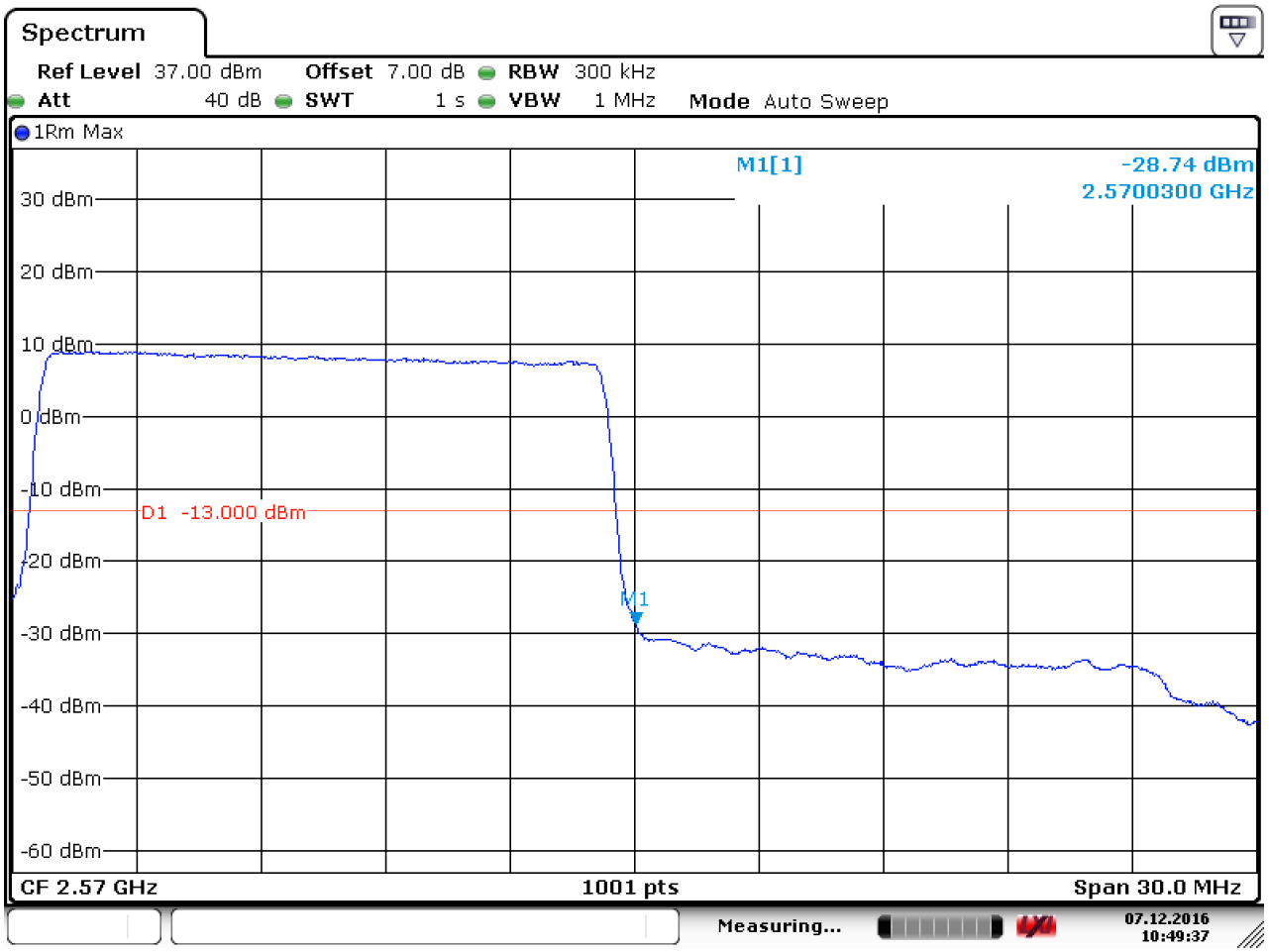
5.1.1.5.2.2 Test RB=75RB

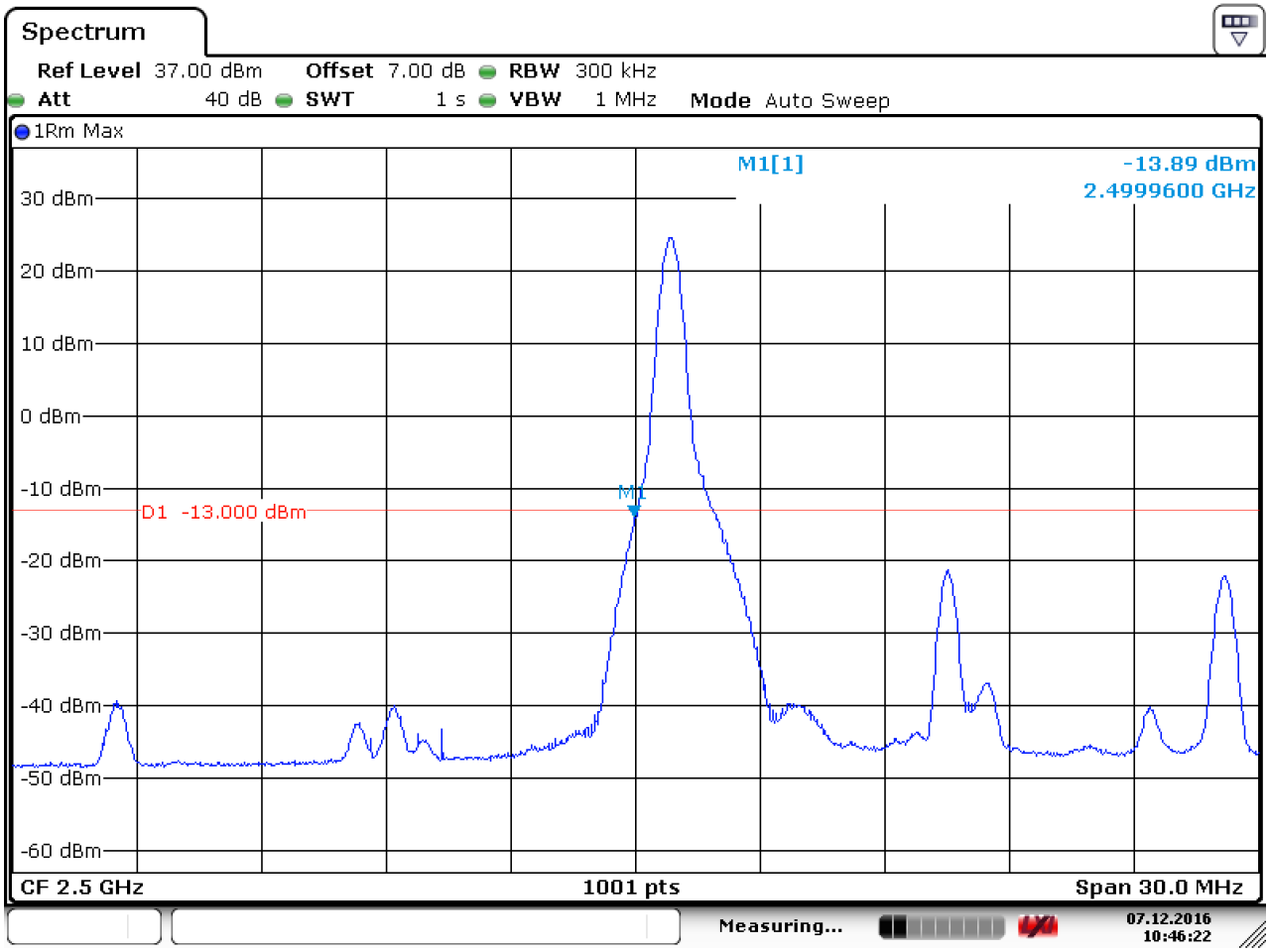


Date: 7.DEC.2016 10:49:37

5.1.1.6 Test Mode = LTE/TM2 15MHz

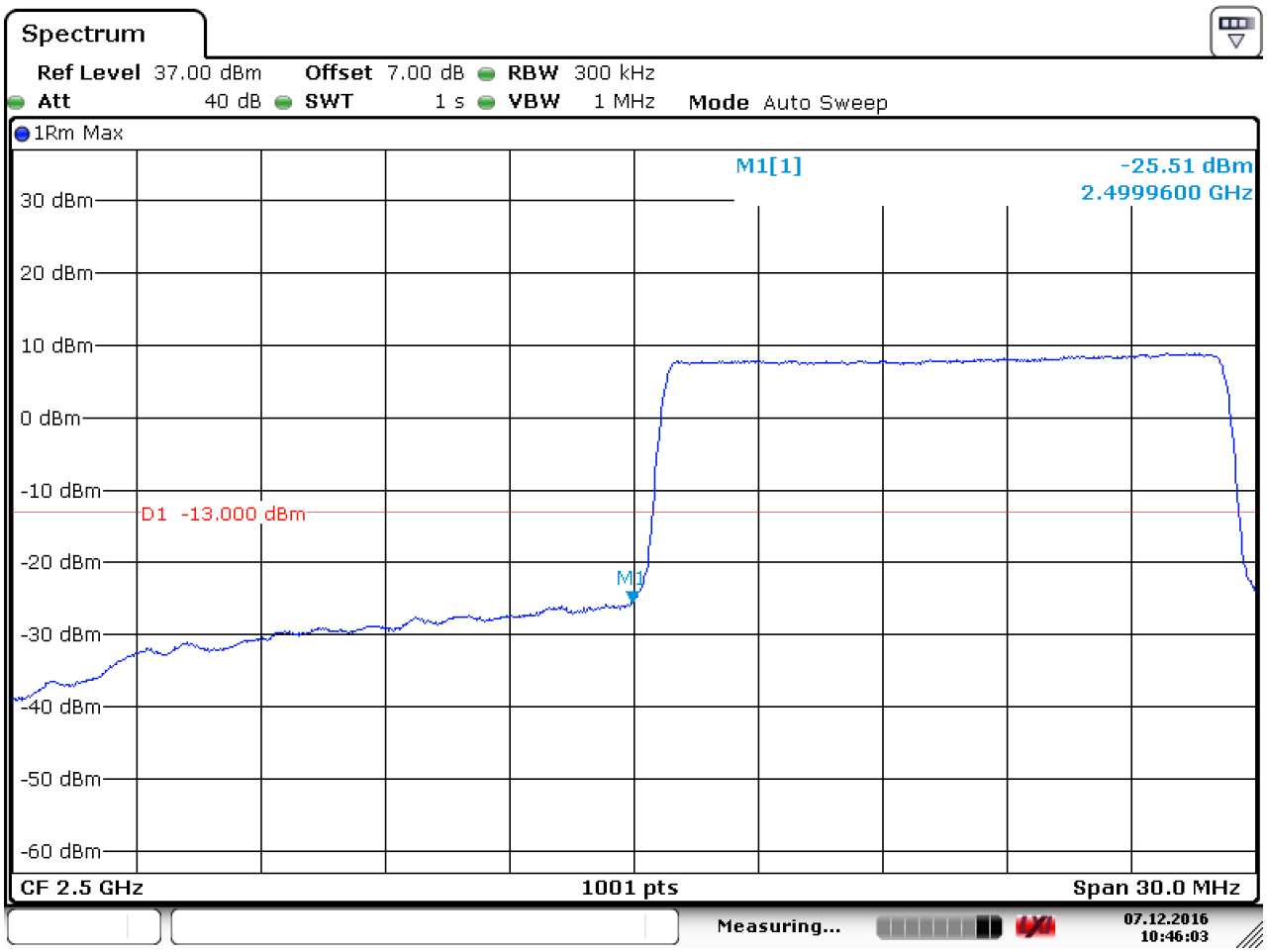
5.1.1.6.1 Test Channel = LCH

5.1.1.6.1.1 Test RB=1RB



Date: 7.DEC.2016 10:46:22

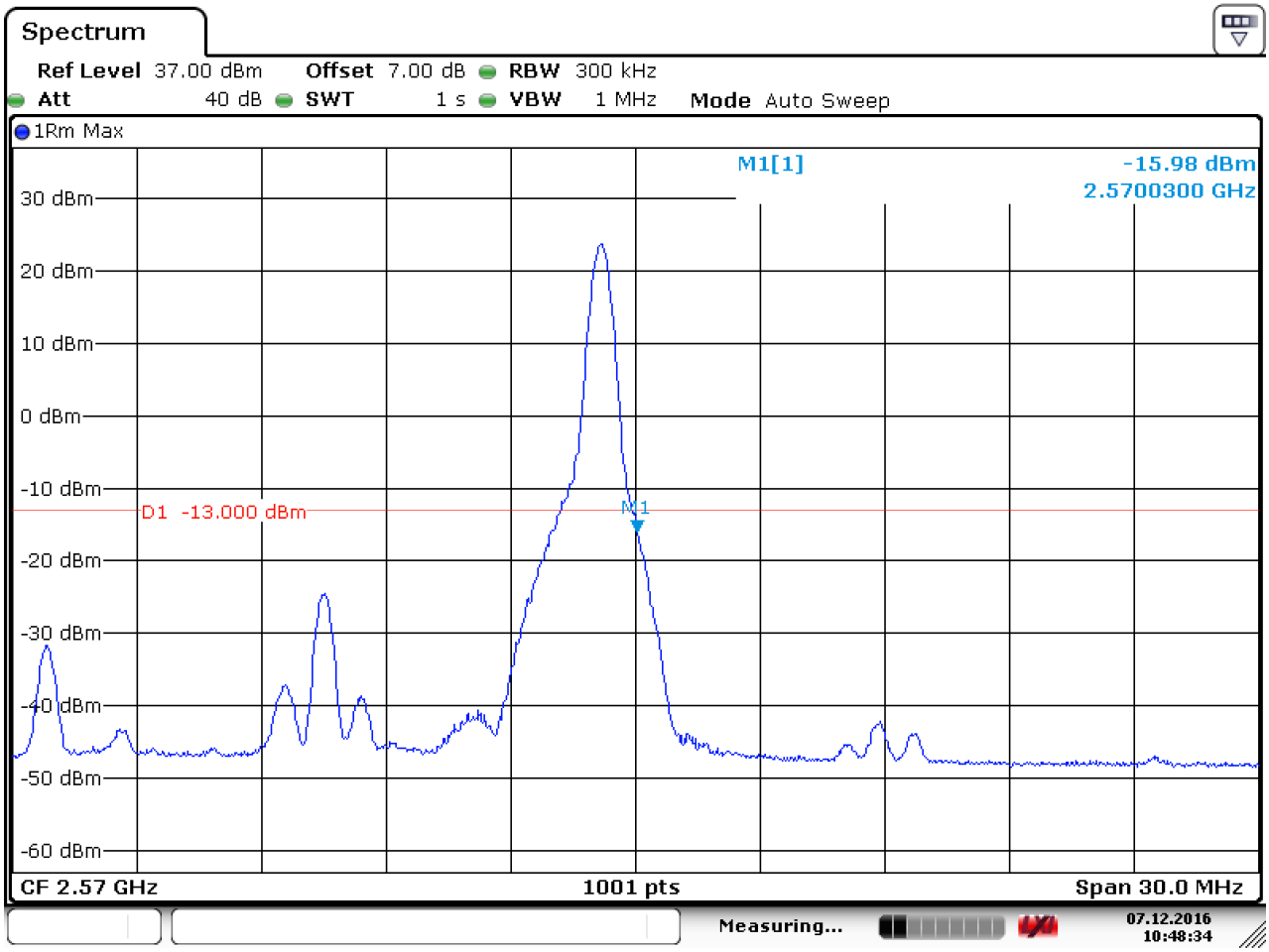
5.1.1.6.1.2 Test RB=75RB



Date: 7.DEC.2016 10:46:04

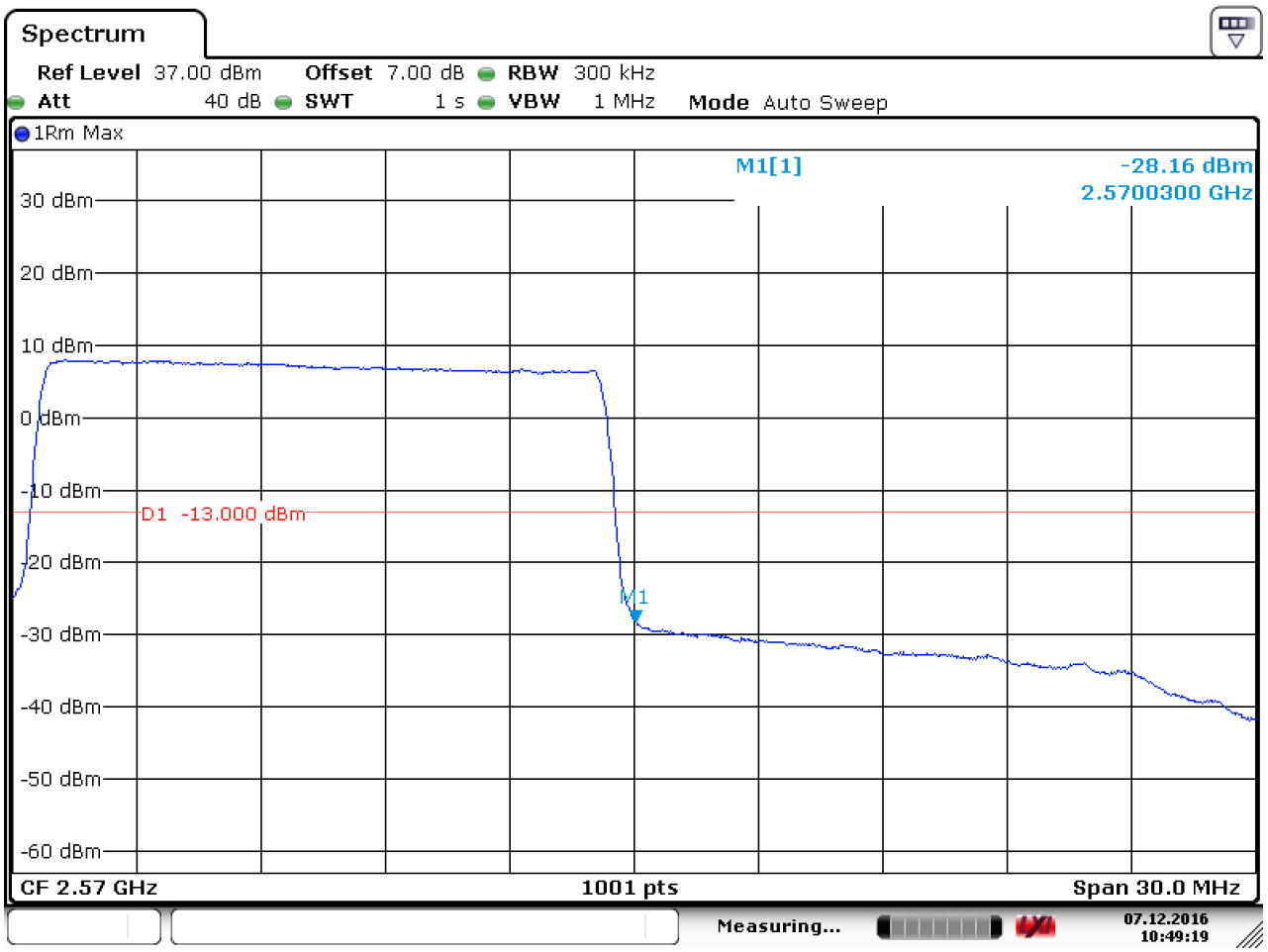
5.1.1.6.2 Test Channel = HCH

5.1.1.6.2.1 Test RB=1RB



Date: 7.DEC.2016 10:48:34

5.1.1.6.2.2 Test RB=75RB

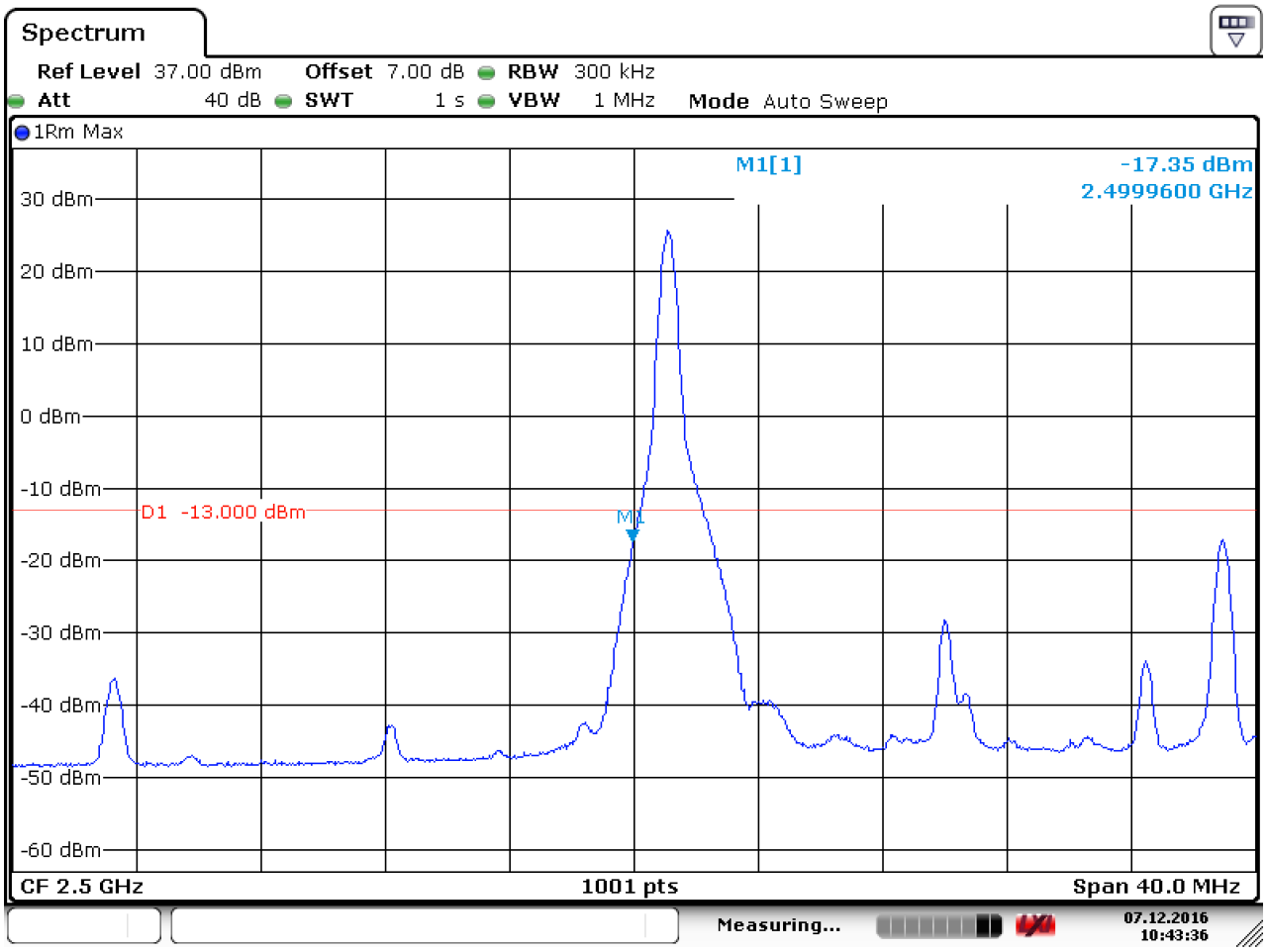


Date: 7.DEC.2016 10:49:19

5.1.1.7 Test Mode = LTE/TM1 20MHz

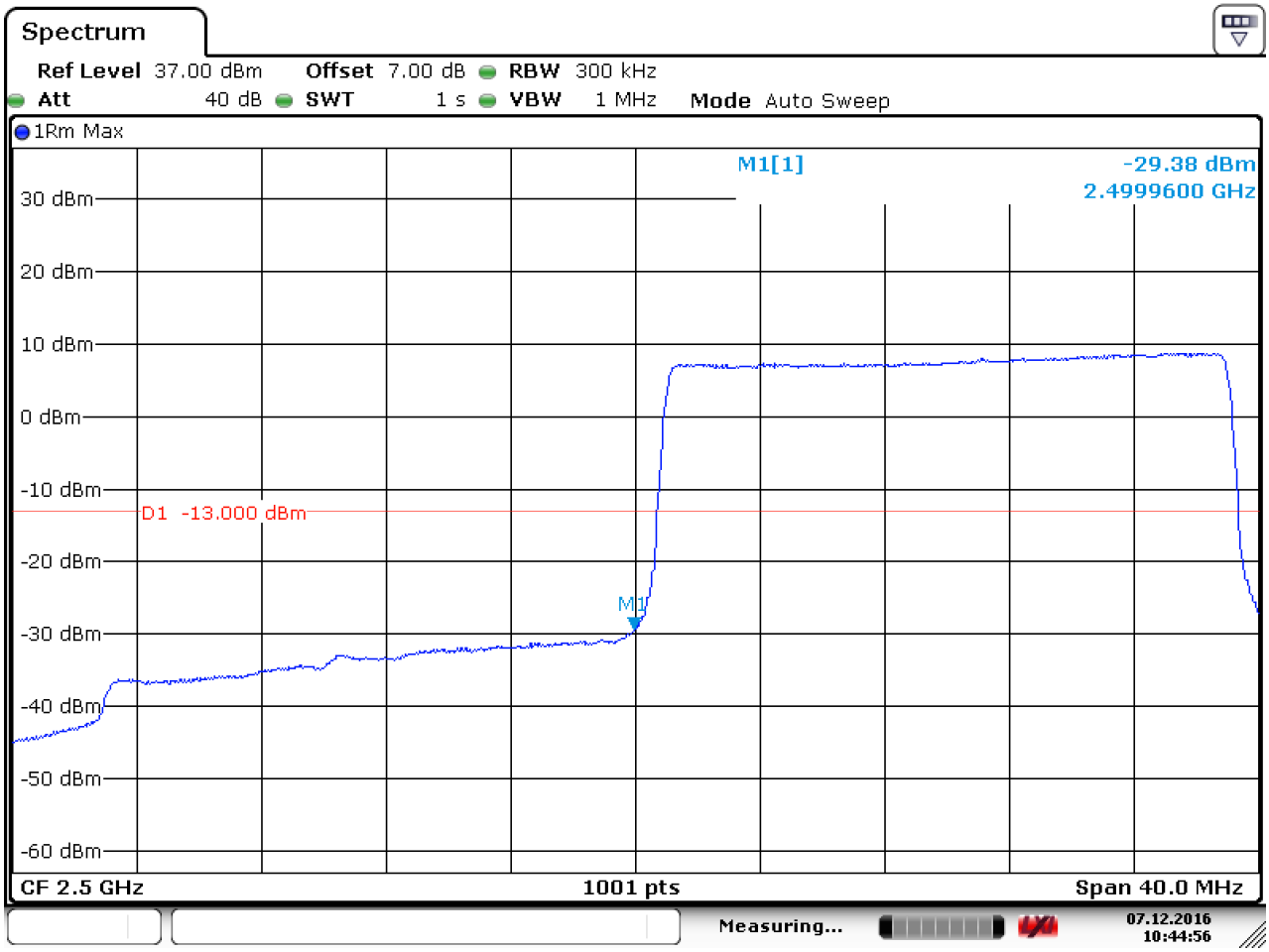
5.1.1.7.1 Test Channel = LCH

5.1.1.7.1.1 Test RB=1RB



Date: 7.DEC.2016 10:43:36

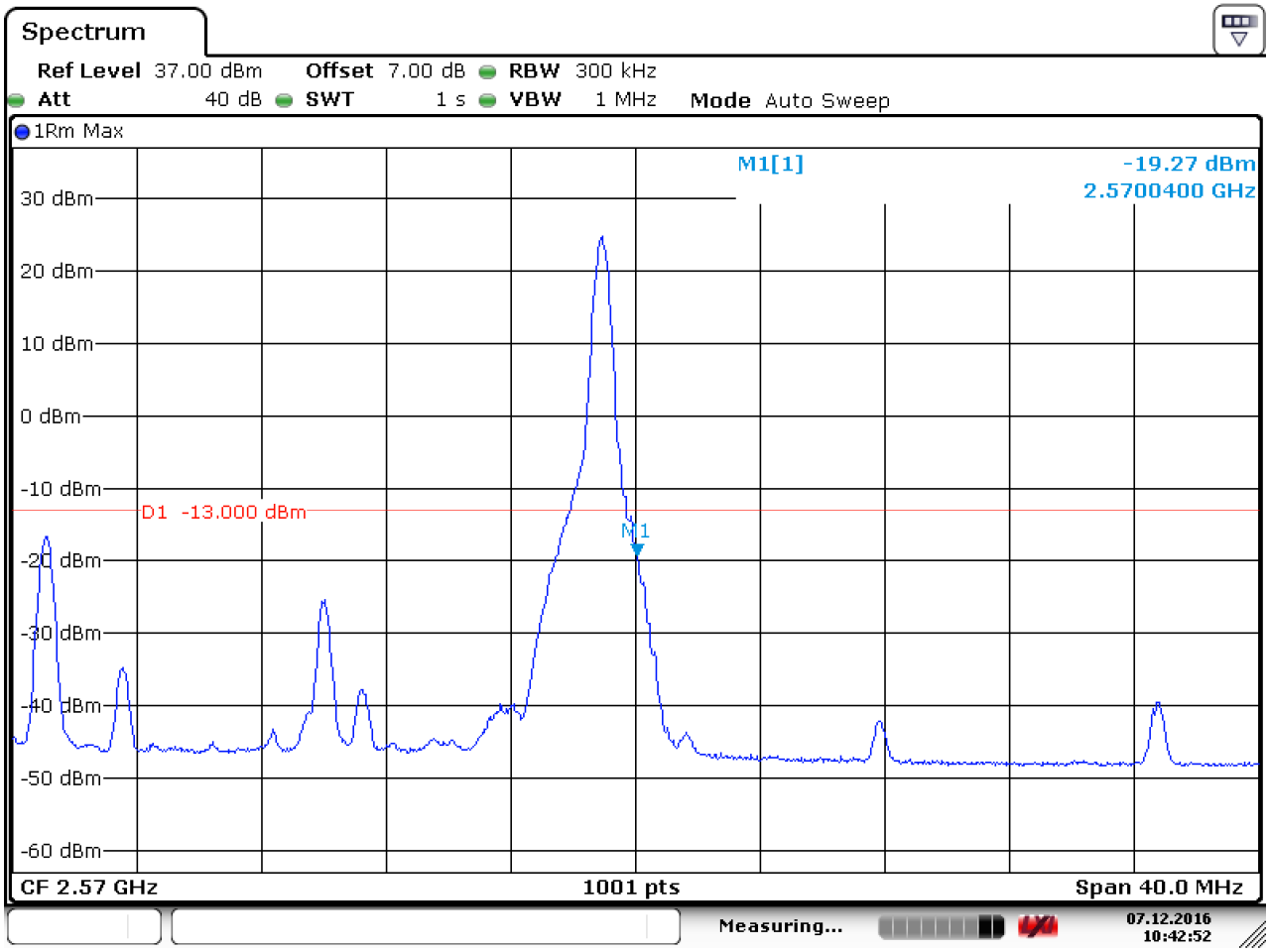
5.1.1.7.1.2 Test RB=100RB



Date: 7.DEC.2016 10:44:56

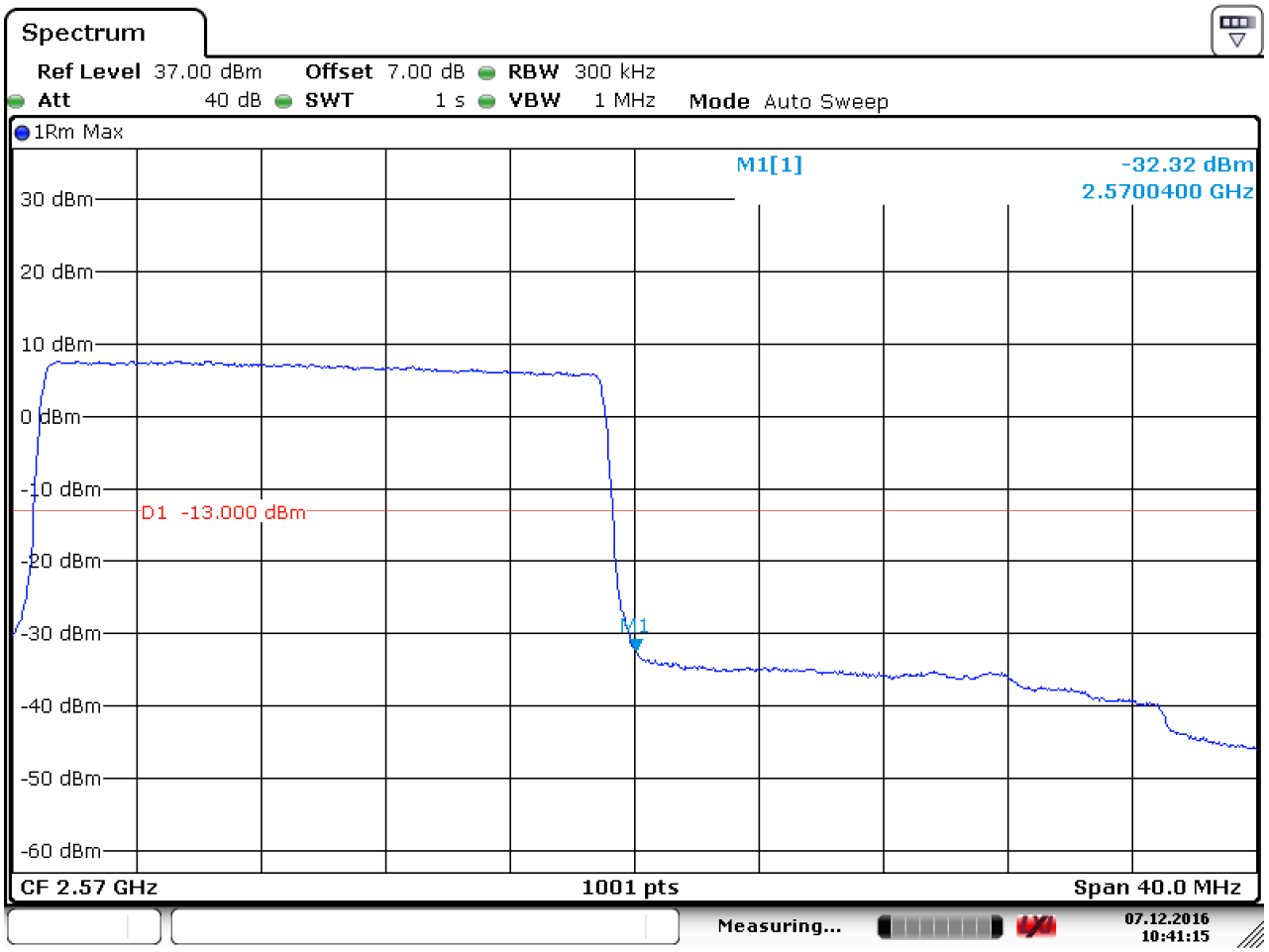
5.1.1.7.2 Test Channel = HCH

5.1.1.7.2.1 Test RB=1RB



Date: 7.DEC.2016 10:42:53

5.1.1.7.2.2 Test RB=100RB

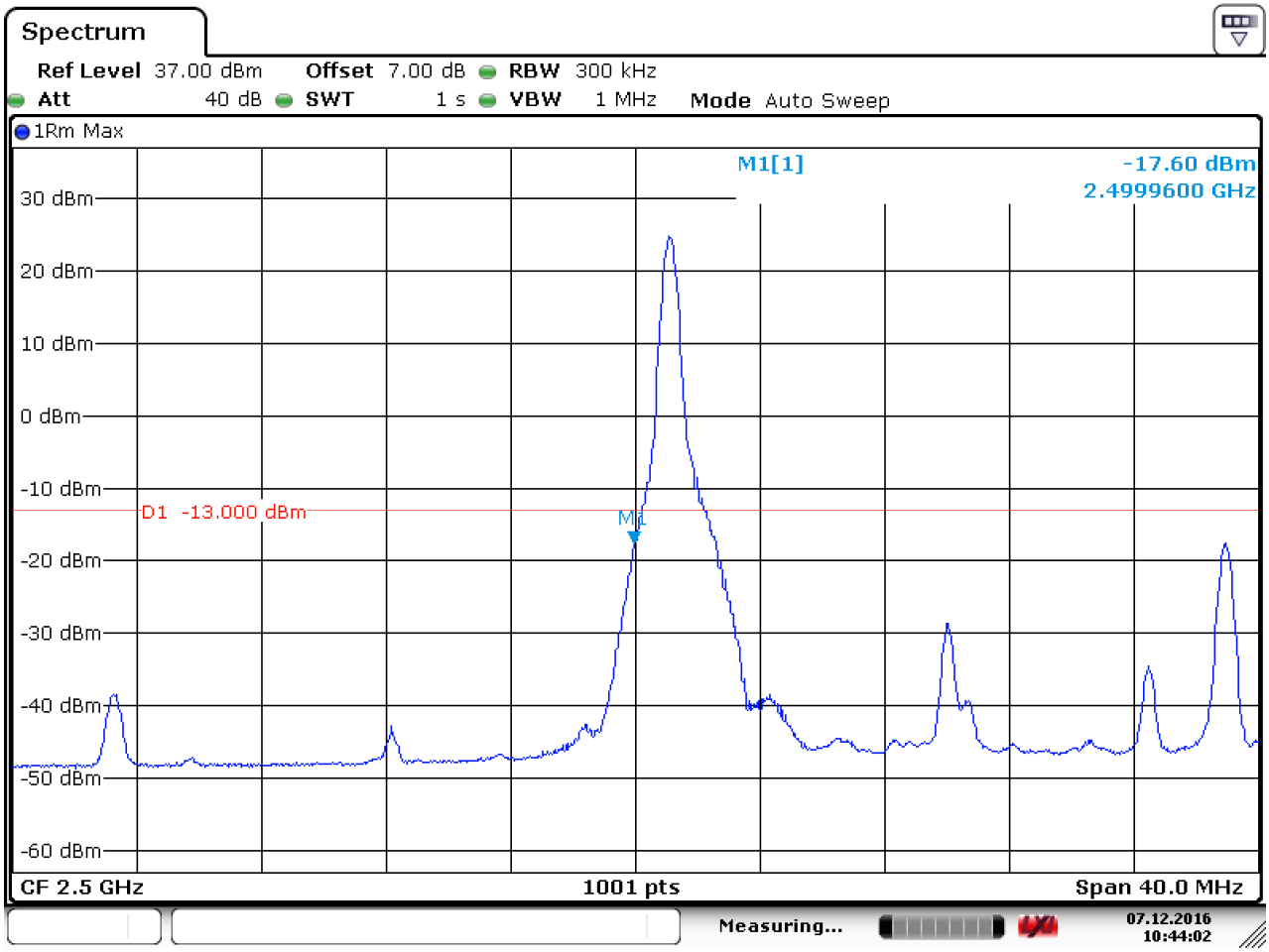


Date: 7.DEC.2016 10:41:15

5.1.1.8 Test Mode = LTE/TM2 20MHz

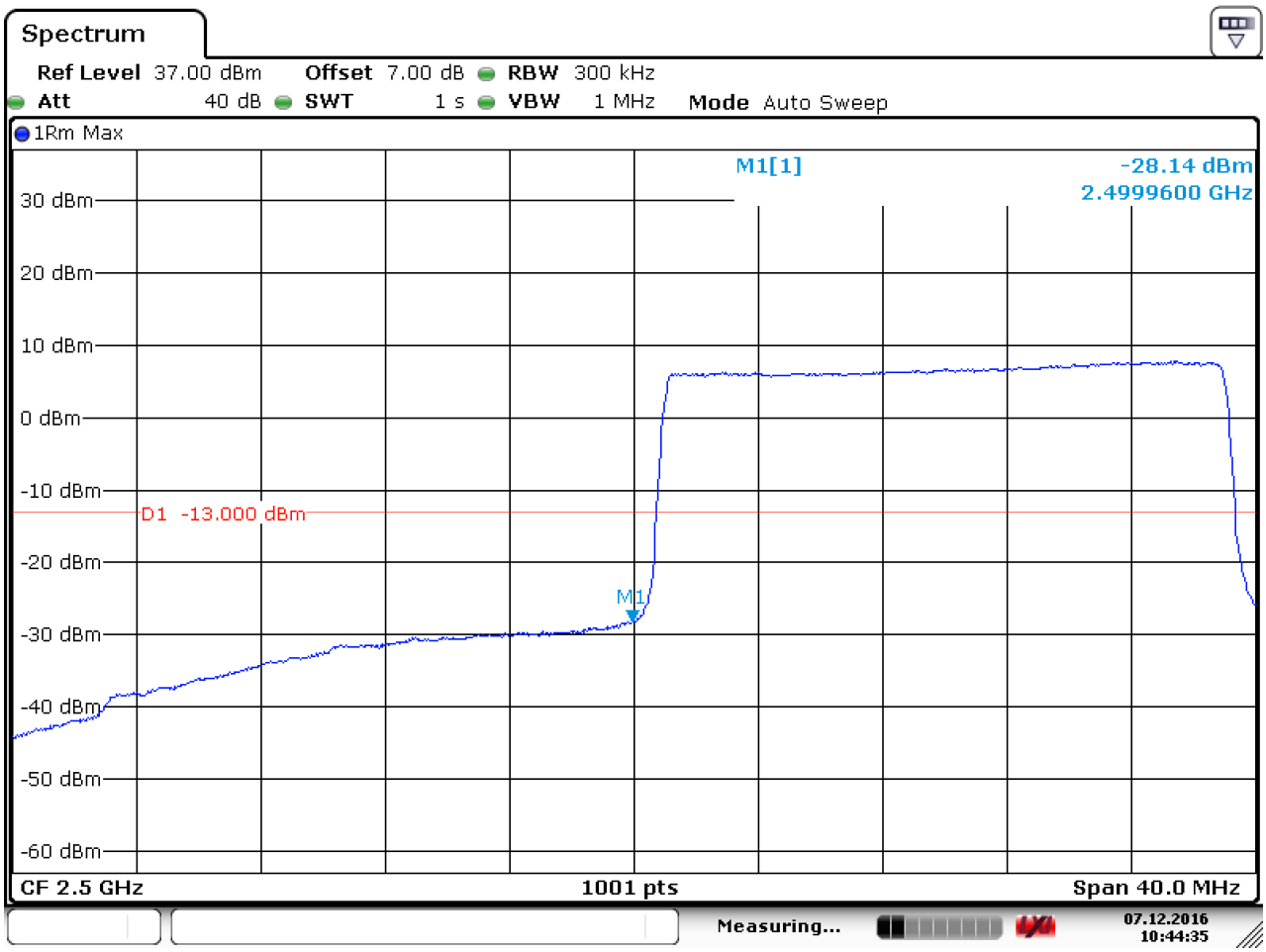
5.1.1.8.1 Test Channel = LCH

5.1.1.8.1.1 Test RB=1RB



Date: 7.DEC.2016 10:44:02

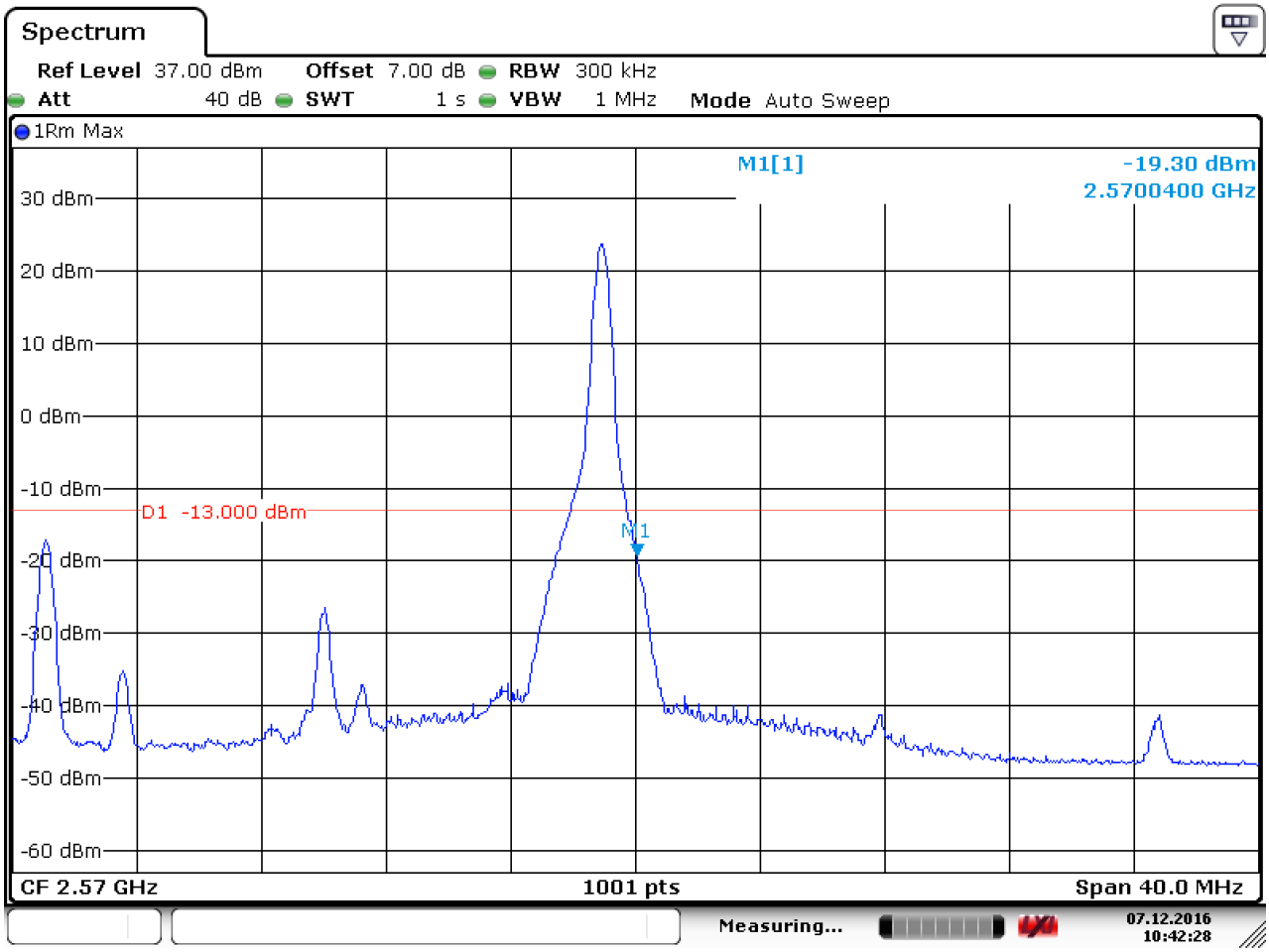
5.1.1.8.1.2 Test RB=100RB



Date: 7.DEC.2016 10:44:35

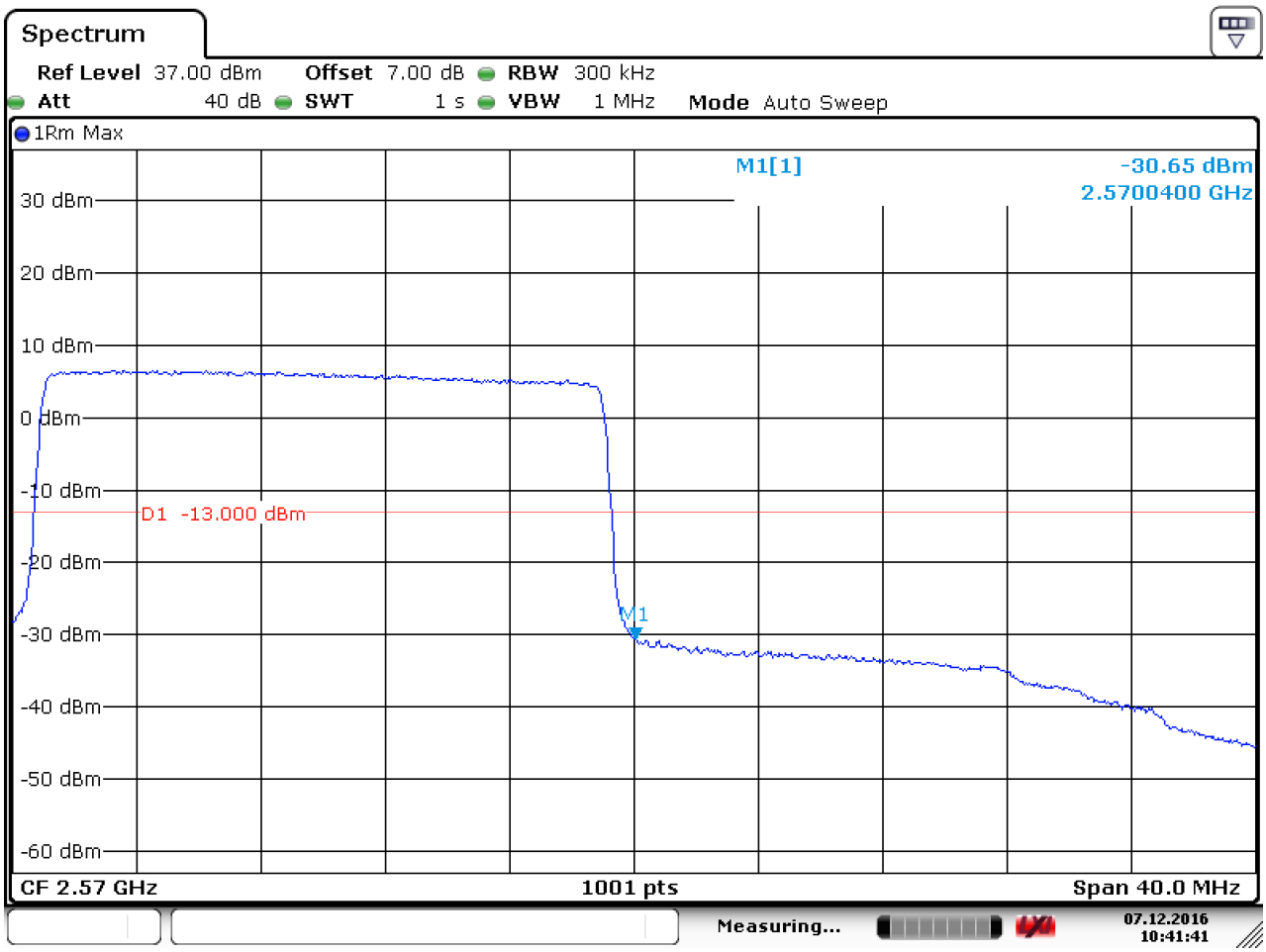
5.1.1.8.2 Test Channel = HCH

5.1.1.8.2.1 Test RB=1RB



Date: 7.DEC.2016 10:42:28

5.1.1.8.2.2 Test RB=100RB



Date: 7.DEC.2016 10:41:42

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.

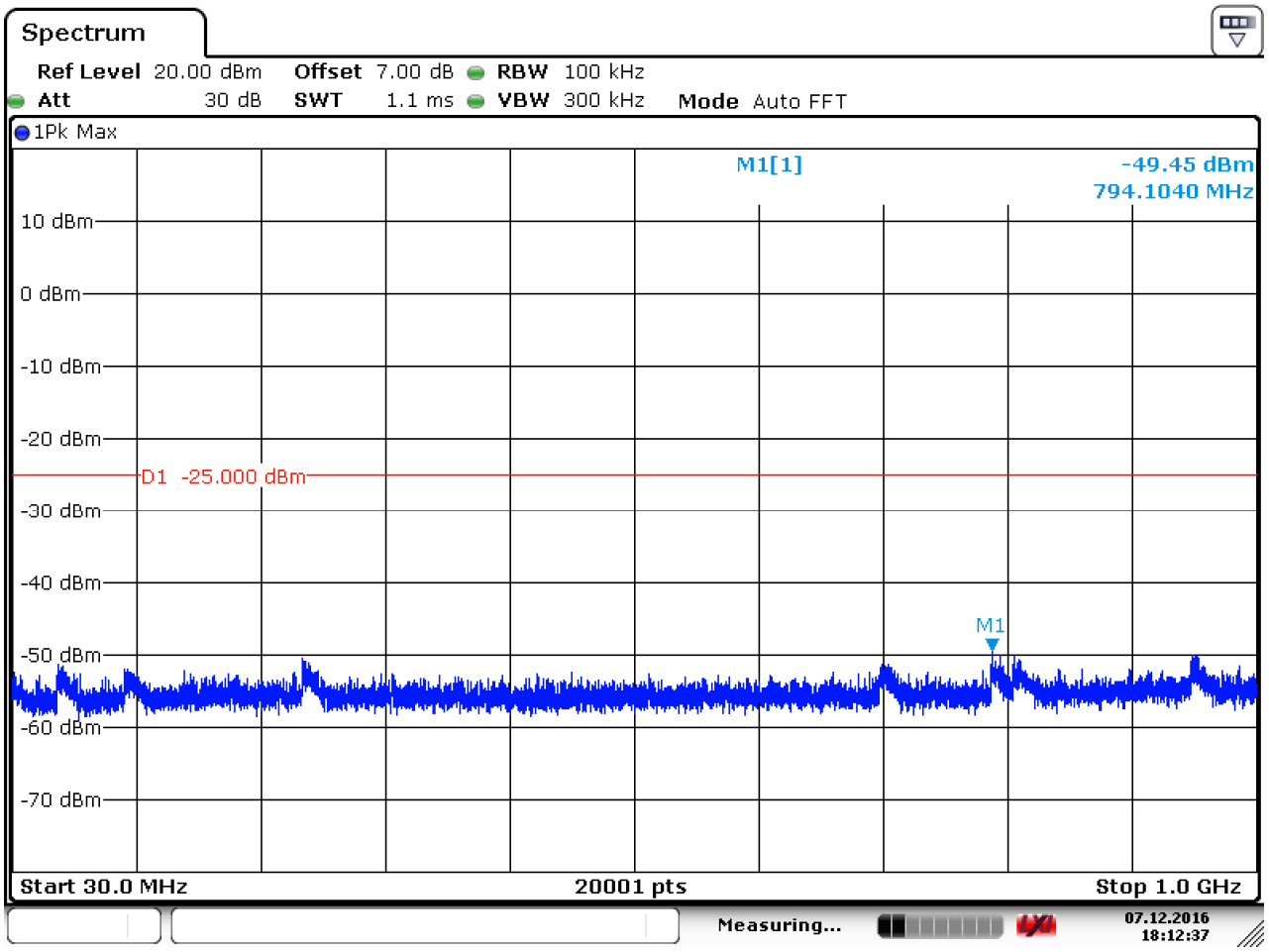
Part I - Test Plots

6.1 For LTE

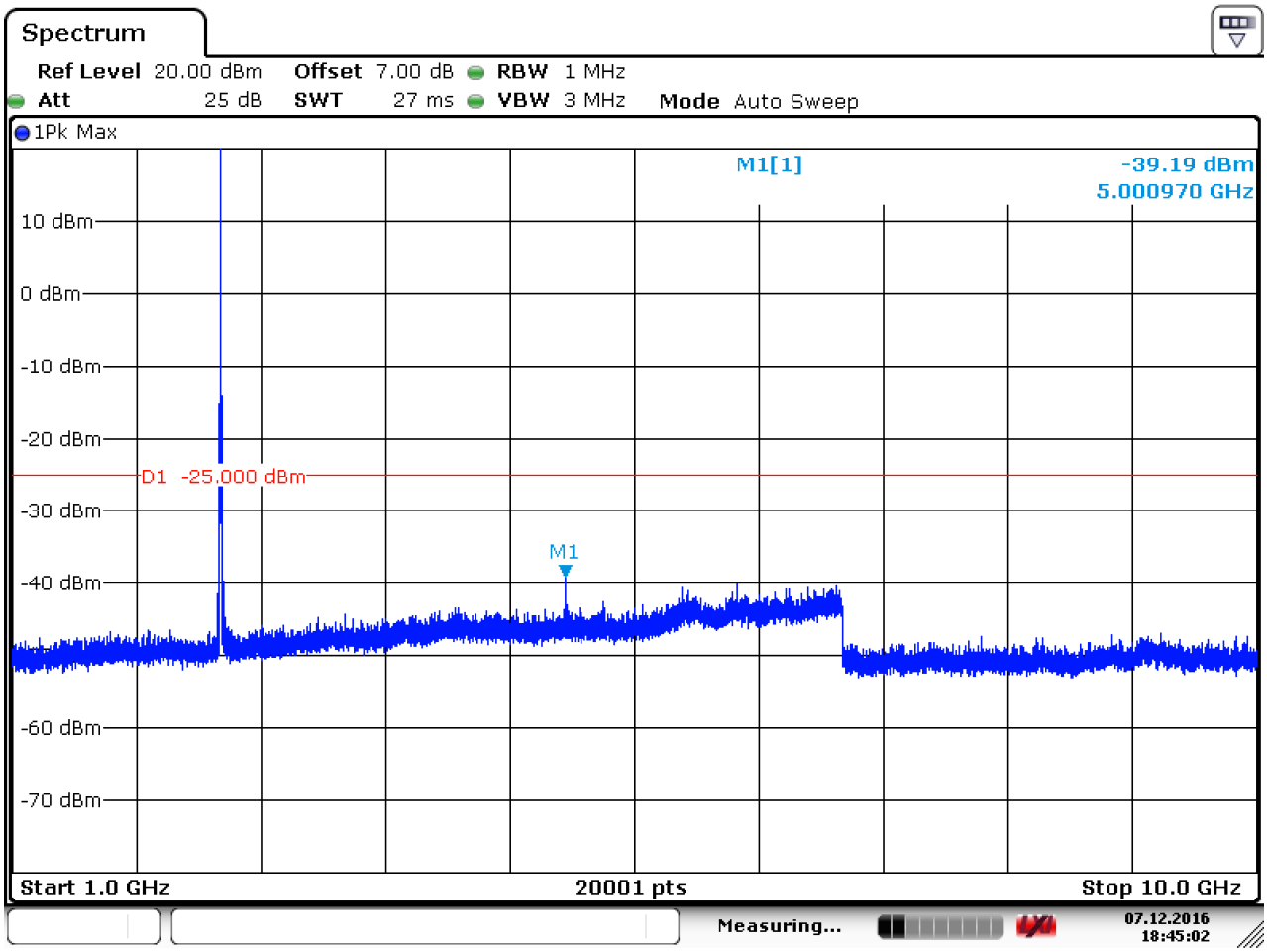
6.1.1 Test Band = LTE band7

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

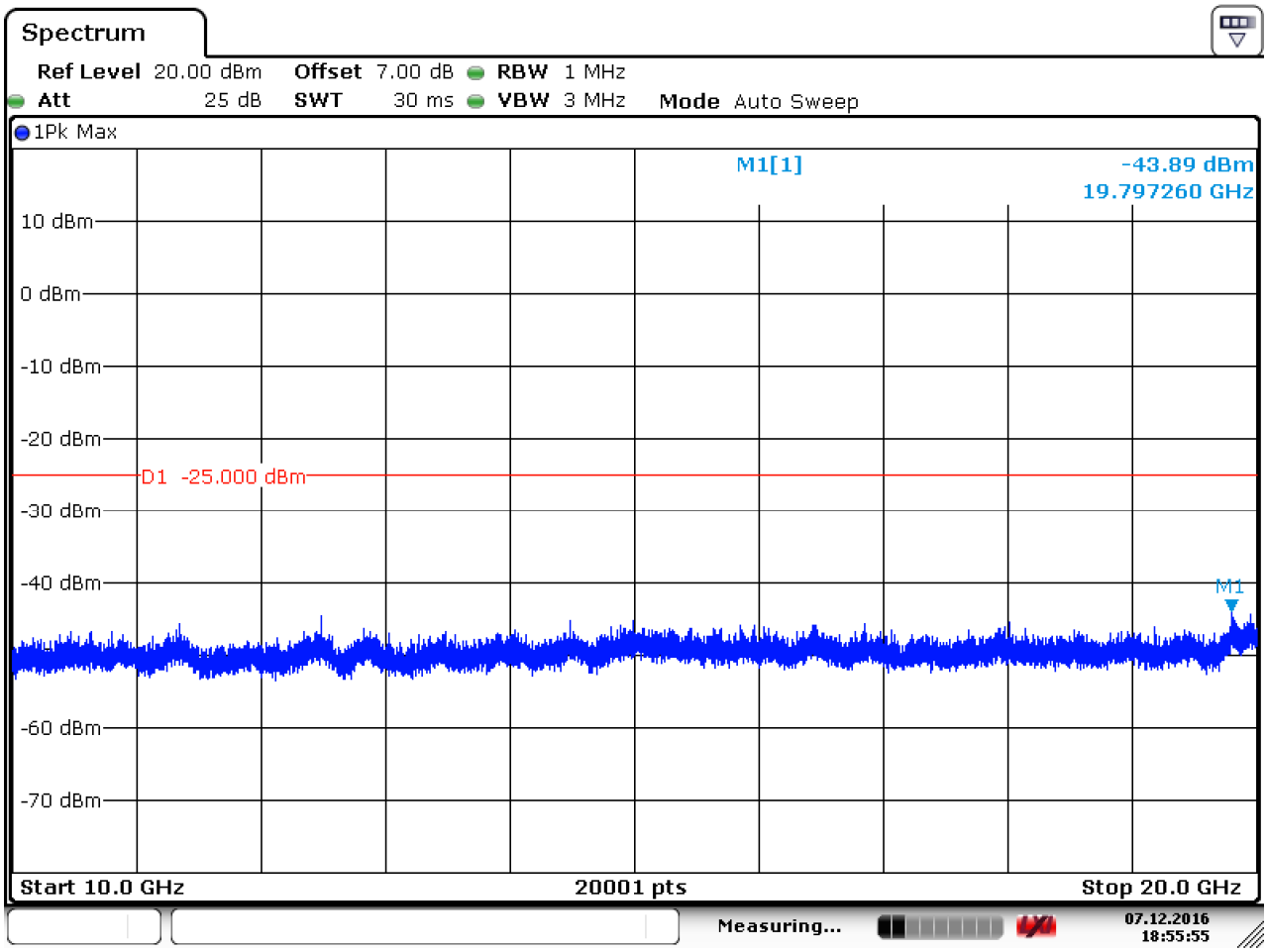
6.1.1.1.1 Test Channel = LCH



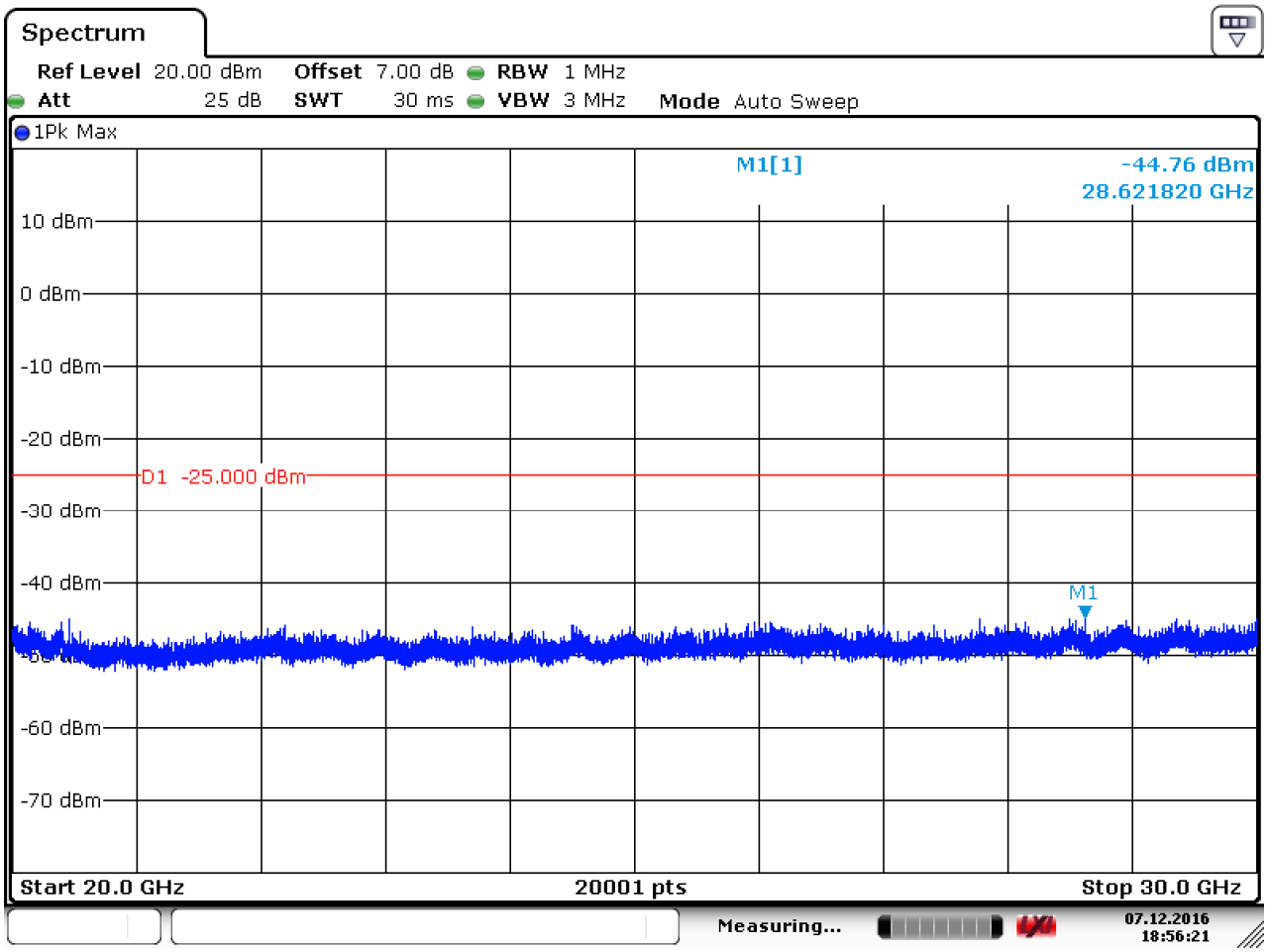
Date: 7.DEC.2016 18:12:37



Date: 7.DEC.2016 18:45:03

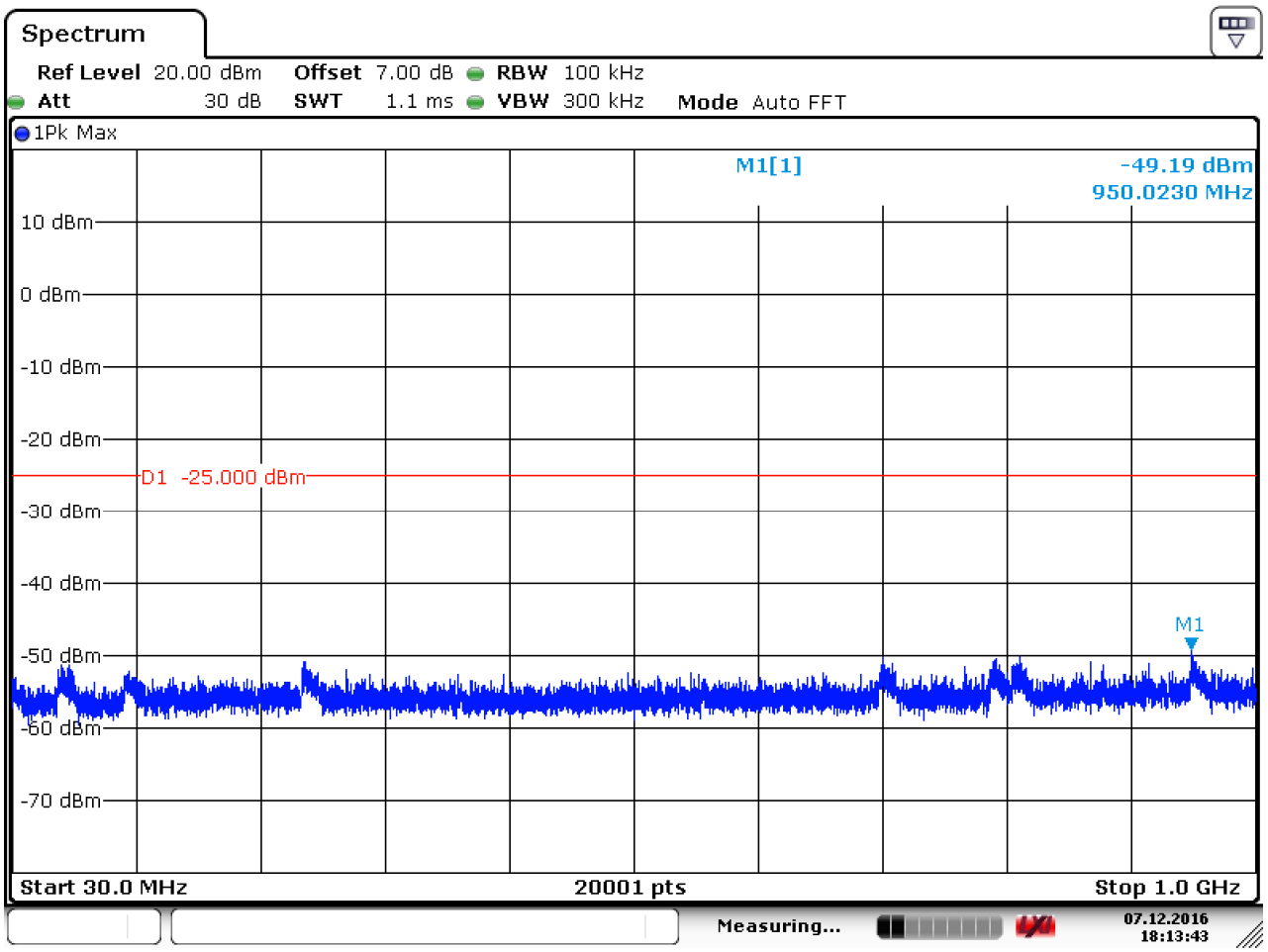


Date: 7.DEC.2016 18:55:56

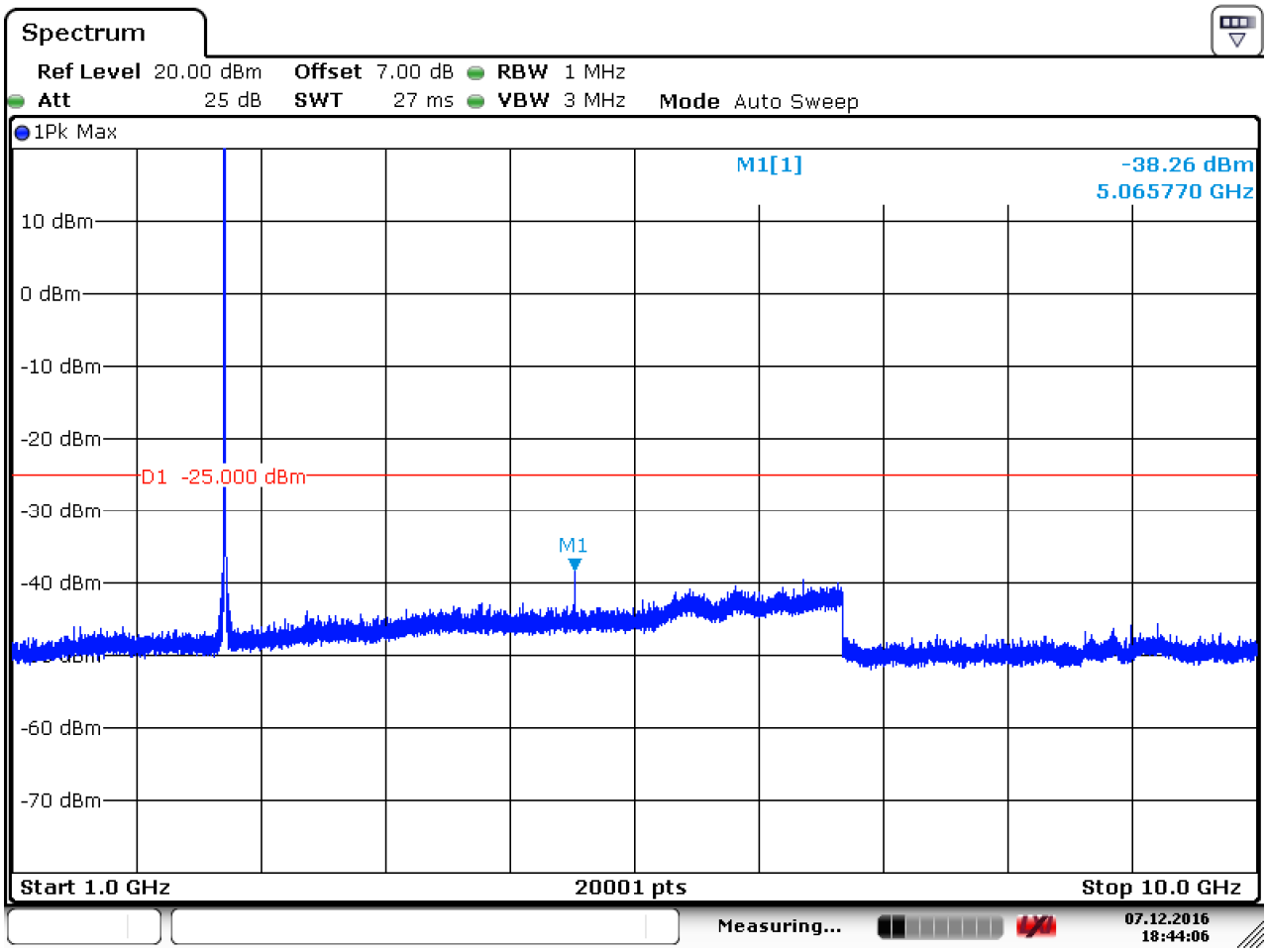


Date: 7.DEC.2016 18:56:22

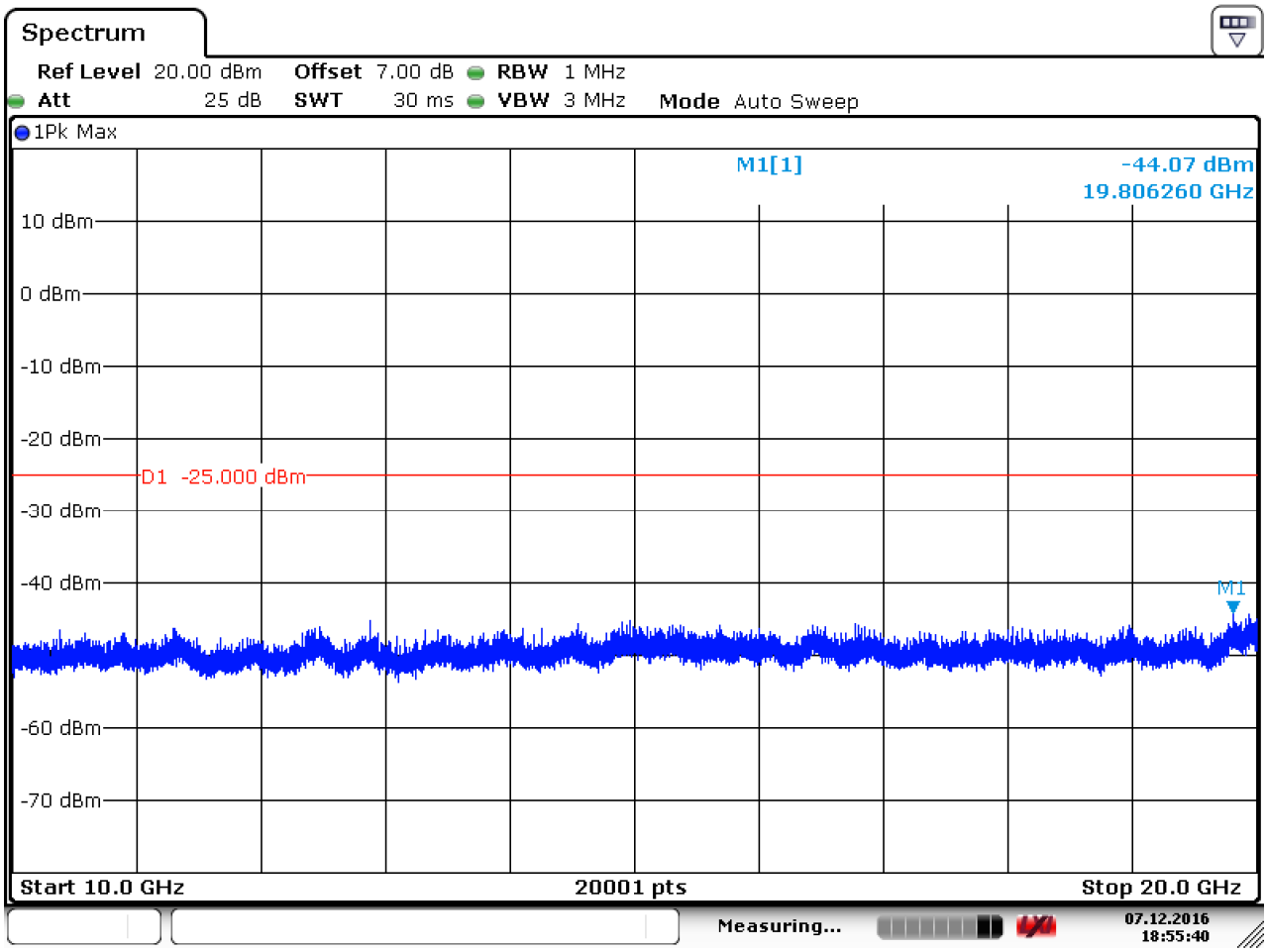
6.1.1.1.2 Test Channel = MCH



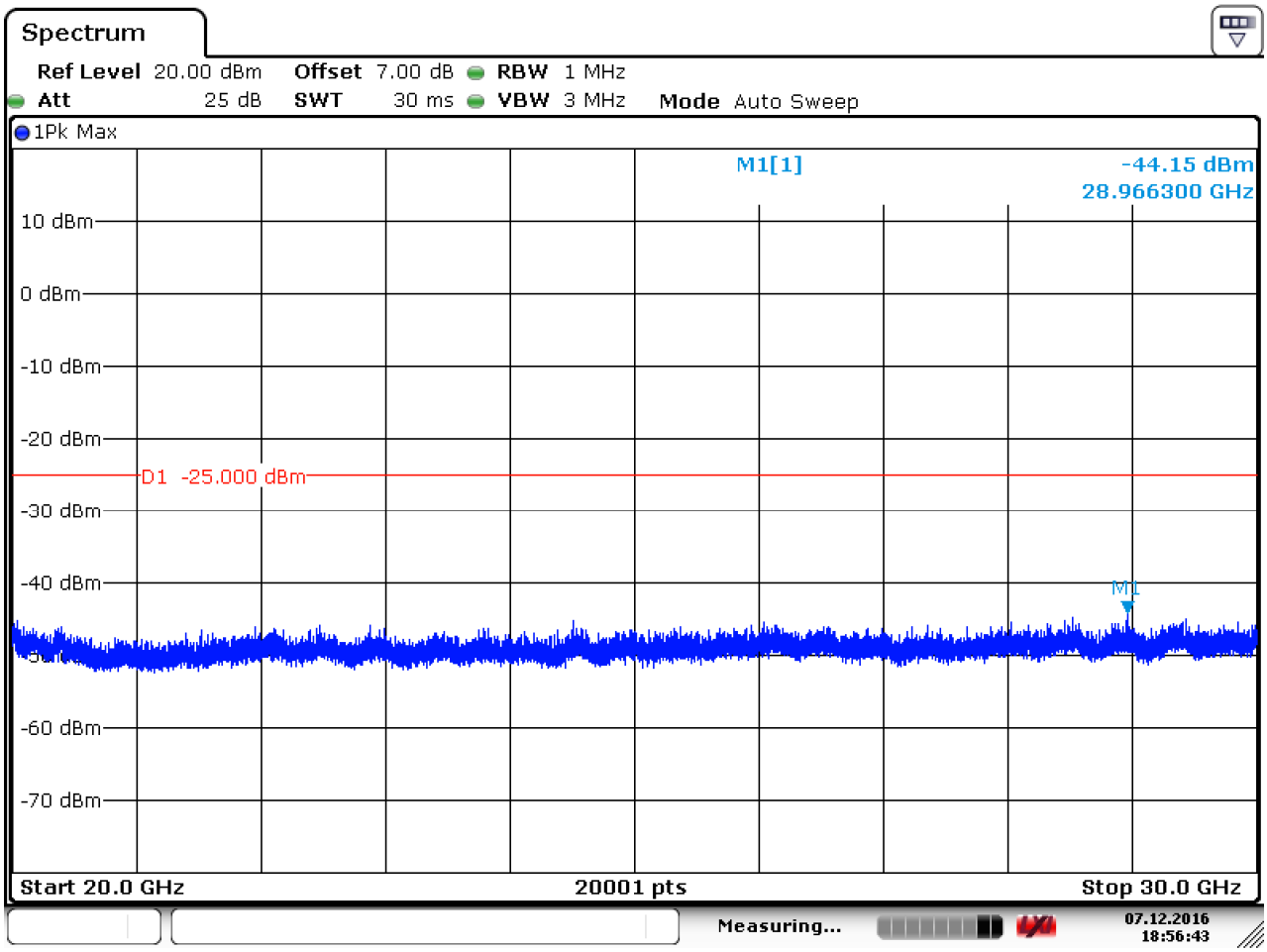
Date: 7.DEC.2016 18:13:43



Date: 7.DEC.2016 18:44:07

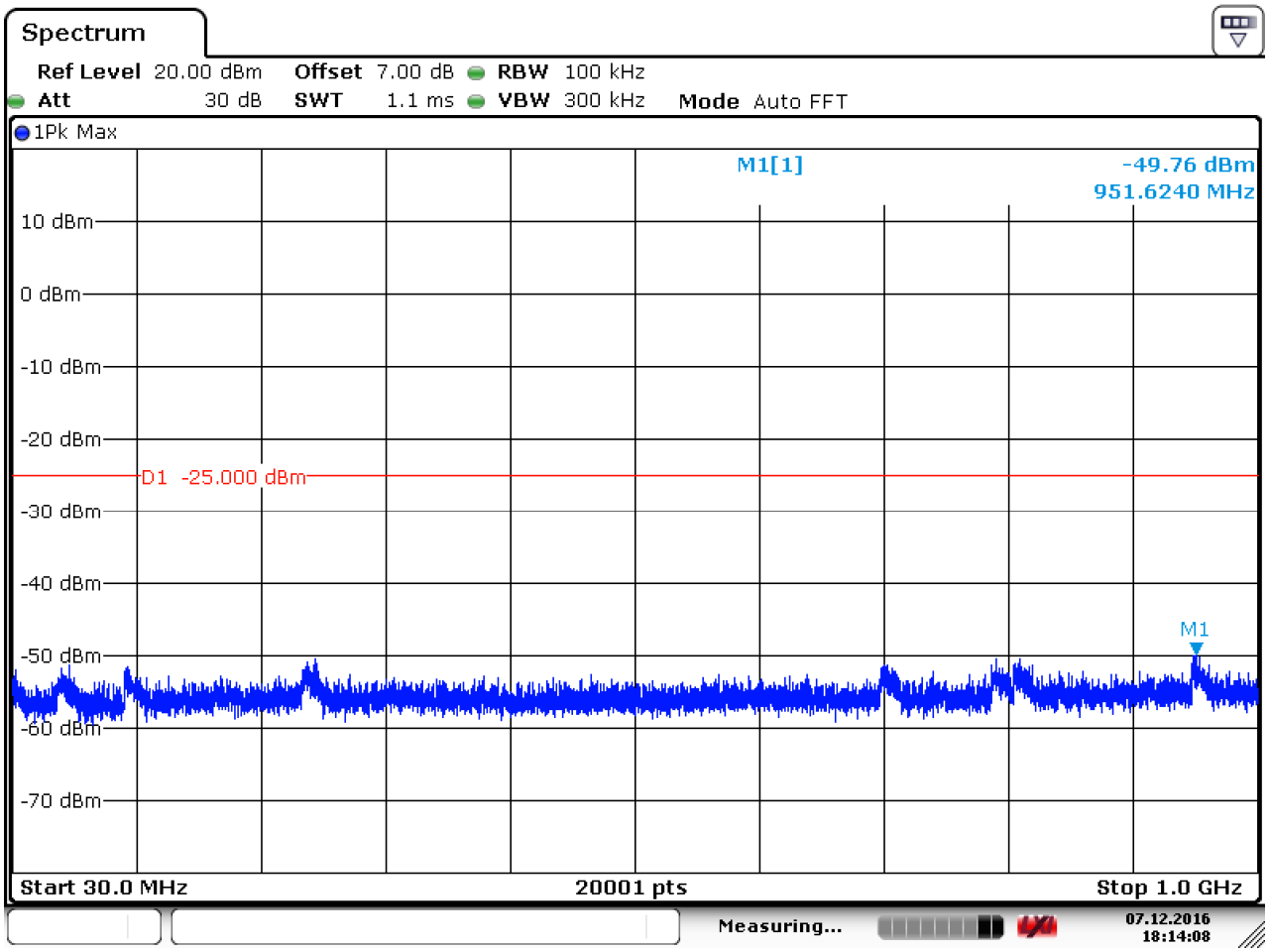


Date: 7.DEC.2016 18:55:40

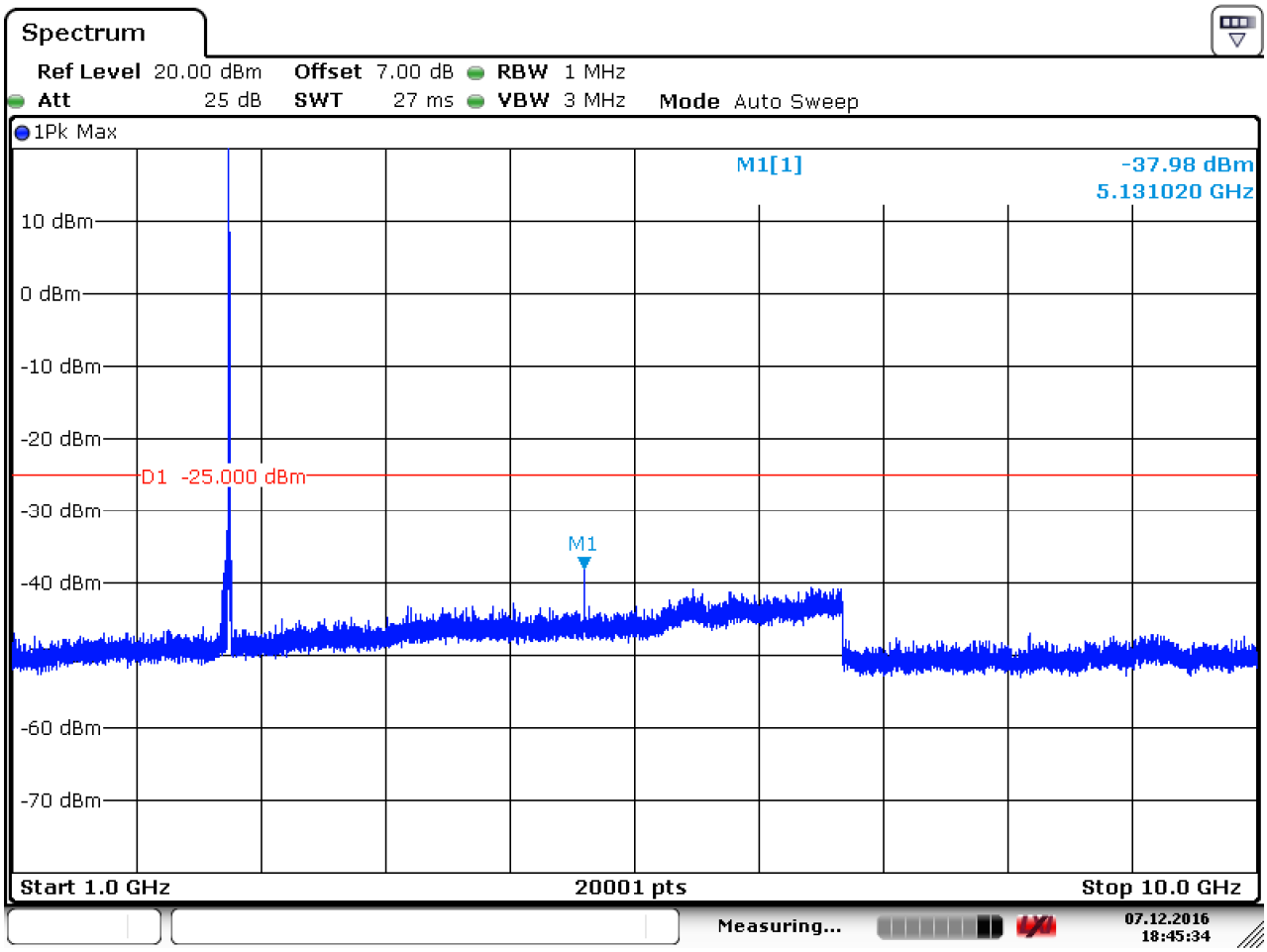


Date: 7.DEC.2016 18:56:44

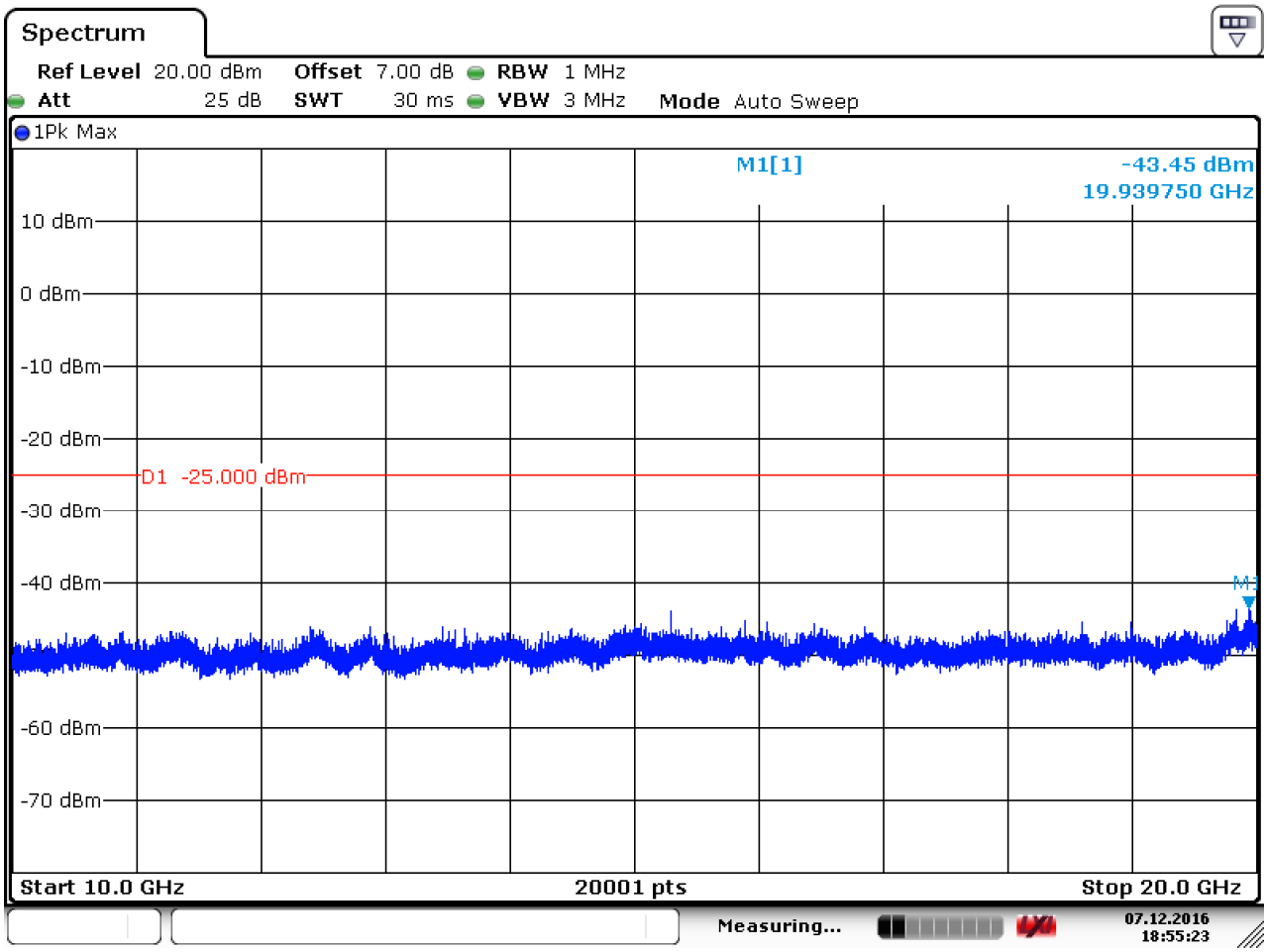
6.1.1.1.3 Test Channel = HCH



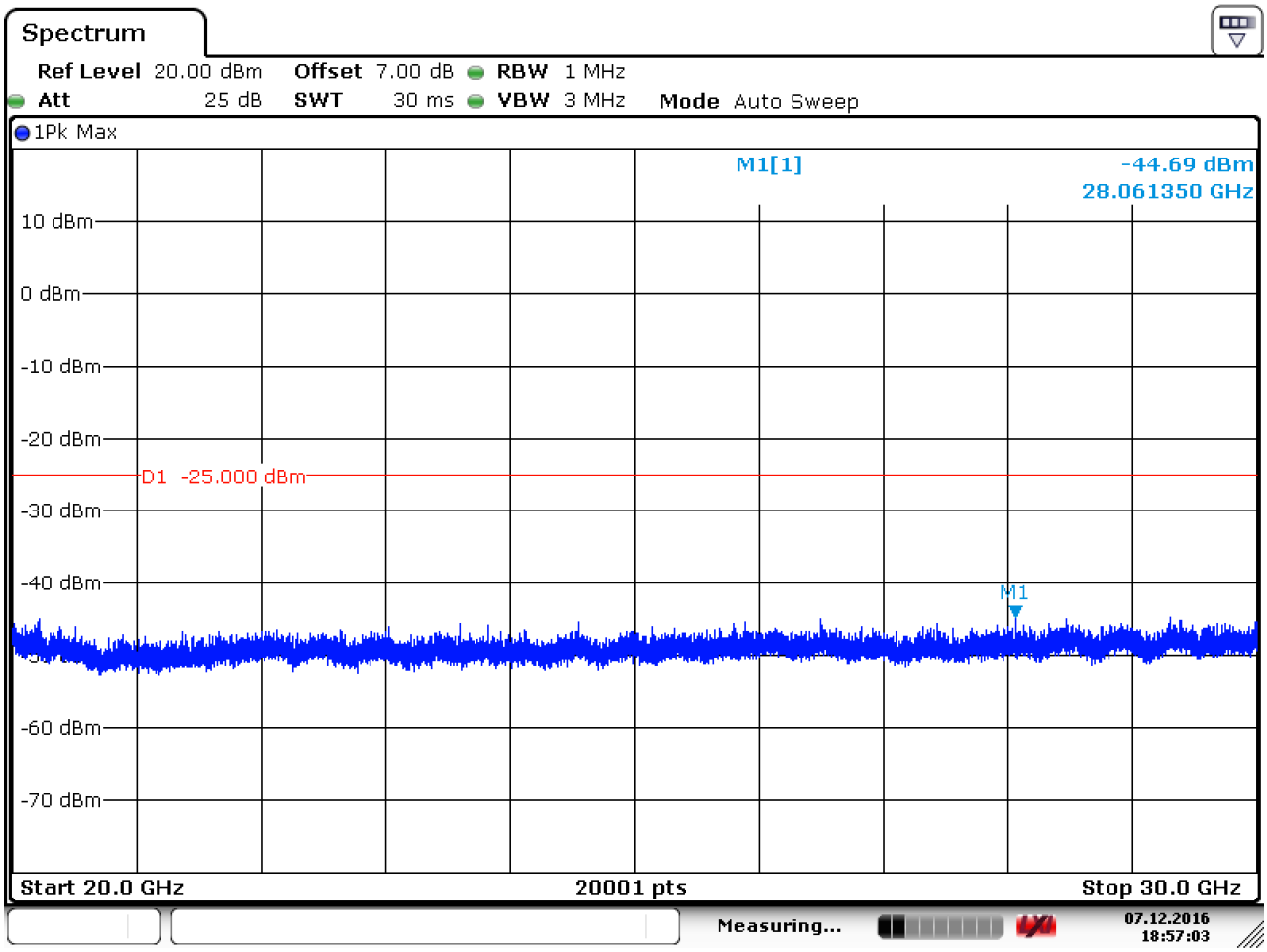
Date: 7.DEC.2016 18:14:09



Date: 7.DEC.2016 18:45:34



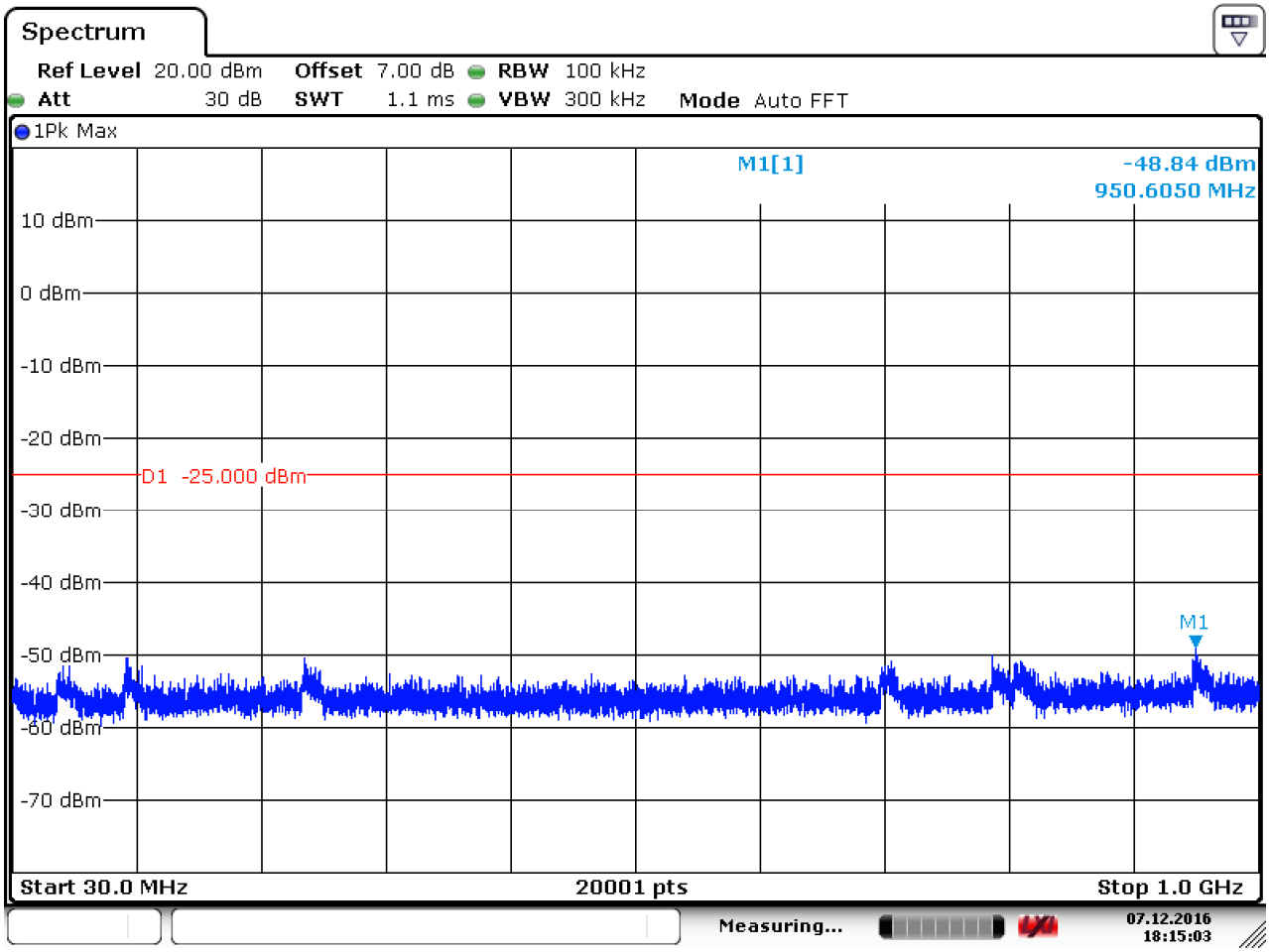
Date: 7.DEC.2016 18:55:24



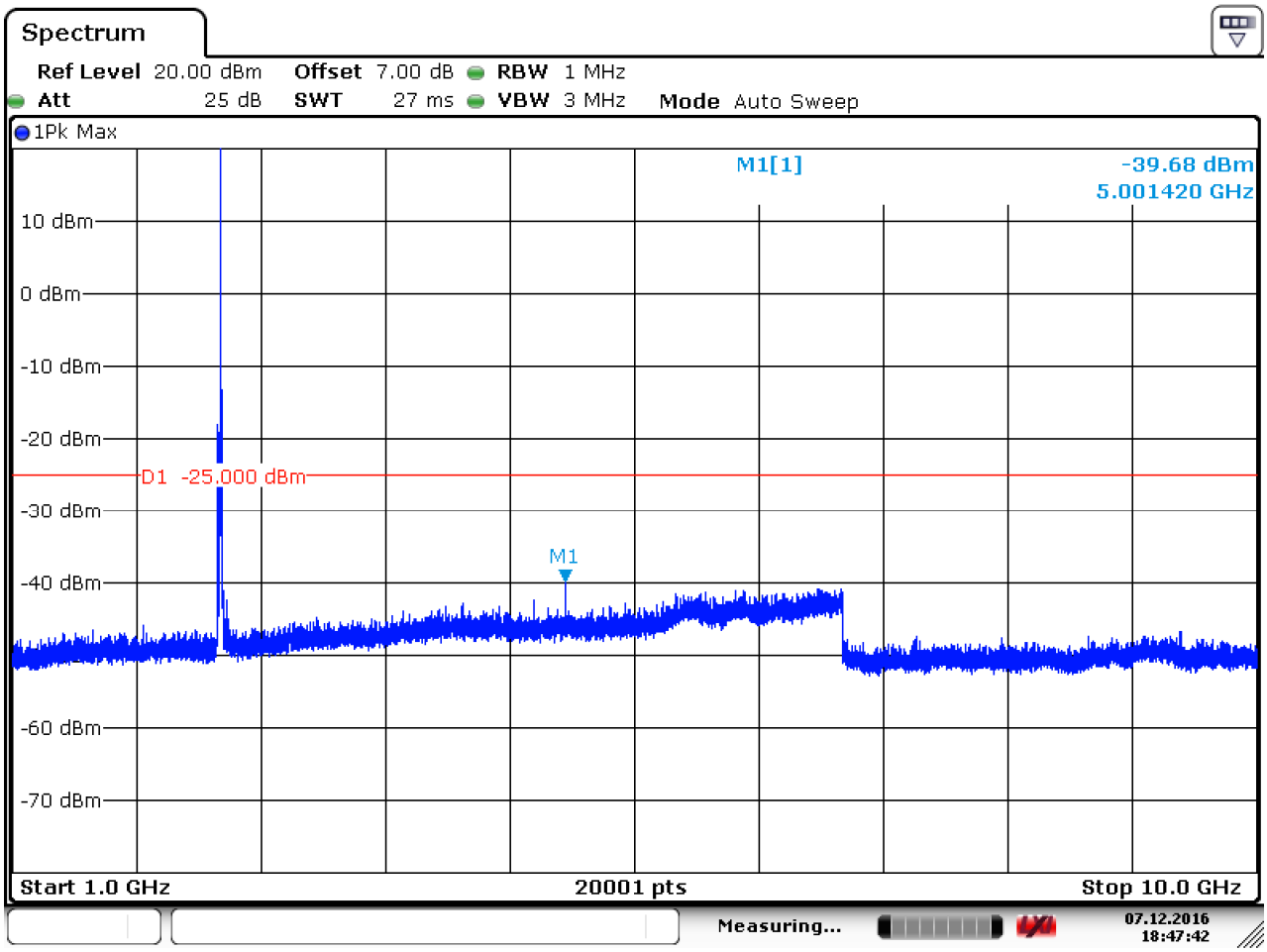
Date: 7.DEC.2016 18:57:03

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

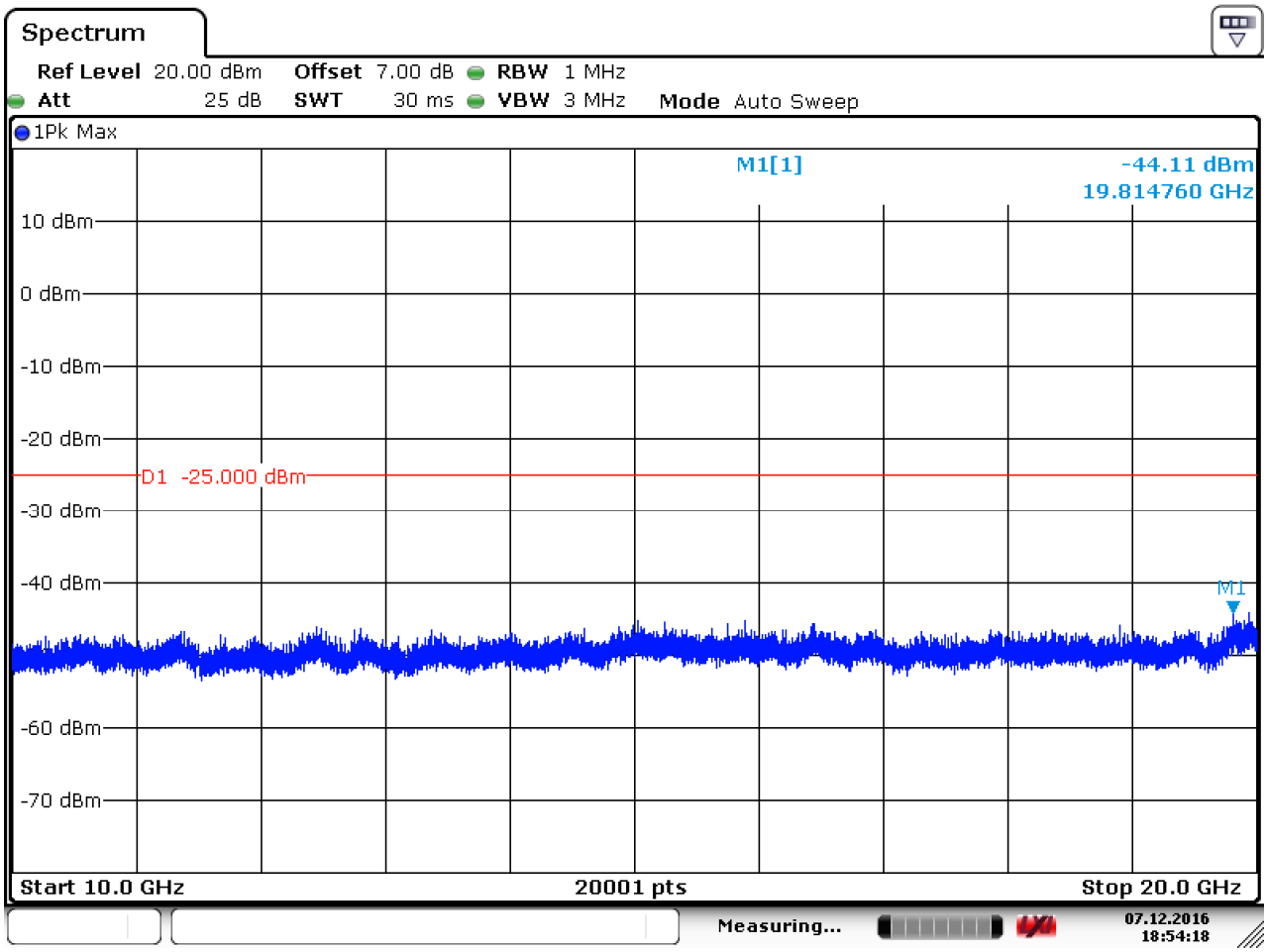
6.1.1.2.1 Test Channel = LCH



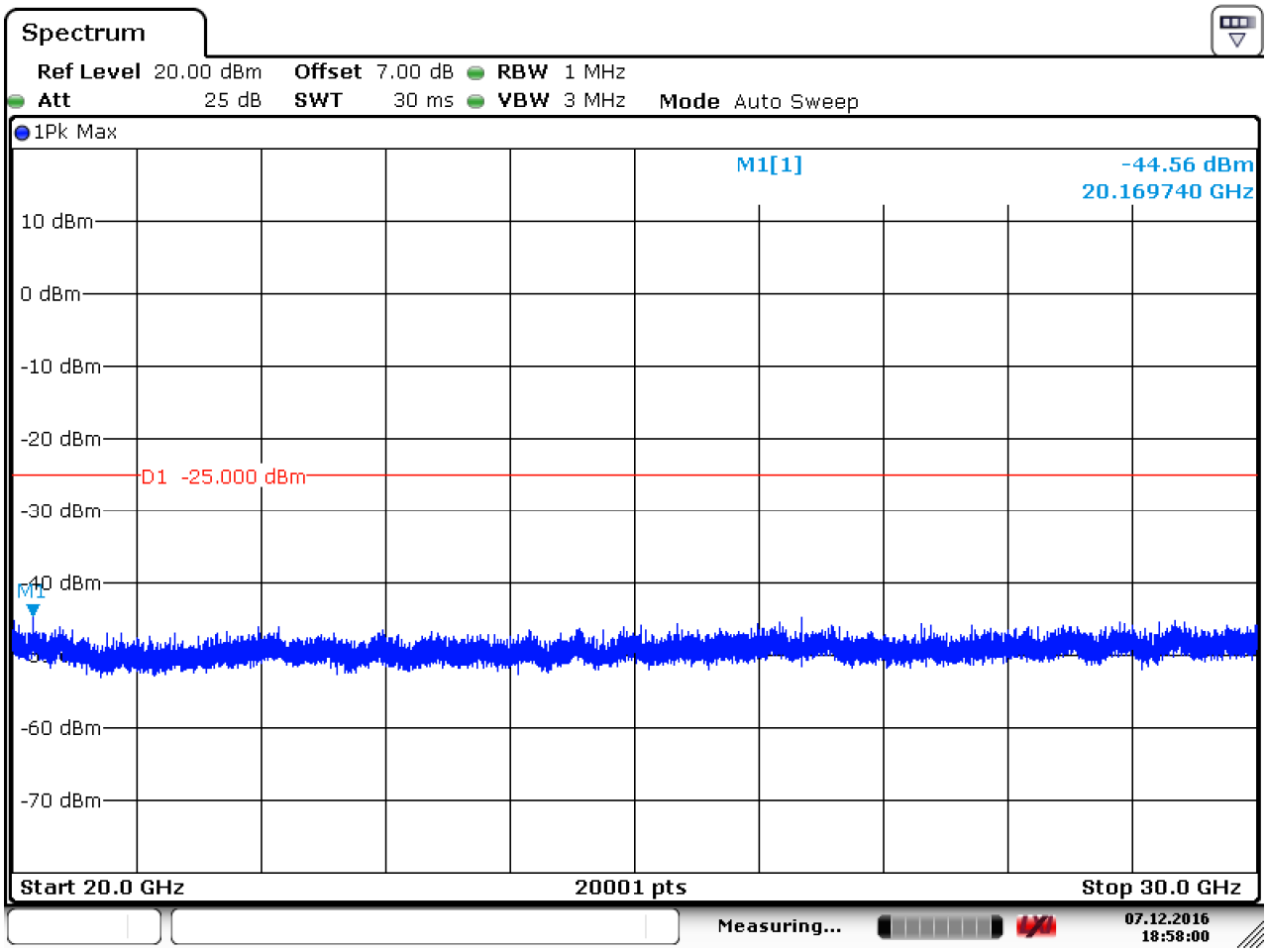
Date: 7.DEC.2016 18:15:03



Date: 7.DEC.2016 18:47:42

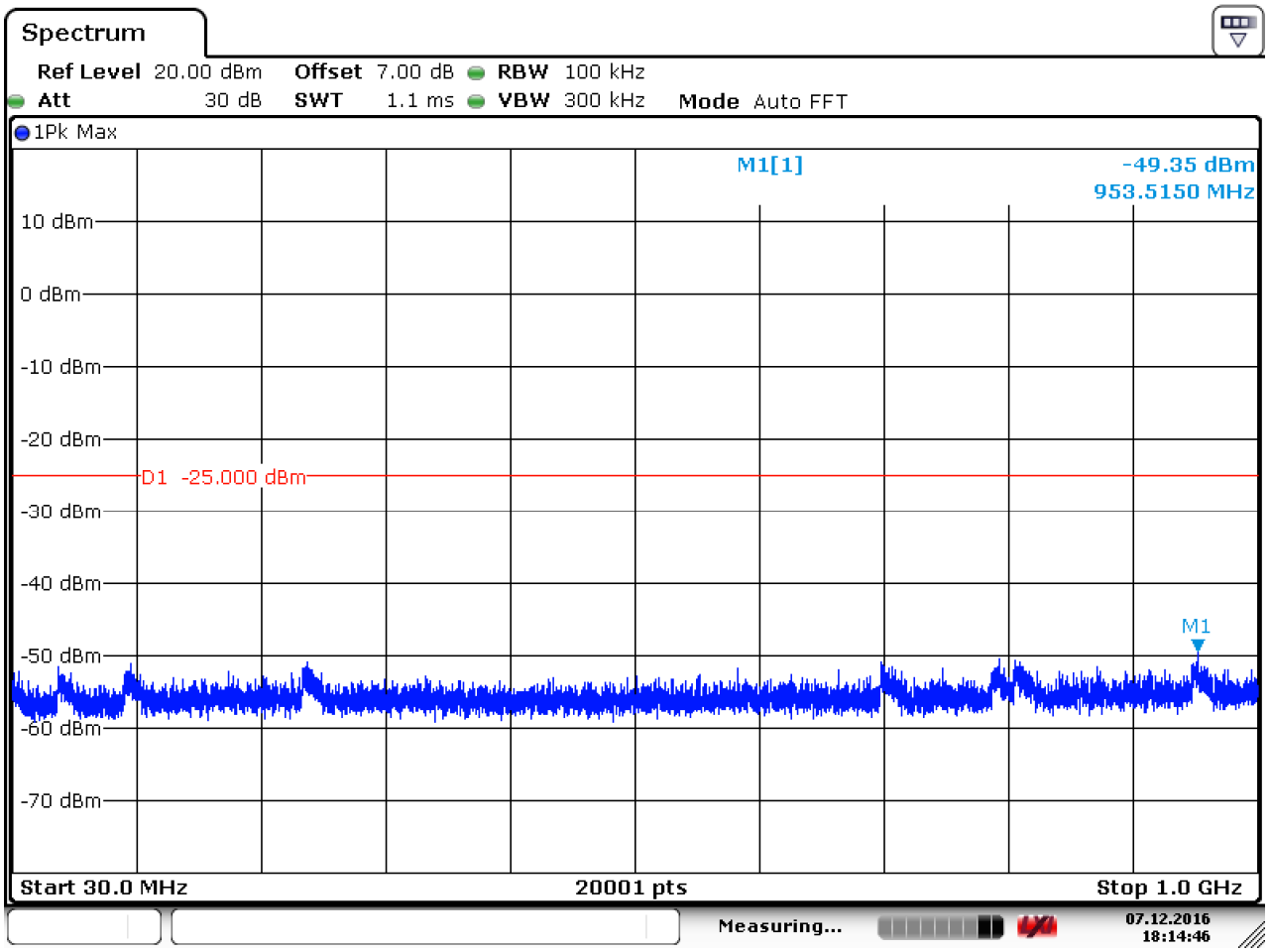


Date: 7.DEC.2016 18:54:19

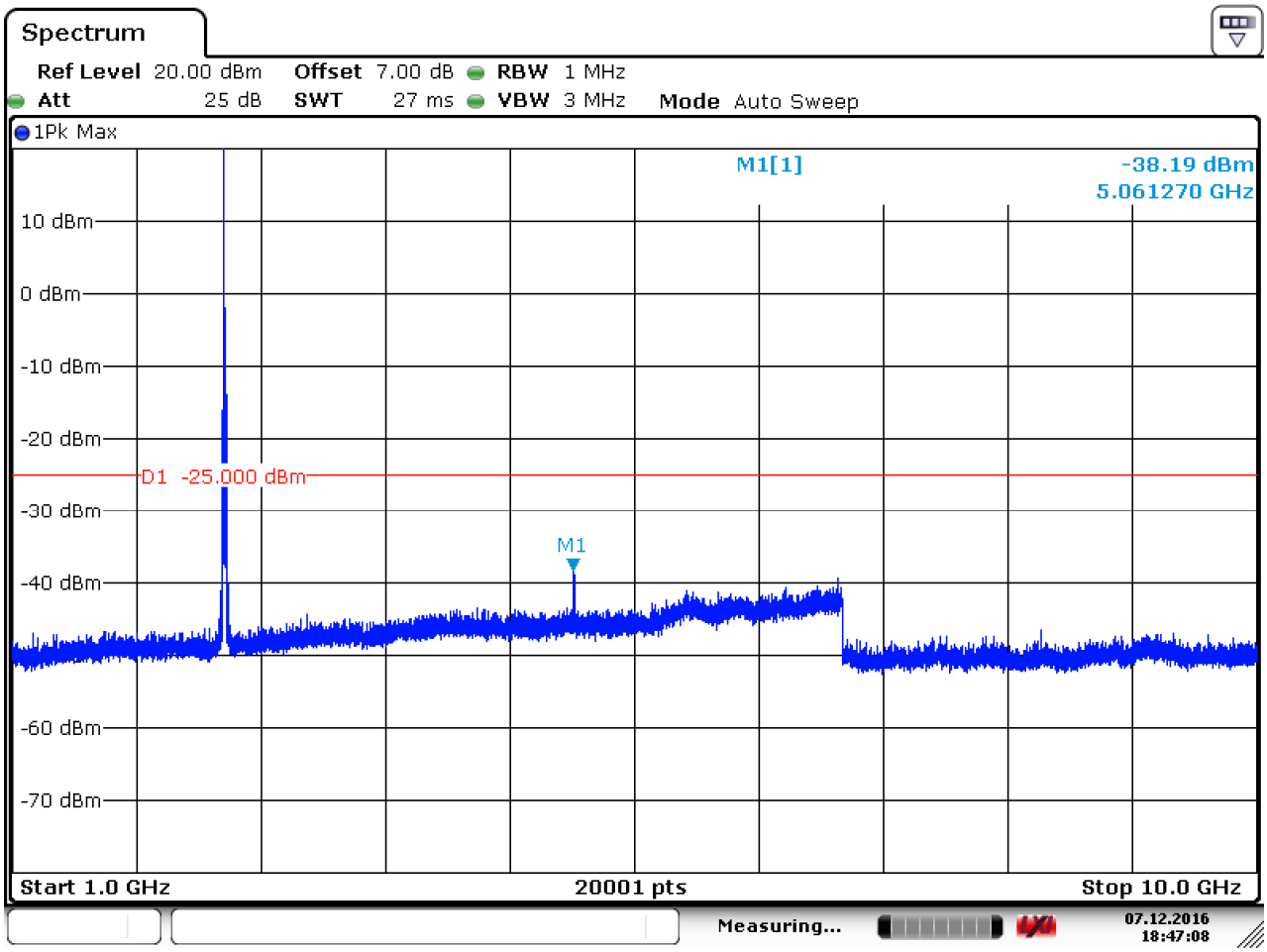


Date: 7.DEC.2016 18:58:00

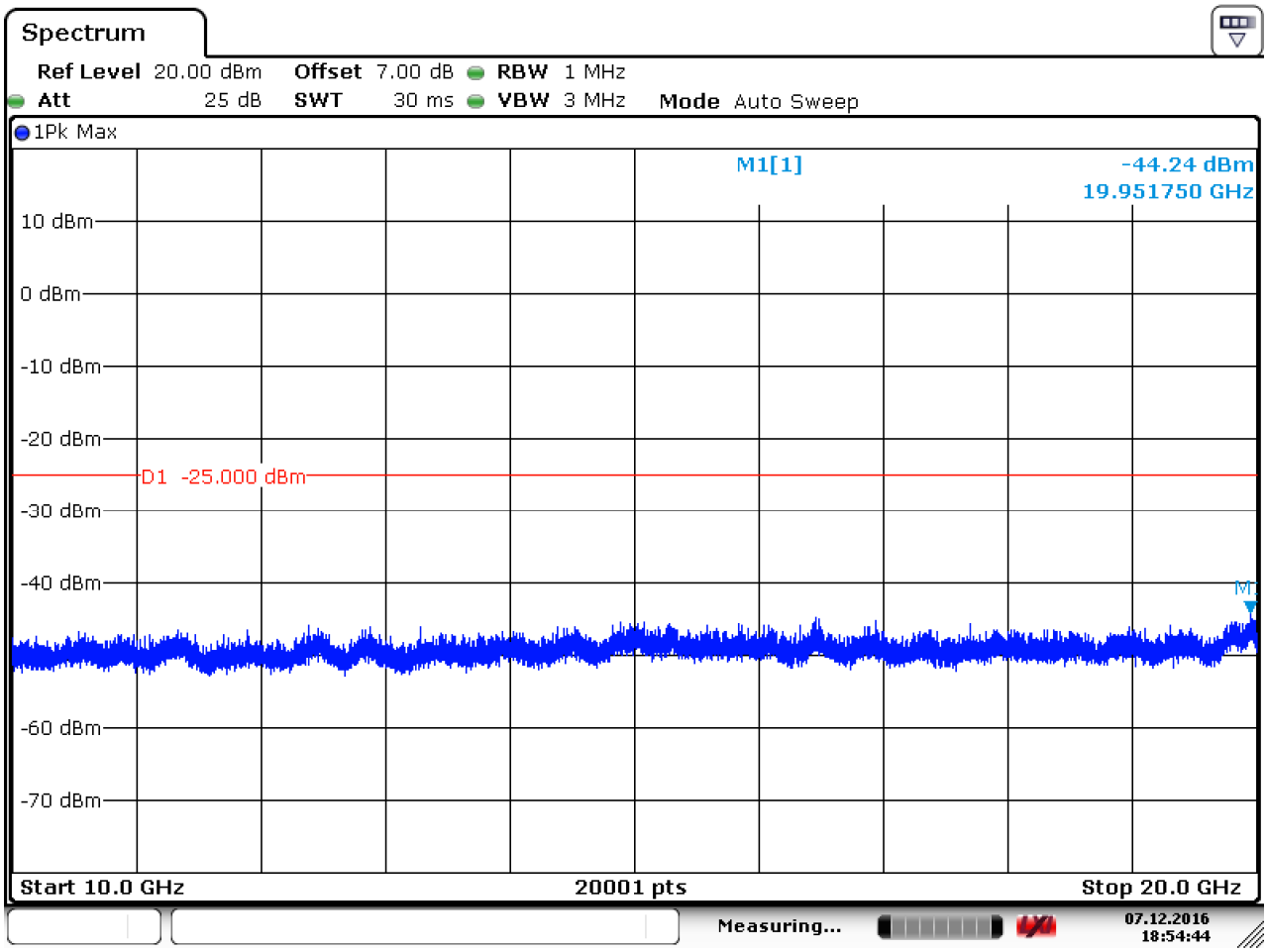
6.1.1.2.2 Test Channel = MCH



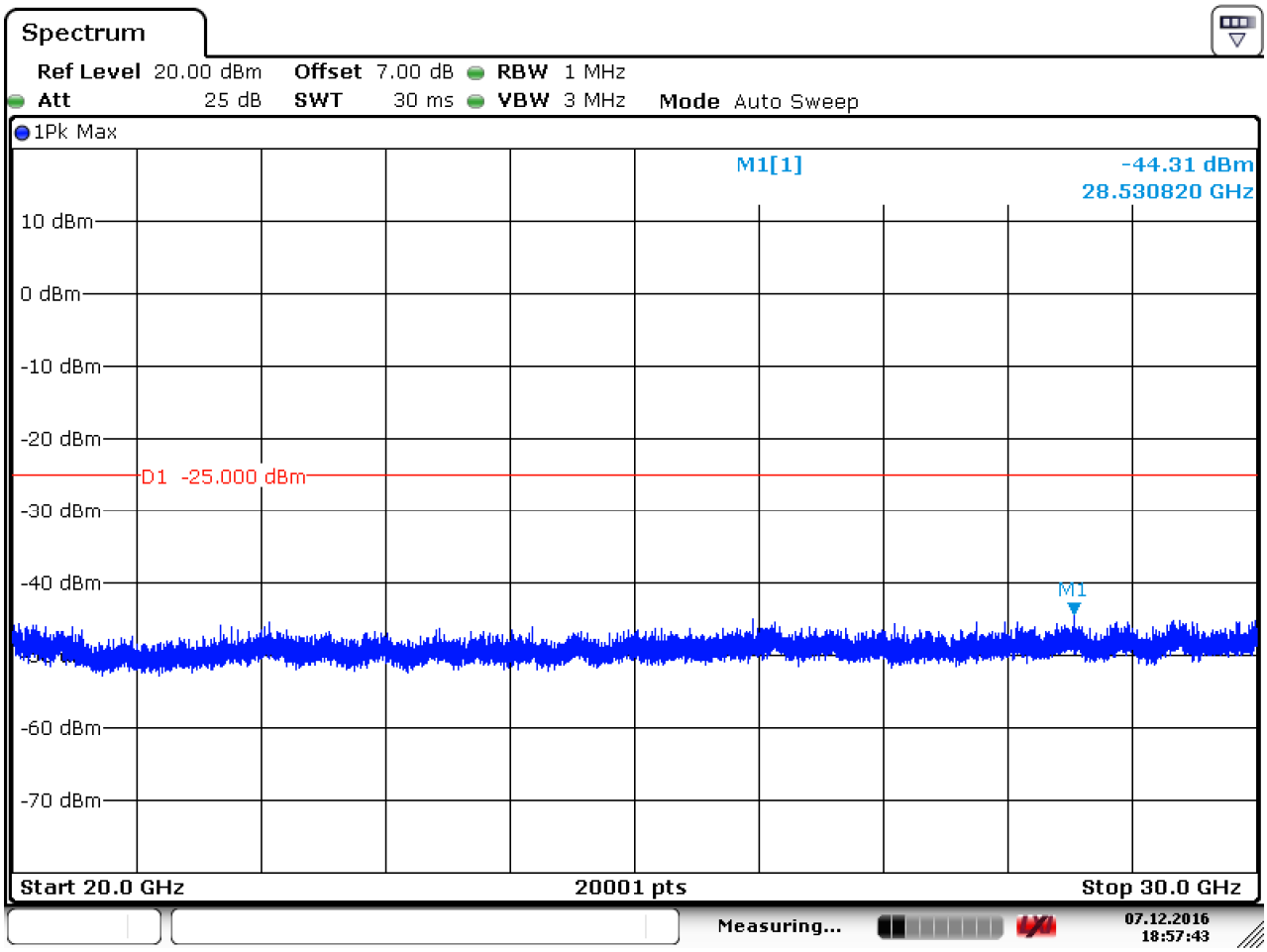
Date: 7.DEC.2016 18:14:47



Date: 7.DEC.2016 18:47:08

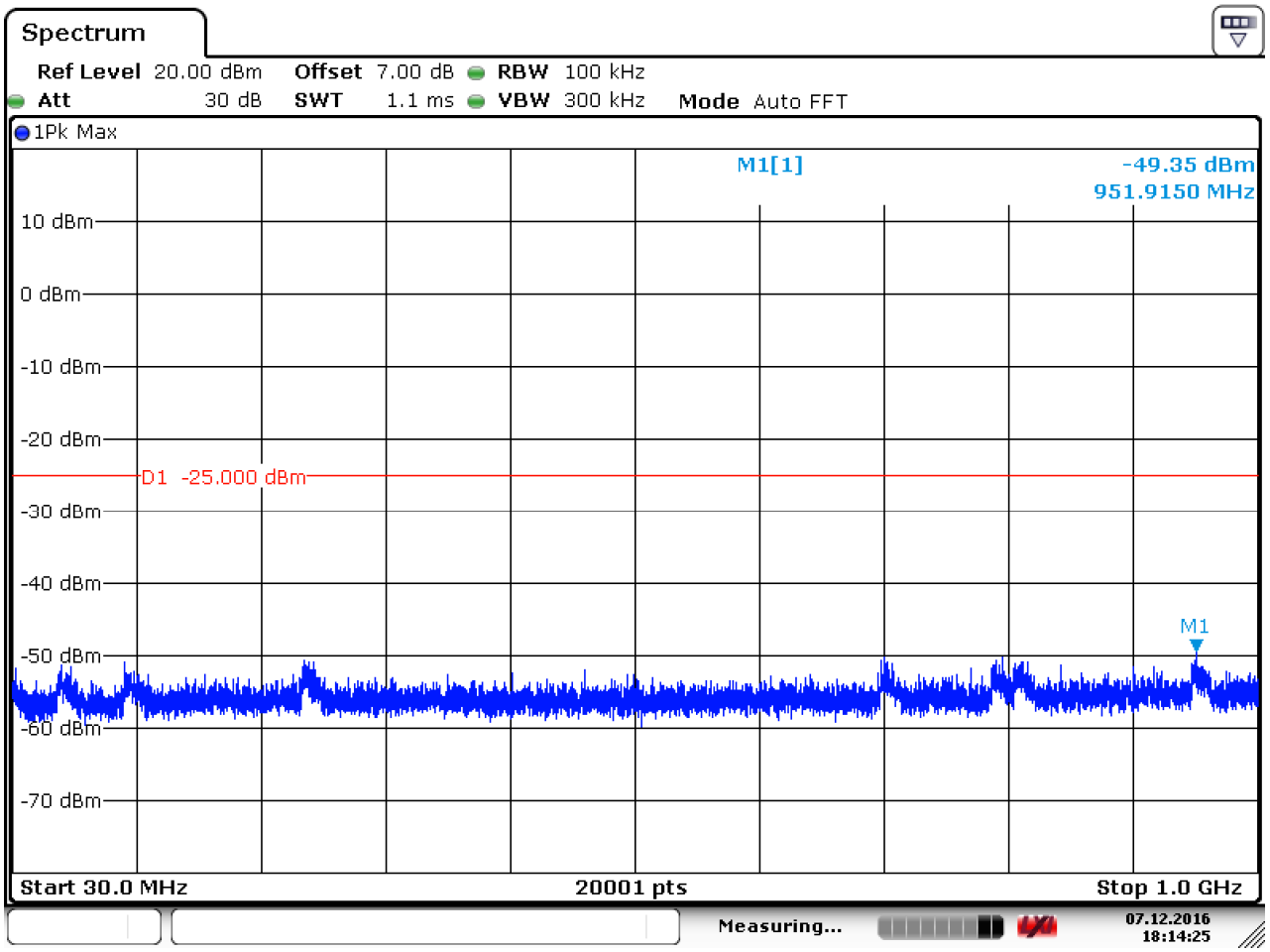


Date: 7.DEC.2016 18:54:44

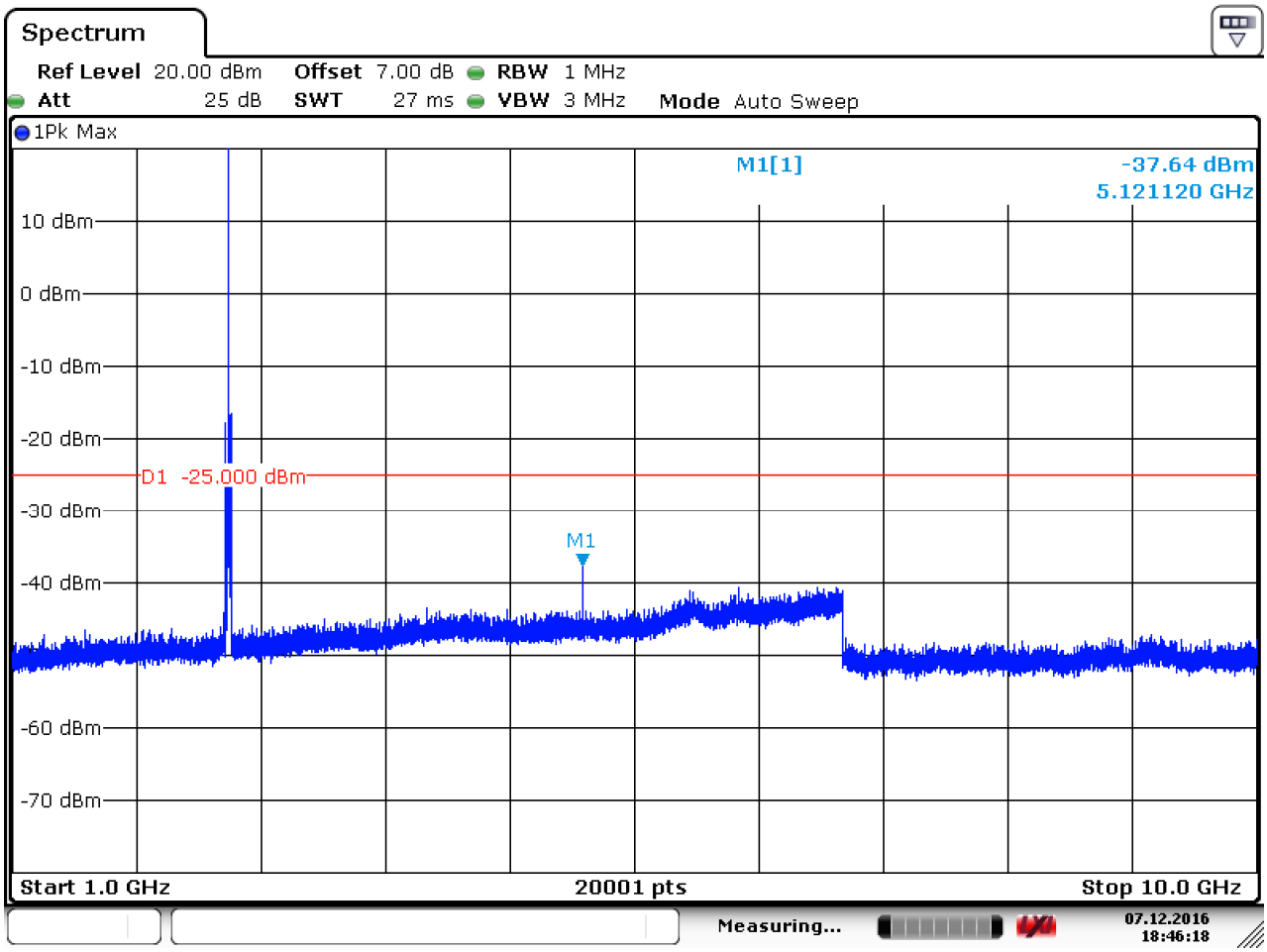


Date: 7.DEC.2016 18:57:44

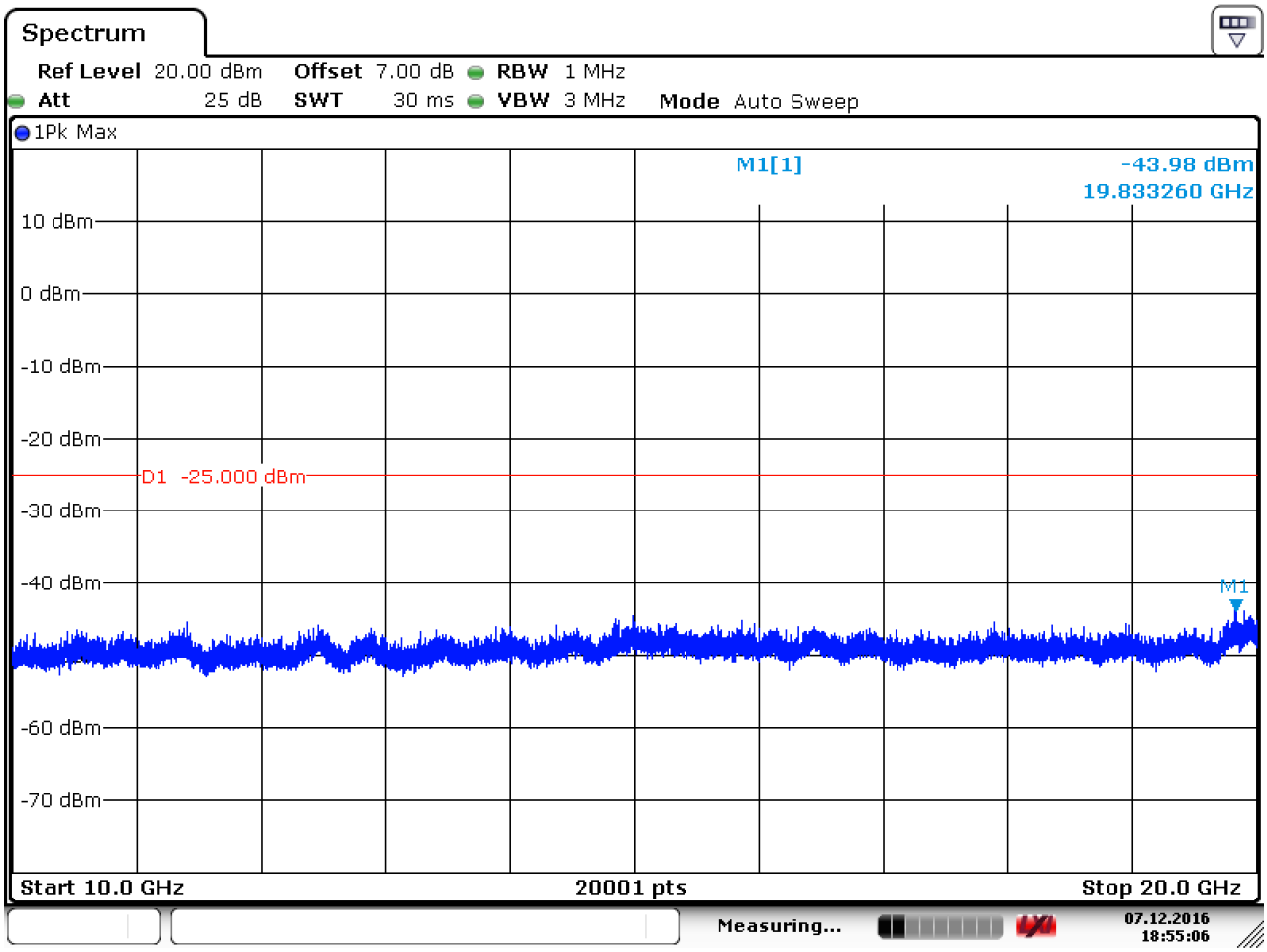
6.1.1.2.3 Test Channel = HCH



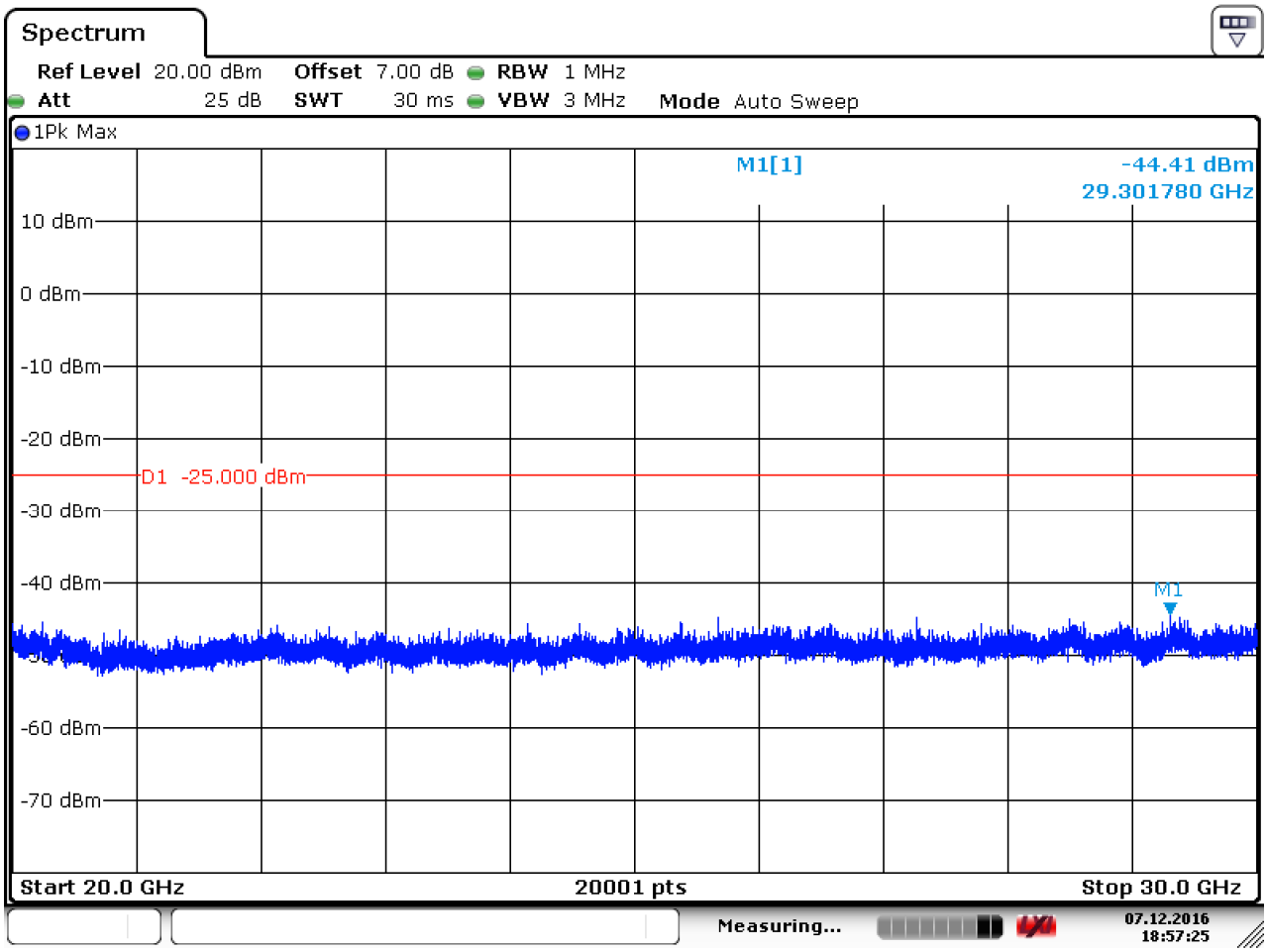
Date: 7.DEC.2016 18:14:26



Date: 7.DEC.2016 18:46:18



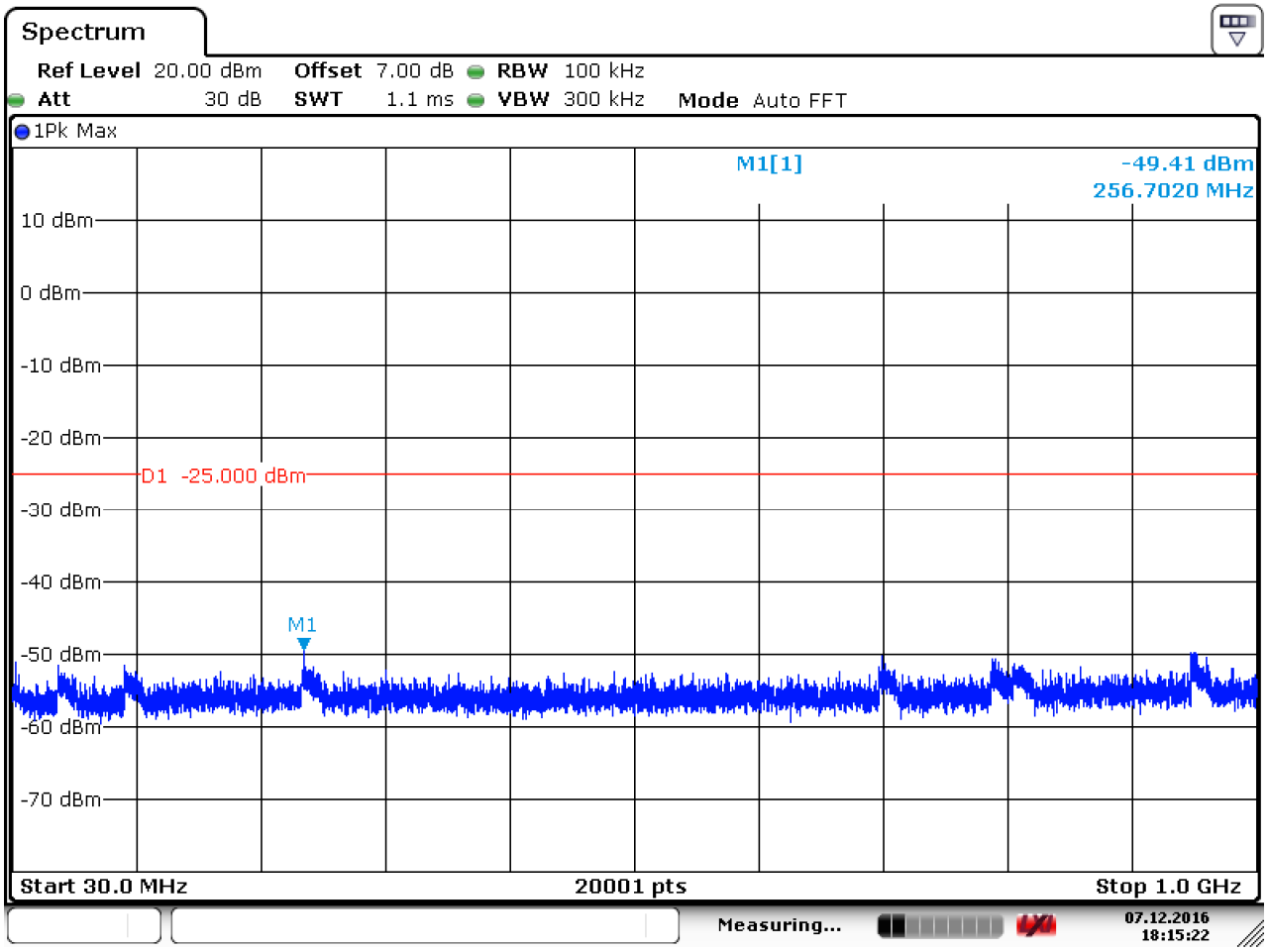
Date: 7.DEC.2016 18:55:07



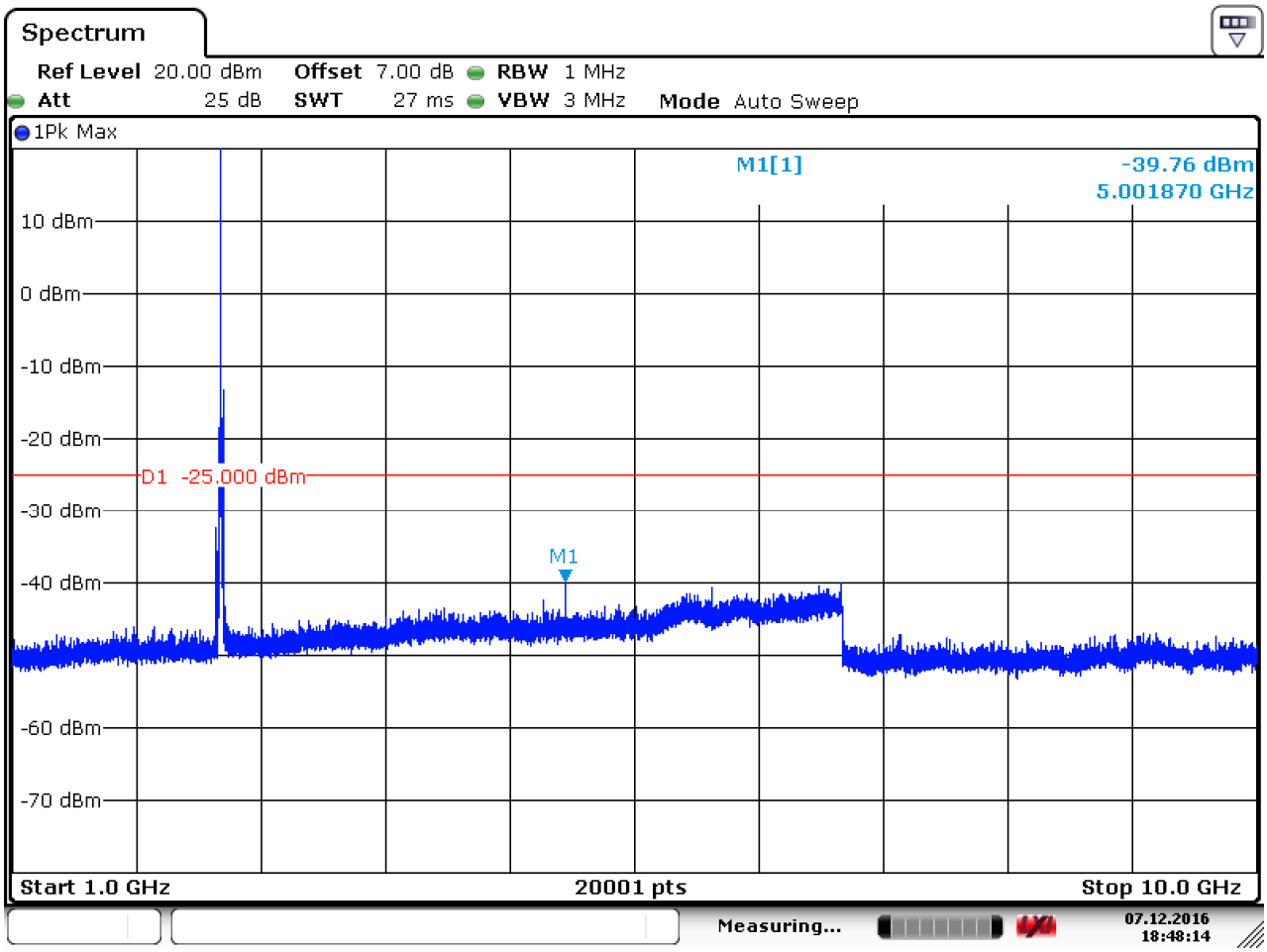
Date: 7.DEC.2016 18:57:25

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

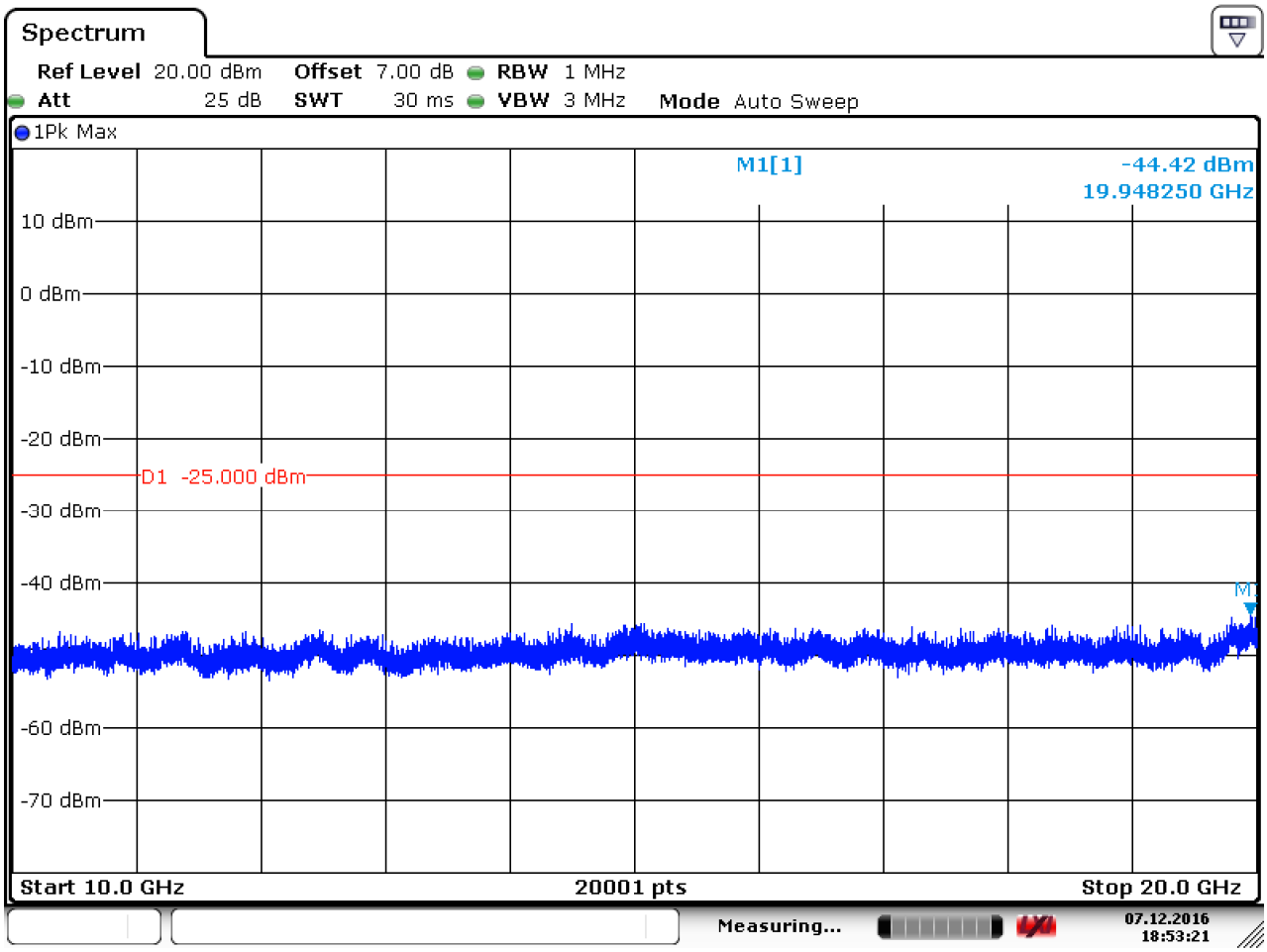
6.1.1.3.1 Test Channel = LCH



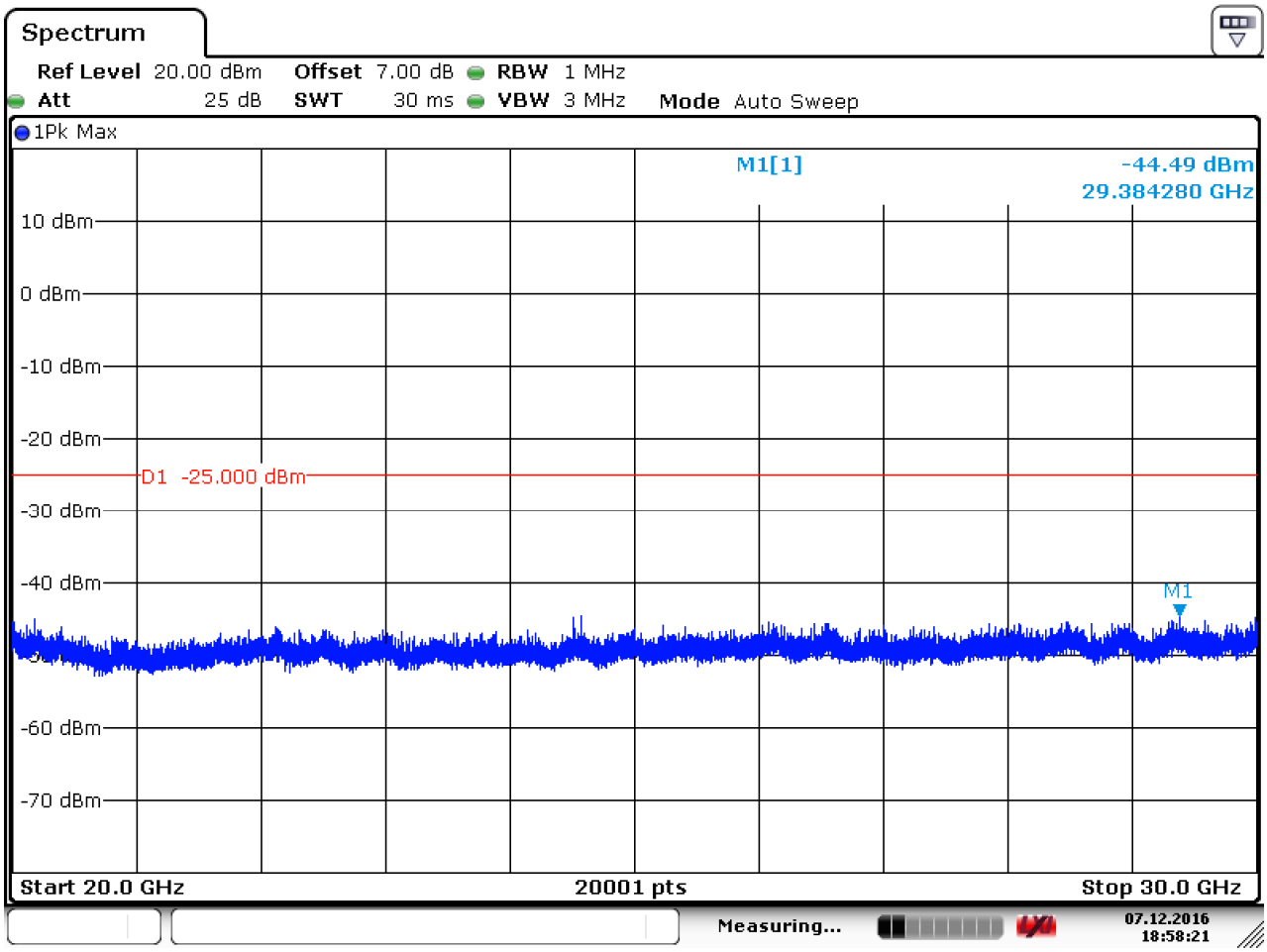
Date: 7.DEC.2016 18:15:22



Date: 7.DEC.2016 18:48:14

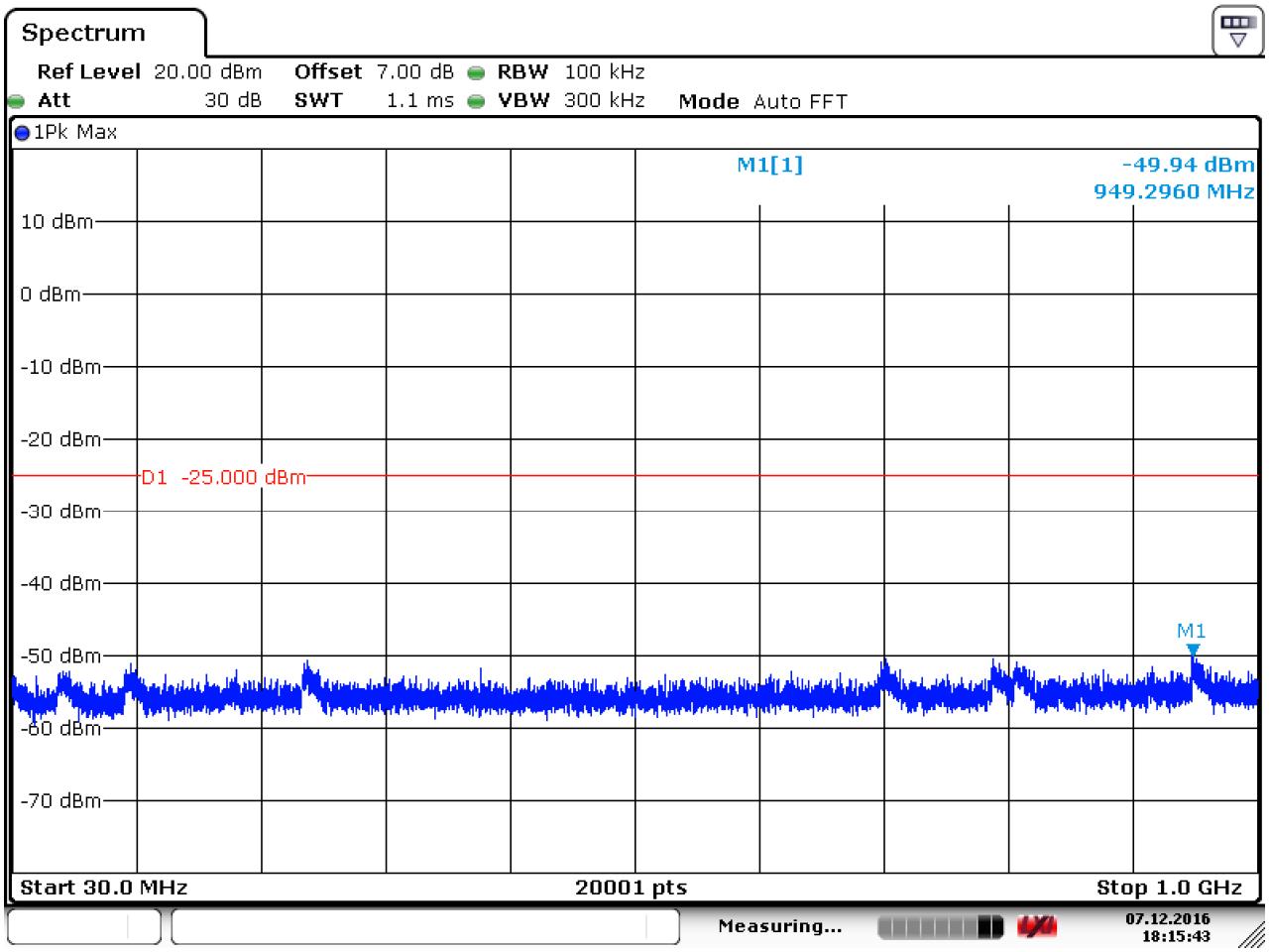


Date: 7.DEC.2016 18:53:21

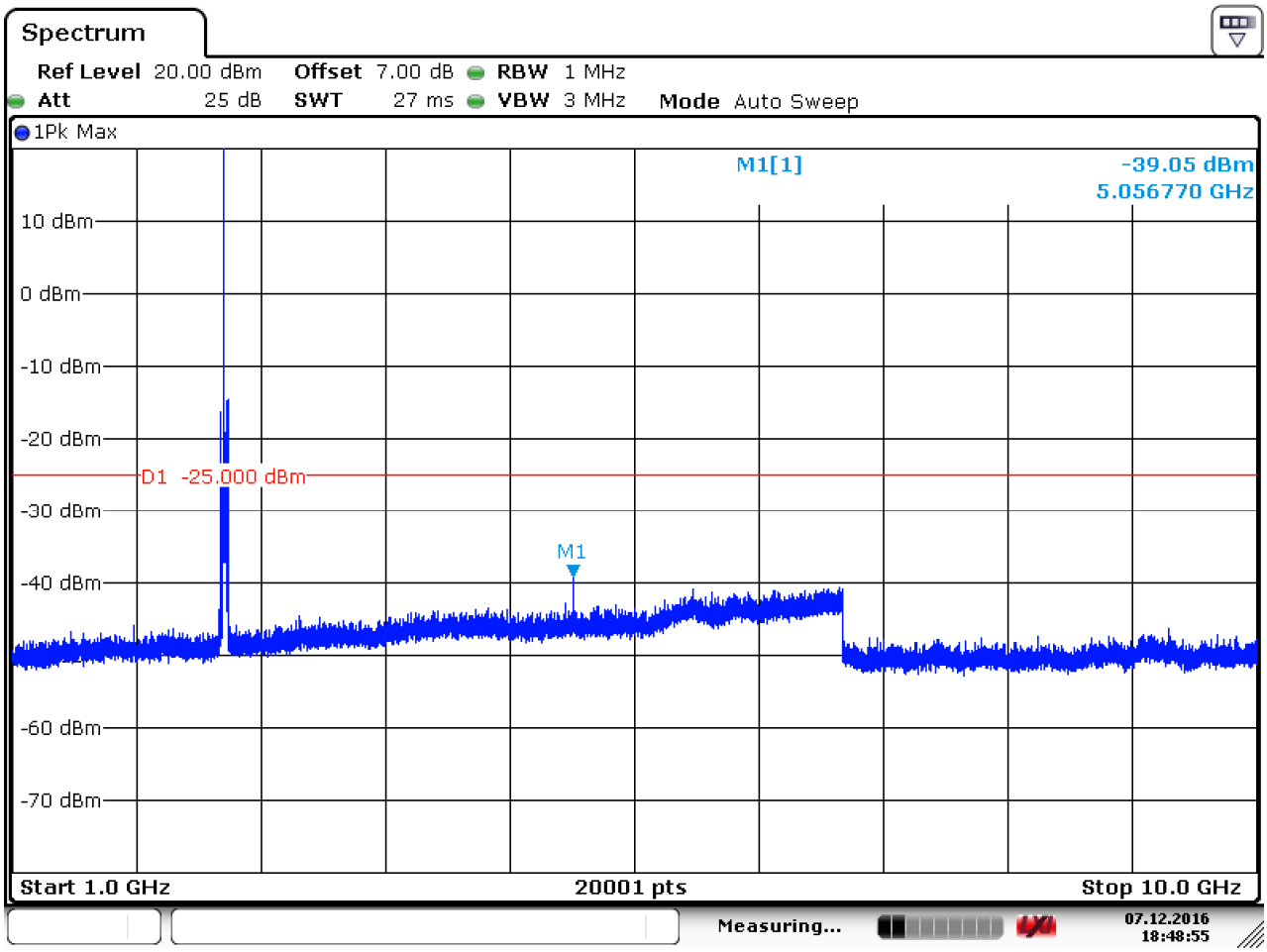


Date: 7.DEC.2016 18:58:21

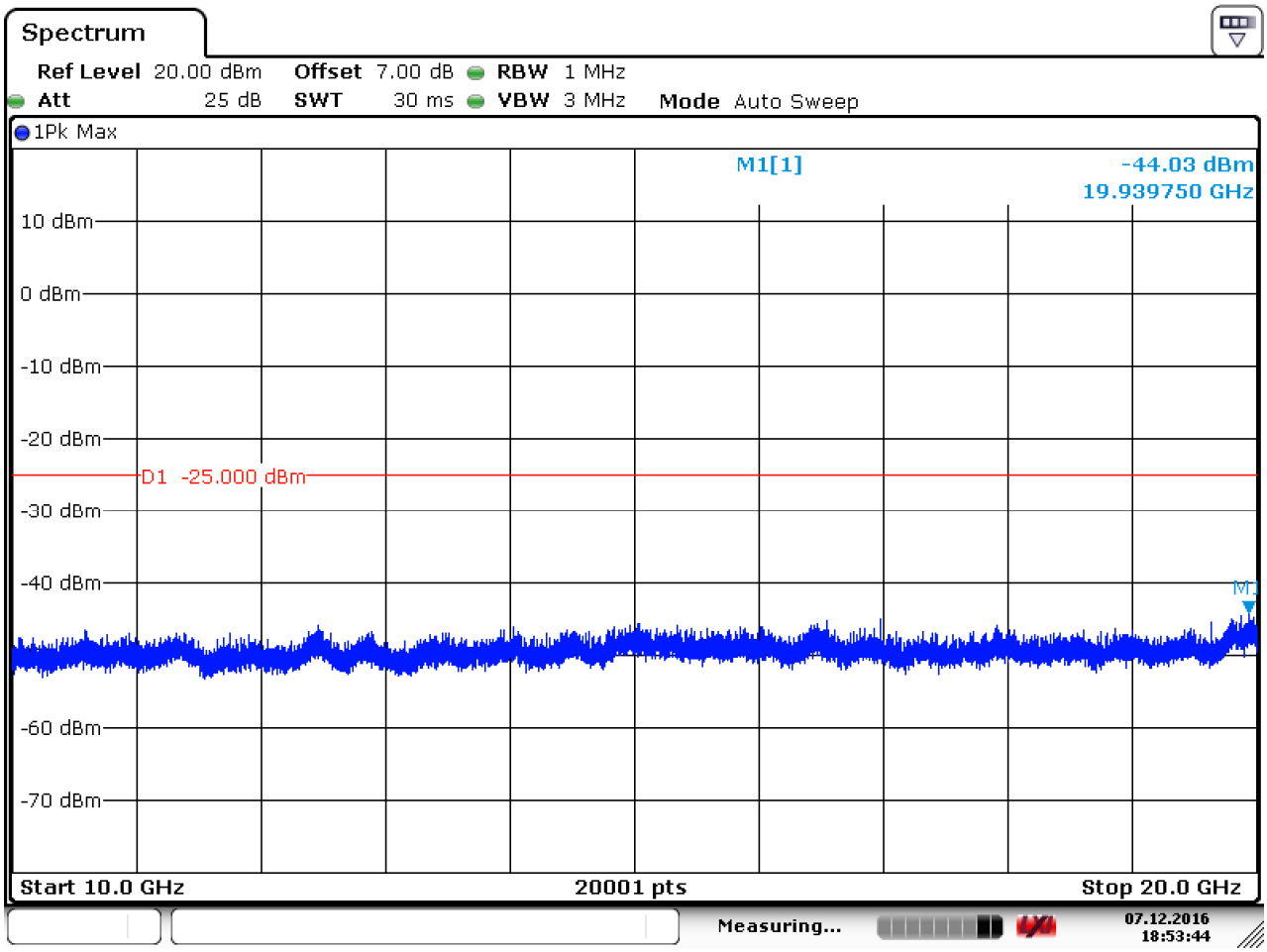
6.1.1.3.2 Test Channel = MCH



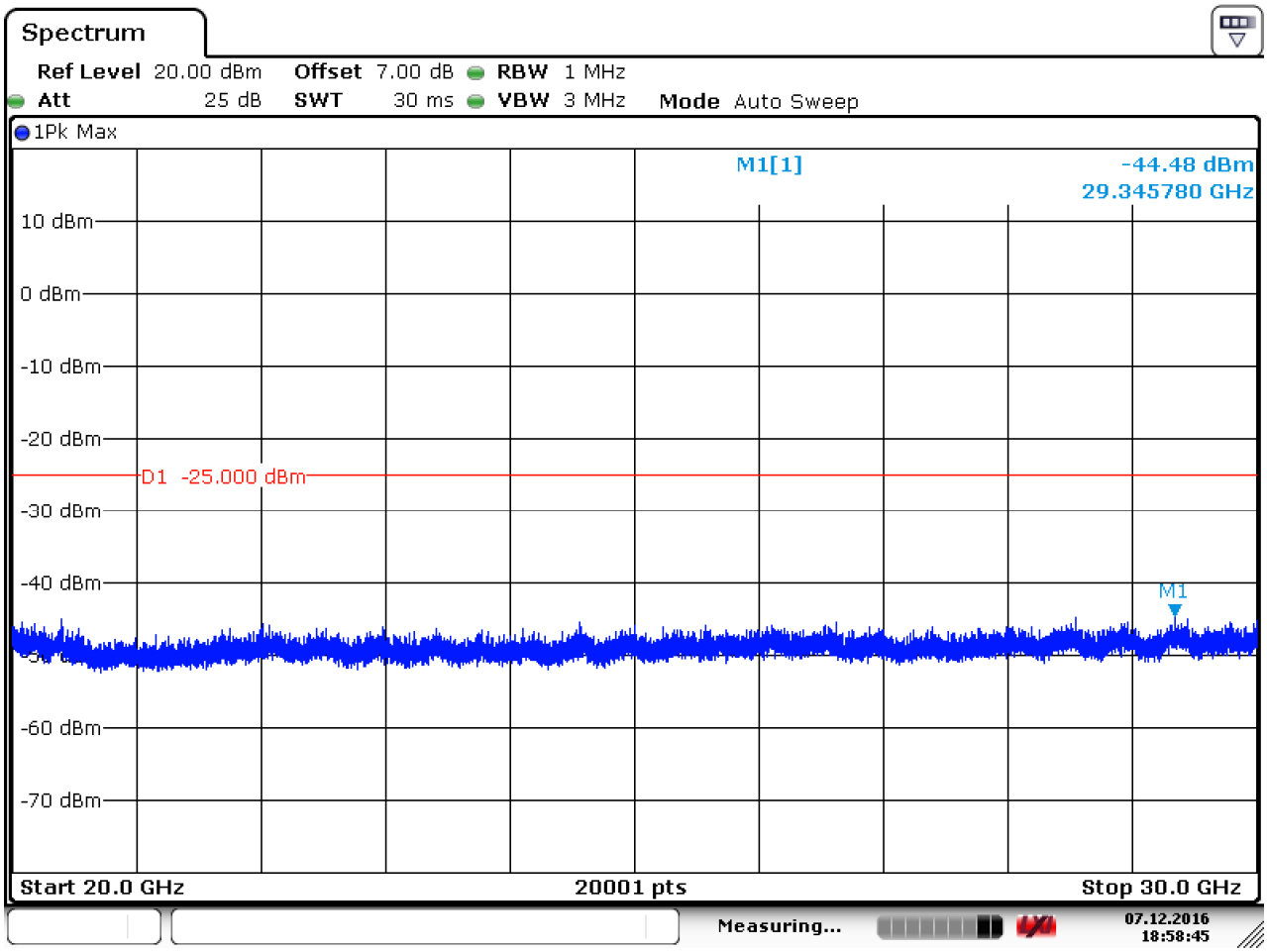
Date: 7.DEC.2016 18:15:44



Date: 7.DEC.2016 18:48:55

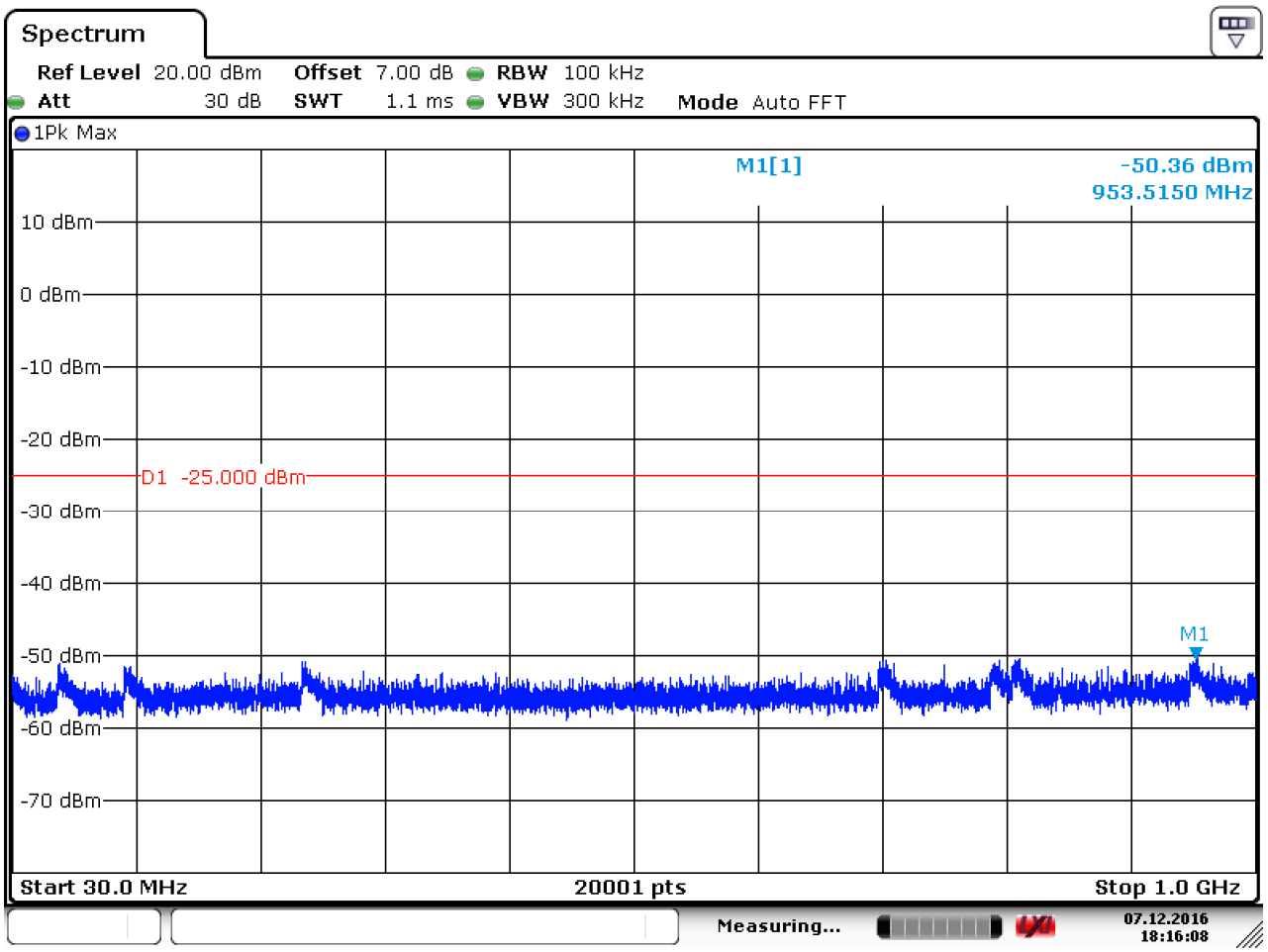


Date: 7.DEC.2016 18:53:44

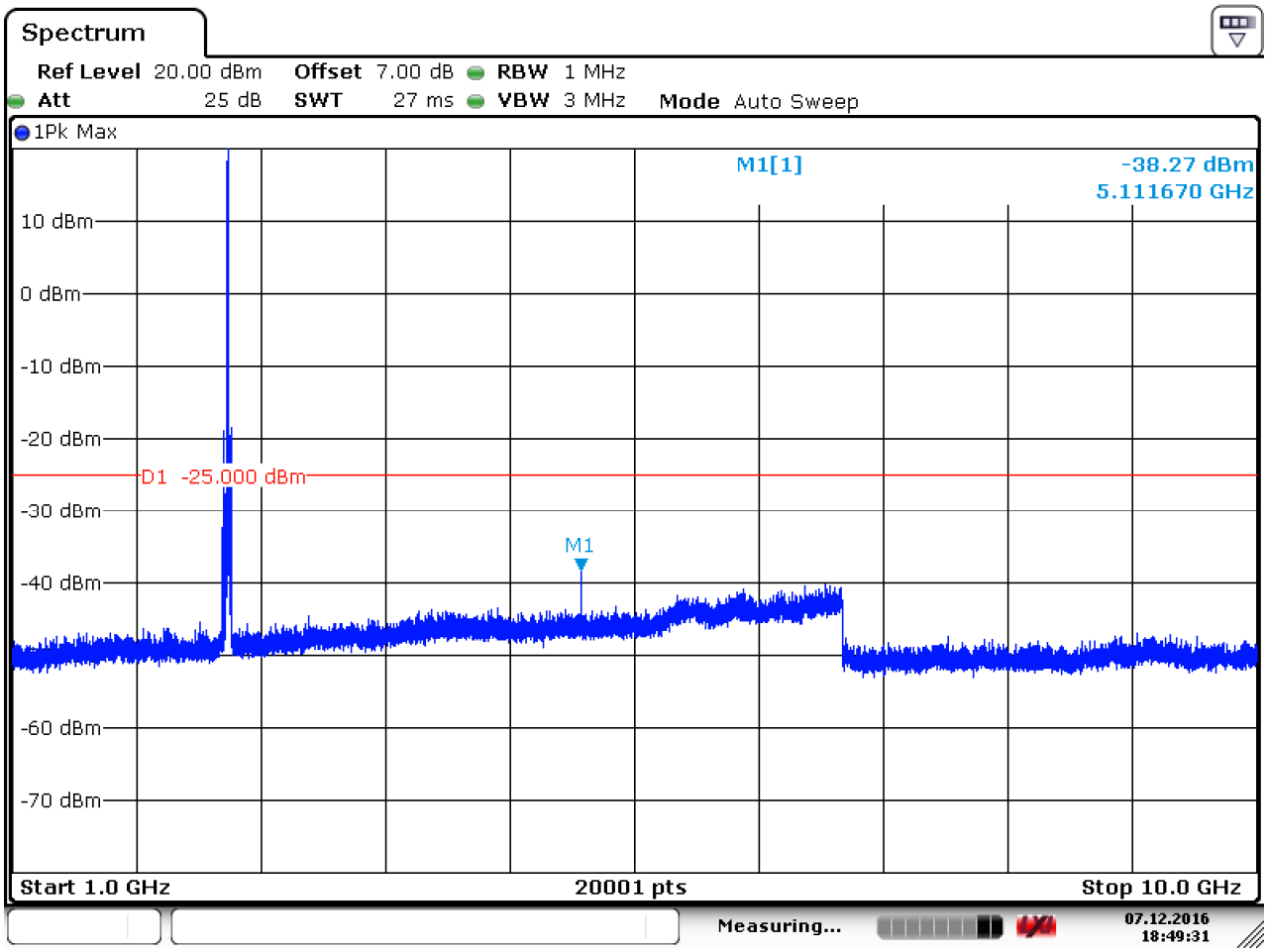


Date: 7.DEC.2016 18:58:46

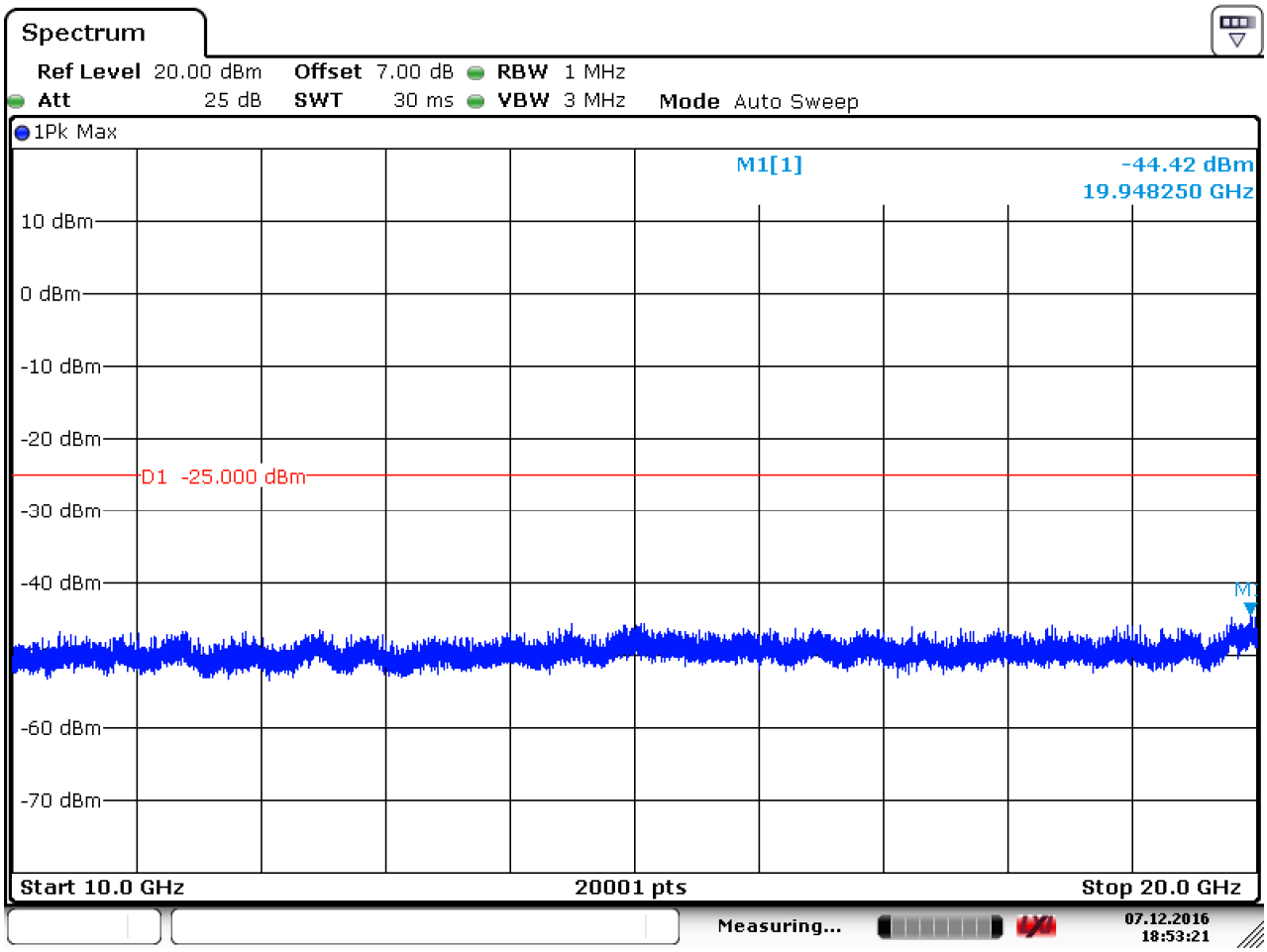
6.1.1.3.3 Test Channel = HCH



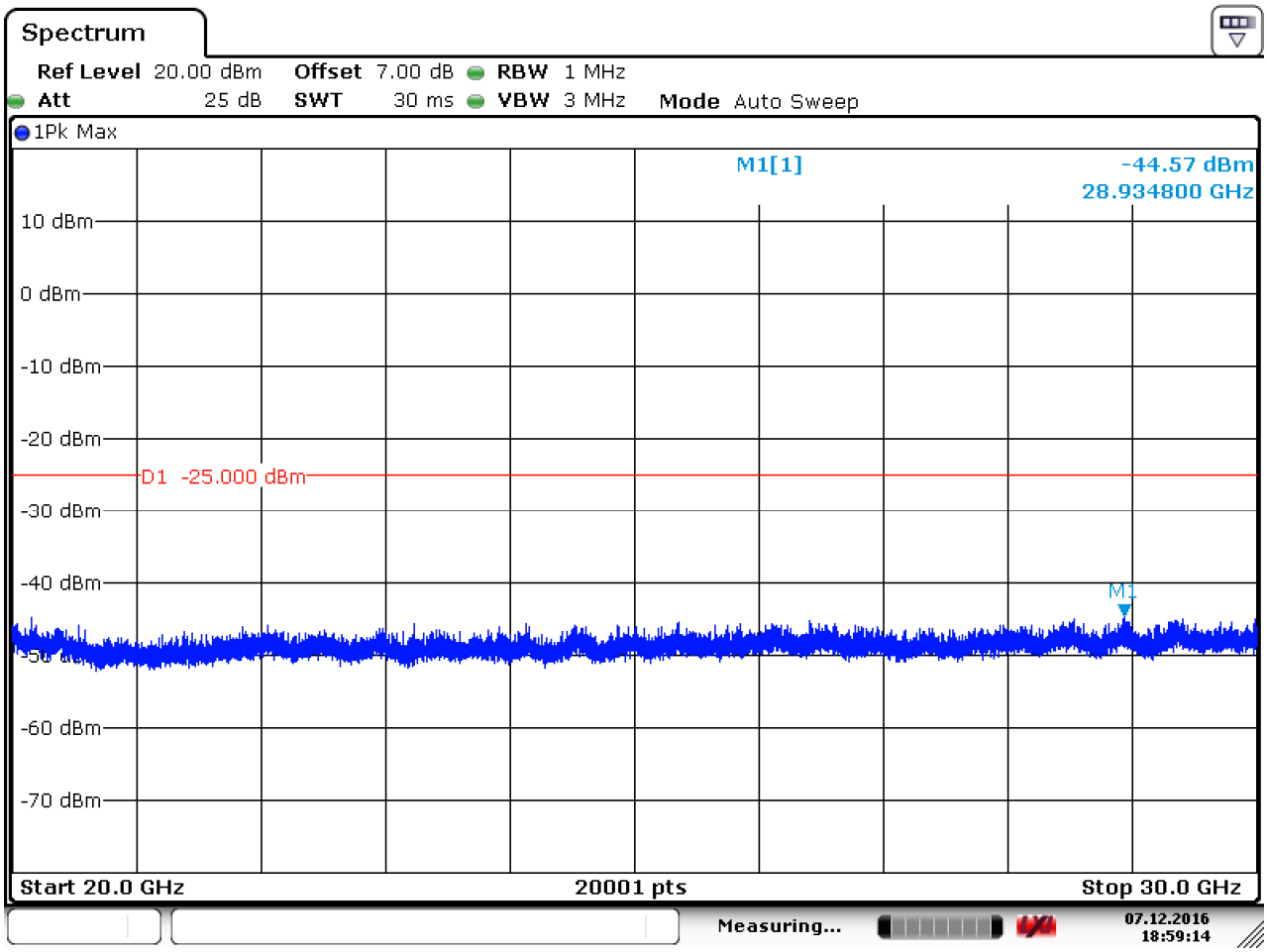
Date: 7.DEC.2016 18:16:08



Date: 7.DEC.2016 18:49:31



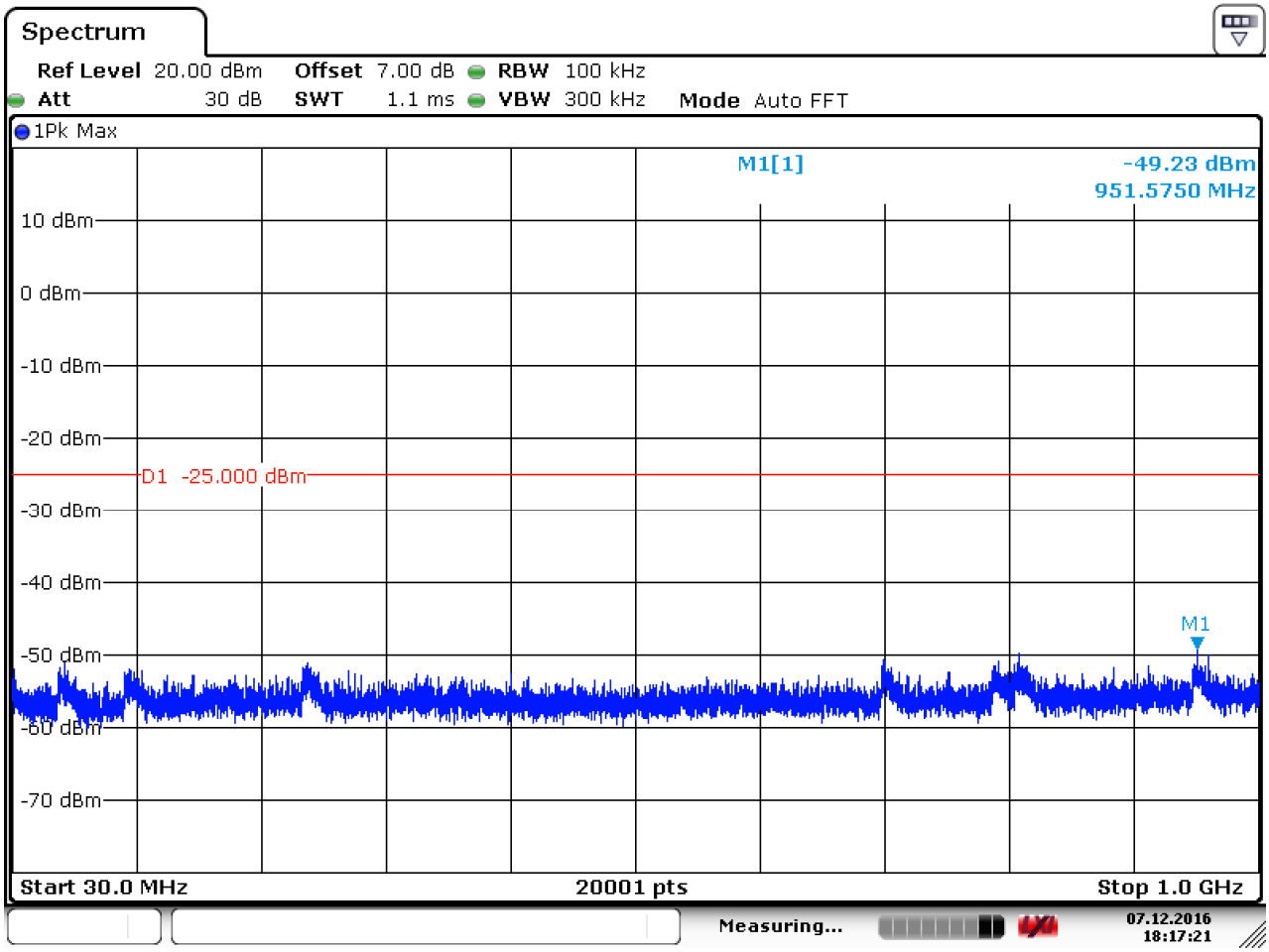
Date: 7.DEC.2016 18:53:21



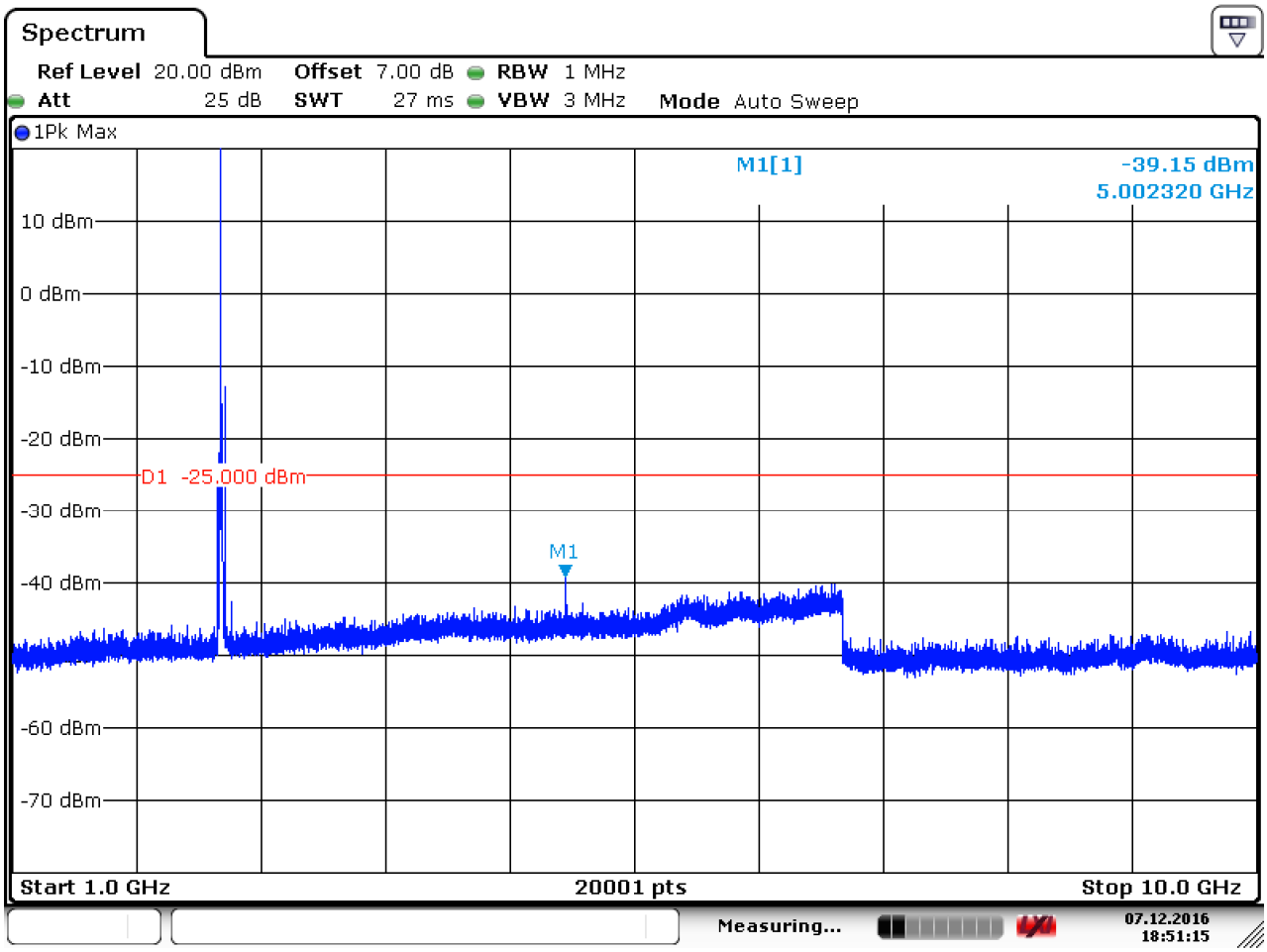
Date: 7.DEC.2016 18:59:14

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

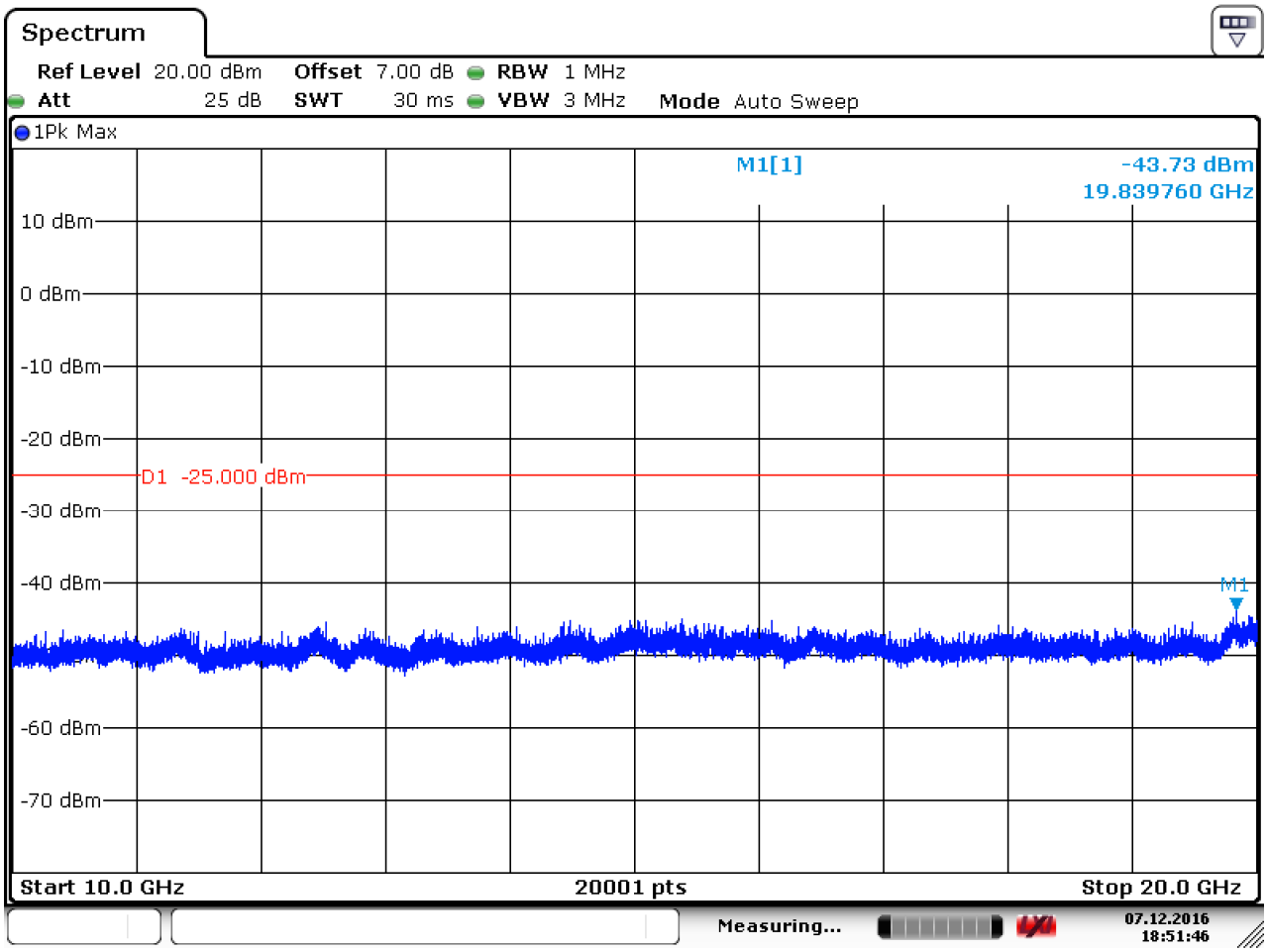
6.1.1.4.1 Test Channel = LCH



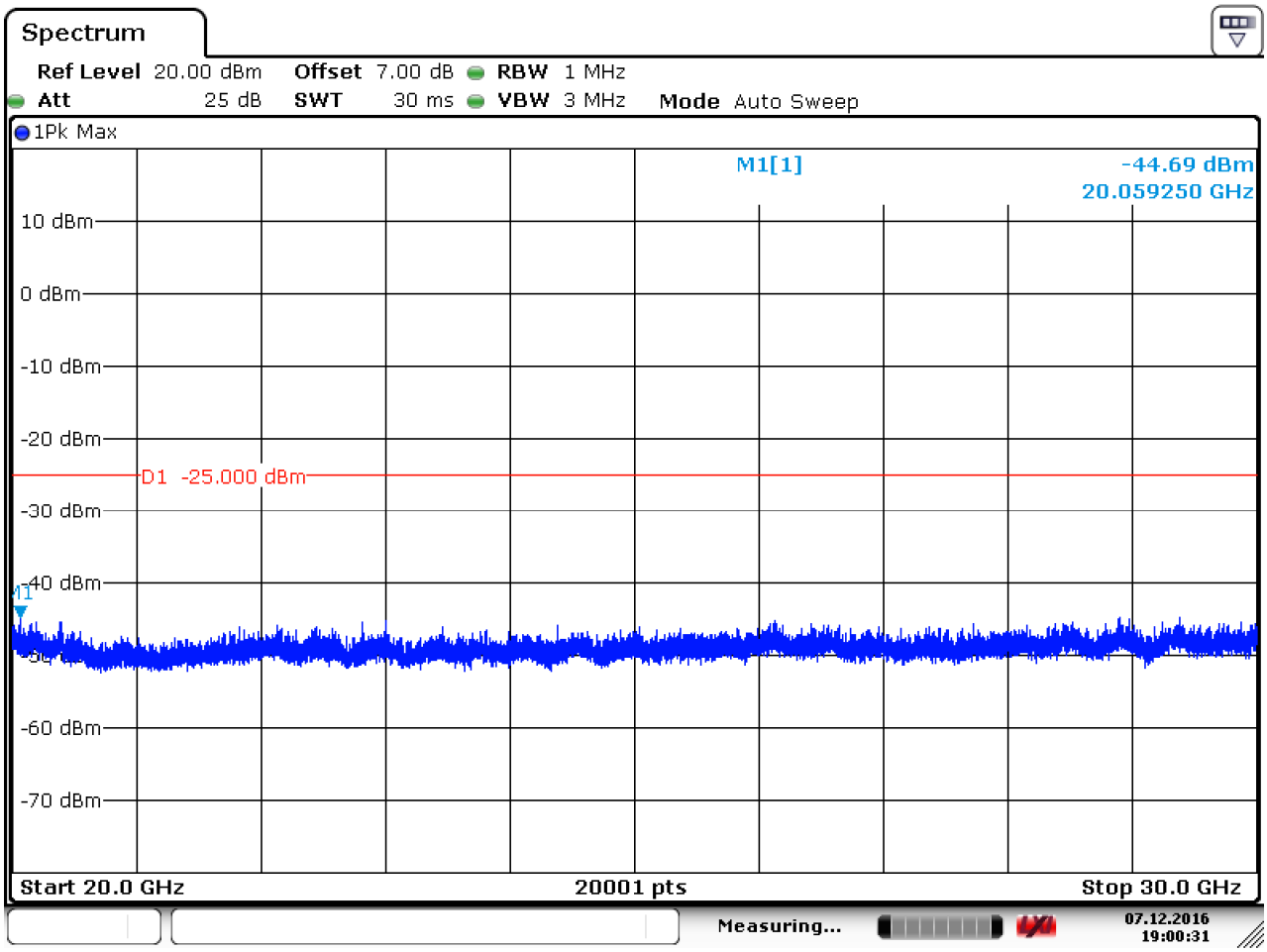
Date: 7.DEC.2016 18:17:21



Date: 7.DEC.2016 18:51:16

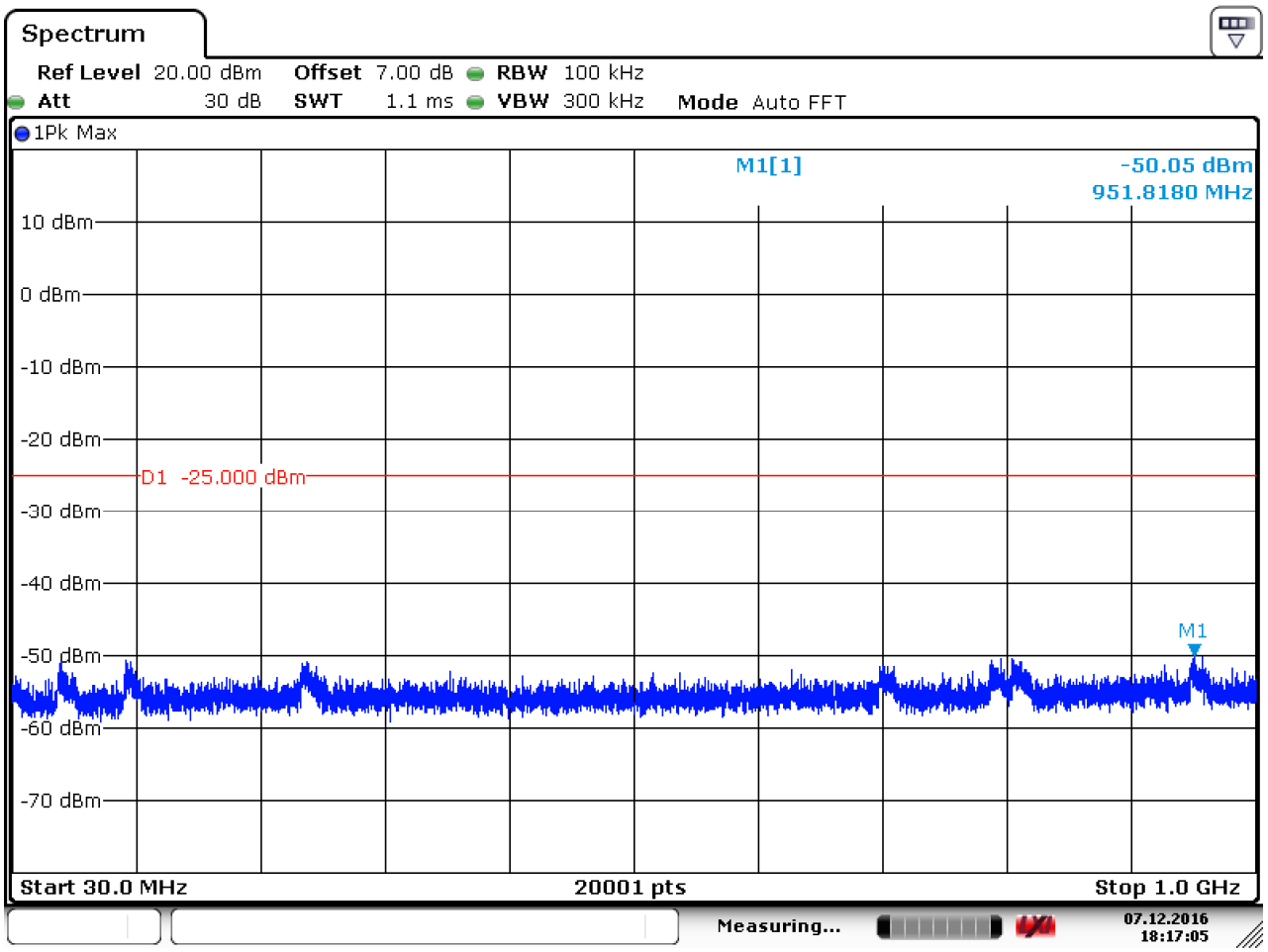


Date: 7.DEC.2016 18:51:47

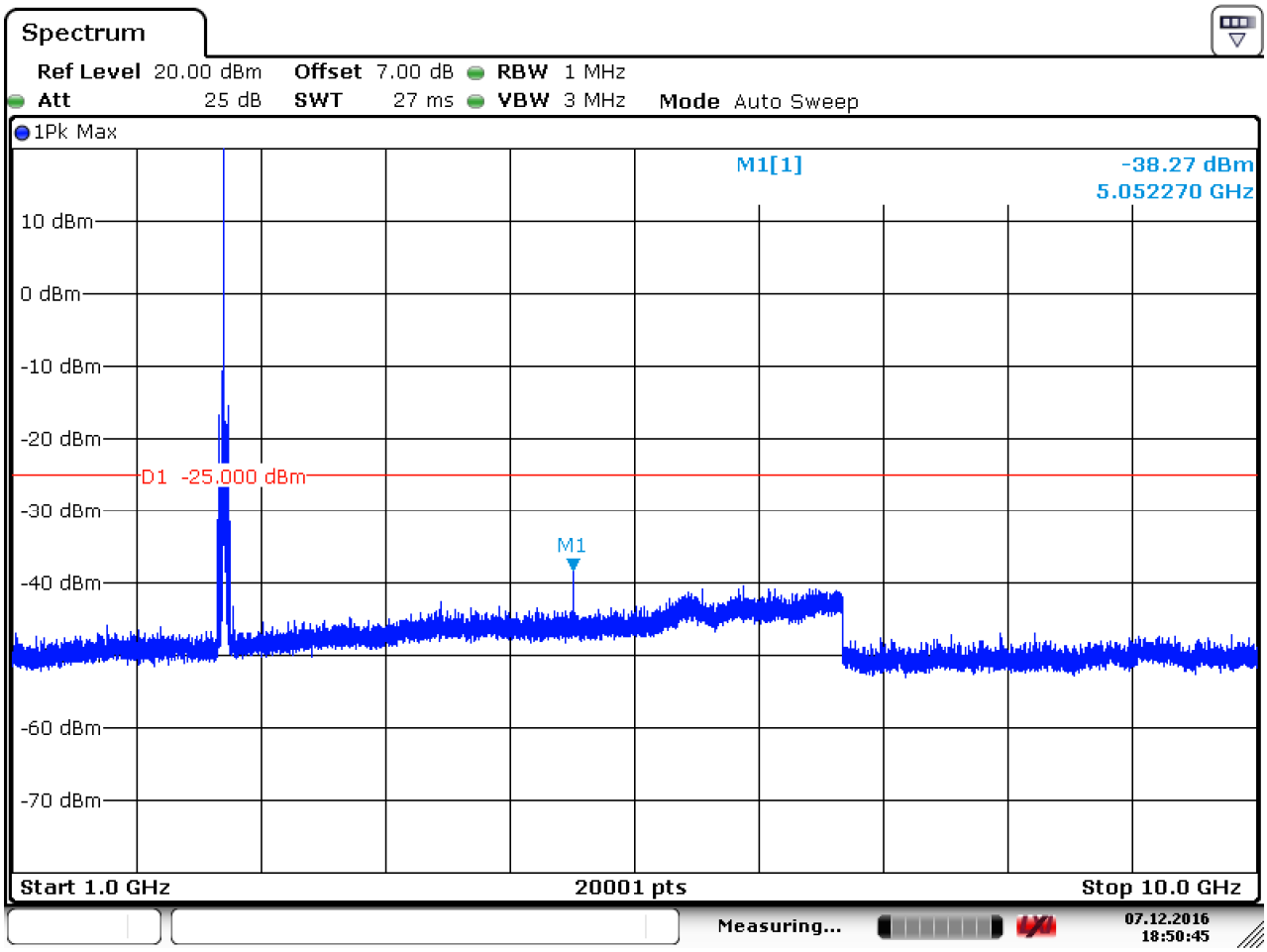


Date: 7.DEC.2016 19:00:31

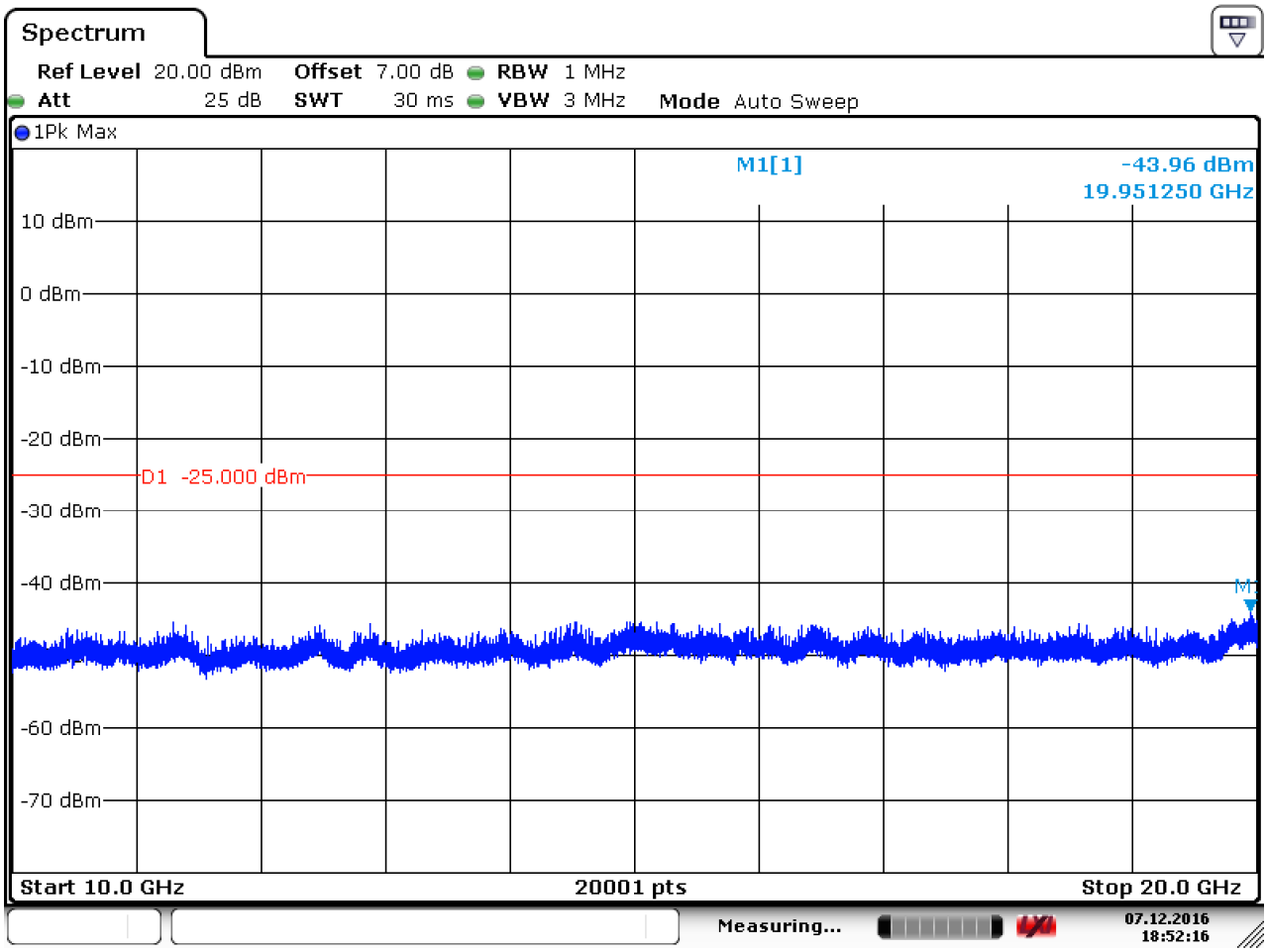
6.1.1.4.2 Test Channel = MCH



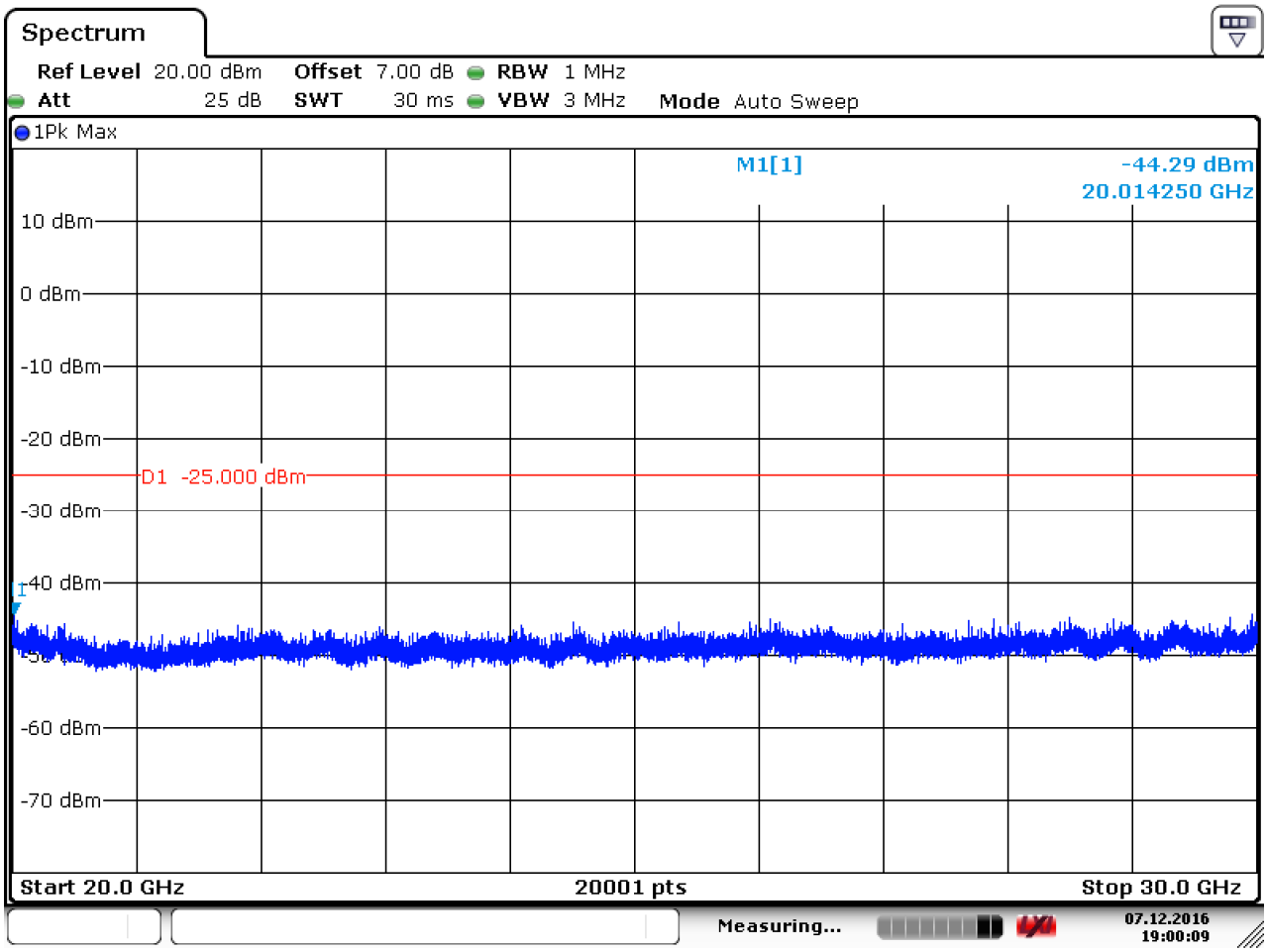
Date: 7.DEC.2016 18:17:05



Date: 7.DEC.2016 18:50:45

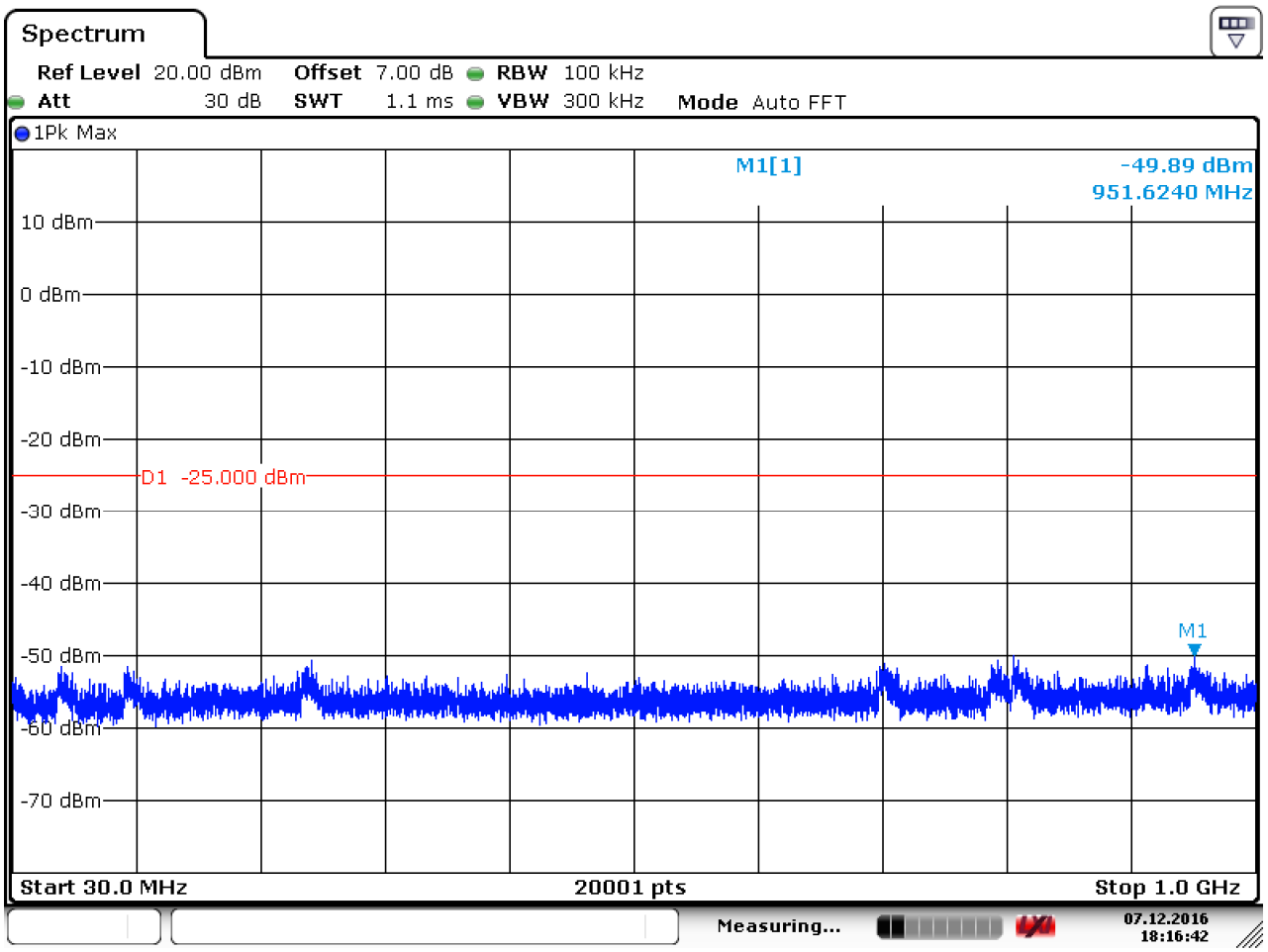


Date: 7.DEC.2016 18:52:16

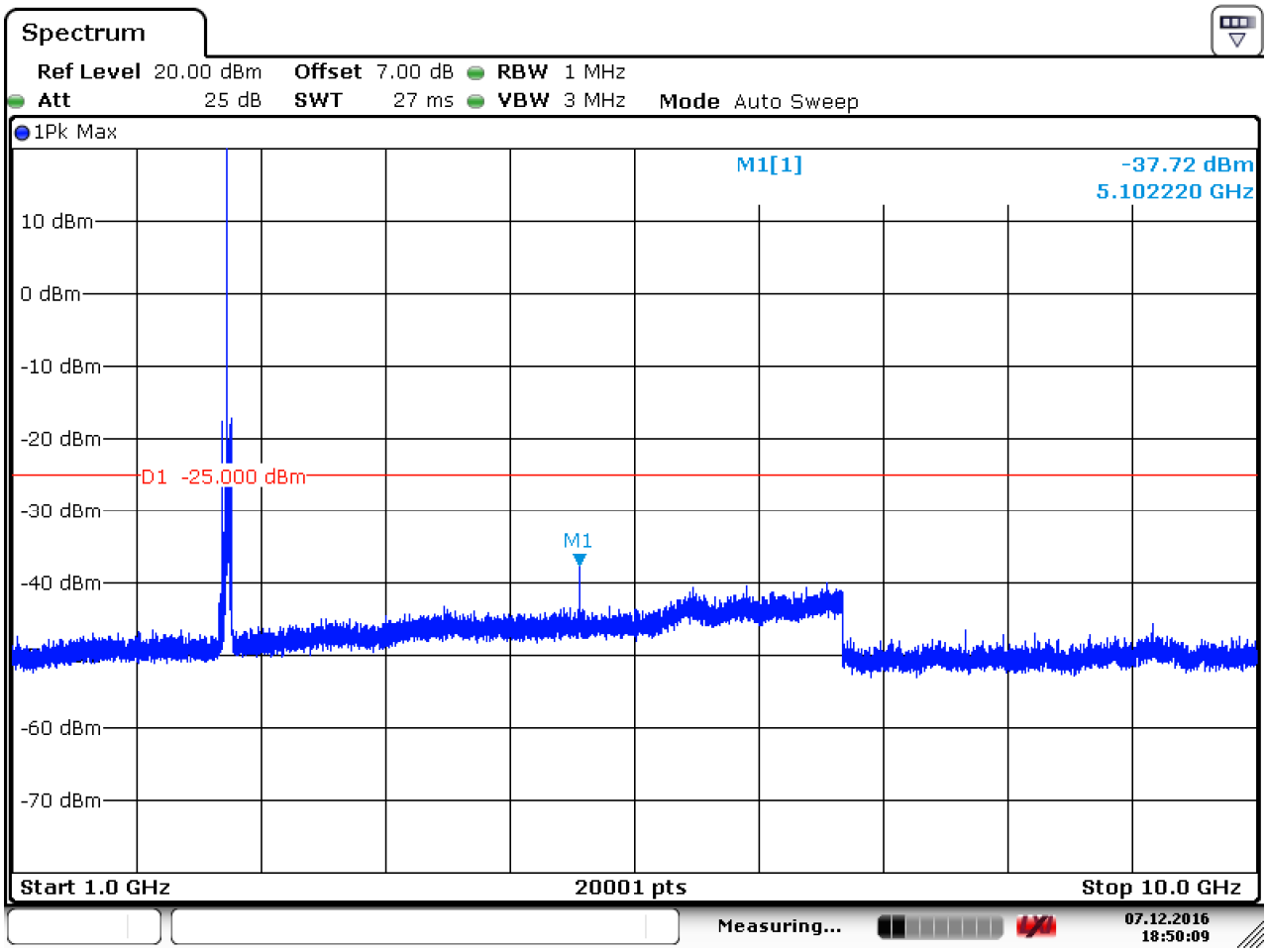


Date: 7.DEC.2016 19:00:10

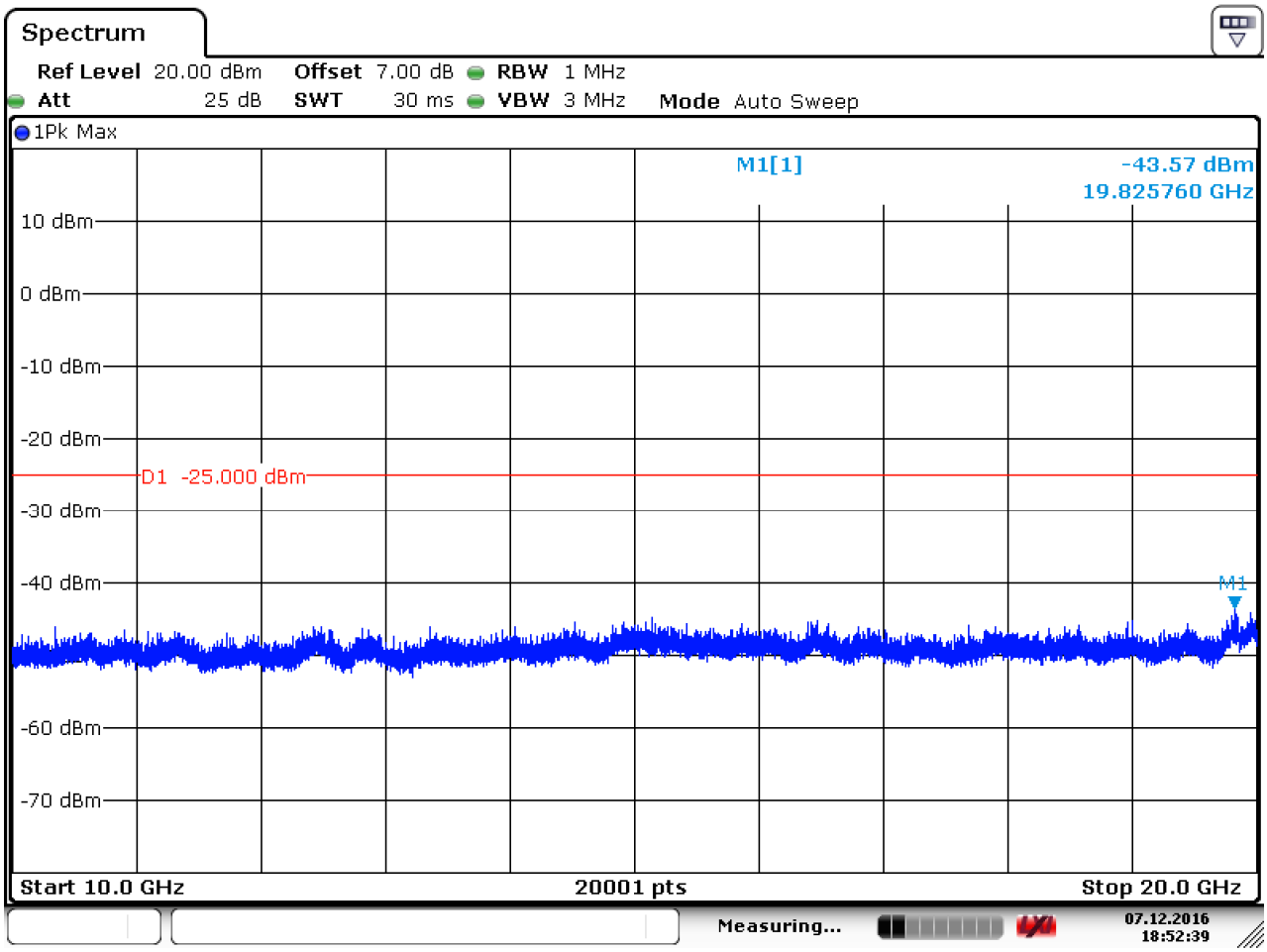
6.1.1.4.3 Test Channel = HCH



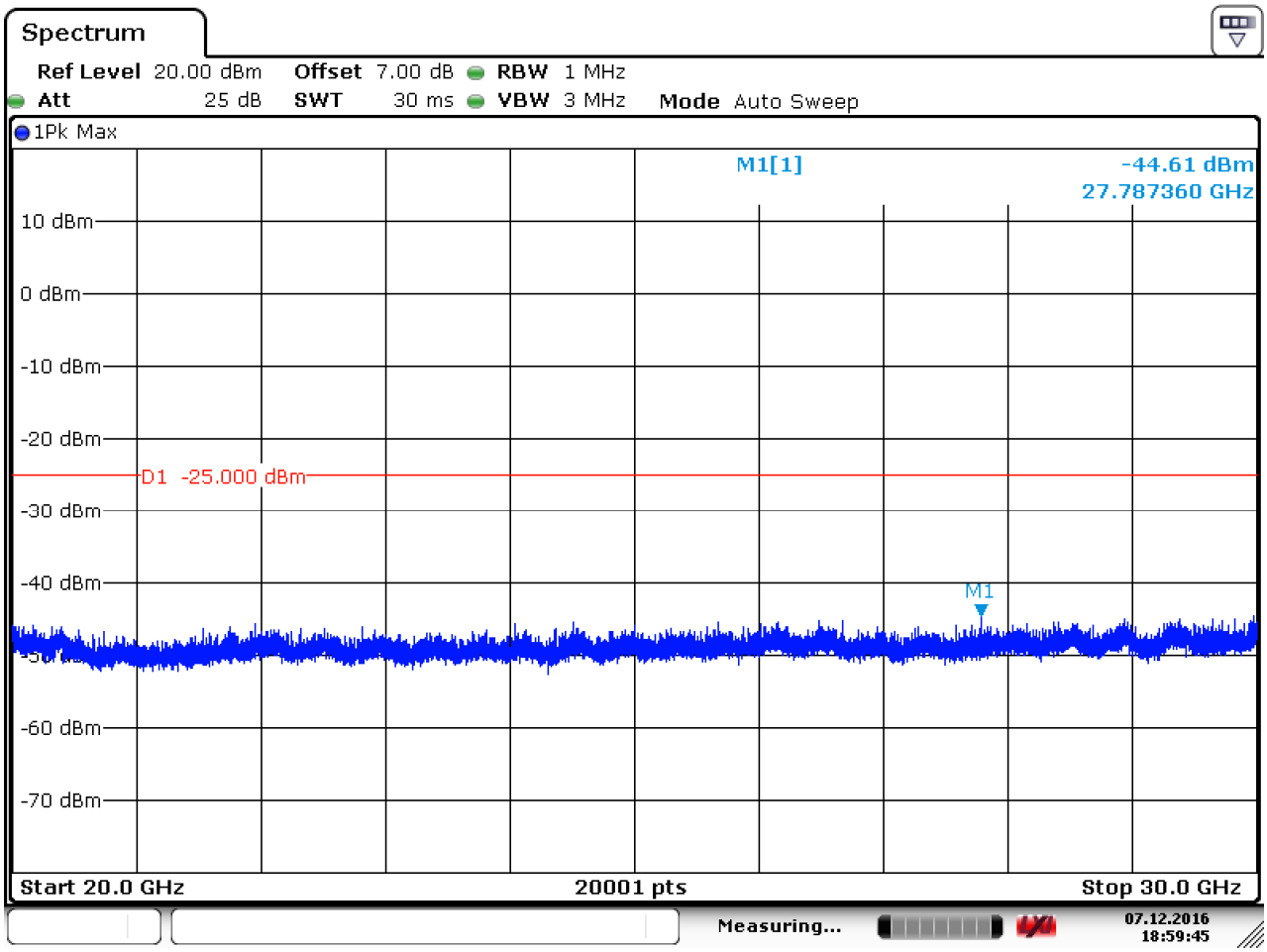
Date: 7.DEC.2016 18:16:43



Date: 7.DEC.2016 18:50:09



Date: 7.DEC.2016 18:52:39



Date: 7.DEC.2016 18:59:46

7 Field Strength of Spurious Radiation

7.1 For LTE

7.1.1 Test Band = LTE band7

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

7.1.1.1.1 Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
1265.000	-66.38	-25.00	41.38	Vertical
2608.000	-58.07	-25.00	33.07	Vertical
6412.500	-66.82	-25.00	41.82	Vertical
1199.000	-67.08	-25.00	42.08	Horizontal
3487.500	-69.85	-25.00	44.85	Horizontal
4267.500	-67.67	-25.00	42.67	Horizontal

7.1.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
1617.000	-65.70	-25.00	40.7 0	Vertical
1991.000	-61.61	-25.00	36.6 1	Vertical
6120.000	-66.25	-25.00	41.25	Vertical
1463.000	-66.26	-25.00	41.26	Horizontal
1782.000	-63.77	-25.00	38.77	Horizontal
2384.000	-59.04	-25.00	34.04	Horizontal

7.1.1.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
1694.000	-64.53	-25.00	39.53	Vertical
6900.000	-65.80	-25.00	40.80	Vertical
9045.000	-64.79	-25.00	39.79	Vertical
1529.000	-66.13	-25.00	41.13	Horizontal
3292.500	-69.70	-25.00	44.70	Horizontal
4170.000	-67.98	-25.00	42.98	Horizontal

NOTE:

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

8 Frequency Stability

8.1 Frequency Error VS. Voltage

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTE band 7	LTE/TM1 20MHz	LCH	TN	VL	-3.32	-0.00132	PASS
				VN	1.86	0.00074	PASS
				VH	-5.33	-0.00212	PASS
		MCH	TN	VL	-3.48	-0.00137	PASS
				VN	-1.04	-0.00041	PASS
				VH	2.62	0.00103	PASS
		HCH	TN	VL	-6.22	-0.00243	PASS
				VN	-3.67	-0.00143	PASS
				VH	-0.54	-0.00021	PASS
	LTE/TM2 20MHz	LCH	TN	VL	-4.77	-0.00190	PASS
				VN	-2.85	-0.00114	PASS
				VH	-4.69	-0.00187	PASS
		MCH	TN	VL	-1.48	-0.00058	PASS
				VN	-2.87	-0.00113	PASS
				VH	-5.59	-0.00221	PASS
		HCH	TN	VL	-3.08	-0.00120	PASS
				VN	-5.31	-0.00207	PASS
				VH	0.65	0.00025	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
LTEband7	LTE/TM1 20MHz	LCH	VN	-30	-2.51	-0.00100	PASS
				-20	-3.89	-0.00155	PASS
				-10	2.34	0.00093	PASS
				0	-3.75	-0.00149	PASS
				10	1.65	0.00066	PASS
				20	1.11	0.00044	PASS
				30	-4.52	-0.00180	PASS
				40	-5.14	-0.00205	PASS
				50	-4.89	-0.00195	PASS
		MCH	VN	-30	-7.80	-0.00308	PASS
				-20	-5.35	-0.00211	PASS
				-10	-3.12	-0.00123	PASS
				0	-4.33	-0.00171	PASS
				10	-2.04	-0.00080	PASS
				20	-1.05	-0.00041	PASS
				30	-2.36	-0.00093	PASS
				40	-2.44	-0.00096	PASS
				50	-6.08	-0.00240	PASS
		HCH	VN	-30	2.54	0.00099	PASS
				-20	-1.49	-0.00058	PASS
				-10	3.53	0.00138	PASS
				0	-2.36	-0.00092	PASS
				10	2.89	0.00113	PASS
				20	-1.47	-0.00057	PASS
				30	-2.68	-0.00105	PASS
				40	-5.23	-0.00204	PASS
				50	-5.96	-0.00233	PASS

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTE band7	LTE/TM2 20MHz	LCH	VN	-30	-1.54	-0.00061	PASS
				-20	-2.25	-0.00090	PASS
				-10	3.66	0.00146	PASS
				0	-2.38	-0.00095	PASS
				10	1.67	0.00067	PASS
				20	-0.28	-0.00011	PASS
				30	-3.44	-0.00137	PASS
				40	2.34	0.00093	PASS
				50	-3.99	-0.00159	PASS
		MCH	VN	-30	-3.87	-0.00153	PASS
				-20	-2.98	-0.00118	PASS
				-10	-7.23	-0.00285	PASS
				0	-3.32	-0.00131	PASS
				10	-2.34	-0.00092	PASS
				20	1.98	0.00078	PASS
				30	-3.45	-0.00136	PASS
				40	-4.52	-0.00178	PASS
				50	-5.46	-0.00215	PASS
		HCH	VN	-30	3.64	0.00142	PASS
				-20	-2.78	-0.00109	PASS
				-10	1.66	0.00065	PASS
				0	-3.23	-0.00126	PASS
				10	-2.78	-0.00109	PASS
				20	2.43	0.00095	PASS
				30	-2.87	-0.00112	PASS
				40	-3.83	-0.00150	PASS
				50	-6.43	-0.00251	PASS

The End