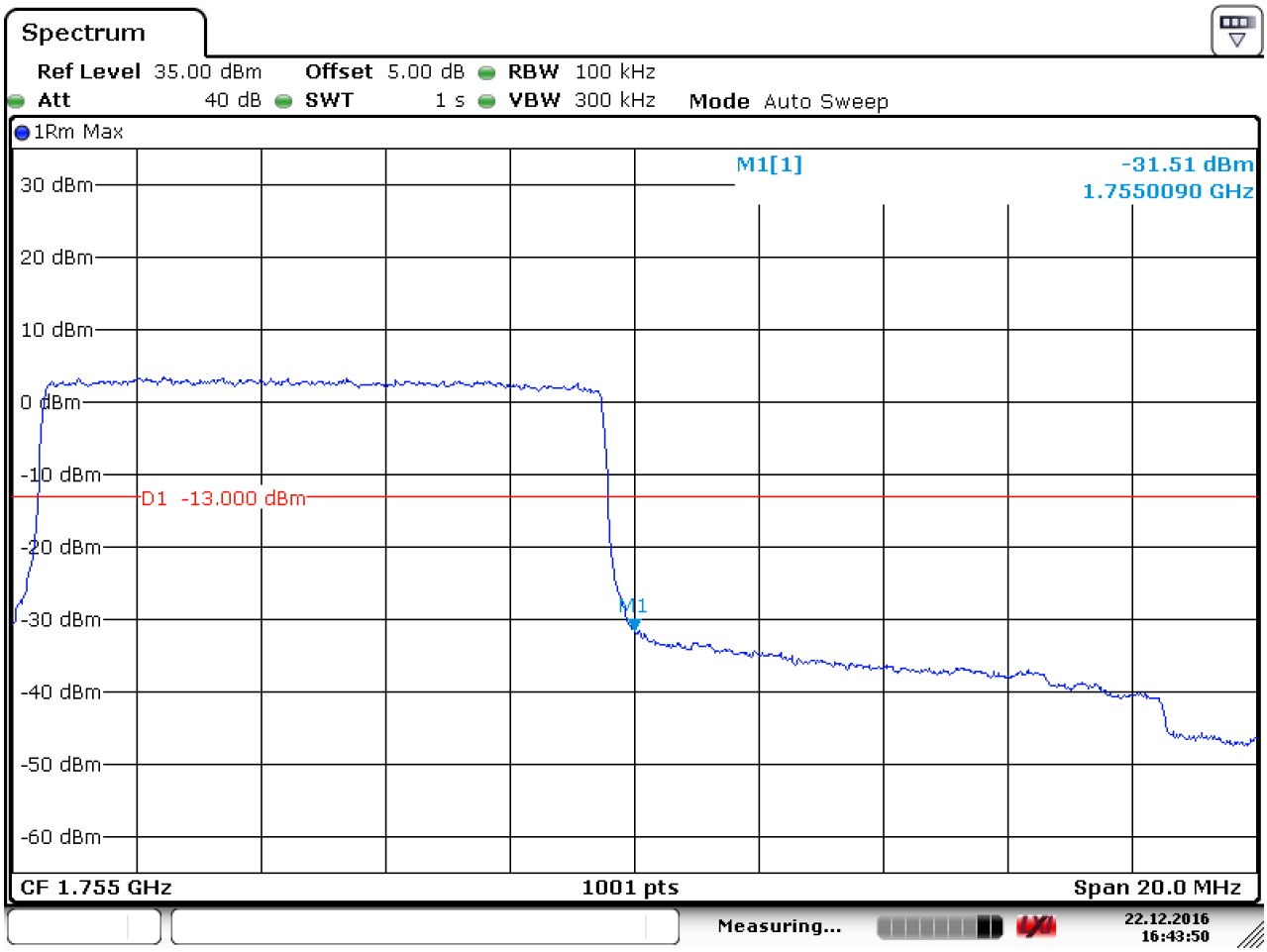
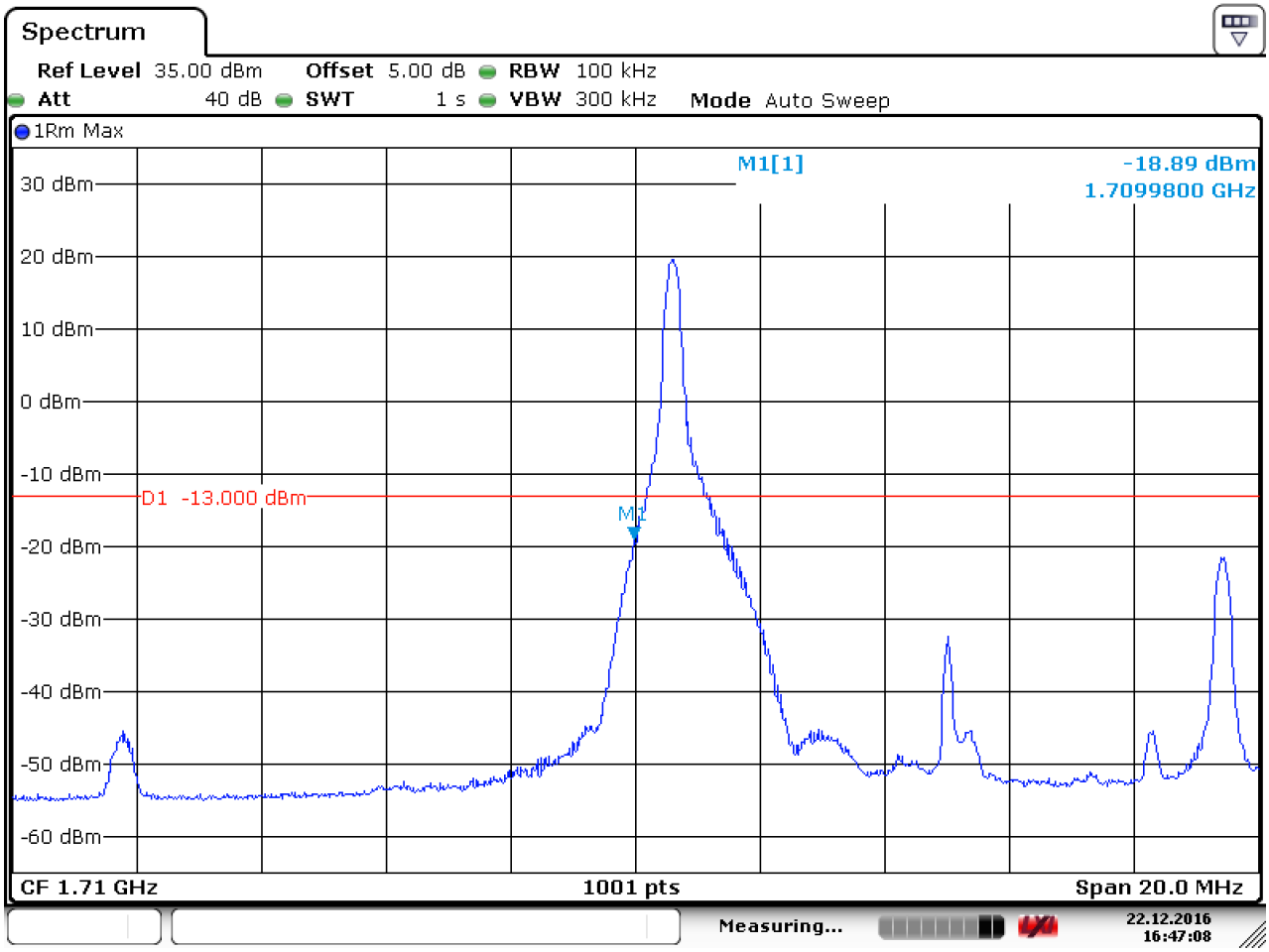


Date: 22.DEC.2016 16:43:51

5.1.1.8 Test Mode = LTE/TM2 10MHz

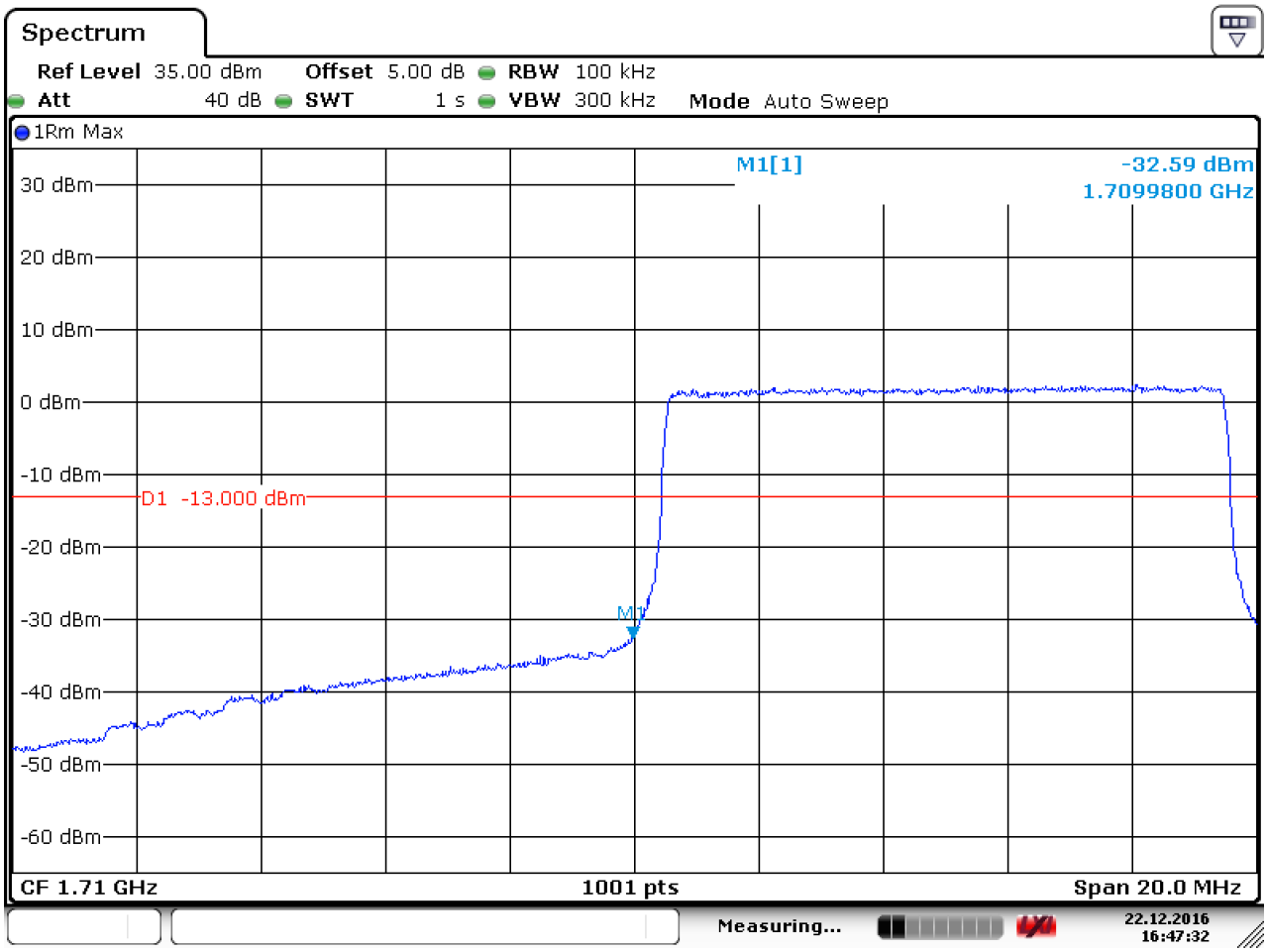
5.1.1.8.1 Test Channel = LCH

5.1.1.8.1.1 Test RB=1RB



Date: 22.DEC.2016 16:47:08

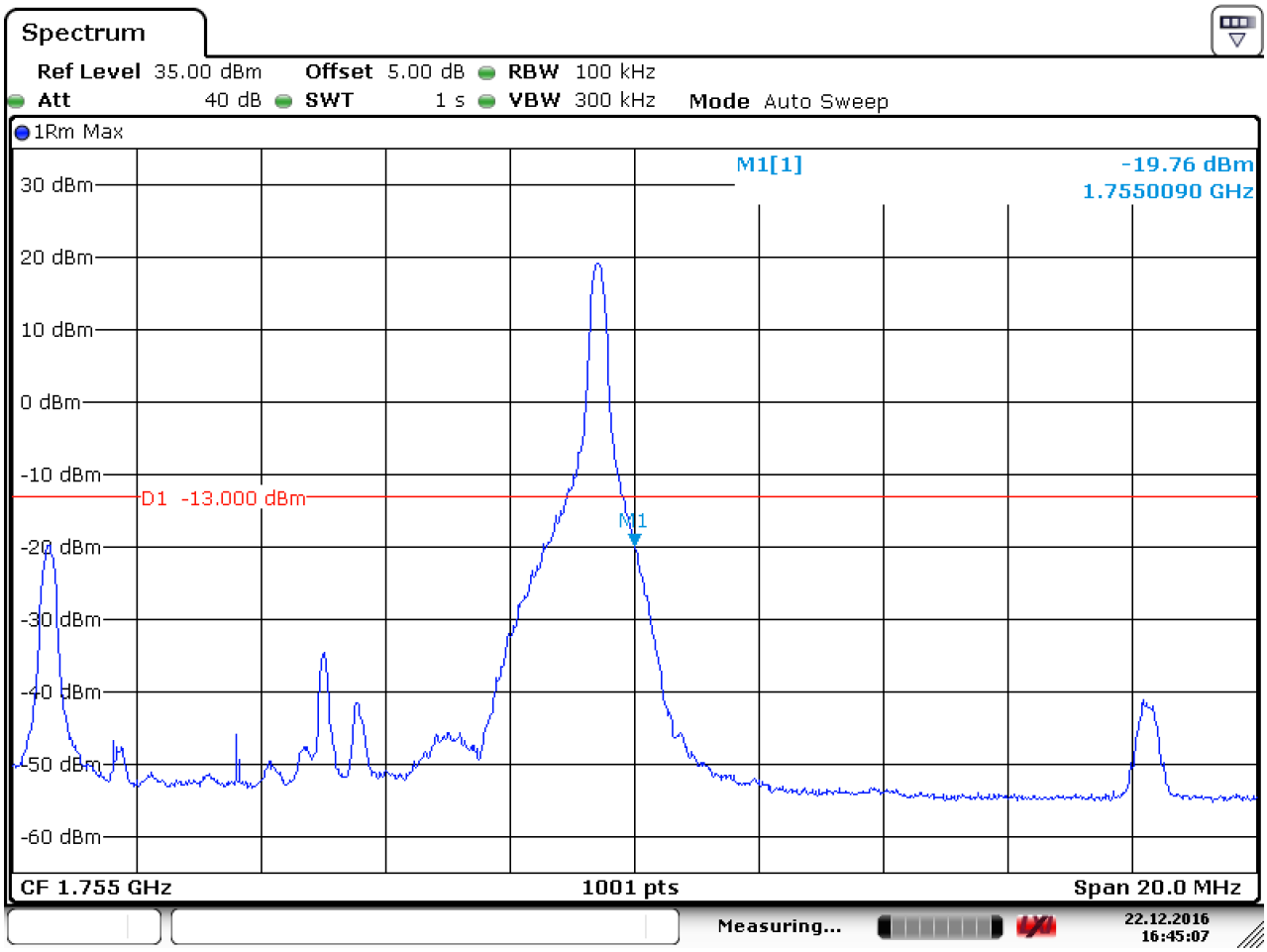
5.1.1.8.1.2 Test RB=50RB



Date: 22.DEC.2016 16:47:33

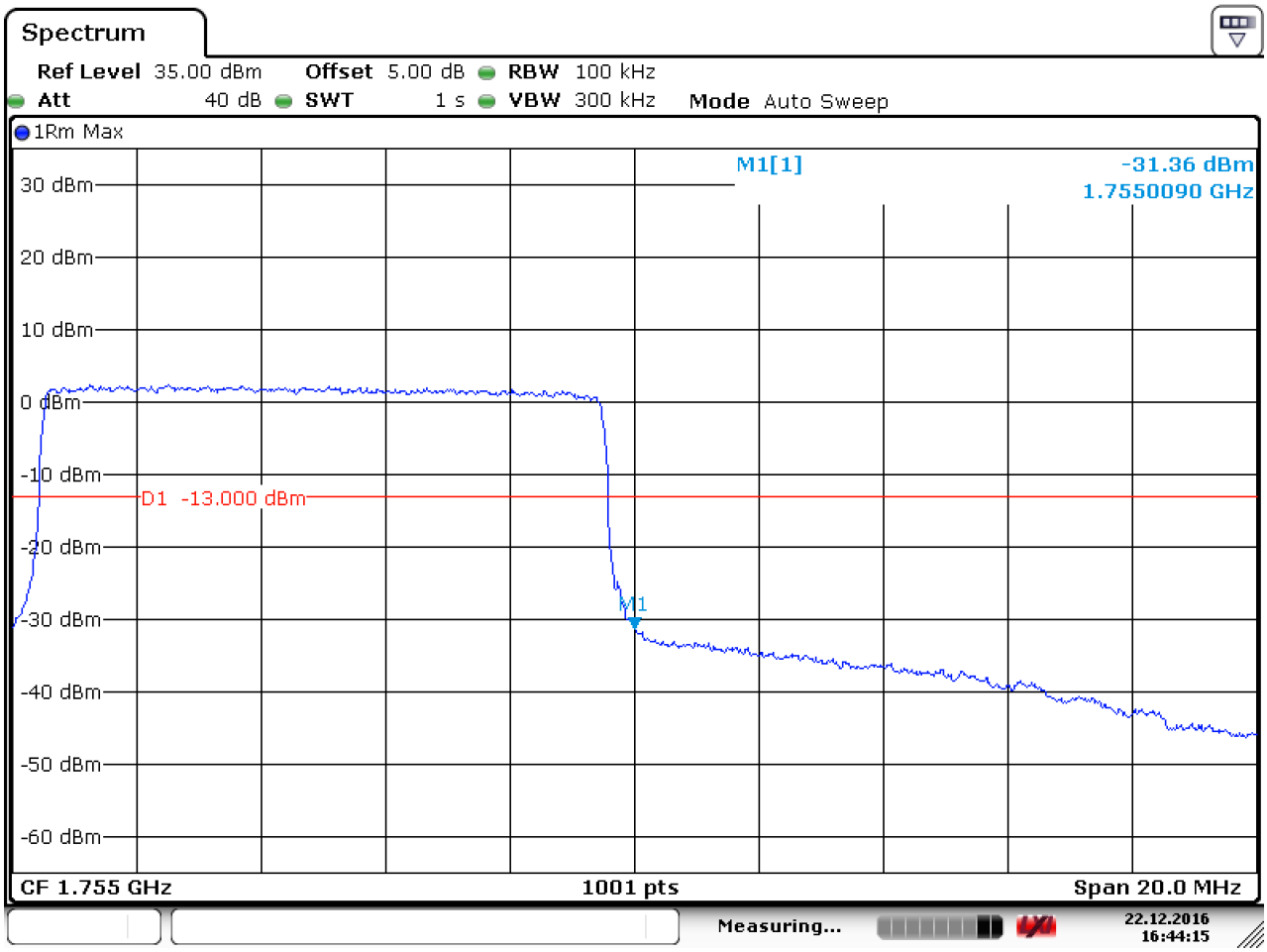
5.1.1.8.2 Test Channel = HCH

5.1.1.8.2.1 Test RB=1RB



Date: 22.DEC.2016 16:45:08

5.1.1.8.2.2 Test RB=50RB

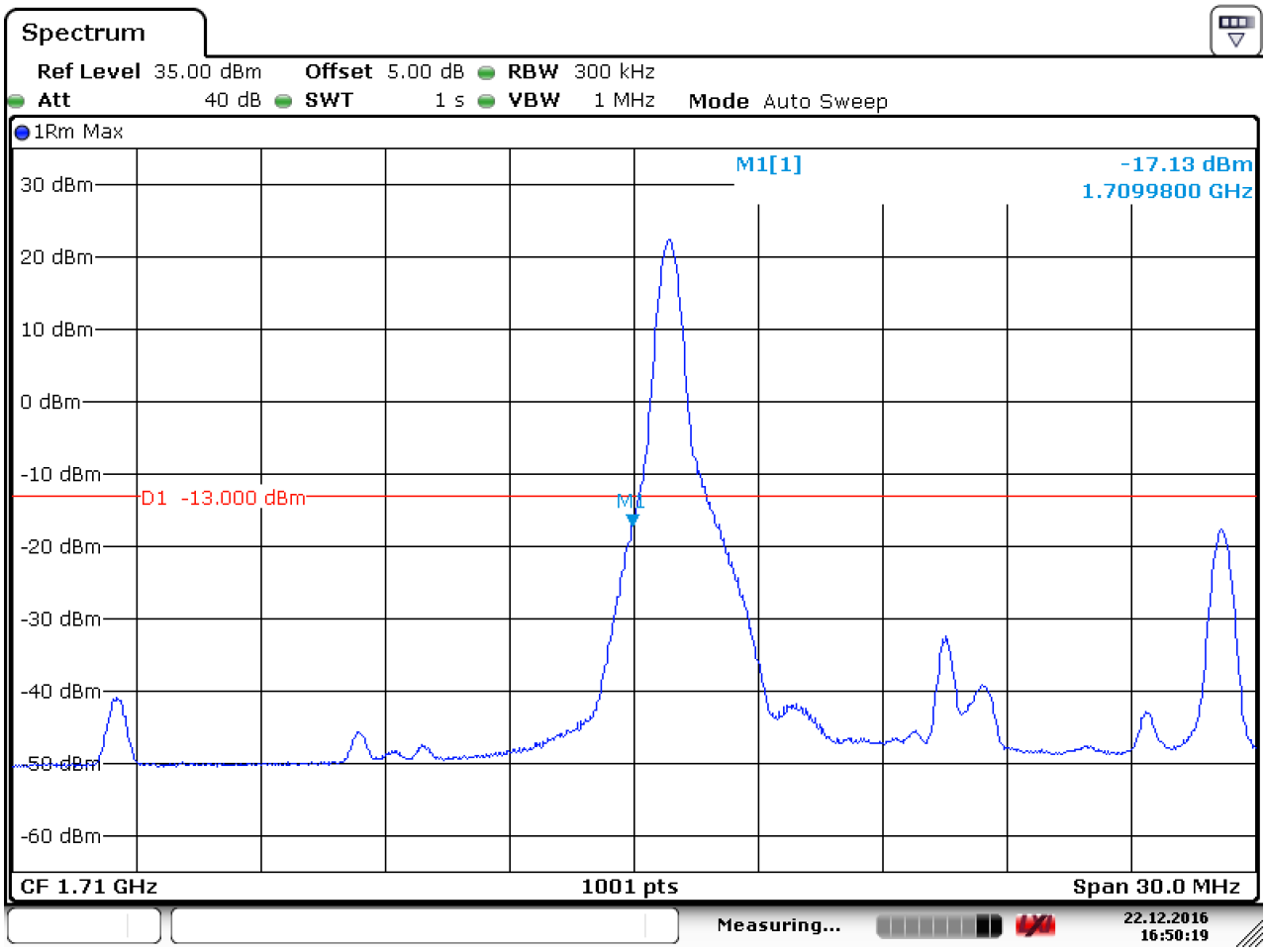


Date: 22.DEC.2016 16:44:14

5.1.1.9 Test Mode = LTE/TM1 15MHz

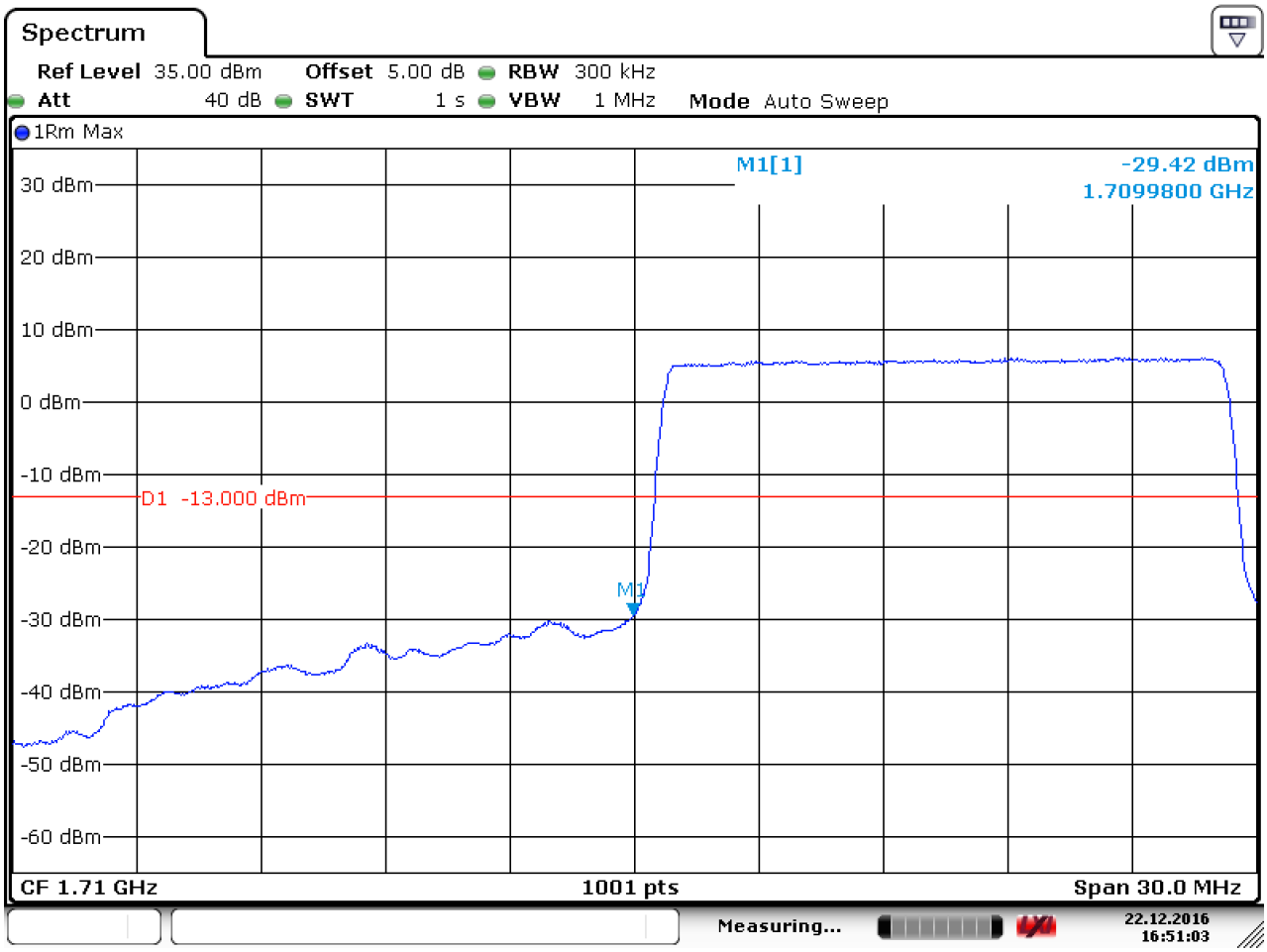
5.1.1.9.1 Test Channel = LCH

5.1.1.9.1.1 Test RB=1RB



Date: 22.DEC.2016 16:50:19

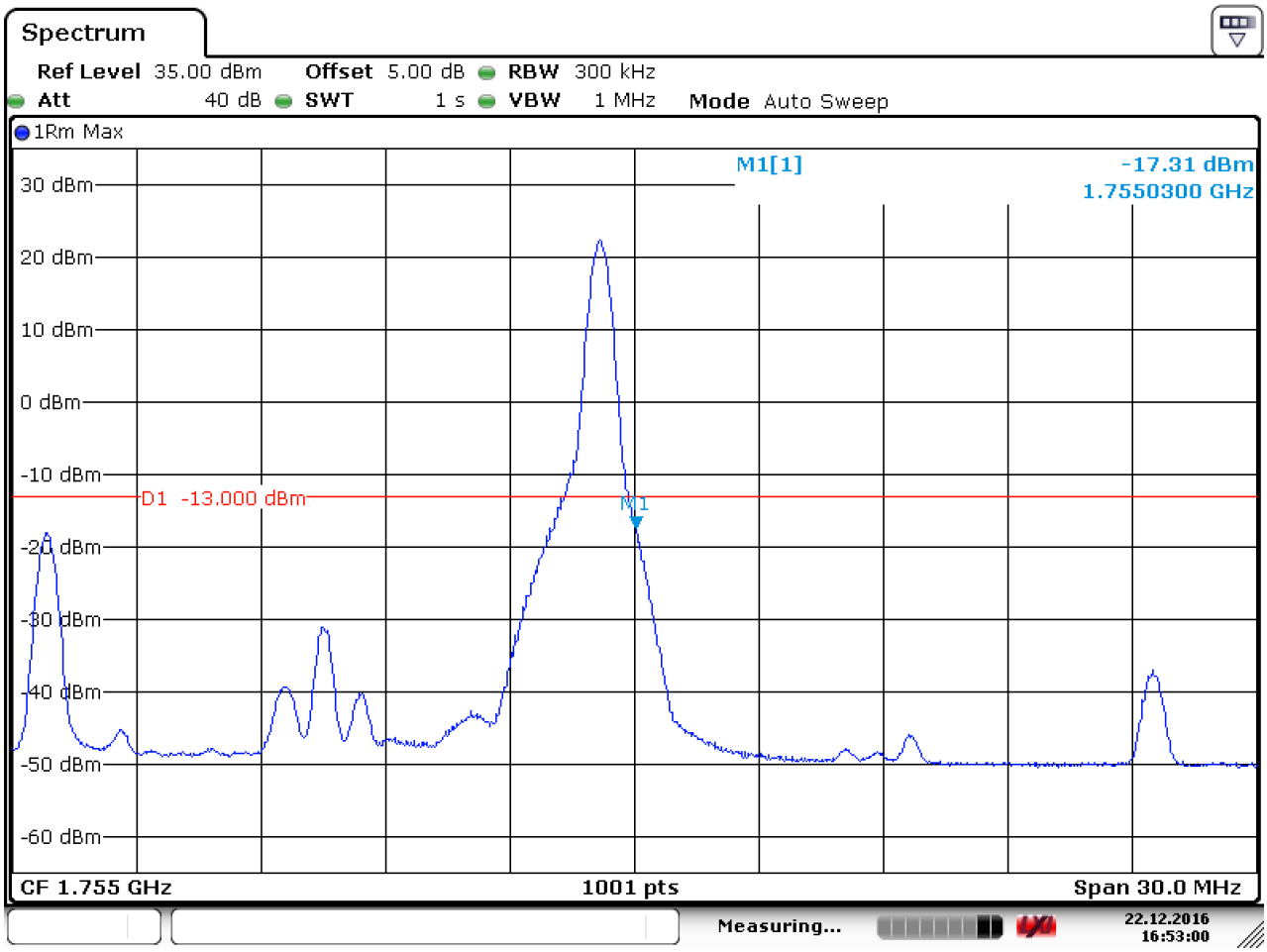
5.1.1.9.1.2 Test RB=75RB



Date: 22.DEC.2016 16:51:03

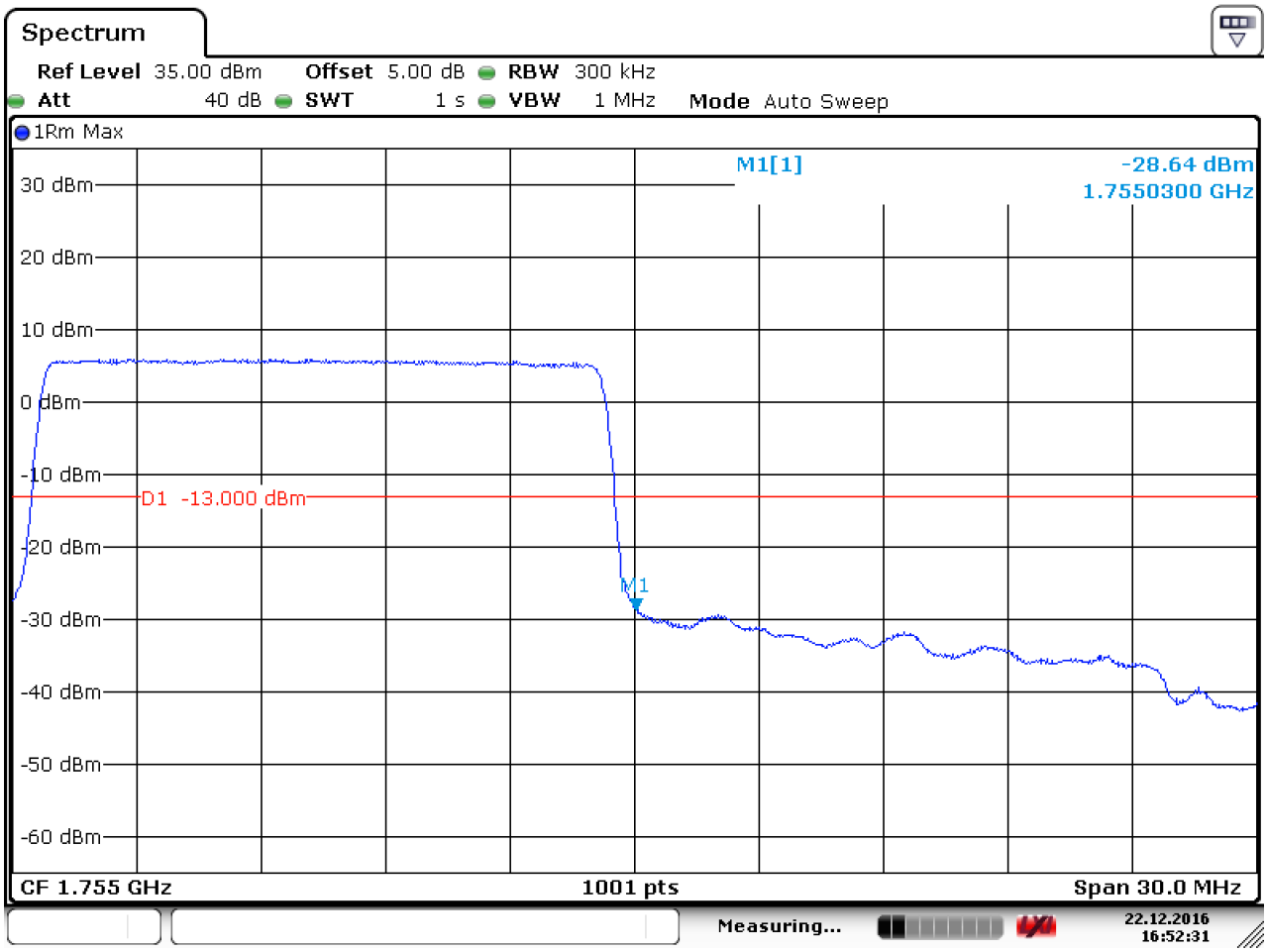
5.1.1.9.2 Test Channel = HCH

5.1.1.9.2.1 Test RB=1RB



Date: 22.DEC.2016 16:53:00

5.1.1.9.2.2 Test RB=75RB

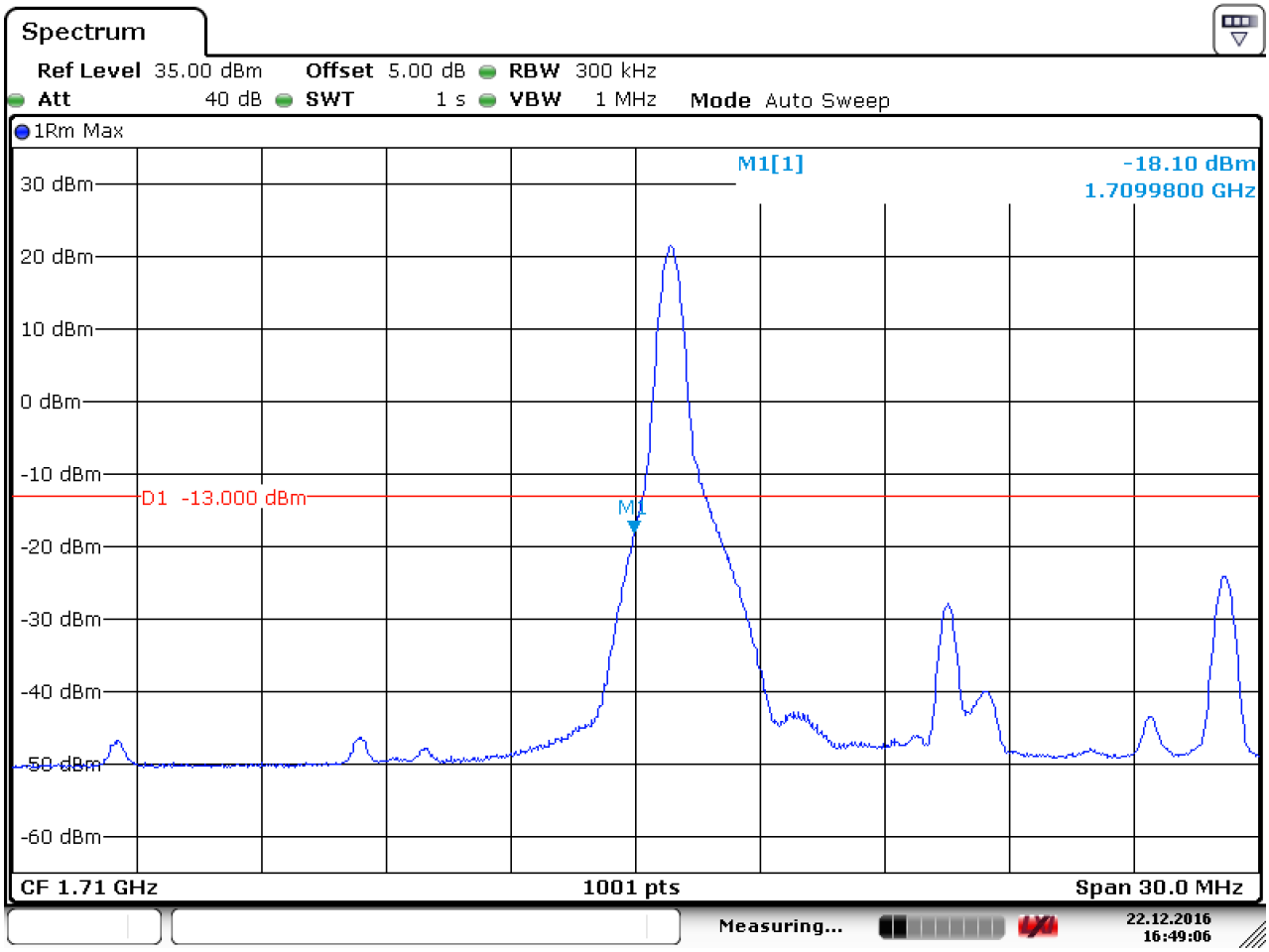


Date: 22.DEC.2016 16:52:31

5.1.1.10 Test Mode = LTE/TM2 15MHz

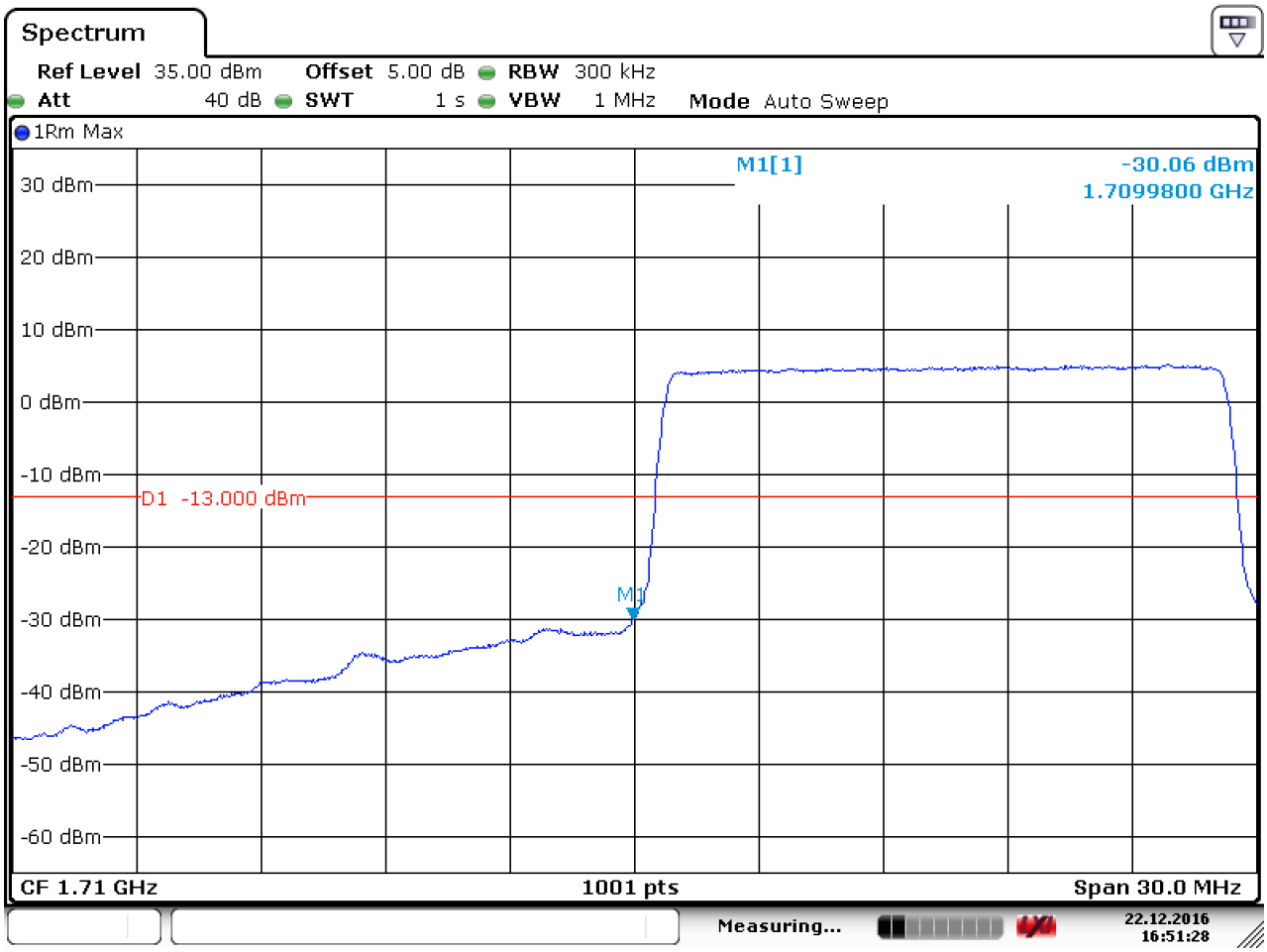
5.1.1.10.1 Test Channel = LCH

5.1.1.10.1.1 Test RB=1RB



Date: 22.DEC.2016 16:49:06

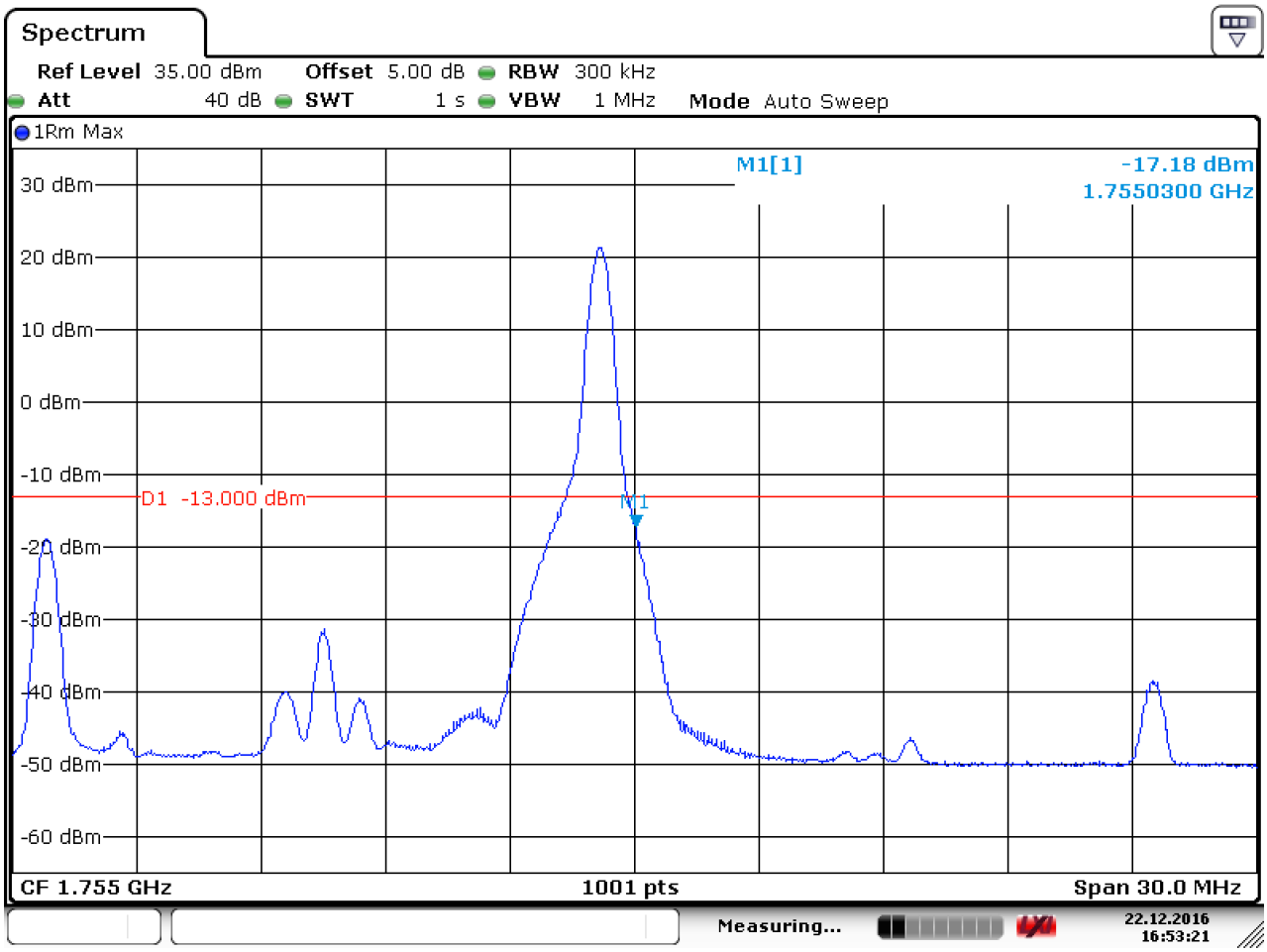
5.1.1.10.1.2 Test RB=75RB



Date: 22.DEC.2016 16:51:27

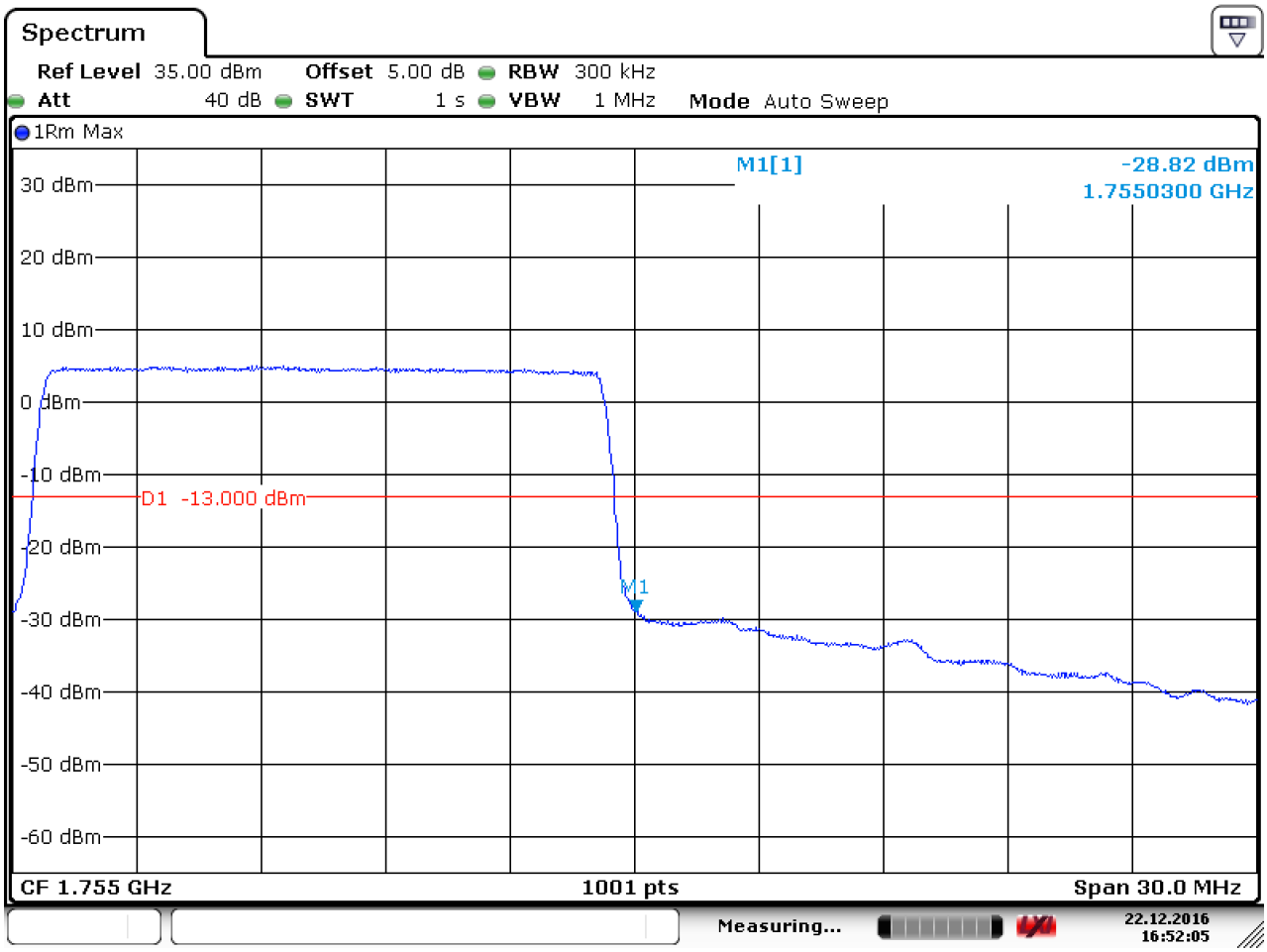
5.1.1.10.2 Test Channel = HCH

5.1.1.10.2.1 Test RB=1RB



Date: 22.DEC.2016 16:53:22

5.1.1.10.2.2 Test RB=75RB

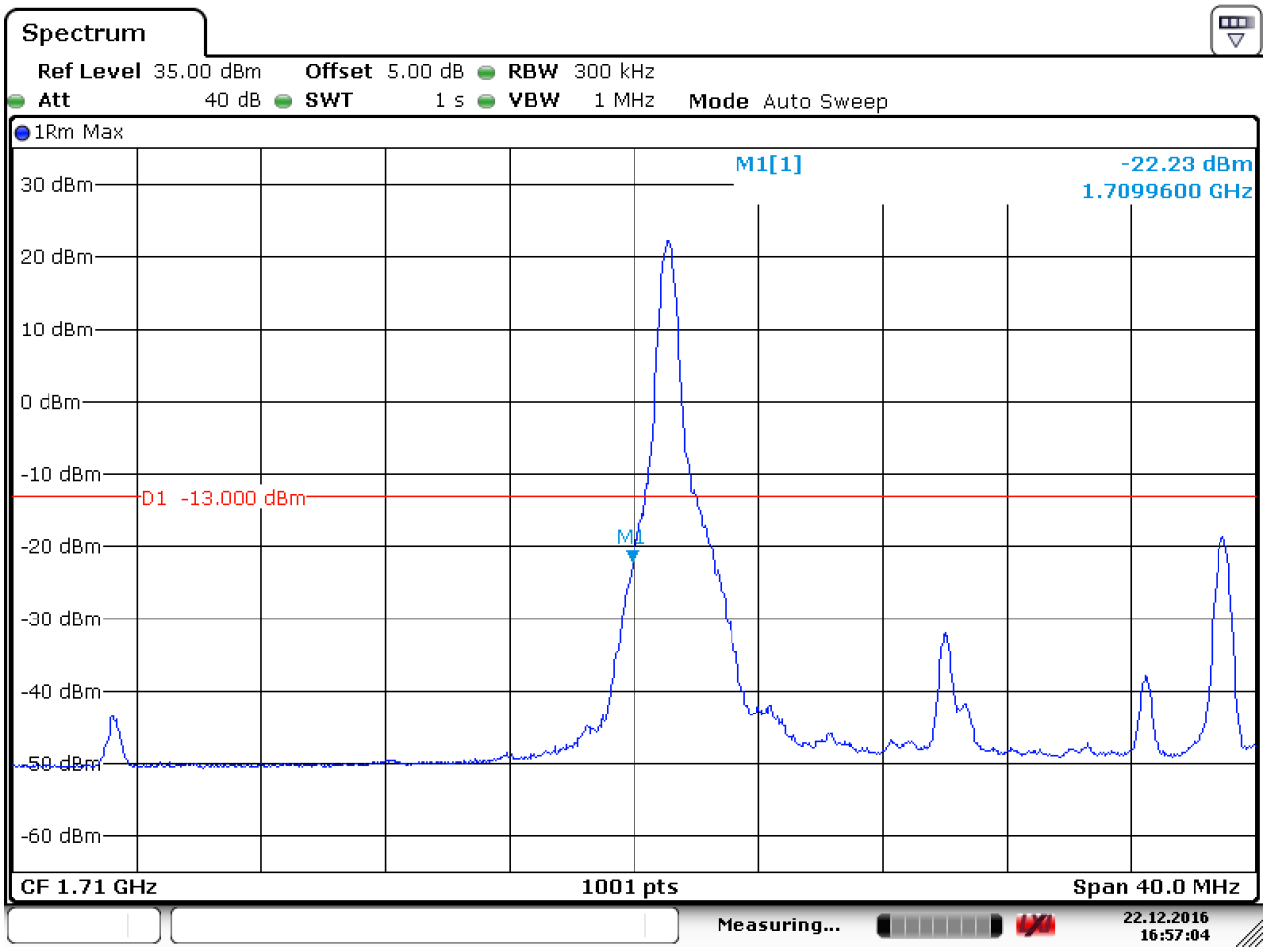


Date: 22.DEC.2016 16:52:05

5.1.1.11 Test Mode = LTE/TM1 20MHz

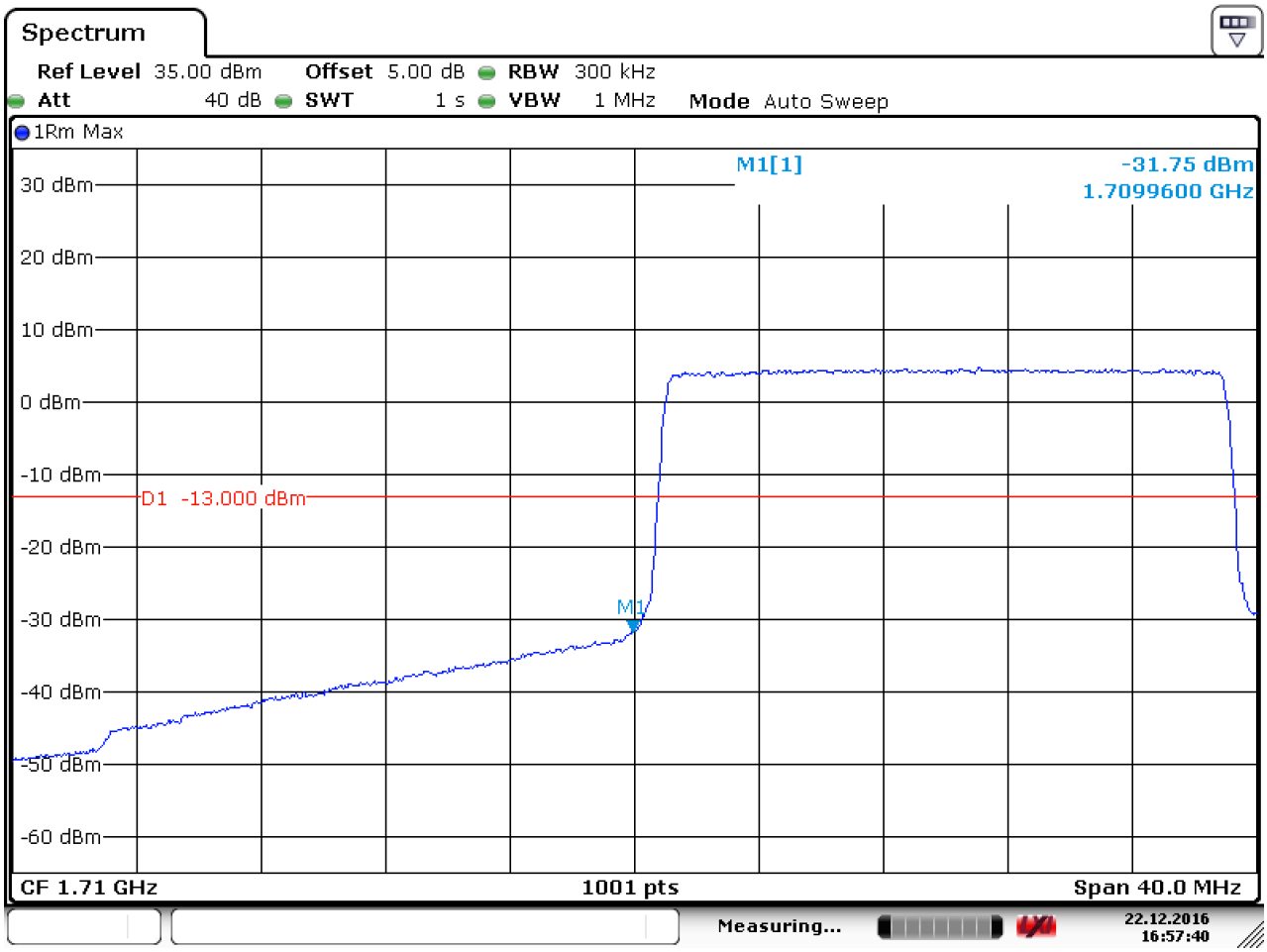
5.1.1.11.1 Test Channel = LCH

5.1.1.11.1.1 Test RB=1RB



Date: 22.DEC.2016 16:57:05

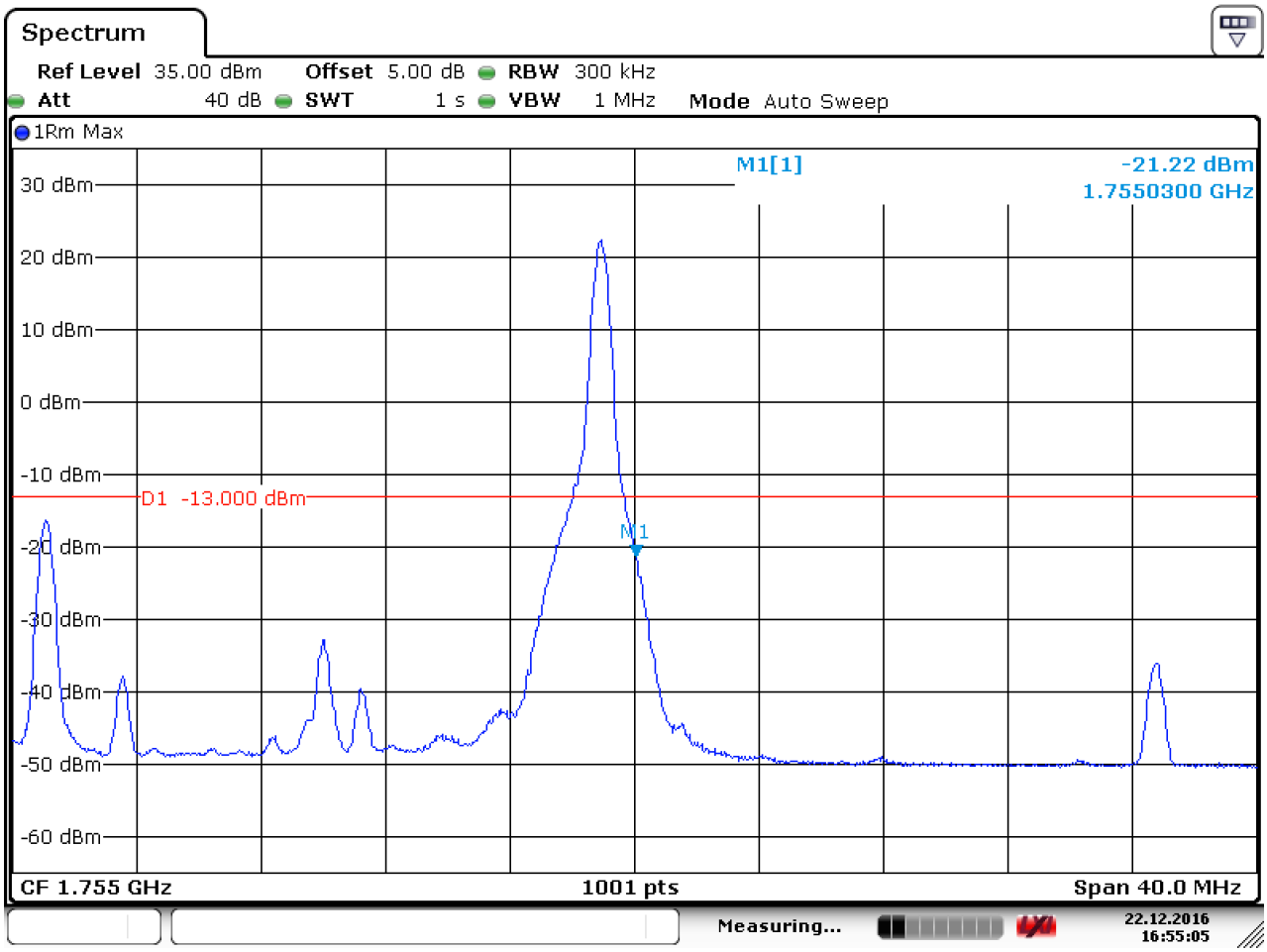
5.1.1.11.1.2 Test RB=100RB



Date: 22.DEC.2016 16:57:40

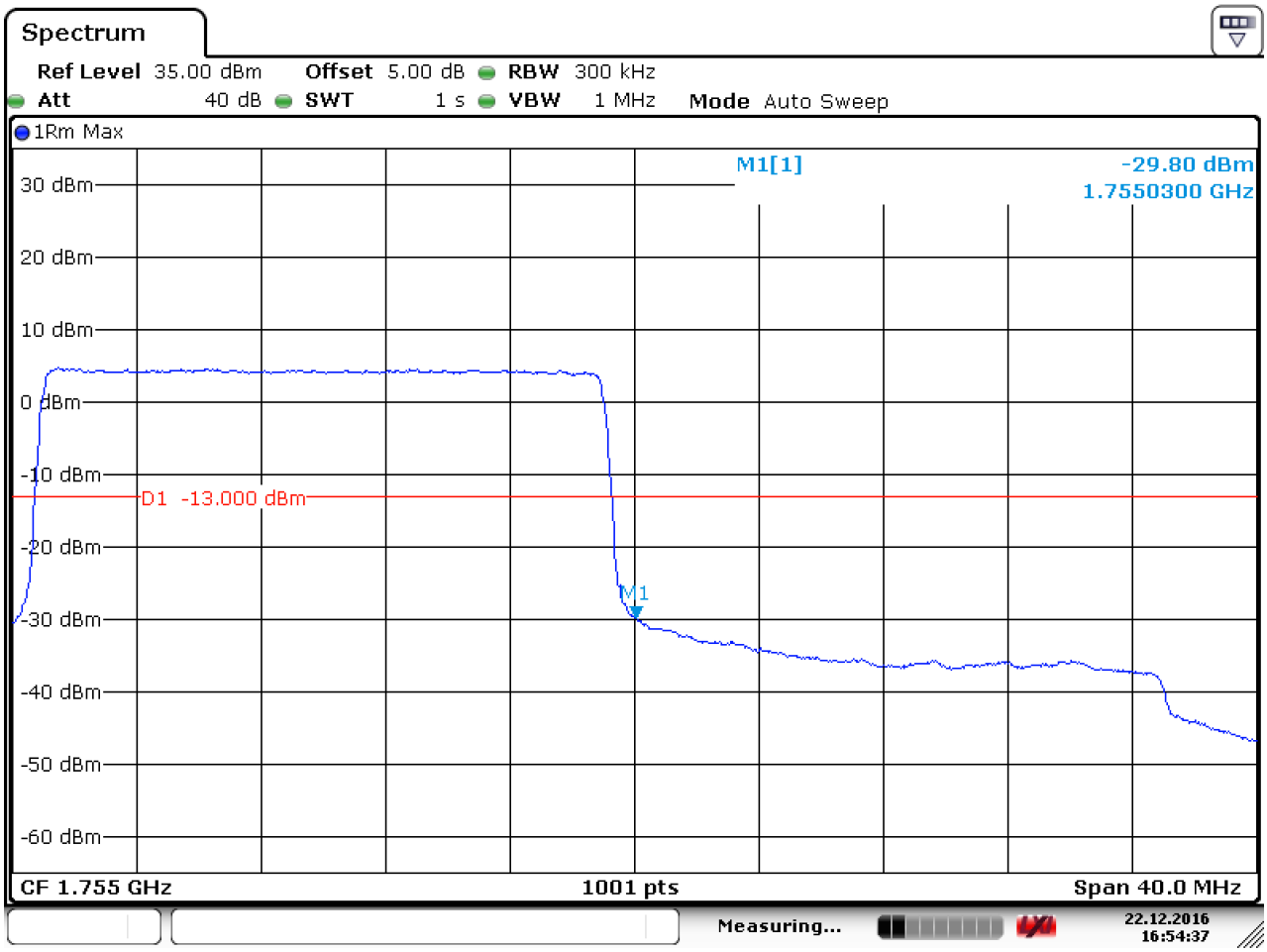
5.1.1.11.2 Test Channel = HCH

5.1.1.11.2.1 Test RB=1RB



Date: 22.DEC.2016 16:55:05

5.1.1.11.2.2 Test RB=100RB

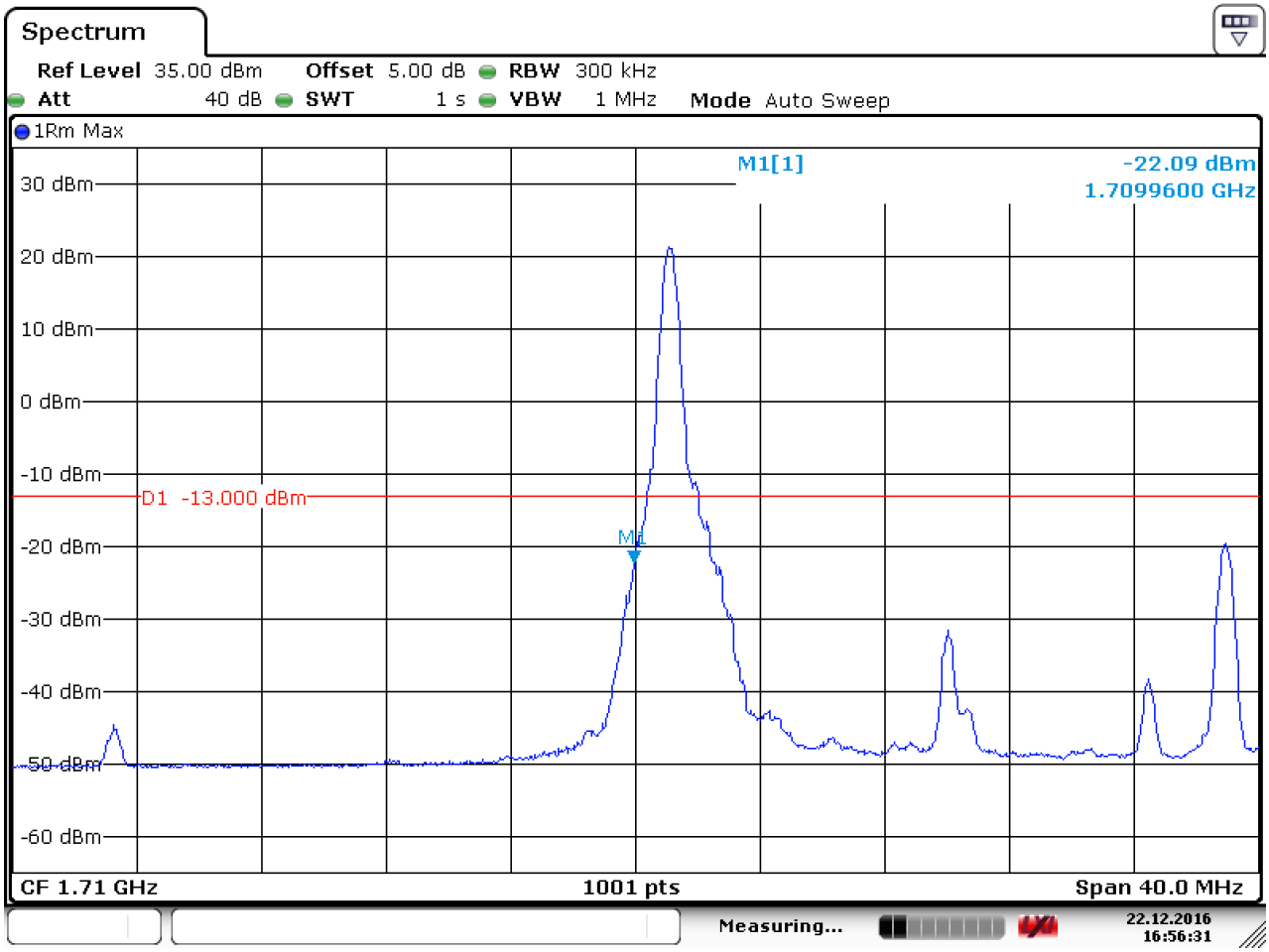


Date: 22.DEC.2016 16:54:38

5.1.1.12 Test Mode = LTE/TM2 20MHz

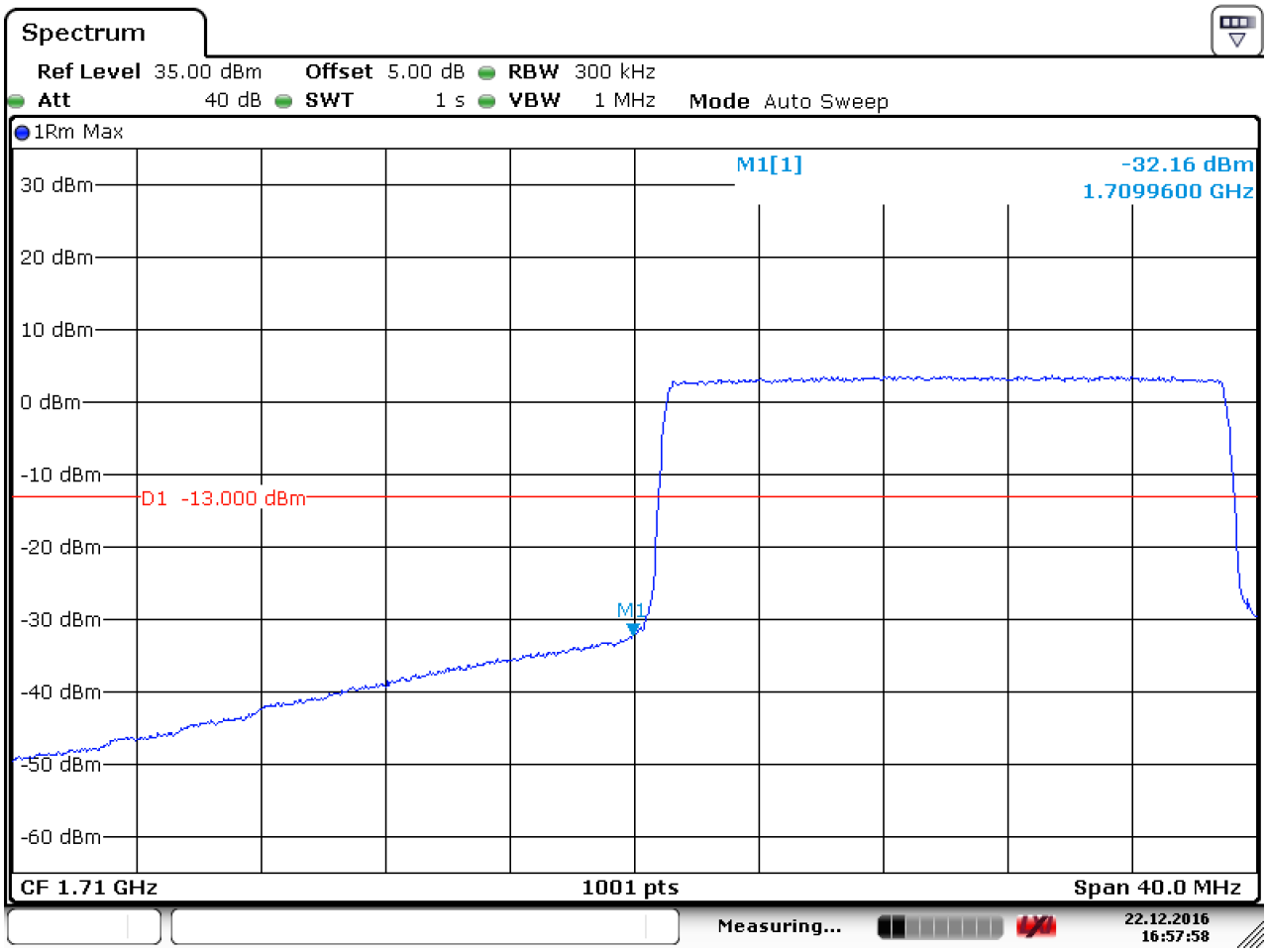
5.1.1.12.1 Test Channel = LCH

5.1.1.12.1.1 Test RB=1RB



Date: 22.DEC.2016 16:56:31

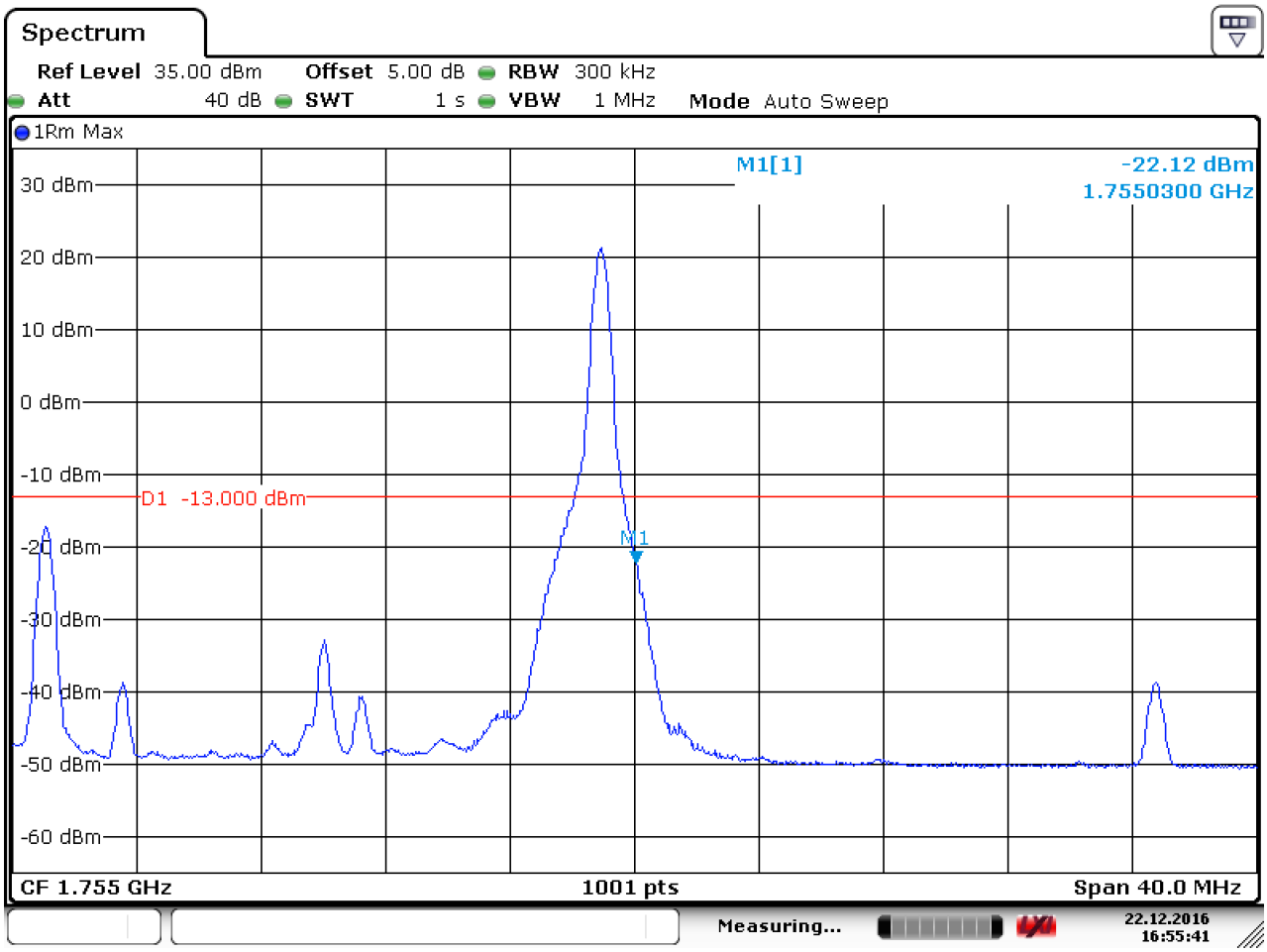
5.1.1.12.1.2 Test RB=100RB



Date: 22.DEC.2016 16:57:58

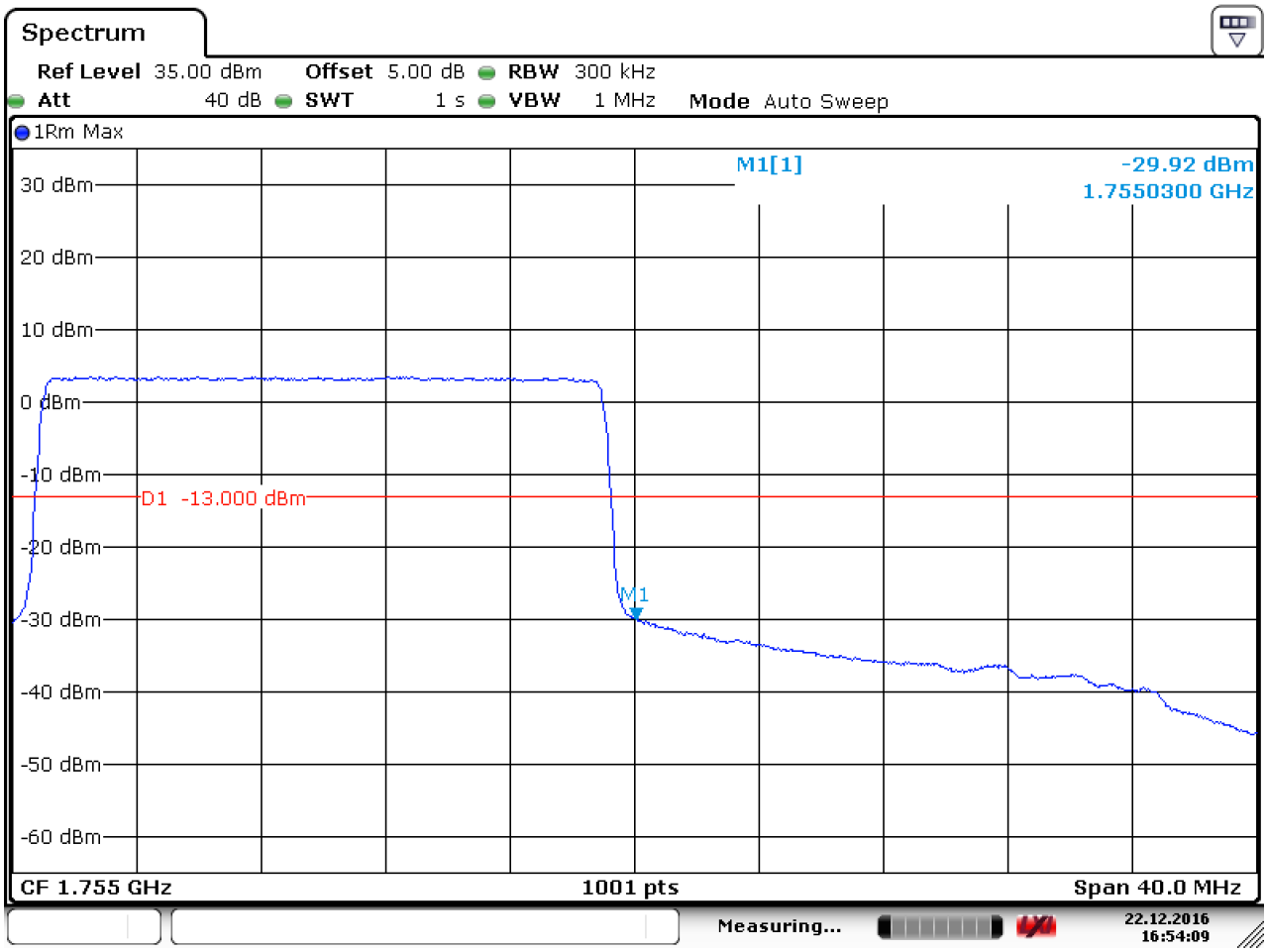
5.1.1.12.2 Test Channel = HCH

5.1.1.12.2.1 Test RB=1RB



Date: 22.DEC.2016 16:55:41

5.1.1.12.2.2 Test RB=100RB



Date: 22.DEC.2016 16:54:09

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 < 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.

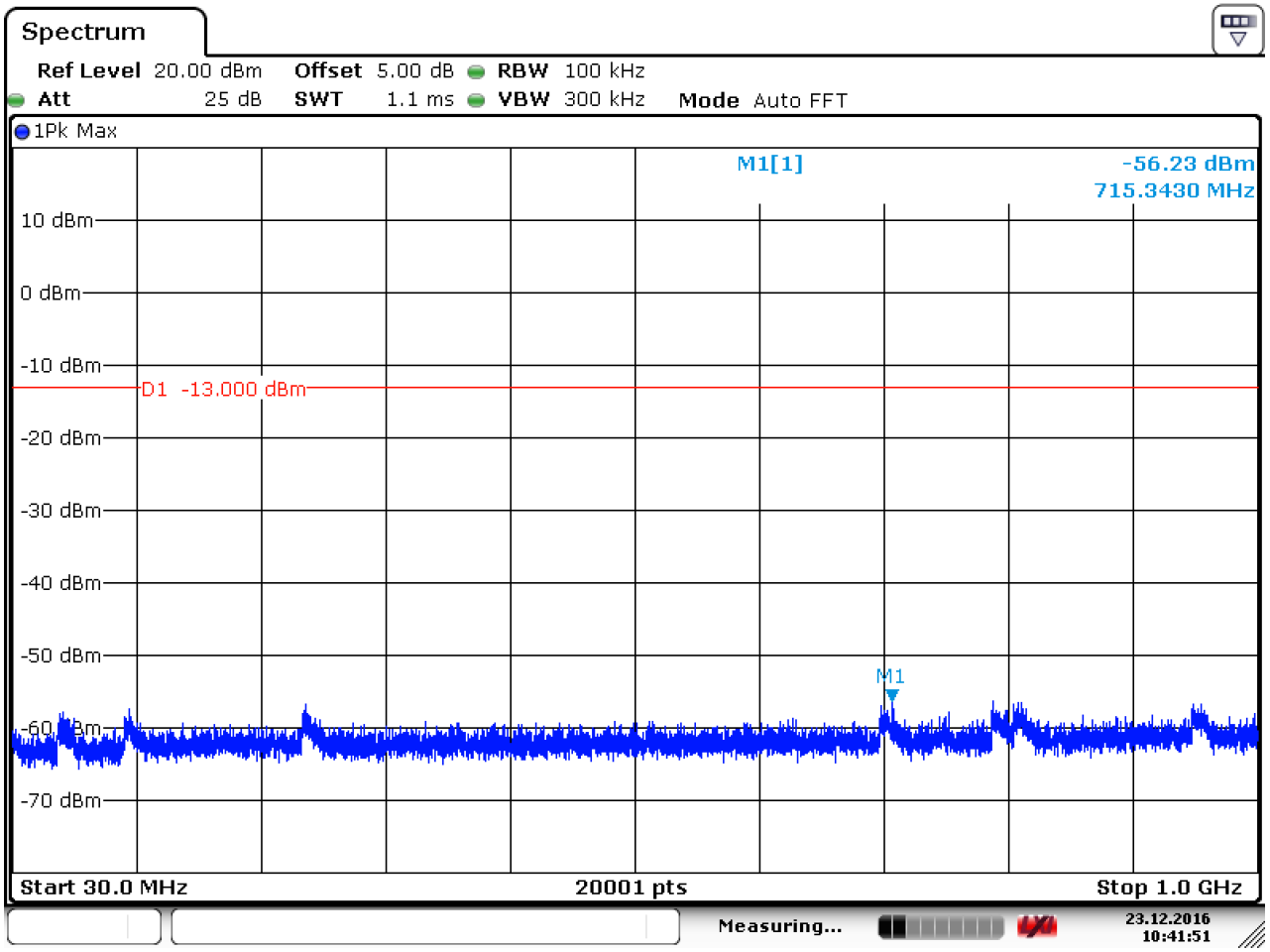
Part I - Test Plots

6.1 For LTE

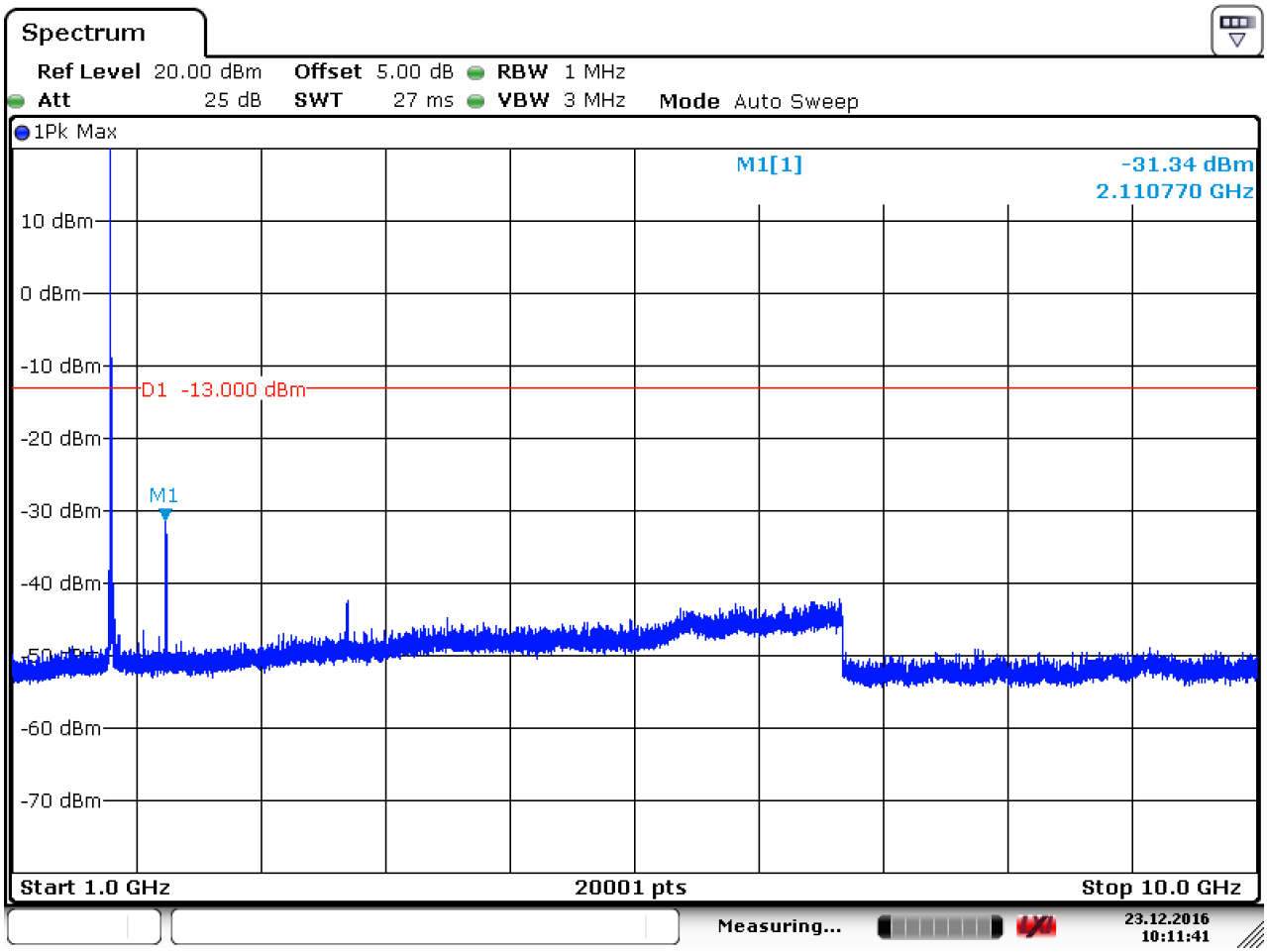
6.1.1 Test Band = LTE band4

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

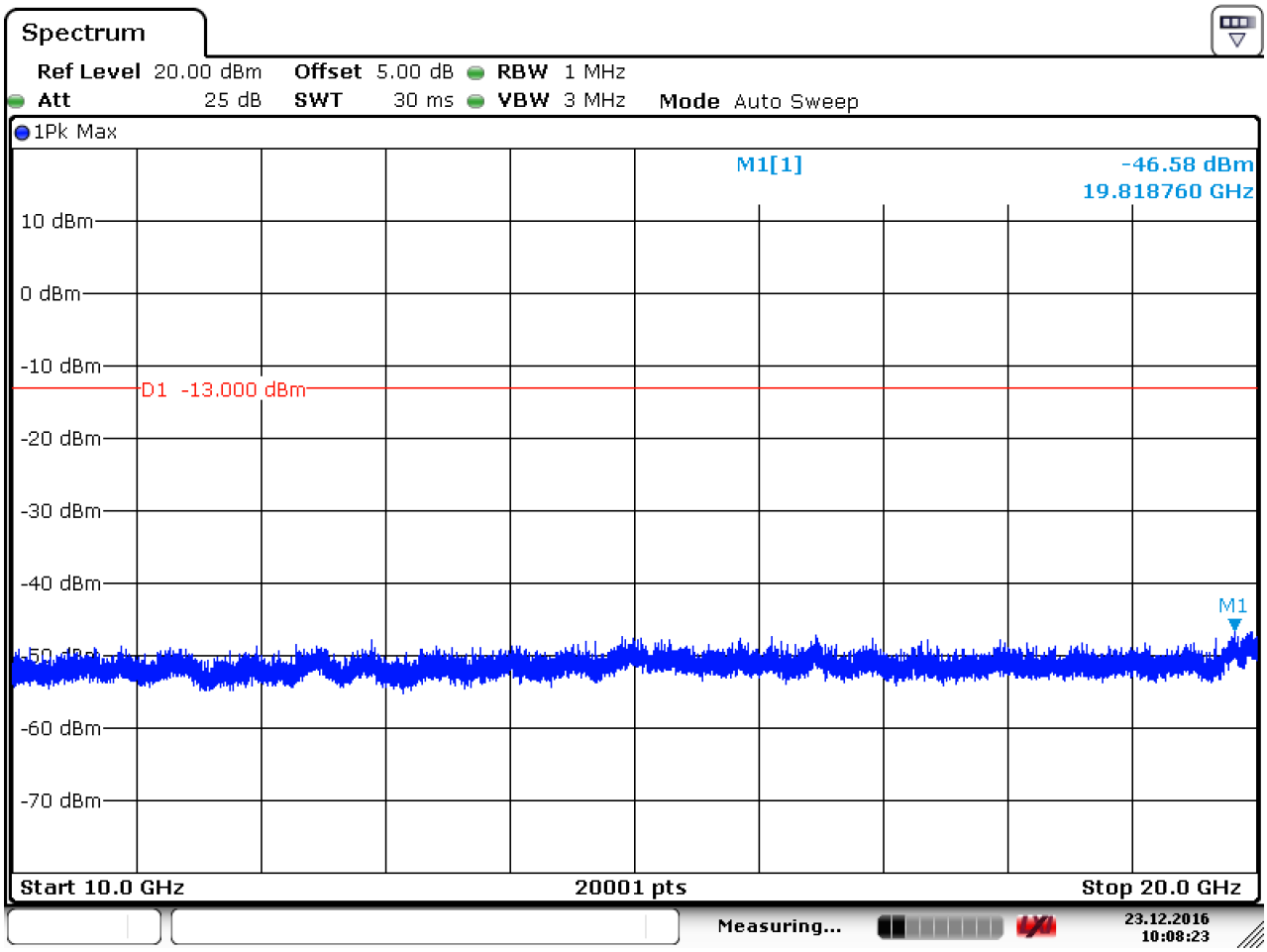
6.1.1.1.1 Test Channel = LCH



Date: 23.DEC.2016 10:41:51

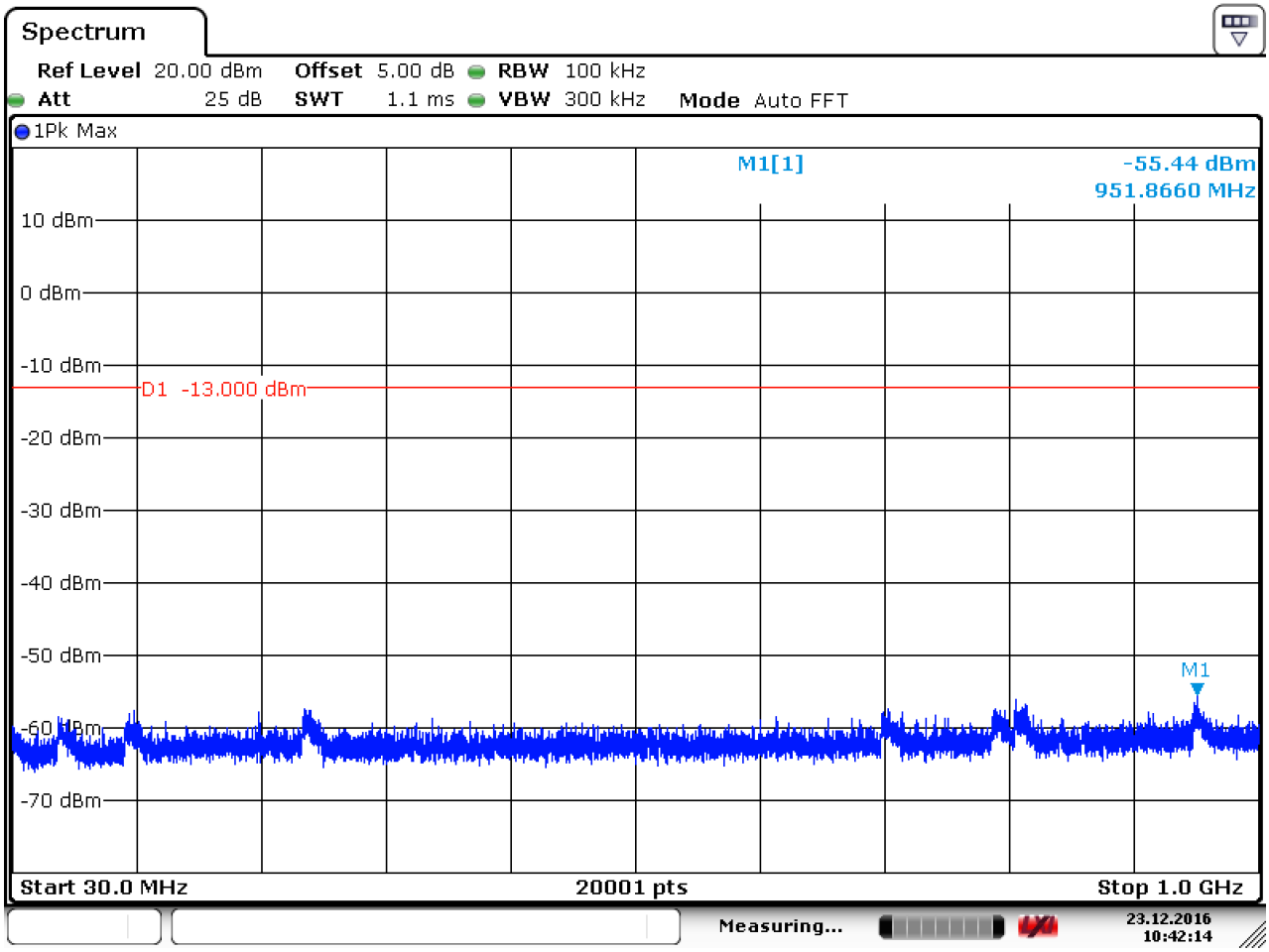


Date: 23.DEC.2016 10:11:41

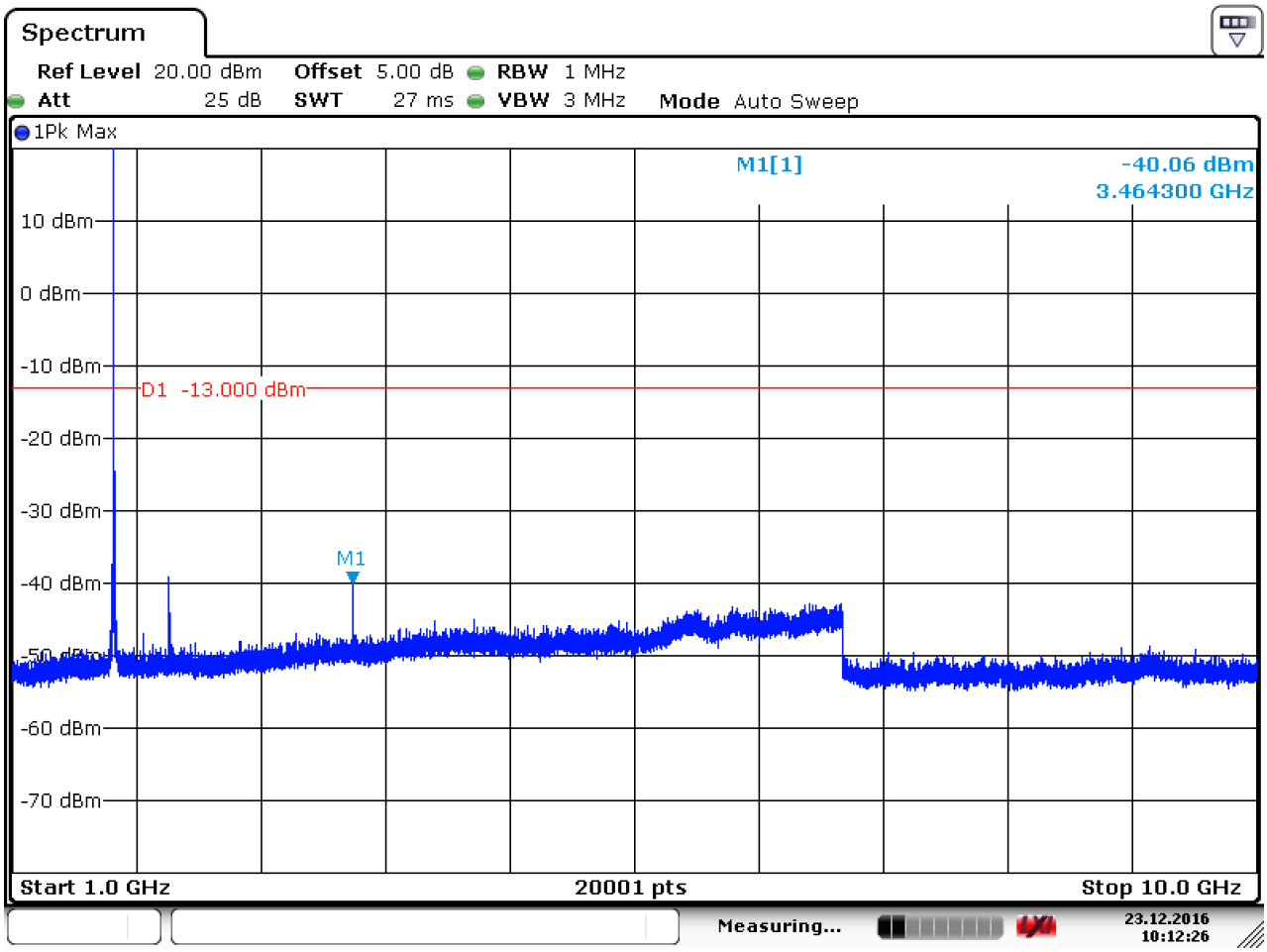


Date: 23.DEC.2016 10:08:24

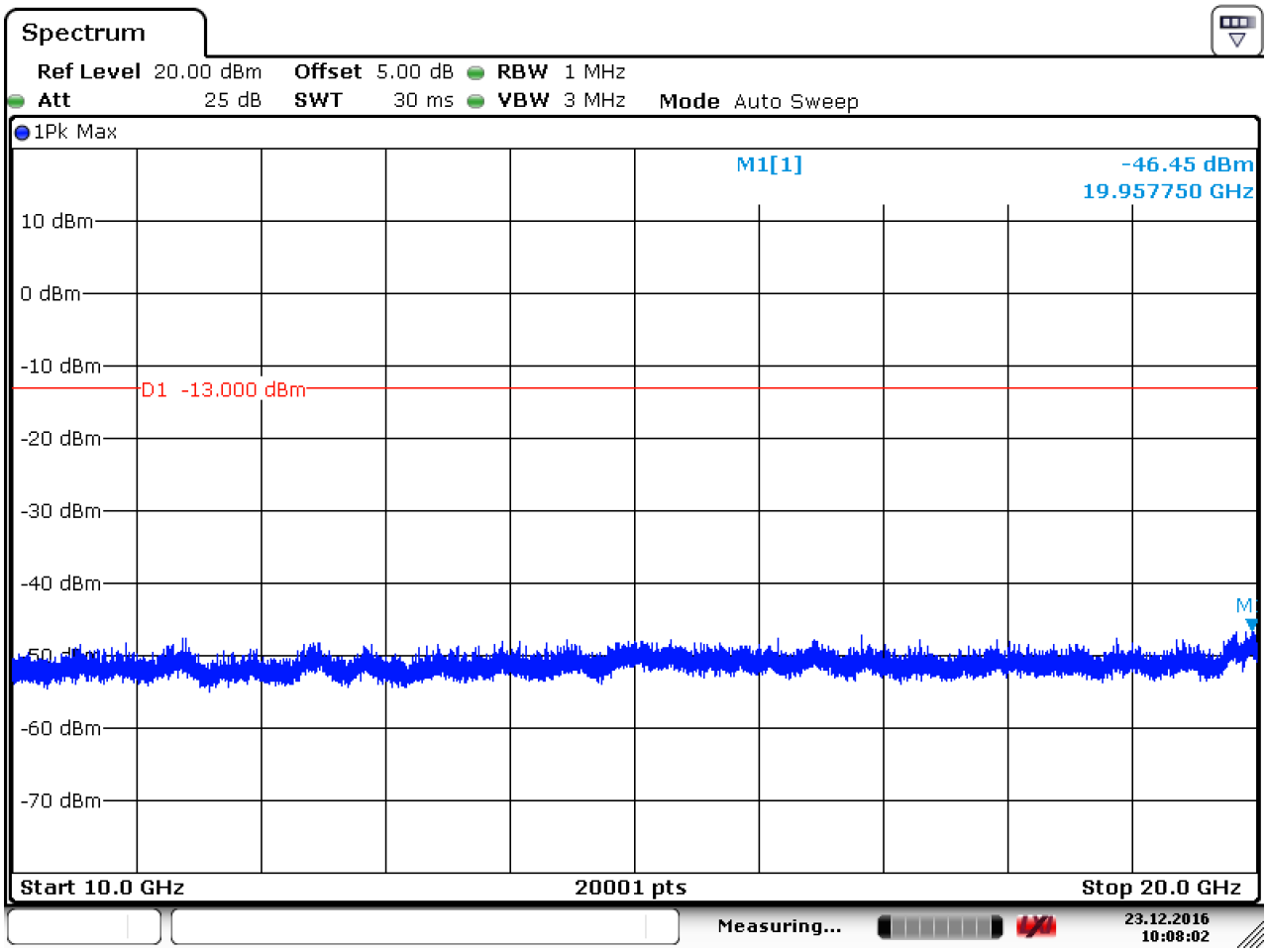
6.1.1.1.2 Test Channel = MCH



Date: 23.DEC.2016 10:42:14

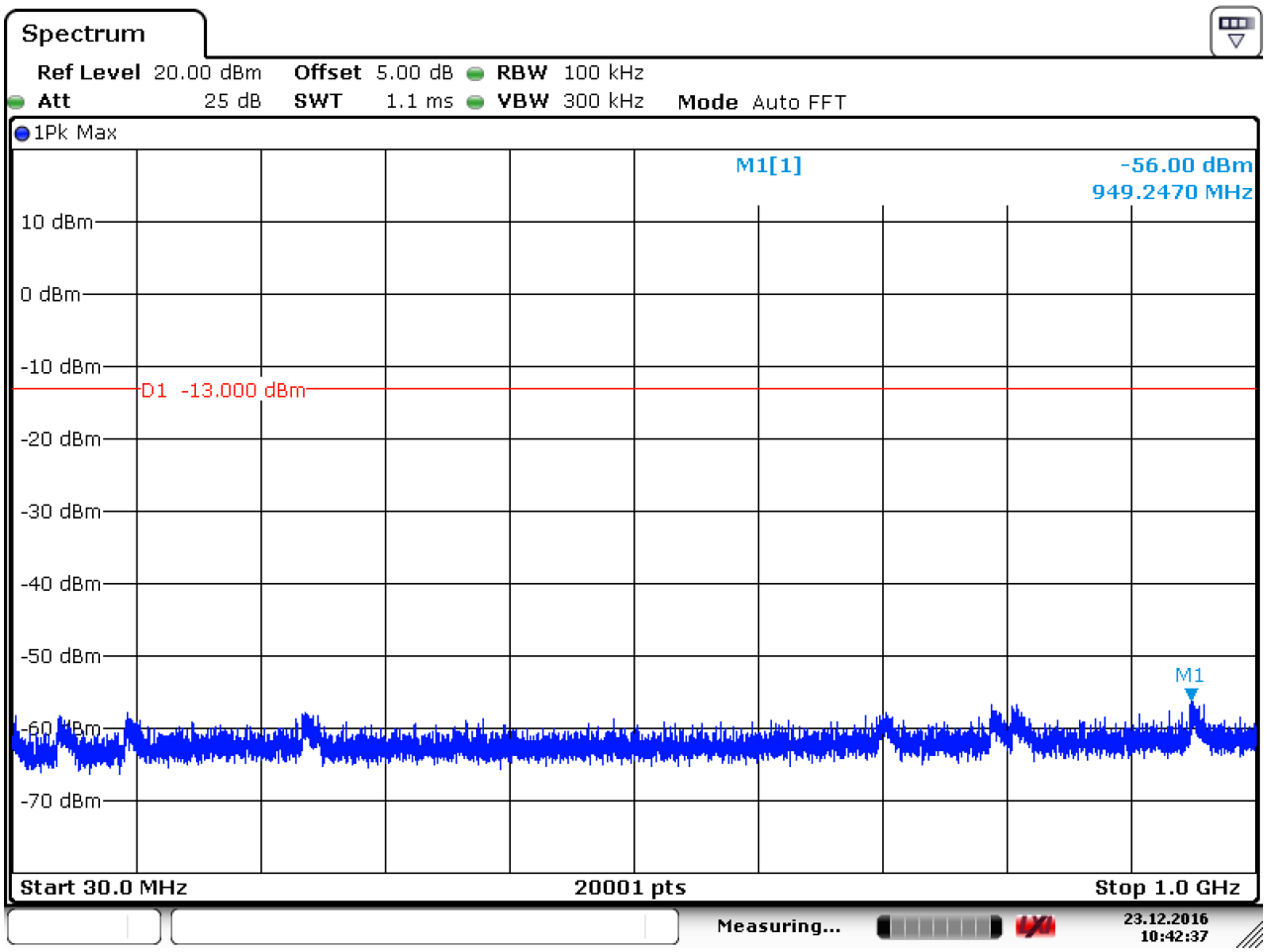


Date: 23.DEC.2016 10:12:27

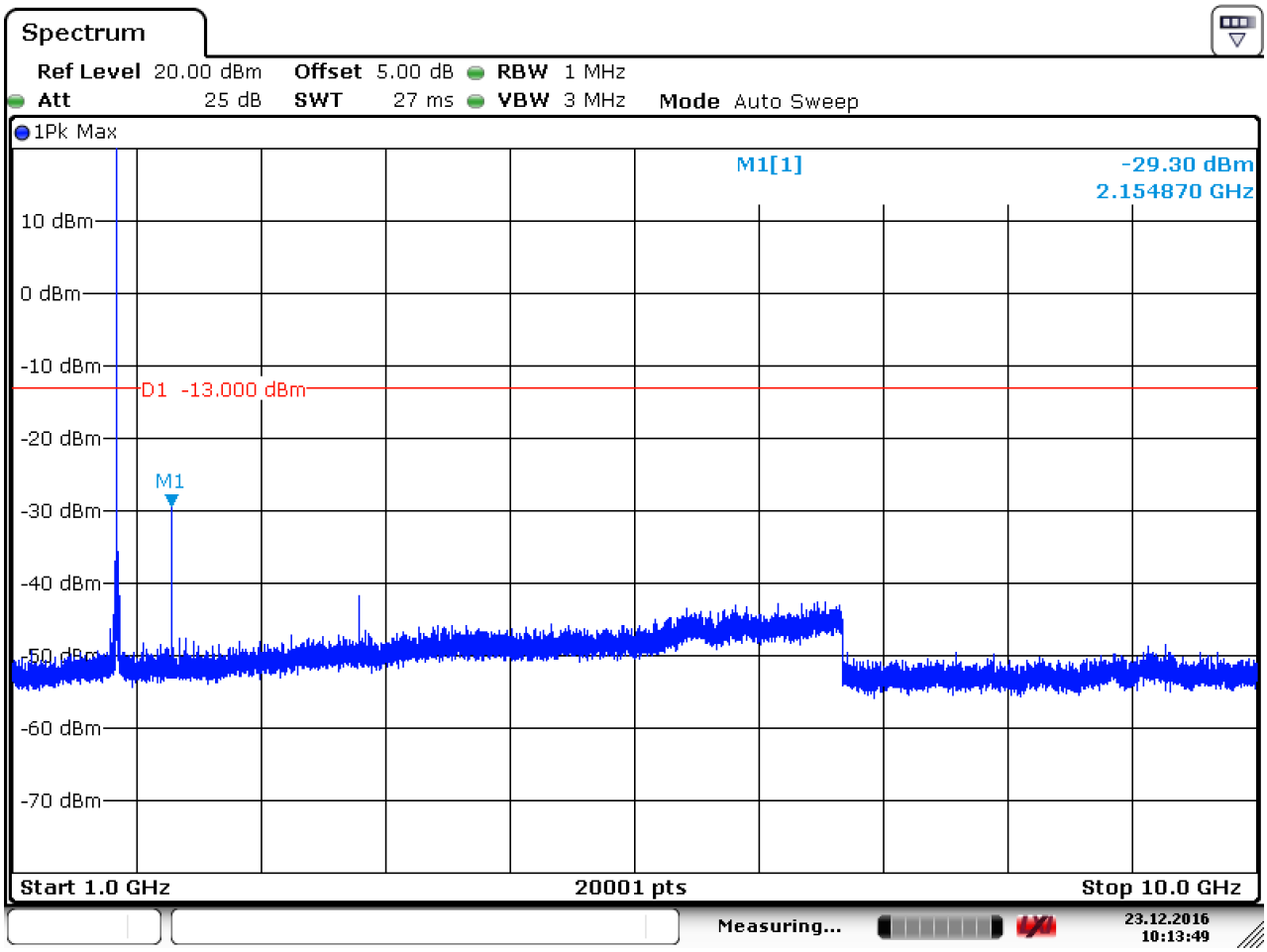


Date: 23.DEC.2016 10:08:03

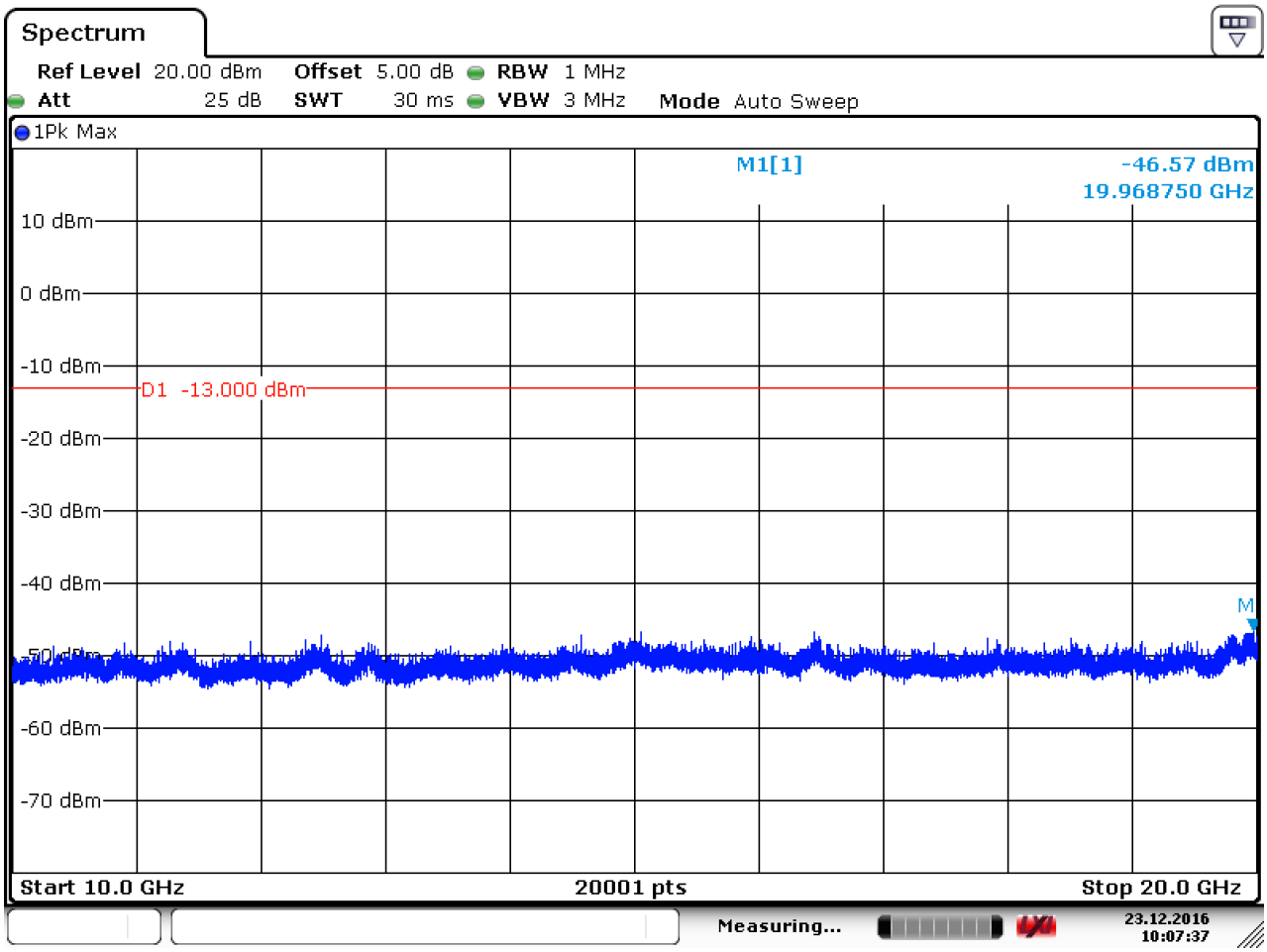
6.1.1.1.3 Test Channel = HCH



Date: 23.DEC.2016 10:42:37



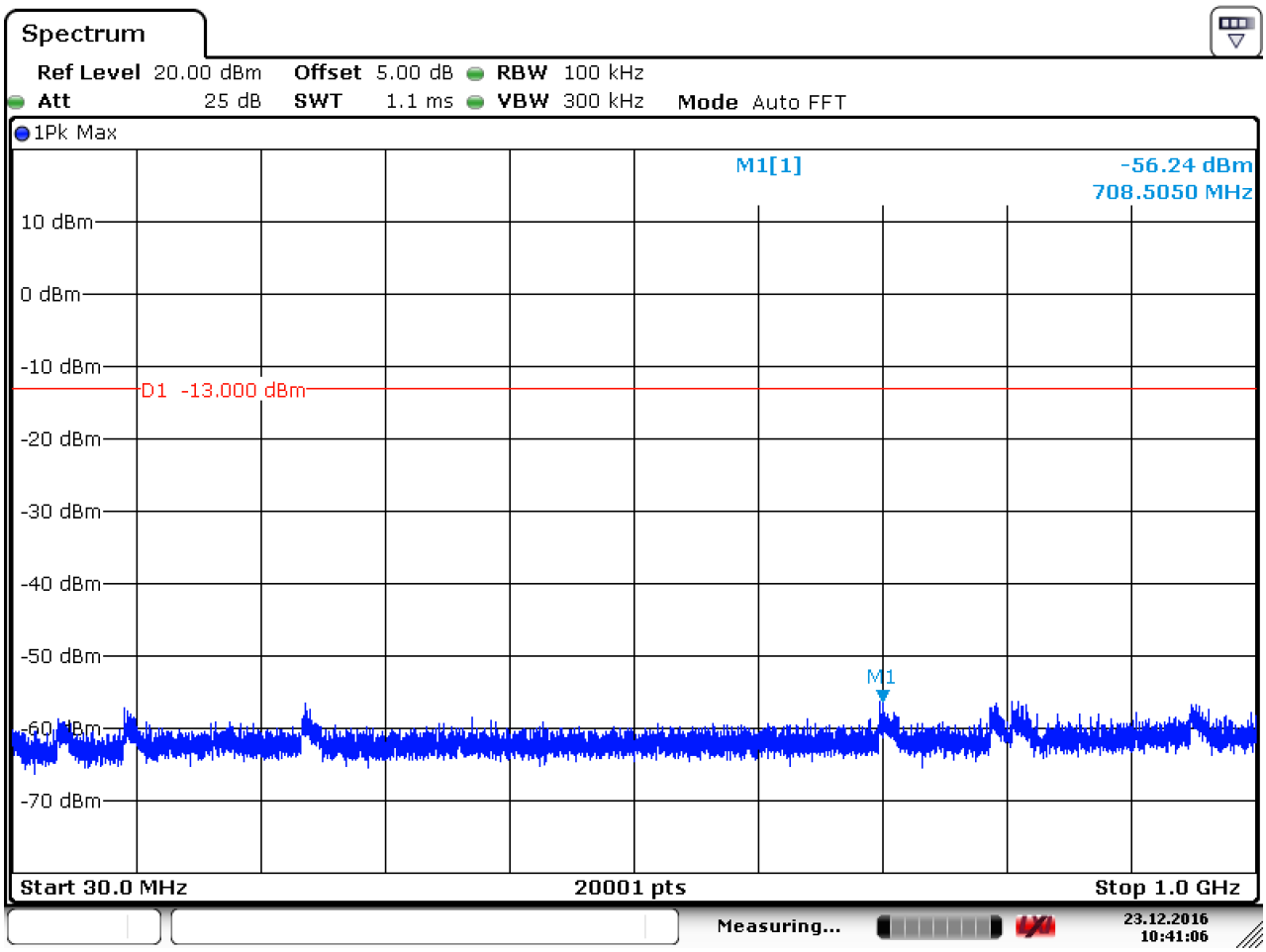
Date: 23.DEC.2016 10:13:50



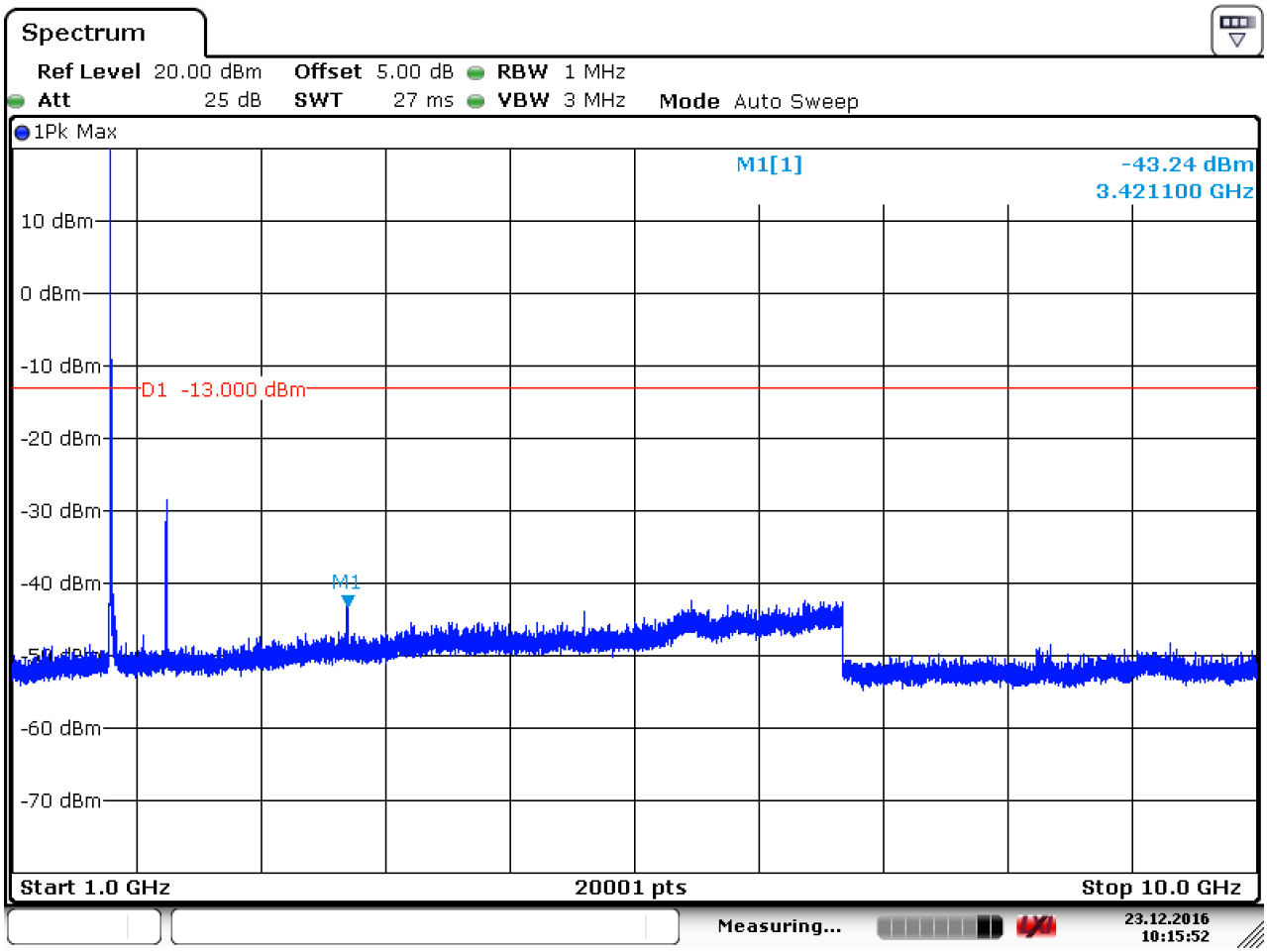
Date: 23.DEC.2016 10:07:38

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

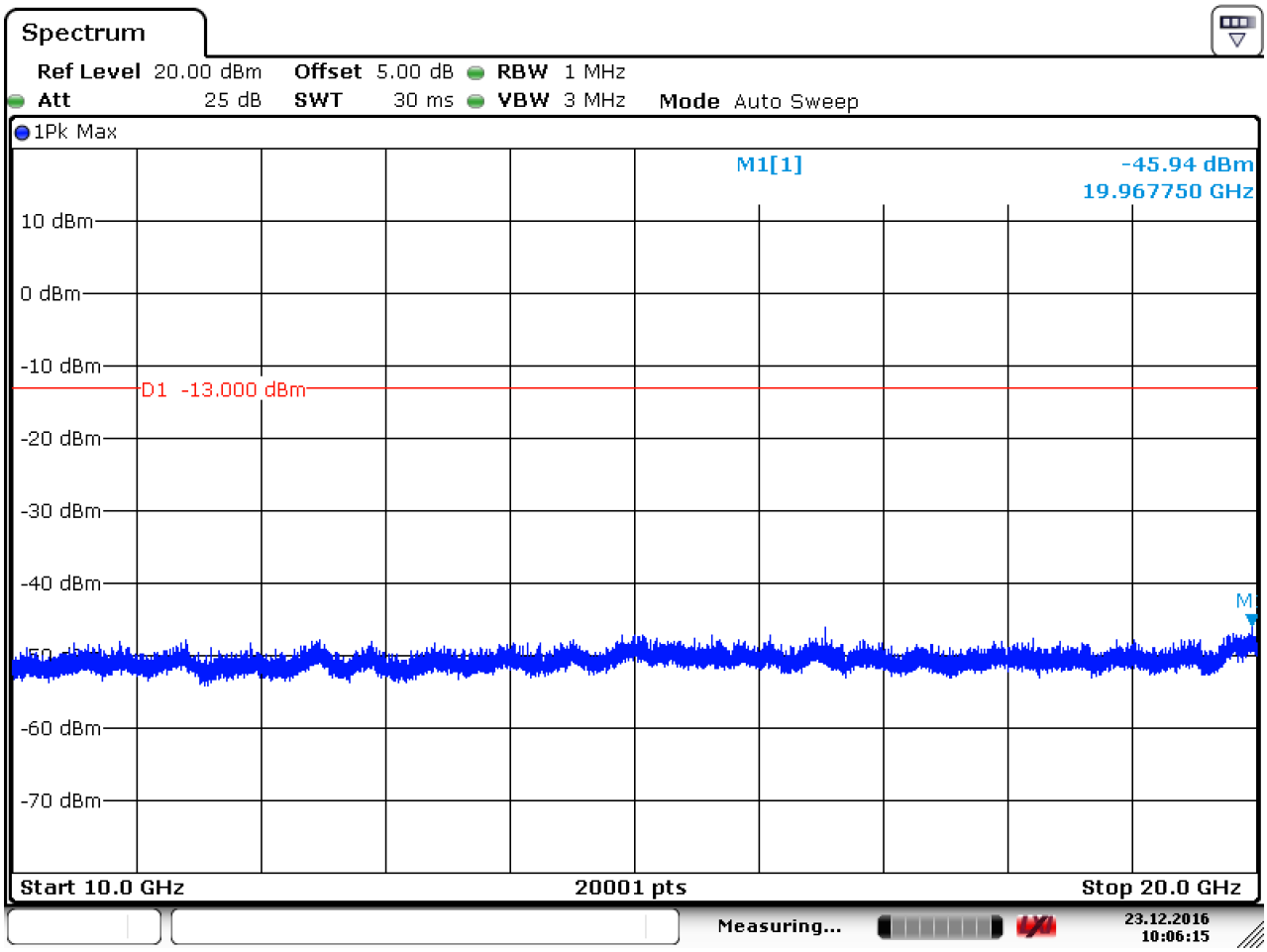
6.1.1.2.1 Test Channel = LCH



Date: 23.DEC.2016 10:41:06

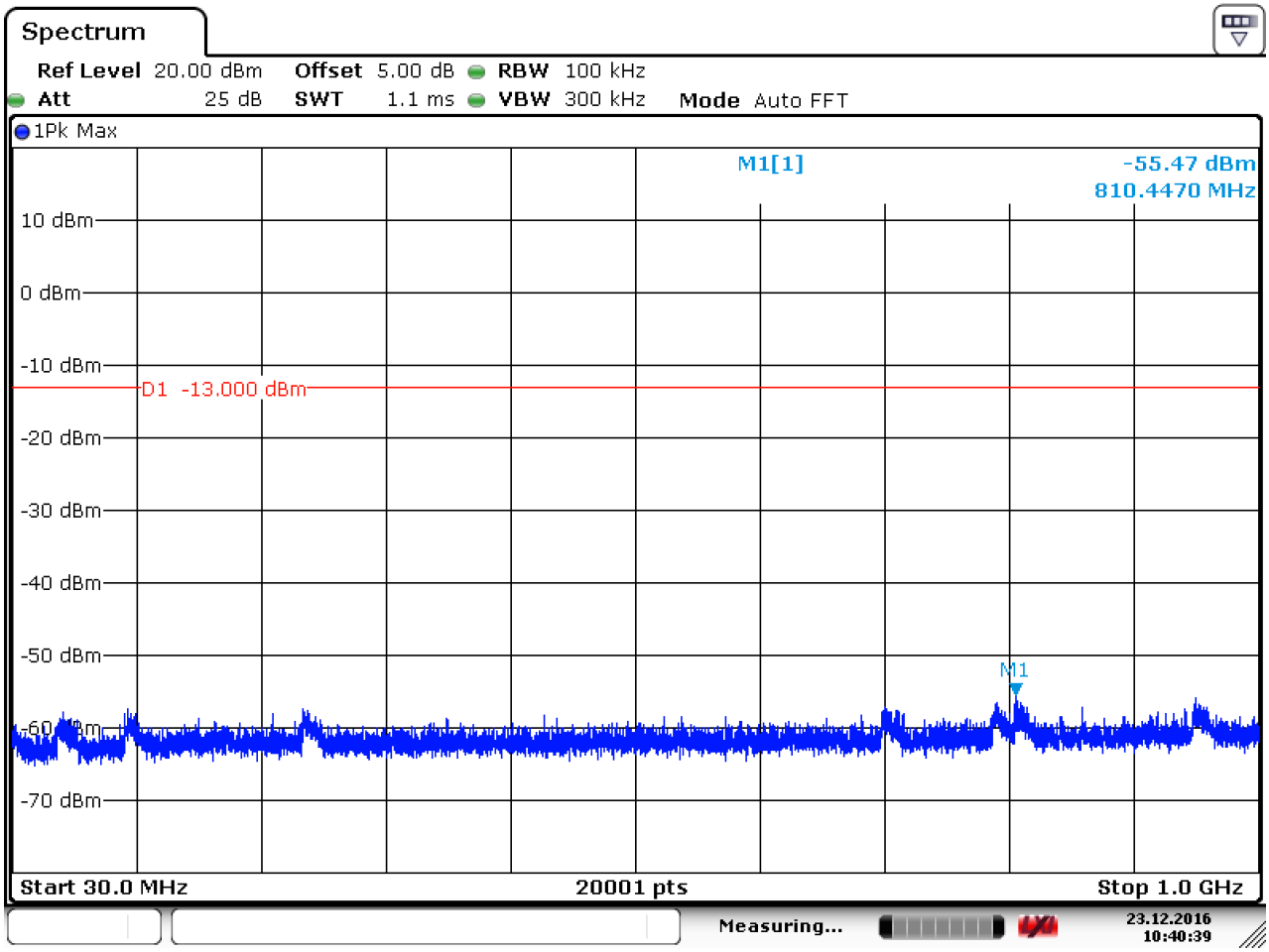


Date: 23.DEC.2016 10:15:52

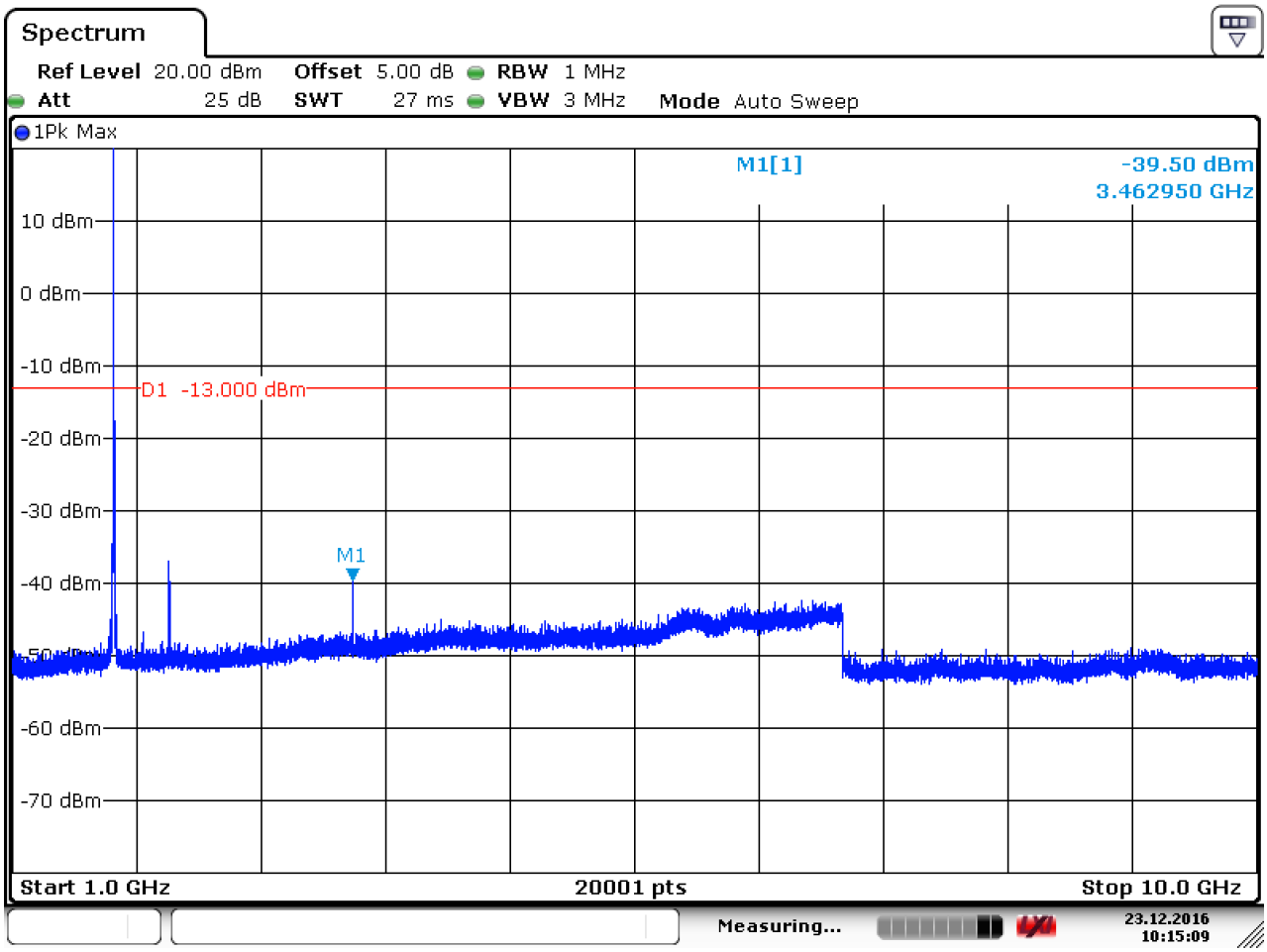


Date: 23.DEC.2016 10:06:15

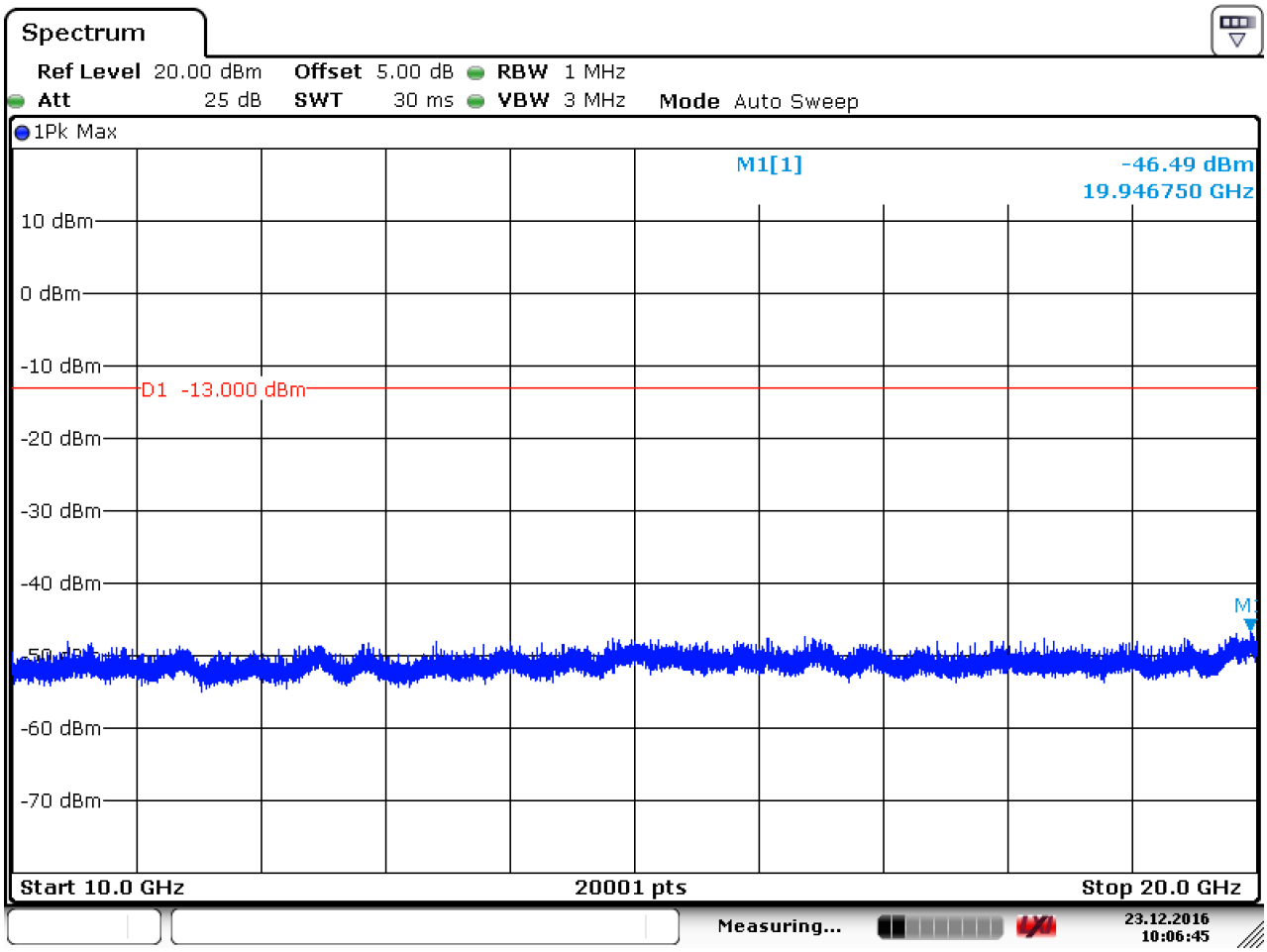
6.1.1.2.2 Test Channel = MCH



Date: 23.DEC.2016 10:40:39

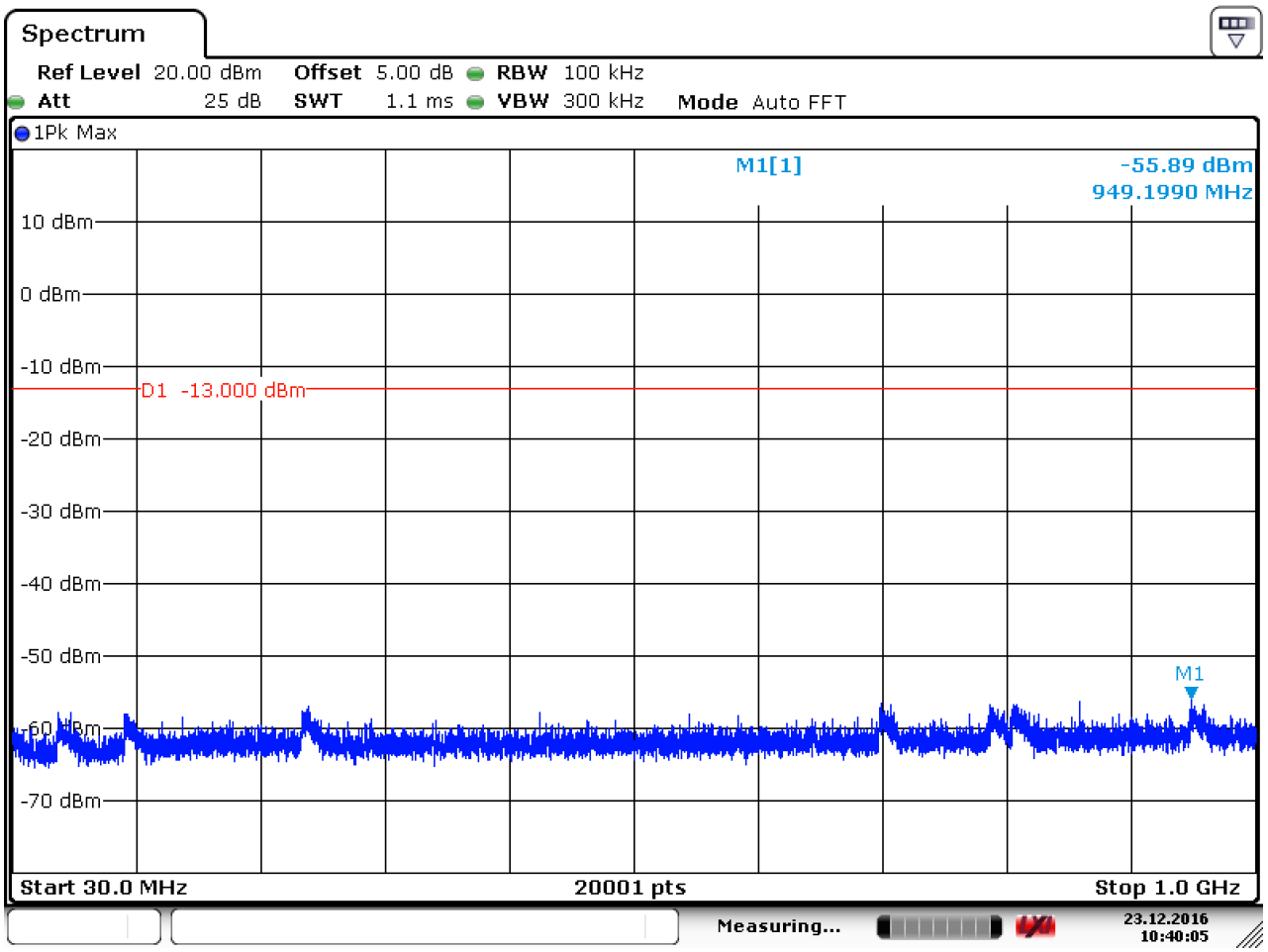


Date: 23.DEC.2016 10:15:10

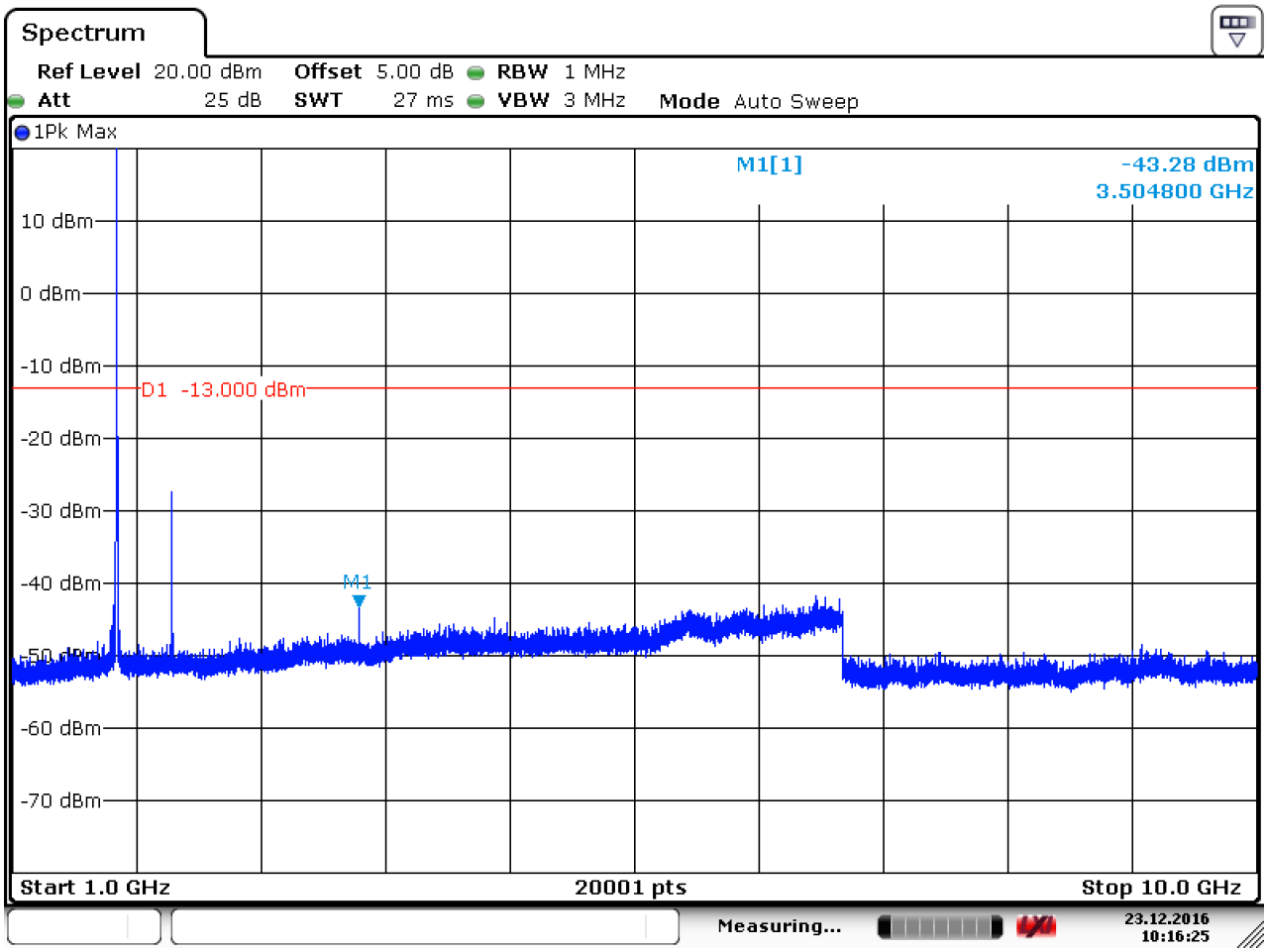


Date: 23.DEC.2016 10:06:46

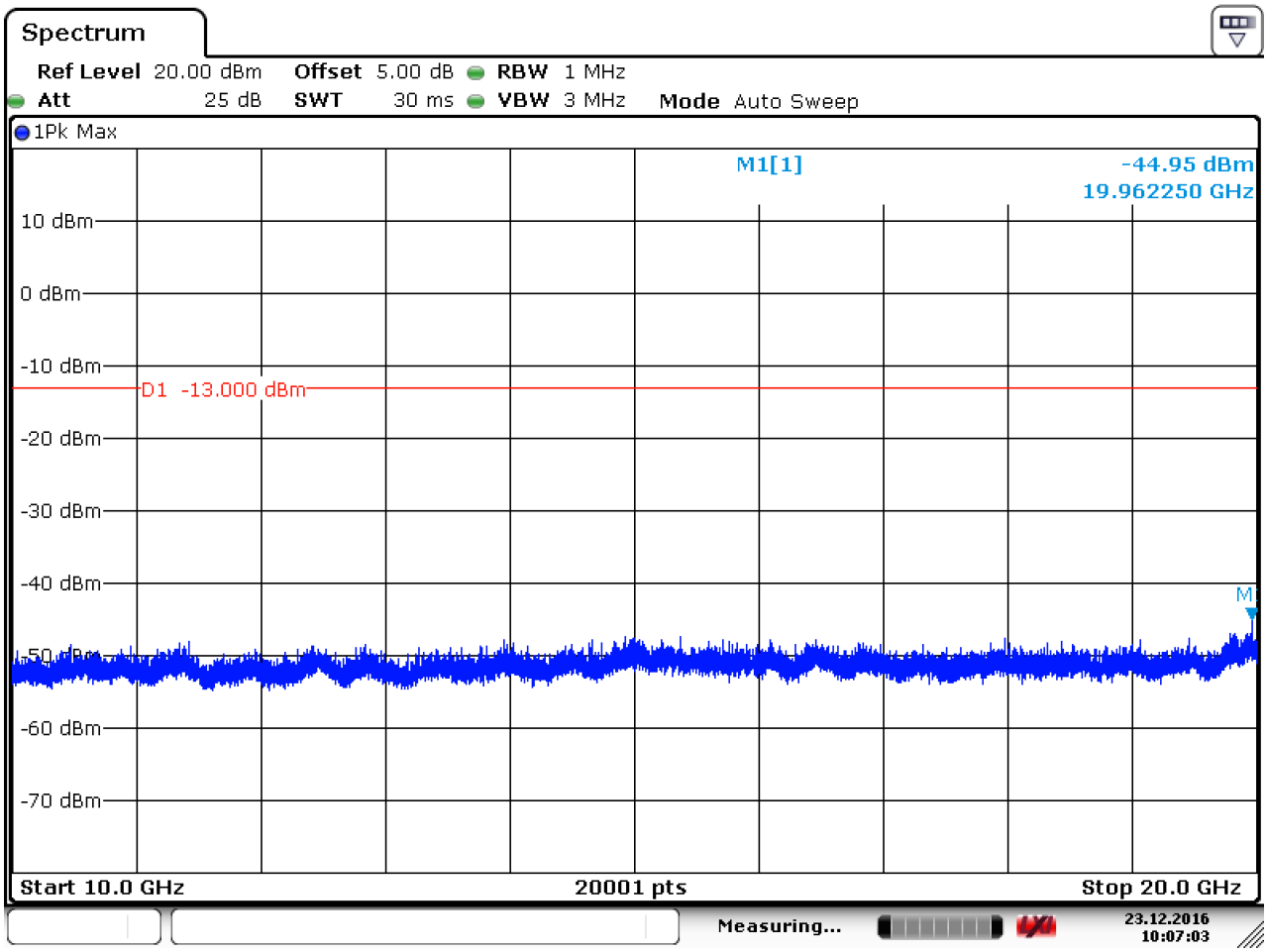
6.1.1.2.3 Test Channel = HCH



Date: 23.DEC.2016 10:40:06



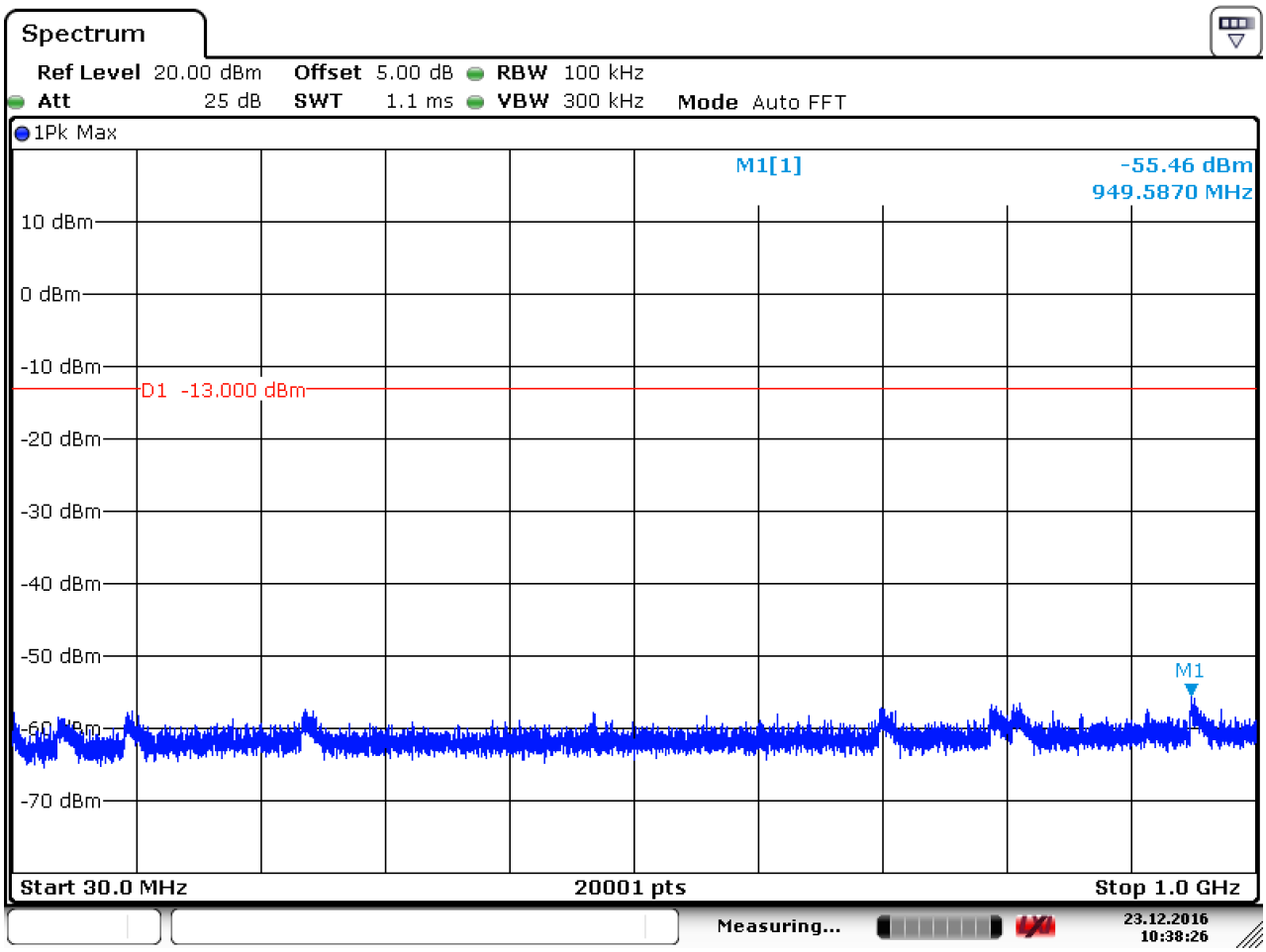
Date: 23.DEC.2016 10:16:25



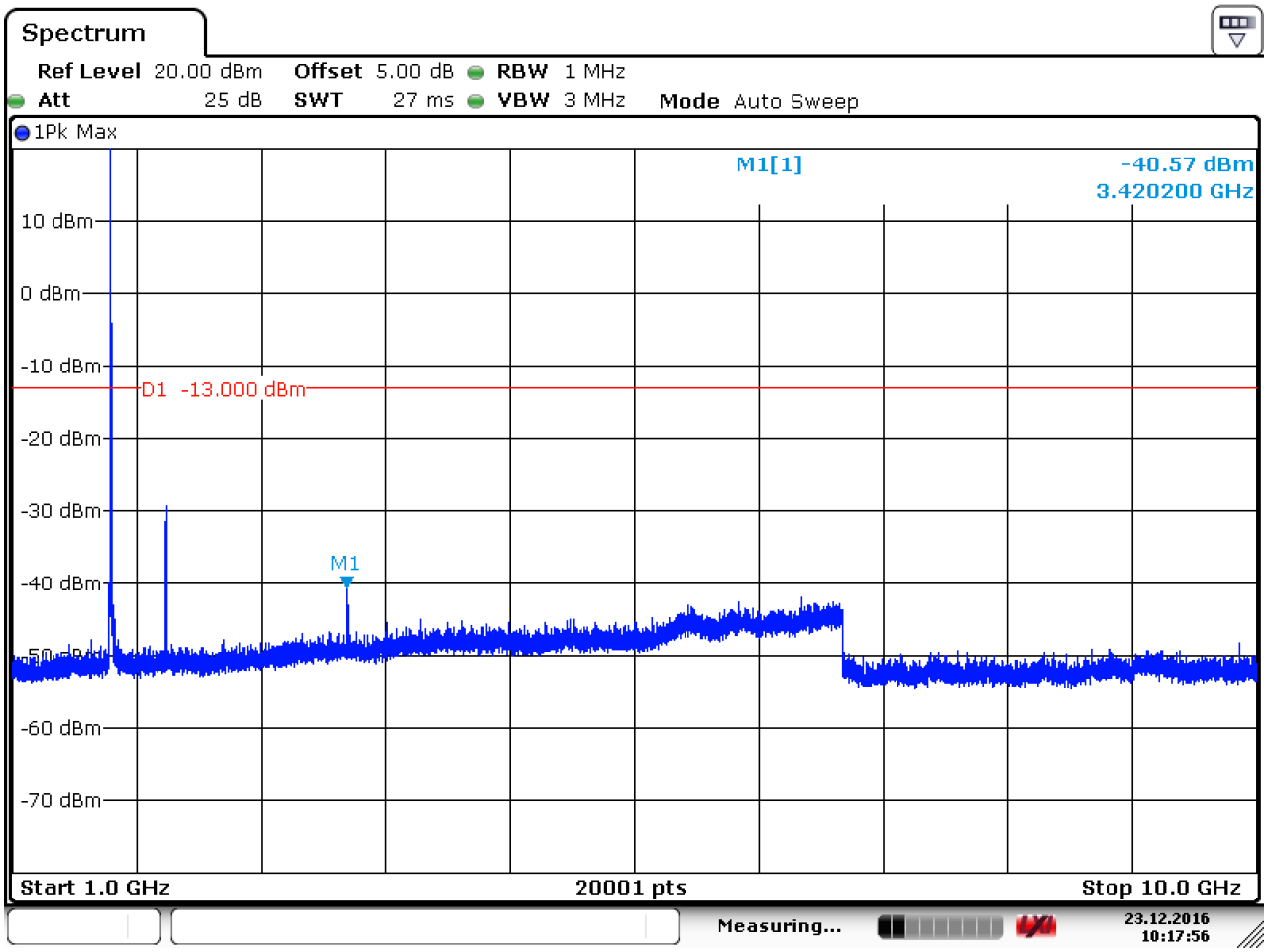
Date: 23.DEC.2016 10:07:04

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

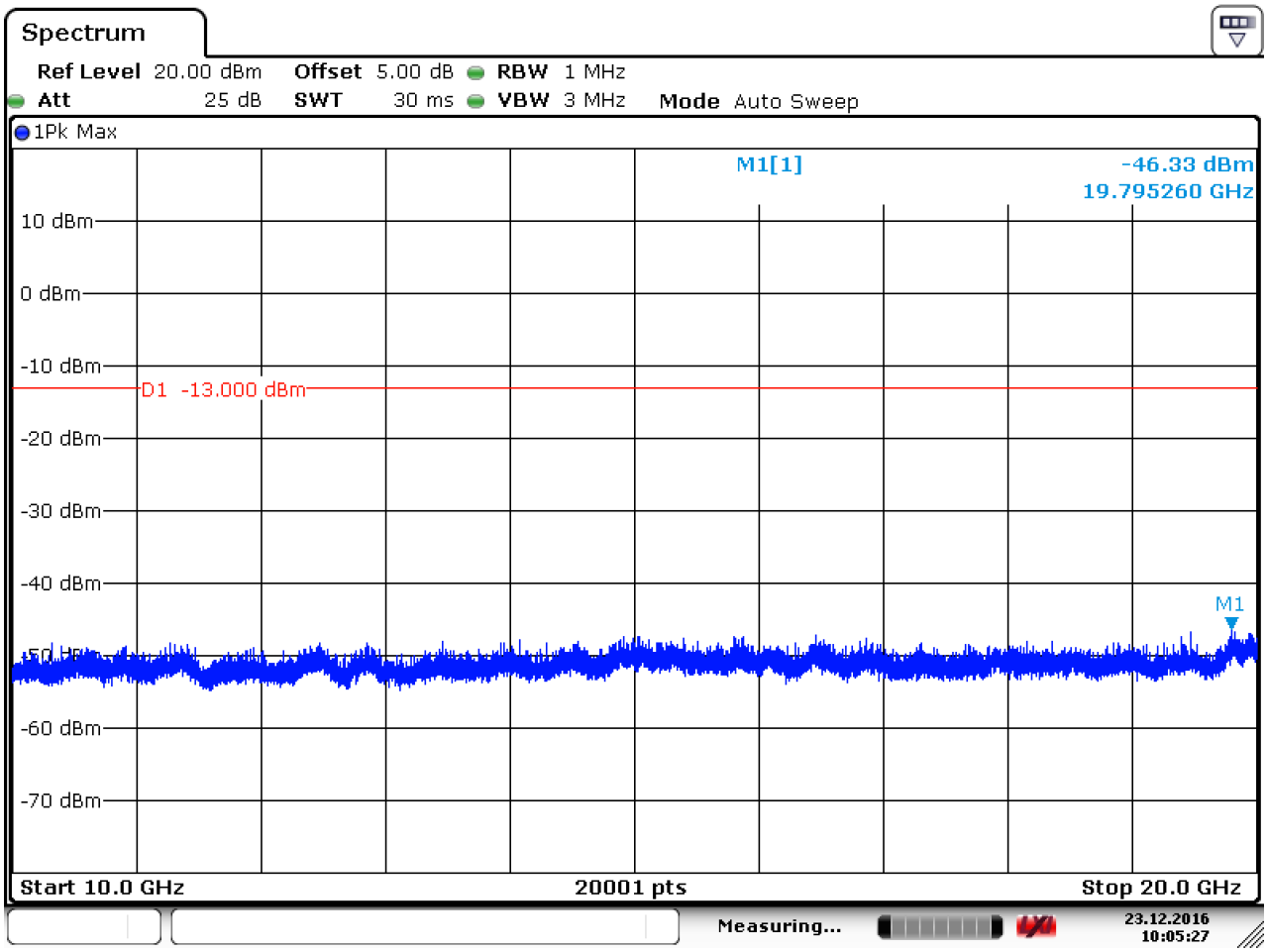
6.1.1.3.1 Test Channel = LCH



Date: 23.DEC.2016 10:38:27

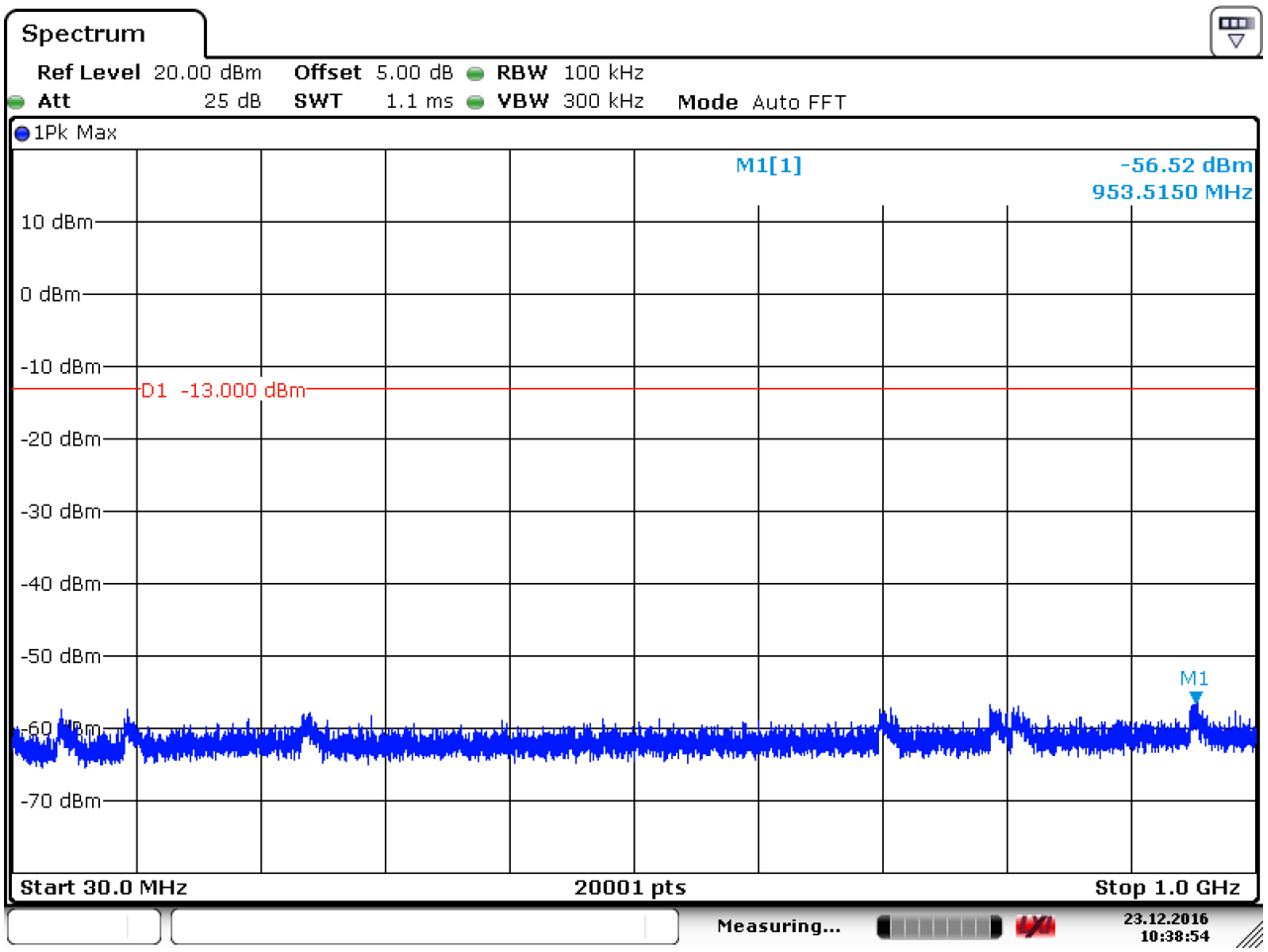


Date: 23.DEC.2016 10:17:56

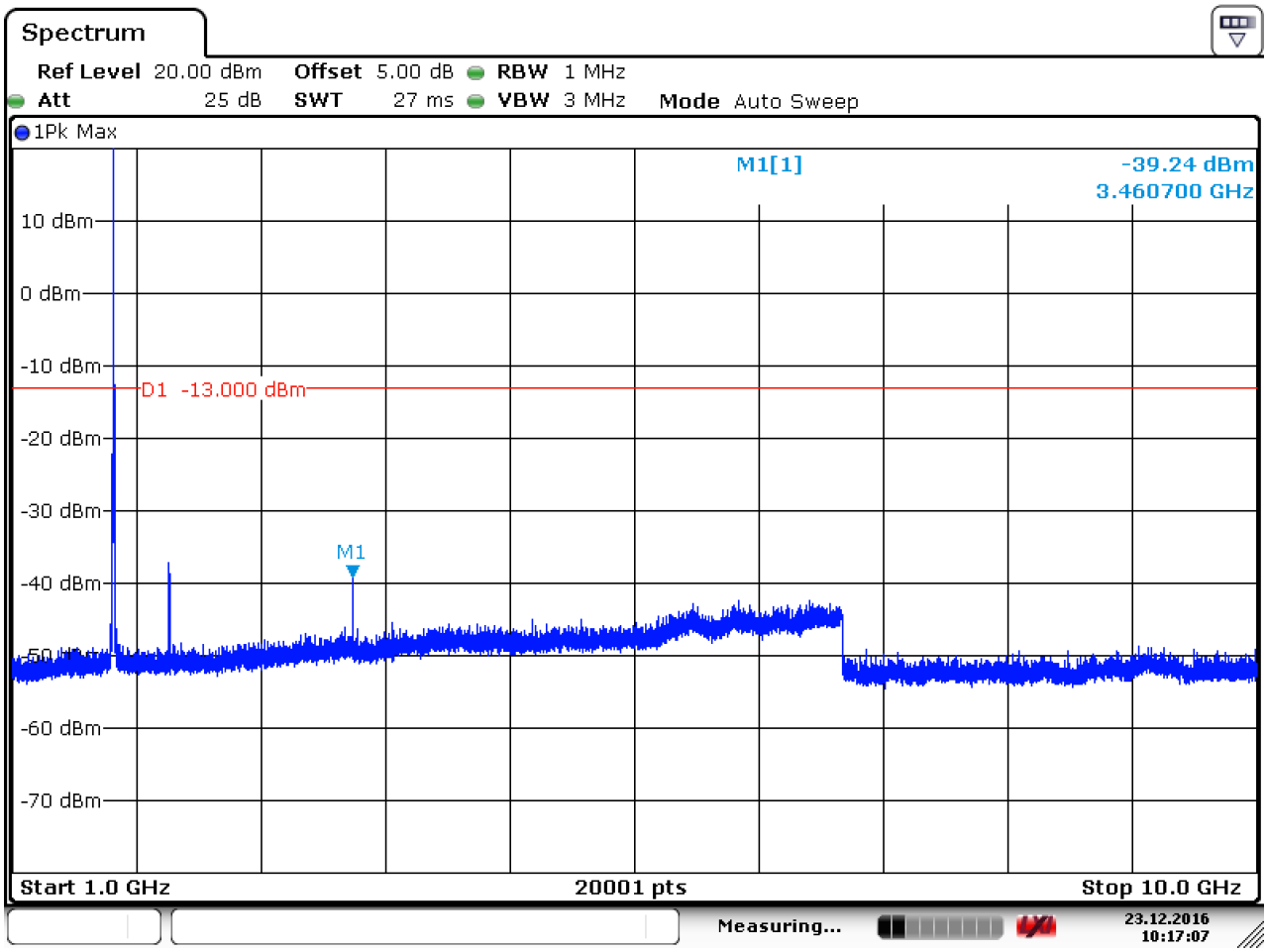


Date: 23.DEC.2016 10:05:27

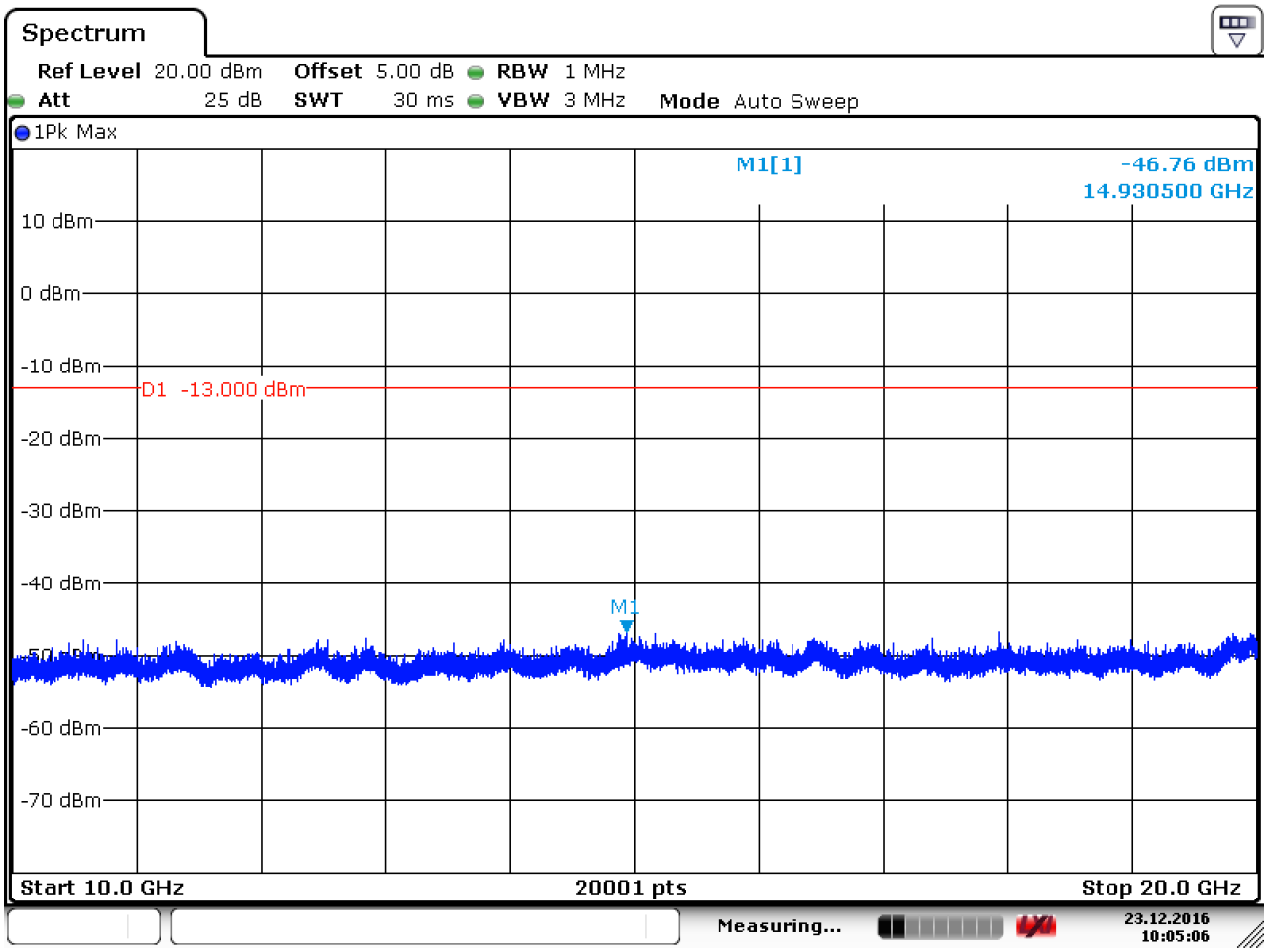
6.1.1.3.2 Test Channel = MCH



Date: 23.DEC.2016 10:38:54

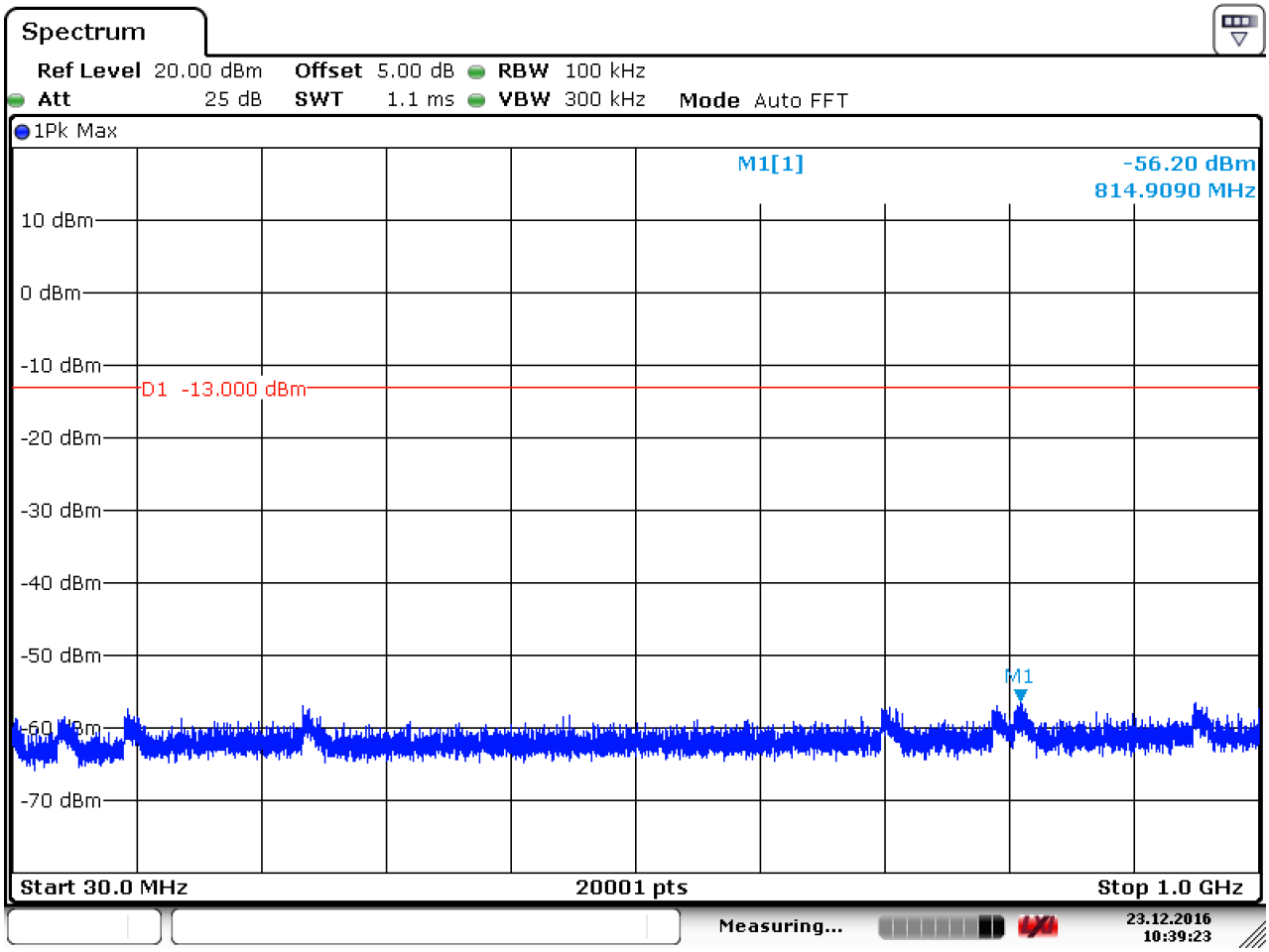


Date: 23.DEC.2016 10:17:07

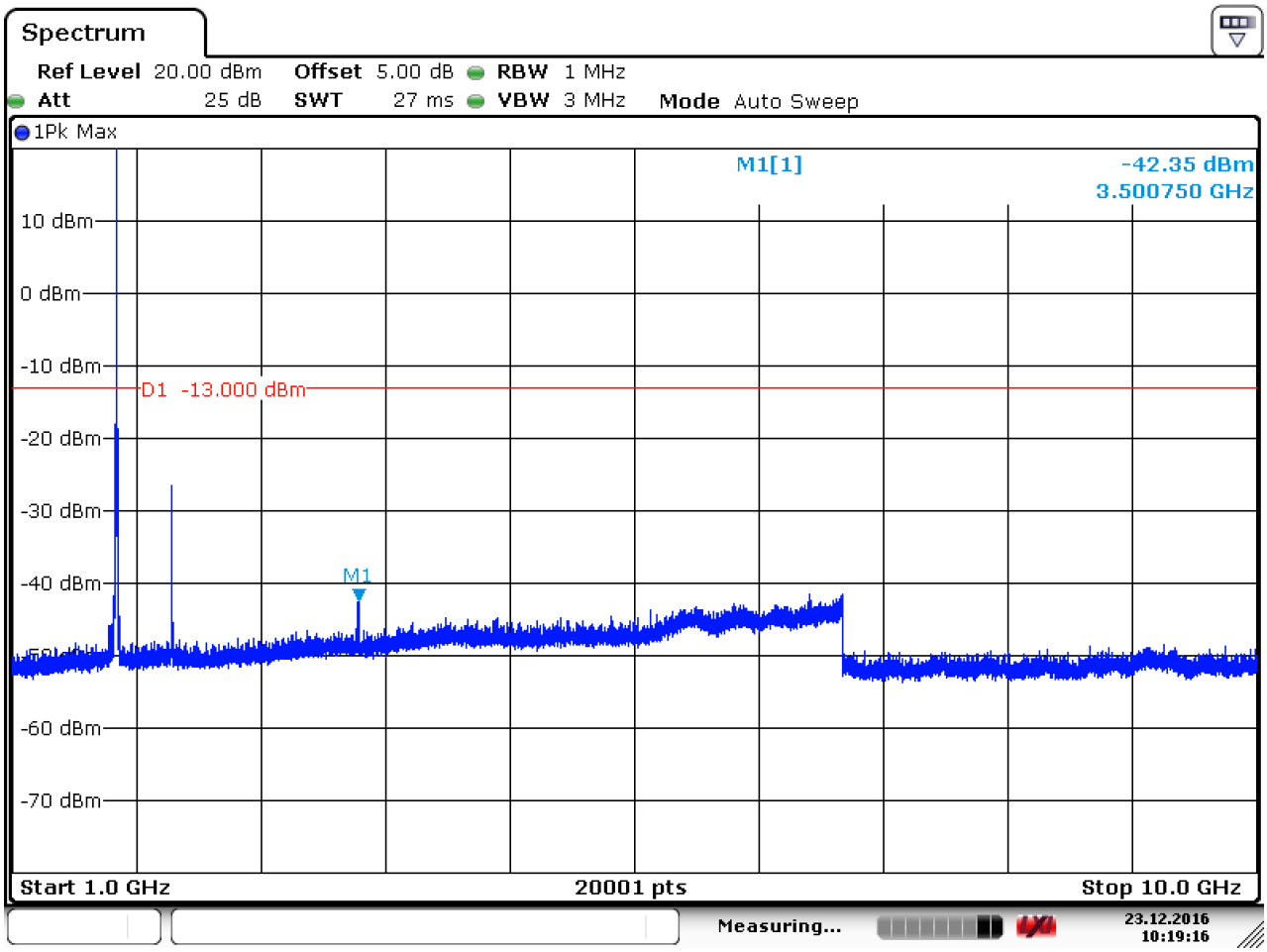


Date: 23.DEC.2016 10:05:06

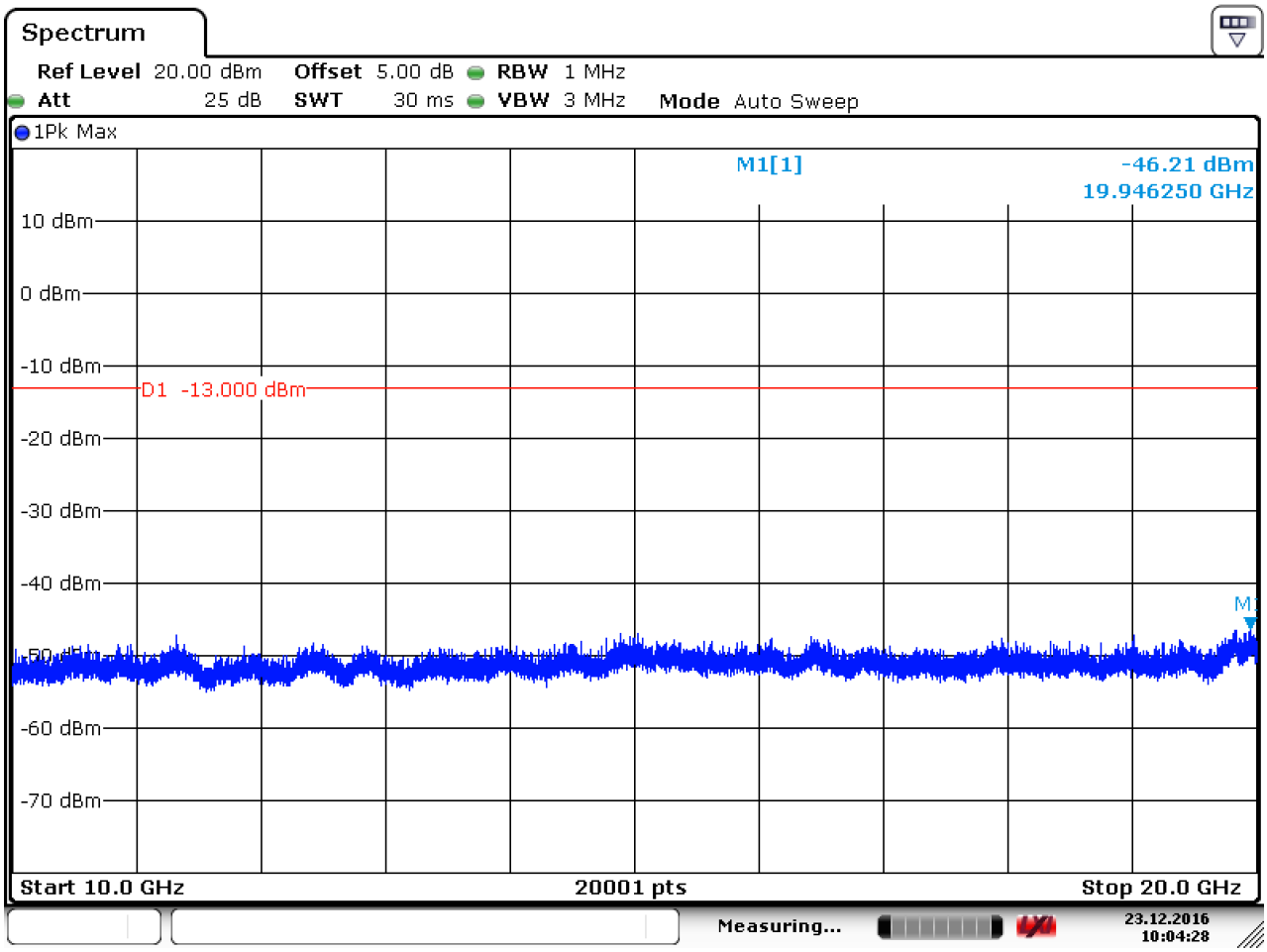
6.1.1.3.3 Test Channel = HCH



Date: 23.DEC.2016 10:39:23



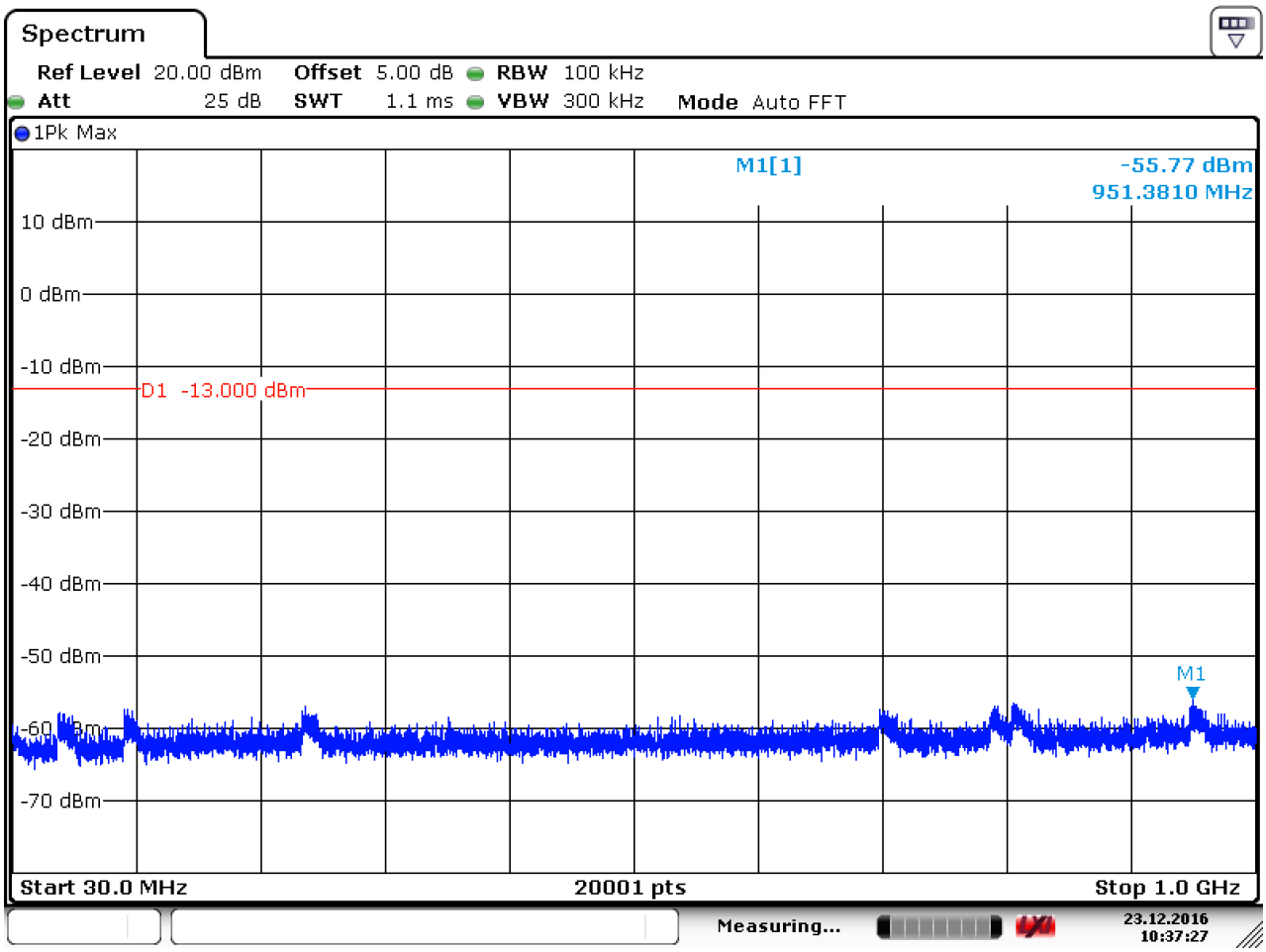
Date: 23.DEC.2016 10:19:17



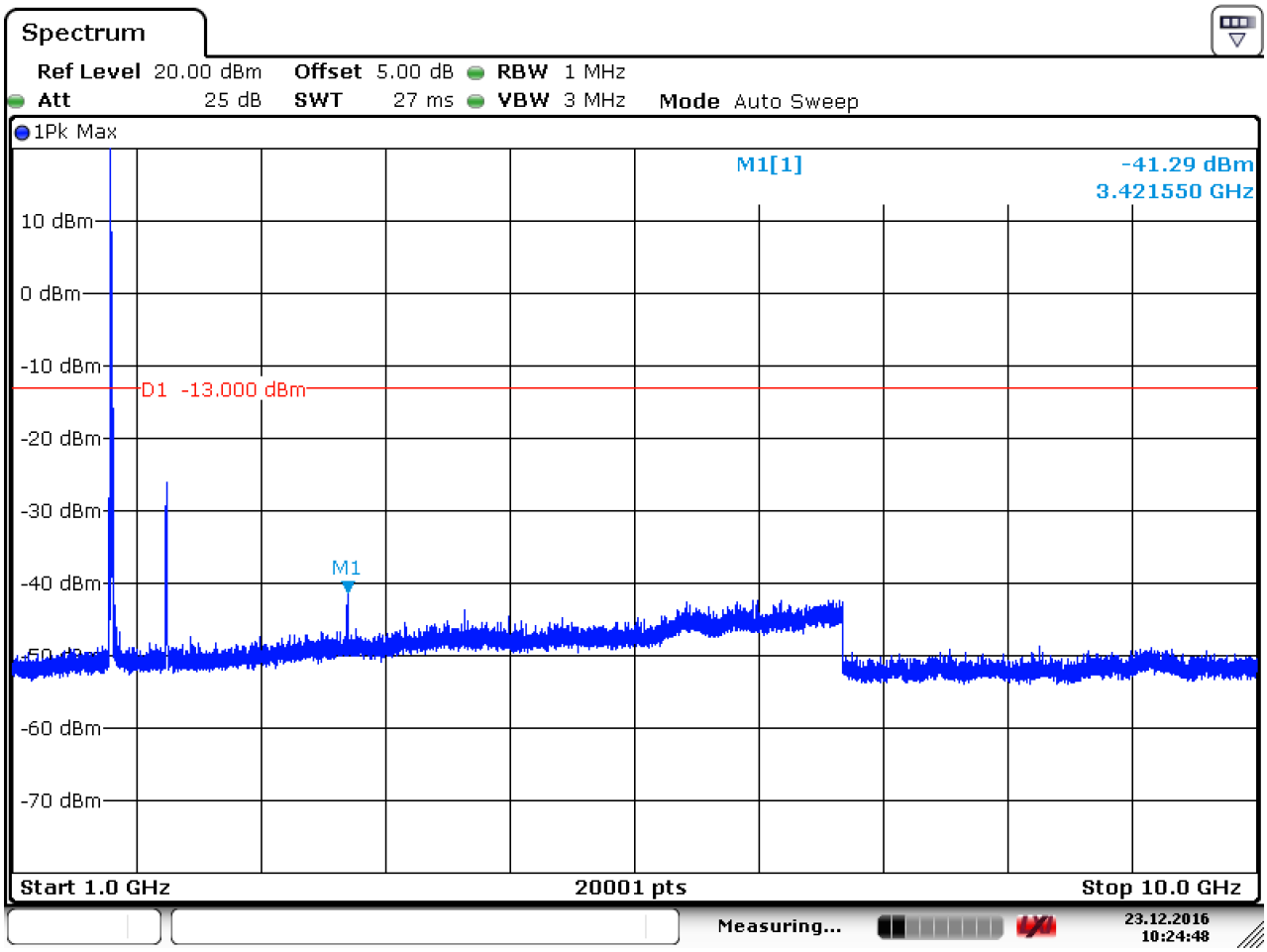
Date: 23.DEC.2016 10:04:29

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

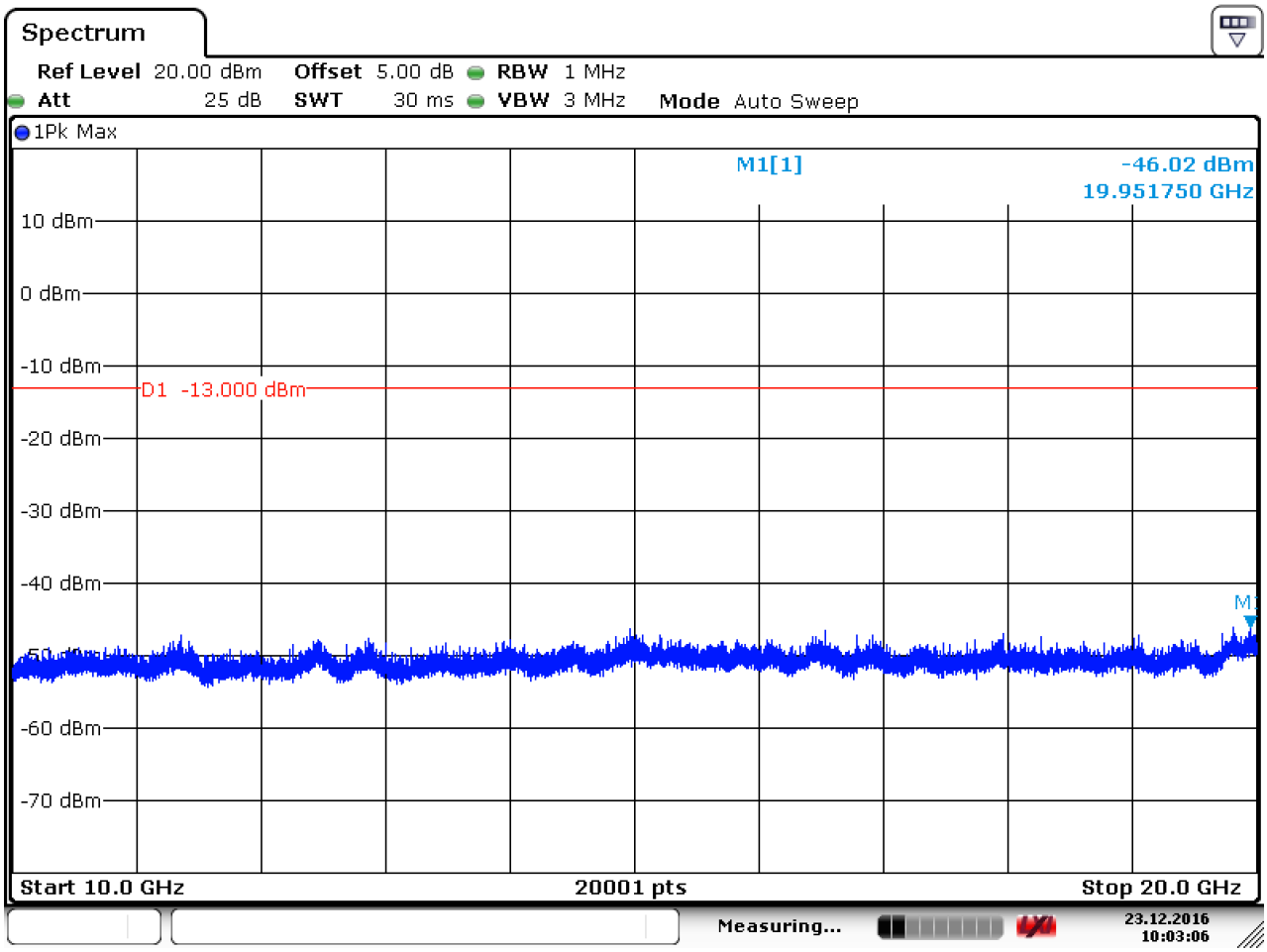
6.1.1.4.1 Test Channel = LCH



Date: 23.DEC.2016 10:37:27

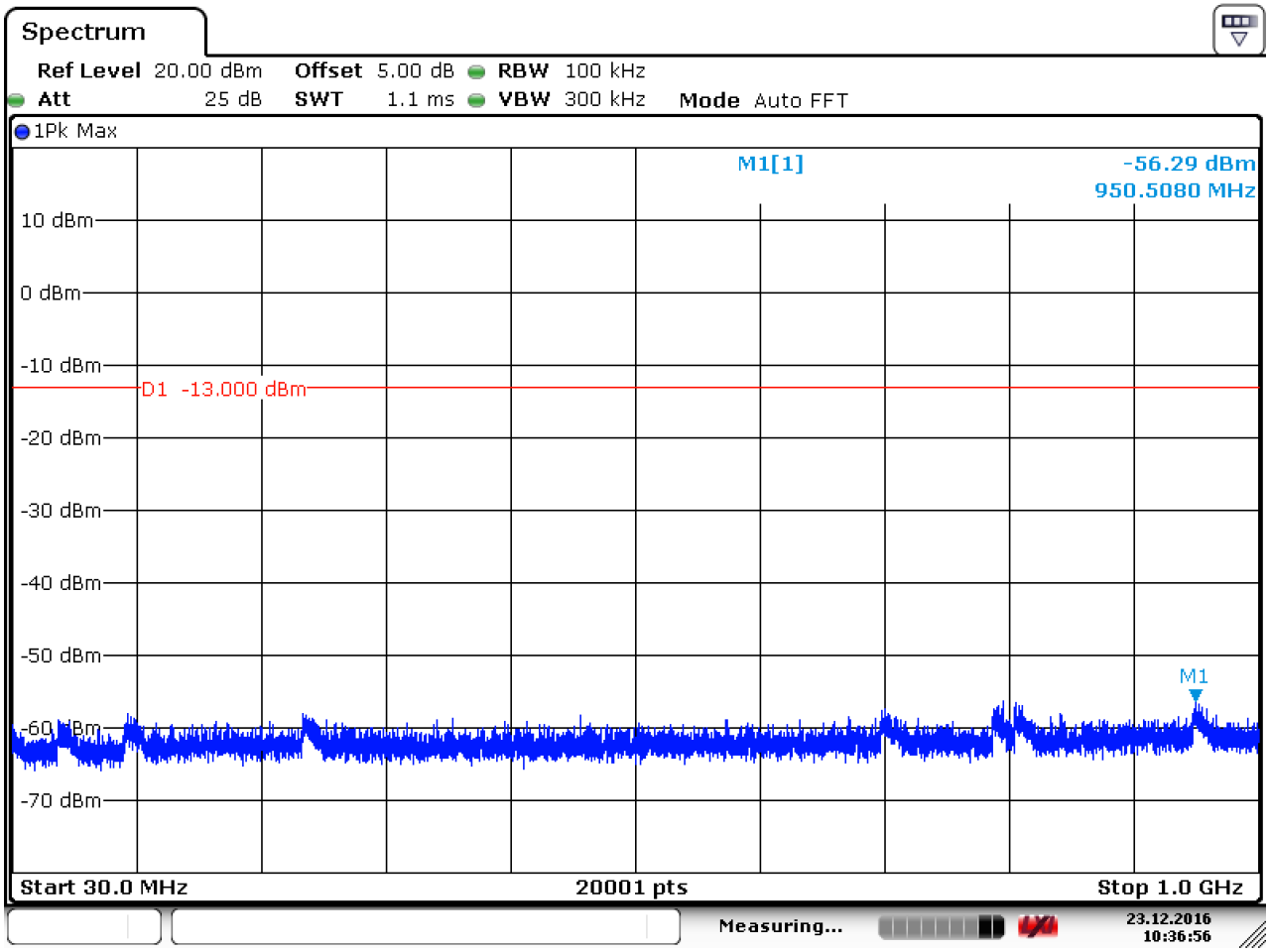


Date: 23.DEC.2016 10:24:48

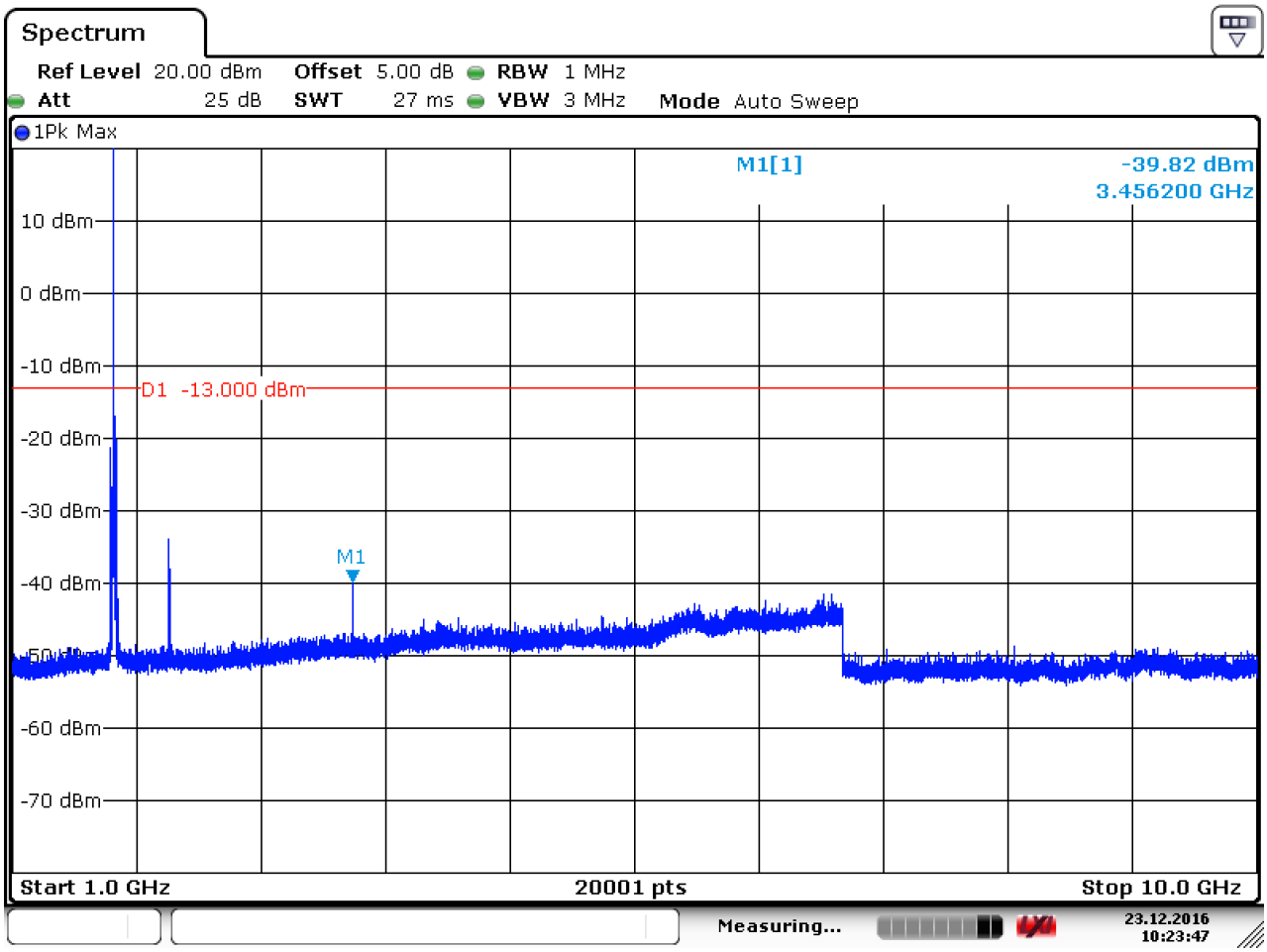


Date: 23.DEC.2016 10:03:06

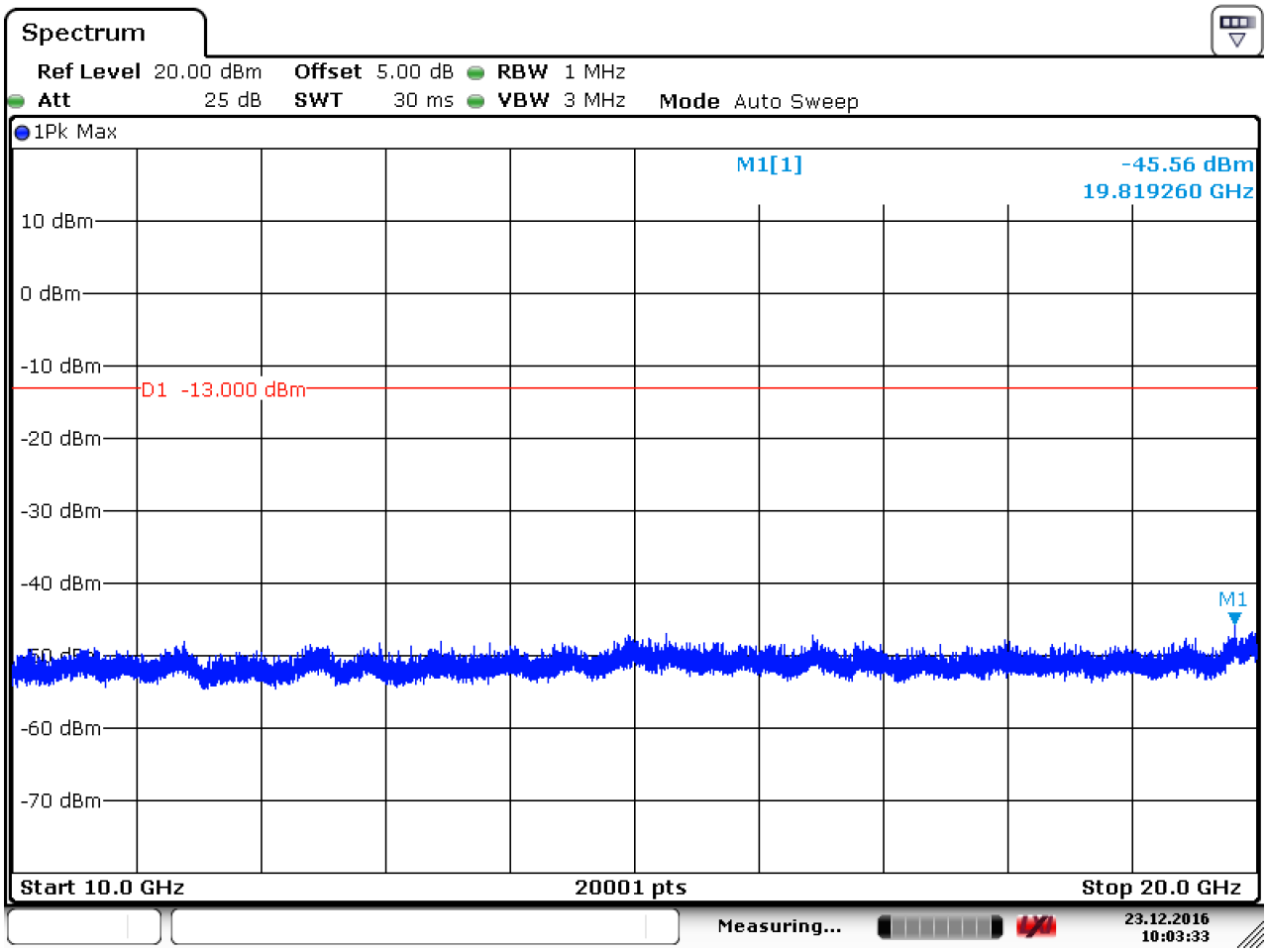
6.1.1.4.2 Test Channel = MCH



Date: 23.DEC.2016 10:36:56

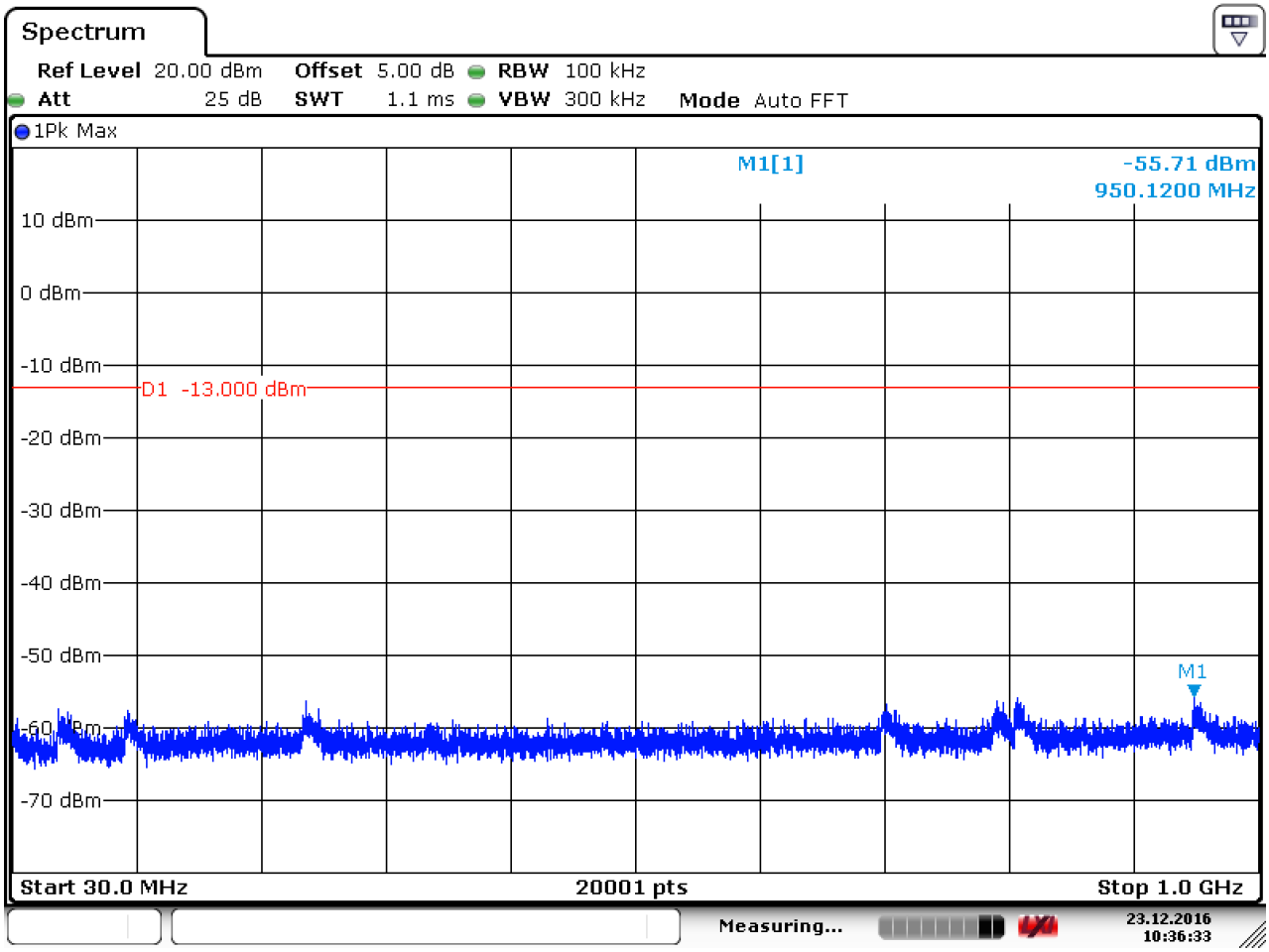


Date: 23.DEC.2016 10:23:47

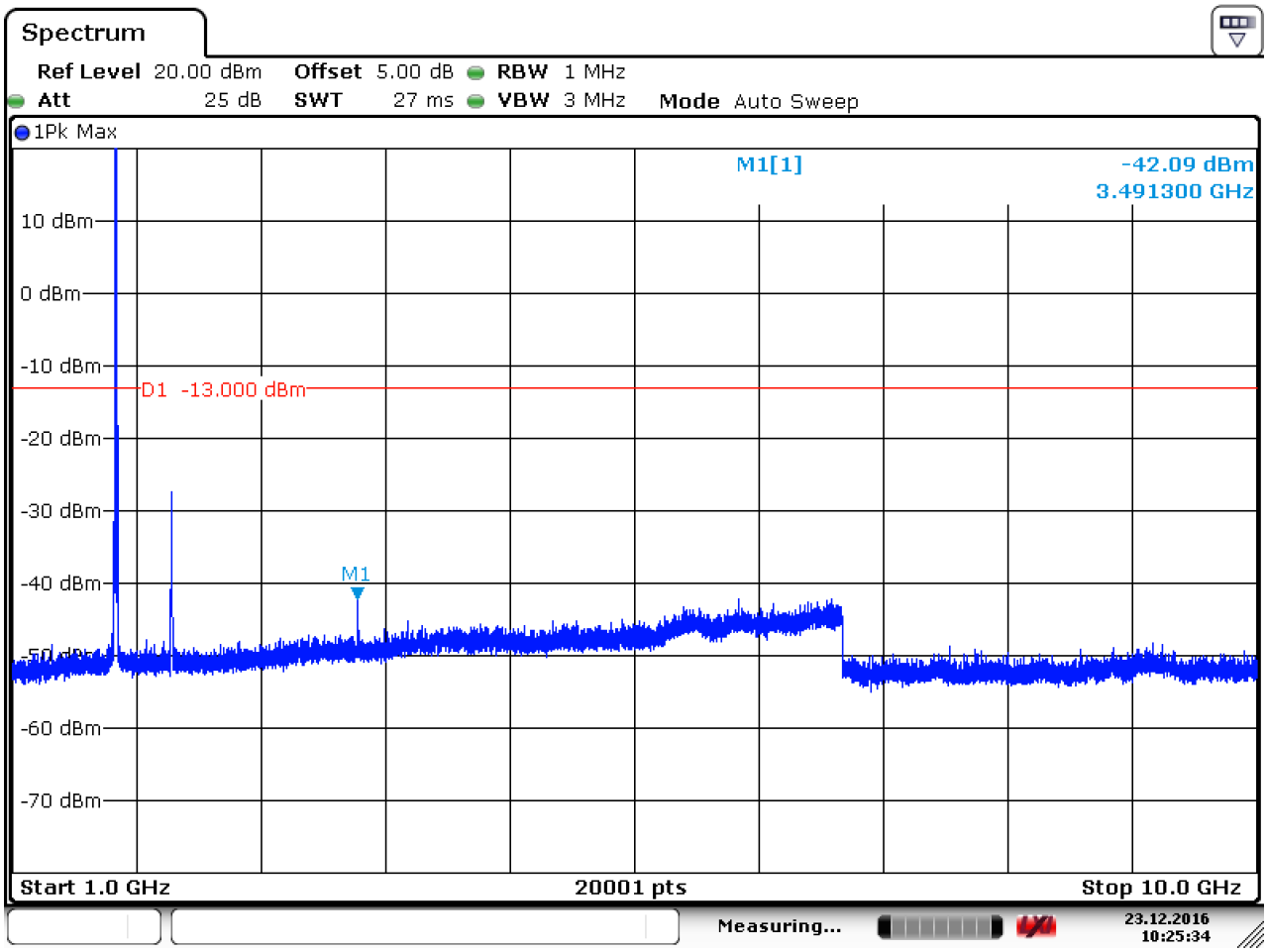


Date: 23.DEC.2016 10:03:34

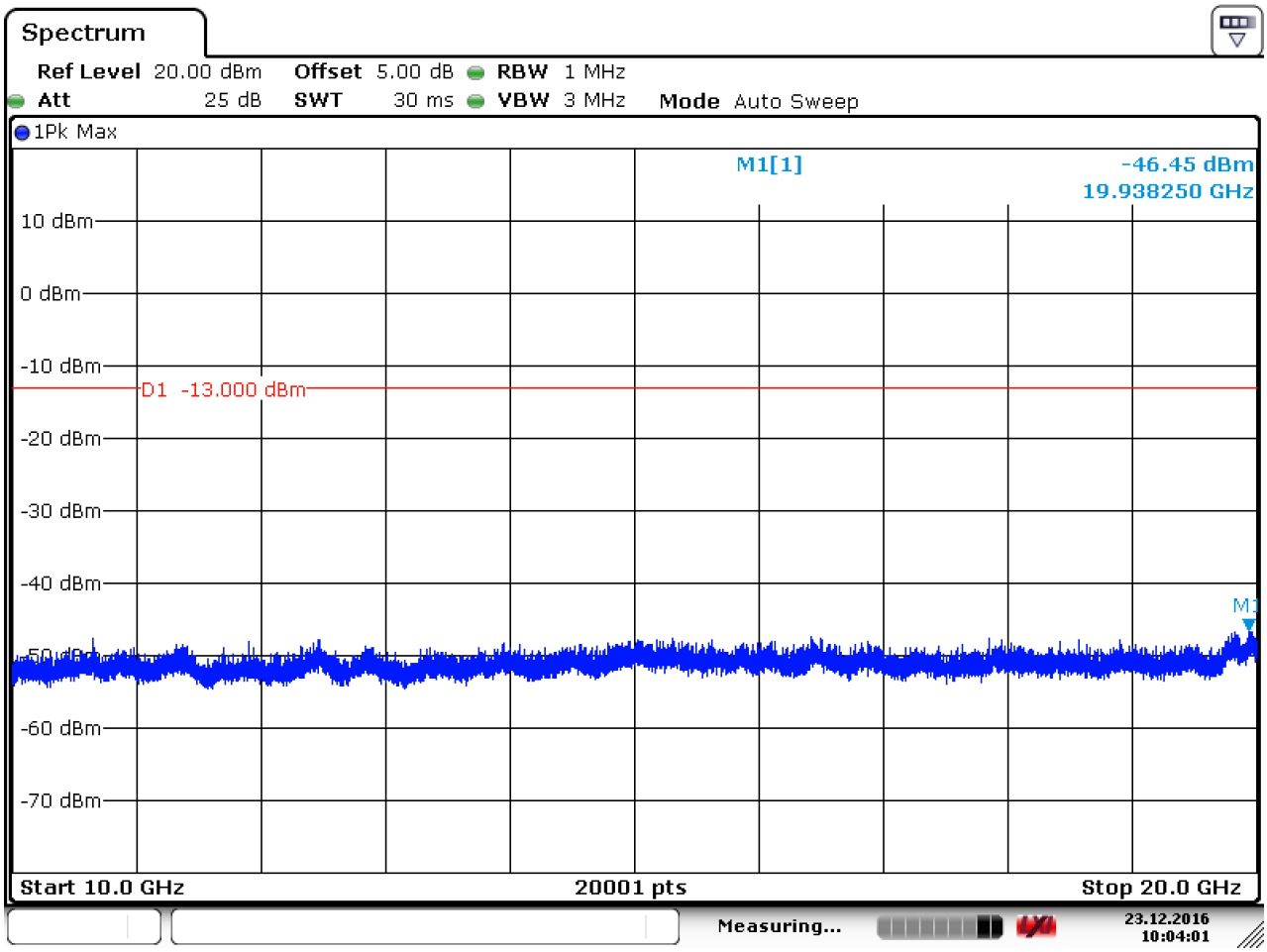
6.1.1.4.3 Test Channel = HCH



Date: 23.DEC.2016 10:36:33



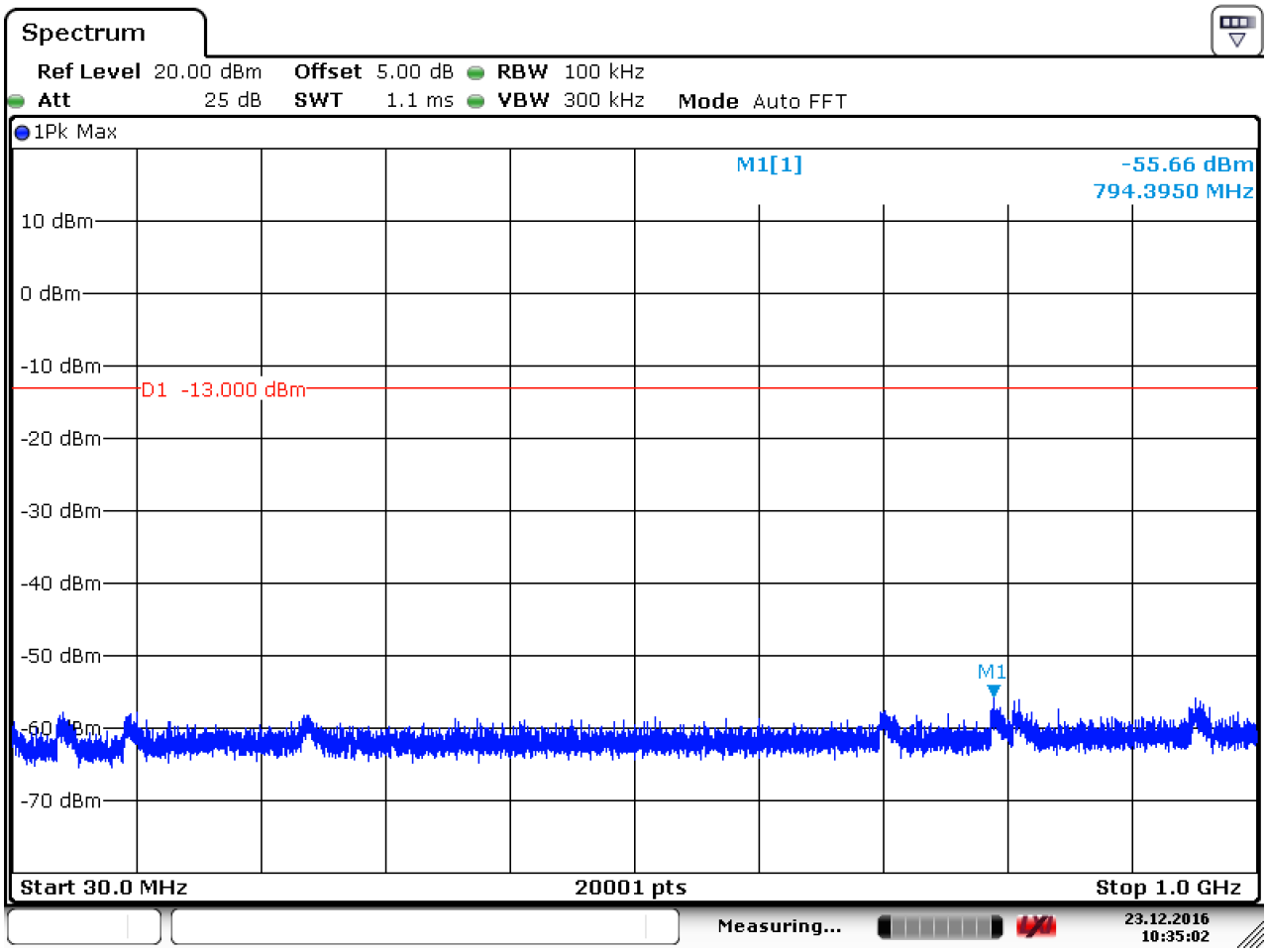
Date: 23.DEC.2016 10:25:34



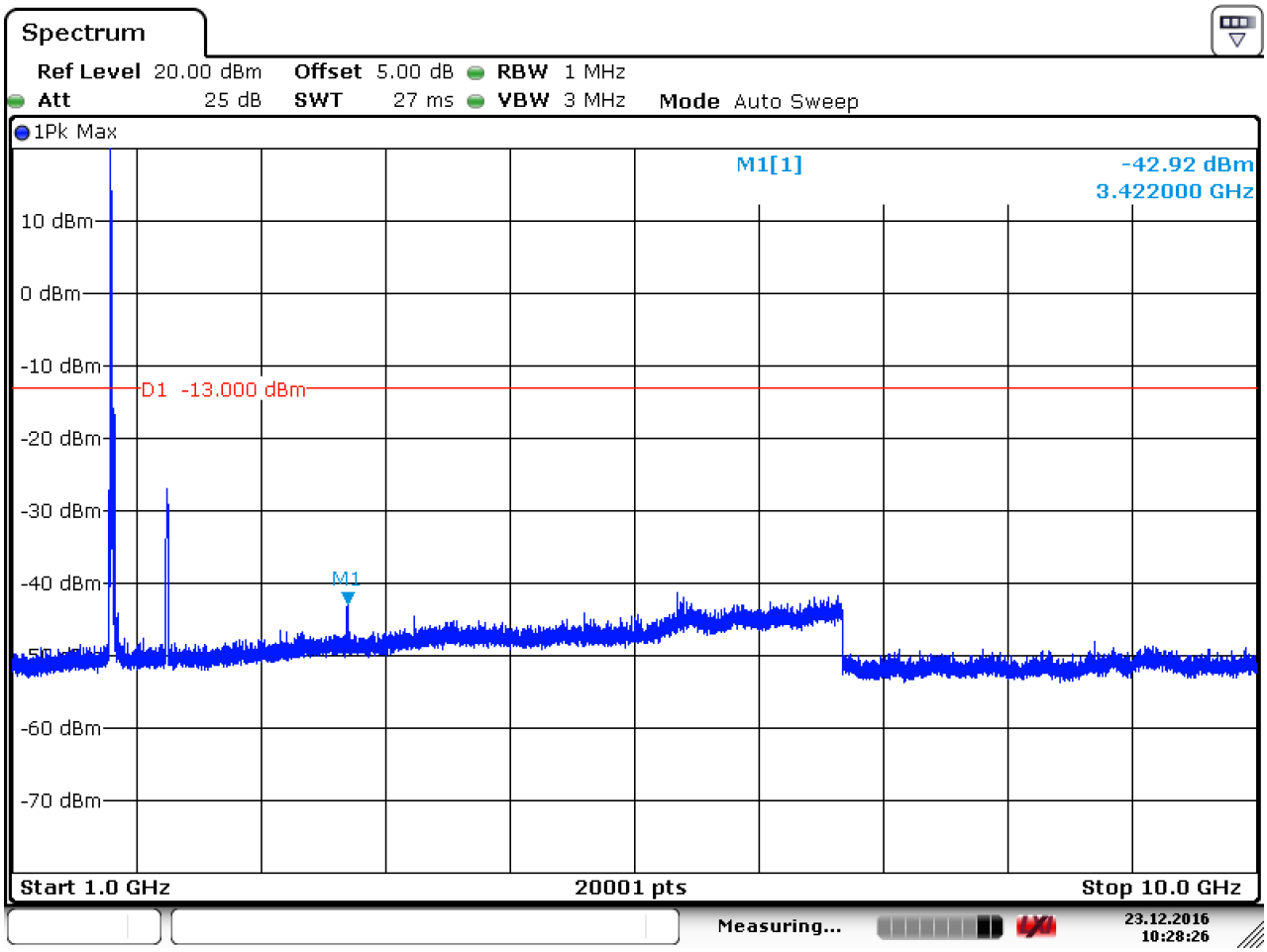
Date: 23.DEC.2016 10:04:01

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

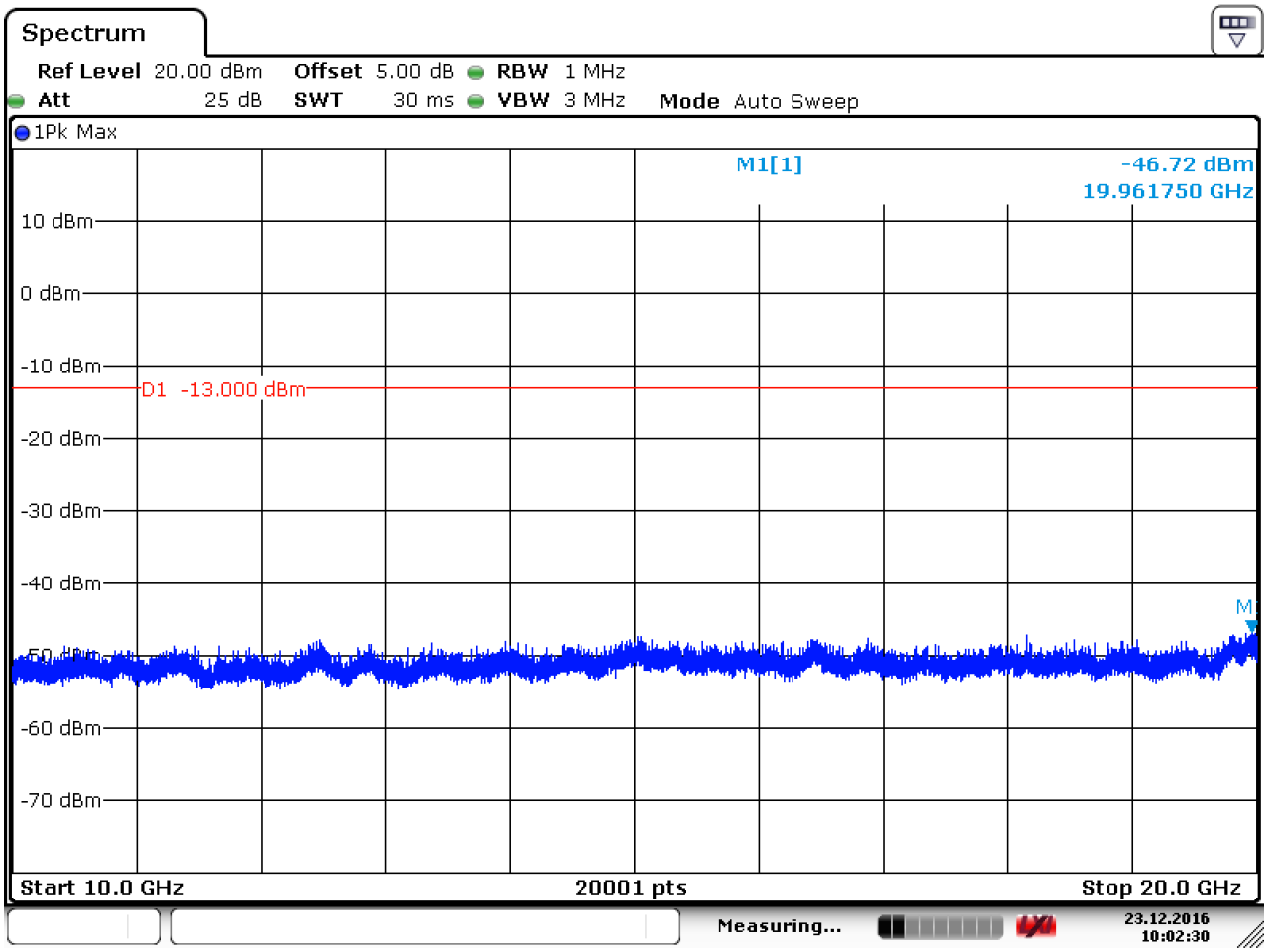
6.1.1.5.1 Test Channel = LCH



Date: 23.DEC.2016 10:35:02

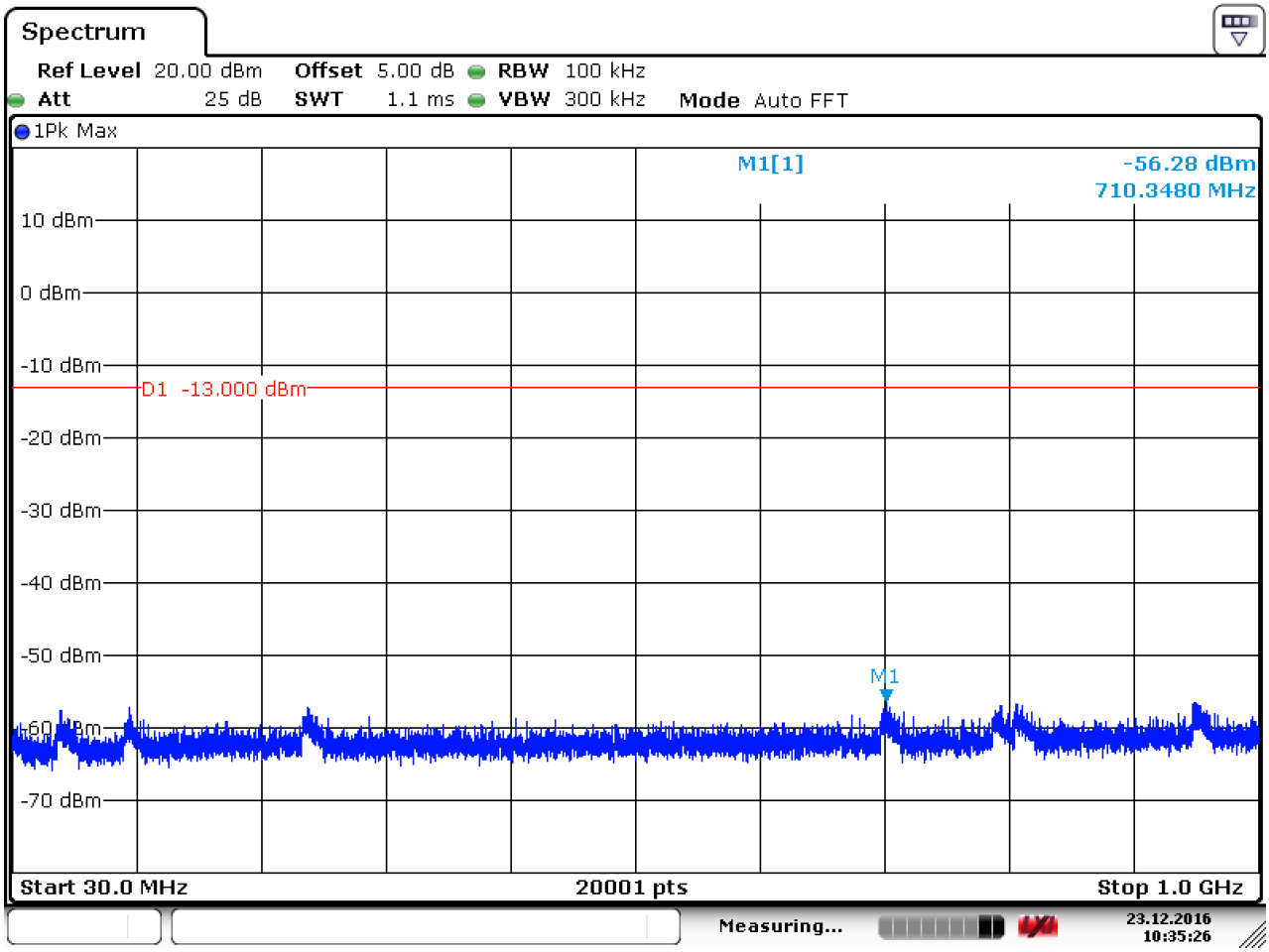


Date: 23.DEC.2016 10:28:27

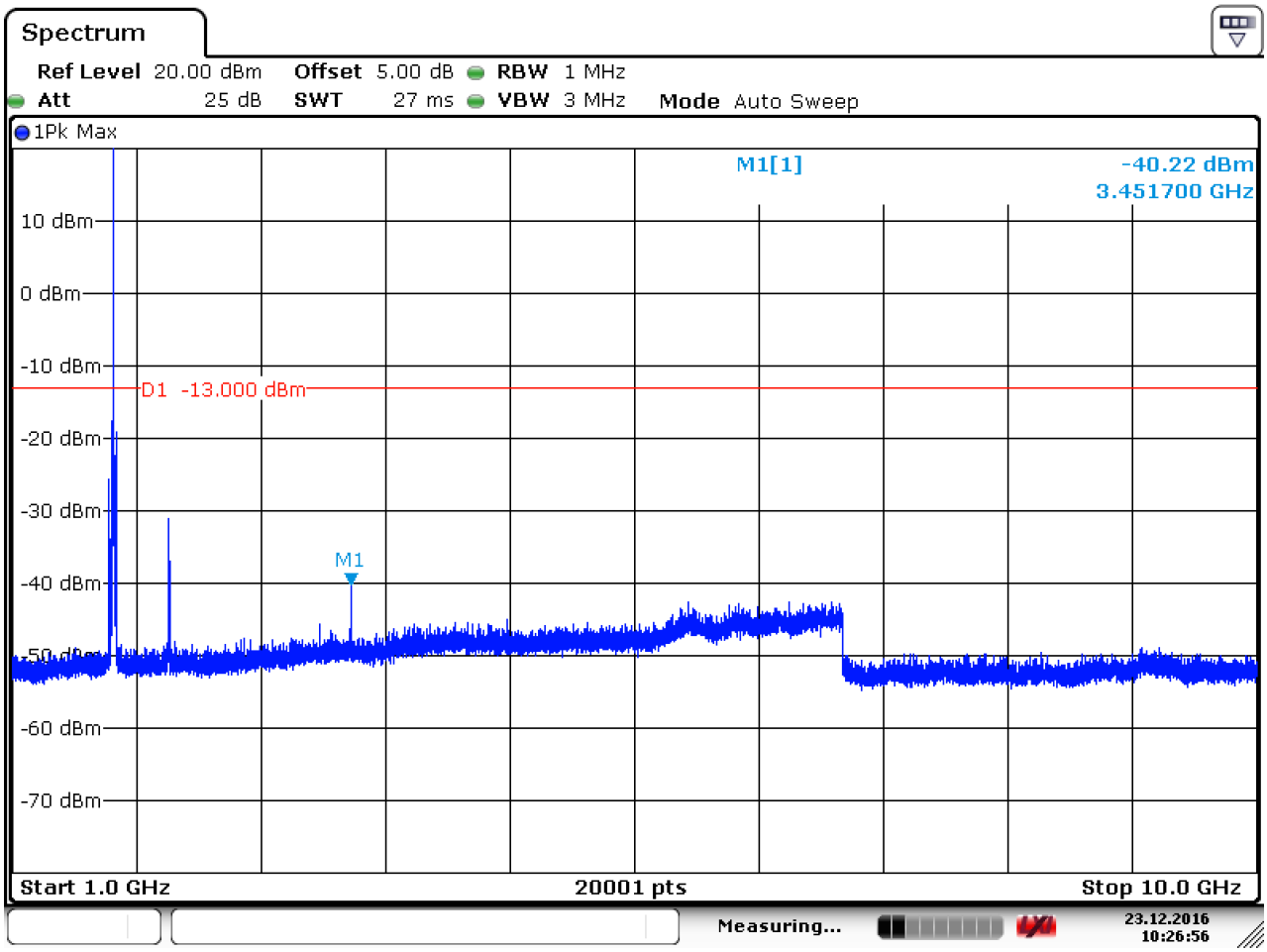


Date: 23.DEC.2016 10:02:29

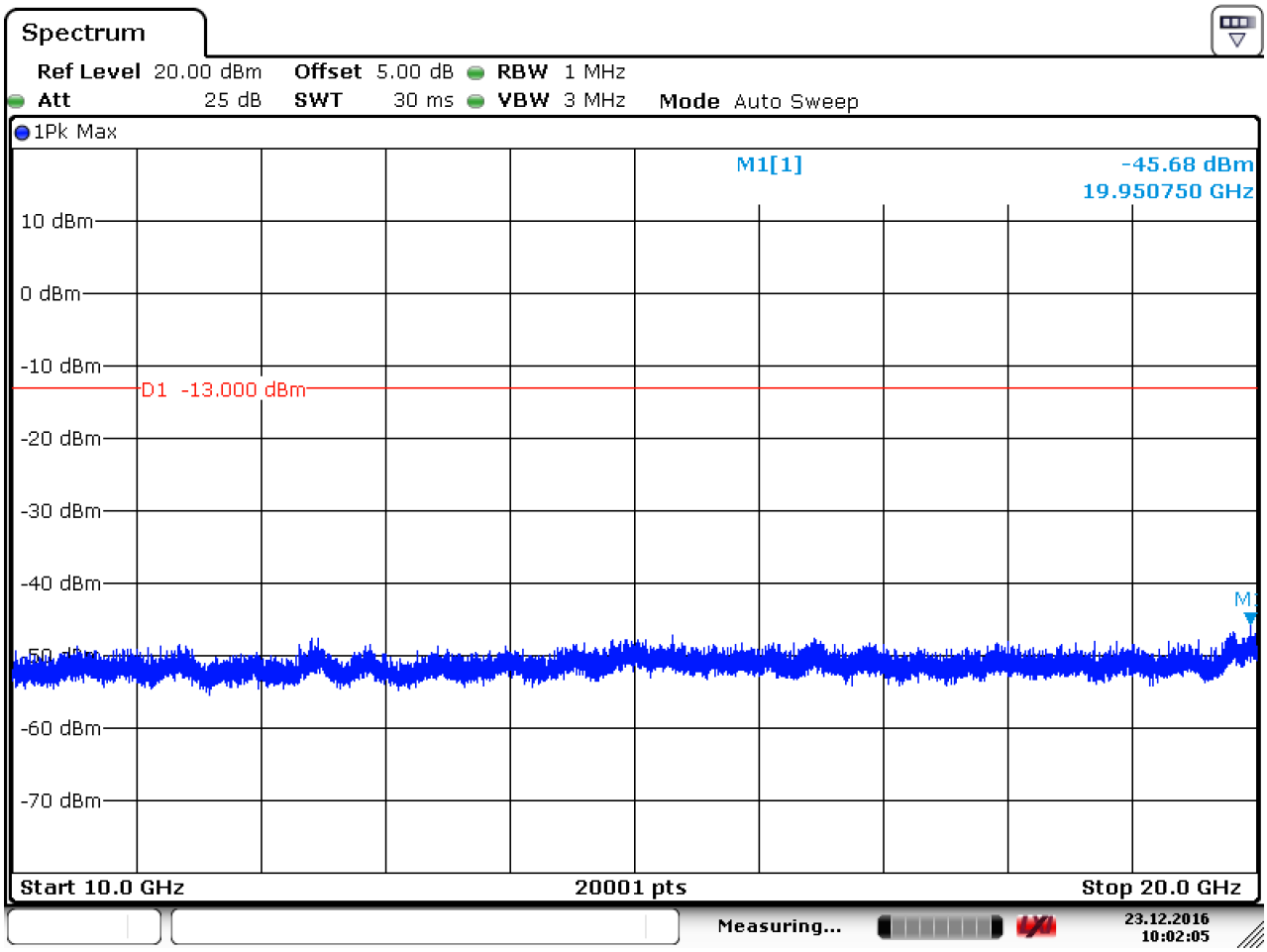
6.1.1.5.2 Test Channel = MCH



Date: 23.DEC.2016 10:35:26

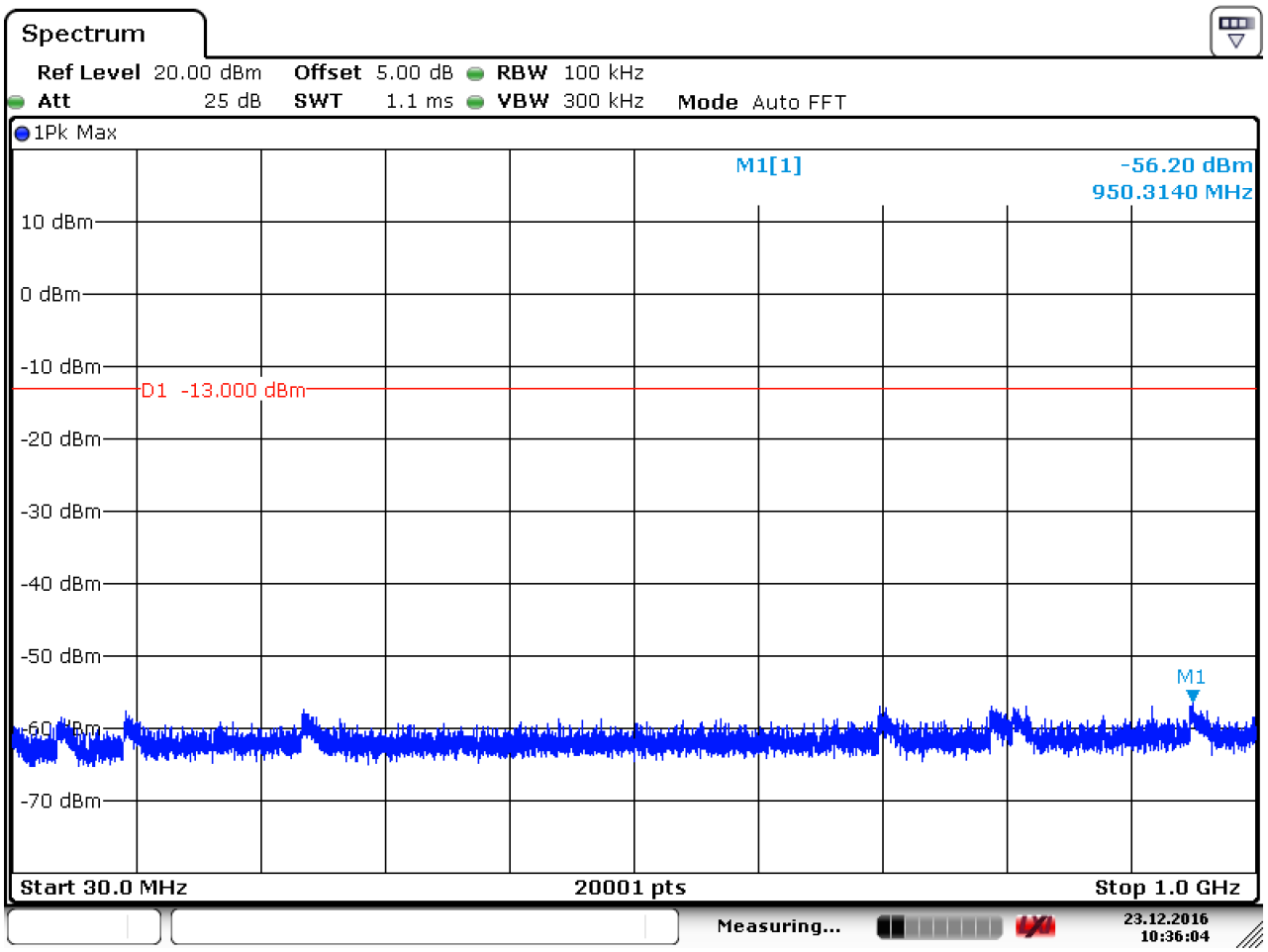


Date: 23.DEC.2016 10:26:56

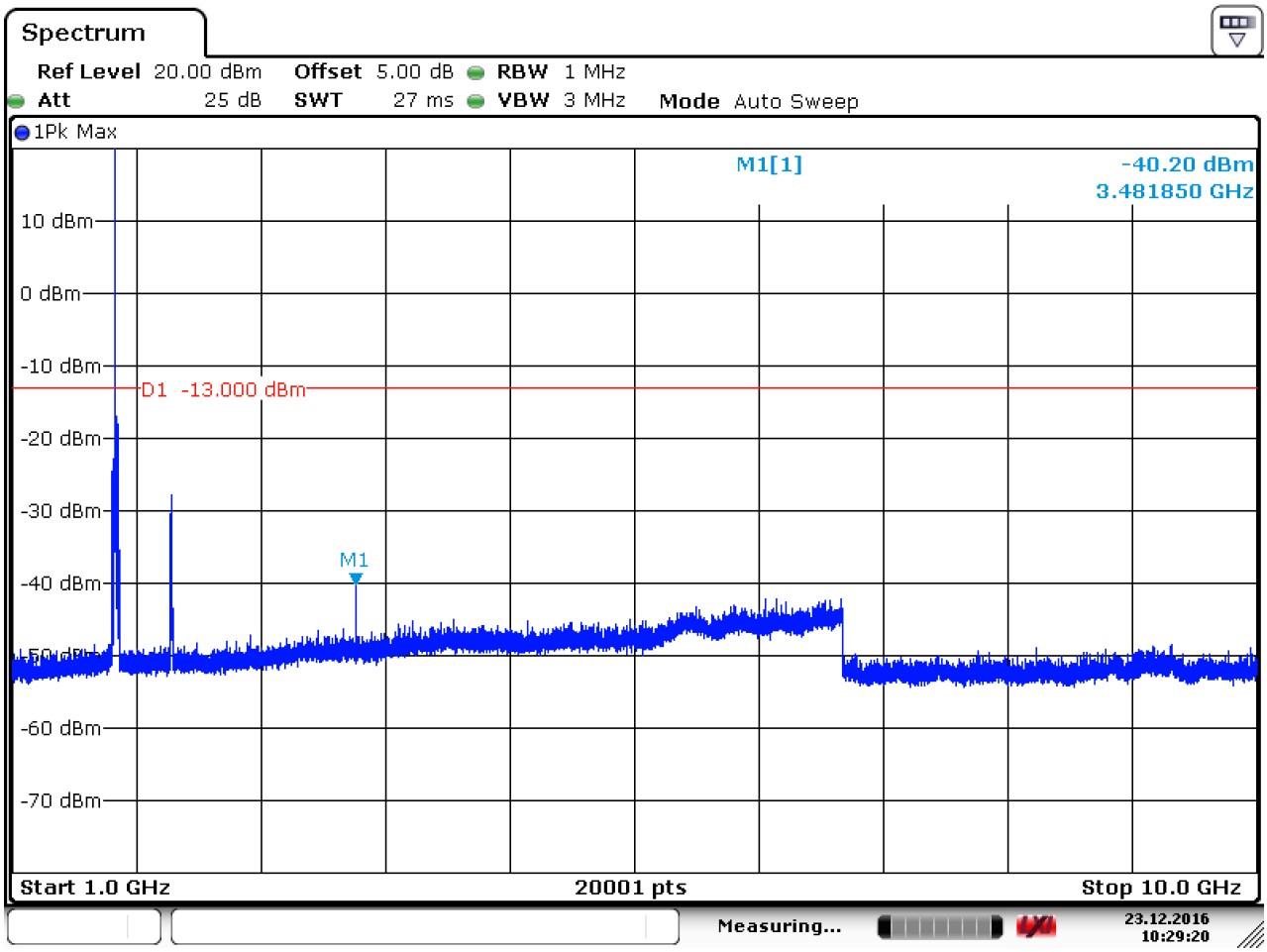


Date: 23.DEC.2016 10:02:05

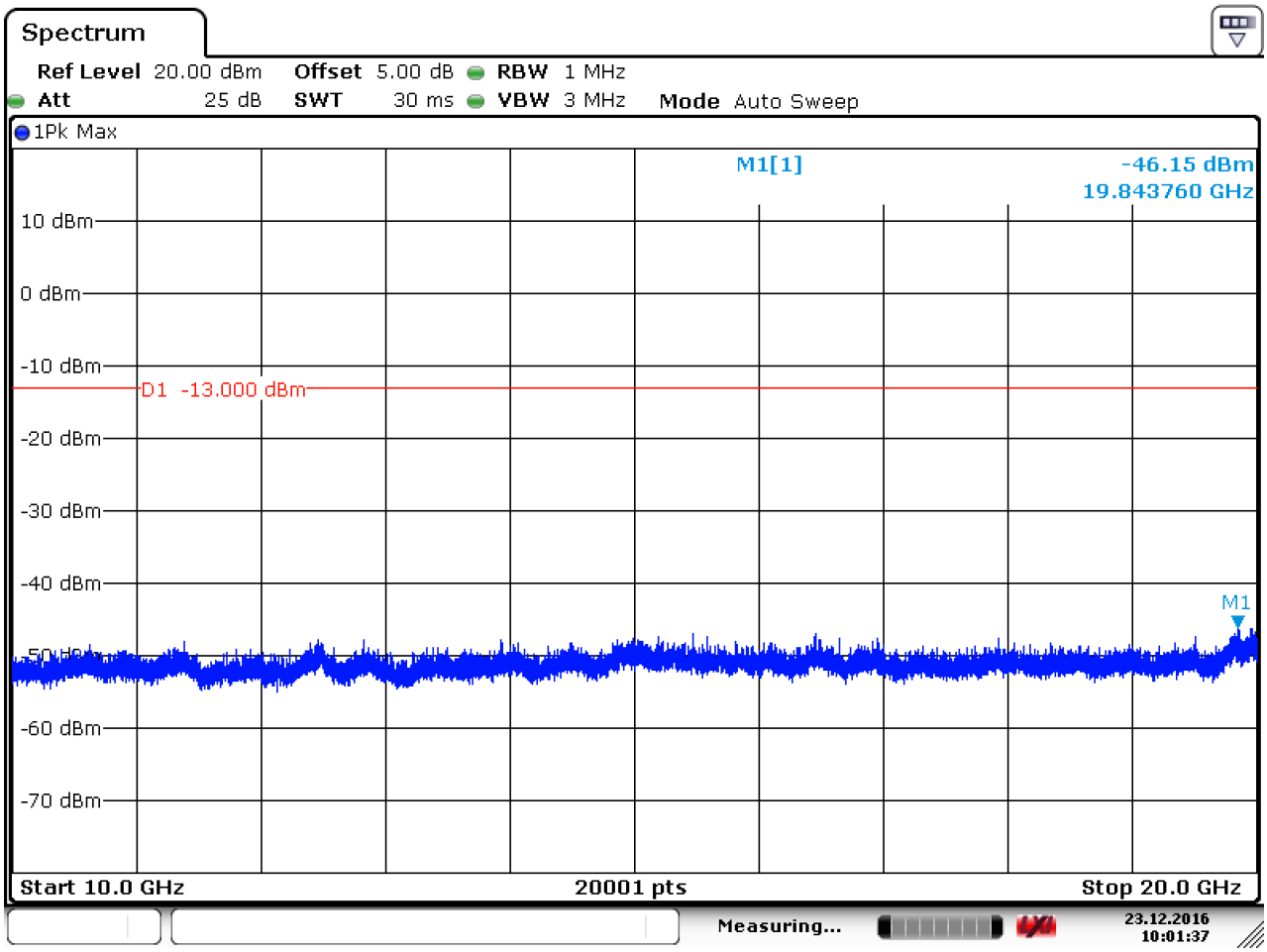
6.1.1.5.3 Test Channel = HCH



Date: 23.DEC.2016 10:36:05



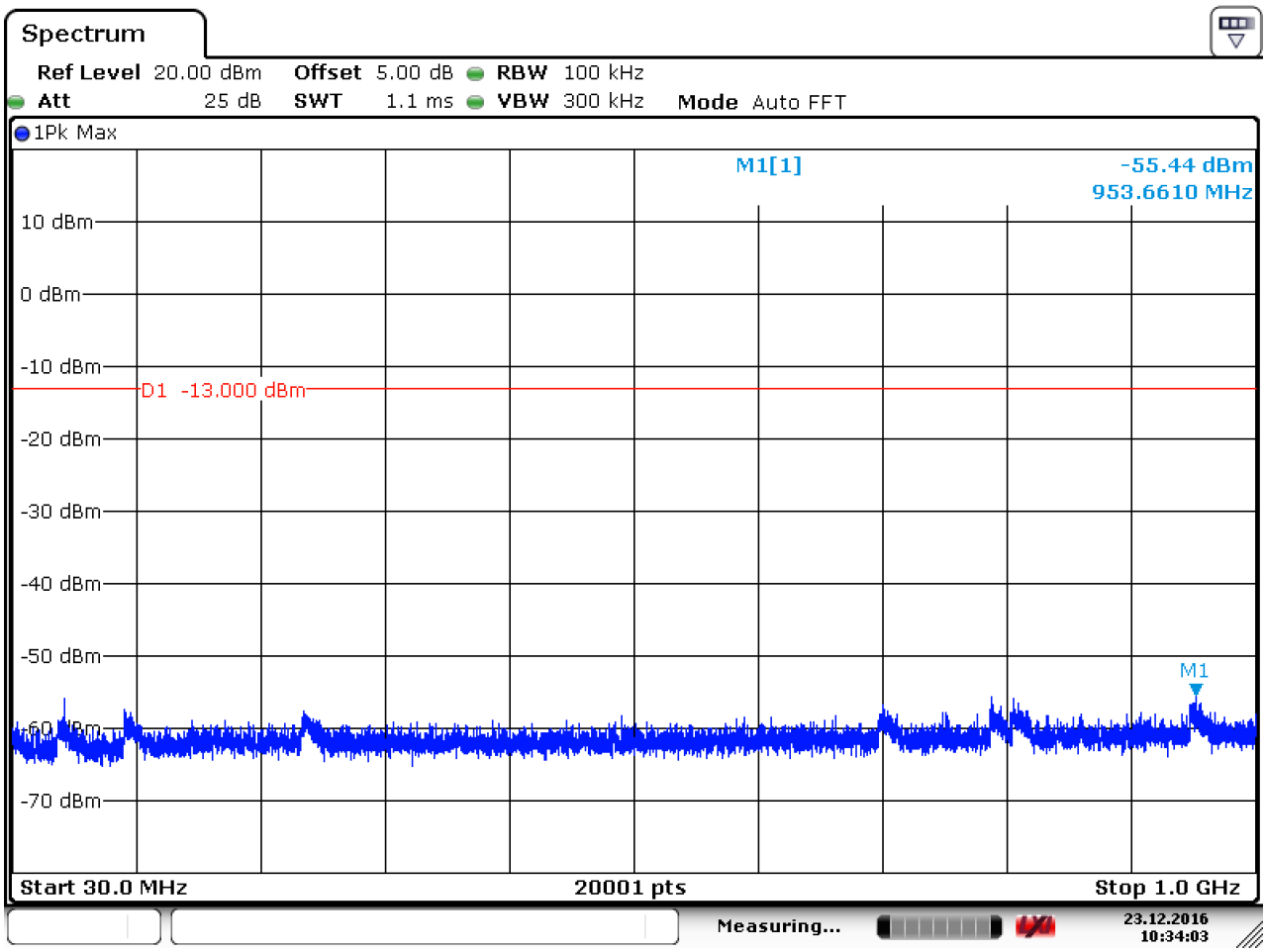
Date: 23.DEC.2016 10:29:20



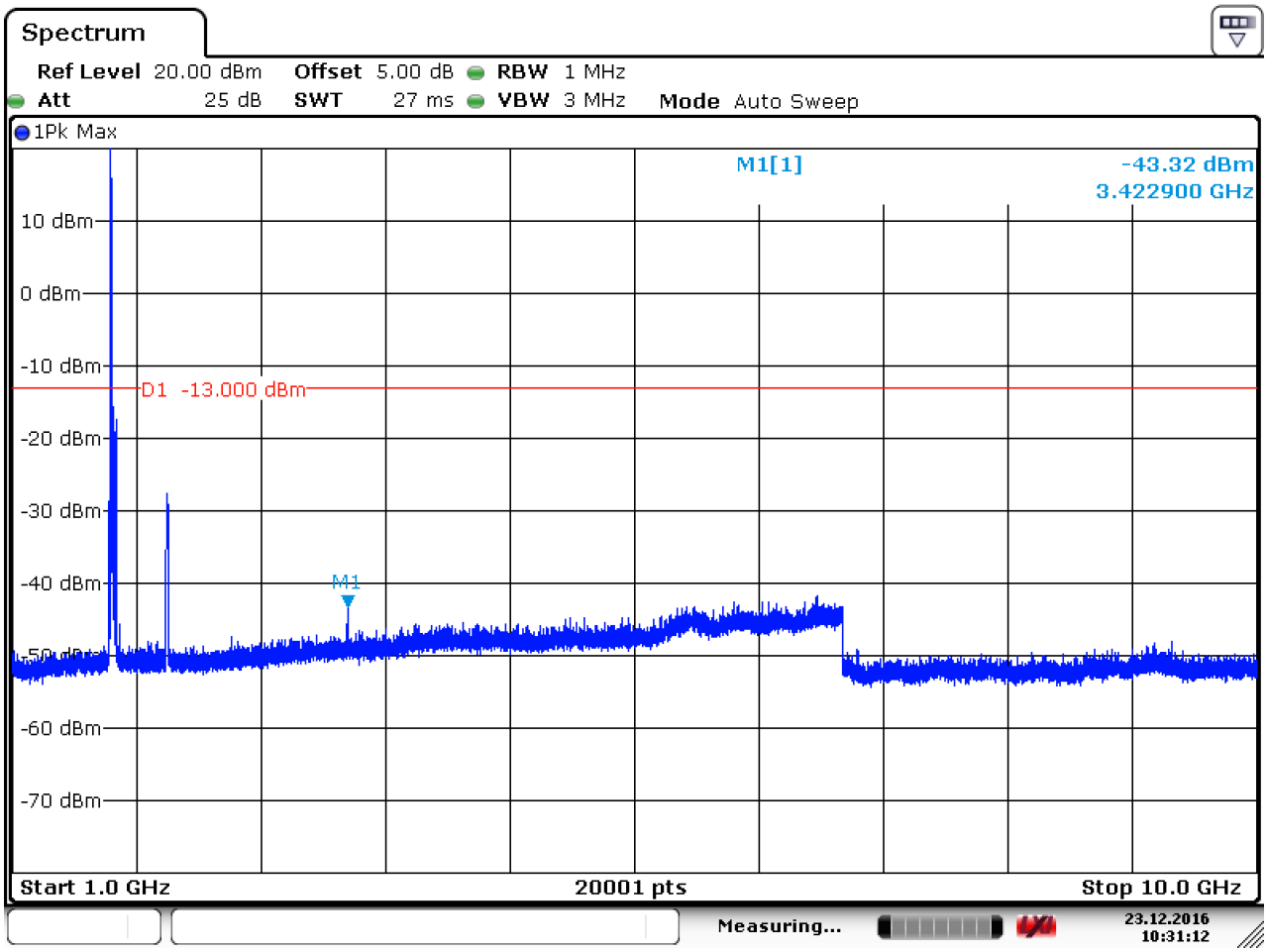
Date: 23.DEC.2016 10:01:37

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

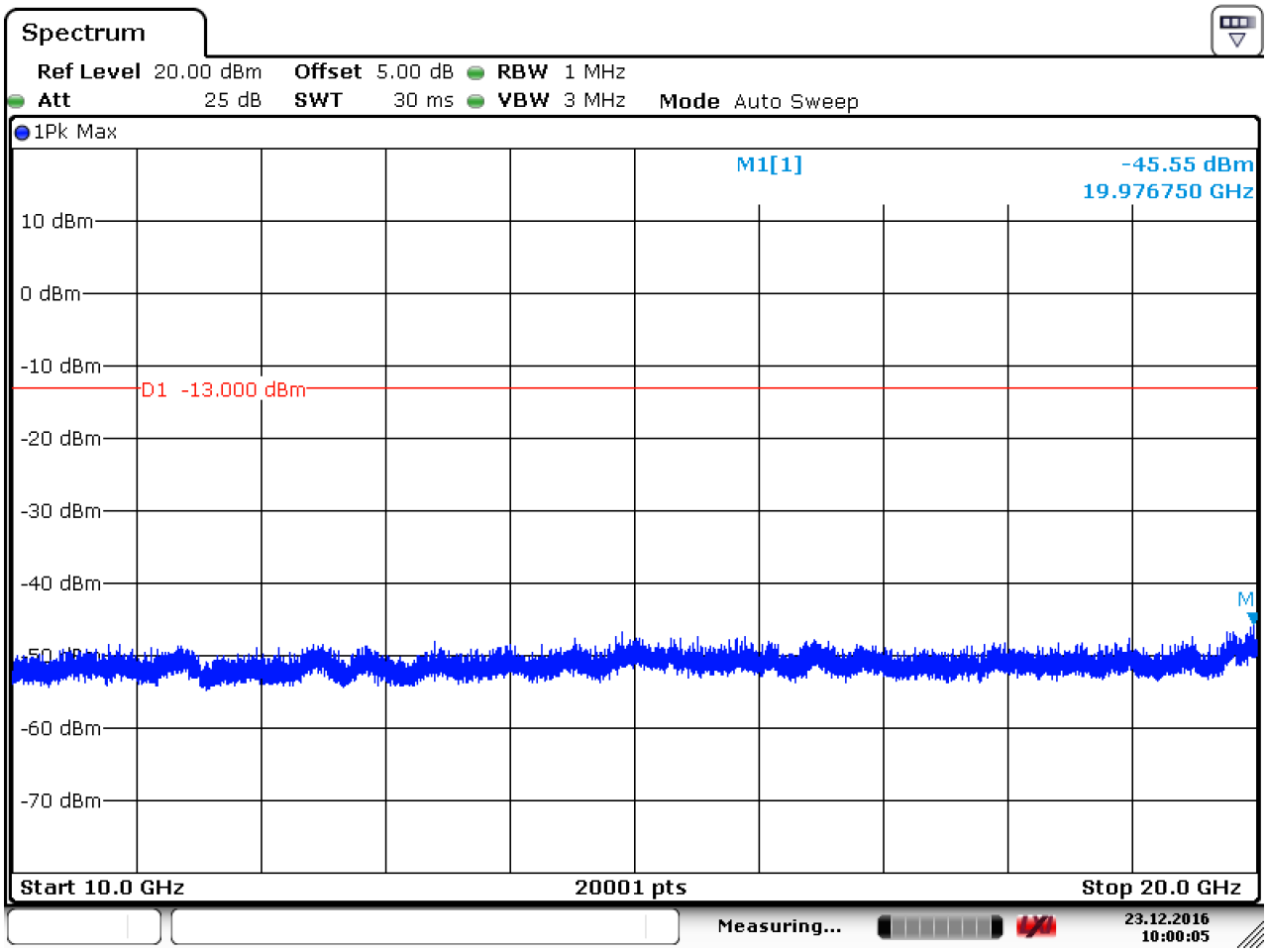
6.1.1.6.1 Test Channel = LCH



Date: 23.DEC.2016 10:34:03

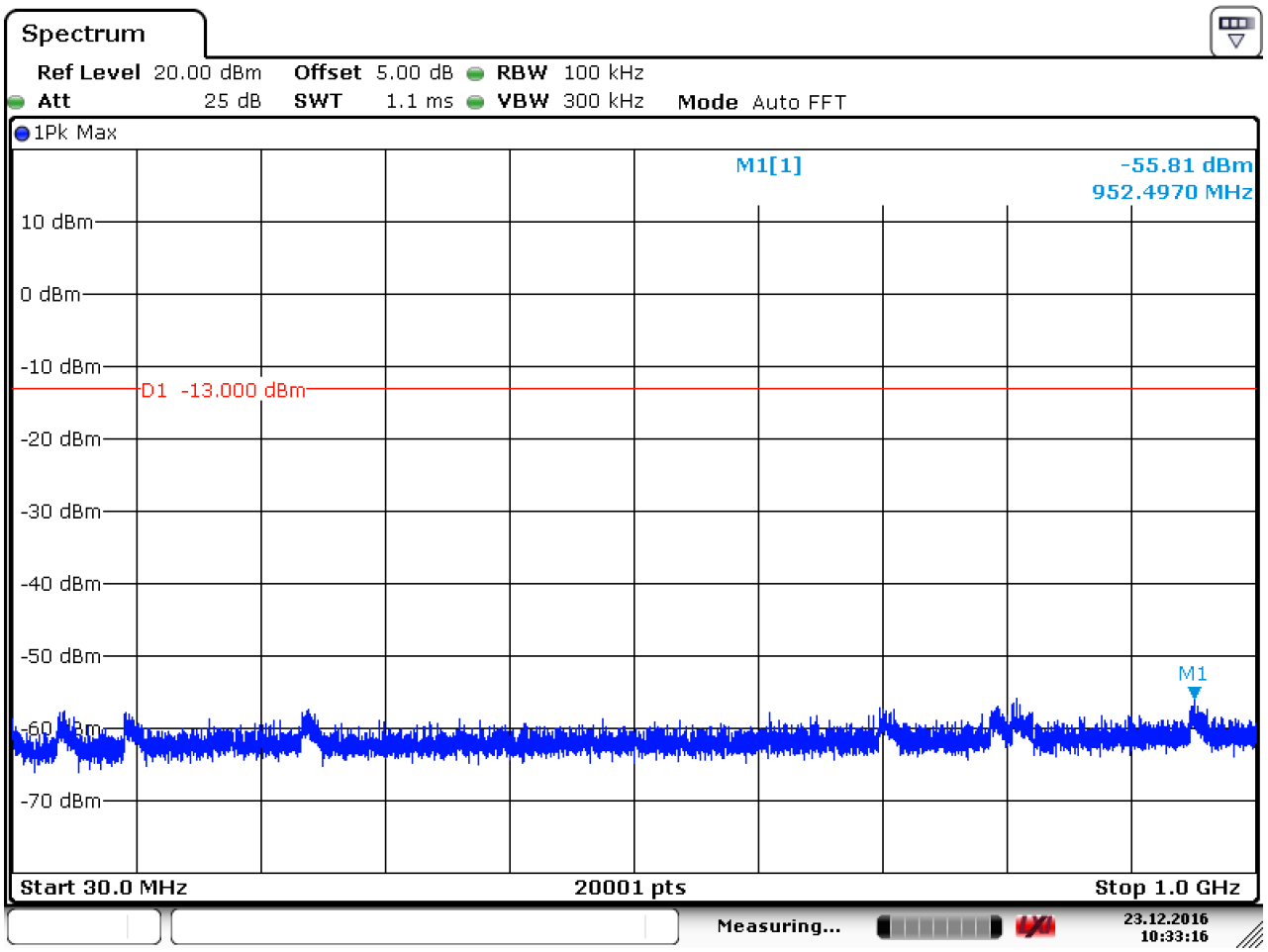


Date: 23.DEC.2016 10:31:13

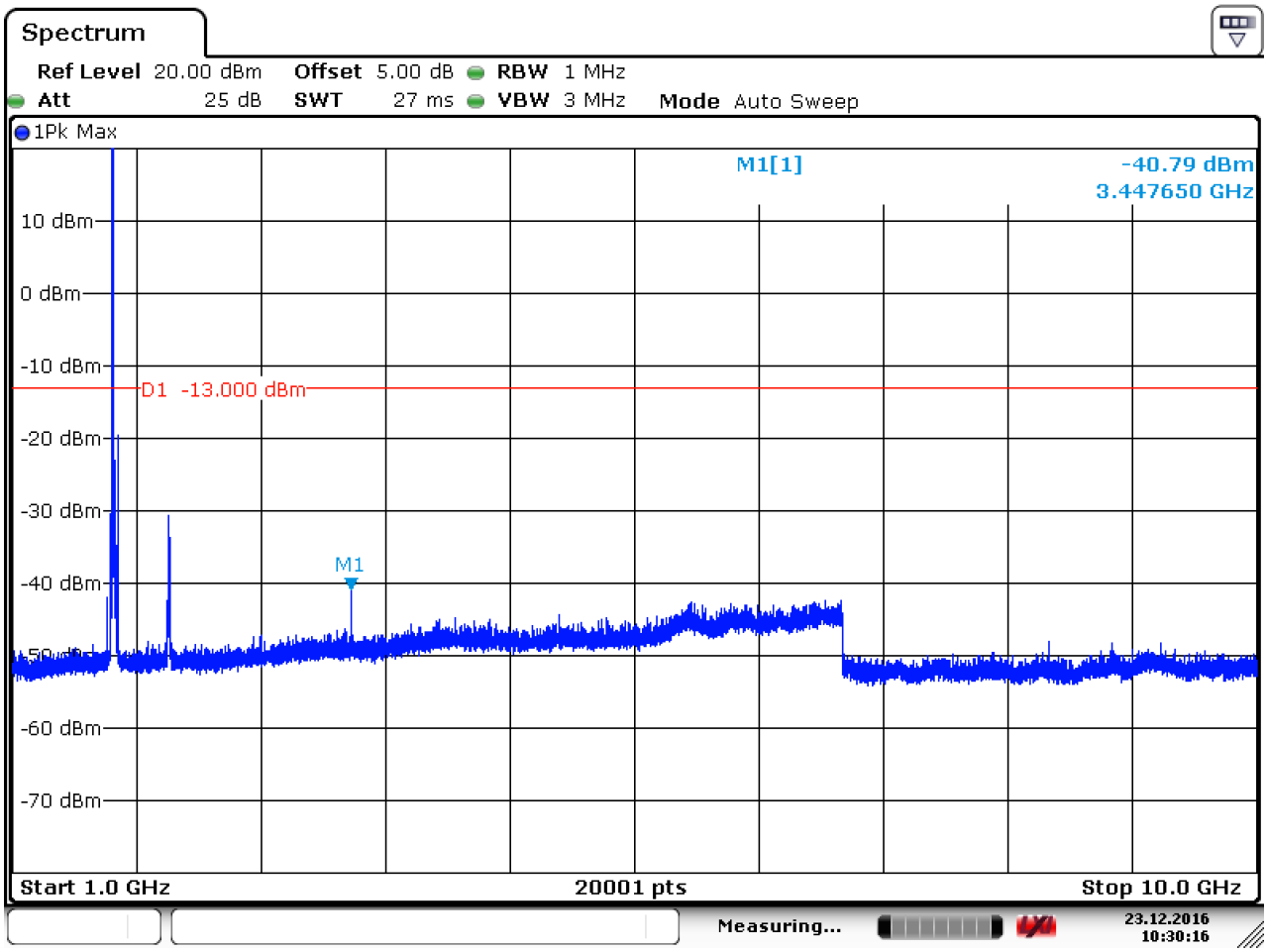


Date: 23.DEC.2016 10:00:05

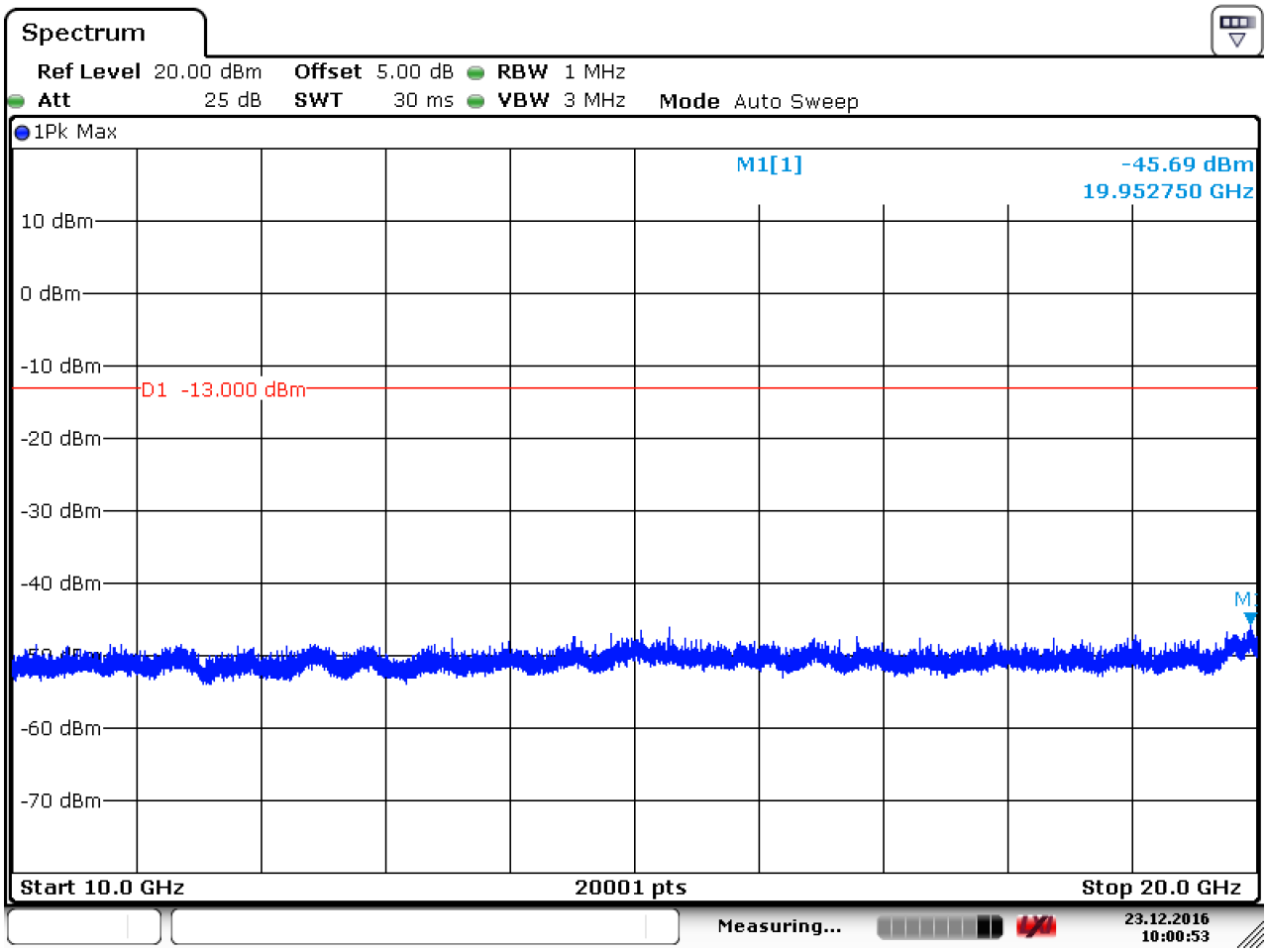
6.1.1.6.2 Test Channel = MCH



Date: 23.DEC.2016 10:33:17

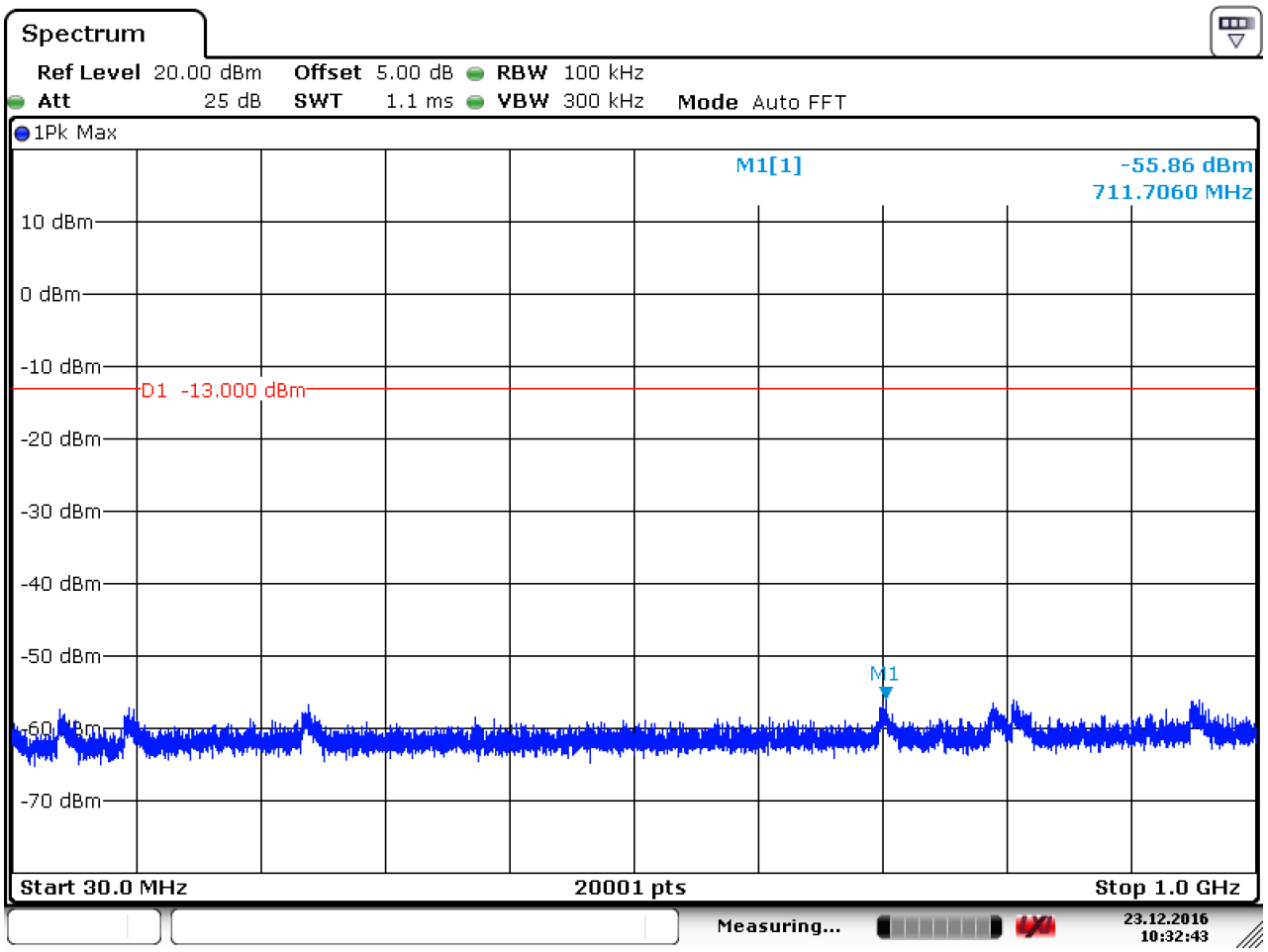


Date: 23.DEC.2016 10:30:16

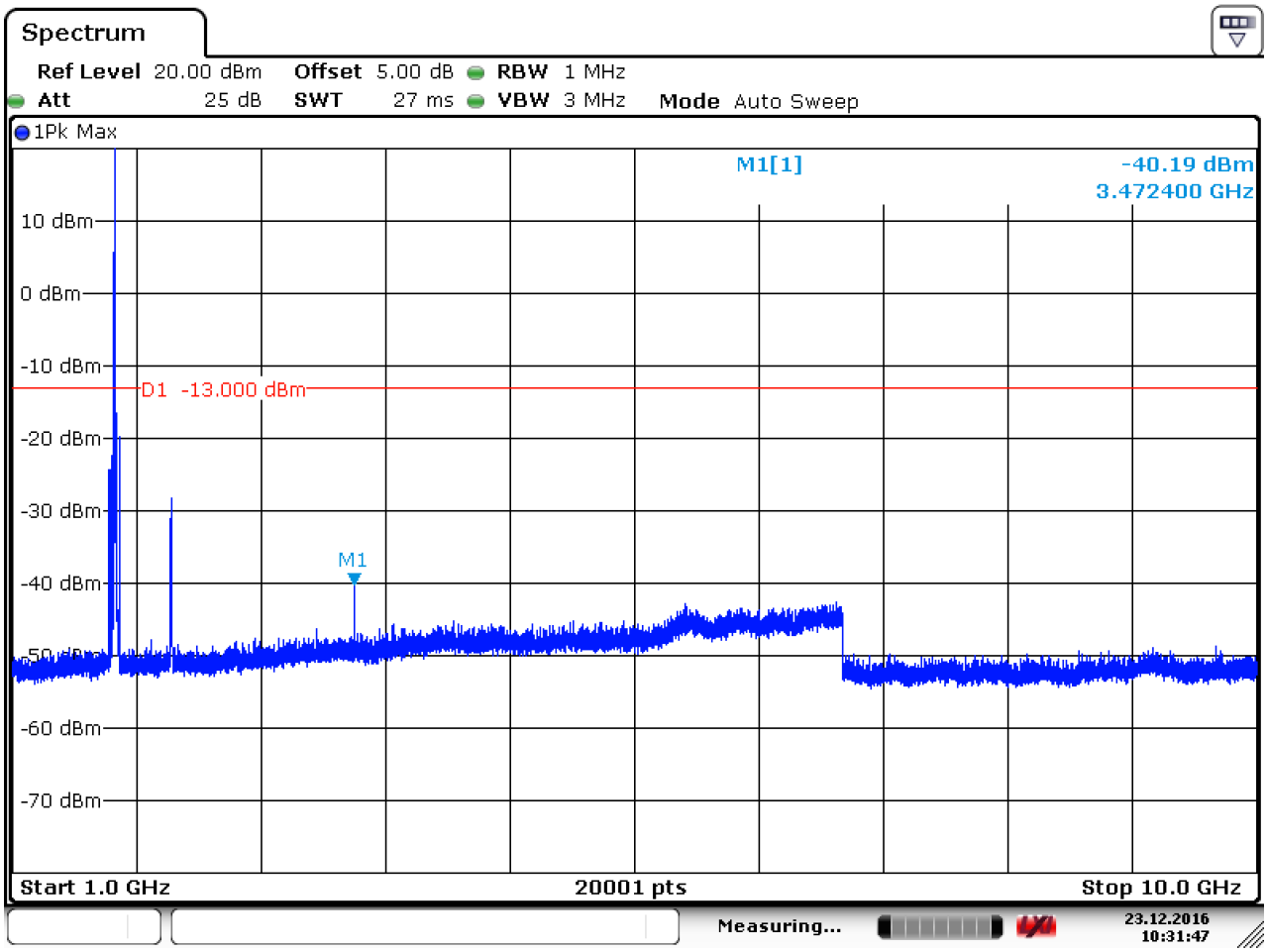


Date: 23.DEC.2016 10:00:54

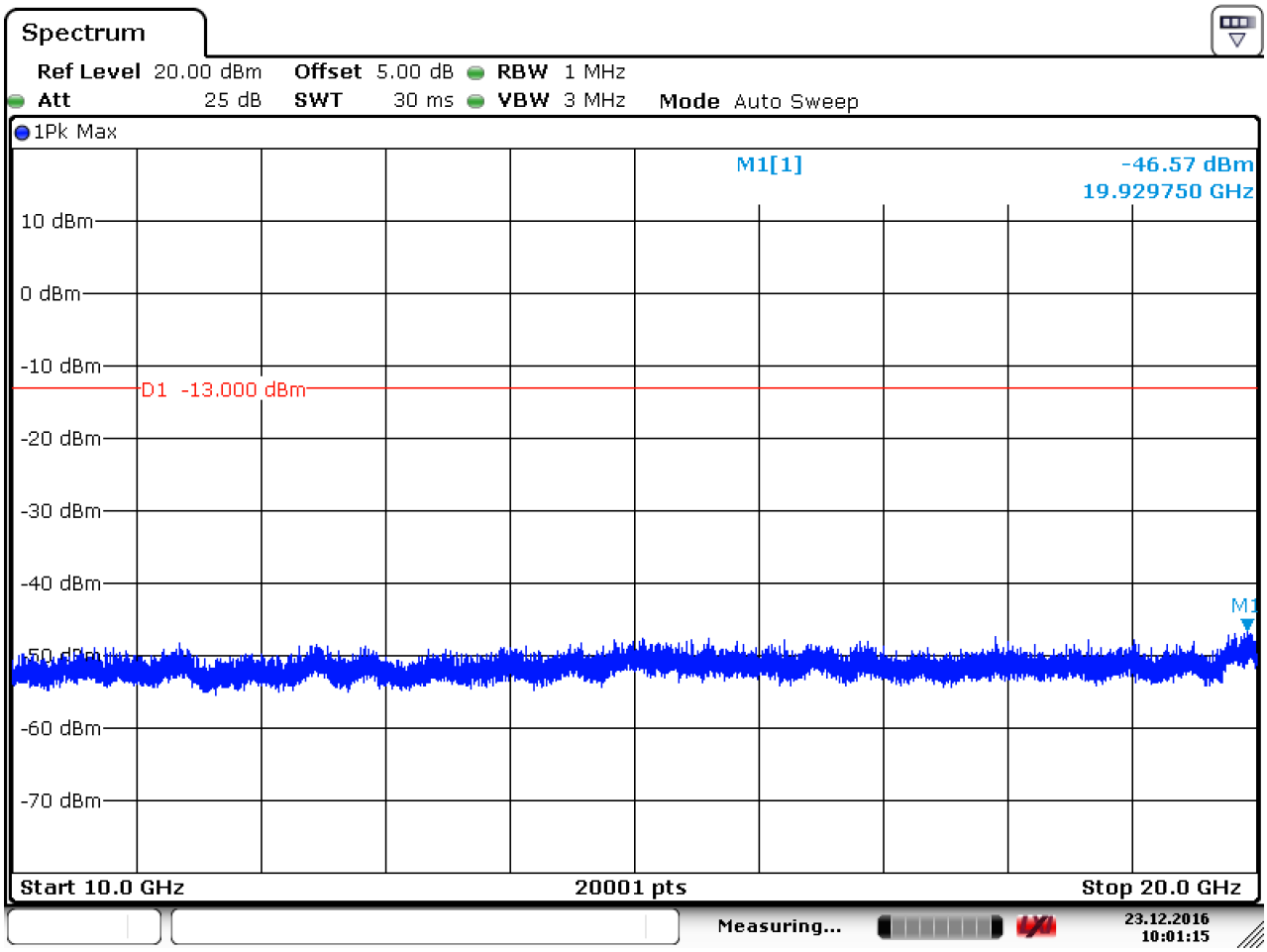
6.1.1.6.3 Test Channel = HCH



Date: 23.DEC.2016 10:32:43



Date: 23.DEC.2016 10:31:48



Date: 23.DEC.2016 10:01:15

7 Field Strength of Spurious Radiation

7.1 For LTE

7.1.1 Test Band = LTE band4

7.1.1.1.1 Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
1199.000	-66.17	-13.00	53.17	Vertical
1518.000	-66.42	-13.00	53.42	Vertical
4267.500	-67.63	-13.00	54.63	Vertical
1584.000	-65.57	-13.00	52.57	Horizontal
4267.500	-67.44	-13.00	54.44	Horizontal
5730.000	-67.16	-13.00	54.16	Horizontal

7.1.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
1584.000	-66.13	-13.00	53.13	Vertical
2632.000	-58.03	-13.00	45.03	Vertical
4950.000	-67.27	-13.00	54.27	Vertical
1958.000	-63.31	-13.00	50.31	Horizontal
3975.000	-68.68	-13.00	55.68	Horizontal
6510.000	-66.64	-13.00	53.64	Horizontal

7.1.1.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
1595.000	-65.95	-13.00	52.95	Vertical
2552.000	-58.82	-13.00	45.82	Vertical
5145.000	-67.63	-13.00	54.63	Vertical
2616.000	-58.55	-13.00	45.55	Horizontal
4267.500	-67.83	-13.00	54.83	Horizontal
6510.000	-66.57	-13.00	53.57	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 4	LTE/TM1 20MHz	LCH	TN	VL	-3.03	-0.00176	PASS
				VN	1.46	0.00085	PASS
				VH	-4.73	-0.00275	PASS
		MCH	TN	VL	2.49	0.00144	PASS
				VN	-3.84	-0.00222	PASS
				VH	2.22	0.00128	PASS
		HCH	TN	VL	-3.56	-0.00204	PASS
				VN	-5.07	-0.00291	PASS
				VH	-1.39	-0.00080	PASS
	LTE/TM2 20MHz	LCH	TN	VL	-4.08	-0.00237	PASS
				VN	-2.95	-0.00172	PASS
				VH	-3.06	-0.00178	PASS
		MCH	TN	VL	3.56	0.00205	PASS
				VN	-5.25	-0.00303	PASS
				VH	2.54	0.00147	PASS
		HCH	TN	VL	-3.38	-0.00194	PASS
				VN	-7.10	-0.00407	PASS
				VH	1.45	0.00083	PASS

8.2 Frequency Error VS. Temperature

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband 4	LTE/TM1 20MHz	LCH	VN	-30	-3.40	-0.00198	PASS
				-20	-1.24	-0.00072	PASS
				-10	3.38	0.00197	PASS
				0	-3.75	-0.00218	PASS
				10	1.65	0.00096	PASS
				20	2.15	0.00125	PASS
				30	-0.71	-0.00041	PASS
				40	-4.14	-0.00241	PASS
				50	1.69	0.00098	PASS
		MCH	VN	-30	-2.80	-0.00162	PASS
				-20	-3.95	-0.00228	PASS
				-10	-7.29	-0.00421	PASS
				0	-5.32	-0.00307	PASS
				10	-0.44	-0.00025	PASS
				20	-3.94	-0.00227	PASS
				30	-5.66	-0.00327	PASS
				40	-2.43	-0.00140	PASS
				50	-6.92	-0.00399	PASS
		HCH	VN	-30	2.24	0.00128	PASS
				-20	-1.49	-0.00085	PASS
				-10	1.65	0.00095	PASS
				0	-2.83	-0.00162	PASS
				10	1.60	0.00092	PASS
				20	-3.57	-0.00205	PASS
				30	-2.09	-0.00120	PASS
				40	-5.53	-0.00317	PASS
				50	-4.90	-0.00281	PASS

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband 4	LTE/TM2 20MHz	LCH	VN	-30	-2.52	-0.00147	PASS
				-20	-2.45	-0.00142	PASS
				-10	3.18	0.00185	PASS
				0	-2.64	-0.00153	PASS
				10	1.60	0.00093	PASS
				20	-0.23	-0.00013	PASS
				30	-2.44	-0.00142	PASS
				40	5.34	0.00310	PASS
				50	4.73	0.00275	PASS
		MCH	VN	-30	-3.80	-0.00219	PASS
				-20	-5.38	-0.00311	PASS
				-10	-7.19	-0.00415	PASS
				0	-4.32	-0.00249	PASS
				10	-2.34	-0.00135	PASS
				20	1.74	0.00100	PASS
				30	-5.67	-0.00327	PASS
				40	-2.32	-0.00134	PASS
				50	-3.41	-0.00197	PASS
		HCH	VN	-30	3.84	0.00220	PASS
				-20	-2.55	-0.00146	PASS
				-10	1.59	0.00091	PASS
				0	-3.73	-0.00214	PASS
				10	-2.34	-0.00134	PASS
				20	-1.47	-0.00084	PASS
				30	-2.89	-0.00166	PASS
				40	-4.39	-0.00252	PASS
				50	-5.60	-0.00321	PASS

The End