Appendix B

Test Data for SZEM1610008522RG

CONTENT

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1 Effective (Isotropic) Radiated Power Output Data

Effective Radiated Power of Transmitter (ERP) for LTE BAND 17

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND17	LTE/TM1	5M	LCH	RB1#0	22.57	20.16	34.70	PASS
				RB1#13	22.55	20.14	34.70	PASS
				RB1#24	22.51	20.10	34.70	PASS
				RB12#0	21.51	19.10	34.70	PASS
				RB12#6	21.53	19.12	34.70	PASS
				RB12#13	21.50	19.09	34.70	PASS
				RB25#0	21.46	19.05	34.70	PASS
			MCH	RB1#0	22.59	20.18	34.70	PASS
				RB1#13	22.63	20.22	34.70	PASS
				RB1#24	22.59	20.18	34.70	PASS
				RB12#0	21.67	19.26	34.70	PASS
				RB12#6	21.66	19.25	34.70	PASS
				RB12#13	21.61	19.20	34.70	PASS
				RB25#0	21.63	19.22	34.70	PASS
			HCH	RB1#0	22.53	20.12	34.70	PASS
				RB1#13	22.49	20.08	34.70	PASS
				RB1#24	22.48	20.07	34.70	PASS
				RB12#0	21.62	19.21	34.70	PASS
				RB12#6	21.63	19.22	34.70	PASS
				RB12#13	21.59	19.18	34.70	PASS
				RB25#0	21.61	19.20	34.70	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND17	LTE/TM2	5M	LCH	RB1#0	21.63	19.22	34.70	PASS
				RB1#13	21.59	19.18	34.70	PASS
				RB1#24	21.56	19.15	34.70	PASS
				RB12#0	20.53	18.12	34.70	PASS
				RB12#6	20.54	18.13	34.70	PASS
				RB12#13	20.53	18.12	34.70	PASS
				RB25#0	20.56	18.15	34.70	PASS
			MCH	RB1#0	21.71	19.30	34.70	PASS
				RB1#13	21.71	19.30	34.70	PASS
				RB1#24	21.66	19.25	34.70	PASS
				RB12#0	20.60	18.19	34.70	PASS
				RB12#6	20.57	18.16	34.70	PASS
				RB12#13	20.51	18.10	34.70	PASS
				RB25#0	20.60	18.19	34.70	PASS
			HCH	RB1#0	21.67	19.26	34.70	PASS
				RB1#13	21.68	19.27	34.70	PASS
				RB1#24	21.66	19.25	34.70	PASS
				RB12#0	20.63	18.22	34.70	PASS
				RB12#6	20.67	18.26	34.70	PASS
				RB12#13	20.67	18.26	34.70	PASS
				RB25#0	20.69	18.28	34.70	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND17	LTE/TM3	5M	LCH	RB1#0	20.68	18.27	34.70	PASS
				RB1#13	20.44	18.03	34.70	PASS
				RB1#24	20.43	18.02	34.70	PASS
				RB12#0	19.54	17.13	34.70	PASS
				RB12#6	19.38	16.97	34.70	PASS
				RB12#13	19.36	16.95	34.70	PASS
				RB25#0	19.46	17.05	34.70	PASS
			MCH	RB1#0	20.74	18.33	34.70	PASS
				RB1#13	20.56	18.15	34.70	PASS
				RB1#24	20.49	18.08	34.70	PASS
				RB12#0	19.61	17.20	34.70	PASS
				RB12#6	19.63	17.22	34.70	PASS
				RB12#13	19.57	17.16	34.70	PASS
				RB25#0	19.67	17.26	34.70	PASS
			HCH	RB1#0	20.6	18.19	34.70	PASS
				RB1#13	20.38	17.97	34.70	PASS
				RB1#24	20.33	17.92	34.70	PASS
				RB12#0	19.58	17.17	34.70	PASS
				RB12#6	19.50	17.09	34.70	PASS
				RB12#13	19.49	17.08	34.70	PASS
				RB25#0	19.64	17.23	34.70	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND17	LTE/TM1	10M	LCH	RB1#0	22.57	20.16	34.70	PASS
				RB1#25	22.56	20.15	34.70	PASS
				RB1#49	22.52	20.11	34.70	PASS
				RB25#0	21.55	19.14	34.70	PASS
				RB25#13	21.54	19.13	34.70	PASS
				RB25#25	21.54	19.13	34.70	PASS
				RB50#0	21.49	19.08	34.70	PASS
			MCH	RB1#0	22.64	20.23	34.70	PASS
				RB1#25	22.64	20.23	34.70	PASS
				RB1#49	22.61	20.20	34.70	PASS
				RB25#0	21.68	19.27	34.70	PASS
				RB25#13	21.66	19.25	34.70	PASS
				RB25#25	21.66	19.25	34.70	PASS
				RB50#0	21.64	19.23	34.70	PASS
			HCH	RB1#0	22.54	20.13	34.70	PASS
				RB1#25	22.50	20.09	34.70	PASS
				RB1#49	22.49	20.08	34.70	PASS
				RB25#0	21.66	19.25	34.70	PASS
				RB25#13	21.64	19.23	34.70	PASS
				RB25#25	21.61	19.20	34.70	PASS
				RB50#0	21.62	19.21	34.70	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND17	LTE/TM2	10M	LCH	RB1#0	21.64	19.23	34.70	PASS
				RB1#25	21.61	19.20	34.70	PASS
				RB1#49	21.57	19.16	34.70	PASS
				RB25#0	20.56	18.15	34.70	PASS
				RB25#13	20.55	18.14	34.70	PASS
				RB25#25	20.54	18.13	34.70	PASS
				RB50#0	20.57	18.16	34.70	PASS
			MCH	RB1#0	21.73	19.32	34.70	PASS
				RB1#25	21.71	19.30	34.70	PASS
				RB1#49	21.69	19.28	34.70	PASS
				RB25#0	20.62	18.21	34.70	PASS
				RB25#13	20.59	18.18	34.70	PASS
				RB25#25	20.56	18.15	34.70	PASS
				RB50#0	20.63	18.22	34.70	PASS
			HCH	RB1#0	21.70	19.29	34.70	PASS
				RB1#25	21.68	19.27	34.70	PASS
				RB1#49	21.66	19.25	34.70	PASS
				RB25#0	20.67	18.26	34.70	PASS
				RB25#13	20.67	18.26	34.70	PASS
				RB25#25	20.67	18.26	34.70	PASS
				RB50#0	20.70	18.29	34.70	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND17	LTE/TM3	10M	LCH	RB1#0	20.68	18.27	34.70	PASS
				RB1#25	20.47	18.06	34.70	PASS
				RB1#49	20.47	18.06	34.70	PASS
				RB25#0	19.57	17.16	34.70	PASS
				RB25#13	19.39	16.98	34.70	PASS
				RB25#25	19.39	16.98	34.70	PASS
				RB50#0	19.48	17.07	34.70	PASS
			MCH	RB1#0	20.75	18.34	34.70	PASS
				RB1#25	20.57	18.16	34.70	PASS
				RB1#49	20.53	18.12	34.70	PASS
				RB25#0	19.65	17.24	34.70	PASS
				RB25#13	19.63	17.22	34.70	PASS
				RB25#25	19.62	17.21	34.70	PASS
				RB50#0	19.67	17.26	34.70	PASS
			HCH	RB1#0	20.64	18.23	34.70	PASS
				RB1#25	20.41	18.00	34.70	PASS
				RB1#49	20.36	17.95	34.70	PASS
				RB25#0	19.59	17.18	34.70	PASS
				RB25#13	19.54	17.13	34.70	PASS
				RB25#25	19.50	17.09	34.70	PASS
				RB50#0	19.67	17.26	34.70	PASS

Note:
a: For getting the ERP (Efficient Radiated Power) in substitution method, the following formula should be taken to calculate it,

ERP [dBm] = SGP [dBm] – Cable Loss [dB] + Gain [dBd]

b: SGP=Signal Generator Level
c: RBW > emission bandwidth, VBW > 3 x RBW.
Detector: RMS

2 Peak-to-Average Ratio

Part I - Test Results

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
Band 17	TM1/10M	LCH	5.30	13	PASS
		MCH	4.84	13	PASS
		HCH	5.22	13	PASS
	TM2/10M	LCH	6.06	13	PASS
		MCH	5.74	13	PASS
		HCH	6.00	13	PASS
	TM3/10M	LCH	6.46	13	PASS
		MCH	6.38	13	PASS
		HCH	6.49	13	PASS

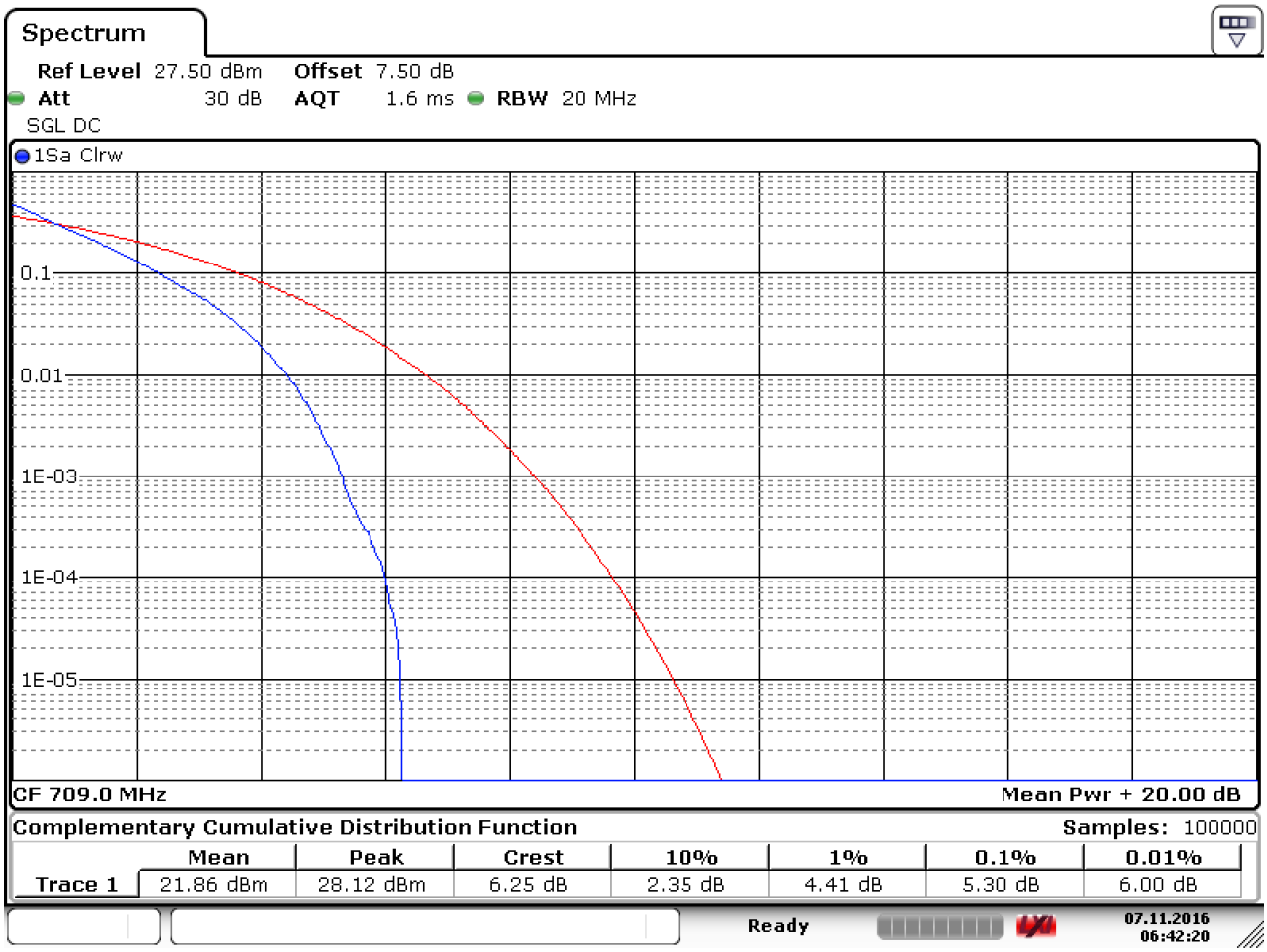
Part II - Test Plots

2.1 For LTE

2.1.1 Test Band = LTE band17

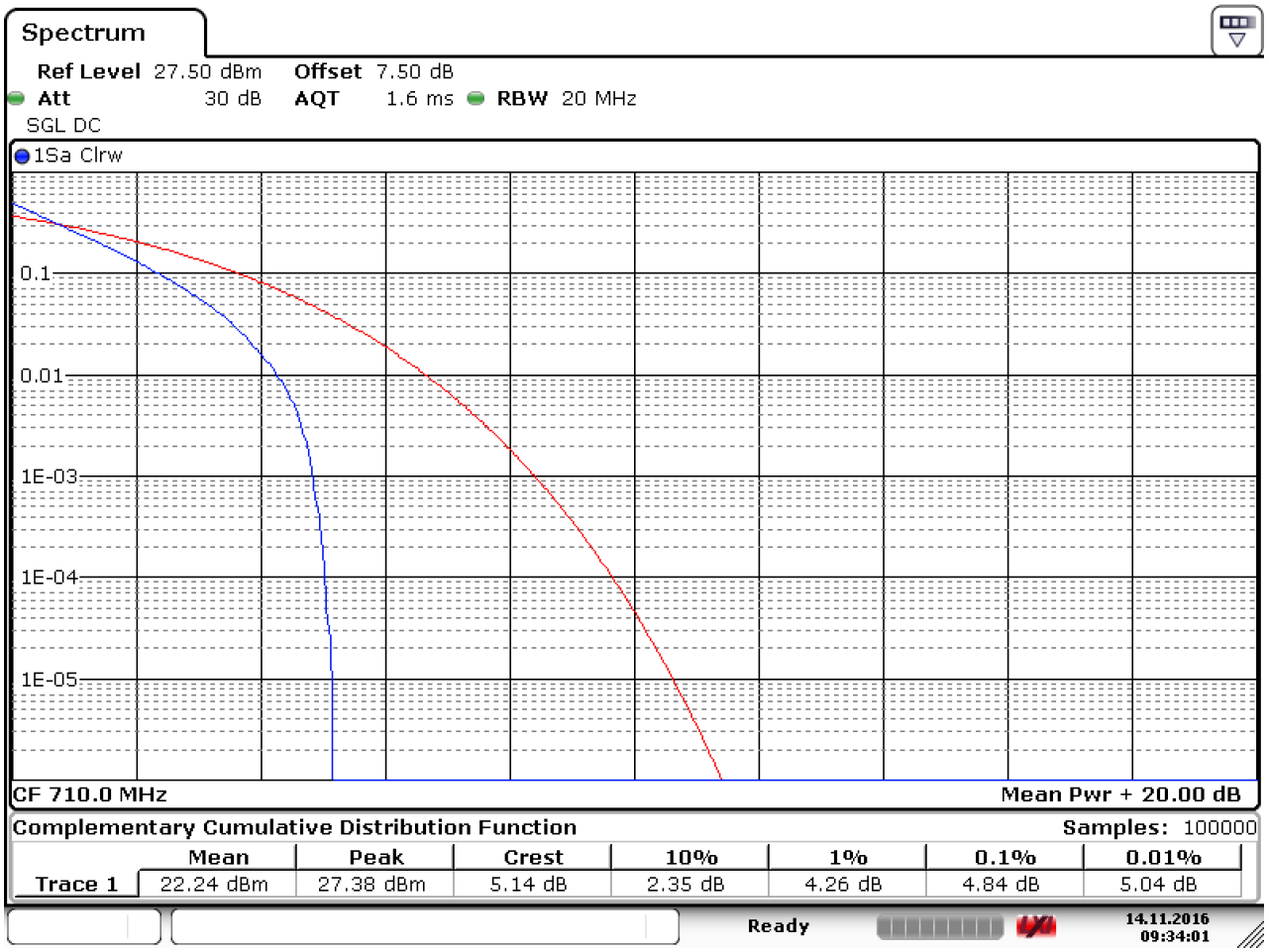
2.1.1.1 Test Mode = LTE/TM1.Bandwidth=10MHz

2.1.1.1.1 Test Channel = LCH



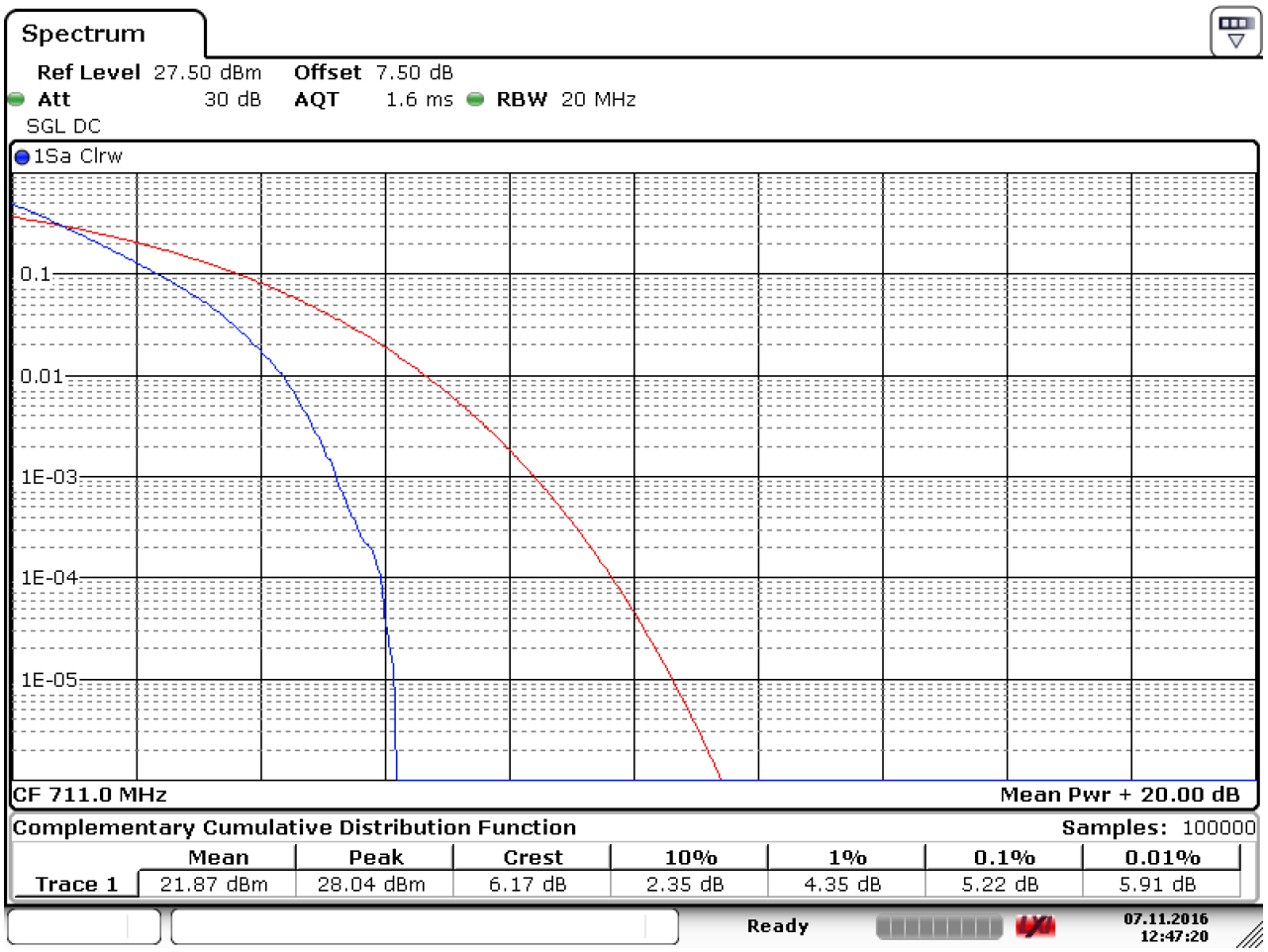
Date: 7.NOV.2016 06:42:21

2.1.1.1.2 Test Channel = MCH



Date: 14.NOV.2016 09:34:02

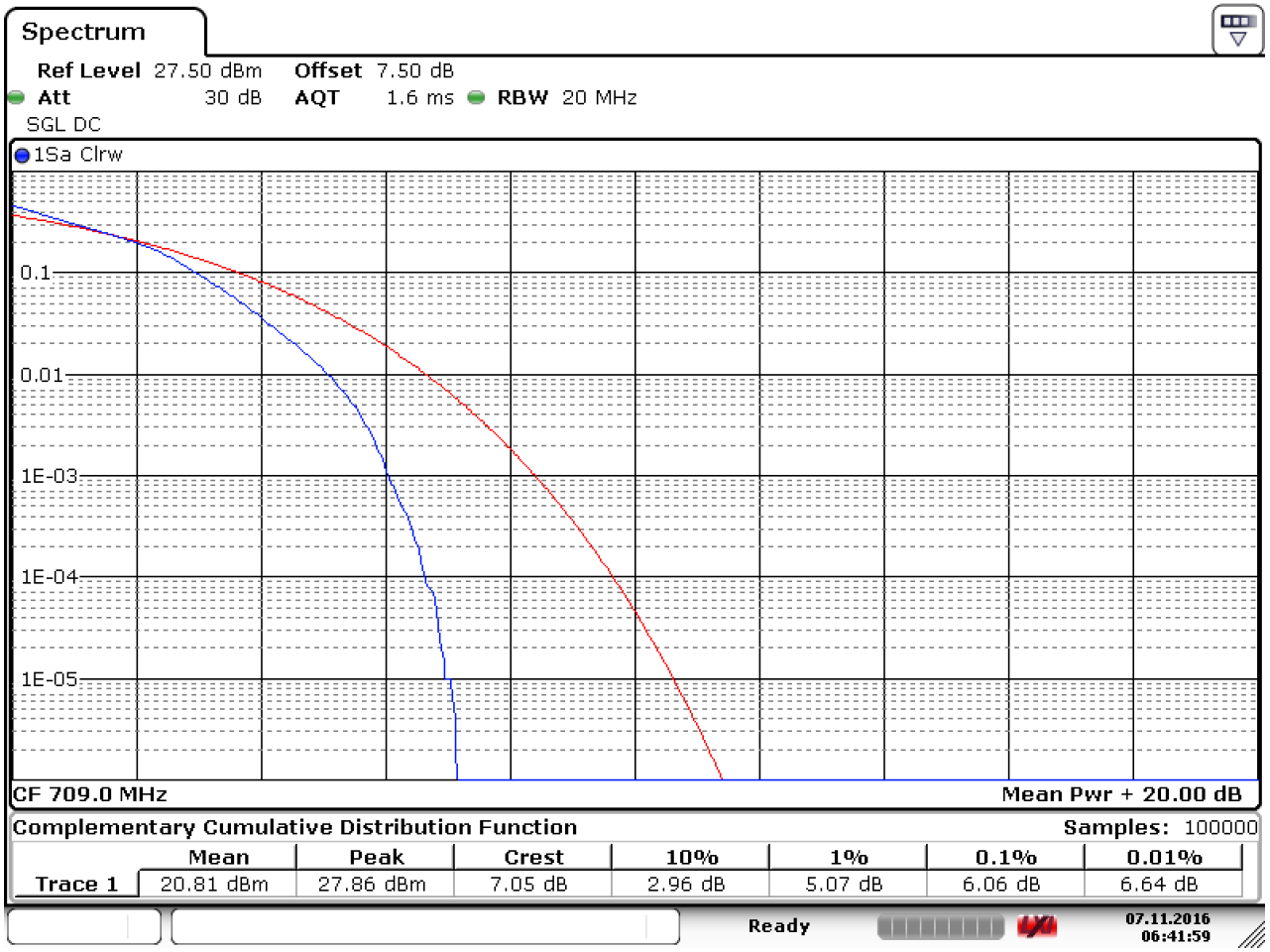
2.1.1.1.3 Test Channel = HCH



Date: 7.NOV.2016 12:47:20

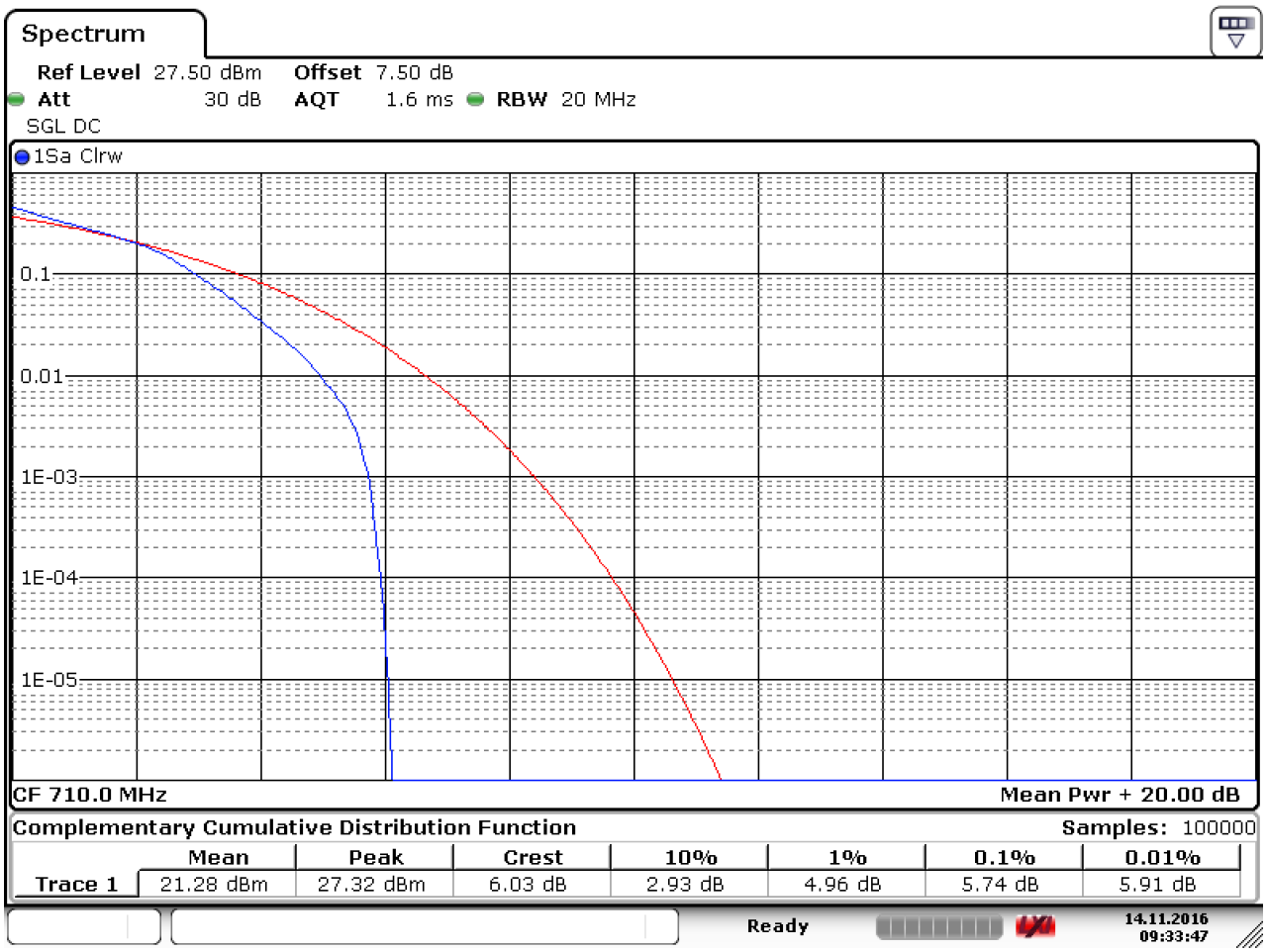
2.1.1.2 Test Mode = LTE/TM2.Bandwidth=10MHz

2.1.1.2.1 Test Channel = LCH



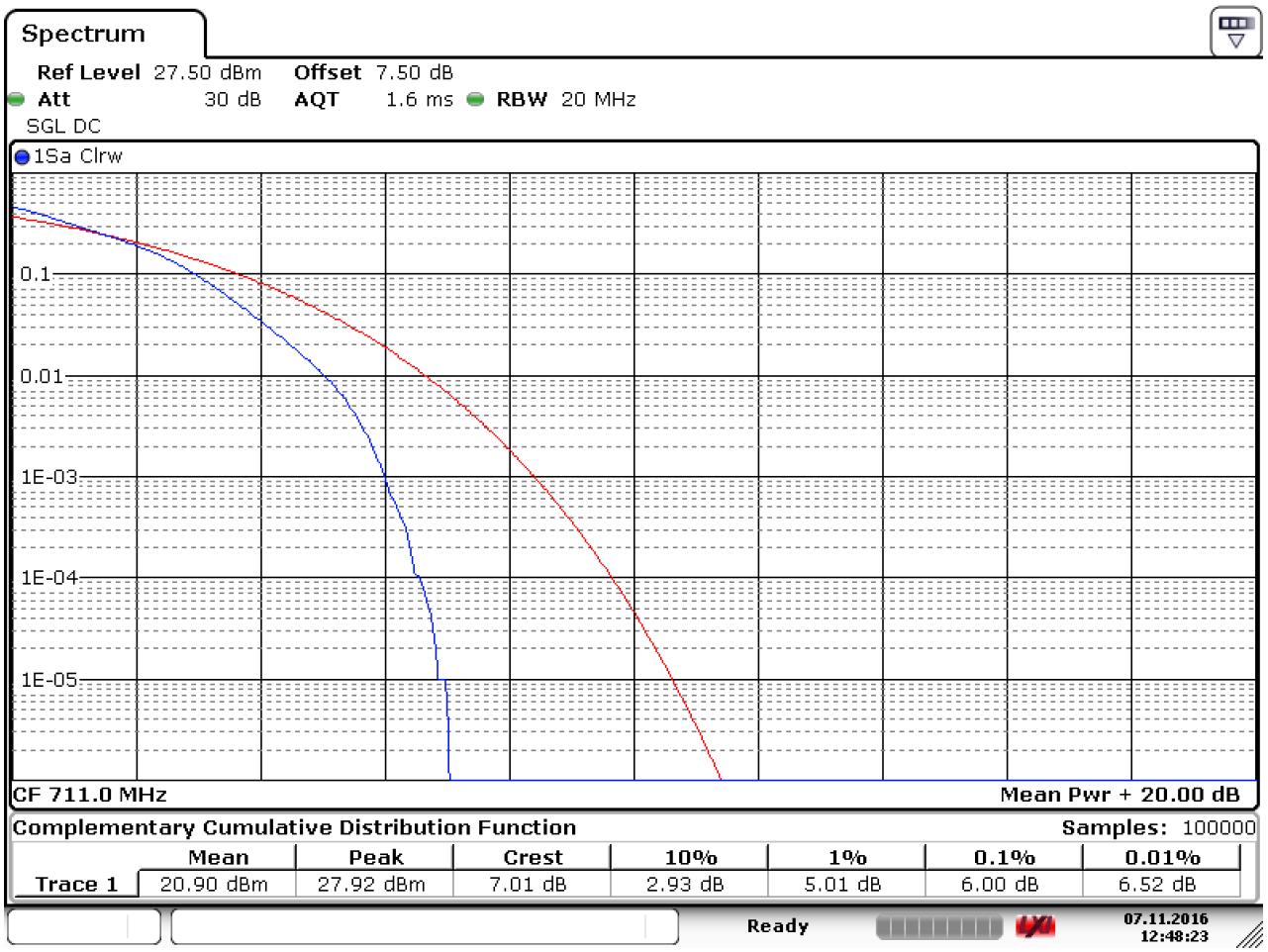
Date: 7.NOV.2016 06:42:00

2.1.1.2.2 Test Channel = MCH



Date: 14.NOV.2016 09:33:48

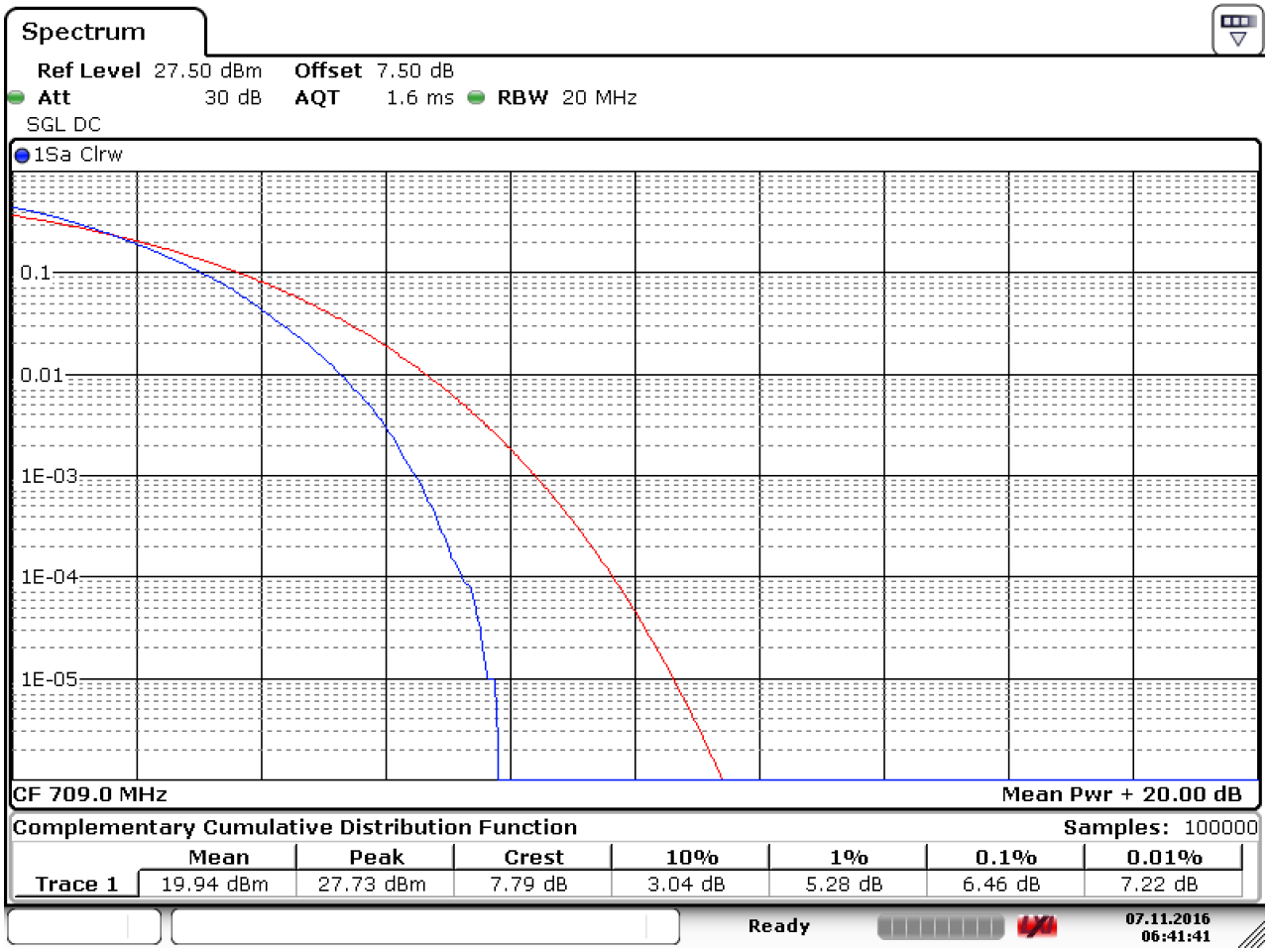
2.1.1.2.3 Test Channel = HCH



Date: 7.NOV.2016 12:48:23

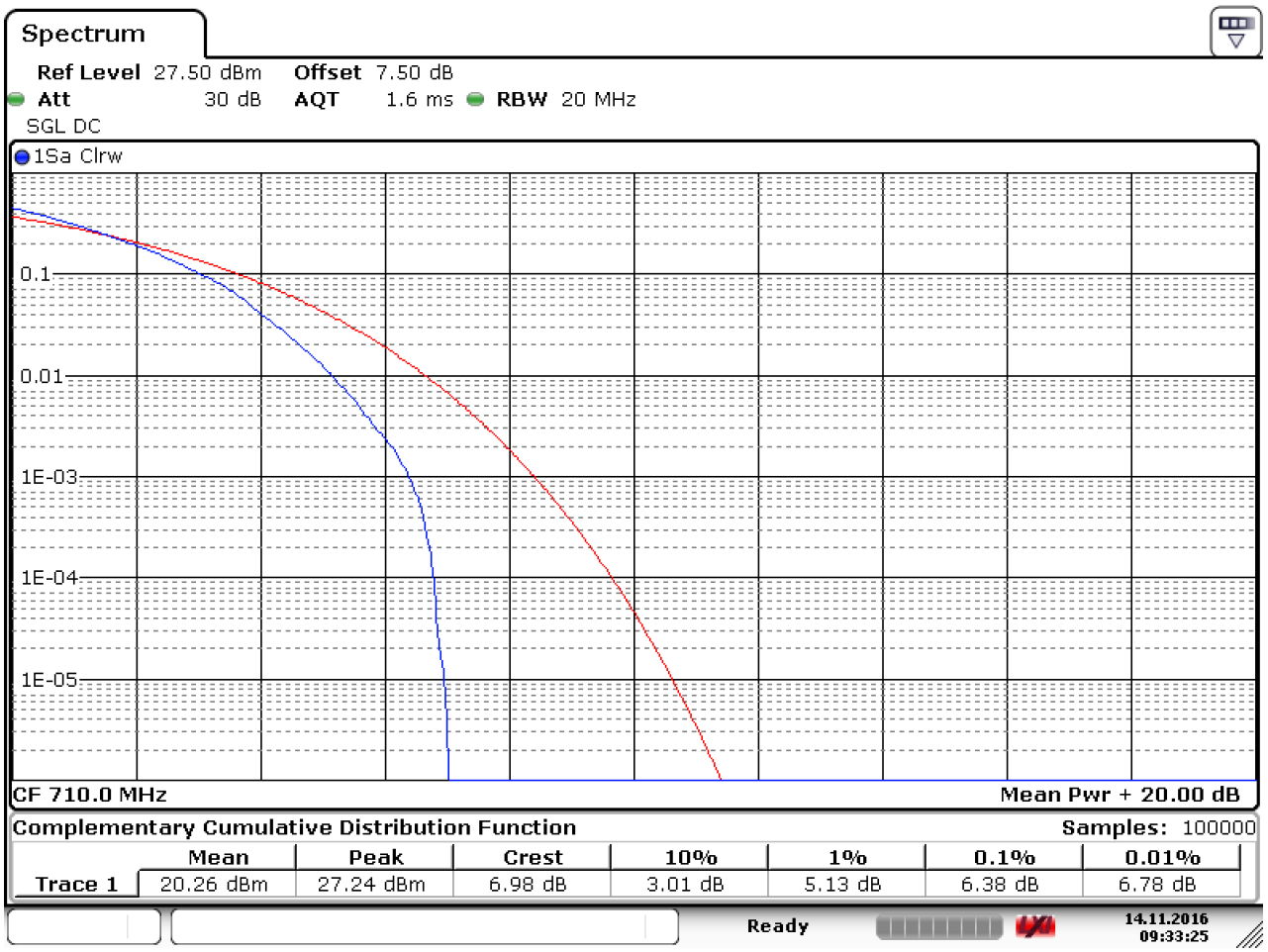
2.1.1.3 Test Mode = LTE/TM3.Bandwidth=10MHz

2.1.1.3.1 Test Channel = LCH



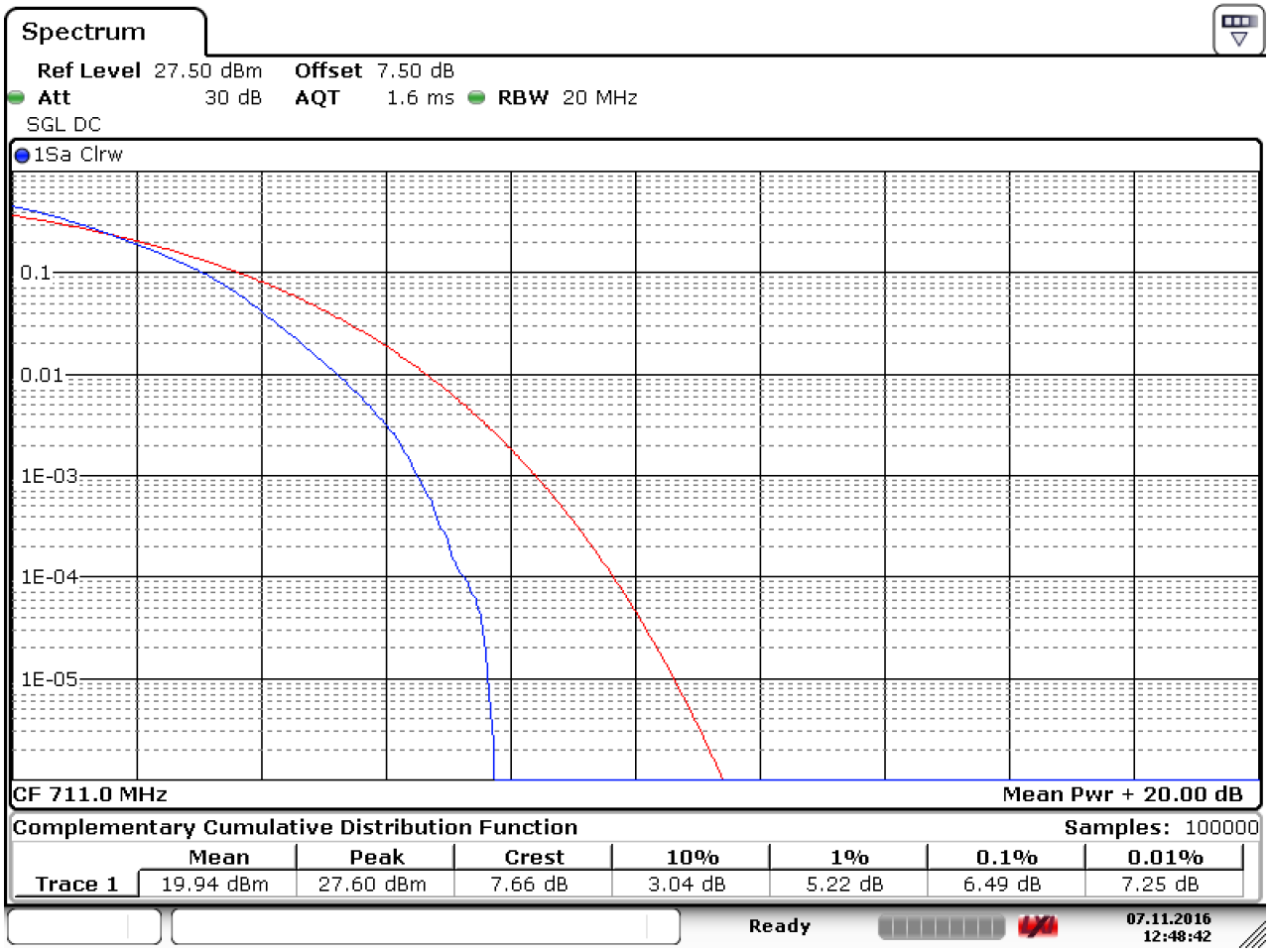
Date: 7.NOV.2016 06:41:42

2.1.1.3.2 Test Channel = MCH



Date: 14.NOV.2016 09:33:25

2.1.1.3.3 Test Channel = HCH



Date: 7.NOV.2016 12:48:42

3 Modulation Characteristics

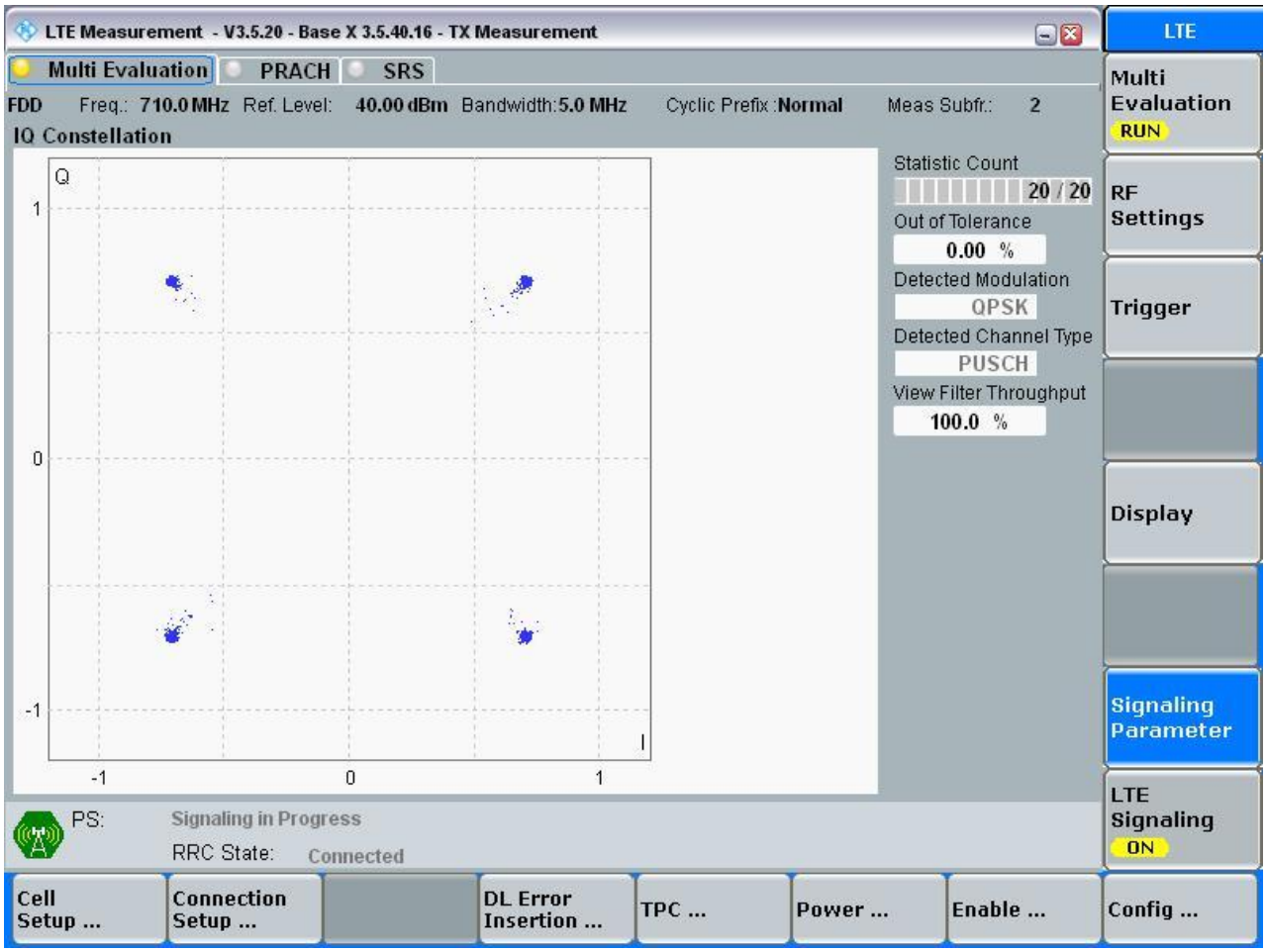
Part I - Test Plots

3.1 For LTE

3.1.1 Test Band = LTE band17

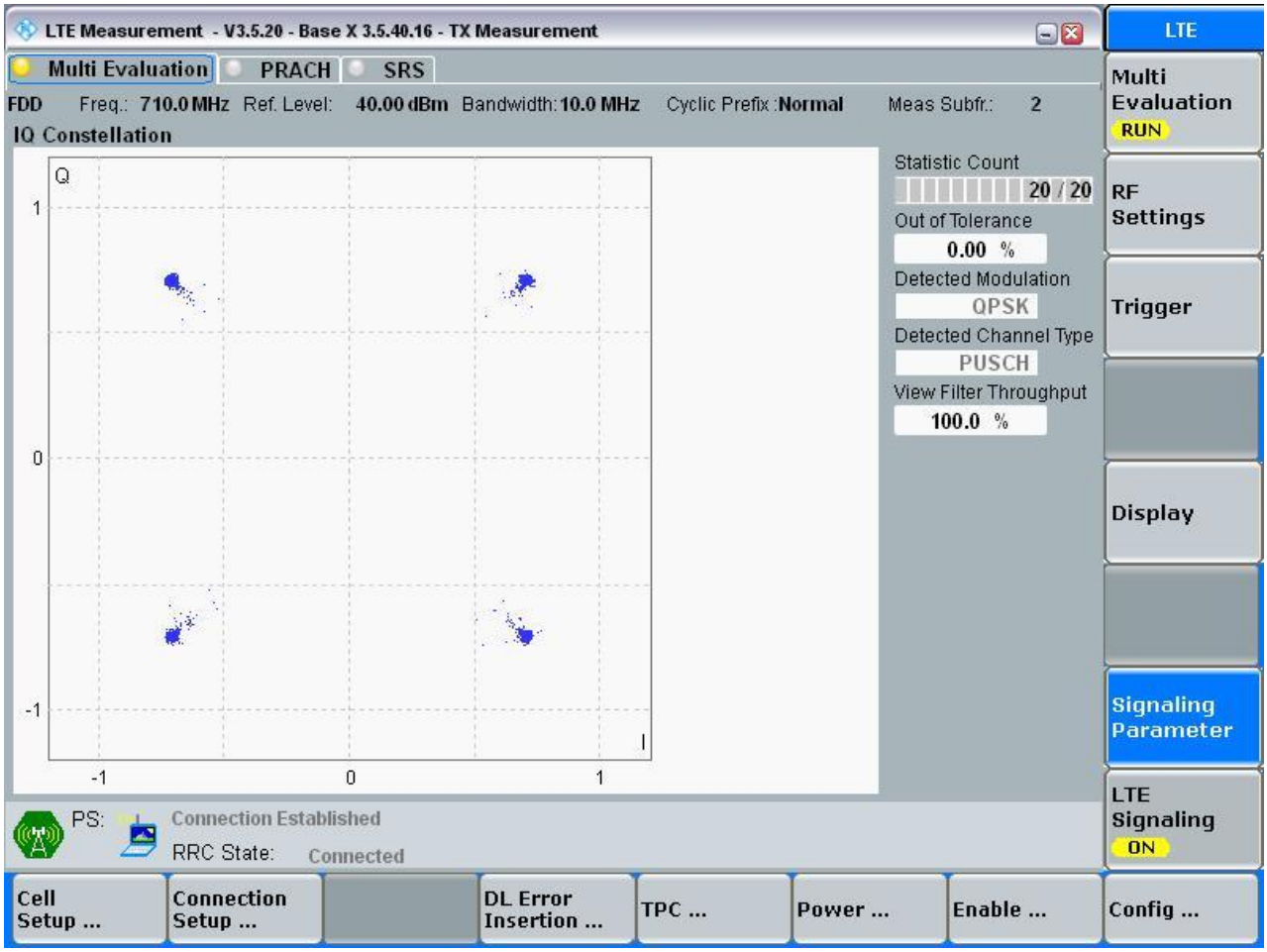
3.1.1.1 Test Mode = LTE /TM1 5MHz

3.1.1.1.1 Test Channel = MCH



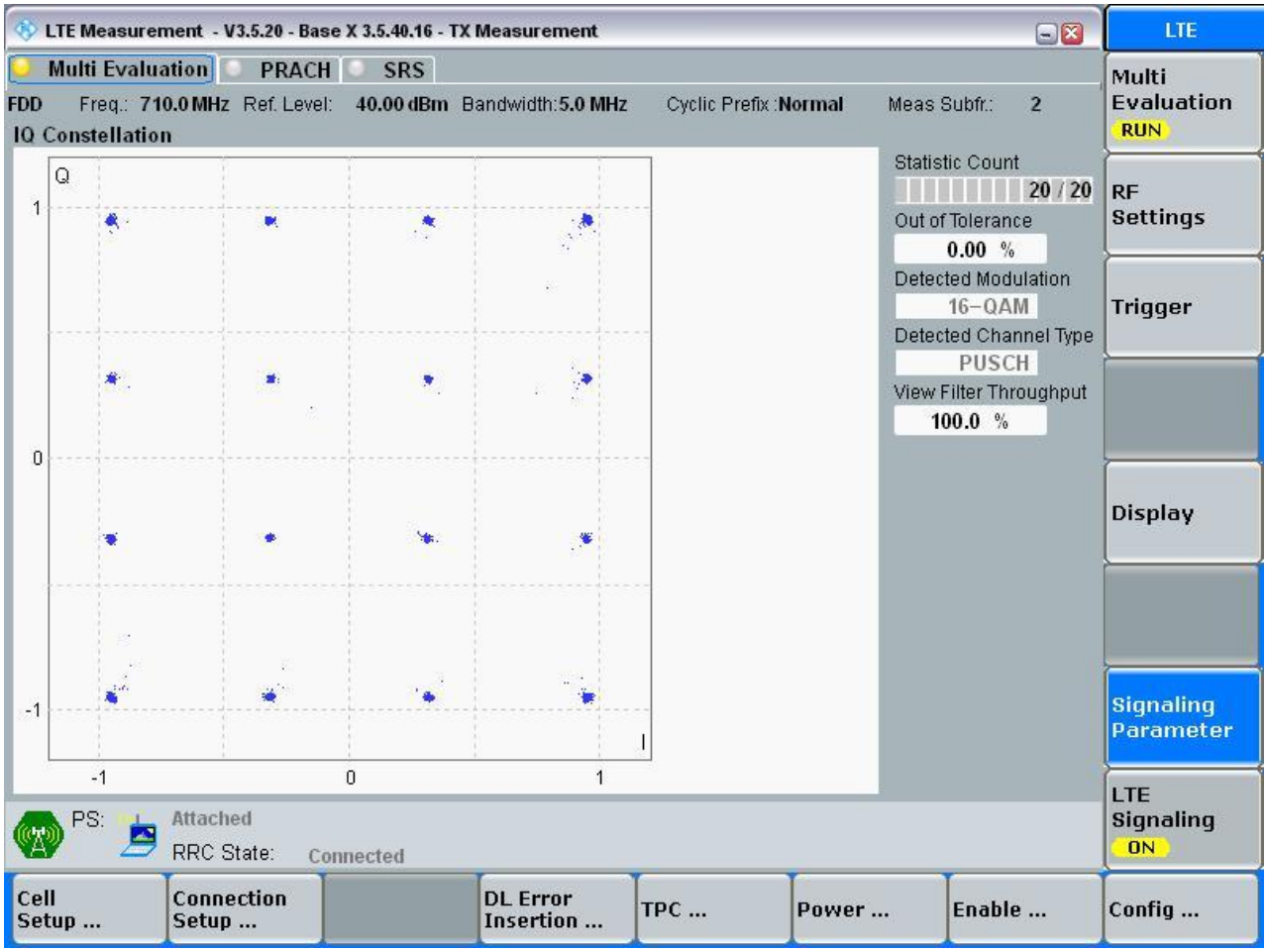
3.1.1.2 Test Mode = LTE /TM1 10MHz

3.1.1.2.1 Test Channel = MCH



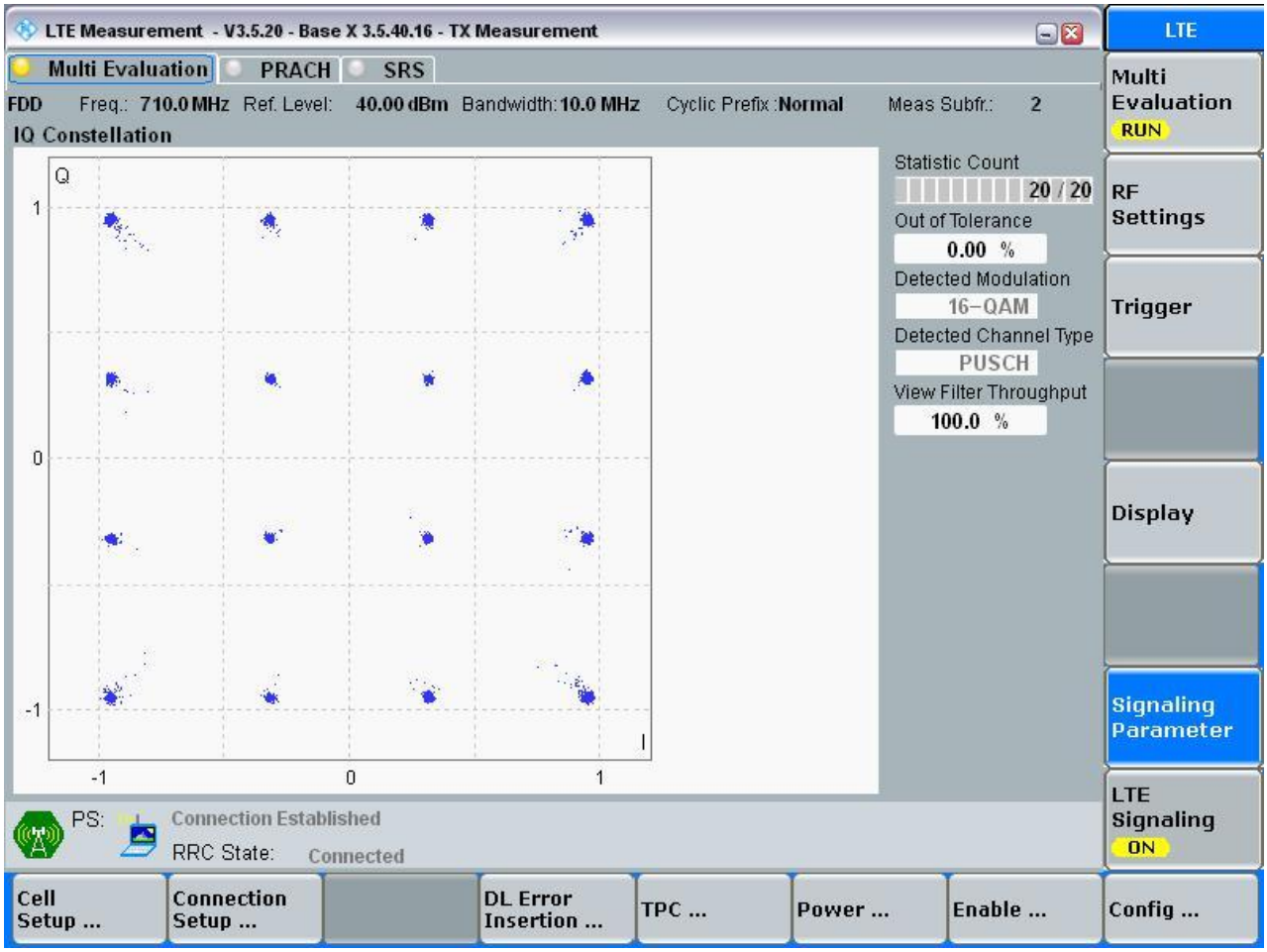
3.1.1.3 Test Mode = LTE /TM2 5MHz

3.1.1.3.1 Test Channel = MCH



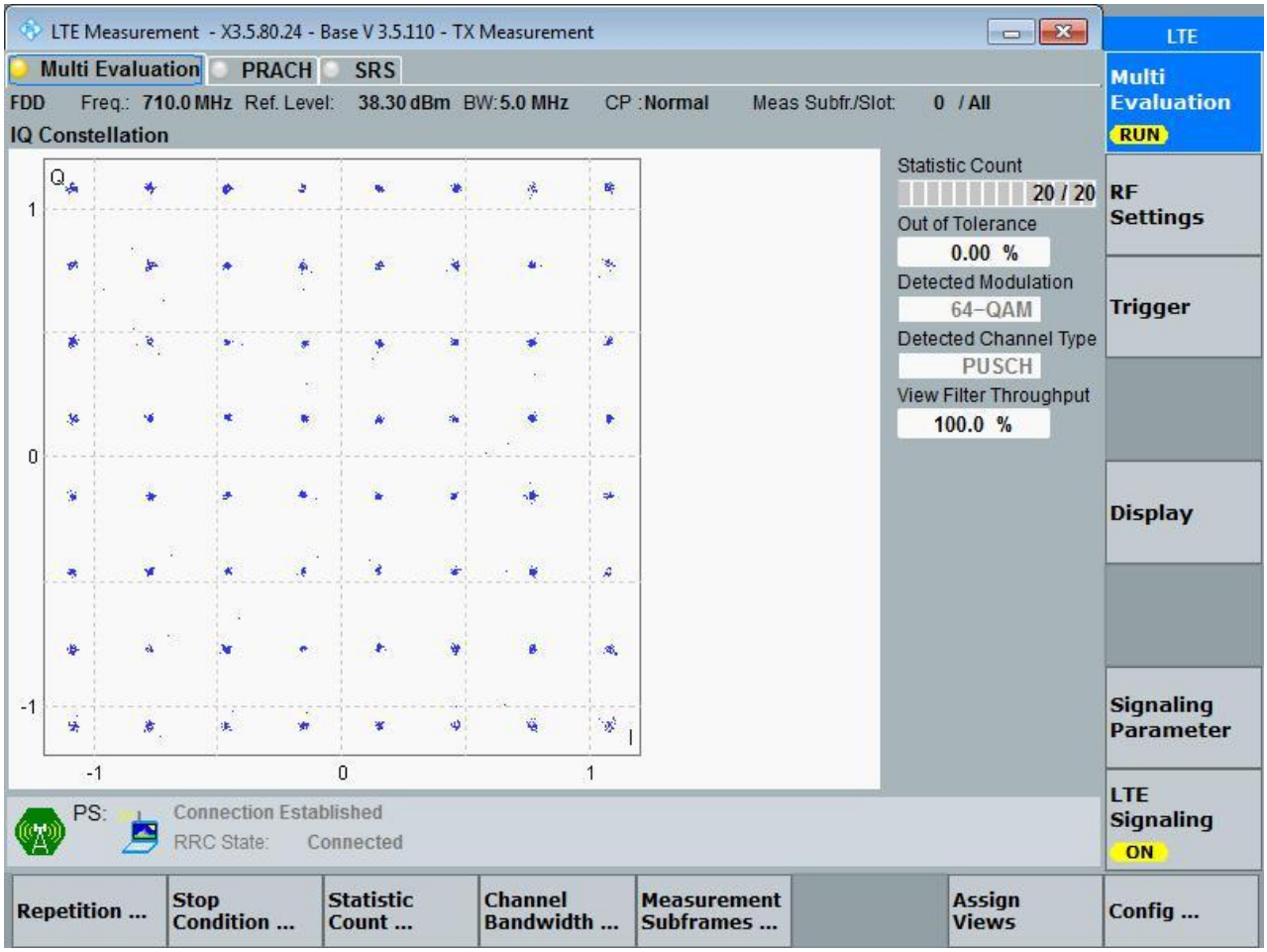
3.1.1.4 Test Mode = LTE /TM2 10MHz

3.1.1.4.1 Test Channel = MCH



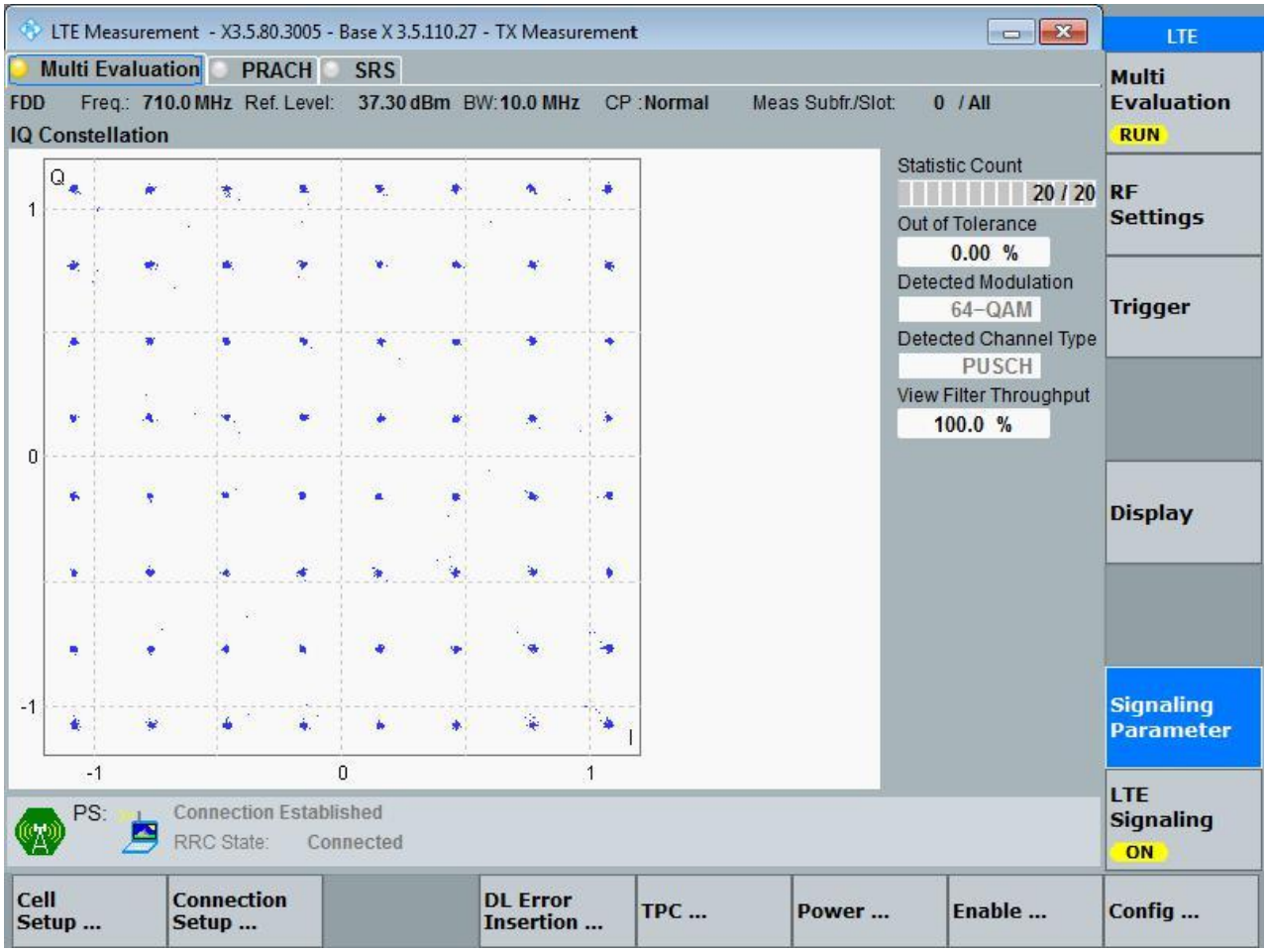
3.1.1.5 Test Mode = LTE /TM3 5MHz

3.1.1.5.1 Test Channel = MCH



3.1.1.6 Test Mode = LTE /TM3 10MHz

3.1.1.6.1 Test Channel = MCH



4 Bandwidth

Part I - Test Results

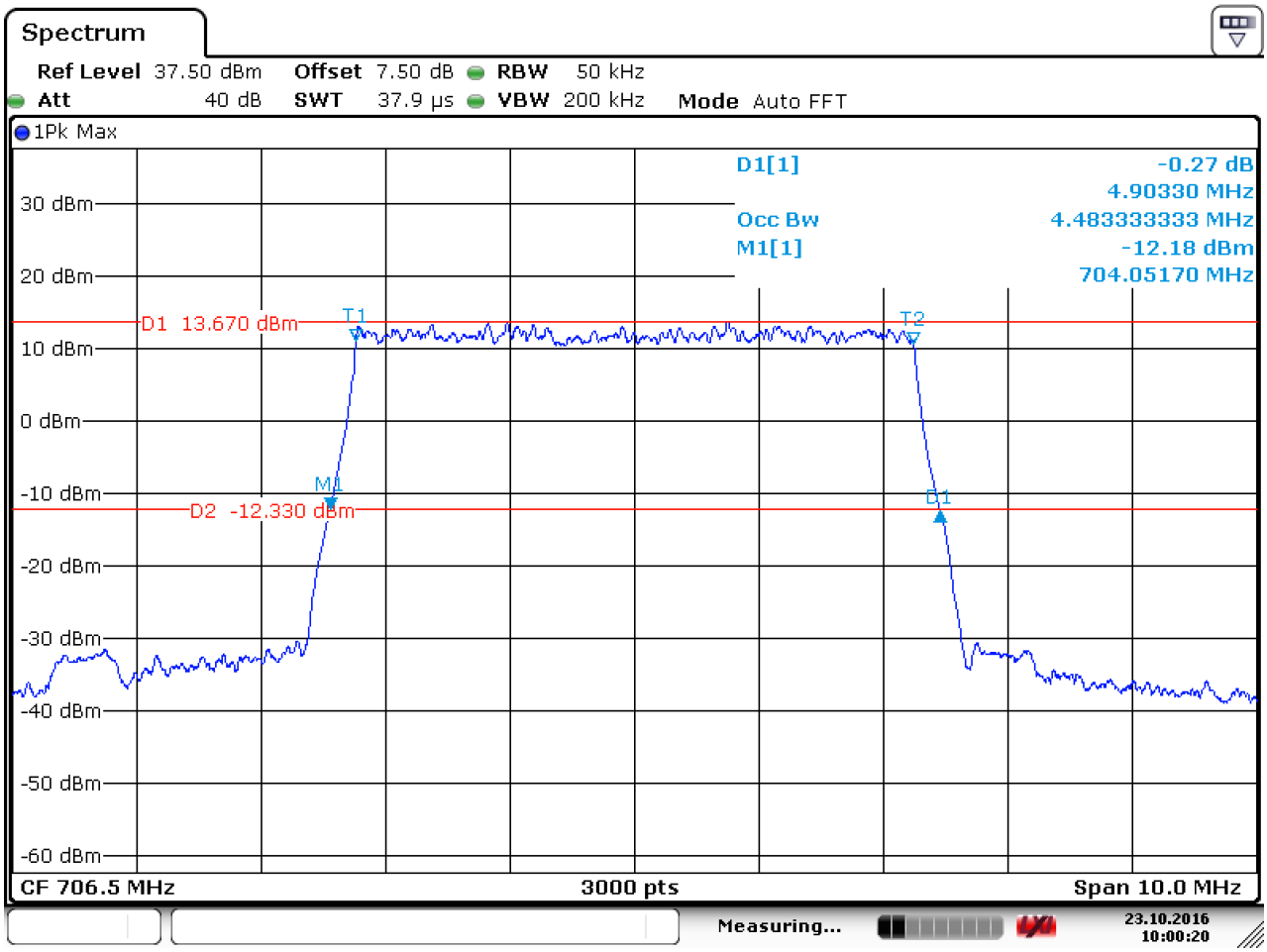
Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
Band 17	TM1/ 5MHz	LCH	4.48	4.90	PASS
		MCH	4.48	4.90	PASS
		HCH	4.46	4.86	PASS
	TM2/ 5MHz	LCH	4.47	4.84	PASS
		MCH	4.47	4.84	PASS
		HCH	4.47	4.91	PASS
	TM3/5MHz	LCH	4.48	4.88	PASS
		MCH	4.48	4.88	PASS
		HCH	4.47	4.88	PASS
	TM1/10MHz	LCH	8.95	9.70	PASS
		MCH	8.92	9.62	PASS
		HCH	8.92	9.67	PASS
	TM2/ 10MHz	LCH	8.96	9.67	PASS
		MCH	8.95	9.68	PASS
		HCH	8.95	9.67	PASS
	TM3/ 10MHz	LCH	8.96	9.67	PASS
		MCH	8.95	9.68	PASS
		HCH	8.95	9.67	PASS

4.1 For LTE

4.1.1 Test Band = LTE band17

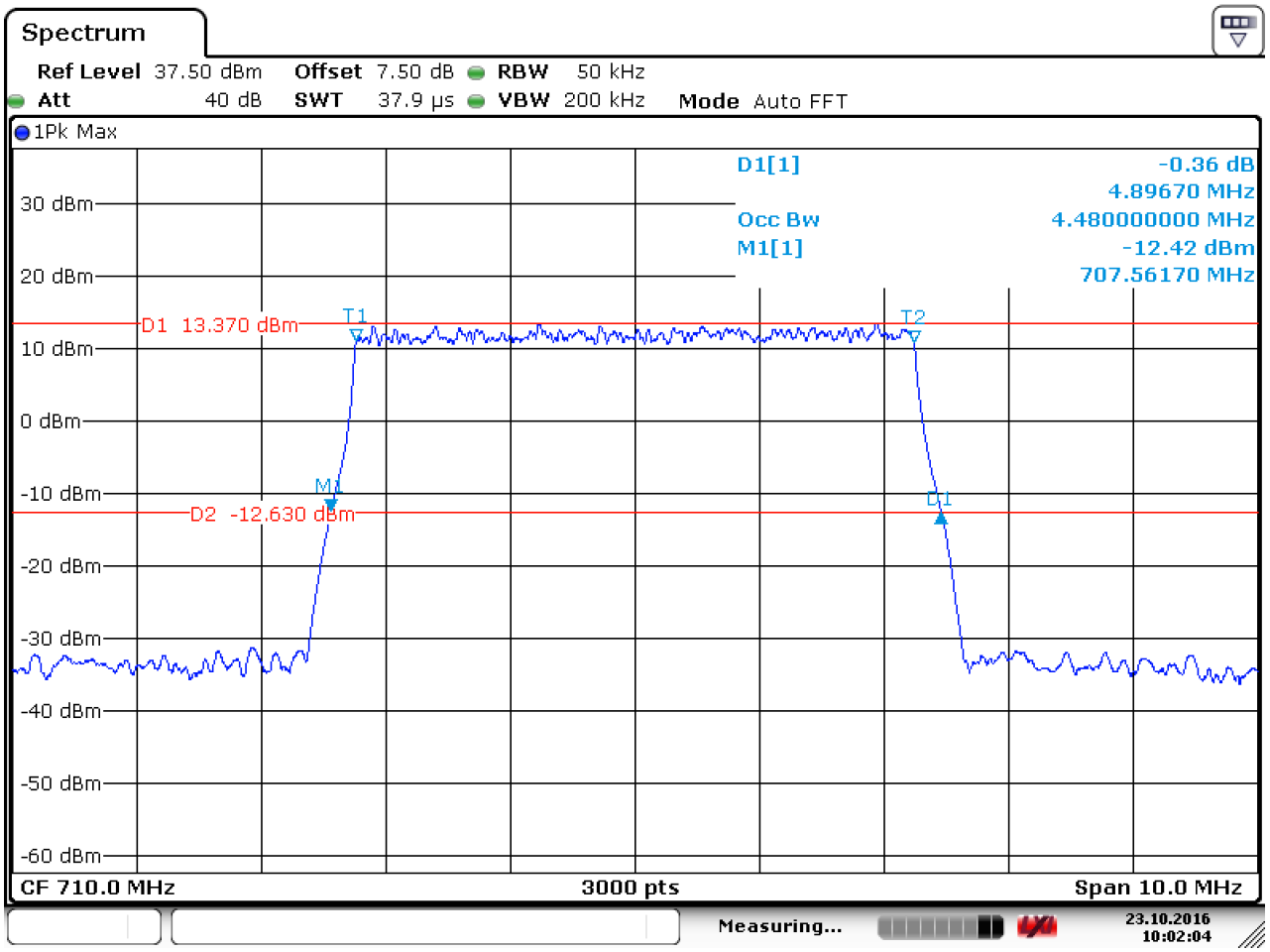
4.1.1.1 Test Mode = LTE/TM1 5MHz

4.1.1.1.1 Test Channel = LCH



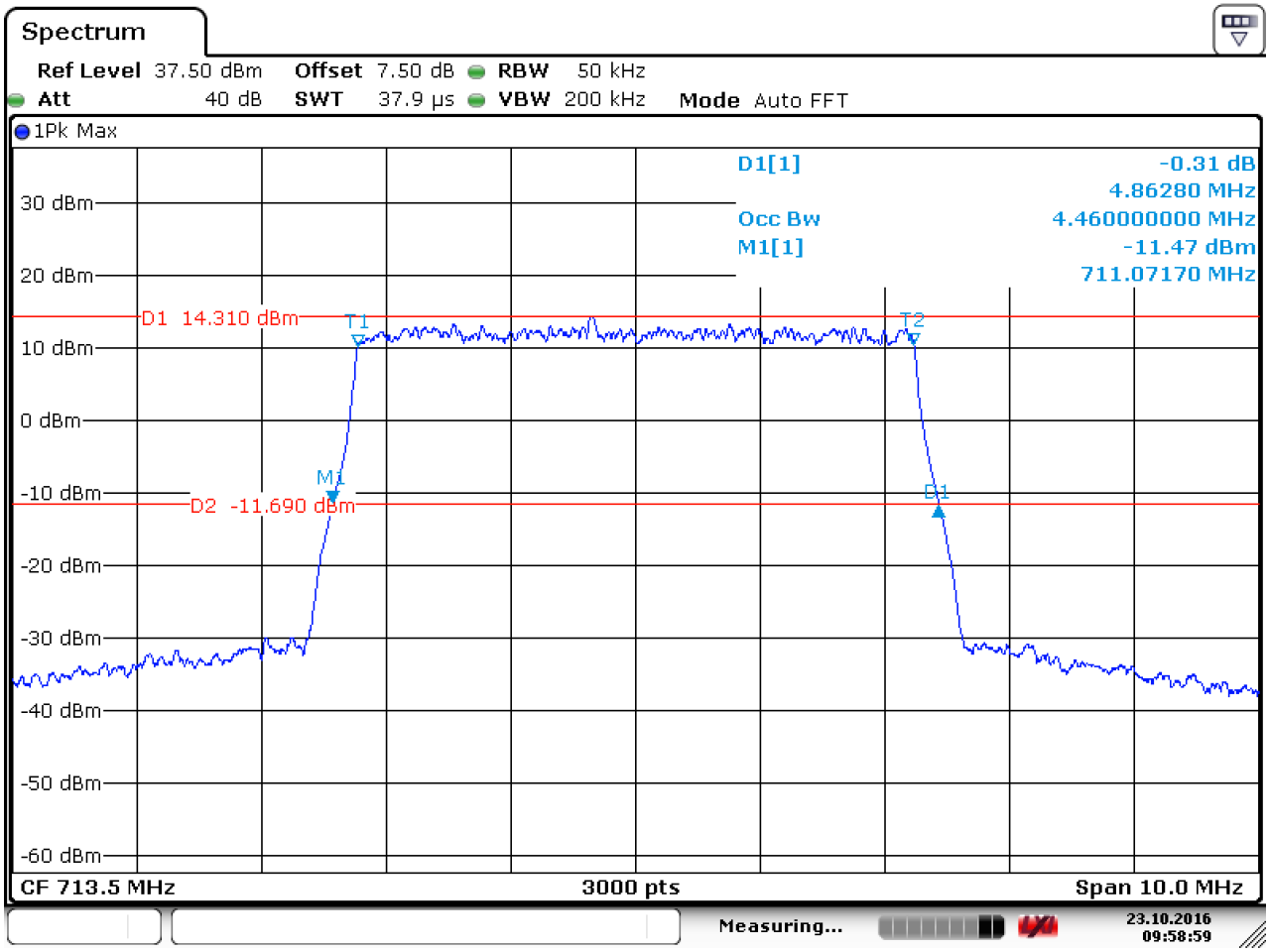
Date: 23.OCT.2016 10:00:20

4.1.1.1.2 Test Channel = MCH



Date: 23.OCT.2016 10:02:04

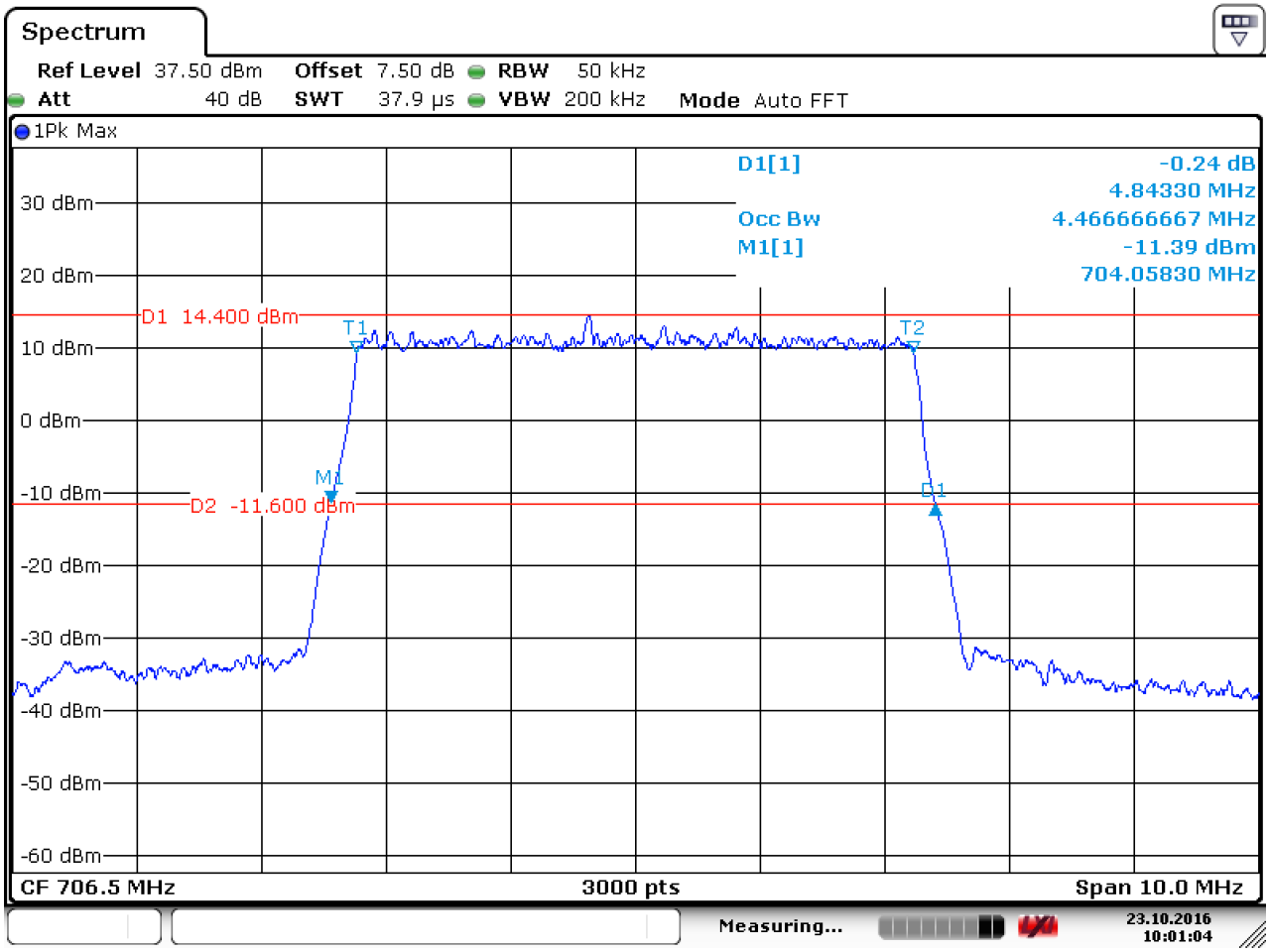
4.1.1.1.3 Test Channel = HCH



Date: 23.OCT.2016 09:58:59

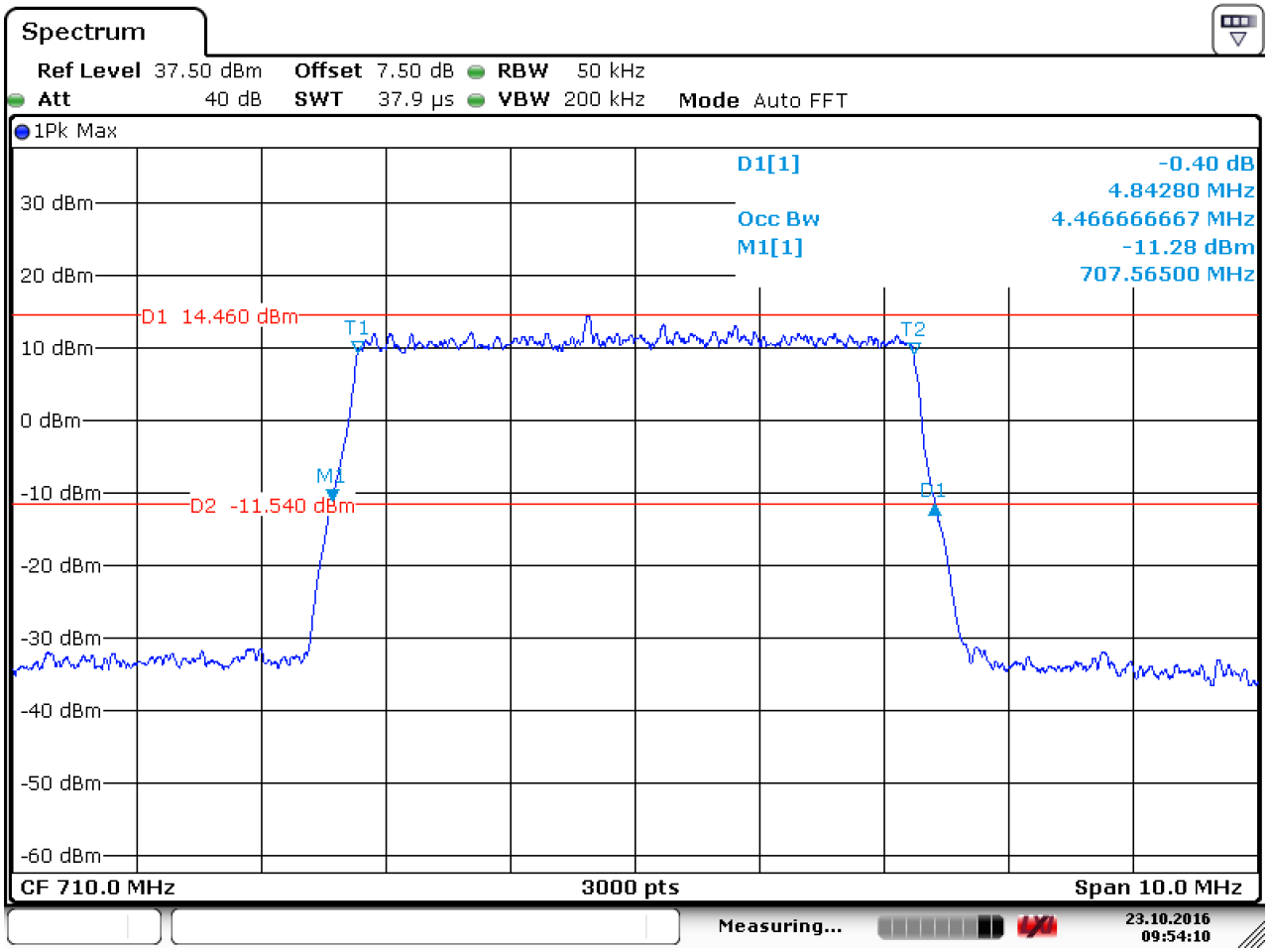
4.1.1.2 Test Mode = LTE/TM2 5MHz

4.1.1.2.1 Test Channel = LCH



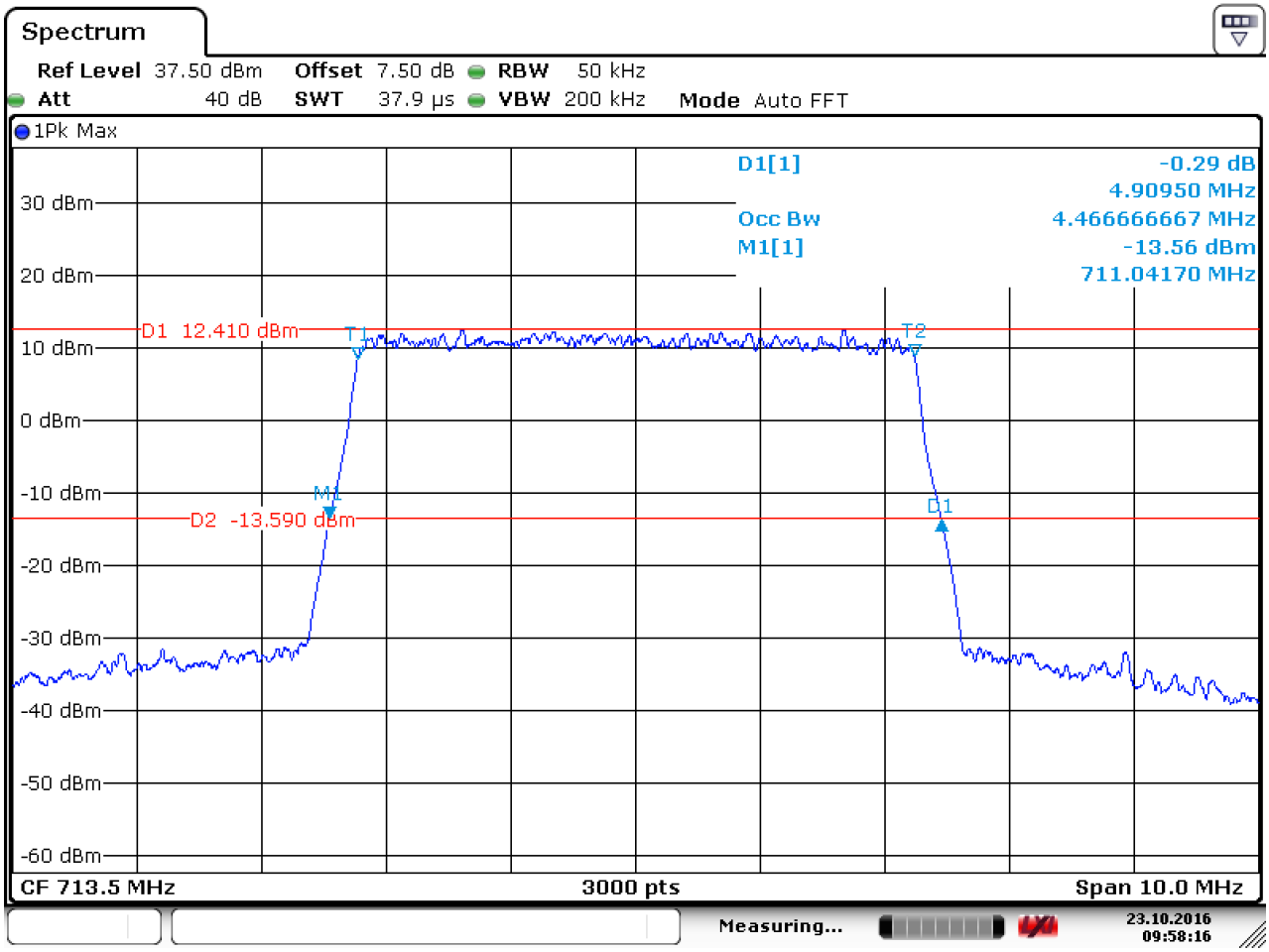
Date: 23.OCT.2016 10:01:05

4.1.1.2.2 Test Channel = MCH



Date: 23.OCT.2016 09:54:10

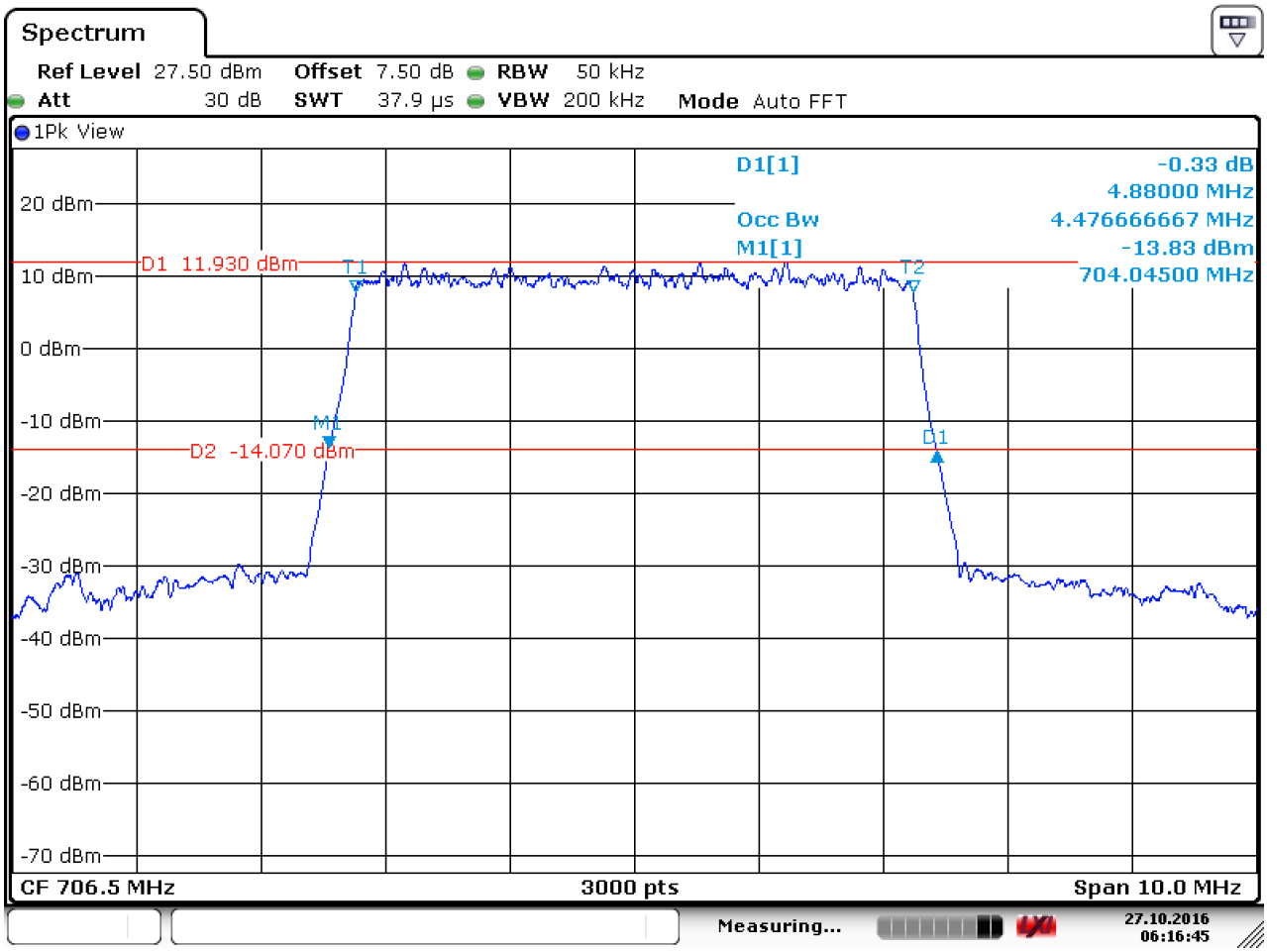
4.1.1.2.3 Test Channel = HCH



Date: 23.OCT.2016 09:58:17

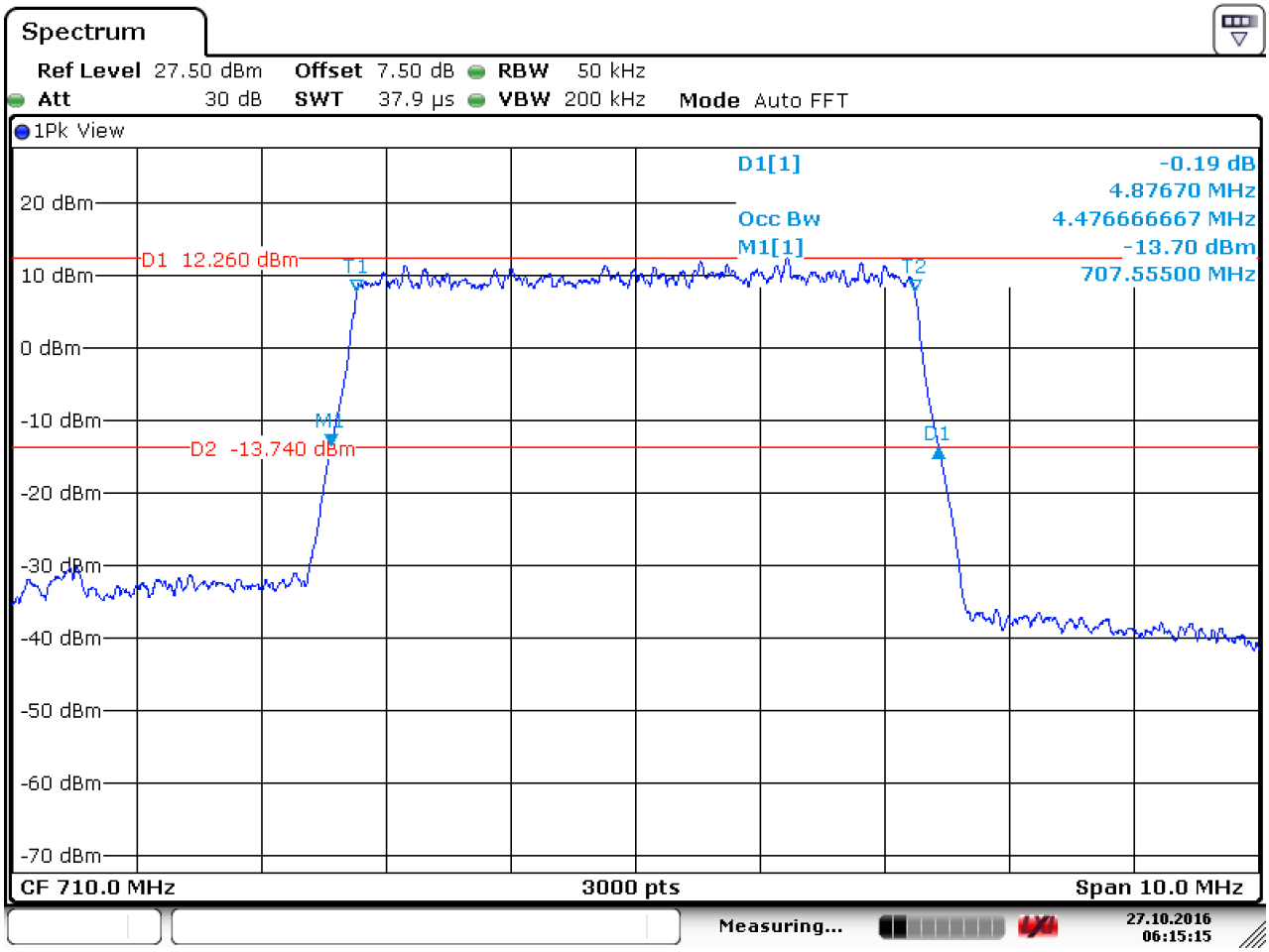
4.1.1.3 Test Mode = LTE/TM3 5MHz

4.1.1.3.1 Test Channel = LCH



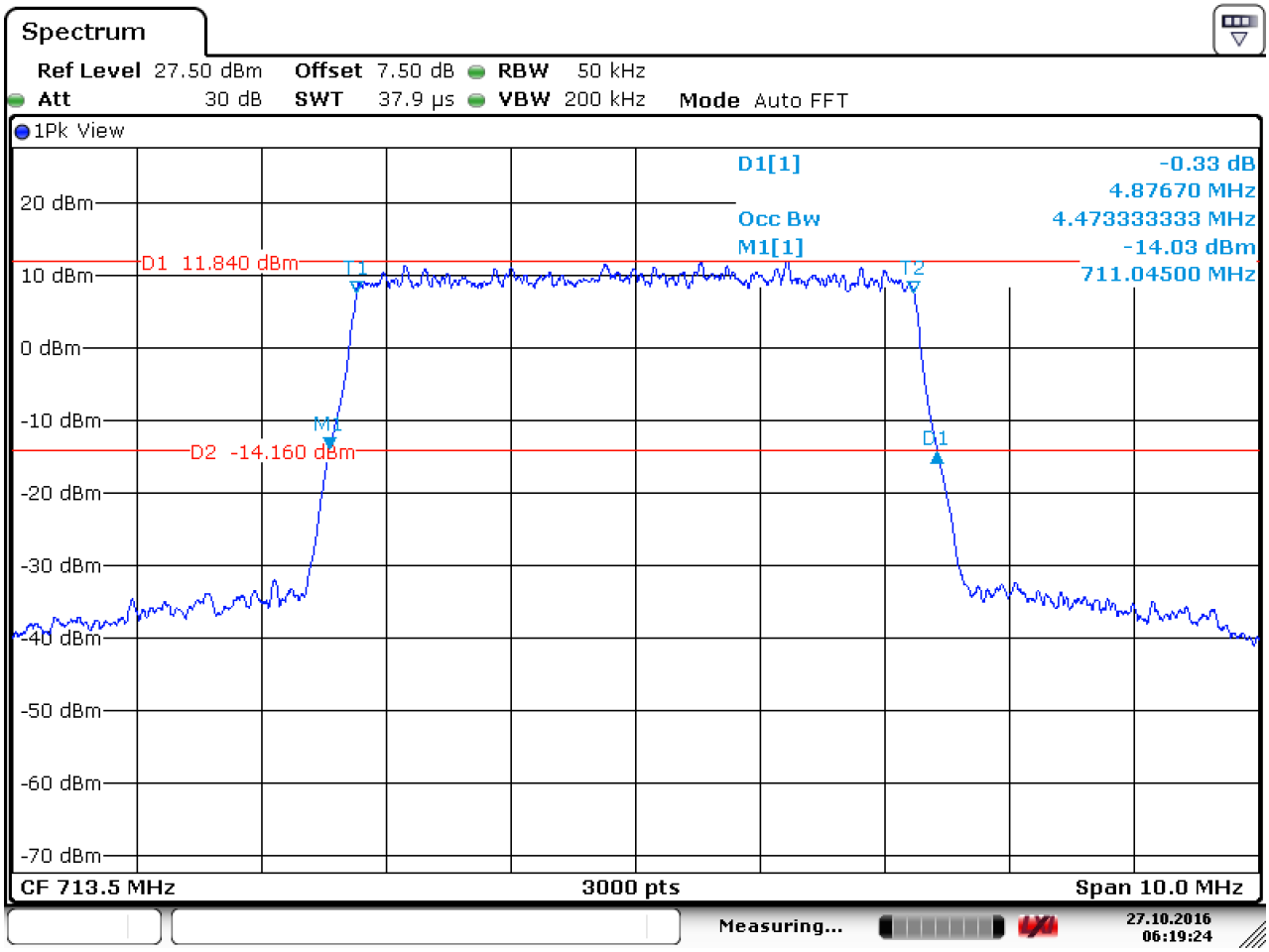
Date: 27.OCT.2016 06:16:46

4.1.1.3.2 Test Channel = MCH



Date: 27.OCT.2016 06:15:16

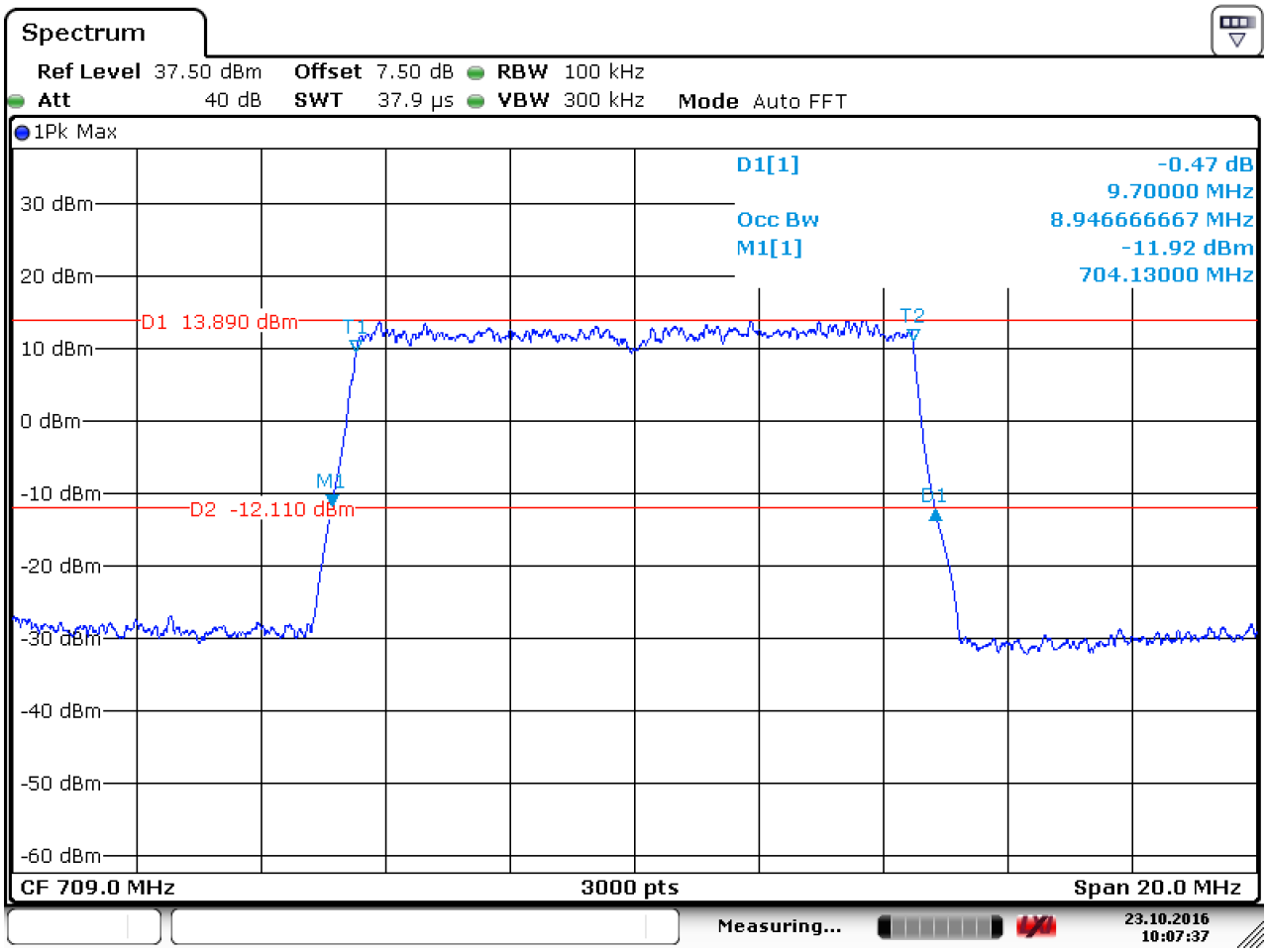
4.1.1.3.3 Test Channel = HCH



Date: 27.OCT.2016 06:19:24

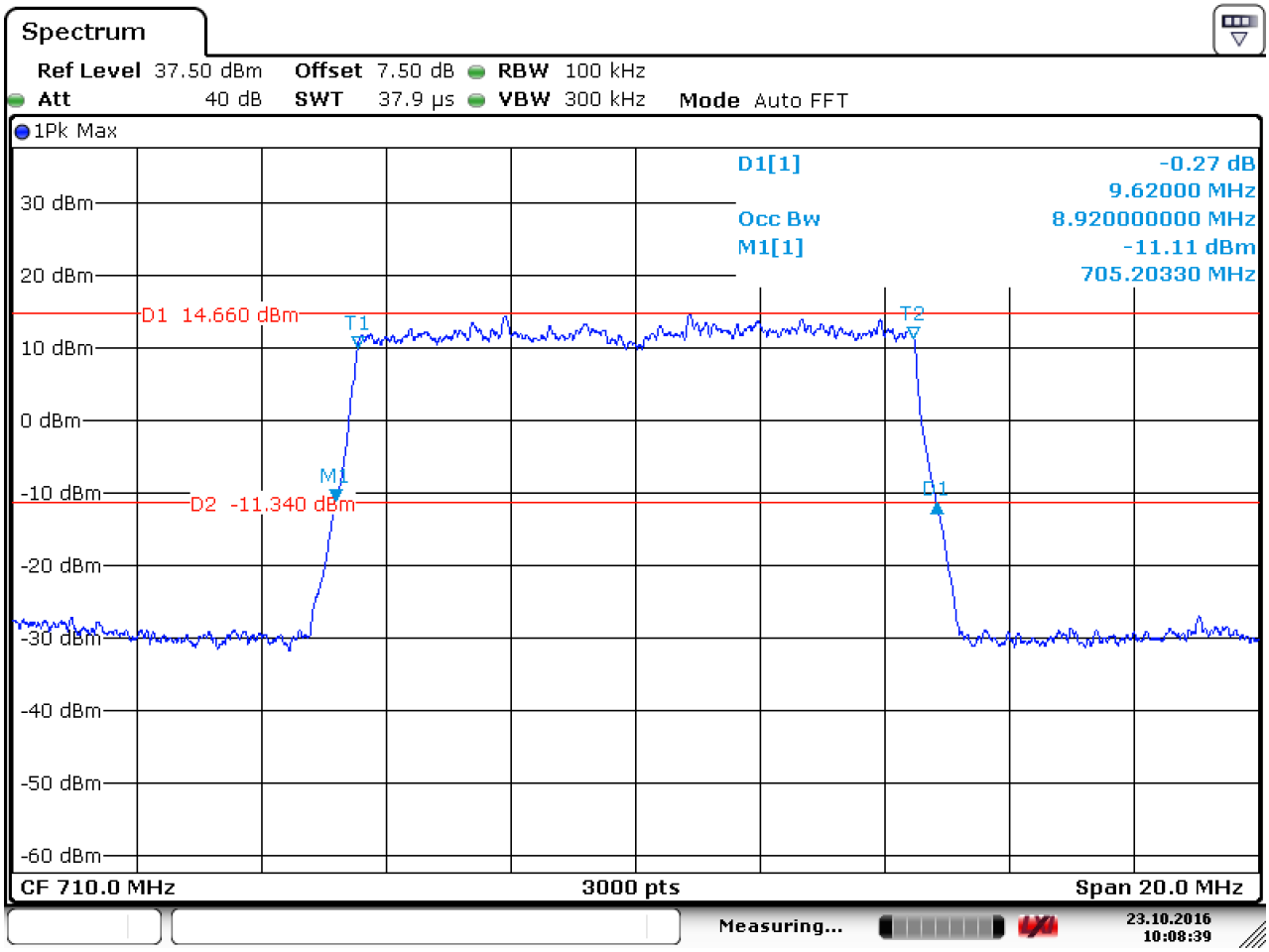
4.1.1.4 Test Mode = LTE/TM1 10MHz

4.1.1.4.1 Test Channel = LCH



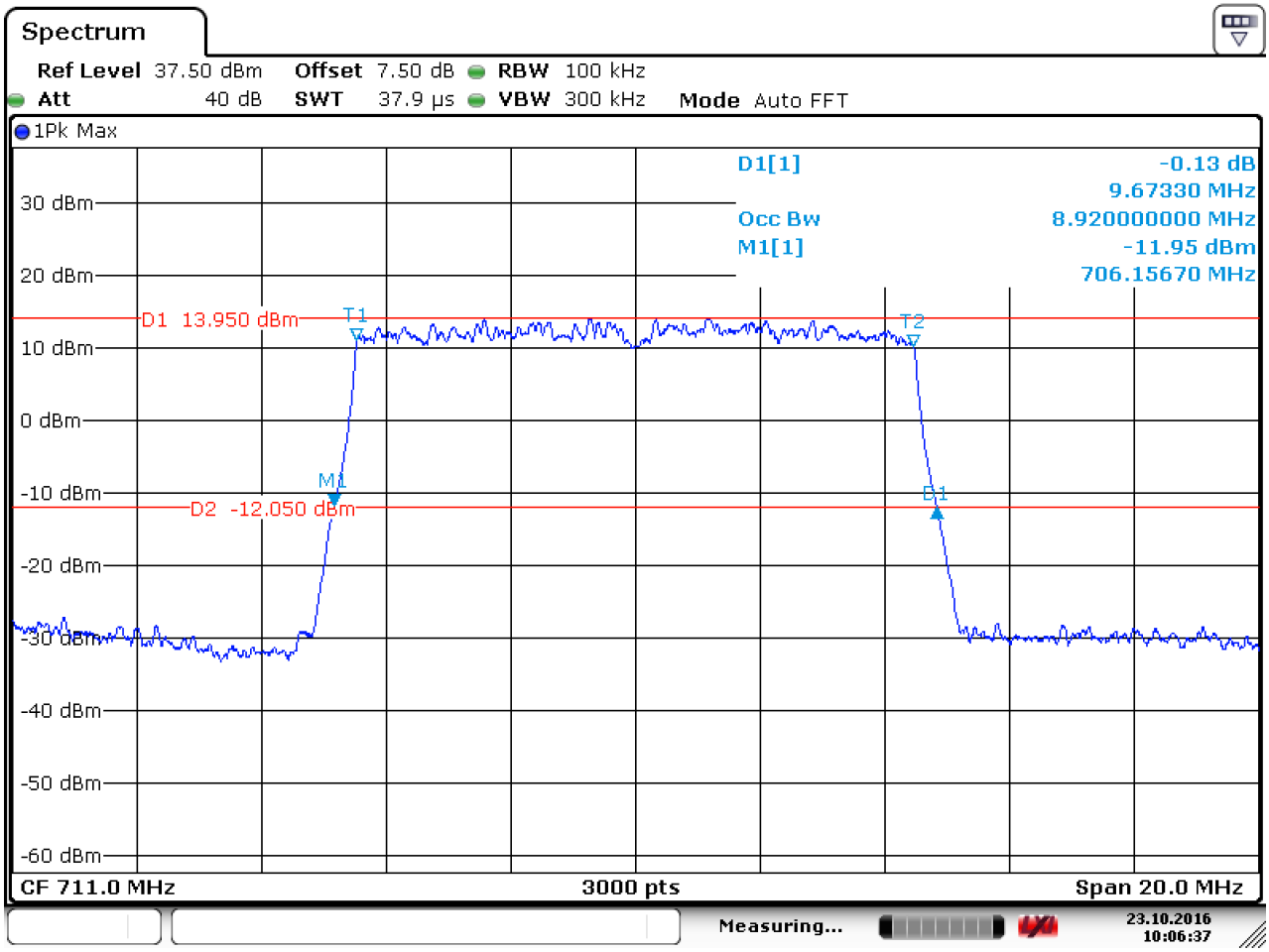
Date: 23.OCT.2016 10:07:37

4.1.1.4.2 Test Channel = MCH



Date: 23.OCT.2016 10:08:39

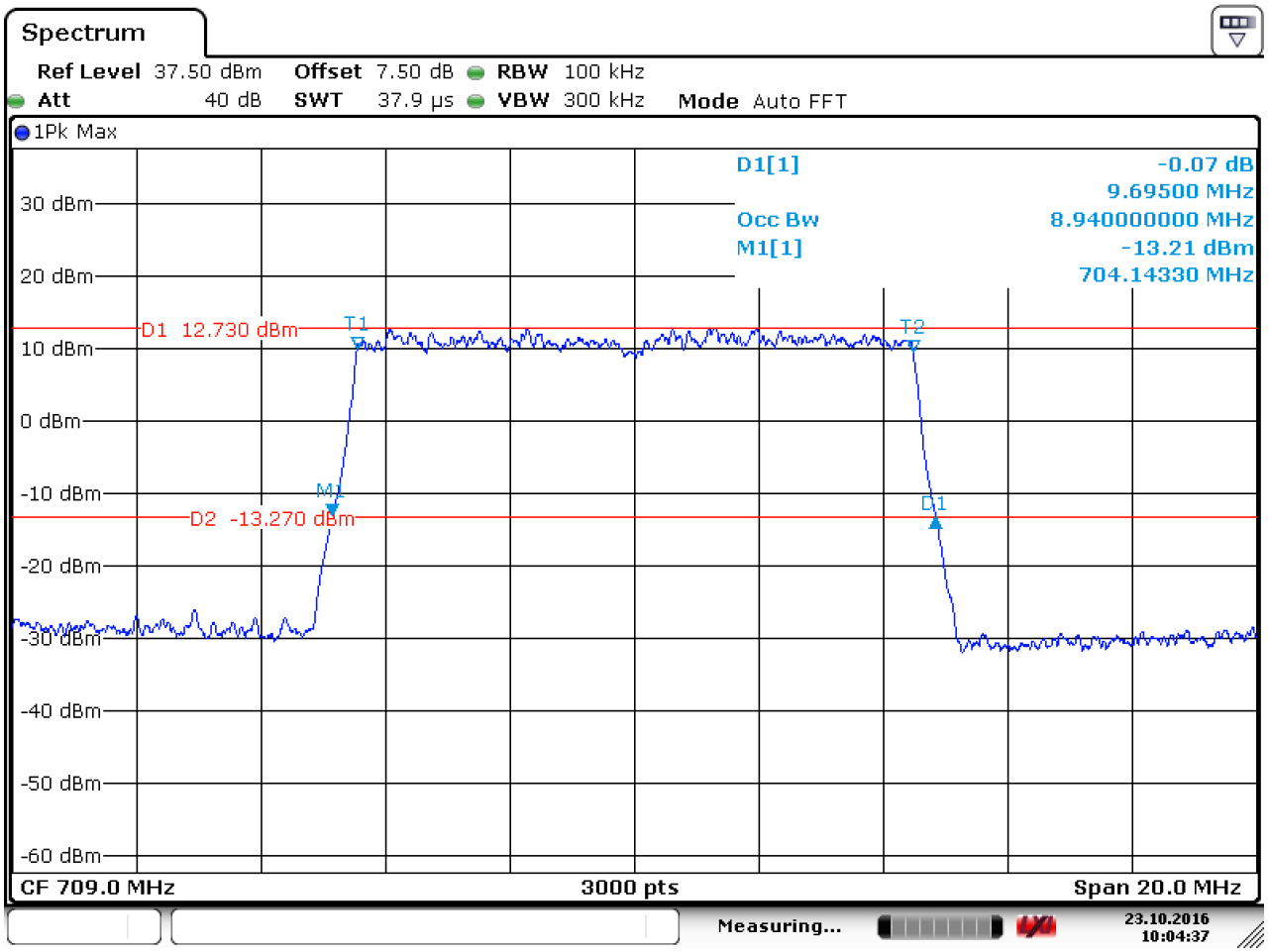
4.1.1.4.3 Test Channel = HCH



Date: 23.OCT.2016 10:06:38

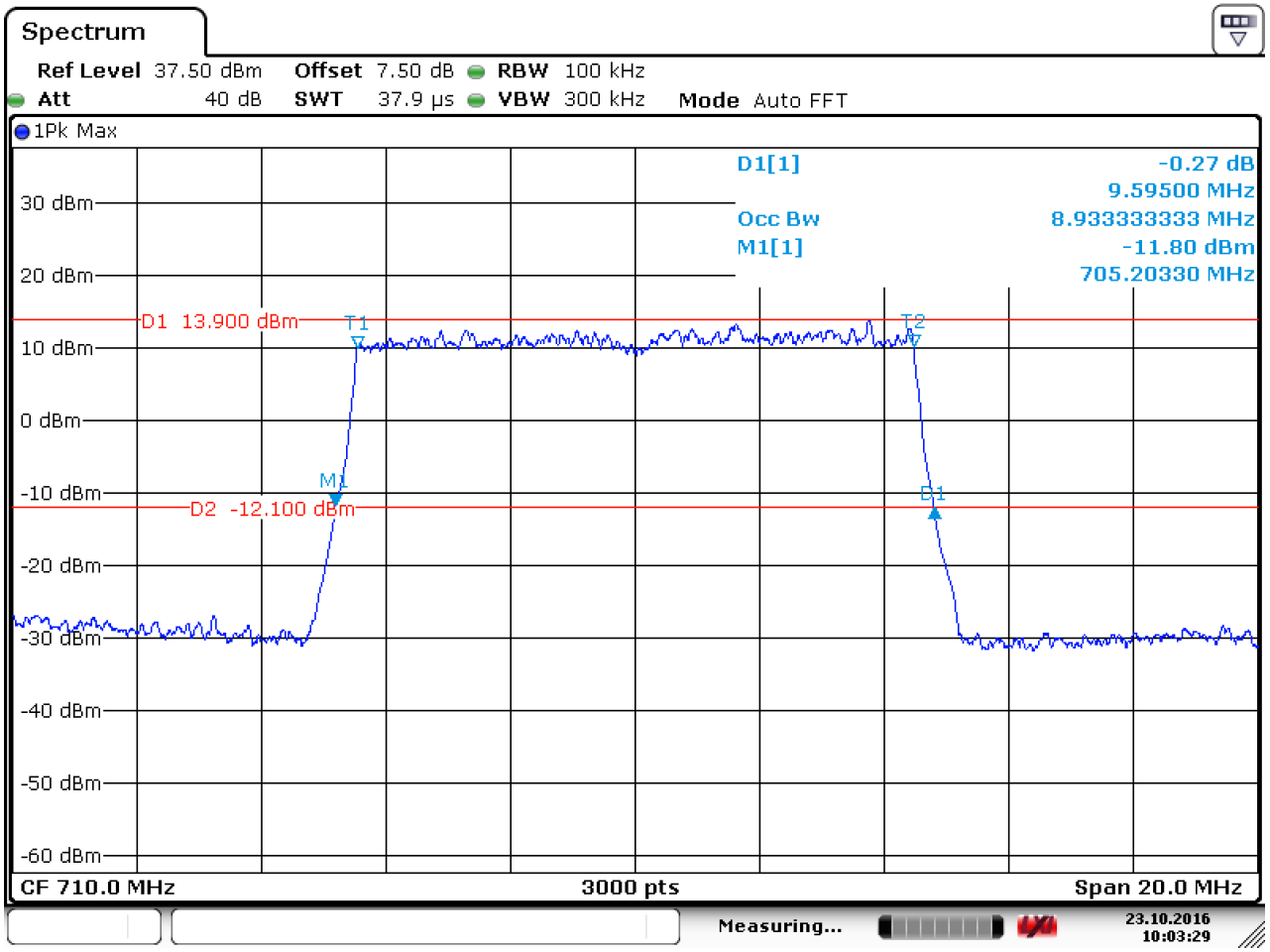
4.1.1.5 Test Mode = LTE/TM2 10MHz

4.1.1.5.1 Test Channel = LCH



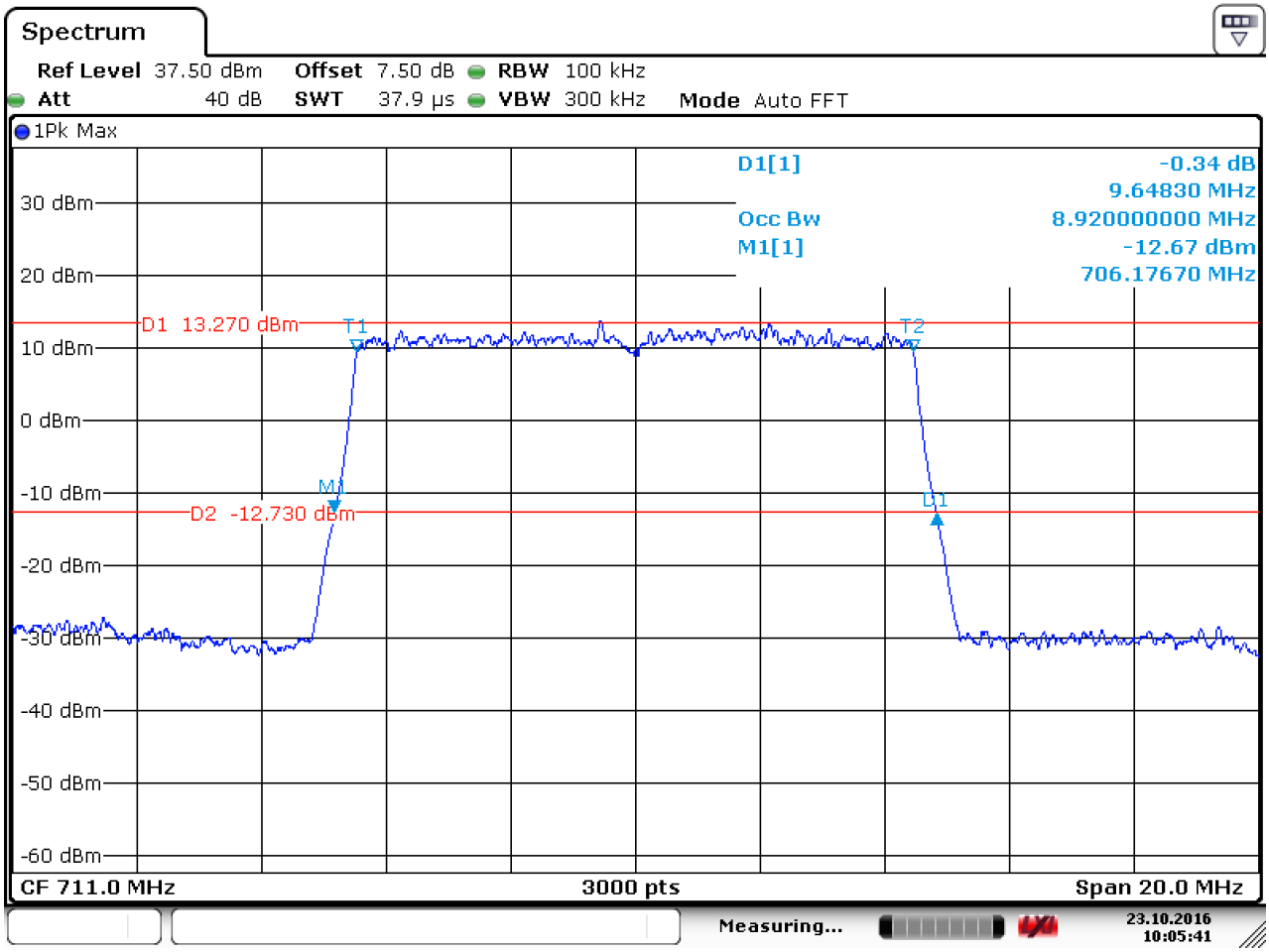
Date: 23.OCT.2016 10:04:38

4.1.1.5.2 Test Channel = MCH



Date: 23.OCT.2016 10:03:30

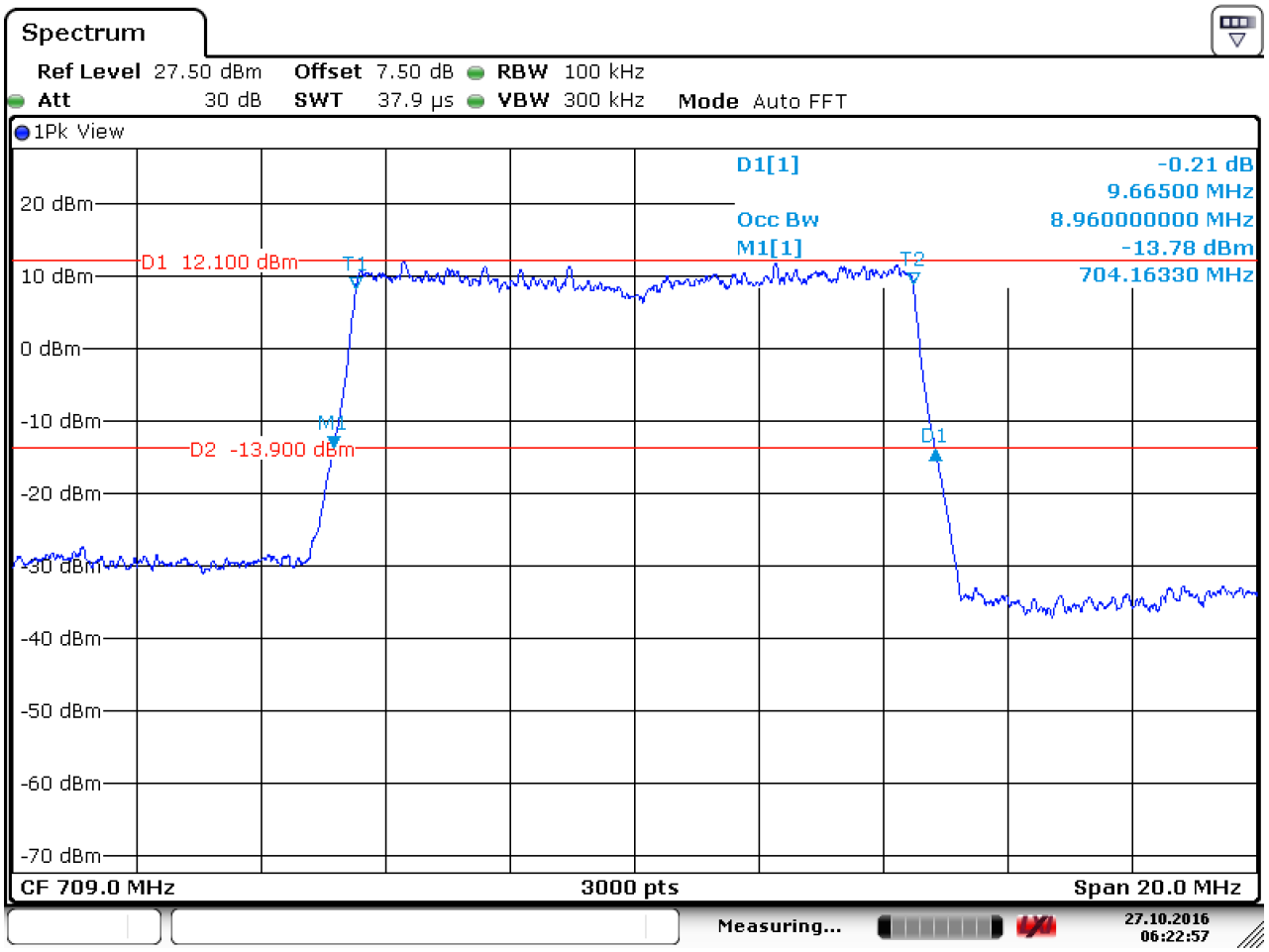
4.1.1.5.3 Test Channel = HCH



Date: 23.OCT.2016 10:05:41

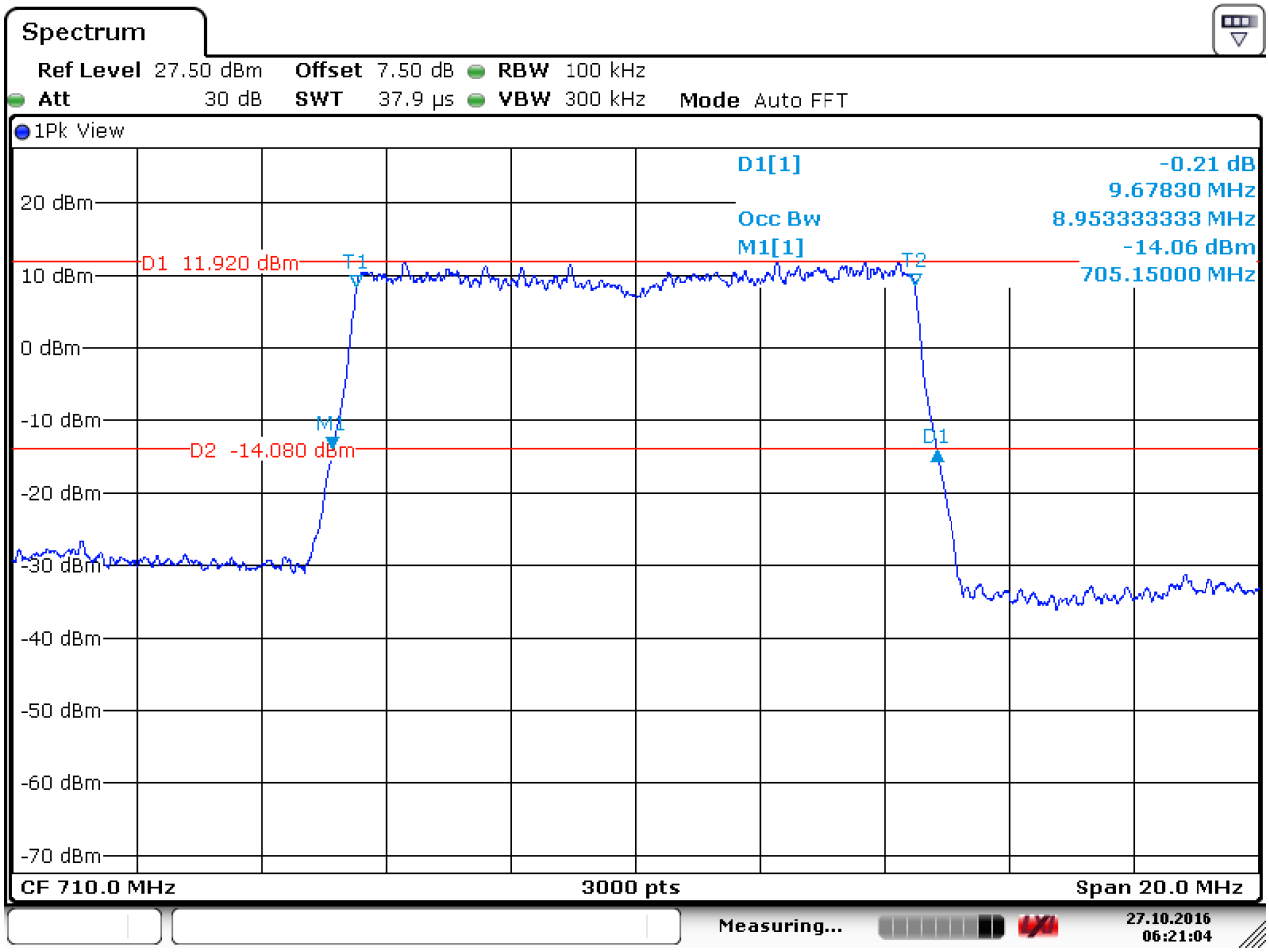
4.1.1.6 Test Mode = LTE/TM3 10MHz

4.1.1.6.1 Test Channel = LCH



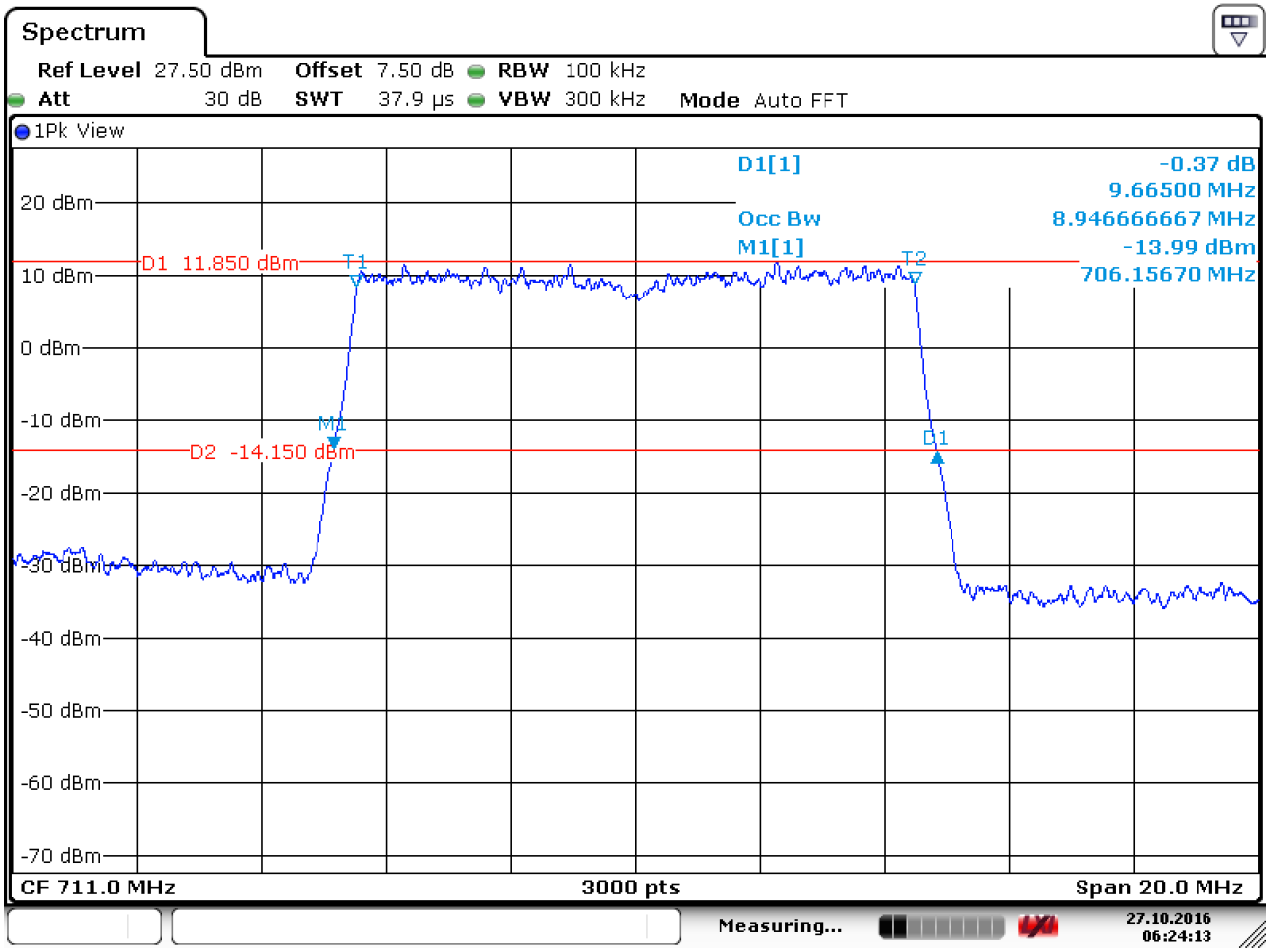
Date: 27.OCT.2016 06:22:57

4.1.1.6.2 Test Channel = MCH



Date: 27.OCT.2016 06:21:04

4.1.1.6.3 Test Channel = HCH



Date: 27.OCT.2016 06:24:13

5 Band Edges Compliance

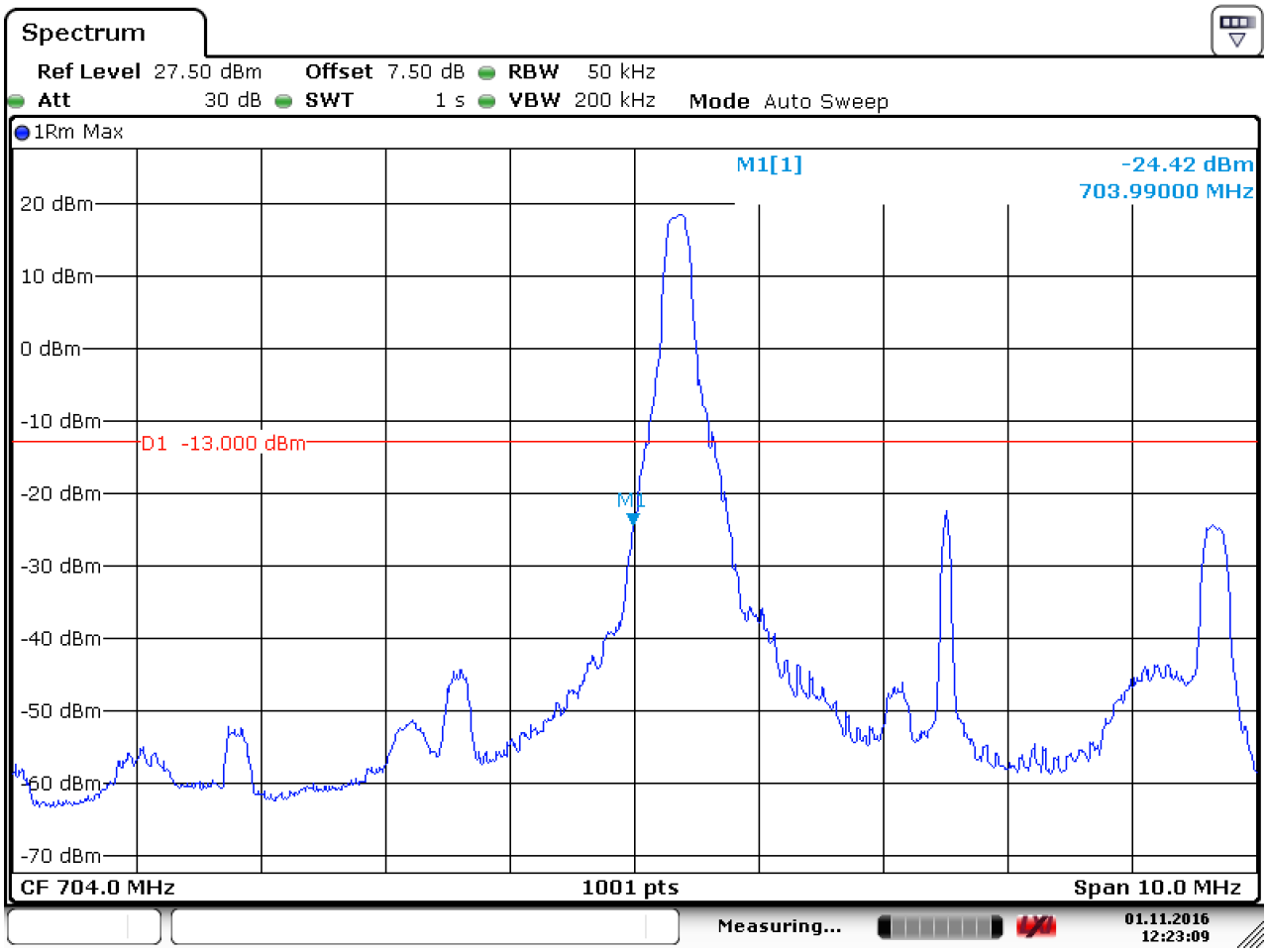
5.1 For LTE

5.1.1 Test Band = LTE band2

5.1.1.1 Test Mode = LTE/TM1 5MHz

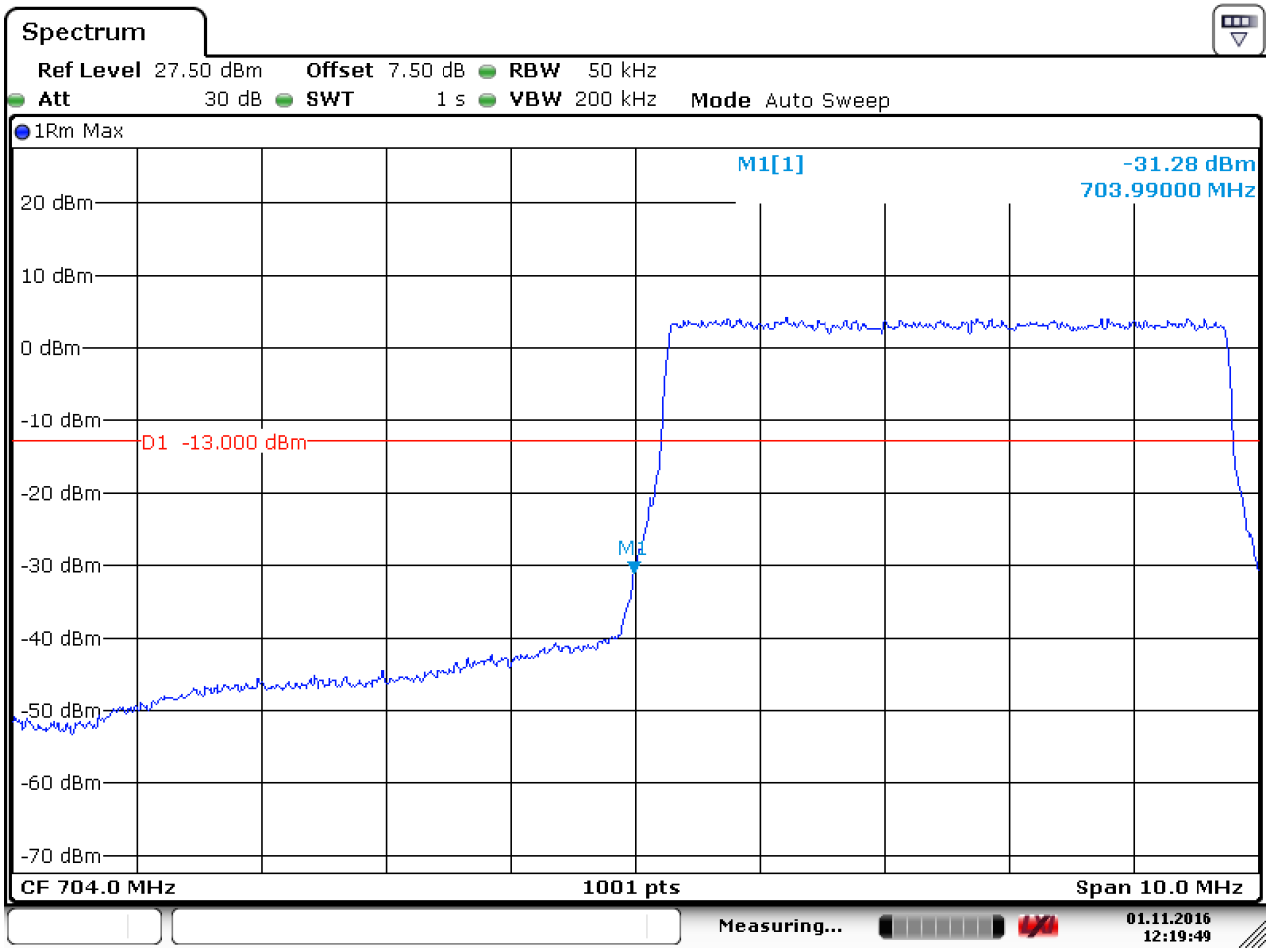
5.1.1.1.1 Test Channel = LCH

5.1.1.1.1.1 Test RB=1RB



Date: 1.NOV.2016 12:23:10

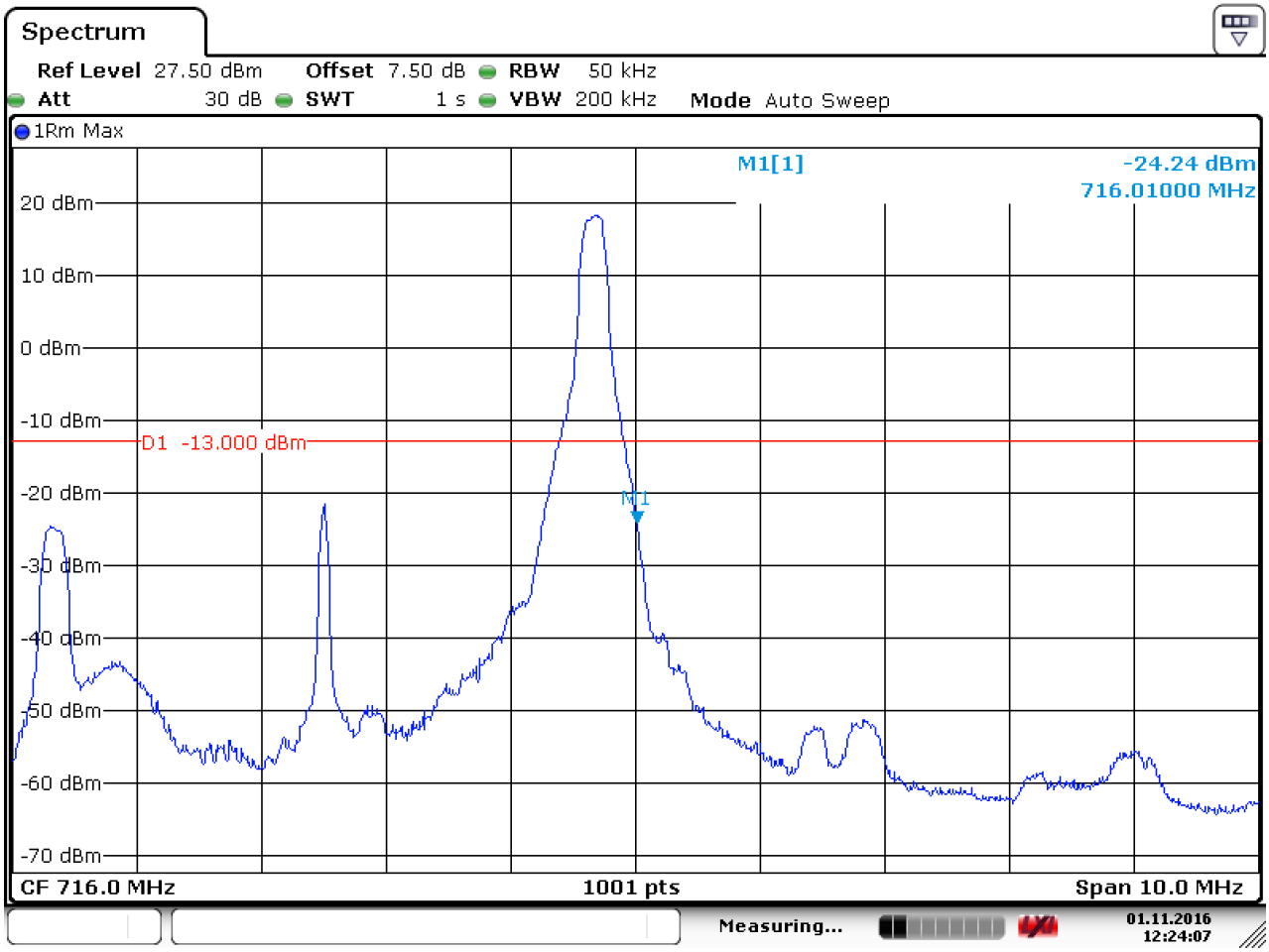
5.1.1.1.1.2 Test RB=25RB



Date: 1.NOV.2016 12:19:50

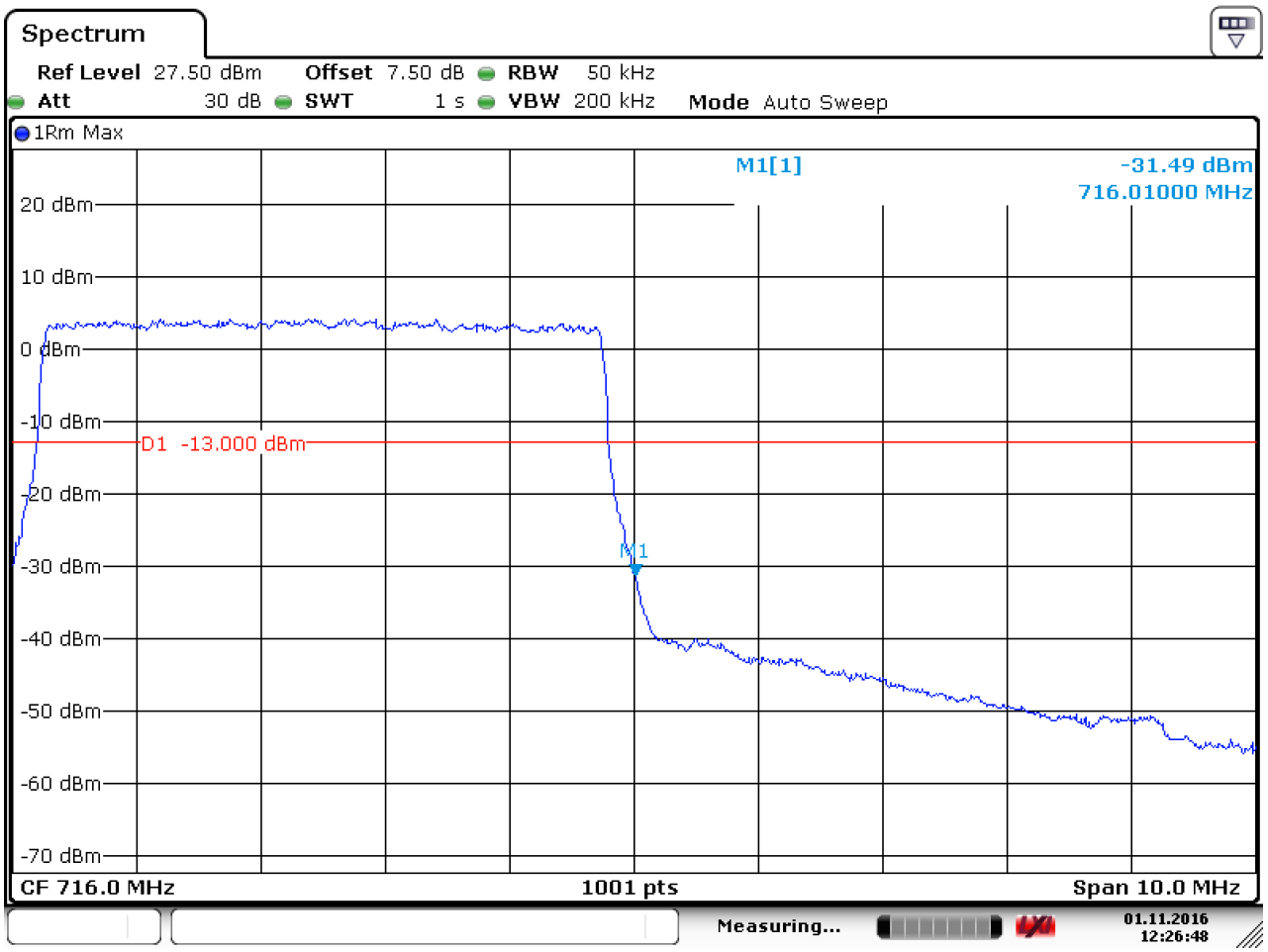
5.1.1.1.2 Test Channel = HCH

5.1.1.1.2.1 Test RB=1RB



Date: 1.NOV.2016 12:24:07

5.1.1.1.2.2 Test RB=25RB

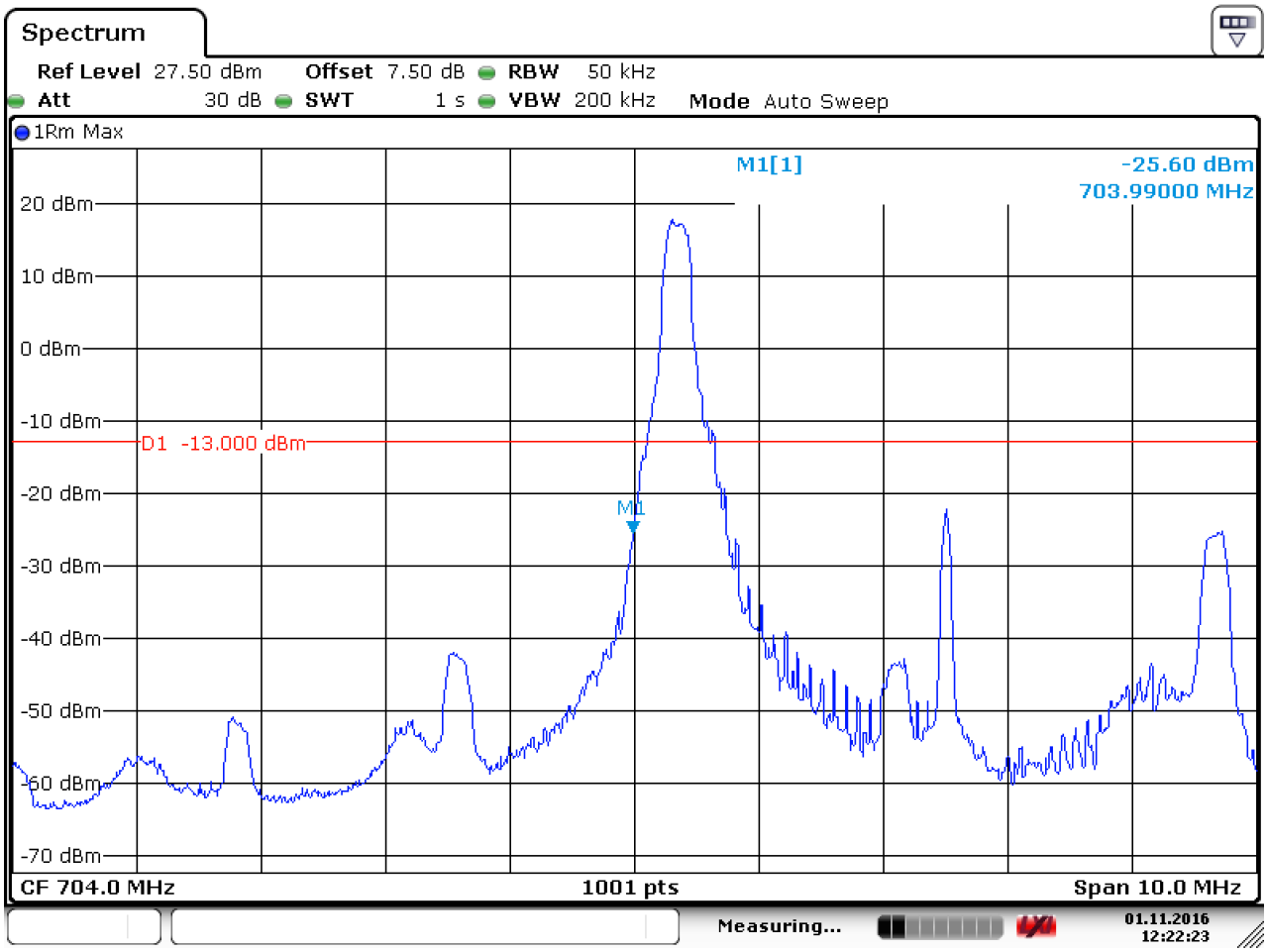


Date: 1.NOV.2016 12:26:49

5.1.1.2 Test Mode = LTE/TM2 5MHz

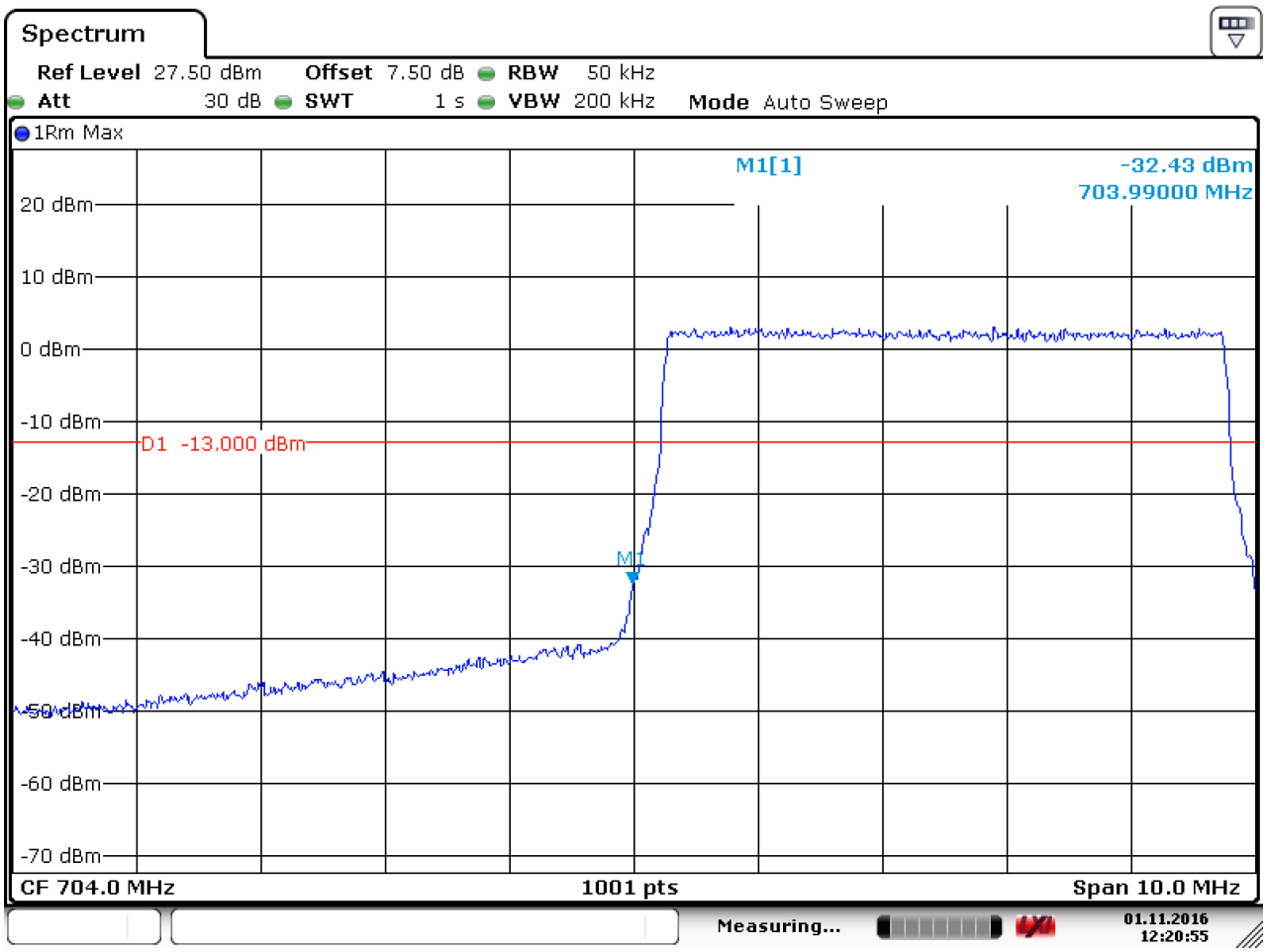
5.1.1.2.1 Test Channel = LCH

5.1.1.2.1.1 Test RB=1RB



Date: 1.NOV.2016 12:22:24

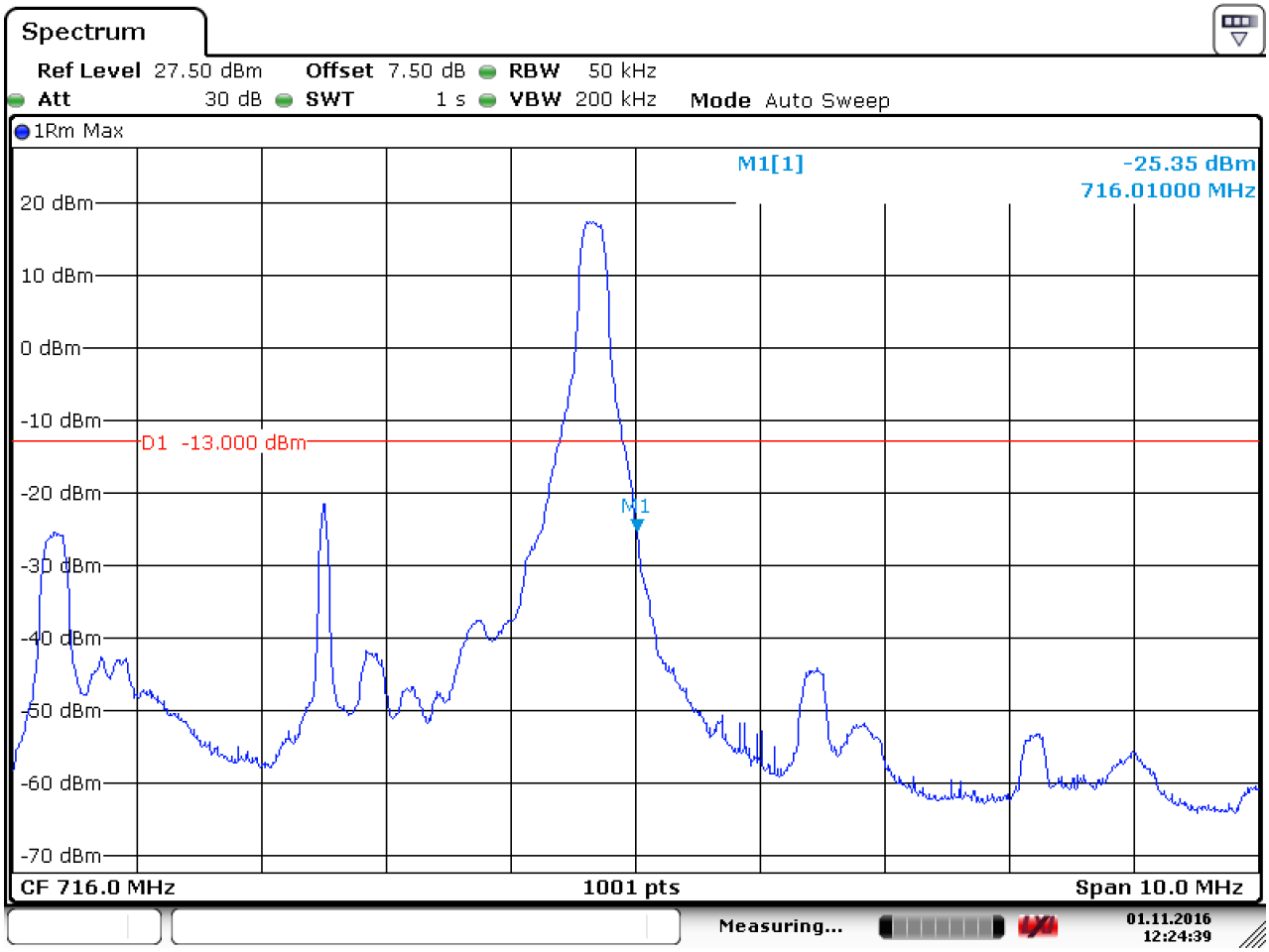
5.1.1.2.1.2 Test RB=25RB



Date: 1.NOV.2016 12:20:56

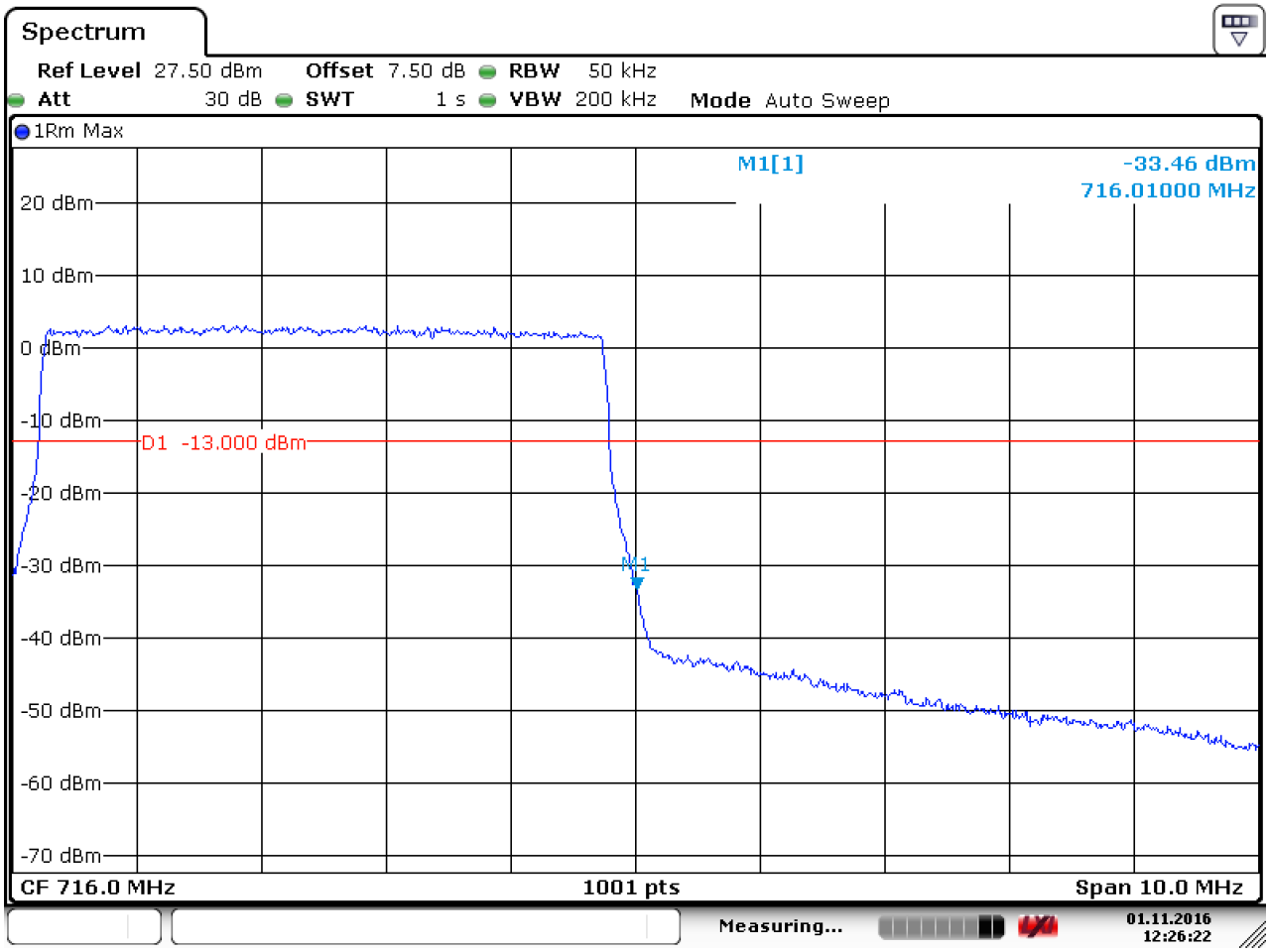
5.1.1.2.2 Test Channel = HCH

5.1.1.2.2.1 Test RB=1RB



Date: 1.NOV.2016 12:24:40

5.1.1.2.2.2 Test RB=25RB

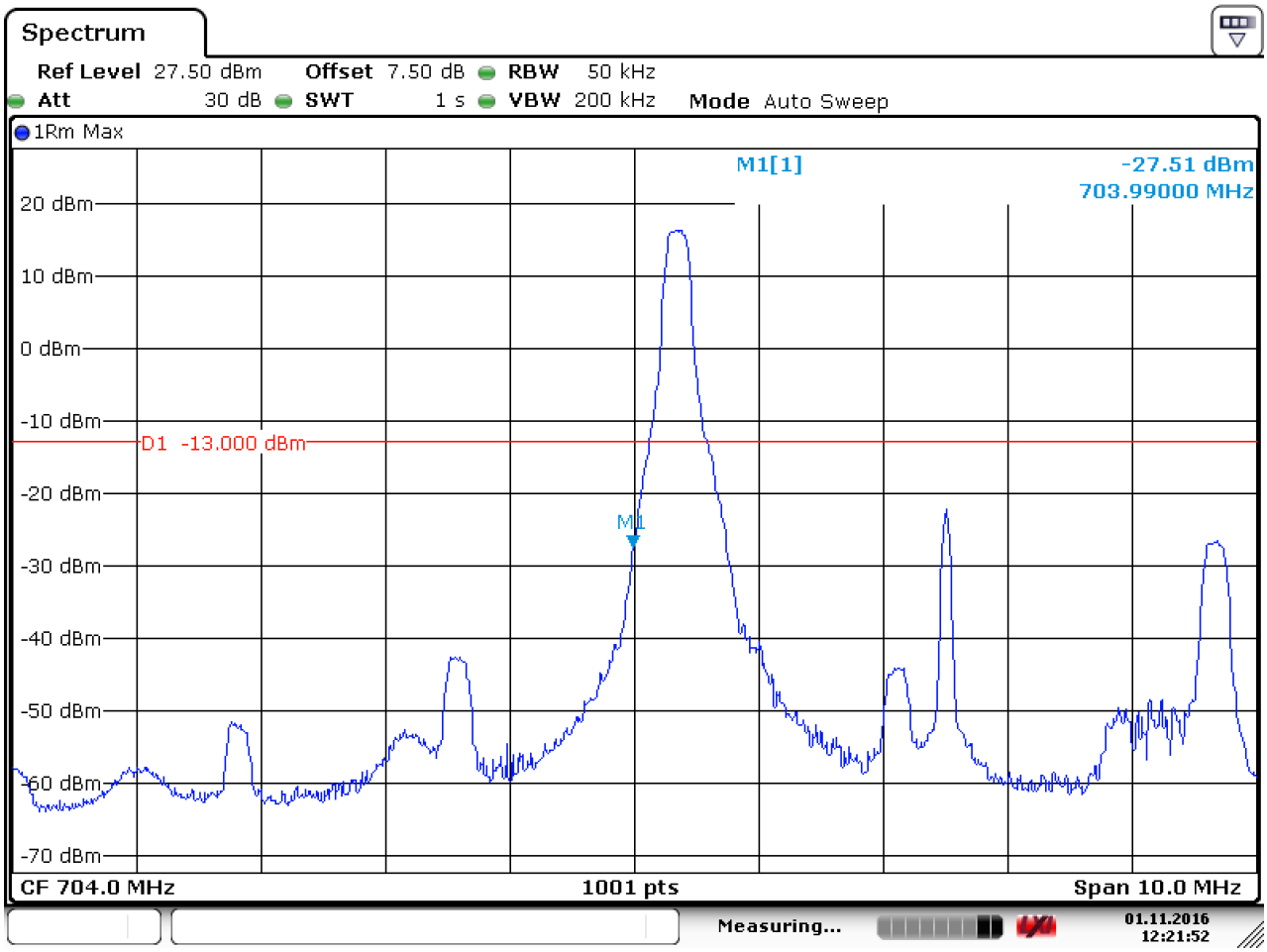


Date: 1.NOV.2016 12:26:22

5.1.1.3 Test Mode = LTE/TM3 5MHz

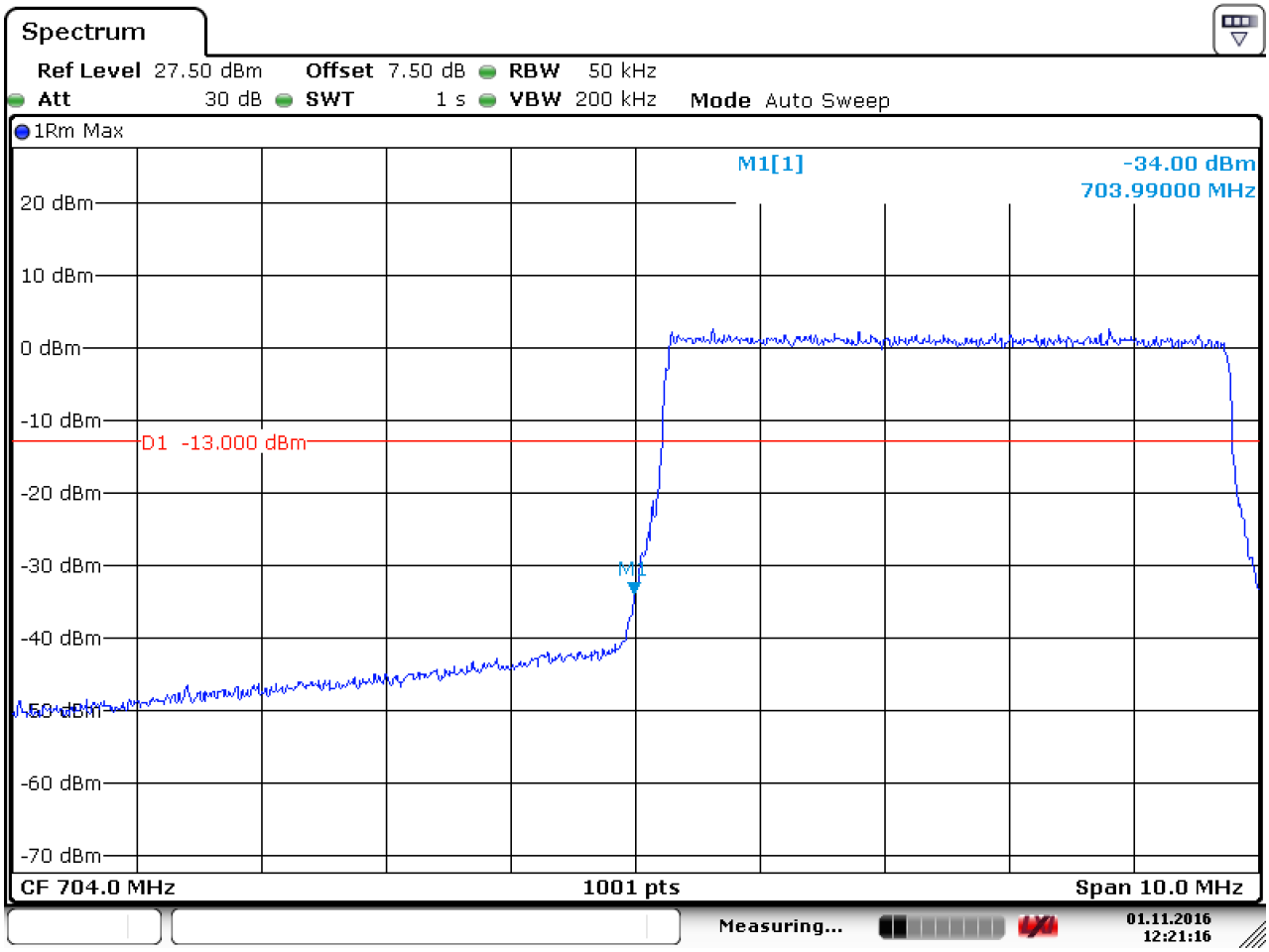
5.1.1.3.1 Test Channel = LCH

5.1.1.3.1.1 Test RB=1RB



Date: 1.NOV.2016 12:21:52

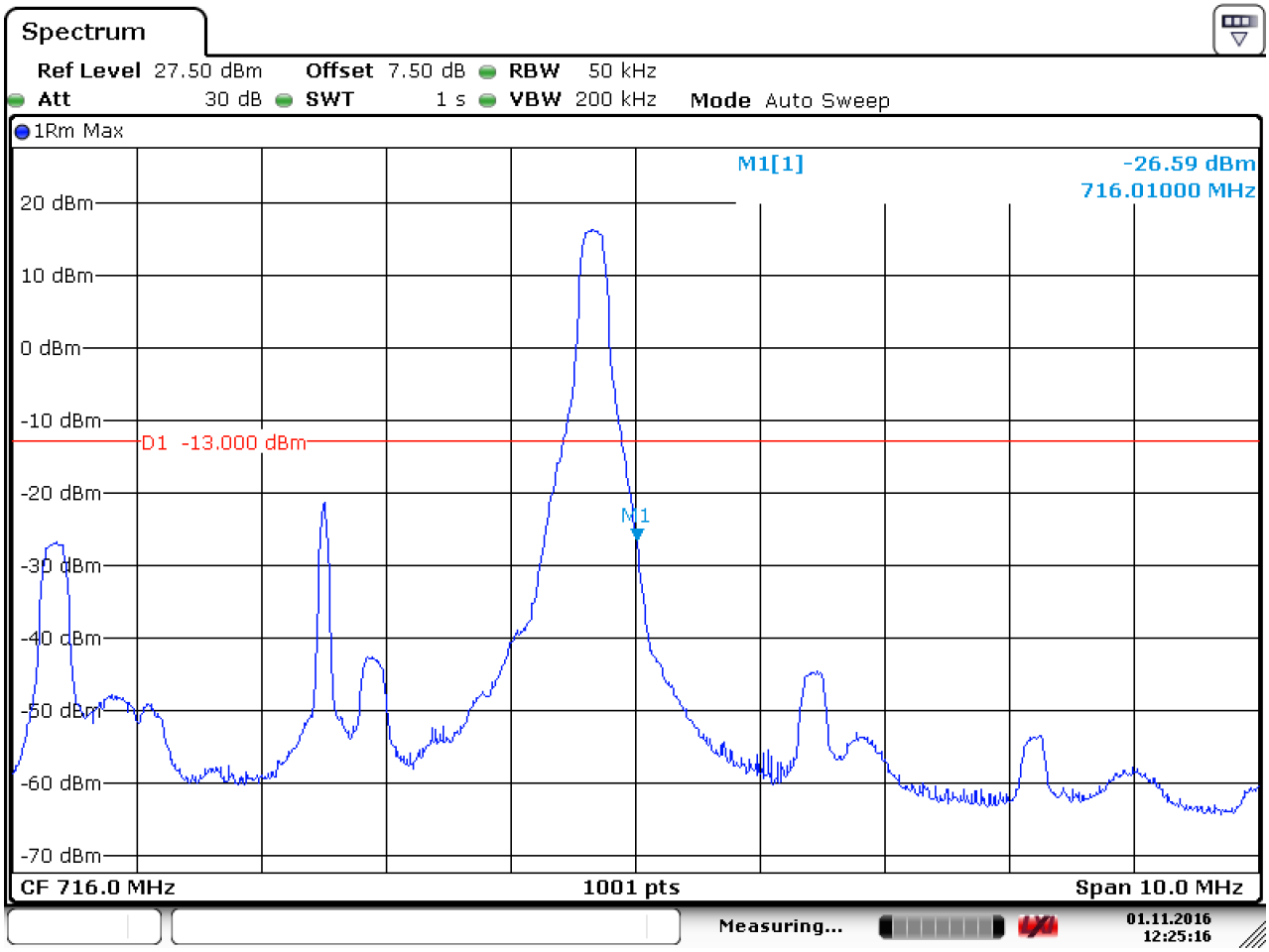
5.1.1.3.1.2 Test RB=25RB



Date: 1.NOV.2016 12:21:17

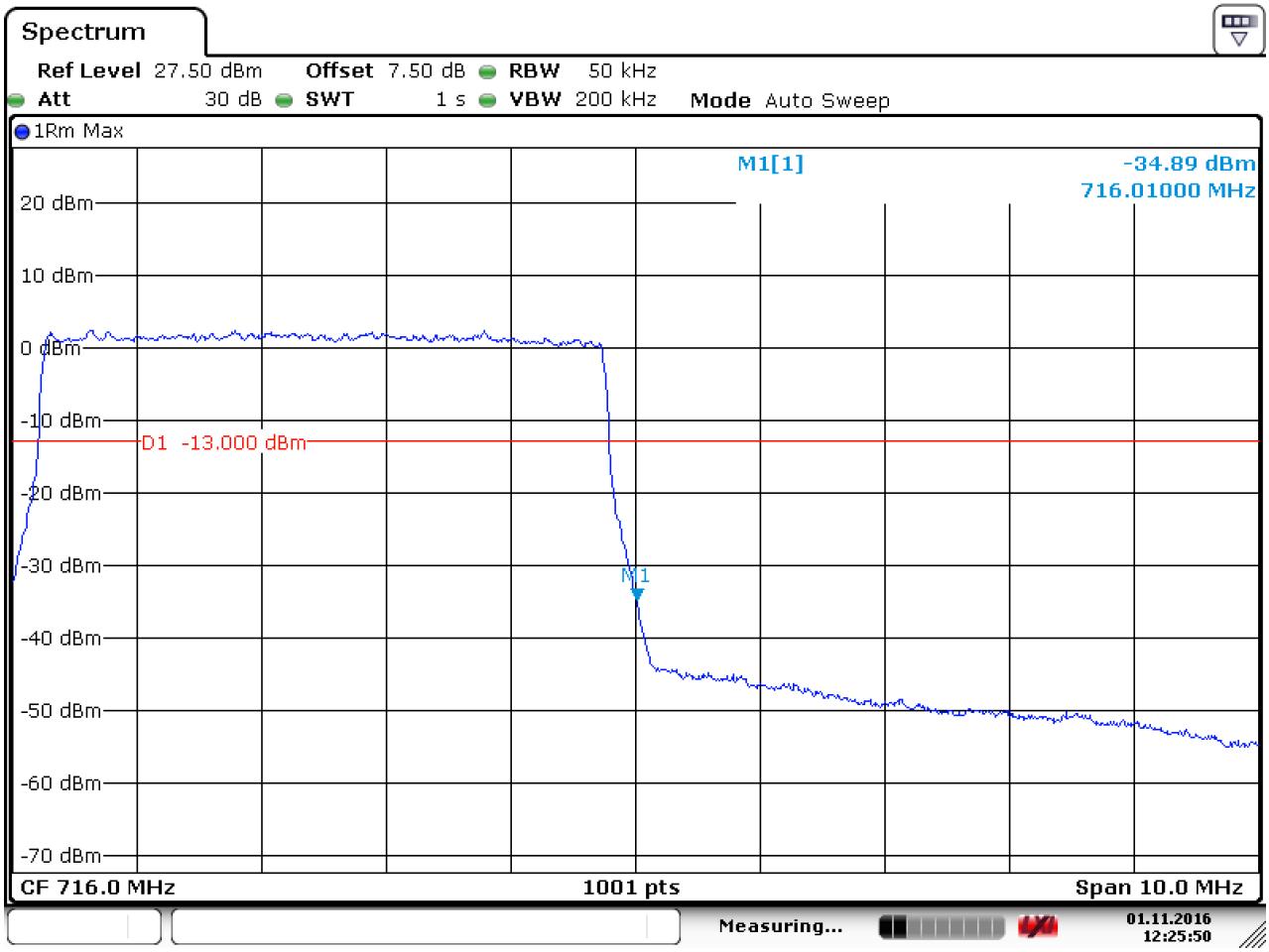
5.1.1.3.2 Test Channel = HCH

5.1.1.3.2.1 Test RB=1RB



Date: 1.NOV.2016 12:25:16

5.1.1.3.2.2 Test RB=25RB

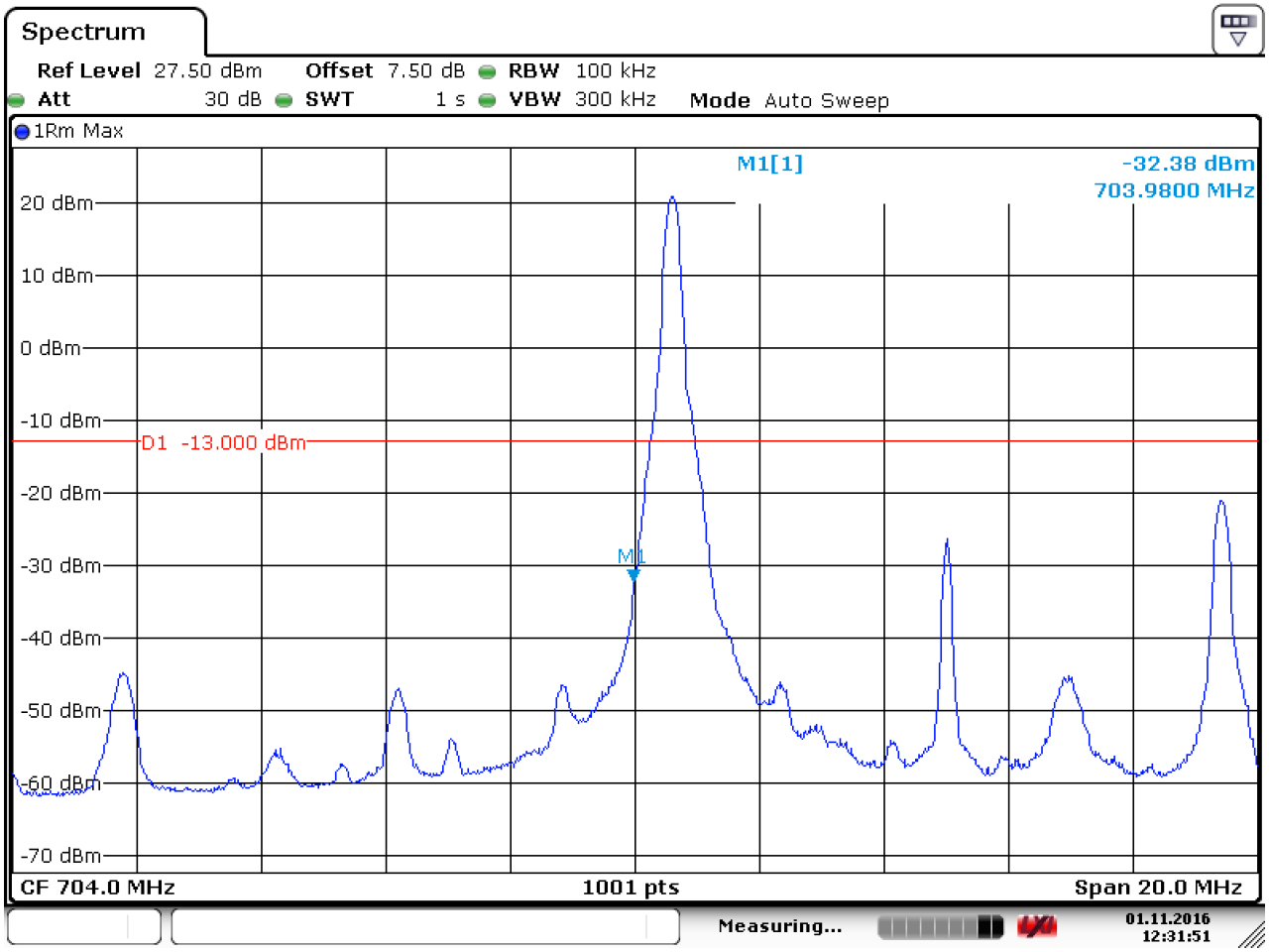


Date: 1.NOV.2016 12:25:50

5.1.1.4 Test Mode = LTE/TM1 10MHz

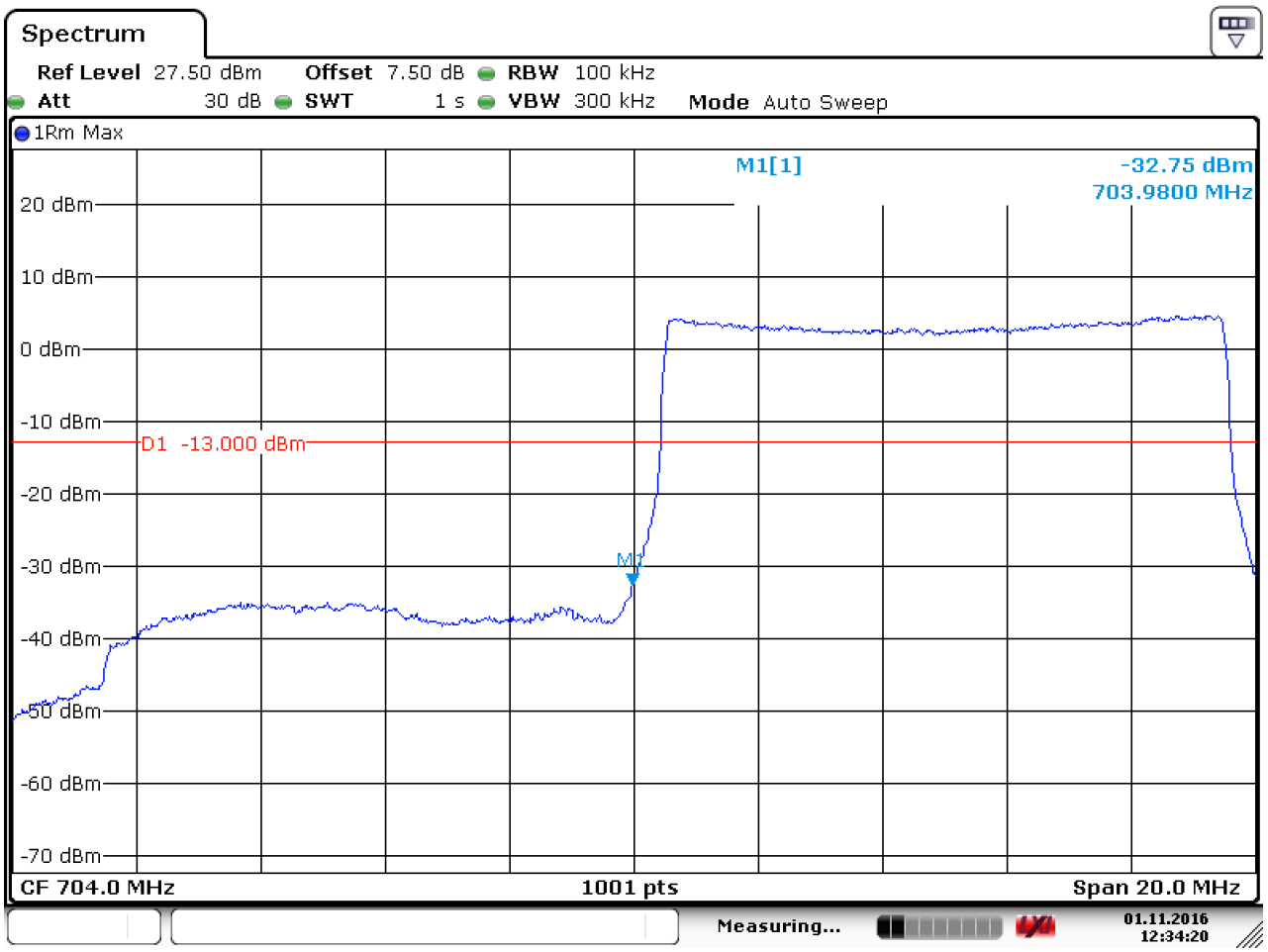
5.1.1.4.1 Test Channel = LCH

5.1.1.4.1.1 Test RB=1RB



Date: 1.NOV.2016 12:31:52

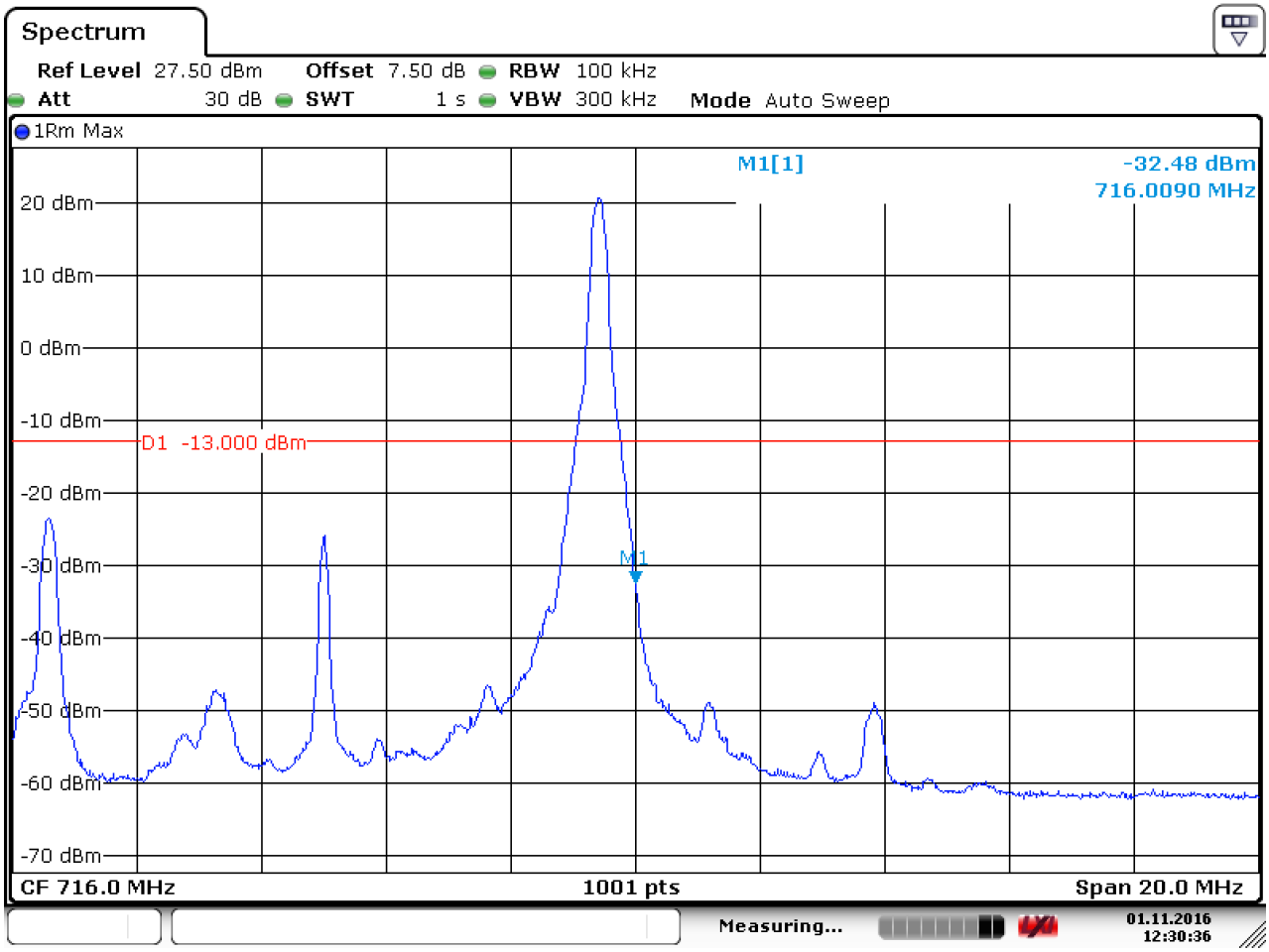
5.1.1.4.1.2 Test RB=50RB



Date: 1.NOV.2016 12:34:21

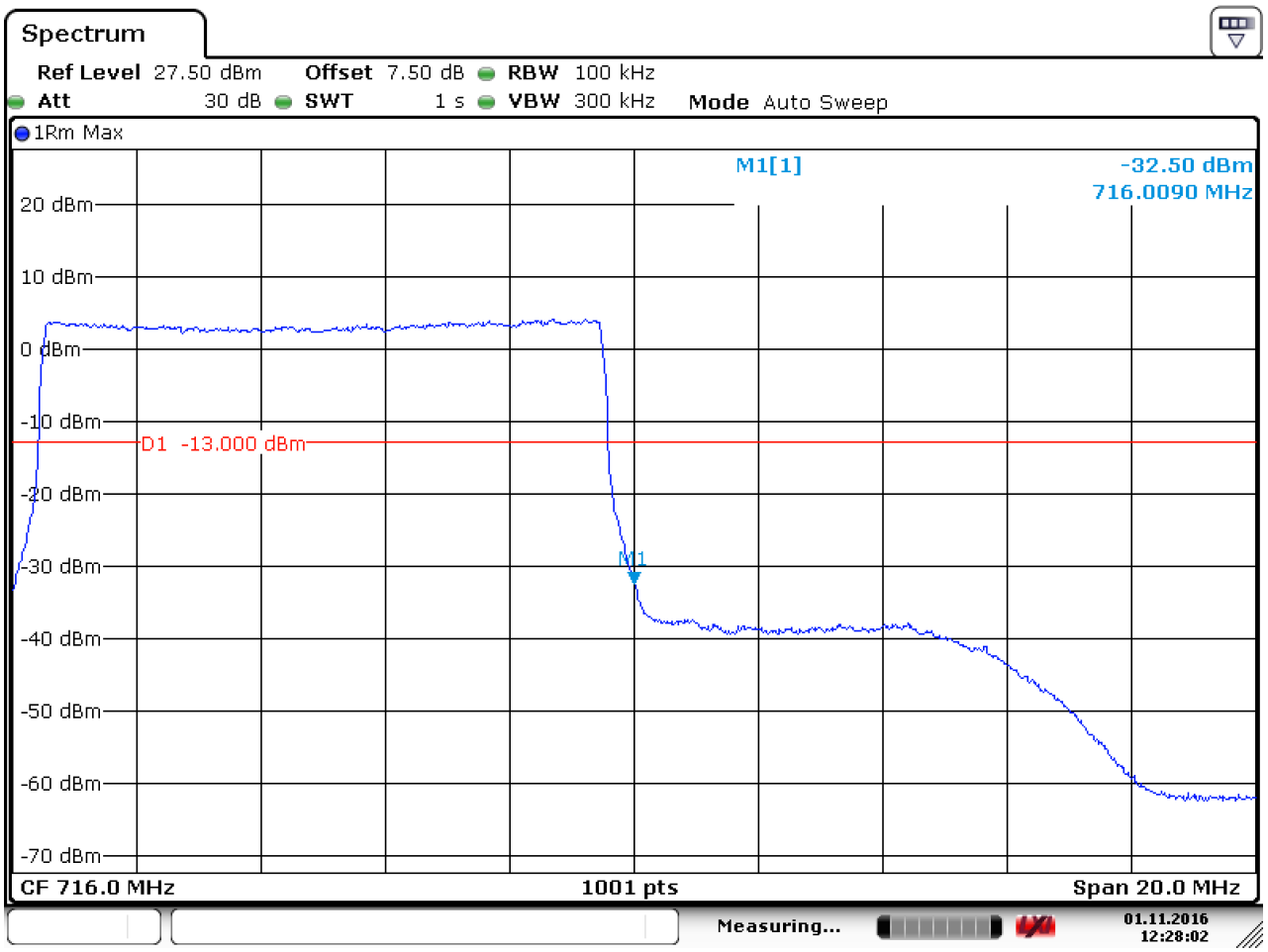
5.1.1.4.2 Test Channel = HCH

5.1.1.4.2.1 Test RB=1RB



Date: 1.NOV.2016 12:30:37

5.1.1.4.2.2 Test RB=50RB

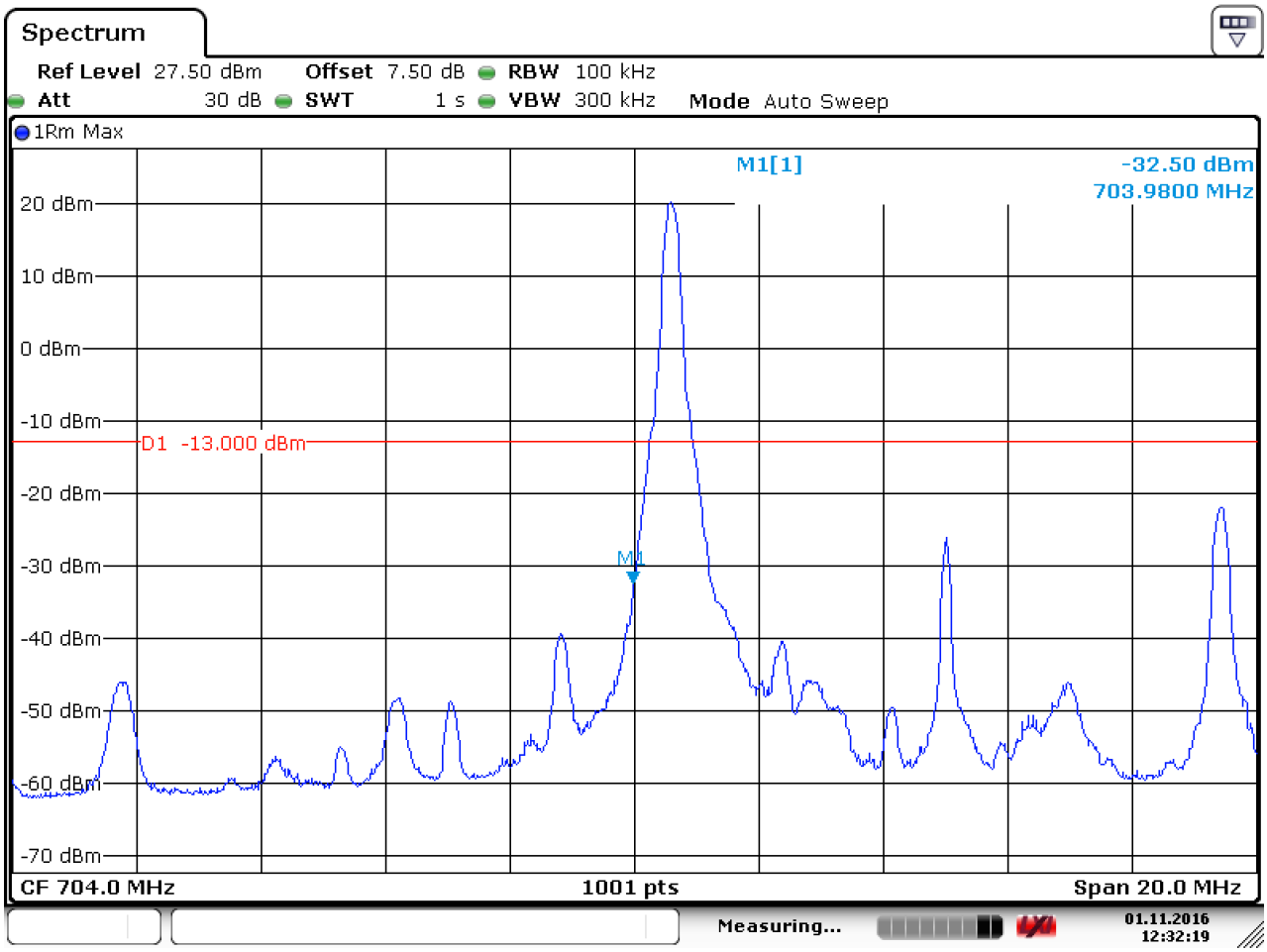


Date: 1.NOV.2016 12:28:03

5.1.1.5 Test Mode = LTE/TM2 10MHz

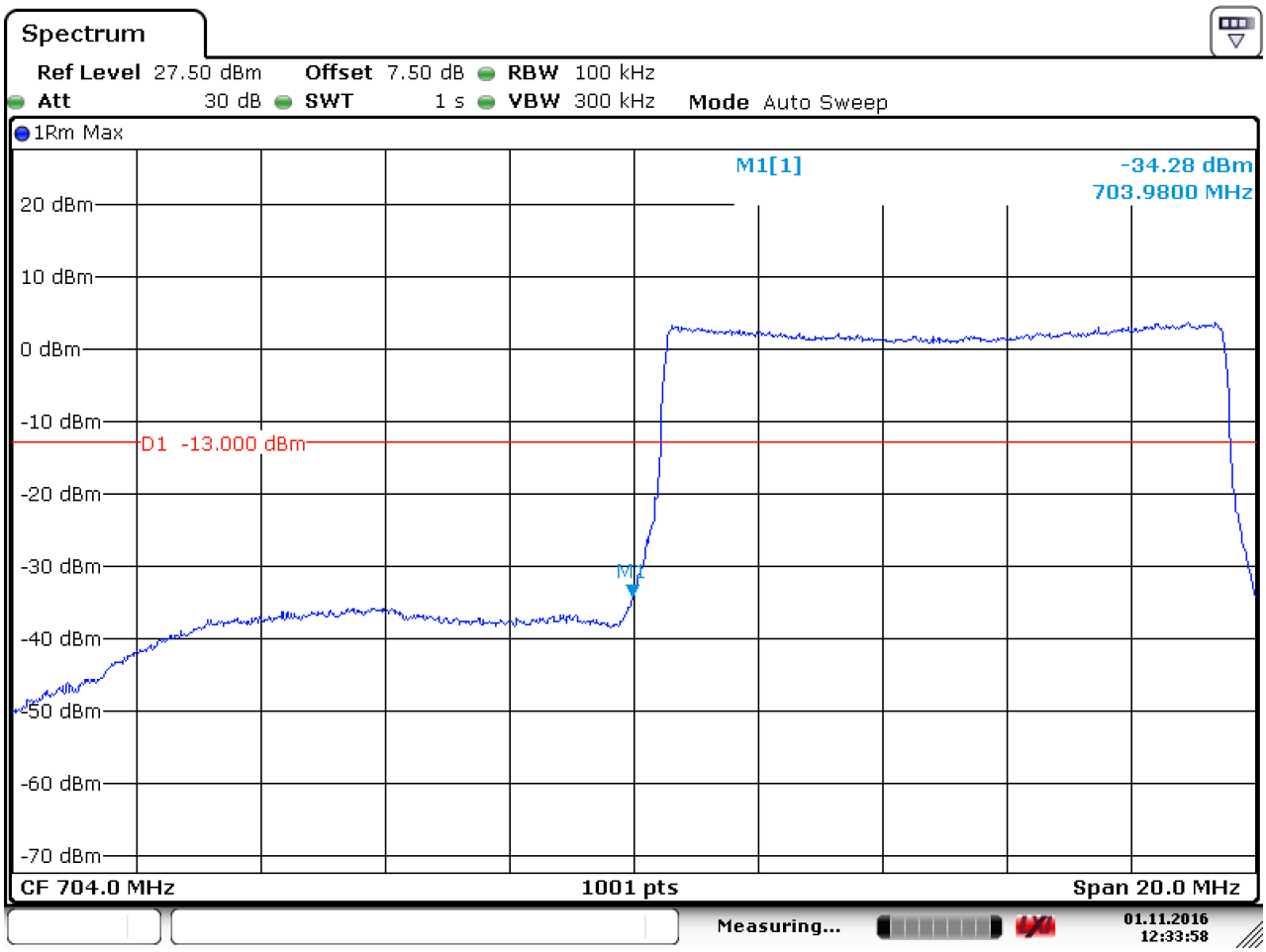
5.1.1.5.1 Test Channel = LCH

5.1.1.5.1.1 Test RB=1RB



Date: 1.NOV.2016 12:32:19

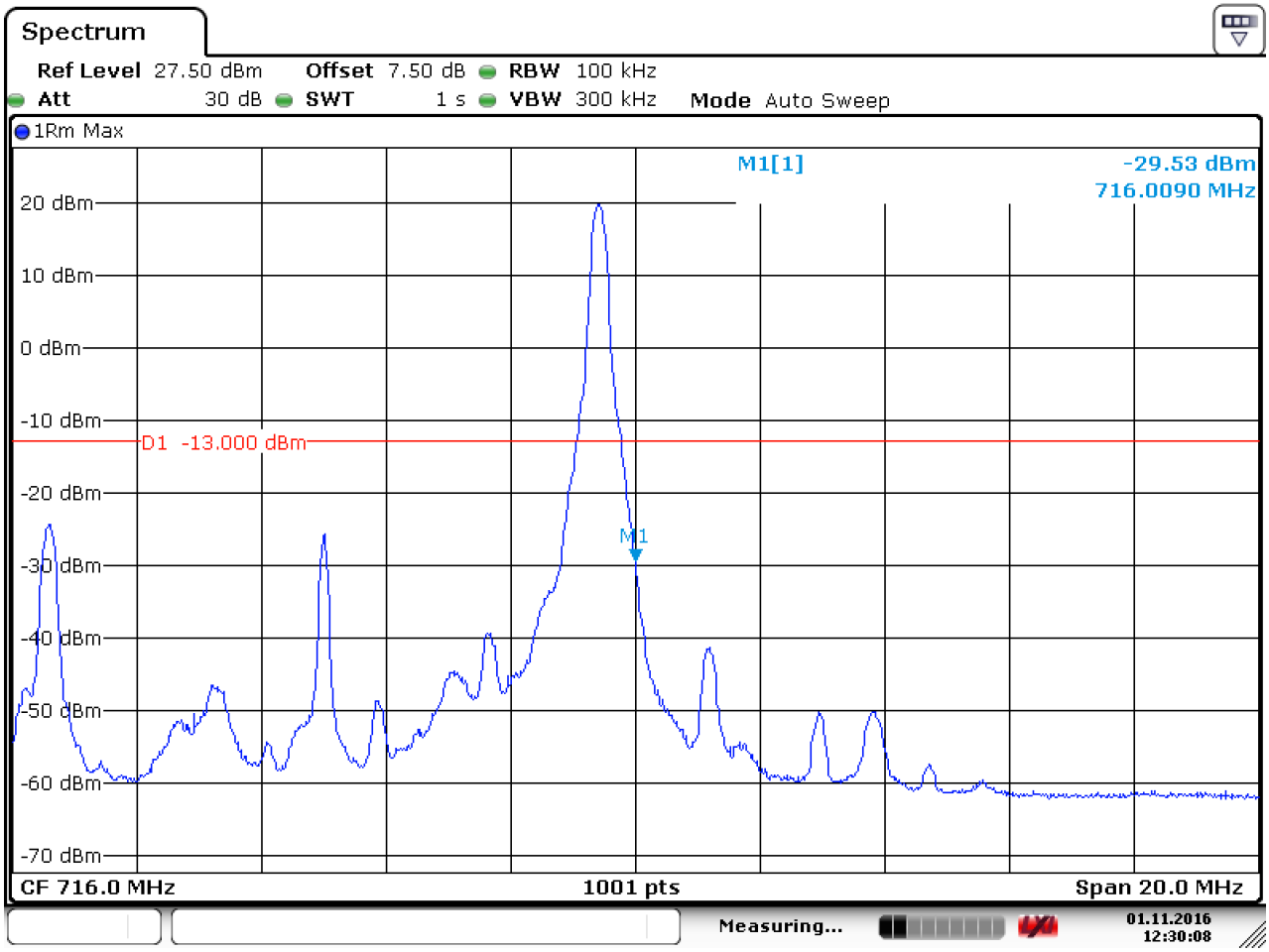
5.1.1.5.1.2 Test RB=50RB



Date: 1.NOV.2016 12:33:58

5.1.1.5.2 Test Channel = HCH

5.1.1.5.2.1 Test RB=1RB



Date: 1.NOV.2016 12:30:08

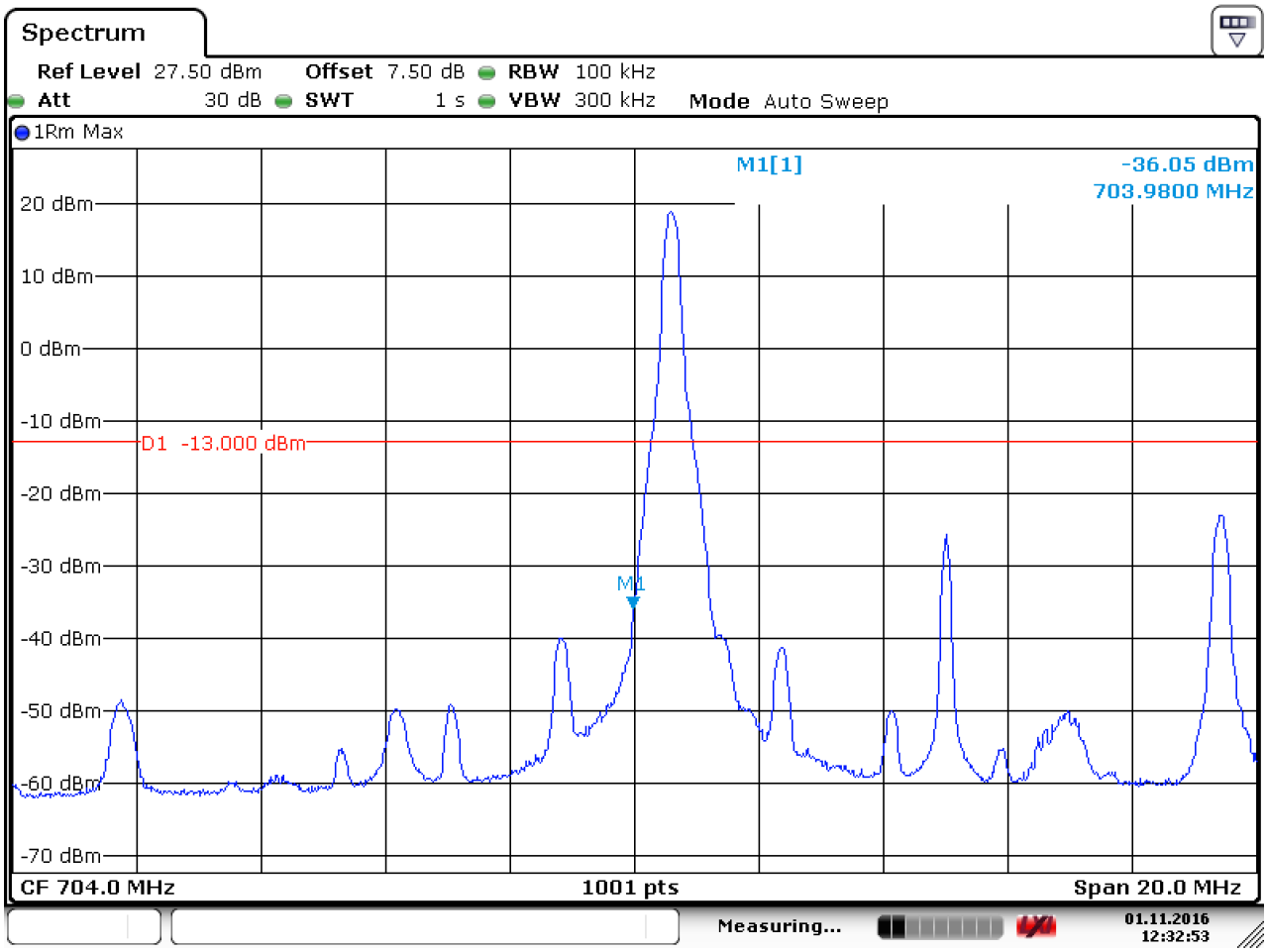
5.1.1.5.2.2 Test RB=50RB

Date: 1.NOV.2016 12:28:29

5.1.1.6 Test Mode = LTE/TM3 10MHz

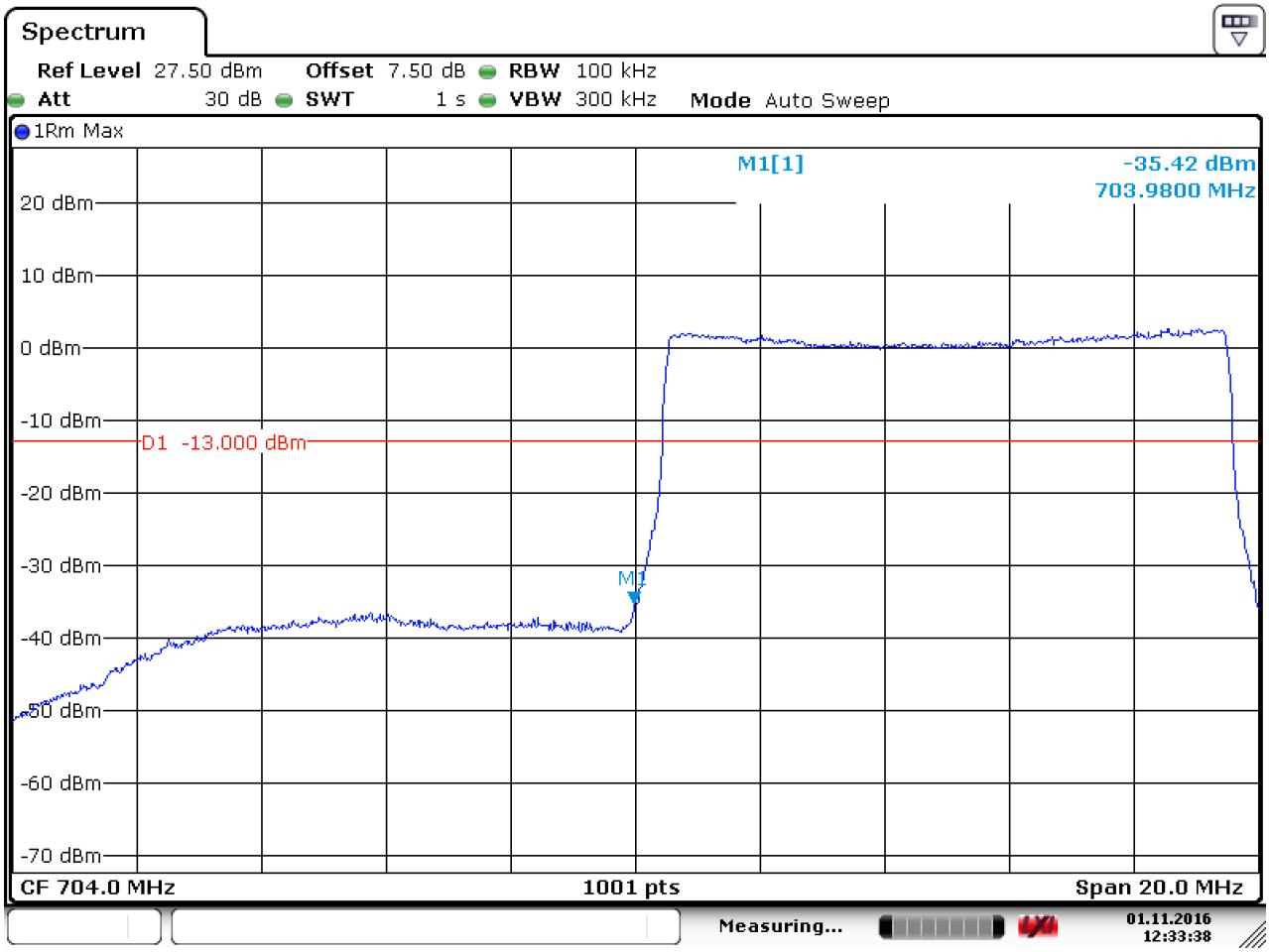
5.1.1.6.1 Test Channel = LCH

5.1.1.6.1.1 Test RB=1RB



Date: 1.NOV.2016 12:32:54

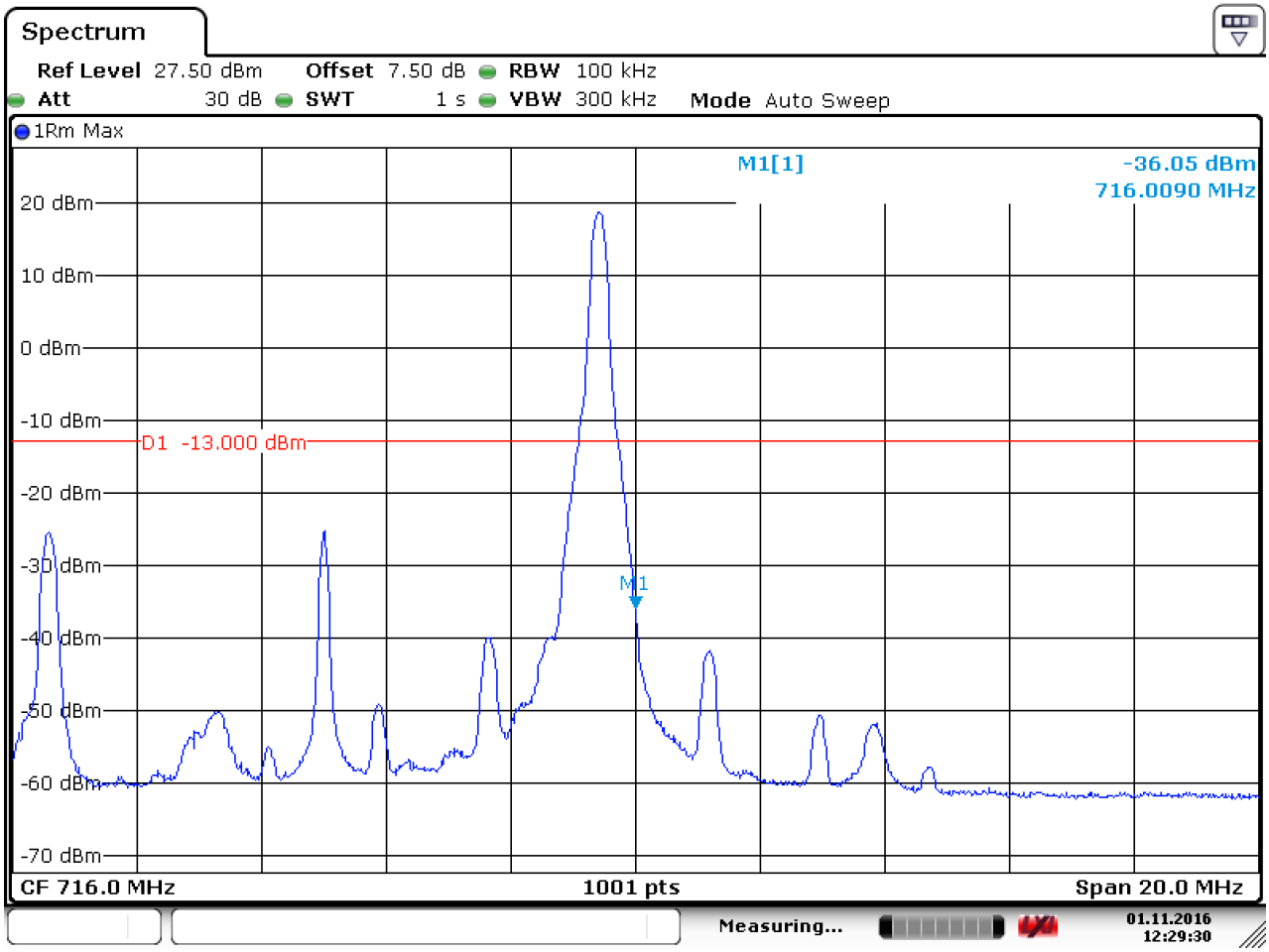
5.1.1.6.1.2 Test RB=50RB



Date: 1.NOV.2016 12:33:38

5.1.1.6.2 Test Channel = HCH

5.1.1.6.2.1 Test RB=1RB



Date: 1.NOV.2016 12:29:31

5.1.1.6.2.2 Test RB=50RB

Date: 1.NOV.2016 12:28:53

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.

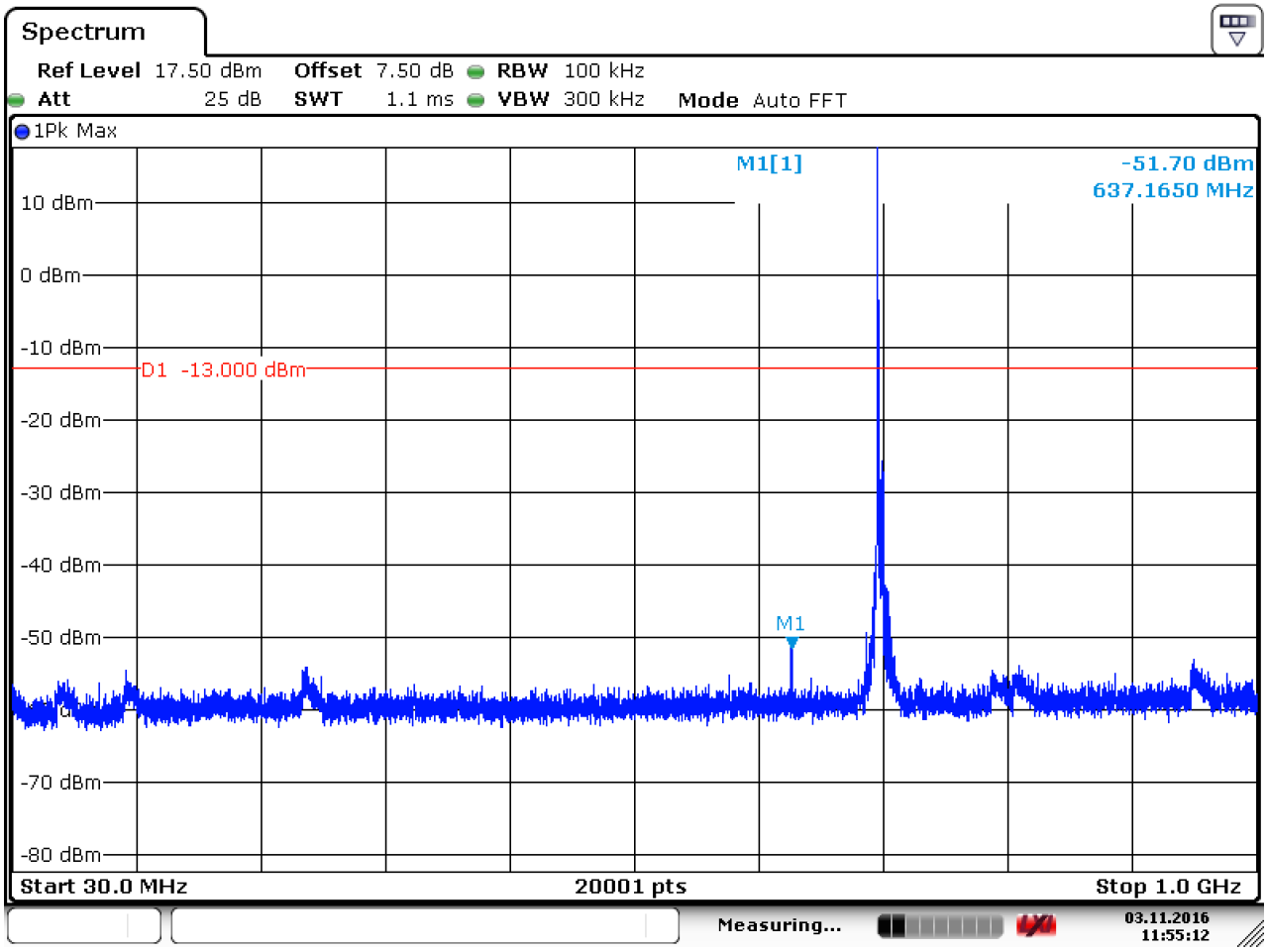
Part I - Test Plots

6.1 For LTE

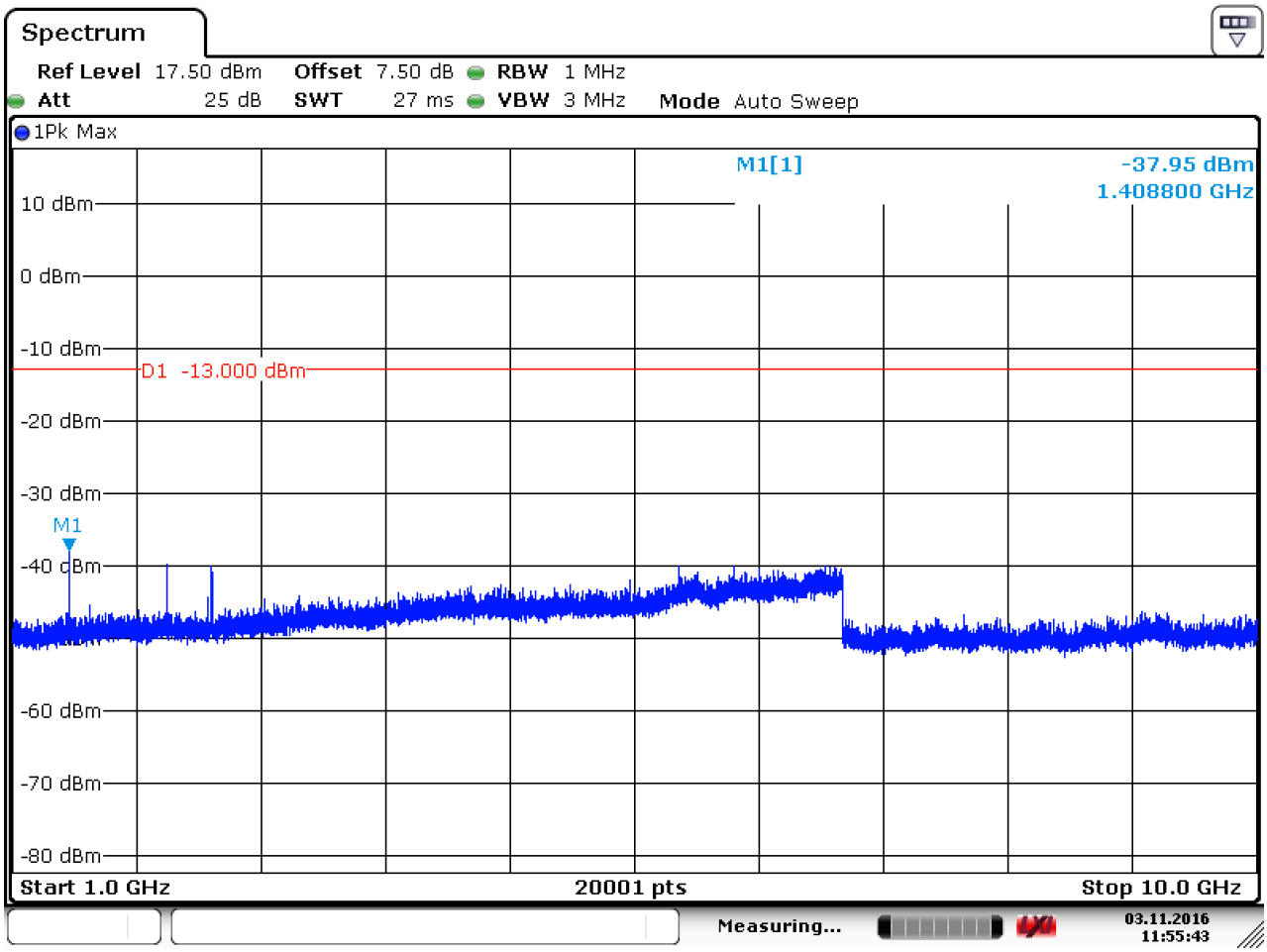
6.1.1 Test Band = LTE band17

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

6.1.1.1.1 Test Channel = LCH

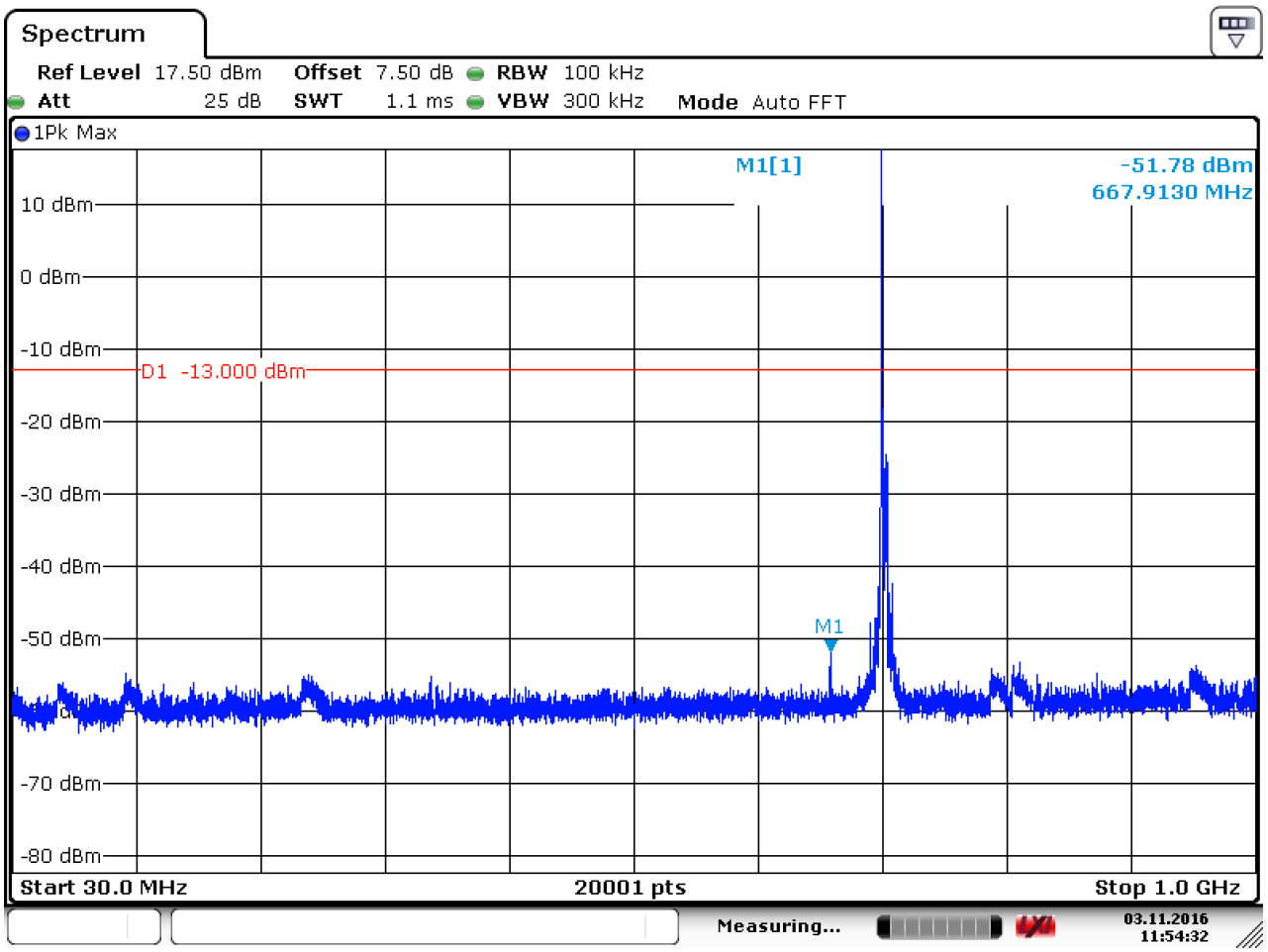


Date: 3.NOV.2016 11:55:13

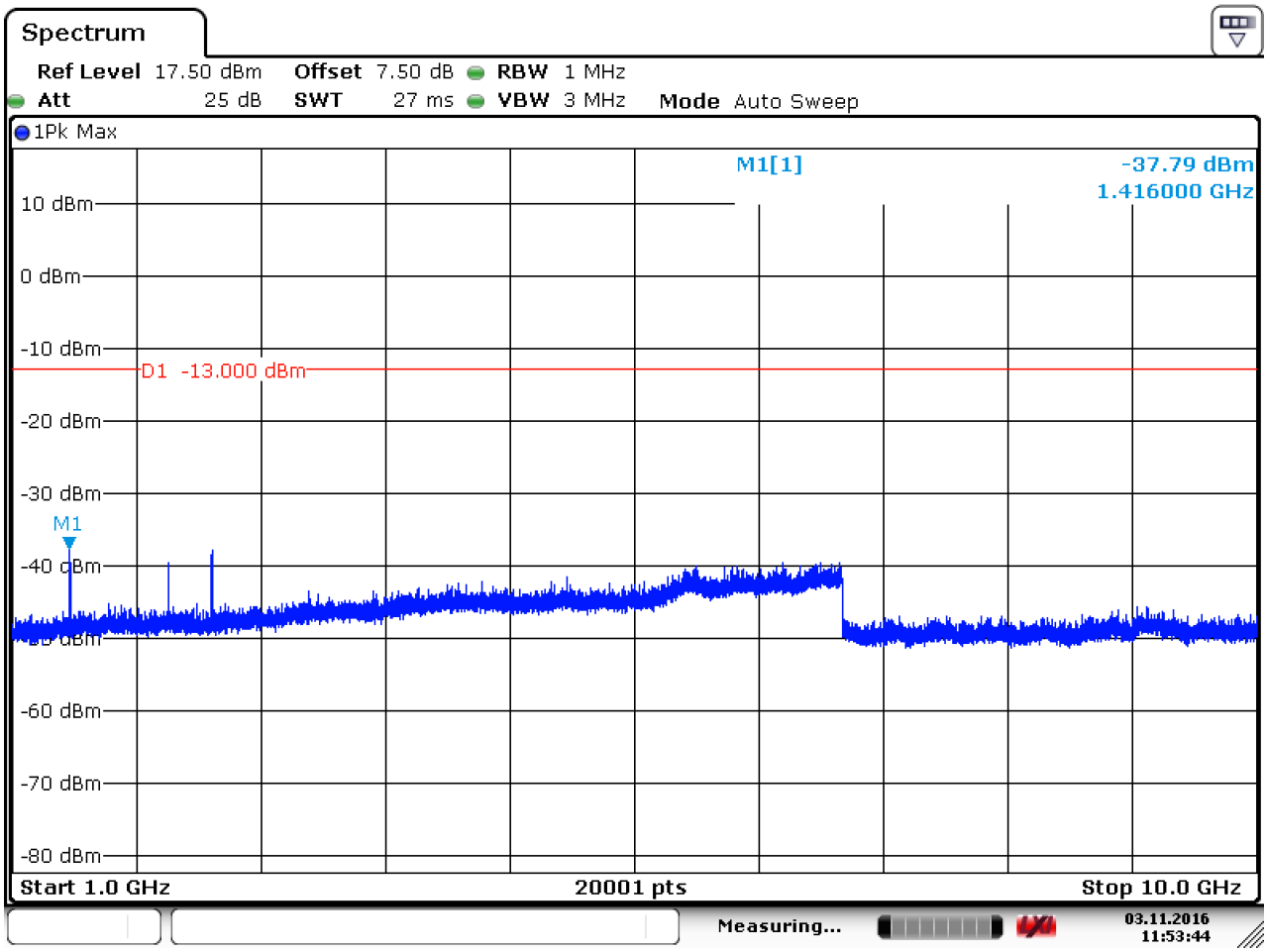


Date: 3.NOV.2016 11:55:44

6.1.1.1.2 Test Channel = MCH

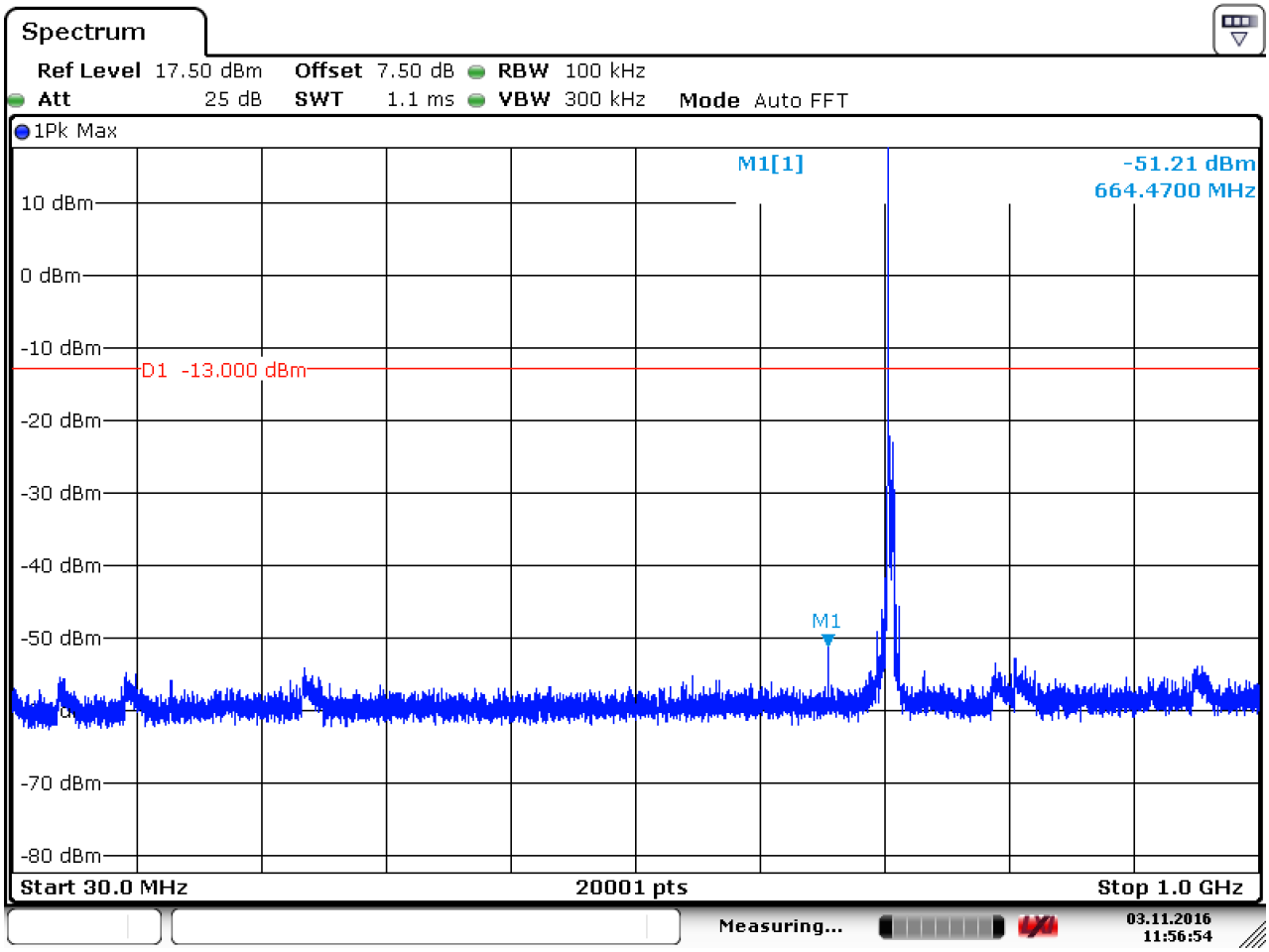


Date: 3.NOV.2016 11:54:32

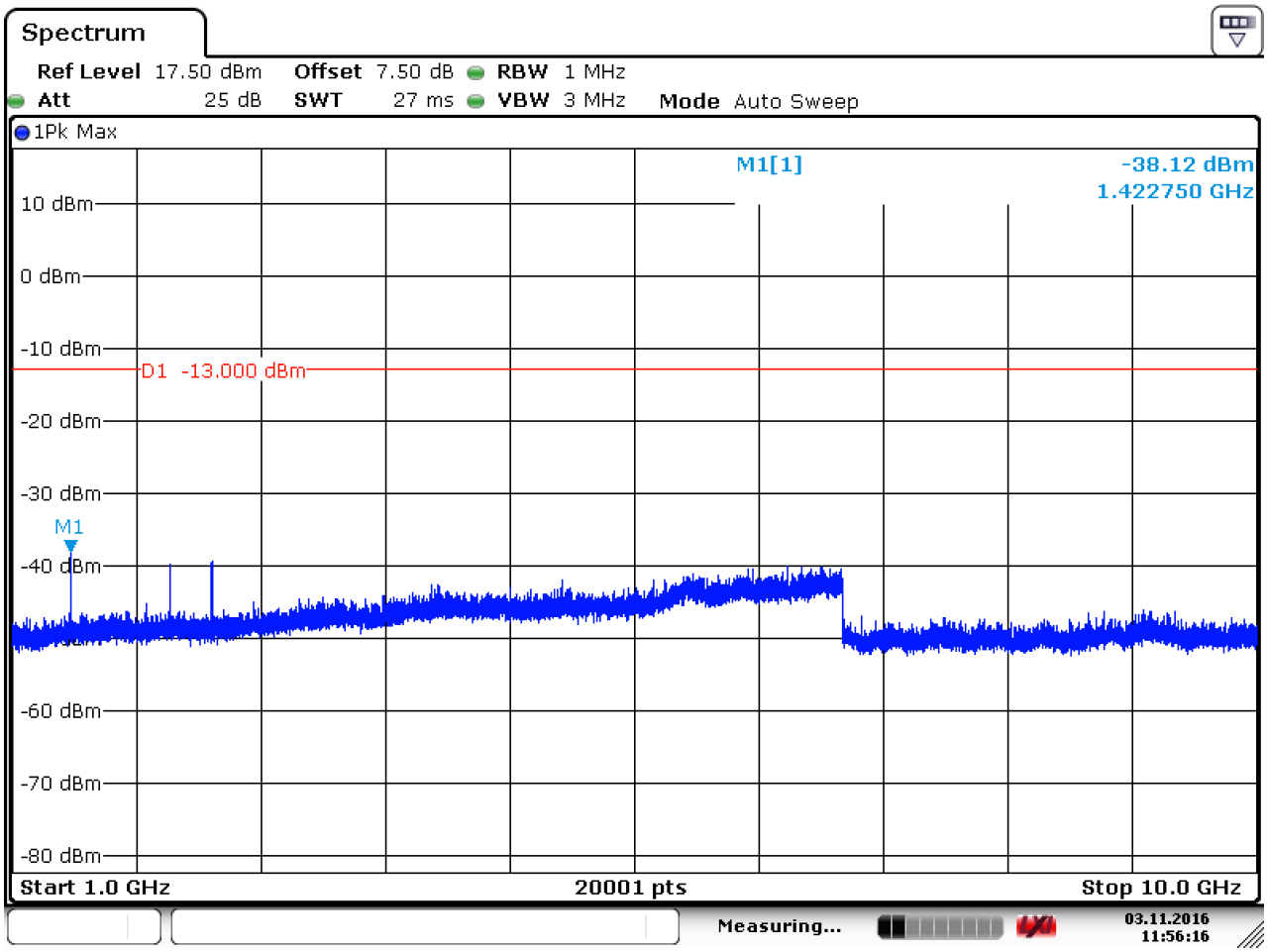


Date: 3.NOV.2016 11:53:44

6.1.1.1.3 Test Channel = HCH



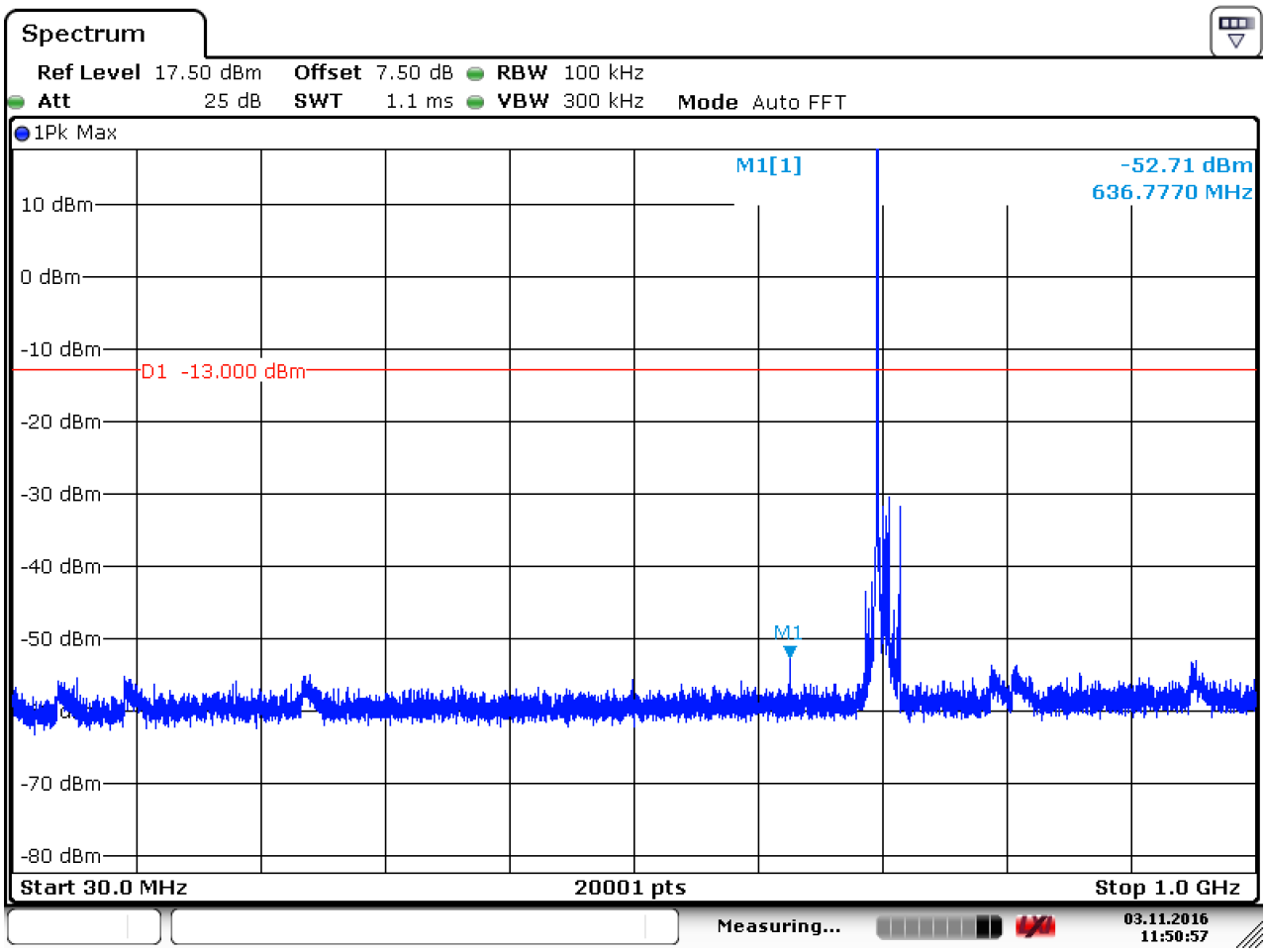
Date: 3.NOV.2016 11:56:54



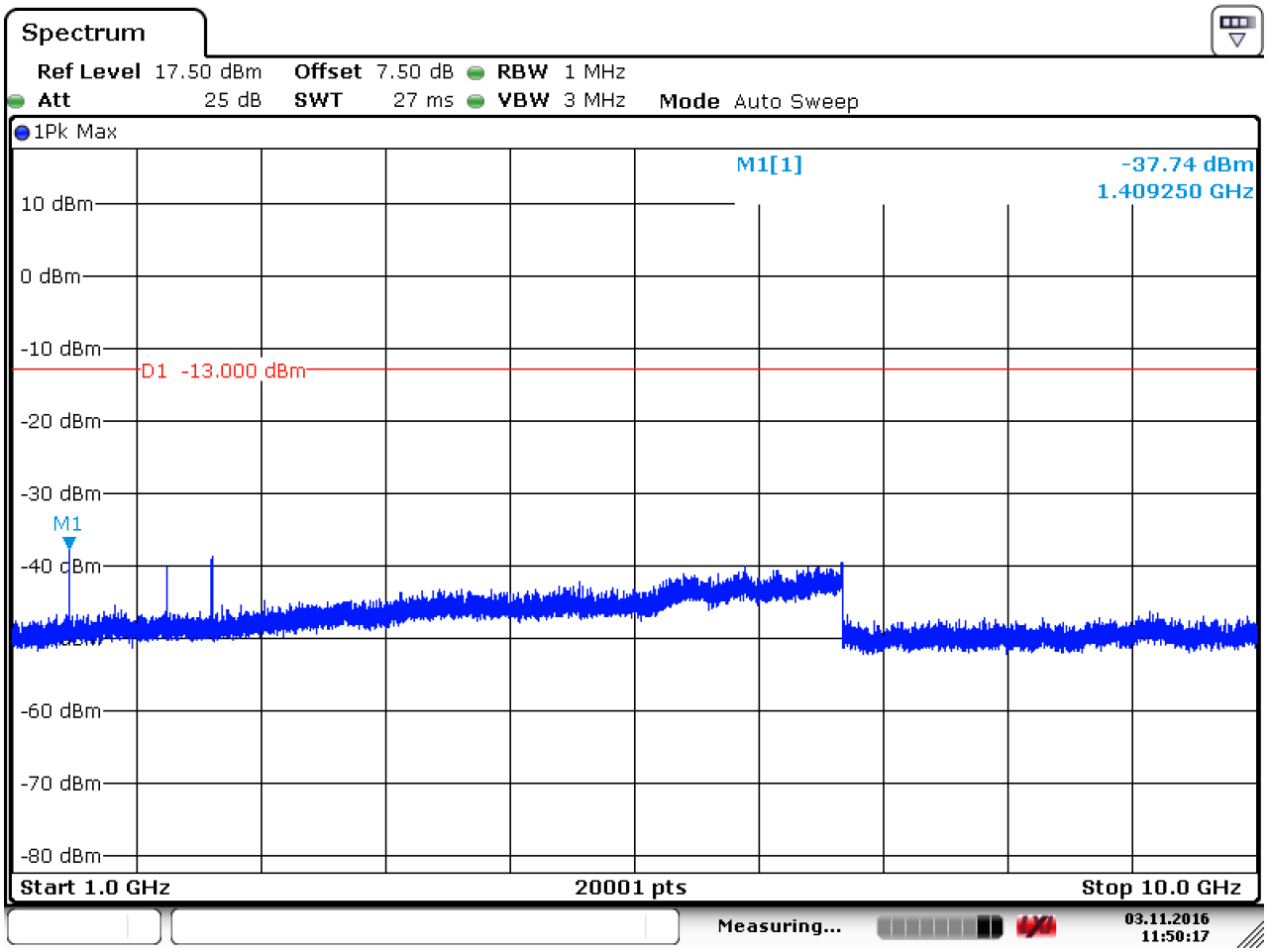
Date: 3.NOV.2016 11:56:16

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

6.1.1.2.1 Test Channel = LCH

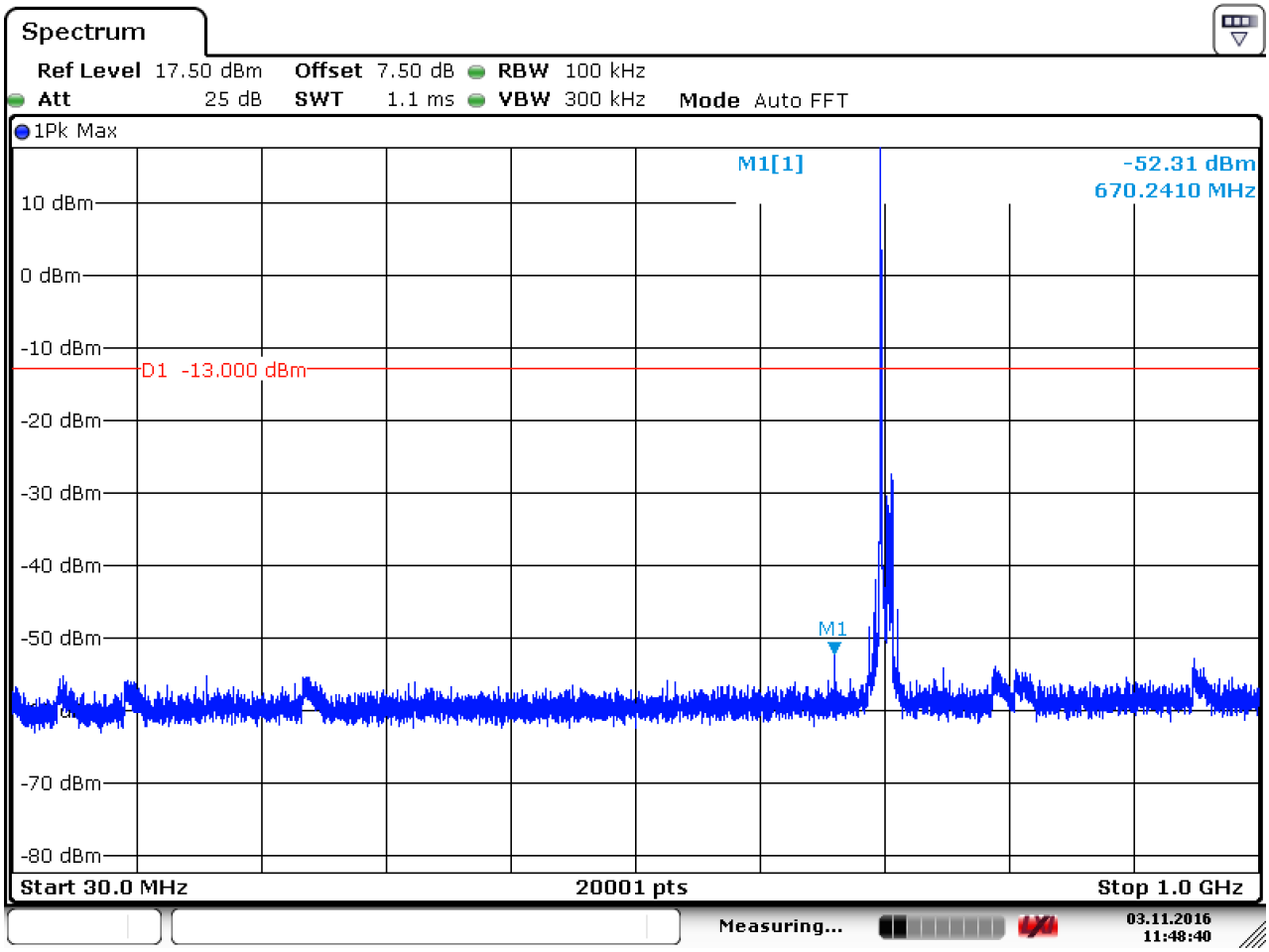


Date: 3.NOV.2016 11:50:57

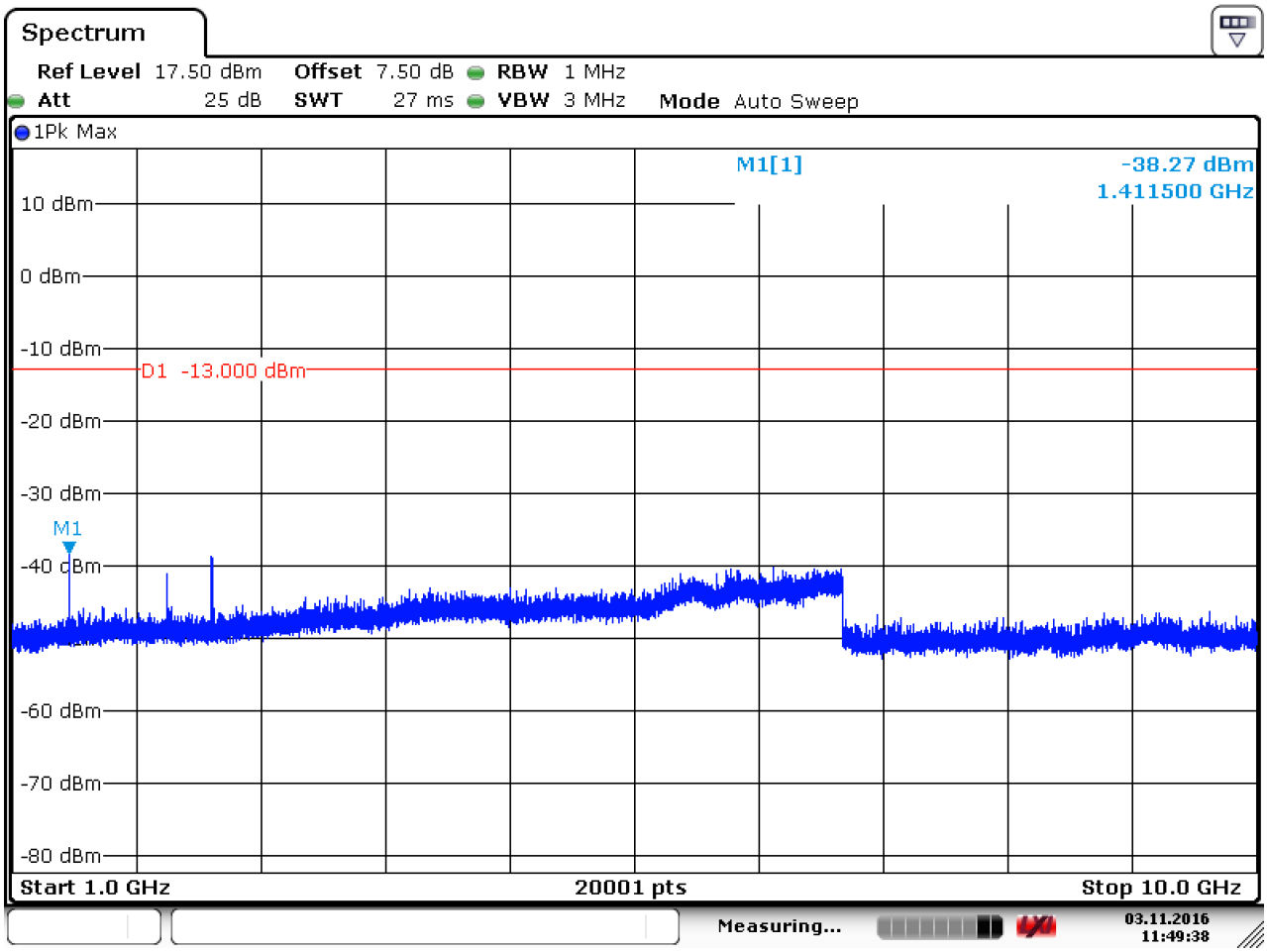


Date: 3.NOV.2016 11:50:17

6.1.1.2.2 Test Channel = MCH

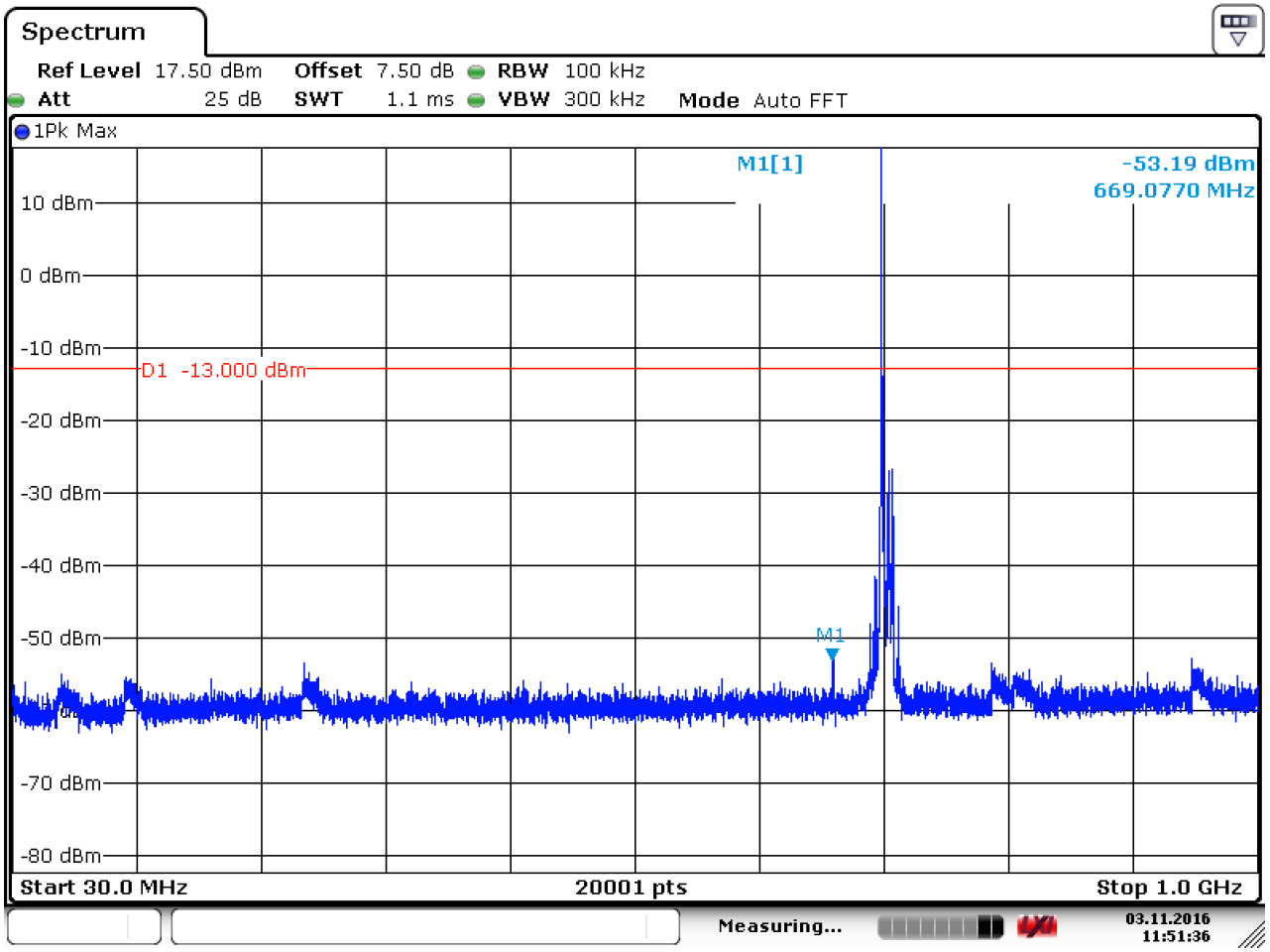


Date: 3.NOV.2016 11:48:40

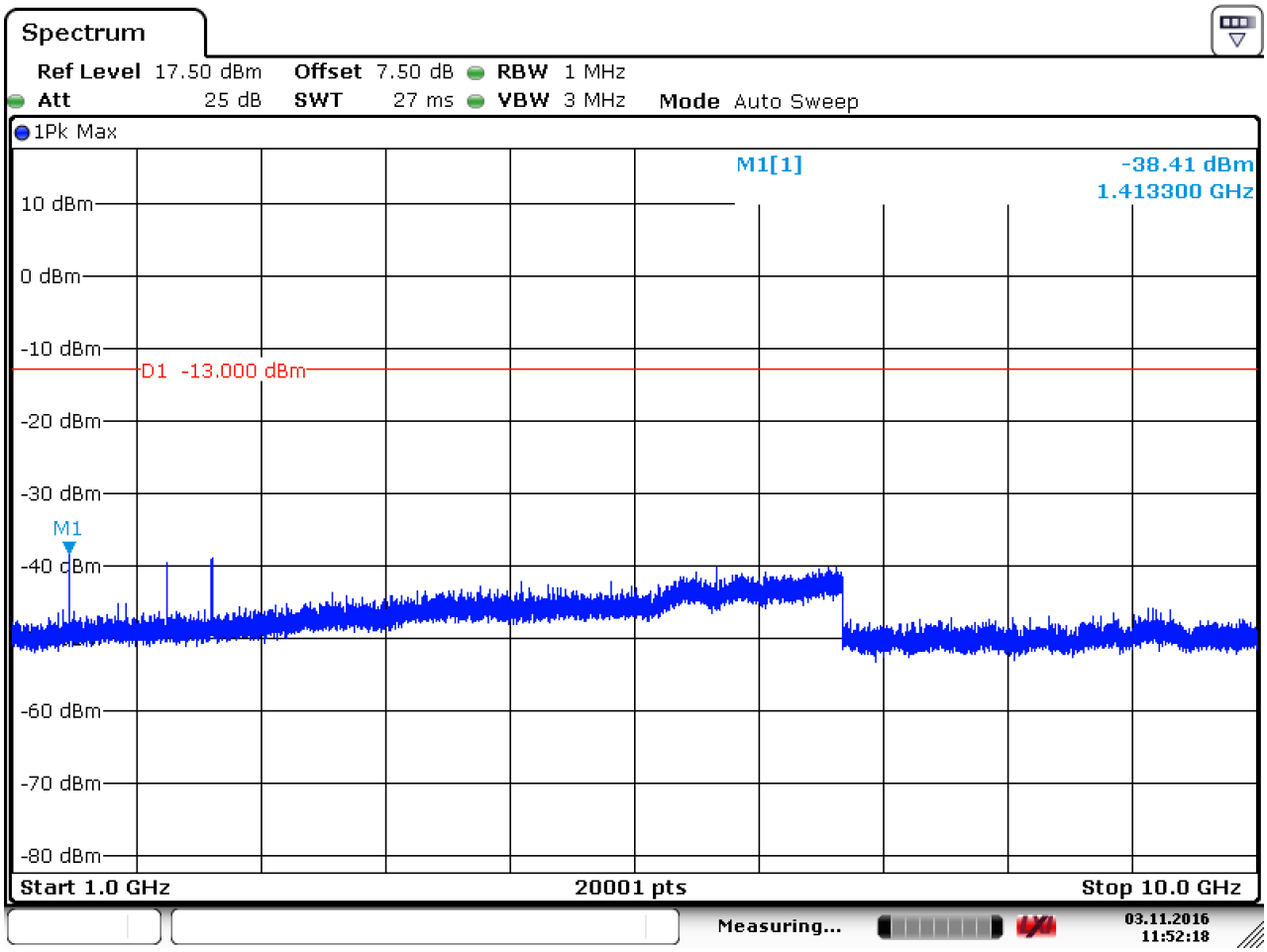


Date: 3.NOV.2016 11:49:38

6.1.1.2.3 Test Channel = HCH



Date: 3.NOV.2016 11:51:37



Date: 3.NOV.2016 11:52:19

7 Field Strength of Spurious Radiation

7.1 For LTE

7.1.1 Test Band = LTEband17

7.1.1.1 Test Mode = LTE/TM1 RB1#0

7.1.1.1.1 Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
75.500	-90.14	-13.00	-77.14	Vertical
150.000	-89.54	-13.00	-76.54	Vertical
235.000	-88.52	-13.00	-75.52	Vertical
352.500	-78.36	-13.00	-65.36	Vertical
430.000	-84.34	-13.00	-71.34	Vertical
521.500	-66.73	-13.00	-53.73	Vertical
1320.000	-50.49	-13.00	-37.49	Vertical
1738.000	-47.15	-13.00	-34.15	Vertical
3877.500	-51.39	-13.00	-38.39	Vertical
4956.000	-64.55	-13.00	-51.55	Vertical
7827.500	-63.62	-13.00	-50.62	Vertical
10517.000	-63.02	-13.00	-50.02	Vertical

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
76.000	-91.40	-13.00	-78.40	Horizontal
149.500	-88.46	-13.00	-75.46	Horizontal
235.000	-84.21	-13.00	-71.21	Horizontal
352.500	-82.94	-13.00	-69.94	Horizontal
469.000	-74.63	-13.00	-61.63	Horizontal
622.00	-78.40	-13.00	-65.40	Horizontal
1650.000	-64.18	-13.00	-51.18	Horizontal
2154.000	-36.70	-13.00	-23.70	Horizontal
3847.500	-51.45	-13.00	-38.45	Horizontal
5437.500	-50.31	-13.00	-37.31	Horizontal
7862.000	-64.11	-13.00	-51.11	Horizontal
10627.00	-63.08	-13.00	-50.08	Horizontal

7.1.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
76.000	-91.60	-13.00	-78.60	Vertical
190.500	-93.74	-13.00	-80.74	Vertical
286.000	-88.16	-13.00	-75.16	Vertical
371.000	-86.33	-13.00	-73.33	Vertical
457.000	-82.87	-13.00	-69.87	Vertical
613.500	-79.69	-13.00	-66.69	Vertical
1672.500	-64.57	-13.00	-51.57	Vertical
2013.000	-44.62	-13.00	-31.62	Vertical
3292.500	-52.46	-13.00	-39.46	Vertical
4560.000	-51.13	-13.00	-38.13	Vertical
7819.000	-64.43	-13.00	-51.43	Vertical
10500.000	-63.92	-13.00	-50.92	Vertical

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
76.000	-91.70	-13.00	-78.70	Horizontal
149.500	-90.25	-13.00	-77.25	Horizontal
293.500	-87.75	-13.00	-74.75	Horizontal
401.000	-87.35	-13.00	-74.35	Horizontal
471.000	-81.46	-13.00	-68.46	Horizontal
741.500	-61.64	-13.00	-48.64	Horizontal
1100.000	-49.85	-13.00	-36.85	Horizontal
1987.500	-61.70	-13.00	-48.70	Horizontal
4307.500	-66.73	-13.00	-53.73	Horizontal
7962.500	-47.62	-13.00	-34.62	Horizontal
8694.000	-64.52	-13.00	-51.52	Horizontal
11889.000	-63.62	-13.00	-50.62	Horizontal

7.1.1.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
75.000	-89.20	-13.00	-76.20	Vertical
171.500	-92.57	-13.00	-79.57	Vertical
258.500	-89.71	-13.00	-76.71	Vertical
380.500	-86.67	-13.00	-73.67	Vertical
479.500	-82.67	-13.00	-69.67	Vertical
626.000	-79.23	-13.00	-66.23	Vertical
1055.000	-51.37	-13.00	-38.37	Vertical
1551.000	-49.55	-13.00	-36.55	Vertical
2712.000	-40.56	-13.00	-27.56	Vertical
5031.500	-65.81	-13.00	-52.81	Vertical
7265.000	-65.22	-13.00	-52.22	Vertical
10497.000	-64.02	-13.00	-51.02	Vertical

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
76.000	-92.15	-13.00	-79.15	Horizontal
146.500	-88.26	-13.00	-75.26	Horizontal
226.500	-90.14	-13.00	-77.14	Horizontal
346.000	-87.88	-13.00	-74.88	Horizontal
479.000	-81.76	-13.00	-68.76	Horizontal
612.000	-78.73	-13.00	-65.73	Horizontal
1540.000	-49.21	-13.00	-36.21	Horizontal
3292.500	-52.66	-13.00	-39.66	Horizontal
3706.500	-64.68	-13.00	-51.68	Horizontal
5047.000	-50.27	-13.00	-37.27	Horizontal
7798.000	-64.24	-13.00	-51.24	Horizontal
10070.000	-64.40	-13.00	-51.40	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 band17	LTE/TM1 10MHz	LCH	TN	VL	0.38	0.00034	PASS
				VN	-0.15	-0.00022	PASS
				VH	1.02	0.00002	PASS
		MCH	TN	VL	0.84	0.00100	PASS
				VN	1.75	0.00090	PASS
				VH	-4.35	-0.00161	PASS
		HCH	TN	VL	1.74	0.00206	PASS
				VN	-2.64	-0.00312	PASS
				VH	2.84	0.00335	PASS
	LTE /TM2 10MHz	LCH	TN	VL	-2.15	-0.00241	PASS
				VN	-7.28	-0.00425	PASS
				VH	-3.01	-0.00176	PASS
		MCH	TN	VL	-1.44	-0.00302	PASS
				VN	-3.18	-0.00184	PASS
				VH	-7.23	-0.00460	PASS
		HCH	TN	VL	0.24	0.00031	PASS
				VN	-7.73	-0.00441	PASS
				VH	-6.28	-0.00375	PASS
	LTE /TM3 10MHz	LCH	TN	VL	-2.18	-0.00388	PASS
				VN	-1.10	-0.00221	PASS
				VH	-5.80	-0.00421	PASS
		MCH	TN	VL	-2.43	-0.00342	PASS
				VN	-1.33	-0.00499	PASS
				VH	-5.68	-0.00302	PASS
		HCH	TN	VL	-6.12	-0.00295	PASS
				VN	-3.32	-0.00541	PASS
				VH	2.19	-0.00115	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 band17	LTE/TM1 10MHz	LCH	VN	-30	-7.05	-0.00994	PASS
				-20	-1.01	-0.00142	PASS
				-10	-1.69	-0.00238	PASS
				0	-3.23	-0.00456	PASS
				10	1.22	0.00172	PASS
				20	2.48	0.00350	PASS
				30	0.51	0.00072	PASS
				40	0.34	0.00048	PASS
				50	6.10	0.00860	PASS
		MCH	VN	-30	-0.21	-0.00030	PASS
				-20	2.95	0.00415	PASS
				-10	-0.75	-0.00106	PASS
				0	-2.03	-0.00286	PASS
				10	0.39	0.00055	PASS
				20	-1.15	-0.00162	PASS
				30	2.93	0.00413	PASS
				40	-4.67	-0.00658	PASS
				50	-7.37	-0.01038	PASS
		HCH	VN	-30	0.33	0.00046	PASS
				-20	4.16	0.00585	PASS
				-10	-0.67	-0.00094	PASS
				0	-1.23	-0.00173	PASS
				10	-0.86	-0.00121	PASS
				20	-1.12	-0.00158	PASS
				30	-1.31	-0.00184	PASS
				40	-4.21	-0.00592	PASS
				50	-6.17	-0.00868	PASS

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTE band17	LTE/TM2 10MHz	LCH	VN	-30	-10.11	-0.01426	PASS
				-20	-8.87	-0.01251	PASS
				-10	-6.09	-0.00859	PASS
				0	-2.25	-0.00317	PASS
				10	1.62	0.00228	PASS
				20	-5.01	-0.00707	PASS
				30	-4.86	-0.00685	PASS
				40	-5.37	-0.00757	PASS
				50	1.34	0.00189	PASS
		MCH	VN	-30	-5.81	-0.00818	PASS
				-20	-7.35	-0.01035	PASS
				-10	-1.13	-0.00159	PASS
				0	-0.63	-0.00089	PASS
				10	-2.33	-0.00328	PASS
				20	-7.68	-0.01082	PASS
				30	2.44	0.00344	PASS
				40	-8.84	-0.01245	PASS
				50	-11.95	-0.01683	PASS
		HCH	VN	-30	-7.62	-0.01072	PASS
				-20	-5.18	-0.00729	PASS
				-10	-6.69	-0.00941	PASS
				0	-3.26	-0.00459	PASS
				10	1.07	0.00150	PASS
				20	2.60	0.00366	PASS
				30	-6.21	-0.00873	PASS
				40	-4.56	-0.00641	PASS
				50	-5.21	-0.00733	PASS

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTE band17	LTE/TM3 10MHz	LCH	VN	-30	2.73	0.00385	PASS
				-20	1.50	0.00212	PASS
				-10	0.67	0.00094	PASS
				0	-2.68	-0.00378	PASS
				10	0.56	0.00079	PASS
				20	-1.80	-0.00254	PASS
				30	1.60	0.00226	PASS
				40	-0.04	-0.00006	PASS
				50	-1.01	-0.00142	PASS
		MCH	VN	-30	-1.80	-0.00254	PASS
				-20	-1.08	-0.00152	PASS
				-10	-0.39	-0.00055	PASS
				0	-1.38	-0.00194	PASS
				10	2.31	0.00325	PASS
				20	1.72	0.00242	PASS
				30	1.61	0.00227	PASS
				40	0.13	0.00018	PASS
				50	-0.35	-0.00049	PASS
		HCH	VN	-30	-0.17	-0.00024	PASS
				-20	0.68	0.00096	PASS
				-10	0.55	0.00077	PASS
				0	-1.52	-0.00214	PASS
				10	1.57	0.00221	PASS
				20	-2.78	-0.00391	PASS
				30	2.64	0.00371	PASS
				40	-0.63	-0.00089	PASS
				50	-2.60	-0.00366	PASS

The End