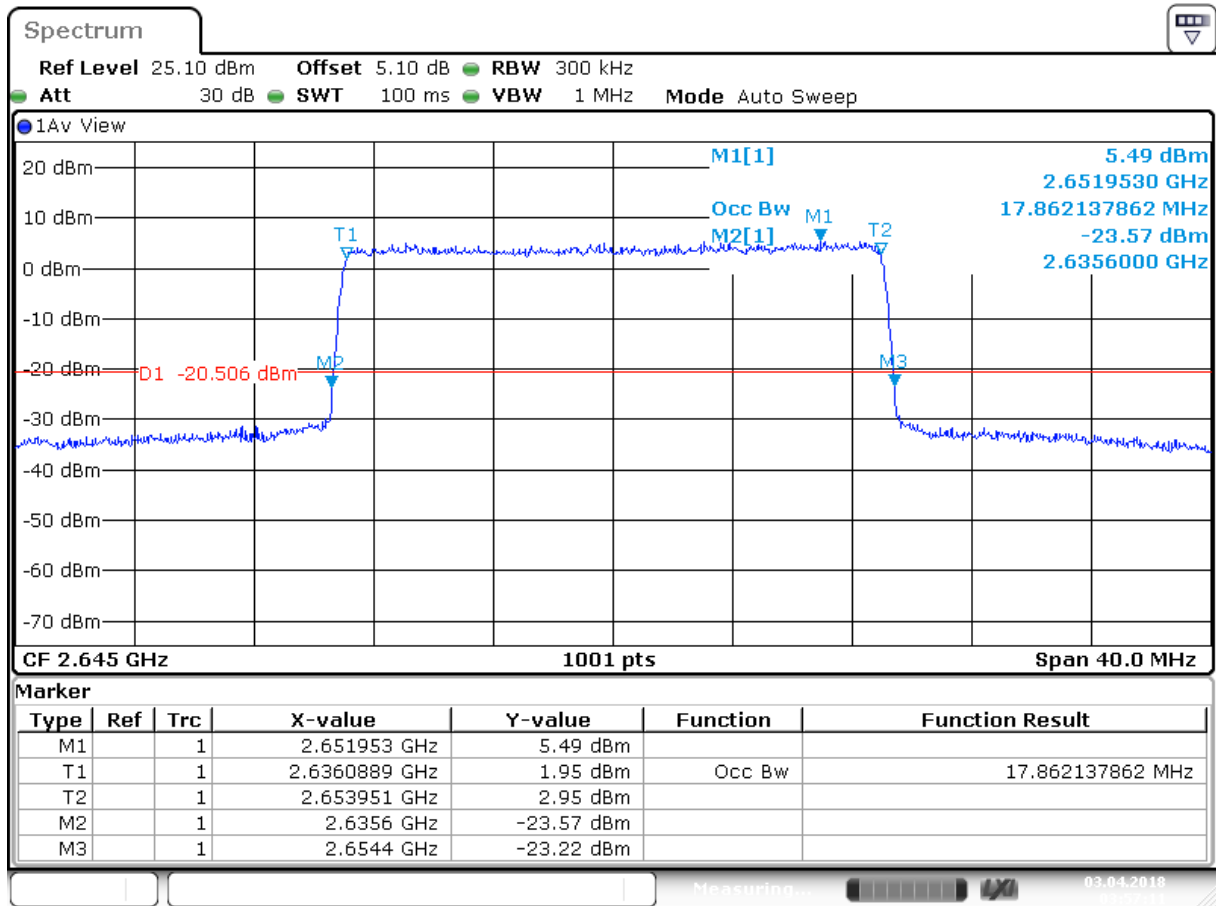
4.1.1.7.2 Test Channel = MCH



Date: 3 APR 2018 03:56:49



4.1.1.7.3 Test Channel = HCH



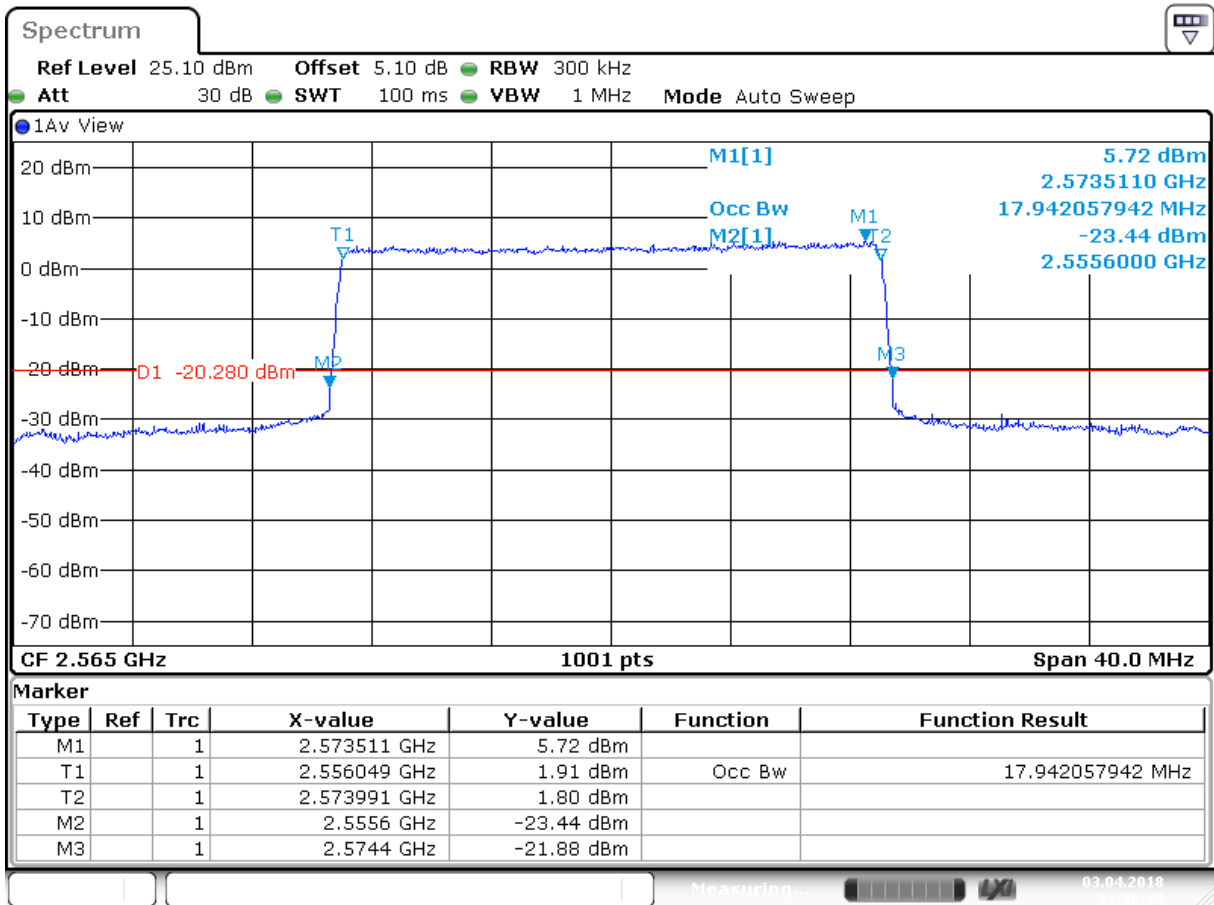
Date: 3 APR 2018 03:57:11





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

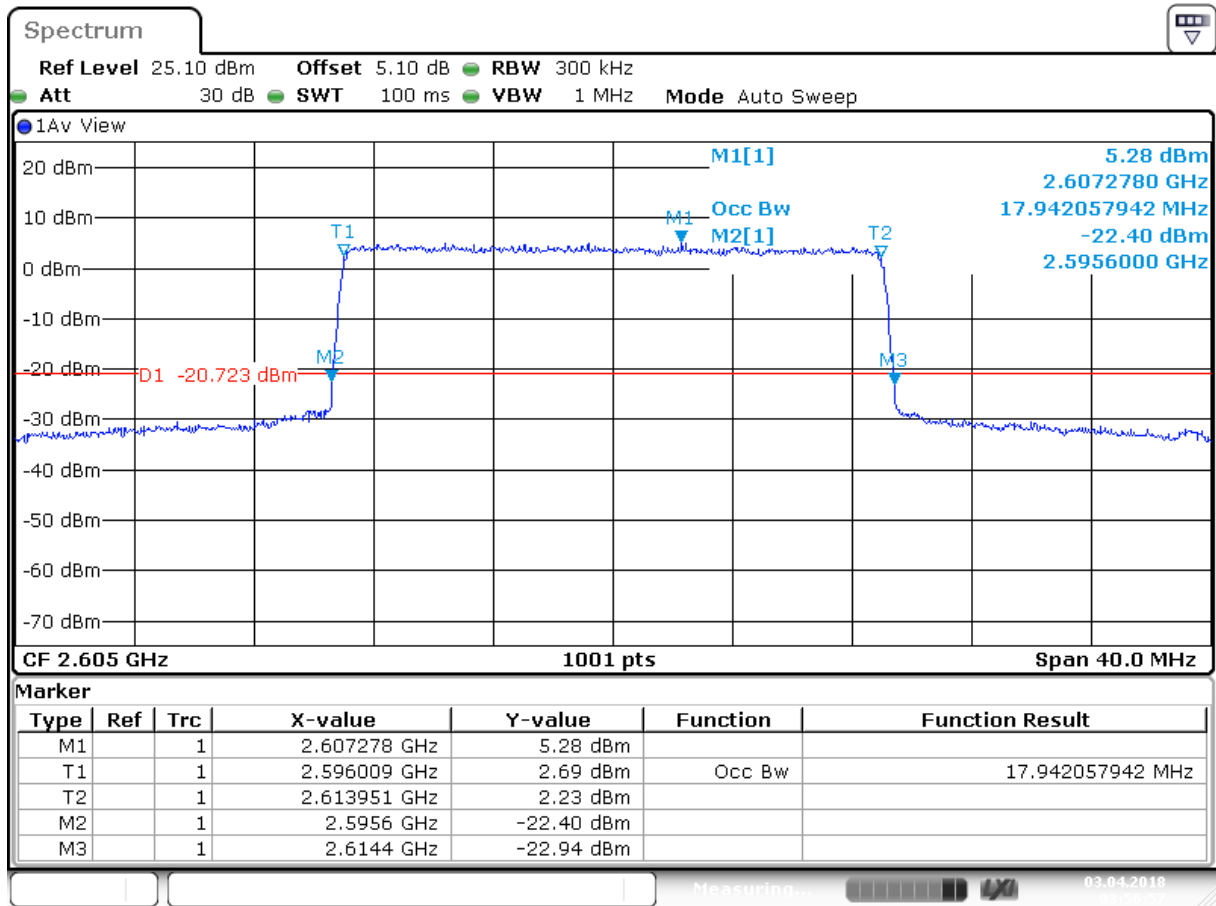
**4.1.1.8.1 Test Channel = LCH**



Date: 3 APR 2018 03:56:35

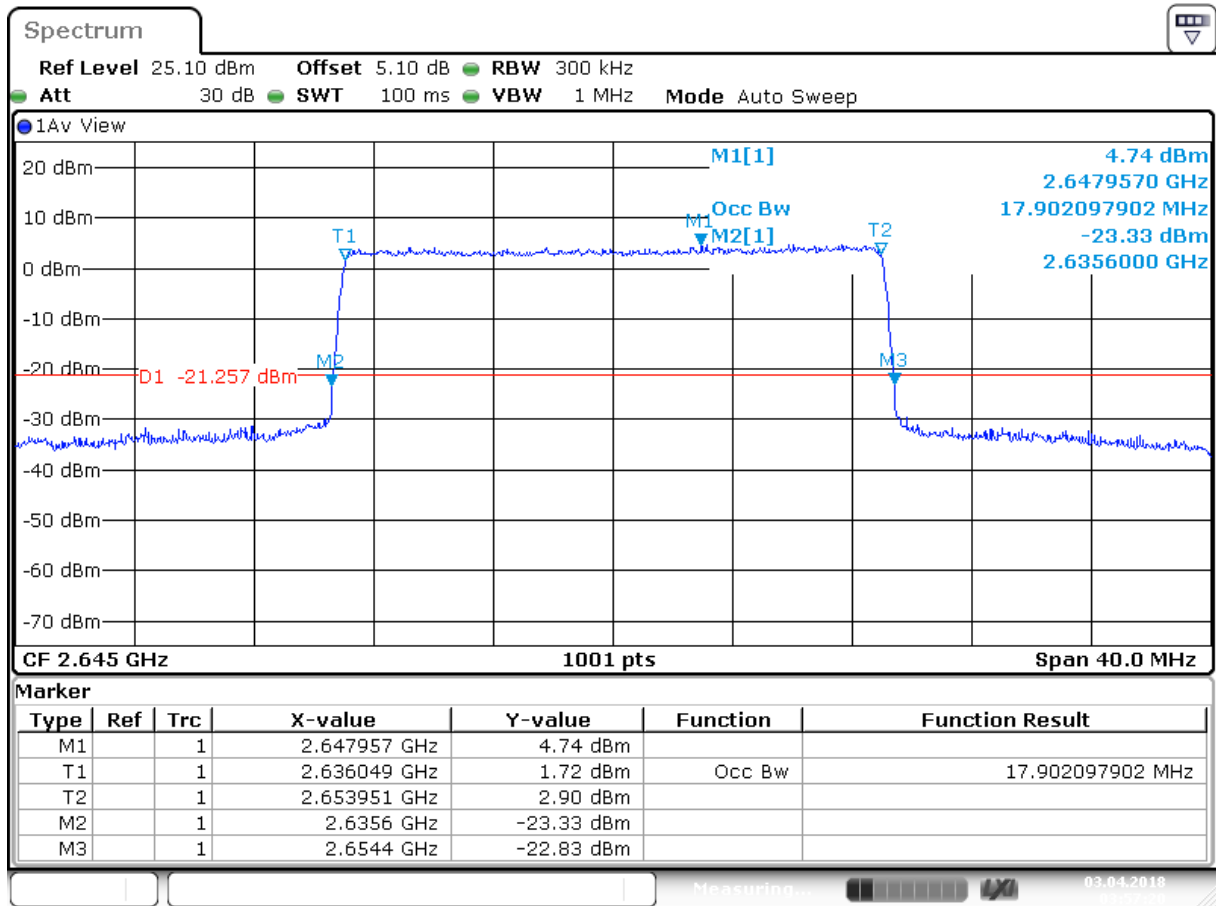
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**4.1.1.8.2 Test Channel = MCH**



Date: 3 APR 2018 03:56:58

**4.1.1.8.3 Test Channel = HCH**



Date: 3 APR 2018 03:57:20

## 5 Band Edges Compliance

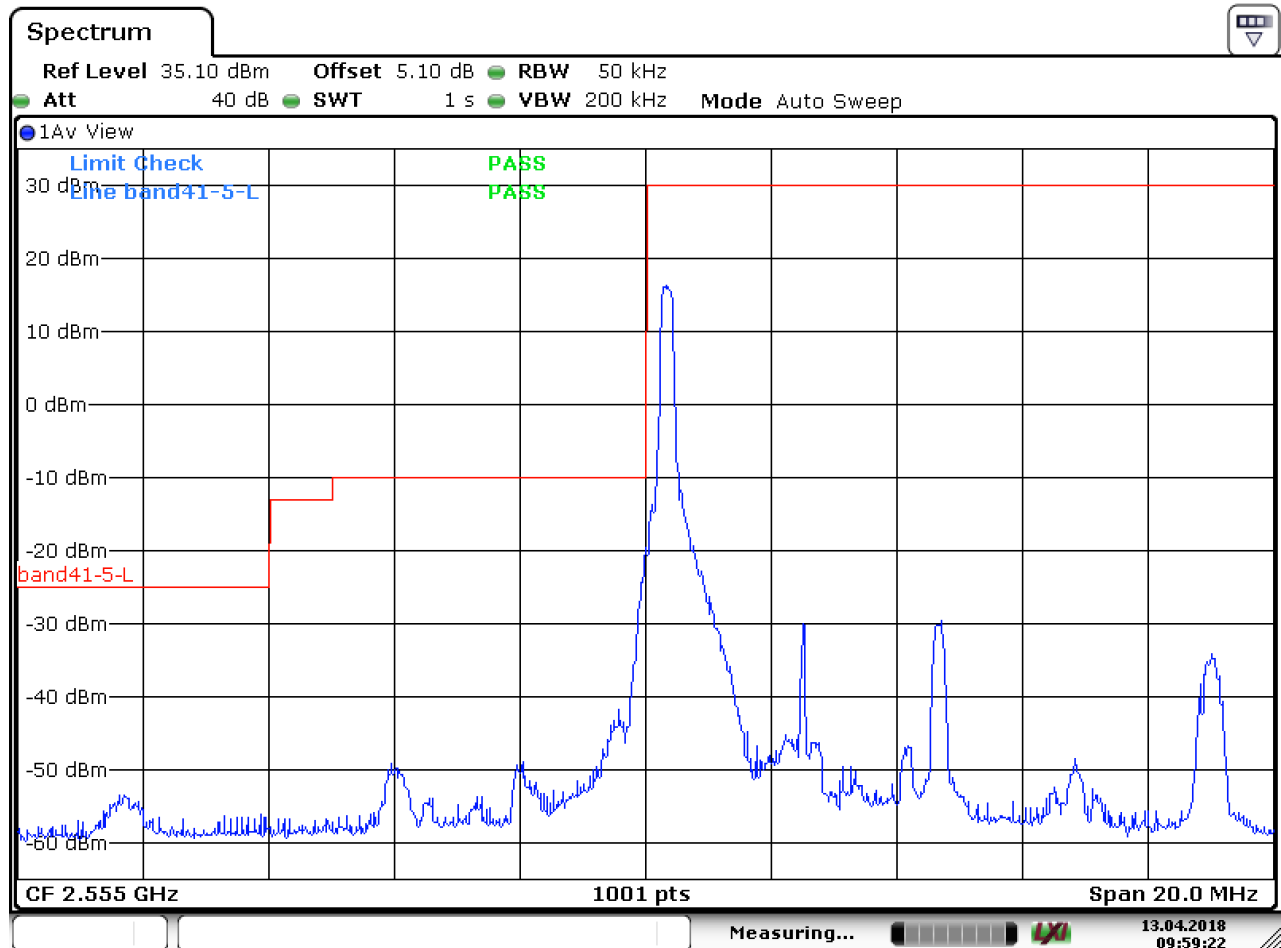
### 5.1 For LTE

#### 5.1.1 Test Band = LTE BAND 41

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

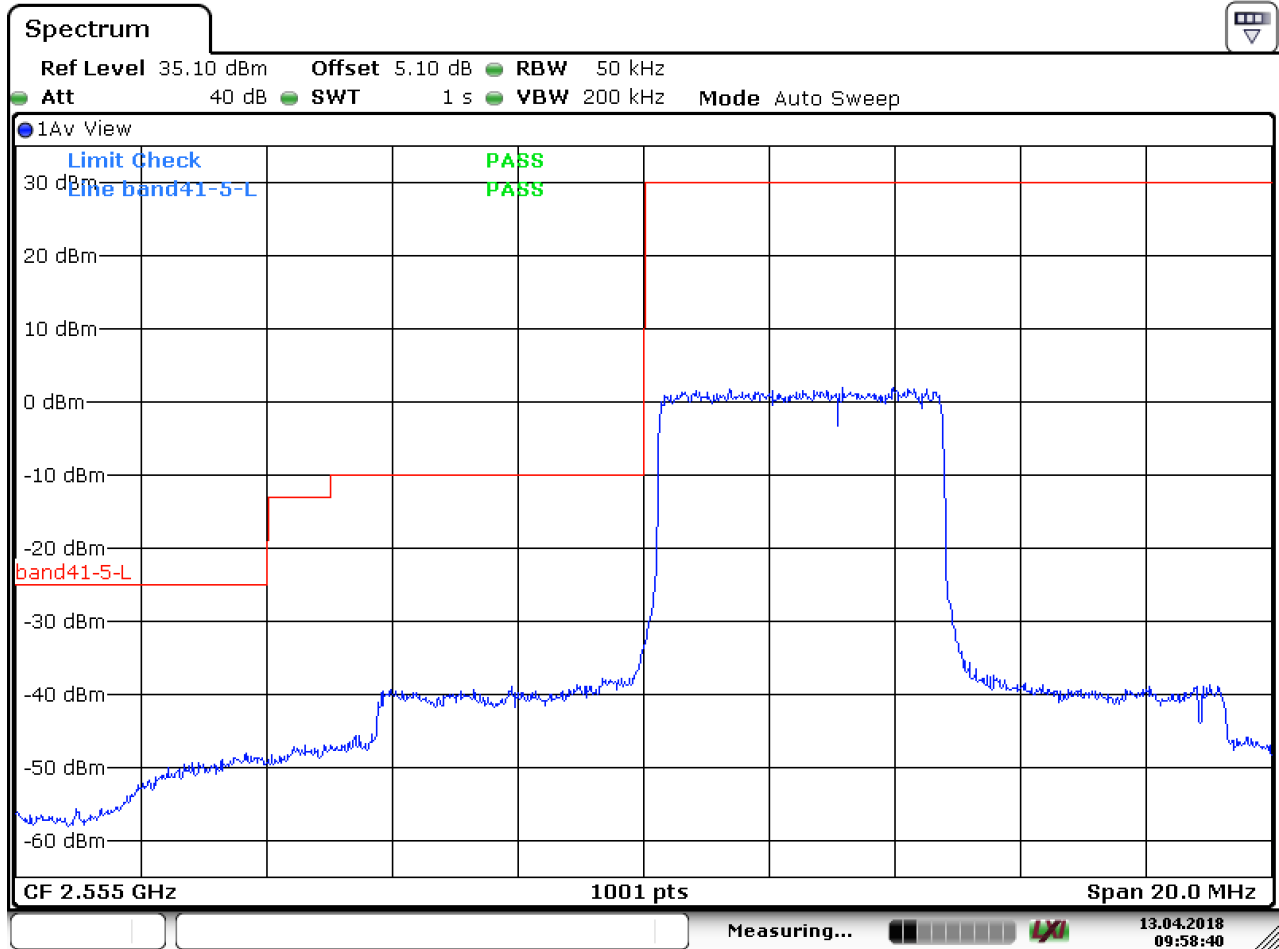
##### 5.1.1.1.1 Test Channel = LCH

##### 5.1.1.1.1.1 Test RB=1RB#Low



Date: 13.APR.2018 09:59:22

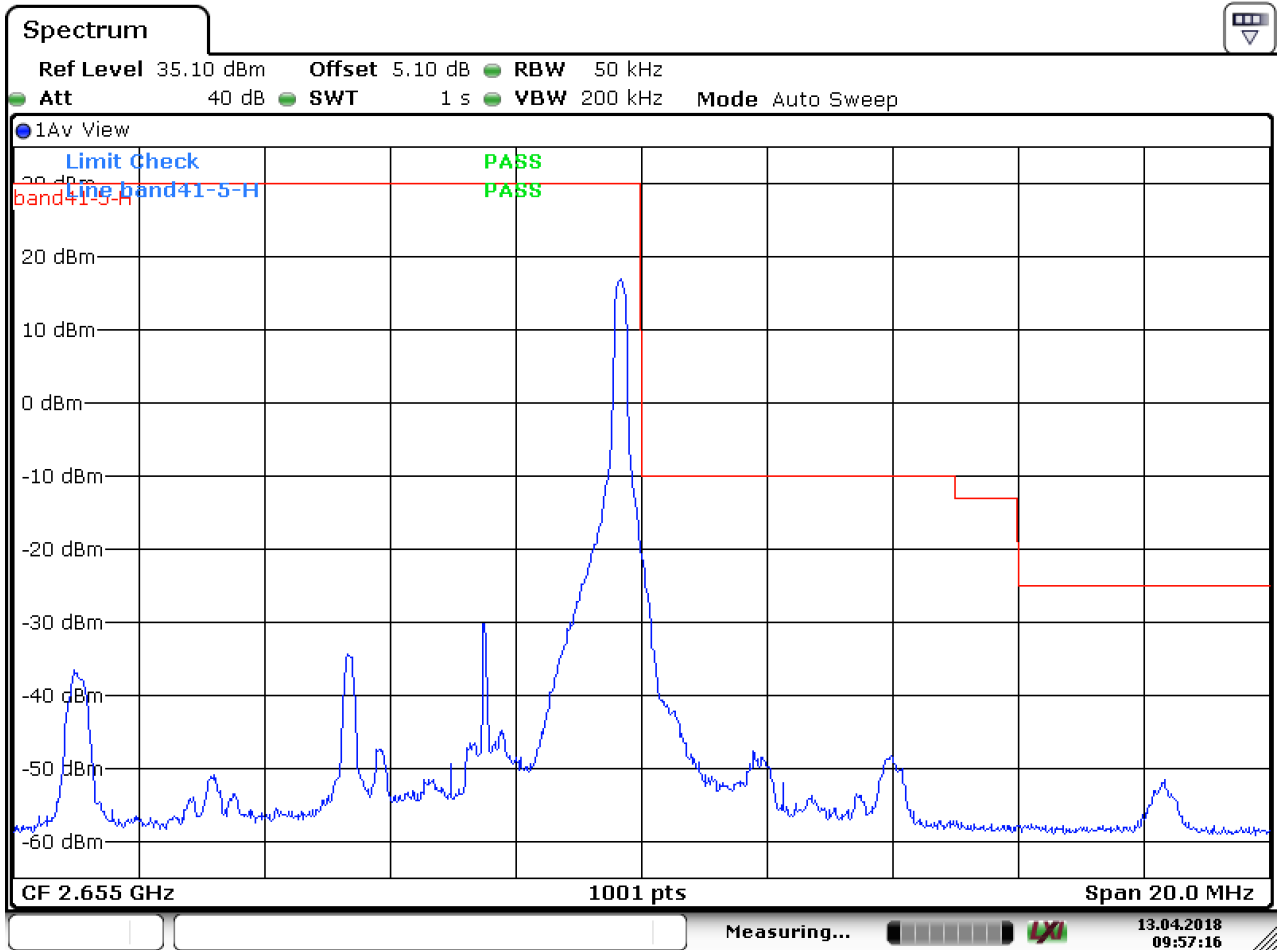
**5.1.1.1.1.2 Test RB=FullRBs**



Date: 13.APR.2018 09:58:40

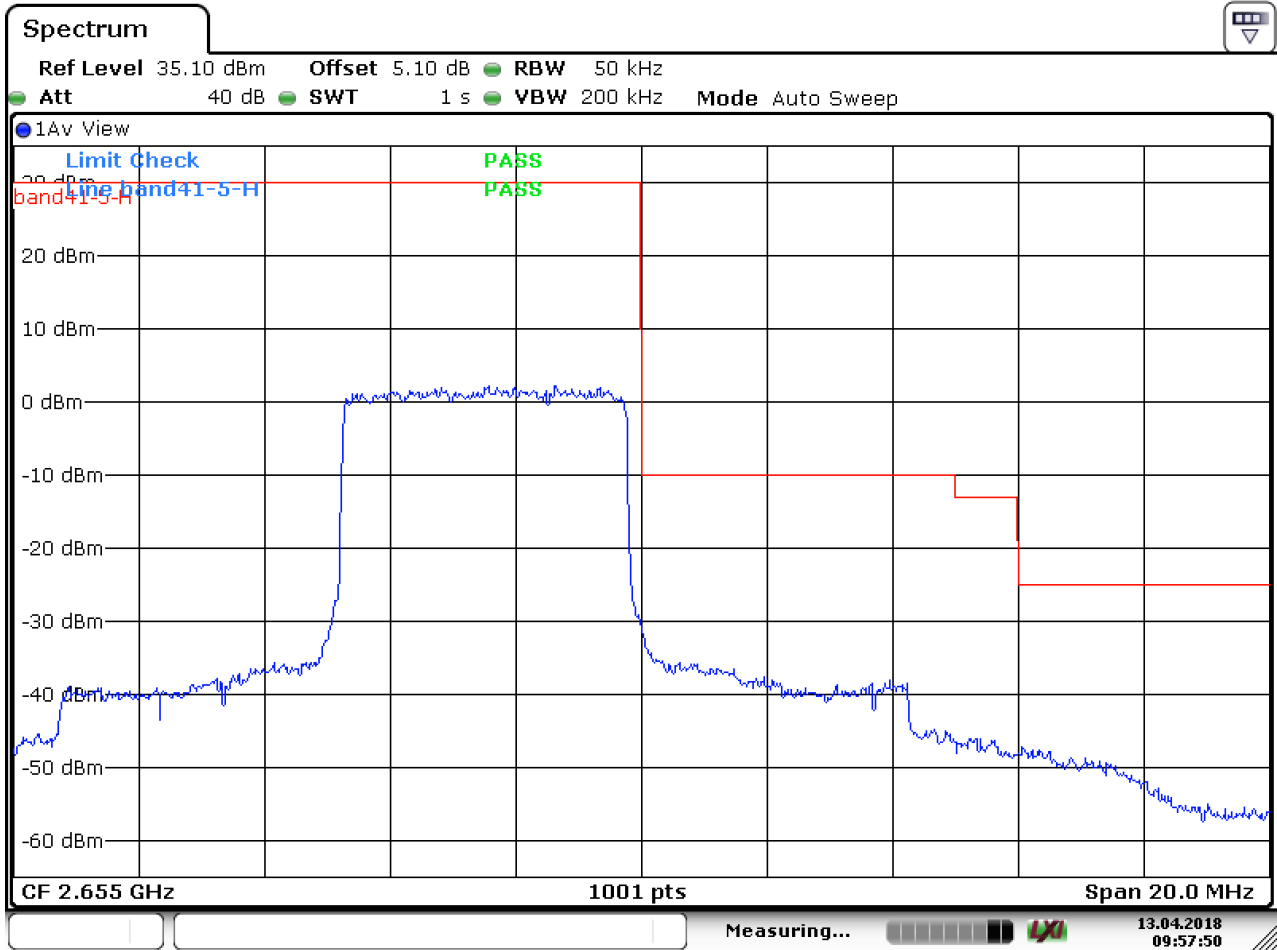
**5.1.1.1.2 Test Channel = HCH**

**5.1.1.1.2.1 Test RB=1RB#High**



Date: 13.APR.2018 09:57:17

5.1.1.1.2.2 Test RB=FullRBs



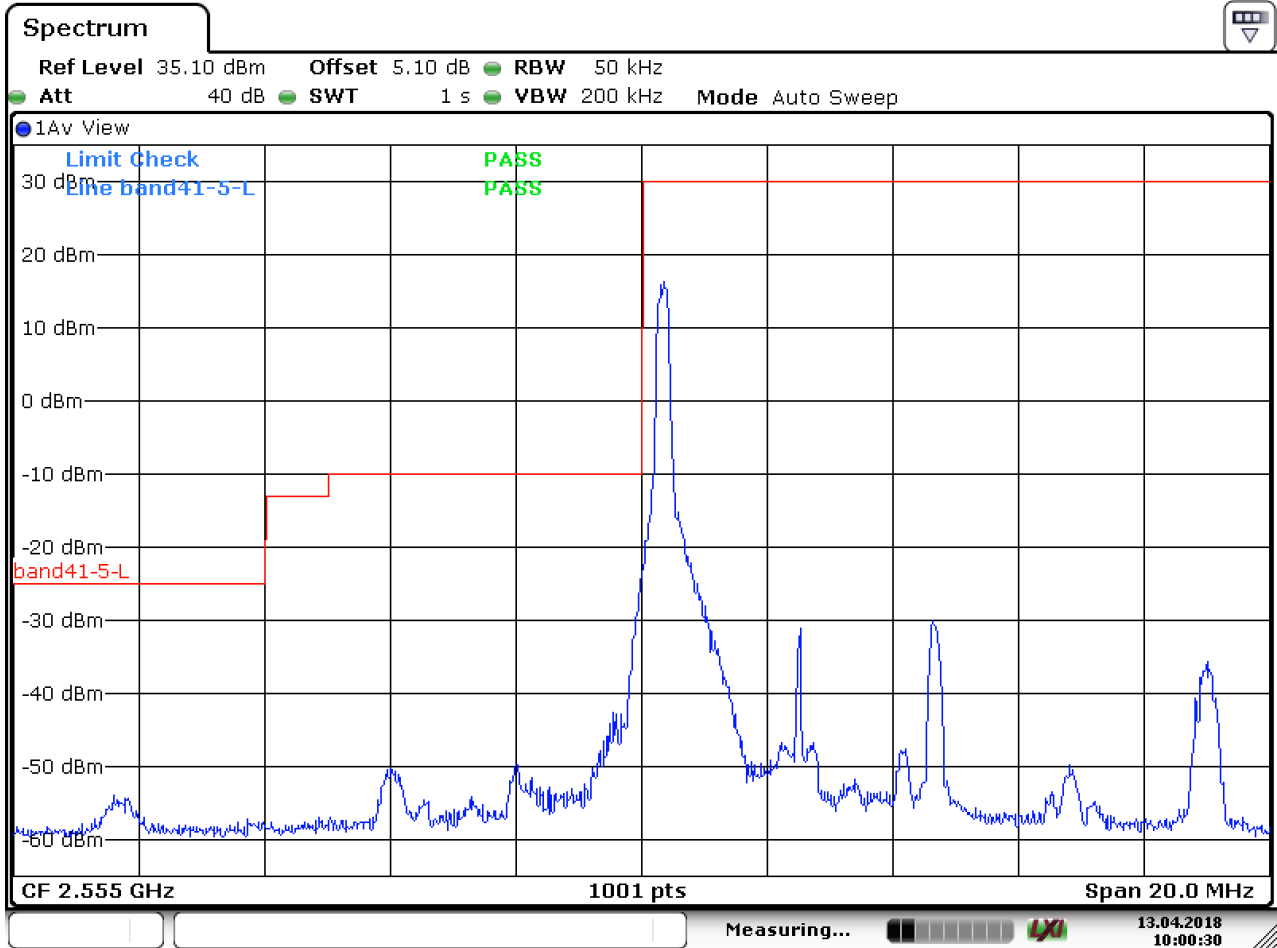
Date: 13.APR.2018 09:57:51

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**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#Low**

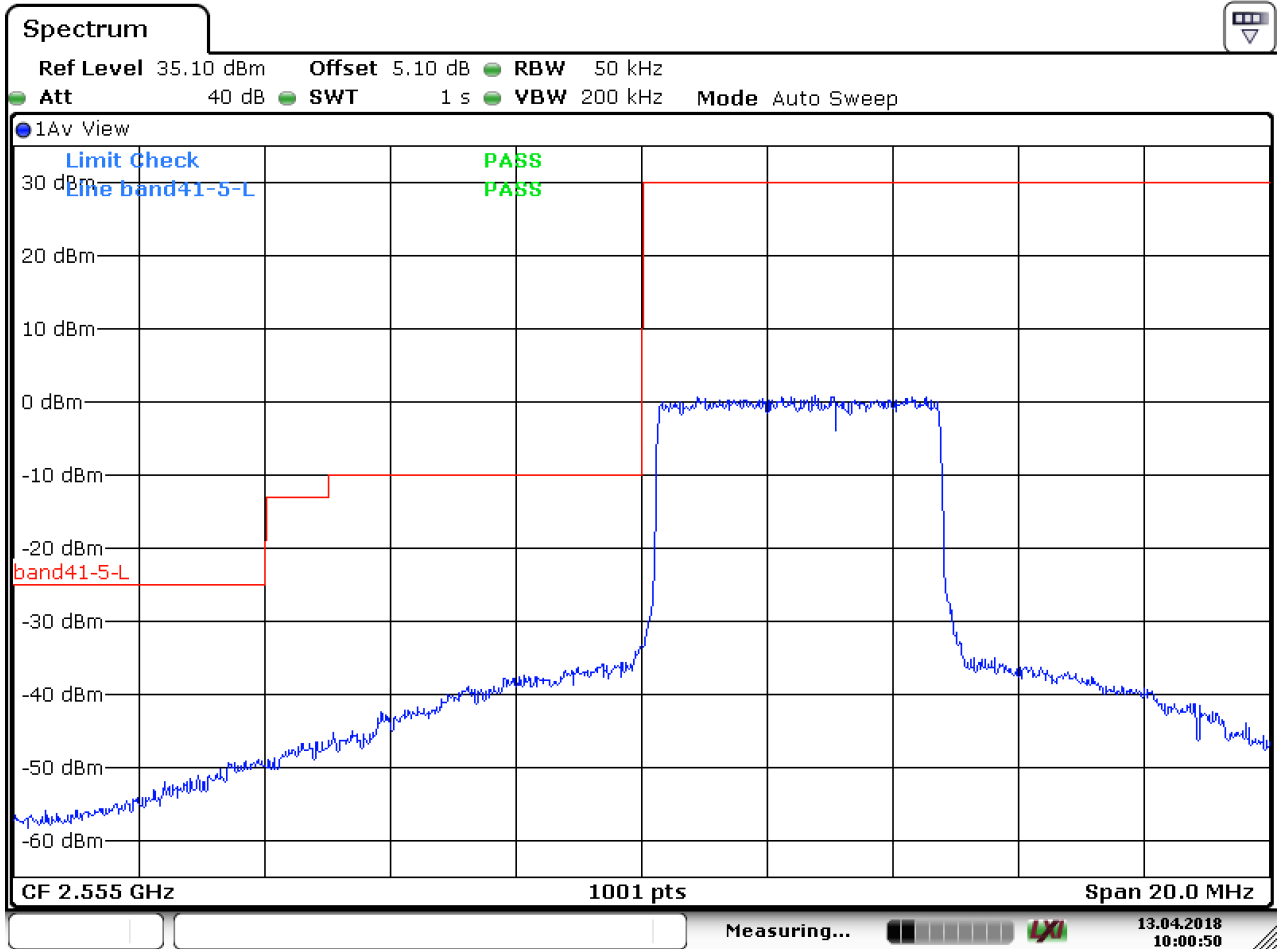


Date: 13.APR.2018 10:00:30

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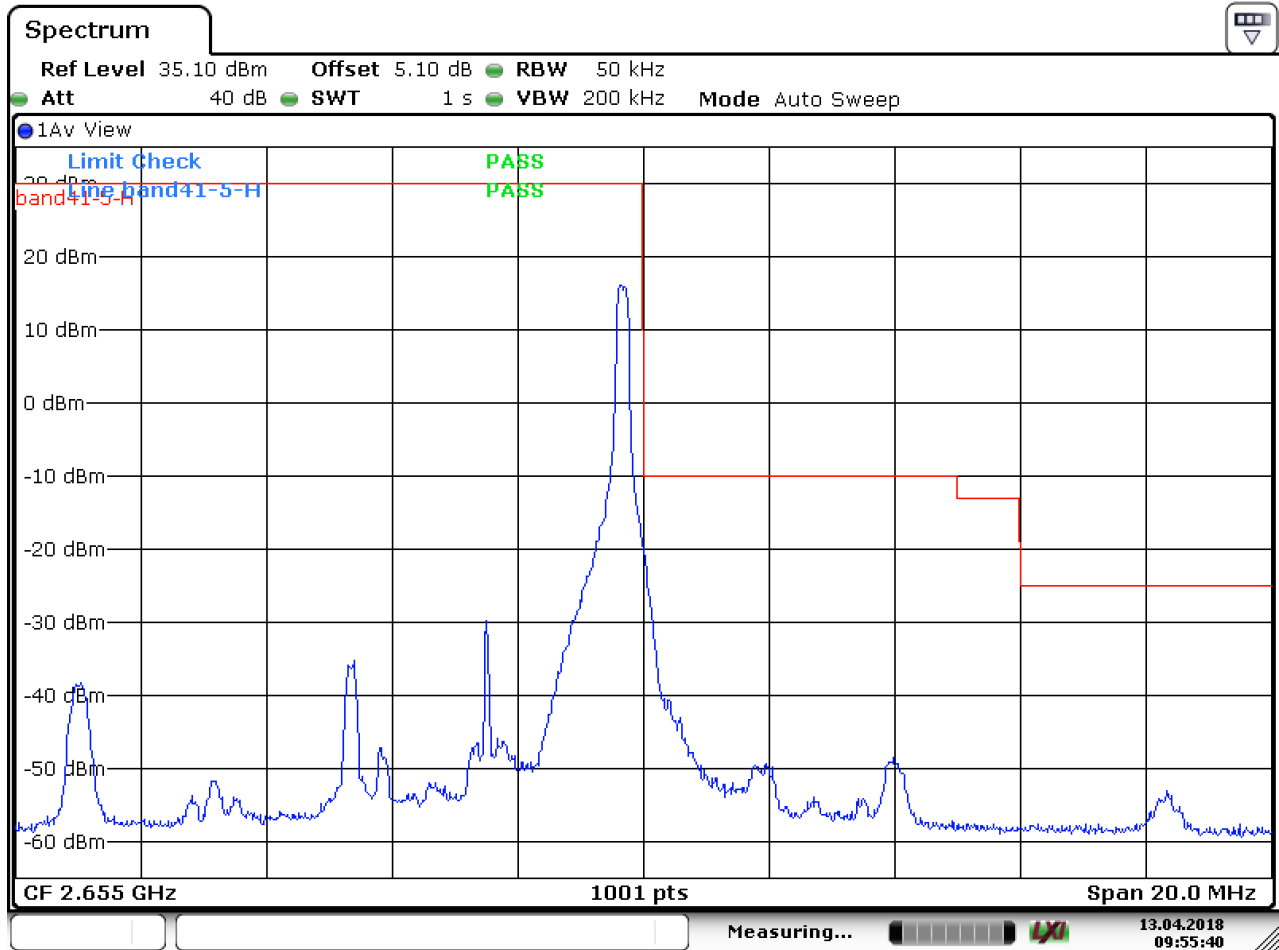
**5.1.1.2.1.2 Test RB=FullRBs**



Date: 13.APR.2018 10:00:50

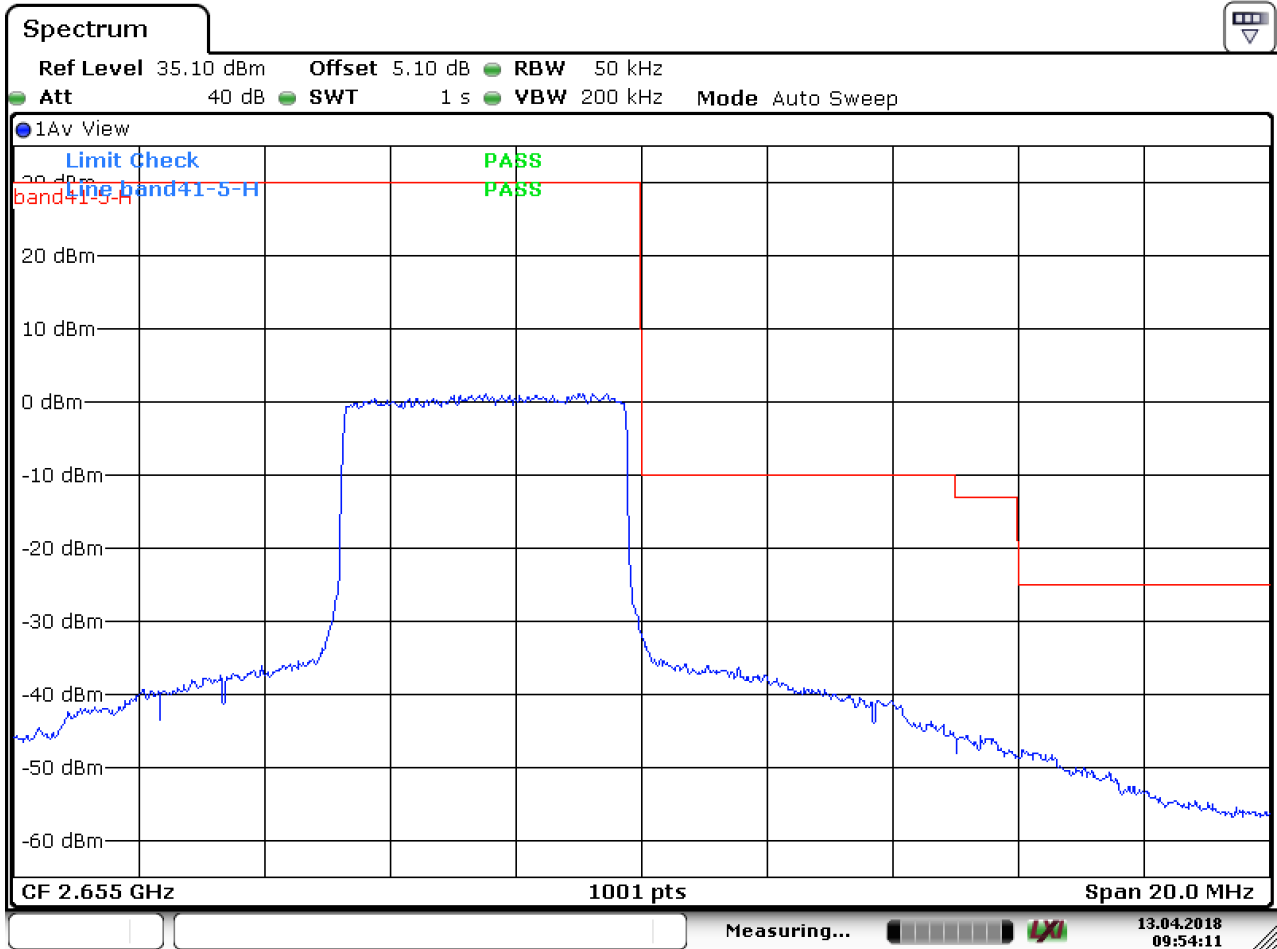
**5.1.1.2.2 Test Channel = HCH**

**5.1.1.2.2.1 Test RB=1RB#High**



Date: 13.APR.2018 09:55:40

**5.1.1.2.2 Test RB=FullRBs**



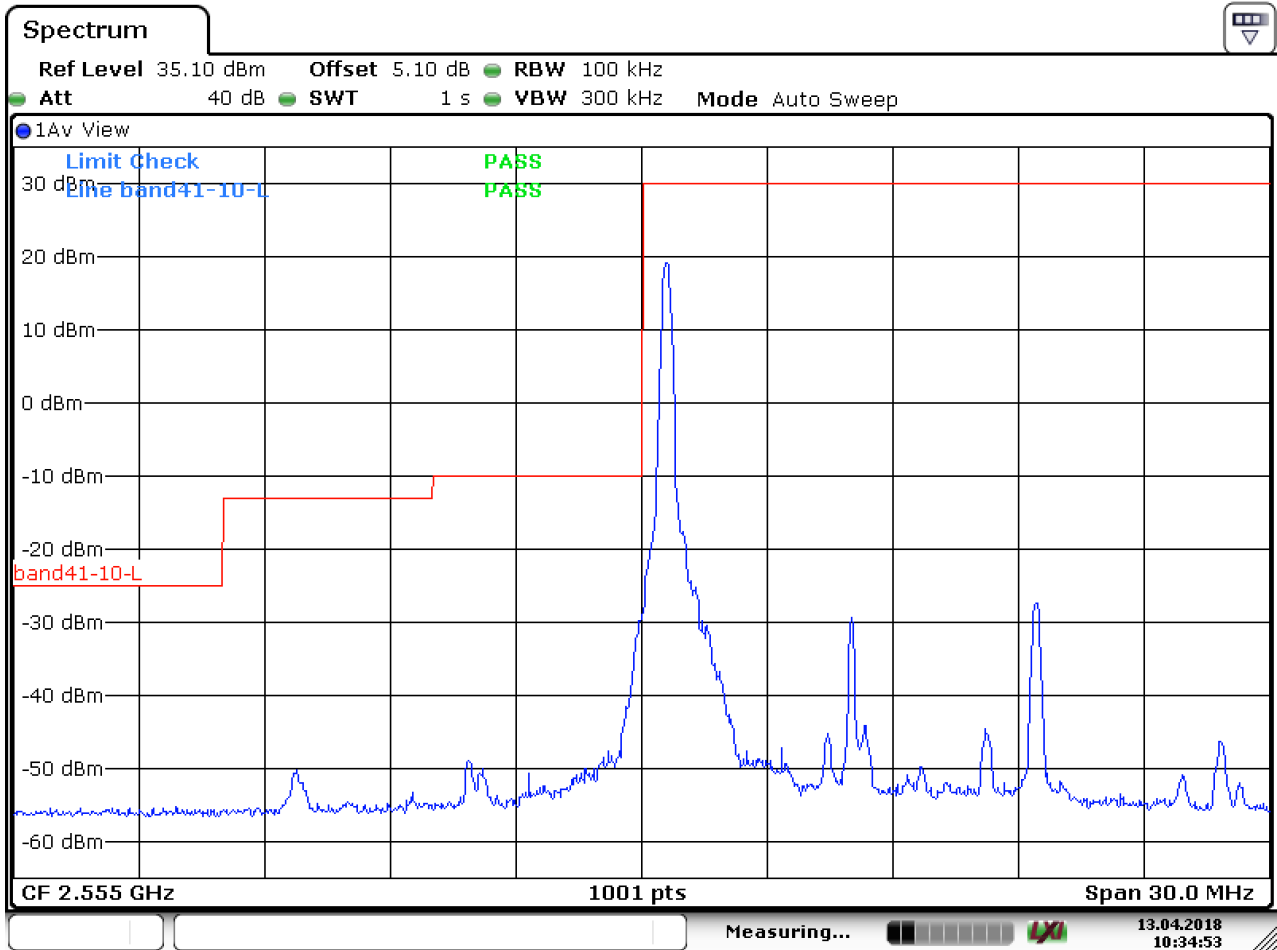
Date: 13.APR.2018 09:54:12

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

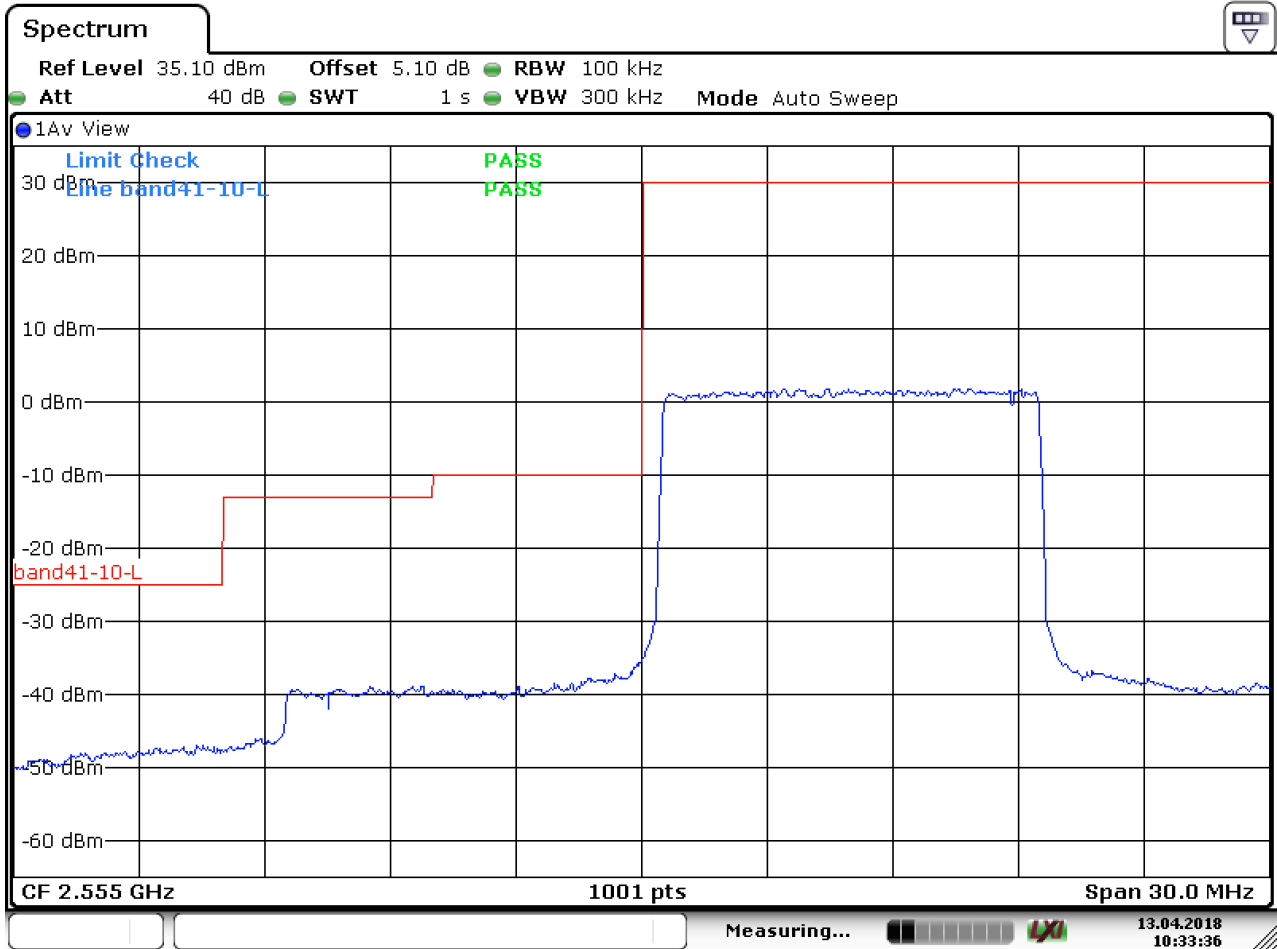
**5.1.1.3.1 Test Channel = LCH**

**5.1.1.3.1.1 Test RB=1RB#Low**



Date: 13.APR.2018 10:34:53

**5.1.1.3.1.2 Test RB=FullRBs**

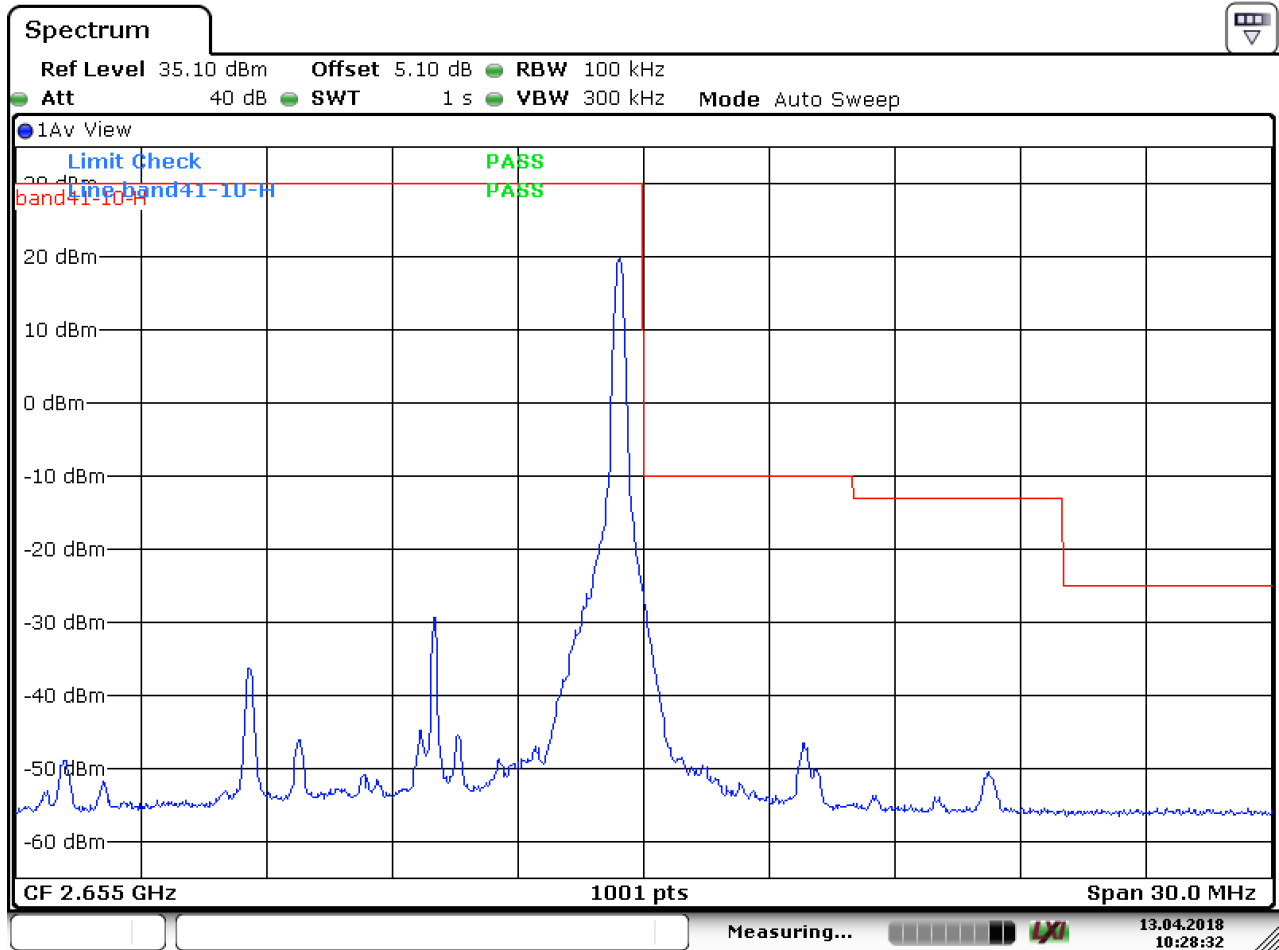


Date: 13.APR.2018 10:33:36

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**5.1.1.3.2 Test Channel = HCH**

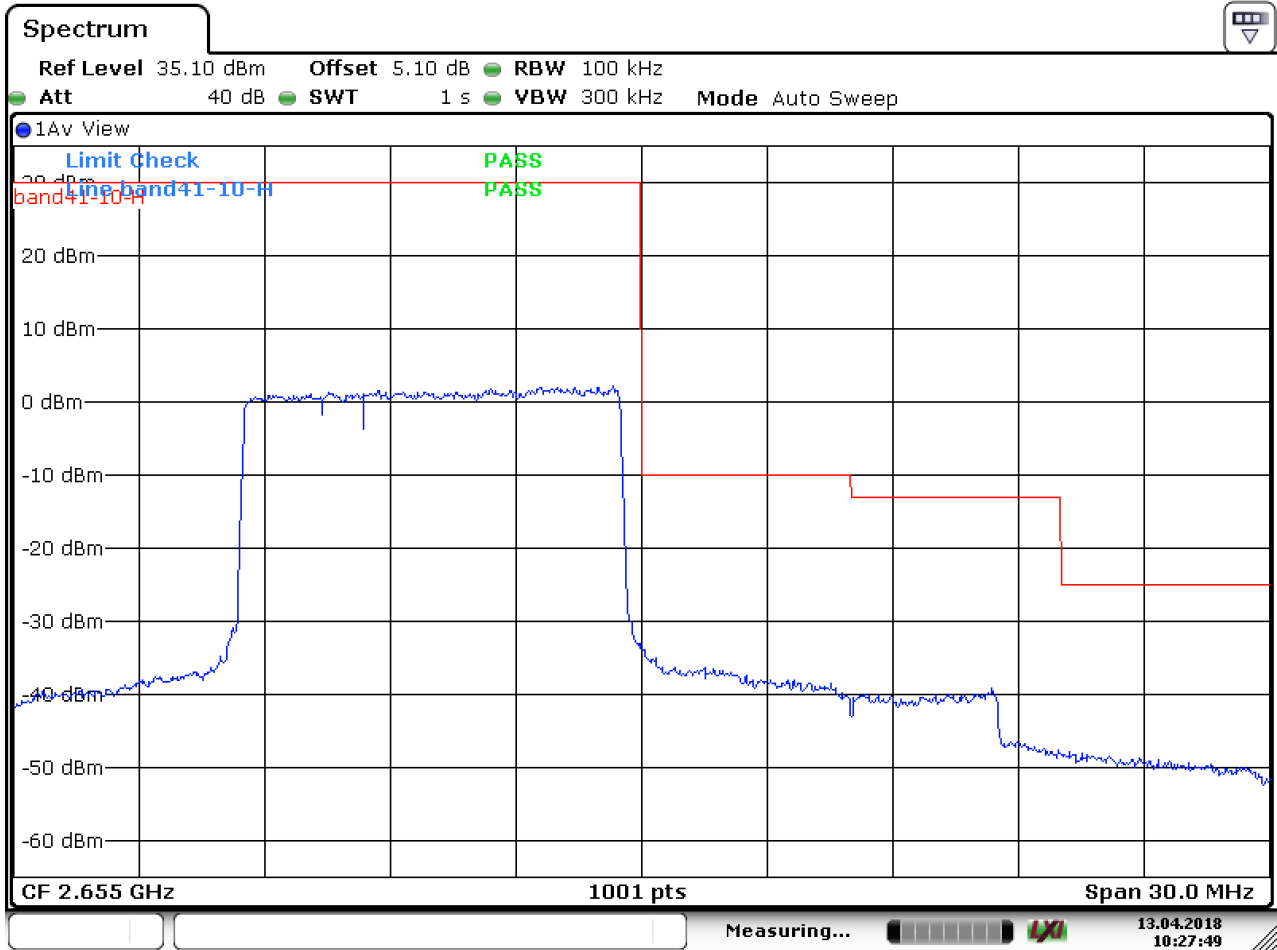
**5.1.1.3.2.1 Test RB=1RB#High**



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5.1.1.3.2.2 Test RB=FullRBs

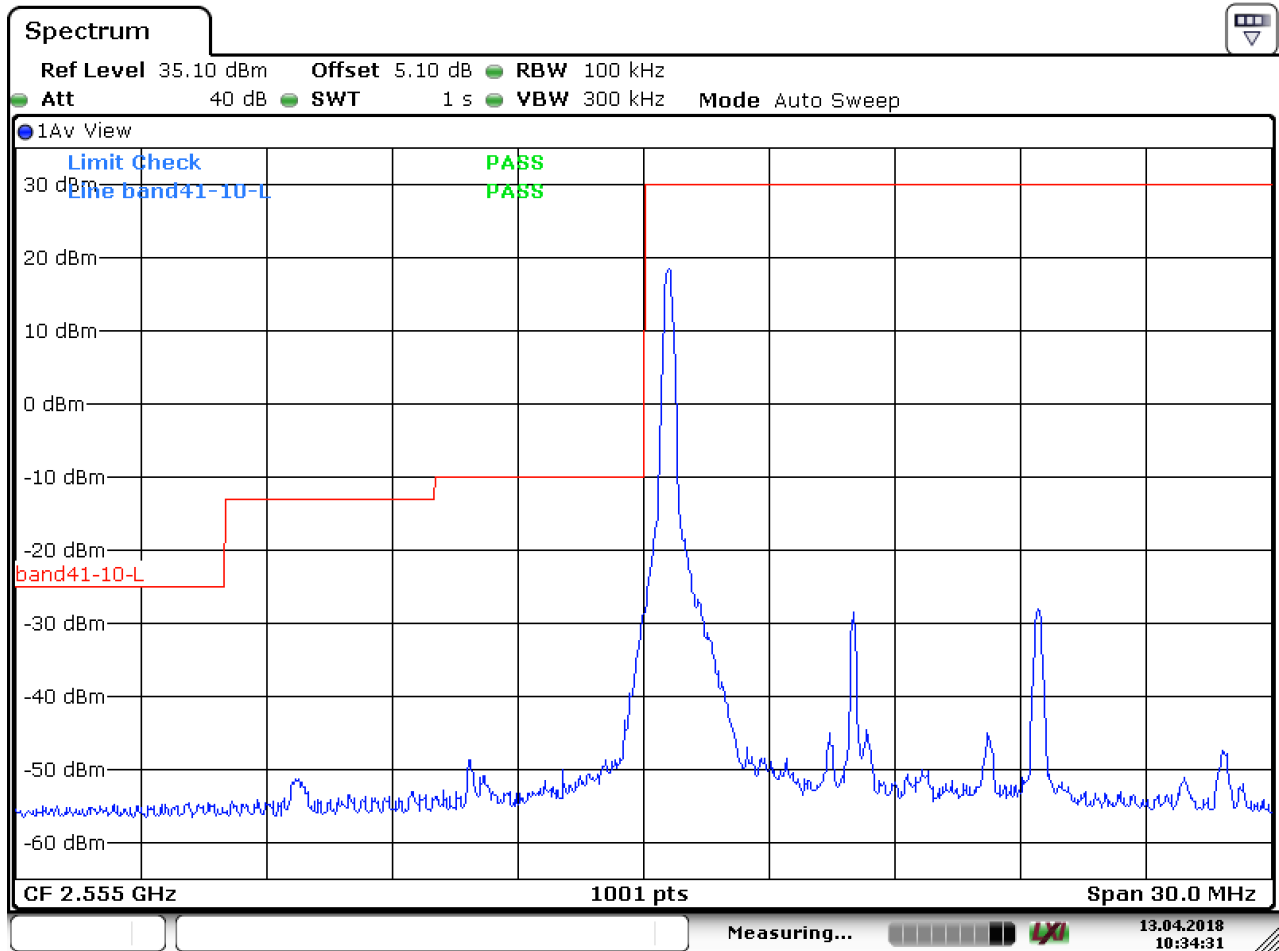


Date: 13.APR.2018 10:27:50

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

**5.1.1.4.1 Test Channel = LCH**

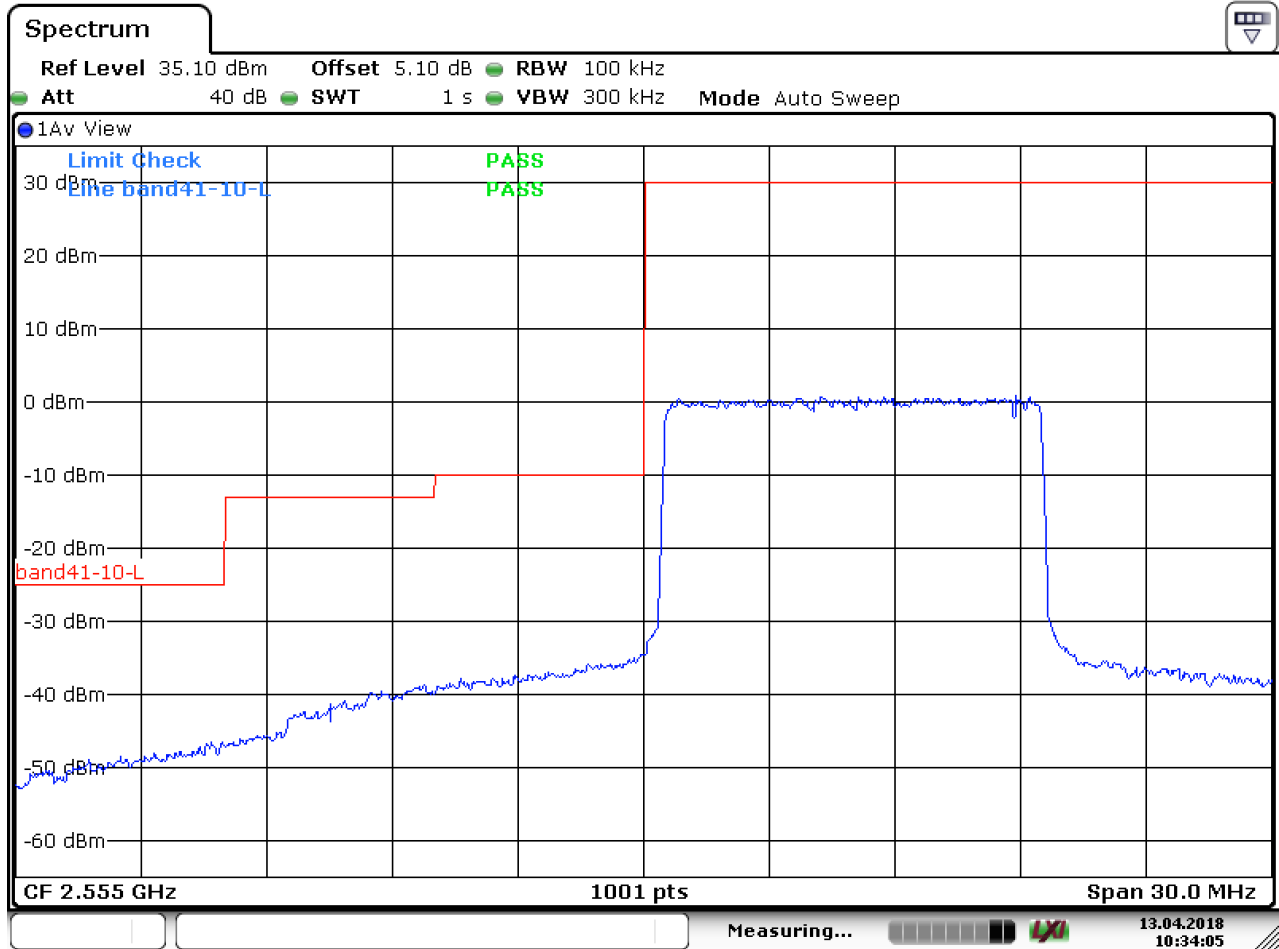
**5.1.1.4.1.1 Test RB=1RB#Low**



Date: 13.APR.2018 10:34:31



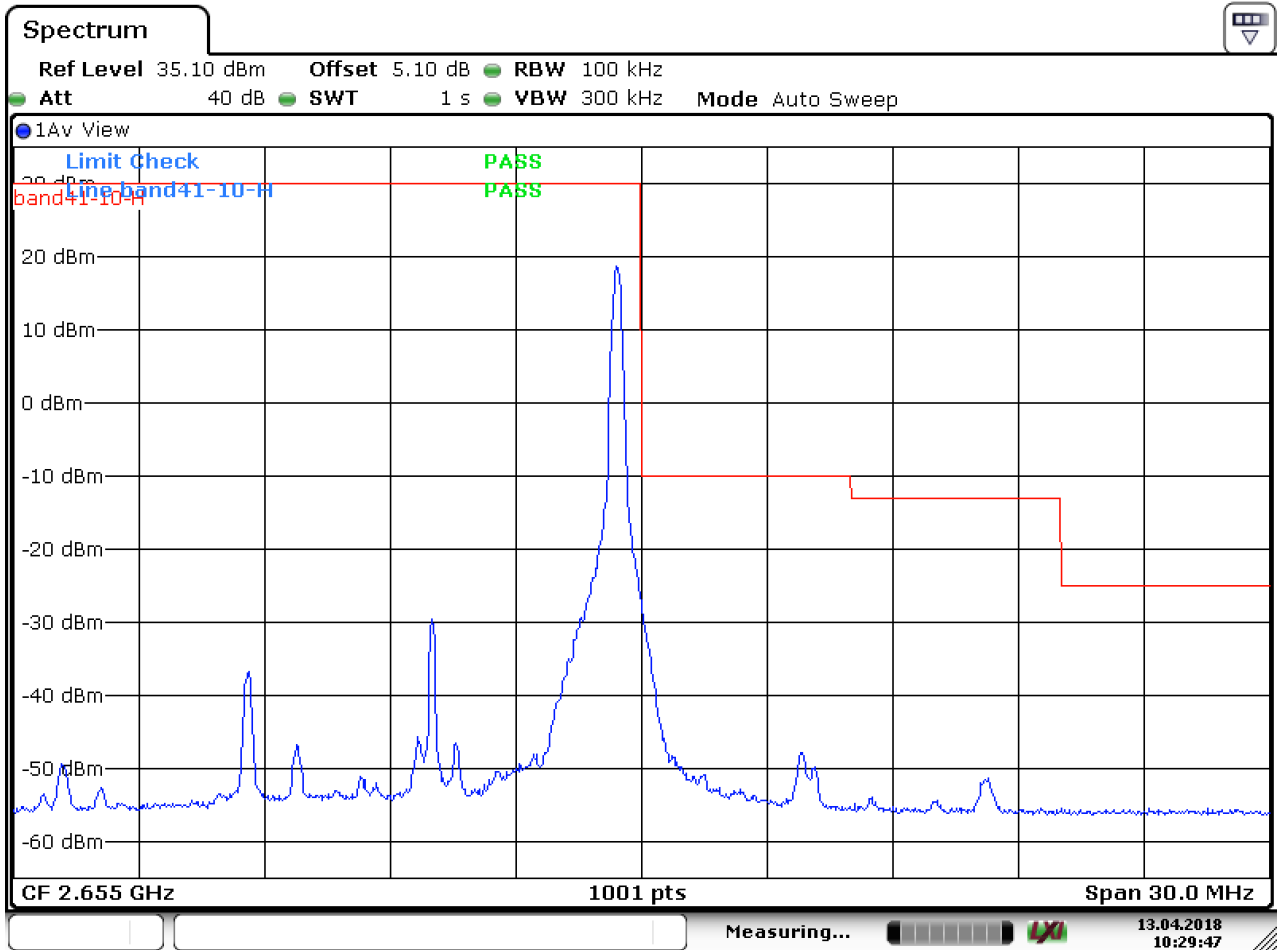
5.1.1.4.1.2 Test RB=FullIRBs



Date: 13.APR.2018 10:34:05

**5.1.1.4.2 Test Channel = HCH**

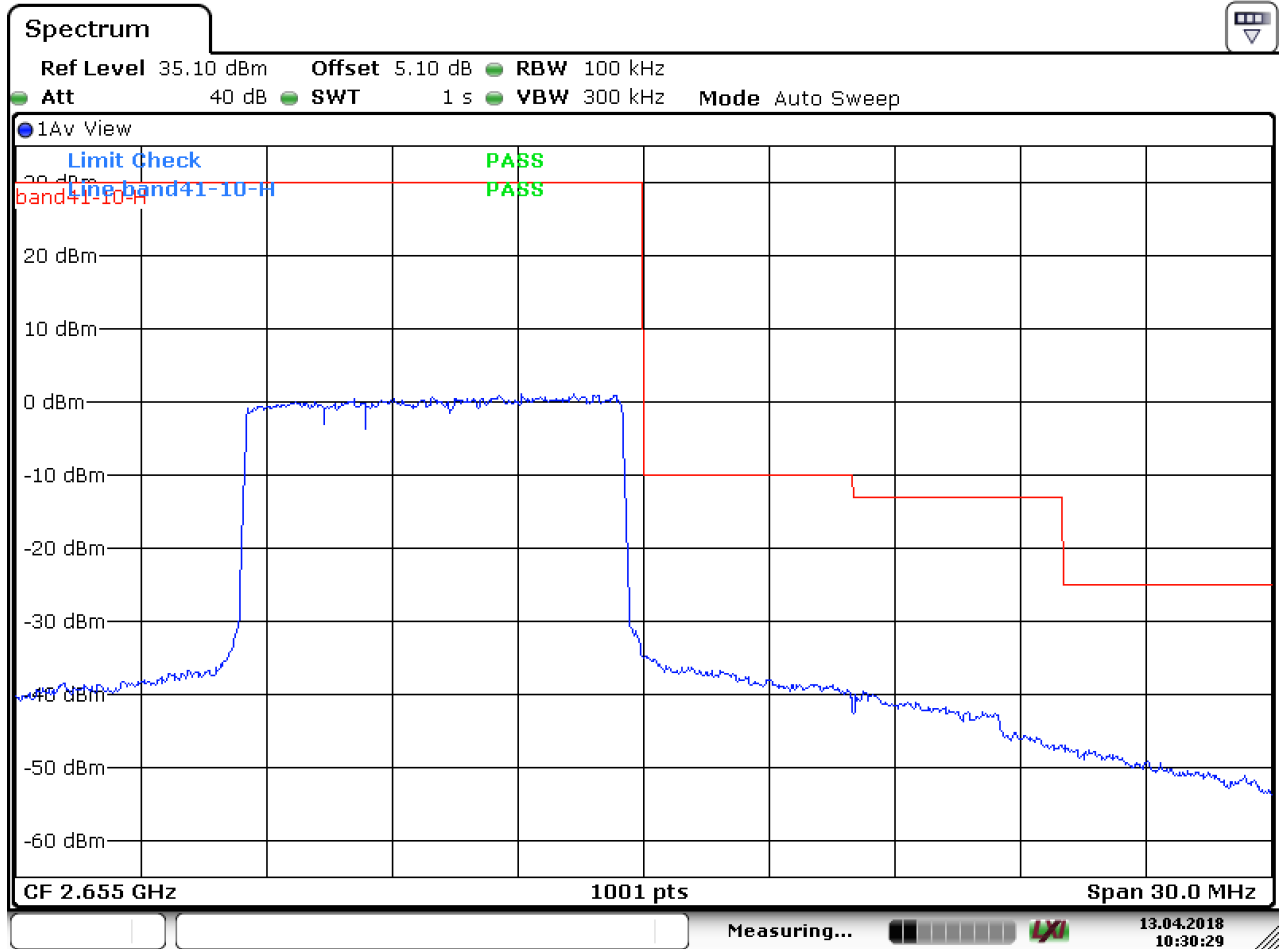
**5.1.1.4.2.1 Test RB=1RB#High**



Date: 13.APR.2018 10:29:47

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**5.1.1.4.2.2 Test RB=FullRBs**



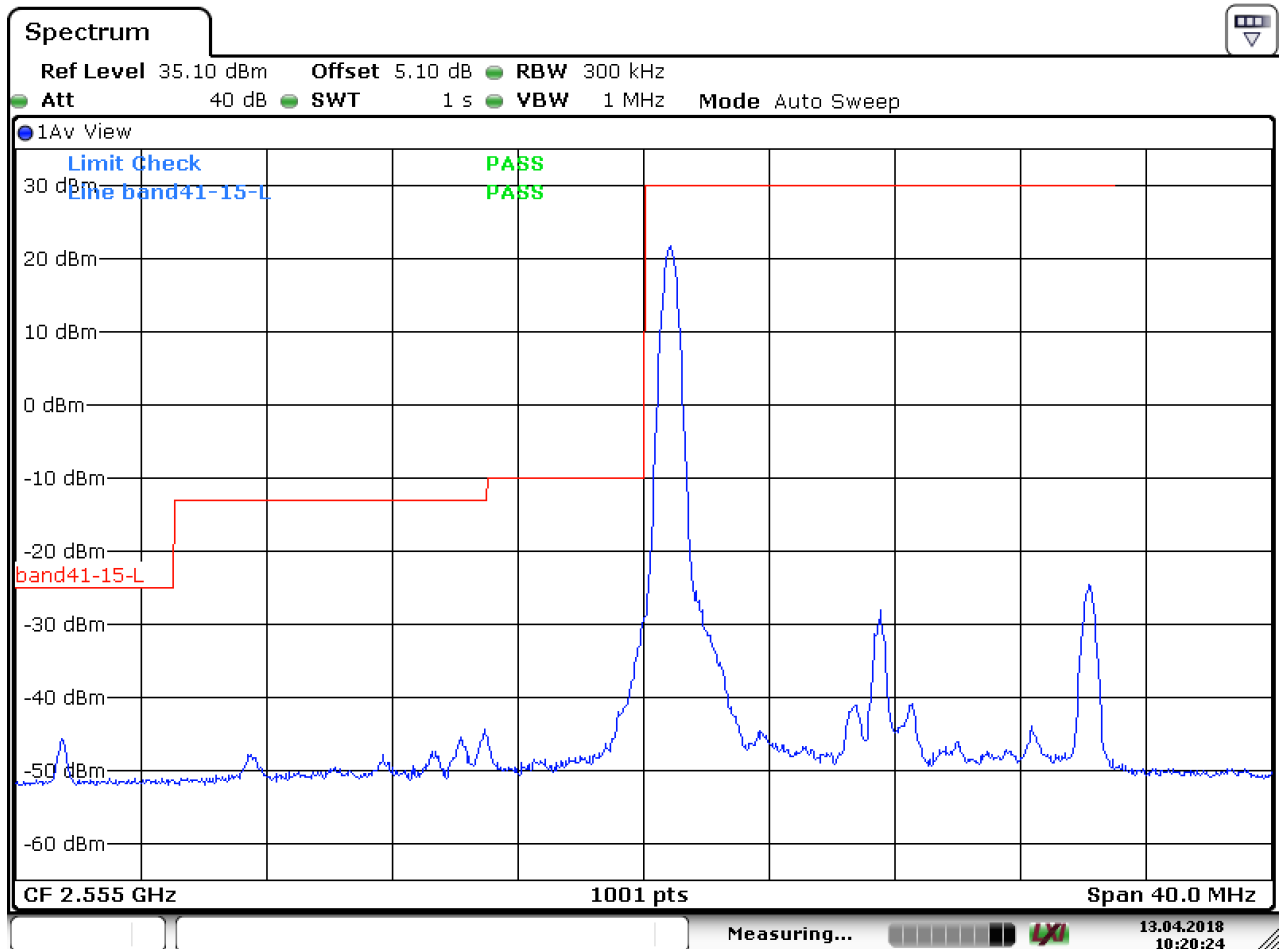
Date: 13.APR.2018 10:30:29

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

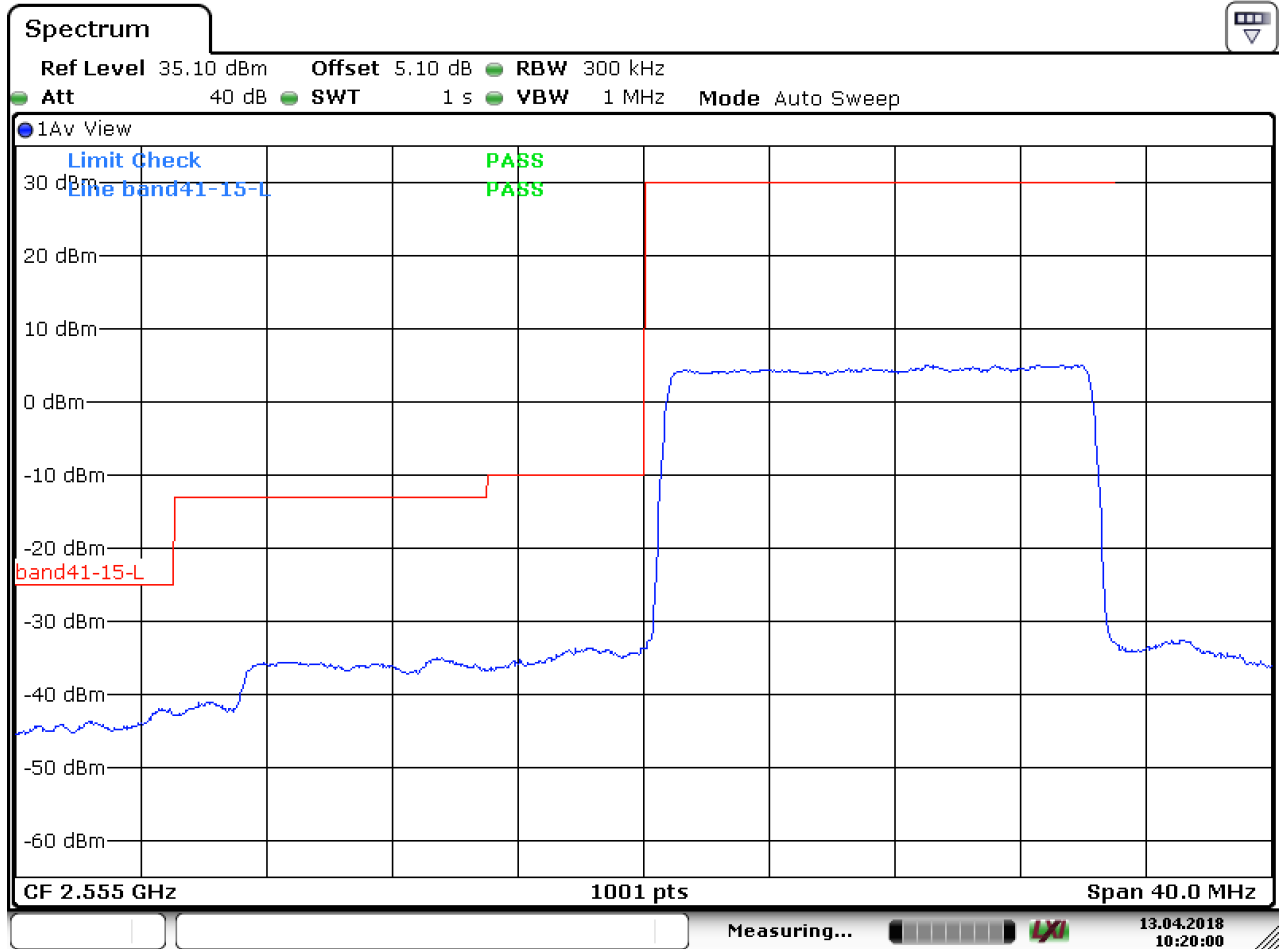
**5.1.1.5.1 Test Channel = LCH**

**5.1.1.5.1.1 Test RB=1RB#Low**



Date: 13.APR.2018 10:20:25

**5.1.1.5.1.2 Test RB=FullRBs**

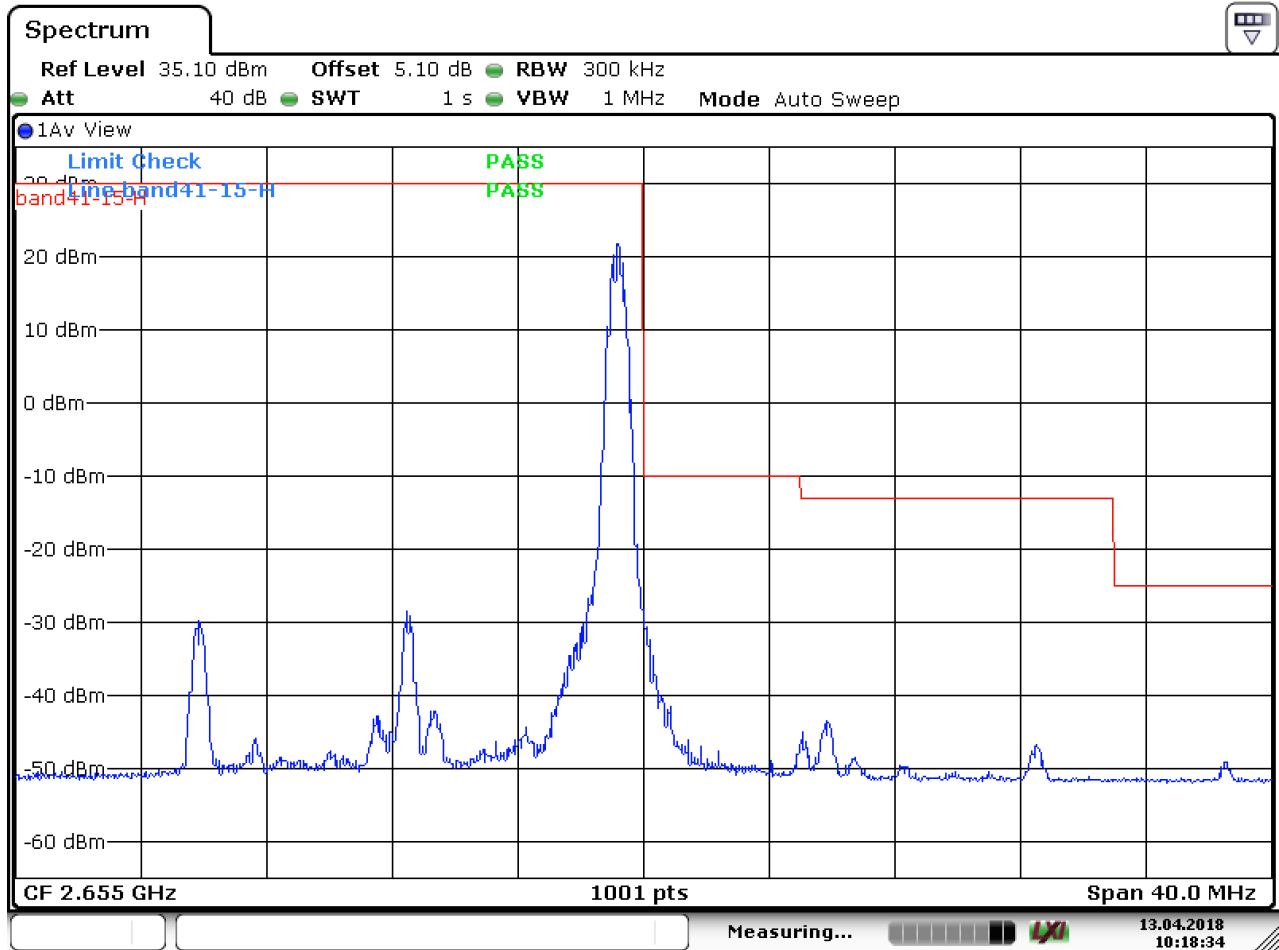


Date: 13.APR.2018 10:20:00

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**5.1.1.5.2 Test Channel = HCH**

**5.1.1.5.2.1 Test RB=1RB#High**



Date: 13.APR.2018 10:18:34

5.1.1.5.2.2 Test RB=FullRBs



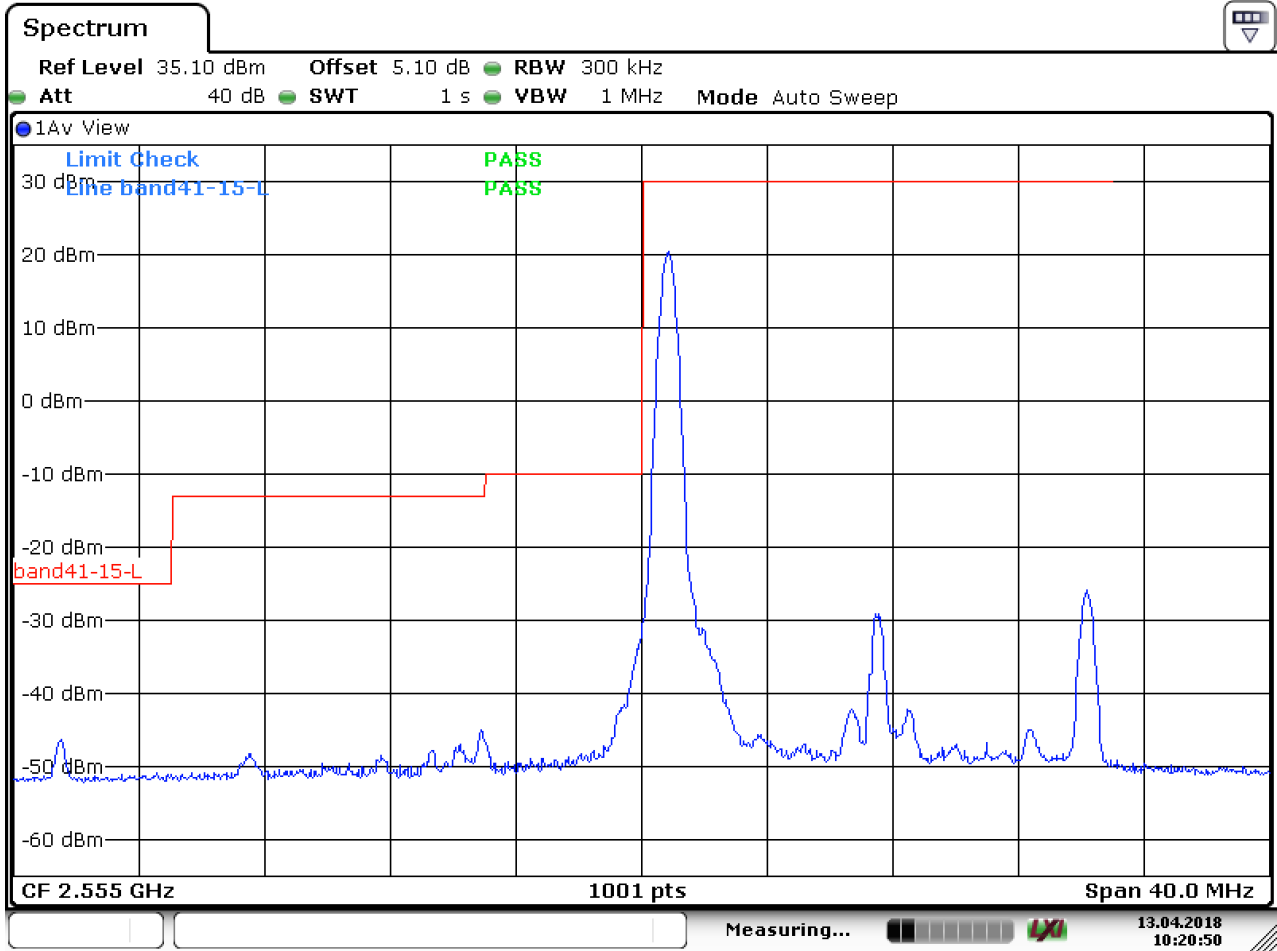
Date: 13.APR.2018 10:19:08

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**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#Low**

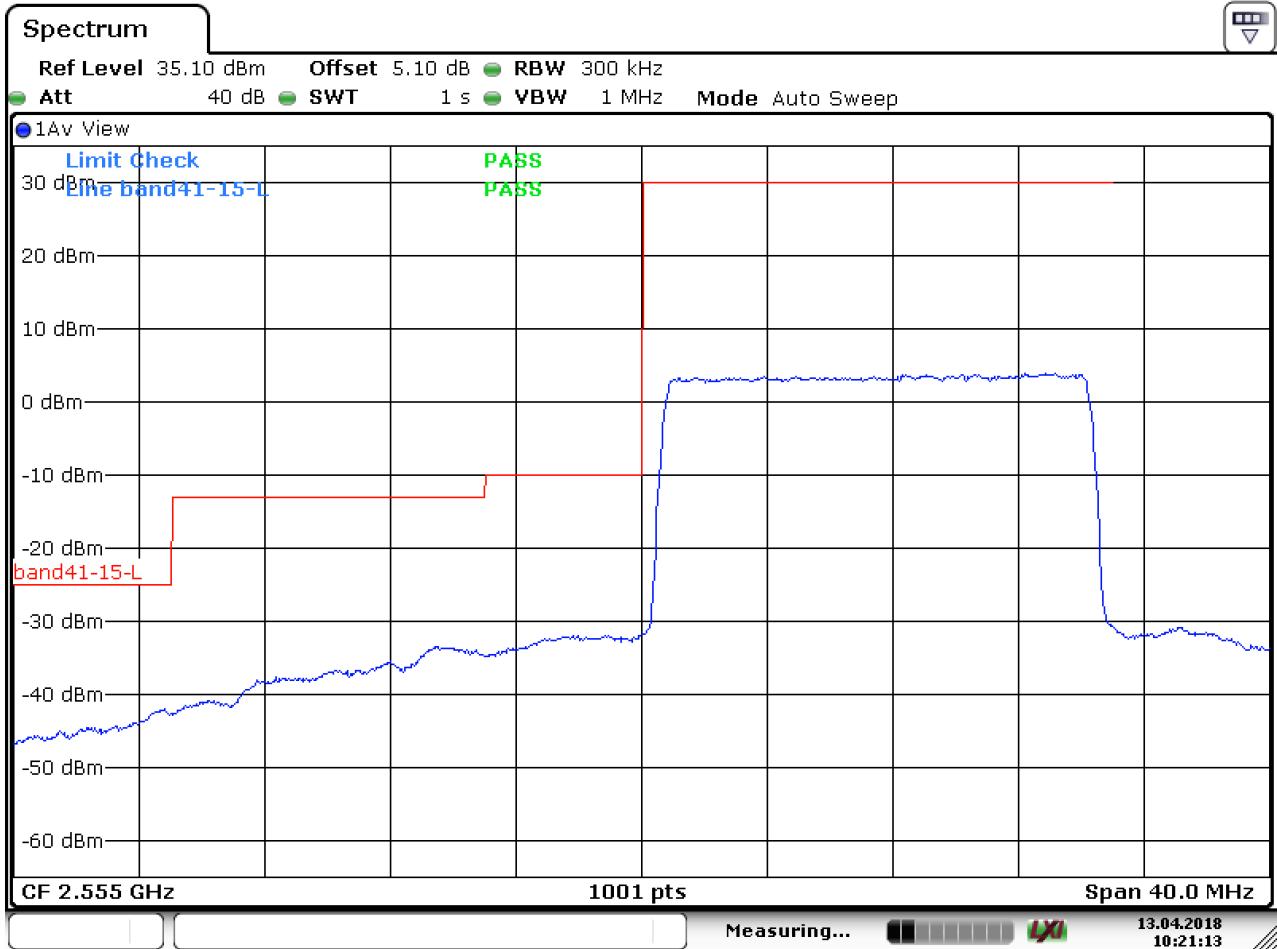


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**5.1.1.6.1.2 Test RB=FullRBs**

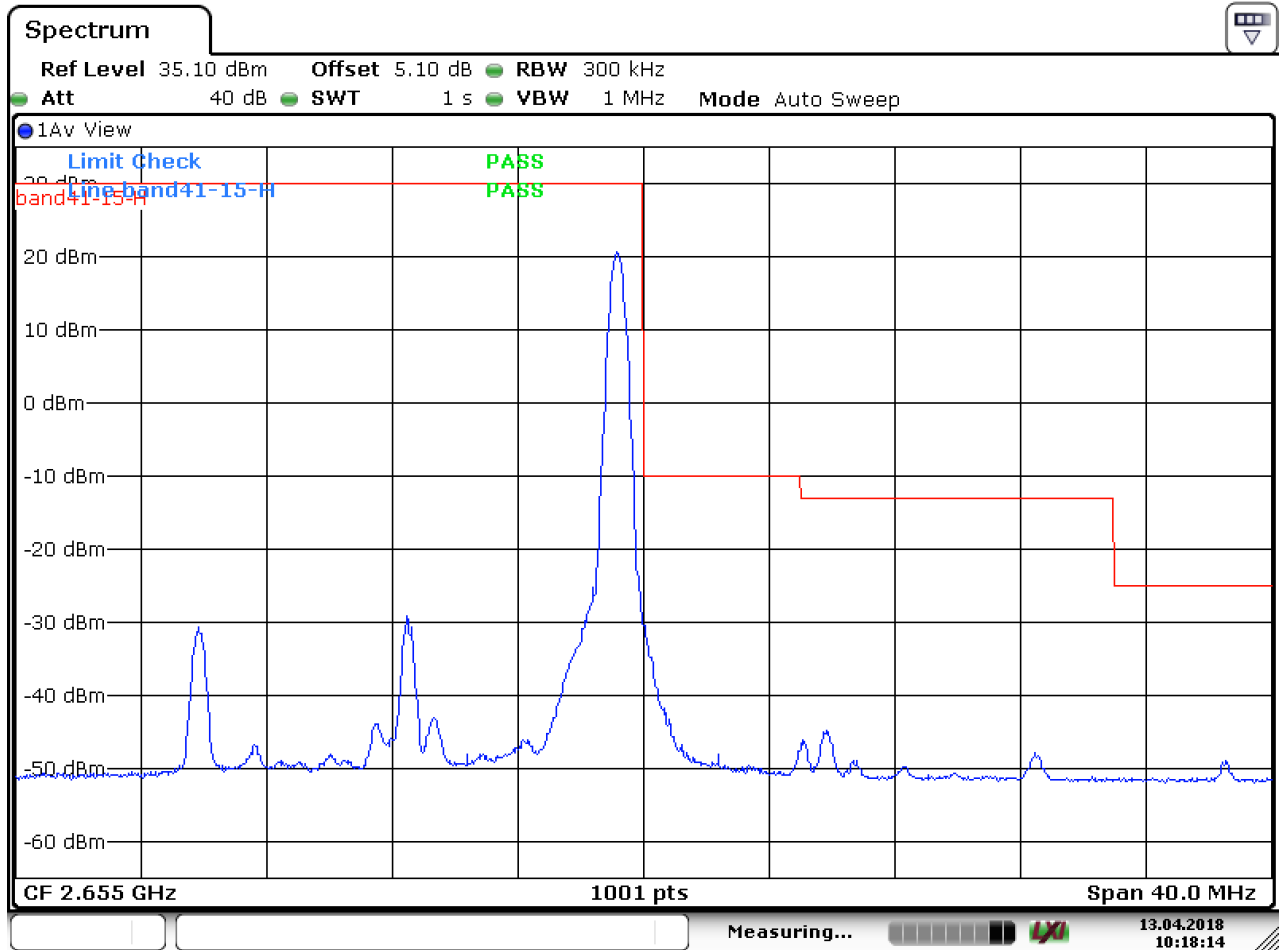


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**5.1.1.6.2 Test Channel = HCH**

**5.1.1.6.2.1 Test RB=1RB#High**



Date: 13.APR.2018 10:18:14

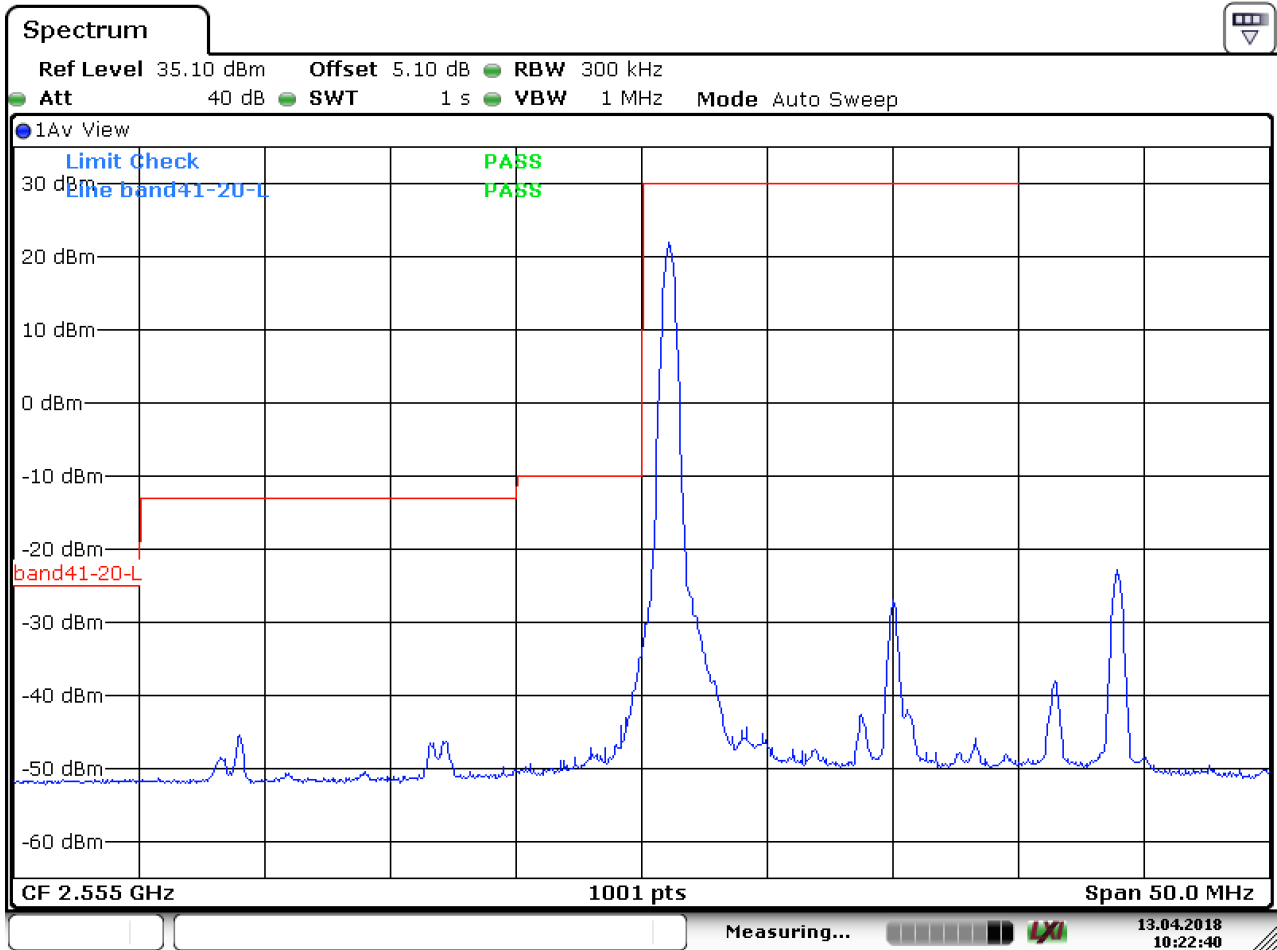
**5.1.1.6.2.2 Test RB=FullRBs**



Date: 13.APR.2018 10:17:40

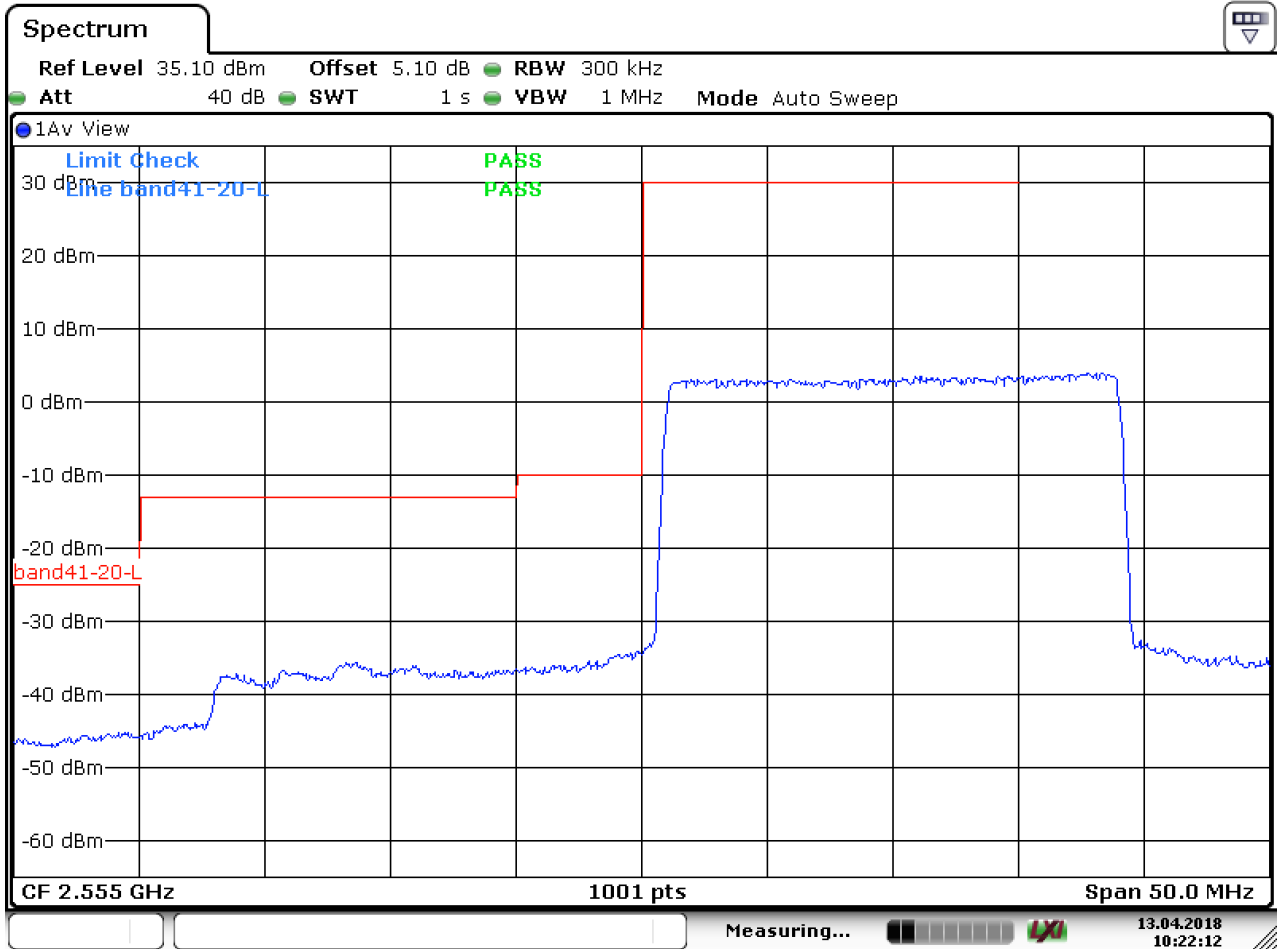
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**5.1.1.7 Test Mode = LTE/TM1 20MHz**  
**5.1.1.7.1 Test Channel = LCH**  
**5.1.1.7.1.1 Test RB=1RB#Low**



Date: 13.APR.2018 10:22:41

**5.1.1.7.1.2 Test RB=FullRBs**

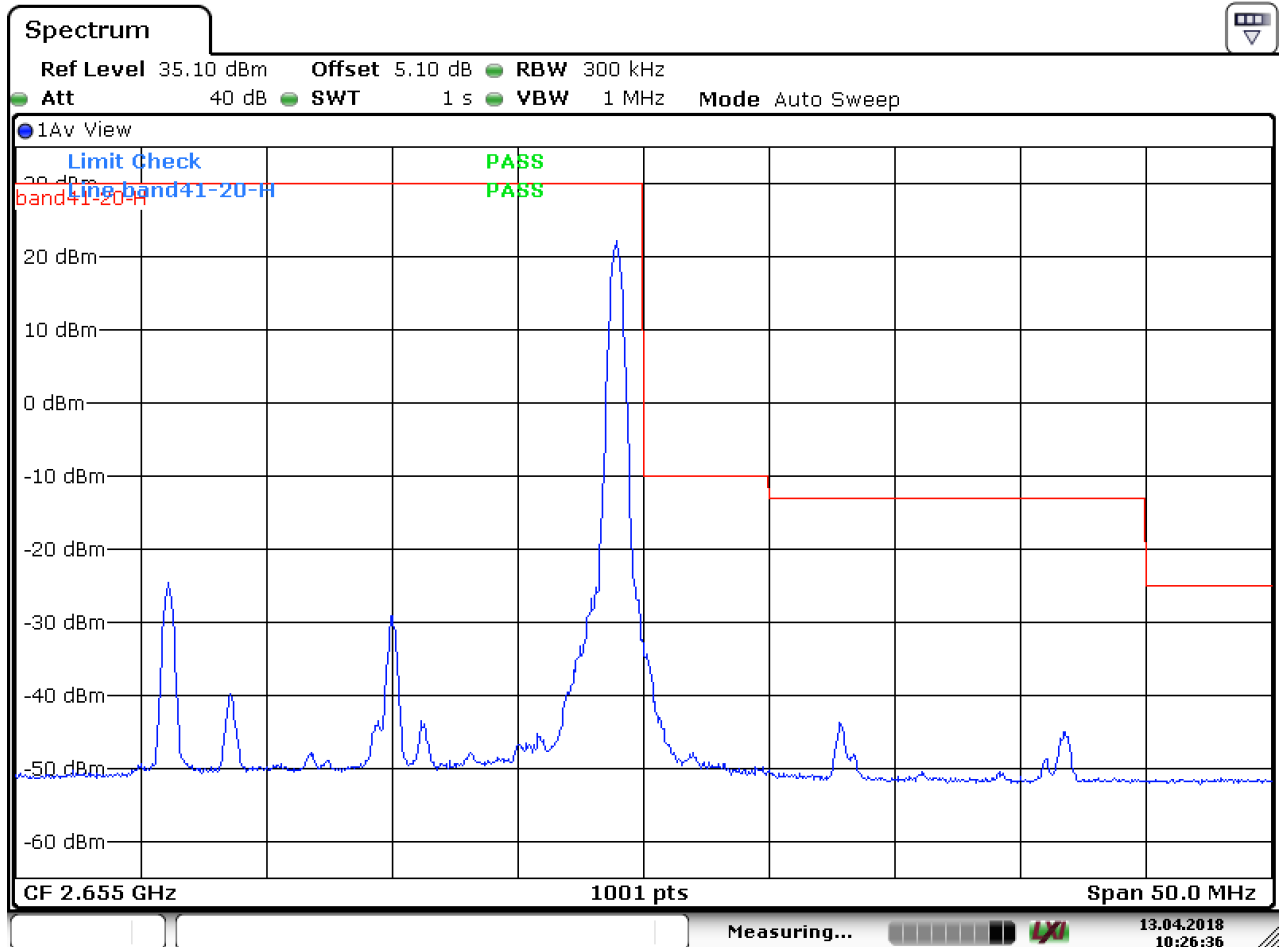


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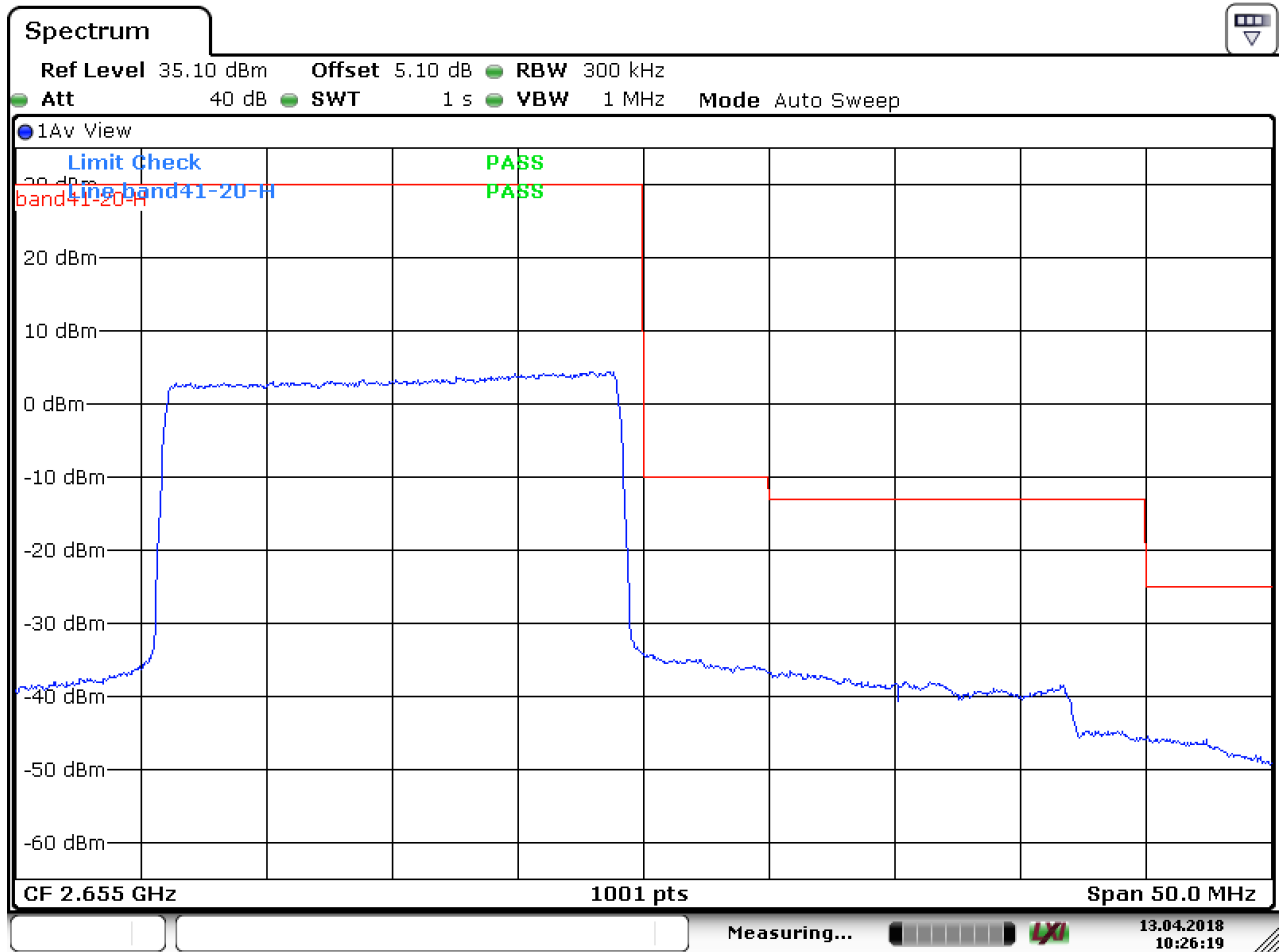
**5.1.1.7.2 Test Channel = HCH**

**5.1.1.7.2.1 Test RB=1RB#High**



Date: 13.APR.2018 10:26:37

**5.1.1.7.2.2 Test RB=FullRBs**



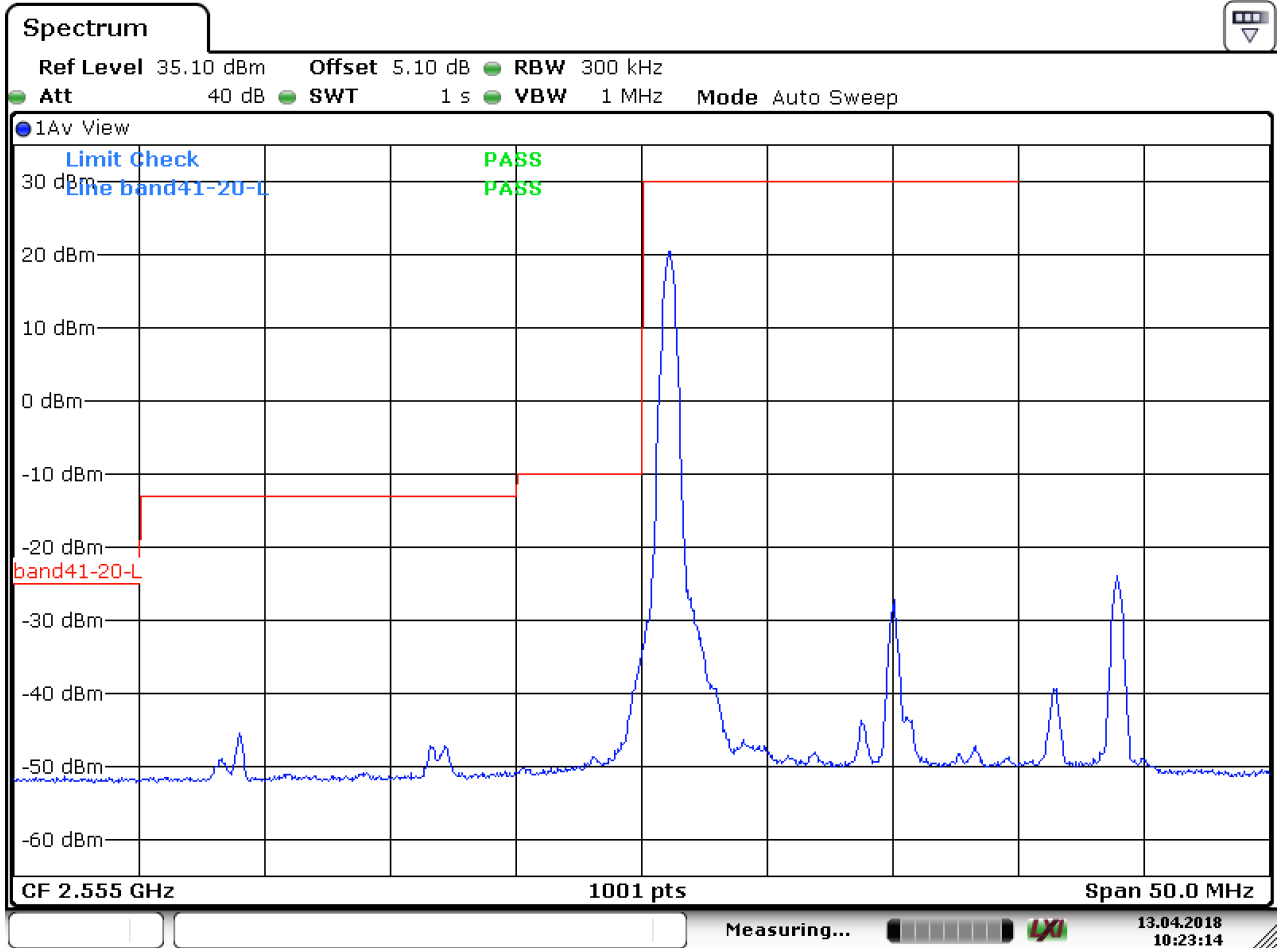
Date: 13.APR.2018 10:26:19

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**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#Low**

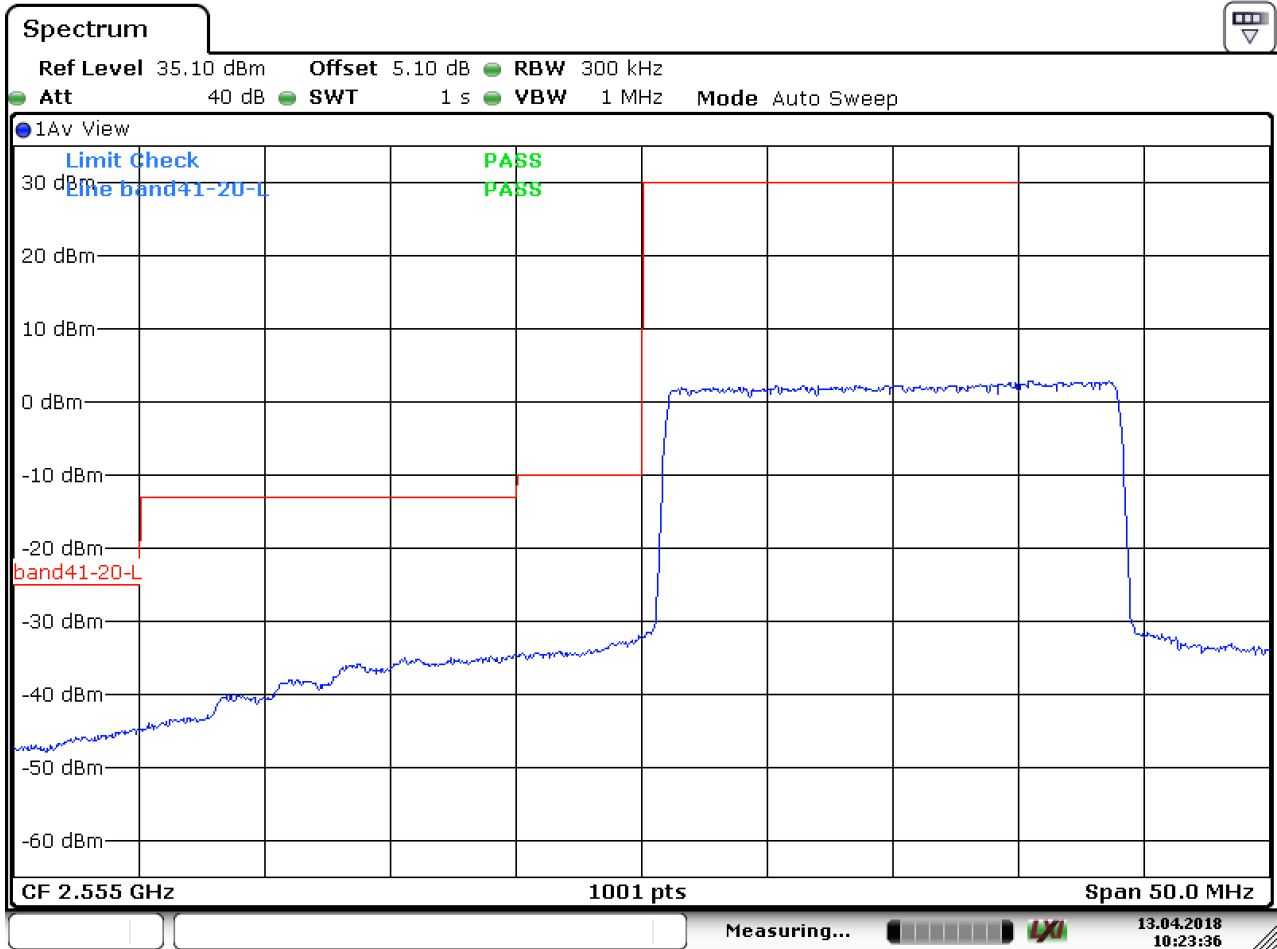


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**5.1.1.8.1.2 Test RB=FullIRBs**

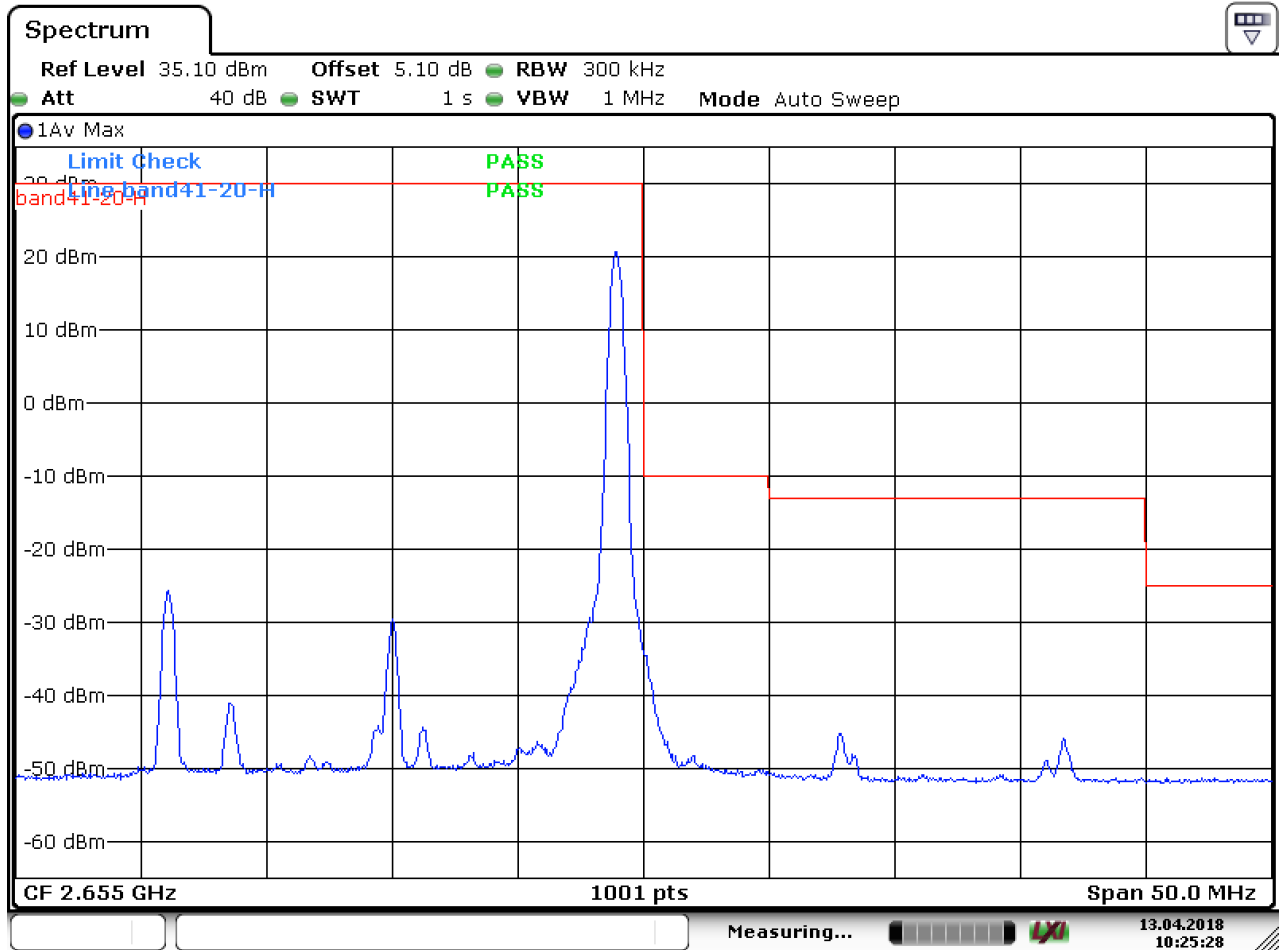


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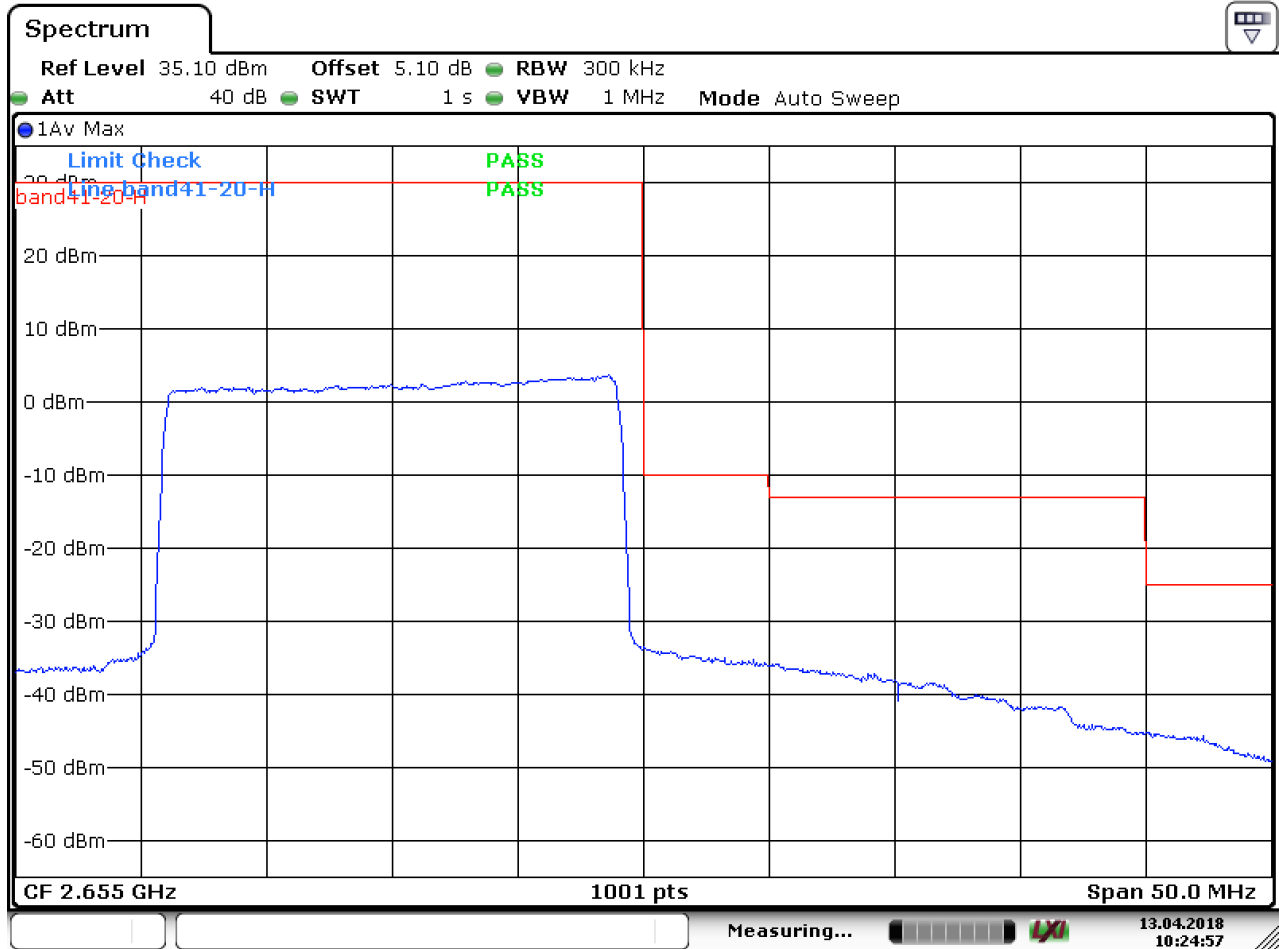
**5.1.1.8.2 Test Channel = HCH**

**5.1.1.8.2.1 Test RB=1RB#High**



Date: 13.APR.2018 10:25:29

**5.1.1.8.2.2 Test RB=FullRBs**



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## 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.

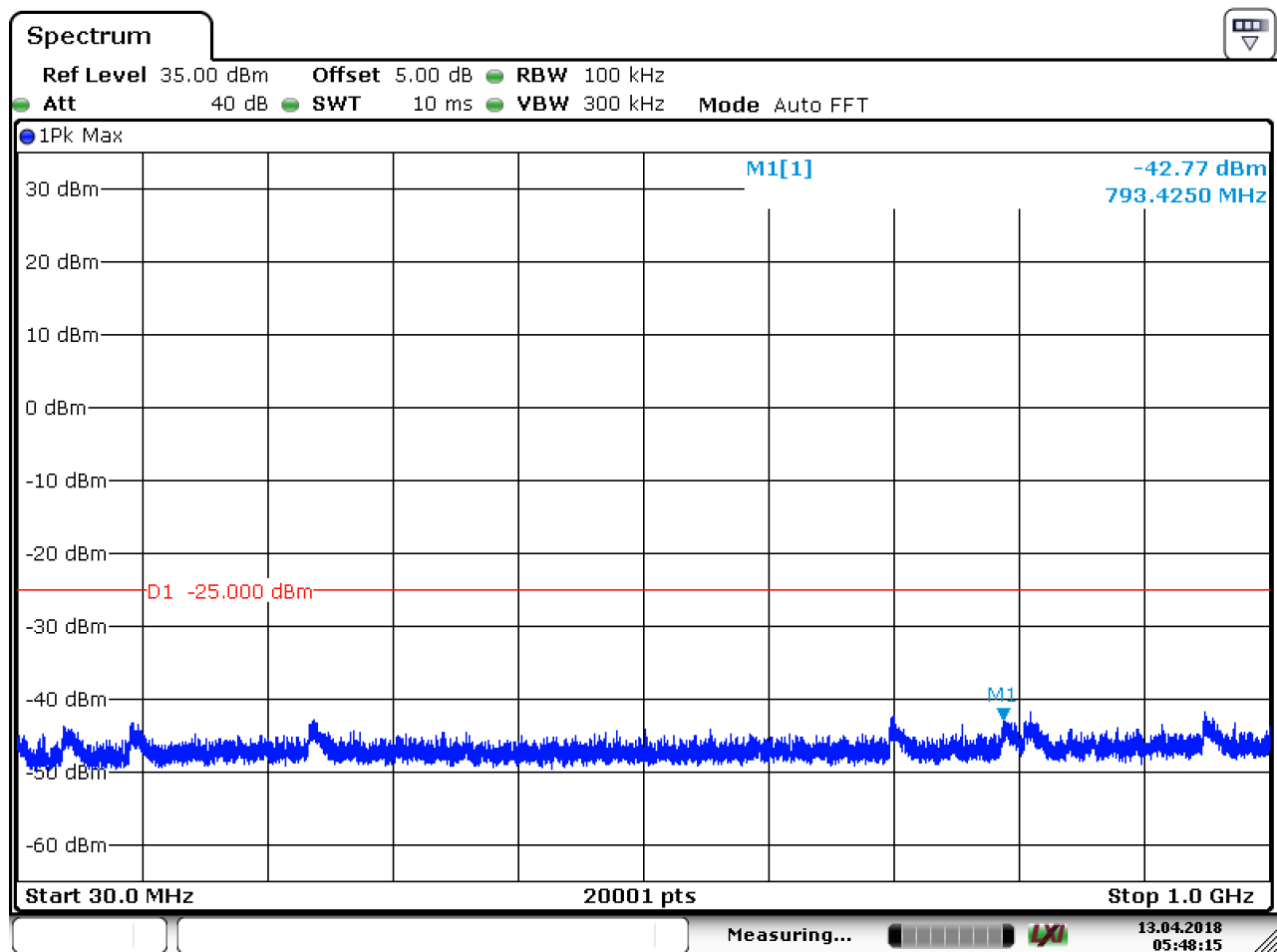
Part I - Test Plots

### 6.1 For LTE

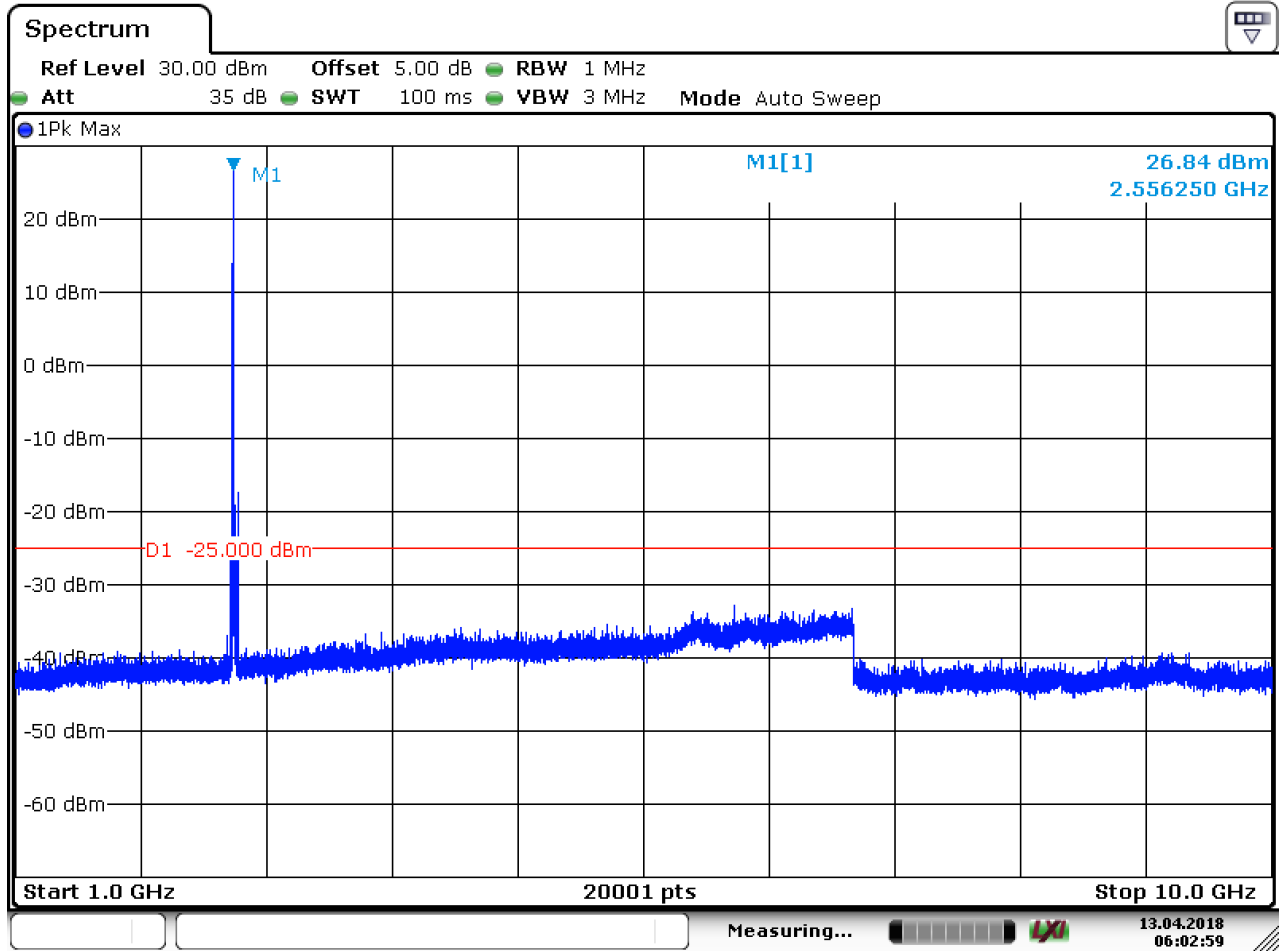
#### 6.1.1 Test Band = LTE BAND 41

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

##### 6.1.1.1.1 Test Channel = LCH

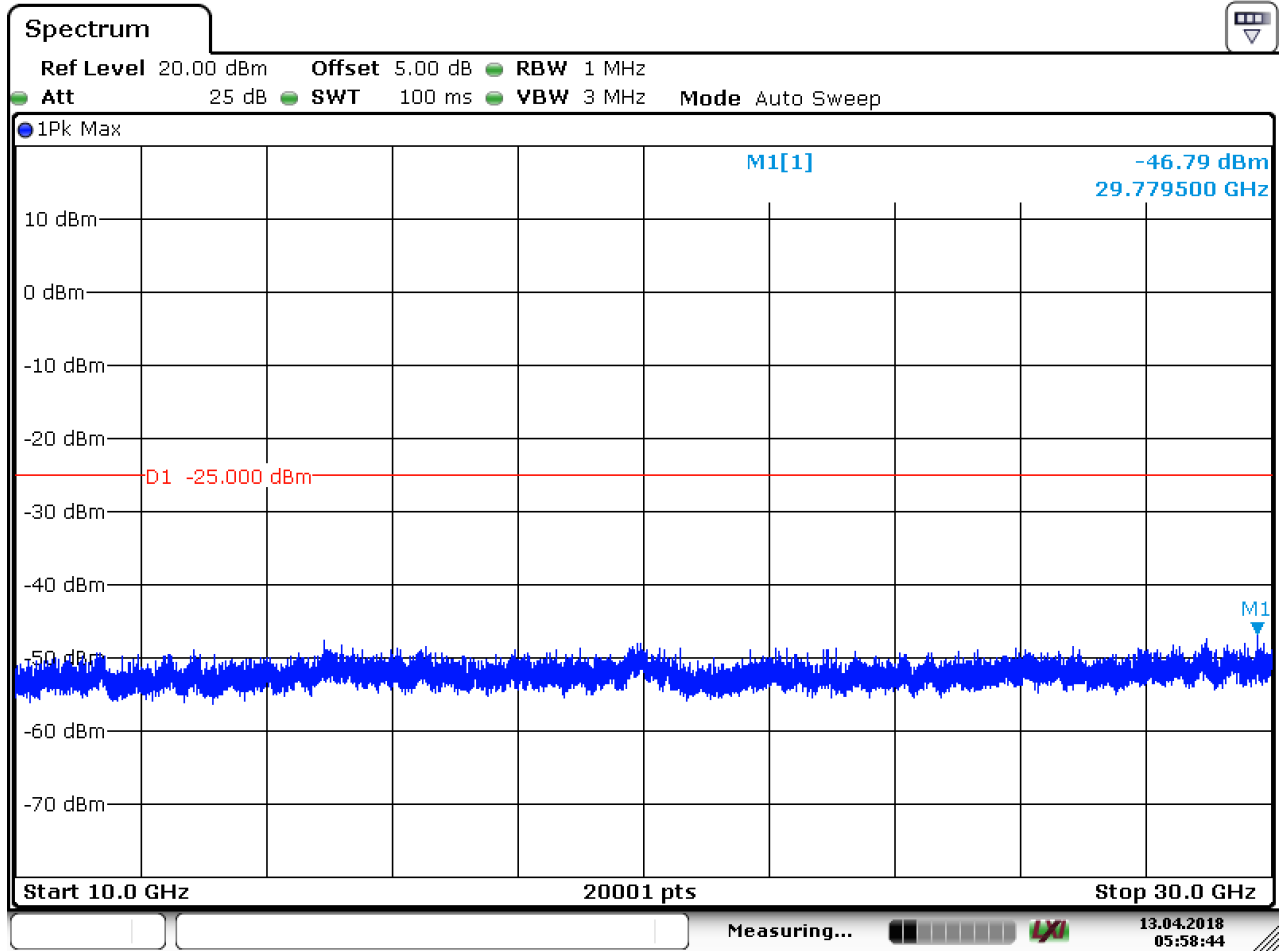


Date: 13.APR.2018 05:48:15



Date: 13.APR.2018 06:02:59

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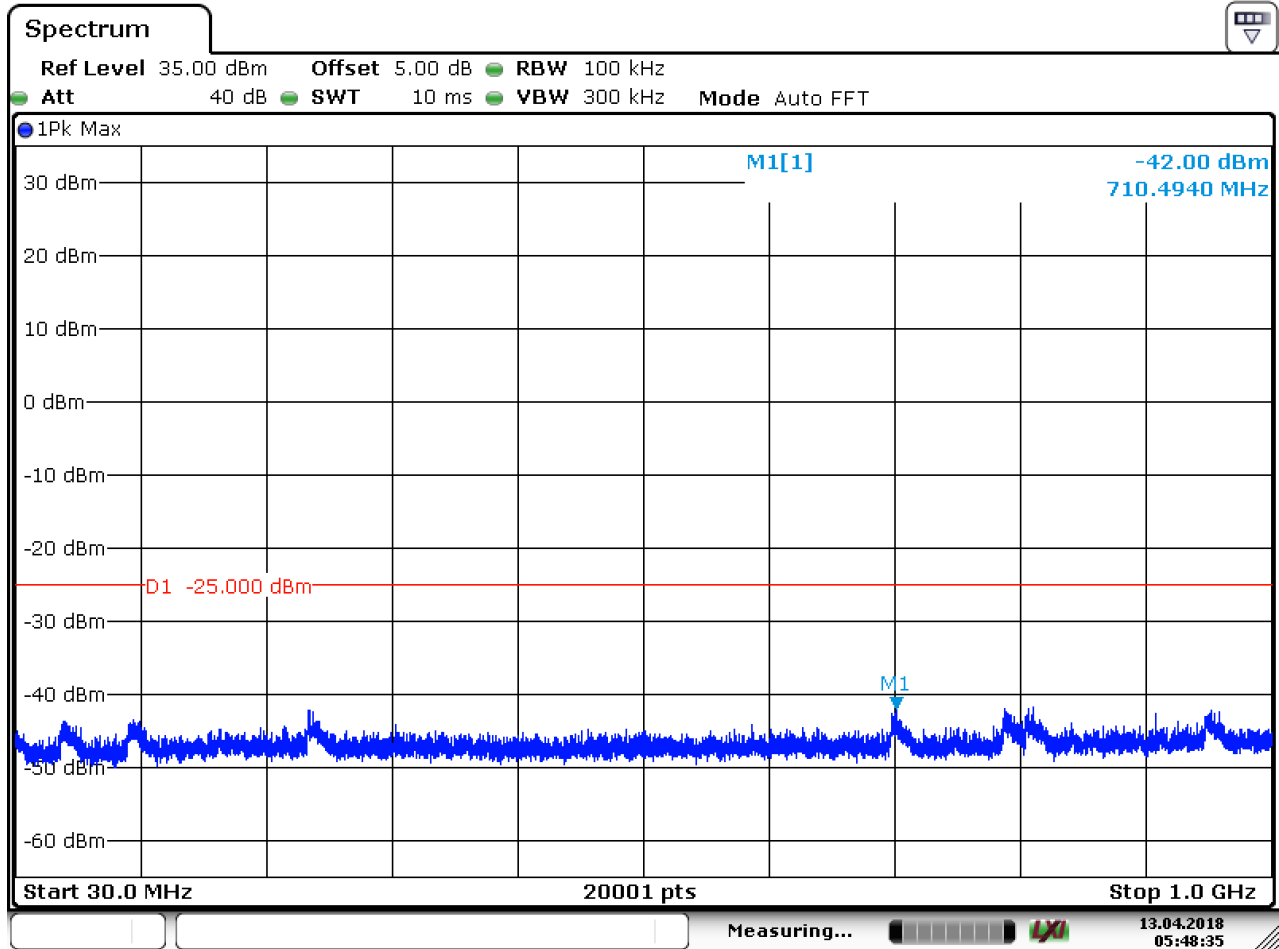


Date: 13.APR.2018 05:58:44

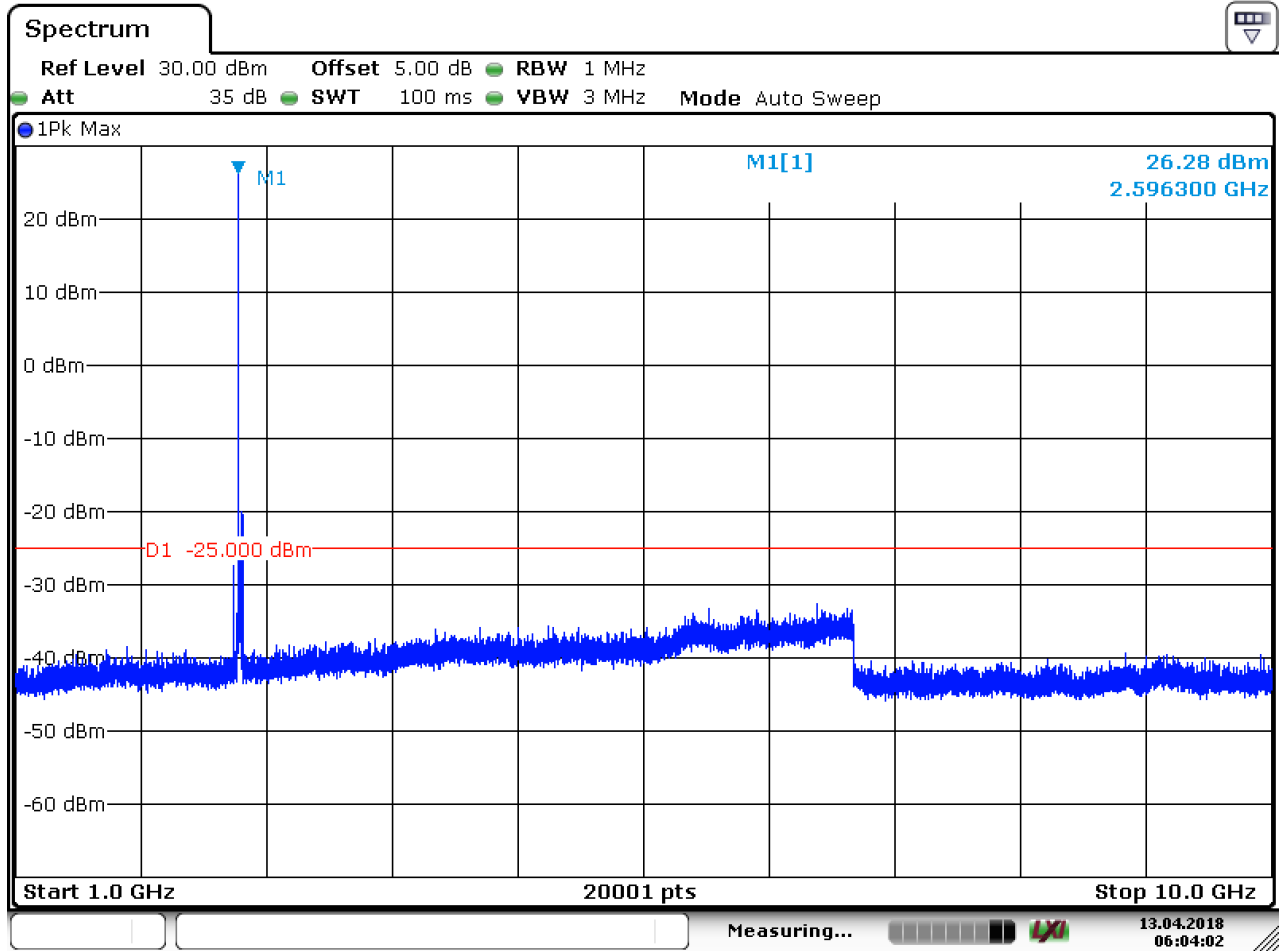
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6.1.1.1.2 Test Channel = MCH



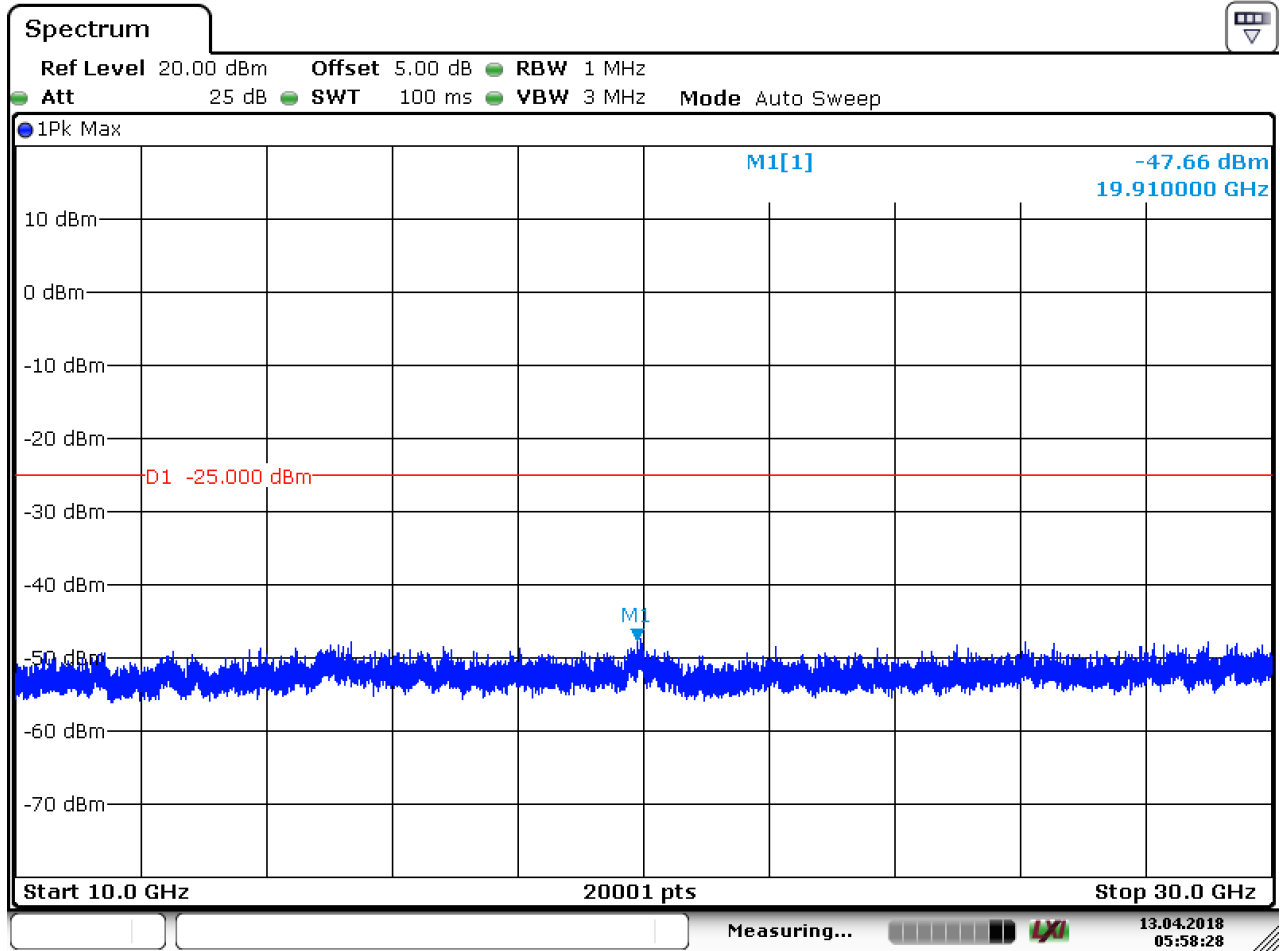
Date: 13.APR.2018 05:48:36



Date: 13.APR.2018 06:04:03

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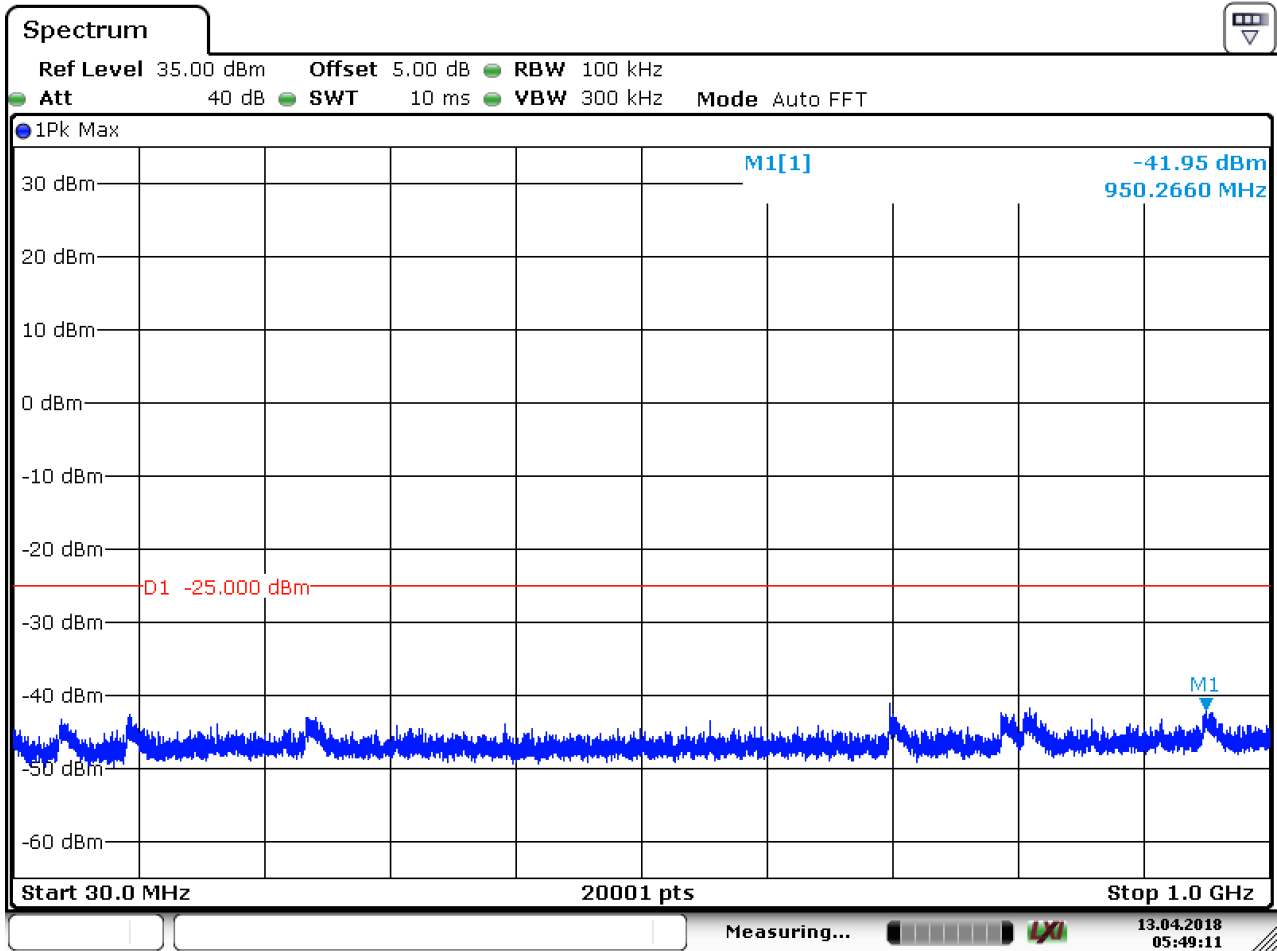


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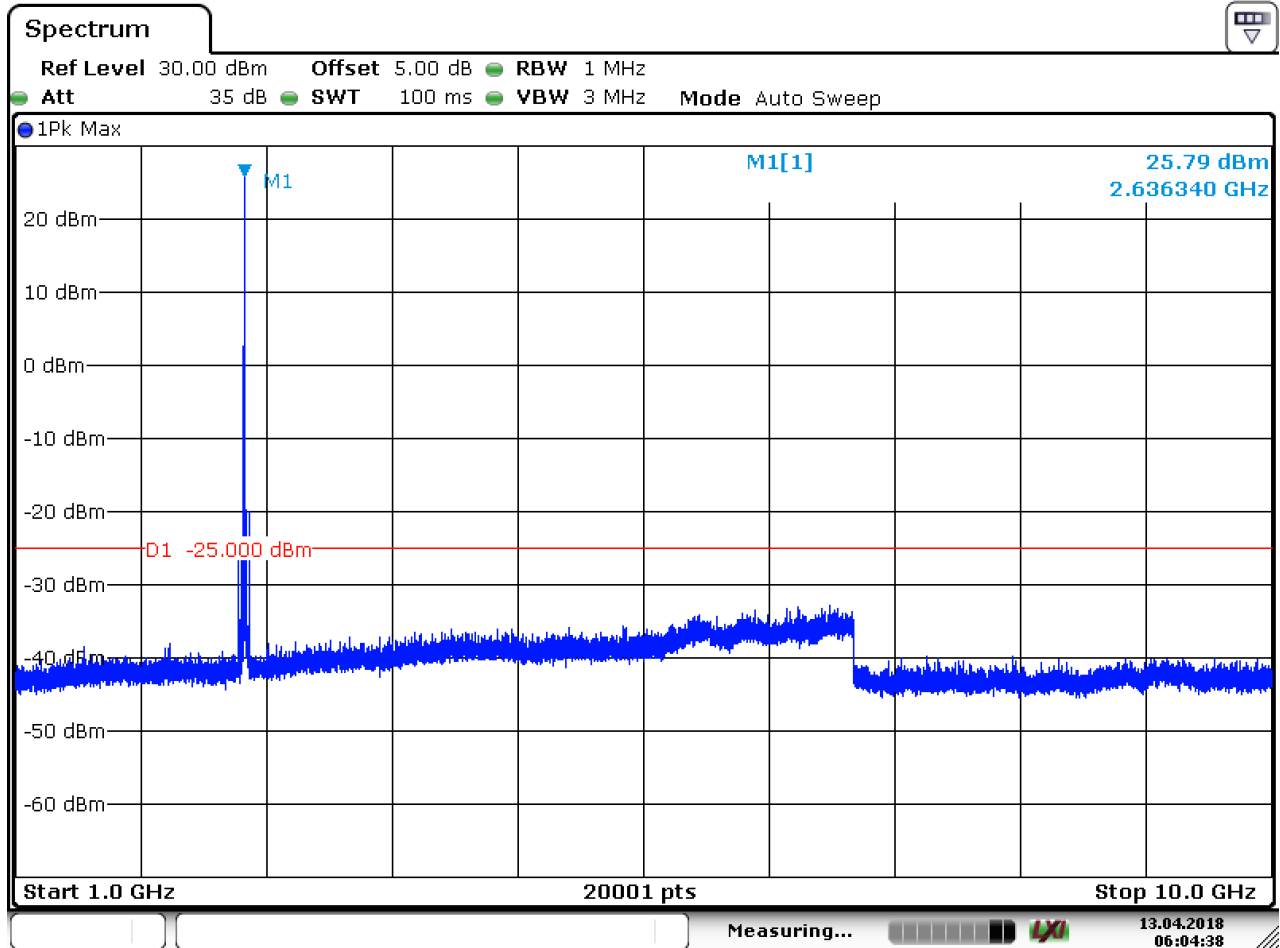


6.1.1.1.3 Test Channel = HCH



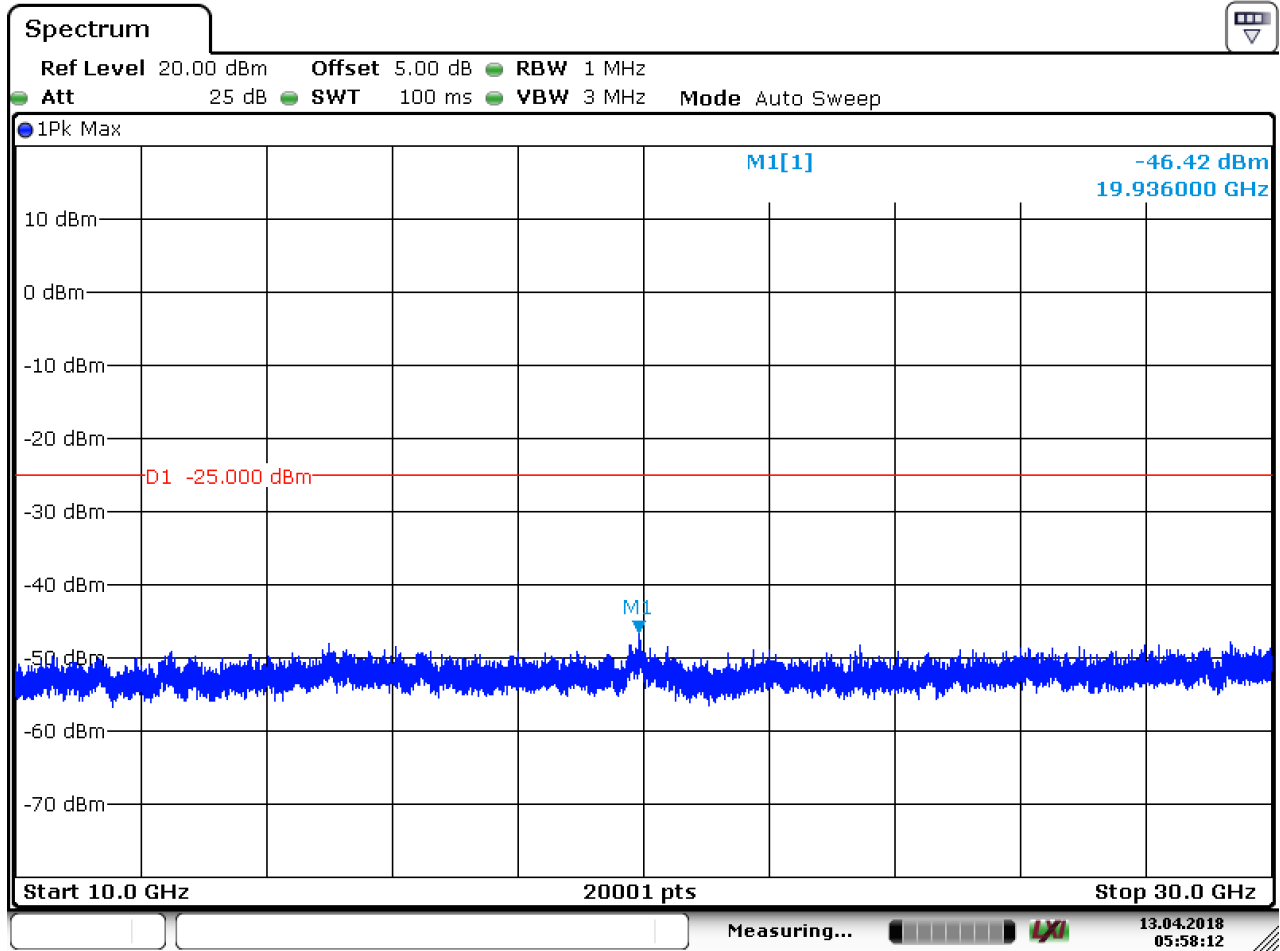
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## 7 Field Strength of Spurious Radiation

### 7.1 For LTE

#### 7.1.1 Test Band = LTE BAND 41

##### 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
63.500000	-81.97	-25.00	56.97	Vertical
90.500000	-85.11	-25.00	60.11	Vertical
1200.000000	-66.35	-25.00	41.35	Vertical
5112.175000	-63.16	-25.00	38.16	Vertical
7668.625000	-59.15	-25.00	34.15	Vertical
10621.900000	-63.26	-25.00	38.26	Vertical
62.950000	-77.88	-25.00	52.88	Horizontal
104.300000	-82.39	-25.00	57.39	Horizontal
1248.500000	-67.46	-25.00	42.46	Horizontal
5112.175000	-61.18	-25.00	36.18	Horizontal
7668.625000	-44.71	-25.00	19.71	Horizontal
10224.425000	-58.98	-25.00	33.98	Horizontal

###### 7.1.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
65.000000	-82.43	-25.00	57.43	Vertical
90.500000	-84.91	-25.00	59.91	Vertical
434.000000	-73.79	-25.00	48.79	Vertical
1236.000000	-66.53	-25.00	41.53	Vertical
5192.125000	-62.09	-25.00	37.09	Vertical
7788.225000	-60.86	-25.00	35.86	Vertical
63.950000	-78.24	-25.00	53.24	Horizontal
434.000000	-75.83	-25.00	50.83	Horizontal
1202.000000	-67.06	-25.00	42.06	Horizontal
5192.125000	-62.82	-25.00	37.82	Horizontal
7788.550000	-45.51	-25.00	20.51	Horizontal
10384.325000	-60.22	-25.00	35.22	Horizontal



**7.1.1.1.3 Test Channel = HCH**

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
62.900000	-82.36	-25.00	57.36	Vertical
109.400000	-86.32	-25.00	61.32	Vertical
1192.000000	-66.68	-25.00	41.68	Vertical
5272.075000	-60.90	-25.00	35.90	Vertical
7908.150000	-60.70	-25.00	35.70	Vertical
10592.650000	-63.71	-25.00	38.71	Vertical
62.500000	-77.73	-25.00	52.73	Horizontal
104.250000	-83.47	-25.00	58.47	Horizontal
434.000000	-74.66	-25.00	49.66	Horizontal
5272.400000	-62.41	-25.00	37.41	Horizontal
7908.475000	-49.10	-25.00	24.10	Horizontal
10544.550000	-59.49	-25.00	34.49	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 41	LTE/TM1 20MHz	LCH	TN	VL	-14.19	-0.005532	PASS
				VN	-12.25	-0.004776	PASS
				VH	-12.40	-0.004834	PASS
		MCH	TN	VL	-15.94	-0.006119	PASS
				VN	-17.04	-0.006541	PASS
				VH	-21.01	-0.008065	PASS
		HCH	TN	VL	-15.59	-0.005894	PASS
				VN	-17.64	-0.006669	PASS
				VH	-20.44	-0.007728	PASS
	LTE/TM2 20MHz	LCH	TN	VL	-12.60	-0.004912	PASS
				VN	-14.59	-0.005688	PASS
				VH	-13.48	-0.005255	PASS
		MCH	TN	VL	-17.28	-0.006633	PASS
				VN	-16.31	-0.006261	PASS
				VH	-16.45	-0.006315	PASS
		HCH	TN	VL	-16.84	-0.006367	PASS
				VN	-15.92	-0.006019	PASS
				VH	-15.39	-0.005819	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 41	LTE/TM1 20MHz	LCH	VN	-30	-11.54	-0.004499	PASS
				-20	-13.39	-0.005220	PASS
				-10	-12.69	-0.004947	PASS
				0	-11.40	-0.004444	PASS
				10	-15.21	-0.005839	PASS
				20	-16.08	-0.006173	PASS
				30	-15.52	-0.005958	PASS
				40	-18.25	-0.007006	PASS
				50	-15.08	-0.005789	PASS
		MCH	VN	-30	-16.78	-0.006344	PASS
				-20	-13.95	-0.005274	PASS
				-10	-15.19	-0.005743	PASS
				0	-15.16	-0.005732	PASS
				10	-15.52	-0.005868	PASS
				20	-11.53	-0.004508	PASS
				30	-11.34	-0.004434	PASS
				40	-12.86	-0.005028	PASS
				50	-10.44	-0.004082	PASS
		HCH	VN	-30	-13.56	-0.005302	PASS
				-20	-16.14	-0.006196	PASS
				-10	-16.57	-0.006361	PASS
				0	-20.99	-0.008058	PASS
				10	-18.05	-0.006805	PASS
				20	-17.32	-0.006530	PASS
30	-16.78			-0.006326	PASS		
40	-16.25			-0.006126	PASS		
50	-16.32	-0.006153	PASS				

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Shenzhen Branch**

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Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEBAND 41	LTE/TM2 20MHz	LCH	VN	-30	-16.49	-0.006330	PASS
				-20	-15.06	-0.005781	PASS
				-10	-16.31	-0.006161	PASS
				0	-13.62	-0.005144	PASS
				10	-14.16	-0.005348	PASS
				20	-16.06	-0.006066	PASS
				30	-16.85	-0.006364	PASS
				40	-12.87	-0.005018	PASS
				50	-13.22	-0.005154	PASS
		MCH	VN	-30	-14.98	-0.005840	PASS
				-20	-13.07	-0.005096	PASS
				-10	-13.48	-0.005255	PASS
				0	-15.18	-0.005827	PASS
				10	-14.76	-0.005666	PASS
				20	-13.83	-0.005309	PASS
				30	-16.32	-0.006265	PASS
				40	-16.95	-0.006507	PASS
				50	-13.86	-0.005240	PASS
		HCH	VN	-30	-16.14	-0.006102	PASS
				-20	-15.11	-0.005713	PASS
				-10	-14.59	-0.005516	PASS
				0	-14.48	-0.005474	PASS
				10	-12.30	-0.004795	PASS
				20	-16.49	-0.006330	PASS
30	-15.06			-0.005781	PASS		
40	-16.31			-0.006161	PASS		
50	-13.62			-0.005144	PASS		

The End

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