SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Appendix B

E-UTRA Band 7

CONTENT

1   Effective (Isotropic) Radiated Power Output Data

Effective Isotropic Radiated Power of Transmitter (EIRP) for LTE BAND 7

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND7	LTE/TM1	5M	LCH	RB1#0	21.20	21.20	33.00	PASS
				RB1#13	21.13	21.13	33.00	PASS
				RB1#24	21.25	21.25	33.00	PASS
				RB12#0	20.28	20.28	33.00	PASS
				RB12#6	20.26	20.26	33.00	PASS
				RB12#13	20.38	20.38	33.00	PASS
				RB25#0	20.10	20.10	33.00	PASS
			MCH	RB1#0	21.23	21.23	33.00	PASS
				RB1#13	21.37	21.37	33.00	PASS
				RB1#24	21.63	21.63	33.00	PASS
				RB12#0	19.99	19.99	33.00	PASS
				RB12#6	20.04	20.04	33.00	PASS
				RB12#13	20.06	20.06	33.00	PASS
				RB25#0	20.06	20.06	33.00	PASS
			HCH	RB1#0	21.71	21.71	33.00	PASS
				RB1#13	20.99	20.99	33.00	PASS
				RB1#24	21.04	21.04	33.00	PASS
				RB12#0	20.64	20.64	33.00	PASS
				RB12#6	20.69	20.69	33.00	PASS
				RB12#13	20.61	20.61	33.00	PASS
				RB25#0	20.23	20.23	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND7	LTE/TM2	5M	LCH	RB1#0	19.97	19.97	33.00	PASS
				RB1#13	19.83	19.83	33.00	PASS
				RB1#24	19.79	19.79	33.00	PASS
				RB12#0	19.60	19.60	33.00	PASS
				RB12#6	19.64	19.64	33.00	PASS
				RB12#13	19.86	19.86	33.00	PASS
				RB25#0	19.07	19.07	33.00	PASS
			MCH	RB1#0	20.51	20.51	33.00	PASS
				RB1#13	20.01	20.01	33.00	PASS
				RB1#24	19.82	19.82	33.00	PASS
				RB12#0	19.27	19.27	33.00	PASS
				RB12#6	19.46	19.46	33.00	PASS
				RB12#13	19.81	19.81	33.00	PASS
				RB25#0	18.93	18.93	33.00	PASS
			HCH	RB1#0	20.57	20.57	33.00	PASS
				RB1#13	20.27	20.27	33.00	PASS
				RB1#24	20.06	20.06	33.00	PASS
				RB12#0	19.68	19.68	33.00	PASS
				RB12#6	19.59	19.59	33.00	PASS
				RB12#13	19.43	19.43	33.00	PASS
				RB25#0	19.41	19.41	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND7	LTE/TM1	10M	LCH	RB1#0	21.26	21.26	33.00	PASS
				RB1#25	21.21	21.21	33.00	PASS
				RB1#49	21.30	21.30	33.00	PASS
				RB25#0	20.33	20.33	33.00	PASS
				RB25#13	20.32	20.32	33.00	PASS
				RB25#25	20.45	20.45	33.00	PASS
				RB50#0	20.16	20.16	33.00	PASS
			MCH	RB1#0	21.27	21.27	33.00	PASS
				RB1#25	21.45	21.45	33.00	PASS
				RB1#49	21.70	21.70	33.00	PASS
				RB25#0	20.04	20.04	33.00	PASS
				RB25#13	20.11	20.11	33.00	PASS
				RB25#25	20.13	20.13	33.00	PASS
				RB50#0	20.09	20.09	33.00	PASS
			HCH	RB1#0	21.76	21.76	33.00	PASS
				RB1#25	21.06	21.06	33.00	PASS
				RB1#49	21.09	21.09	33.00	PASS
				RB25#0	20.72	20.72	33.00	PASS
				RB25#13	20.73	20.73	33.00	PASS
				RB25#25	20.66	20.66	33.00	PASS
				RB50#0	20.30	20.30	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND7	LTE/TM2	10M	LCH	RB1#0	20.05	20.05	33.00	PASS
				RB1#25	19.90	19.90	33.00	PASS
				RB1#49	19.85	19.85	33.00	PASS
				RB25#0	19.66	19.66	33.00	PASS
				RB25#13	19.70	19.70	33.00	PASS
				RB25#25	19.90	19.90	33.00	PASS
				RB50#0	19.10	19.10	33.00	PASS
			MCH	RB1#0	20.54	20.54	33.00	PASS
				RB1#25	20.08	20.08	33.00	PASS
				RB1#49	19.88	19.88	33.00	PASS
				RB25#0	19.35	19.35	33.00	PASS
				RB25#13	19.51	19.51	33.00	PASS
				RB25#25	19.87	19.87	33.00	PASS
				RB50#0	19.00	19.00	33.00	PASS
			HCH	RB1#0	20.65	20.65	33.00	PASS
				RB1#25	20.34	20.34	33.00	PASS
				RB1#49	20.09	20.09	33.00	PASS
				RB25#0	19.74	19.74	33.00	PASS
				RB25#13	19.62	19.62	33.00	PASS
				RB25#25	19.47	19.47	33.00	PASS
				RB50#0	19.45	19.45	33.00	PASS

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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND7	LTE/TM1	15M	LCH	RB1#0	21.32	21.32	33.00	PASS
				RB1#38	21.27	21.27	33.00	PASS
				RB1#74	21.34	21.34	33.00	PASS
				RB36#0	20.39	20.39	33.00	PASS
				RB36#18	20.38	20.38	33.00	PASS
				RB36#39	20.51	20.51	33.00	PASS
				RB75#0	20.21	20.21	33.00	PASS
			MCH	RB1#0	21.31	21.31	33.00	PASS
				RB1#38	21.48	21.48	33.00	PASS
				RB1#74	21.74	21.74	33.00	PASS
				RB36#0	20.12	20.12	33.00	PASS
				RB36#18	20.17	20.17	33.00	PASS
				RB36#39	20.19	20.19	33.00	PASS
				RB75#0	20.14	20.14	33.00	PASS
			HCH	RB1#0	21.84	21.84	33.00	PASS
				RB1#38	21.11	21.11	33.00	PASS
				RB1#74	21.12	21.12	33.00	PASS
				RB36#0	20.78	20.78	33.00	PASS
				RB36#18	20.79	20.79	33.00	PASS
				RB36#39	20.70	20.70	33.00	PASS
				RB75#0	20.36	20.36	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND7	LTE/TM2	15M	LCH	RB1#0	20.12	20.12	33.00	PASS
				RB1#38	19.97	19.97	33.00	PASS
				RB1#74	19.91	19.91	33.00	PASS
				RB36#0	19.72	19.72	33.00	PASS
				RB36#18	19.76	19.76	33.00	PASS
				RB36#39	19.95	19.95	33.00	PASS
				RB75#0	19.18	19.18	33.00	PASS
			MCH	RB1#0	20.59	20.59	33.00	PASS
				RB1#38	20.14	20.14	33.00	PASS
				RB1#74	19.92	19.92	33.00	PASS
				RB36#0	19.43	19.43	33.00	PASS
				RB36#18	19.56	19.56	33.00	PASS
				RB36#39	19.91	19.91	33.00	PASS
				RB75#0	19.06	19.06	33.00	PASS
			HCH	RB1#0	20.70	20.70	33.00	PASS
				RB1#38	20.39	20.39	33.00	PASS
				RB1#74	20.15	20.15	33.00	PASS
				RB36#0	19.82	19.82	33.00	PASS
				RB36#18	19.65	19.65	33.00	PASS
				RB36#39	19.50	19.50	33.00	PASS
				RB75#0	19.51	19.51	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND7	LTE/TM1	20M	LCH	RB1#0	21.38	21.38	33.00	PASS
				RB1#50	21.32	21.32	33.00	PASS
				RB1#99	21.37	21.37	33.00	PASS
				RB50#0	20.44	20.44	33.00	PASS
				RB50#25	20.45	20.45	33.00	PASS
				RB50#50	20.58	20.58	33.00	PASS
				RB100#0	20.27	20.27	33.00	PASS
			MCH	RB1#0	21.37	21.37	33.00	PASS
				RB1#50	21.54	21.54	33.00	PASS
				RB1#99	21.80	21.80	33.00	PASS
				RB50#0	20.16	20.16	33.00	PASS
				RB50#25	20.21	20.21	33.00	PASS
				RB50#50	20.24	20.24	33.00	PASS
				RB100#0	20.21	20.21	33.00	PASS
			HCH	RB1#0	21.87	21.87	33.00	PASS
				RB1#50	21.16	21.16	33.00	PASS
				RB1#99	21.15	21.15	33.00	PASS
				RB50#0	20.86	20.86	33.00	PASS
				RB50#25	20.83	20.83	33.00	PASS
				RB50#50	20.77	20.77	33.00	PASS
				RB100#0	20.41	20.41	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND7	LTE/TM2	20M	LCH	RB1#0	20.19	20.19	33.00	PASS
				RB1#50	20.01	20.01	33.00	PASS
				RB1#99	19.98	19.98	33.00	PASS
				RB50#0	19.79	19.79	33.00	PASS
				RB50#25	19.82	19.82	33.00	PASS
				RB50#50	20.01	20.01	33.00	PASS
				RB100#0	19.24	19.24	33.00	PASS
			MCH	RB1#0	20.63	20.63	33.00	PASS
				RB1#50	20.18	20.18	33.00	PASS
				RB1#99	19.99	19.99	33.00	PASS
				RB50#0	19.51	19.51	33.00	PASS
				RB50#25	19.63	19.63	33.00	PASS
				RB50#50	19.98	19.98	33.00	PASS
				RB100#0	19.11	19.11	33.00	PASS
			HCH	RB1#0	20.76	20.76	33.00	PASS
				RB1#50	20.45	20.45	33.00	PASS
				RB1#99	20.18	20.18	33.00	PASS
				RB50#0	19.88	19.88	33.00	PASS
				RB50#25	19.73	19.73	33.00	PASS
				RB50#50	19.54	19.54	33.00	PASS
				RB100#0	19.56	19.56	33.00	PASS

Note:

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

$$EIRP [dBm] = SGP [dBm] – Cable Loss [dB] + Gain [dBi]$$

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 7	TM1/20M	LCH	4.67	13	PASS
		MCH	4.67	13	PASS
		HCH	4.61	13	PASS
	TM2/20M	LCH	5.45	13	PASS
		MCH	5.54	13	PASS
		HCH	5.51	13	PASS

Part II - Test Plots

2.1 For LTE

2.1.1 Test Band = LTE band7

2.1.1.1   Test Mode = LTE/TM1.Bandwidth=20MHz

2.1.1.1.1   Test Channel = LCH

Spectrum							
Ref Level 20.00 dBm	**Offset** 5.00 dB						
● **Att** 25 dB	**AQT** 1.6 ms	● **RBW** 20 MHz					
SGL							

● 1Sa Clrw

0.1
0.01
1E-03
1E-04
1E-05

CF 2.51 GHz   Mean Pwr + 20.00 dB

Complementary Cumulative Distribution Function   Samples: 100000

	Mean	Peak	Crest	10%	1%	0.1%	0.01%
Trace 1	21.04 dBm	26.52 dBm	5.47 dB	2.20 dB	3.83 dB	4.67 dB	5.13 dB

Ready   23.12.2016
                         09:16:53
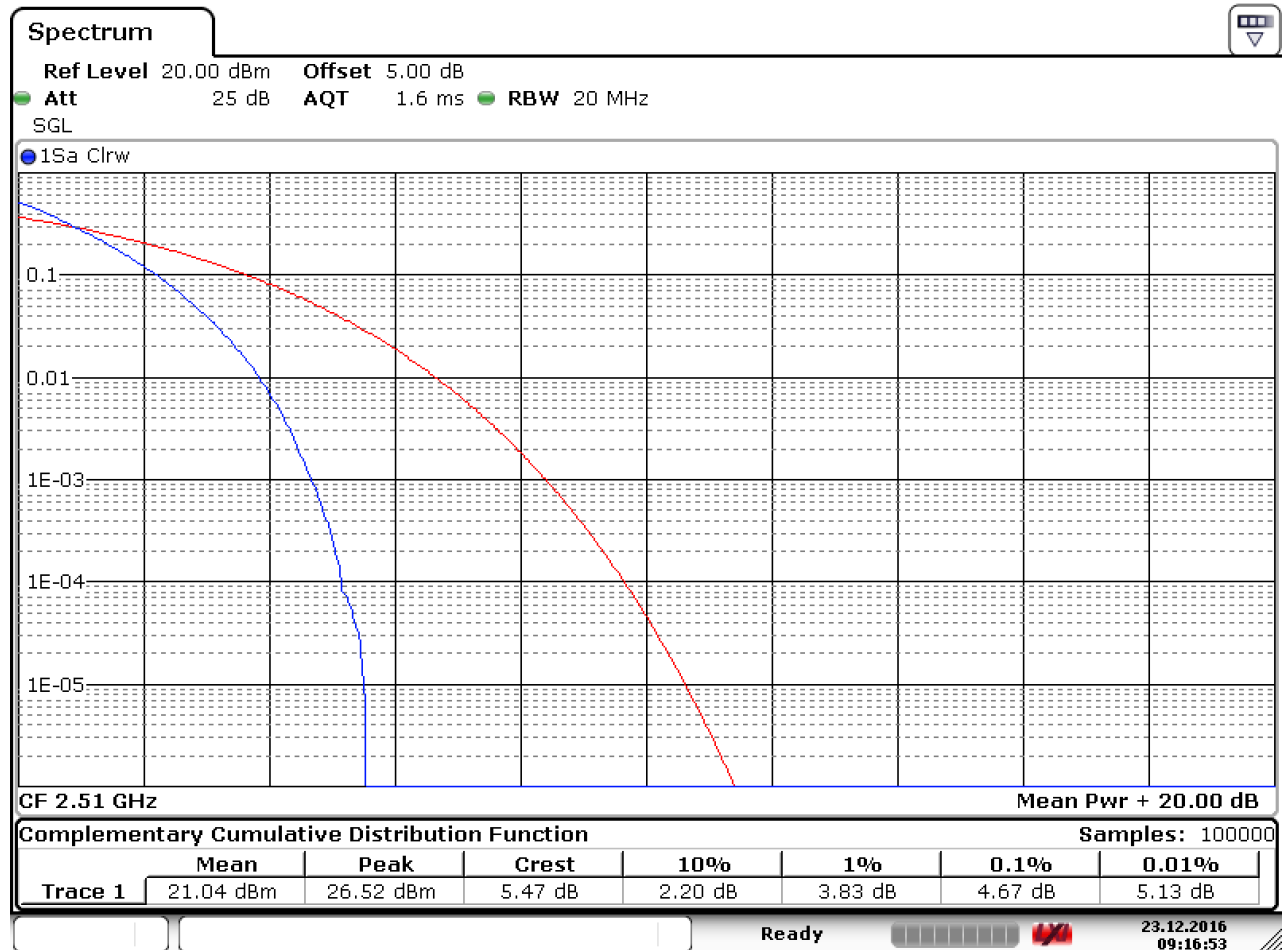
Date: 23.DEC.2016 09:16:53

2.1.1.1.2 Test Channel = MCH

Spectrum

Ref Level 20.00 dBm   Offset 5.00 dB
Att   25 dB   AQT   1.6 ms   RBW 20 MHz
SGL

1Sa Clrw

0.1
0.01
1E-03
1E-04
1E-05

CF 2.535 GHz   Mean Pwr + 20.00 dB

Complementary Cumulative Distribution Function   Samples: 100000

	Mean	Peak	Crest	10%	1%	0.1%	0.01%
Trace 1	21.49 dBm	27.05 dBm	5.56 dB	2.20 dB	3.86 dB	4.67 dB	5.16 dB

Ready   23.12.2016 09:16:27
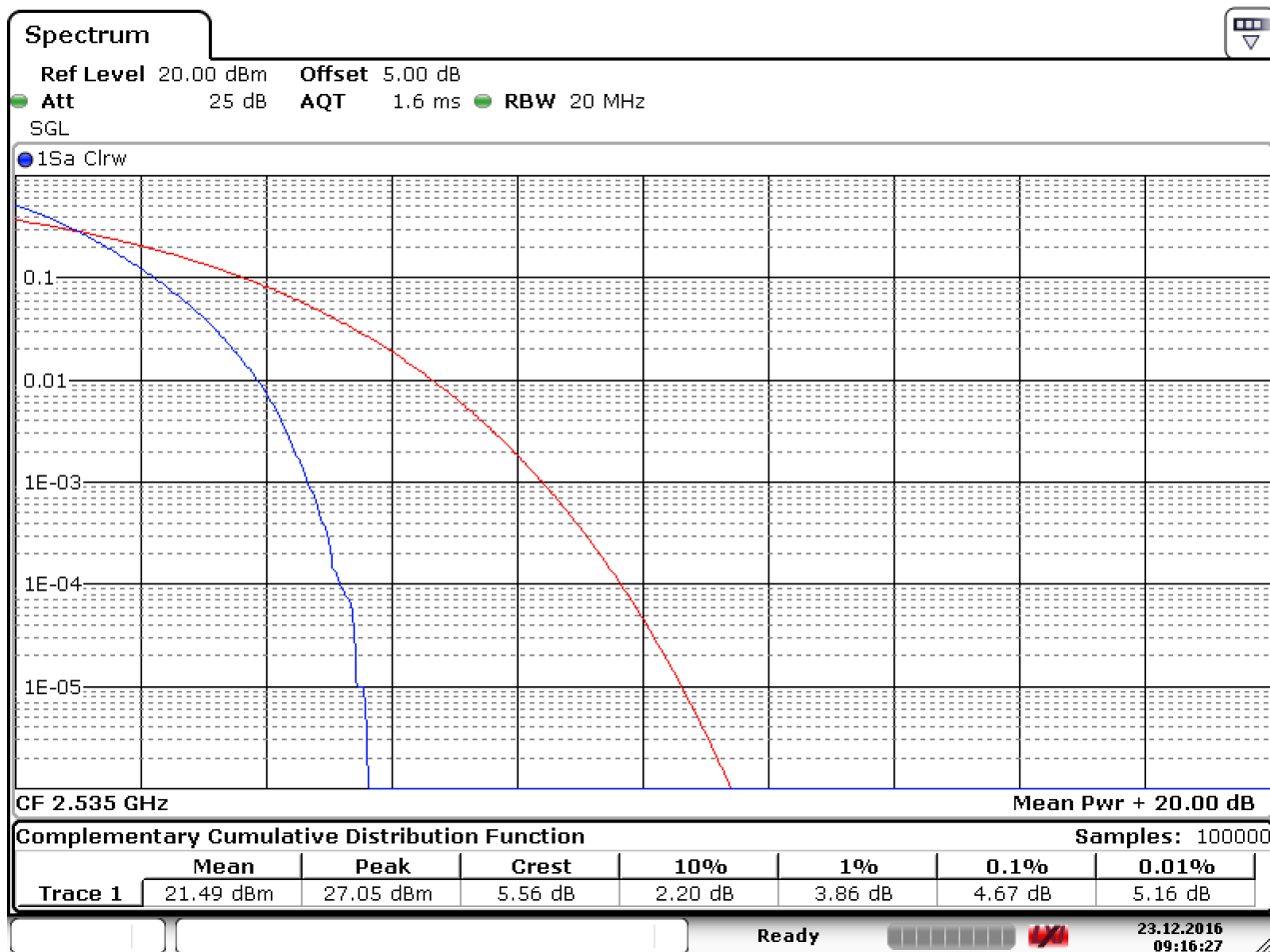
Date: 23.DEC.2016 09:16:28

2.1.1.1.3   Test Channel = HCH

Spectrum							
Ref Level 20.00 dBm	Offset 5.00 dB						
Att	25 dB	AQT	1.6 ms	RBW	20 MHz		
SGL							

1Sa Clrw

CF 2.56 GHz   Mean Pwr + 20.00 dB

Complementary Cumulative Distribution Function						Samples: 100000	
	Mean	Peak	Crest	10%	1%	0.1%	0.01%
Trace 1	21.74 dBm	27.10 dBm	5.36 dB	2.17 dB	3.80 dB	4.61 dB	5.07 dB

Ready   23.12.2016 09:15:54
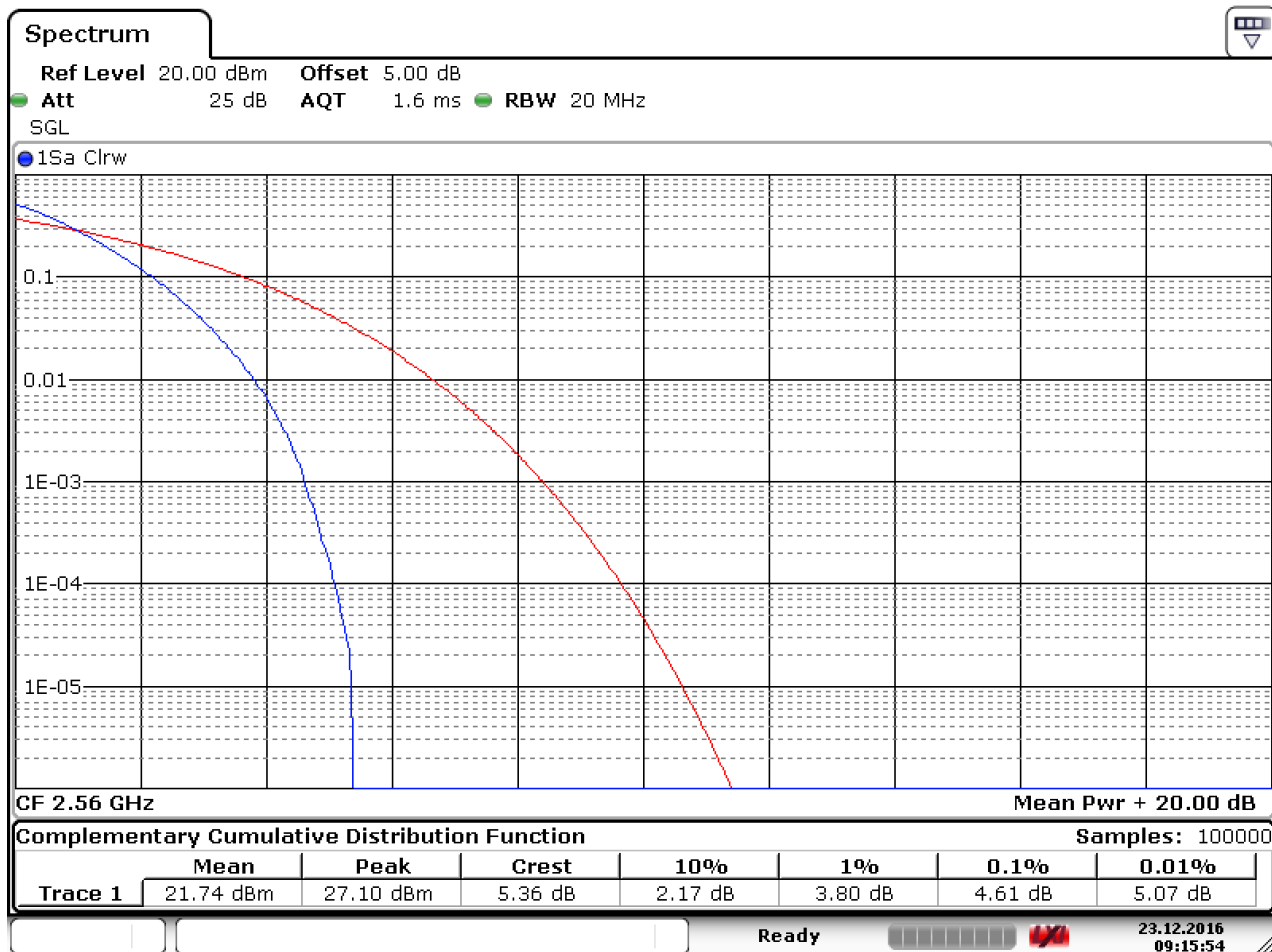
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2.1.1.2　Test Mode = LTE/TM2.Bandwidth=20MHz

2.1.1.2.1　Test Channel = LCH

Spectrum							
Ref Level 20.00 dBm　Offset 5.00 dB							
● Att　　　　25 dB　AQT　1.6 ms ● RBW 20 MHz							
SGL							

● 1Sa Clrw

CF 2.51 GHz　　　　　　　　　　　　　　　　　Mean Pwr + 20.00 dB

Complementary Cumulative Distribution Function						Samples:	100000
	Mean	Peak	Crest	10%	1%	0.1%	0.01%
Trace 1	20.50 dBm	26.98 dBm	6.48 dB	2.78 dB	4.46 dB	5.45 dB	6.09 dB

Ready　　　　　　　　　　　　　　23.12.2016
　　　　　　　　　　　　　　　　　09:15:18
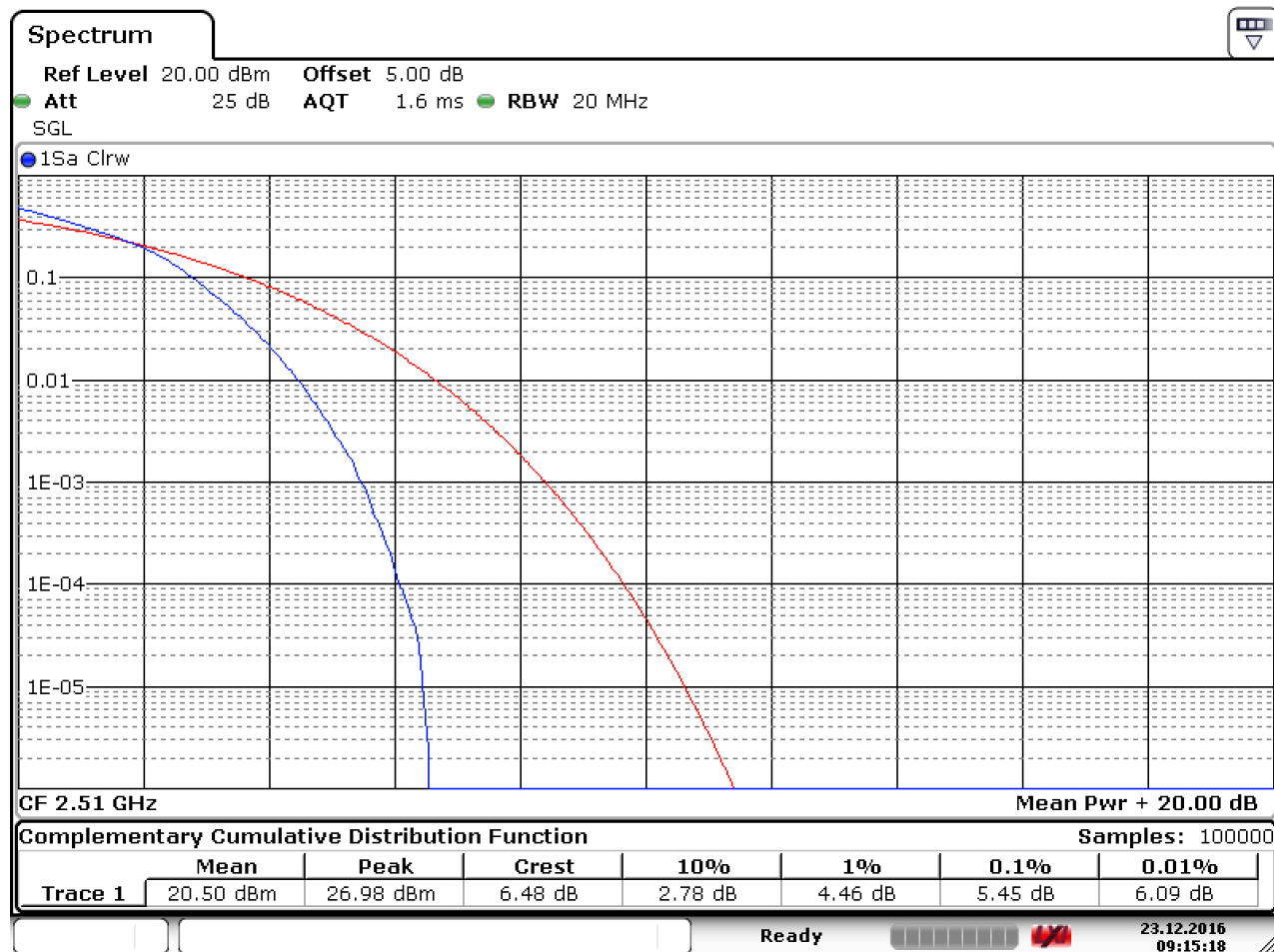
Date: 23.DEC.2016 09:15:19

2.1.1.2.2 Test Channel = MCH

Spectrum

Ref Level 20.00 dBm   Offset 5.00 dB
Att   25 dB   AQT   1.6 ms   RBW 20 MHz
SGL

1Sa Clrw

| | 0.1 | 0.01 | 1E-03 | 1E-04 | 1E-05 |

CF 2.535 GHz   Mean Pwr + 20.00 dB

Complementary Cumulative Distribution Function   Samples: 100000

	Mean	Peak	Crest	10%	1%	0.1%	0.01%
Trace 1	20.79 dBm	27.44 dBm	6.66 dB	2.81 dB	4.58 dB	5.54 dB	6.20 dB

Ready   23.12.2016
                                   09:14:45
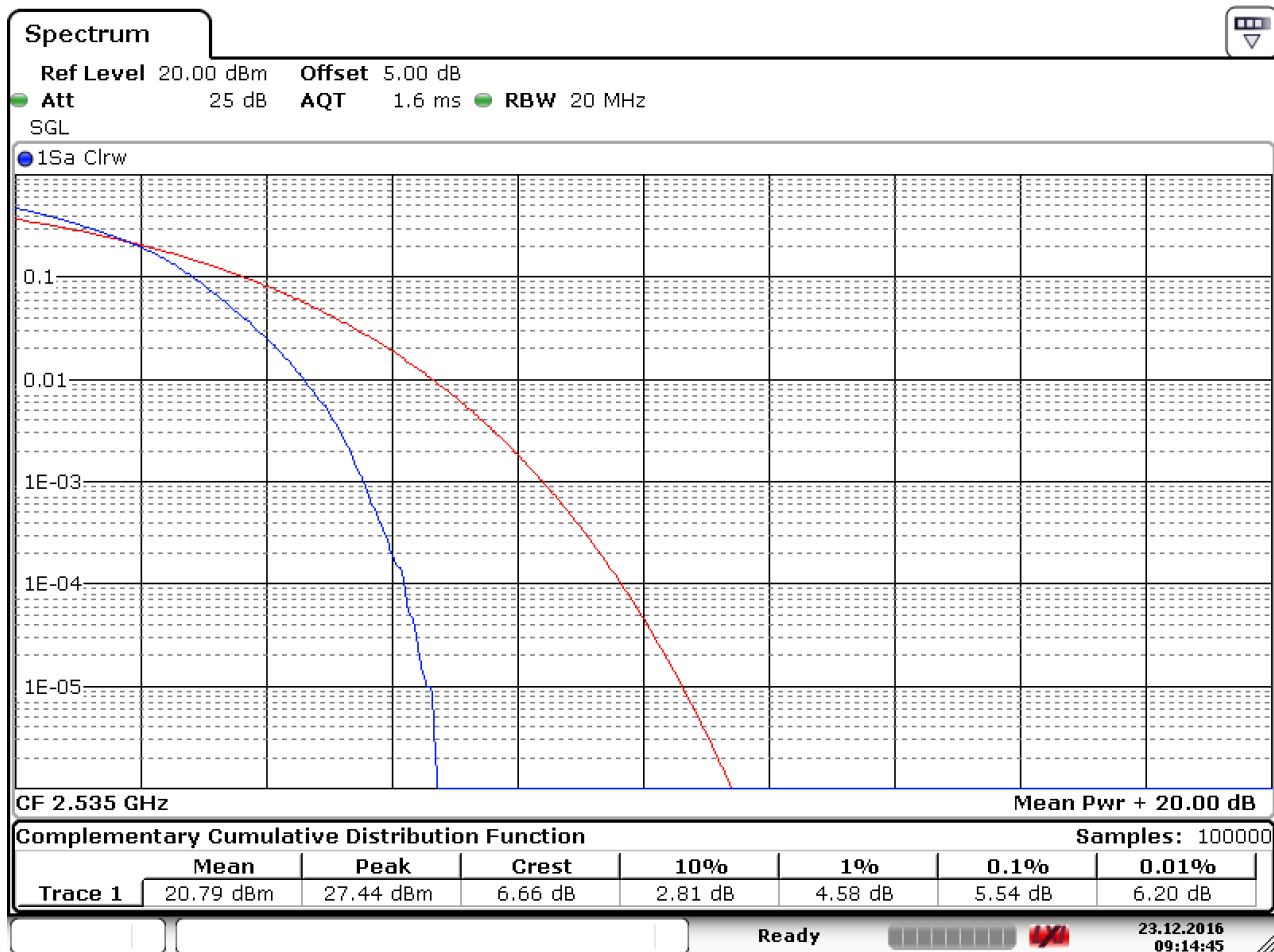
Date: 23.DEC.2016 09:14:45

2.1.1.2.3   Test Channel = HCH

Spectrum							
Ref Level 20.00 dBm	**Offset** 5.00 dB						
● **Att** 25 dB	**AQT** 1.6 ms ● **RBW** 20 MHz						
SGL							
● 1Sa Clrw							

CF 2.56 GHz   Mean Pwr + 20.00 dB

Complementary Cumulative Distribution Function						Samples: 100000	
	Mean	Peak	Crest	10%	1%	0.1%	0.01%
Trace 1	20.68 dBm	27.10 dBm	6.42 dB	2.78 dB	4.55 dB	5.51 dB	6.06 dB

Ready   23.12.2016
                                   09:15:37

Date: 23.DEC.2016 09:15:37

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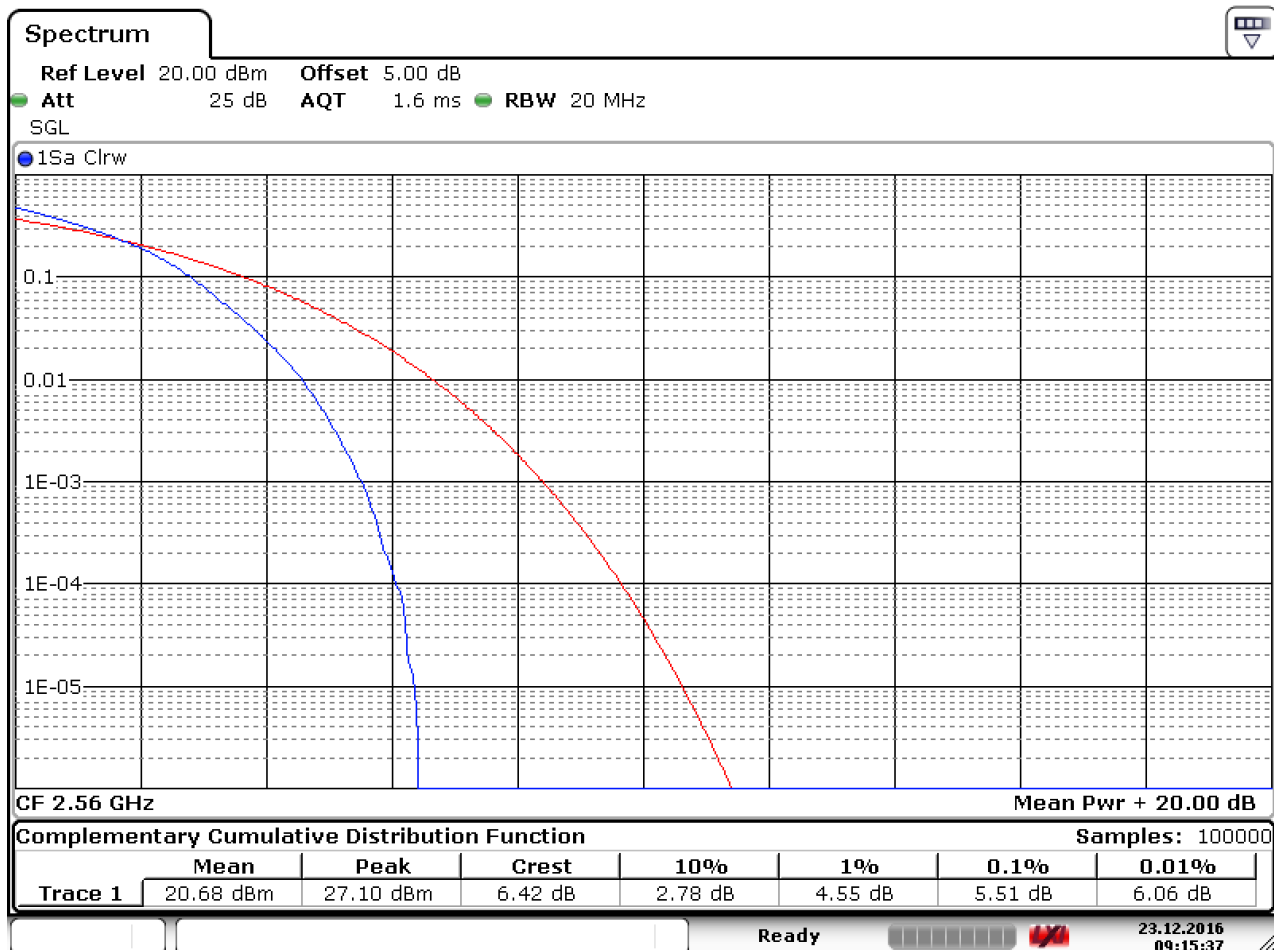
3   Modulation Characteristics

Part I - Test Plots

3.1 For LTE

3.1.1 Test Band = LTE band7

3.1.1.1   Test Mode = LTE /TM1 5MHz

3.1.1.1.1   Test Channel = MCH
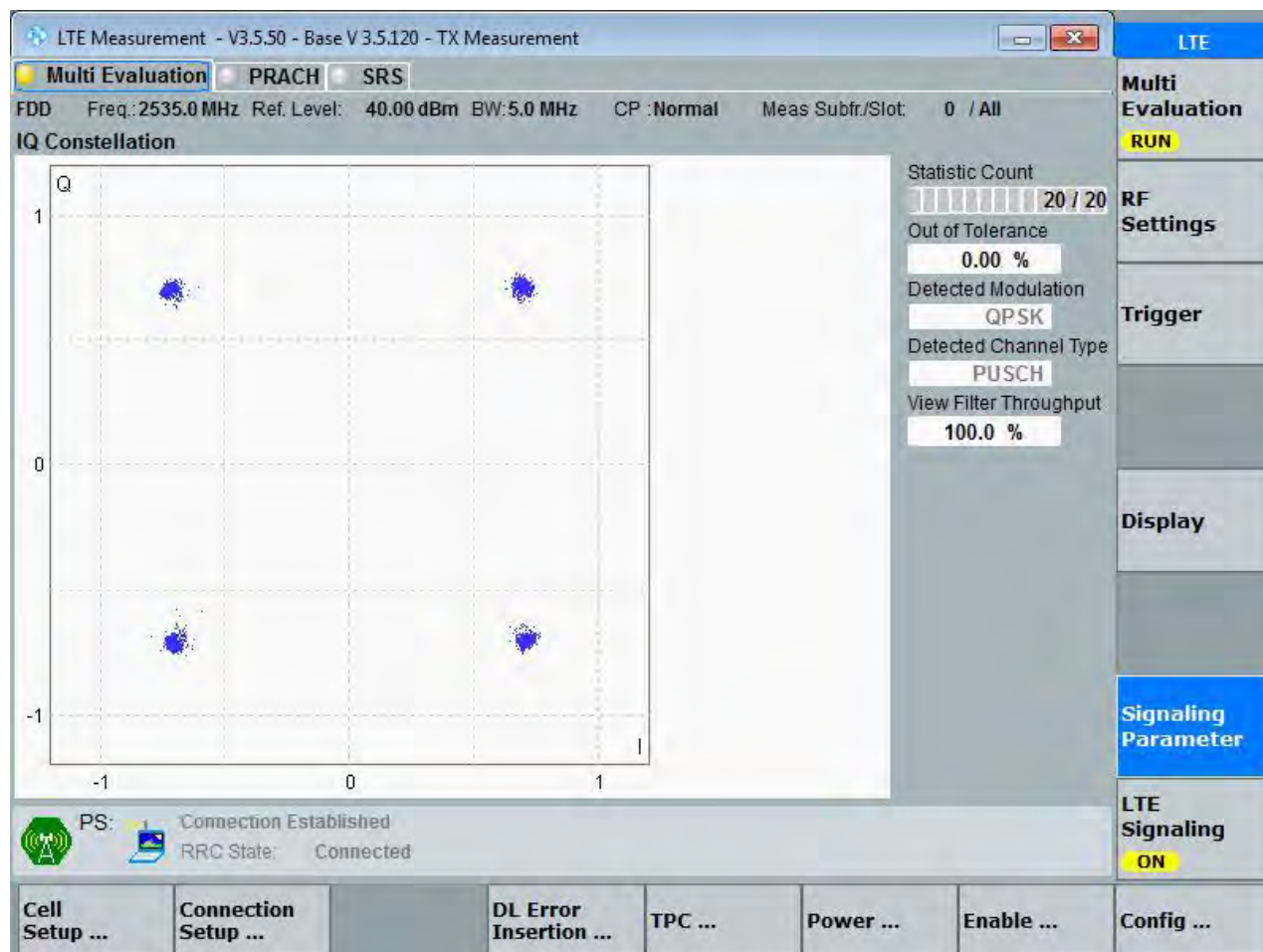
3.1.1.2 Test Mode = LTE /TM1 10MHz

3.1.1.2.1 Test Channel = MCH
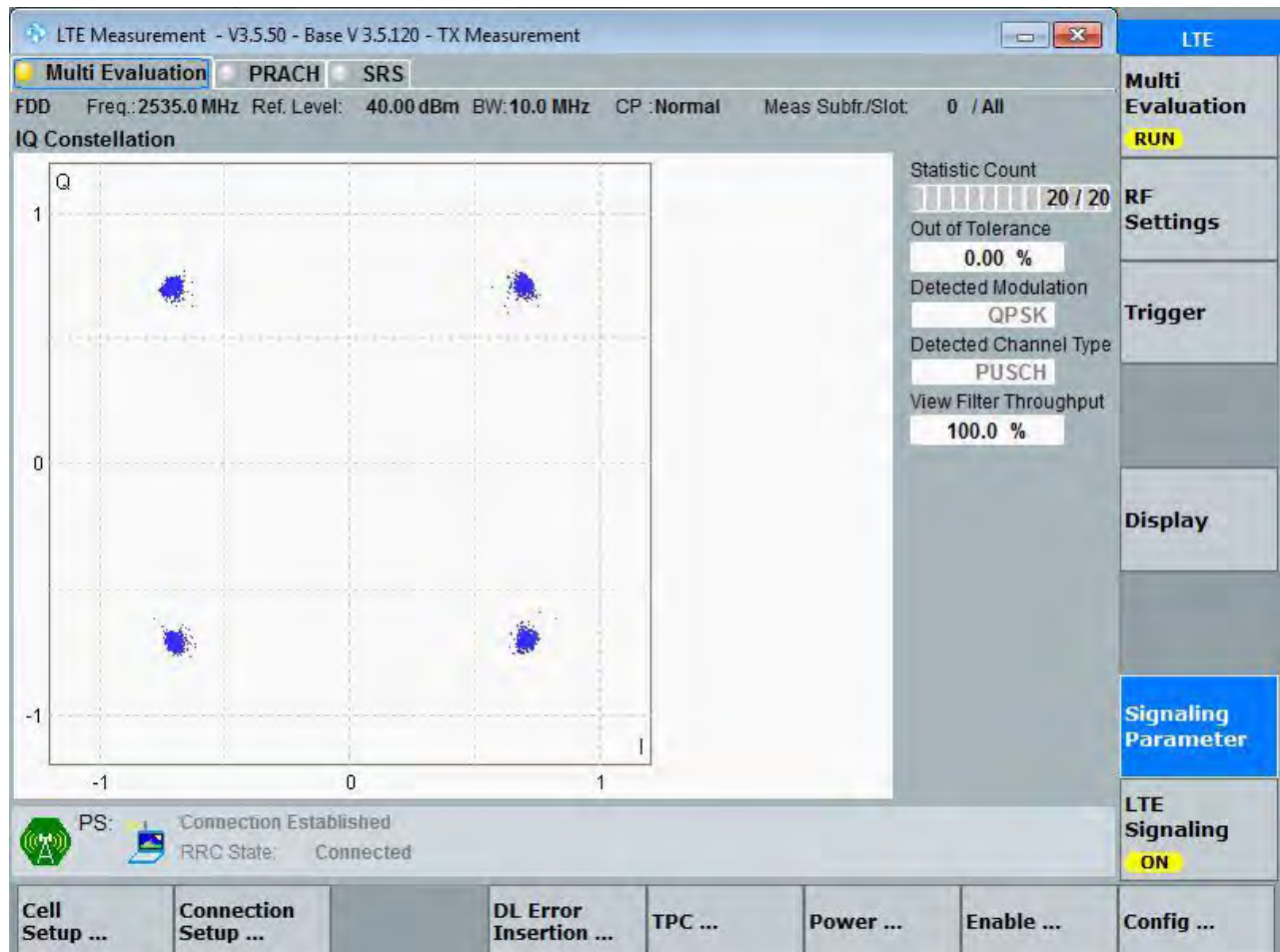
3.1.1.3   Test Mode = LTE /TM1 15MHz

3.1.1.3.1   Test Channel = MCH
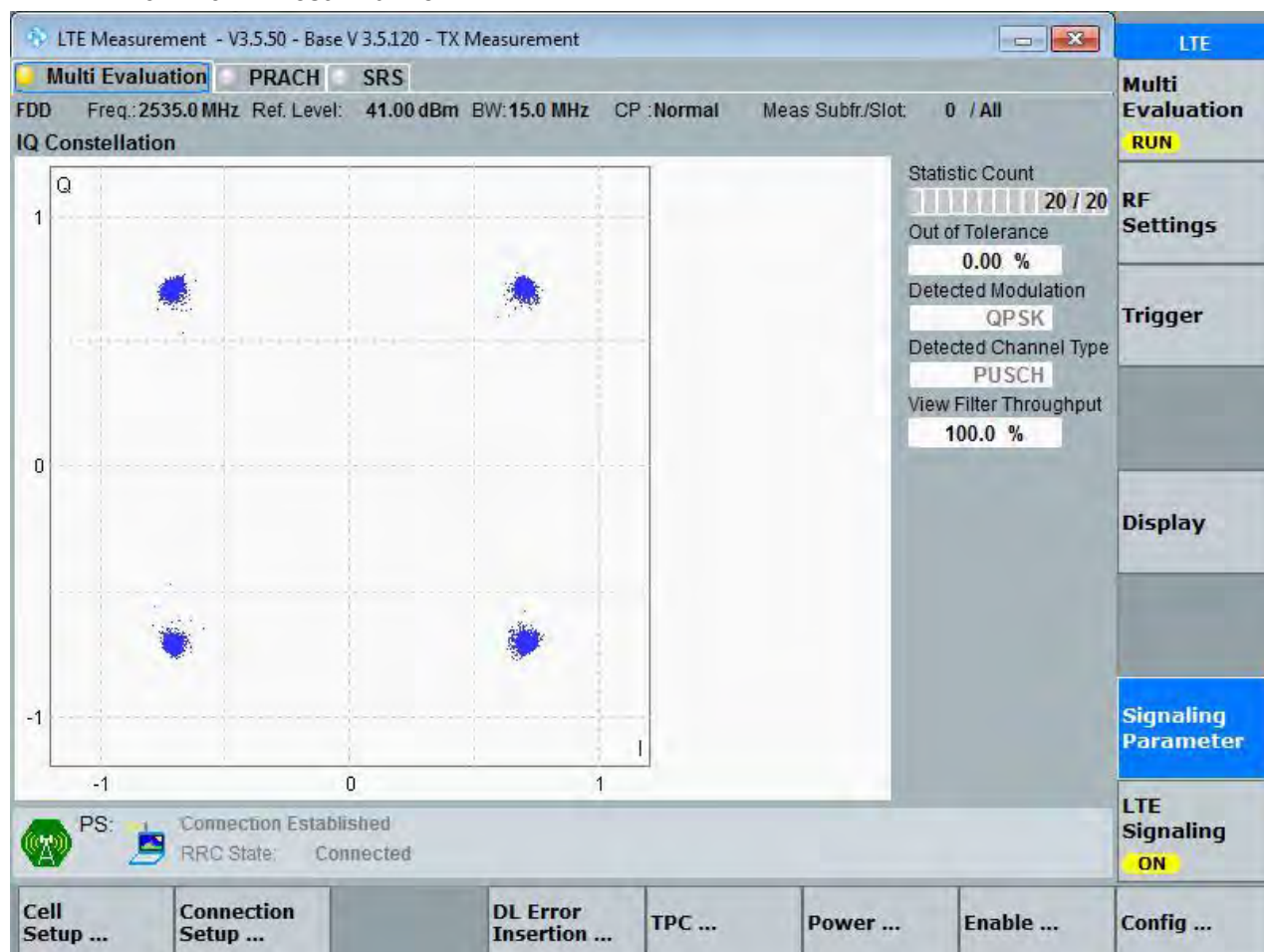
3.1.1.4   Test Mode = LTE /TM1 20MHz

3.1.1.4.1   Test Channel = MCH
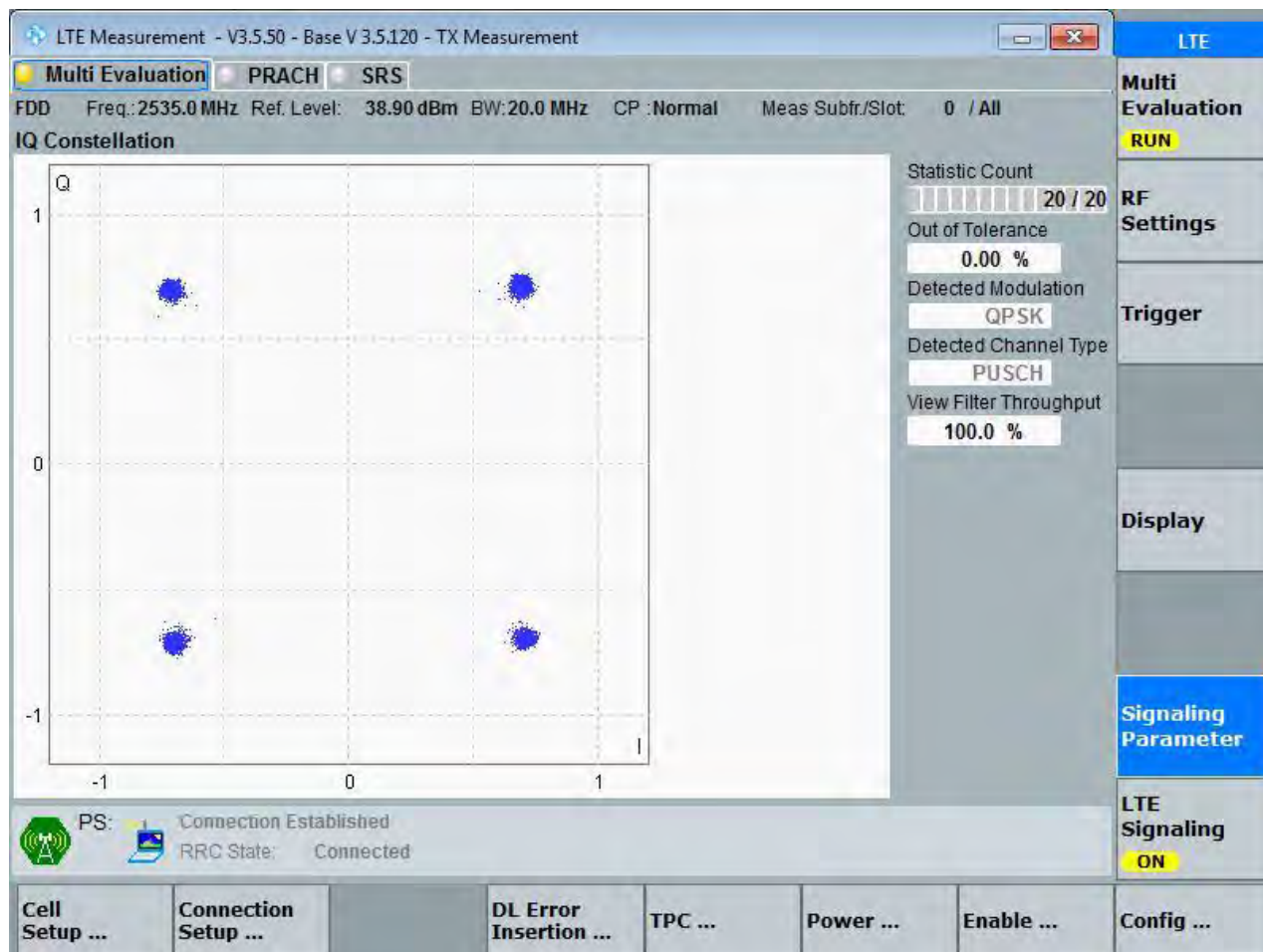
3.1.1.5   Test Mode = LTE /TM2 5MHz

3.1.1.5.1   Test Channel = MCH
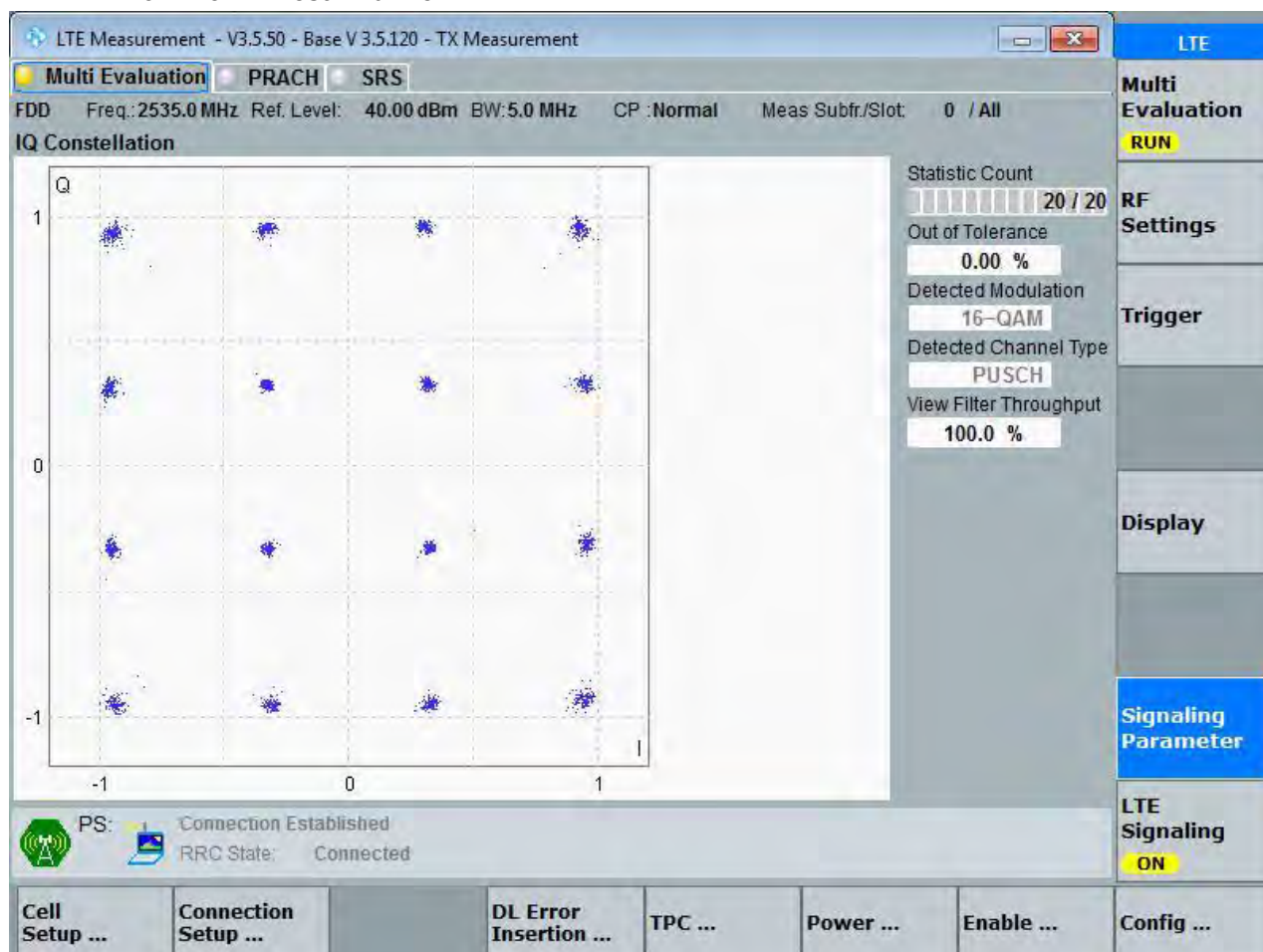
3.1.1.6   Test Mode = LTE /TM2 10MHz

3.1.1.6.1   Test Channel = MCH
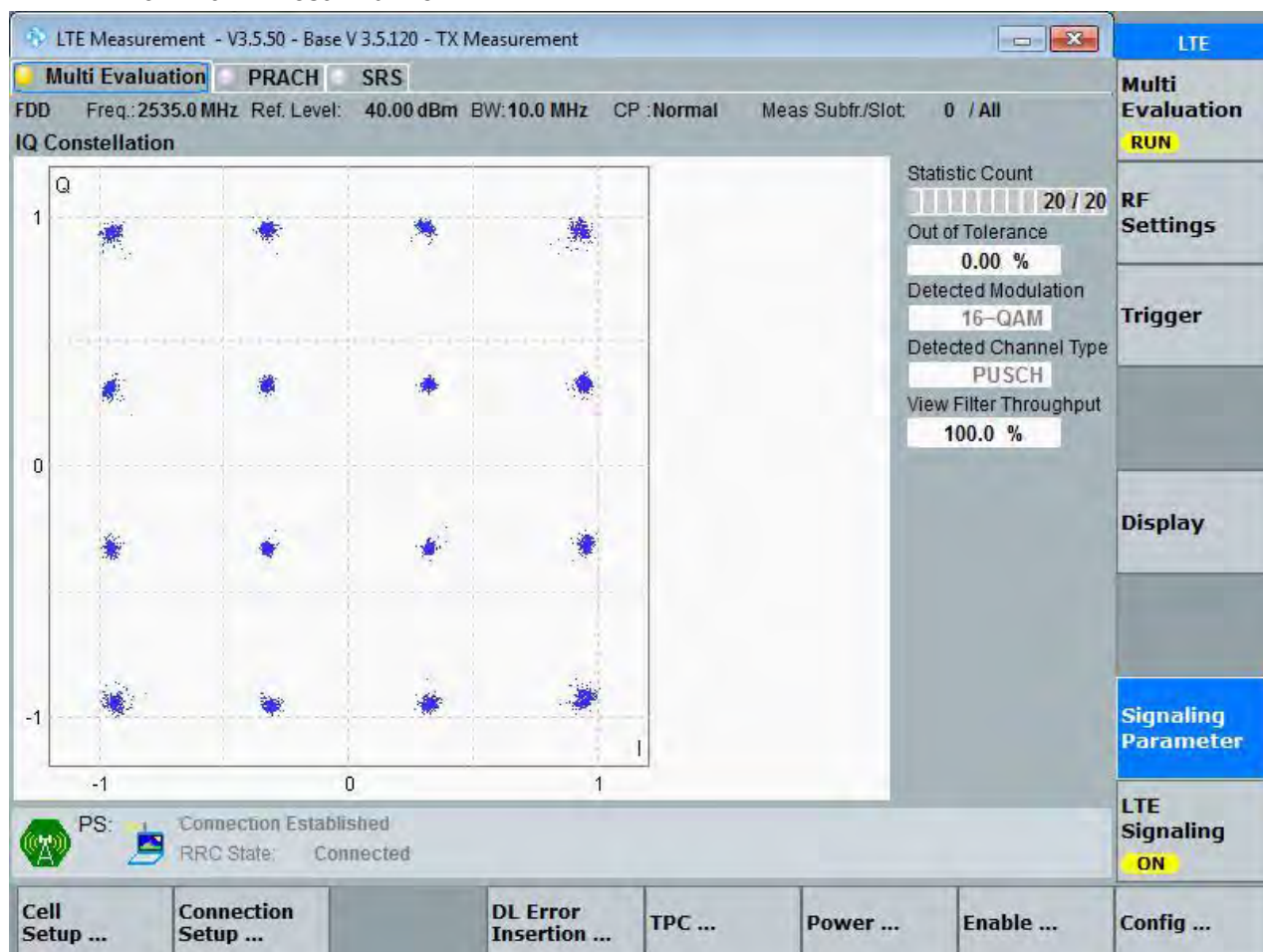
3.1.1.7 Test Mode = LTE /TM2 15MHz

3.1.1.7.1 Test Channel = MCH
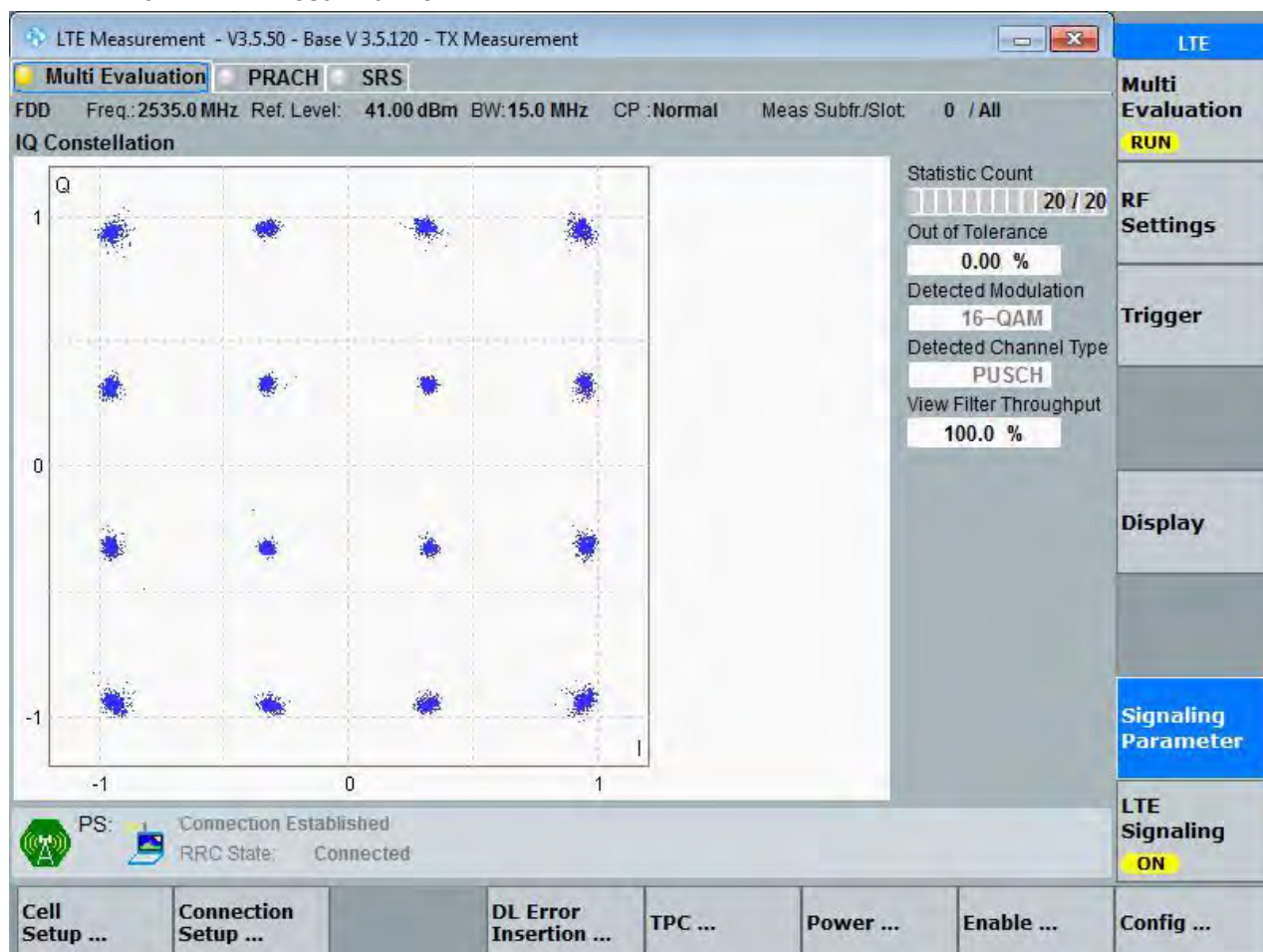
3.1.1.8   Test Mode = LTE /TM2 20MHz

3.1.1.8.1   Test Channel = MCH

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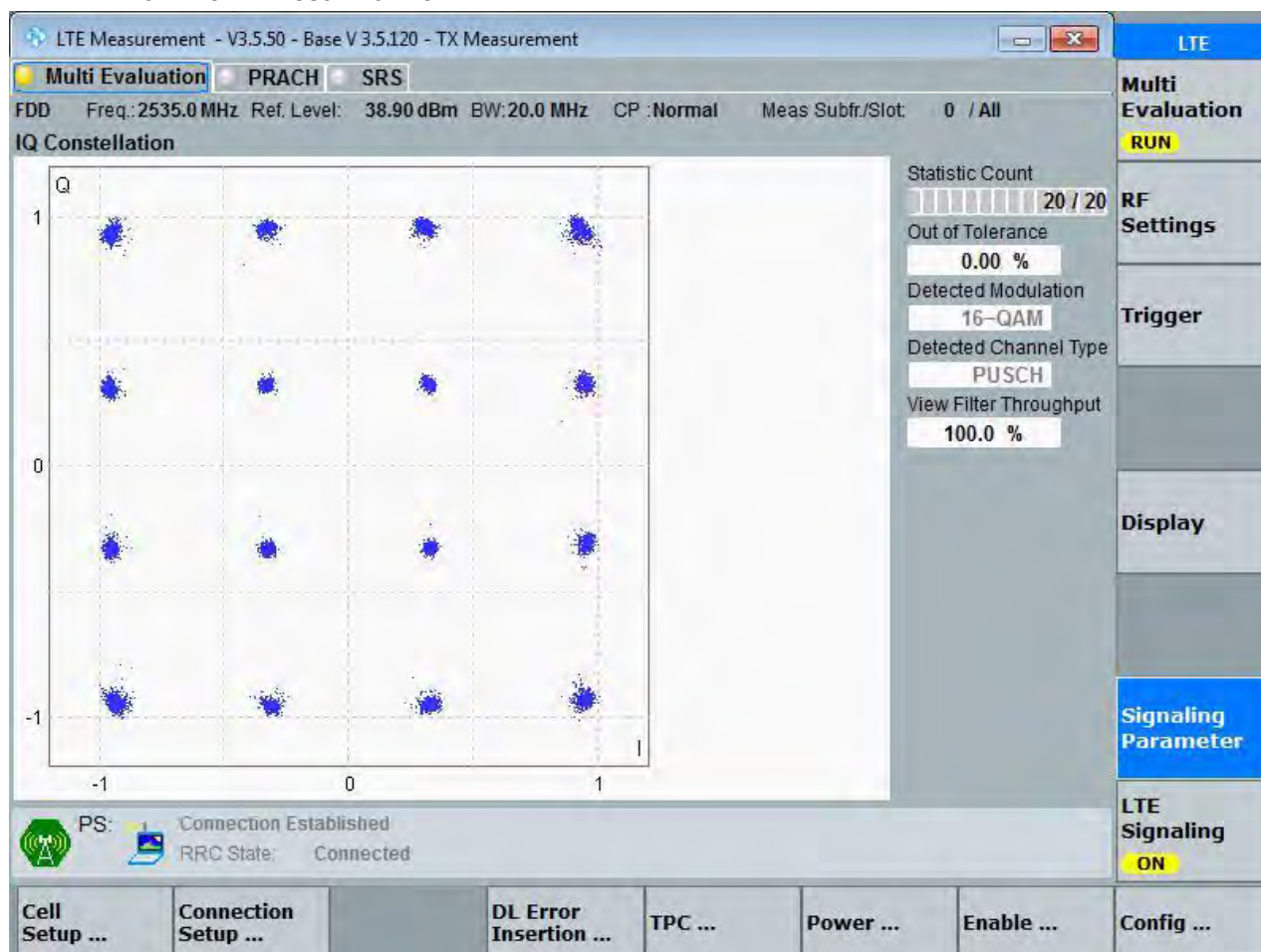
4 Bandwidth

Part I - Test Results

Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
Band 7	TM1/ 5MHz	LCH	4.50	5.00	PASS
		MCH	4.50	5.00	PASS
		HCH	4.48	5.00	PASS
	TM2/ 5MHz	LCH	4.50	5.00	PASS
		MCH	4.49	4.95	PASS
		HCH	4.49	5.00	PASS
	TM1/10MHz	LCH	8.95	9.73	PASS
		MCH	8.97	9.88	PASS
		HCH	8.95	9.79	PASS
	TM2/ 10MHz	LCH	8.95	9.77	PASS
		MCH	8.95	9.66	PASS
		HCH	8.97	9.75	PASS
	TM1/ 15MHz	LCH	13.49	15.02	PASS
		MCH	13.49	14.98	PASS
		HCH	13.49	15.02	PASS
	TM2/ 15MHz	LCH	13.55	14.90	PASS
		MCH	13.49	14.83	PASS
		HCH	13.49	14.99	PASS
	TM1/ 20MHz	LCH	17.94	19.62	PASS
		MCH	17.94	19.42	PASS
		HCH	17.98	19.66	PASS
	TM2/ 20MHz	LCH	17.98	19.74	PASS
		MCH	17.94	19.46	PASS
		HCH	17.90	19.46	PASS

4.1 For LTE

4.1.1 Test Band = LTE band7

4.1.1.1   Test Mode = LTE/TM1 5MHz

4.1.1.1.1   Test Channel = LCH
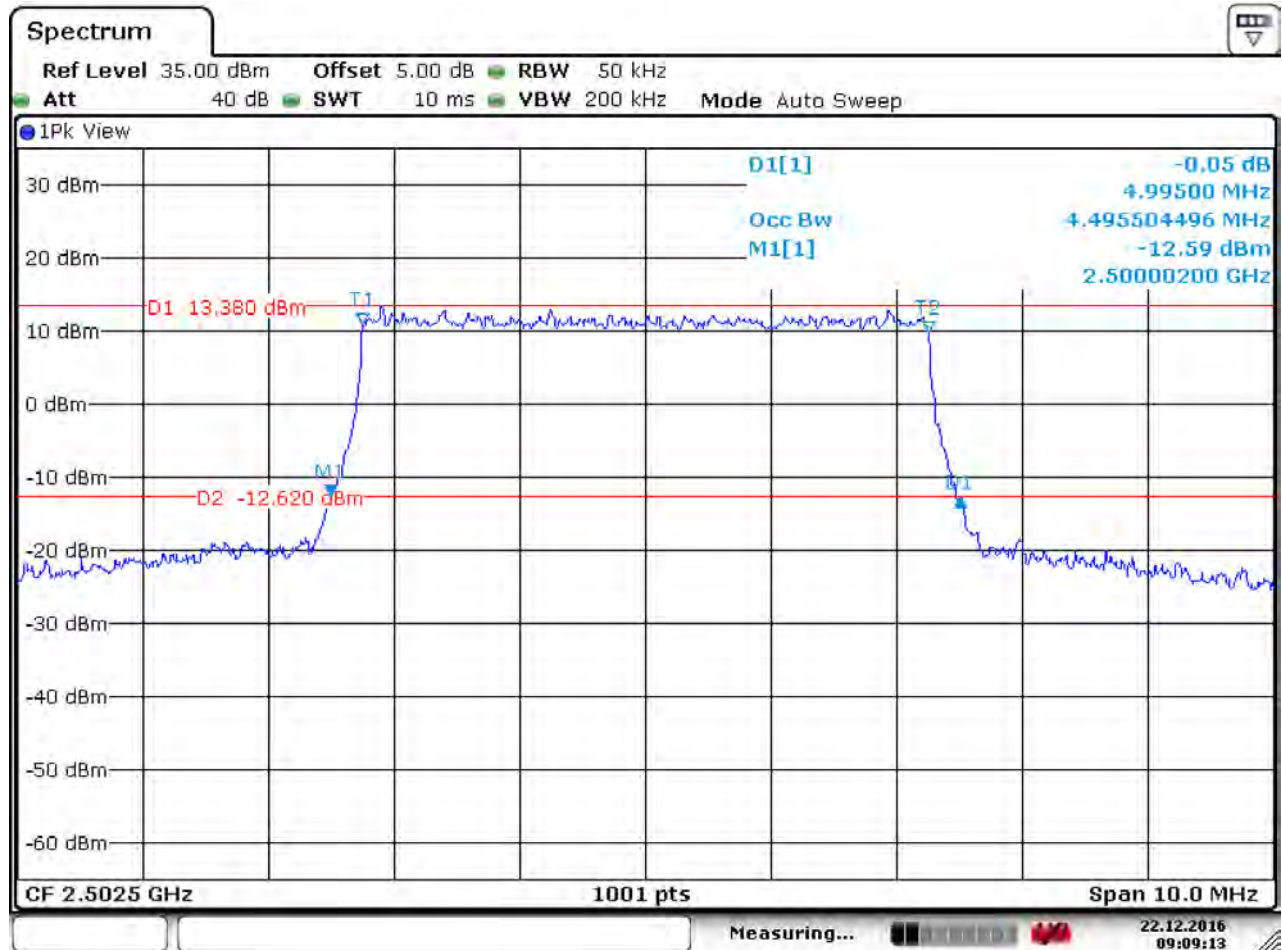
Date: 22.DEC.2016 09:09:14

4.1.1.1.2　Test Channel = MCH


```
Spectrum

Ref Level 35.00 dBm    Offset 5.00 dB  ● RBW   50 kHz
● Att          40 dB  ● SWT   10 ms  ● VBW  200 kHz   Mode Auto Sweep
● 1Pk View
                                              D1[1]              -1.26 dB
30 dBm                                                         5.00500 MHz
                                              Occ Bw        4.495504496 MHz
20 dBm                                        M1[1]             -11.39 dBm
                                                             2.53250200 GHz
     D1 13.760 dBm     T1                            T2
10 dBm

0 dBm

-10 dBm          M1
     D2 -12.240 dBm                                   D1
-20 dBm

-30 dBm

-40 dBm

-50 dBm

-60 dBm

CF 2.535 GHz                    1001 pts                    Span 10.0 MHz

                              Measuring...              22.12.2016
                                                        09:01:36
```
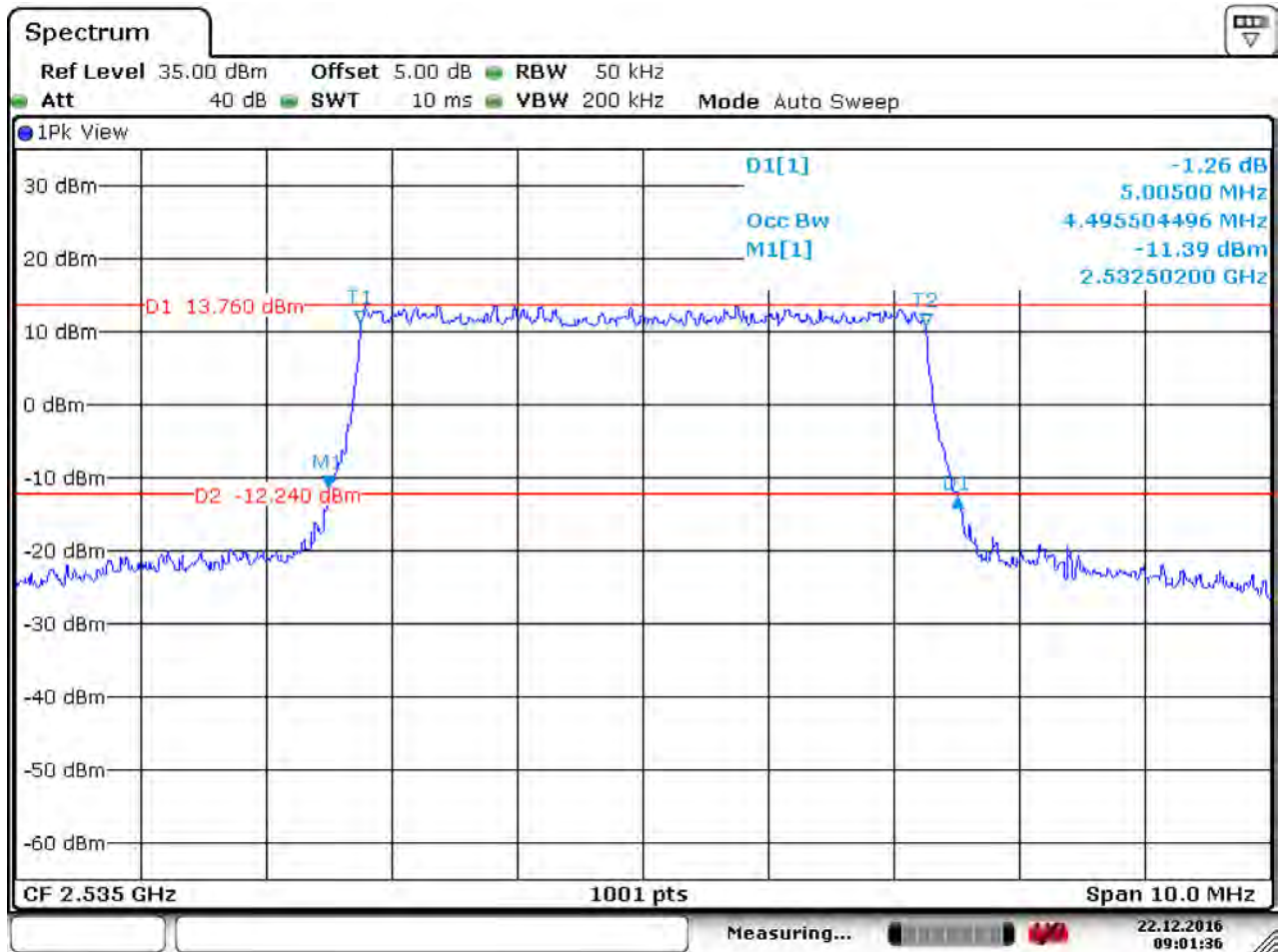
Date: 22.DEC.2016　09:01:37

4.1.1.1.3   Test Channel = HCH

Spectrum

| Ref Level 35.00 dBm | Offset 5.00 dB | RBW 50 kHz |
| Att 40 dB | SWT 10 ms | VBW 200 kHz | Mode Auto Sweep |

1Pk View

D1[1]   -0.20 dB
                            4.99500 MHz
Occ Bw   4.475524476 MHz
M1[1]   -12.05 dBm
                           2.56499300 GHz

D1 13.850 dBm

D2 -12.150 dBm

CF 2.5675 GHz   1001 pts   Span 10.0 MHz

Measuring...   22.12.2016 09:10:48

Date: 22.DEC.2016 09:10:48

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch
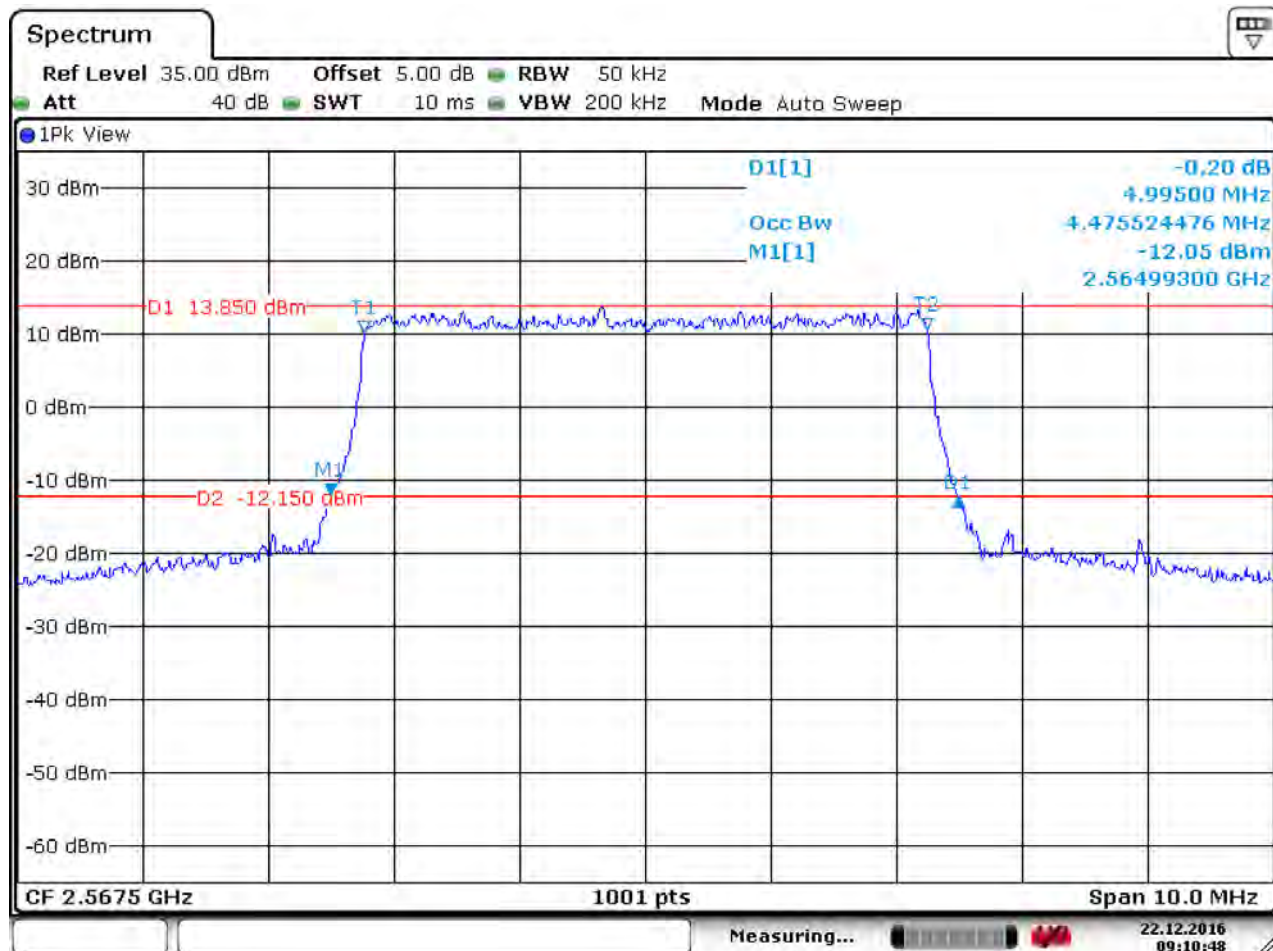
4.1.1.2   Test Mode = LTE/TM2 5MHz

4.1.1.2.1   Test Channel = LCH
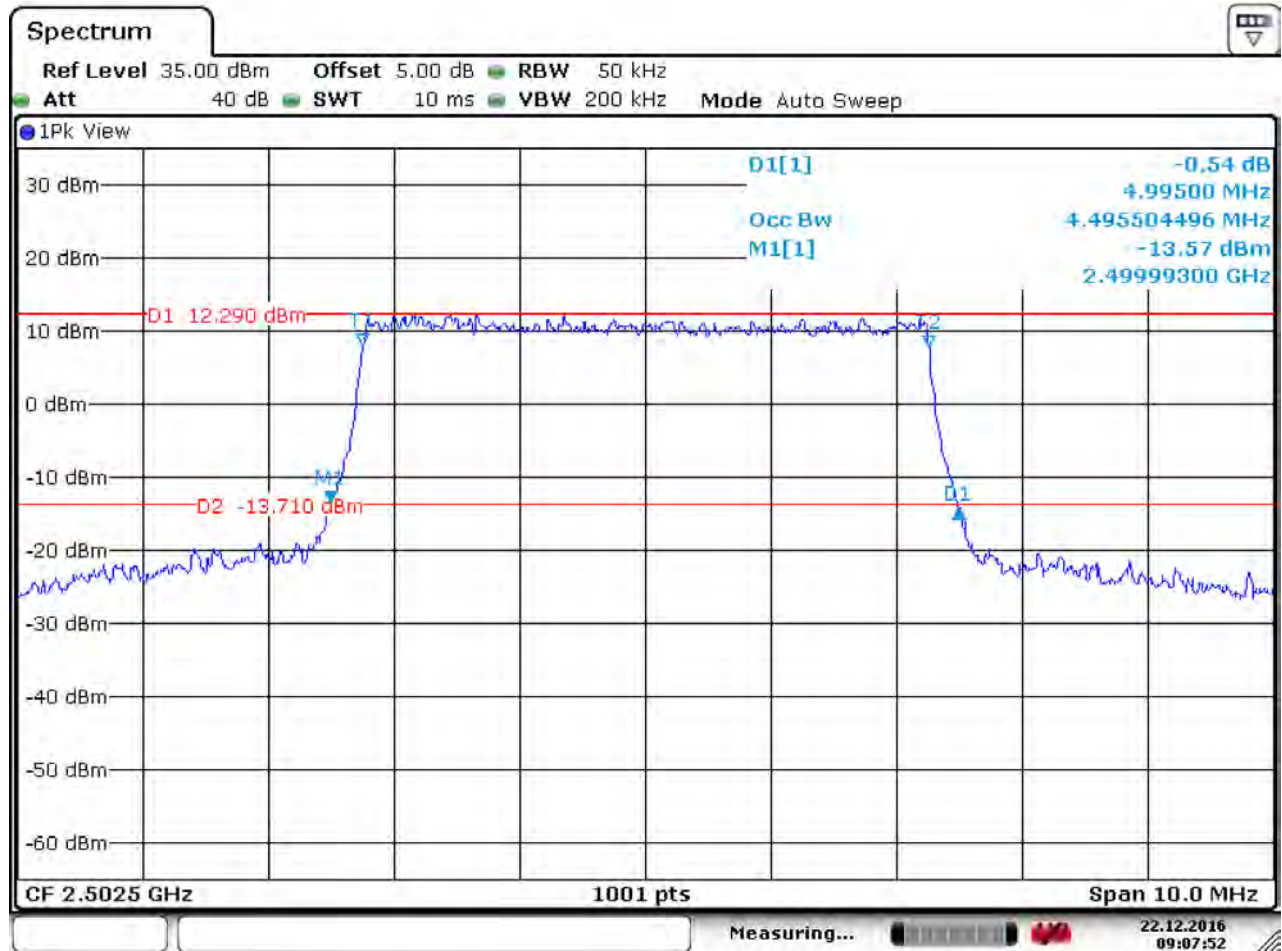
Date: 22.DEC.2016 09:07:52

4.1.1.2.2   Test Channel = MCH

Spectrum

Ref Level 35.00 dBm	Offset 5.00 dB	RBW 50 kHz
Att 40 dB	SWT 10 ms	VBW 200 kHz Mode Auto Sweep

1Pk View

D1[1]   -0.01 dB
                         4.94500 MHz
Occ Bw   4.485514486 MHz
M1[1]   -11.56 dBm
                      2.53253200 GHz

D1 14.360 dBm

D2 -11.640 dBm

CF 2.535 GHz   1001 pts   Span 10.0 MHz

Measuring...   22.12.2016 09:03:42
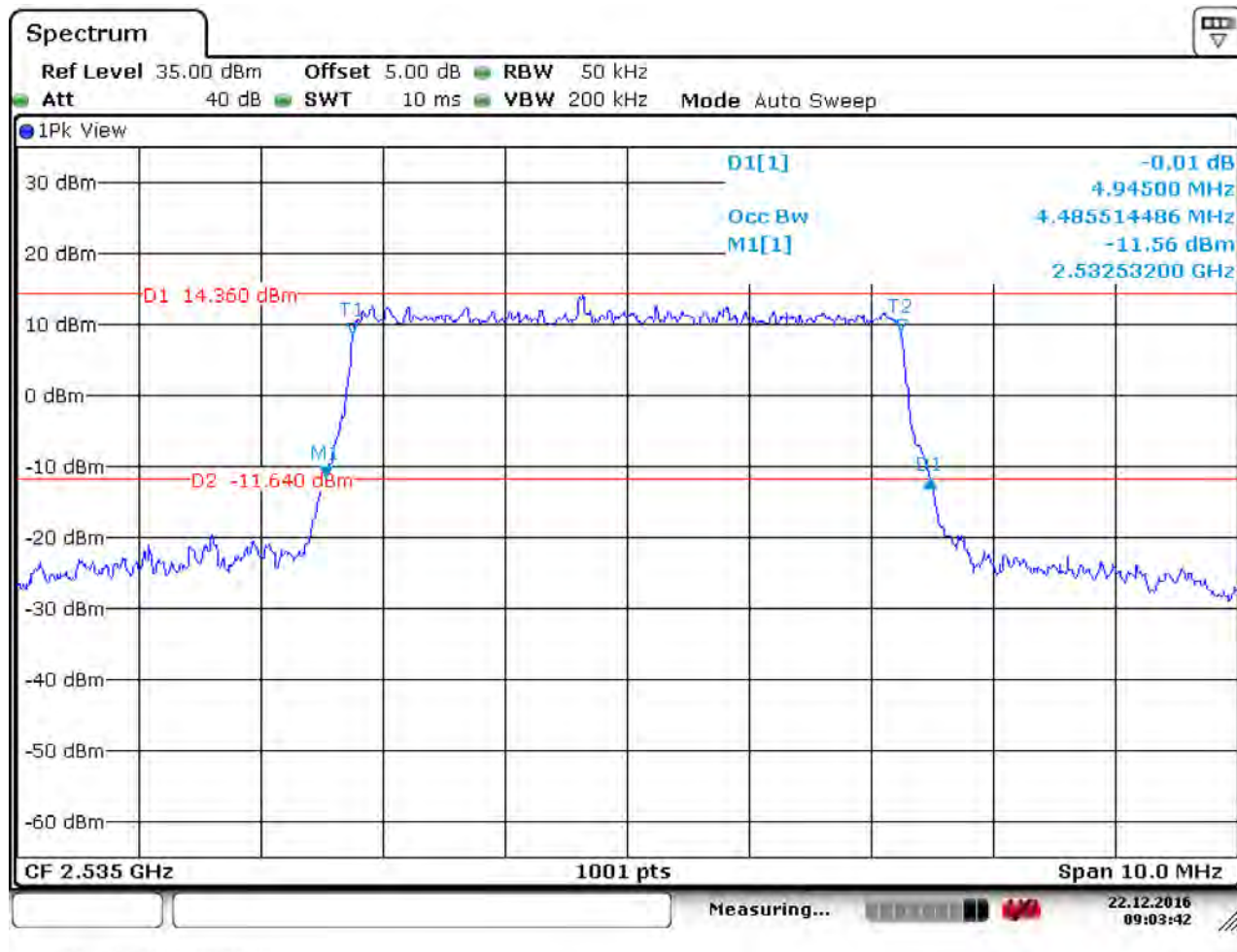
Date: 22.DEC.2016 09:03:42

4.1.1.2.3   Test Channel = HCH
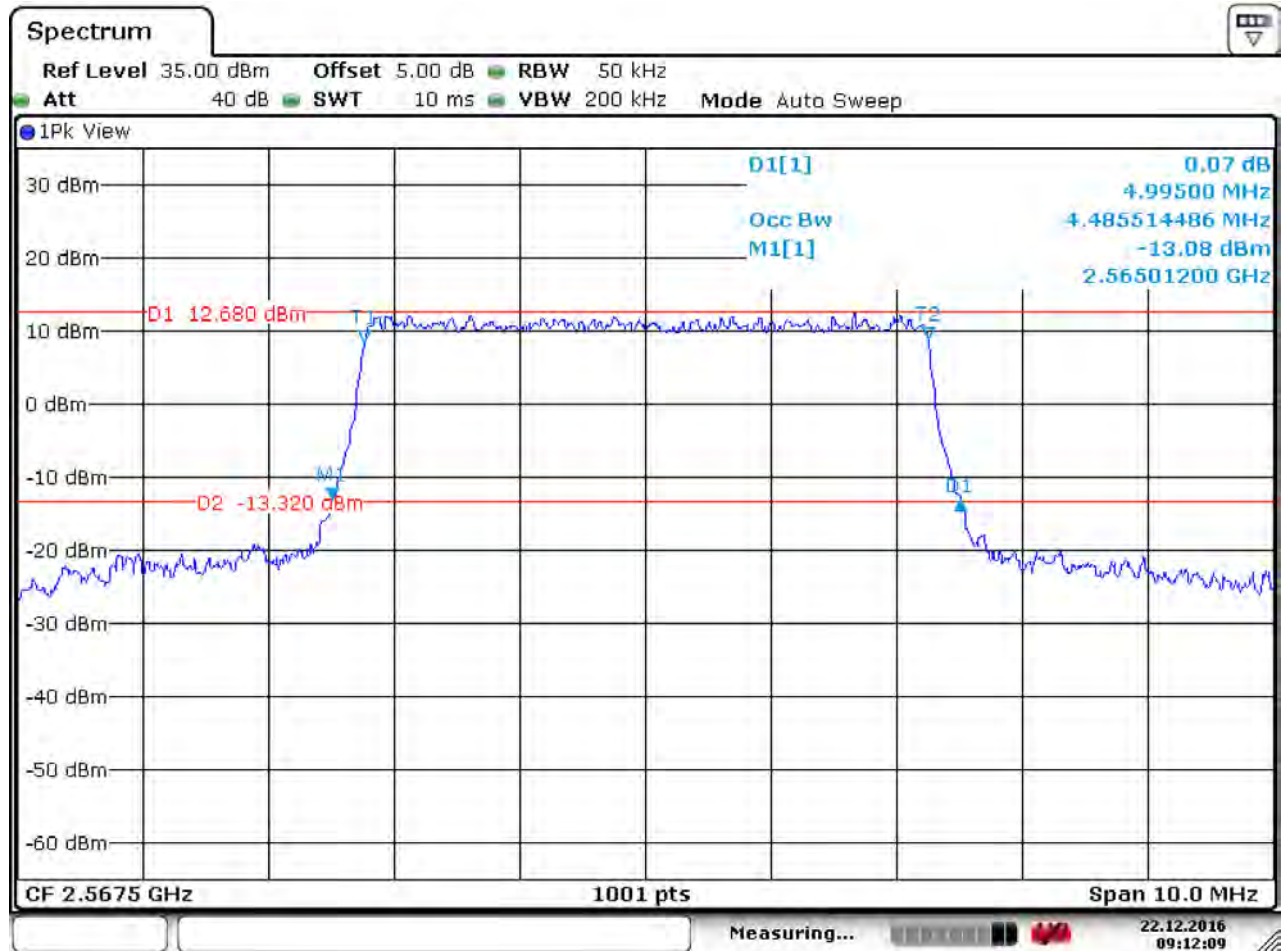
Date: 22.DEC.2016 09:12:09

4.1.1.3 Test Mode = LTE/TM1 10MHz

4.1.1.3.1 Test Channel = LCH
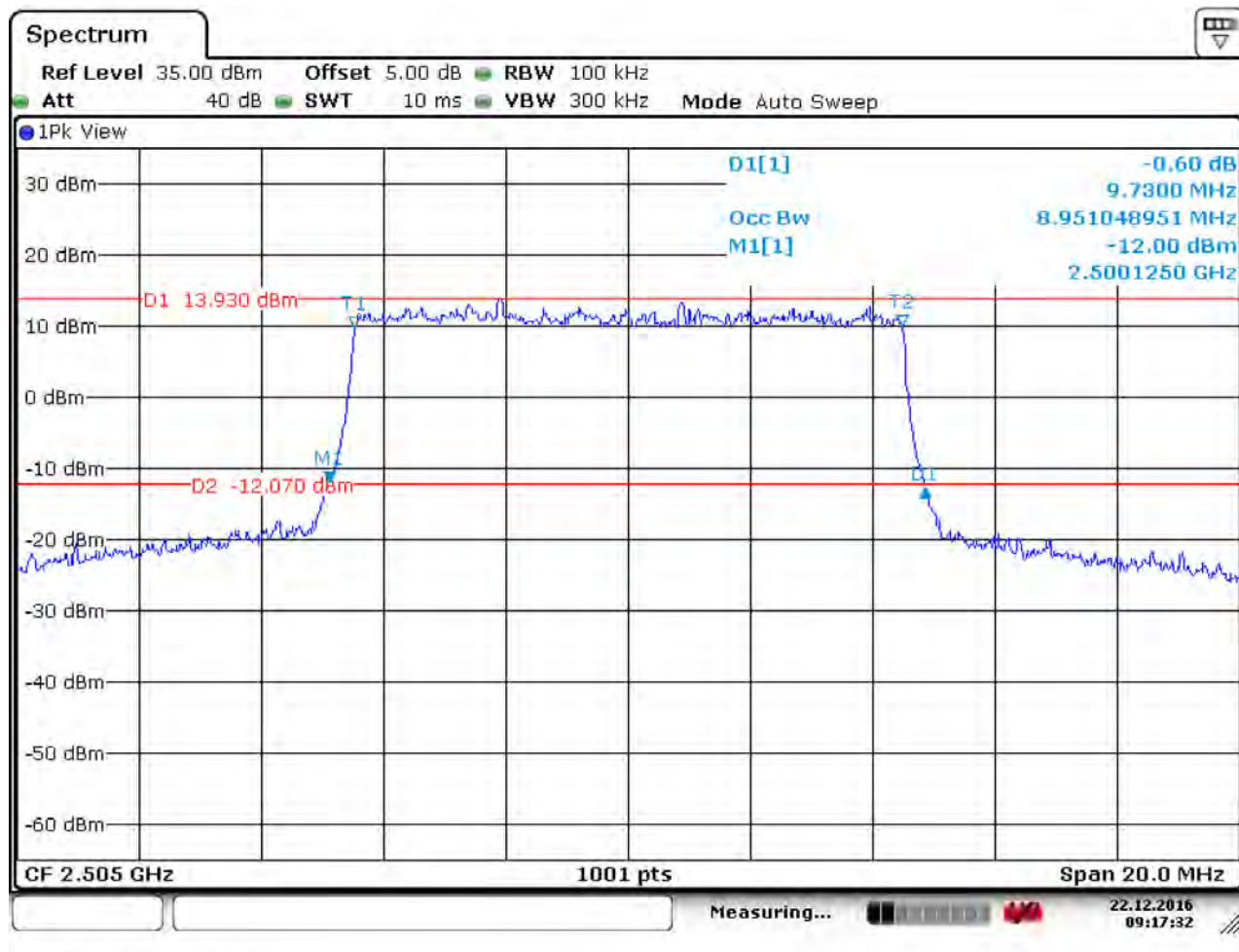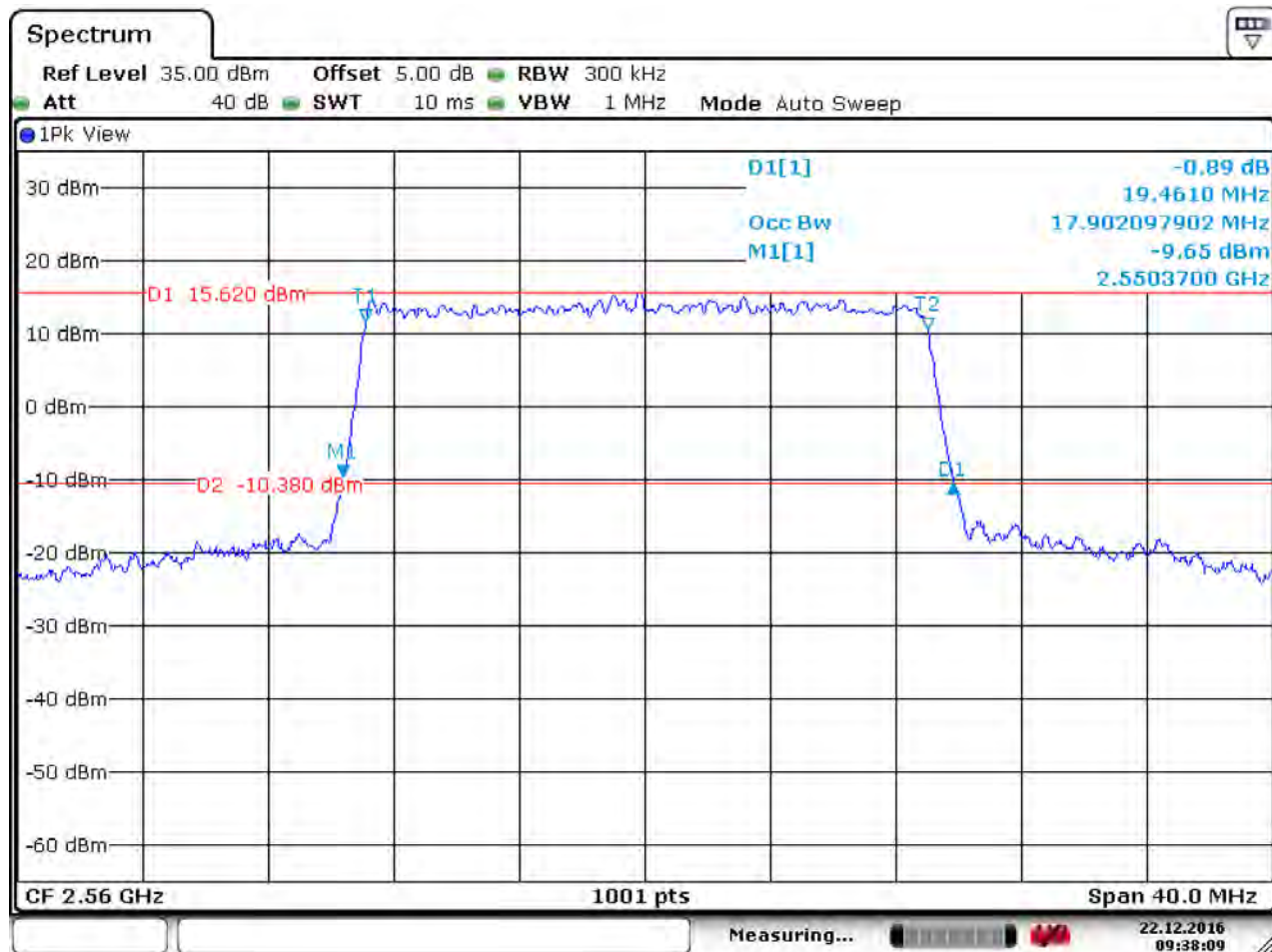

Date: 22.DEC.2016 09:17:32

4.1.1.3.2   Test Channel = MCH
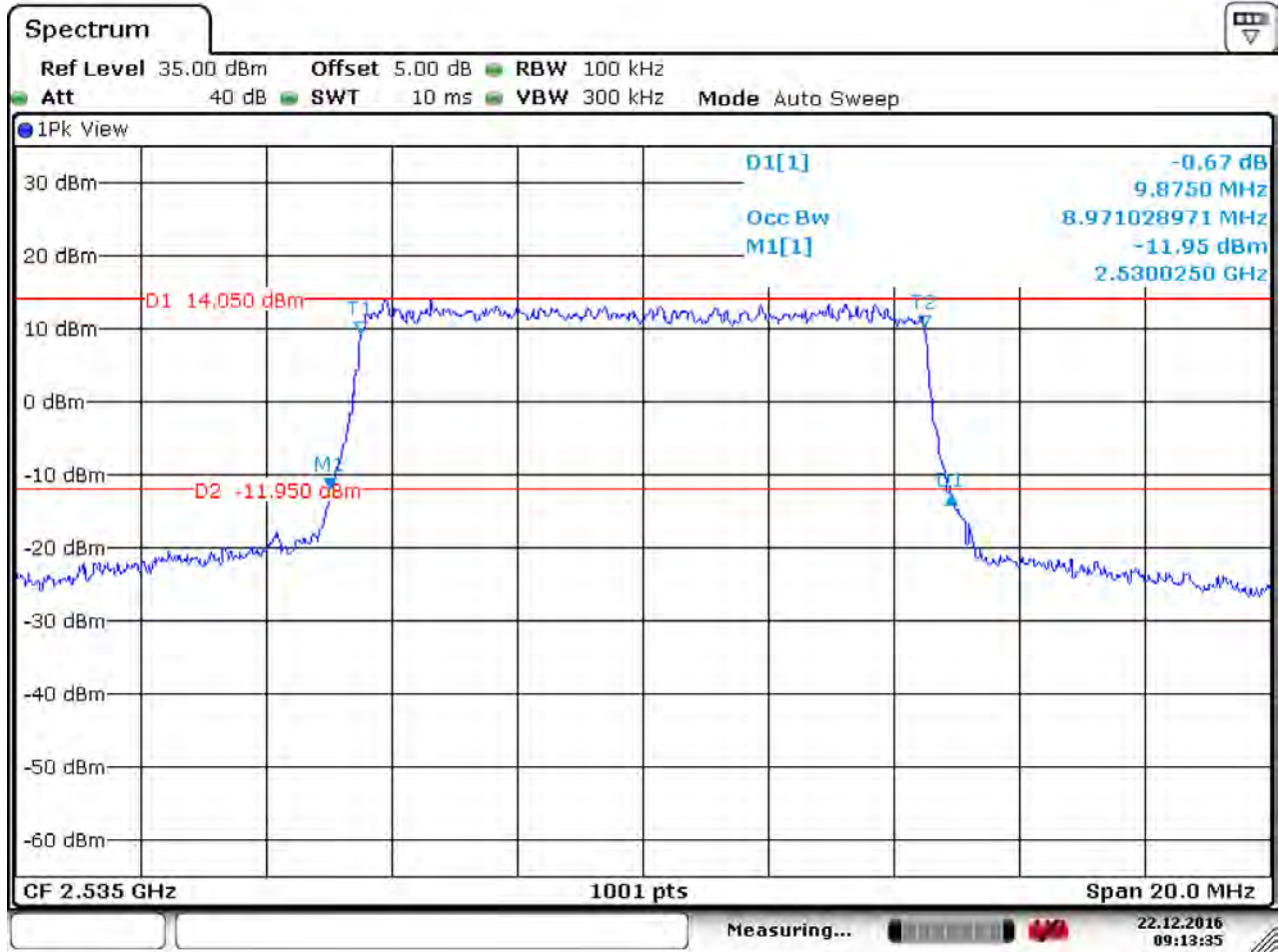
Date: 22.DEC.2016 09:13:35

4.1.1.3.3   Test Channel = HCH
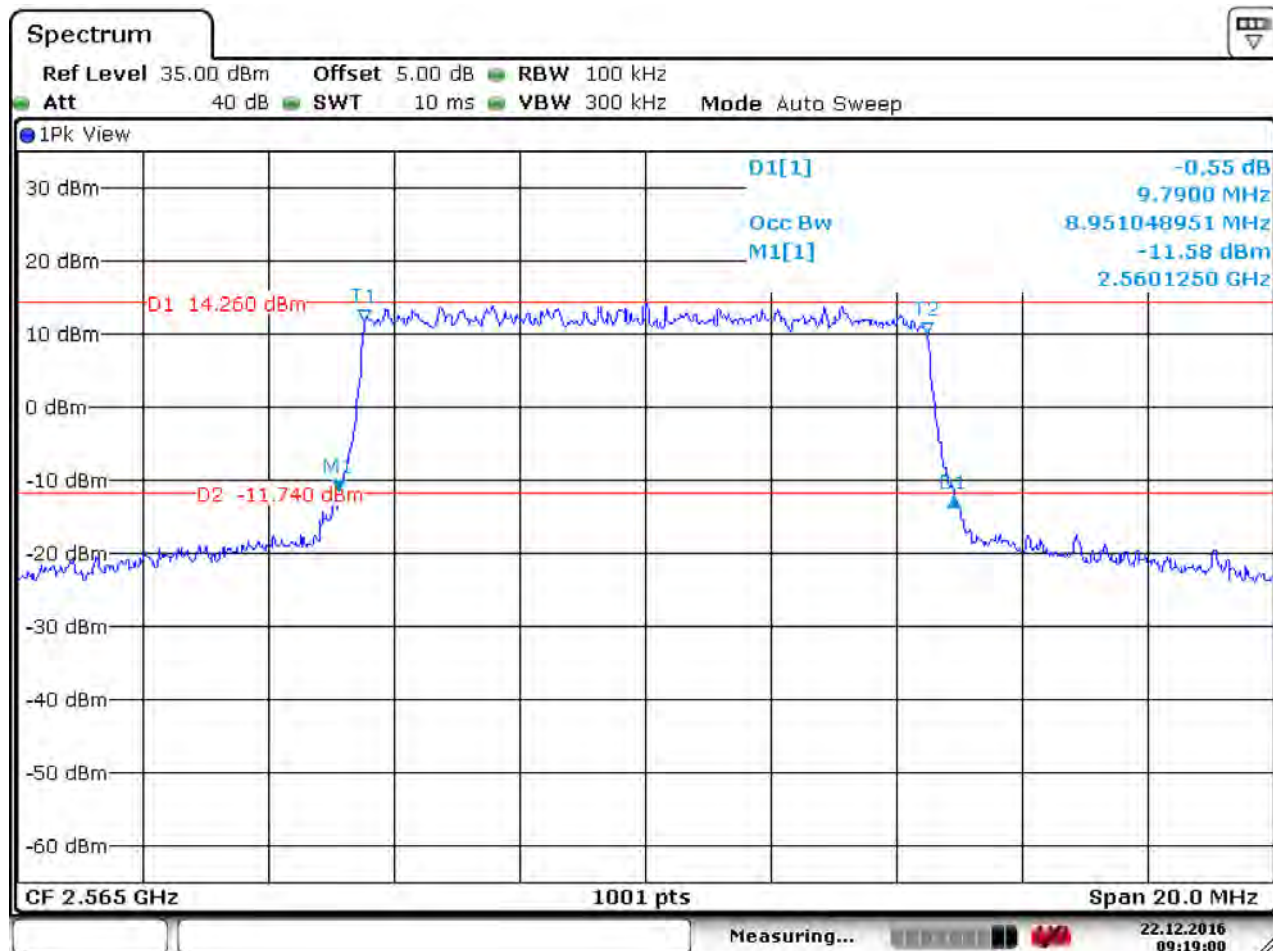
Date: 22.DEC.2016 09:19:00

4.1.1.4   Test Mode = LTE/TM2 10MHz

4.1.1.4.1   Test Channel = LCH
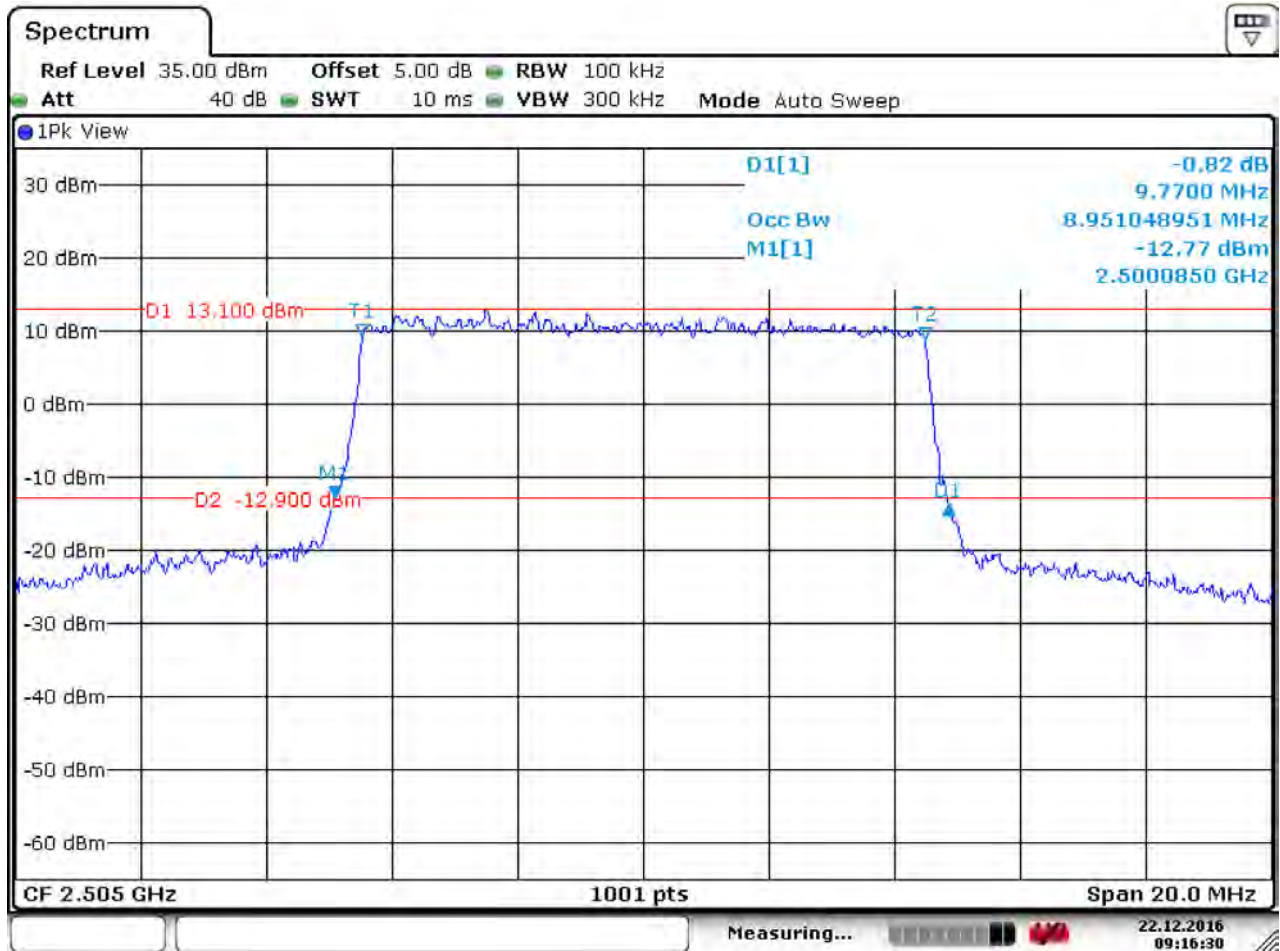
Date: 22.DEC.2016 09:16:31

4.1.1.4.2   Test Channel = MCH
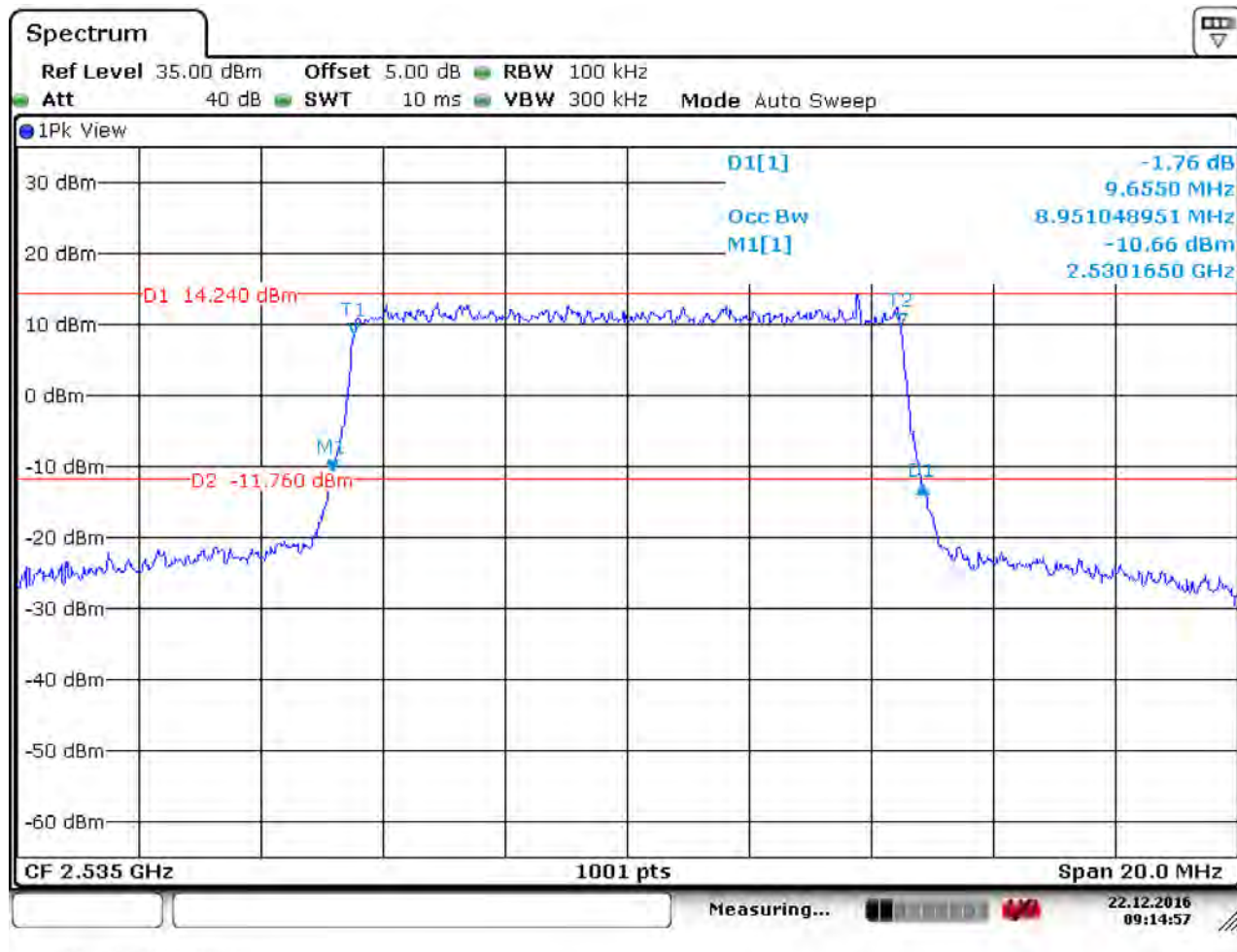
Date: 22.DEC.2016 09:14:58

4.1.1.4.3   Test Channel = HCH


```
Spectrum
Ref Level 35.00 dBm    Offset 5.00 dB    RBW 100 kHz
Att        40 dB    SWT    10 ms    VBW 300 kHz    Mode Auto Sweep
1Pk View
                                          D1[1]              -0.47 dB
30 dBm                                                      9.7500 MHz
                                          Occ Bw        8.971028971 MHz
20 dBm                                    M1[1]             -12.07 dBm
                                                          2.5601450 GHz
D1 13.770 dBm
10 dBm
0 dBm
-10 dBm
D2 -12.230 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
CF 2.565 GHz                     1001 pts              Span 20.0 MHz
                         Measuring...              22.12.2016
                                                   09:20:25
```

Date: 22.DEC.2016 09:20:25

![SGS logo]

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch
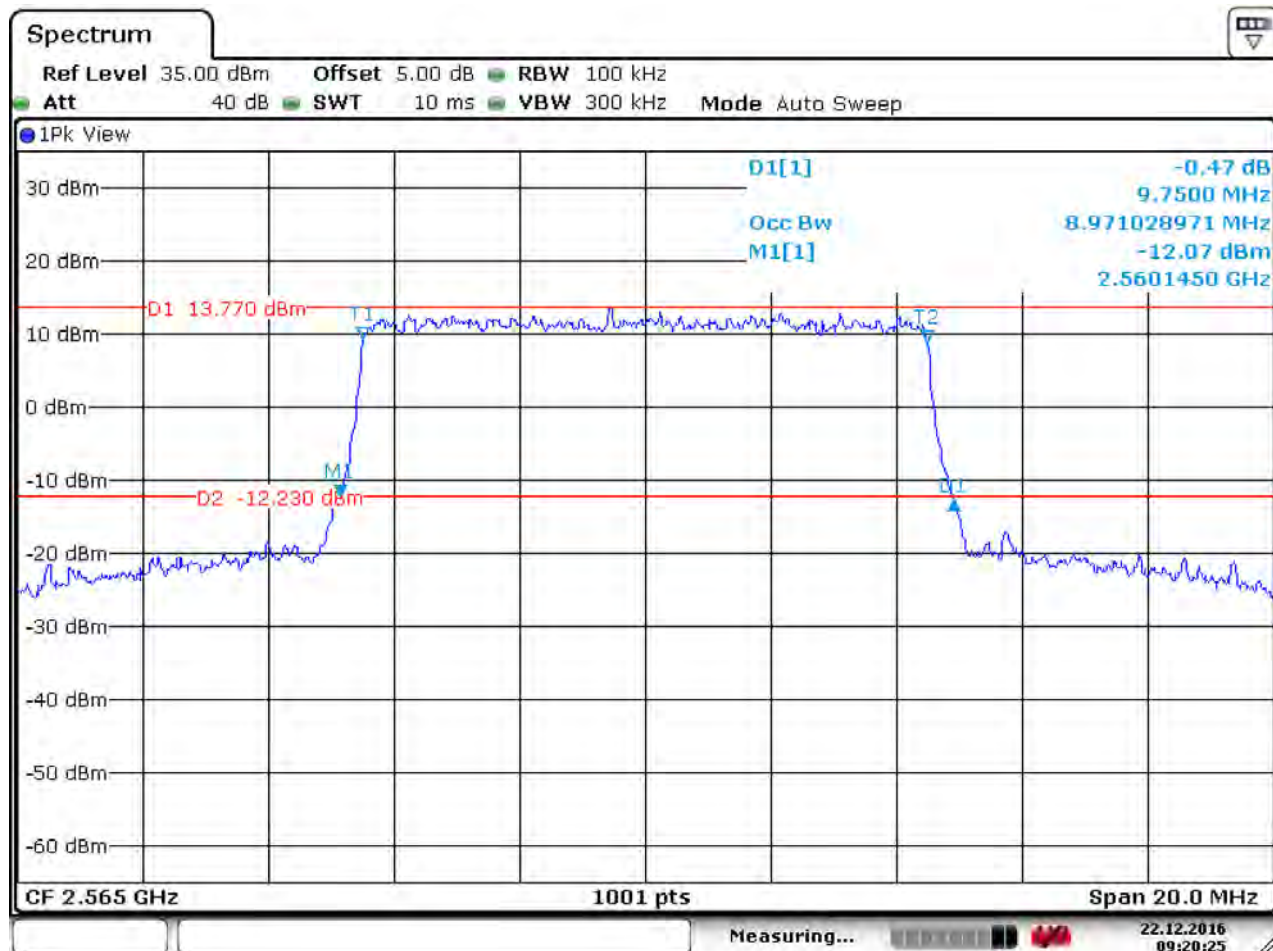
4.1.1.5   Test Mode = LTE/TM1 15MHz

4.1.1.5.1   Test Channel = LCH
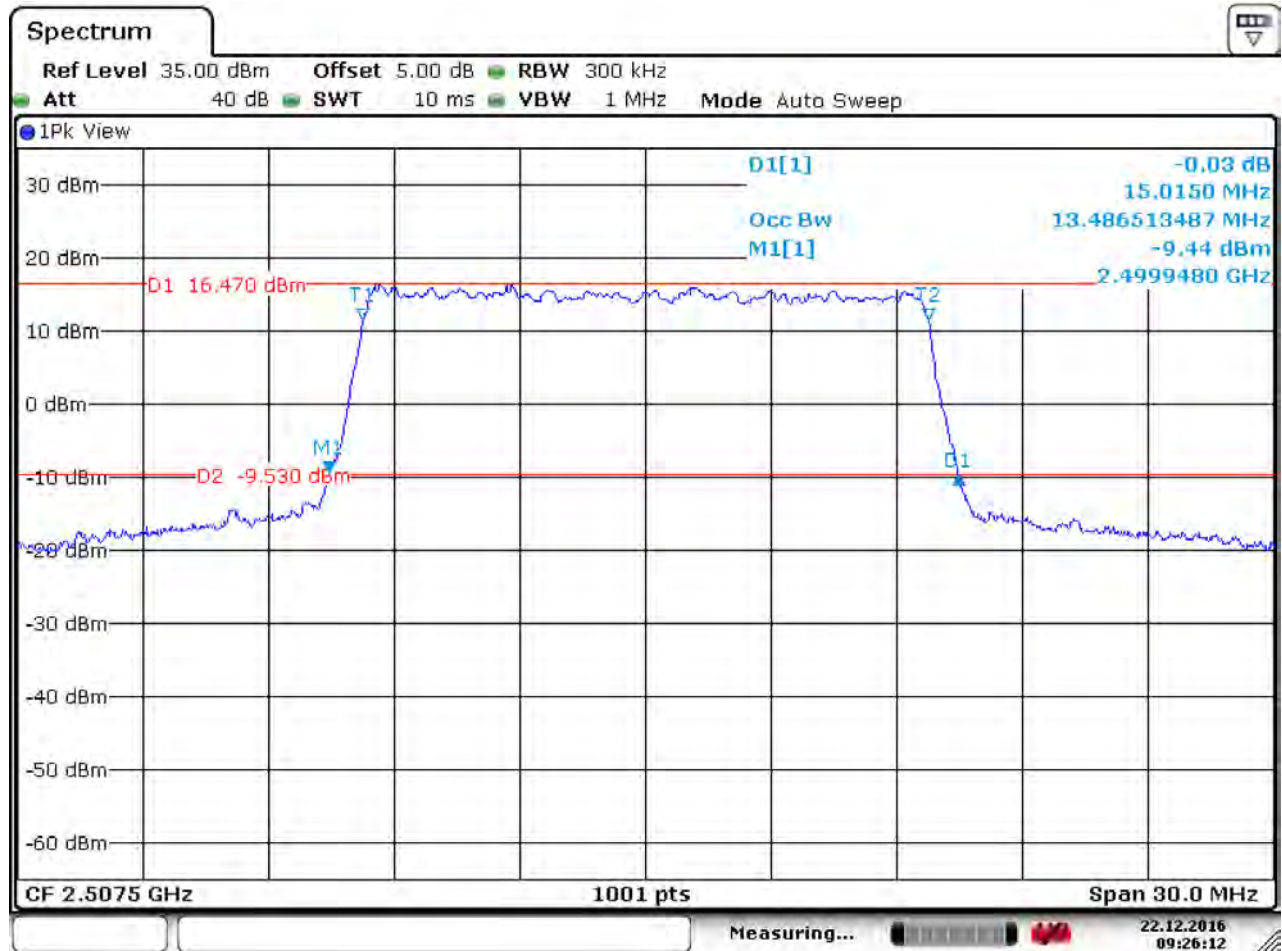
4.1.1.5.2   Test Channel = MCH
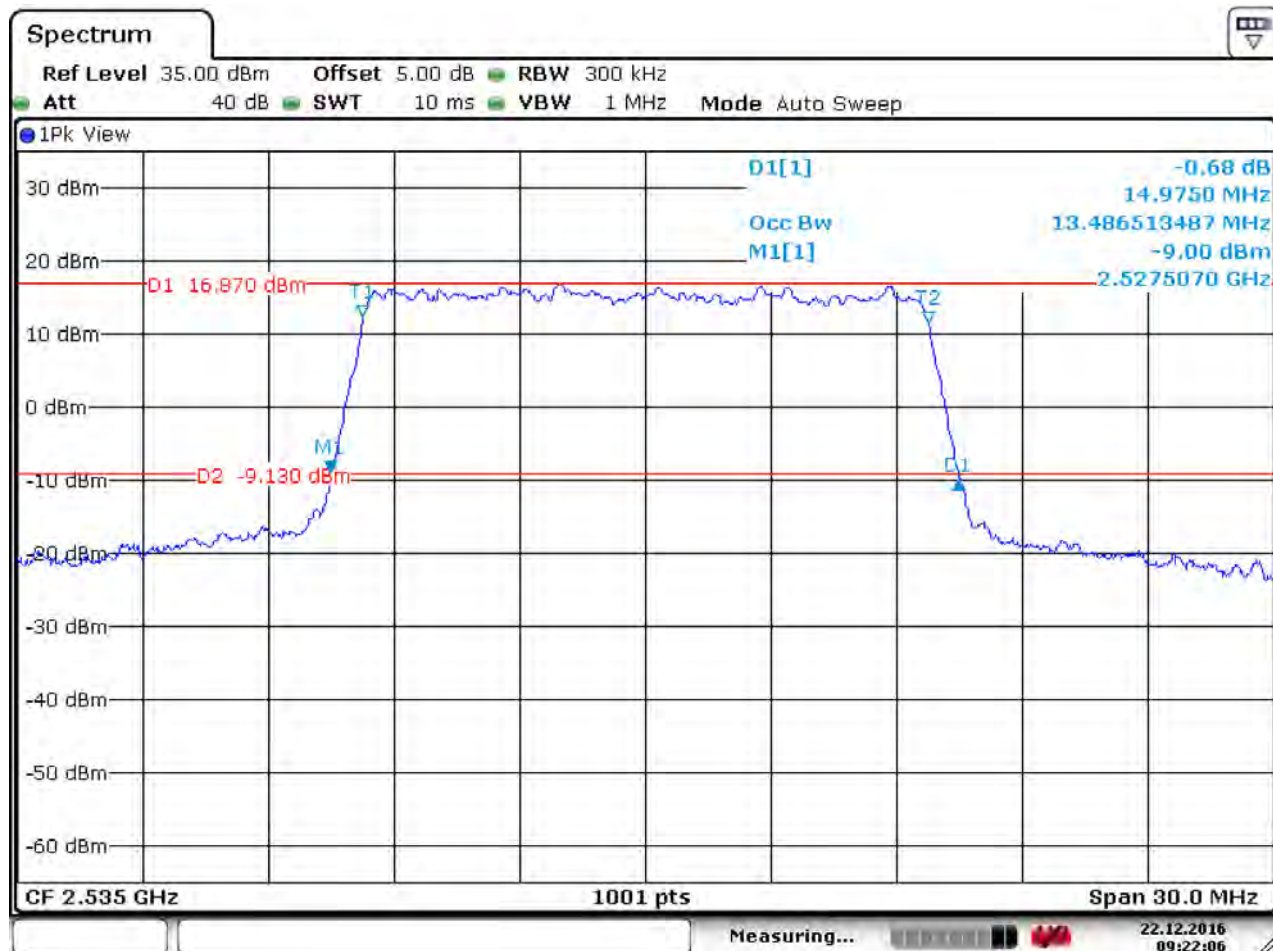
Date: 22.DEC.2016 09:22:06

4.1.1.5.3   Test Channel = HCH
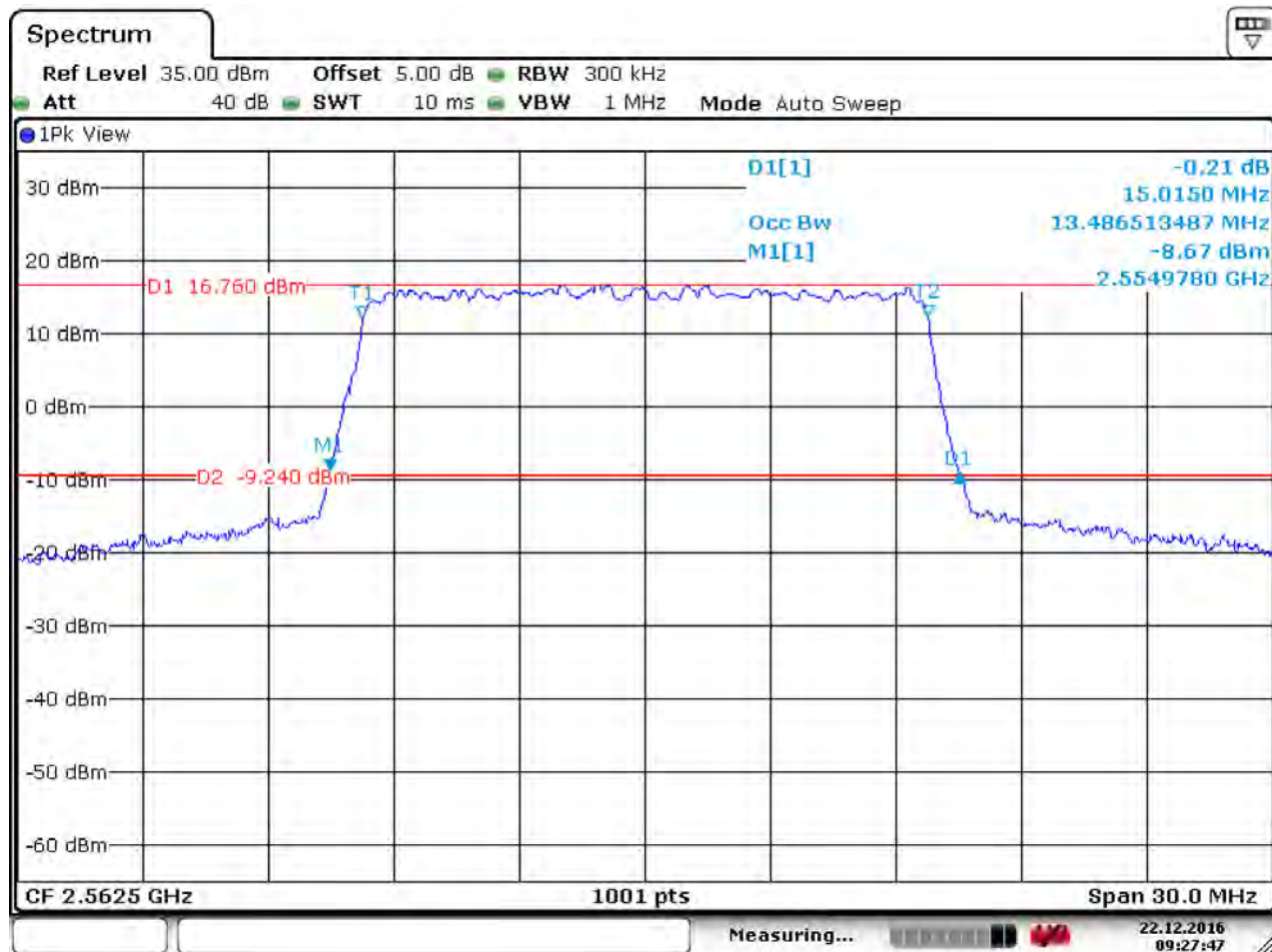
Date: 22.DEC.2016 09:27:47

4.1.1.6   Test Mode = LTE/TM2 15MHz

4.1.1.6.1   Test Channel = LCH
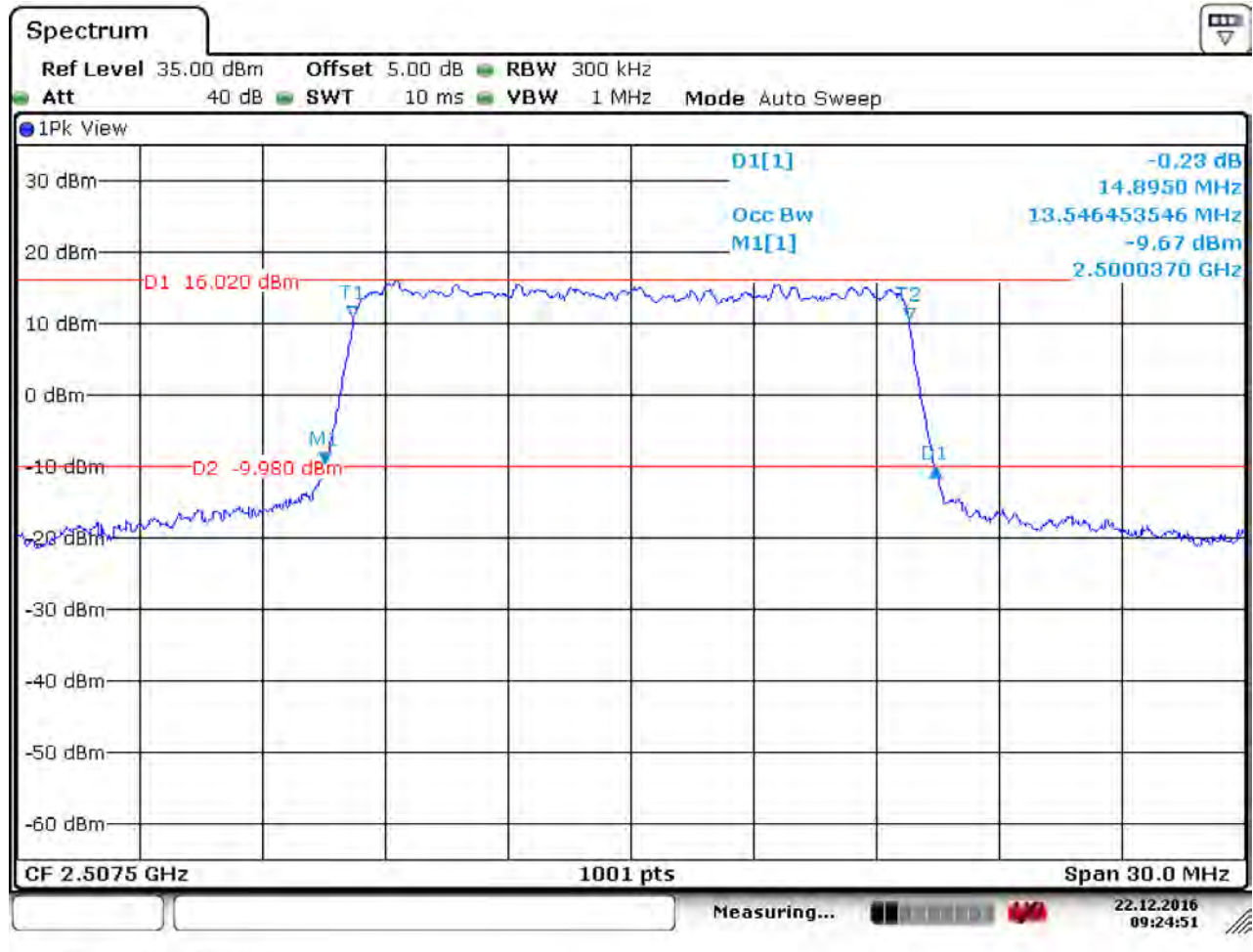
Date: 22.DEC.2016 09:24:52

4.1.1.6.2   Test Channel = MCH

Spectrum

| Ref Level | 35.00 dBm | Offset | 5.00 dB | RBW | 300 kHz |
| Att | 40 dB | SWT | 10 ms | VBW | 1 MHz | Mode | Auto Sweep |

1Pk View

D1[1] −1.00 dB
14.8250 MHz
Occ Bw 13.486513487 MHz
M1[1] −8.94 dBm
2.5275970 GHz

D1 16.330 dBm

D2 −9.670 dBm

CF 2.535 GHz   1001 pts   Span 30.0 MHz

Measuring...   22.12.2016 09:23:24
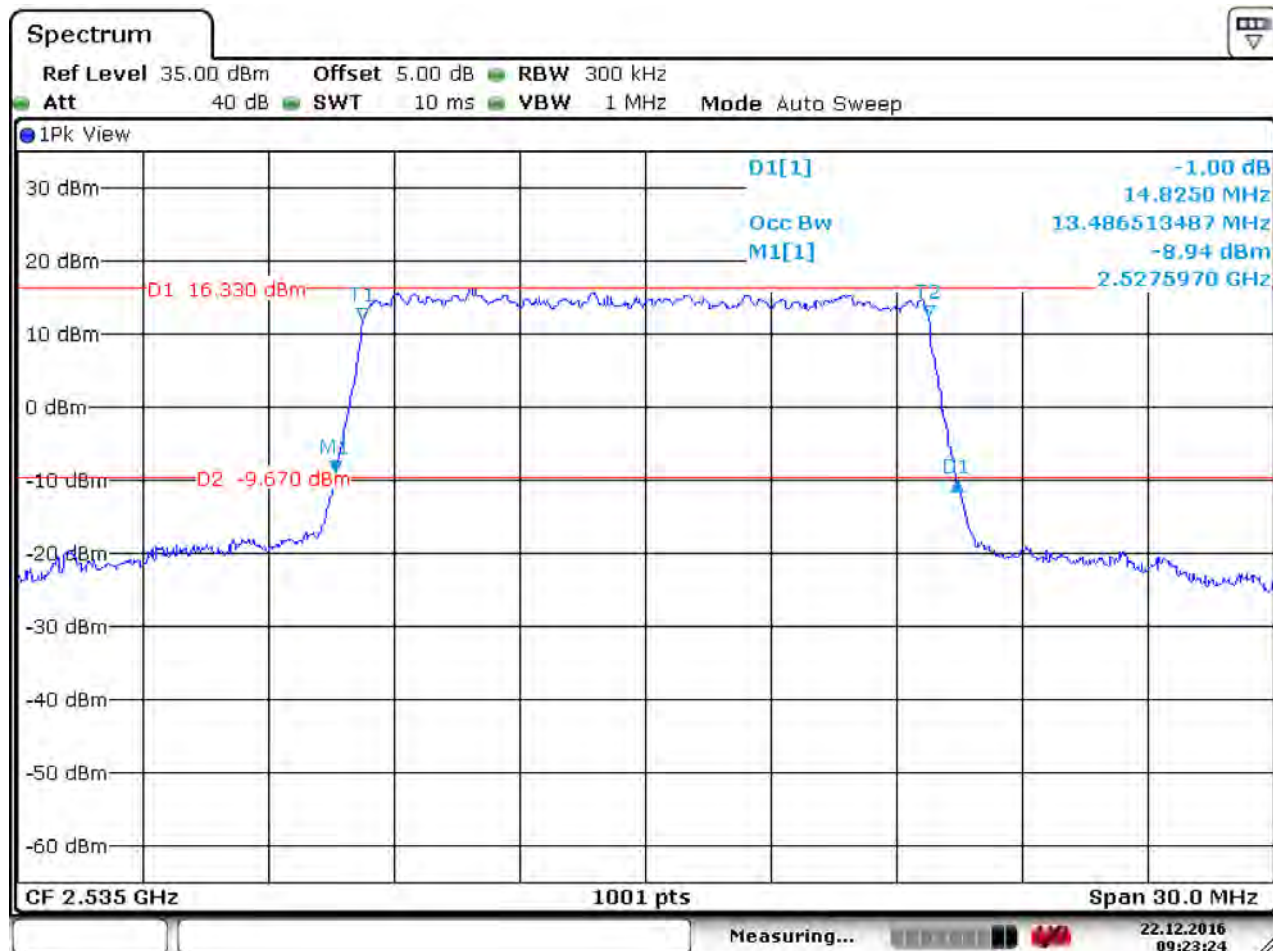
Date: 22.DEC.2016 09:23:25

4.1.1.6.3   Test Channel = HCH
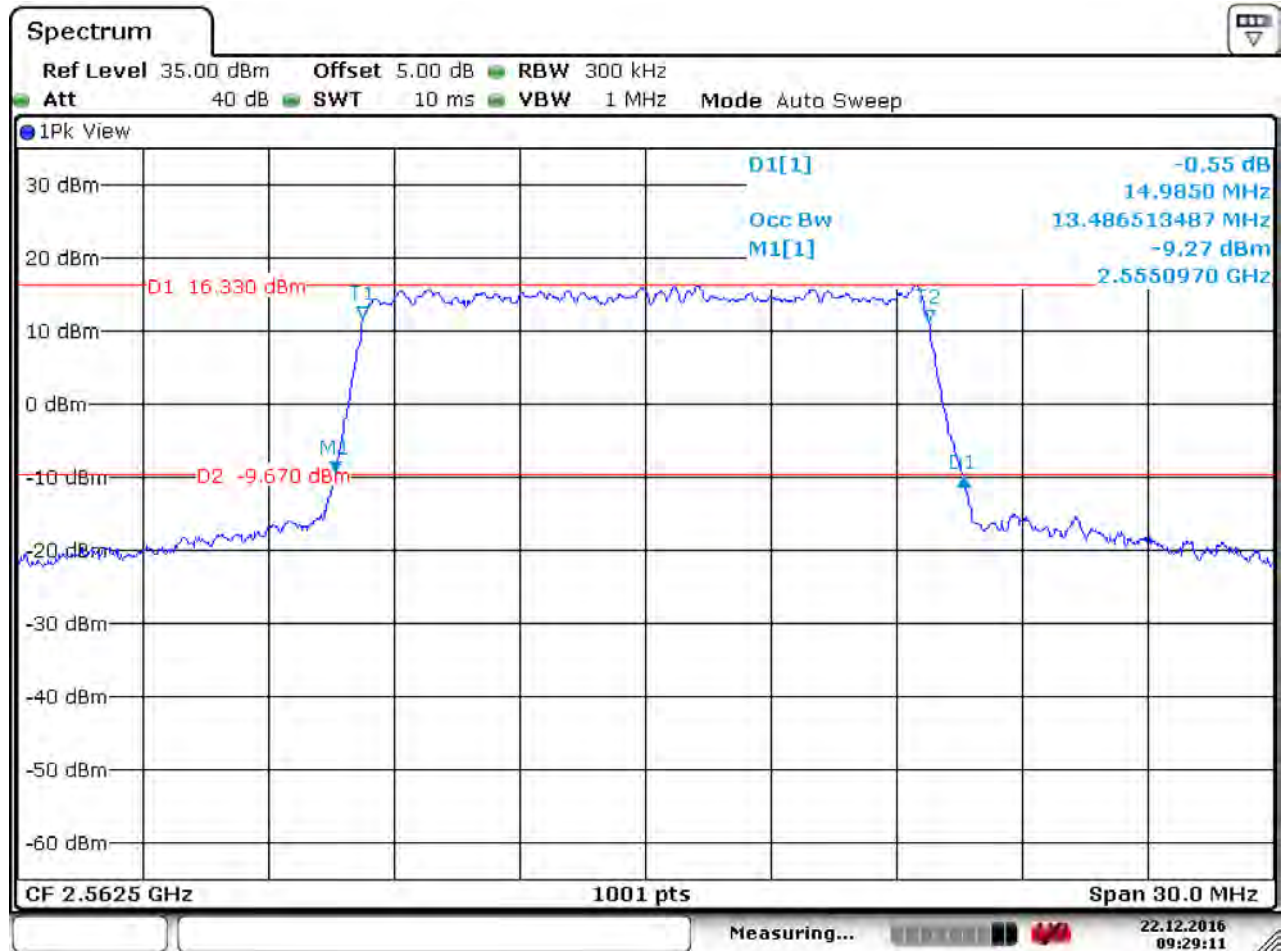
Date: 22.DEC.2016 09:29:12

4.1.1.7   Test Mode = LTE/TM1 20MHz

4.1.1.7.1   Test Channel = LCH

Date: 22.DEC.2016 09:35:19

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4.1.1.7.2　Test Channel = MCH

Spectrum

Ref Level 35.00 dBm　　Offset 5.00 dB　RBW 300 kHz
Att　　40 dB　SWT　10 ms　VBW　1 MHz　Mode Auto Sweep

1Pk View

D1[1]　　　-1.01 dB
　　　　　19.4210 MHz
Occ Bw　17.942057942 MHz
M1[1]　　　-8.96 dBm
　　　　　2.5252500 GHz

D1 16.210 dBm

D2 -9.790 dBm

CF 2.535 GHz　　　1001 pts　　　Span 40.0 MHz

Measuring...　　22.12.2016 09:31:16
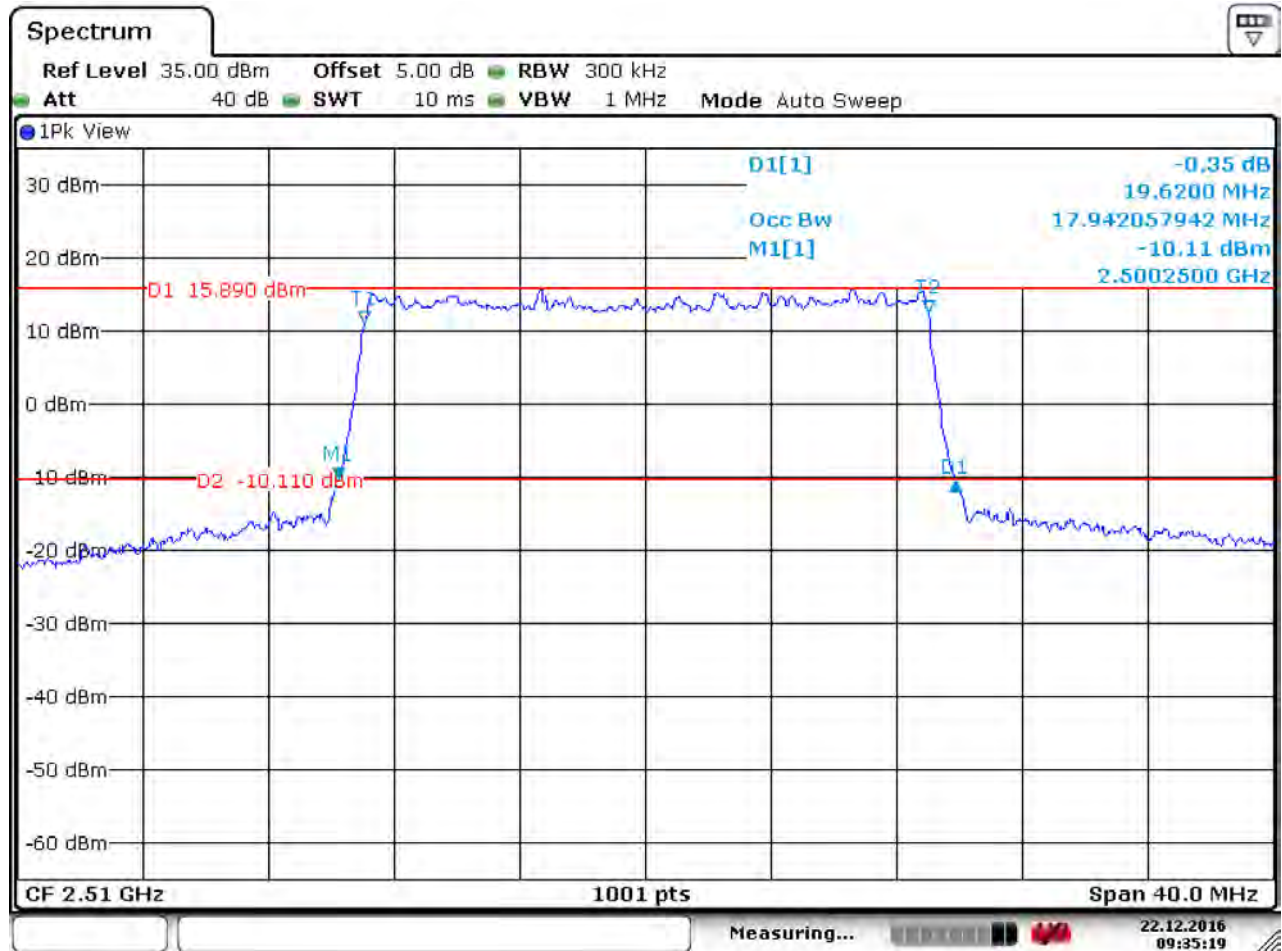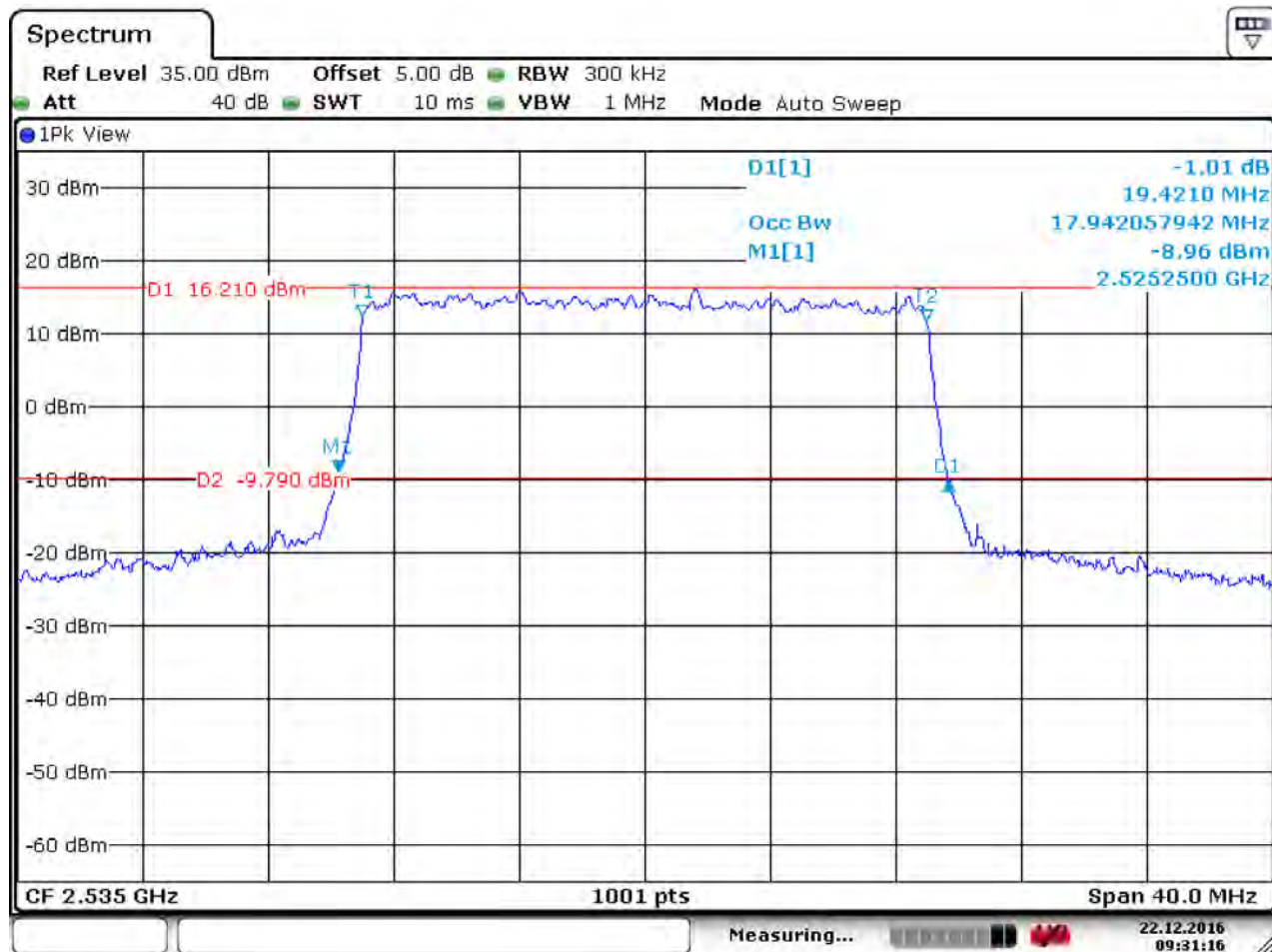
Date: 22.DEC.2016　09:31:16

4.1.1.7.3   Test Channel = HCH

```
Spectrum                                                        [icon]

  Ref Level 35.00 dBm    Offset 5.00 dB ● RBW  300 kHz
● Att         40 dB ● SWT      10 ms ● VBW   1 MHz    Mode Auto Sweep

● 1Pk View
                                              D1[1]              -0.26 dB
 30 dBm                                                        19.6600 MHz
                                              Occ Bw       17.982017982 MHz
 20 dBm                                        M1[1]             -9.61 dBm
                                                              2.5502100 GHz
D1 15.980 dBm
 10 dBm

  0 dBm

-10 dBm    D2  -10.020 dBm

-20 dBm

-30 dBm

-40 dBm

-50 dBm

-60 dBm

 CF 2.56 GHz                        1001 pts              Span 40.0 MHz

                                   Measuring...  [====] [icon]   22.12.2016
                                                                 09:36:48
```
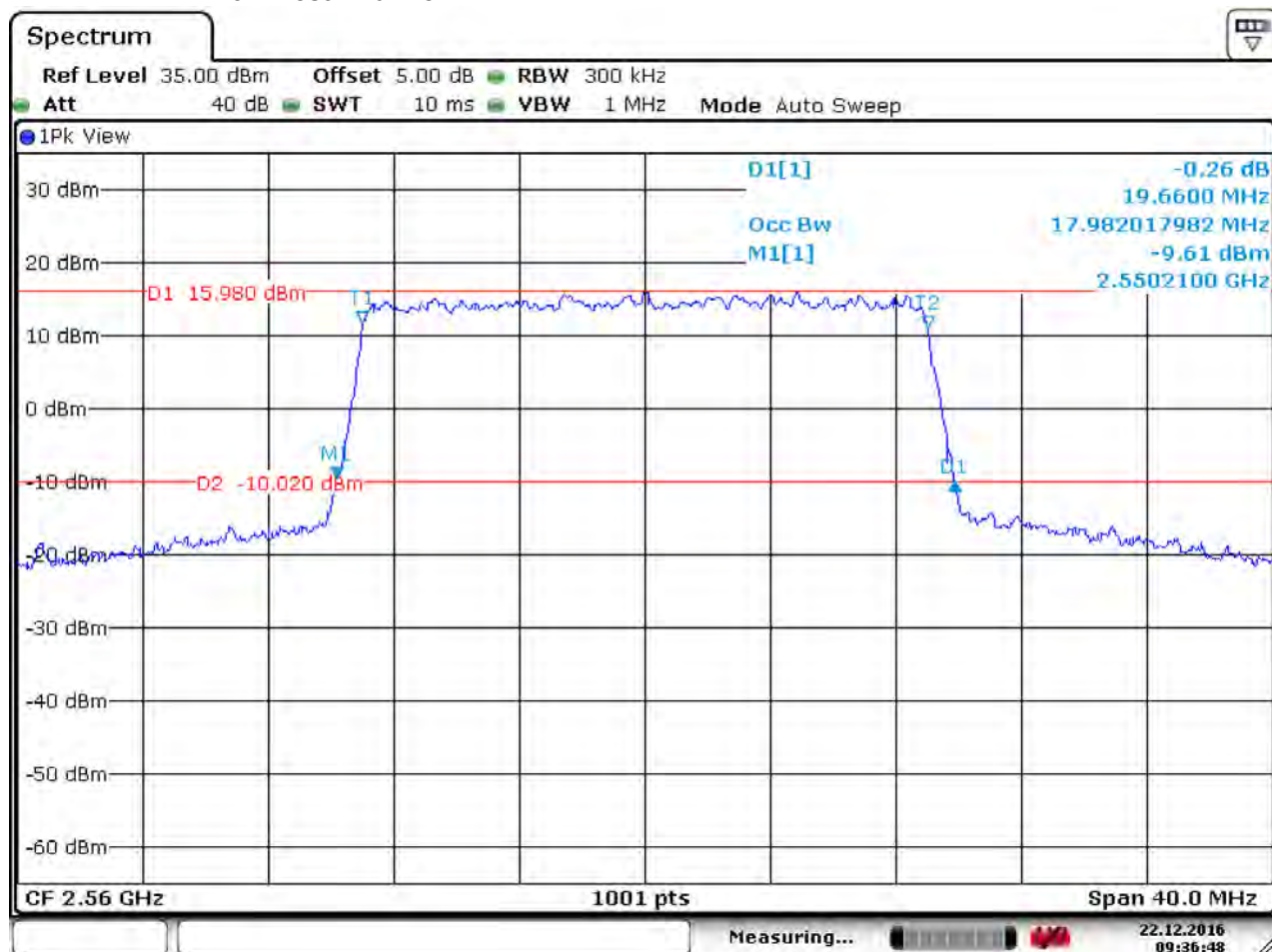
Date: 22.DEC.2016 09:36:49

4.1.1.8 Test Mode = LTE/TM2 20MHz

4.1.1.8.1 Test Channel = LCH
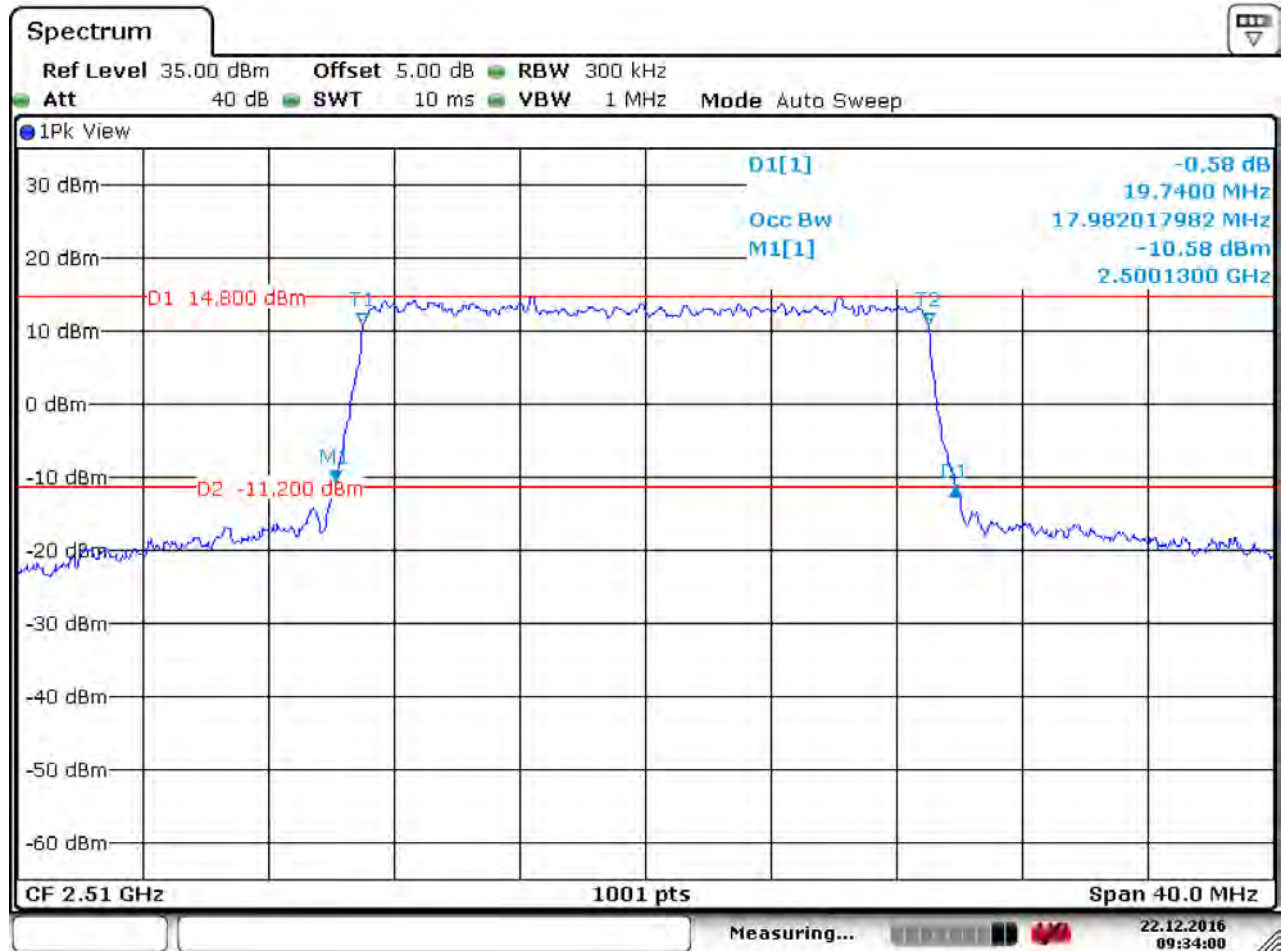
Date: 22.DEC.2016 09:34:00

4.1.1.8.2 Test Channel = MCH

Spectrum

Ref Level 35.00 dBm	Offset 5.00 dB	RBW 300 kHz
Att 40 dB	SWT 10 ms	VBW 1 MHz	Mode Auto Sweep

1Pk View

D1[1]   -0.72 dB
19.4610 MHz
Occ Bw   17.942057942 MHz
M1[1]   -10.03 dBm
2.5253300 GHz

D1 15.150 dBm

D2 -10.850 dBm

CF 2.535 GHz   1001 pts   Span 40.0 MHz

Measuring...   22.12.2016 09:32:25
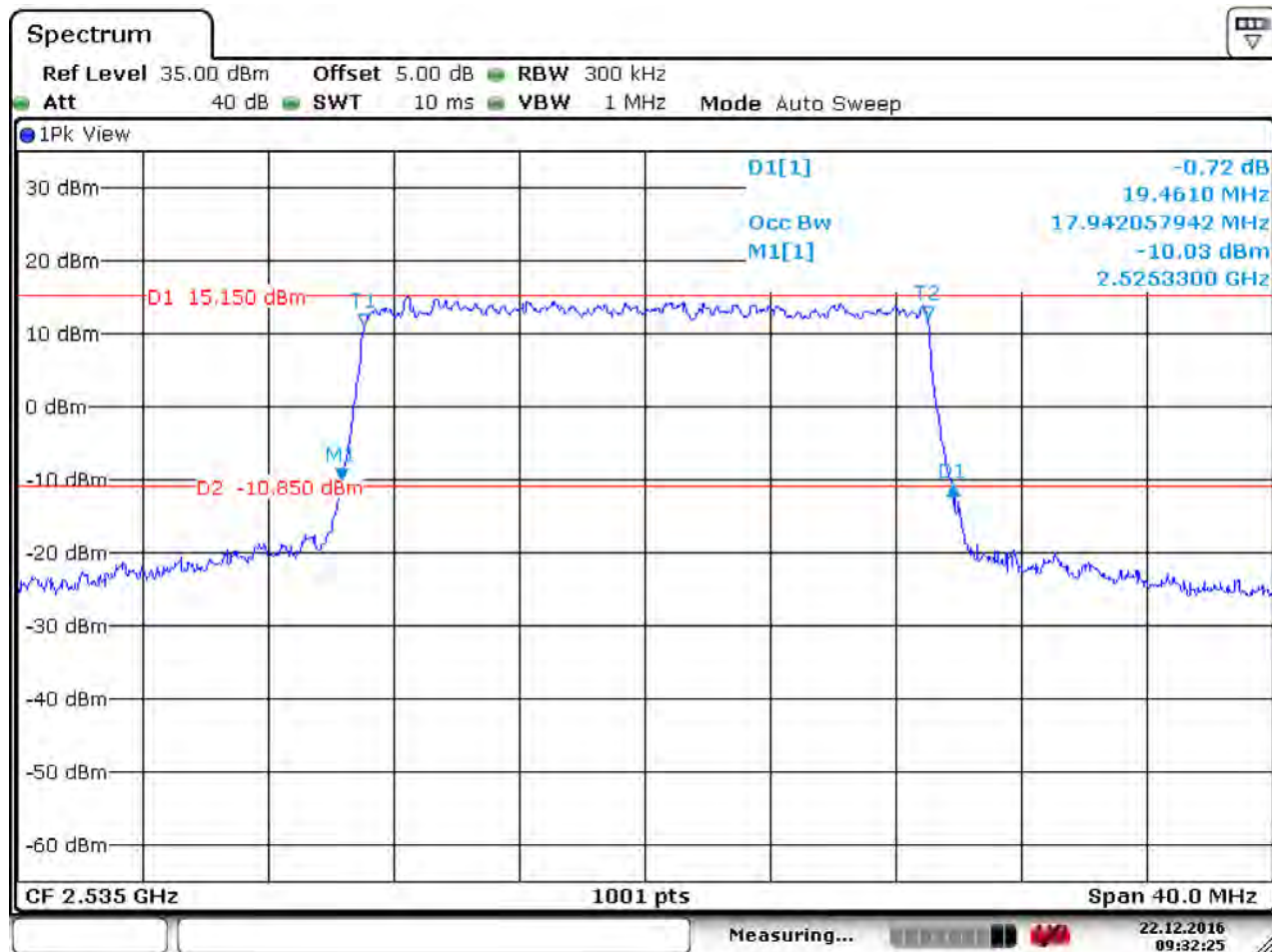
Date: 22.DEC.2016 09:32:25

4.1.1.8.3   Test Channel = HCH

```
Spectrum                                                              ▯
   Ref Level 35.00 dBm    Offset 5.00 dB ● RBW  300 kHz
 ● Att          40 dB ● SWT    10 ms ● VBW   1 MHz    Mode Auto Sweep
● 1Pk View
                                              D1[1]              -0.89 dB
 30 dBm                                                         19.4610 MHz
                                              Occ Bw       17.902097902 MHz
 20 dBm                                       M1[1]              -9.65 dBm
                                                                2.5503700 GHz
D1 15.620 dBm        T1
 10 dBm
  0 dBm
                     M1
-10 dBm  D2 -10.380 dBm                                    D1
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
 CF 2.56 GHz                    1001 pts              Span 40.0 MHz
                               Measuring...  ▮▮▮▮▮▮  ▨▨   22.12.2016
                                                         09:38:09
```

Date: 22.DEC.2016 09:38:10

5 Band Edges Compliance

Part I –

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
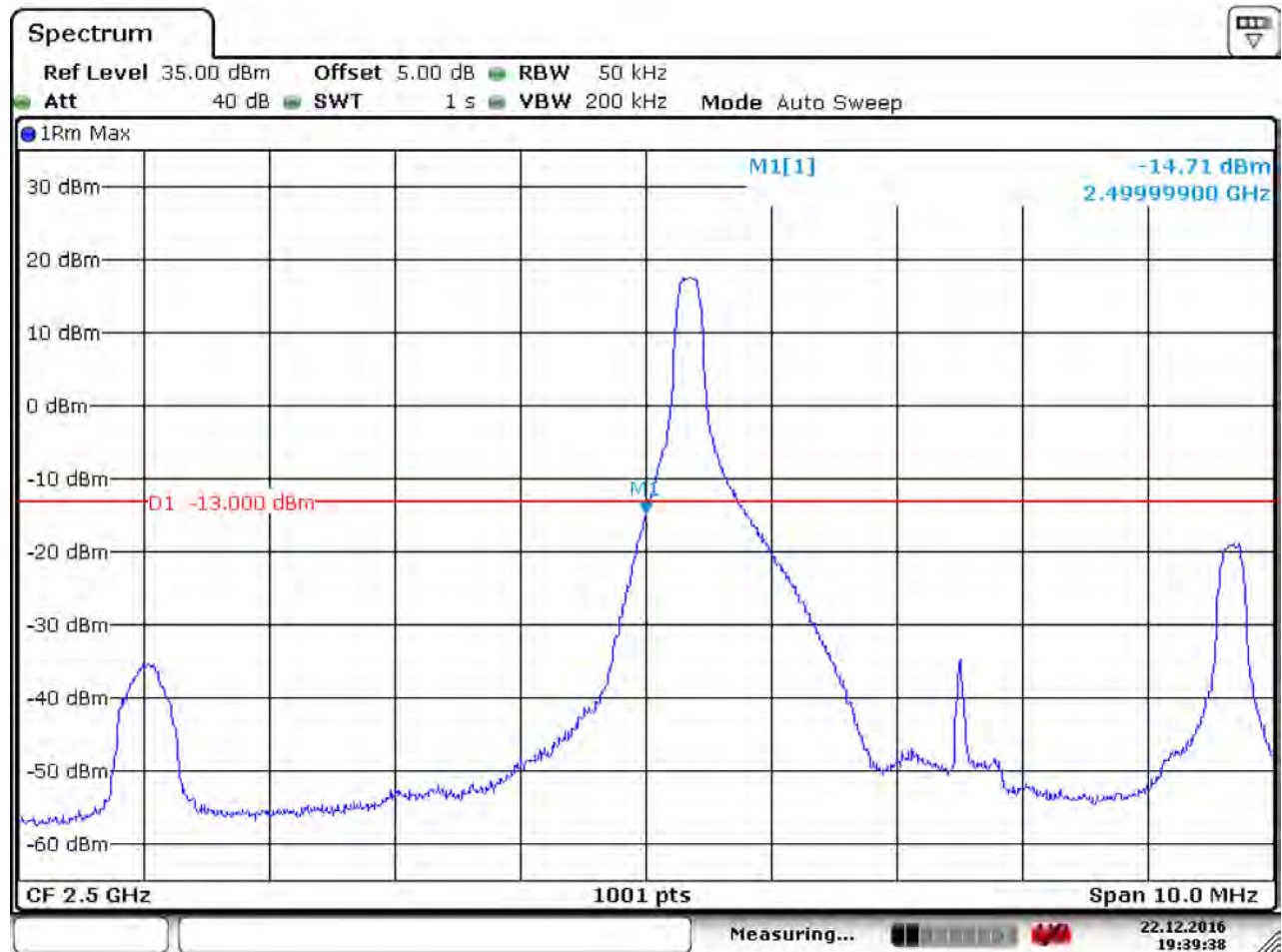
Date: 22.DEC.2016 19:39:38

5.1.1.1.1.2 Test RB=25RB

Date: 22.DEC.2016 19:37:32

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch
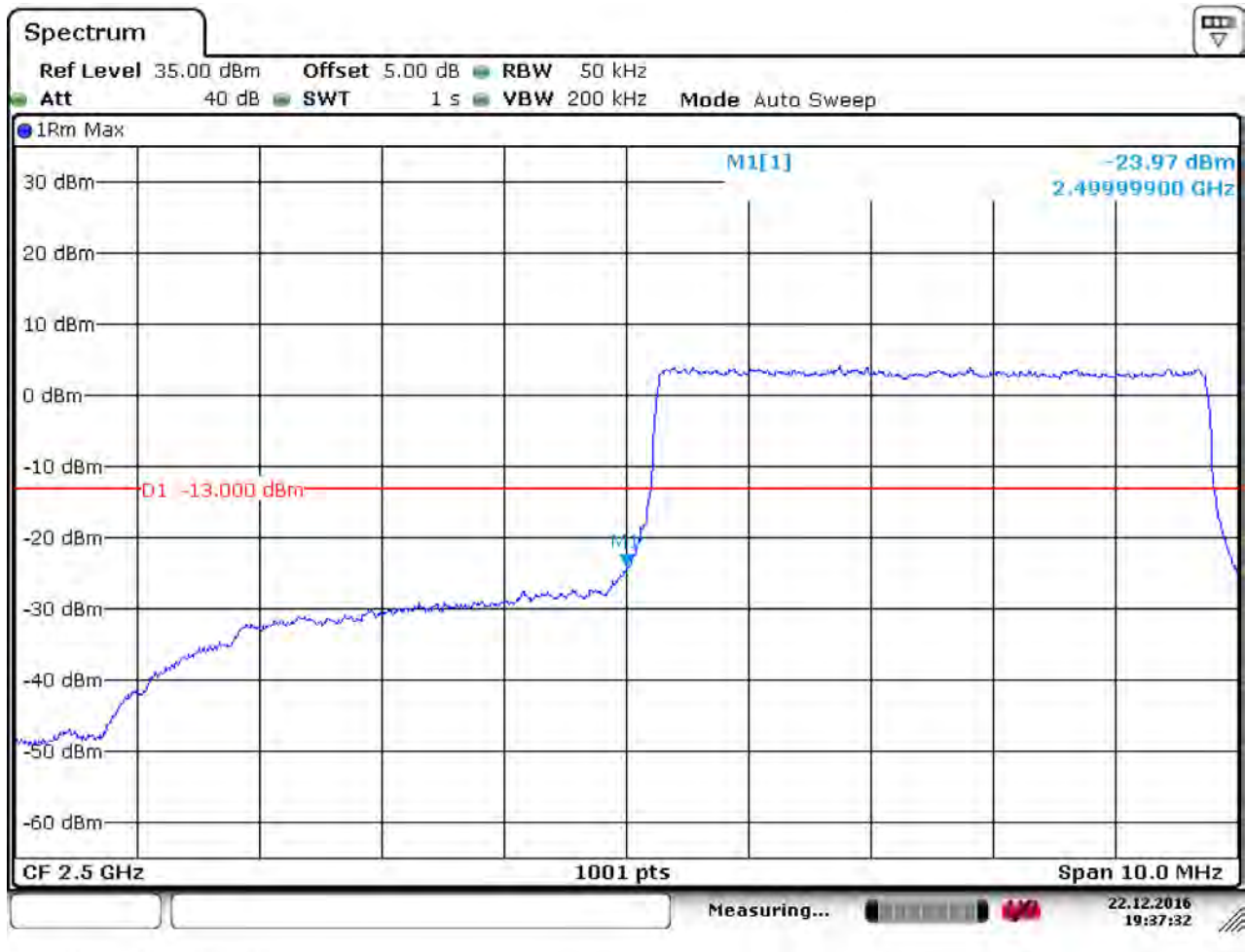
5.1.1.1.2   Test Channel = HCH

5.1.1.1.2.1 Test RB=1RB
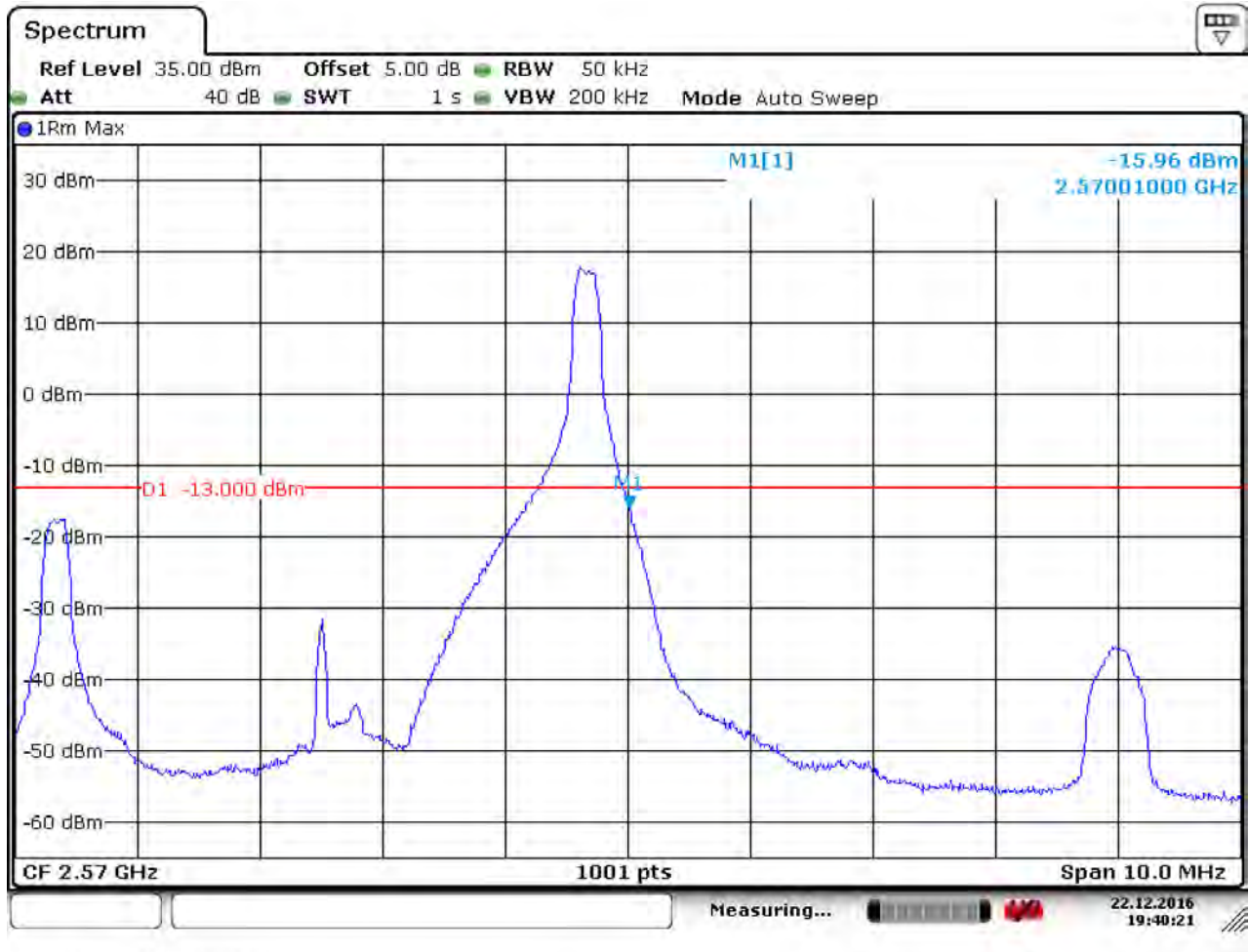
Date: 22.DEC.2016 19:40:21

5.1.1.1.2.2 Test RB=25RB
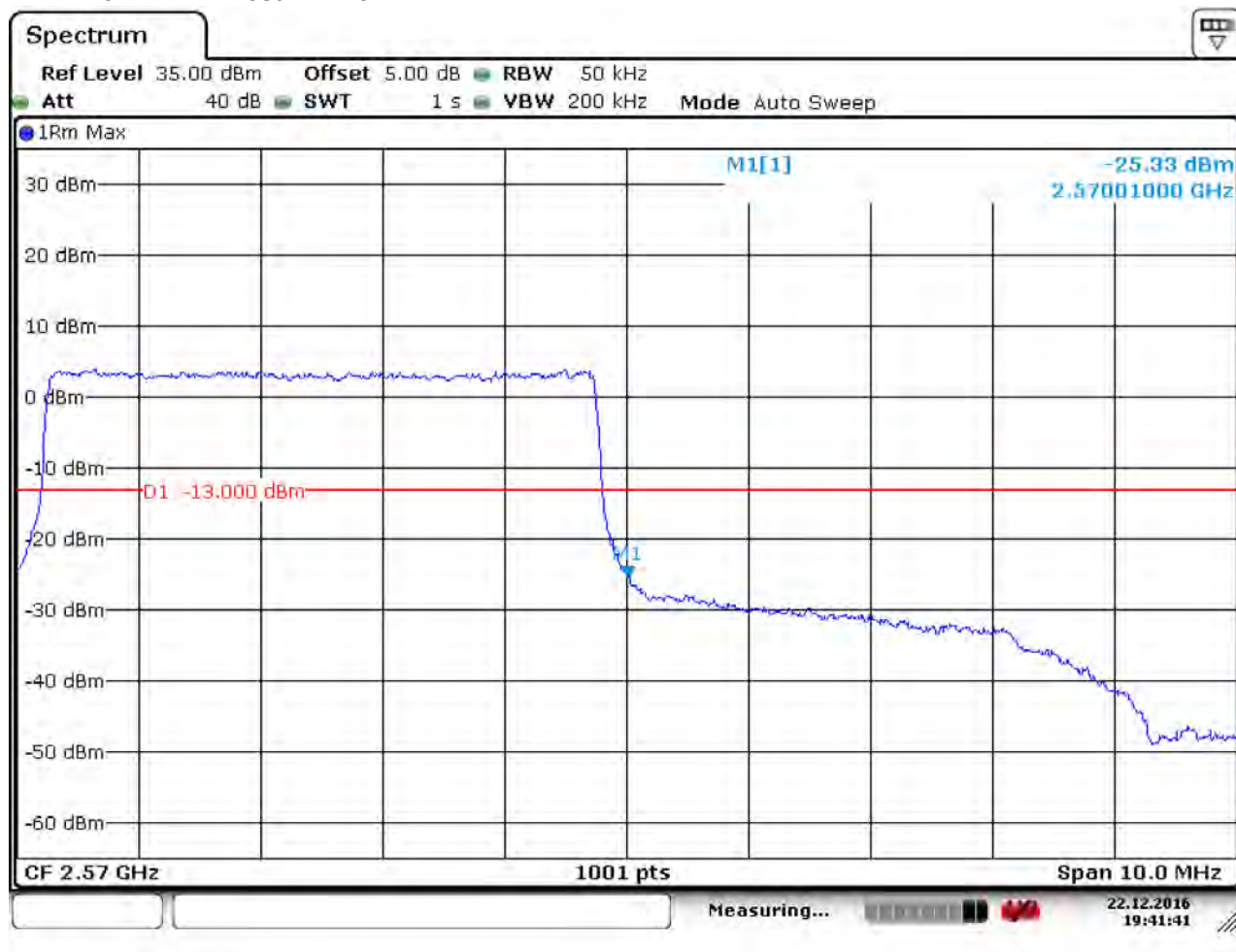
Date: 22.DEC.2016 19:41:41

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
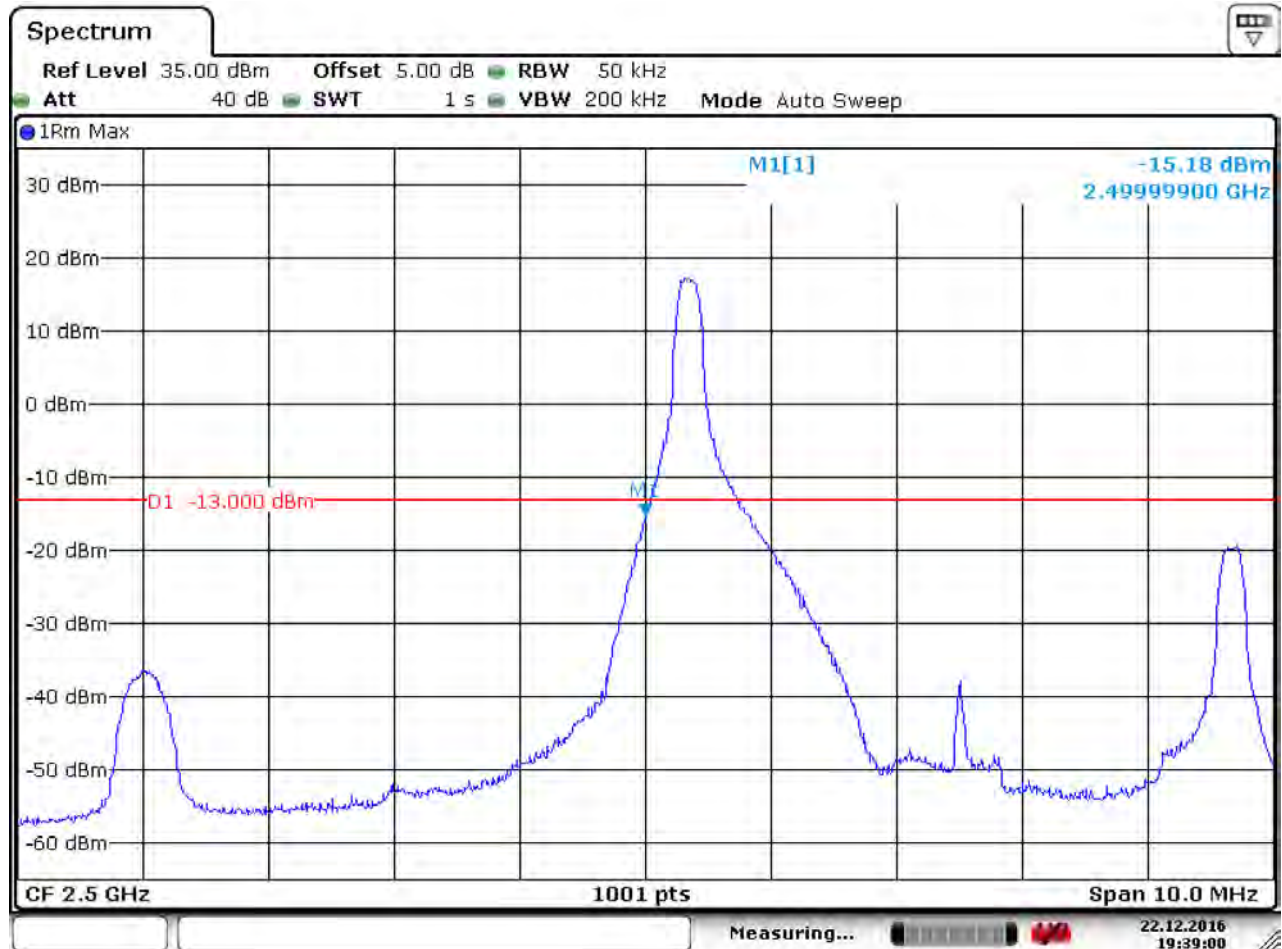
Date: 22.DEC.2016 19:39:01

5.1.1.2.1.2 Test RB=25RB
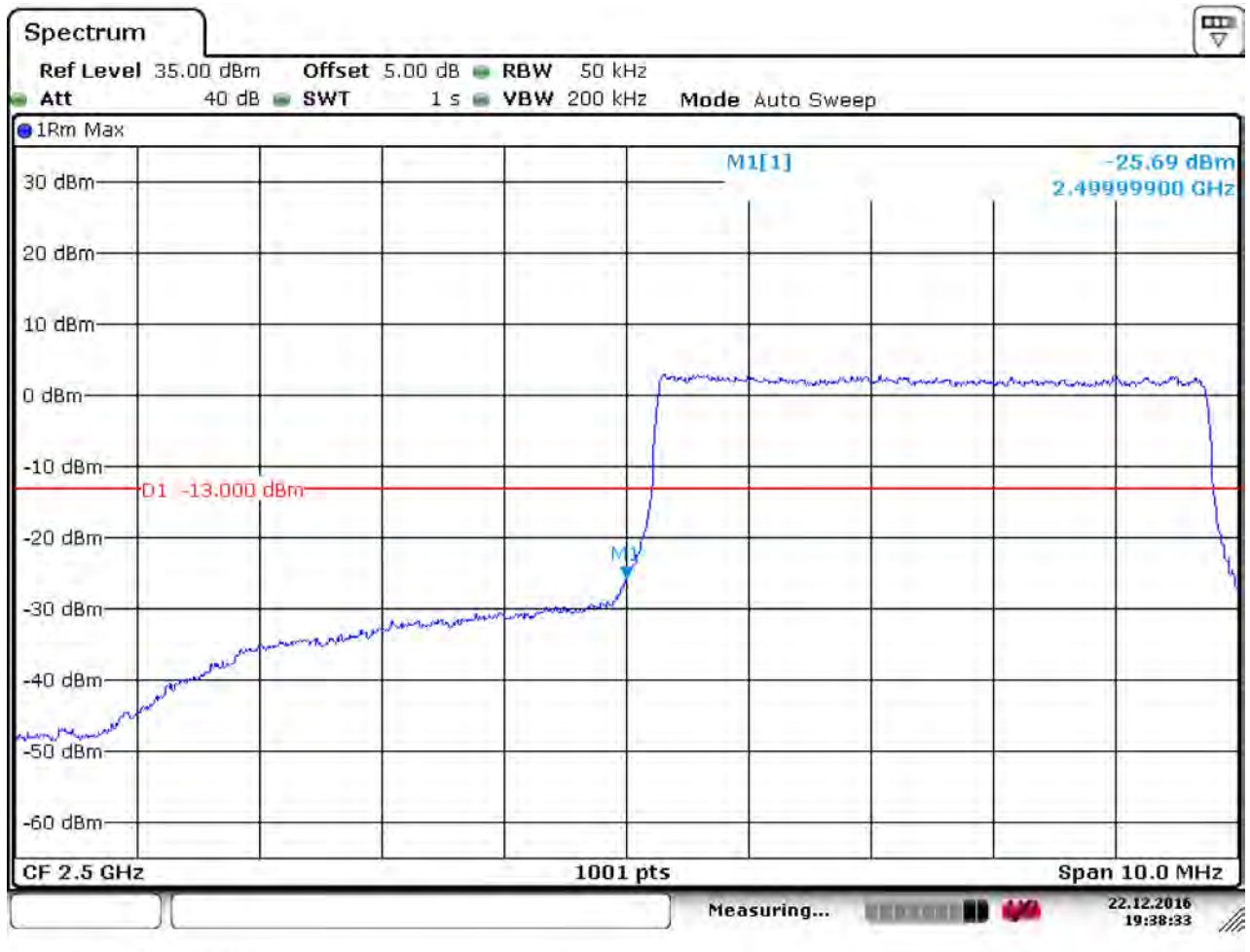
Date: 22.DEC.2016 19:38:34

5.1.1.2.2 Test Channel = HCH

5.1.1.2.2.1 Test RB=1RB
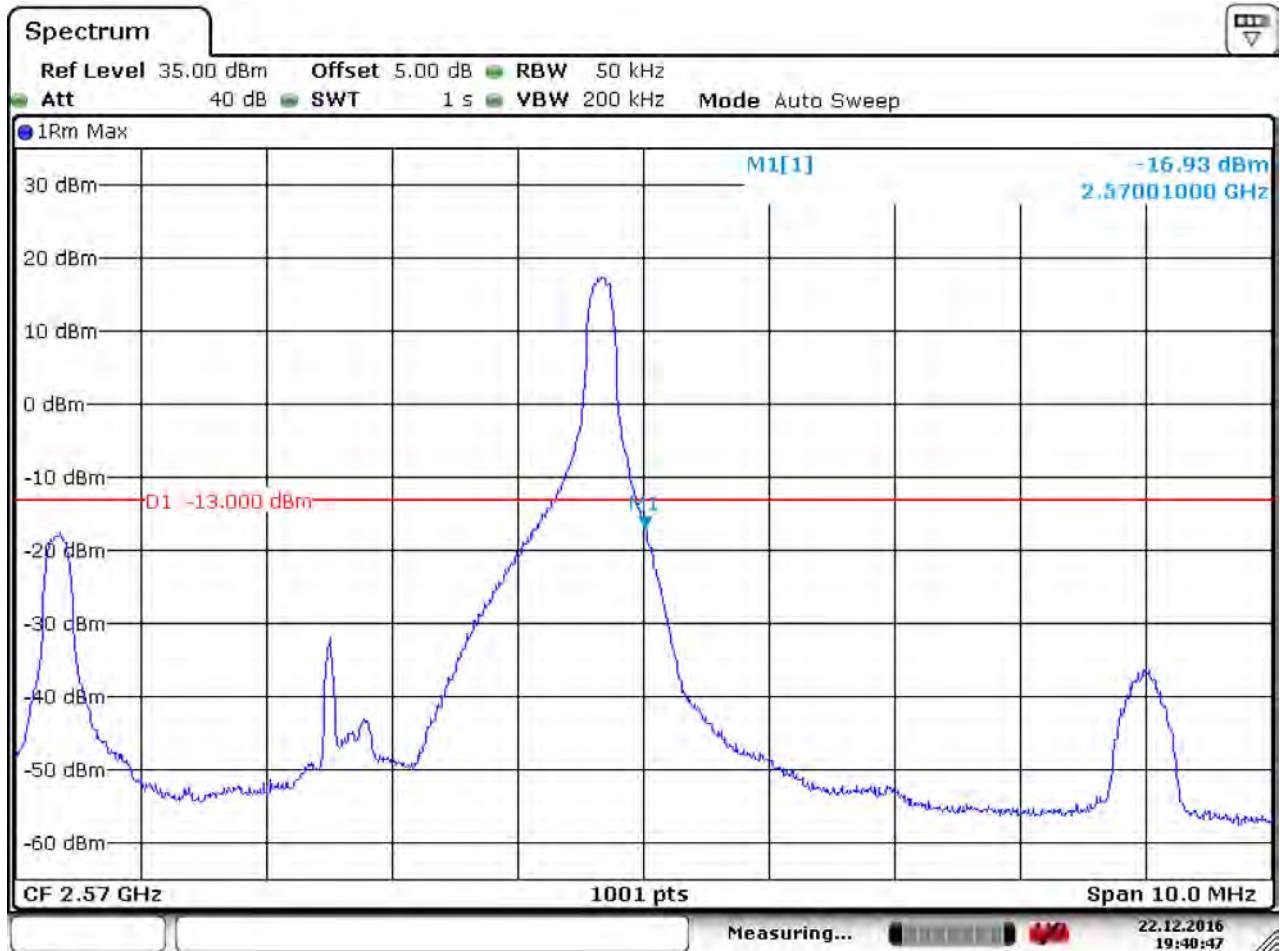
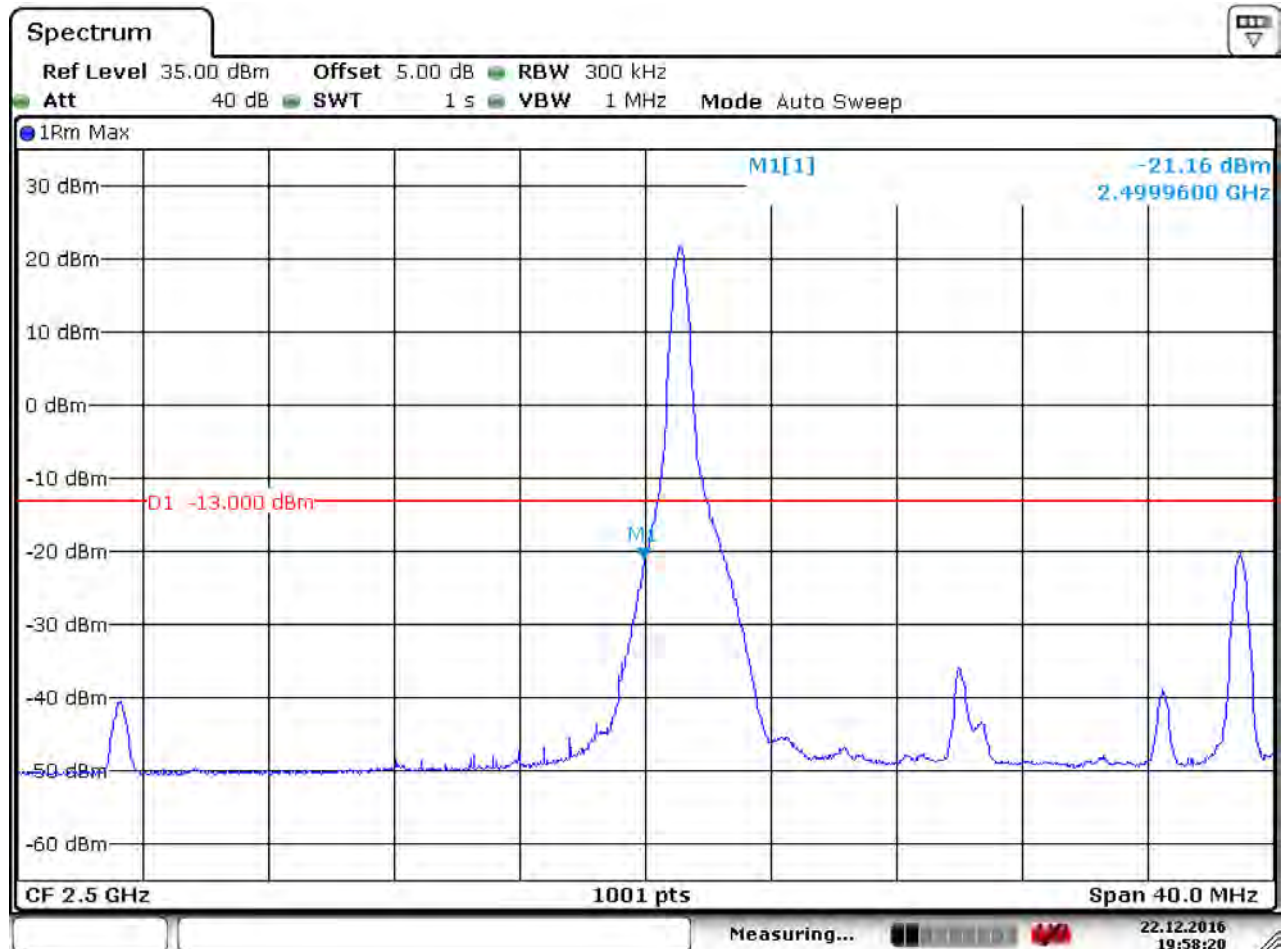Date: 22.DEC.2016 19:40:47

5.1.1.2.2.2 Test RB=25RB

Date: 22.DEC.2016 19:41:17

5.1.1.3 Test Mode = LTE/TM1 10MHz

5.1.1.3.1 Test Channel = LCH

5.1.1.3.1.1 Test RB=1RB
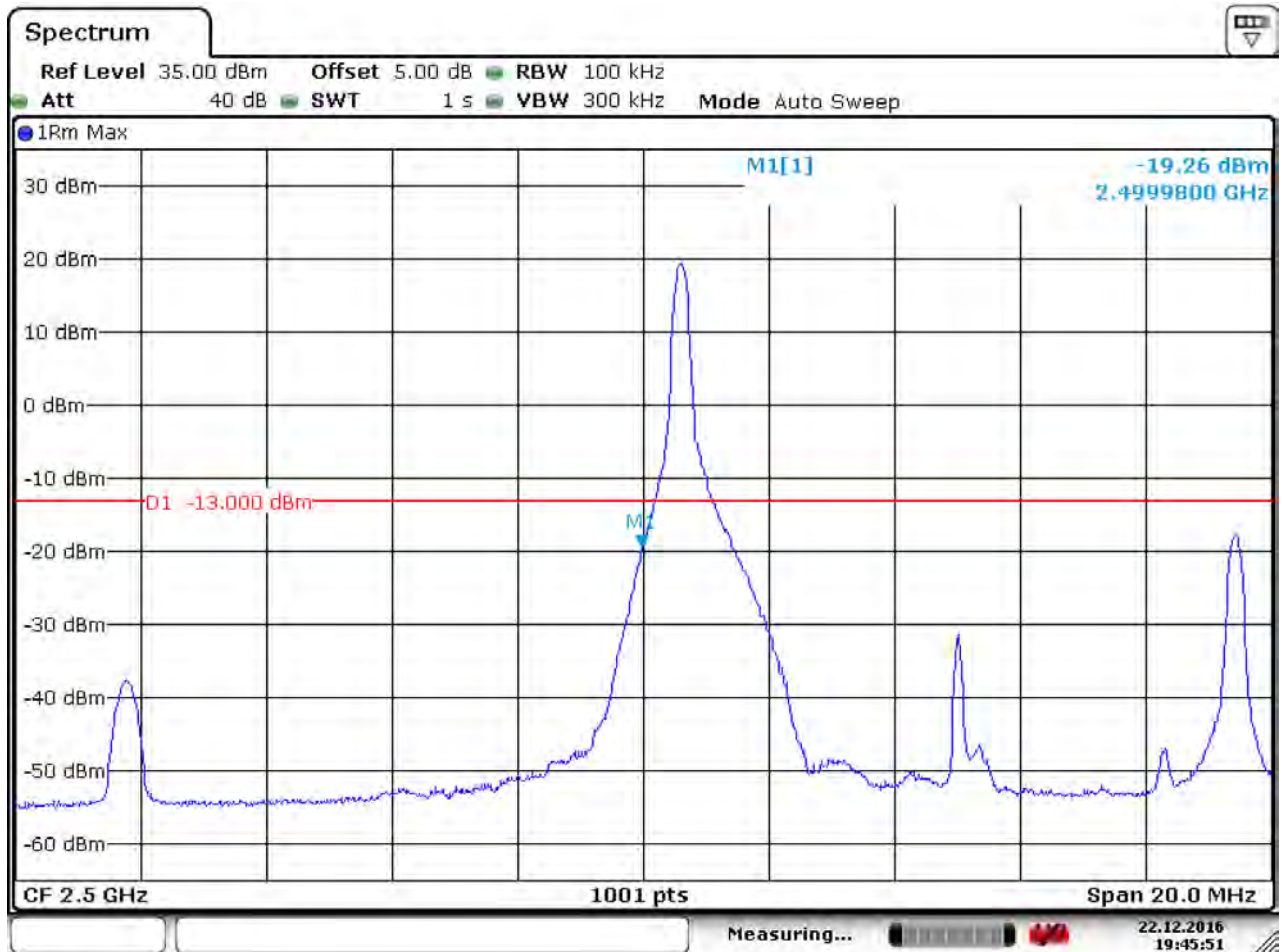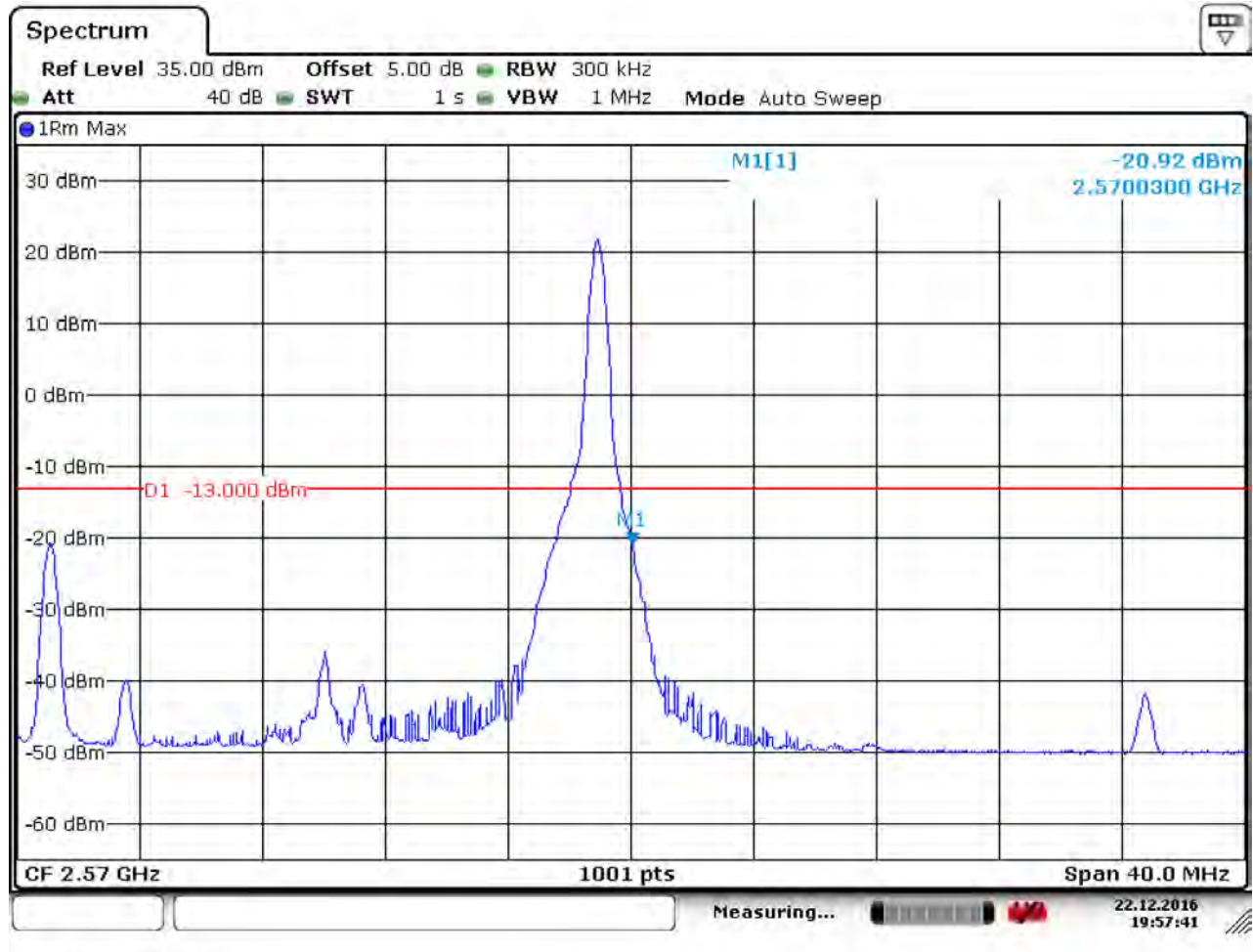

Date: 22.DEC.2016 19:45:51

5.1.1.3.1.2 Test RB=50RB

Date: 22.DEC.2016 19:47:21

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch
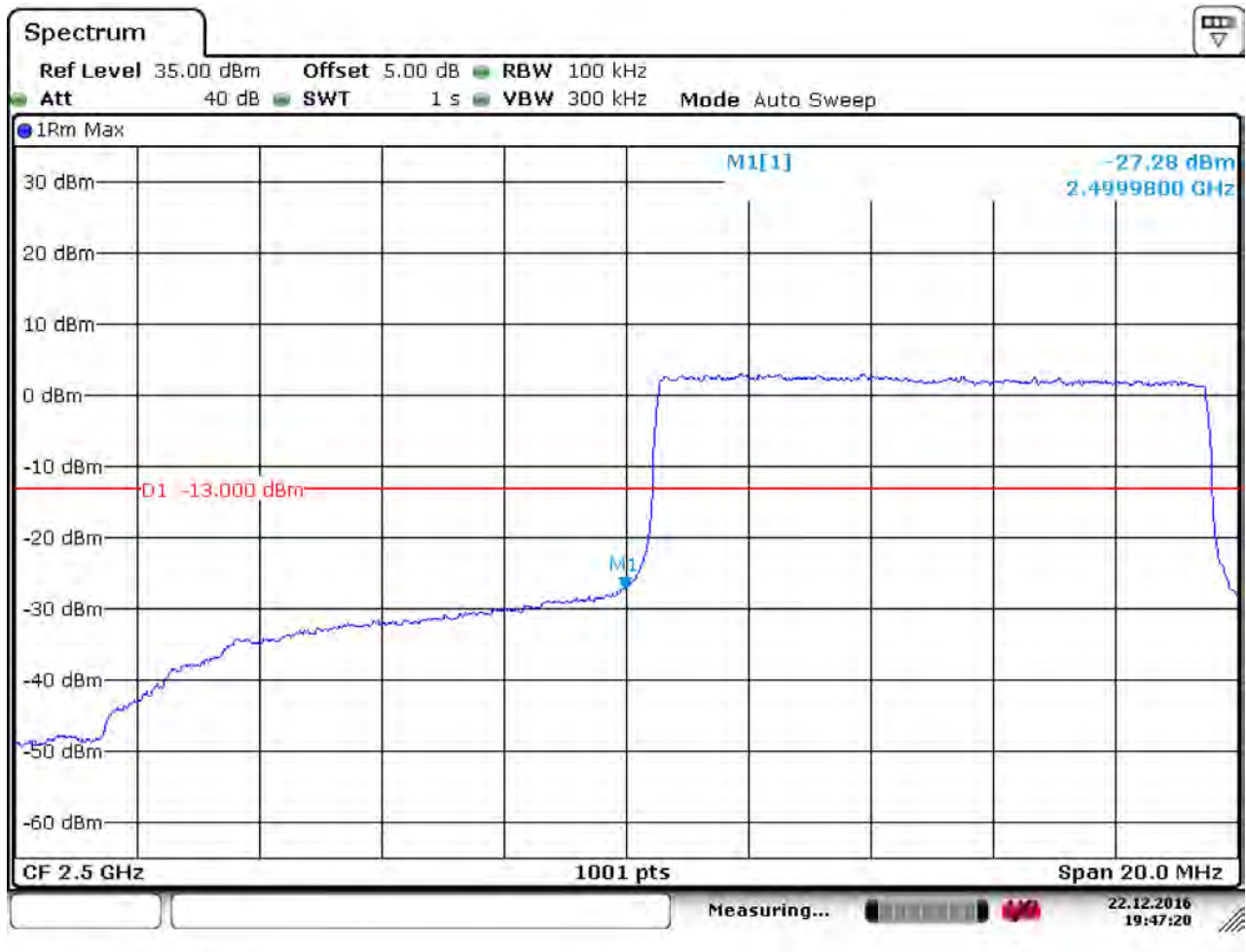
5.1.1.3.2   Test Channel = HCH

5.1.1.3.2.1 Test RB=1RB
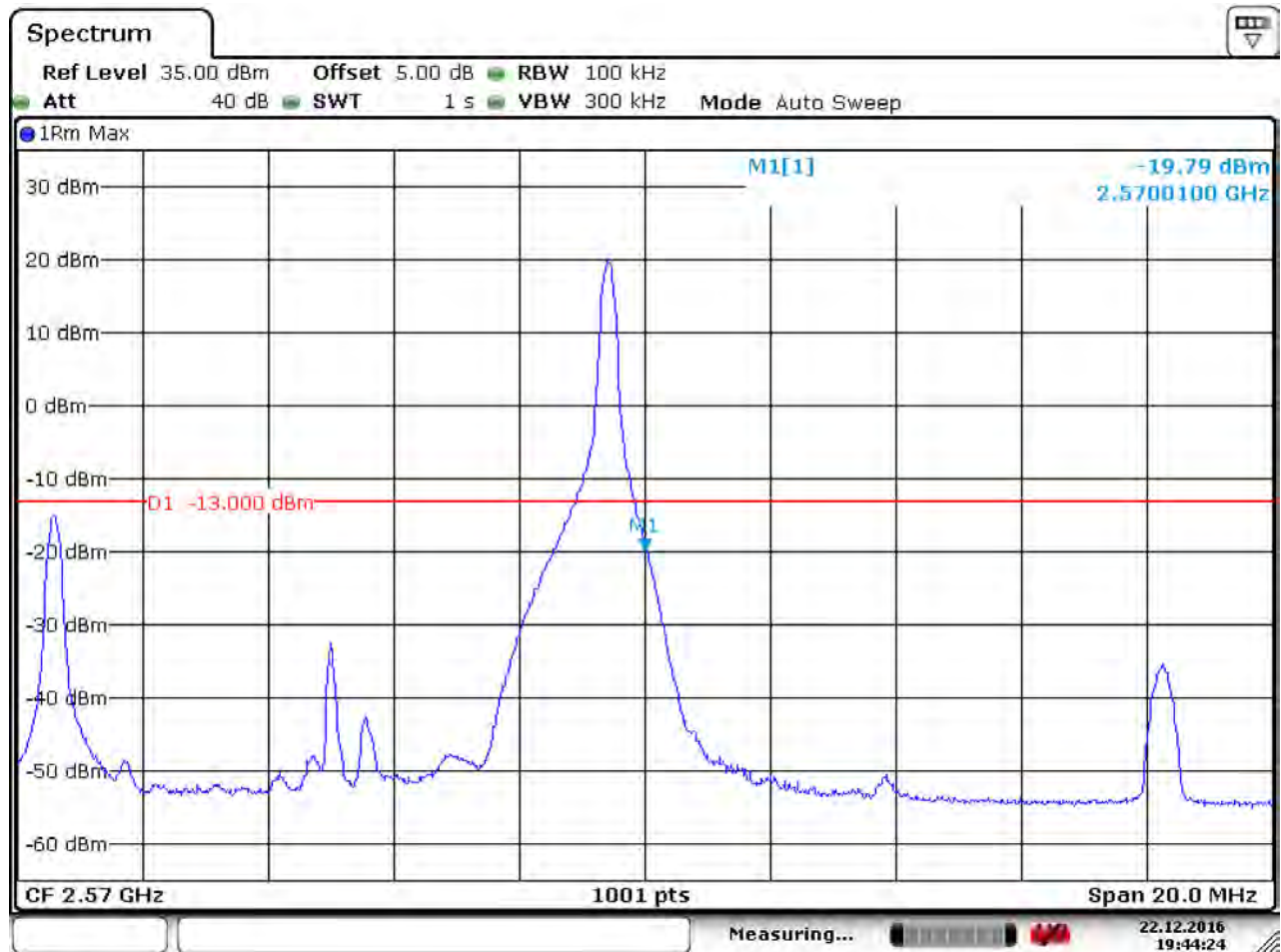
Date: 22.DEC.2016 19:44:24

5.1.1.3.2.2 Test RB=50RB

Date: 22.DEC.2016 19:42:37

5.1.1.4 Test Mode = LTE/TM2 10MHz

5.1.1.4.1 Test Channel = LCH

5.1.1.4.1.1 Test RB=1RB
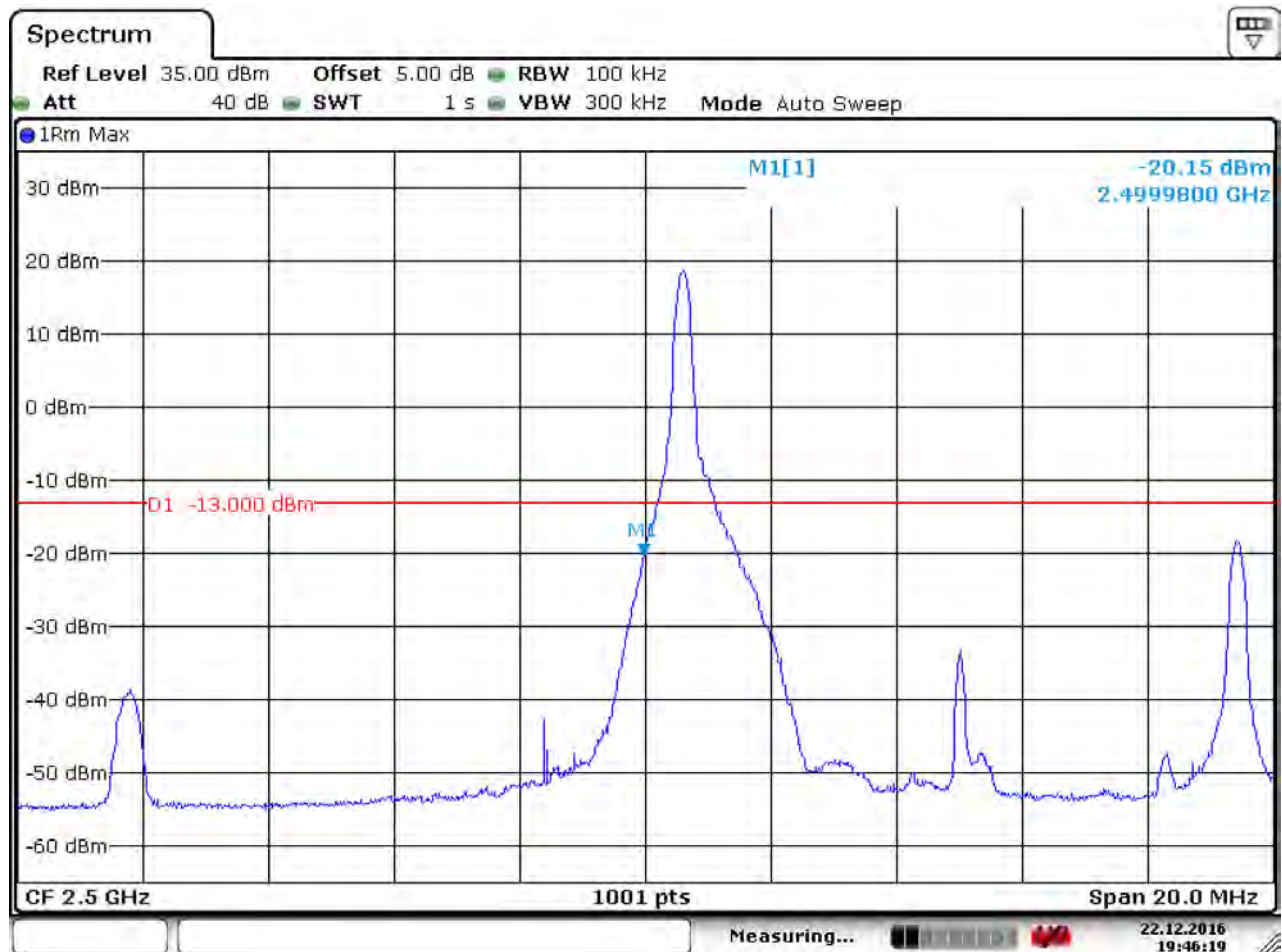
5.1.1.4.1.2 Test RB=50RB
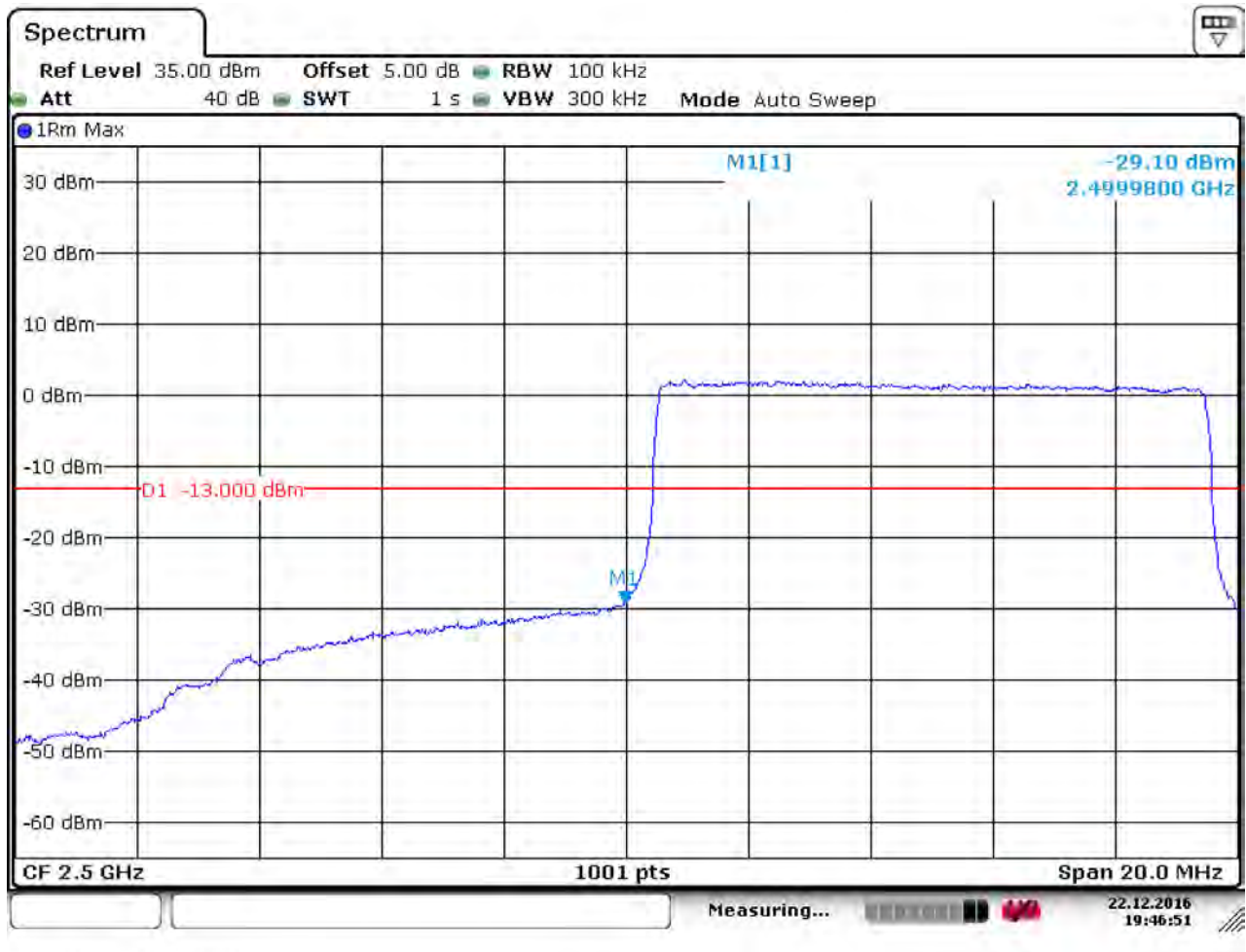
Date: 22.DEC.2016 19:46:52

5.1.1.4.2 Test Channel = HCH

5.1.1.4.2.1 Test RB=1RB
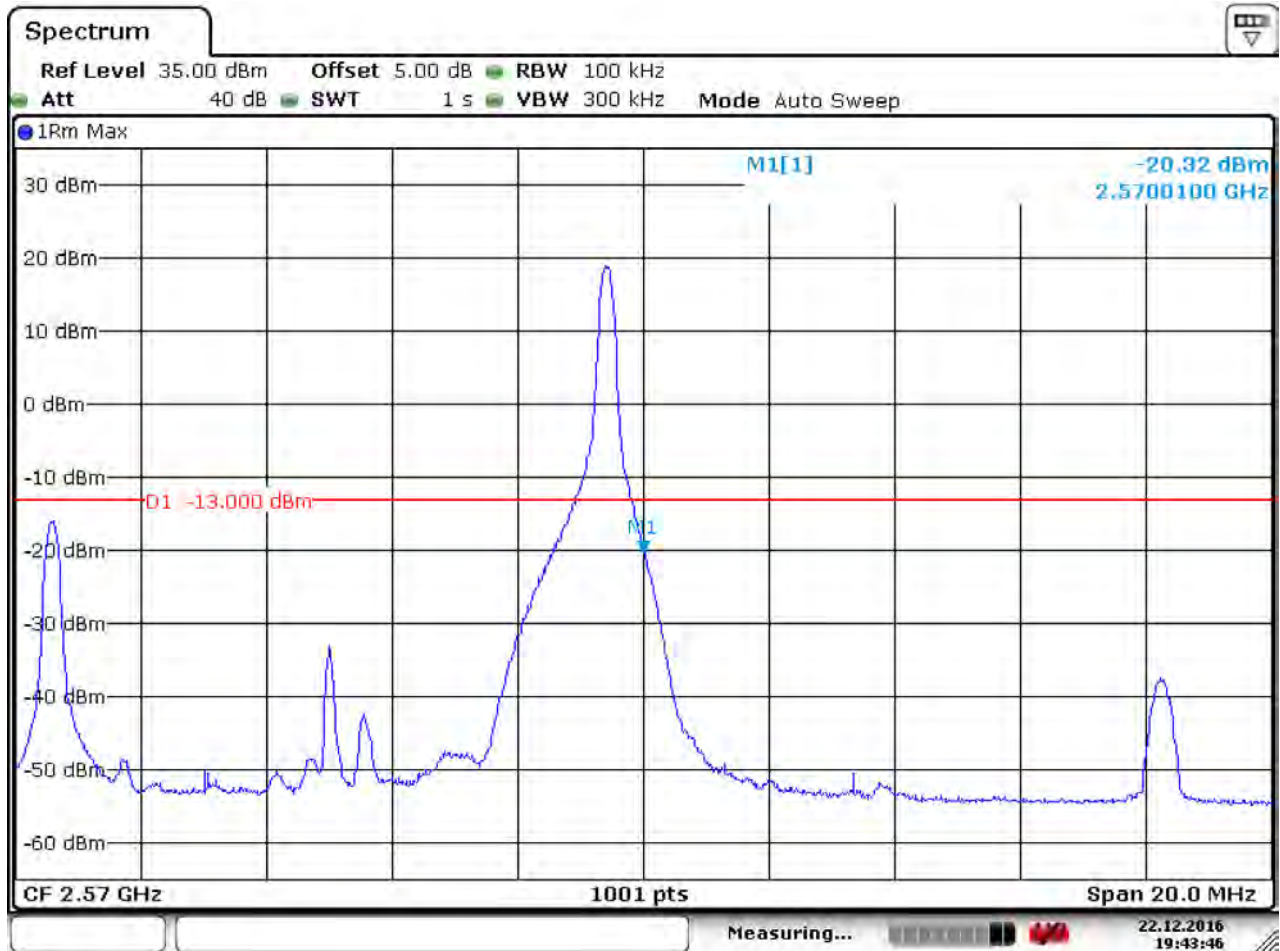
Date: 22.DEC.2016 19:43:47

5.1.1.4.2.2 Test RB=50RB

Spectrum

Ref Level 35.00 dBm   Offset 5.00 dB   RBW 100 kHz
Att   40 dB   SWT   1 s   VBW 300 kHz   Mode Auto Sweep

1Rm Max

M1[1]   -28.24 dBm
2.5700100 GHz

D1 -13.000 dBm

M1

CF 2.57 GHz   1001 pts   Span 20.0 MHz

Measuring...   22.12.2016 19:43:12
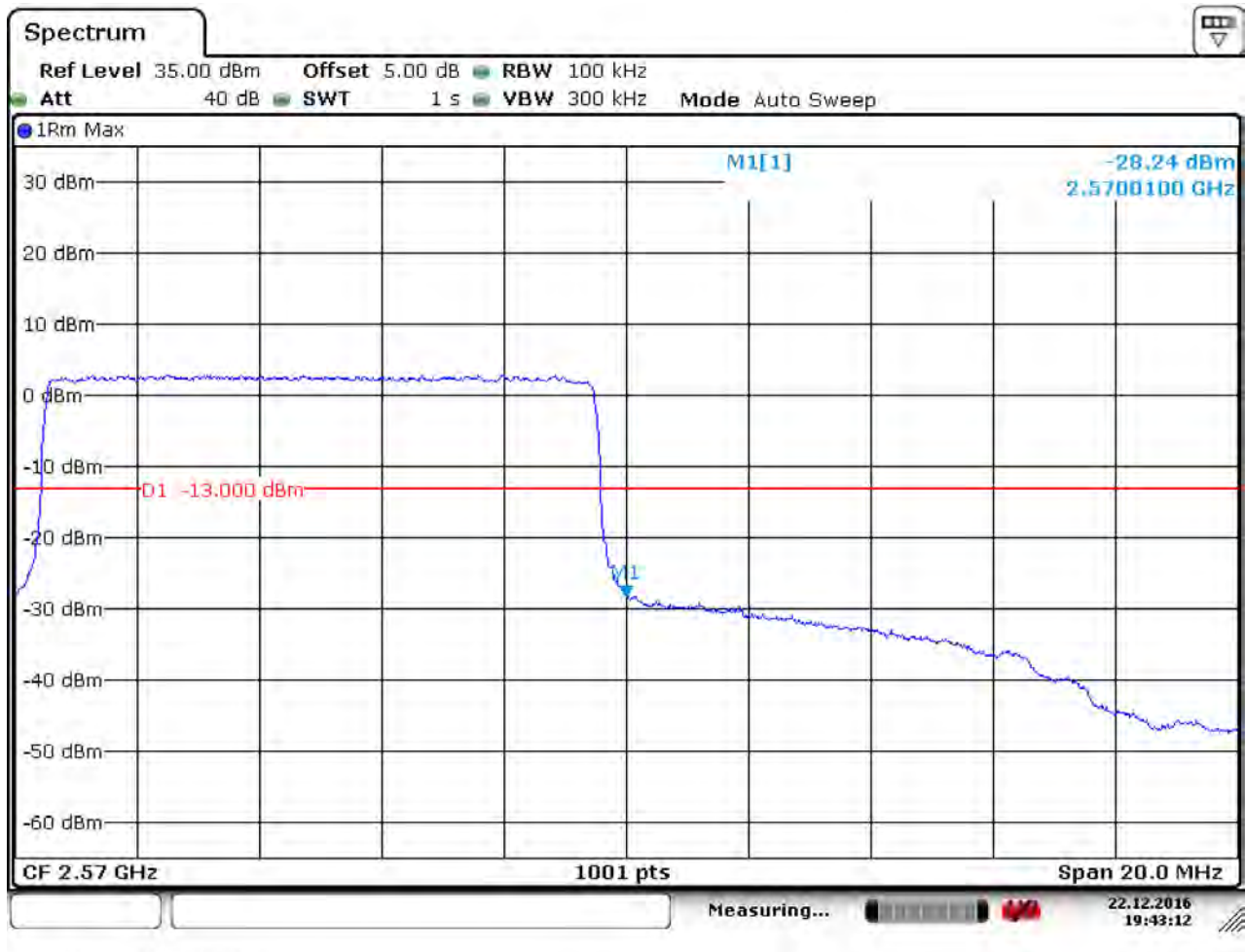
Date: 22.DEC.2016 19:43:13

5.1.1.5   Test Mode = LTE/TM1 15MHz

5.1.1.5.1   Test Channel = LCH

5.1.1.5.1.1 Test RB=1RB
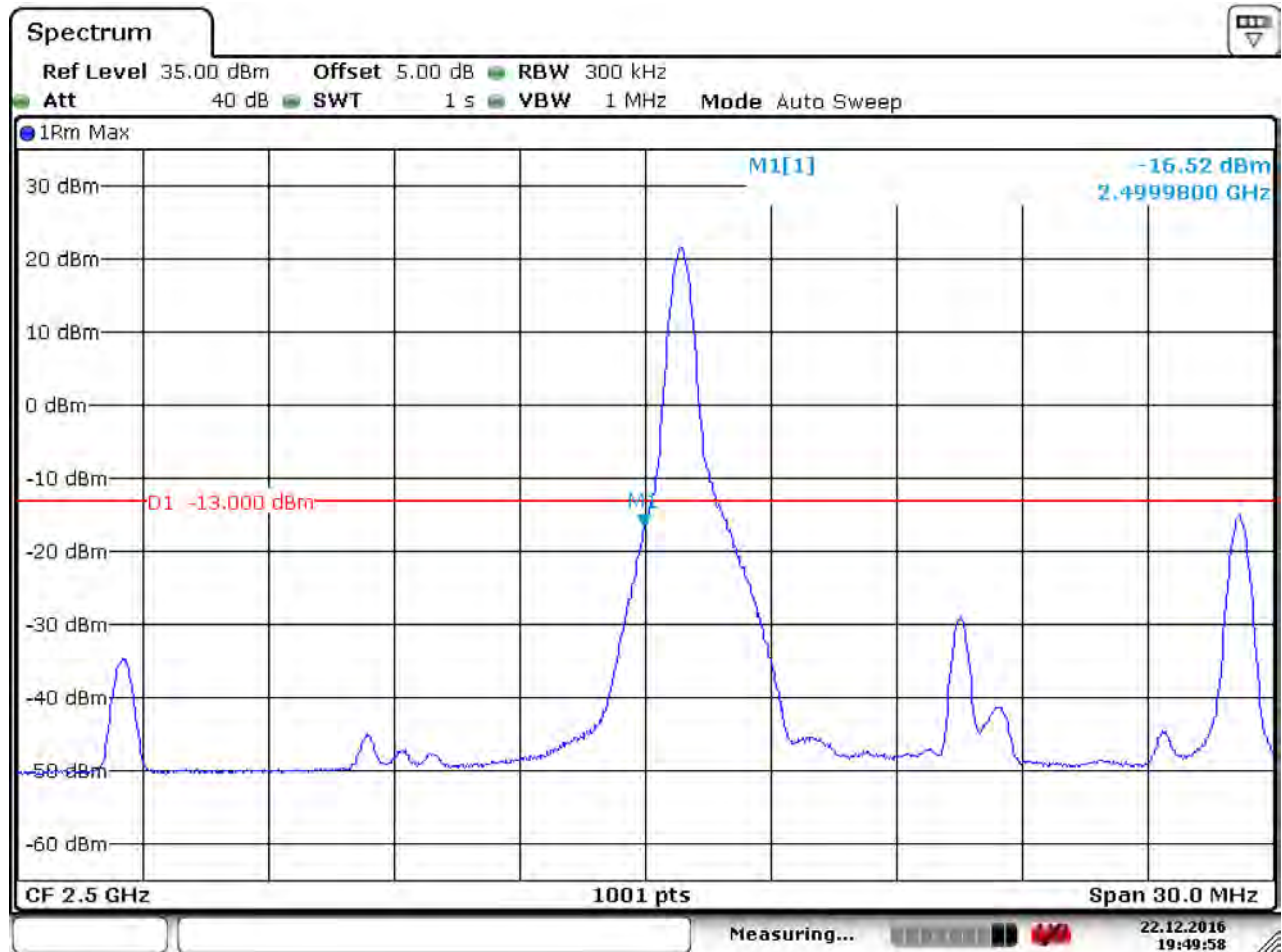
Date: 22.DEC.2016 19:49:59

5.1.1.5.1.2 Test RB=75RB
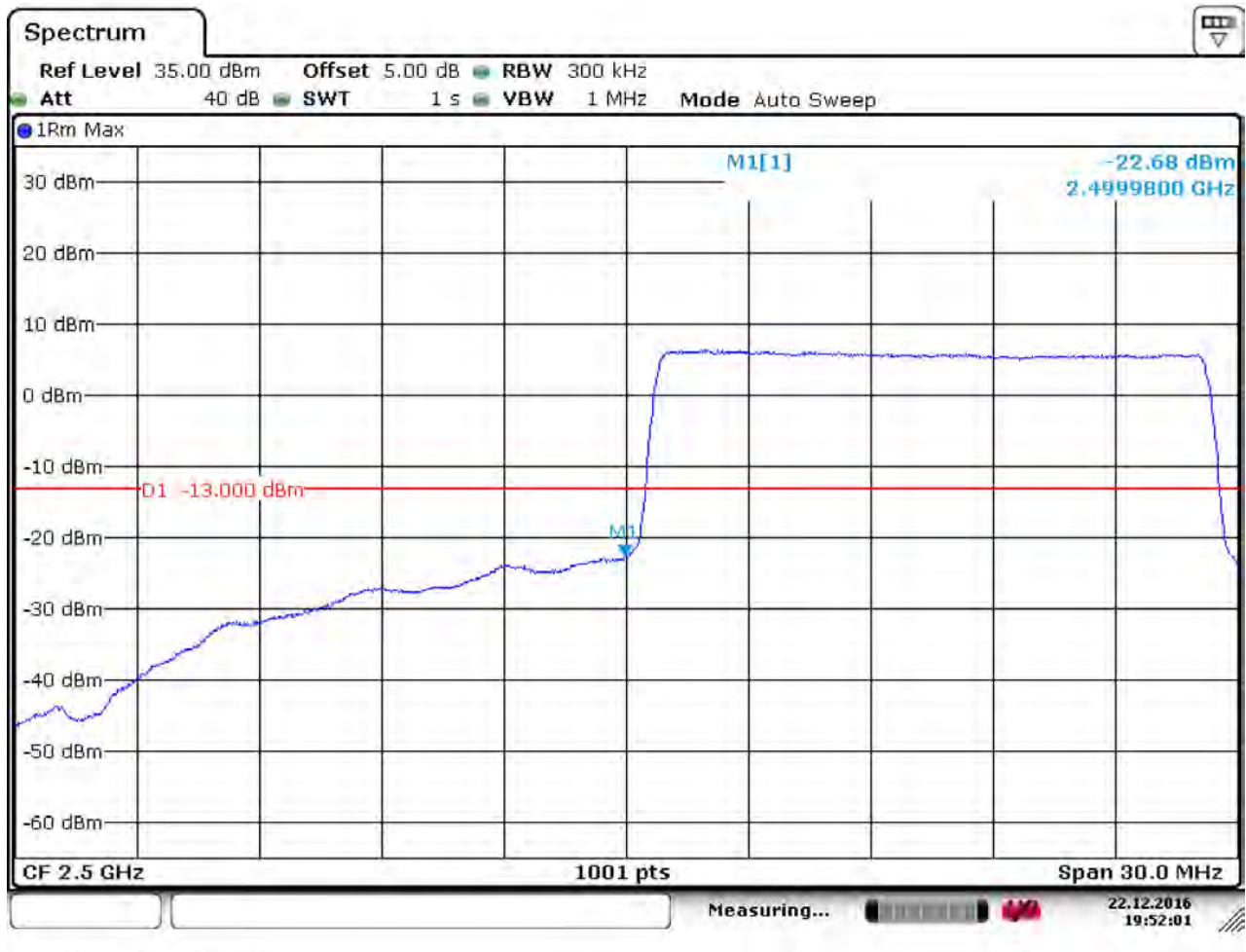
Date: 22.DEC.2016 19:52:02

5.1.1.5.2 Test Channel = HCH

5.1.1.5.2.1 Test RB=1RB
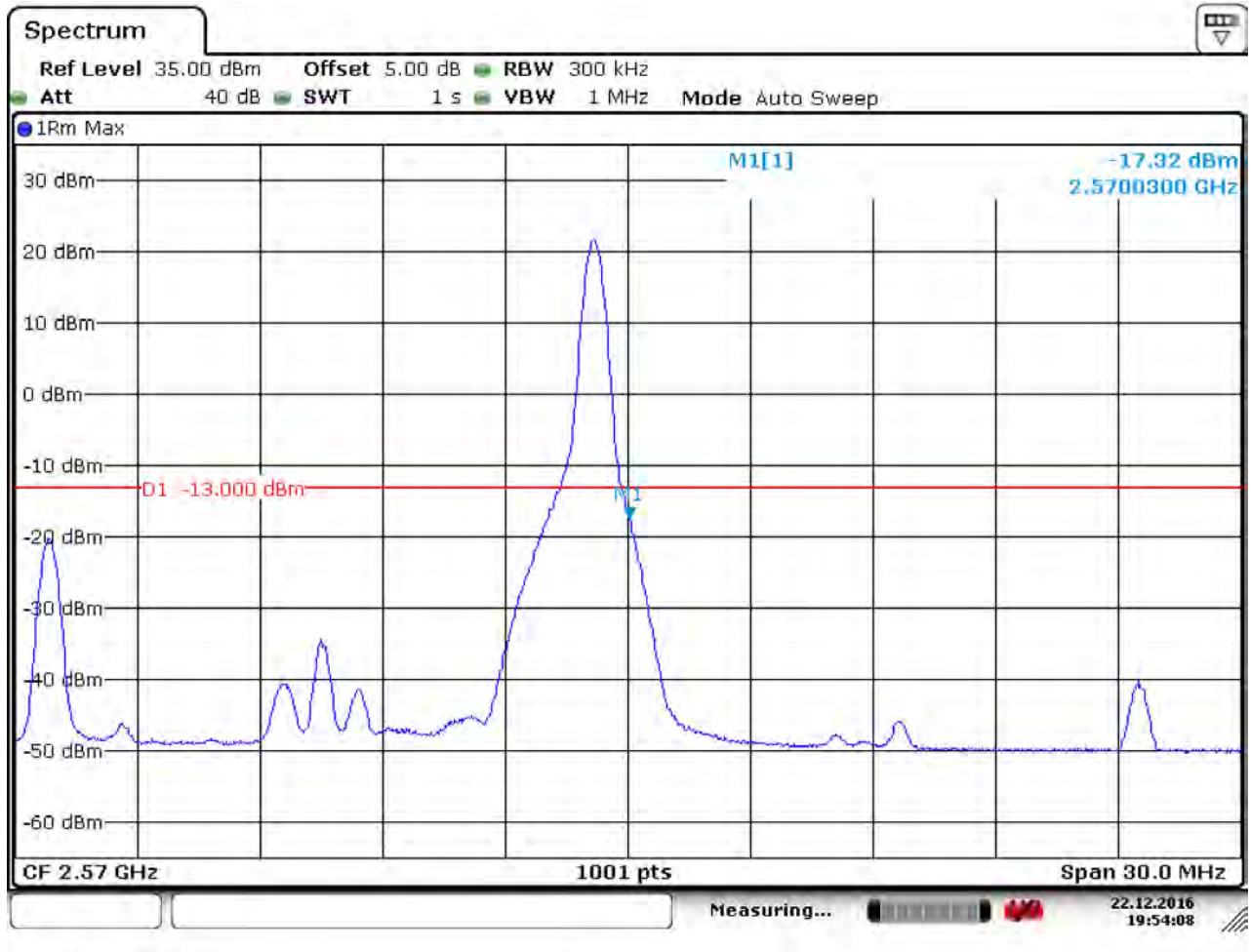
Date: 22.DEC.2016 19:54:08

5.1.1.5.2.2 Test RB=75RB
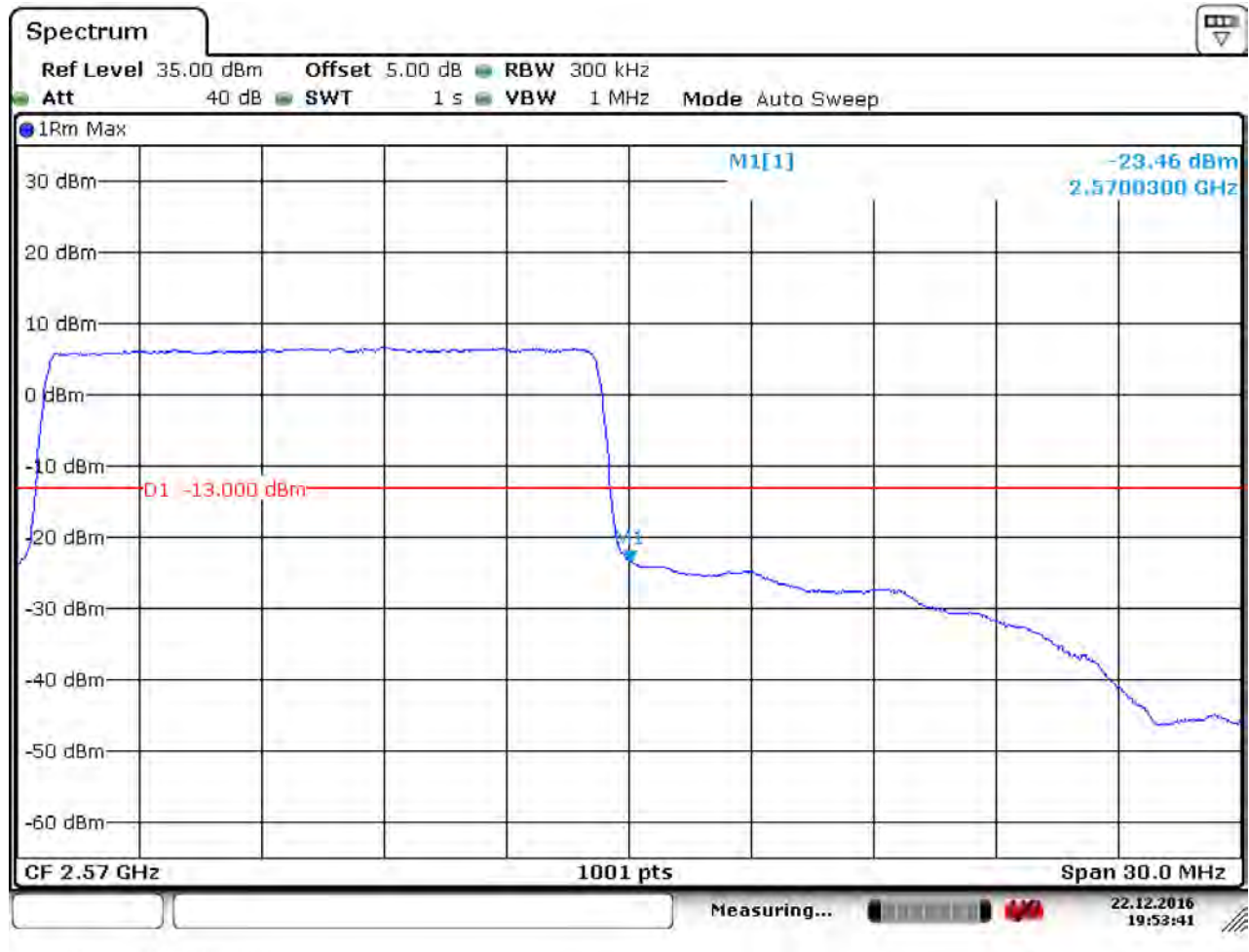
Date: 22.DEC.2016 19:53:41

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
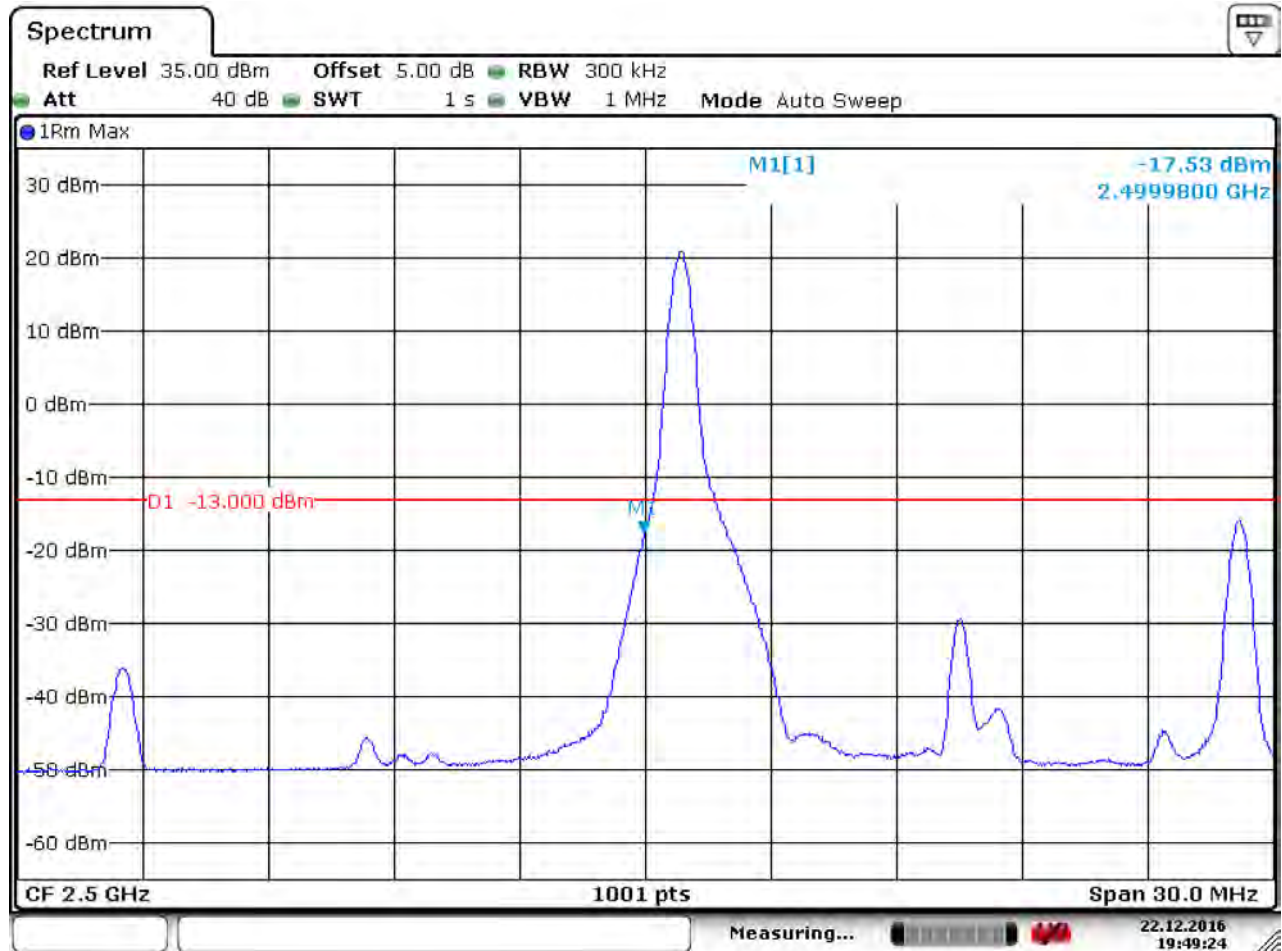
Date: 22.DEC.2016 19:49:25

5.1.1.6.1.2 Test RB=75RB
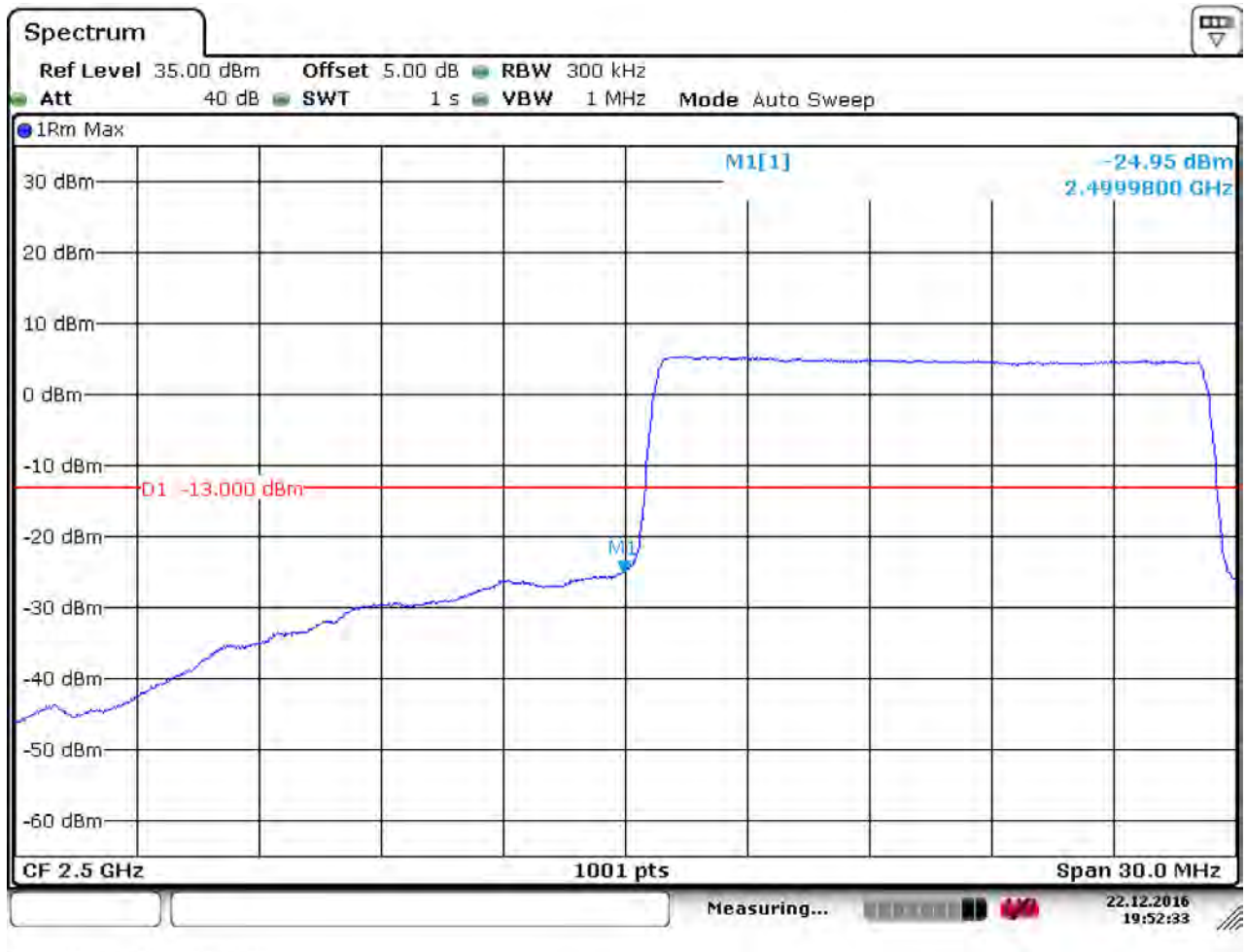
Date: 22.DEC.2016 19:52:33

5.1.1.6.2 Test Channel = HCH

5.1.1.6.2.1 Test RB=1RB
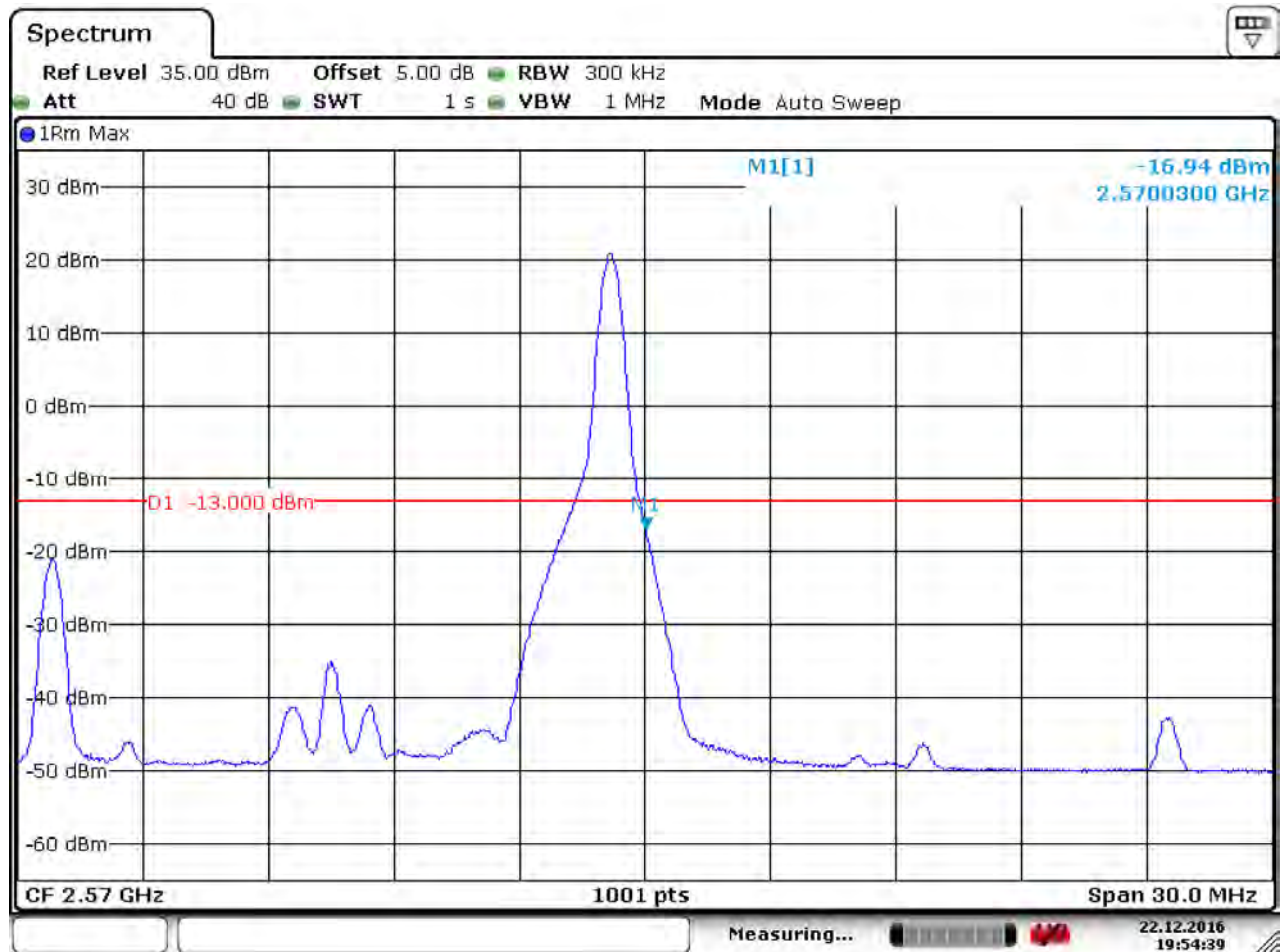
Date: 22.DEC.2016 19:54:40

5.1.1.6.2.2 Test RB=75RB
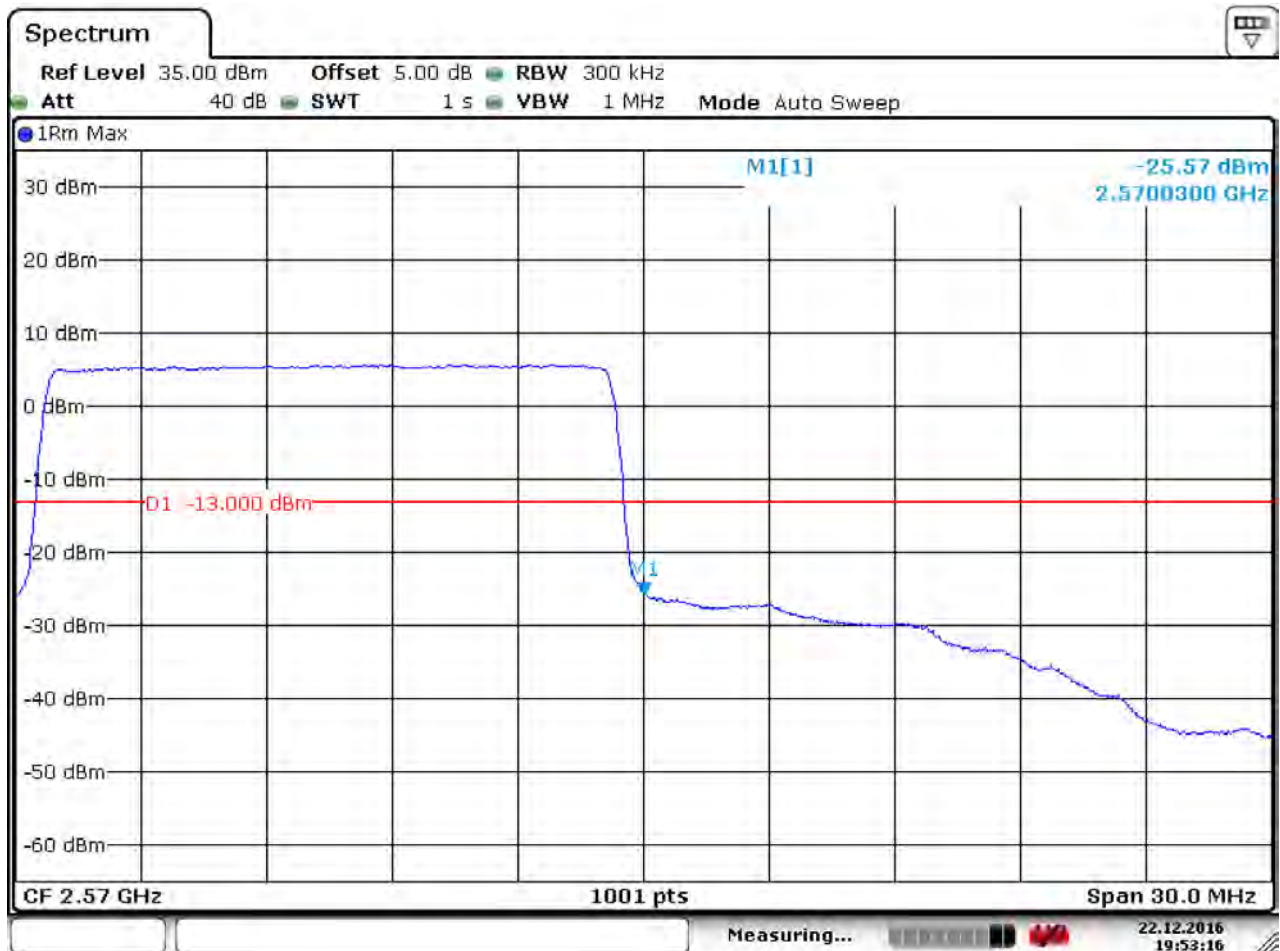
Date: 22.DEC.2016 19:53:16

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: 22.DEC.2016 19:58:20

5.1.1.7.1.2 Test RB=100RB

Date: 22.DEC.2016 20:00:14

5.1.1.7.2   Test Channel = HCH

5.1.1.7.2.1 Test RB=1RB

Date: 22.DEC.2016 19:57:42

5.1.1.7.2.2 Test RB=100RB
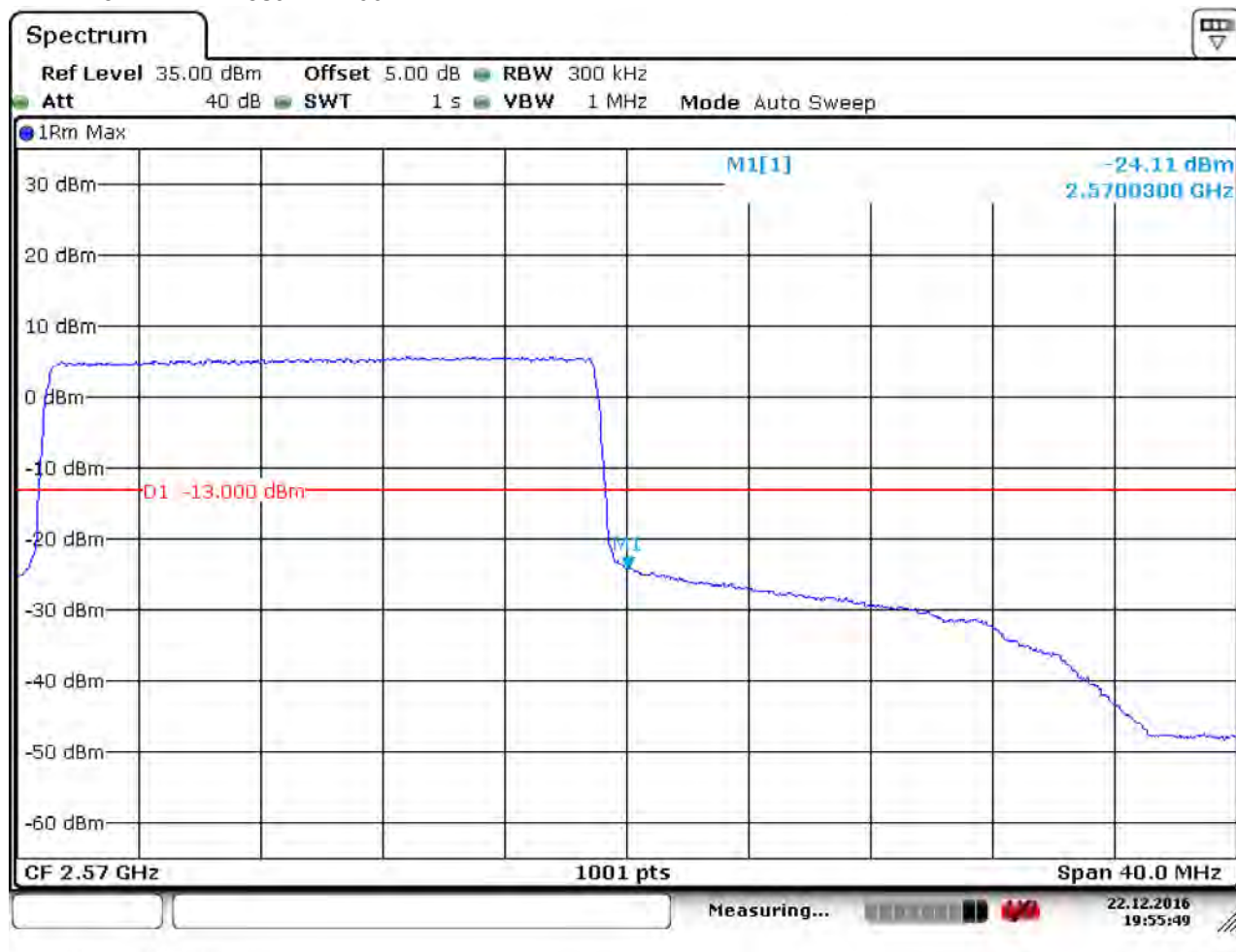
Date: 22.DEC.2016 19:55:49

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
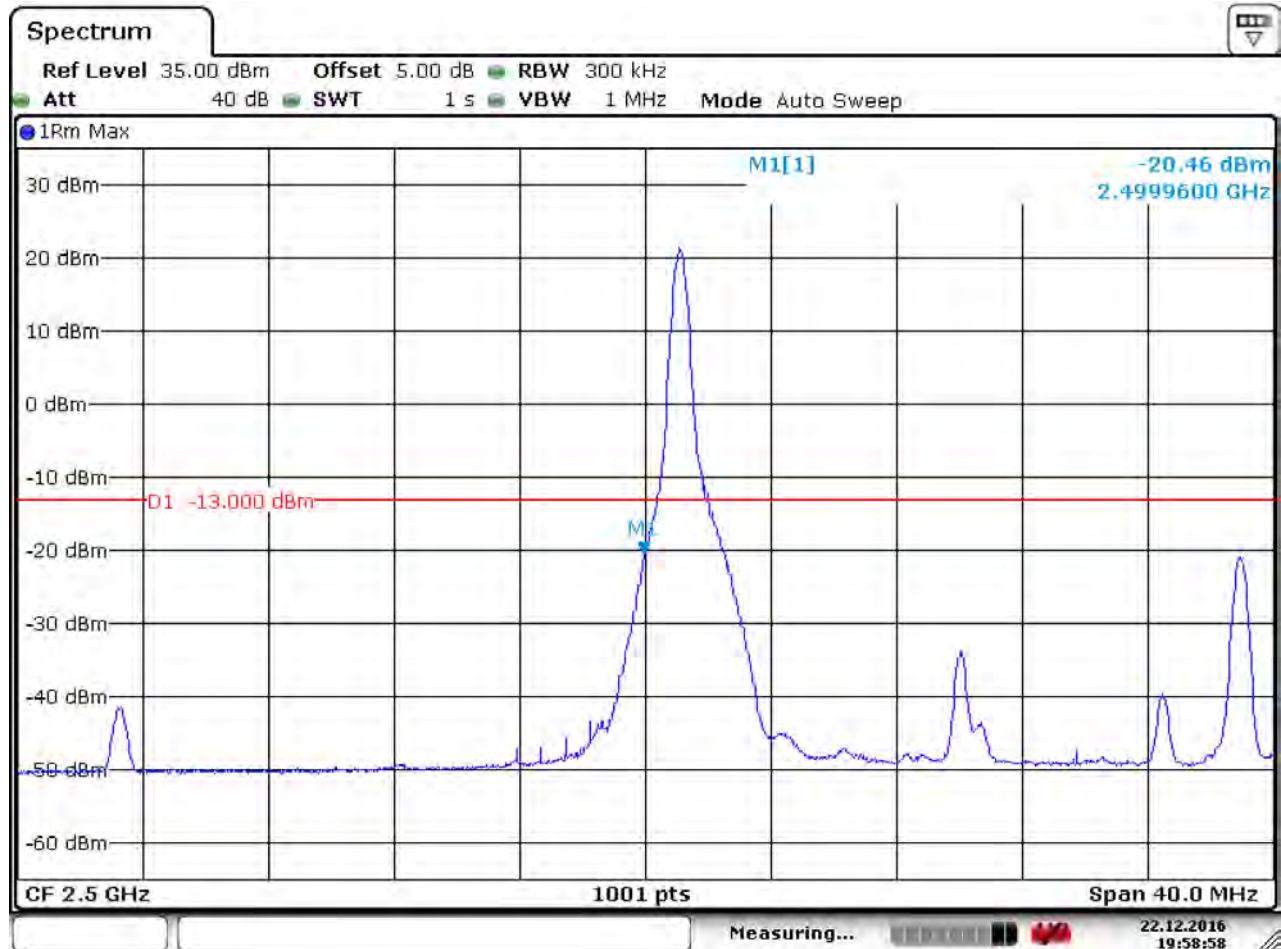
Date: 22.DEC.2016 19:58:59

5.1.1.8.1.2 Test RB=100RB

Spectrum

| Ref Level | 35.00 dBm | Offset | 5.00 dB | RBW | 300 kHz |
| Att | 40 dB | SWT | 1 s | VBW | 1 MHz | Mode | Auto Sweep |

1Rm Max

M1[1]   -27.48 dBm
2.4999600 GHz

D1 -13.000 dBm

M1

CF 2.5 GHz   1001 pts   Span 40.0 MHz

Measuring...   22.12.2016 19:59:34
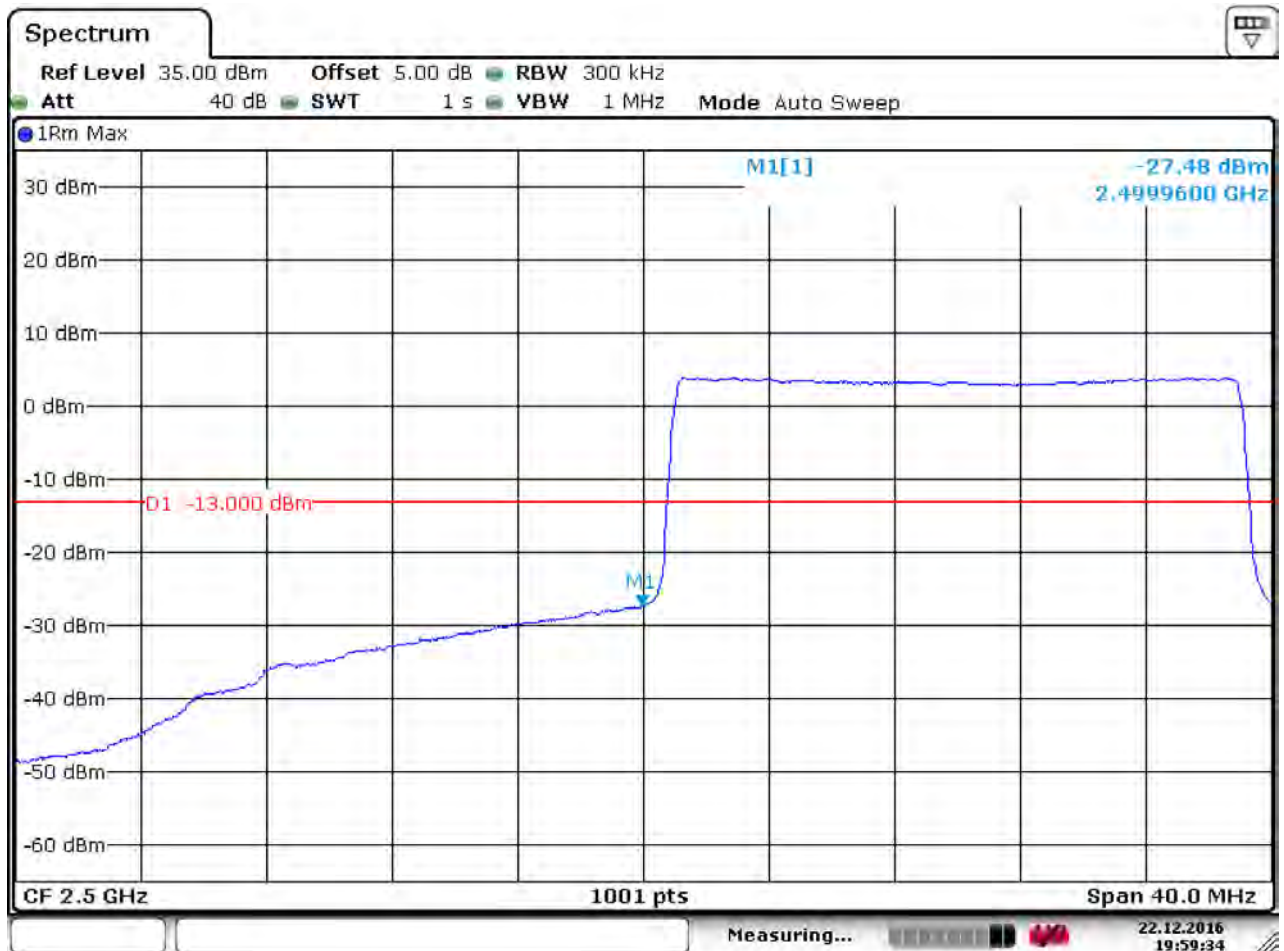
Date: 22.DEC.2016 19:59:35

5.1.1.8.2 Test Channel = HCH

5.1.1.8.2.1 Test RB=1RB
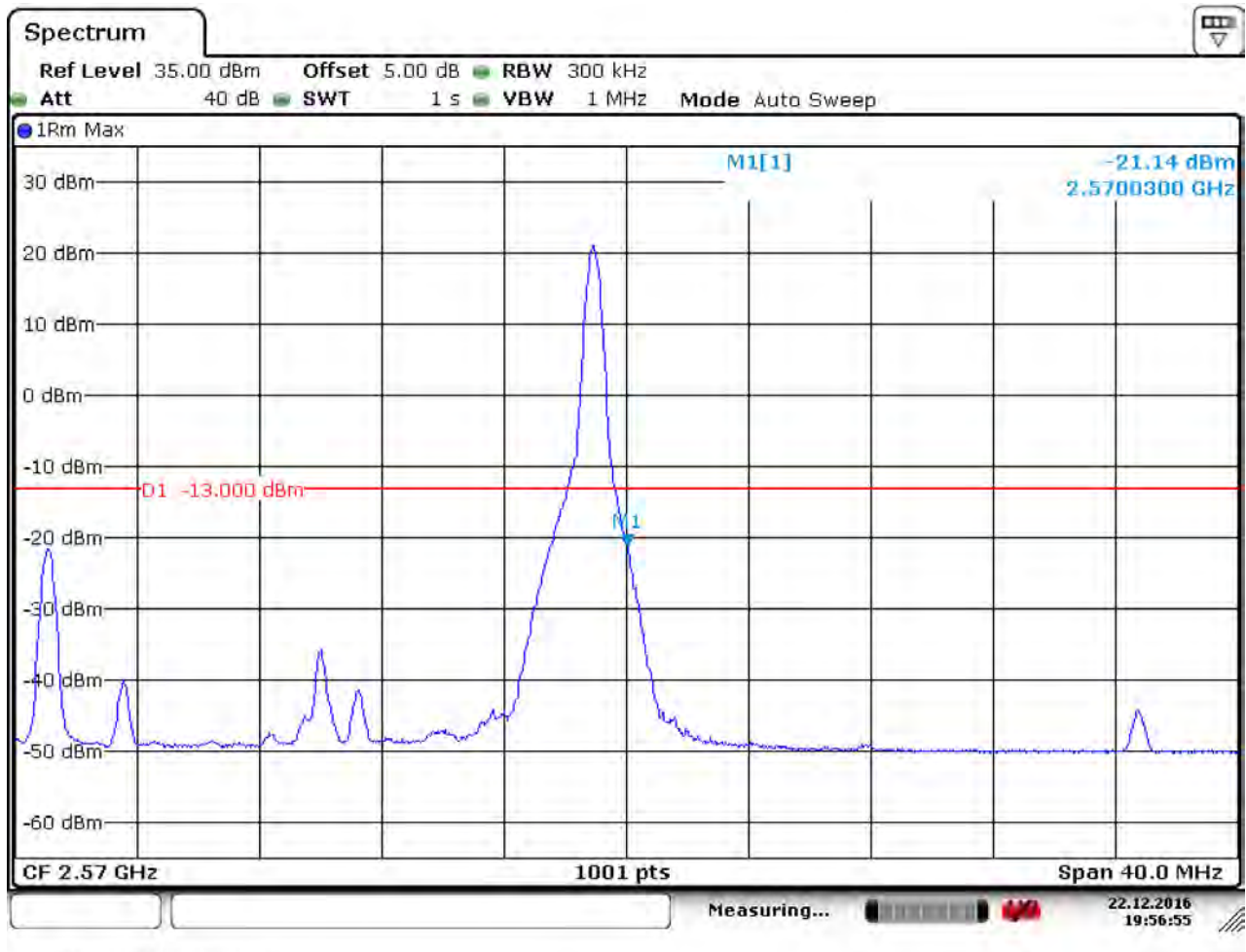
Date: 22.DEC.2016 19:56:55

5.1.1.8.2.2 Test RB=100RB
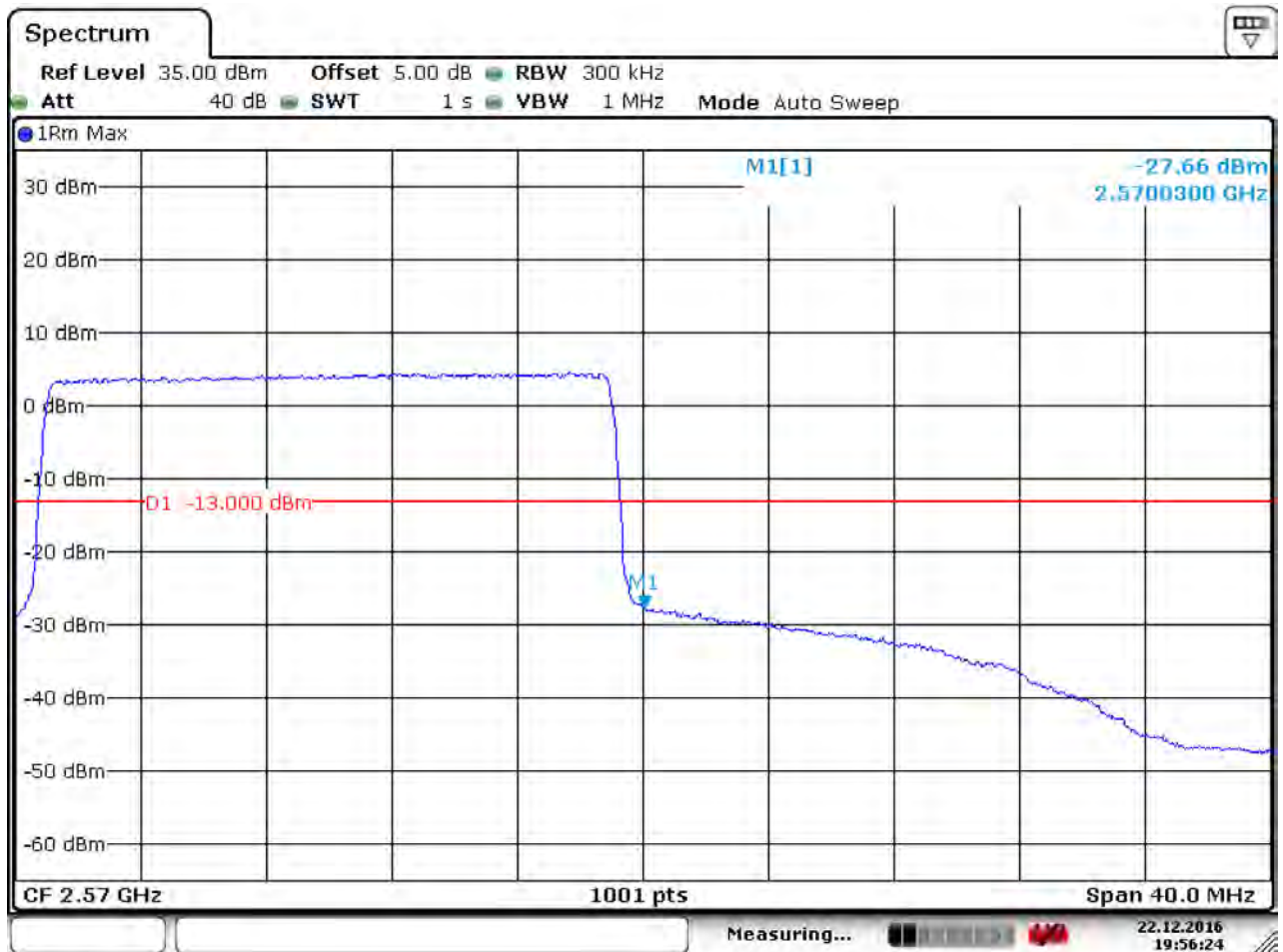
Date: 22.DEC.2016 19:56:25

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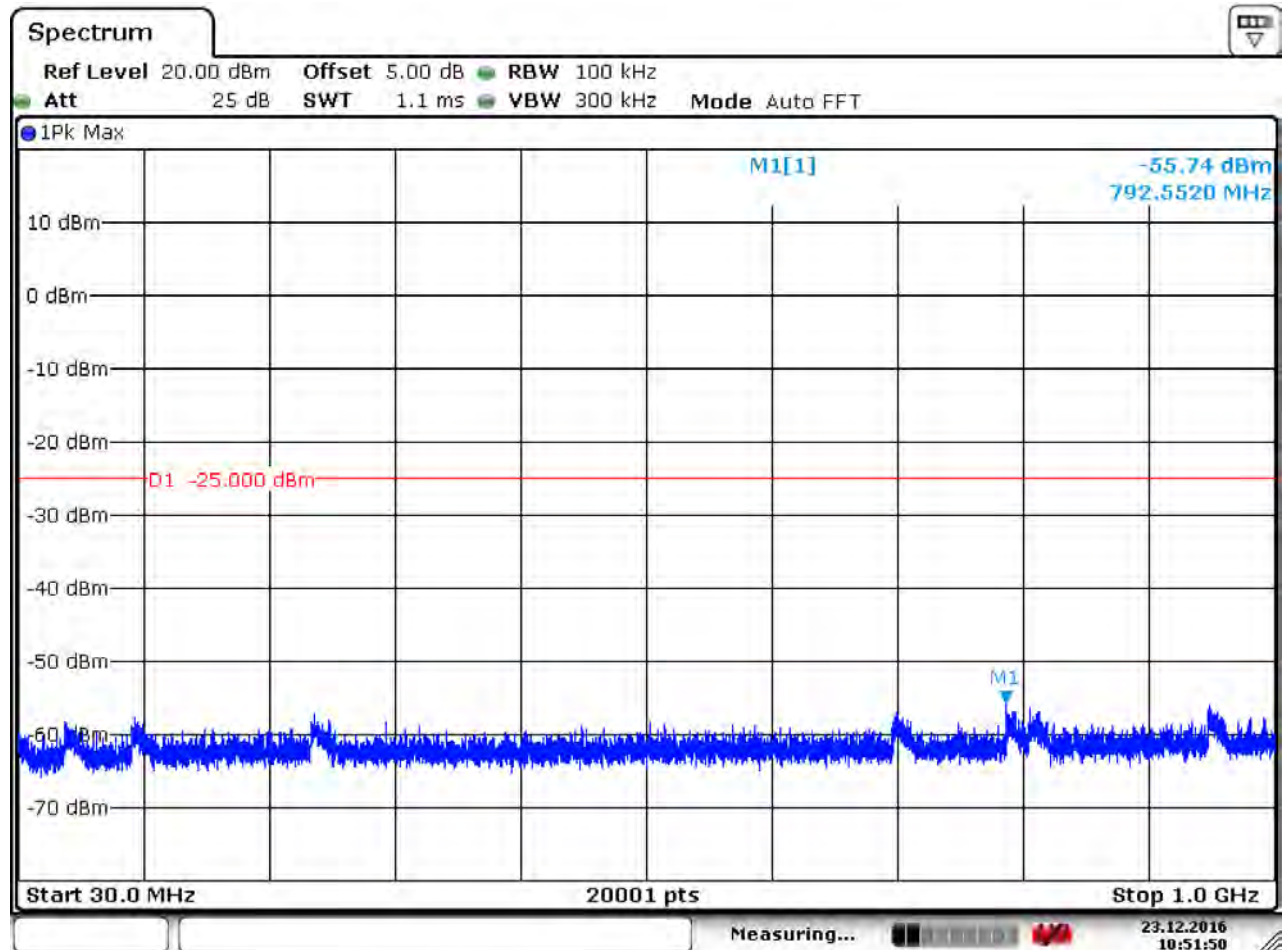
Date: 23.DEC.2016 10:51:51
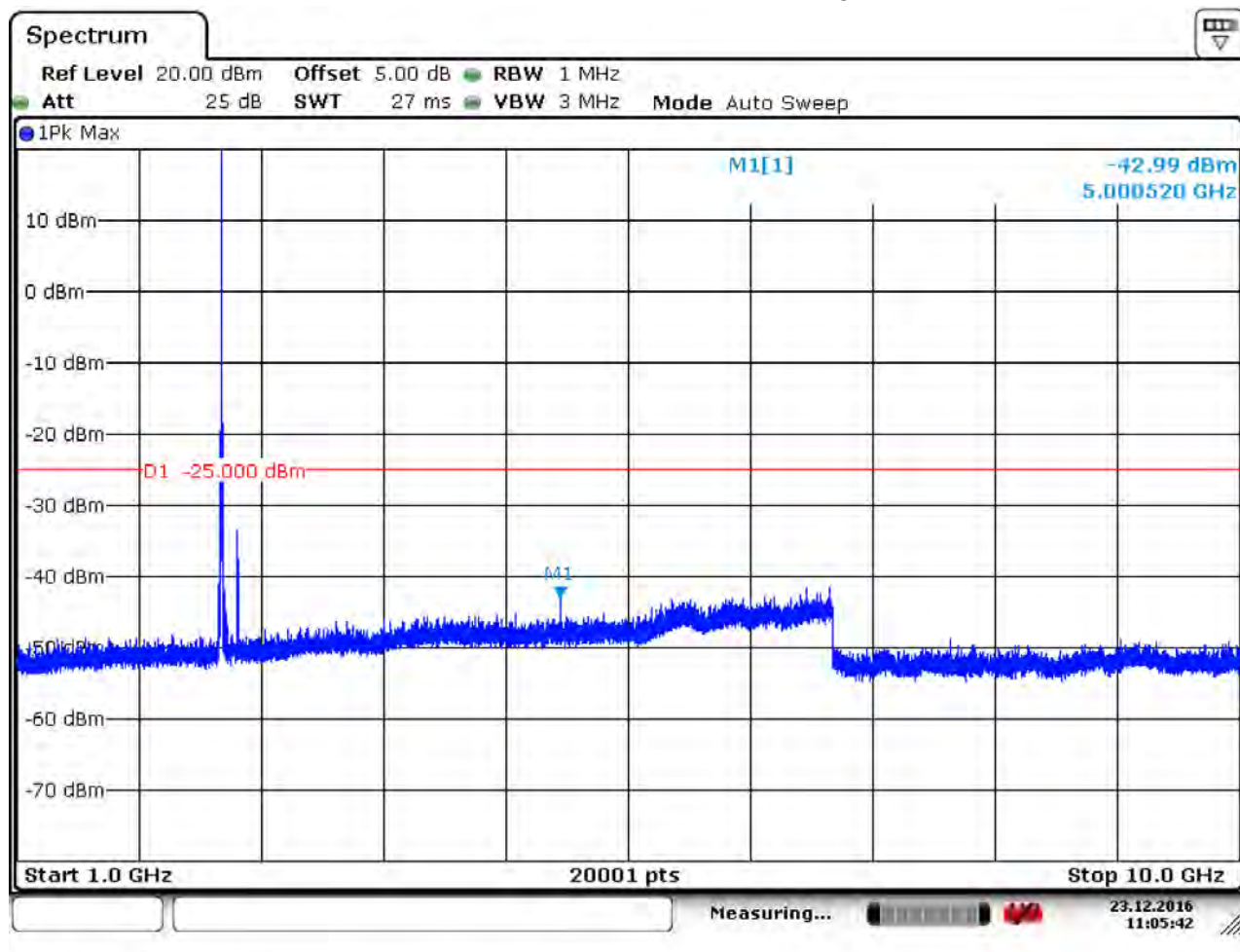
Spectrum

Ref Level 20.00 dBm	Offset 5.00 dB ● RBW 1 MHz	
● Att 25 dB	SWT 27 ms ● VBW 3 MHz	Mode Auto Sweep

● 1Pk Max

M1[1]   -42.99 dBm
               5.000520 GHz

10 dBm

0 dBm

-10 dBm

-20 dBm

D1 -25.000 dBm

-30 dBm

-40 dBm   A41

-50 dBm

-60 dBm

-70 dBm

Start 1.0 GHz   20001 pts   Stop 10.0 GHz

Measuring...   23.12.2016
                      11:05:42

Date: 23.DEC.2016 11:05:42

Spectrum

Ref Level 20.00 dBm   Offset 5.00 dB   RBW 1 MHz
Att   25 dB   SWT   30 ms   VBW 3 MHz   Mode Auto Sweep

1Pk Max

M1[1]   -45.72 dBm
             19.806260 GHz

D1 -25.000 dBm

Start 10.0 GHz   20001 pts   Stop 20.0 GHz

Measuring...   23.12.2016 16:52:24
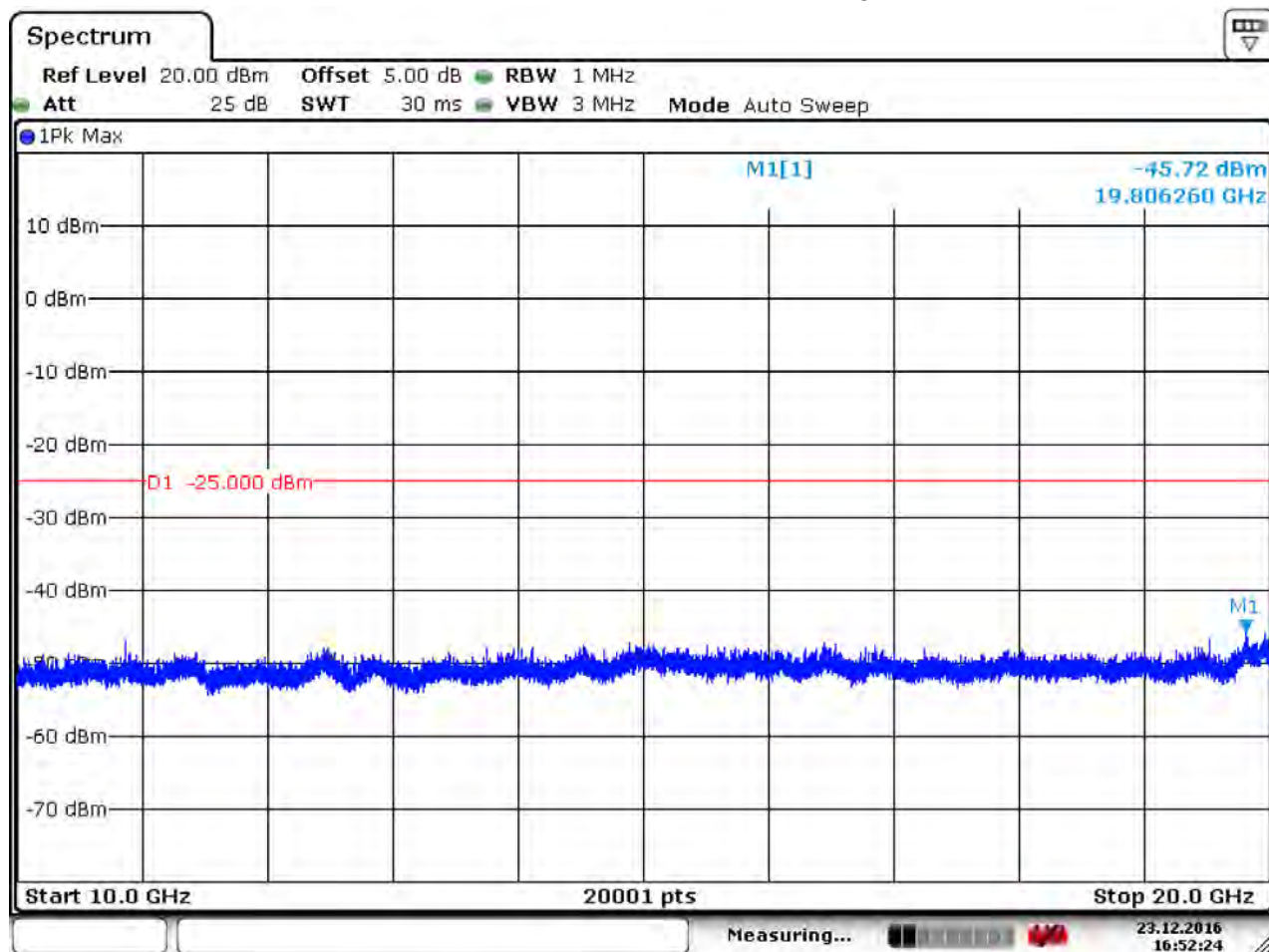
Date: 23.DEC.2016 16:52:25
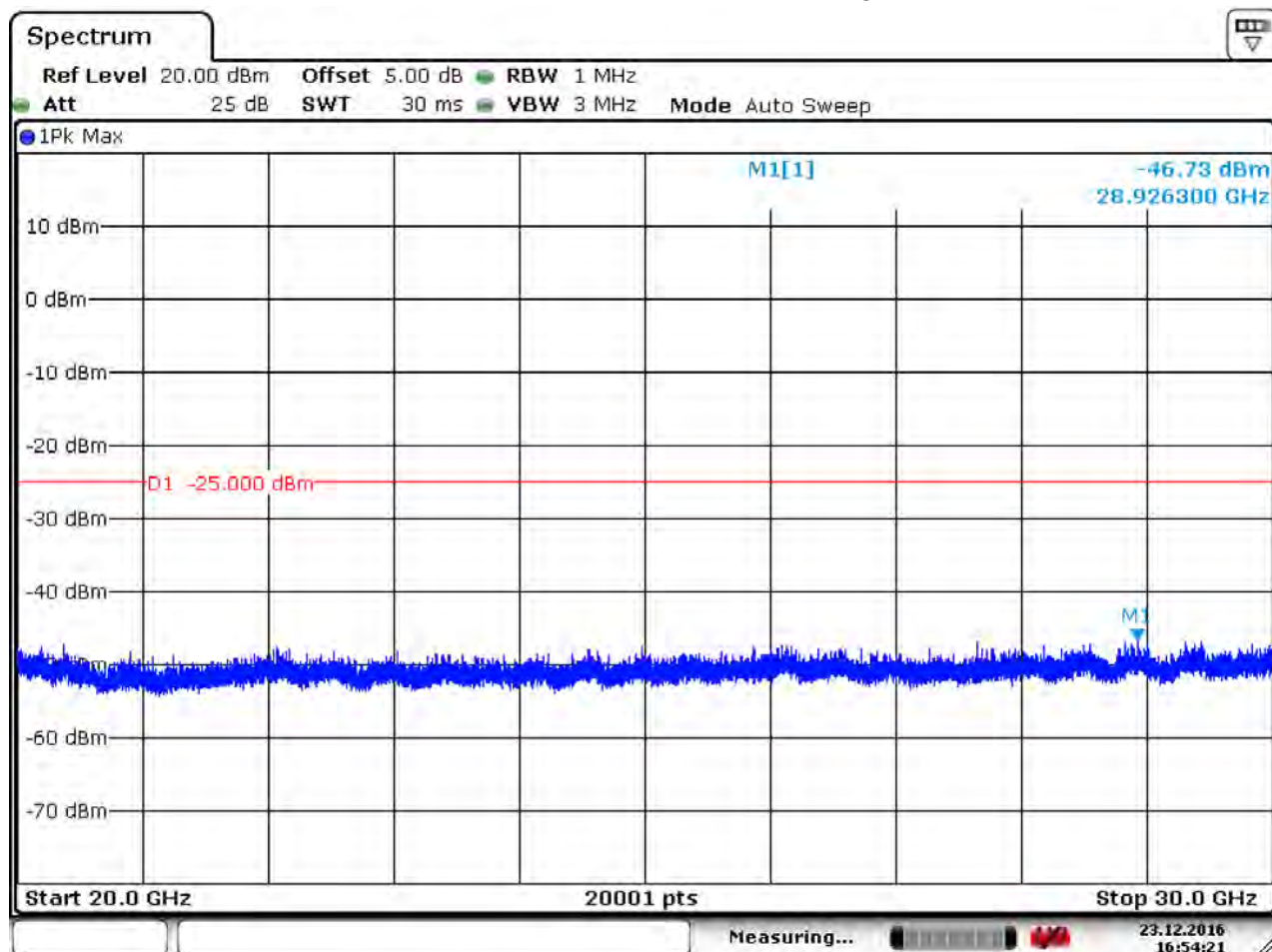
Date: 23.DEC.2016 16:54:21

6.1.1.1.2   Test Channel = MCH

Date: 23.DEC.2016 10:52:37

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Spectrum

Ref Level 20.00 dBm	Offset 5.00 dB	RBW 1 MHz	
Att 25 dB	SWT 27 ms	VBW 3 MHz	Mode Auto Sweep

● 1Pk Max

M1[1] −39.92 dBm
5.066220 GHz

10 dBm

0 dBm

−10 dBm

−20 dBm

D1 −25.000 dBm

−30 dBm

M1

−40 dBm

−50 dBm

−60 dBm

−70 dBm

Start 1.0 GHz   20001 pts   Stop 10.0 GHz

Measuring...   23.12.2016 11:05:03
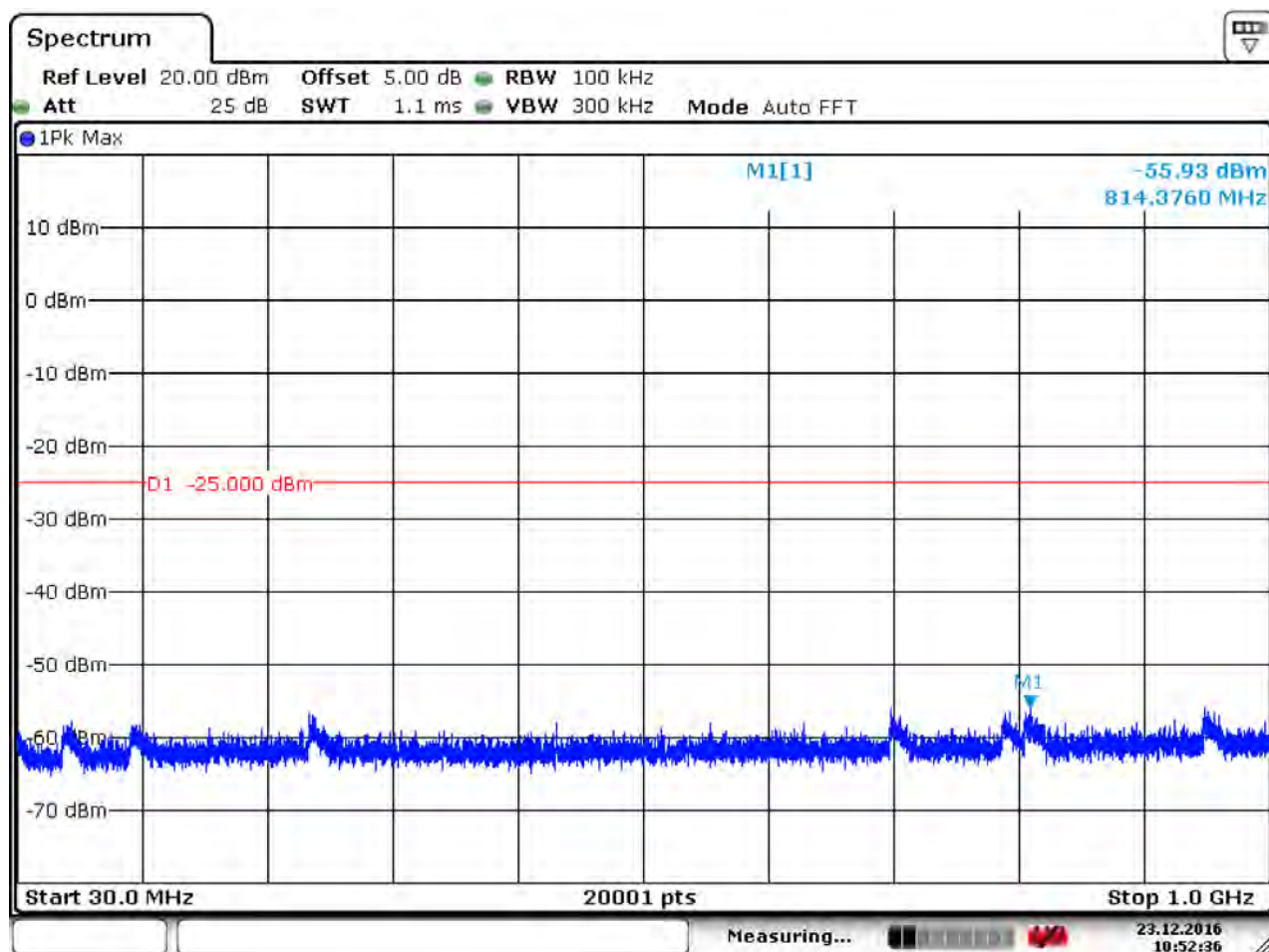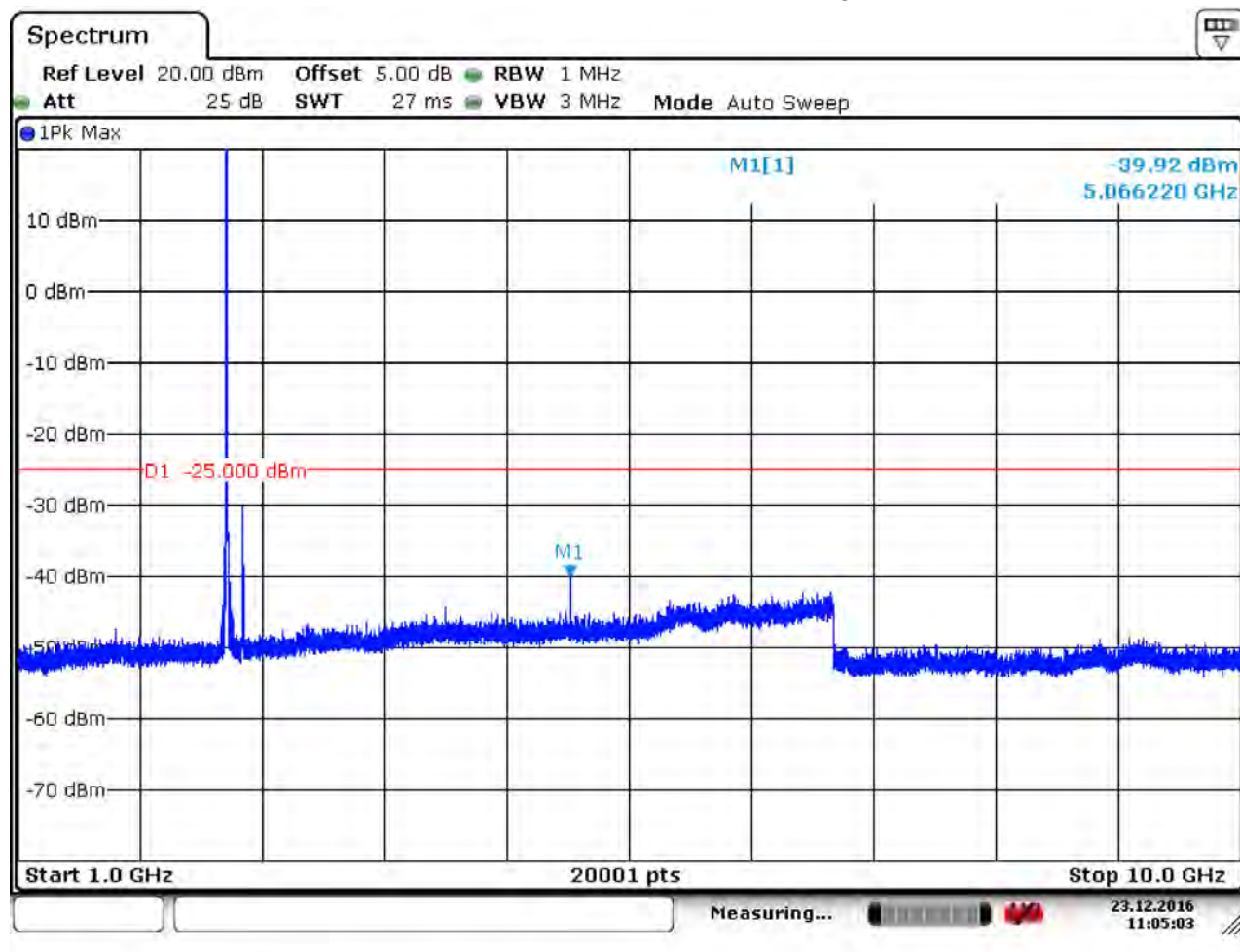
Date: 23.DEC.2016 11:05:03

Spectrum

| Ref Level | 20.00 dBm | Offset | 5.00 dB | RBW | 1 MHz |
| Att | 25 dB | SWT | 30 ms | VBW | 3 MHz | Mode Auto Sweep |

1Pk Max

M1[1]   -46.52 dBm
          19.977250 GHz

10 dBm
0 dBm
-10 dBm
-20 dBm
D1 -25.000 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm

Start 10.0 GHz   20001 pts   Stop 20.0 GHz

Measuring...   23.12.2016 16:52:48

Date: 23.DEC.2016 16:52:48

Spectrum

Ref Level 20.00 dBm   Offset 5.00 dB ● RBW 1 MHz
● Att   25 dB   SWT   30 ms ● VBW 3 MHz   Mode Auto Sweep

● 1Pk Max

M1[1]   -46.77 dBm
                                         29.348280 GHz

10 dBm
0 dBm
-10 dBm
-20 dBm
D1 -25.000 dBm
-30 dBm
-40 dBm
                                                    M1
-60 dBm
-70 dBm

Start 20.0 GHz   20001 pts   Stop 30.0 GHz

Measuring...   23.12.2016
                                16:53:57
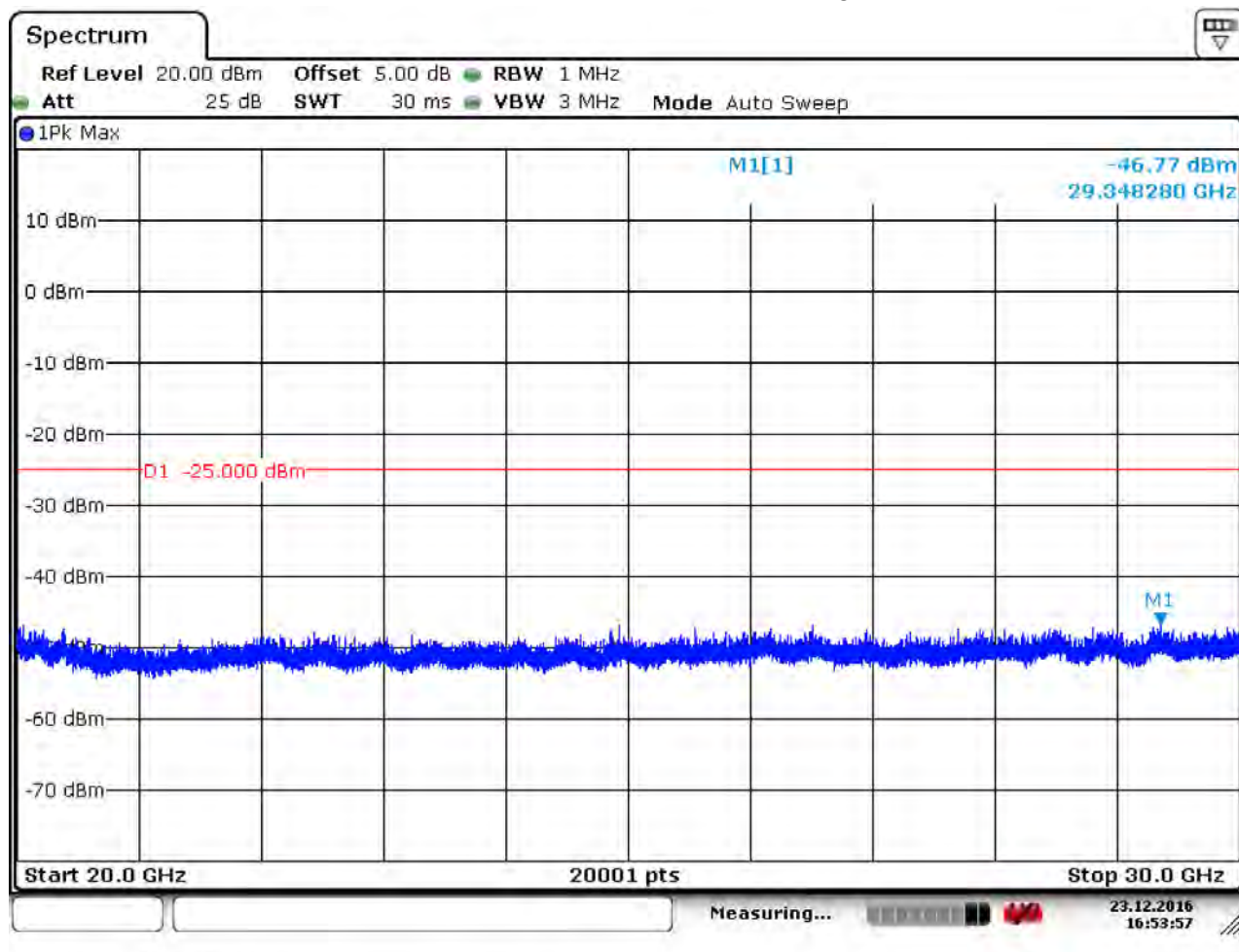
Date: 23.DEC.2016 16:53:57

6.1.1.1.3 Test Channel = HCH
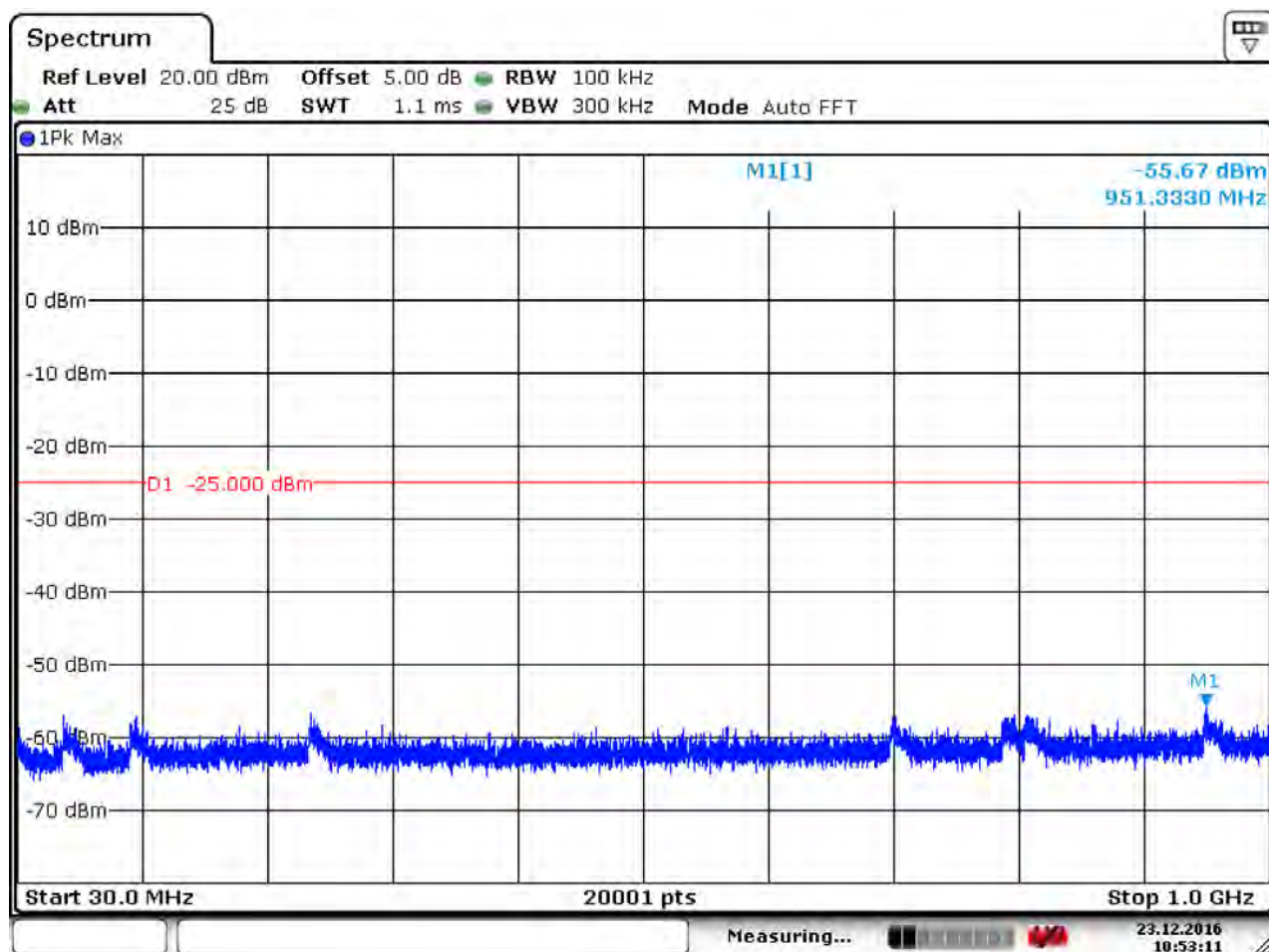
Date: 23.DEC.2016 10:53:11

Spectrum

| Ref Level | 20.00 dBm | Offset | 5.00 dB ● | RBW | 1 MHz |
| Att | 25 dB | SWT | 27 ms ● | VBW | 3 MHz | Mode Auto Sweep |

● 1Pk Max

M1[1]   -42.39 dBm
                         5.131020 GHz

10 dBm—

0 dBm—

-10 dBm—

-20 dBm—

D1 -25.000 dBm

-30 dBm—

-40 dBm—   M1

-50 dBm—

-60 dBm—

-70 dBm—

Start 1.0 GHz   20001 pts   Stop 10.0 GHz

Measuring...   23.12.2016
                      11:06:11
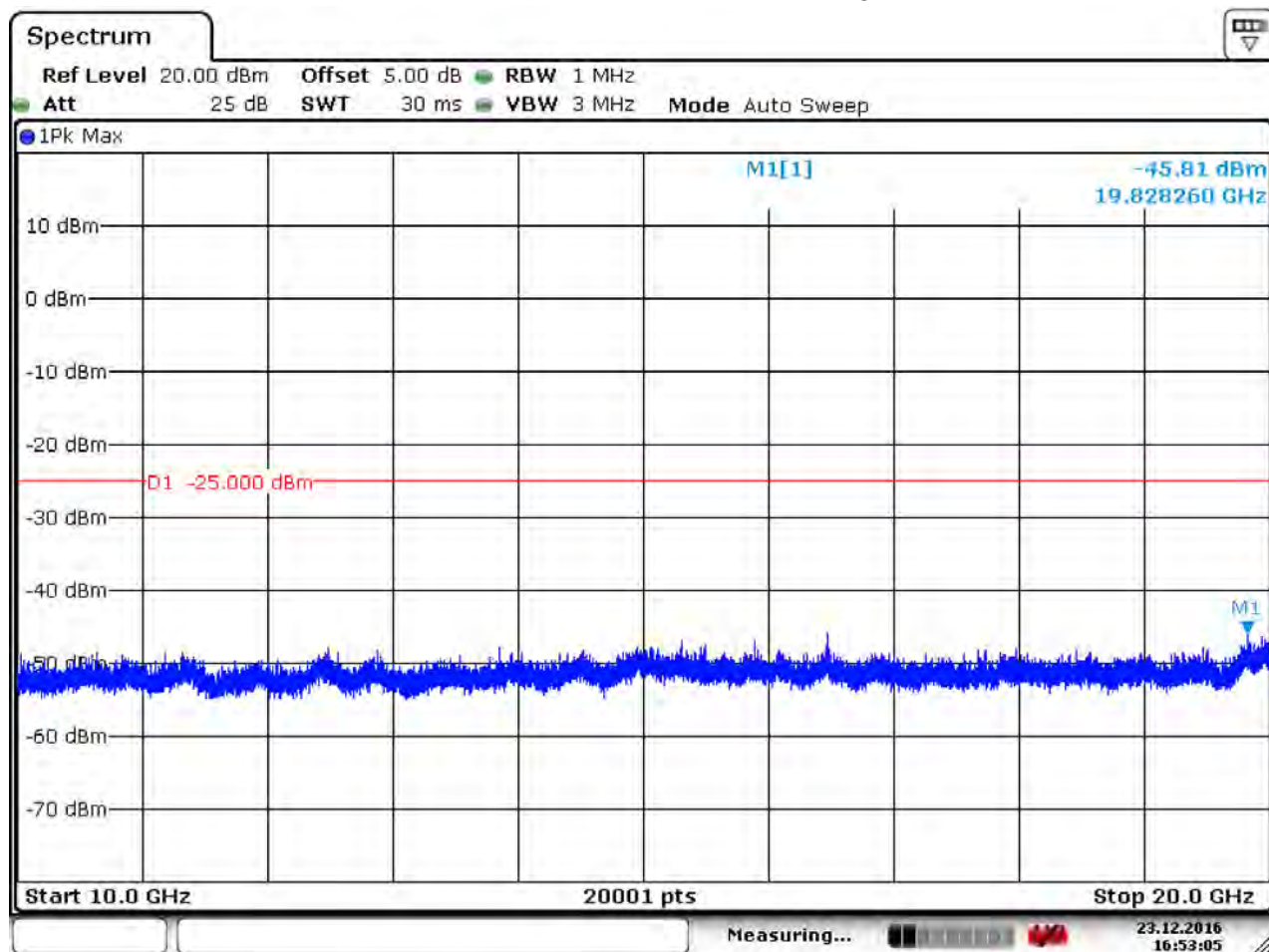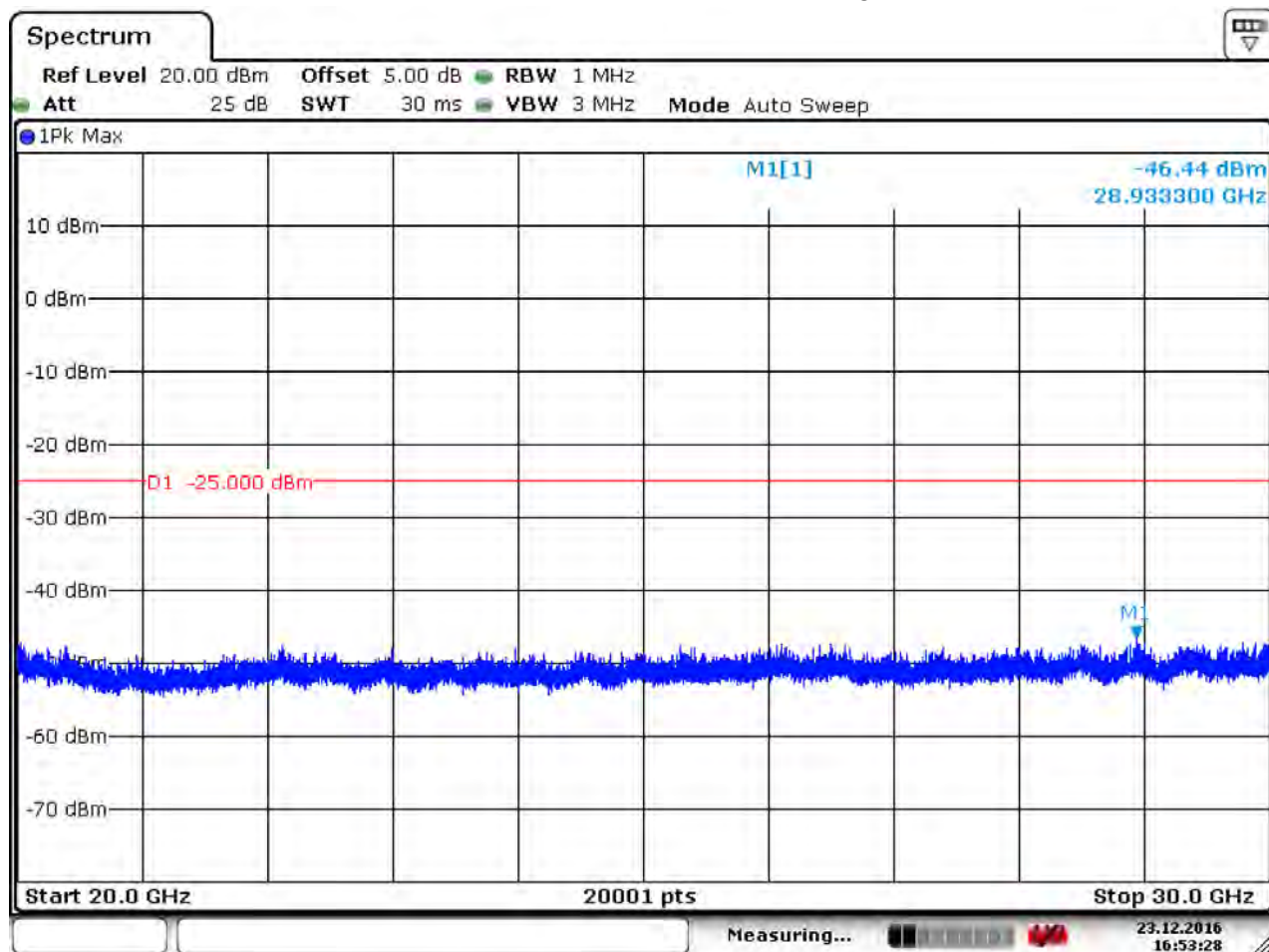
Date: 23.DEC.2016 11:06:12

Date: 23.DEC.2016 16:53:05

Date: 23.DEC.2016 16:53:28

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

   6.1.1.2.1   Test Channel = LCH
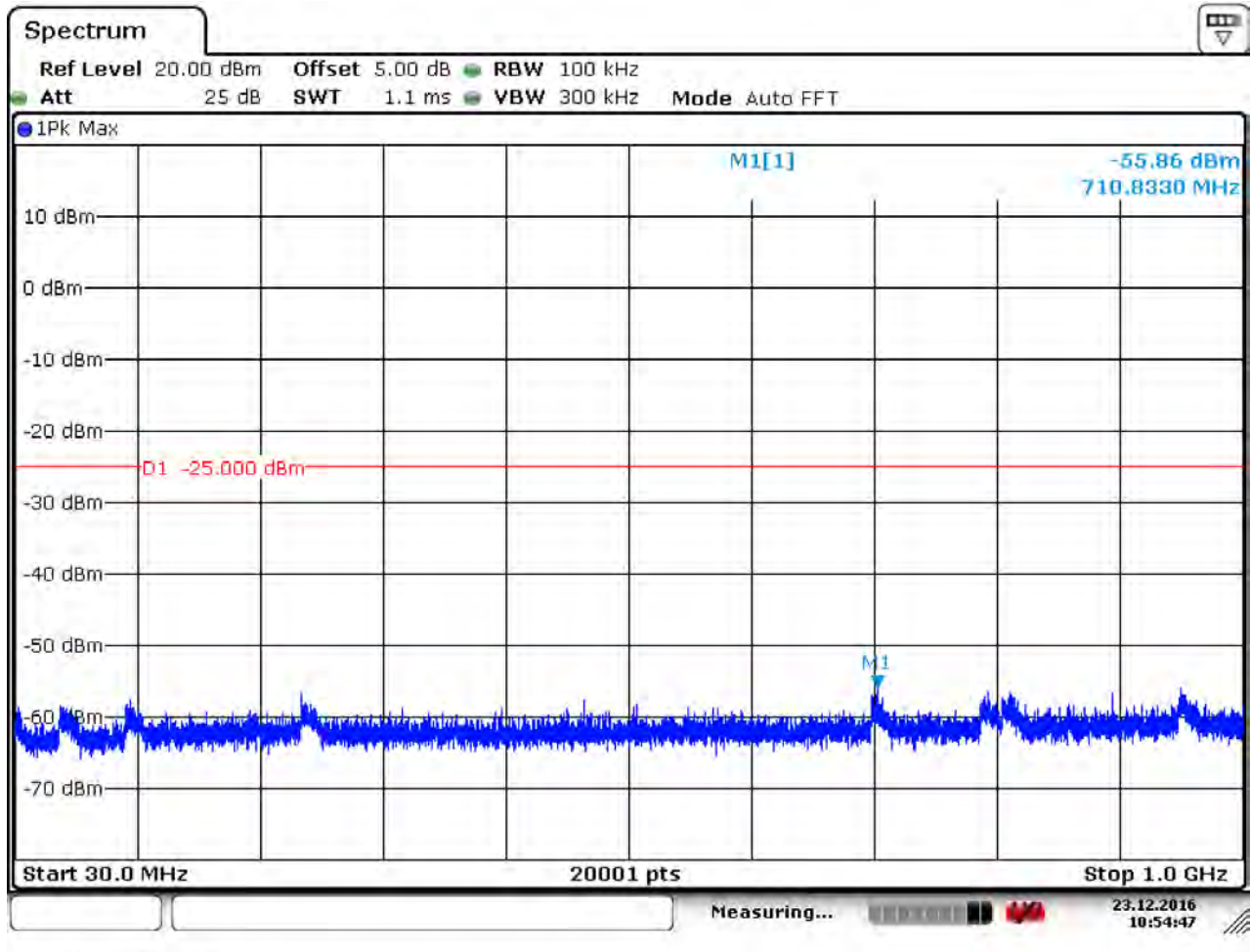
Date: 23.DEC.2016 10:54:47
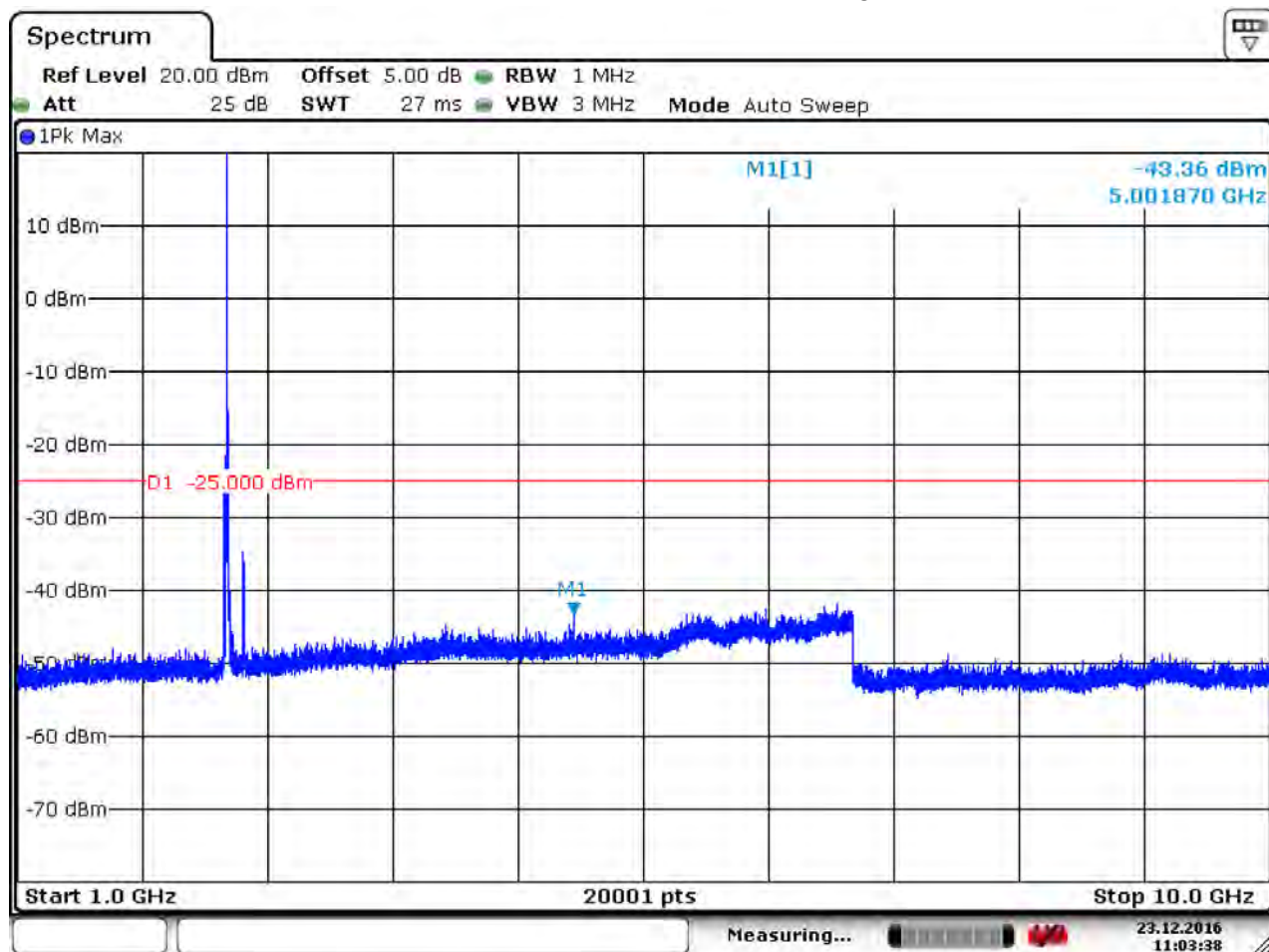
Date: 23.DEC.2016 11:03:39
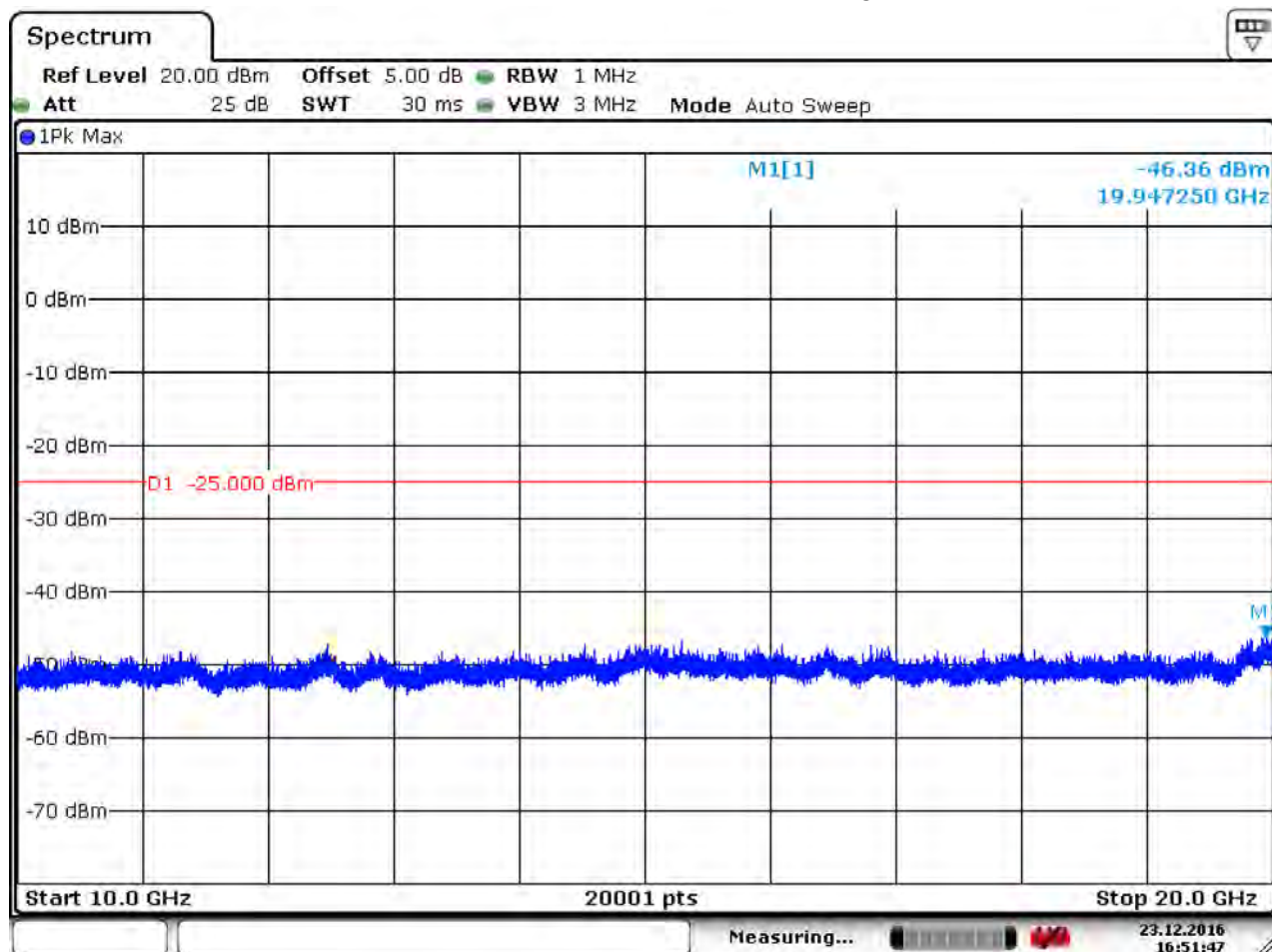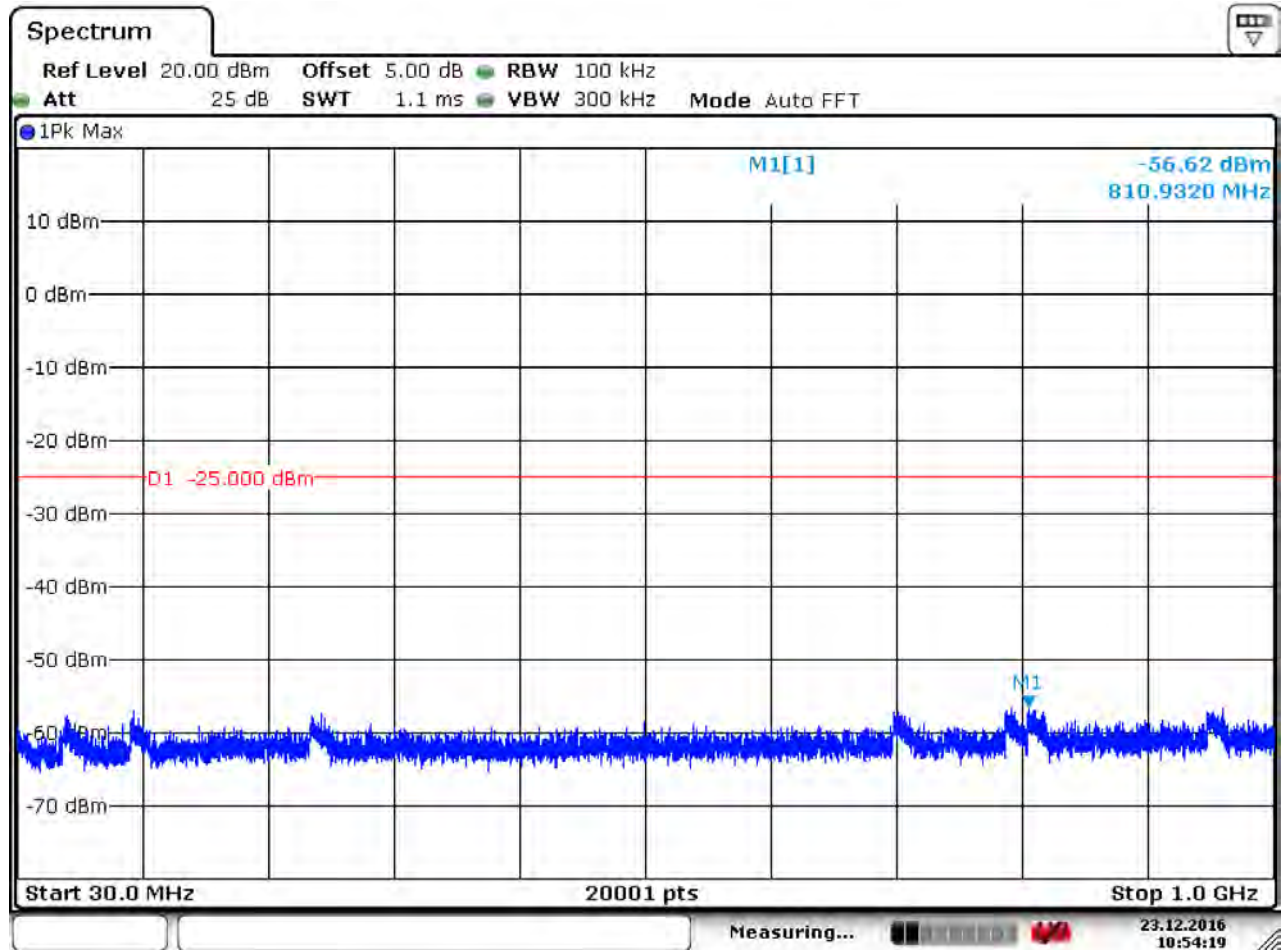
Date: 23.DEC.2016 16:51:47
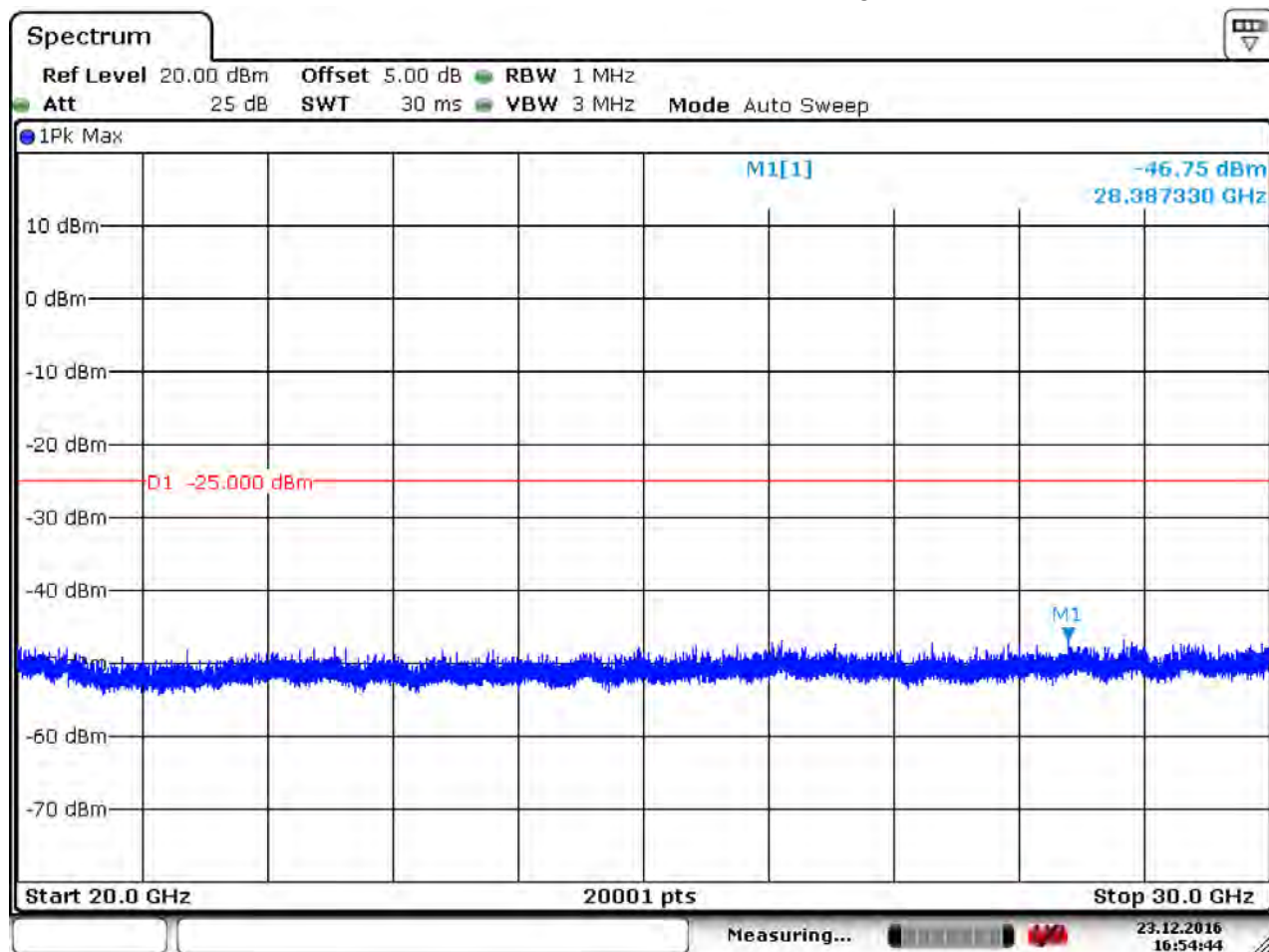
Date: 23.DEC.2016 16:54:45

6.1.1.2.2 Test Channel = MCH
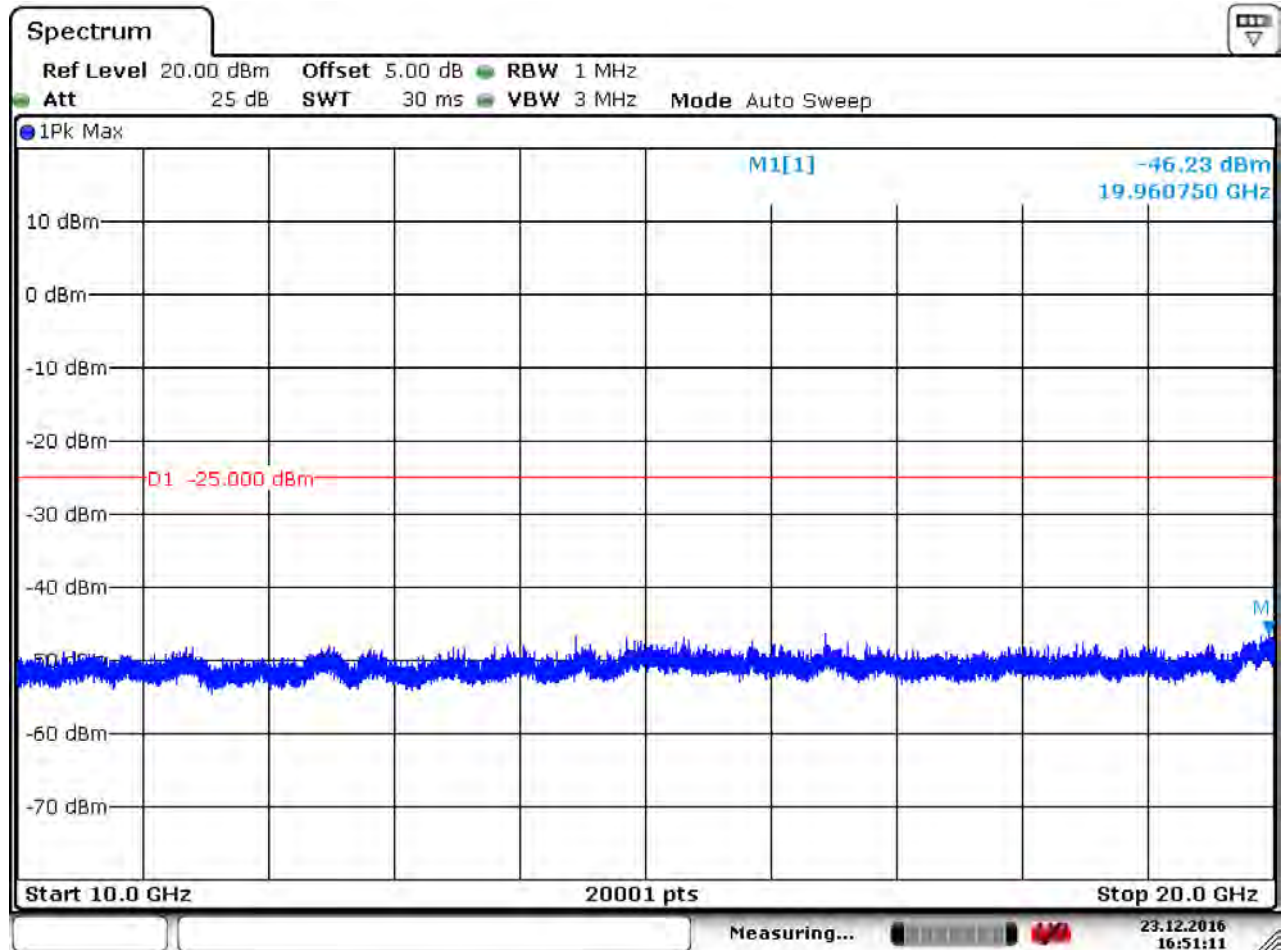

Date: 23.DEC.2016 10:54:19
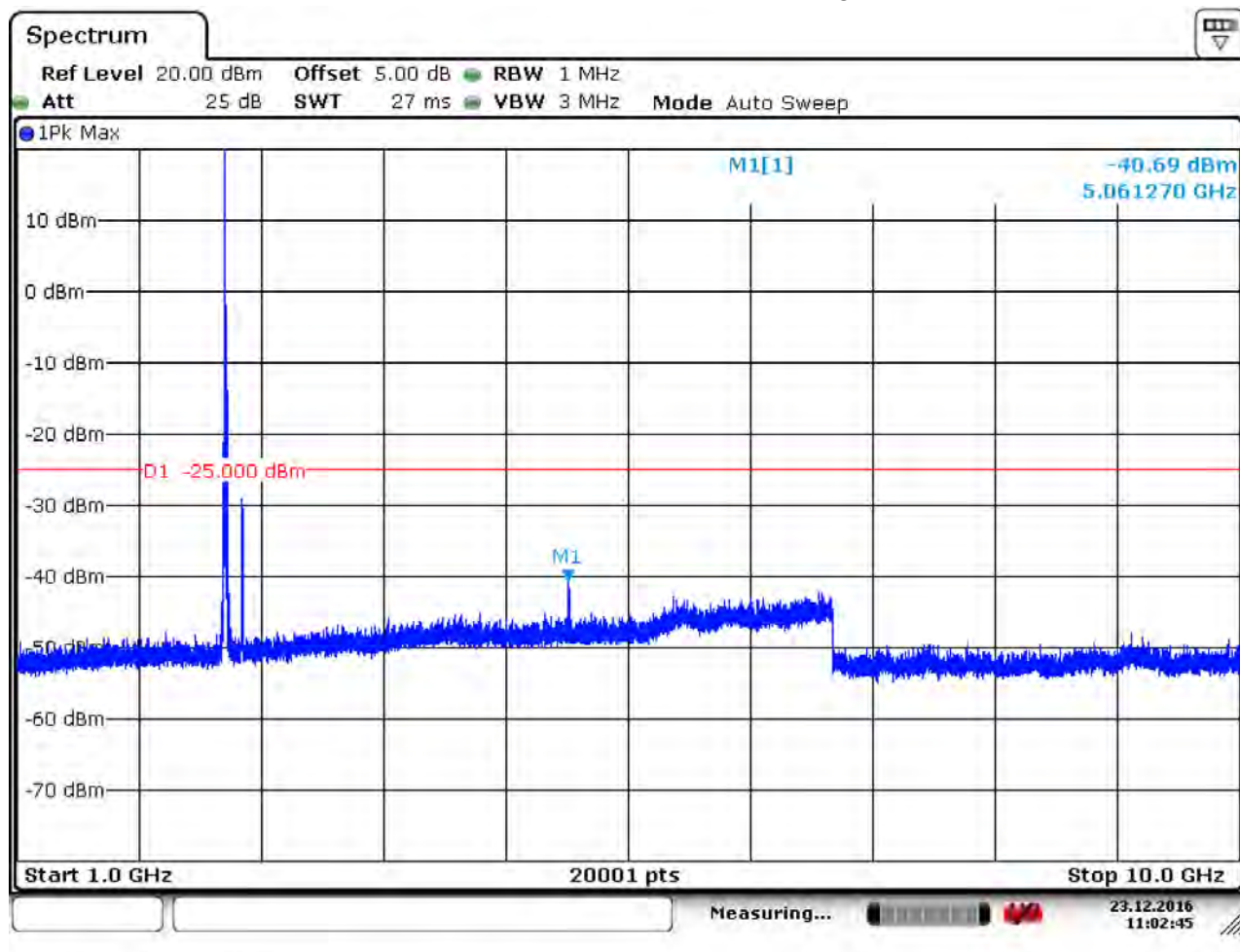
Spectrum

| Ref Level 20.00 dBm | Offset 5.00 dB | RBW 1 MHz |
| Att 25 dB | SWT 30 ms | VBW 3 MHz | Mode Auto Sweep |

1Pk Max

M1[1]　　　　　　　　　-46.23 dBm
　　　　　　　　　　　　19.960750 GHz

10 dBm

0 dBm

-10 dBm

-20 dBm

D1 -25.000 dBm

-30 dBm

-40 dBm

-50 dBm

-60 dBm

-70 dBm

Start 10.0 GHz　　　　　20001 pts　　　　　Stop 20.0 GHz

Measuring...　　　23.12.2016 16:51:11

Date: 23.DEC.2016 16:51:12

Spectrum

| Ref Level 20.00 dBm | Offset 5.00 dB | RBW 1 MHz |
| Att 25 dB | SWT 30 ms | VBW 3 MHz | Mode Auto Sweep |

1Pk Max

M1[1]   -46.72 dBm
              28.093850 GHz

10 dBm
0 dBm
-10 dBm
-20 dBm
D1 -25.000 dBm
-30 dBm
-40 dBm   M1
-60 dBm
-70 dBm

Start 20.0 GHz   20001 pts   Stop 30.0 GHz

Measuring...   23.12.2016 16:55:13
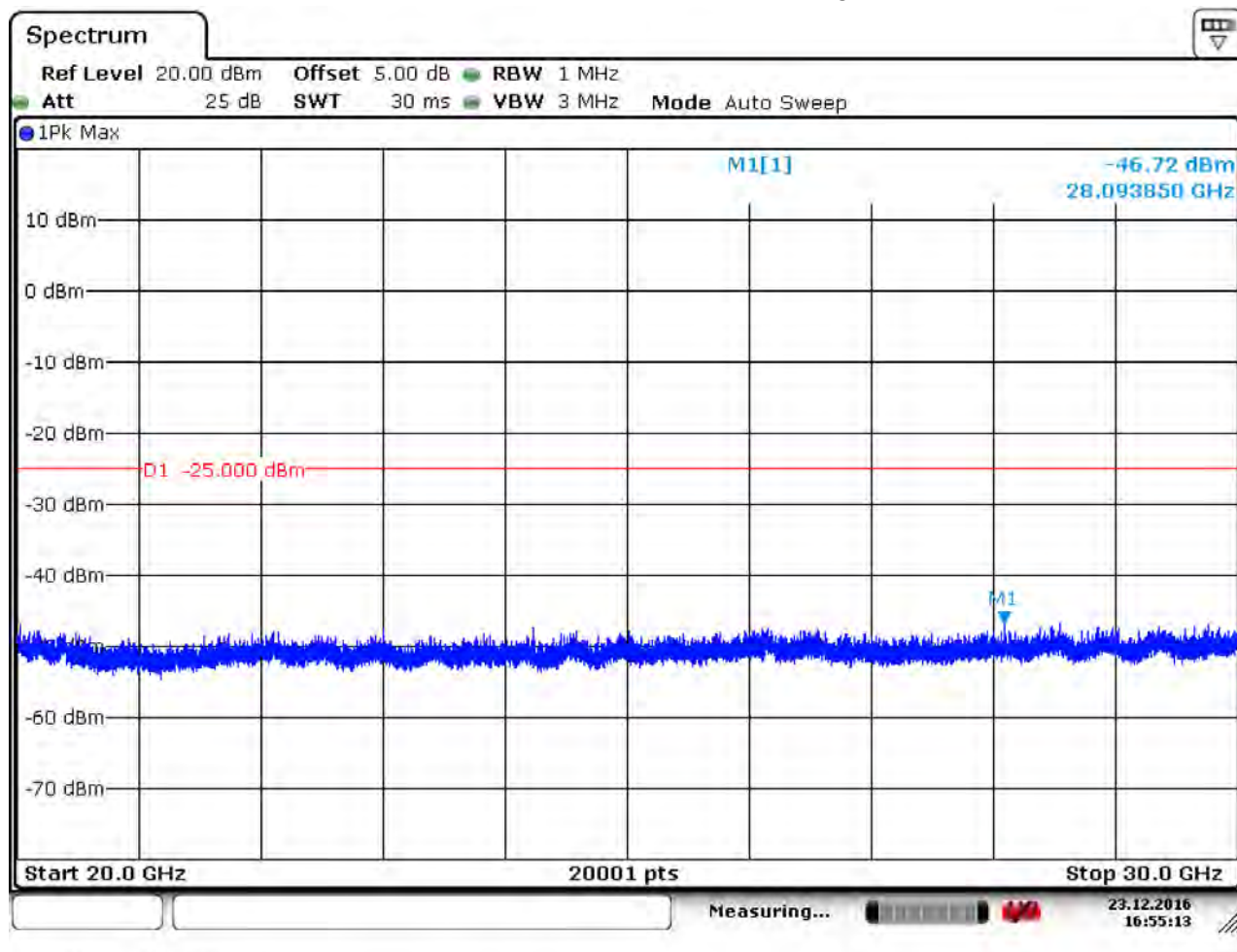
Date: 23.DEC.2016 16:55:13

6.1.1.2.3   Test Channel = HCH

Date: 23.DEC.2016 10:53:47

Spectrum

| Ref Level | 20.00 dBm | Offset | 5.00 dB | RBW | 1 MHz |
| Att | 25 dB | SWT | 27 ms | VBW | 3 MHz | Mode Auto Sweep |

1Pk Max

M1[1]   -42.22 dBm
5.121570 GHz

D1 -25.000 dBm

M1

Start 1.0 GHz   20001 pts   Stop 10.0 GHz

Measuring...   23.12.2016 11:04:16
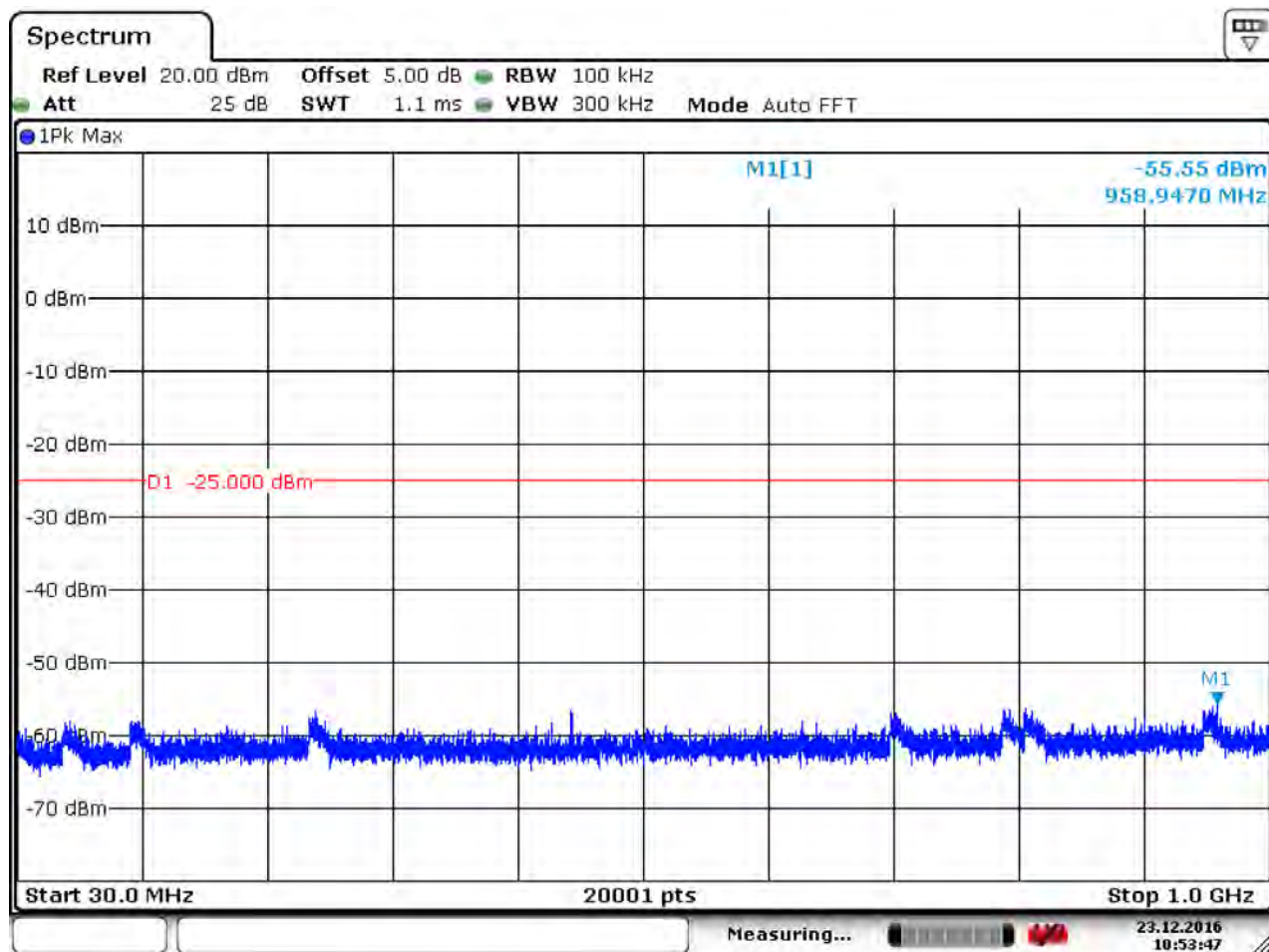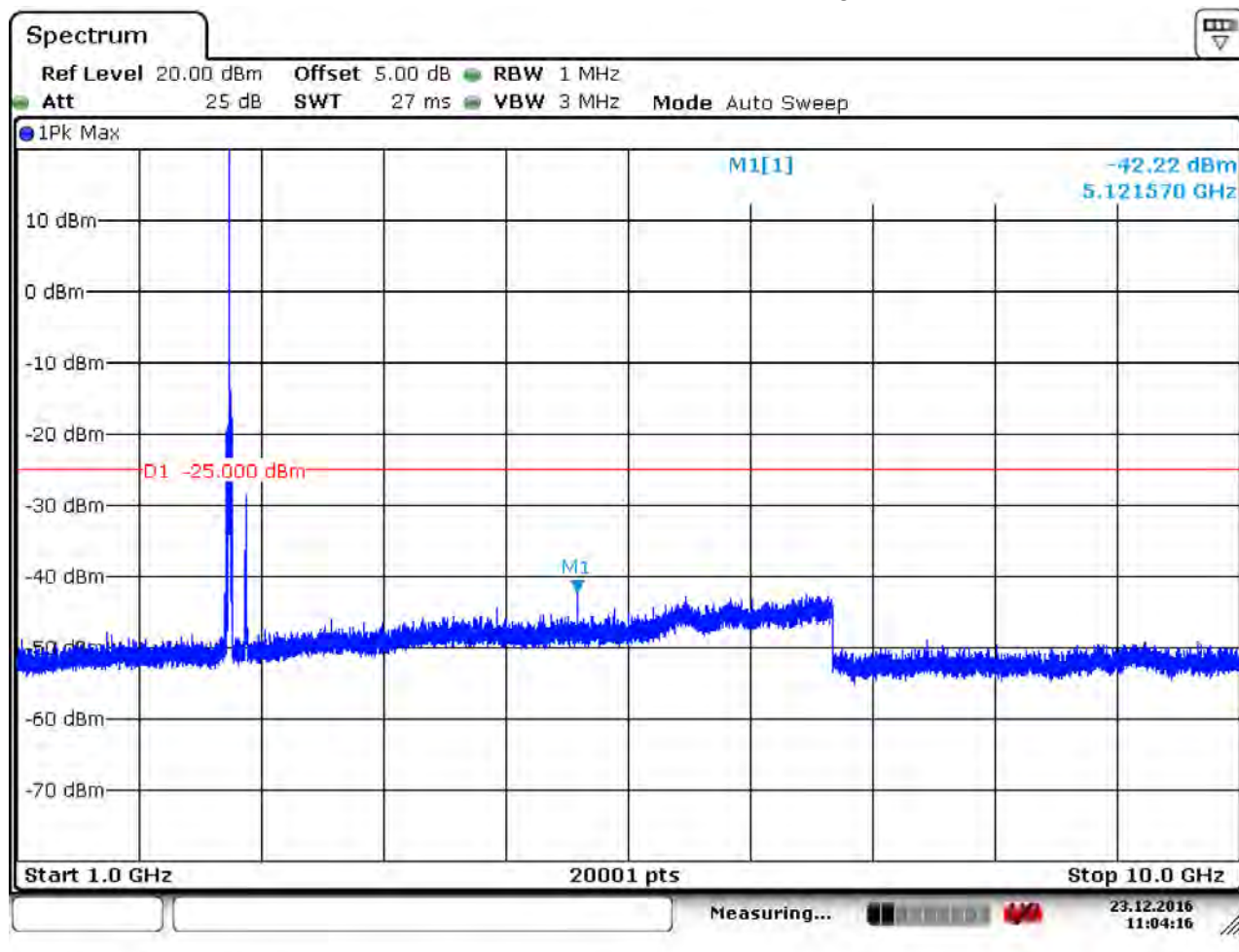
Date: 23.DEC.2016 11:04:17

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Date: 23.DEC.2016 16:50:40

Spectrum

| Ref Level 20.00 dBm | Offset 5.00 dB | RBW 1 MHz |
| Att 25 dB | SWT 30 ms | VBW 3 MHz | Mode Auto Sweep |

1Pk Max

M1[1]   -45.85 dBm
28.511320 GHz

D1 -25.000 dBm

M1

Start 20.0 GHz   20001 pts   Stop 30.0 GHz

Measuring...   23.12.2016 16:55:39
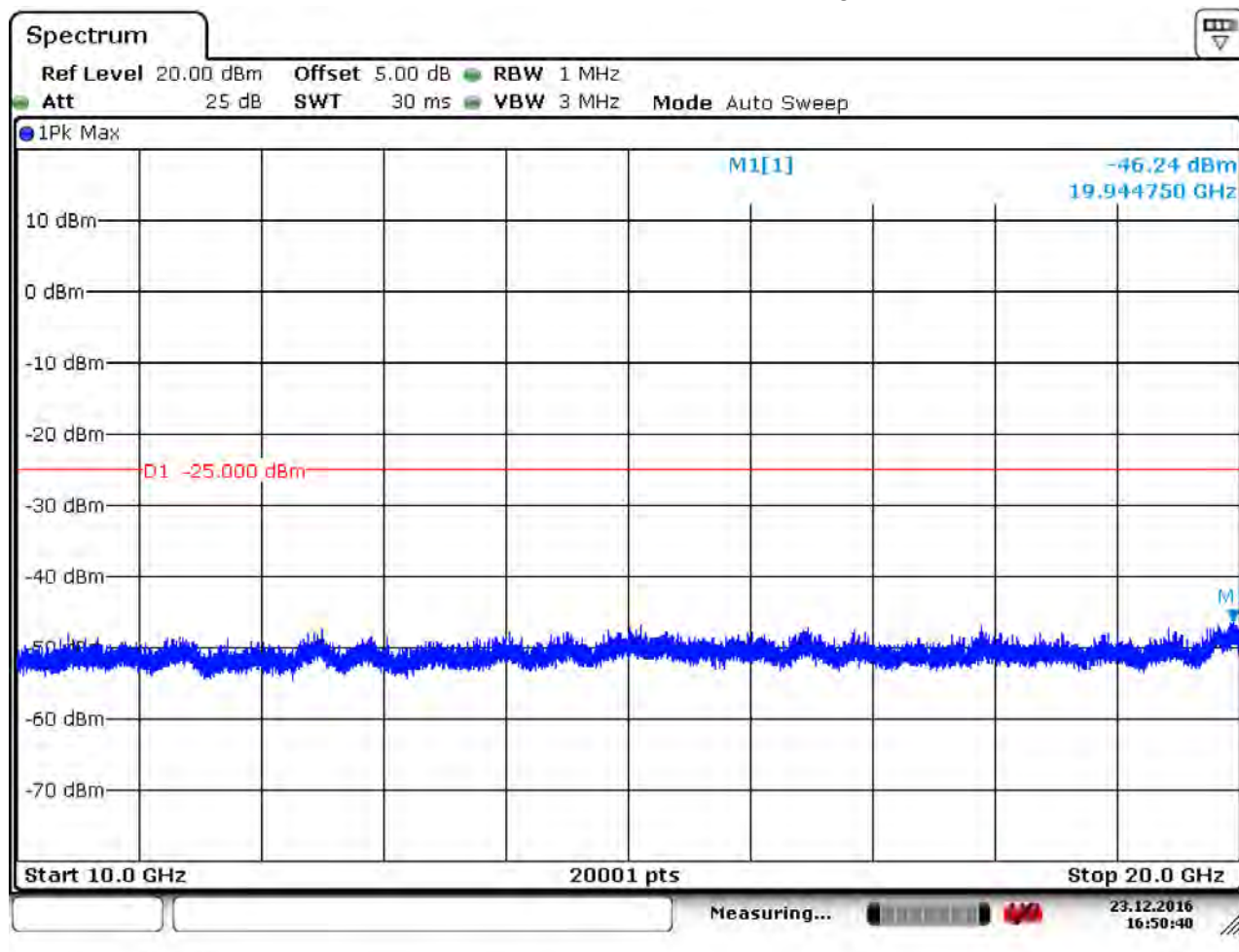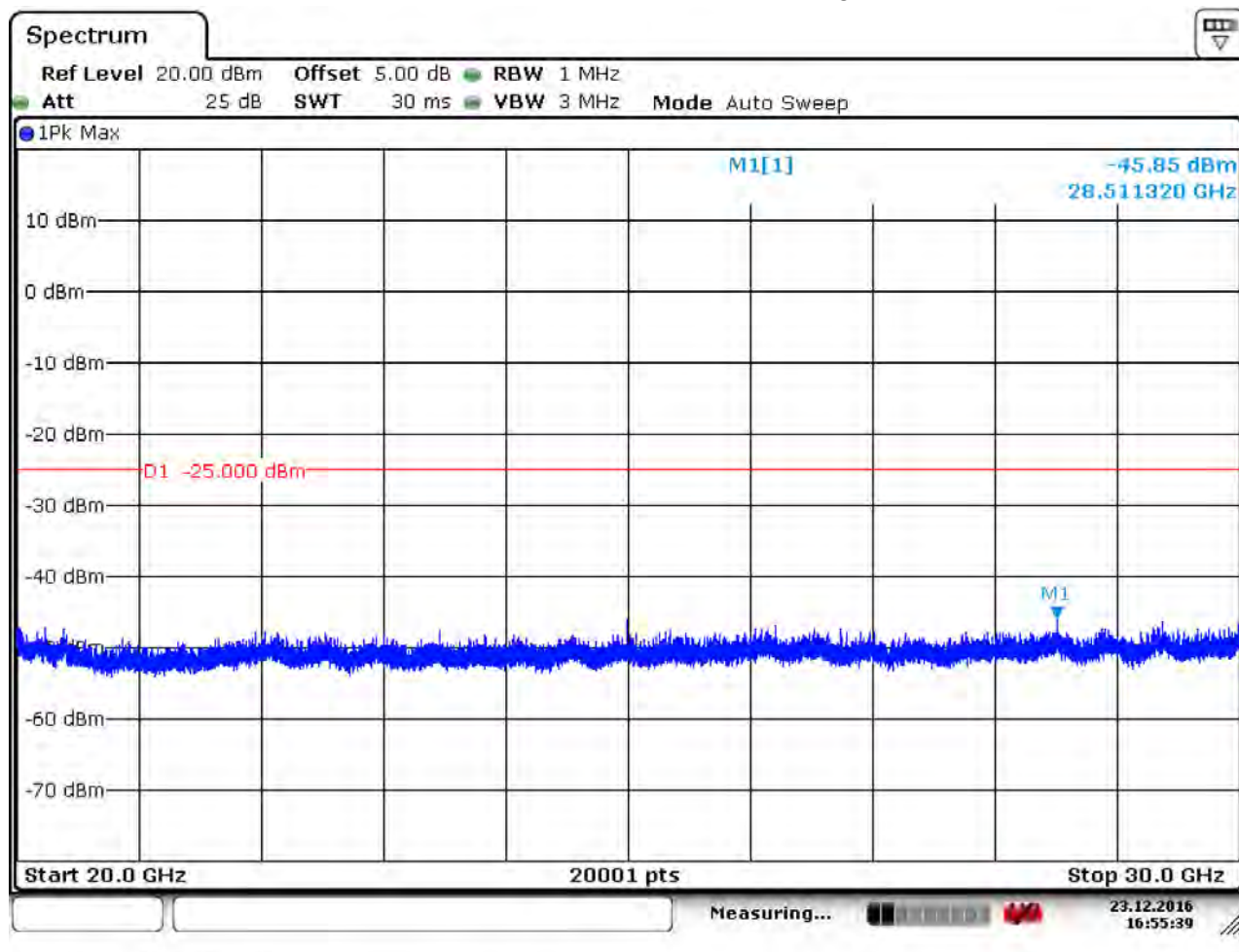
Date: 23.DEC.2016 16:55:40

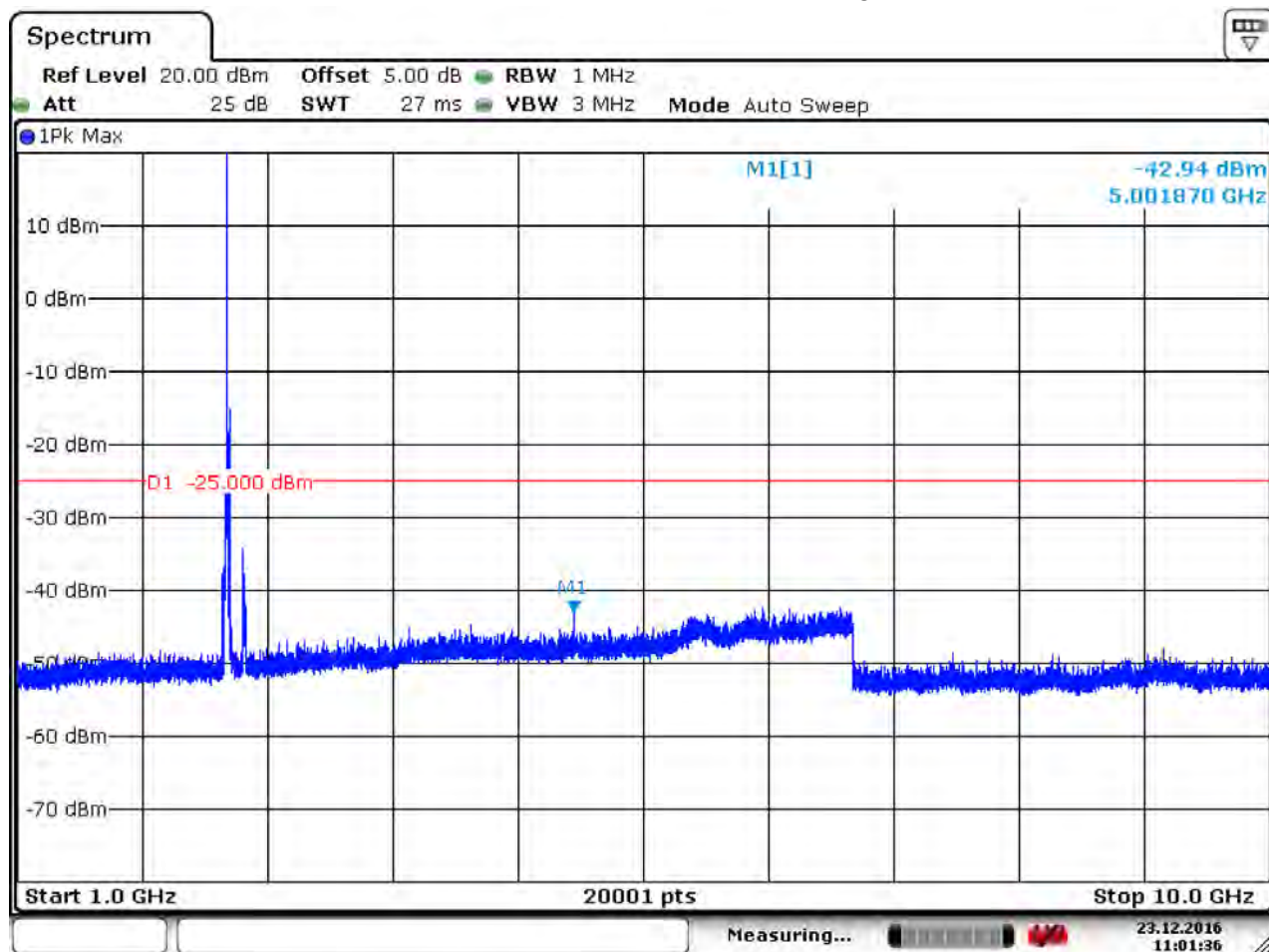**SGS-CSTC Standards Technical Services Co., Ltd.**
Shenzhen Branch

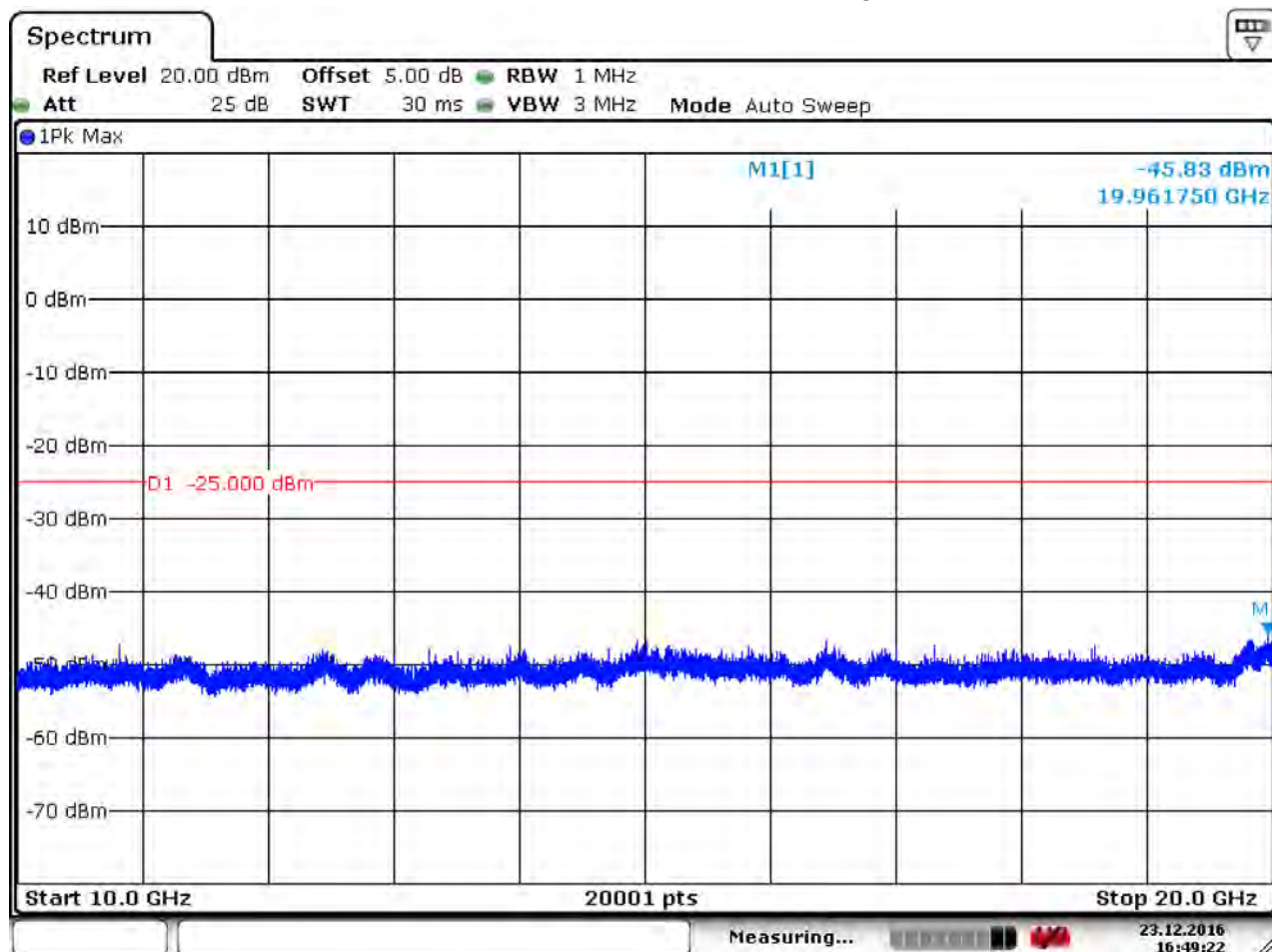**6.1.1.3   Test Mode = LTE / TM1 15MHz RB1#0**

6.1.1.3.1   Test Channel = LCH
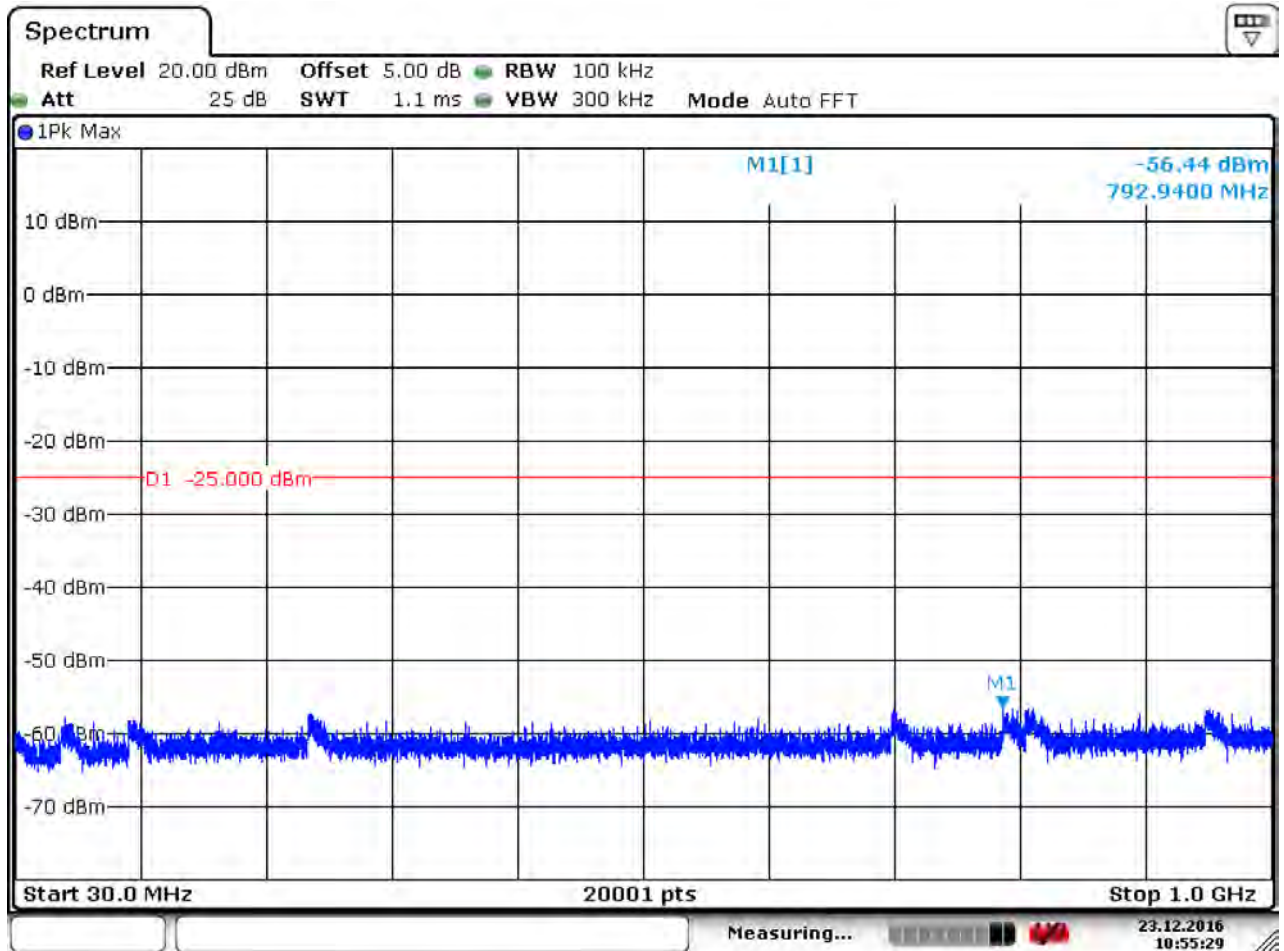
Date: 23.DEC.2016 10:55:30

Date: 23.DEC.2016 11:01:36

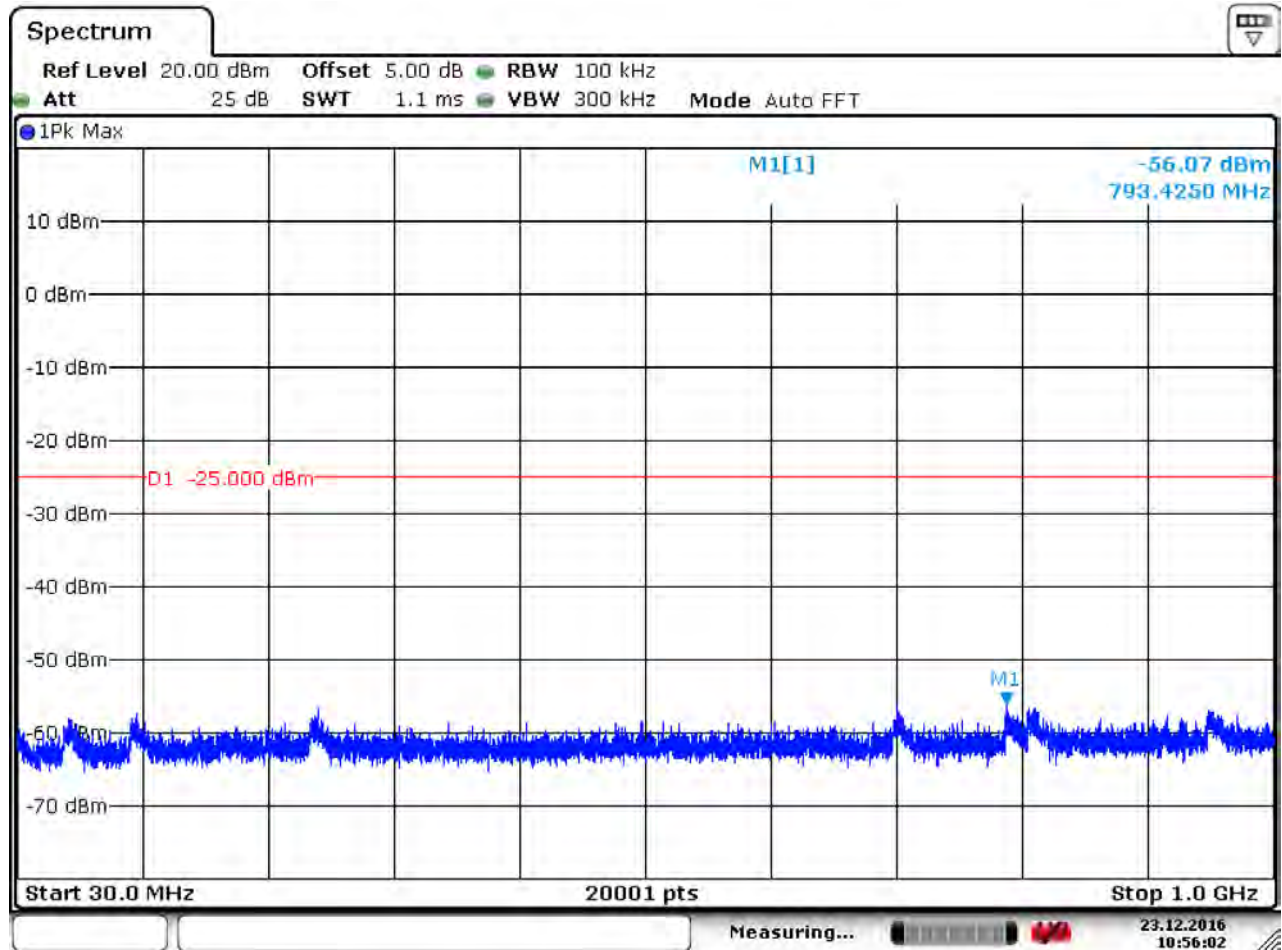Date: 23.DEC.2016 16:49:22

Date: 23.DEC.2016 16:57:07

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6.1.1.3.2   Test Channel = MCH

Date: 23.DEC.2016 10:56:03

Spectrum

Ref Level 20.00 dBm   Offset 5.00 dB ● RBW 1 MHz
Att   25 dB   SWT   27 ms ● VBW 3 MHz   Mode Auto Sweep

1Pk Max

M1[1]   -42.18 dBm
                               5.057220 GHz

10 dBm
0 dBm
-10 dBm
-20 dBm
D1 -25.000 dBm
-30 dBm
-40 dBm   M1
-50 dBm
-60 dBm
-70 dBm

Start 1.0 GHz   20001 pts   Stop 10.0 GHz

Measuring...   23.12.2016
                                11:00:41
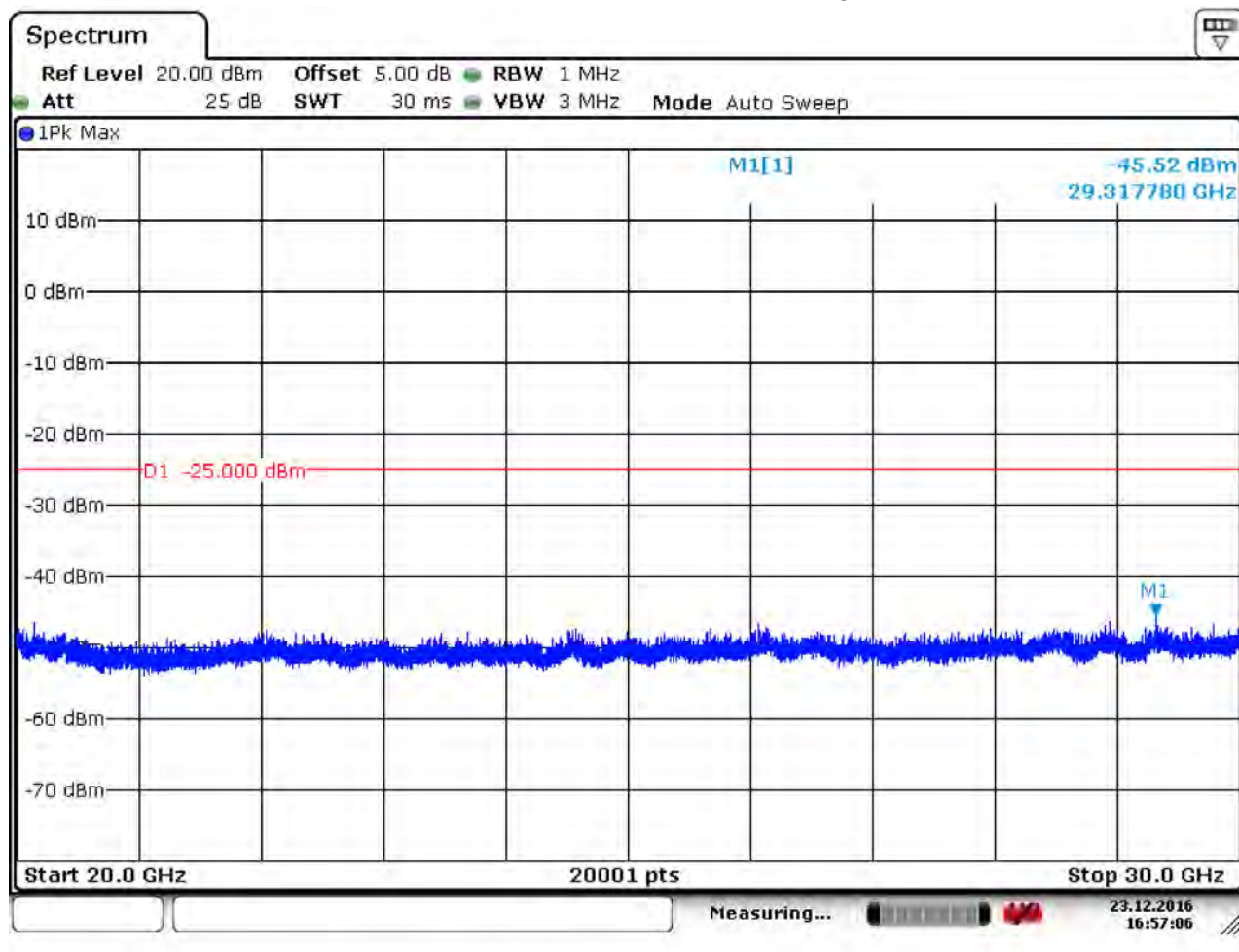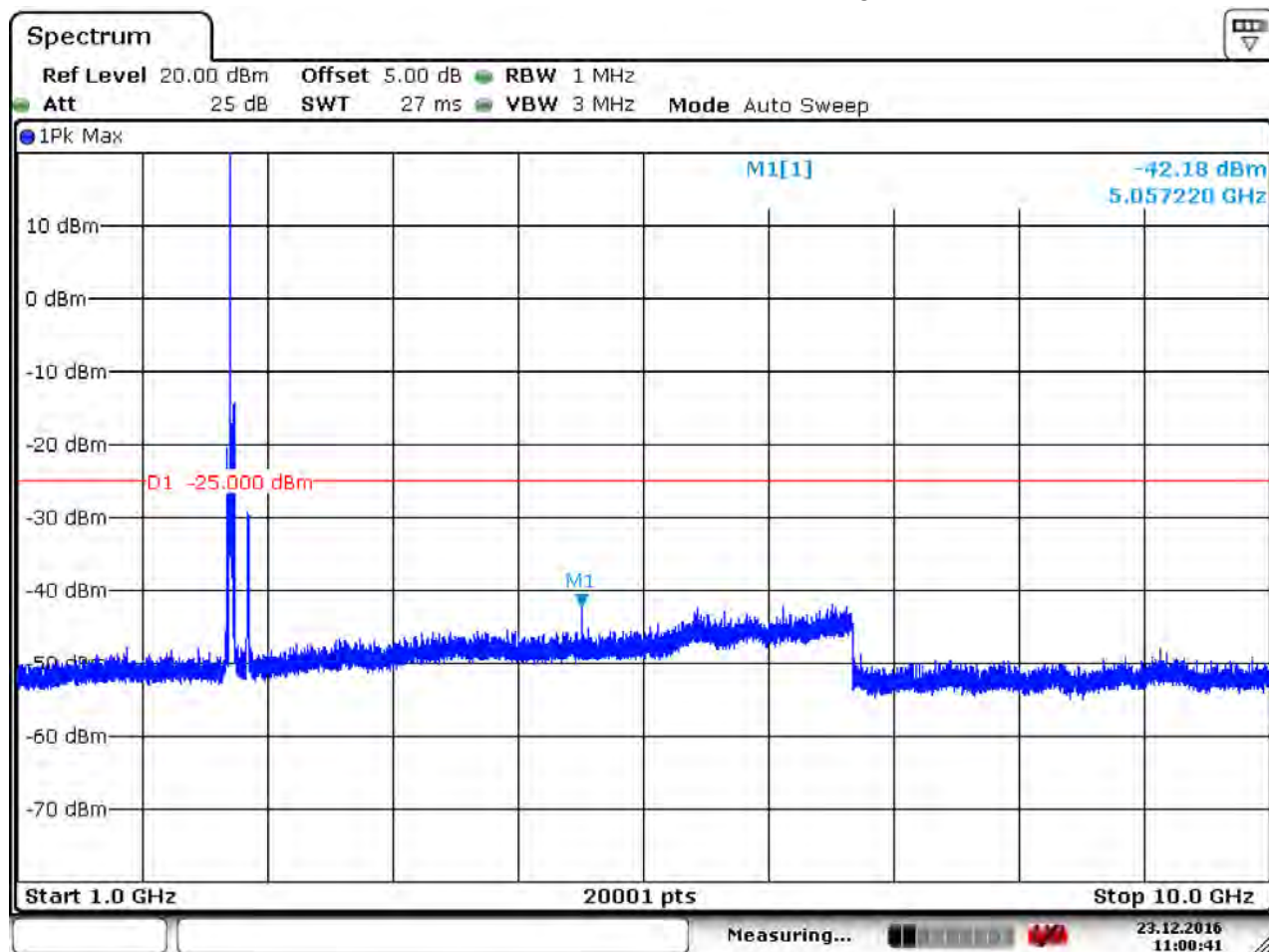
Date: 23.DEC.2016 11:00:41

Spectrum

Ref Level 20.00 dBm	Offset 5.00 dB	RBW 1 MHz	
Att 25 dB	SWT 30 ms	VBW 3 MHz	Mode Auto Sweep

1Pk Max

M1[1]   -46.81 dBm
         29.329780 GHz

10 dBm
0 dBm
-10 dBm
-20 dBm
D1 -25.000 dBm
-30 dBm
-40 dBm
M1
-60 dBm
-70 dBm

Start 20.0 GHz   20001 pts   Stop 30.0 GHz

Measuring...   23.12.2016 16:56:31
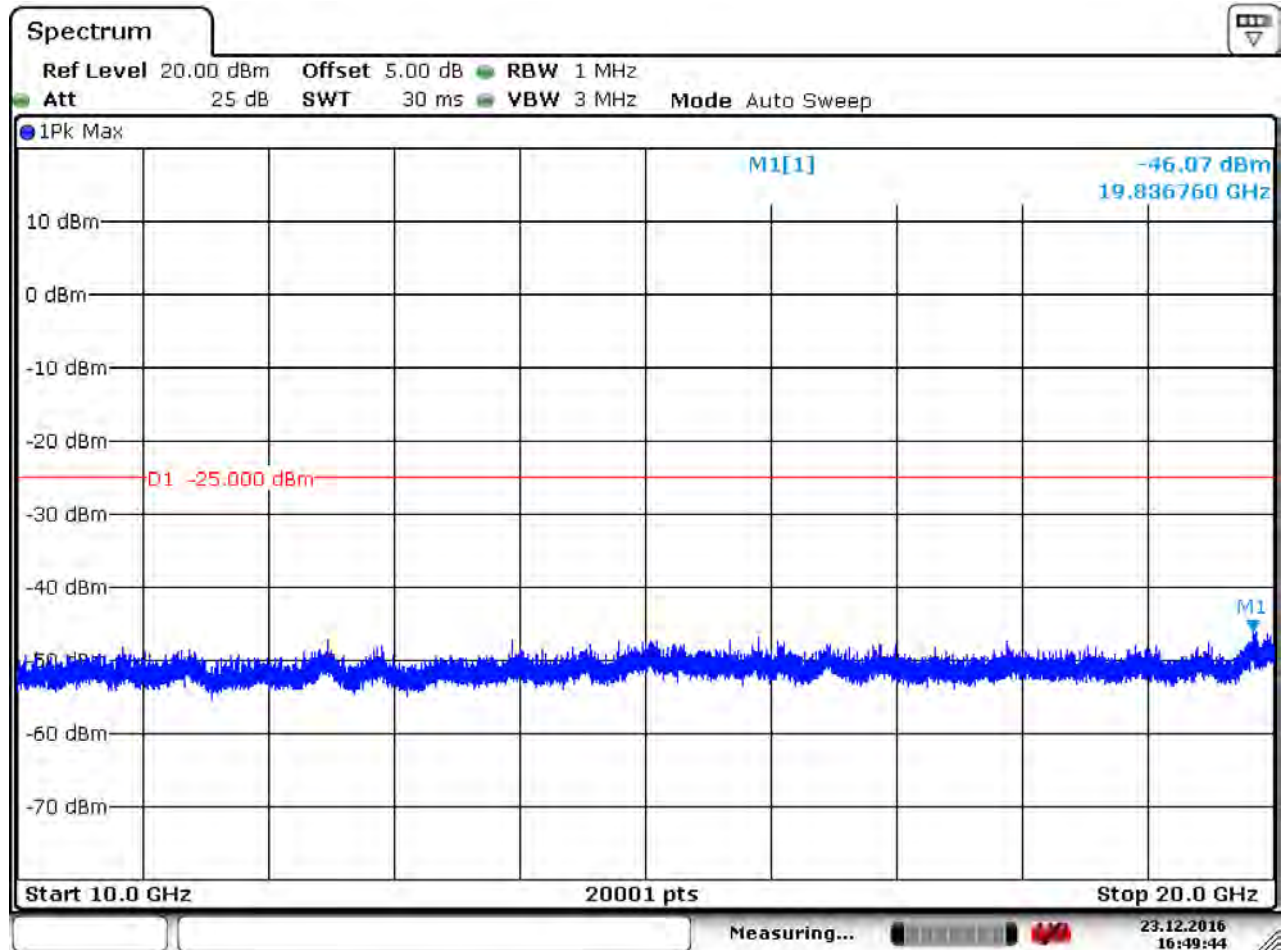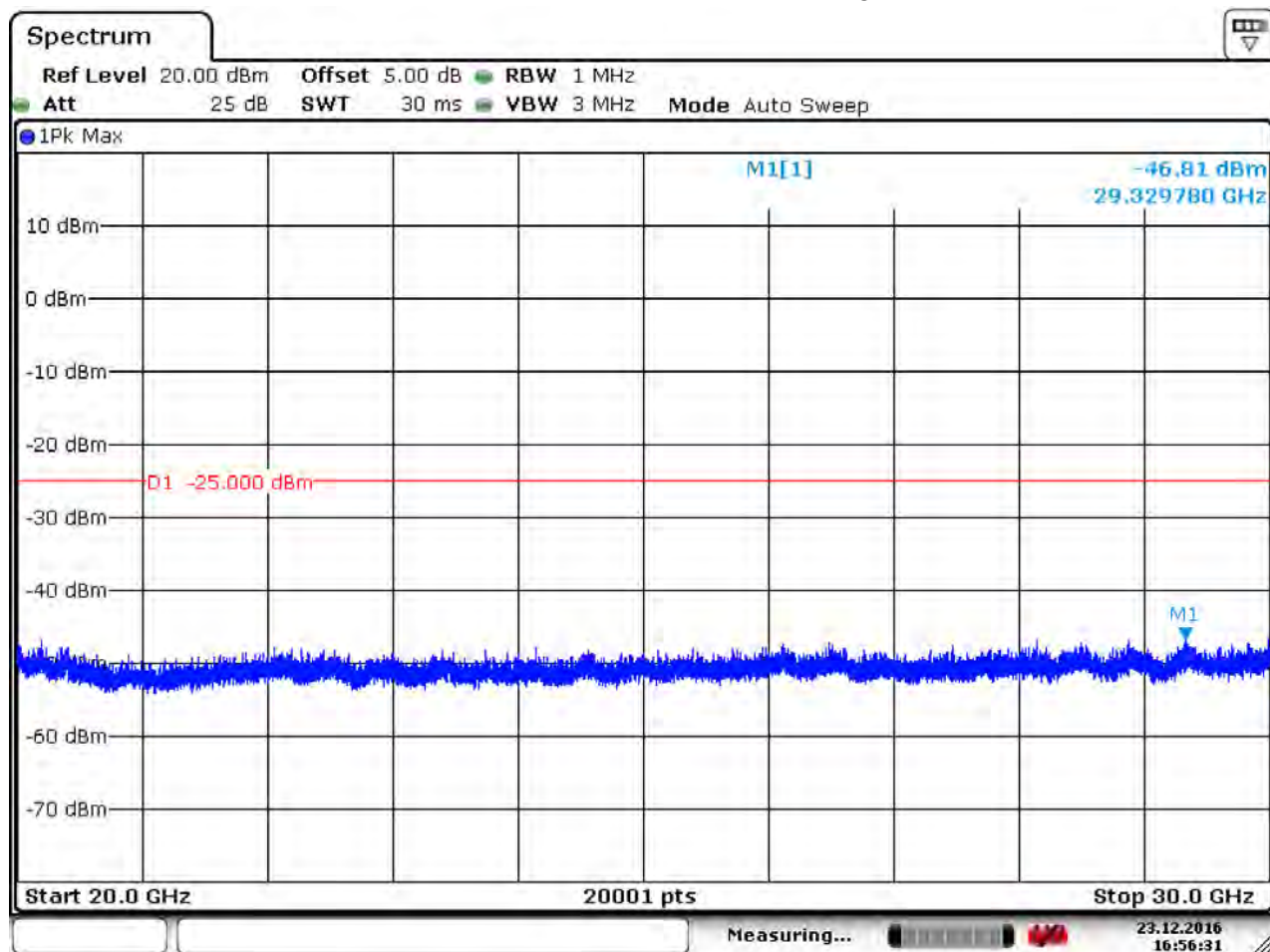
Date: 23.DEC.2016 16:56:31

6.1.1.3.3   Test Channel = HCH

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

Spectrum

Ref Level 20.00 dBm   Offset 5.00 dB ● RBW 1 MHz
Att   25 dB   SWT   27 ms ● VBW 3 MHz   Mode Auto Sweep

●1Pk Max

M1[1]   -41.23 dBm
                         5.112120 GHz

10 dBm

0 dBm

-10 dBm

-20 dBm

D1 -25.000 dBm

-30 dBm

-40 dBm   M1

-50 dBm

-60 dBm

-70 dBm

Start 1.0 GHz   20001 pts   Stop 10.0 GHz

Measuring...   23.12.2016
                      11:02:09
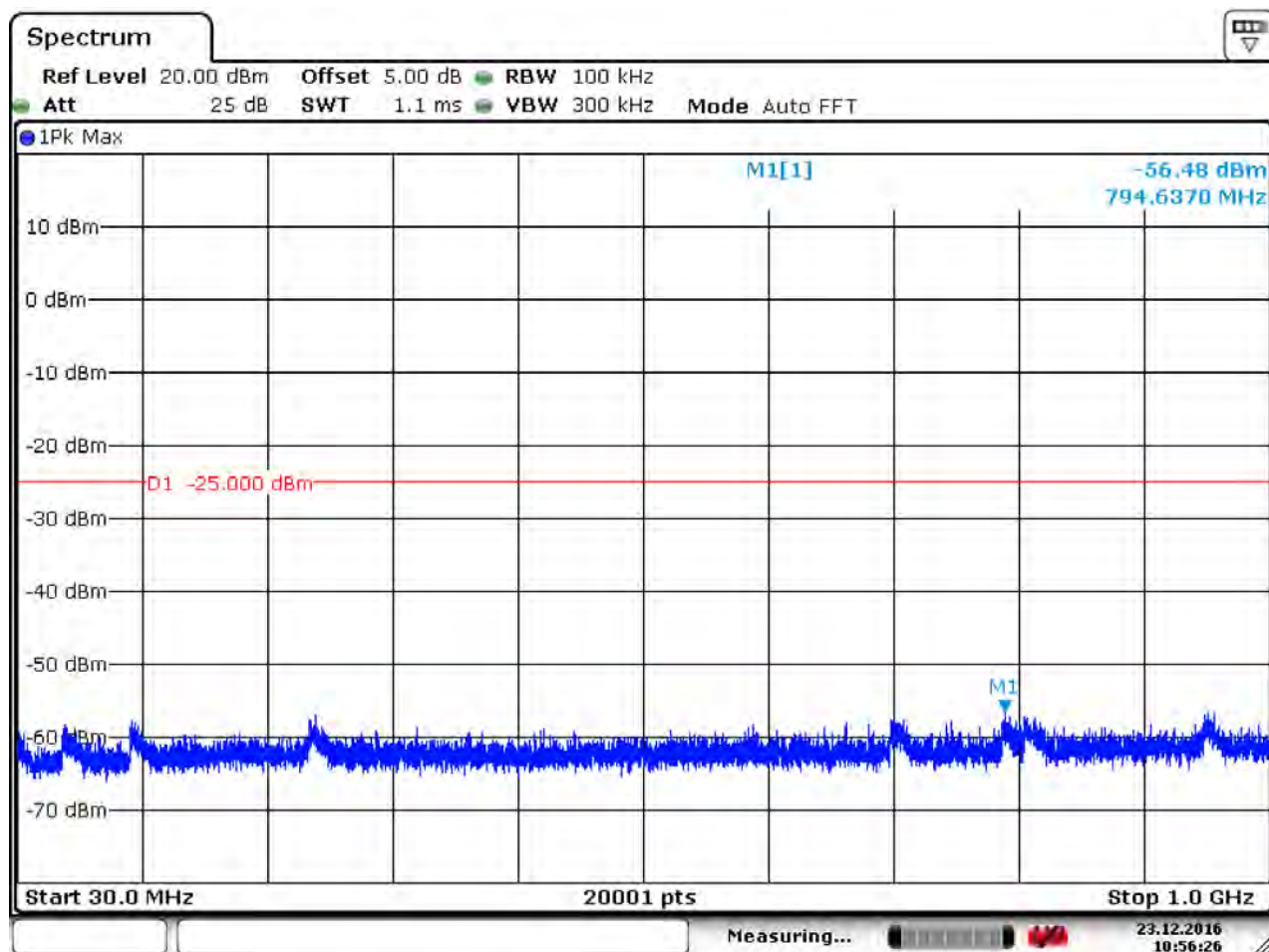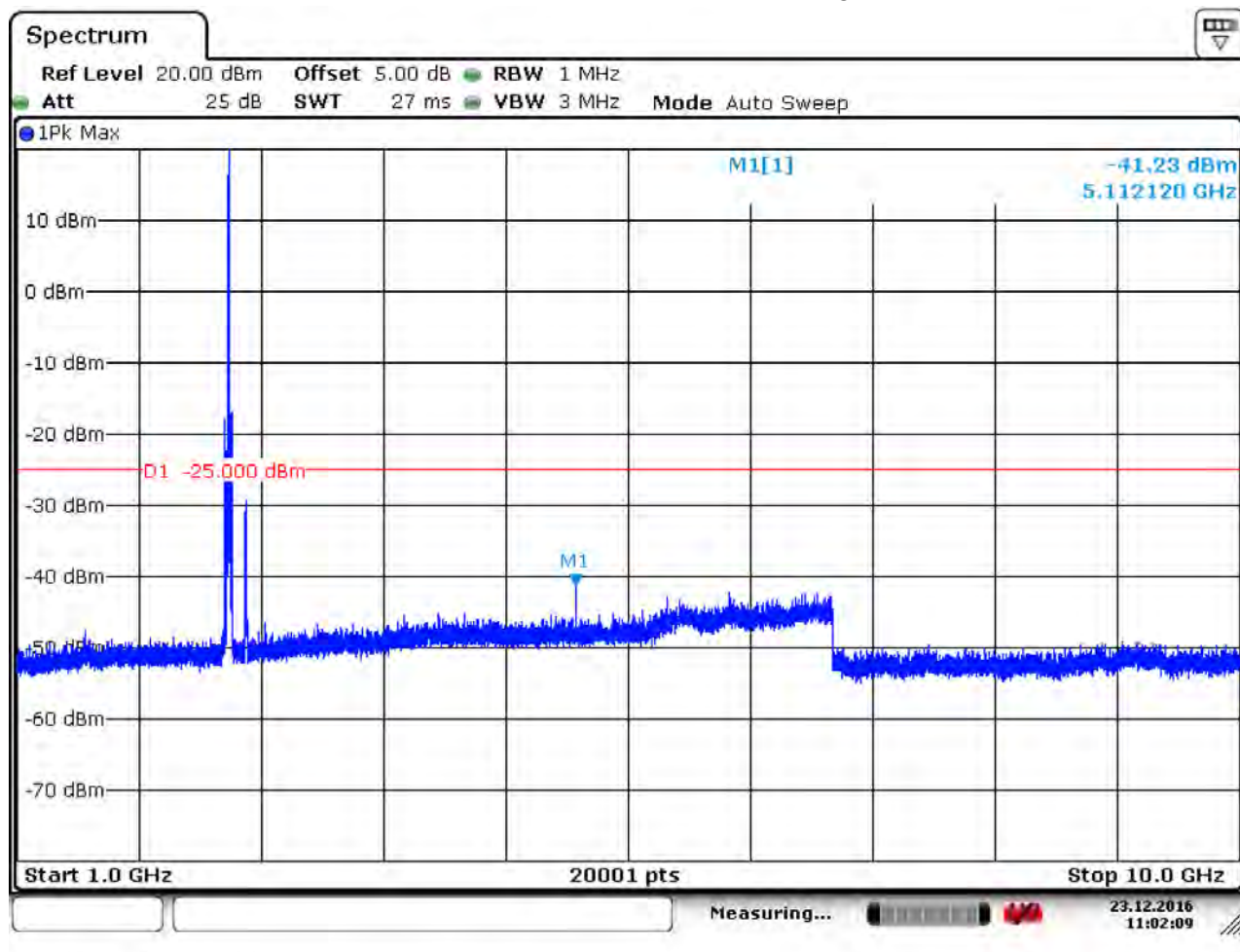
Date: 23.DEC.2016 11:02:09

Spectrum

| Ref Level | 20.00 dBm | Offset | 5.00 dB | RBW | 1 MHz |
| Att | 25 dB | SWT | 30 ms | VBW | 3 MHz | Mode Auto Sweep |

1Pk Max

M1[1]   -45.50 dBm
                         19.950750 GHz

10 dBm

0 dBm

-10 dBm

-20 dBm

D1 -25.000 dBm

-30 dBm

-40 dBm

-50 dBm

-60 dBm

-70 dBm

Start 10.0 GHz   20001 pts   Stop 20.0 GHz

Measuring...   23.12.2016
                      16:50:08

Date: 23.DEC.2016 16:50:08

Spectrum

| Ref Level 20.00 dBm | Offset 5.00 dB ● RBW 1 MHz |
| Att   25 dB | SWT   30 ms ● VBW 3 MHz   Mode Auto Sweep |

1Pk Max

M1[1]   -46.56 dBm
                         28.957300 GHz

D1 -25.000 dBm

M1

Start 20.0 GHz   20001 pts   Stop 30.0 GHz

Measuring...   23.12.2016
                        16:56:04

Date: 23.DEC.2016 16:56:05

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

6.1.1.4.1 Test Channel = LCH

Date: 23.DEC.2016 10:57:42
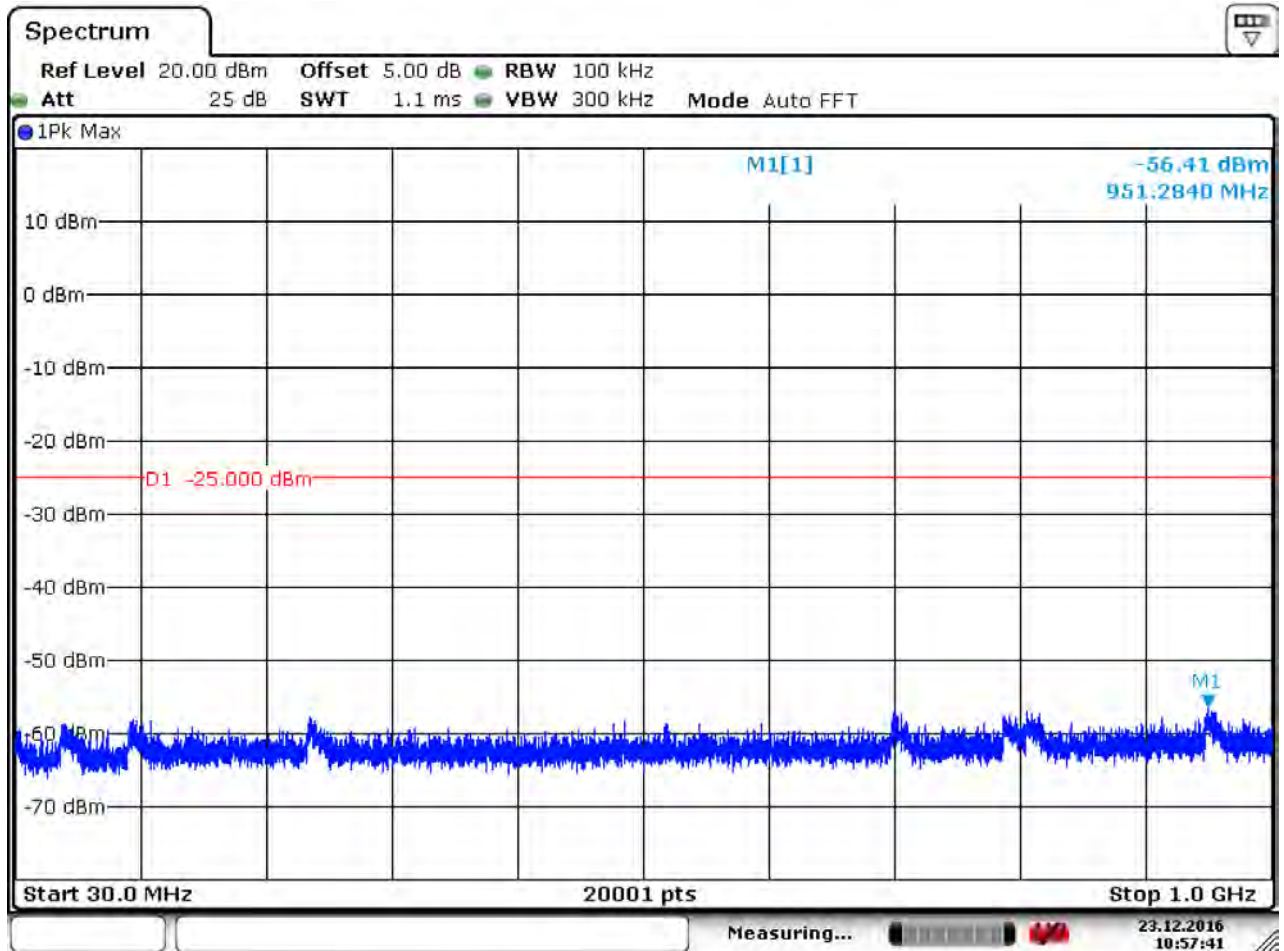
SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch
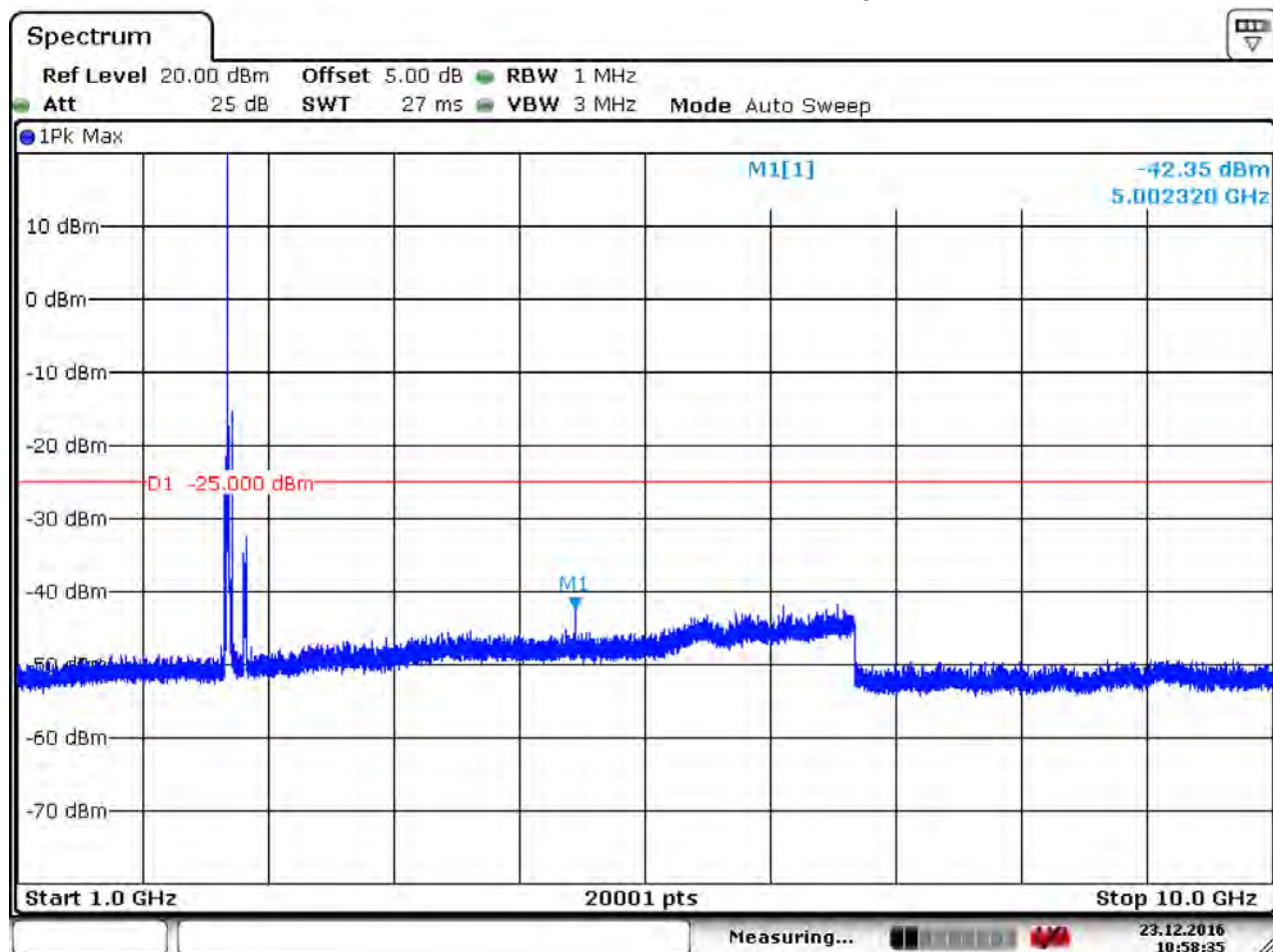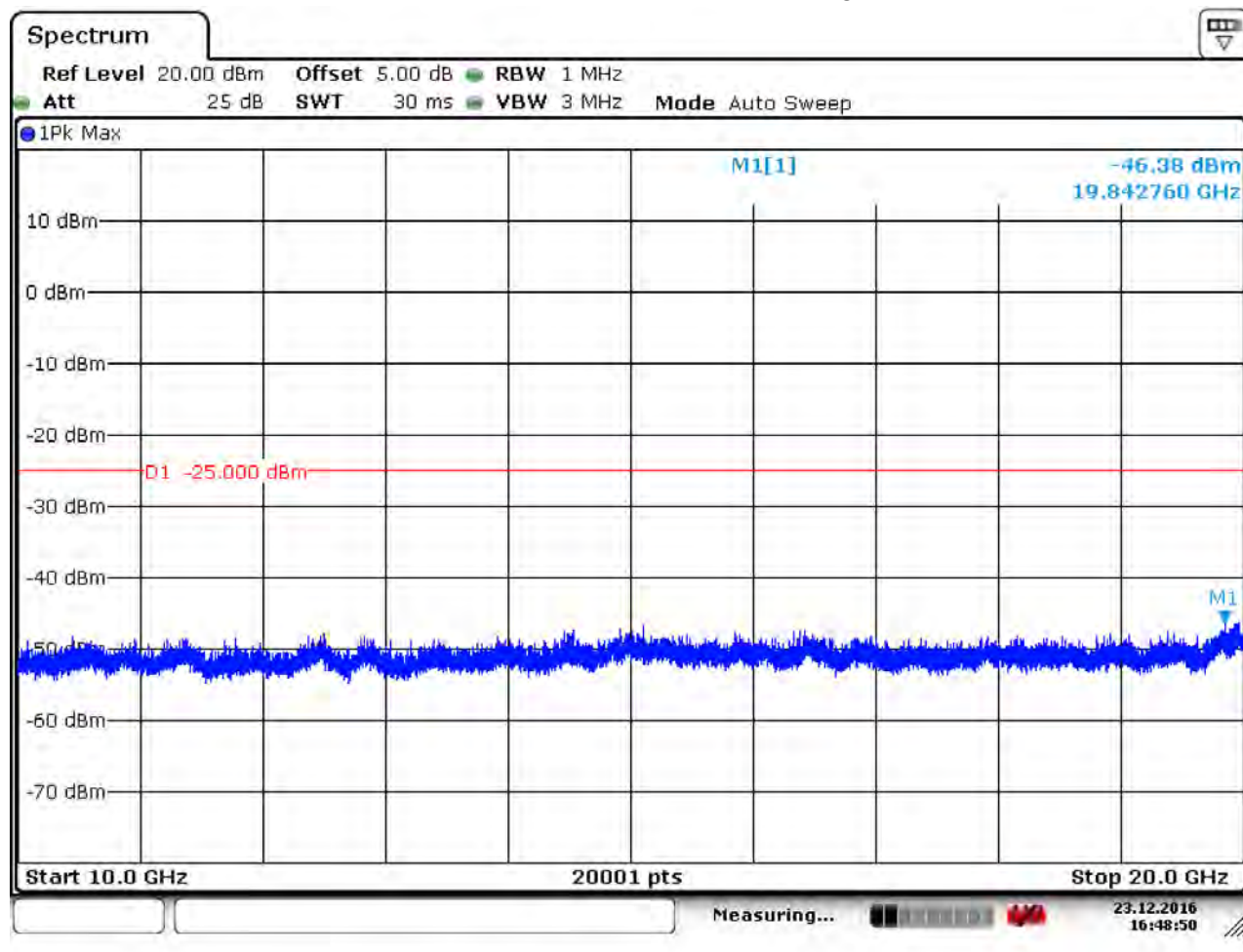
Date: 23.DEC.2016 16:48:51
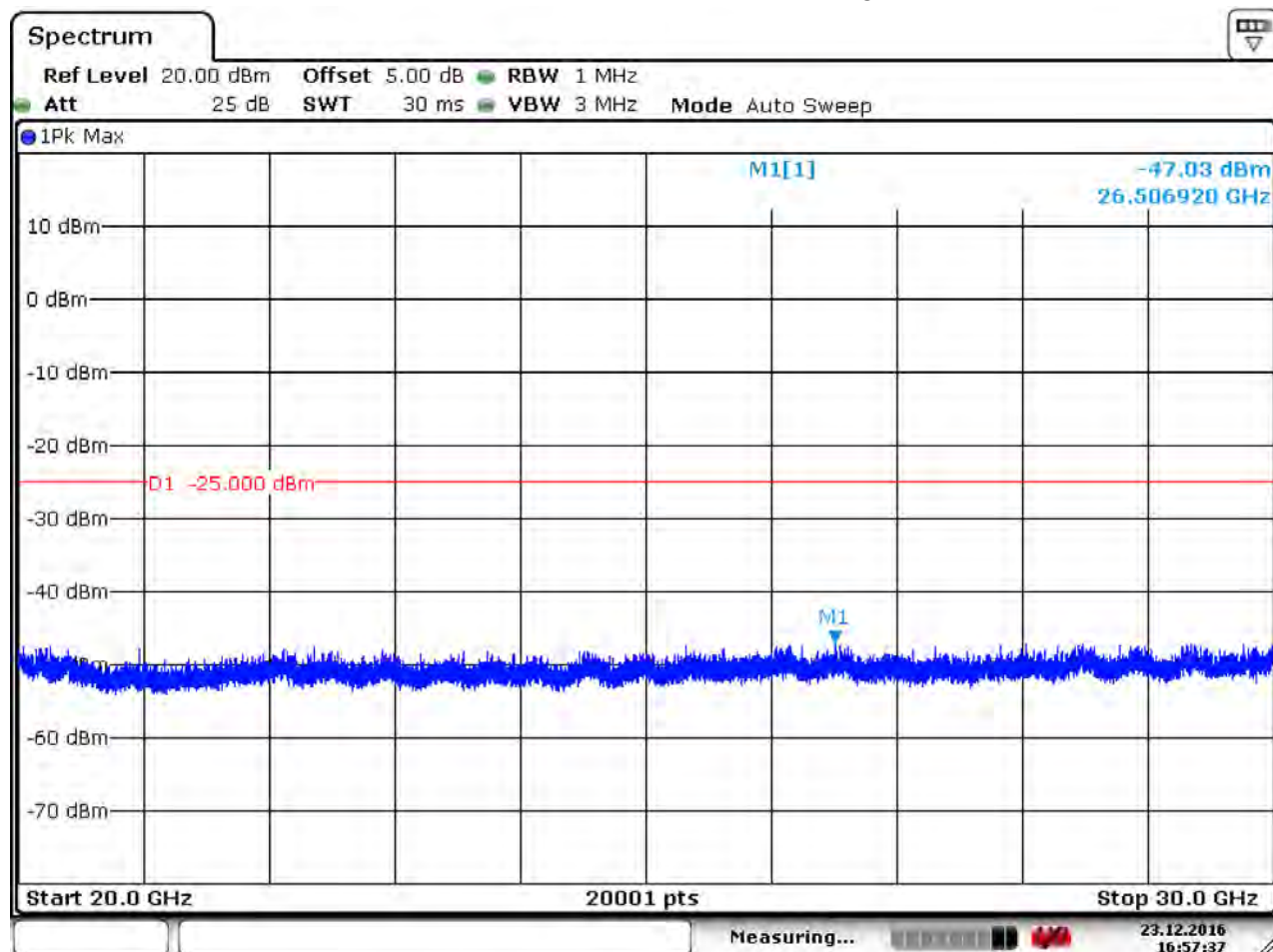
Date: 23.DEC.2016 16:57:37

6.1.1.4.2　Test Channel = MCH

Date: 23.DEC.2016 10:57:18

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch
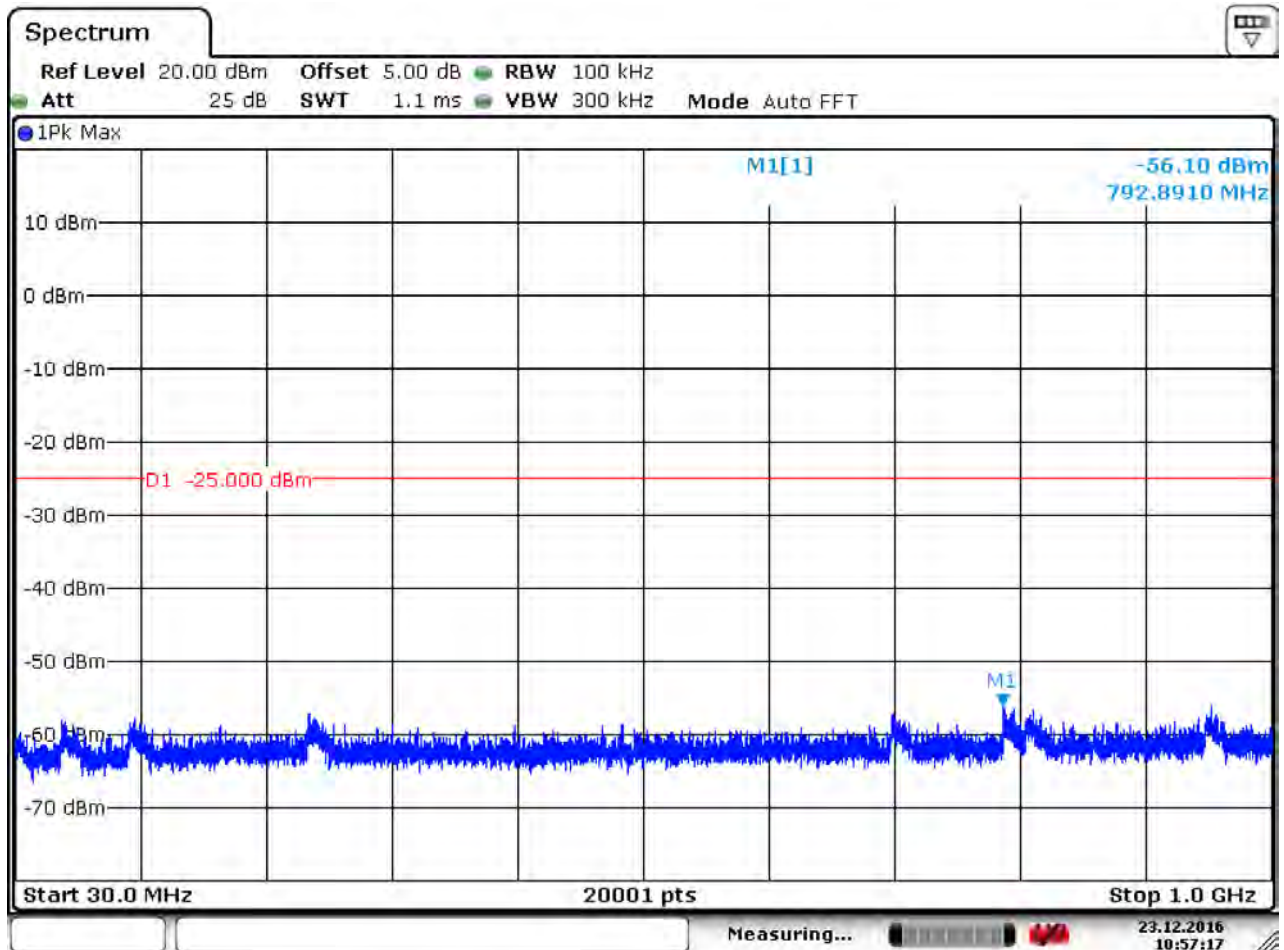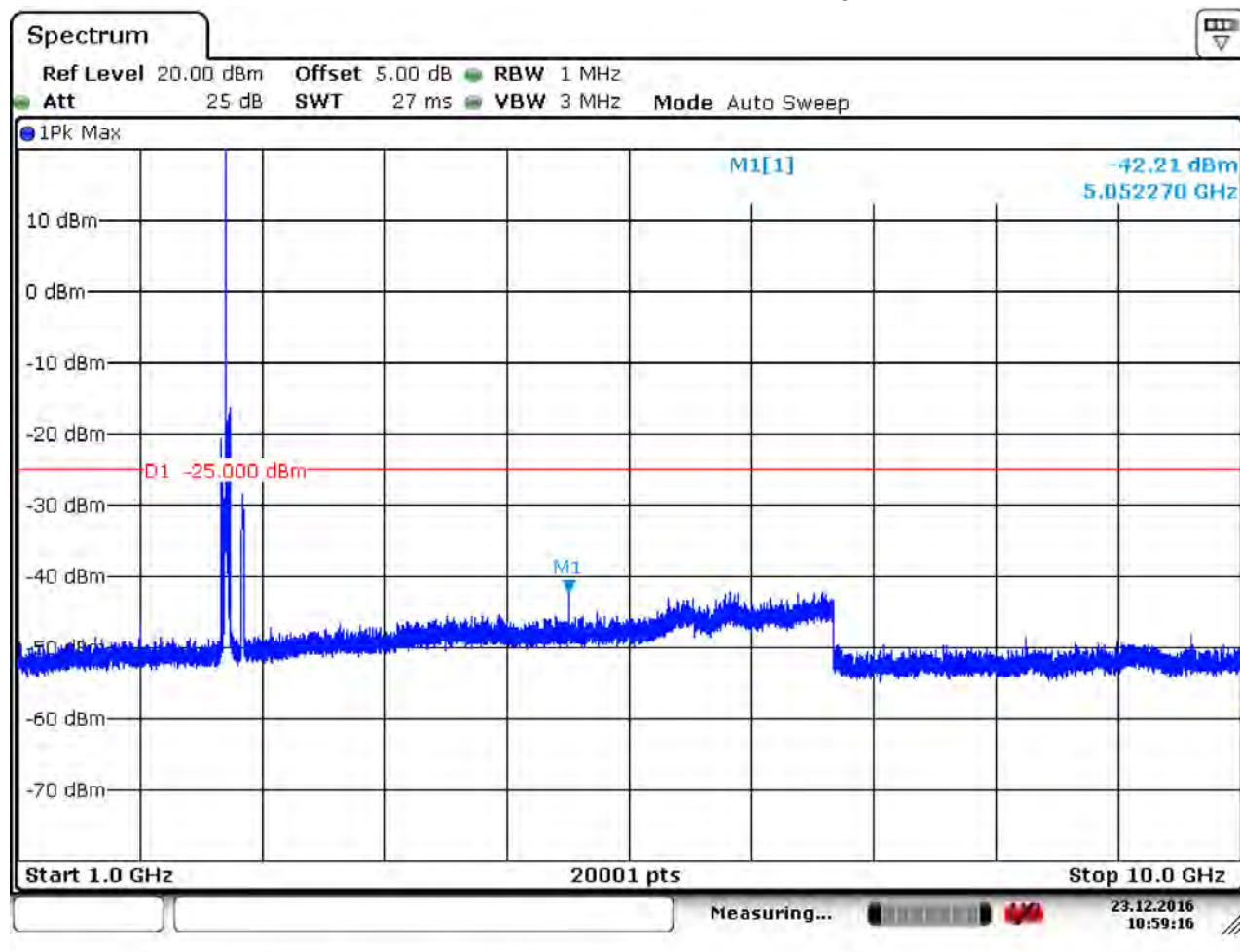
Date: 23.DEC.2016 10:59:16

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Spectrum

| Ref Level 20.00 dBm | Offset 5.00 dB | RBW 1 MHz |
| Att 25 dB | SWT 30 ms | VBW 3 MHz | Mode Auto Sweep |

1Pk Max

M1[1]   −46.26 dBm
19.980750 GHz

D1 −25.000 dBm

Start 10.0 GHz   20001 pts   Stop 20.0 GHz

Measuring...   23.12.2016 16:48:23
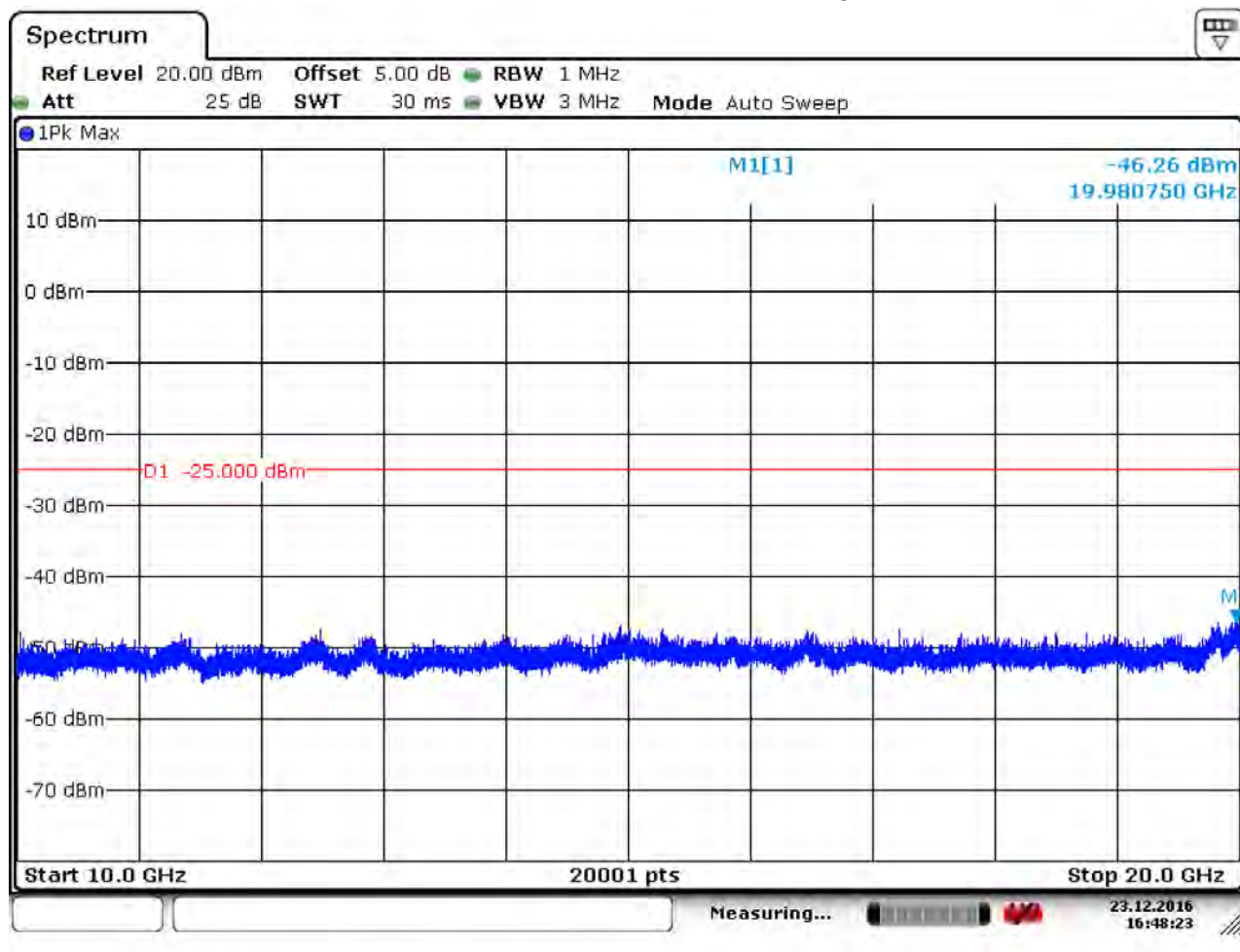
Date: 23.DEC.2016 16:48:23
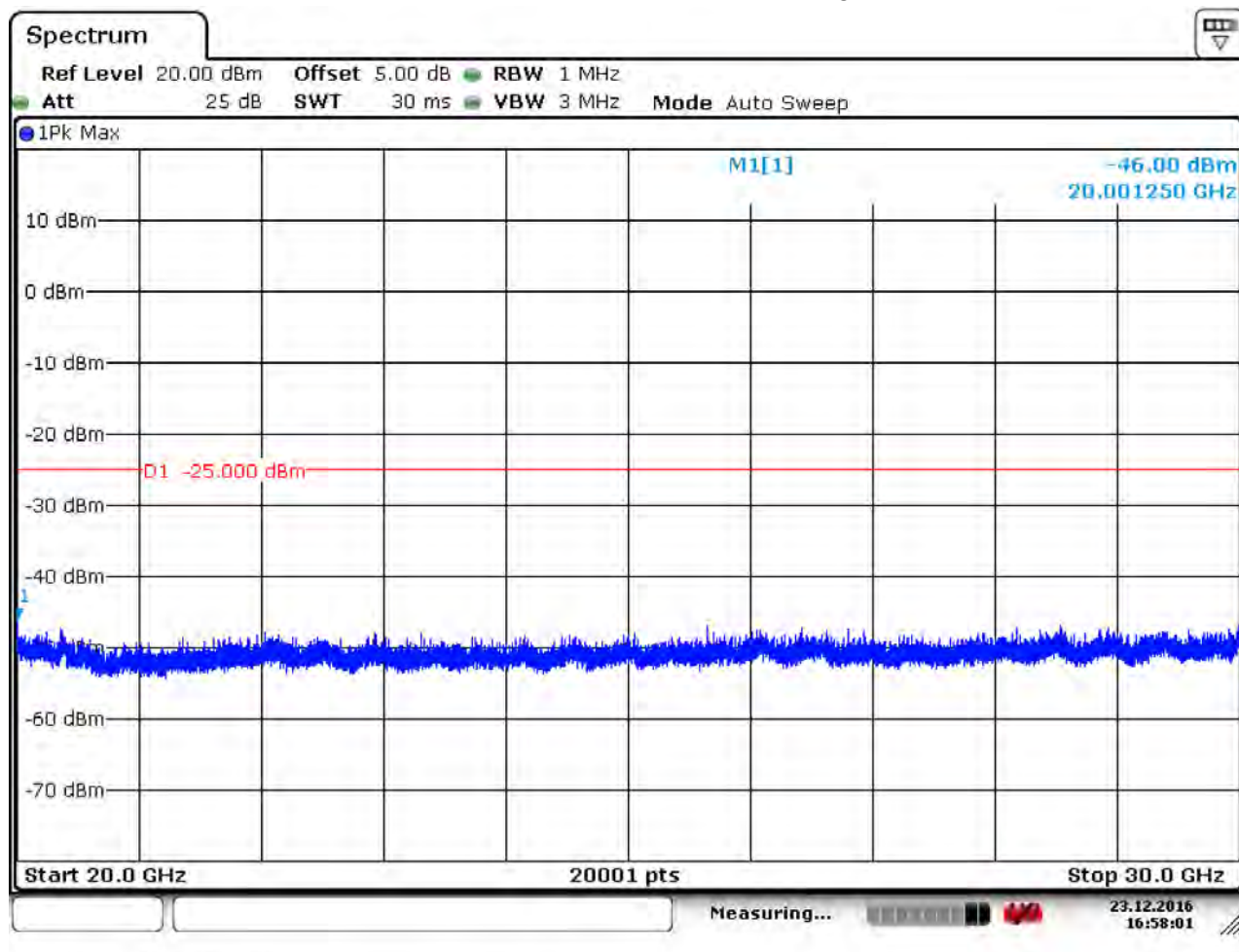
Date: 23.DEC.2016 16:58:01

6.1.1.4.3 Test Channel = HCH
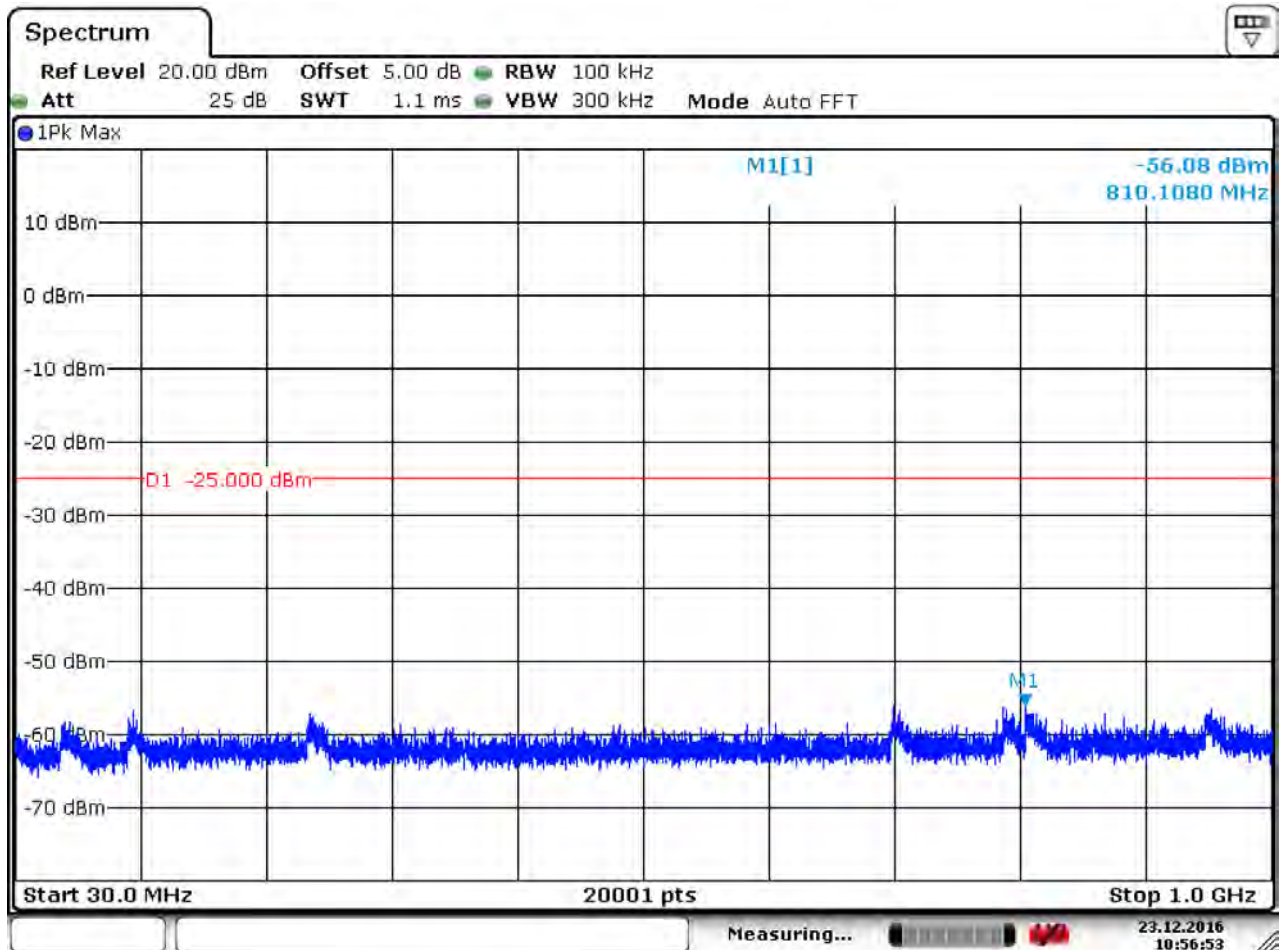
Date: 23.DEC.2016 10:56:53

Spectrum

| Ref Level 20.00 dBm | Offset 5.00 dB ● RBW 1 MHz |
| Att   25 dB | SWT   27 ms ● VBW 3 MHz | Mode Auto Sweep |

1Pk Max

M1[1]   -40.89 dBm
             5.102220 GHz

D1 -25.000 dBm

M1

Start 1.0 GHz   20001 pts   Stop 10.0 GHz

Measuring...   23.12.2016 10:59:51

Date: 23.DEC.2016 10:59:52

Spectrum

Ref Level 20.00 dBm	Offset 5.00 dB ● RBW 1 MHz
● Att 25 dB	SWT 30 ms ● VBW 3 MHz Mode Auto Sweep

● 1Pk Max

M1[1]   -44.68 dBm
                         19.793260 GHz

10 dBm

0 dBm

-10 dBm

-20 dBm

D1 -25.000 dBm

-30 dBm

-40 dBm   M1

-50 dBm

-60 dBm

-70 dBm

Start 10.0 GHz   20001 pts   Stop 20.0 GHz

Measuring...   23.12.2016
                        16:47:40
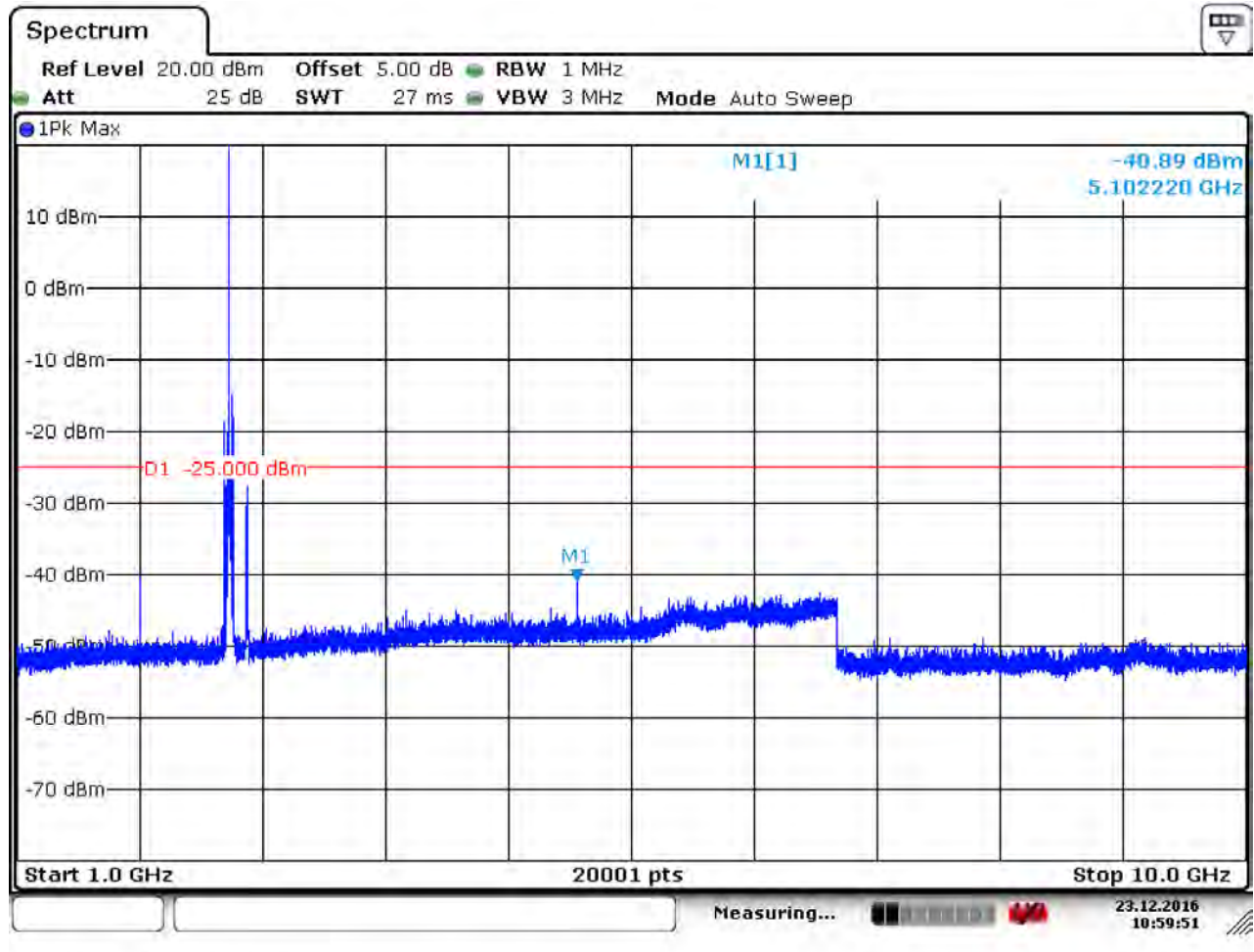
Date: 23.DEC.2016 16:47:41

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Date: 23.DEC.2016 16:58:21

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch
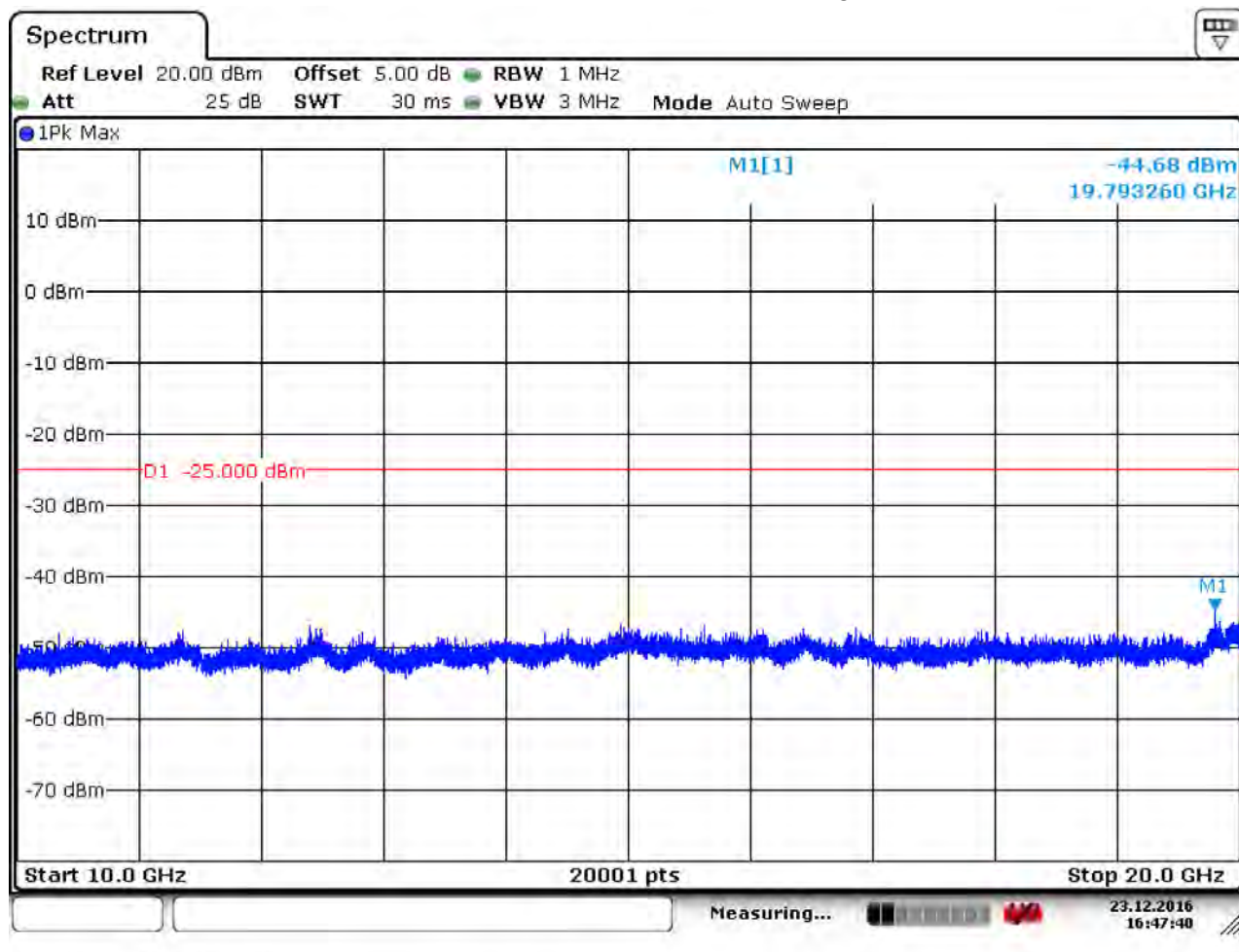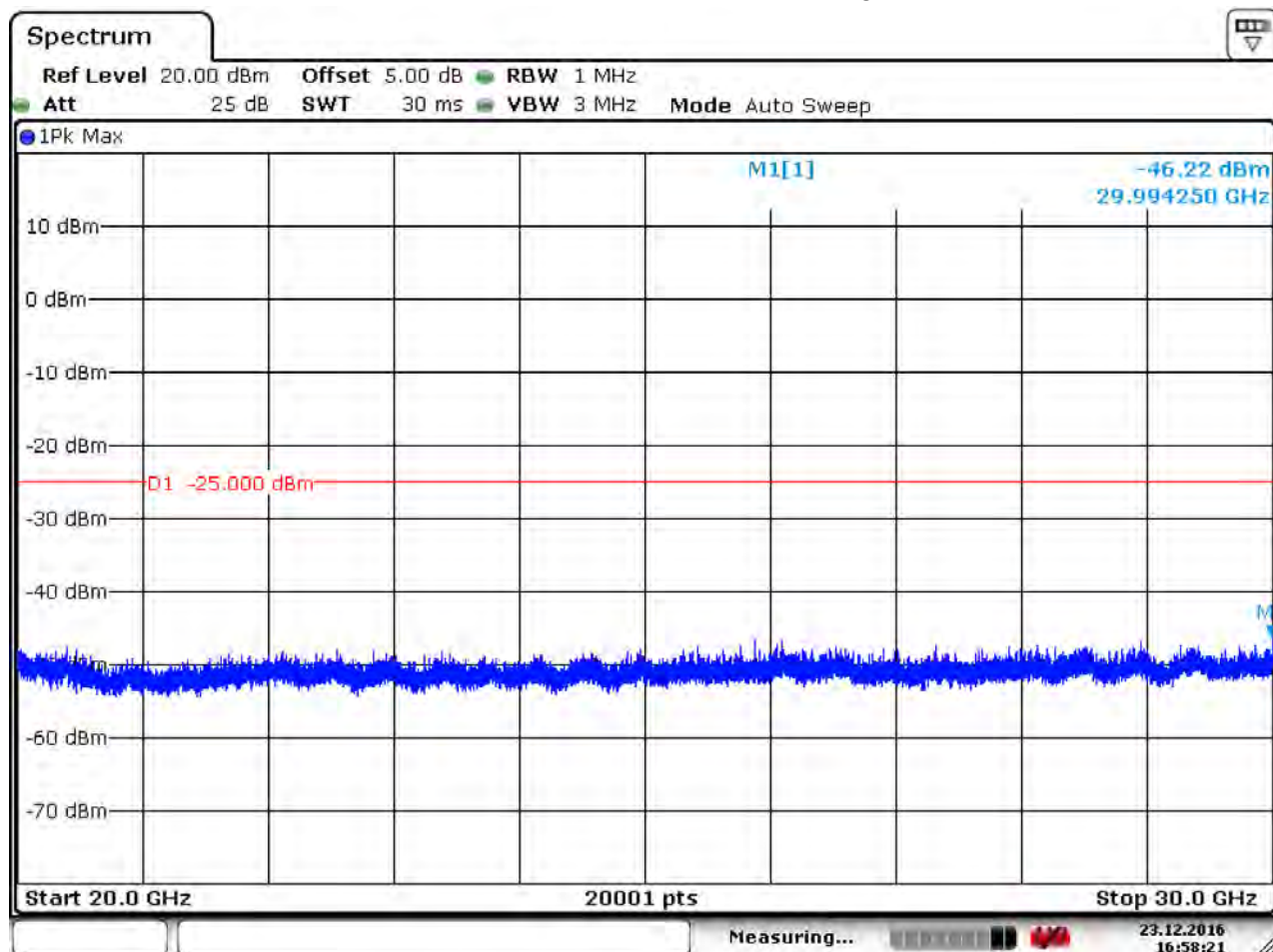
7 Field Strength of Spurious Radiation

7.1 For LTE

7.1.1 Test Band = LTE band7

7.1.1.1.1 Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
1397.000000	-67.29	-25.00	-42.29	Vertical
4267.500000	-66.87	-25.00	-41.87	Vertical
6412.500000	-65.49	-25.00	-40.49	Vertical
1276.000000	-67.11	-25.00	-42.11	Horizontal
4657.500000	-67.07	-25.00	-42.07	Horizontal
6607.500000	-65.11	-25.00	-40.11	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.

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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	-3.13	-0.00125	PASS
				VN	2.44	0.00097	PASS
				VH	-5.73	-0.00228	PASS
		MCH	TN	VL	1.49	0.00059	PASS
				VN	-2.34	-0.00092	PASS
				VH	3.63	0.00143	PASS
		HCH	TN	VL	-3.56	-0.00139	PASS
				VN	-5.65	-0.00221	PASS
				VH	-1.59	-0.00062	PASS
	LTE/TM2 20MHz	LCH	TN	VL	-3.48	-0.00139	PASS
				VN	-2.74	-0.00109	PASS
				VH	-4.66	-0.00186	PASS
		MCH	TN	VL	0.56	0.00022	PASS
				VN	-1.89	-0.00075	PASS
				VH	2.59	0.00102	PASS
		HCH	TN	VL	-2.95	-0.00115	PASS
				VN	-4.43	-0.00173	PASS
				VH	-2.53	-0.00099	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	-3.40	-0.00135	PASS
				-20	-1.34	-0.00053	PASS
				-10	2.38	0.00095	PASS
				0	1.75	0.00070	PASS
				10	1.65	0.00066	PASS
				20	2.11	0.00084	PASS
				30	-4.31	-0.00172	PASS
				40	-0.65	-0.00026	PASS
				50	2.59	0.00103	PASS
		MCH	VN	-30	-4.80	-0.00189	PASS
				-20	-2.95	-0.00116	PASS
				-10	-7.49	-0.00295	PASS
				0	-5.12	-0.00202	PASS
				10	-4.04	-0.00159	PASS
				20	-3.94	-0.00155	PASS
				30	-5.16	-0.00204	PASS
				40	-2.62	-0.00103	PASS
				50	-6.52	-0.00257	PASS
		HCH	VN	-30	2.51	0.00098	PASS
				-20	-1.88	-0.00073	PASS
				-10	2.53	0.00099	PASS
				0	-4.83	-0.00189	PASS
				10	2.60	0.00102	PASS
				20	-3.51	-0.00137	PASS
				30	-2.87	-0.00112	PASS
				40	-5.43	-0.00212	PASS
				50	-4.90	-0.00191	PASS

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Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband7	LTE/TM2 20MHz	LCH	VN	-30	-2.50	-0.00100	PASS
				-20	-2.45	-0.00098	PASS
				-10	3.54	0.00141	PASS
				0	2.64	0.00105	PASS
				10	1.60	0.00064	PASS
				20	-0.23	-0.00009	PASS
				30	-3.44	-0.00137	PASS
				40	5.34	0.00213	PASS
				50	6.39	0.00255	PASS
		MCH	VN	-30	-3.30	-0.00130	PASS
				-20	-5.28	-0.00208	PASS
				-10	-6.29	-0.00248	PASS
				0	-4.32	-0.00170	PASS
				10	-3.85	-0.00152	PASS
				20	1.34	0.00053	PASS
				30	-3.64	-0.00144	PASS
				40	-2.62	-0.00103	PASS
				50	-4.99	-0.00197	PASS
		HCH	VN	-30	1.34	0.00052	PASS
				-20	-2.25	-0.00088	PASS
				-10	3.59	0.00140	PASS
				0	-3.72	-0.00145	PASS
				10	2.88	0.00113	PASS
				20	-1.92	-0.00075	PASS
				30	-2.52	-0.00098	PASS
				40	-4.13	-0.00161	PASS
				50	-3.60	-0.00141	PASS

The End