



# Appendix B

## E-UTRA Band 5



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# 1 Effective (Isotropic) Radiated Power Output Data

Effective Radiated Power of Transmitter (ERP) for LTE BAND 5

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND5	LTE/TM1	1.4M	LCH	RB1#0	22.8	16.75	38.45	PASS
				RB1#2	22.87	16.82	38.45	PASS
				RB1#5	22.85	16.8	38.45	PASS
				RB3#0	22.99	16.94	38.45	PASS
				RB3#2	22.99	16.94	38.45	PASS
				RB3#3	22.99	16.94	38.45	PASS
				RB6#0	22	15.95	38.45	PASS
			MCH	RB1#0	22.81	16.76	38.45	PASS
				RB1#2	22.85	16.8	38.45	PASS
				RB1#5	22.85	16.8	38.45	PASS
				RB3#0	22.95	16.9	38.45	PASS
				RB3#2	22.96	16.91	38.45	PASS
				RB3#3	22.95	16.9	38.45	PASS
				RB6#0	21.98	15.93	38.45	PASS
			HCH	RB1#0	22.77	16.72	38.45	PASS
				RB1#2	22.82	16.77	38.45	PASS
				RB1#5	22.83	16.78	38.45	PASS
				RB3#0	22.95	16.9	38.45	PASS
				RB3#2	22.94	16.89	38.45	PASS
				RB3#3	22.95	16.9	38.45	PASS
				RB6#0	21.97	15.92	38.45	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
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BAND5	LTE/TM2	1.4M	LCH	RB1#0	21.76	15.71	38.45	PASS
				RB1#2	21.85	15.8	38.45	PASS
				RB1#5	21.77	15.72	38.45	PASS
				RB3#0	21.86	15.81	38.45	PASS
				RB3#2	21.86	15.81	38.45	PASS
				RB3#3	21.81	15.76	38.45	PASS
				RB6#0	21.07	15.02	38.45	PASS
			MCH	RB1#0	22.04	15.99	38.45	PASS
				RB1#2	22.12	16.07	38.45	PASS
				RB1#5	22.07	16.02	38.45	PASS
				RB3#0	21.91	15.86	38.45	PASS
				RB3#2	21.91	15.86	38.45	PASS
				RB3#3	21.96	15.91	38.45	PASS
				RB6#0	20.93	14.88	38.45	PASS
			HCH	RB1#0	21.88	15.83	38.45	PASS
				RB1#2	21.98	15.93	38.45	PASS
				RB1#5	21.91	15.86	38.45	PASS
				RB3#0	21.89	15.84	38.45	PASS
				RB3#2	21.89	15.84	38.45	PASS
				RB3#3	21.83	15.78	38.45	PASS
				RB6#0	21.01	14.96	38.45	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND5	LTE/TM1	3M	LCH	RB1#0	22.96	16.91	38.45	PASS
				RB1#7	22.91	16.86	38.45	PASS
				RB1#14	22.98	16.93	38.45	PASS
				RB8#0	22.16	16.11	38.45	PASS
				RB8#4	22.16	16.11	38.45	PASS
				RB8#7	22.15	16.1	38.45	PASS
				RB15#0	22.15	16.1	38.45	PASS
			MCH	RB1#0	22.88	16.83	38.45	PASS
				RB1#7	22.83	16.78	38.45	PASS
				RB1#14	22.86	16.81	38.45	PASS
				RB8#0	22.11	16.06	38.45	PASS
				RB8#4	22.12	16.07	38.45	PASS
				RB8#7	22.11	16.06	38.45	PASS
				RB15#0	22.09	16.04	38.45	PASS
			HCH	RB1#0	22.87	16.82	38.45	PASS
				RB1#7	22.8	16.75	38.45	PASS
				RB1#14	22.88	16.83	38.45	PASS
				RB8#0	22.08	16.03	38.45	PASS
				RB8#4	22.07	16.02	38.45	PASS
				RB8#7	22.06	16.01	38.45	PASS
				RB15#0	22.05	16	38.45	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND5	LTE/TM2	3M	LCH	RB1#0	21.85	15.8	38.45	PASS
				RB1#7	21.81	15.76	38.45	PASS
				RB1#14	21.86	15.81	38.45	PASS
				RB8#0	21.23	15.18	38.45	PASS
				RB8#4	21.23	15.18	38.45	PASS
				RB8#7	21.23	15.18	38.45	PASS
				RB15#0	21.15	15.1	38.45	PASS
			MCH	RB1#0	22.08	16.03	38.45	PASS
				RB1#7	22.01	15.96	38.45	PASS
				RB1#14	22.02	15.97	38.45	PASS
				RB8#0	21.18	15.13	38.45	PASS
				RB8#4	21.19	15.14	38.45	PASS
				RB8#7	21.17	15.12	38.45	PASS
				RB15#0	21.18	15.13	38.45	PASS
			HCH	RB1#0	22.02	15.97	38.45	PASS
				RB1#7	21.95	15.9	38.45	PASS
				RB1#14	22.02	15.97	38.45	PASS
				RB8#0	21.06	15.01	38.45	PASS
				RB8#4	21.06	15.01	38.45	PASS
				RB8#7	21.07	15.02	38.45	PASS
				RB15#0	21	14.95	38.45	PASS



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BAND5	LTE/TM1	5M	LCH	RB1#0	22.98	16.93	38.45	PASS
				RB1#13	22.97	16.92	38.45	PASS
				RB1#24	22.96	16.91	38.45	PASS
				RB12#0	22.04	15.99	38.45	PASS
				RB12#6	22.05	16	38.45	PASS
				RB12#13	22.05	16	38.45	PASS
				RB25#0	22.07	16.02	38.45	PASS
			MCH	RB1#0	22.98	16.93	38.45	PASS
				RB1#13	22.96	16.91	38.45	PASS
				RB1#24	22.93	16.88	38.45	PASS
				RB12#0	22.02	15.97	38.45	PASS
				RB12#6	22.02	15.97	38.45	PASS
				RB12#13	21.96	15.91	38.45	PASS
				RB25#0	21.99	15.94	38.45	PASS
			HCH	RB1#0	22.94	16.89	38.45	PASS
				RB1#13	22.93	16.88	38.45	PASS
				RB1#24	22.93	16.88	38.45	PASS
				RB12#0	22.04	15.99	38.45	PASS
				RB12#6	22.03	15.98	38.45	PASS
				RB12#13	21.93	15.88	38.45	PASS
				RB25#0	21.98	15.93	38.45	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND5	LTE/TM2	5M	LCH	RB1#0	21.99	15.94	38.45	PASS
				RB1#13	21.99	15.94	38.45	PASS
				RB1#24	21.99	15.94	38.45	PASS
				RB12#0	21.1	15.05	38.45	PASS
				RB12#6	21.11	15.06	38.45	PASS
				RB12#13	21.12	15.07	38.45	PASS
				RB25#0	21.16	15.11	38.45	PASS
			MCH	RB1#0	22.16	16.11	38.45	PASS
				RB1#13	22.13	16.08	38.45	PASS
				RB1#24	22.09	16.04	38.45	PASS
				RB12#0	21.12	15.07	38.45	PASS
				RB12#6	21.11	15.06	38.45	PASS
				RB12#13	21.06	15.01	38.45	PASS
				RB25#0	21.04	14.99	38.45	PASS
			HCH	RB1#0	21.94	15.89	38.45	PASS
				RB1#13	21.94	15.89	38.45	PASS
				RB1#24	21.96	15.91	38.45	PASS
				RB12#0	21.04	14.99	38.45	PASS
				RB12#6	21.05	15	38.45	PASS
				RB12#13	20.95	14.9	38.45	PASS
				RB25#0	20.99	14.94	38.45	PASS





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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND5	LTE/TM1	10M	LCH	1RB#0	23.12	17.07	38.45	PASS
				1RB#24	23.06	17.01	38.45	PASS
				1RB#49	23.04	16.99	38.45	PASS
				25RB#0	22.08	16.03	38.45	PASS
				25RB#12	22.08	16.03	38.45	PASS
				25RB#25	22.07	16.02	38.45	PASS
				50RB#0	22.08	16.03	38.45	PASS
			MCH	1RB#0	23.1	17.05	38.45	PASS
				1RB#24	23.04	16.99	38.45	PASS
				1RB#49	22.99	16.94	38.45	PASS
				25RB#0	22.06	16.01	38.45	PASS
				25RB#12	22.06	16.01	38.45	PASS
				25RB#25	21.95	15.9	38.45	PASS
				50RB#0	22.04	15.99	38.45	PASS
			HCH	1RB#0	23.01	16.96	38.45	PASS
				1RB#24	22.9	16.85	38.45	PASS
				1RB#49	22.92	16.87	38.45	PASS
				25RB#0	22.1	16.05	38.45	PASS
				25RB#12	22.1	16.05	38.45	PASS
				25RB#25	21.88	15.83	38.45	PASS
				50RB#0	22.02	15.97	38.45	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND5	LTE/TM2	10M	LCH	1RB#0	22.33	16.28	38.45	PASS
				1RB#24	22.27	16.22	38.45	PASS
				1RB#49	22.23	16.18	38.45	PASS
				25RB#0	21.19	15.14	38.45	PASS
				25RB#12	21.19	15.14	38.45	PASS
				25RB#25	21.17	15.12	38.45	PASS
				50RB#0	21.19	15.14	38.45	PASS
			MCH	1RB#0	22.02	15.97	38.45	PASS
				1RB#24	21.96	15.91	38.45	PASS
				1RB#49	21.93	15.88	38.45	PASS
				25RB#0	21.18	15.13	38.45	PASS
				25RB#12	21.17	15.12	38.45	PASS
				25RB#25	21	14.95	38.45	PASS
				50RB#0	21.11	15.06	38.45	PASS
			HCH	1RB#0	22.23	16.18	38.45	PASS
				1RB#24	22.13	16.08	38.45	PASS
				1RB#49	22.15	16.1	38.45	PASS
				25RB#0	21.1	15.05	38.45	PASS
				25RB#12	21.11	15.06	38.45	PASS
				25RB#25	20.88	14.83	38.45	PASS
				50RB#0	21.02	14.97	38.45	PASS

Note:

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

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

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 5	TM1/10M	LCH	5.04	13	PASS
		MCH	5.01	13	PASS
		HCH	4.96	13	PASS
	TM2/10M	LCH	6.03	13	PASS
		MCH	5.97	13	PASS
		HCH	5.94	13	PASS

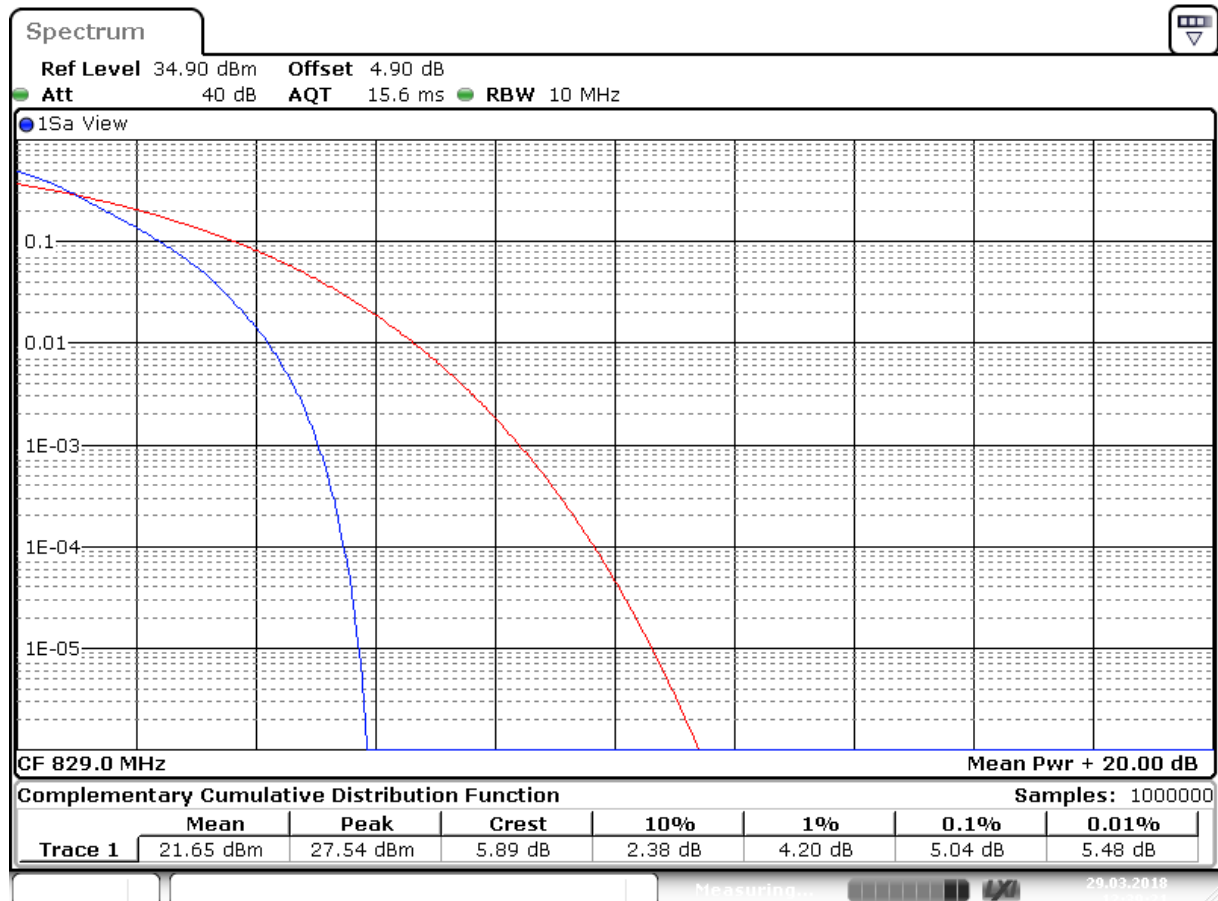
### Part II - Test Plots

## 2.1 For LTE

### 2.1.1 Test Band = LTE band5

#### 2.1.1.1 Test Mode = LTE/TM1.Bandwidth=10MHz

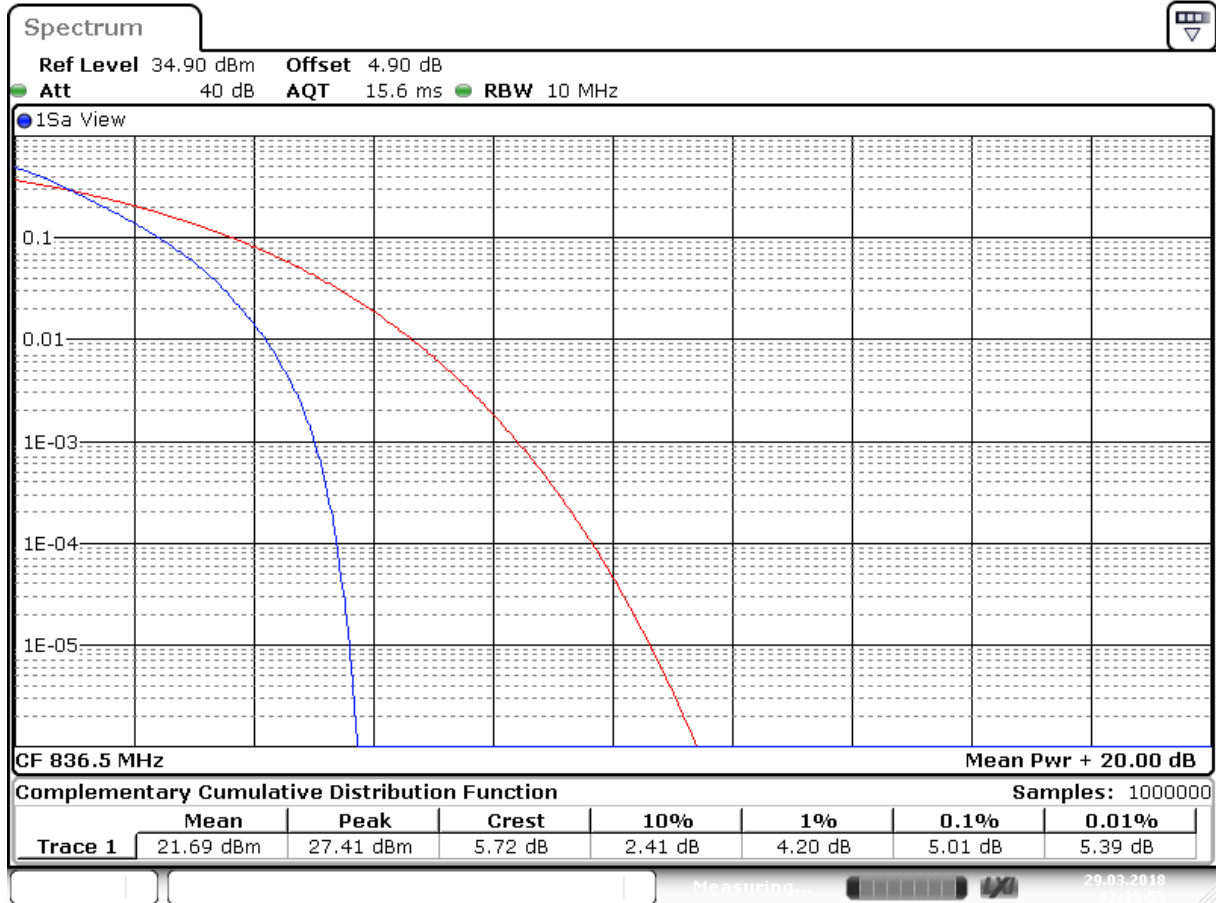
##### 2.1.1.1.1 Test Channel = LCH



Date: 29 MAR 2018 12:39:22



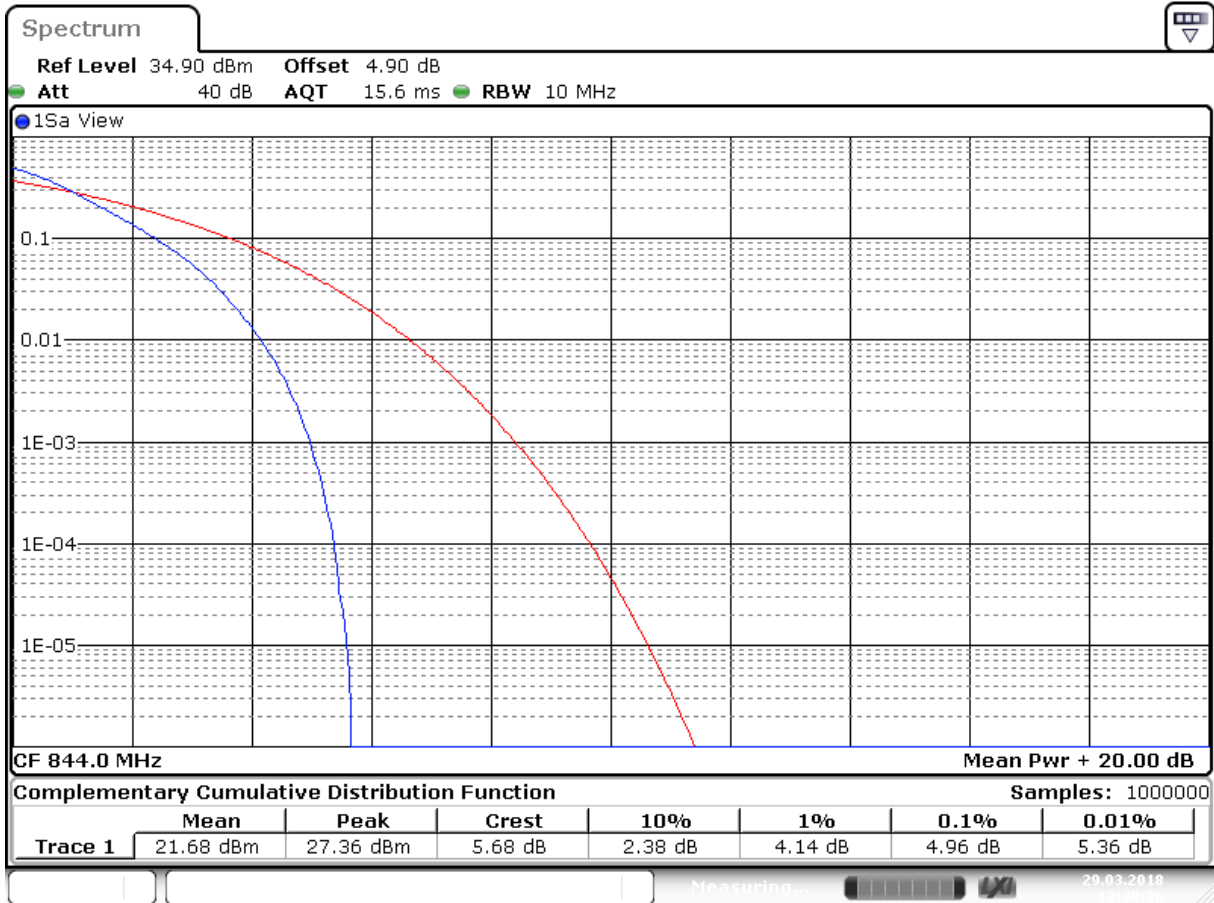
**2.1.1.1.2 Test Channel = MCH**



Date: 29 MAR 2018 12:39:59



**2.1.1.1.3 Test Channel = HCH**

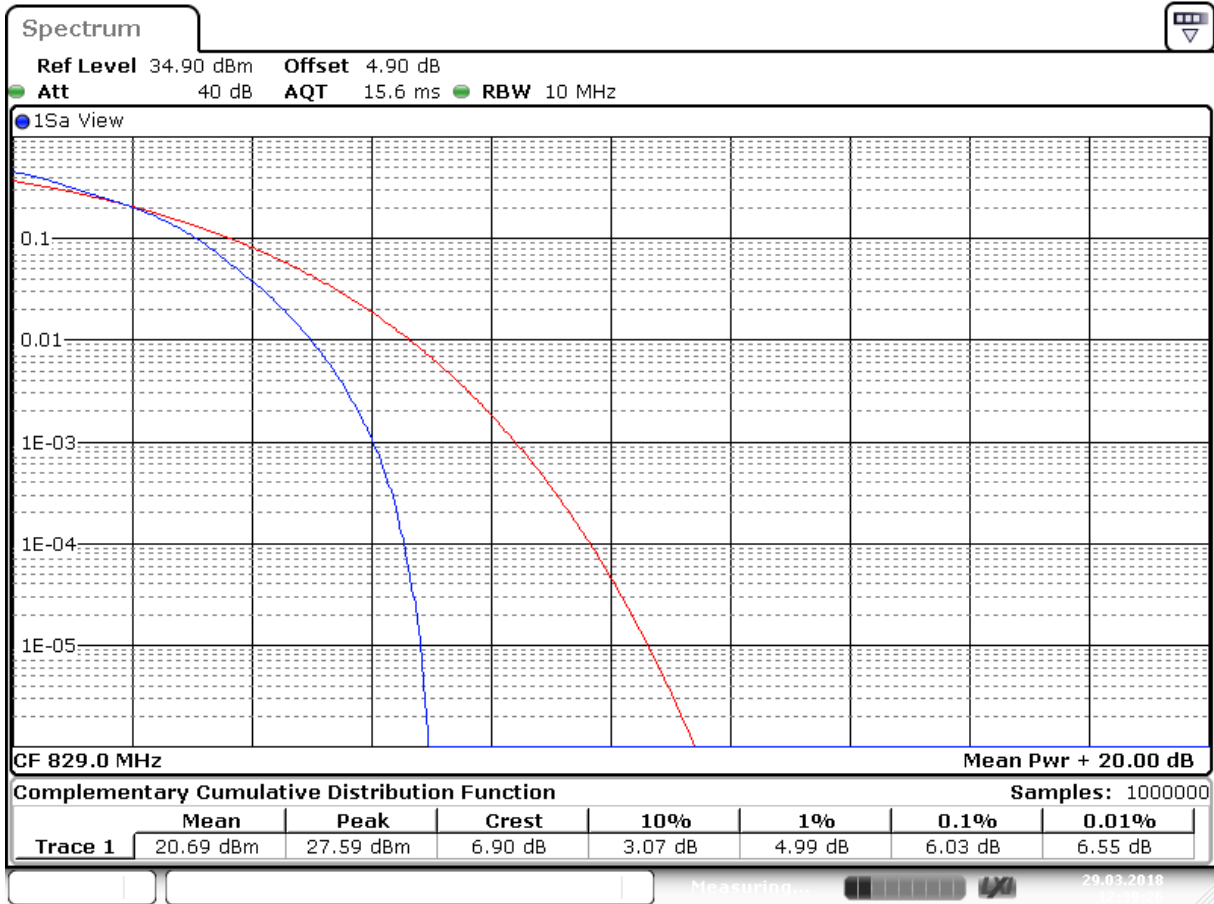


Date: 29 MAR 2018 12:40:37



**2.1.1.2 Test Mode = LTE/TM2.Bandwidth=10MHz**

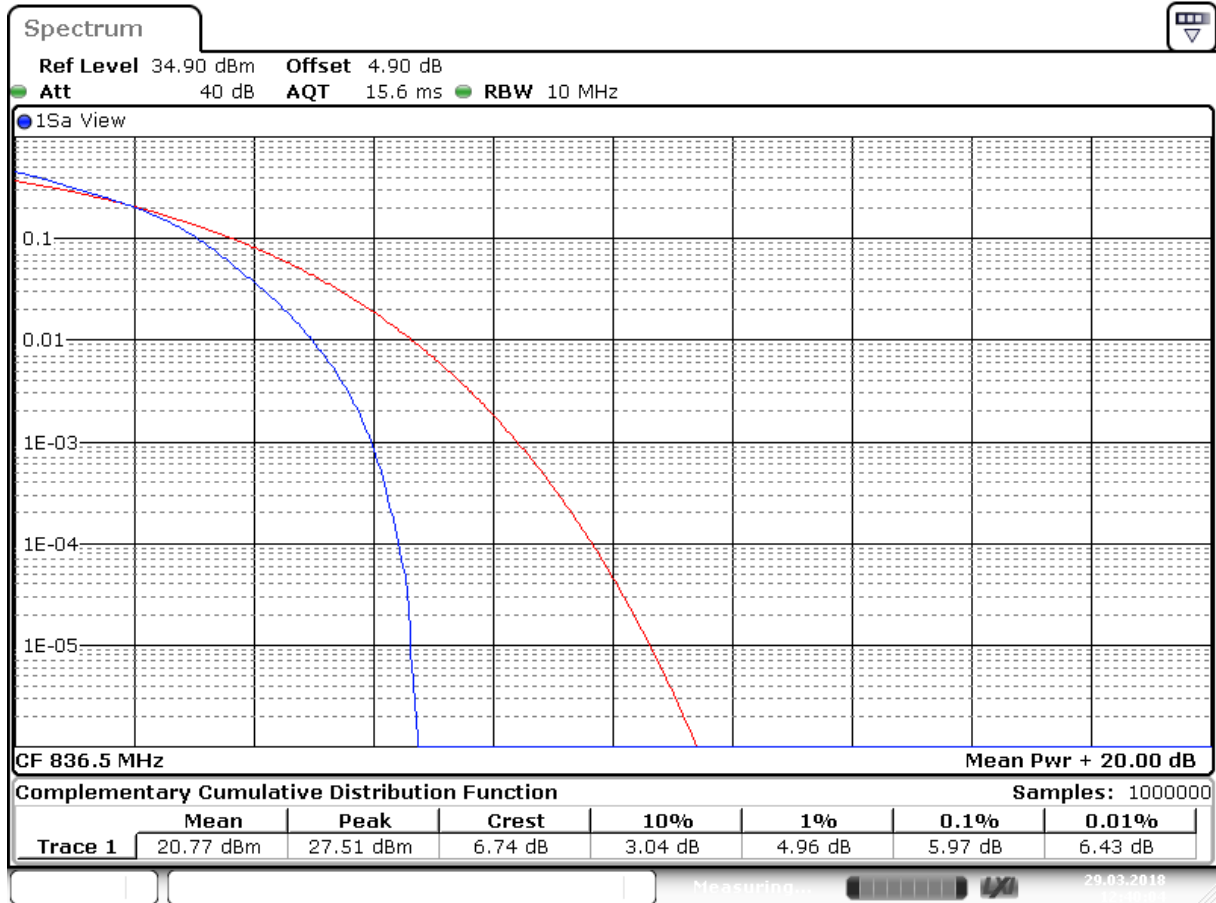
**2.1.1.2.1 Test Channel = LCH**



Date: 29 MAR 2018 12:39:27

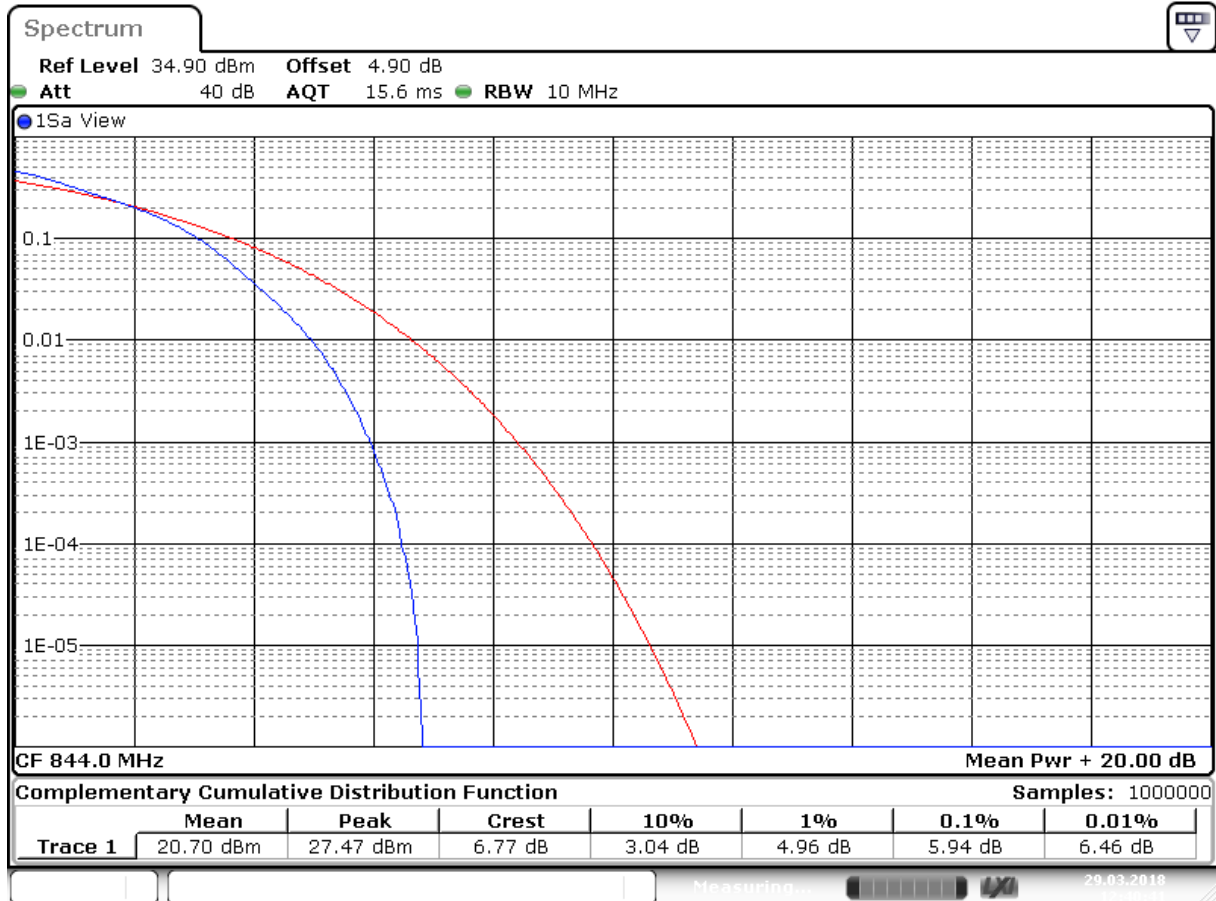


**2.1.1.2.2 Test Channel = MCH**



Date: 29 MAR 2018 12:40:05

**2.1.1.2.3 Test Channel = HCH**



Date: 29 MAR 2018 12:40:42



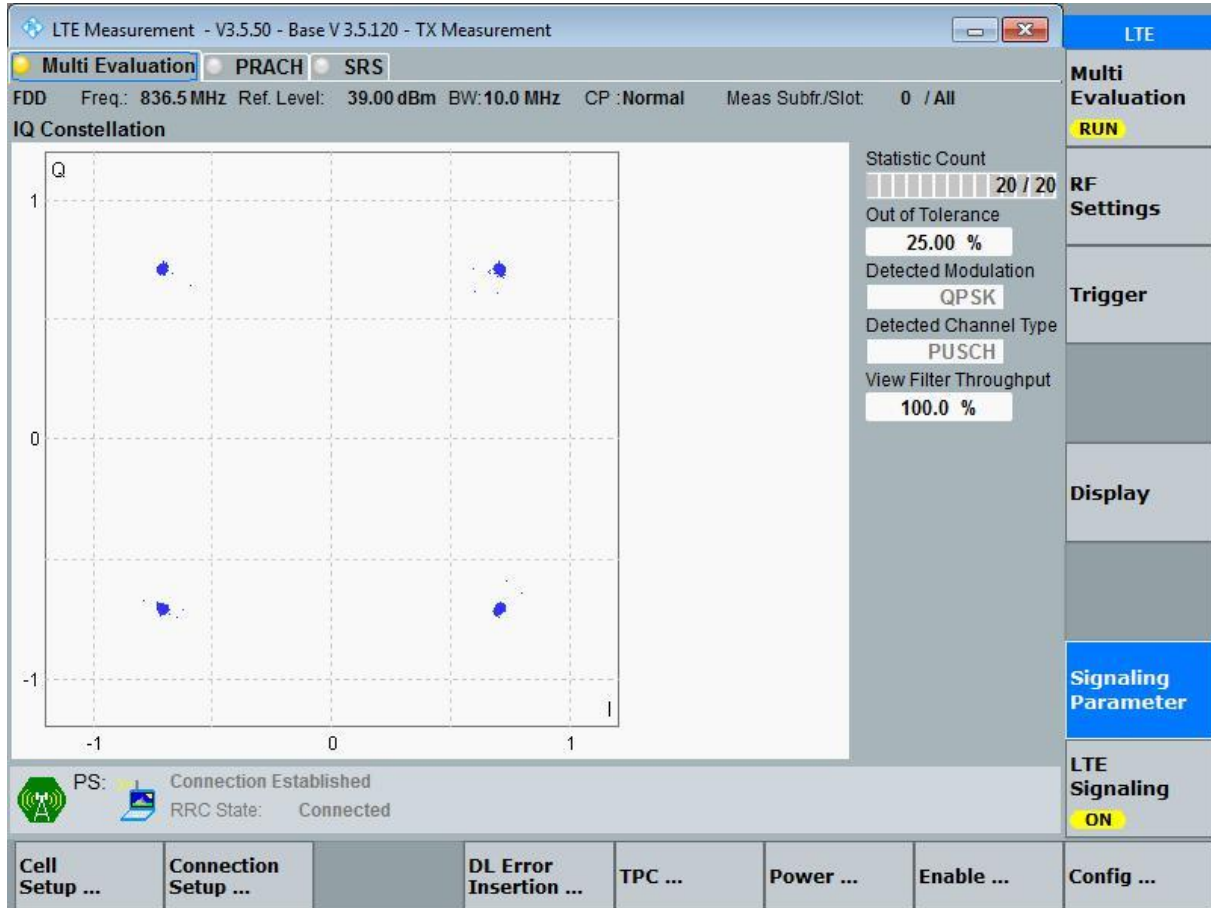
### 3 Modulation Characteristics

#### 3.1 For LTE

##### 3.1.1 Test Band = LTE band5

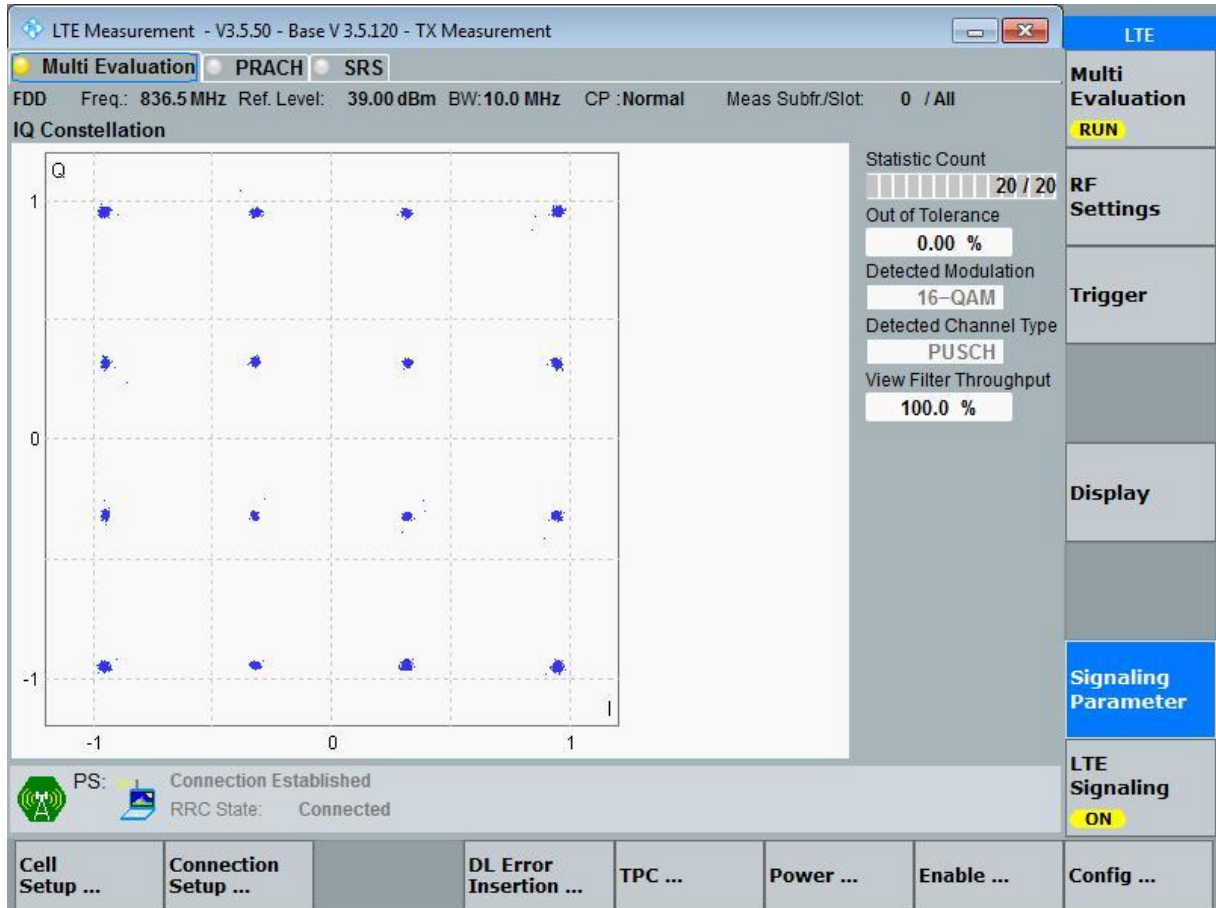
##### 3.1.1.1 Test Mode = LTE /TM1 10MHz

##### 3.1.1.1.1 Test Channel = MCH



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

**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 5	TM1/1.4MHz	LCH	1.091	1.236	PASS
		MCH	1.085	1.218	PASS
		HCH	1.088	1.206	PASS
	TM2/1.4MHz	LCH	1.088	1.233	PASS
		MCH	1.088	1.242	PASS
		HCH	1.091	1.233	PASS
	TM1/ 3MHz	LCH	2.697	2.874	PASS
		MCH	2.697	2.862	PASS
		HCH	2.697	2.856	PASS
	TM2/3MHz	LCH	2.691	2.868	PASS
		MCH	2.697	2.892	PASS
		HCH	2.697	2.850	PASS
	TM1/ 5MHz	LCH	4.476	4.770	PASS
		MCH	4.476	4.700	PASS
		HCH	4.466	4.730	PASS
	TM2/ 5MHz	LCH	4.466	4.730	PASS
		MCH	4.466	4.730	PASS
		HCH	4.476	4.730	PASS
	TM1/10MHz	LCH	8.931	9.340	PASS
		MCH	8.971	9.320	PASS
		HCH	8.931	9.300	PASS
TM2/ 10MHz	LCH	8.931	9.280	PASS	
	MCH	8.931	9.280	PASS	
	HCH	8.931	9.300	PASS	

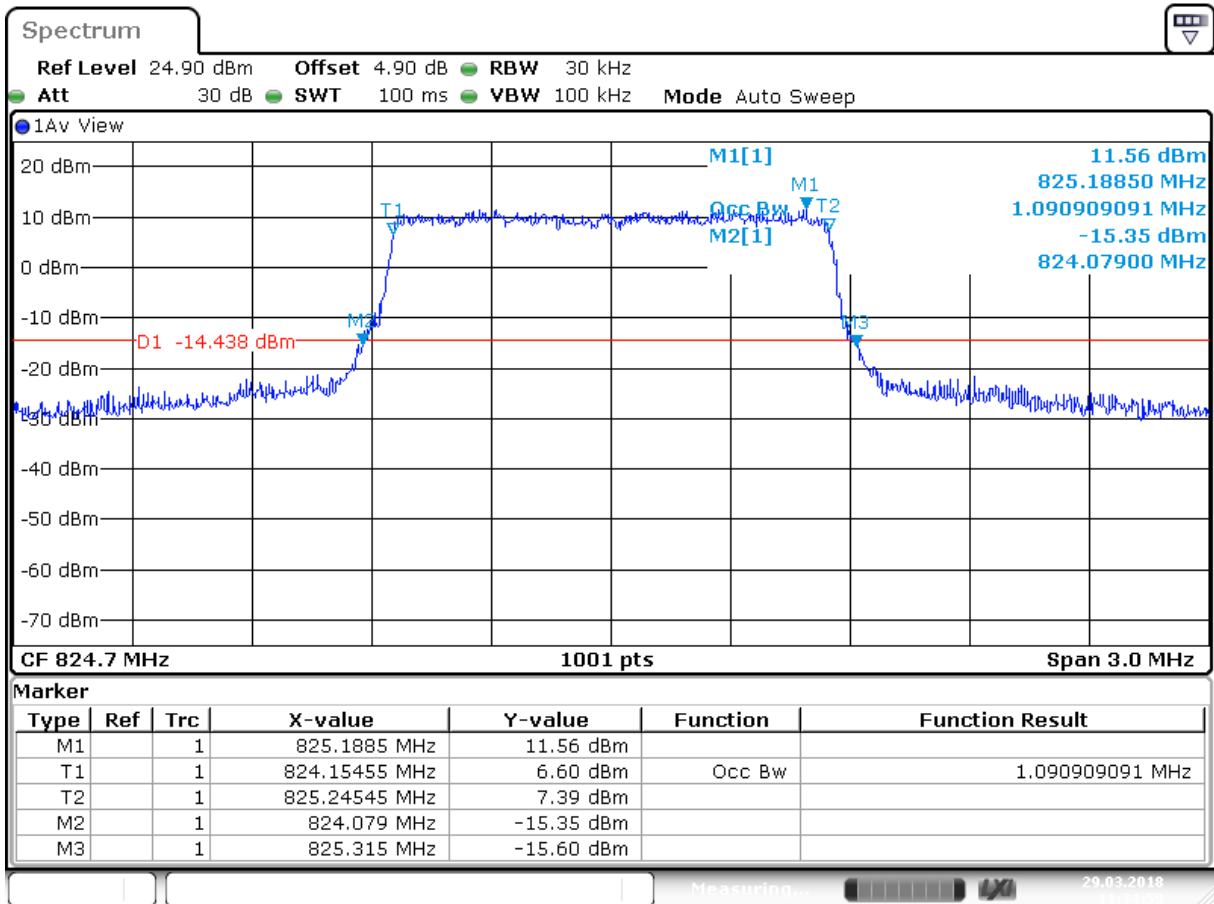
**Part II –Test Plots**

**4.1 For LTE**

**4.1.1 Test Band = LTE band5**

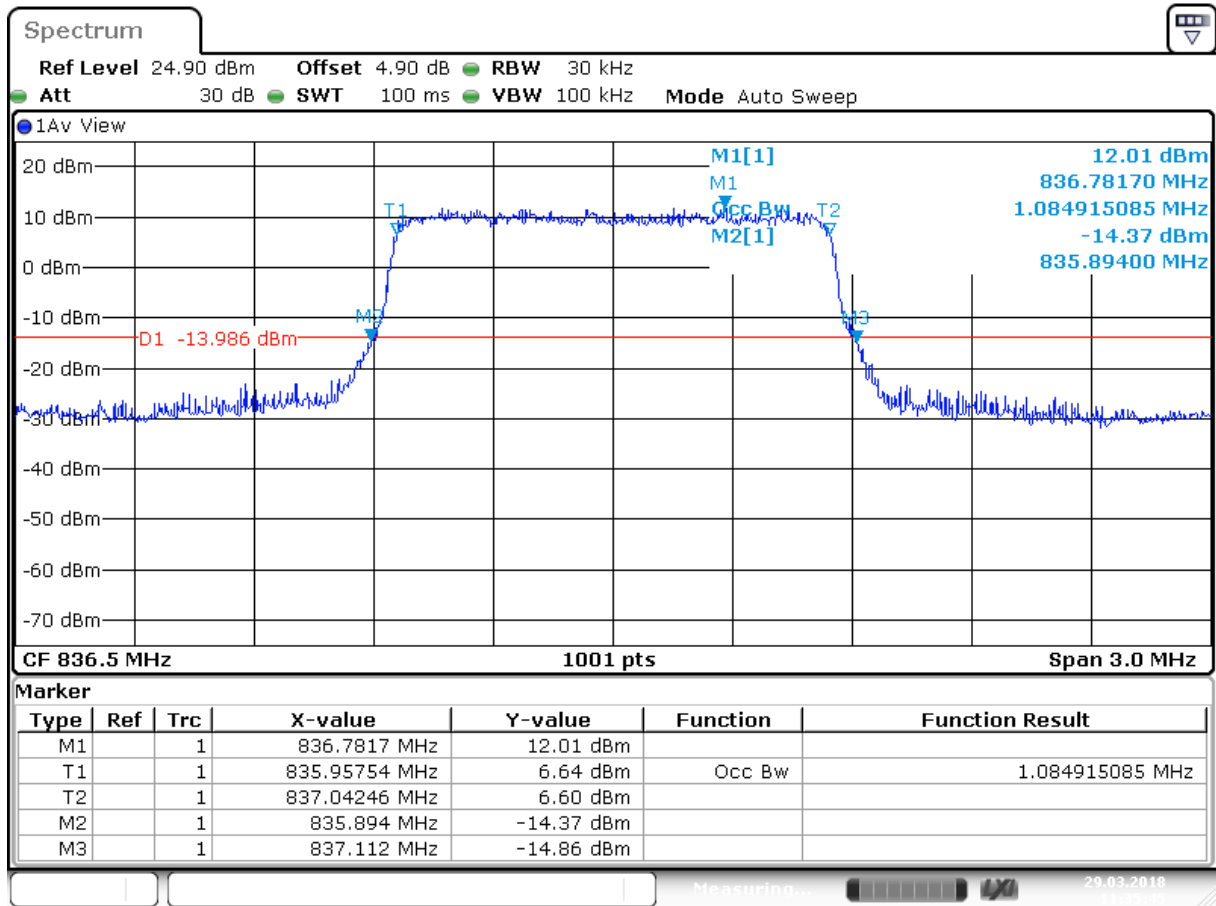
**4.1.1.1 Test Mode = LTE/TM1 1.4MHz**

**4.1.1.1.1 Test Channel = LCH**



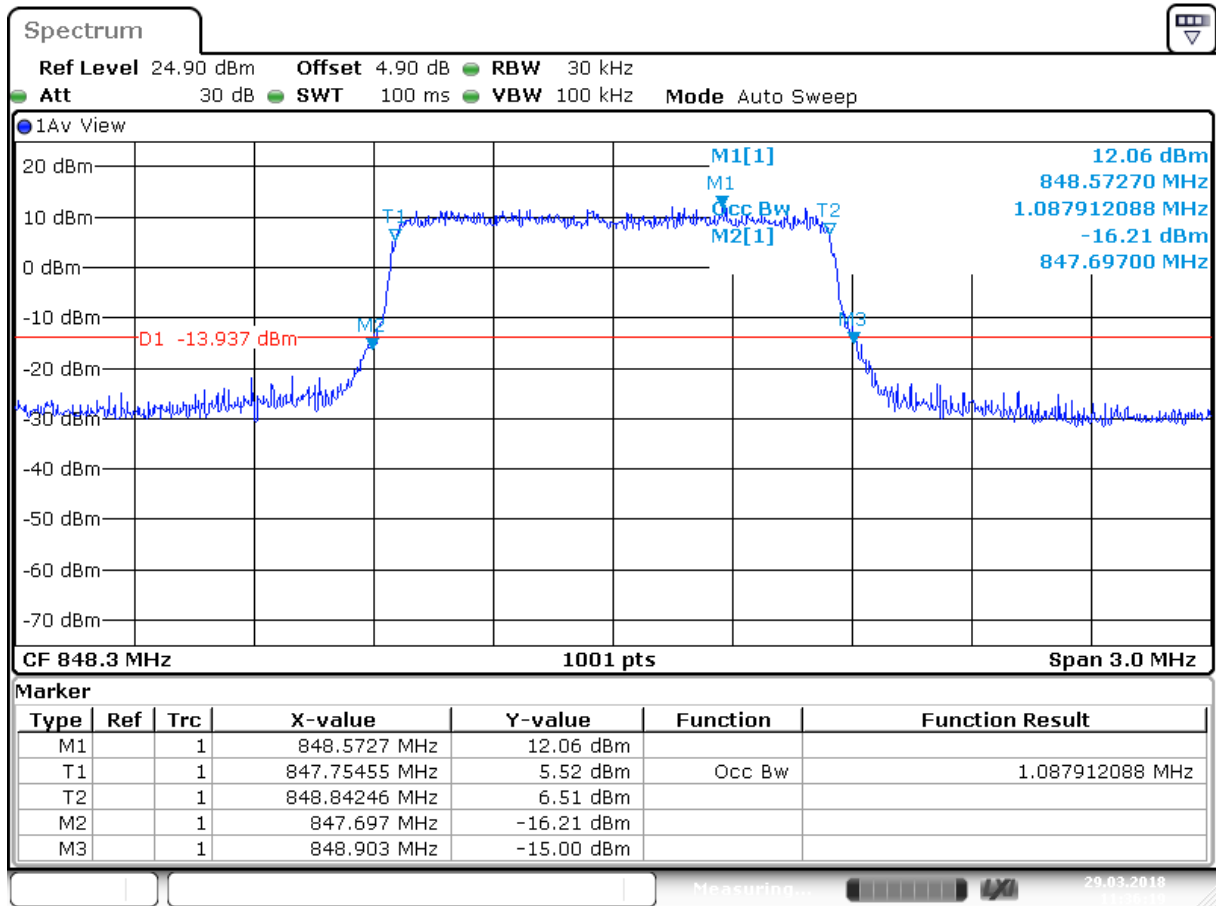
Date: 29 MAR 2018 11:34:59

4.1.1.1.2 Test Channel = MCH



Date: 29 MAR 2018 11:35:45

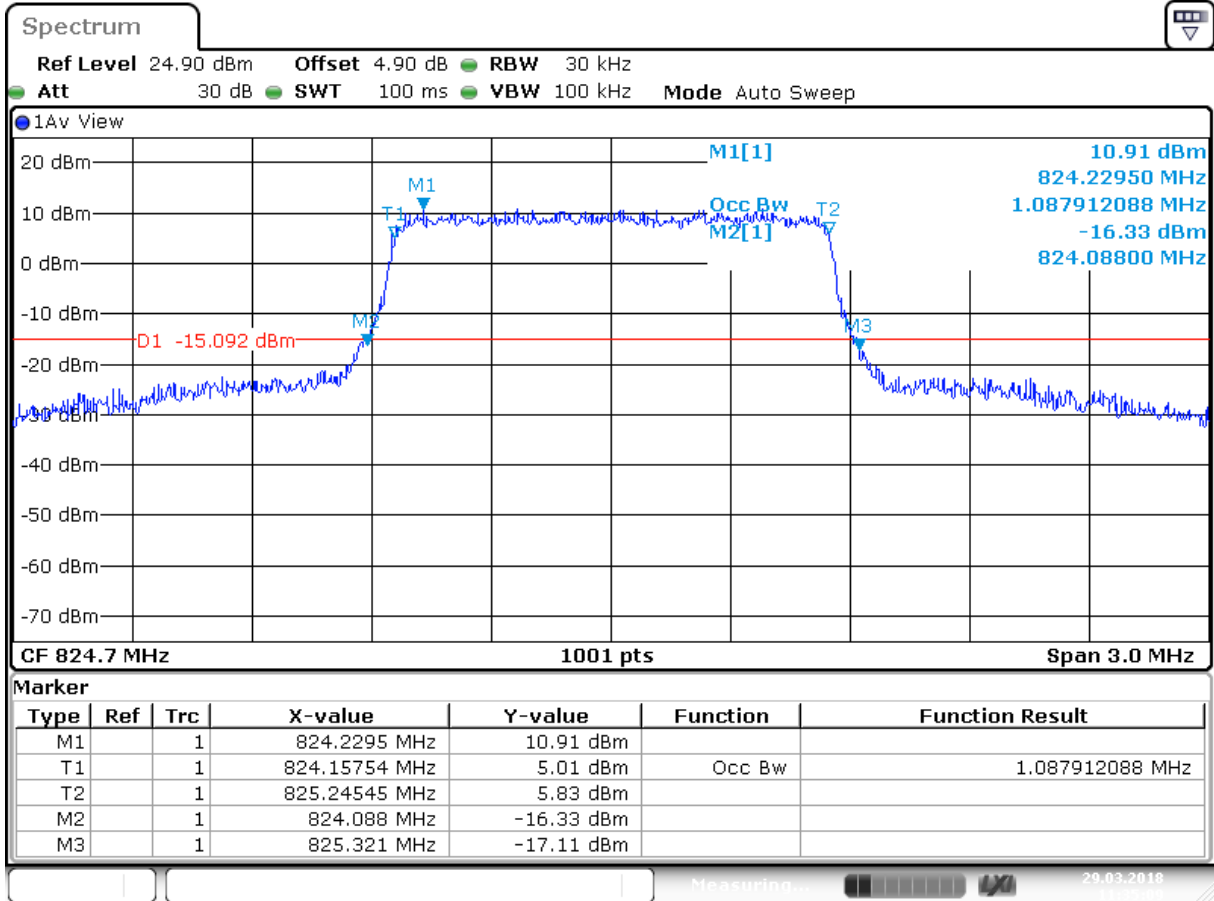
4.1.1.1.3 Test Channel = HCH



Date: 29 MAR 2018 11:36:19

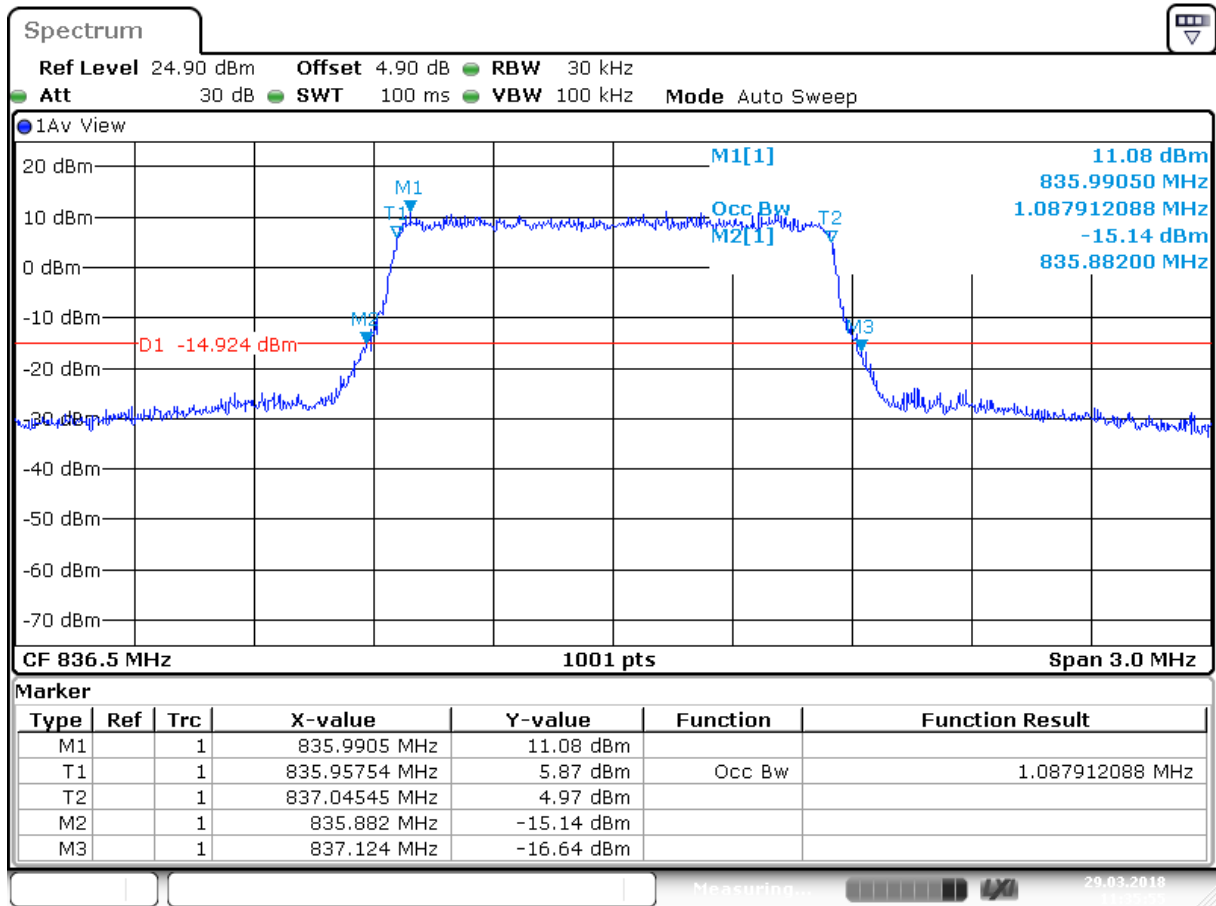
**4.1.1.2 Test Mode = LTE/TM2 1.4MHz**

**4.1.1.2.1 Test Channel = LCH**



Date: 29 MAR 2018 11:35:09

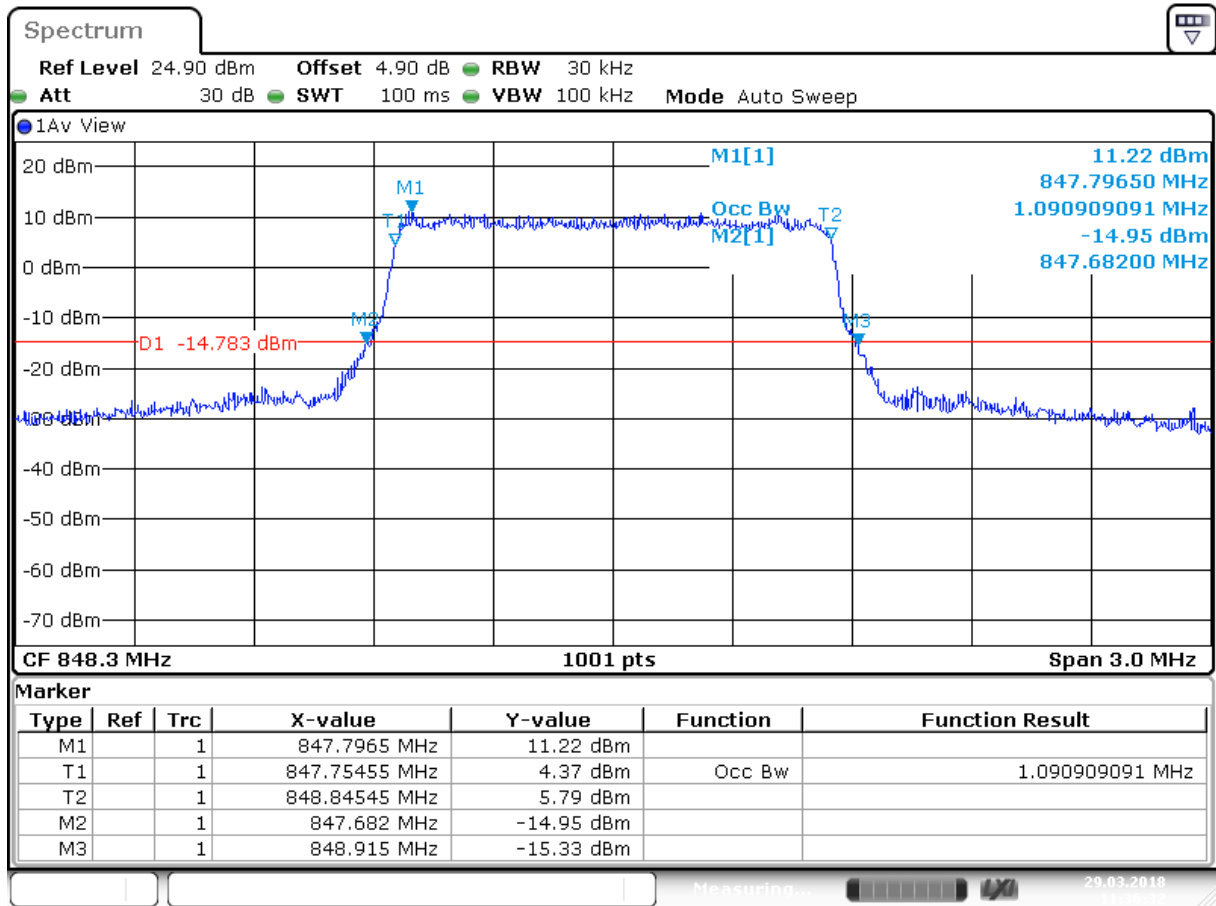
4.1.1.2.2 Test Channel = MCH



Date: 29 MAR 2018 11:35:55



**4.1.1.2.3 Test Channel = HCH**

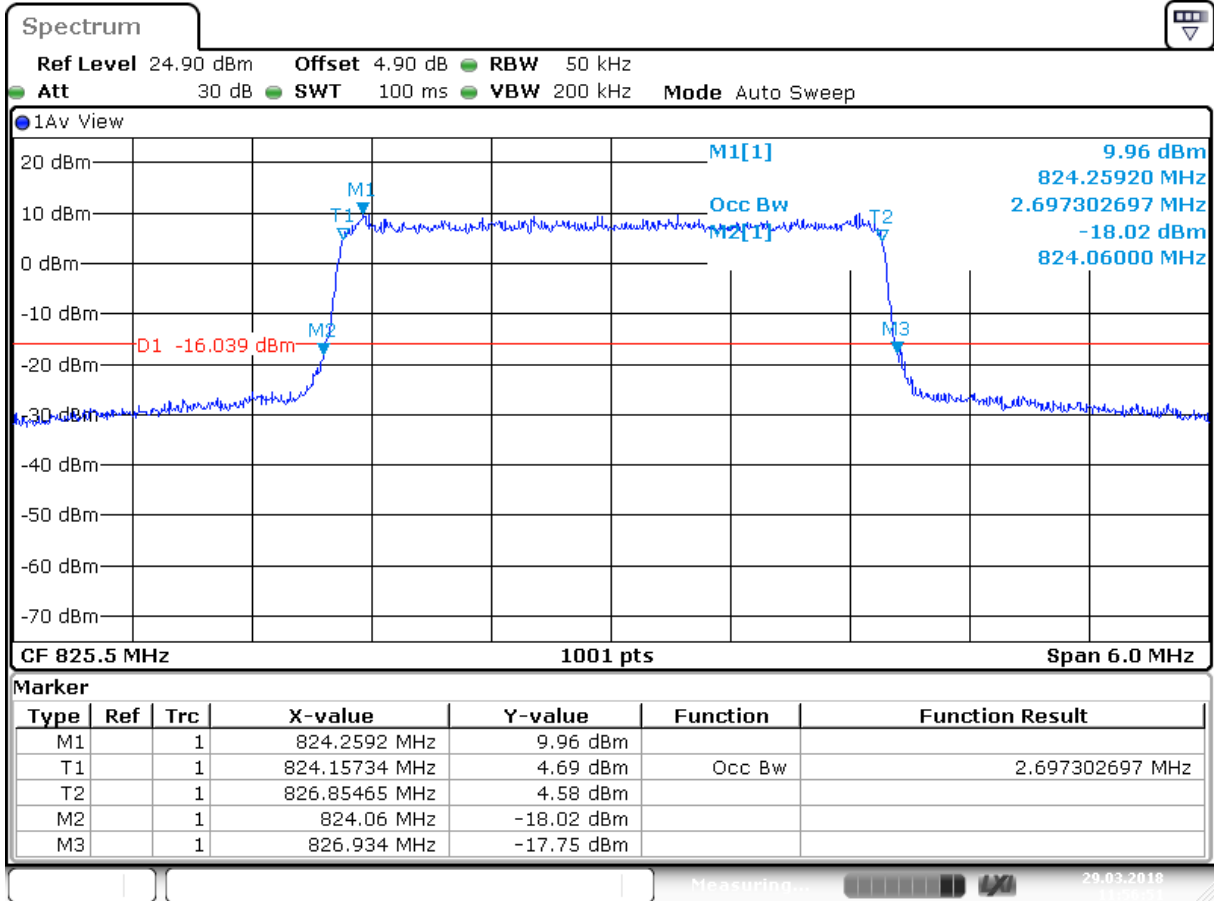


Date: 29 MAR 2018 11:36:33



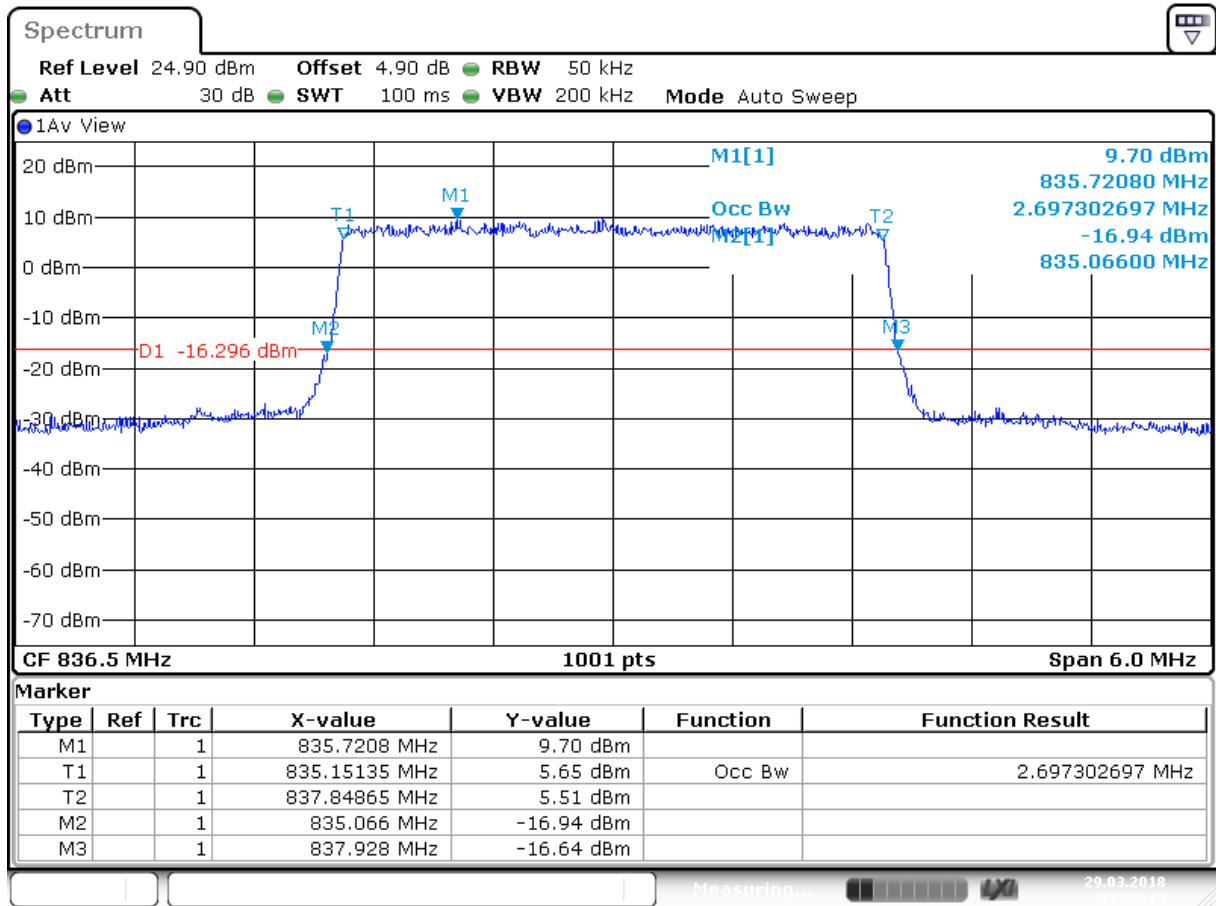
4.1.1.3 Test Mode = LTE/TM1 3MHz

4.1.1.3.1 Test Channel = LCH



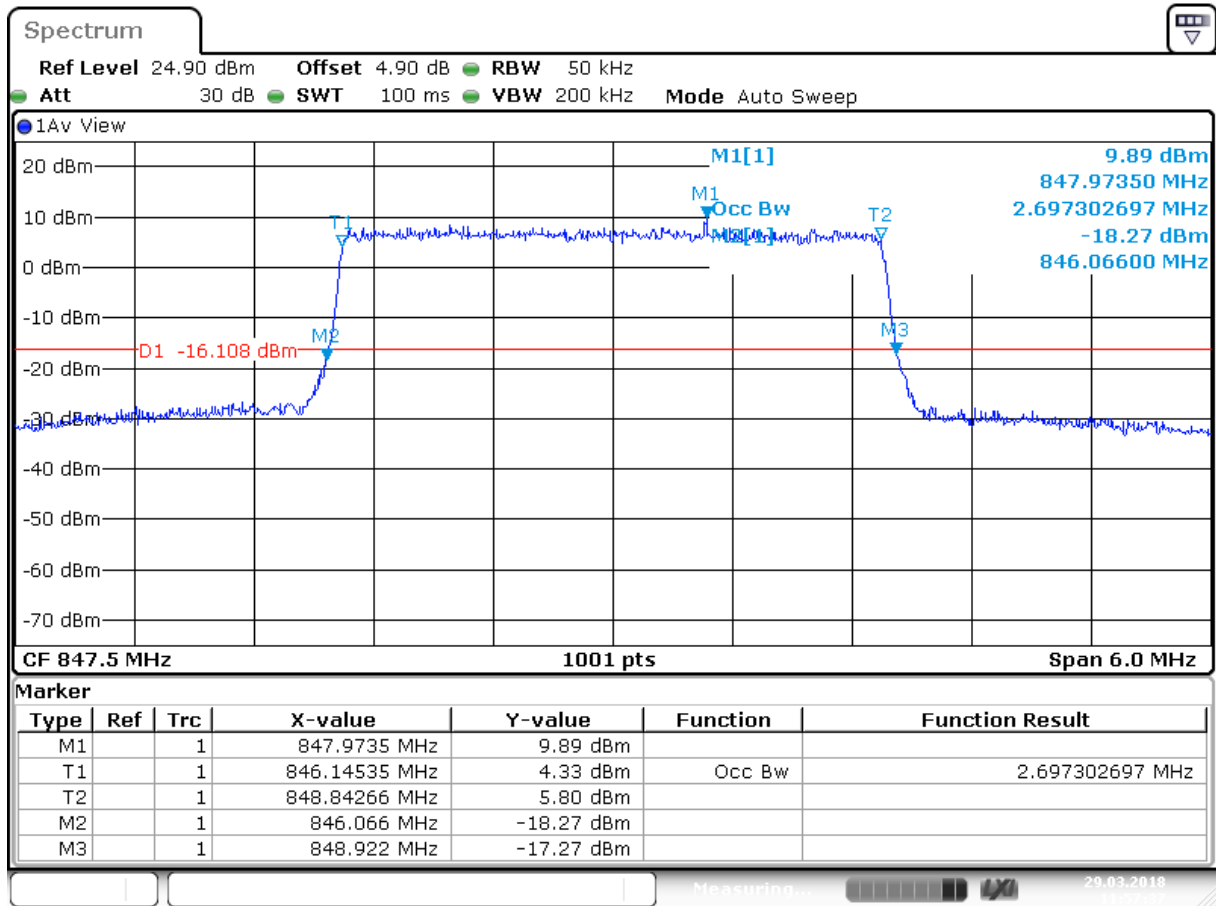
Date: 29 MAR 2018 11:56:52

4.1.1.3.2 Test Channel = MCH



Date: 29 MAR 2018 11:57:15

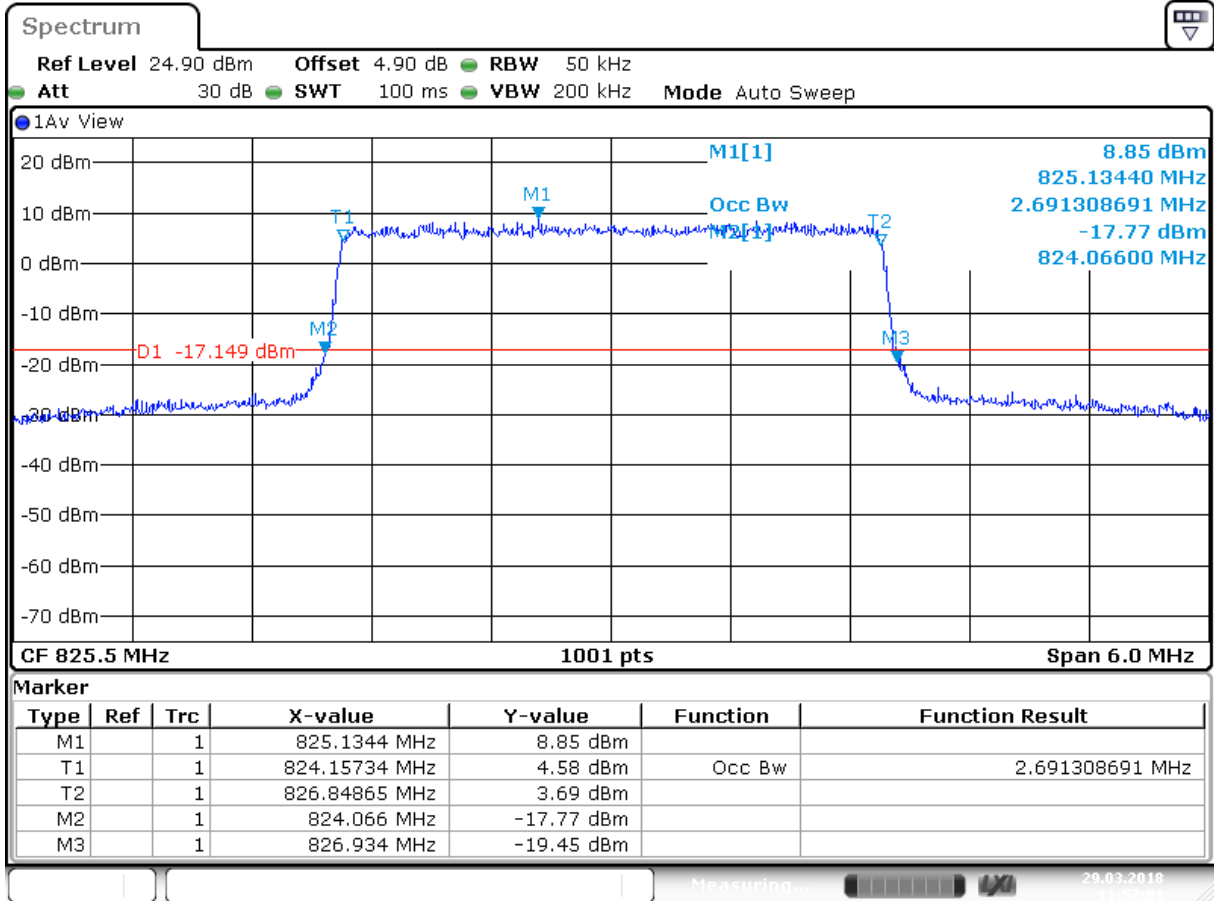
**4.1.1.3.3 Test Channel = HCH**



Date: 29 MAR 2018 11:57:37

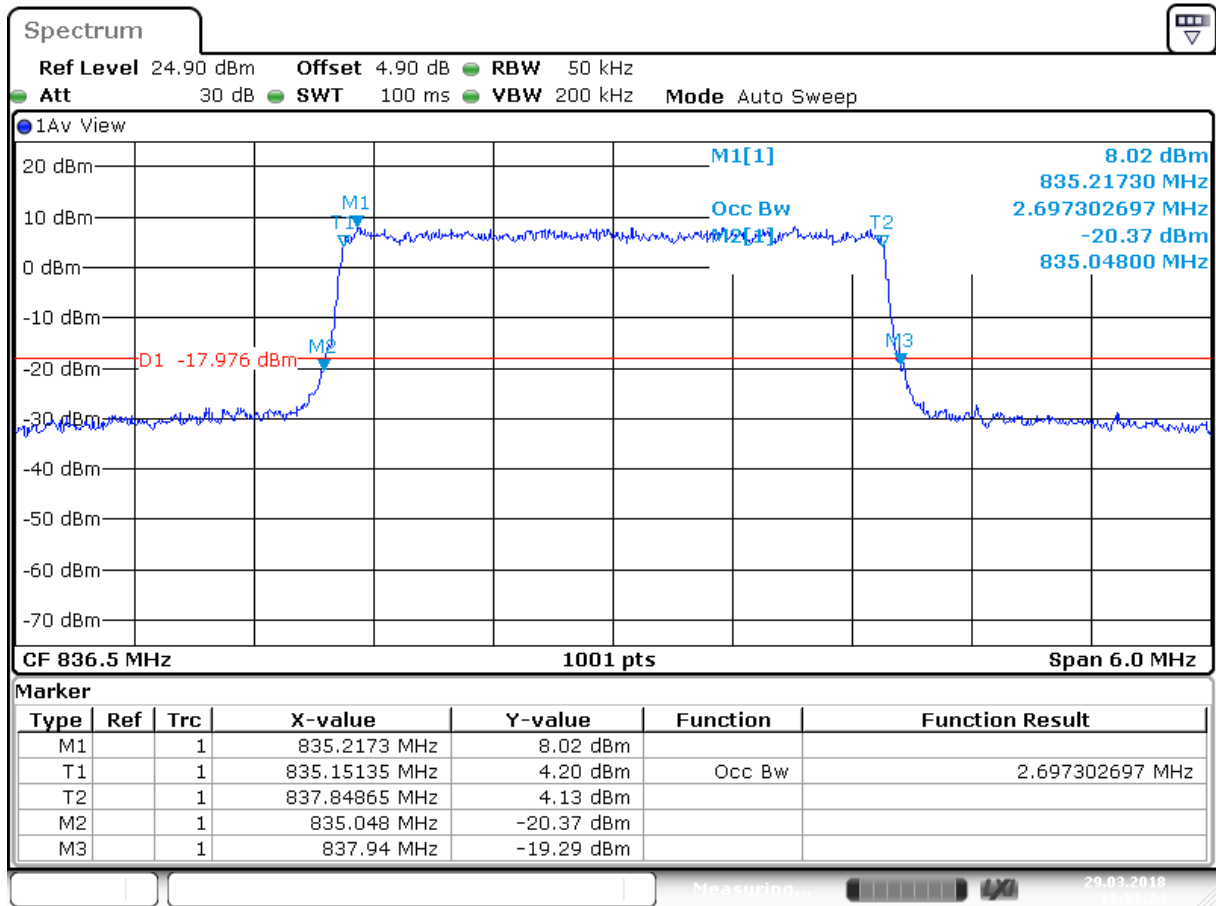
**4.1.1.4 Test Mode = LTE/TM2 3MHz**

**4.1.1.4.1 Test Channel = LCH**



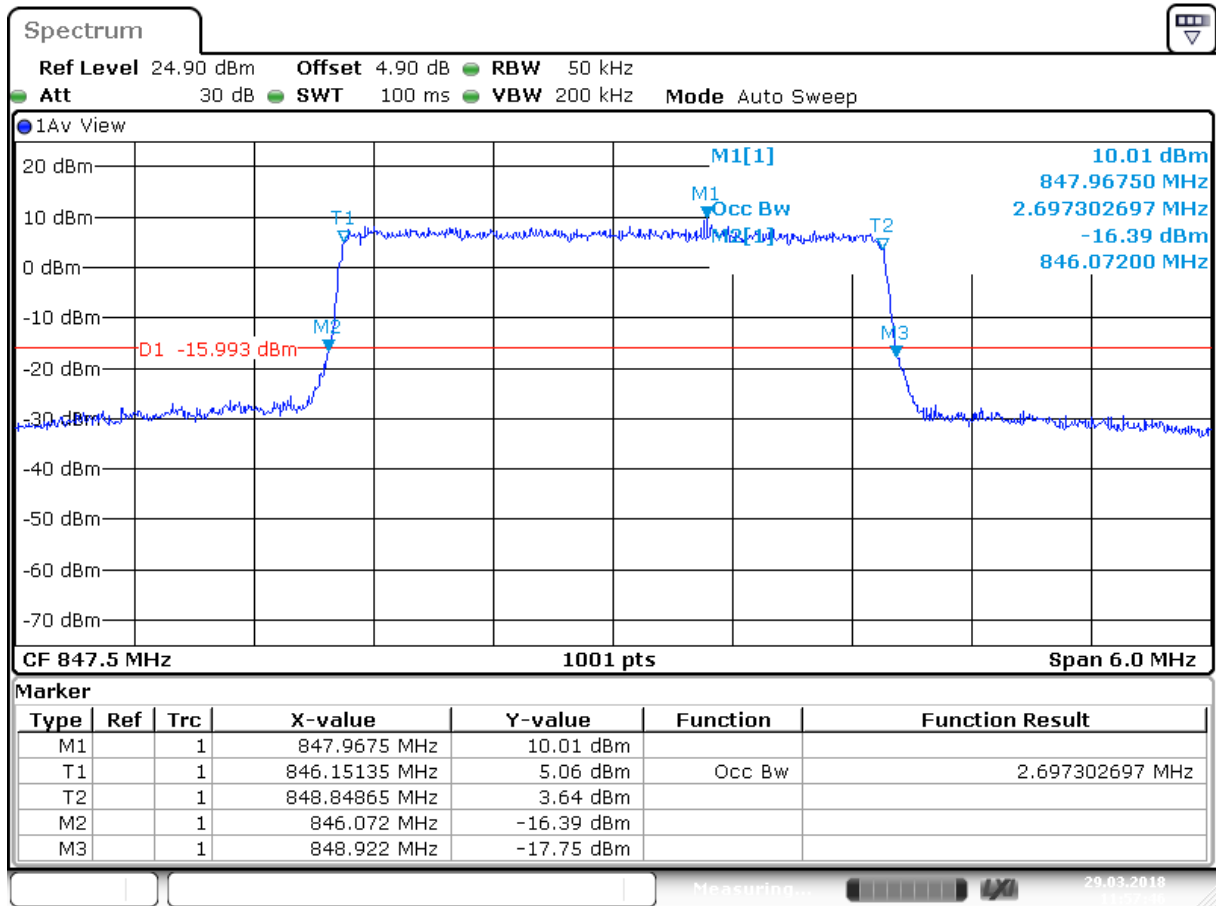
Date: 29 MAR 2018 11:57:01

4.1.1.4.2 Test Channel = MCH



Date: 29 MAR 2018 11:57:24

**4.1.1.4.3 Test Channel = HCH**

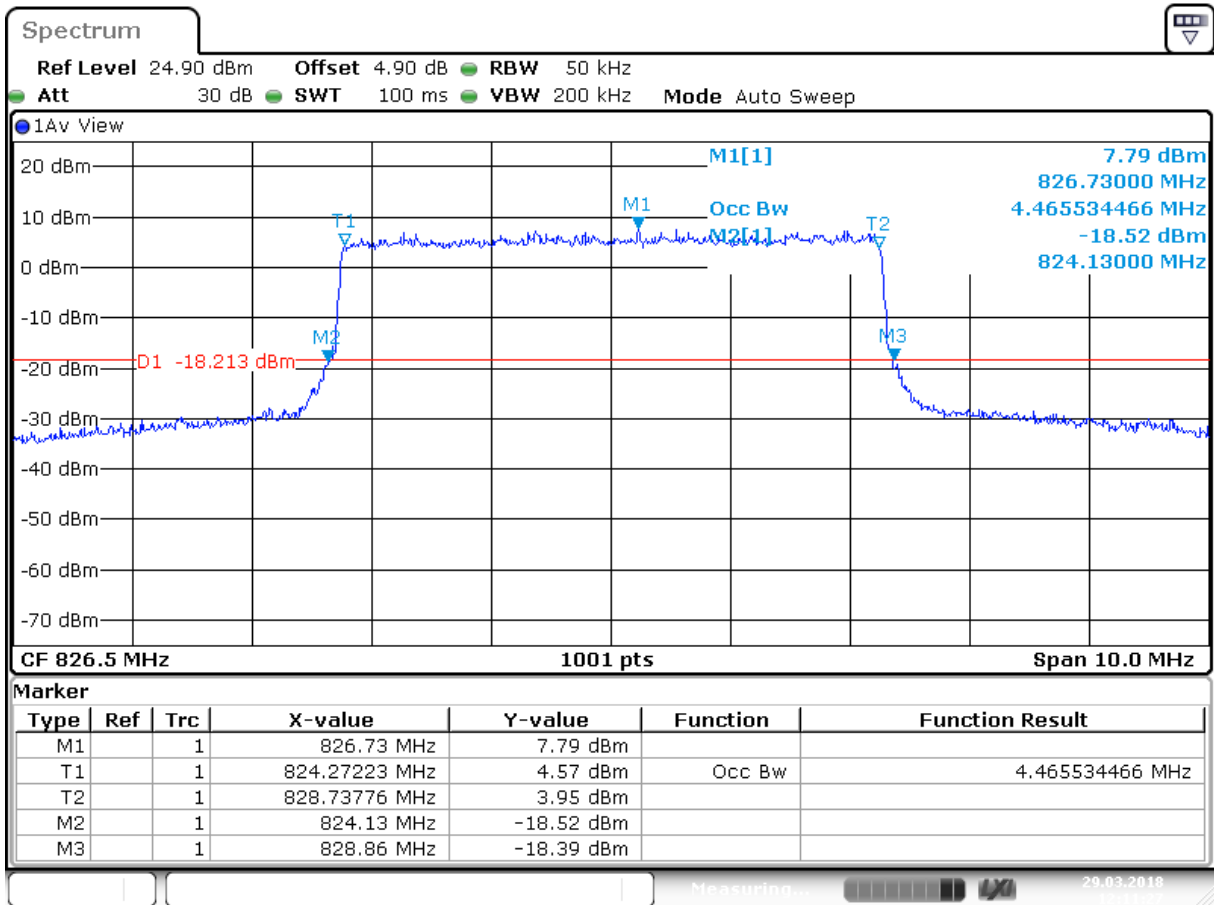


Date: 29 MAR 2018 11:57:47



**4.1.1.5 Test Mode = LTE/TM1 5MHz**

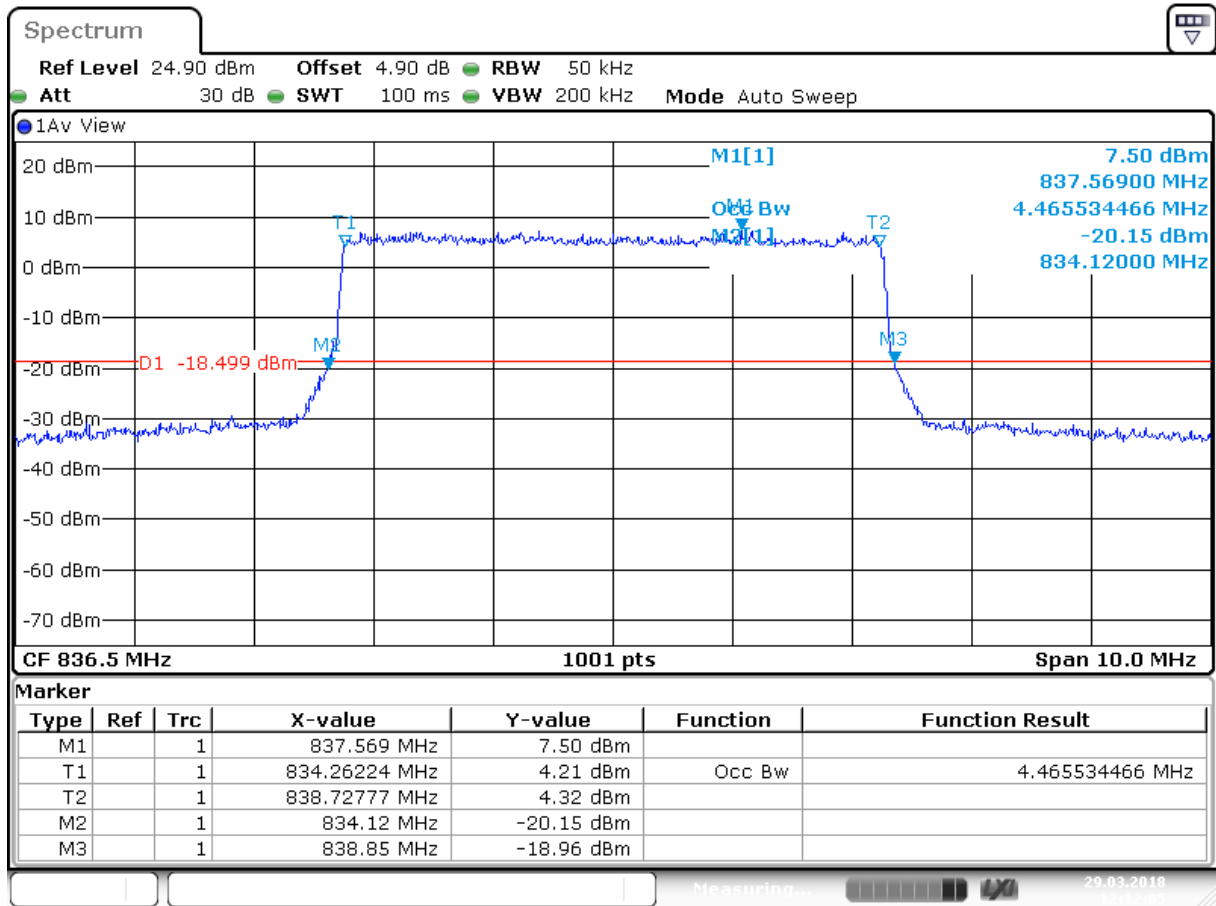
**4.1.1.5.1 Test Channel = LCH**



Date: 29 MAR 2018 12:11:28

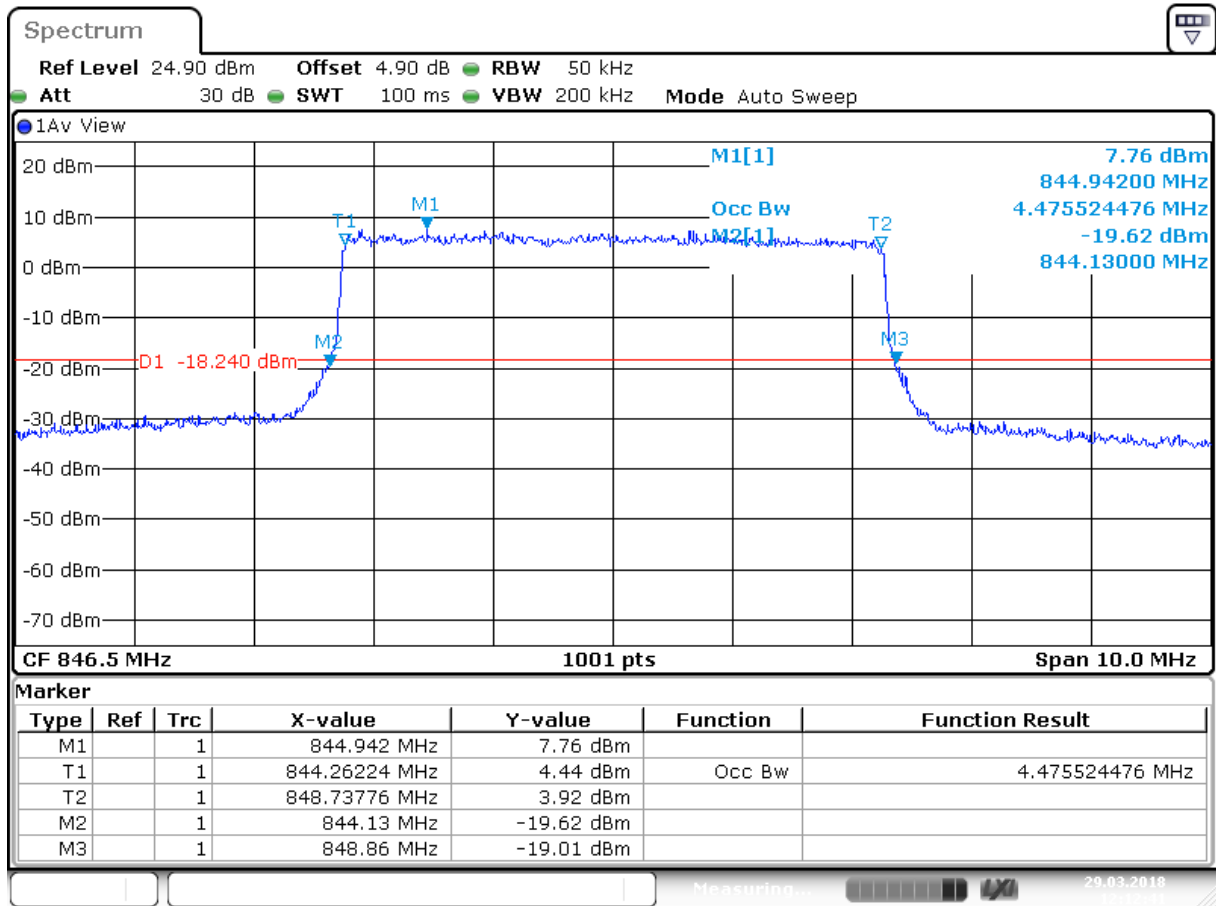


**4.1.1.5.2 Test Channel = MCH**



Date: 29 MAR 2018 12:12:05

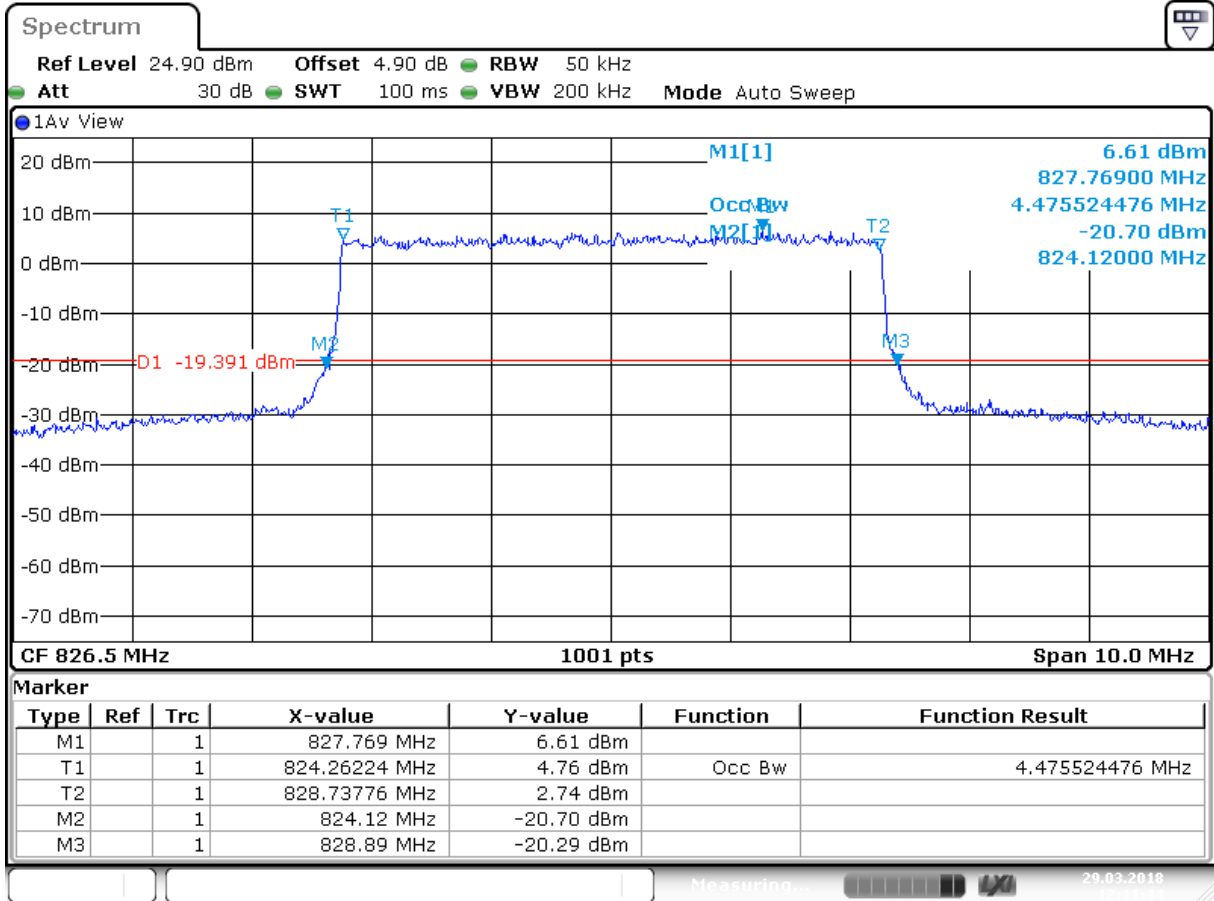
**4.1.1.5.3 Test Channel = HCH**



Date: 29 MAR 2018 12:12:42

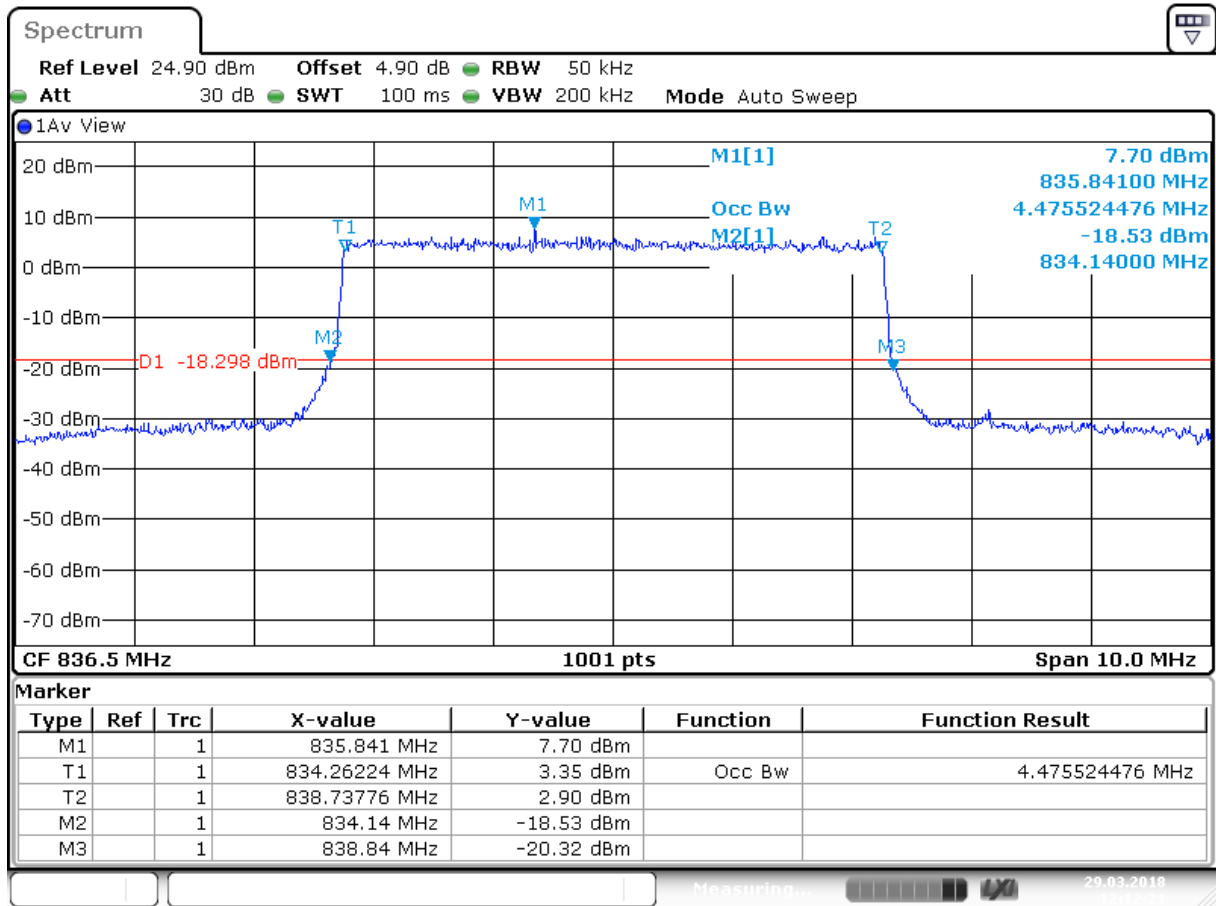
**4.1.1.6 Test Mode = LTE/TM2 5MHz**

**4.1.1.6.1 Test Channel = LCH**



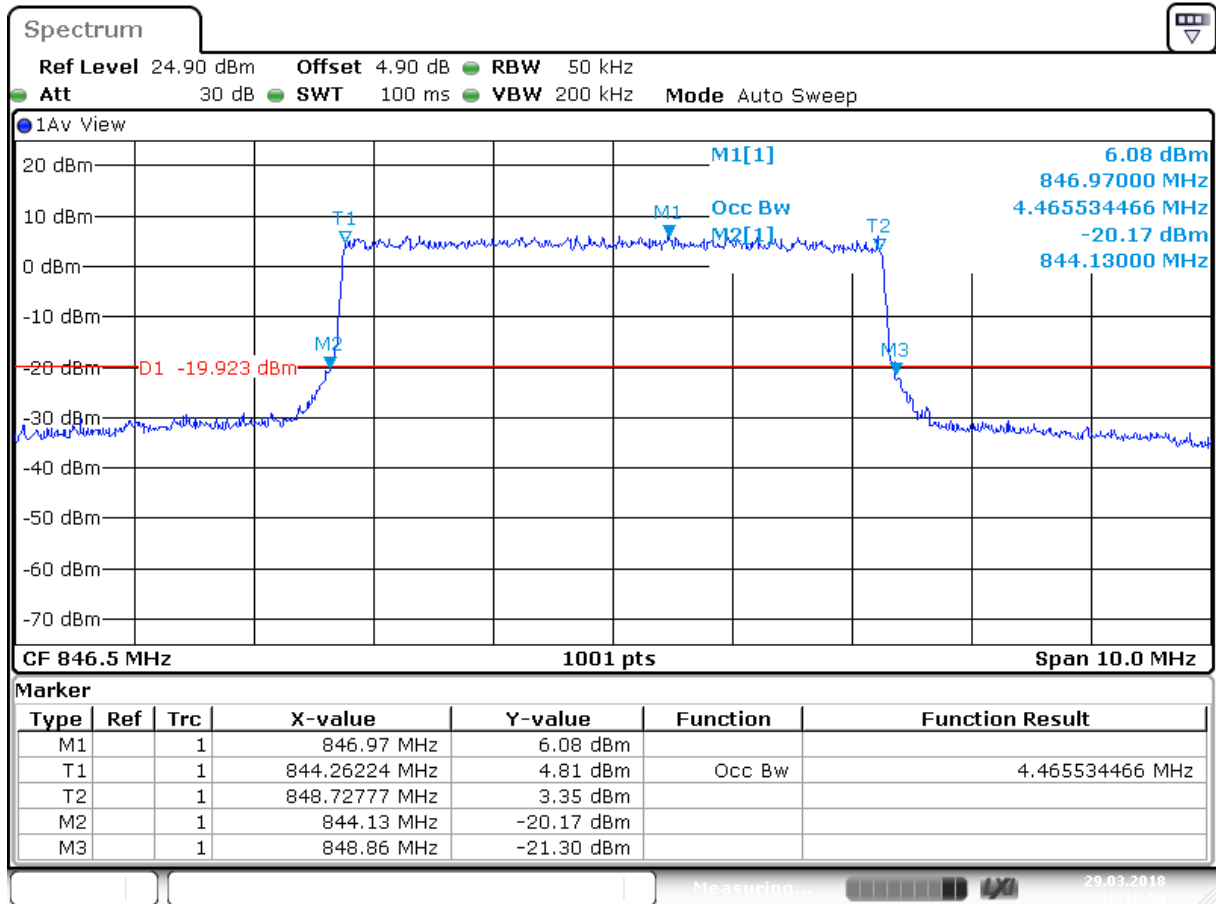
Date: 29 MAR 2018 12:11:45

**4.1.1.6.2 Test Channel = MCH**



Date: 29 MAR 2018 12:12:22

**4.1.1.6.3 Test Channel = HCH**

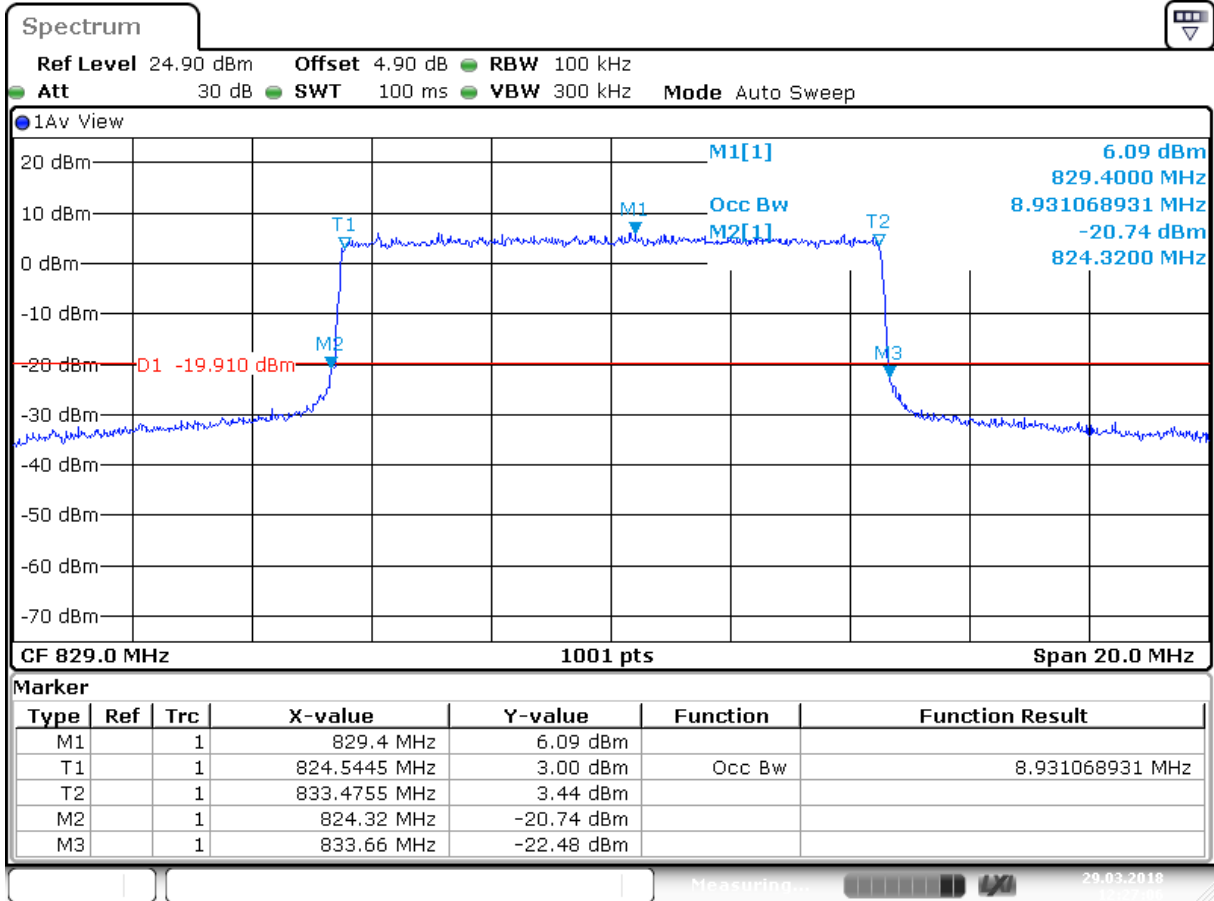


Date: 29 MAR 2018 12:12:58



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

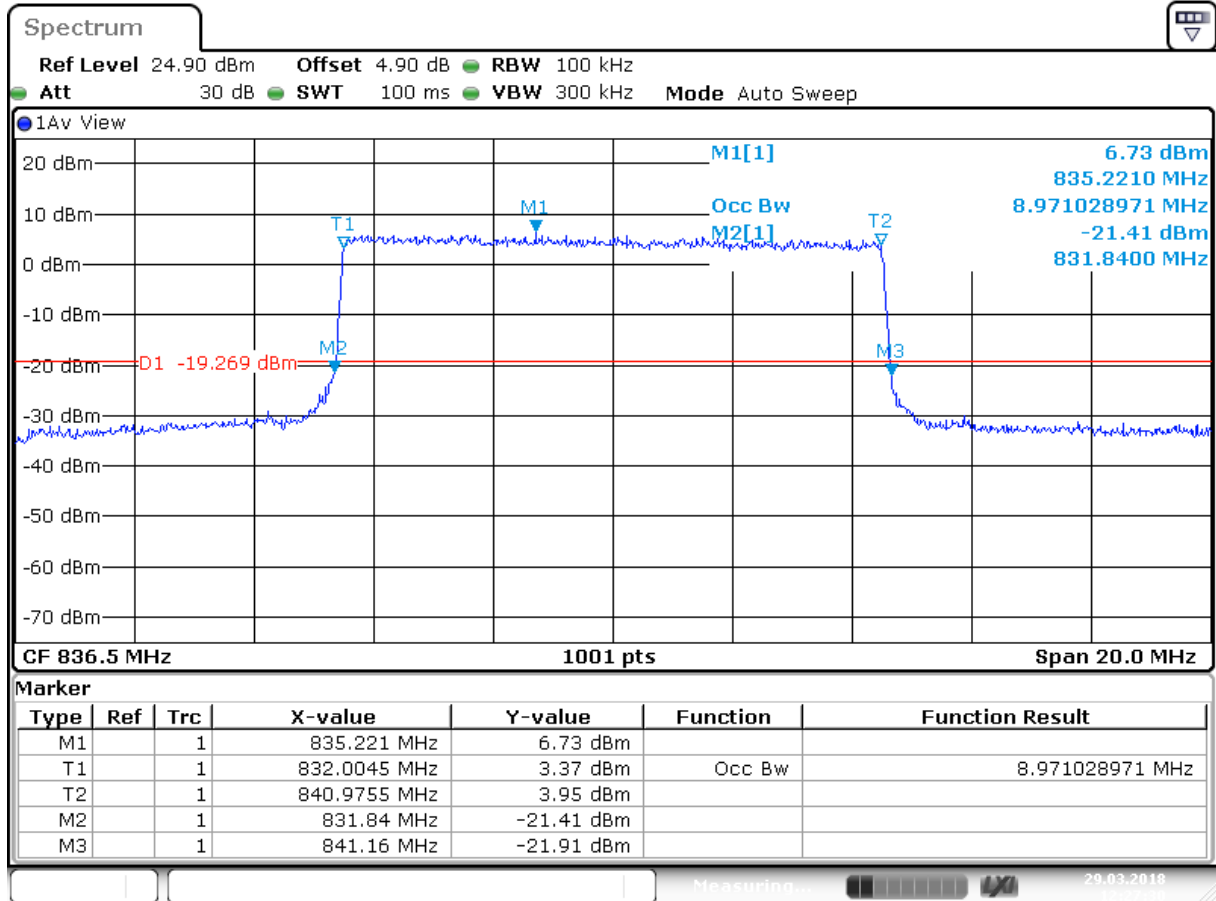
**4.1.1.7.1 Test Channel = LCH**



Date: 29 MAR 2018 12:27:06

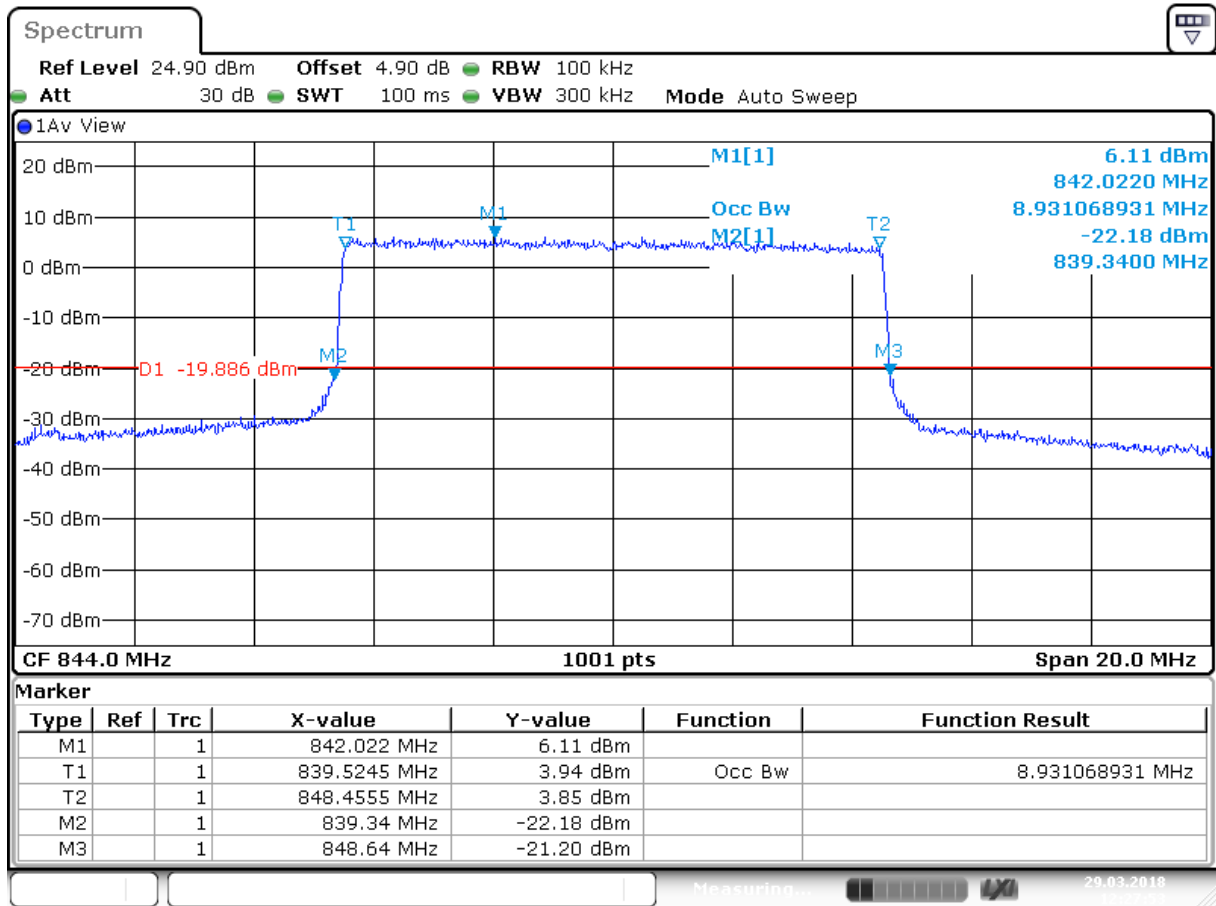


**4.1.1.7.2 Test Channel = MCH**



Date: 29 MAR 2018 12:27:30

**4.1.1.7.3 Test Channel = HCH**



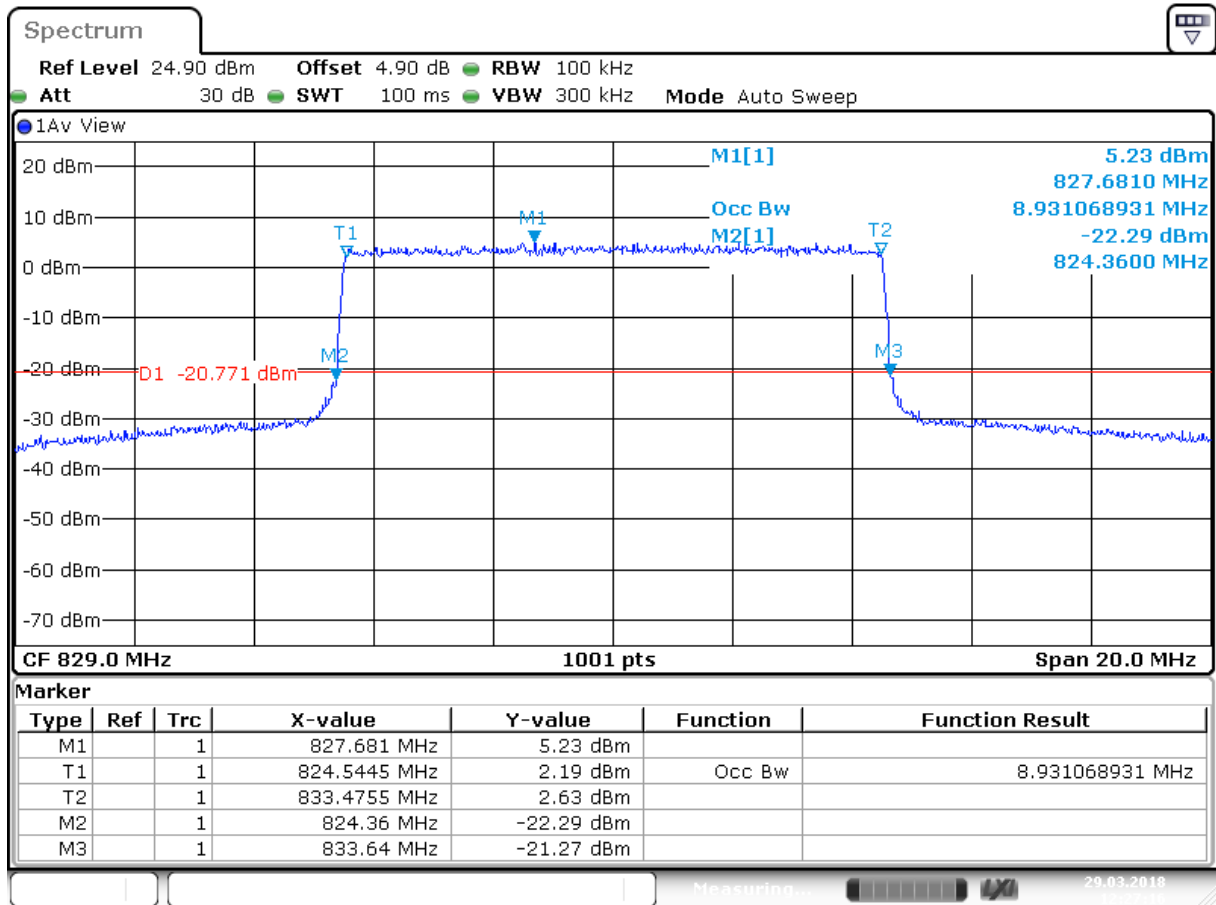
Date: 29 MAR 2018 12:27:53





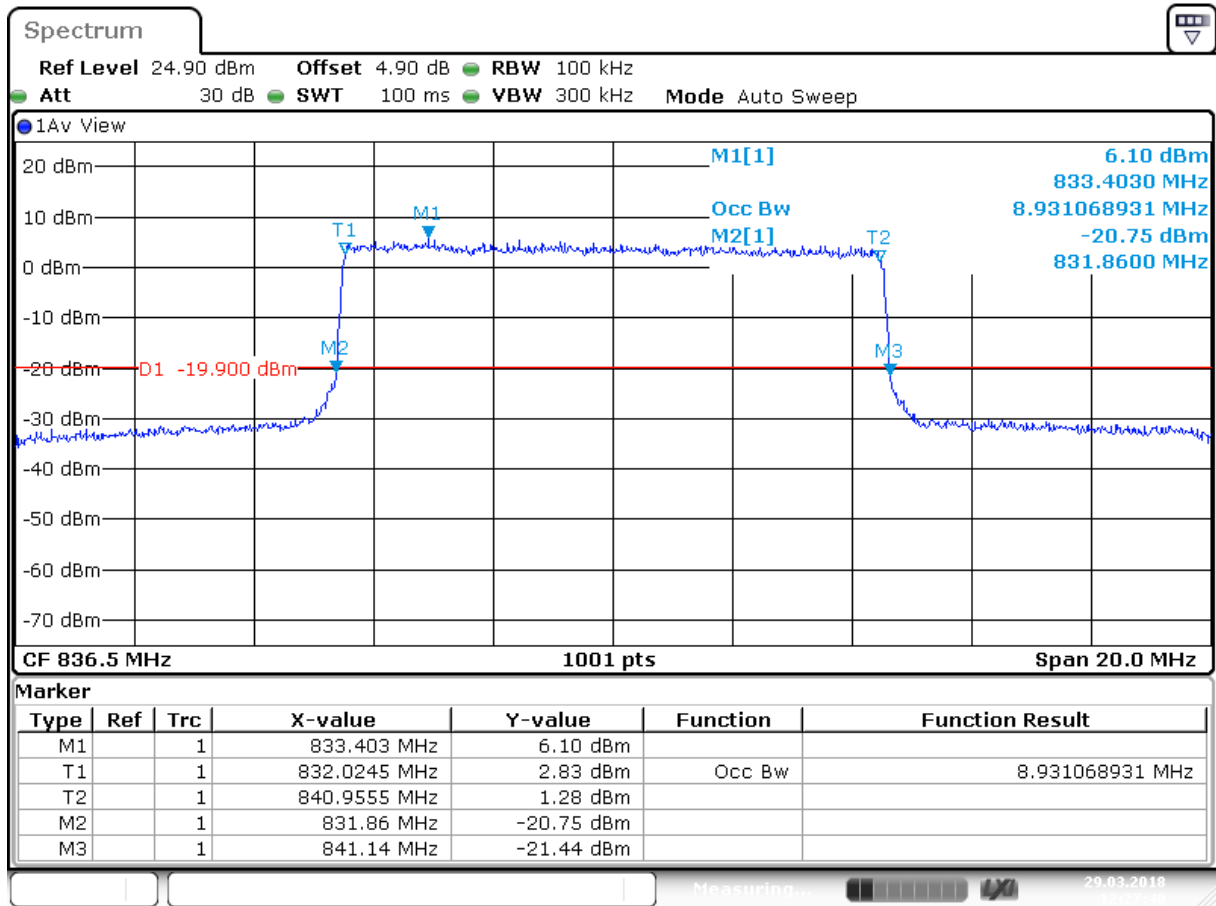
**4.1.1.8 Test Mode = LTE/TM2 10MHz**

**4.1.1.8.1 Test Channel = LCH**



Date: 29 MAR 2018 12:27:16

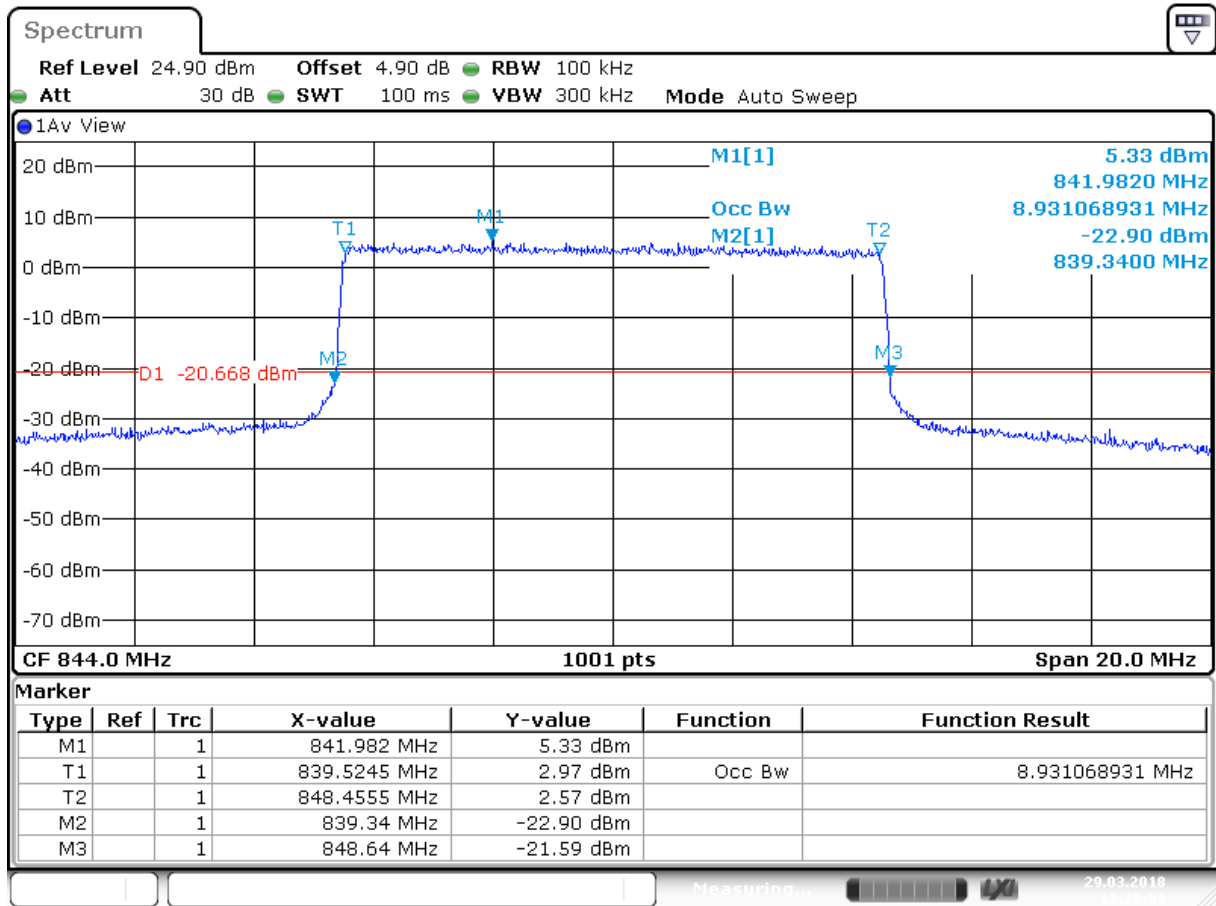
**4.1.1.8.2 Test Channel = MCH**



Date: 29 MAR 2018 12:27:40



**4.1.1.8.3 Test Channel = HCH**



Date: 29 MAR 2018 12:28:03

## 5 Band Edges Compliance

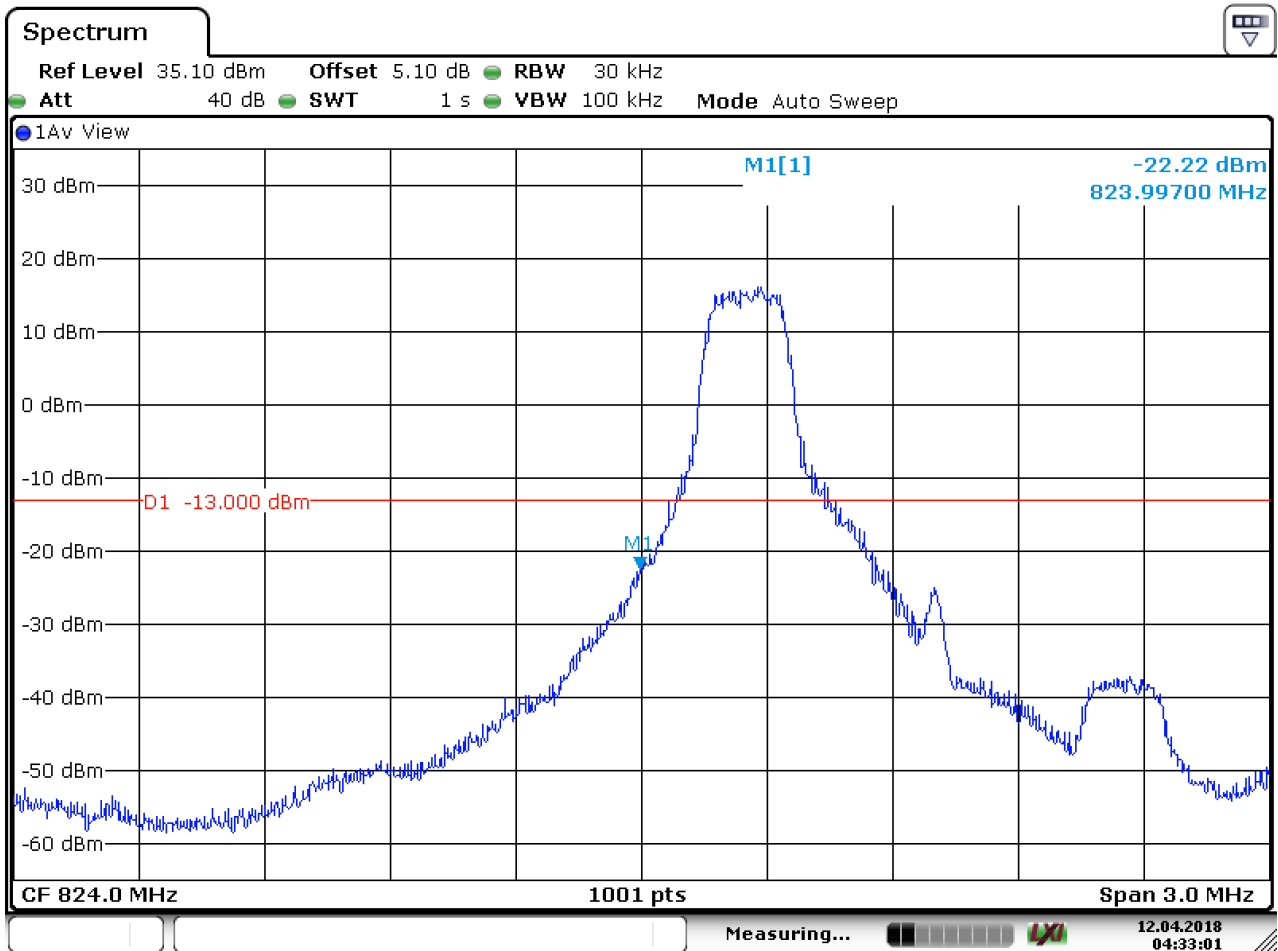
### 5.1 For LTE

#### 5.1.1 Test Band = LTE band5

##### 5.1.1.1 Test Mode = LTE/TM1 1.4MHz

##### 5.1.1.1.1 Test Channel = LCH

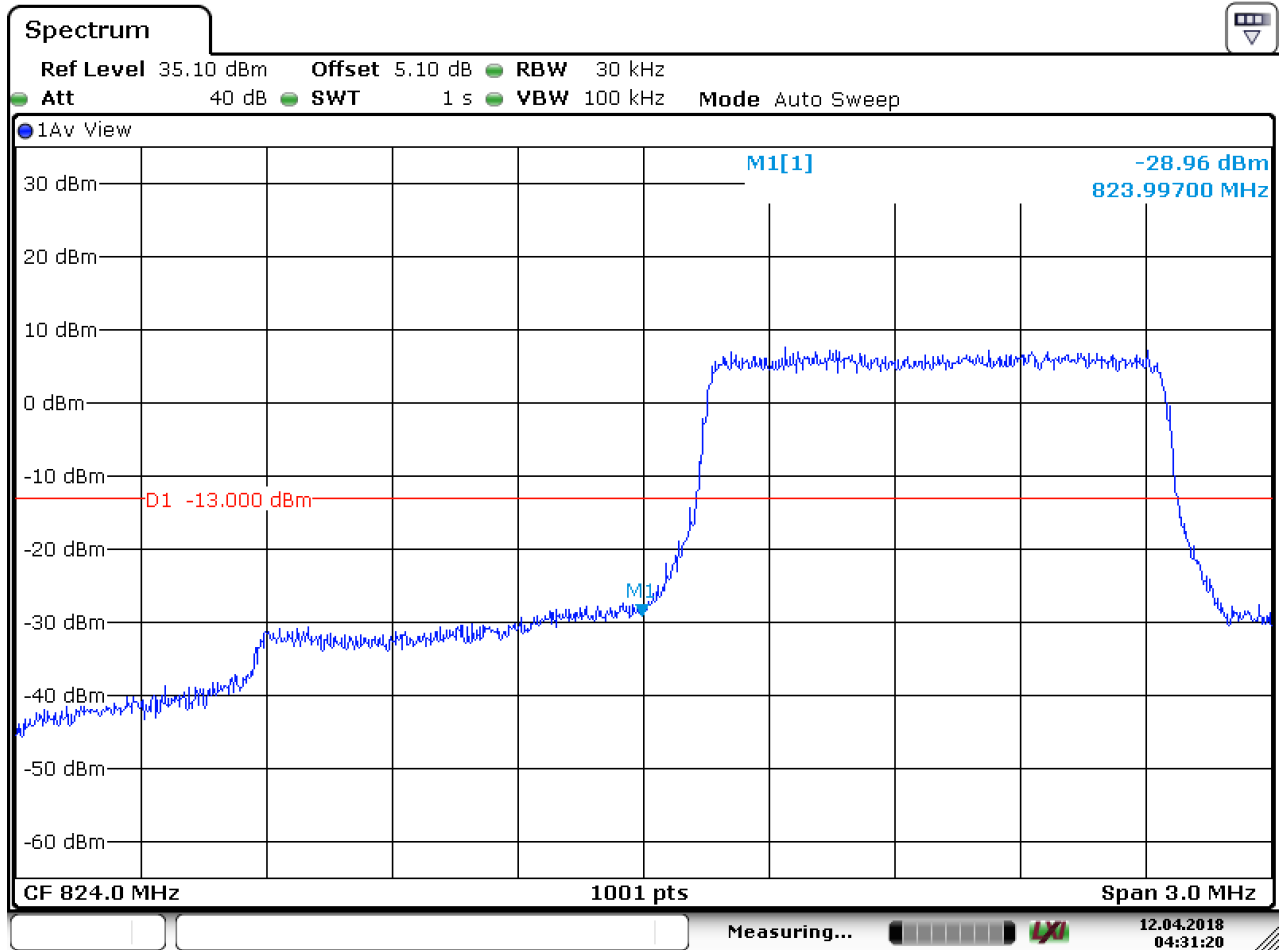
##### 5.1.1.1.1.1 Test RB=1RB



Date: 12.APR.2018 04:33:01



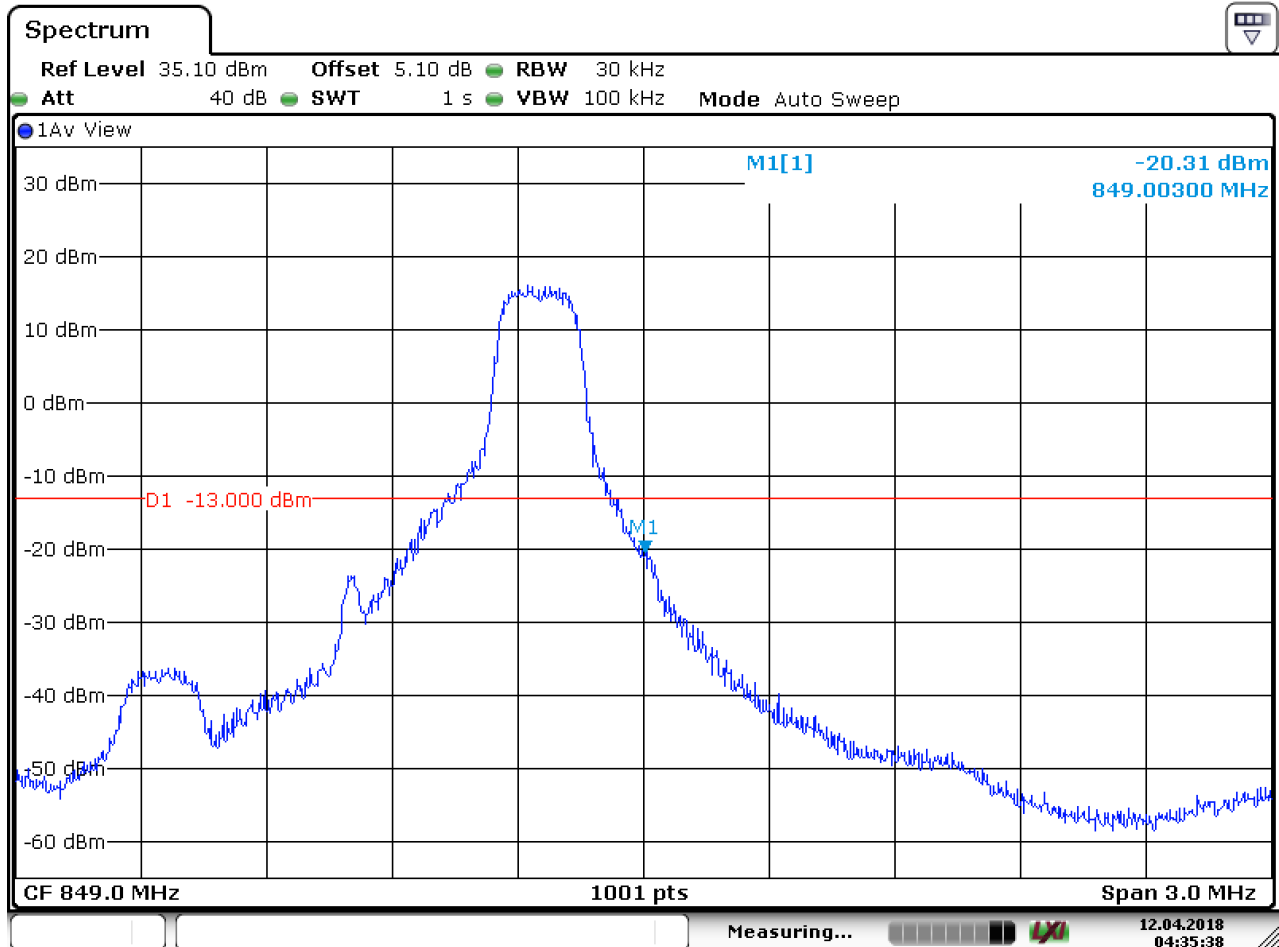
5.1.1.1.1.2 Test RB=6RB



Date: 12.APR.2018 04:31:20

**5.1.1.1.2 Test Channel = HCH**

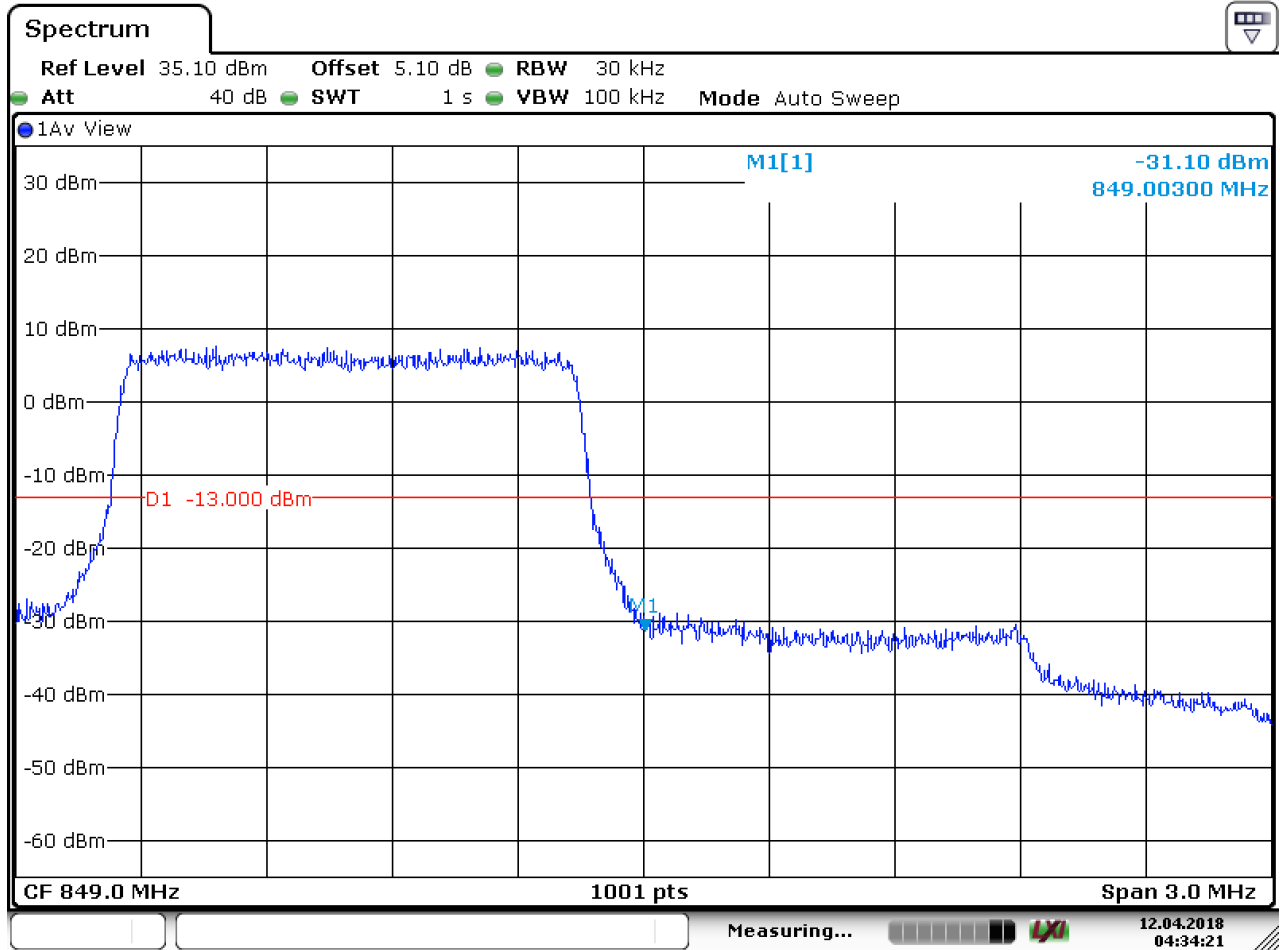
**5.1.1.1.2.1 Test RB=1RB**



Date: 12.APR.2018 04:35:39



5.1.1.1.2.2 Test RB=6RB

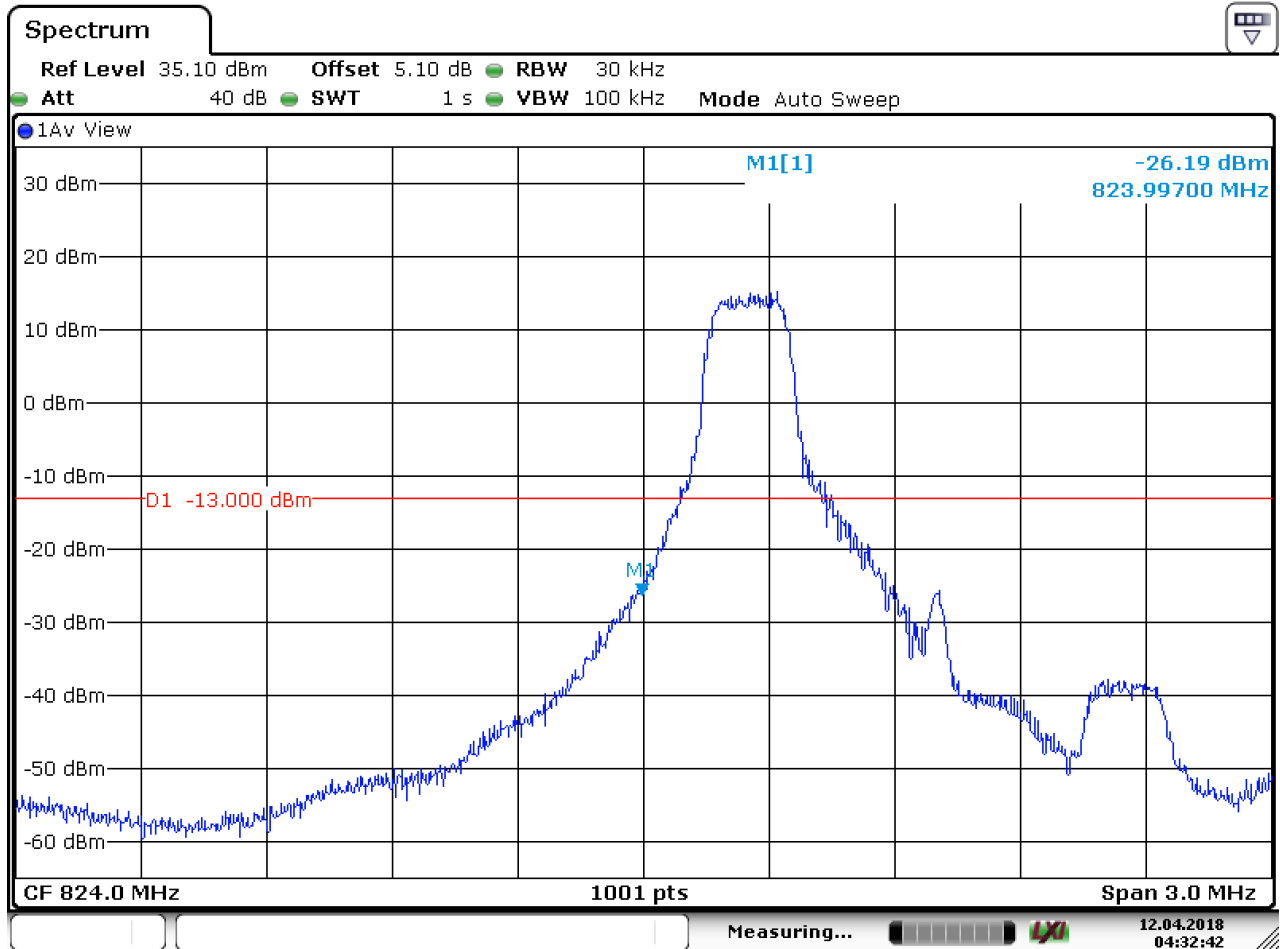


Date: 12.APR.2018 04:34:22



5.1.1.2 Test Mode = LTE/TM2 1.4MHz  
5.1.1.2.1 Test Channel = LCH

5.1.1.2.1.1 Test RB=1RB

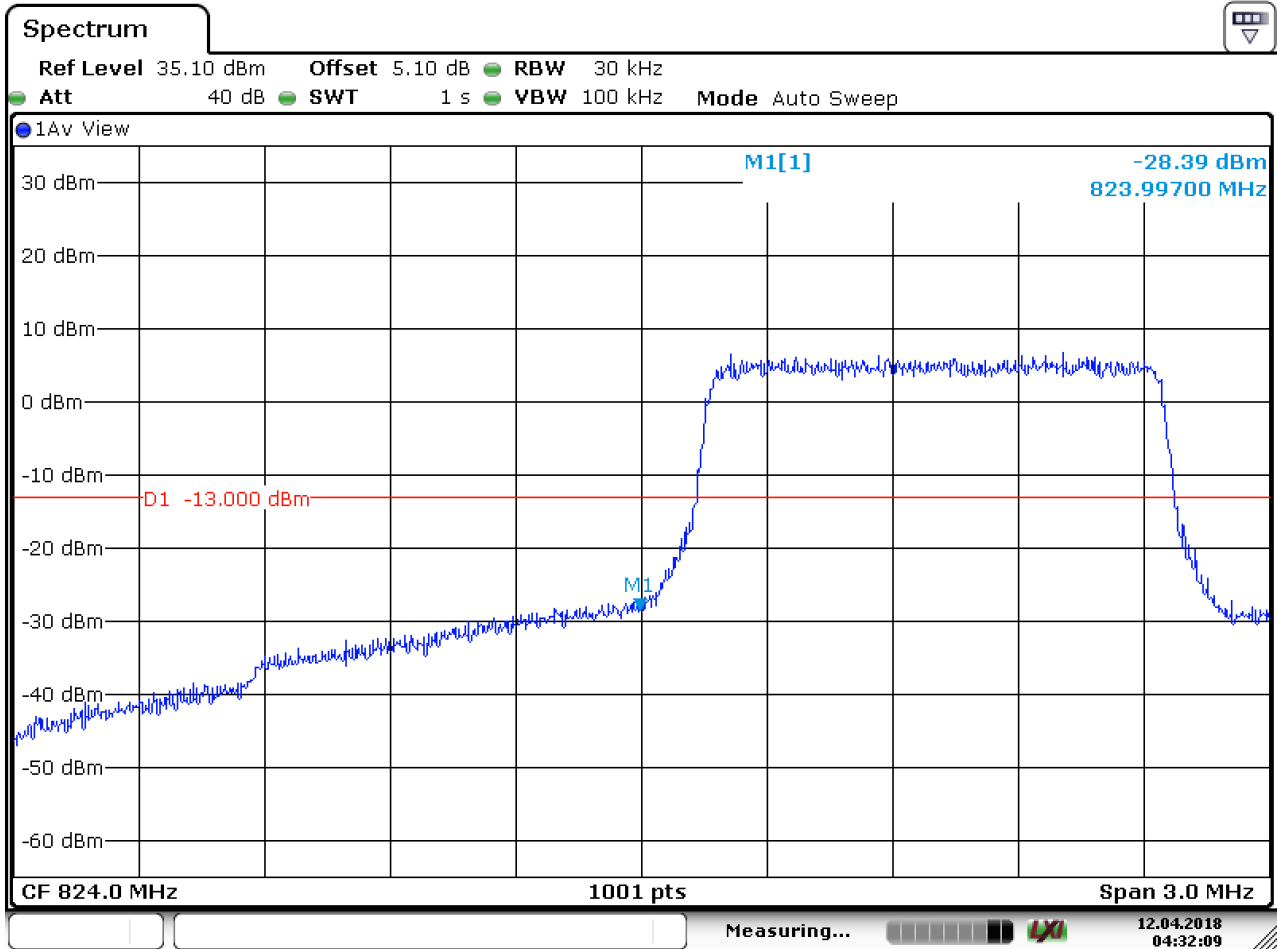


Date: 12.APR.2018 04:32:42





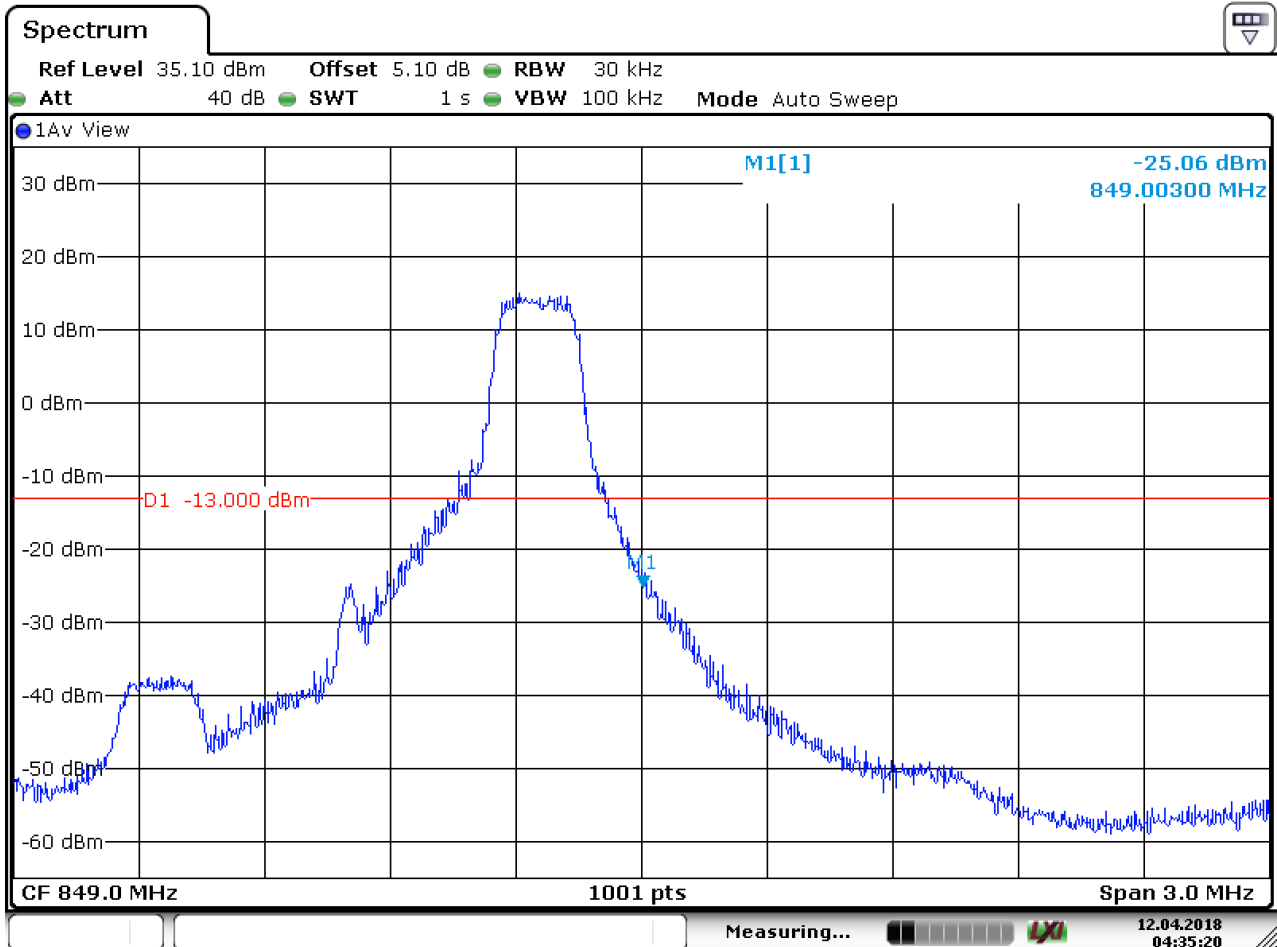
5.1.1.2.1.2 Test RB=6RB



Date: 12.APR.2018 04:32:09

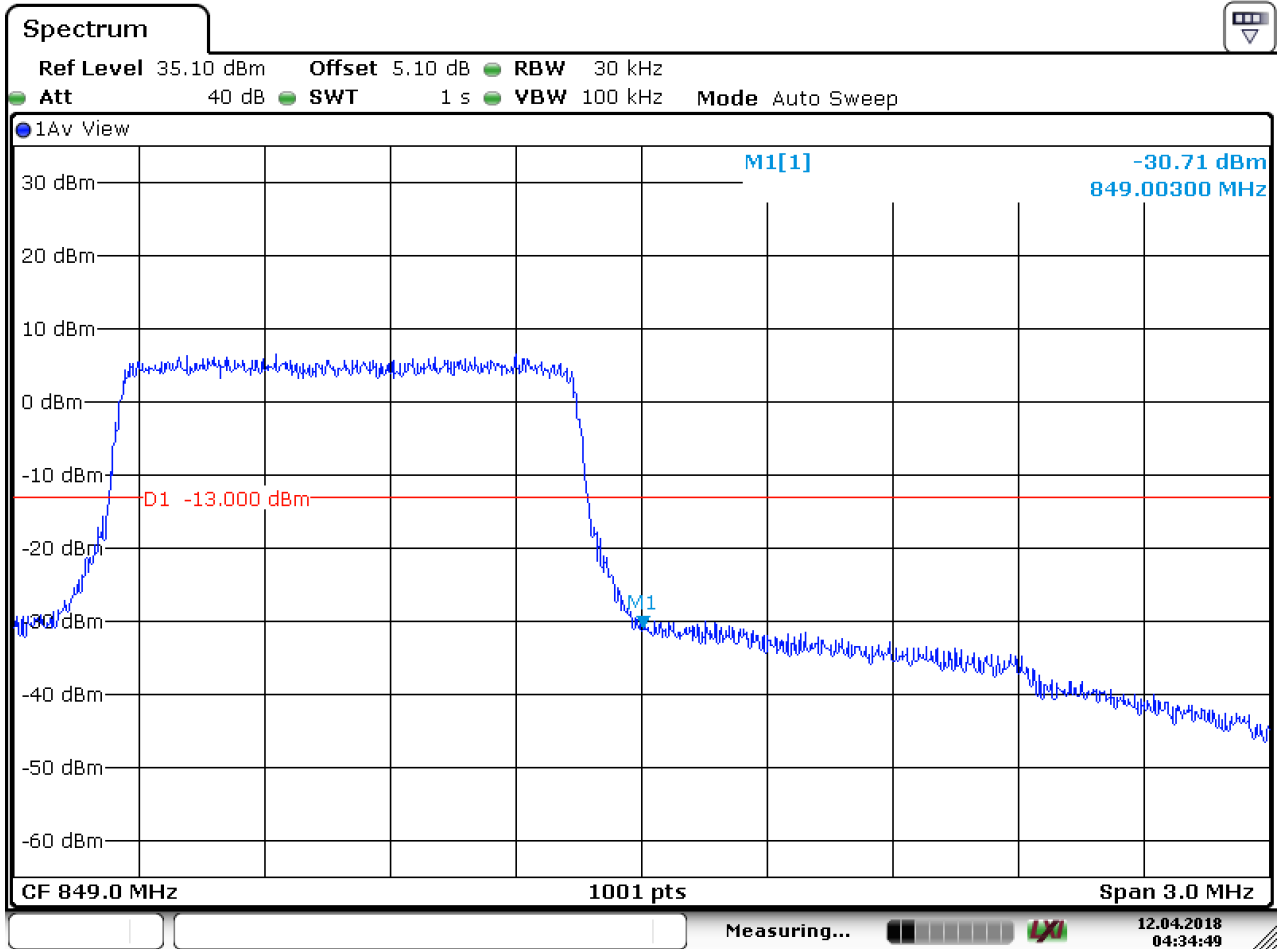
**5.1.1.2.2 Test Channel = HCH**

**5.1.1.2.2.1 Test RB=1RB**



Date: 12.APR.2018 04:35:20

**5.1.1.2.2 Test RB=6RB**



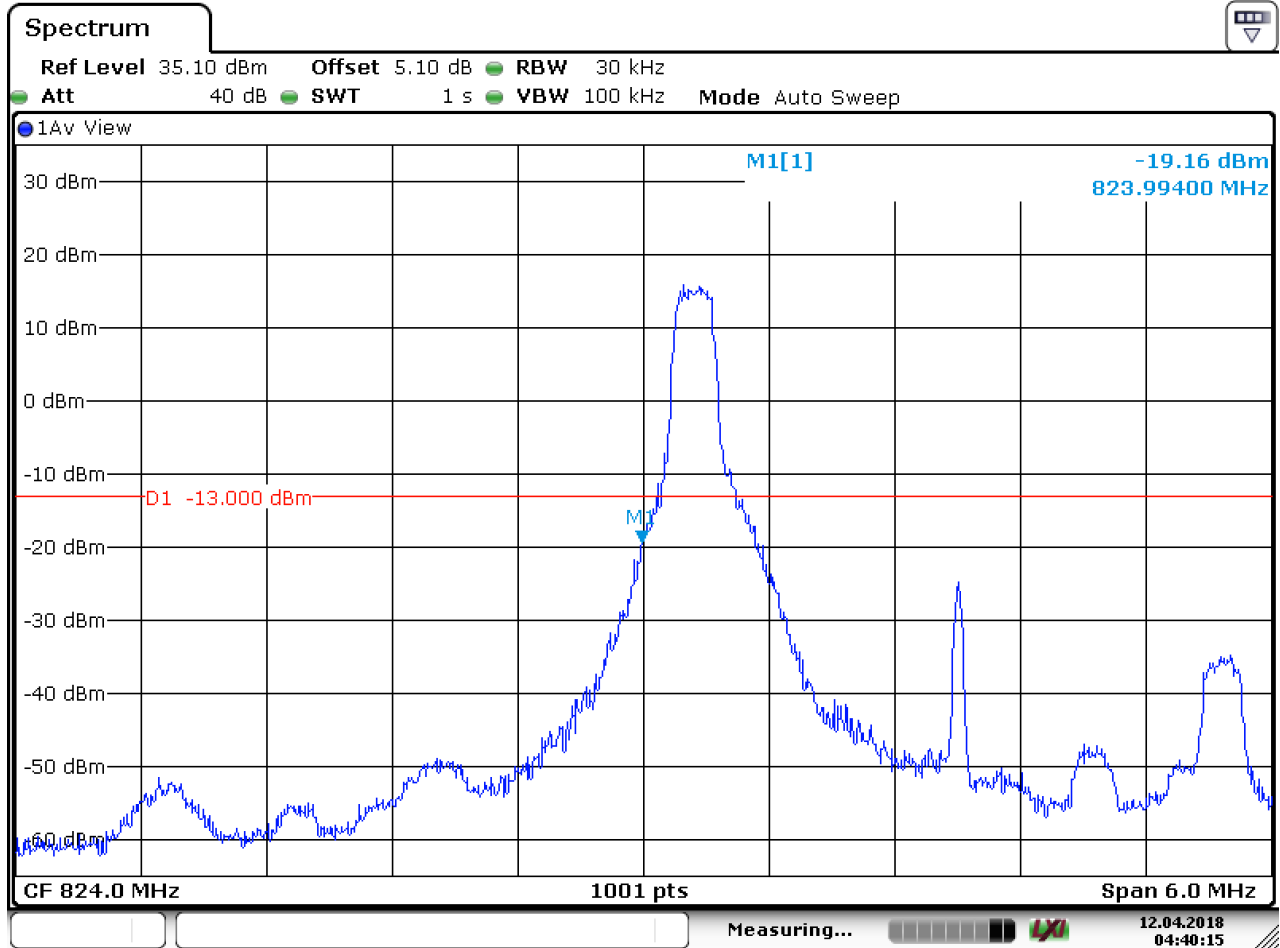
Date: 12.APR.2018 04:34:50



5.1.1.3 Test Mode = LTE/TM1 3MHz

5.1.1.3.1 Test Channel = LCH

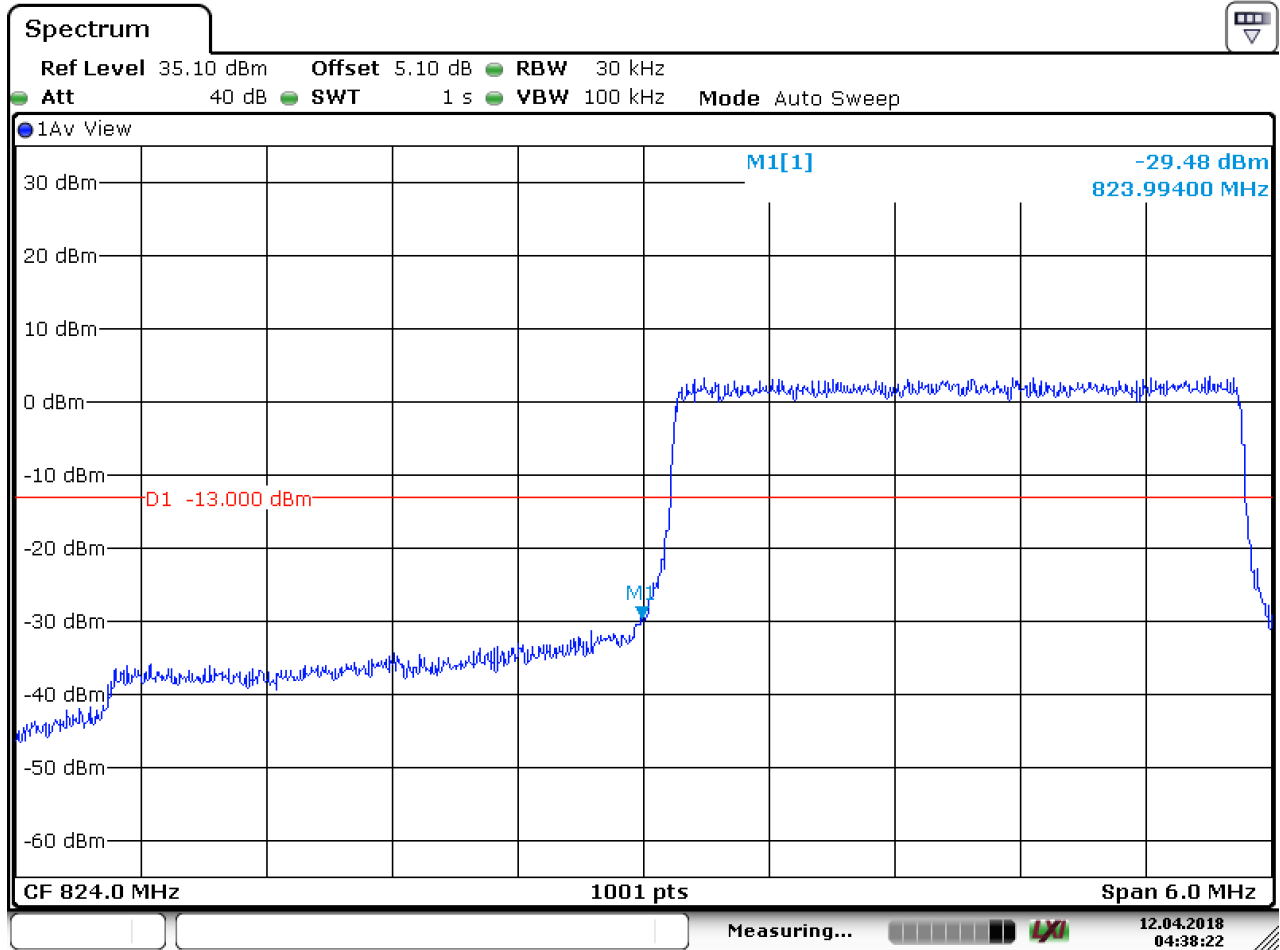
5.1.1.3.1.1 Test RB=1RB



Date: 12.APR.2018 04:40:15



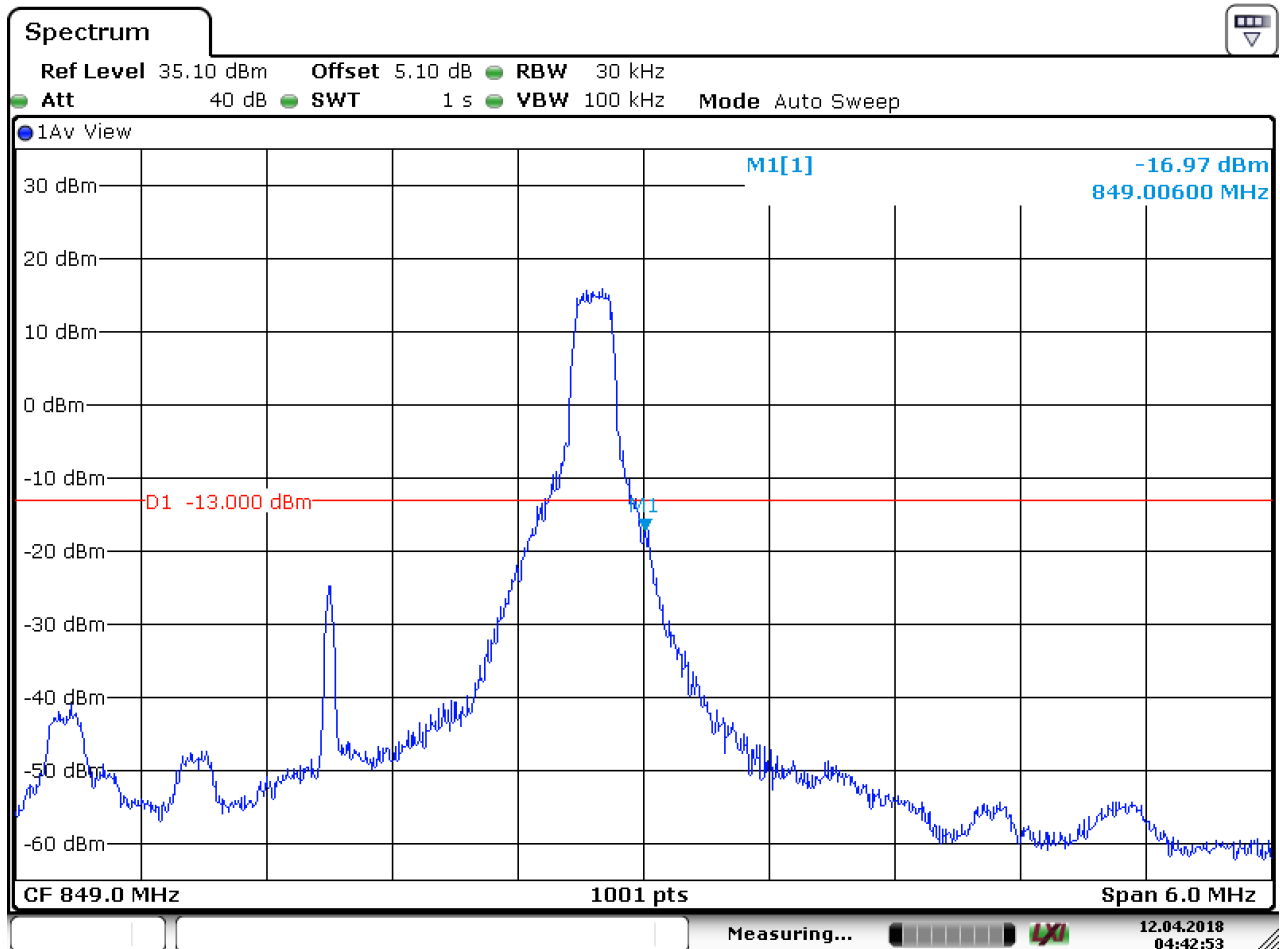
5.1.1.3.1.2 Test RB=15RB



Date: 12.APR.2018 04:38:22

**5.1.1.3.2 Test Channel = HCH**

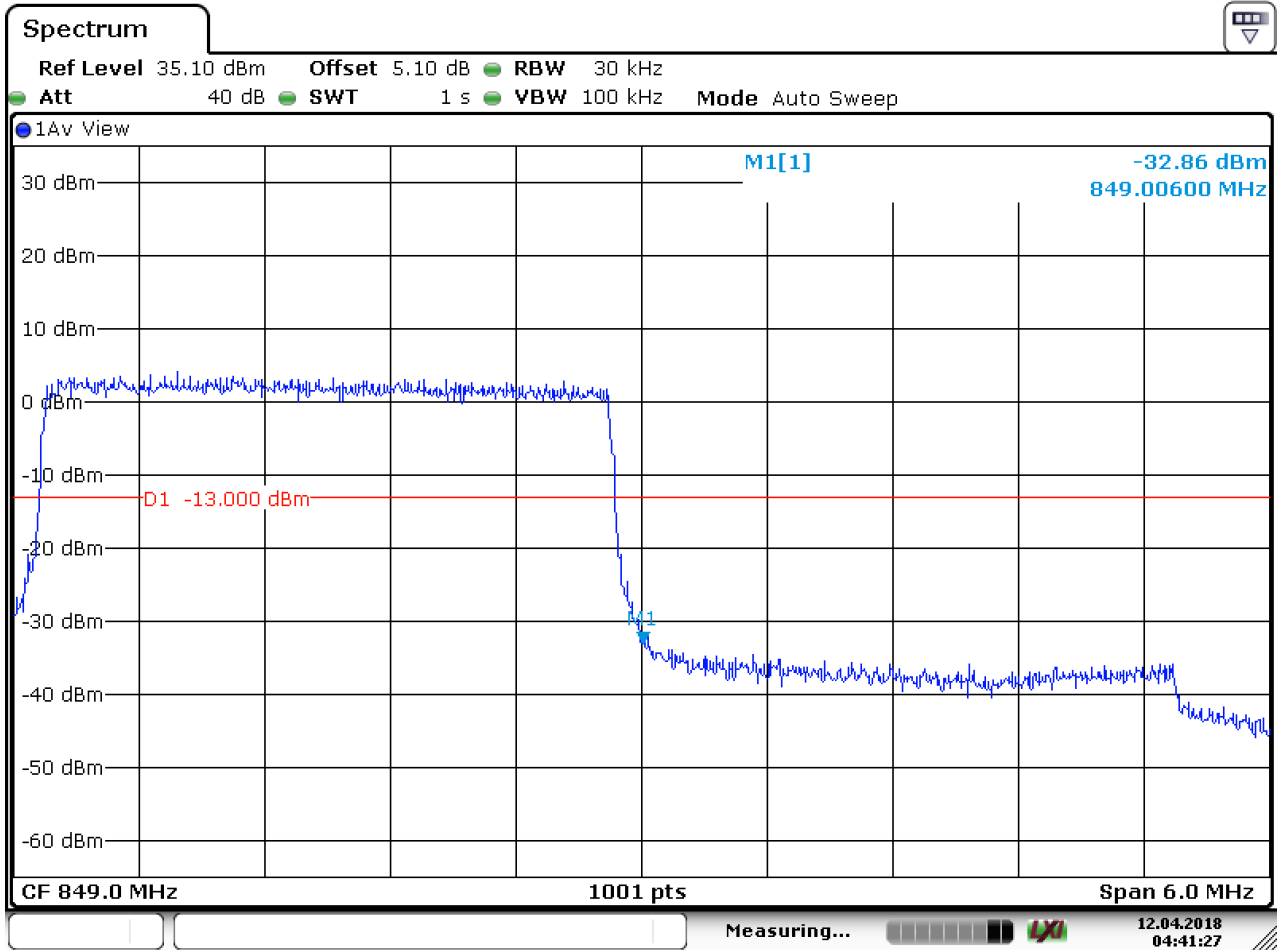
**5.1.1.3.2.1 Test RB=1RB**



Date: 12.APR.2018 04:42:53



5.1.1.3.2.2 Test RB=15RB

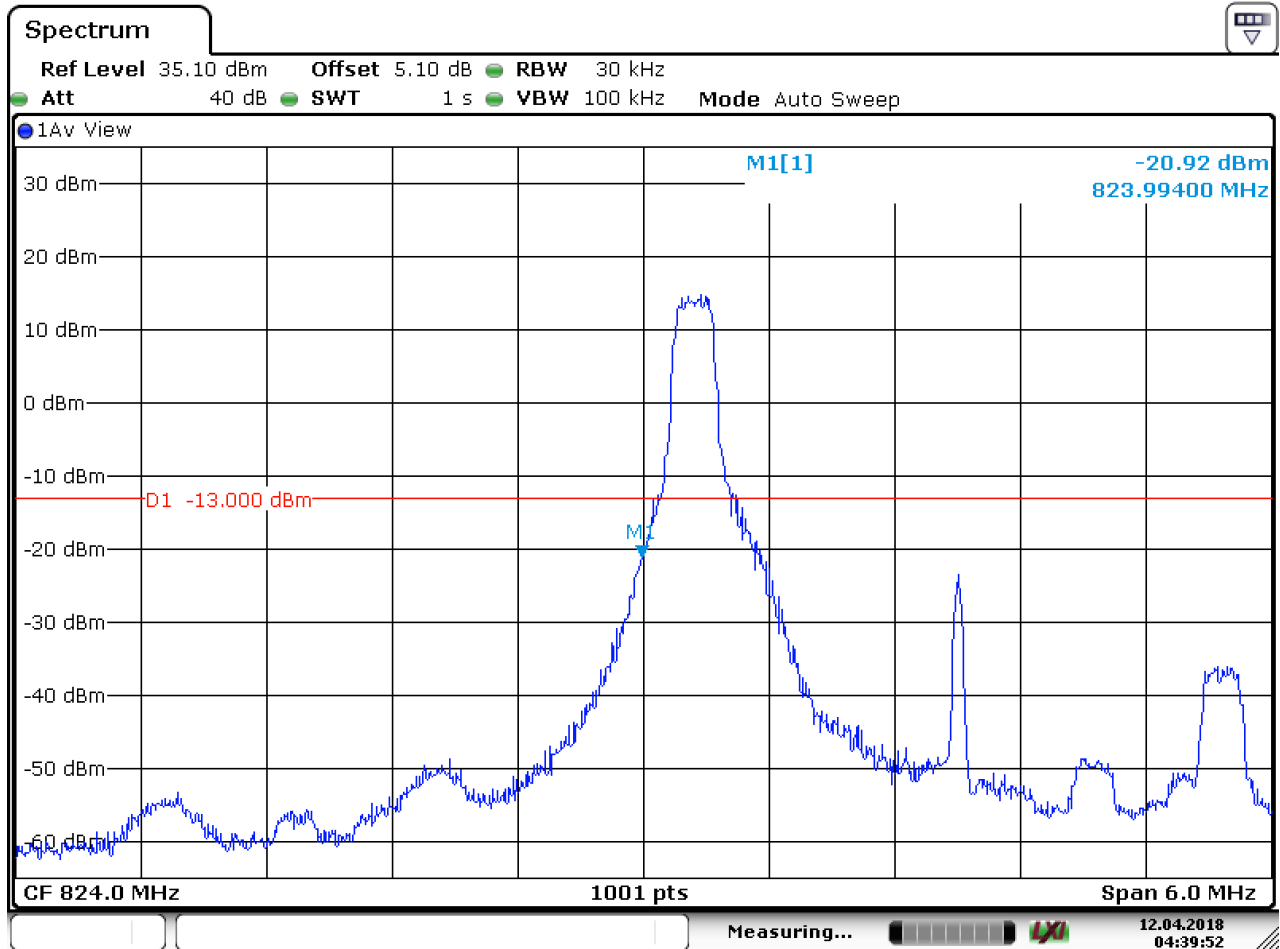


Date: 12.APR.2018 04:41:27

**5.1.1.4 Test Mode = LTE/TM2 3MHz**

**5.1.1.4.1 Test Channel = LCH**

**5.1.1.4.1.1 Test RB=1RB**

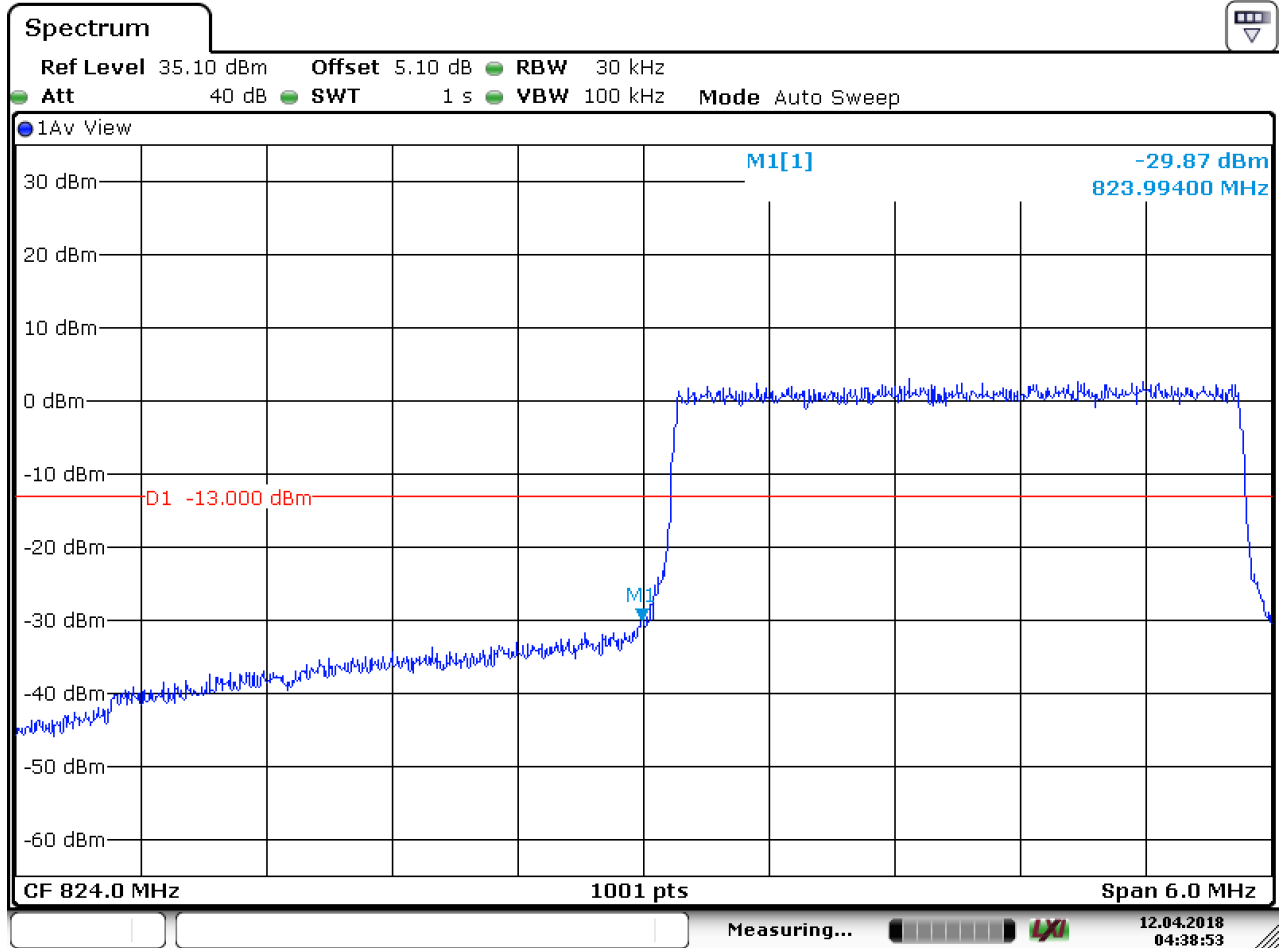


Date: 12.APR.2018 04:39:52





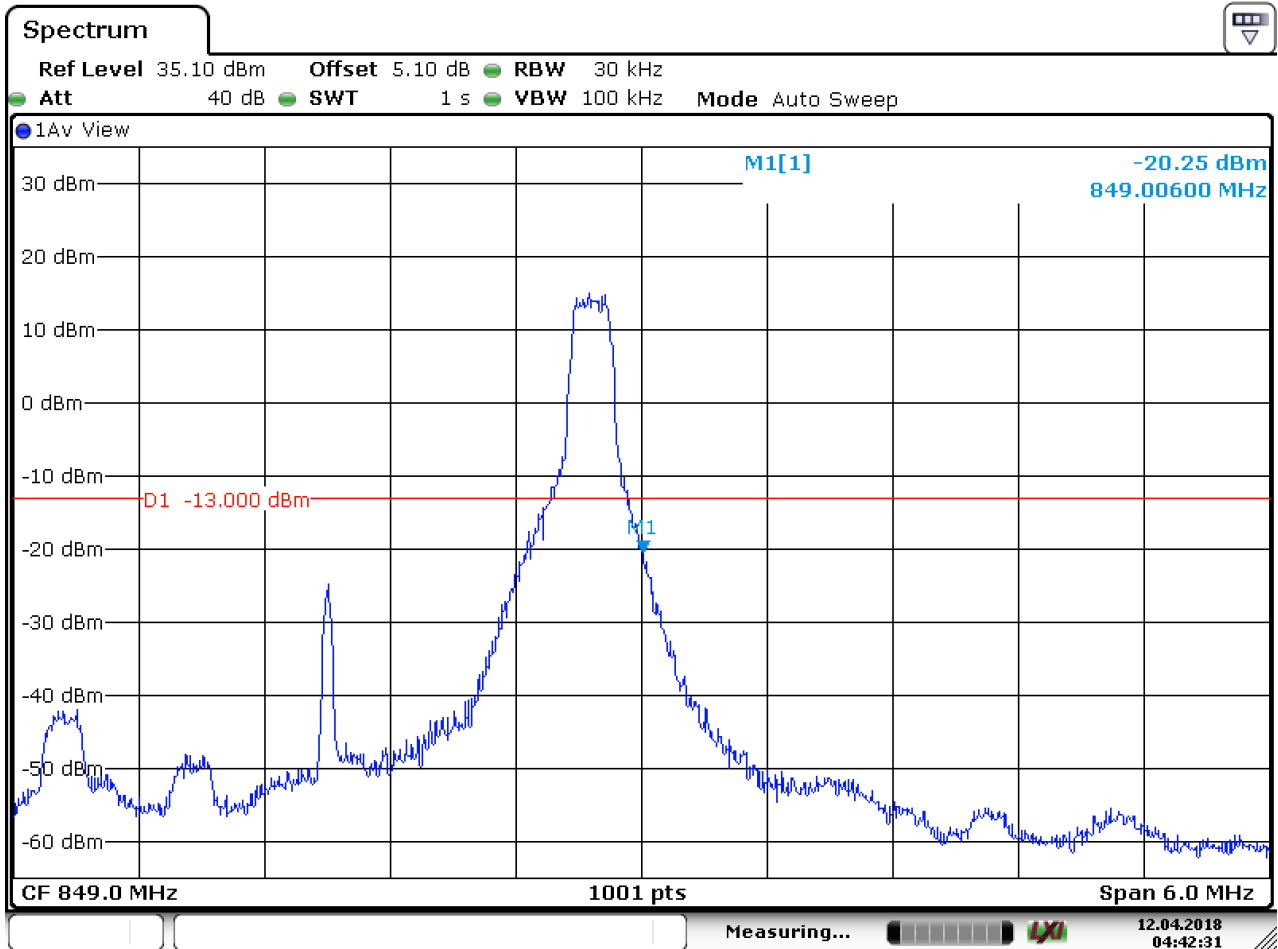
5.1.1.4.1.2 Test RB=15RB



Date: 12.APR.2018 04:38:53

**5.1.1.4.2 Test Channel = HCH**

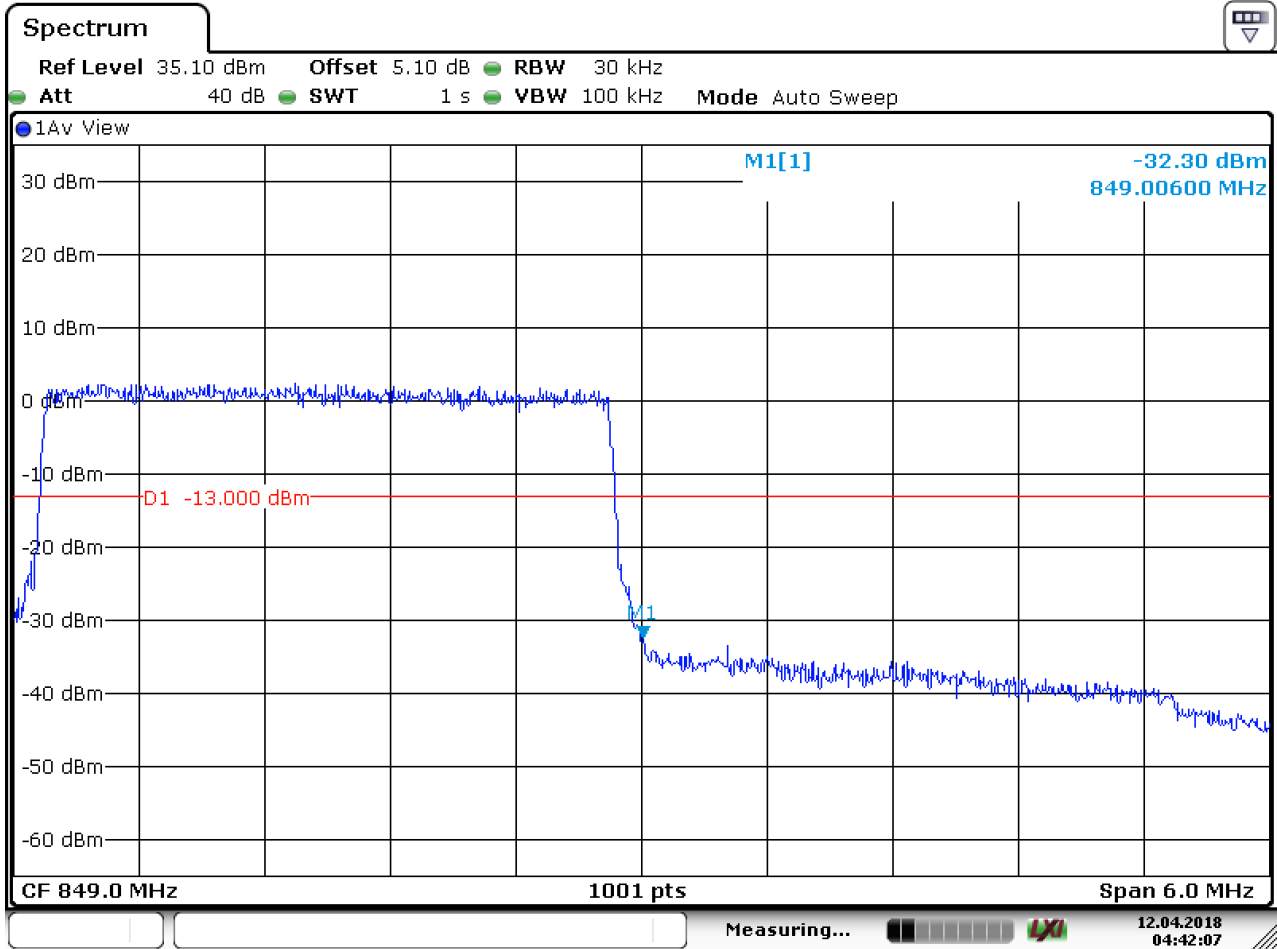
**5.1.1.4.2.1 Test RB=1RB**



Date: 12.APR.2018 04:42:31



5.1.1.4.2.2 Test RB=15RB

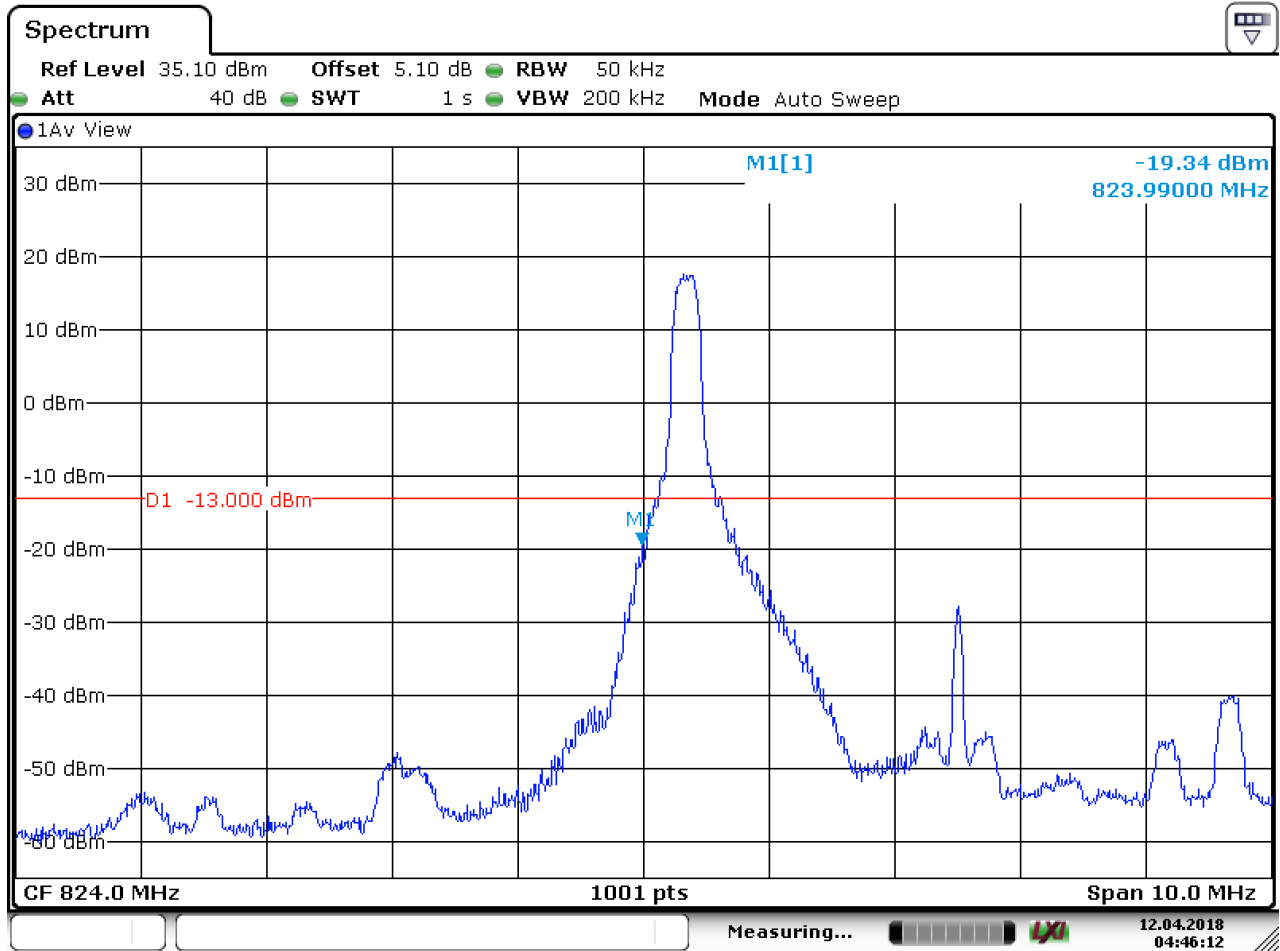


Date: 12.APR.2018 04:42:07

**5.1.1.5 Test Mode = LTE/TM1 5MHz**

**5.1.1.5.1 Test Channel = LCH**

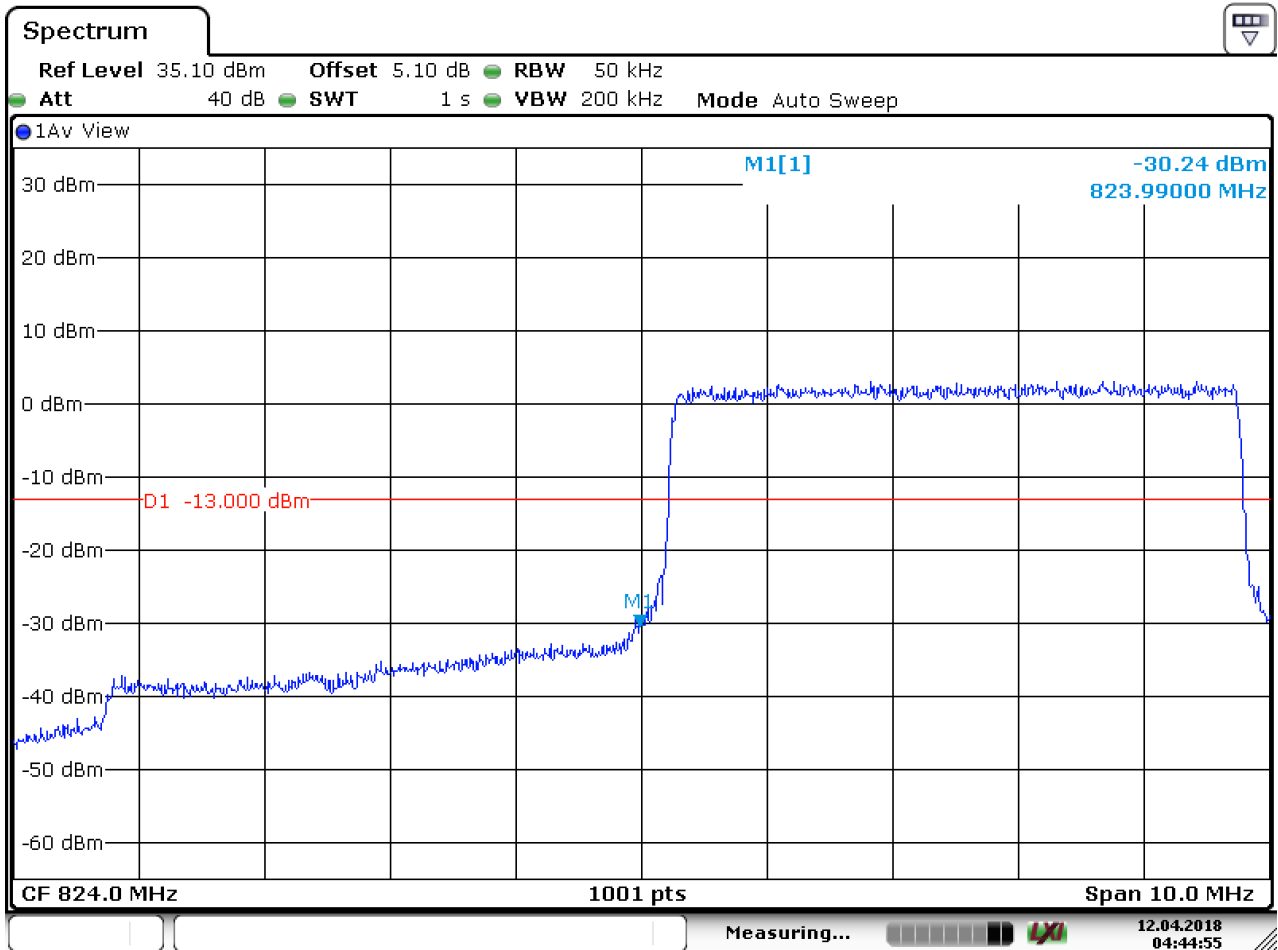
**5.1.1.5.1.1 Test RB=1RB**



Date: 12.APR.2018 04:46:13



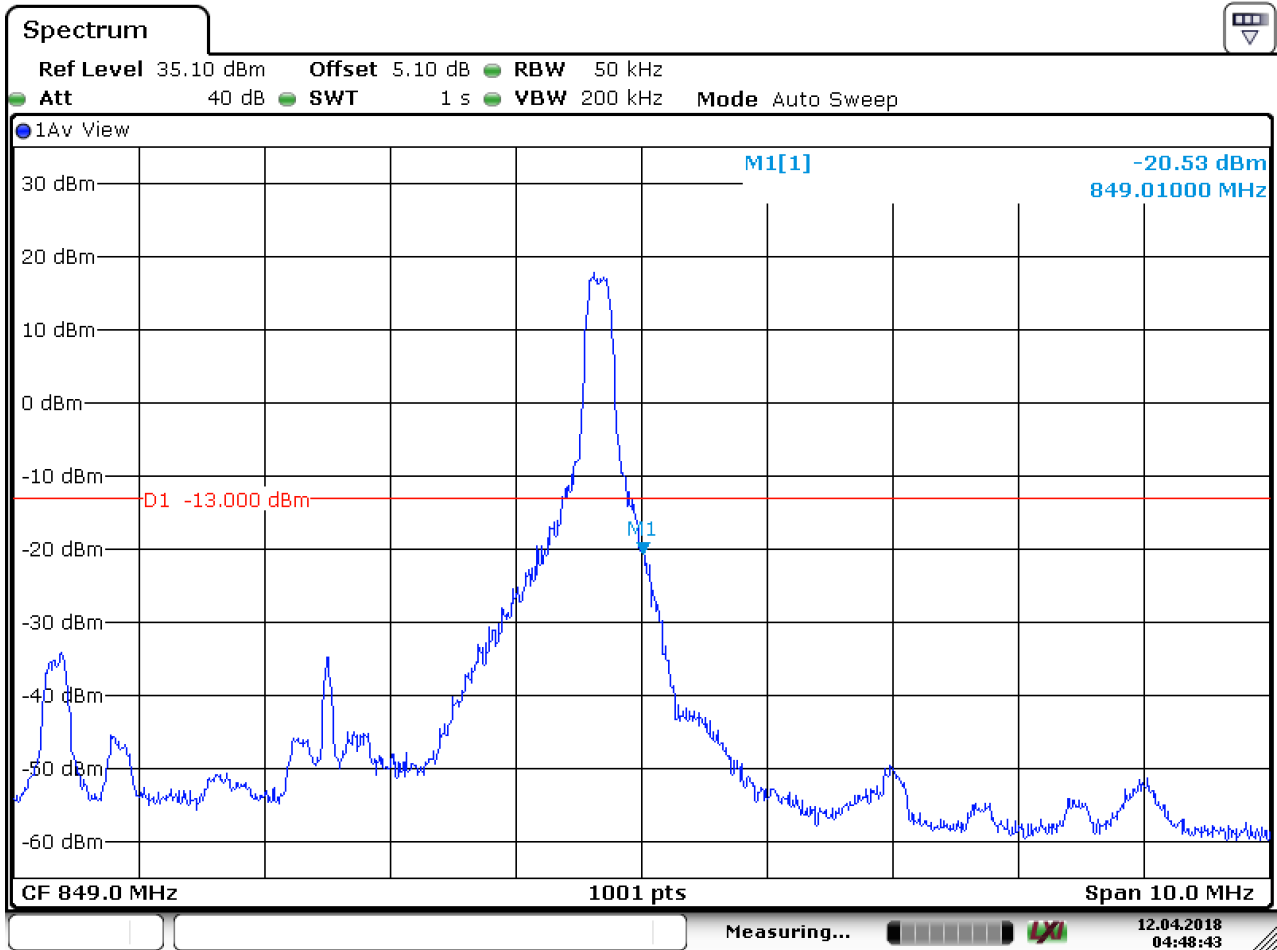
5.1.1.5.1.2 Test RB=25RB



Date: 12.APR.2018 04:44:55

**5.1.1.5.2 Test Channel = HCH**

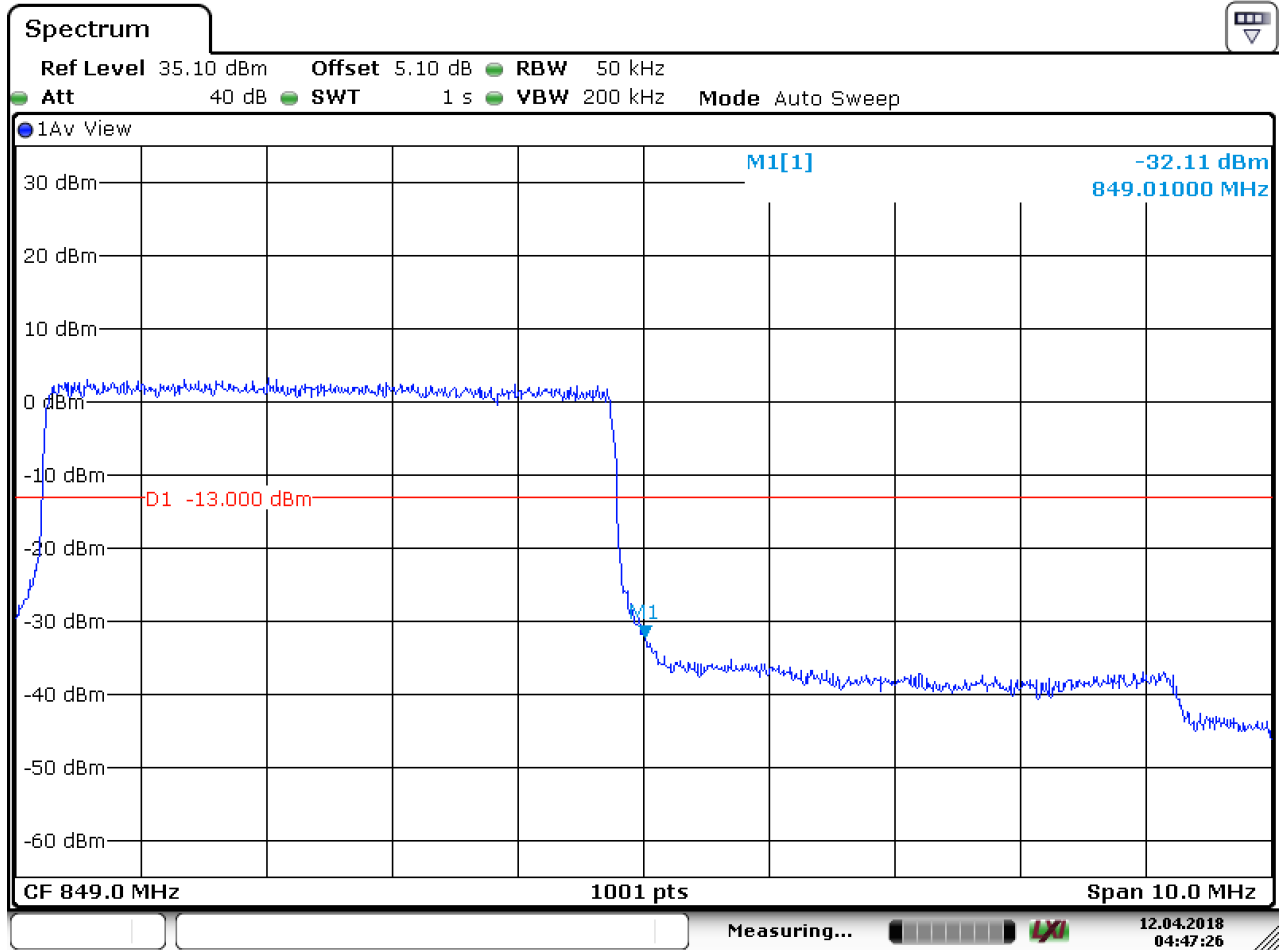
**5.1.1.5.2.1 Test RB=1RB**



Date: 12.APR.2018 04:48:44



5.1.1.5.2.2 Test RB=25RB

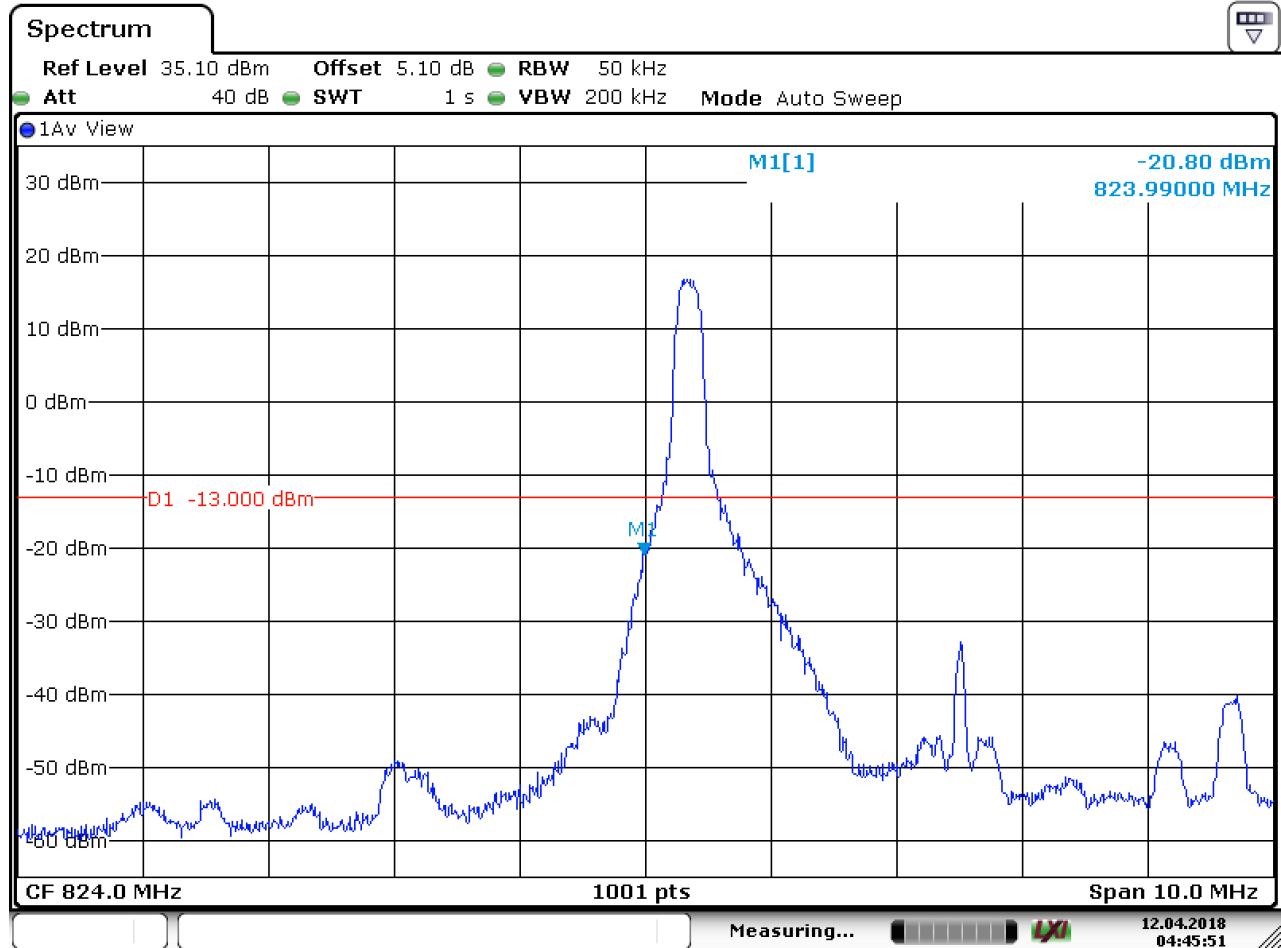


Date: 12.APR.2018 04:47:26

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

**5.1.1.6.1 Test Channel = LCH**

**5.1.1.6.1.1 Test RB=1RB**

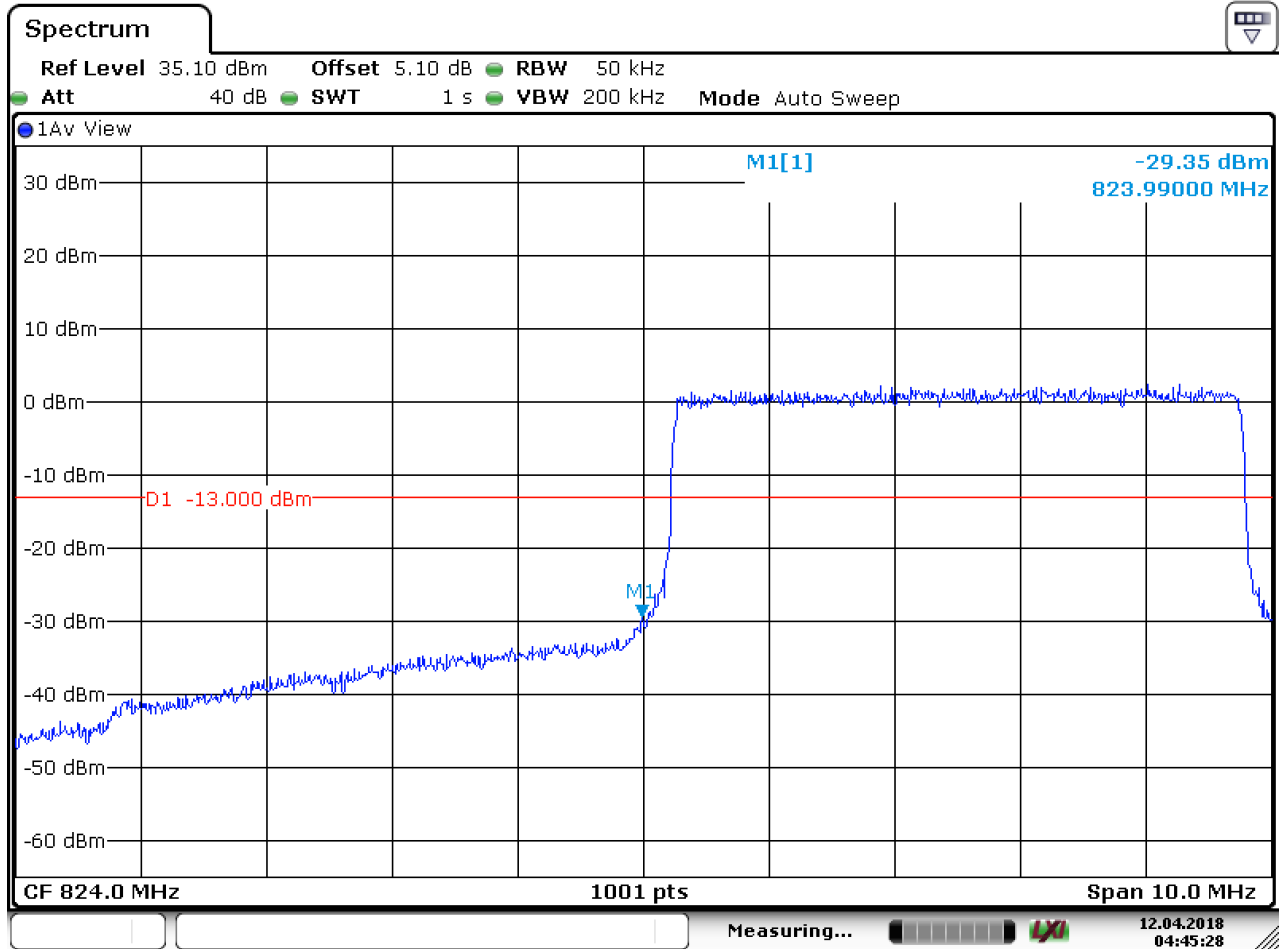


Date: 12.APR.2018 04:45:51





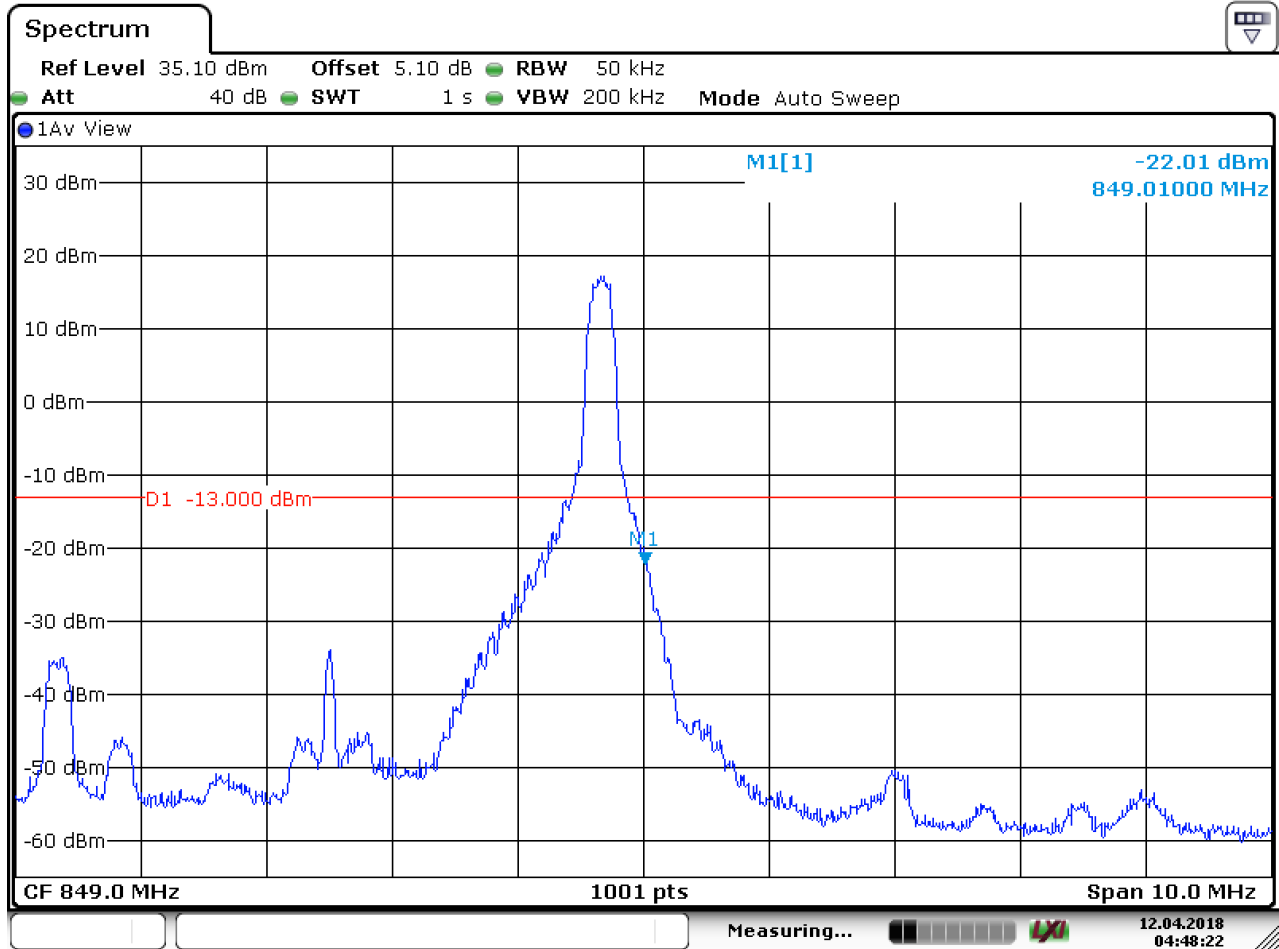
5.1.1.6.1.2 Test RB=25RB



Date: 12.APR.2018 04:45:29

**5.1.1.6.2 Test Channel = HCH**

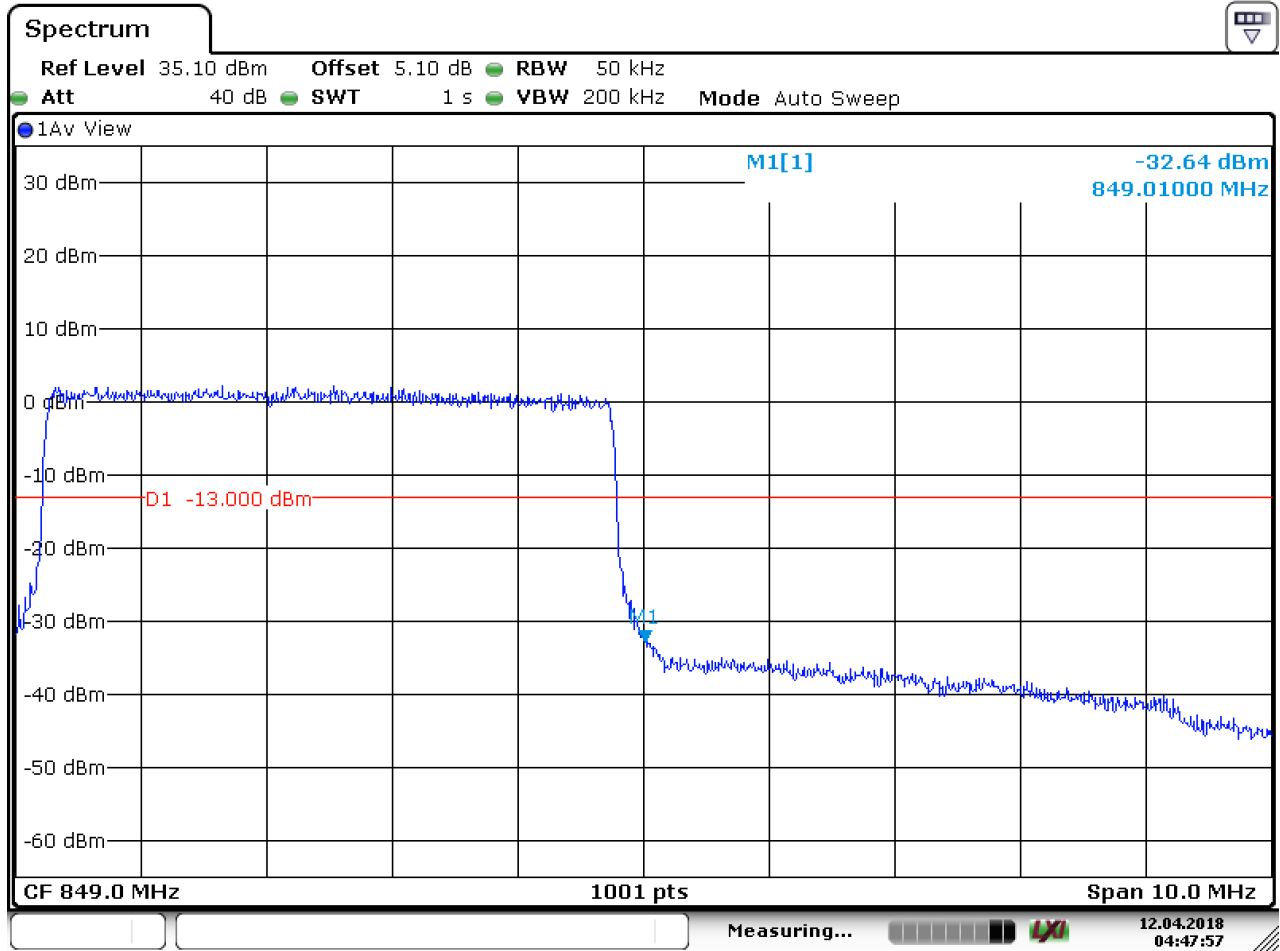
**5.1.1.6.2.1 Test RB=1RB**



Date: 12.APR.2018 04:48:22



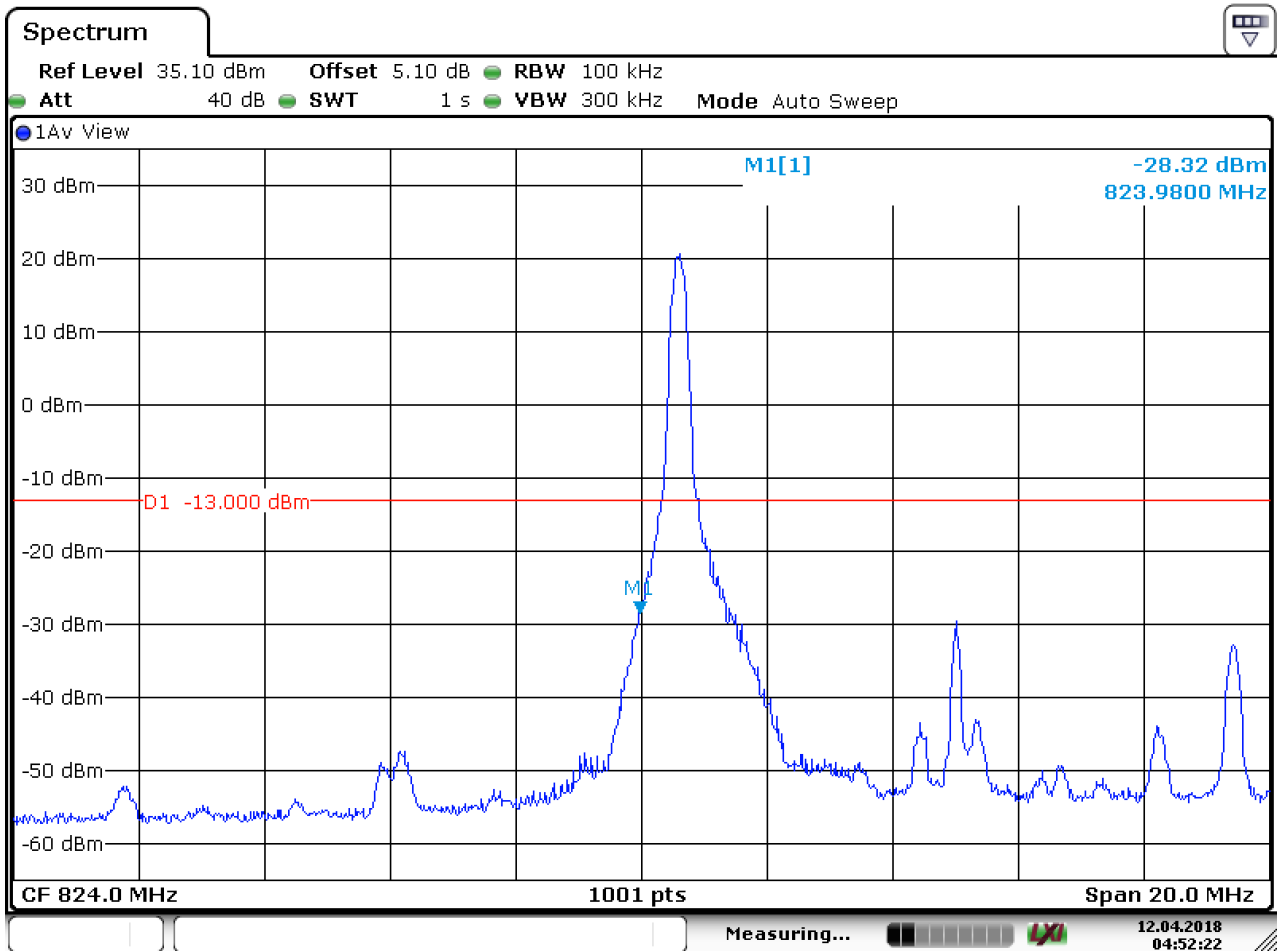
5.1.1.6.2.2 Test RB=25RB



Date: 12.APR.2018 04:47:57



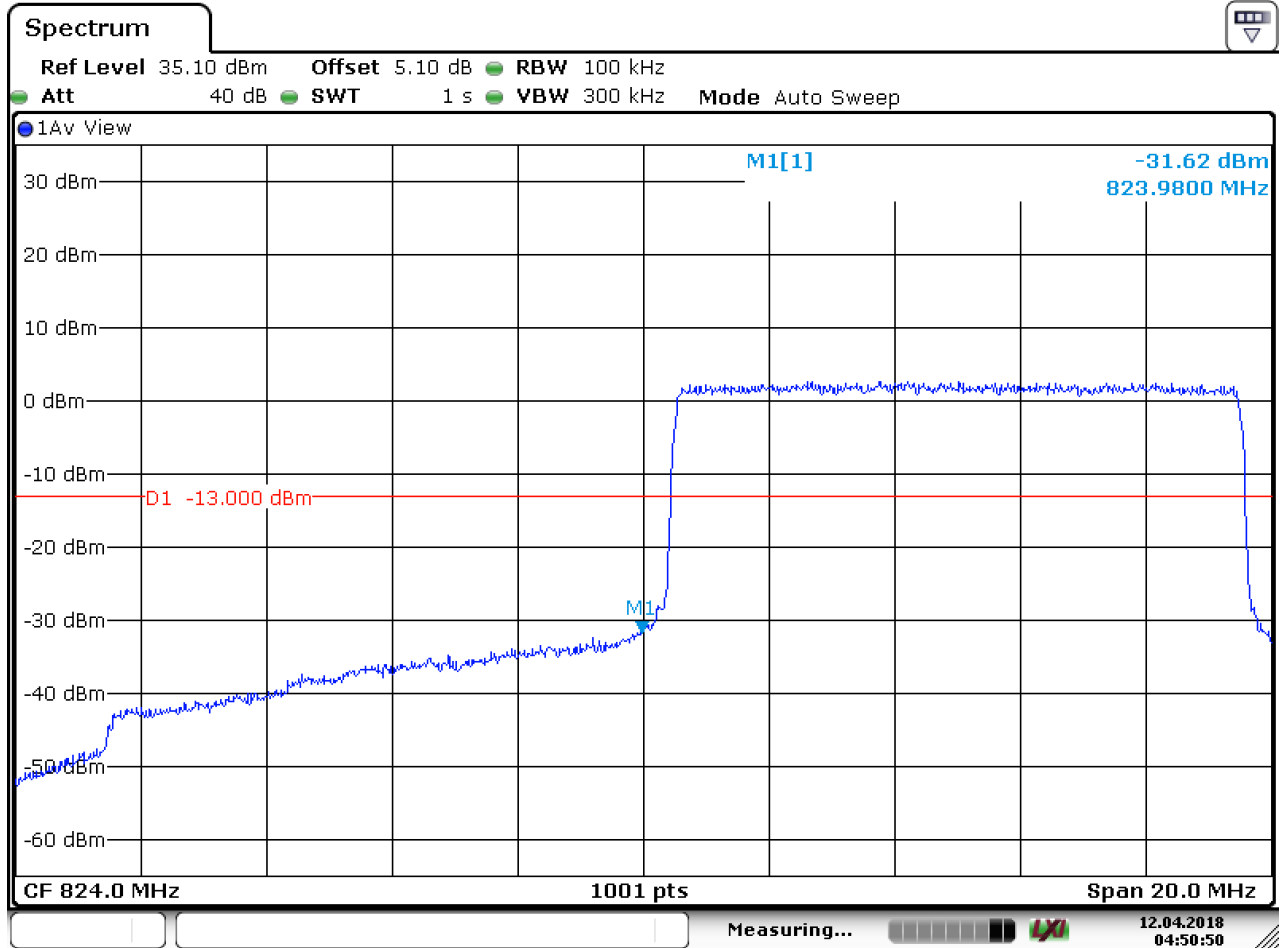
5.1.1.7 Test Mode = LTE/TM1 10MHz  
5.1.1.7.1 Test Channel = LCH  
5.1.1.7.1.1 Test RB=1RB



Date: 12.APR.2018 04:52:22



5.1.1.7.1.2 Test RB=50RB

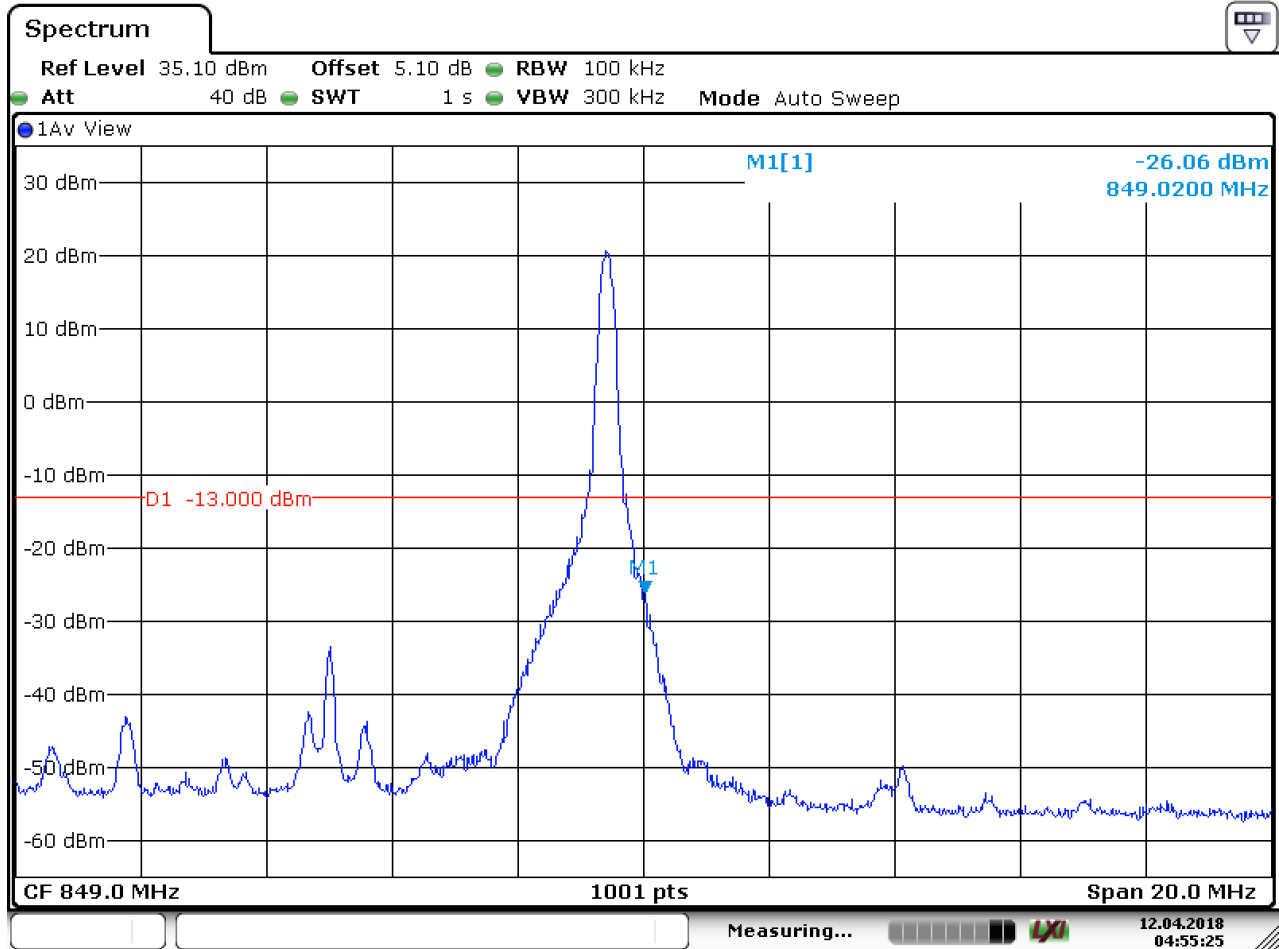


Date: 12.APR.2018 04:50:50



5.1.1.7.2 Test Channel = HCH

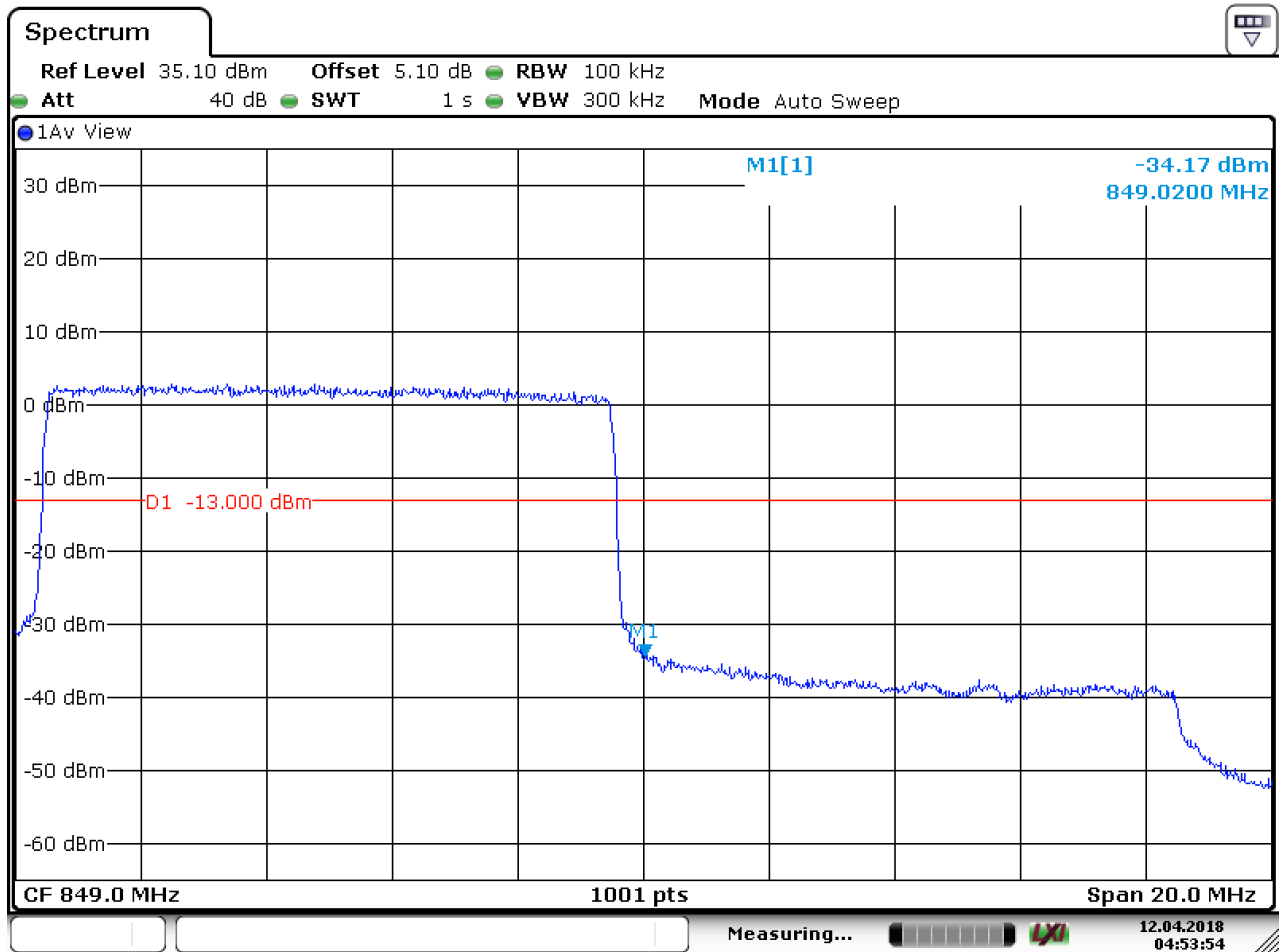
5.1.1.7.2.1 Test RB=1RB



Date: 12.APR.2018 04:55:25



5.1.1.7.2.2 Test RB=50RB

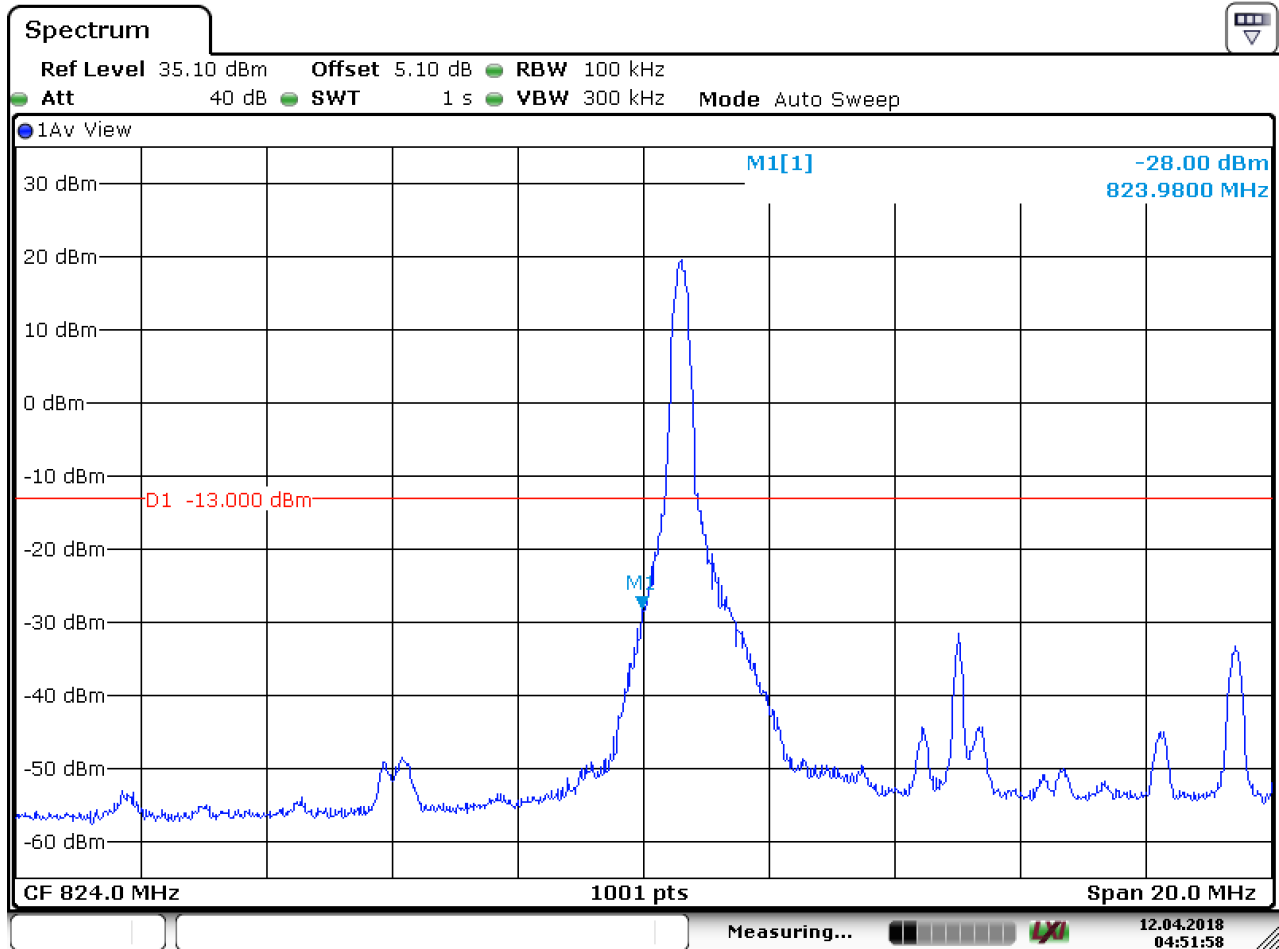


Date: 12.APR.2018 04:53:54

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

**5.1.1.8.1 Test Channel = LCH**

**5.1.1.8.1.1 Test RB=1RB**

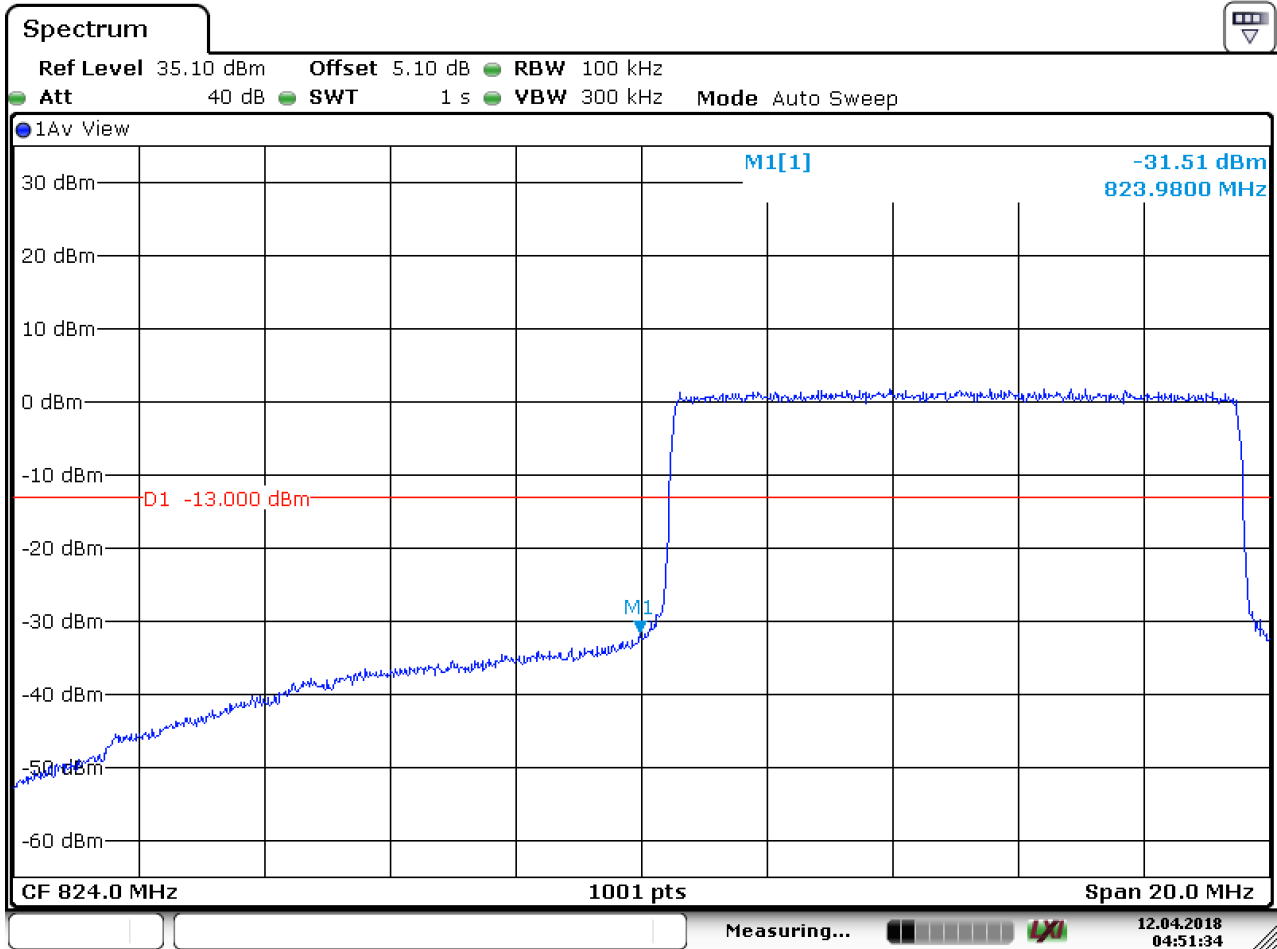


Date: 12.APR.2018 04:51:58





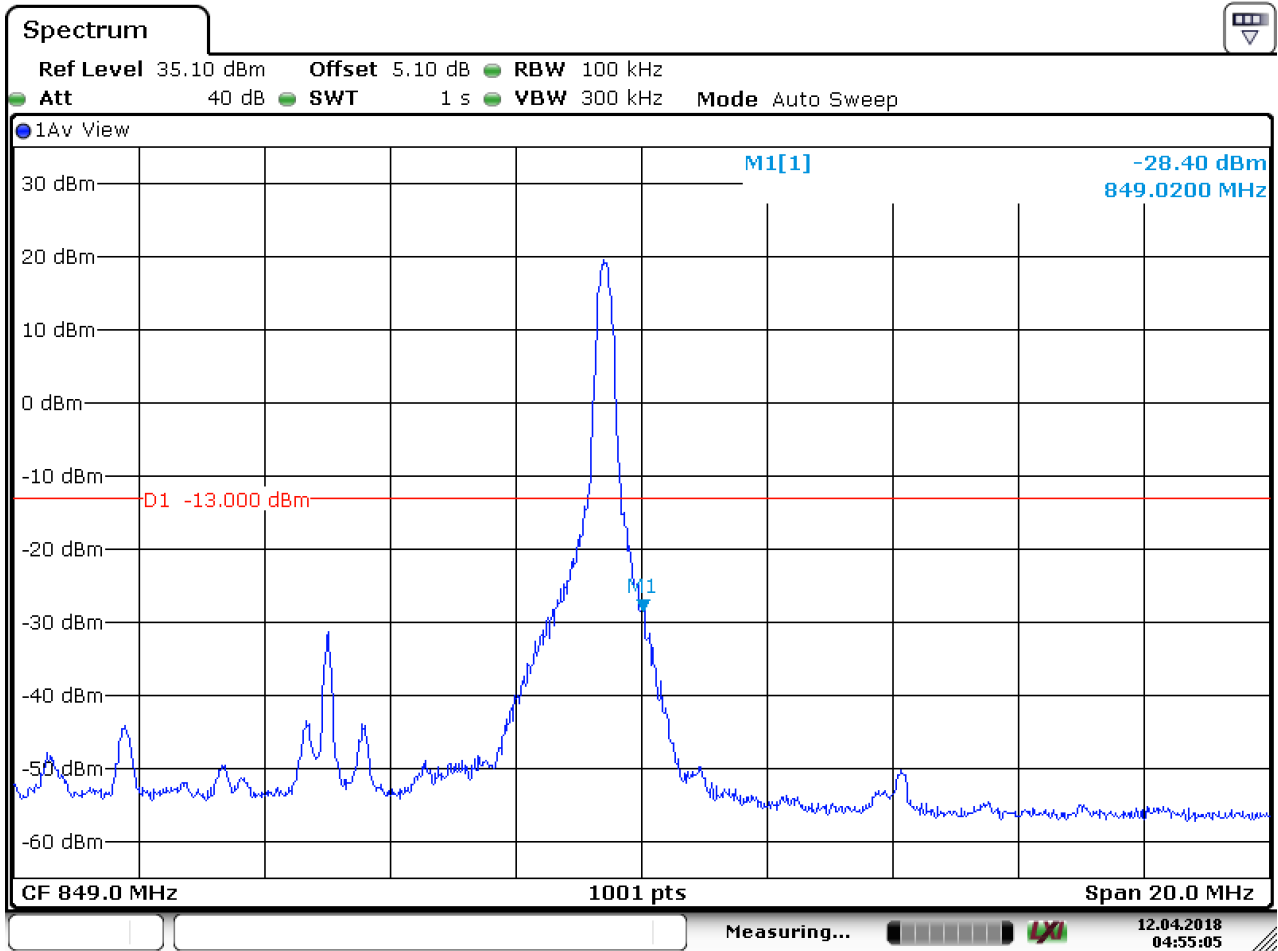
5.1.1.8.1.2 Test RB=50RB



Date: 12.APR.2018 04:51:34

**5.1.1.8.2 Test Channel = HCH**

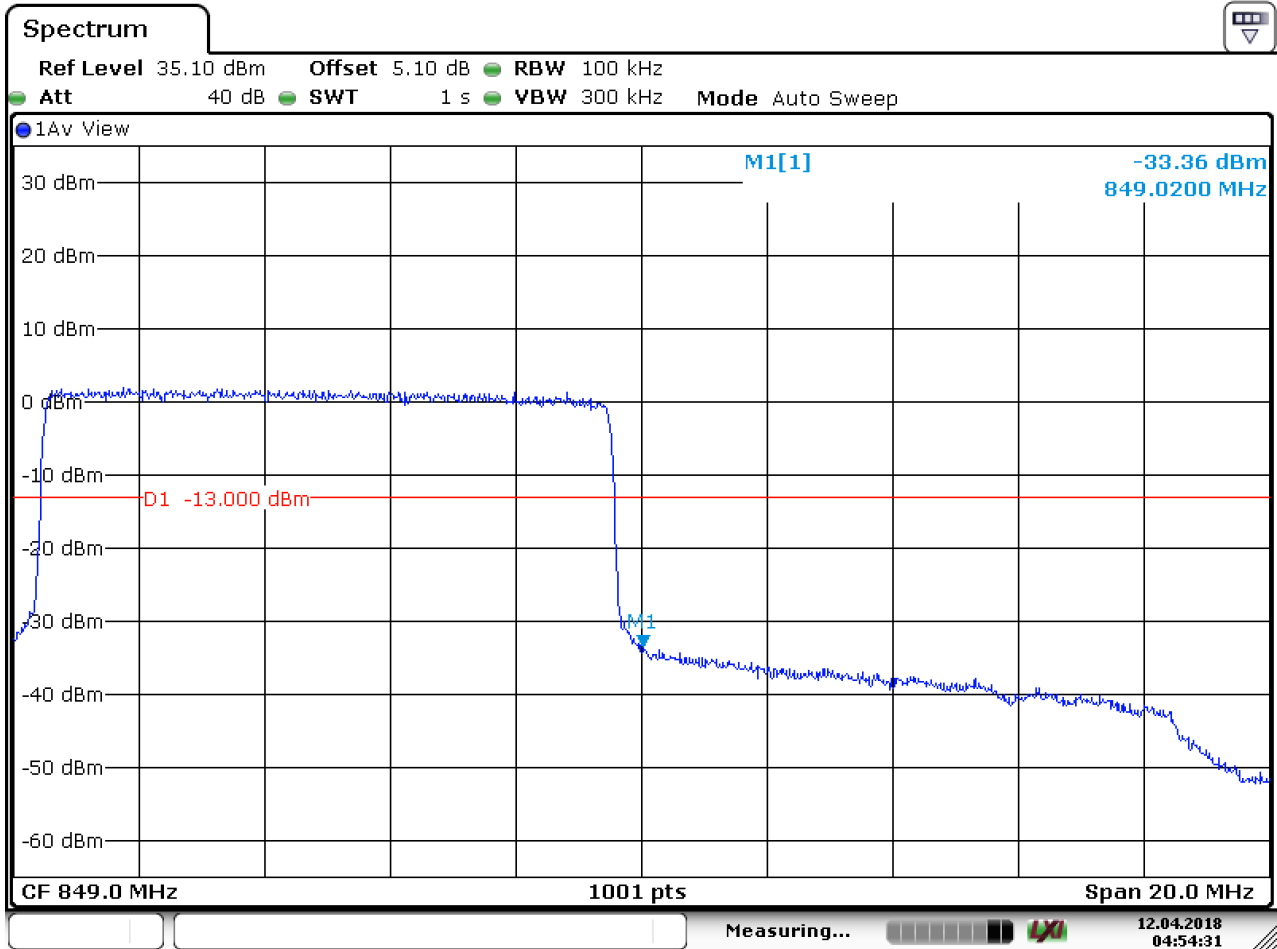
**5.1.1.8.2.1 Test RB=1RB**



Date: 12.APR.2018 04:55:05



5.1.1.8.2.2 Test RB=50RB



Date: 12.APR.2018 04:54:31

## 6 Spurious Emission at Antenna Terminal

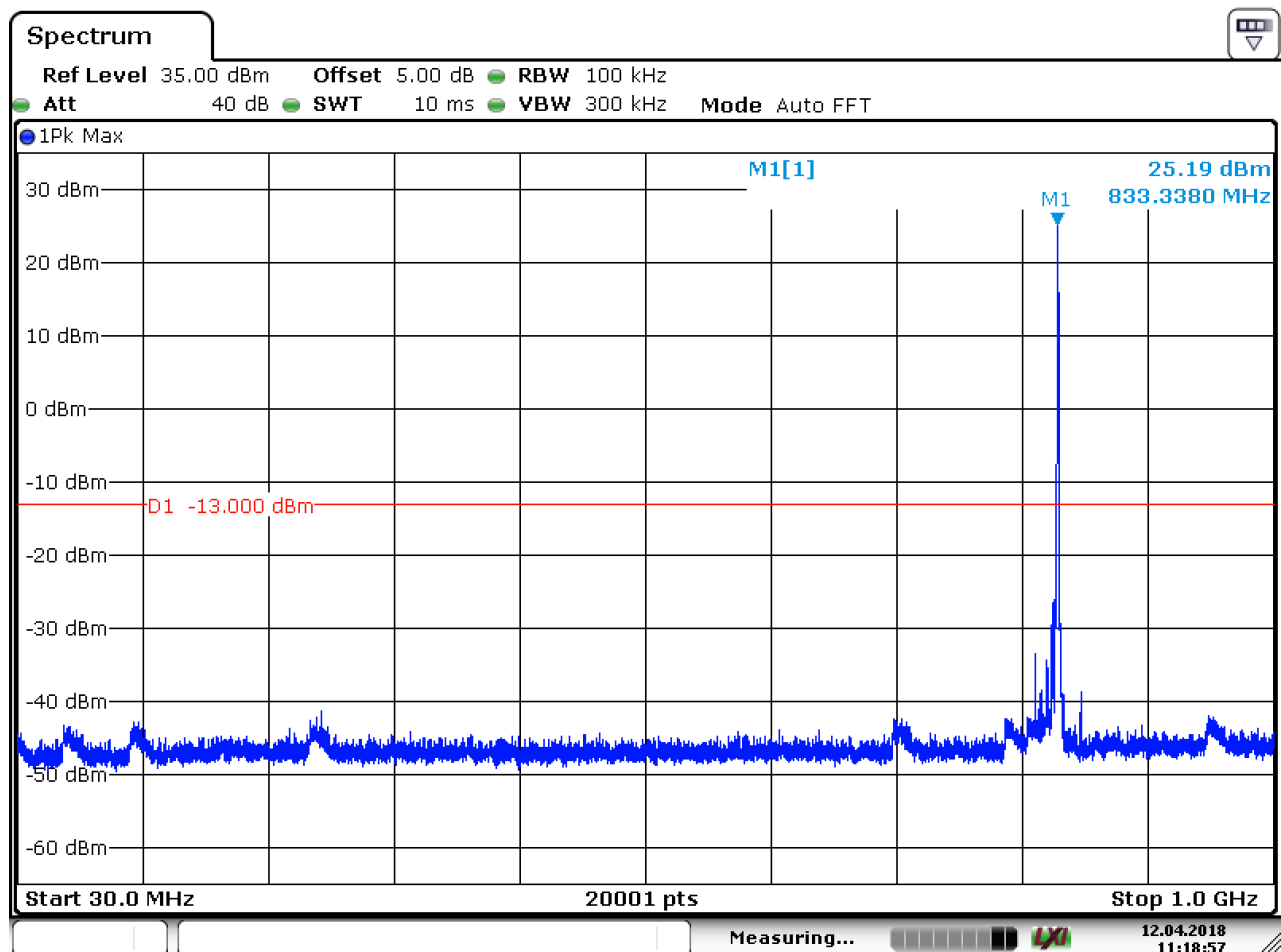
NOTE: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of  $< RBW/2$  so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = 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

Part I - Test Plots

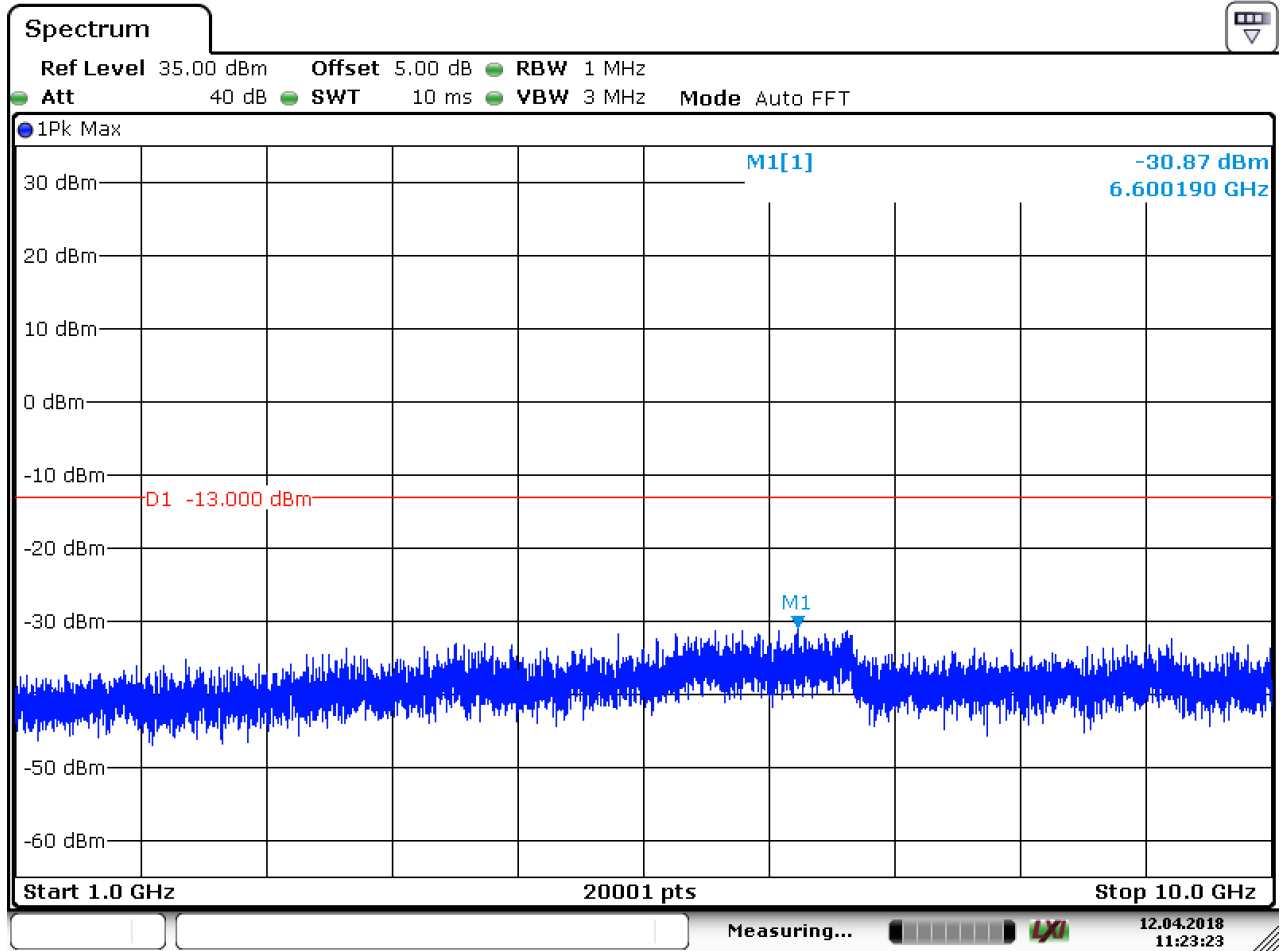
### 6.1 For LTE

6.1.1.1 Test Mode = LTE / TM1 15MHz RB1#0

6.1.1.1.1 Test Channel = LCH



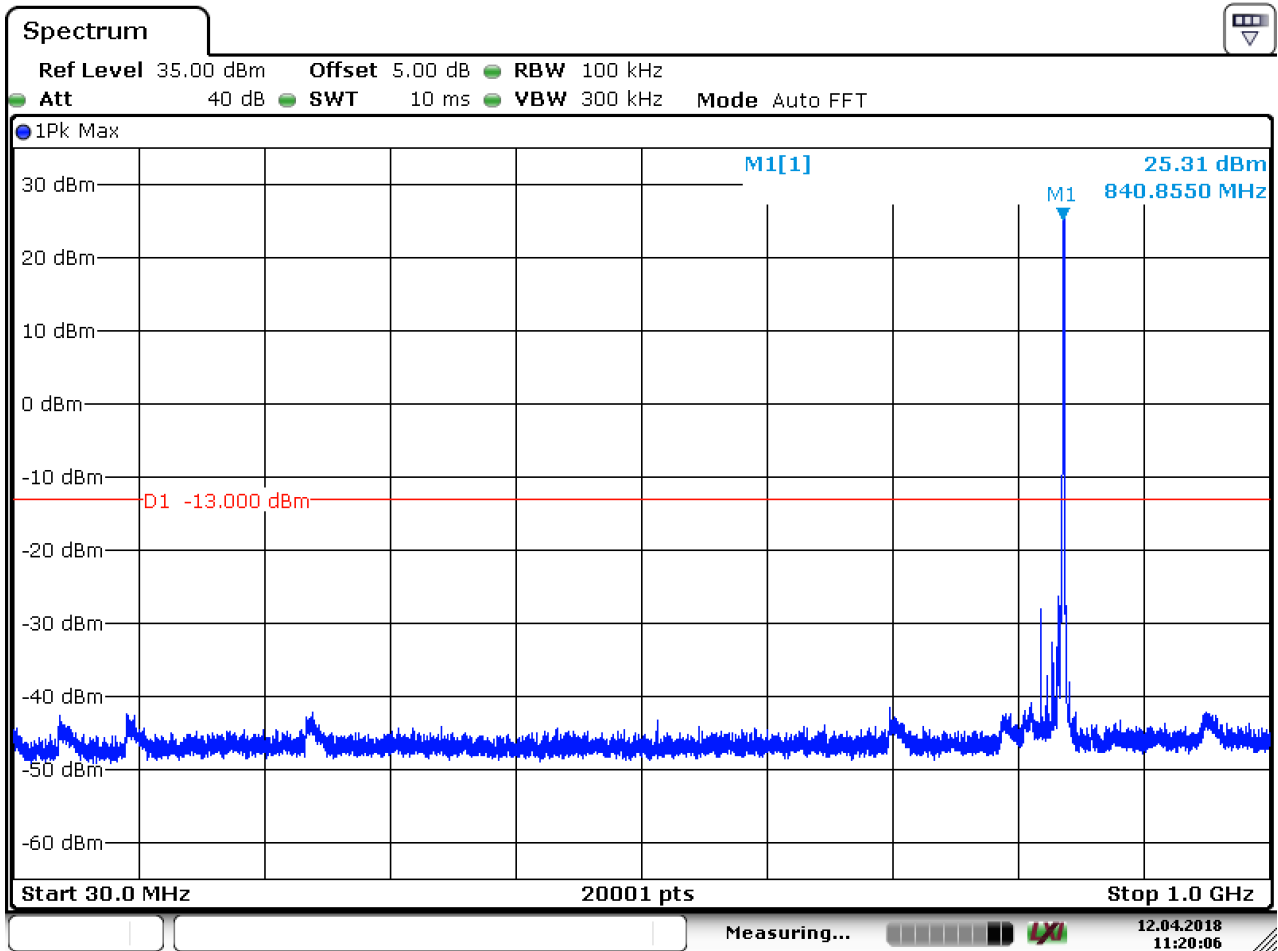
Date: 12.APR.2018 11:18:58



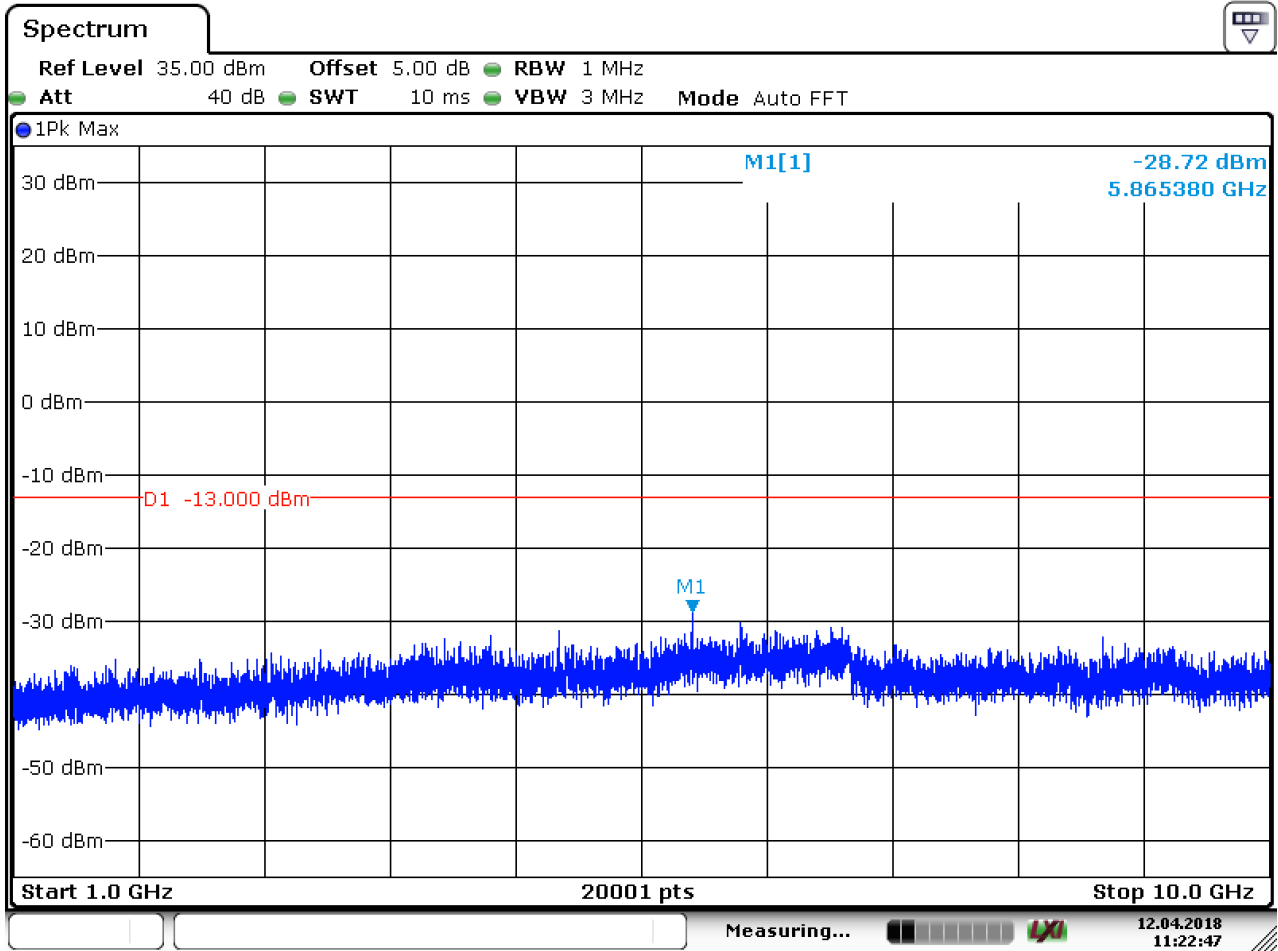
Date: 12.APR.2018 11:23:24



6.1.1.1.2 Test Channel = MCH

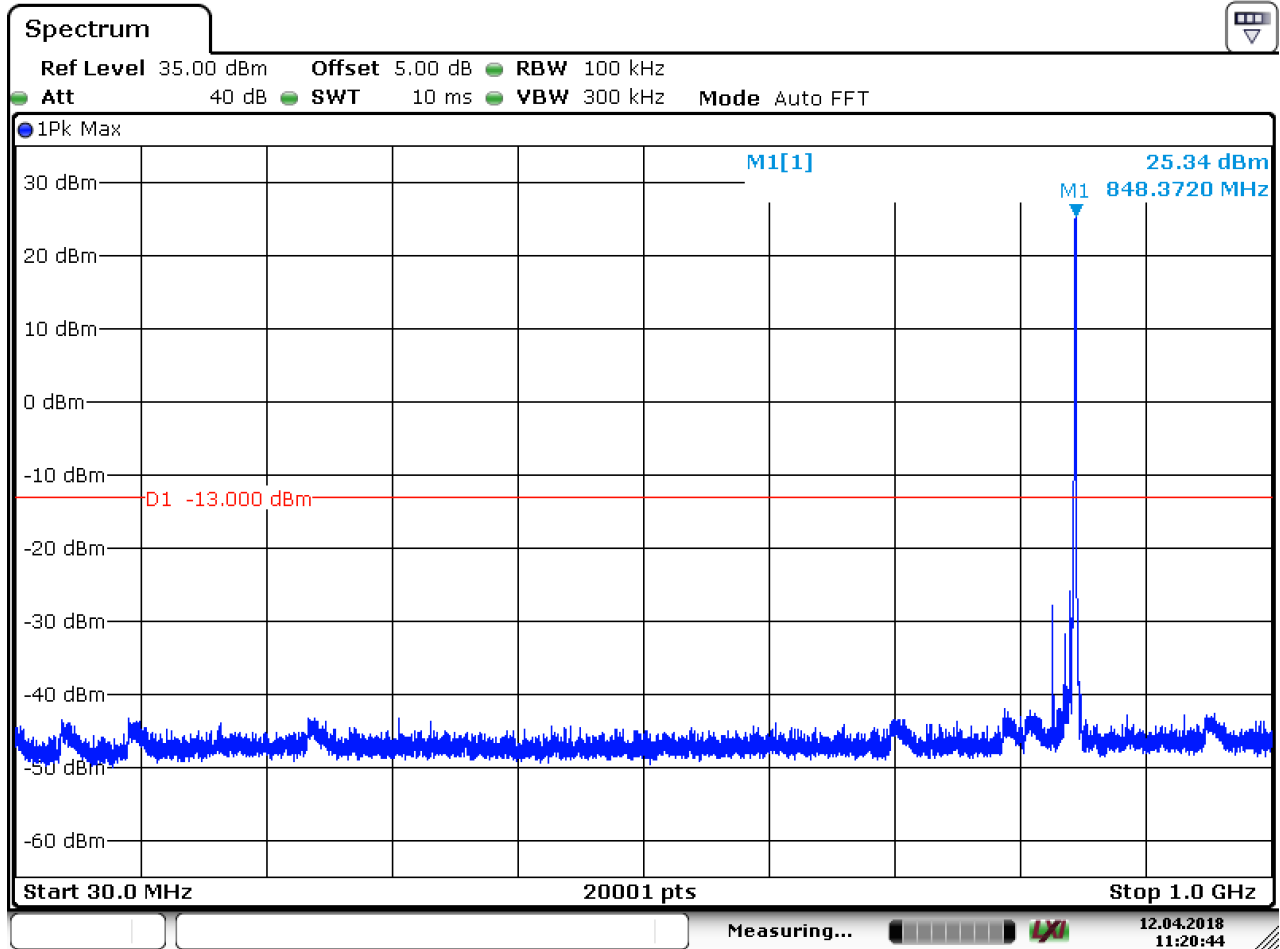


Date: 12.APR.2018 11:20:07



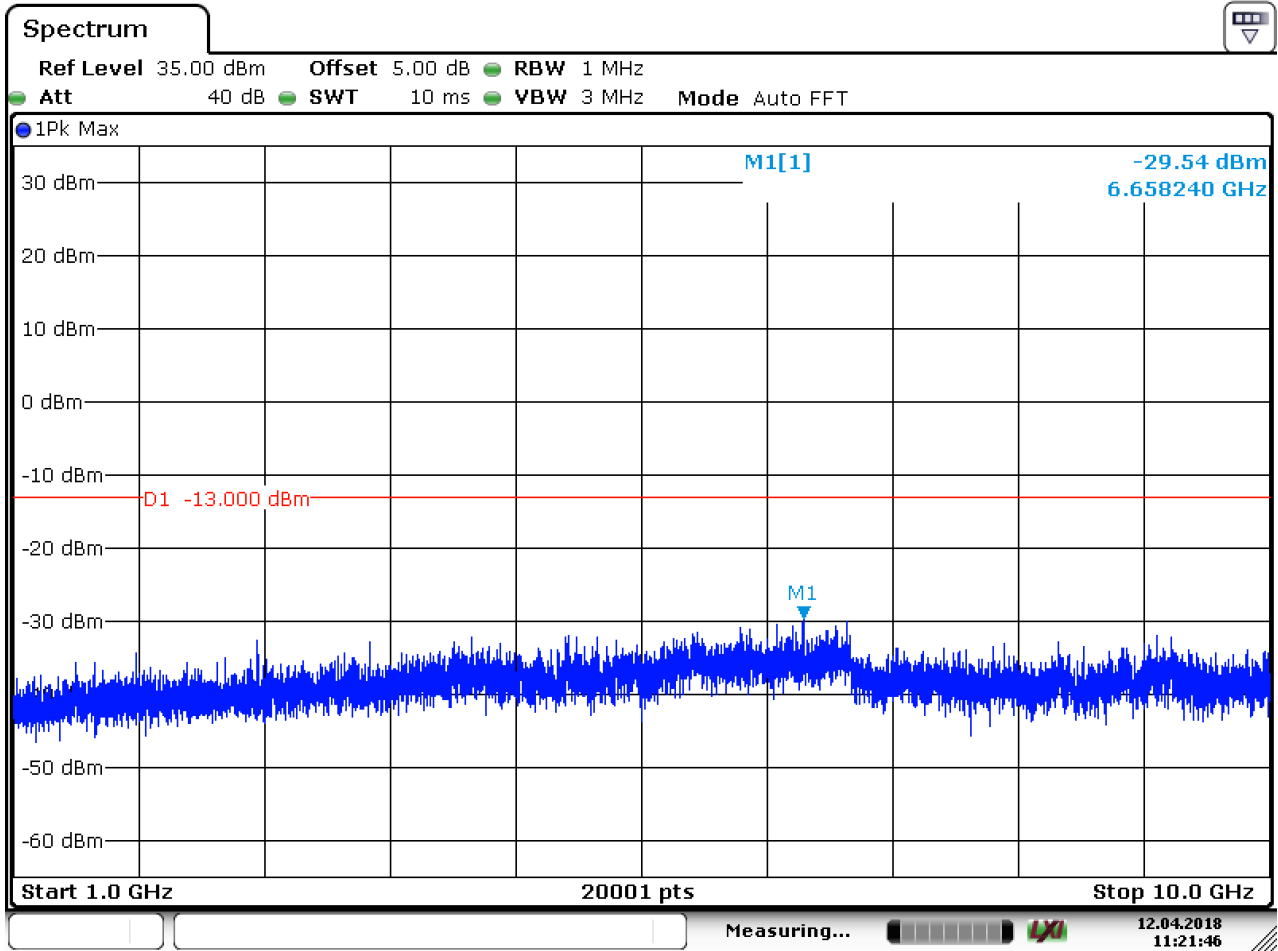
Date: 12.APR.2018 11:22:47

**6.1.1.1.3 Test Channel = HCH**



Date: 12.APR.2018 11:20:44





Date: 12.APR.2018 11:21:47



## 7 Field Strength of Spurious Radiation

### 7.1 For LTE

#### 7.1.1 Test Band = LTE band5

##### 7.1.1.1 Test Mode =LTE/TM1 10MHz RB1#0

###### 7.1.1.1.1 Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
72.186667	-80.40	-13.00	67.40	Vertical
170.466667	-84.87	-13.00	71.87	Vertical
1649.000000	-60.61	-13.00	47.61	Vertical
2470.000000	-46.78	-13.00	33.78	Vertical
4648.725000	-67.41	-13.00	54.41	Vertical
9213.675000	-63.96	-13.00	50.96	Vertical
62.900000	-77.94	-13.00	64.94	Horizontal
433.993333	-81.38	-13.00	68.38	Horizontal
1649.500000	-61.03	-13.00	48.03	Horizontal
2469.500000	-49.06	-13.00	36.06	Horizontal
4415.700000	-67.37	-13.00	54.37	Horizontal
9070.350000	-62.74	-13.00	49.74	Horizontal

###### 7.1.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
71.580000	-79.90	-13.00	66.90	Vertical
434.040000	-80.00	-13.00	67.00	Vertical
1664.500000	-62.37	-13.00	49.37	Vertical
2651.000000	-57.73	-13.00	44.73	Vertical
4295.287500	-67.13	-13.00	54.13	Vertical
7819.912500	-64.31	-13.00	51.31	Vertical
63.786667	-78.27	-13.00	65.27	Horizontal
605.925000	-79.17	-13.00	66.17	Horizontal
1664.000000	-62.61	-13.00	49.61	Horizontal
4387.425000	-67.39	-13.00	54.39	Horizontal
7938.862500	-64.00	-13.00	51.00	Horizontal
9526.650000	-64.46	-13.00	51.46	Horizontal

###### 7.1.1.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
70.973333	-80.83	-13.00	67.83	Vertical



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633.470833	-80.18	-13.00	67.18	Vertical
1679.000000	-59.87	-13.00	46.87	Vertical
2711.000000	-57.76	-13.00	44.76	Vertical
5078.700000	-67.11	-13.00	54.11	Vertical
9267.787500	-63.98	-13.00	50.98	Vertical
56.320000	-77.44	-13.00	64.44	Horizontal
104.293333	-84.93	-13.00	71.93	Horizontal
1679.000000	-60.70	-13.00	47.70	Horizontal
4313.812500	-67.10	-13.00	54.10	Horizontal
5952.787500	-66.51	-13.00	53.51	Horizontal
9235.612500	-61.98	-13.00	48.98	Horizontal

**NOTE:**

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



## 8 Frequency Stability

### 8.1 Frequency Error VS. Voltage

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTE band5	LTE/TM1 10MHz	LCH	TN	VL	-4.91	-0.005923	PASS
				VN	-5.28	-0.006369	PASS
				VH	-5.89	-0.007105	PASS
		MCH	TN	VL	4.88	0.005834	PASS
				VN	5.46	0.006527	PASS
				VH	-8.75	-0.010460	PASS
		HCH	TN	VL	4.39	0.005201	PASS
				VN	3.99	0.004727	PASS
				VH	-9.43	-0.011173	PASS
	LTE/TM2 10MHz	LCH	TN	VL	-5.24	-0.006321	PASS
				VN	-5.15	-0.006212	PASS
				VH	-4.68	-0.005645	PASS
		MCH	TN	VL	3.03	0.003622	PASS
				VN	6.04	0.007221	PASS
				VH	6.38	0.007627	PASS
		HCH	TN	VL	-5.08	-0.006019	PASS
				VN	5.32	0.006303	PASS
				VH	-4.51	-0.005344	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
LTE band5	LTE/TM1 10MHz	LCH	VN	-30	5.01	0.006043	PASS
				-20	-4.49	-0.005416	PASS
				-10	-4.32	-0.005211	PASS
				0	4.39	0.005296	PASS
				10	4.23	0.005103	PASS
				20	-4.38	-0.005236	PASS
				30	3.98	0.004758	PASS
				40	-5.51	-0.006587	PASS
				50	4.03	0.004818	PASS
		MCH	VN	-30	4.39	0.005248	PASS
				-20	-6.27	-0.007429	PASS
				-10	-4.61	-0.005462	PASS
				0	-3.25	-0.003851	PASS
				10	-4.96	-0.005877	PASS
				20	4.23	0.005012	PASS
				30	-2.98	-0.003513	PASS
				40	-4.86	-0.005729	PASS
				50	4.62	0.005446	PASS
		HCH	VN	-30	-3.13	-0.003690	PASS
				-20	-3.79	-0.004468	PASS
				-10	-4.65	-0.005638	PASS
				0	-5.35	-0.006487	PASS
				10	-4.88	-0.005917	PASS
				20	-3.88	-0.004705	PASS
				30	-2.98	-0.003513	PASS
				40	-4.86	-0.005729	PASS
				50	4.62	0.005446	PASS



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Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTE band5	LTE/TM2 10MHz	LCH	VN	-30	-4.82	-0.005814	PASS
				-20	-5.42	-0.006538	PASS
				-10	-4.69	-0.005657	PASS
				0	-5.35	-0.006454	PASS
				10	-4.08	-0.004922	PASS
				20	2.95	0.003527	PASS
				30	-3.13	-0.003742	PASS
				40	2.42	0.002893	PASS
				50	4.33	0.005176	PASS
		MCH	VN	-30	5.59	0.006683	PASS
				-20	4.81	0.005699	PASS
				-10	-5.66	-0.006706	PASS
				0	-5.25	-0.006220	PASS
				10	-4.59	-0.005438	PASS
				20	-4.29	-0.005083	PASS
				30	-3.62	-0.004389	PASS
				40	-2.86	-0.003419	PASS
				50	5.68	0.006790	PASS
		HCH	VN	-30	3.25	0.003885	PASS
				-20	3.28	0.003921	PASS
				-10	6.69	0.007998	PASS
				0	-2.78	-0.003277	PASS
				10	3.72	0.004385	PASS
				20	-3.55	-0.004185	PASS
				30	3.33	0.003925	PASS
				40	3.40	0.004008	PASS
				50	-4.82	-0.005814	PASS

The End