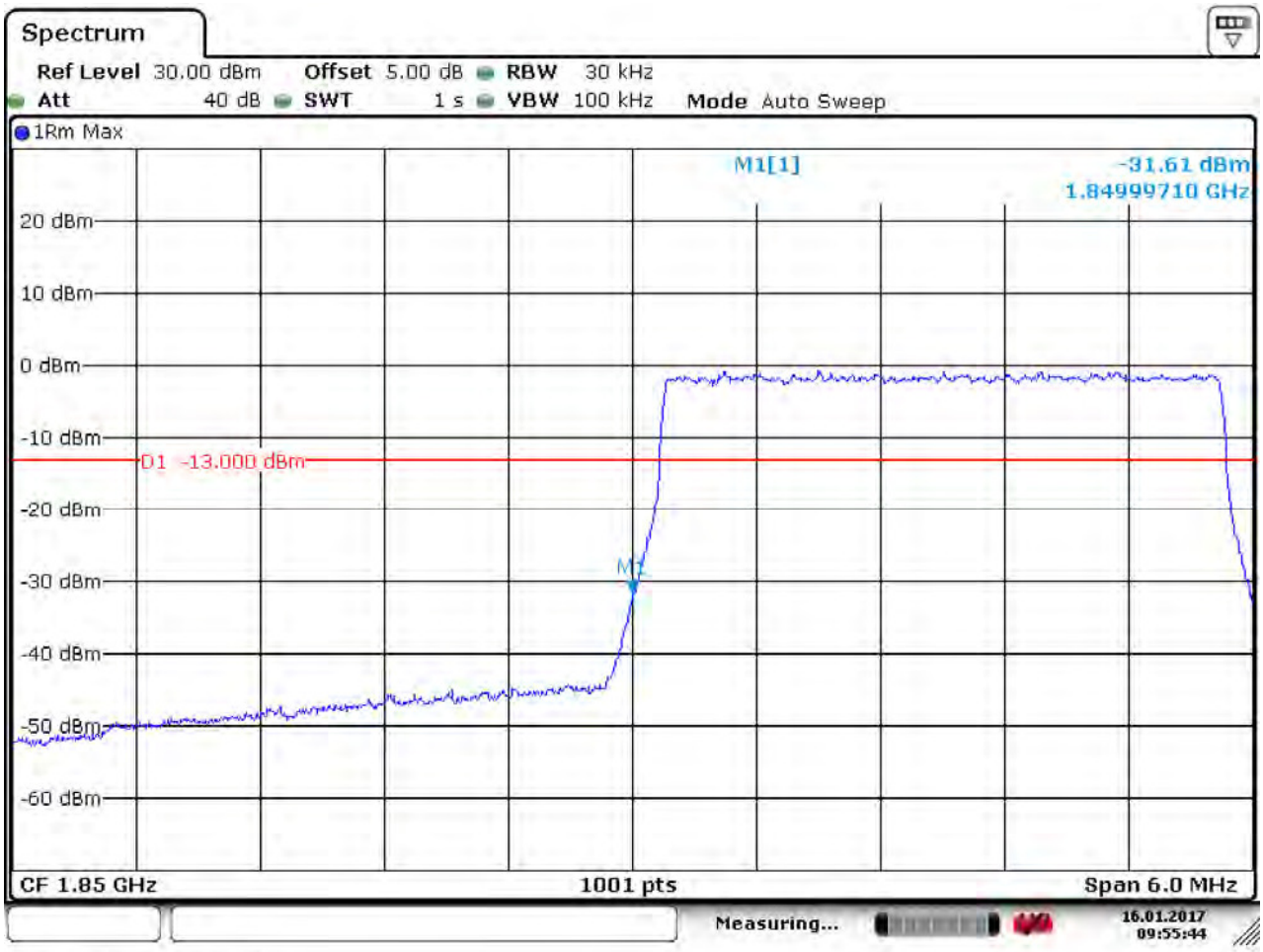
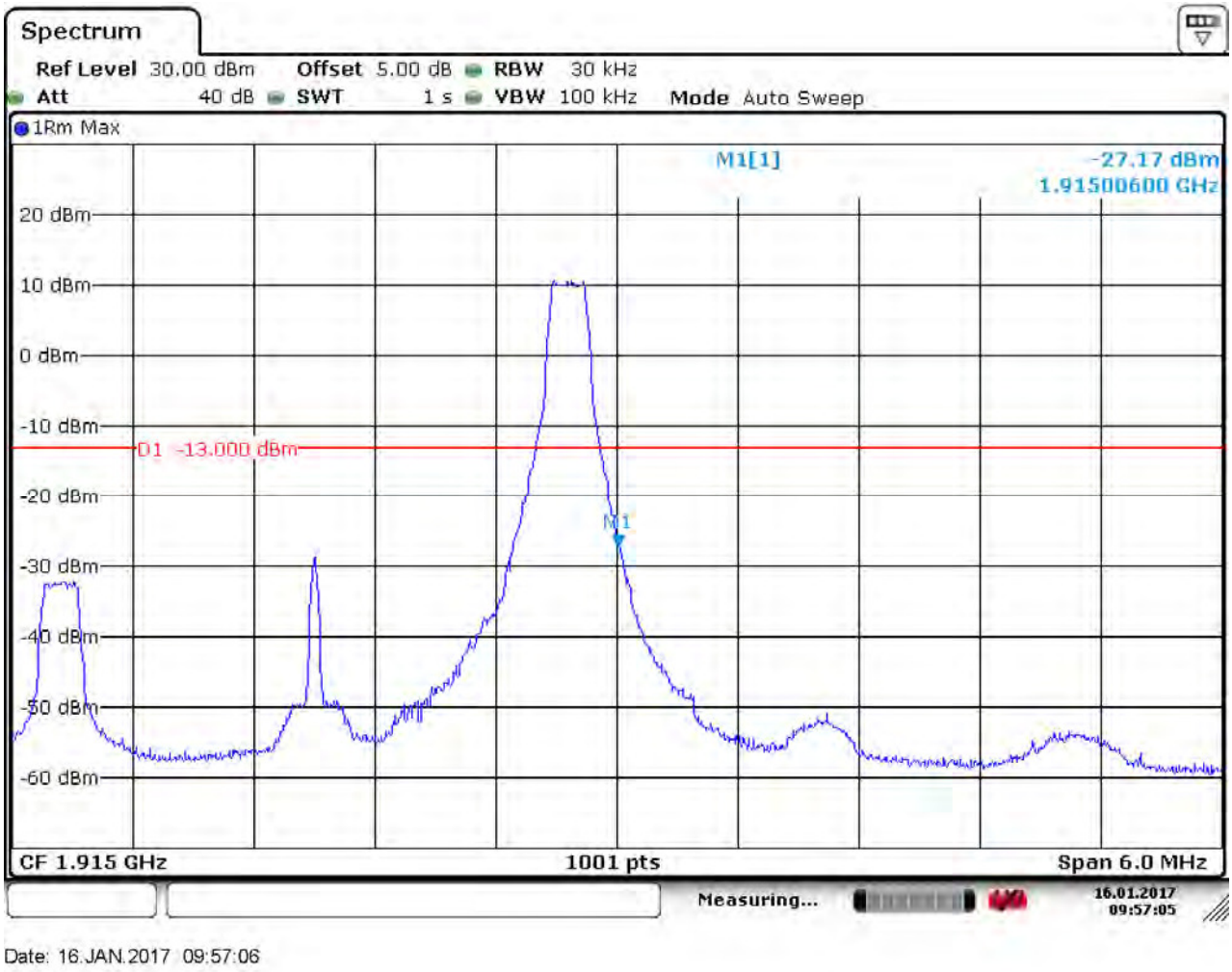
5.1.1.6.2.1 Test RB=15RB



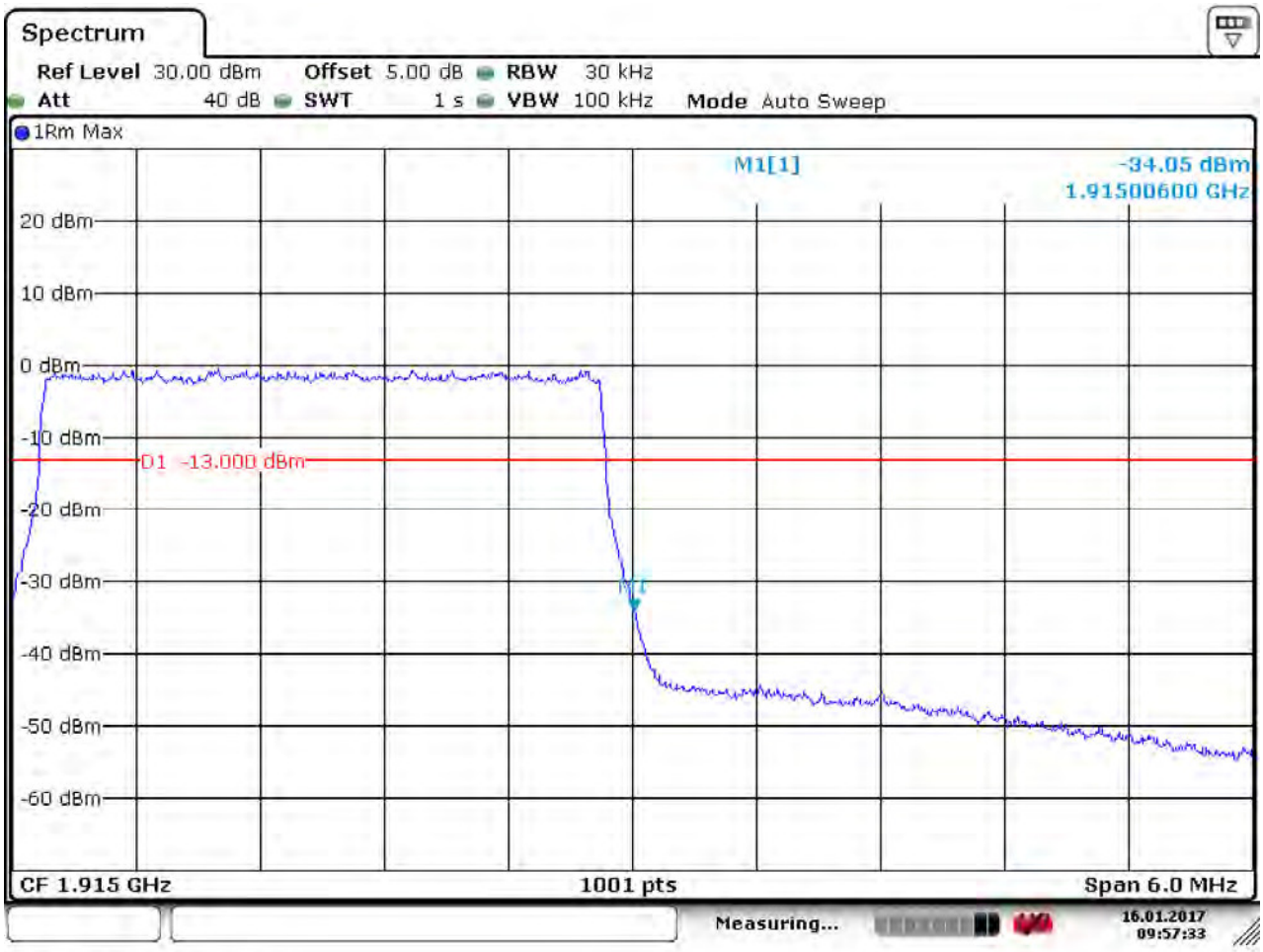
Date: 16.JAN.2017 09:55:44

5.1.1.6.3 Test Channel = HCH

5.1.1.6.3.1 Test RB=1RB



5.1.1.6.3.2 Test RB=15RB

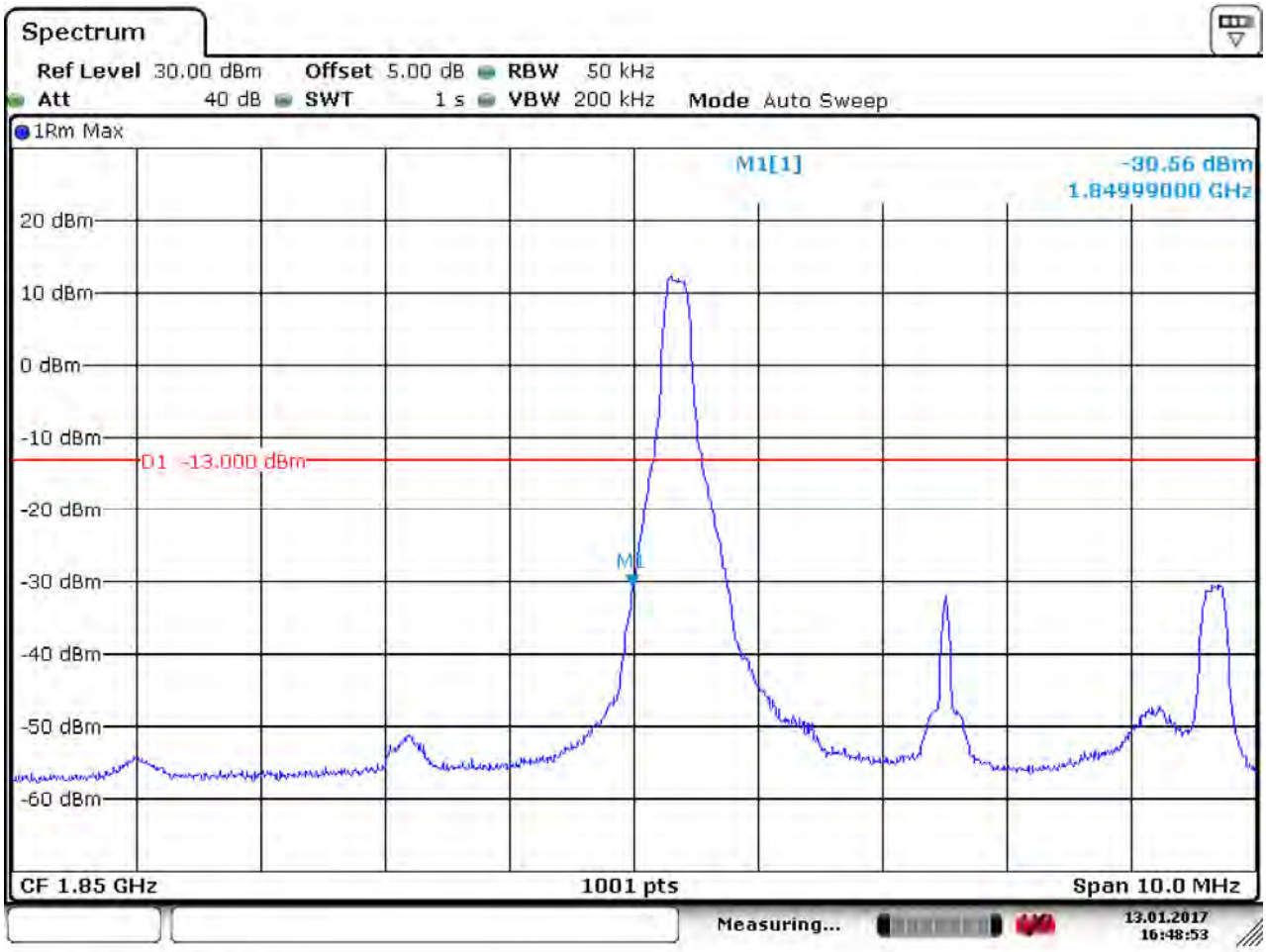


Date: 16.JAN.2017 09:57:33

5.1.1.7 Test Mode = LTE/TM1 5MHz

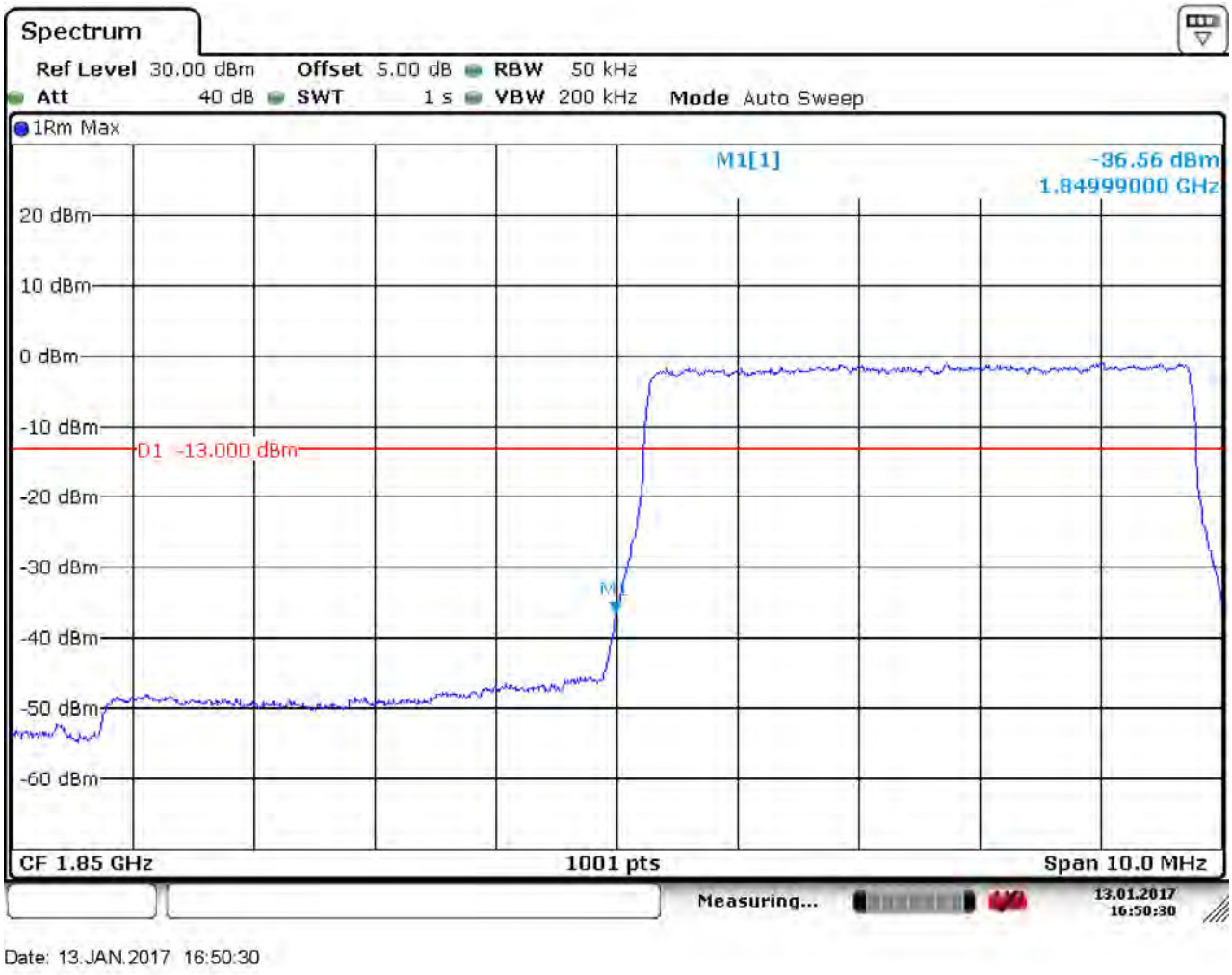
5.1.1.7.1 Test Channel = LCH

5.1.1.7.1.1 Test RB=1RB



Date: 13.JAN.2017 16:48:54

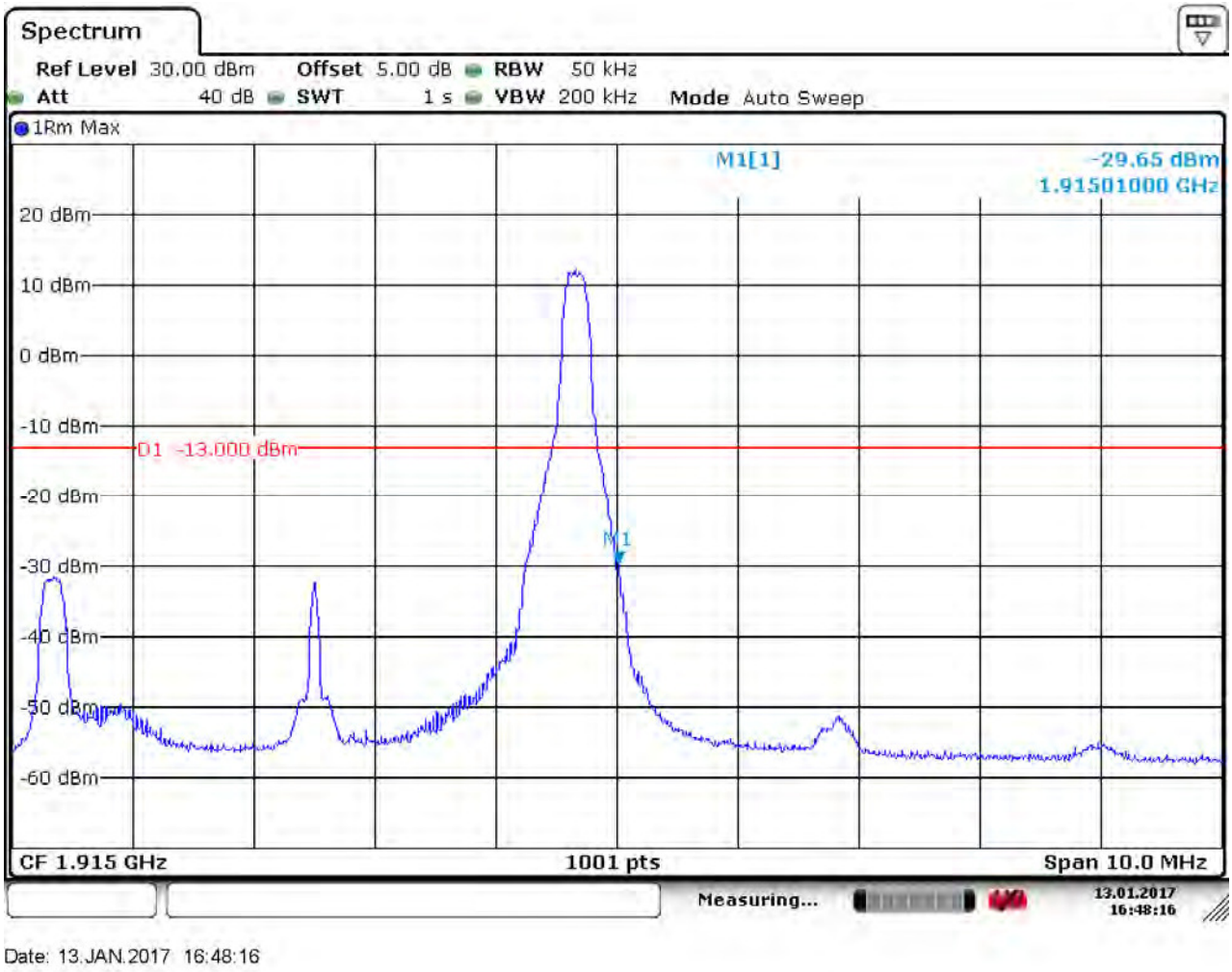
5.1.1.7.1.2 Test RB=25RB



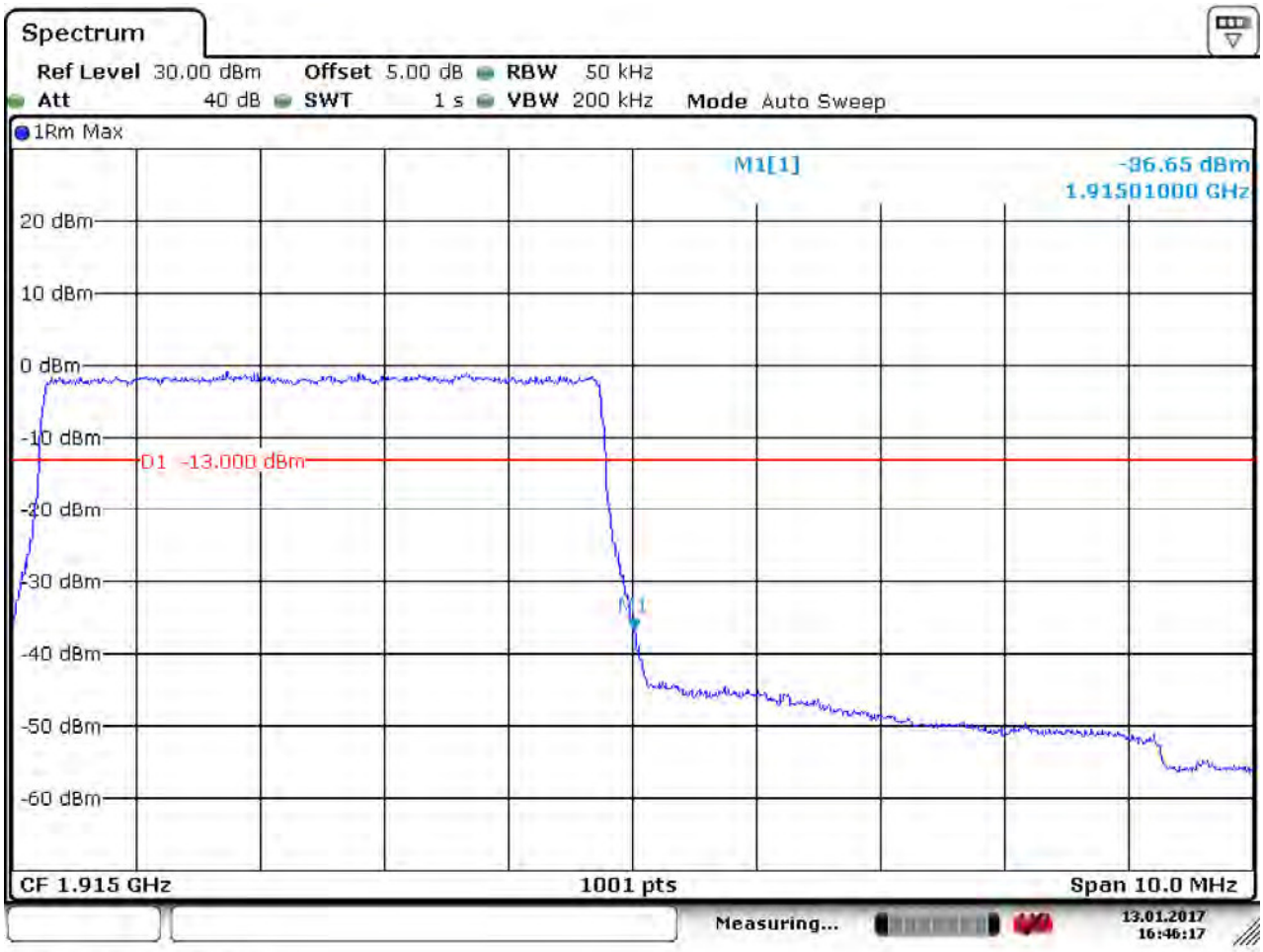
Date: 13.JAN.2017 16:50:30

5.1.1.7.2 Test Channel = HCH

5.1.1.7.2.1 Test RB=1RB



5.1.1.7.2.2 Test RB=25RB

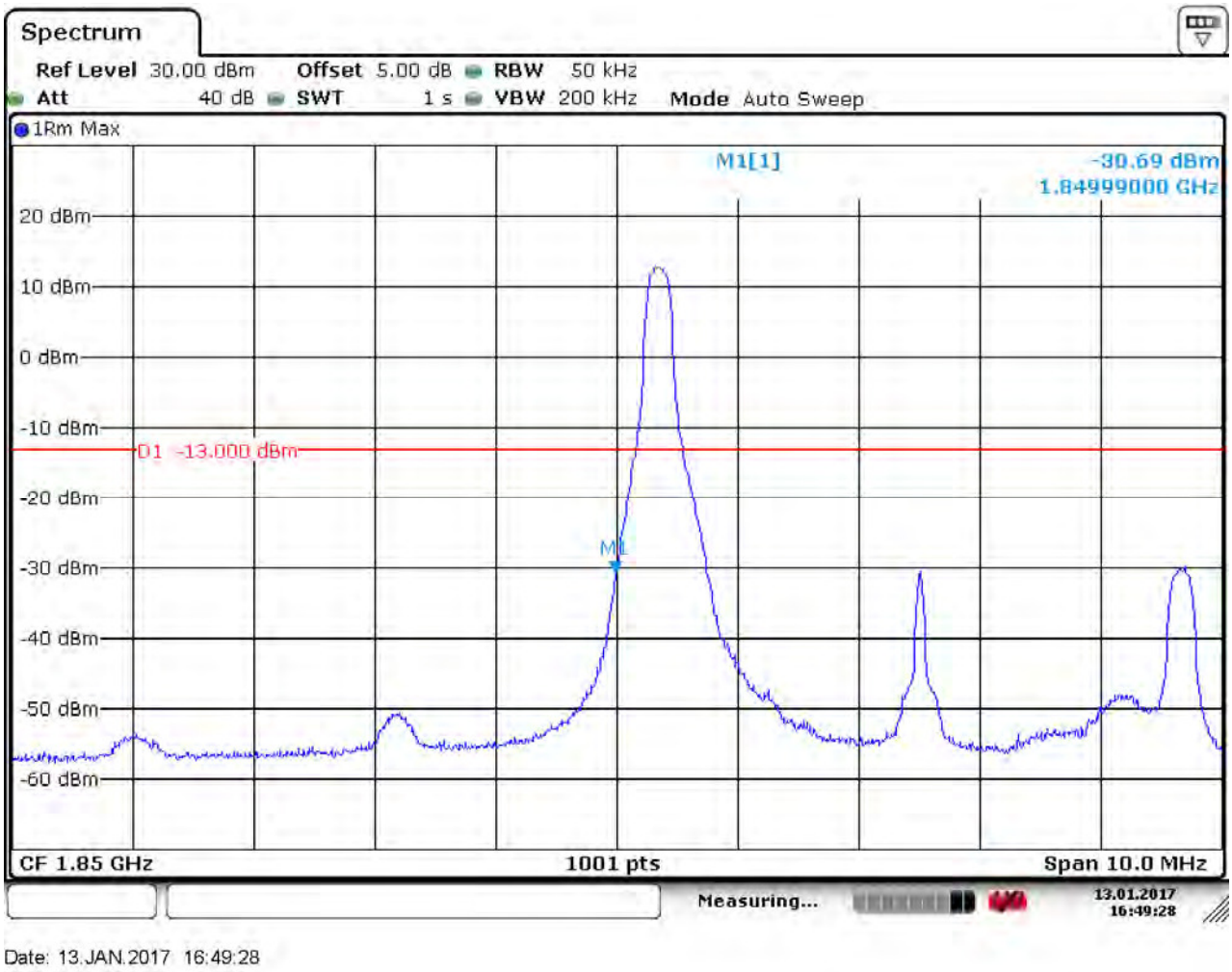


Date: 13.JAN.2017 16:46:18

5.1.1.8 Test Mode = LTE/TM2 5MHz

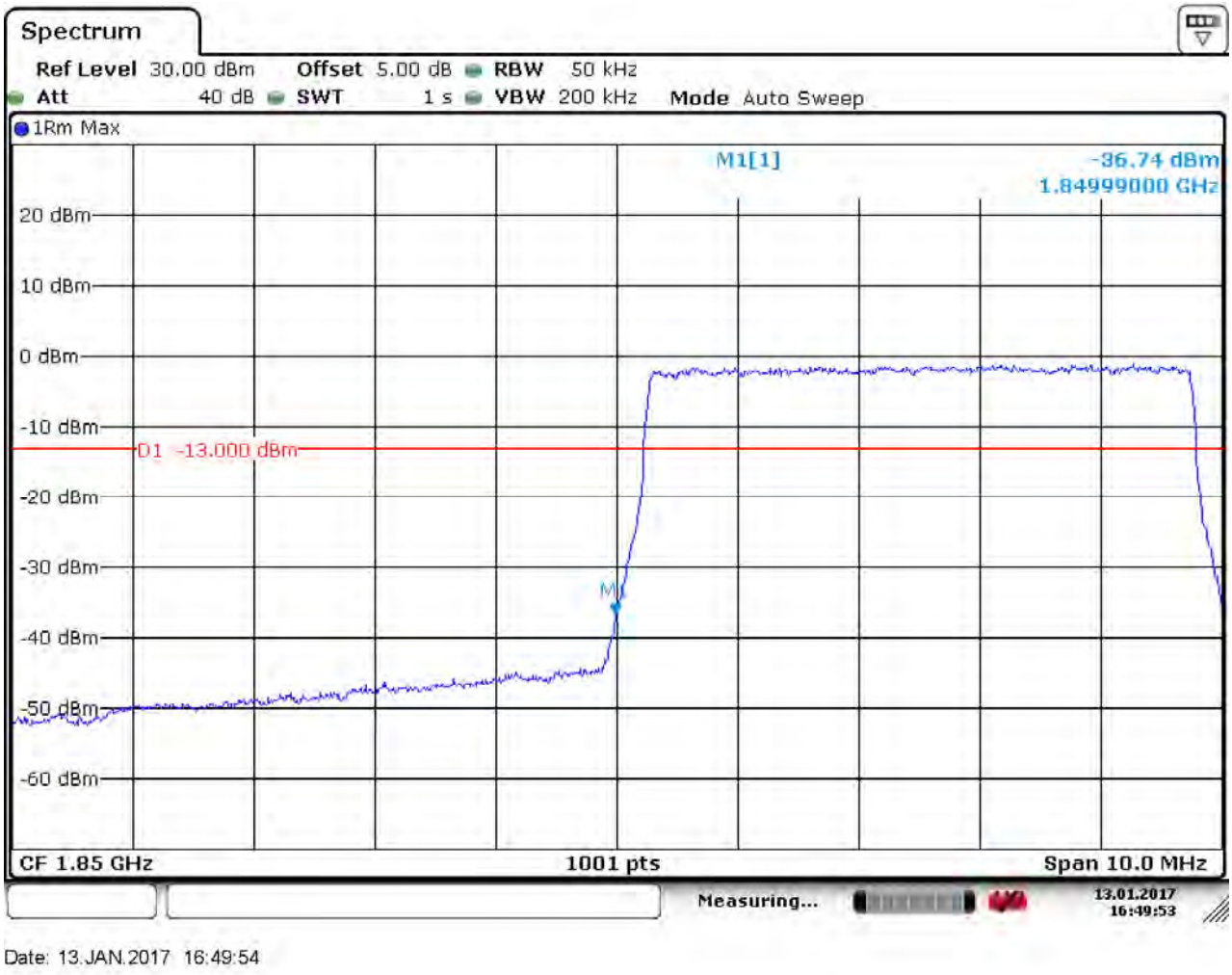
5.1.1.8.1 Test Channel = LCH

5.1.1.8.1.1 Test RB=1RB



Date: 13.JAN.2017 16:49:28

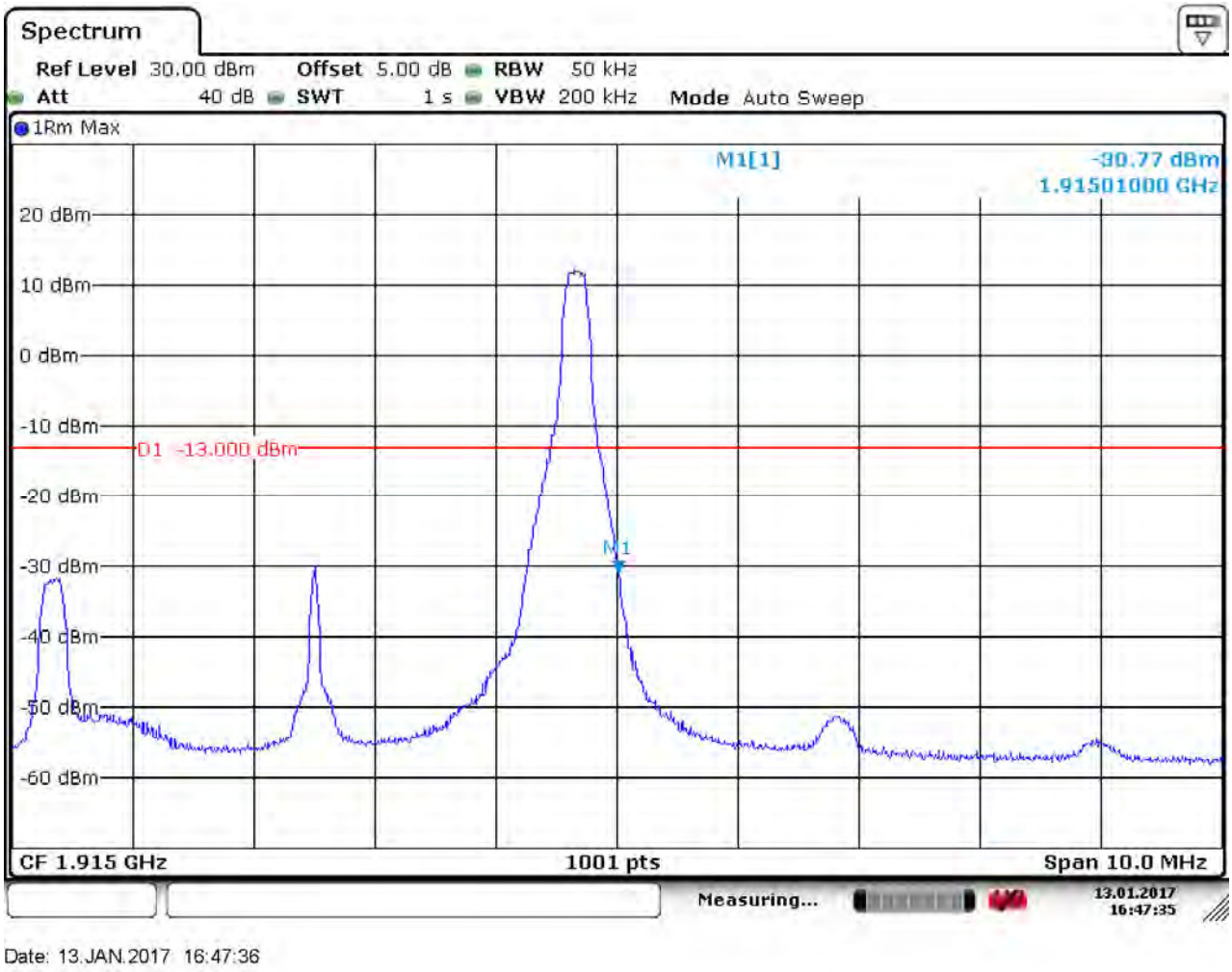
5.1.1.8.1.2 Test RB=25RB



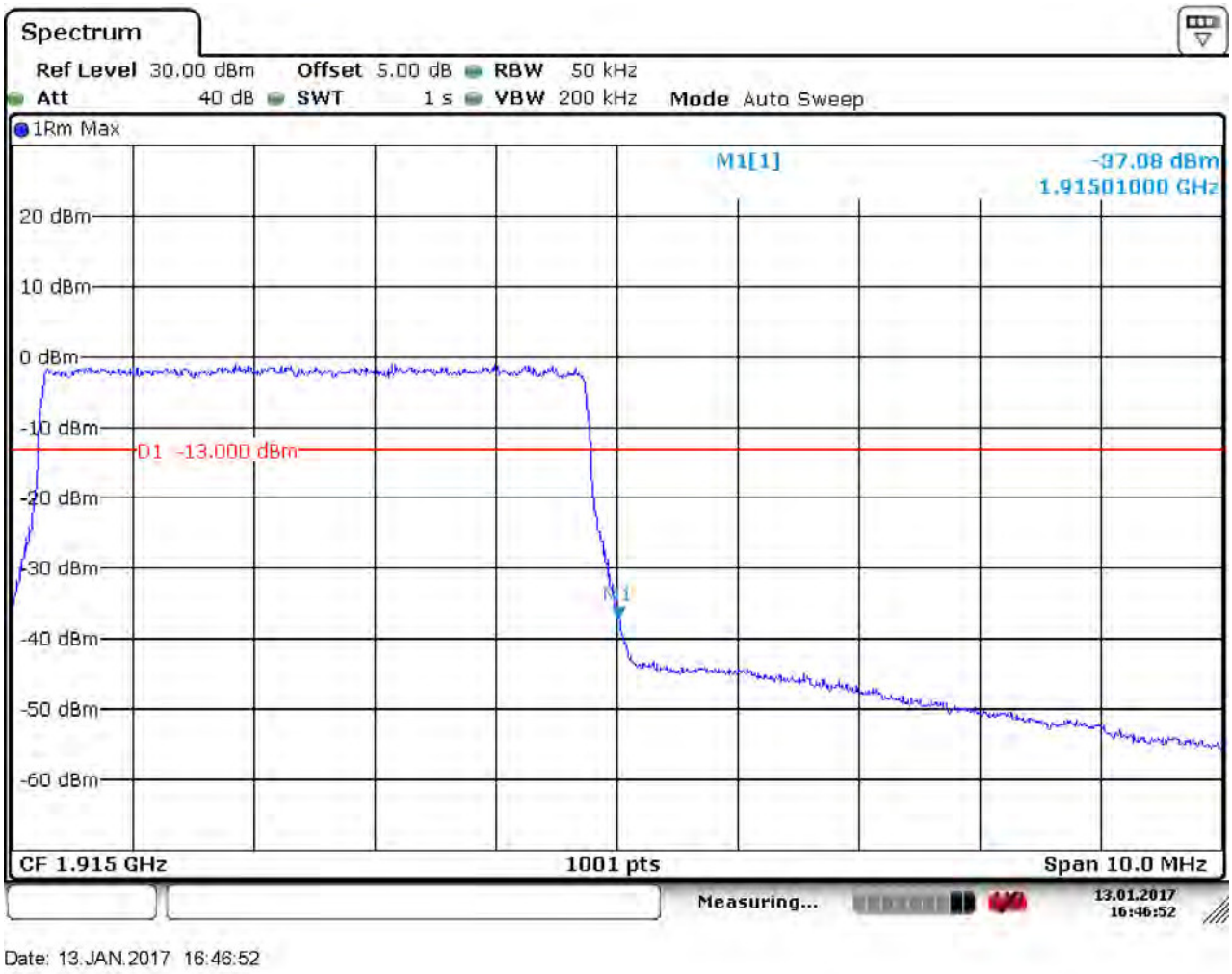
Date: 13.JAN.2017 16:49:54

5.1.1.8.2 Test Channel = HCH

5.1.1.8.2.1 Test RB=1RB



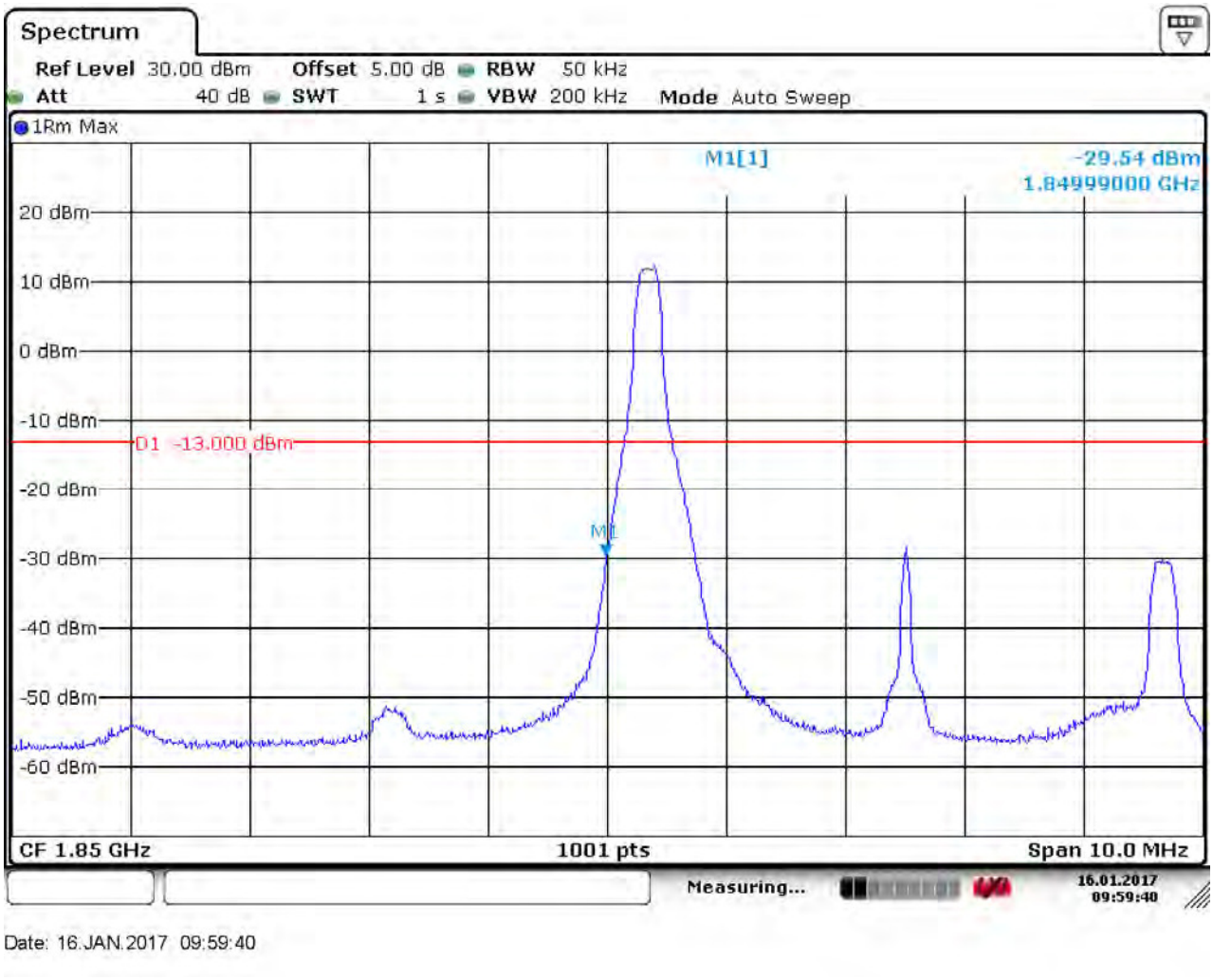
5.1.1.8.2.2 Test RB=25RB



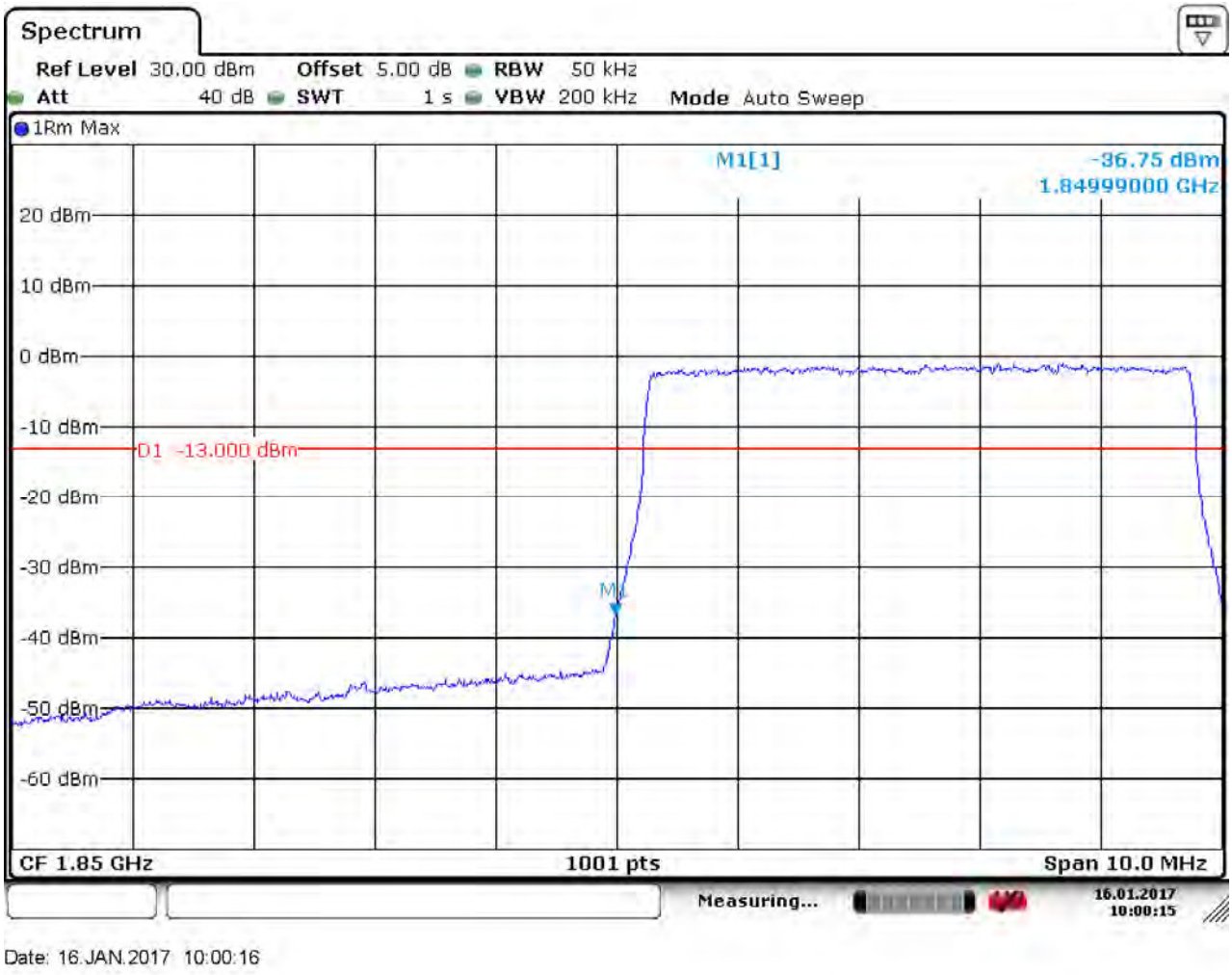
5.1.1.9 Test Mode = LTE/TM3 5MHz

5.1.1.9.1 Test Channel = LCH

5.1.1.9.1.1 Test RB=1RB

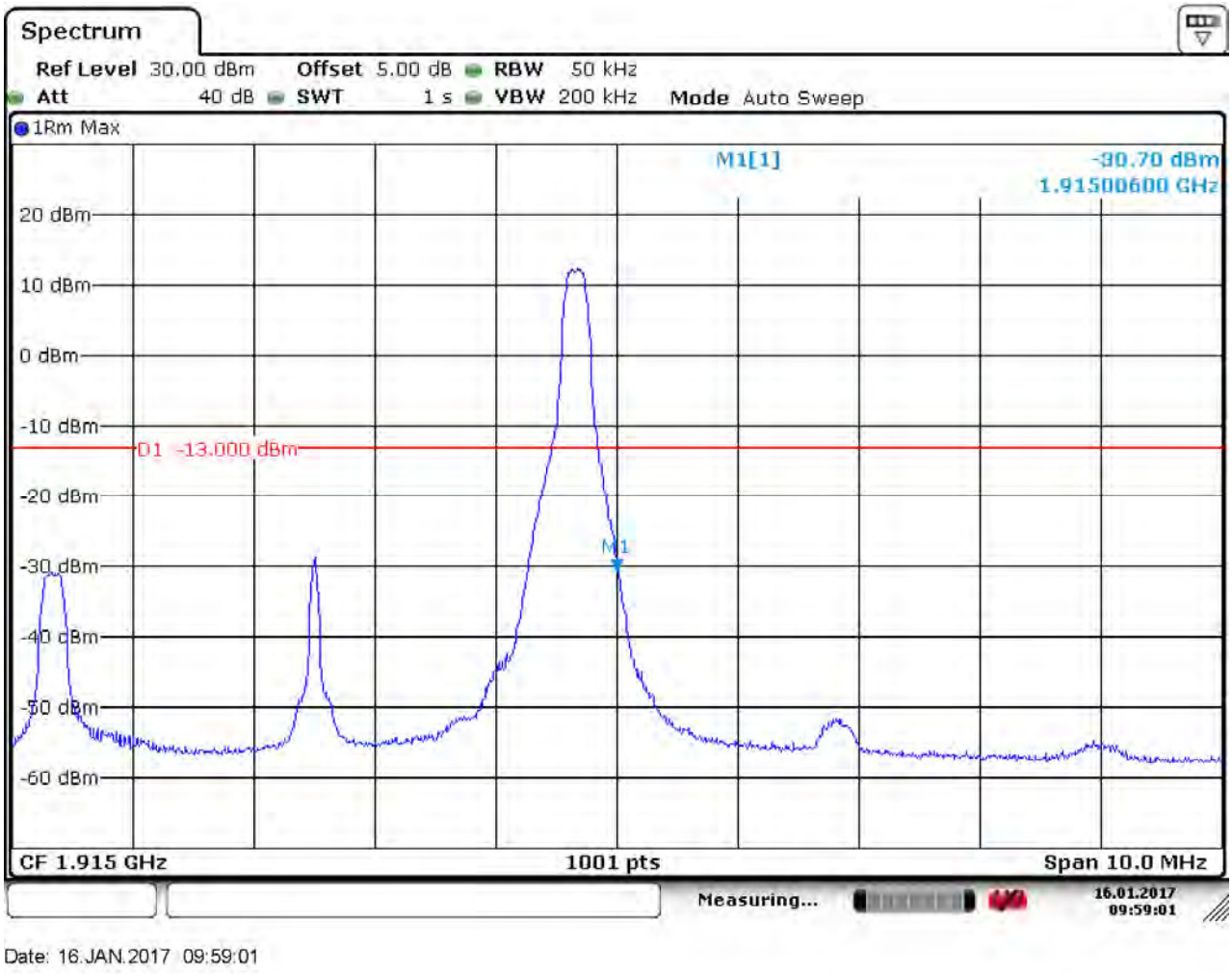


5.1.1.9.1.2 Test RB=25RB

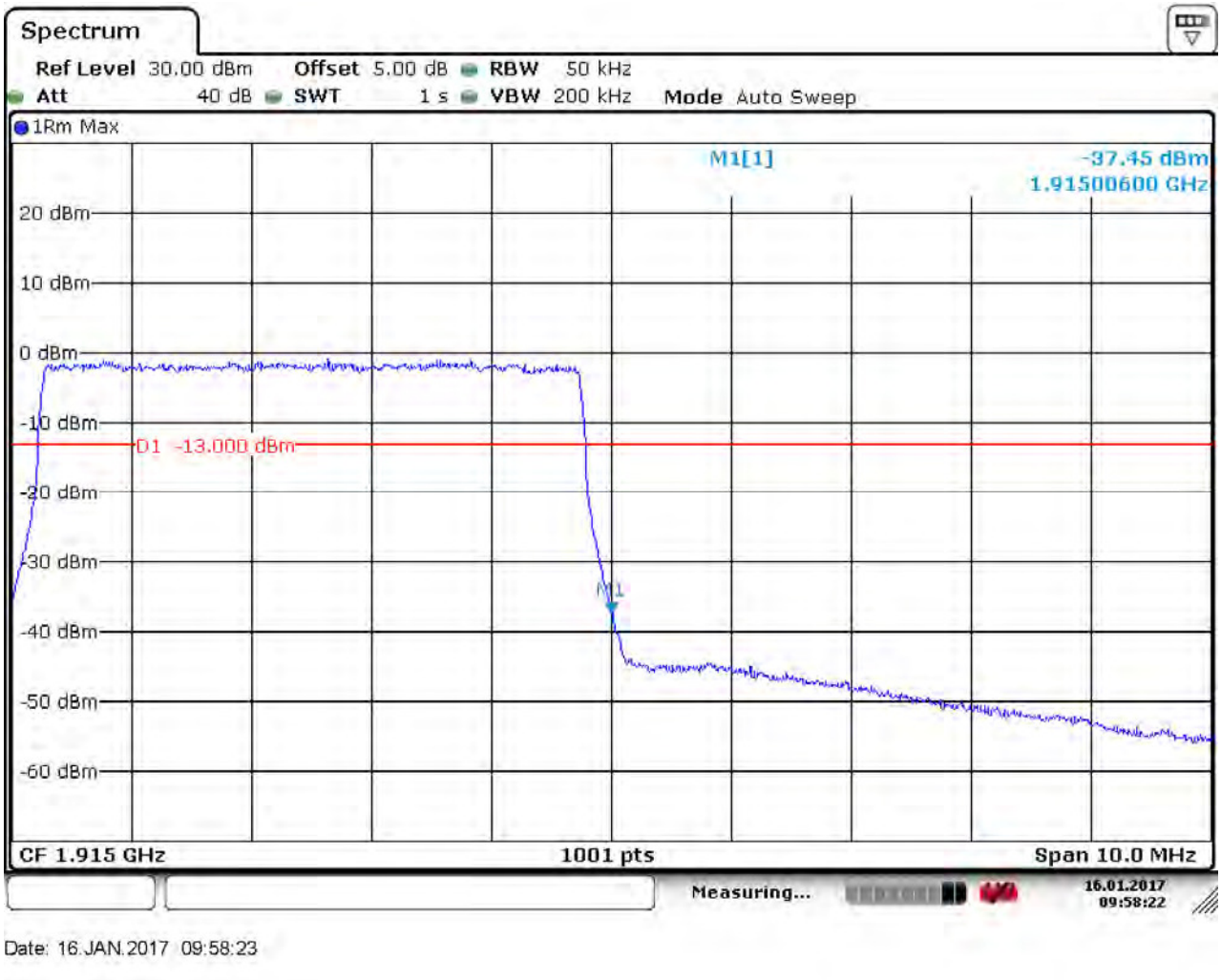


5.1.1.9.2 Test Channel = HCH

5.1.1.9.2.1 Test RB=1RB



5.1.1.9.2.2 Test RB=25RB

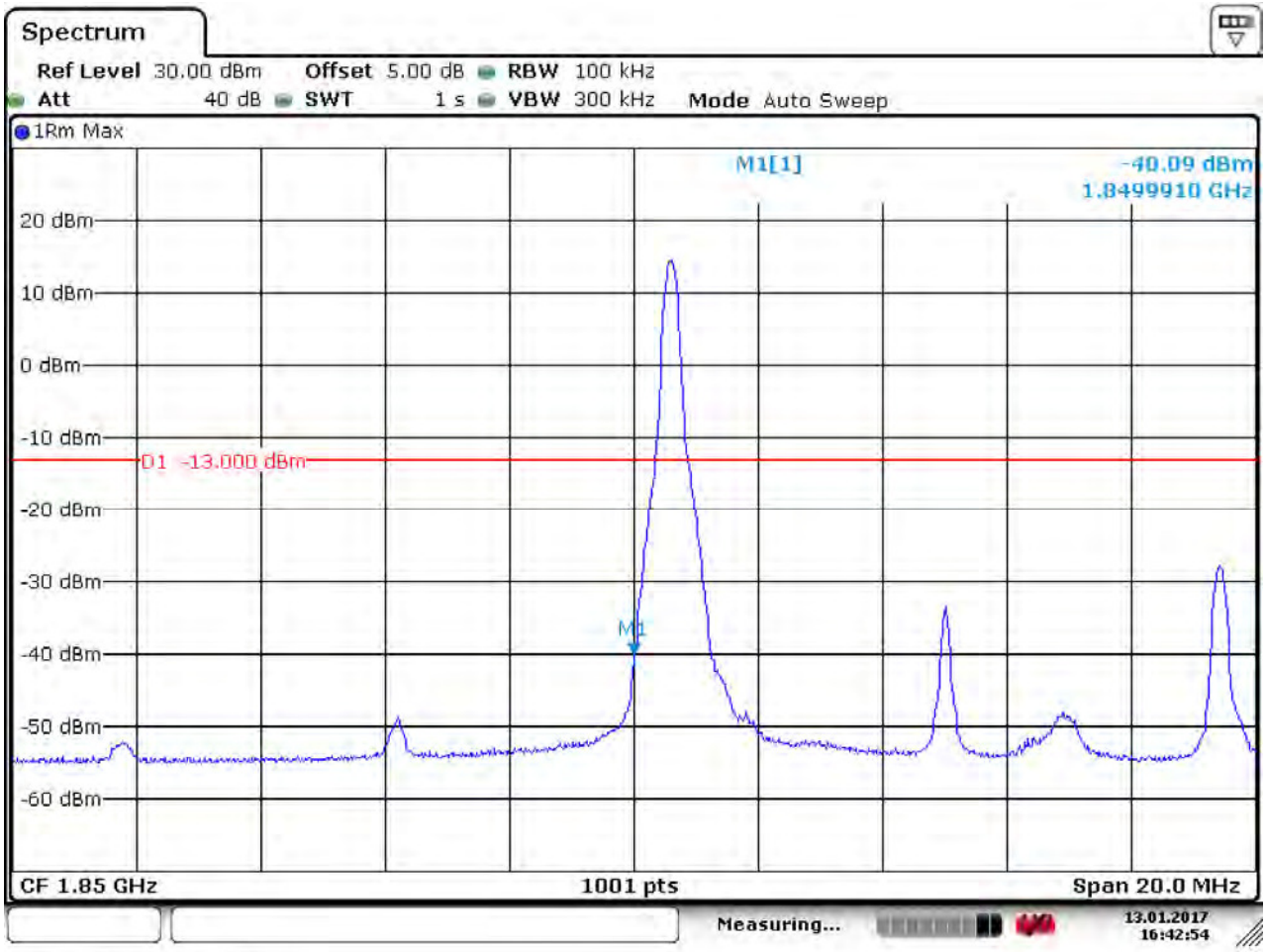


Date: 16.JAN.2017 09:58:23

5.1.1.10 Test Mode = LTE/TM1 10MHz

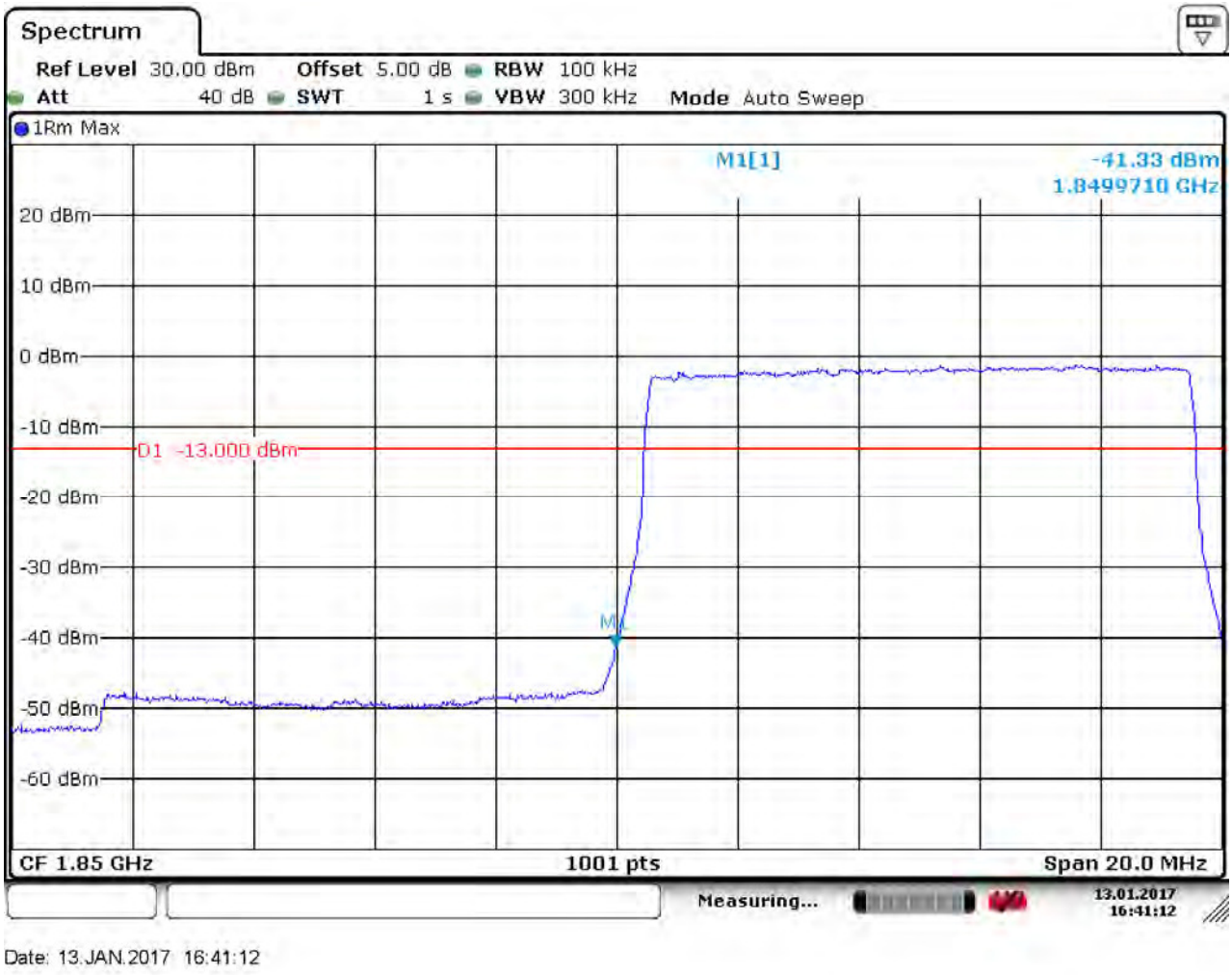
5.1.1.10.1 Test Channel = LCH

5.1.1.10.1.1 Test RB=1RB



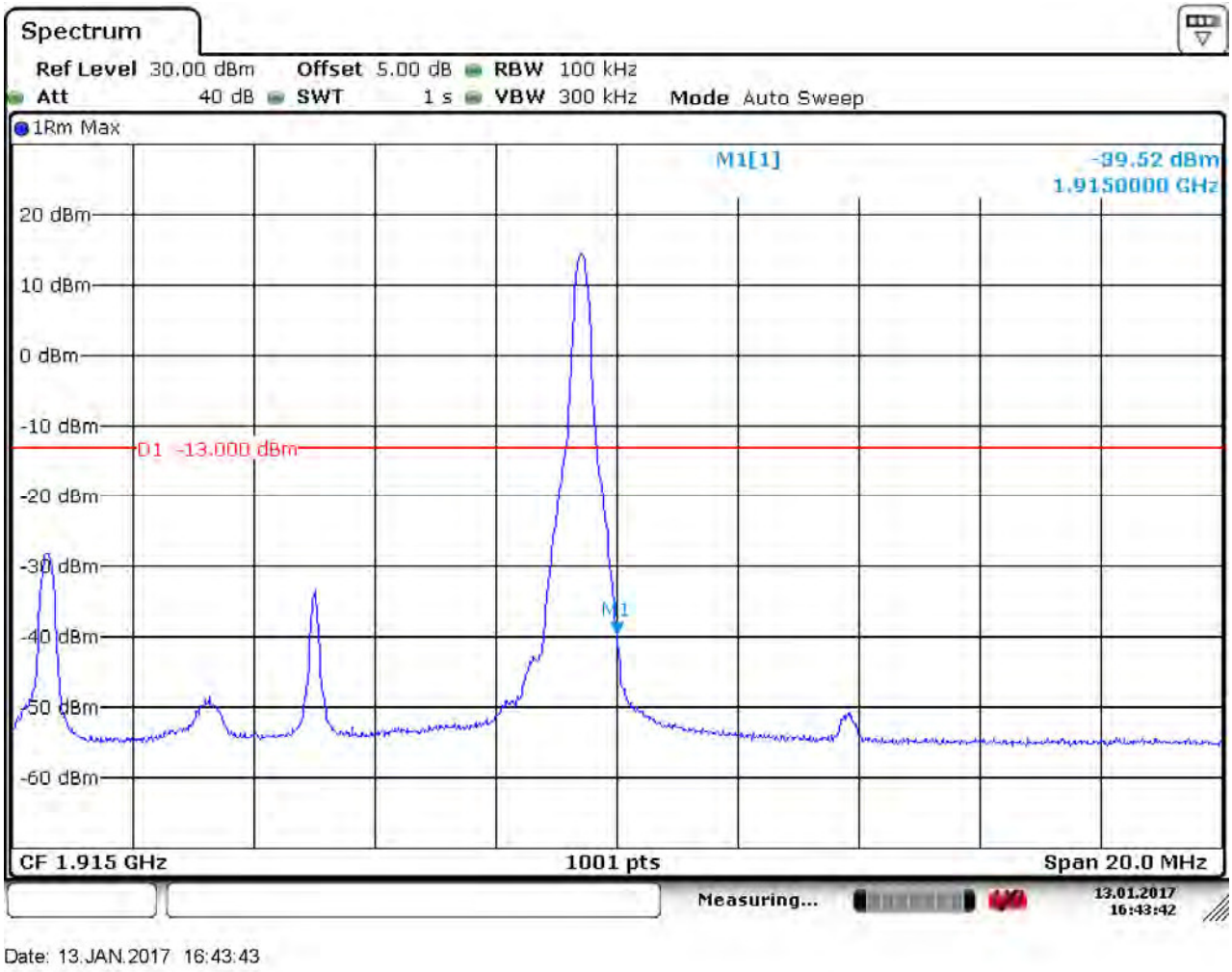
Date: 13.JAN.2017 16:42:55

5.1.1.10.1.2 Test RB=50RB

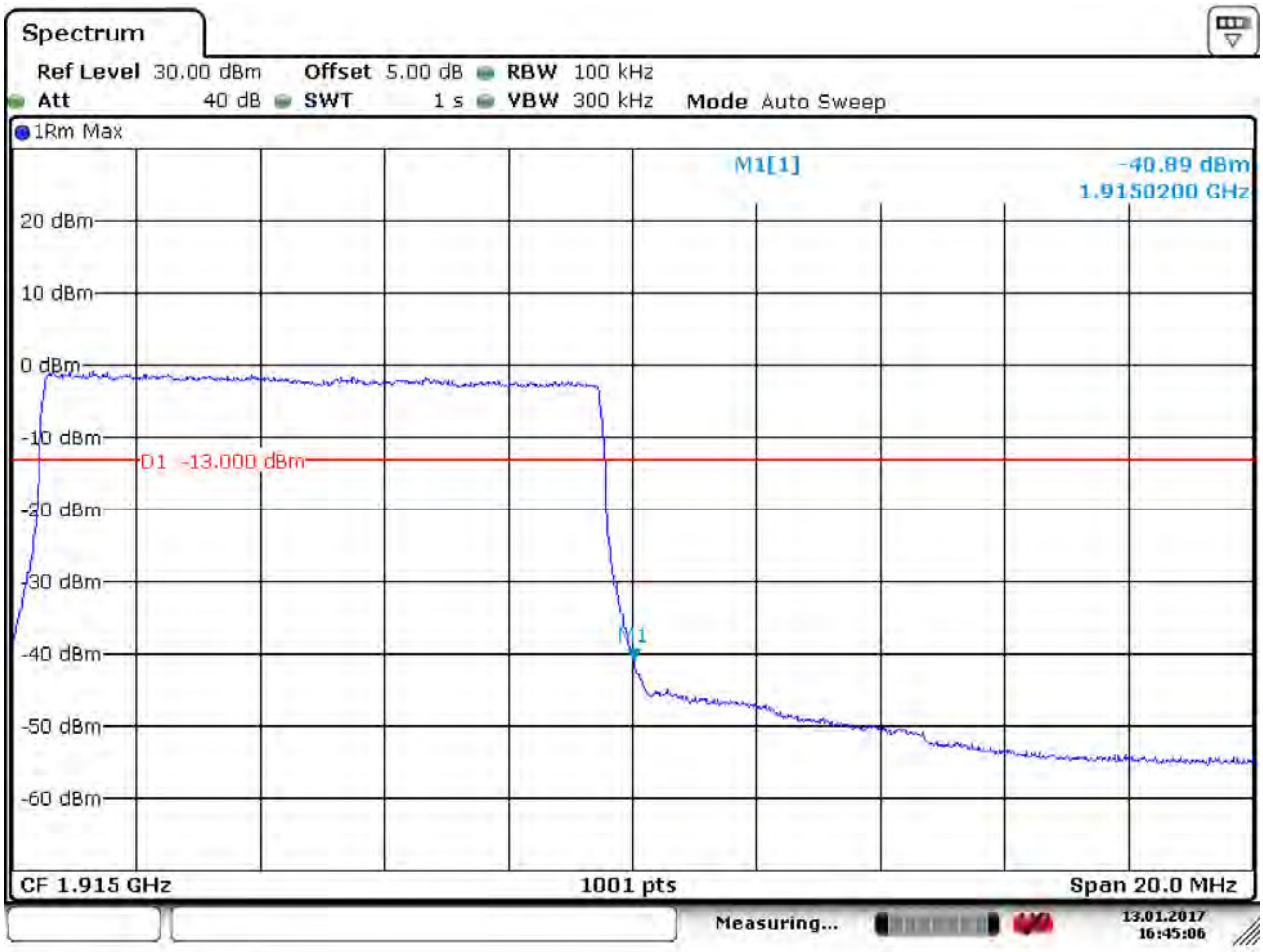


5.1.1.10.2 Test Channel = HCH

5.1.1.10.2.1 Test RB=1RB



5.1.1.10.2.2 Test RB=50RB

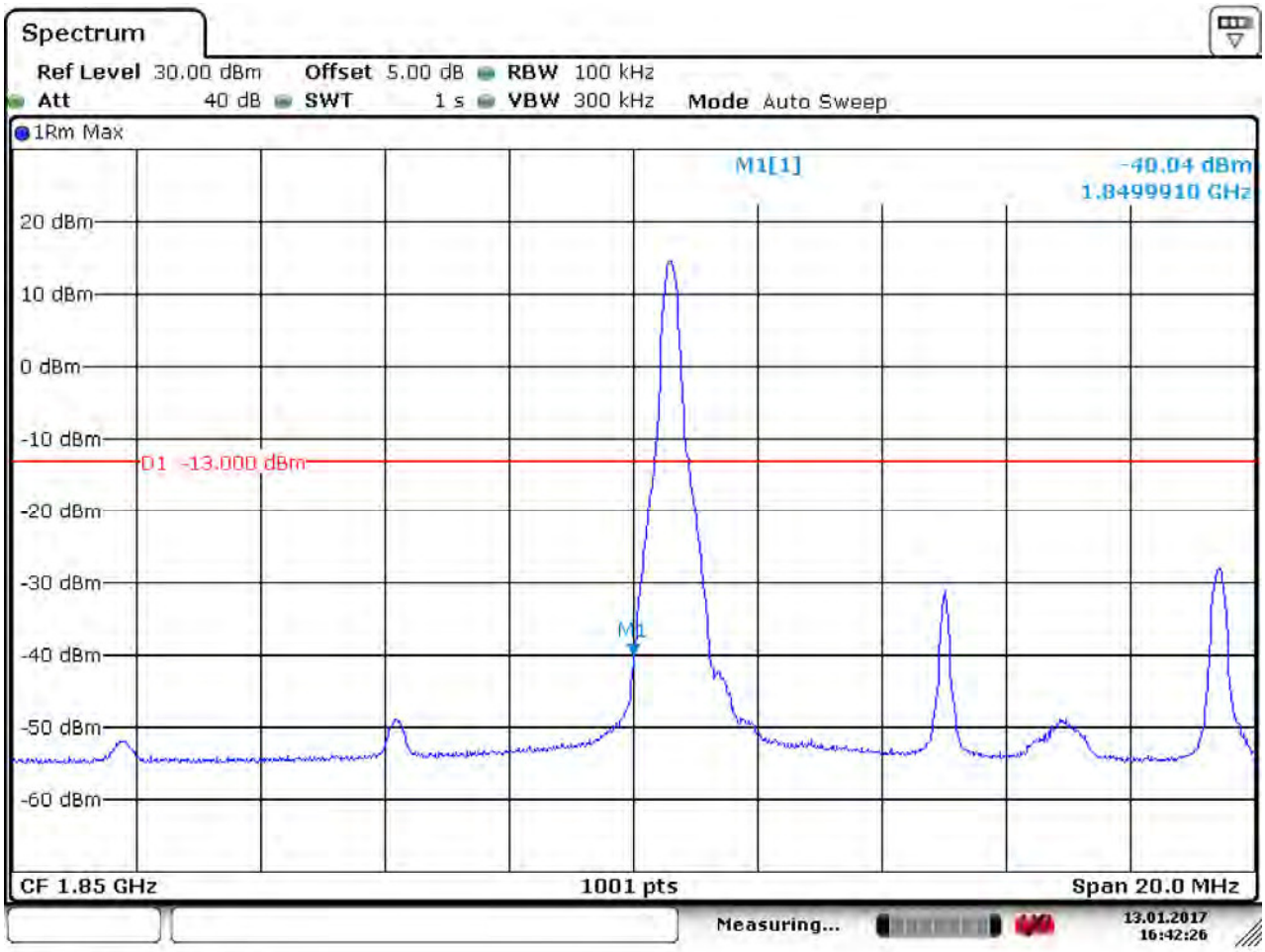


Date: 13.JAN.2017 16:45:06

5.1.1.11 Test Mode = LTE/TM2 10MHz

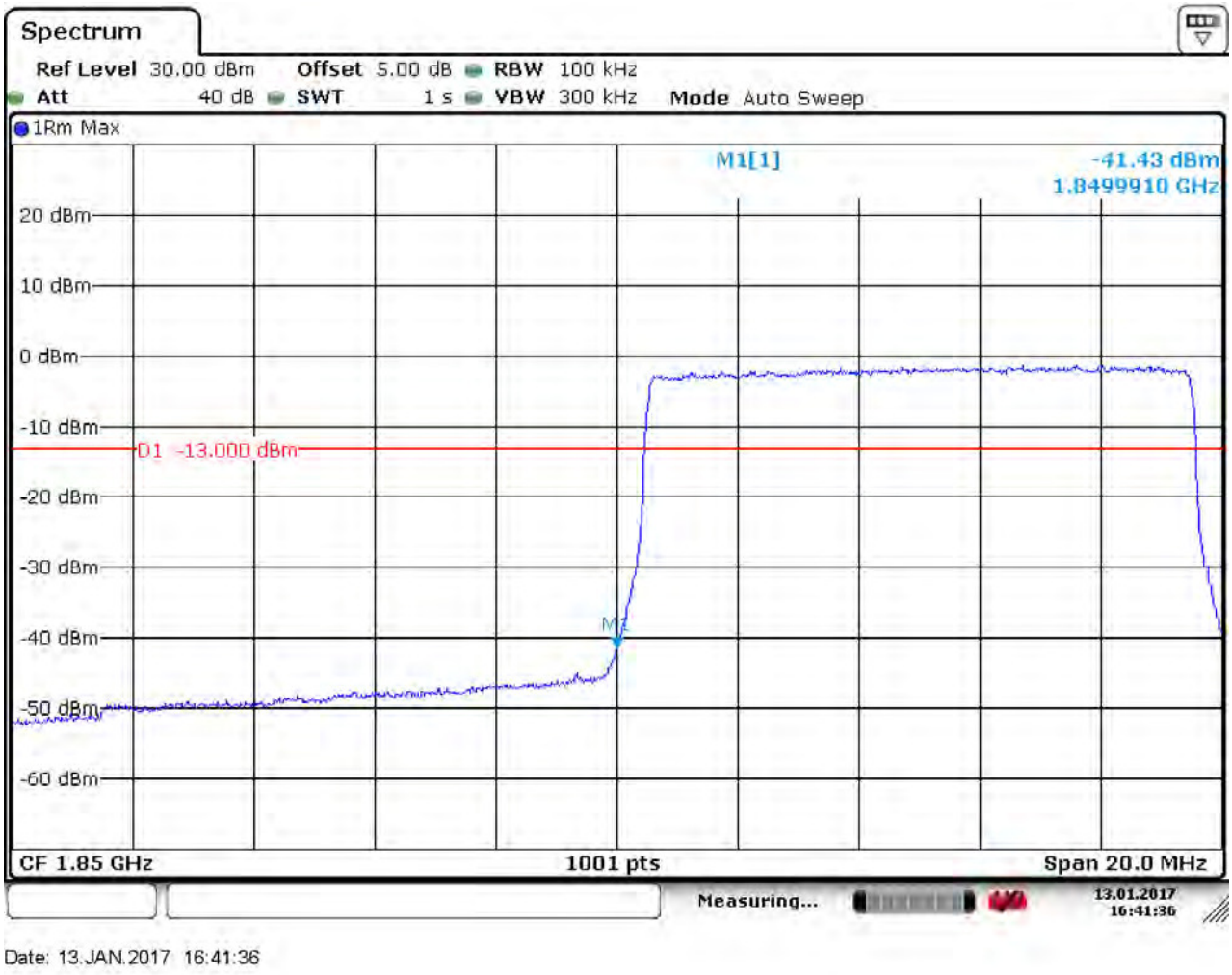
5.1.1.11.1 Test Channel = LCH

5.1.1.11.1.1 Test RB=1RB



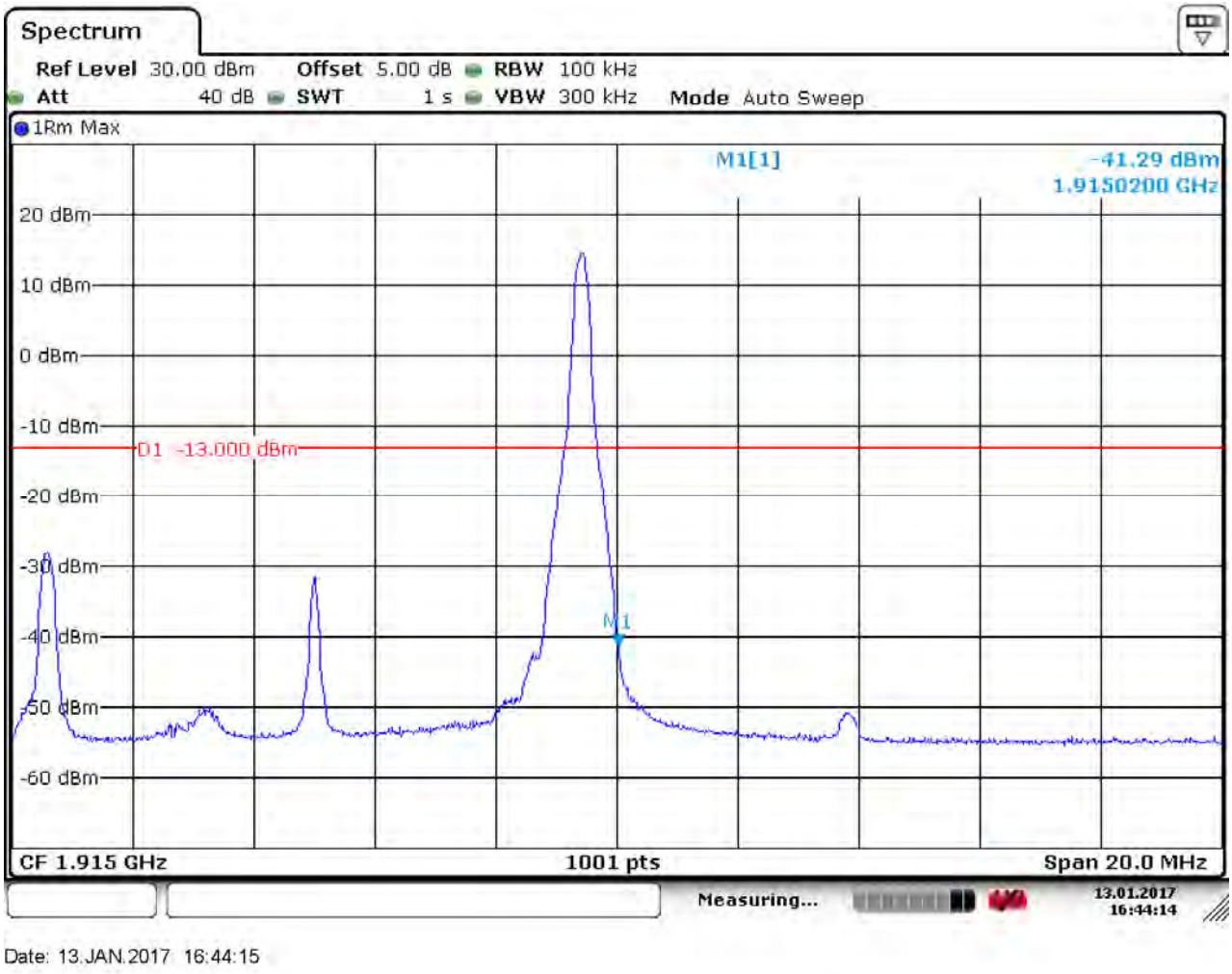
Date: 13.JAN.2017 16:42:26

5.1.1.11.1.2 Test RB=50RB



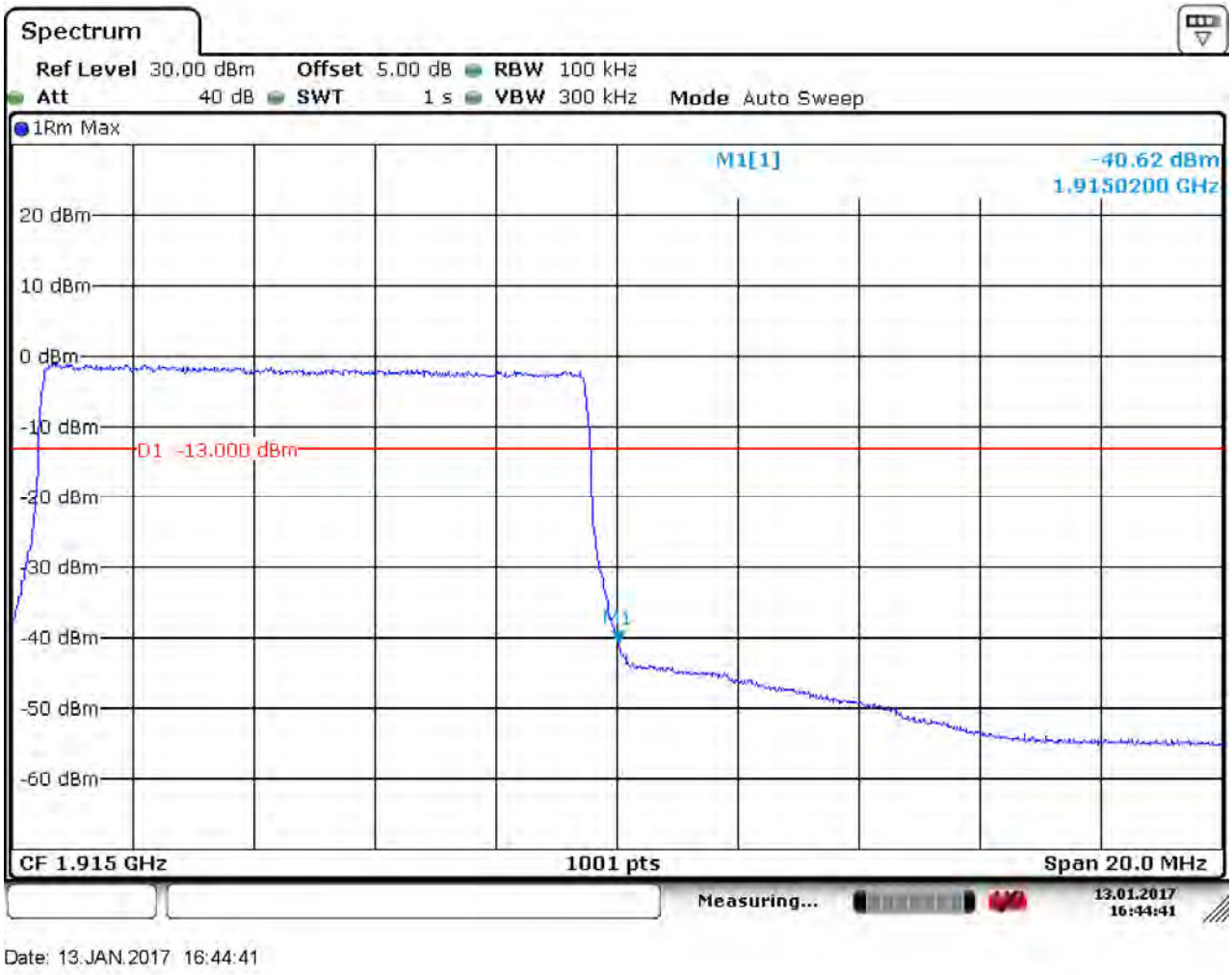
5.1.1.11.2 Test Channel = HCH

5.1.1.11.2.1 Test RB=1RB



Date: 13.JAN.2017 16:44:15

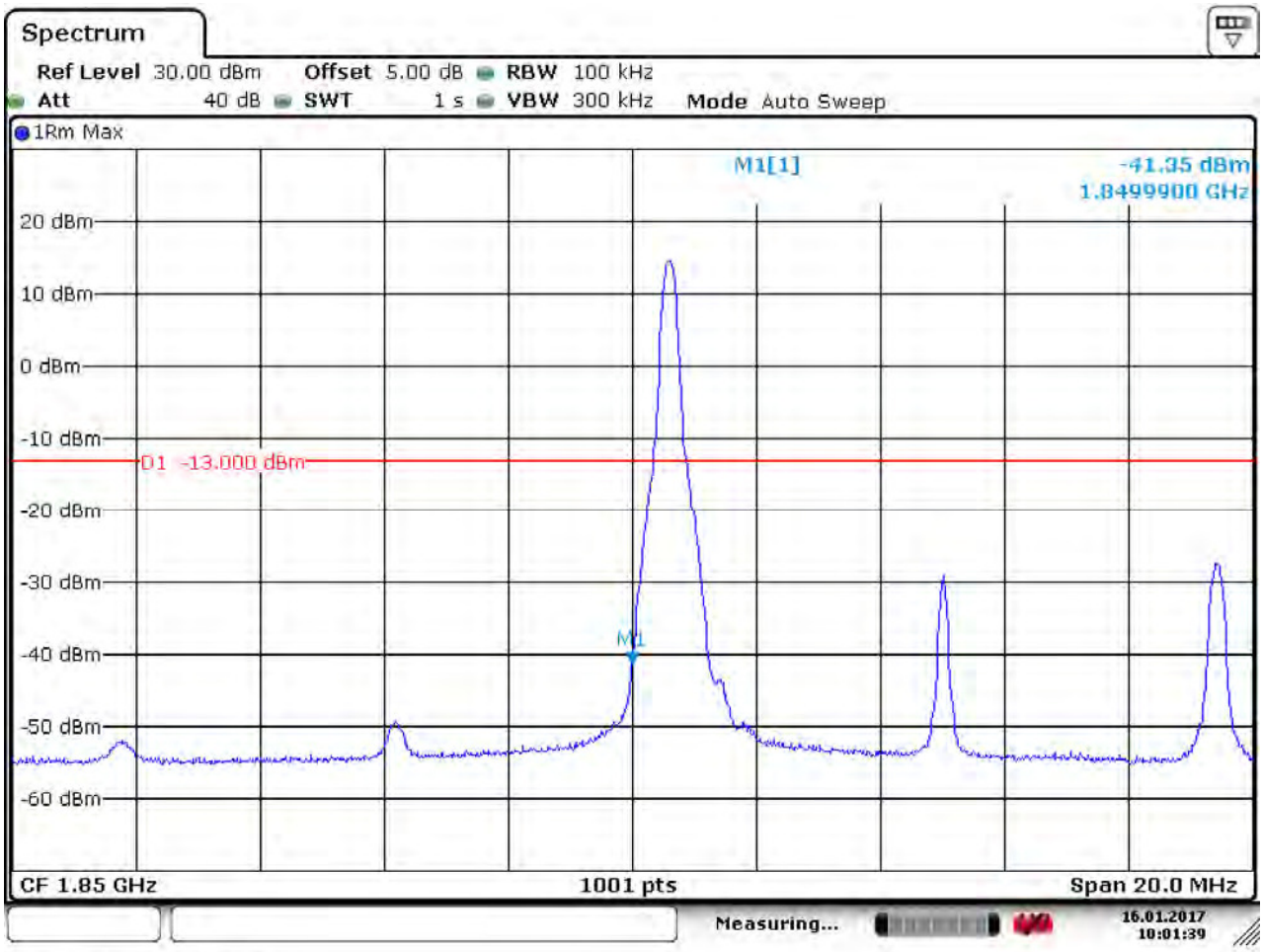
5.1.1.11.2.2 Test RB=50RB



5.1.1.12 Test Mode = LTE/TM3 10MHz

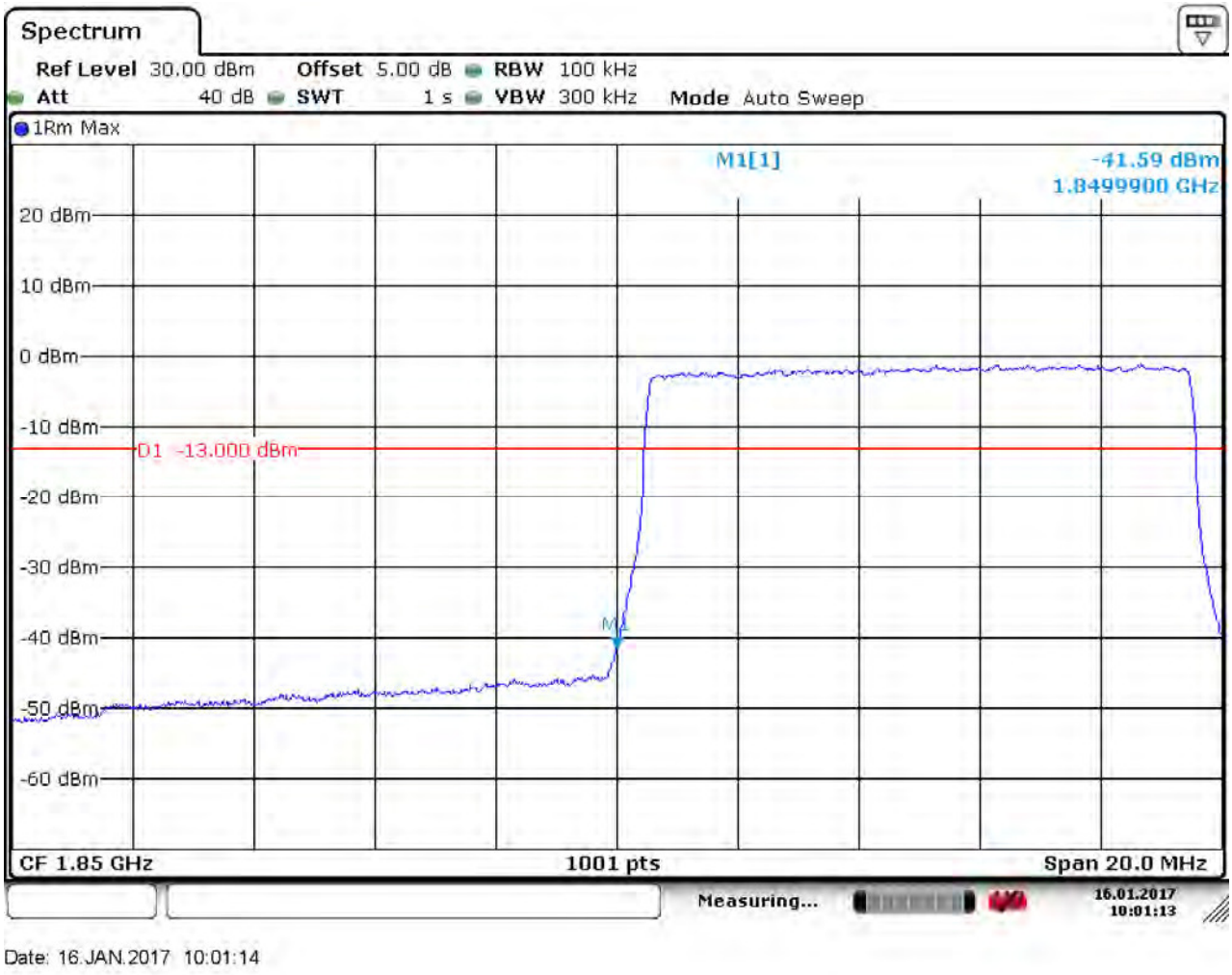
5.1.1.12.1 Test Channel = LCH

5.1.1.12.1.1 Test RB=1RB



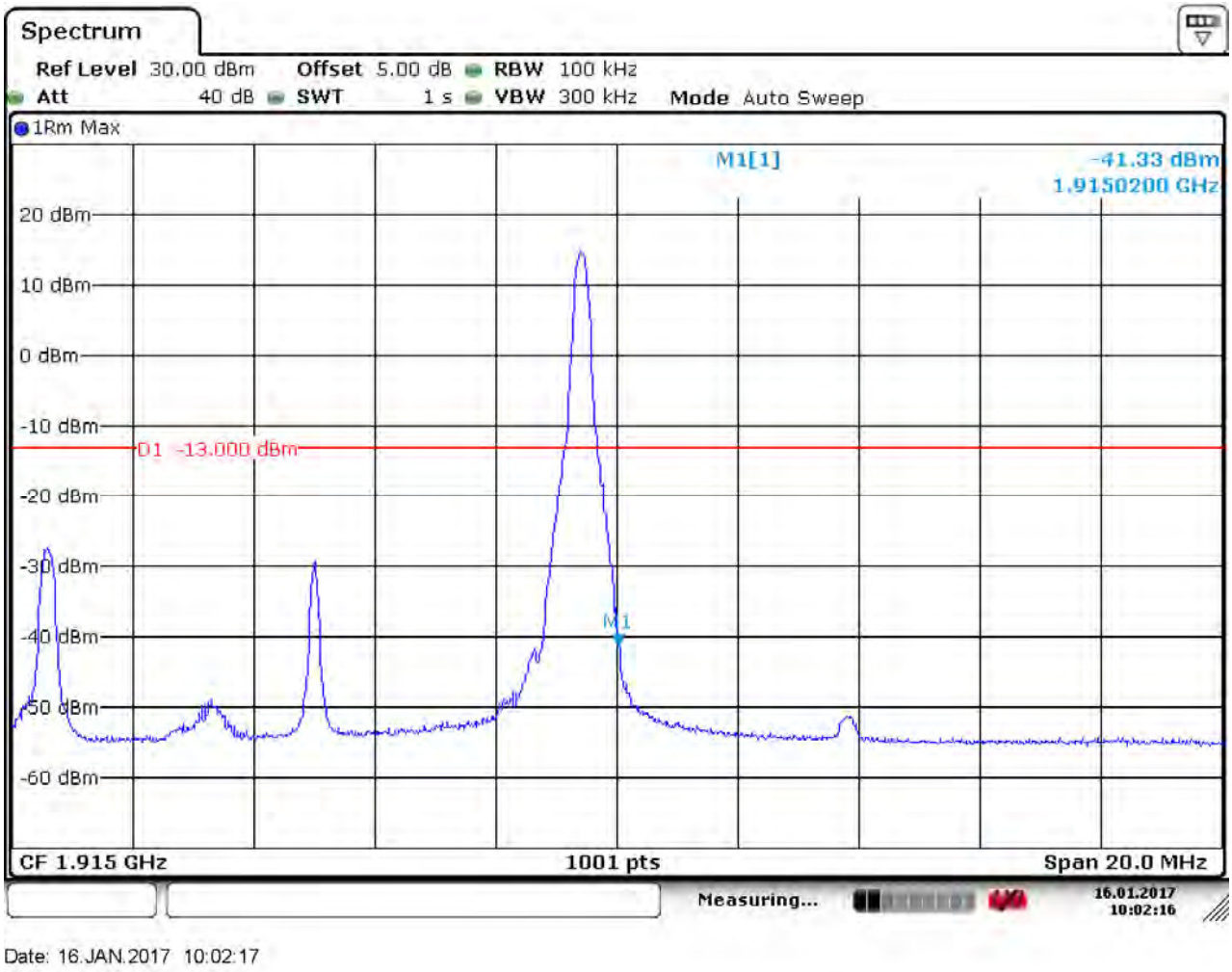
Date: 16.JAN.2017 10:01:39

5.1.1.12.1.2 Test RB=50RB

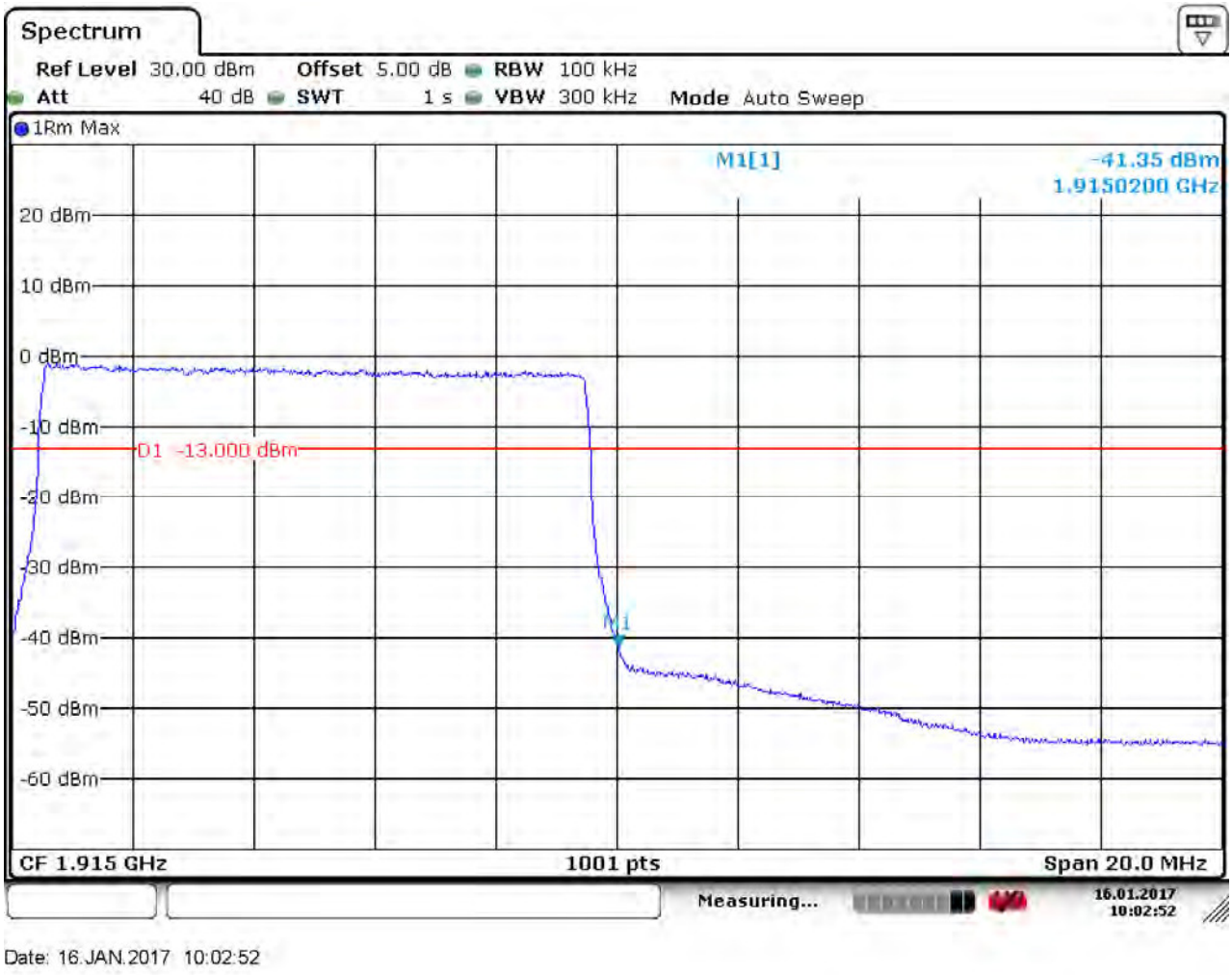


5.1.1.12.2 Test Channel = HCH

5.1.1.12.2.1 Test RB=1RB



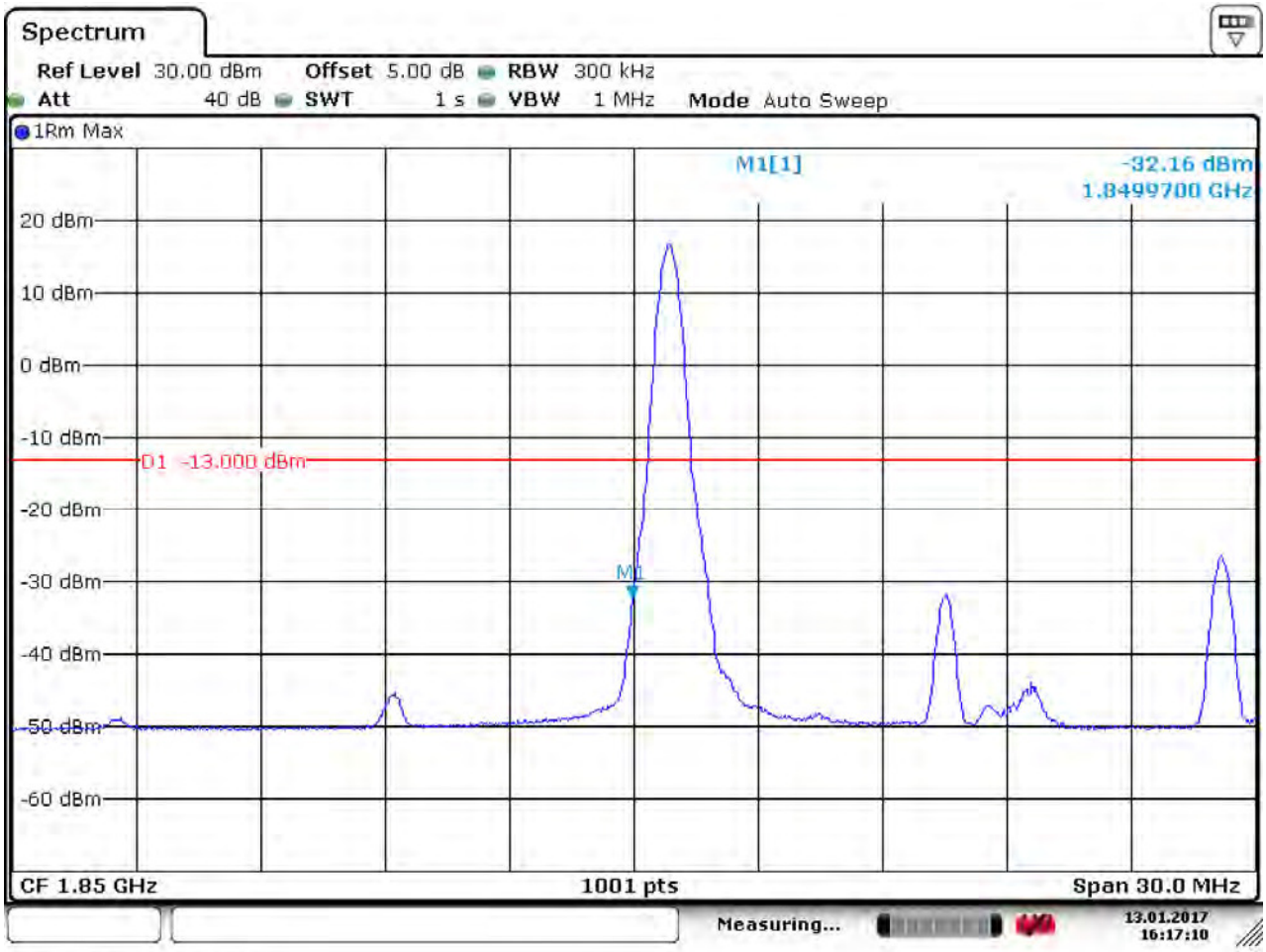
5.1.1.12.2.2 Test RB=50RB



5.1.1.13 Test Mode = LTE/TM1 15MHz

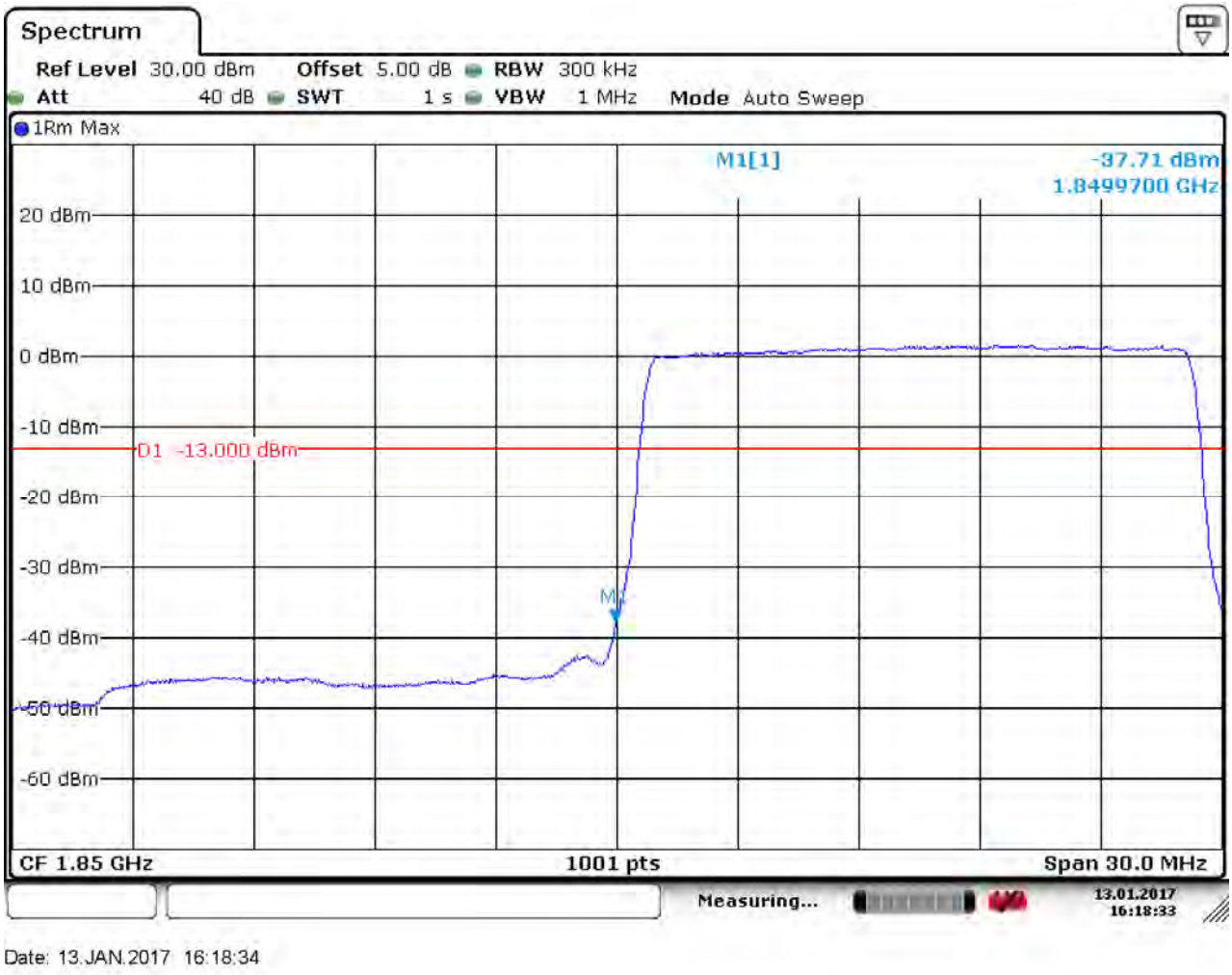
5.1.1.13.1 Test Channel = LCH

5.1.1.13.1.1 Test RB=1RB



Date: 13.JAN.2017 16:17:10

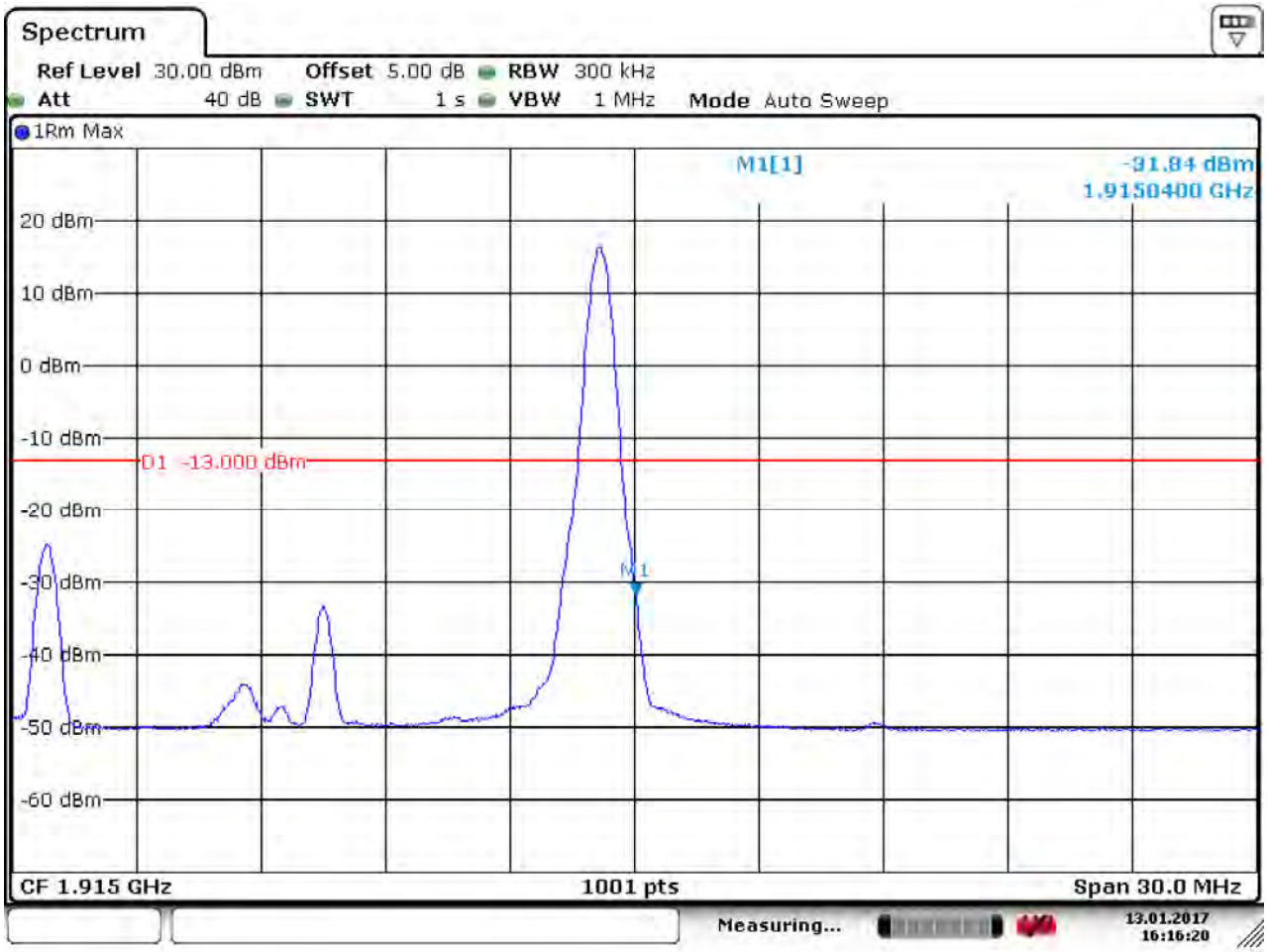
5.1.1.13.1.2 Test RB=75RB



Date: 13.JAN.2017 16:18:34

5.1.1.13.2 Test Channel = HCH

5.1.1.13.2.1 Test RB=1RB



Date: 13.JAN.2017 16:16:20

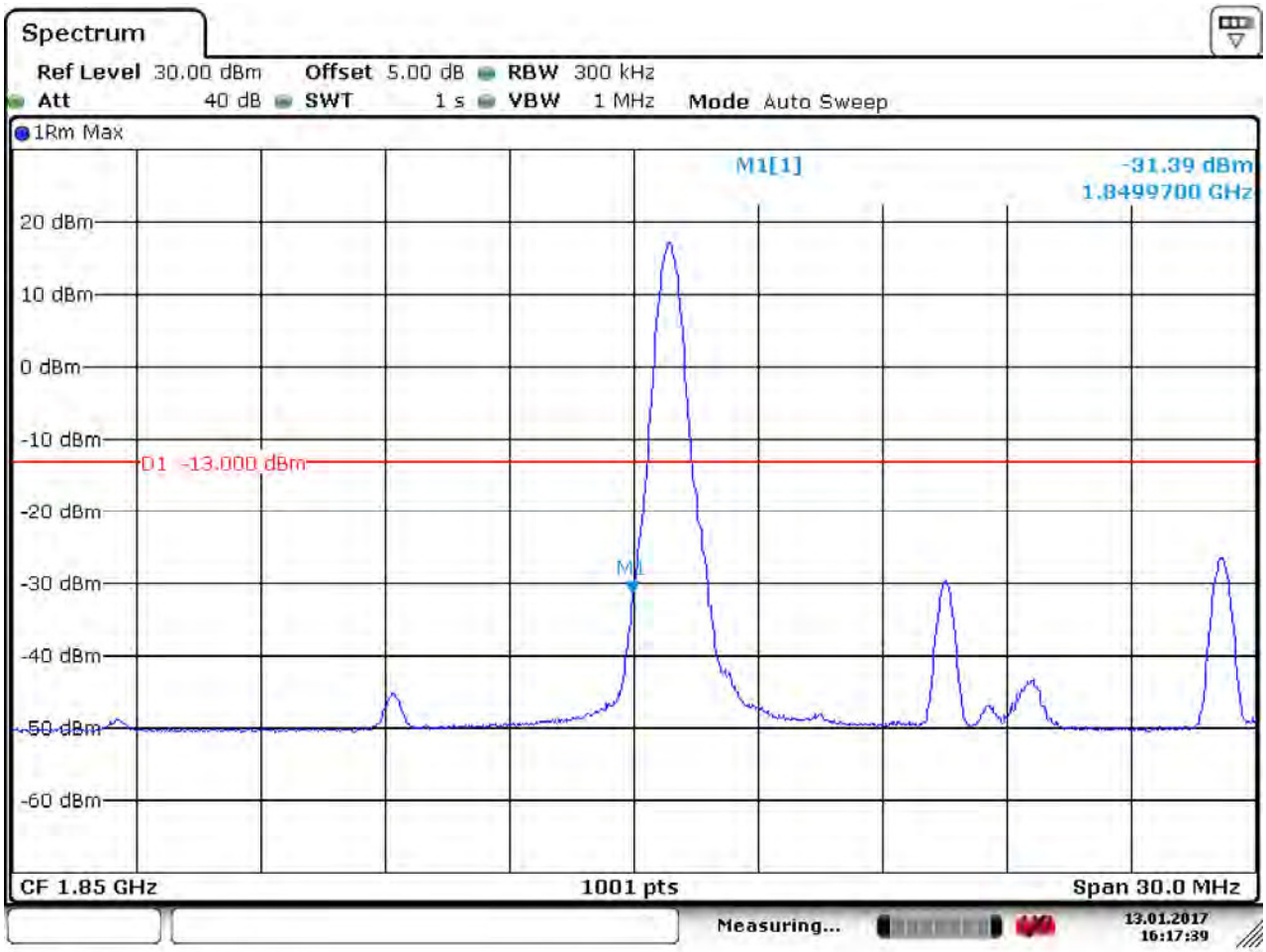
5.1.1.13.2.2 Test RB=75RB

Date: 13.JAN.2017 16:14:43

5.1.1.14 Test Mode = LTE/TM2 15MHz

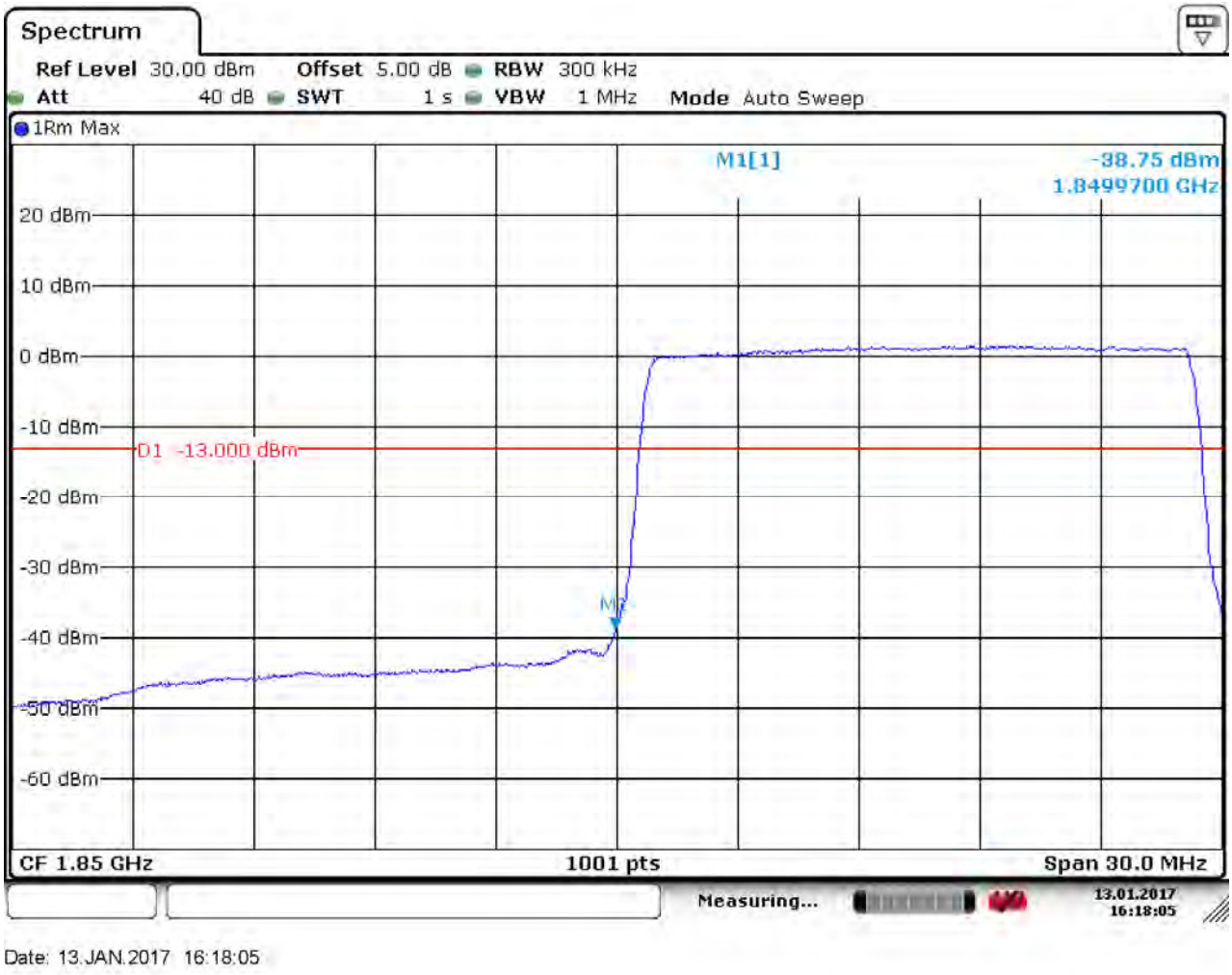
5.1.1.14.1 Test Channel = LCH

5.1.1.14.1.1 Test RB=1RB



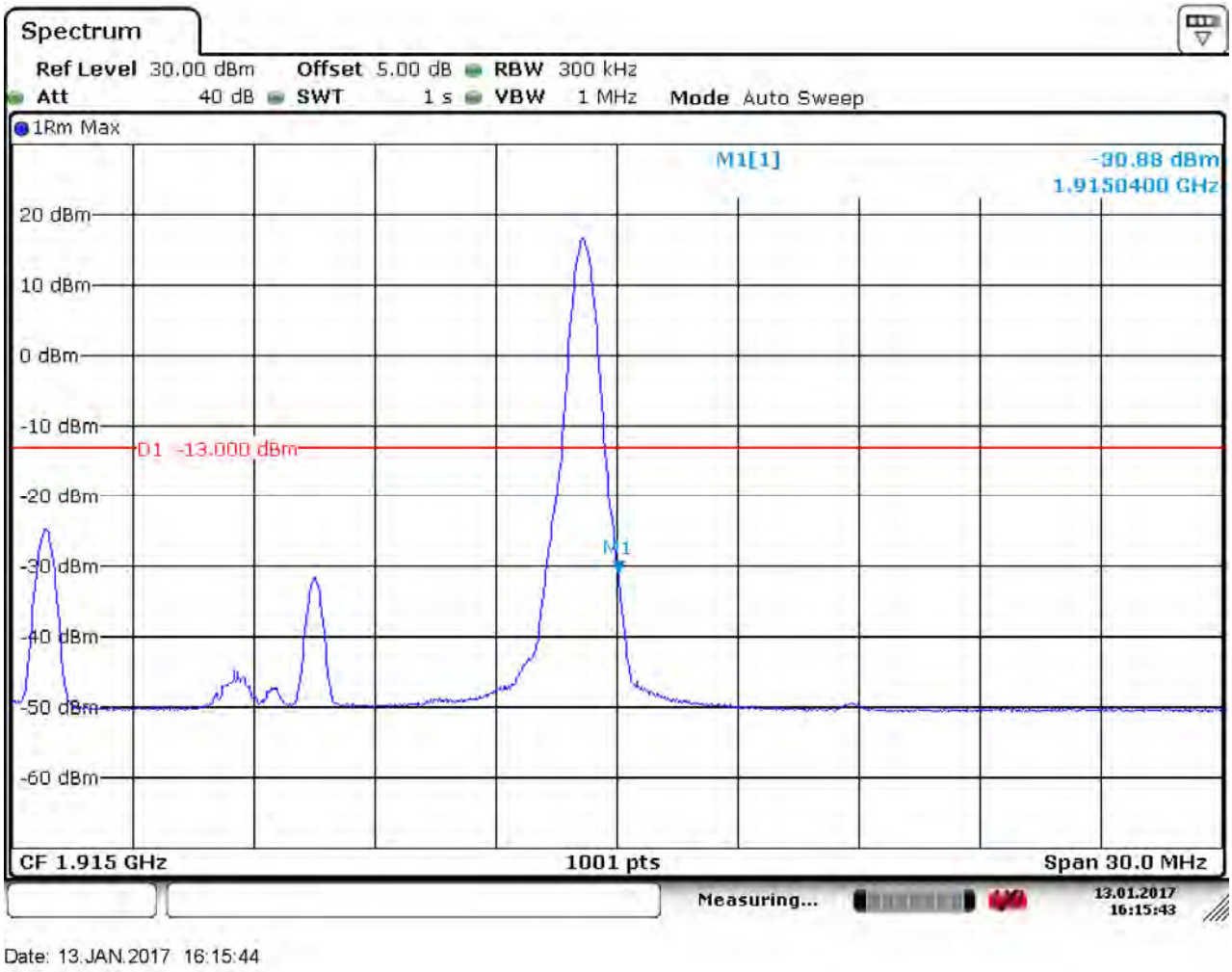
Date: 13.JAN.2017 16:17:40

5.1.1.14.1.2 Test RB=75RB

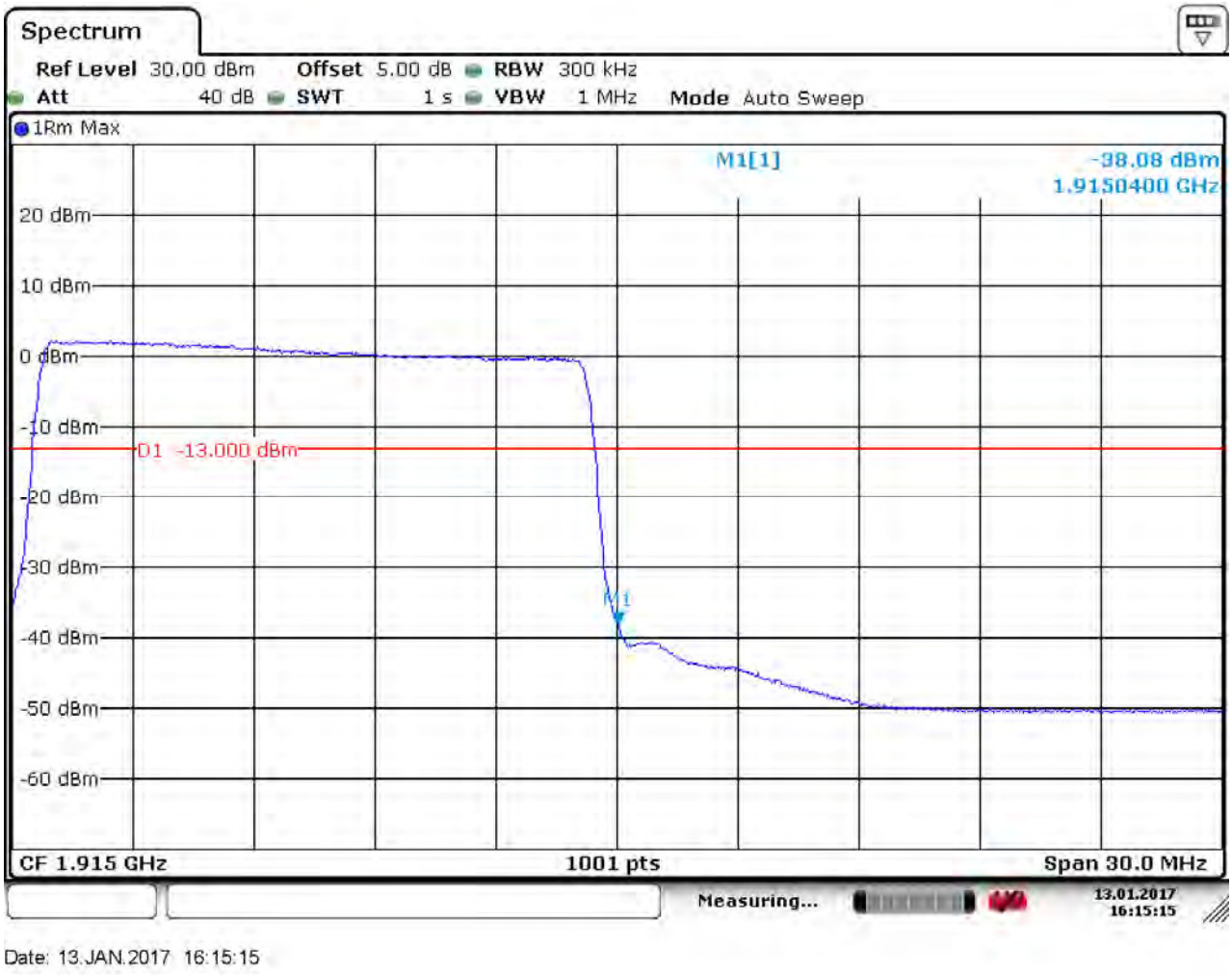


5.1.1.14.2 Test Channel = HCH

5.1.1.14.2.1 Test RB=1RB



5.1.1.14.2.2 Test RB=75RB

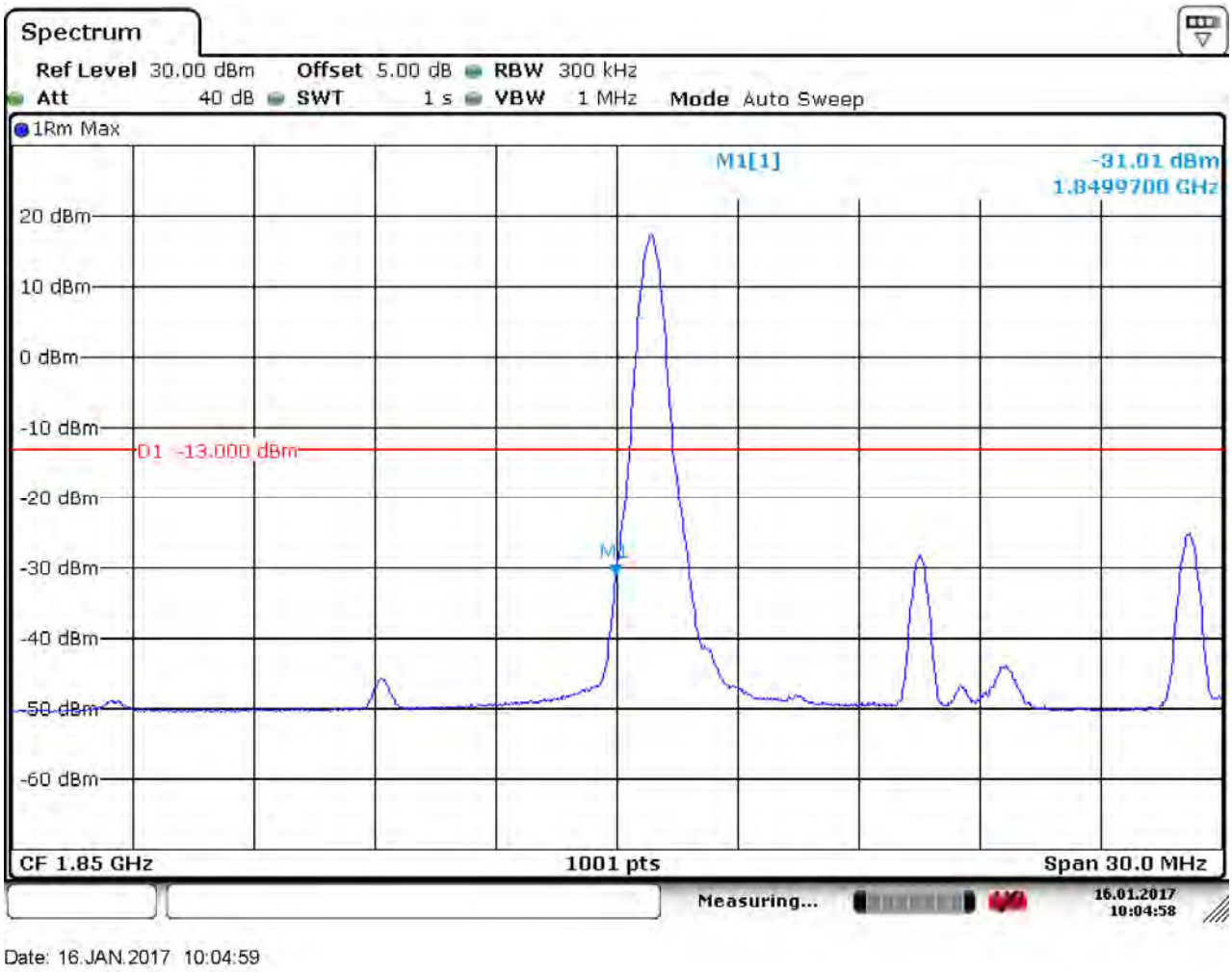


Date: 13.JAN.2017 16:15:15

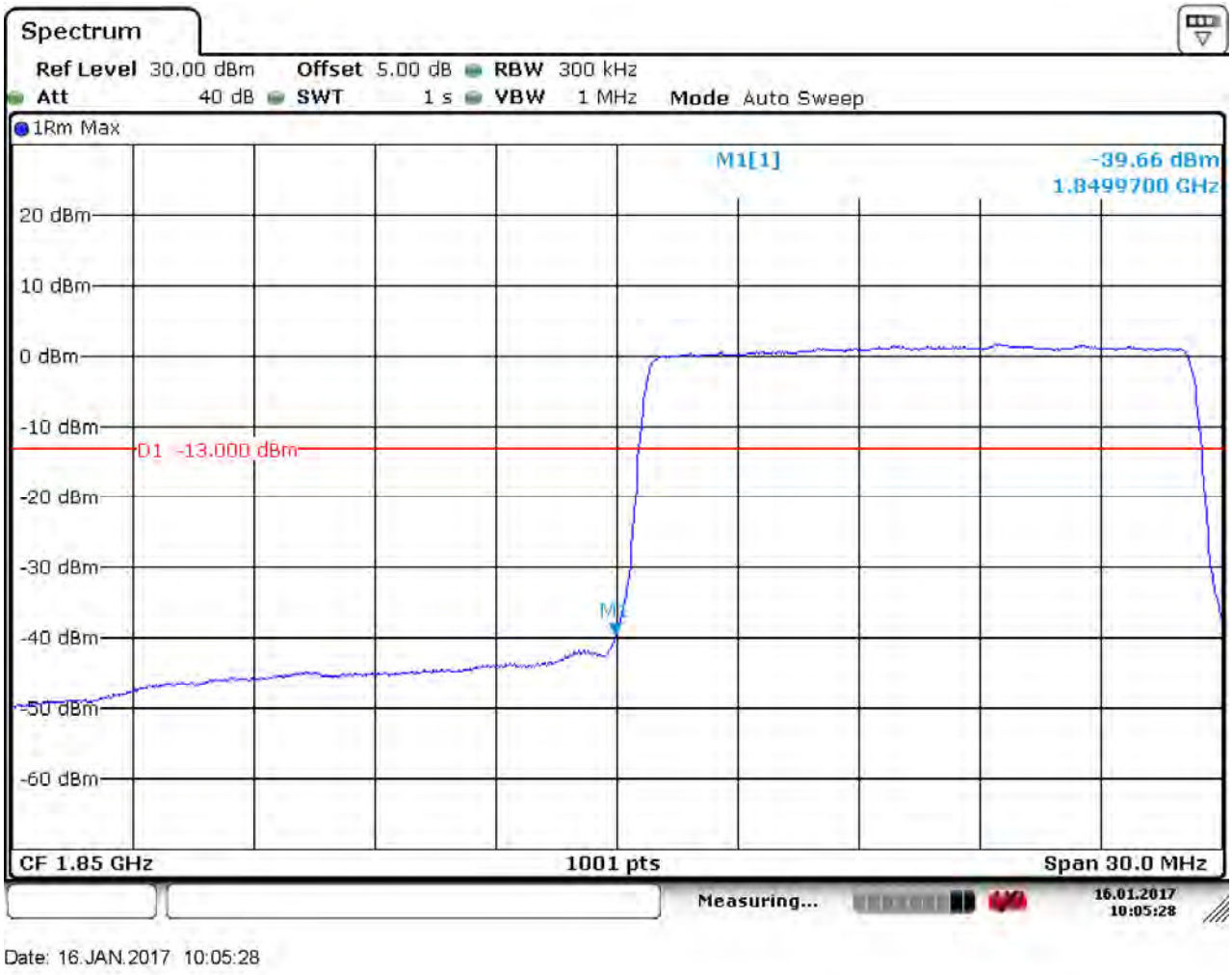
5.1.1.15 Test Mode = LTE/TM3 15MHz

5.1.1.15.1 Test Channel = LCH

5.1.1.15.1.1 Test RB=1RB



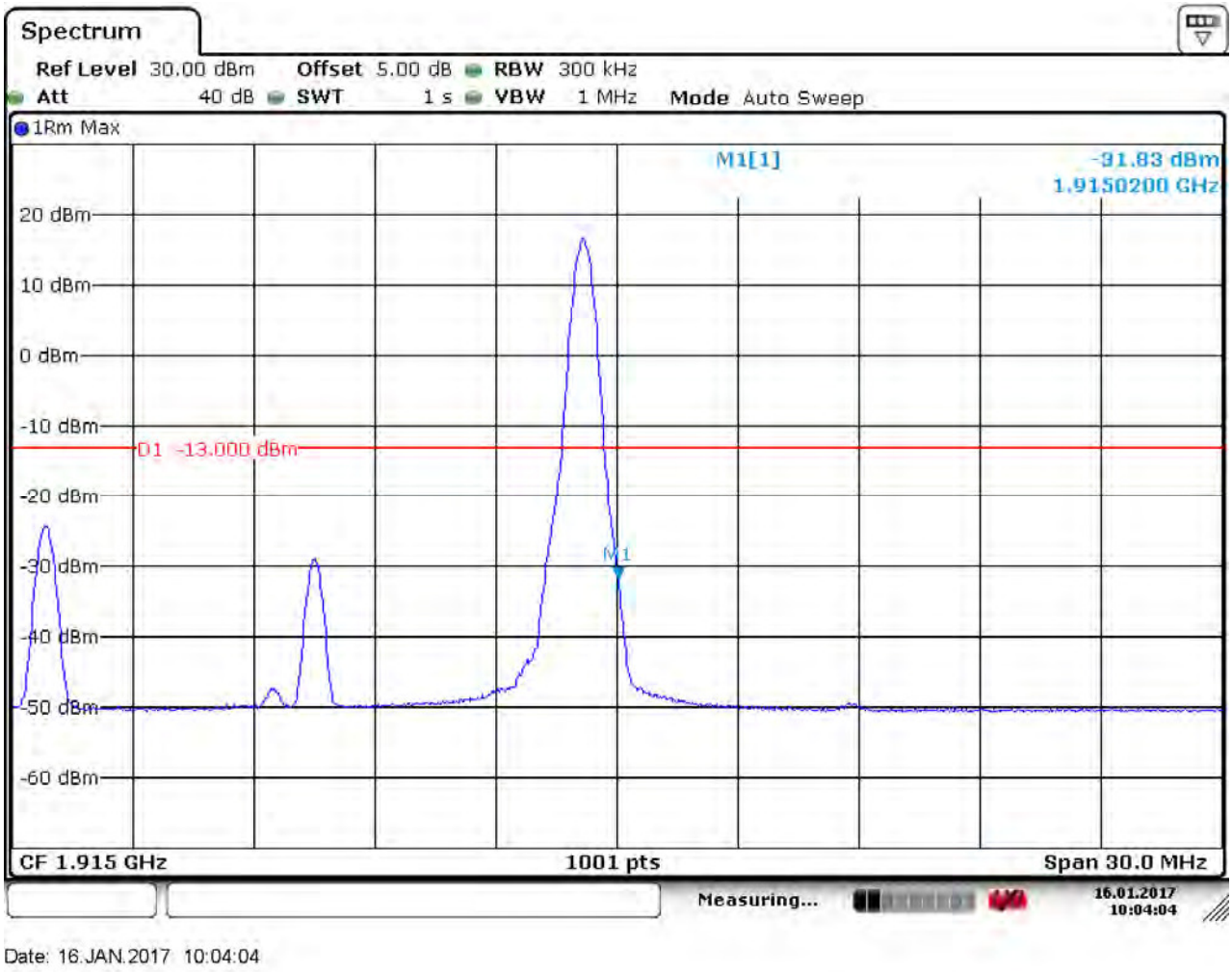
5.1.1.15.1.2 Test RB=75RB



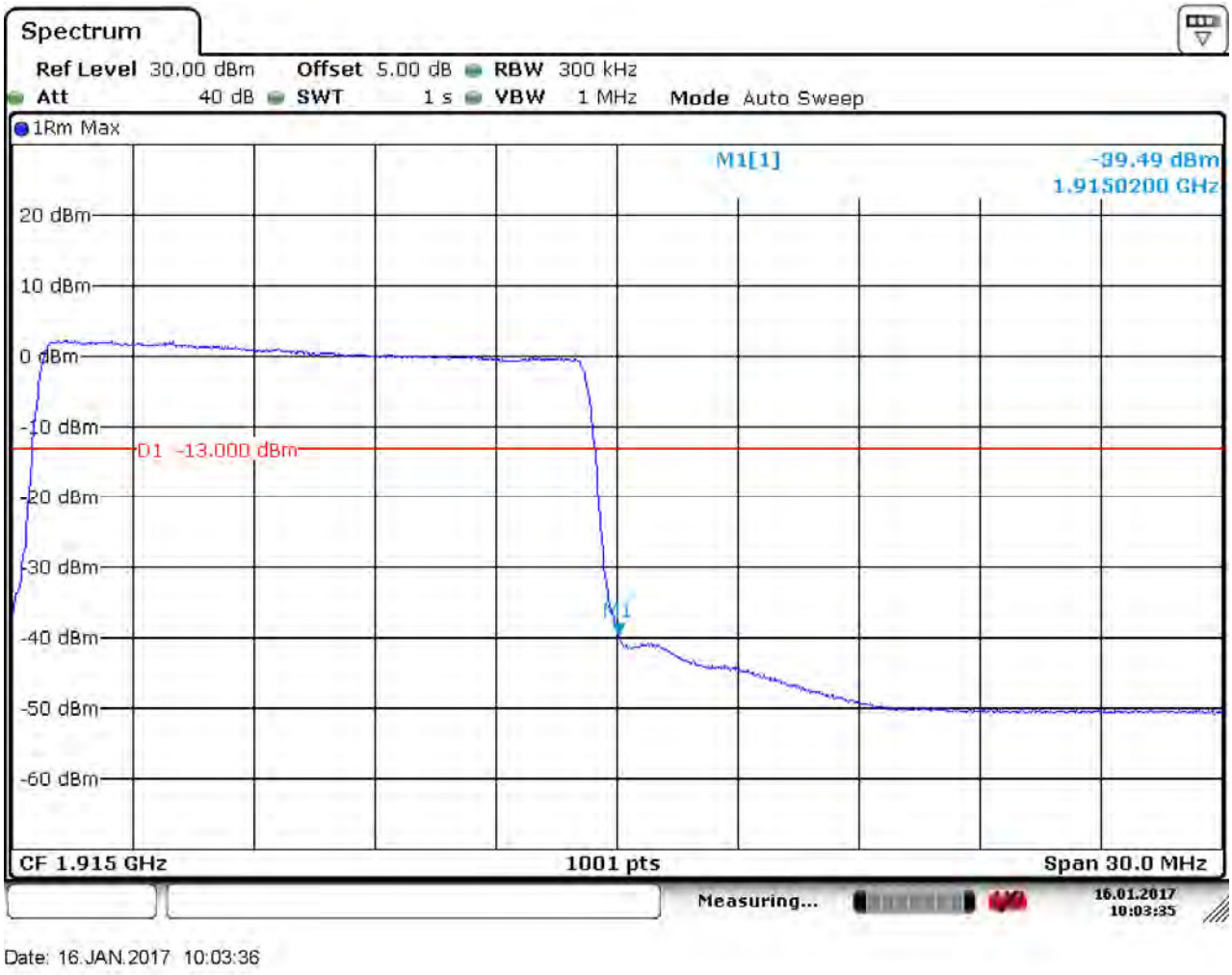
Date: 16.JAN.2017 10:05:28

5.1.1.15.2 Test Channel = HCH

5.1.1.15.2.1 Test RB=1RB



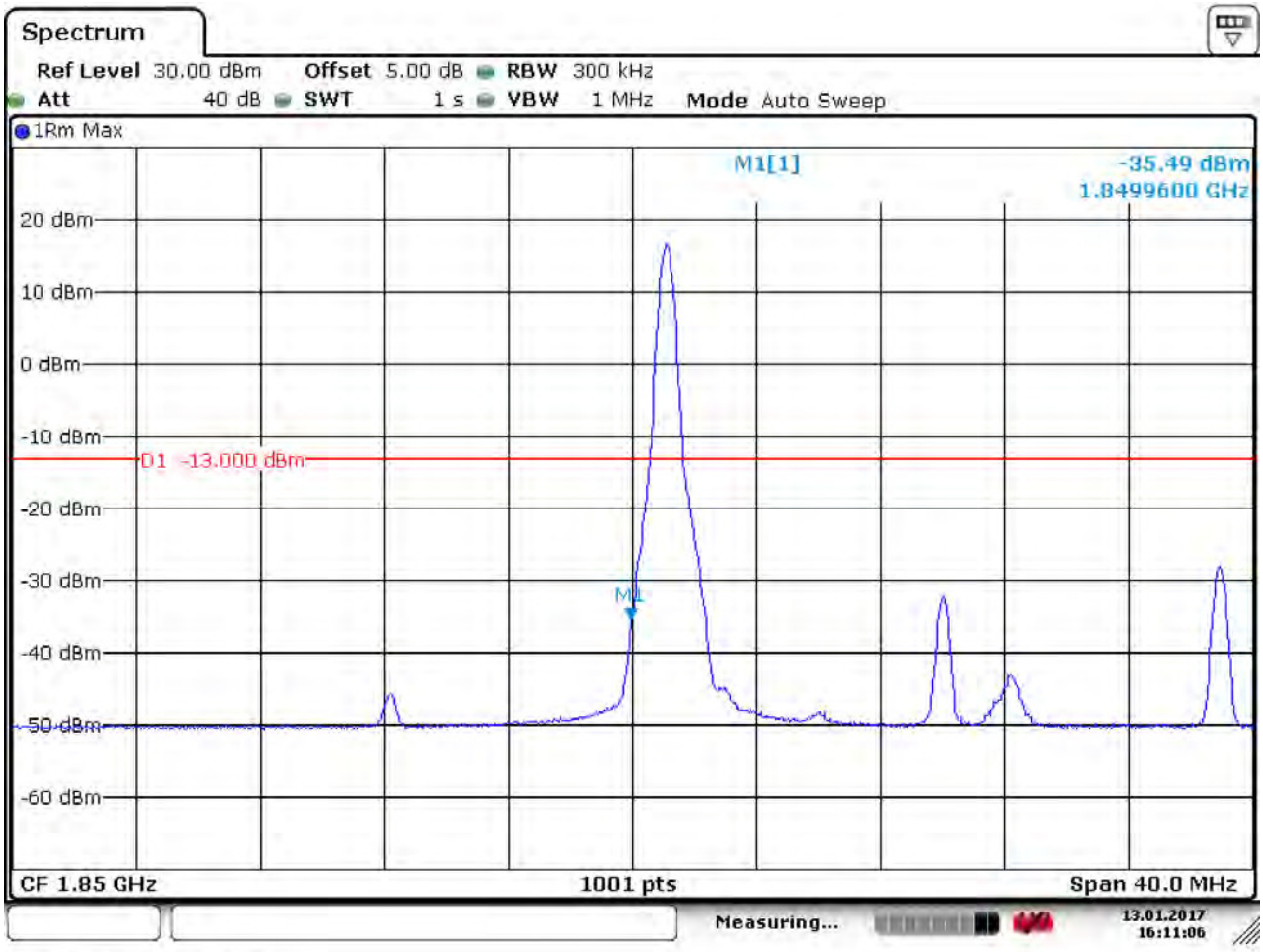
5.1.1.15.2.2 Test RB=75RB



5.1.1.16 Test Mode = LTE/TM1 20MHz

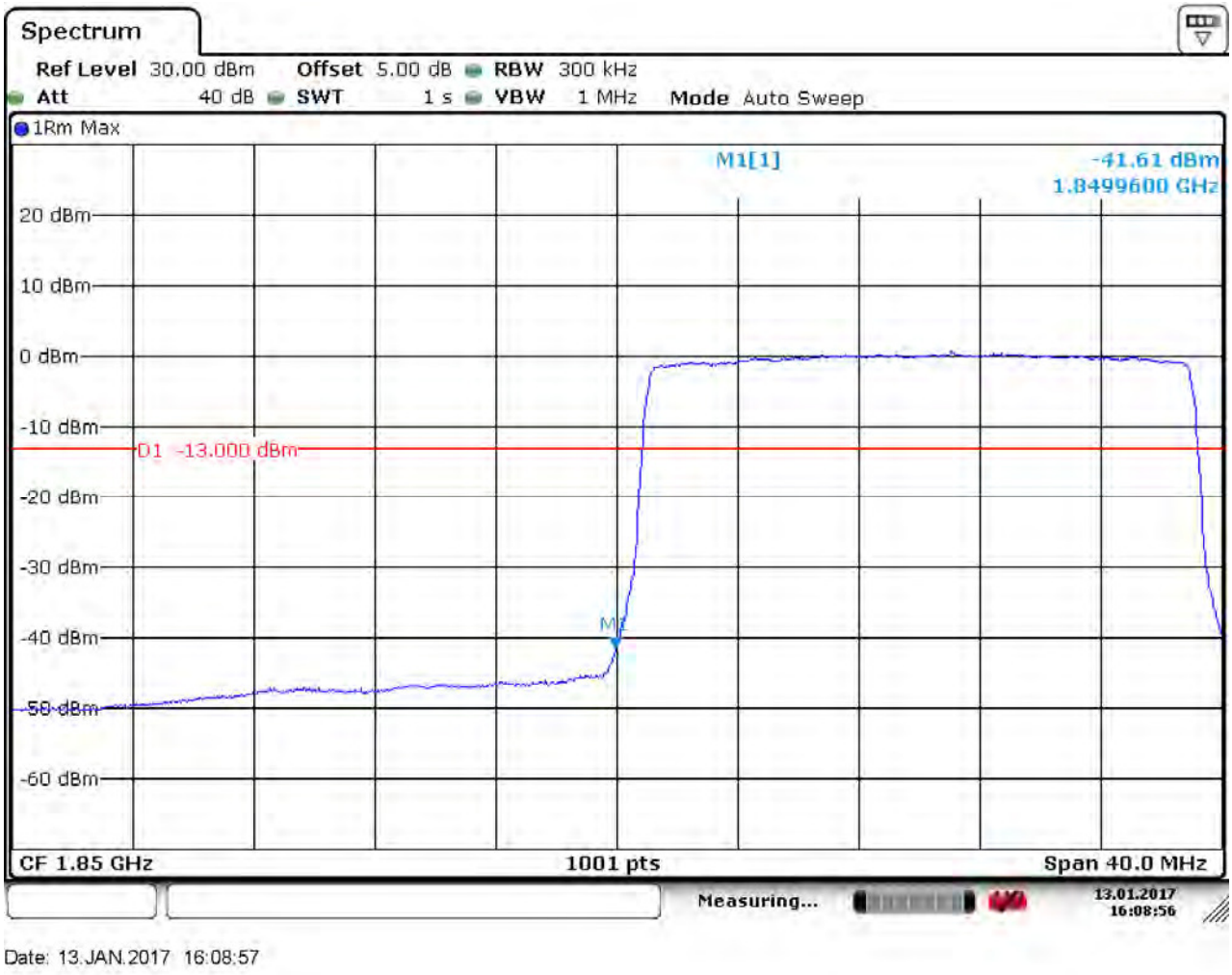
5.1.1.16.1 Test Channel = LCH

5.1.1.16.1.1 Test RB=1RB



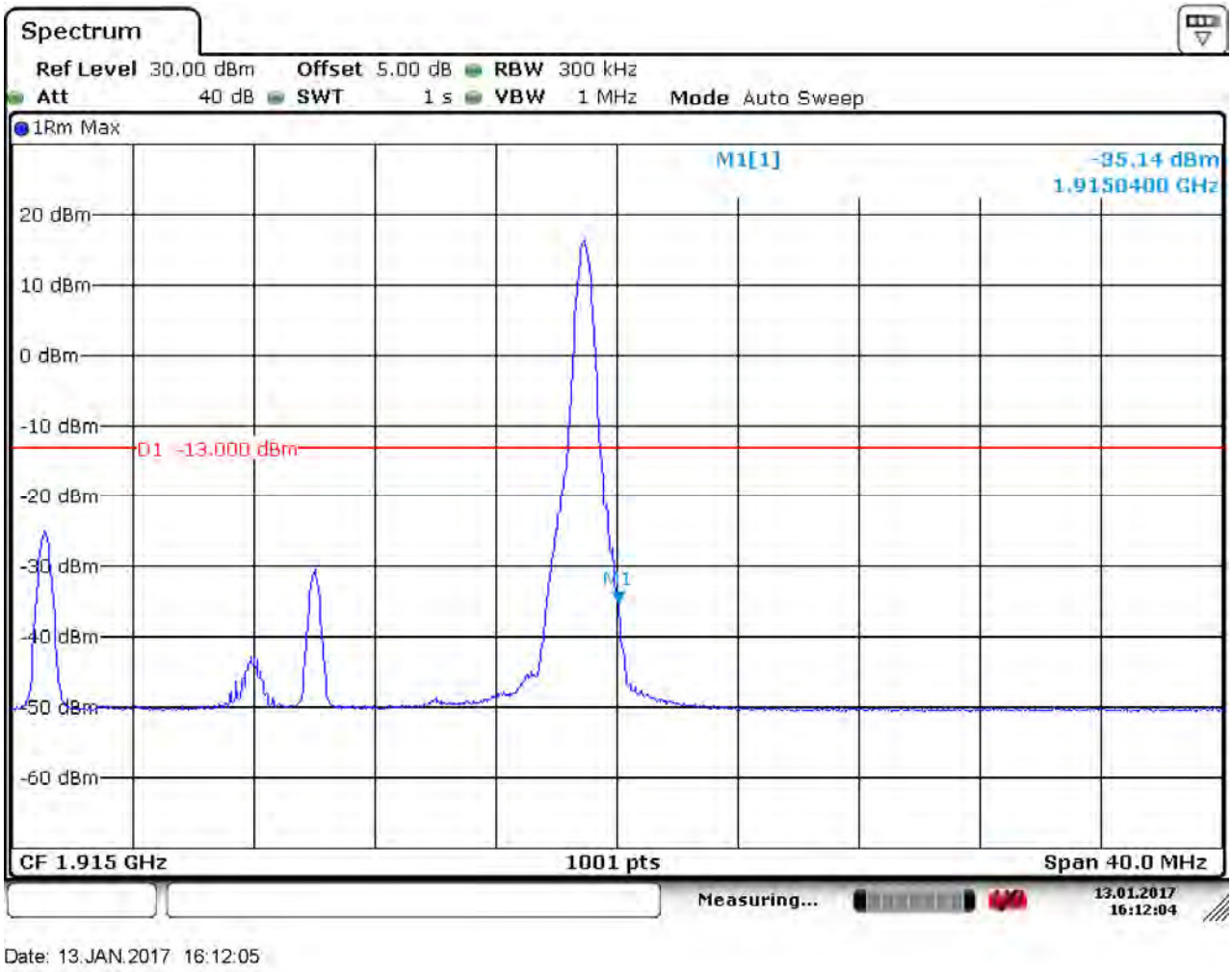
Date: 13.JAN.2017 16:11:06

5.1.1.16.1.2 Test RB=100RB



5.1.1.16.2 Test Channel = HCH

5.1.1.16.2.1 Test RB=1RB



Date: 13.JAN.2017 16:12:05

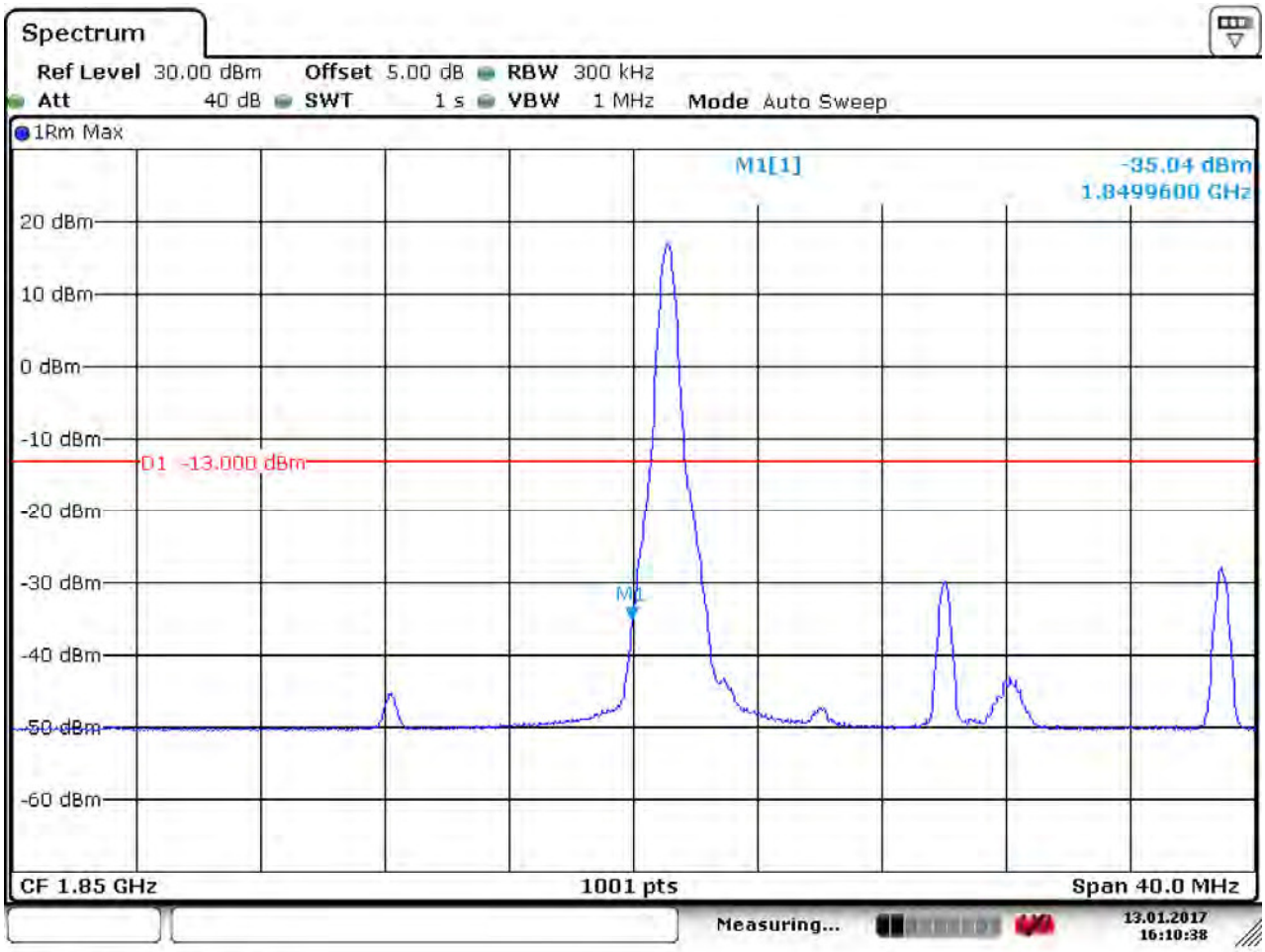
5.1.1.16.2.2 Test RB=100RB

Date: 13.JAN.2017 16:13:52

5.1.1.17 Test Mode = LTE/TM2 20MHz

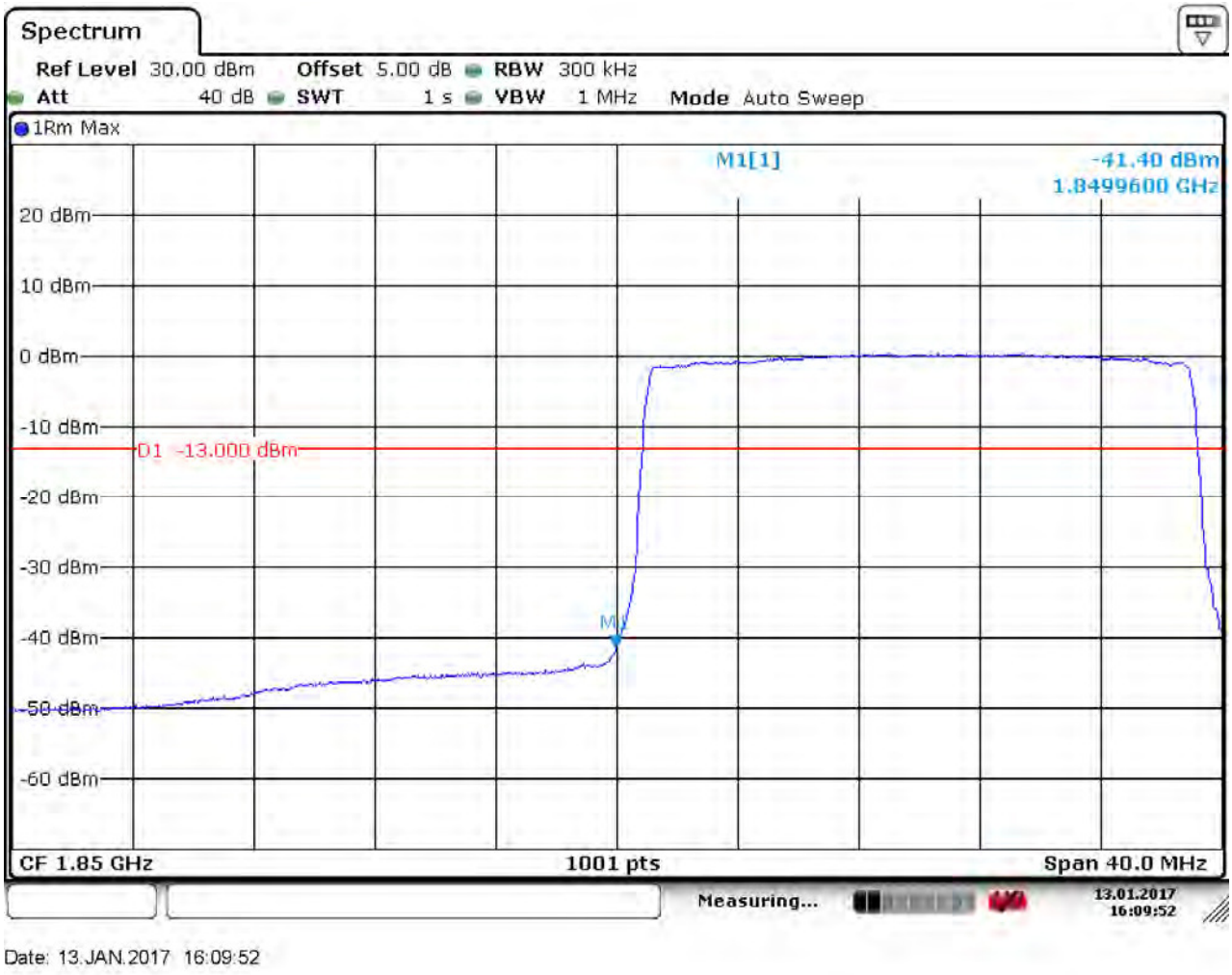
5.1.1.17.1 Test Channel = LCH

5.1.1.17.1.1 Test RB=1RB



Date: 13.JAN.2017 16:10:38

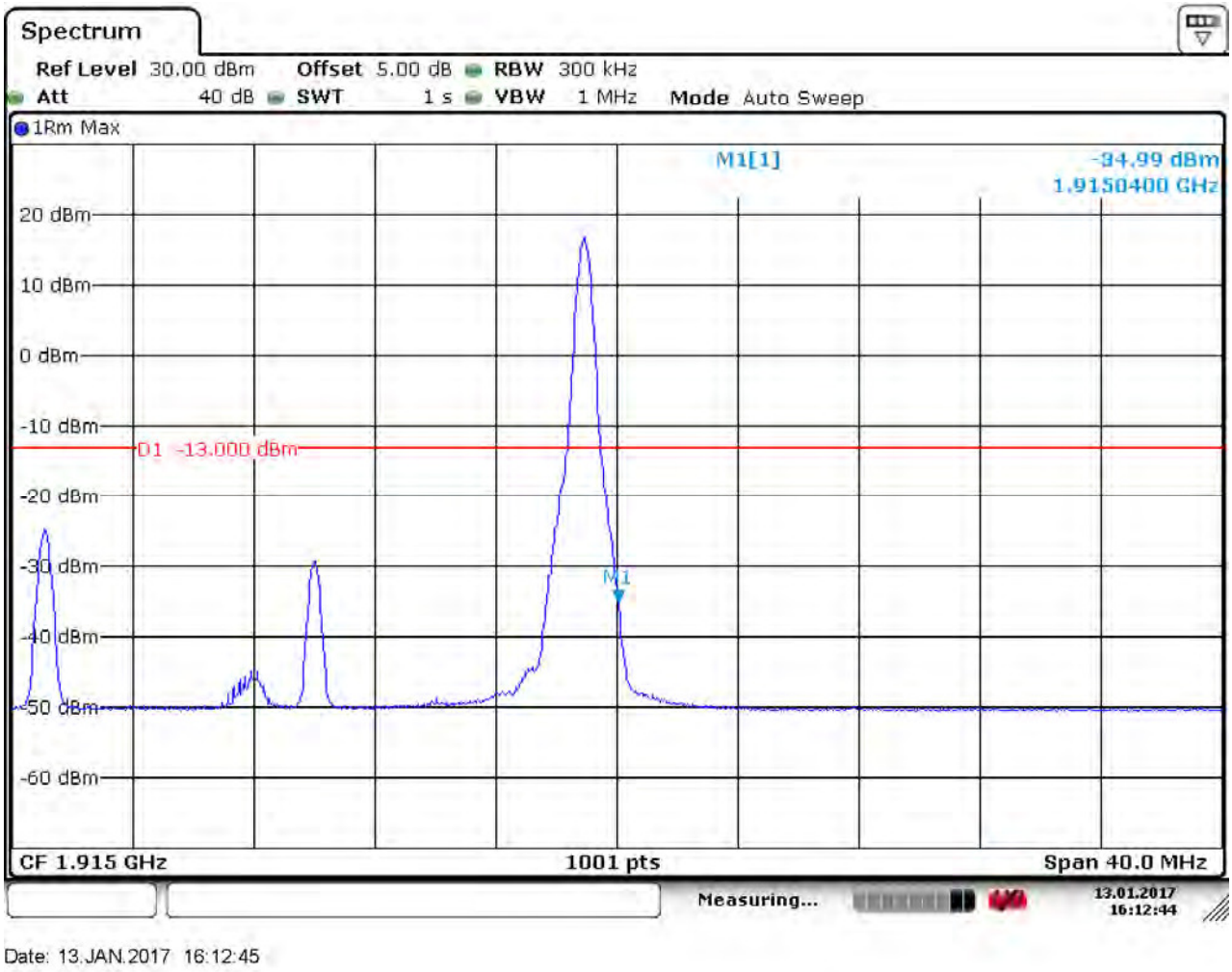
5.1.1.17.1.2 Test RB=100RB



Date: 13.JAN.2017 16:09:52

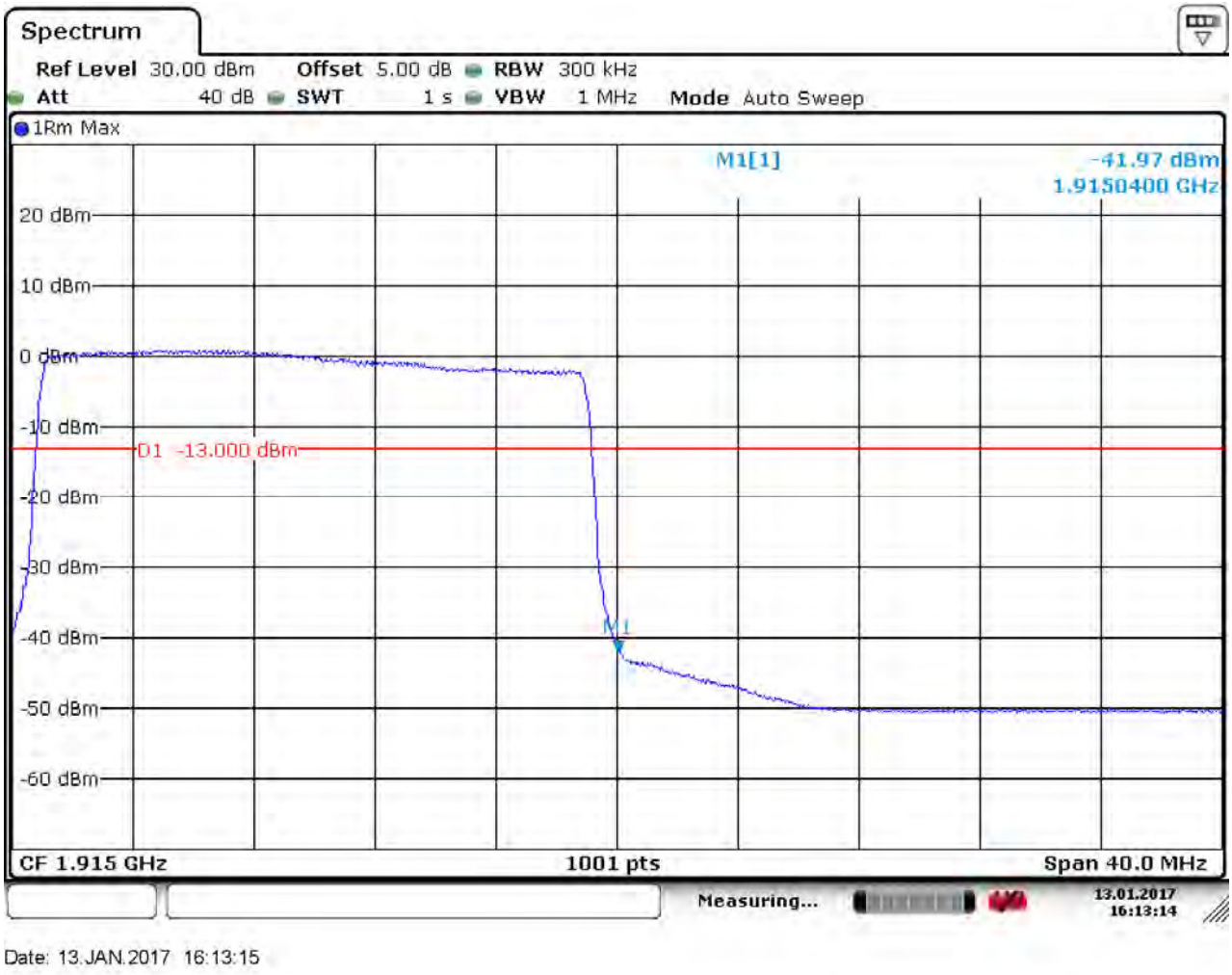
5.1.1.17.2 Test Channel = HCH

5.1.1.17.2.1 Test RB=1RB



Date: 13.JAN.2017 16:12:45

5.1.1.17.2.2 Test RB=100RB

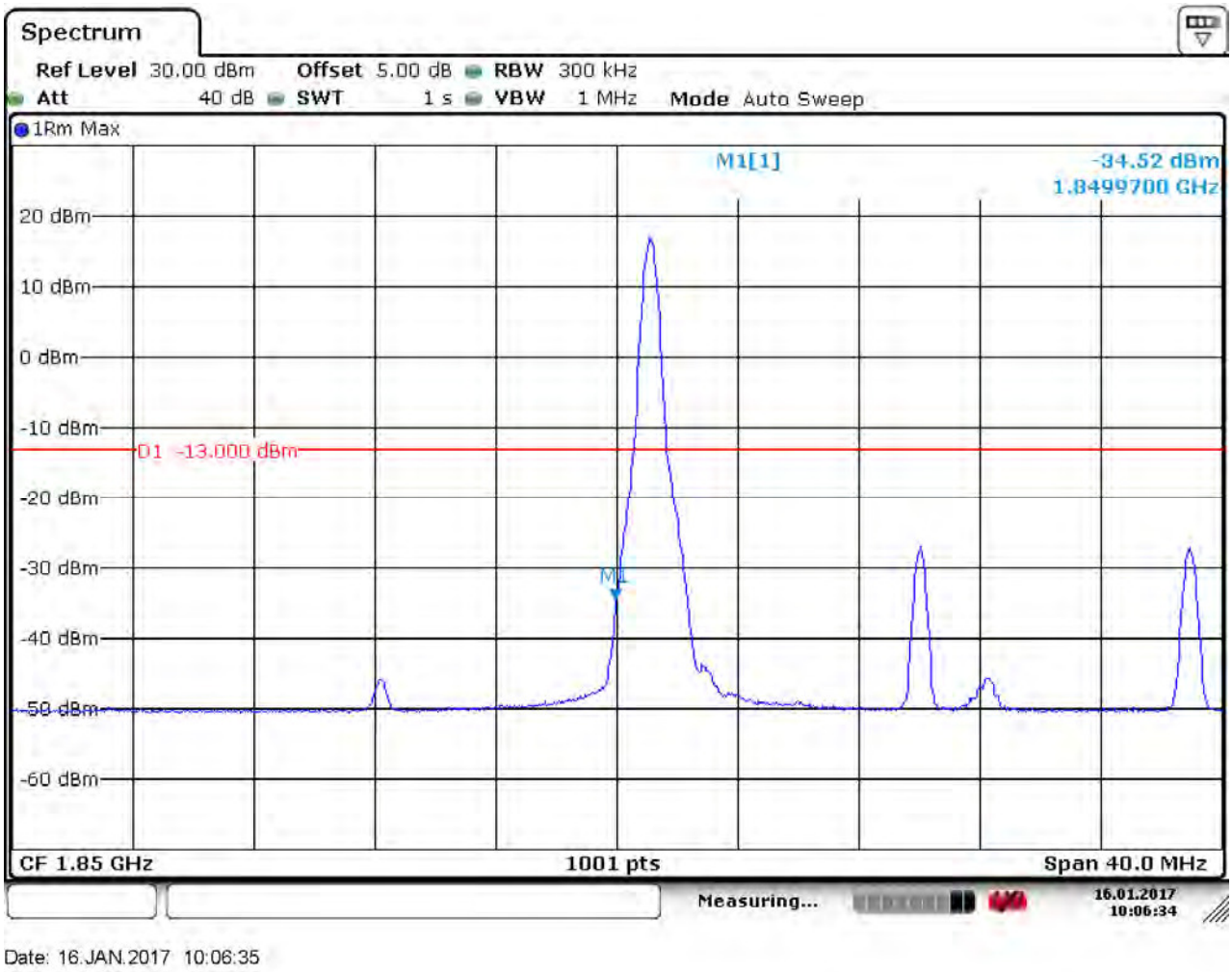


Date: 13.JAN.2017 16:13:15

5.1.1.18 Test Mode = LTE/TM3 20MHz

5.1.1.18.1 Test Channel = LCH

5.1.1.18.1.1 Test RB=1RB

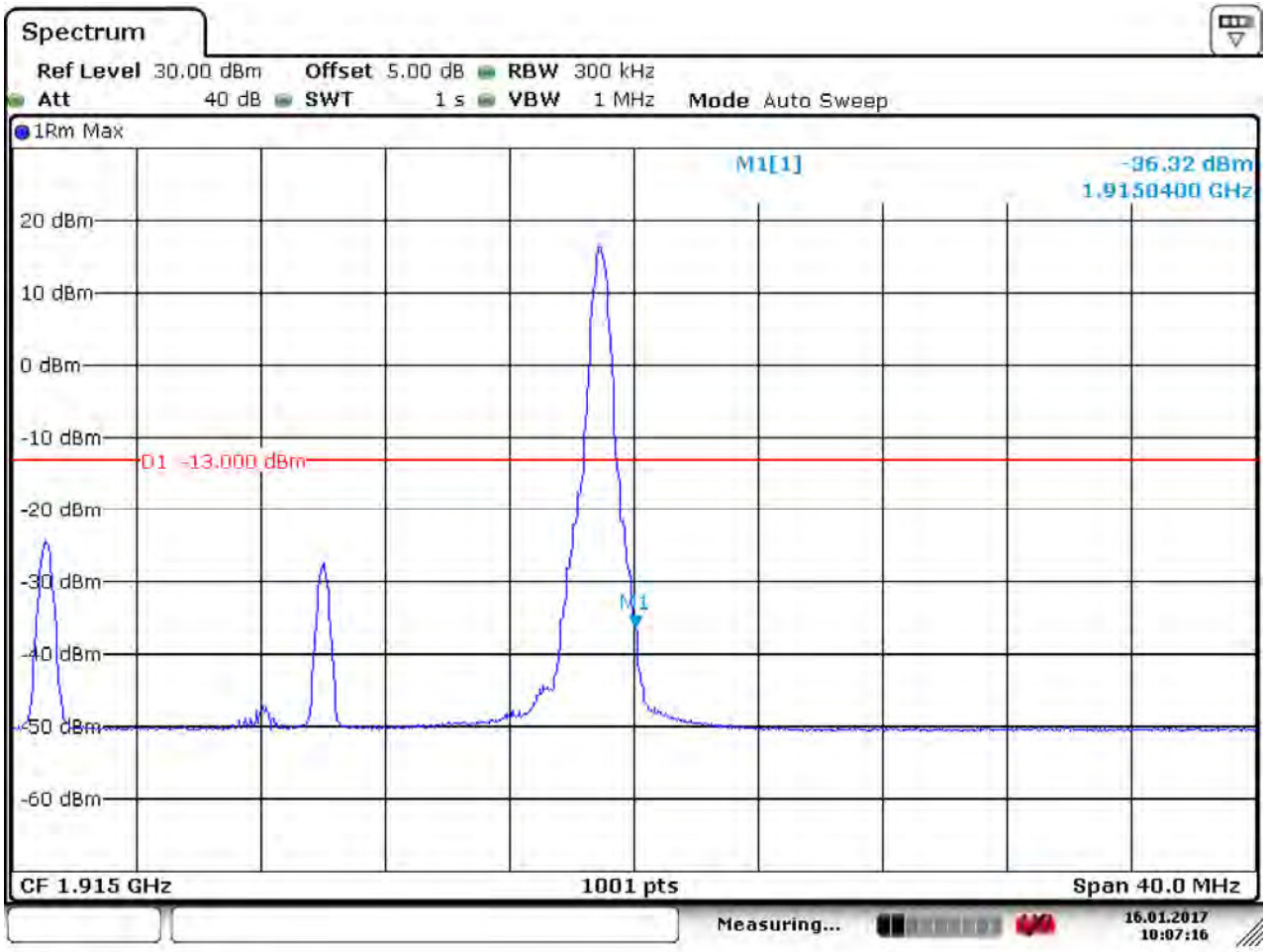


5.1.1.18.1.2 Test RB=100RB

Date: 16.JAN.2017 10:06:06

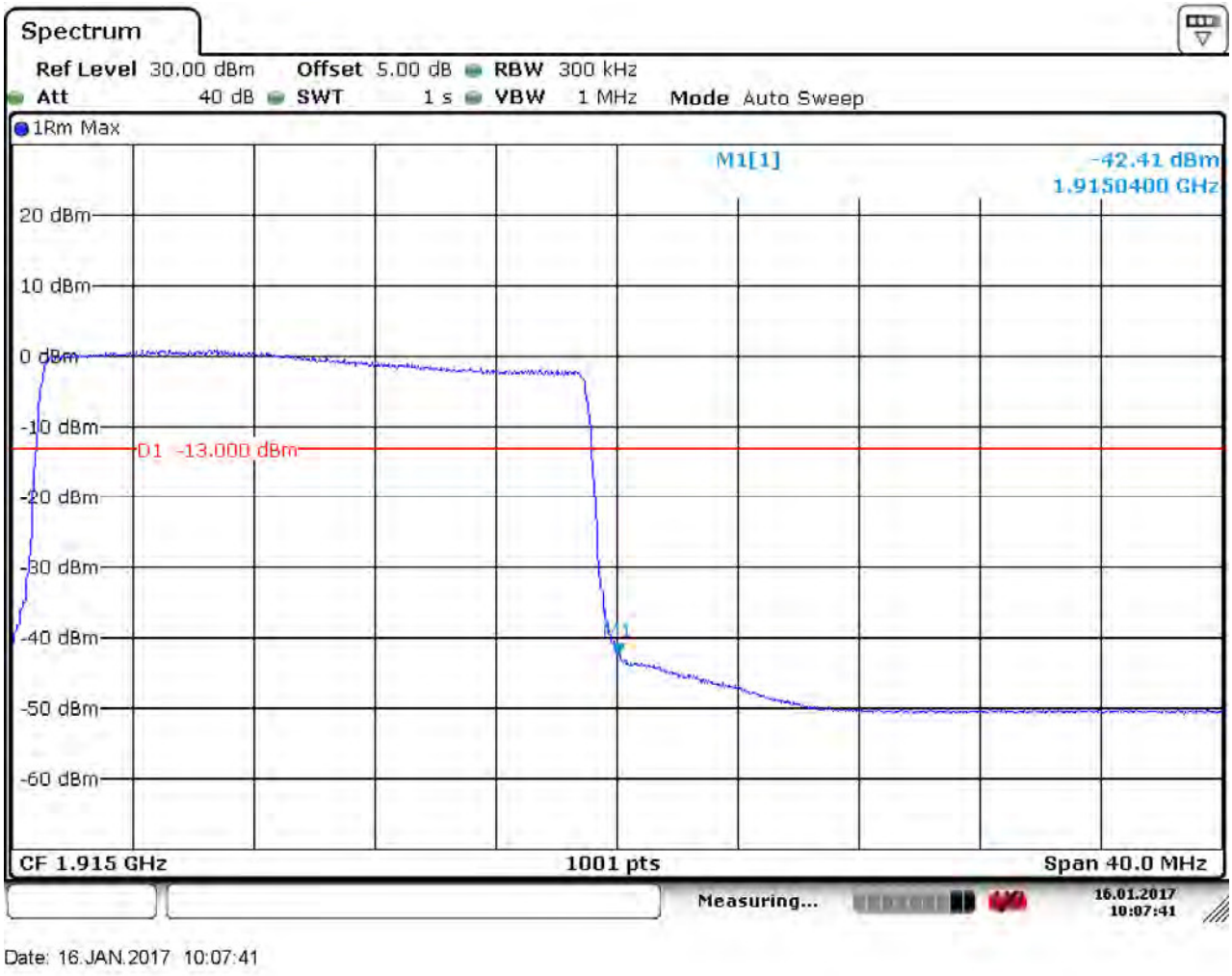
5.1.1.18.2 Test Channel = HCH

5.1.1.18.2.1 Test RB=1RB



Date: 16.JAN.2017 10:07:16

5.1.1.18.2.2 Test RB=100RB



Date: 16.JAN.2017 10:07:41

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.

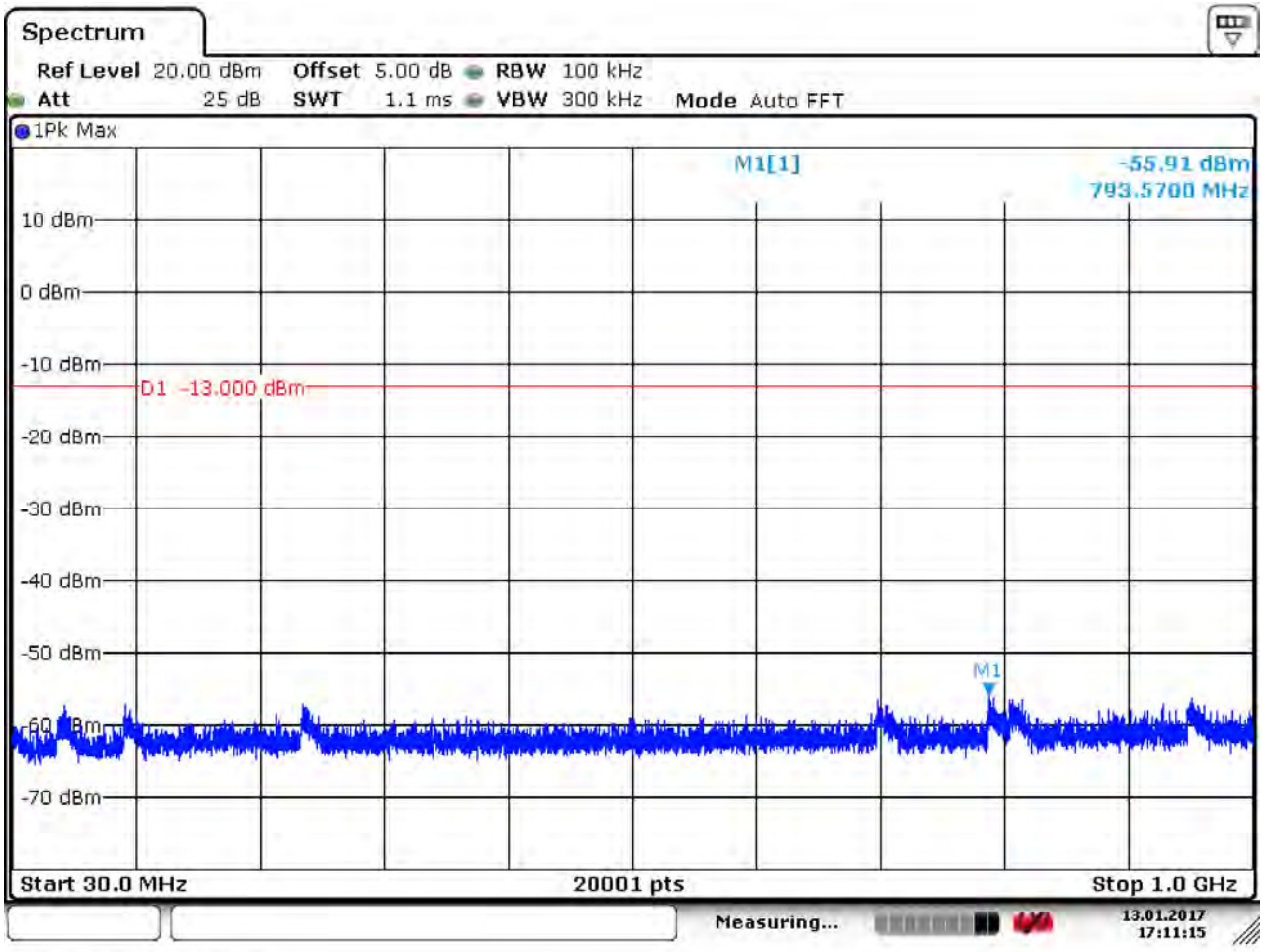
Part I - Test Plots

6.1 For LTE

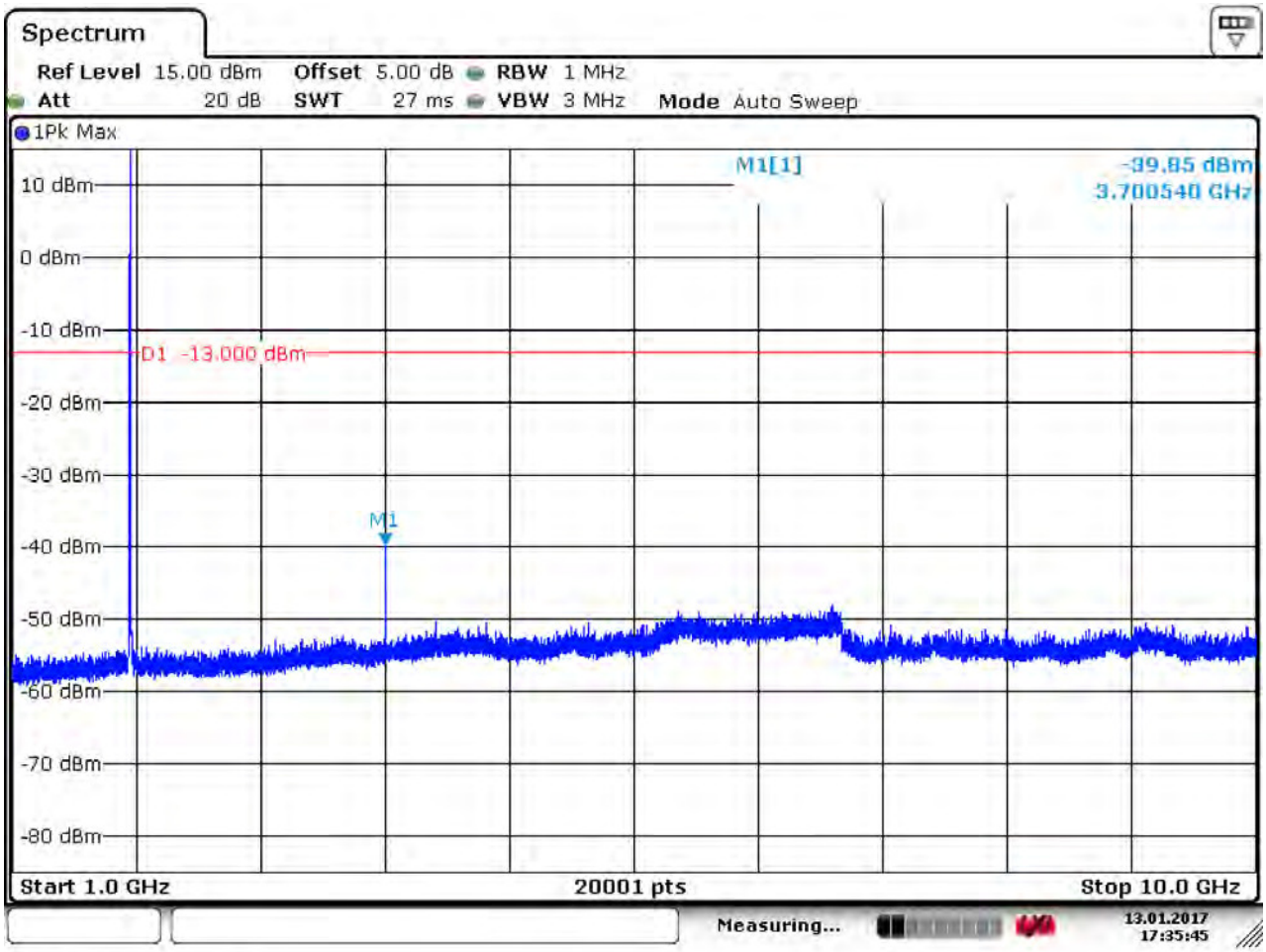
6.1.1 Test Band = LTE band 25

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

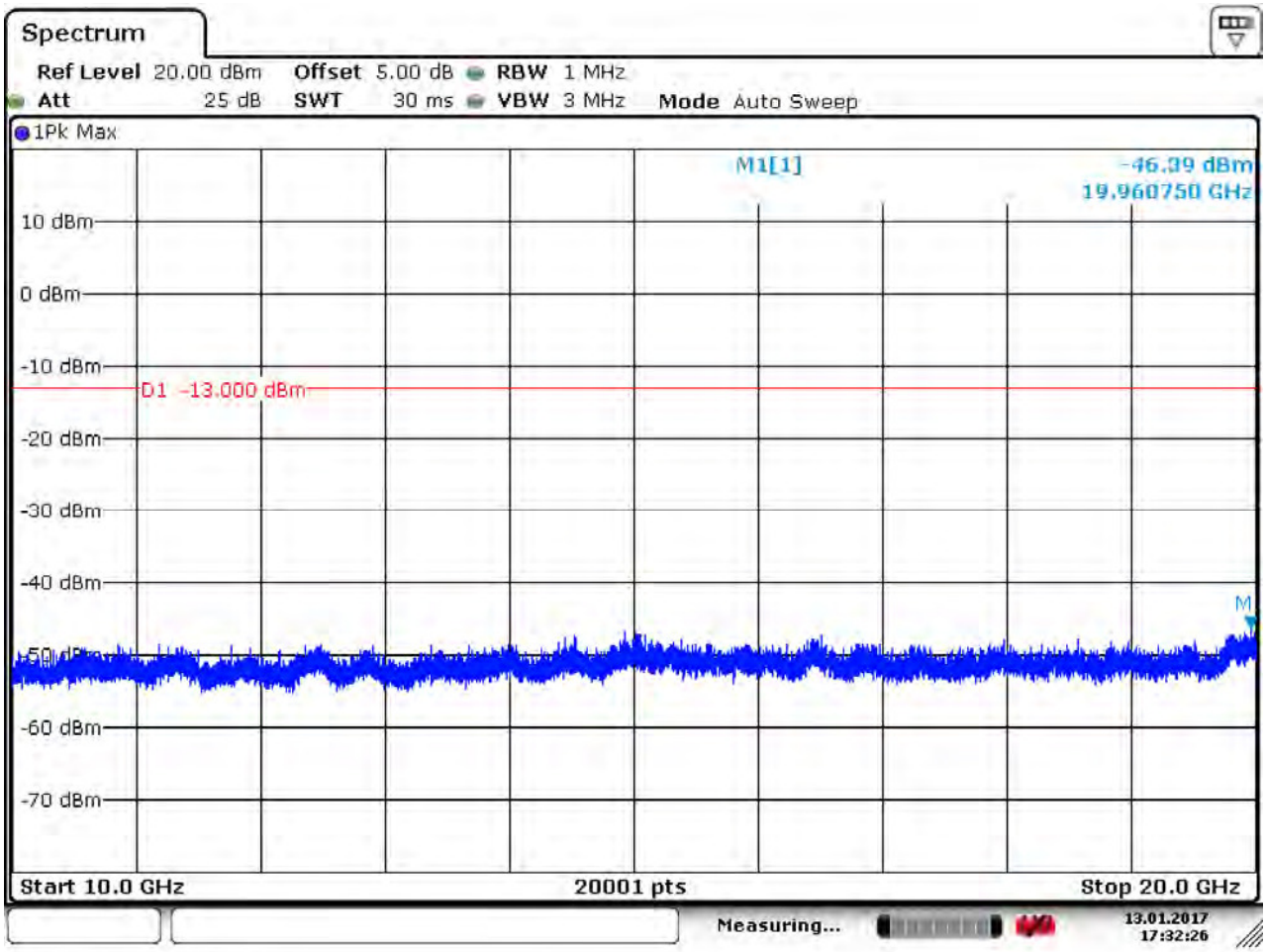
6.1.1.1.1 Test Channel = LCH



Date: 13.JAN.2017 17:11:15

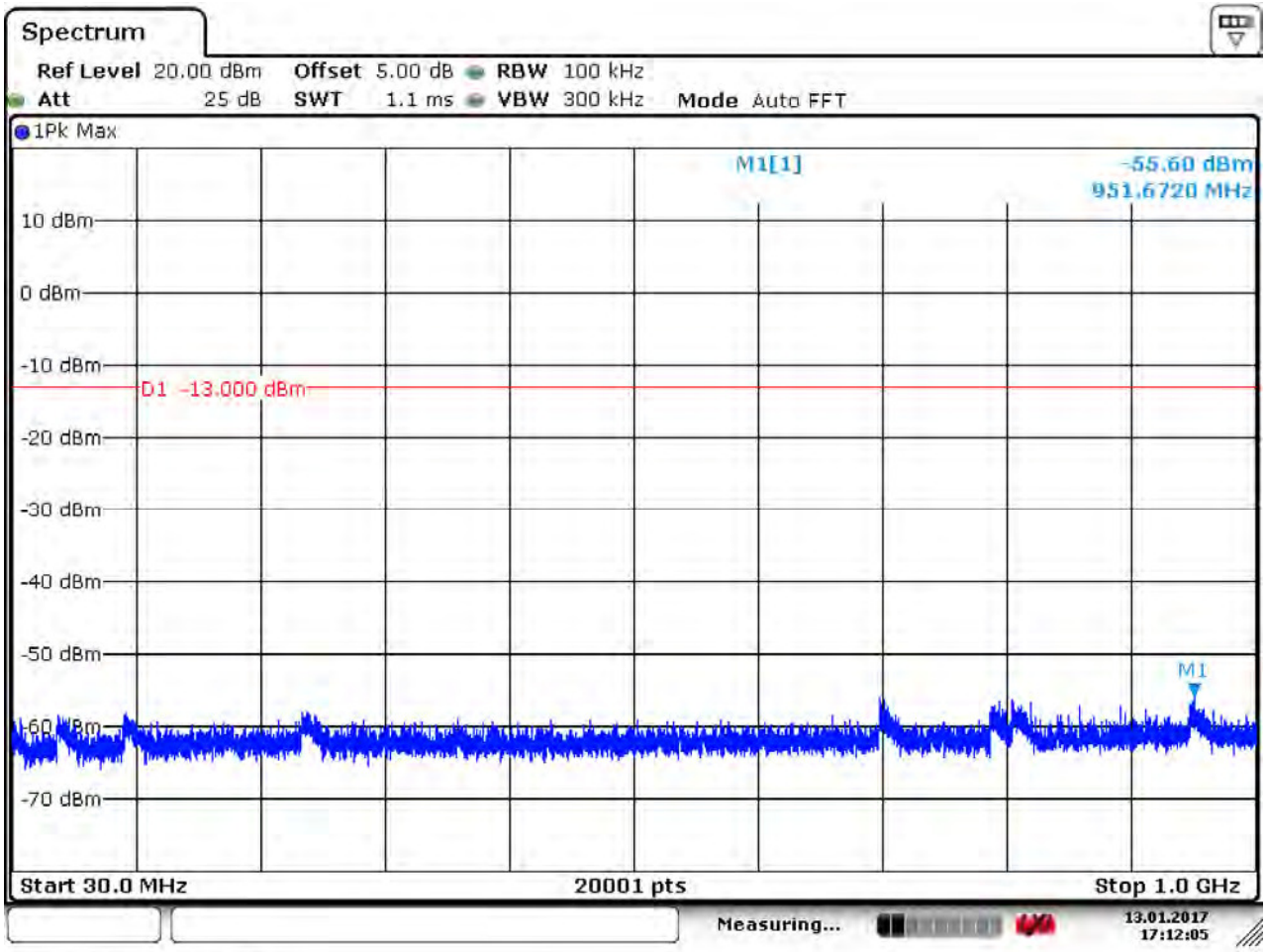


Date: 13.JAN.2017 17:35:45

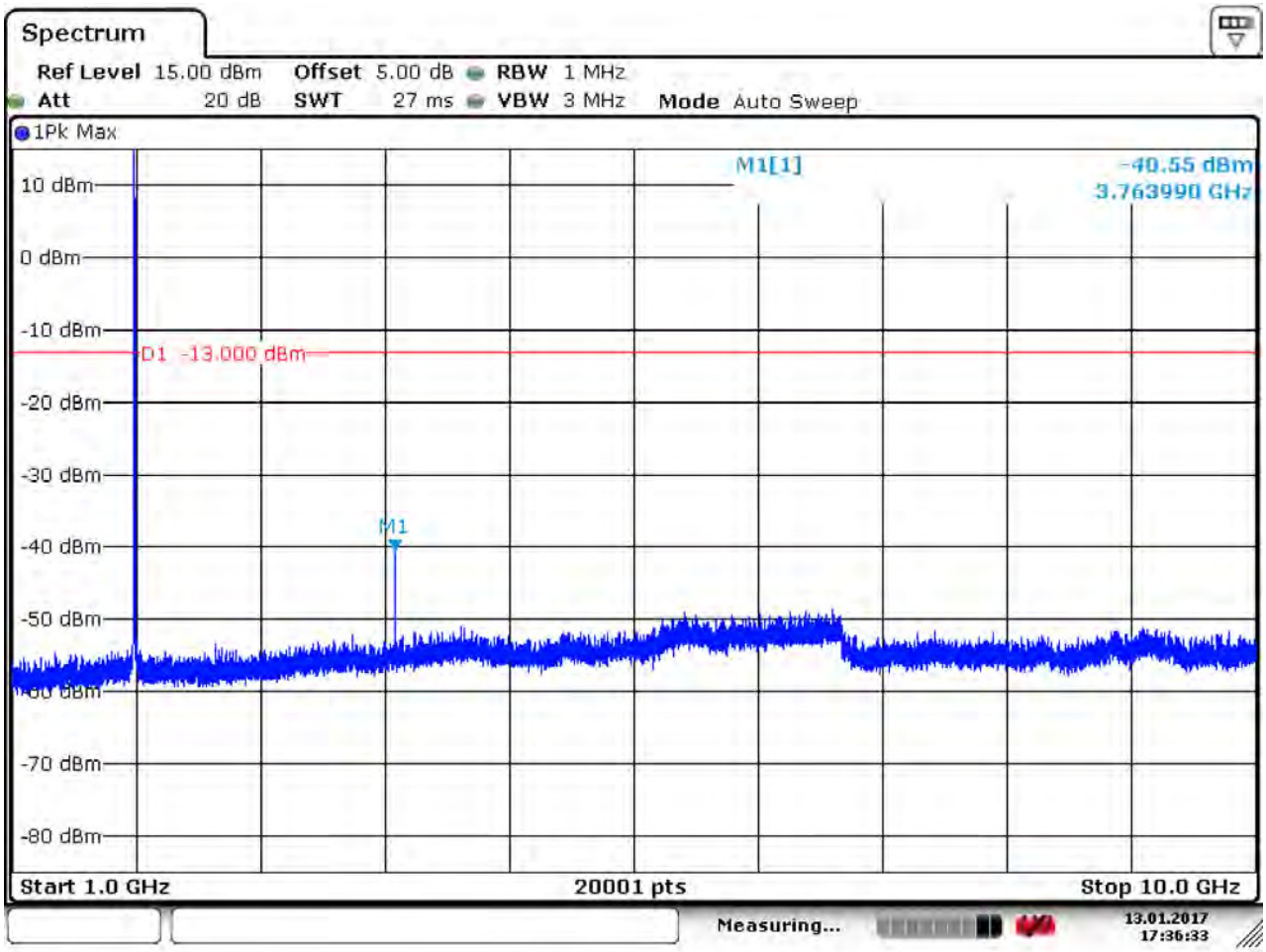


Date: 13.JAN.2017 17:32:27

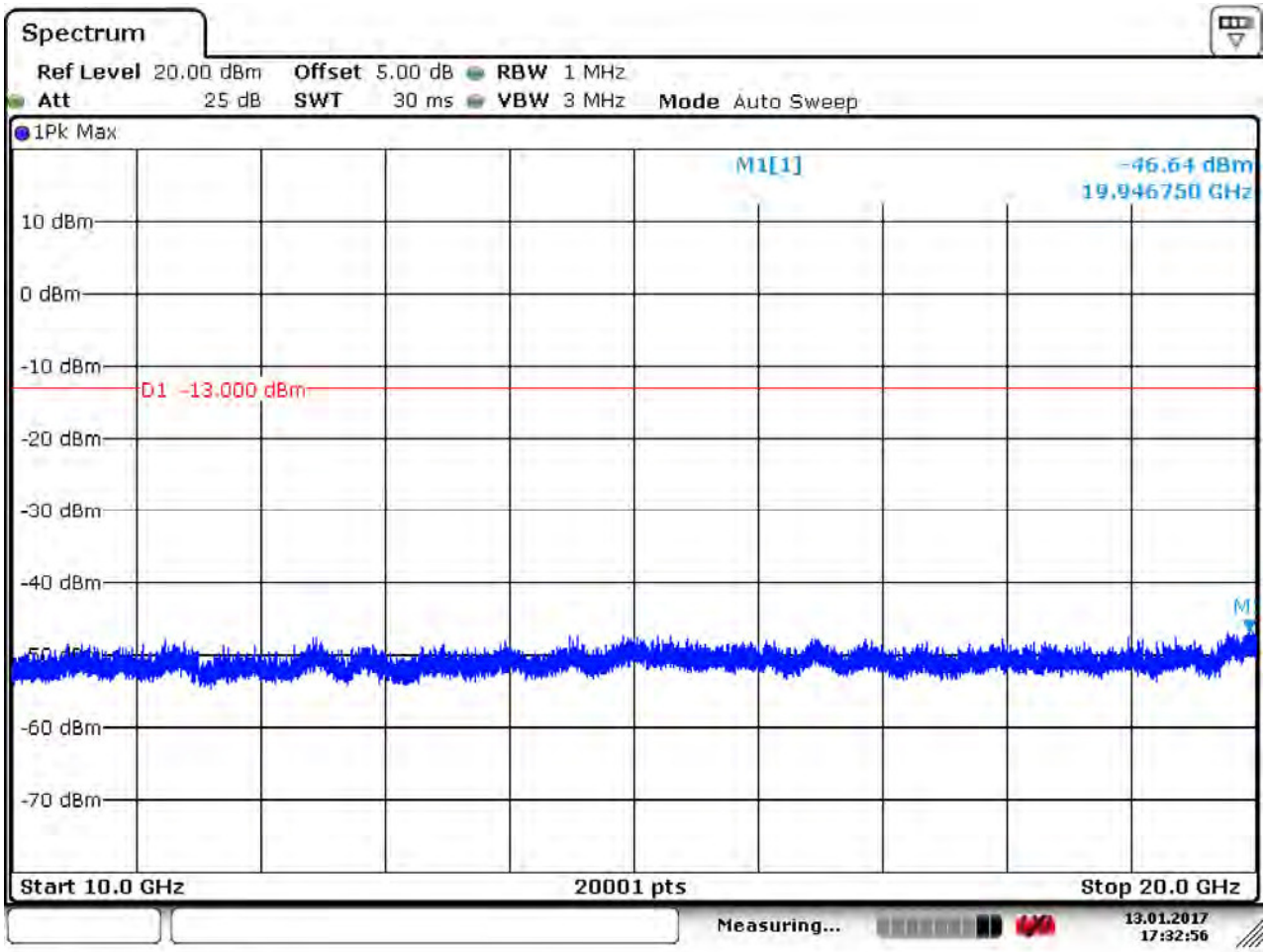
6.1.1.1.2 Test Channel = MCH



Date: 13.JAN.2017 17:12:06

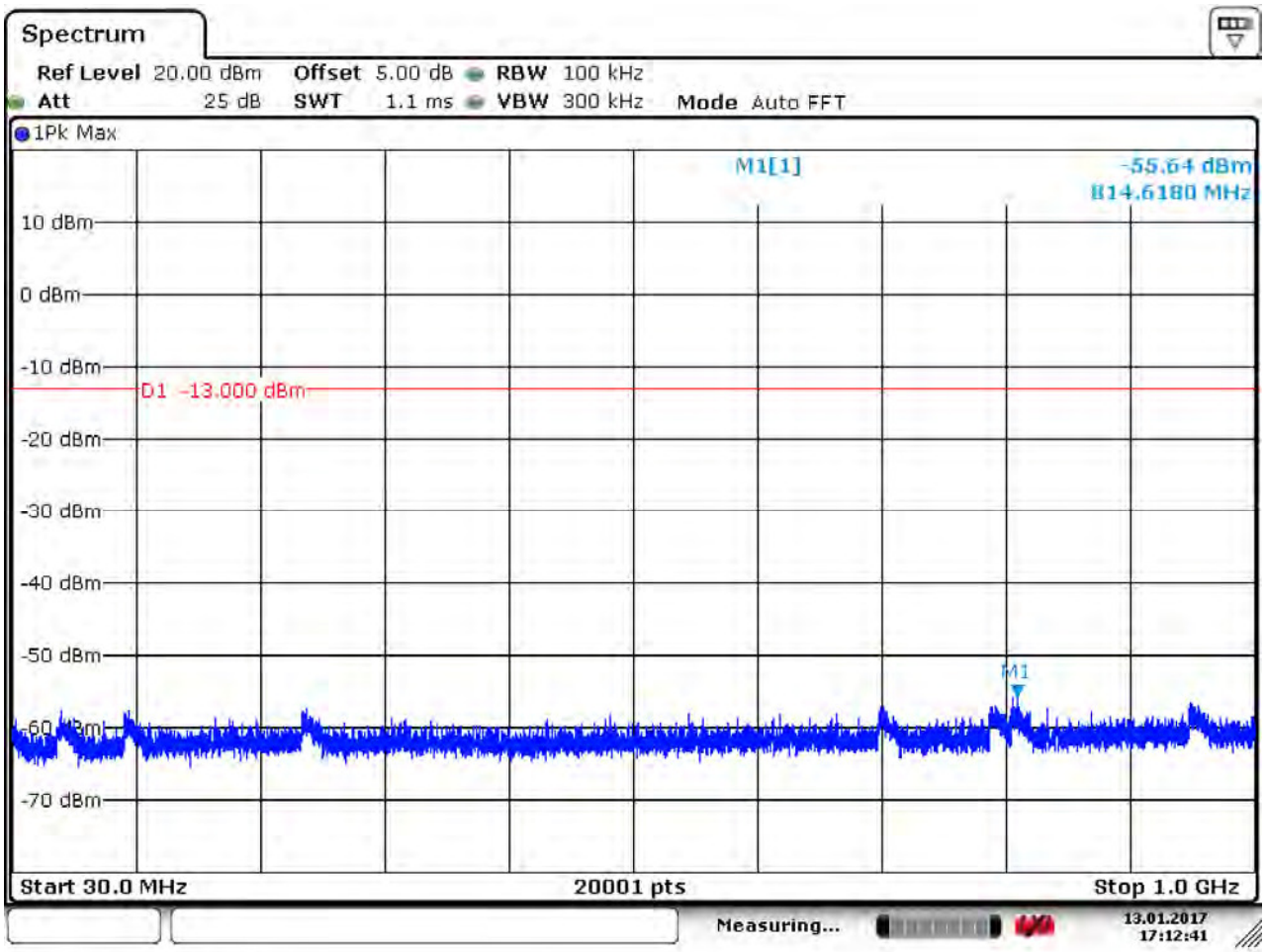


Date: 13.JAN.2017 17:36:33

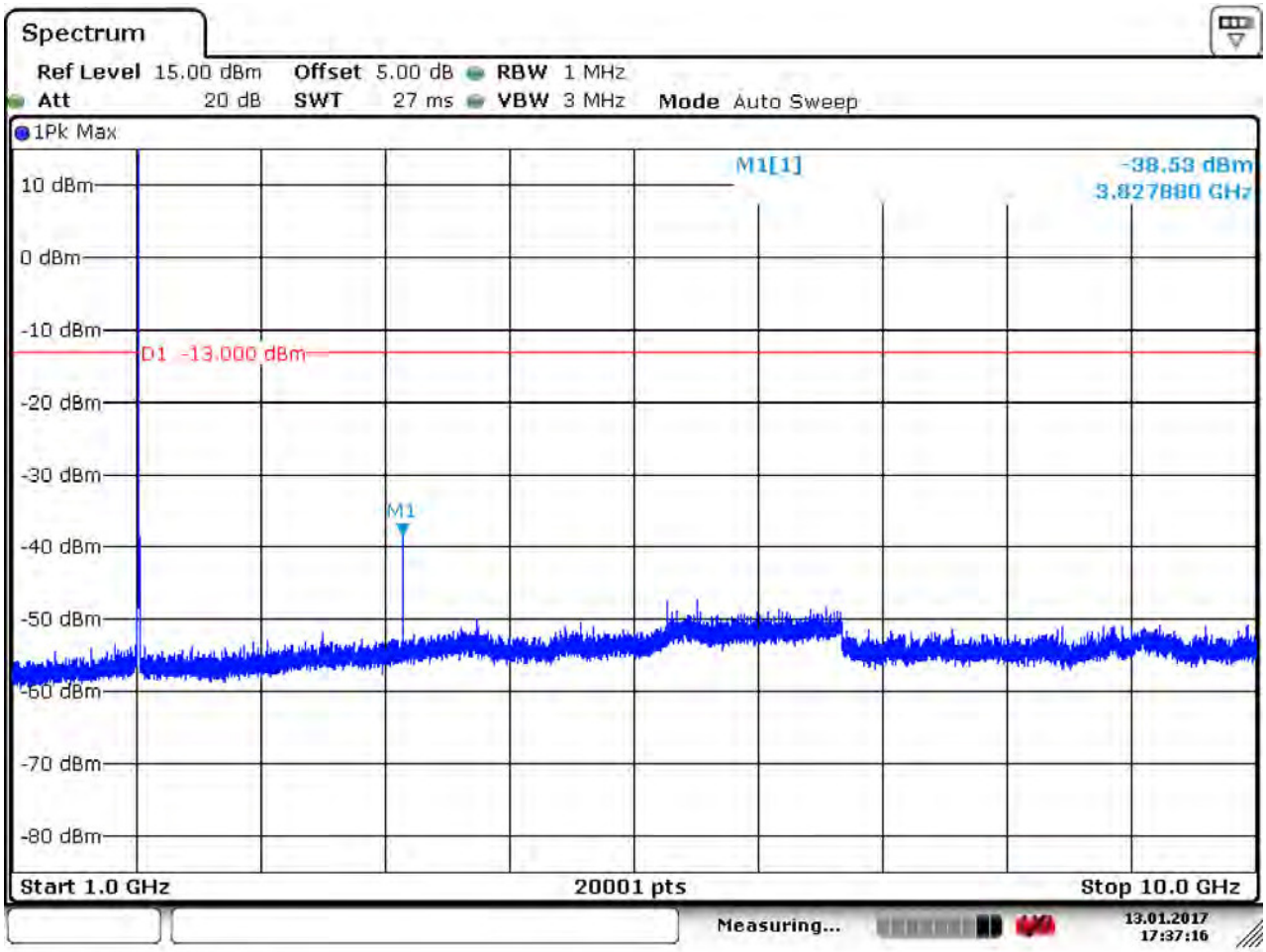


Date: 13.JAN.2017 17:32:56

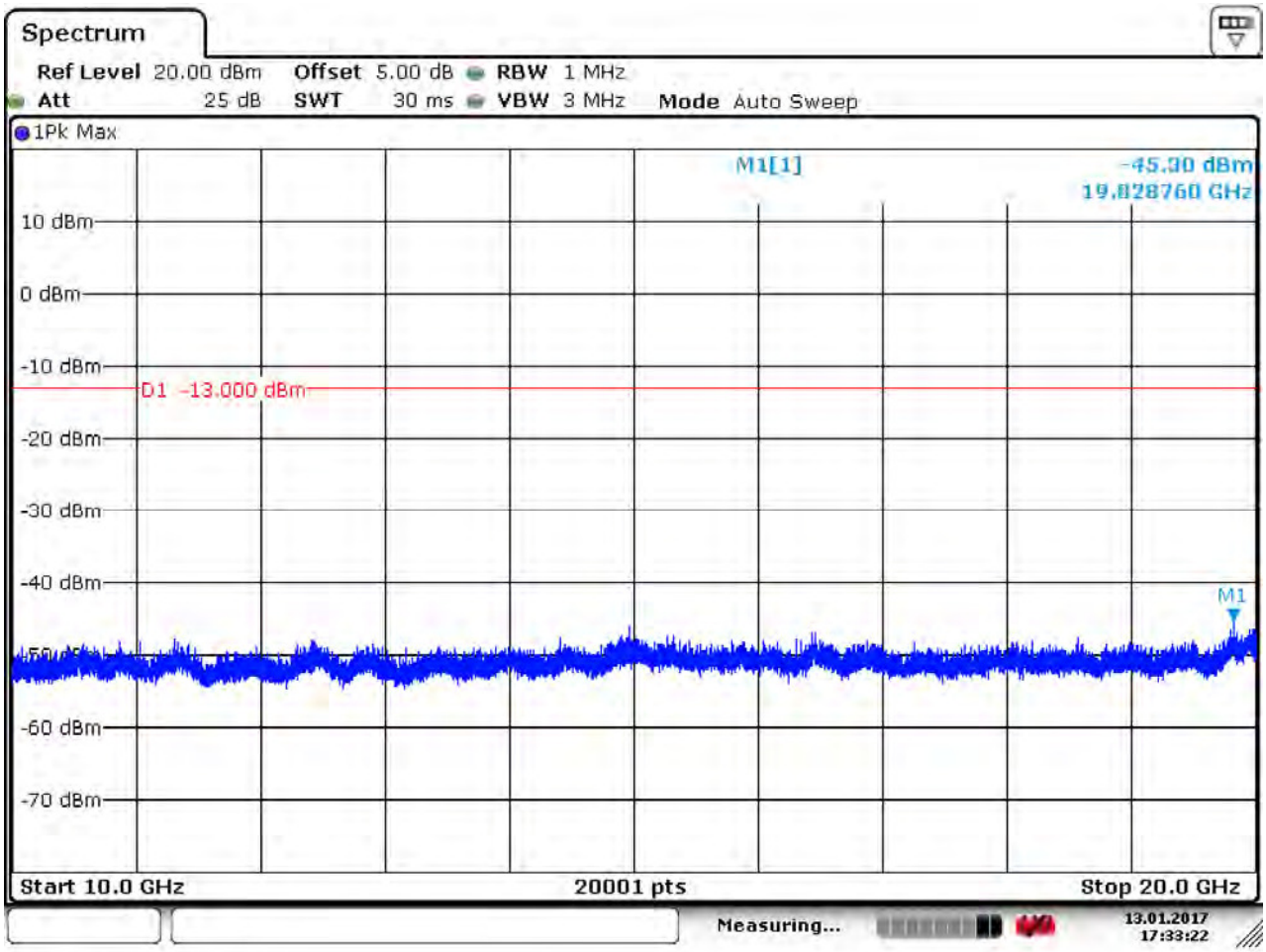
6.1.1.1.3 Test Channel = HCH



Date: 13.JAN.2017 17:12:42



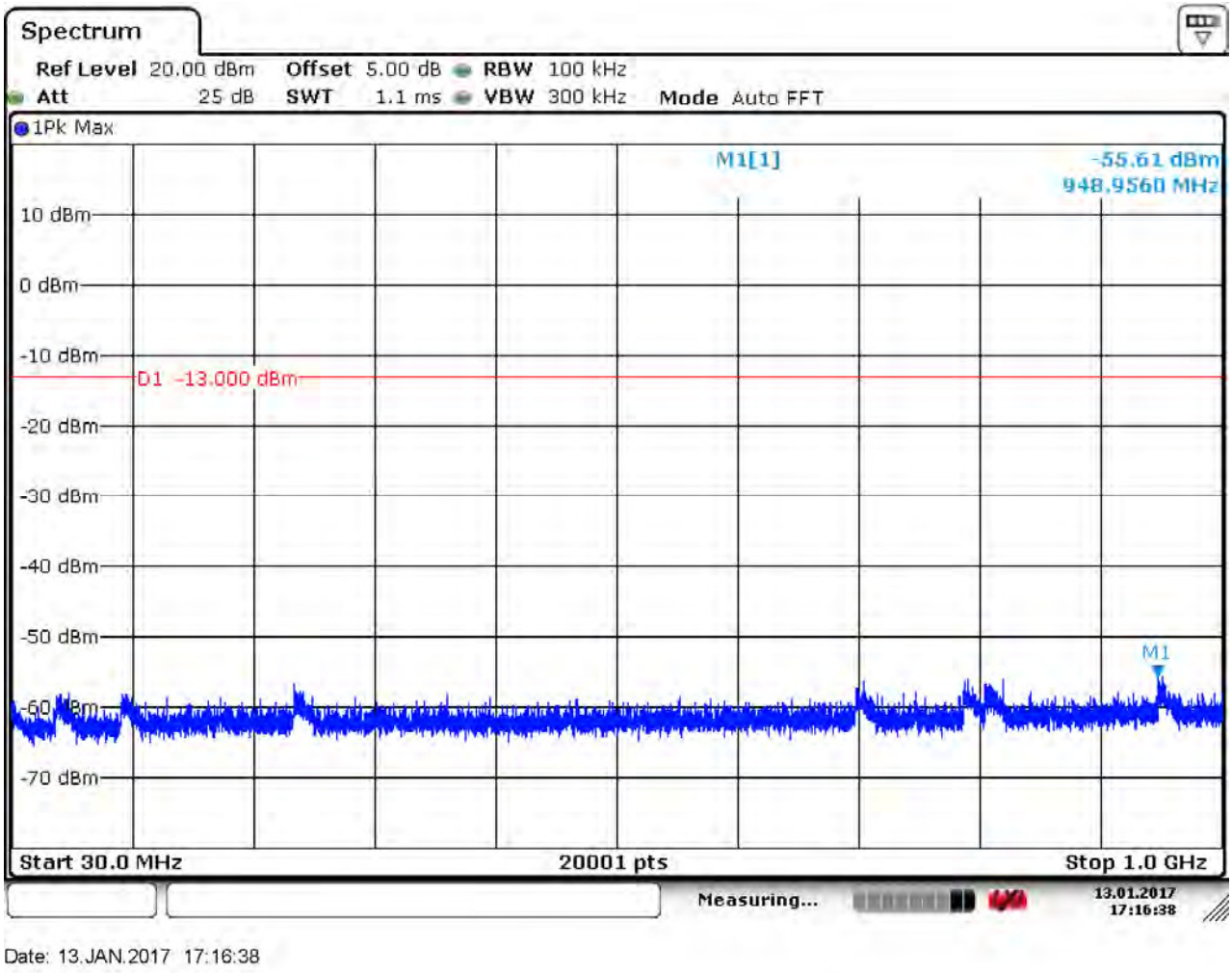
Date: 13.JAN.2017 17:37:16

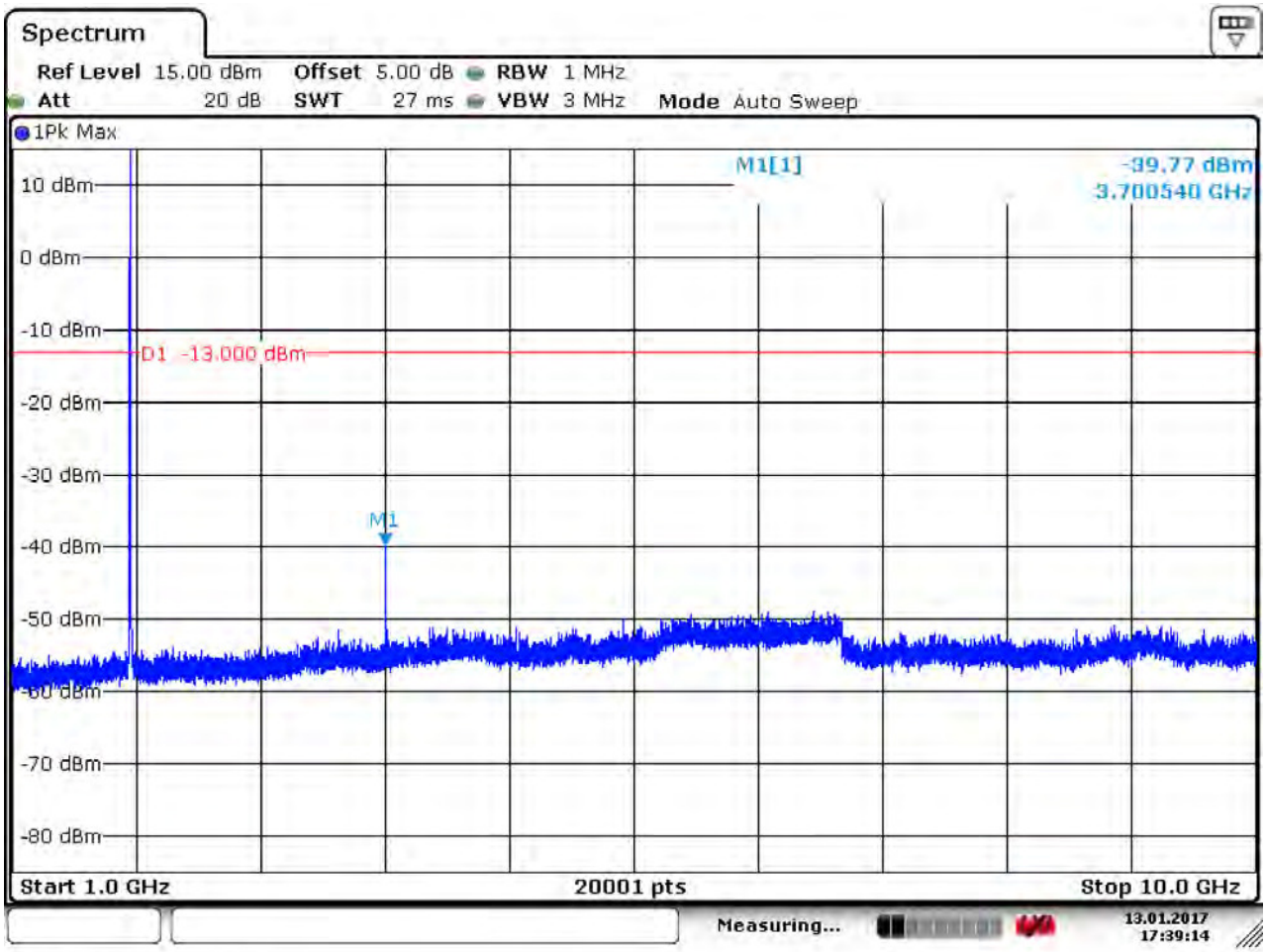


Date: 13.JAN.2017 17:33:23

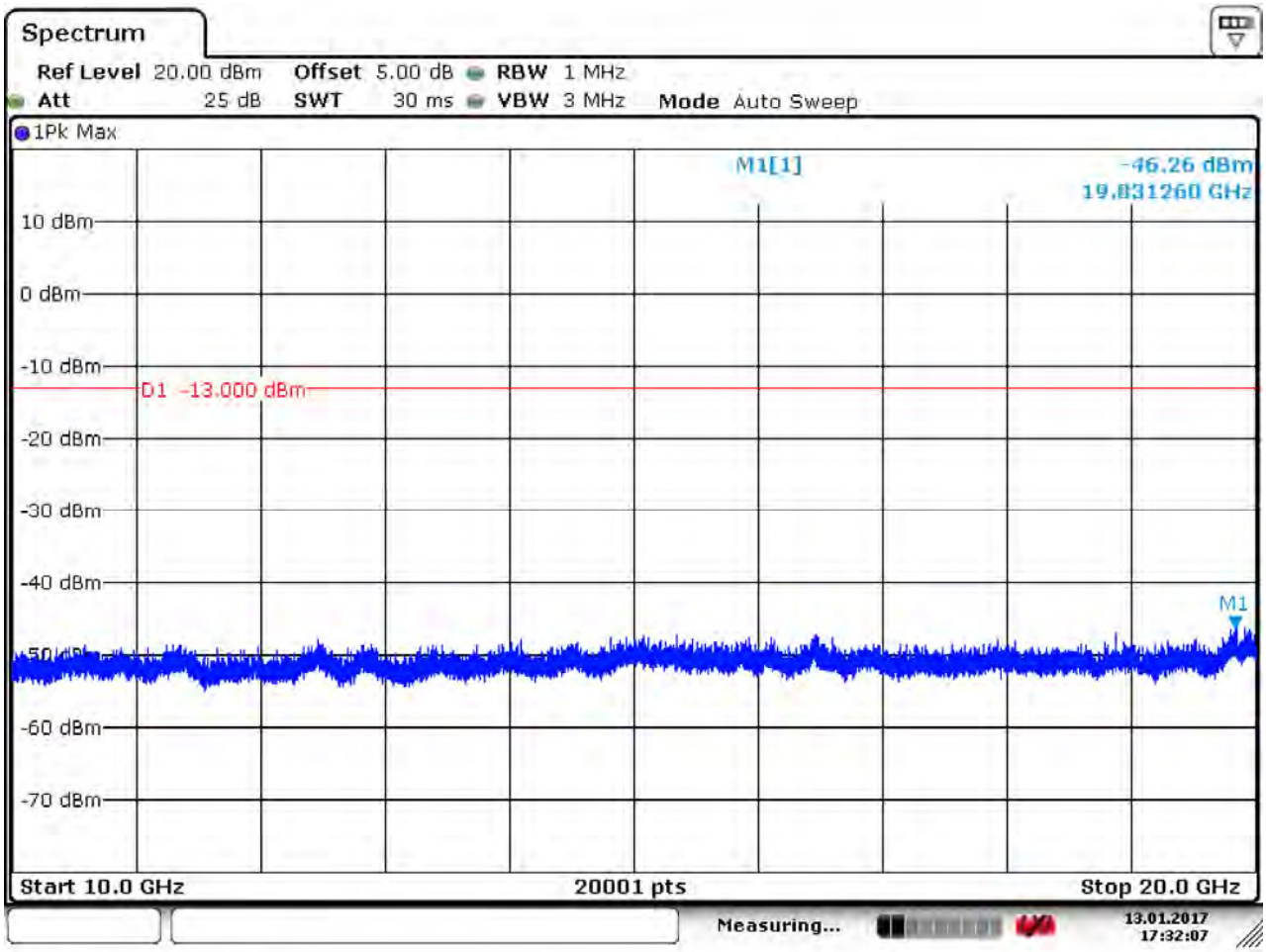
6.1.1.2 Test Mode = LTE / TM1 3MHz RB1#0

6.1.1.2.1 Test Channel = LCH



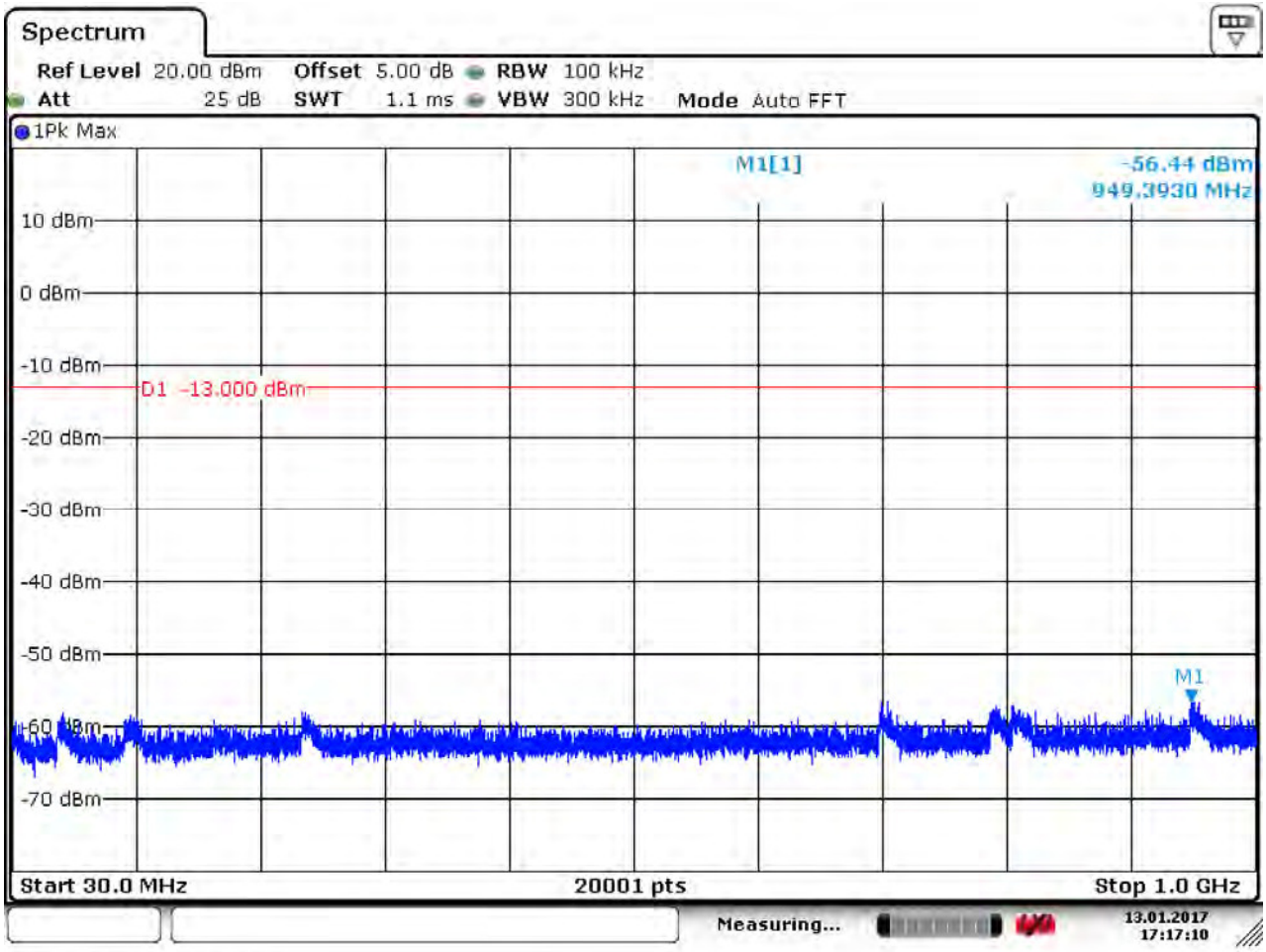


Date: 13.JAN.2017 17:39:14

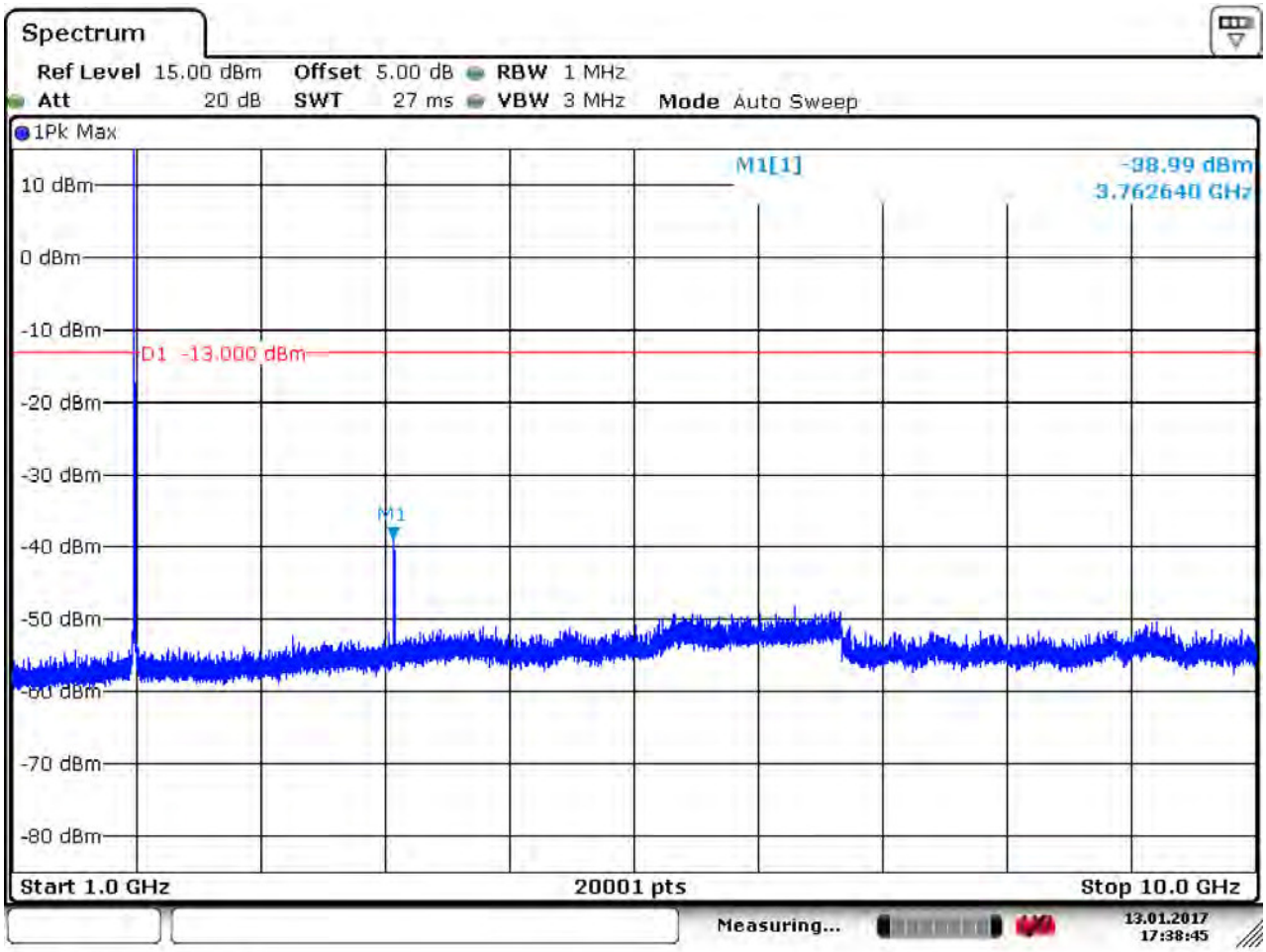


Date: 13.JAN.2017 17:32:07

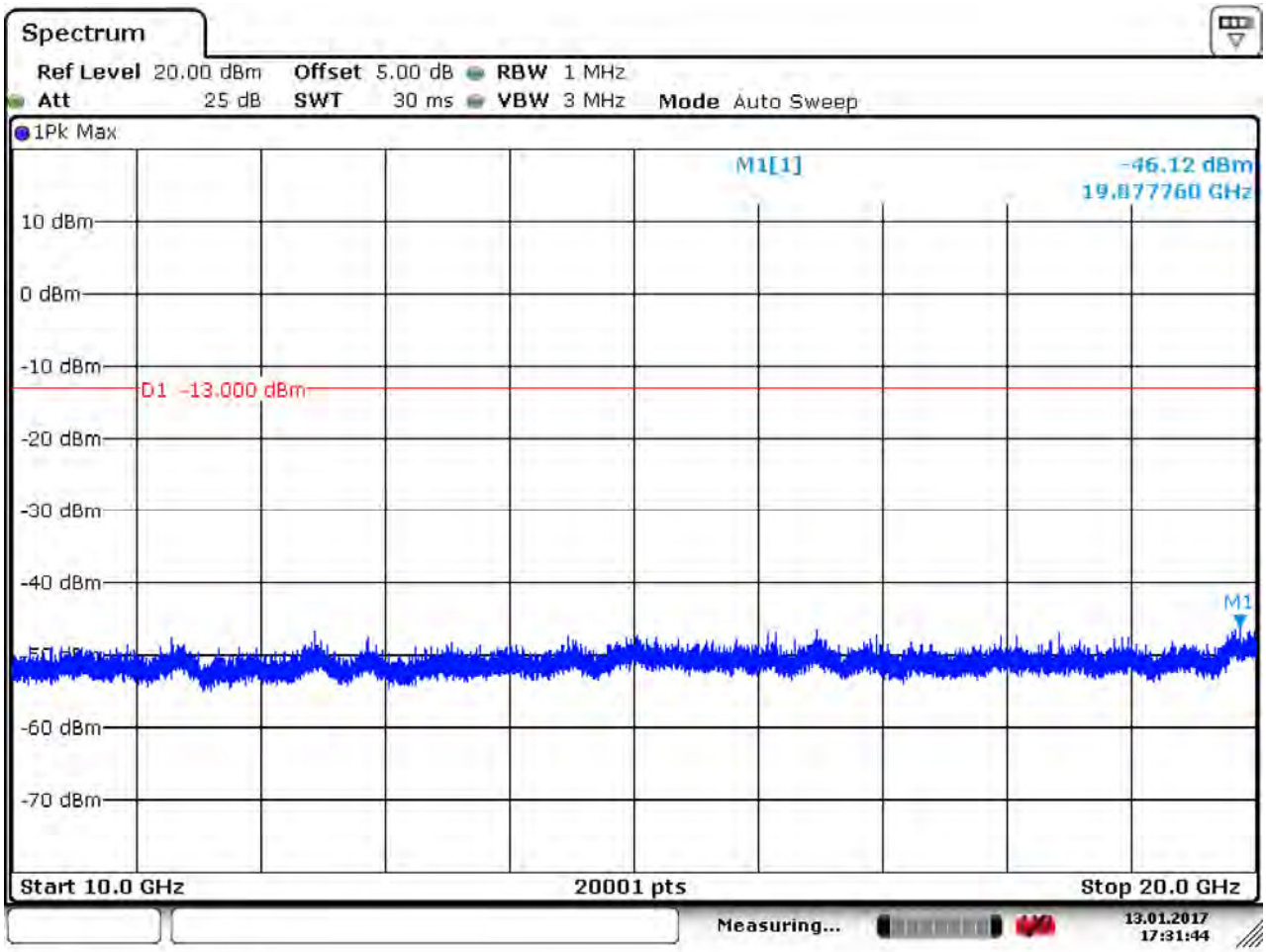
6.1.1.2.2 Test Channel = MCH



Date: 13.JAN.2017 17:17:10

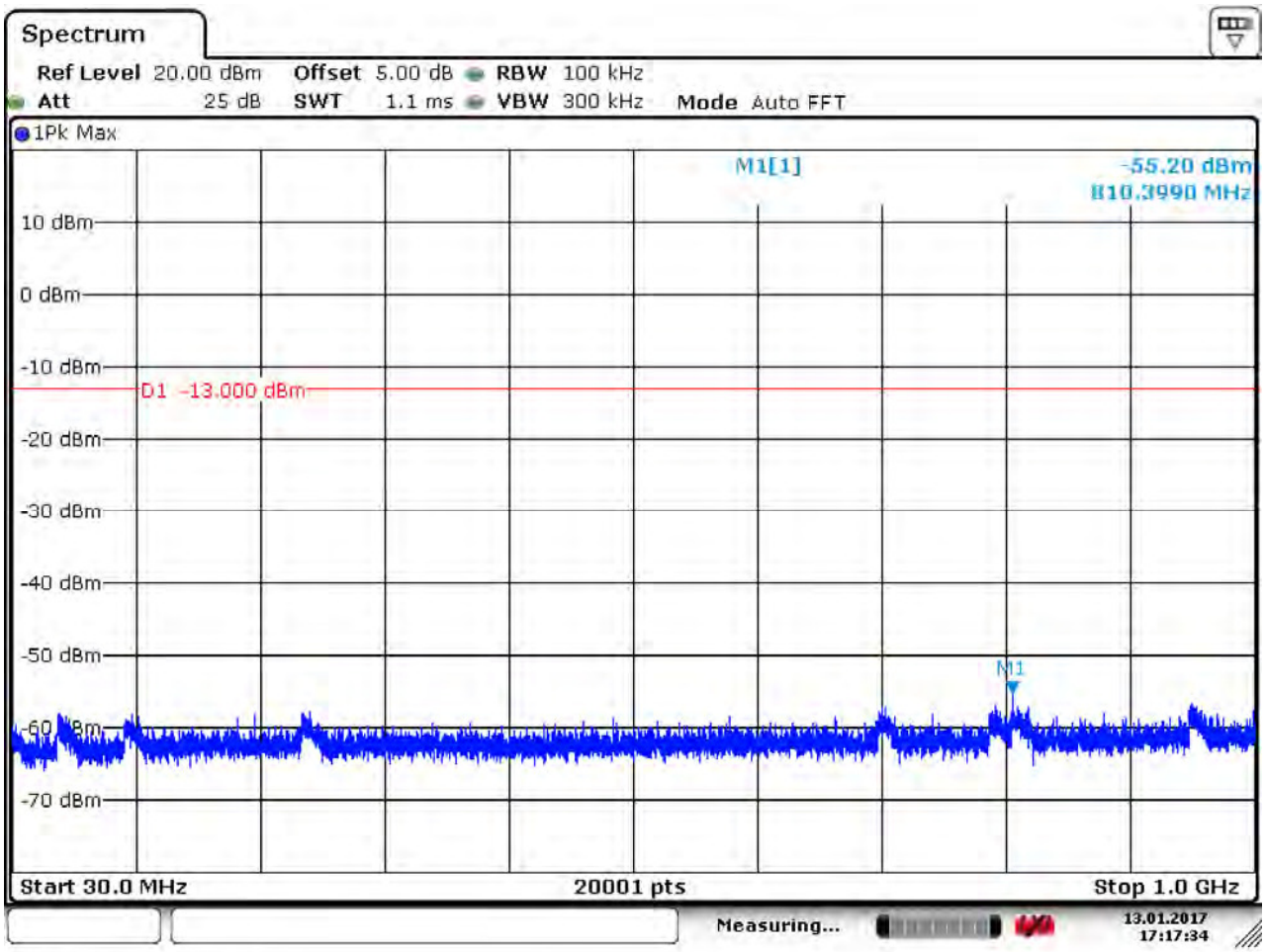


Date: 13.JAN.2017 17:38:45

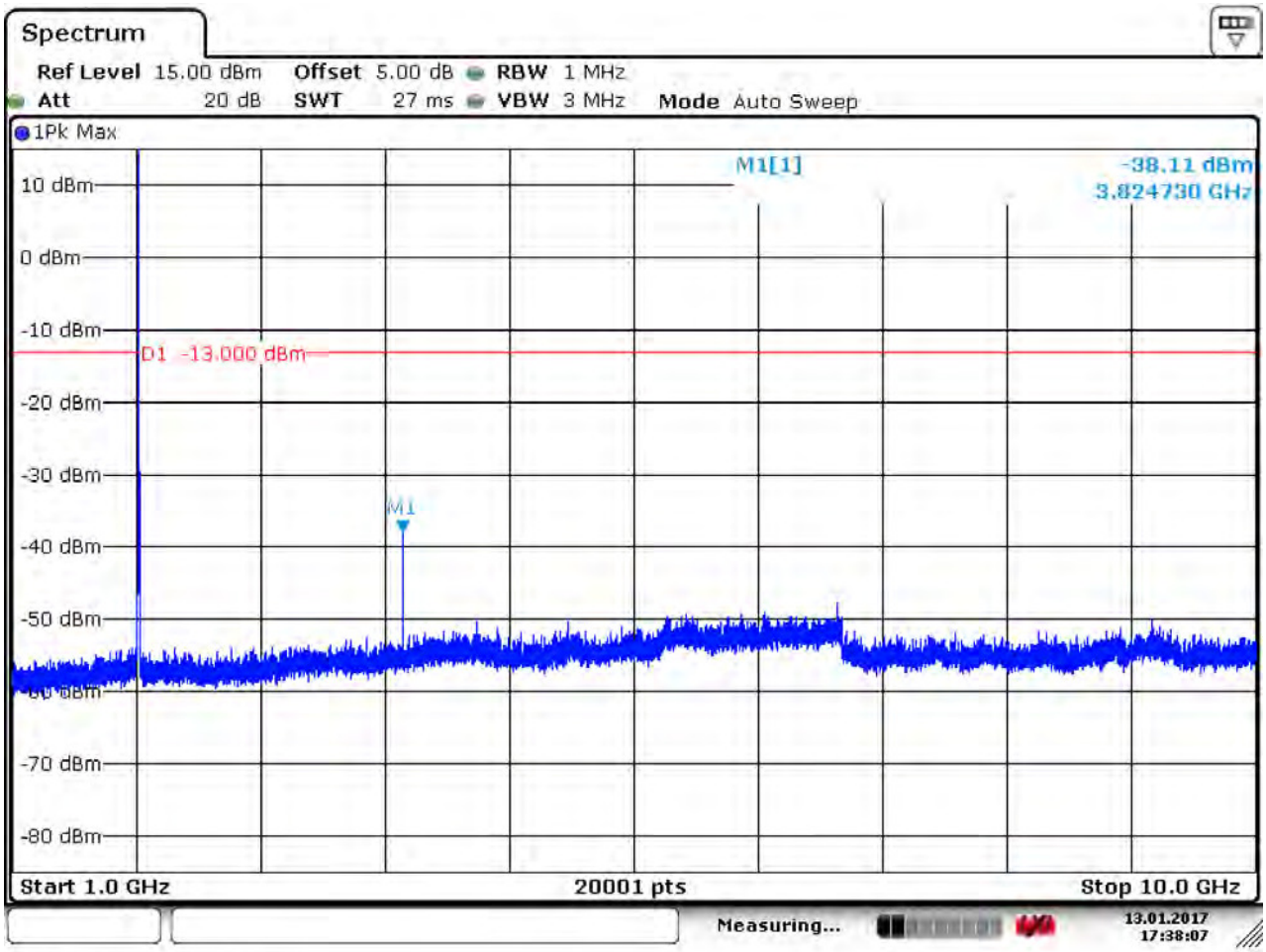


Date: 13.JAN.2017 17:31:45

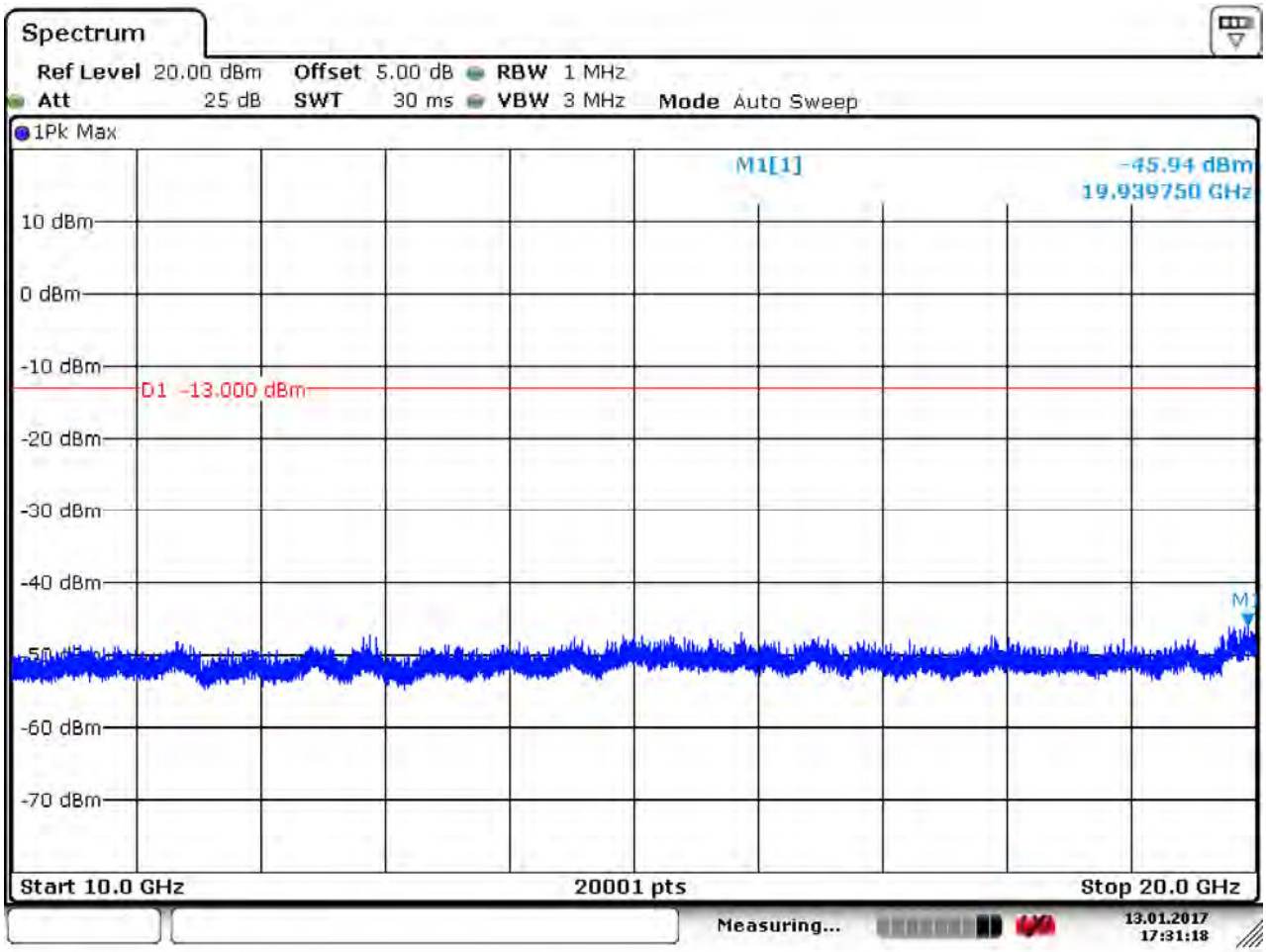
6.1.1.2.3 Test Channel = HCH



Date: 13.JAN.2017 17:17:35



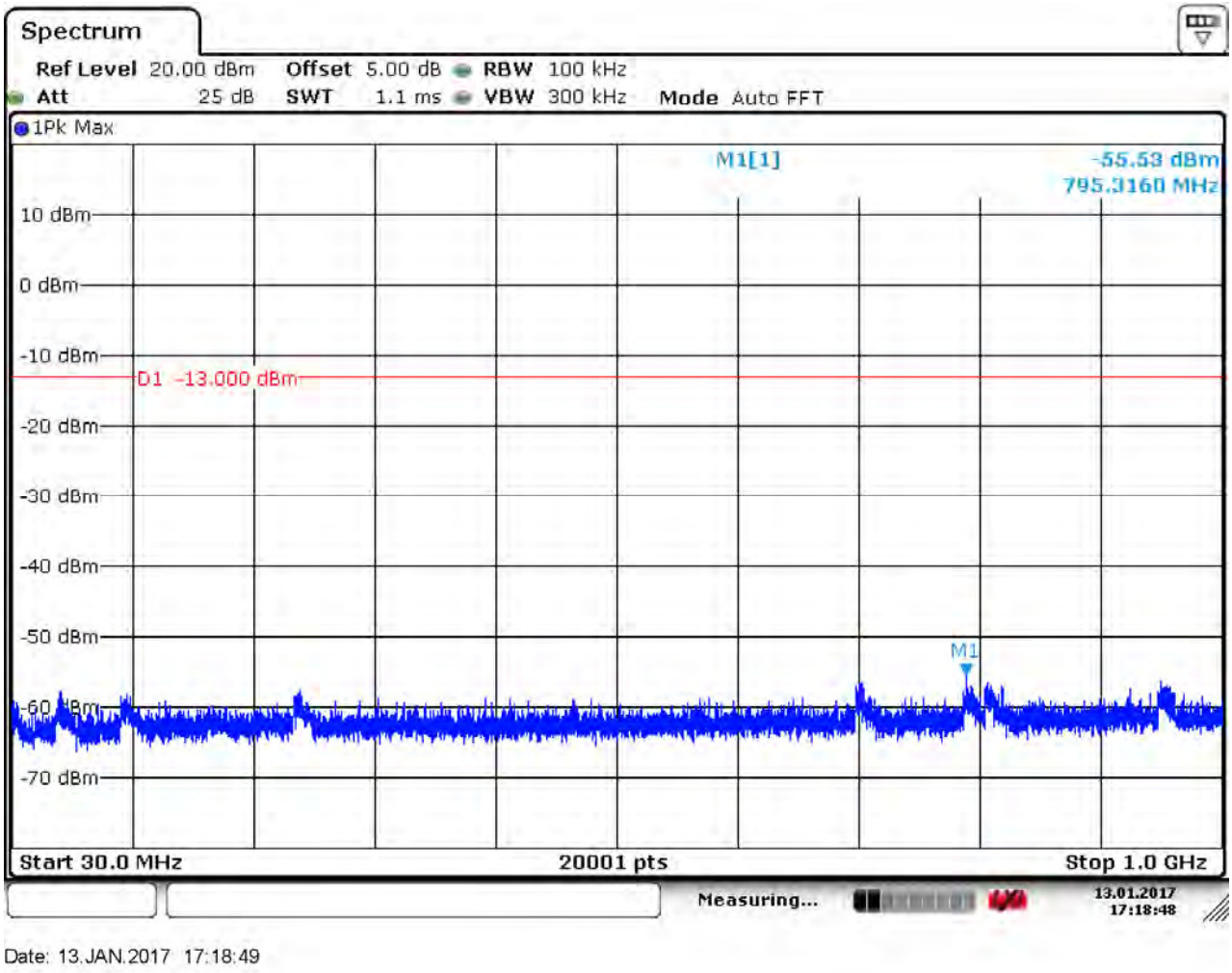
Date: 13.JAN.2017 17:38:07



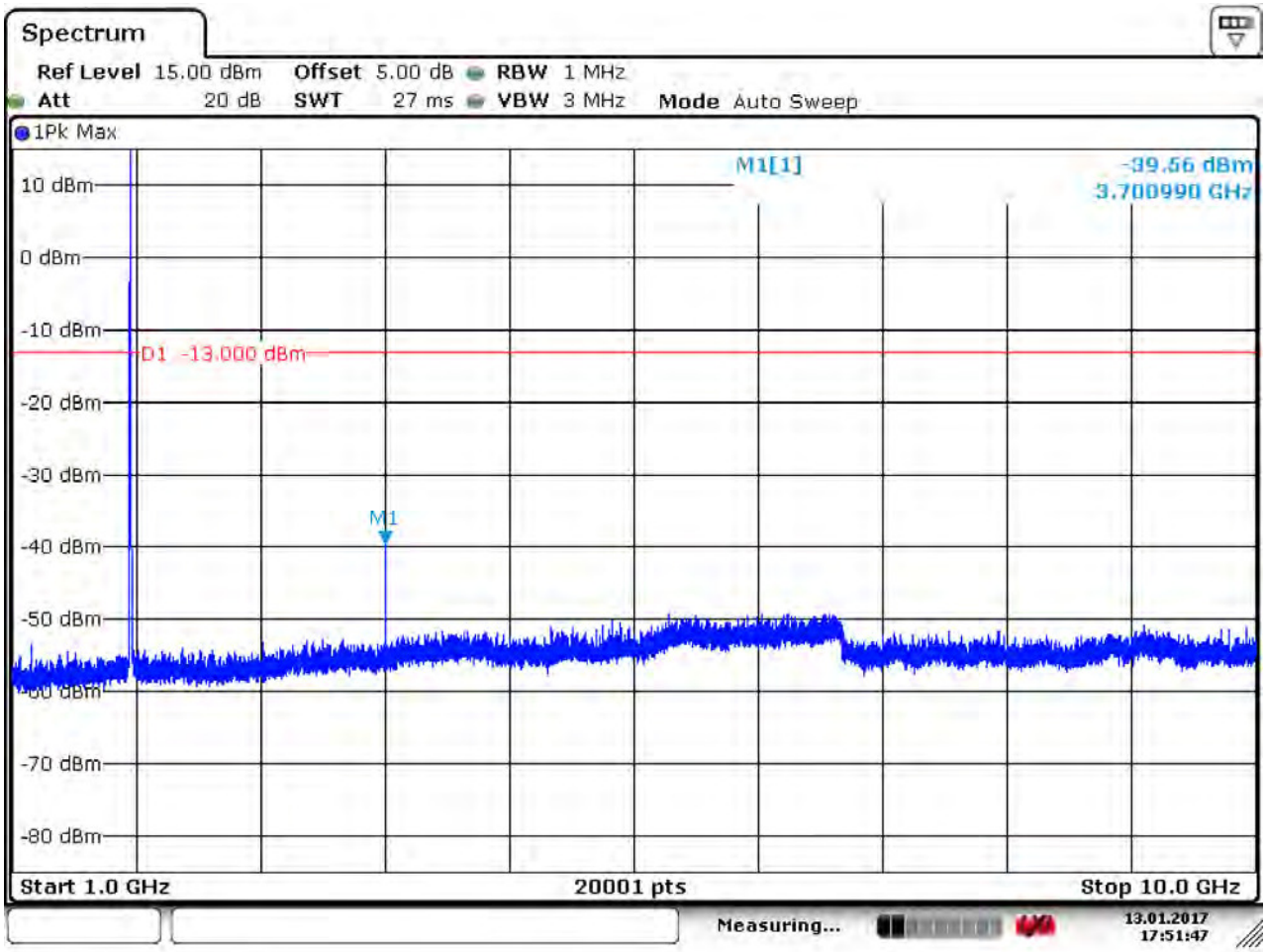
Date: 13.JAN.2017 17:31:19

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

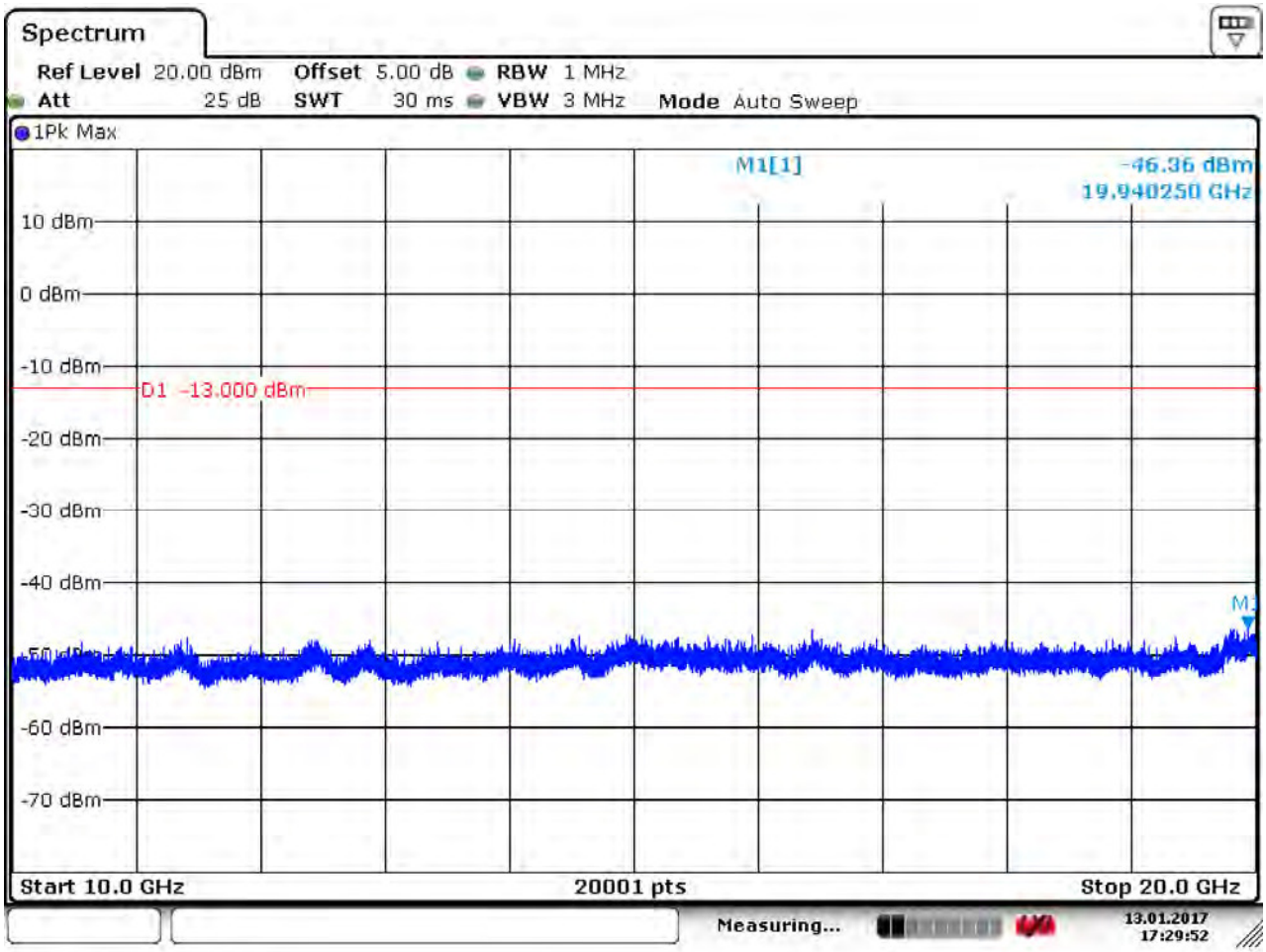
6.1.1.3.1 Test Channel = LCH



Date: 13.JAN.2017 17:18:49

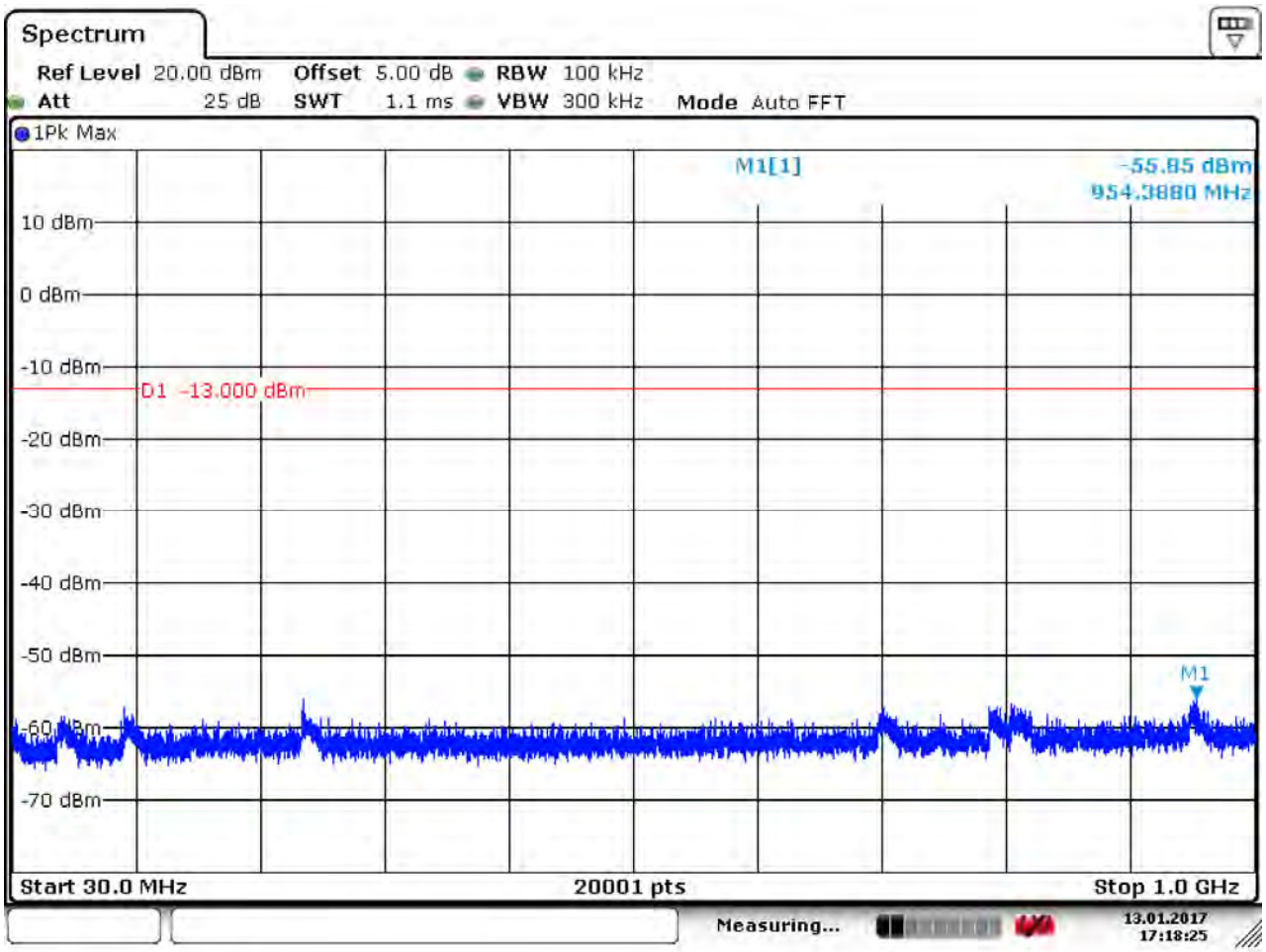


Date: 13.JAN.2017 17:51:48

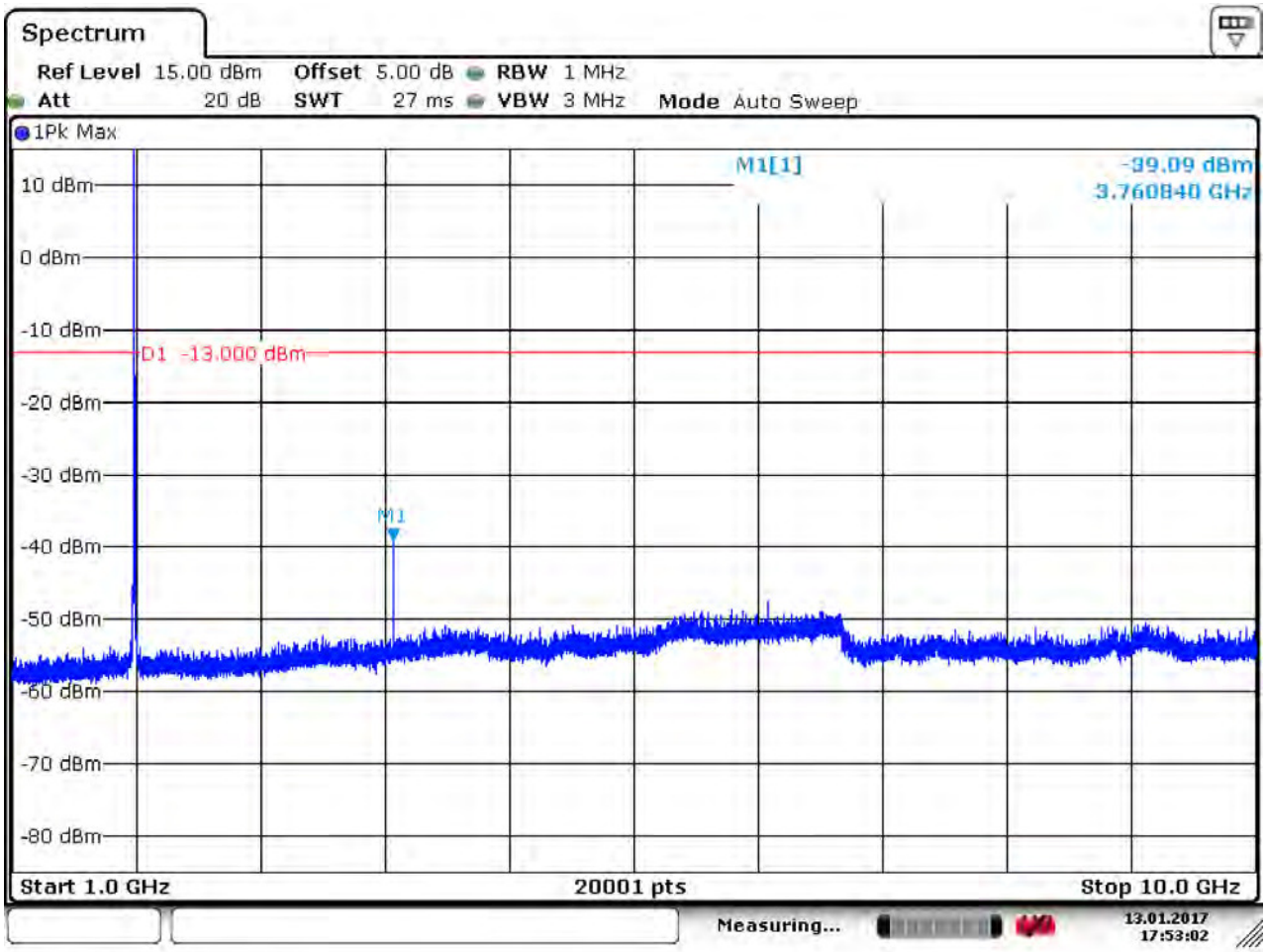


Date: 13.JAN.2017 17:29:53

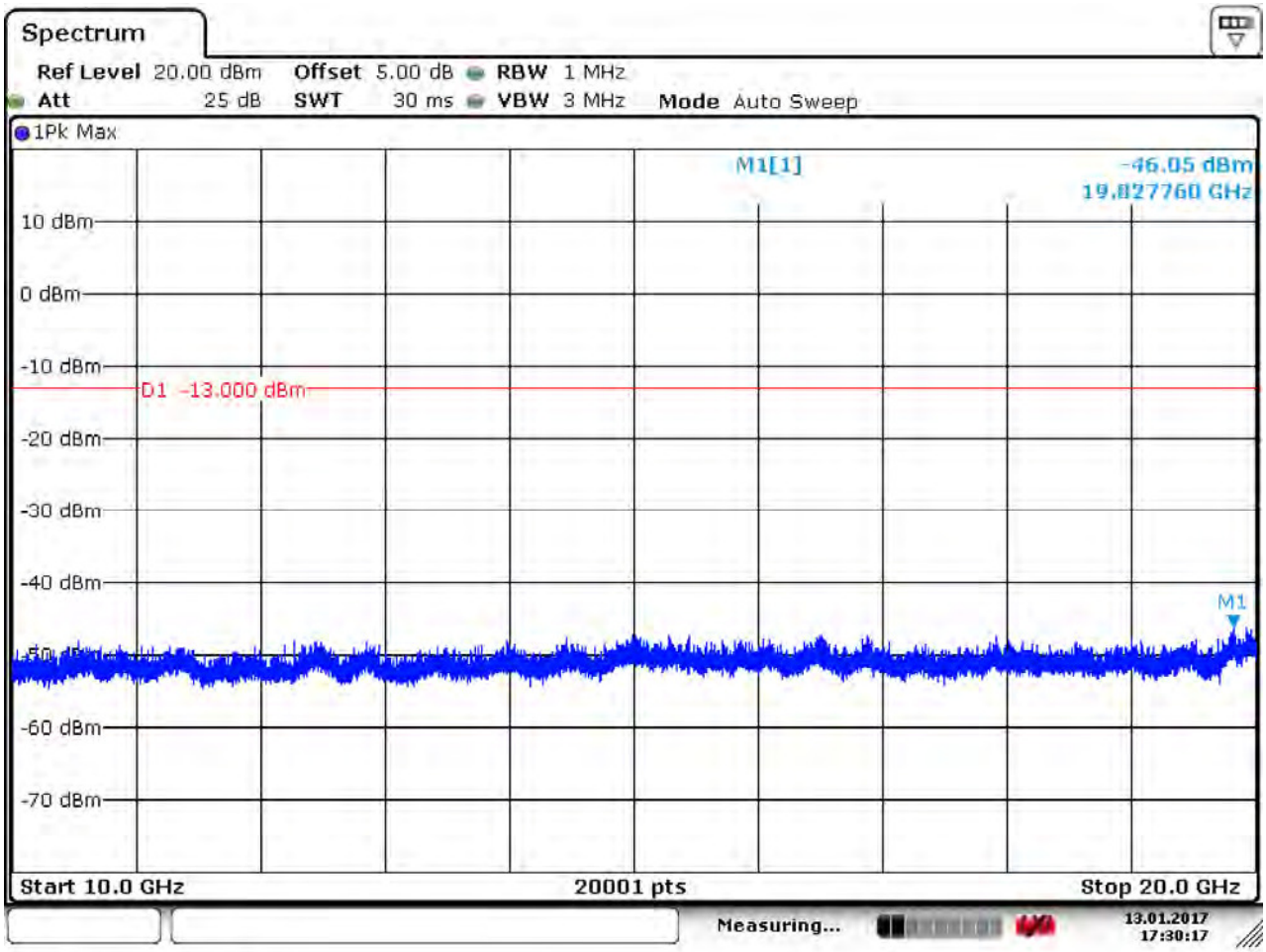
6.1.1.3.2 Test Channel = MCH



Date: 13.JAN.2017 17:18:25

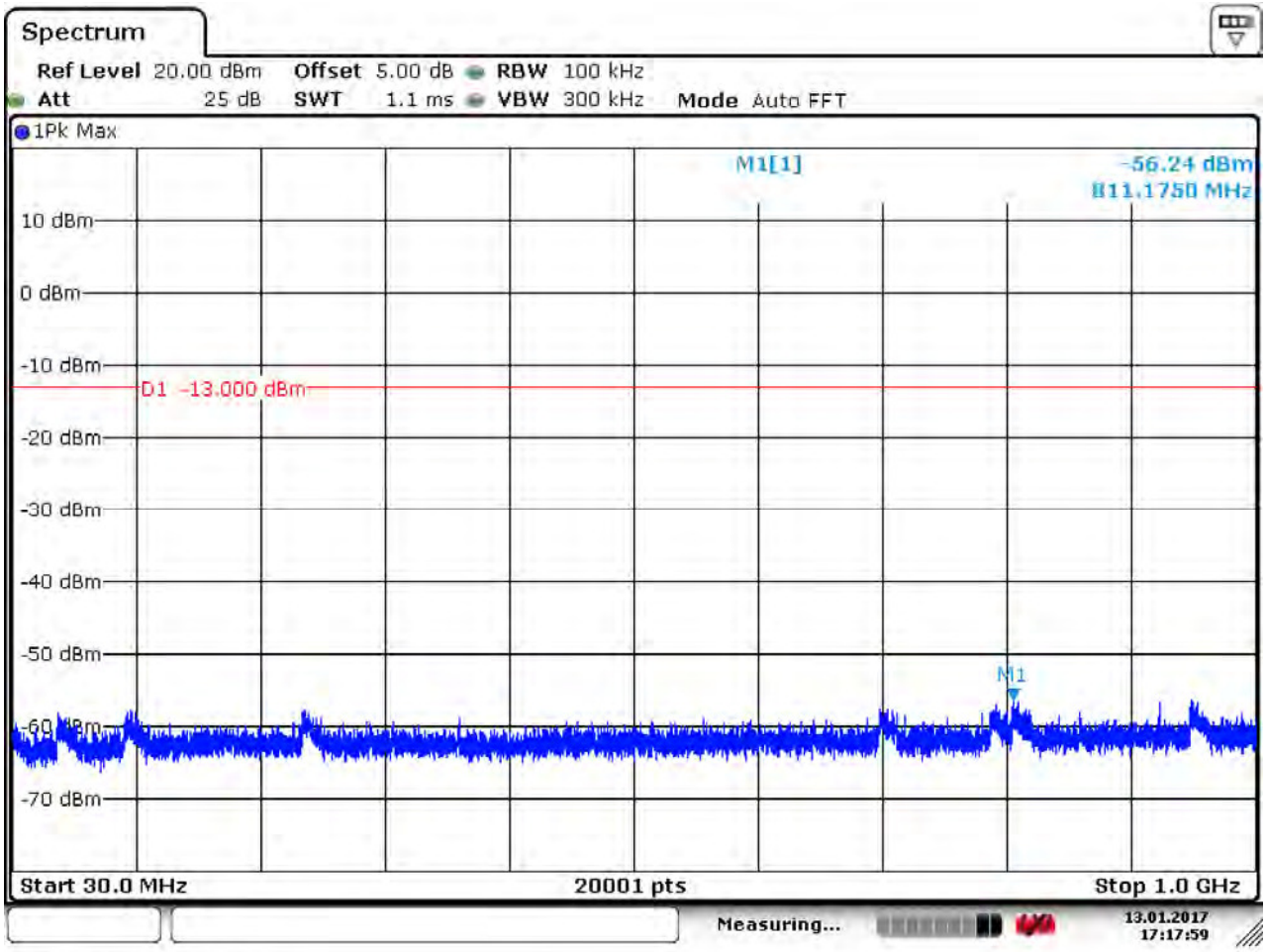


Date: 13.JAN.2017 17:53:03

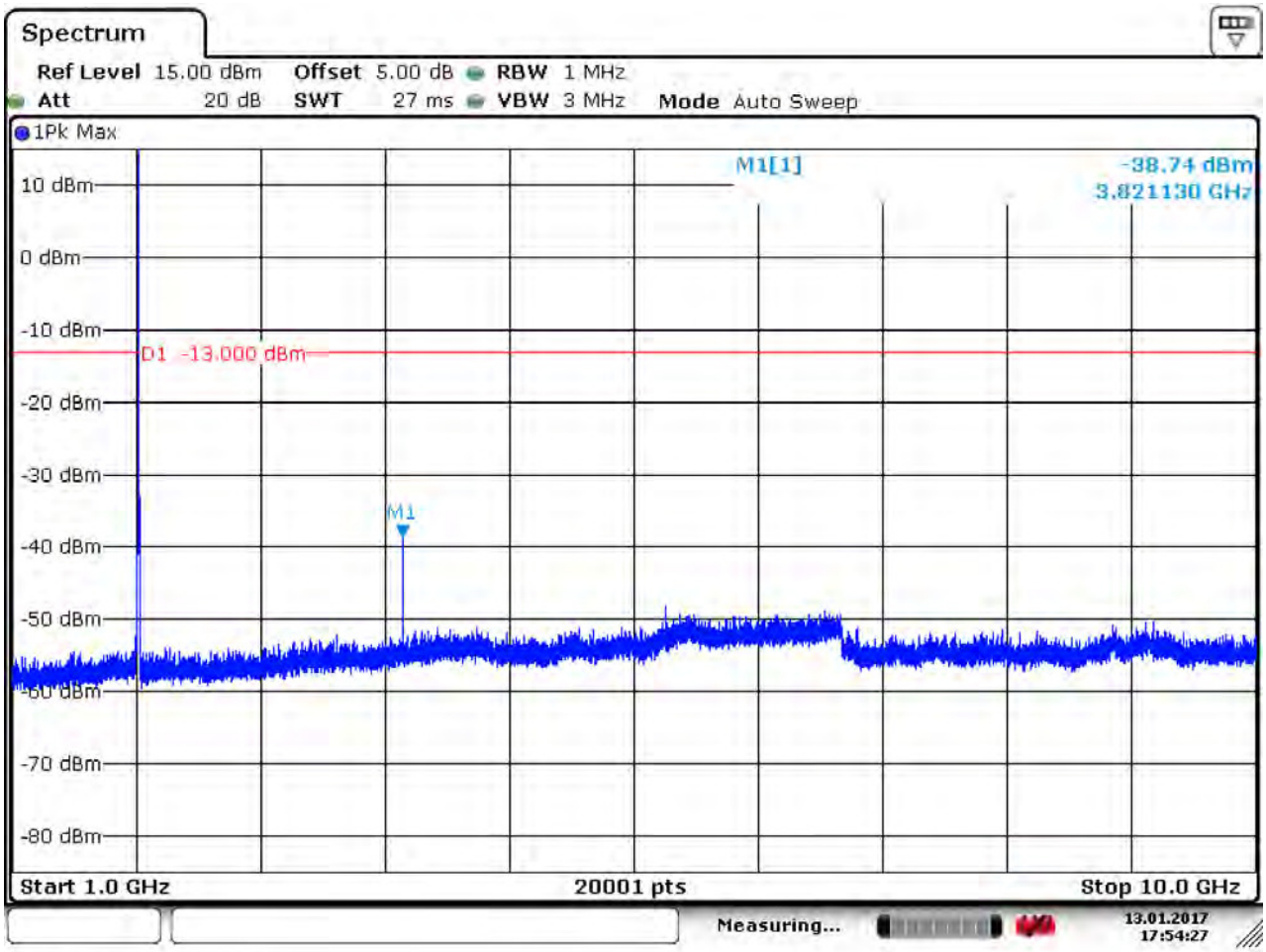


Date: 13.JAN.2017 17:30:16

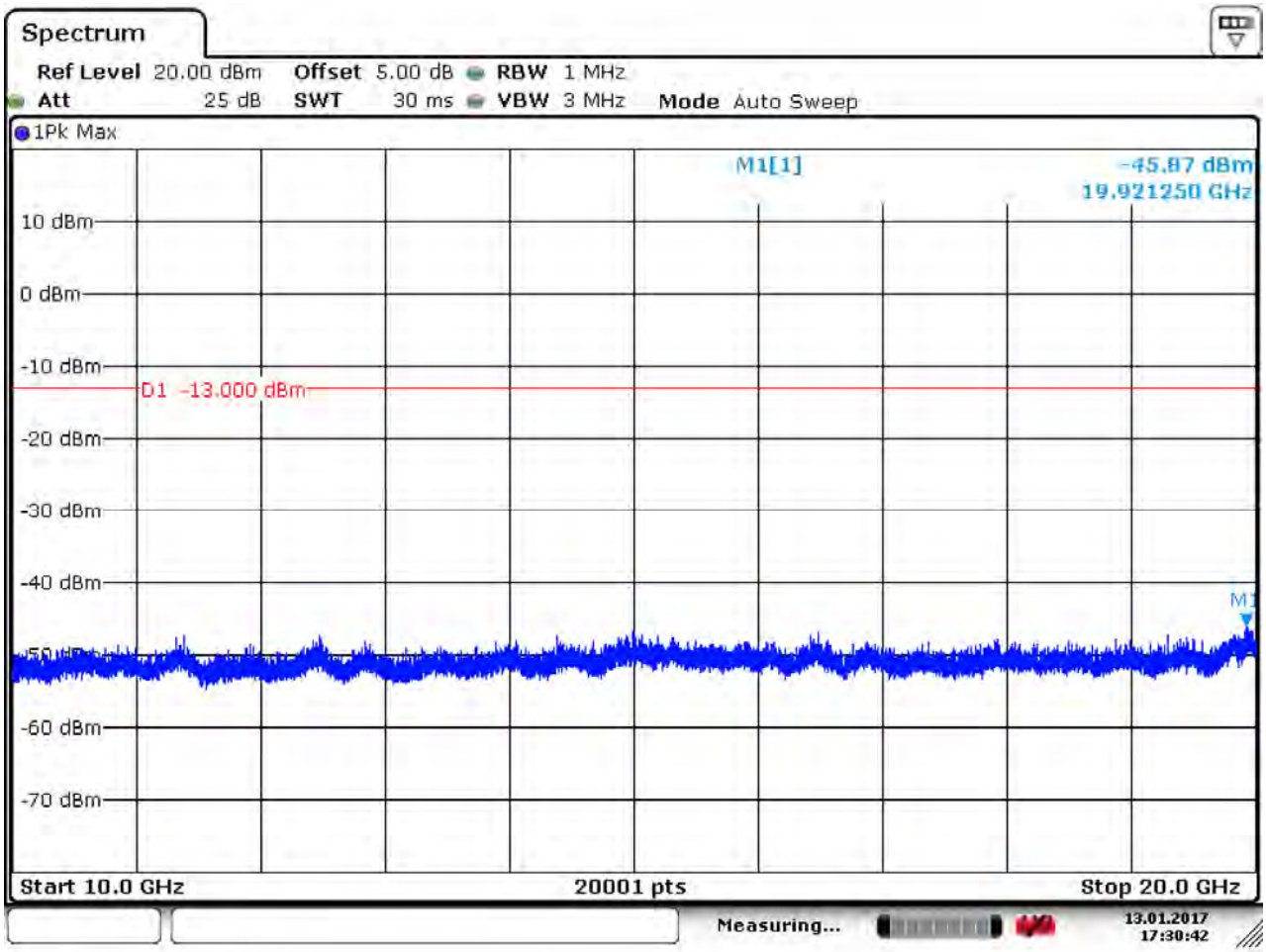
6.1.1.3.3 Test Channel = HCH



Date: 13.JAN.2017 17:18:00



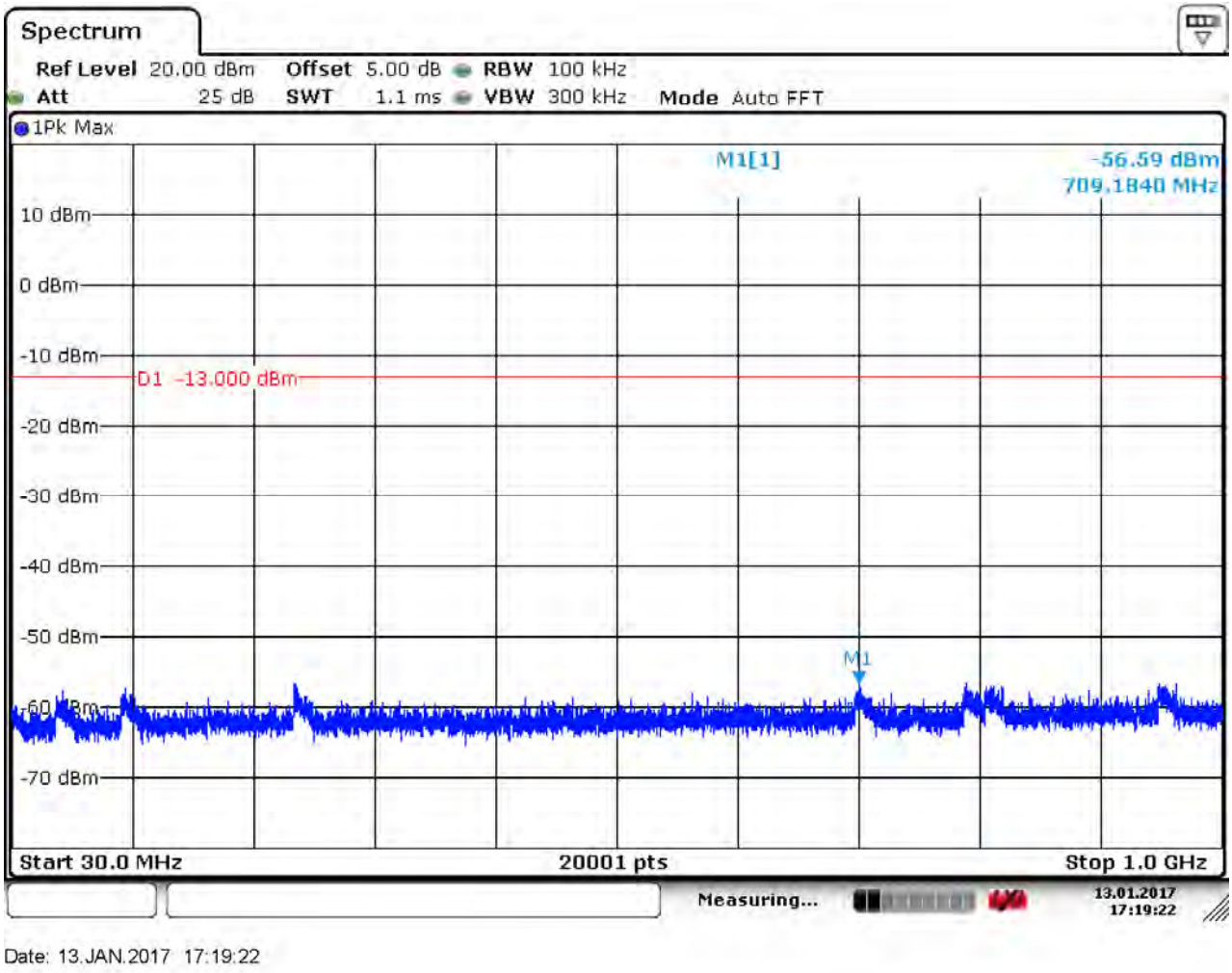
Date: 13.JAN.2017 17:54:27

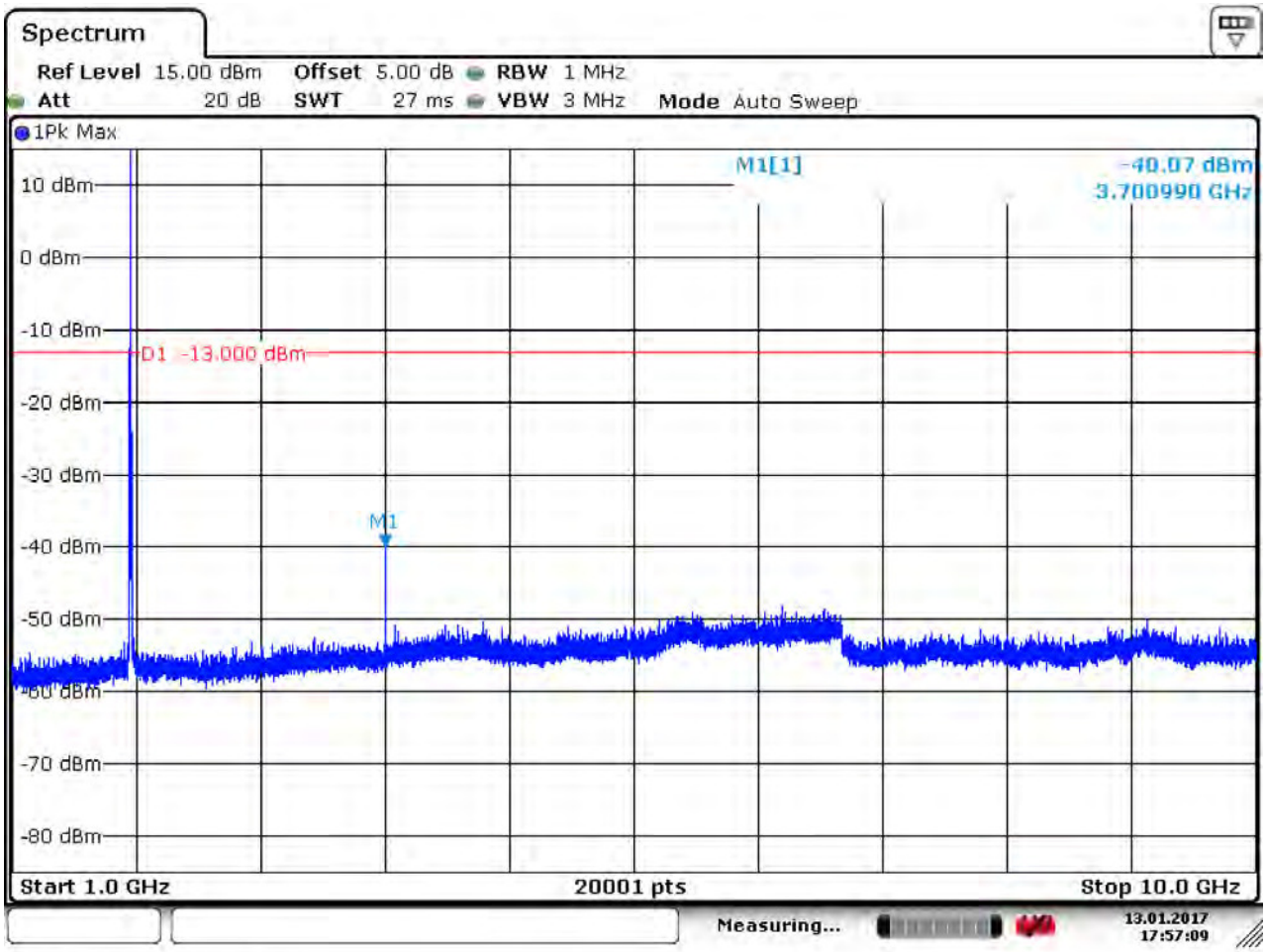


Date: 13.JAN.2017 17:30:43

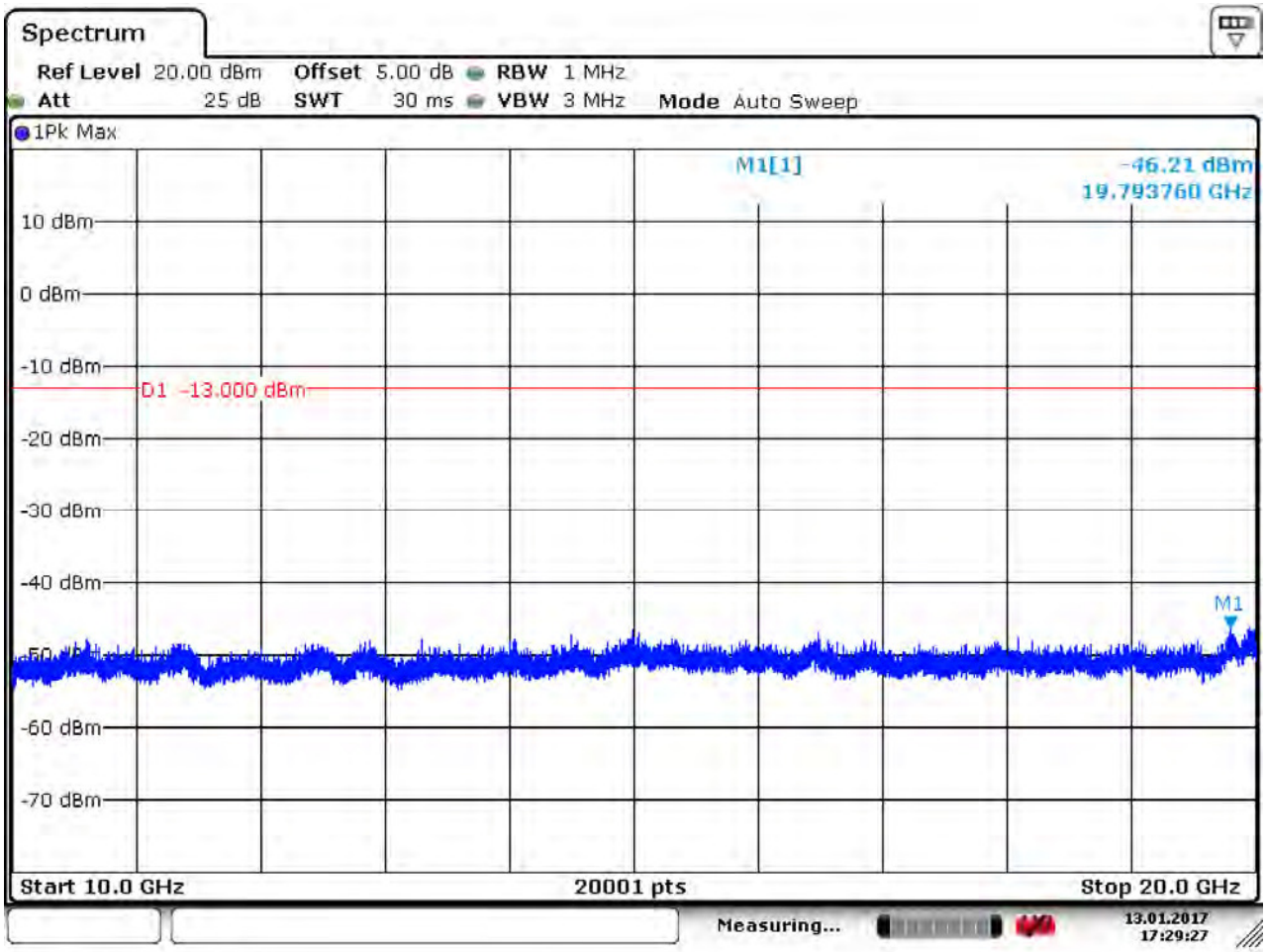
6.1.1.4 Test Mode = LTE / TM1 10MHz RB1#0

6.1.1.4.1 Test Channel = LCH



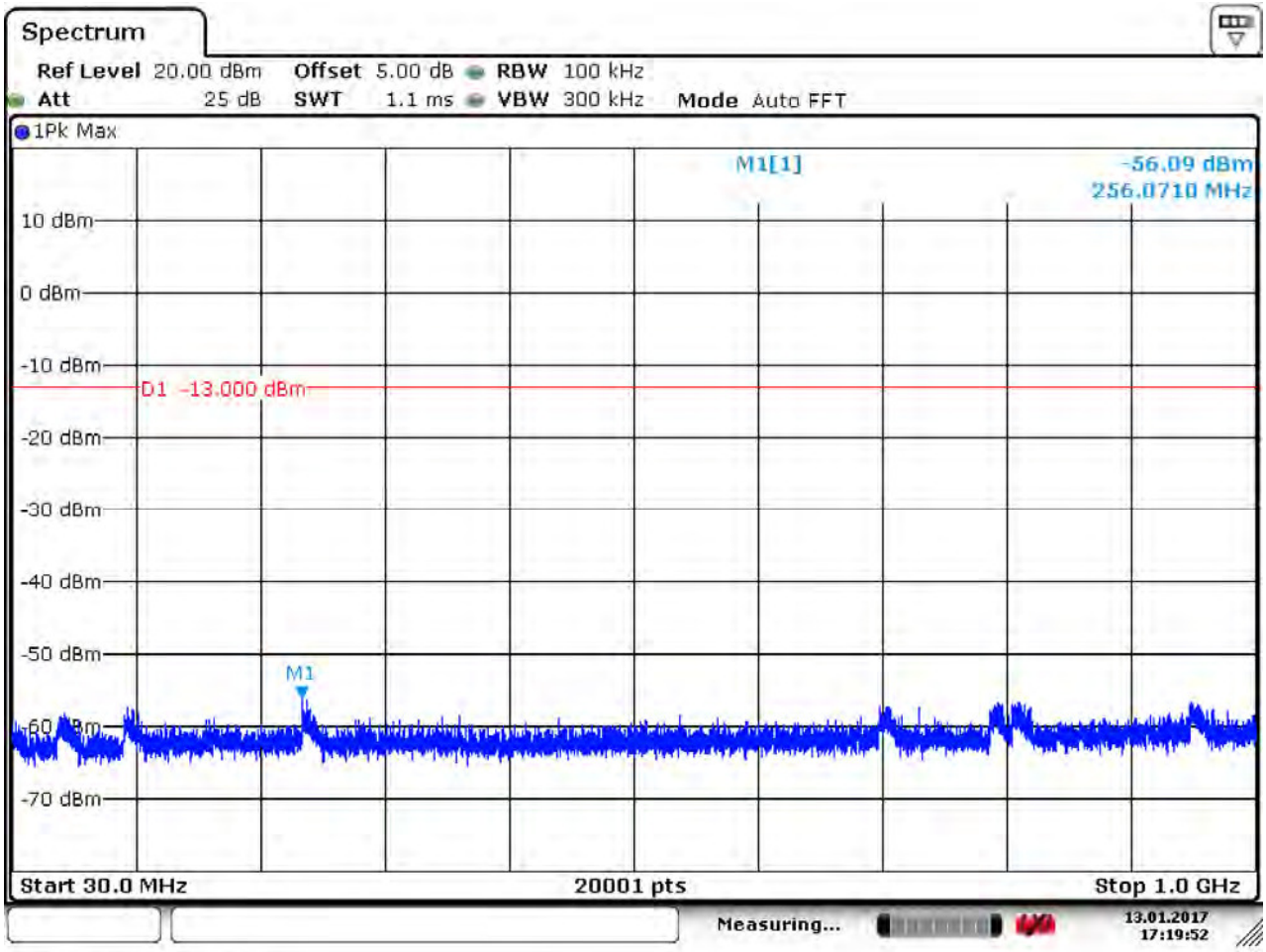


Date: 13.JAN.2017 17:57:09

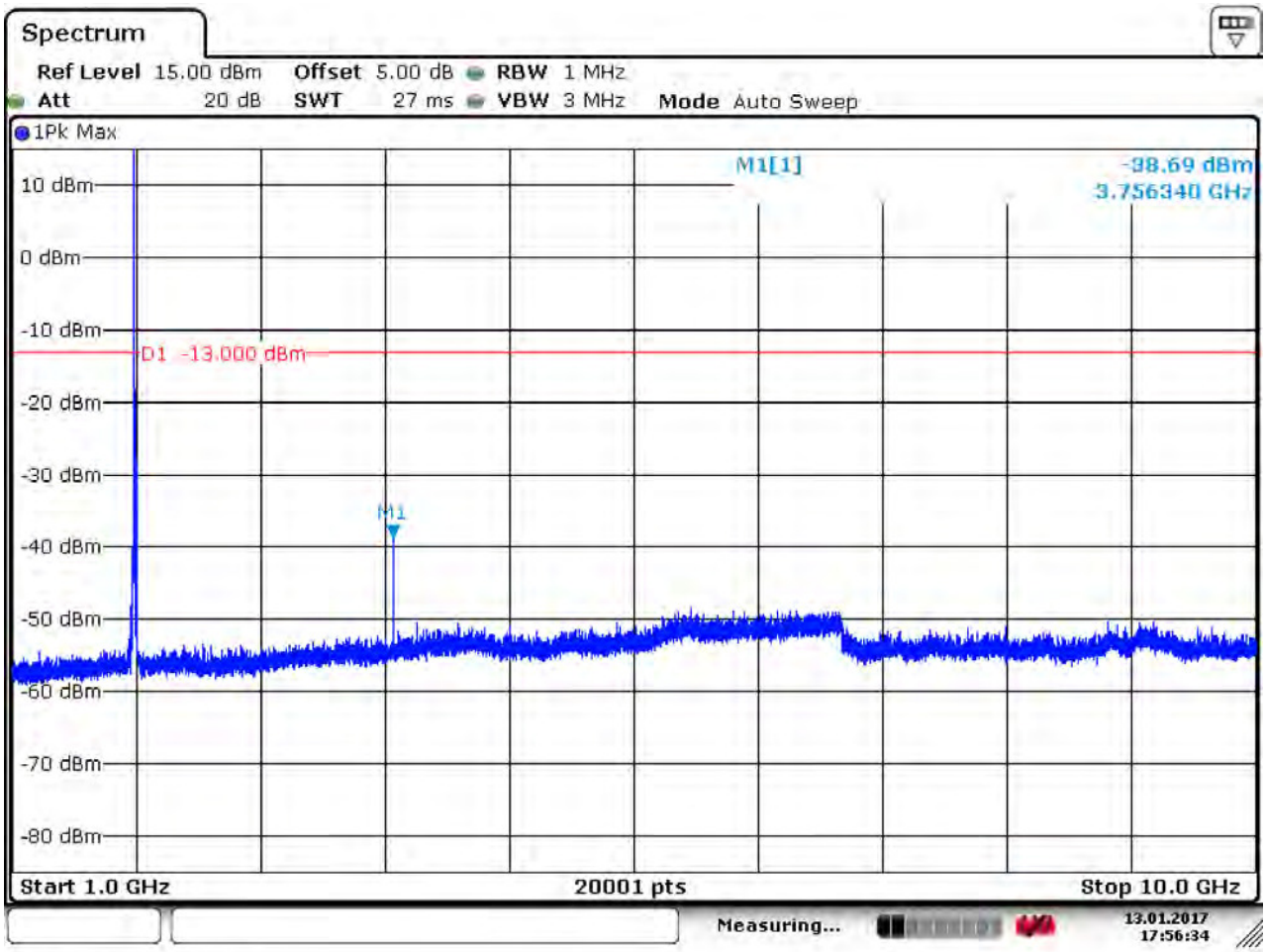


Date: 13.JAN.2017 17:29:27

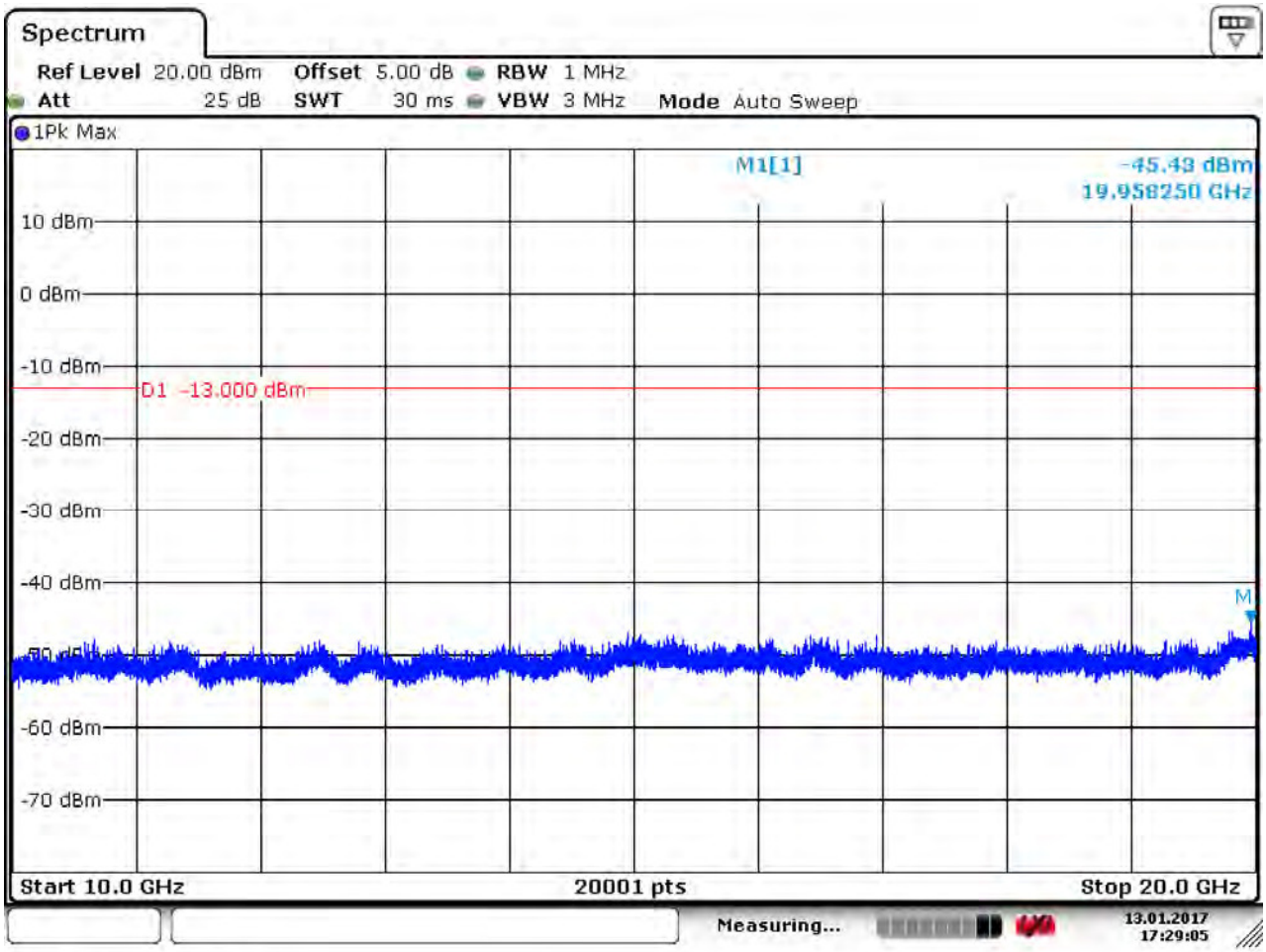
6.1.1.4.2 Test Channel = MCH



Date: 13.JAN.2017 17:19:53

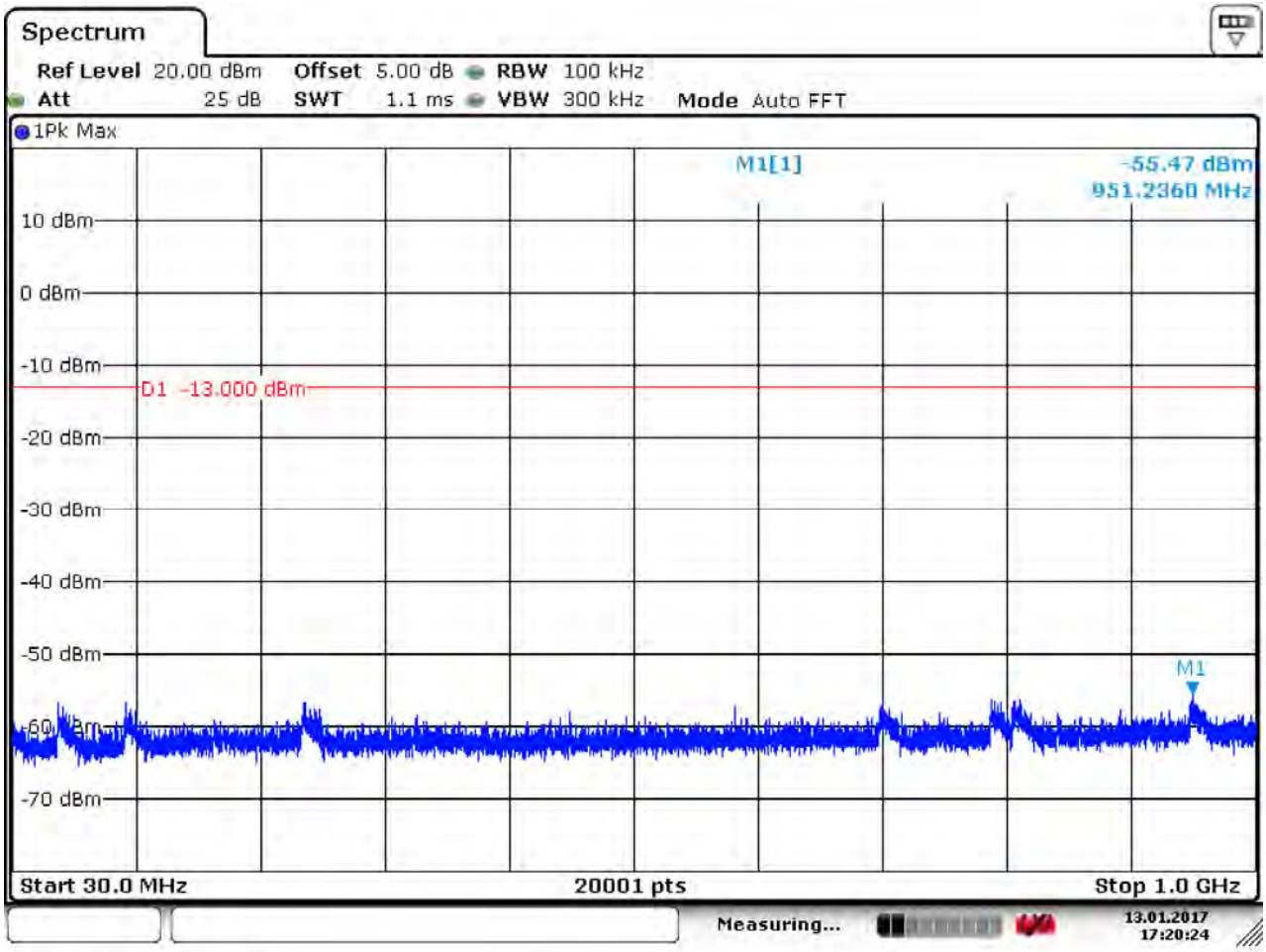


Date: 13.JAN.2017 17:56:35

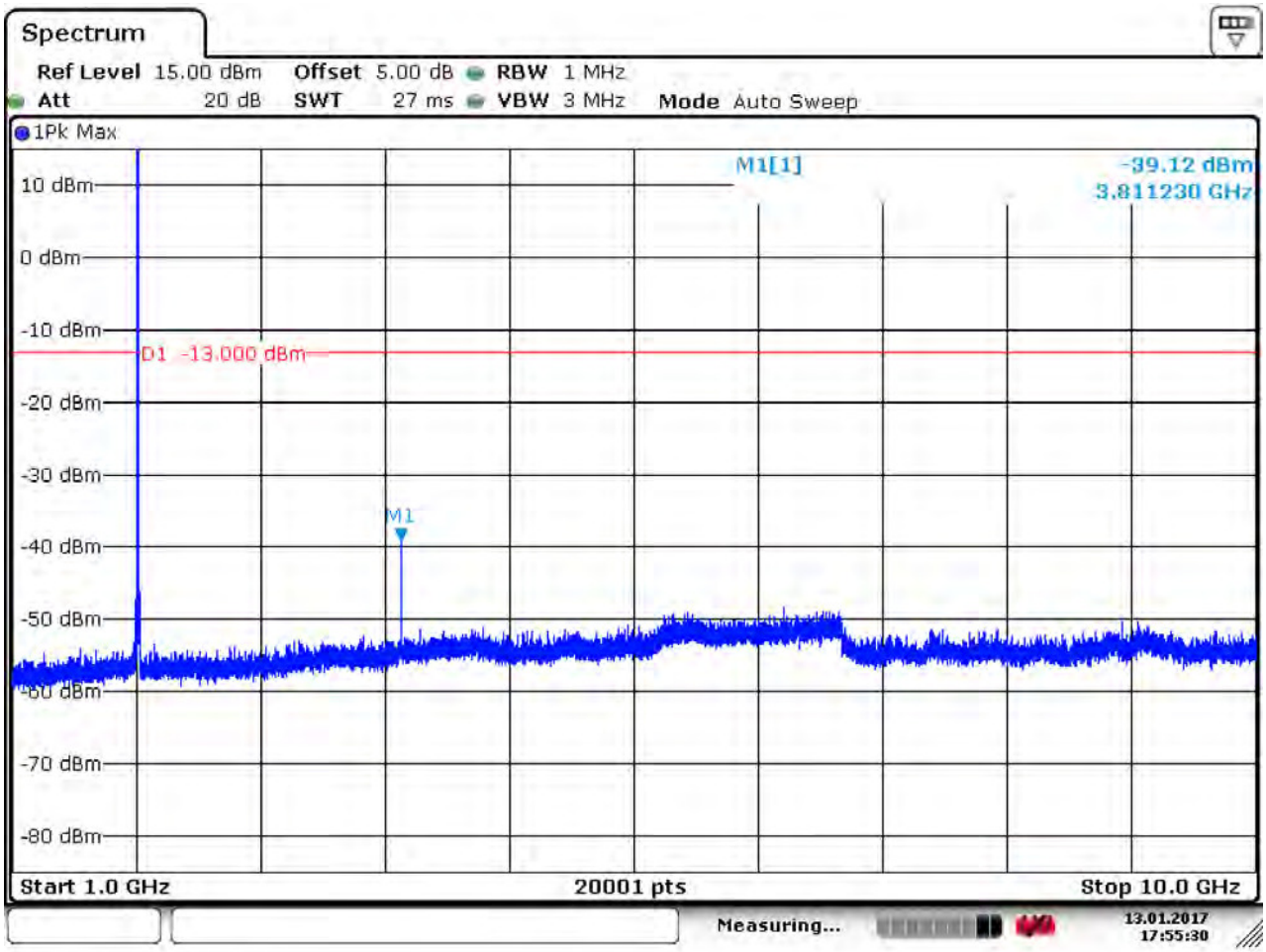


Date: 13.JAN.2017 17:29:05

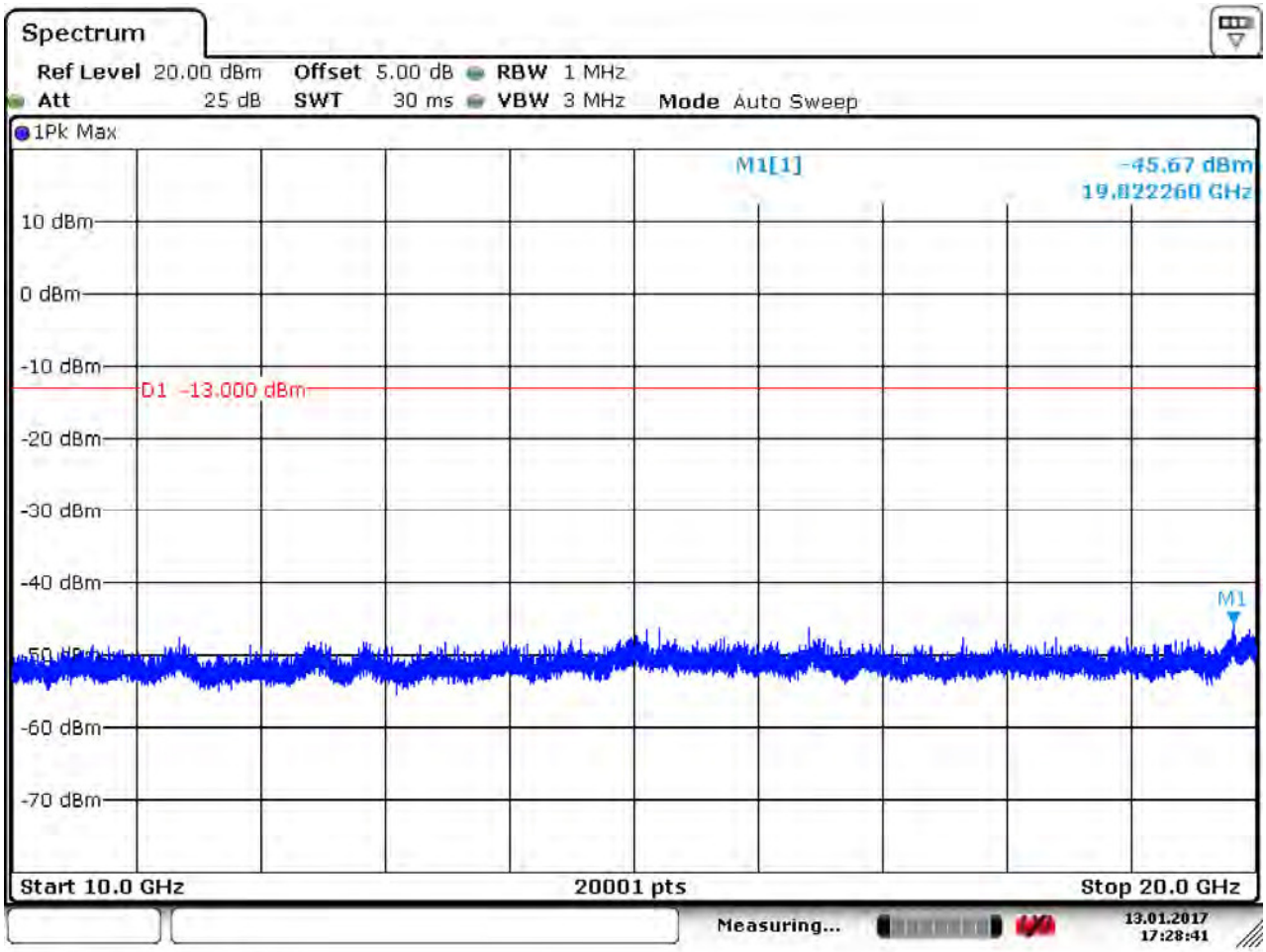
6.1.1.4.3 Test Channel = HCH



Date: 13.JAN.2017 17:20:25



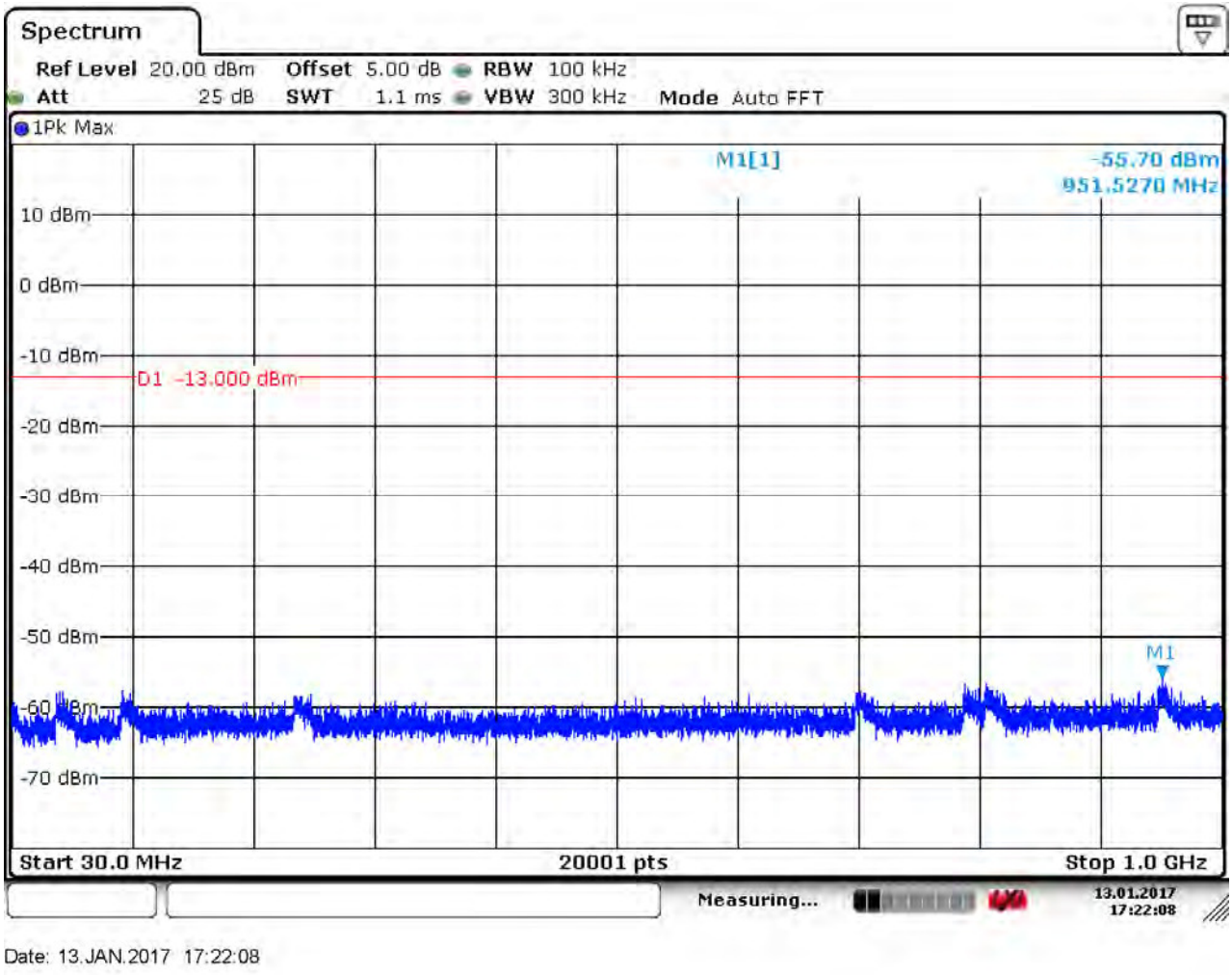
Date: 13.JAN.2017 17:55:30

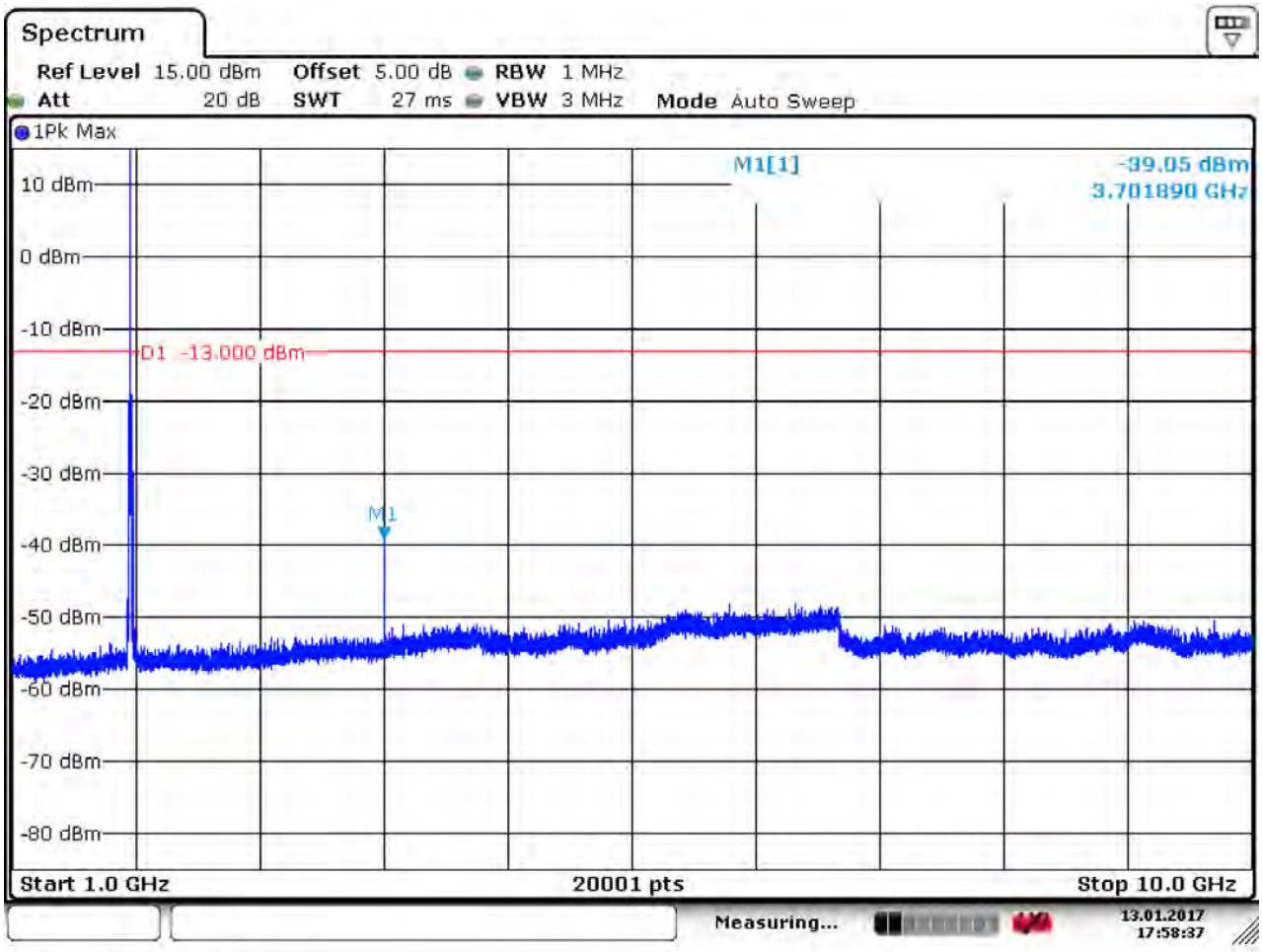


Date: 13.JAN.2017 17:28:42

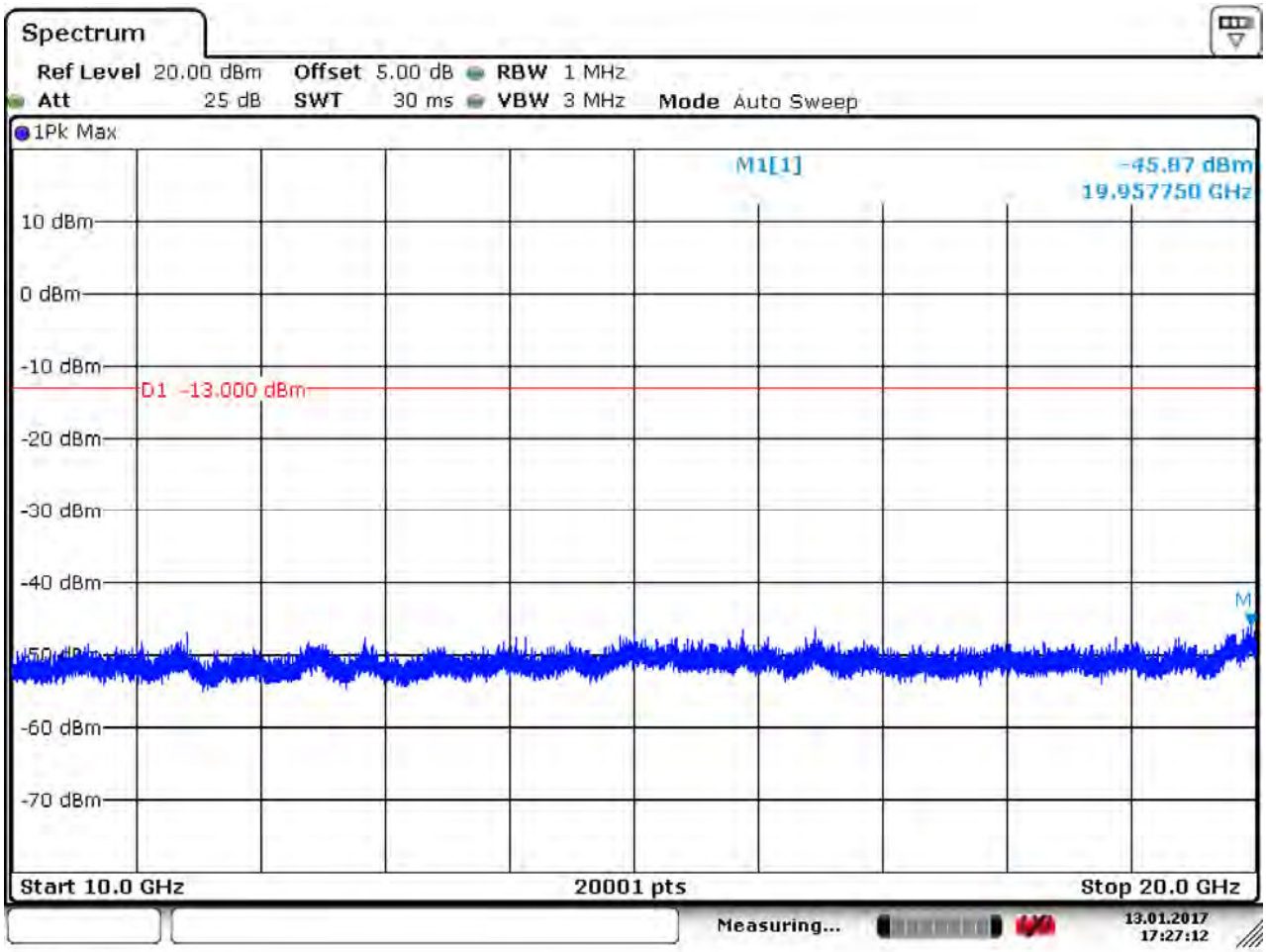
6.1.1.5 Test Mode = LTE / TM1 15MHz RB1#0

6.1.1.5.1 Test Channel = LCH



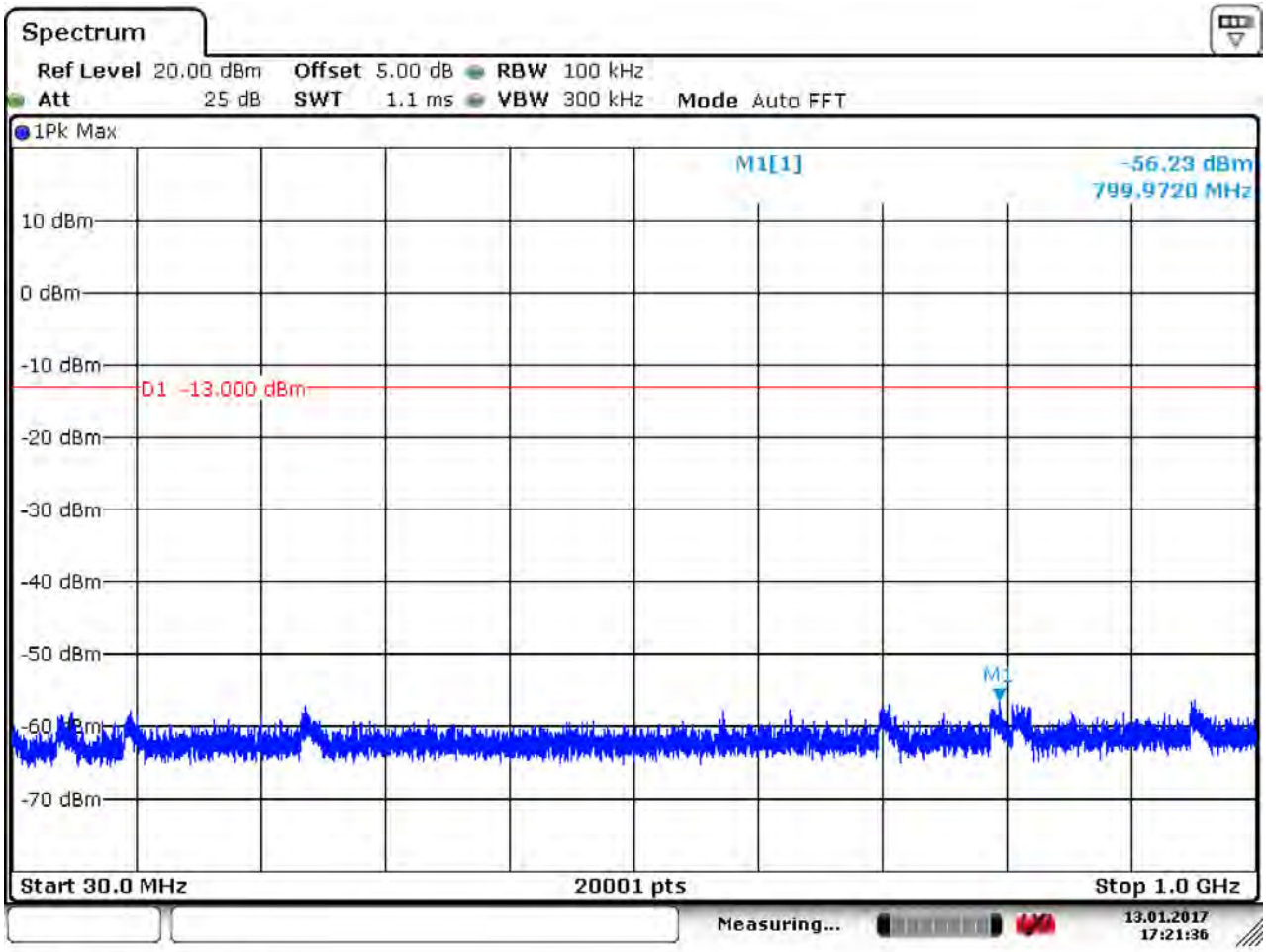


Date: 13.JAN.2017 17:58:37

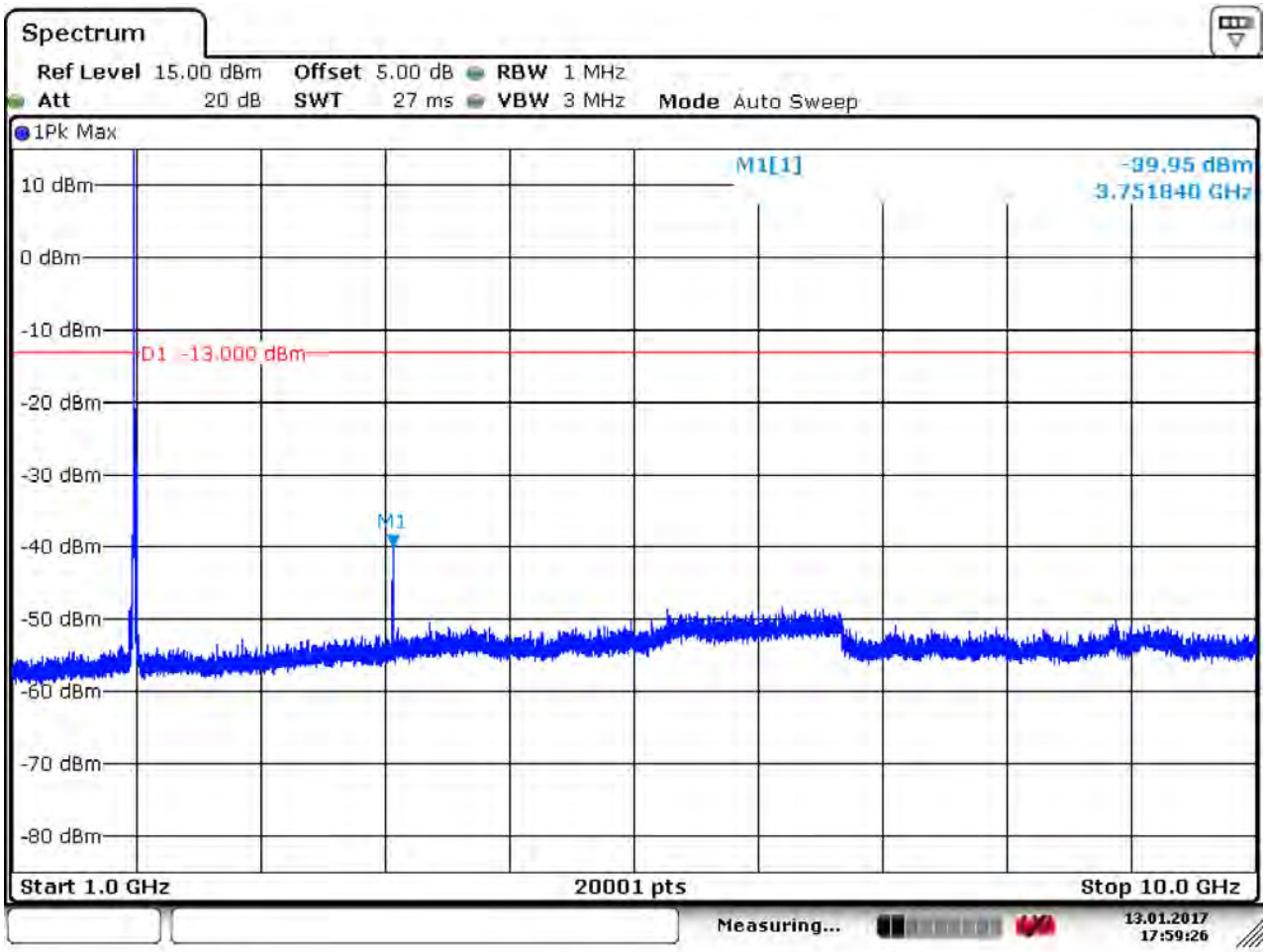


Date: 13.JAN.2017 17:27:13

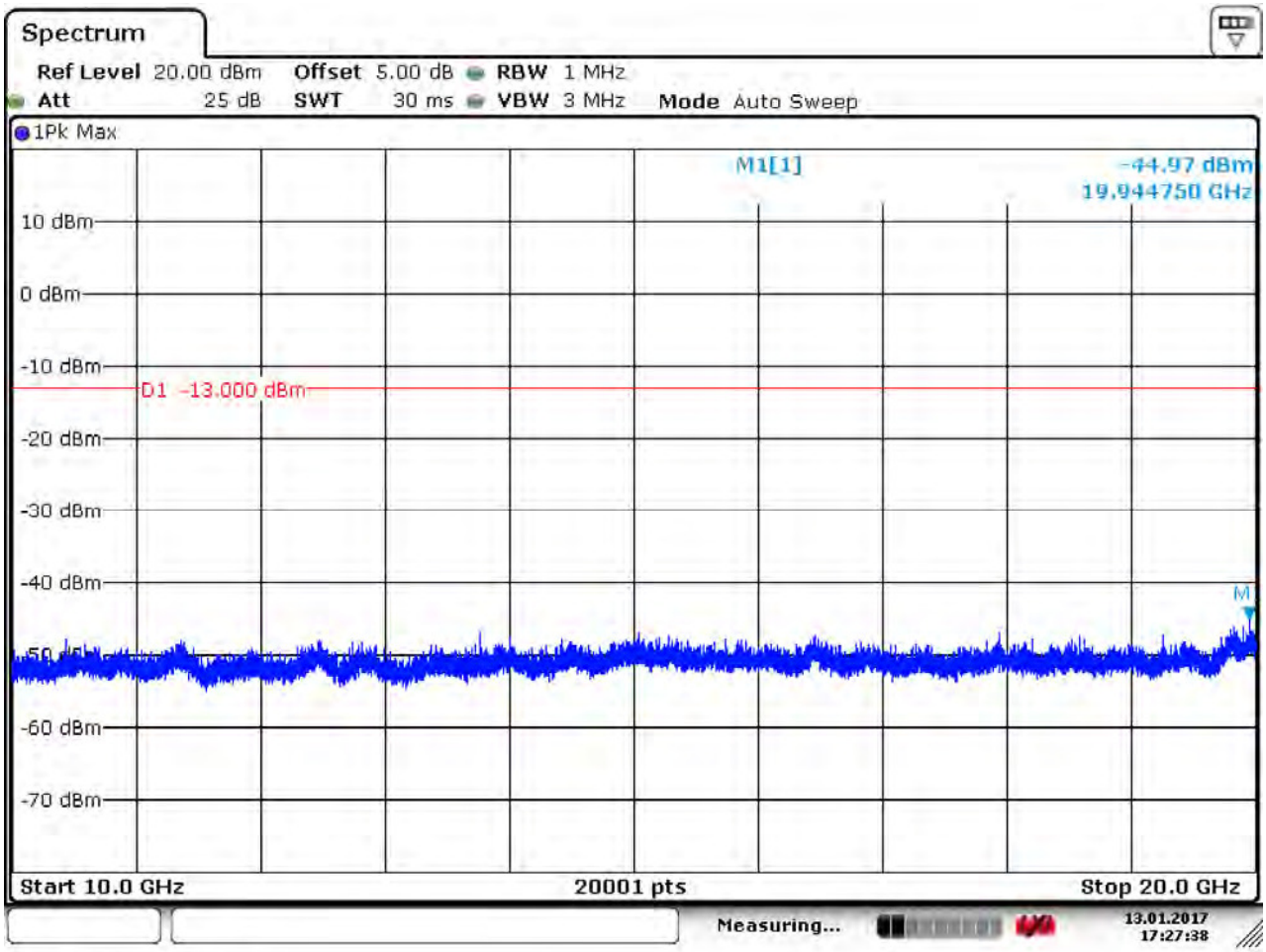
6.1.1.5.2 Test Channel = MCH



Date: 13.JAN.2017 17:21:37

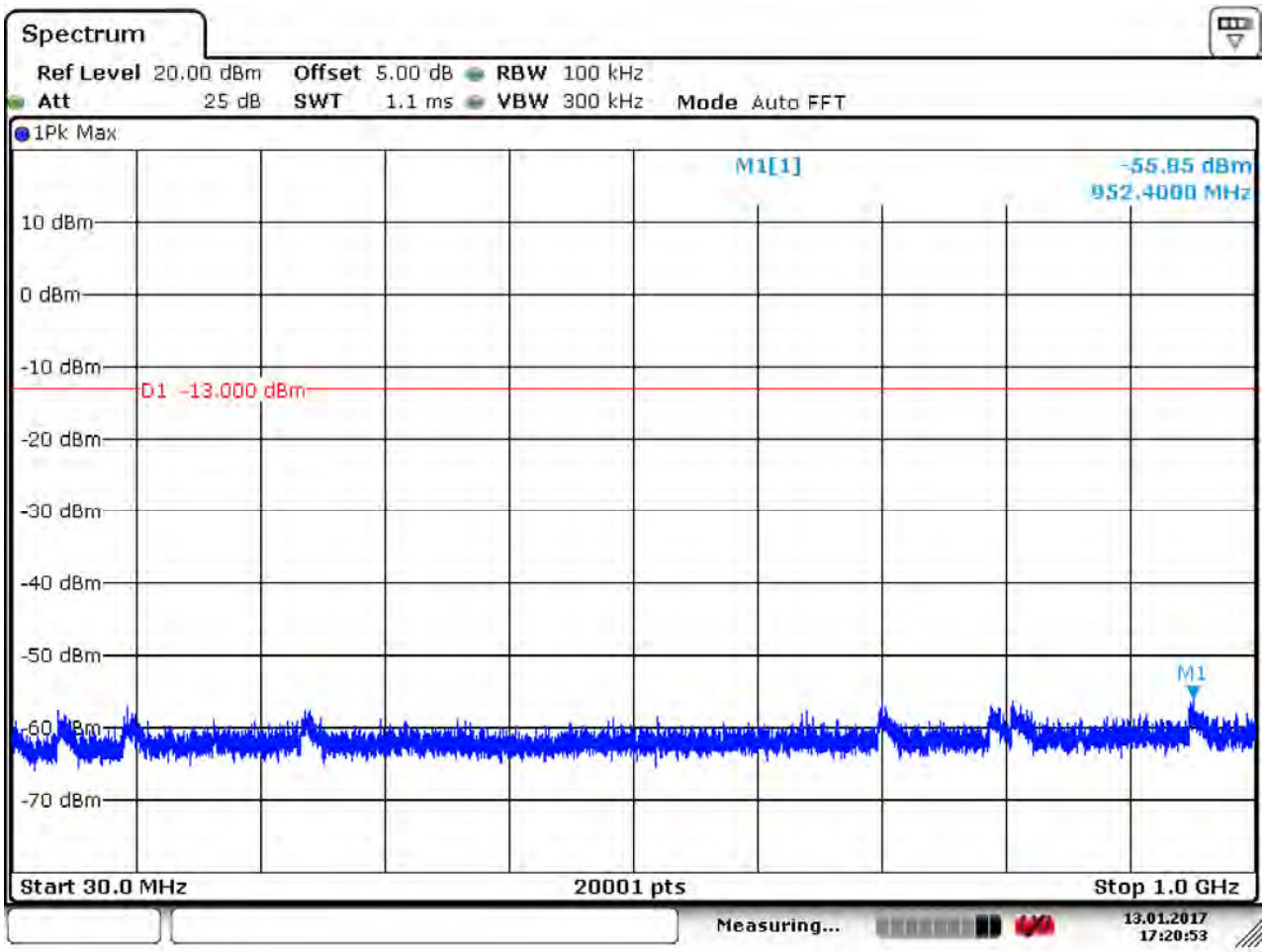


Date: 13.JAN.2017 17:59:26

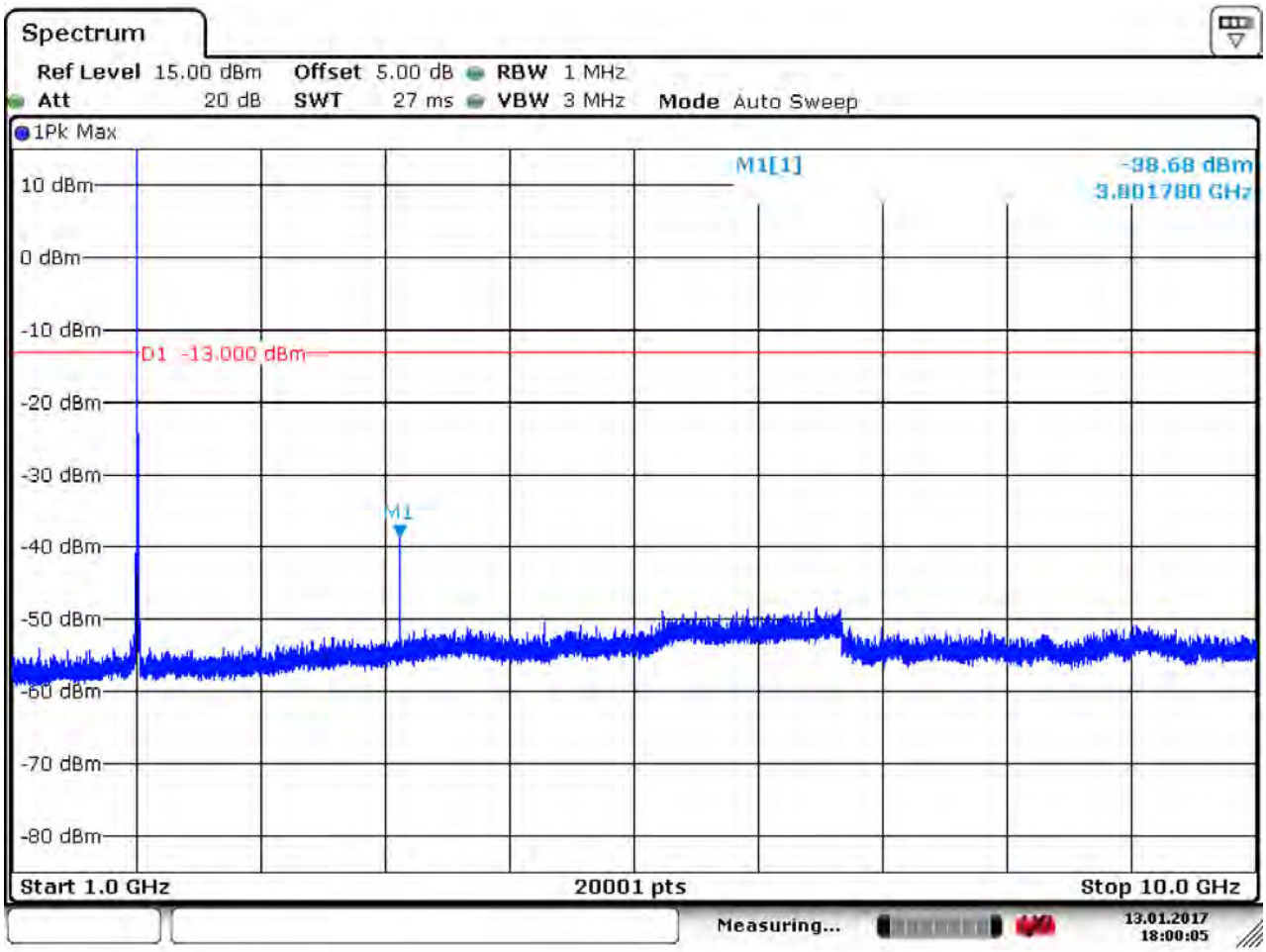


Date: 13.JAN.2017 17:27:39

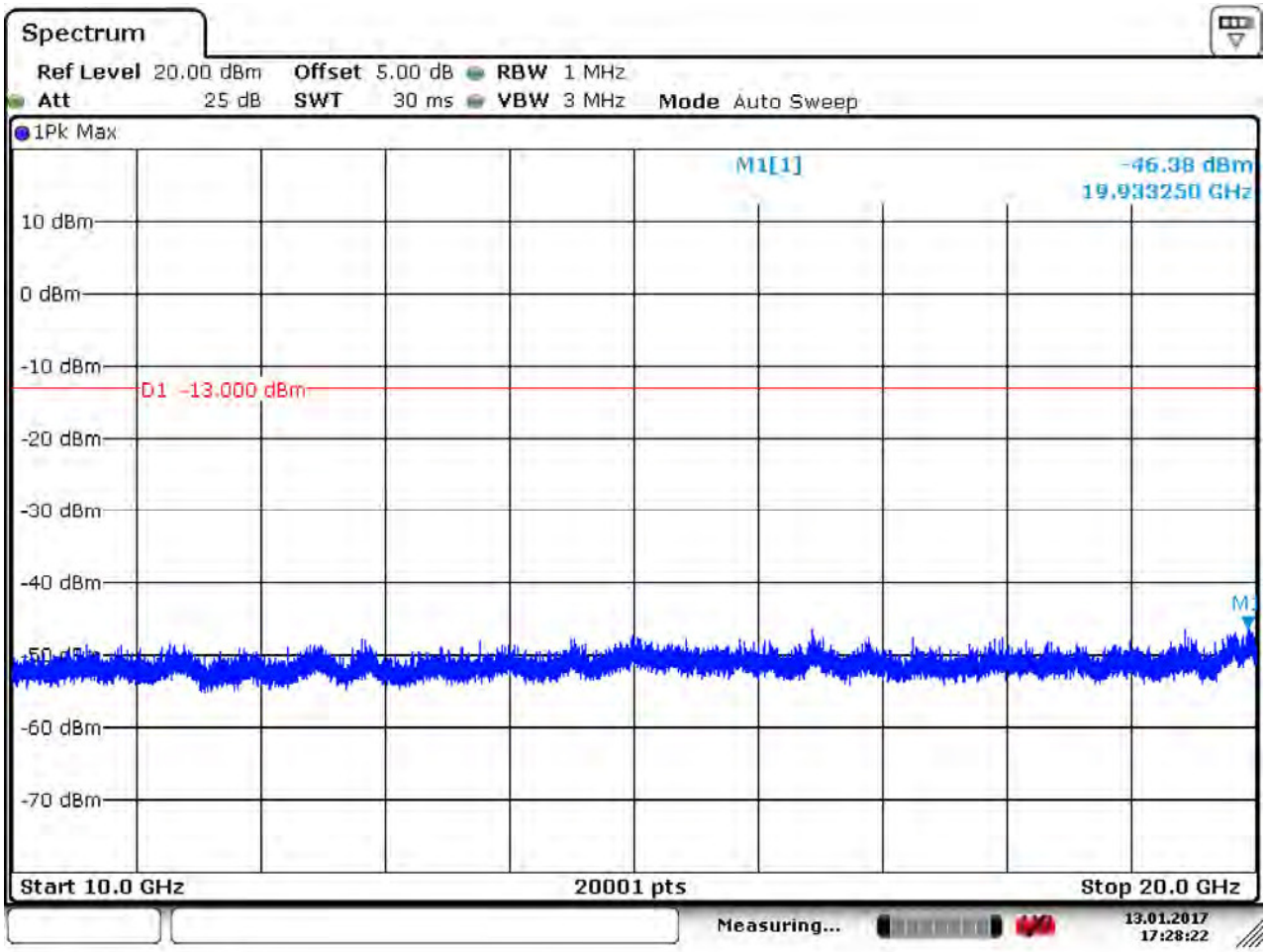
6.1.1.5.3 Test Channel = HCH



Date: 13.JAN.2017 17:20:54



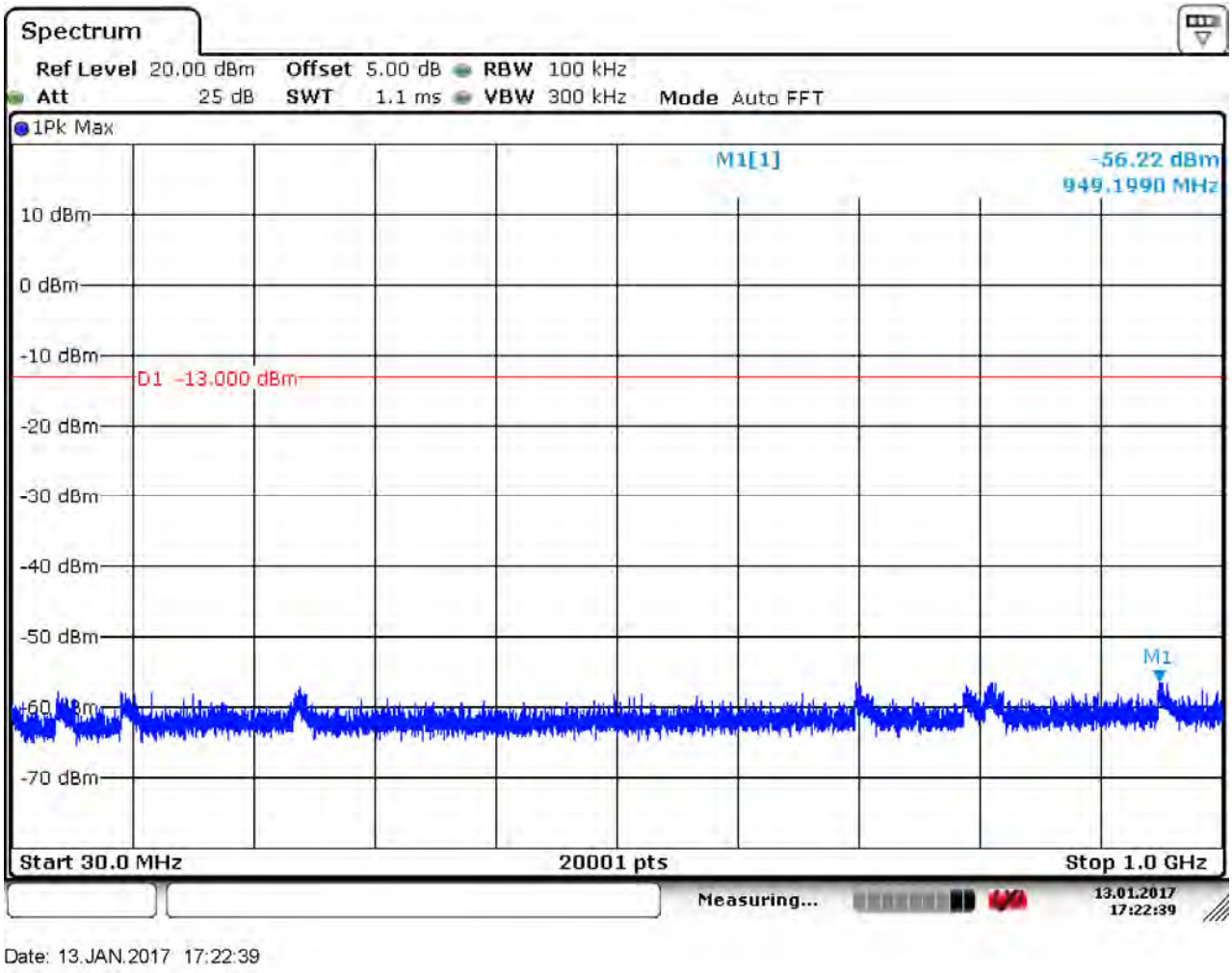
Date: 13.JAN.2017 18:00:05



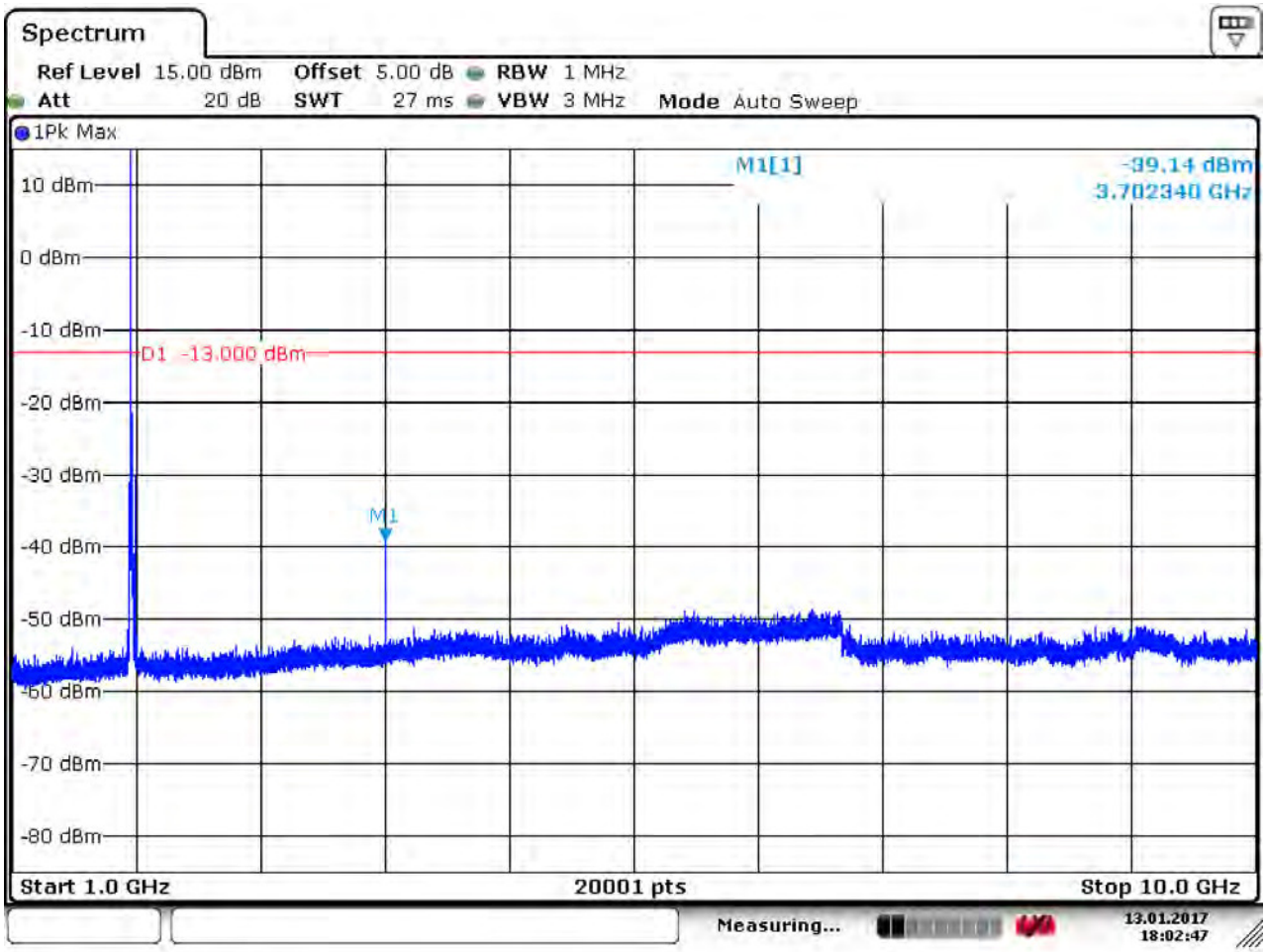
Date: 13.JAN.2017 17:28:23

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

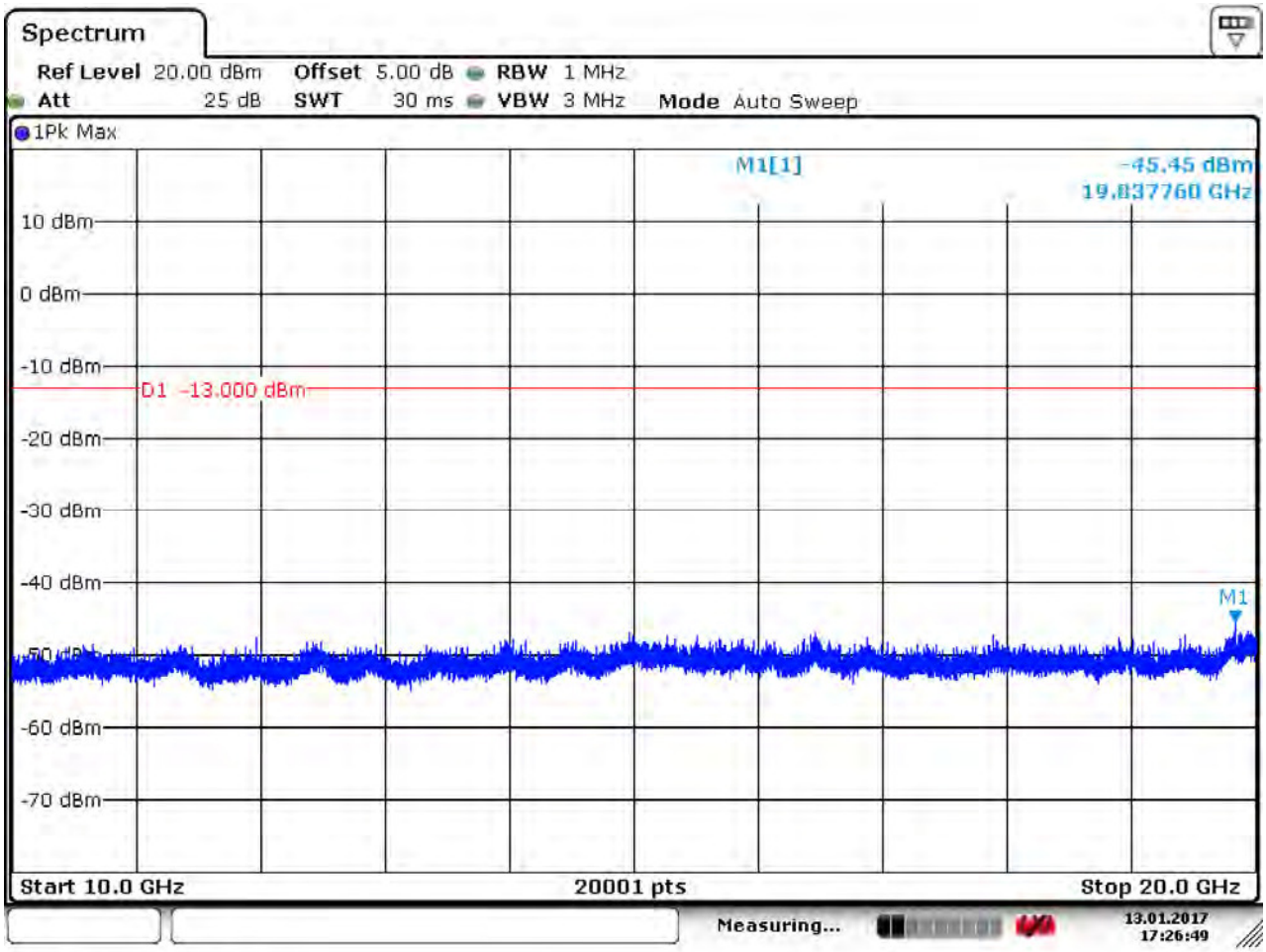
6.1.1.6.1 Test Channel = LCH



Date: 13.JAN.2017 17:22:39

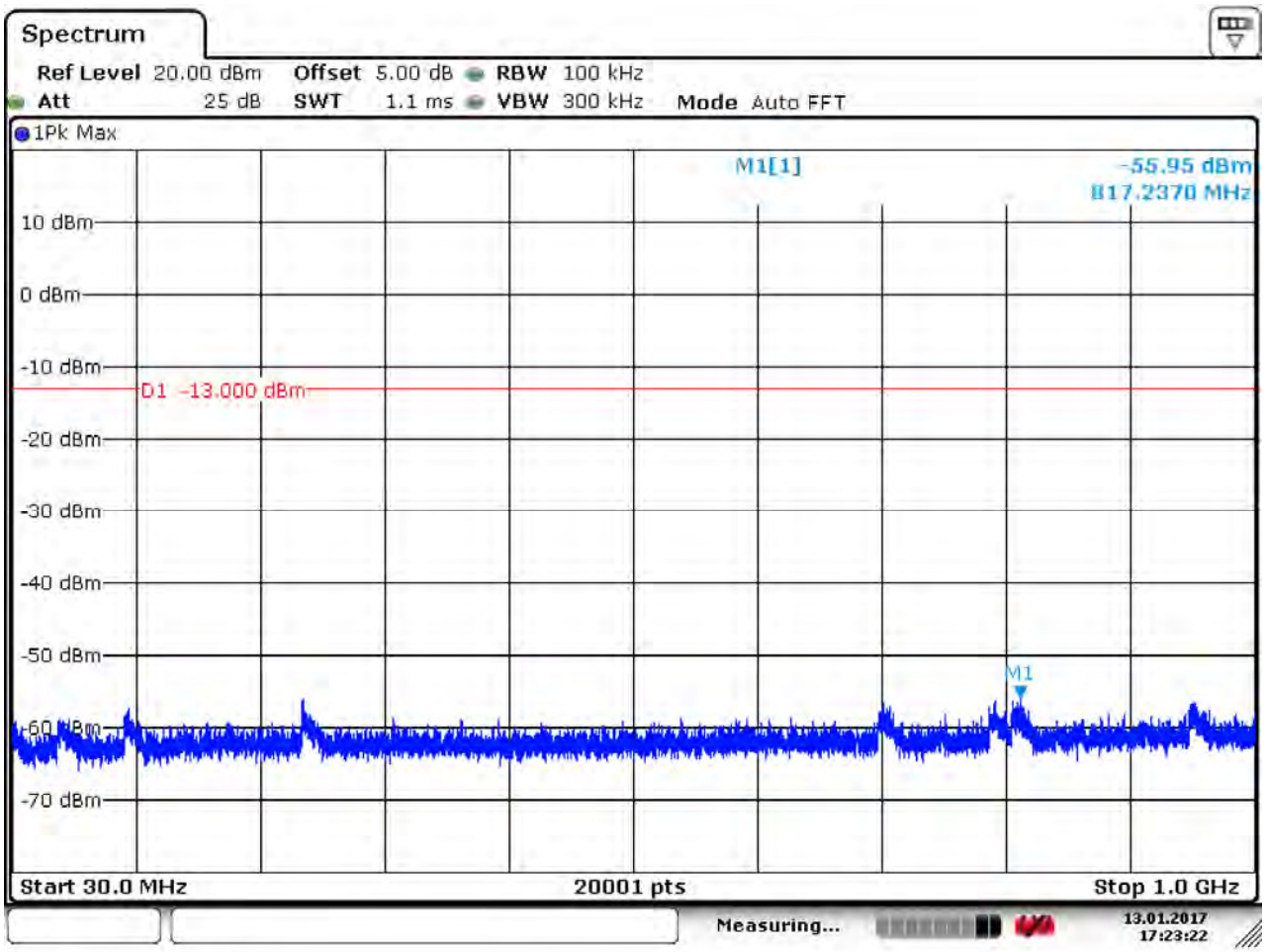


Date: 13.JAN.2017 18:02:48

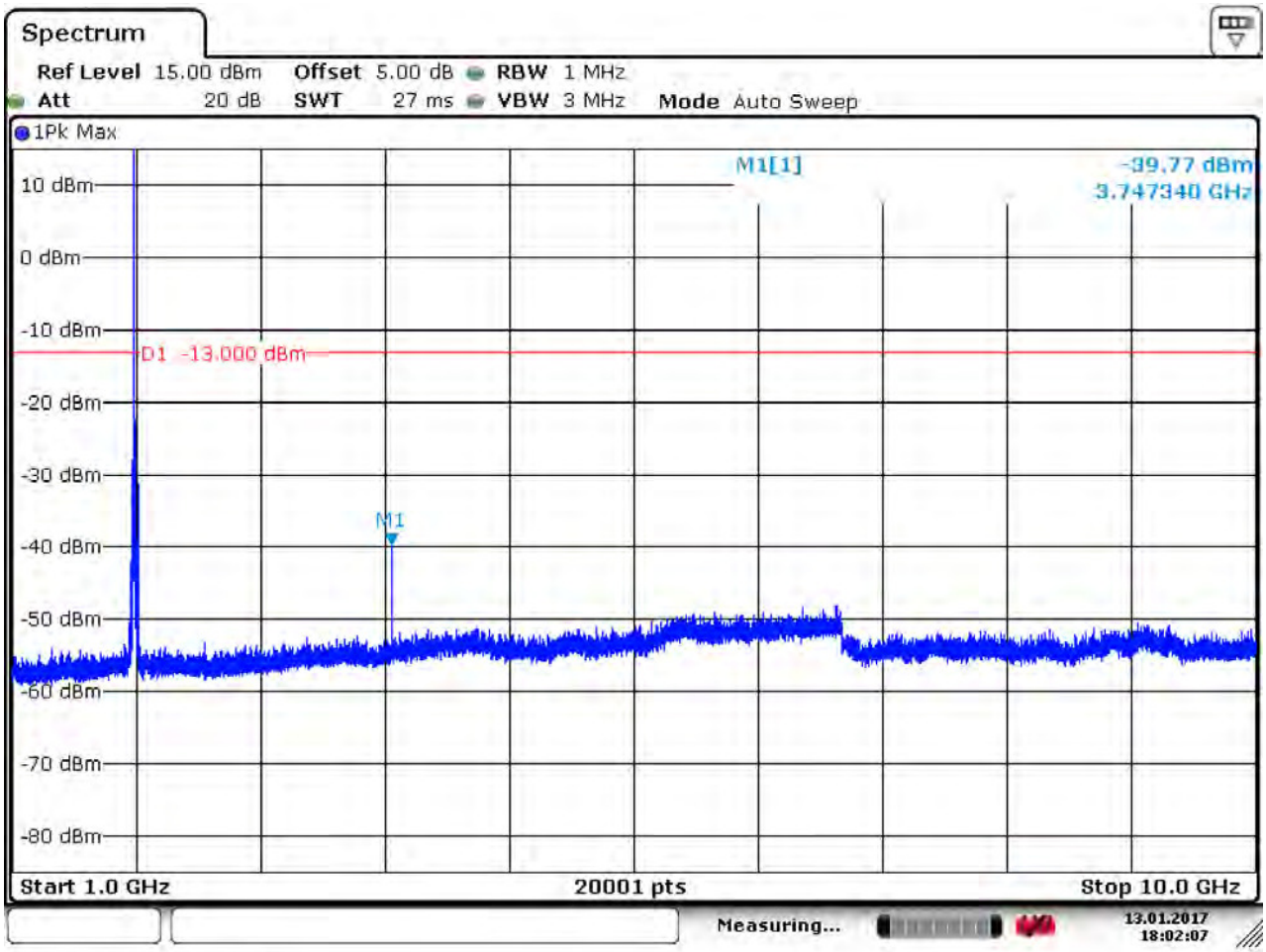


Date: 13.JAN.2017 17:26:49

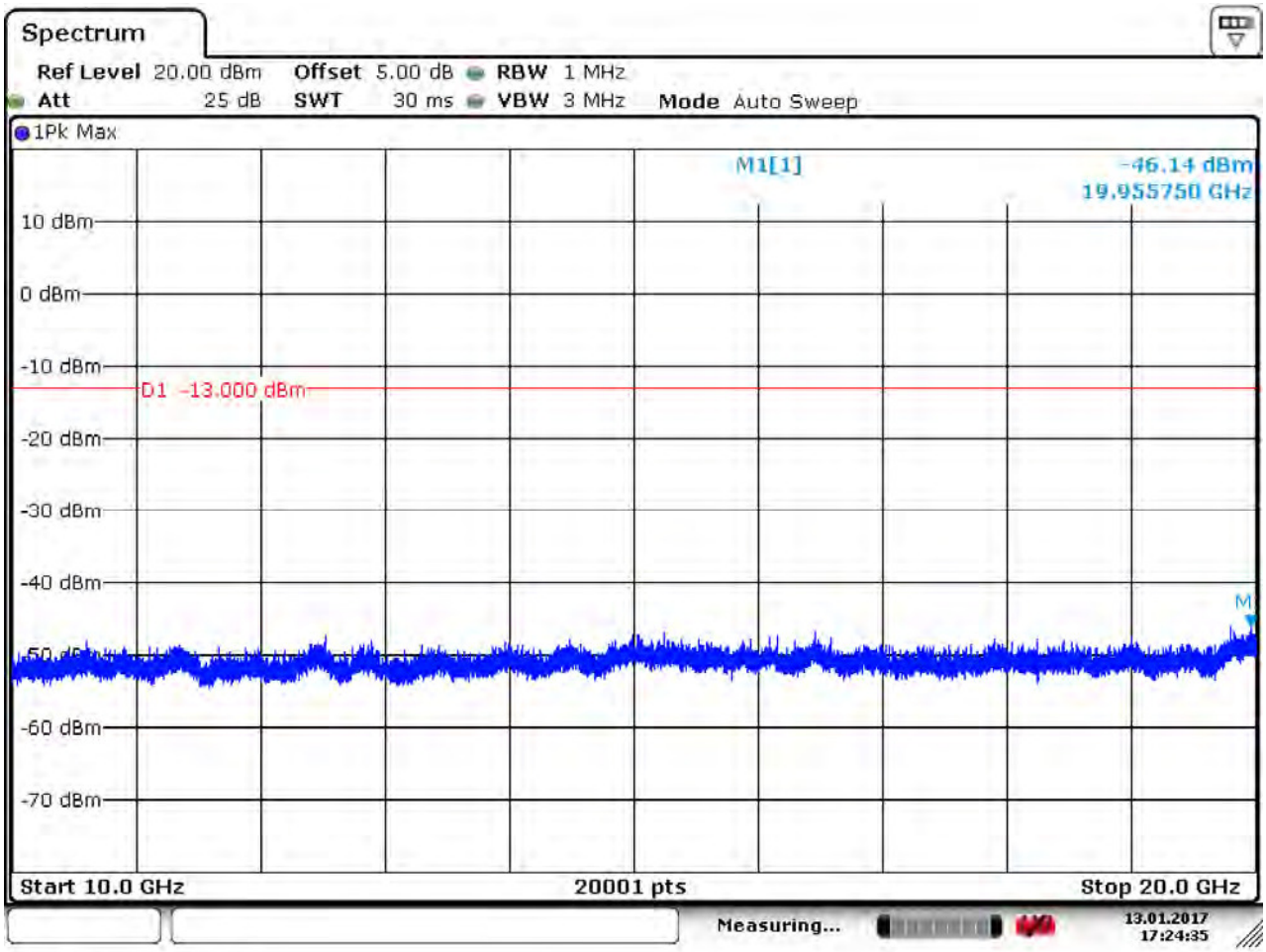
6.1.1.6.2 Test Channel = MCH



Date: 13.JAN.2017 17:23:22

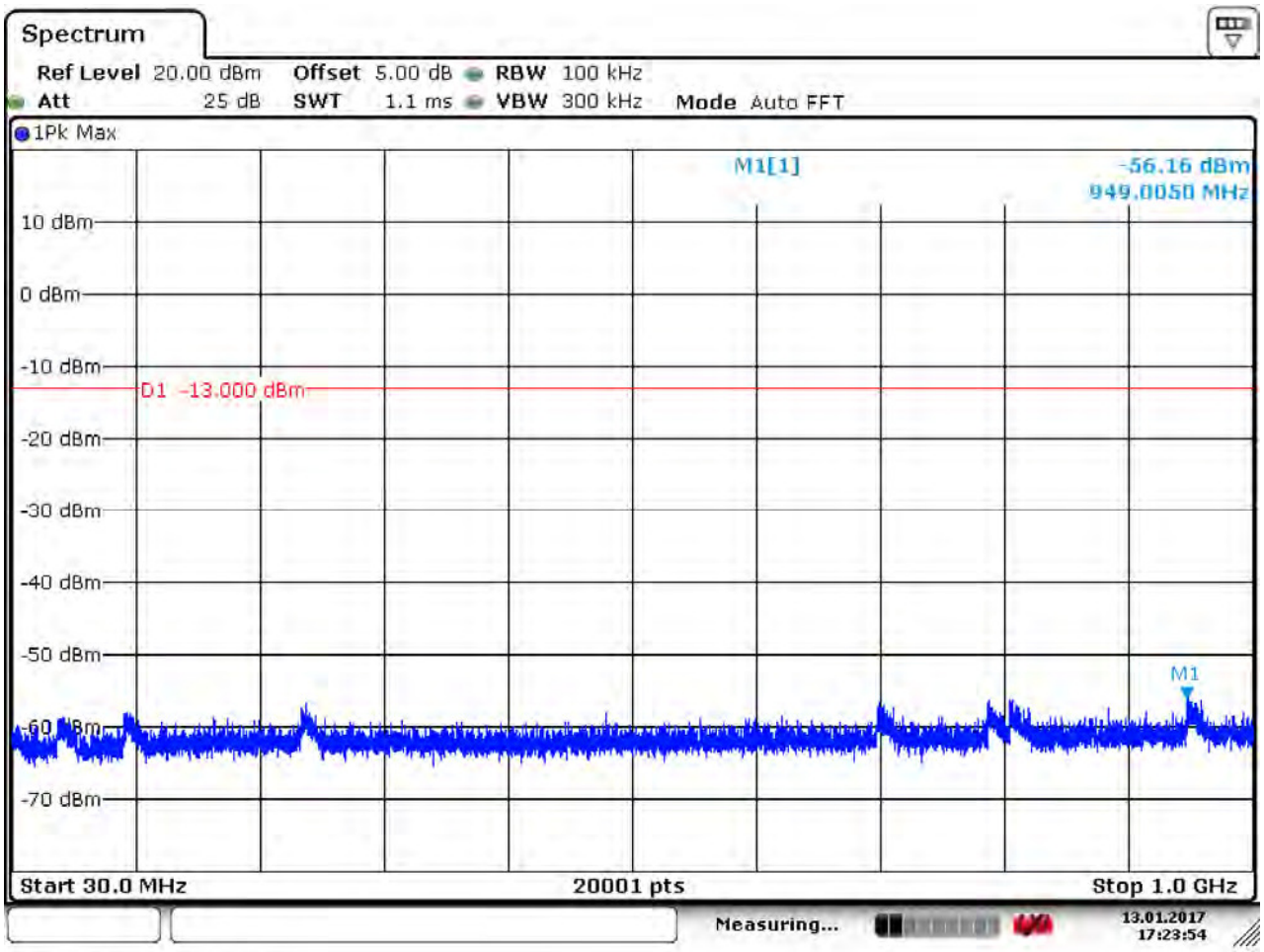


Date: 13.JAN.2017 18:02:07

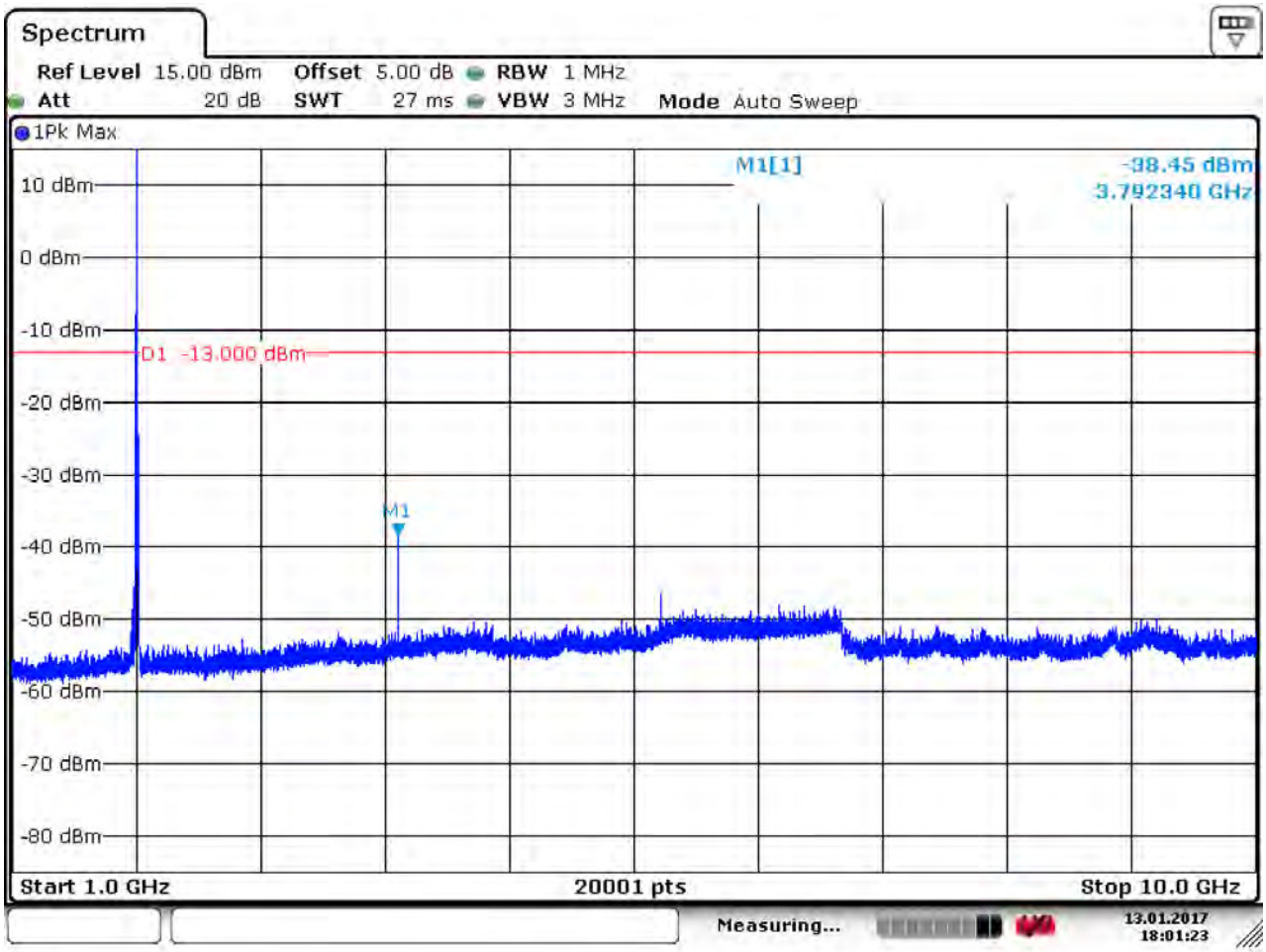


Date: 13.JAN.2017 17:24:35

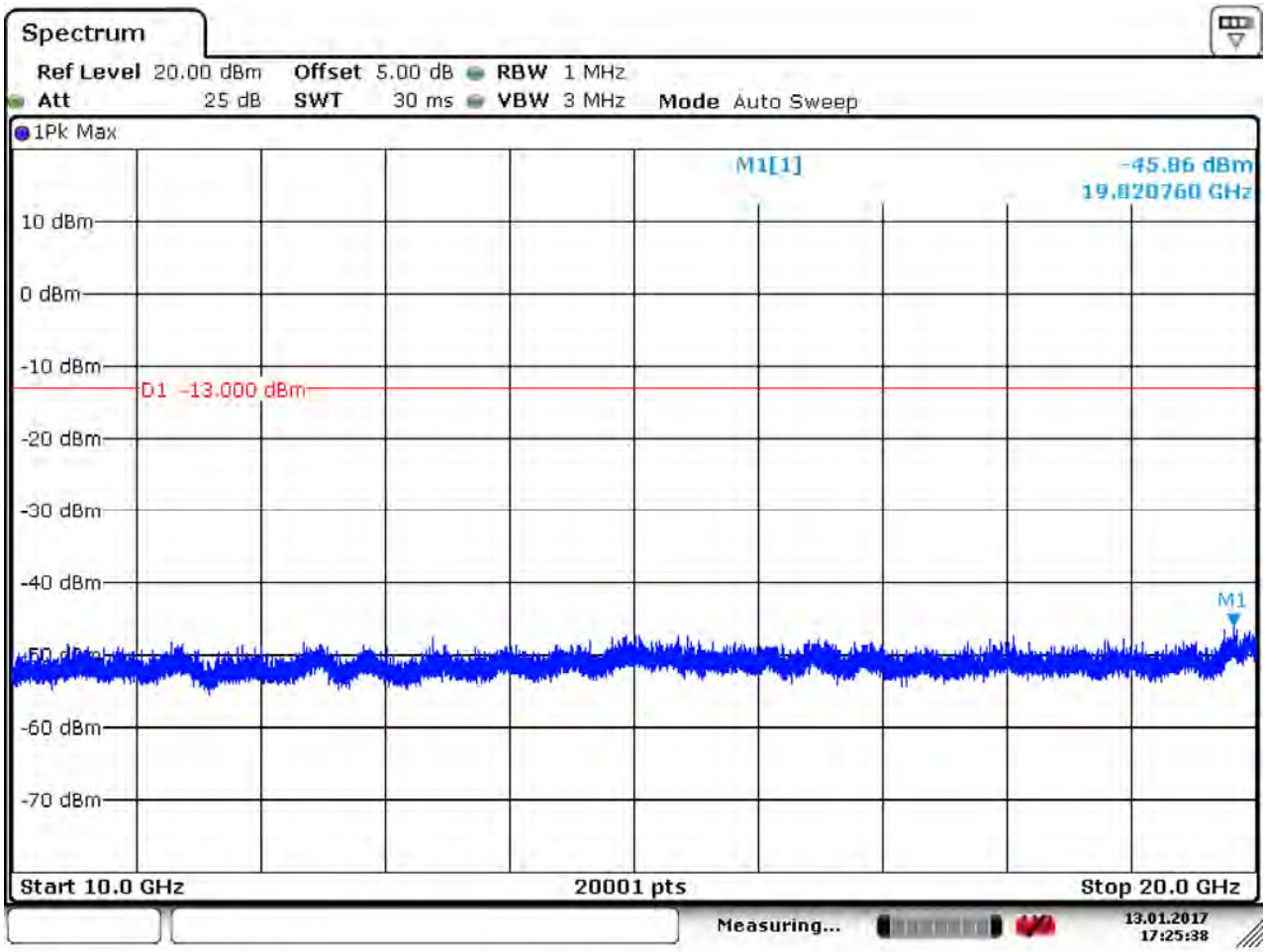
6.1.1.6.3 Test Channel = HCH



Date: 13.JAN.2017 17:23:54



Date: 13.JAN.2017 18:01:23



Date: 13.JAN.2017 17:25:38

7 Field Strength of Spurious Radiation

7.1 For LTE

7.1.1 Test Band = LTE band 25

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

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

7.1.1.1.2 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 25	LTE/TM1 20MHz	LCH	TN	VL	0.15	0.00008	PASS
				VN	5.06	0.00272	PASS
				VH	-6.78	-0.00365	PASS
		MCH	TN	VL	-1.77	-0.00094	PASS
				VN	-4.23	-0.00225	PASS
				VH	-6.97	-0.00370	PASS
		HCH	TN	VL	5.20	0.00273	PASS
				VN	0.91	0.00048	PASS
				VH	-7.00	-0.00367	PASS
	LTE/TM2 20MHz	LCH	TN	VL	1.93	0.00104	PASS
				VN	-1.49	-0.00080	PASS
				VH	-4.36	-0.00234	PASS
		MCH	TN	VL	0.89	0.00048	PASS
				VN	-6.56	-0.00349	PASS
				VH	5.28	0.00281	PASS
		HCH	TN	VL	-2.71	-0.00142	PASS
				VN	4.87	0.00256	PASS
				VH	4.82	0.00253	PASS
	LTE/TM3 20MHz	LCH	TN	VL	-2.67	-0.00143	PASS
				VN	-0.84	-0.00045	PASS
				VH	-2.13	-0.00114	PASS
		MCH	TN	VL	5.90	0.00313	PASS
				VN	-2.70	-0.00144	PASS
				VH	-1.40	-0.00074	PASS
		HCH	TN	VL	-4.82	-0.00253	PASS
				VN	-6.77	-0.00355	PASS
				VH	3.06	0.00161	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 Band 25	LTE/TM1 20MHz	LCH	VN	-30	-3.27	-0.00176	PASS
				-20	1.90	0.00102	PASS
				-10	3.25	0.00175	PASS
				0	-3.42	-0.00184	PASS
				10	-6.82	-0.00367	PASS
				20	5.24	0.00282	PASS
				30	5.89	0.00317	PASS
				40	6.47	0.00348	PASS
				50	-5.91	-0.00318	PASS
		MCH	VN	-30	2.78	0.00147	PASS
				-20	-0.23	-0.00012	PASS
				-10	-0.18	-0.00010	PASS
				0	0.60	0.00032	PASS
				10	0.40	0.00021	PASS
				20	0.49	0.00026	PASS
				30	-6.62	-0.00352	PASS
				40	-6.85	-0.00364	PASS
				50	0.03	0.00002	PASS
		HCH	VN	-30	-5.35	-0.00281	PASS
				-20	-3.40	-0.00179	PASS
				-10	6.51	0.00342	PASS
				0	1.19	0.00063	PASS
				10	-3.60	-0.00189	PASS
				20	1.54	0.00081	PASS
				30	1.12	0.00059	PASS
				40	-4.61	-0.00242	PASS
				50	4.12	0.00216	PASS

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTE Band 25	LTE/TM2 20MHz	LCH	VN	-30	-5.18	-0.00278	PASS
				-20	0.16	0.00008	PASS
				-10	-4.68	-0.00252	PASS
				0	-6.20	-0.00333	PASS
				10	-3.48	-0.00187	PASS
				20	4.39	0.00236	PASS
				30	1.81	0.00097	PASS
				40	6.11	0.00329	PASS
				50	-0.84	-0.00045	PASS
		MCH	VN	-30	6.44	0.00342	PASS
				-20	1.62	0.00086	PASS
				-10	1.86	0.00099	PASS
				0	5.84	0.00310	PASS
				10	-5.03	-0.00267	PASS
				20	6.39	0.00339	PASS
				30	-1.33	-0.00071	PASS
				40	5.52	0.00293	PASS
				50	-6.98	-0.00371	PASS
		HCH	VN	-30	-2.48	-0.00130	PASS
				-20	2.06	0.00108	PASS
				-10	0.18	0.00009	PASS
				0	4.13	0.00217	PASS
				10	1.38	0.00072	PASS
				20	-5.67	-0.00298	PASS
				30	-6.37	-0.00335	PASS
				40	5.58	0.00293	PASS
				50	1.74	0.00091	PASS

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTE Band 25	LTE/TM3 20MHz	LCH	VN	-30	4.08	0.00219	PASS
				-20	-6.01	-0.00323	PASS
				-10	-2.60	-0.00140	PASS
				0	0.14	0.00008	PASS
				10	6.48	0.00348	PASS
				20	6.78	0.00365	PASS
				30	-1.74	-0.00094	PASS
				40	3.89	0.00209	PASS
				50	-3.26	-0.00175	PASS
		MCH	VN	-30	-1.01	-0.00053	PASS
				-20	3.65	0.00194	PASS
				-10	-3.32	-0.00177	PASS
				0	6.25	0.00332	PASS
				10	-3.32	-0.00176	PASS
				20	3.68	0.00195	PASS
				30	4.35	0.00231	PASS
				40	6.04	0.00321	PASS
				50	2.40	0.00128	PASS
		HCH	VN	-30	-4.24	-0.00223	PASS
				-20	-5.45	-0.00286	PASS
				-10	2.55	0.00134	PASS
				0	-4.18	-0.00219	PASS
				10	-5.41	-0.00284	PASS
				20	3.28	0.00172	PASS
				30	0.33	0.00017	PASS
				40	-4.83	-0.00254	PASS
				50	-0.59	-0.00031	PASS

The End