Appendix B

E-UTRA Band 5

CONTENT

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1 Effective (Isotropic) Radiated Power Output Data

Effective Isotropic 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	22.06	21.06	38.45	PASS
				RB1#2	22.15	21.15	38.45	PASS
				RB1#5	22.06	21.06	38.45	PASS
				RB3#0	22.15	21.15	38.45	PASS
				RB3#2	22.10	21.10	38.45	PASS
				RB3#3	22.15	21.15	38.45	PASS
				RB6#0	21.12	20.12	38.45	PASS
			MCH	RB1#0	22.06	21.06	38.45	PASS
				RB1#2	22.14	21.14	38.45	PASS
				RB1#5	22.08	21.08	38.45	PASS
				RB3#0	22.16	21.16	38.45	PASS
				RB3#2	22.15	21.15	38.45	PASS
				RB3#3	22.17	21.17	38.45	PASS
				RB6#0	21.14	20.14	38.45	PASS
			HCH	RB1#0	22.12	21.12	38.45	PASS
				RB1#2	22.21	21.21	38.45	PASS
				RB1#5	22.11	21.11	38.45	PASS
				RB3#0	22.25	21.25	38.45	PASS
				RB3#2	22.22	21.22	38.45	PASS
				RB3#3	22.23	21.23	38.45	PASS
				RB6#0	21.22	20.22	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	21.28	20.28	38.45	PASS
				RB1#2	21.38	20.38	38.45	PASS
				RB1#5	21.26	20.26	38.45	PASS
				RB3#0	21.13	20.13	38.45	PASS
				RB3#2	21.08	20.08	38.45	PASS
				RB3#3	21.11	20.11	38.45	PASS
				RB6#0	20.18	19.18	38.45	PASS
			MCH	RB1#0	21.27	20.27	38.45	PASS
				RB1#2	21.40	20.40	38.45	PASS
				RB1#5	21.30	20.30	38.45	PASS
				RB3#0	21.15	20.15	38.45	PASS
				RB3#2	21.14	20.14	38.45	PASS
				RB3#3	21.15	20.15	38.45	PASS
				RB6#0	20.20	19.20	38.45	PASS
			HCH	RB1#0	21.25	20.25	38.45	PASS
				RB1#2	21.32	20.32	38.45	PASS
				RB1#5	21.23	20.23	38.45	PASS
				RB3#0	21.15	20.15	38.45	PASS
				RB3#2	21.10	20.10	38.45	PASS
				RB3#3	21.12	20.12	38.45	PASS
				RB6#0	20.24	19.24	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	22.03	21.03	38.45	PASS
				RB1#7	22.07	21.07	38.45	PASS
				RB1#14	21.97	20.97	38.45	PASS
				RB8#0	21.13	20.13	38.45	PASS
				RB8#4	21.12	20.12	38.45	PASS
				RB8#7	21.10	20.10	38.45	PASS
				RB15#0	21.10	20.10	38.45	PASS
			MCH	RB1#0	22.07	21.07	38.45	PASS
				RB1#7	22.13	21.13	38.45	PASS
				RB1#14	22.06	21.06	38.45	PASS
				RB8#0	21.19	20.19	38.45	PASS
				RB8#4	21.19	20.19	38.45	PASS
				RB8#7	21.18	20.18	38.45	PASS
				RB15#0	21.16	20.16	38.45	PASS
			HCH	RB1#0	22.15	21.15	38.45	PASS
				RB1#7	22.18	21.18	38.45	PASS
				RB1#14	22.09	21.09	38.45	PASS
				RB8#0	21.28	20.28	38.45	PASS
				RB8#4	21.24	20.24	38.45	PASS
				RB8#7	21.22	20.22	38.45	PASS
				RB15#0	21.24	20.24	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	21.25	20.25	38.45	PASS
				RB1#7	21.32	20.32	38.45	PASS
				RB1#14	21.22	20.22	38.45	PASS
				RB8#0	20.16	19.16	38.45	PASS
				RB8#4	20.16	19.16	38.45	PASS
				RB8#7	20.15	19.15	38.45	PASS
				RB15#0	20.10	19.10	38.45	PASS
			MCH	RB1#0	21.29	20.29	38.45	PASS
				RB1#7	21.35	20.35	38.45	PASS
				RB1#14	21.31	20.31	38.45	PASS
				RB8#0	20.25	19.25	38.45	PASS
				RB8#4	20.23	19.23	38.45	PASS
				RB8#7	20.22	19.22	38.45	PASS
				RB15#0	20.19	19.19	38.45	PASS
			HCH	RB1#0	21.30	20.30	38.45	PASS
				RB1#7	21.29	20.29	38.45	PASS
				RB1#14	21.21	20.21	38.45	PASS
				RB8#0	20.29	19.29	38.45	PASS
				RB8#4	20.24	19.24	38.45	PASS
				RB8#7	20.23	19.23	38.45	PASS
				RB15#0	20.22	19.22	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	22.07	21.07	38.45	PASS
				RB1#13	22.06	21.06	38.45	PASS
				RB1#24	22.00	21.00	38.45	PASS
				RB12#0	21.11	20.11	38.45	PASS
				RB12#6	21.11	20.11	38.45	PASS
				RB12#13	21.12	20.12	38.45	PASS
				RB25#0	21.08	20.08	38.45	PASS
			MCH	RB1#0	22.11	21.11	38.45	PASS
				RB1#13	22.11	21.11	38.45	PASS
				RB1#24	22.07	21.07	38.45	PASS
				RB12#0	21.18	20.18	38.45	PASS
				RB12#6	21.19	20.19	38.45	PASS
				RB12#13	21.17	20.17	38.45	PASS
				RB25#0	21.14	20.14	38.45	PASS
			HCH	RB1#0	22.19	21.19	38.45	PASS
				RB1#13	22.20	21.20	38.45	PASS
				RB1#24	22.10	21.10	38.45	PASS
				RB12#0	21.27	20.27	38.45	PASS
				RB12#6	21.26	20.26	38.45	PASS
				RB12#13	21.22	20.22	38.45	PASS
				RB25#0	21.25	20.25	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	21.36	20.36	38.45	PASS
				RB1#13	21.36	20.36	38.45	PASS
				RB1#24	21.29	20.29	38.45	PASS
				RB12#0	20.16	19.16	38.45	PASS
				RB12#6	20.16	19.16	38.45	PASS
				RB12#13	20.17	19.17	38.45	PASS
				RB25#0	20.12	19.12	38.45	PASS
			MCH	RB1#0	21.37	20.37	38.45	PASS
				RB1#13	21.40	20.40	38.45	PASS
				RB1#24	21.38	20.38	38.45	PASS
				RB12#0	20.19	19.19	38.45	PASS
				RB12#6	20.22	19.22	38.45	PASS
				RB12#13	20.21	19.21	38.45	PASS
				RB25#0	20.15	19.15	38.45	PASS
			HCH	RB1#0	21.42	20.42	38.45	PASS
				RB1#13	21.40	20.40	38.45	PASS
				RB1#24	21.26	20.26	38.45	PASS
				RB12#0	20.29	19.29	38.45	PASS
				RB12#6	20.25	19.25	38.45	PASS
				RB12#13	20.22	19.22	38.45	PASS
				RB25#0	20.23	19.23	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	22.16	21.16	38.45	PASS
				RB1#25	22.13	21.13	38.45	PASS
				RB1#49	22.09	21.09	38.45	PASS
				RB25#0	21.15	20.15	38.45	PASS
				RB25#13	21.12	20.12	38.45	PASS
				RB25#25	21.15	20.15	38.45	PASS
				RB50#0	21.16	20.16	38.45	PASS
			MCH	RB1#0	22.18	21.18	38.45	PASS
				RB1#25	22.14	21.14	38.45	PASS
				RB1#49	22.04	21.04	38.45	PASS
				RB25#0	21.15	20.15	38.45	PASS
				RB25#13	21.16	20.16	38.45	PASS
				RB25#25	21.11	20.11	38.45	PASS
				RB50#0	21.13	20.13	38.45	PASS
			HCH	RB1#0	22.09	21.09	38.45	PASS
				RB1#25	22.13	21.13	38.45	PASS
				RB1#49	22.05	21.05	38.45	PASS
				RB25#0	21.16	20.16	38.45	PASS
				RB25#13	21.14	20.14	38.45	PASS
				RB25#25	21.12	20.12	38.45	PASS
				RB50#0	21.14	20.14	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	21.53	20.53	38.45	PASS
				RB1#25	21.13	20.13	38.45	PASS
				RB1#49	21.11	20.11	38.45	PASS
				RB25#0	20.16	19.16	38.45	PASS
				RB25#13	20.15	19.15	38.45	PASS
				RB25#25	20.18	19.18	38.45	PASS
				RB50#0	20.17	19.17	38.45	PASS
			MCH	RB1#0	21.18	20.18	38.45	PASS
				RB1#25	21.52	20.52	38.45	PASS
				RB1#49	21.06	20.06	38.45	PASS
				RB25#0	20.23	19.23	38.45	PASS
				RB25#13	20.19	19.19	38.45	PASS
				RB25#25	20.15	19.15	38.45	PASS
				RB50#0	20.14	19.14	38.45	PASS
			HCH	RB1#0	21.11	20.11	38.45	PASS
				RB1#25	21.04	20.04	38.45	PASS
				RB1#49	21.31	20.31	38.45	PASS
				RB25#0	20.20	19.20	38.45	PASS
				RB25#13	20.24	19.24	38.45	PASS
				RB25#25	20.18	19.18	38.45	PASS
				RB50#0	20.10	19.10	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	5.28	13	PASS
		MCH	5.33	13	PASS
		HCH	5.13	13	PASS
	TM2/10M	LCH	5.97	13	PASS
		MCH	6.06	13	PASS
		HCH	5.80	13	PASS

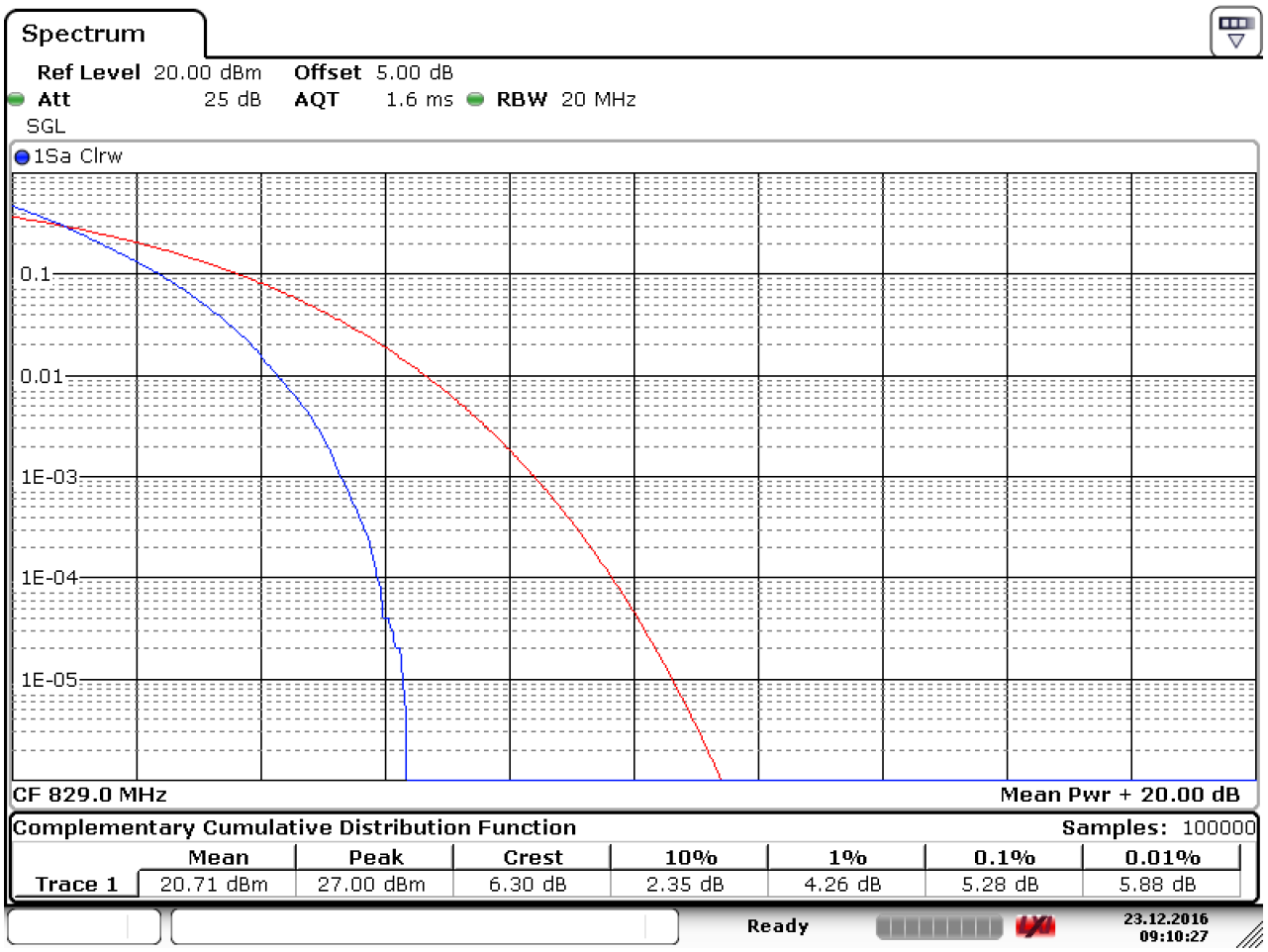
Part II - Test Plots

2.1 For LTE

2.1.1 Test Band = LTE band5

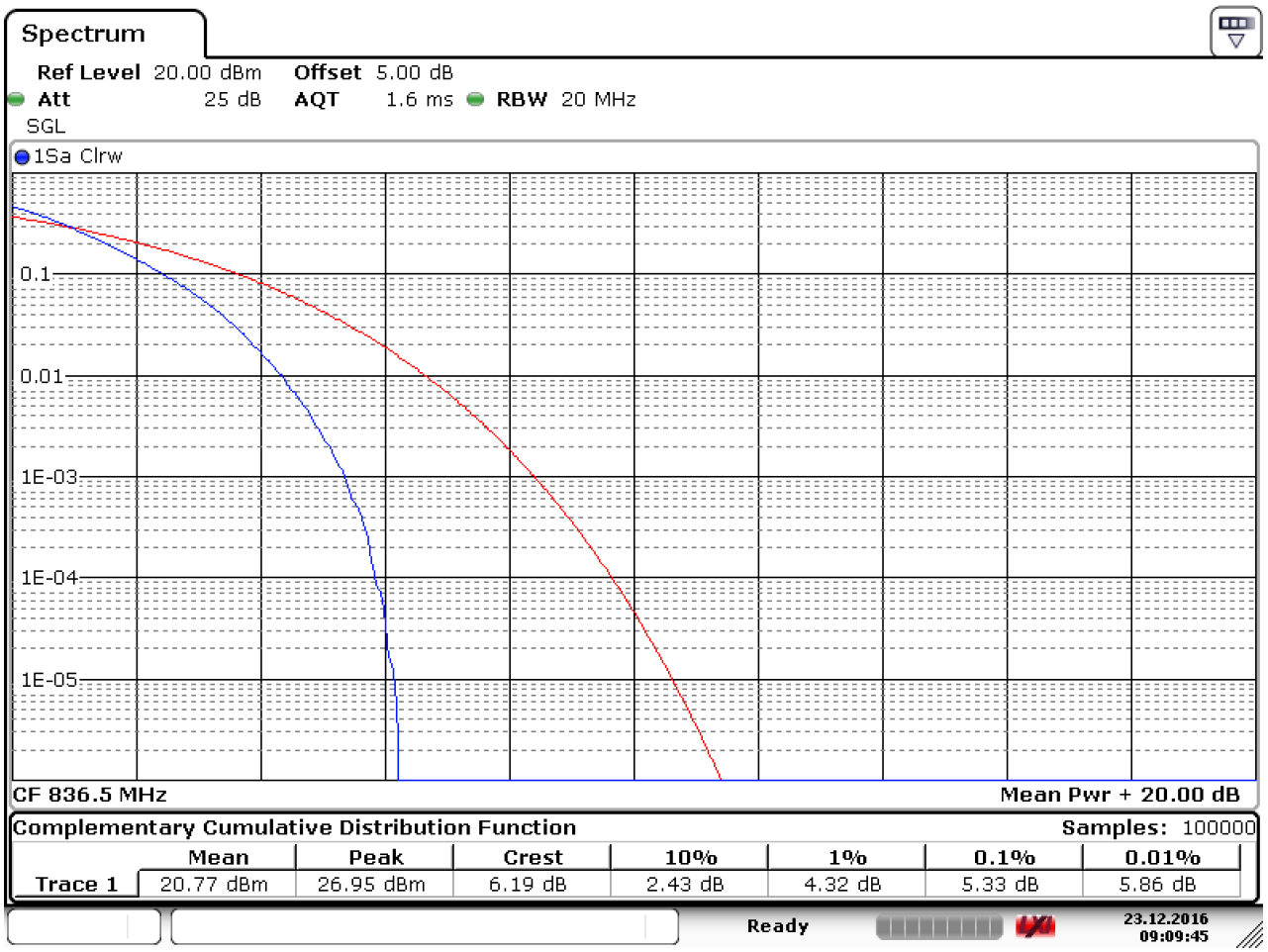
2.1.1.1 Test Mode = LTE/TM1.Bandwidth=10MHz

2.1.1.1.1 Test Channel = LCH



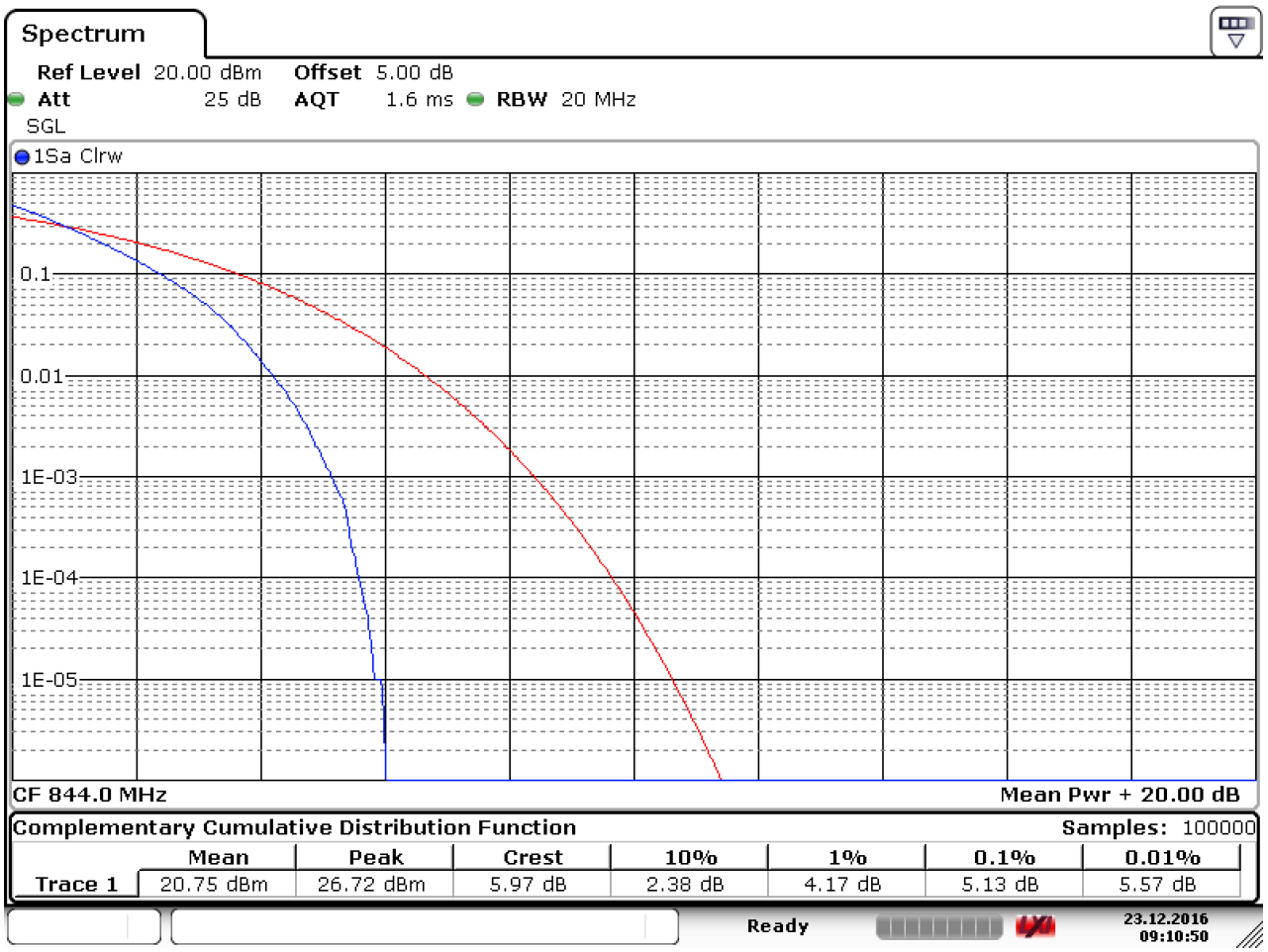
Date: 23.DEC.2016 09:10:27

2.1.1.1.2 Test Channel = MCH



Date: 23.DEC.2016 09:09:45

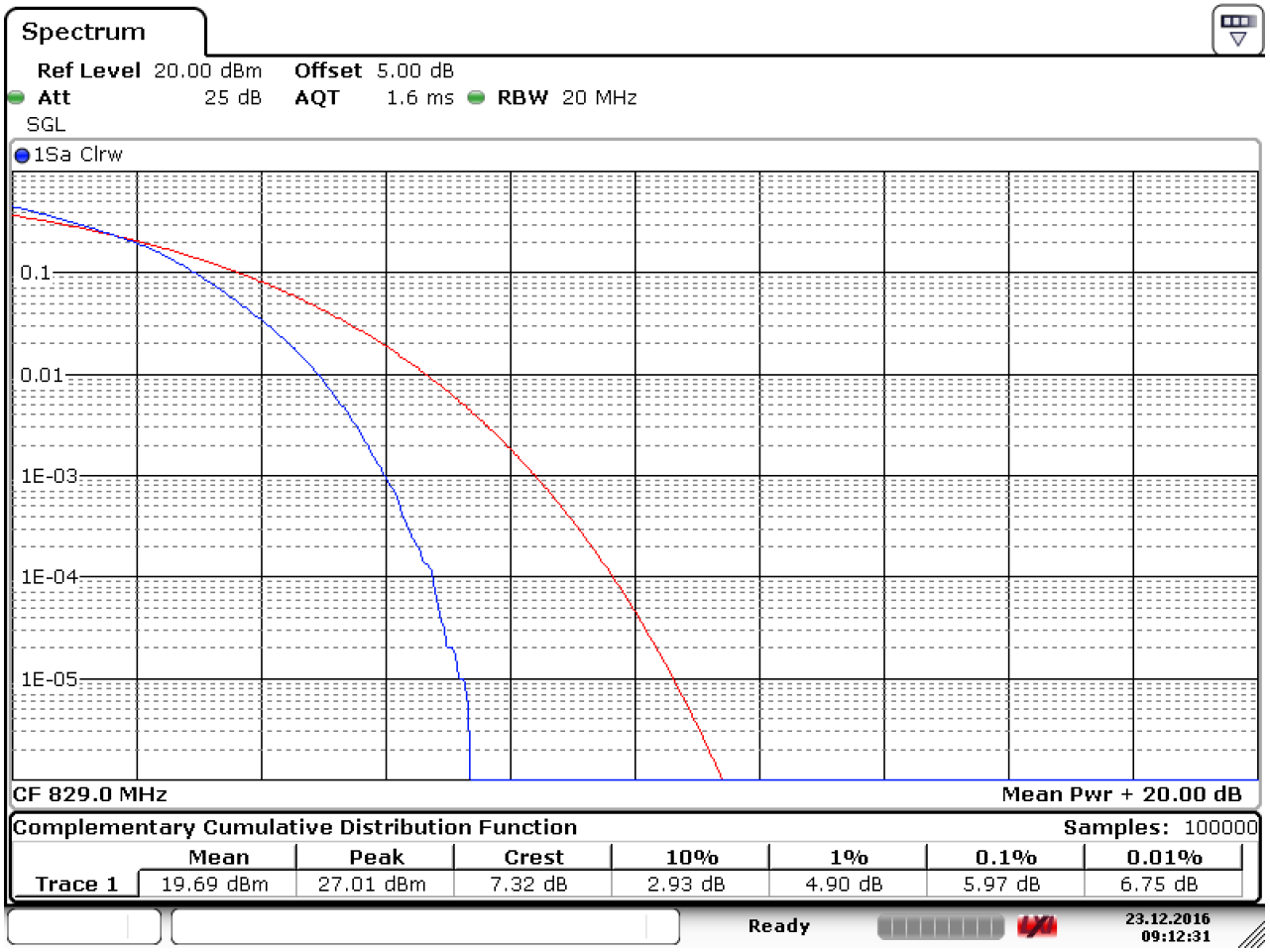
2.1.1.1.3 Test Channel = HCH



Date: 23.DEC.2016 09:10:50

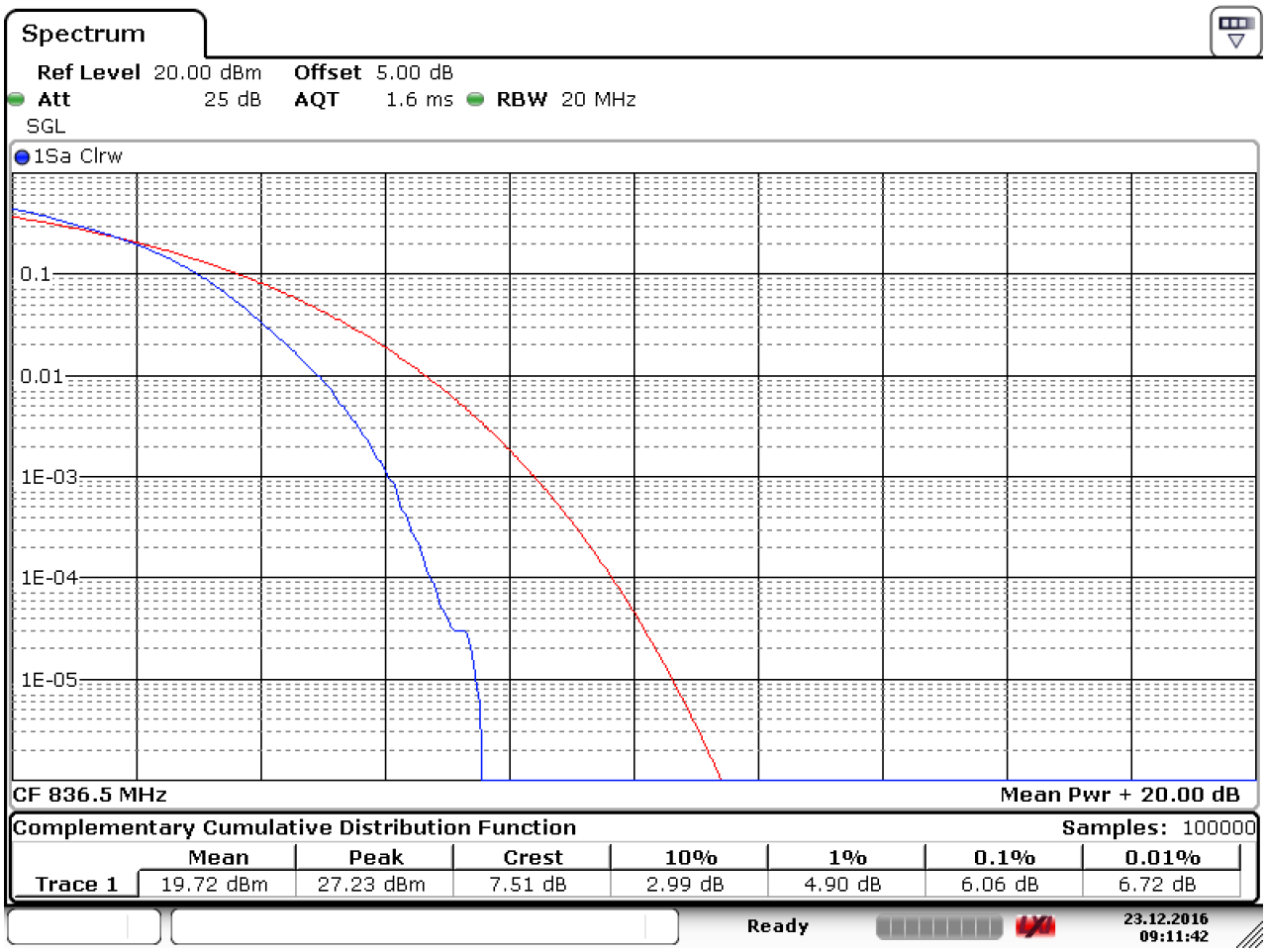
2.1.1.2 Test Mode = LTE/TM2.Bandwidth=10MHz

2.1.1.2.1 Test Channel = LCH



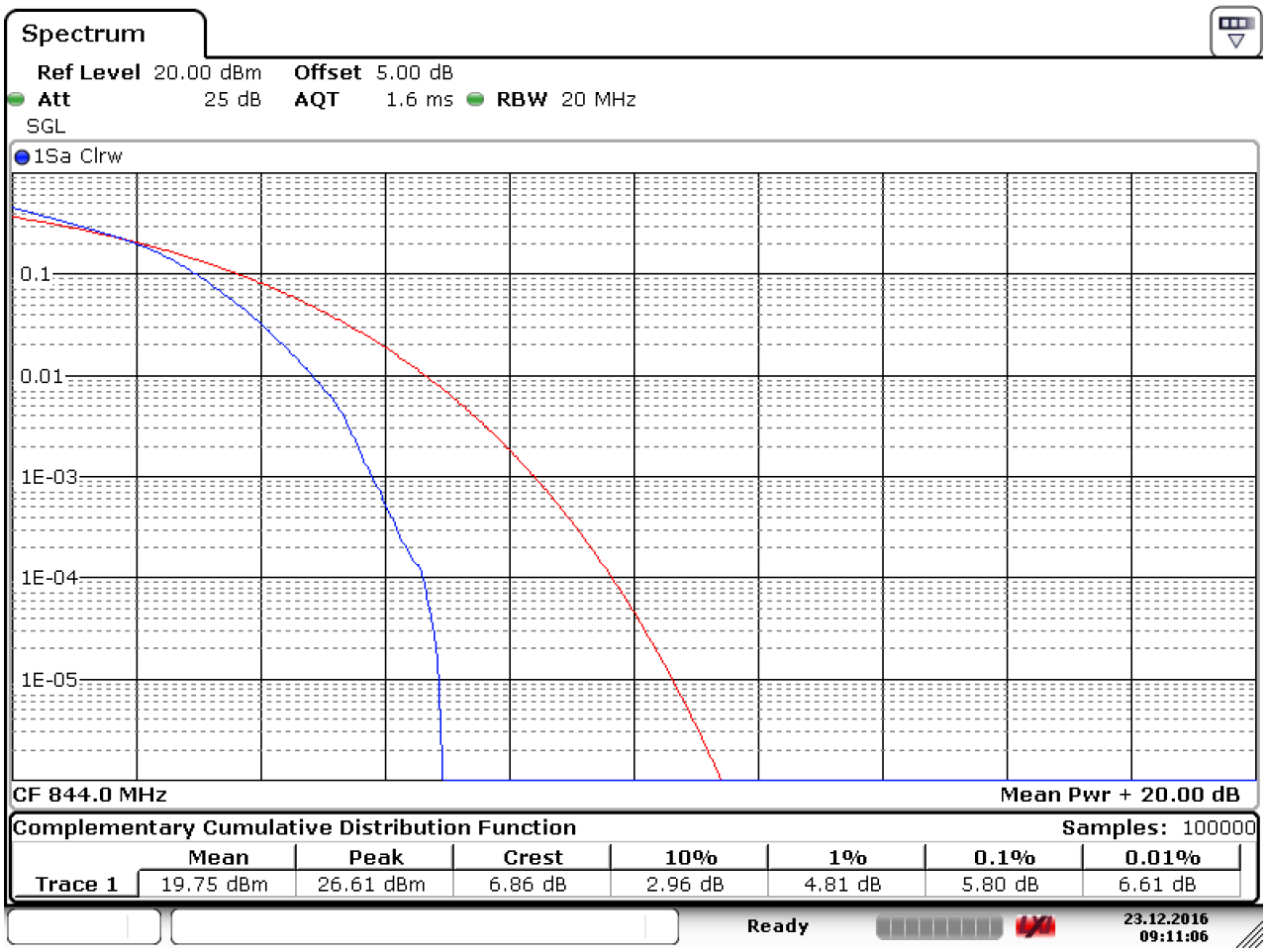
Date: 23.DEC.2016 09:12:31

2.1.1.2.2 Test Channel = MCH



Date: 23.DEC.2016 09:11:43

2.1.1.2.3 Test Channel = HCH



Date: 23.DEC.2016 09:11:07

3 Modulation Characteristics

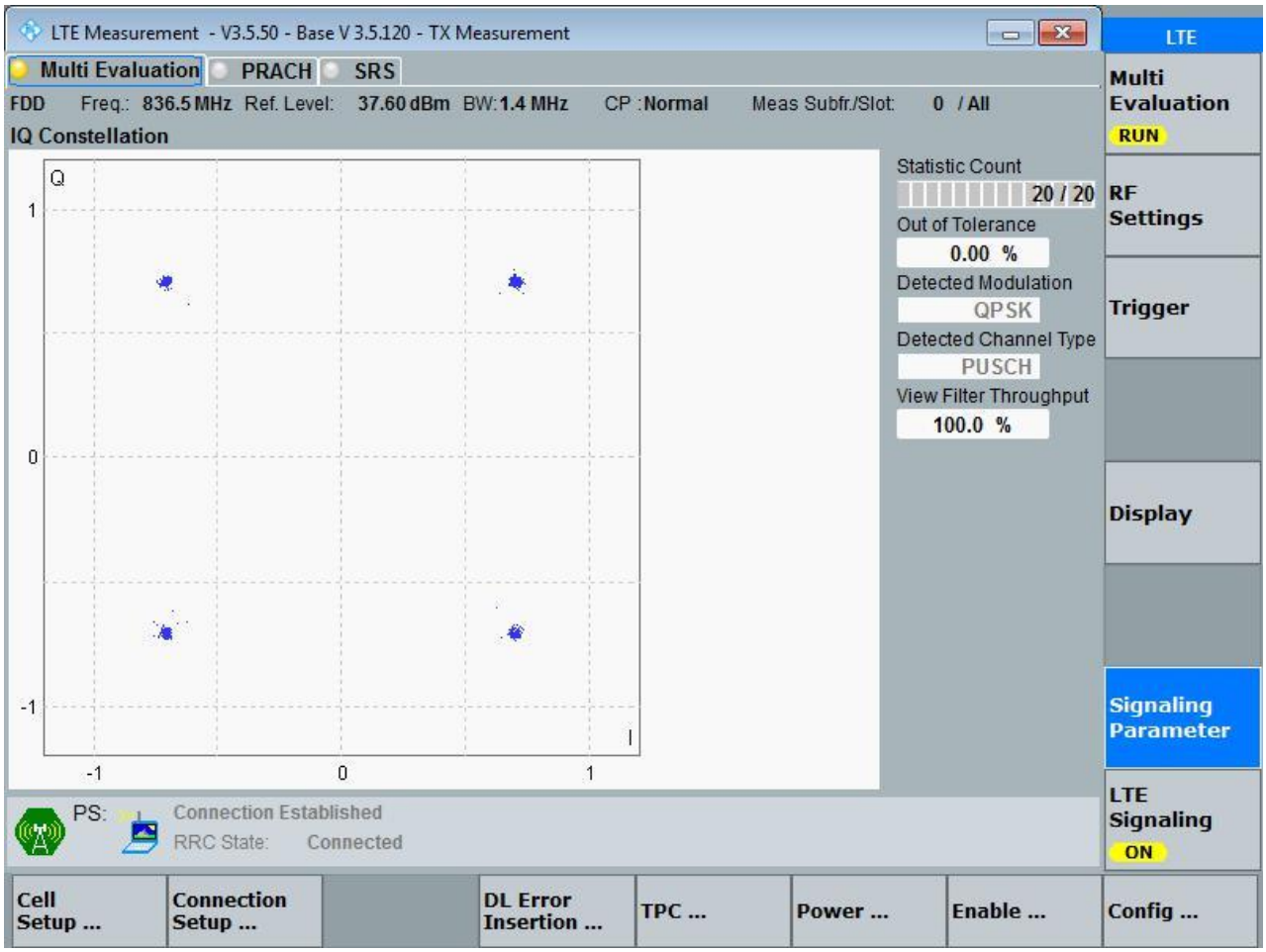
Part I - Test Plots

3.1 For LTE

3.1.1 Test Band = LTE band5

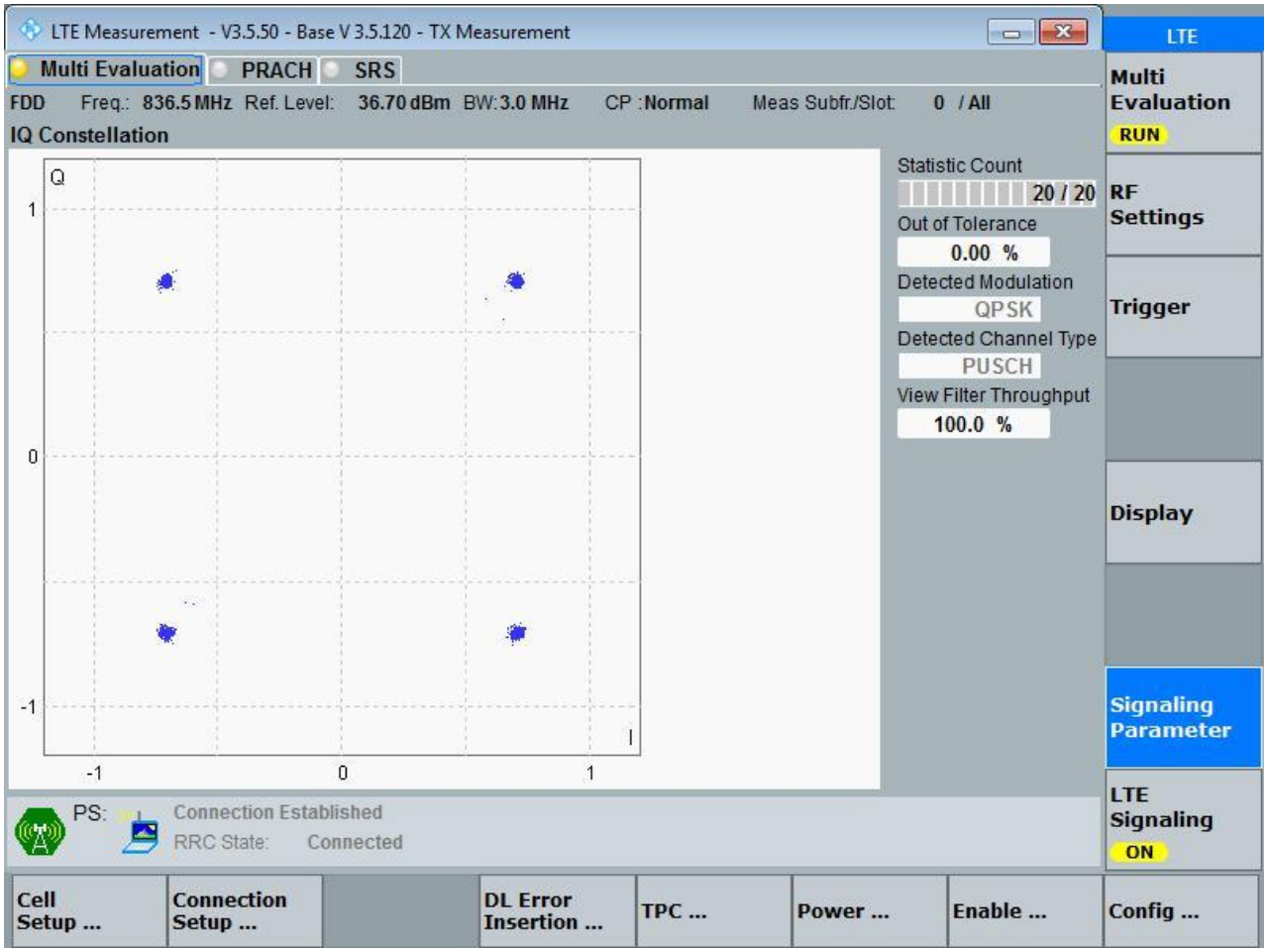
3.1.1.1 Test Mode = LTE /TM1 1.4MHz

3.1.1.1.1 Test Channel = MCH



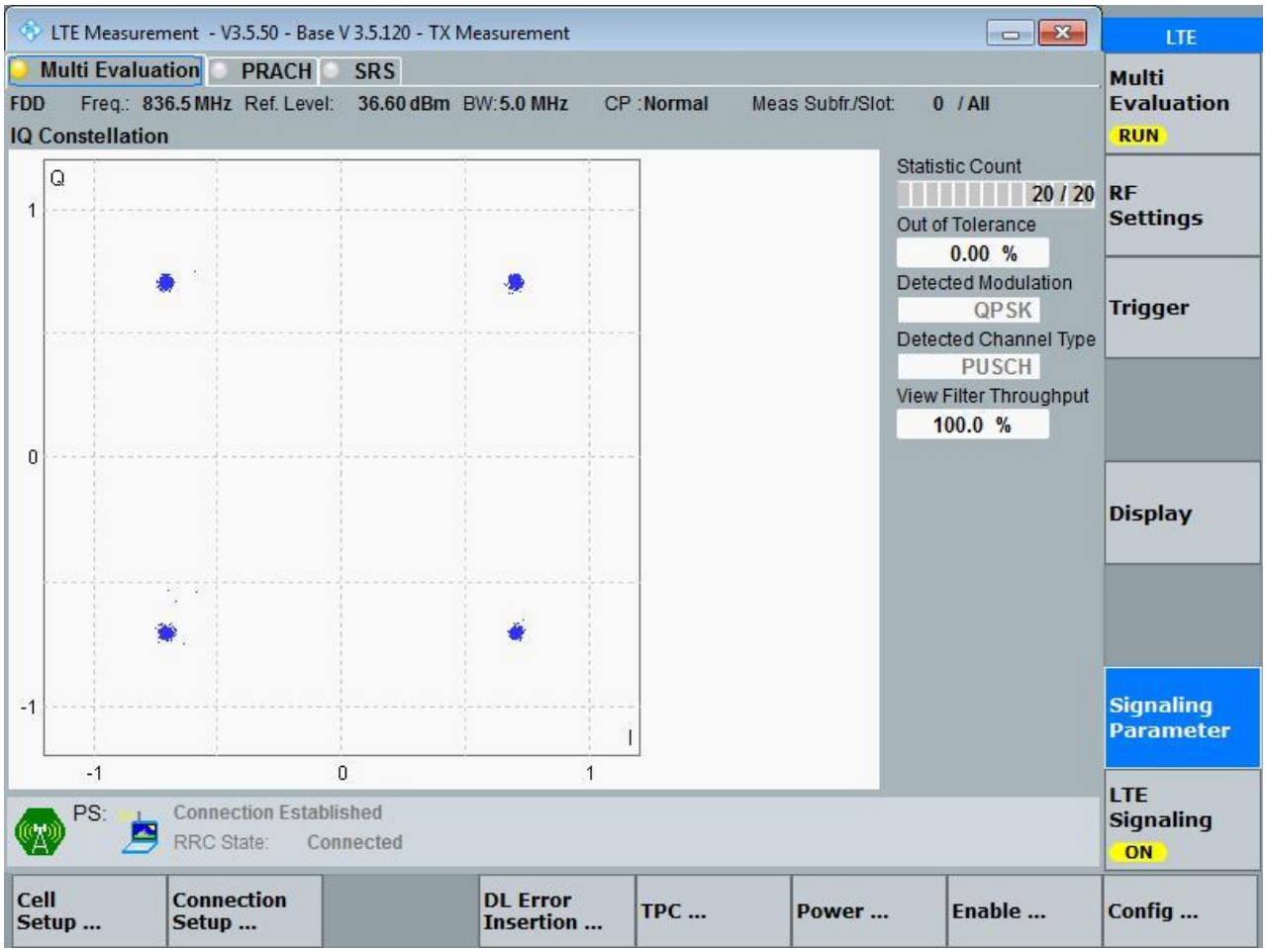
3.1.1.2 Test Mode = LTE /TM1 3MHz

3.1.1.2.1 Test Channel = MCH



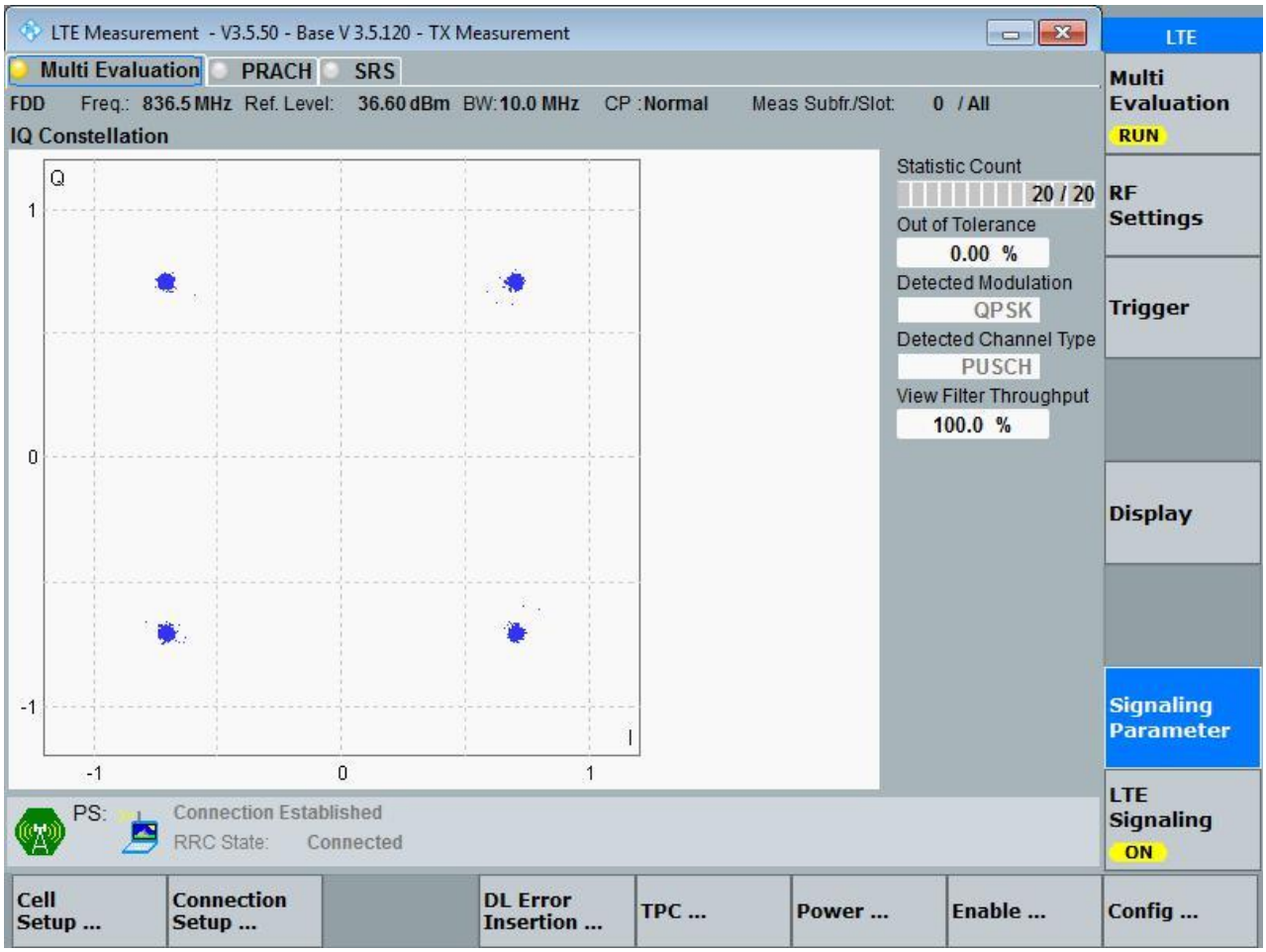
3.1.1.3 Test Mode = LTE /TM1 5MHz

3.1.1.3.1 Test Channel = MCH



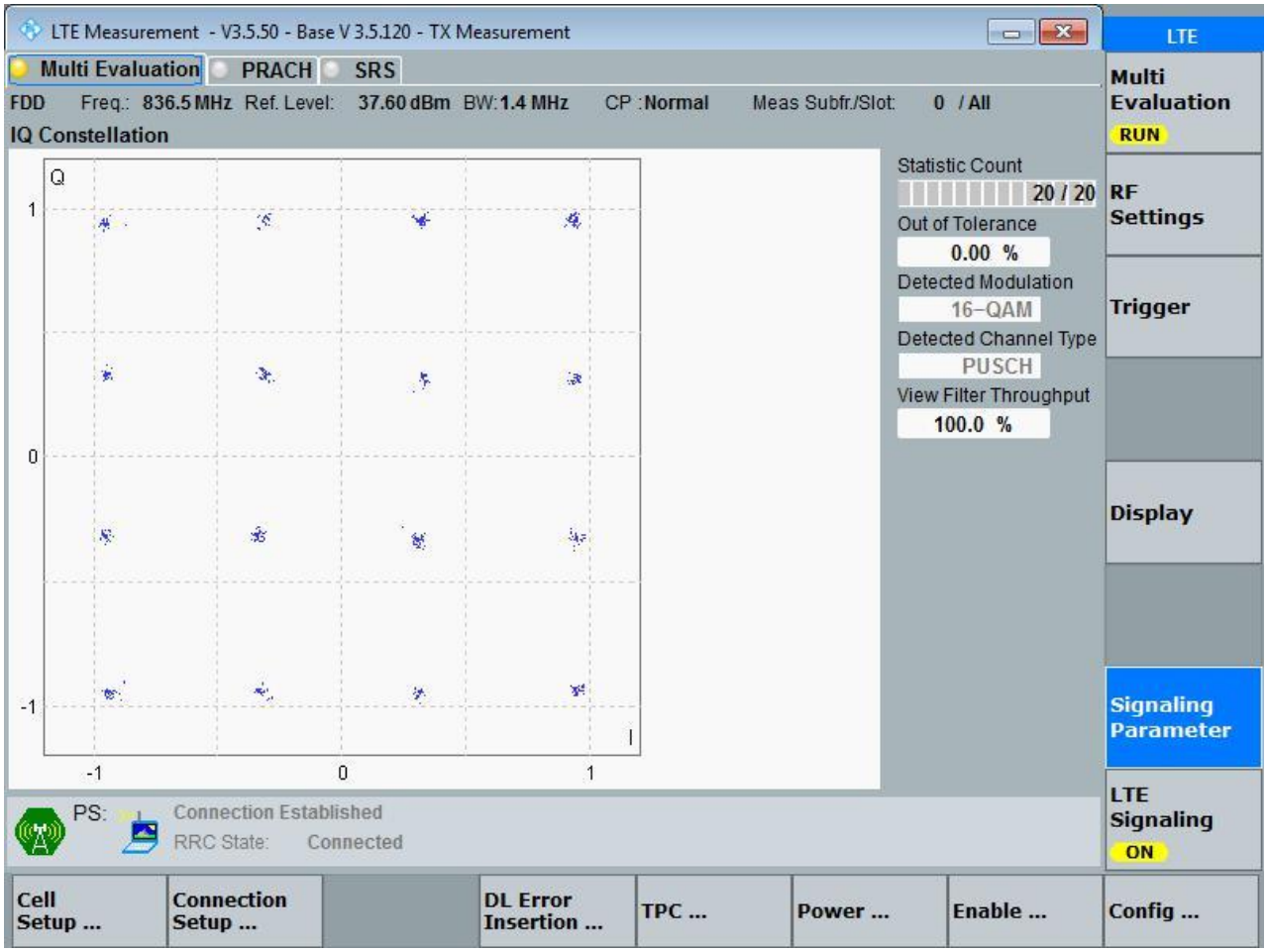
3.1.1.4 Test Mode = LTE /TM1 10MHz

3.1.1.4.1 Test Channel = MCH



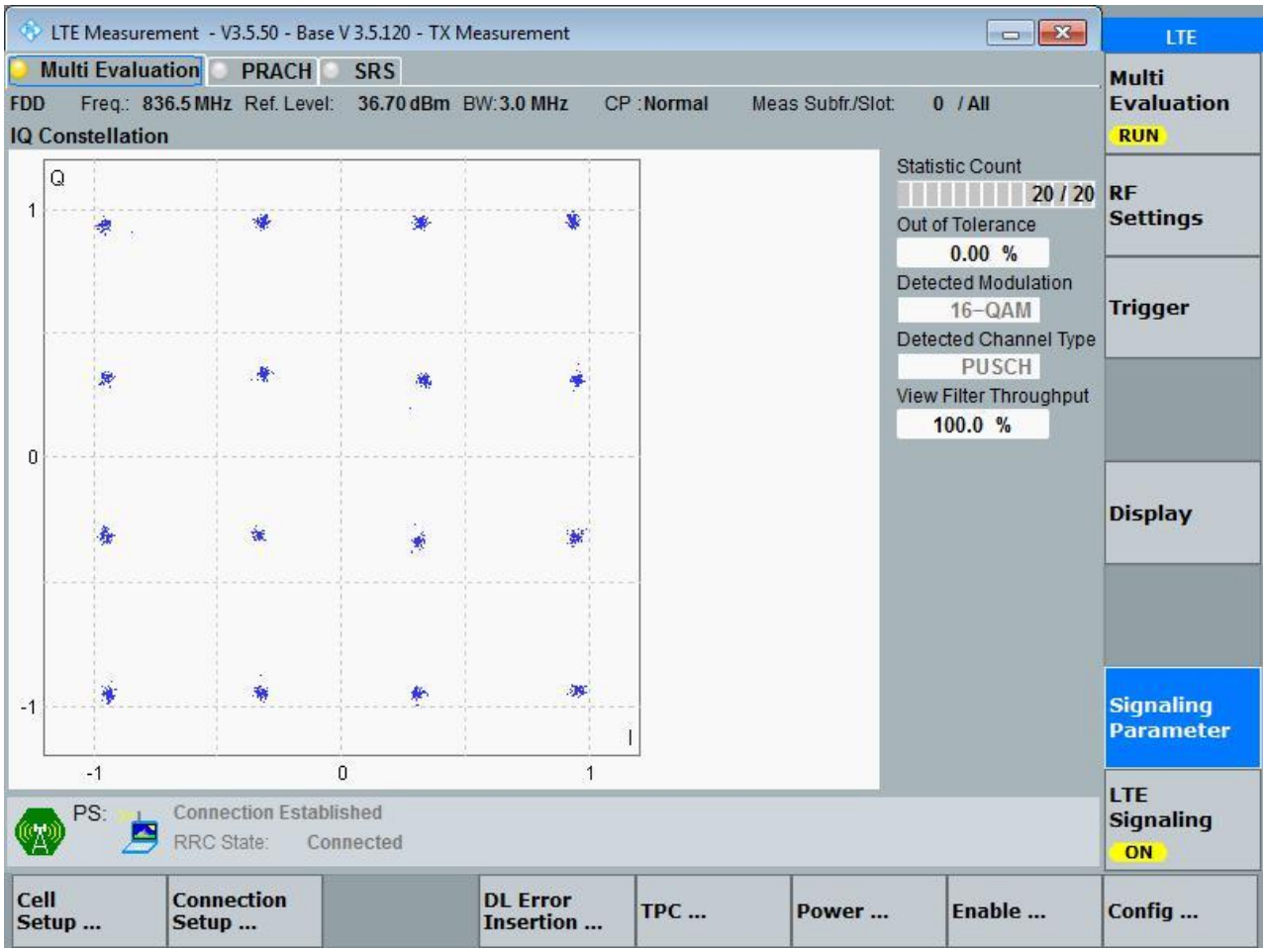
3.1.1.5 Test Mode = LTE /TM2 1.4MHz

3.1.1.5.1 Test Channel = MCH



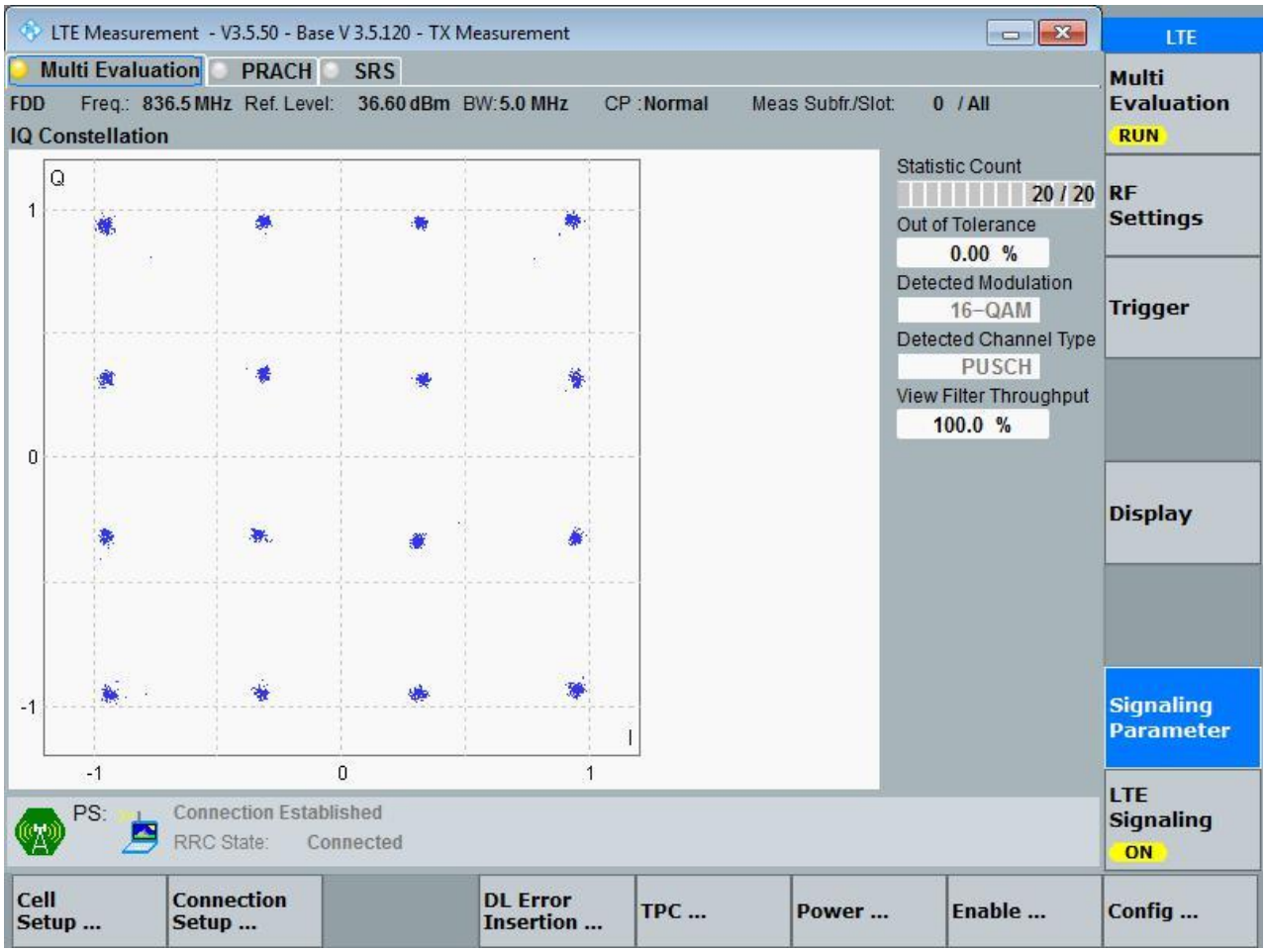
3.1.1.6 Test Mode = LTE /TM2 3MHz

3.1.1.6.1 Test Channel = MCH



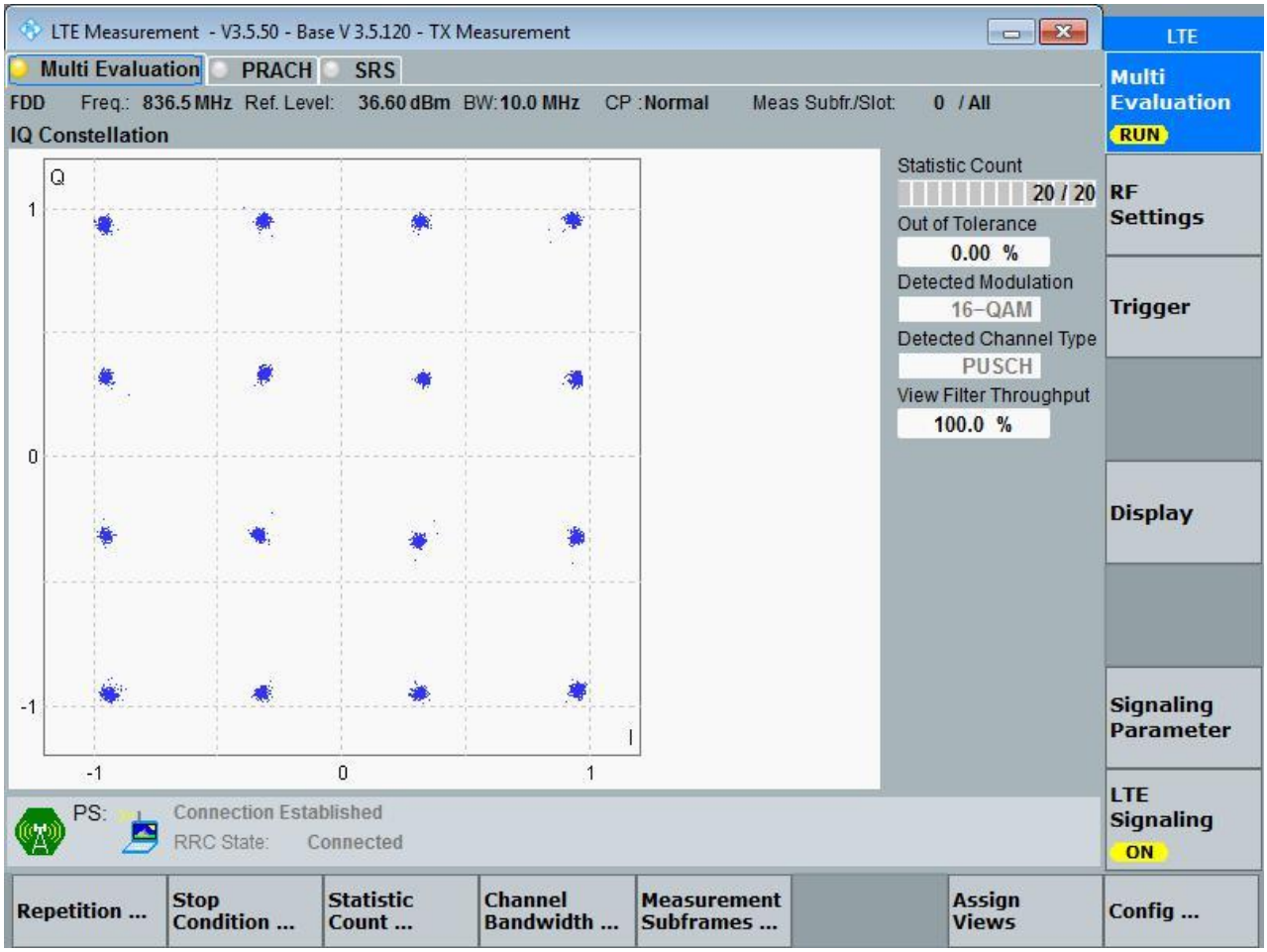
3.1.1.7 Test Mode = LTE /TM2 5MHz

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

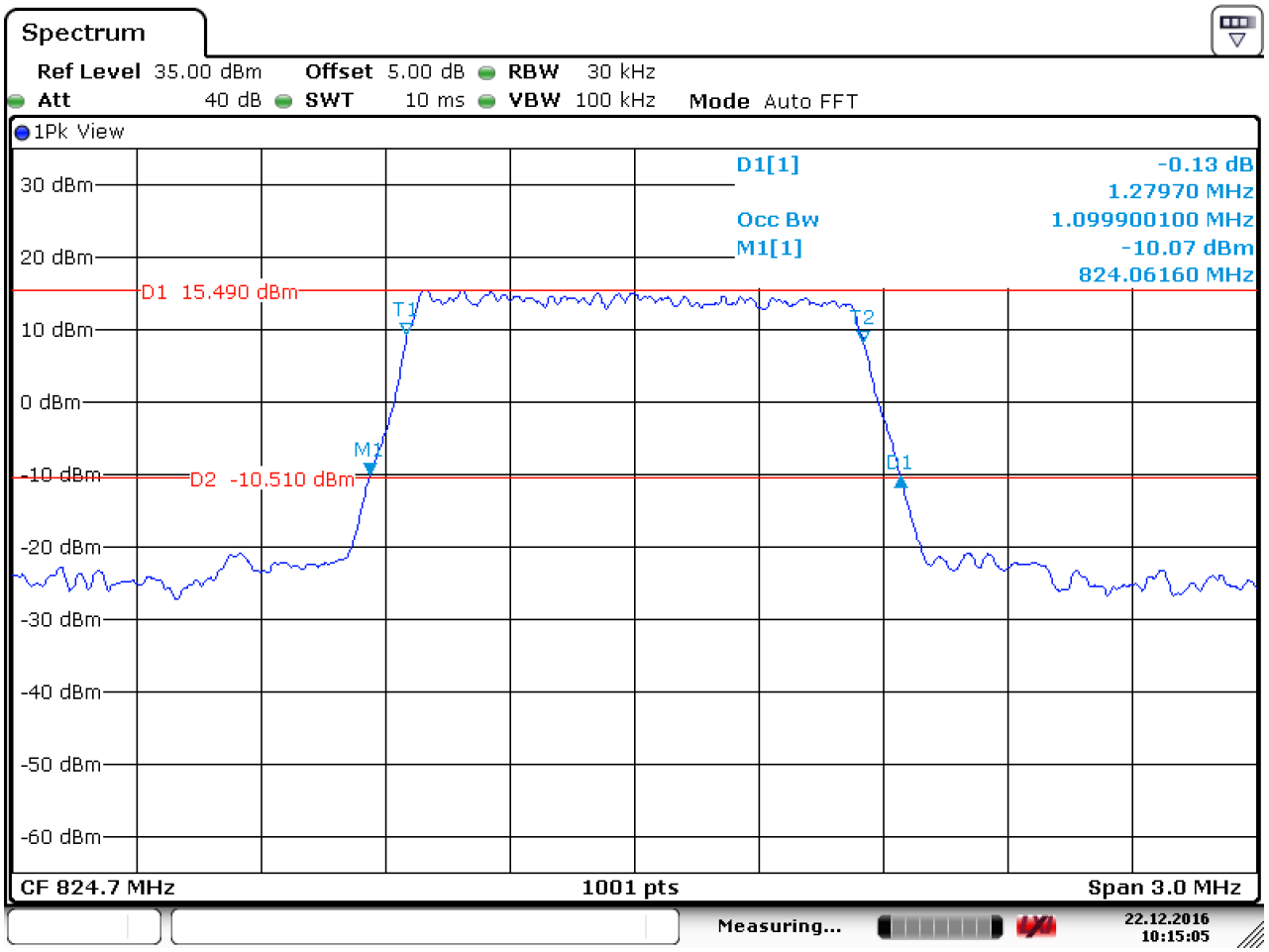
Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
Band 5	TM1/1.4MHz	LCH	1.10	1.28	PASS
		MCH	1.09	1.27	PASS
		HCH	1.10	1.27	PASS
	TM2/1.4MHz	LCH	1.10	1.26	PASS
		MCH	1.10	1.28	PASS
		HCH	1.10	1.27	PASS
	TM1/ 3MHz	LCH	2.69	2.91	PASS
		MCH	2.69	2.91	PASS
		HCH	2.69	2.93	PASS
	TM2/ 3MHz	LCH	2.69	2.93	PASS
		MCH	2.69	2.93	PASS
		HCH	2.68	2.93	PASS
	TM1/ 5MHz	LCH	4.50	4.98	PASS
		MCH	4.50	4.97	PASS
		HCH	4.49	4.98	PASS
	TM2/ 5MHz	LCH	4.50	4.99	PASS
		MCH	4.49	4.95	PASS
		HCH	4.49	5.01	PASS
	TM1/10MHz	LCH	8.95	9.69	PASS
		MCH	8.97	9.79	PASS
		HCH	8.95	9.85	PASS
	TM2/ 10MHz	LCH	8.97	9.79	PASS
		MCH	8.95	9.67	PASS
		HCH	8.95	9.77	PASS

4.1 For LTE

4.1.1 Test Band = LTE band5

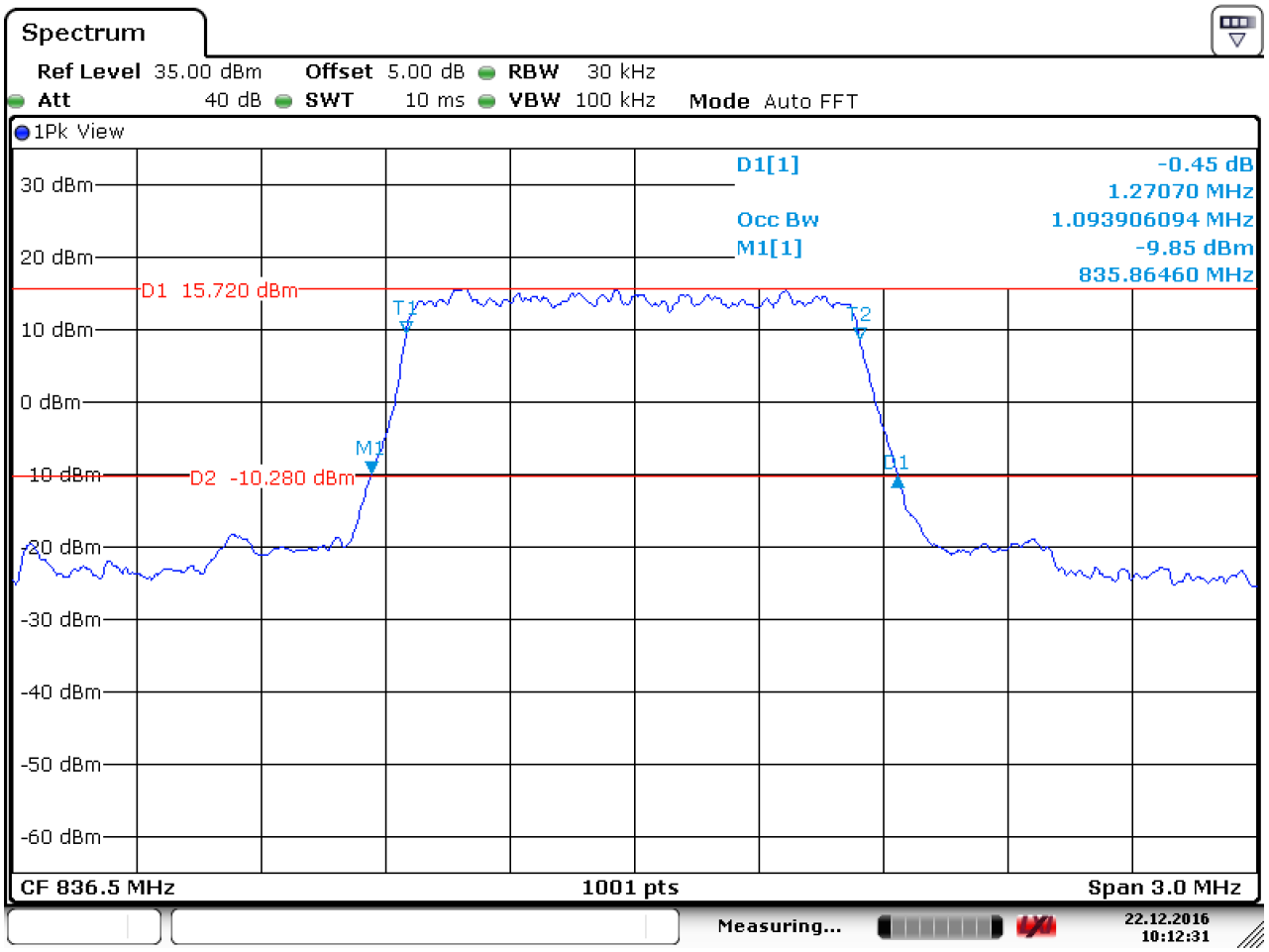
4.1.1.1 Test Mode = LTE/TM1 1.4MHz

4.1.1.1.1 Test Channel = LCH



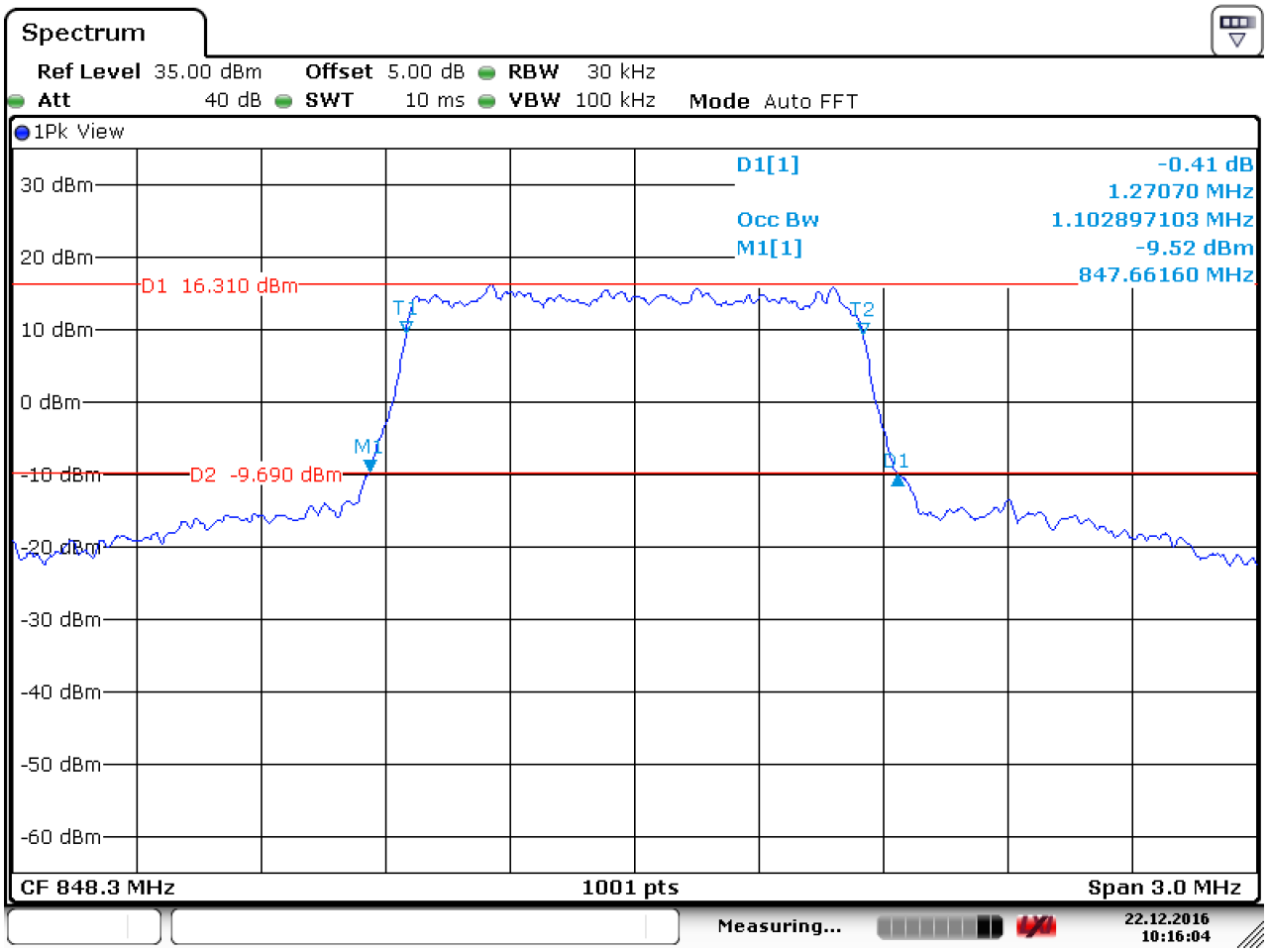
Date: 22.DEC.2016 10:15:05

4.1.1.1.2 Test Channel = MCH



Date: 22.DEC.2016 10:12:32

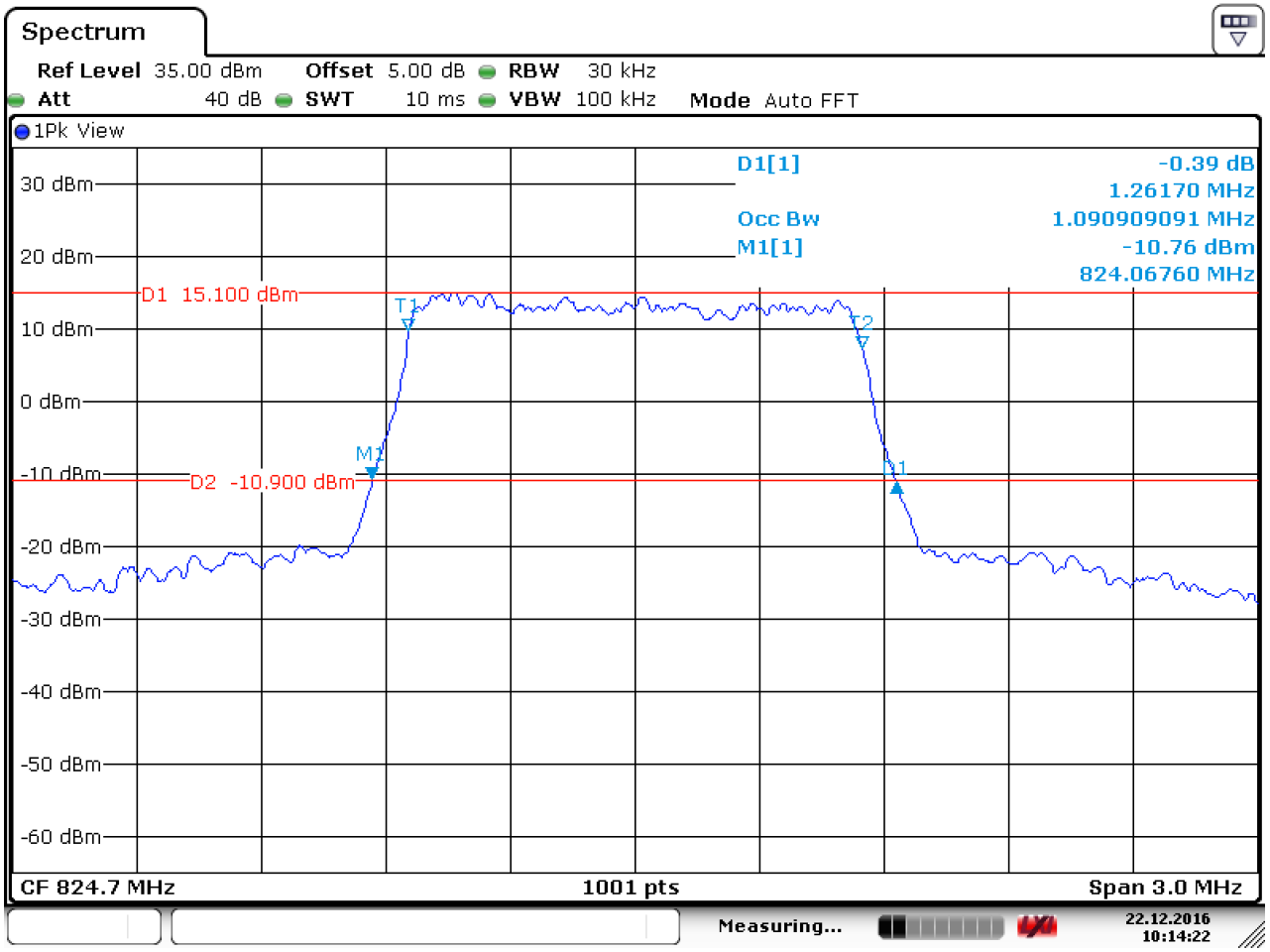
4.1.1.1.3 Test Channel = HCH



Date: 22.DEC.2016 10:16:04

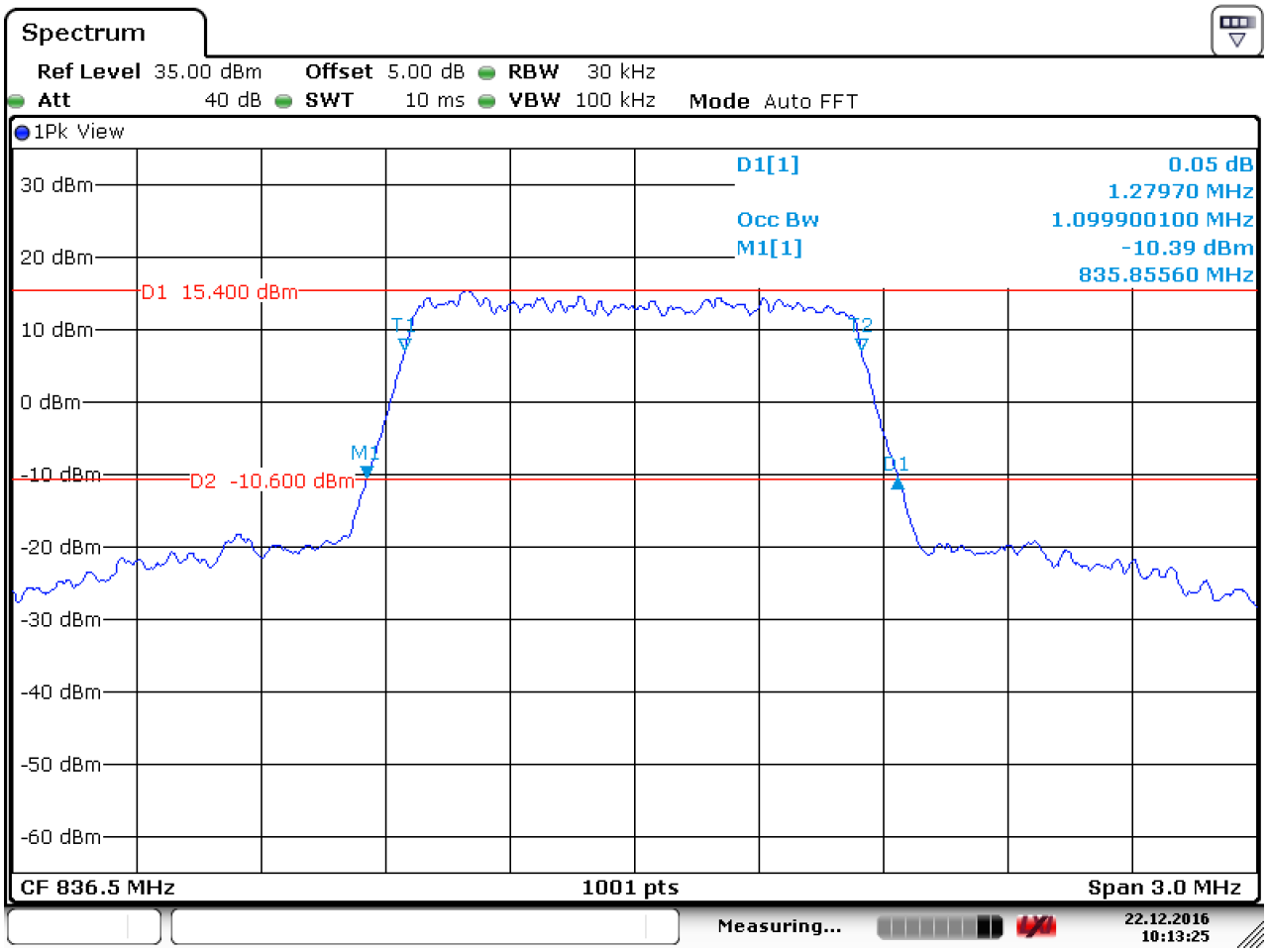
4.1.1.2 Test Mode = LTE/TM2 1.4MHz

4.1.1.2.1 Test Channel = LCH



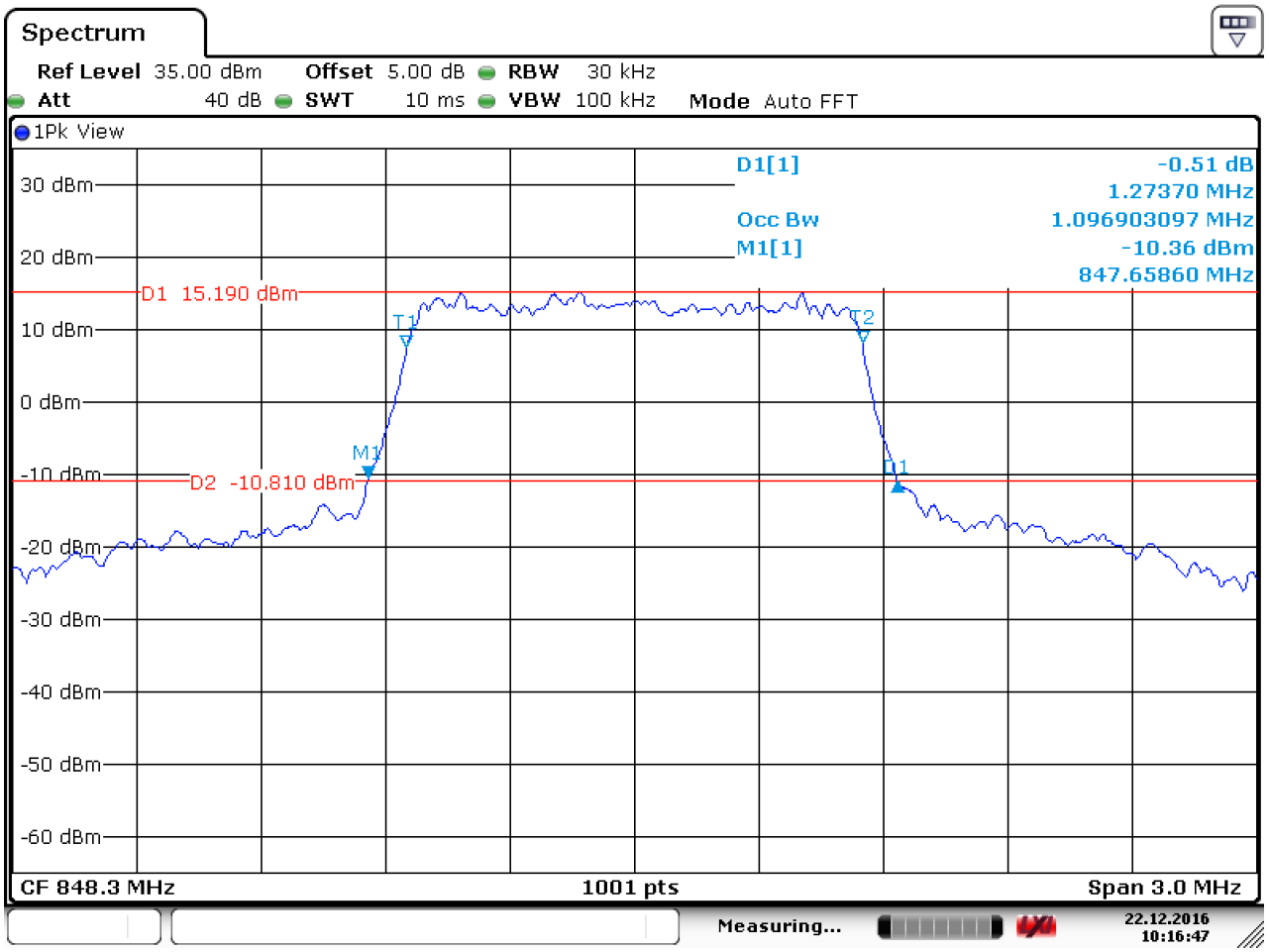
Date: 22.DEC.2016 10:14:23

4.1.1.2.2 Test Channel = MCH



Date: 22.DEC.2016 10:13:25

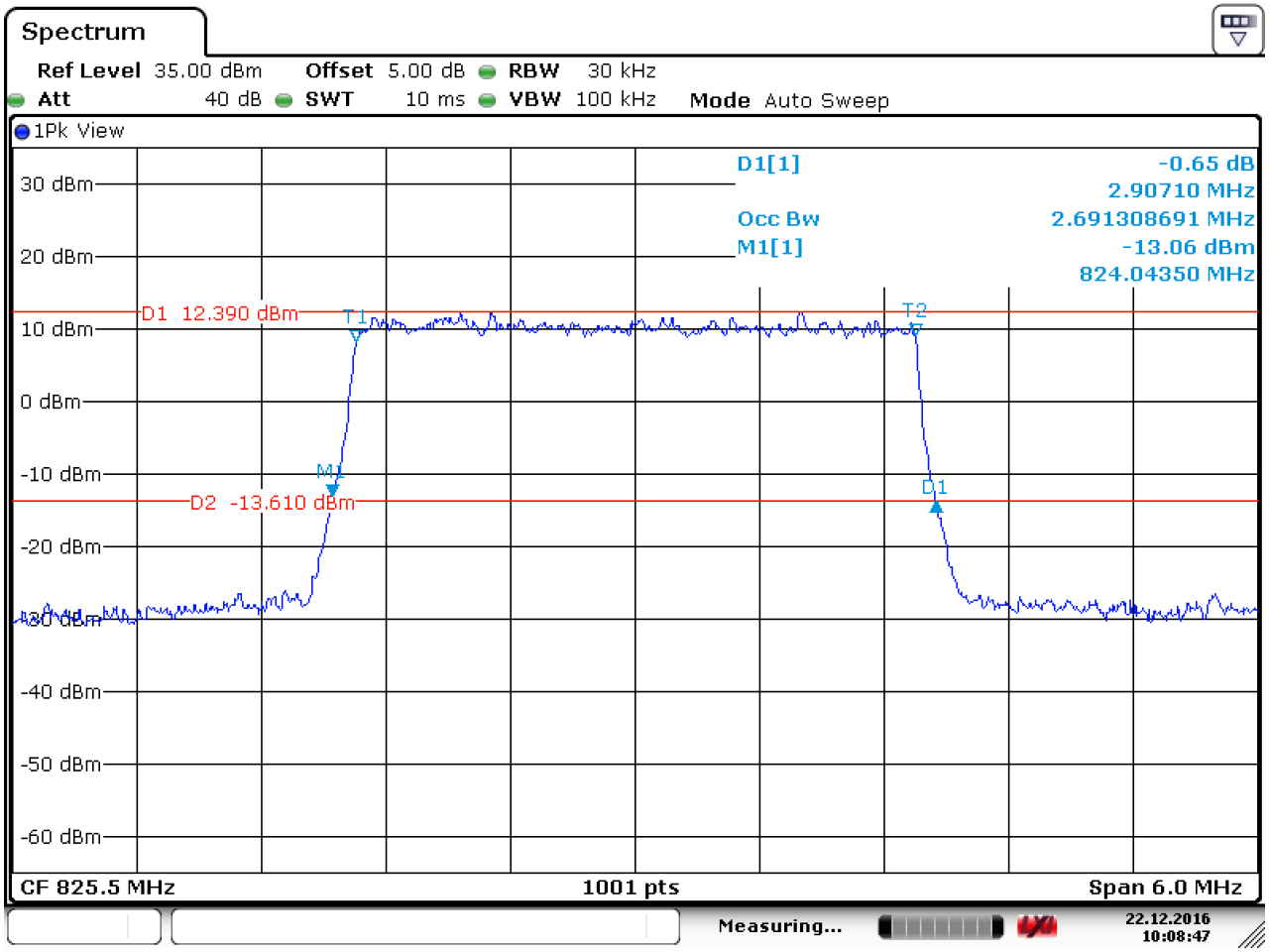
4.1.1.2.3 Test Channel = HCH



Date: 22.DEC.2016 10:16:47

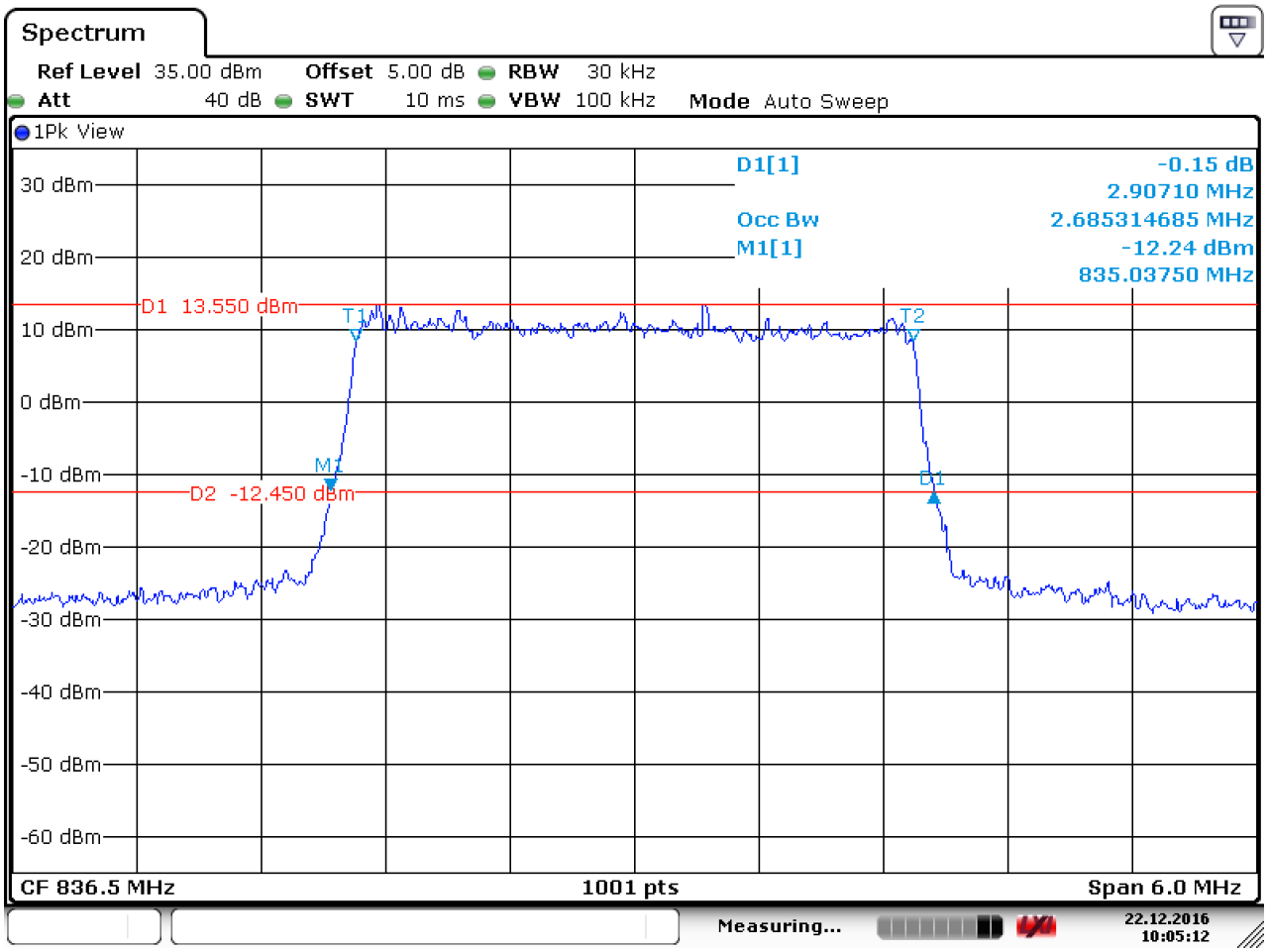
4.1.1.3 Test Mode = LTE/TM1 3MHz

4.1.1.3.1 Test Channel = LCH



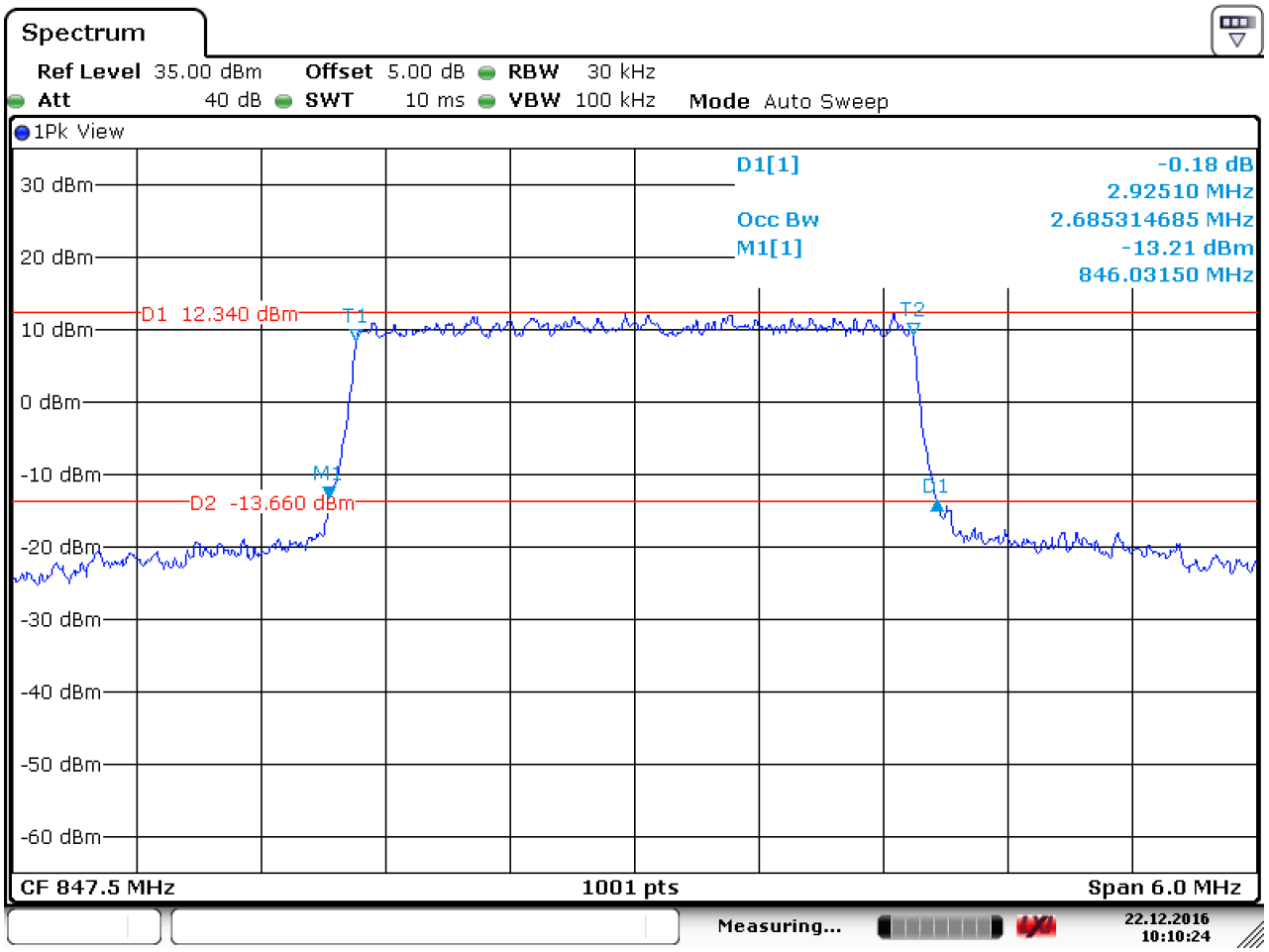
Date: 22.DEC.2016 10:08:47

4.1.1.3.2 Test Channel = MCH



Date: 22.DEC.2016 10:05:12

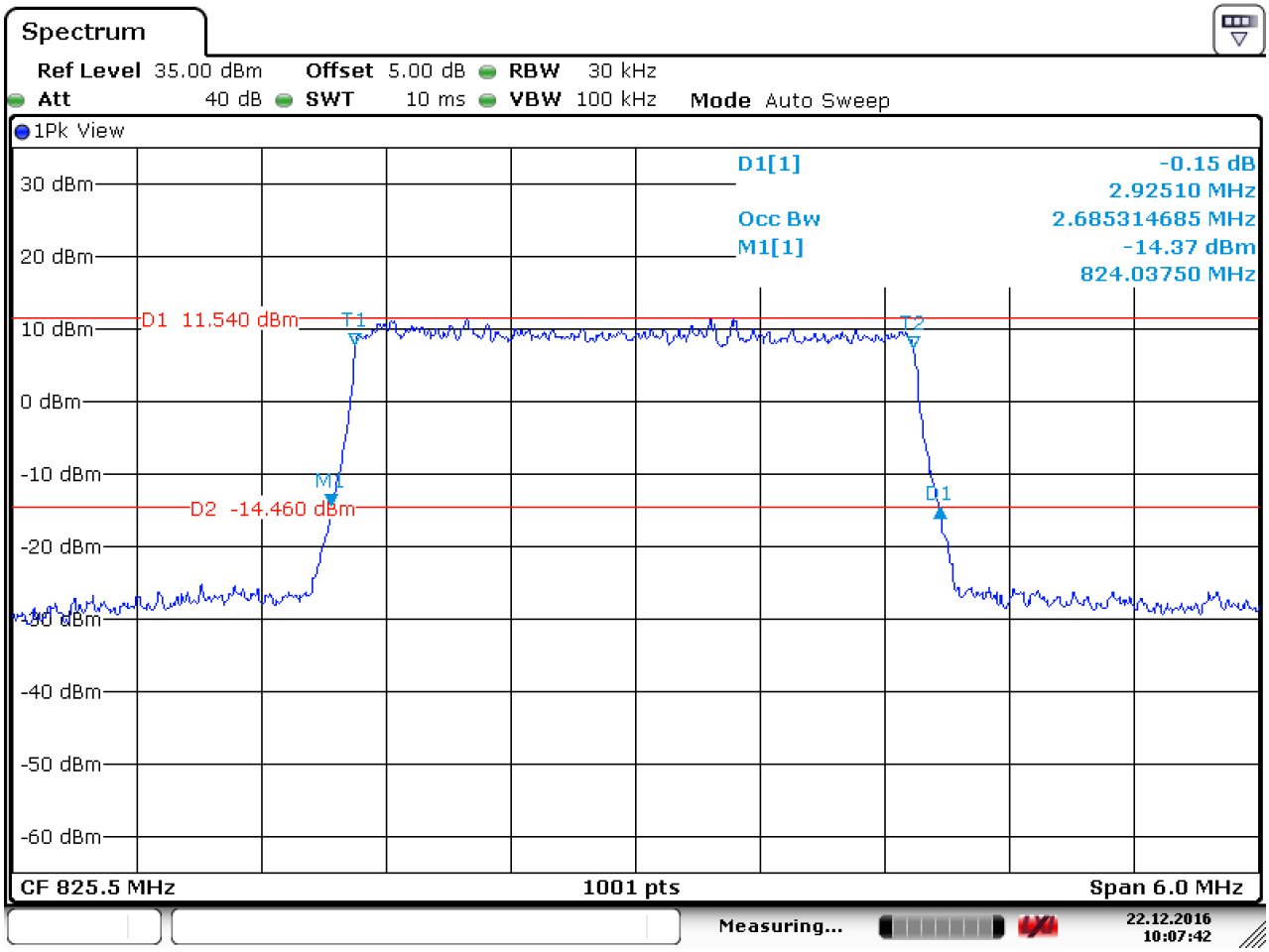
4.1.1.3.3 Test Channel = HCH



Date: 22.DEC.2016 10:10:25

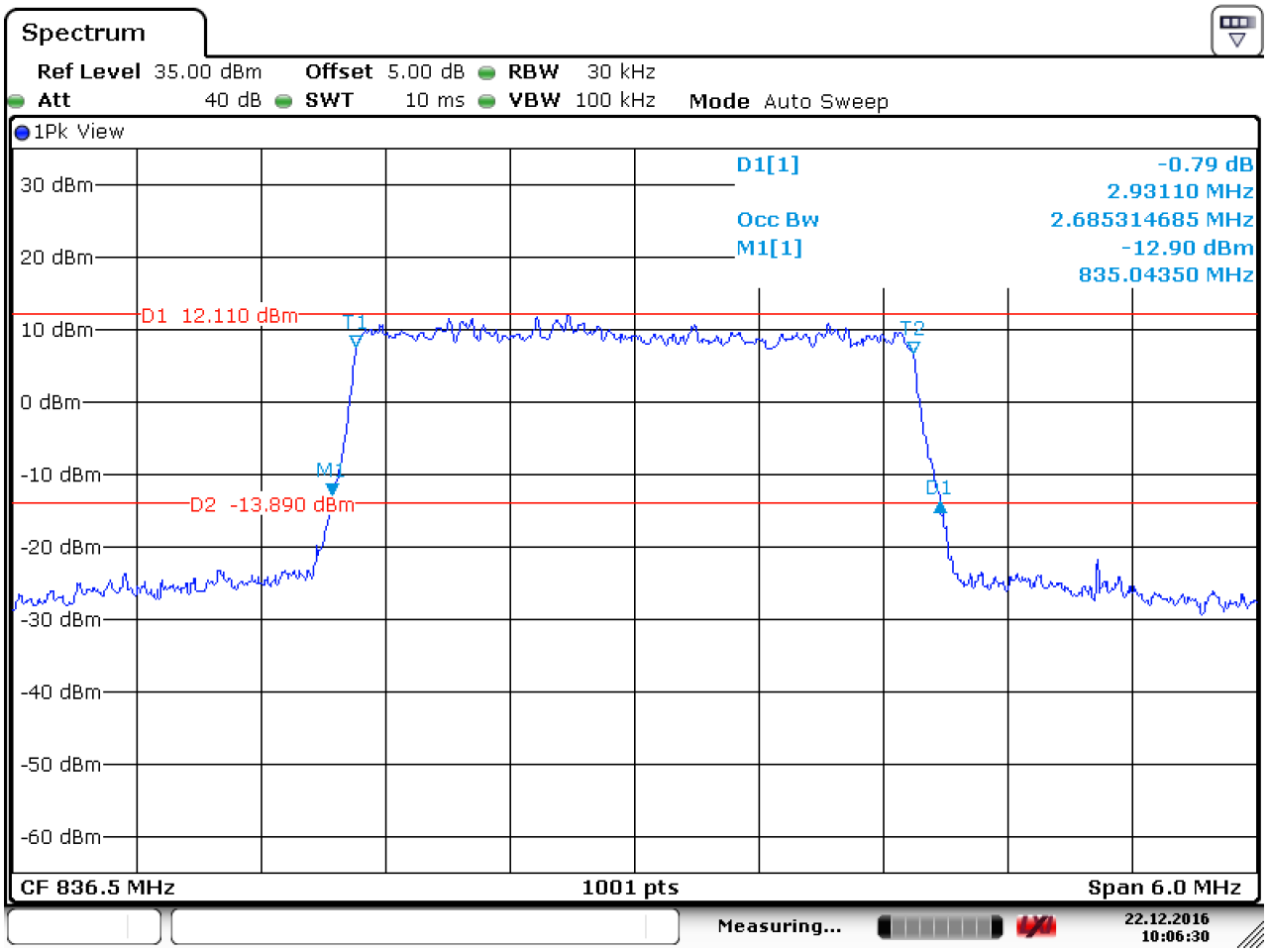
4.1.1.4 Test Mode = LTE/TM2 3MHz

4.1.1.4.1 Test Channel = LCH



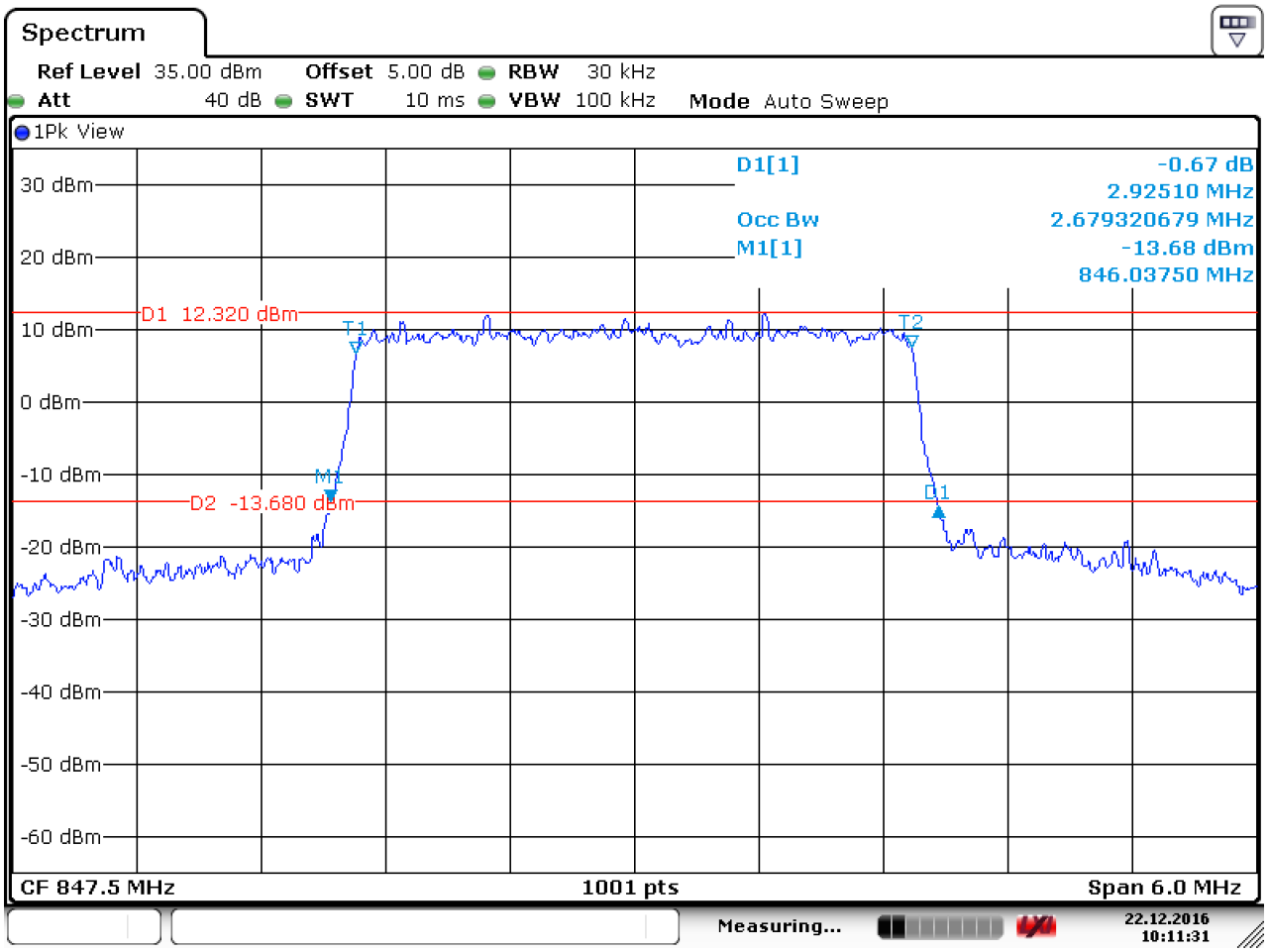
Date: 22.DEC.2016 10:07:43

4.1.1.4.2 Test Channel = MCH



Date: 22.DEC.2016 10:06:31

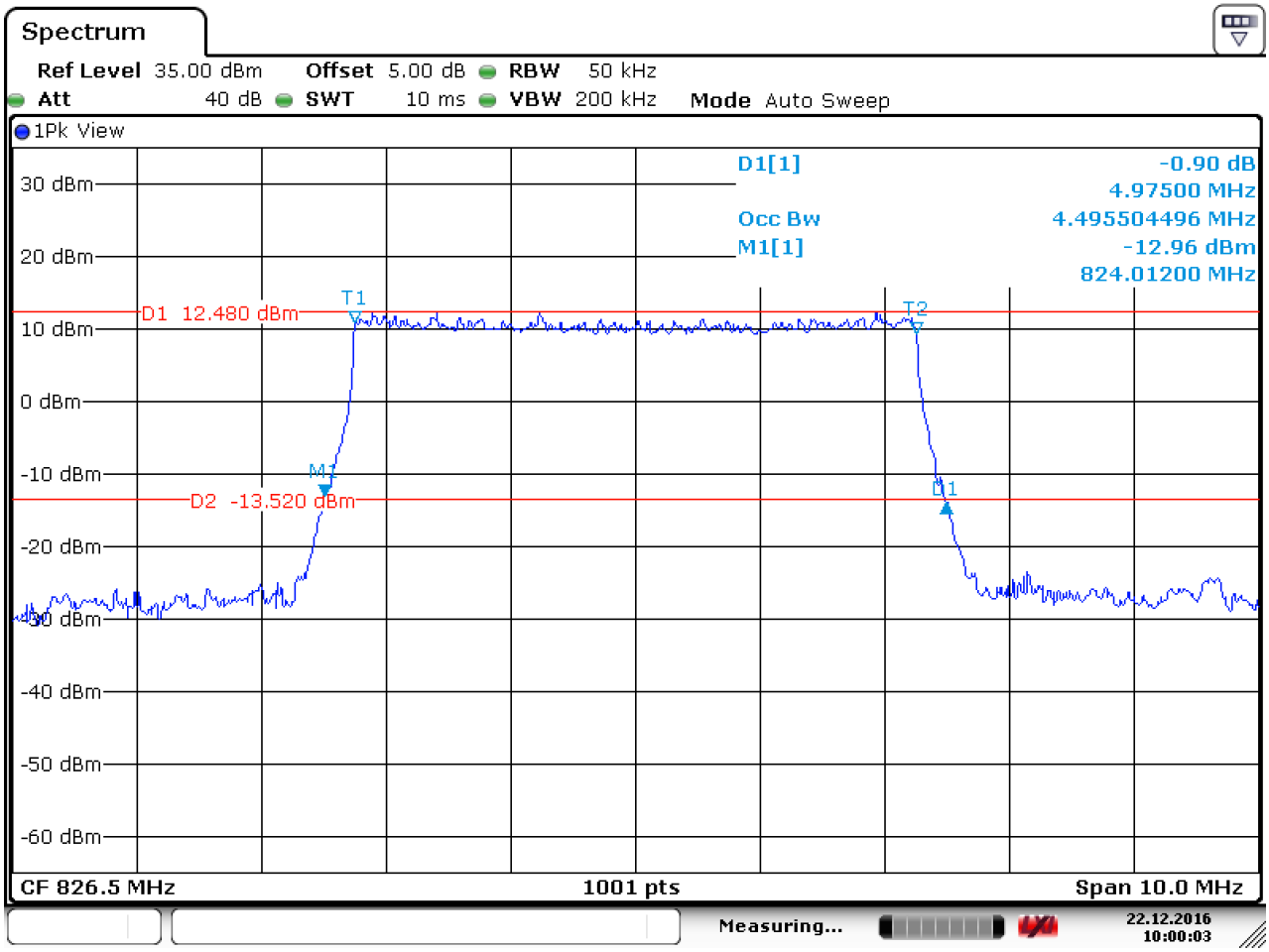
4.1.1.4.3 Test Channel = HCH



Date: 22.DEC.2016 10:11:31

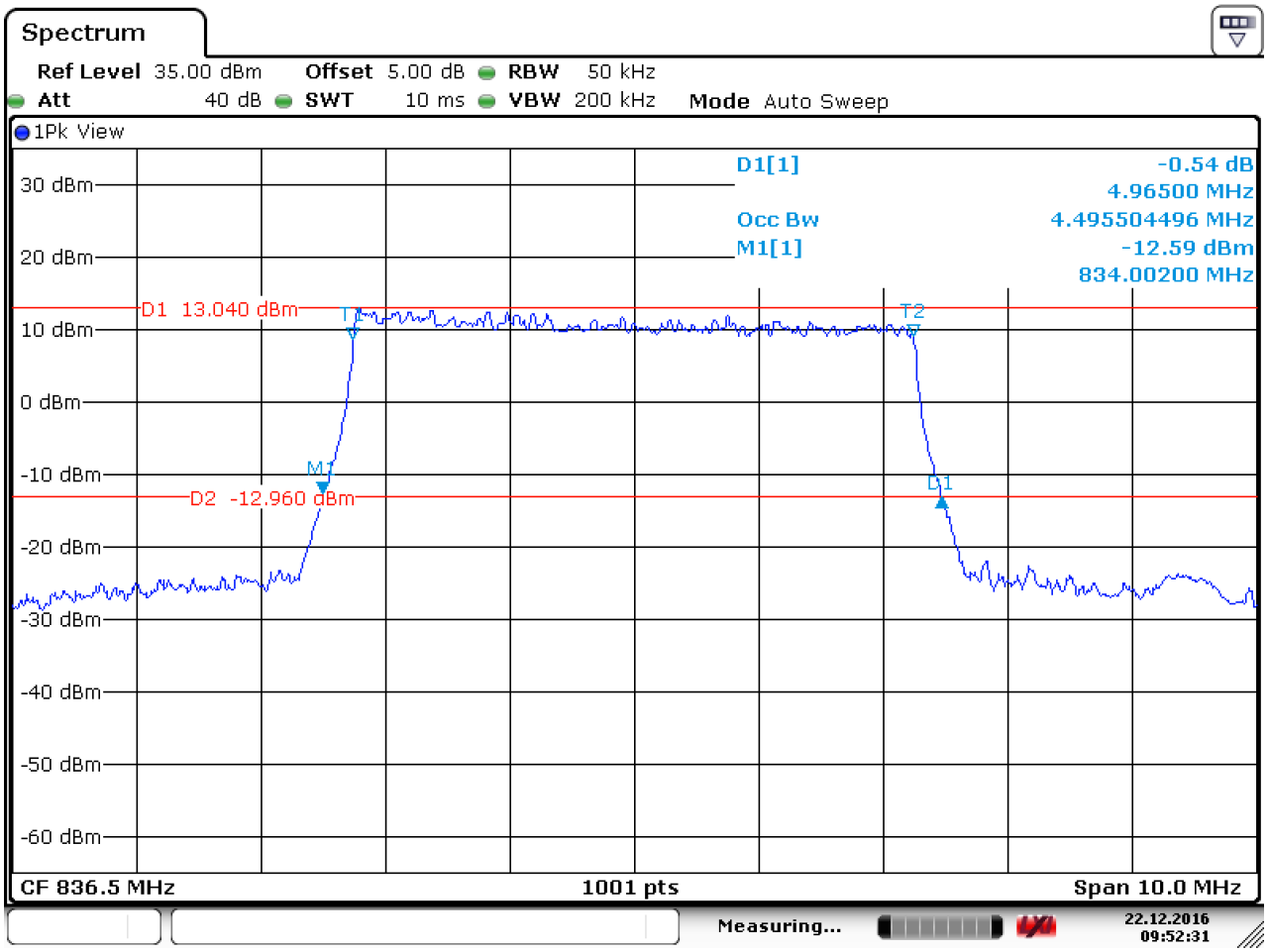
4.1.1.5 Test Mode = LTE/TM1 5MHz

4.1.1.5.1 Test Channel = LCH



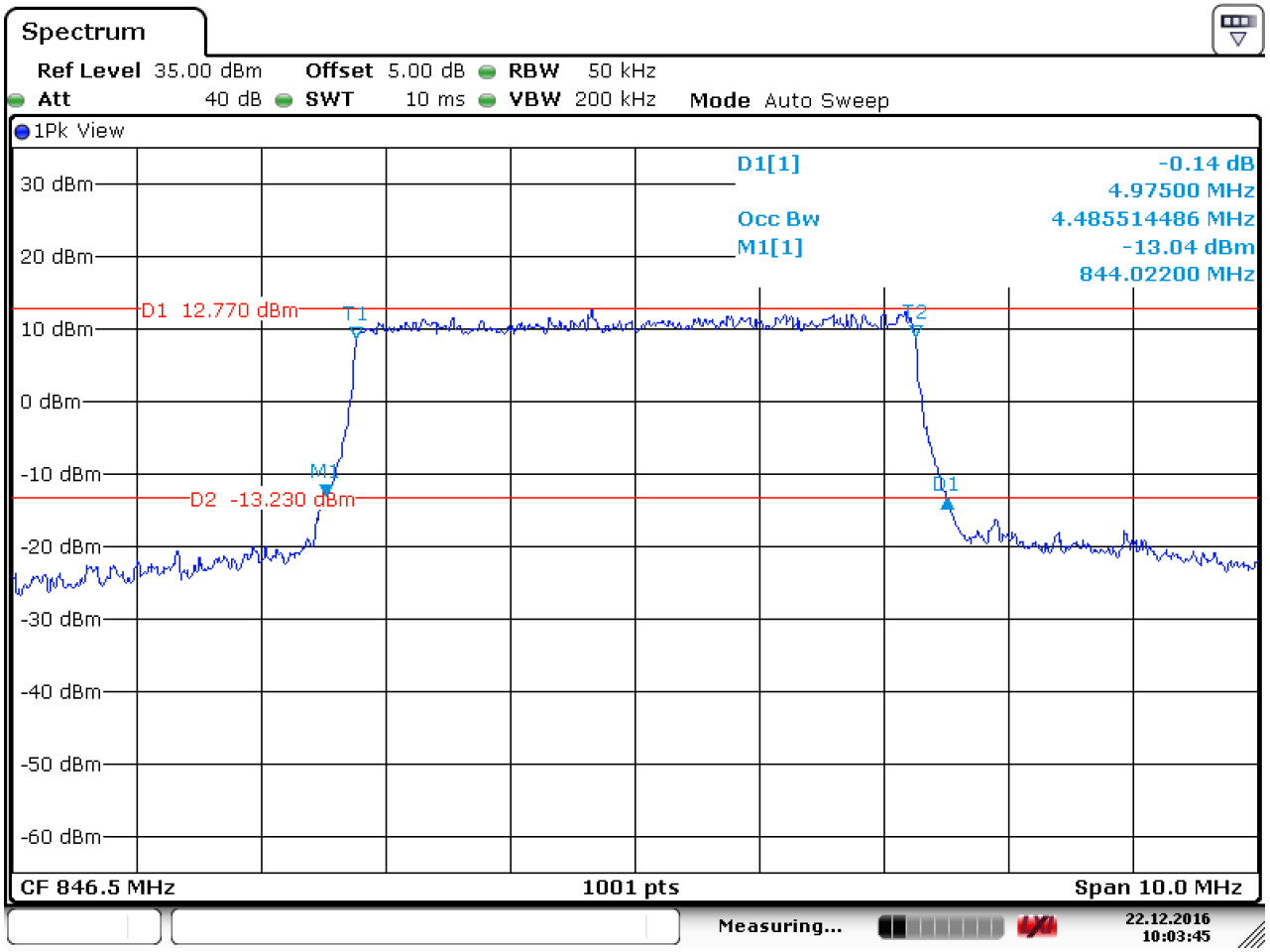
Date: 22.DEC.2016 10:00:03

4.1.1.5.2 Test Channel = MCH



Date: 22.DEC.2016 09:52:31

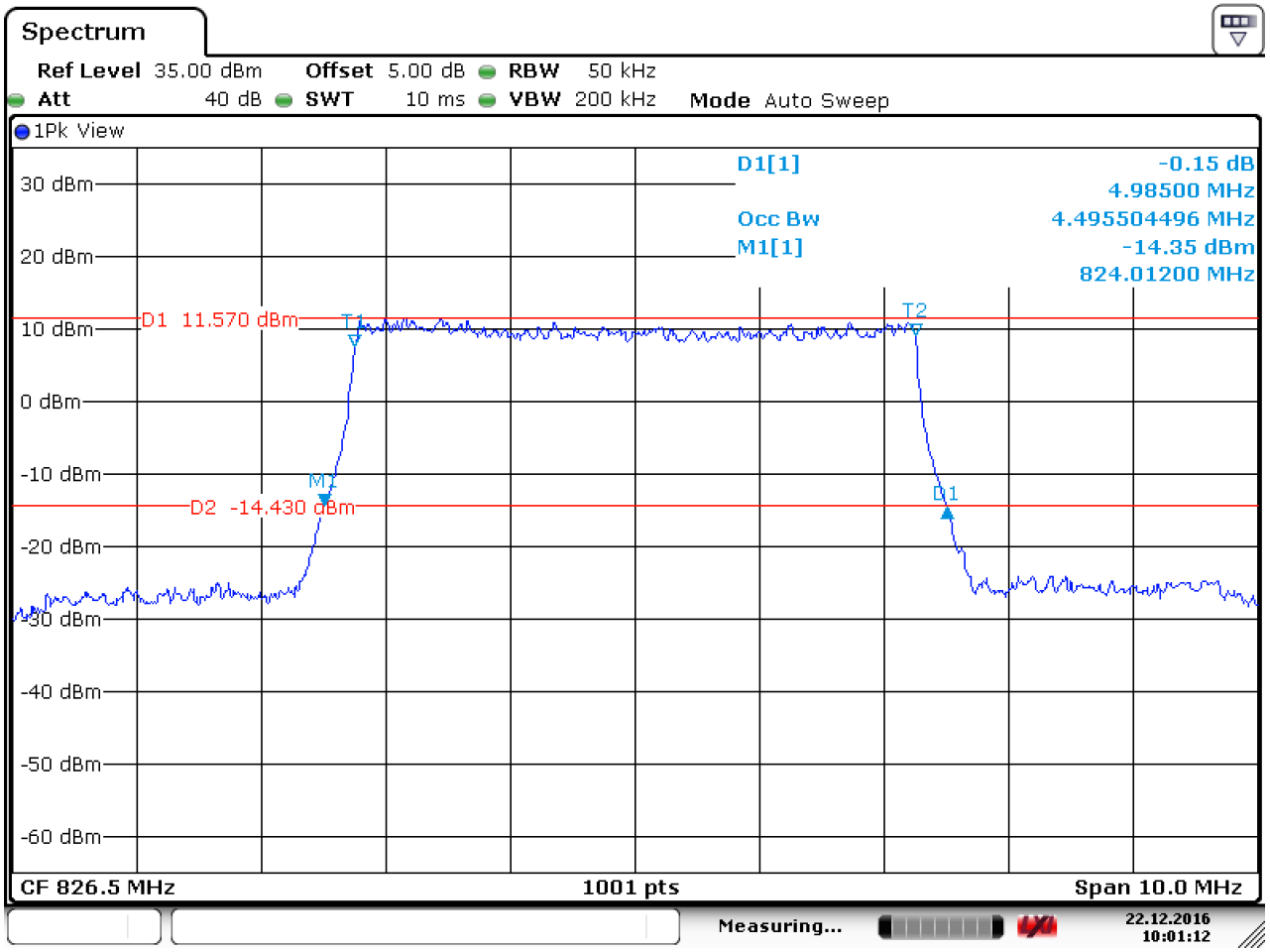
4.1.1.5.3 Test Channel = HCH



Date: 22.DEC.2016 10:03:45

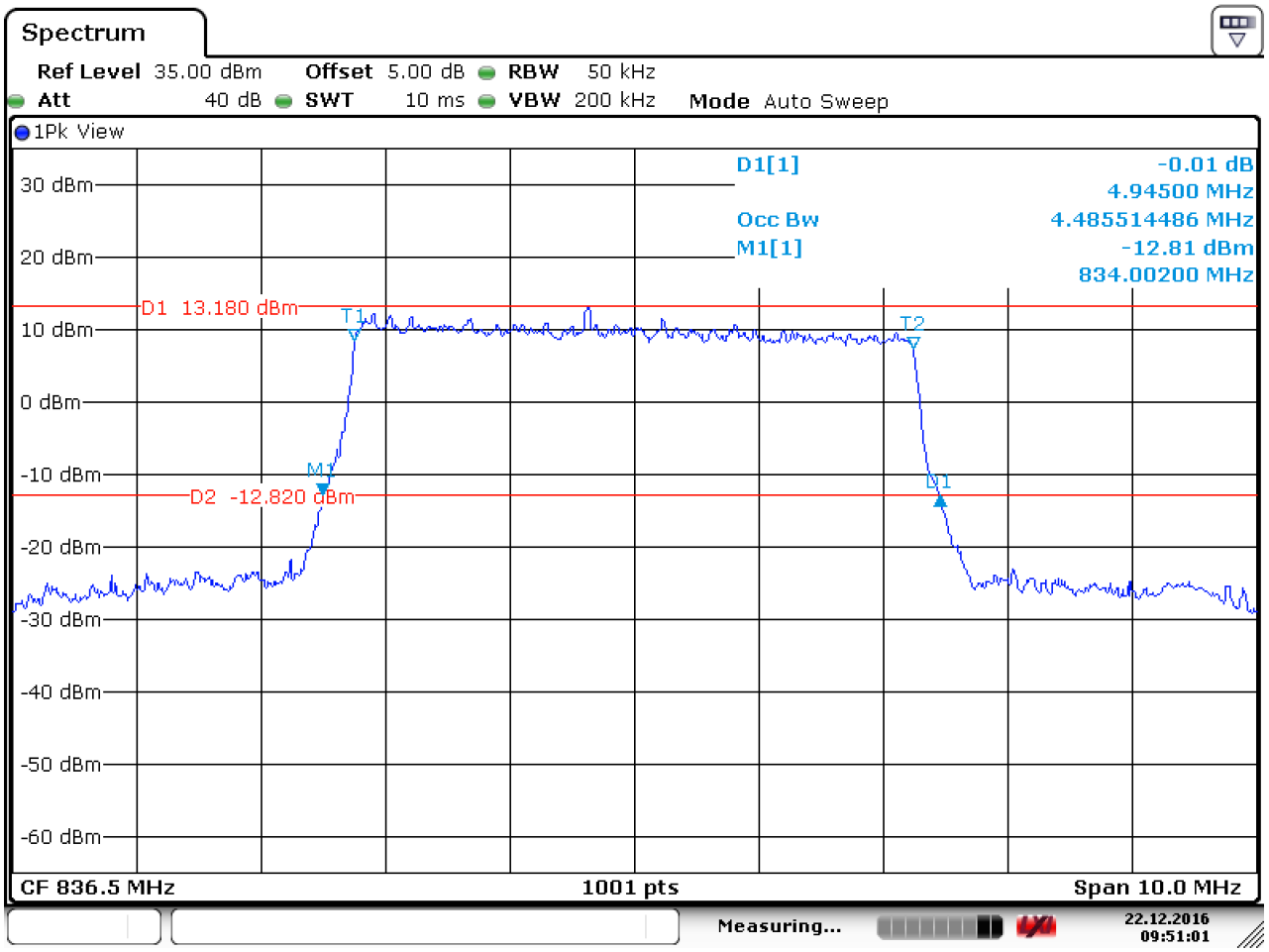
4.1.1.6 Test Mode = LTE/TM2 5MHz

4.1.1.6.1 Test Channel = LCH



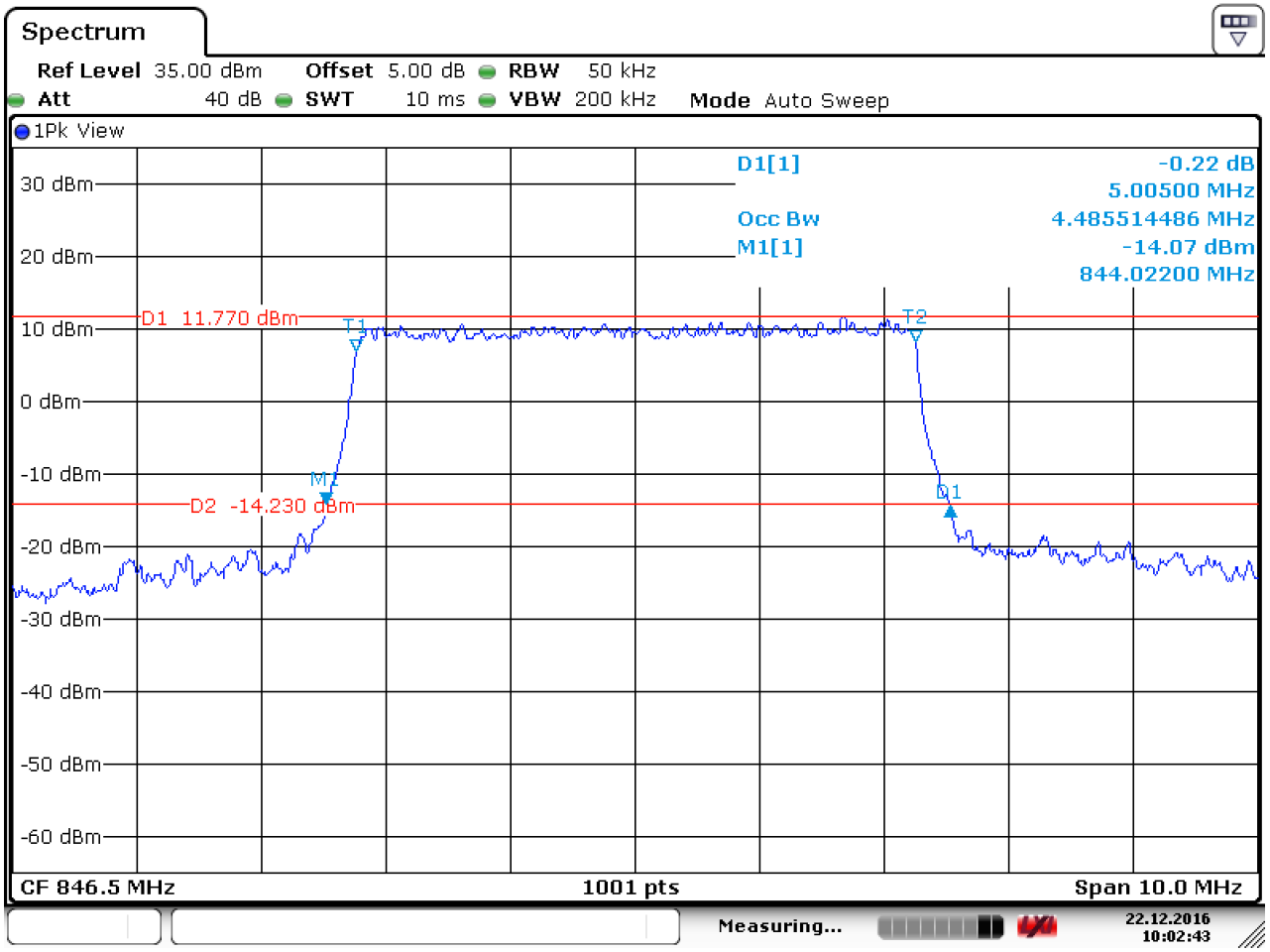
Date: 22.DEC.2016 10:01:12

4.1.1.6.2 Test Channel = MCH



Date: 22.DEC.2016 09:51:02

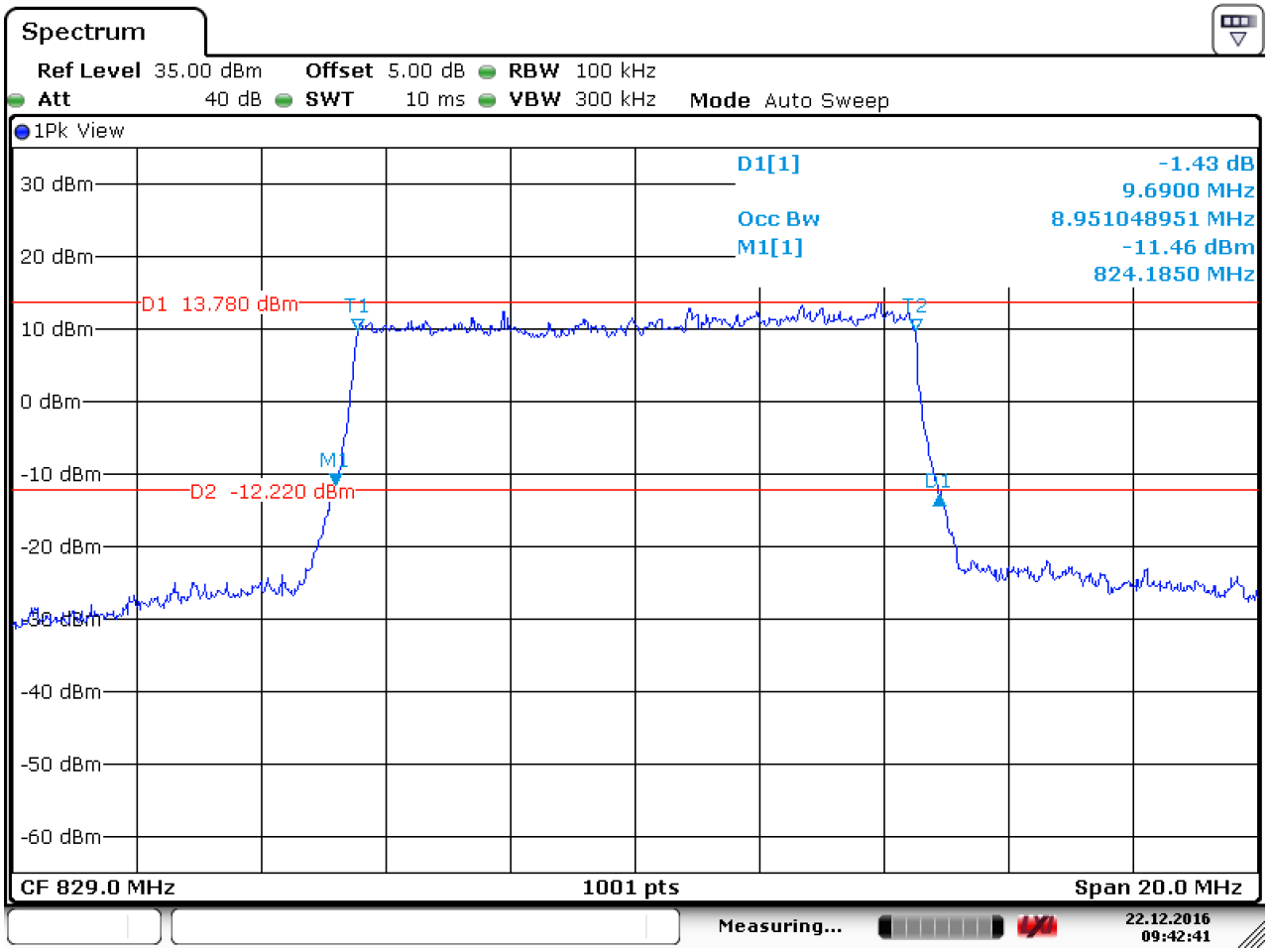
4.1.1.6.3 Test Channel = HCH



Date: 22.DEC.2016 10:02:43

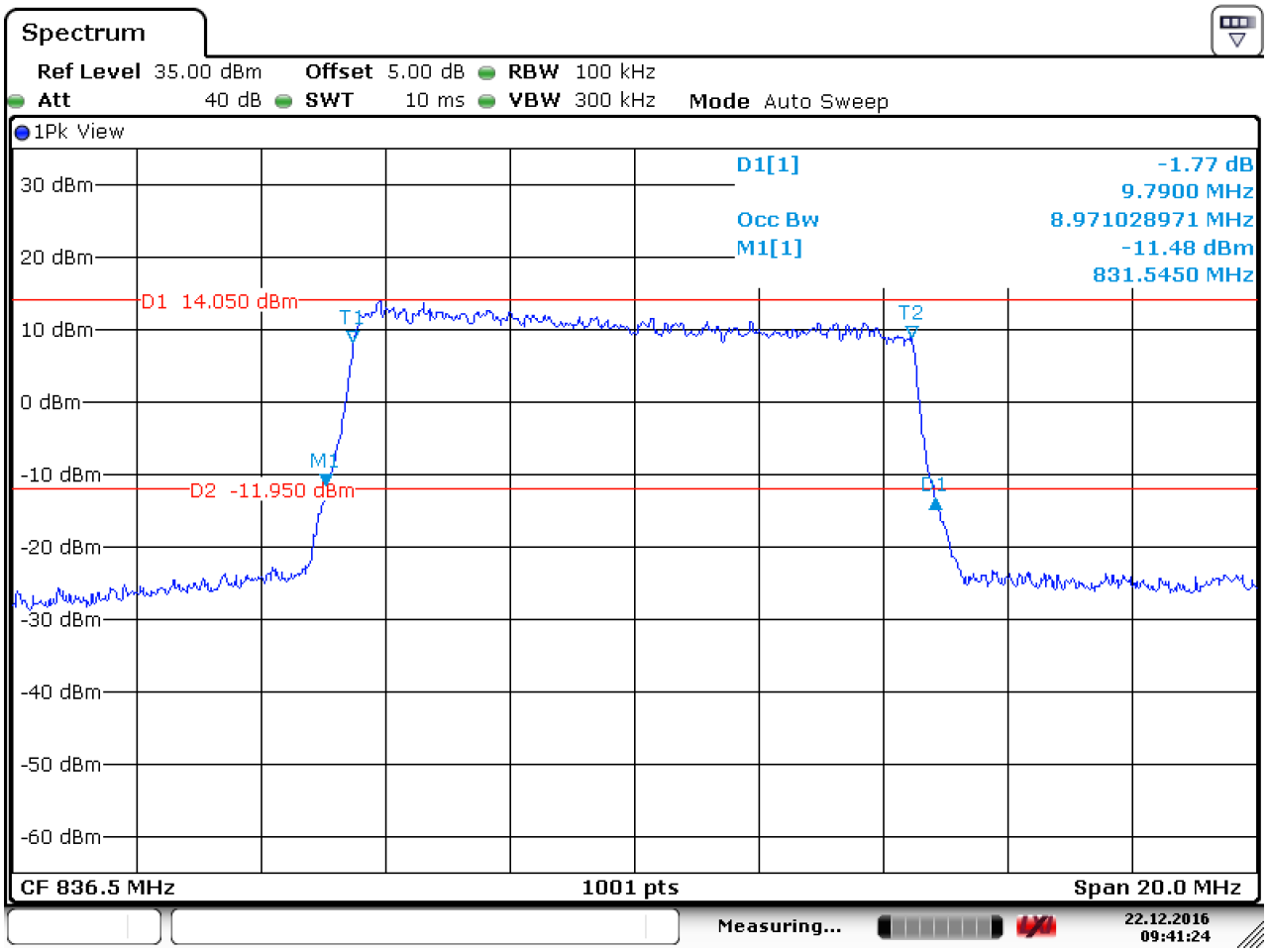
4.1.1.7 Test Mode = LTE/TM1 10MHz

4.1.1.7.1 Test Channel = LCH



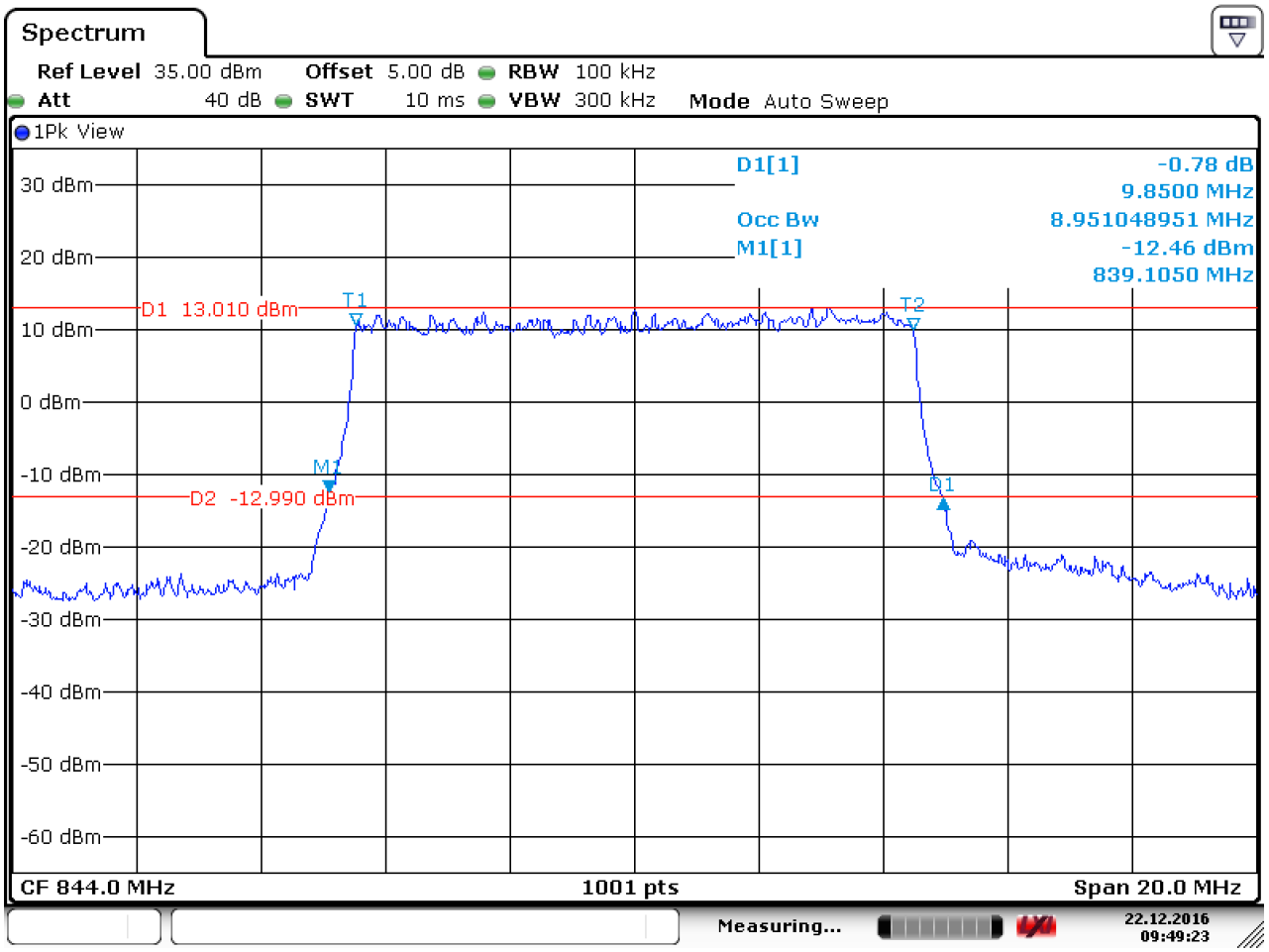
Date: 22.DEC.2016 09:42:42

4.1.1.7.2 Test Channel = MCH



Date: 22.DEC.2016 09:41:24

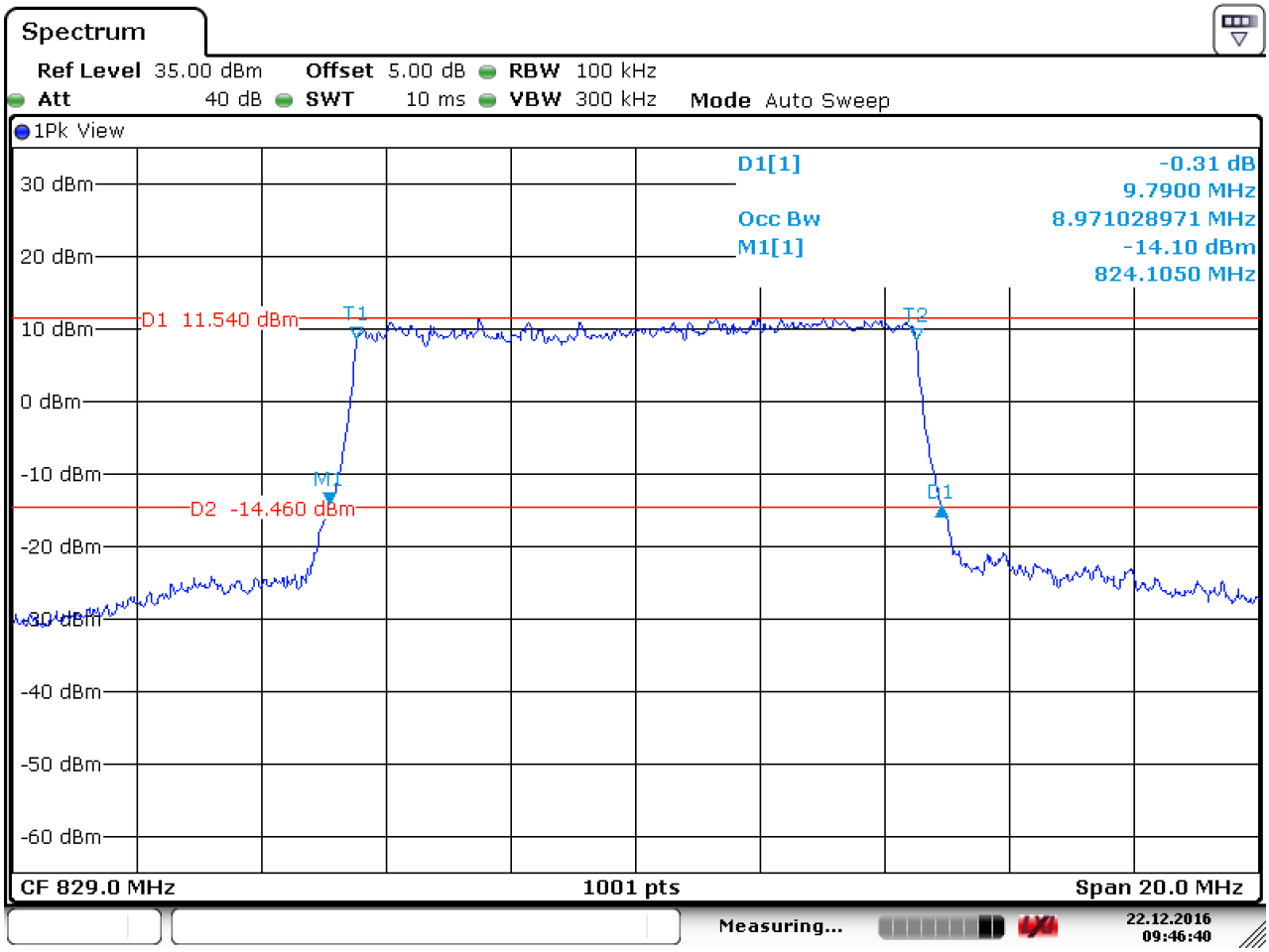
4.1.1.7.3 Test Channel = HCH



Date: 22.DEC.2016 09:49:23

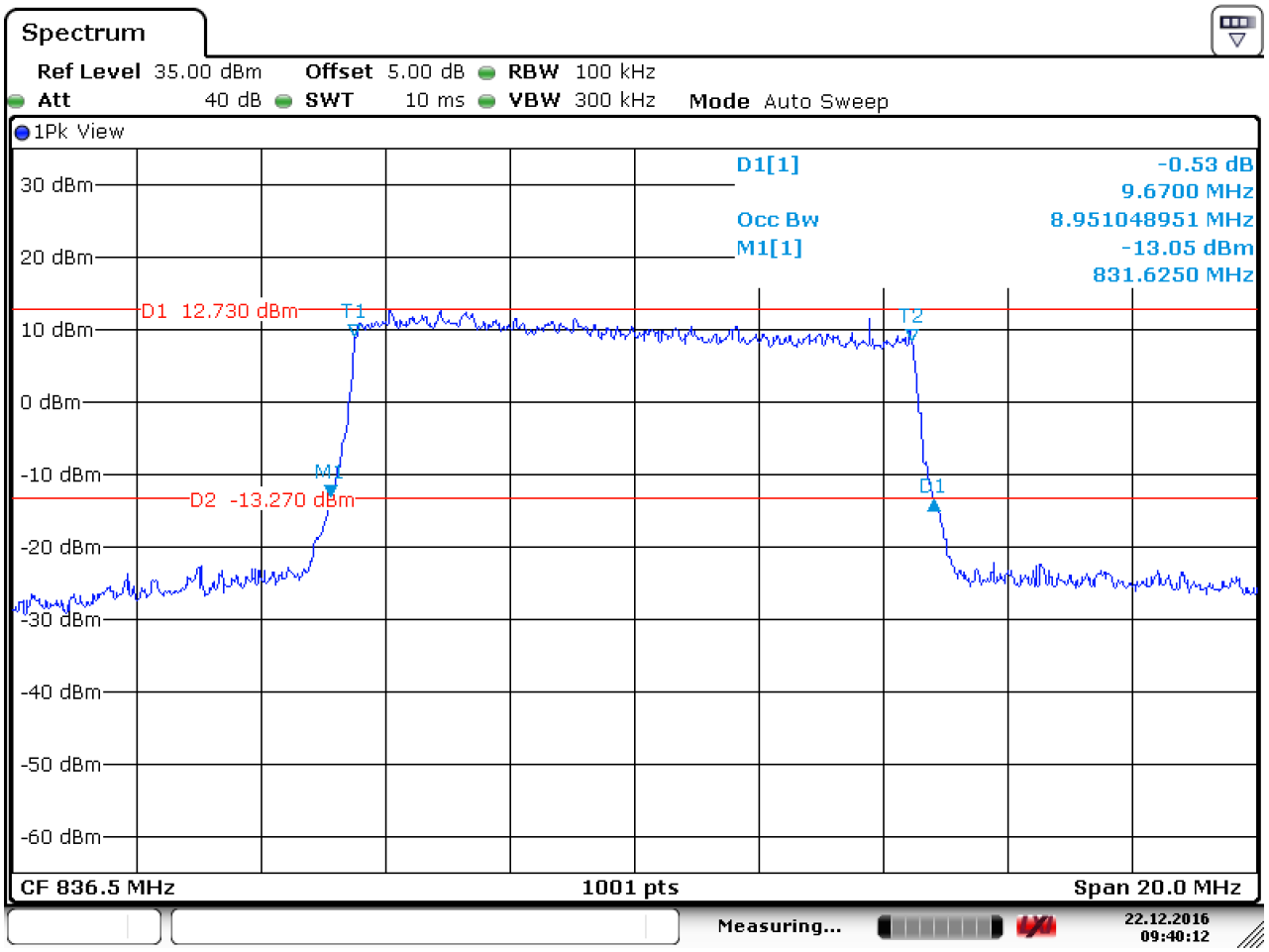
4.1.1.8 Test Mode = LTE/TM2 10MHz

4.1.1.8.1 Test Channel = LCH



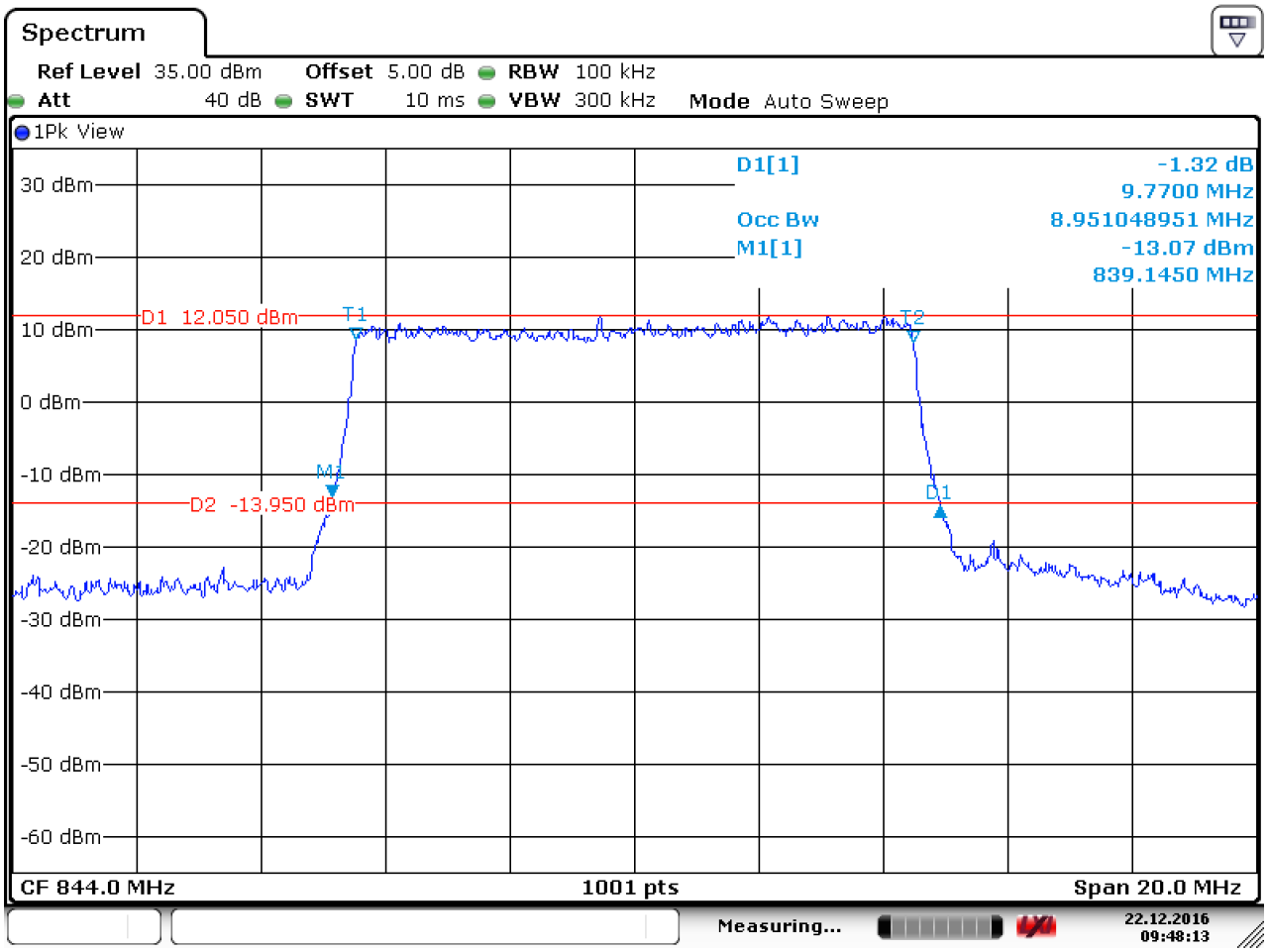
Date: 22.DEC.2016 09:46:40

4.1.1.8.2 Test Channel = MCH



Date: 22.DEC.2016 09:40:12

4.1.1.8.3 Test Channel = HCH



Date: 22.DEC.2016 09:48:13

5 Band Edges Compliance

Part I –

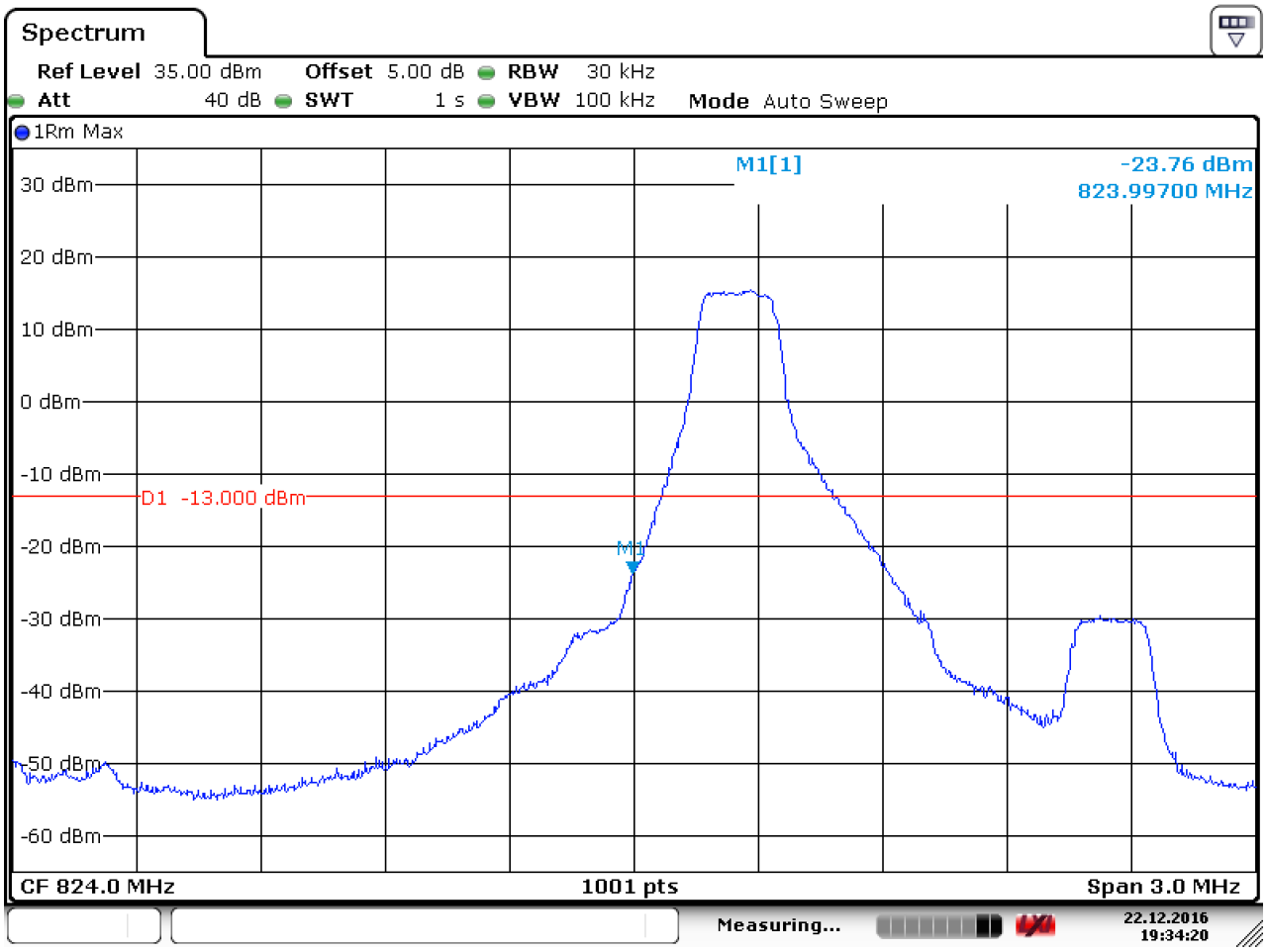
5.1 For LTE

5.1.1 Test Band = LTE band5

5.1.1.1 Test Mode = LTE/TM1 1.4MHz

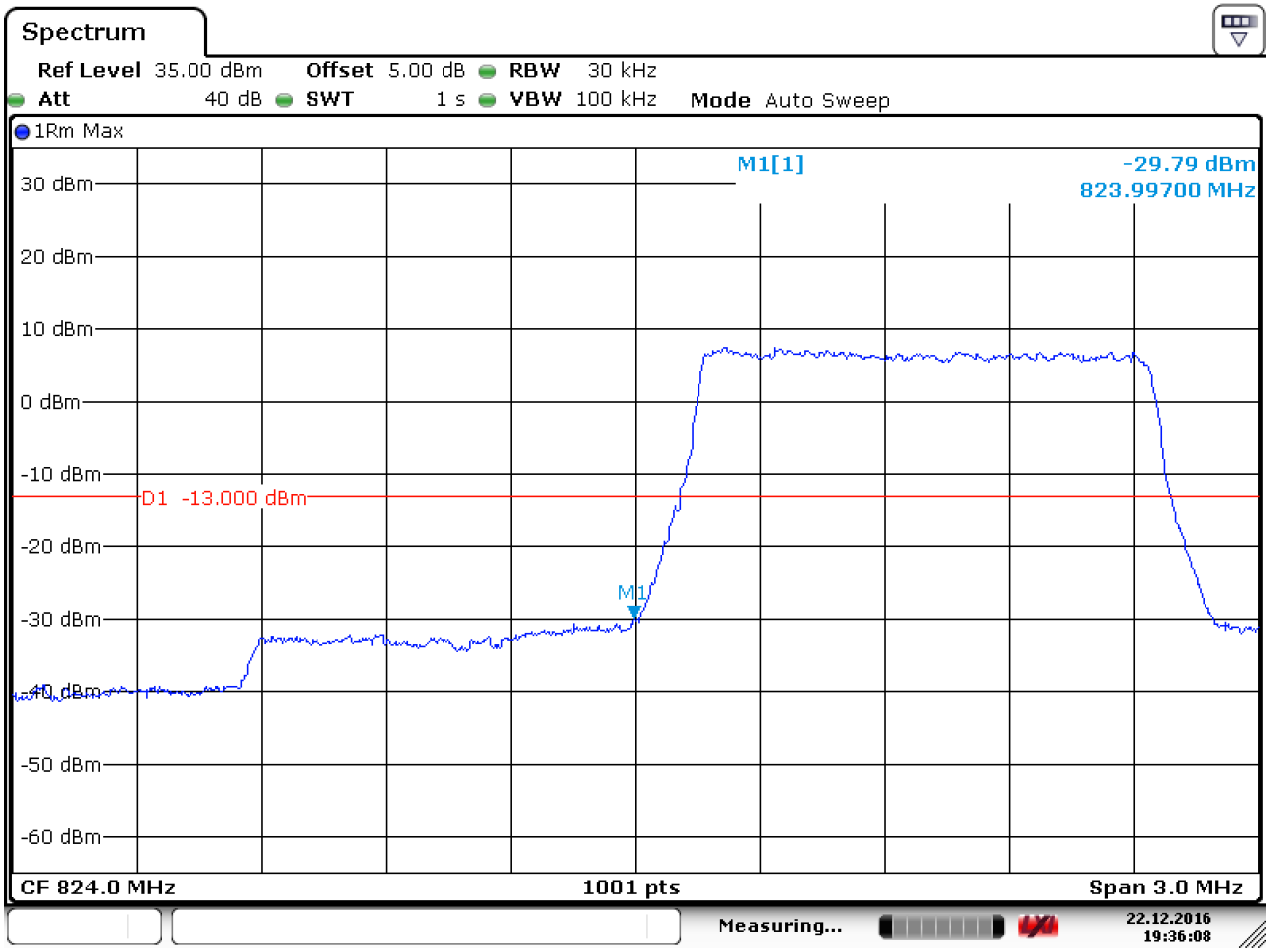
5.1.1.1.1 Test Channel = LCH

5.1.1.1.1.1 Test RB=1RB



Date: 22.DEC.2016 19:34:20

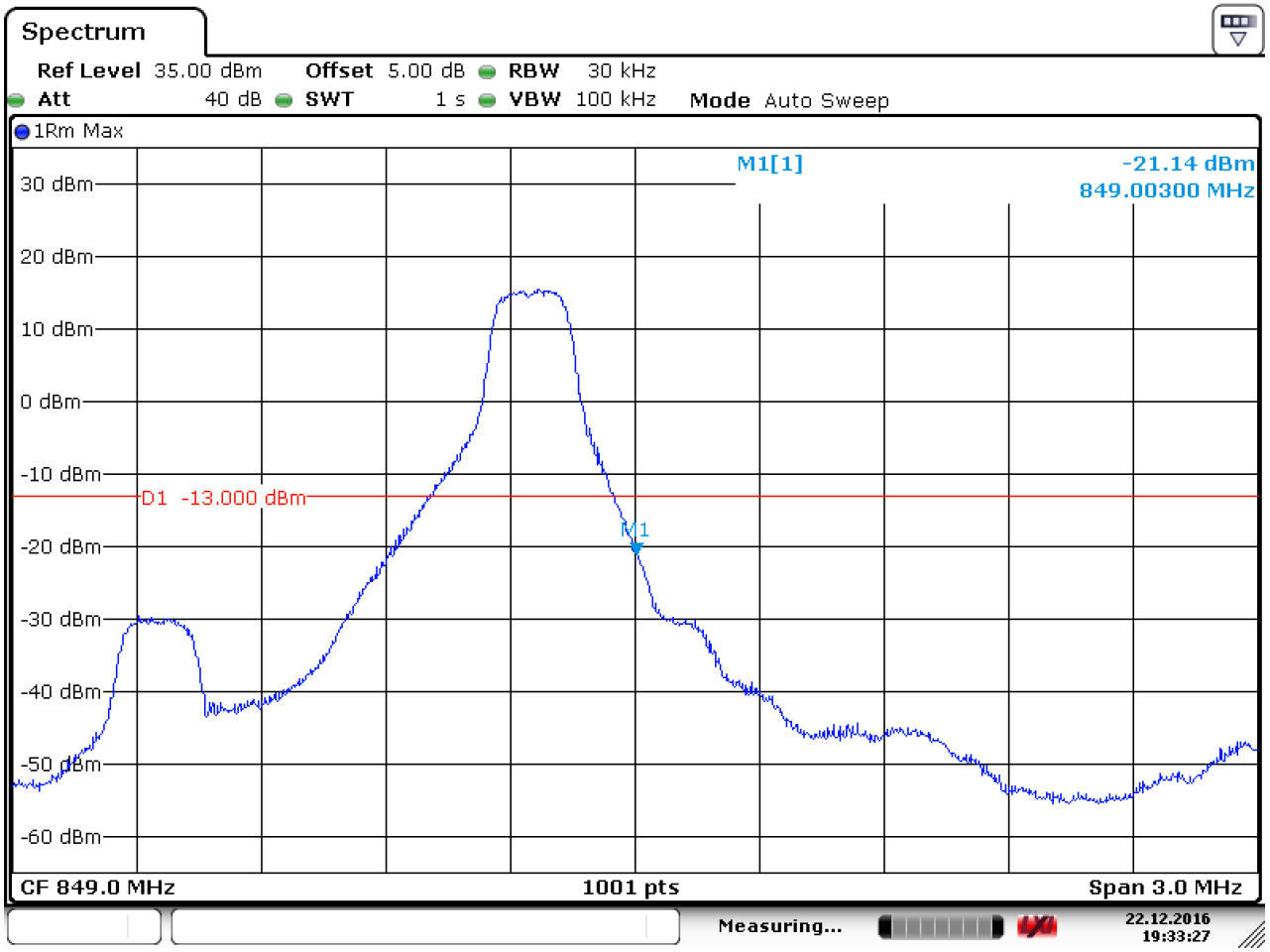
5.1.1.1.1.2 Test RB=6RB



Date: 22.DEC.2016 19:36:09

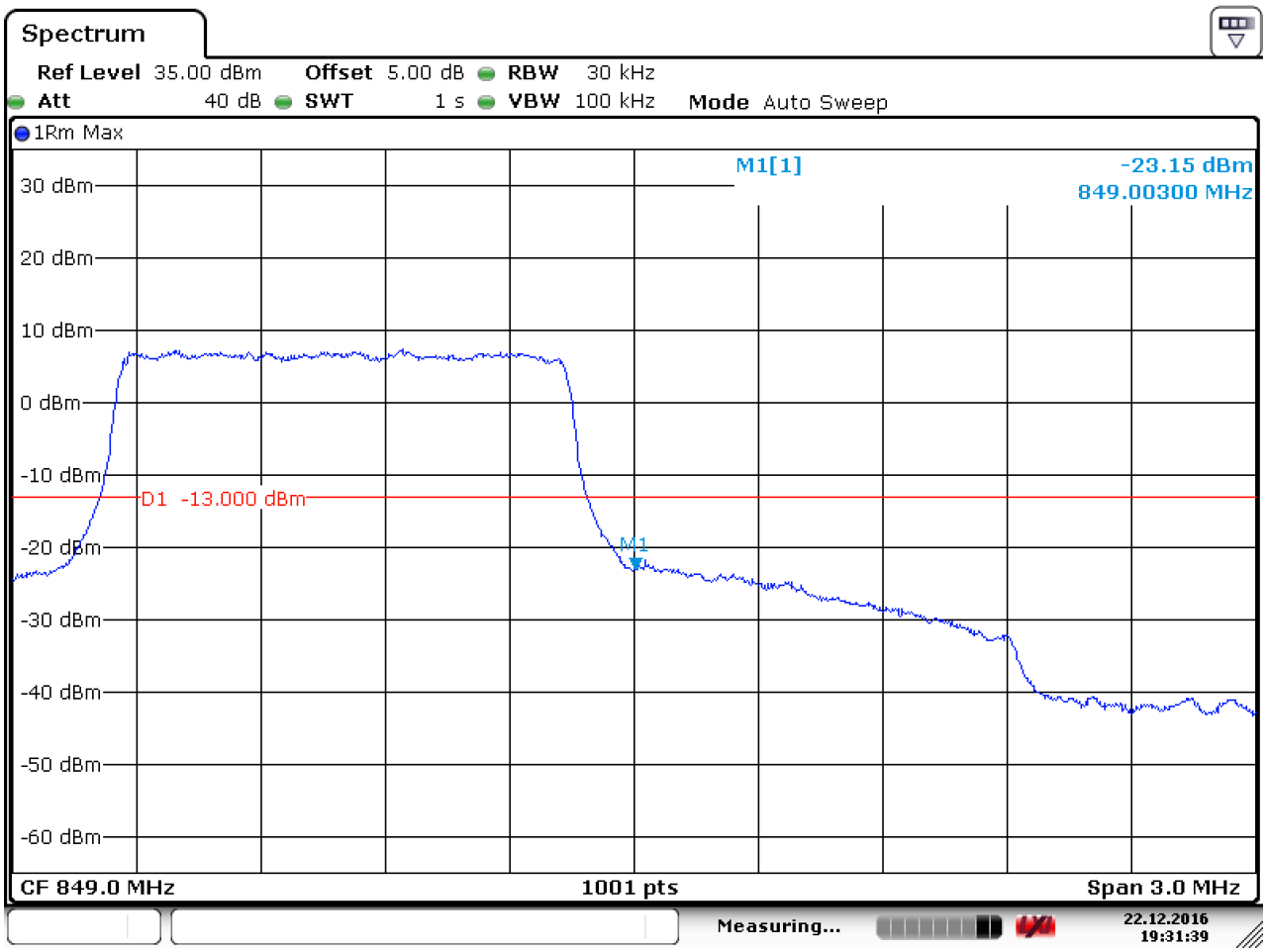
5.1.1.1.2 Test Channel = HCH

5.1.1.1.2.1 Test RB=1RB



Date: 22.DEC.2016 19:33:28

5.1.1.1.2.2 Test RB=6RB

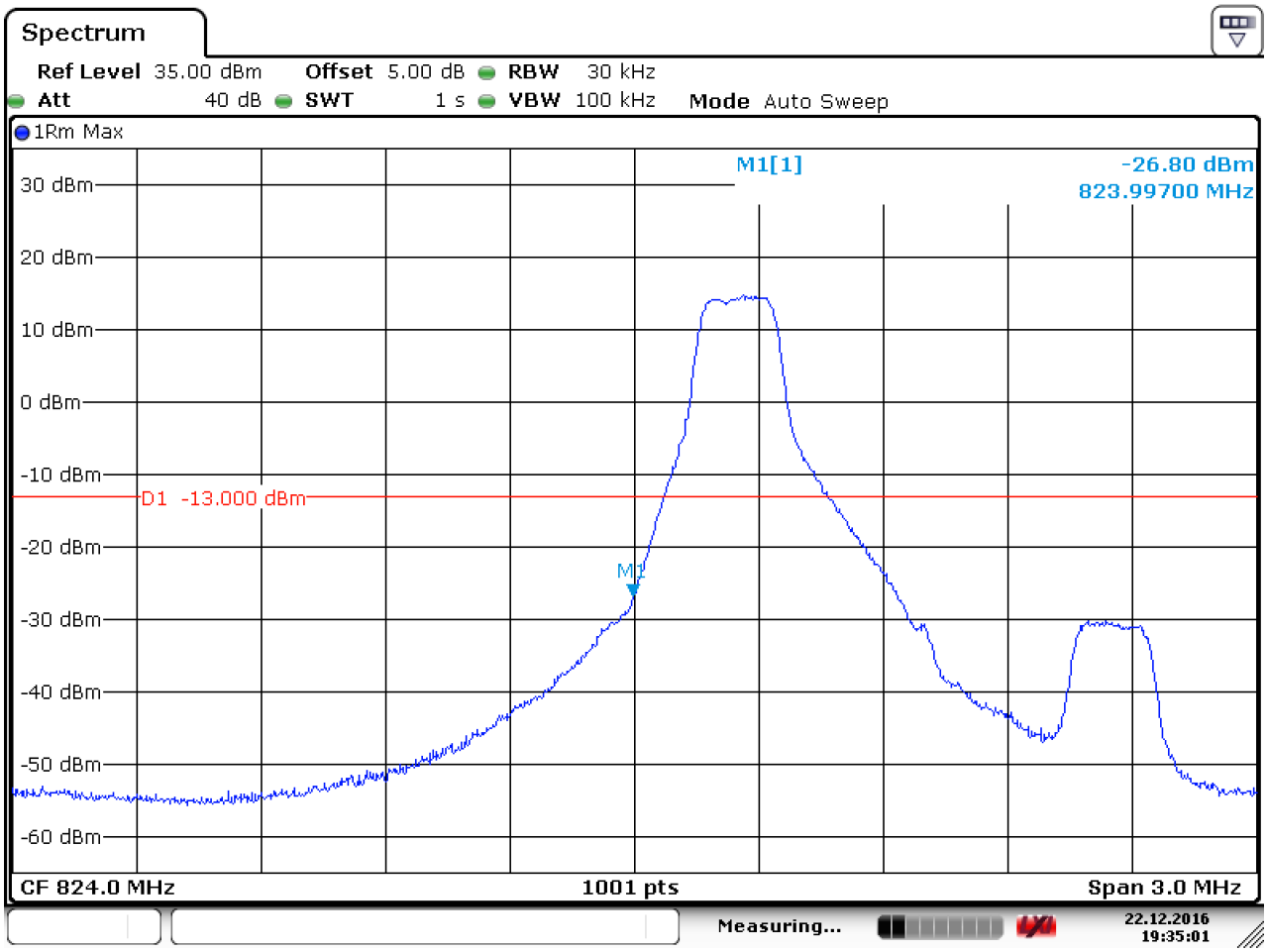


Date: 22.DEC.2016 19:31:40

5.1.1.2 Test Mode = LTE/TM2 1.4MHz

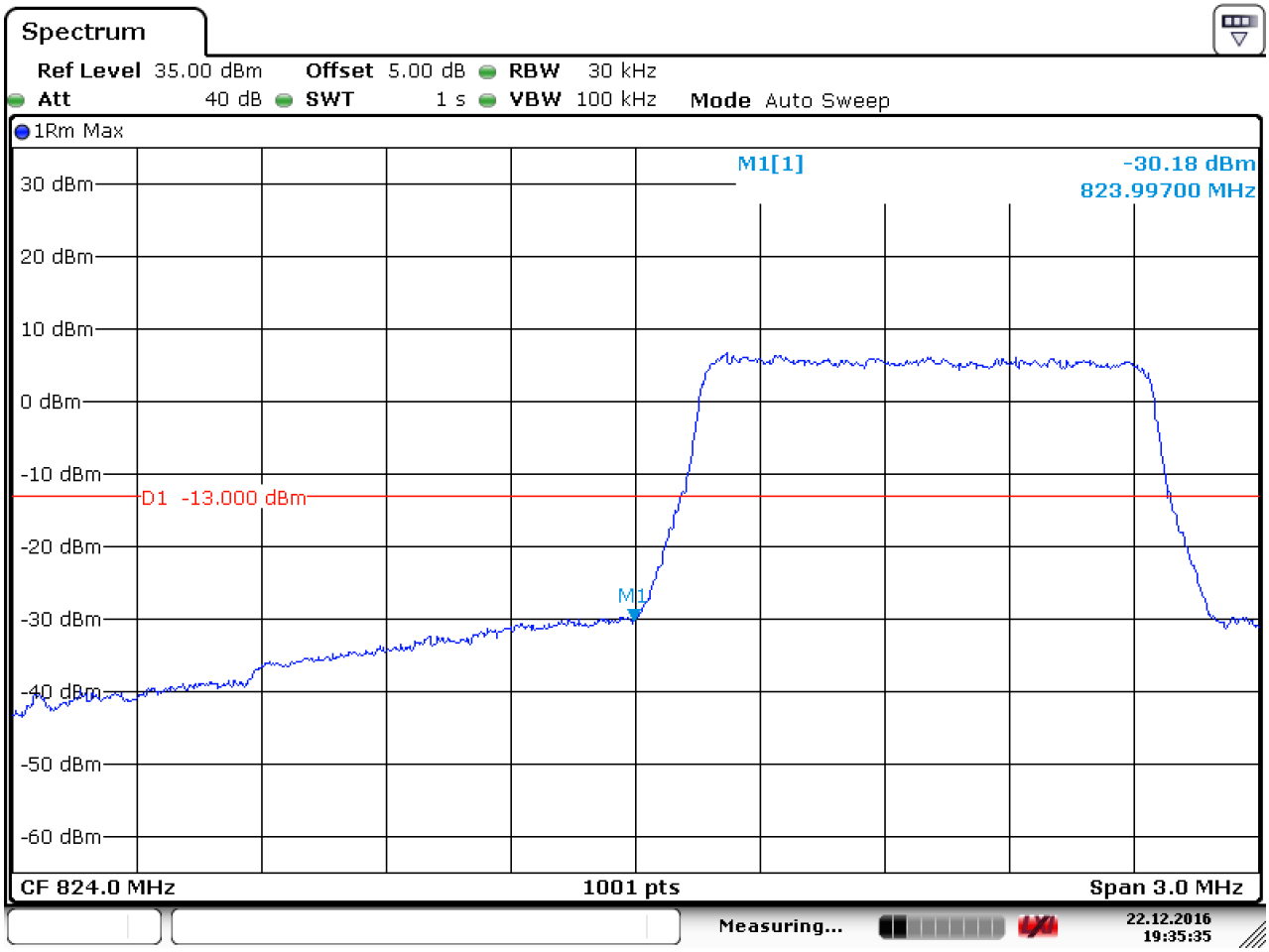
5.1.1.2.1 Test Channel = LCH

5.1.1.2.1.1 Test RB=1RB



Date: 22.DEC.2016 19:35:02

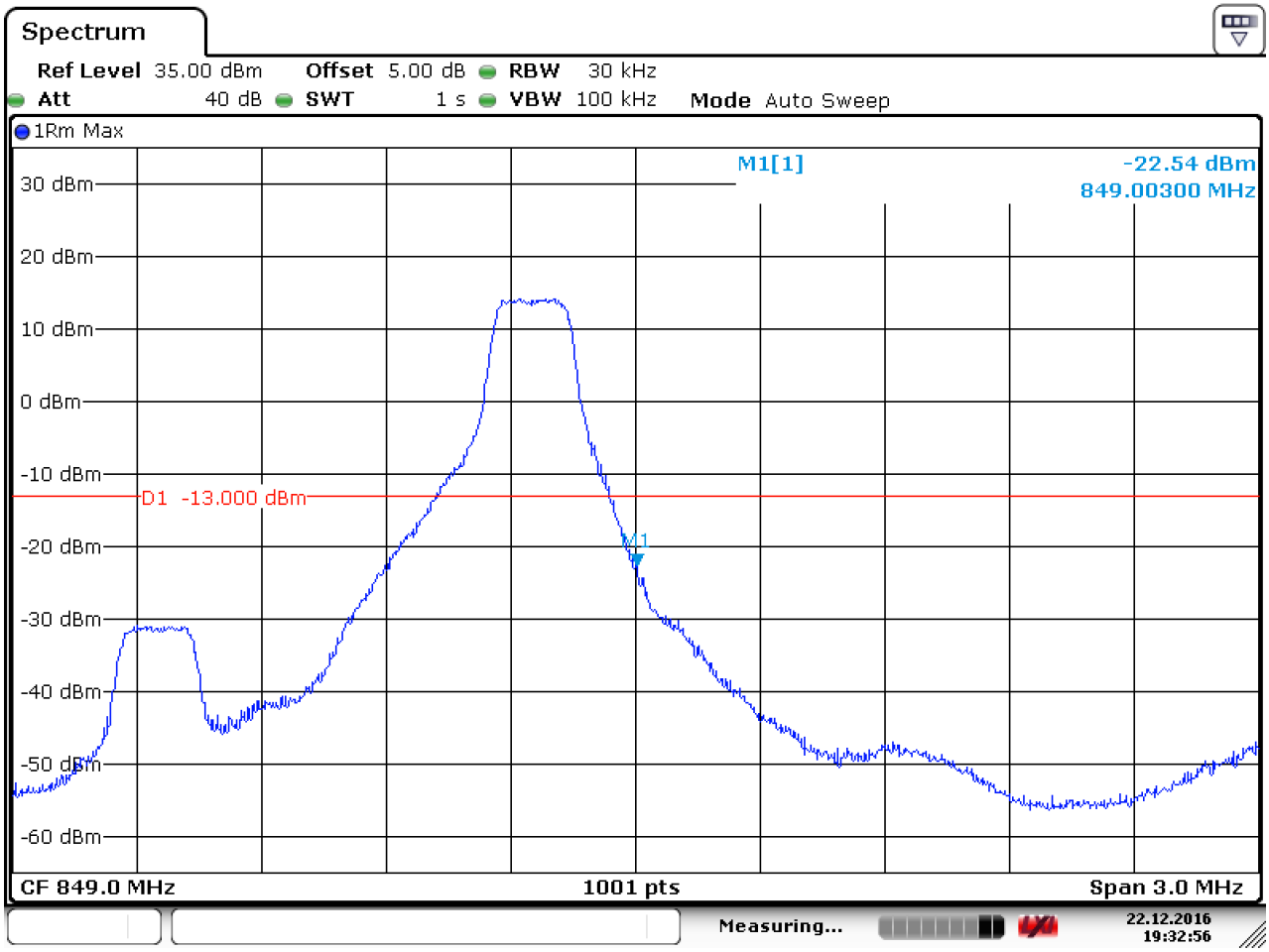
5.1.1.2.1.2 Test RB=6RB



Date: 22.DEC.2016 19:35:35

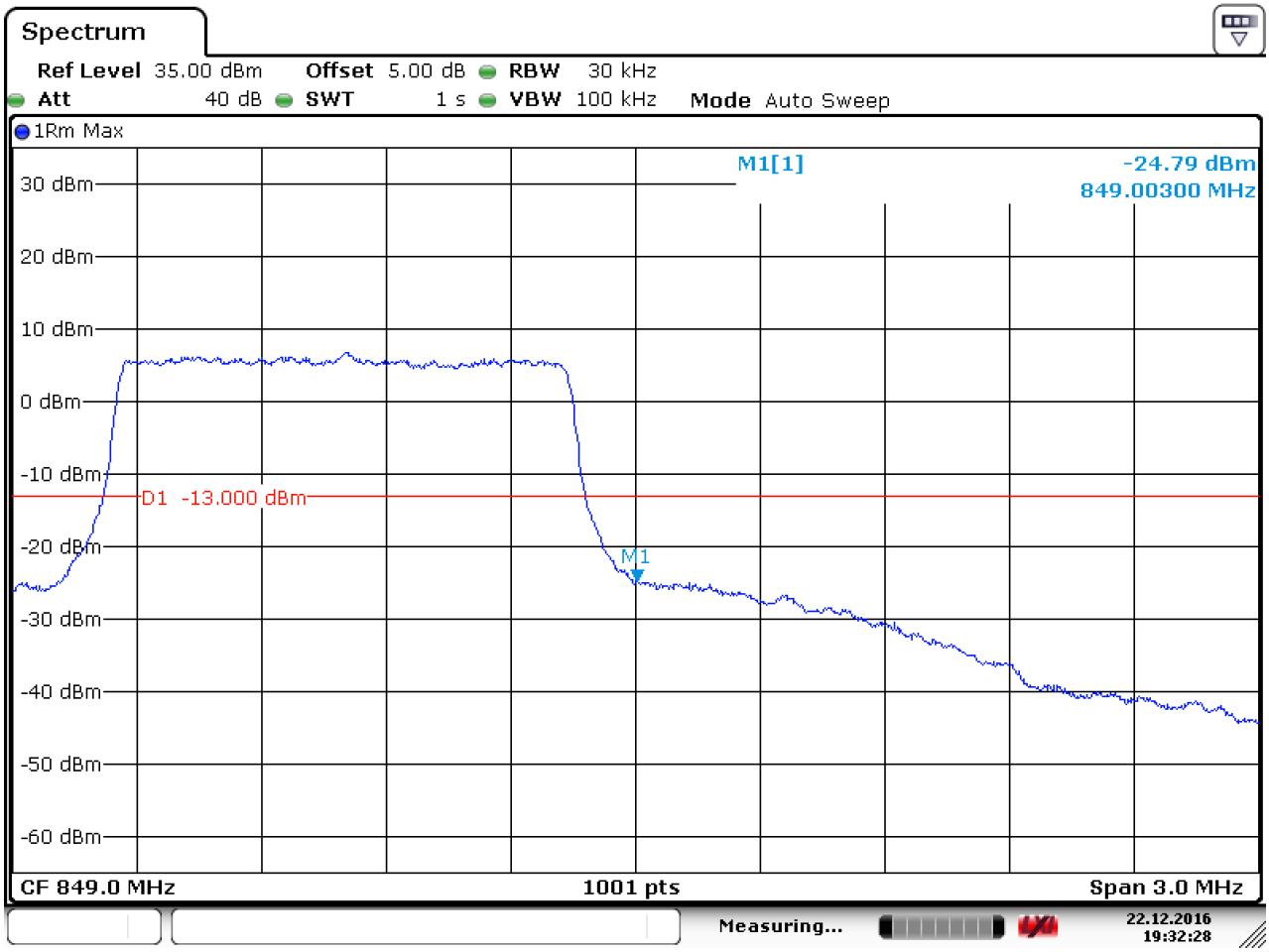
5.1.1.2.2 Test Channel = HCH

5.1.1.2.2.1 Test RB=1RB



Date: 22.DEC.2016 19:32:56

5.1.1.2.2.2 Test RB=6RB

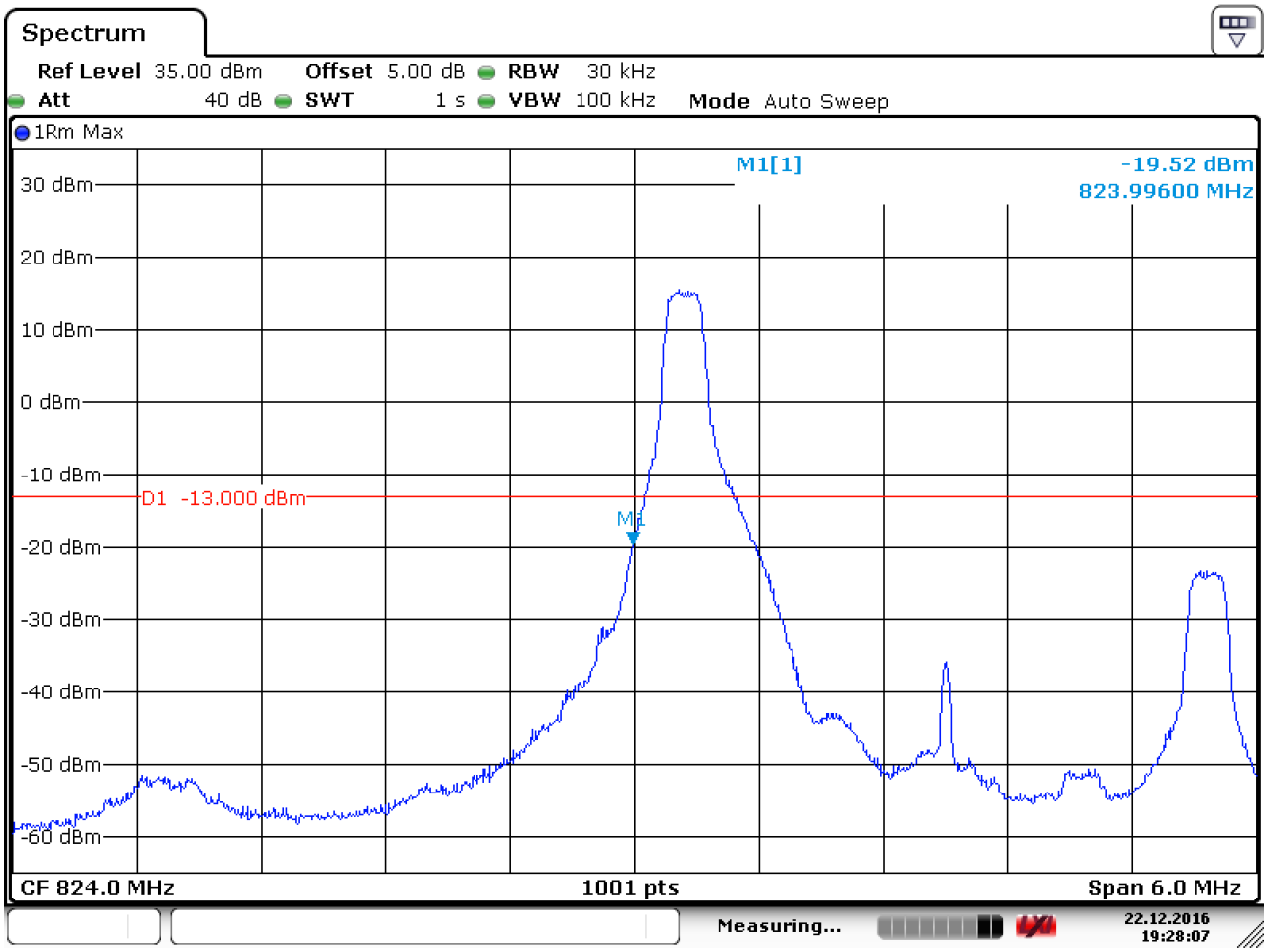


Date: 22.DEC.2016 19:32:29

5.1.1.3 Test Mode = LTE/TM1 3MHz

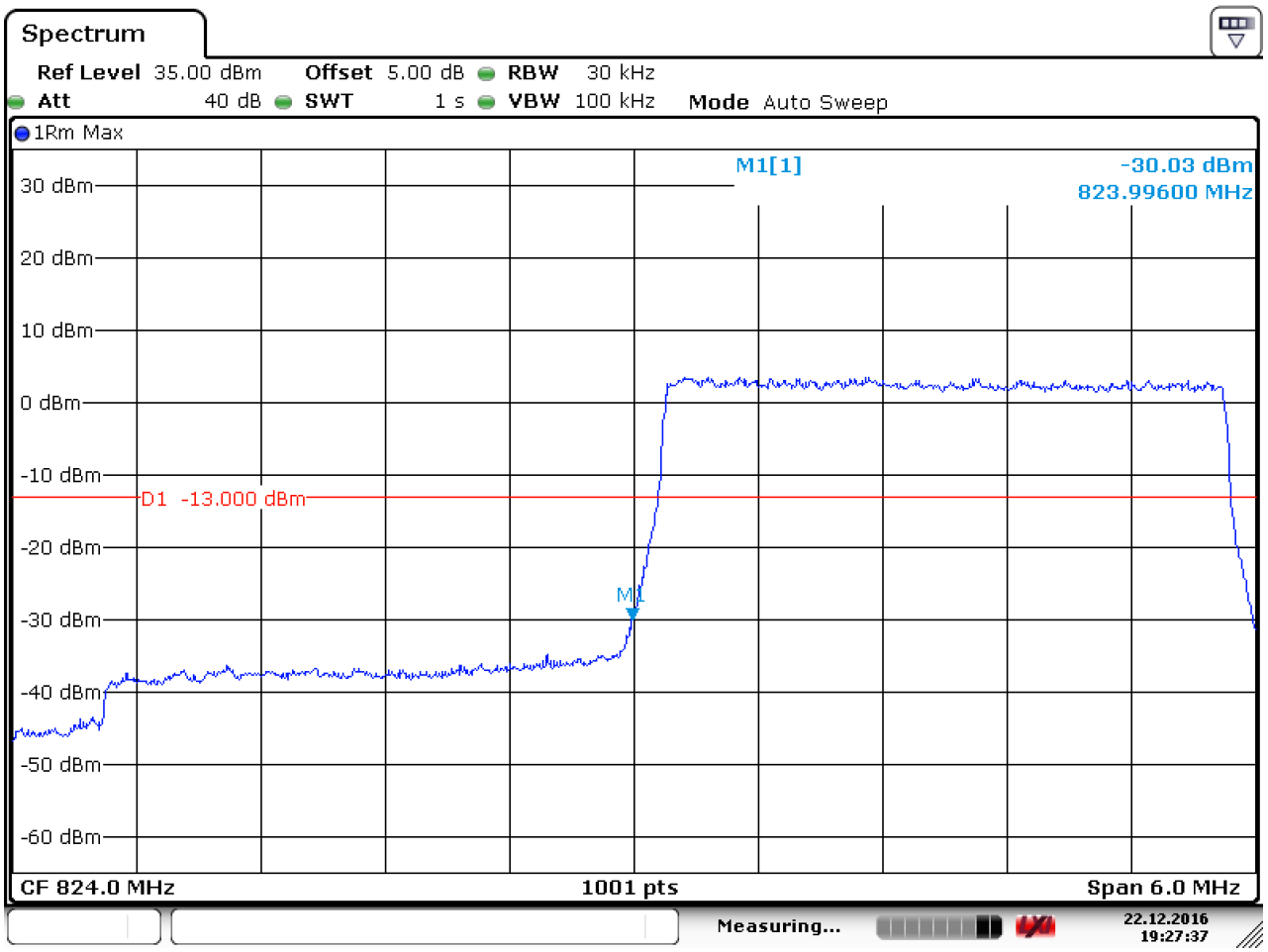
5.1.1.3.1 Test Channel = LCH

5.1.1.3.1.1 Test RB=1RB



Date: 22.DEC.2016 19:28:08

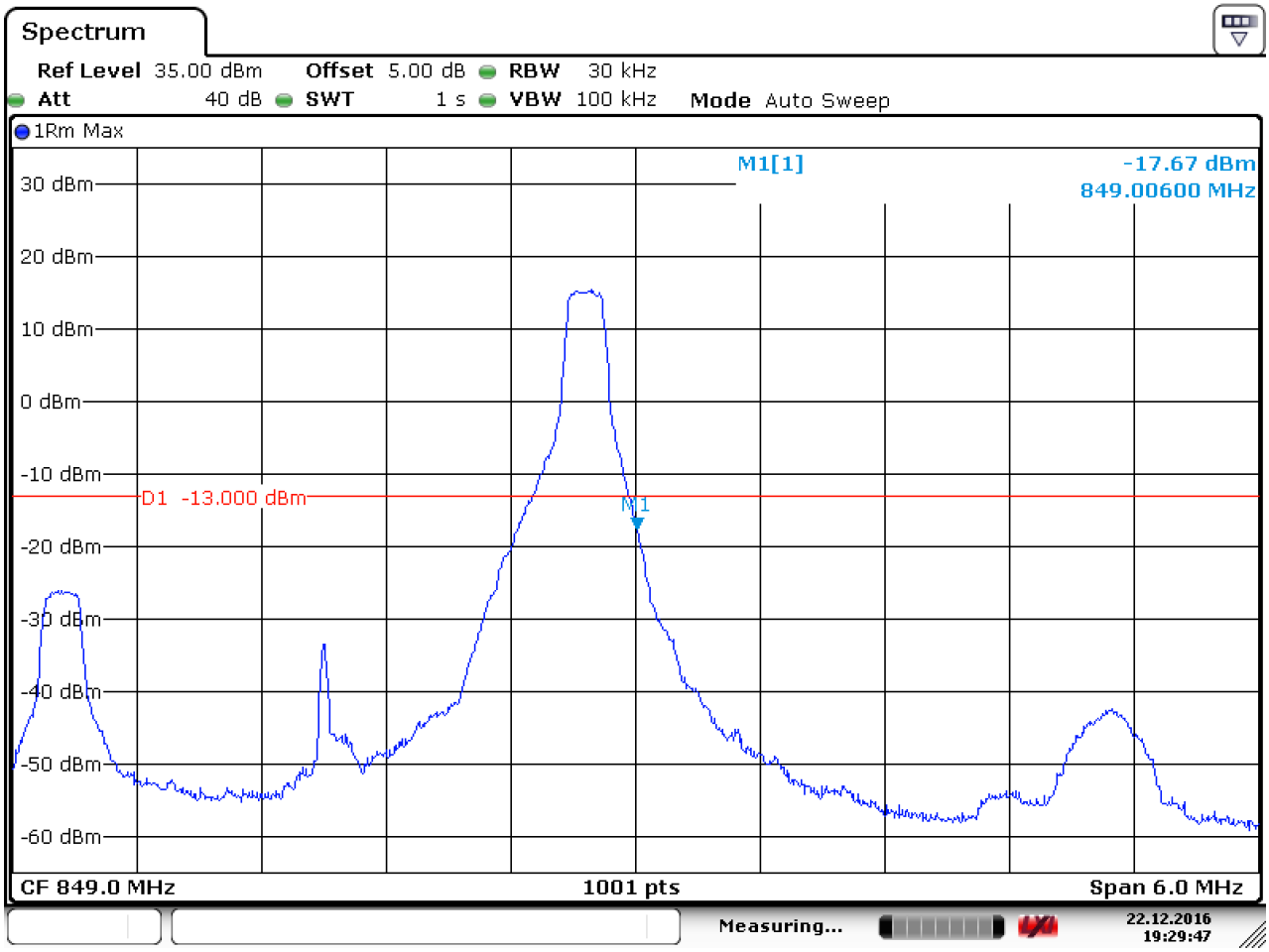
5.1.1.3.1.2 Test RB=15RB



Date: 22.DEC.2016 19:27:38

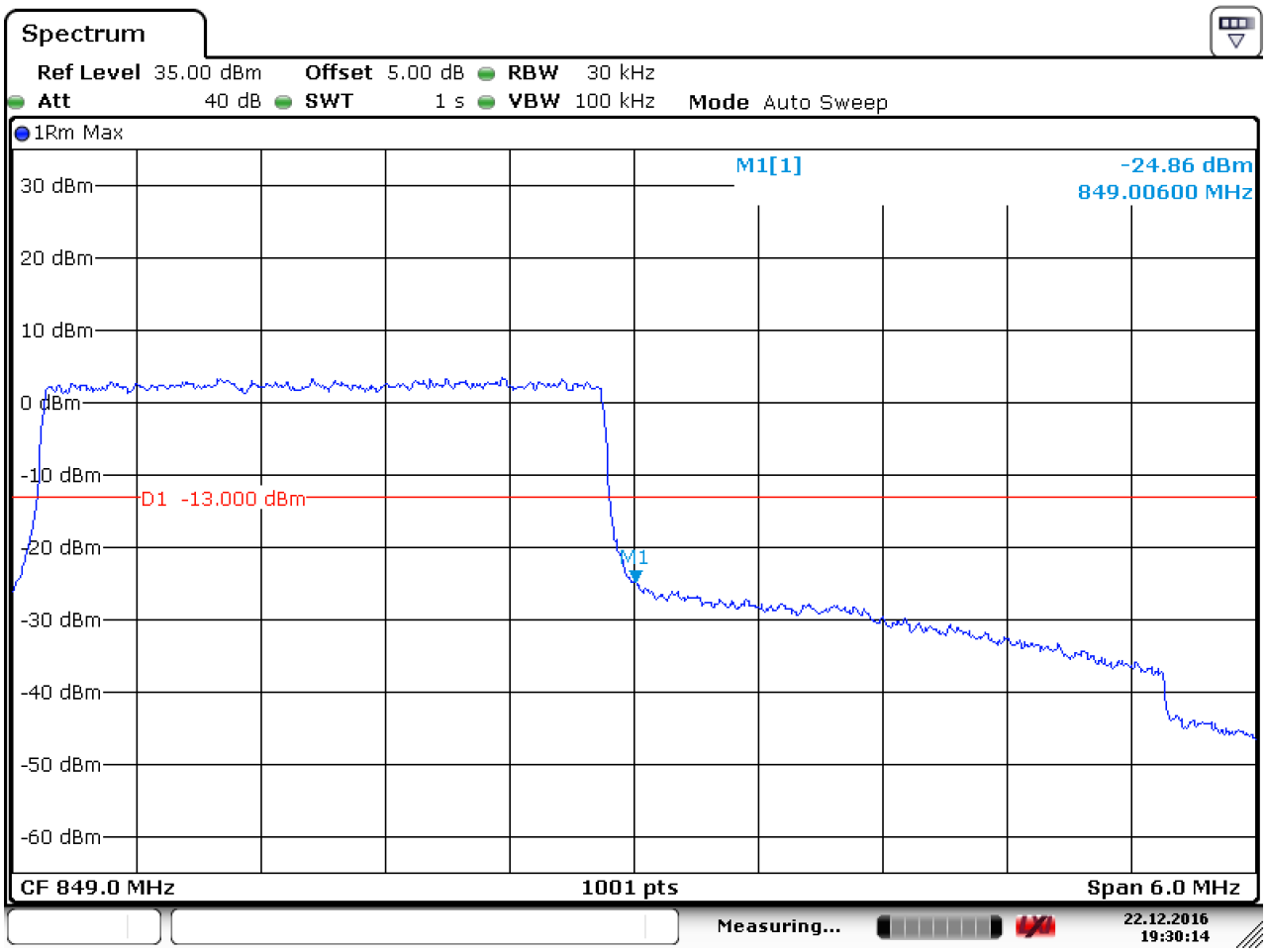
5.1.1.3.2 Test Channel = HCH

5.1.1.3.2.1 Test RB=1RB



Date: 22.DEC.2016 19:29:48

5.1.1.3.2.2 Test RB=15RB

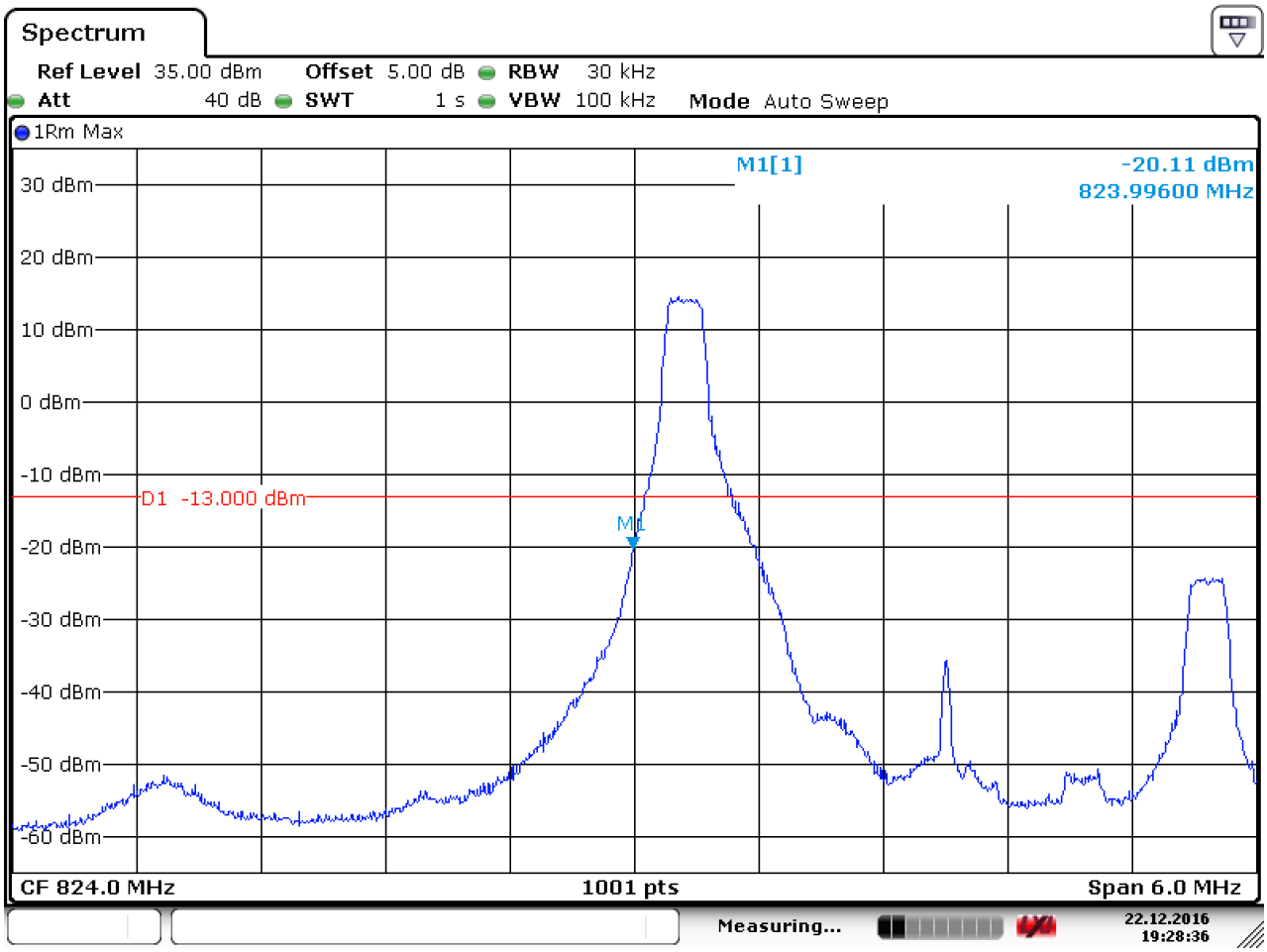


Date: 22.DEC.2016 19:30:15

5.1.1.4 Test Mode = LTE/TM2 3MHz

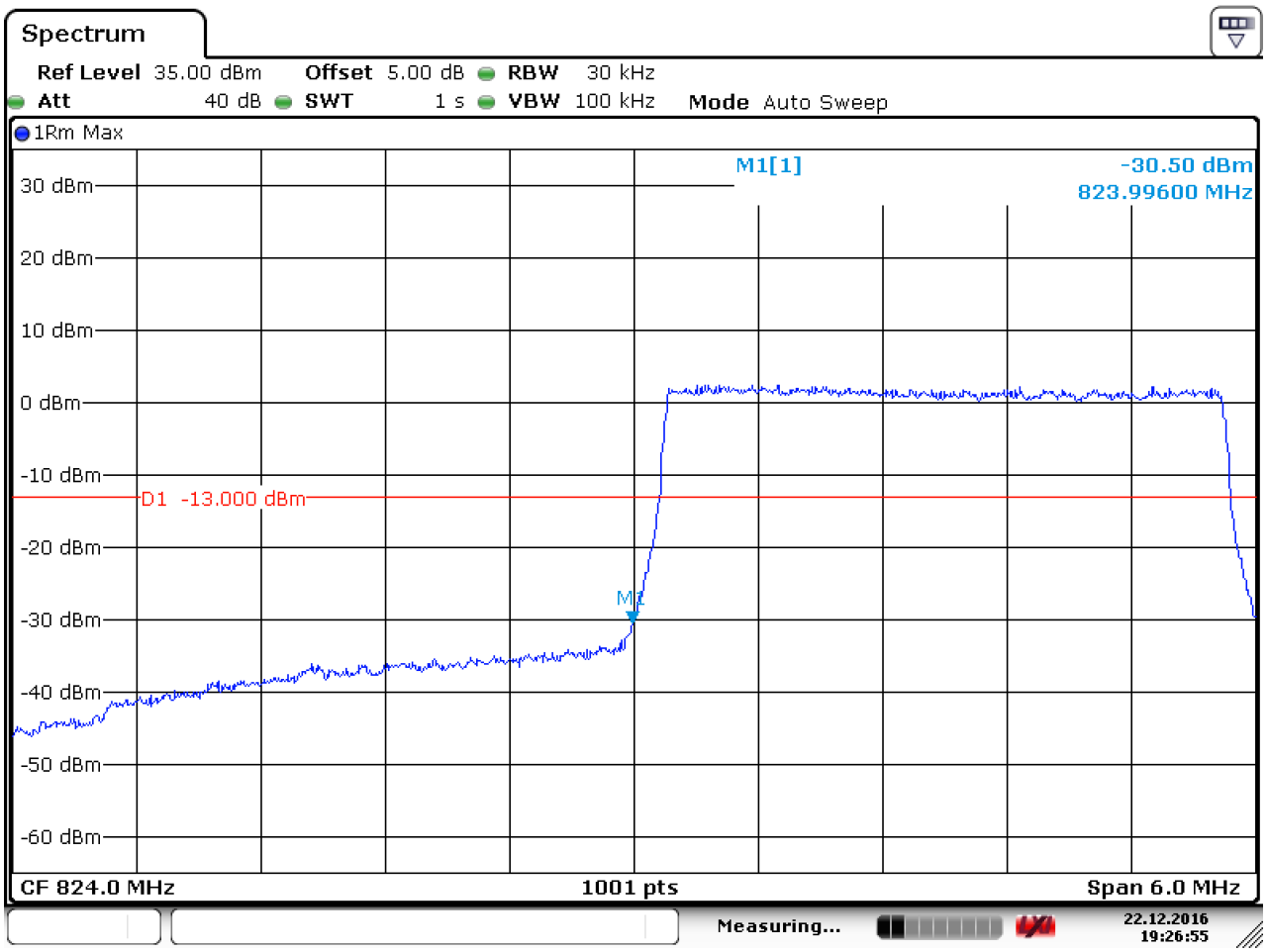
5.1.1.4.1 Test Channel = LCH

5.1.1.4.1.1 Test RB=1RB



Date: 22.DEC.2016 19:28:36

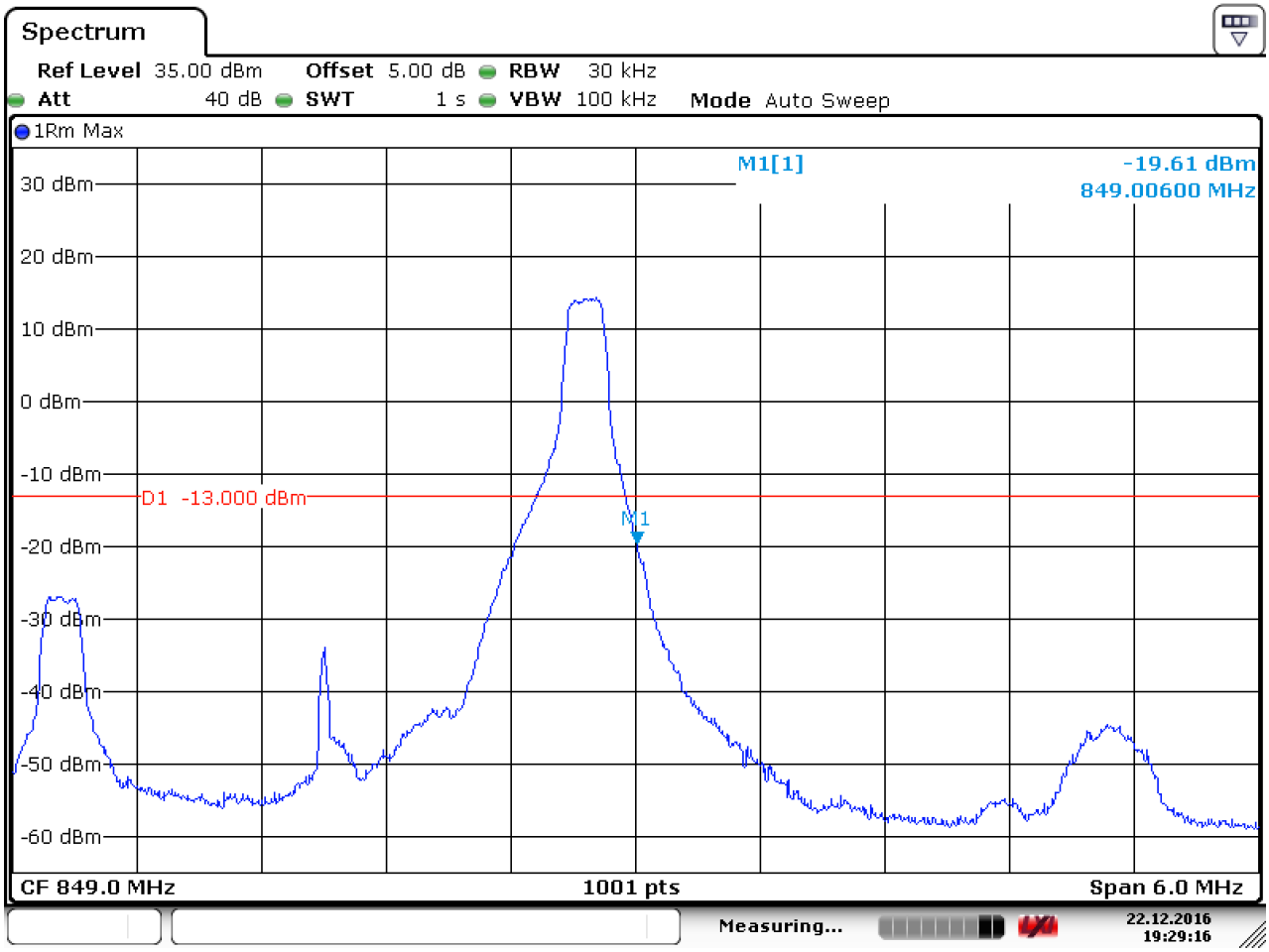
5.1.1.4.1.2 Test RB=15RB



Date: 22.DEC.2016 19:26:56

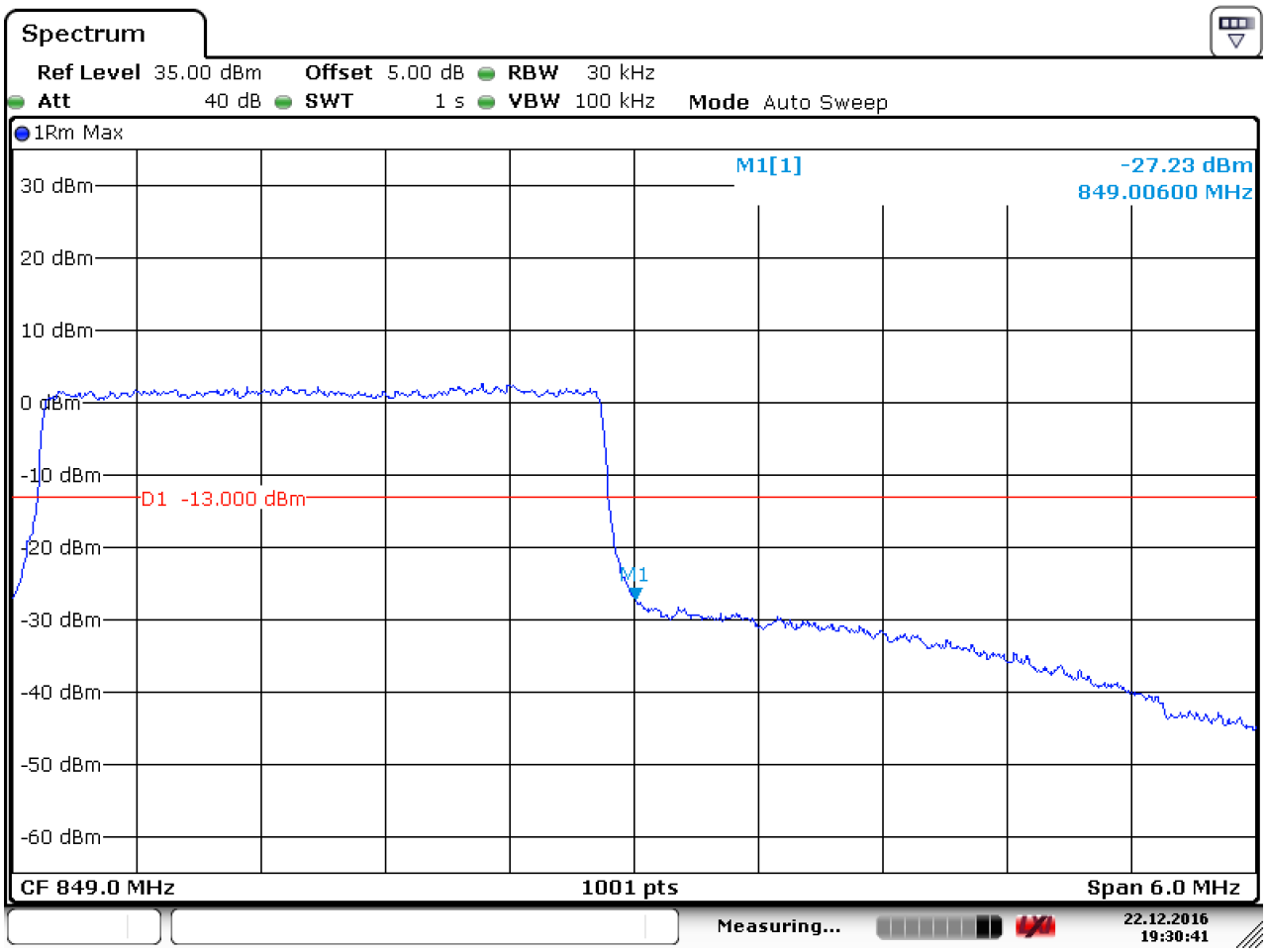
5.1.1.4.2 Test Channel = HCH

5.1.1.4.2.1 Test RB=1RB



Date: 22.DEC.2016 19:29:17

5.1.1.4.3 Test RB=15RB

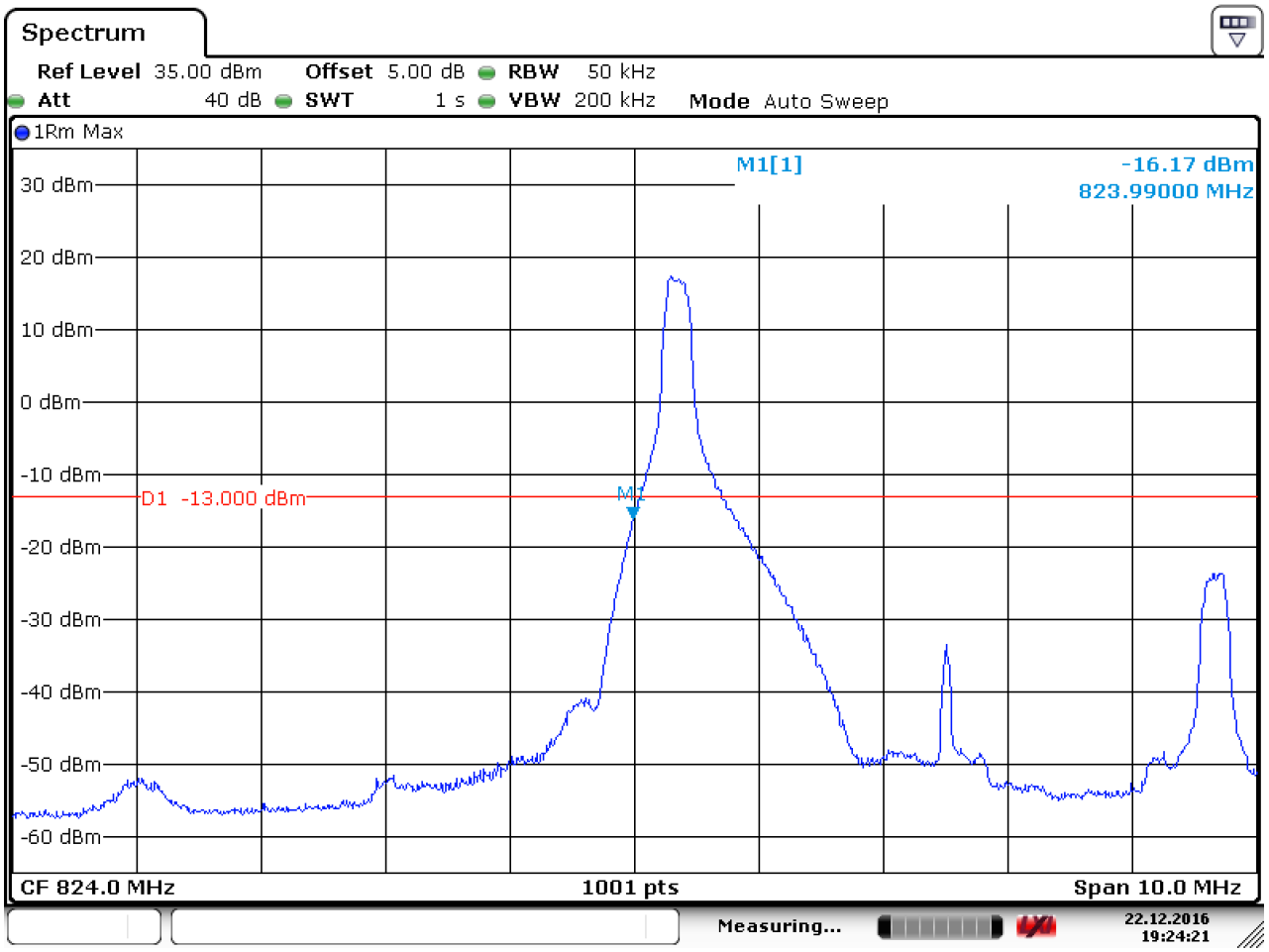


Date: 22.DEC.2016 19:30:40

5.1.1.5 Test Mode = LTE/TM1 5MHz

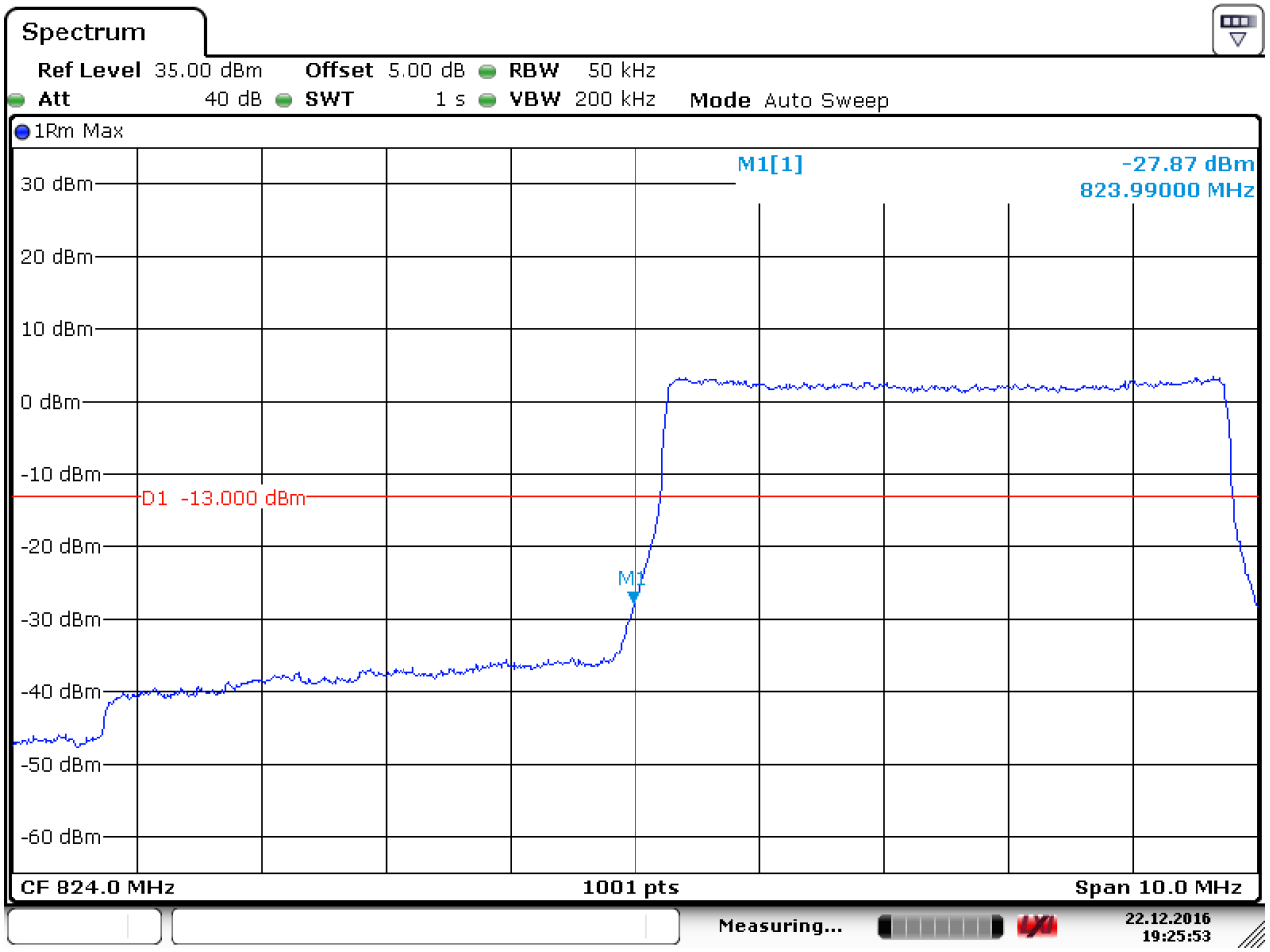
5.1.1.5.1 Test Channel = LCH

5.1.1.5.1.1 Test RB=1RB



Date: 22.DEC.2016 19:24:22

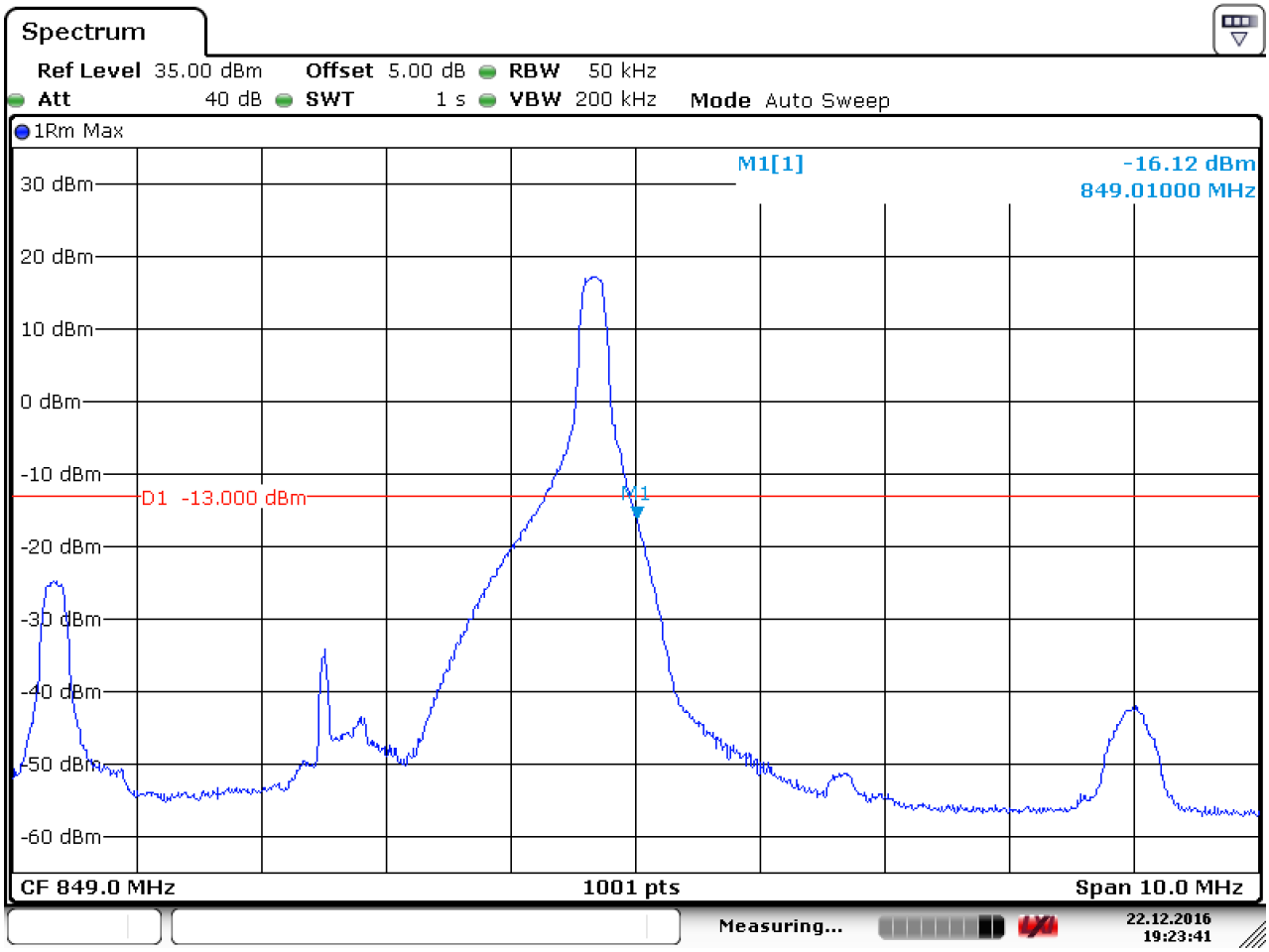
5.1.1.5.1.2 Test RB=25RB



Date: 22.DEC.2016 19:25:53

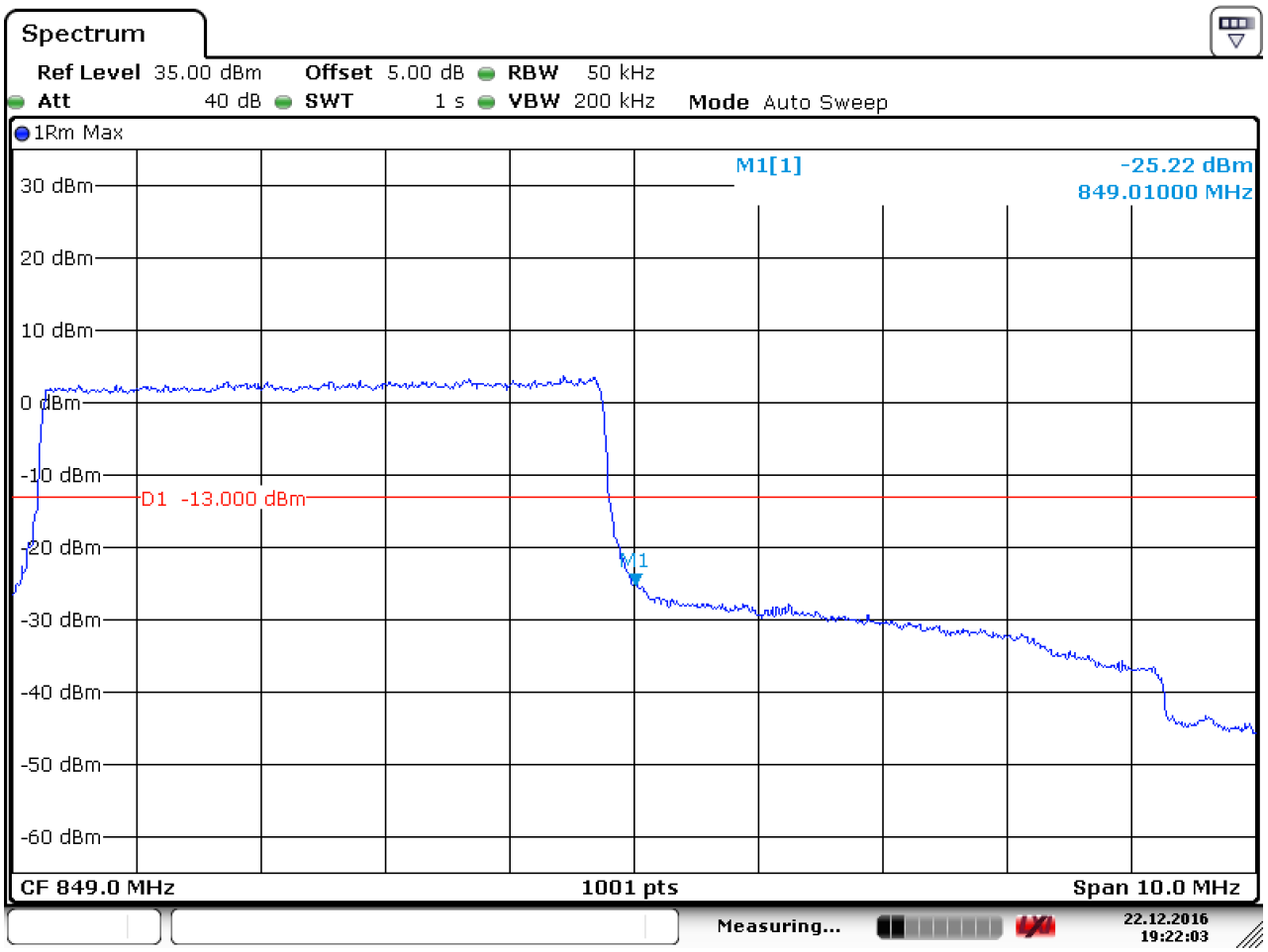
5.1.1.5.2 Test Channel = HCH

5.1.1.5.2.1 Test RB=1RB



Date: 22.DEC.2016 19:23:42

5.1.1.5.2.2 Test RB=25RB

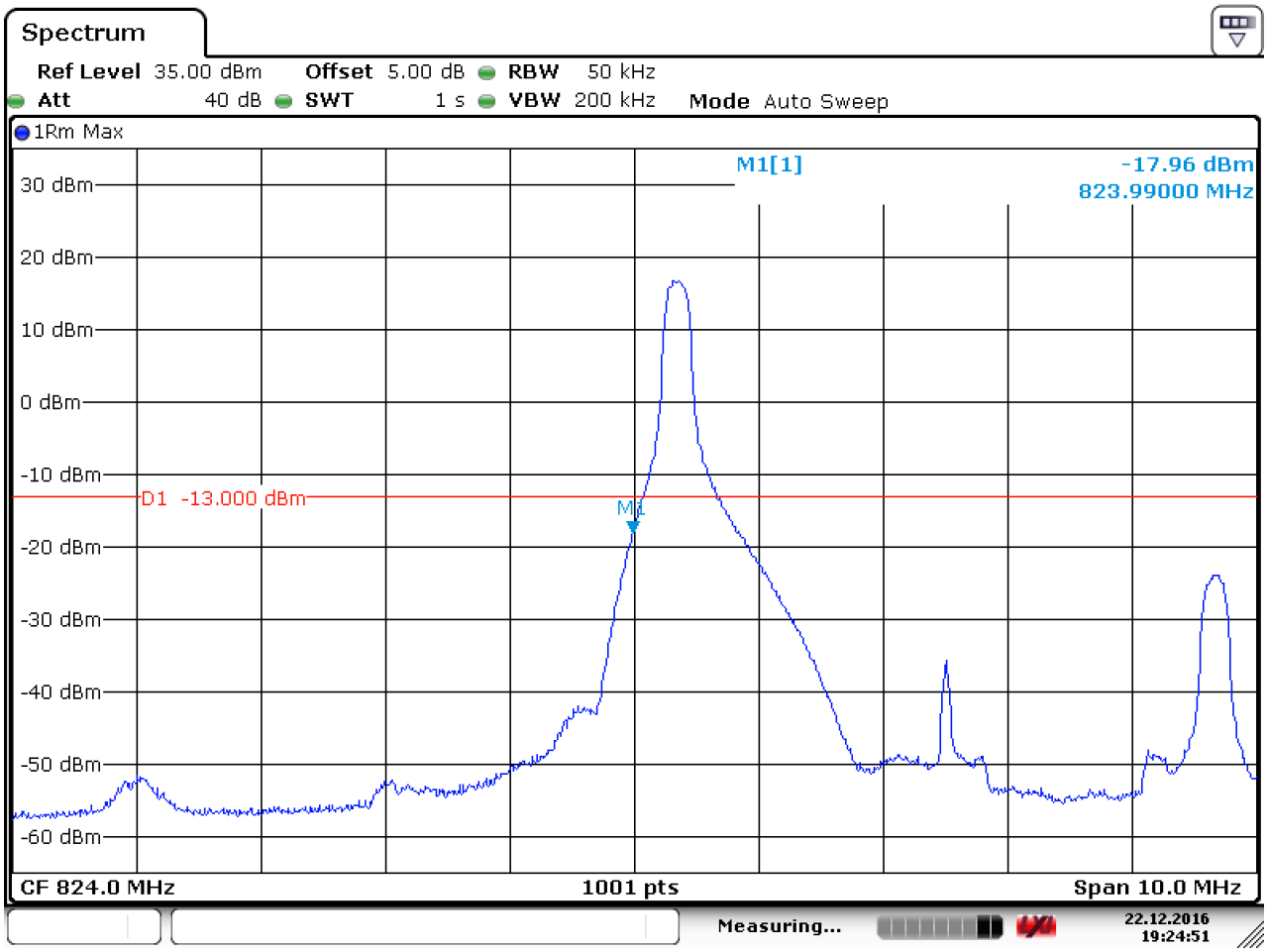


Date: 22.DEC.2016 19:22:04

5.1.1.6 Test Mode = LTE/TM2 5MHz

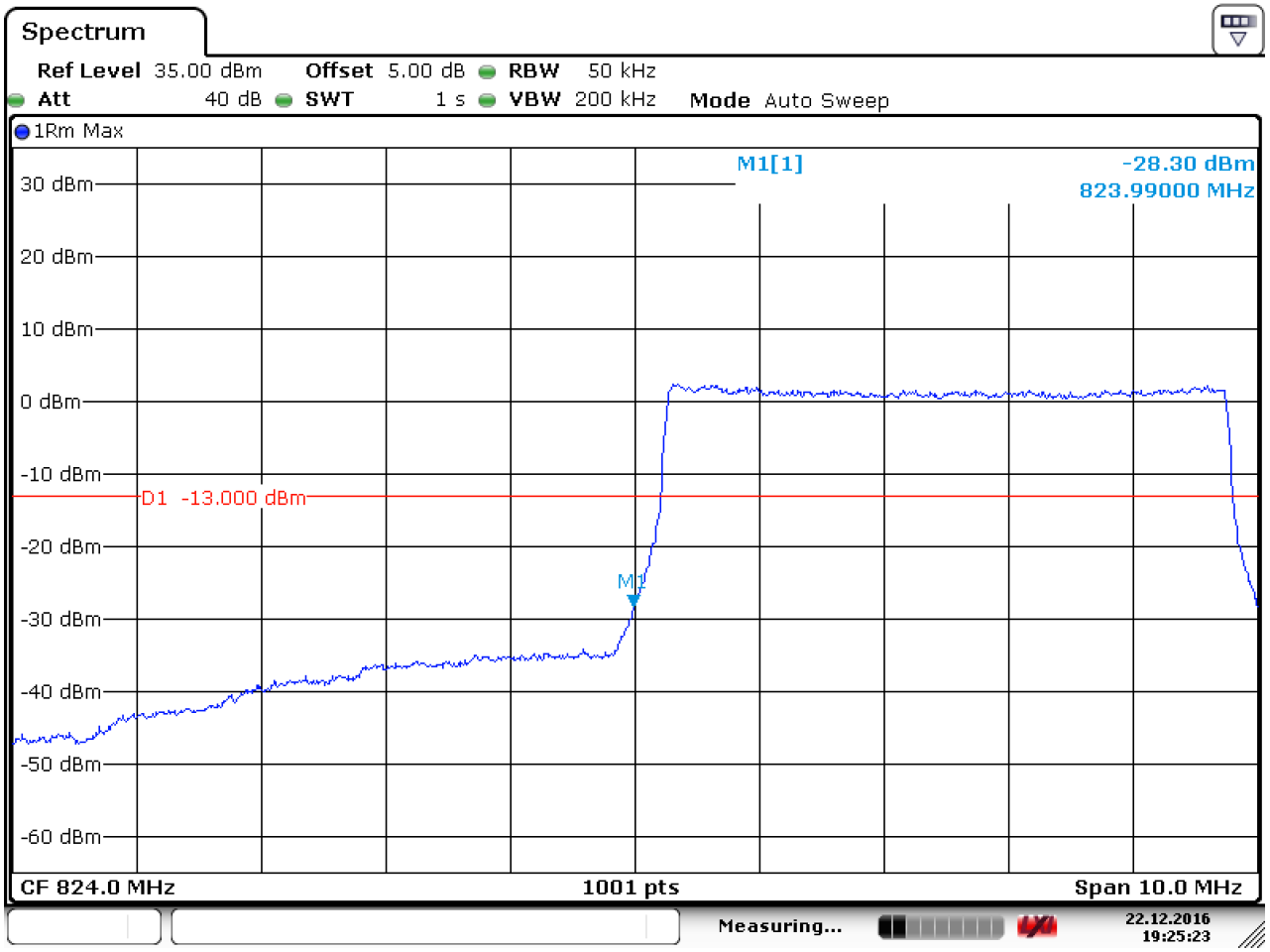
5.1.1.6.1 Test Channel = LCH

5.1.1.6.1.1 Test RB=1RB



Date: 22.DEC.2016 19:24:51

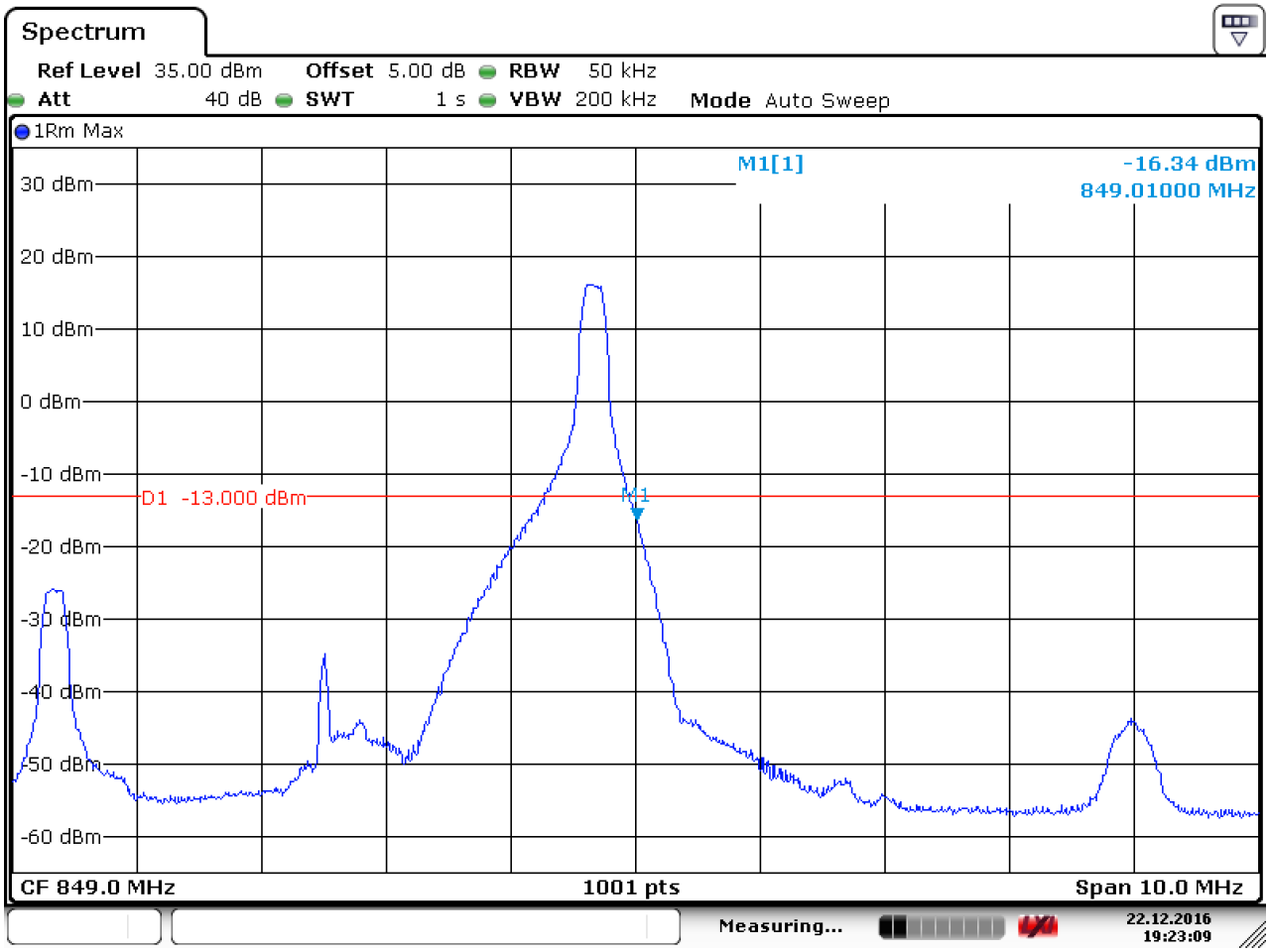
5.1.1.6.1.2 Test RB=25RB



Date: 22.DEC.2016 19:25:23

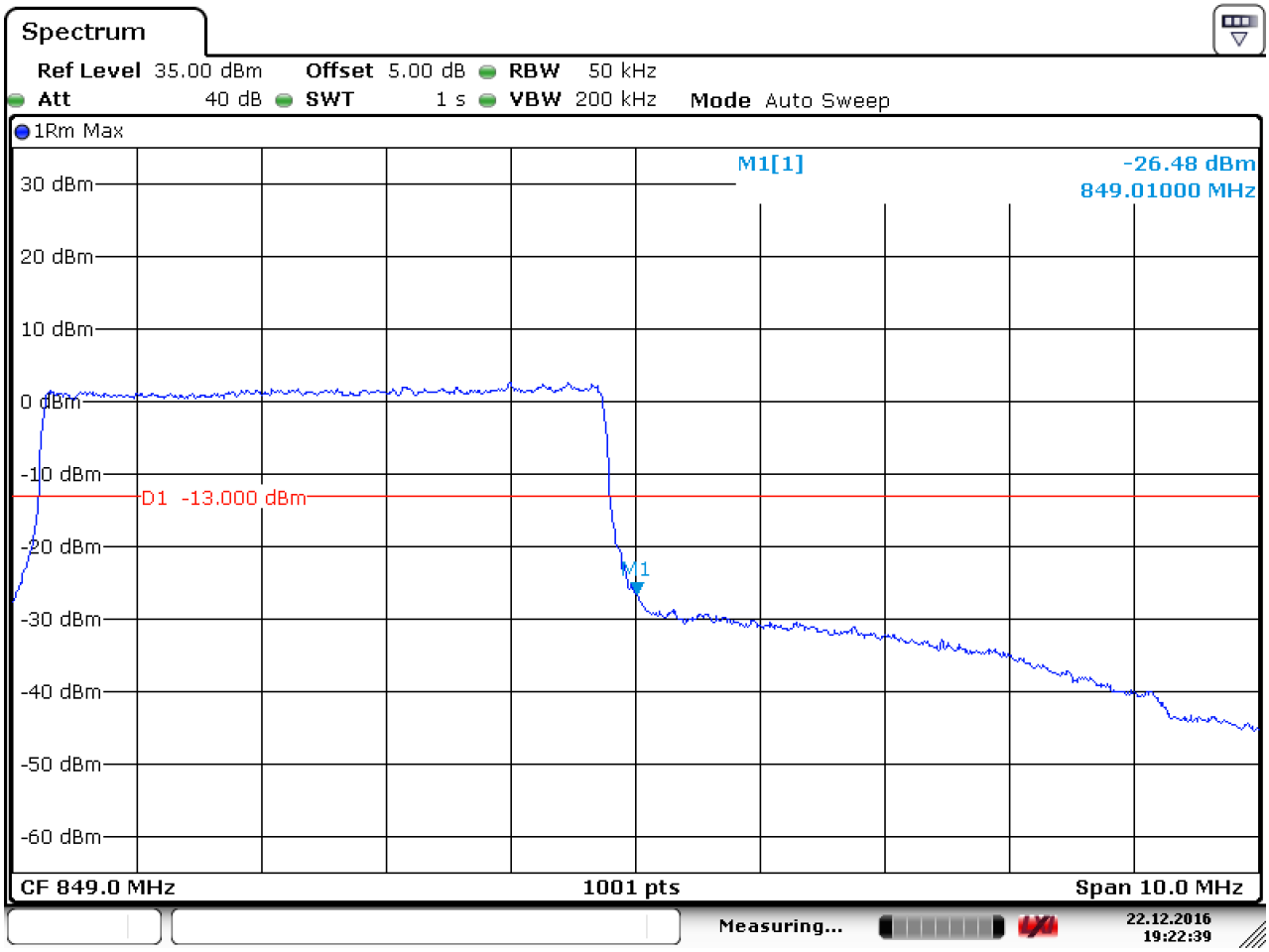
5.1.1.6.2 Test Channel = HCH

5.1.1.6.2.1 Test RB=1RB



Date: 22.DEC.2016 19:23:10

5.1.1.6.2.2 Test RB=25RB

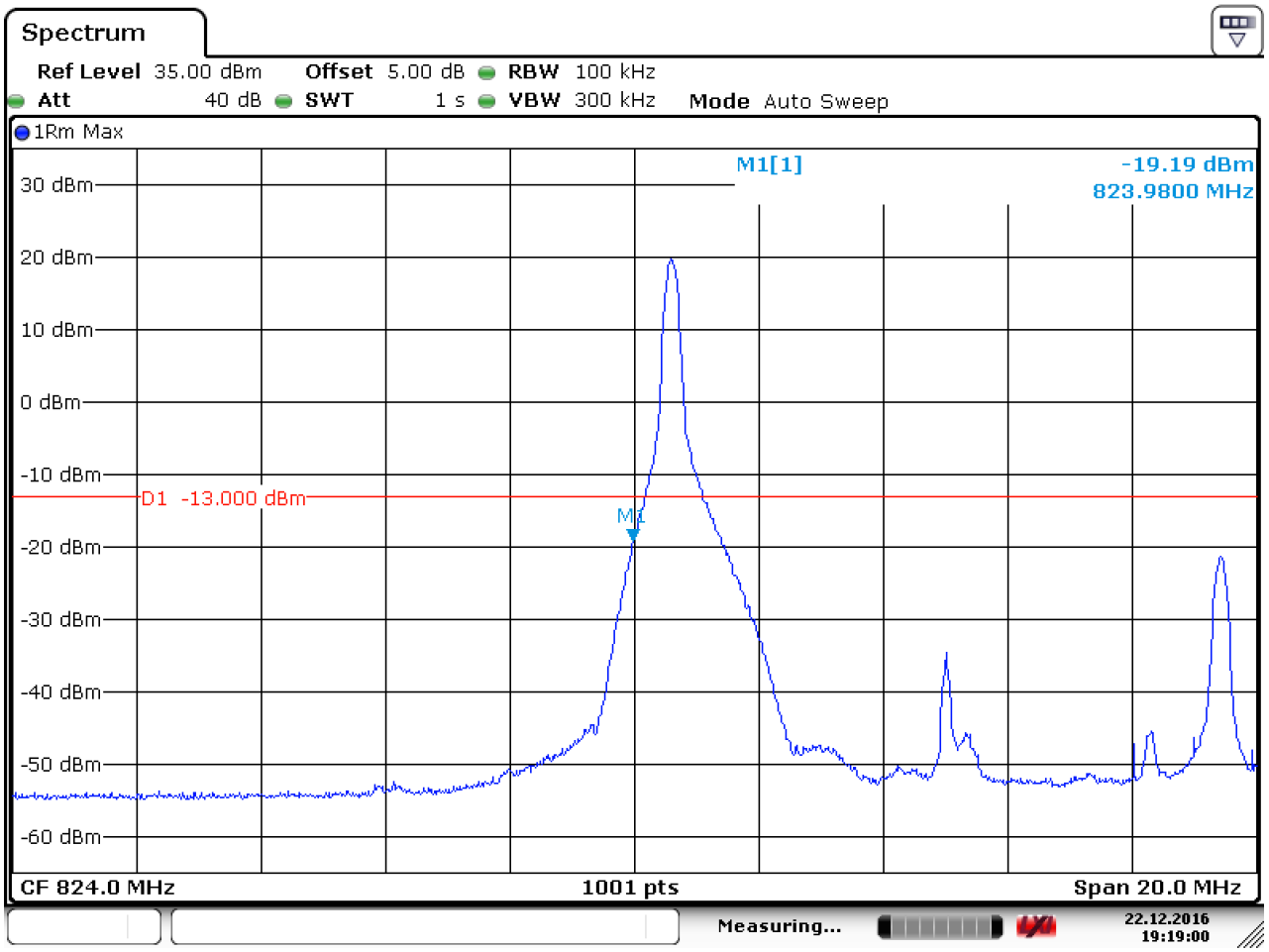


Date: 22.DEC.2016 19:22:39

5.1.1.7 Test Mode = LTE/TM1 10MHz

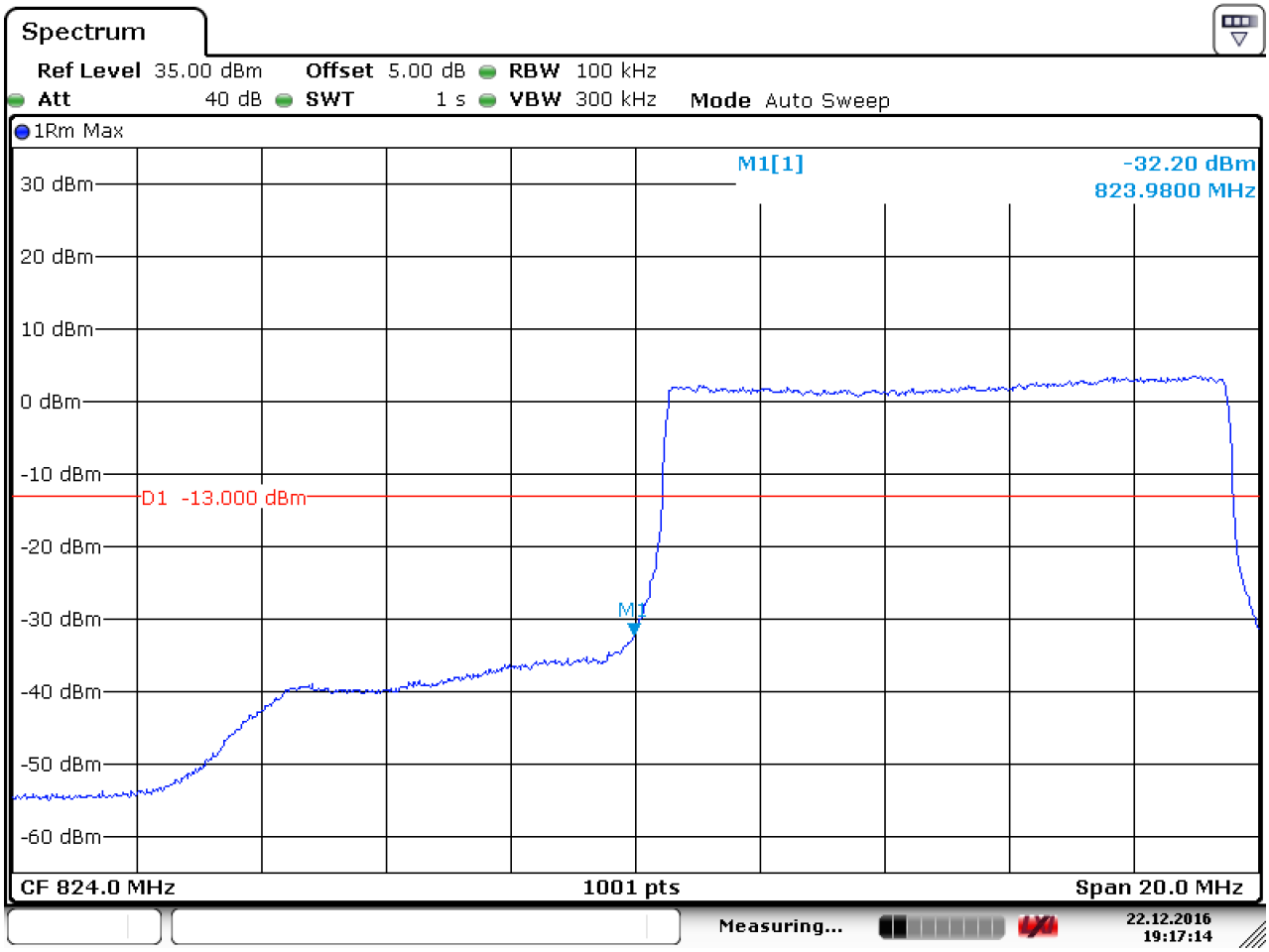
5.1.1.7.1 Test Channel = LCH

5.1.1.7.1.1 Test RB=1RB



Date: 22.DEC.2016 19:19:00

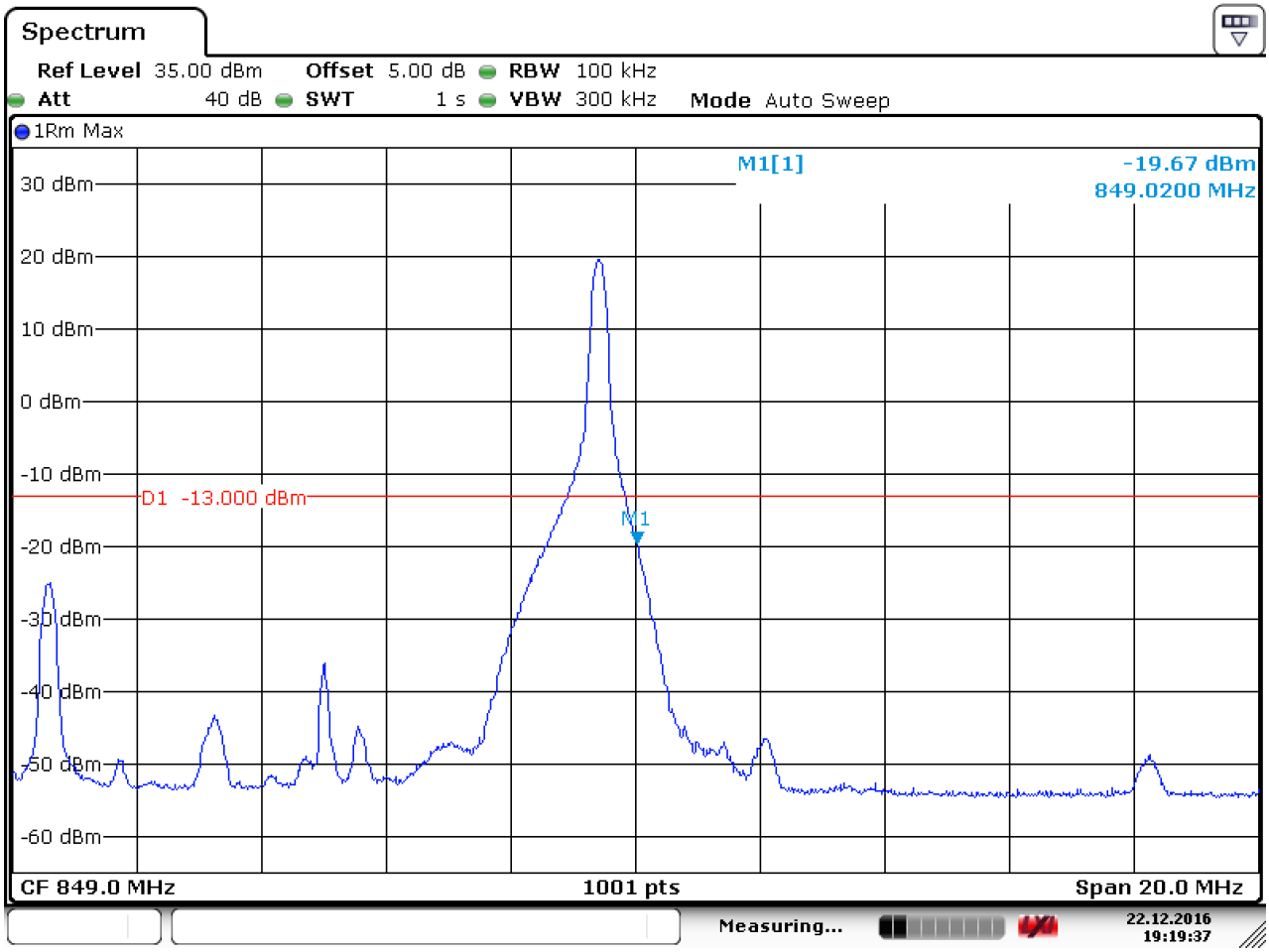
5.1.1.7.1.2 Test RB=50RB



Date: 22.DEC.2016 19:17:14

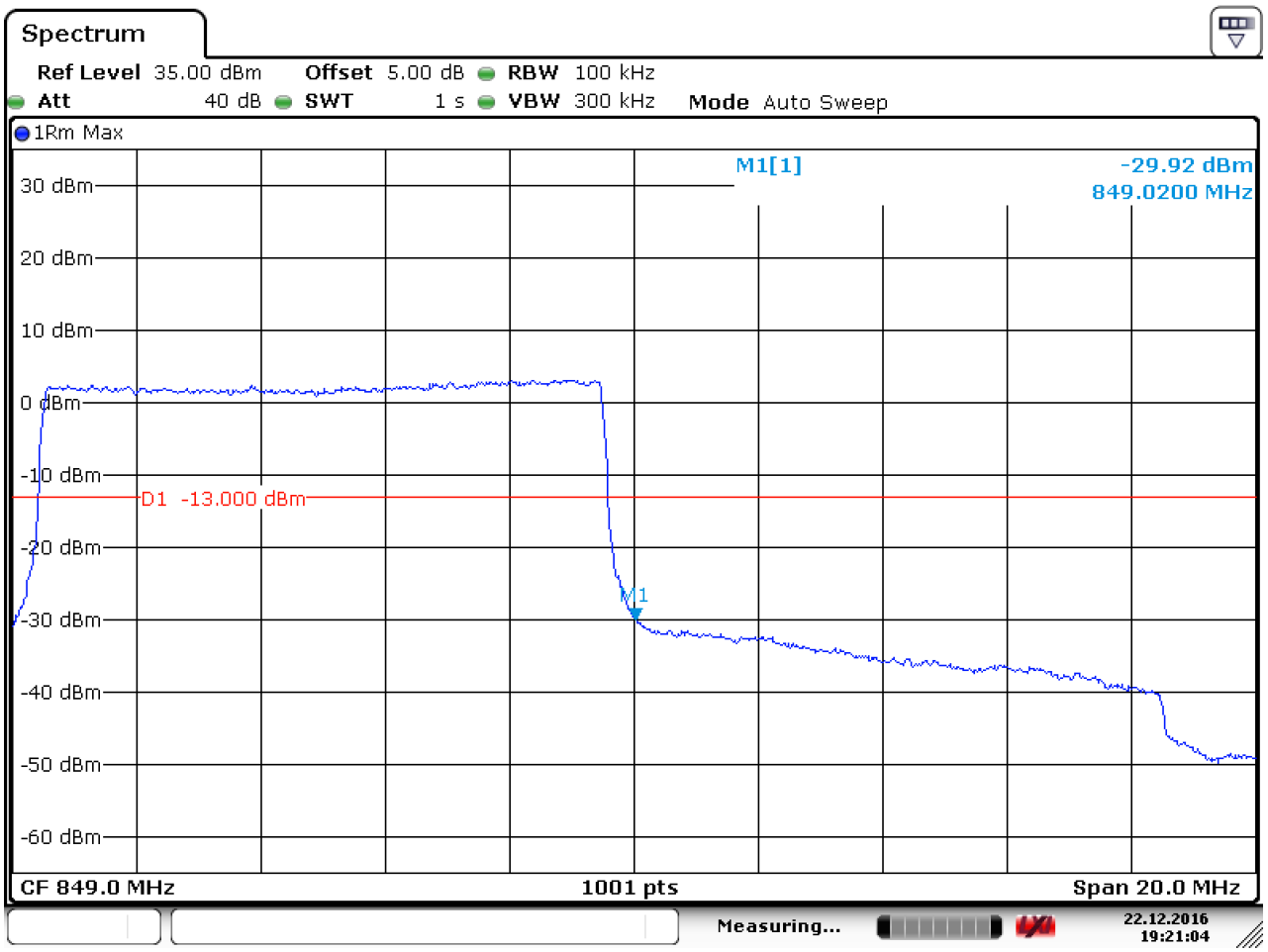
5.1.1.7.2 Test Channel = HCH

5.1.1.7.2.1 Test RB=1RB



Date: 22.DEC.2016 19:19:37

5.1.1.7.2.2 Test RB=50RB

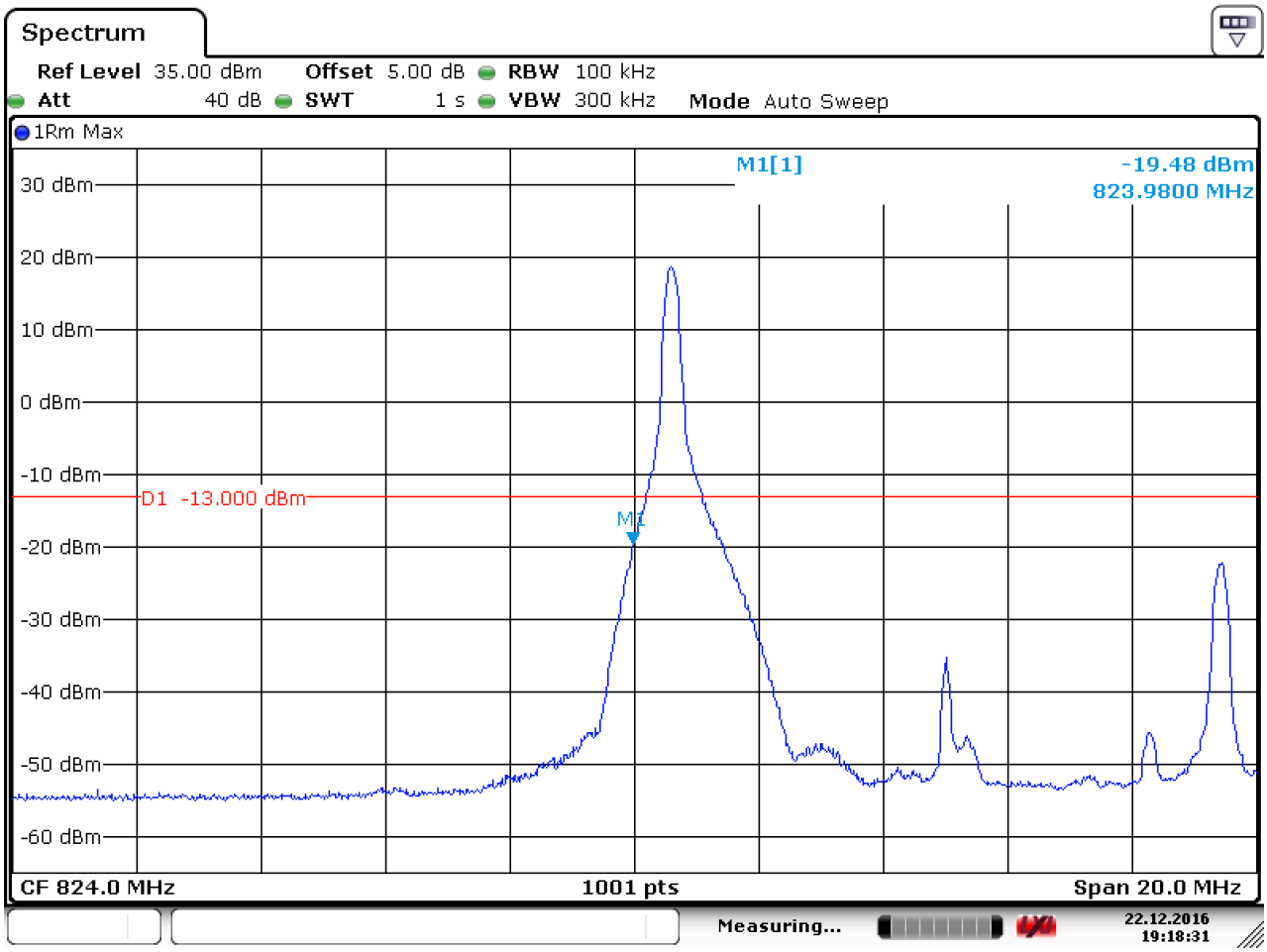


Date: 22.DEC.2016 19:21:04

5.1.1.8 Test Mode = LTE/TM2 10MHz

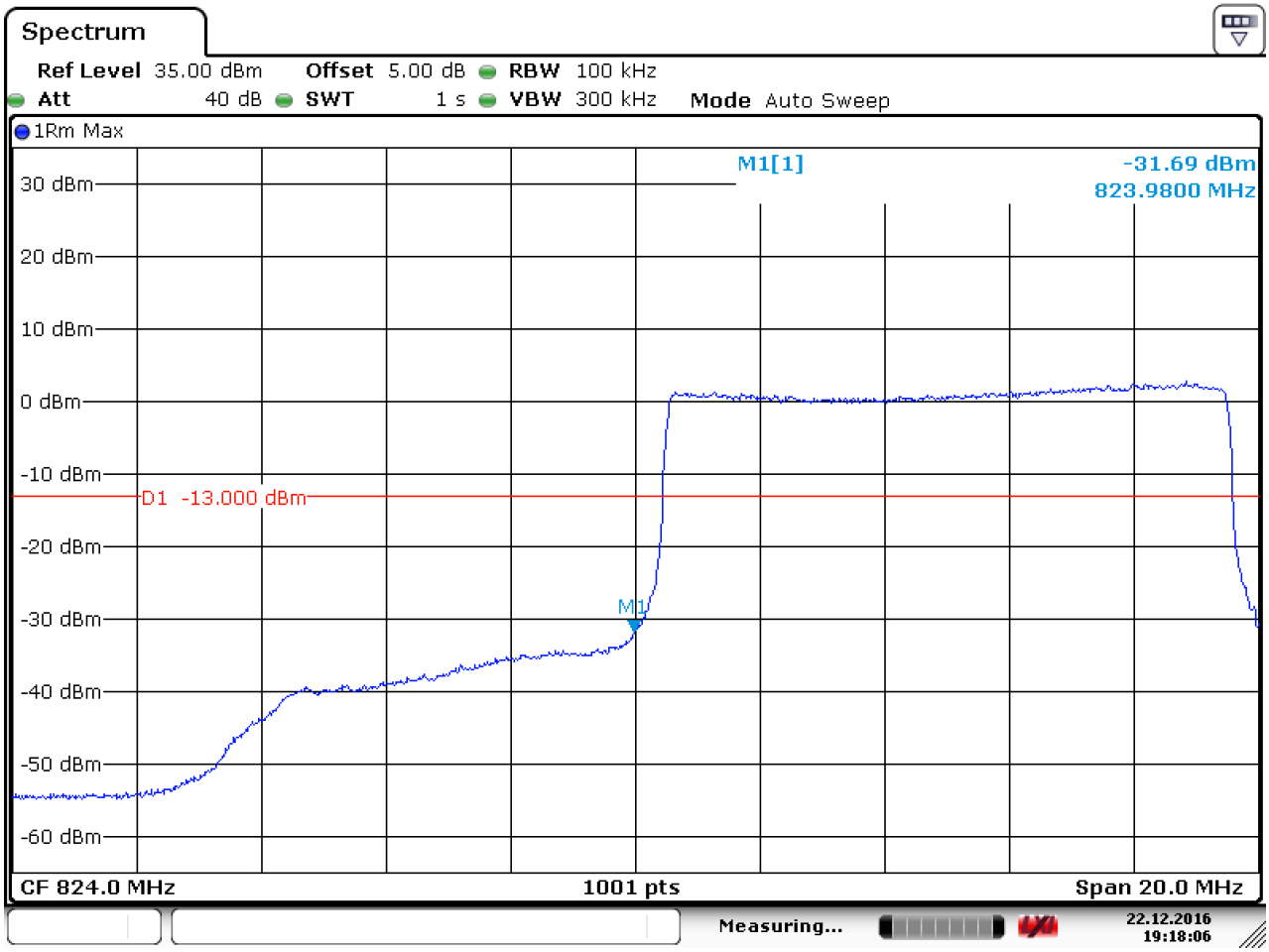
5.1.1.8.1 Test Channel = LCH

5.1.1.8.1.1 Test RB=1RB



Date: 22.DEC.2016 19:18:32

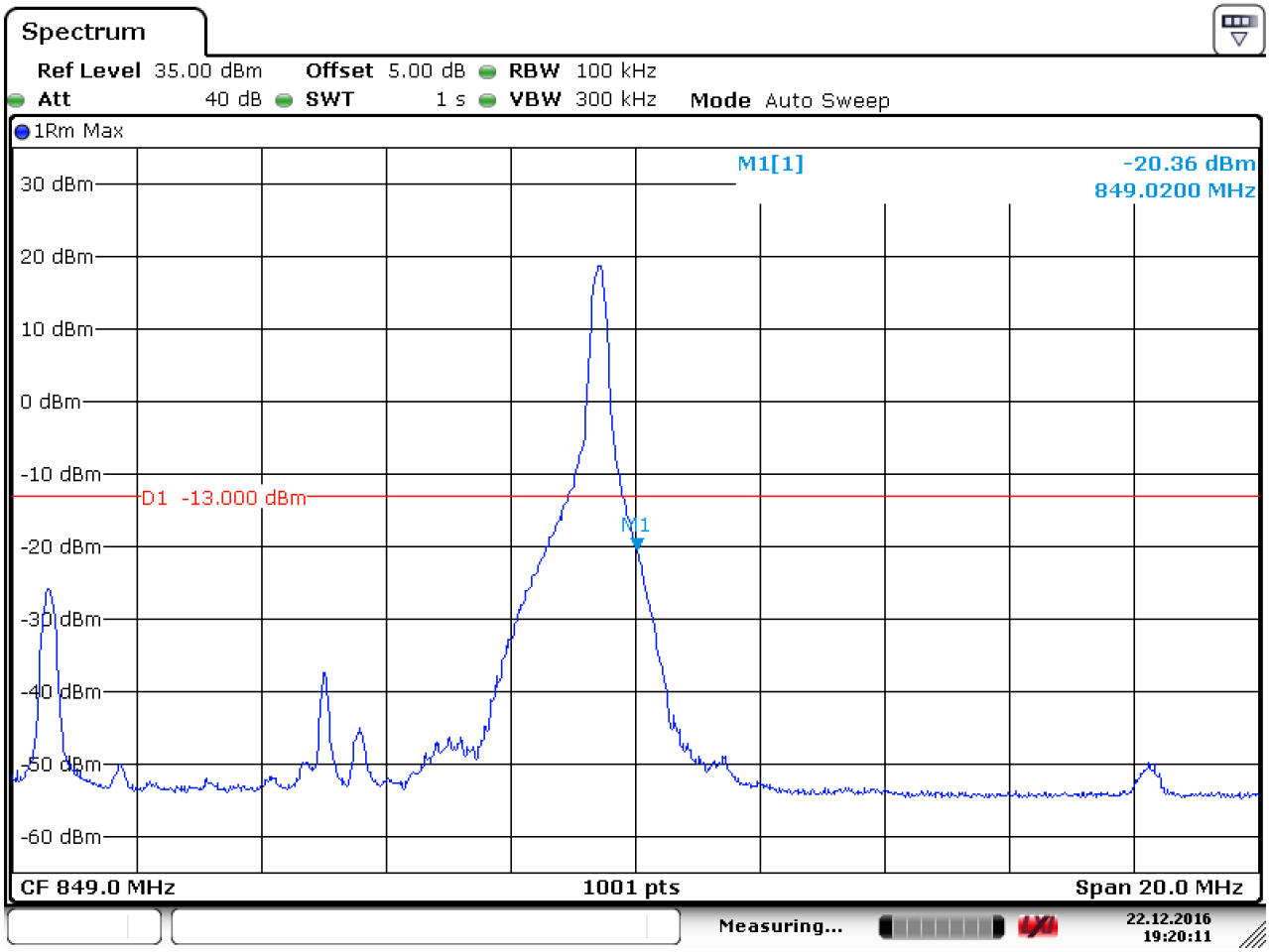
5.1.1.8.1.2 Test RB=50RB



Date: 22.DEC.2016 19:18:06

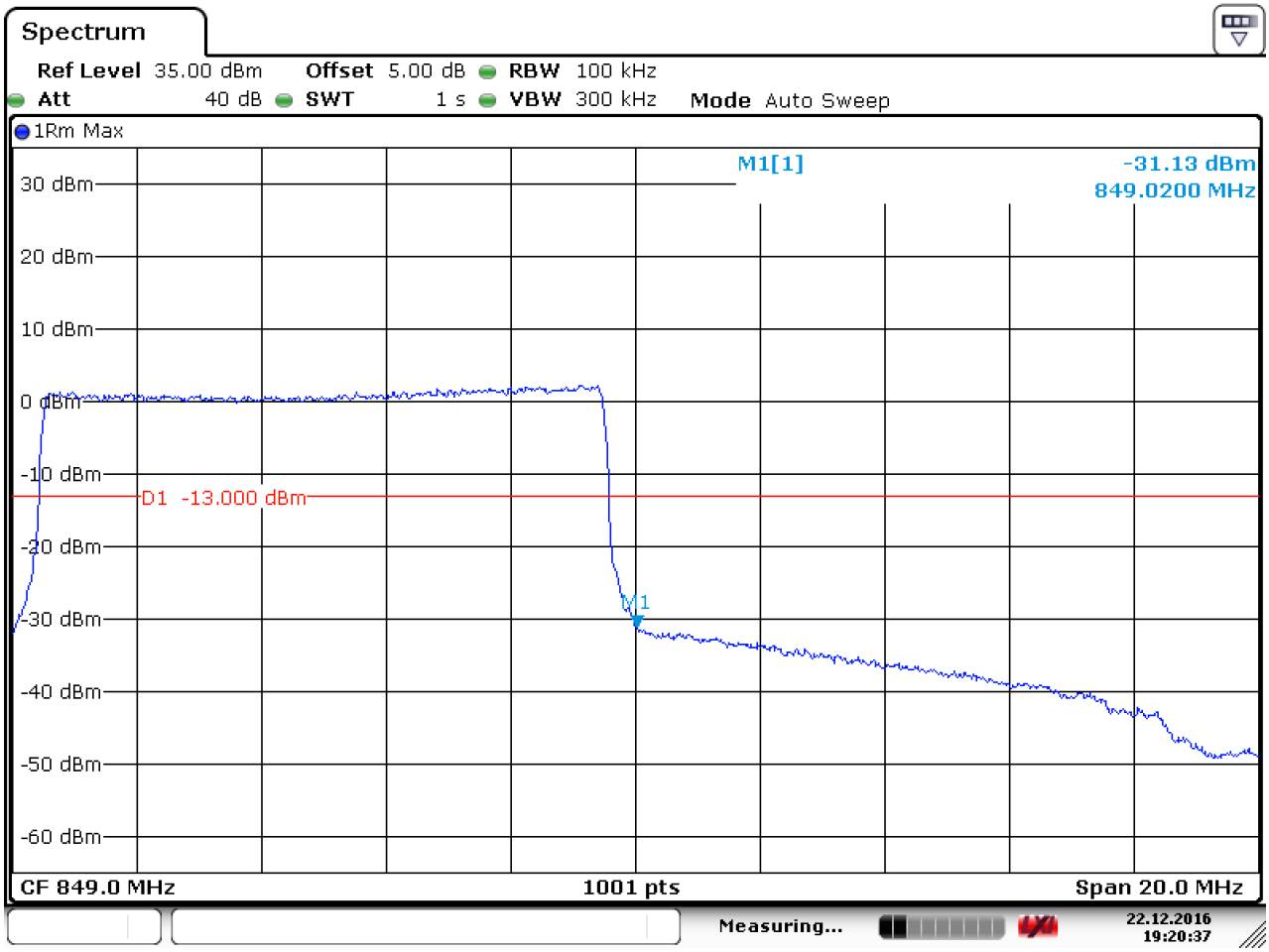
5.1.1.8.2 Test Channel = HCH

5.1.1.8.2.1 Test RB=1RB



Date: 22.DEC.2016 19:20:11

5.1.1.8.2.2 Test RB=50RB



Date: 22.DEC.2016 19:20:38

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.

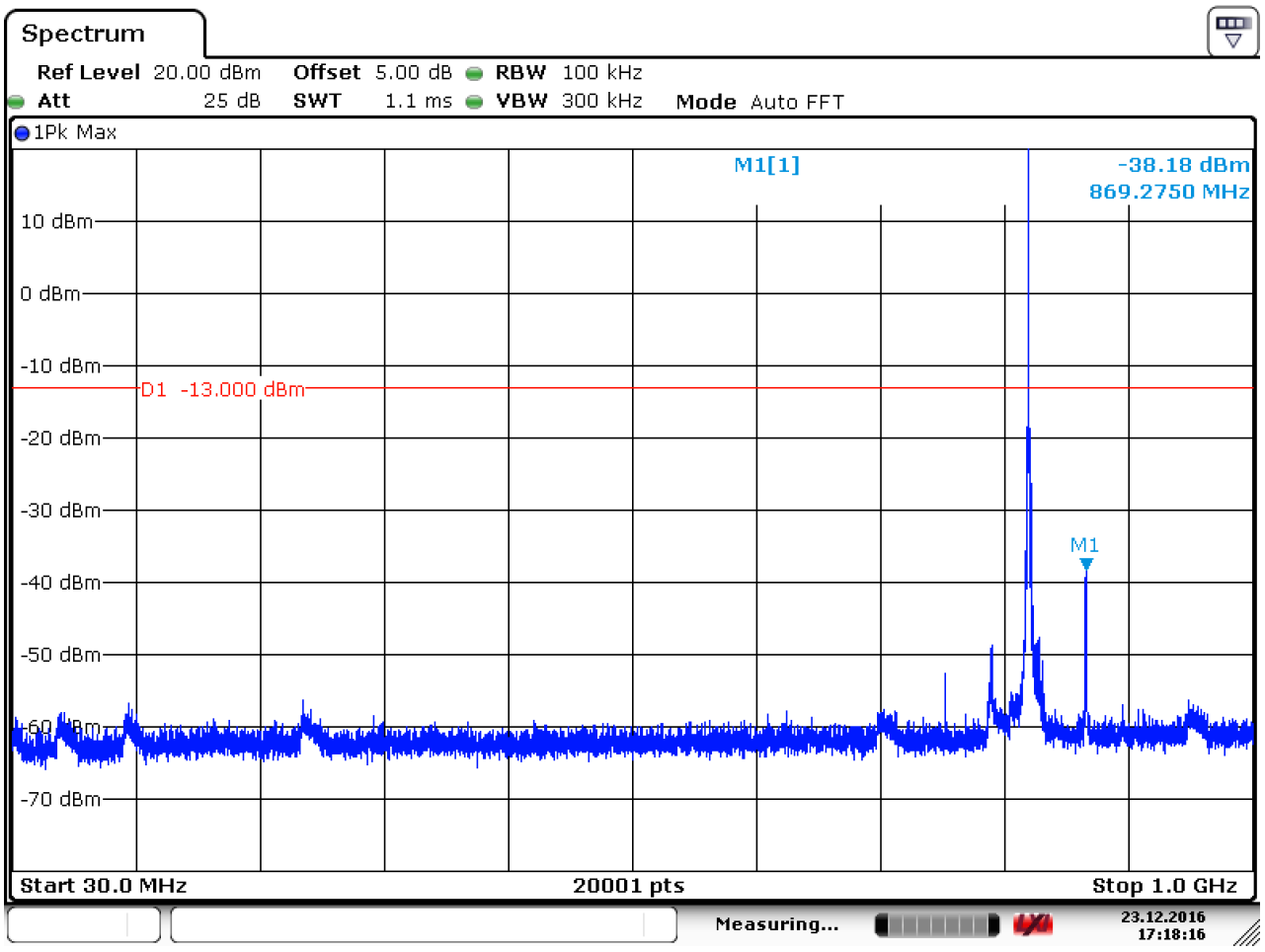
Part I - Test Plots

6.1 For LTE

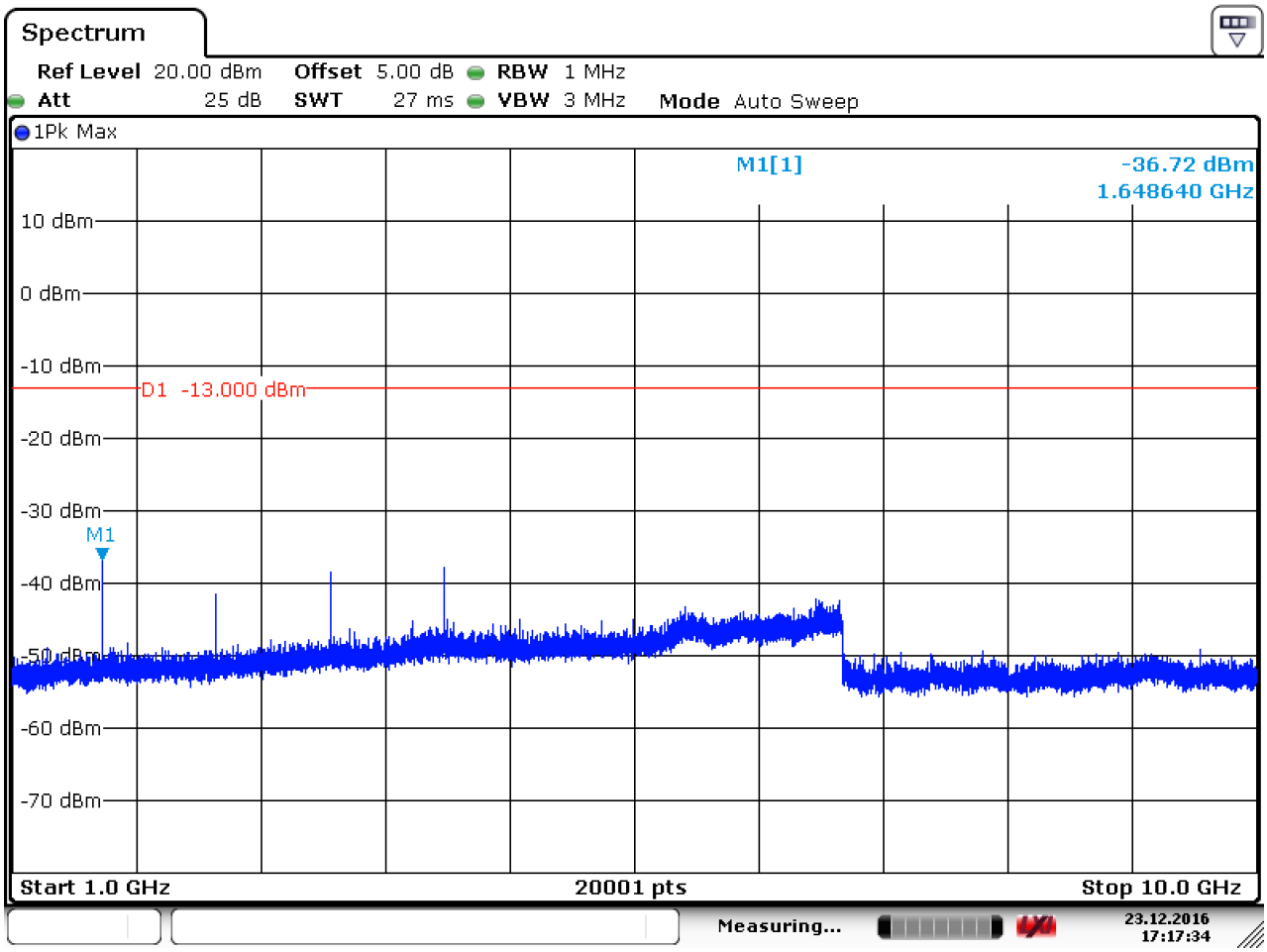
6.1.1 Test Band = LTE band5

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

6.1.1.1.1 Test Channel = LCH

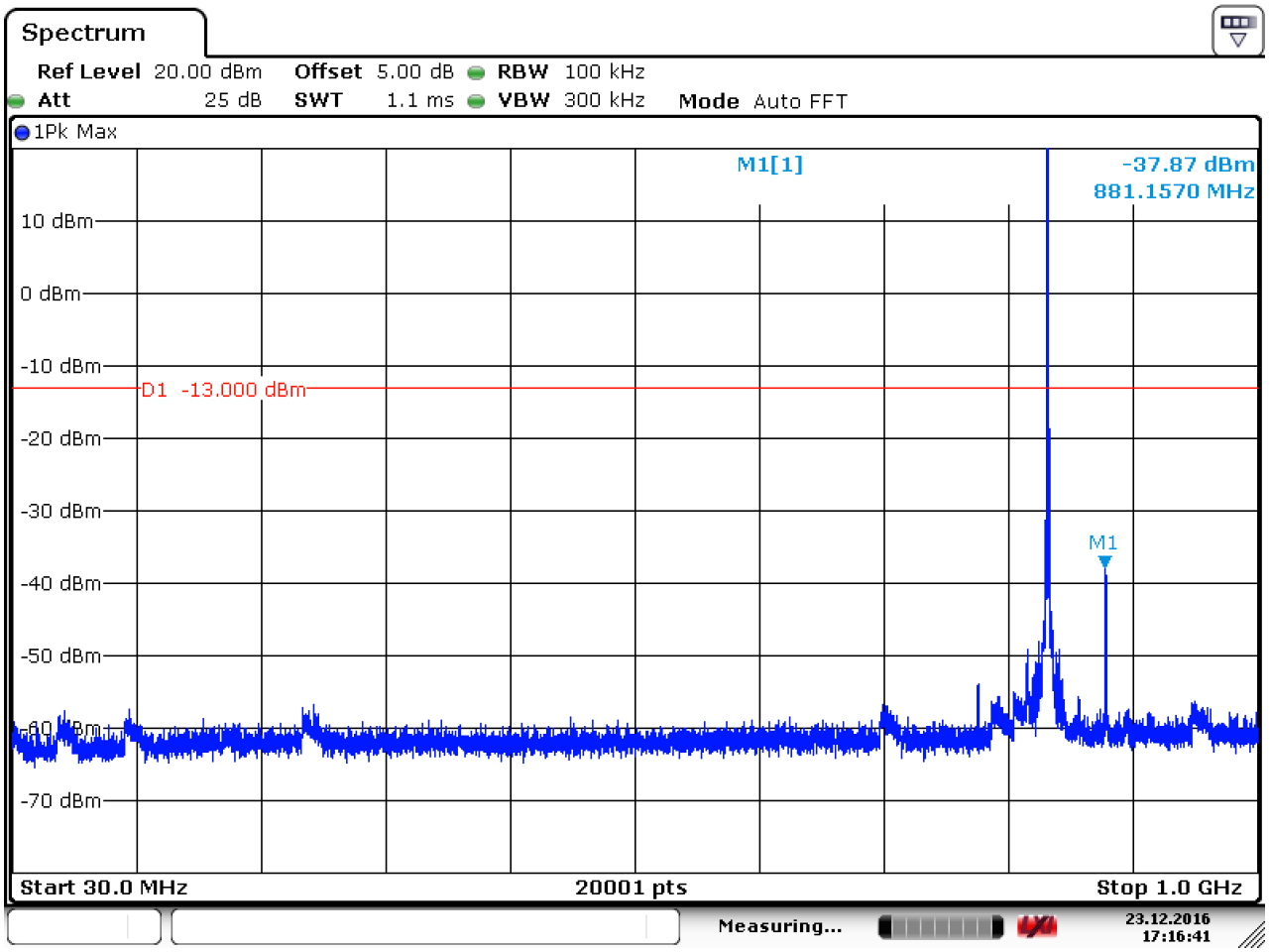


Date: 23.DEC.2016 17:18:16

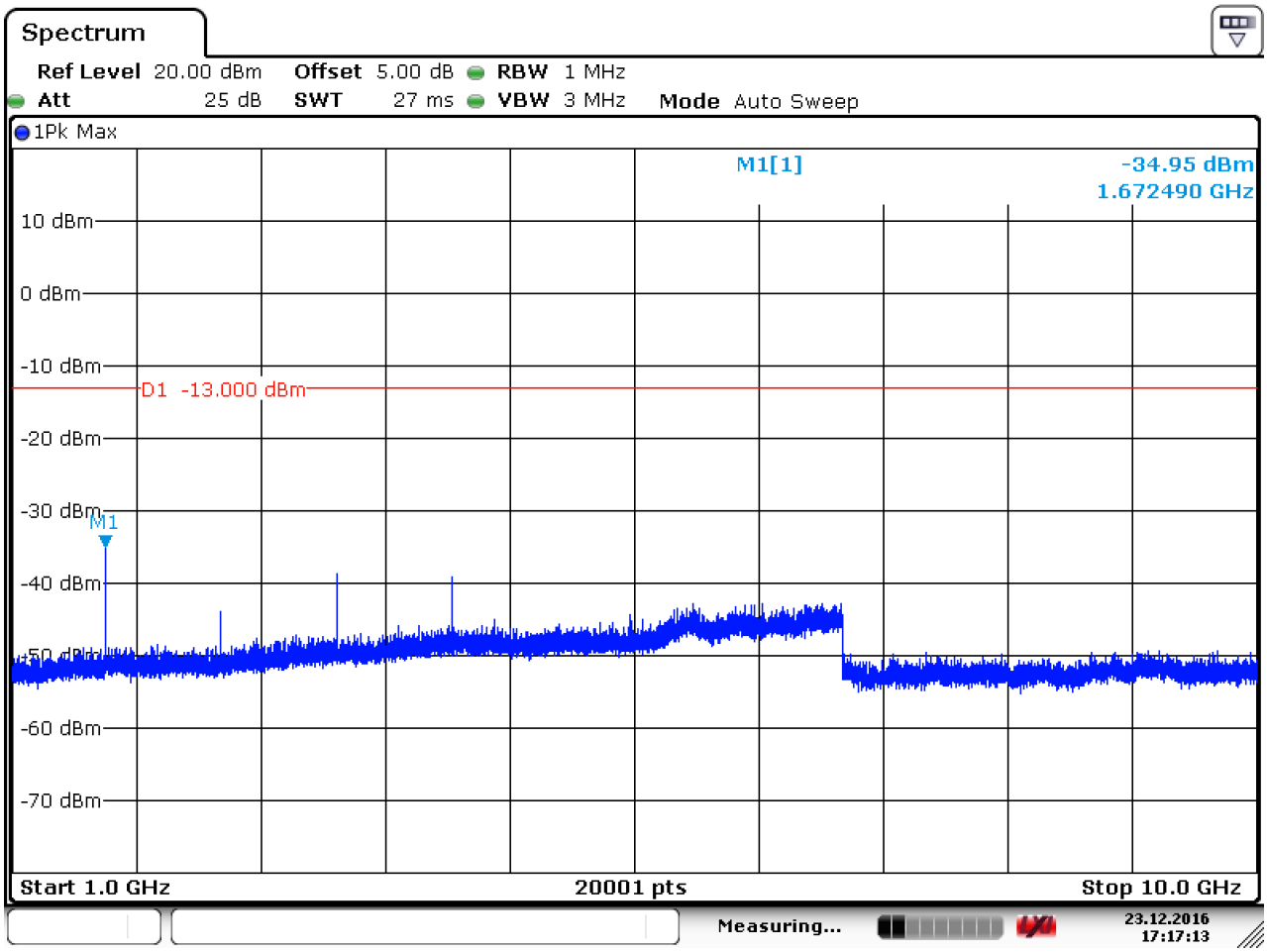


Date: 23.DEC.2016 17:17:34

6.1.1.1.2 Test Channel = MCH

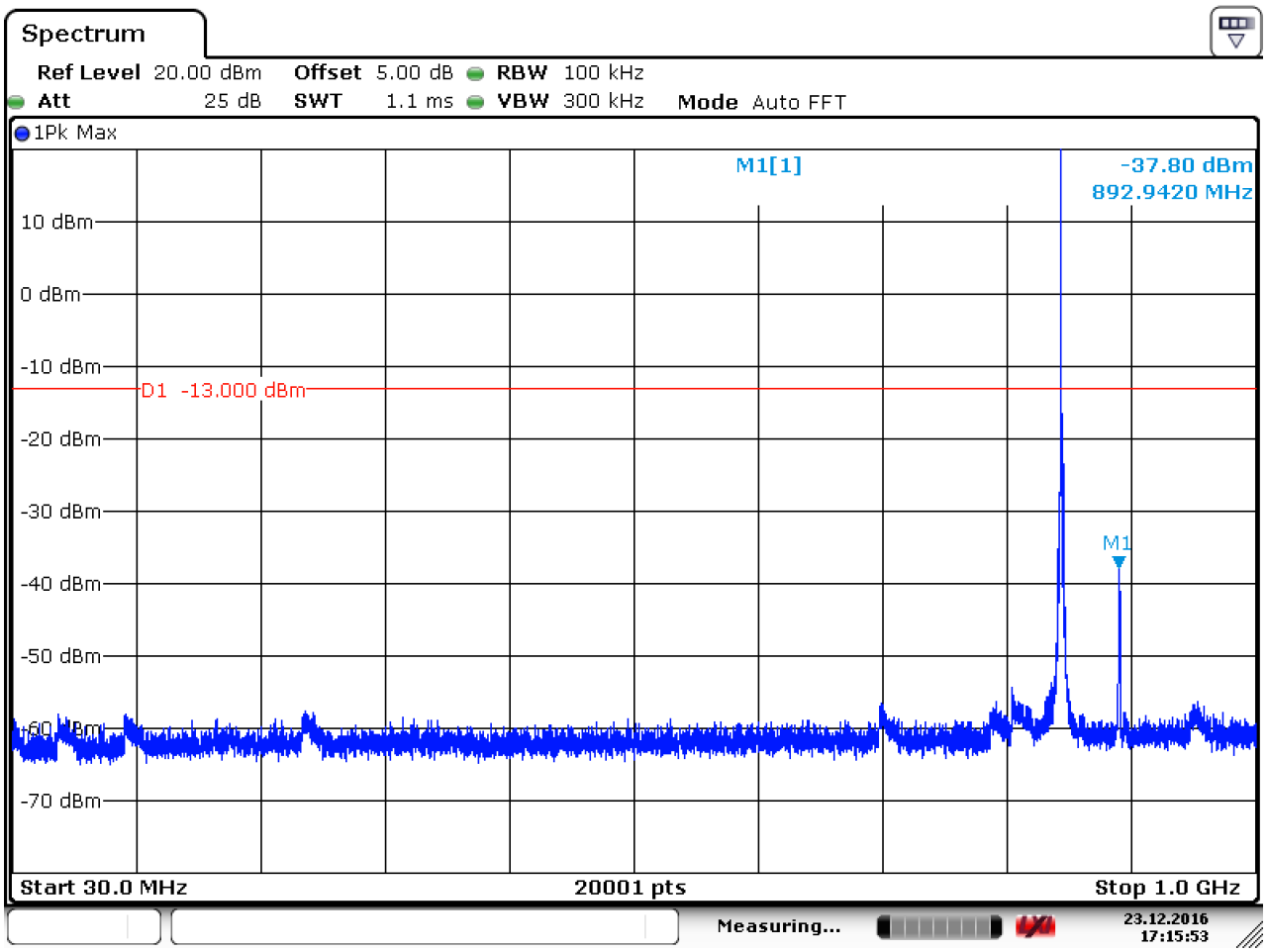


Date: 23.DEC.2016 17:16:42

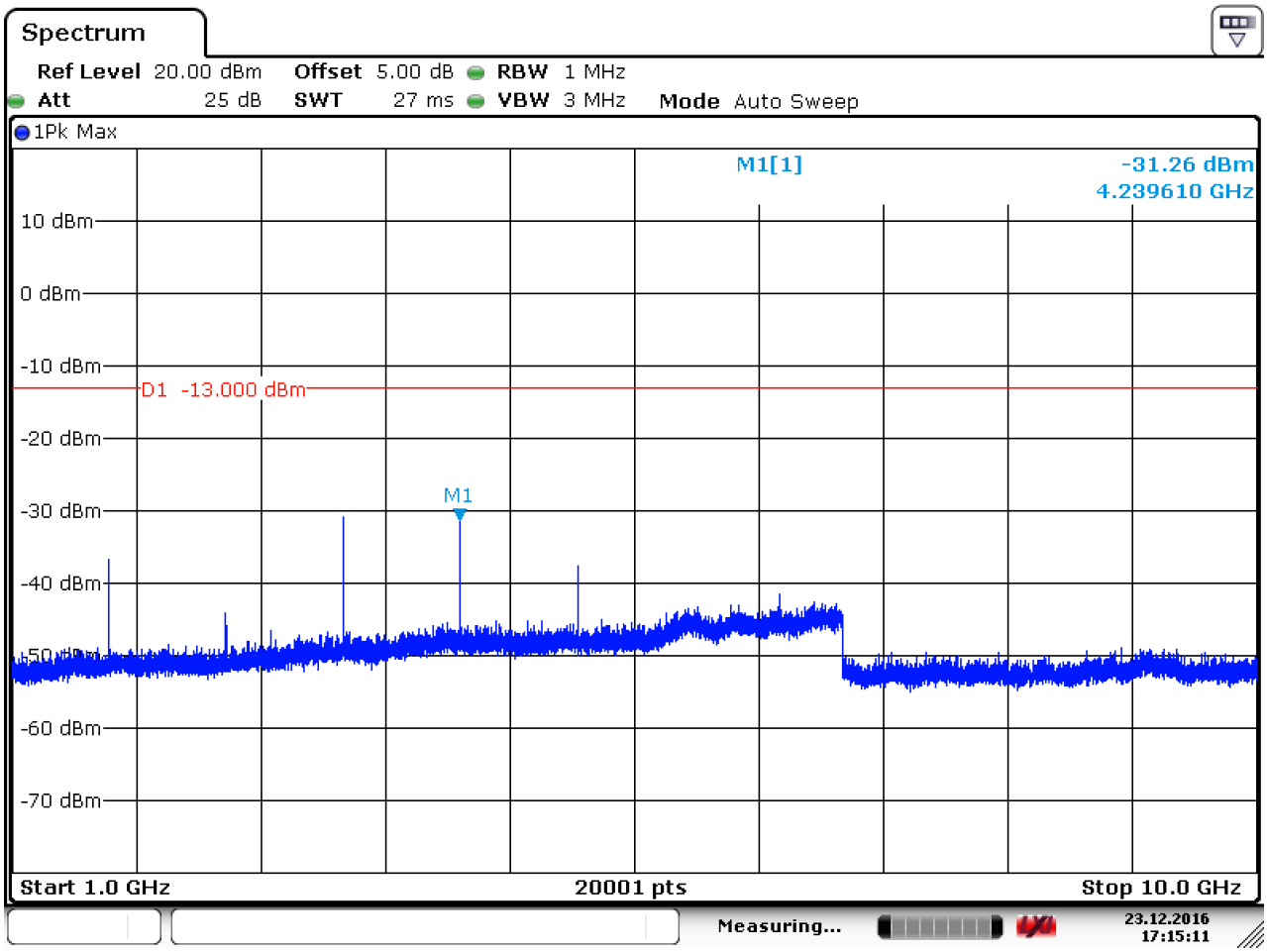


Date: 23.DEC.2016 17:17:13

6.1.1.1.3 Test Channel = HCH



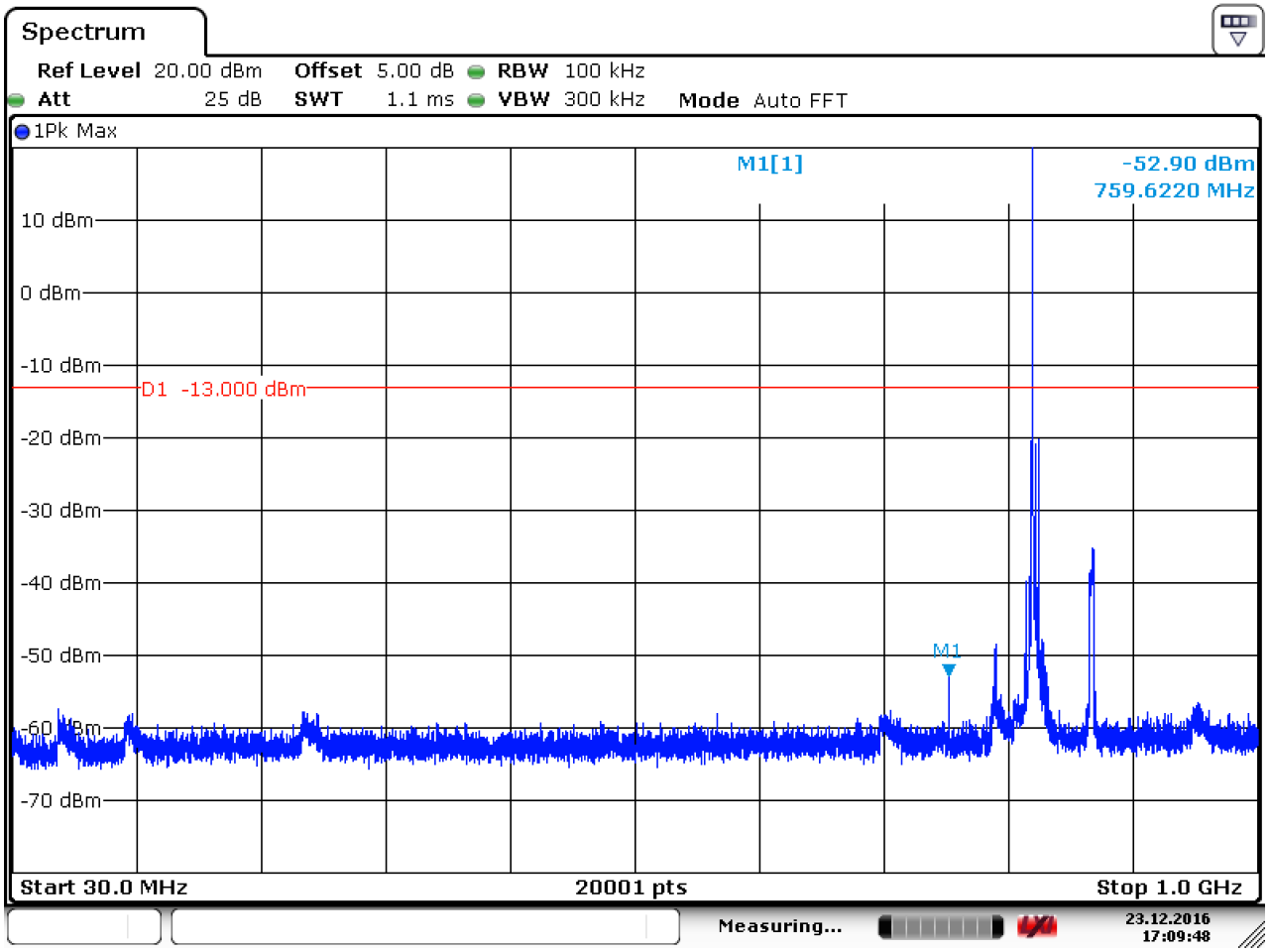
Date: 23.DEC.2016 17:15:53



Date: 23.DEC.2016 17:15:12

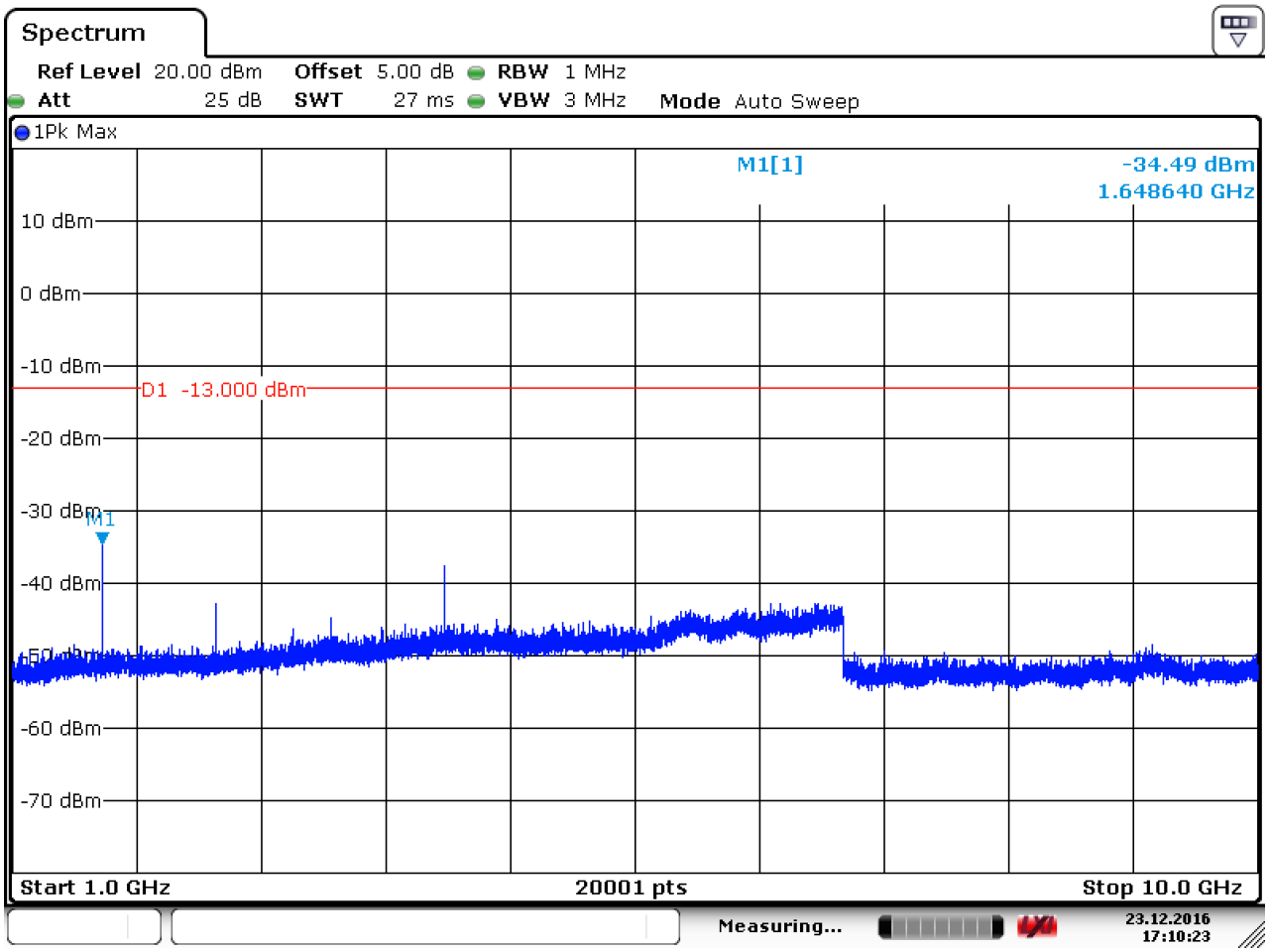
6.1.1.2 Test Mode = LTE / TM1 3MHz RB1#0

6.1.1.2.1 Test Channel = LCH



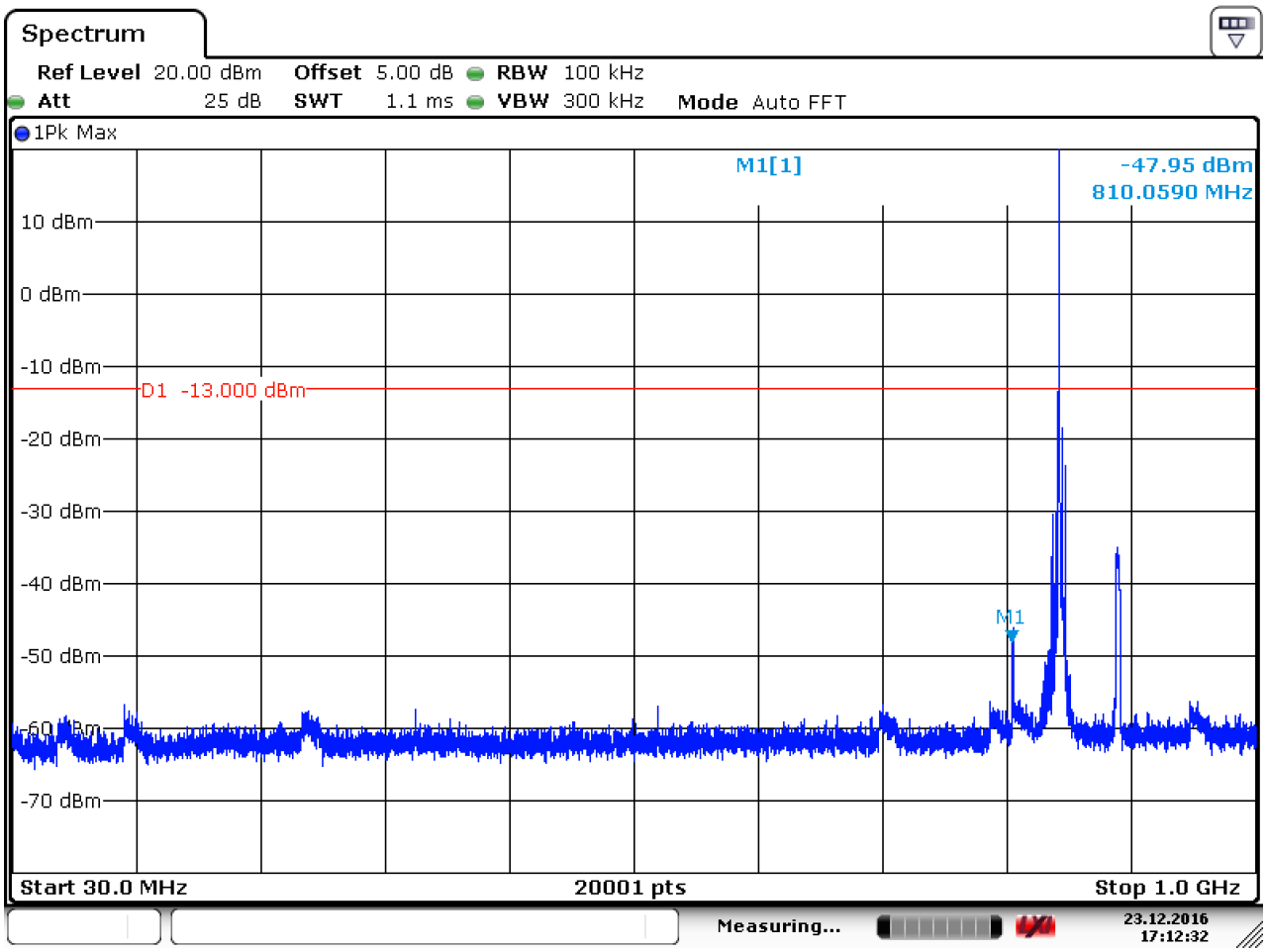
Date: 23.DEC.2016 17:09:48

6.1.1.2.2 Test Channel = MCH

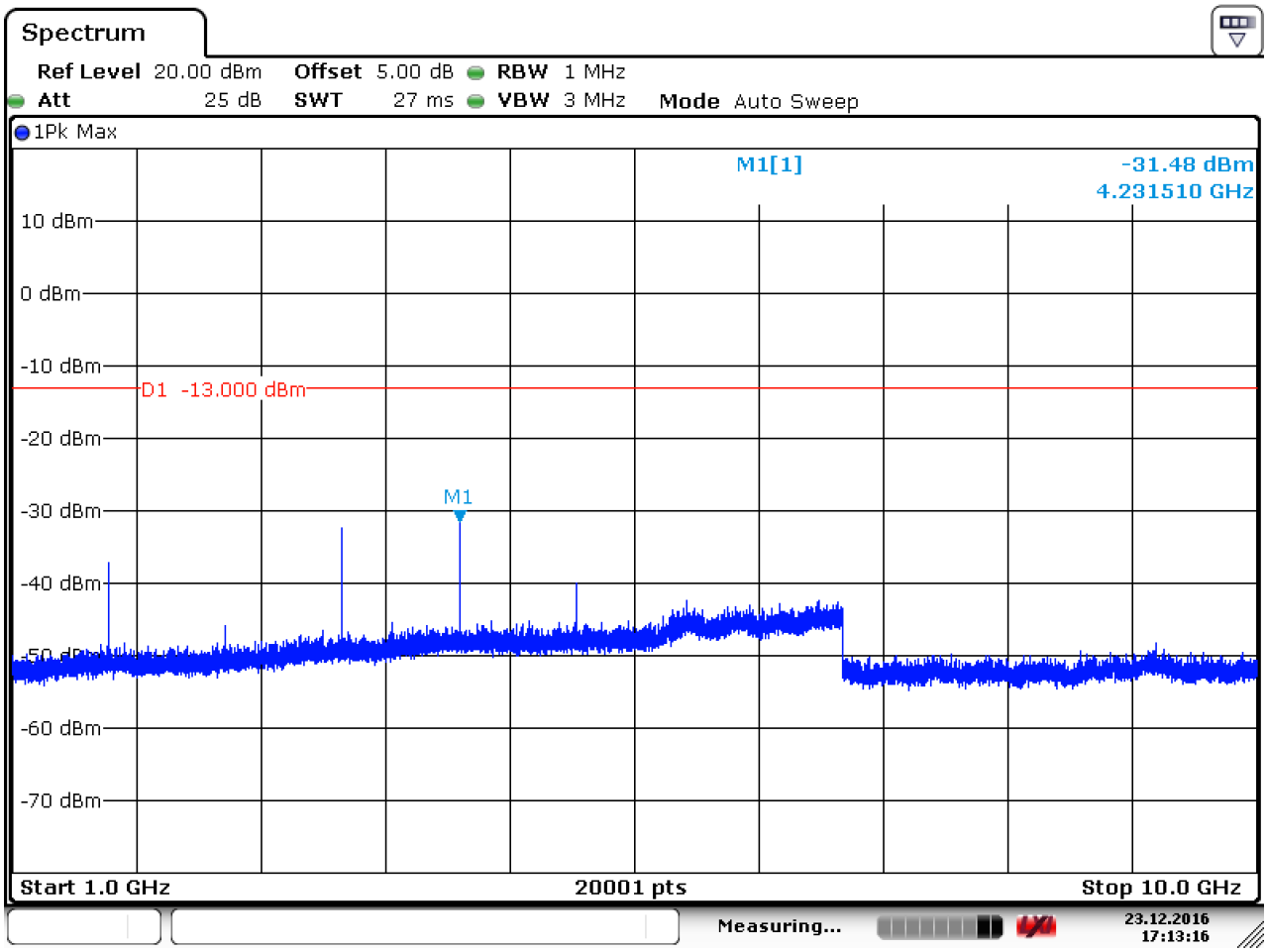


Date: 23.DEC.2016 17:10:23

6.1.1.2.3 Test Channel = HCH



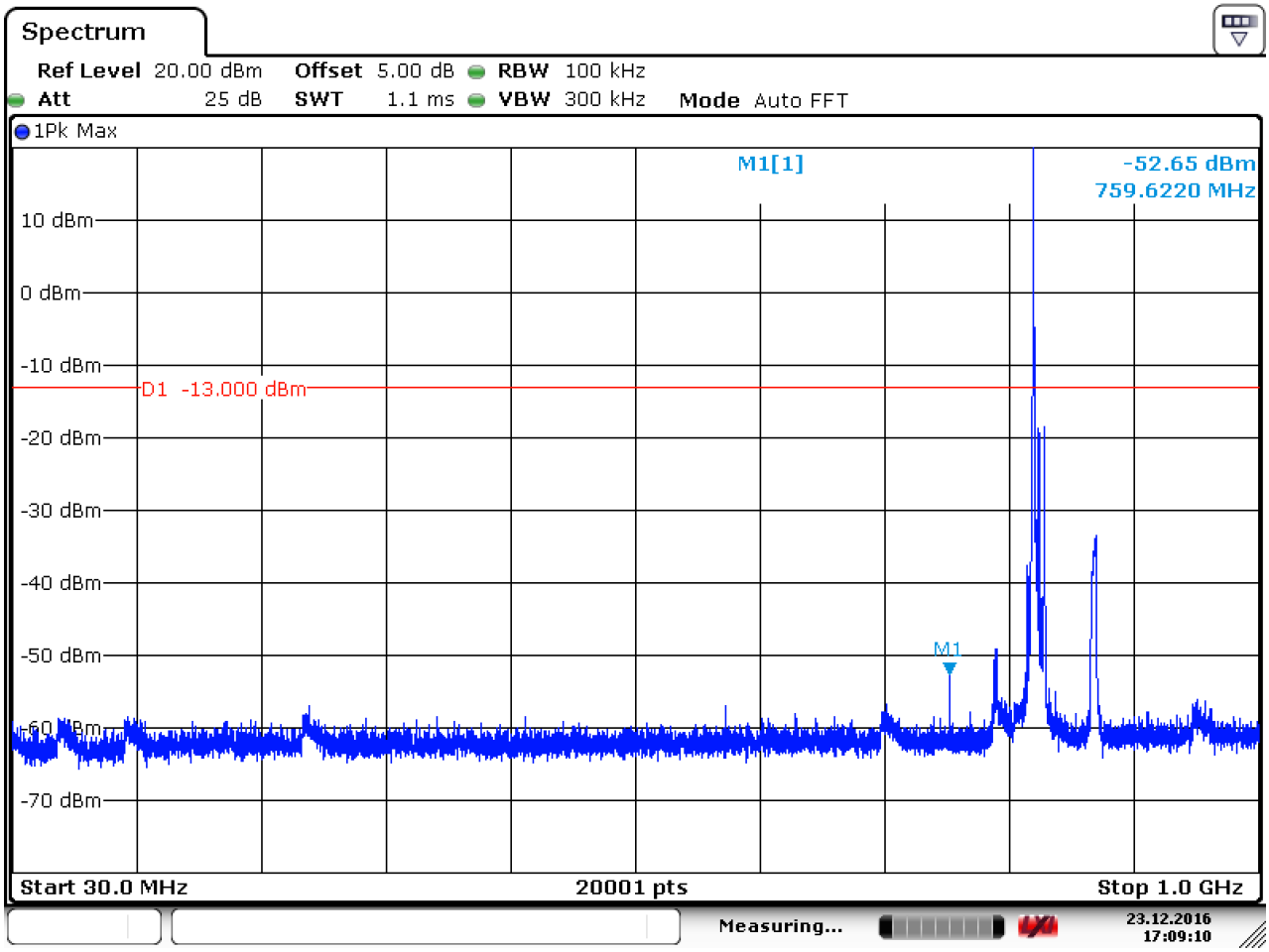
Date: 23.DEC.2016 17:12:32



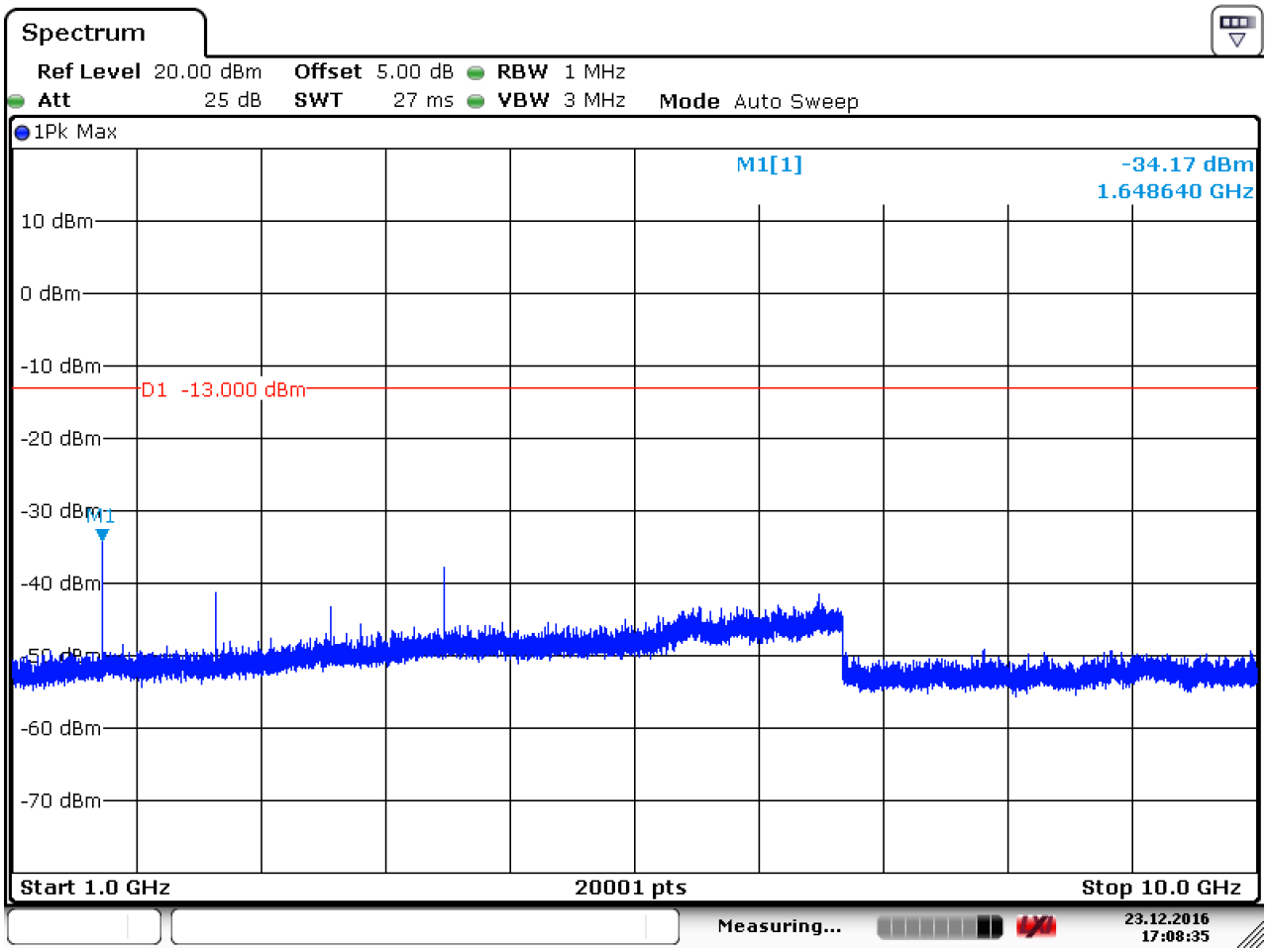
Date: 23.DEC.2016 17:13:16

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

6.1.1.3.1 Test Channel = LCH

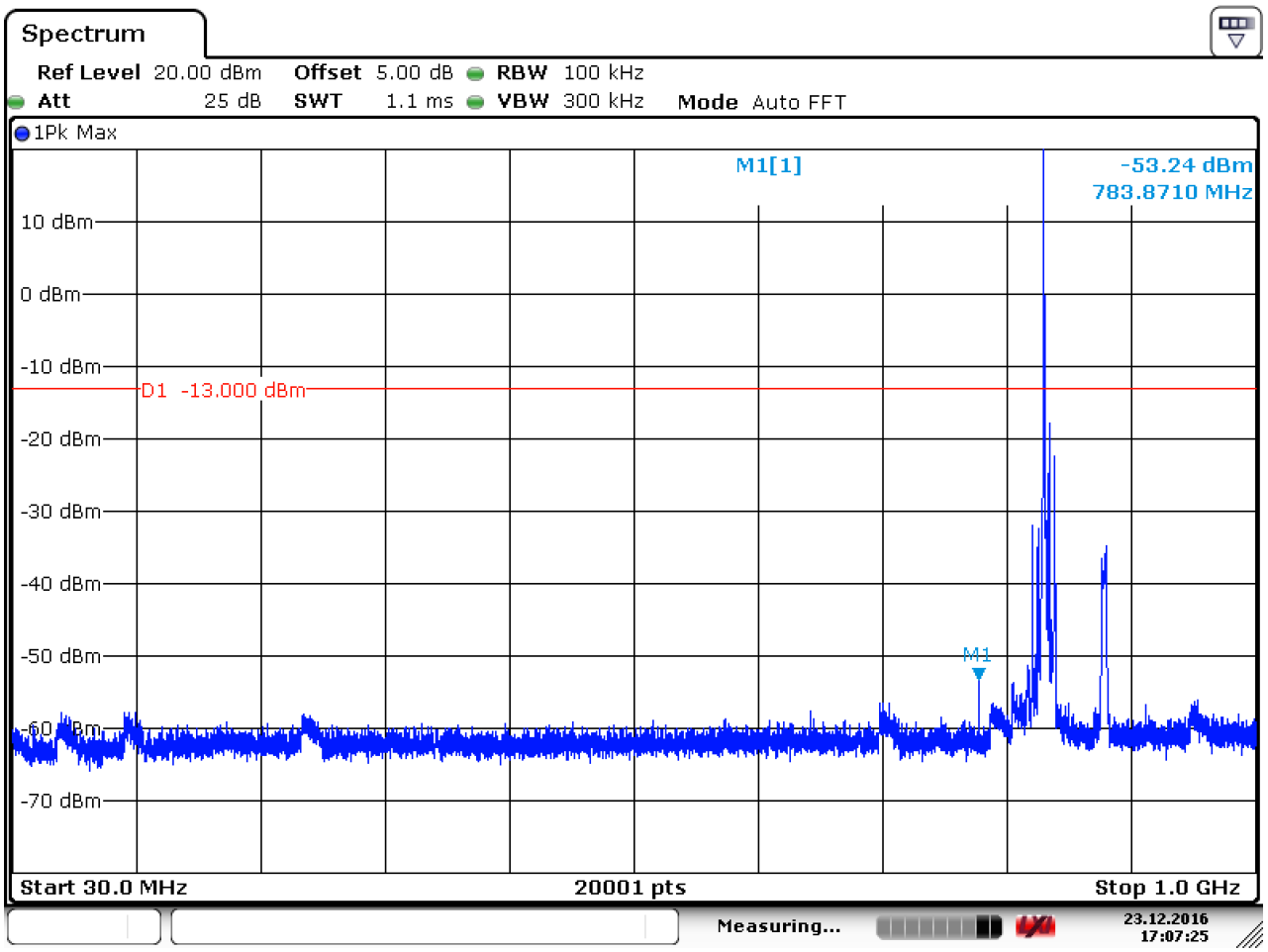


Date: 23.DEC.2016 17:09:10

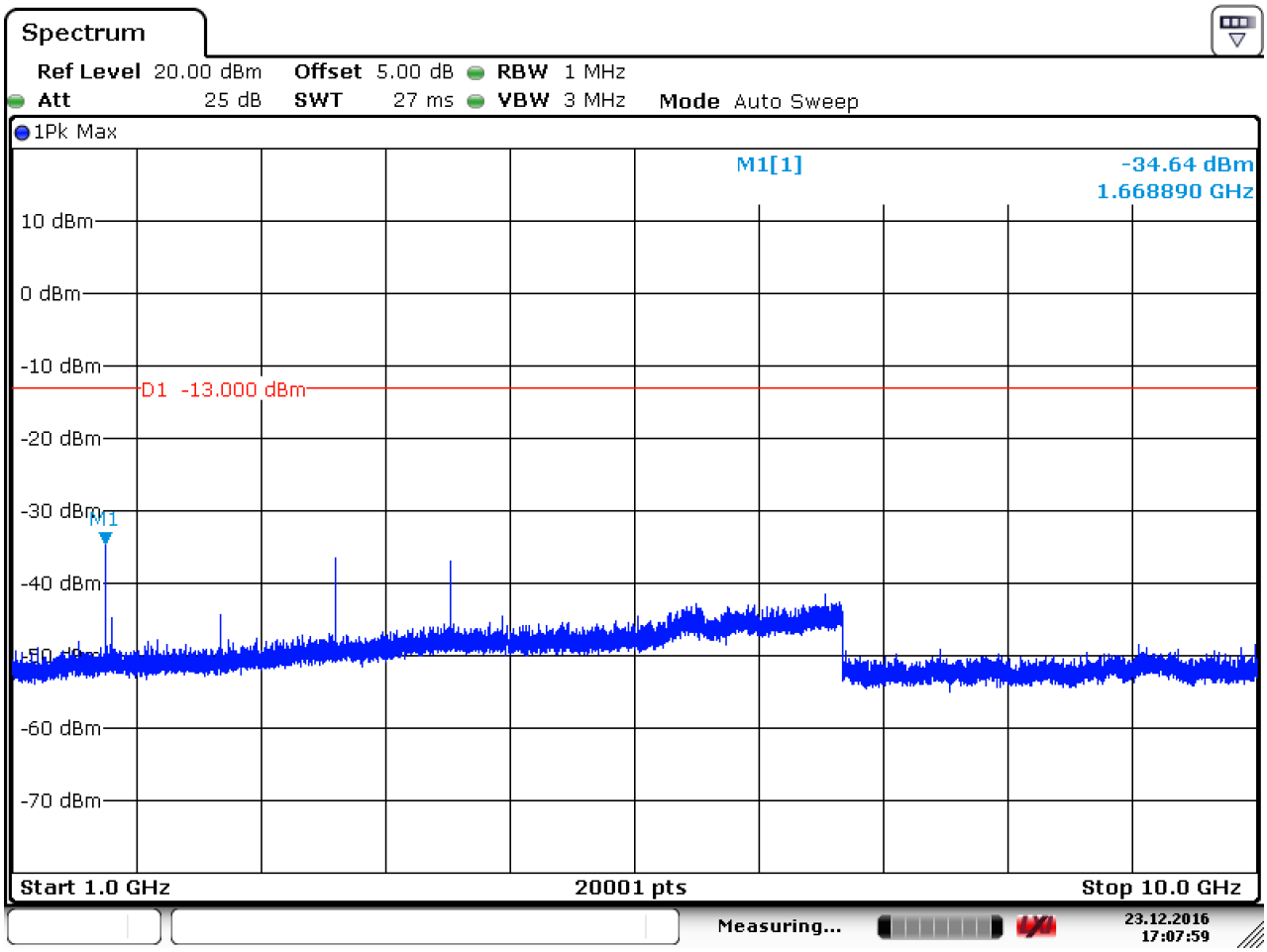


Date: 23.DEC.2016 17:08:35

6.1.1.3.2 Test Channel = MCH

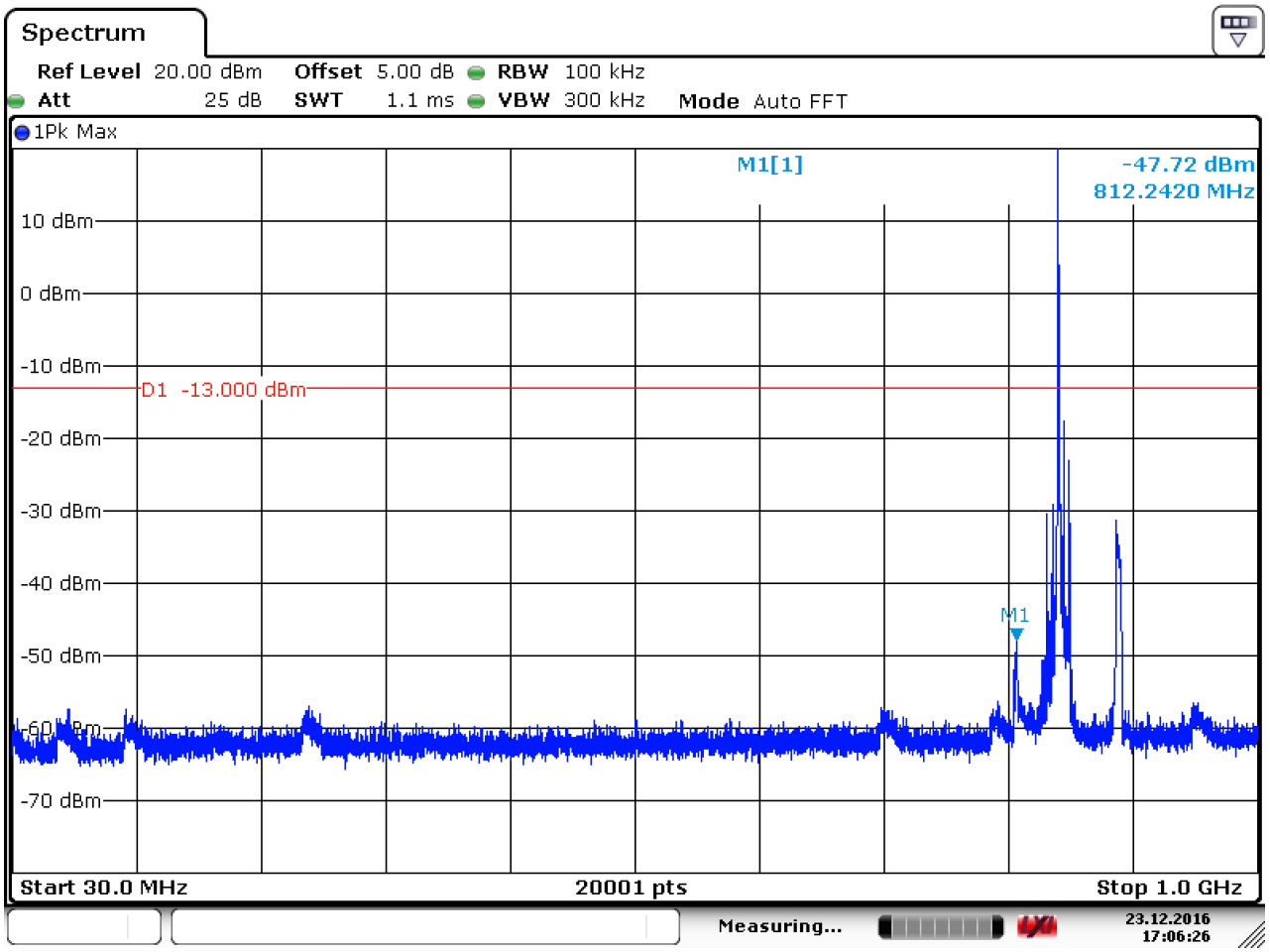


Date: 23.DEC.2016 17:07:25

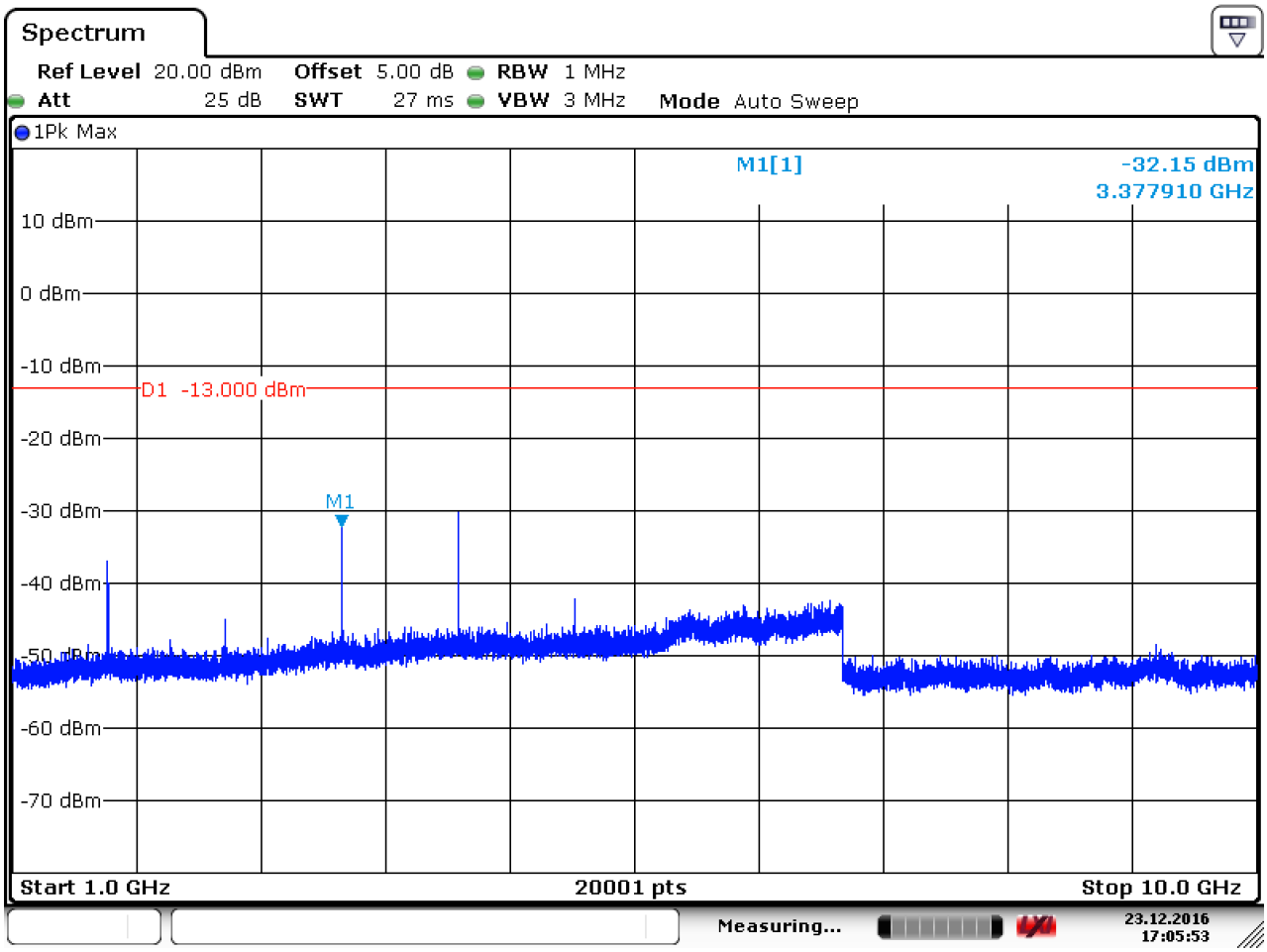


Date: 23.DEC.2016 17:07:59

6.1.1.3.3 Test Channel = HCH



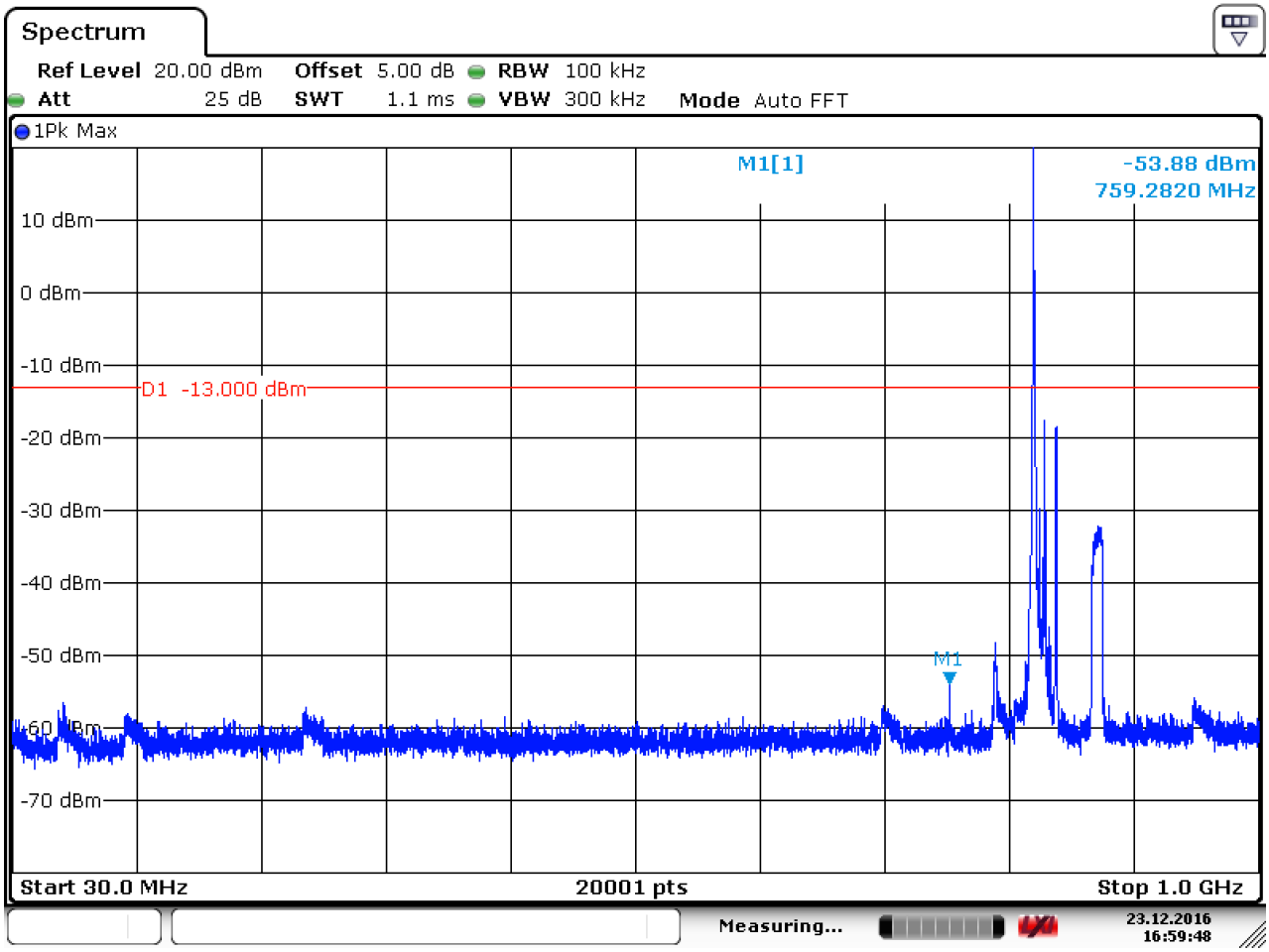
Date: 23.DEC.2016 17:06:27



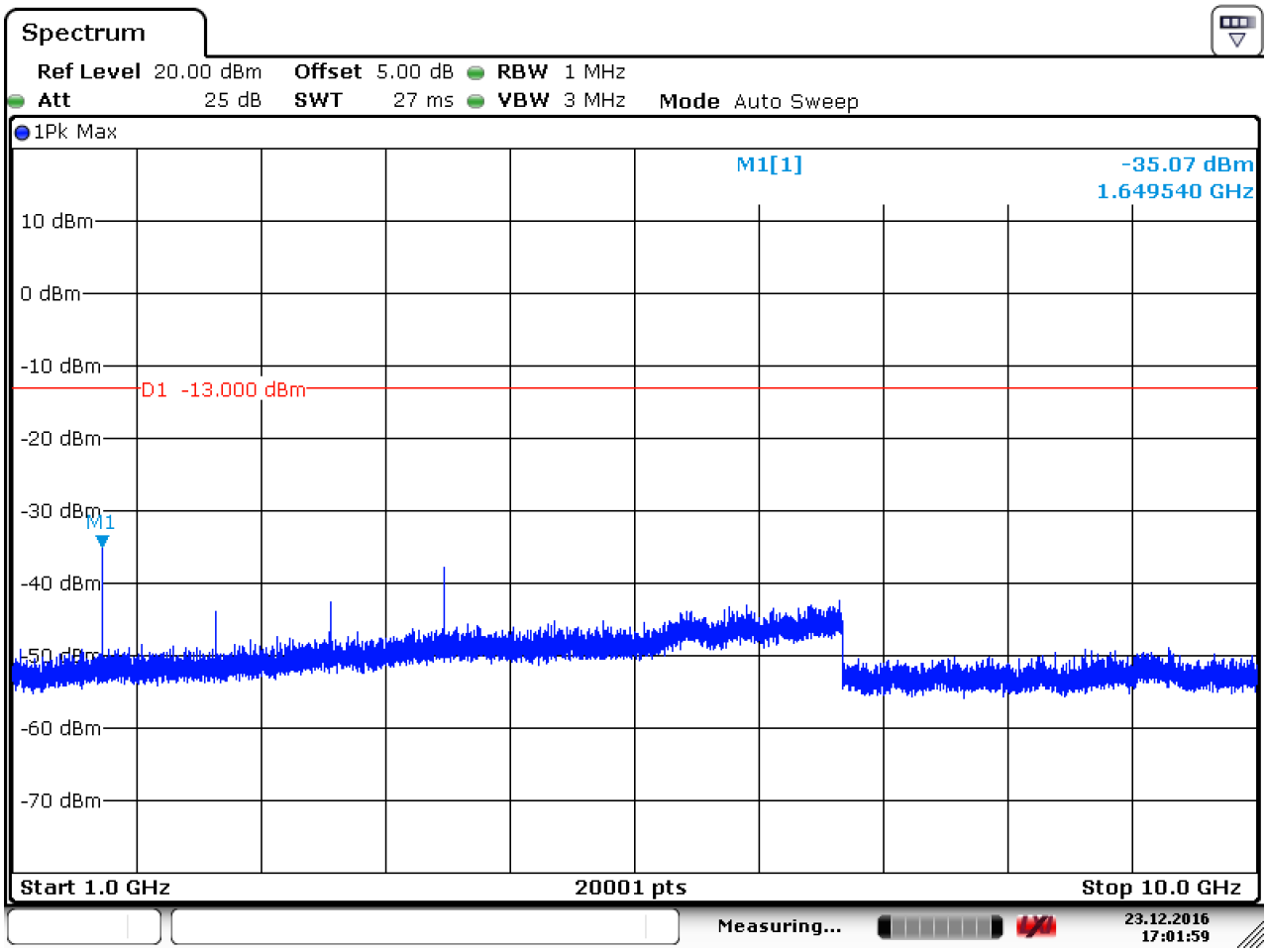
Date: 23.DEC.2016 17:05:53

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

6.1.1.4.1 Test Channel = LCH

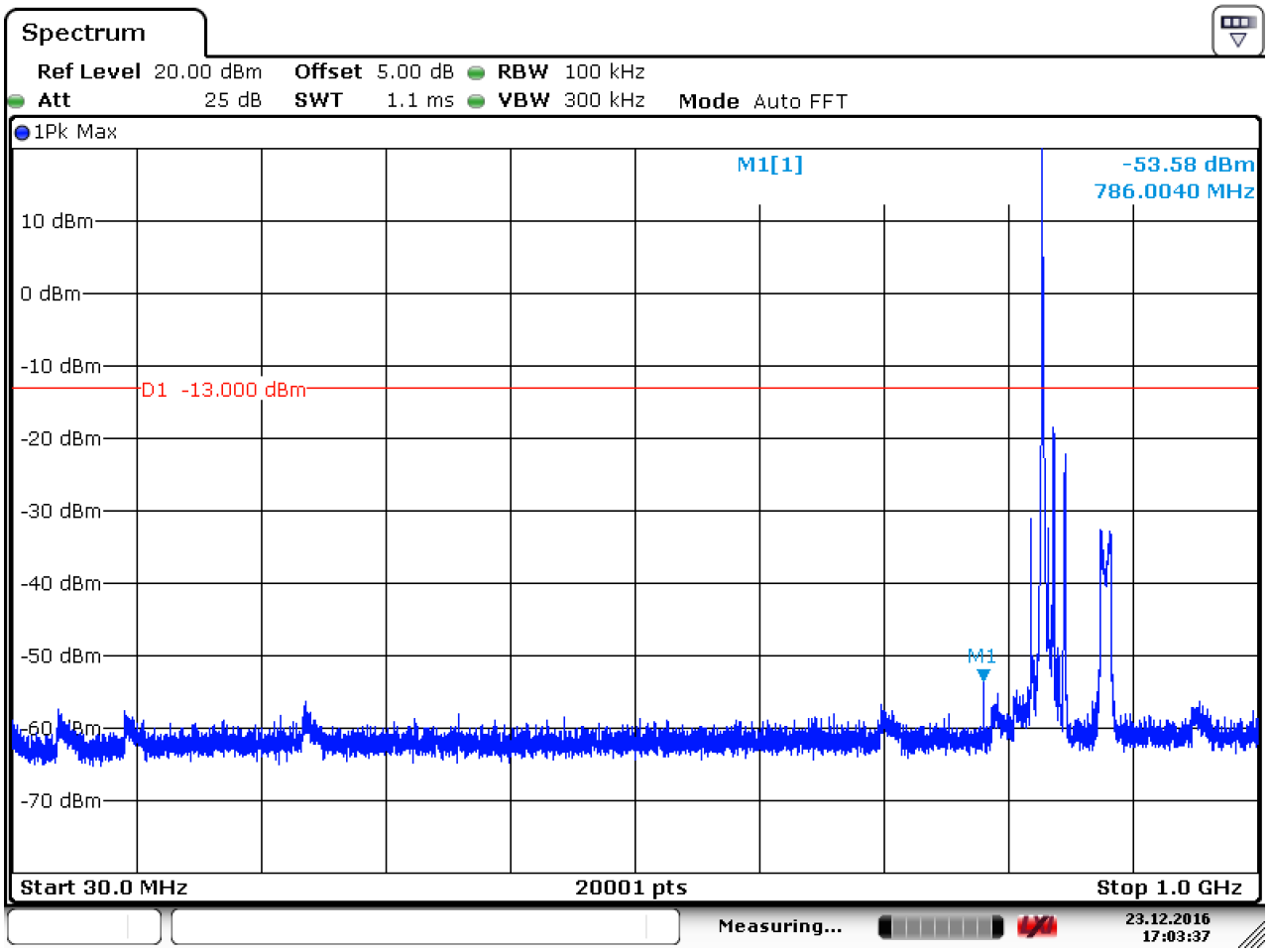


Date: 23.DEC.2016 16:59:49

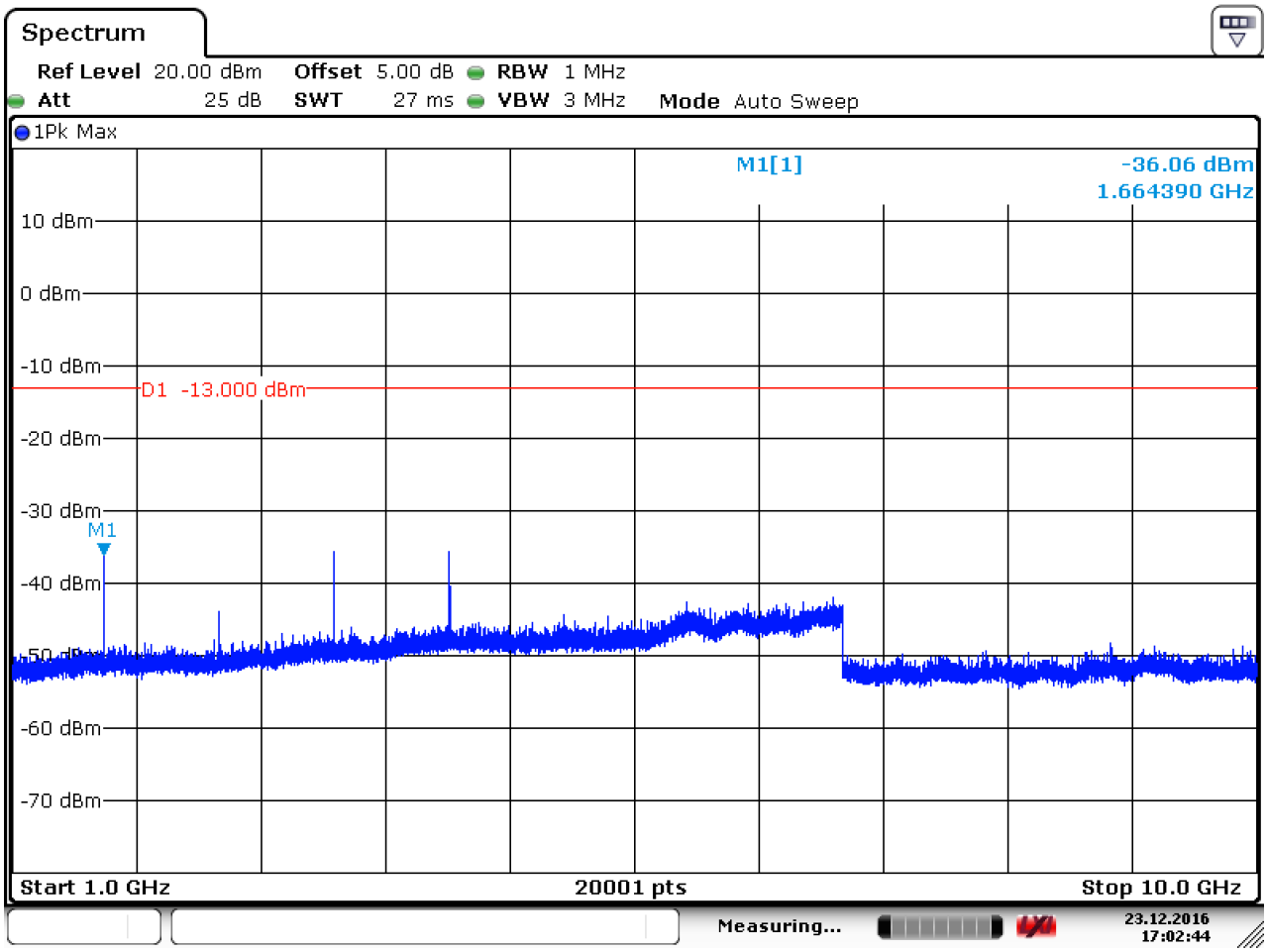


Date: 23.DEC.2016 17:02:00

6.1.1.4.2 Test Channel = MCH

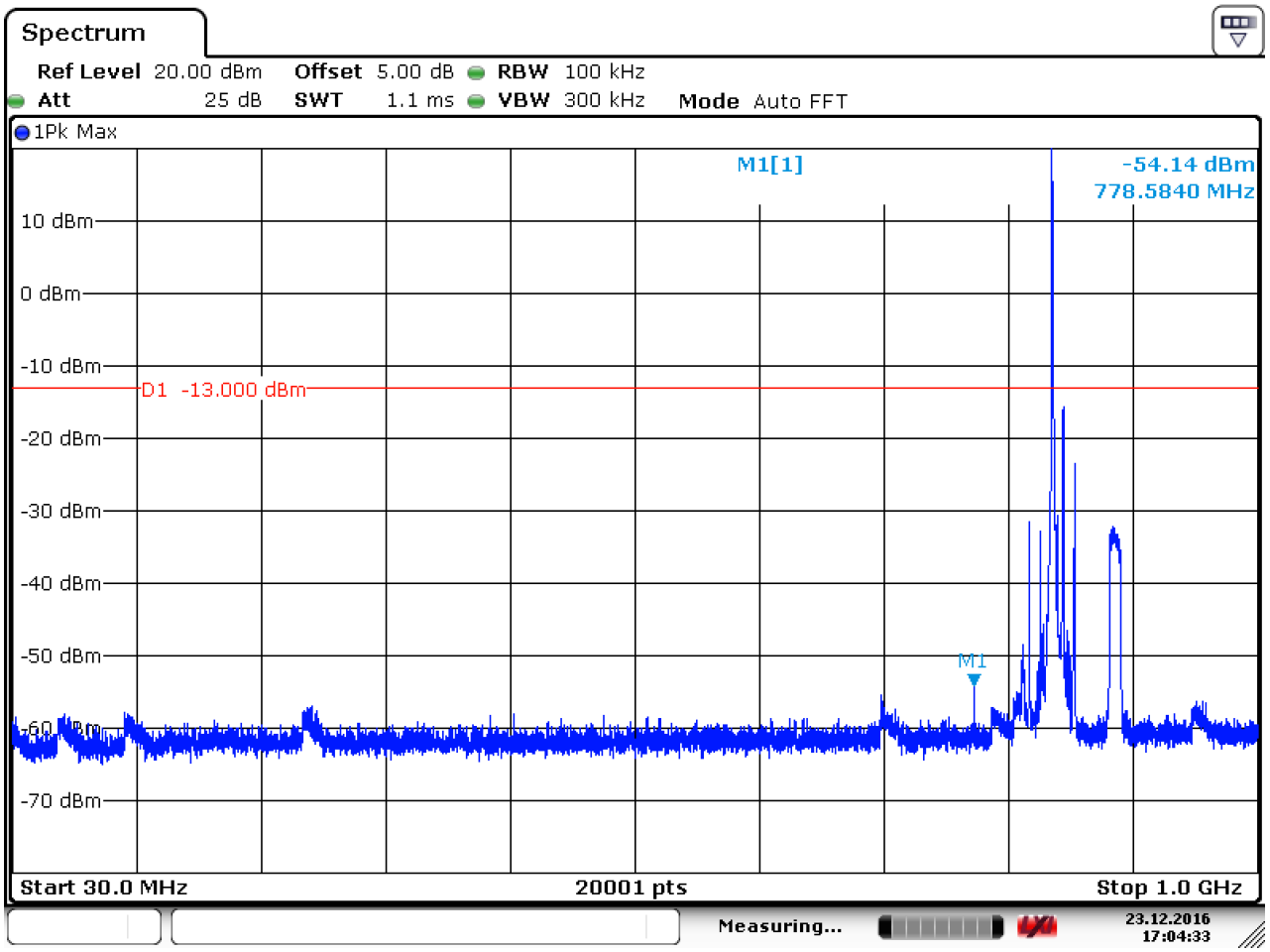


Date: 23.DEC.2016 17:03:37

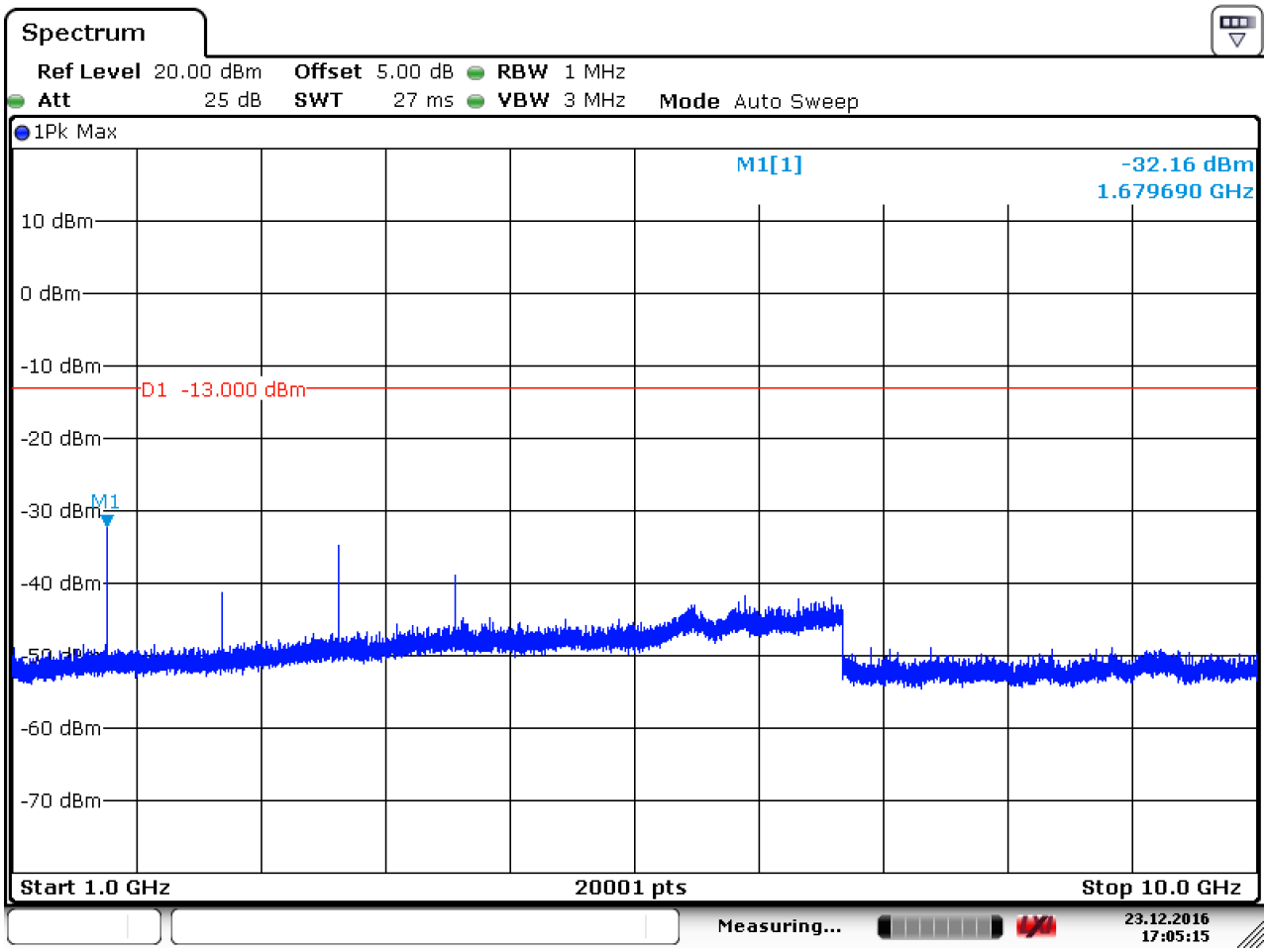


Date: 23.DEC.2016 17:02:44

6.1.1.4.3 Test Channel = HCH



Date: 23.DEC.2016 17:04:34



Date: 23.DEC.2016 17:05:15

7 Field Strength of Spurious Radiation

7.1 For LTE

7.1.1 Test Band = LTE band5

7.1.1.1.1 Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
1463.000	-66.41	-13.00	-53.41	Vertical
4365.000	-67.18	-13.00	-54.18	Vertical
6607.500	-64.77	-13.00	-51.77	Vertical
1562.000	-66.13	-13.00	-53.13	Horizontal
4560.000	-67.33	-13.00	-54.33	Horizontal
7095.000	-64.54	-13.00	-51.54	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.

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 band 5	LTE/TM1 10MHz	LCH	TN	VL	-3.28	-0.00396	PASS
				VN	1.46	0.00176	PASS
				VH	-5.72	-0.00690	PASS
		MCH	TN	VL	5.29	0.00632	PASS
				VN	-3.80	-0.00454	PASS
				VH	1.63	0.00195	PASS
		HCH	TN	VL	-4.26	-0.00505	PASS
				VN	-5.07	-0.00601	PASS
				VH	-2.79	-0.00331	PASS
	LTE/TM2 10MHz	LCH	TN	VL	-4.18	-0.00504	PASS
				VN	-2.45	-0.00296	PASS
				VH	-5.26	-0.00634	PASS
		MCH	TN	VL	1.56	0.00186	PASS
				VN	-2.85	-0.00341	PASS
				VH	1.59	0.00190	PASS
		HCH	TN	VL	-4.38	-0.00519	PASS
				VN	-7.20	-0.00853	PASS
				VH	-3.24	-0.00384	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
LTEband5	LTE/TM1 10MHz	LCH	VN	-30	-2.63	-0.00317	PASS
				-20	-3.31	-0.00399	PASS
				-10	2.38	0.00287	PASS
				0	3.75	0.00452	PASS
				10	1.65	0.00199	PASS
				20	-4.11	-0.00496	PASS
				30	-2.31	-0.00279	PASS
				40	-3.14	-0.00379	PASS
				50	2.54	0.00306	PASS
		MCH	VN	-30	-5.30	-0.00634	PASS
				-20	-6.92	-0.00827	PASS
				-10	-3.49	-0.00417	PASS
				0	-5.62	-0.00672	PASS
				10	-2.04	-0.00244	PASS
				20	-2.90	-0.00347	PASS
				30	-5.66	-0.00677	PASS
				40	-7.34	-0.00877	PASS
				50	-3.59	-0.00429	PASS
		HCH	VN	-30	2.54	0.00301	PASS
				-20	-1.49	-0.00177	PASS
				-10	1.50	0.00178	PASS
				0	-2.44	-0.00289	PASS
				10	2.60	0.00308	PASS
				20	-4.57	-0.00541	PASS
				30	-2.46	-0.00291	PASS
				40	-5.63	-0.00667	PASS
				50	-4.22	-0.00500	PASS

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	-3.24	-0.00391	PASS
				-20	-5.45	-0.00657	PASS
				-10	3.38	0.00408	PASS
				0	2.53	0.00305	PASS
				10	1.70	0.00205	PASS
				20	-0.23	-0.00028	PASS
				30	-3.44	-0.00415	PASS
				40	-5.22	-0.00630	PASS
				50	5.79	0.00698	PASS
		MCH	VN	-30	-3.84	-0.00459	PASS
				-20	-2.38	-0.00285	PASS
				-10	-7.66	-0.00916	PASS
				0	-3.32	-0.00397	PASS
				10	-0.17	-0.00020	PASS
				20	1.44	0.00172	PASS
				30	-4.69	-0.00561	PASS
				40	-2.47	-0.00295	PASS
				50	-3.67	-0.00439	PASS
		HCH	VN	-30	1.44	0.00171	PASS
				-20	-2.55	-0.00302	PASS
				-10	4.59	0.00544	PASS
				0	-3.88	-0.00460	PASS
				10	2.28	0.00270	PASS
				20	-1.47	-0.00174	PASS
				30	-4.50	-0.00533	PASS
				40	-4.23	-0.00501	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
LTEband2	LTE/TM3 20MHz	LCH	VN	-30	1.50	0.00081	PASS
				-20	-1.60	-0.00086	PASS
				-10	4.38	0.00235	PASS
				0	1.69	0.00091	PASS
				10	1.43	0.00077	PASS
				20	0.54	0.00029	PASS
				30	-2.61	-0.00140	PASS
				40	-0.69	-0.00037	PASS
				50	3.52	0.00189	PASS
		MCH	VN	-30	-7.34	-0.00390	PASS
				-20	-5.33	-0.00284	PASS
				-10	-7.23	-0.00385	PASS
				0	-5.34	-0.00284	PASS
				10	-4.04	-0.00215	PASS
				20	-6.34	-0.00337	PASS
				30	-5.26	-0.00280	PASS
				40	-4.13	-0.00220	PASS
				50	-6.47	-0.00344	PASS
		HCH	VN	-30	2.34	0.00123	PASS
				-20	-1.83	-0.00096	PASS
				-10	1.57	0.00083	PASS
				0	-2.43	-0.00128	PASS
				10	1.60	0.00084	PASS
				20	-0.57	-0.00030	PASS
				30	0.66	0.00035	PASS
				40	-5.43	-0.00286	PASS
				50	-5.90	-0.00311	PASS

The End