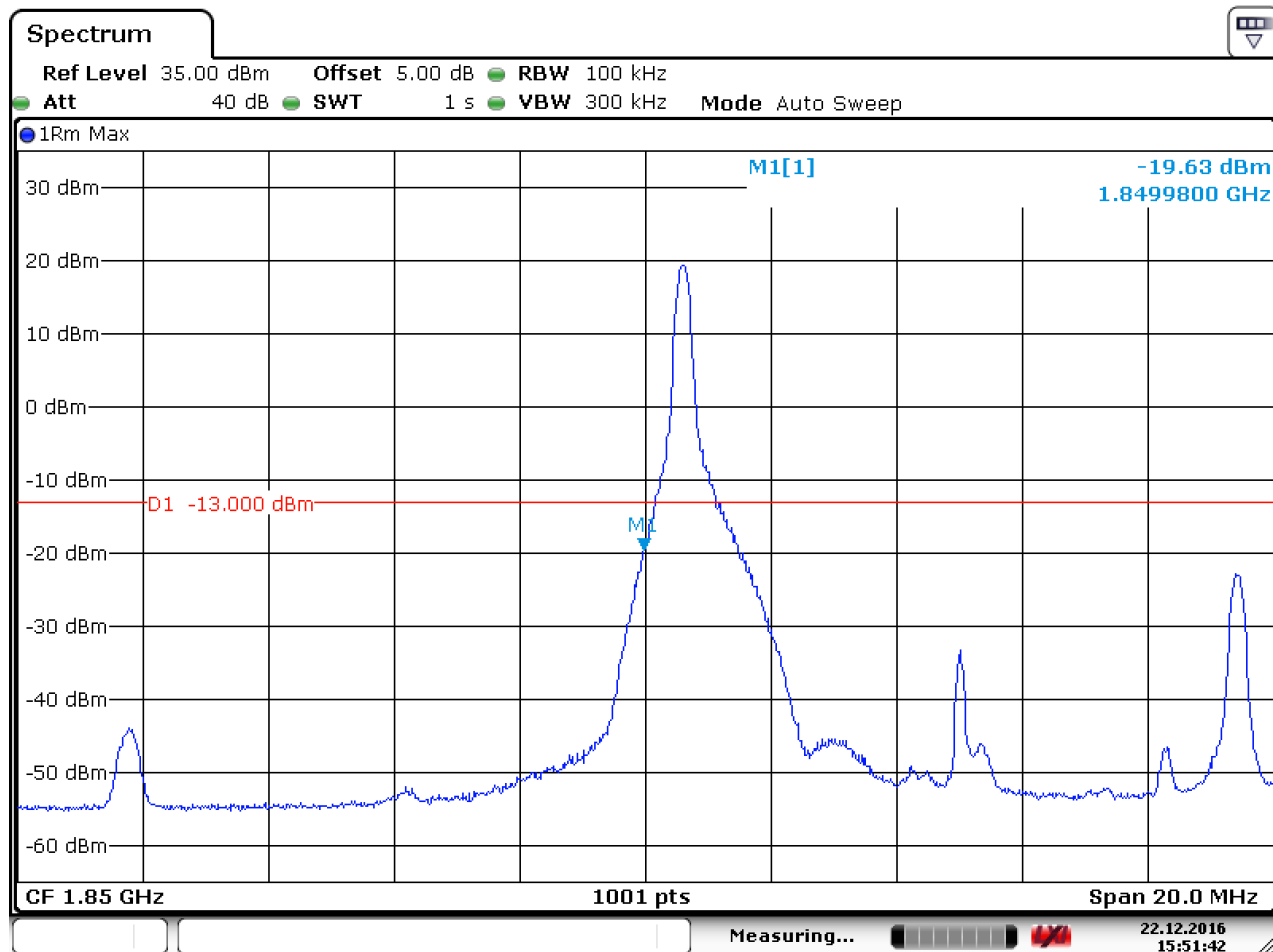




5.1.1.8 Test Mode = LTE/TM2 10MHz
5.1.1.8.1 Test Channel = LCH

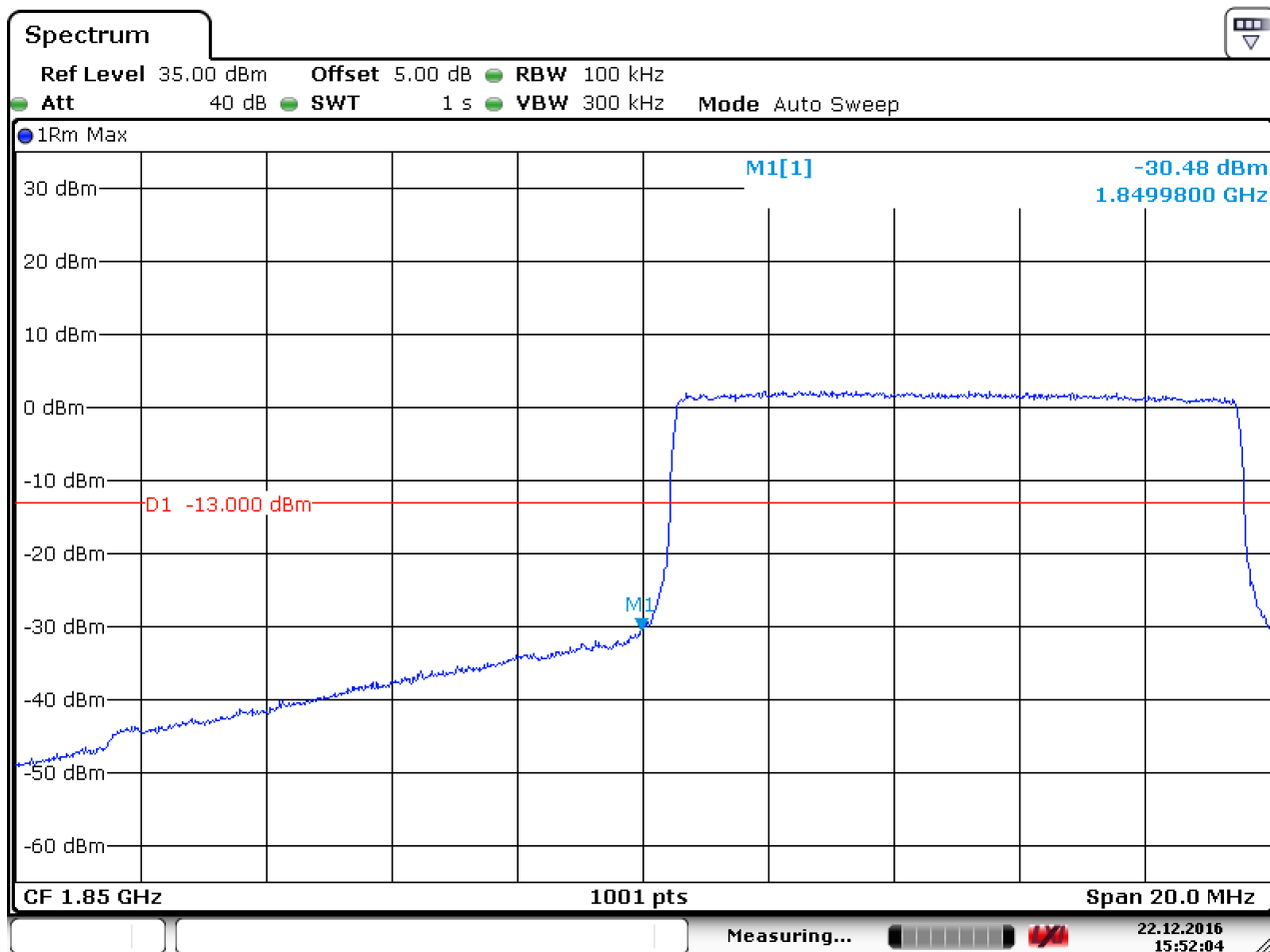
5.1.1.8.1.1 Test RB=1RB



Date: 22.DEC.2016 15:51:43



5.1.1.8.1.2 Test RB=50RB

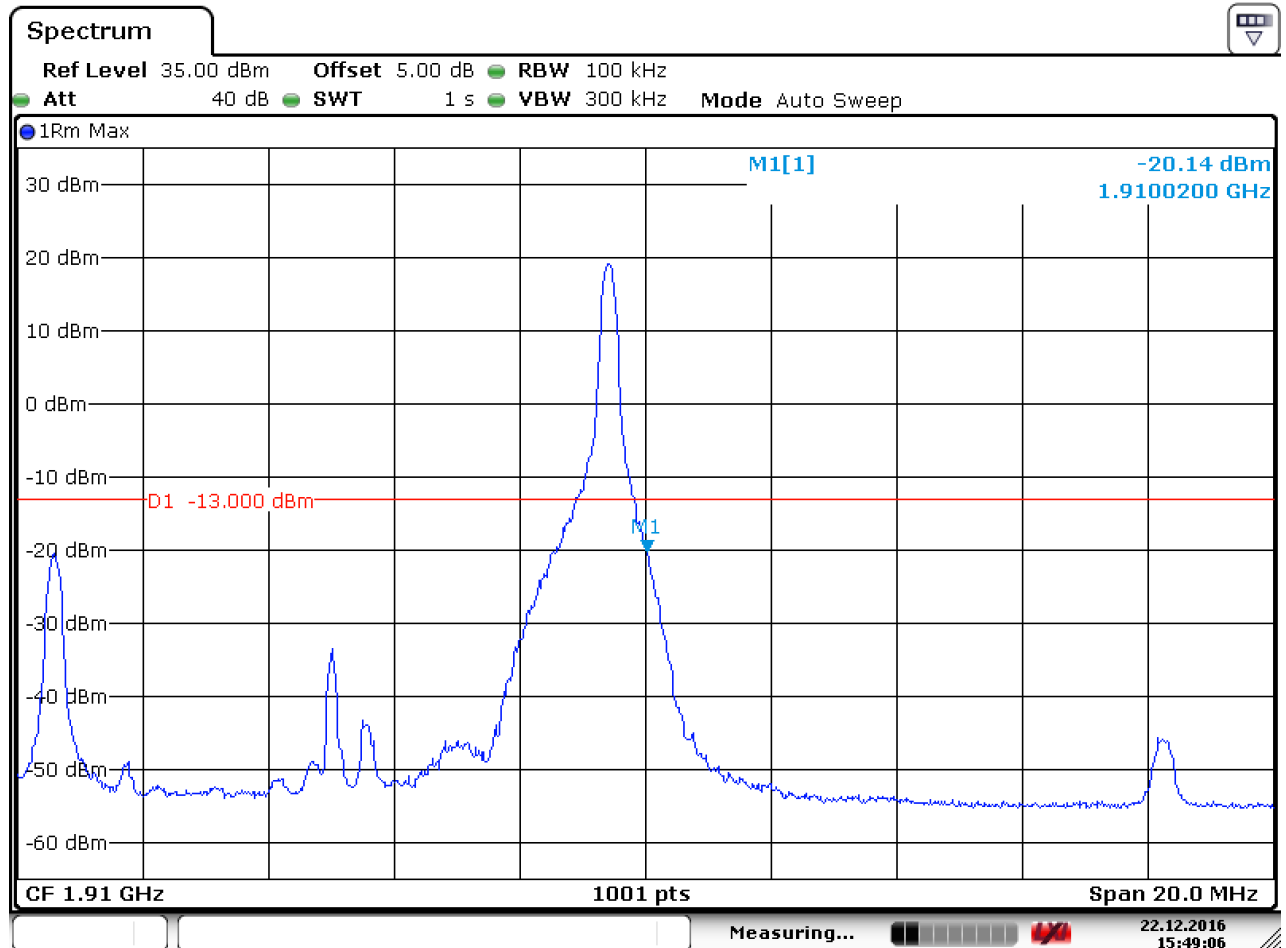


Date: 22.DEC.2016 15:52:04



5.1.1.8.2 Test Channel = HCH

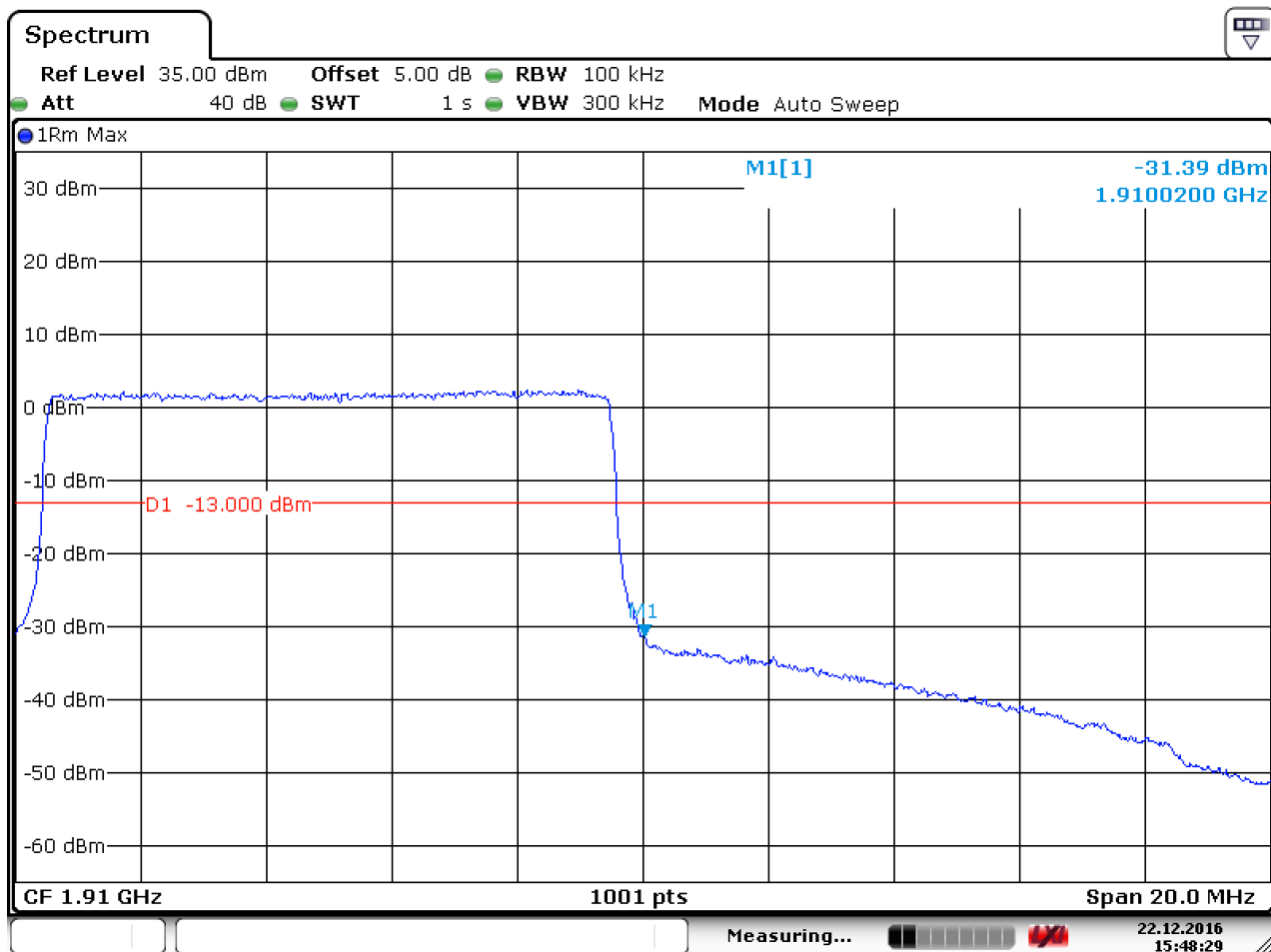
5.1.1.8.2.1 Test RB=1RB



Date: 22.DEC.2016 15:49:07



5.1.1.8.2.2 Test RB=50RB



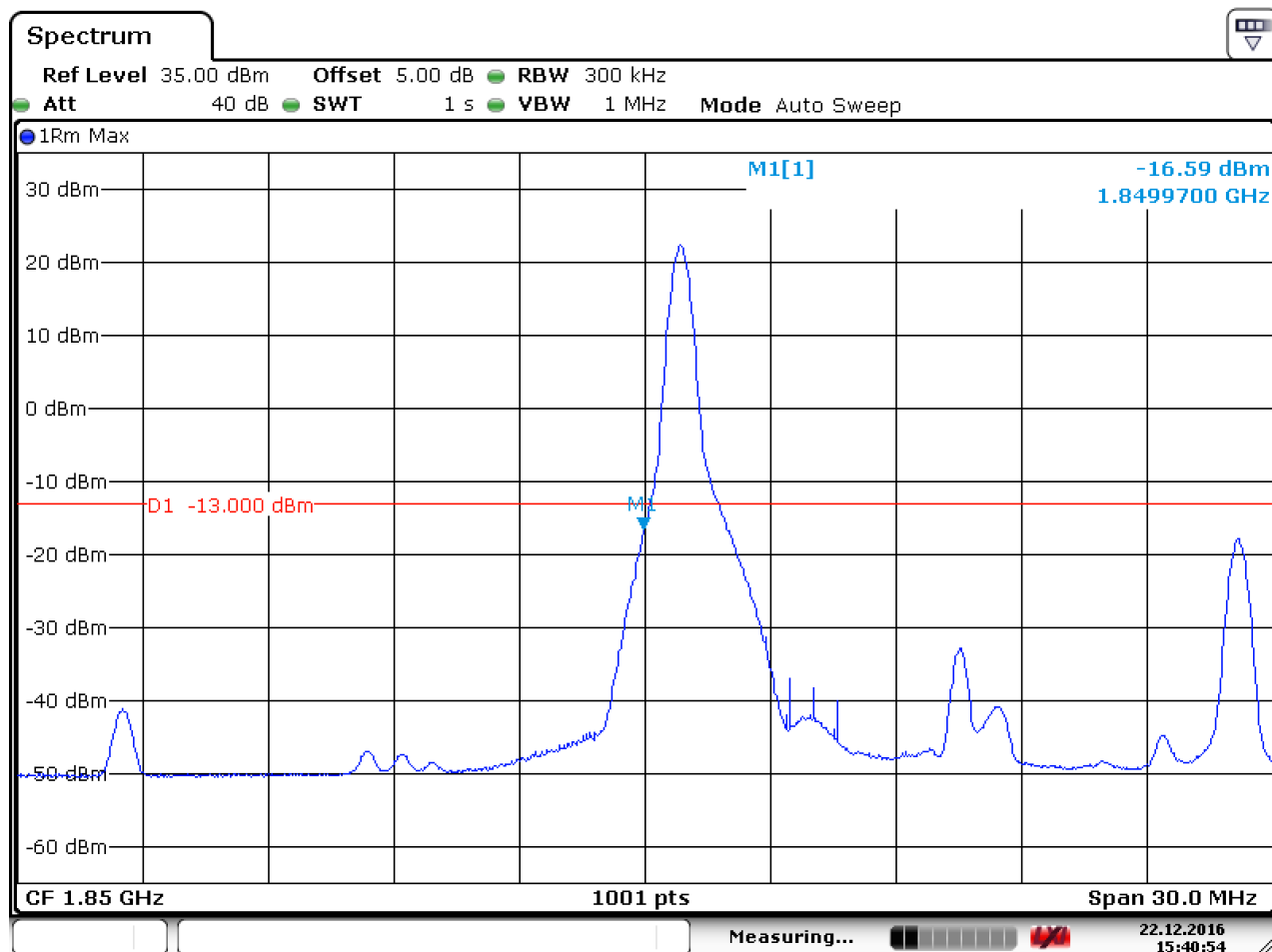
Date: 22.DEC.2016 15:48:30



5.1.1.9 Test Mode = LTE/TM1 15MHz

5.1.1.9.1 Test Channel = LCH

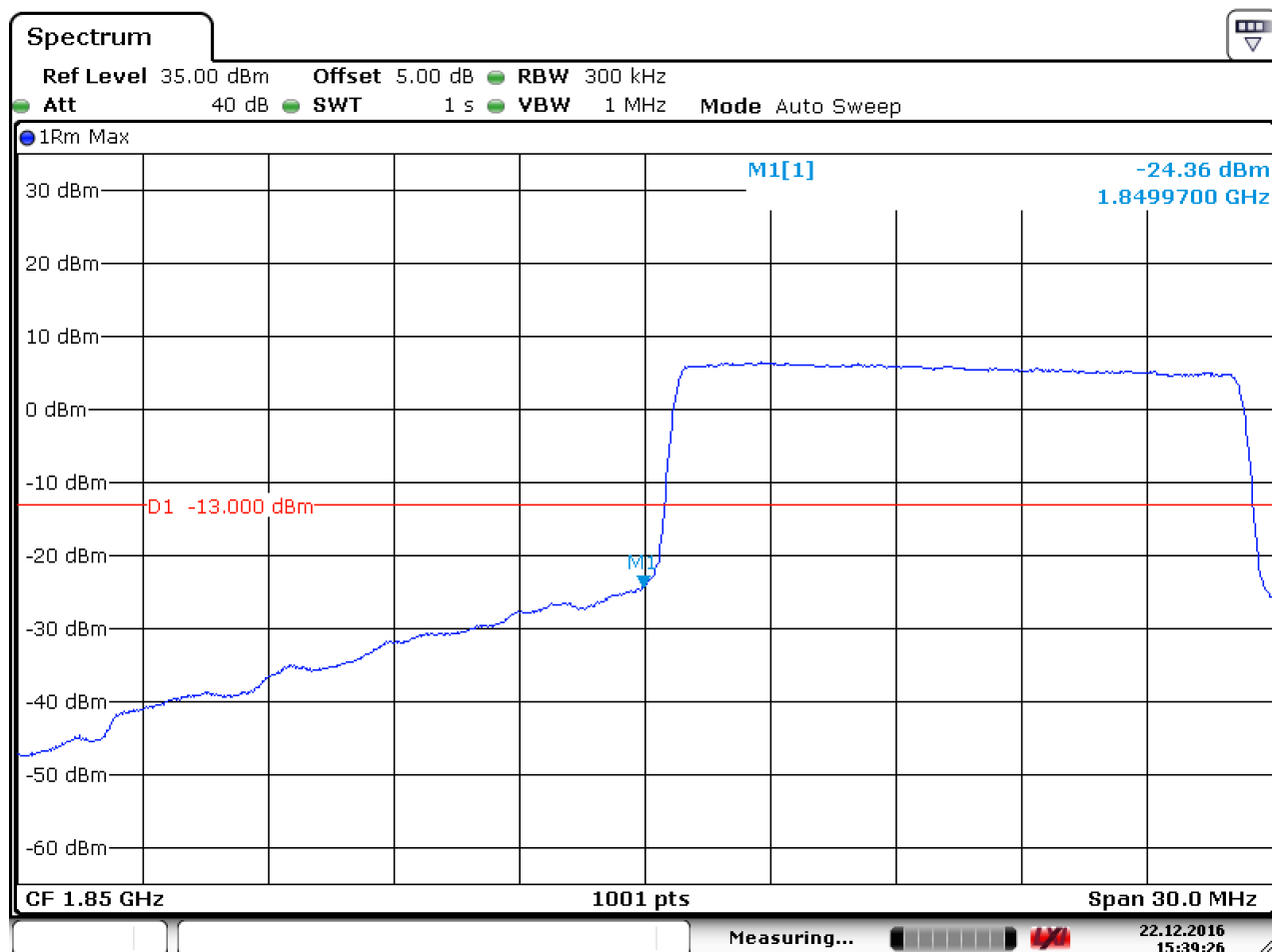
5.1.1.9.1.1 Test RB=1RB



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5.1.1.9.1.2 Test RB=75RB

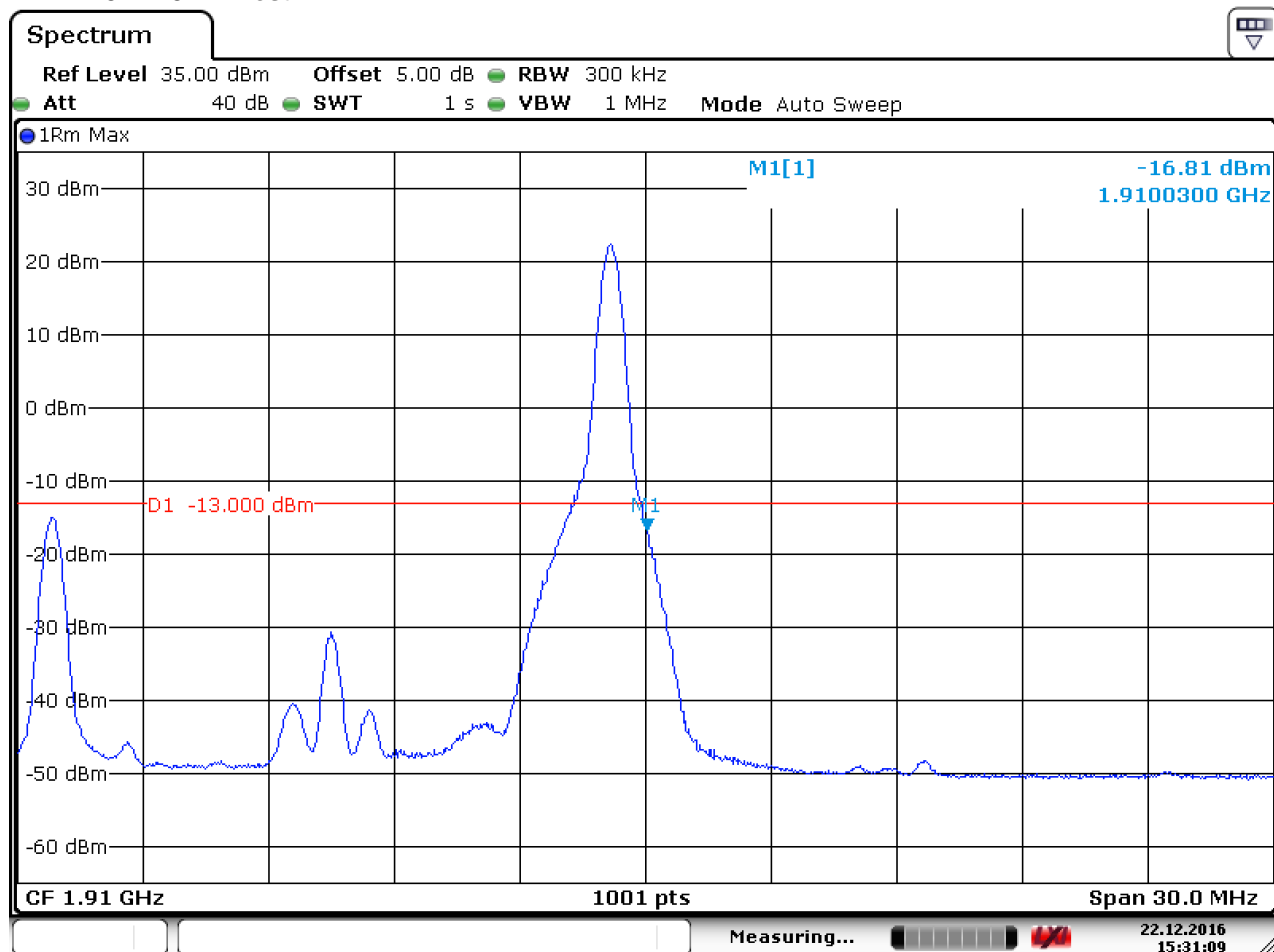


Date: 22.DEC.2016 15:39:26



5.1.1.9.2 Test Channel = HCH

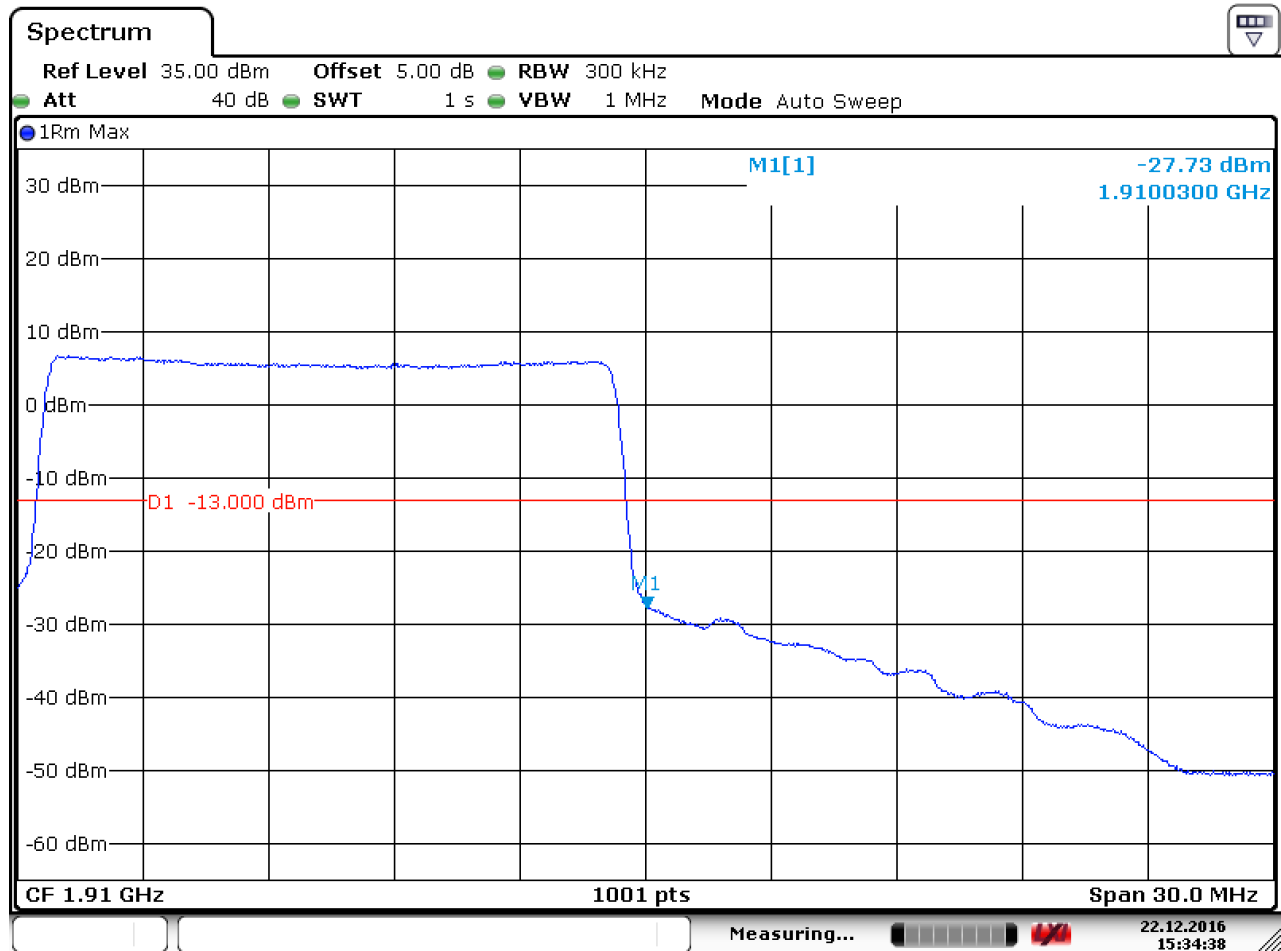
5.1.1.9.2.1 Test RB=1RB



Date: 22.DEC.2016 15:31:09



5.1.1.9.2.2 Test RB=75RB



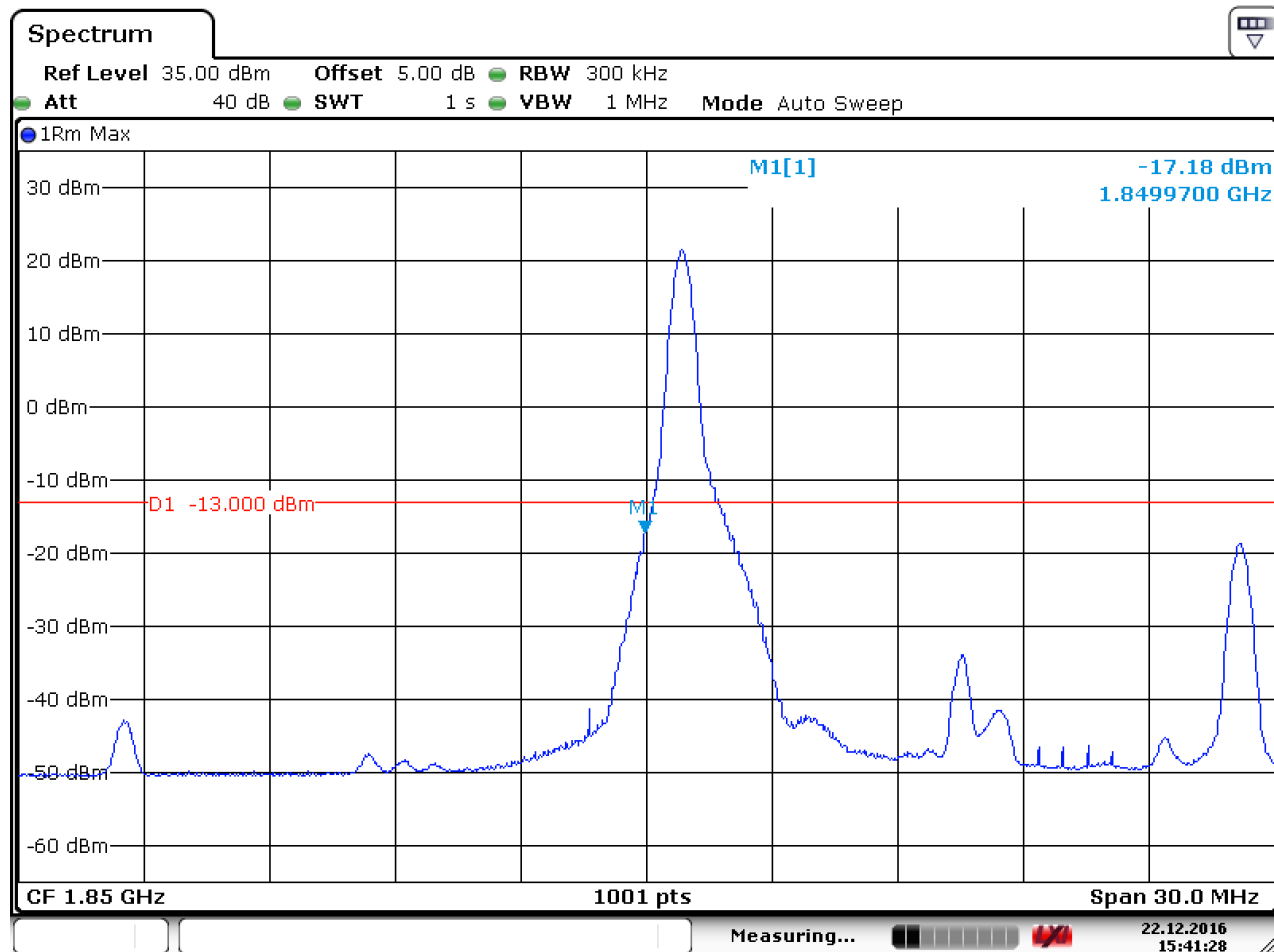
Date: 22.DEC.2016 15:34:38



5.1.1.10 Test Mode = LTE/TM2 15MHz

5.1.1.10.1 Test Channel = LCH

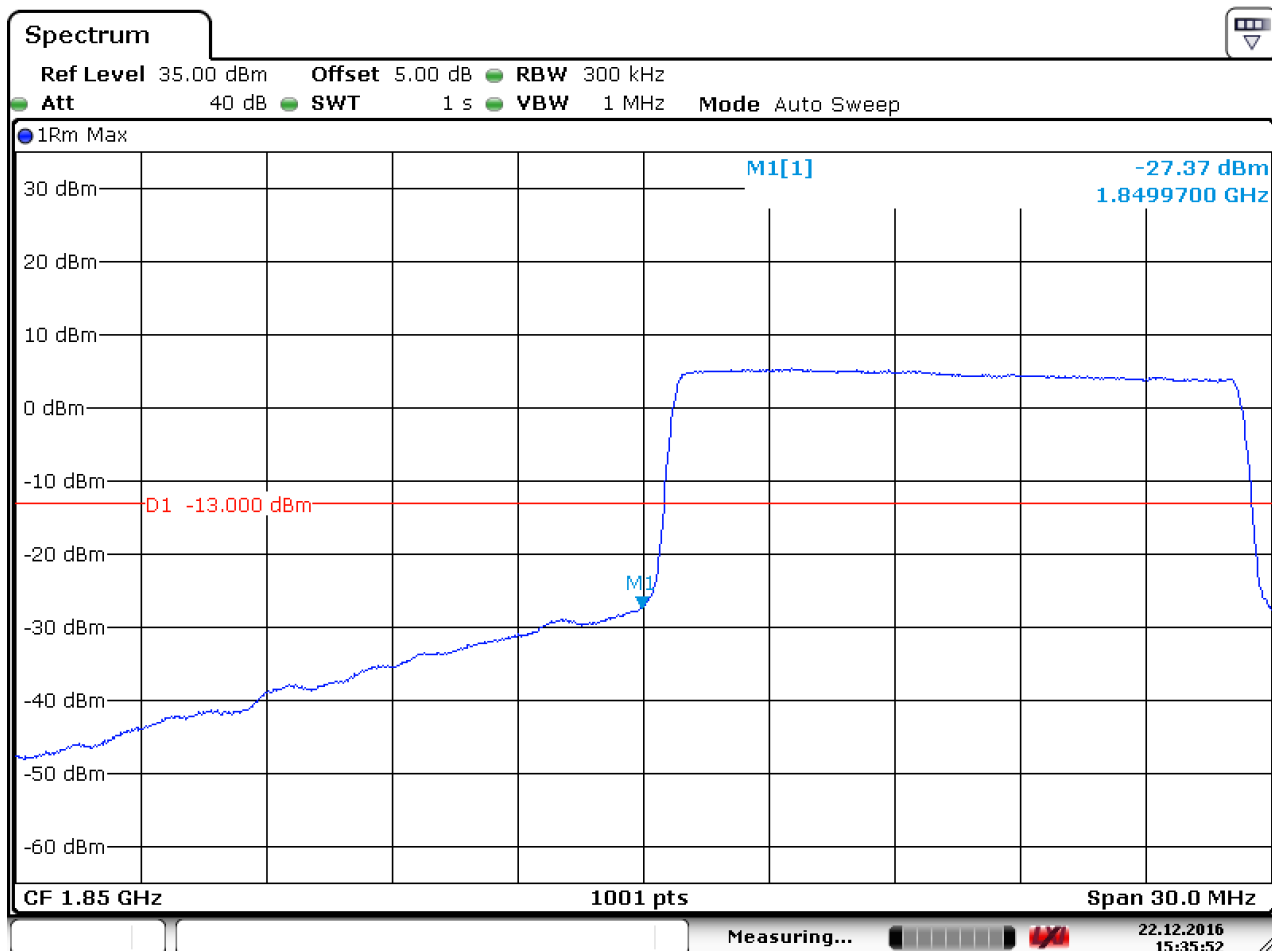
5.1.1.10.1.1 Test RB=1RB



Date: 22.DEC.2016 15:41:28



5.1.1.10.1.2 Test RB=75RB

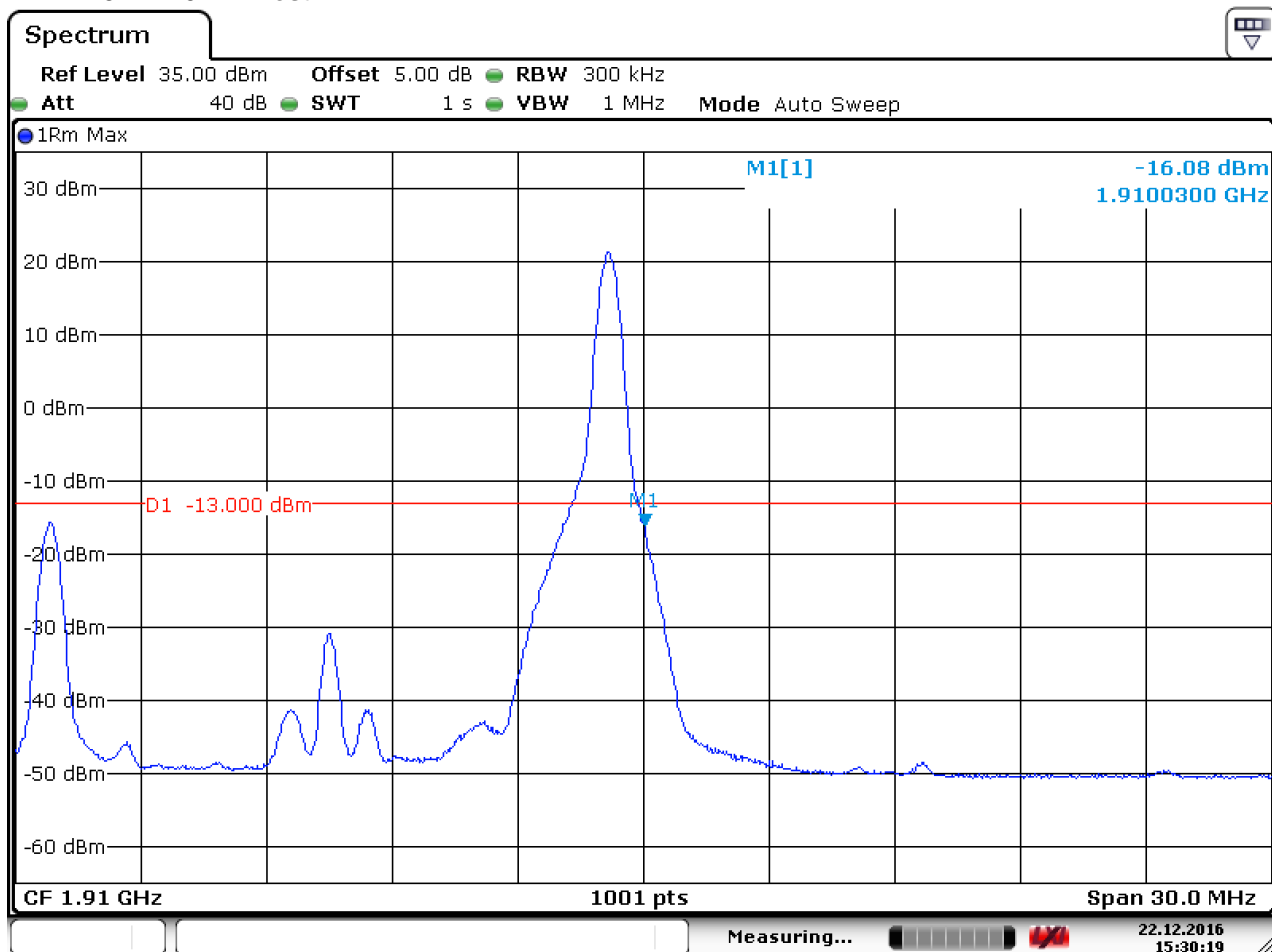


Date: 22.DEC.2016 15:35:52



5.1.1.10.2 Test Channel = HCH

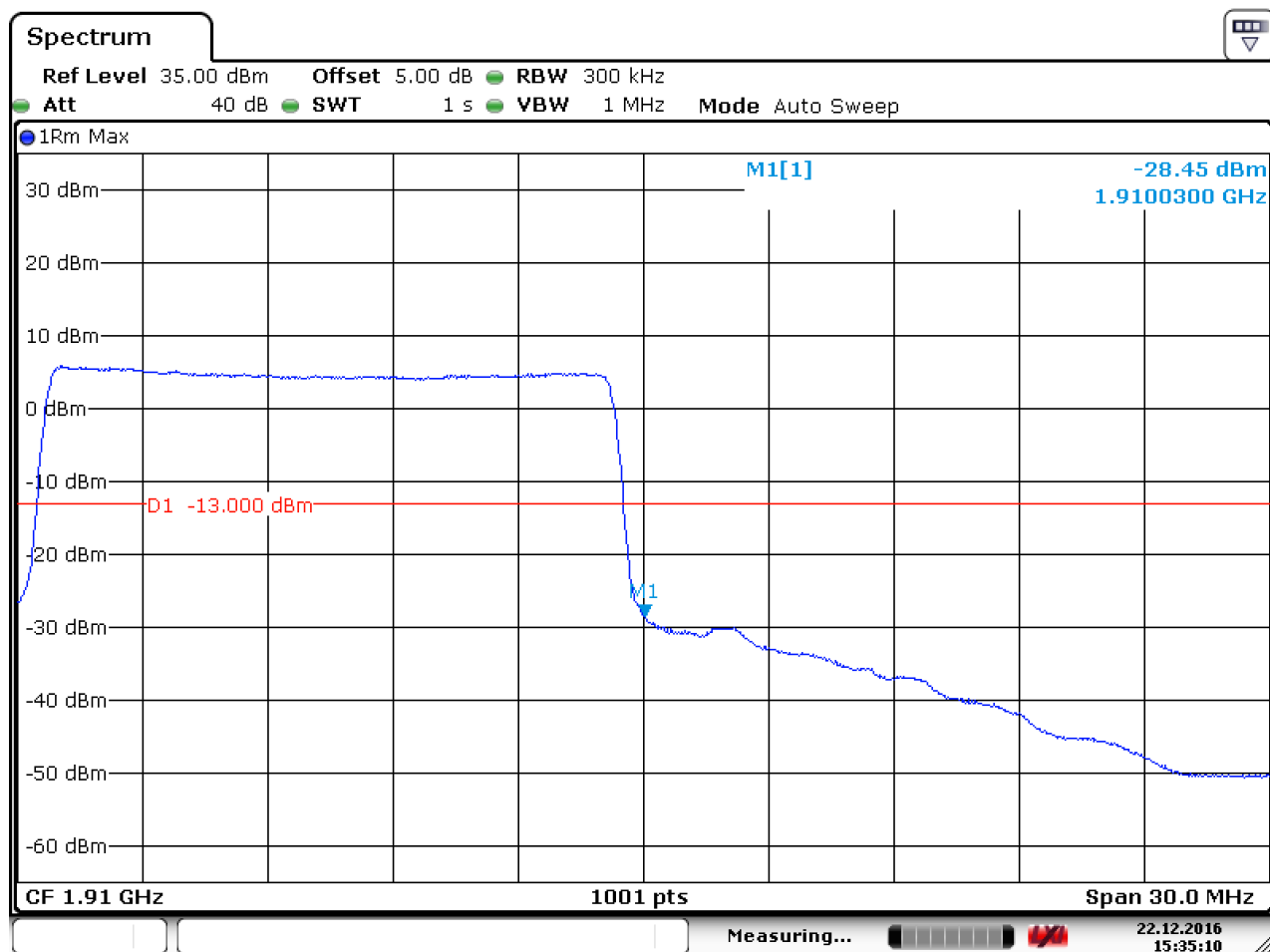
5.1.1.10.2.1 Test RB=1RB



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



5.1.1.10.2.2 Test RB=75RB



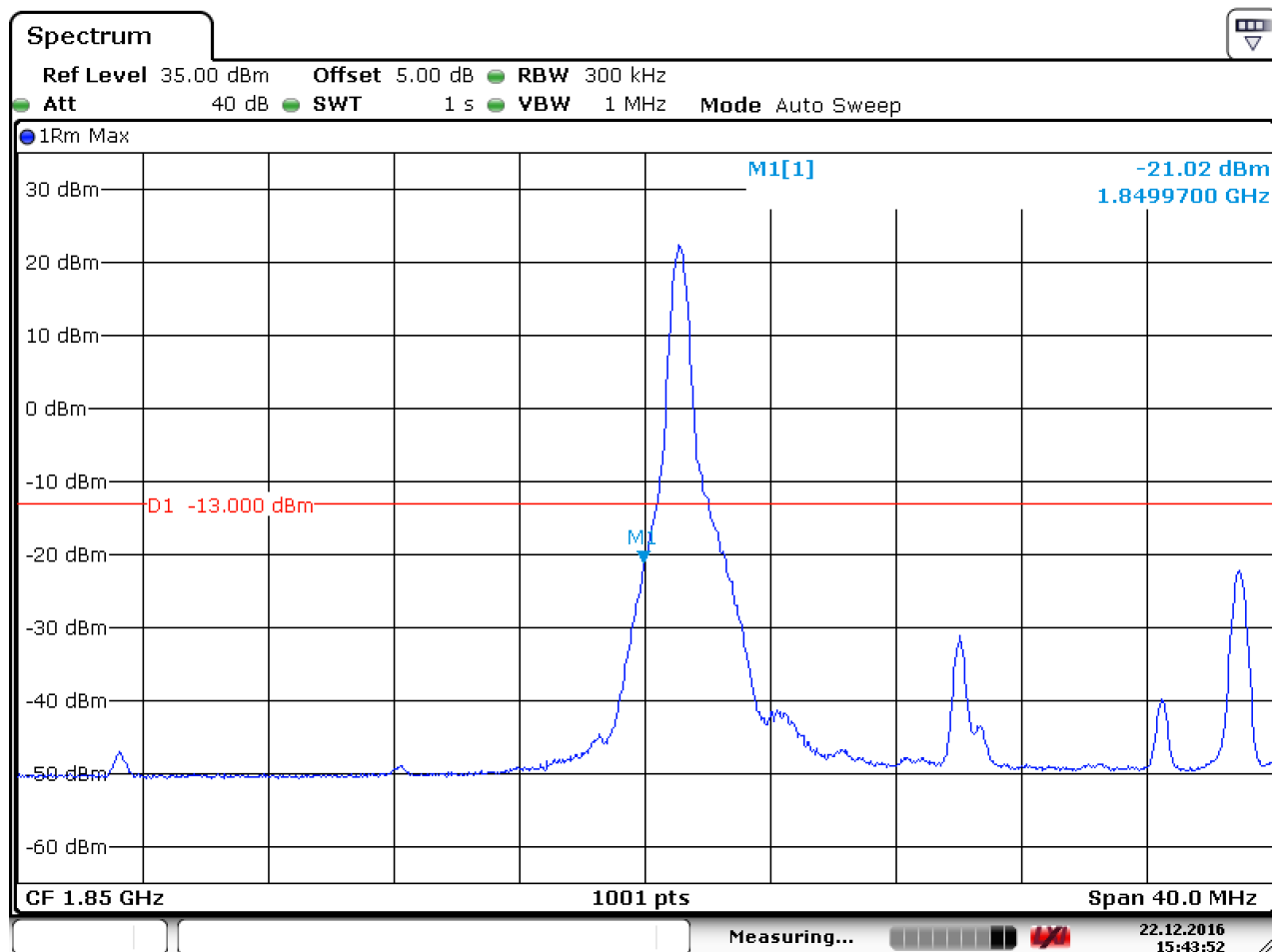
Date: 22.DEC.2016 15:35:11



5.1.1.11 Test Mode = LTE/TM1 20MHz

5.1.1.11.1 Test Channel = LCH

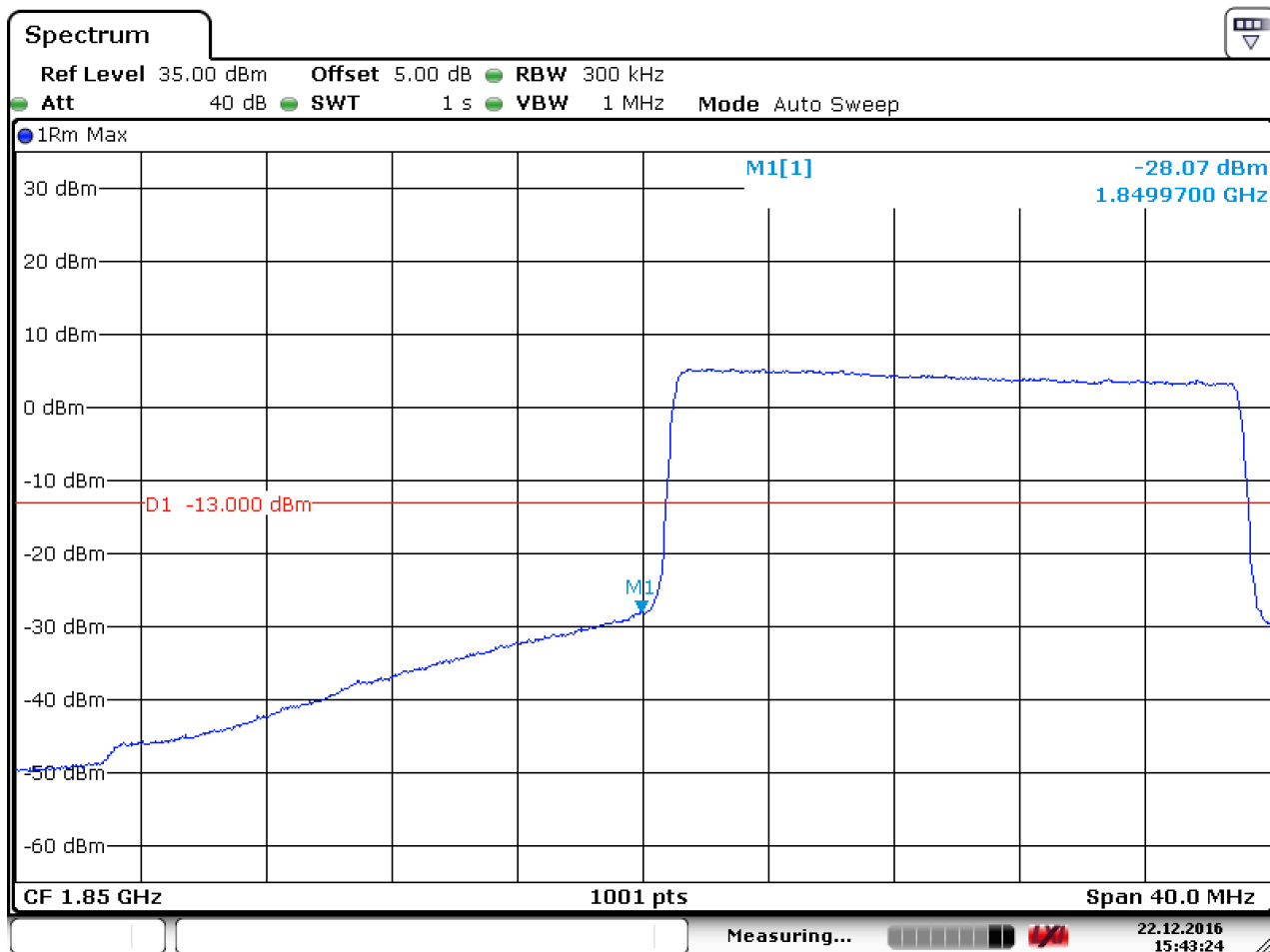
5.1.1.11.1.1 Test RB=1RB



Date: 22.DEC.2016 15:43:52



5.1.1.11.1.2 Test RB=100RB

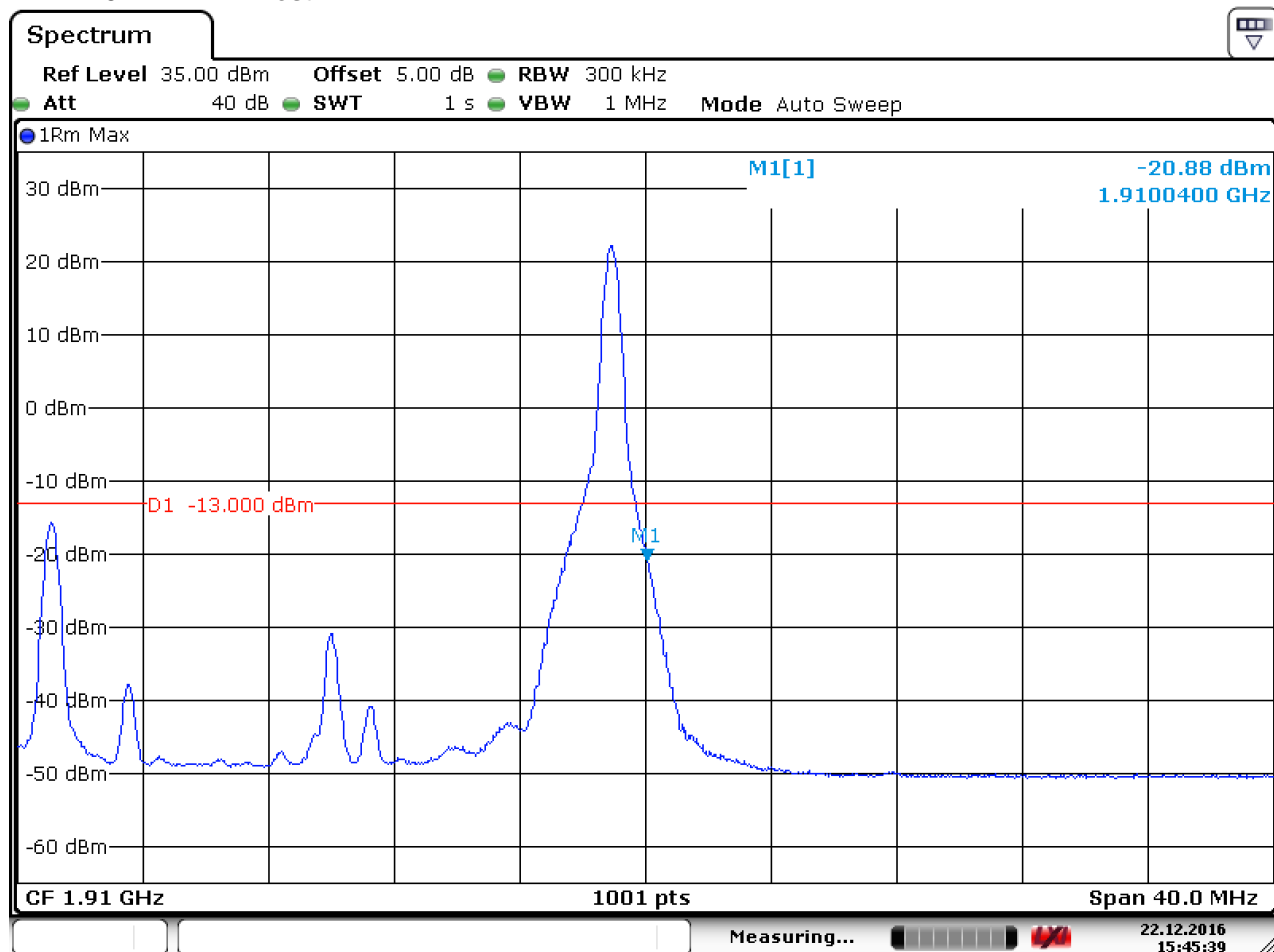


Date: 22.DEC.2016 15:43:25



5.1.1.11.2 Test Channel = HCH

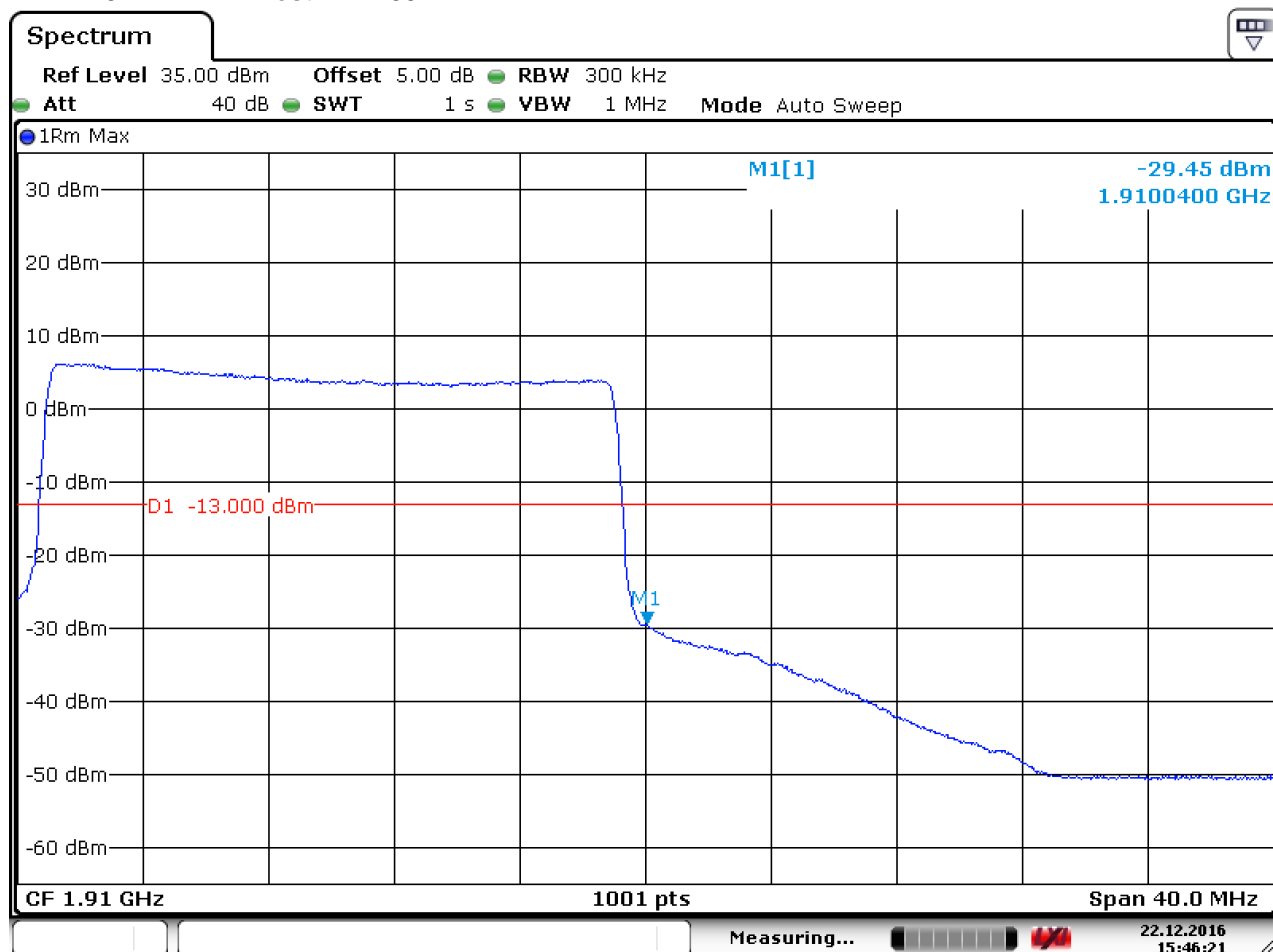
5.1.1.11.2.1 Test RB=1RB



Date: 22.DEC.2016 15:45:39



5.1.1.11.2.2 Test RB=100RB



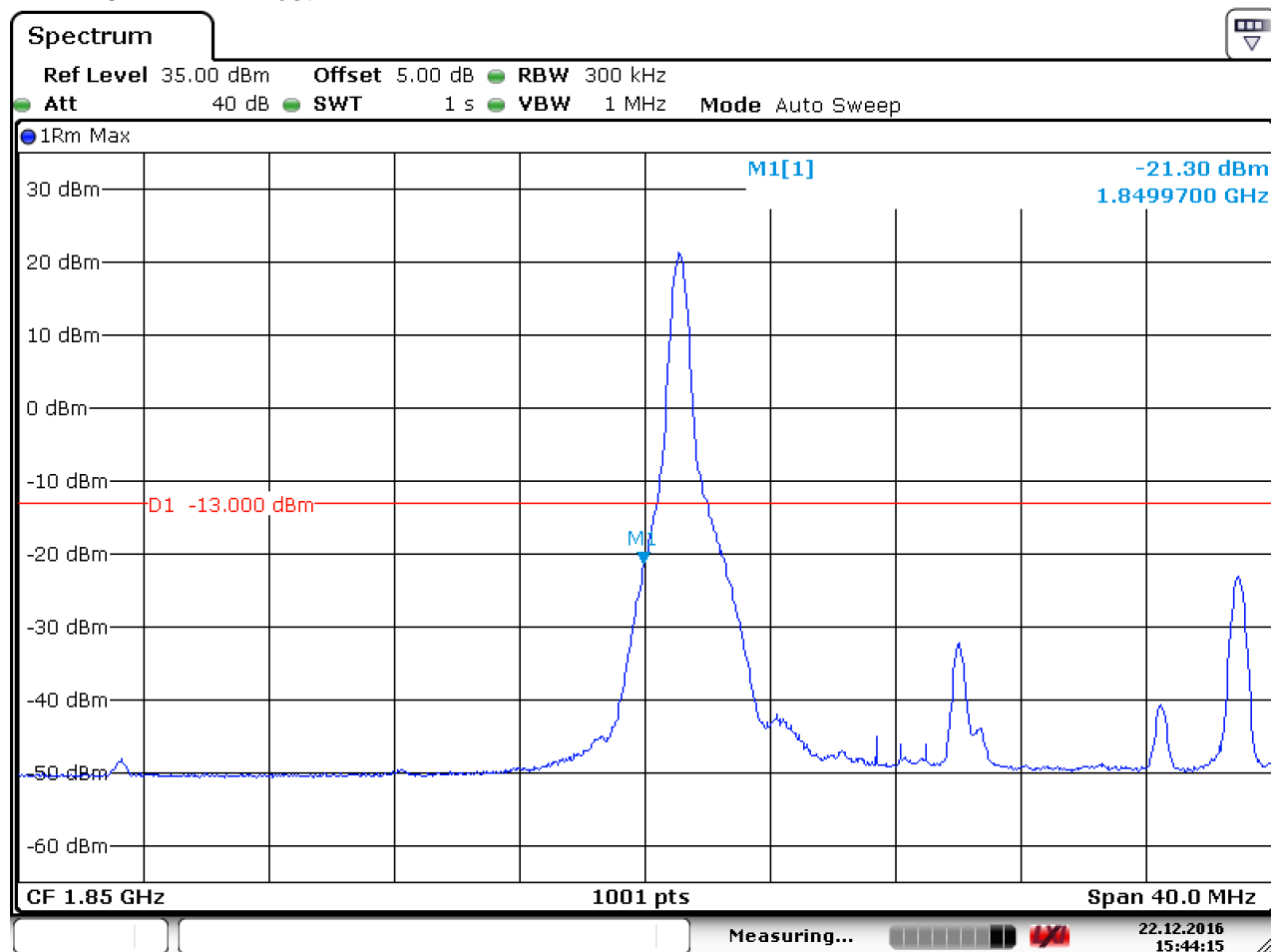
Date: 22.DEC.2016 15:46:21



5.1.1.12 Test Mode = LTE/TM2 20MHz

5.1.1.12.1 Test Channel = LCH

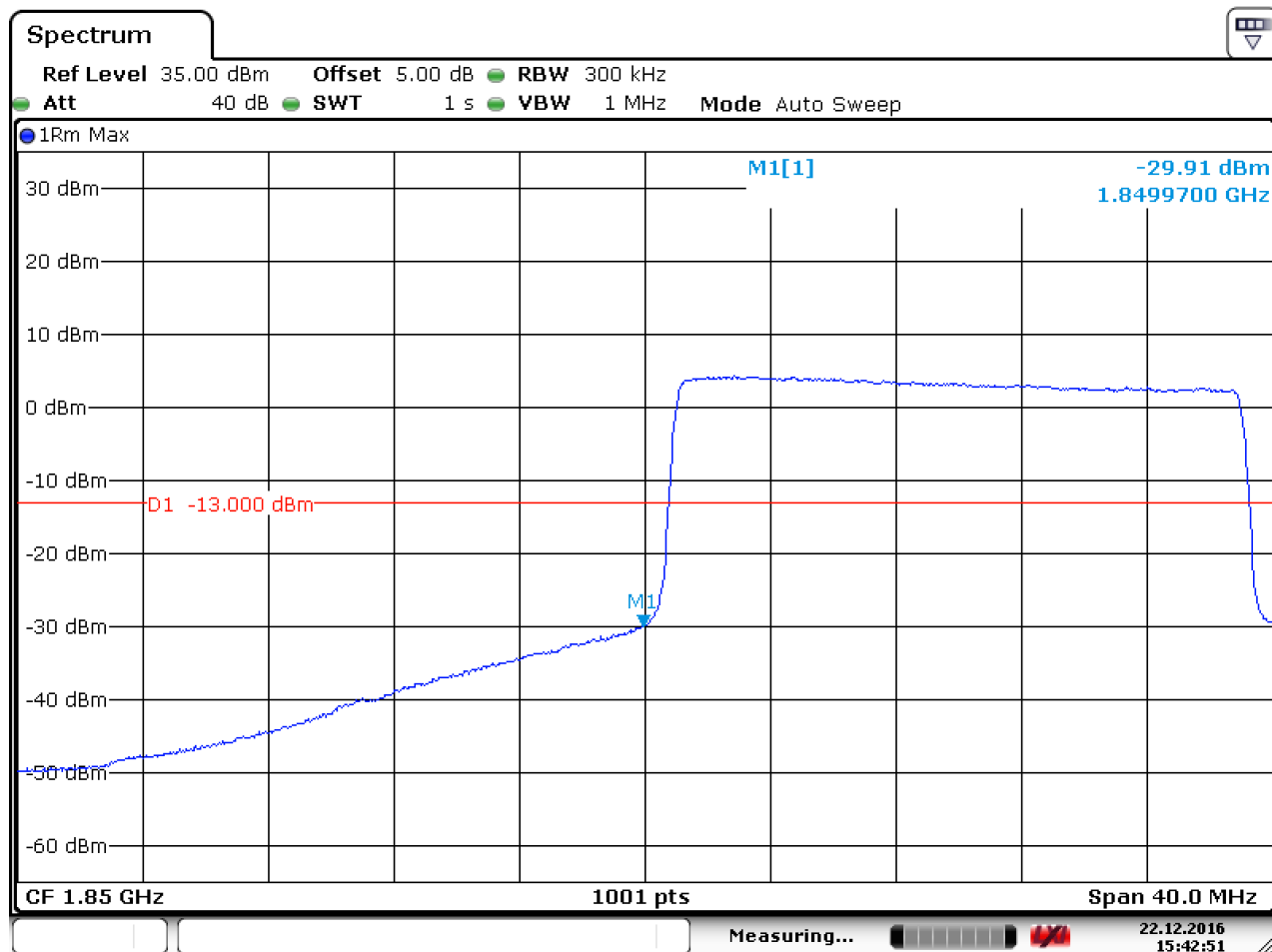
5.1.1.12.1.1 Test RB=1RB



Date: 22.DEC.2016 15:44:15



5.1.1.12.1.2 Test RB=100RB

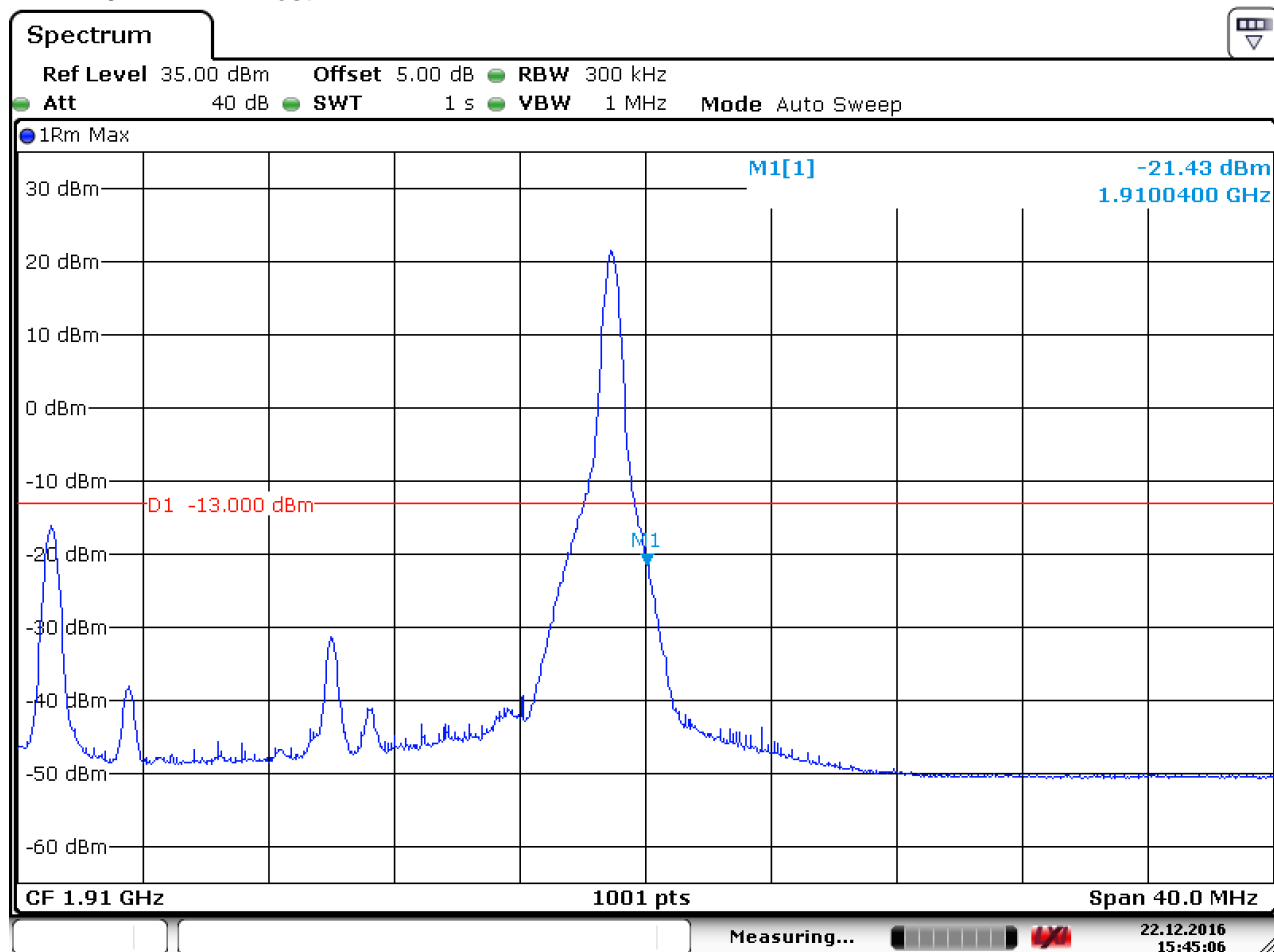


Date: 22.DEC.2016 15:42:51



5.1.1.12.2 Test Channel = HCH

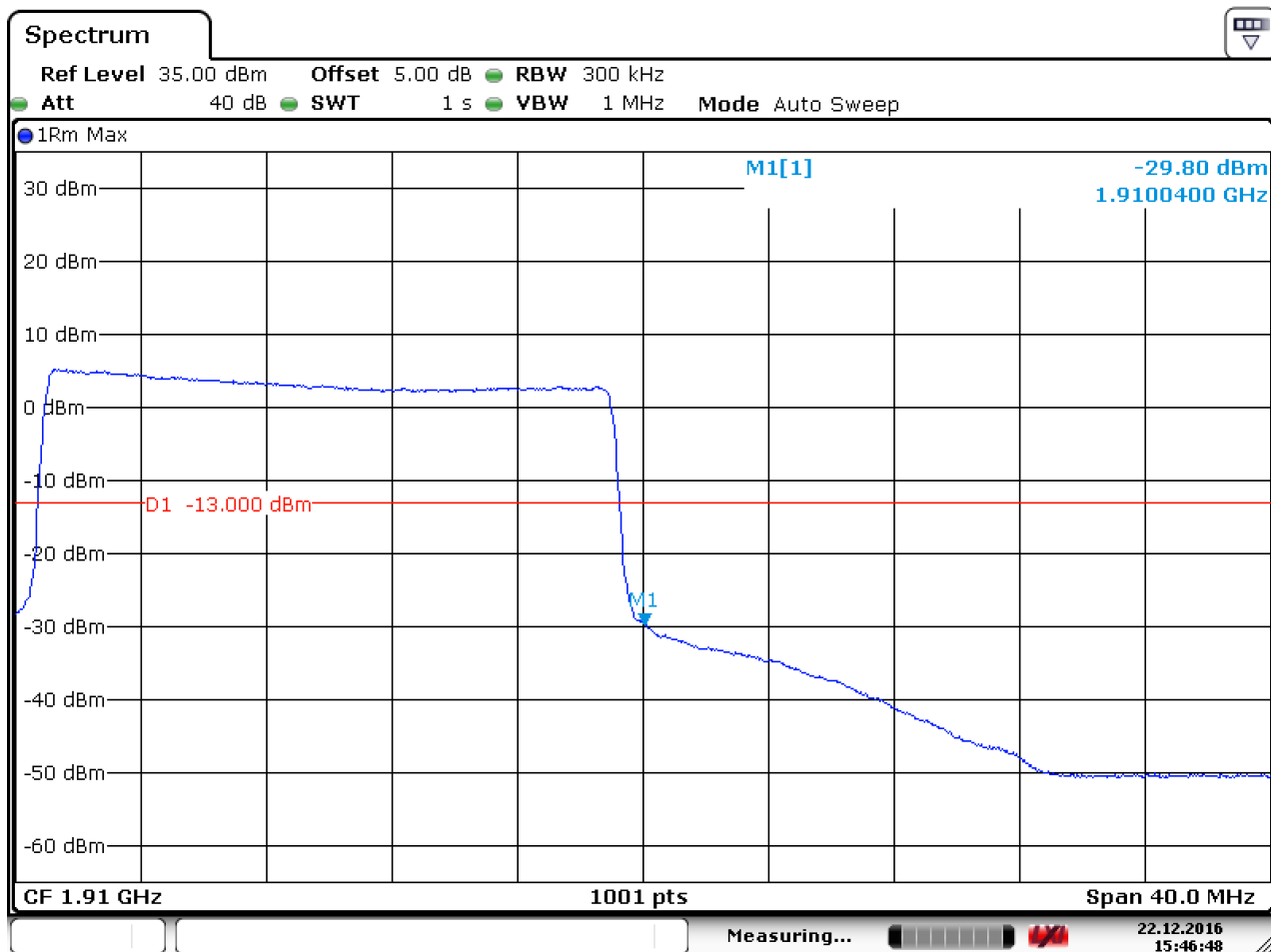
5.1.1.12.2.1 Test RB=1RB



Date: 22.DEC.2016 15:45:06



5.1.1.12.2.2 Test RB=100RB



Date: 22.DEC.2016 15:46:48



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 = $k \cdot (\text{Span} / RBW)$ " with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

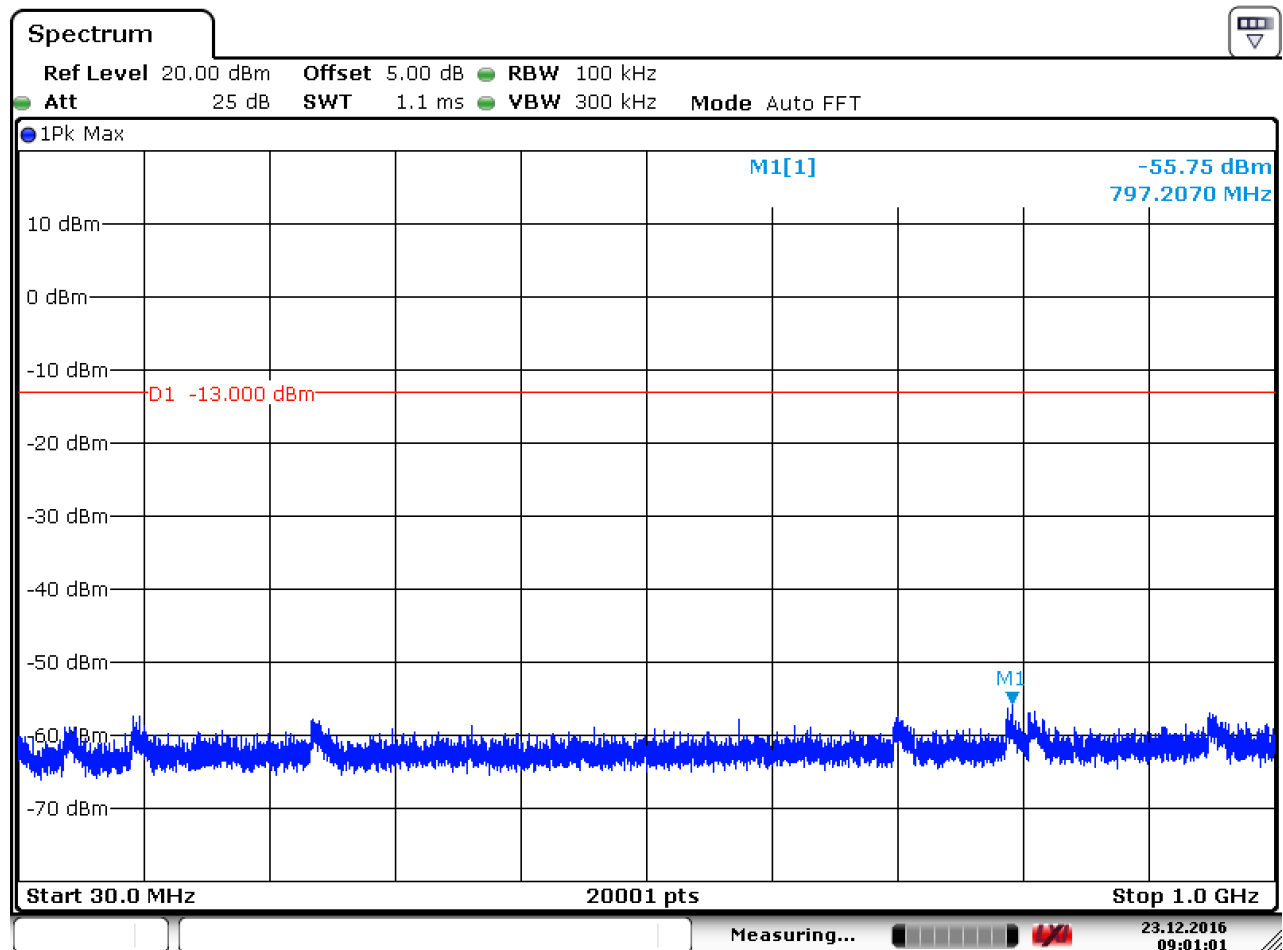
Part I - Test Plots

6.1 For LTE

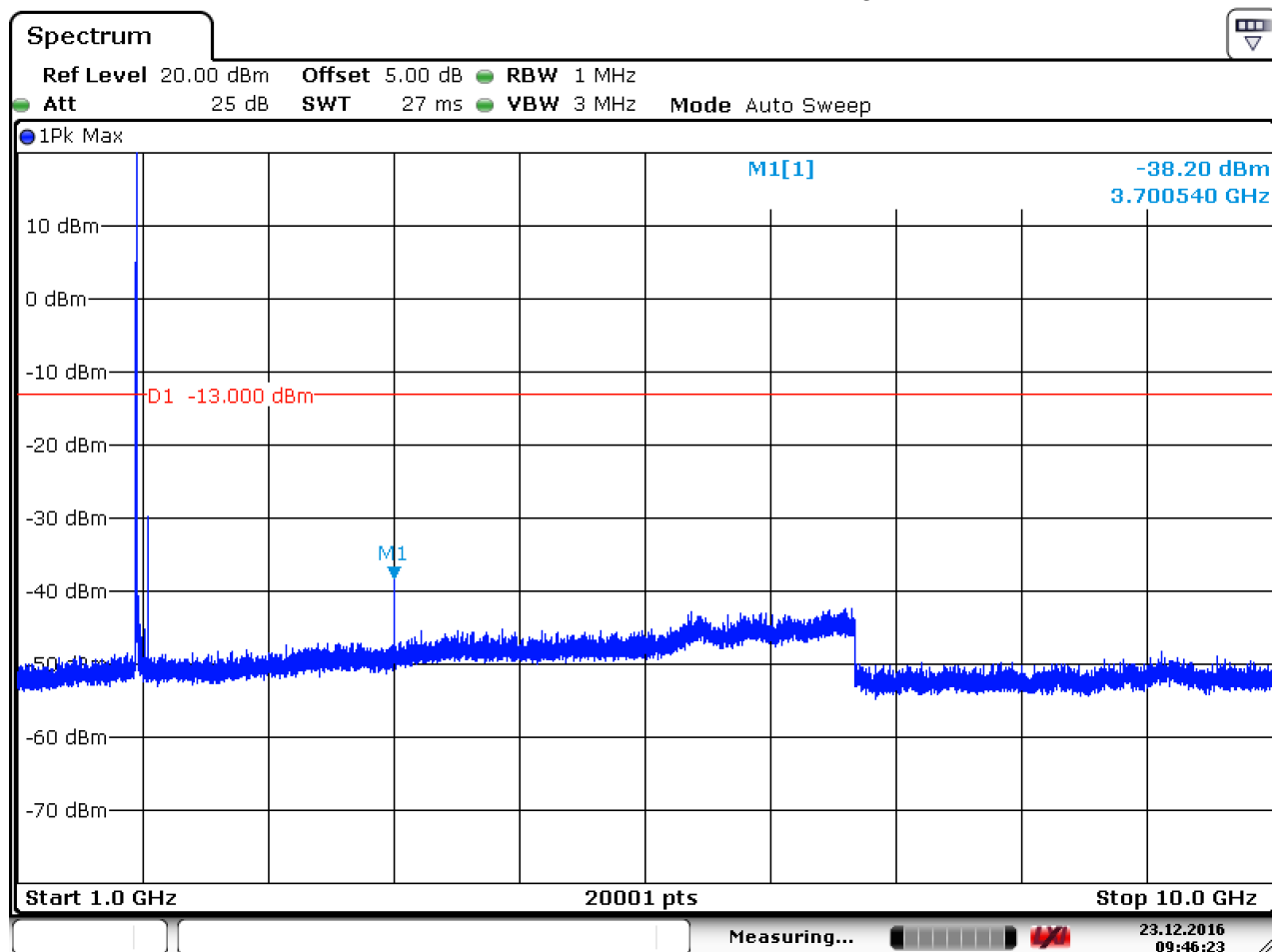
6.1.1 Test Band = LTE band2

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

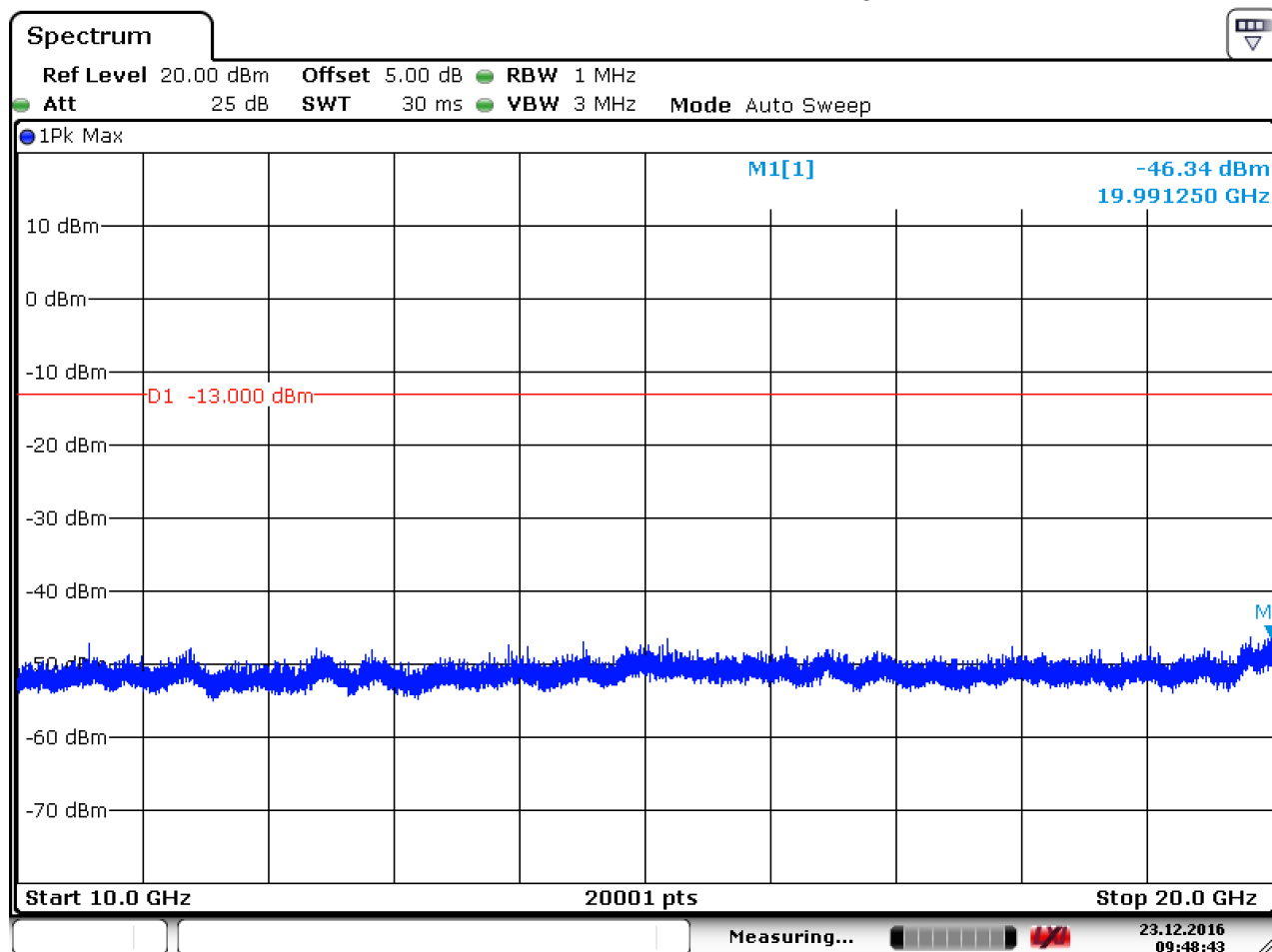
6.1.1.1.1 Test Channel = LCH



Date: 23.DEC.2016 09:01:01



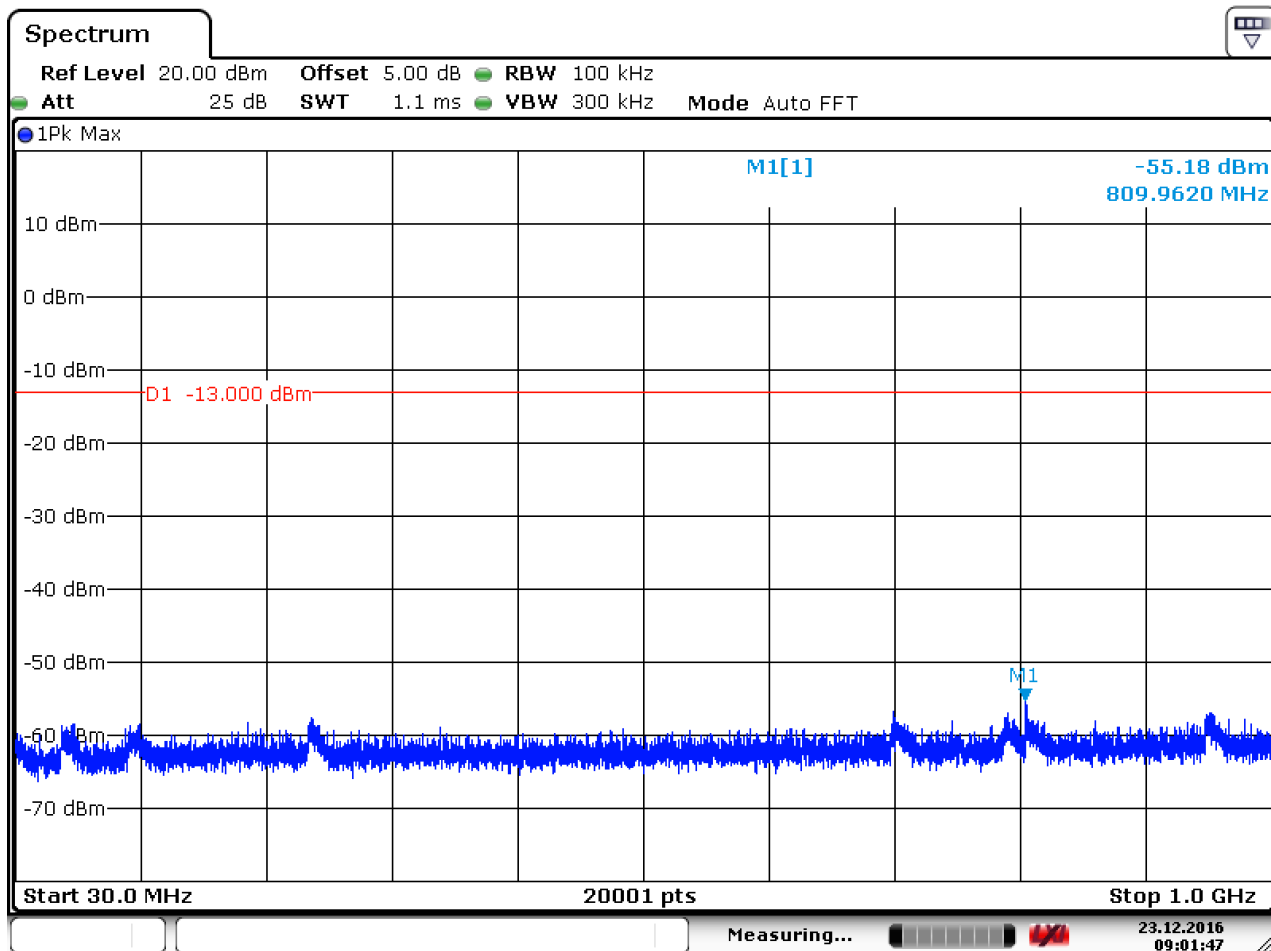
Date: 23.DEC.2016 09:46:24



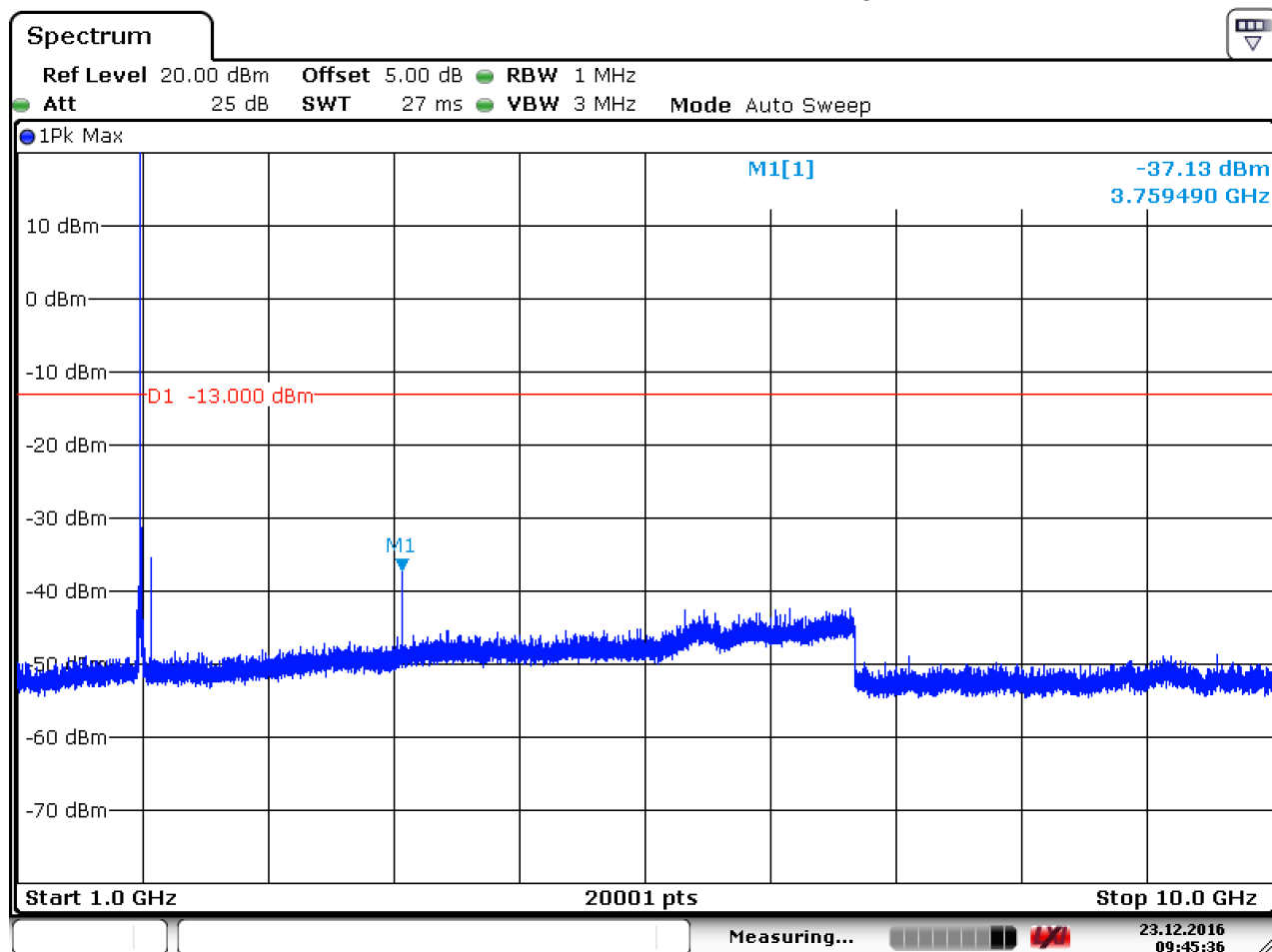
Date: 23.DEC.2016 09:48:44



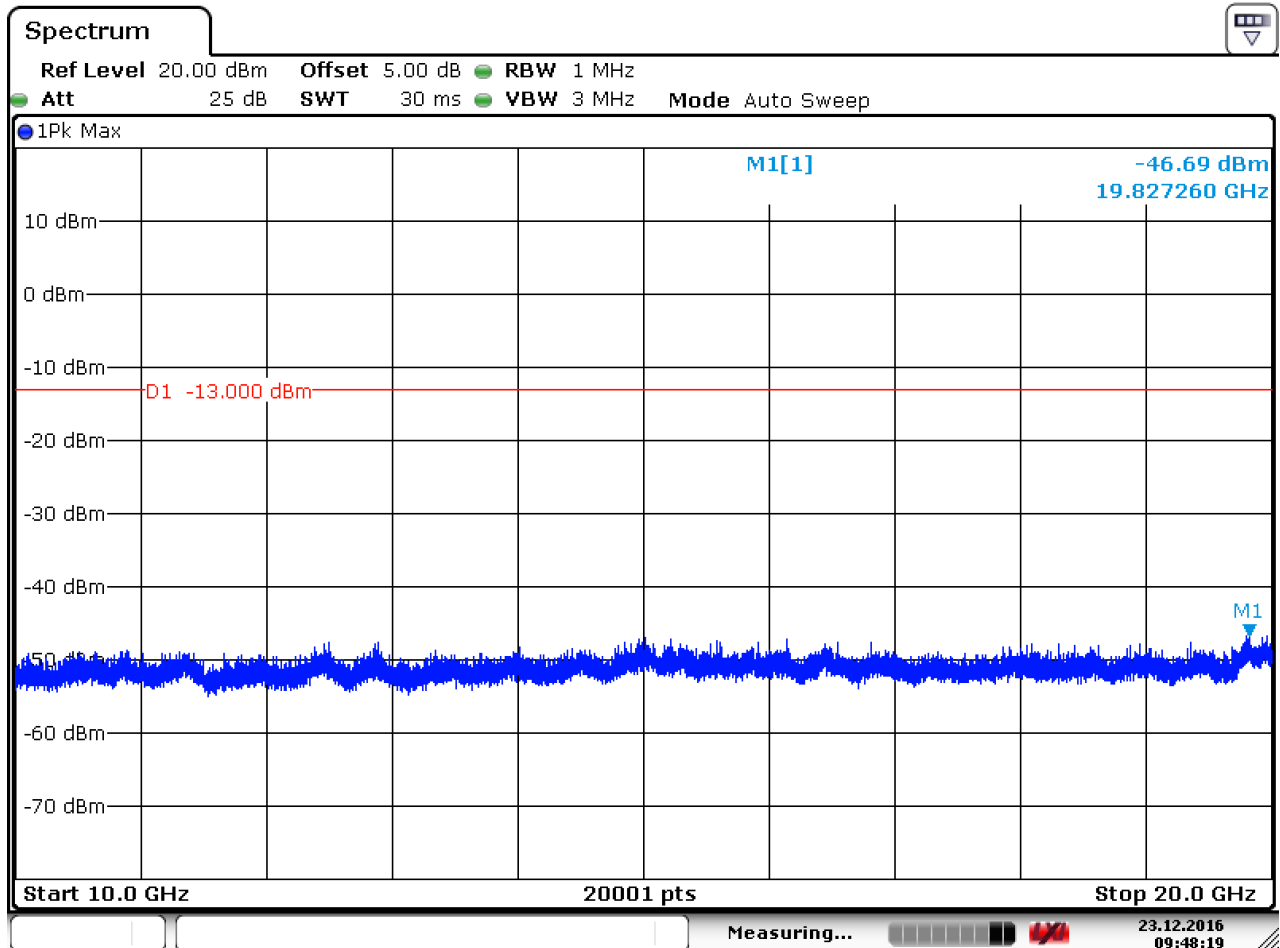
6.1.1.1.2 Test Channel = MCH



Date: 23.DEC.2016 09:01:48



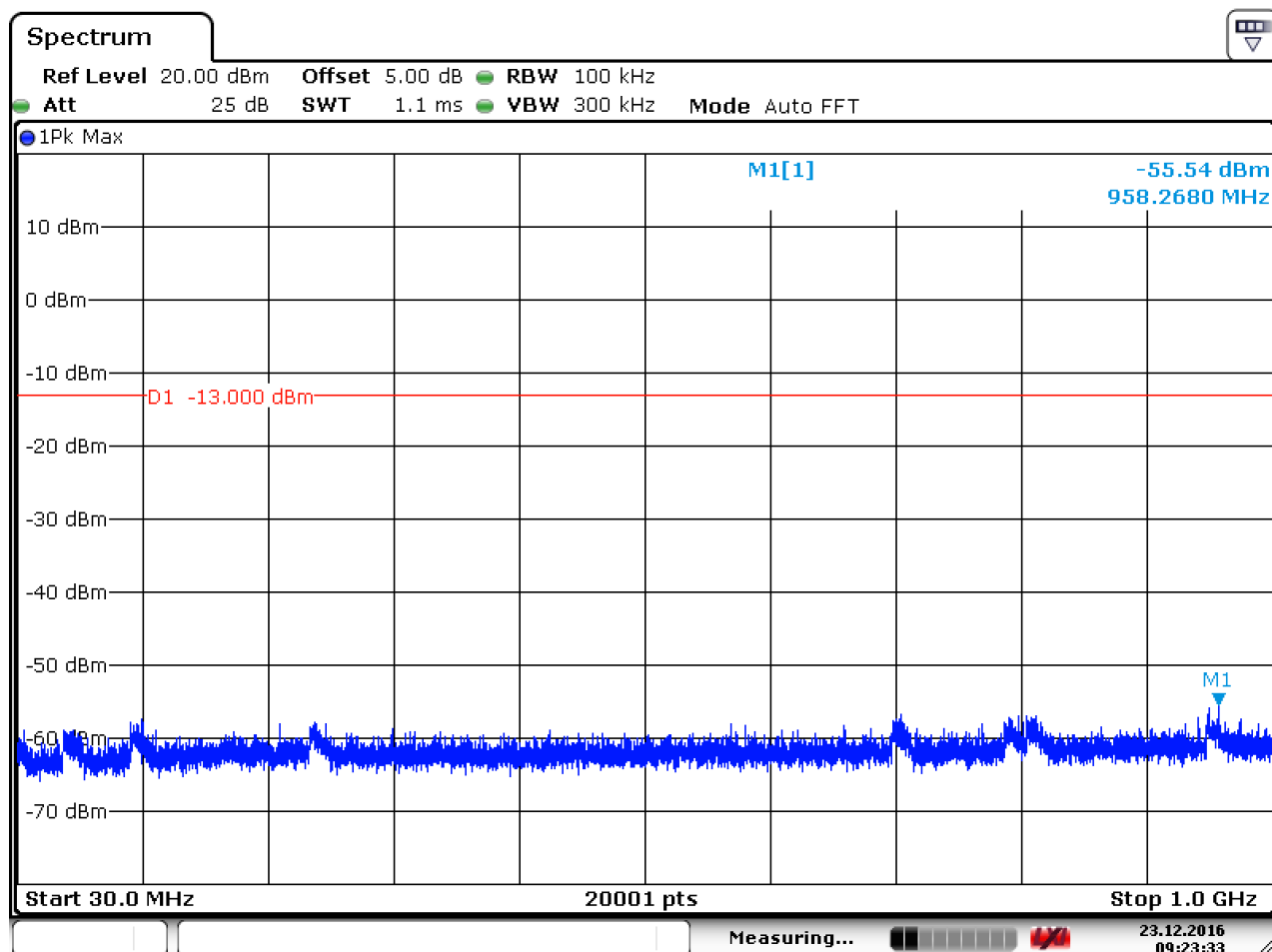
Date: 23.DEC.2016 09:45:36



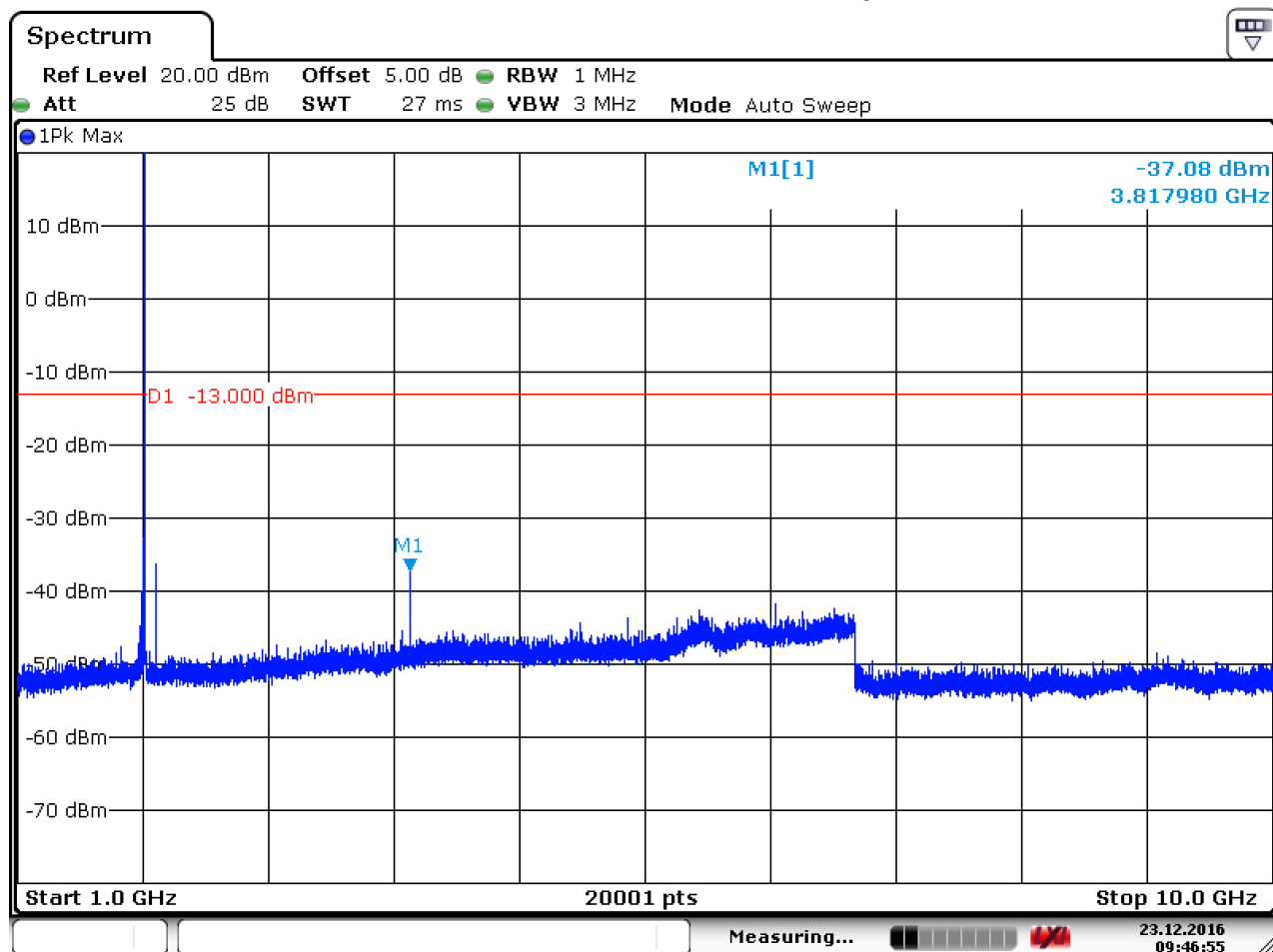
Date: 23.DEC.2016 09:48:19



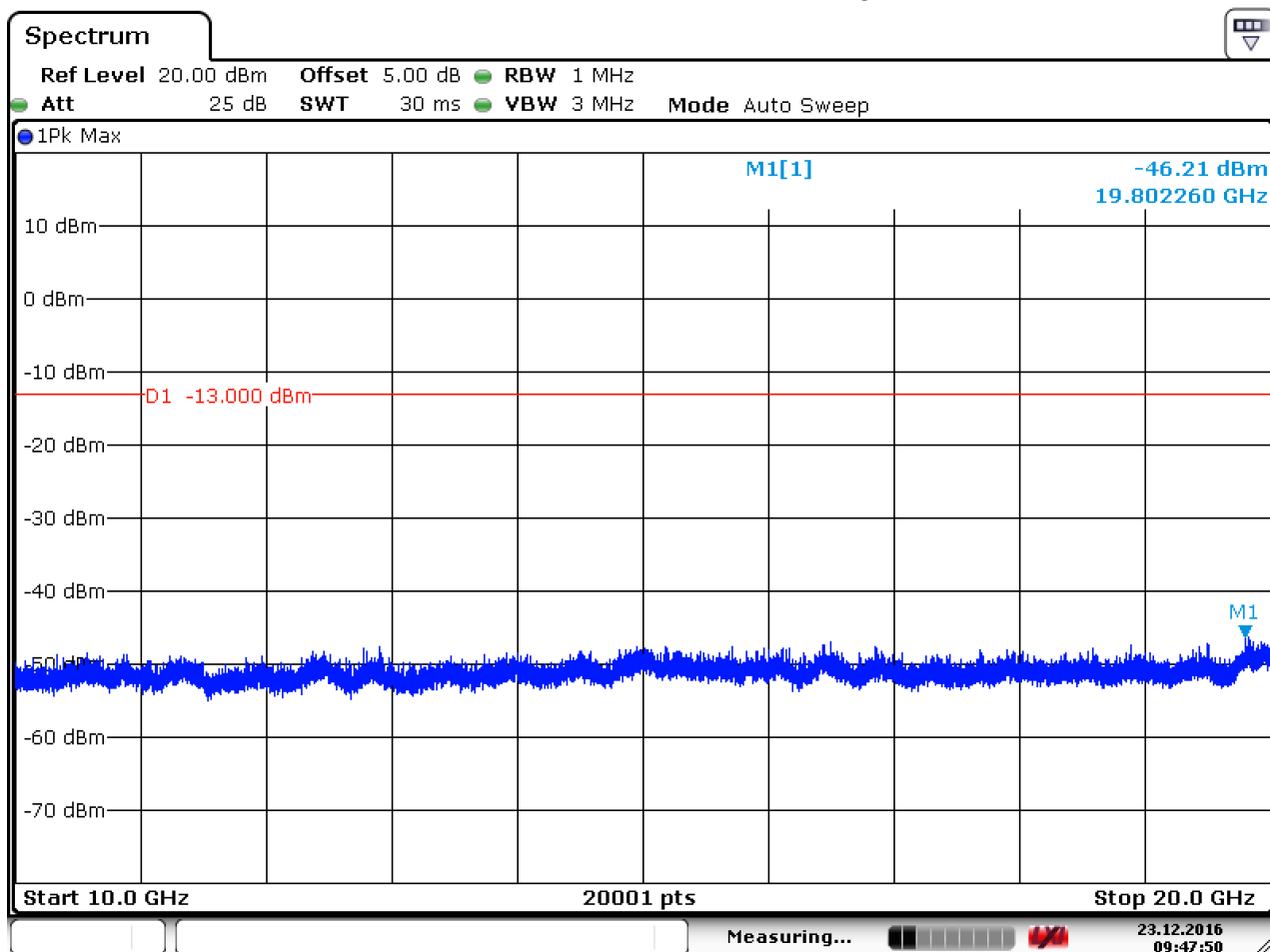
6.1.1.1.3 Test Channel = HCH



Date: 23.DEC.2016 09:23:33



Date: 23.DEC.2016 09:46:55



Date: 23.DEC.2016 09:47:51



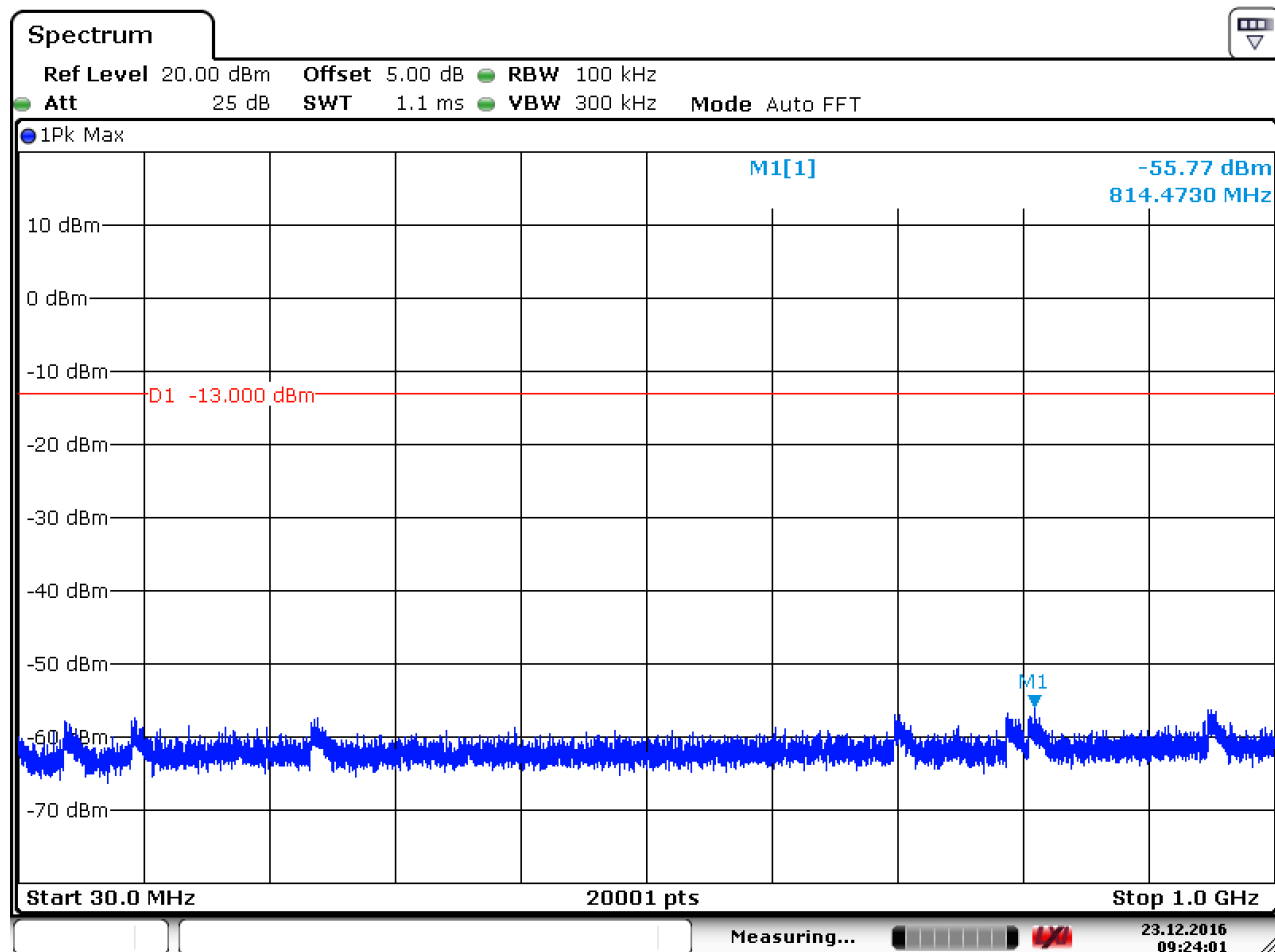
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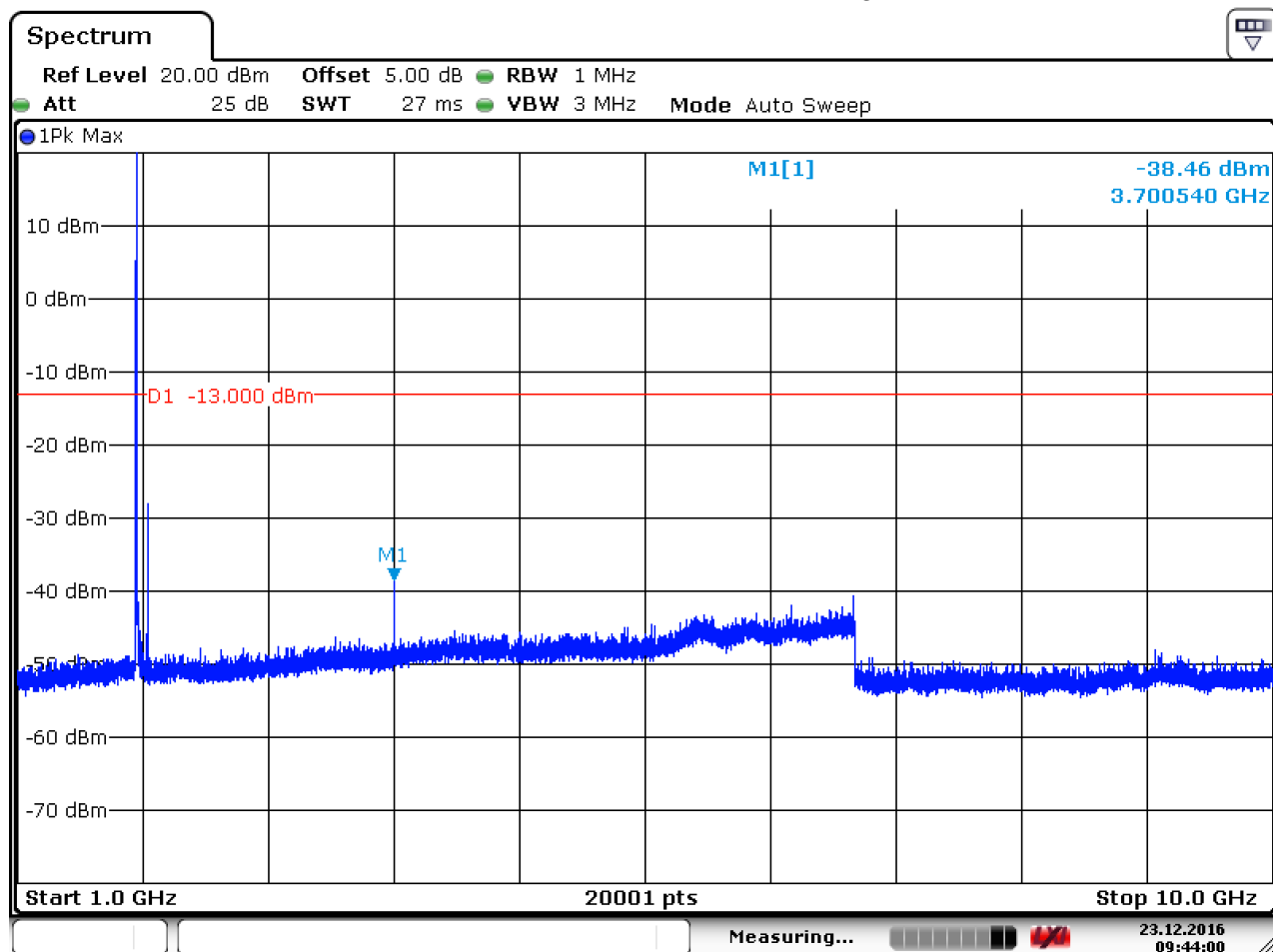
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6.1.1.2 Test Mode = LTE / TM1 3MHz RB1#0

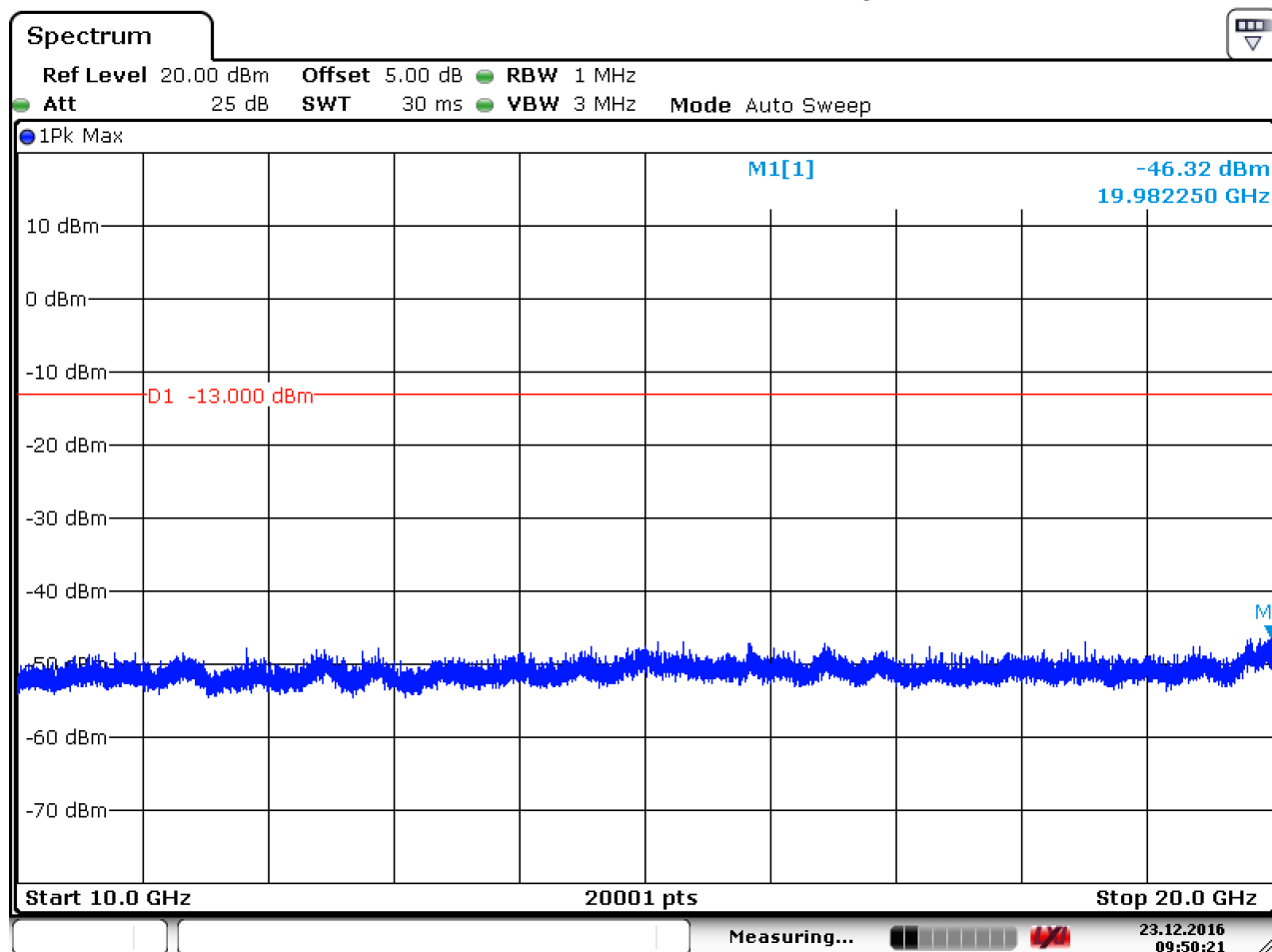
6.1.1.2.1 Test Channel = LCH



Date: 23.DEC.2016 09:24:01



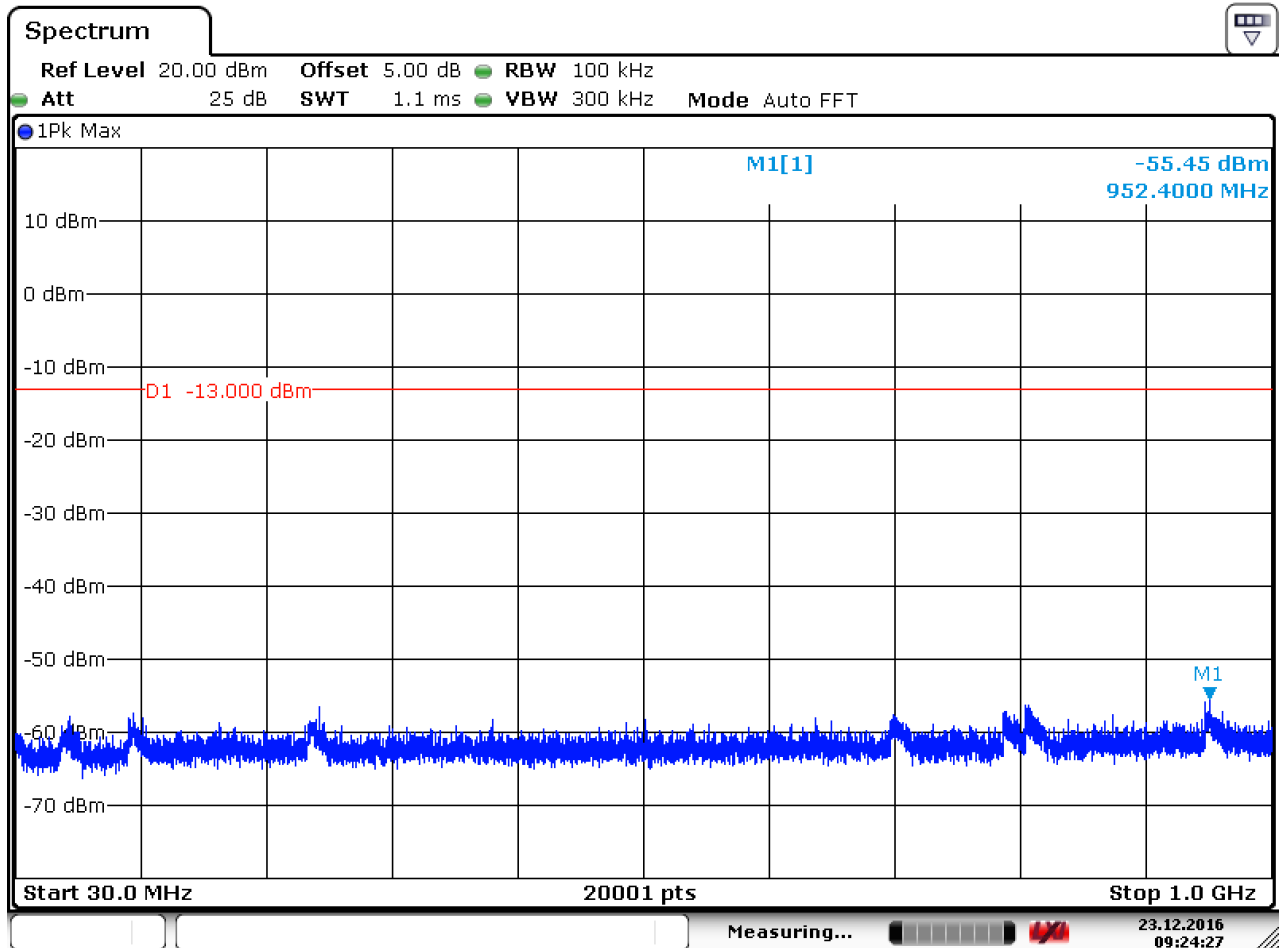
Date: 23.DEC.2016 09:44:00



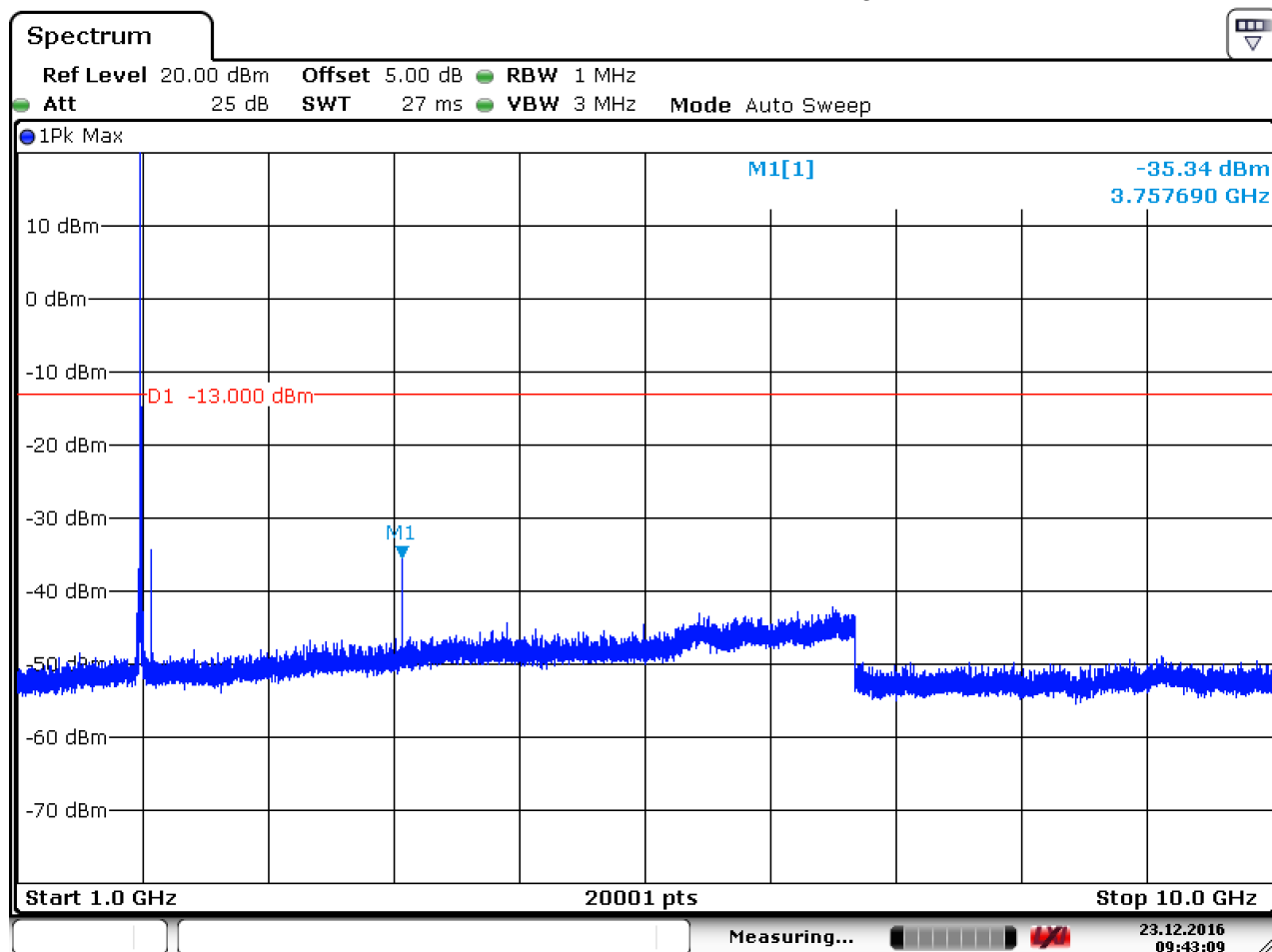
Date: 23.DEC.2016 09:50:21



6.1.1.2.2 Test Channel = MCH



Date: 23.DEC.2016 09:24:28

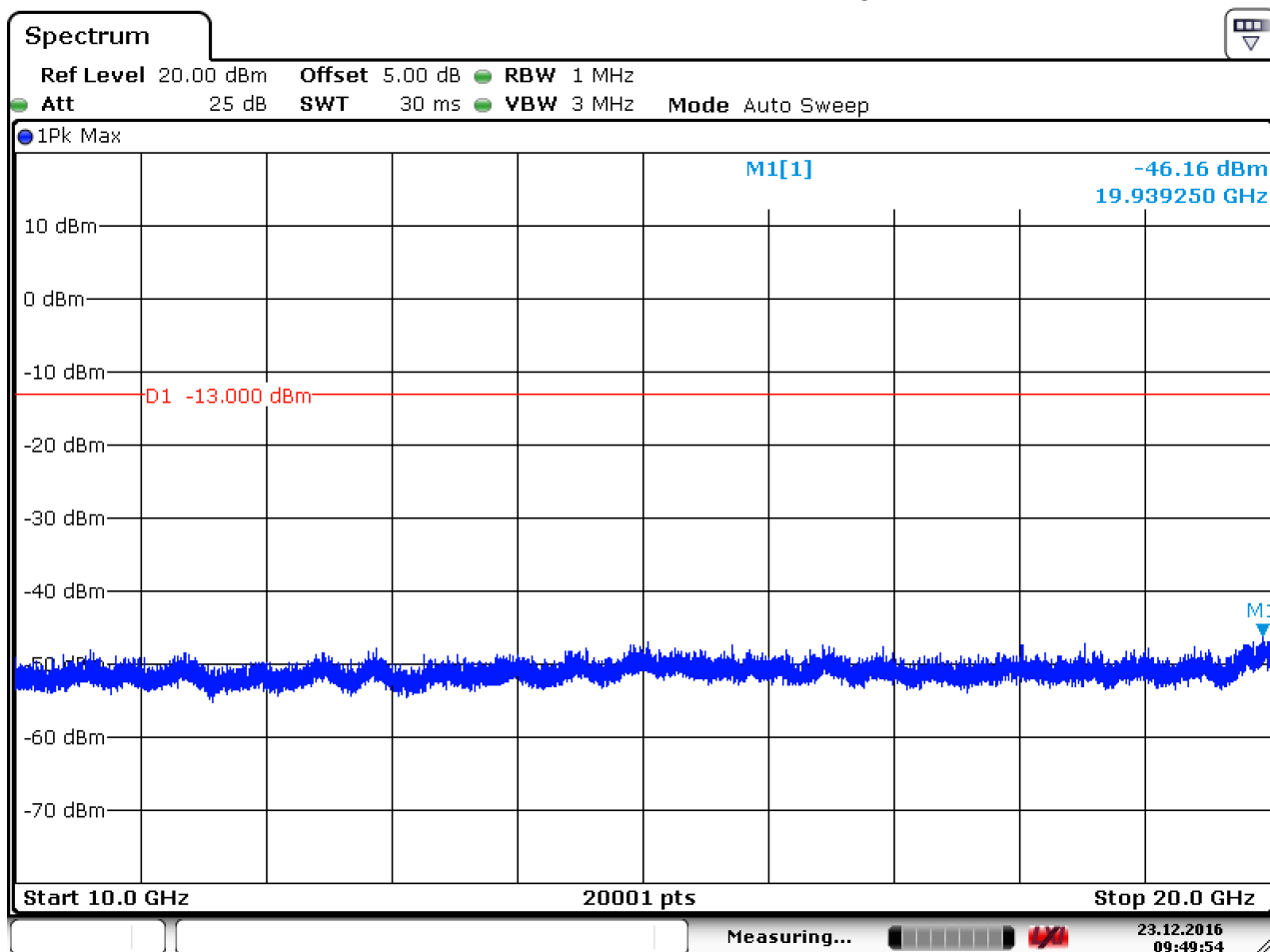


Date: 23.DEC.2016 09:43:08



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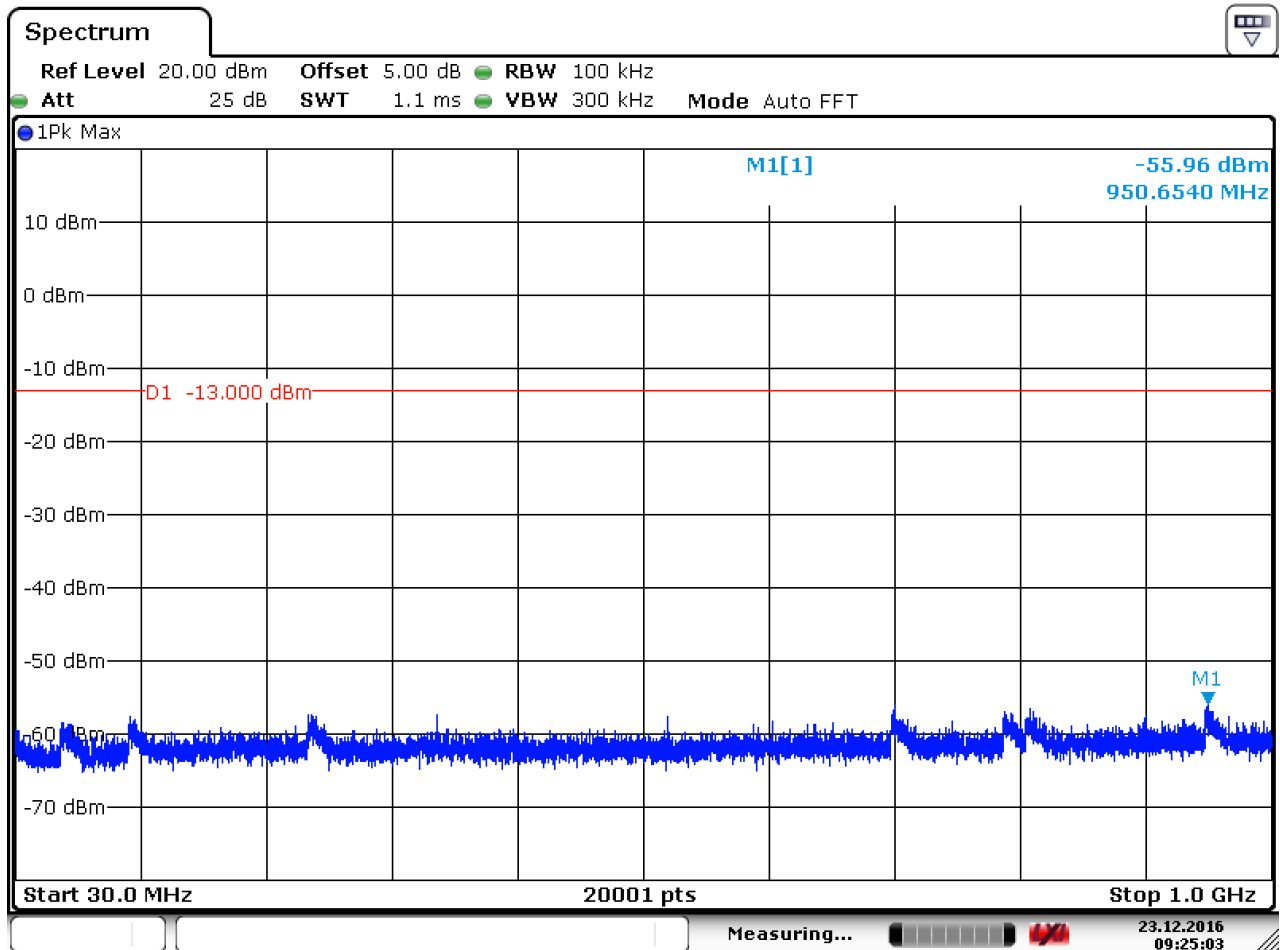
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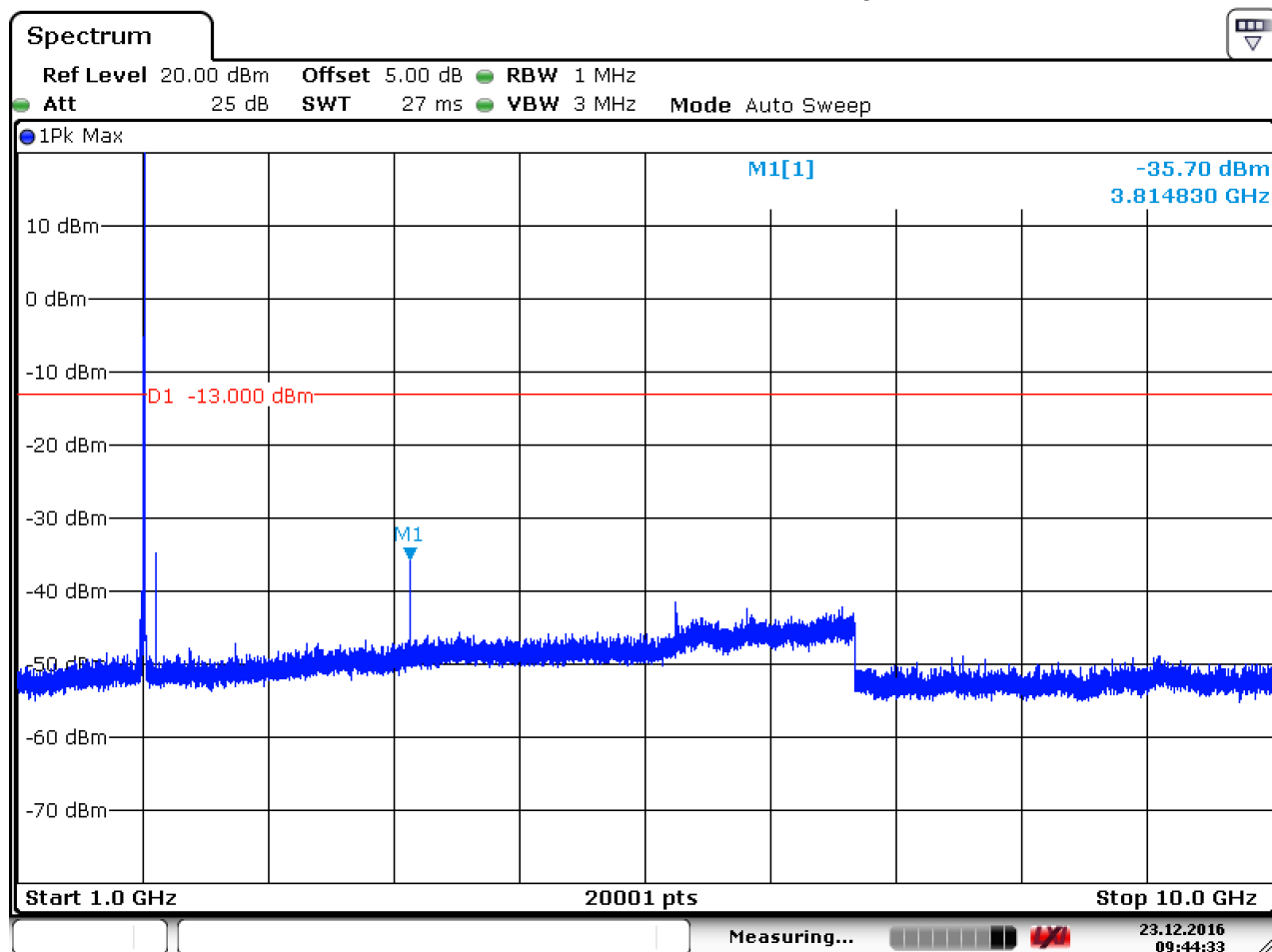
Date: 23.DEC.2016 09:49:55



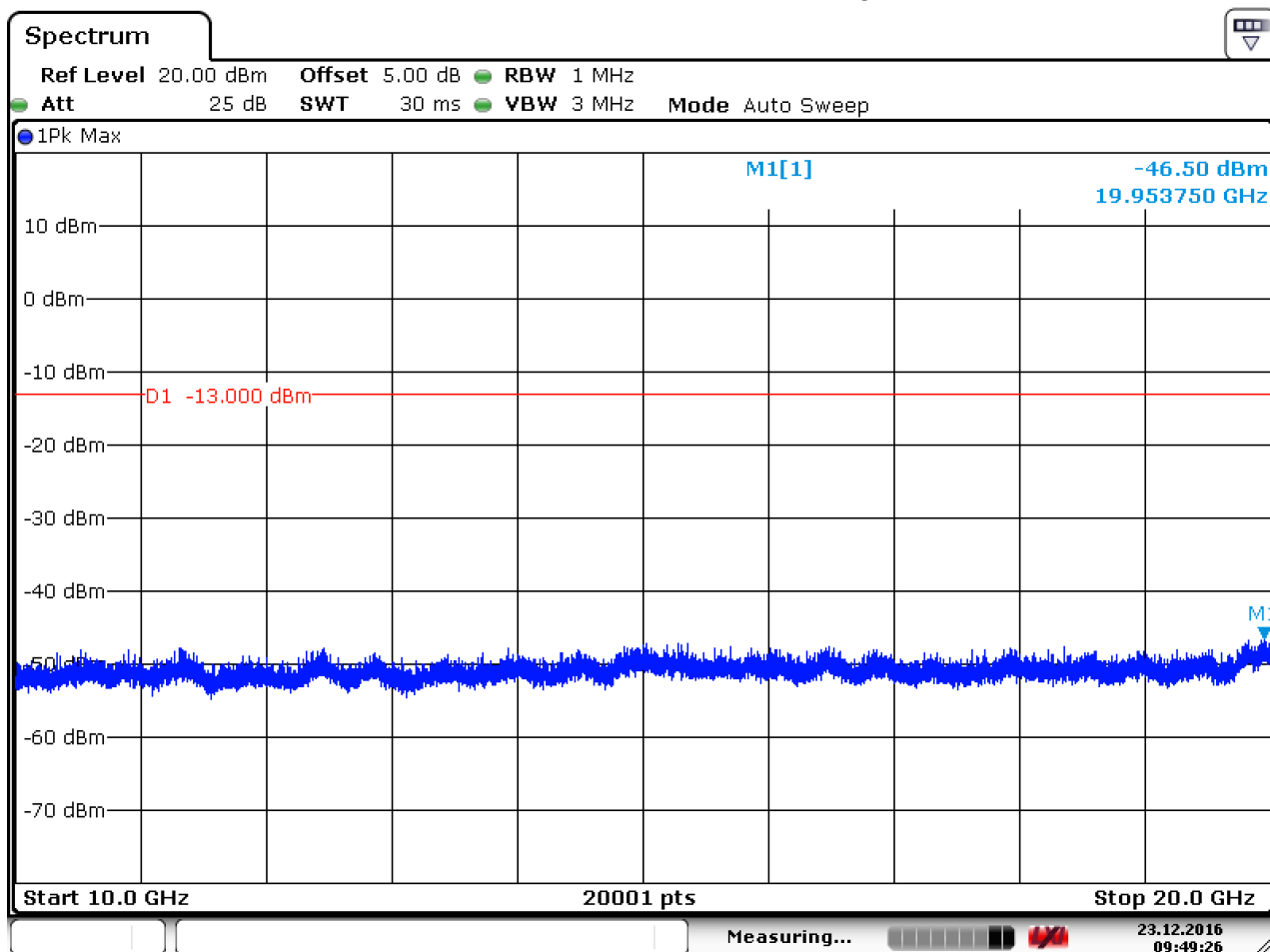
6.1.1.2.3 Test Channel = HCH



Date: 23.DEC.2016 09:25:03



Date: 23.DEC.2016 09:44:34

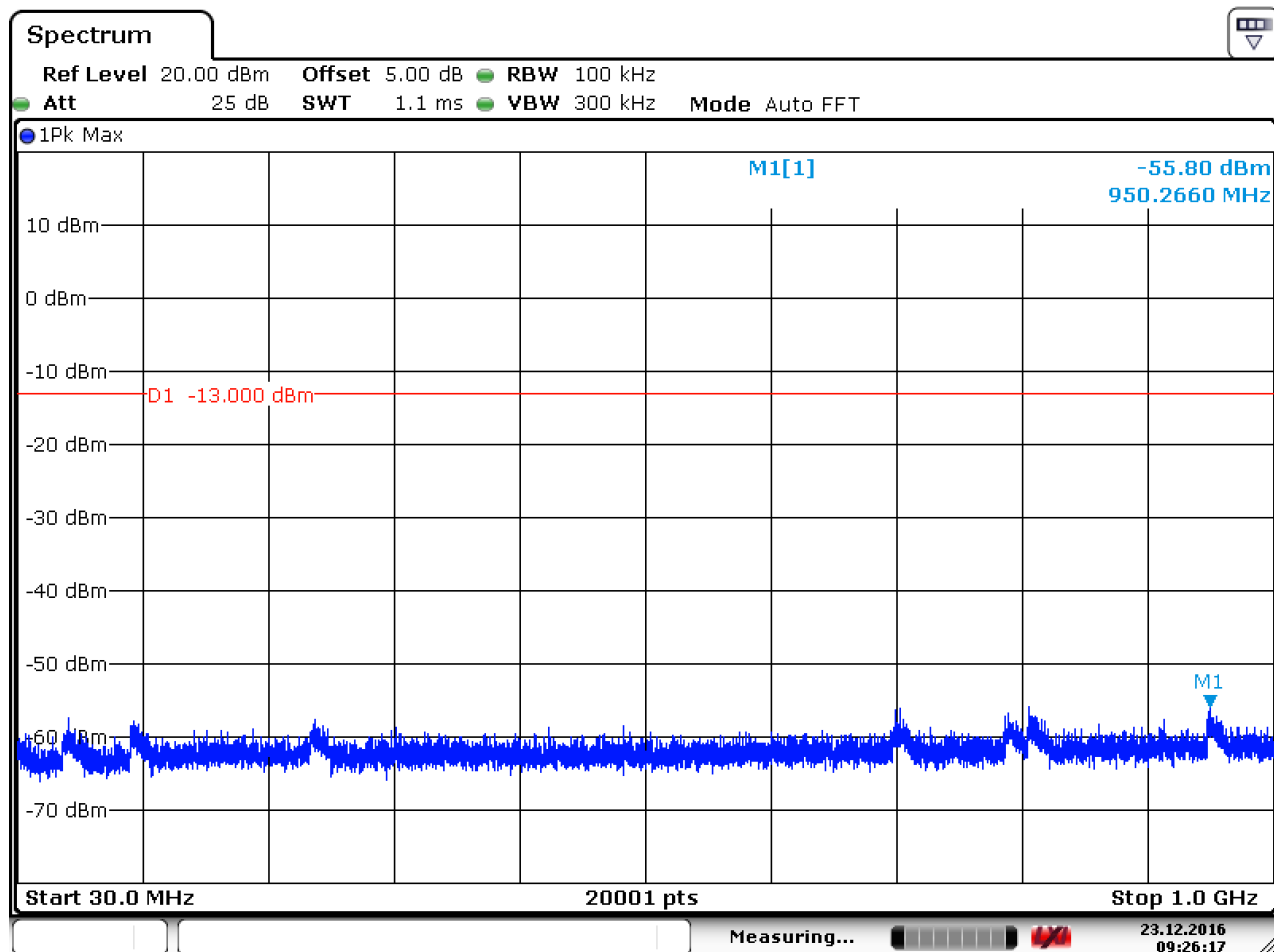


Date: 23.DEC.2016 09:49:26



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

6.1.1.3.1 Test Channel = LCH



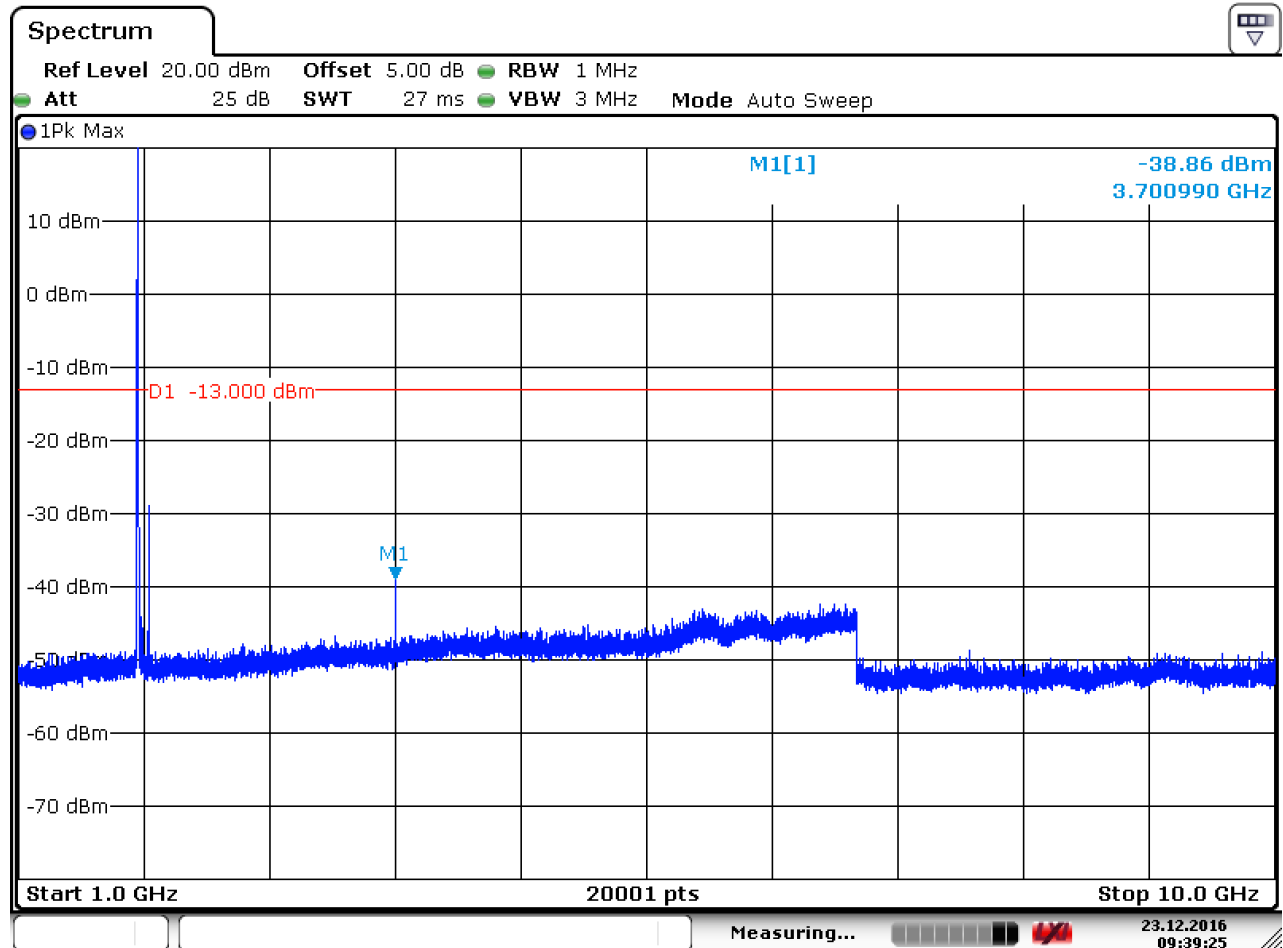
Date: 23.DEC.2016 09:26:16



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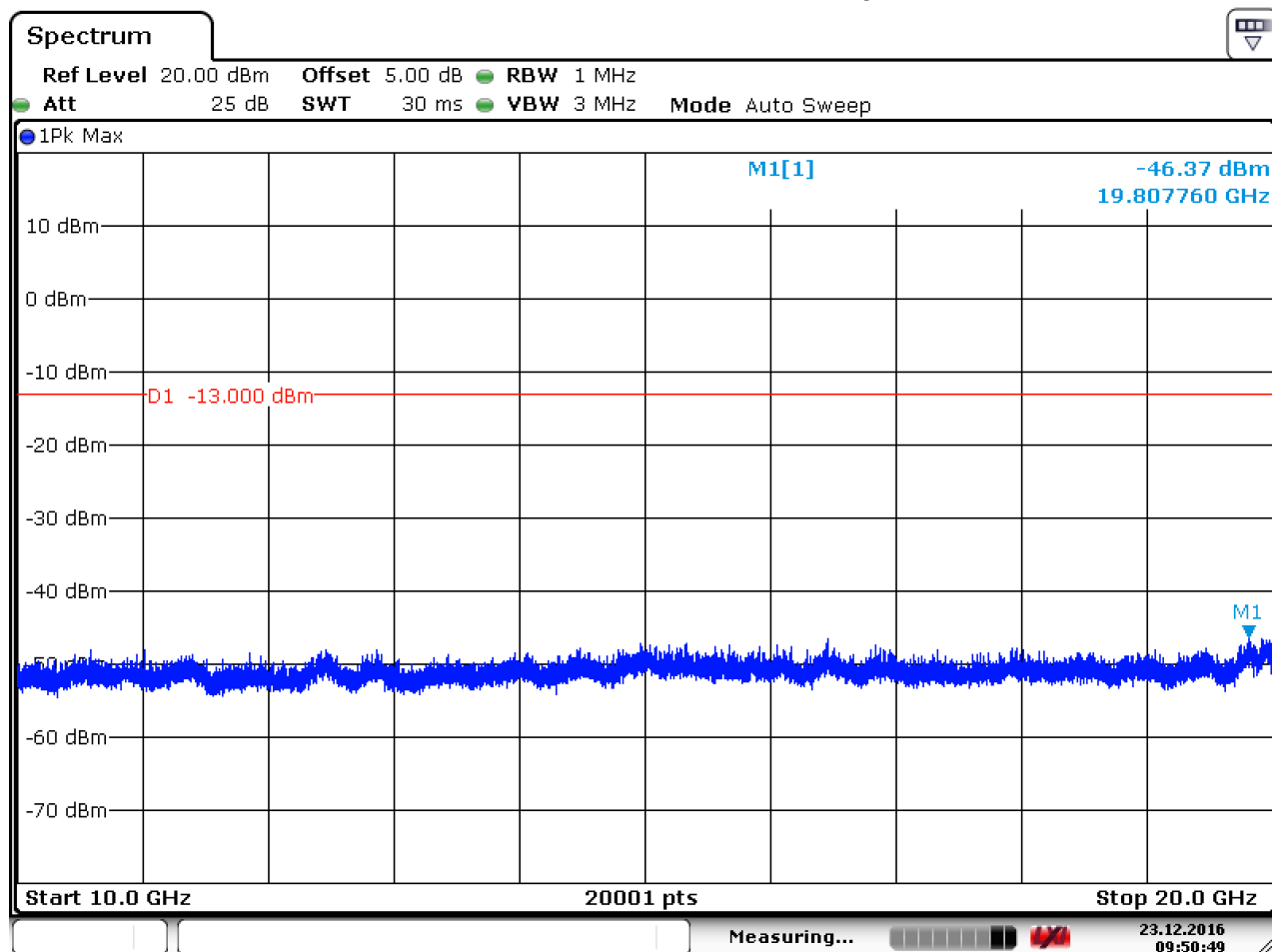


Date: 23.DEC.2016 09:39:25



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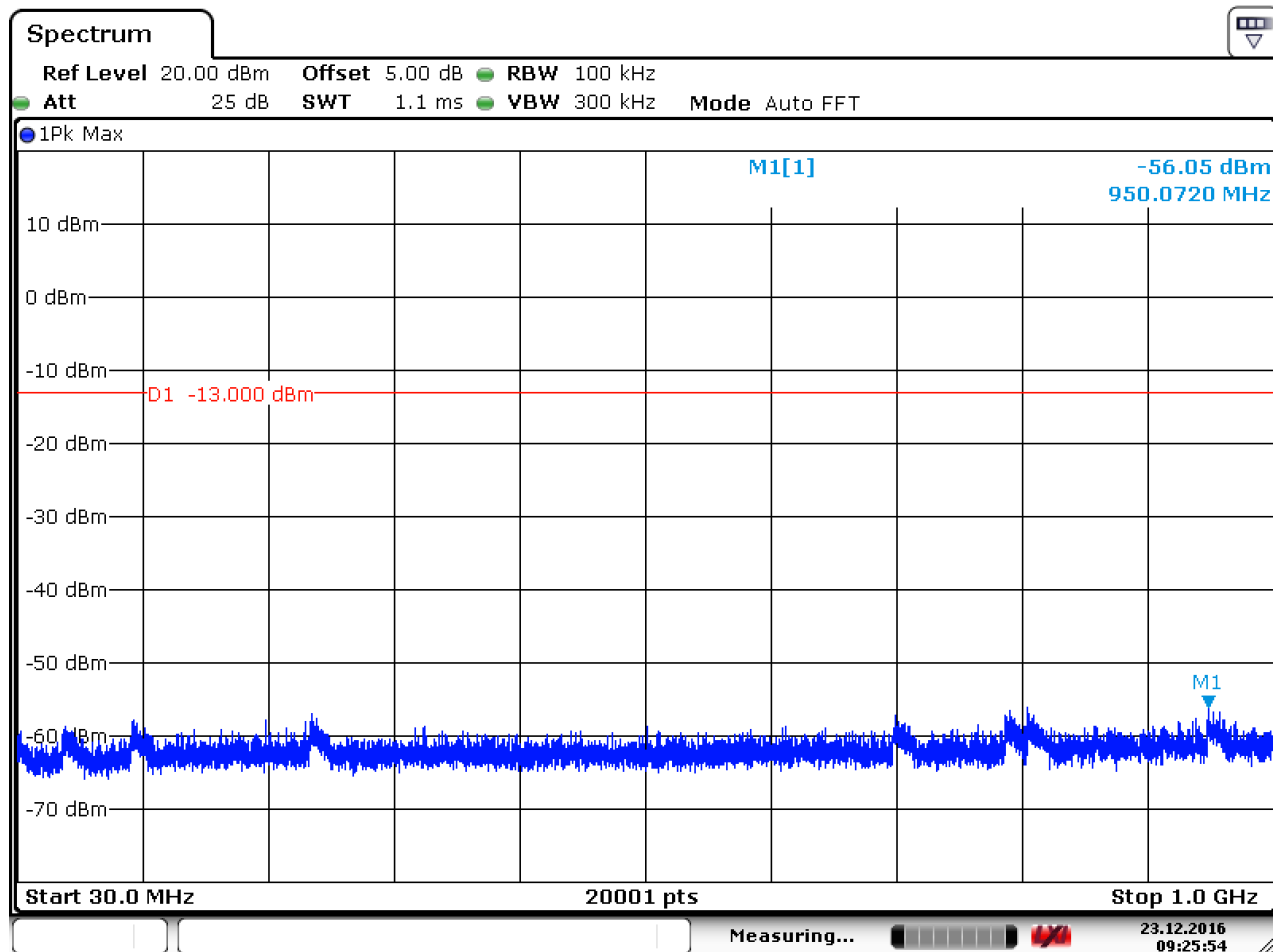
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Date: 23.DEC.2016 09:50:49



6.1.1.3.2 Test Channel = MCH

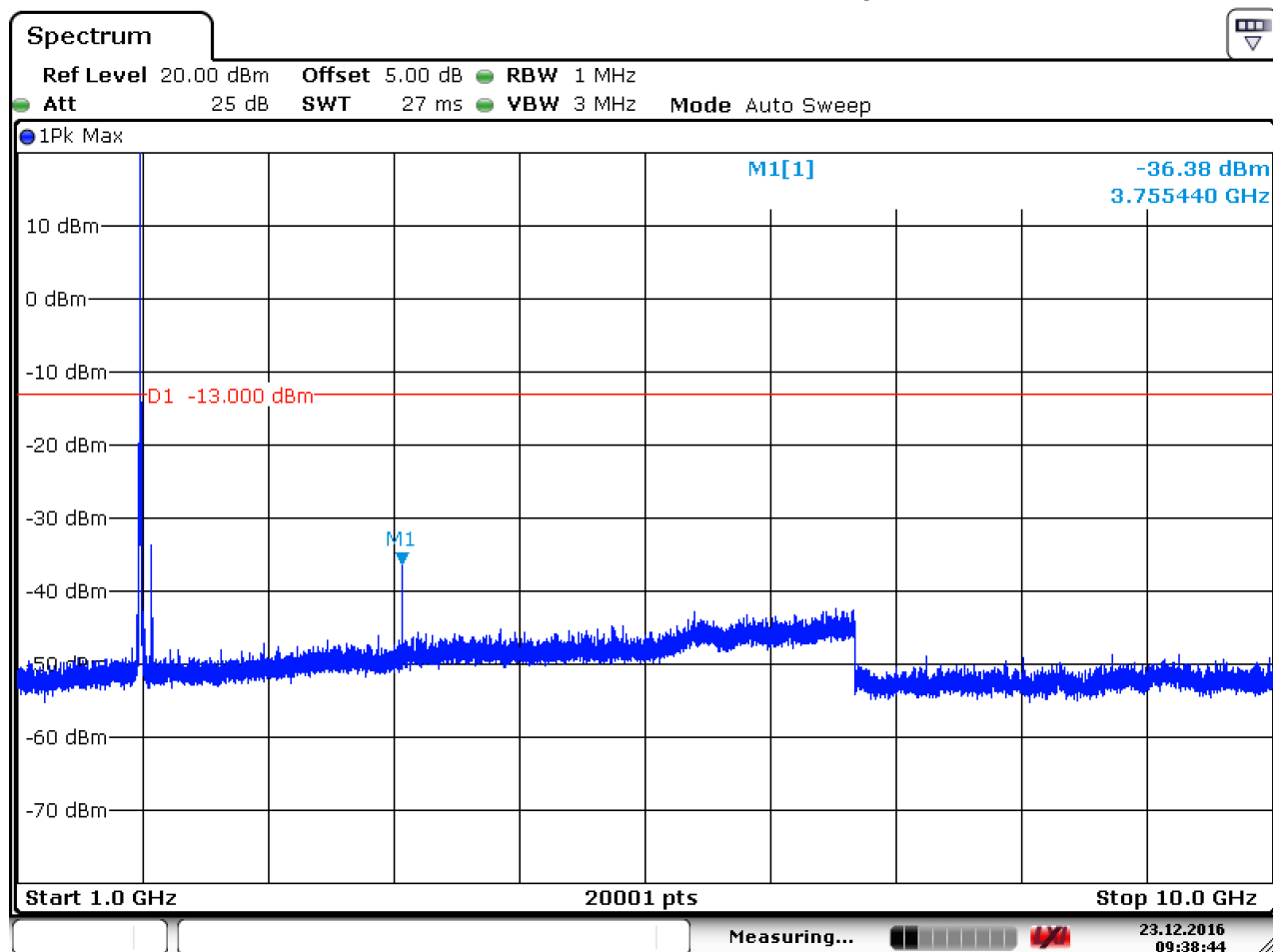


Date: 23.DEC.2016 09:25:55

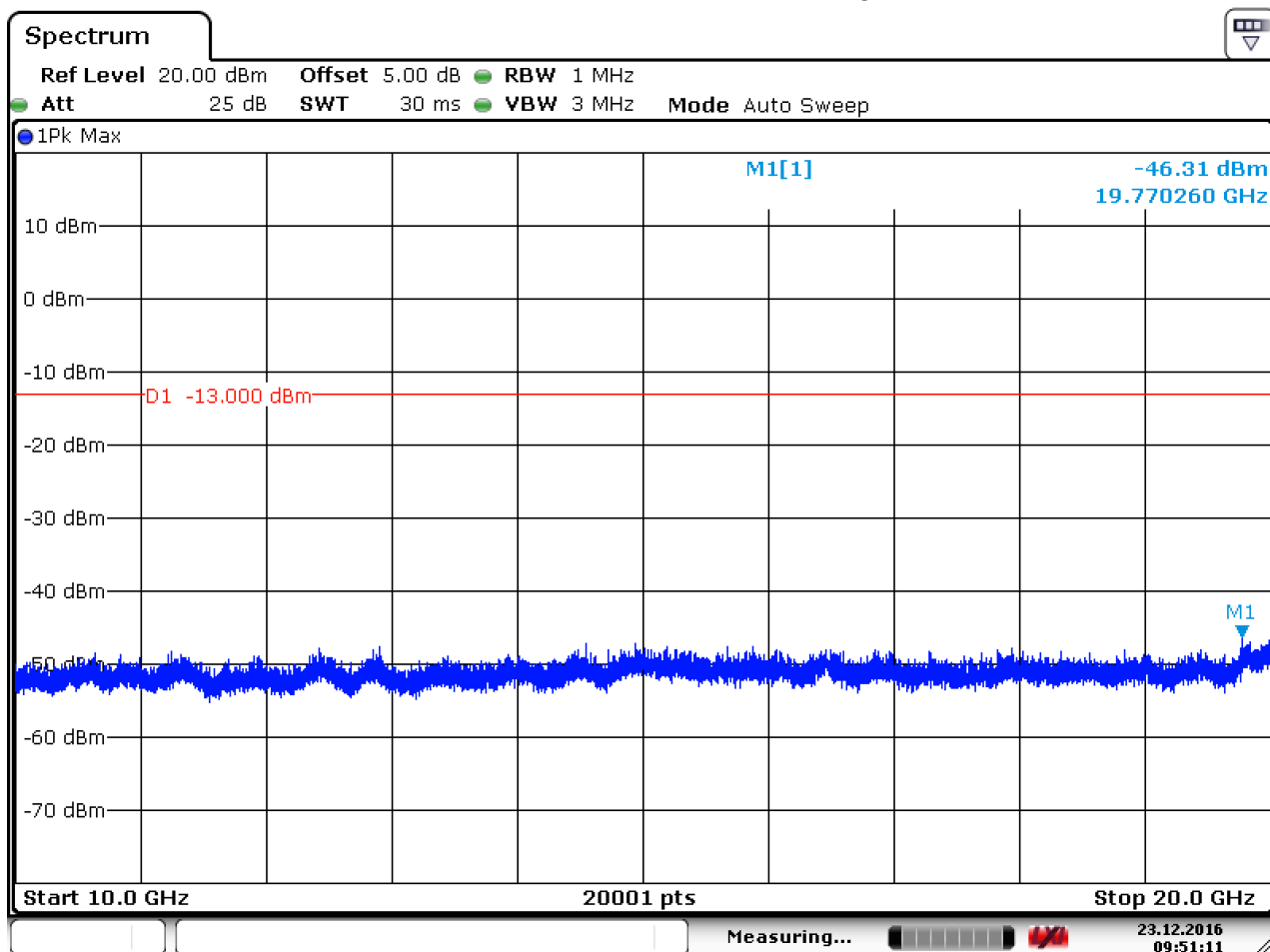


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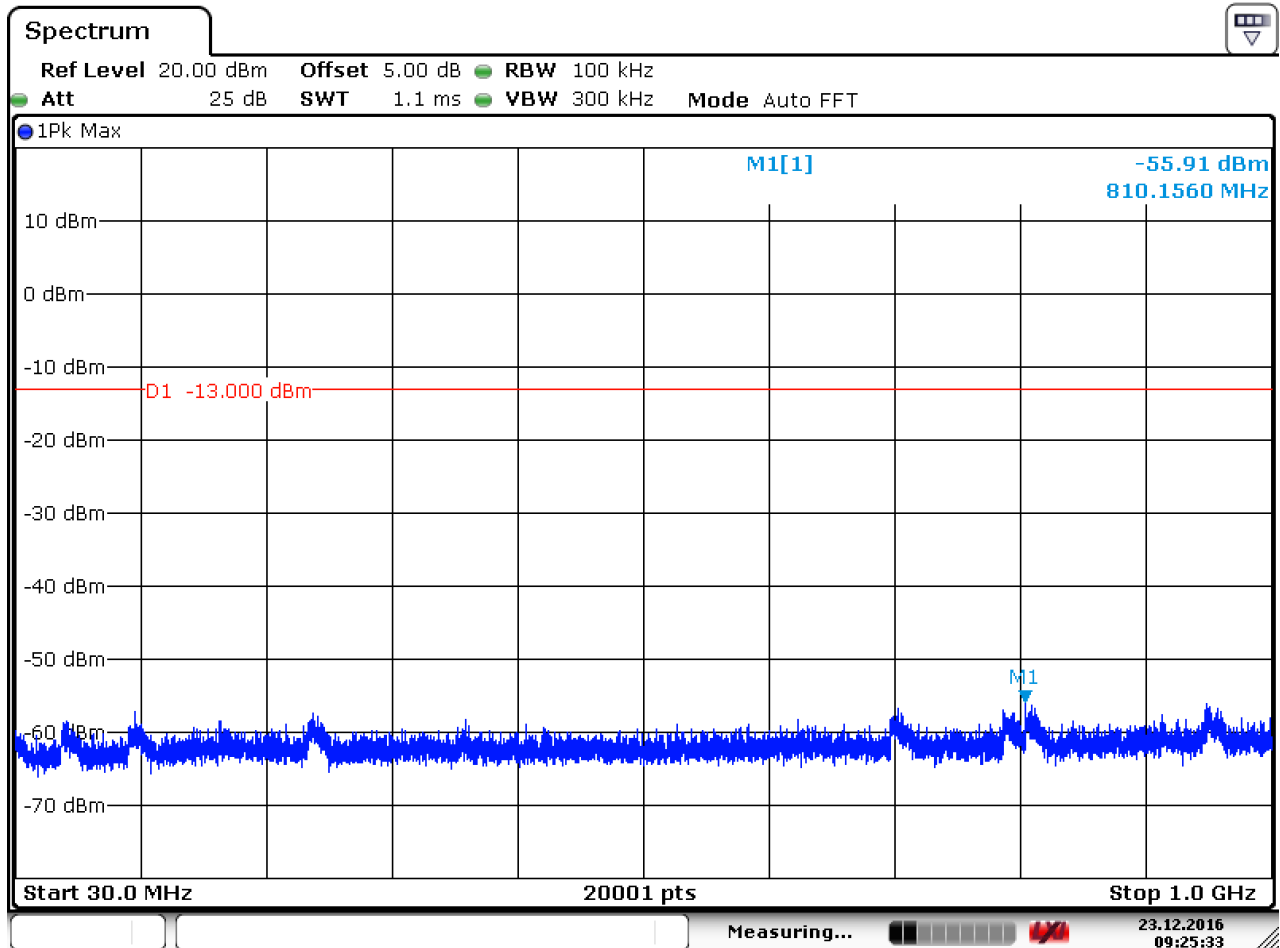
Date: 23.DEC.2016 09:38:44



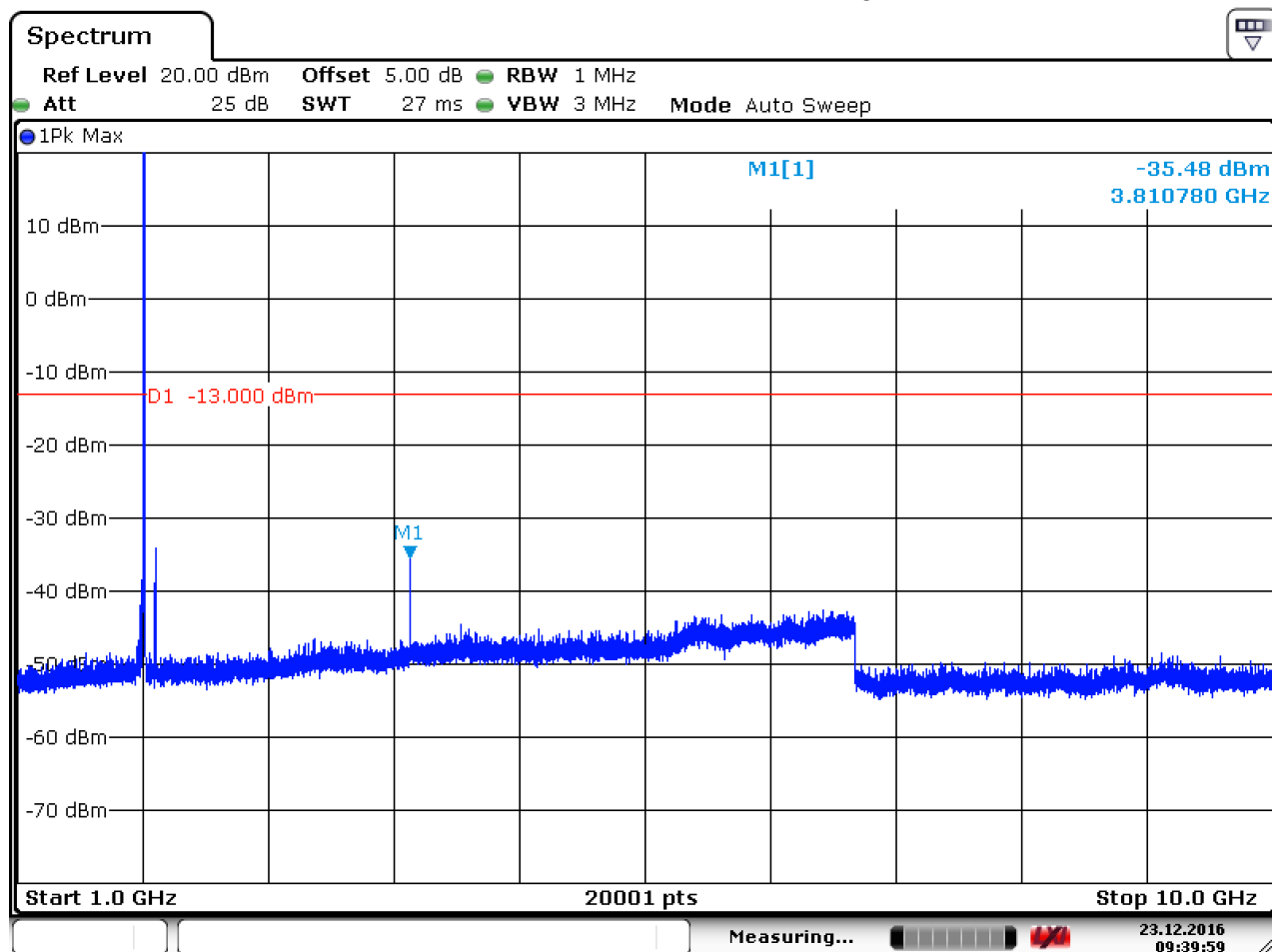
Date: 23.DEC.2016 09:51:11



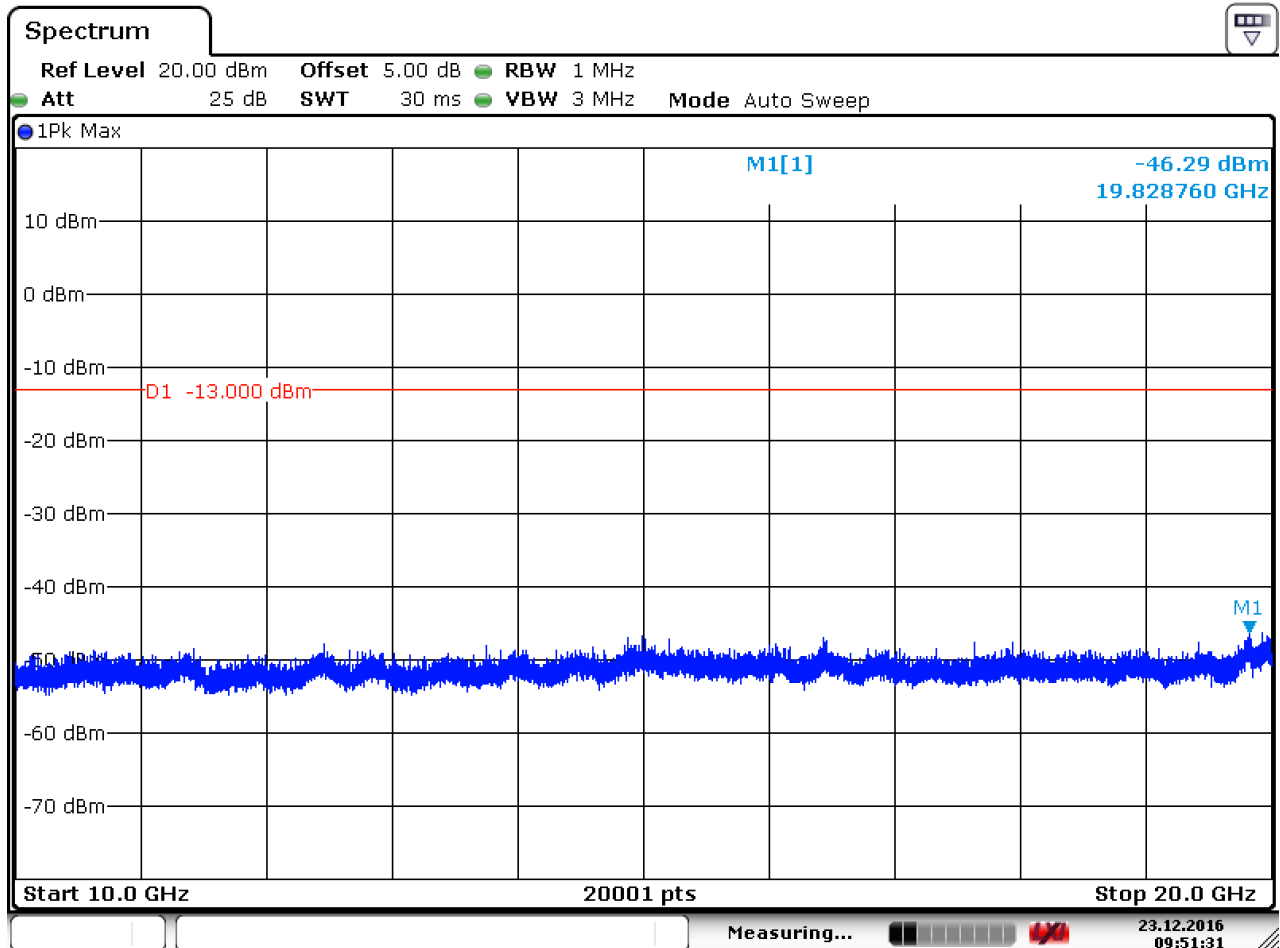
6.1.1.3.3 Test Channel = HCH



Date: 23.DEC.2016 09:25:33



Date: 23.DEC.2016 09:40:00

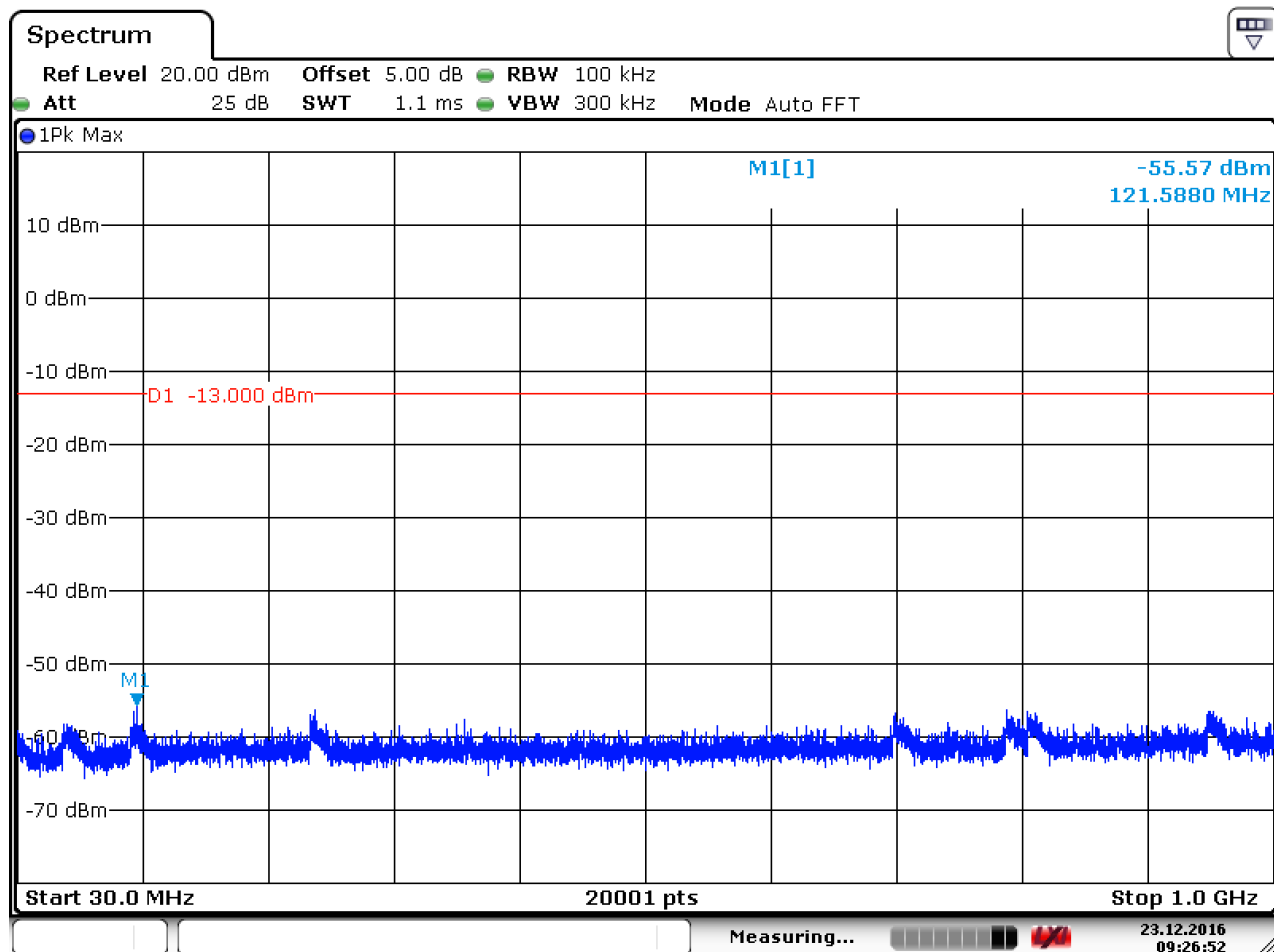


Date: 23.DEC.2016 09:51:31

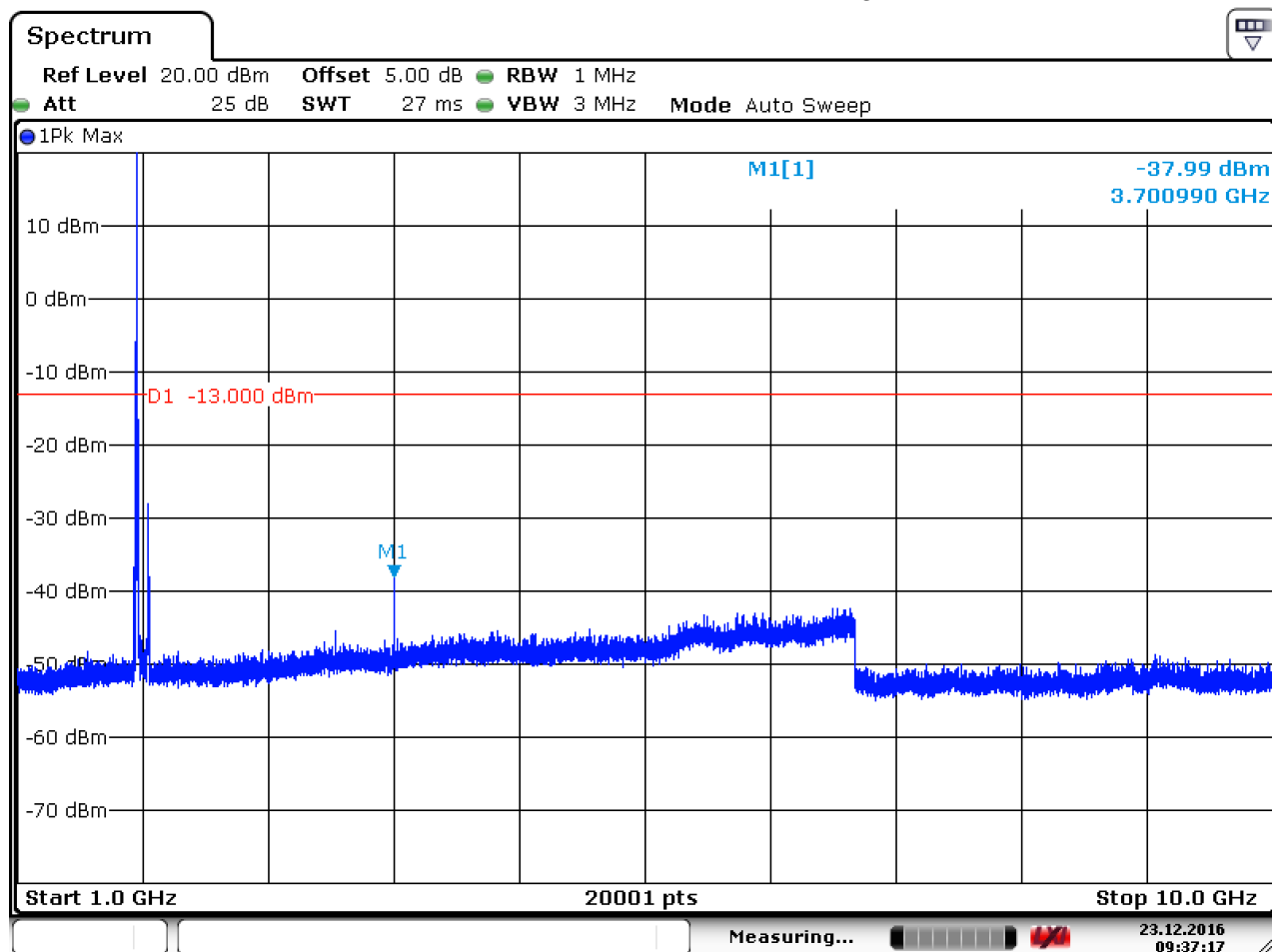


6.1.1.4 Test Mode = LTE / TM1 10MHz RB1#0

6.1.1.4.1 Test Channel = LCH



Date: 23.DEC.2016 09:26:53

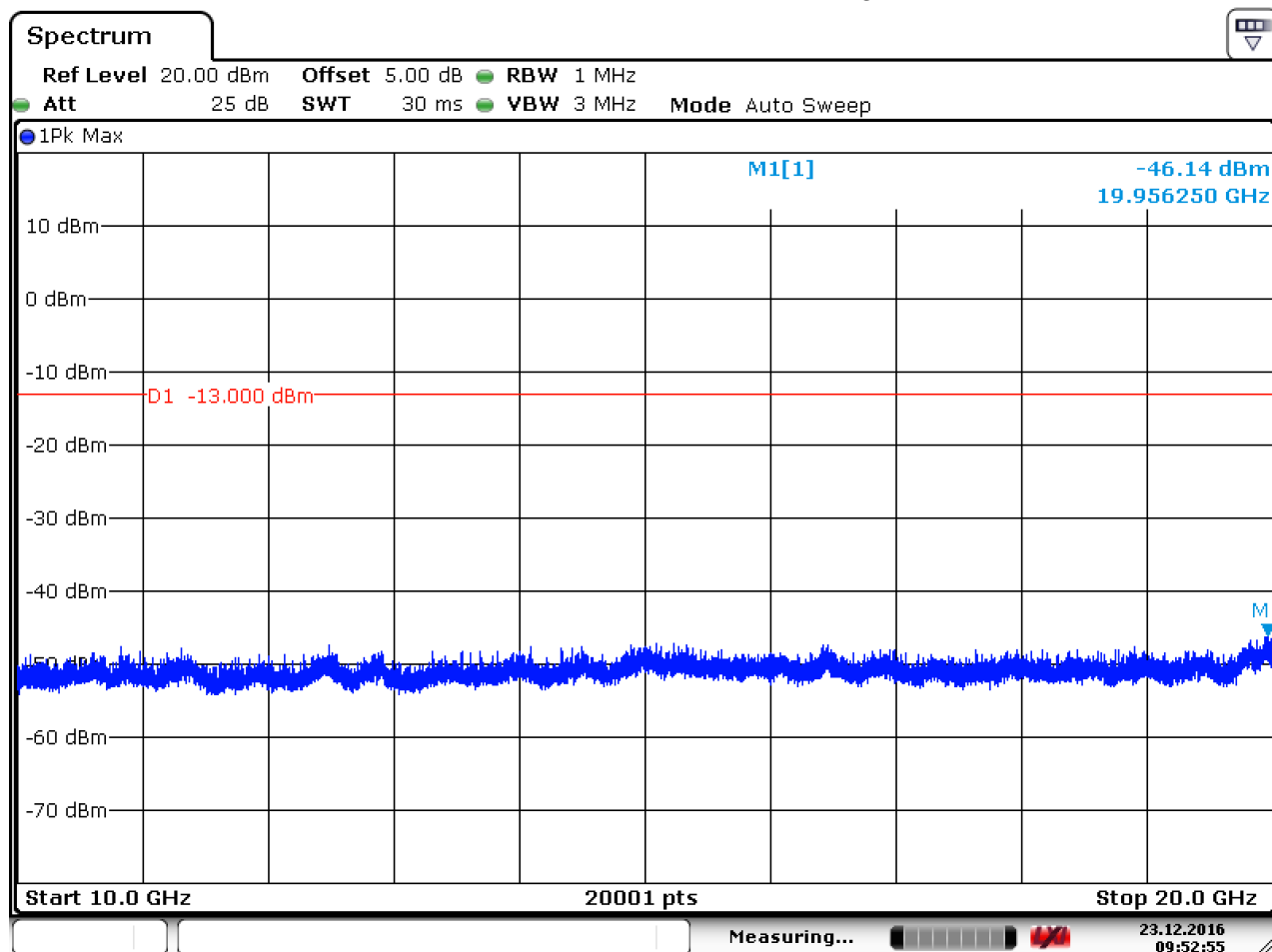


Date: 23.DEC.2016 09:37:17



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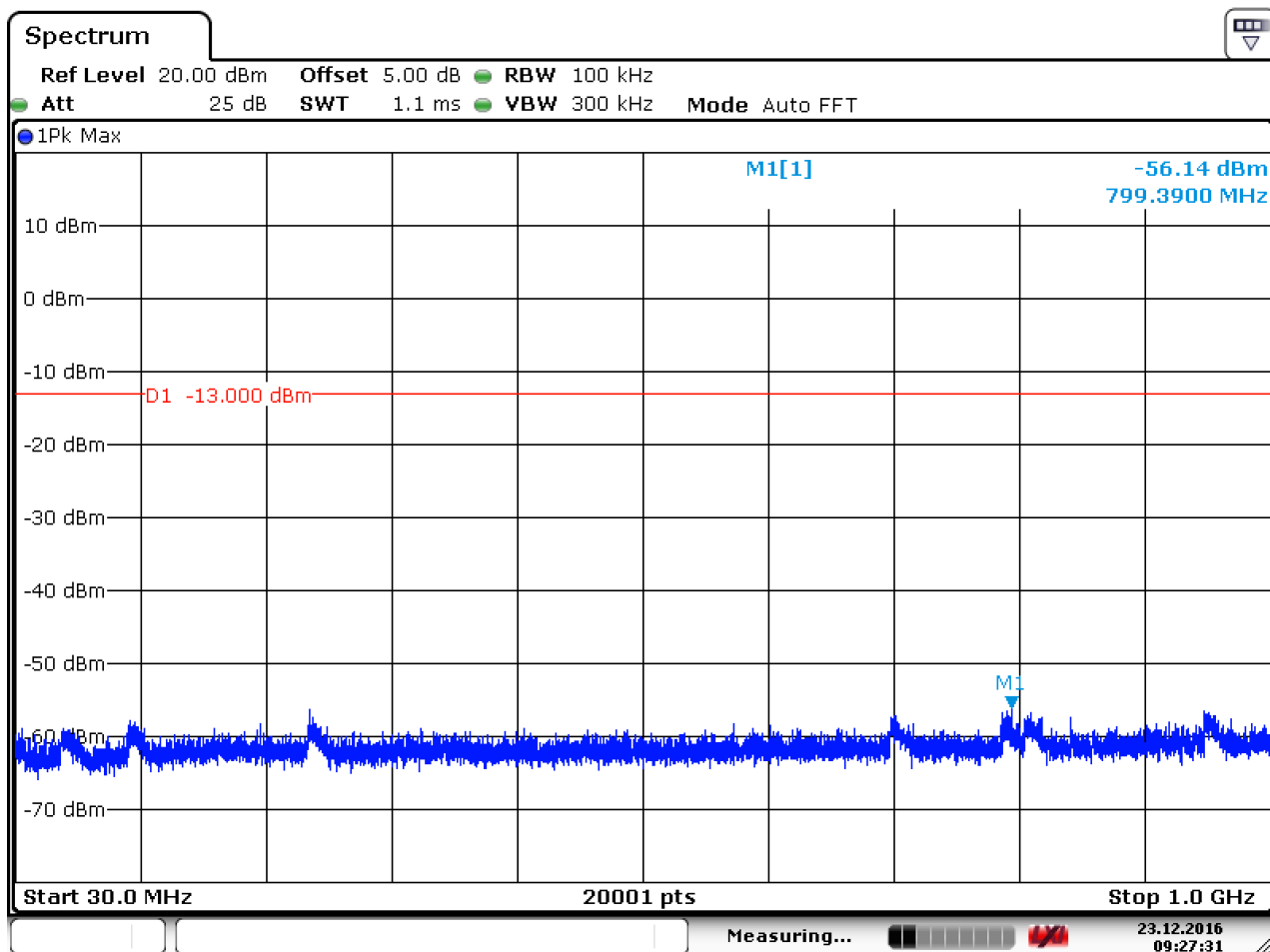
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6.1.1.4.2 Test Channel = MCH

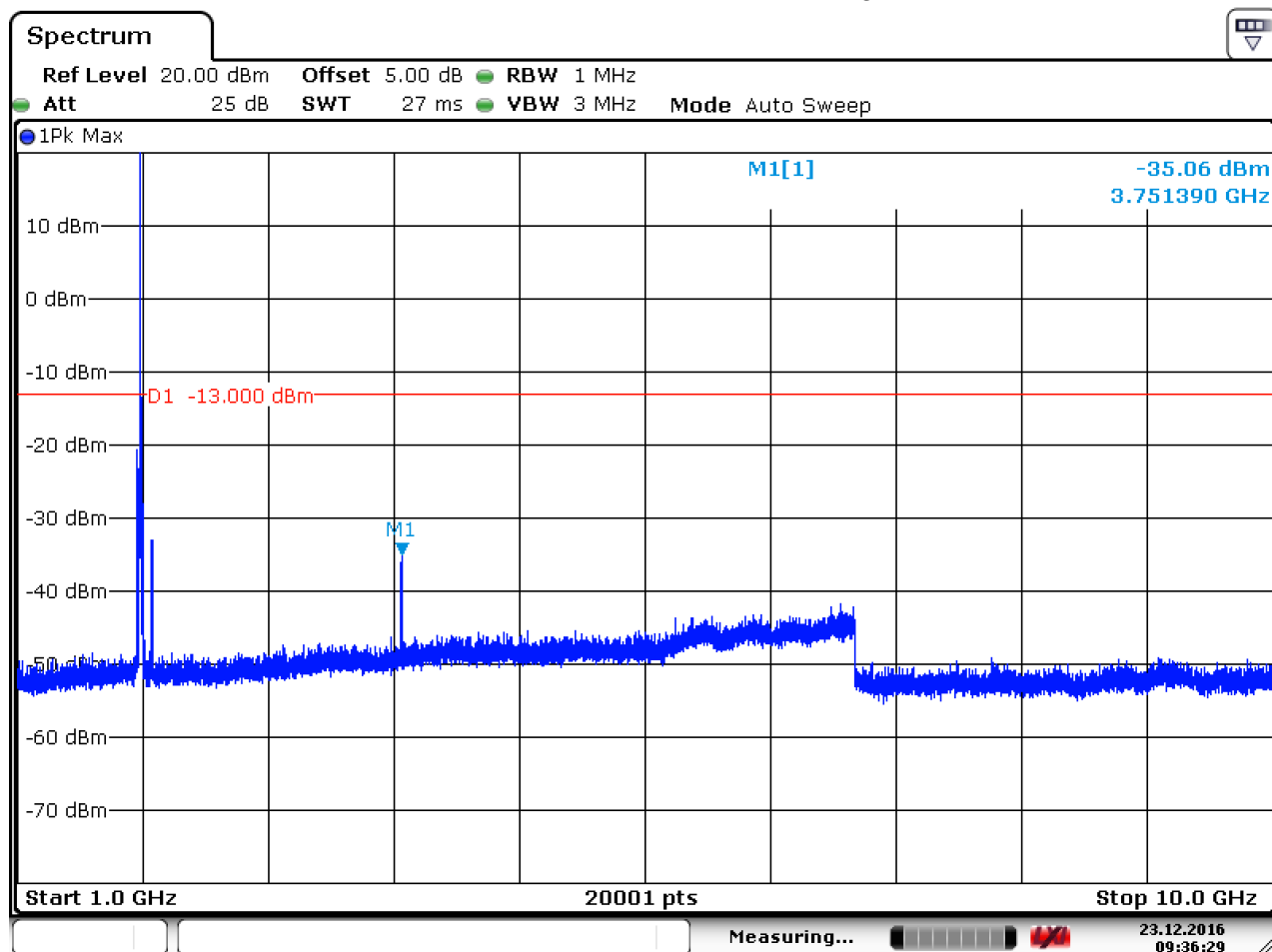


Date: 23.DEC.2016 09:27:31

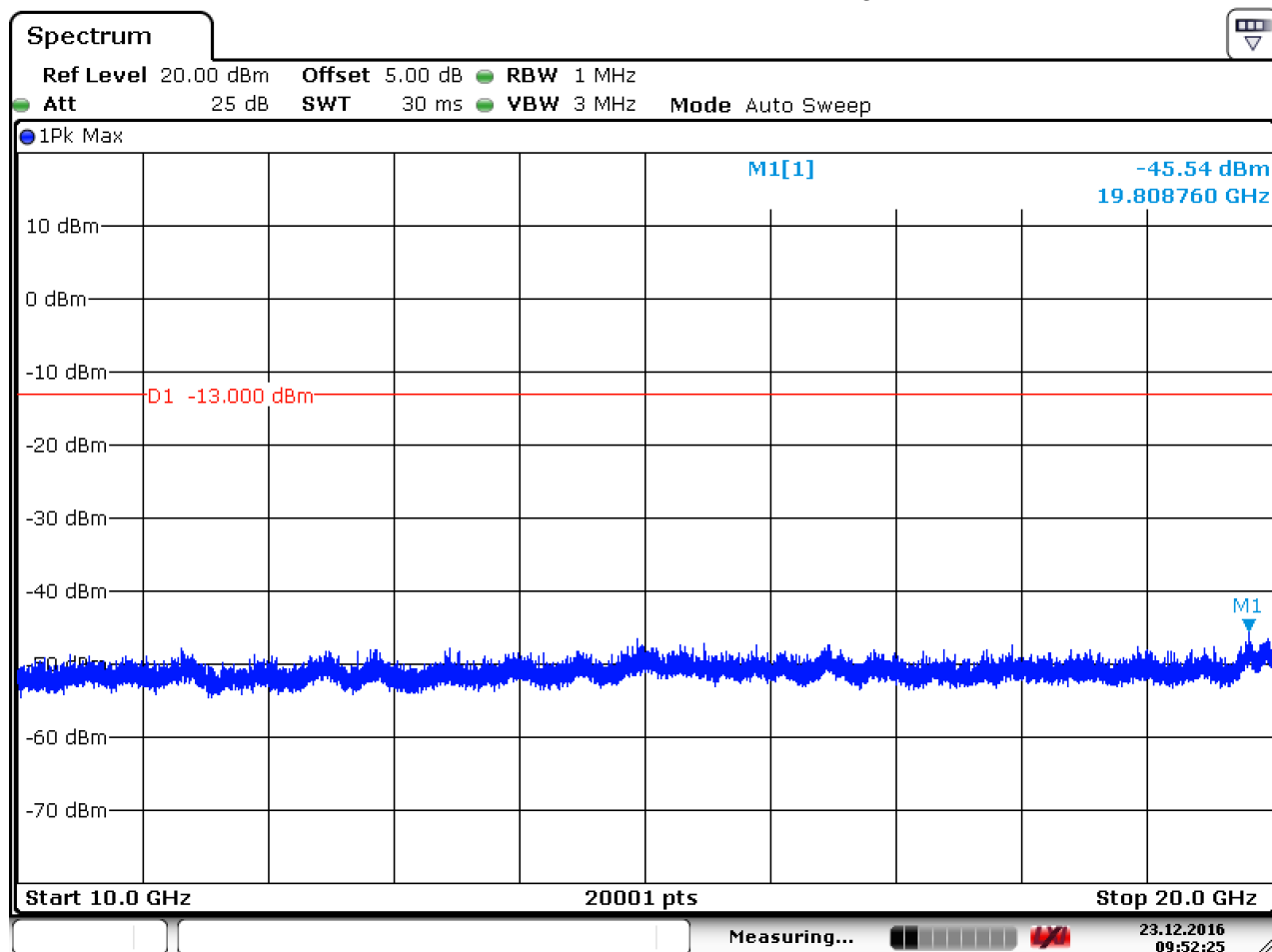


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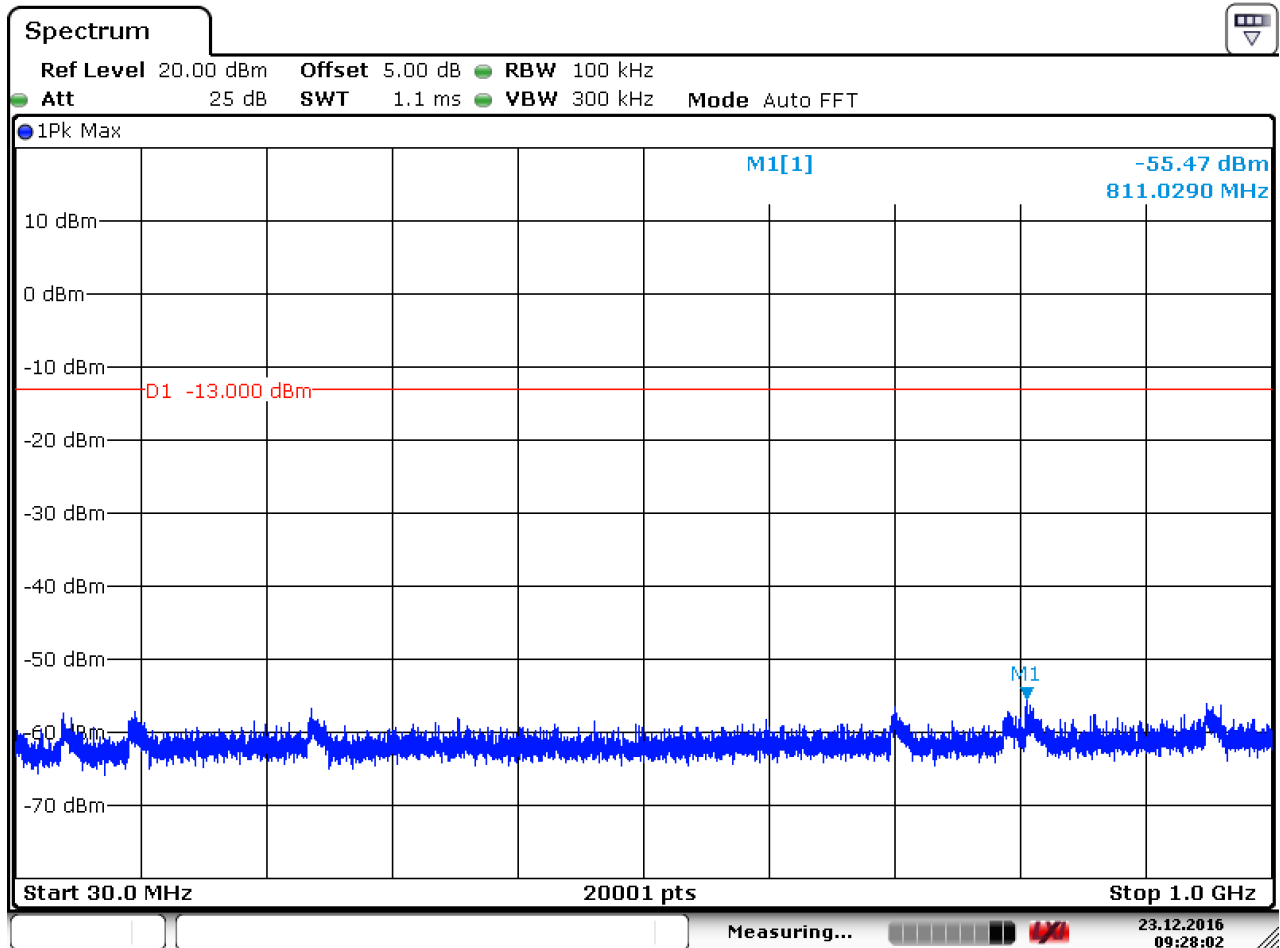
Date: 23.DEC.2016 09:36:30



Date: 23.DEC.2016 09:52:25



6.1.1.4.3 Test Channel = HCH

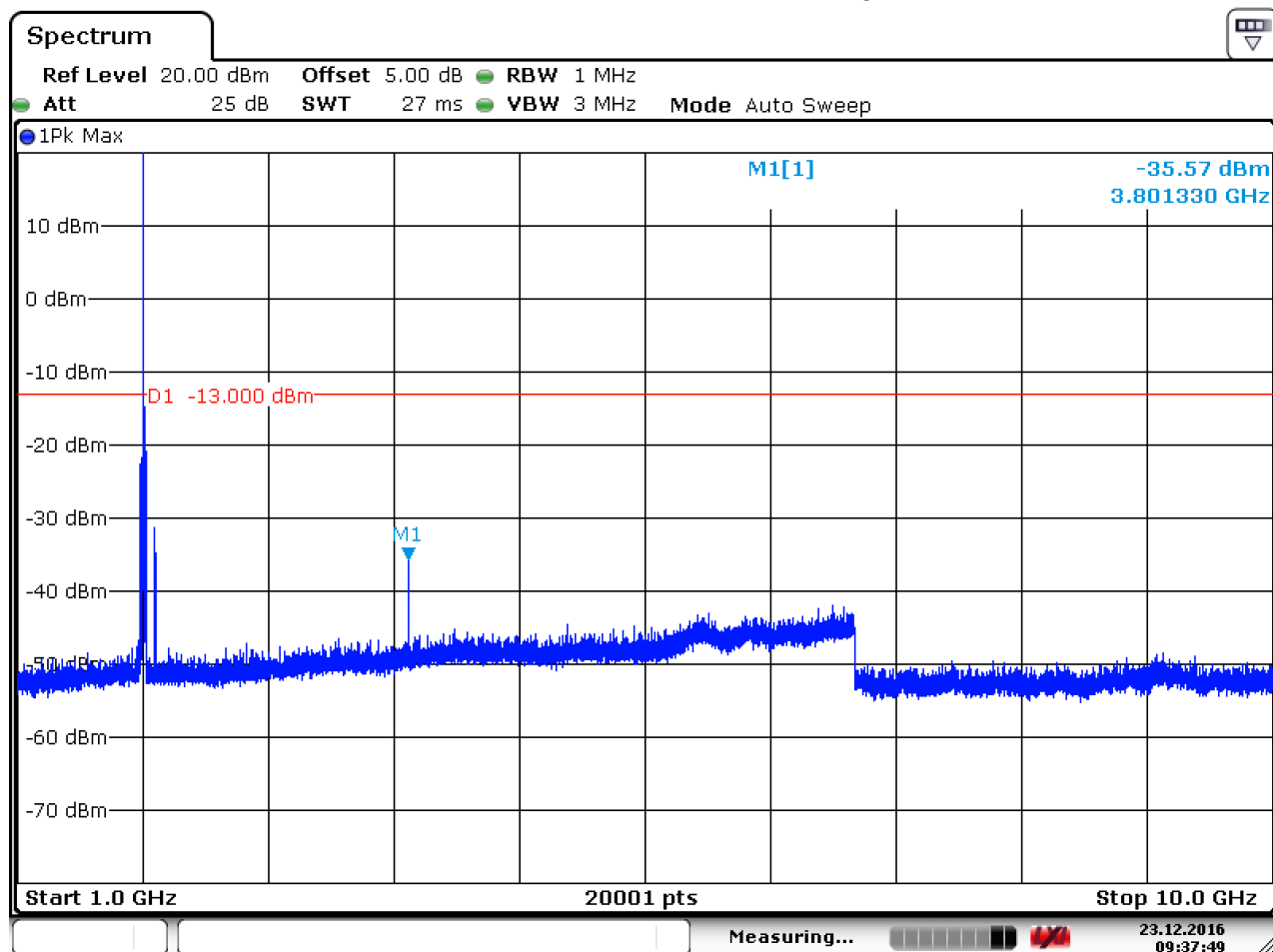


Date: 23.DEC.2016 09:28:02

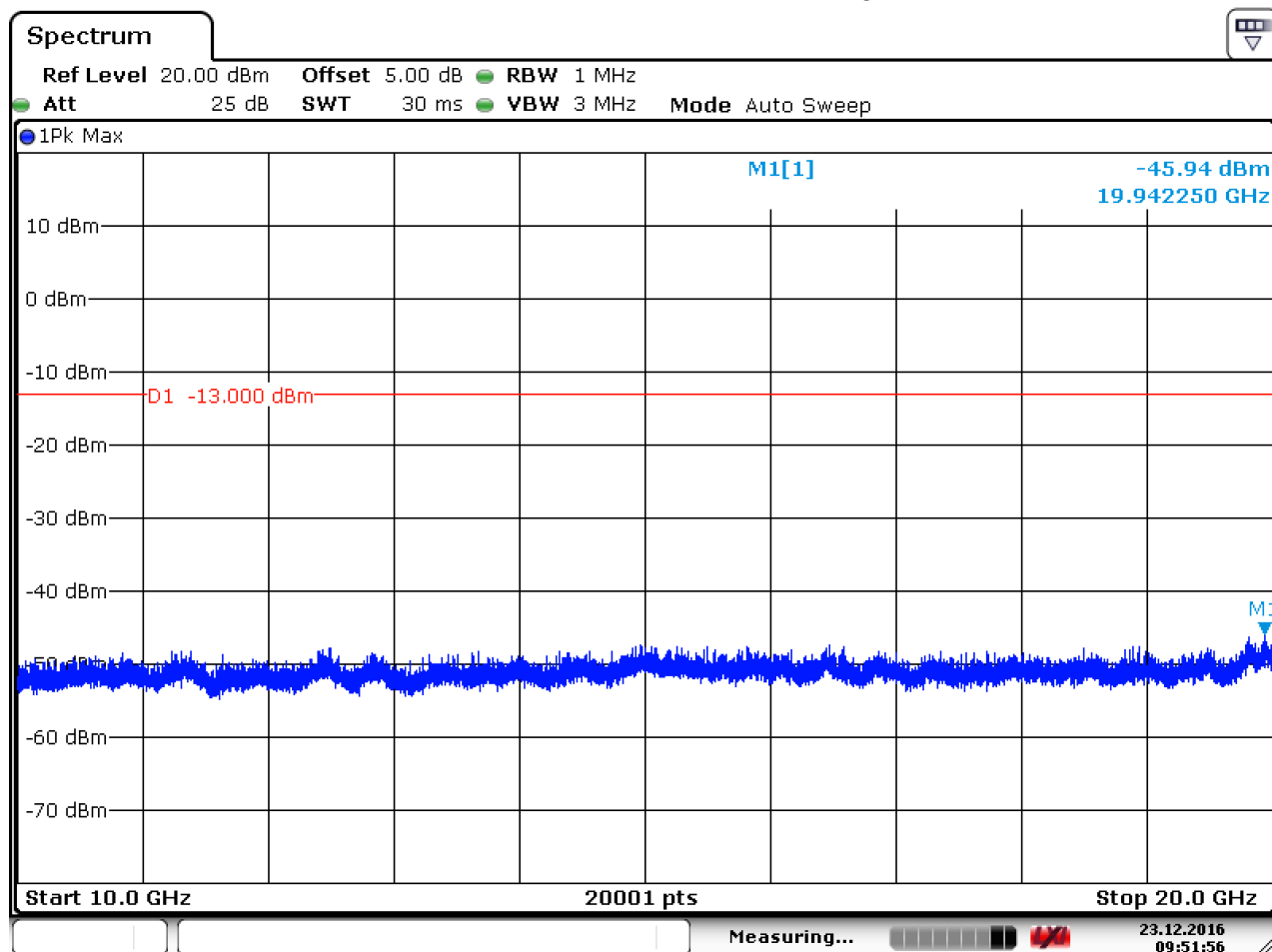


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Date: 23.DEC.2016 09:37:50

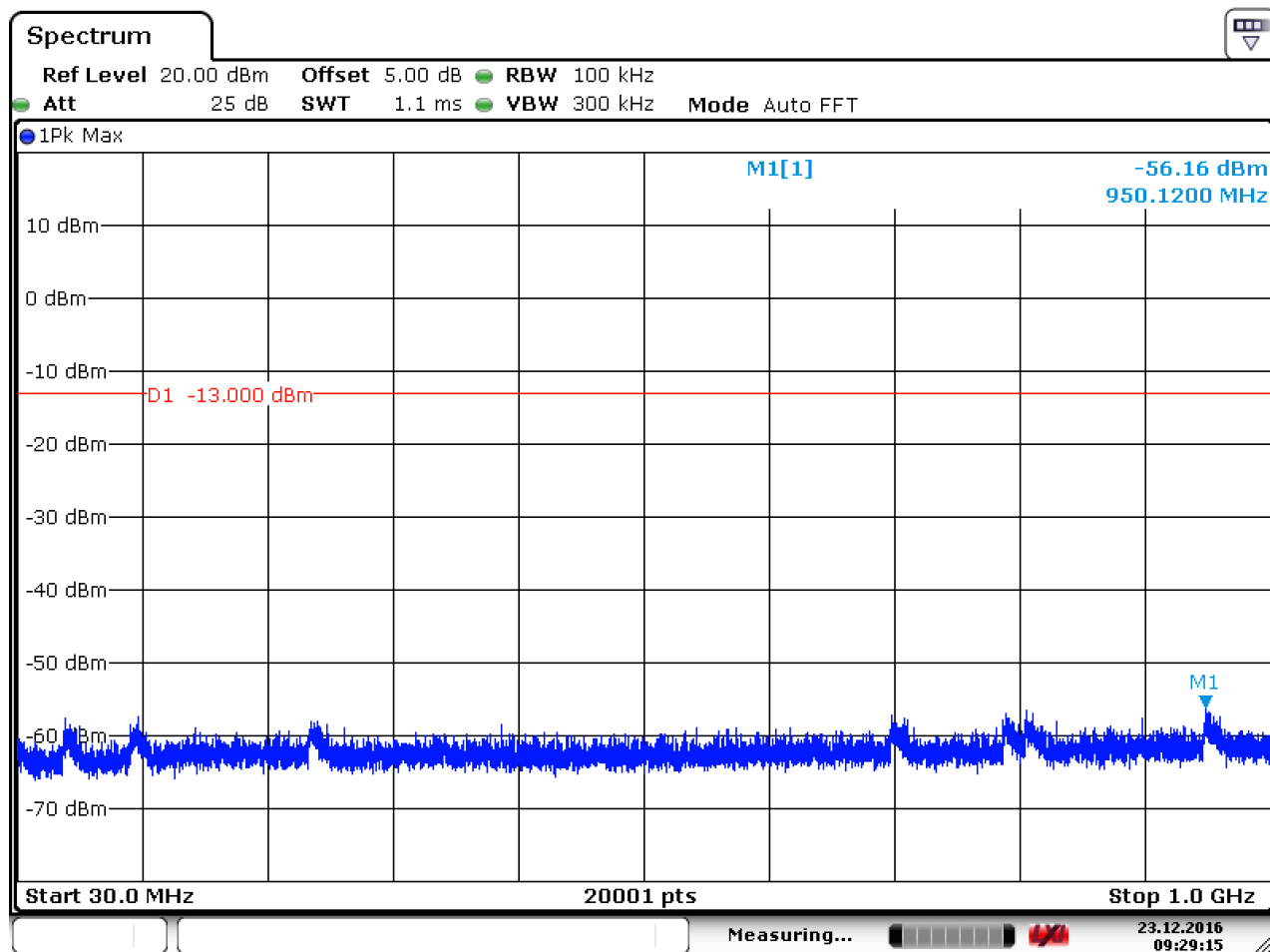


Date: 23.DEC.2016 09:51:57

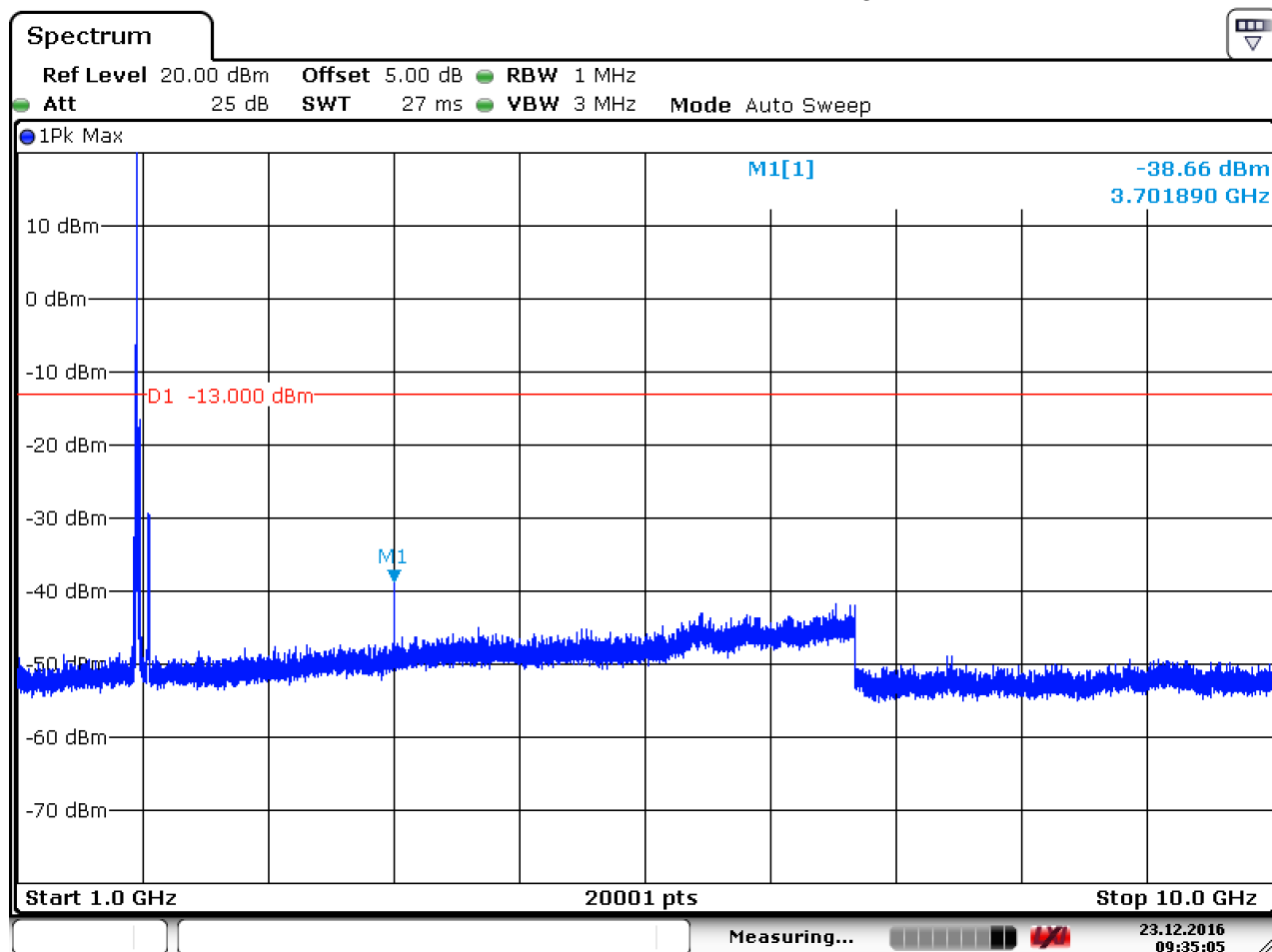


6.1.1.5 Test Mode = LTE / TM1 15MHz RB1#0

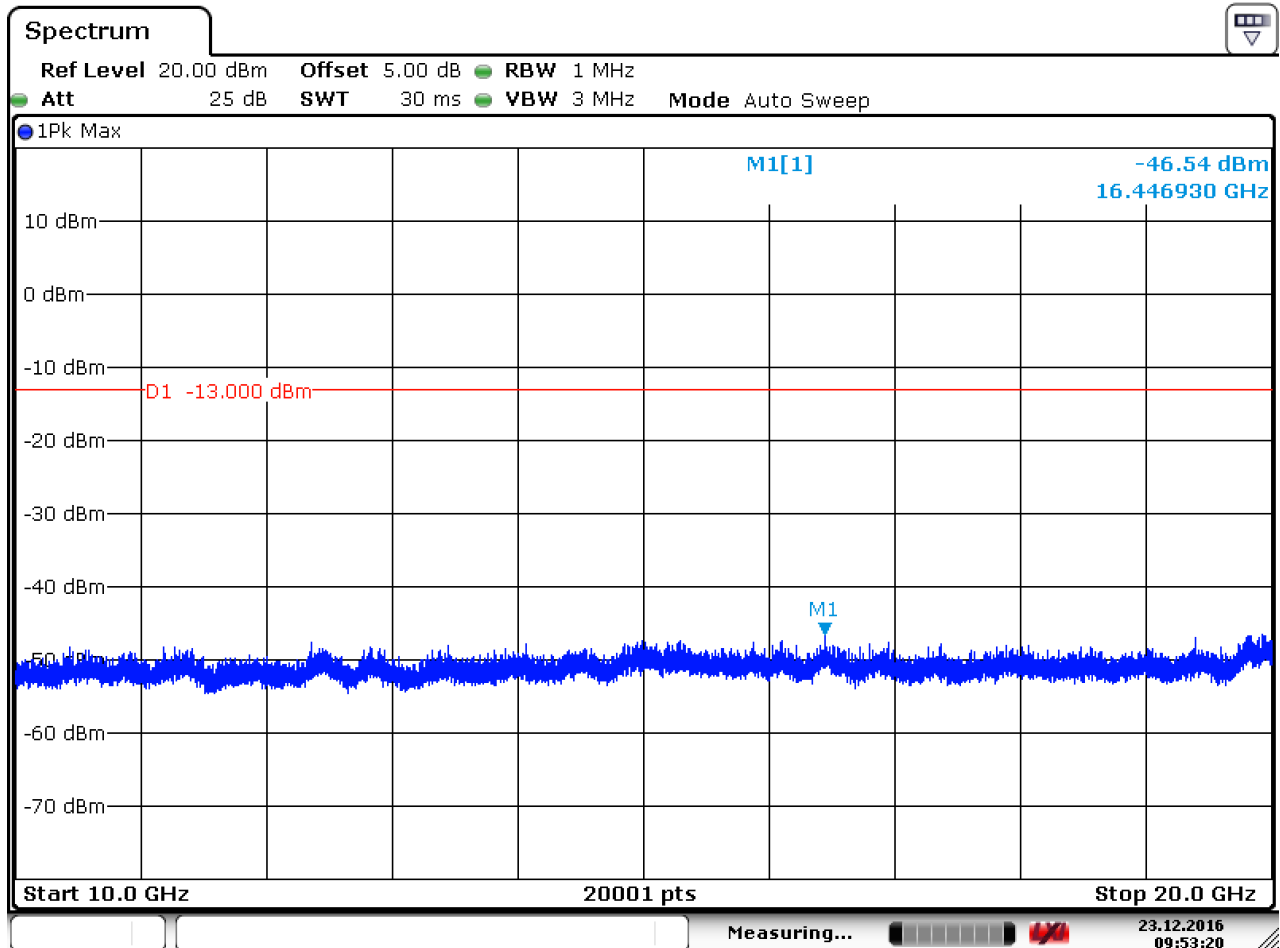
6.1.1.5.1 Test Channel = LCH



Date: 23.DEC.2016 09:29:16



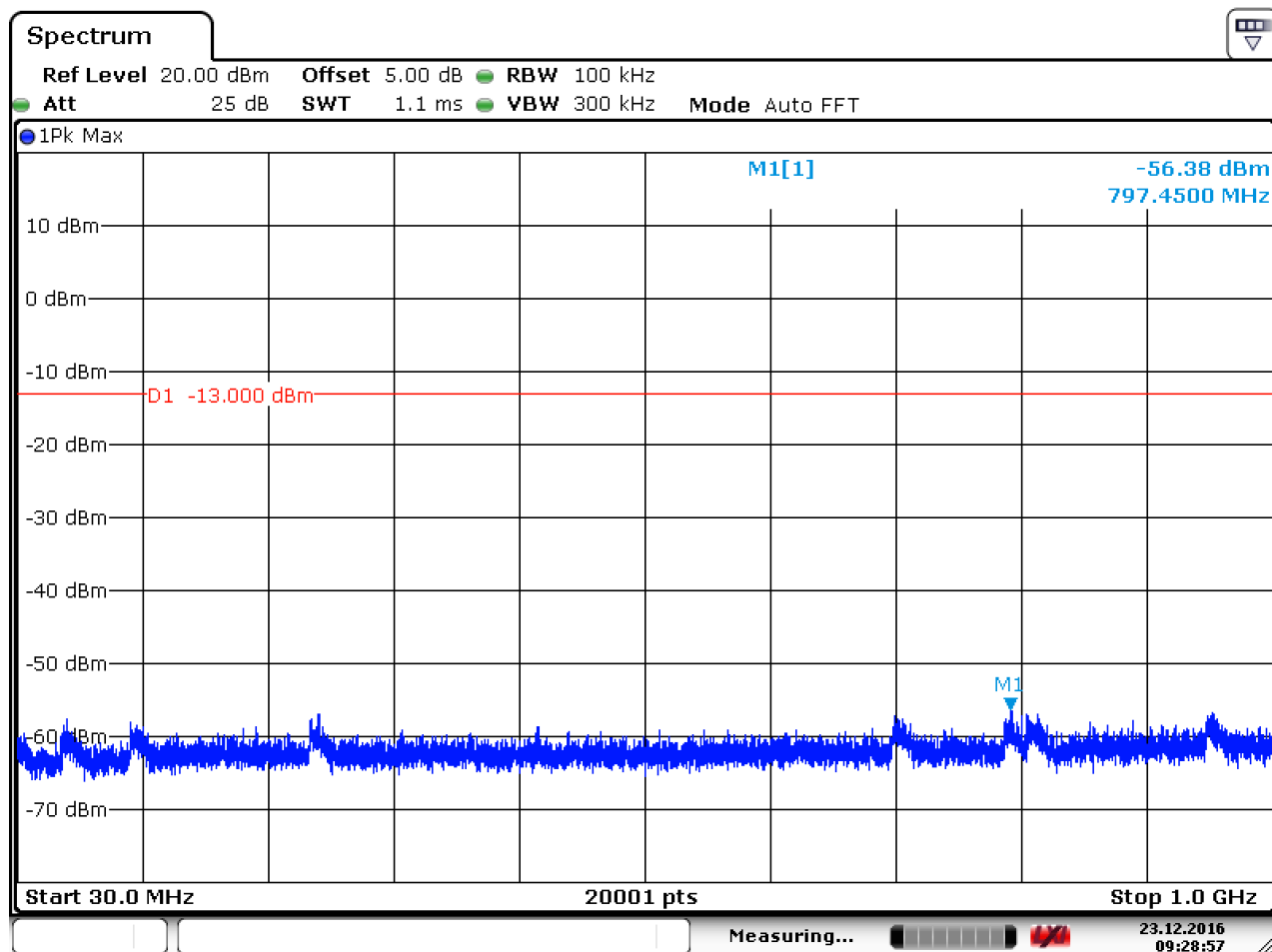
Date: 23.DEC.2016 09:35:05



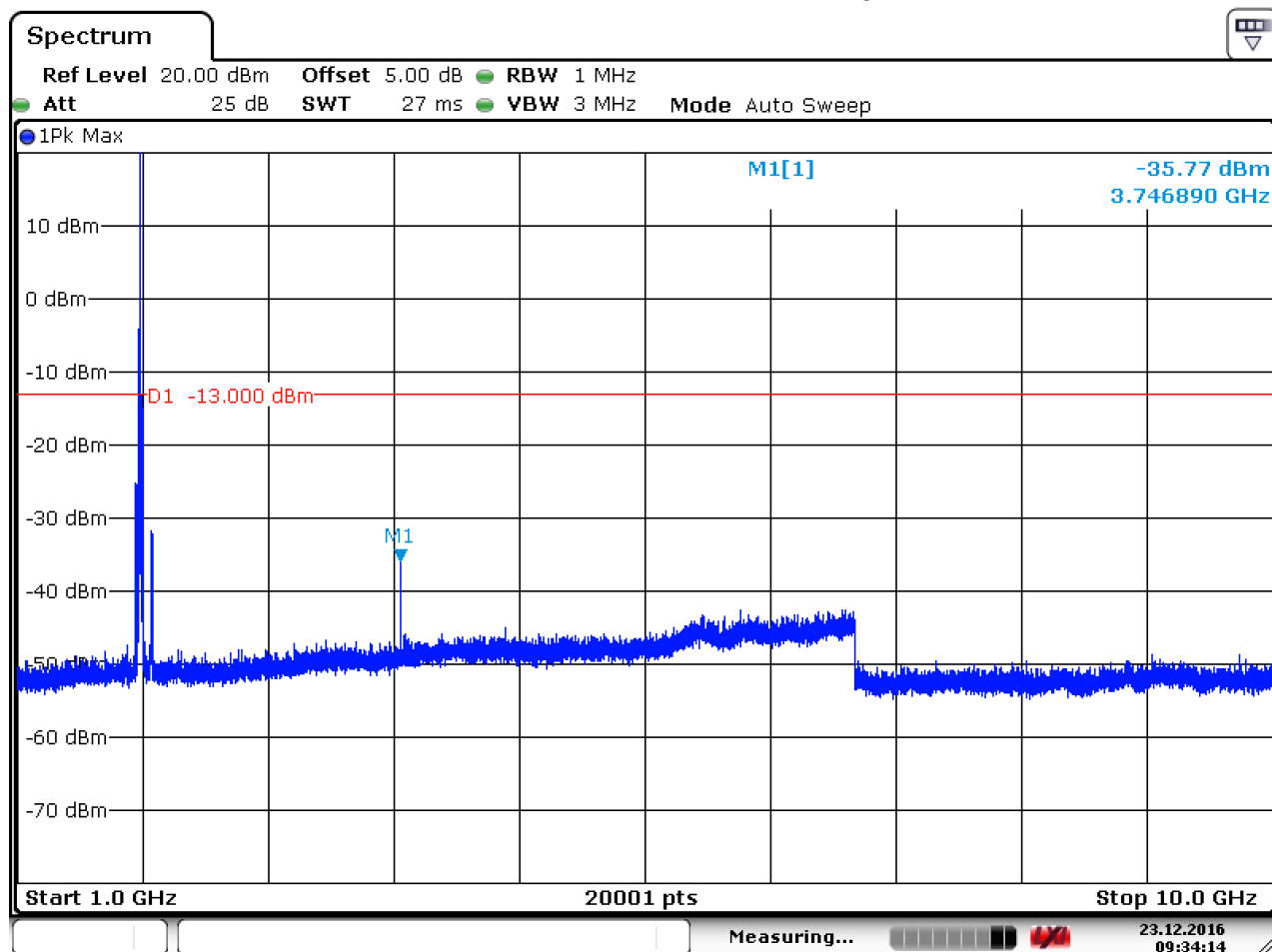
Date: 23.DEC.2016 09:53:20



6.1.1.5.2 Test Channel = MCH



Date: 23.DEC.2016 09:28:57



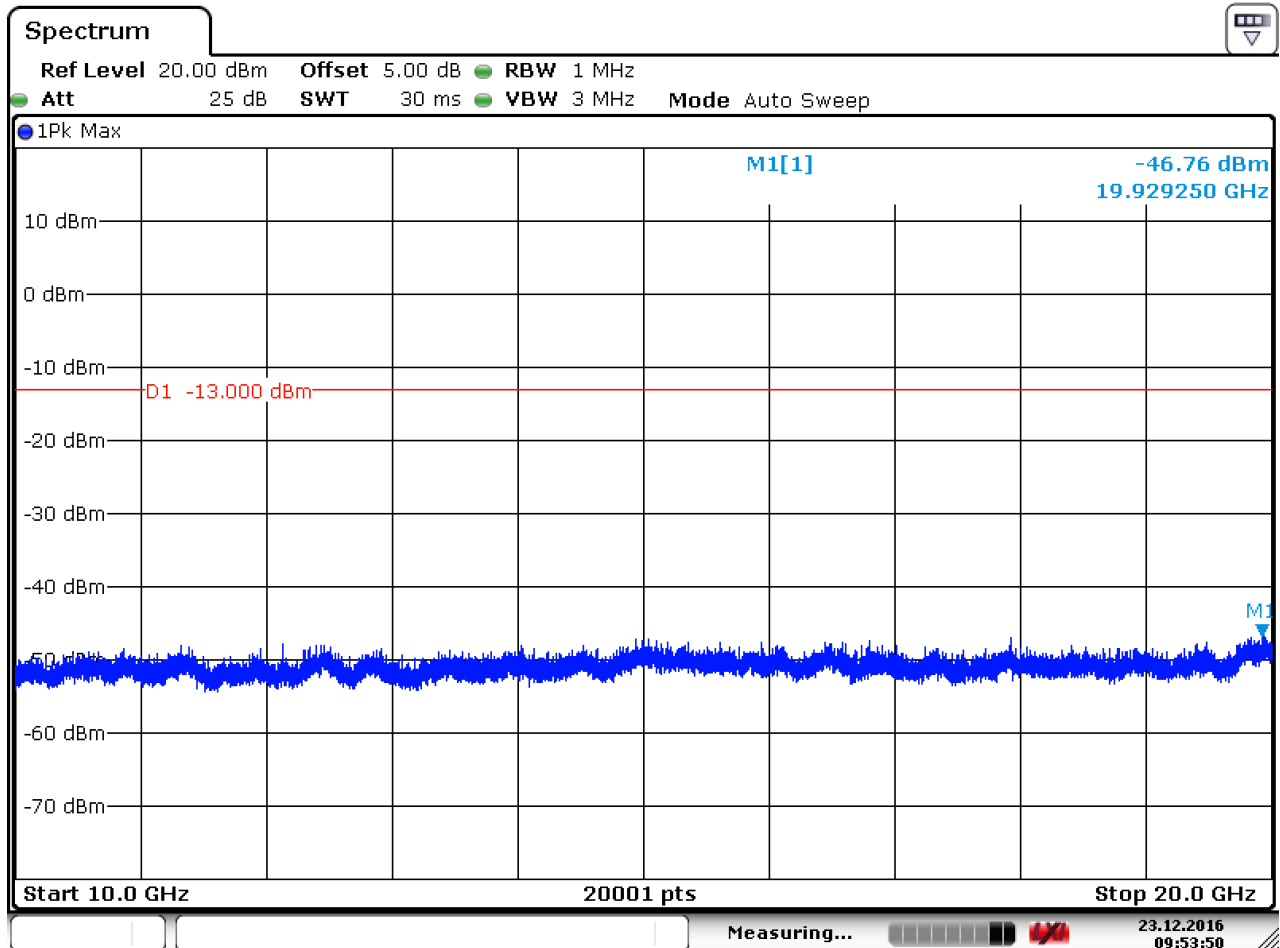
Date: 23.DEC.2016 09:34:15



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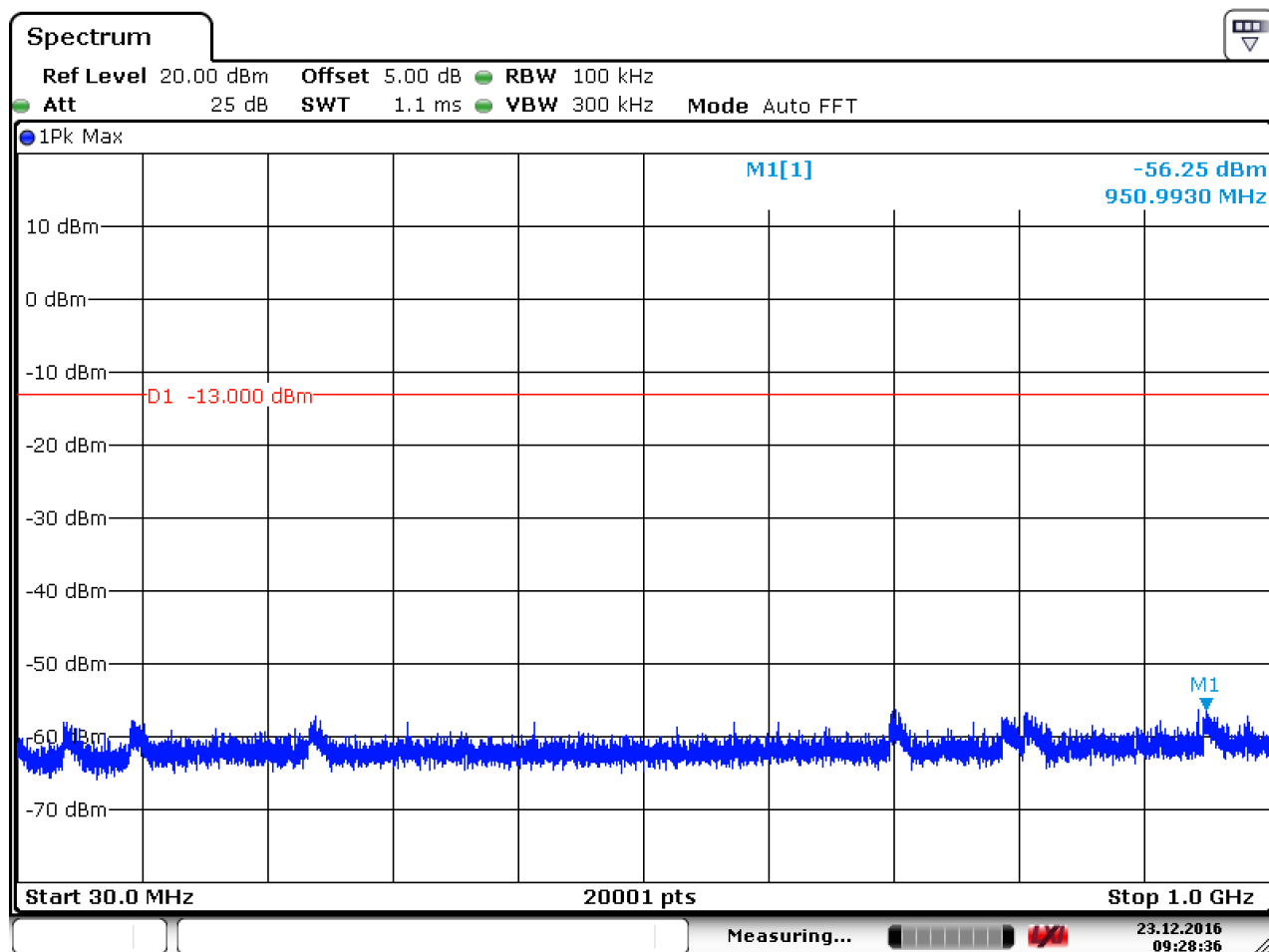
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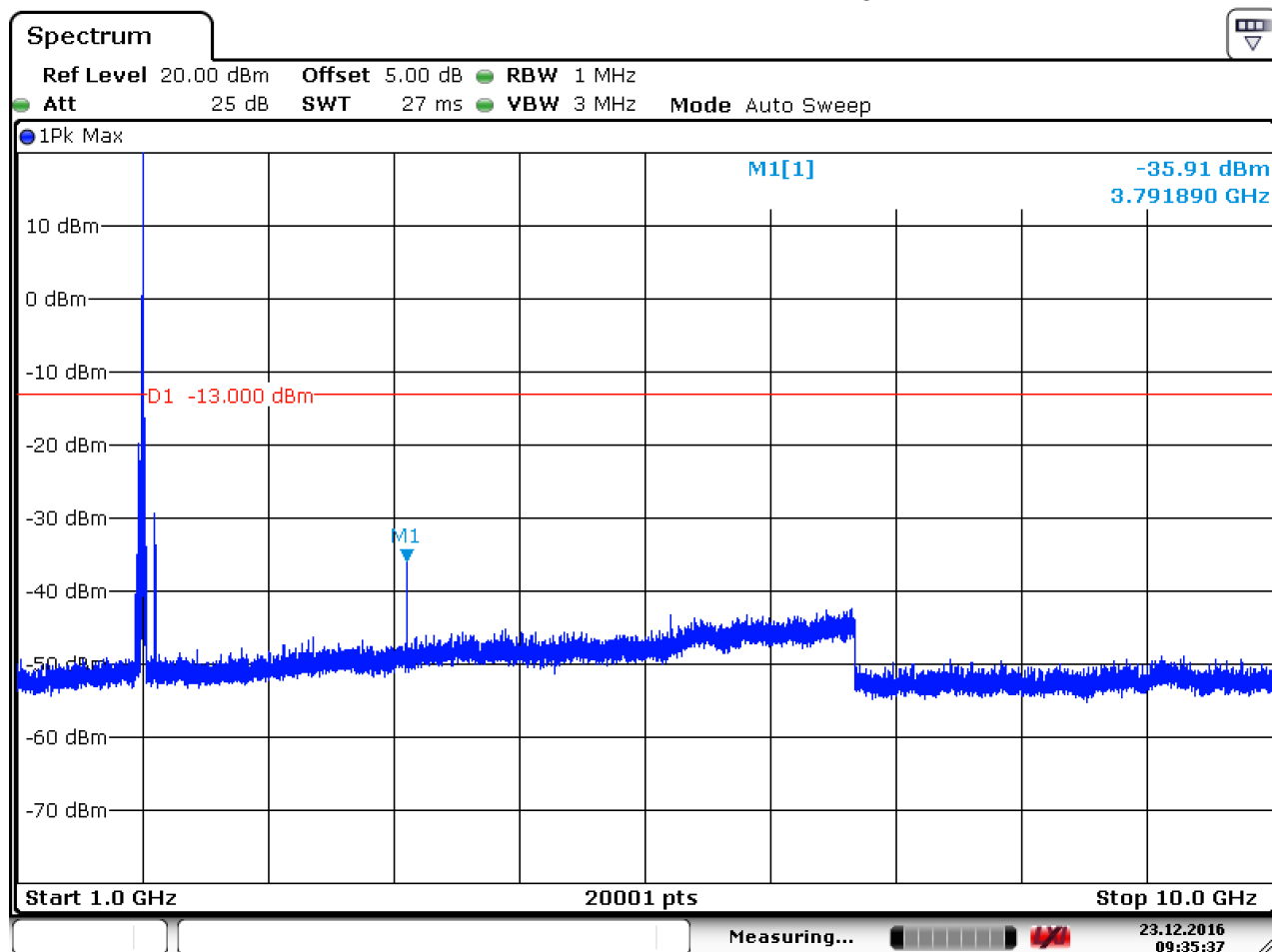
Date: 23.DEC.2016 09:53:51



6.1.1.5.3 Test Channel = HCH



Date: 23.DEC.2016 09:28:37

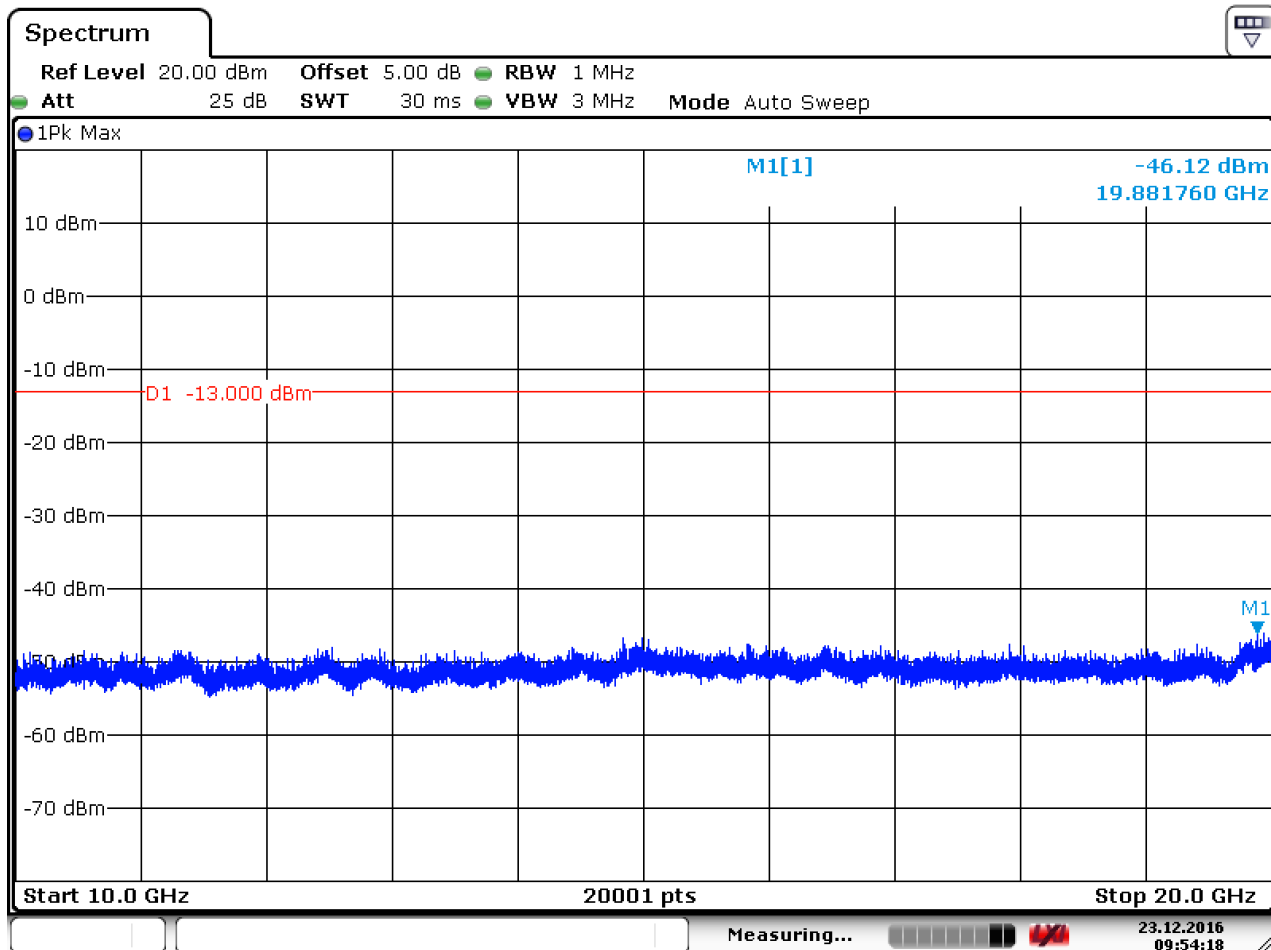


Date: 23.DEC.2016 09:35:37



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Date: 23.DEC.2016 09:54:18

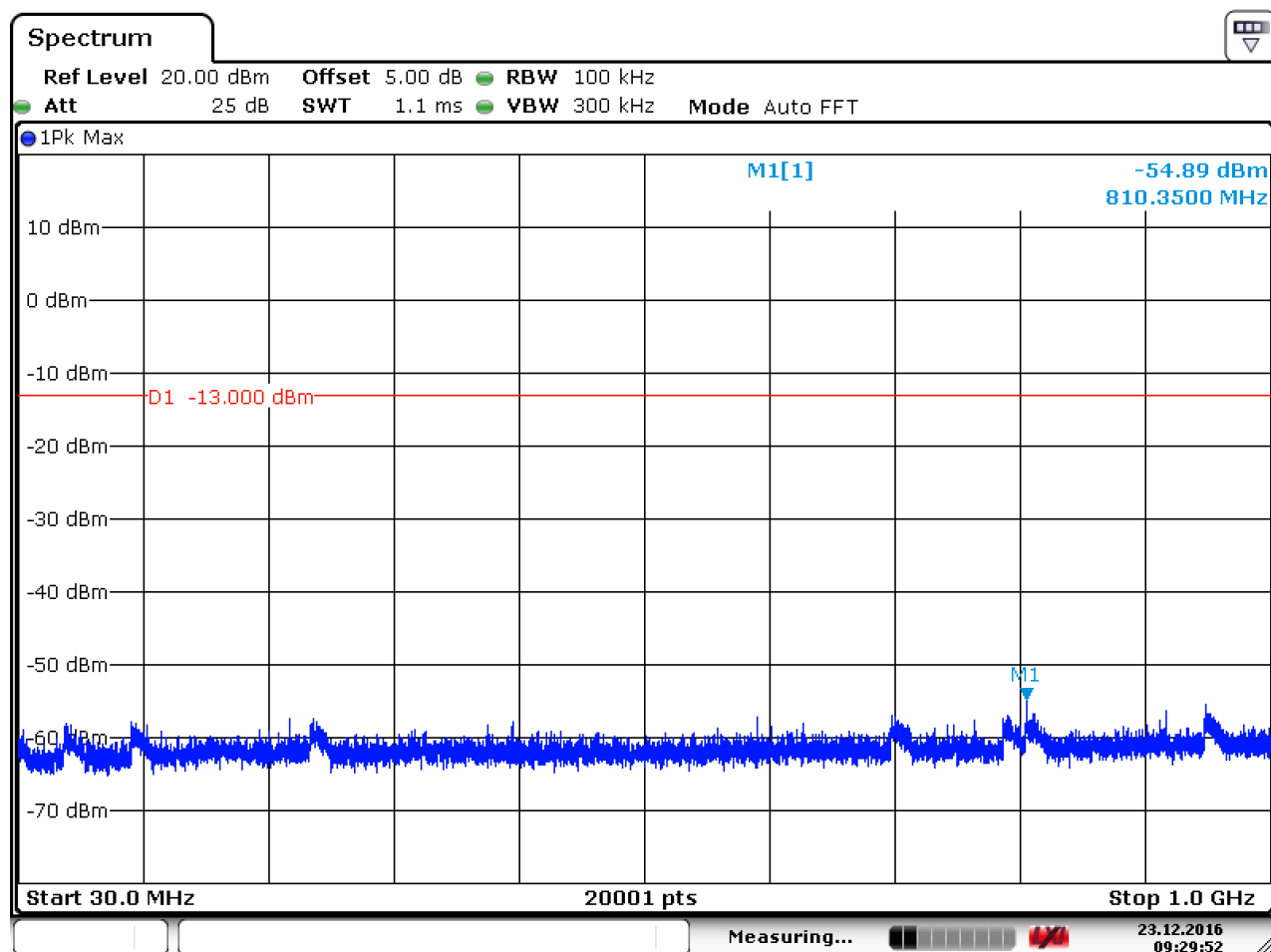


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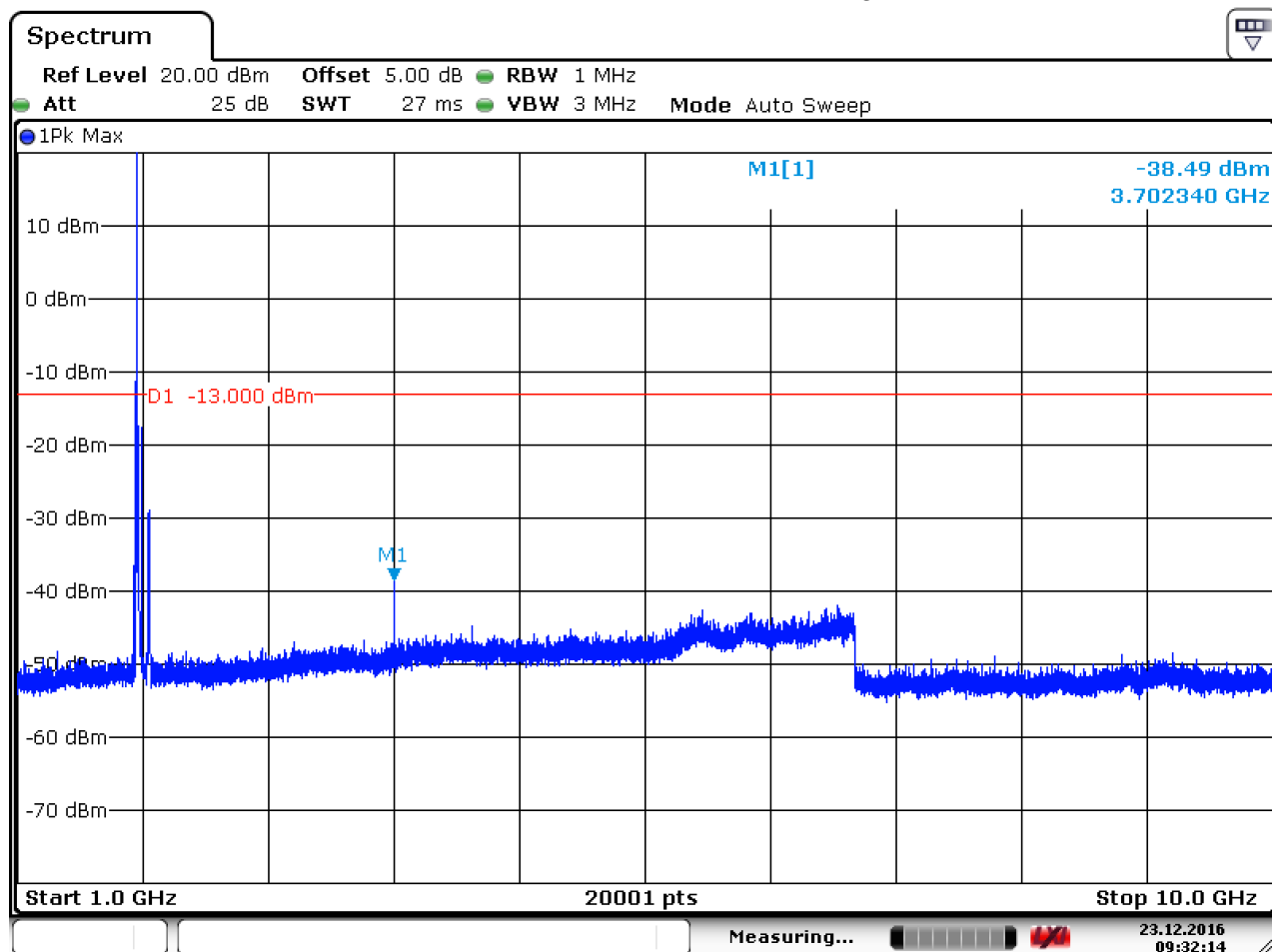
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6.1.1.6 Test Mode = LTE / TM1 20MHz RB1#0

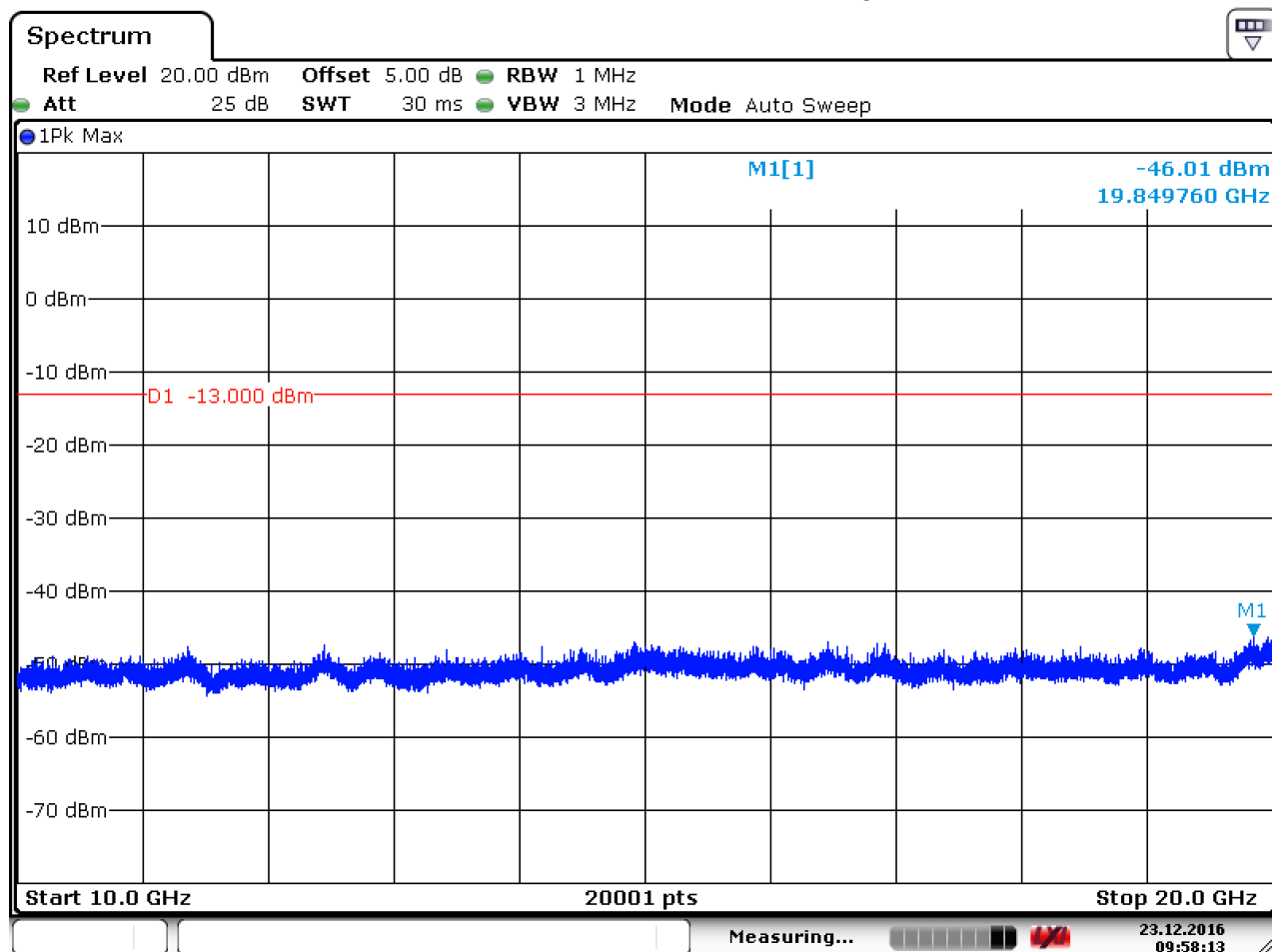
6.1.1.6.1 Test Channel = LCH



Date: 23.DEC.2016 09:29:51



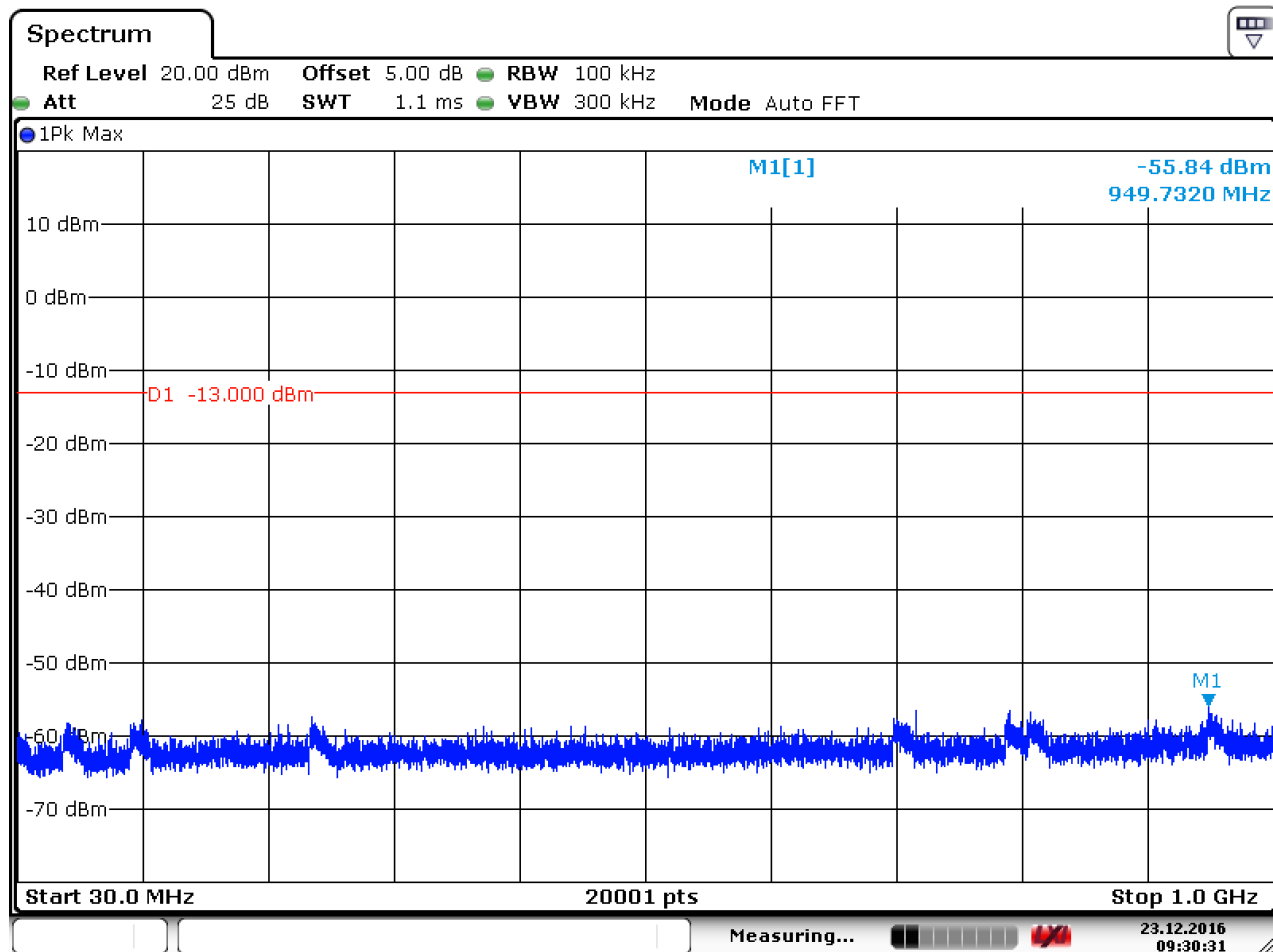
Date: 23.DEC.2016 09:32:15



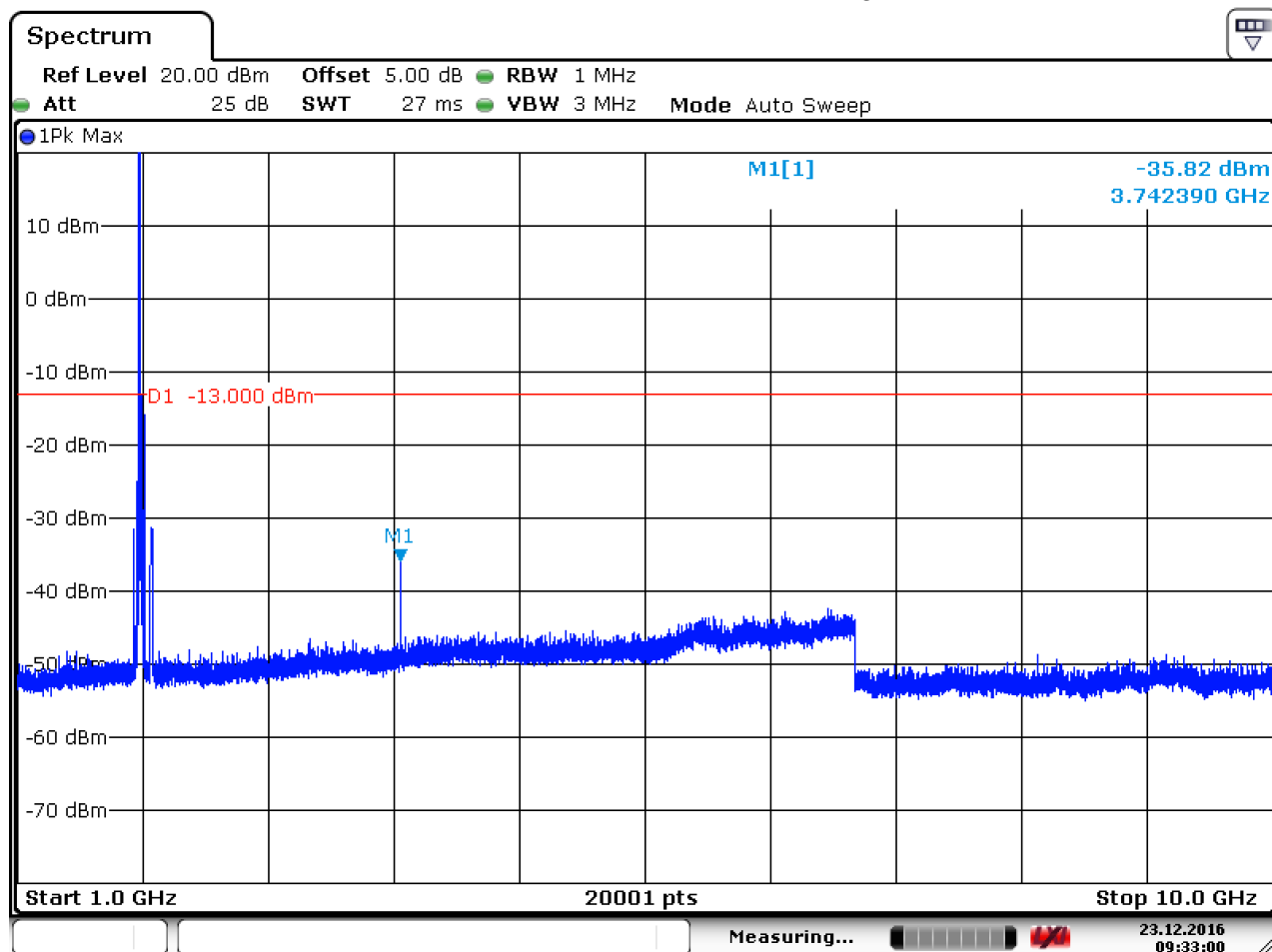
Date: 23.DEC.2016 09:58:13



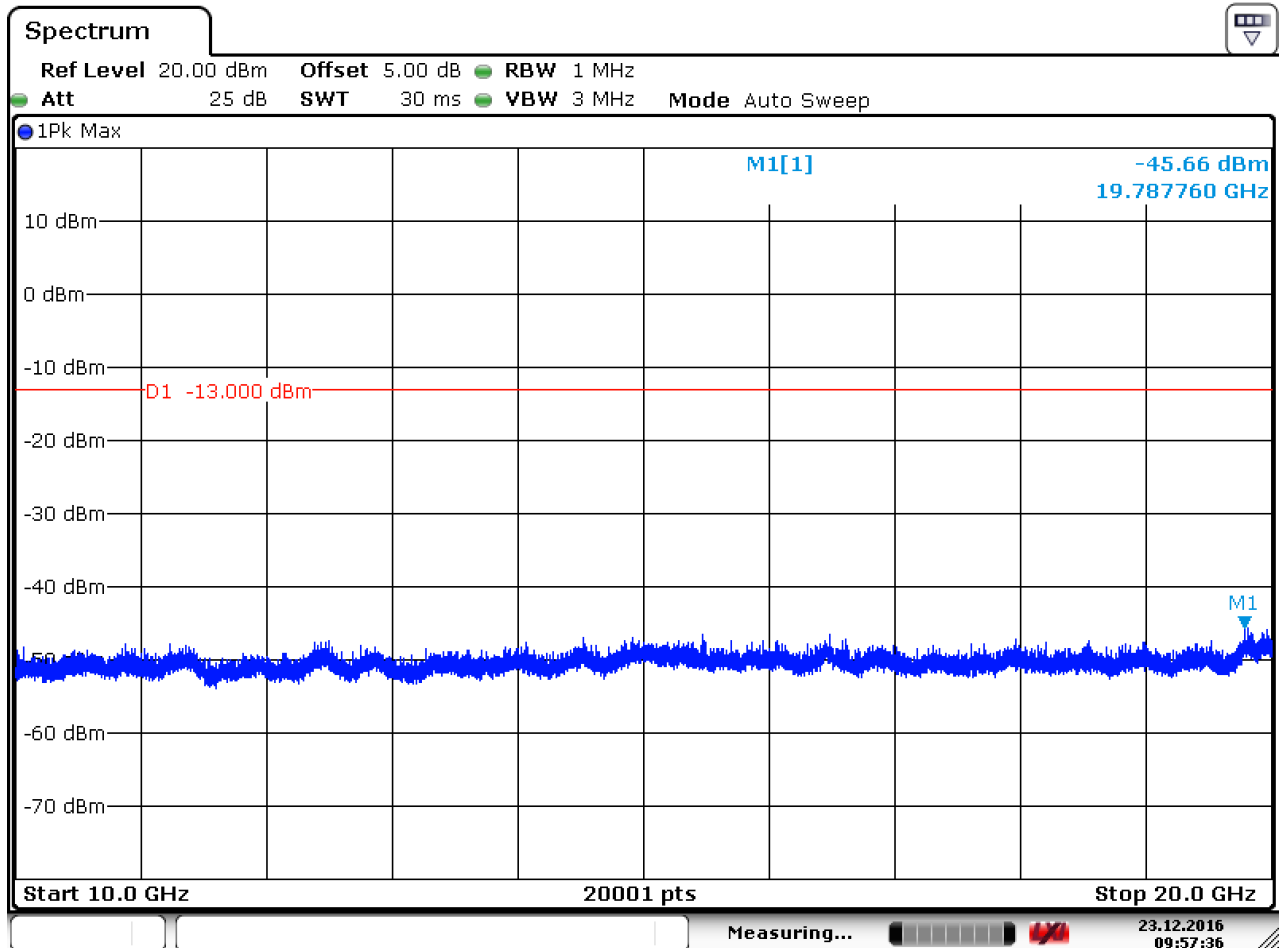
6.1.1.6.2 Test Channel = MCH



Date: 23.DEC.2016 09:30:31



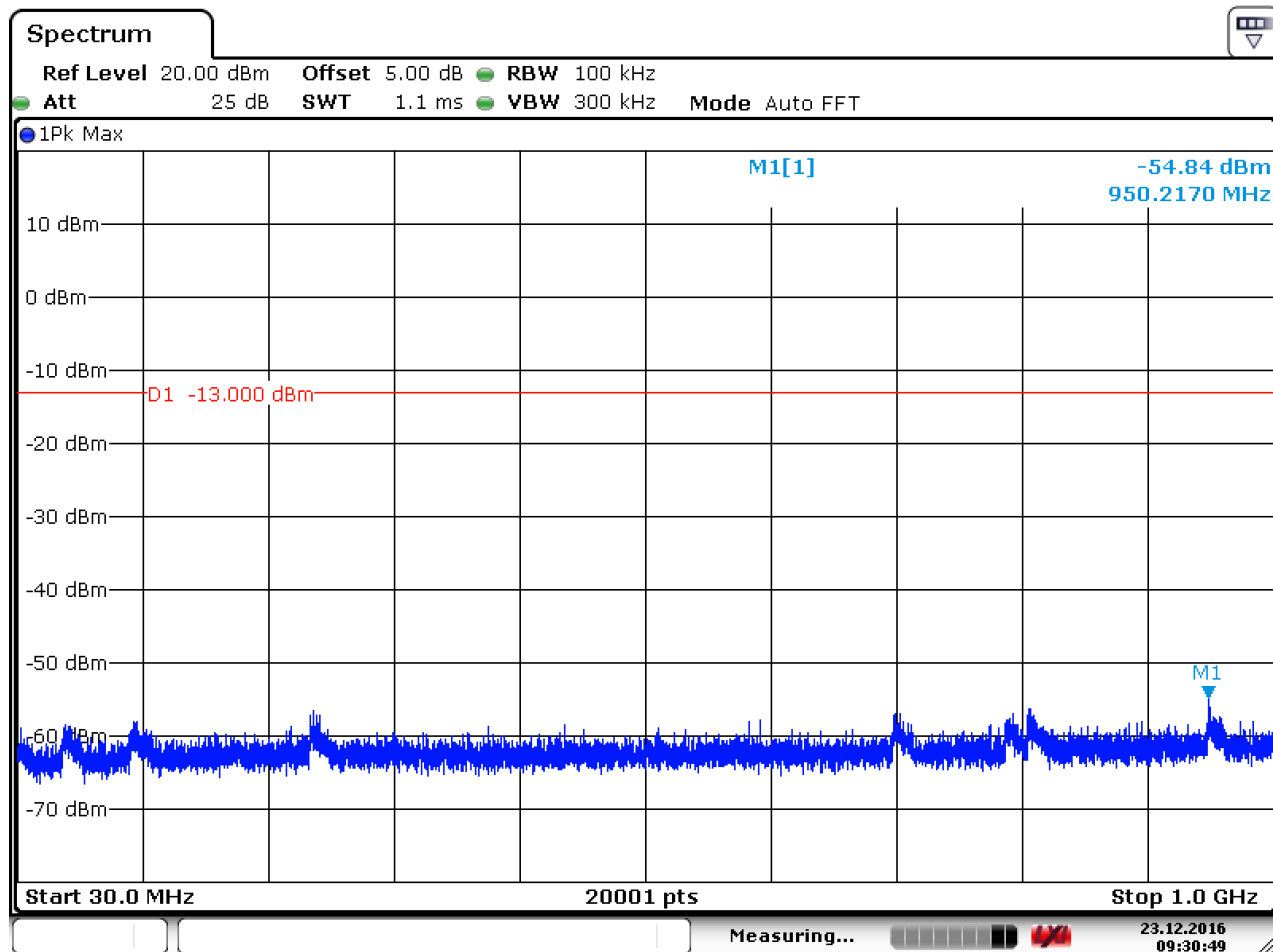
Date: 23.DEC.2016 09:33:01



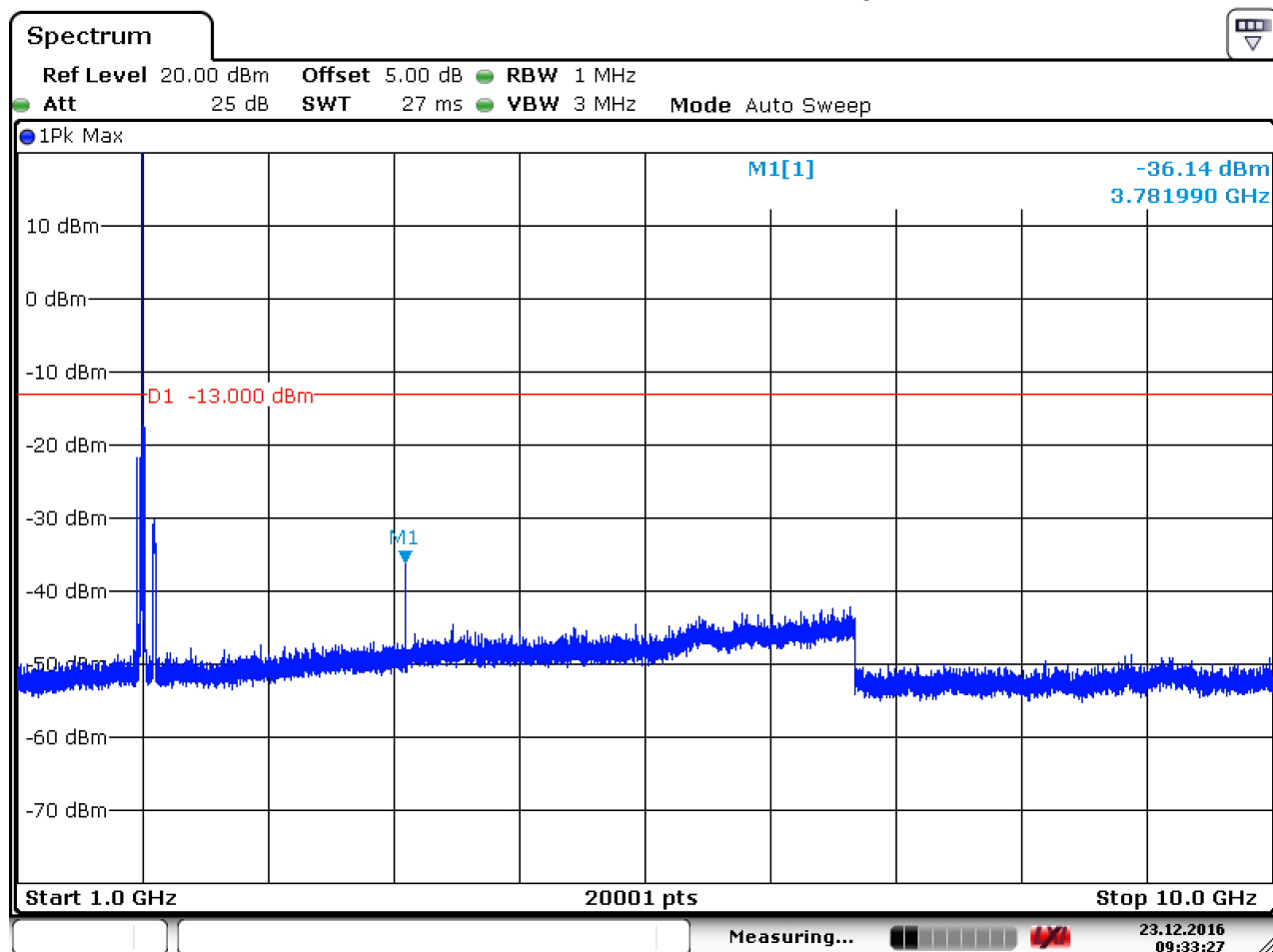
Date: 23.DEC.2016 09:57:36



6.1.1.6.3 Test Channel = HCH



Date: 23.DEC.2016 09:30:50

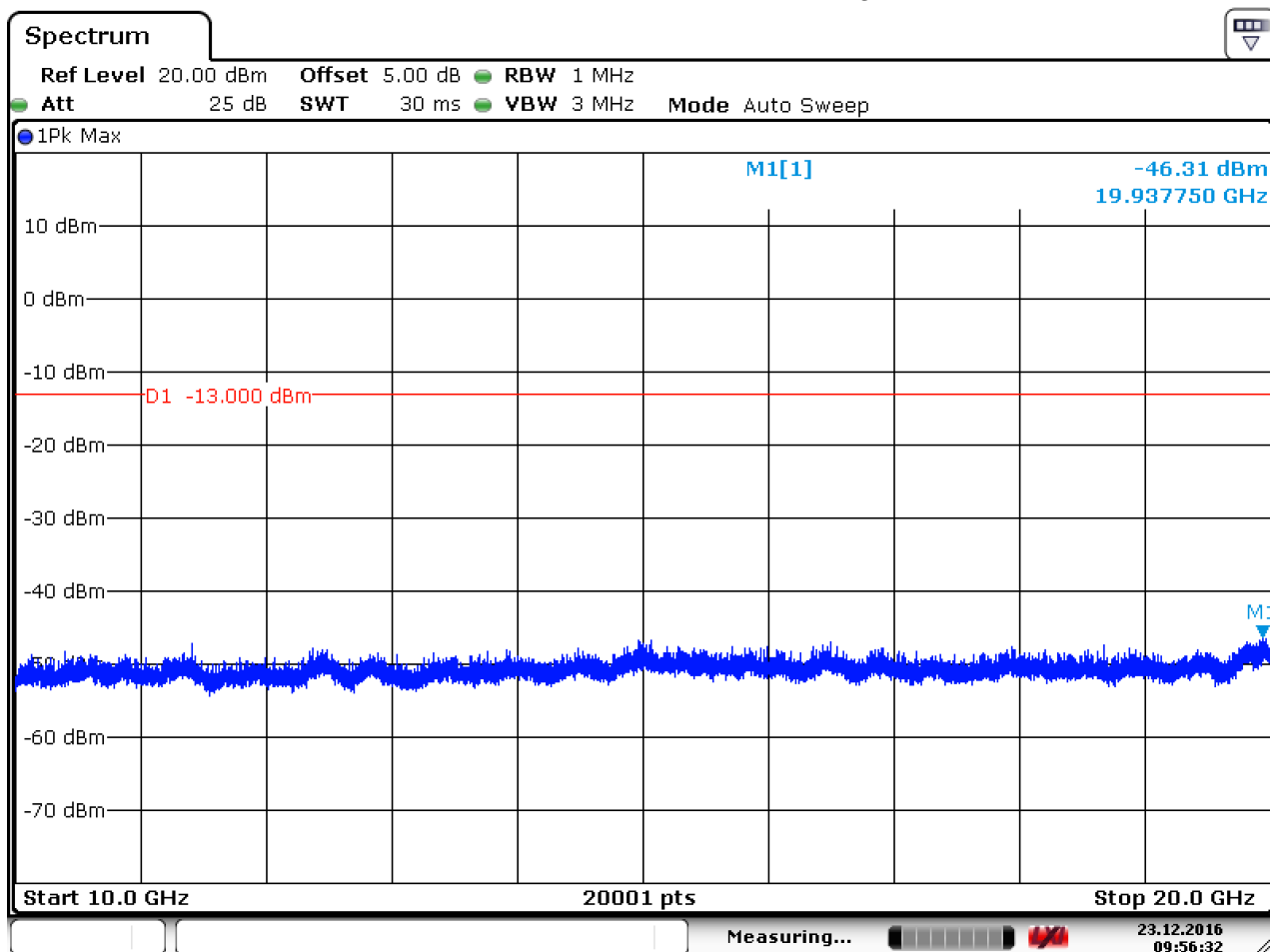


Date: 23.DEC.2016 09:33:27



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7 Field Strength of Spurious Radiation

7.1 For LTE

7.1.1 Test Band = LTE band2

7.1.1.1.1 Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
1177.000	-66.80	-13.00	53.80	Vertical
2712.000	-57.36	-13.00	44.36	Vertical
3975.000	-67.94	-13.00	54.94	Vertical
1452.000	-66.27	-13.00	53.27	Horizontal
2360.000	-58.96	-13.00	45.96	Horizontal
6217.500	-65.85	-13.00	52.85	Horizontal

7.1.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
901.000	-75.75	-13.00	62.75	Vertical
1419.000	-67.24	-13.00	54.24	Vertical
1914.000	-63.25	-13.00	50.25	Vertical
2232.000	-59.28	-13.00	46.28	Horizontal
3975.000	-68.29	-13.00	55.29	Horizontal
4852.500	-67.07	-13.00	54.07	Horizontal

7.1.1.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
1474.000	-66.43	-13.00	53.43	Vertical
1738.000	-63.98	-13.00	50.98	Vertical
4950.000	-66.83	-13.00	53.83	Vertical
1661.000	-64.89	-13.00	51.89	Horizontal
2090.000	-62.75	-13.00	49.75	Horizontal
4267.500	-67.43	-13.00	54.43	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 2	LTE/TM1 20MHz	LCH	TN	VL	-3.03	-0.00163	PASS
				VN	2.46	0.00132	PASS
				VH	-5.73	-0.00308	PASS
		MCH	TN	VL	1.40	0.00074	PASS
				VN	-2.64	-0.00140	PASS
				VH	2.88	0.00153	PASS
		HCH	TN	VL	-6.26	-0.00329	PASS
				VN	-4.17	-0.00219	PASS
				VH	-2.84	-0.00149	PASS
	LTE/TM2 20MHz	LCH	TN	VL	-4.18	-0.00225	PASS
				VN	-2.95	-0.00159	PASS
				VH	-5.16	-0.00277	PASS
		MCH	TN	VL	1.56	0.00083	PASS
				VN	-2.90	-0.00154	PASS
				VH	2.34	0.00124	PASS
		HCH	TN	VL	-4.08	-0.00215	PASS
				VN	-7.20	-0.00379	PASS
				VH	-4.40	-0.00232	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
LTEband2	LTE/TM1 20MHz	LCH	VN	-30	-4.40	-0.00237	PASS
				-20	-1.44	-0.00077	PASS
				-10	3.38	0.00182	PASS
				0	1.88	0.00101	PASS
				10	1.65	0.00089	PASS
				20	2.96	0.00159	PASS
				30	-0.31	-0.00017	PASS
				40	-2.14	-0.00115	PASS
				50	3.50	0.00188	PASS
		MCH	VN	-30	-7.80	-0.00415	PASS
				-20	-5.95	-0.00316	PASS
				-10	-3.07	-0.00163	PASS
				0	-5.62	-0.00299	PASS
				10	-2.04	-0.00109	PASS
				20	-7.37	-0.00392	PASS
				30	-5.26	-0.00280	PASS
				40	-4.55	-0.00242	PASS
				50	-6.22	-0.00331	PASS
		HCH	VN	-30	0.54	0.00028	PASS
				-20	-4.49	-0.00236	PASS
				-10	1.53	0.00081	PASS
				0	-3.83	-0.00202	PASS
				10	2.60	0.00137	PASS
				20	-0.77	-0.00041	PASS
				30	-2.62	-0.00138	PASS
				40	-3.43	-0.00181	PASS
				50	-5.67	-0.00298	PASS



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Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband2	LTE/TM2 20MHz	LCH	VN	-30	-2.53	-0.00136	PASS
				-20	-4.45	-0.00239	PASS
				-10	3.18	0.00171	PASS
				0	2.67	0.00144	PASS
				10	1.60	0.00086	PASS
				20	-3.29	-0.00177	PASS
				30	-0.34	-0.00018	PASS
				40	-5.34	-0.00287	PASS
				50	3.79	0.00204	PASS
		MCH	VN	-30	-3.50	-0.00186	PASS
				-20	-1.28	-0.00068	PASS
				-10	-6.29	-0.00335	PASS
				0	-4.32	-0.00230	PASS
				10	-2.30	-0.00122	PASS
				20	1.74	0.00093	PASS
				30	-3.24	-0.00172	PASS
				40	-2.68	-0.00143	PASS
				50	-3.87	-0.00206	PASS
		HCH	VN	-30	1.54	0.00081	PASS
				-20	-2.25	-0.00118	PASS
				-10	4.57	0.00241	PASS
				0	-3.23	-0.00170	PASS
				10	2.58	0.00136	PASS
				20	-4.43	-0.00233	PASS
				30	-2.39	-0.00126	PASS
				40	-4.93	-0.00259	PASS
				50	-5.40	-0.00284	PASS



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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