Appendix B

Test Data for SZEM161000916605RG

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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	23.16	23.27	38.45	PASS
				RB1#2	23.25	23.36	38.45	PASS
				RB1#5	23.16	23.27	38.45	PASS
				RB3#0	23.25	23.36	38.45	PASS
				RB3#2	23.22	23.33	38.45	PASS
				RB3#3	23.27	23.38	38.45	PASS
				RB6#0	22.27	22.38	38.45	PASS
			MCH	RB1#0	23.50	23.61	38.45	PASS
				RB1#2	23.62	23.73	38.45	PASS
				RB1#5	23.58	23.69	38.45	PASS
				RB3#0	23.61	23.72	38.45	PASS
				RB3#2	23.59	23.70	38.45	PASS
				RB3#3	23.66	23.77	38.45	PASS
				RB6#0	22.64	22.75	38.45	PASS
			HCH	RB1#0	23.00	23.11	38.45	PASS
				RB1#2	22.80	22.91	38.45	PASS
				RB1#5	22.29	22.40	38.45	PASS
				RB3#0	22.95	23.06	38.45	PASS
				RB3#2	22.79	22.90	38.45	PASS
				RB3#3	22.55	22.66	38.45	PASS
				RB6#0	21.74	21.85	38.45	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND5	LTE/TM2	1.4M	LCH	RB1#0	22.46	22.57	38.45	PASS
				RB1#2	22.55	22.66	38.45	PASS
				RB1#5	22.42	22.53	38.45	PASS
				RB3#0	22.28	22.39	38.45	PASS
				RB3#2	22.25	22.36	38.45	PASS
				RB3#3	22.27	22.38	38.45	PASS
				RB6#0	21.29	21.40	38.45	PASS
			MCH	RB1#0	22.99	23.10	38.45	PASS
				RB1#2	22.97	23.08	38.45	PASS
				RB1#5	22.94	23.05	38.45	PASS
				RB3#0	22.68	22.79	38.45	PASS
				RB3#2	22.66	22.77	38.45	PASS
				RB3#3	22.77	22.88	38.45	PASS
				RB6#0	21.78	21.89	38.45	PASS
			HCH	RB1#0	22.39	22.50	38.45	PASS
				RB1#2	22.20	22.31	38.45	PASS
				RB1#5	21.71	21.82	38.45	PASS
				RB3#0	21.99	22.10	38.45	PASS
				RB3#2	21.85	21.96	38.45	PASS
				RB3#3	21.59	21.70	38.45	PASS
				RB6#0	20.82	20.93	38.45	PASS

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	23.15	23.26	38.45	PASS
				RB1#7	23.20	23.31	38.45	PASS
				RB1#14	23.20	23.31	38.45	PASS
				RB8#0	22.29	22.40	38.45	PASS
				RB8#4	22.29	22.40	38.45	PASS
				RB8#7	22.33	22.44	38.45	PASS
				RB15#0	22.31	22.42	38.45	PASS
			MCH	RB1#0	23.40	23.51	38.45	PASS
				RB1#7	23.57	23.68	38.45	PASS
				RB1#14	23.54	23.65	38.45	PASS
				RB8#0	22.62	22.73	38.45	PASS
				RB8#4	22.69	22.80	38.45	PASS
				RB8#7	22.70	22.81	38.45	PASS
				RB15#0	22.65	22.76	38.45	PASS
			HCH	RB1#0	23.68	23.79	38.45	PASS
				RB1#7	23.31	23.42	38.45	PASS
				RB1#14	22.27	22.38	38.45	PASS
				RB8#0	22.71	22.82	38.45	PASS
				RB8#4	22.33	22.44	38.45	PASS
				RB8#7	21.91	22.02	38.45	PASS
				RB15#0	22.32	22.43	38.45	PASS

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	22.46	22.57	38.45	PASS
				RB1#7	22.53	22.64	38.45	PASS
				RB1#14	22.48	22.59	38.45	PASS
				RB8#0	21.30	21.41	38.45	PASS
				RB8#4	21.32	21.43	38.45	PASS
				RB8#7	21.36	21.47	38.45	PASS
				RB15#0	21.27	21.38	38.45	PASS
			MCH	RB1#0	22.73	22.84	38.45	PASS
				RB1#7	22.87	22.98	38.45	PASS
				RB1#14	22.82	22.93	38.45	PASS
				RB8#0	21.64	21.75	38.45	PASS
				RB8#4	21.78	21.89	38.45	PASS
				RB8#7	21.80	21.91	38.45	PASS
				RB15#0	21.69	21.80	38.45	PASS
			HCH	RB1#0	22.96	23.07	38.45	PASS
				RB1#7	22.60	22.71	38.45	PASS
				RB1#14	21.50	21.61	38.45	PASS
				RB8#0	21.77	21.88	38.45	PASS
				RB8#4	21.34	21.45	38.45	PASS
				RB8#7	20.94	21.05	38.45	PASS
				RB15#0	21.27	21.38	38.45	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND5	LTE/TM1	5M	LCH	RB1#0	23.21	23.32	38.45	PASS
				RB1#13	23.29	23.40	38.45	PASS
				RB1#24	23.31	23.42	38.45	PASS
				RB12#0	22.35	22.46	38.45	PASS
				RB12#6	22.36	22.47	38.45	PASS
				RB12#13	22.39	22.50	38.45	PASS
				RB25#0	22.33	22.44	38.45	PASS
			MCH	RB1#0	23.39	23.50	38.45	PASS
				RB1#13	23.60	23.71	38.45	PASS
				RB1#24	23.55	23.66	38.45	PASS
				RB12#0	22.54	22.65	38.45	PASS
				RB12#6	22.70	22.81	38.45	PASS
				RB12#13	22.68	22.79	38.45	PASS
				RB25#0	22.42	22.53	38.45	PASS
			HCH	RB1#0	23.82	23.93	38.45	PASS
				RB1#13	23.70	23.81	38.45	PASS
				RB1#24	22.41	22.52	38.45	PASS
				RB12#0	23.15	23.26	38.45	PASS
				RB12#6	23.20	23.31	38.45	PASS
				RB12#13	22.58	22.69	38.45	PASS
				RB25#0	22.70	22.81	38.45	PASS

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	22.49	22.60	38.45	PASS
				RB1#13	22.57	22.68	38.45	PASS
				RB1#24	22.59	22.70	38.45	PASS
				RB12#0	21.31	21.42	38.45	PASS
				RB12#6	21.34	21.45	38.45	PASS
				RB12#13	21.38	21.49	38.45	PASS
				RB25#0	21.30	21.41	38.45	PASS
			MCH	RB1#0	22.70	22.81	38.45	PASS
				RB1#13	22.92	23.03	38.45	PASS
				RB1#24	22.86	22.97	38.45	PASS
				RB12#0	21.56	21.67	38.45	PASS
				RB12#6	21.72	21.83	38.45	PASS
				RB12#13	21.77	21.88	38.45	PASS
				RB25#0	21.65	21.76	38.45	PASS
			HCH	RB1#0	23.07	23.18	38.45	PASS
				RB1#13	23.05	23.16	38.45	PASS
				RB1#24	21.74	21.85	38.45	PASS
				RB12#0	21.97	22.08	38.45	PASS
				RB12#6	21.87	21.98	38.45	PASS
				RB12#13	21.29	21.40	38.45	PASS
				RB25#0	21.64	21.75	38.45	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND5	LTE/TM1	10M	LCH	RB1#0	23.33	23.44	38.45	PASS
				RB1#25	23.45	23.56	38.45	PASS
				RB1#49	23.41	23.52	38.45	PASS
				RB25#0	22.51	22.62	38.45	PASS
				RB25#13	22.50	22.61	38.45	PASS
				RB25#25	22.52	22.63	38.45	PASS
				RB50#0	22.50	22.61	38.45	PASS
			MCH	RB1#0	23.44	23.55	38.45	PASS
				RB1#25	23.64	23.75	38.45	PASS
				RB1#49	23.64	23.75	38.45	PASS
				RB25#0	22.65	22.76	38.45	PASS
				RB25#13	22.63	22.74	38.45	PASS
				RB25#25	22.69	22.80	38.45	PASS
				RB50#0	22.63	22.74	38.45	PASS
			HCH	RB1#0	23.64	23.75	38.45	PASS
				RB1#25	23.81	23.92	38.45	PASS
				RB1#49	22.68	22.79	38.45	PASS
				RB25#0	22.76	22.87	38.45	PASS
				RB25#13	22.86	22.97	38.45	PASS
				RB25#25	22.68	22.79	38.45	PASS
				RB50#0	22.75	22.86	38.45	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND5	LTE/TM2	10M	LCH	RB1#0	22.59	22.70	38.45	PASS
				RB1#25	22.74	22.85	38.45	PASS
				RB1#49	22.72	22.83	38.45	PASS
				RB25#0	21.37	21.48	38.45	PASS
				RB25#13	21.47	21.58	38.45	PASS
				RB25#25	21.49	21.60	38.45	PASS
				RB50#0	21.47	21.58	38.45	PASS
			MCH	RB1#0	22.75	22.86	38.45	PASS
				RB1#25	22.93	23.04	38.45	PASS
				RB1#49	22.89	23.00	38.45	PASS
				RB25#0	21.46	21.57	38.45	PASS
				RB25#13	21.66	21.77	38.45	PASS
				RB25#25	21.72	21.83	38.45	PASS
				RB50#0	21.59	21.70	38.45	PASS
			HCH	RB1#0	22.91	23.02	38.45	PASS
				RB1#25	23.05	23.16	38.45	PASS
				RB1#49	21.99	22.10	38.45	PASS
				RB25#0	21.77	21.88	38.45	PASS
				RB25#13	21.85	21.96	38.45	PASS
				RB25#25	21.69	21.80	38.45	PASS
				RB50#0	21.77	21.88	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]

b: SGP=Signal Generator Level
c: RBW > emission bandwidth, VBW > 3 x RBW.
Detector: RMS

2 Peak-to-Average Ratio

Part Ⅰ - Test Results

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
Band 5	TM1/10M	LCH	5.59	13	PASS
		MCH	5.91	13	PASS
		HCH	5.33	13	PASS
	TM2/10M	LCH	6.35	13	PASS
		MCH	6.64	13	PASS
		HCH	6.06	13	PASS

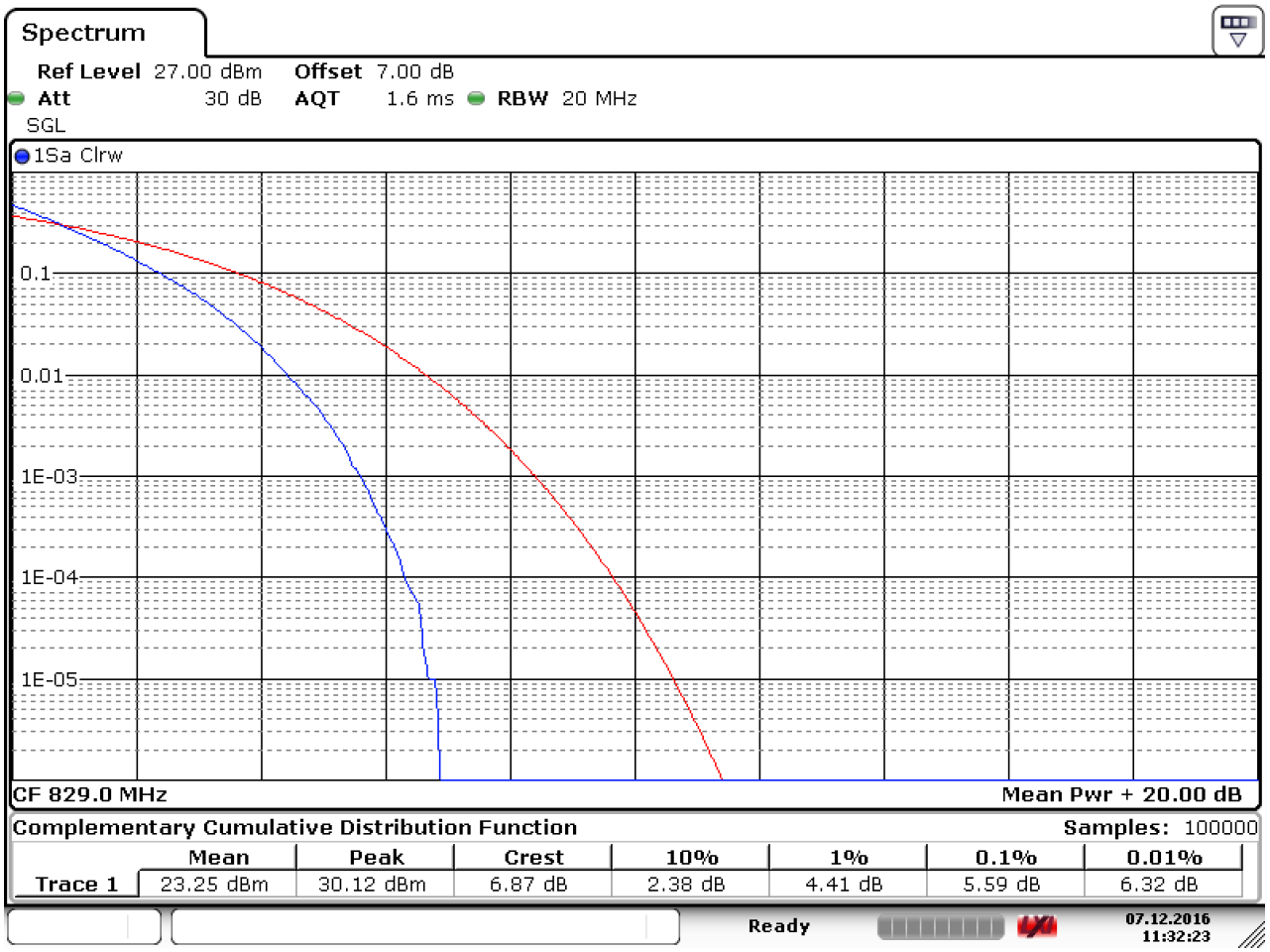
Part Ⅱ - Test Plots

2.1 For LTE

2.1.1 Test Band = LTE band5

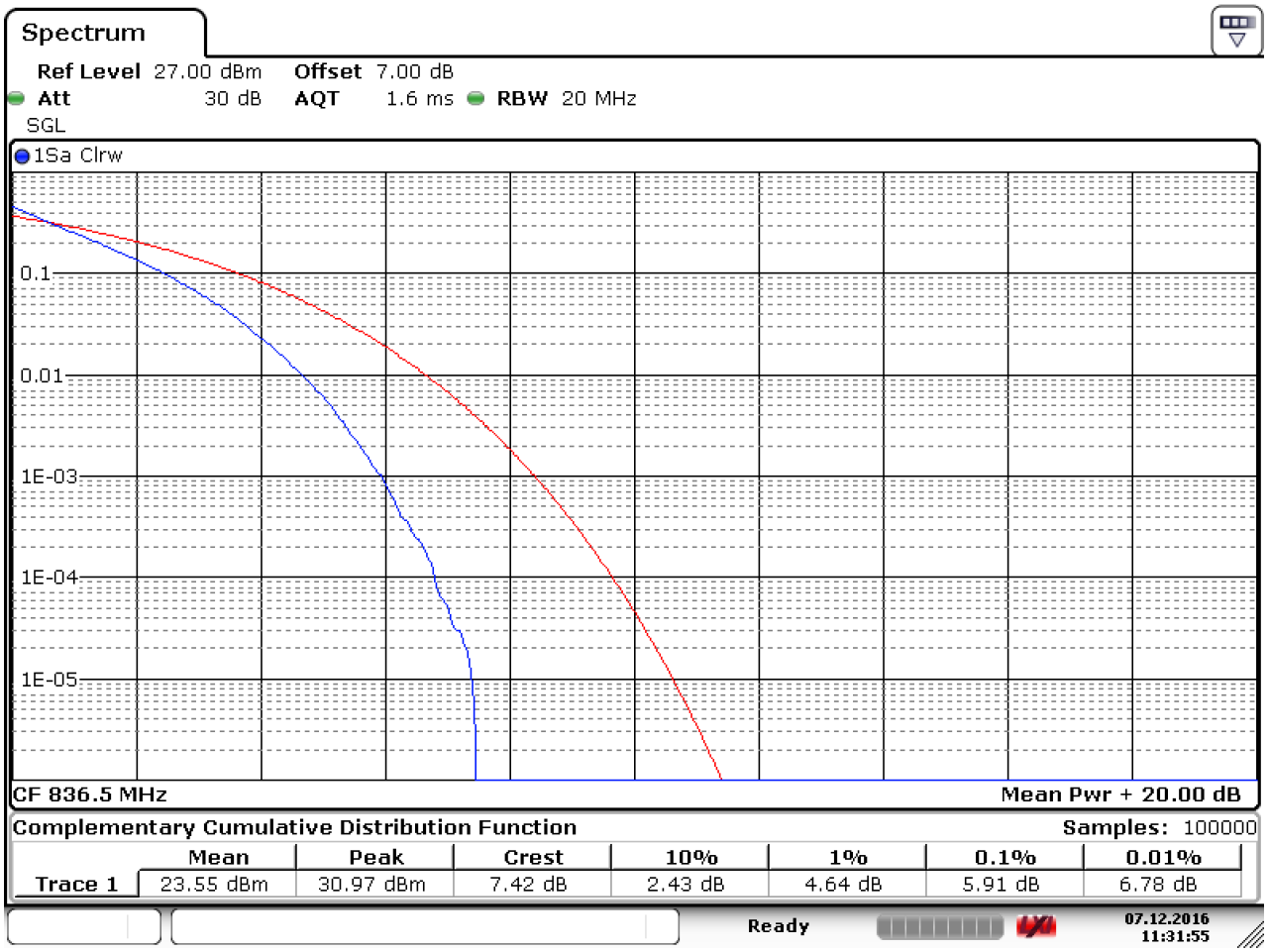
2.1.1.1 Test Mode = LTE/TM1.Bandwidth=10MHz

2.1.1.1.1 Test Channel = LCH



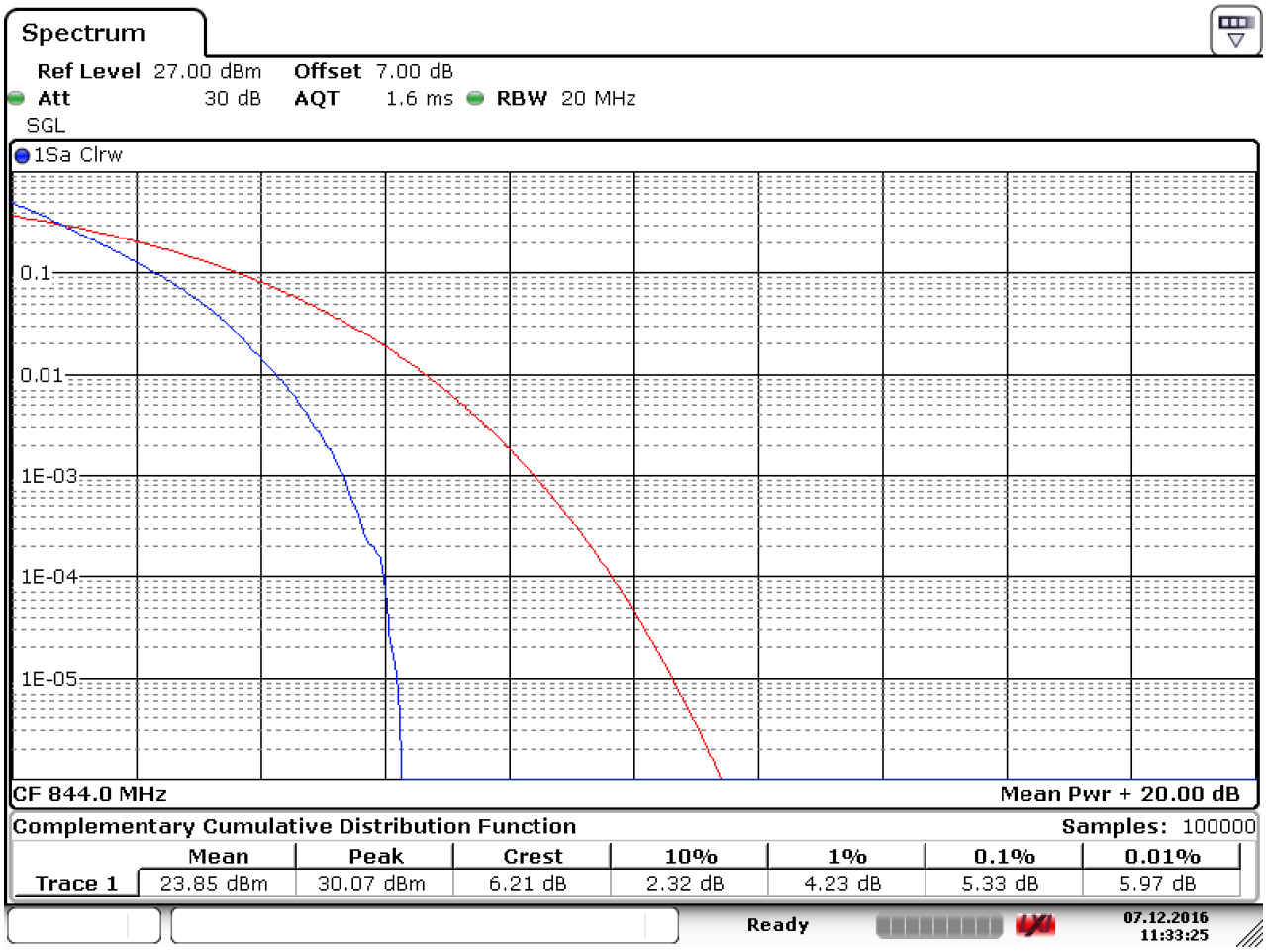
Date: 7.DEC.2016 11:32:24

2.1.1.1.2 Test Channel = MCH



Date: 7.DEC.2016 11:31:55

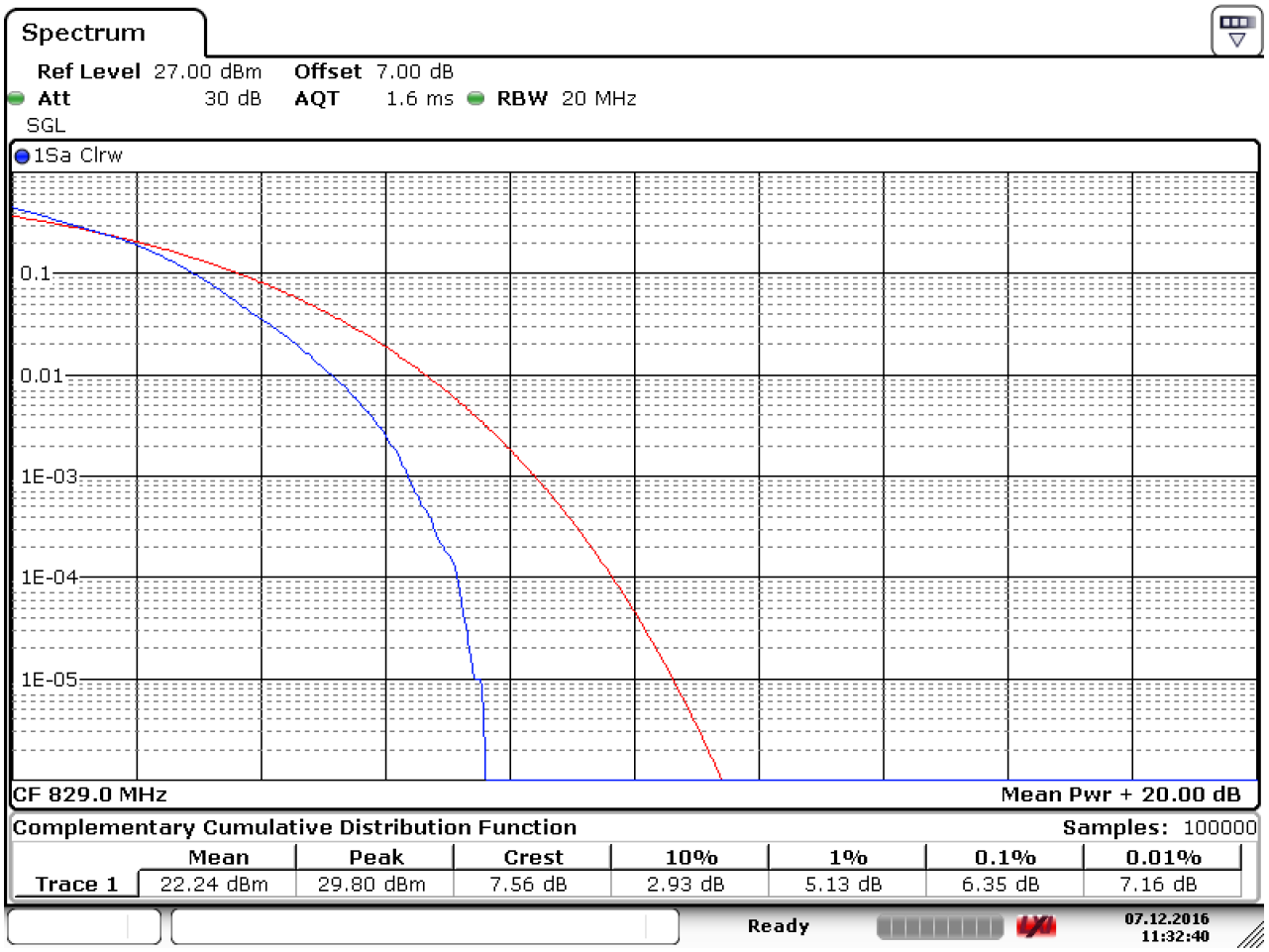
2.1.1.1.3 Test Channel = HCH



Date: 7.DEC.2016 11:33:26

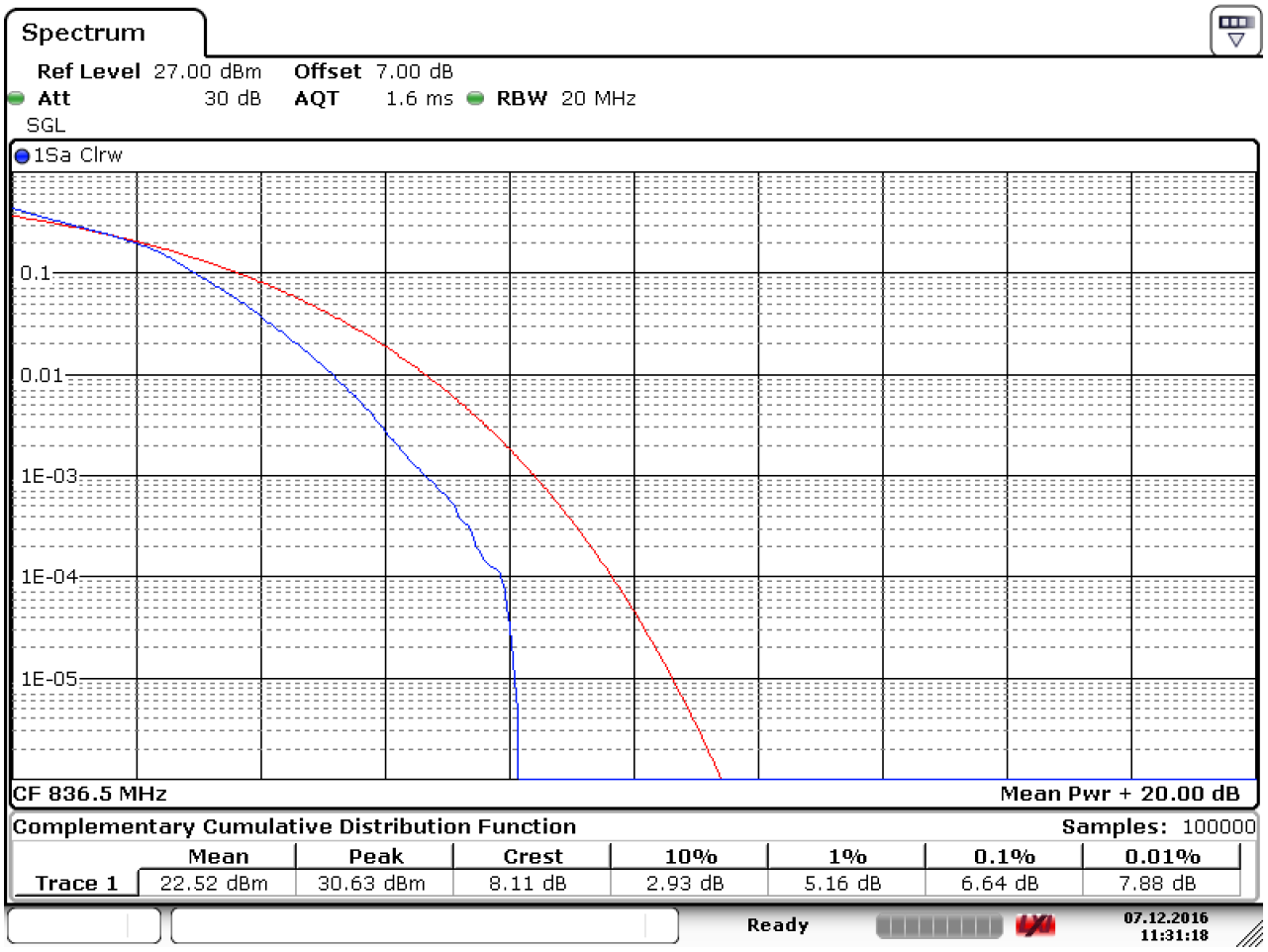
2.1.1.2 Test Mode = LTE/TM2.Bandwidth=20MHz

2.1.1.2.1 Test Channel = LCH



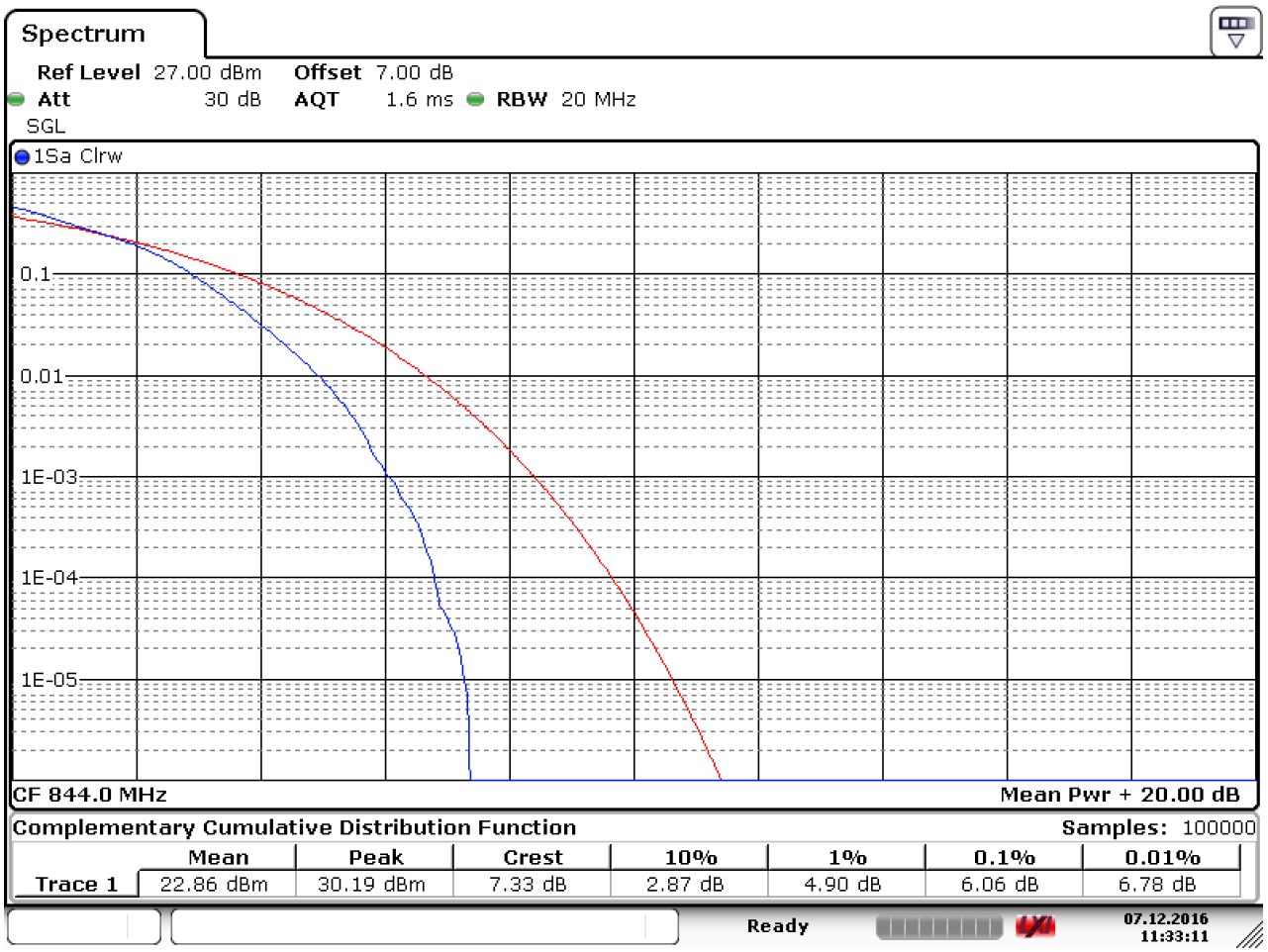
Date: 7.DEC.2016 11:32:40

2.1.1.2.2 Test Channel = MCH



Date: 7.DEC.2016 11:31:19

2.1.1.2.3 Test Channel = HCH



Date: 7.DEC.2016 11:33:12

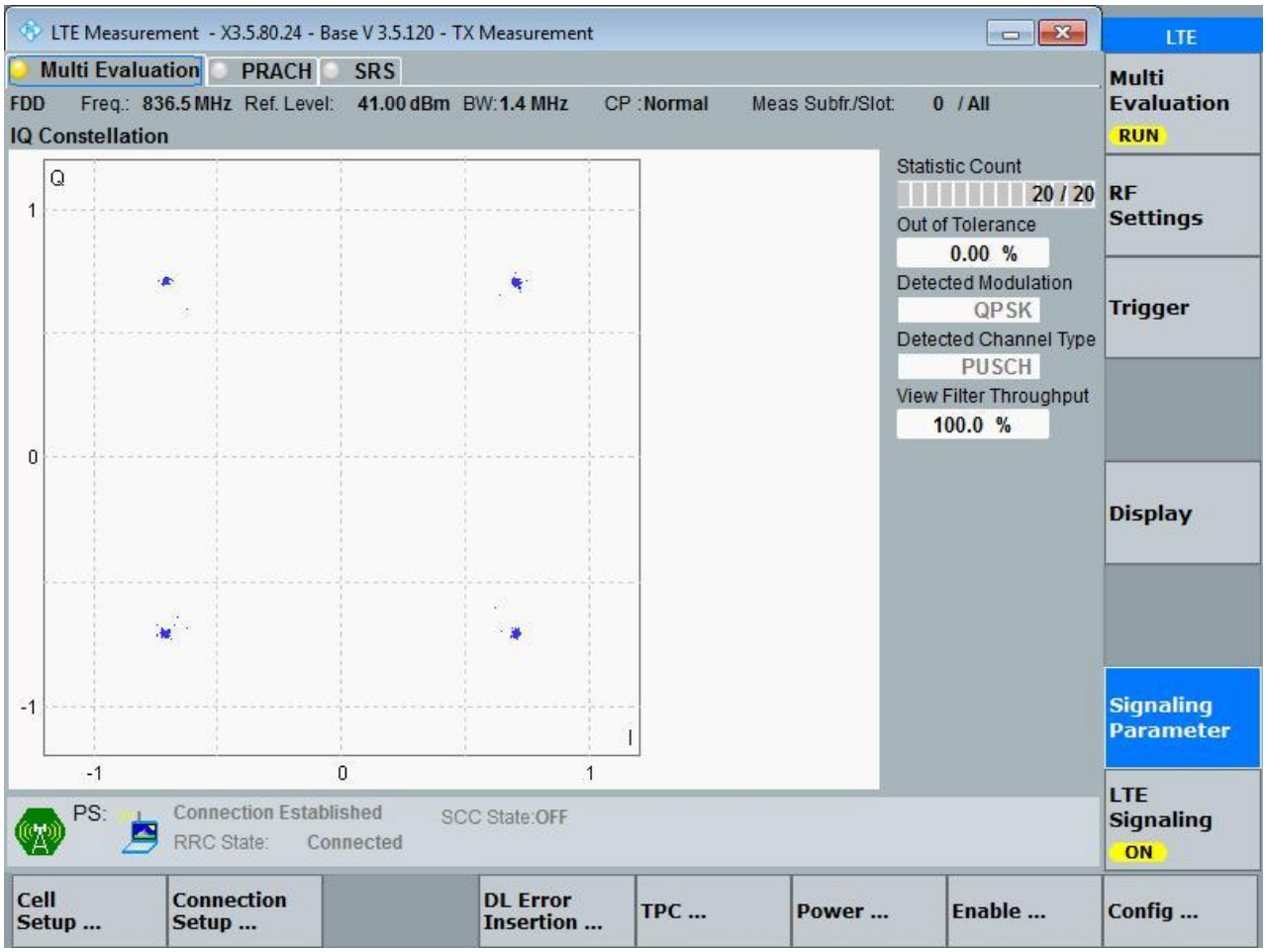
3 Modulation Characteristics

3.1 For LTE

3.1.1 Test Band = LTE band5

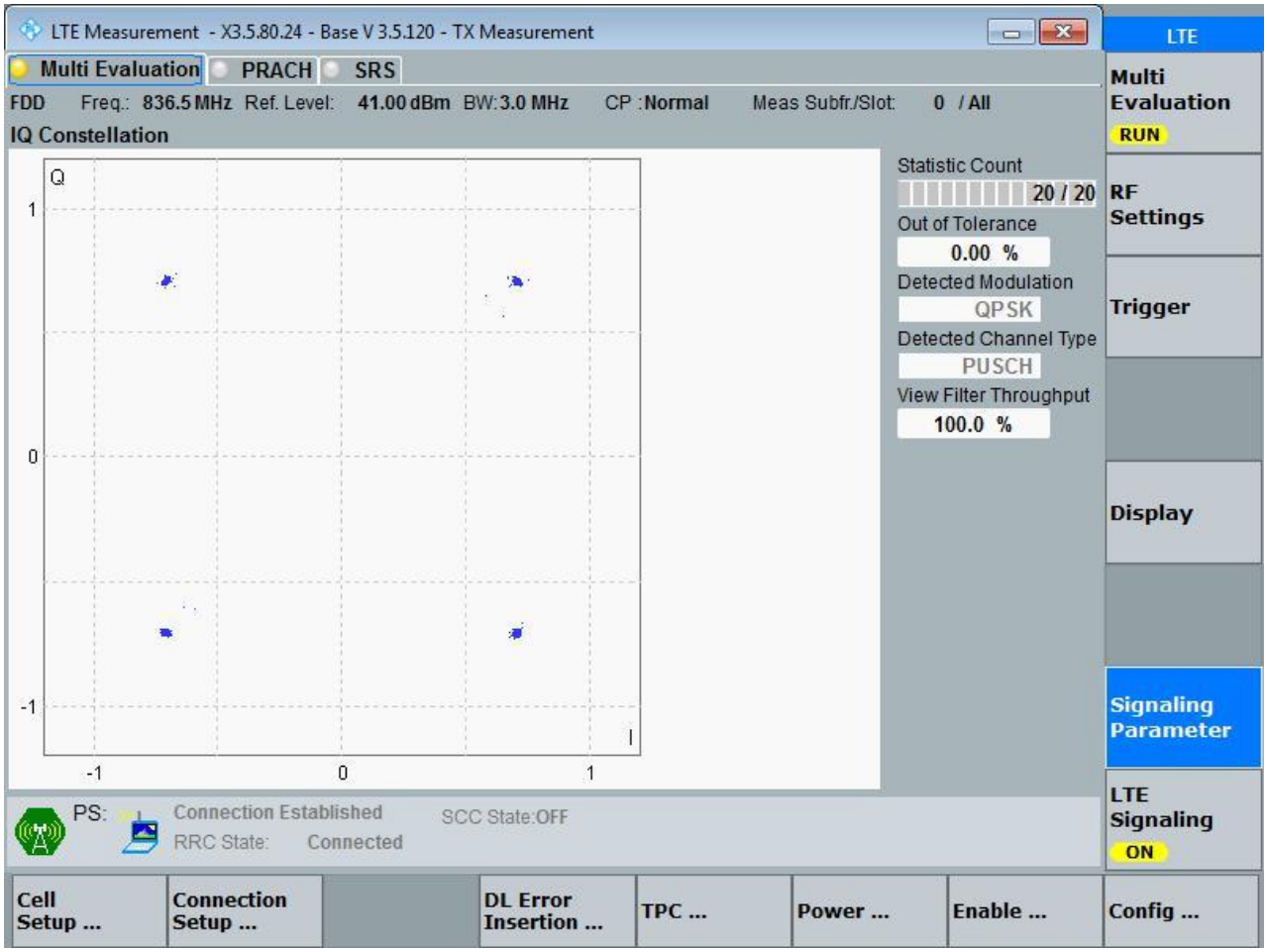
3.1.1.1 Test Mode = LTE /TM1 1.4MHz

3.1.1.1.1 Test Channel = MCH



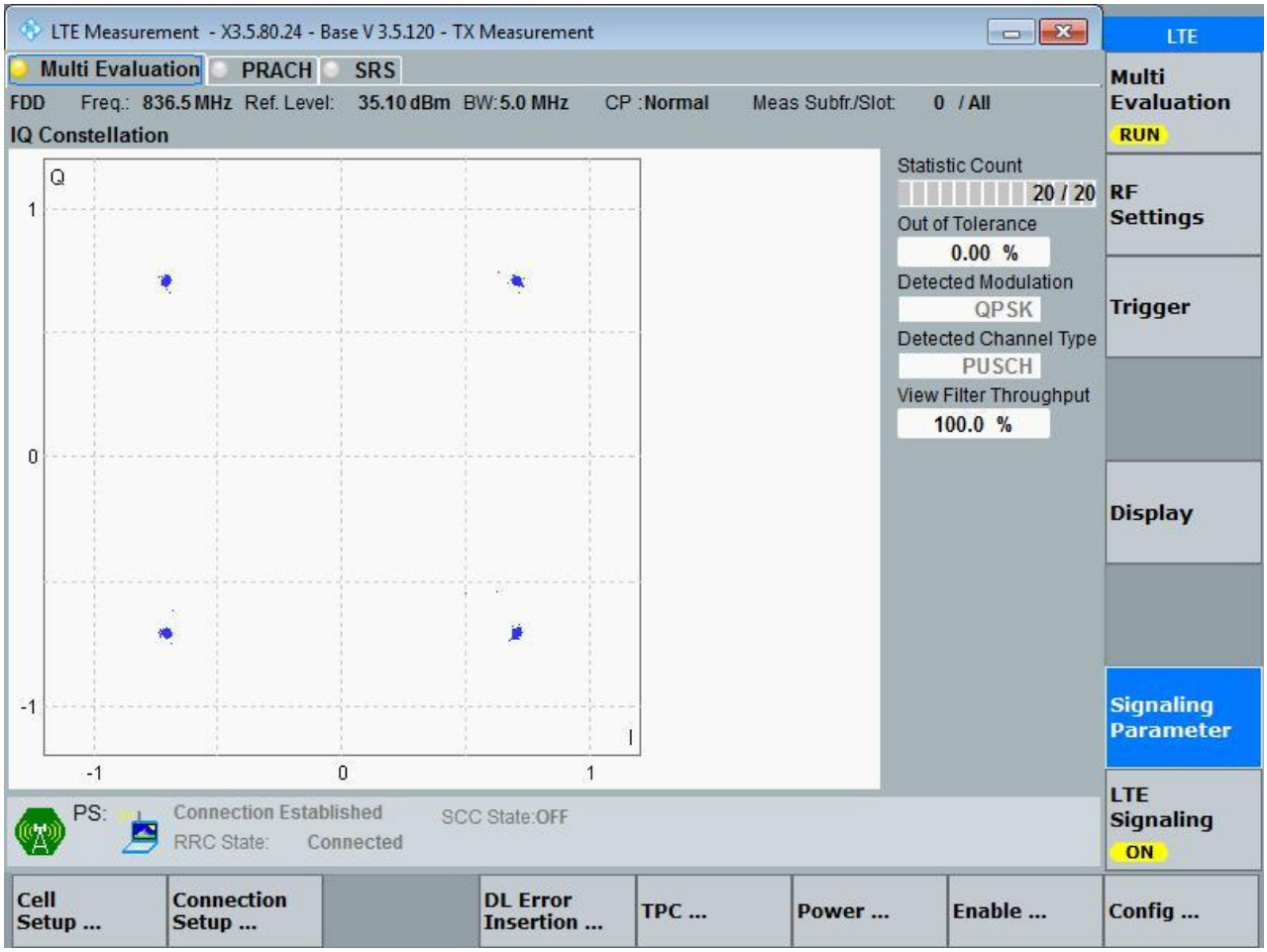
3.1.1.2 Test Mode = LTE /TM1 3MHz

3.1.1.2.1 Test Channel = MCH



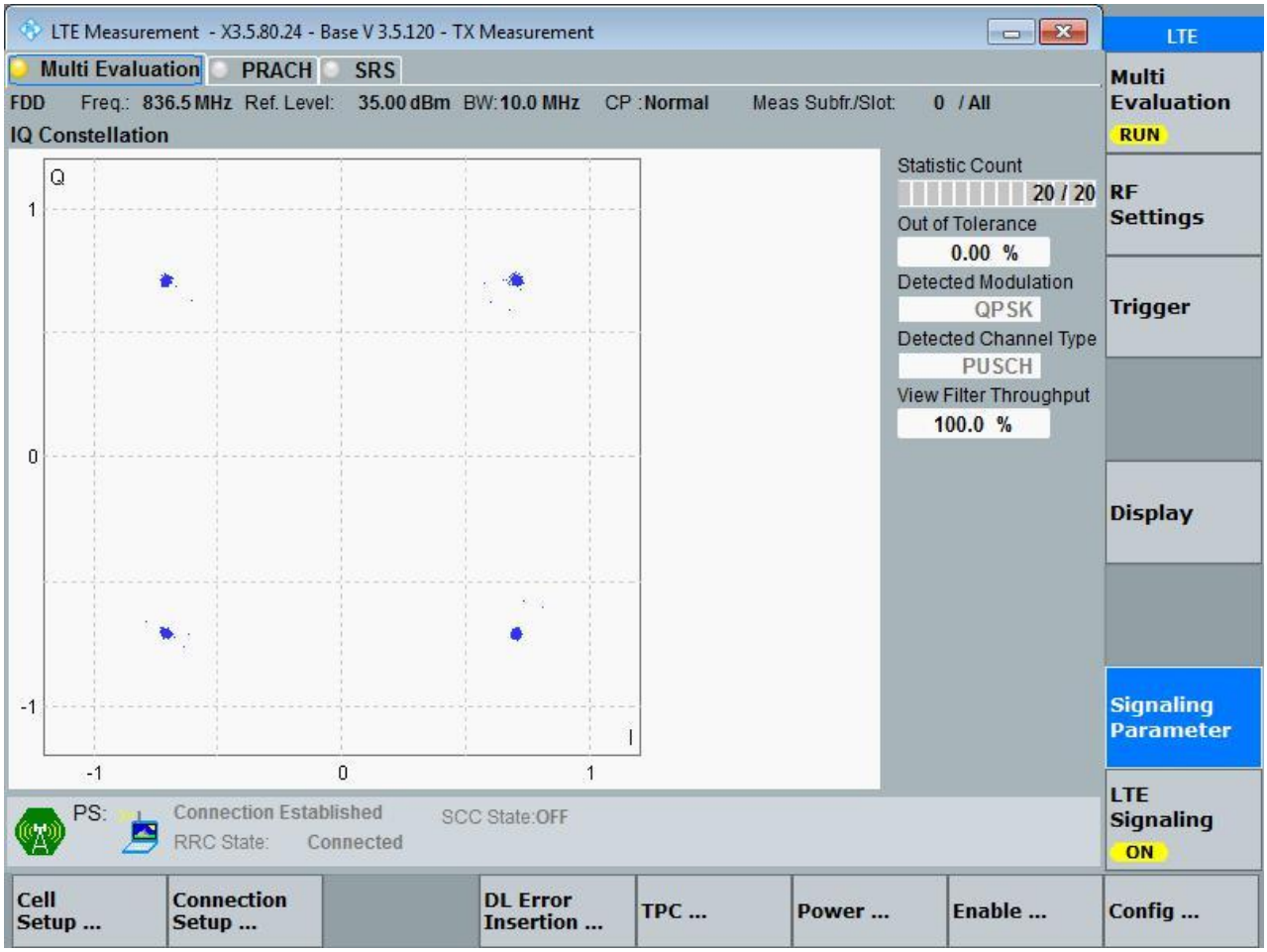
3.1.1.3 Test Mode = LTE /TM1 5MHz

3.1.1.3.1 Test Channel = MCH



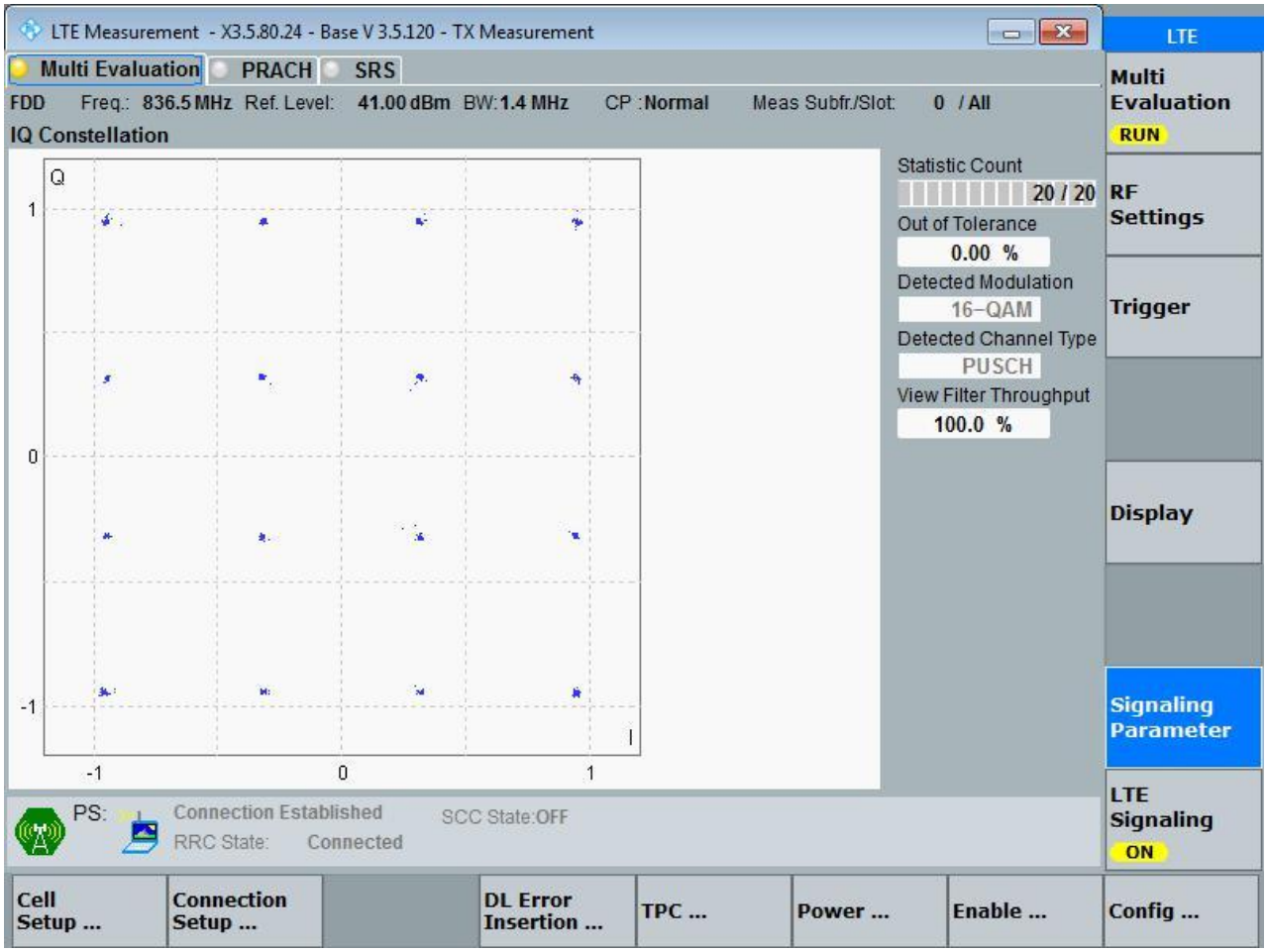
3.1.1.4 Test Mode = LTE /TM1 10MHz

3.1.1.4.1 Test Channel = MCH



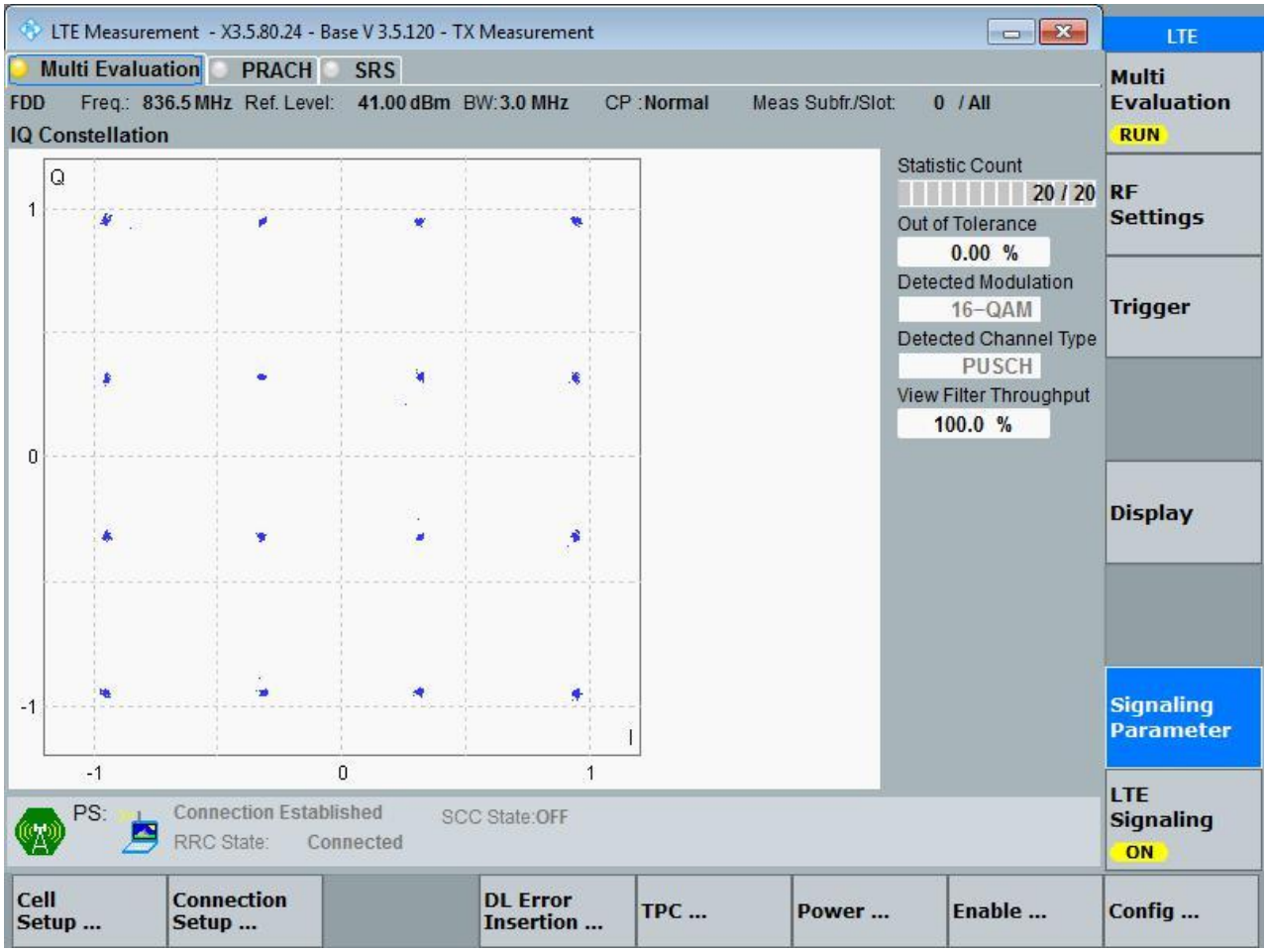
3.1.1.5 Test Mode = LTE /TM2 1.4MHz

3.1.1.5.1 Test Channel = MCH



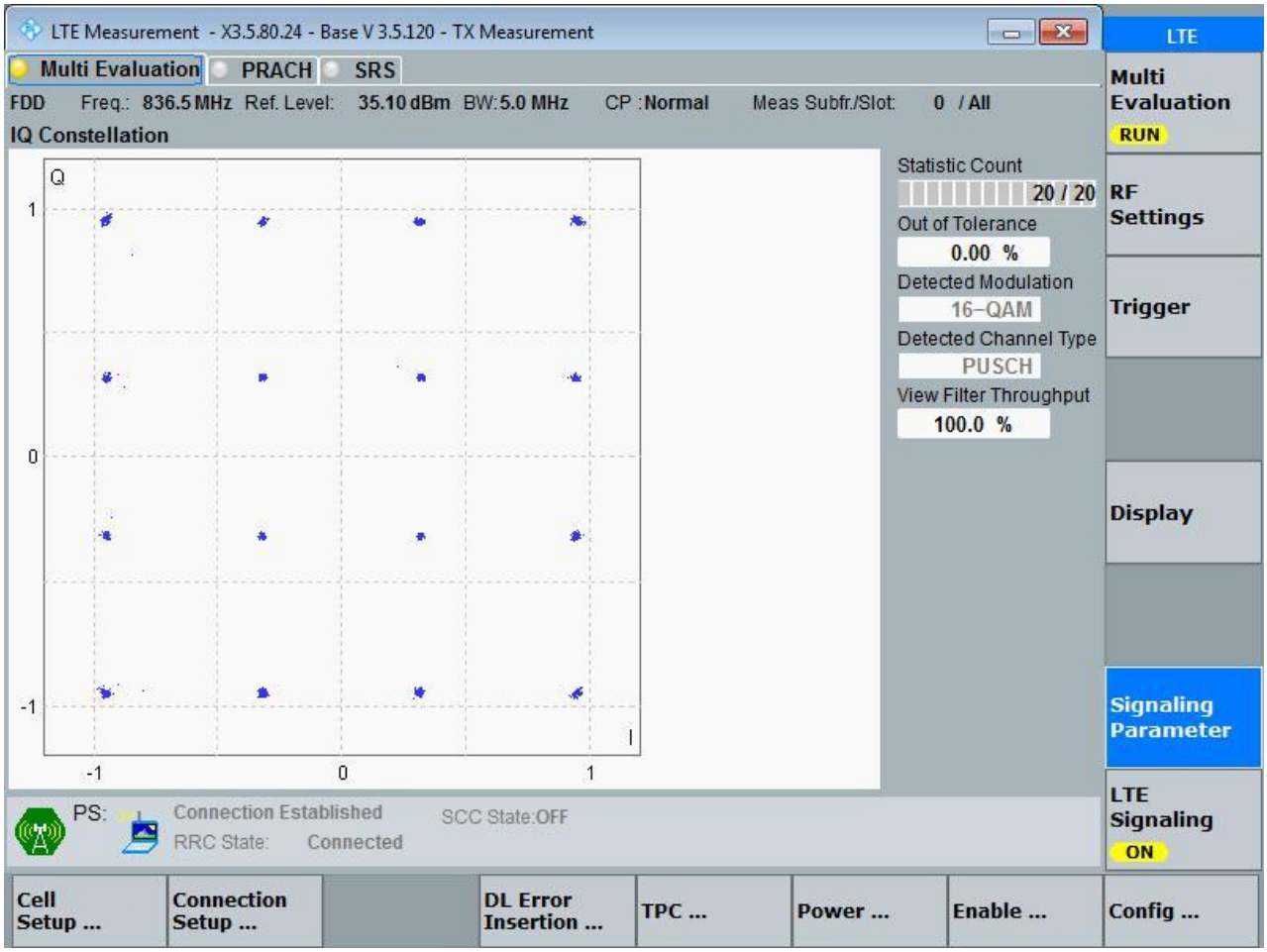
3.1.1.6 Test Mode = LTE /TM2 3MHz

3.1.1.6.1 Test Channel = MCH



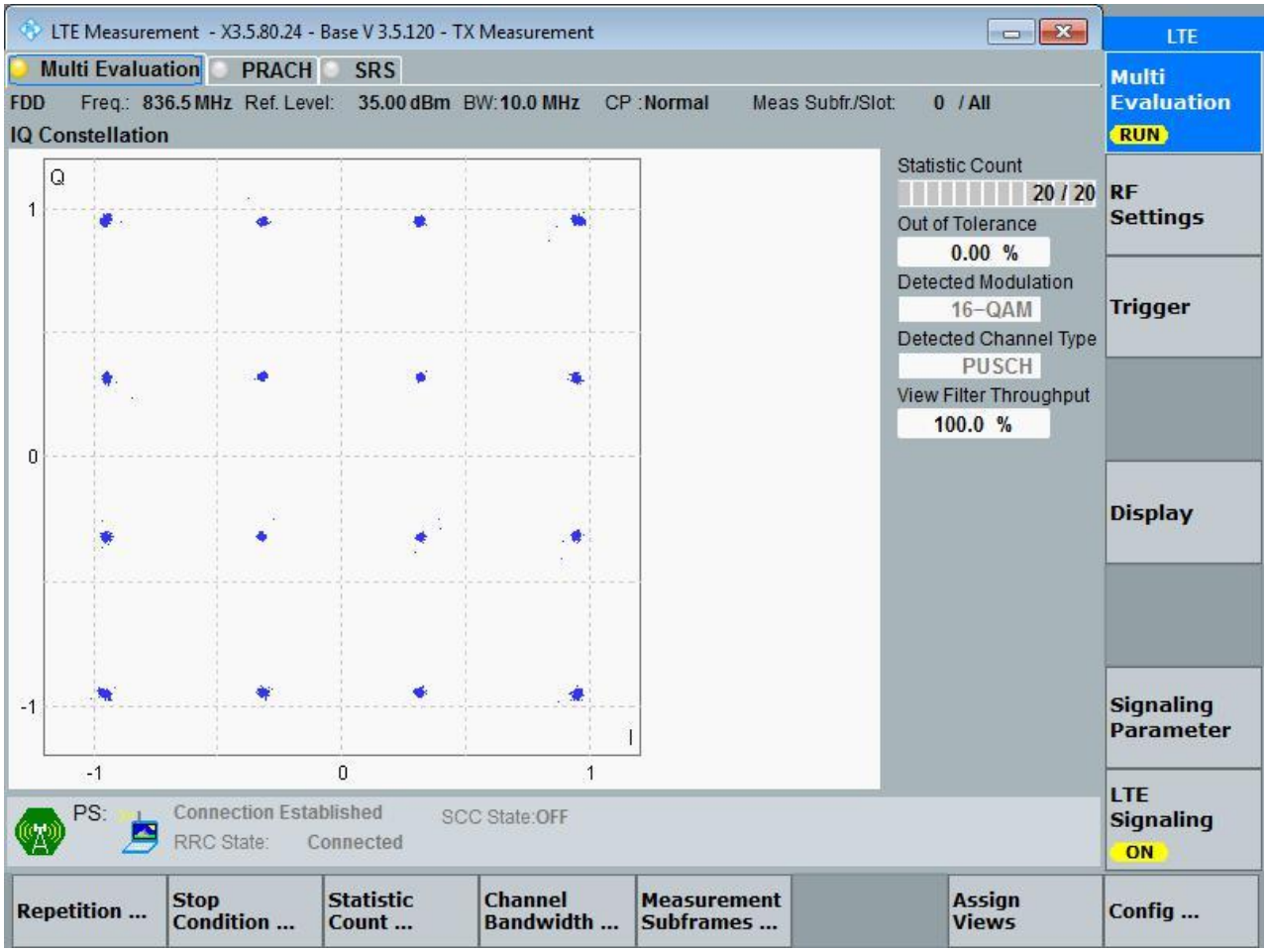
3.1.1.7 Test Mode = LTE /TM2 5MHz

3.1.1.7.1 Test Channel = MCH



3.1.1.8 Test Mode = LTE /TM2 10MHz

3.1.1.8.1 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	1.10	1.27	PASS
		MCH	1.09	1.26	PASS
		HCH	1.10	1.26	PASS
	TM2/1.4MHz	LCH	1.09	1.26	PASS
		MCH	1.10	1.29	PASS
		HCH	1.10	1.27	PASS
	TM1/ 3MHz	LCH	2.69	2.90	PASS
		MCH	2.69	2.91	PASS
		HCH	2.69	2.91	PASS
	TM2/3MHz	LCH	2.69	2.92	PASS
		MCH	2.68	2.93	PASS
		HCH	2.69	2.94	PASS
	TM1/ 5MHz	LCH	4.49	4.94	PASS
		MCH	4.49	4.98	PASS
		HCH	4.50	4.96	PASS
	TM2/ 5MHz	LCH	4.49	4.95	PASS
		MCH	4.49	4.93	PASS
		HCH	4.50	4.96	PASS
	TM1/10MHz	LCH	8.97	9.77	PASS
		MCH	8.97	9.80	PASS
		HCH	8.93	9.63	PASS
	TM2/ 10MHz	LCH	8.95	9.71	PASS
		MCH	8.95	9.62	PASS
		HCH	8.93	9.65	PASS

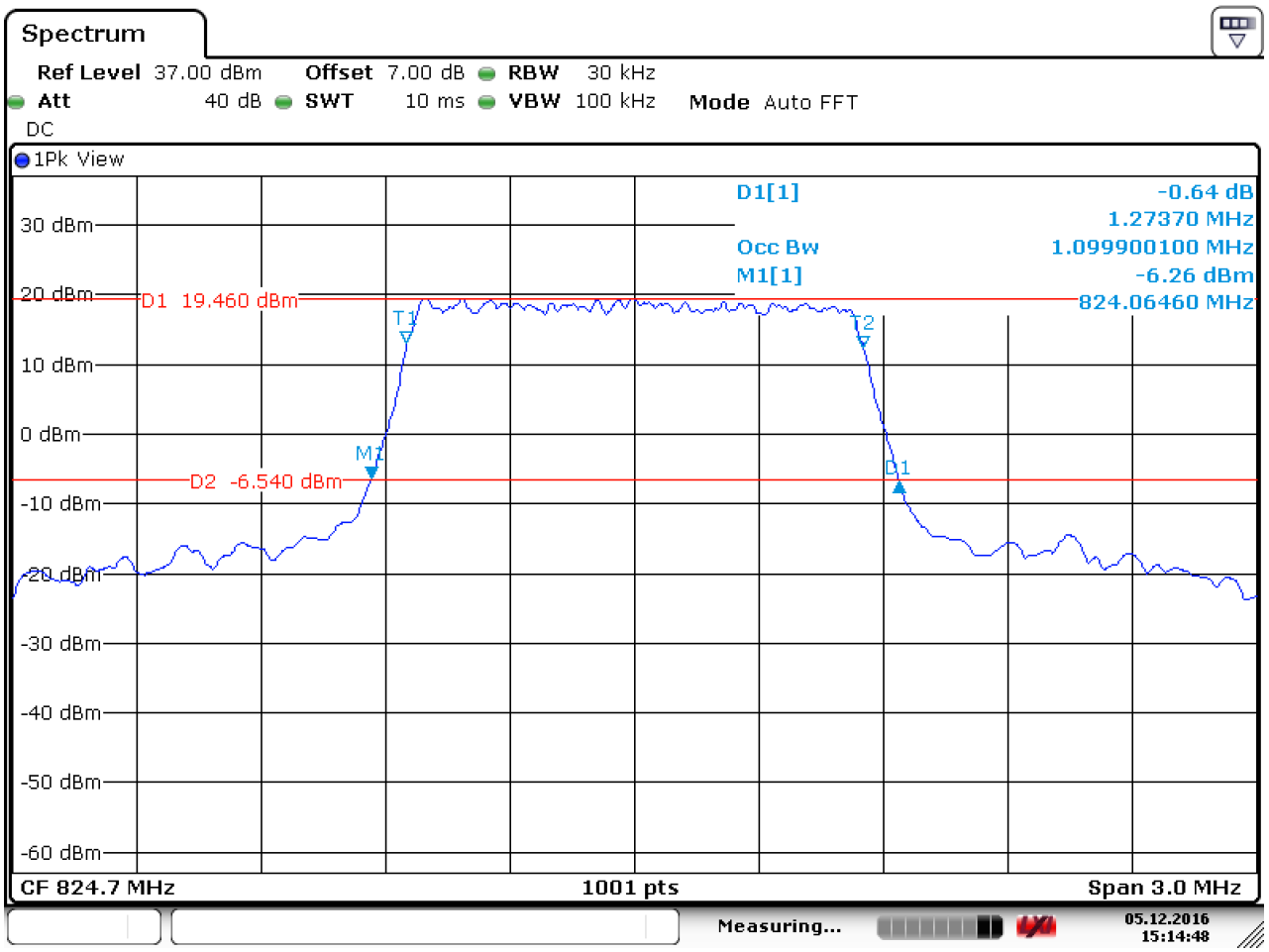
Part Ⅱ –Test Plots

4.1 For LTE

4.1.1 Test Band = LTE band5

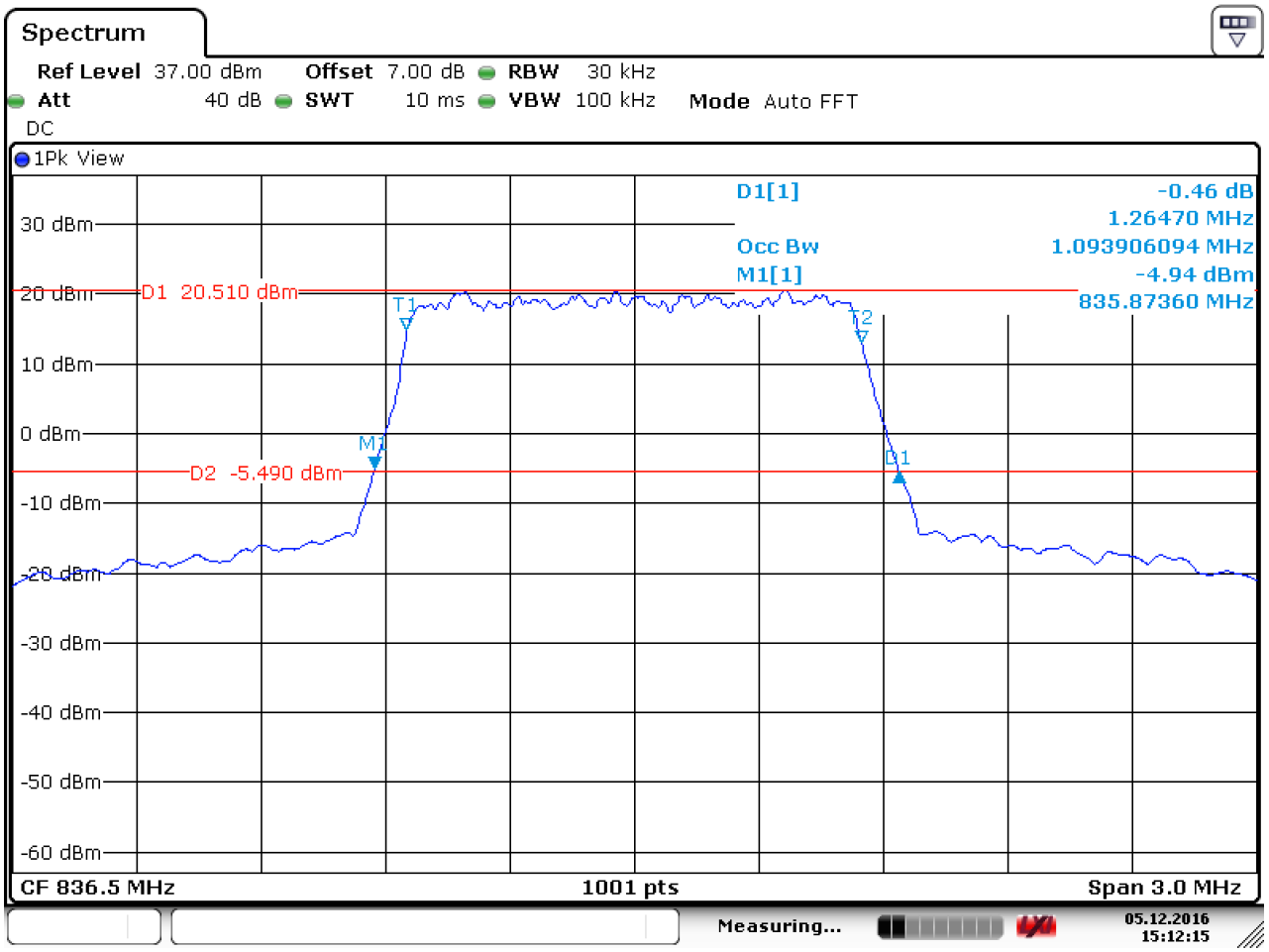
4.1.1.1 Test Mode = LTE/TM1 1.4MHz

4.1.1.1.1 Test Channel = LCH



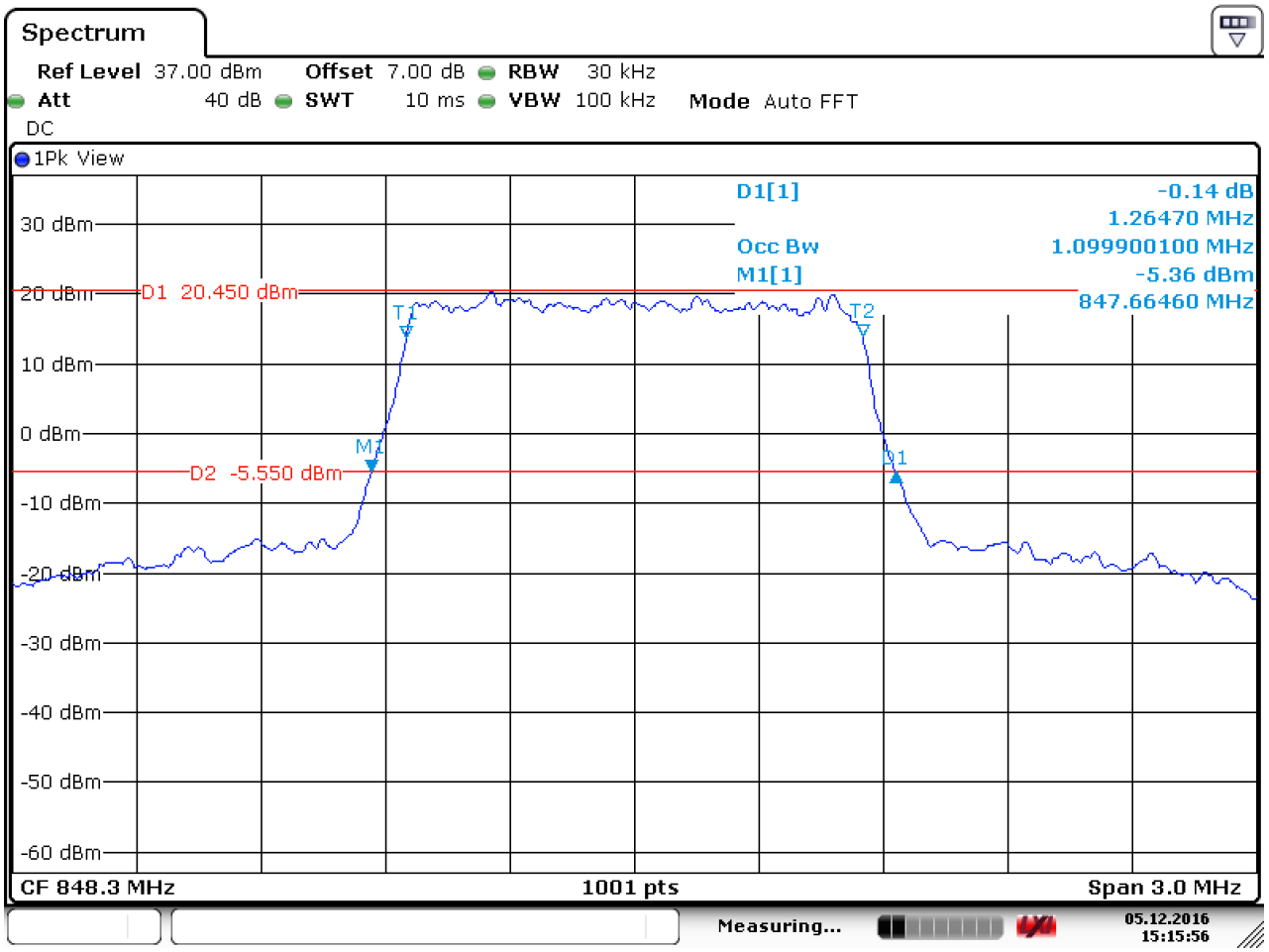
Date: 5.DEC.2016 15:14:48

4.1.1.1.2 Test Channel = MCH



Date: 5.DEC.2016 15:12:16

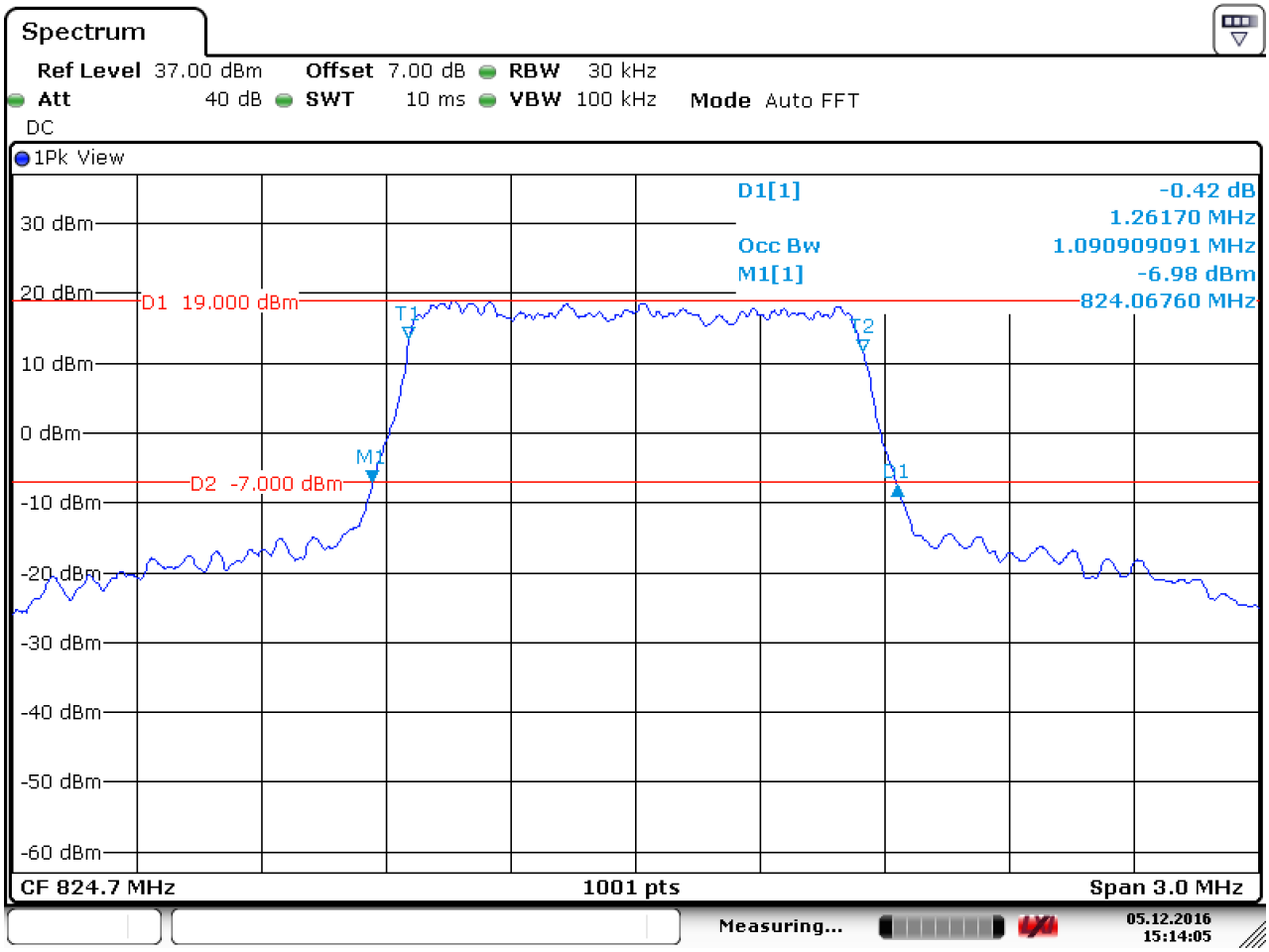
4.1.1.1.3 Test Channel = HCH



Date: 5.DEC.2016 15:15:56

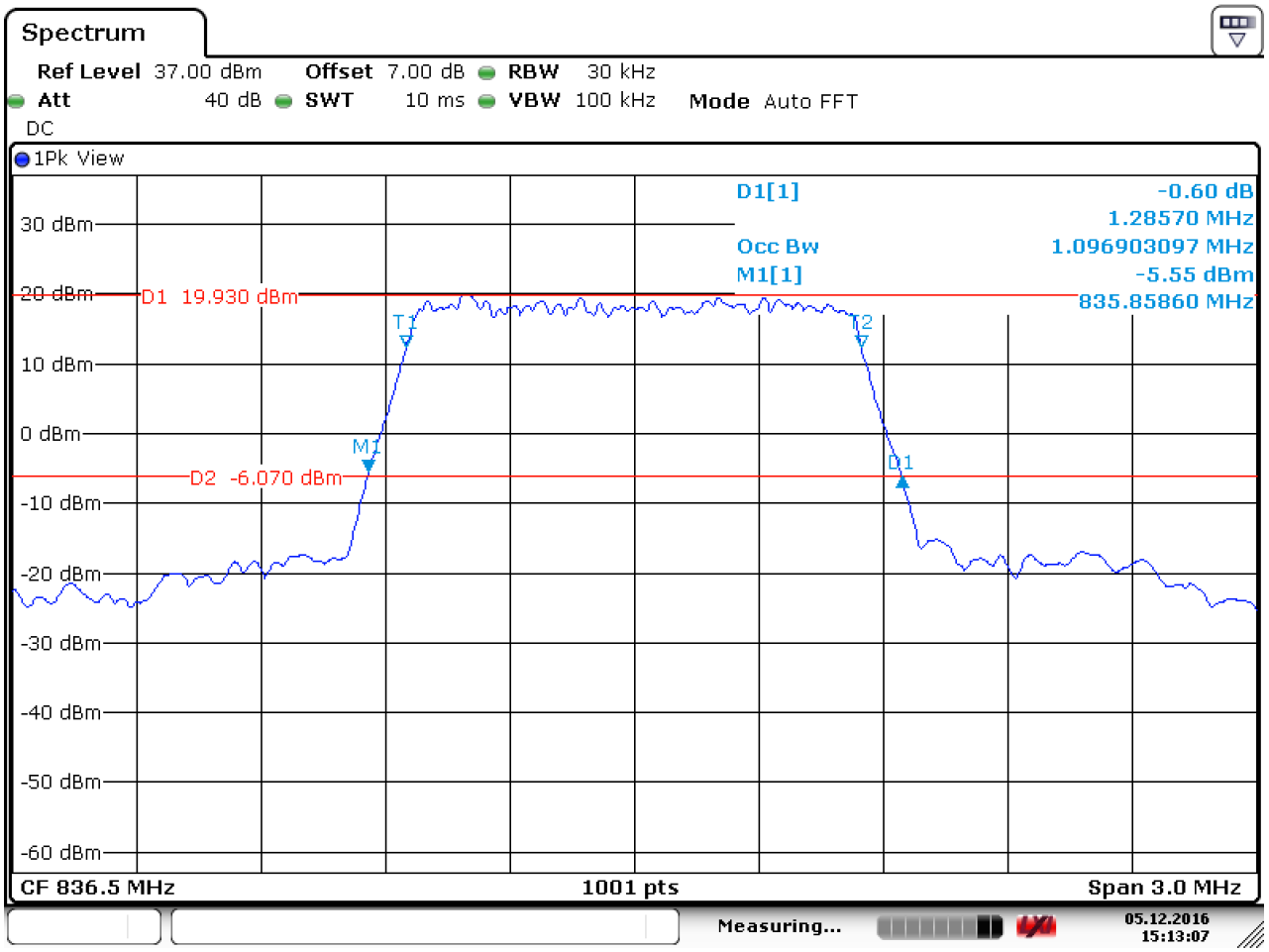
4.1.1.2 Test Mode = LTE/TM2 1.4MHz

4.1.1.2.1 Test Channel = LCH



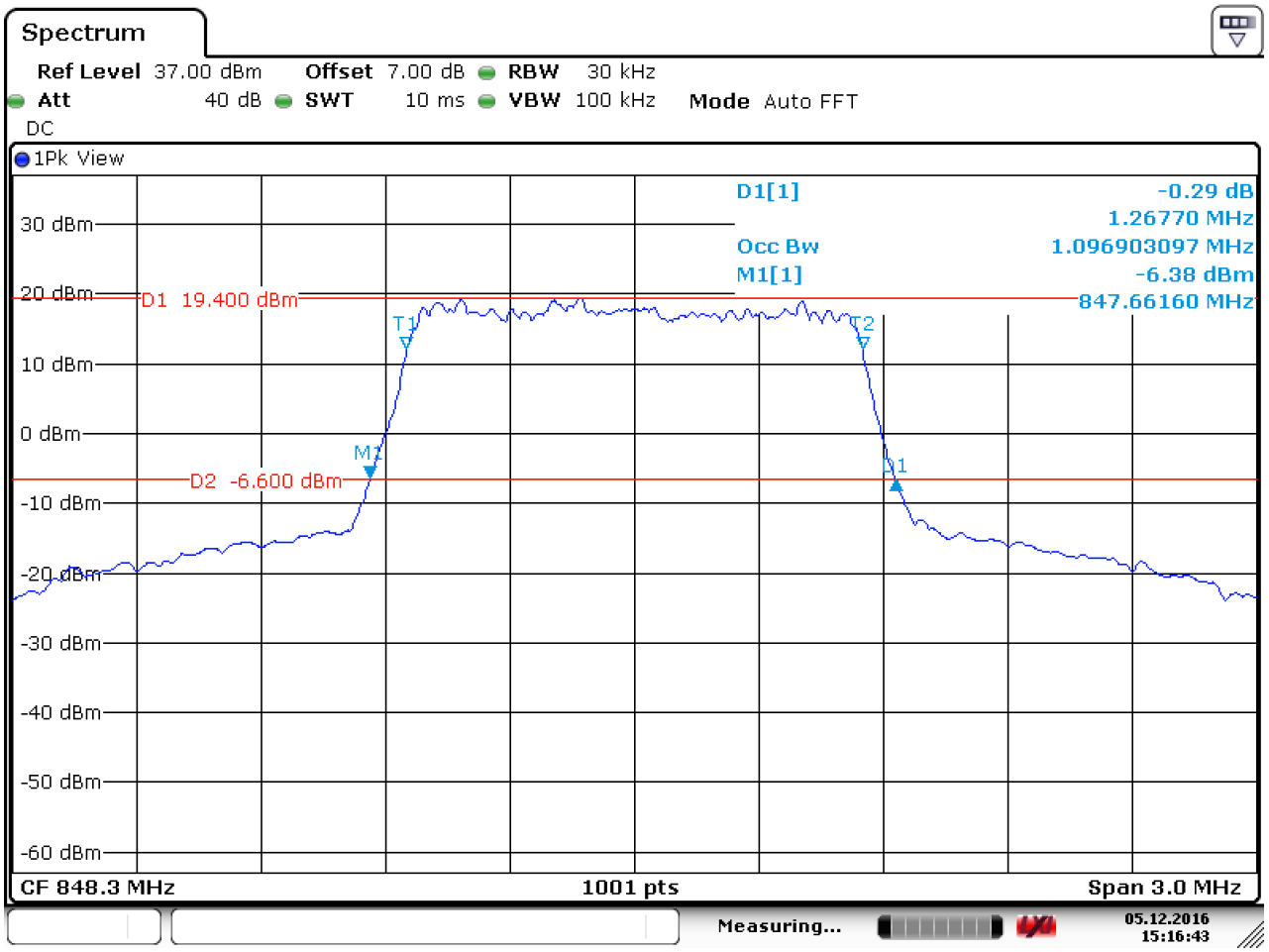
Date: 5.DEC.2016 15:14:05

4.1.1.2.2 Test Channel = MCH



Date: 5.DEC.2016 15:13:07

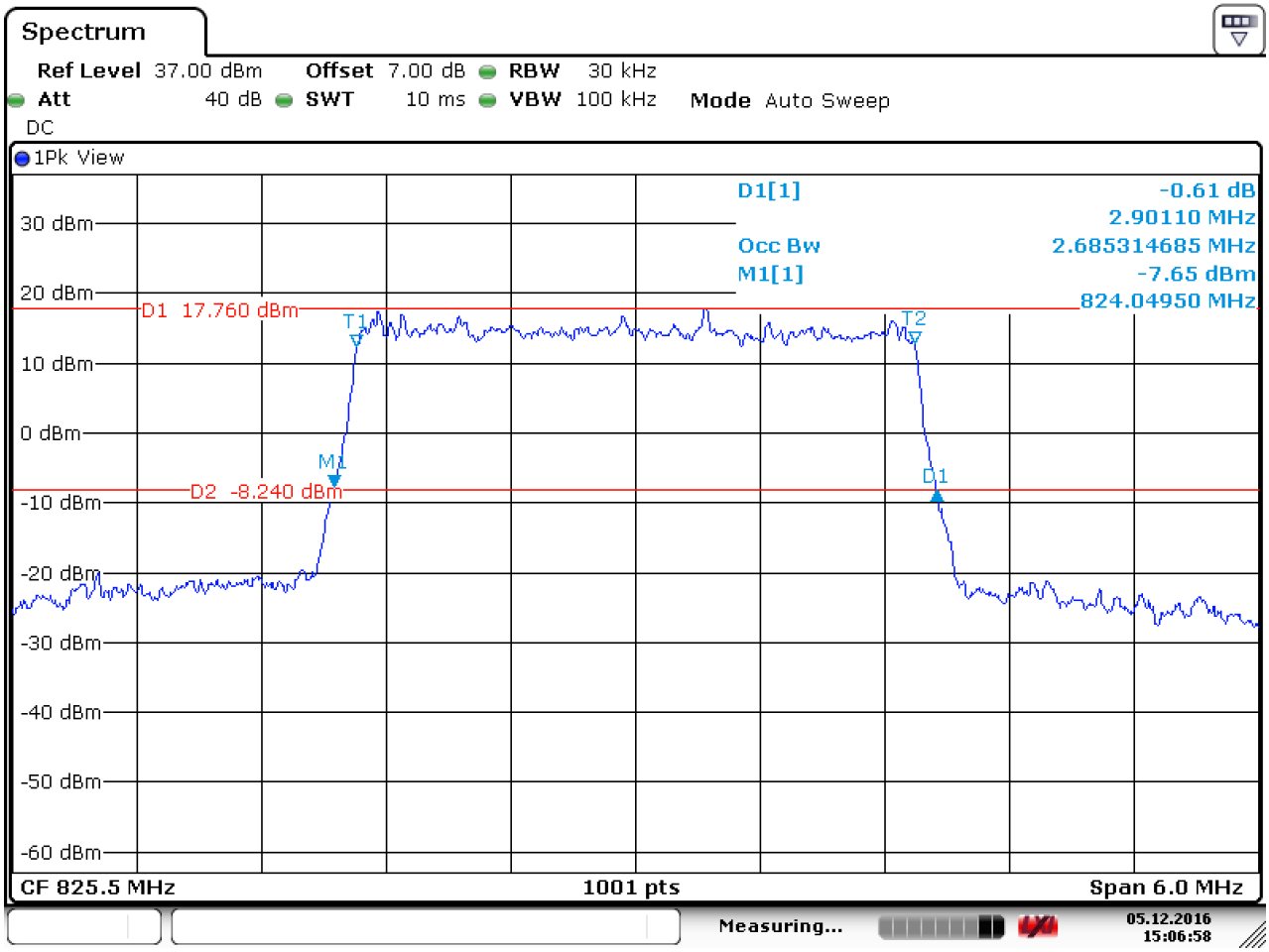
4.1.1.2.3 Test Channel = HCH



Date: 5.DEC.2016 15:16:44

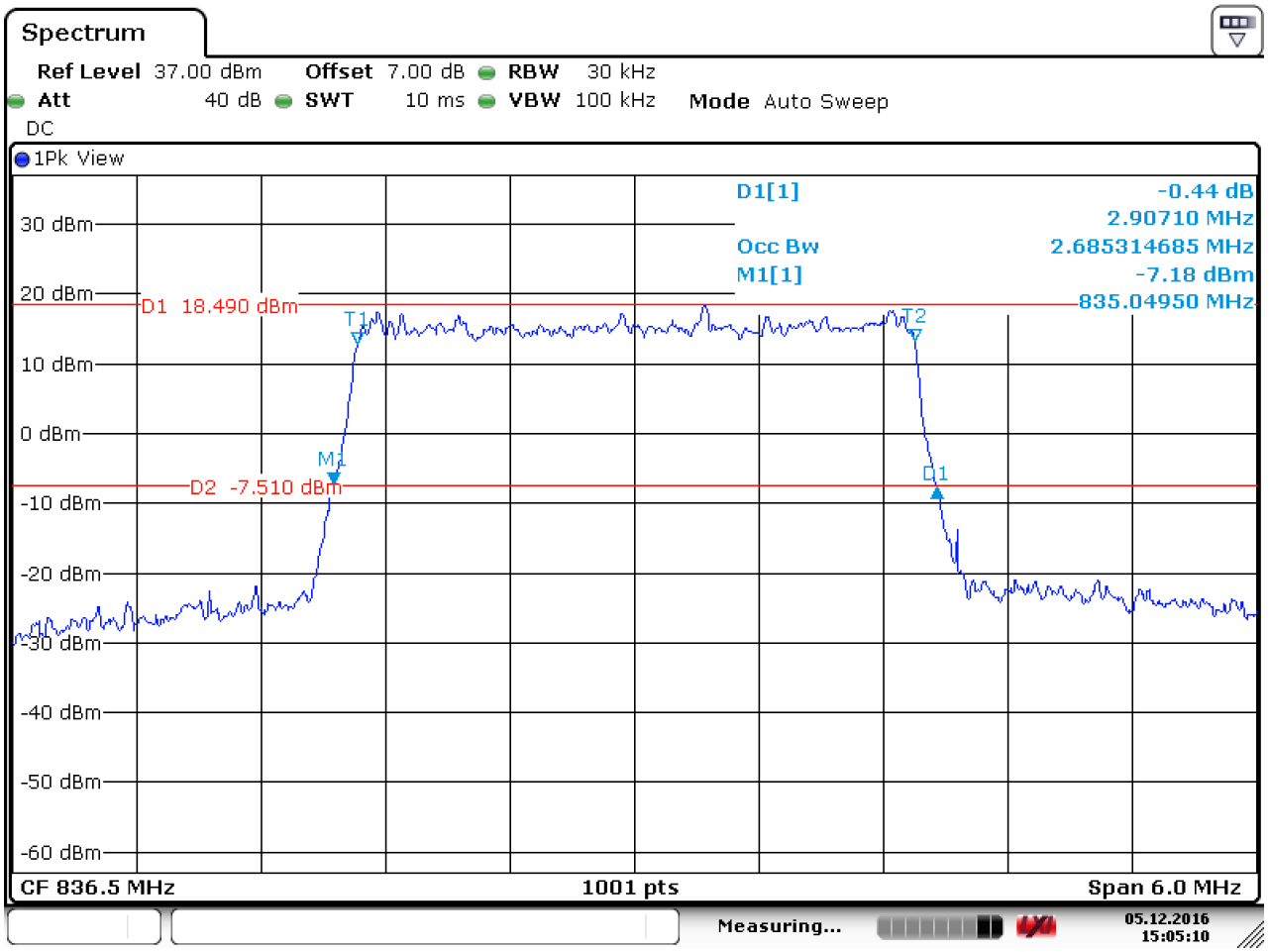
4.1.1.3 Test Mode = LTE/TM1 3MHz

4.1.1.3.1 Test Channel = LCH



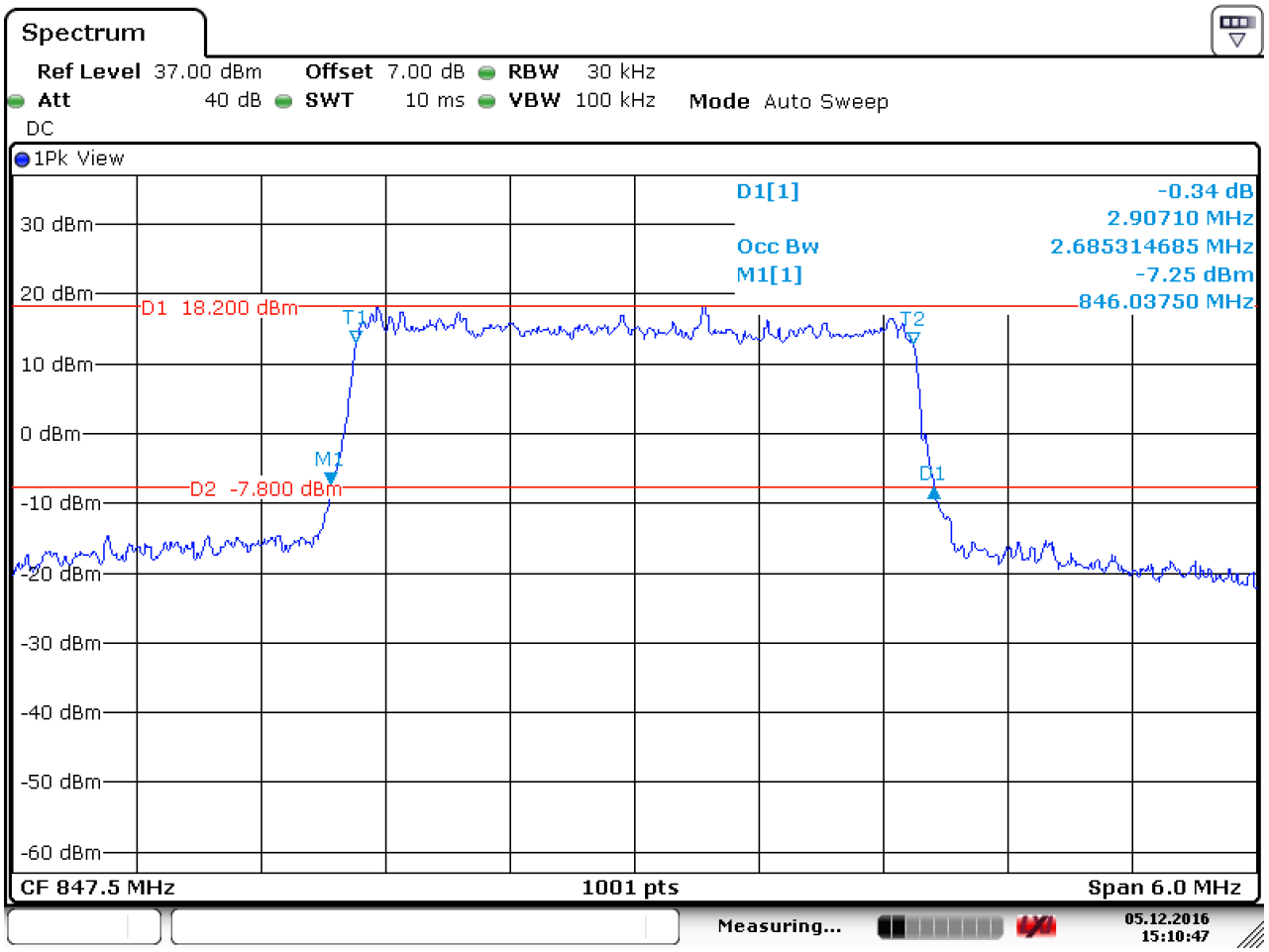
Date: 5.DEC.2016 15:06:58

4.1.1.3.2 Test Channel = MCH



Date: 5.DEC.2016 15:05:10

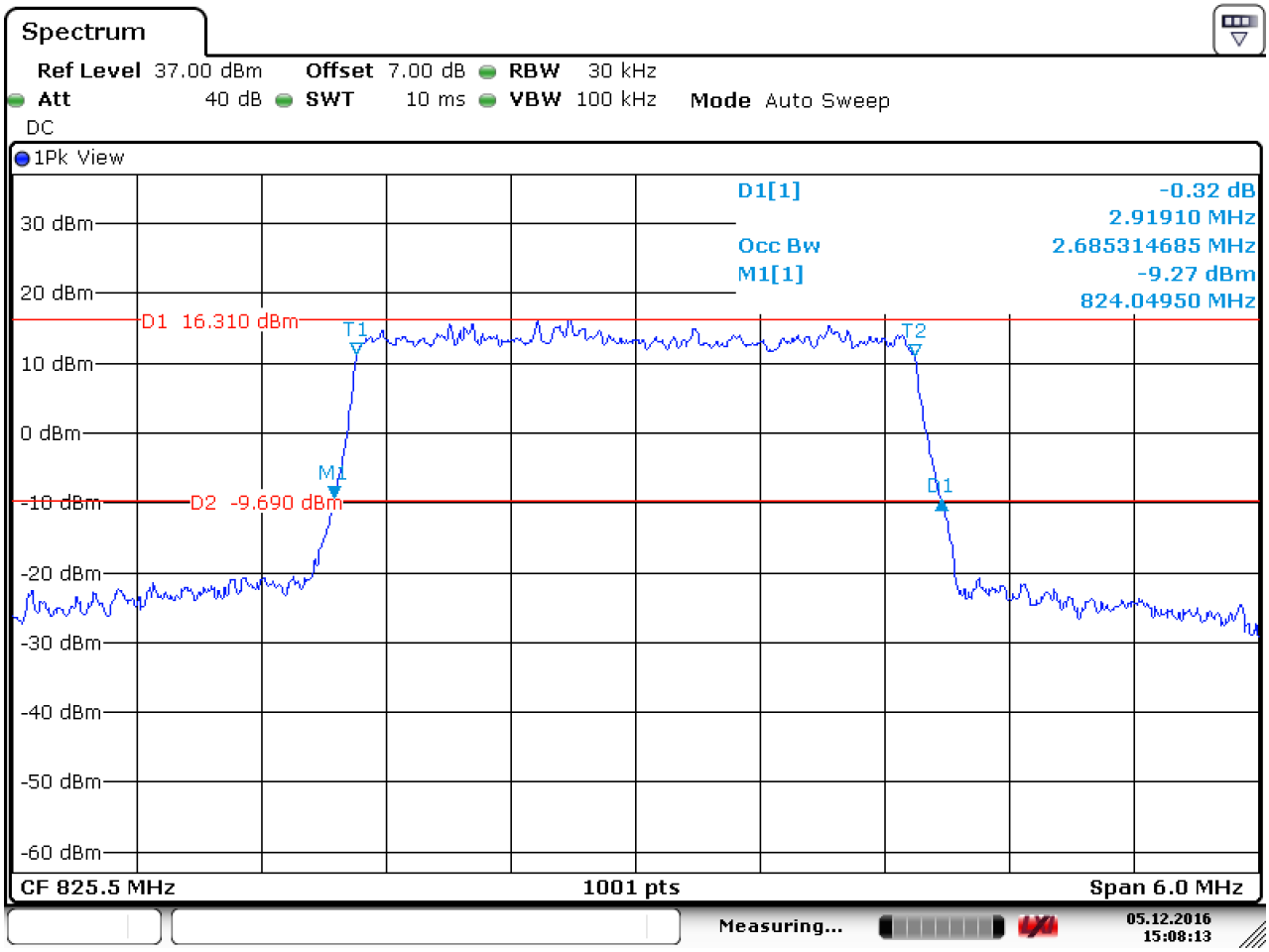
4.1.1.3.3 Test Channel = HCH



Date: 5.DEC.2016 15:10:47

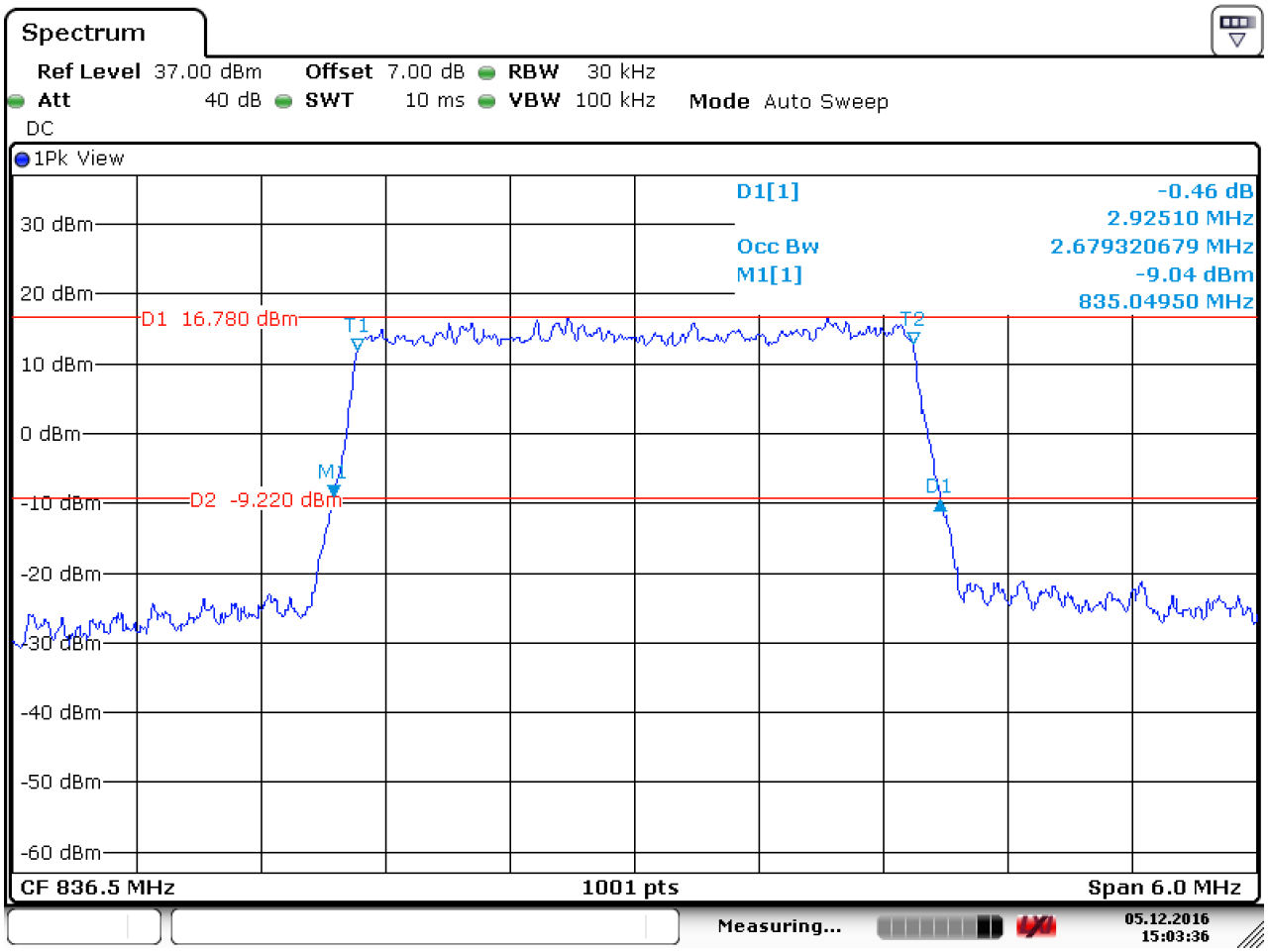
4.1.1.4 Test Mode = LTE/TM2 3MHz

4.1.1.4.1 Test Channel = LCH



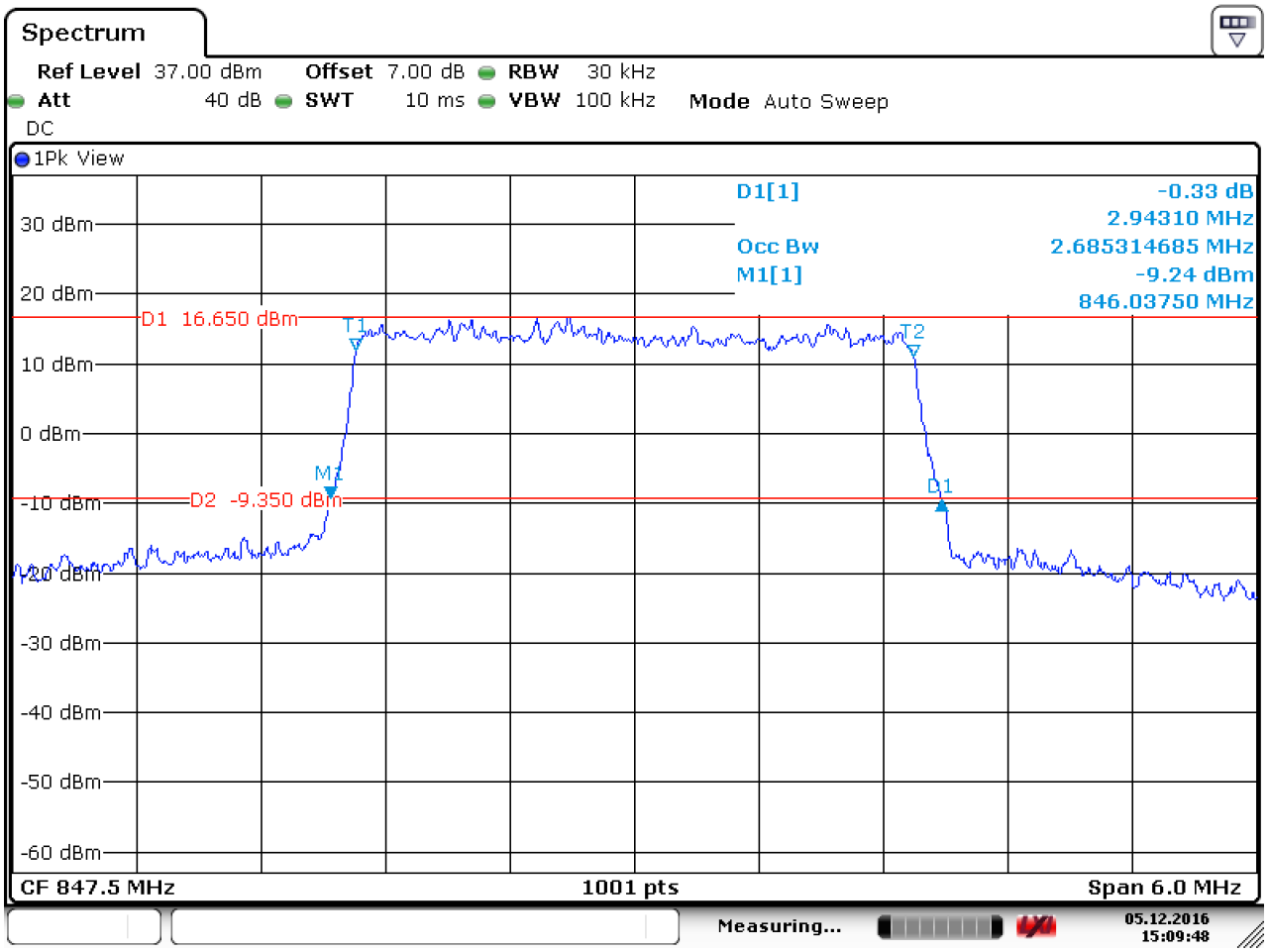
Date: 5.DEC.2016 15:08:13

4.1.1.4.2 Test Channel = MCH



Date: 5.DEC.2016 15:03:36

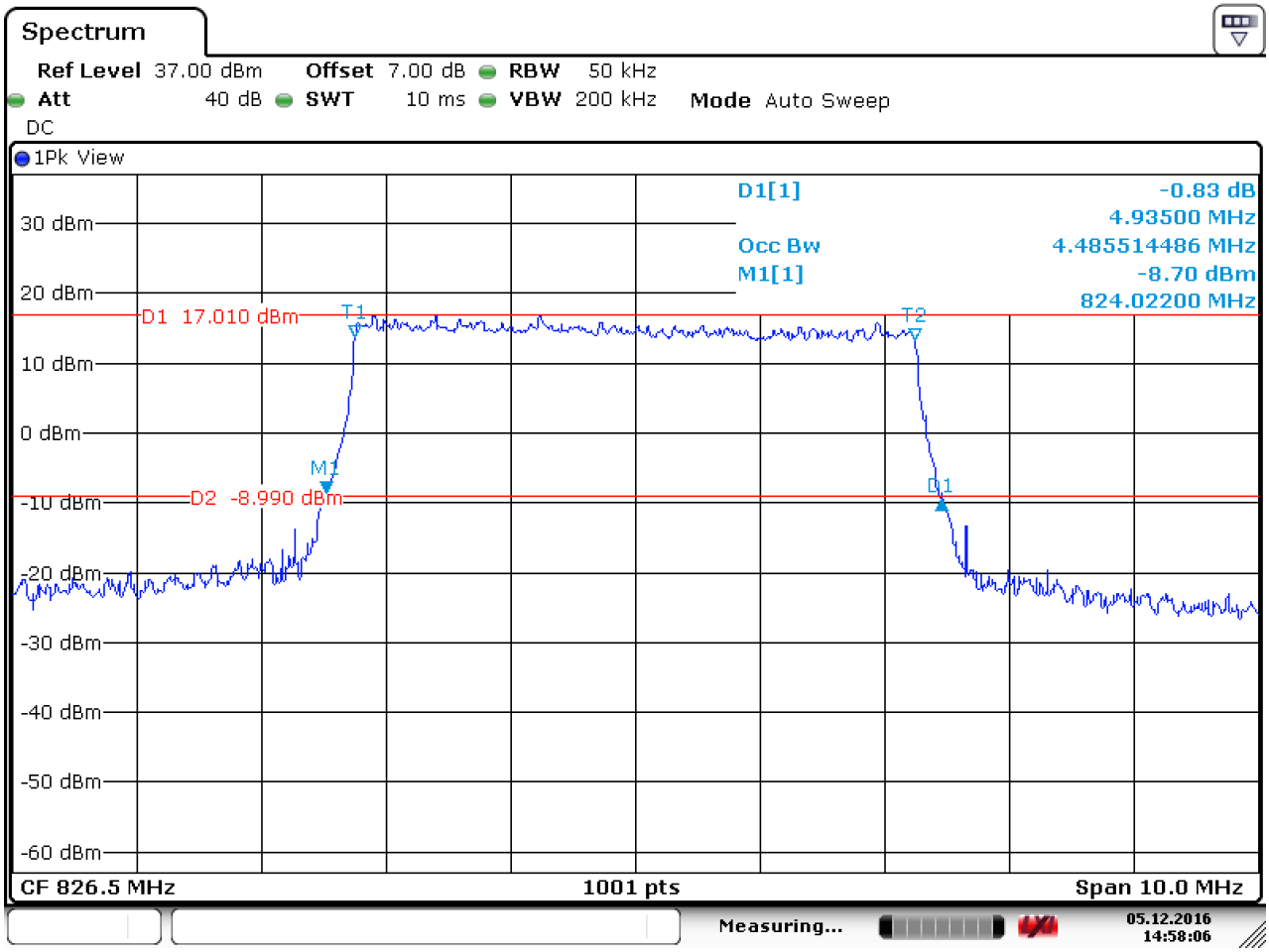
4.1.1.4.3 Test Channel = HCH



Date: 5.DEC.2016 15:09:48

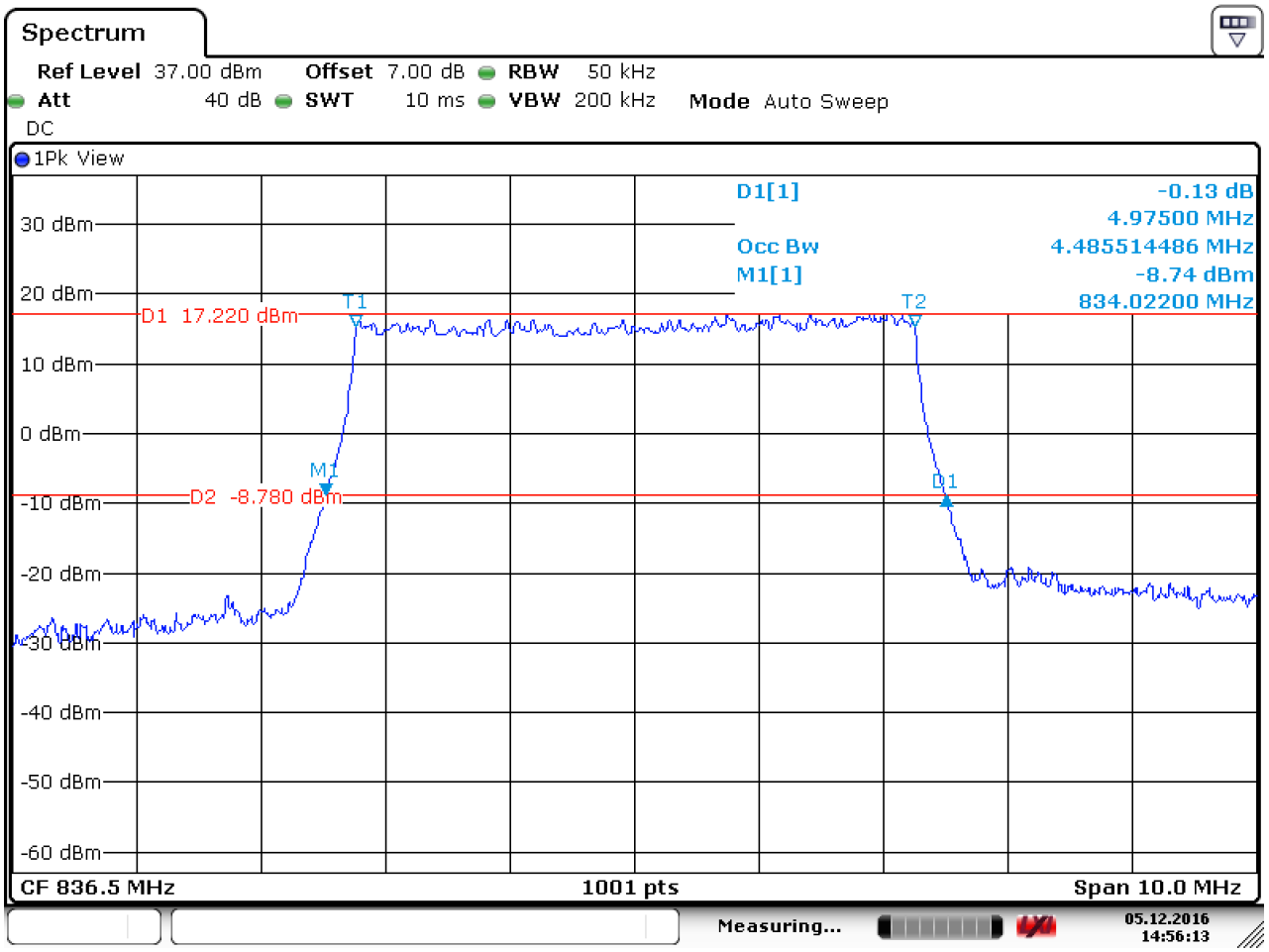
4.1.1.5 Test Mode = LTE/TM1 5MHz

4.1.1.5.1 Test Channel = LCH



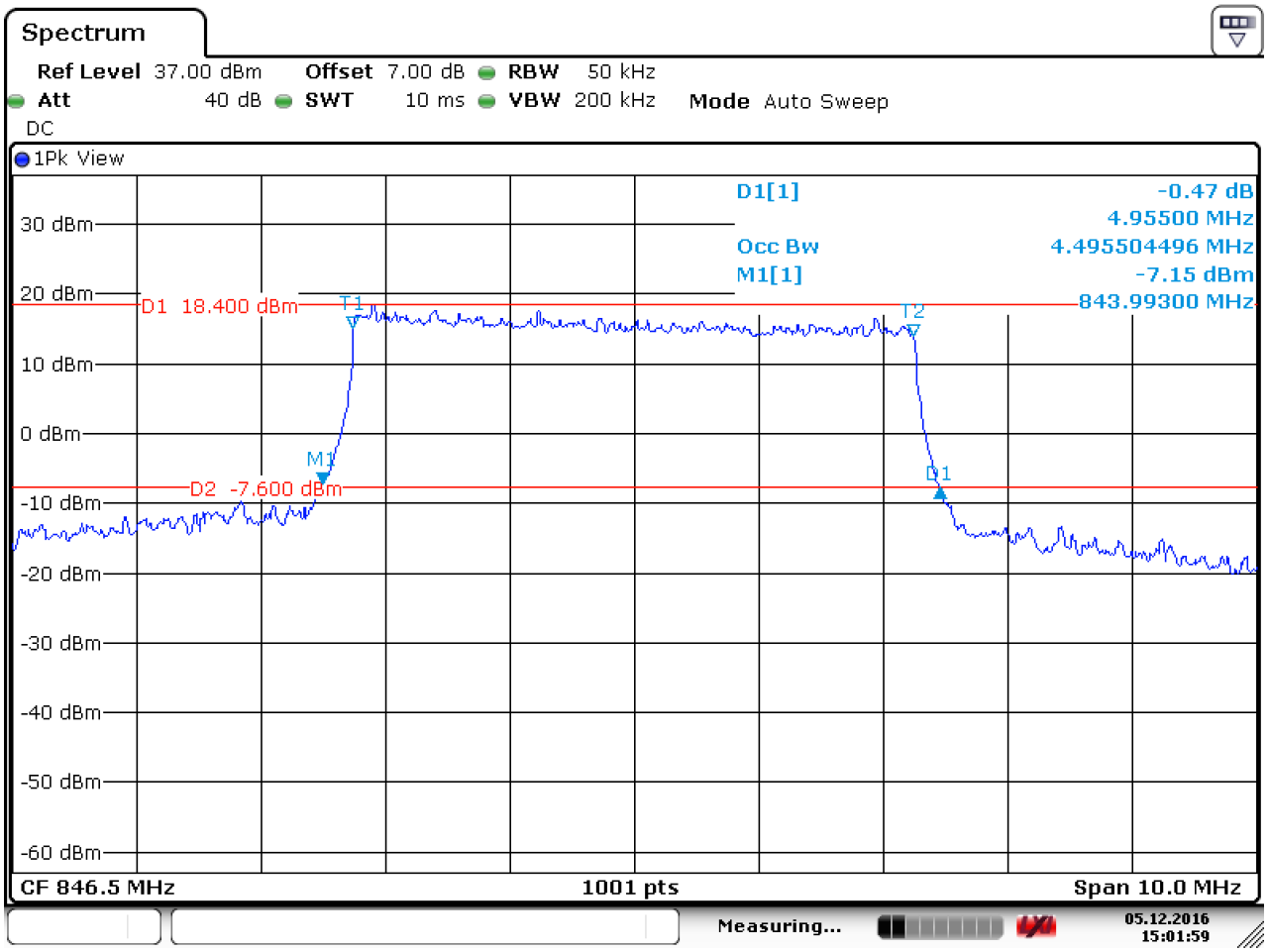
Date: 5.DEC.2016 14:58:06

4.1.1.5.2 Test Channel = MCH



Date: 5.DEC.2016 14:56:13

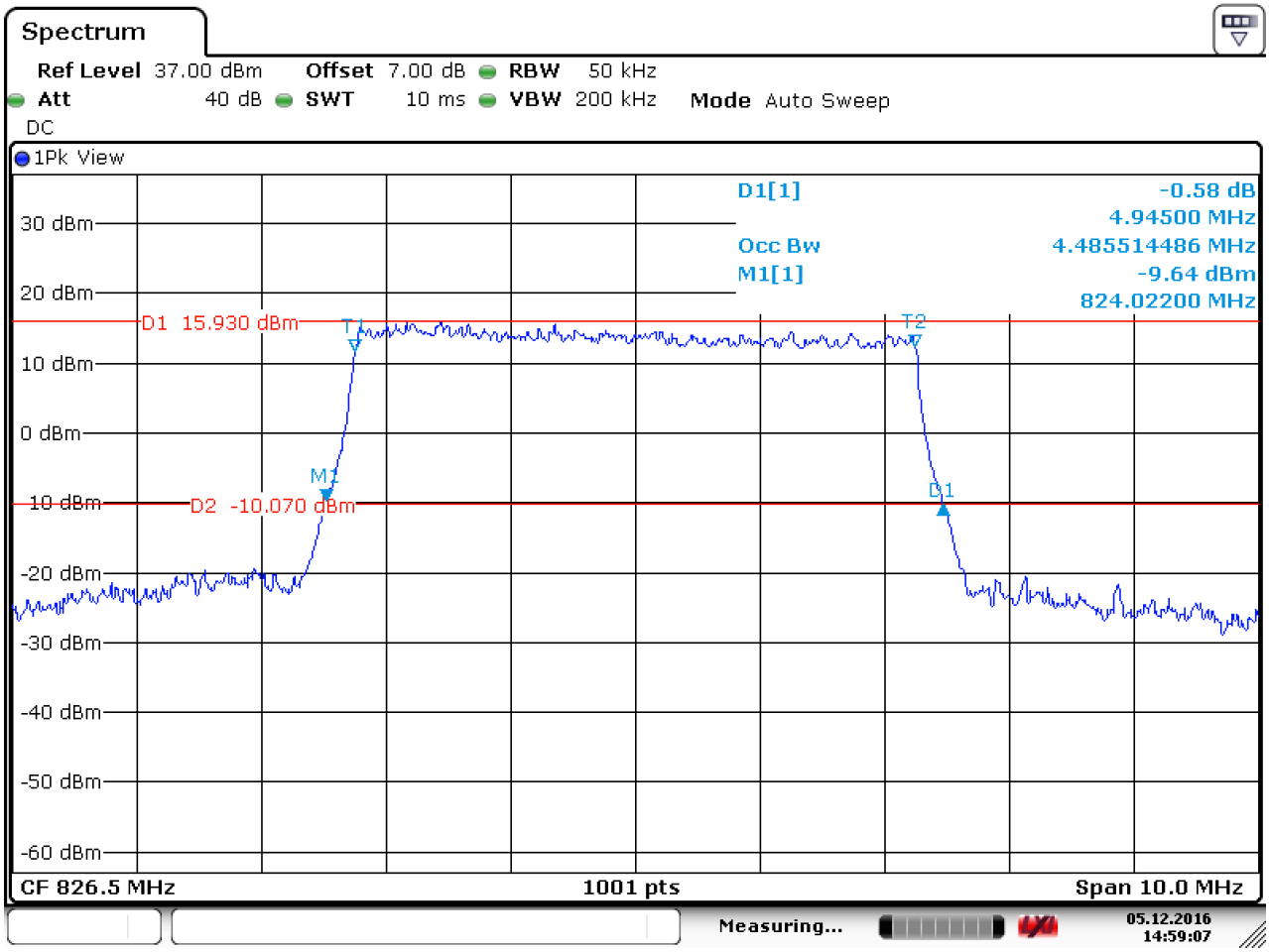
4.1.1.5.3 Test Channel = HCH



Date: 5.DEC.2016 15:01:59

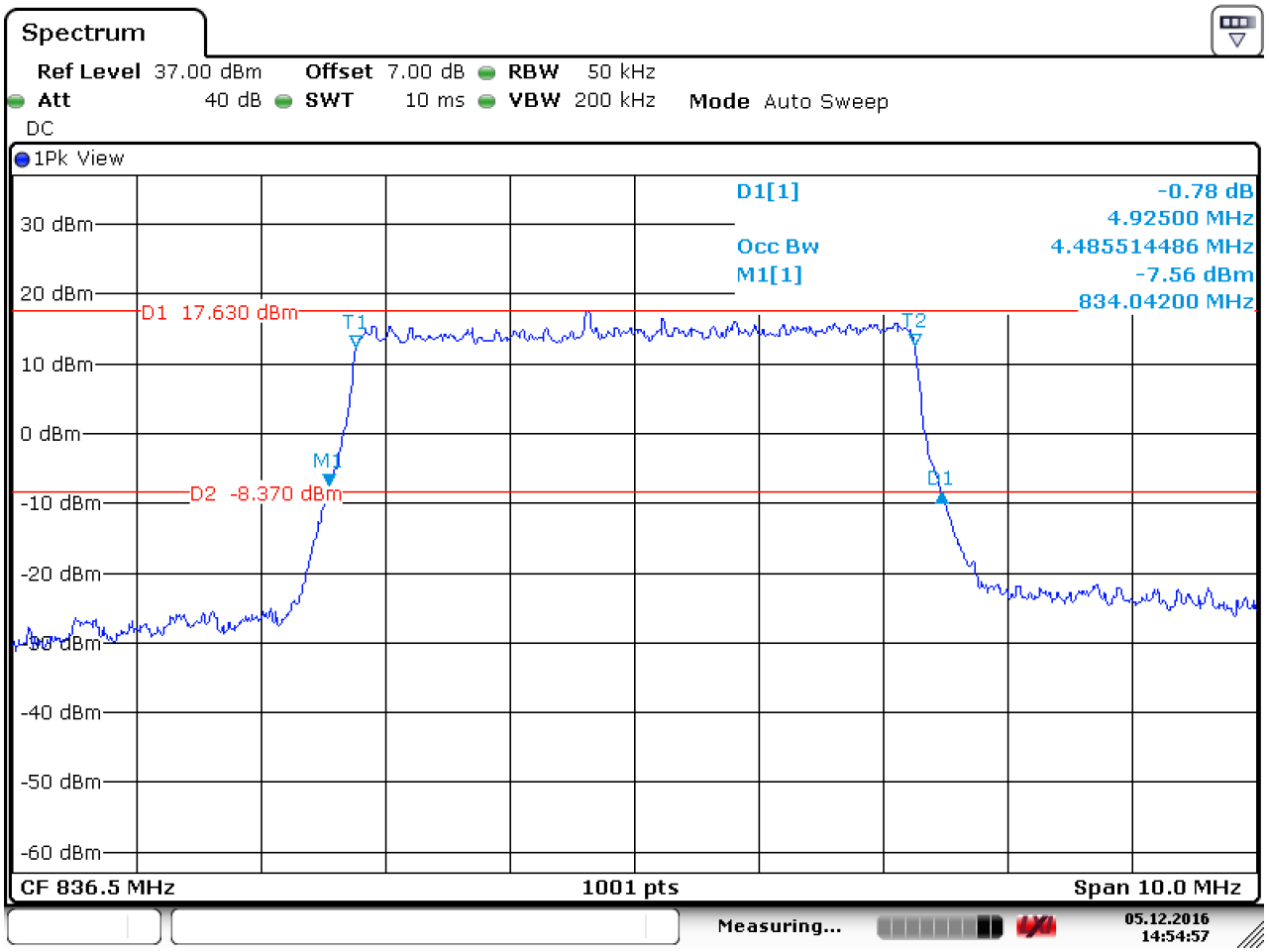
4.1.1.6 Test Mode = LTE/TM2 5MHz

4.1.1.6.1 Test Channel = LCH



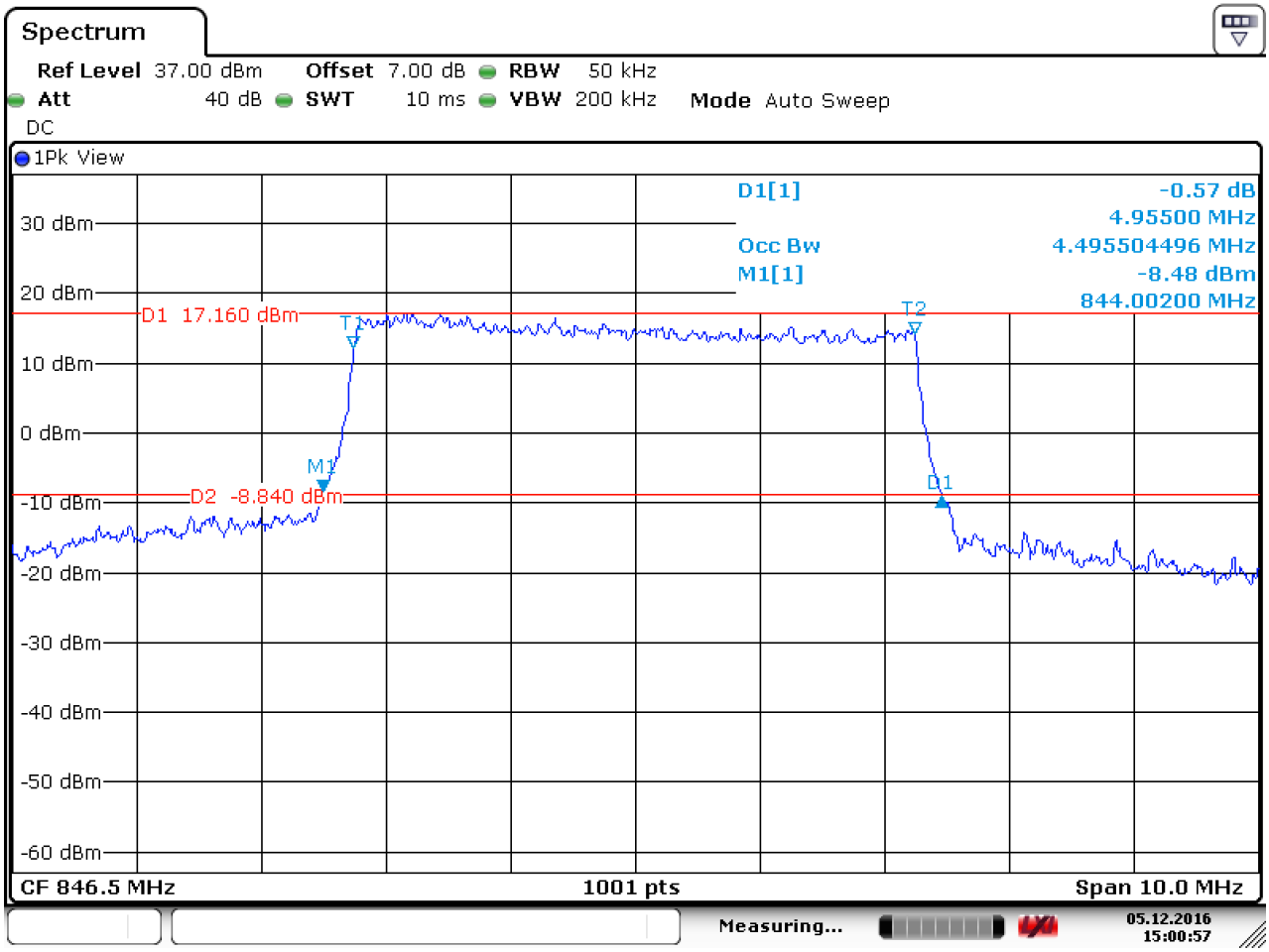
Date: 5.DEC.2016 14:59:08

4.1.1.6.2 Test Channel = MCH



Date: 5.DEC.2016 14:54:57

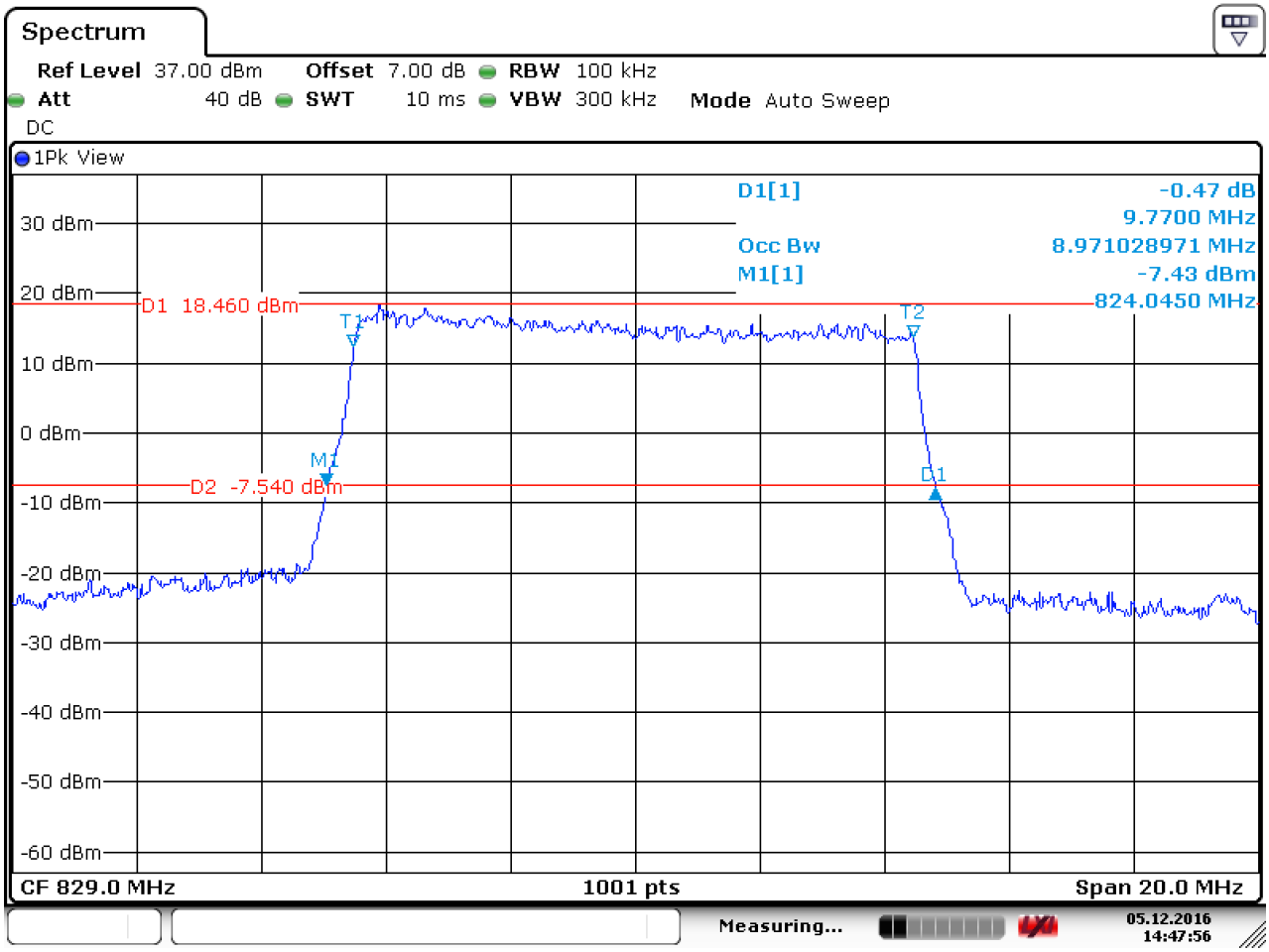
4.1.1.6.3 Test Channel = HCH



Date: 5.DEC.2016 15:00:58

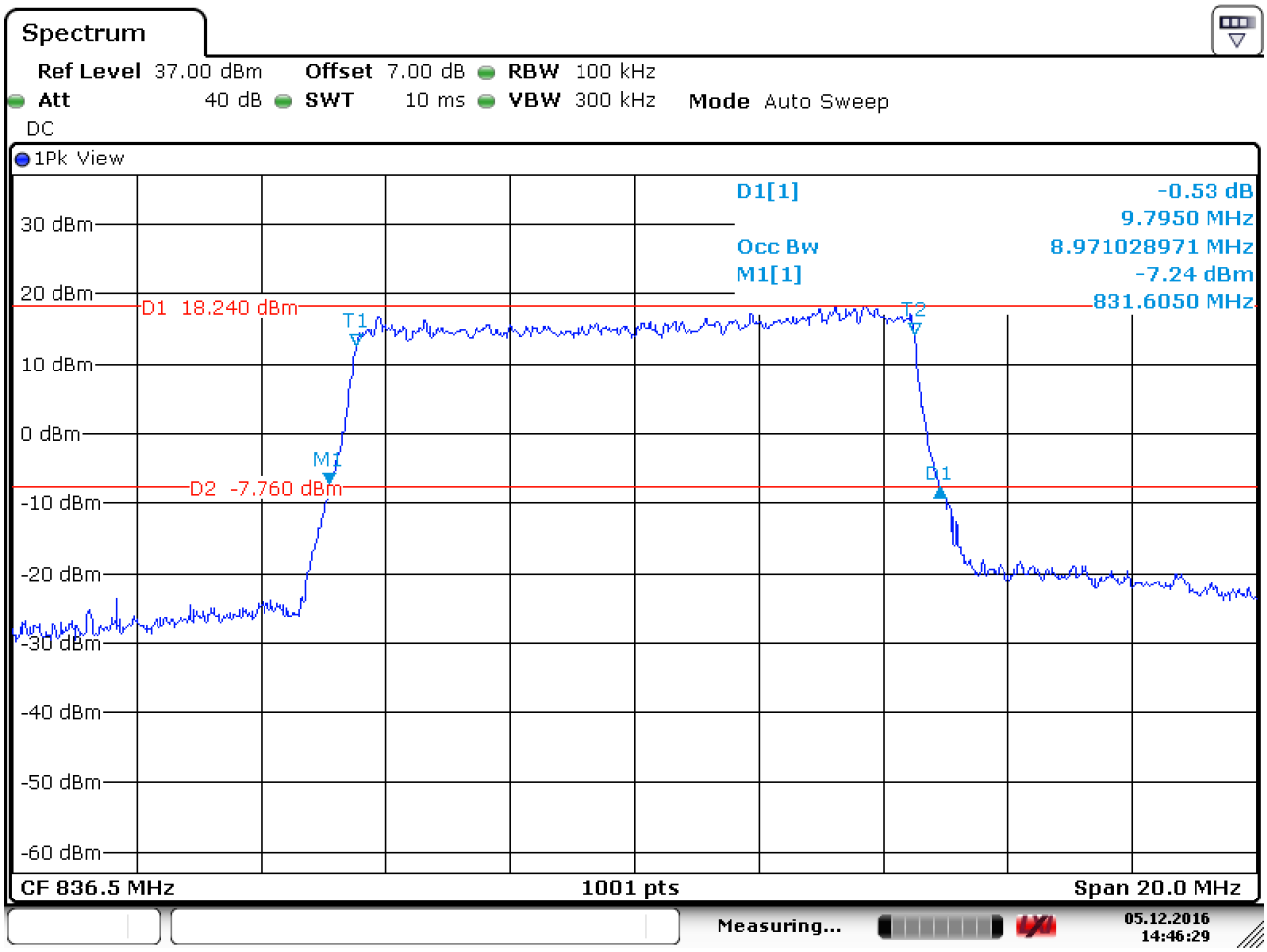
4.1.1.7 Test Mode = LTE/TM1 10MHz

4.1.1.7.1 Test Channel = LCH



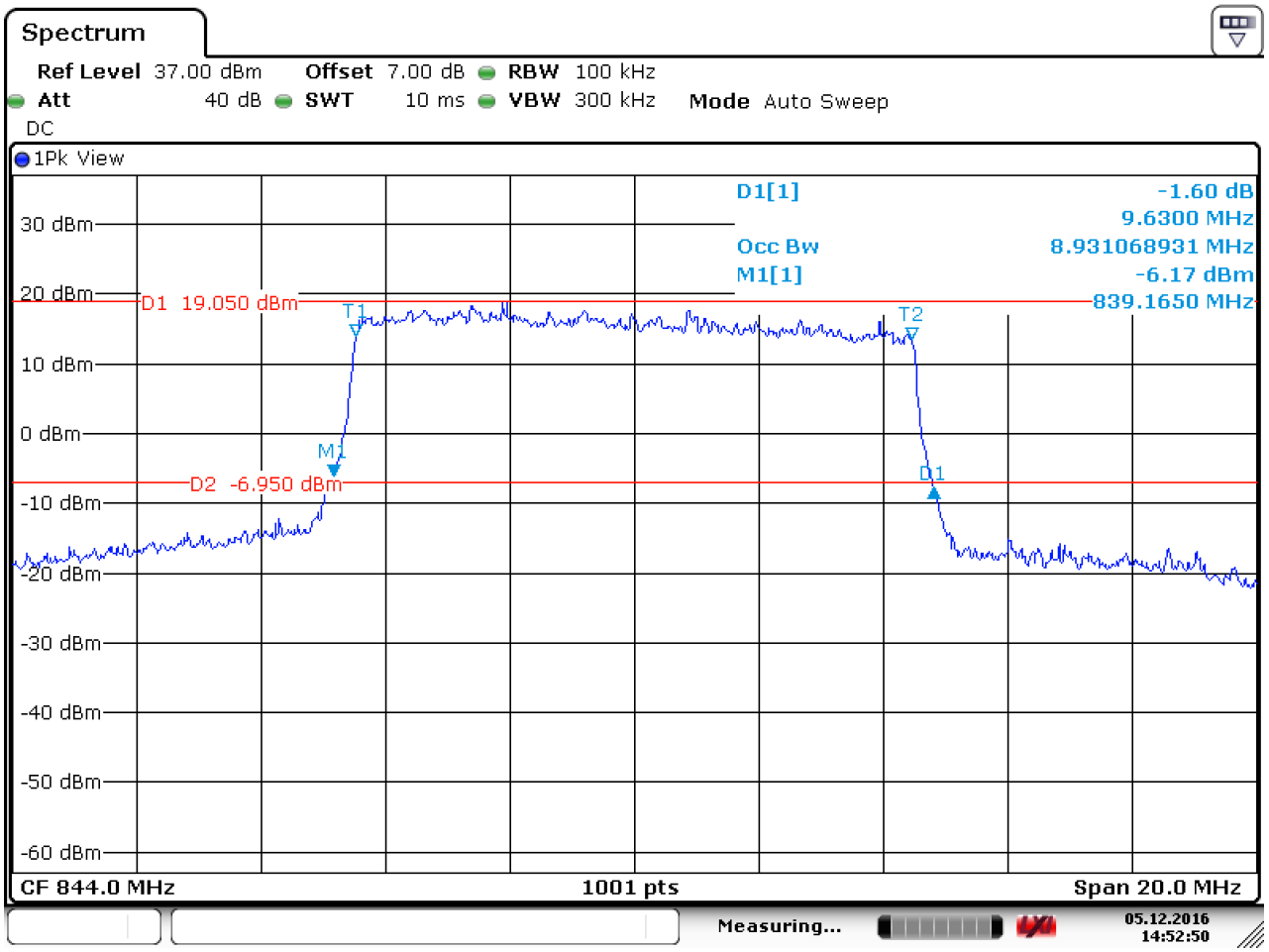
Date: 5.DEC.2016 14:47:56

4.1.1.7.2 Test Channel = MCH



Date: 5.DEC.2016 14:46:29

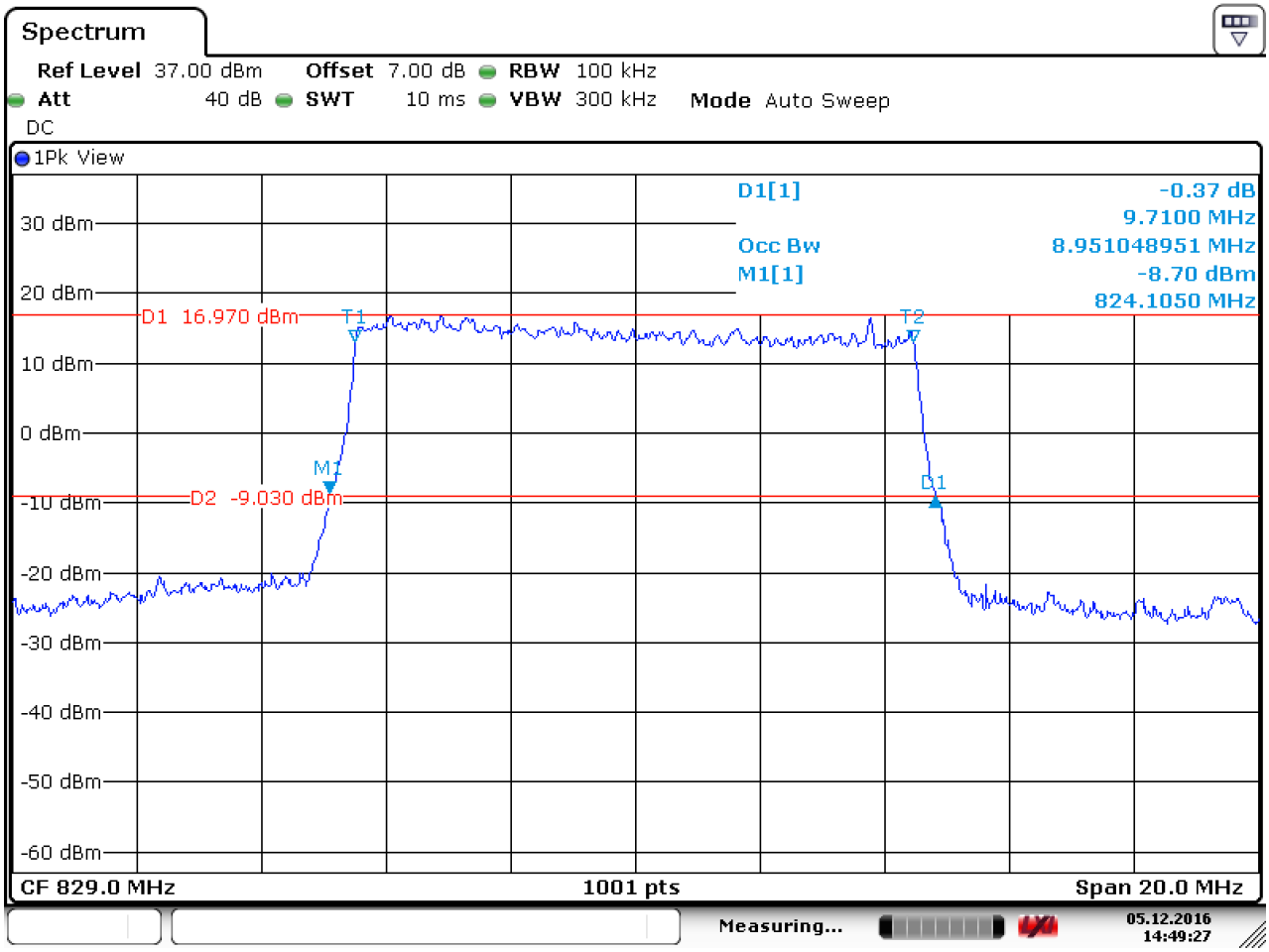
4.1.1.7.3 Test Channel = HCH



Date: 5.DEC.2016 14:52:50

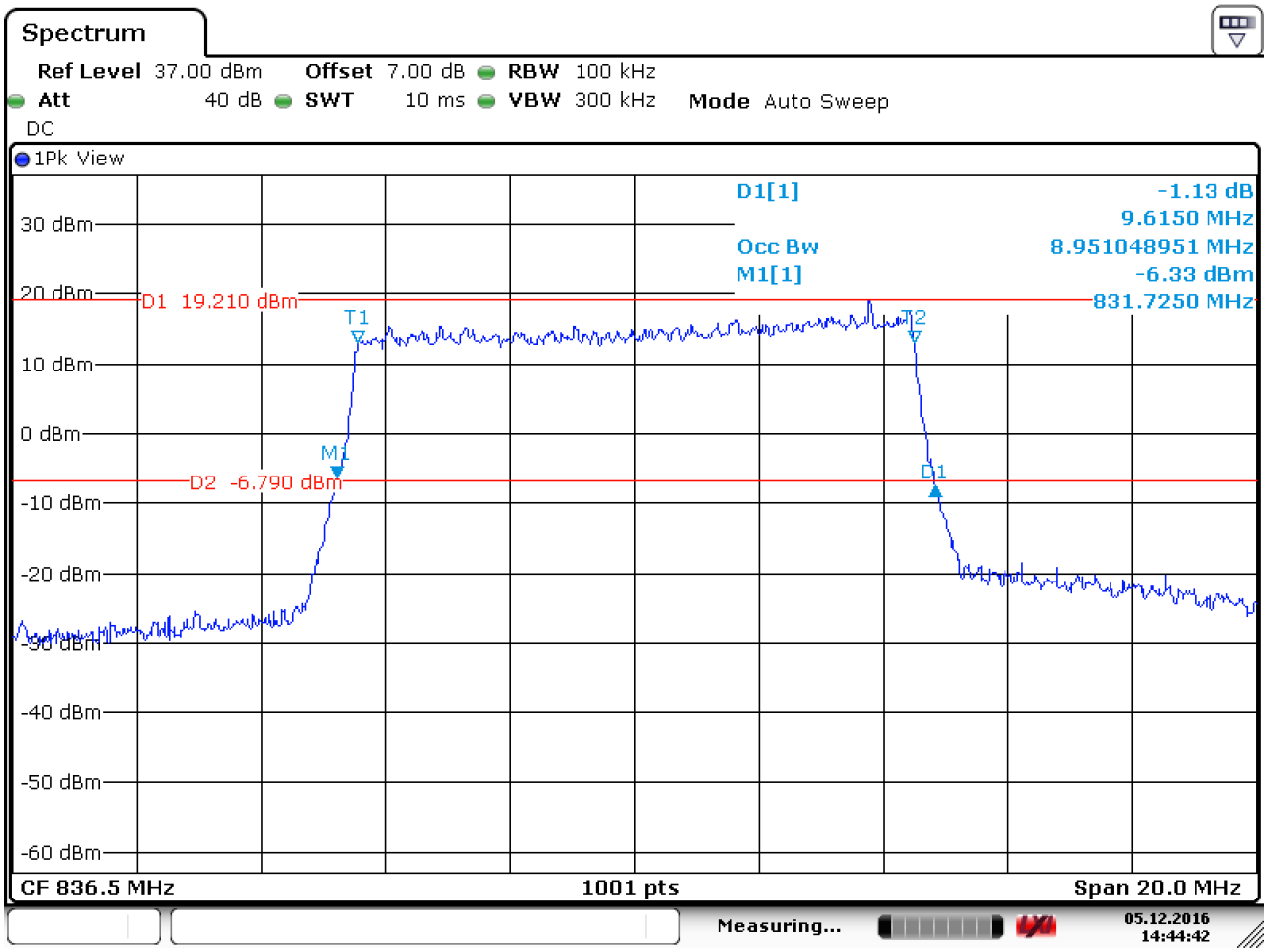
4.1.1.8 Test Mode = LTE/TM2 10MHz

4.1.1.8.1 Test Channel = LCH



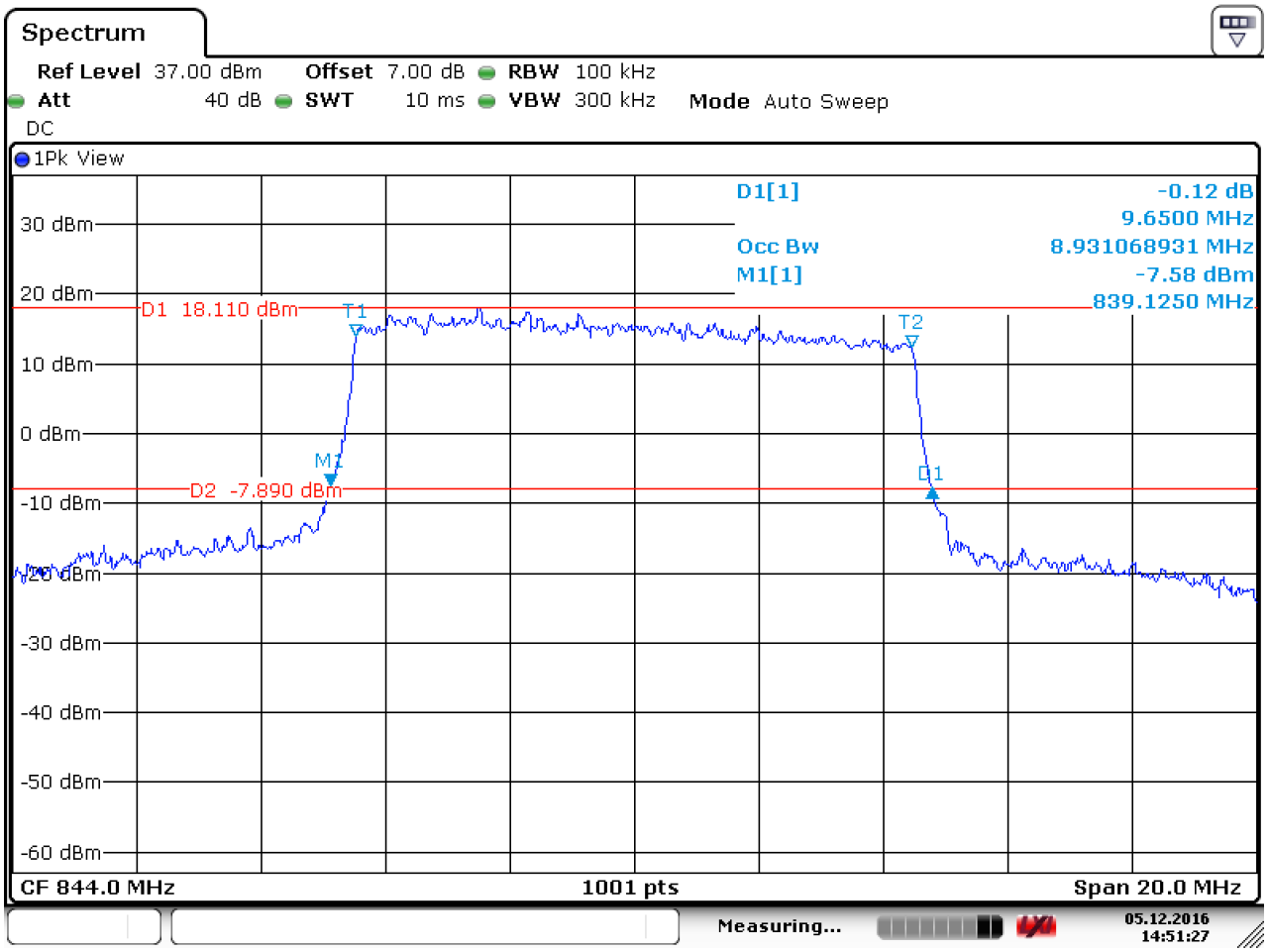
Date: 5.DEC.2016 14:49:27

4.1.1.8.2 Test Channel = MCH



Date: 5.DEC.2016 14:44:42

4.1.1.8.3 Test Channel = HCH



Date: 5.DEC.2016 14:51:28

5 Band Edges Compliance

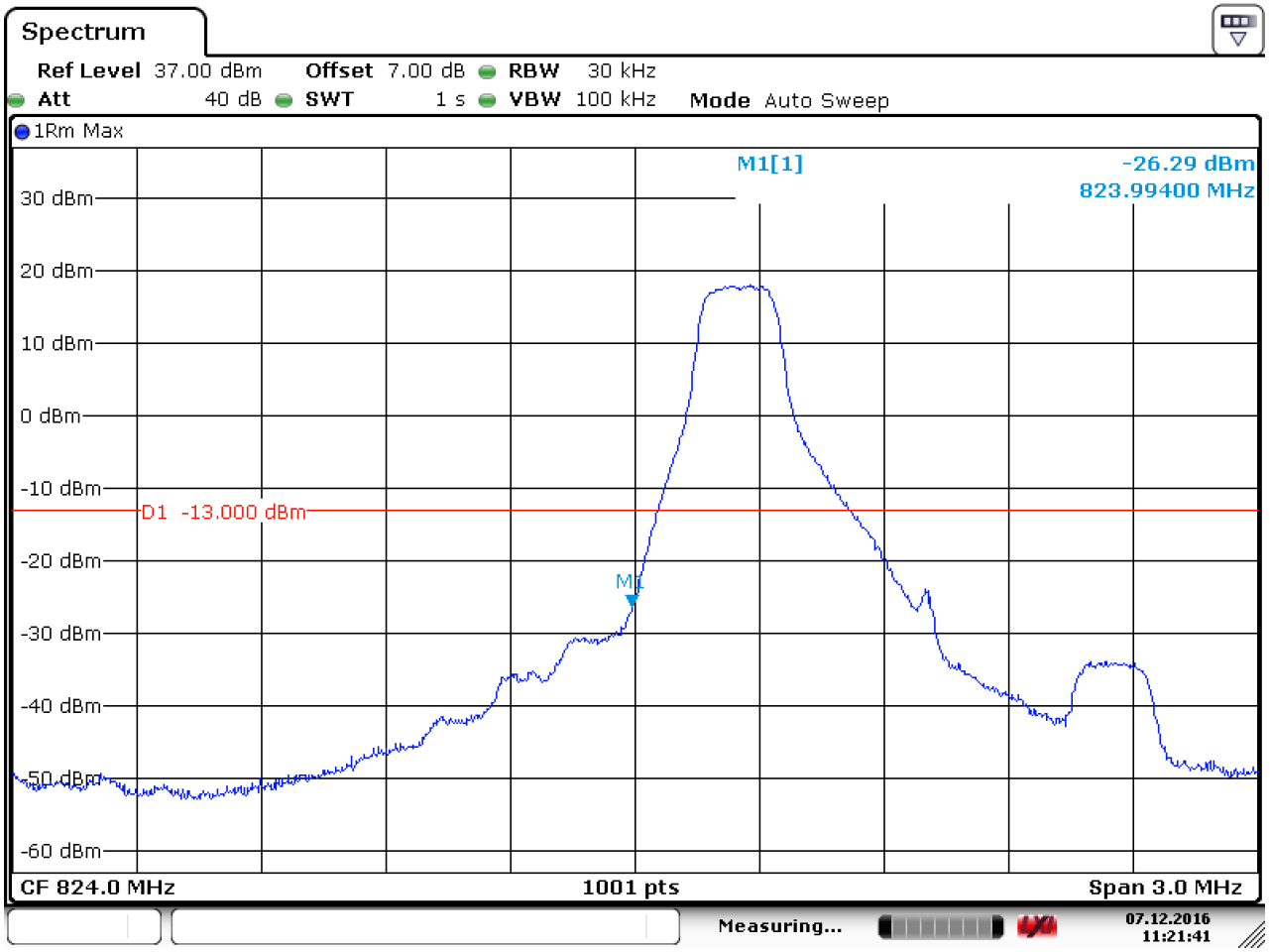
5.1 For LTE

5.1.1 Test Band = LTE band5

5.1.1.1 Test Mode = LTE/TM1 1.4MHz

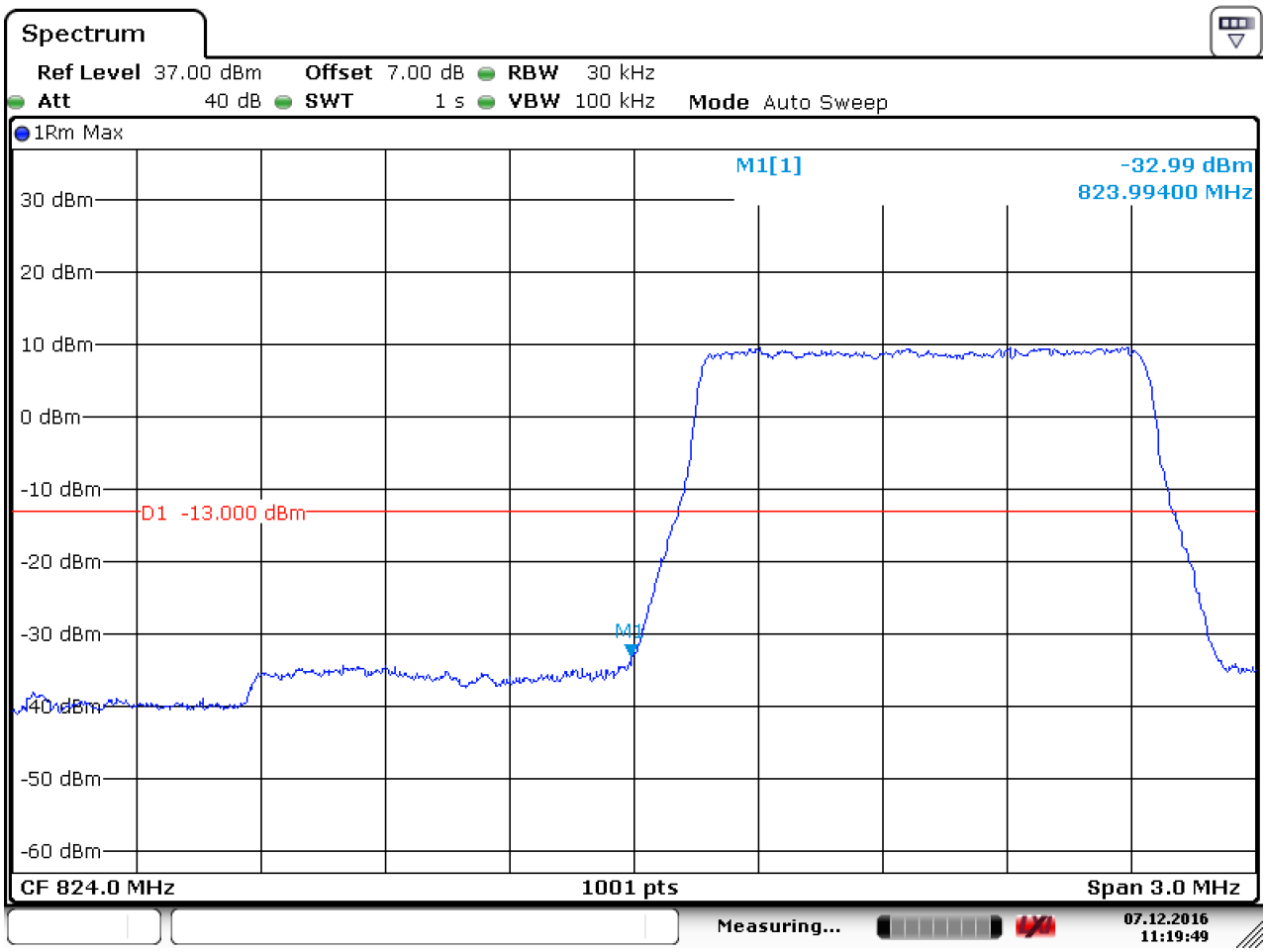
5.1.1.1.1 Test Channel = LCH

5.1.1.1.1.1 Test RB=1RB



Date: 7.DEC.2016 11:21:42

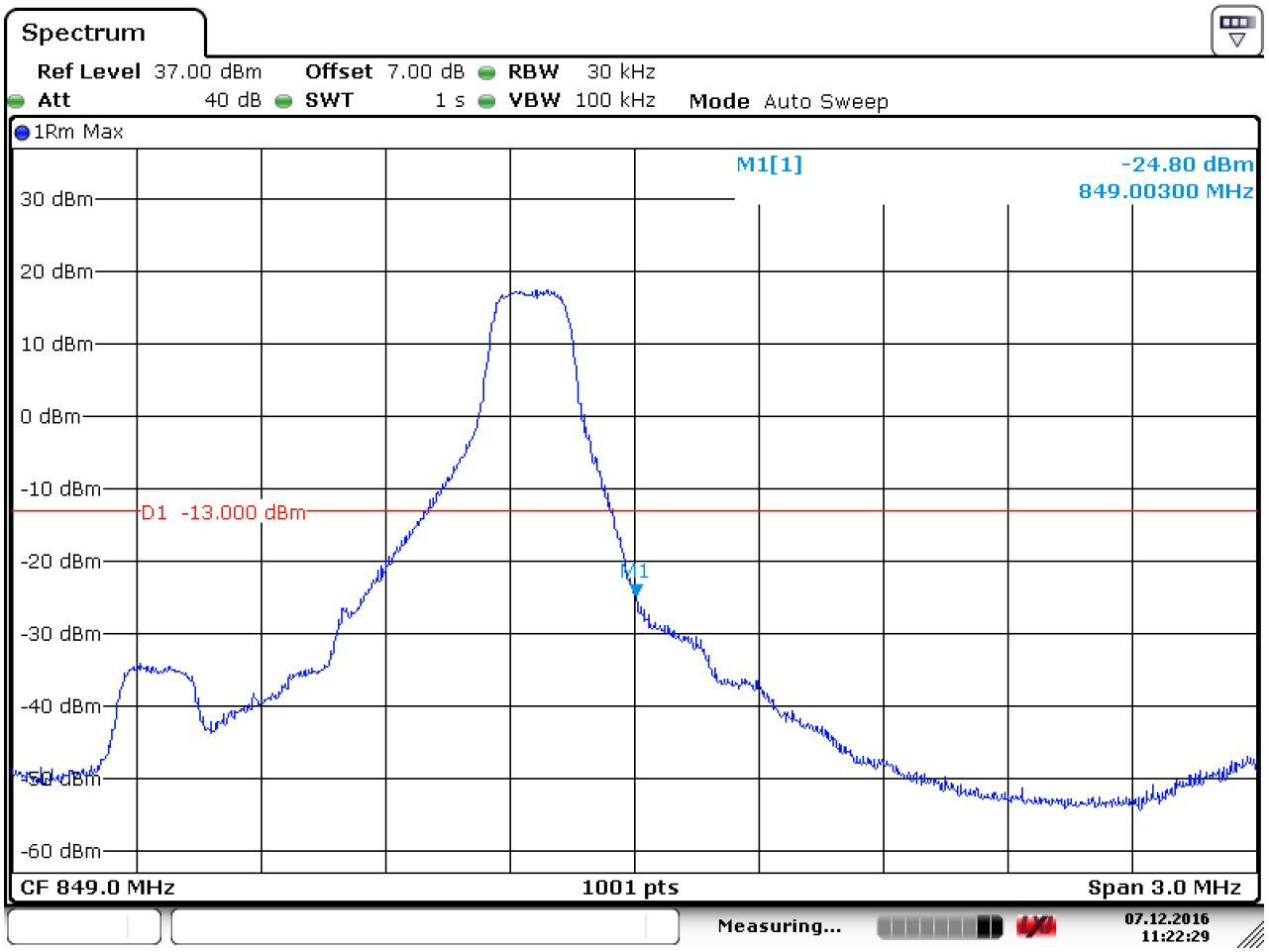
5.1.1.1.1.2 Test RB=6RB



Date: 7.DEC.2016 11:19:49

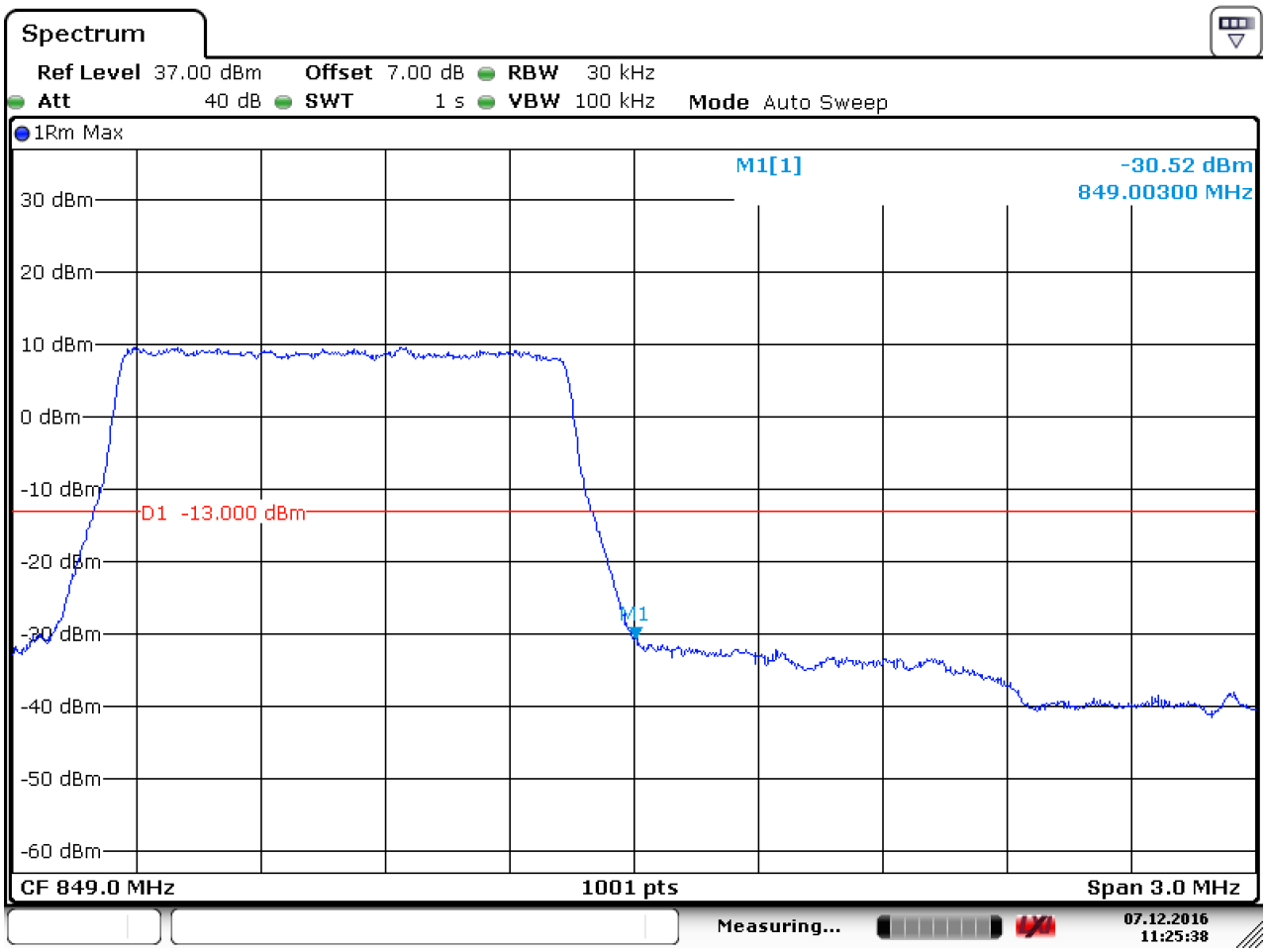
5.1.1.1.2 Test Channel = HCH

5.1.1.1.2.1 Test RB=1RB



Date: 7.DEC.2016 11:22:29

5.1.1.1.2.2 Test RB=6RB

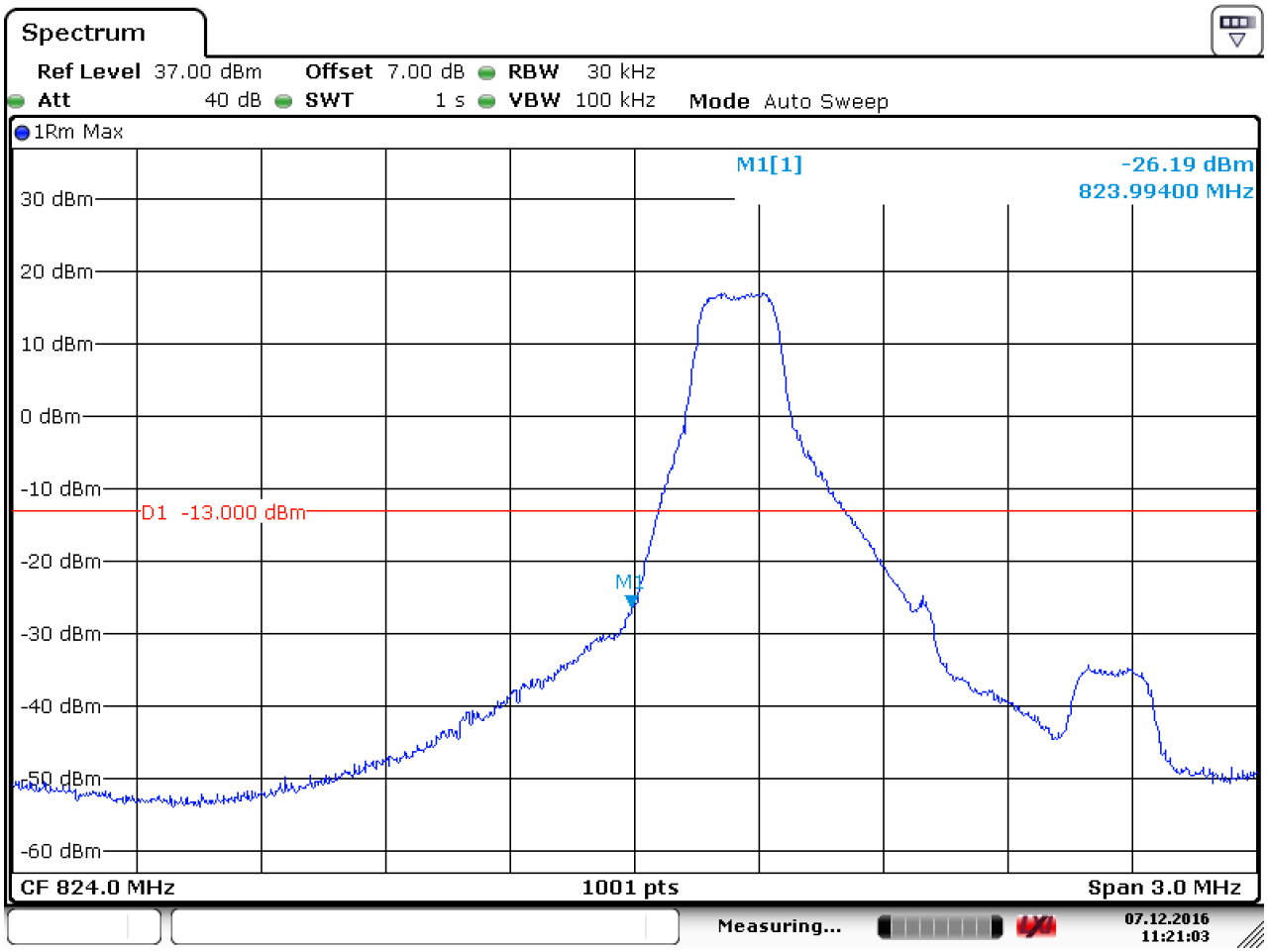


Date: 7.DEC.2016 11:25:38

5.1.1.2 Test Mode = LTE/TM2 1.4MHz

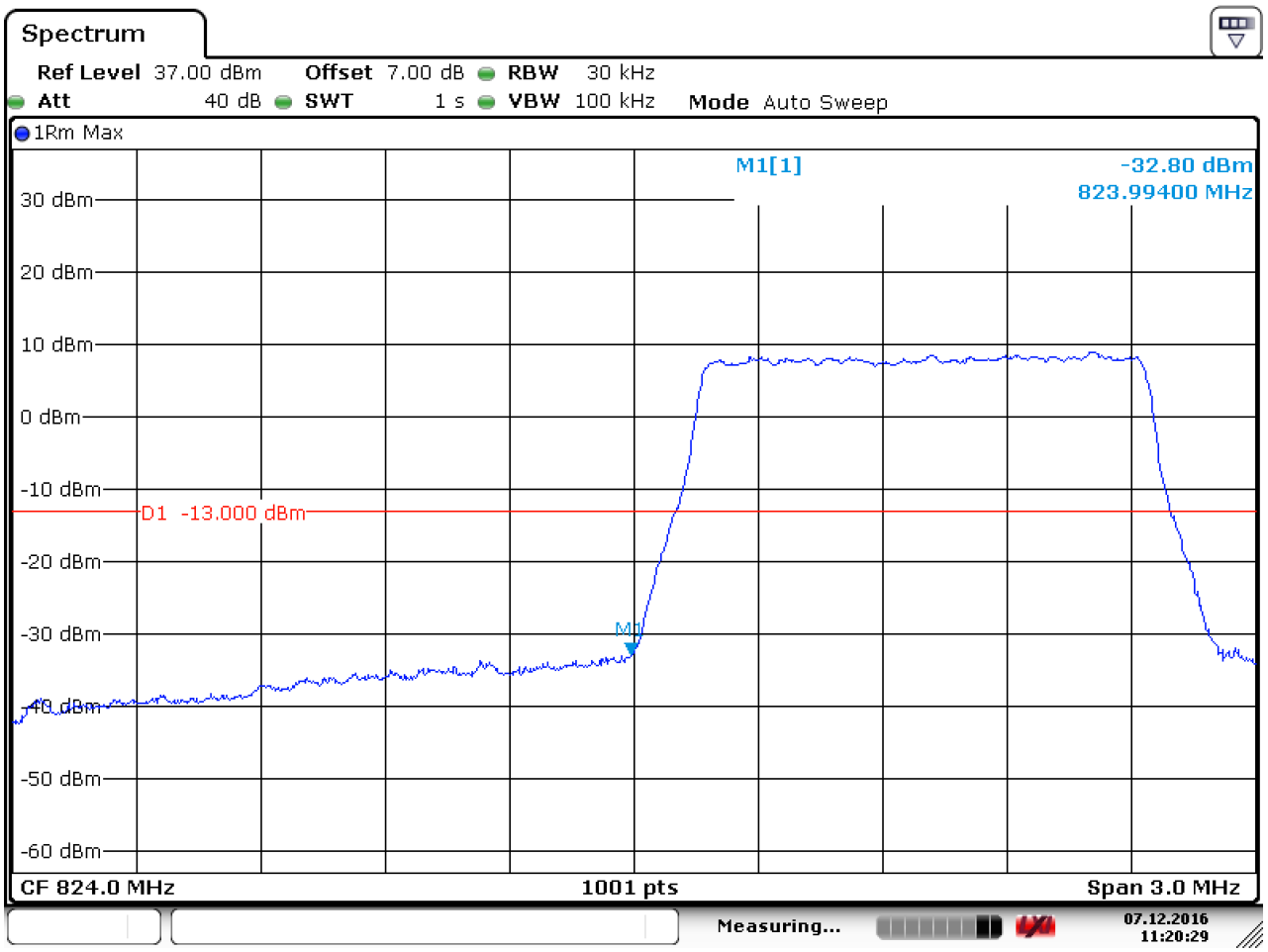
5.1.1.2.1 Test Channel = LCH

5.1.1.2.1.1 Test RB=1RB



Date: 7.DEC.2016 11:21:04

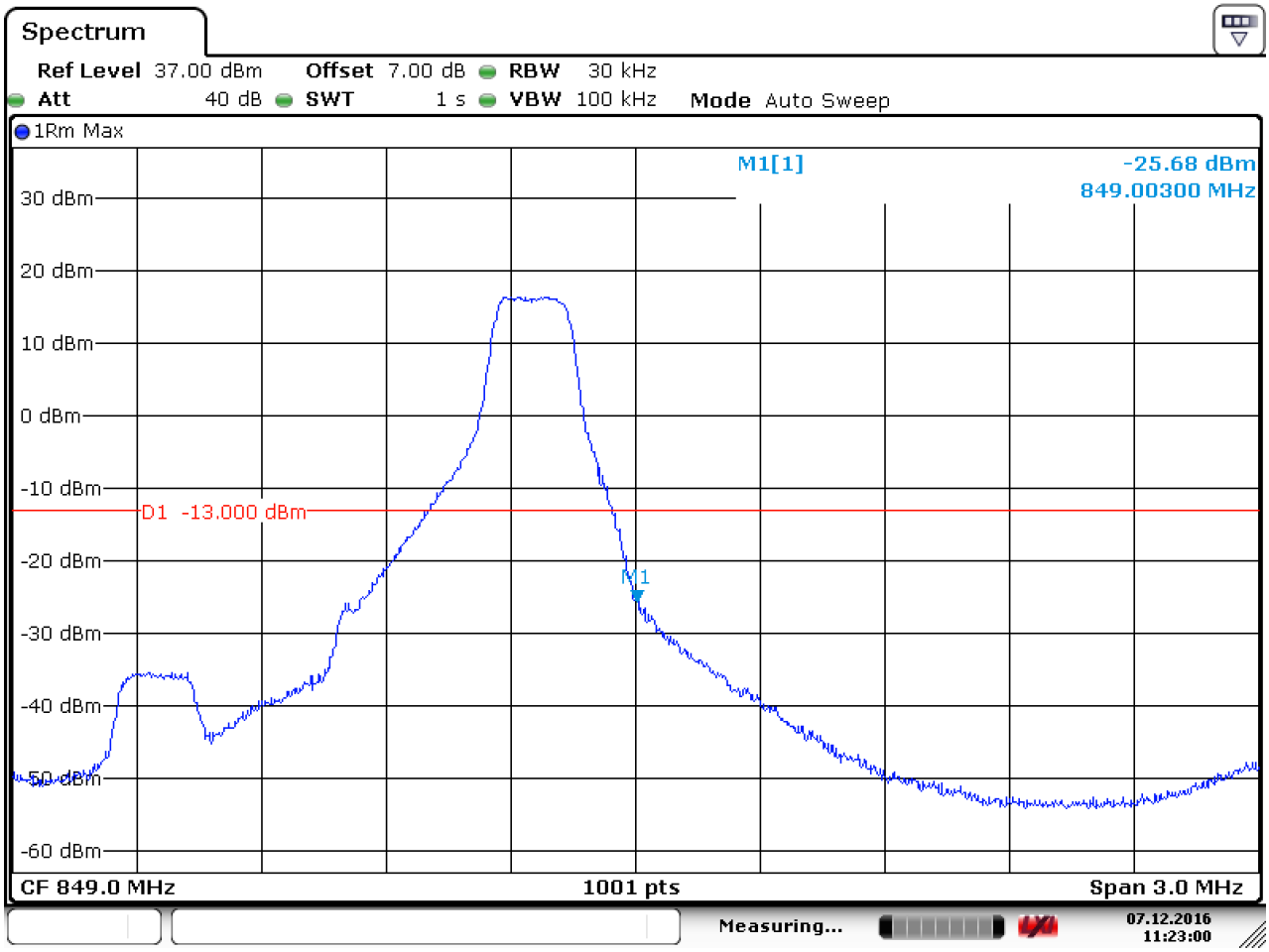
5.1.1.2.1.2 Test RB=6RB



Date: 7.DEC.2016 11:20:30

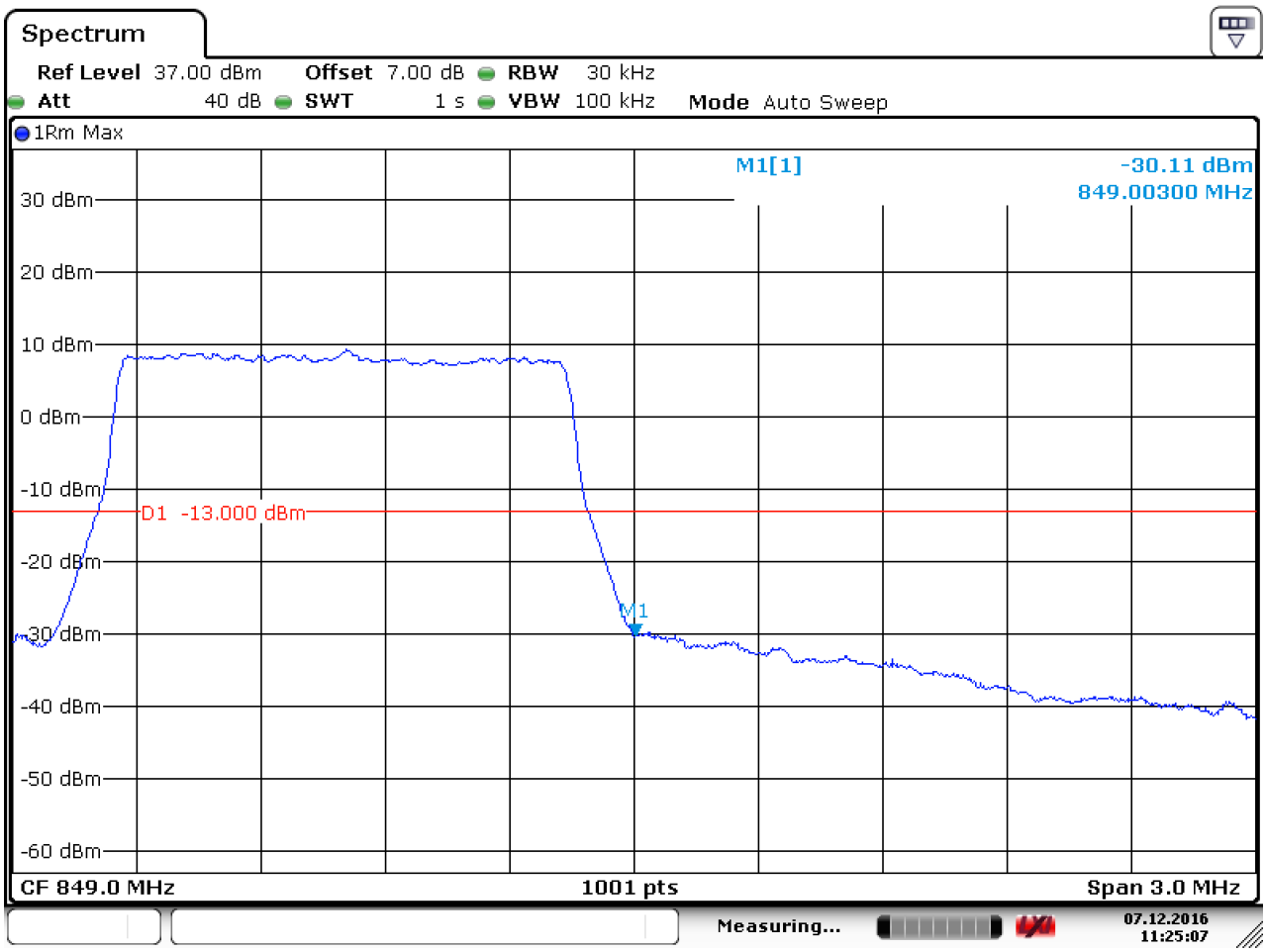
5.1.1.2.2 Test Channel = HCH

5.1.1.2.2.1 Test RB=1RB



Date: 7.DEC.2016 11:23:01

5.1.1.2.2.2 Test RB=6RB

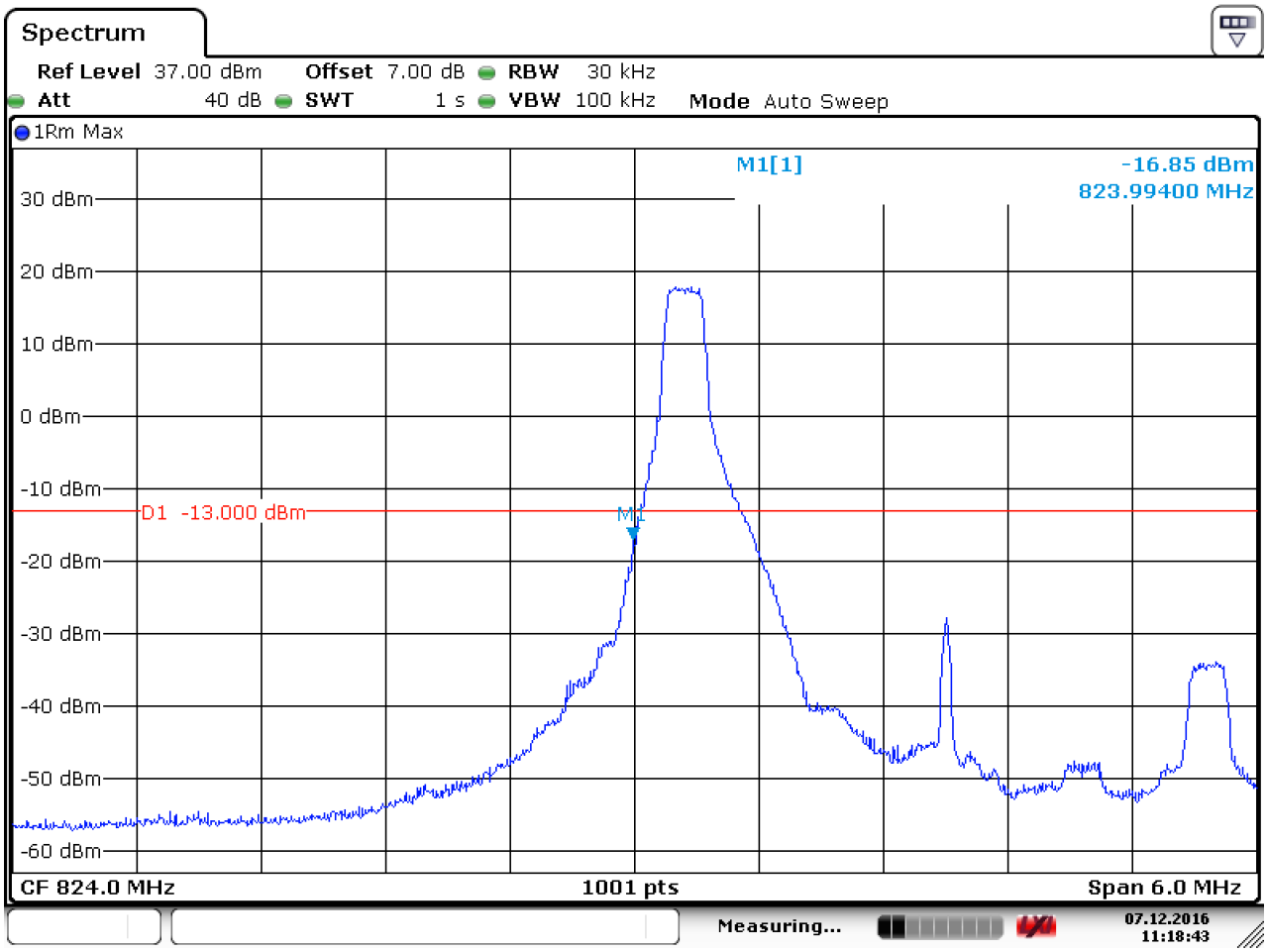


Date: 7.DEC.2016 11:25:07

5.1.1.3 Test Mode = LTE/TM1 3MHz

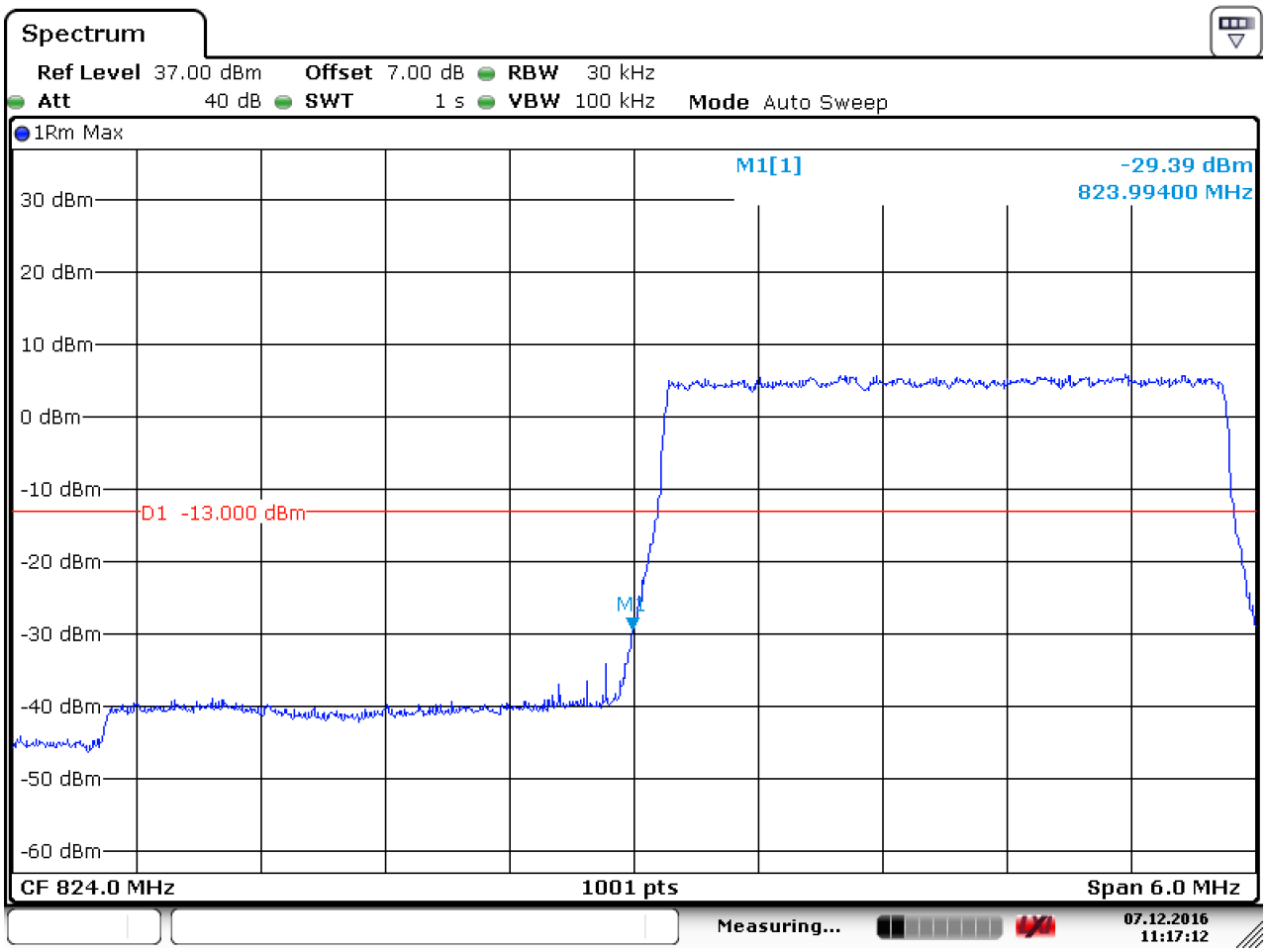
5.1.1.3.1 Test Channel = LCH

5.1.1.3.1.1 Test RB=1RB



Date: 7.DEC.2016 11:18:43

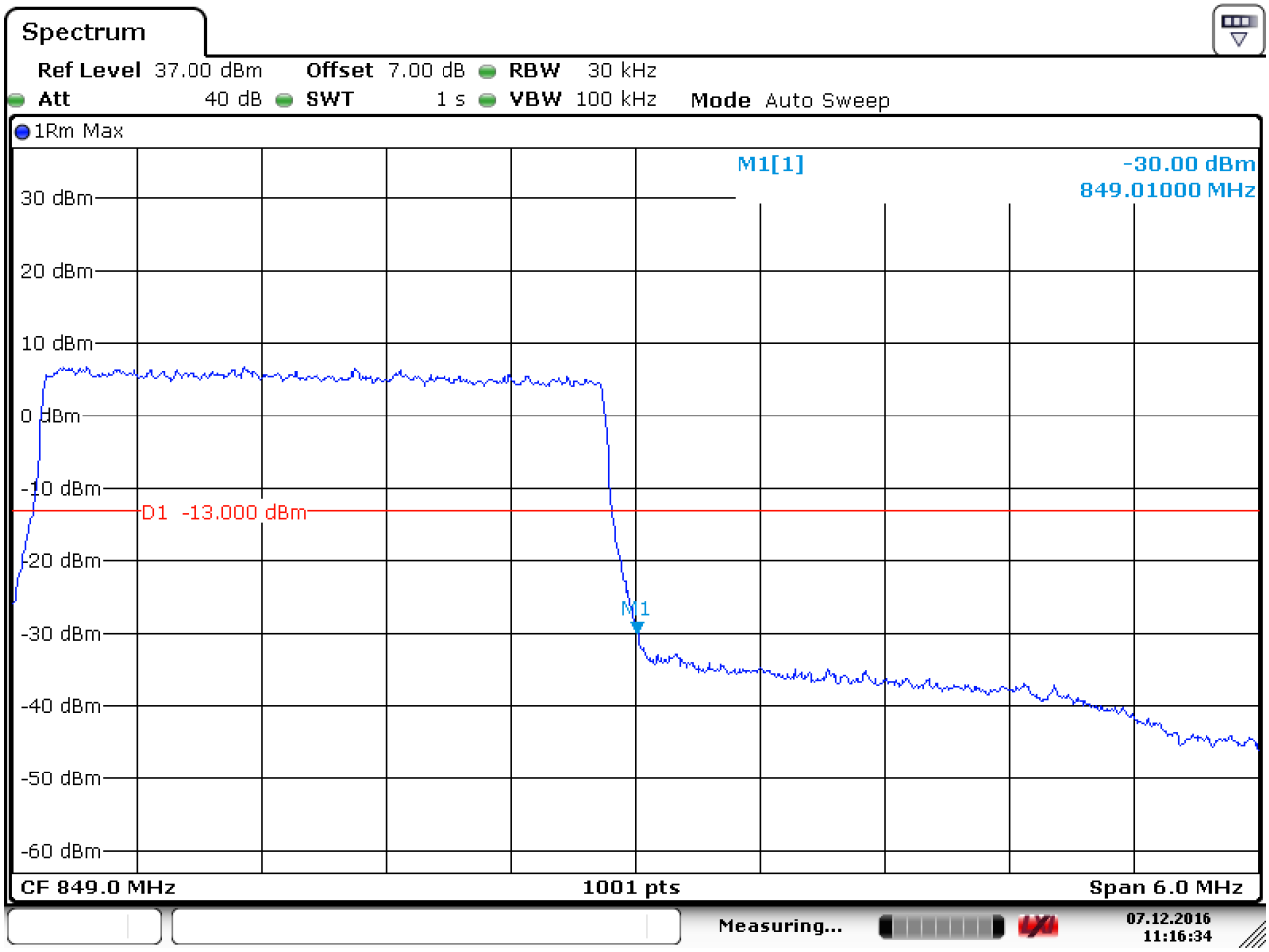
5.1.1.3.1.2 Test RB=15RB



Date: 7.DEC.2016 11:17:12

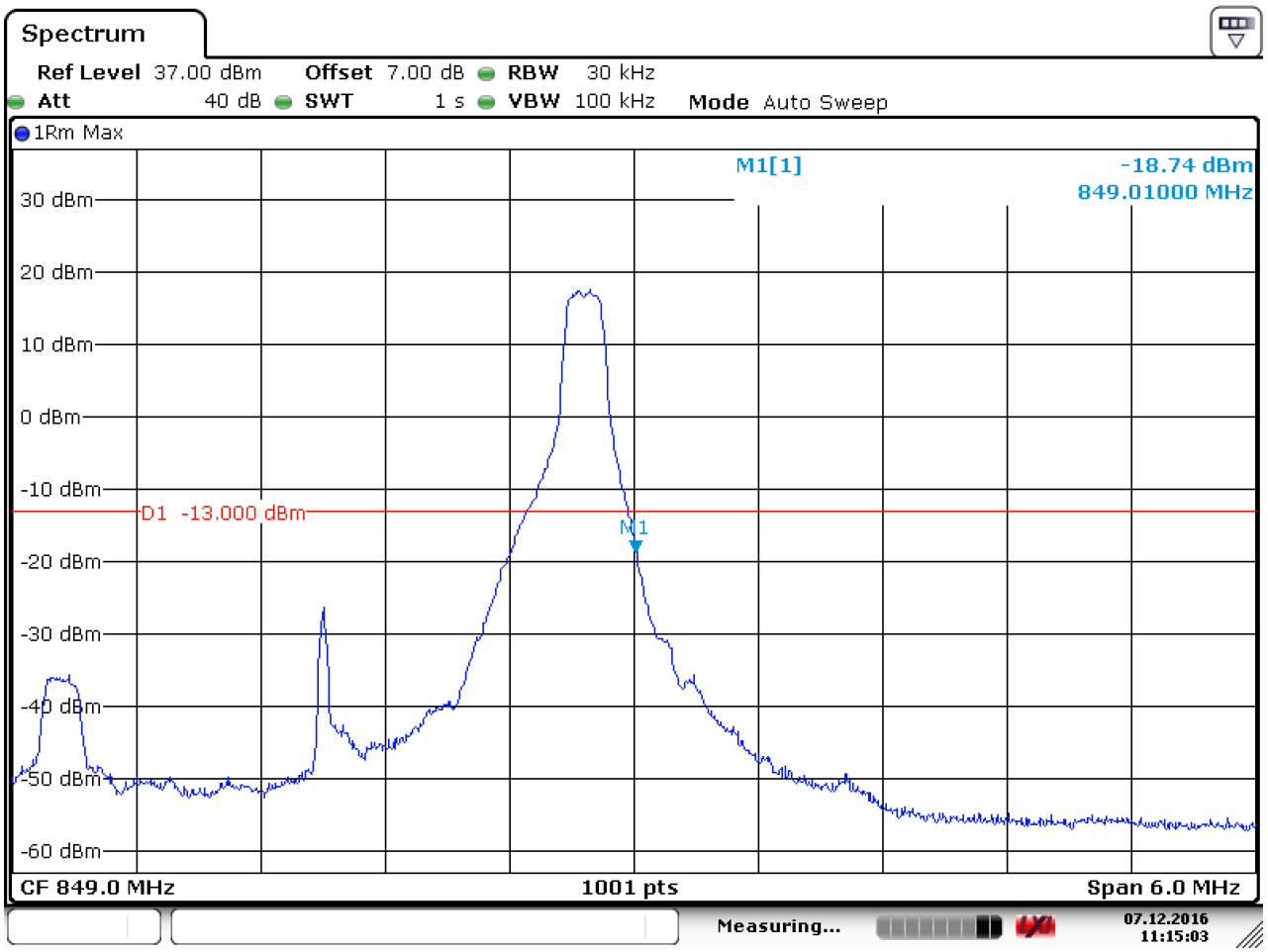
5.1.1.3.2 Test Channel = HCH

5.1.1.3.2.1 Test RB=1RB



Date: 7.DEC.2016 11:16:35

5.1.1.3.2.2 Test RB=15RB

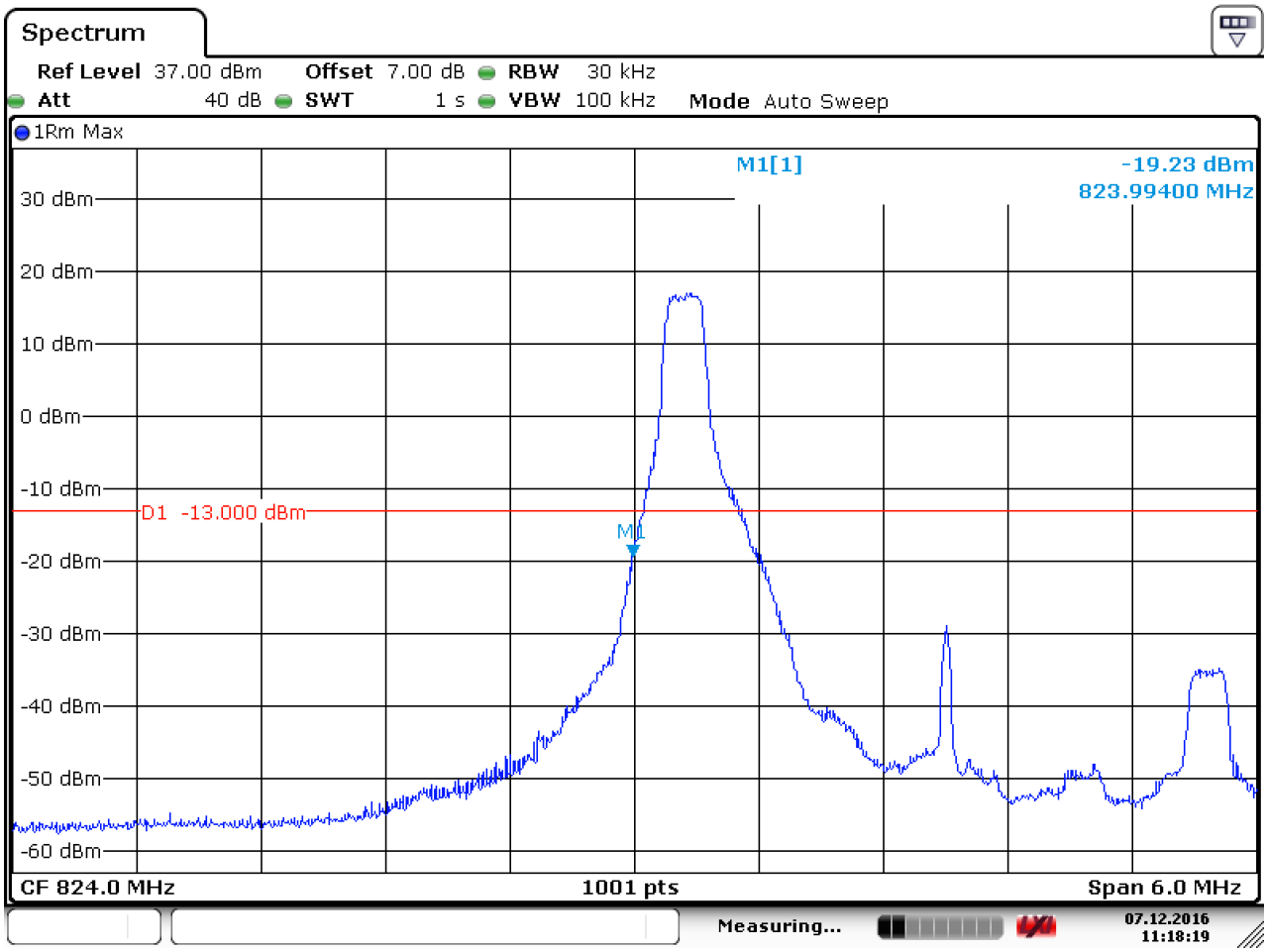


Date: 7.DEC.2016 11:15:03

5.1.1.4 Test Mode = LTE/TM2 3MHz

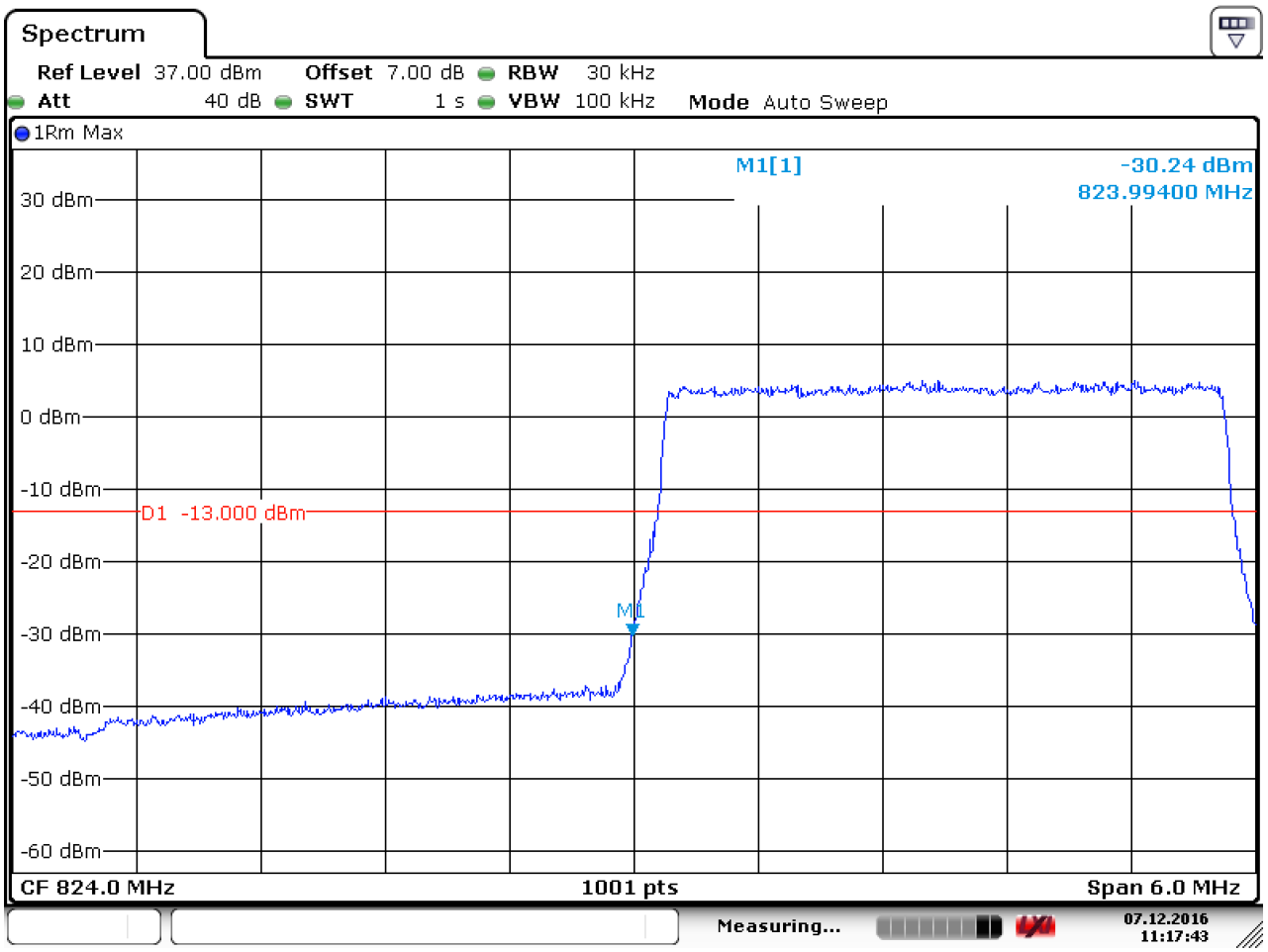
5.1.1.4.1 Test Channel = LCH

5.1.1.4.1.1 Test RB=1RB



Date: 7.DEC.2016 11:18:19

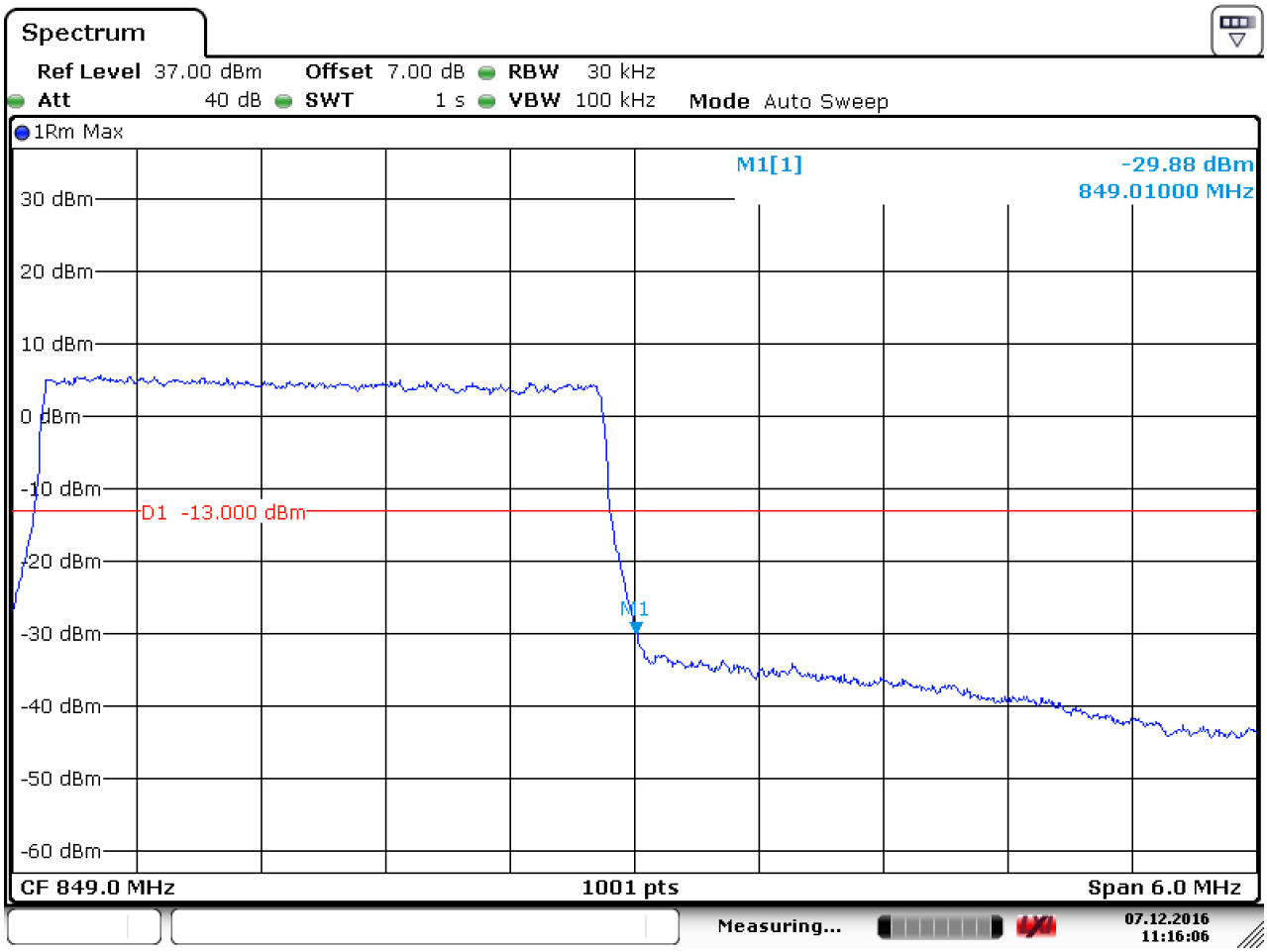
5.1.1.4.1.2 Test RB=15RB



Date: 7.DEC.2016 11:17:44

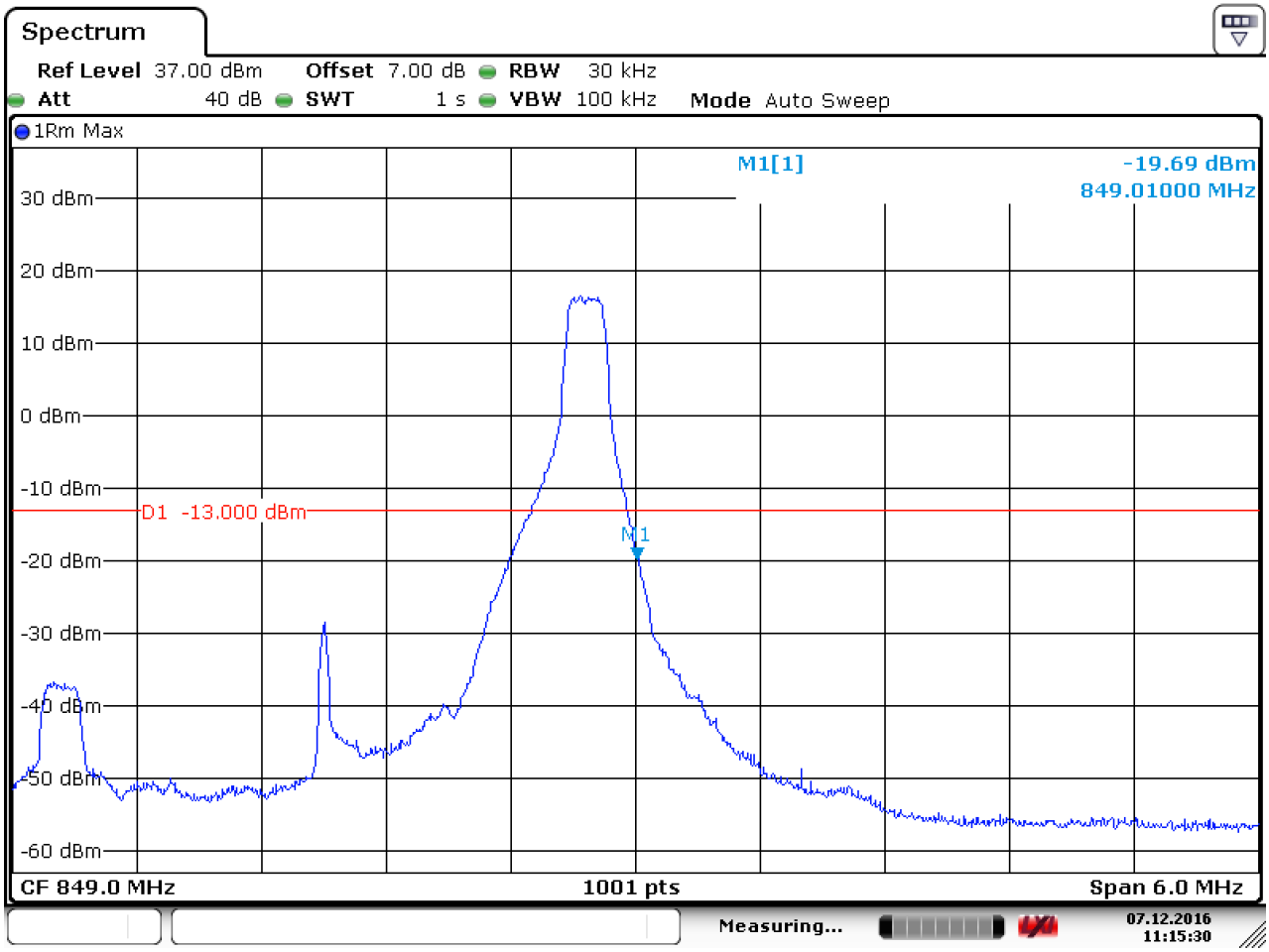
5.1.1.4.2 Test Channel = HCH

5.1.1.4.2.1 Test RB=1RB



Date: 7.DEC.2016 11:16:06

5.1.1.4.3 Test RB=15RB

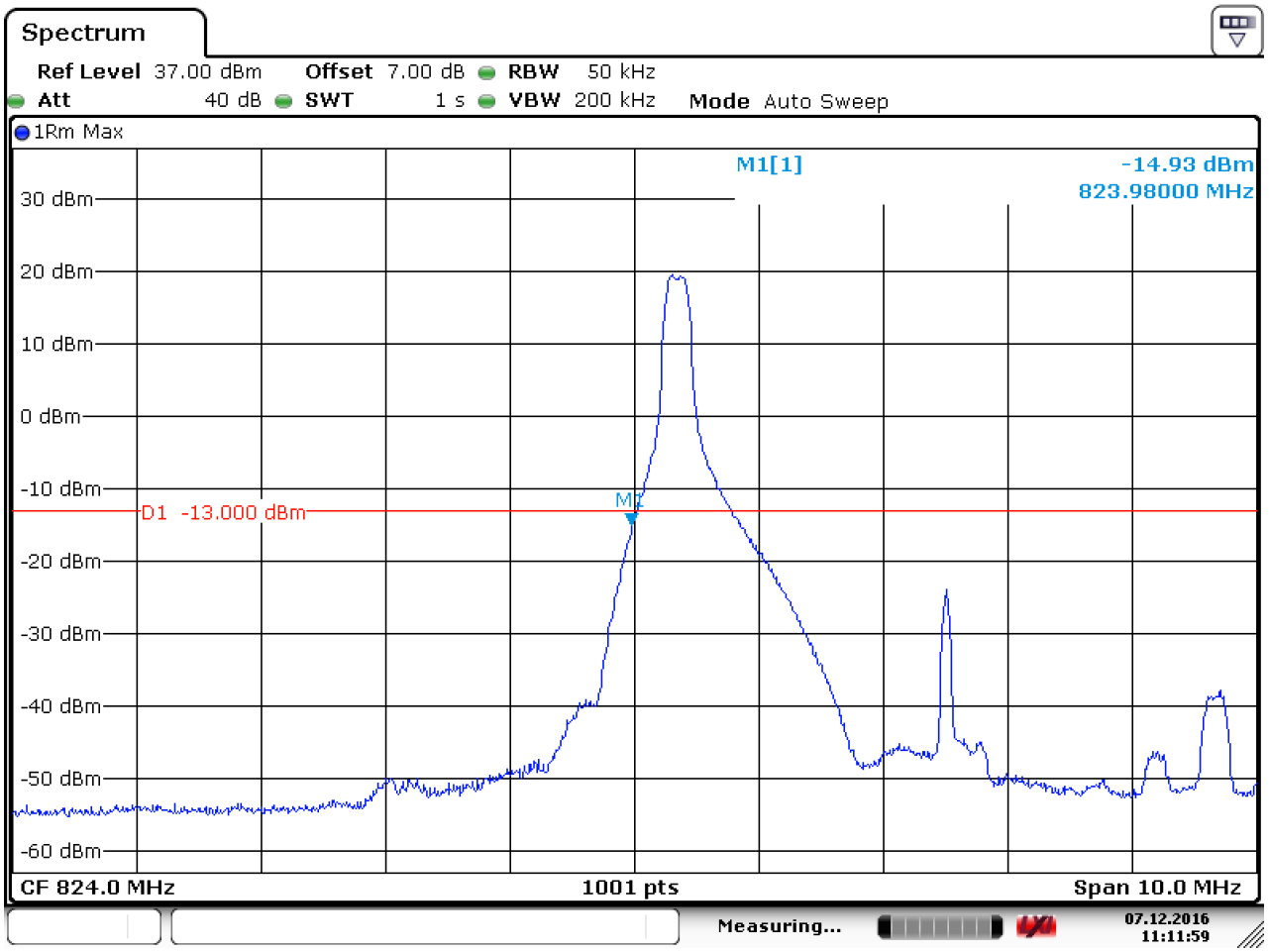


Date: 7.DEC.2016 11:15:31

5.1.1.5 Test Mode = LTE/TM1 5MHz

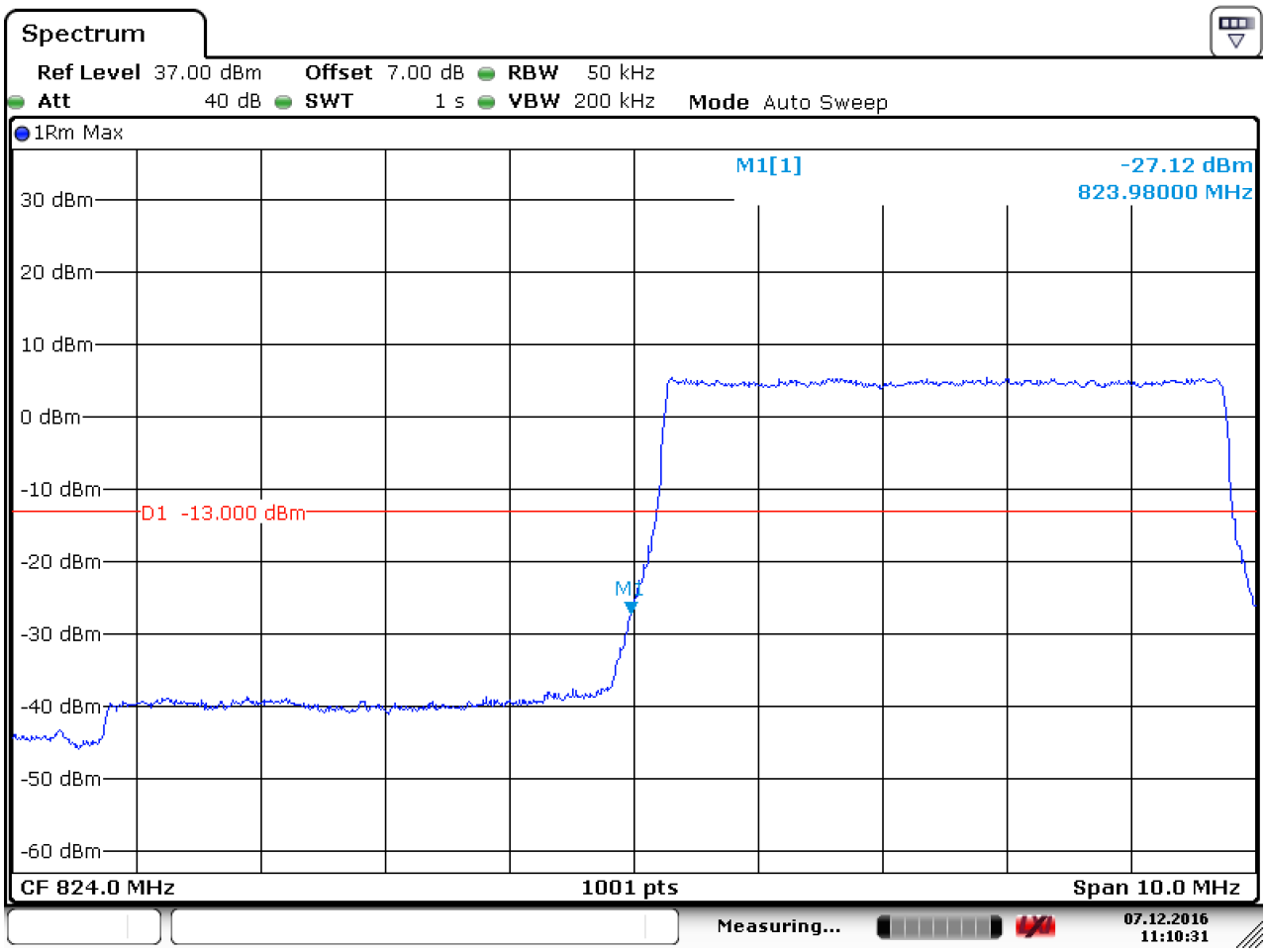
5.1.1.5.1 Test Channel = LCH

5.1.1.5.1.1 Test RB=1RB



Date: 7.DEC.2016 11:11:59

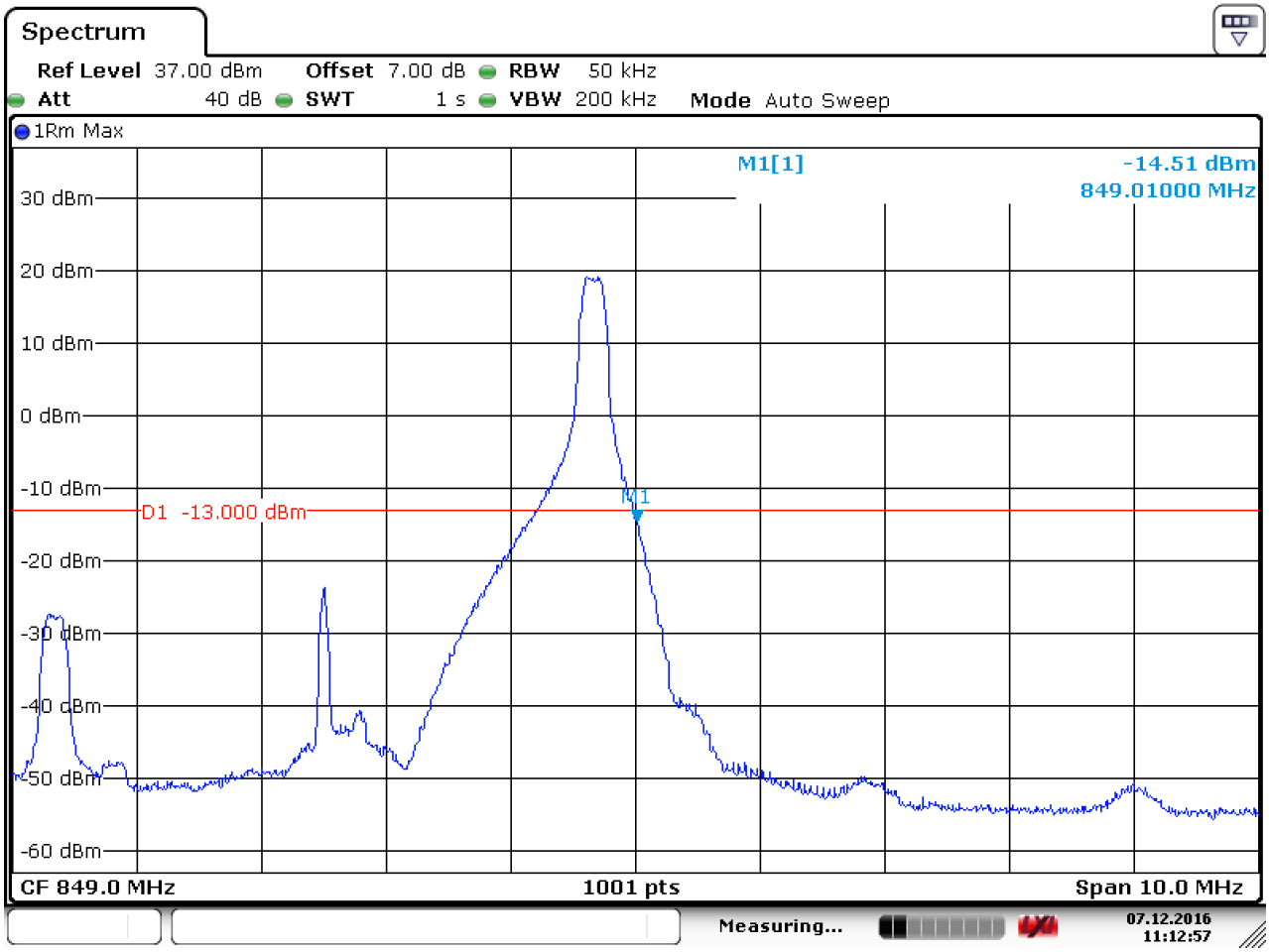
5.1.1.5.1.2 Test RB=25RB



Date: 7.DEC.2016 11:10:31

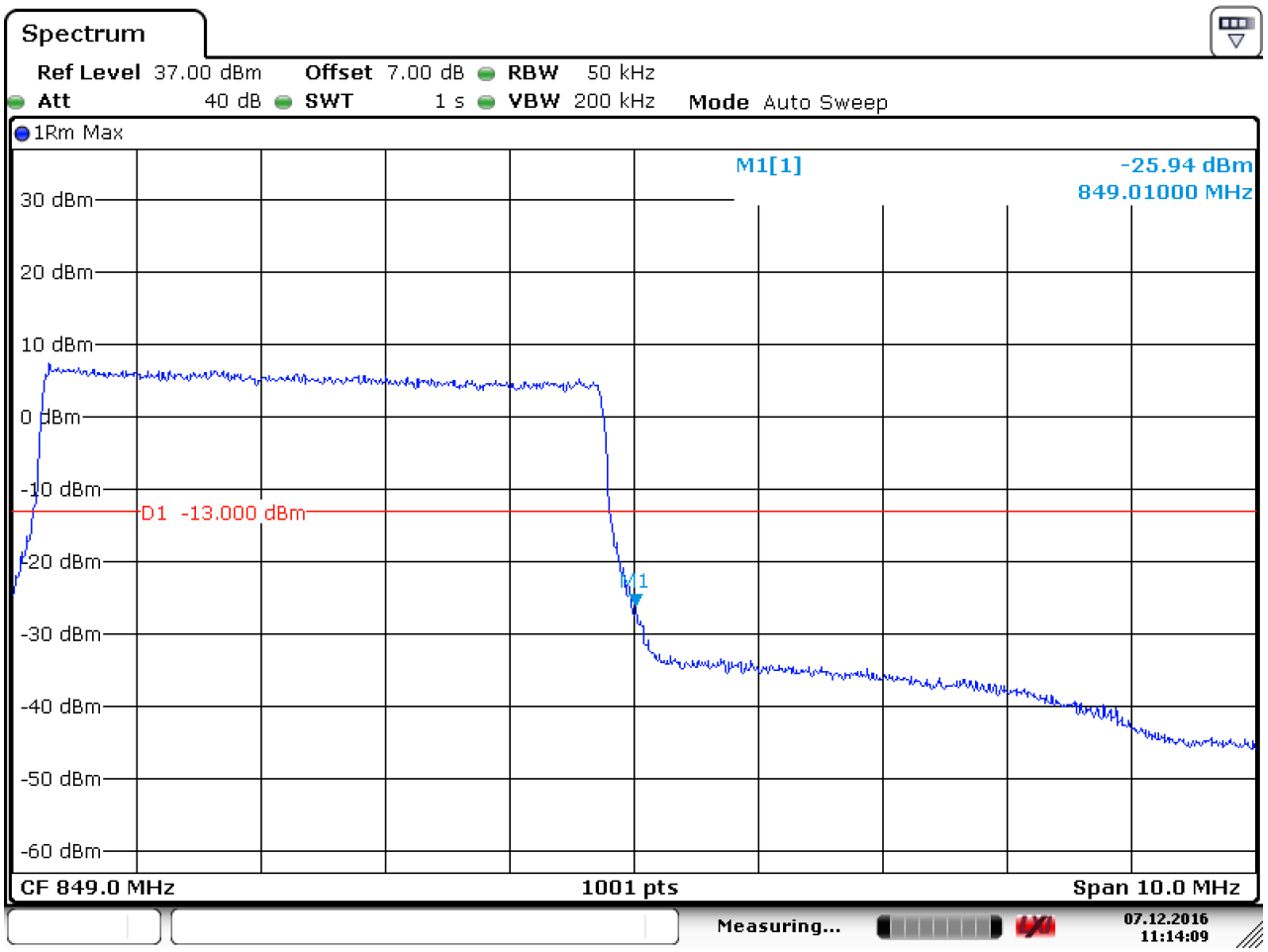
5.1.1.5.2 Test Channel = HCH

5.1.1.5.2.1 Test RB=1RB



Date: 7.DEC.2016 11:12:58

5.1.1.5.2.2 Test RB=25RB

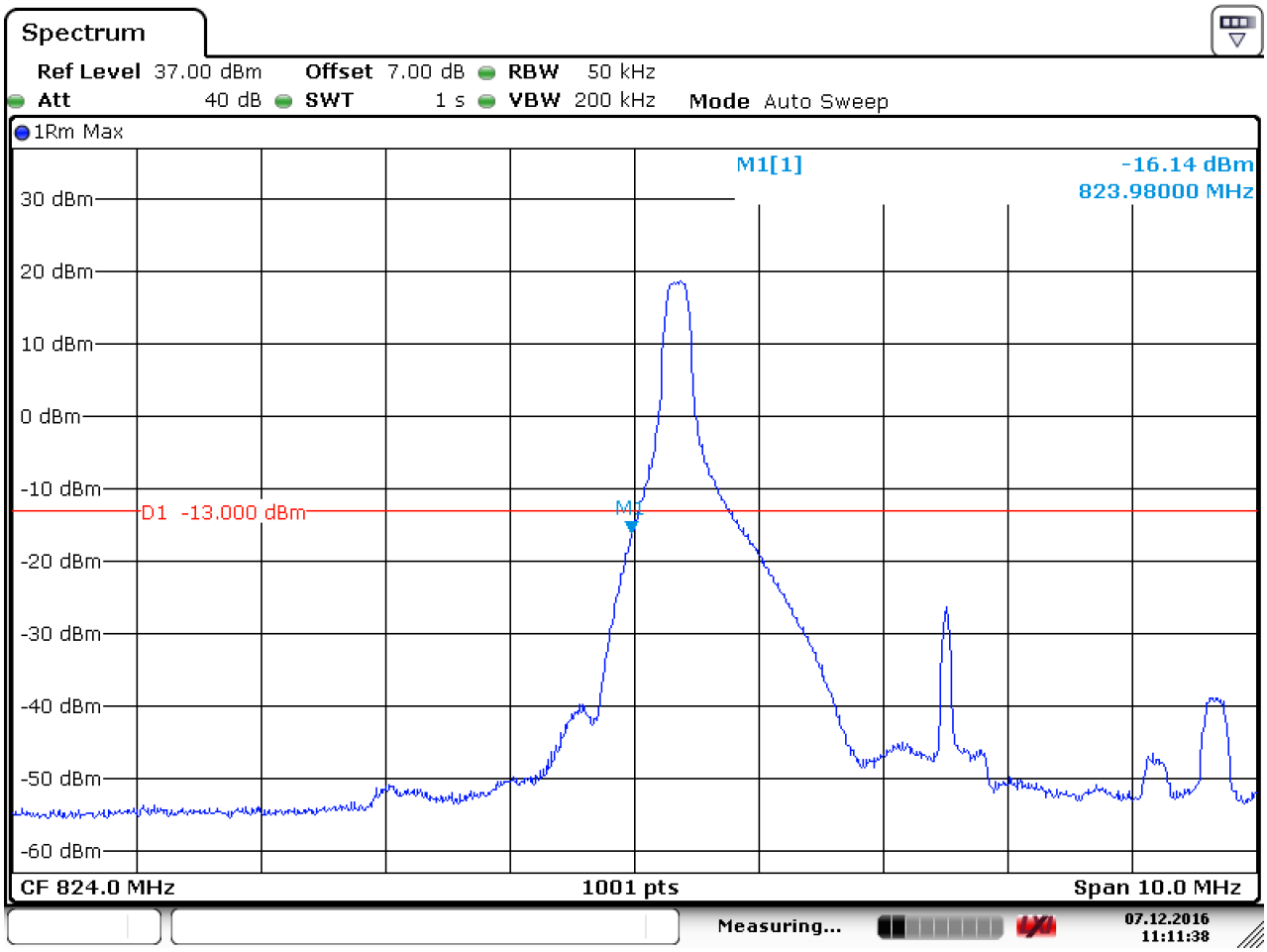


Date: 7.DEC.2016 11:14:10

5.1.1.6 Test Mode = LTE/TM2 5MHz

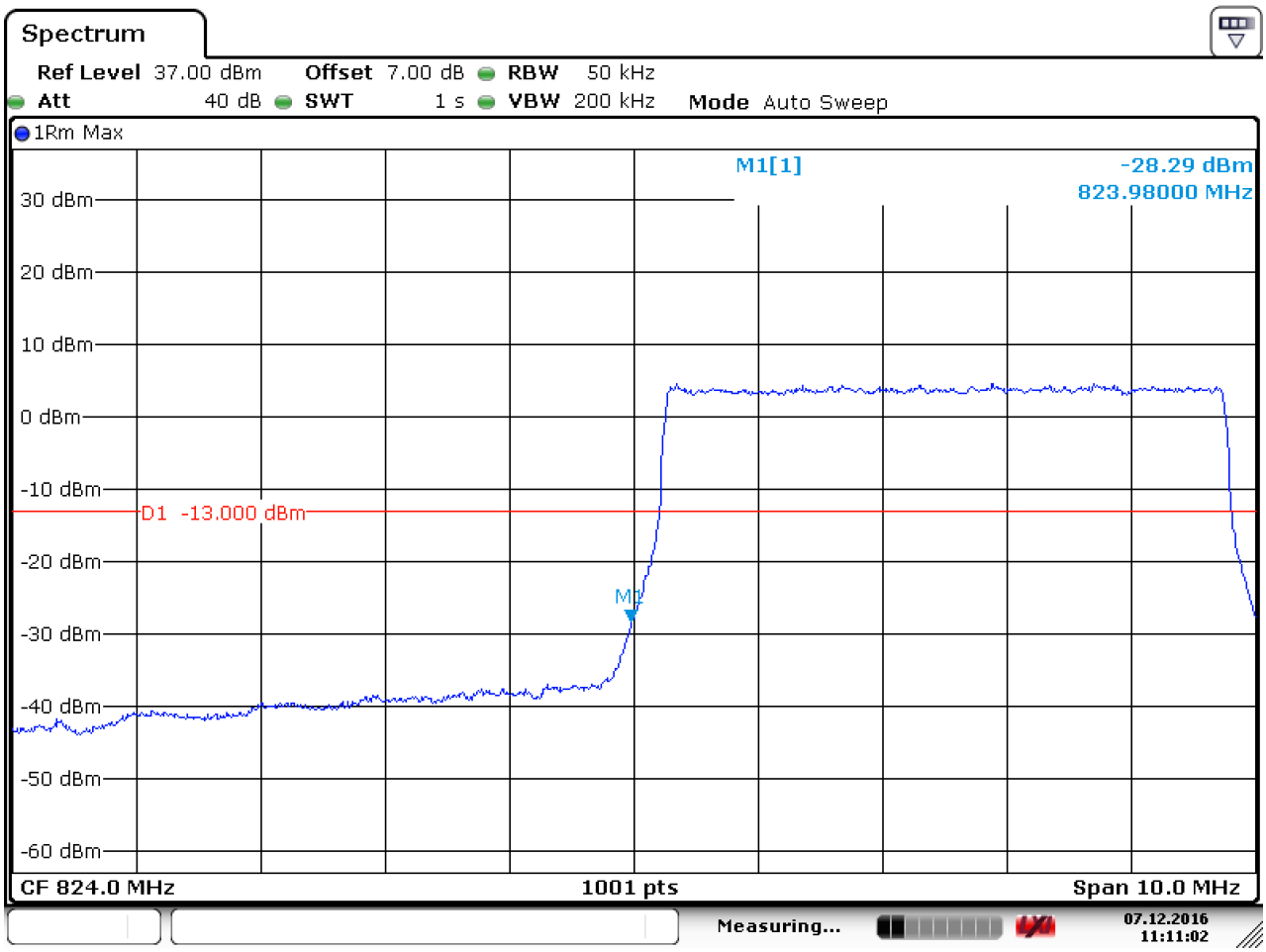
5.1.1.6.1 Test Channel = LCH

5.1.1.6.1.1 Test RB=1RB



Date: 7.DEC.2016 11:11:39

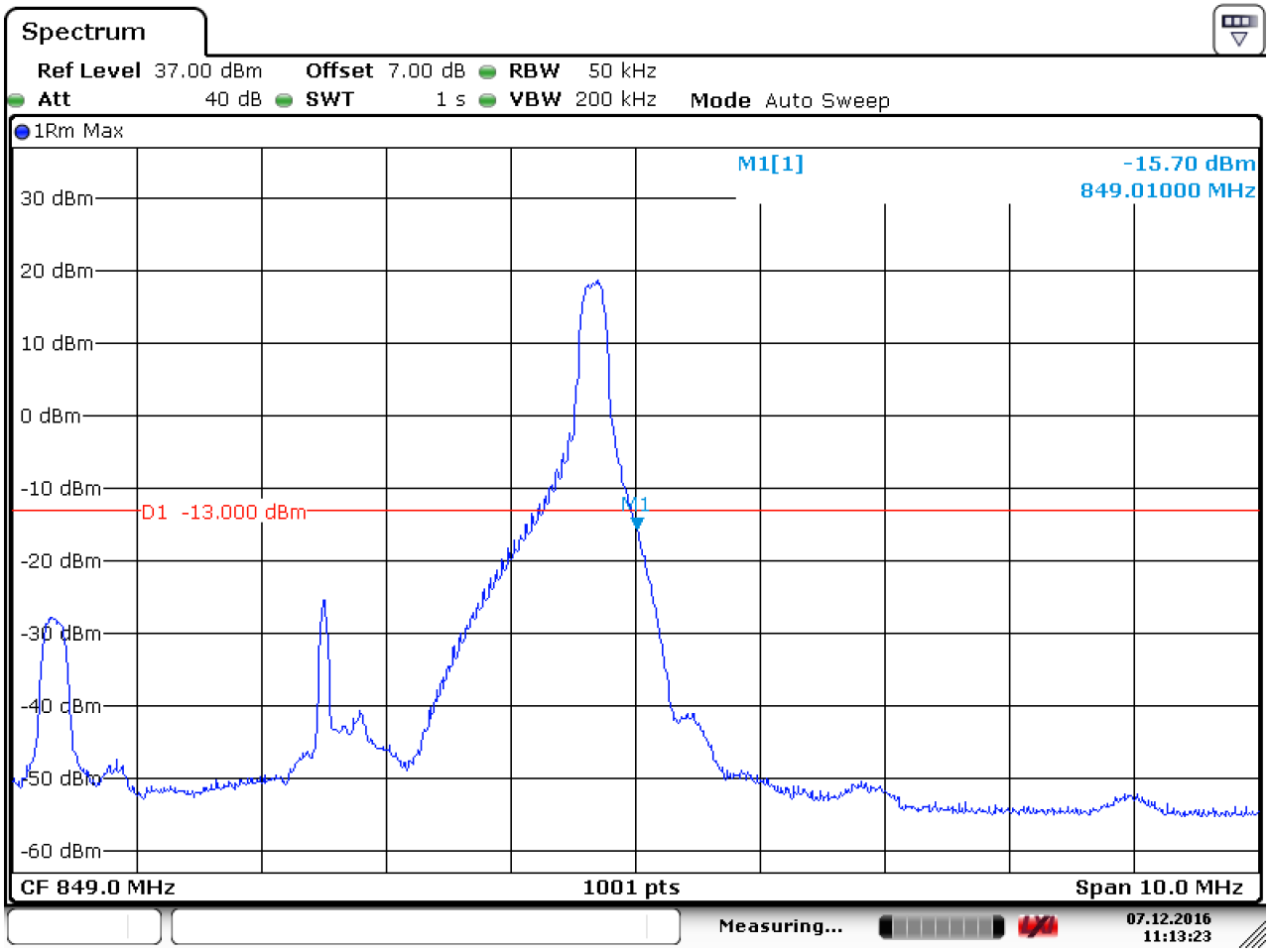
5.1.1.6.1.2 Test RB=25RB



Date: 7.DEC.2016 11:11:02

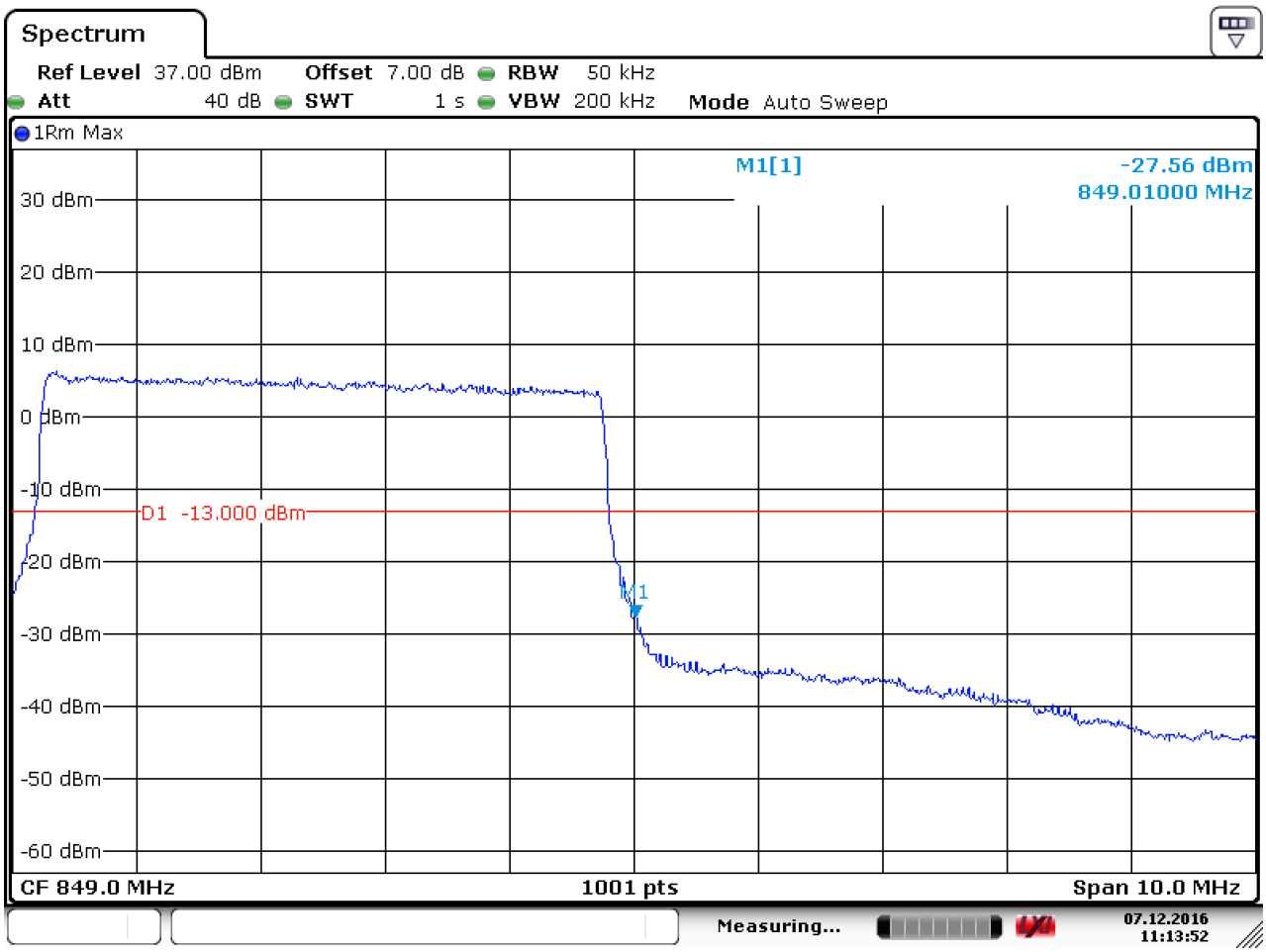
5.1.1.6.2 Test Channel = HCH

5.1.1.6.2.1 Test RB=1RB



Date: 7.DEC.2016 11:13:23

5.1.1.6.2.2 Test RB=25RB

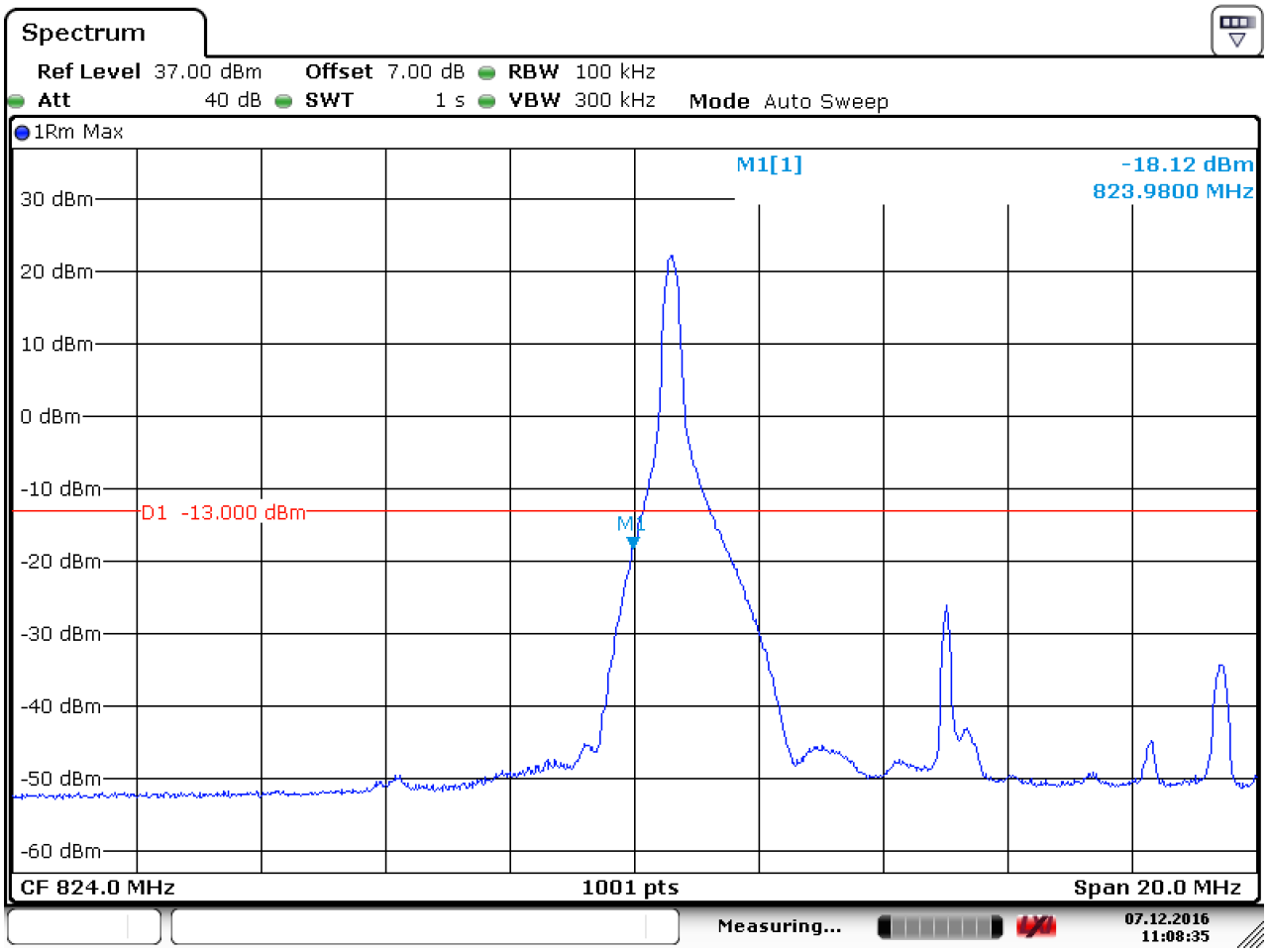


Date: 7.DEC.2016 11:13:52

5.1.1.7 Test Mode = LTE/TM1 10MHz

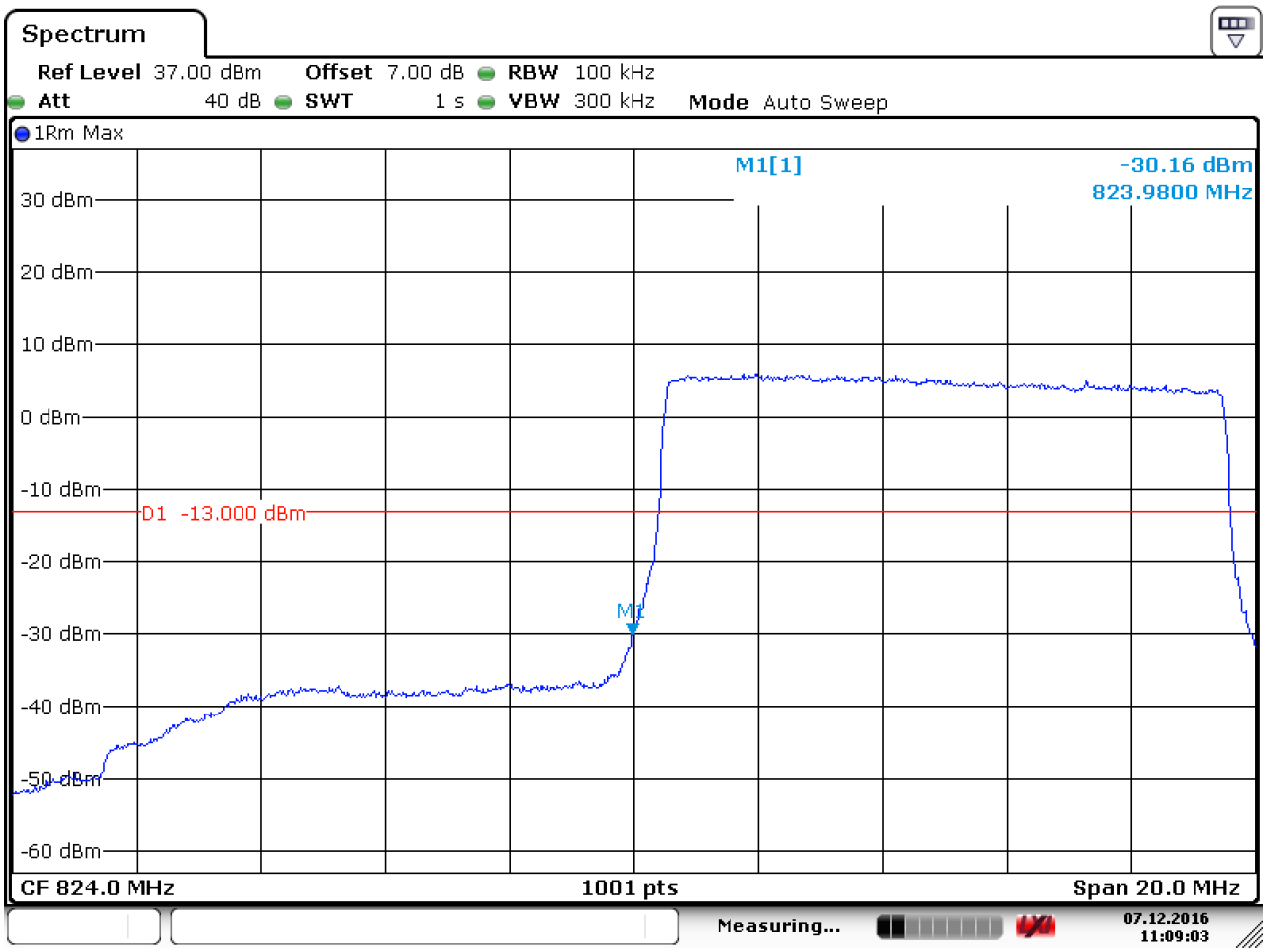
5.1.1.7.1 Test Channel = LCH

5.1.1.7.1.1 Test RB=1RB



Date: 7.DEC.2016 11:08:36

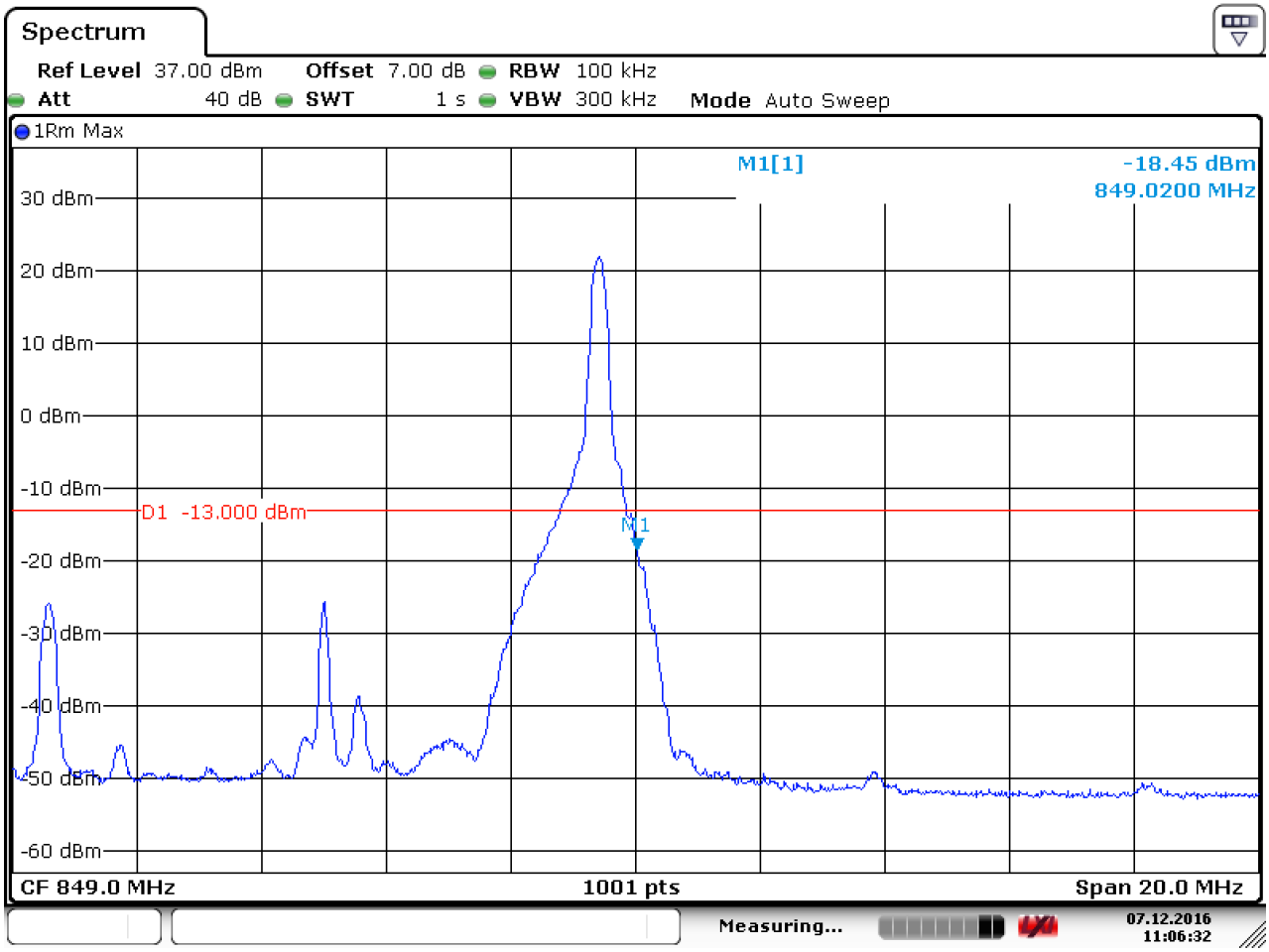
5.1.1.7.1.2 Test RB=50RB



Date: 7.DEC.2016 11:09:03

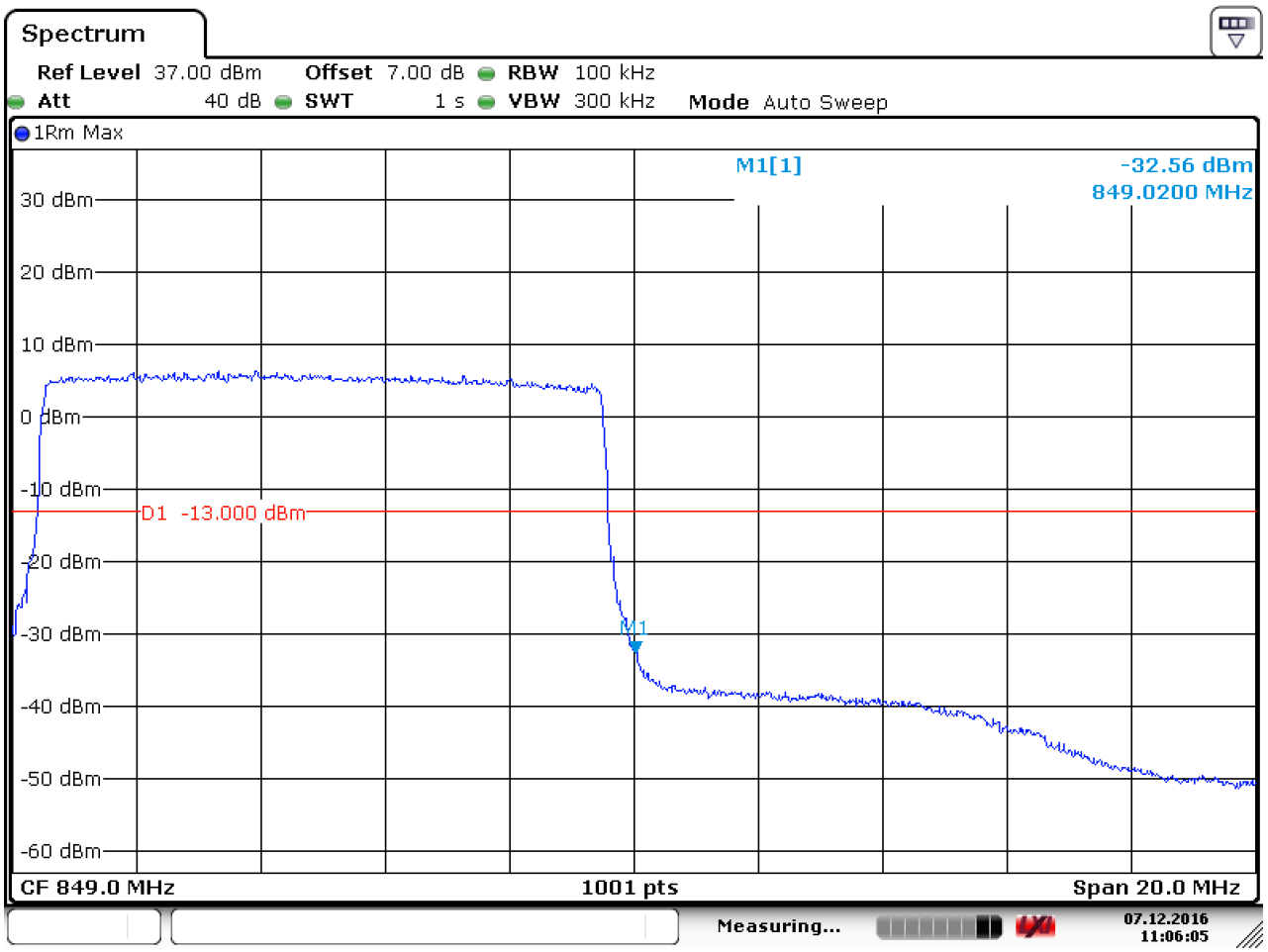
5.1.1.7.2 Test Channel = HCH

5.1.1.7.2.1 Test RB=1RB



Date: 7.DEC.2016 11:06:32

5.1.1.7.2.2 Test RB=50RB

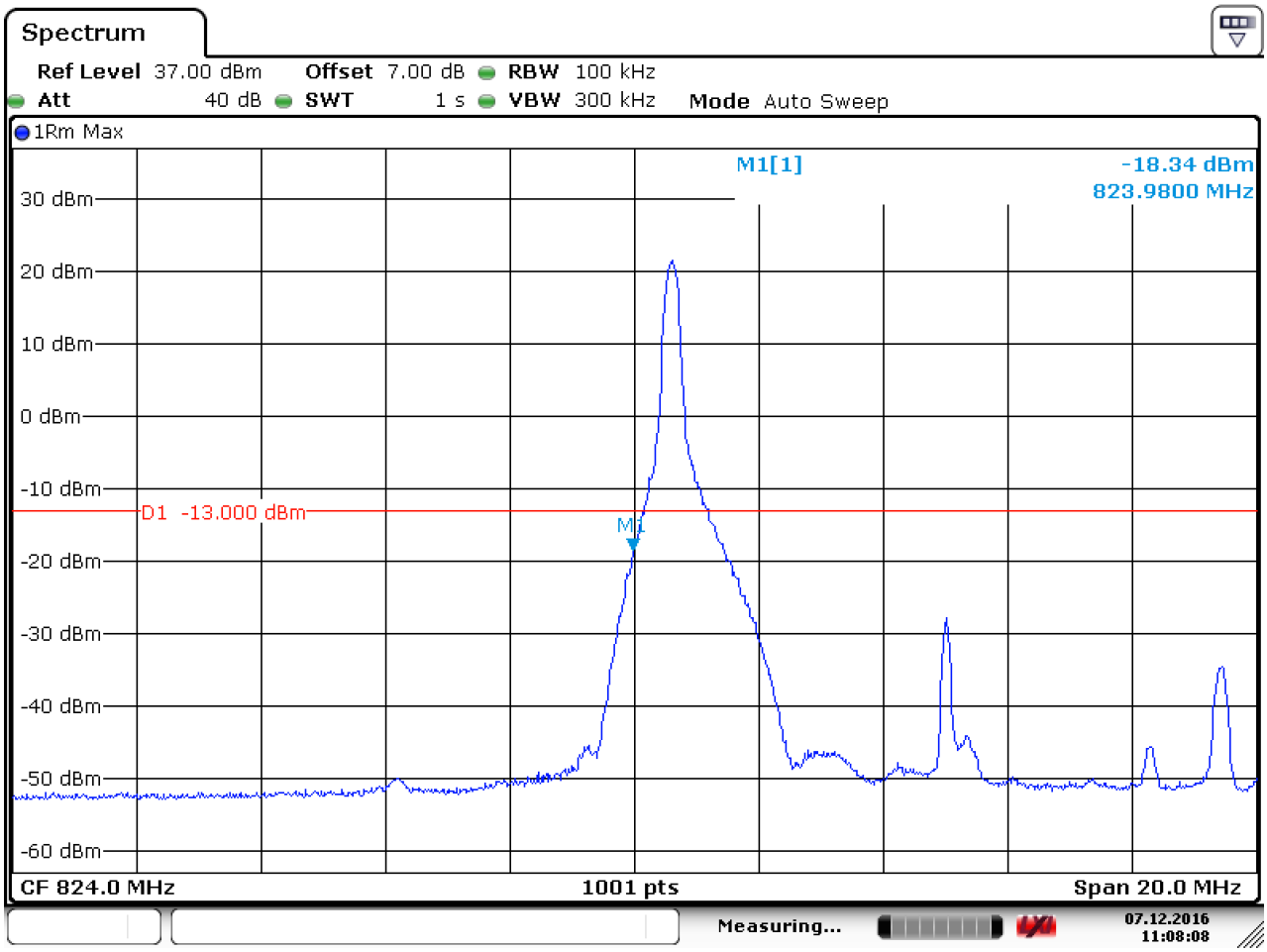


Date: 7.DEC.2016 11:06:06

5.1.1.8 Test Mode = LTE/TM2 10MHz

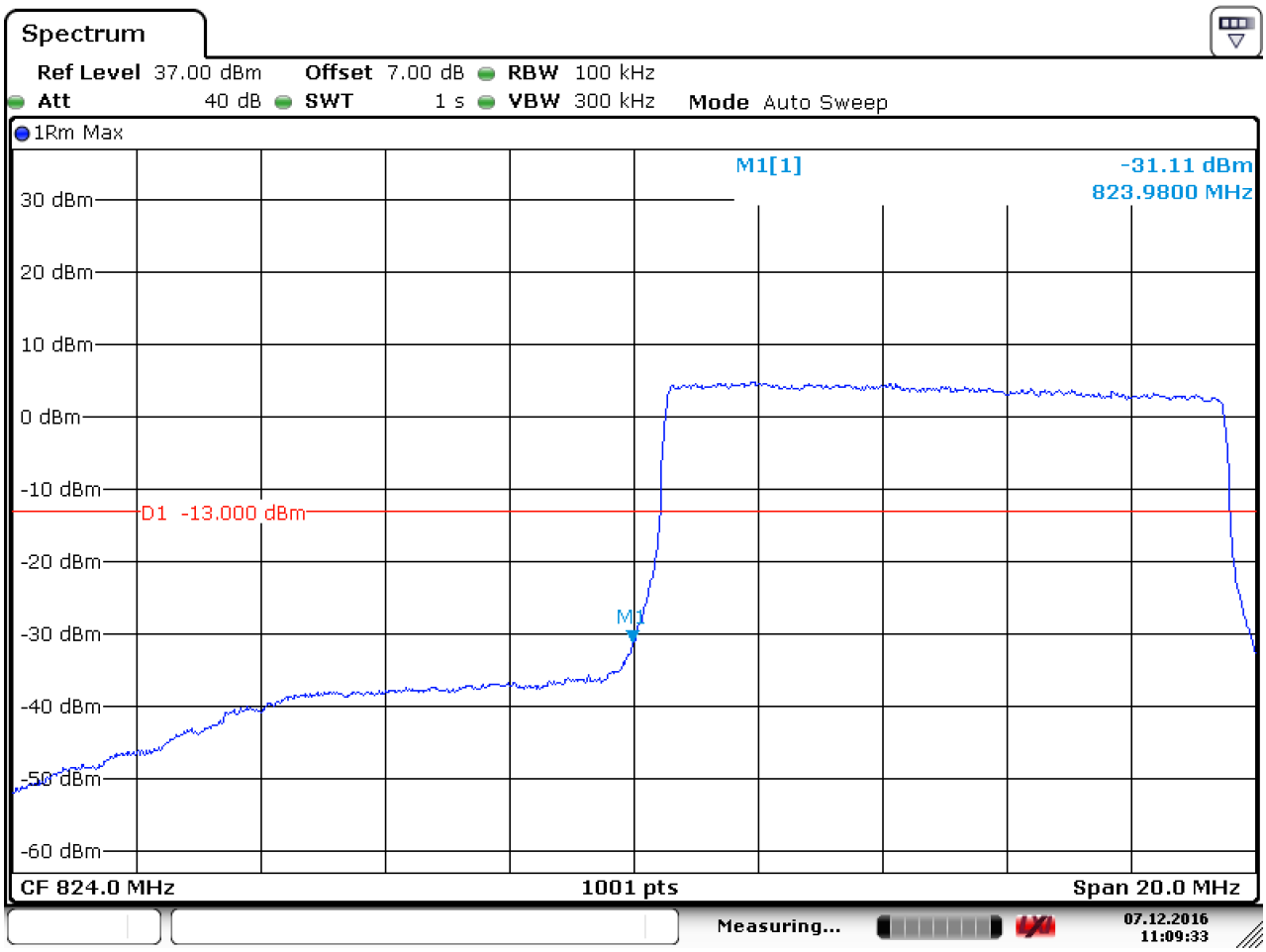
5.1.1.8.1 Test Channel = LCH

5.1.1.8.1.1 Test RB=1RB



Date: 7.DEC.2016 11:08:09

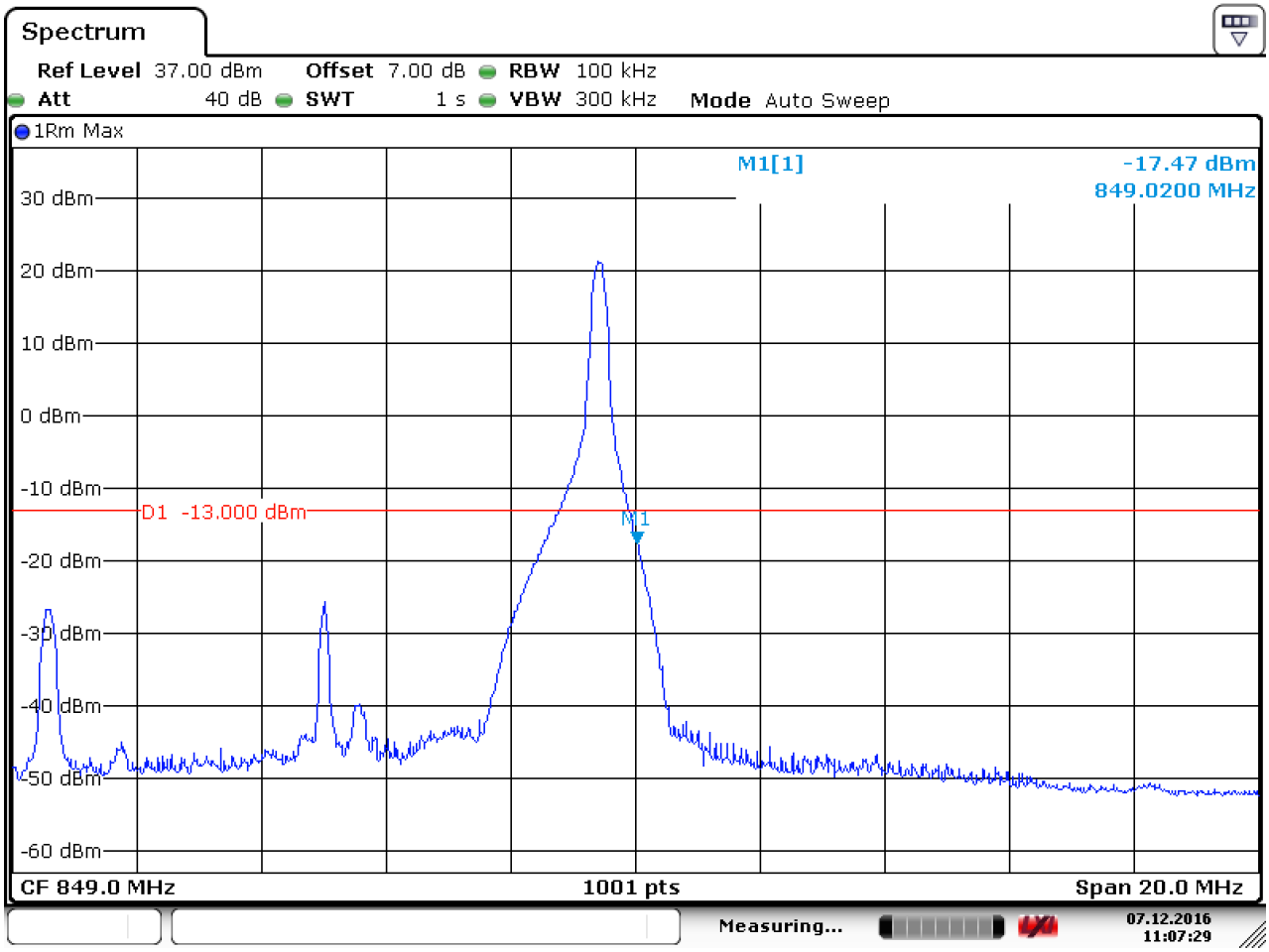
5.1.1.8.1.2 Test RB=50RB



Date: 7.DEC.2016 11:09:33

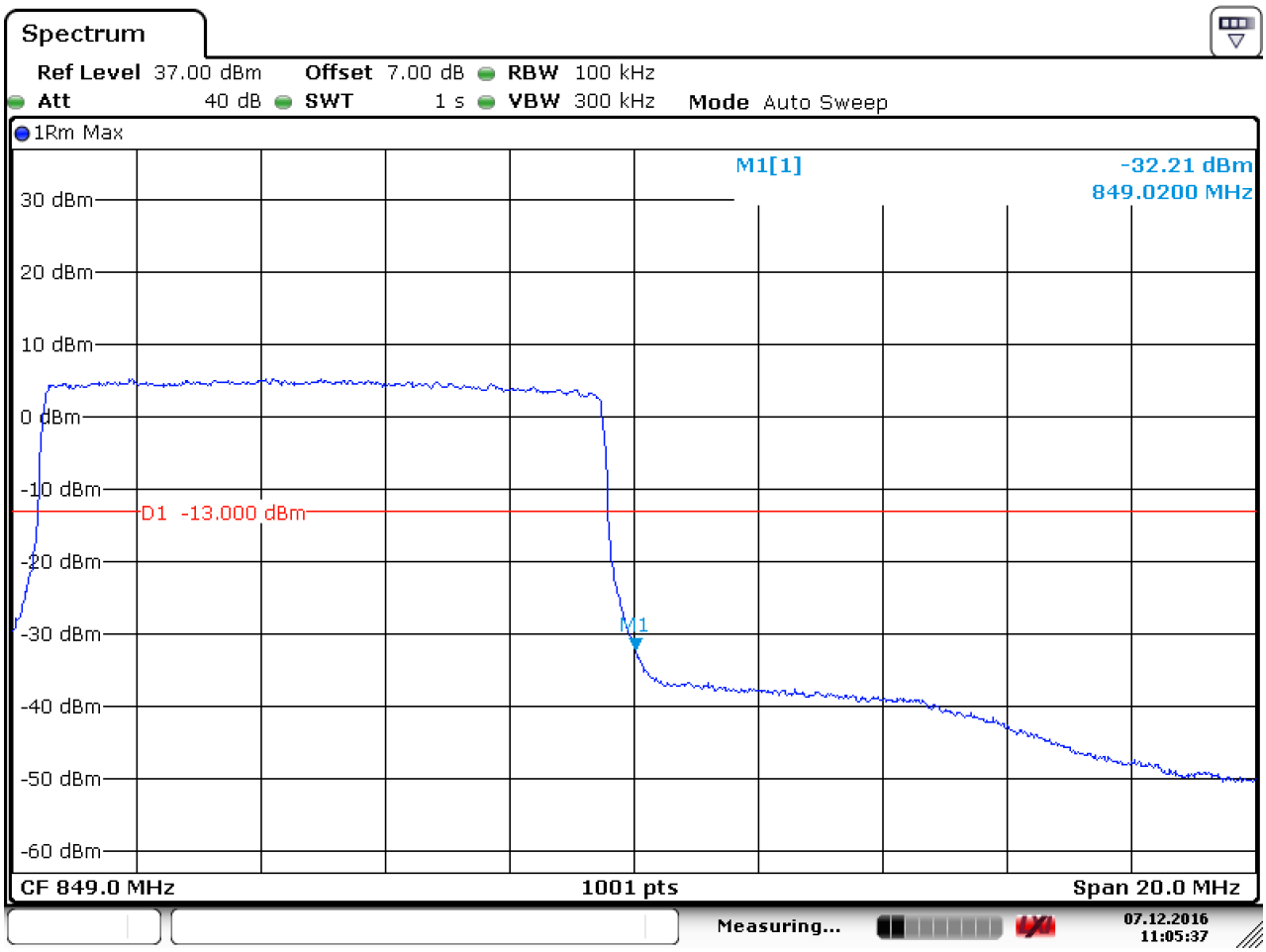
5.1.1.8.2 Test Channel = HCH

5.1.1.8.2.1 Test RB=1RB



Date: 7.DEC.2016 11:07:29

5.1.1.8.2.2 Test RB=50RB



Date: 7.DEC.2016 11:05:37

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.

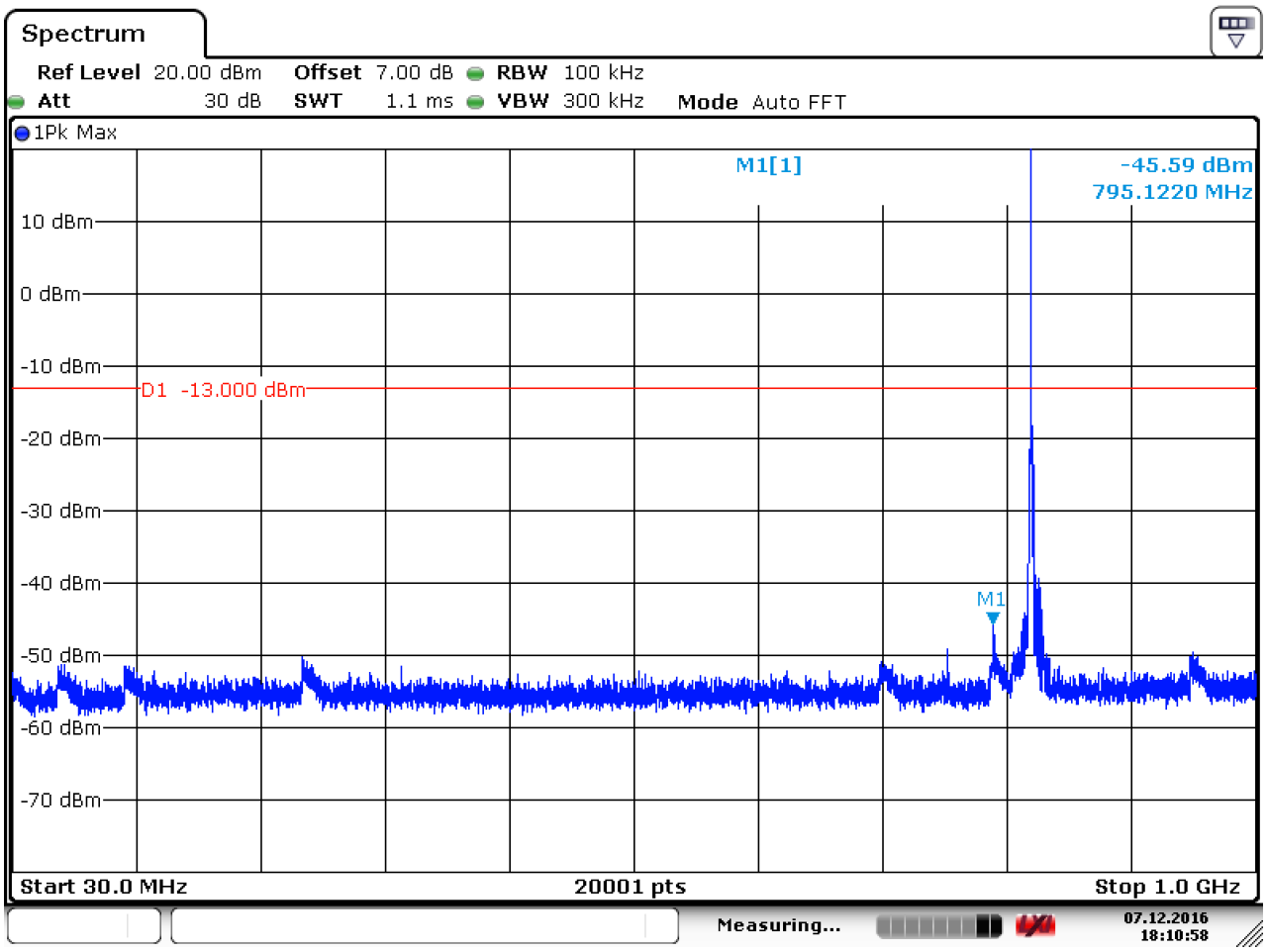
Part I - Test Plots

6.1 For LTE

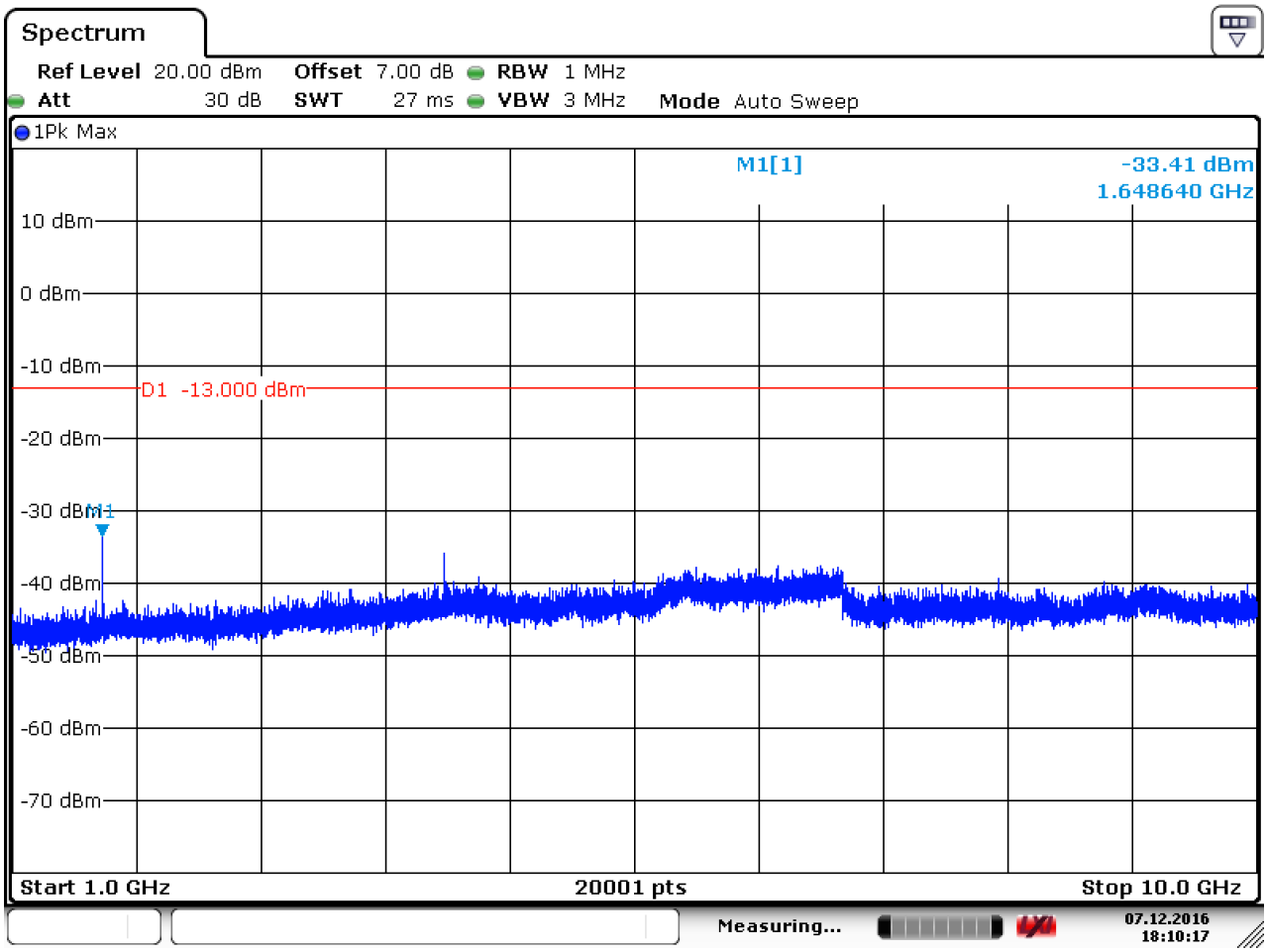
6.1.1 Test Band = LTE band5

6.1.1.1 Test Mode = LTE / TM1 1.4MHz RB1#0

6.1.1.1.1 Test Channel = LCH

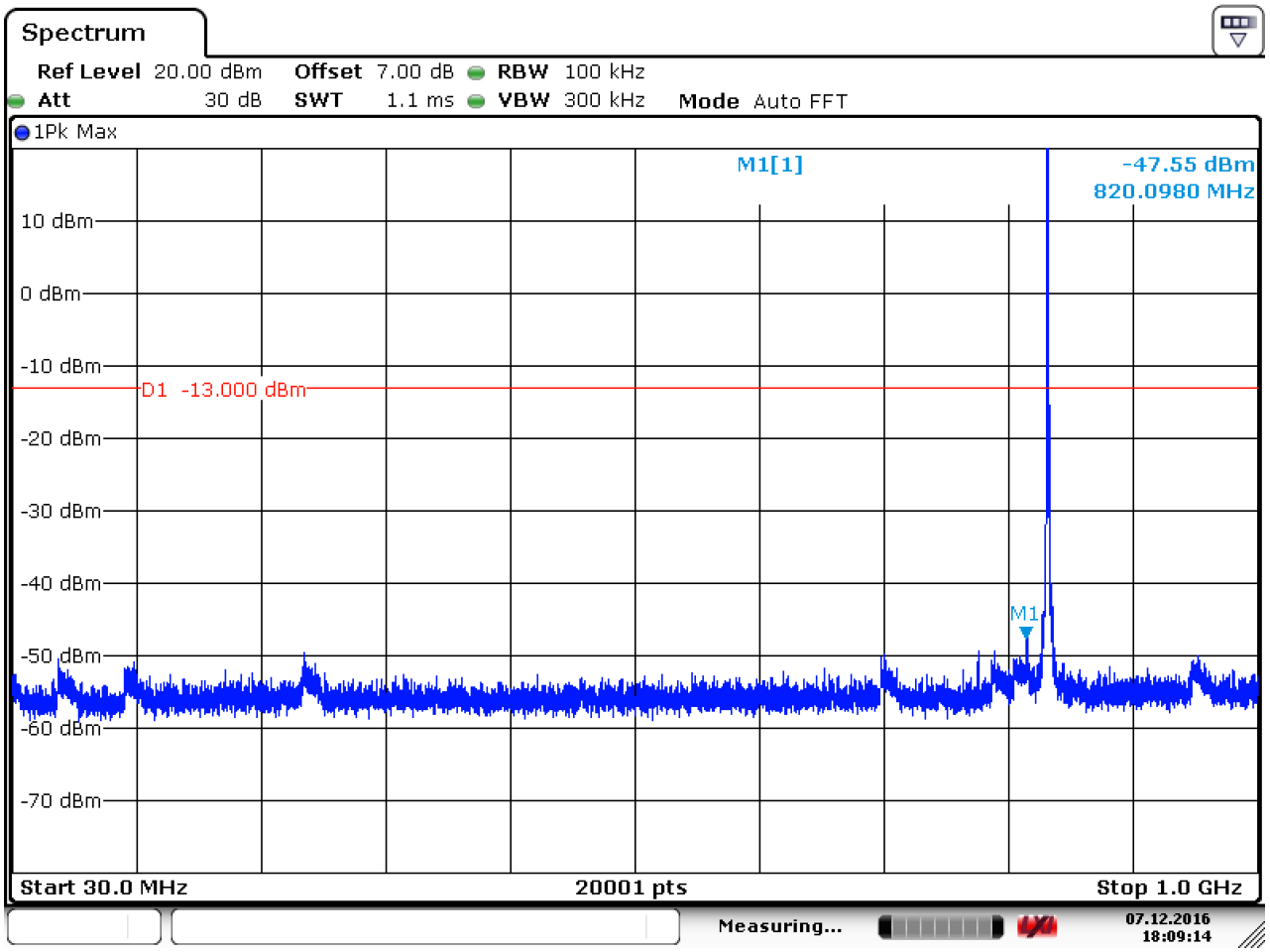


Date: 7.DEC.2016 18:10:58

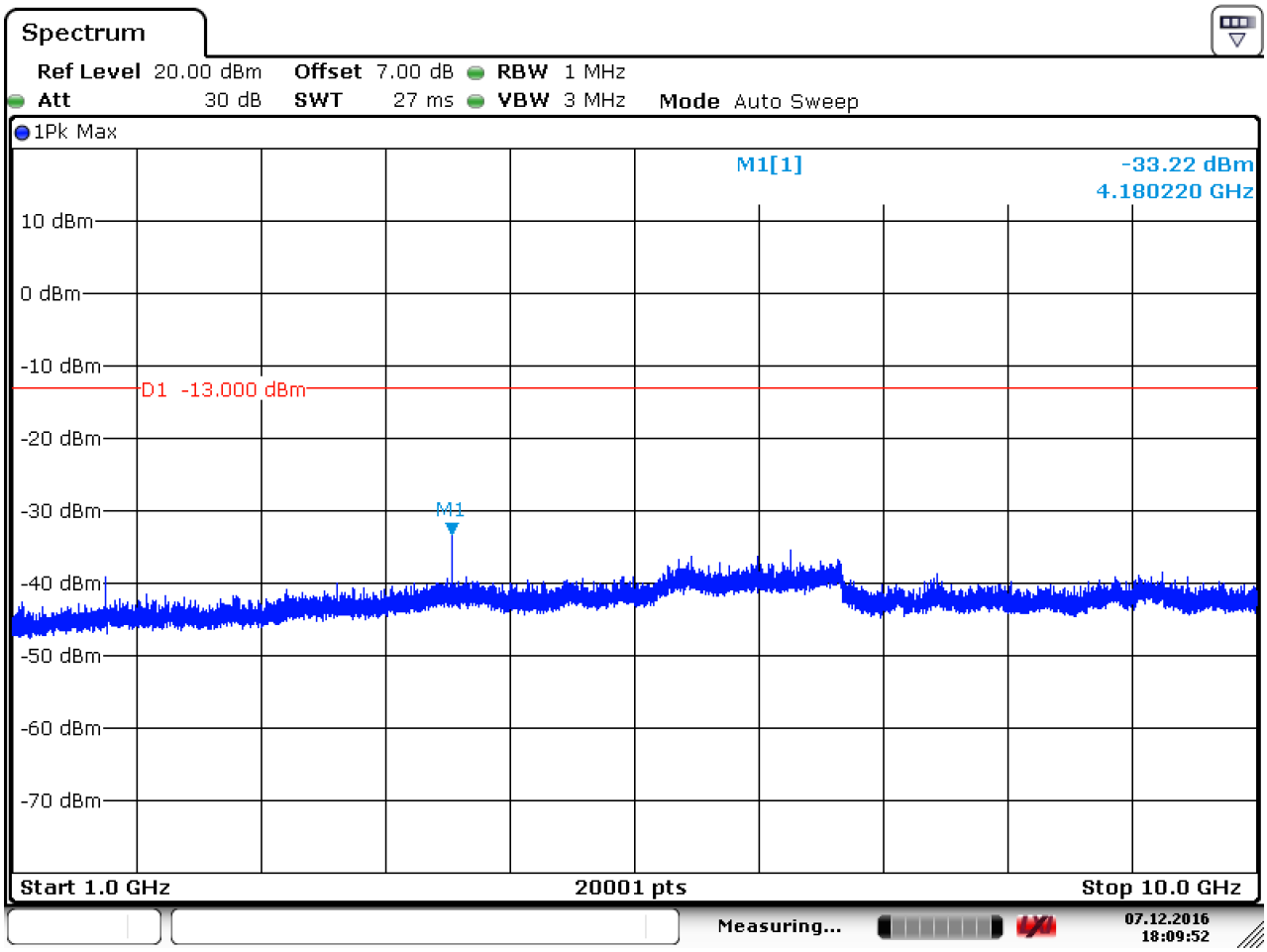


Date: 7.DEC.2016 18:10:17

6.1.1.1.2 Test Channel = MCH

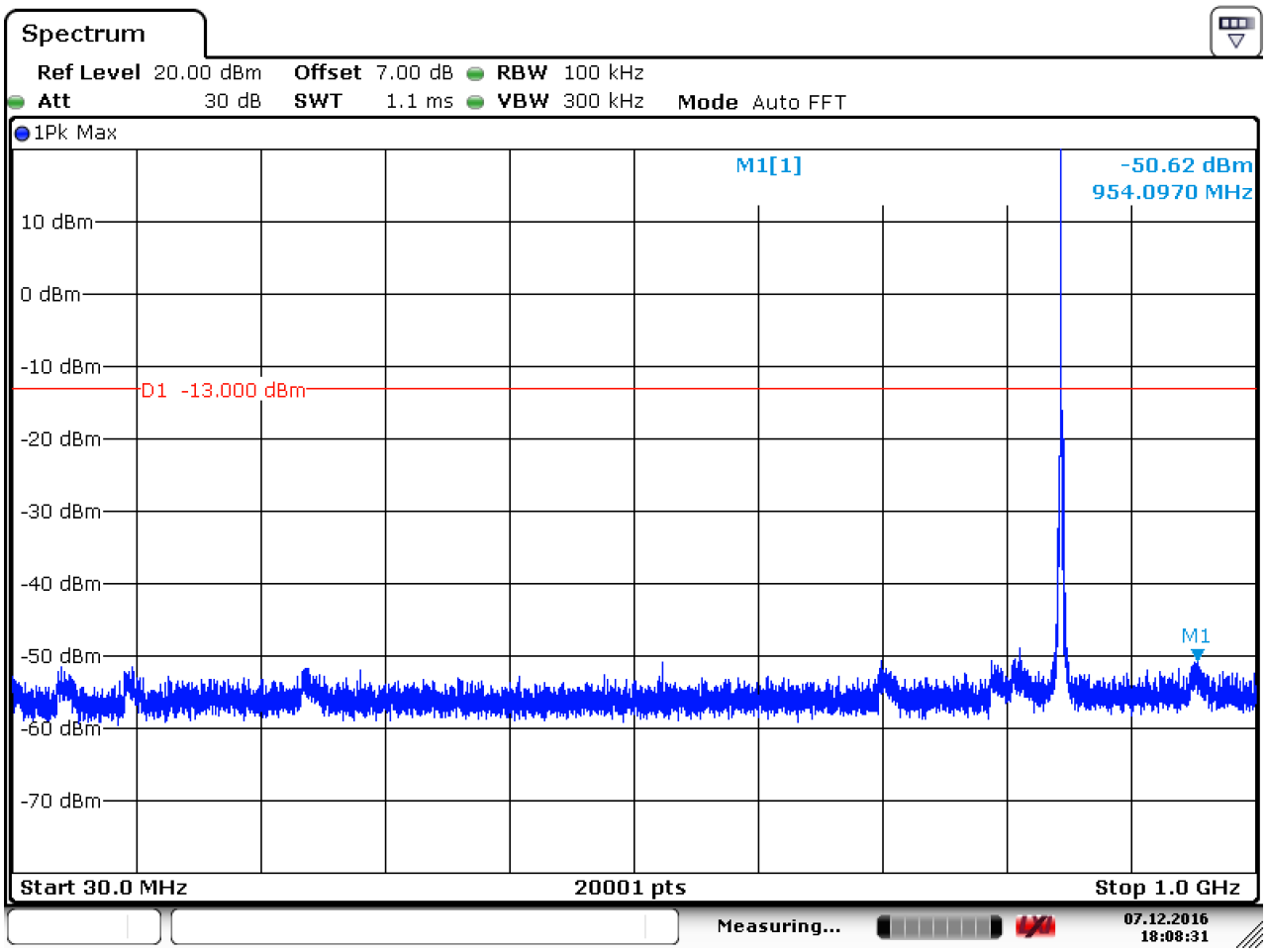


Date: 7.DEC.2016 18:09:14

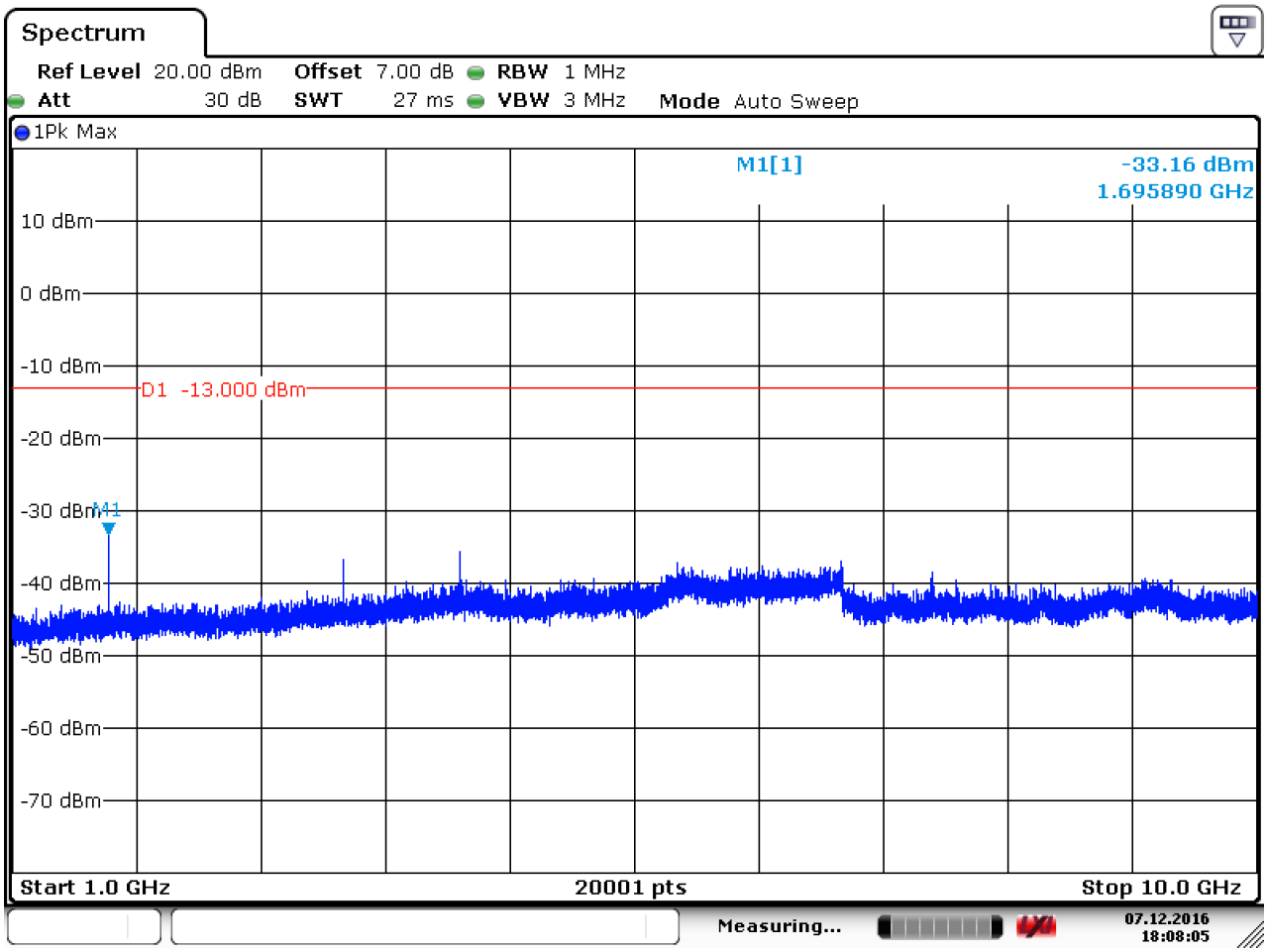


Date: 7.DEC.2016 18:09:52

6.1.1.1.3 Test Channel = HCH



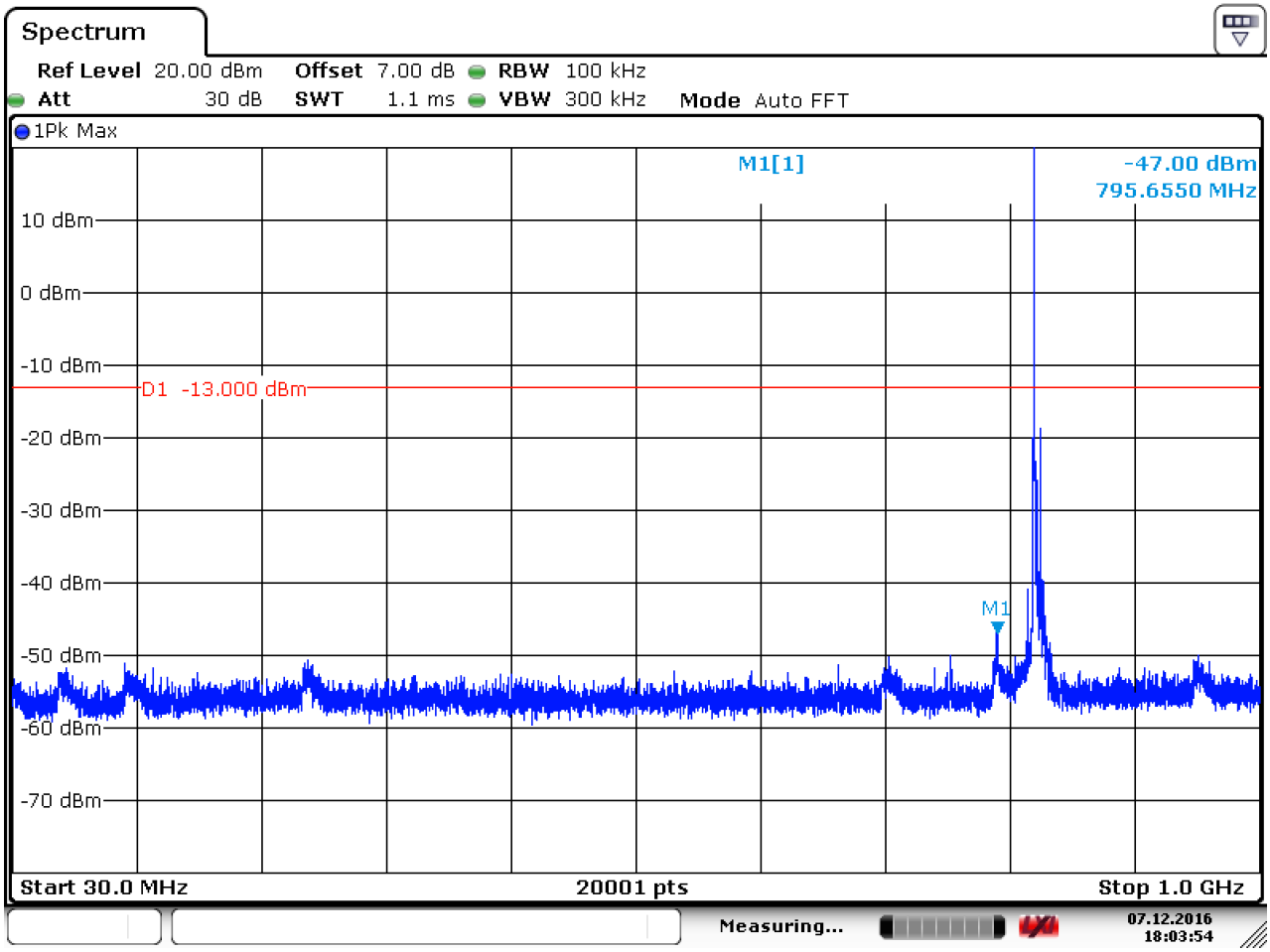
Date: 7.DEC.2016 18:08:31



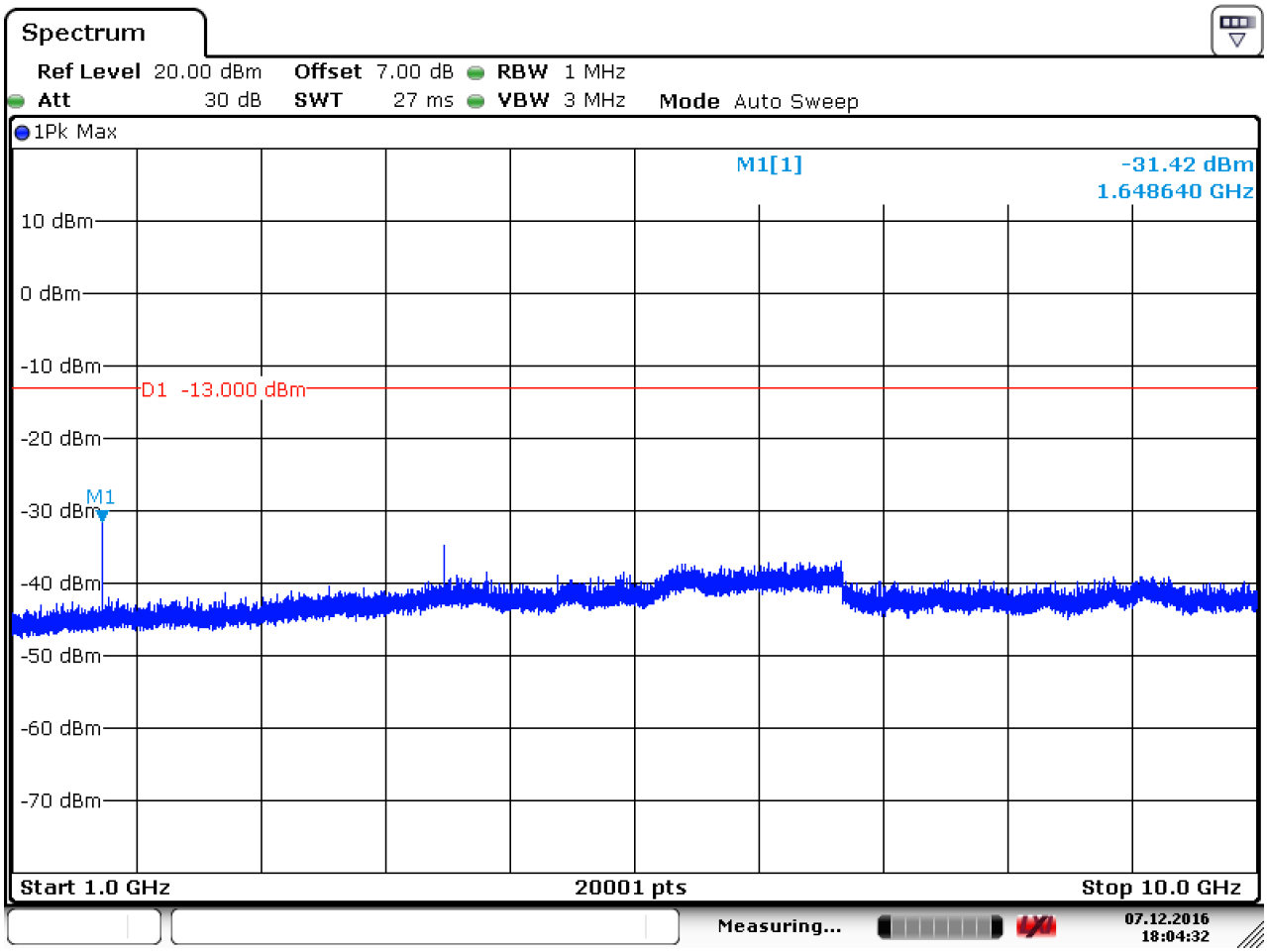
Date: 7.DEC.2016 18:08:05

6.1.1.2 Test Mode = LTE / TM1 3MHz RB1#0

6.1.1.2.1 Test Channel = LCH

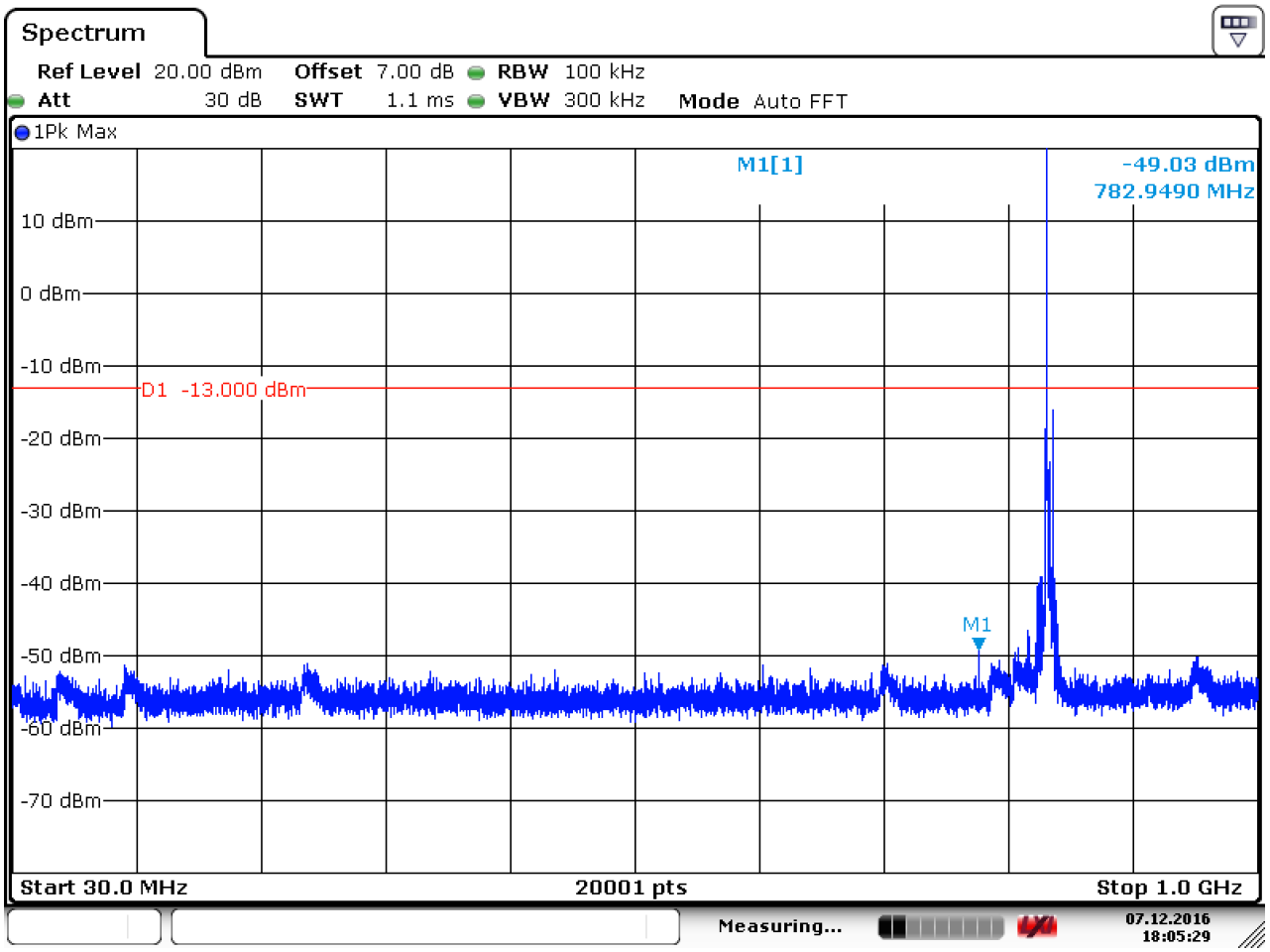


Date: 7.DEC.2016 18:03:54

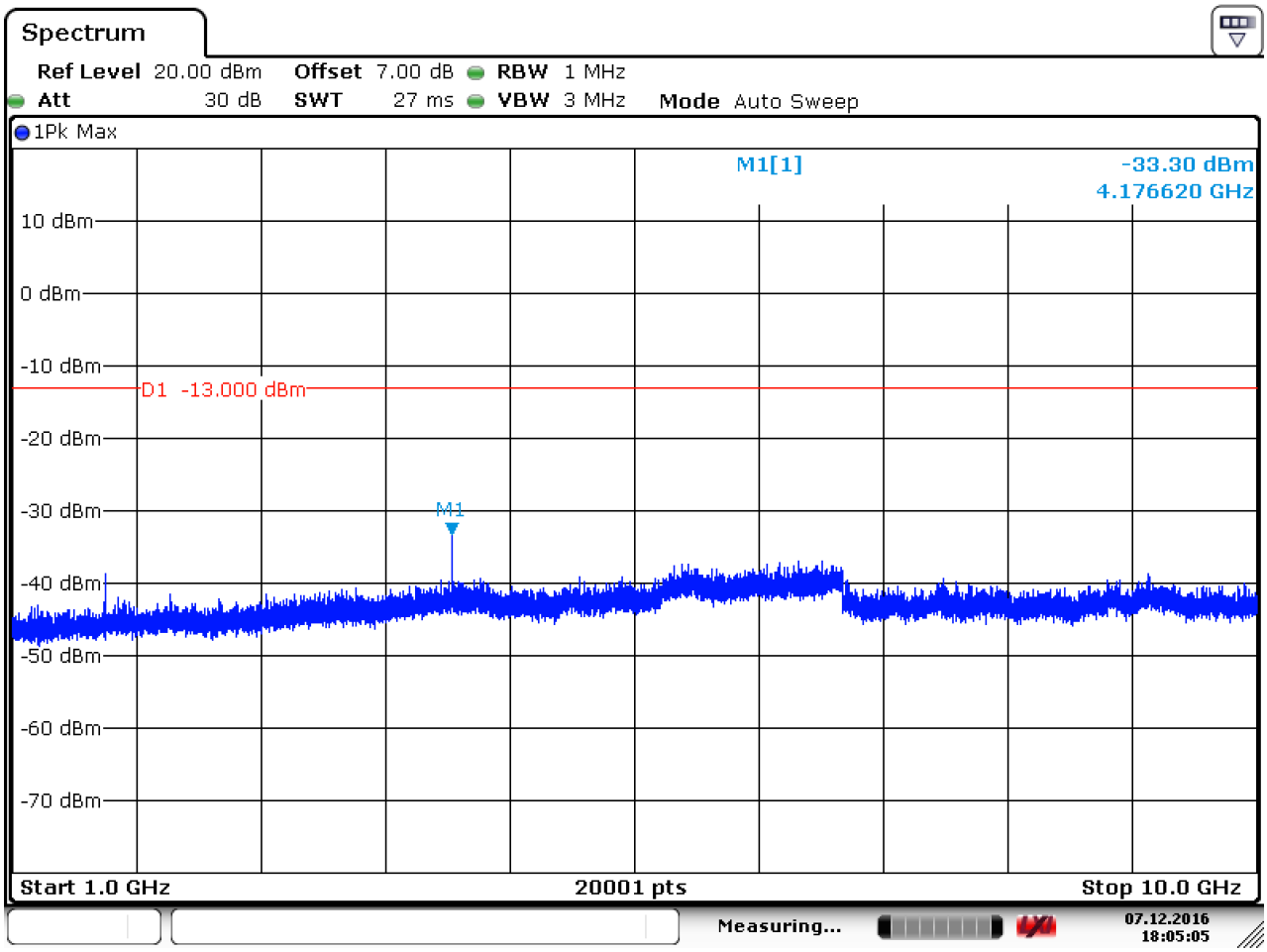


Date: 7.DEC.2016 18:04:33

6.1.1.2.2 Test Channel = MCH

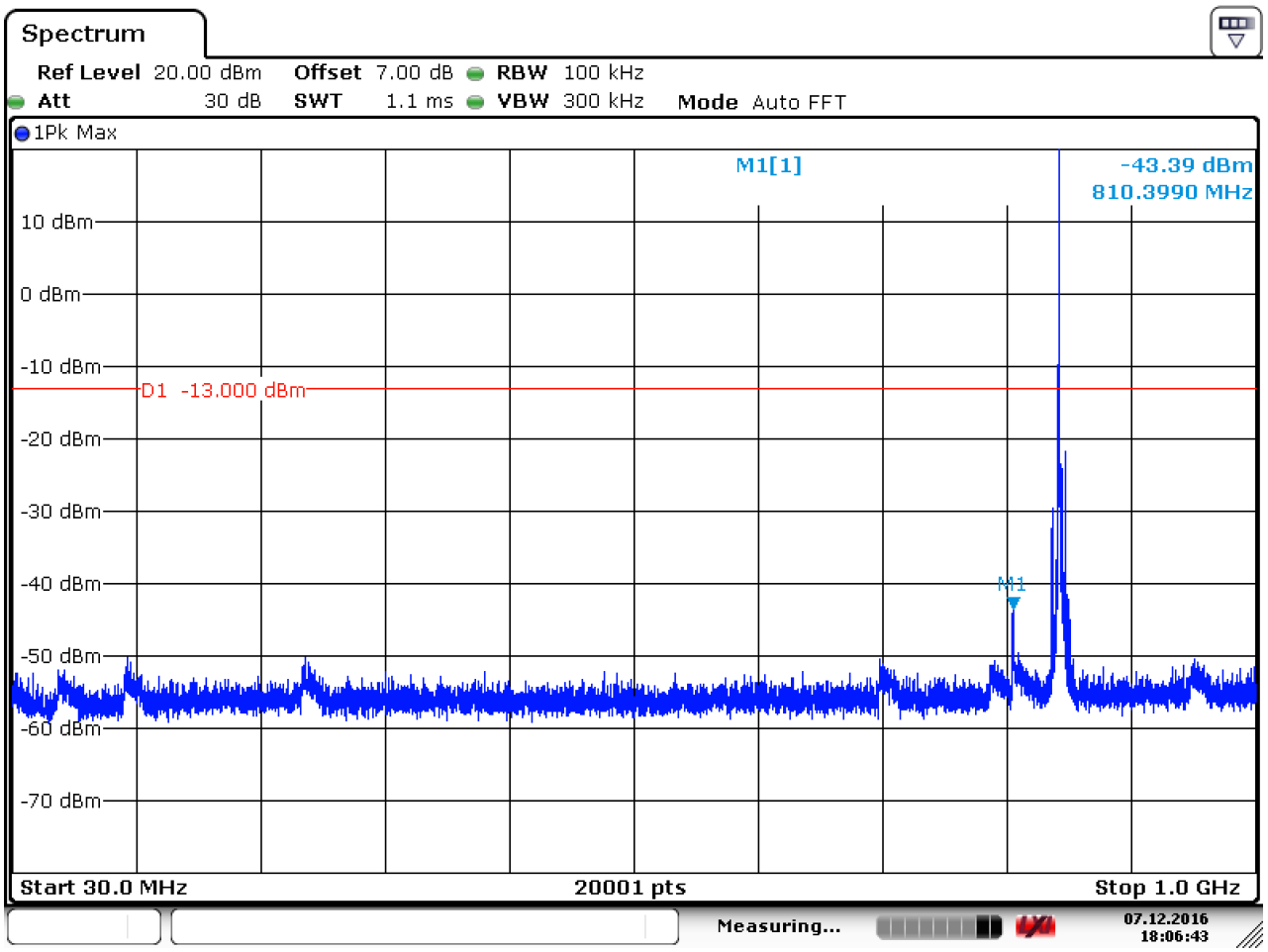


Date: 7.DEC.2016 18:05:29

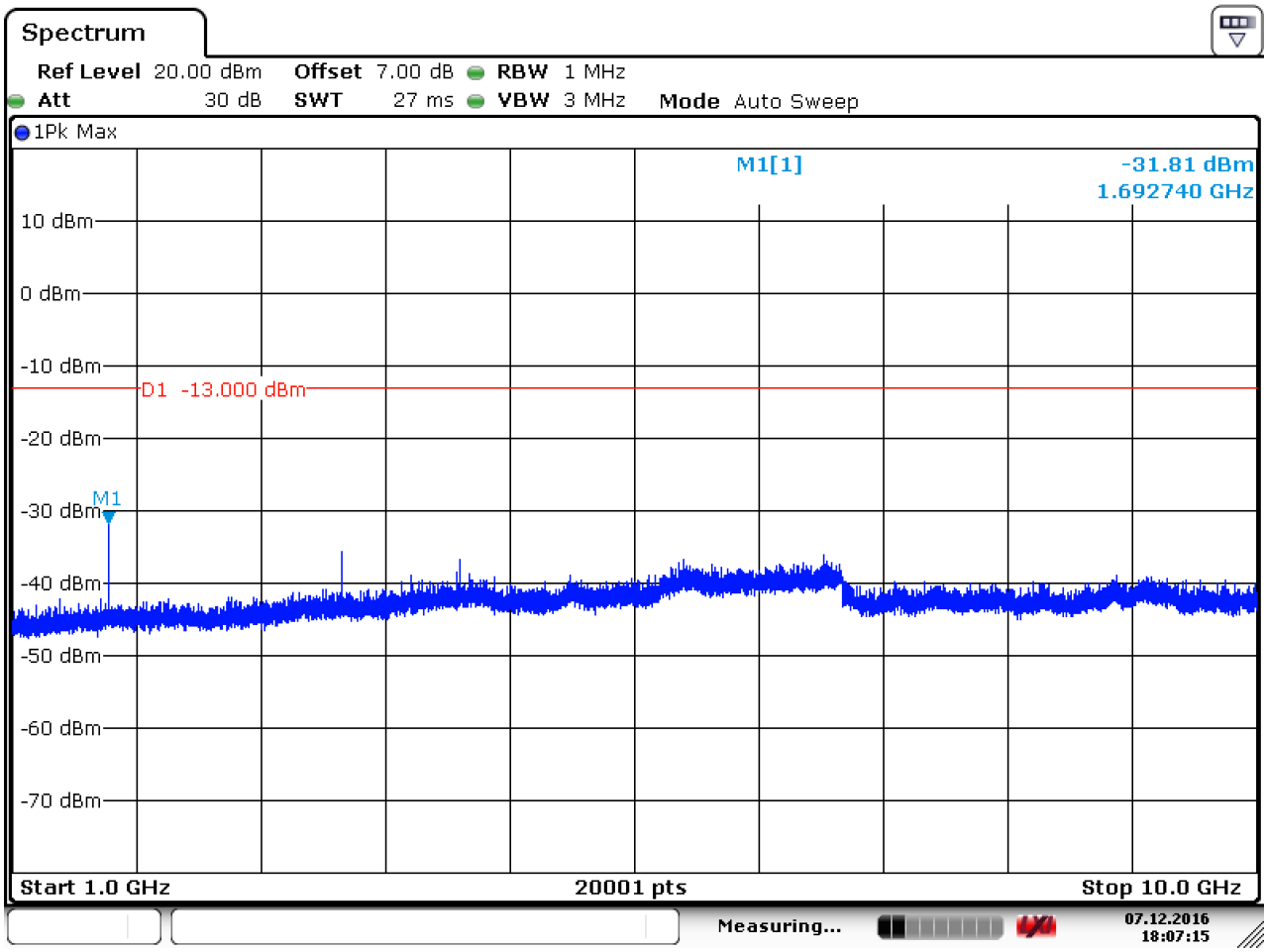


Date: 7.DEC.2016 18:05:05

6.1.1.2.3 Test Channel = HCH



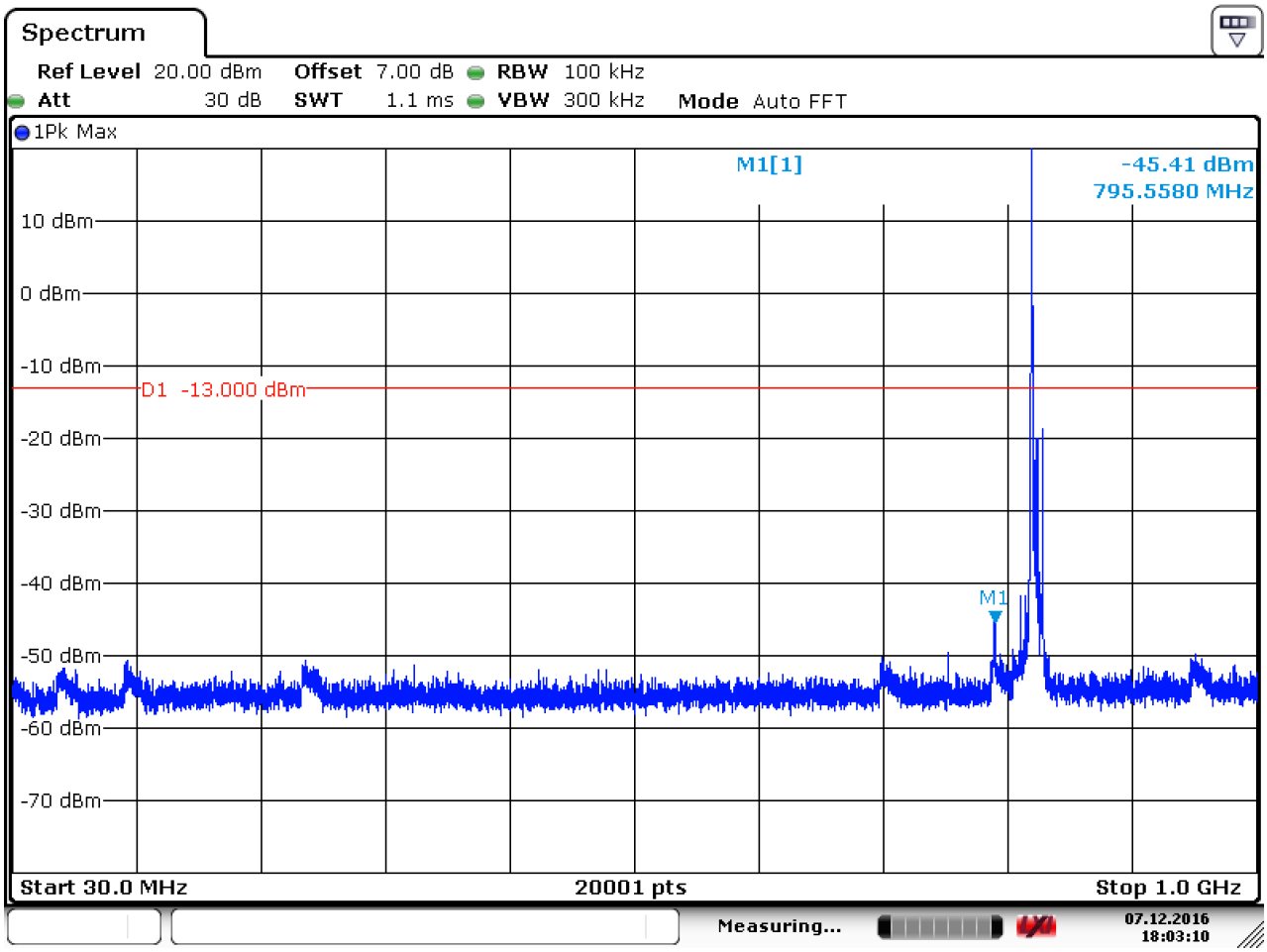
Date: 7.DEC.2016 18:06:44



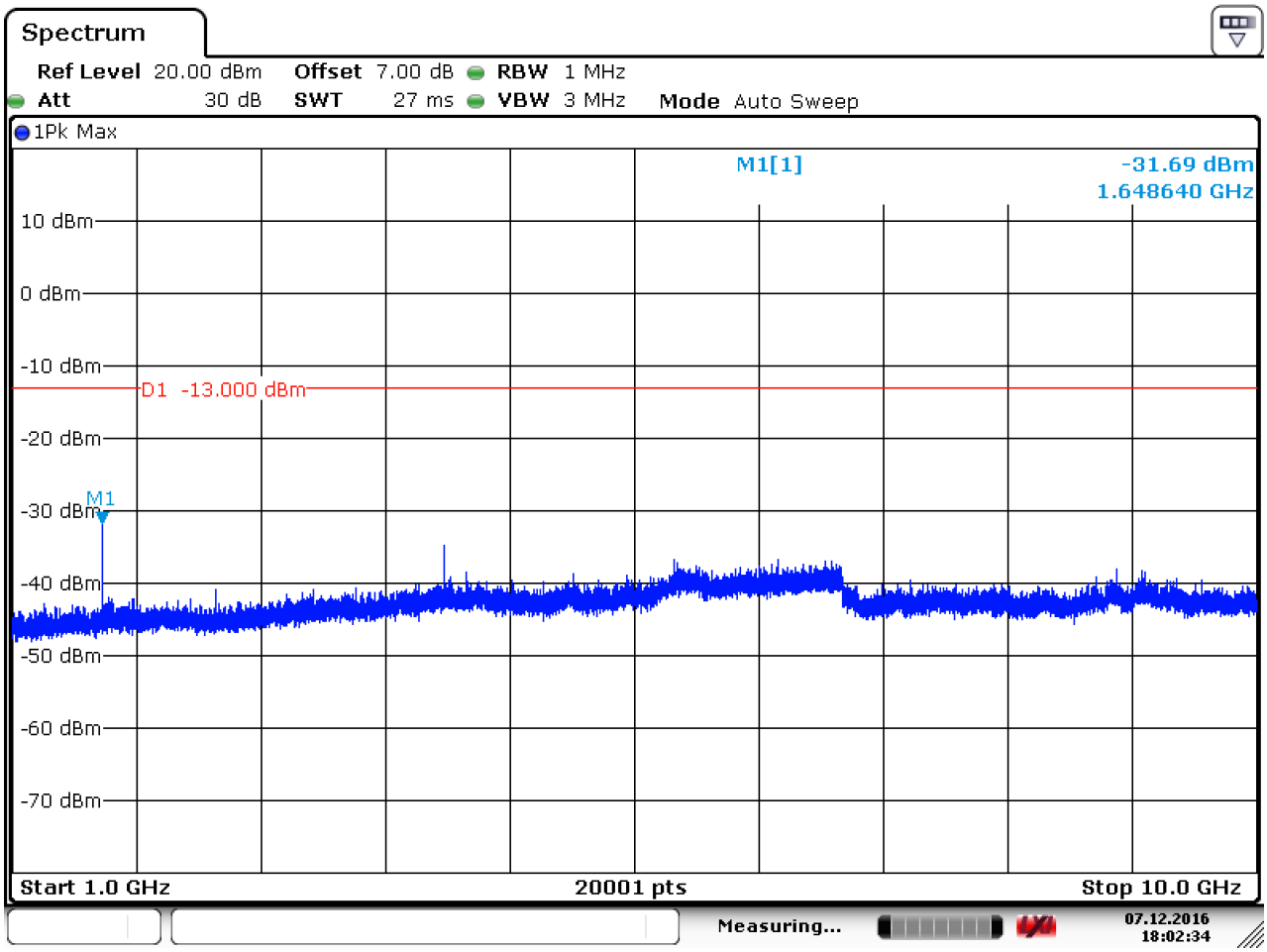
Date: 7.DEC.2016 18:07:16

6.1.1.3 Test Mode = LTE / TM1 5MHz RB1#0

6.1.1.3.1 Test Channel = LCH

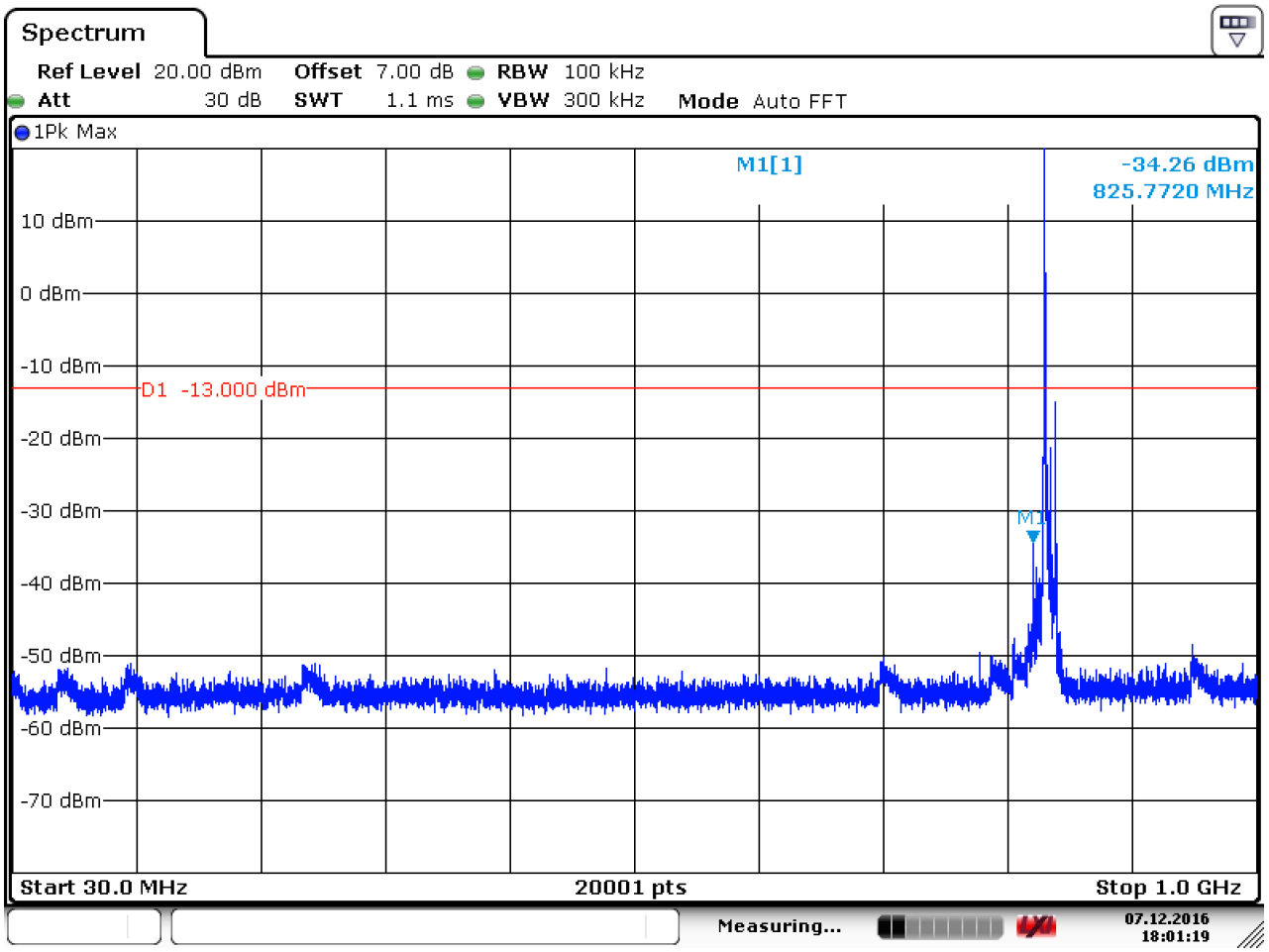


Date: 7.DEC.2016 18:03:11

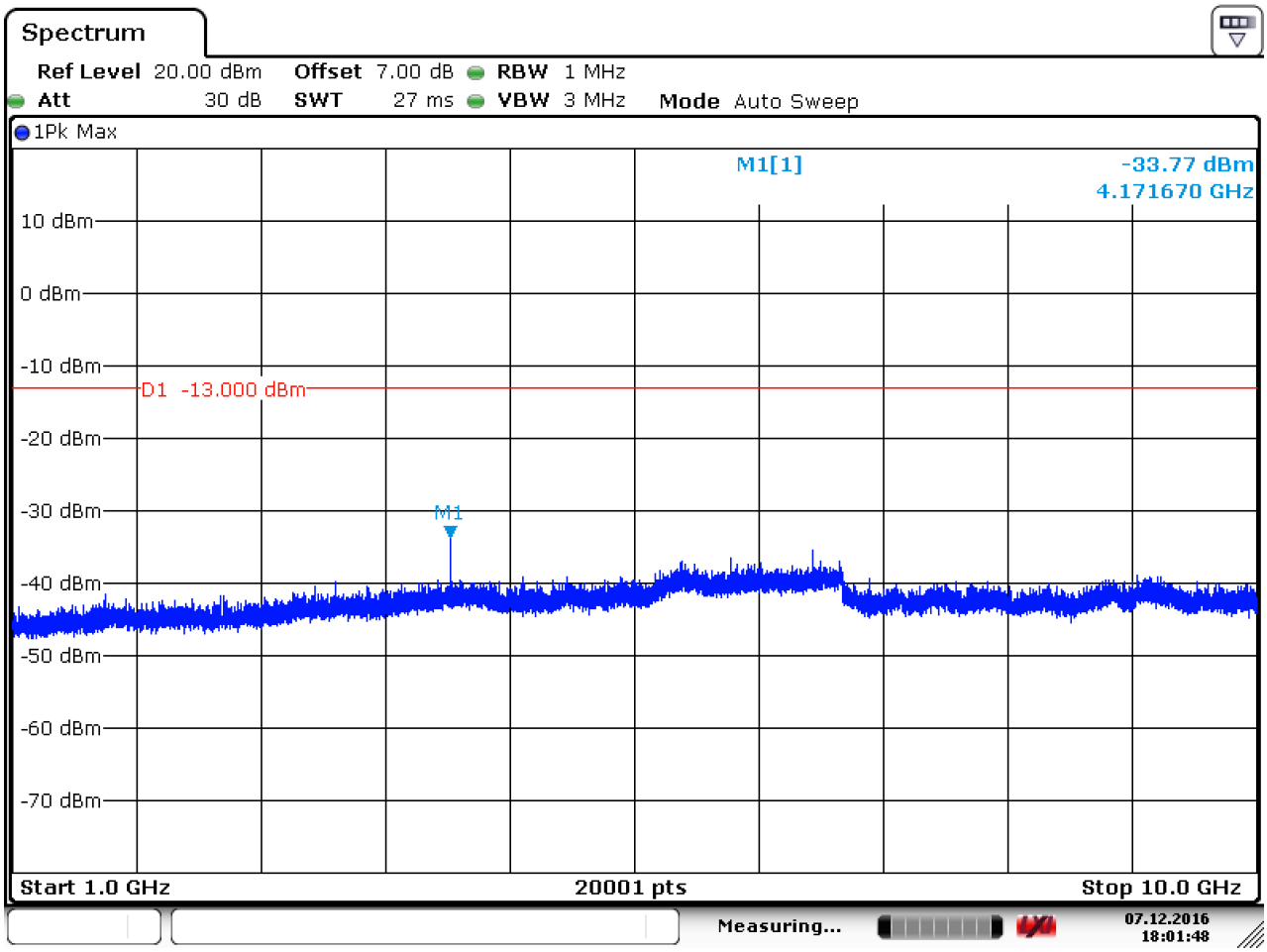


Date: 7.DEC.2016 18:02:34

6.1.1.3.2 Test Channel = MCH

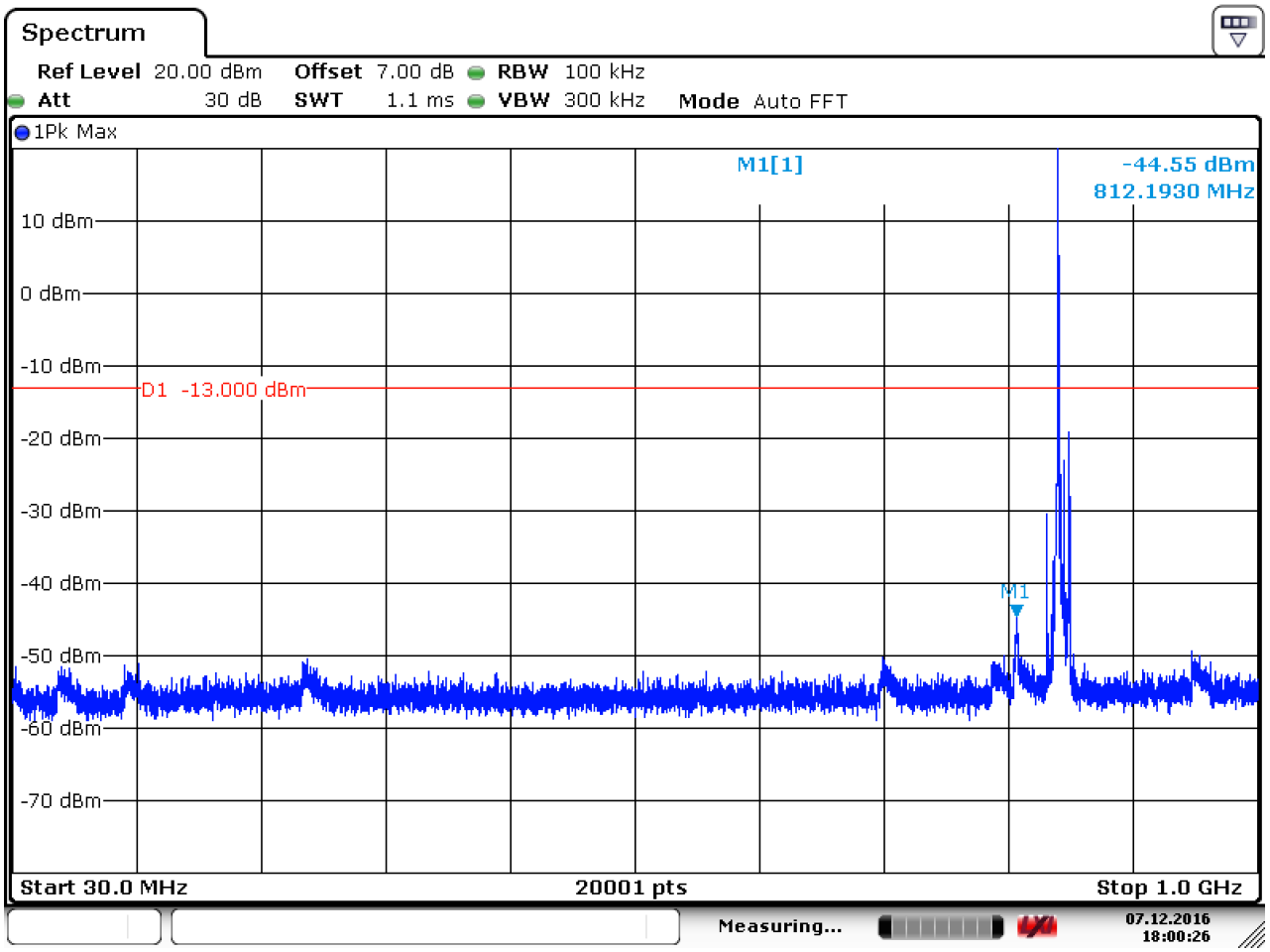


Date: 7.DEC.2016 18:01:19

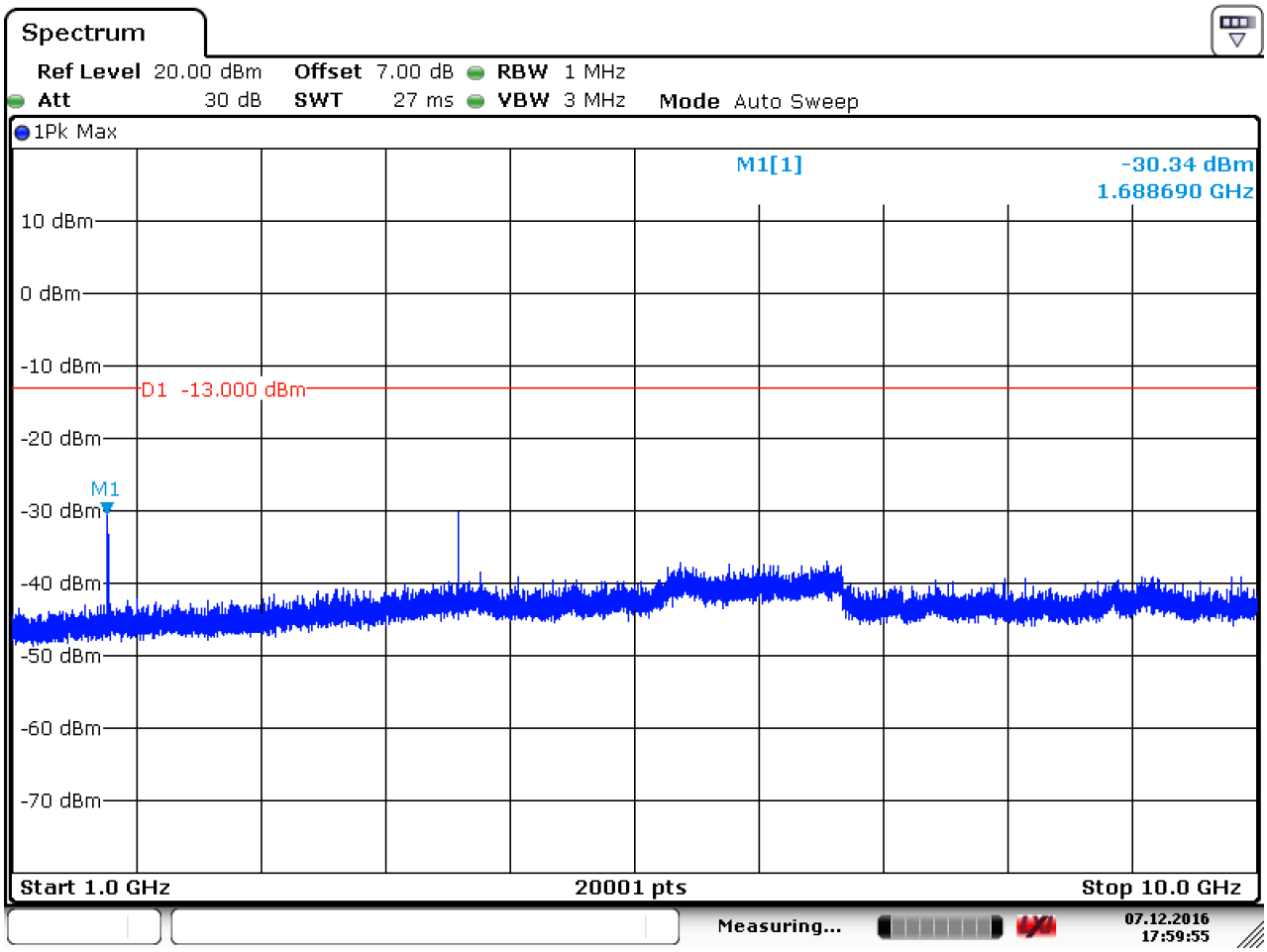


Date: 7.DEC.2016 18:01:48

6.1.1.3.3 Test Channel = HCH



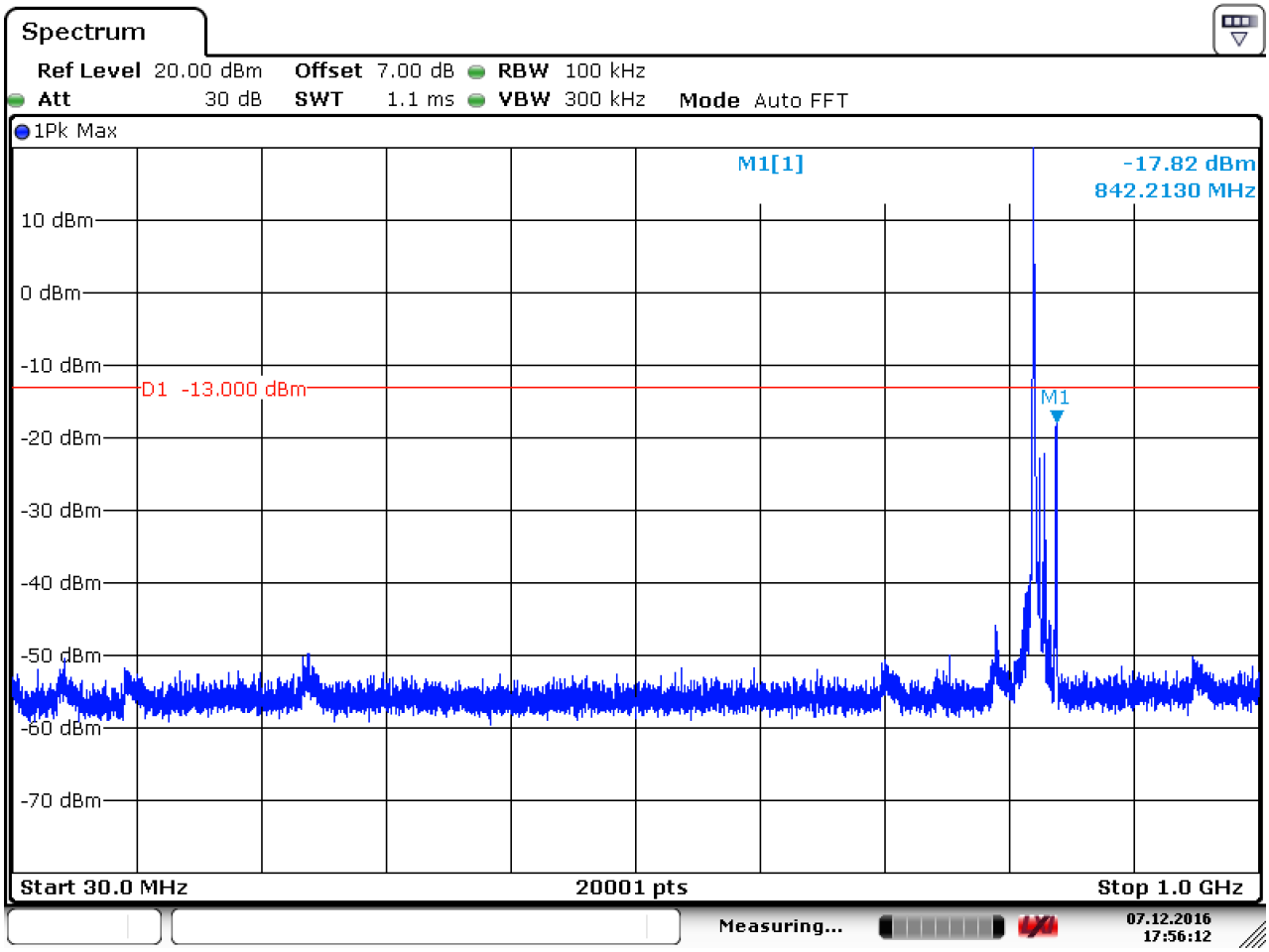
Date: 7.DEC.2016 18:00:27



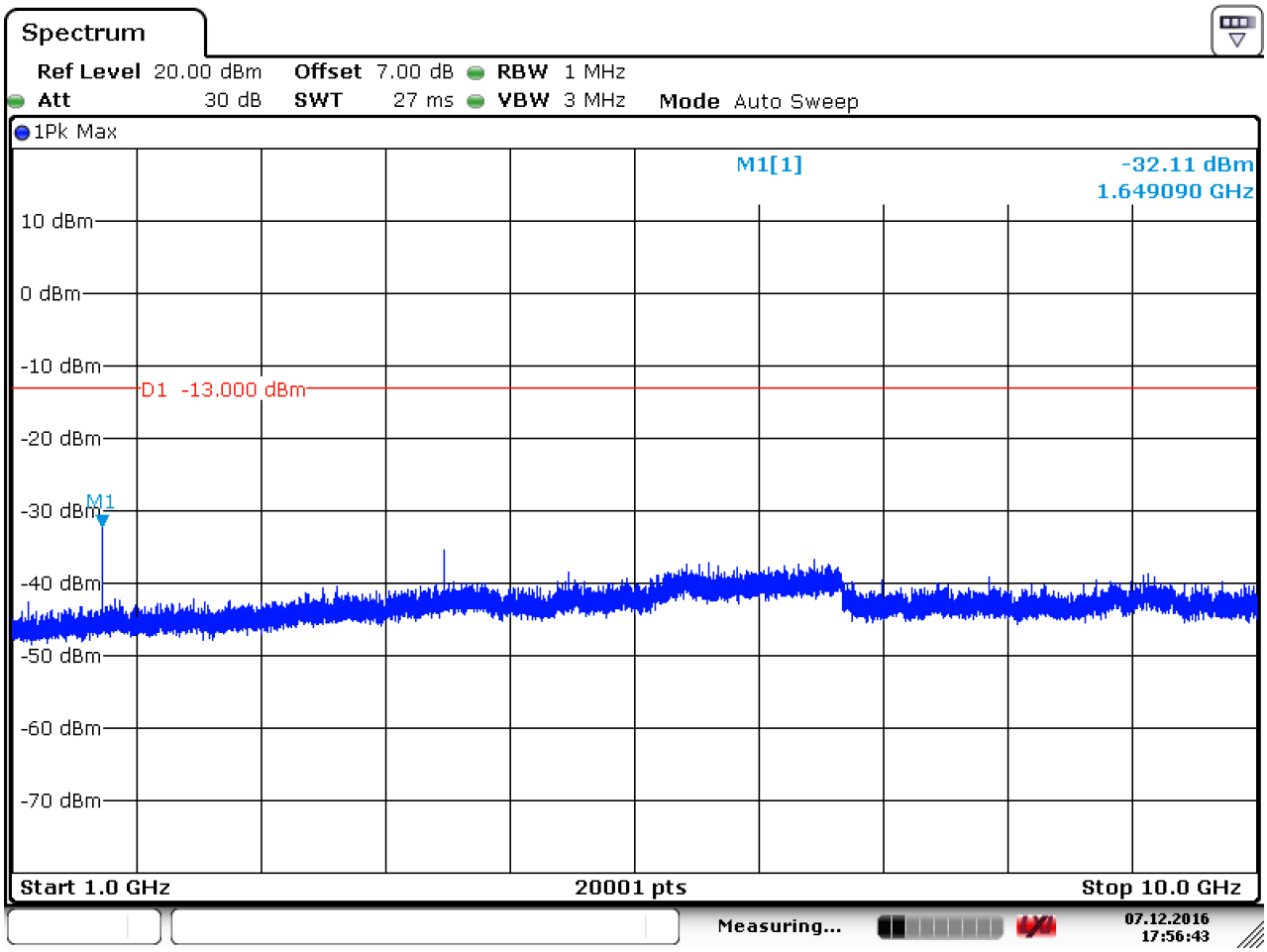
Date: 7.DEC.2016 17:59:56

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

6.1.1.4.1 Test Channel = LCH

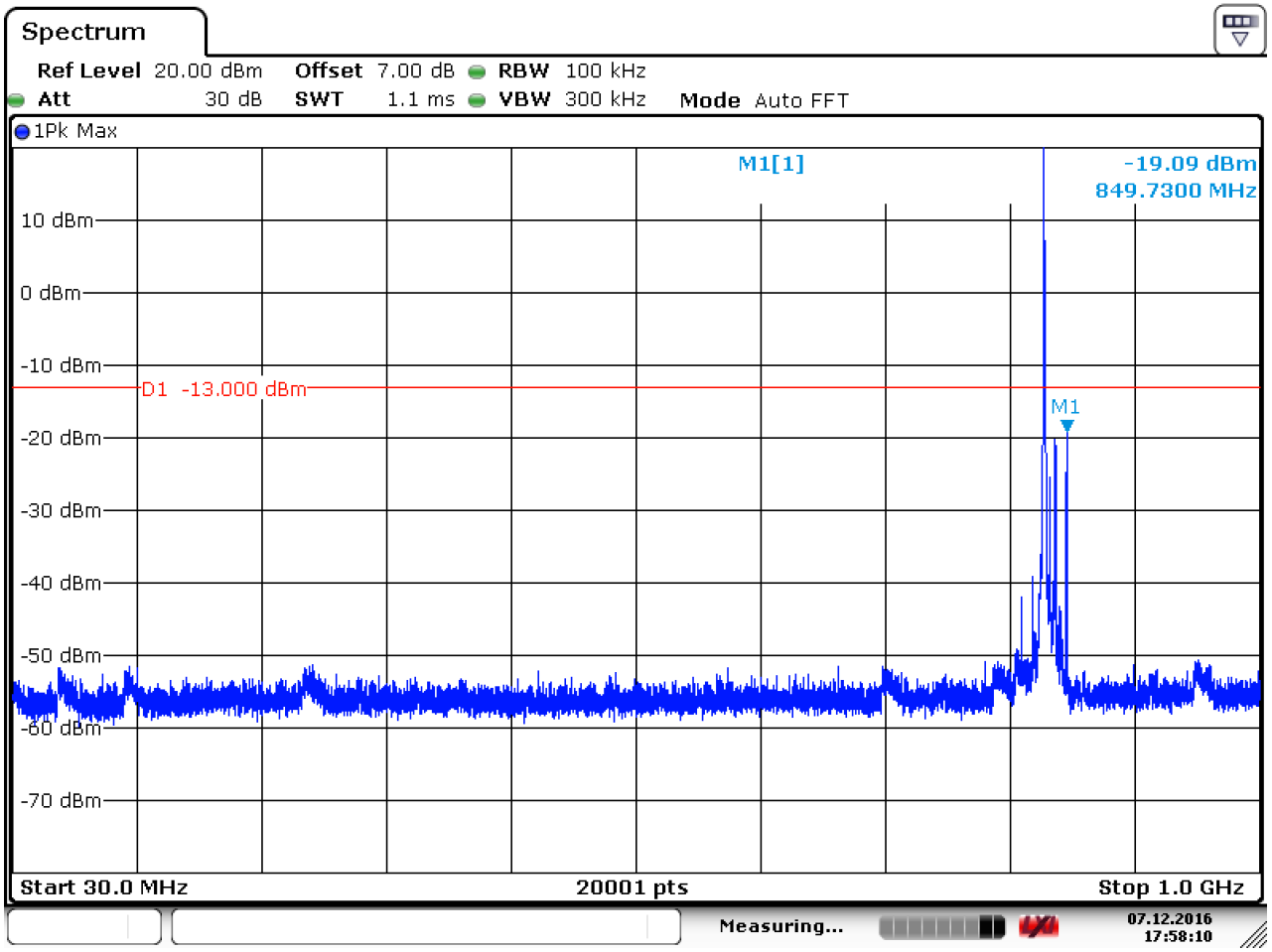


Date: 7.DEC.2016 17:56:12

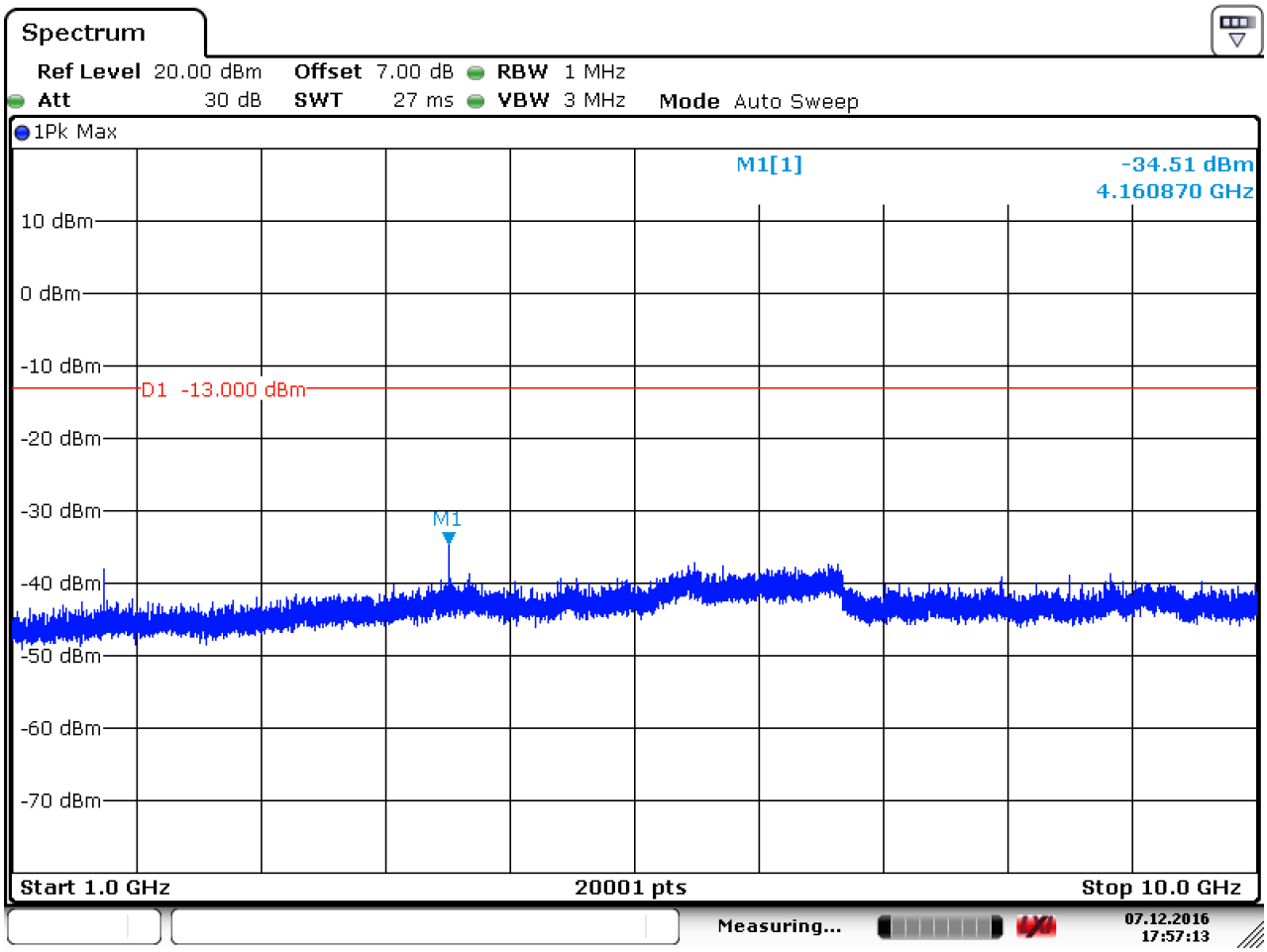


Date: 7.DEC.2016 17:56:43

6.1.1.4.2 Test Channel = MCH

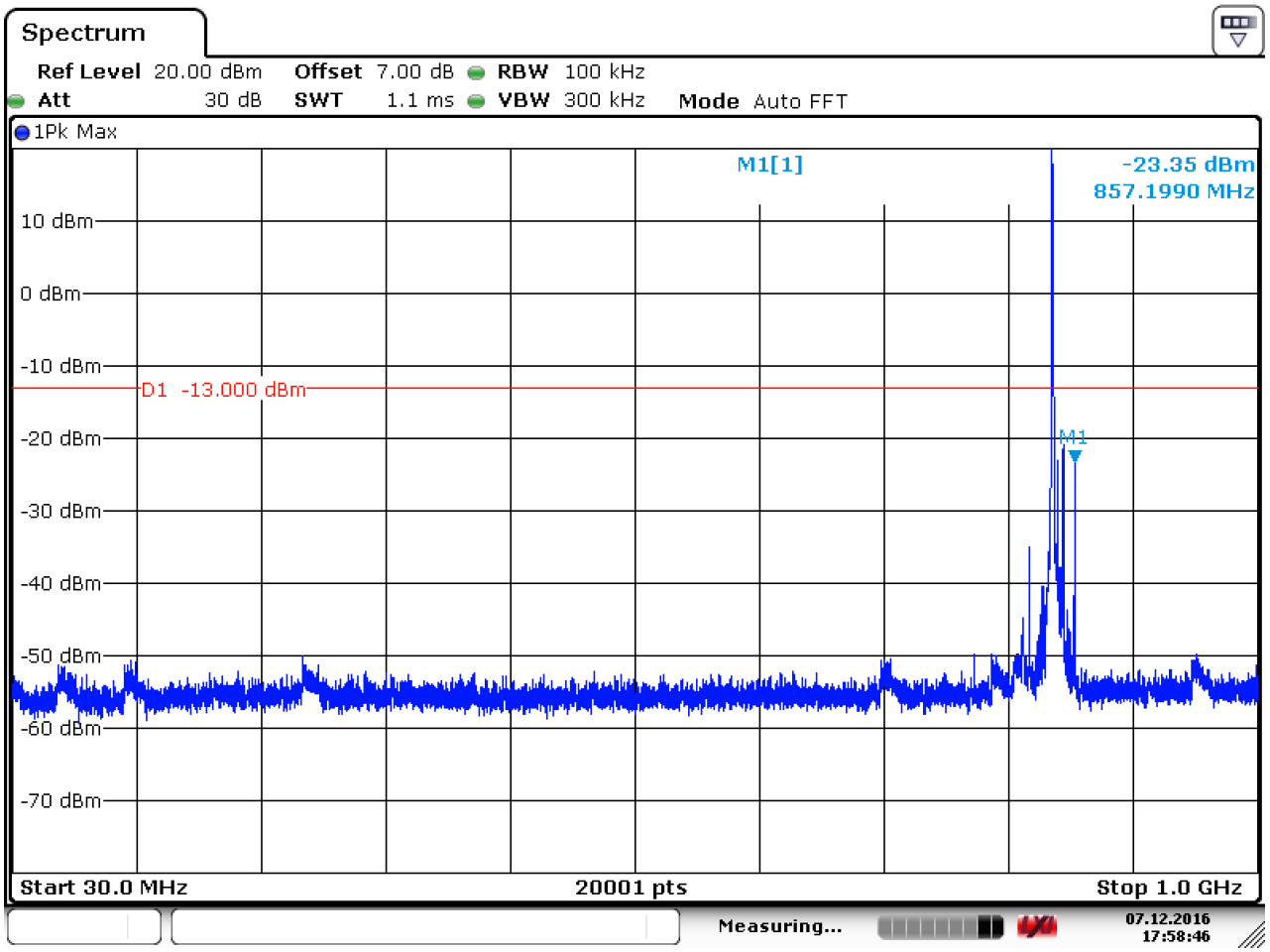


Date: 7.DEC.2016 17:58:10

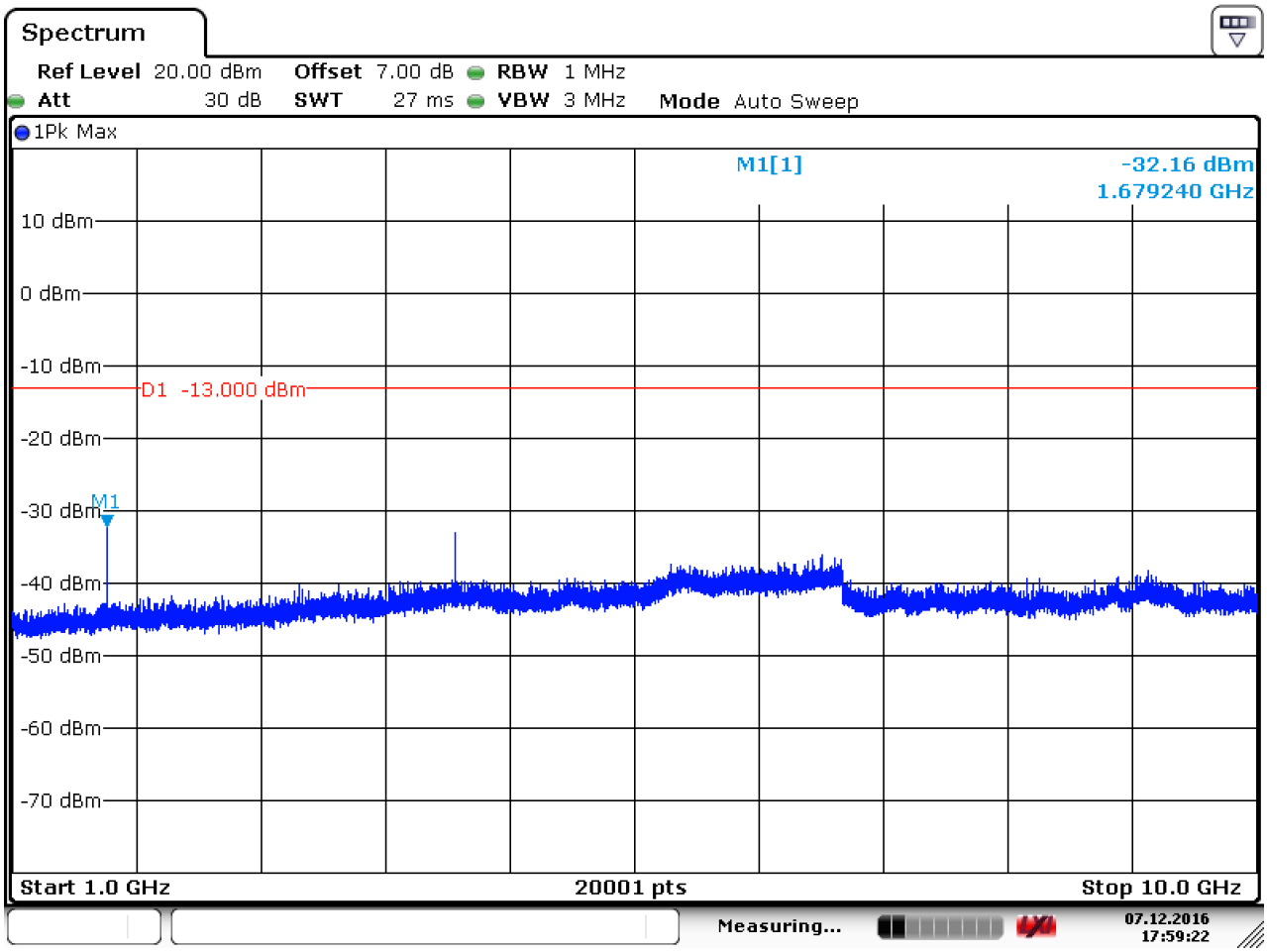


Date: 7.DEC.2016 17:57:14

6.1.1.4.3 Test Channel = HCH



Date: 7.DEC.2016 17:58:47



Date: 7.DEC.2016 17:59:22

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
1073.000	-68.32	-13.00	55.32	Vertical
1551.000	-66.50	-13.00	53.50	Vertical
8655.000	-65.06	-13.00	52.06	Vertical
1111.000	-66.98	-13.00	53.98	Horizontal
4170.000	-68.03	-13.00	55.03	Horizontal
5145.000	-67.43	-13.00	54.43	Horizontal

7.1.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
2576.000	-58.47	-13.00	45.47	Vertical
3975.000	-68.45	-13.00	55.45	Vertical
5925.000	-67.02	-13.00	54.02	Vertical
1452.000	-66.44	-13.00	53.44	Horizontal
2112.000	-62.19	-13.00	49.19	Horizontal
2776.000	-57.30	-13.00	44.30	Horizontal

7.1.1.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
1991.000	-61.75	-13.00	48.75	Vertical
3585.000	-69.34	-13.00	56.34	Vertical
6705.000	-66.09	-13.00	53.09	Vertical
1485.000	-66.13	-13.00	53.13	Horizontal
3487.500	-69.88	-13.00	56.88	Horizontal
7290.000	-66.10	-13.00	53.10	Horizontal

NOTE:

1) The disturbance above 13GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

8 Frequency Stability

8.1 Frequency Error VS. Voltage

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTE band5	LTE/TM1 10MHz	LCH	TN	VL	-3.53	-0.00426	PASS
				VN	1.46	0.00176	PASS
				VH	-5.88	-0.00709	PASS
		MCH	TN	VL	-1.38	-0.00165	PASS
				VN	-2.75	-0.00329	PASS
				VH	1.93	0.00231	PASS
		HCH	TN	VL	-5.36	-0.00635	PASS
				VN	-5.83	-0.00691	PASS
				VH	-1.79	-0.00212	PASS
	LTE/TM2 10MHz	LCH	TN	VL	-4.67	-0.00563	PASS
				VN	-3.75	-0.00452	PASS
				VH	-5.36	-0.00647	PASS
		MCH	TN	VL	1.22	0.00146	PASS
				VN	-3.81	-0.00455	PASS
				VH	1.59	0.00190	PASS
		HCH	TN	VL	-3.08	-0.00365	PASS
				VN	-7.50	-0.00889	PASS
				VH	5.44	0.00645	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	-4.50	-0.00543	PASS
				-20	-1.94	-0.00234	PASS
				-10	-2.85	-0.00344	PASS
				0	0.75	0.00090	PASS
				10	1.32	0.00159	PASS
				20	0.85	0.00103	PASS
				30	-0.31	-0.00037	PASS
				40	-2.82	-0.00340	PASS
				50	-5.59	-0.00674	PASS
		MCH	VN	-30	-6.20	-0.00741	PASS
				-20	-5.35	-0.00640	PASS
				-10	-3.29	-0.00393	PASS
				0	-1.60	-0.00191	PASS
				10	-2.38	-0.00285	PASS
				20	-0.54	-0.00065	PASS
				30	-5.16	-0.00617	PASS
				40	-4.85	-0.00580	PASS
				50	-6.92	-0.00827	PASS
		HCH	VN	-30	-6.54	-0.00775	PASS
				-20	-3.49	-0.00414	PASS
				-10	0.53	0.00063	PASS
				0	-2.44	-0.00289	PASS
				10	2.25	0.00267	PASS
				20	-0.57	-0.00068	PASS
				30	-2.18	-0.00258	PASS
				40	-5.25	-0.00622	PASS
				50	-3.80	-0.00450	PASS

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	-3.44	-0.00415	PASS
				-20	-2.72	-0.00328	PASS
				-10	1.39	0.00168	PASS
				0	2.64	0.00318	PASS
				10	1.60	0.00193	PASS
				20	-0.23	-0.00028	PASS
				30	-3.14	-0.00379	PASS
				40	2.34	0.00282	PASS
				50	-5.72	-0.00690	PASS
		MCH	VN	-30	-3.80	-0.00454	PASS
				-20	-2.58	-0.00308	PASS
				-10	-2.22	-0.00265	PASS
				0	-1.92	-0.00230	PASS
				10	-0.68	-0.00081	PASS
				20	0.99	0.00118	PASS
				30	-2.94	-0.00351	PASS
				40	-6.62	-0.00791	PASS
				50	-6.21	-0.00742	PASS
		HCH	VN	-30	-3.34	-0.00396	PASS
				-20	-4.58	-0.00543	PASS
				-10	2.02	0.00239	PASS
				0	-3.52	-0.00417	PASS
				10	2.82	0.00334	PASS
				20	-1.83	-0.00217	PASS
				30	-3.68	-0.00436	PASS
				40	-4.12	-0.00488	PASS
				50	-5.49	-0.00650	PASS

The End