



# Appendix B

## E-UTRA Band5



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## 1 Effective (Isotropic) Radiated Power Output Data

### Part I - Test Results

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	SG Power(With Cable_Loss)	ERP (dBm)	limit (dBm)	Verdict
BAND5	LTE/TM1	1.4M	LCH	RB1#0	22.47	19.36	18.12	38.45	PASS
				RB1#2	22.56	19.55	18.31	38.45	PASS
				RB1#5	22.51	19.83	18.59	38.45	PASS
				RB3#0	22.36	19.16	17.92	38.45	PASS
				RB3#2	22.26	19.22	17.98	38.45	PASS
				RB3#3	22.27	19.63	18.39	38.45	PASS
				RB6#0	21.25	19.16	17.92	38.45	PASS
			MCH	RB1#0	22.41	18.52	17.28	38.45	PASS
				RB1#2	22.37	18.64	17.4	38.45	PASS
				RB1#5	22.45	18.67	17.43	38.45	PASS
				RB3#0	22.28	19.48	18.24	38.45	PASS
				RB3#2	22.27	19.69	18.45	38.45	PASS
				RB3#3	22.35	19.96	18.72	38.45	PASS
				RB6#0	21.30	18.22	16.98	38.45	PASS
			HCH	RB1#0	22.46	20.42	19.18	38.45	PASS
				RB1#2	22.38	18.51	17.27	38.45	PASS
				RB1#5	22.56	20.27	19.03	38.45	PASS
				RB3#0	22.37	19.06	17.82	38.45	PASS
				RB3#2	22.27	18.56	17.32	38.45	PASS
				RB3#3	22.25	18.52	17.28	38.45	PASS
				RB6#0	21.31	17.42	16.18	38.45	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	SG Power( With Cable Loss)	ERP (dBm )	limit (dBm )	Verdict
BAND5	LTE/TM2	1.4M	LCH	RB1#0	21.6	18.77	17.53	38.45	PASS
				RB1#2	21.72	18.52	17.28	38.45	PASS
				RB1#5	21.51	17.86	16.62	38.45	PASS
				RB3#0	21.14	18.43	17.19	38.45	PASS
				RB3#2	21.22	18.77	17.53	38.45	PASS
				RB3#3	21.14	19.06	17.82	38.45	PASS
				RB6#0	20.55	17.23	15.99	38.45	PASS
			MCH	RB1#0	21.33	18.01	16.77	38.45	PASS
				RB1#2	21.76	18.33	17.09	38.45	PASS
				RB1#5	21.57	18.19	16.95	38.45	PASS
				RB3#0	21.16	18.43	17.19	38.45	PASS
				RB3#2	21.16	18.01	16.77	38.45	PASS
				RB3#3	21.22	18.30	17.06	38.45	PASS
				RB6#0	20.63	17.96	16.72	38.45	PASS
			HCH	RB1#0	21.49	19.27	18.03	38.45	PASS
				RB1#2	21.65	18.70	17.46	38.45	PASS
				RB1#5	21.69	17.83	16.59	38.45	PASS
				RB3#0	21.23	17.46	16.22	38.45	PASS
				RB3#2	21.15	18.69	17.45	38.45	PASS
				RB3#3	21.03	18.29	17.05	38.45	PASS
				RB6#0	20.44	17.40	16.16	38.45	PASS

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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	SG Power( With Cable Loss)	ERP (dBm )	limit (dBm )	Verdict
BAND5	LTE/TM 1	3M	LCH	RB1#0	22.43	20.11	18.87	38.45	PASS
				RB1#7	22.30	19.00	17.76	38.45	PASS
				RB1#14	22.23	20.02	18.78	38.45	PASS
				RB8#0	21.32	18.39	17.15	38.45	PASS
				RB8#4	21.30	18.08	16.84	38.45	PASS
				RB8#7	21.37	18.16	16.92	38.45	PASS
				RB15#0	21.35	19.06	17.82	38.45	PASS
			MCH	RB1#0	22.39	20.28	19.04	38.45	PASS
				RB1#7	22.24	18.72	17.48	38.45	PASS
				RB1#14	22.24	18.29	17.05	38.45	PASS
				RB8#0	21.41	19.14	17.9	38.45	PASS
				RB8#4	21.53	18.81	17.57	38.45	PASS
				RB8#7	21.50	19.44	18.2	38.45	PASS
				RB15#0	21.50	18.41	17.17	38.45	PASS
			HCH	RB1#0	22.57	19.28	18.04	38.45	PASS
				RB1#7	22.43	19.20	17.96	38.45	PASS
				RB1#14	22.20	19.07	17.83	38.45	PASS
				RB8#0	21.55	19.52	18.28	38.45	PASS
				RB8#4	21.38	19.09	17.85	38.45	PASS
				RB8#7	21.39	19.34	18.1	38.45	PASS
				RB15#0	21.51	19.19	17.95	38.45	PASS

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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	SG Power(With Cable Loss)	ERP (dBm)	limit (dBm)	Verdict
BAND5	LTE/TM2	3M	LCH	RB1#0	21.32	18.09	16.85	38.45	PASS
				RB1#7	21.29	18.20	16.96	38.45	PASS
				RB1#14	21.26	19.00	17.76	38.45	PASS
				RB8#0	20.49	18.48	17.24	38.45	PASS
				RB8#4	20.55	16.96	15.72	38.45	PASS
				RB8#7	20.38	18.32	17.08	38.45	PASS
				RB15#0	20.4	18.21	16.97	38.45	PASS
			MCH	RB1#0	21.28	17.64	16.4	38.45	PASS
				RB1#7	21.18	18.75	17.51	38.45	PASS
				RB1#14	21.14	18.38	17.14	38.45	PASS
				RB8#0	20.51	18.10	16.86	38.45	PASS
				RB8#4	20.51	16.59	15.35	38.45	PASS
				RB8#7	20.4	16.54	15.3	38.45	PASS
				RB15#0	20.42	17.47	16.23	38.45	PASS
			HCH	RB1#0	21.6	18.67	17.43	38.45	PASS
				RB1#7	21.59	19.15	17.91	38.45	PASS
				RB1#14	21.53	18.17	16.93	38.45	PASS
				RB8#0	20.4	18.30	17.06	38.45	PASS
				RB8#4	20.32	17.24	16	38.45	PASS
				RB8#7	20.47	17.97	16.73	38.45	PASS
				RB15#0	20.41	17.75	16.51	38.45	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	SG Power( With Cable Loss)	ERP (dBm )	limit (dBm )	Verdict
BAND5	LTE/TM1	5M	LCH	RB1#0	22.39	20.20	18.96	38.45	PASS
				RB1#13	22.46	20.33	19.09	38.45	PASS
				RB1#24	22.23	19.12	17.88	38.45	PASS
				RB12#0	21.30	18.24	17	38.45	PASS
				RB12#6	21.30	18.48	17.24	38.45	PASS
				RB12#13	21.38	19.08	17.84	38.45	PASS
				RB25#0	21.42	18.57	17.33	38.45	PASS
			MCH	RB1#0	22.45	19.98	18.74	38.45	PASS
				RB1#13	22.63	19.85	18.61	38.45	PASS
				RB1#24	22.52	19.62	18.38	38.45	PASS
				RB12#0	21.41	17.50	16.26	38.45	PASS
				RB12#6	21.42	18.50	17.26	38.45	PASS
				RB12#13	21.44	18.38	17.14	38.45	PASS
				RB25#0	21.47	19.06	17.82	38.45	PASS
			HCH	RB1#0	22.43	18.87	17.63	38.45	PASS
				RB1#13	22.62	20.59	19.35	38.45	PASS
				RB1#24	22.40	18.42	17.18	38.45	PASS
				RB12#0	21.45	17.94	16.7	38.45	PASS
				RB12#6	21.36	18.38	17.14	38.45	PASS
				RB12#13	21.37	17.84	16.6	38.45	PASS
				RB25#0	21.43	17.65	16.41	38.45	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	SG Power( With Cable Loss)	ERP (dBm )	limit (dBm )	Verdict
BAND5	LTE/TM2	5M	LCH	RB1#0	20.88	17.44	16.2	38.45	PASS
				RB1#13	21.53	17.80	16.56	38.45	PASS
				RB1#24	20.94	17.33	16.09	38.45	PASS
				RB12#0	20.32	17.14	15.9	38.45	PASS
				RB12#6	20.46	17.85	16.61	38.45	PASS
				RB12#13	20.33	16.37	15.13	38.45	PASS
				RB25#0	20.53	17.41	16.17	38.45	PASS
			MCH	RB1#0	21.63	19.29	18.05	38.45	PASS
				RB1#13	21.16	17.57	16.33	38.45	PASS
				RB1#24	21.16	17.38	16.14	38.45	PASS
				RB12#0	20.56	17.77	16.53	38.45	PASS
				RB12#6	20.45	17.70	16.46	38.45	PASS
				RB12#13	20.5	16.57	15.33	38.45	PASS
				RB25#0	20.42	17.64	16.4	38.45	PASS
			HCH	RB1#0	21.26	18.86	17.62	38.45	PASS
				RB1#13	21.5	17.69	16.45	38.45	PASS
				RB1#24	21.42	18.58	17.34	38.45	PASS
				RB12#0	20.35	17.37	16.13	38.45	PASS
				RB12#6	20.35	17.74	16.5	38.45	PASS
				RB12#13	20.42	16.61	15.37	38.45	PASS
				RB25#0	20.34	17.04	15.8	38.45	PASS

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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	SG Power( With Cable Loss)	ERP (dBm )	limit (dBm )	Verdict
BAND5	LTE/TM 1	10M	LCH	RB1#0	22.48	19.05	17.81	38.45	PASS
				RB1#25	22.67	20.07	18.83	38.45	PASS
				RB1#49	22.41	18.90	17.66	38.45	PASS
				RB25#0	21.43	19.02	17.78	38.45	PASS
				RB25#13	21.42	17.75	16.51	38.45	PASS
				RB25#25	21.47	19.39	18.15	38.45	PASS
				RB50#0	21.41	19.00	17.76	38.45	PASS
			MCH	RB1#0	22.21	18.63	17.39	38.45	PASS
				RB1#25	22.69	18.82	17.58	38.45	PASS
				RB1#49	22.19	19.17	17.93	38.45	PASS
				RB25#0	21.62	18.57	17.33	38.45	PASS
				RB25#13	21.63	19.36	18.12	38.45	PASS
				RB25#25	21.43	18.70	17.46	38.45	PASS
				RB50#0	21.48	19.12	17.88	38.45	PASS
			HCH	RB1#0	22.68	19.40	18.16	38.45	PASS
				RB1#25	22.51	19.21	17.97	38.45	PASS
				RB1#49	22.25	19.45	18.21	38.45	PASS
				RB25#0	21.58	19.40	18.16	38.45	PASS
				RB25#13	21.46	17.80	16.56	38.45	PASS
				RB25#25	21.41	17.65	16.41	38.45	PASS
				RB50#0	21.43	17.73	16.49	38.45	PASS

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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	SG Power(With Cable Loss)	ERP (dBm)	limit (dBm)	Verdict
BAND5	LTE/TM2	10M	LCH	RB1#0	21.27	17.59	16.35	38.45	PASS
				RB1#25	21.87	18.17	16.93	38.45	PASS
				RB1#49	21.33	17.87	16.63	38.45	PASS
				RB25#0	20.54	18.37	17.13	38.45	PASS
				RB25#13	20.53	18.11	16.87	38.45	PASS
				RB25#25	20.34	16.49	15.25	38.45	PASS
				RB50#0	20.35	16.78	15.54	38.45	PASS
			MCH	RB1#0	21.38	18.06	16.82	38.45	PASS
				RB1#25	21.28	18.27	17.03	38.45	PASS
				RB1#49	21.23	18.57	17.33	38.45	PASS
				RB25#0	20.61	16.74	15.5	38.45	PASS
				RB25#13	20.51	17.70	16.46	38.45	PASS
				RB25#25	20.43	17.33	16.09	38.45	PASS
				RB50#0	20.46	16.47	15.23	38.45	PASS
			HCH	RB1#0	21.9	19.09	17.85	38.45	PASS
				RB1#25	21.68	18.78	17.54	38.45	PASS
				RB1#49	21.76	19.26	18.02	38.45	PASS
				RB25#0	20.58	18.55	17.31	38.45	PASS
				RB25#13	20.41	16.72	15.48	38.45	PASS
				RB25#25	20.45	17.08	15.84	38.45	PASS
				RB50#0	20.59	17.11	15.87	38.45	PASS

Note:

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

$$ERP [dBm] = SGP [dBm] - Cable Loss [dB] + Gain [dBd]$$

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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
Band5	TM1/10M	LCH	5.04	13	PASS
		MCH	5.10	13	PASS
		HCH	5.10	13	PASS
	TM2/10M	LCH	5.97	13	PASS
		MCH	5.91	13	PASS
		HCH	6.03	13	PASS

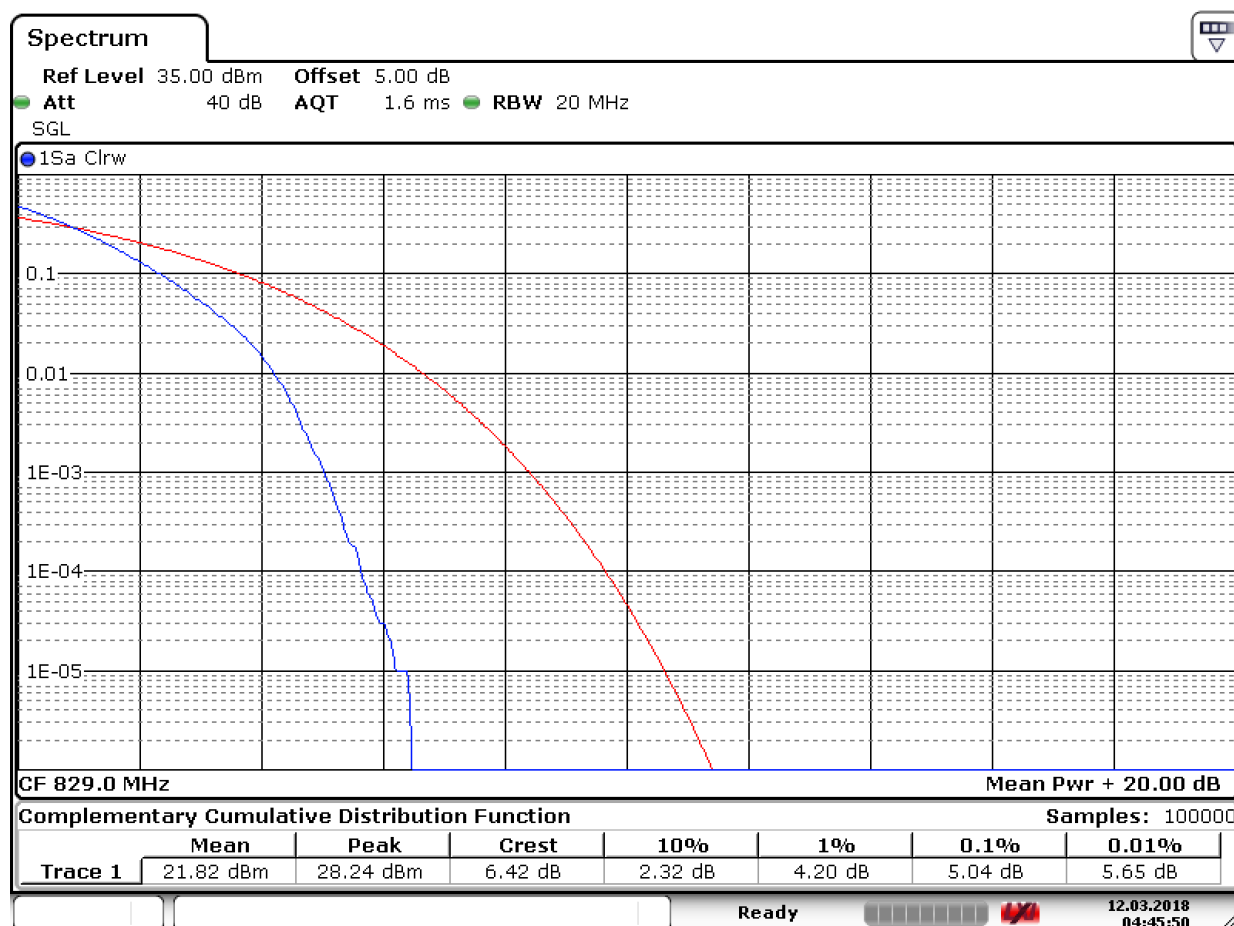
### Part II - Test Plots

## 2.1 For LTE

### 2.1.1 Test Band = LTE band5

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

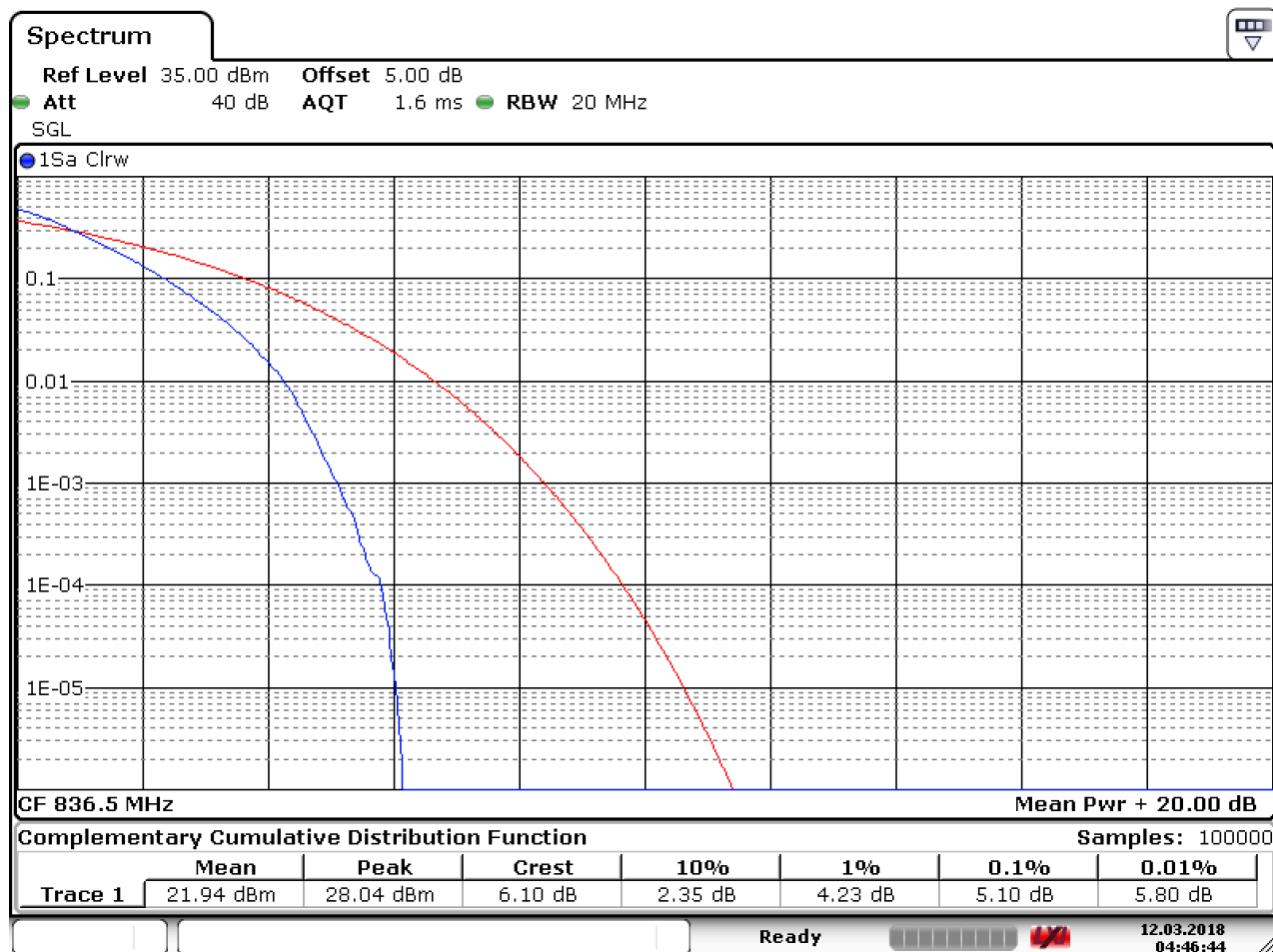
##### 2.1.1.1.1 Test Channel = LCH



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



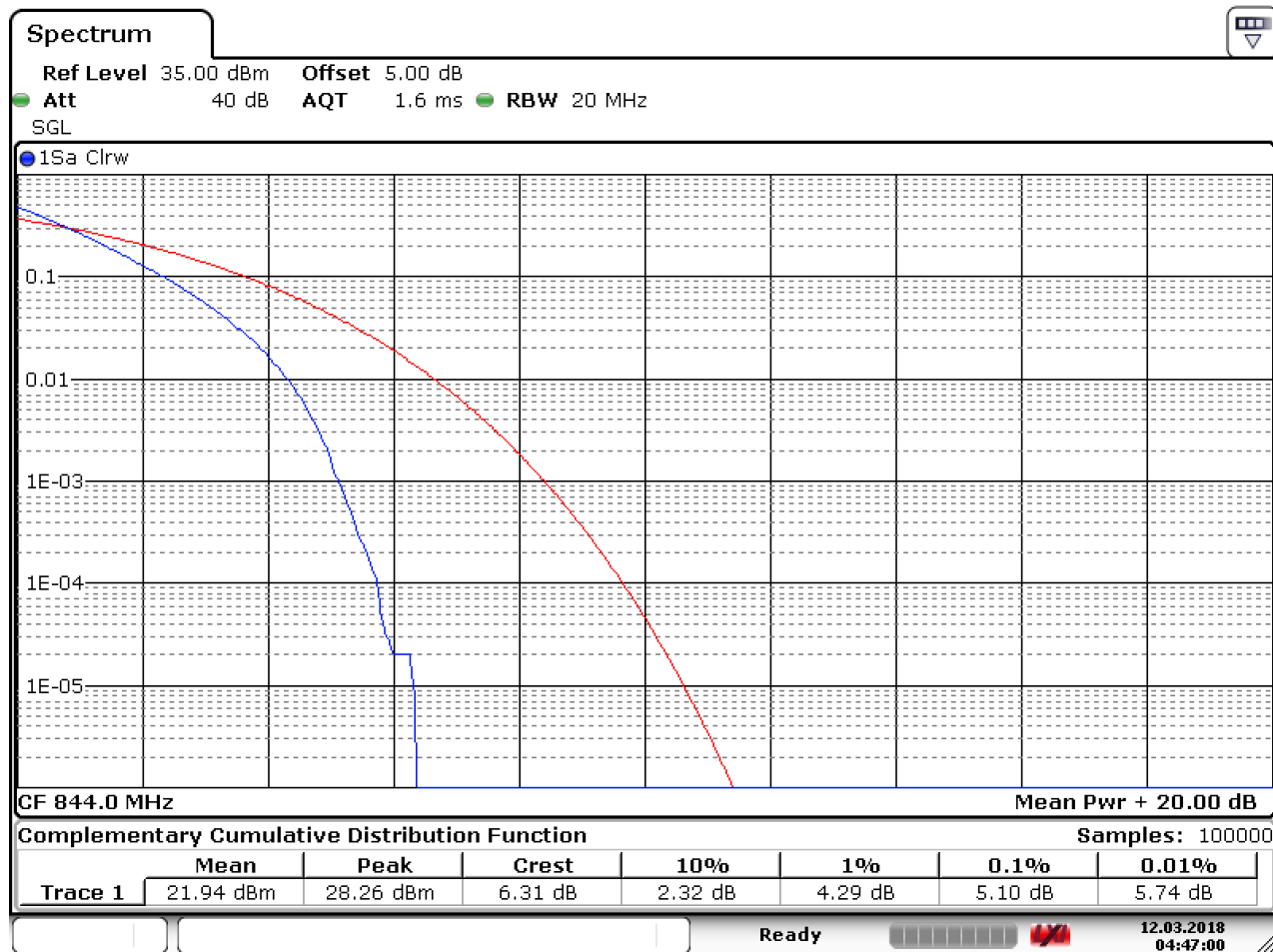
2.1.1.1.2 Test Channel = MCH



Date: 12.MAR.2018 04:46:44



2.1.1.1.3 Test Channel = HCH

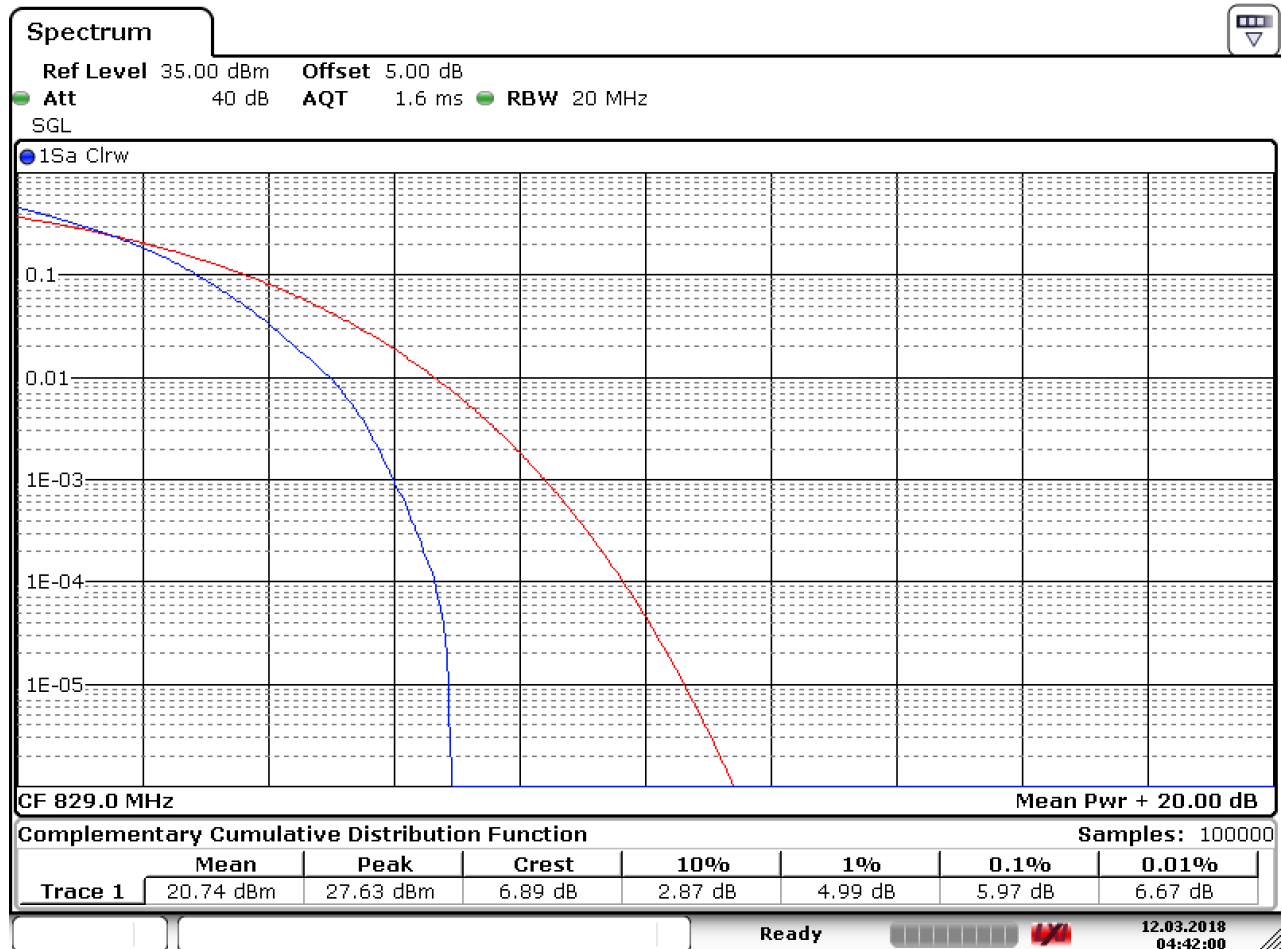


Date: 12.MAR.2018 04:47:00



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

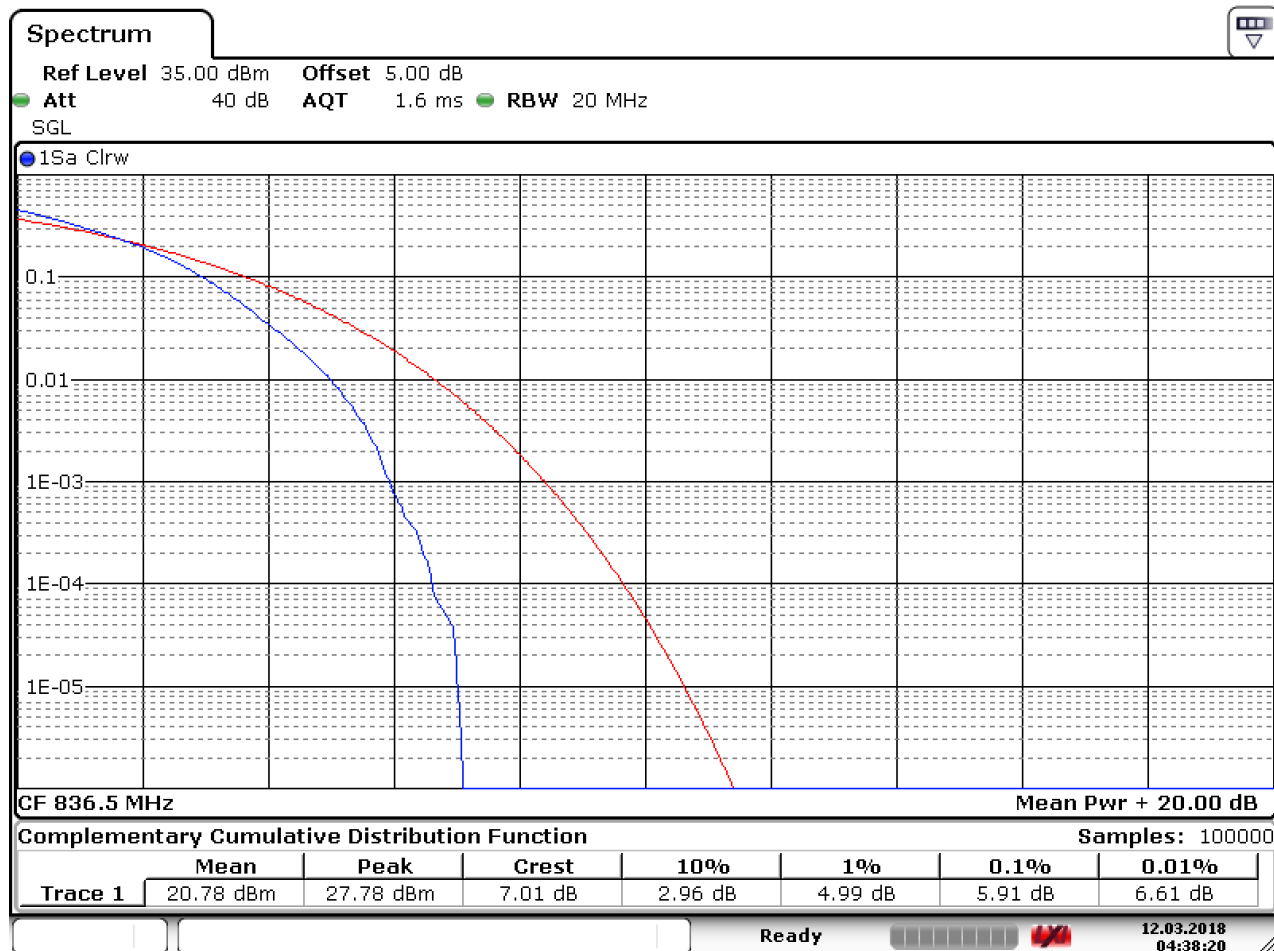
2.1.1.2.1 Test Channel = LCH



Date: 12.MAR.2018 04:42:00



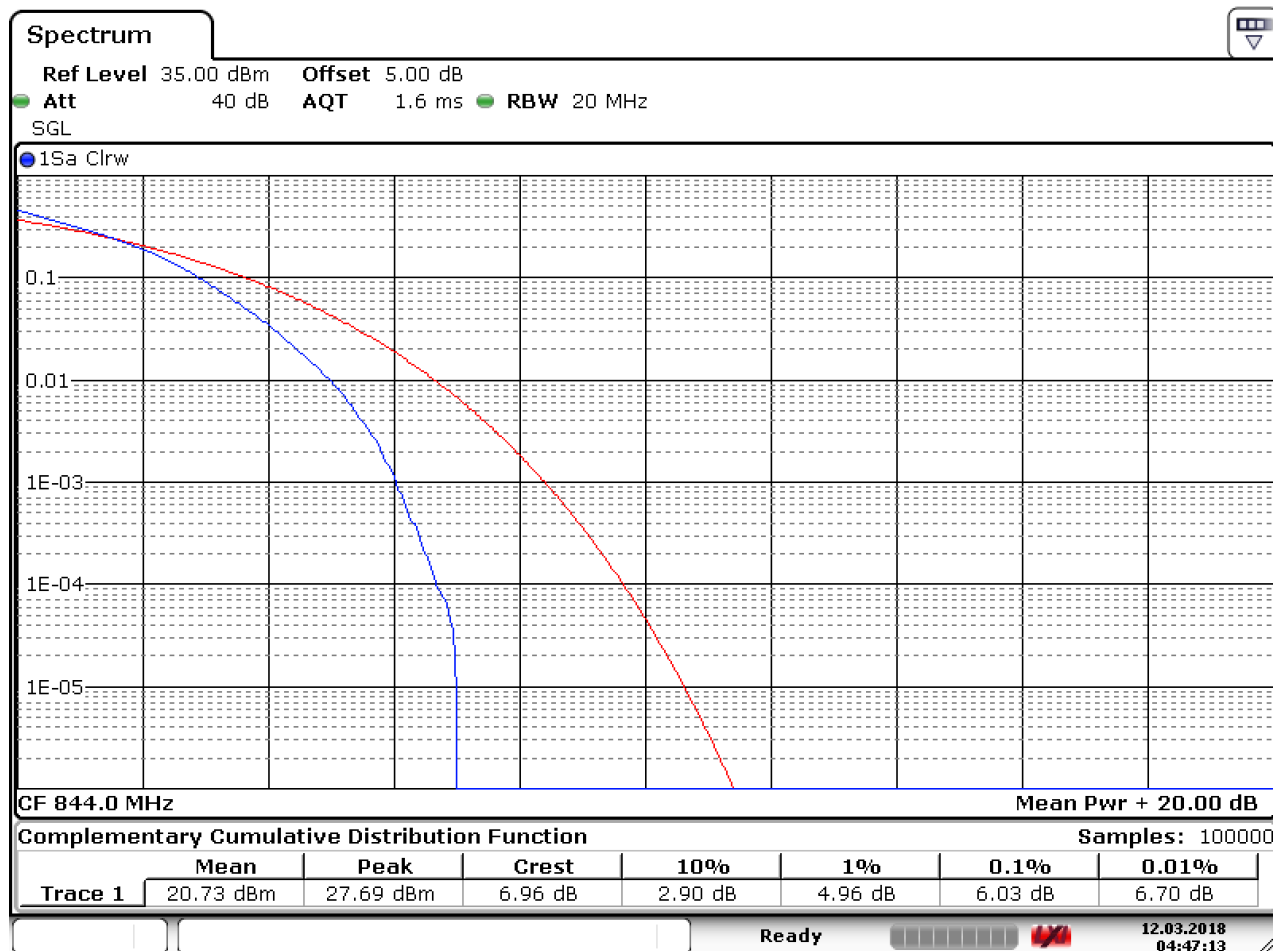
2.1.1.2.2 Test Channel = MCH



Date: 12.MAR.2018 04:38:20



2.1.1.2.3 Test Channel = HCH



Date: 12.MAR.2018 04:47:13



### 3 Modulation Characteristics

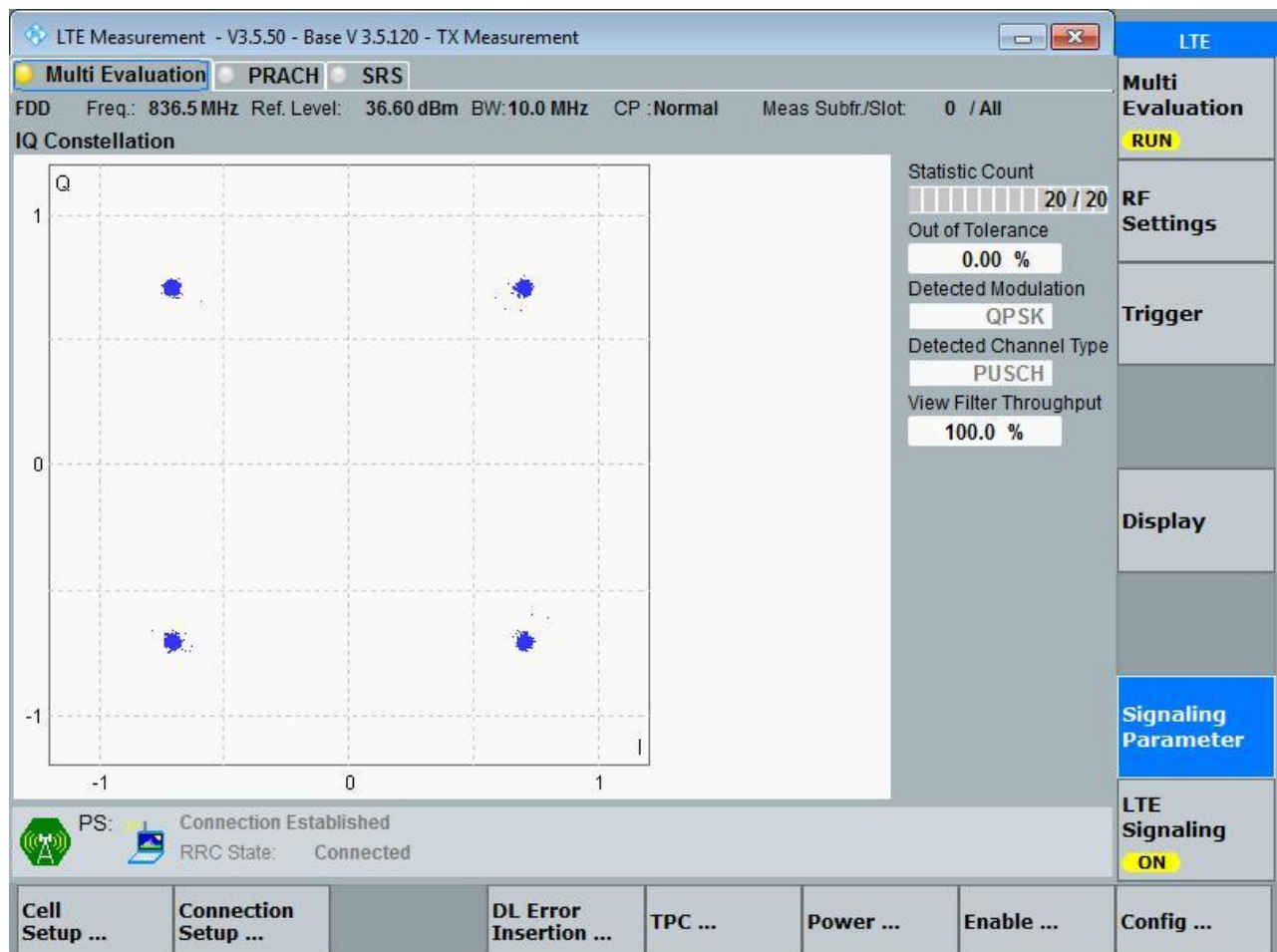
#### Part I - Test Plots

#### 3.1 For LTE

##### 3.1.1 Test Band = LTE band5

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

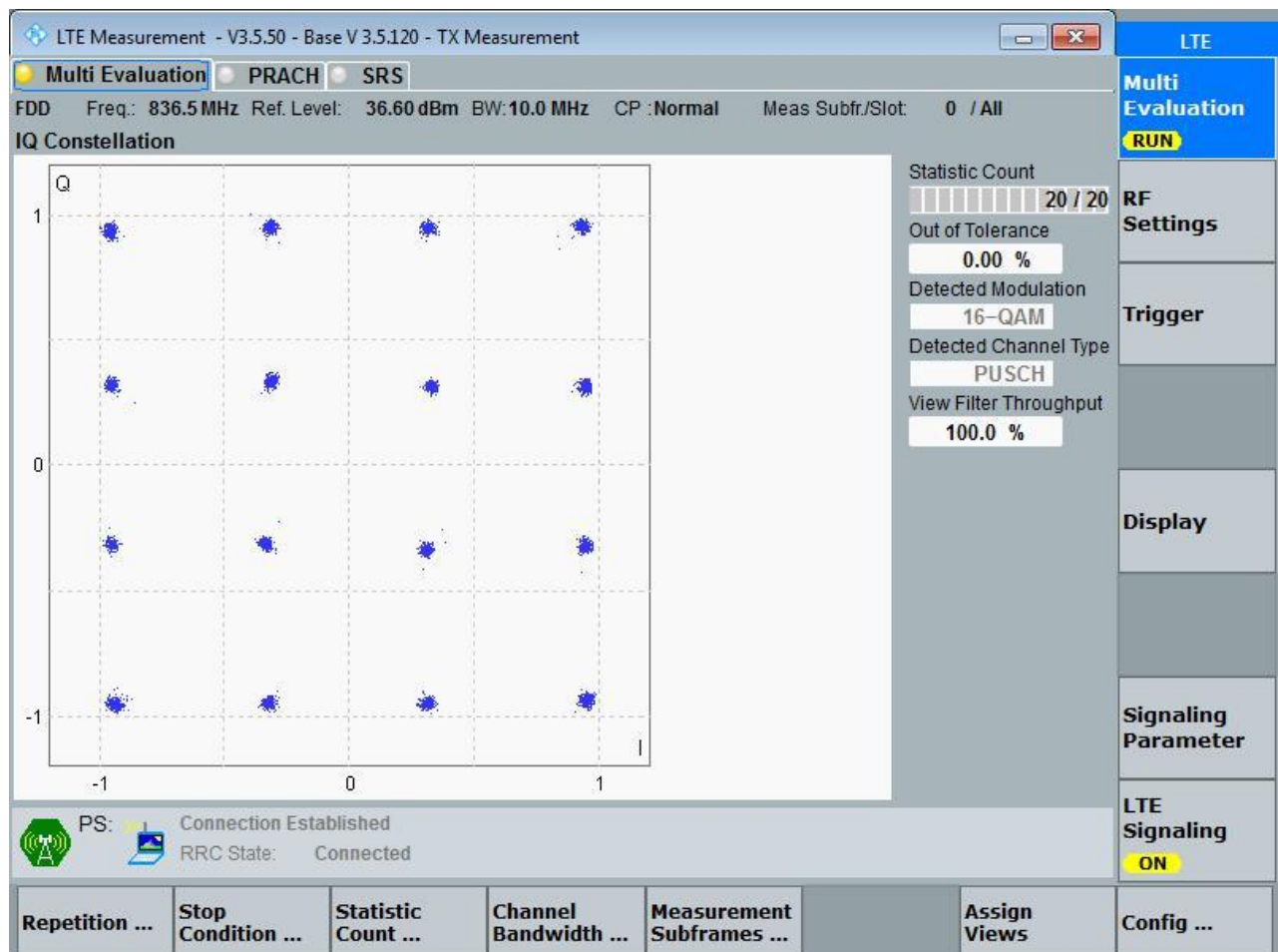
##### 3.1.1.1.1 Test Channel = MCH





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
Band5	TM1/1.4MHz	LCH	1.10	1.31	PASS
		MCH	1.10	1.28	PASS
		HCH	1.10	1.32	PASS
	TM2/1.4MHz	LCH	1.10	1.30	PASS
		MCH	1.10	1.30	PASS
		HCH	1.09	1.29	PASS
	TM1/ 3MHz	LCH	2.69	2.93	PASS
		MCH	2.69	2.94	PASS
		HCH	2.69	2.93	PASS
	TM2/3MHz	LCH	2.69	2.93	PASS
		MCH	2.68	2.94	PASS
		HCH	2.69	2.96	PASS
	TM1/ 5MHz	LCH	4.48	4.94	PASS
		MCH	4.47	4.89	PASS
		HCH	4.47	4.93	PASS
	TM2/ 5MHz	LCH	4.48	4.91	PASS
		MCH	4.48	4.89	PASS
		HCH	4.48	4.94	PASS
	TM1/10MHz	LCH	8.95	9.71	PASS
		MCH	8.91	9.57	PASS
		HCH	8.93	9.69	PASS
	TM2/ 10MHz	LCH	8.91	9.65	PASS
		MCH	8.89	9.55	PASS
		HCH	8.95	9.73	PASS

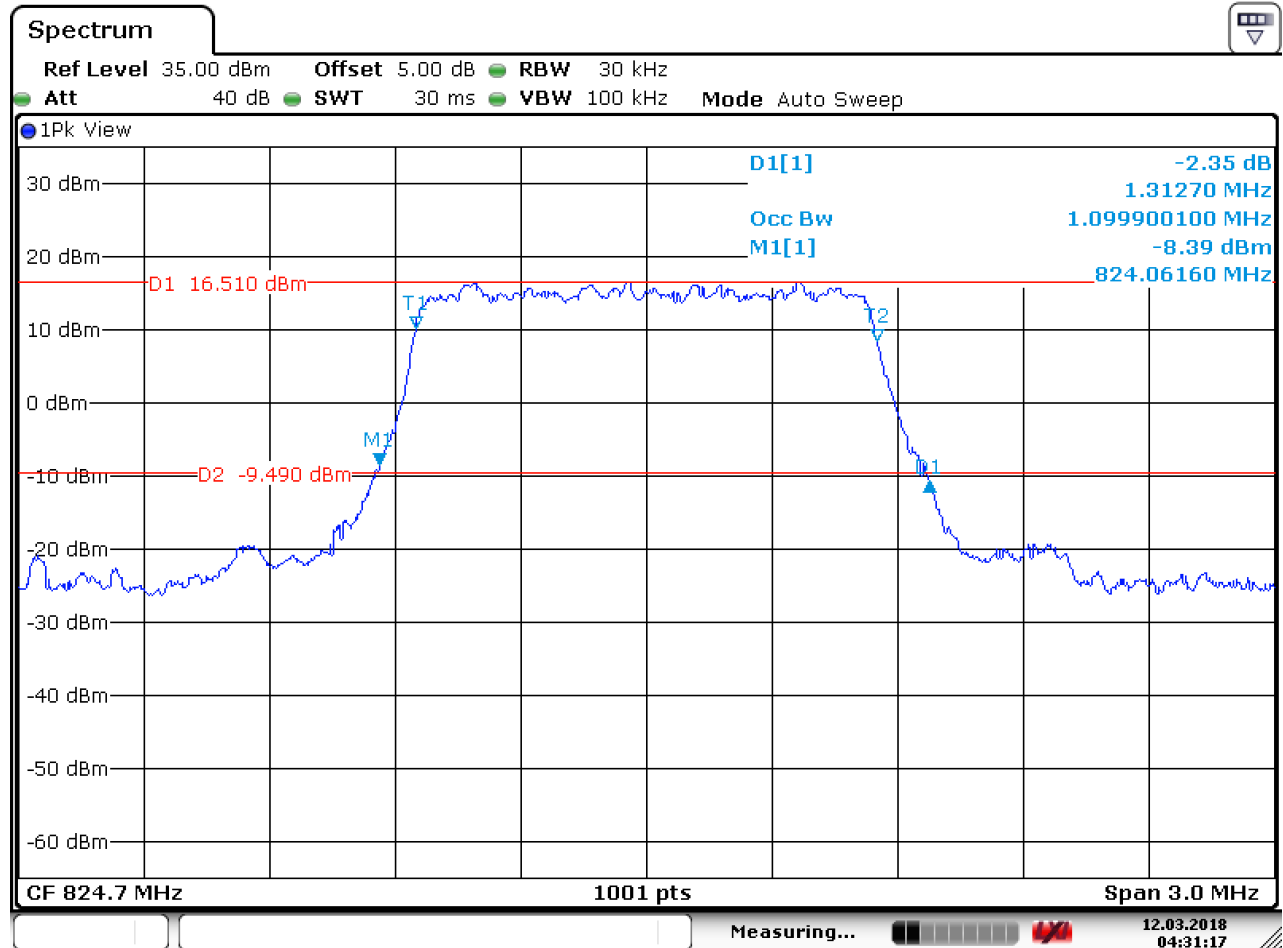
## Part II - Test Plots

### 4.1 For LTE

#### 4.1.1 Test Band = LTE band5

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

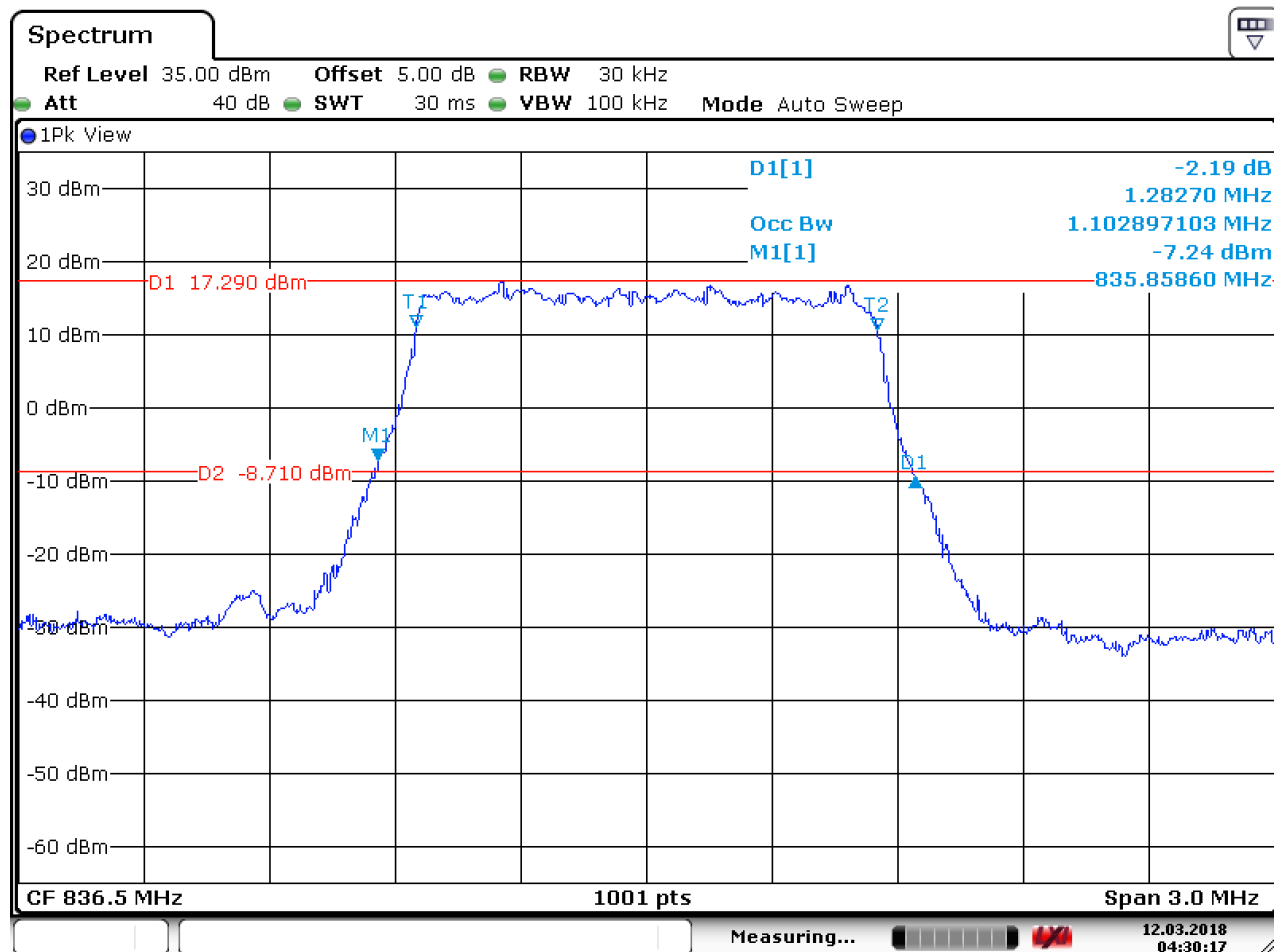
##### 4.1.1.1.1 Test Channel = LCH



Date: 12.MAR.2018 04:31:18

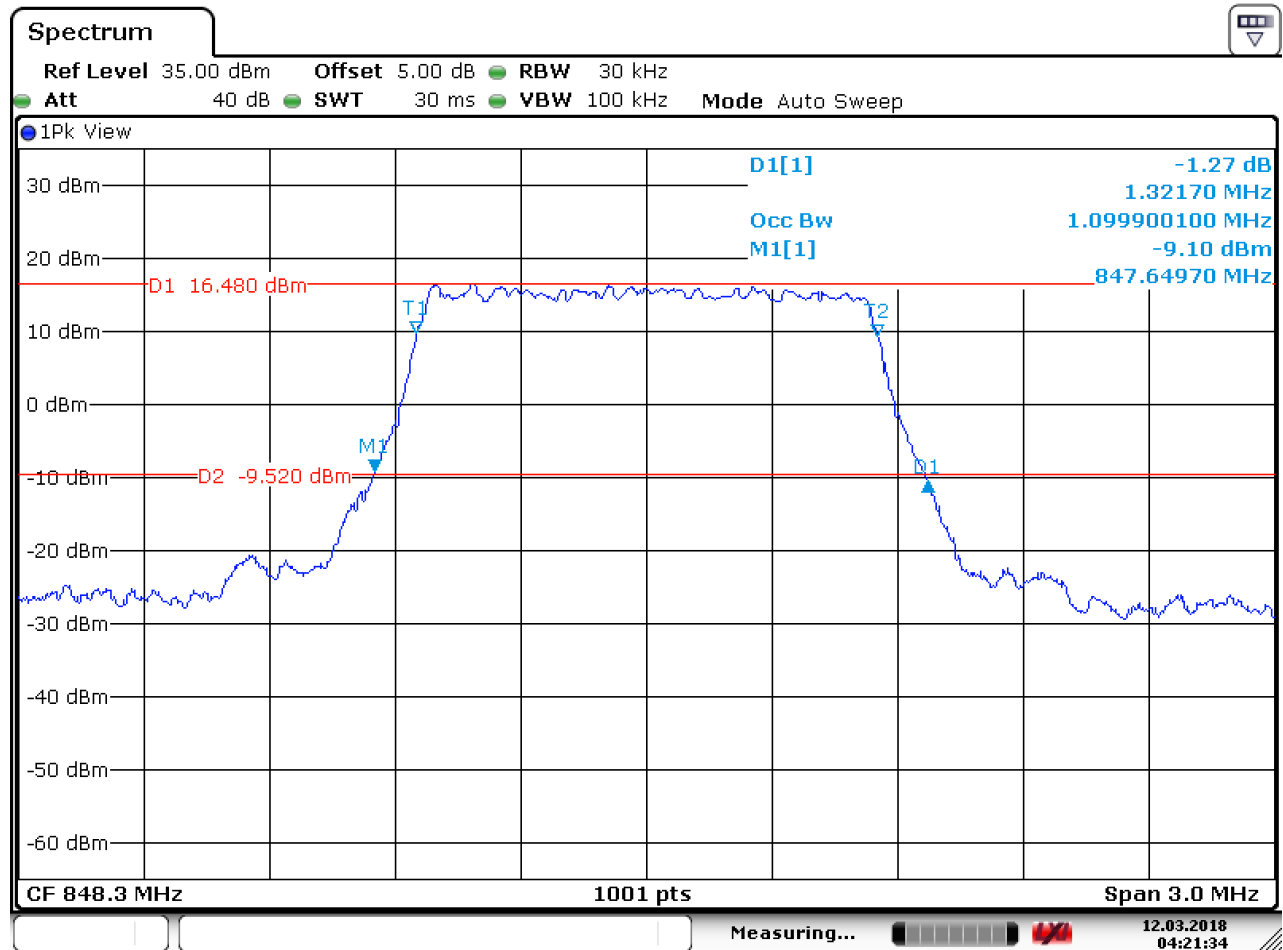


4.1.1.1.2 Test Channel = MCH



Date: 12.MAR.2018 04:30:17

#### 4.1.1.1.3 Test Channel = HCH

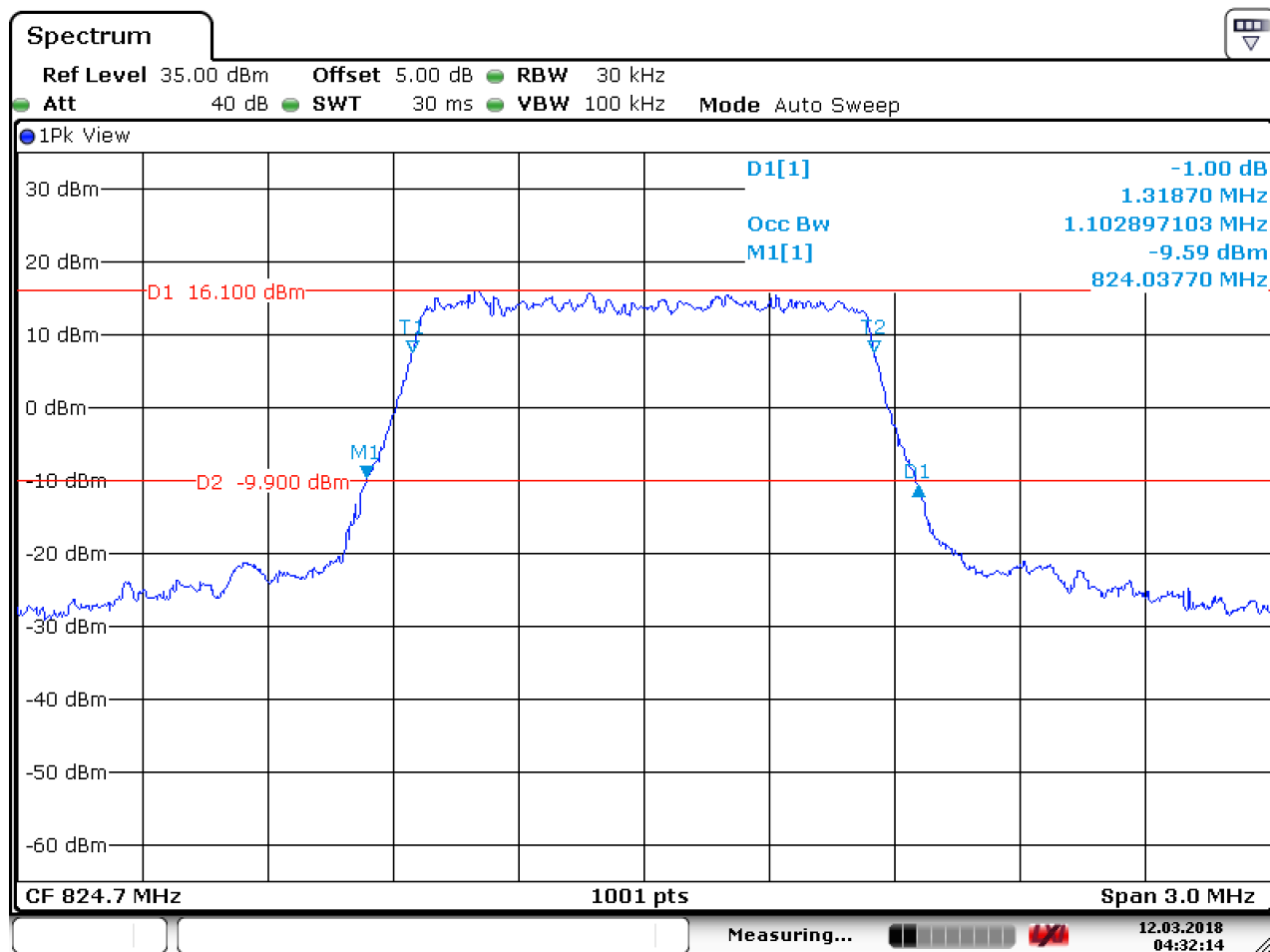


Date: 12.MAR.2018 04:21:34



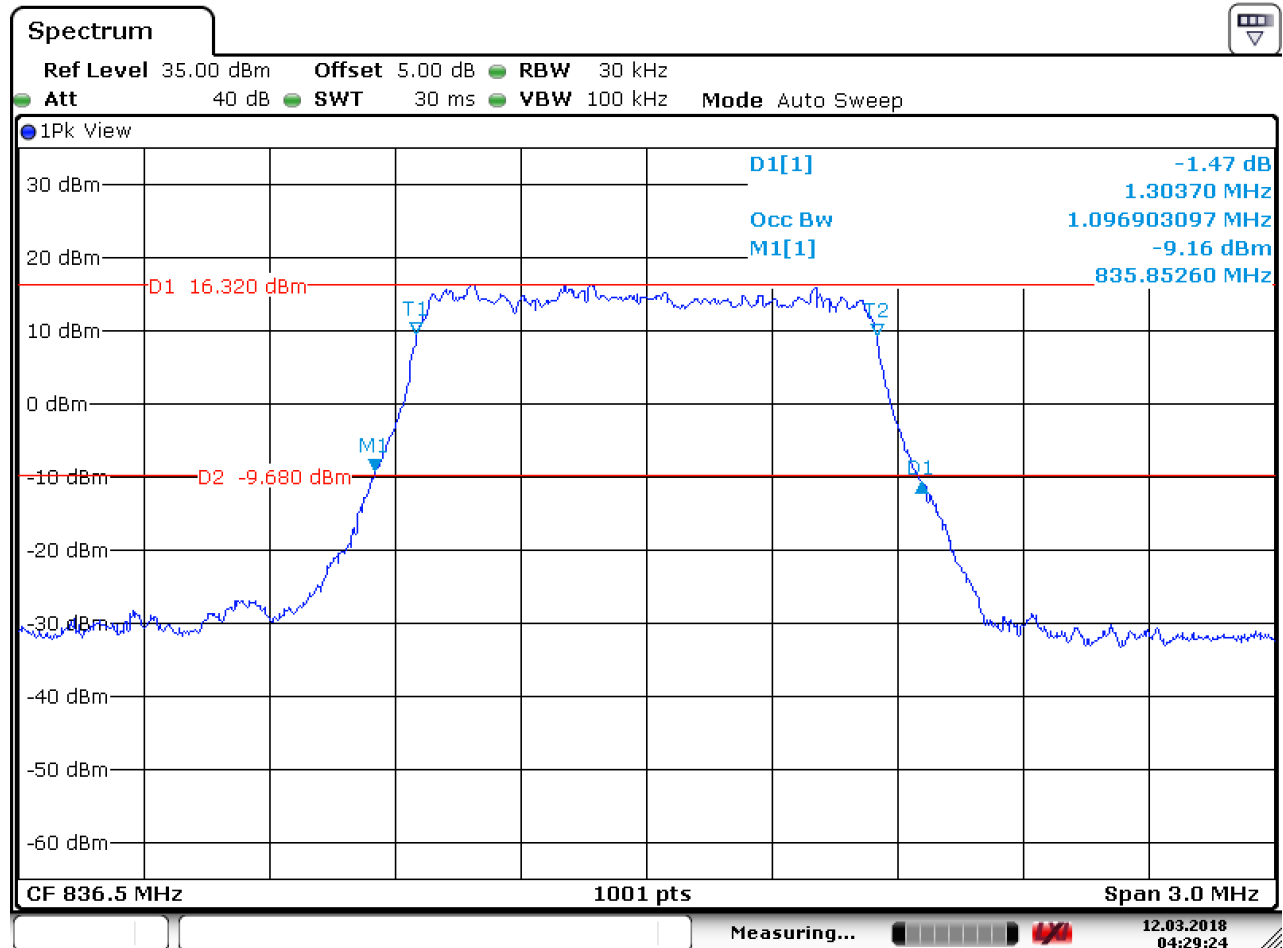
4.1.1.2 Test Mode = LTE/TM2 1.4MHz

4.1.1.2.1 Test Channel = LCH



Date: 12.MAR.2018 04:32:14

#### 4.1.1.2.2 Test Channel = MCH

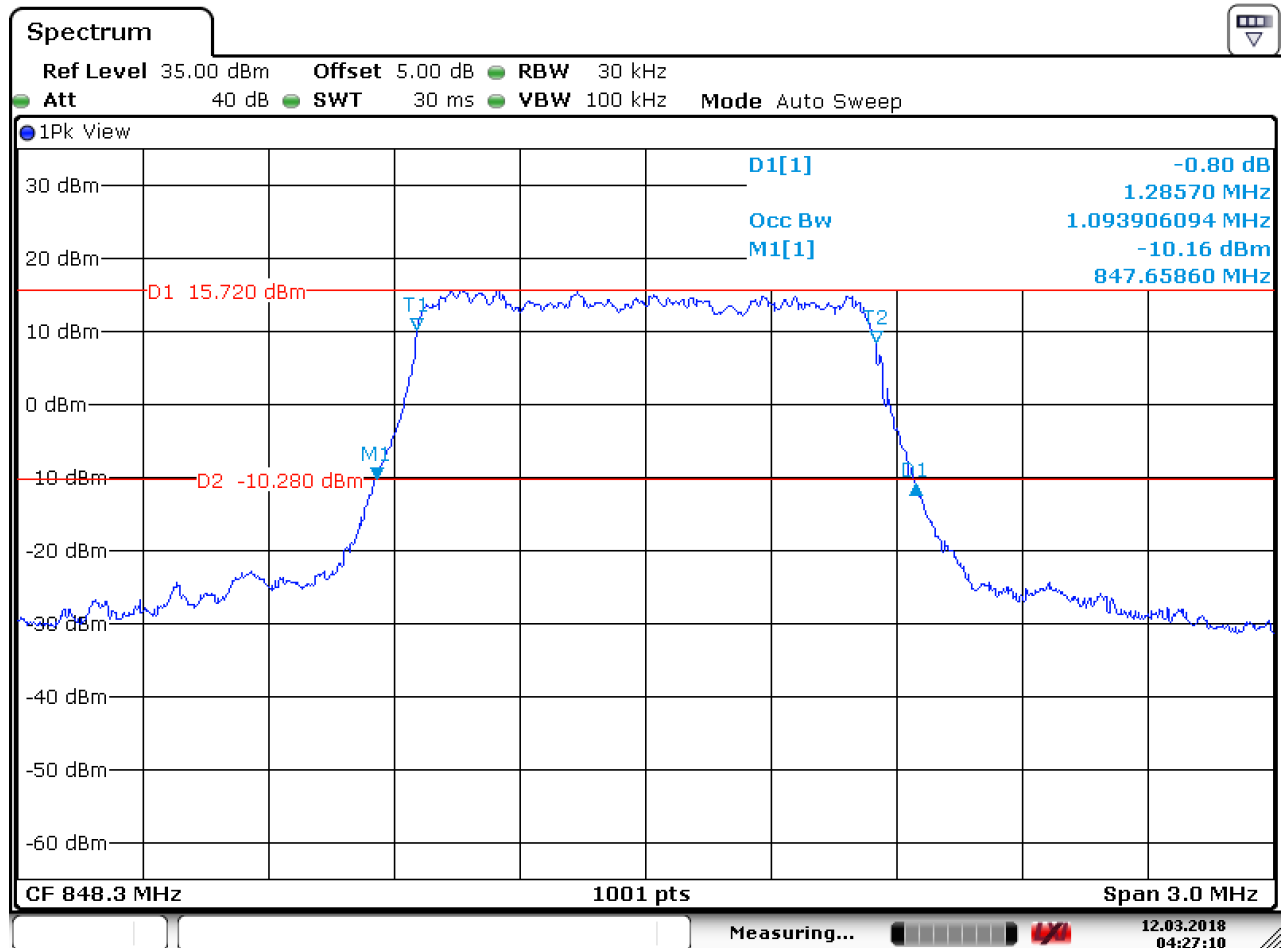


Date: 12.MAR.2018 04:29:25





4.1.1.2.3 Test Channel = HCH

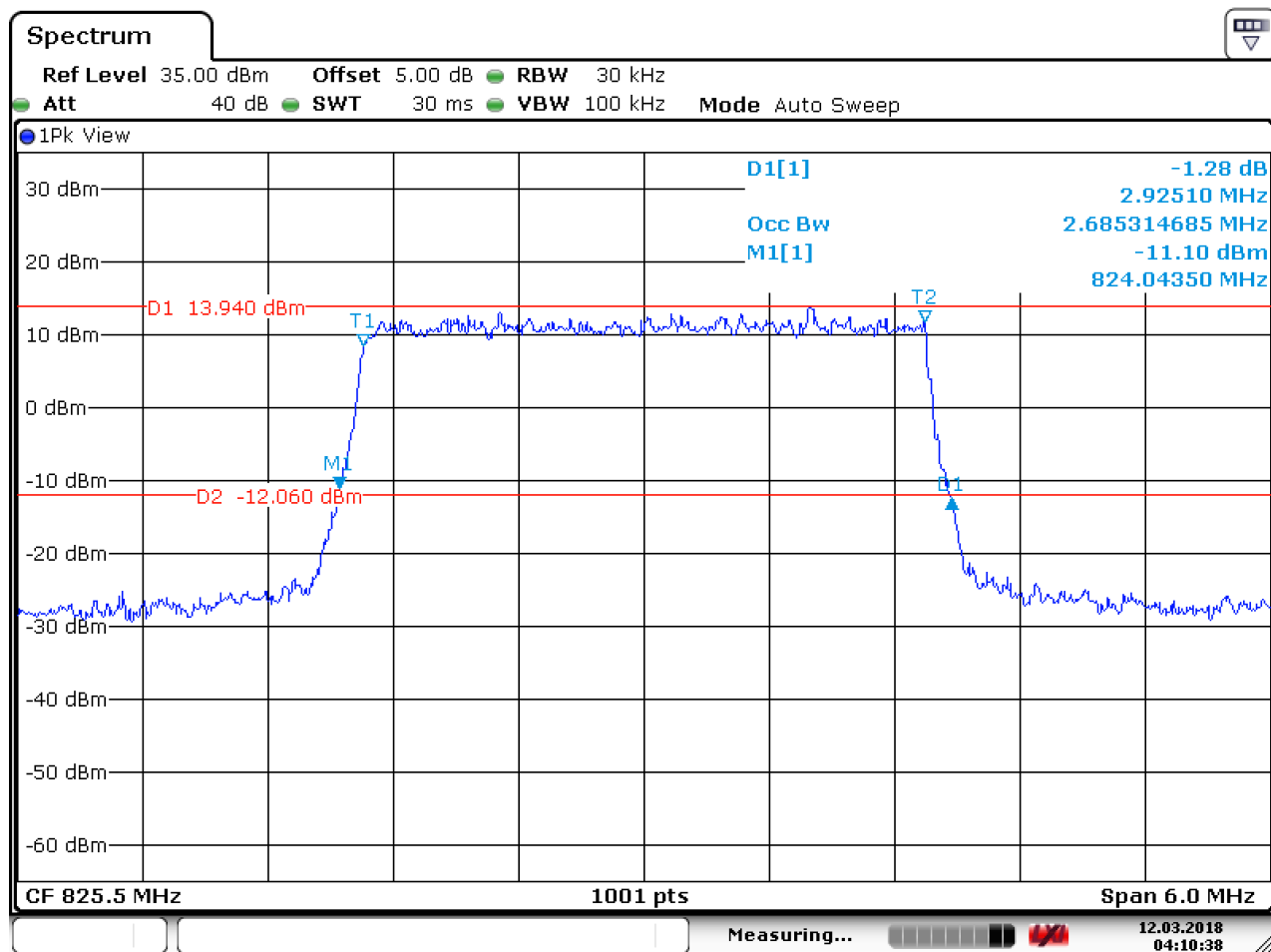


Date: 12.MAR.2018 04:27:11



4.1.1.3 Test Mode = LTE/TM1 3MHz

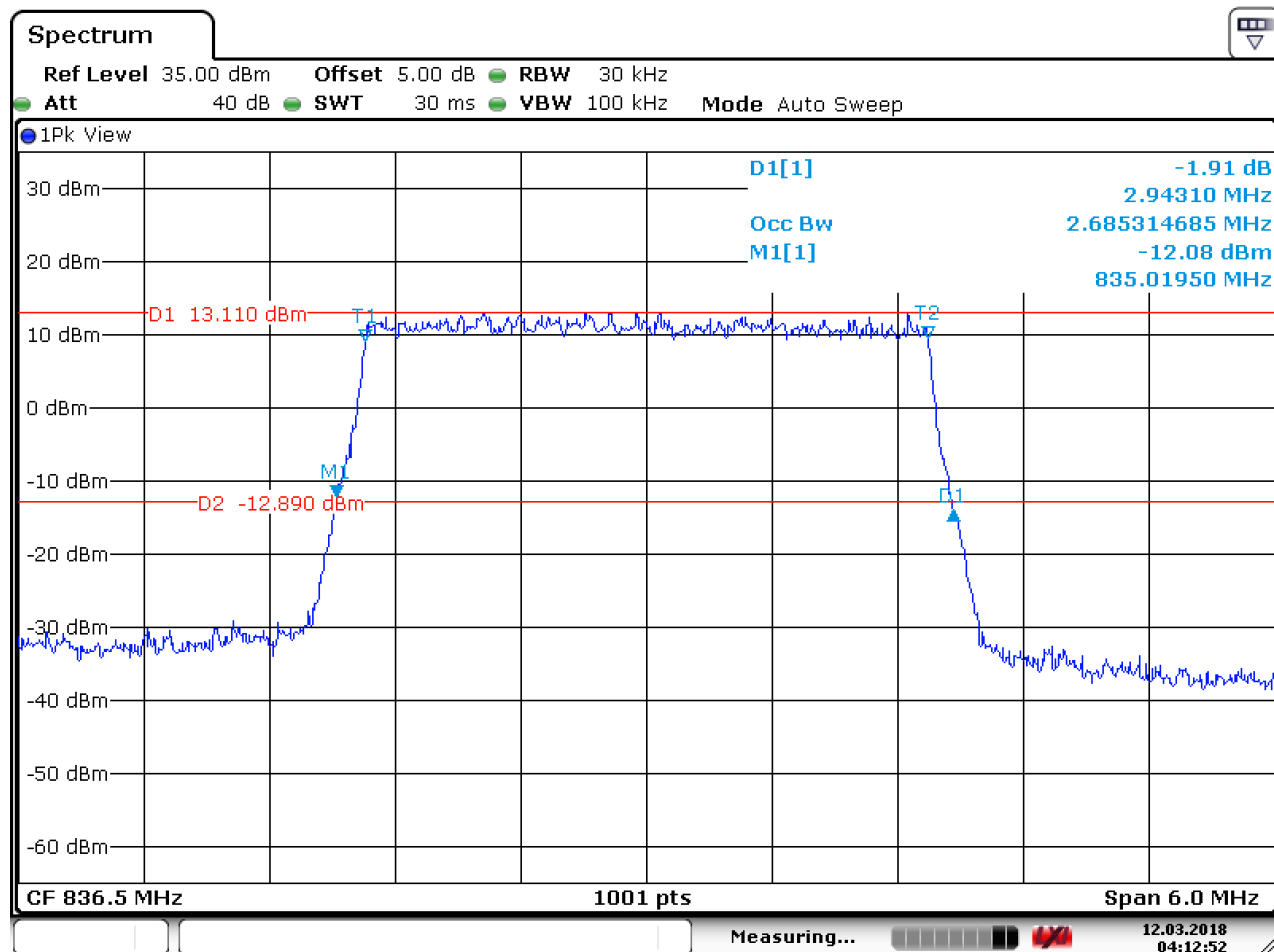
4.1.1.3.1 Test Channel = LCH



Date: 12.MAR.2018 04:10:38



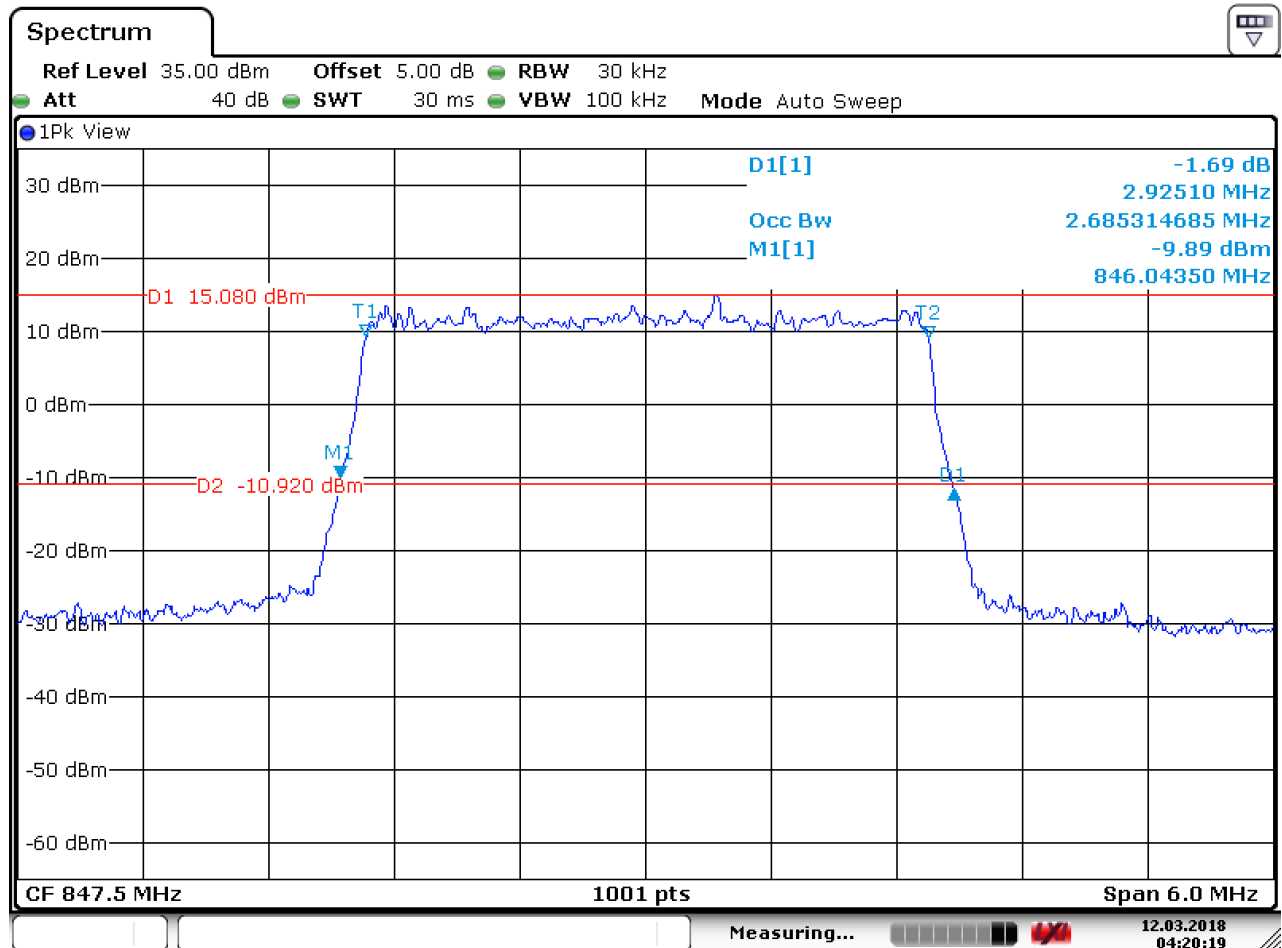
4.1.1.3.2 Test Channel = MCH



Date: 12.MAR.2018 04:12:52



4.1.1.3.3 Test Channel = HCH

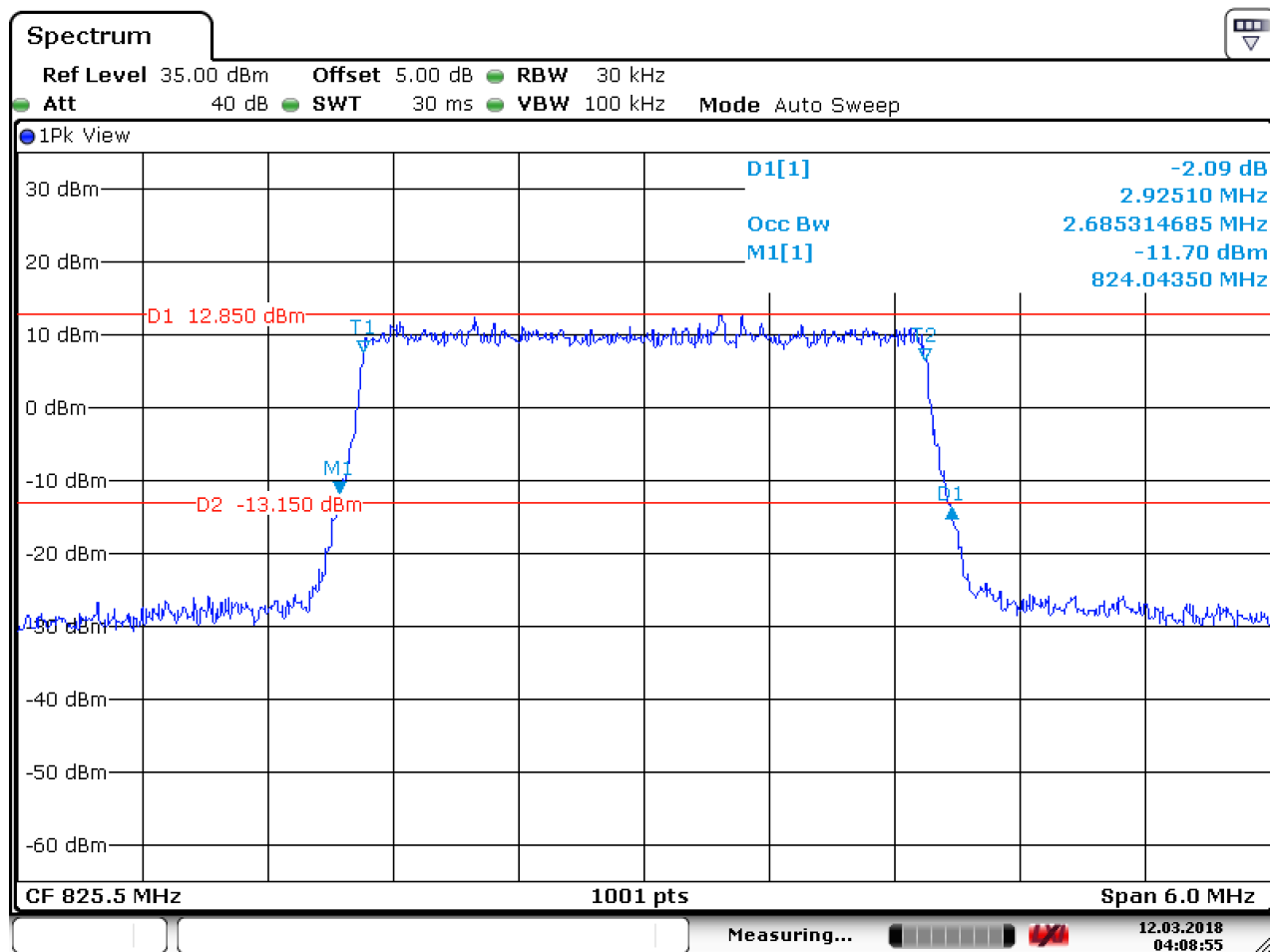


Date: 12.MAR.2018 04:20:19



4.1.1.4 Test Mode = LTE/TM2 3MHz

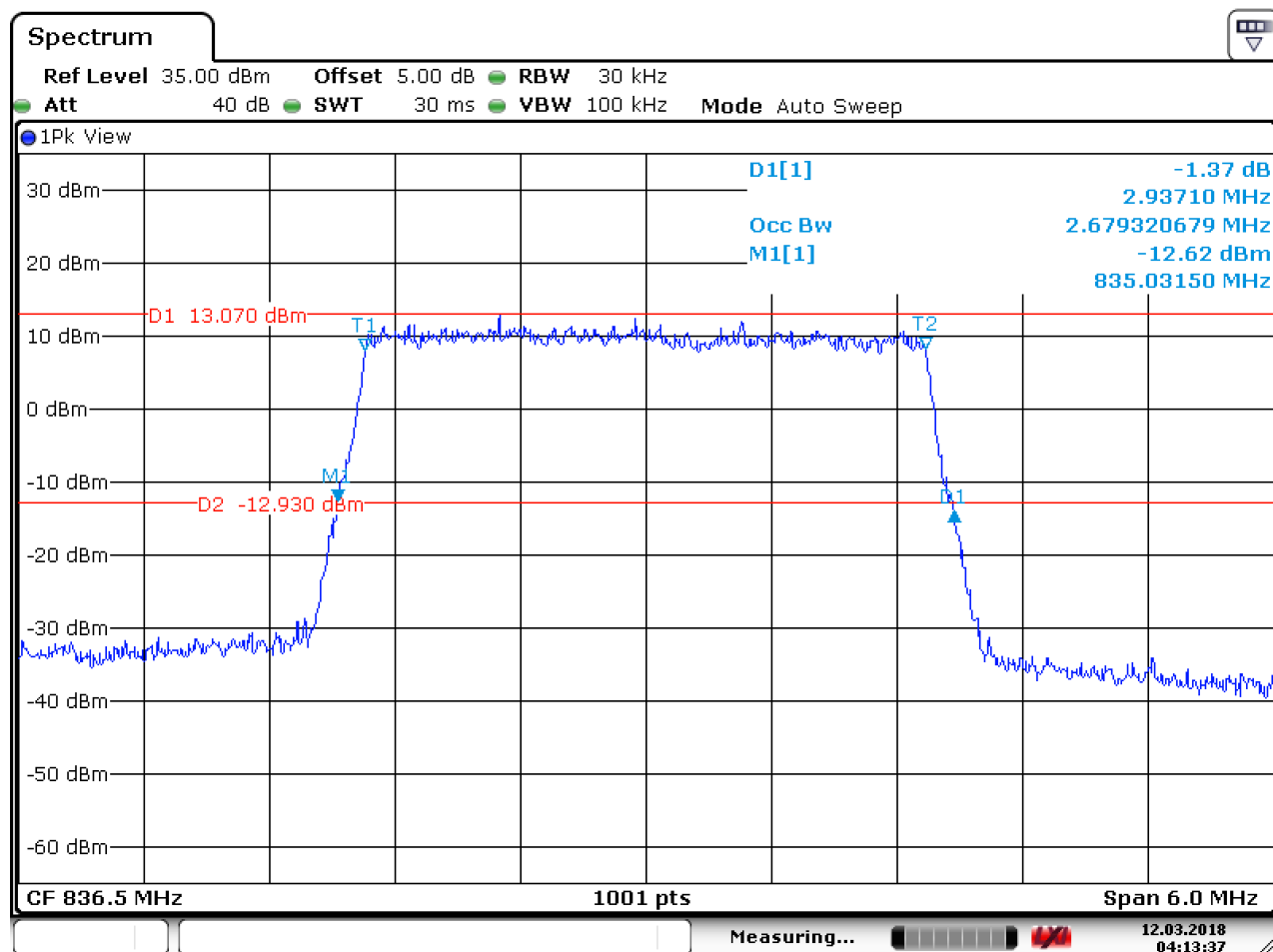
4.1.1.4.1 Test Channel = LCH



Date: 12.MAR.2018 04:08:55



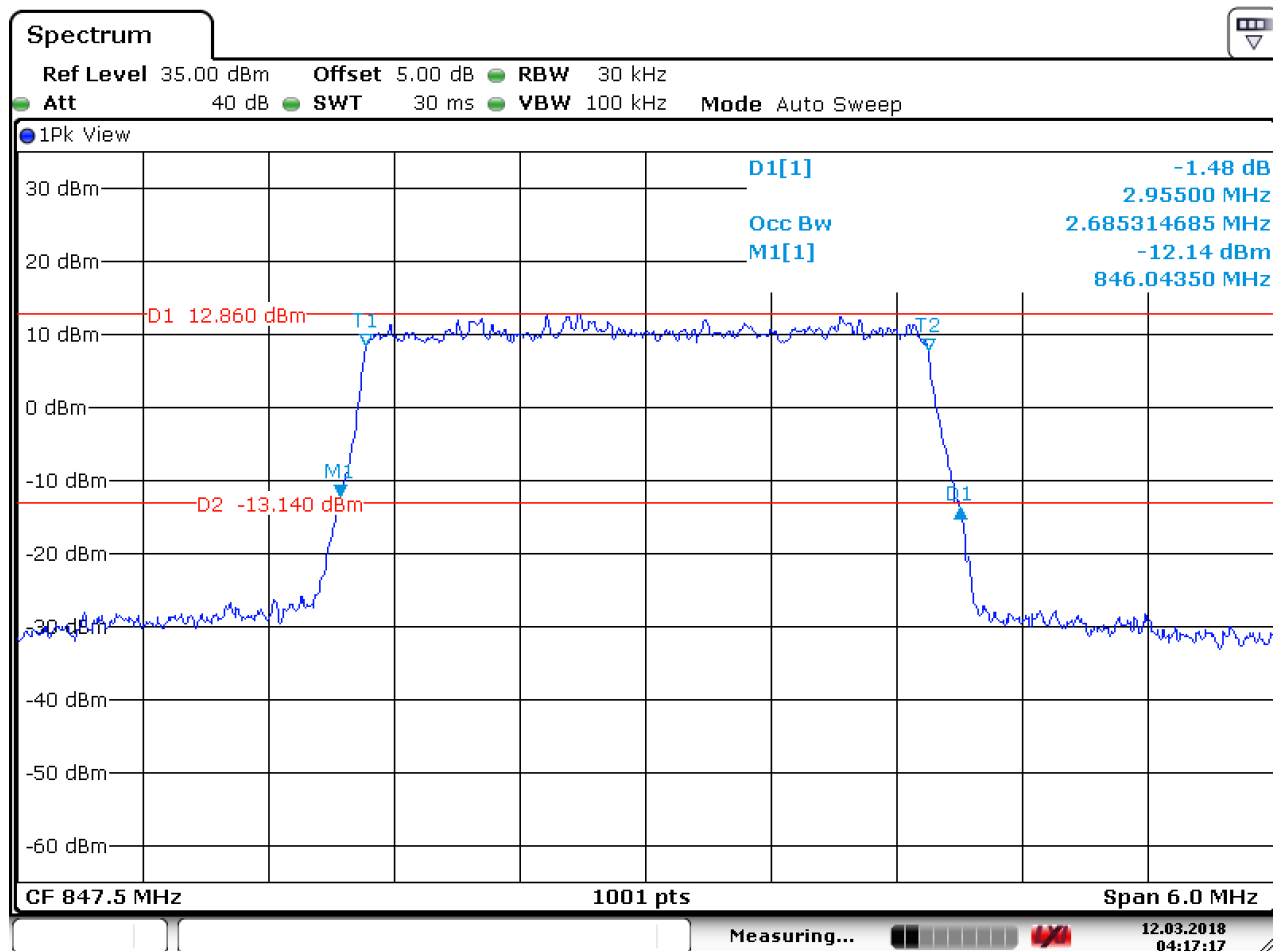
4.1.1.4.2 Test Channel = MCH



Date: 12.MAR.2018 04:13:37



4.1.1.4.3 Test Channel = HCH

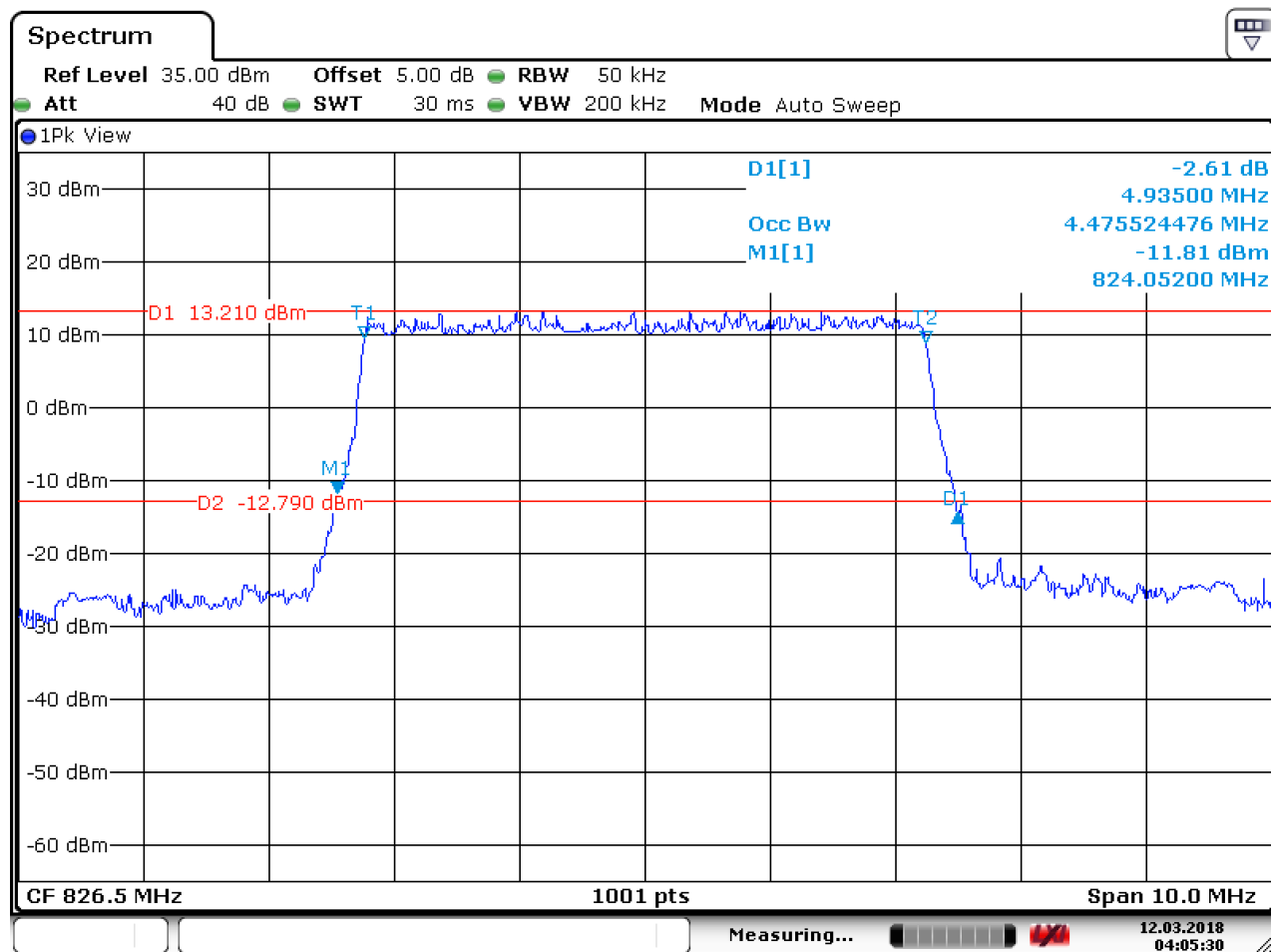


Date: 12.MAR.2018 04:17:18



4.1.1.5 Test Mode = LTE/TM1 5MHz

4.1.1.5.1 Test Channel = LCH

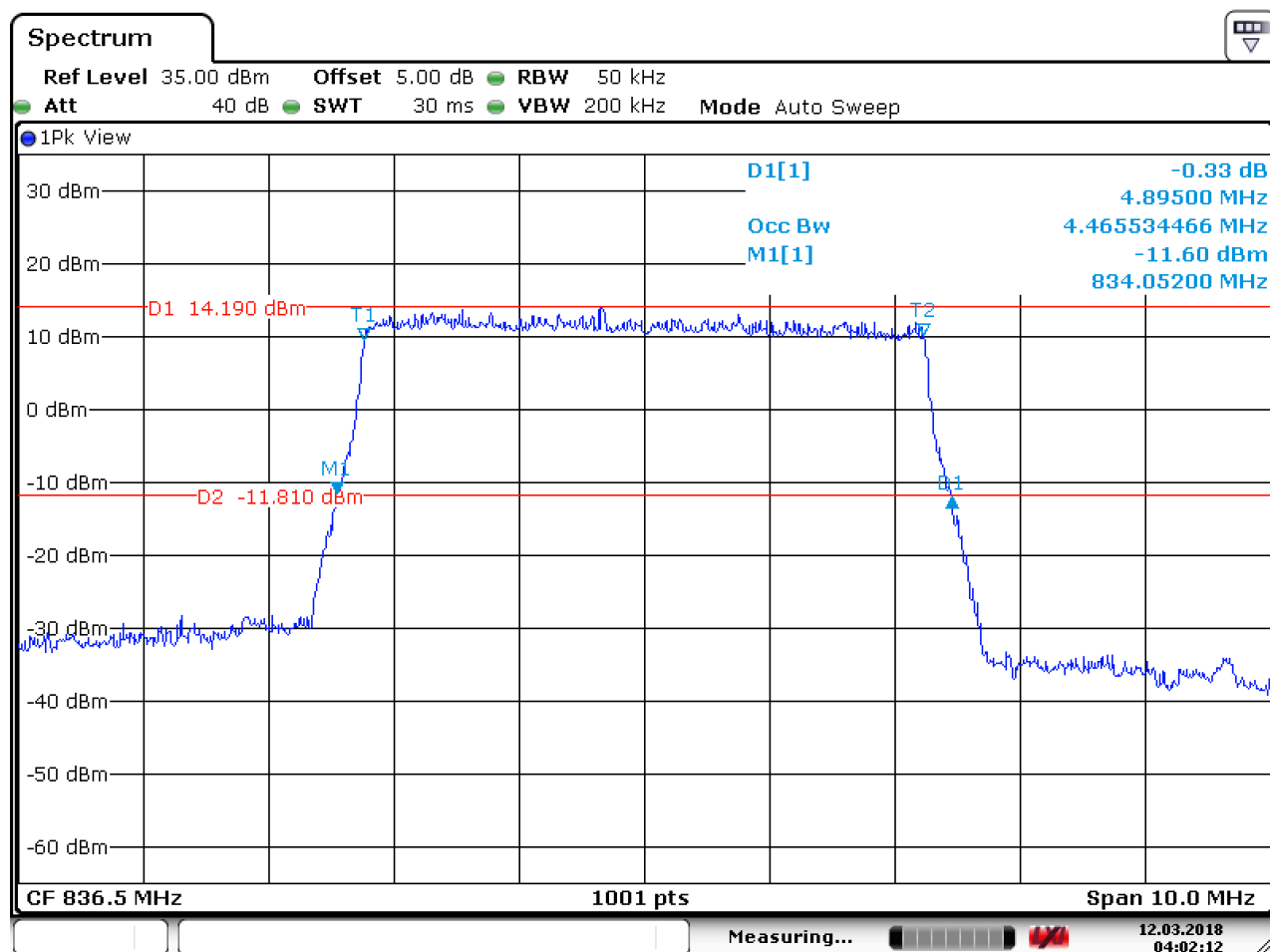


Date: 12.MAR.2018 04:05:31





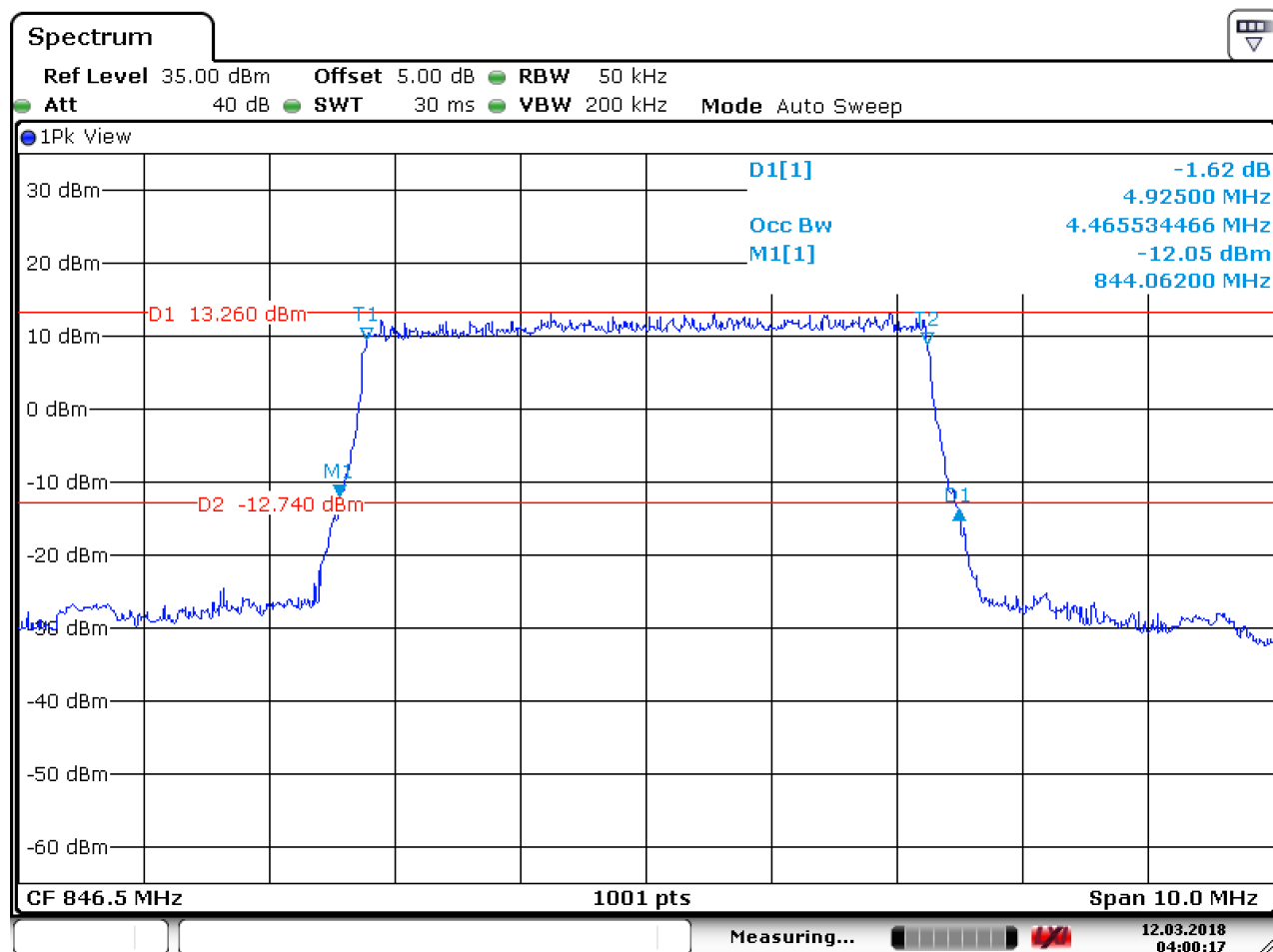
4.1.1.5.2 Test Channel = MCH



Date: 12.MAR.2018 04:02:12



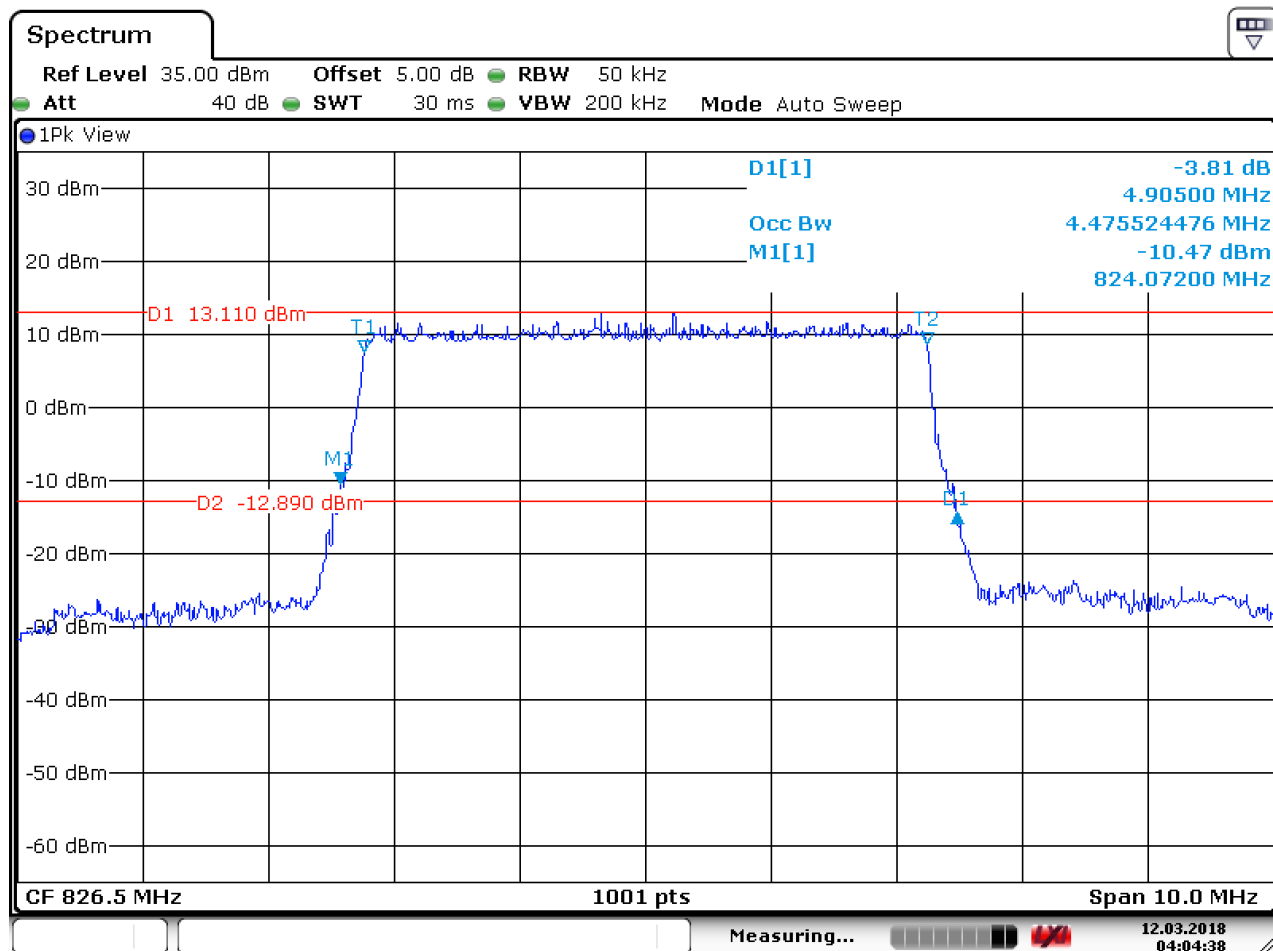
4.1.1.5.3 Test Channel = HCH



Date: 12.MAR.2018 04:00:18



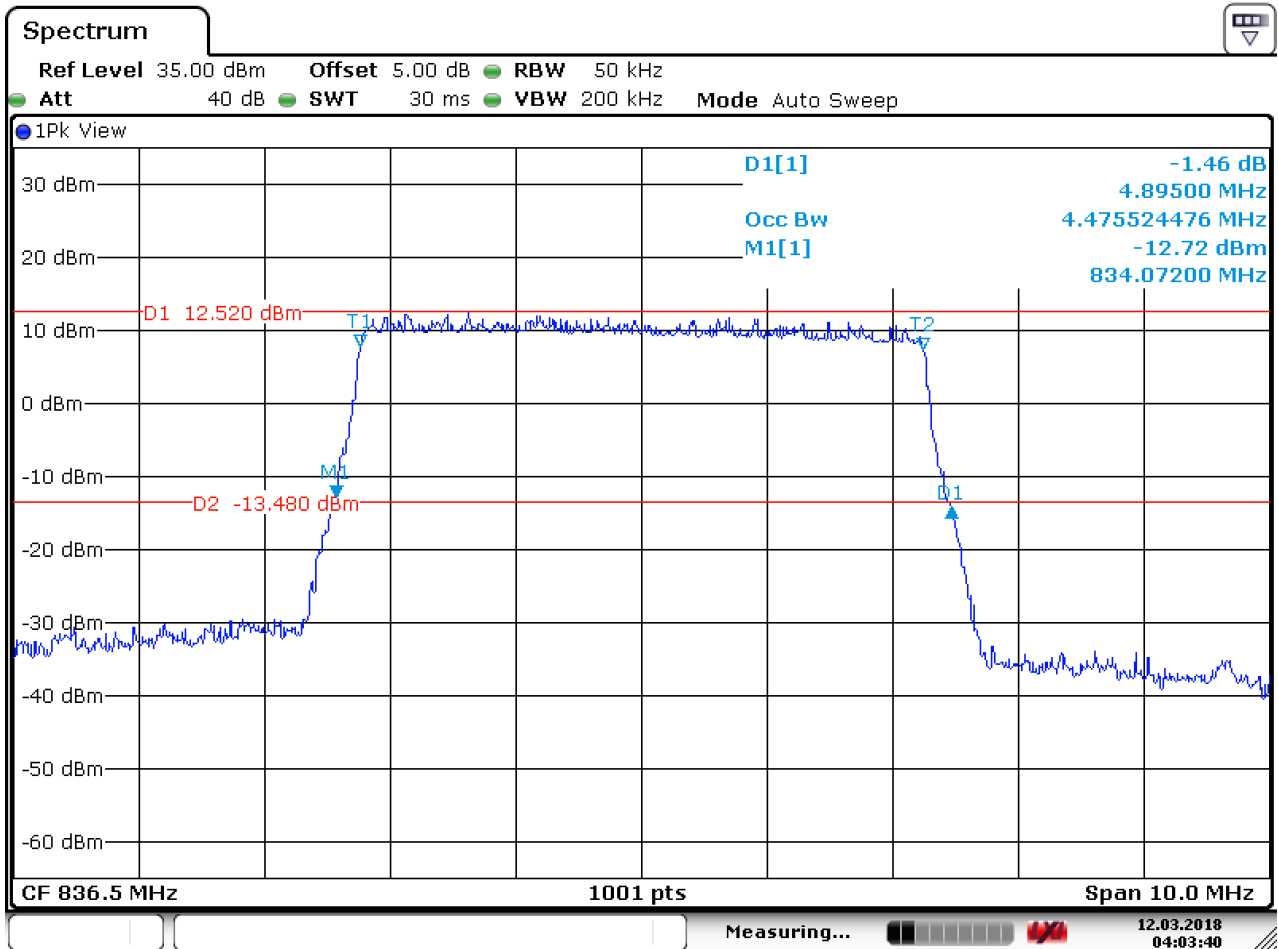
4.1.1.6 Test Mode = LTE/TM2 5MHz  
4.1.1.6.1 Test Channel = LCH



Date: 12.MAR.2018 04:04:38



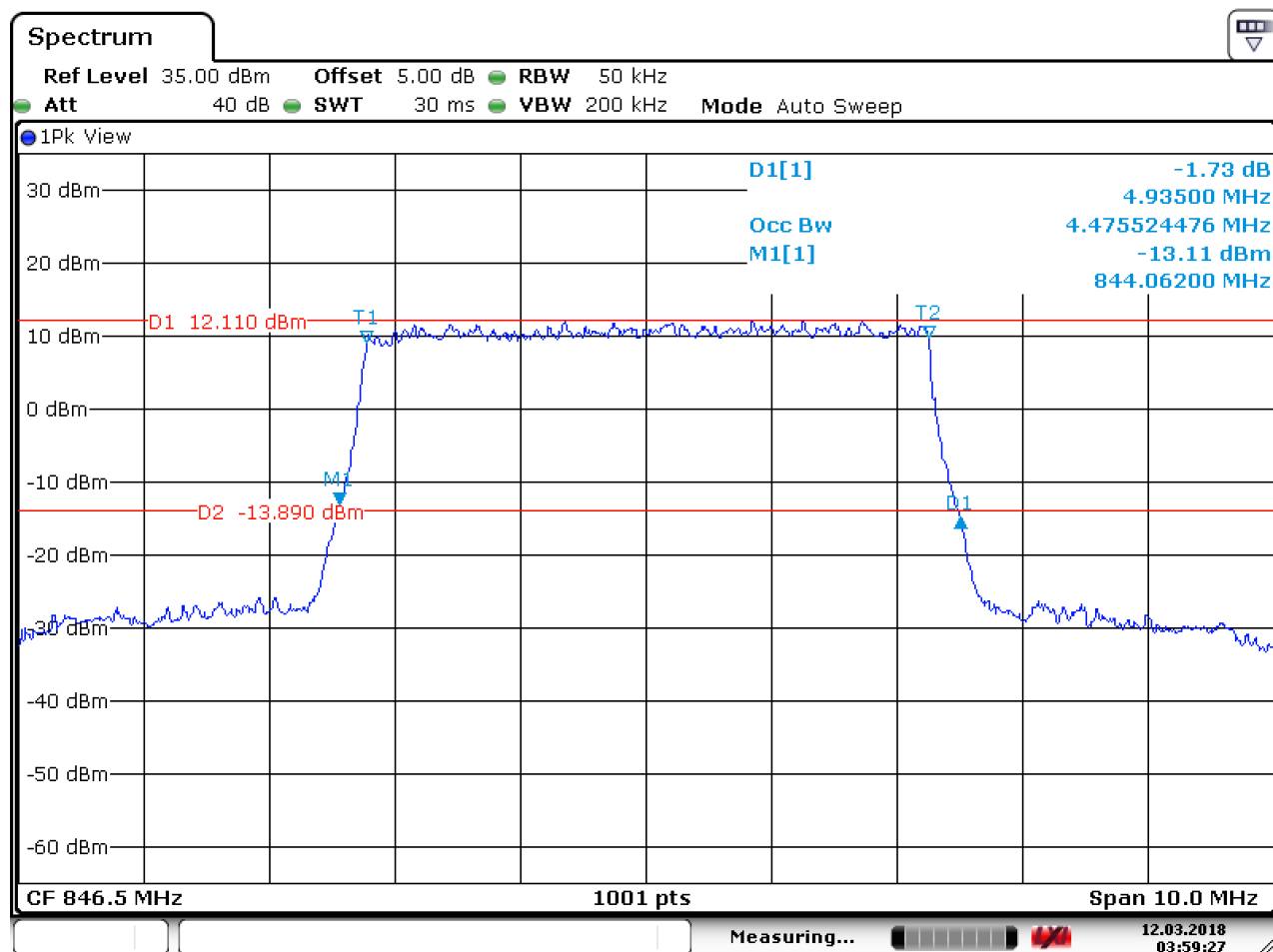
4.1.1.6.2 Test Channel = MCH



Date: 12.MAR.2018 04:03:40



4.1.1.6.3 Test Channel = HCH

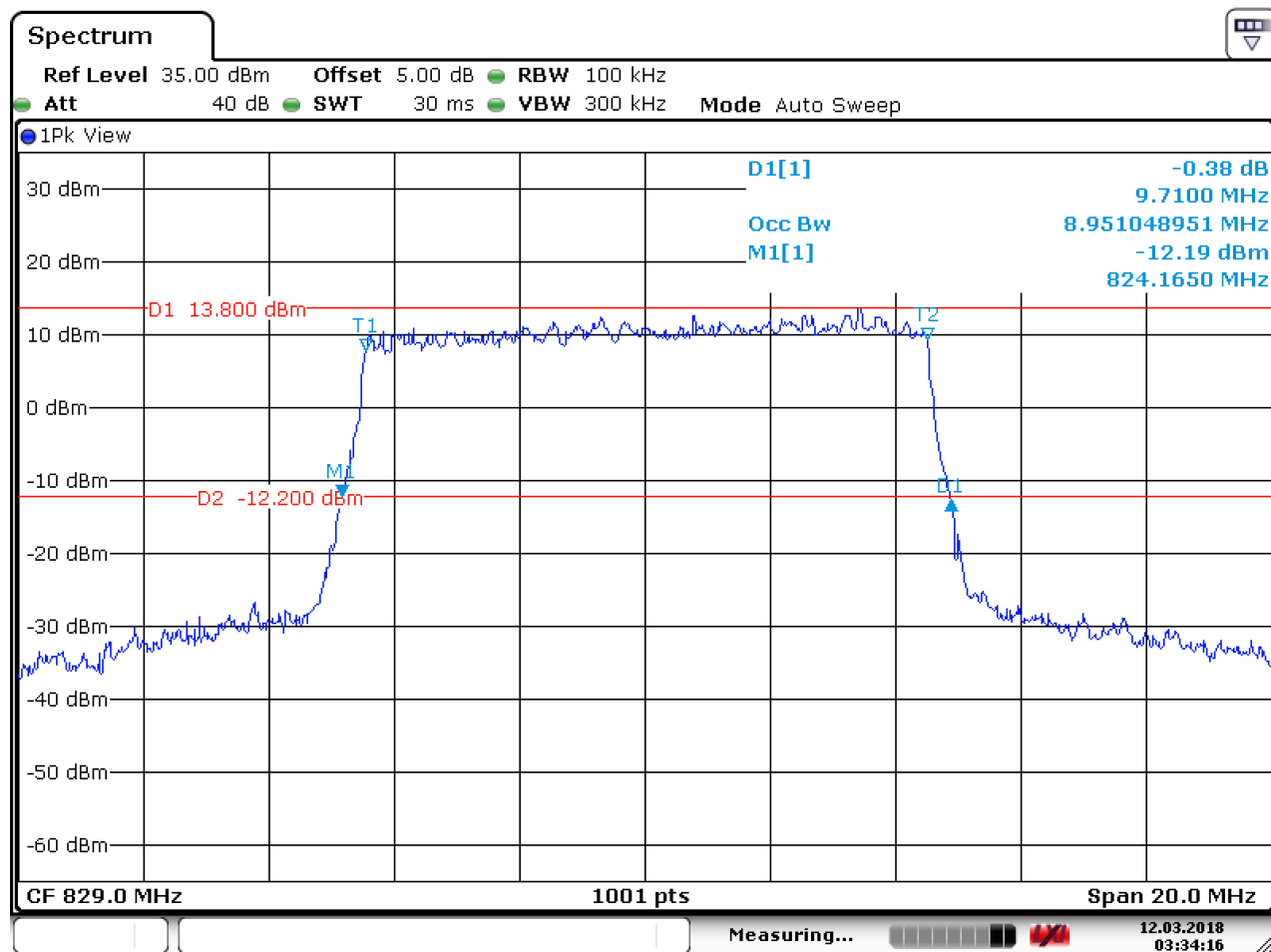


Date: 12.MAR.2018 03:59:28



4.1.1.7 Test Mode = LTE/TM1 10MHz

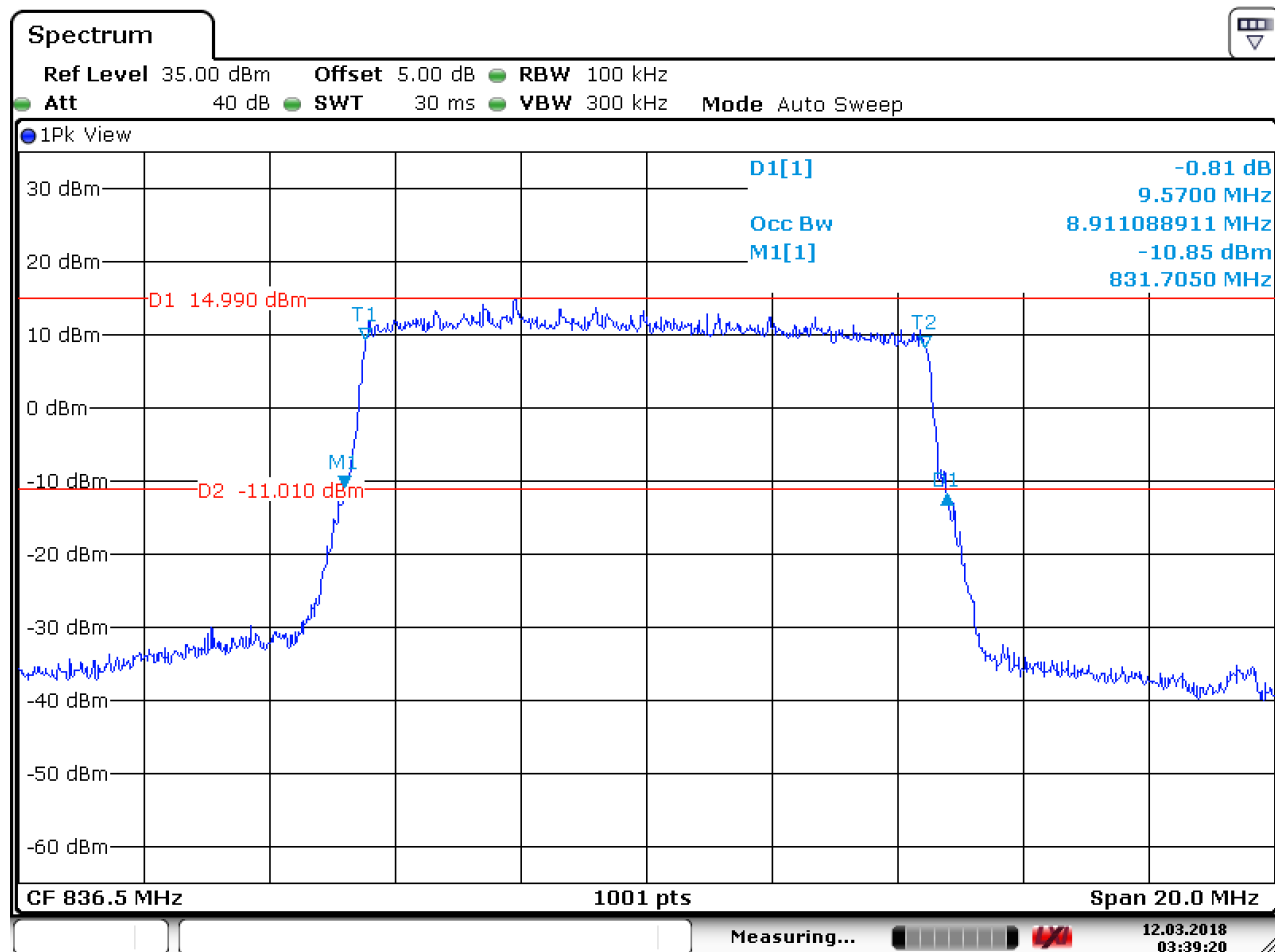
4.1.1.7.1 Test Channel = LCH



Date: 12.MAR.2018 03:34:16



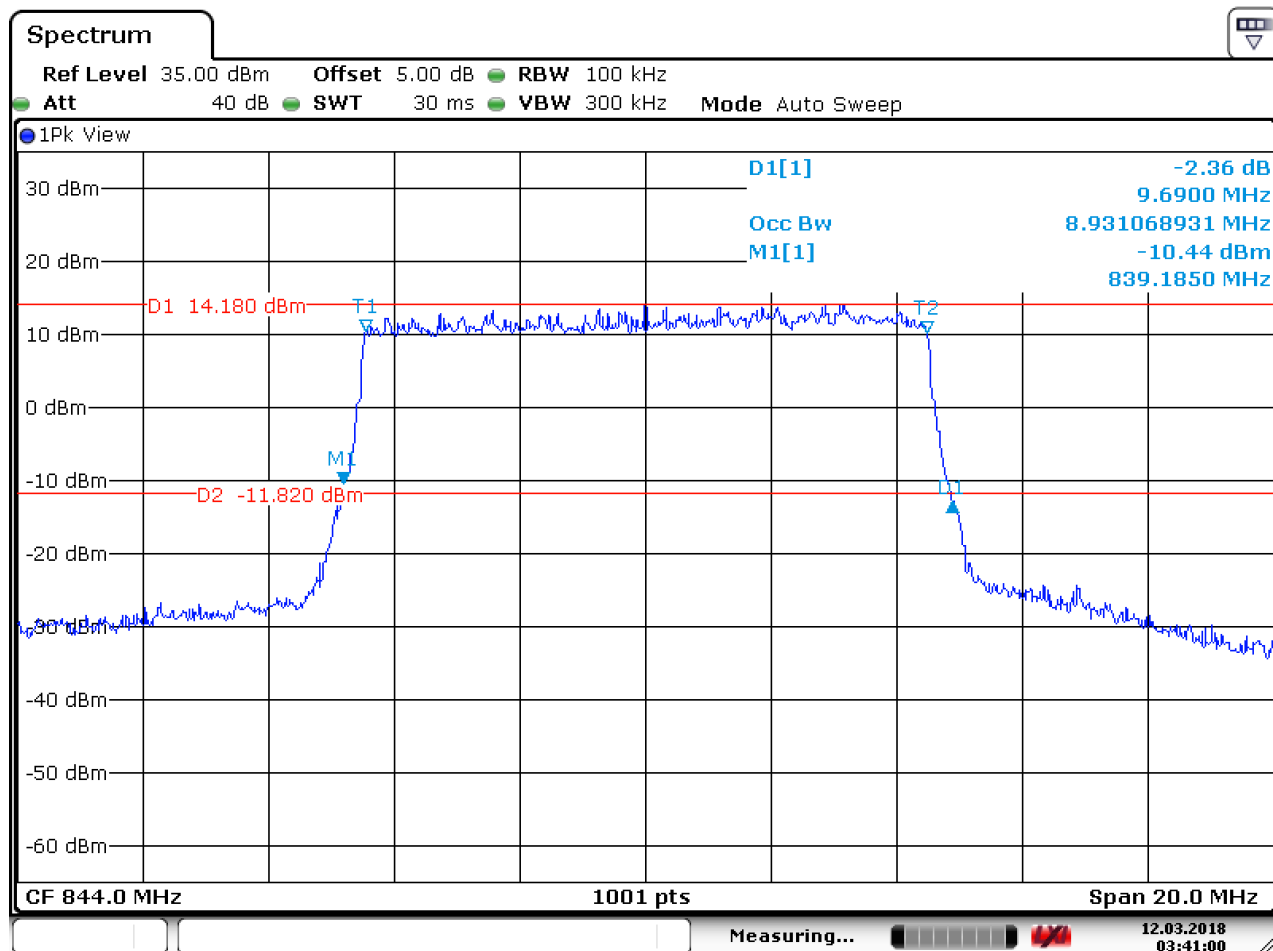
4.1.1.7.2 Test Channel = MCH



Date: 12.MAR.2018 03:39:20



4.1.1.7.3 Test Channel = HCH



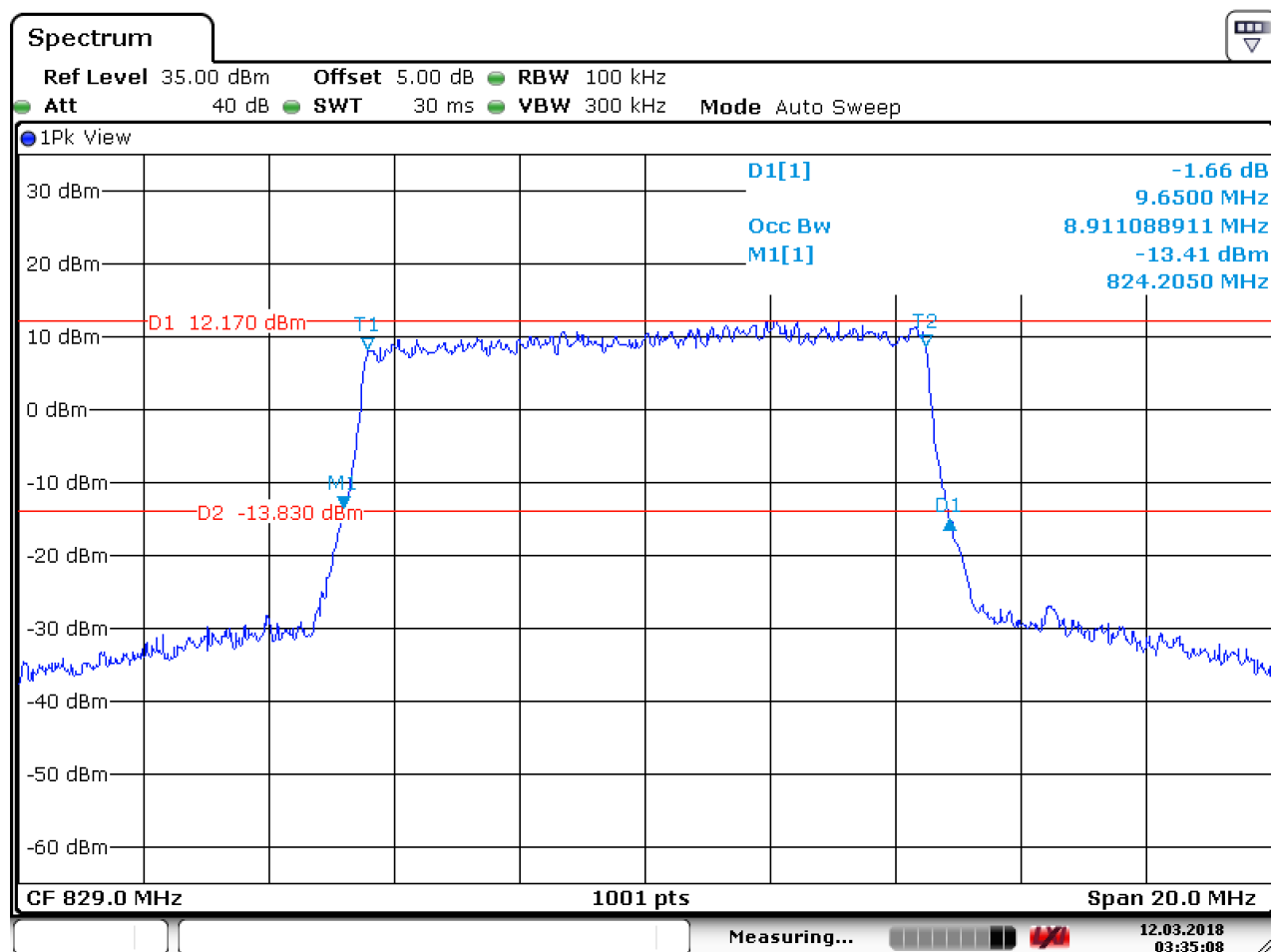
Date: 12.MAR.2018 03:41:01





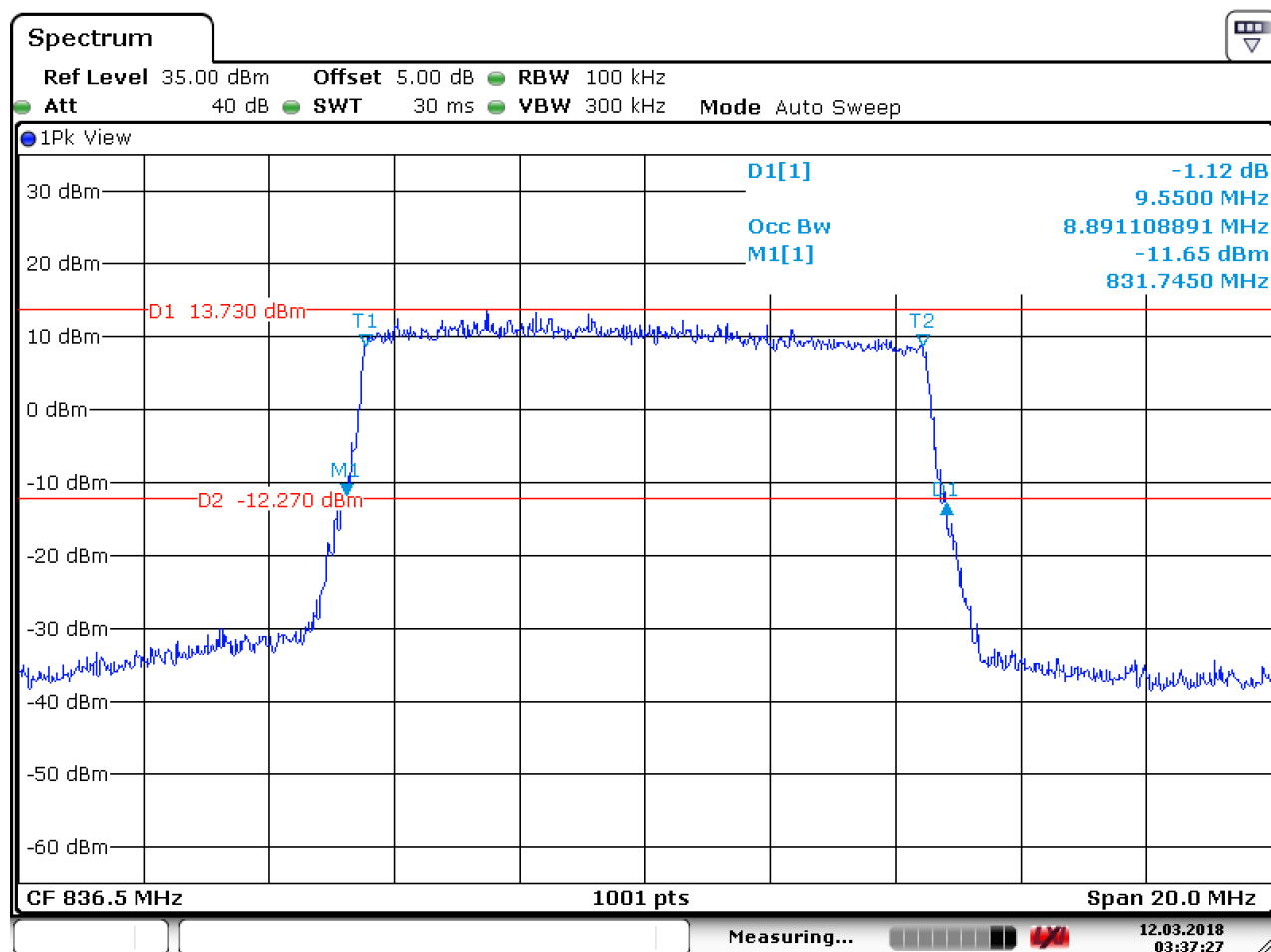
4.1.1.8 Test Mode = LTE/TM2 10MHz

4.1.1.8.1 Test Channel = LCH



Date: 12.MAR.2018 03:35:09

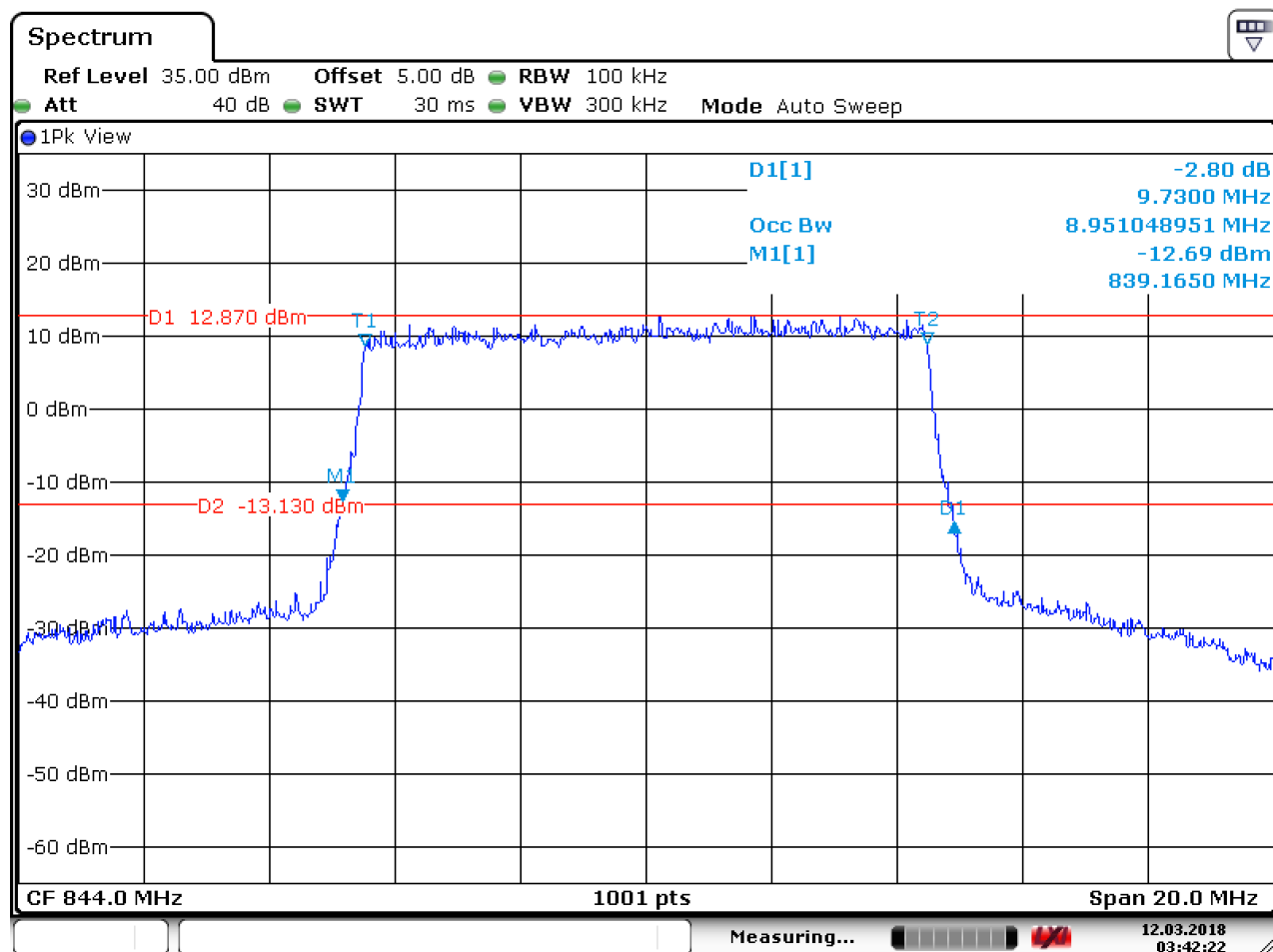
#### 4.1.1.8.2 Test Channel = MCH



Date: 12.MAR.2018 03:37:27



4.1.1.8.3 Test Channel = HCH



Date: 12.MAR.2018 03:42:23

## 5 Band Edges Compliance

### Part I - Test Plots

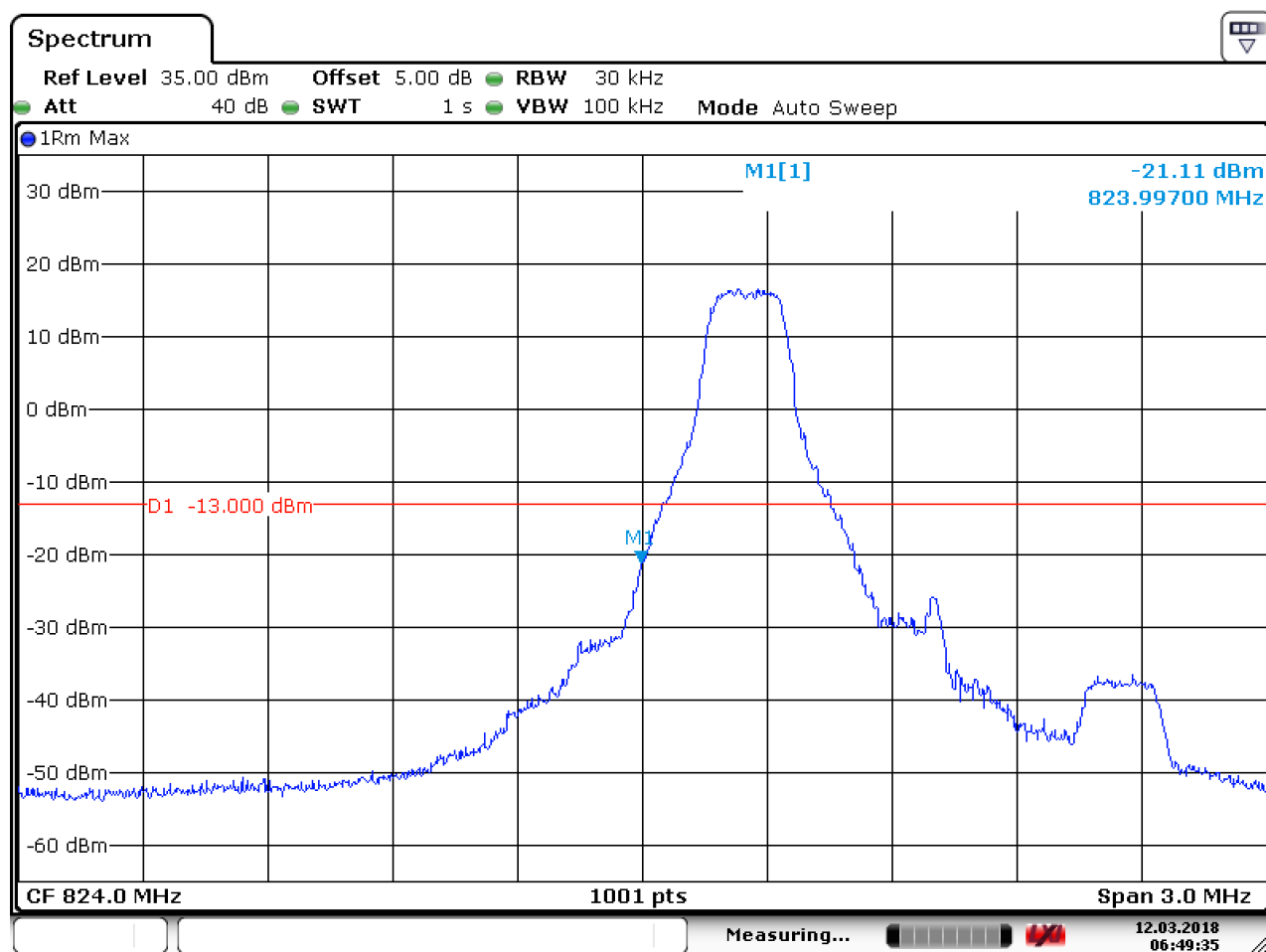
#### 5.1 For LTE

##### 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

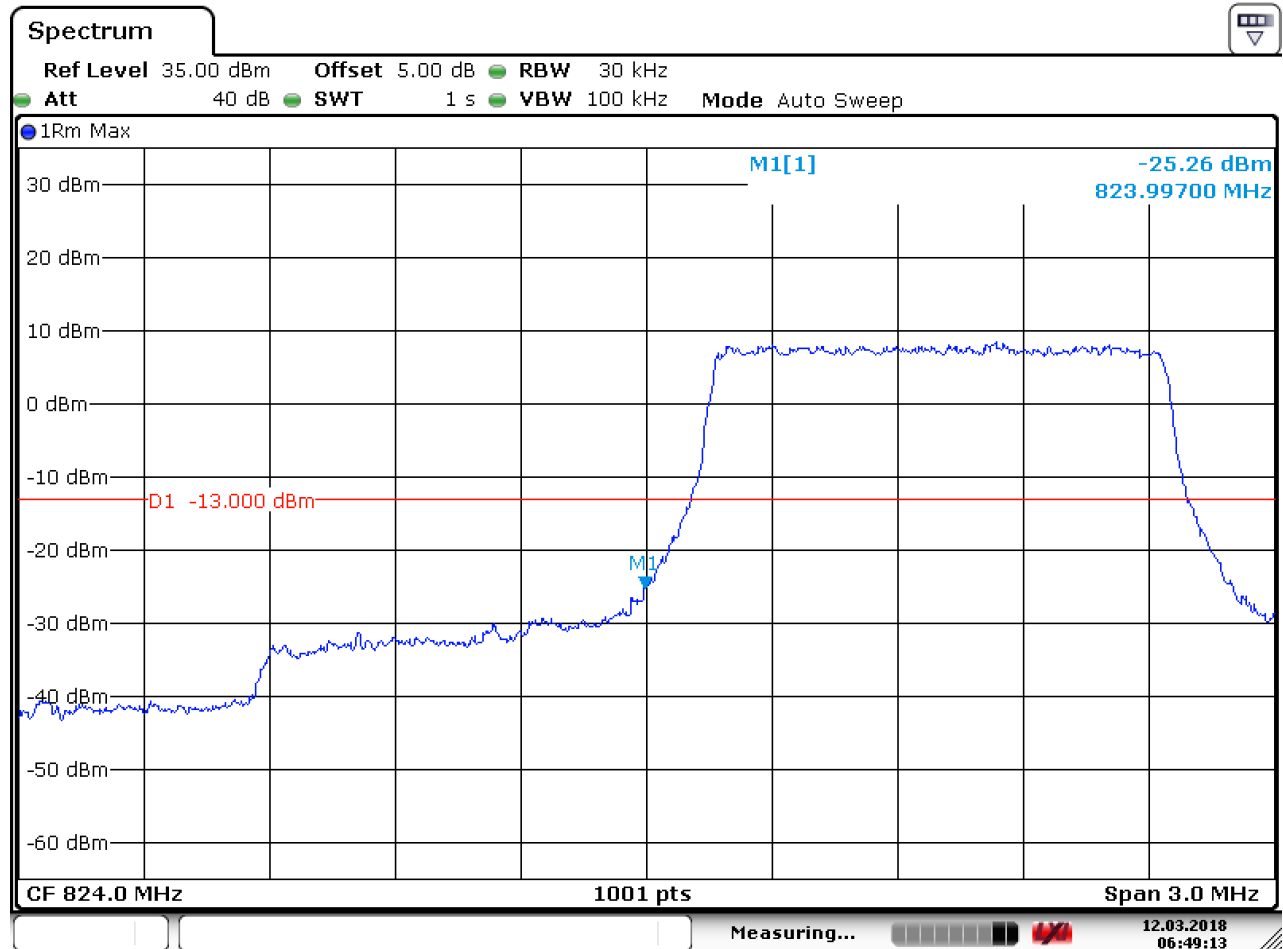
##### 5.1.1.1.1.1 Test RB=1RB



Date: 12.MAR.2018 06:49:36



5.1.1.1.1.2 Test RB=6RB

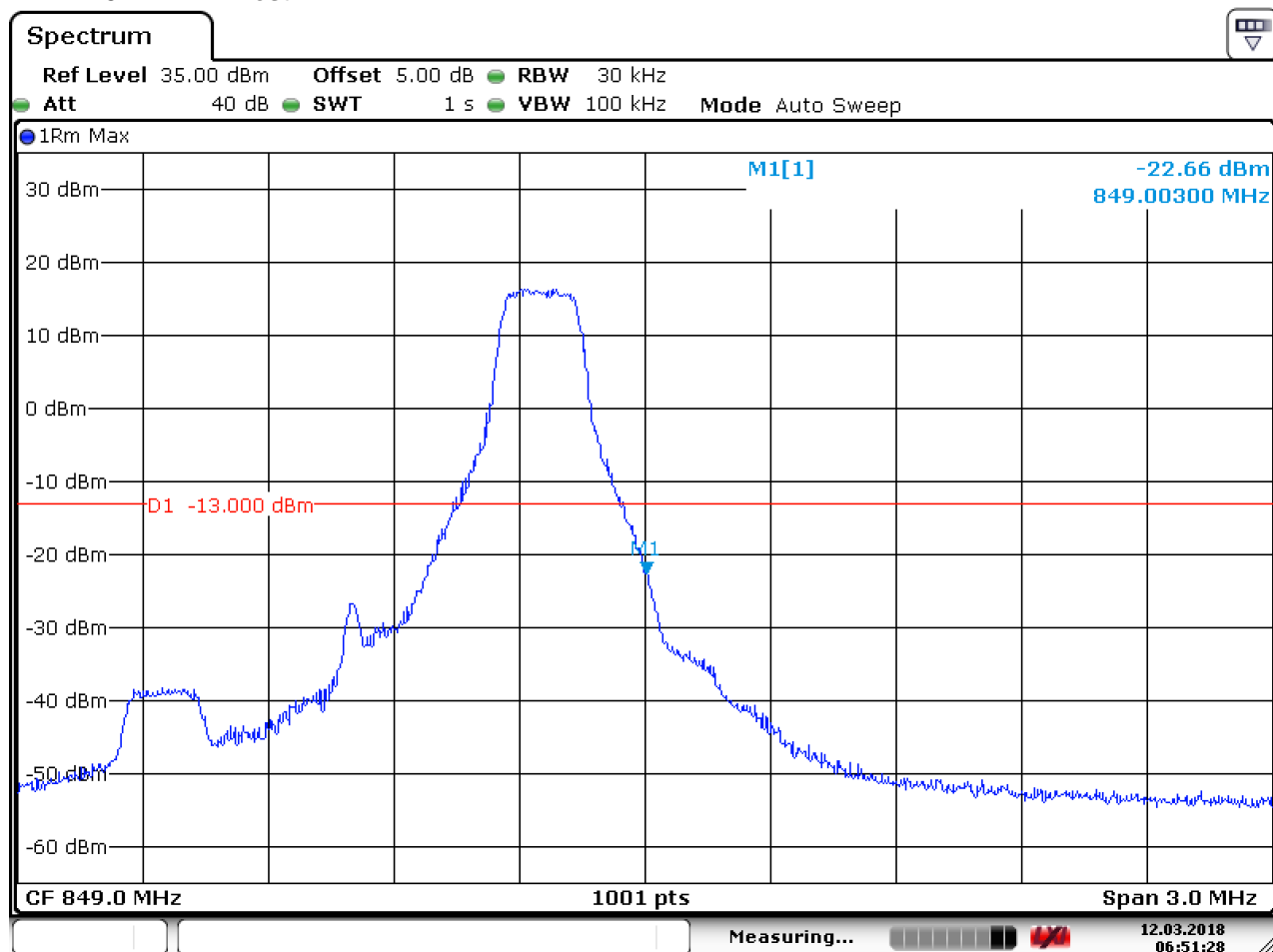


Date: 12.MAR.2018 06:49:13



5.1.1.1.2 Test Channel = HCH

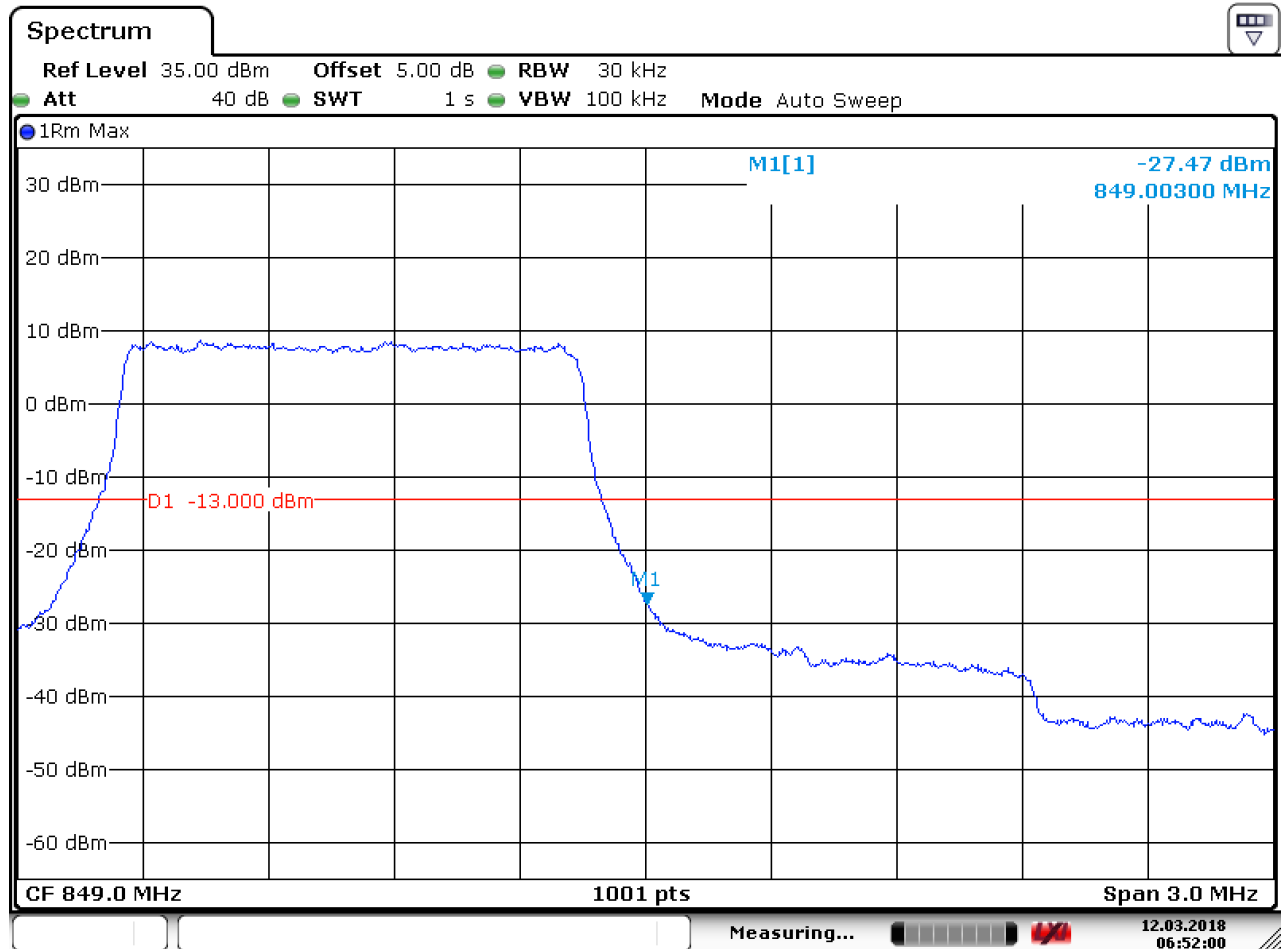
5.1.1.1.2.1 Test RB=1RB



Date: 12.MAR.2018 06:51:28



5.1.1.1.2.2 Test RB=6RB



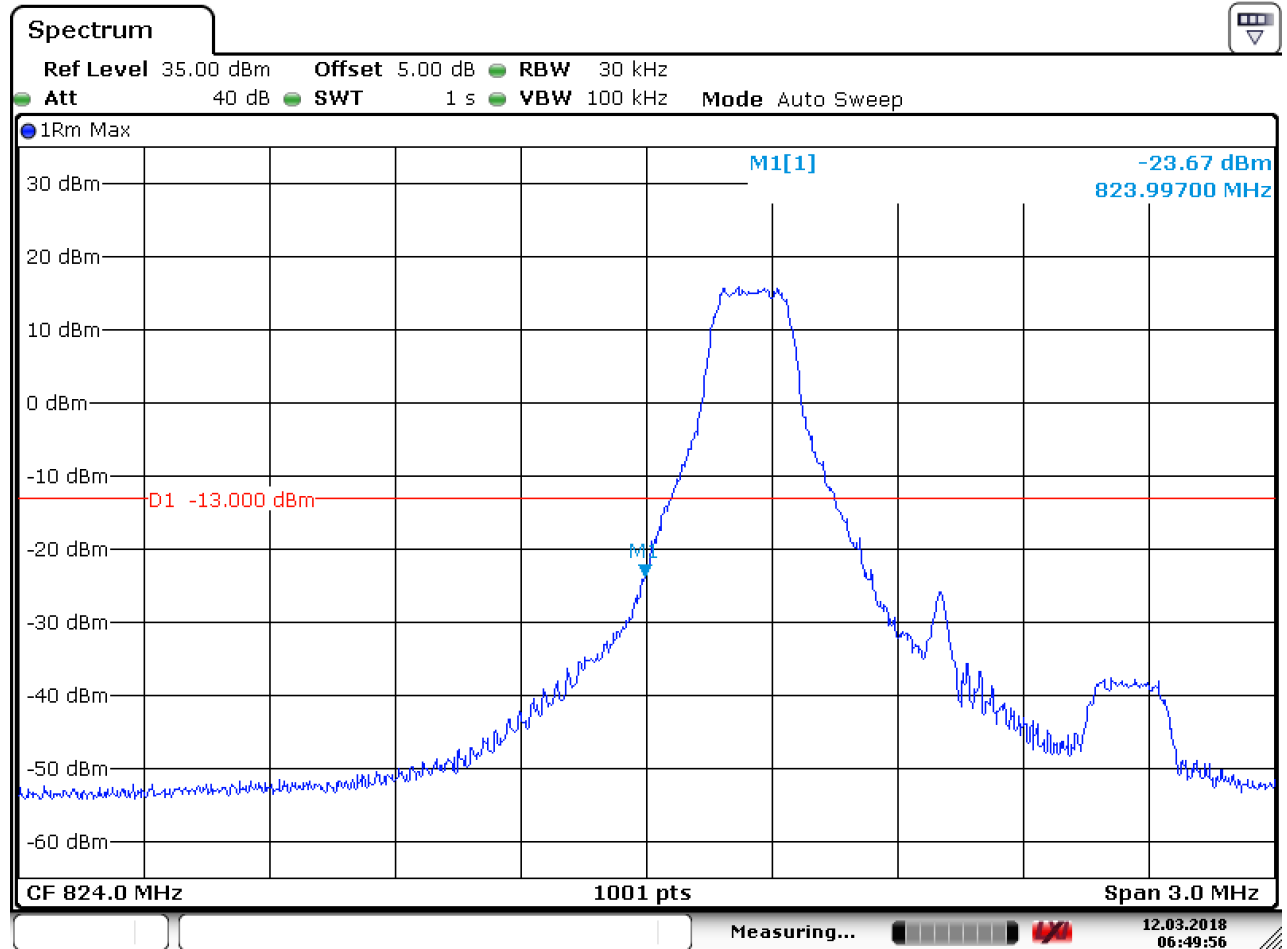
Date: 12.MAR.2018 06:52:00



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

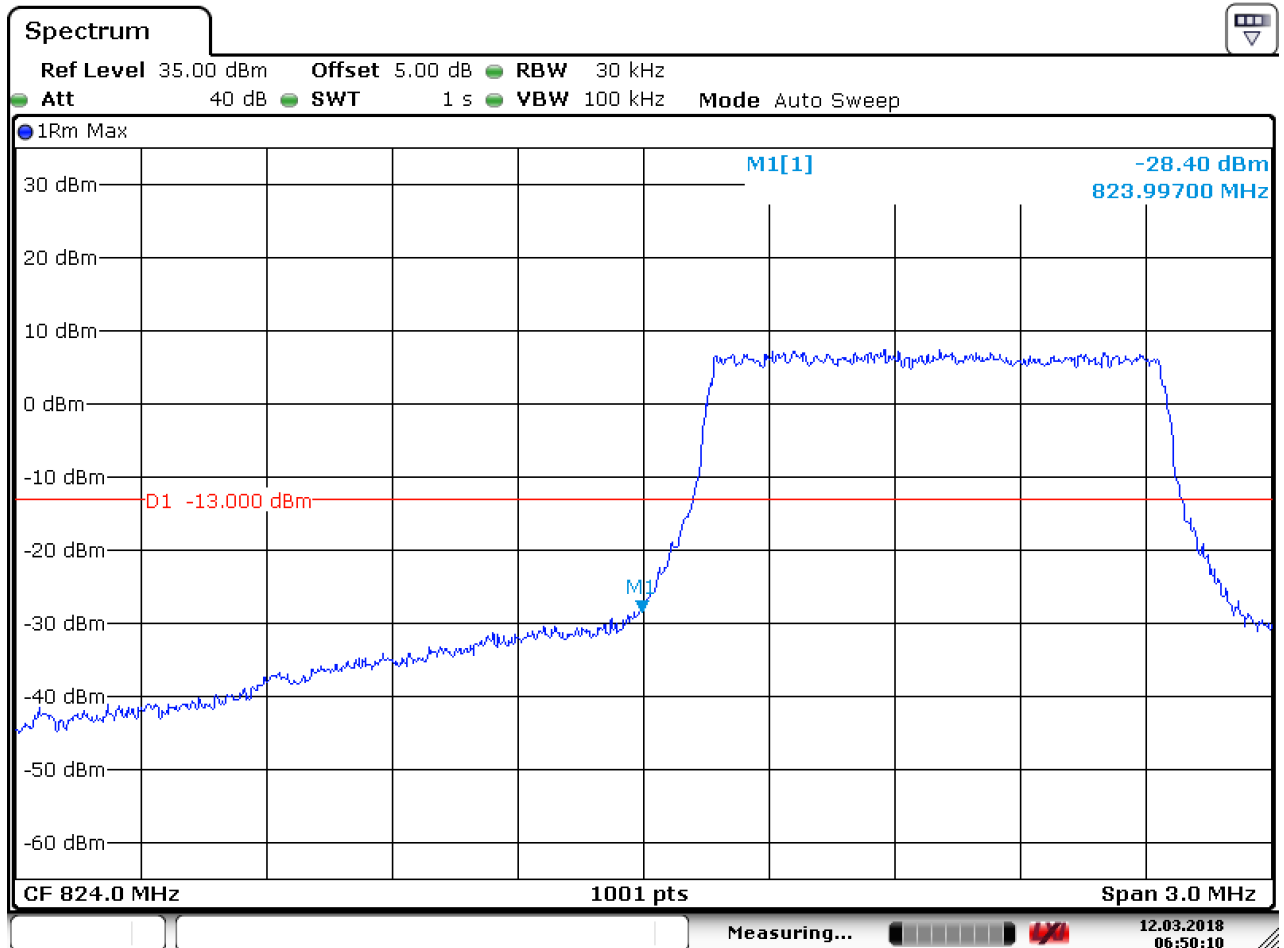


Date: 12.MAR.2018 06:49:56





5.1.1.2.1.2 Test RB=6RB

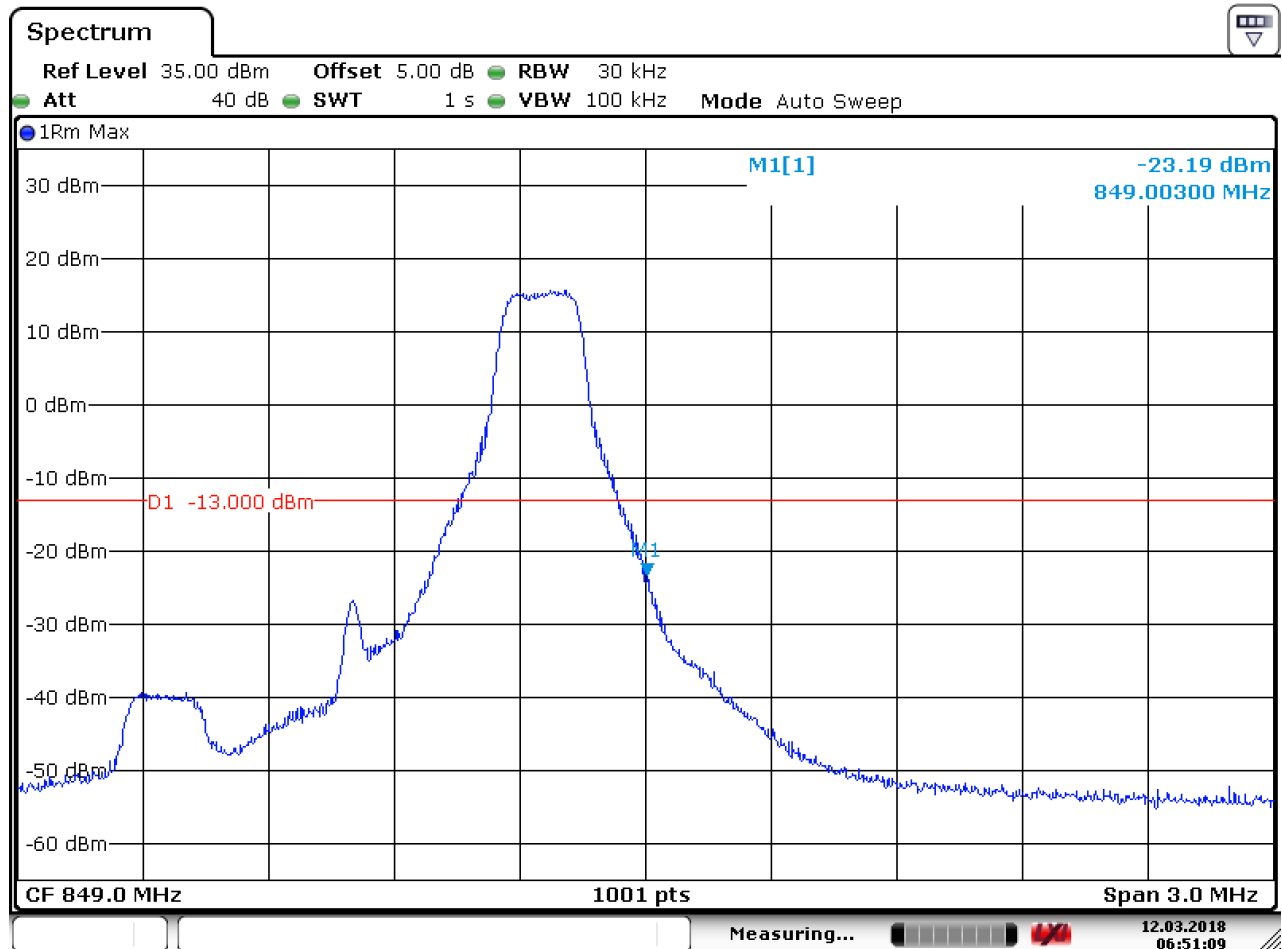


Date: 12.MAR.2018 06:50:10



5.1.1.2.2 Test Channel = HCH

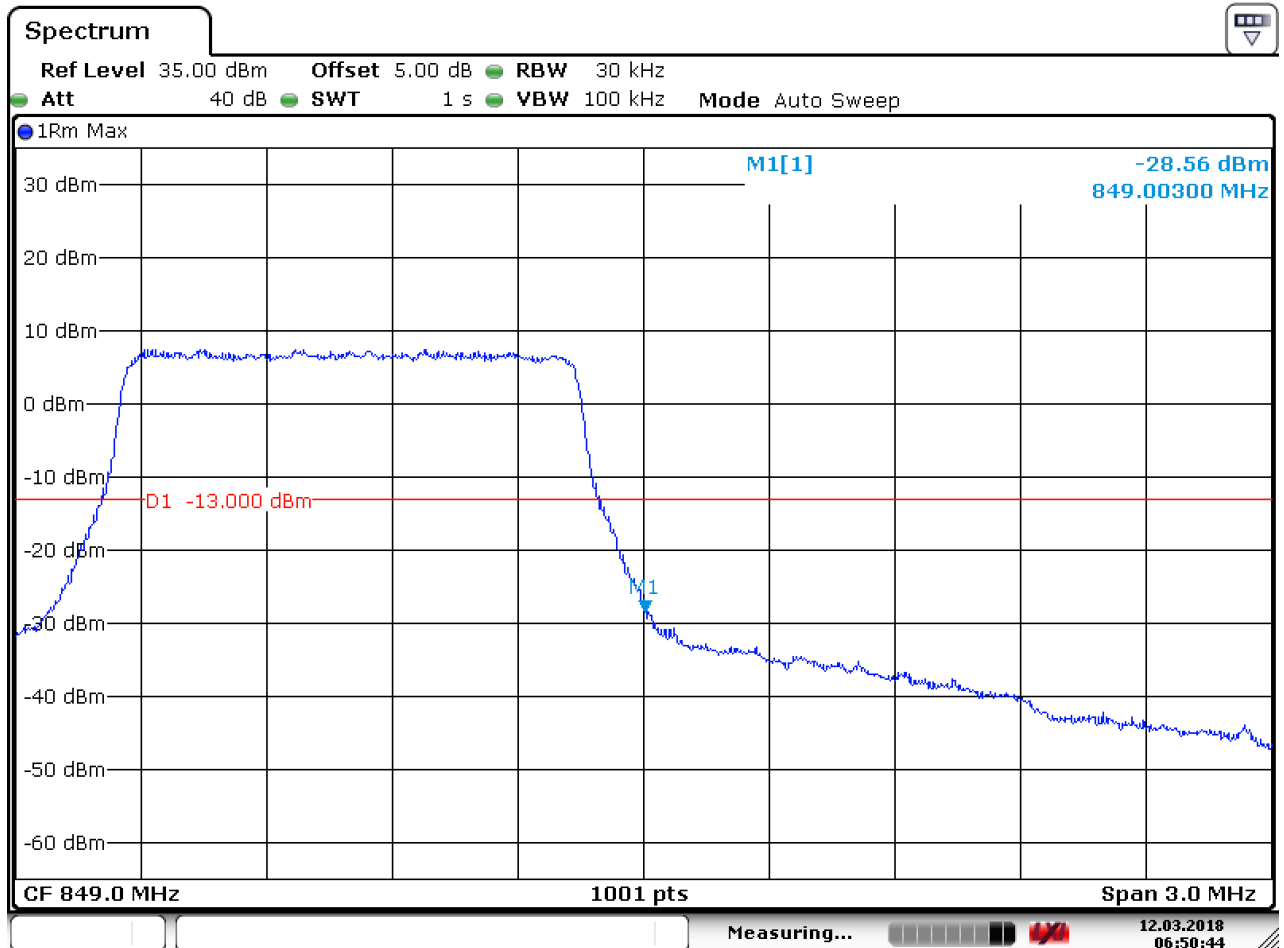
5.1.1.2.2.1 Test RB=1RB



Date: 12.MAR.2018 06:51:09



5.1.1.2.2.2 Test RB=6RB

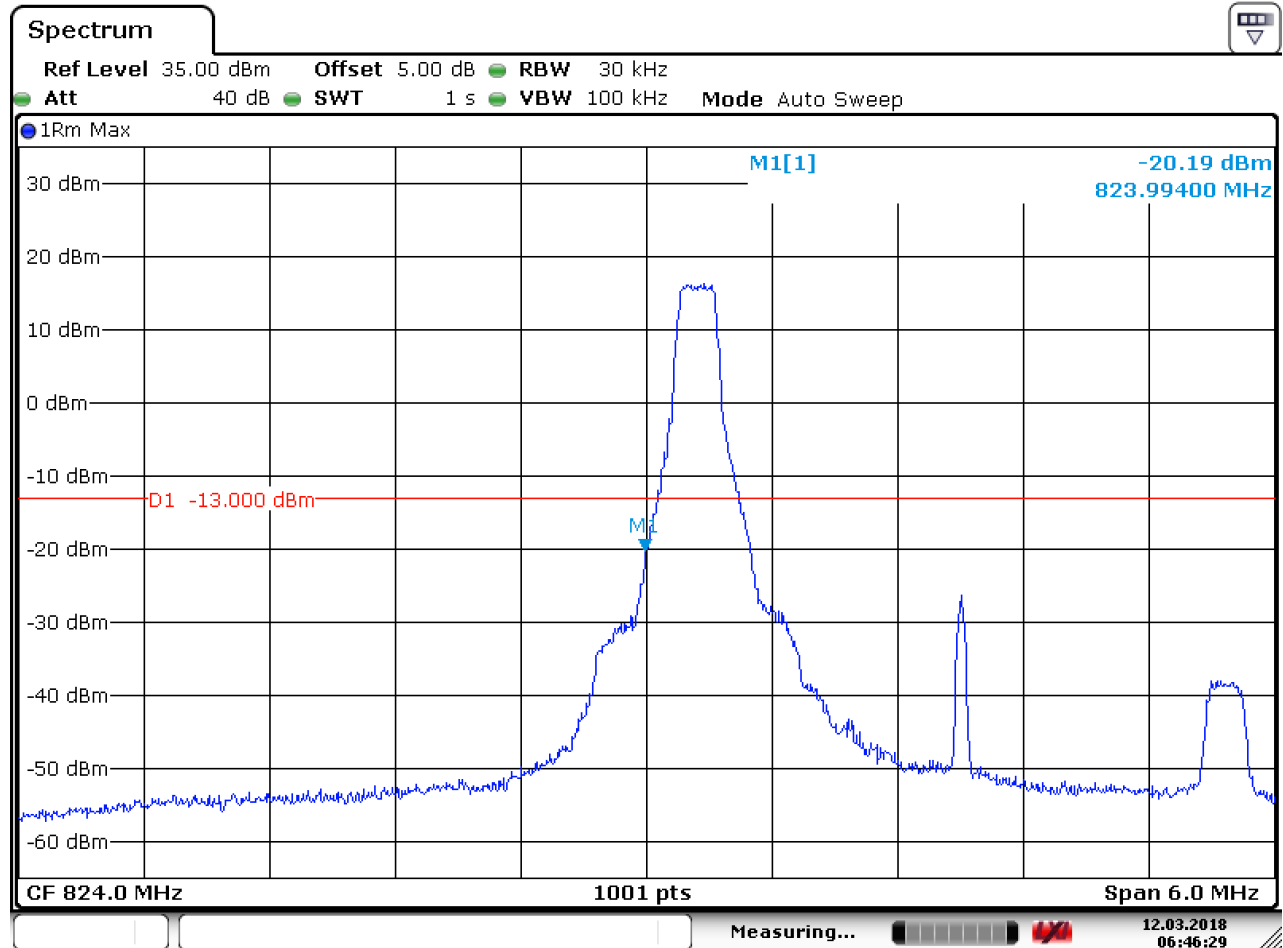


Date: 12.MAR.2018 06:50:44

### 5.1.1.3 Test Mode = LTE/TM1 3MHz

#### 5.1.1.3.1 Test Channel = LCH

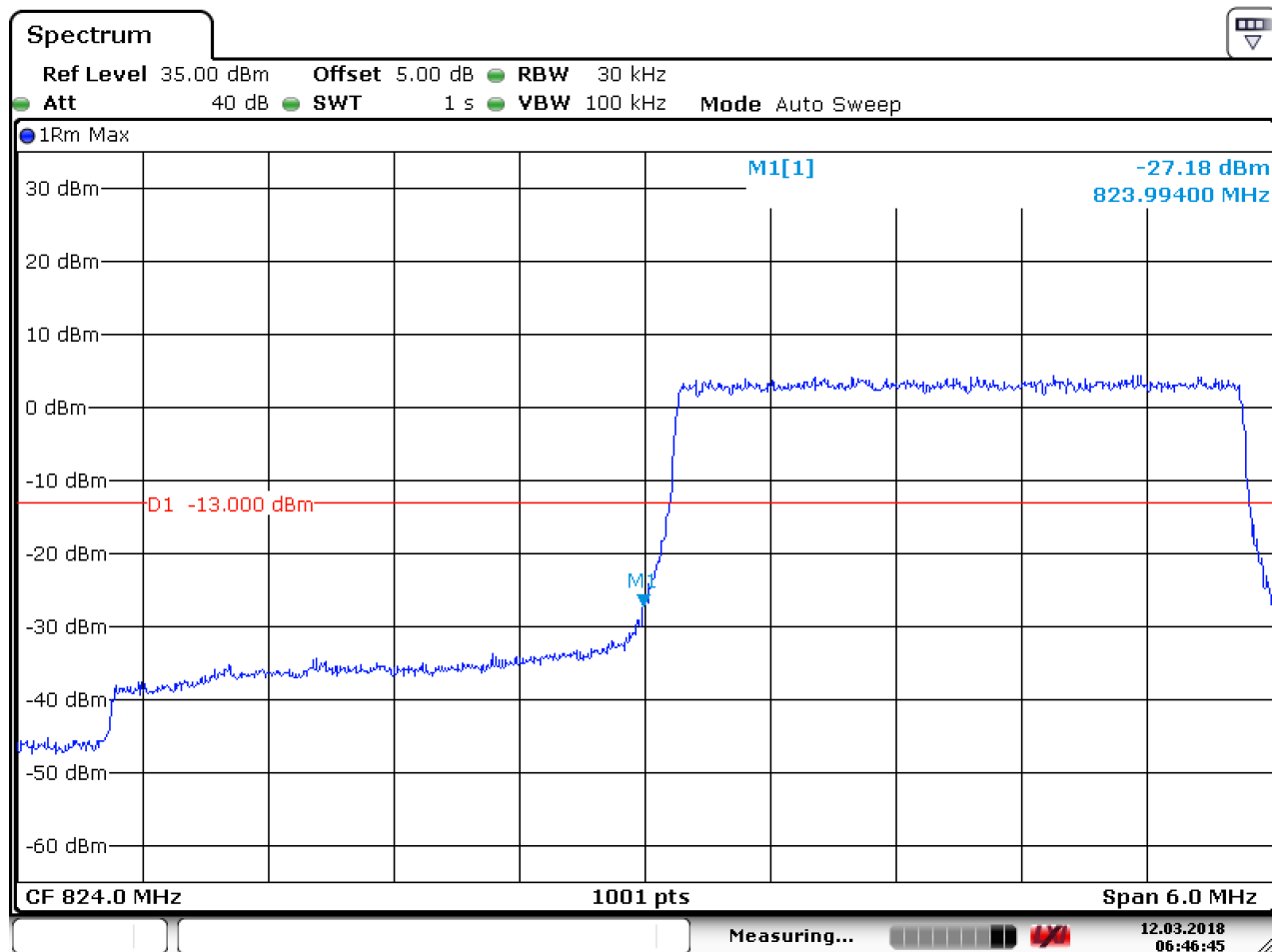
#### 5.1.1.3.1.1 Test RB=1RB



Date: 12.MAR.2018 06:46:29



5.1.1.3.1.2 Test RB=15RB

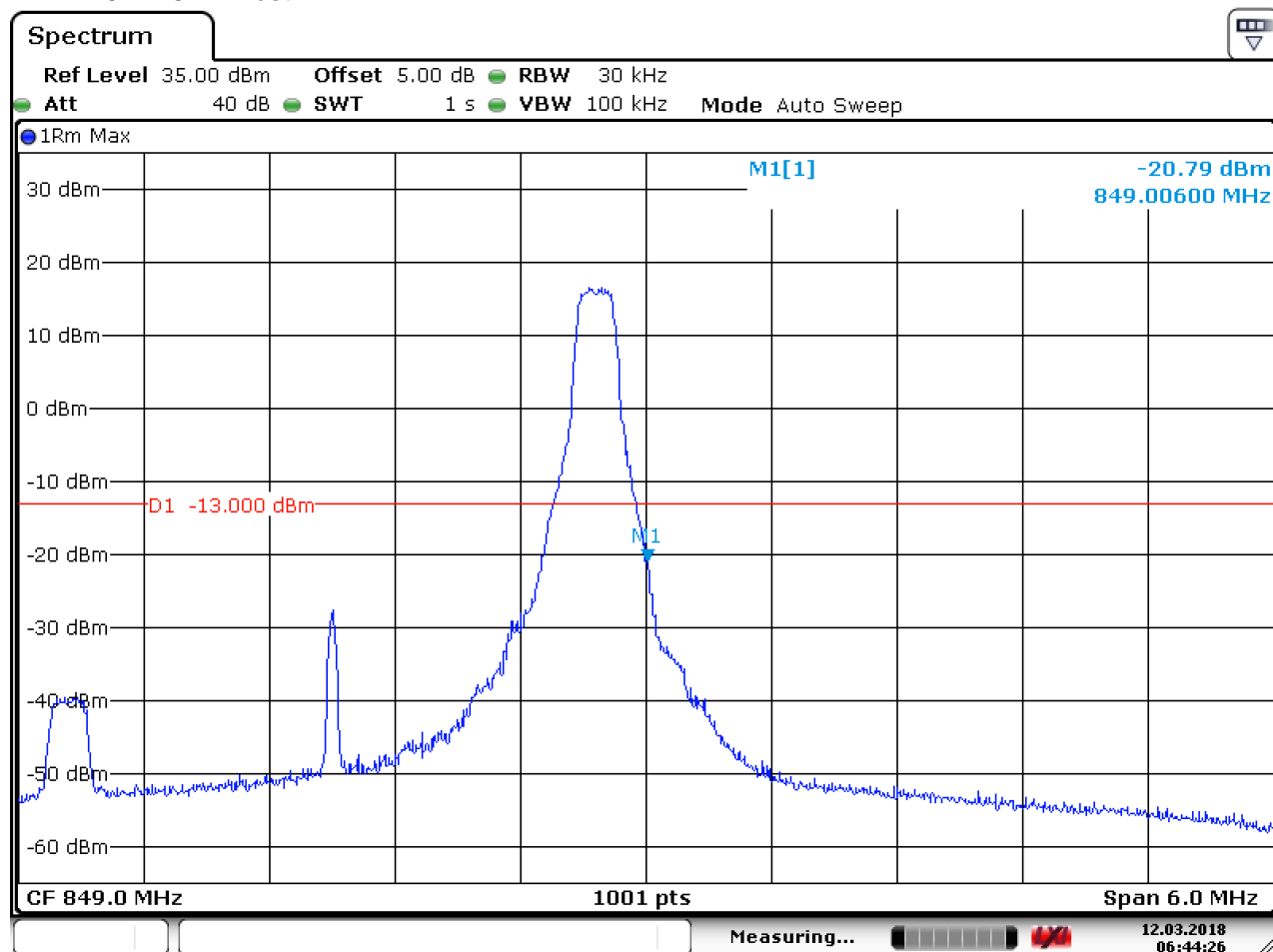


Date: 12.MAR.2018 06:46:46



5.1.1.3.2 Test Channel = HCH

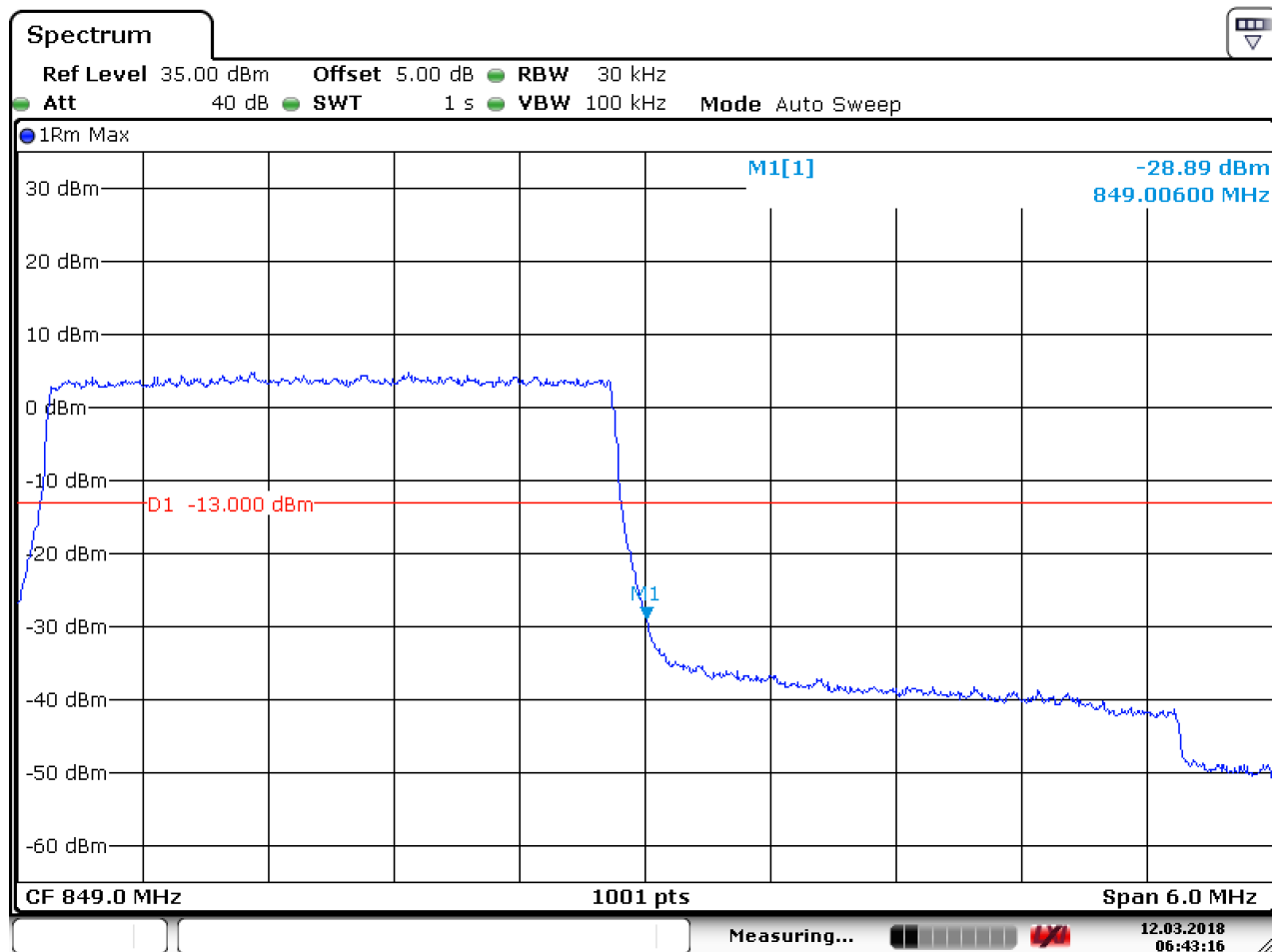
5.1.1.3.2.1 Test RB=1RB



Date: 12.MAR.2018 06:44:26



5.1.1.3.2.2 Test RB=15RB



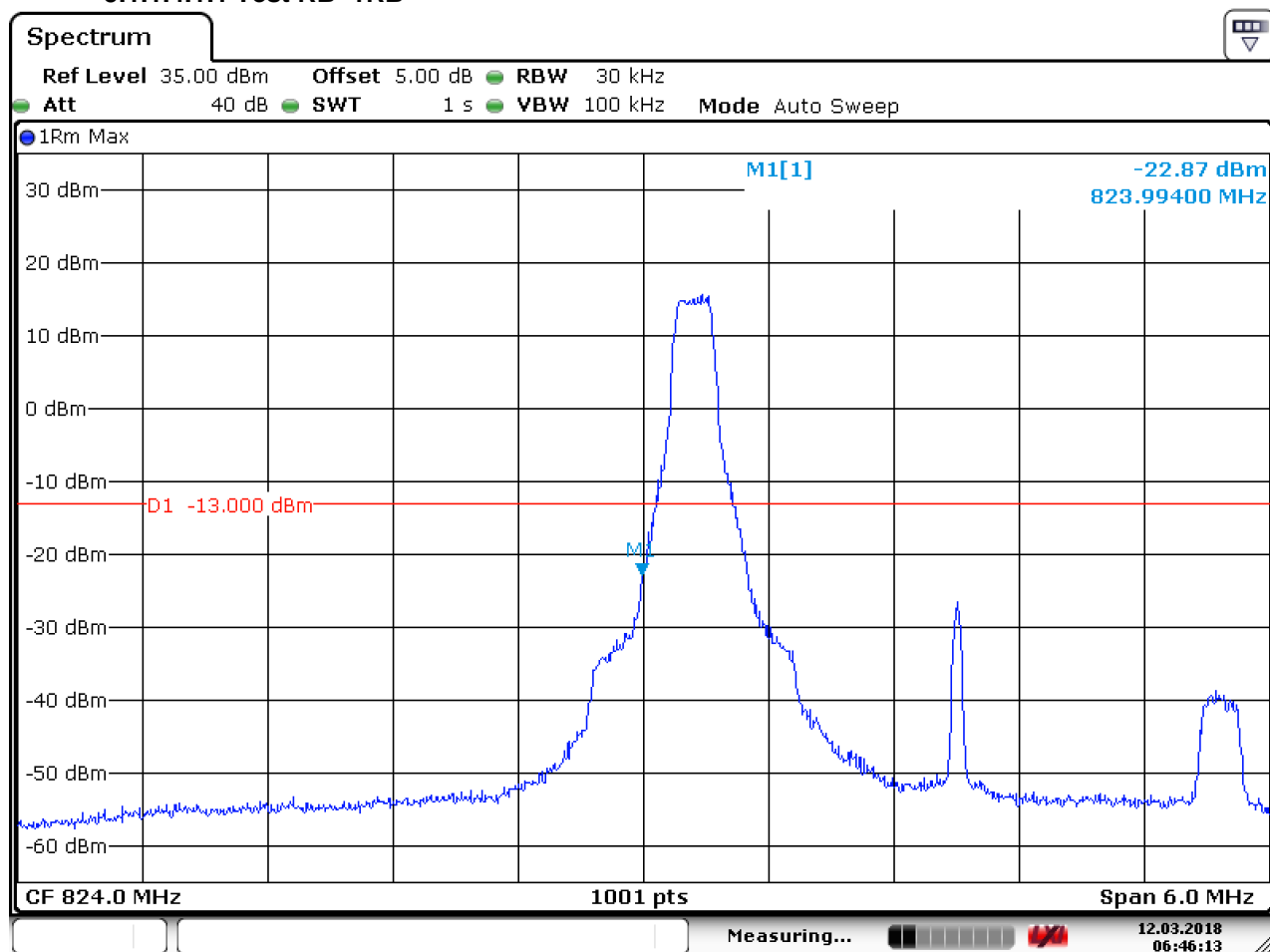
Date: 12.MAR.2018 06:43:17



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

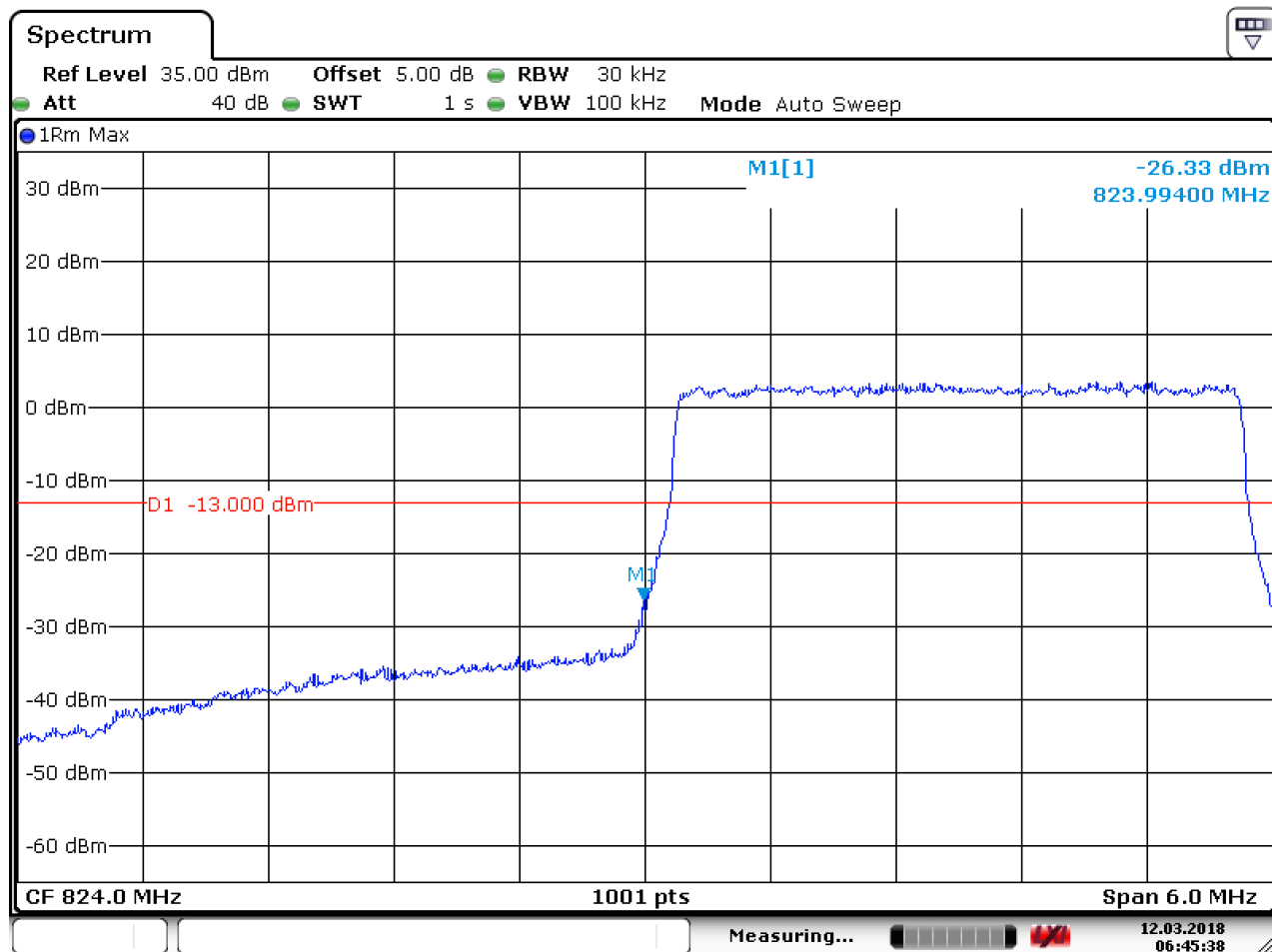


Date: 12.MAR.2018 06:46:13





5.1.1.4.1.2 Test RB=15RB

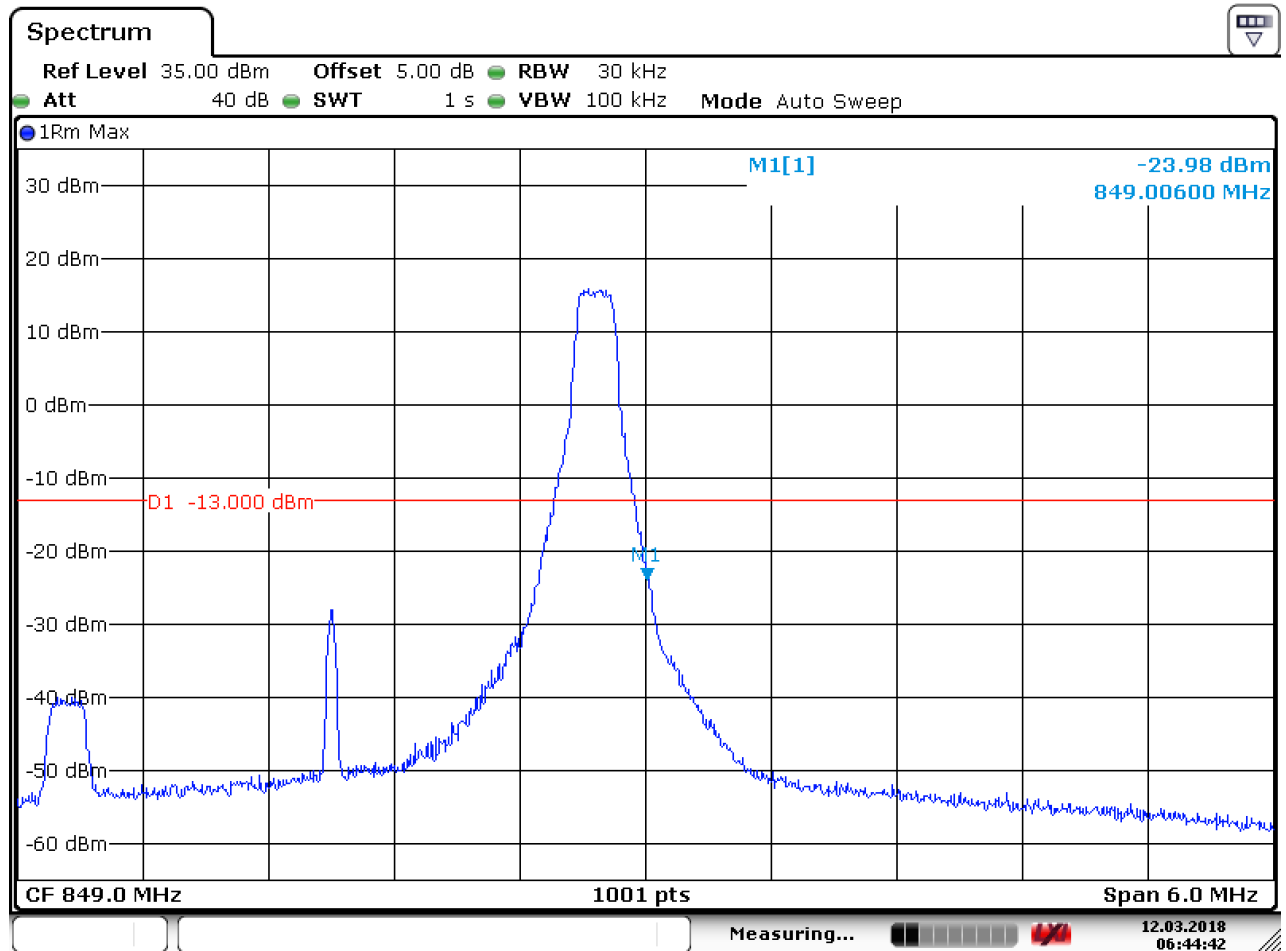


Date: 12.MAR.2018 06:45:38



5.1.1.4.2 Test Channel = HCH

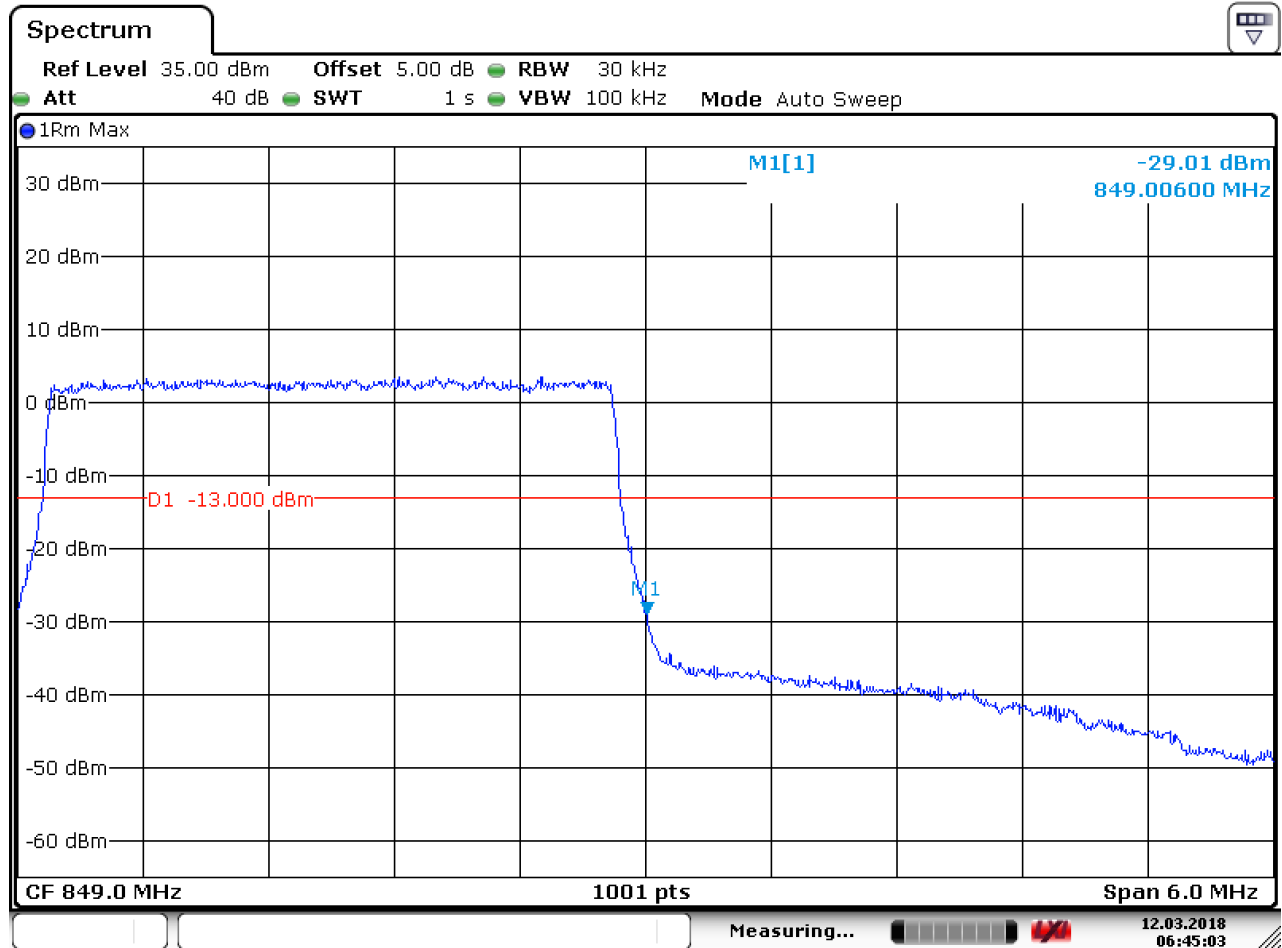
5.1.1.4.3 Test RB=1RB



Date: 12.MAR.2018 06:44:42



5.1.1.4.4 Test RB=15RB



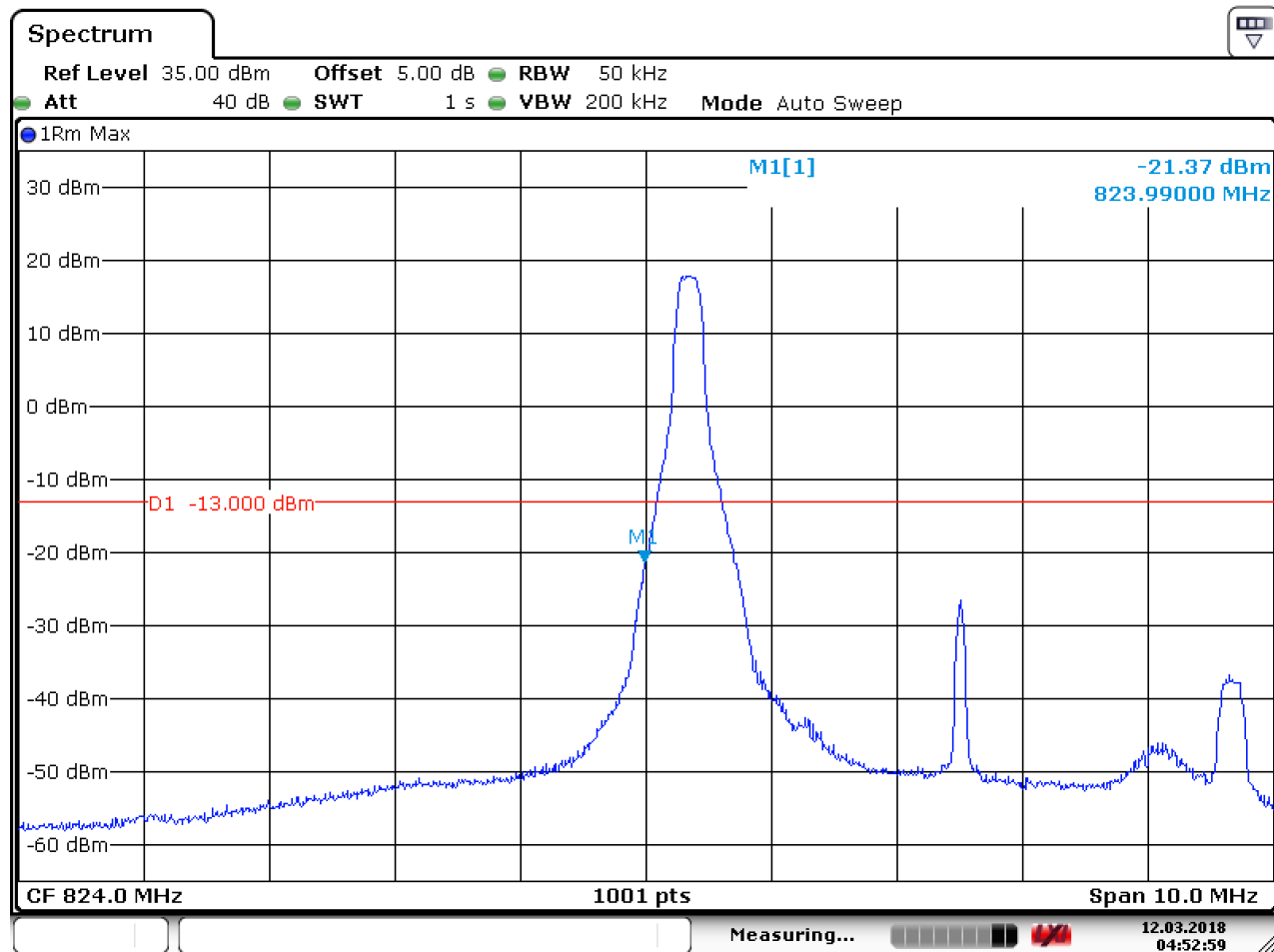
Date: 12.MAR.2018 06:45:03



5.1.1.5 Test Mode = LTE/TM1 5MHz

5.1.1.5.1 Test Channel = LCH

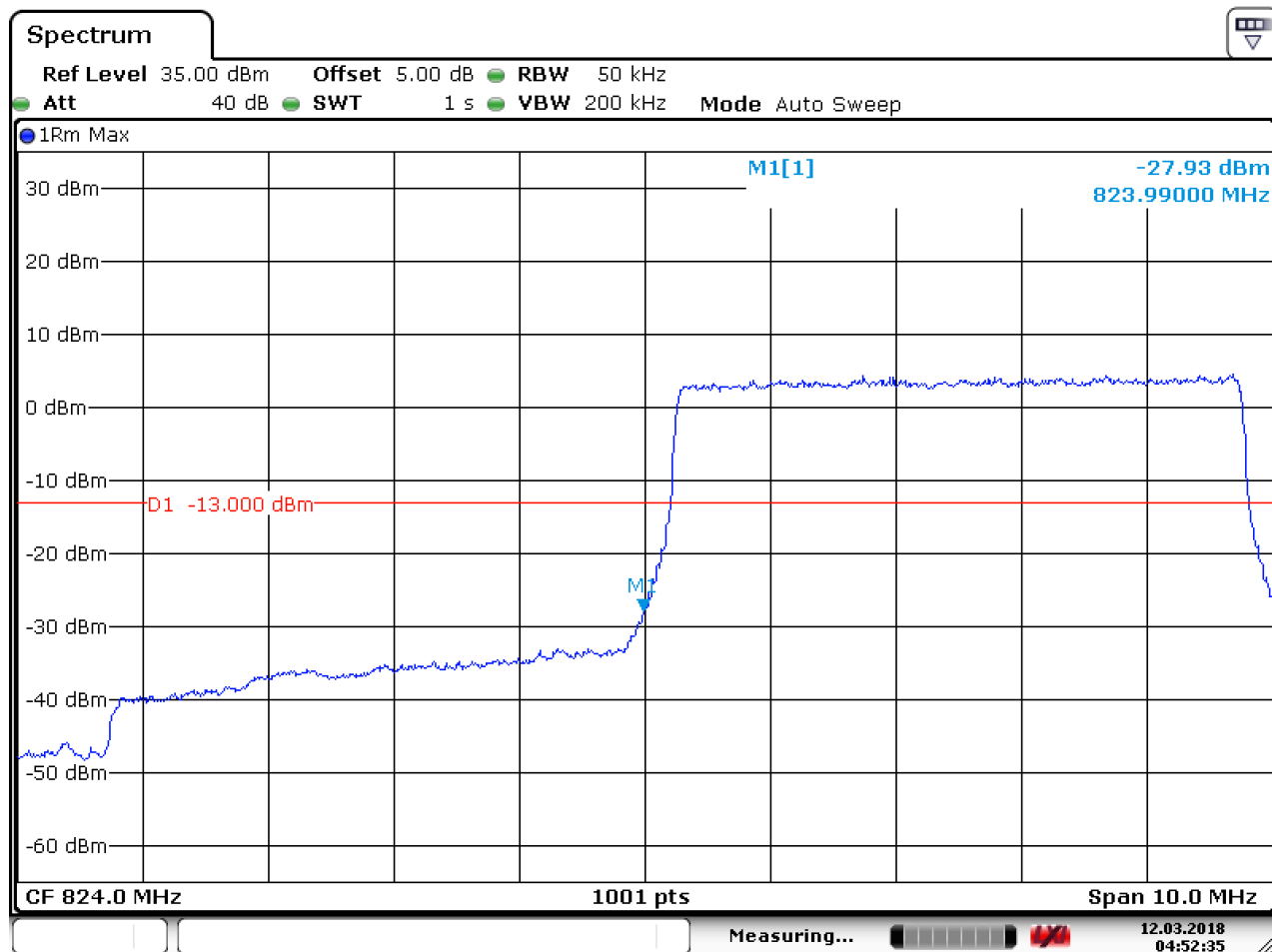
5.1.1.5.1.1 Test RB=1RB



Date: 12.MAR.2018 04:52:59



5.1.1.5.1.2 Test RB=25RB

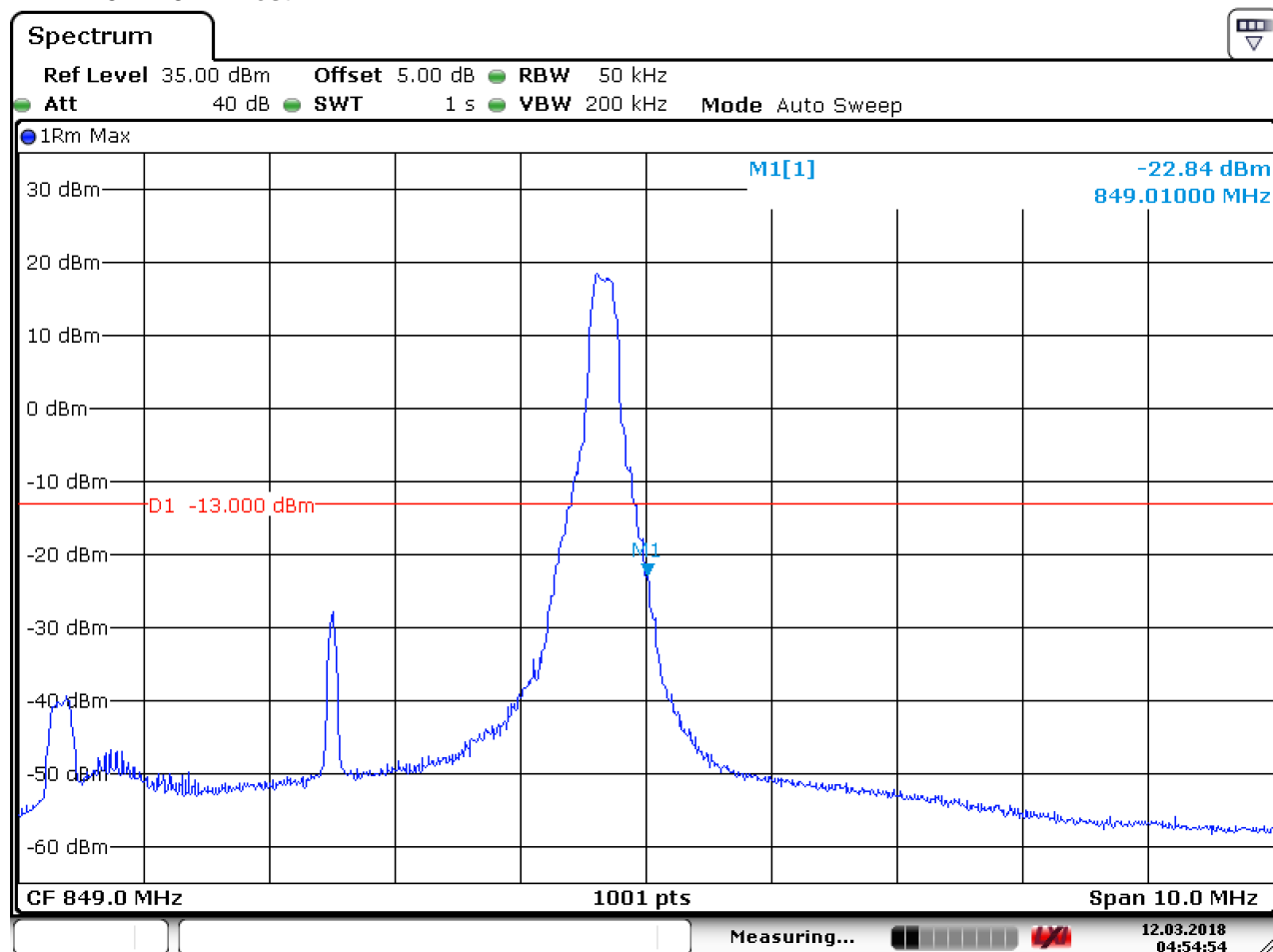


Date: 12.MAR.2018 04:52:36



5.1.1.5.2 Test Channel = HCH

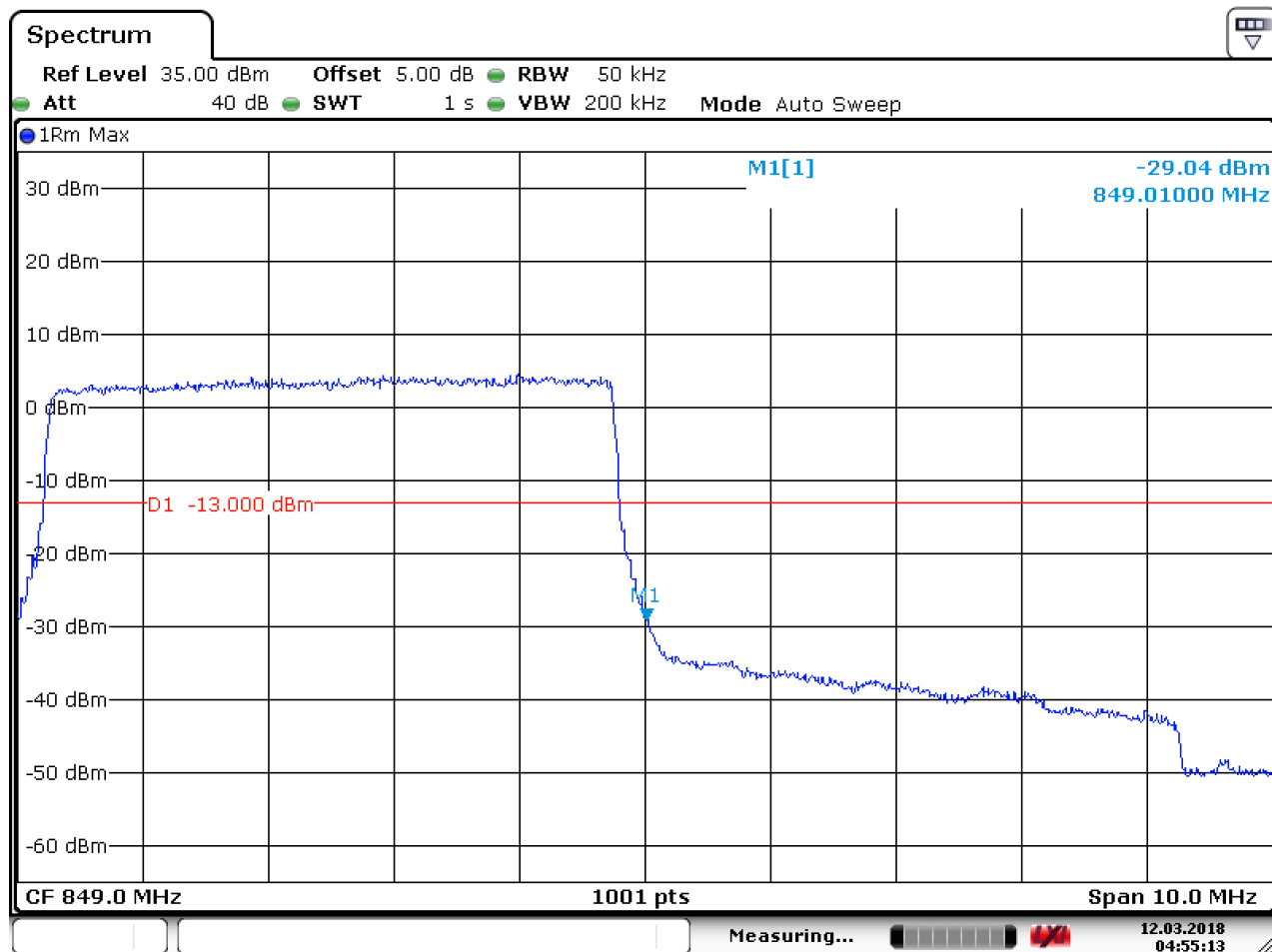
5.1.1.5.2.1 Test RB=1RB



Date: 12.MAR.2018 04:54:55



5.1.1.5.2.2 Test RB=25RB



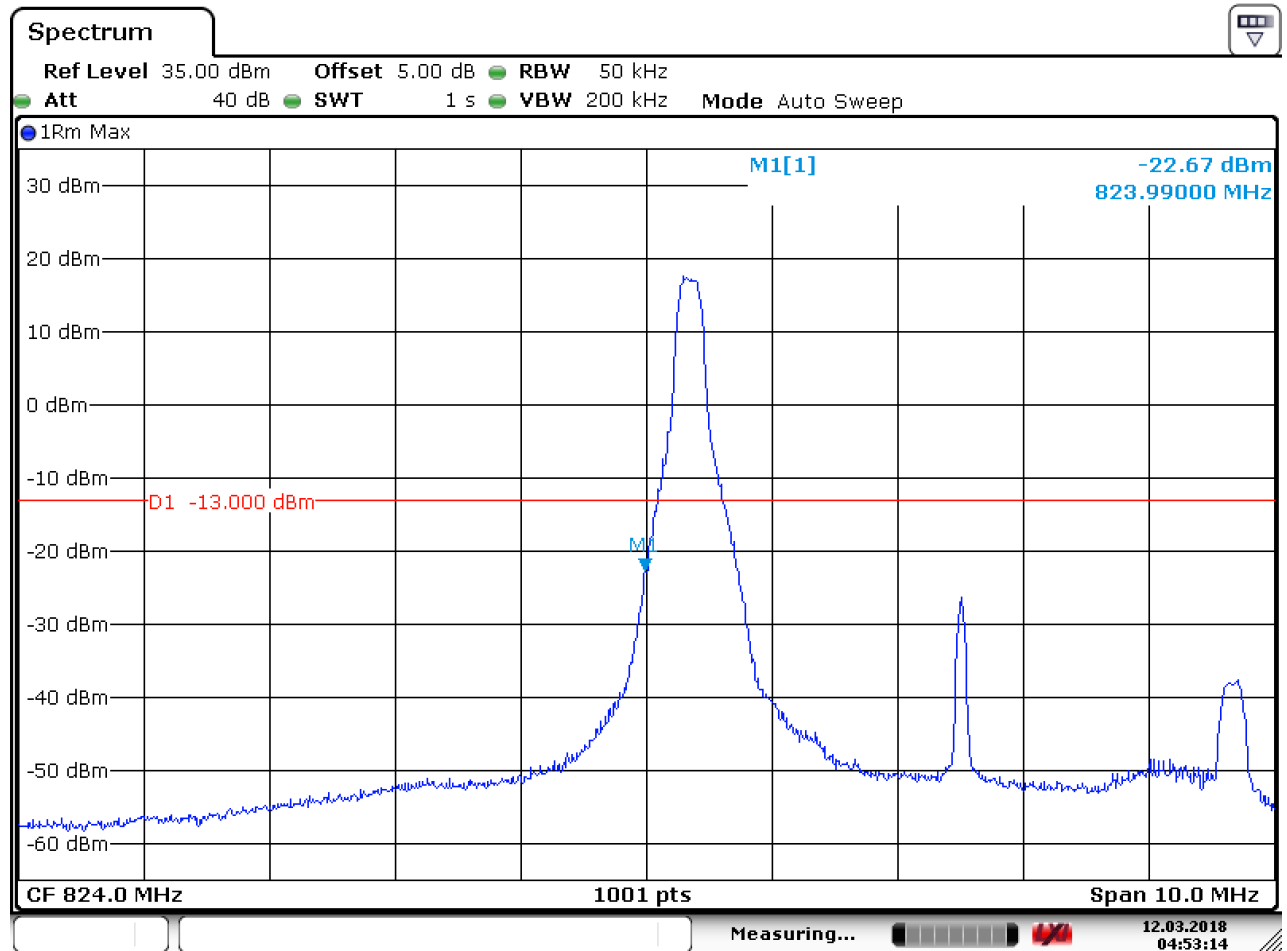
Date: 12.MAR.2018 04:55:13



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

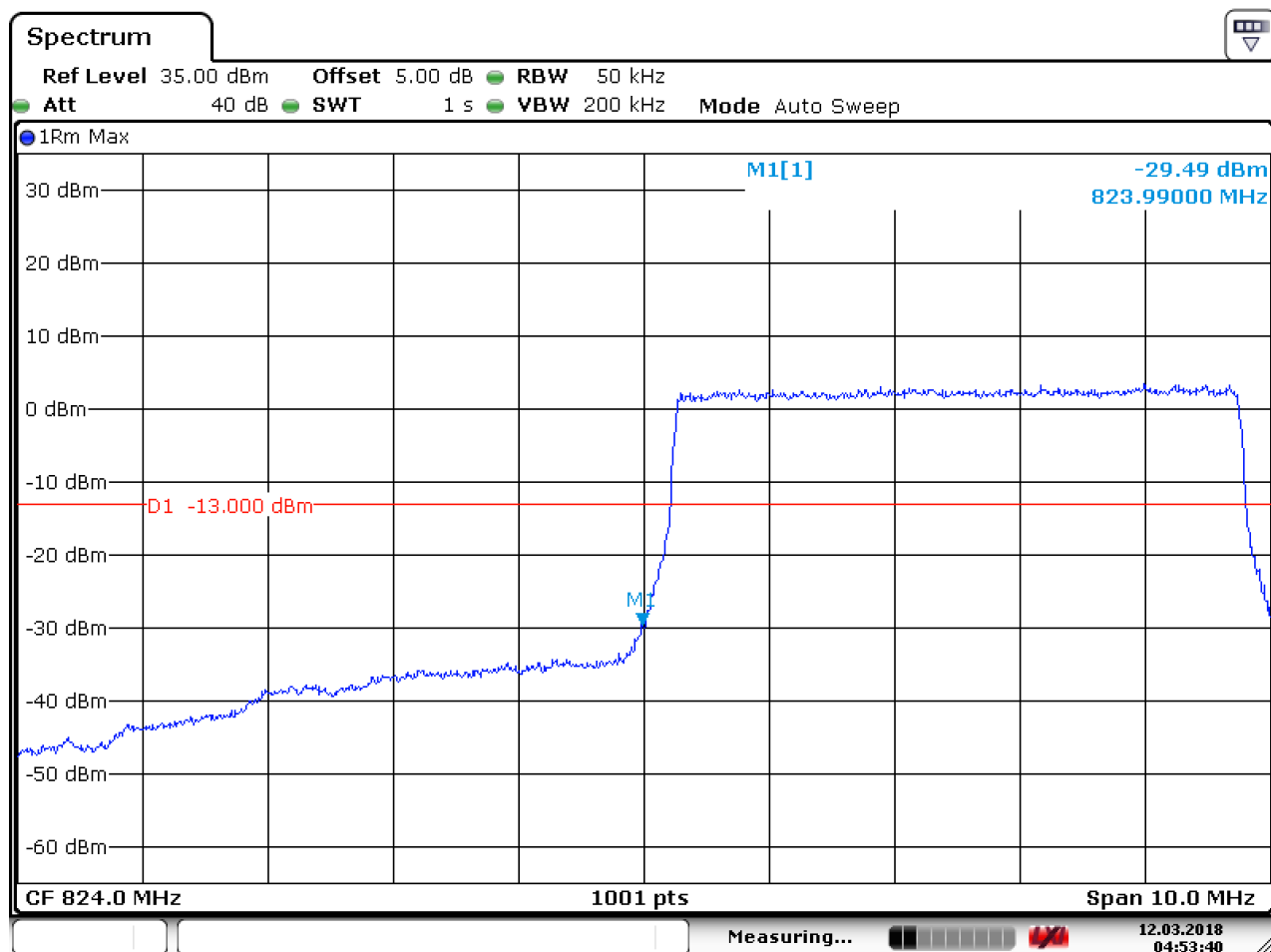


Date: 12.MAR.2018 04:53:15





5.1.1.6.1.2 Test RB=25RB

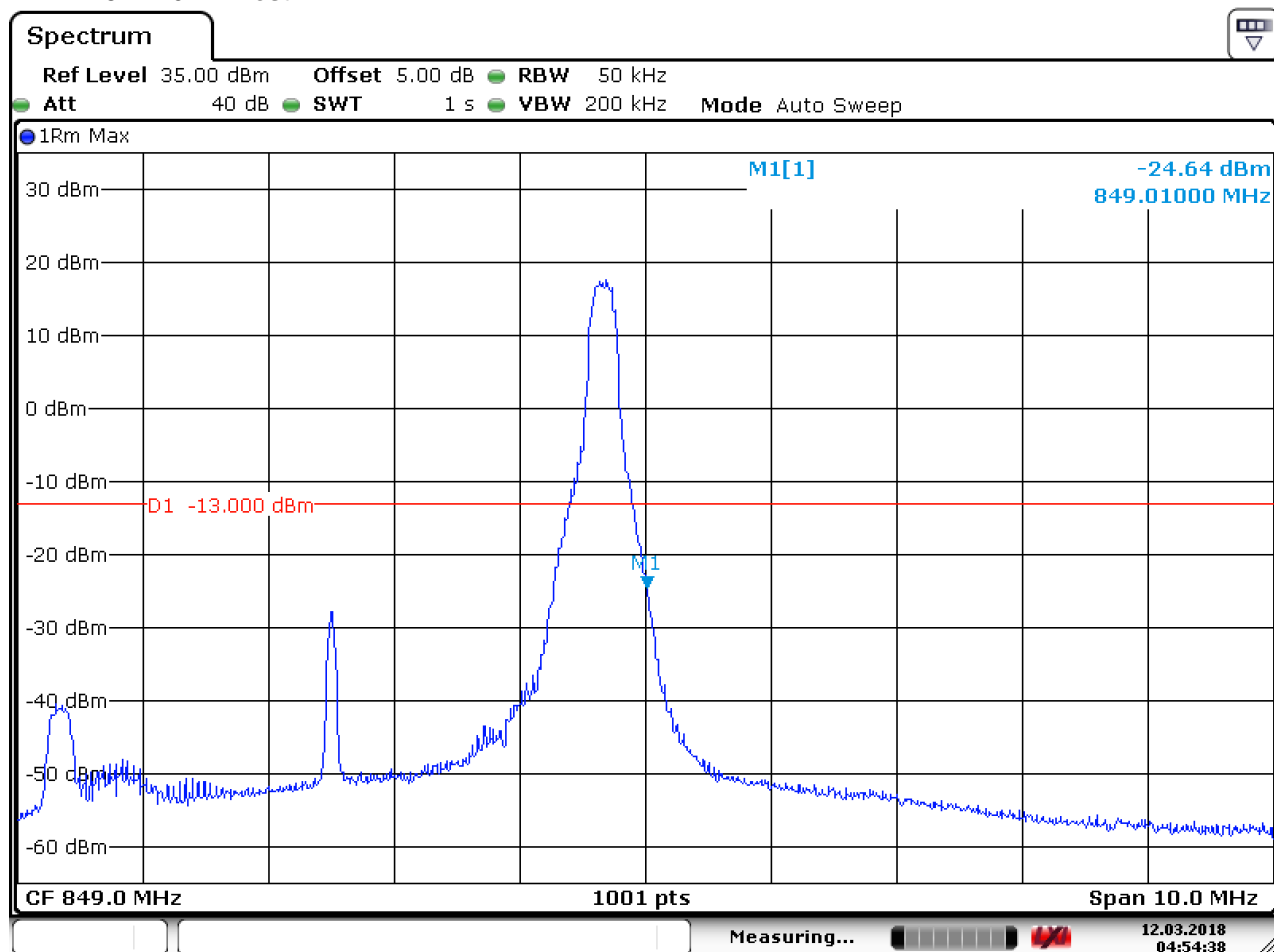


Date: 12.MAR.2018 04:53:41



5.1.1.6.2 Test Channel = HCH

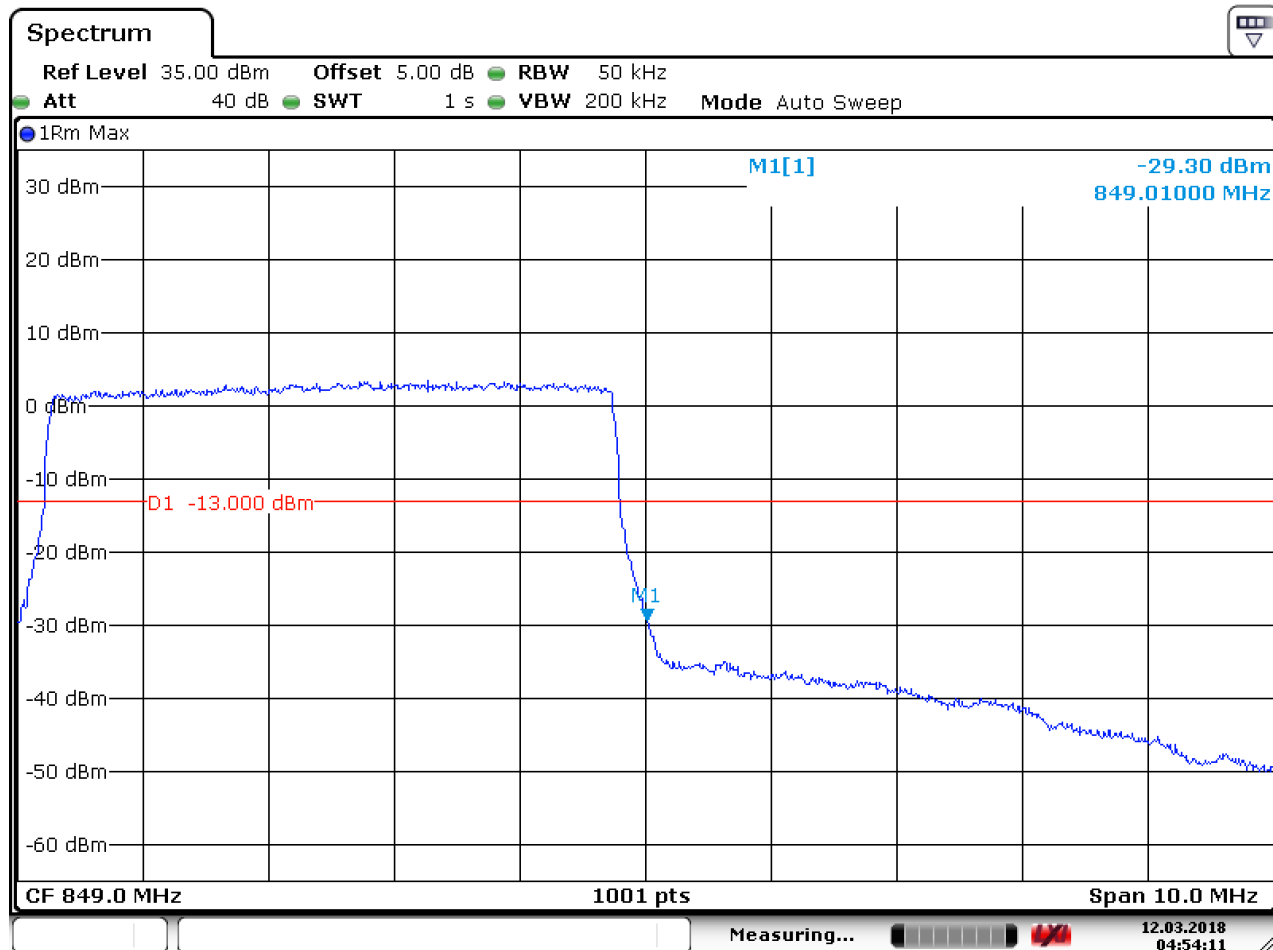
5.1.1.6.2.1 Test RB=1RB



Date: 12.MAR.2018 04:54:39



5.1.1.6.2.2 Test RB=25RB



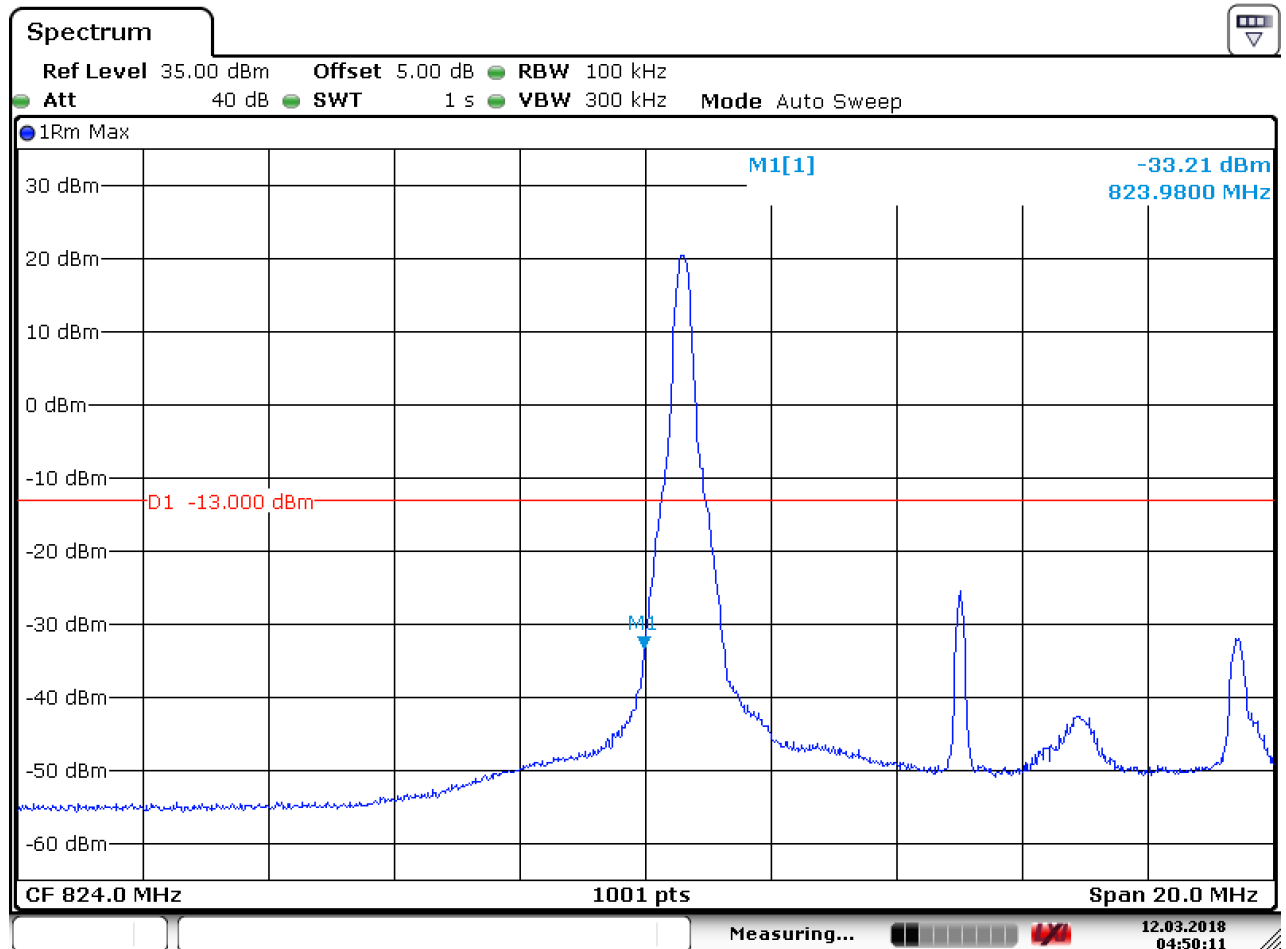
Date: 12.MAR.2018 04:54:12



5.1.1.7 Test Mode = LTE/TM1 10MHz

5.1.1.7.1 Test Channel = LCH

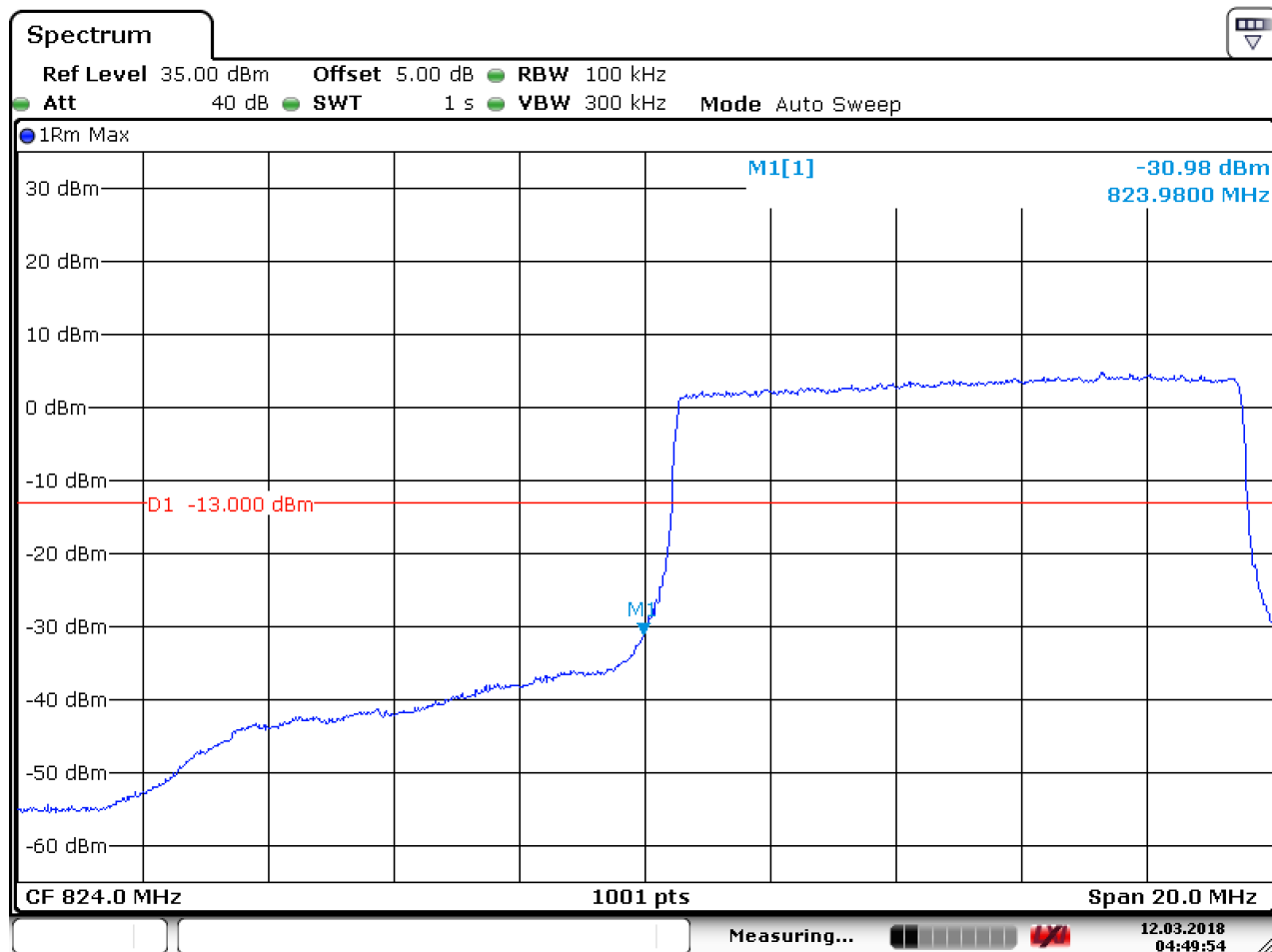
5.1.1.7.1.1 Test RB=1RB



Date: 12.MAR.2018 04:50:12



5.1.1.7.1.2 Test RB=50RB

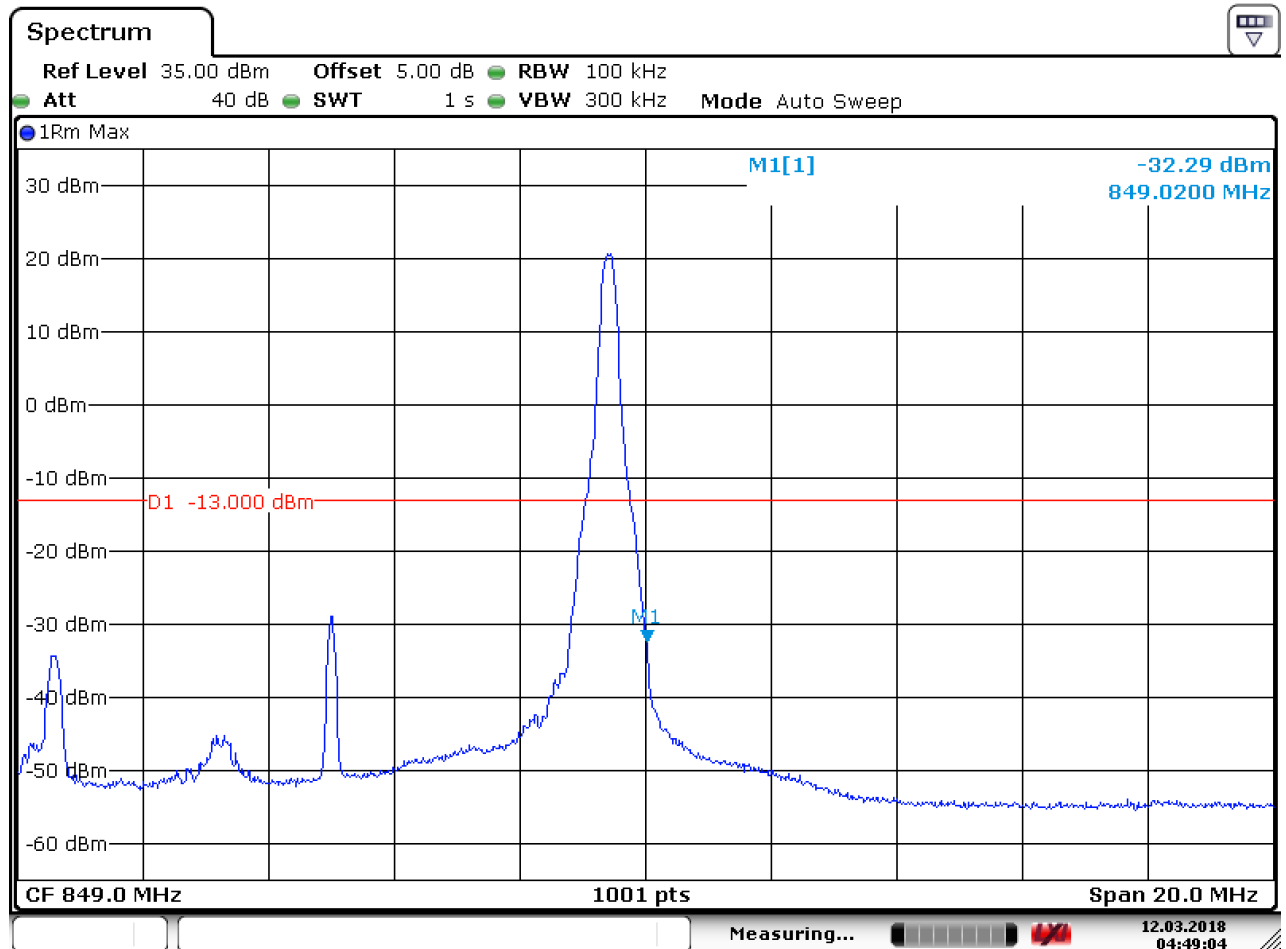


Date: 12.MAR.2018 04:49:55



5.1.1.7.2 Test Channel = HCH

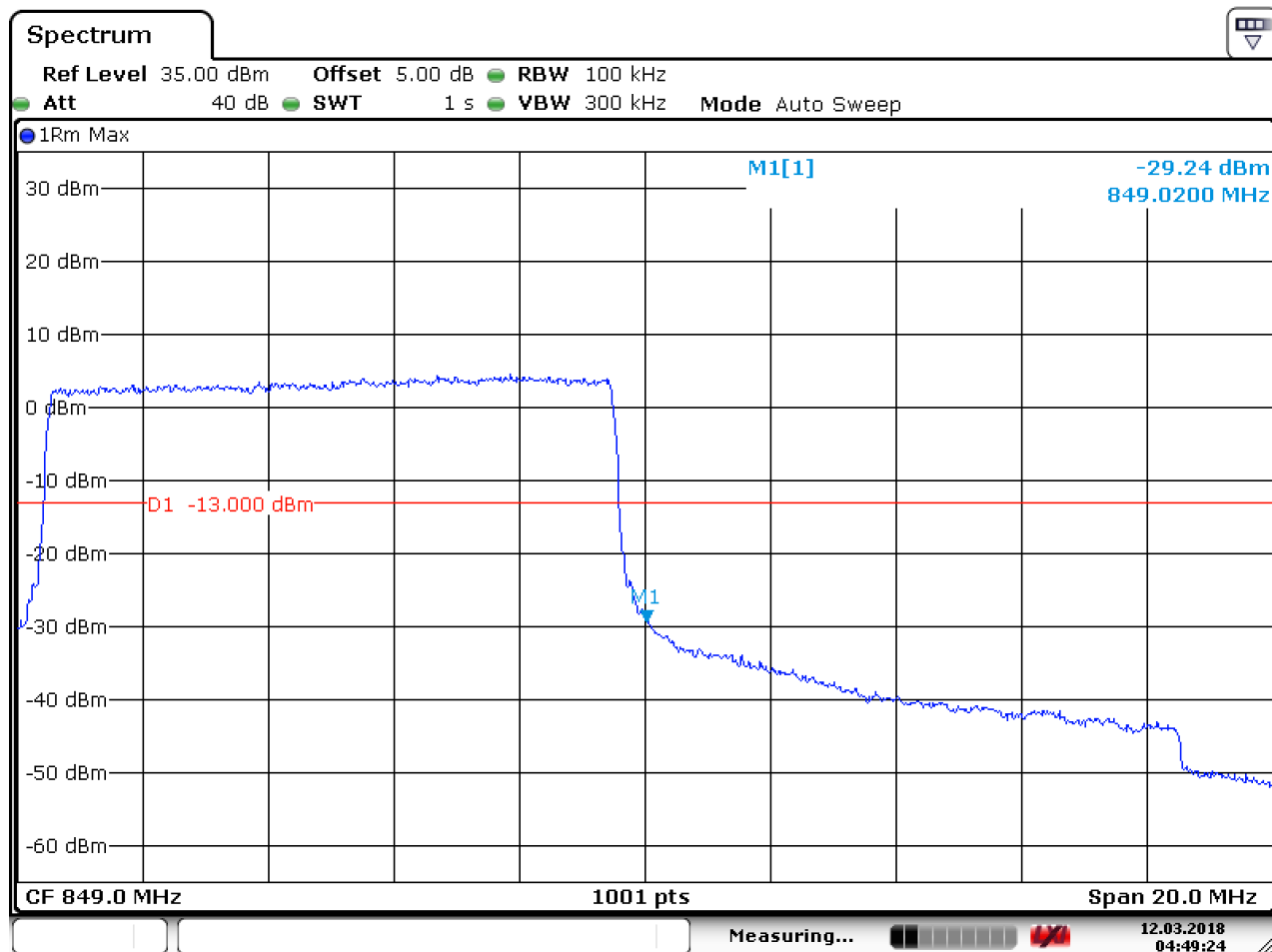
5.1.1.7.2.1 Test RB=1RB



Date: 12.MAR.2018 04:49:04



5.1.1.7.2.2 Test RB=50RB



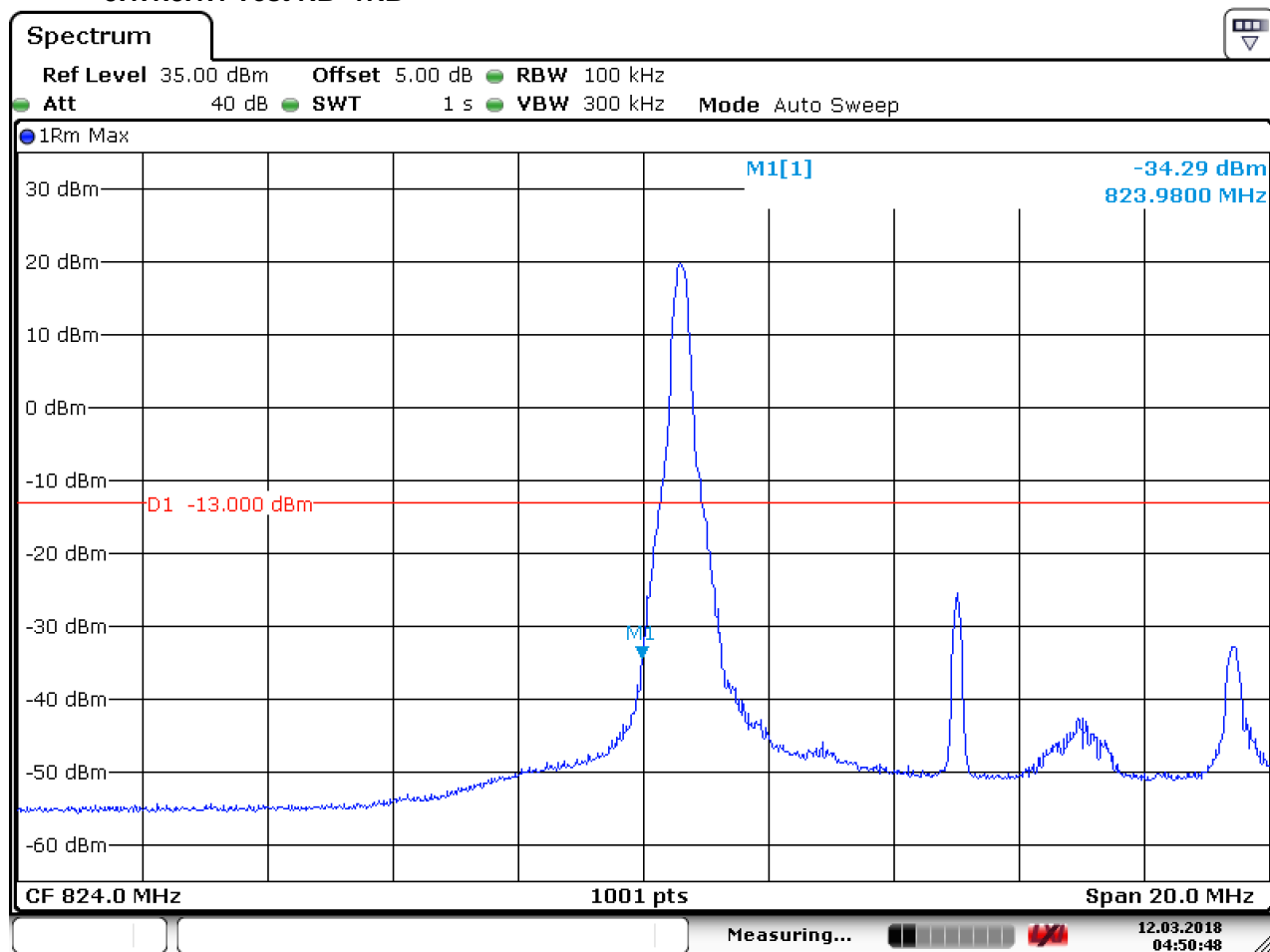
Date: 12.MAR.2018 04:49:25



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

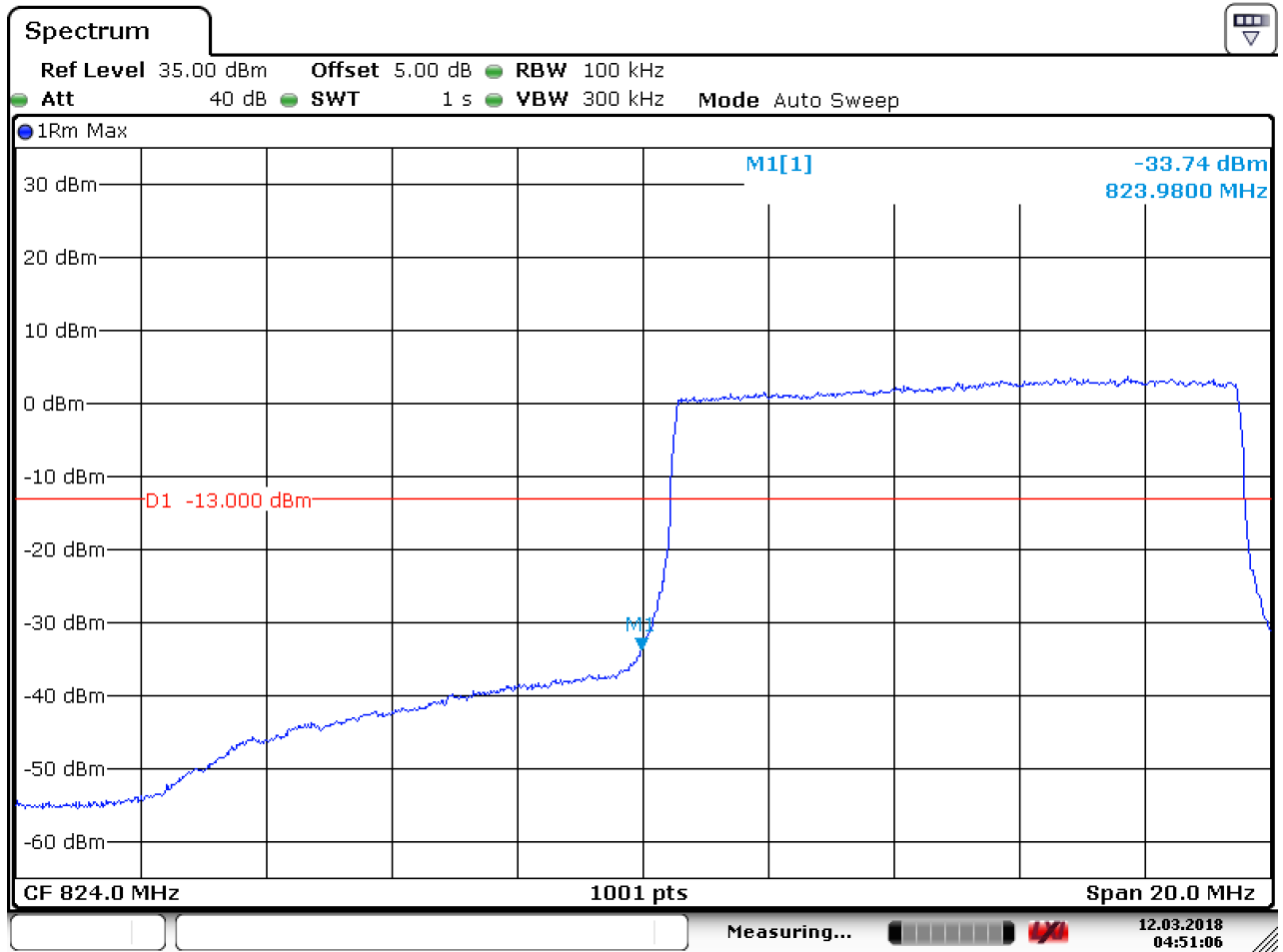


Date: 12.MAR.2018 04:50:48





5.1.1.8.1.2 Test RB=50RB

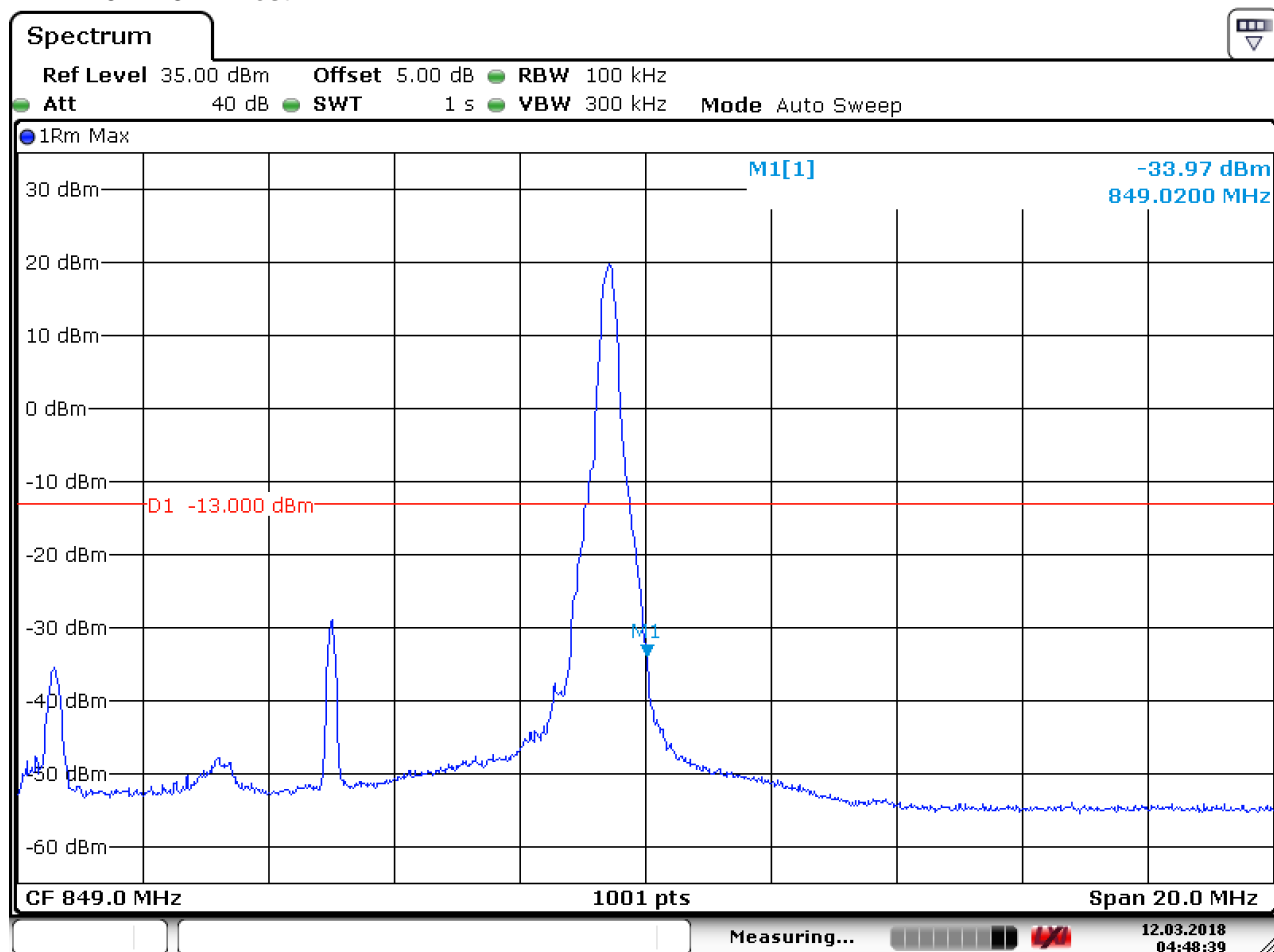


Date: 12.MAR.2018 04:51:07



5.1.1.8.2 Test Channel = HCH

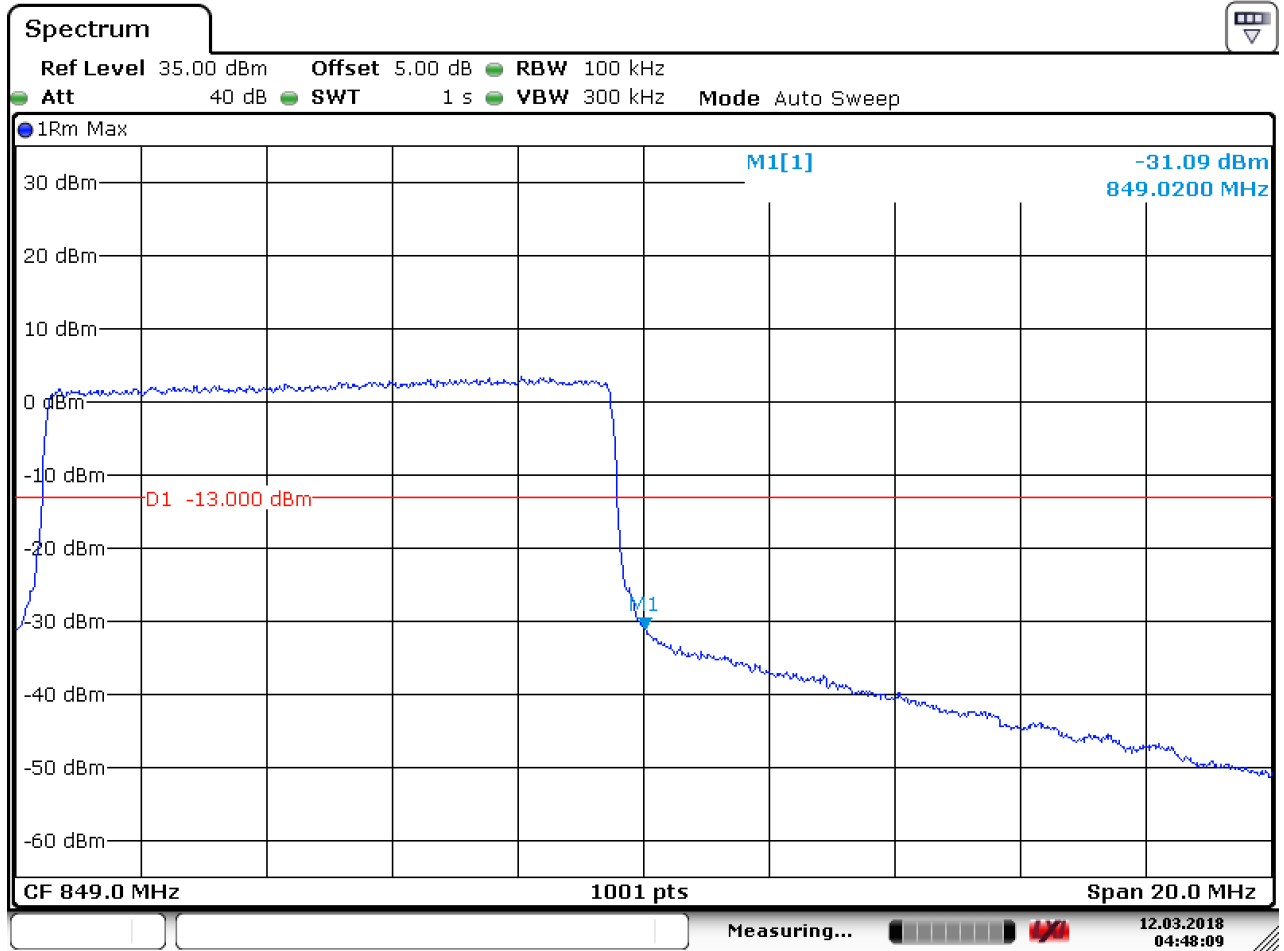
5.1.1.8.2.1 Test RB=1RB



Date: 12.MAR.2018 04:48:39



5.1.1.8.2.2 Test RB=50RB



Date: 12.MAR.2018 04:48:09

## 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  $< \text{RBW}/2$  so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points =  $k \cdot (\text{Span} / \text{RBW})$ " with  $k$  between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

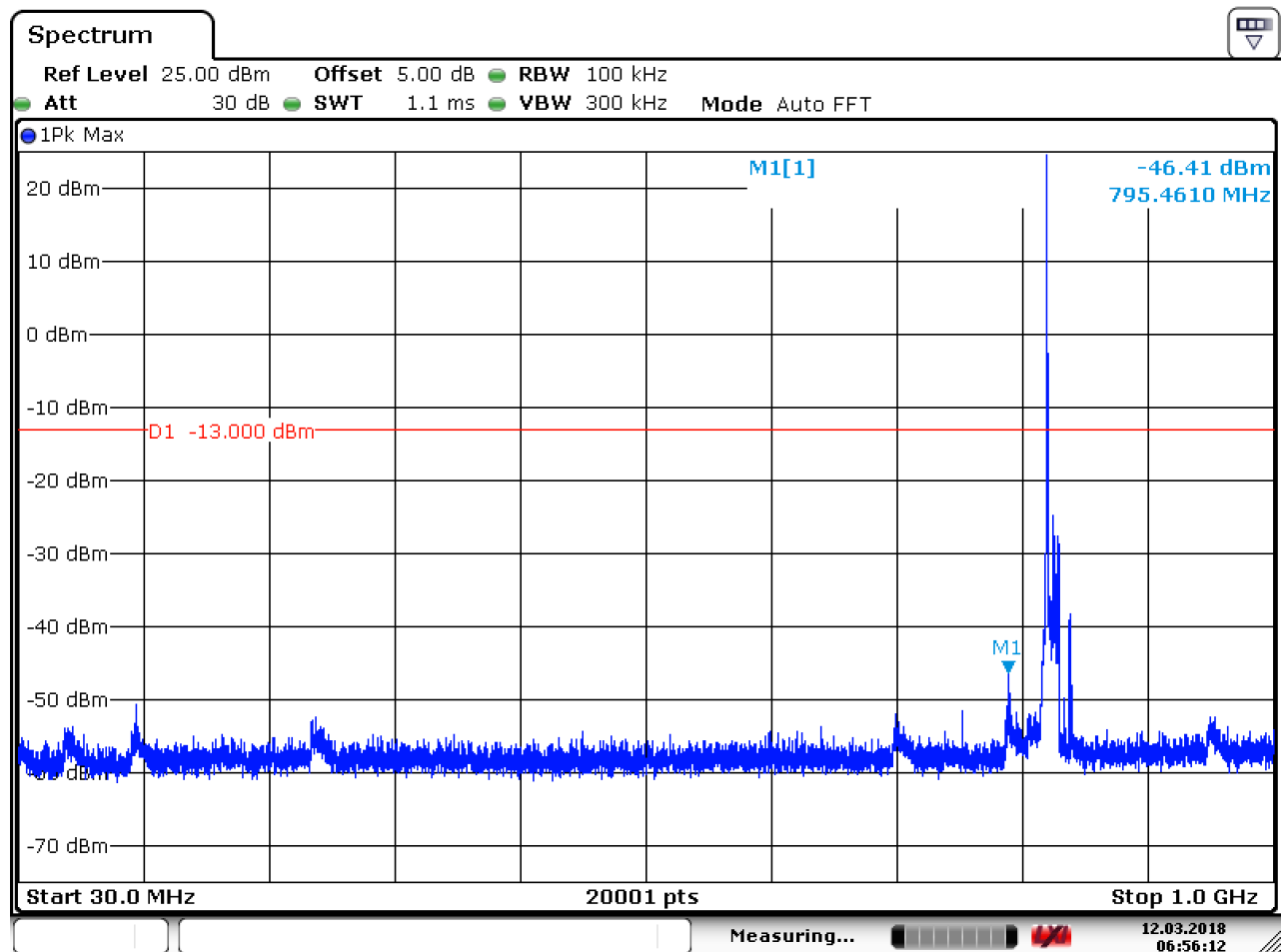
### Part I - Test Plots

#### 6.1 For LTE

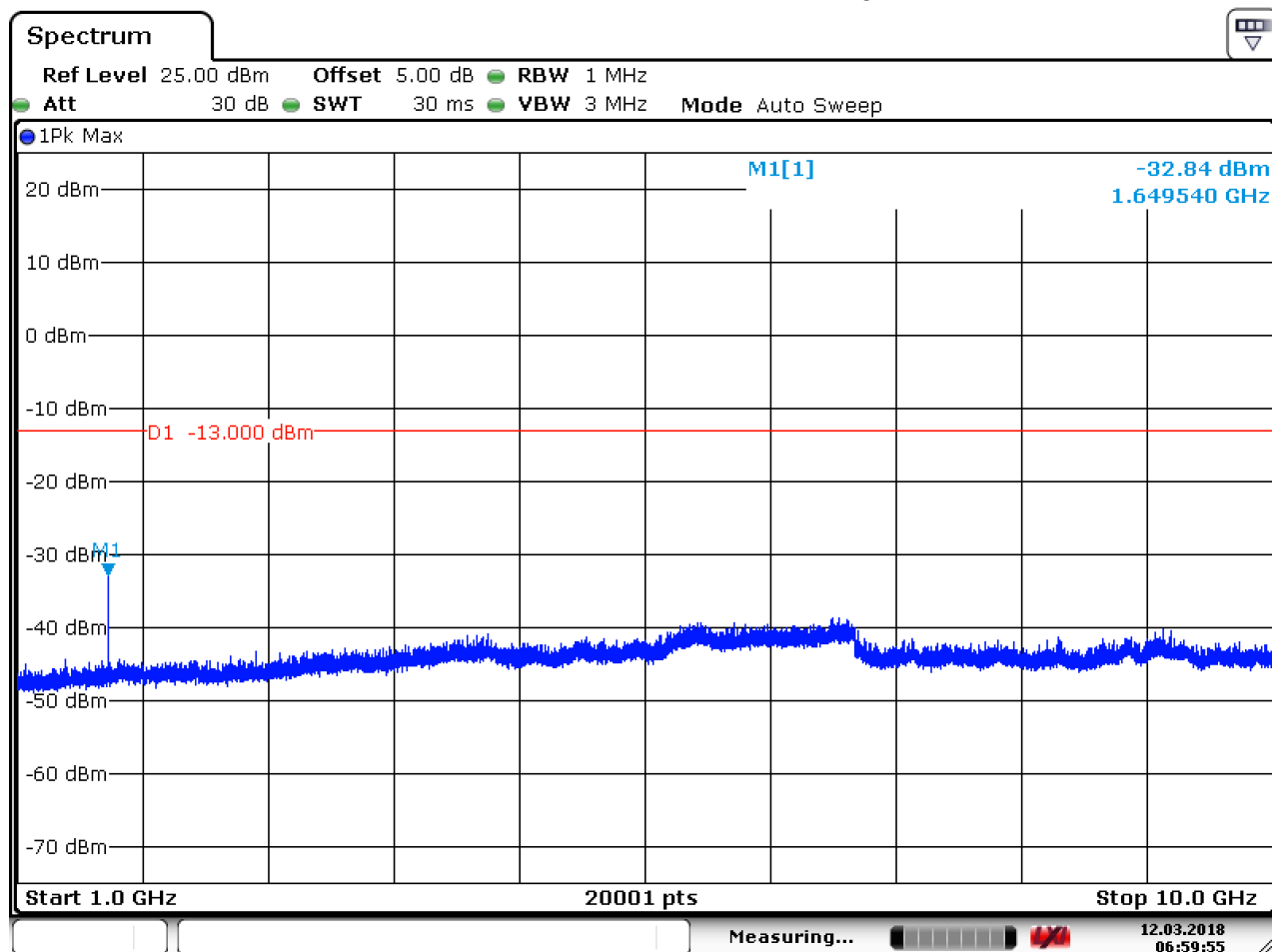
##### 6.1.1 Test Band = LTE band5

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

##### 6.1.1.1.1 Test Channel = LCH



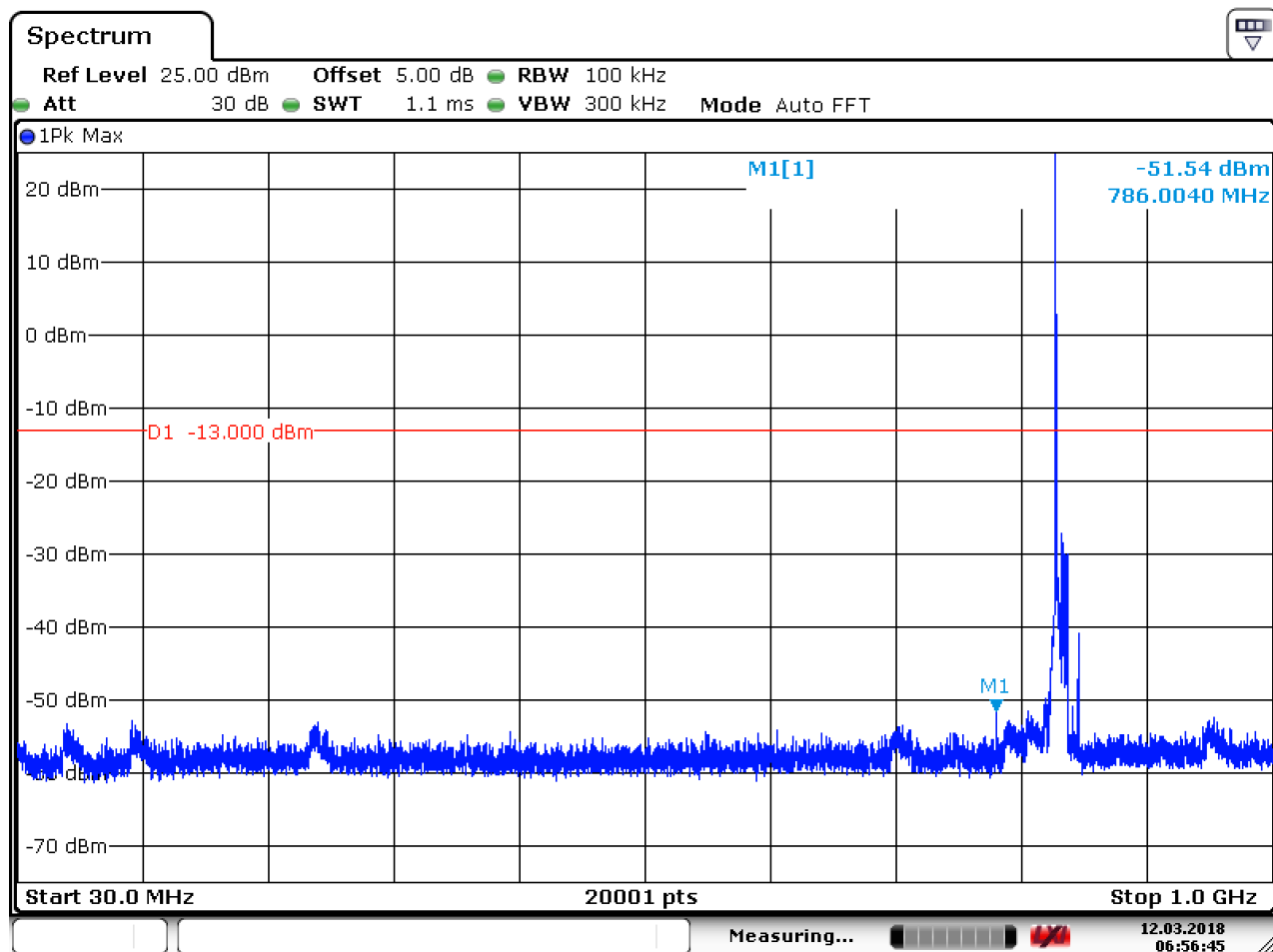
Date: 12.MAR.2018 06:56:12



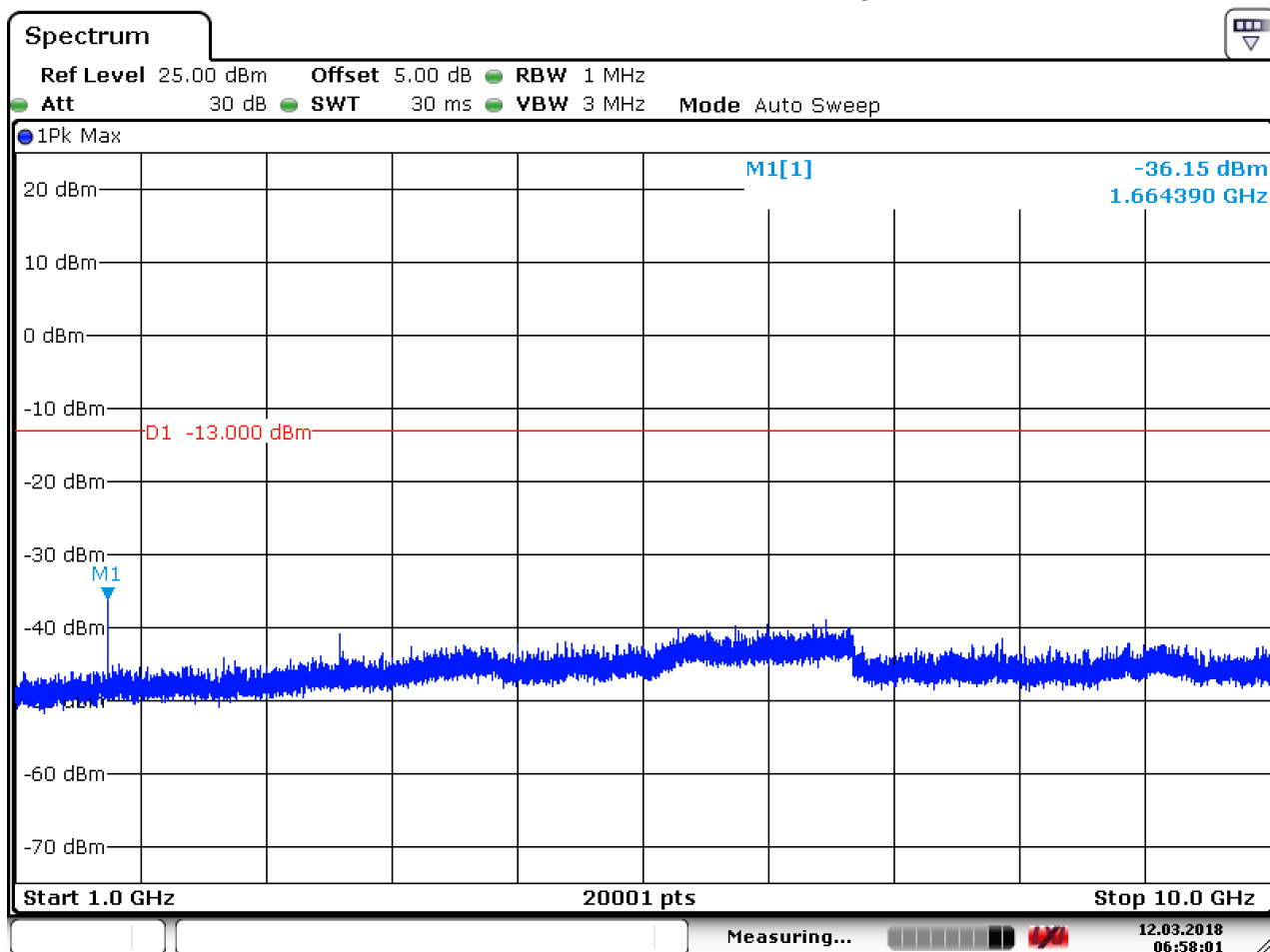
Date: 12.MAR.2018 06:59:56



6.1.1.1.2 Test Channel = MCH



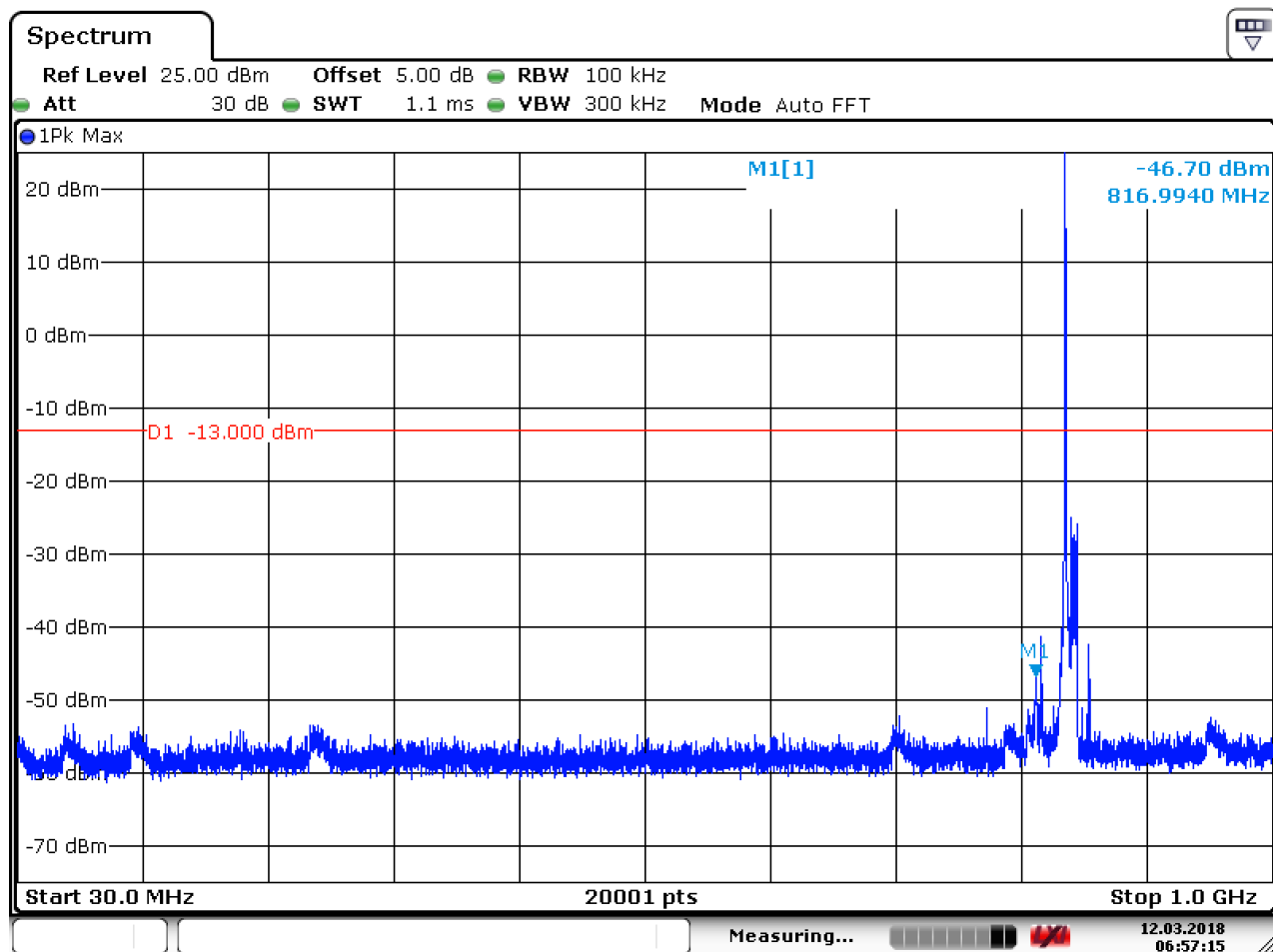
Date: 12.MAR.2018 06:56:46



Date: 12.MAR.2018 06:58:02

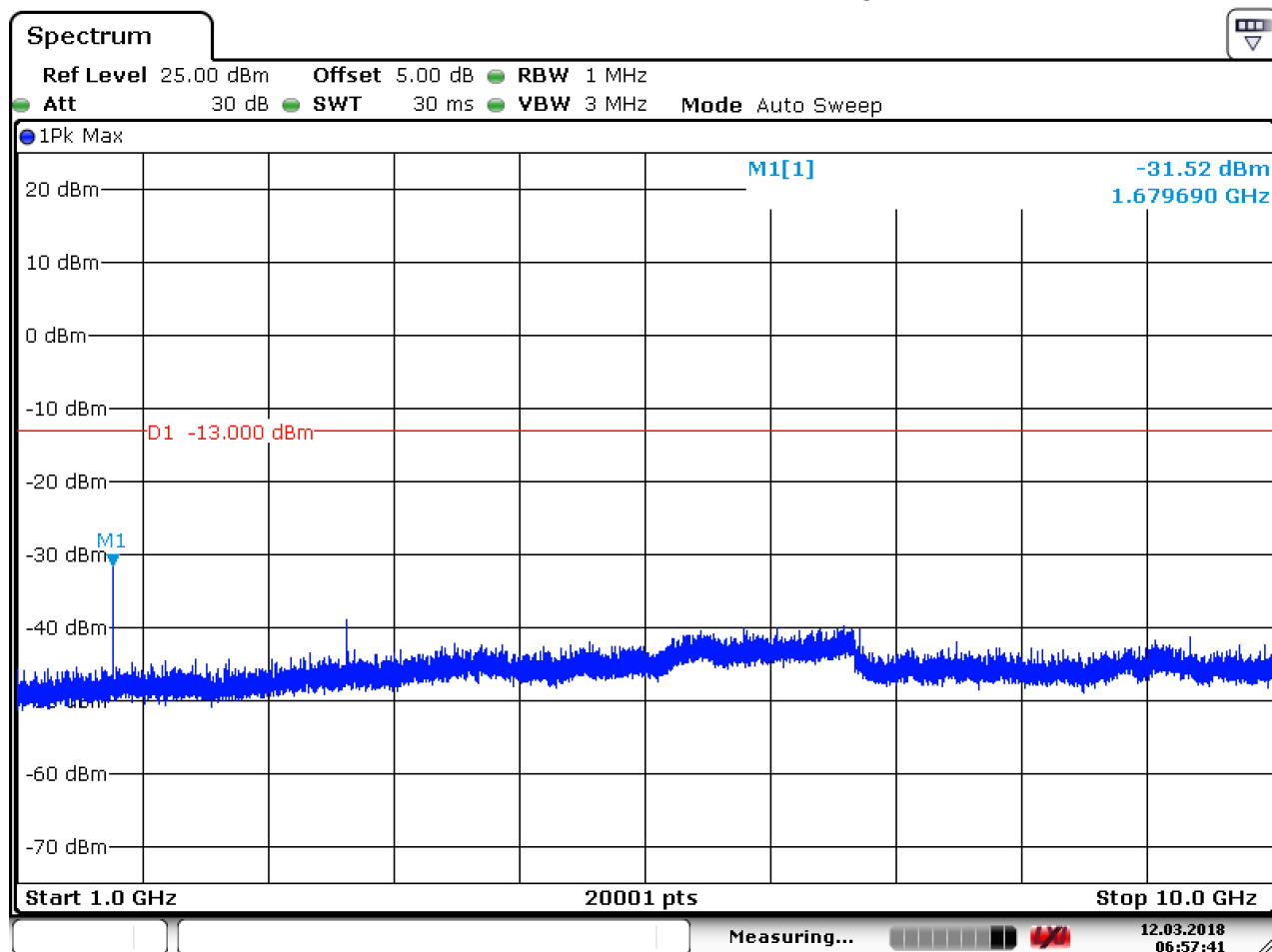


6.1.1.1.3 Test Channel = HCH



Date: 12.MAR.2018 06:57:15





Date: 12.MAR.2018 06:57:42



## 7 Field Strength of Spurious Radiation

### Part I - Test Results

#### 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
65.280000	-75.93	-13.00	62.93	Vertical
111.340000	-72.69	-13.00	59.69	Vertical
1649.000000	-56.03	-13.00	43.03	Vertical
2473.500000	-54.98	-13.00	41.98	Vertical
3298.350000	-60.99	-13.00	47.99	Vertical
6481.725000	-64.87	-13.00	51.87	Vertical
63.226667	-77.86	-13.00	64.86	Horizontal
104.293333	-82.34	-13.00	69.34	Horizontal
1649.000000	-58.24	-13.00	45.24	Horizontal
2473.500000	-56.09	-13.00	43.09	Horizontal
5077.237500	-66.57	-13.00	53.57	Horizontal
7940.812500	-63.85	-13.00	50.85	Horizontal

##### 7.1.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
65.046667	-82.10	-13.00	69.10	Vertical
130.566667	-81.52	-13.00	68.52	Vertical
1664.000000	-55.06	-13.00	42.06	Vertical
2496.000000	-56.35	-13.00	43.35	Vertical
3328.087500	-61.14	-13.00	48.14	Vertical
6017.137500	-65.54	-13.00	52.54	Vertical
63.273333	-77.76	-13.00	64.76	Horizontal
111.386667	-82.61	-13.00	69.61	Horizontal
1664.000000	-56.01	-13.00	43.01	Horizontal
3328.087500	-68.13	-13.00	55.13	Horizontal
6166.312500	-65.65	-13.00	52.65	Horizontal
9267.787500	-63.91	-13.00	50.91	Horizontal



**7.1.1.1.3 Test Channel = HCH**

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
65.233333	-73.81	-13.00	60.81	Vertical
441.600000	-74.44	-13.00	61.44	Vertical
1679.000000	-52.81	-13.00	39.81	Vertical
2518.500000	-53.16	-13.00	40.16	Vertical
3357.825000	-53.53	-13.00	40.53	Vertical
7941.300000	-63.92	-13.00	50.92	Vertical
62.340000	-78.19	-13.00	65.19	Horizontal
104.293333	-82.30	-13.00	69.30	Horizontal
1679.000000	-54.62	-13.00	41.62	Horizontal
2518.500000	-54.70	-13.00	41.70	Horizontal
3358.312500	-63.89	-13.00	50.89	Horizontal
7839.900000	-64.33	-13.00	51.33	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, but only the worst case data presented in this report.



## 8 Frequency Stability

### 8.1 Frequency Error VS. Voltage

#### Part I - Test Results

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband5	LTE/TM1 10MHz	LCH	TN	VL	-4.61	-0.005561	PASS
				VN	3.45	0.004162	PASS
				VH	-5.06	-0.006104	PASS
		MCH	TN	VL	-3.56	-0.004256	PASS
				VN	-4.75	-0.005678	PASS
				VH	-3.92	-0.004686	PASS
		HCH	TN	VL	-4.06	-0.004810	PASS
				VN	-5.75	-0.006813	PASS
				VH	-4.86	-0.005758	PASS
	LTE/TM2 10MHz	LCH	TN	VL	-3.42	-0.004125	PASS
				VN	-3.38	-0.004077	PASS
				VH	-5.05	-0.006092	PASS
		MCH	TN	VL	-4.09	-0.004889	PASS
				VN	-3.79	-0.004531	PASS
				VH	-5.01	-0.005989	PASS
		HCH	TN	VL	-3.78	-0.004479	PASS
				VN	-3.85	-0.004562	PASS
				VH	3.39	0.004017	PASS



## 8.2 Frequency Error VS. Temperature

### Part I - Test Results

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband5	LTE/TM1 10MHz	LCH	VN	-30	-3.62	-0.004276	PASS
				-20	-3.91	-0.004717	PASS
				-10	-5.12	-0.006176	PASS
				0	-3.95	-0.004765	PASS
				10	-5.06	-0.006104	PASS
				20	-3.35	-0.004041	PASS
				30	-3.59	-0.004292	PASS
				40	-3.79	-0.004531	PASS
				50	-4.42	-0.005284	PASS
		MCH	VN	-30	-3.79	-0.004531	PASS
				-20	3.46	0.004136	PASS
				-10	-4.11	-0.004870	PASS
				0	-4.15	-0.004917	PASS
				10	-5.46	-0.006469	PASS
				20	-3.59	-0.004292	PASS
				30	-3.79	-0.004531	PASS
				40	-4.42	-0.005284	PASS
				50	-3.79	-0.004531	PASS
		HCH	VN	-30	3.46	0.004136	PASS
				-20	-3.59	-0.004292	PASS
				-10	-3.79	-0.004531	PASS
				0	-4.42	-0.005237	PASS
				10	-2.56	-0.003033	PASS
				20	-3.12	-0.003764	PASS
				30	-4.22	-0.005090	PASS
				40	-4.22	-0.005090	PASS
				50	-3.05	-0.003679	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
LTEband5	LTE/TM2 10MHz	LCH	VN	-30	-3.91	-0.004717	PASS
				-20	-5.12	-0.006176	PASS
				-10	-3.95	-0.004765	PASS
				0	-5.06	-0.006104	PASS
				10	-3.35	-0.004041	PASS
				20	-3.59	-0.004292	PASS
				30	-3.79	-0.004531	PASS
				40	-4.42	-0.005284	PASS
				50	-3.79	-0.004531	PASS
		MCH	VN	-30	3.46	0.004136	PASS
				-20	-4.11	-0.004870	PASS
				-10	-4.15	-0.004917	PASS
				0	-5.46	-0.006469	PASS
				10	-4.42	-0.005237	PASS
				20	-2.56	-0.003033	PASS
				30	-3.12	-0.003764	PASS
				40	-4.22	-0.005090	PASS
				50	-4.22	-0.005090	PASS
		HCH	VN	-30	-3.05	-0.003679	PASS
				-20	-3.89	-0.004692	PASS
				-10	-3.66	-0.004375	PASS
				0	4.22	0.005045	PASS
				10	-3.39	-0.004053	PASS
				20	-4.79	-0.005726	PASS
				30	-6.32	-0.007555	PASS
				40	4.59	0.005438	PASS
				50	-4.21	-0.004988	PASS

The End