



Appendix B

E-UTRA Band 2

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| Test Band(LTE) | Test Mode | Test Bandwidth | Test channel | Test RB | Measured (dBm) | EIRP (dBm) | limit (dBm) | Verdict |
|----------------|-----------|----------------|--------------|---------|----------------|------------|-------------|---------|
| BAND2 | LTE/TM2 | 1.4M | LCH | RB1#0 | 22.20 | 23.35 | 33.00 | PASS |
| | | | | RB1#2 | 22.62 | 23.77 | 33.00 | PASS |
| | | | | RB1#5 | 22.49 | 23.64 | 33.00 | PASS |
| | | | | RB3#0 | 22.67 | 23.82 | 33.00 | PASS |
| | | | | RB3#2 | 22.65 | 23.80 | 33.00 | PASS |
| | | | | RB3#3 | 22.75 | 23.90 | 33.00 | PASS |
| | | | | RB6#0 | 21.46 | 22.61 | 33.00 | PASS |
| | | | MCH | RB1#0 | 22.67 | 23.82 | 33.00 | PASS |
| | | | | RB1#2 | 22.67 | 23.82 | 33.00 | PASS |
| | | | | RB1#5 | 22.66 | 23.81 | 33.00 | PASS |
| | | | | RB3#0 | 22.73 | 23.88 | 33.00 | PASS |
| | | | | RB3#2 | 22.67 | 23.82 | 33.00 | PASS |
| | | | | RB3#3 | 22.81 | 23.96 | 33.00 | PASS |
| | | | | RB6#0 | 21.30 | 22.45 | 33.00 | PASS |
| | | | HCH | RB1#0 | 22.98 | 24.13 | 33.00 | PASS |
| | | | | RB1#2 | 22.87 | 24.02 | 33.00 | PASS |
| | | | | RB1#5 | 22.74 | 23.89 | 33.00 | PASS |
| | | | | RB3#0 | 22.93 | 24.08 | 33.00 | PASS |
| | | | | RB3#2 | 22.96 | 24.11 | 33.00 | PASS |
| | | | | RB3#3 | 22.96 | 24.11 | 33.00 | PASS |
| | | | | RB6#0 | 21.50 | 22.65 | 33.00 | PASS |

| Test Band(LTE) | Test Mode | Test Bandwidth | Test channel | Test RB | Measured (dBm) | EIRP (dBm) | limit (dBm) | Verdict |
|----------------|-----------|----------------|--------------|---------|----------------|------------|-------------|---------|
| BAND2 | LTE/TM2 | 20M | LCH | RB1#0 | 22.51 | 23.66 | 33.00 | PASS |
| | | | | RB1#50 | 22.31 | 23.46 | 33.00 | PASS |
| | | | | RB1#99 | 22.43 | 23.58 | 33.00 | PASS |
| | | | | RB50#0 | 21.39 | 22.54 | 33.00 | PASS |
| | | | | RB50#25 | 21.45 | 22.60 | 33.00 | PASS |
| | | | | RB50#50 | 21.42 | 22.57 | 33.00 | PASS |
| | | | | RB100#0 | 21.51 | 22.66 | 33.00 | PASS |
| | | | MCH | RB1#0 | 23.03 | 24.18 | 33.00 | PASS |
| | | | | RB1#50 | 22.92 | 24.07 | 33.00 | PASS |
| | | | | RB1#99 | 22.40 | 23.55 | 33.00 | PASS |
| | | | | RB50#0 | 21.63 | 22.78 | 33.00 | PASS |
| | | | | RB50#25 | 21.56 | 22.71 | 33.00 | PASS |
| | | | | RB50#50 | 21.51 | 22.66 | 33.00 | PASS |
| | | | | RB100#0 | 21.72 | 22.87 | 33.00 | PASS |
| | | | HCH | RB1#0 | 23.07 | 24.22 | 33.00 | PASS |
| | | | | RB1#50 | 22.68 | 23.83 | 33.00 | PASS |
| | | | | RB1#99 | 22.84 | 23.99 | 33.00 | PASS |
| | | | | RB50#0 | 21.79 | 22.94 | 33.00 | PASS |
| | | | | RB50#25 | 21.74 | 22.89 | 33.00 | PASS |
| | | | | RB50#50 | 21.57 | 22.72 | 33.00 | PASS |
| | | | | RB100#0 | 21.59 | 22.74 | 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,

$$\text{EIRP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBi]}$$

b: SGP=Signal Generator Level

c: RBW > emission bandwidth, VBW > 3 x RBW.

Detector: RMS



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2 Peak-to-Average Ratio

Part I - Test Results

| Test Band | Test Mode | Test Channel | Measured[dB] | Limit [dB] | Verdict |
|-----------|-----------|--------------|--------------|------------|---------|
| Band 2 | TM1/20M | LCH | 5.04 | 13 | PASS |
| | | MCH | 5.30 | 13 | PASS |
| | | HCH | 5.10 | 13 | PASS |
| | TM2/20M | LCH | 6.00 | 13 | PASS |
| | | MCH | 6.23 | 13 | PASS |
| | | HCH | 6.17 | 13 | PASS |

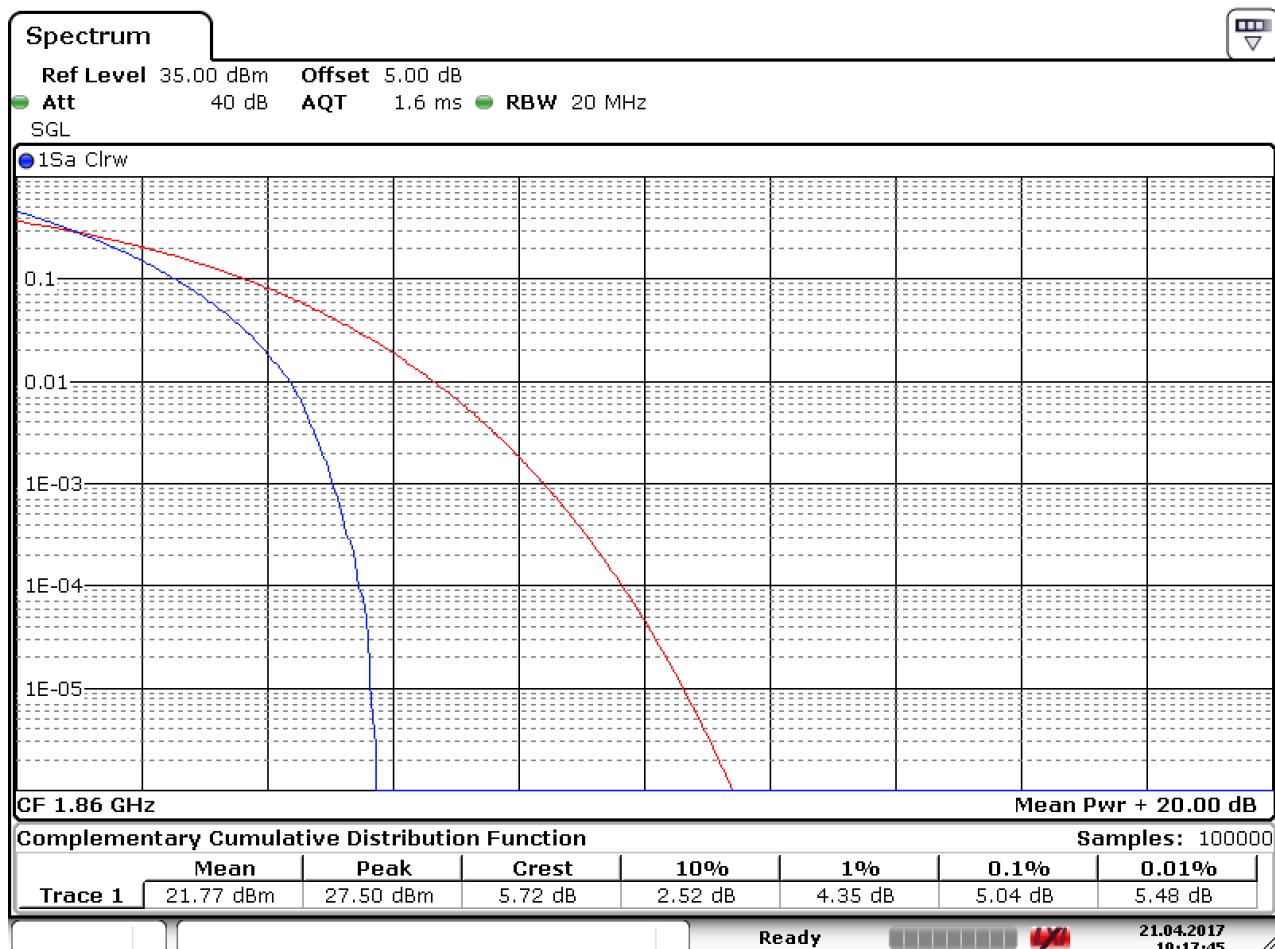
Part II - Test Plots

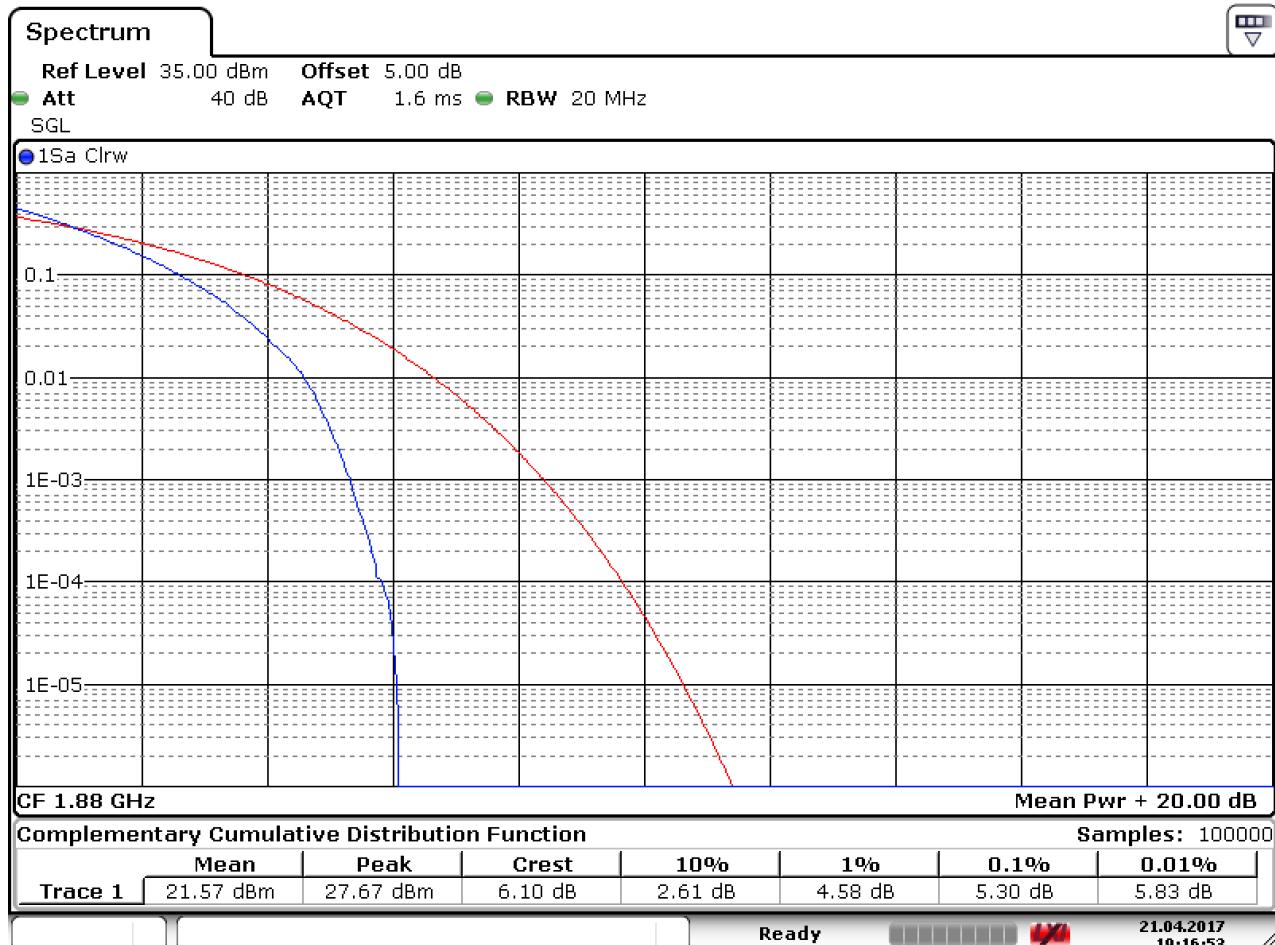
2.1 For LTE

2.1.1 Test Band = LTE band2

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

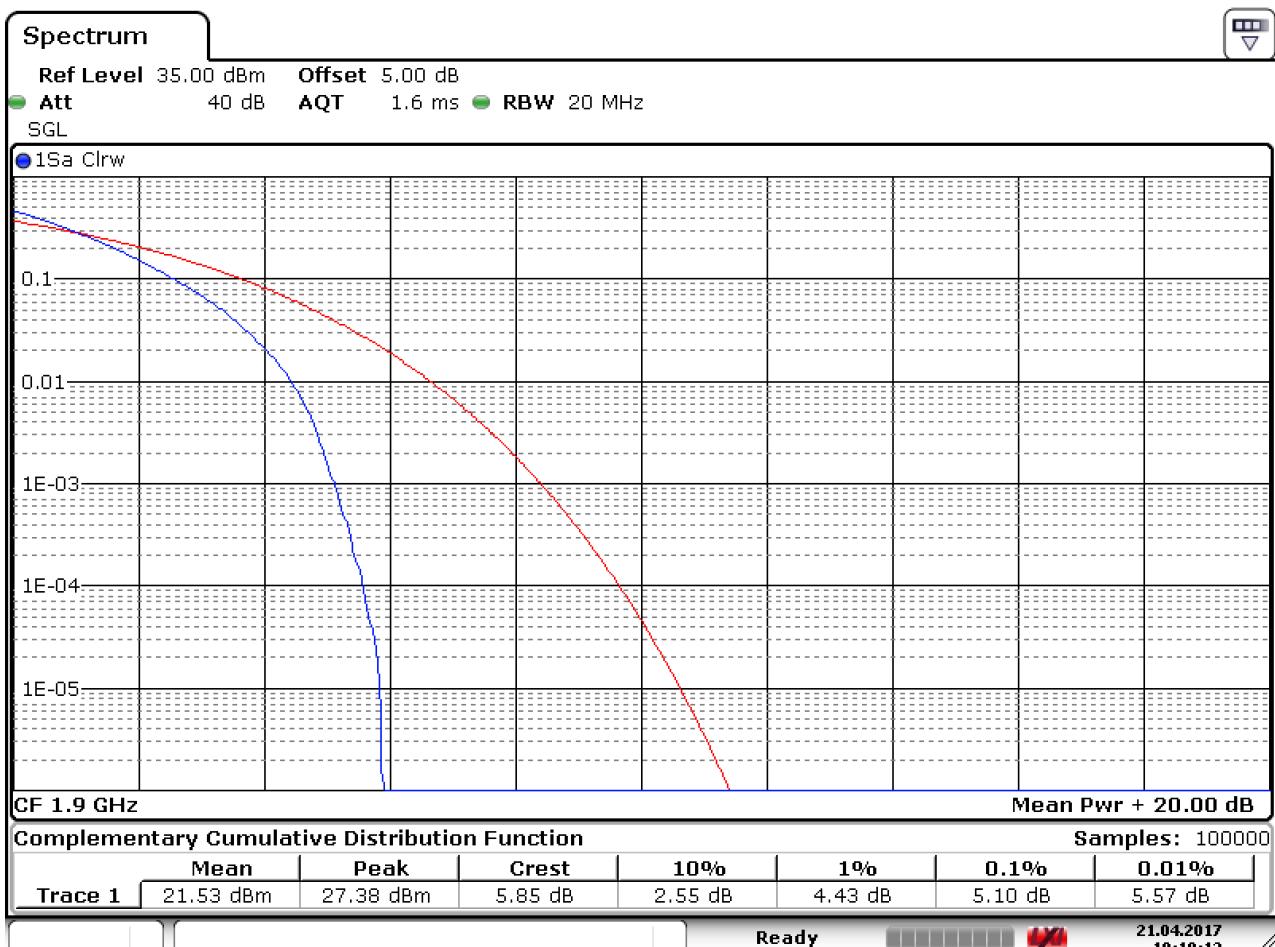
2.1.1.1.1 Test Channel = LCH



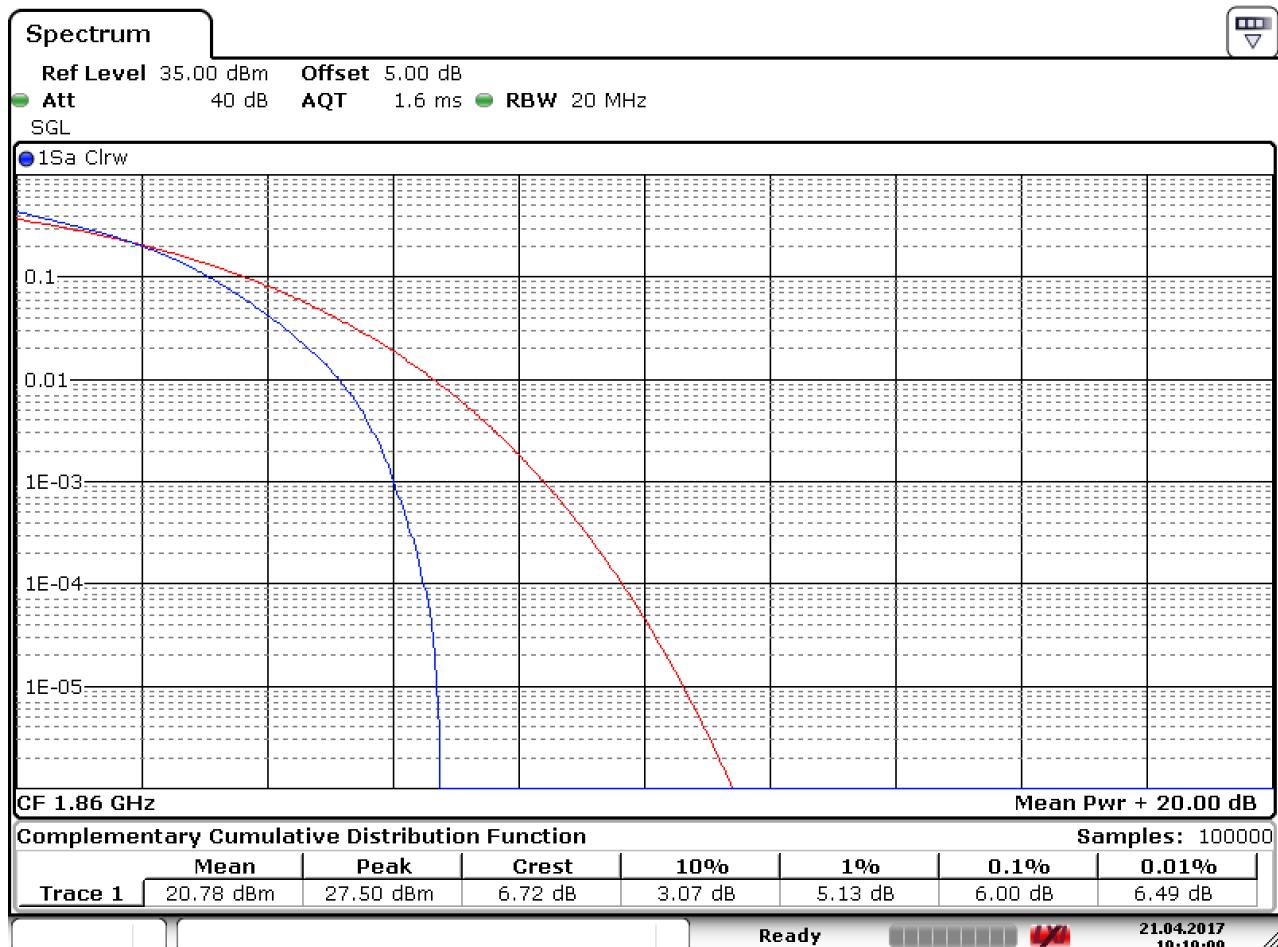
2.1.1.1.2 Test Channel = MCH

Date: 21.APR.2017 19:16:54

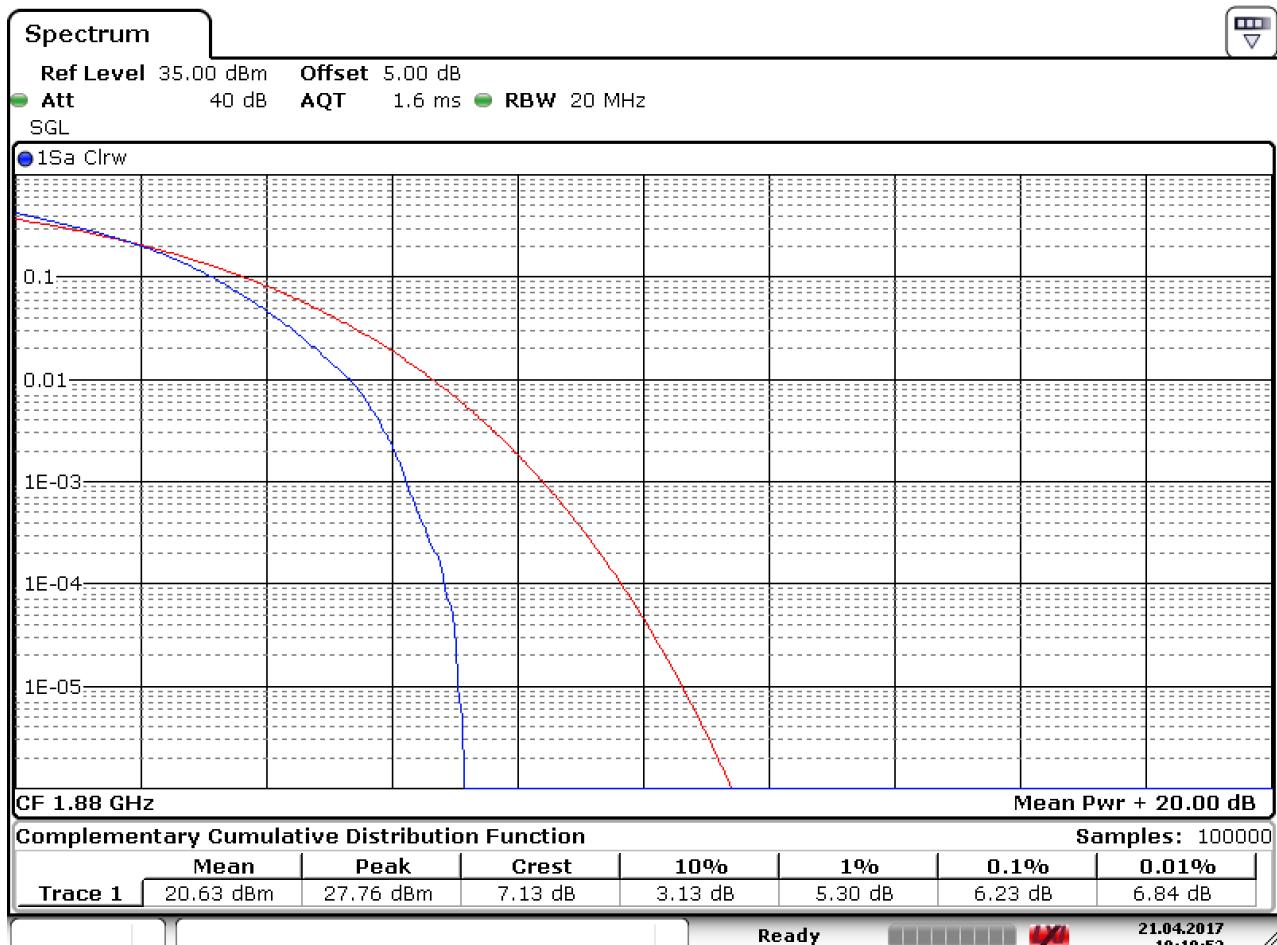
2.1.1.1.3 Test Channel = HCH



Date: 21.APR.2017 19:18:12

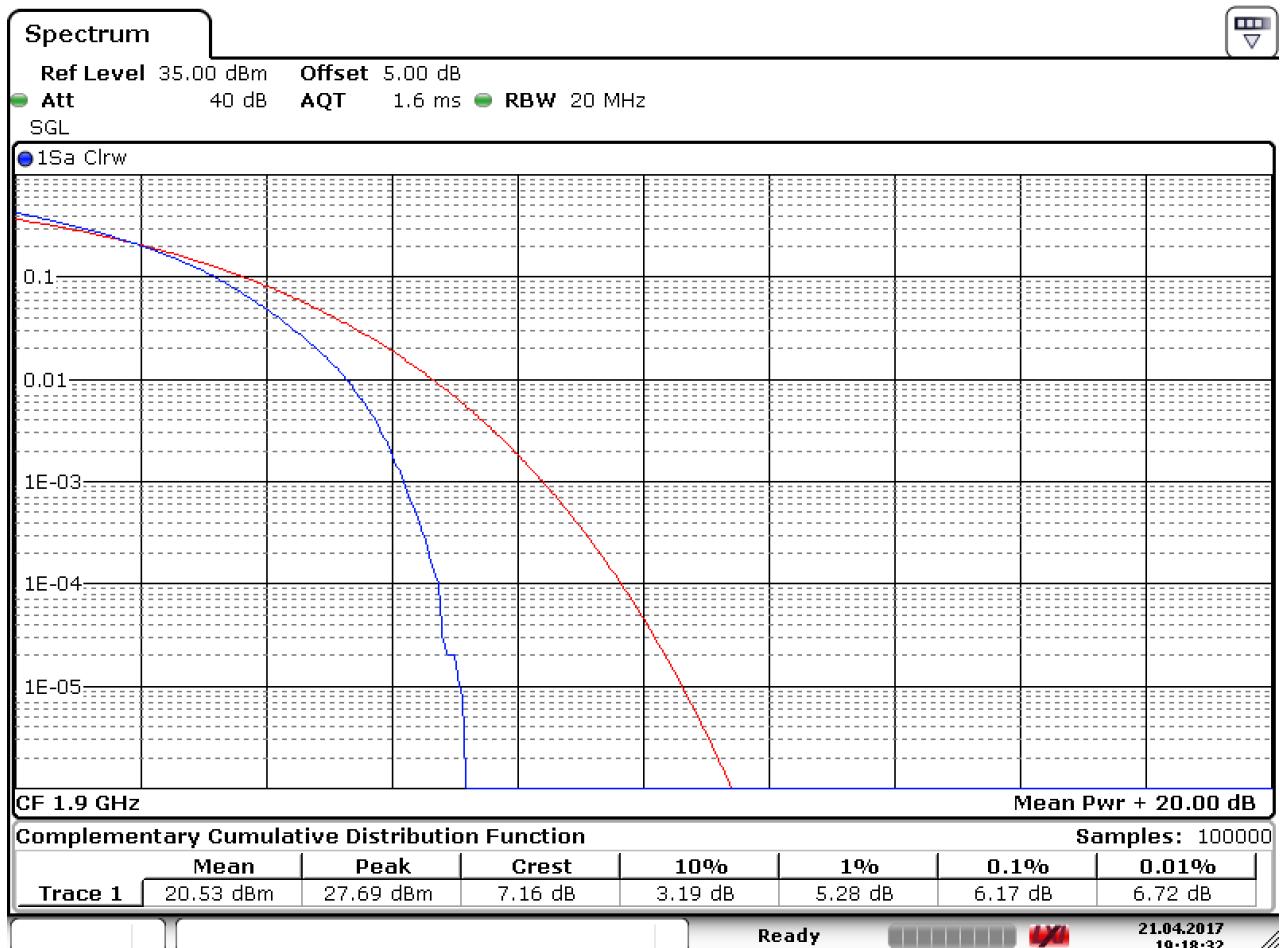
2.1.1.2 Test Mode = LTE/TM2.Bandwidth=20MHz**2.1.1.2.1 Test Channel = LCH**

Date: 21.APR.2017 19:19:10

2.1.1.2.2 Test Channel = MCH

Date: 21.APR.2017 19:18:54

2.1.1.2.3 Test Channel = HCH



Date: 21.APR.2017 19:18:32

3 Modulation Characteristics

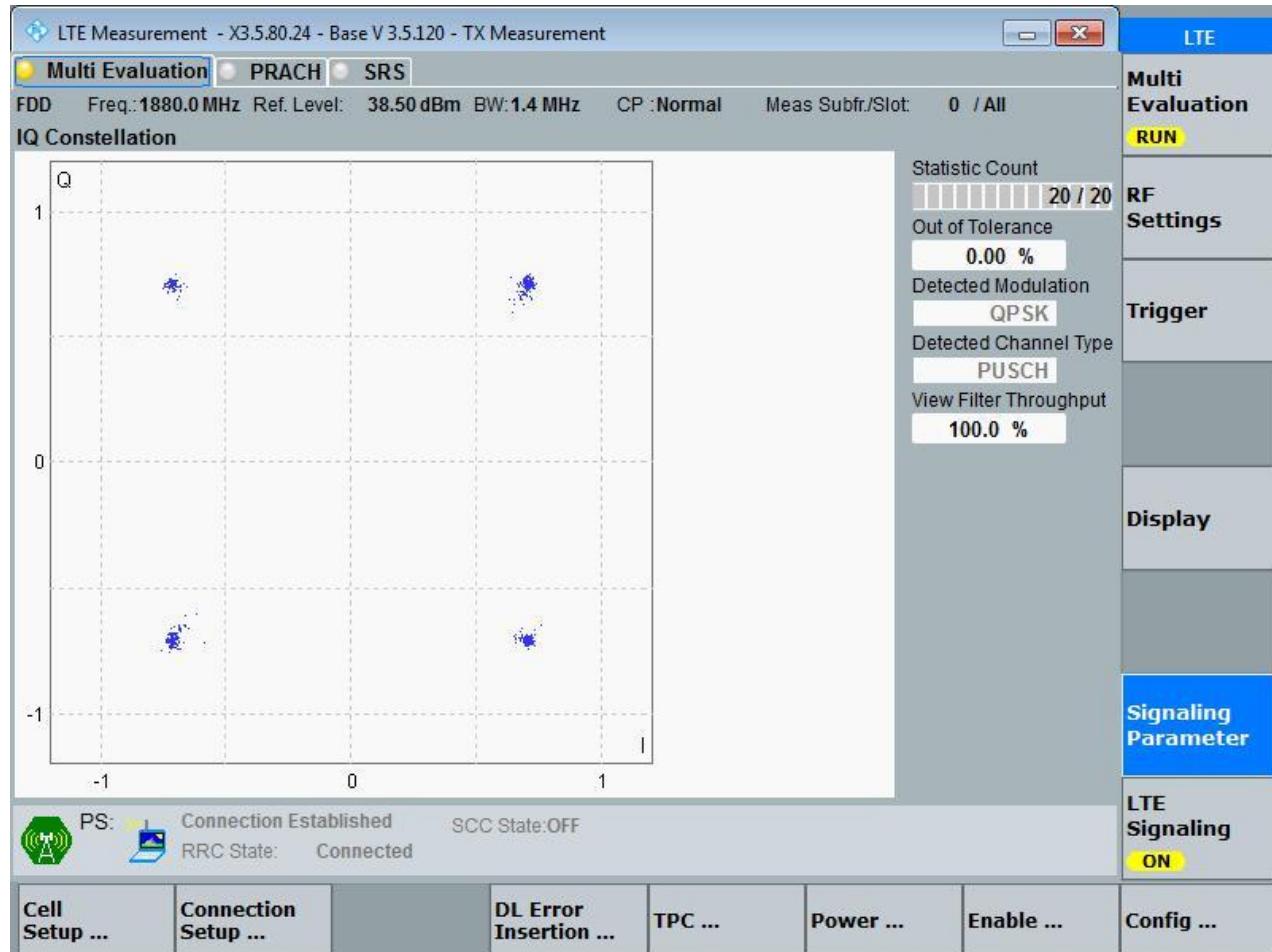
Part I - Test Plots

3.1 For LTE

3.1.1 Test Band = LTE band2

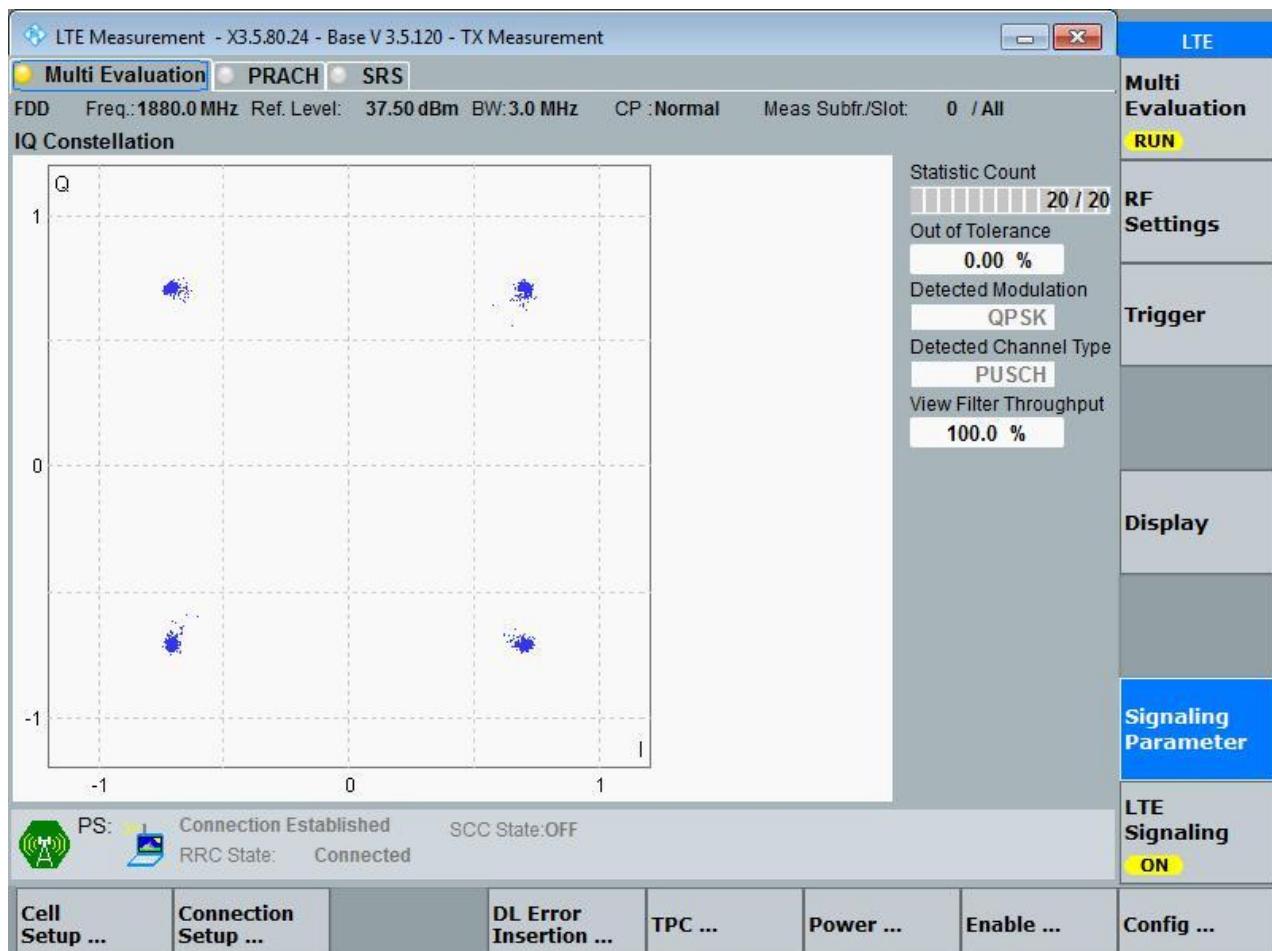
3.1.1.1 Test Mode = LTE /TM1 1.4MHz

3.1.1.1.1 Test Channel = MCH



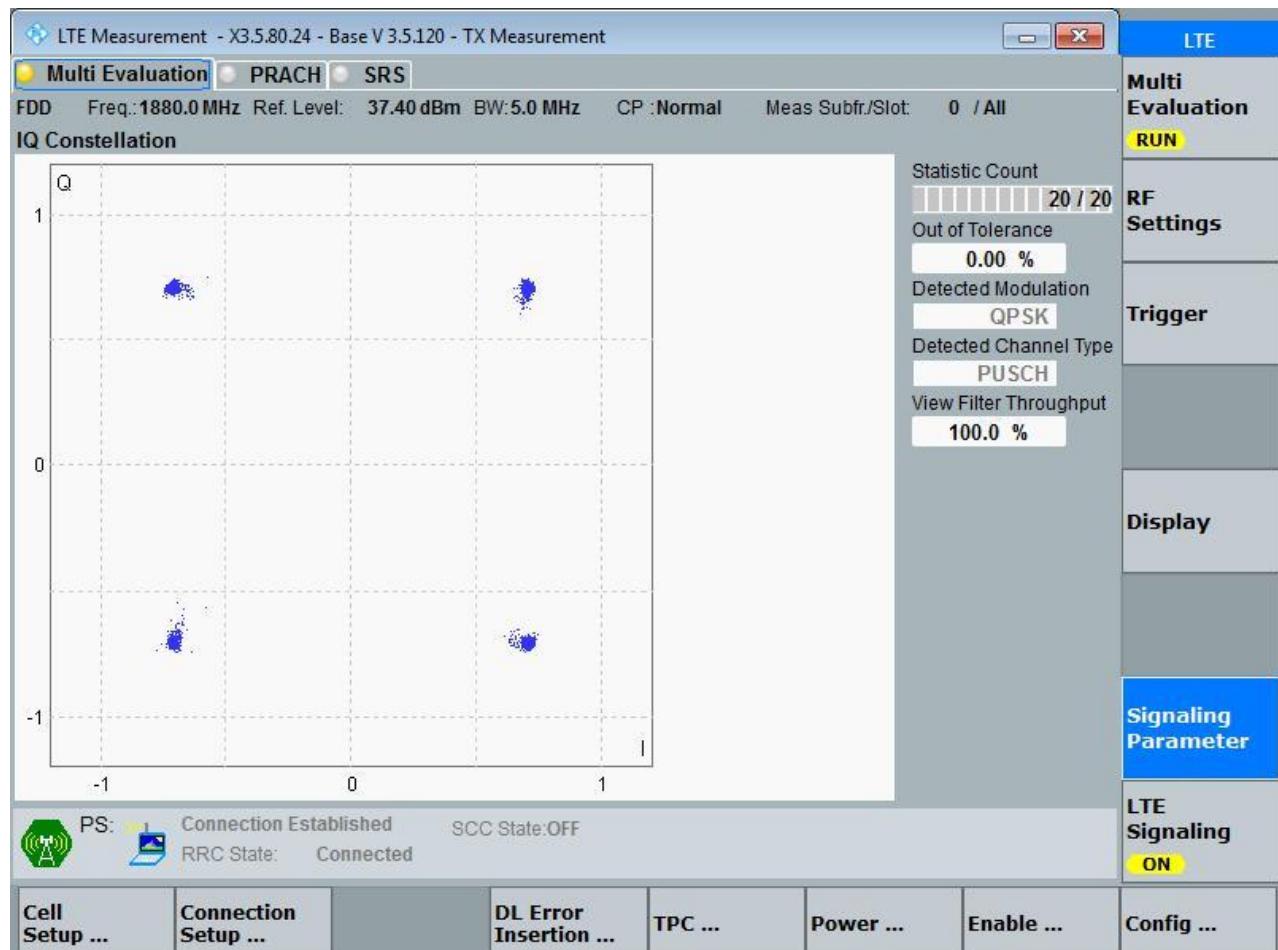
3.1.1.2 Test Mode = LTE /TM1 3MHz

3.1.1.2.1 Test Channel = MCH



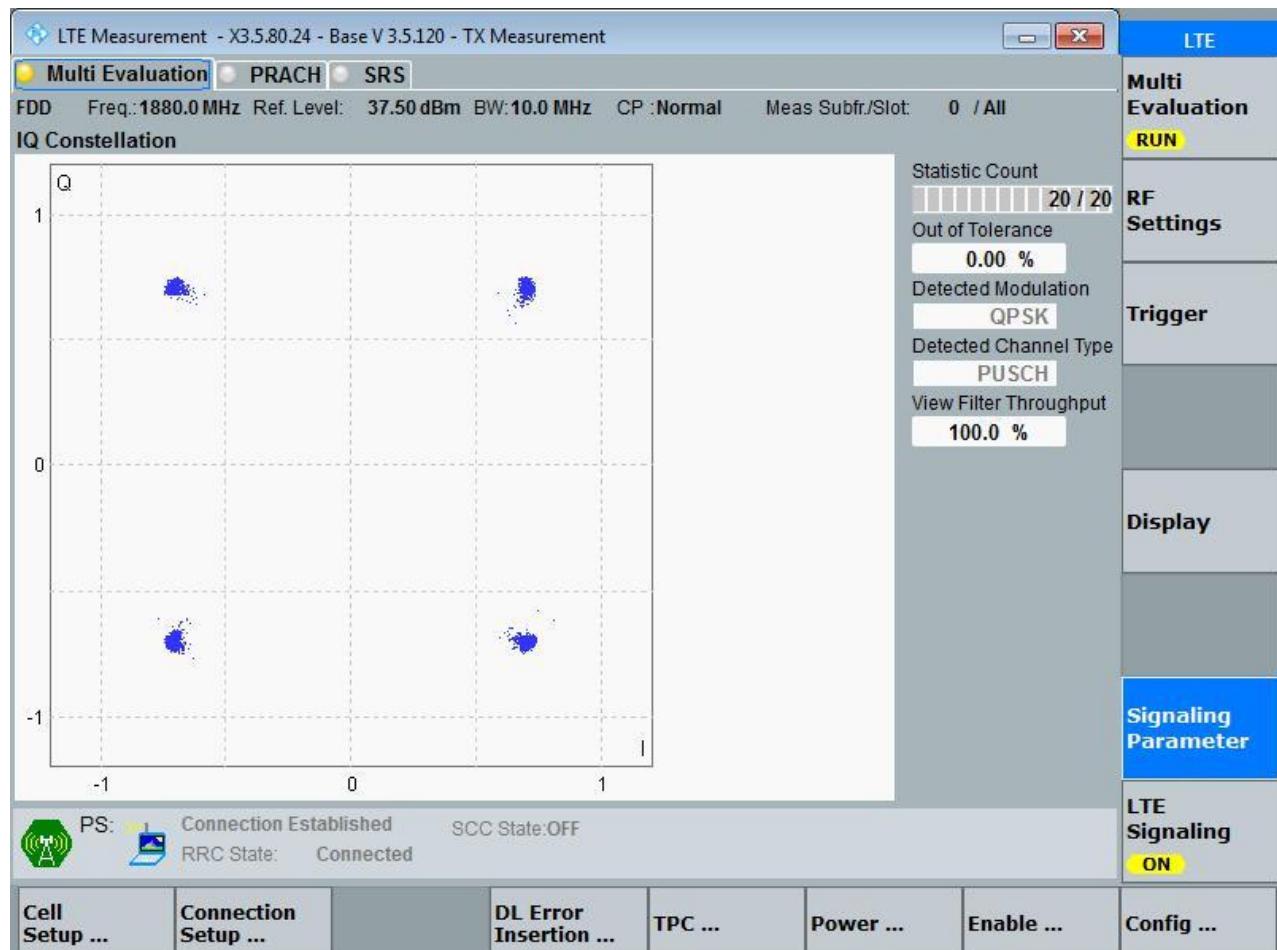
3.1.1.3 Test Mode = LTE /TM1 5MHz

3.1.1.3.1 Test Channel = MCH



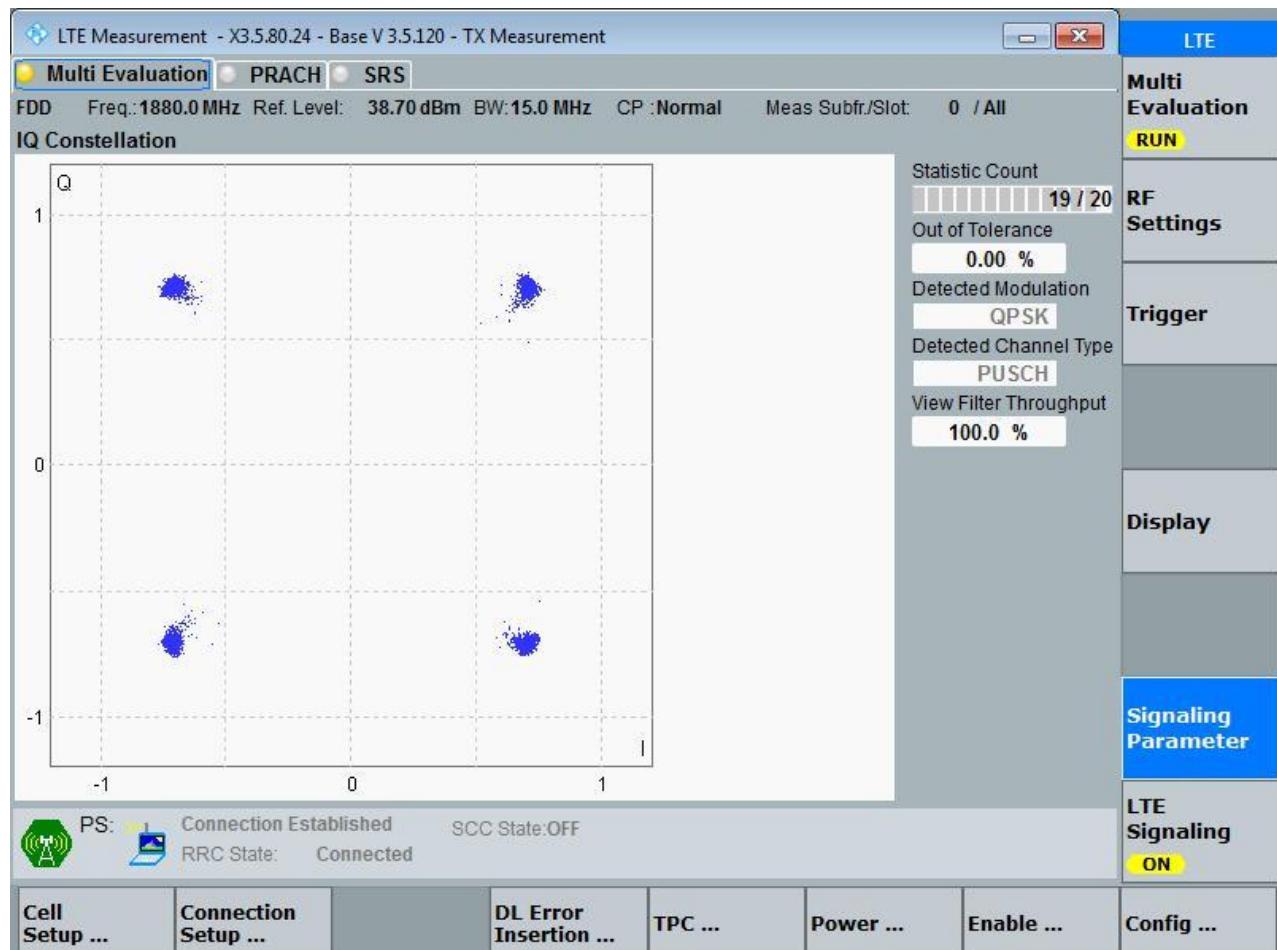
3.1.1.4 Test Mode = LTE /TM1 10MHz

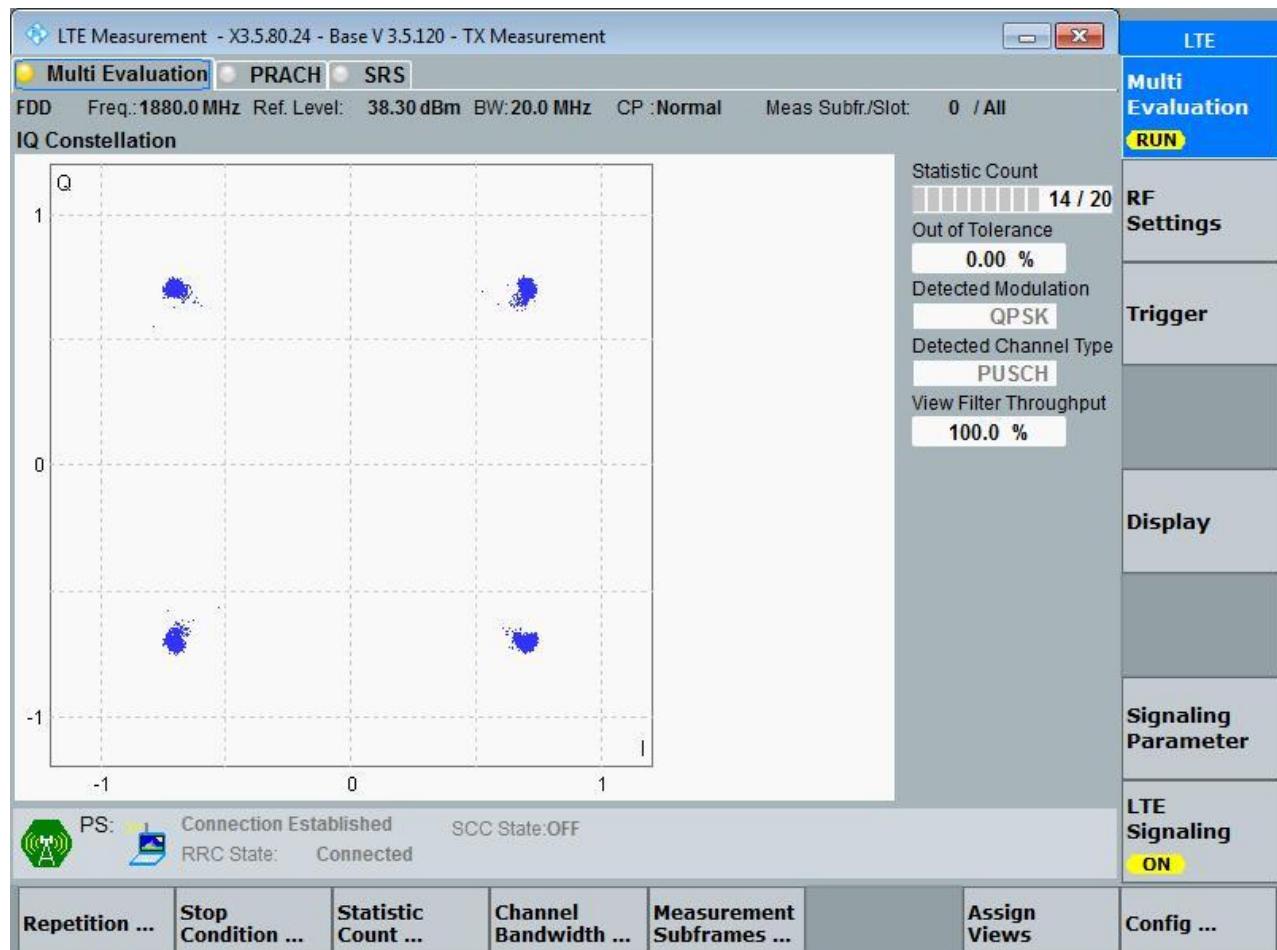
3.1.1.4.1 Test Channel = MCH



3.1.1.5 Test Mode = LTE /TM1 15MHz

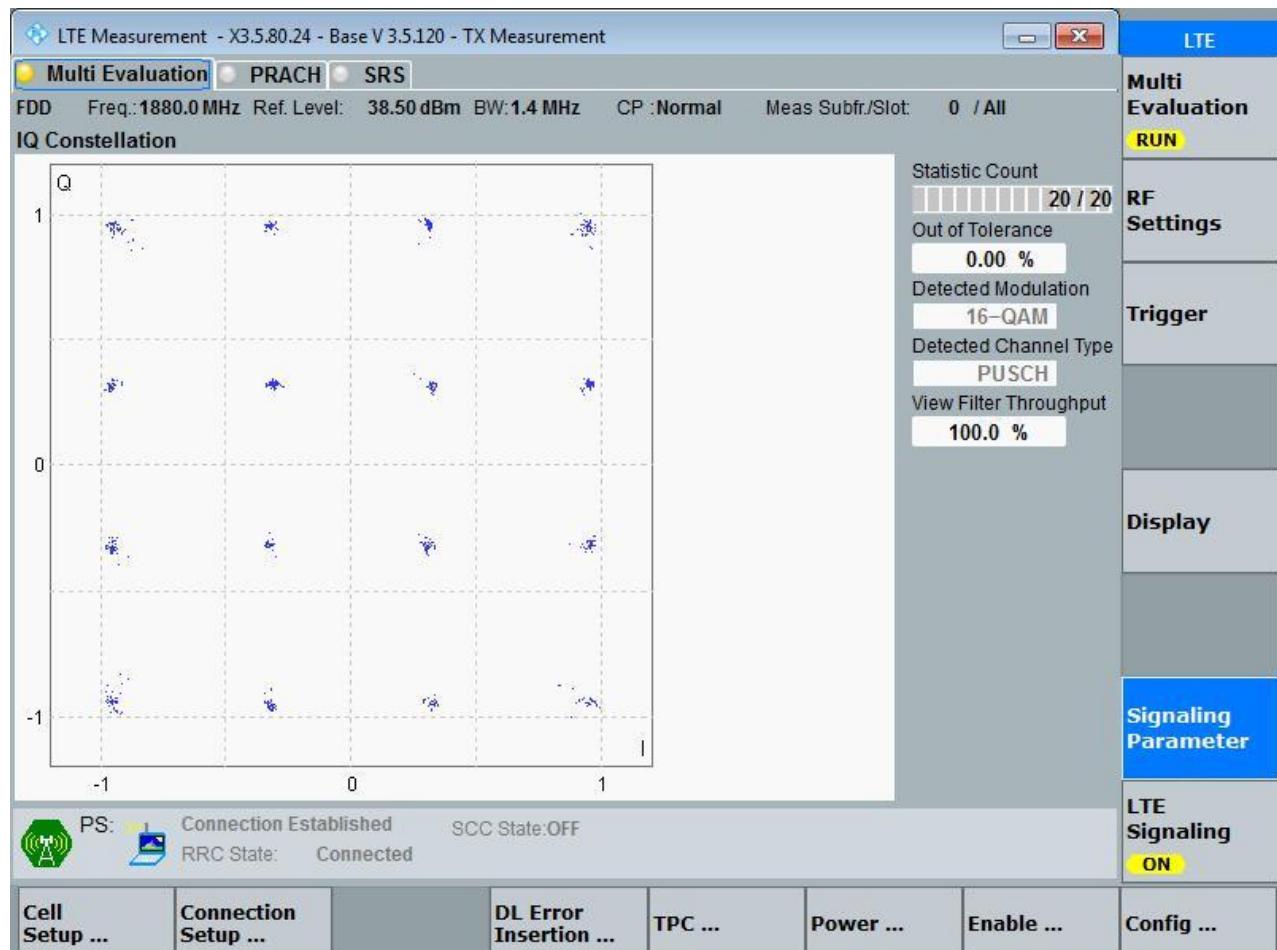
3.1.1.5.1 Test Channel = MCH



3.1.1.6 Test Mode = LTE /TM1 20MHz**3.1.1.6.1 Test Channel = MCH**

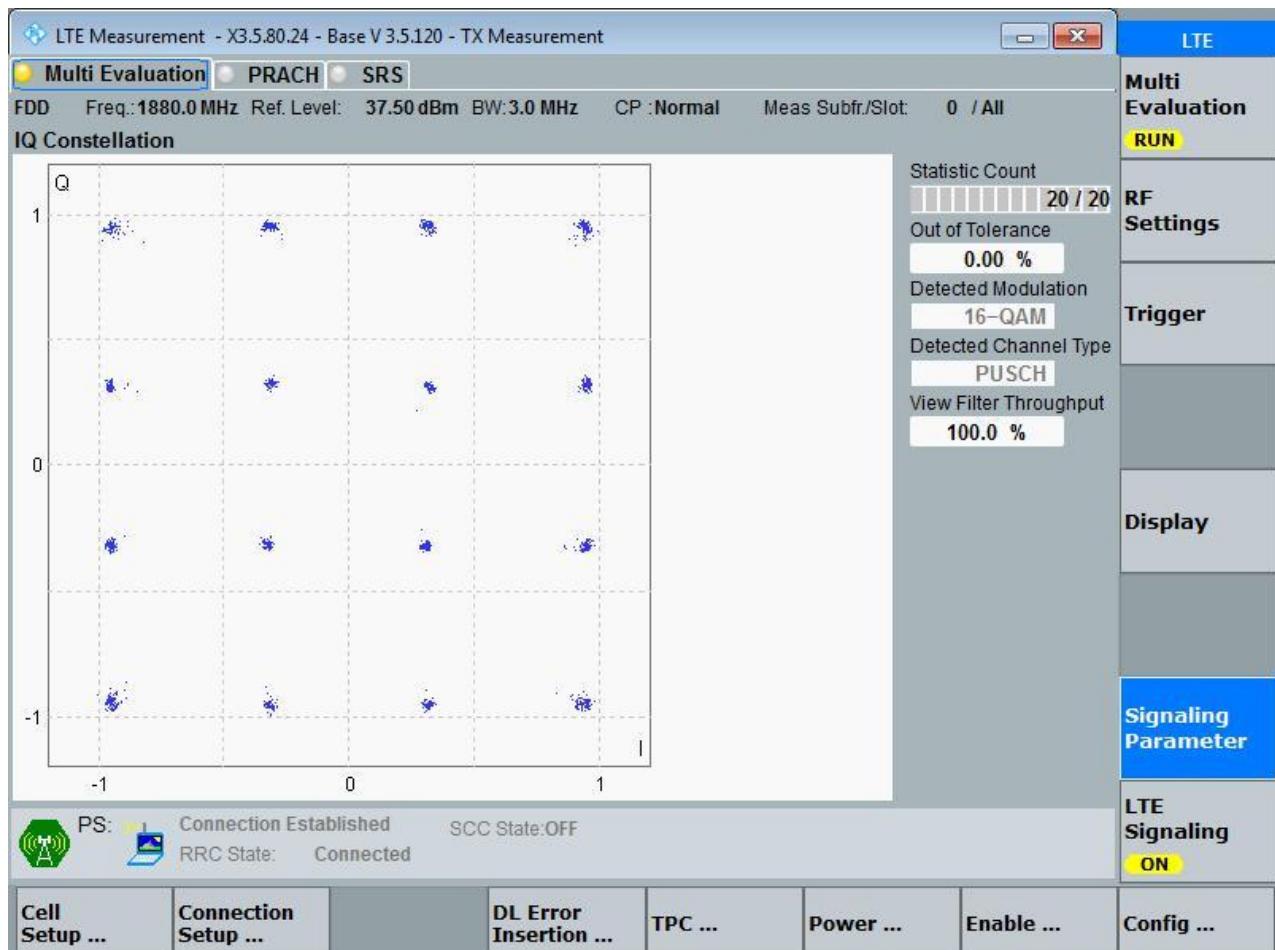
3.1.1.7 Test Mode = LTE /TM2 1.4MHz

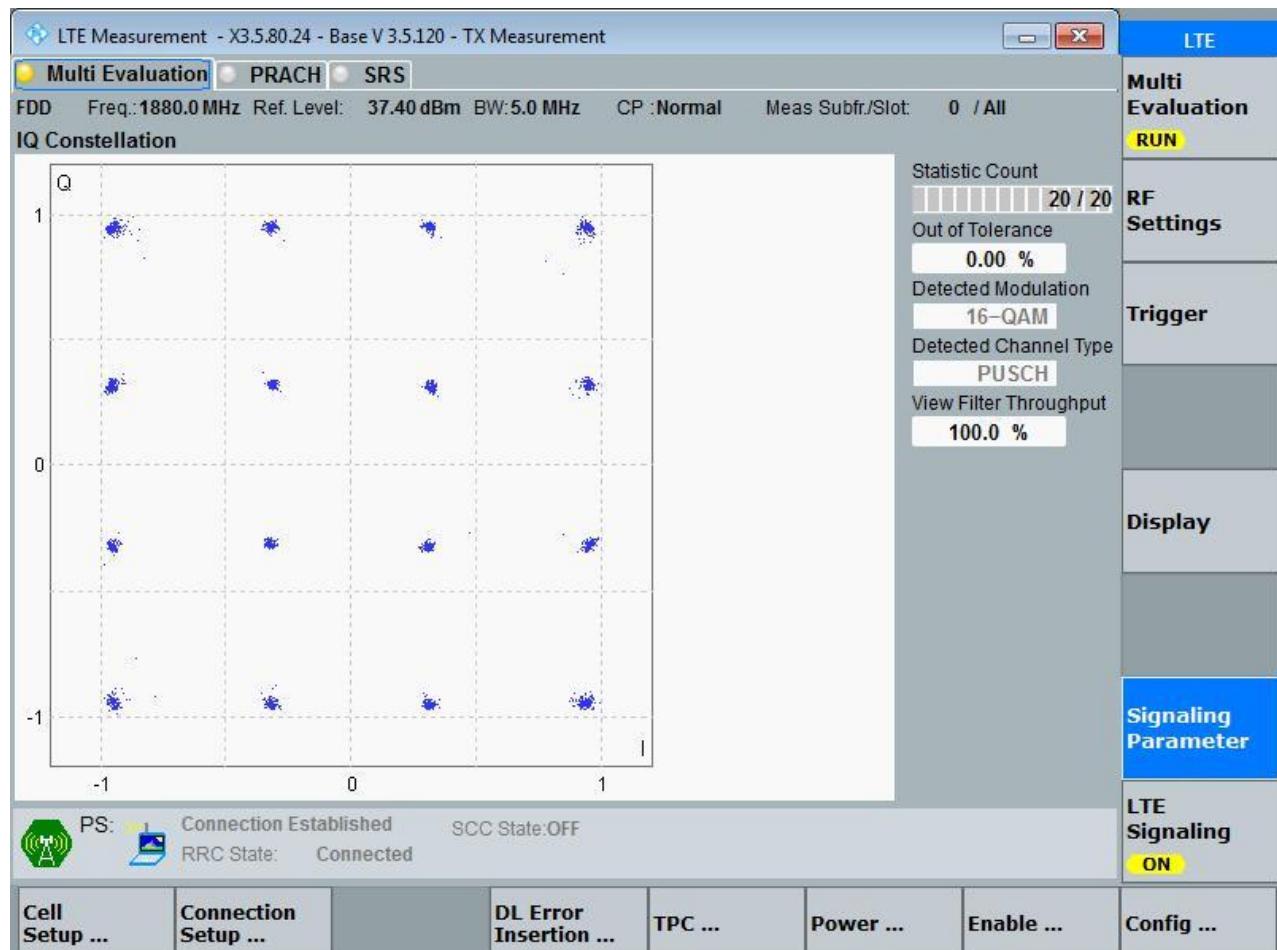
3.1.1.7.1 Test Channel = MCH

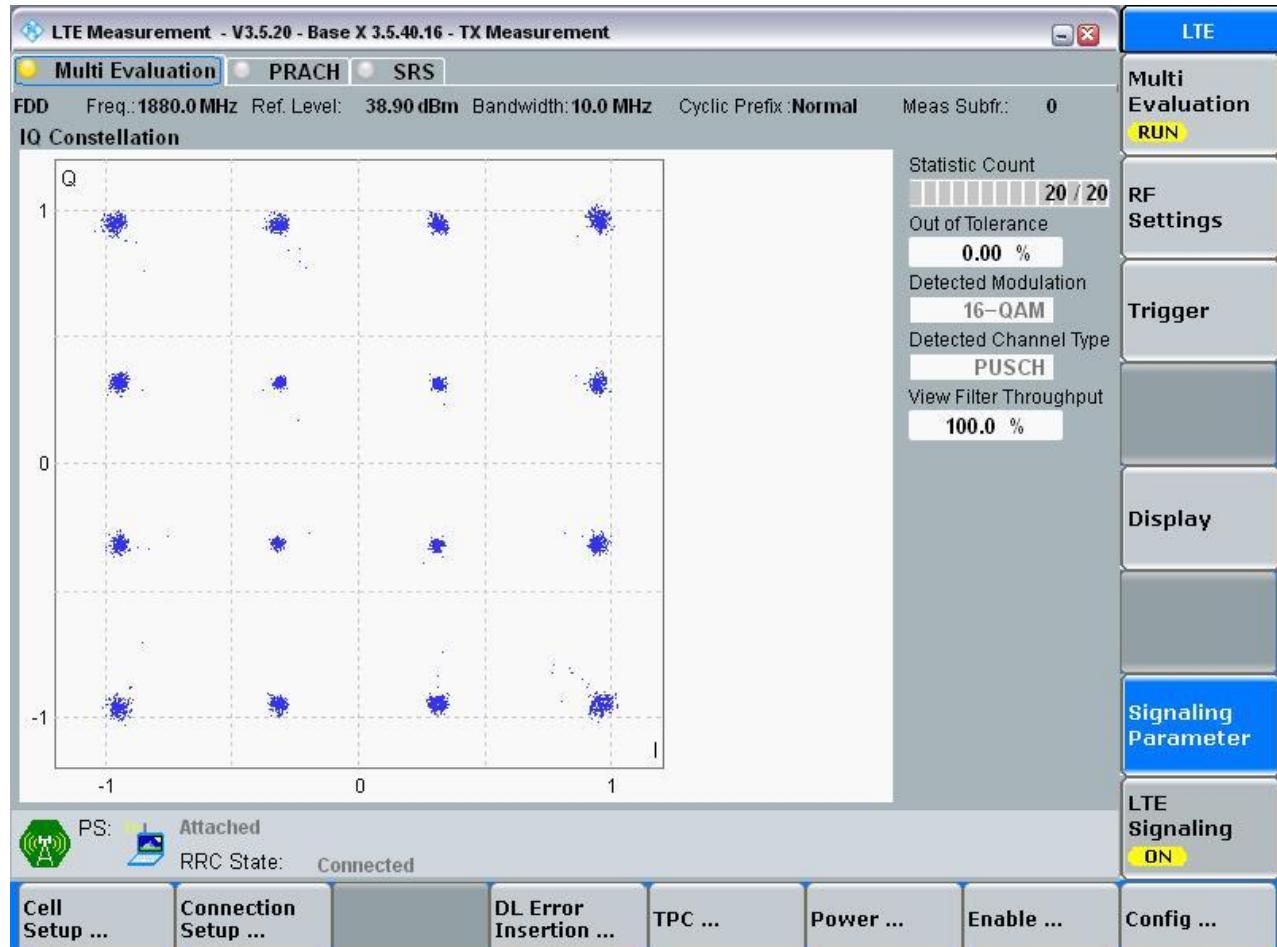


3.1.1.8 Test Mode = LTE /TM2 3MHz

3.1.1.8.1 Test Channel = MCH

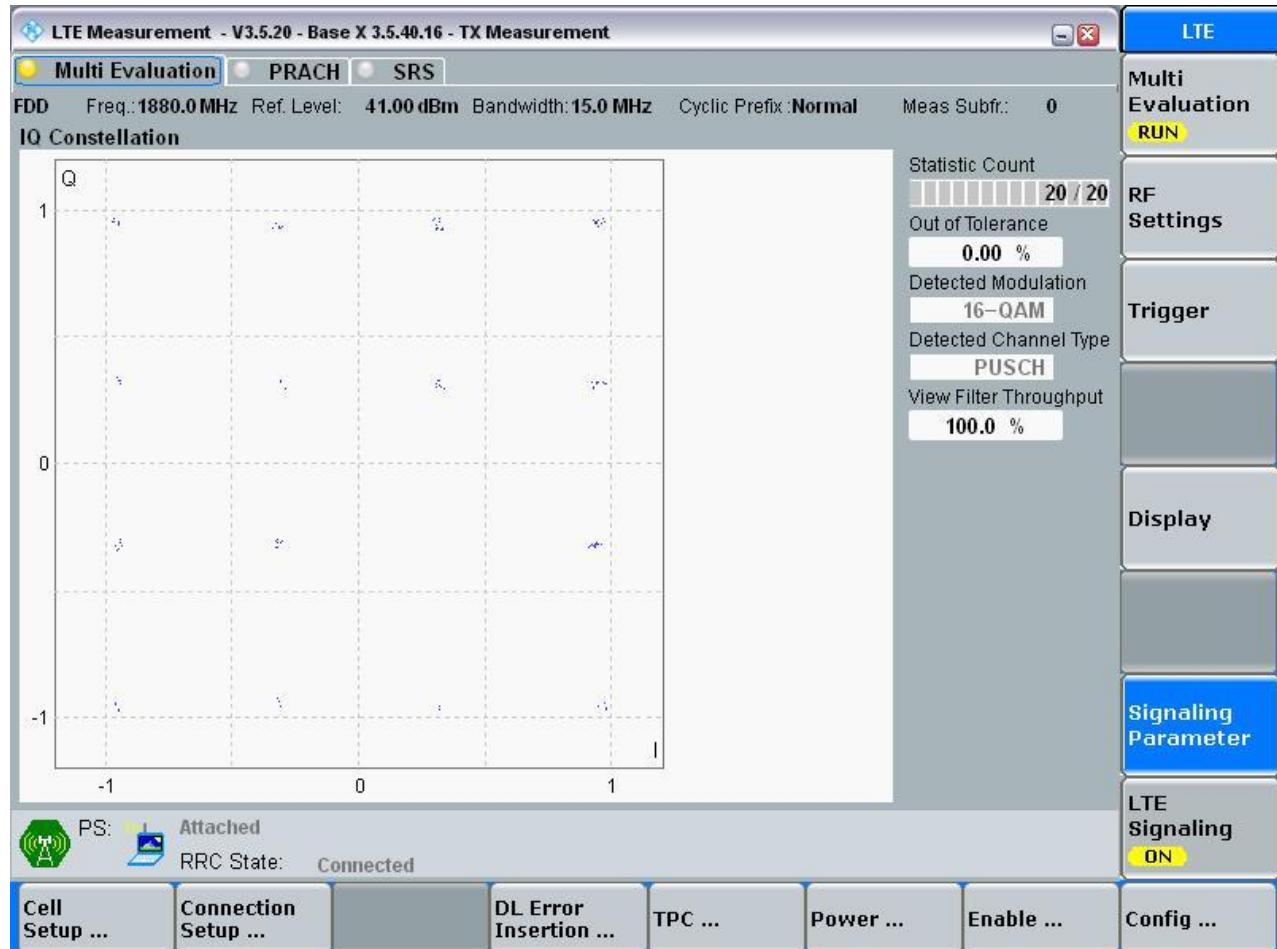


3.1.1.9 Test Mode = LTE /TM2 5MHz**3.1.1.9.1 Test Channel = MCH**

3.1.1.10 Test Mode = LTE /TM2 10MHz**3.1.1.10.1 Test Channel = MCH**

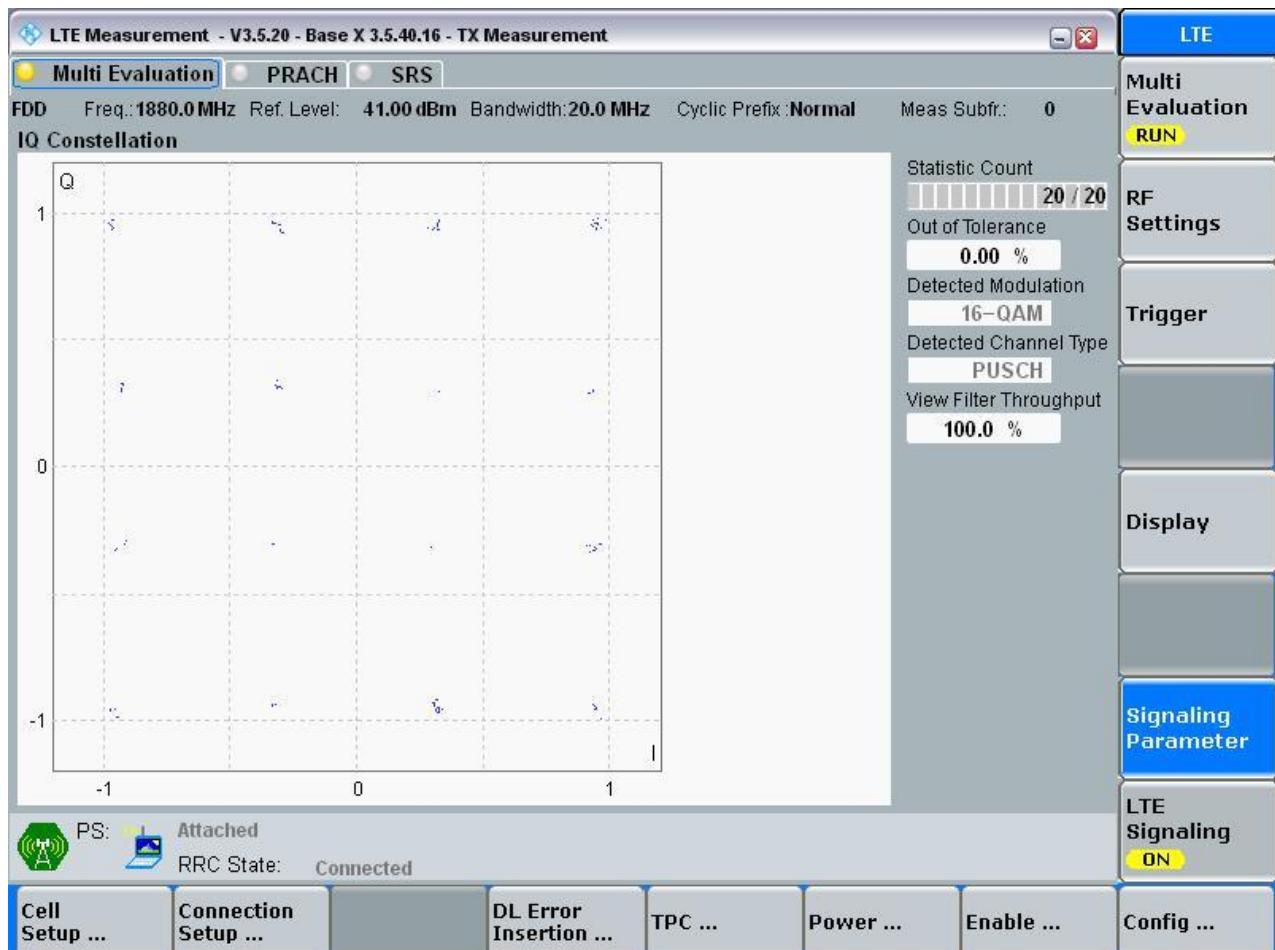
3.1.1.11 Test Mode = LTE /TM2 15MHz

3.1.1.11.1 Test Channel = MCH



3.1.1.12 Test Mode = LTE /TM2 20MHz

3.1.1.12.1 Test Channel = MCH



4 Bandwidth

Part I - Test Results

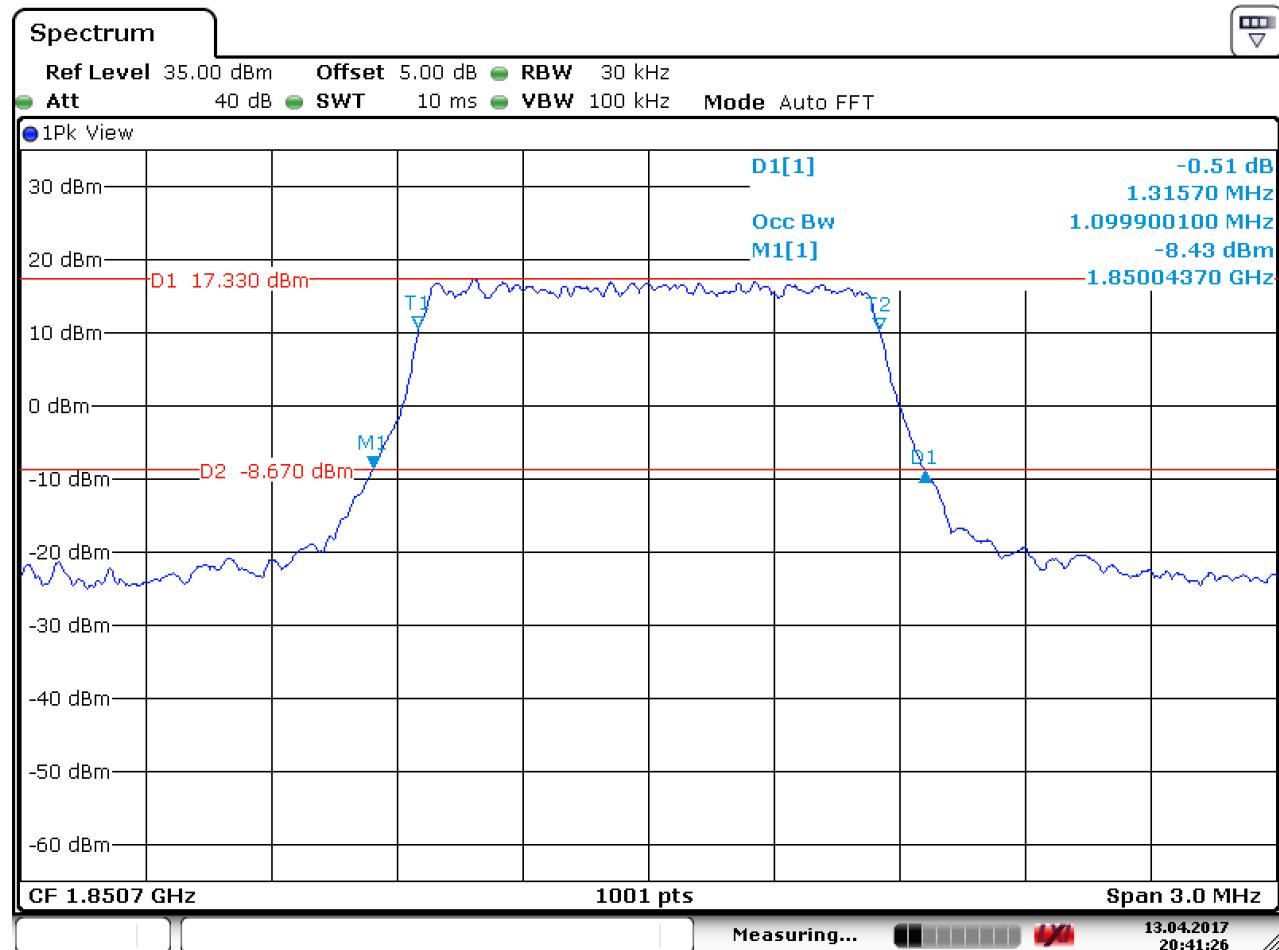
| Test Band | Test Mode | Test Channel | Occupied Bandwidth [MHz] | Emission Bandwidth [MHz] | Verdict |
|-----------|------------|--------------|--------------------------|--------------------------|---------|
| Band 2 | TM1/1.4MHz | LCH | 1.10 | 1.32 | PASS |
| | | MCH | 1.10 | 1.31 | PASS |
| | | HCH | 1.11 | 1.30 | PASS |
| | TM2/1.4MHz | LCH | 1.10 | 1.31 | PASS |
| | | MCH | 1.10 | 1.33 | PASS |
| | | HCH | 1.10 | 1.31 | PASS |
| | TM1/ 3MHz | LCH | 2.69 | 2.93 | PASS |
| | | MCH | 2.69 | 2.93 | PASS |
| | | HCH | 2.69 | 2.95 | PASS |
| | TM2/3MHz | LCH | 2.69 | 2.94 | PASS |
| | | MCH | 2.69 | 2.94 | PASS |
| | | HCH | 2.68 | 2.94 | PASS |
| | TM1/ 5MHz | LCH | 4.50 | 4.94 | PASS |
| | | MCH | 4.50 | 4.98 | PASS |
| | | HCH | 4.48 | 4.93 | PASS |
| | TM2/ 5MHz | LCH | 4.49 | 4.94 | PASS |
| | | MCH | 4.49 | 4.91 | PASS |
| | | HCH | 4.50 | 4.96 | PASS |
| | TM1/10MHz | LCH | 8.93 | 9.71 | PASS |
| | | MCH | 8.97 | 9.79 | PASS |
| | | HCH | 8.93 | 9.73 | PASS |
| | TM2/ 10MHz | LCH | 8.93 | 9.69 | PASS |
| | | MCH | 8.95 | 9.71 | PASS |
| | | HCH | 8.93 | 9.73 | PASS |
| | TM1/ 15MHz | LCH | 13.43 | 14.84 | PASS |
| | | MCH | 13.55 | 14.96 | PASS |
| | | HCH | 13.46 | 14.84 | PASS |
| | TM2/ 15MHz | LCH | 13.49 | 14.84 | PASS |
| | | MCH | 13.49 | 14.84 | PASS |
| | | HCH | 13.49 | 14.84 | PASS |
| | TM1/ 20MHz | LCH | 17.86 | 19.34 | PASS |
| | | MCH | 17.94 | 19.30 | PASS |
| | | HCH | 17.94 | 19.62 | PASS |
| | TM2/ 20MHz | LCH | 17.90 | 19.54 | PASS |
| | | MCH | 17.94 | 19.42 | PASS |
| | | HCH | 17.90 | 19.42 | PASS |

4.1 For LTE

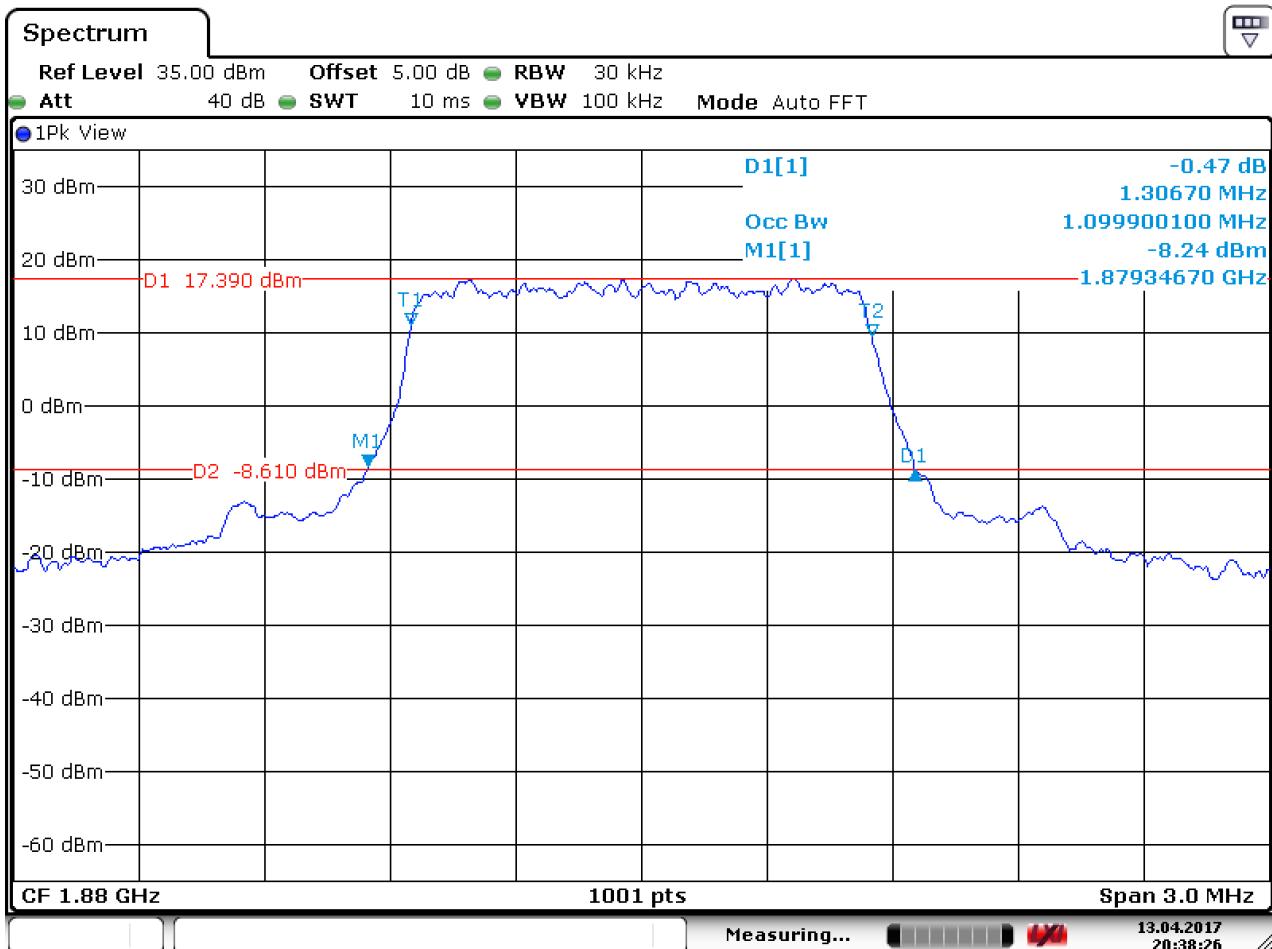
4.1.1 Test Band = LTE band2

4.1.1.1 Test Mode = LTE/TM1 1.4MHz

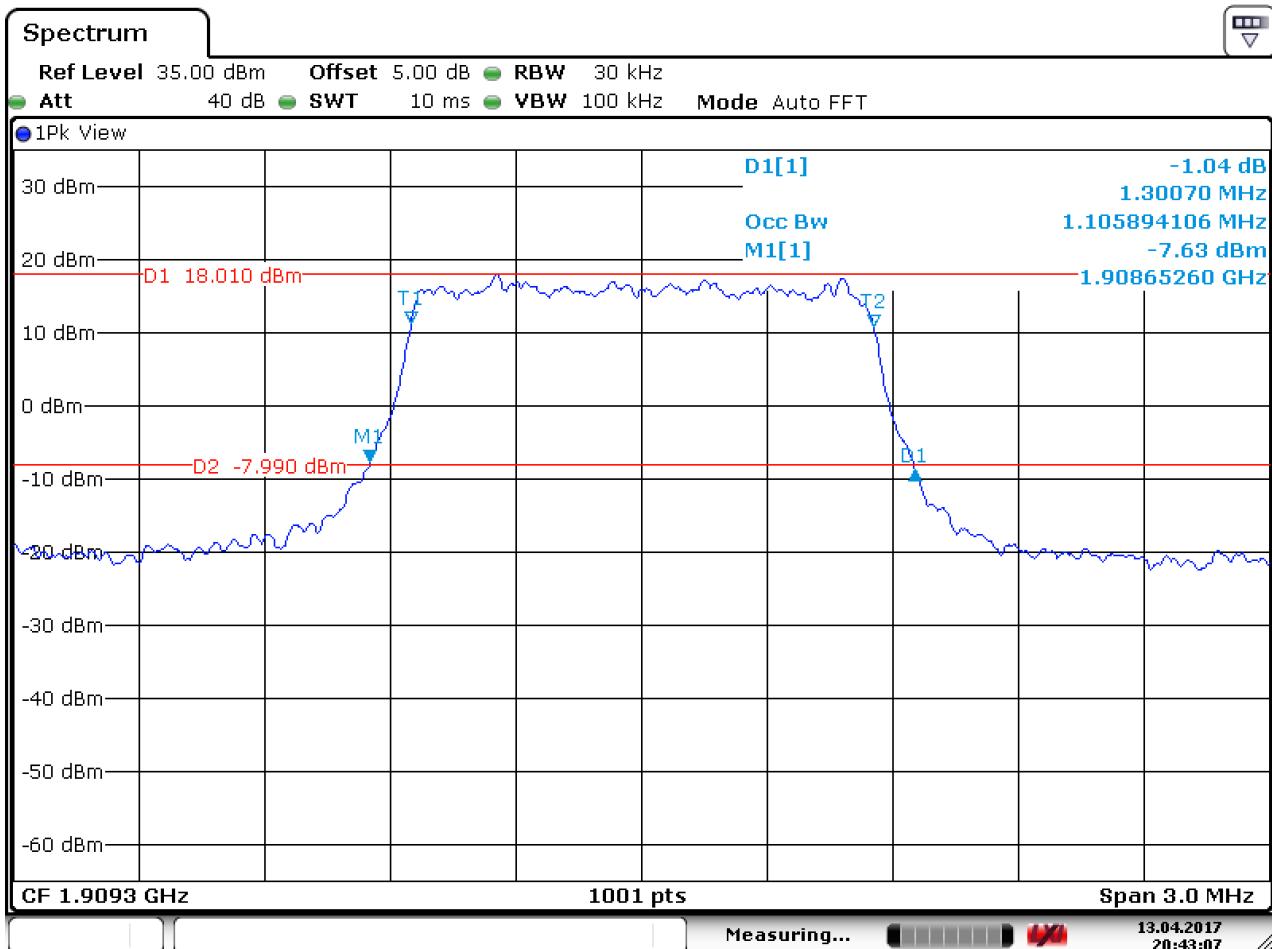
4.1.1.1.1 Test Channel = LCH



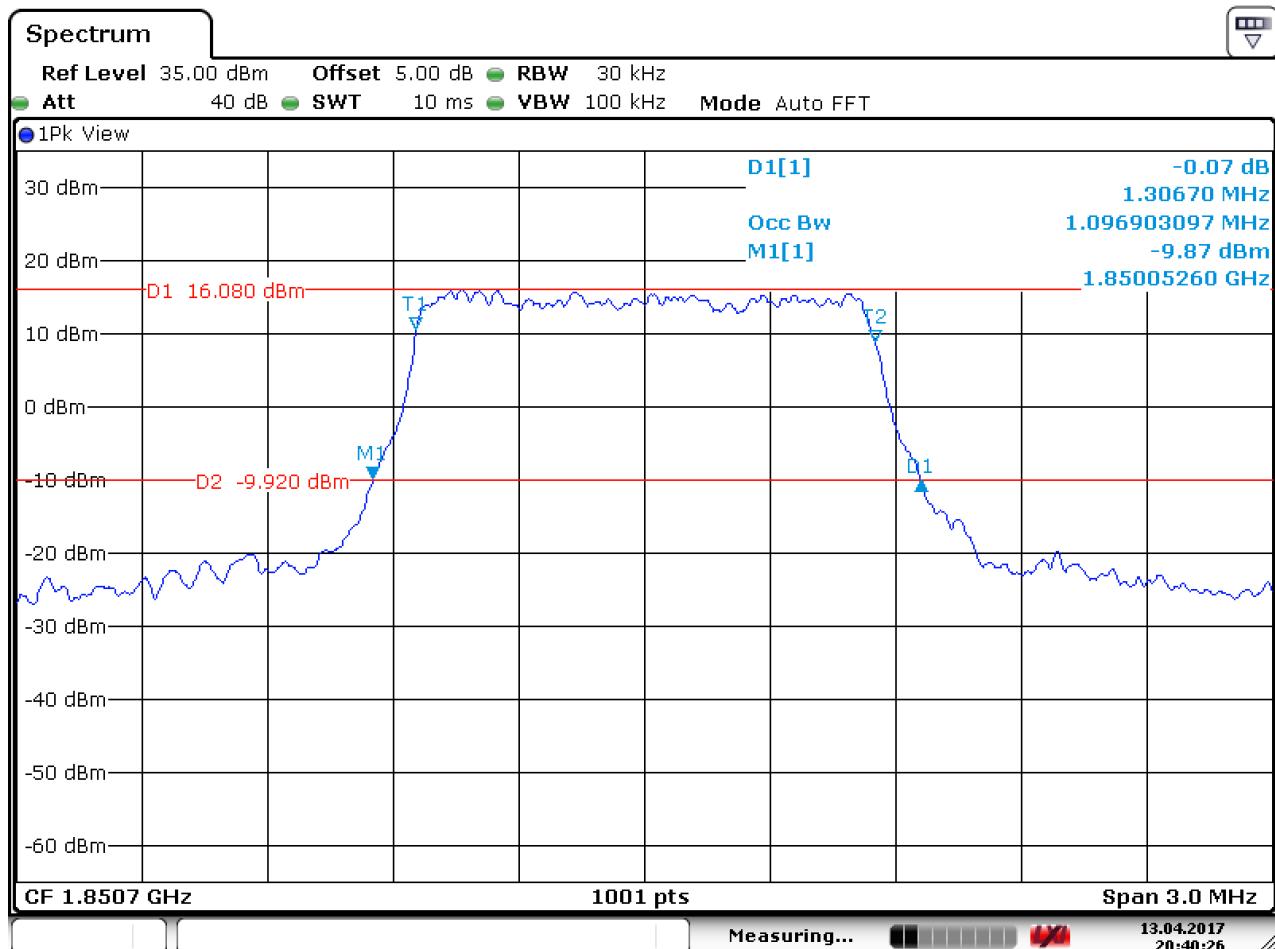
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4.1.1.1.2 Test Channel = MCH

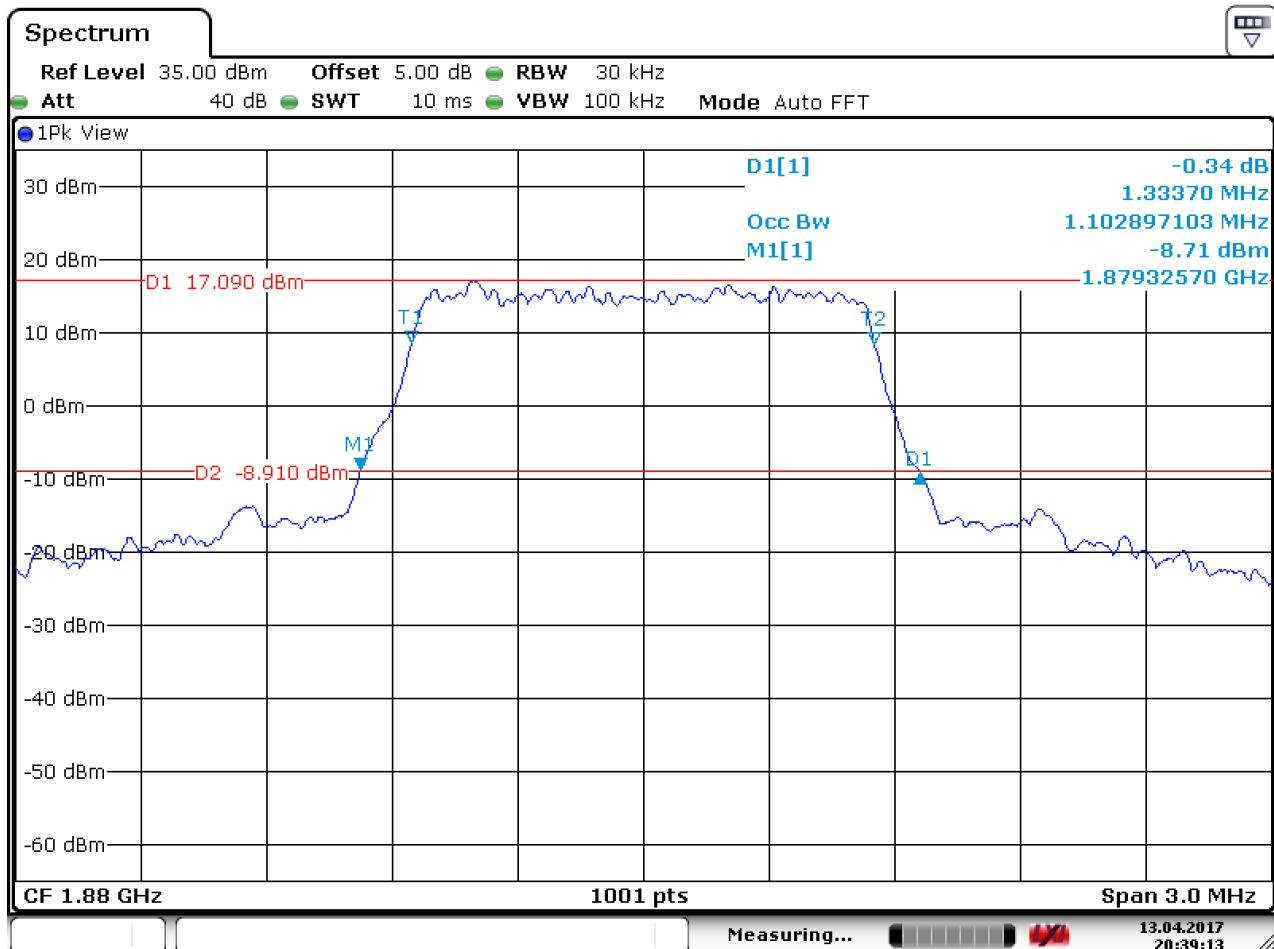
Date: 13.APR.2017 20:38:26

4.1.1.1.3 Test Channel = HCH

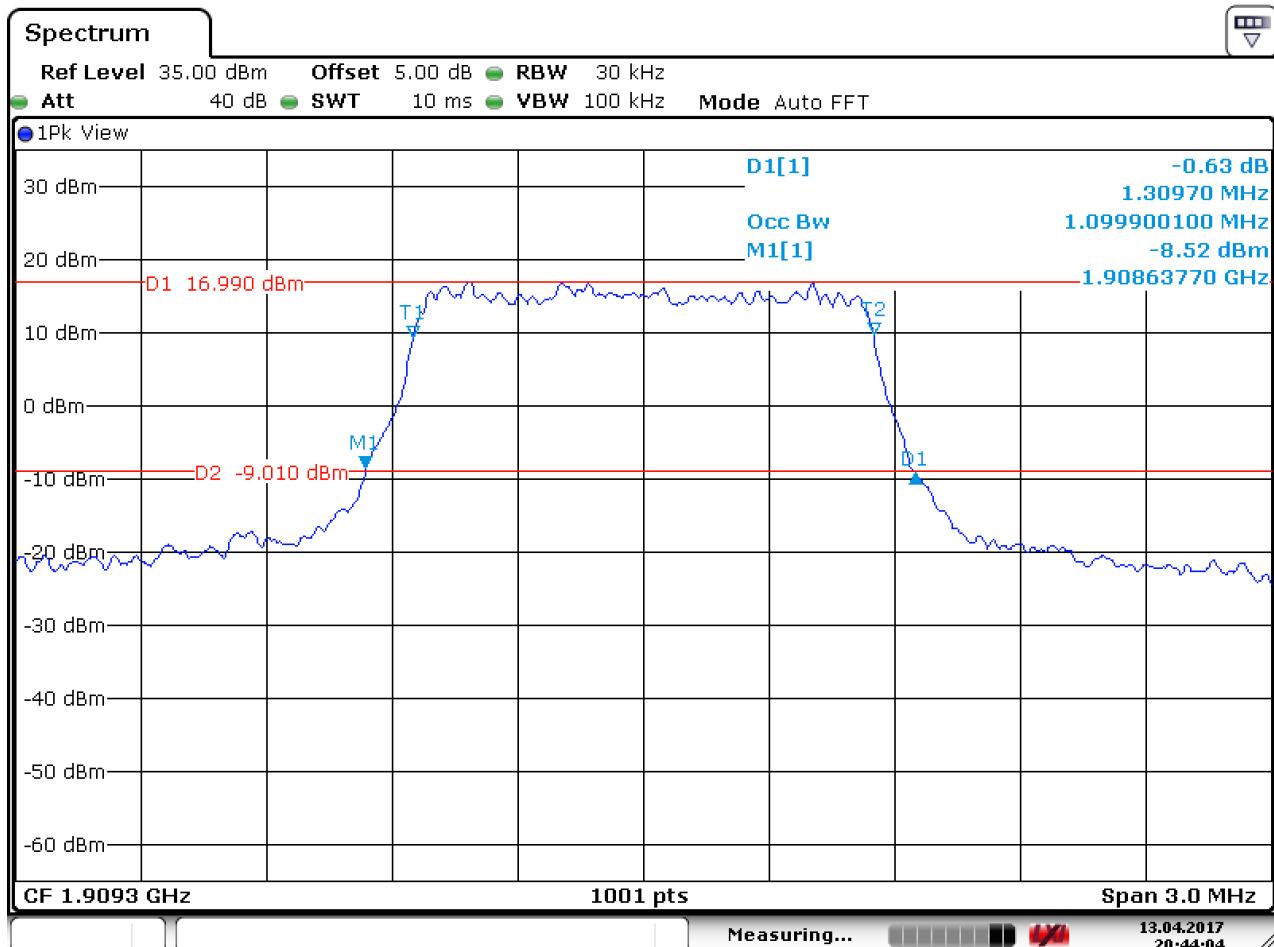
Date: 13.APR.2017 20:43:07

4.1.1.2 Test Mode = LTE/TM2 1.4MHz**4.1.1.2.1 Test Channel = LCH**

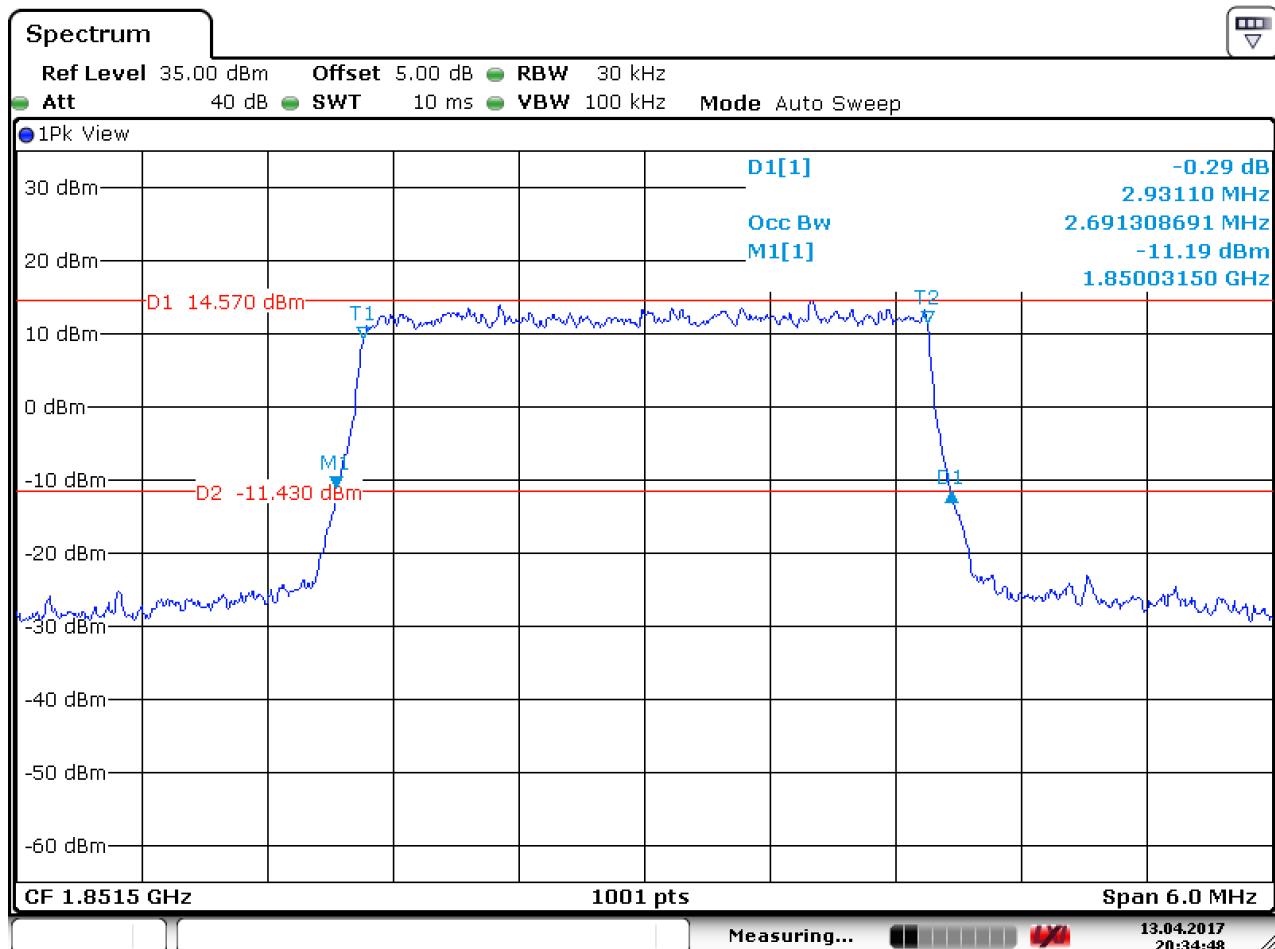
Date: 13.APR.2017 20:40:27

4.1.1.2.2 Test Channel = MCH

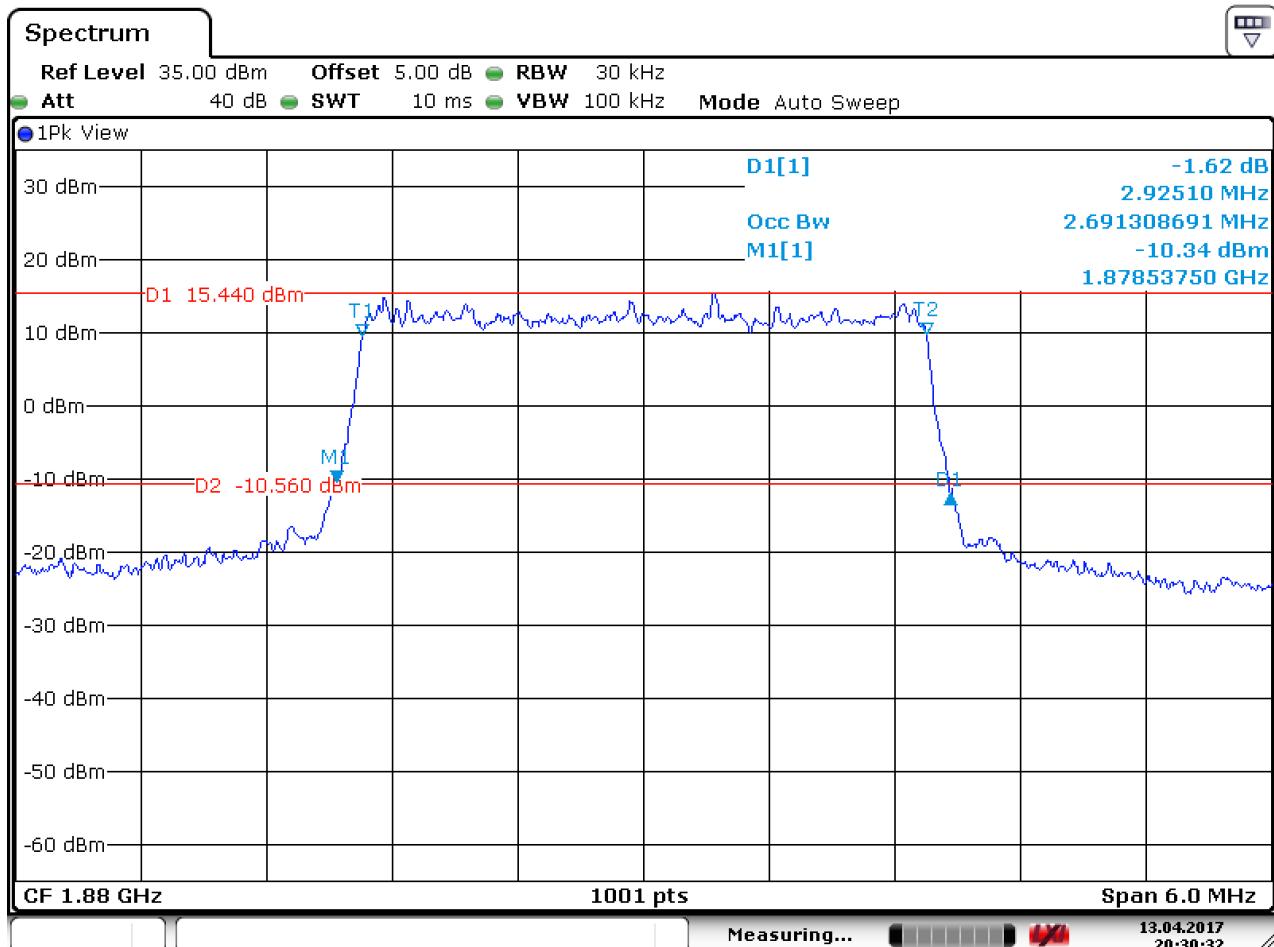
Date: 13.APR.2017 20:39:14

4.1.1.2.3 Test Channel = HCH

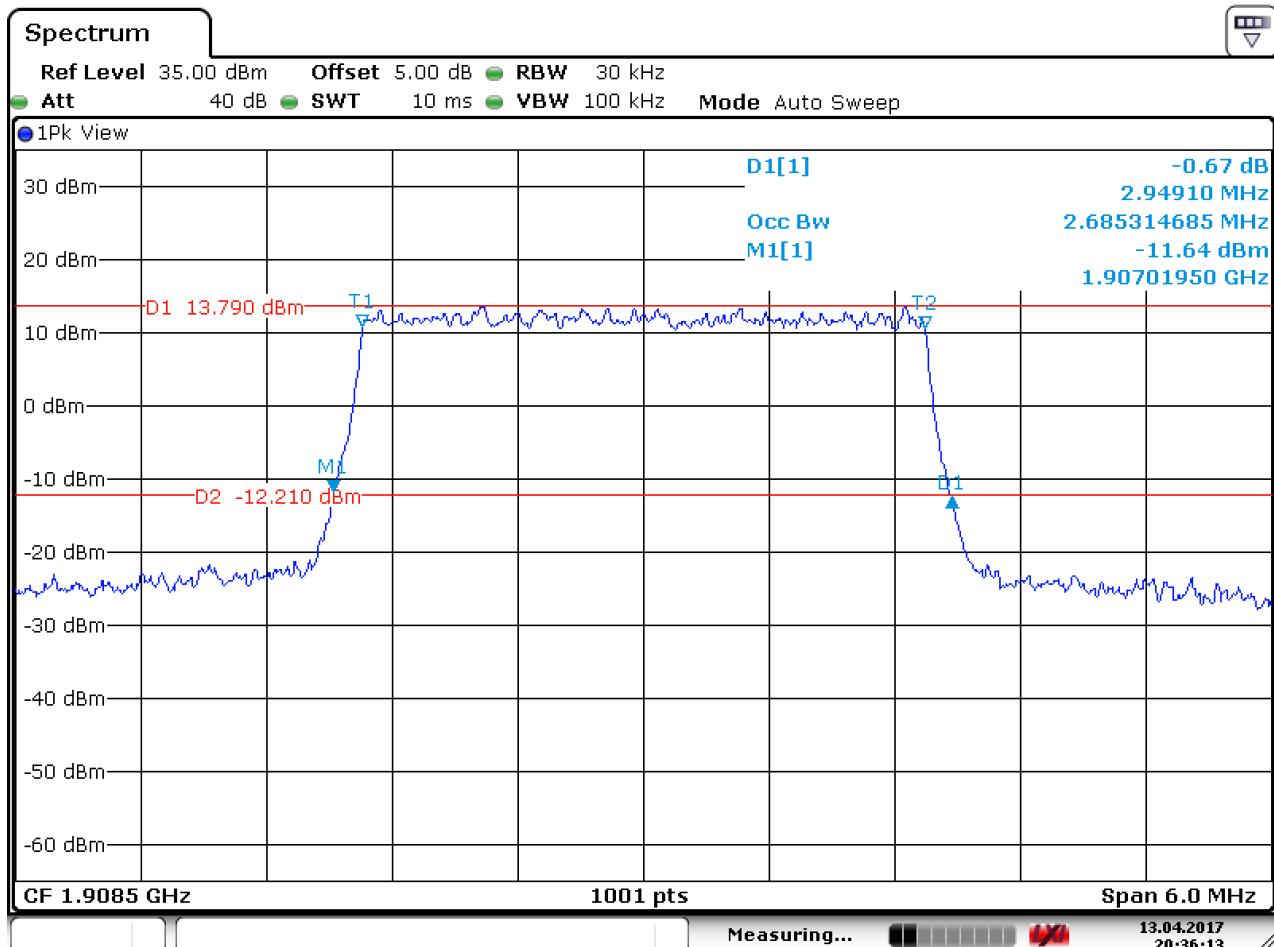
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4.1.1.3 Test Mode = LTE/TM1 3MHz**4.1.1.3.1 Test Channel = LCH**

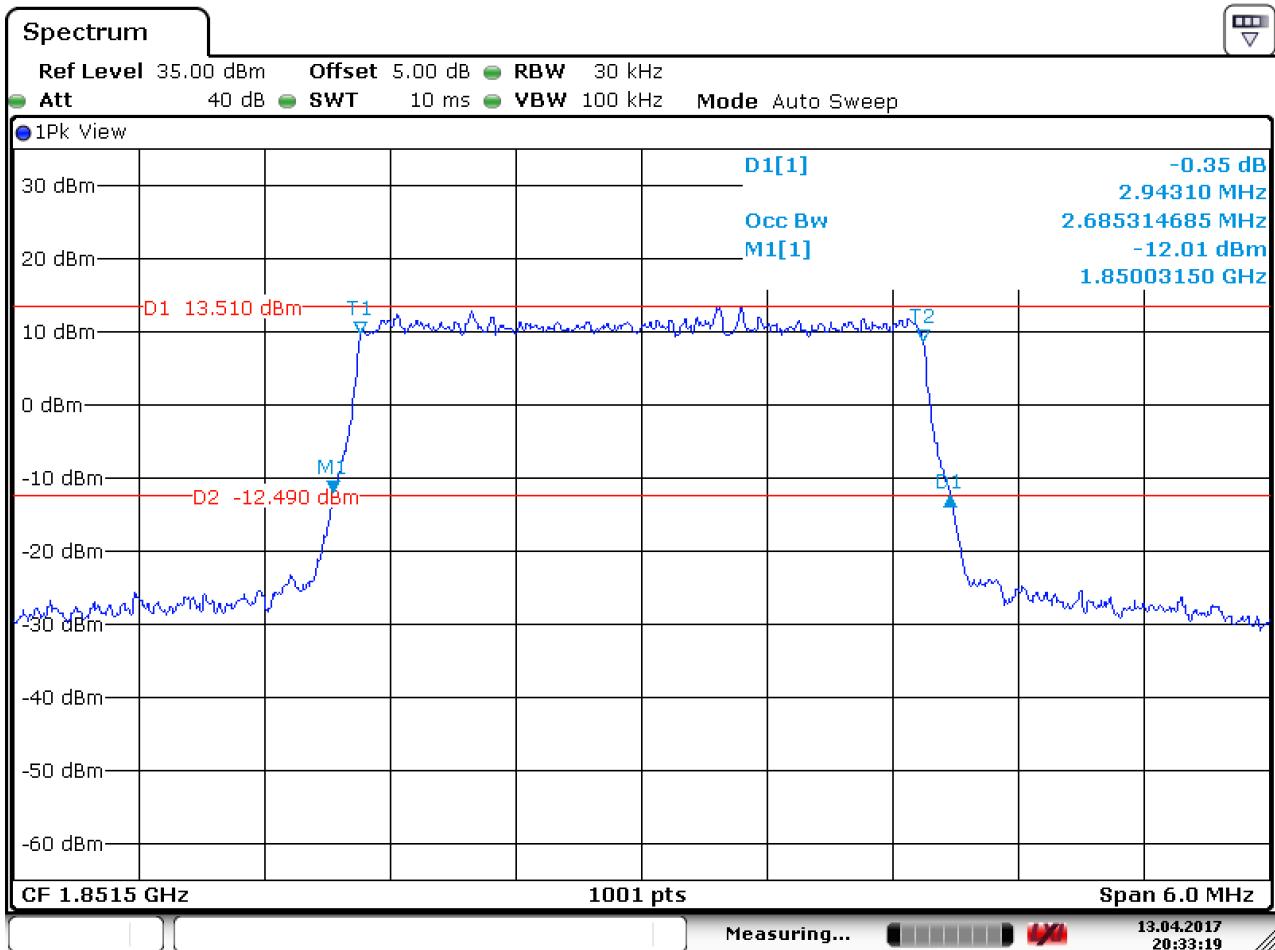
Date: 13.APR.2017 20:34:48

4.1.1.3.2 Test Channel = MCH

Date: 13.APR.2017 20:30:32

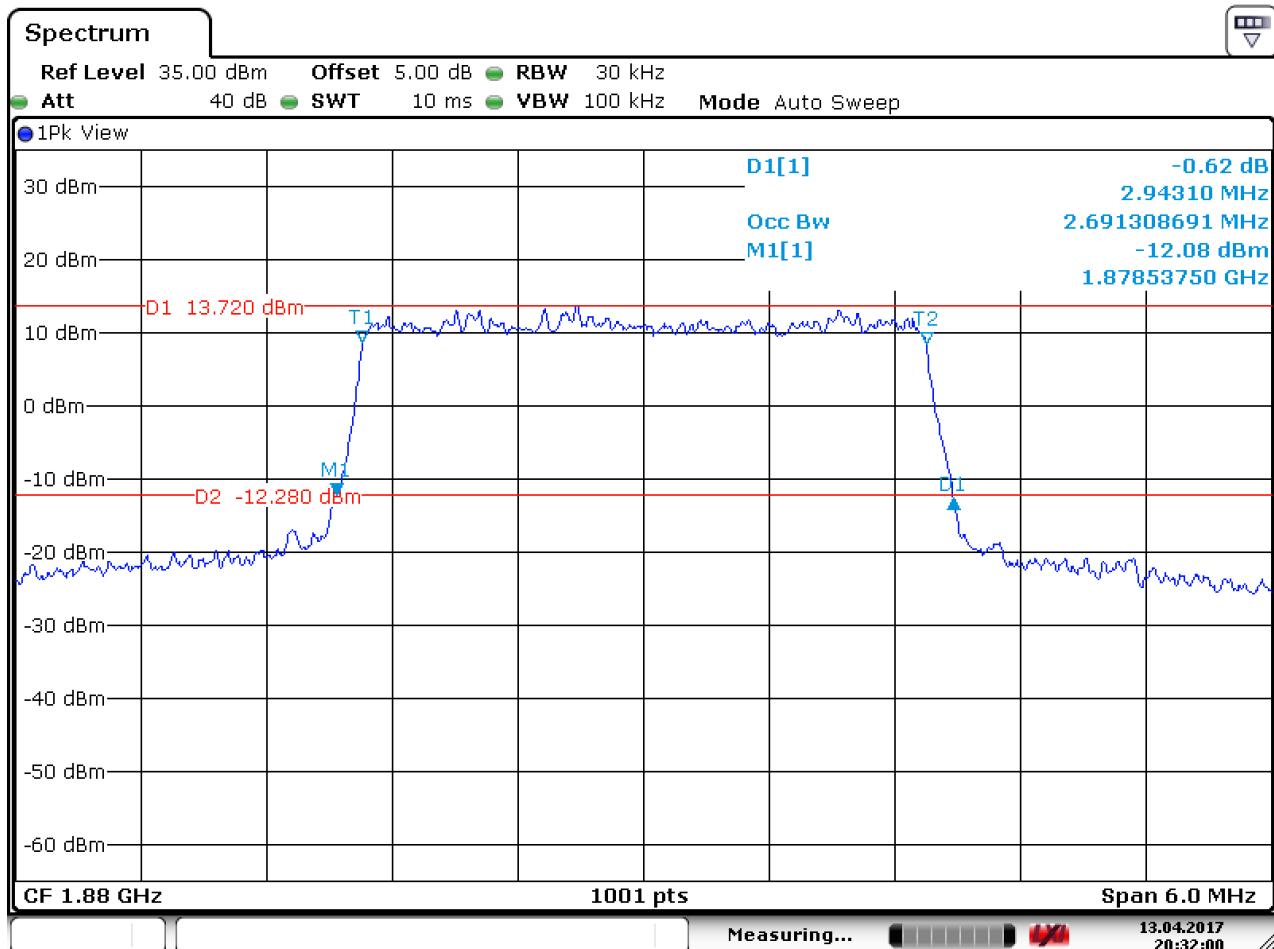
4.1.1.3.3 Test Channel = HCH

Date: 13.APR.2017 20:36:14

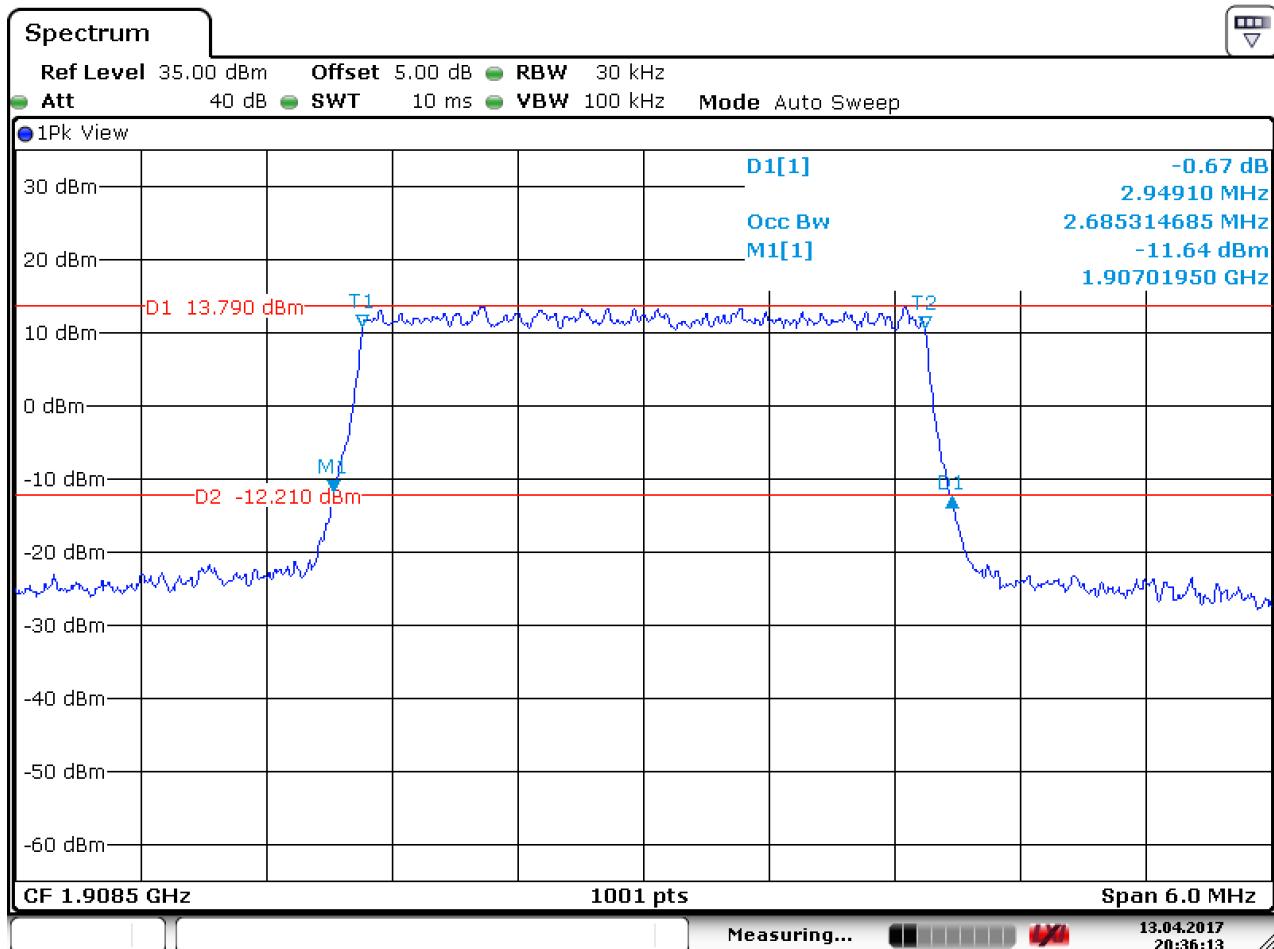
4.1.1.4 Test Mode = LTE/TM2 3MHz**4.1.1.4.1 Test Channel = LCH**

Date: 13.APR.2017 20:33:19

4.1.1.4.2 Test Channel = MCH



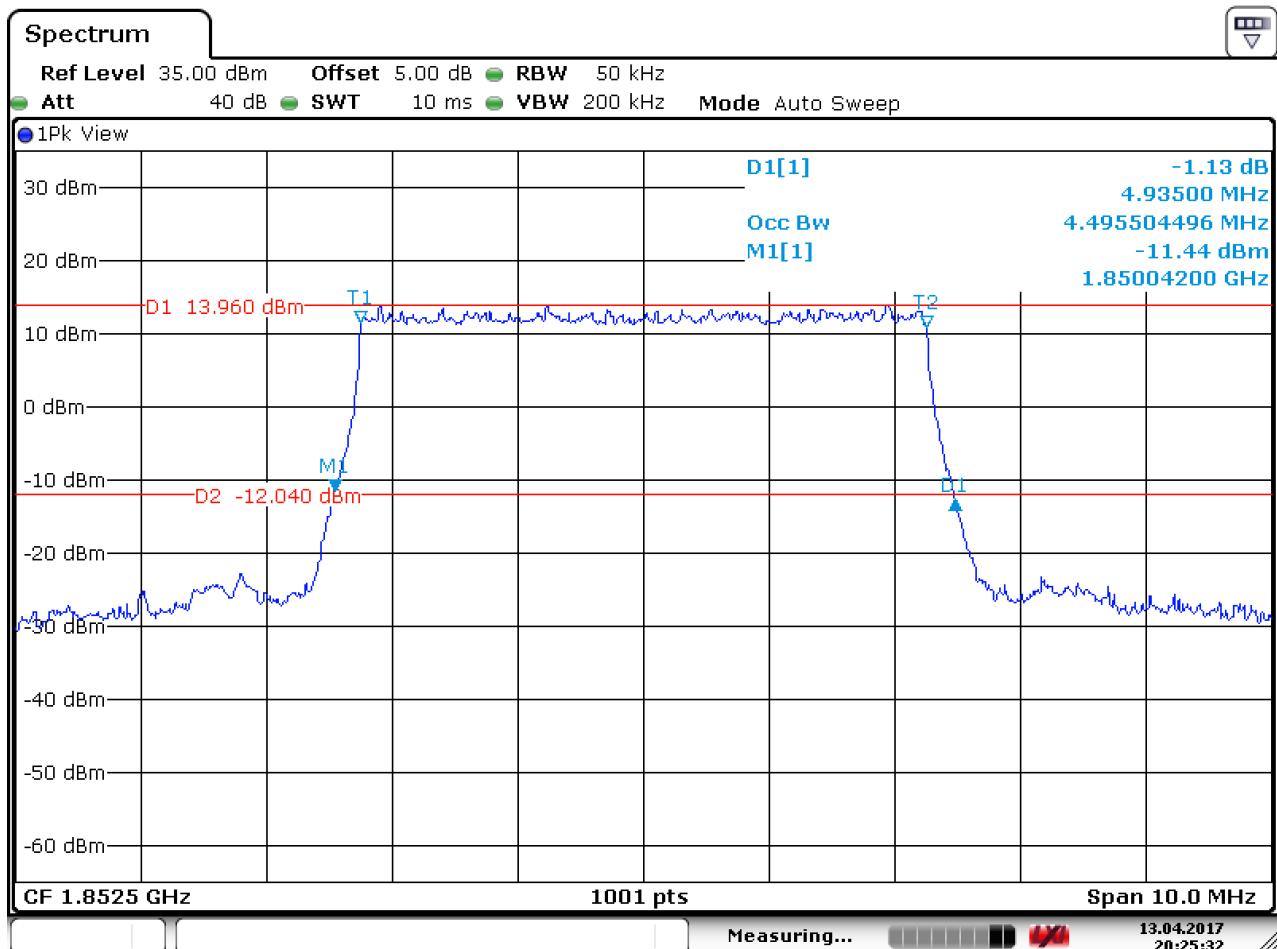
Date: 13.APR.2017 20:32:01

4.1.1.4.3 Test Channel = HCH

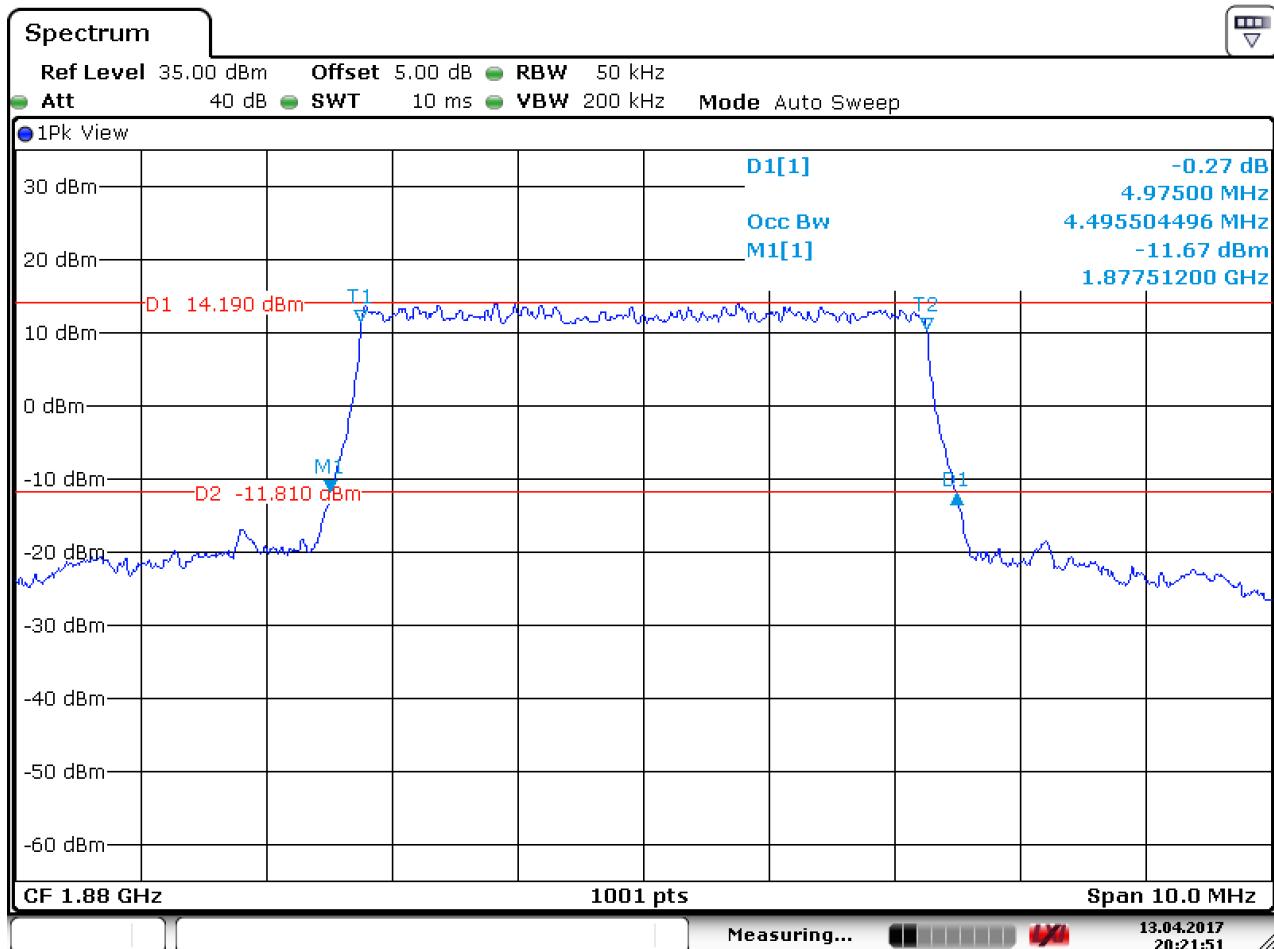
Date: 13.APR.2017 20:36:14

4.1.1.5 Test Mode = LTE/TM1 5MHz

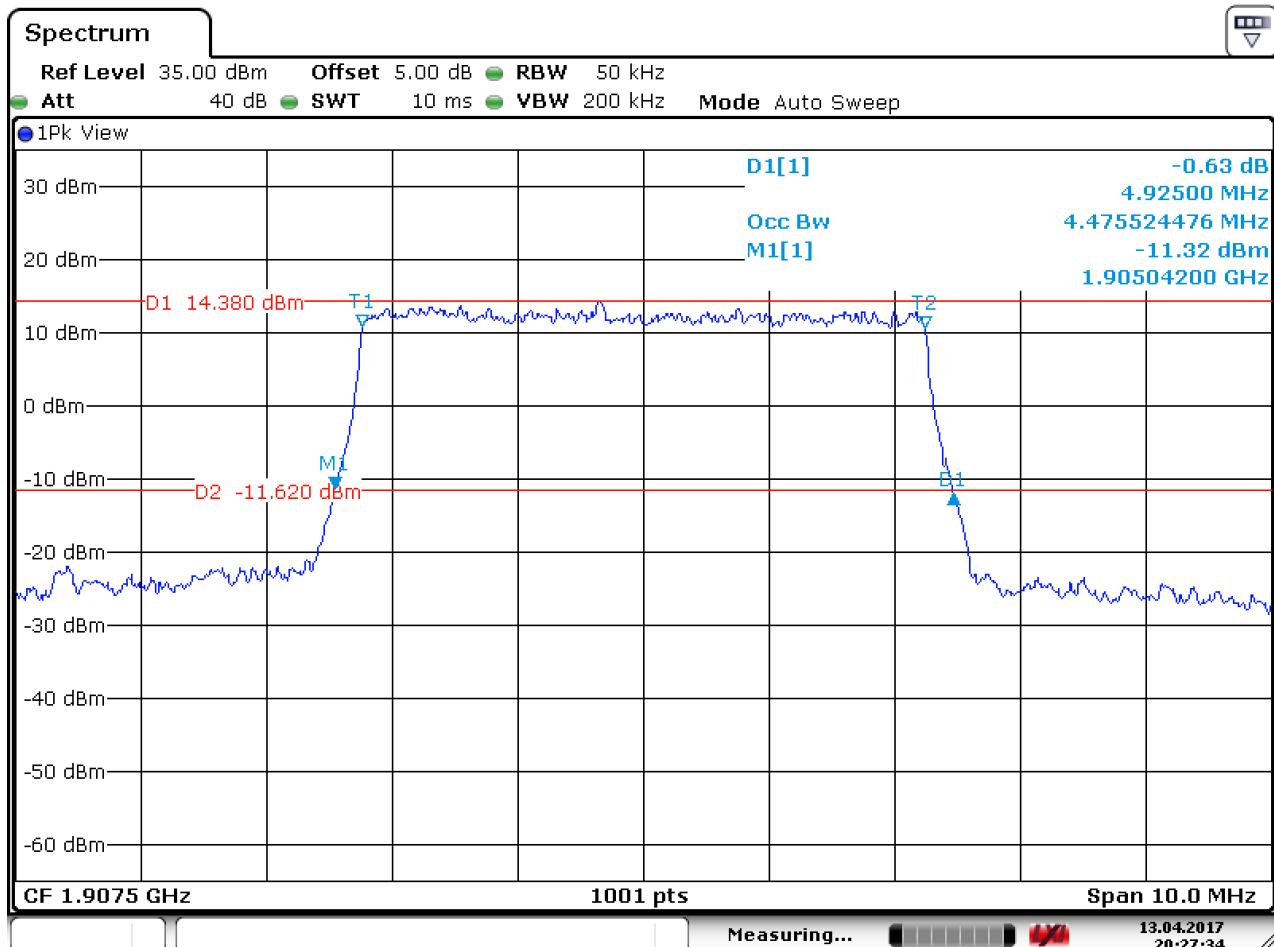
4.1.1.5.1 Test Channel = LCH



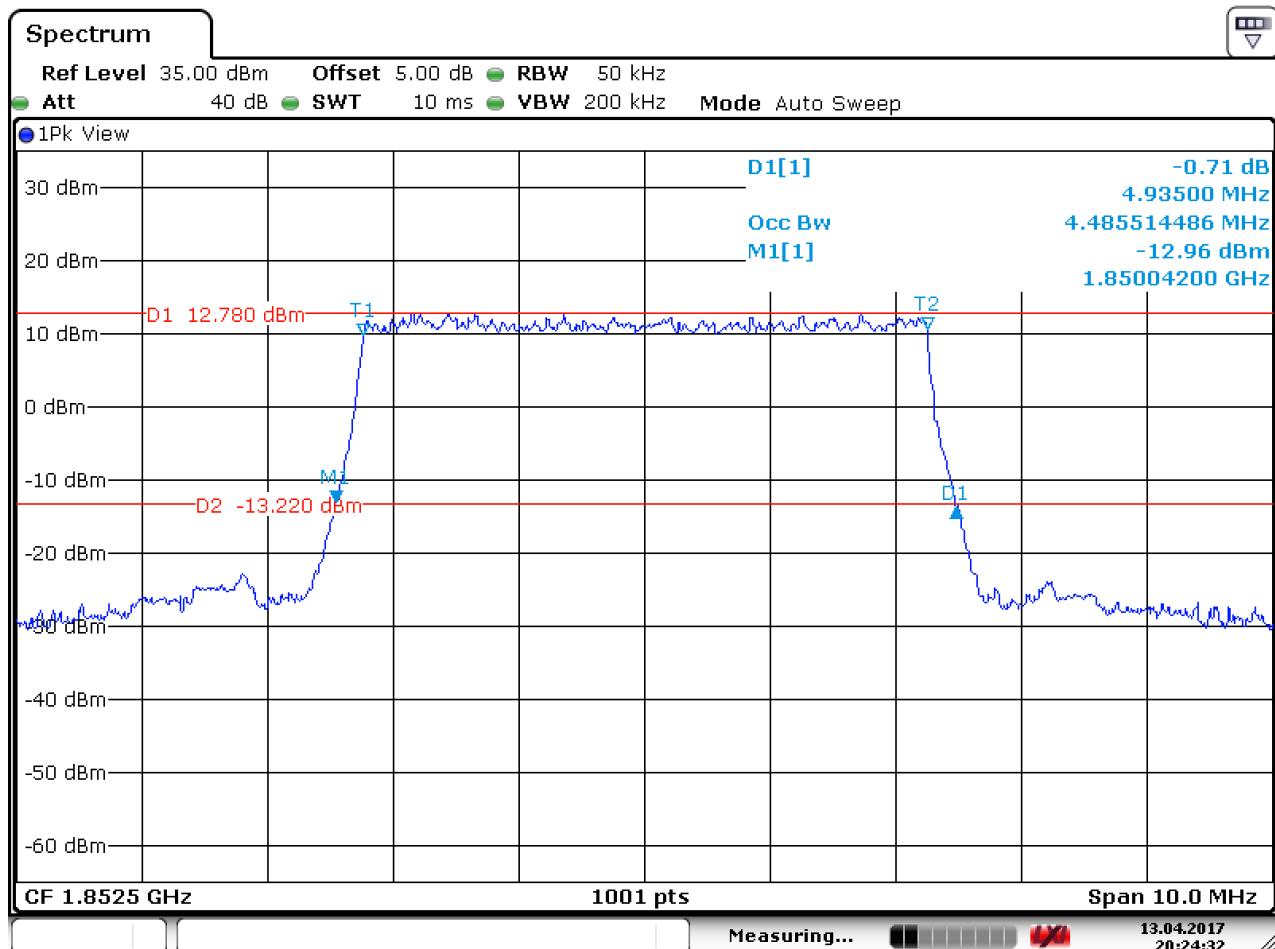
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4.1.1.5.2 Test Channel = MCH

Date: 13.APR.2017 20:21:51

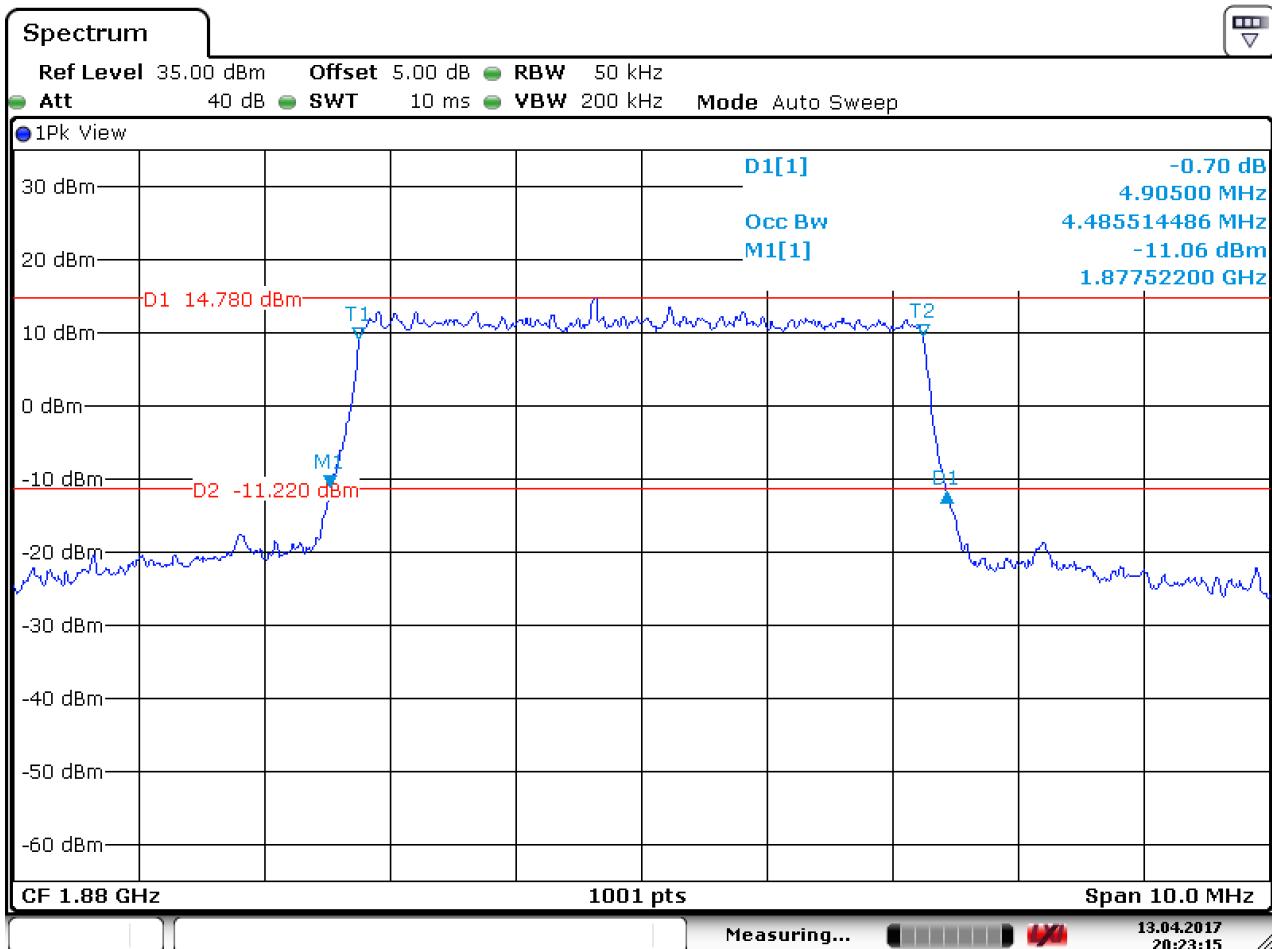
4.1.1.5.3 Test Channel = HCH

Date: 13.APR.2017 20:27:34

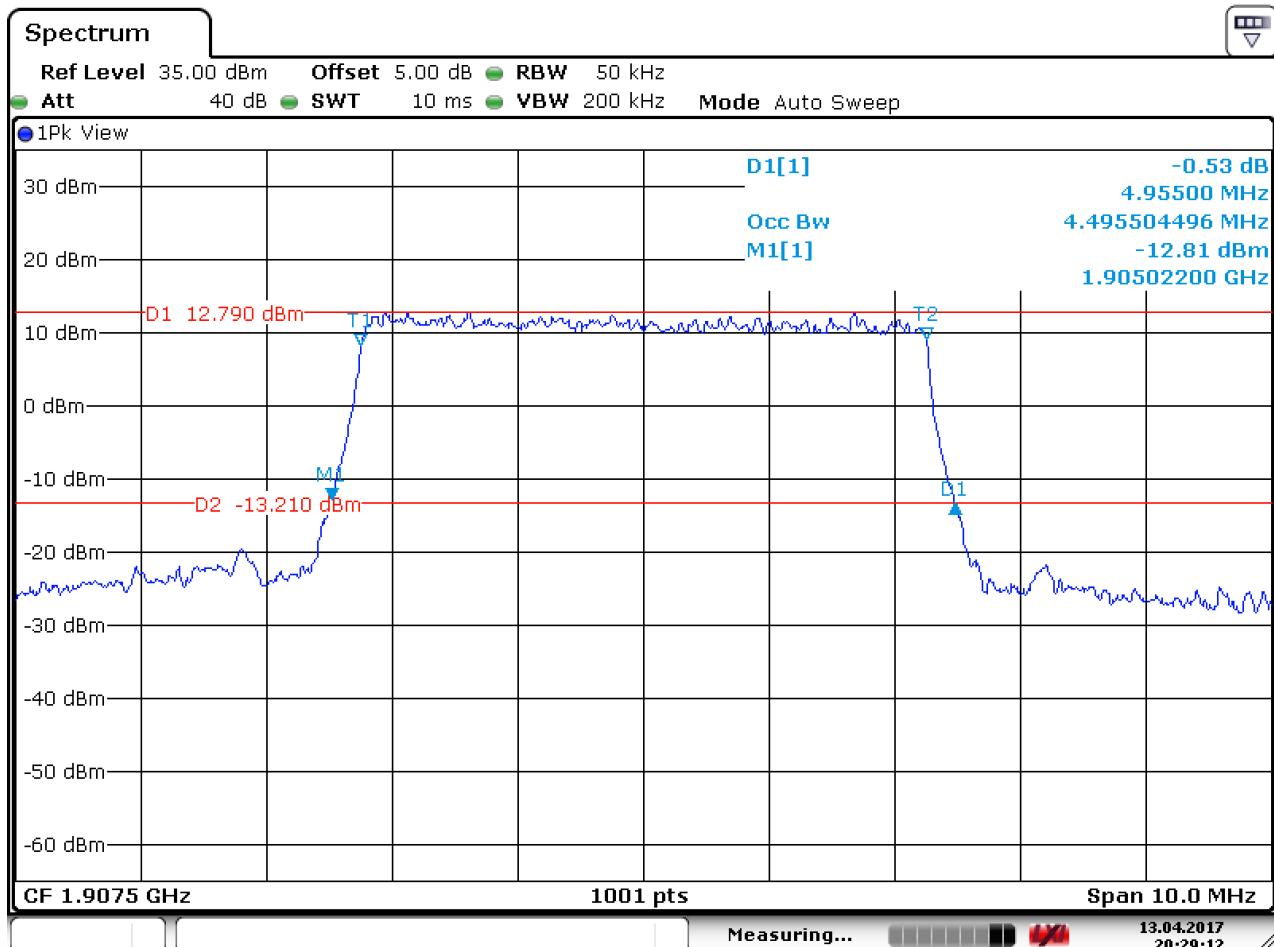
4.1.1.6 Test Mode = LTE/TM2 5MHz**4.1.1.6.1 Test Channel = LCH**

Date: 13.APR.2017 20:24:32

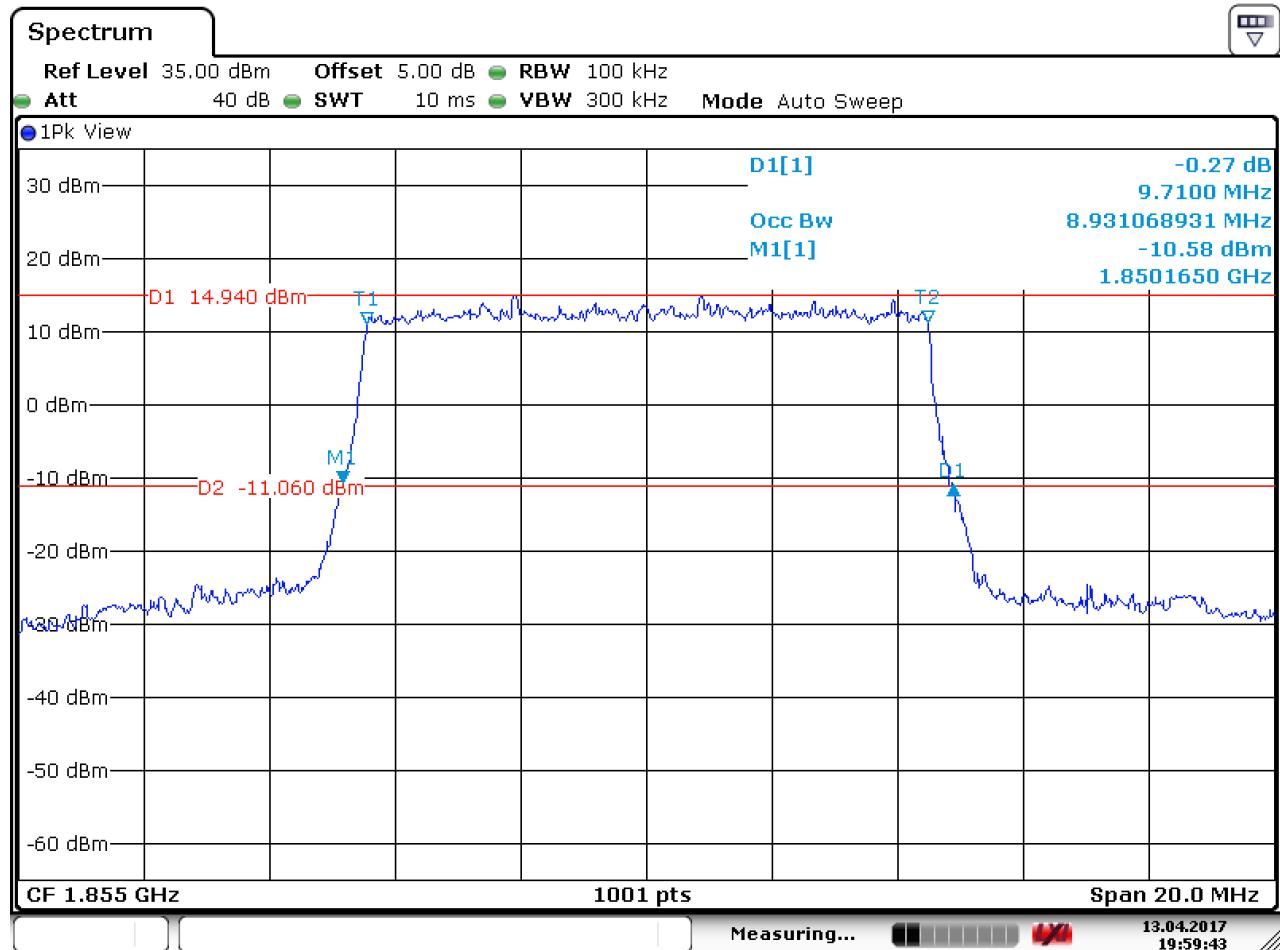
4.1.1.6.2 Test Channel = MCH



Date: 13.APR.2017 20:23:16

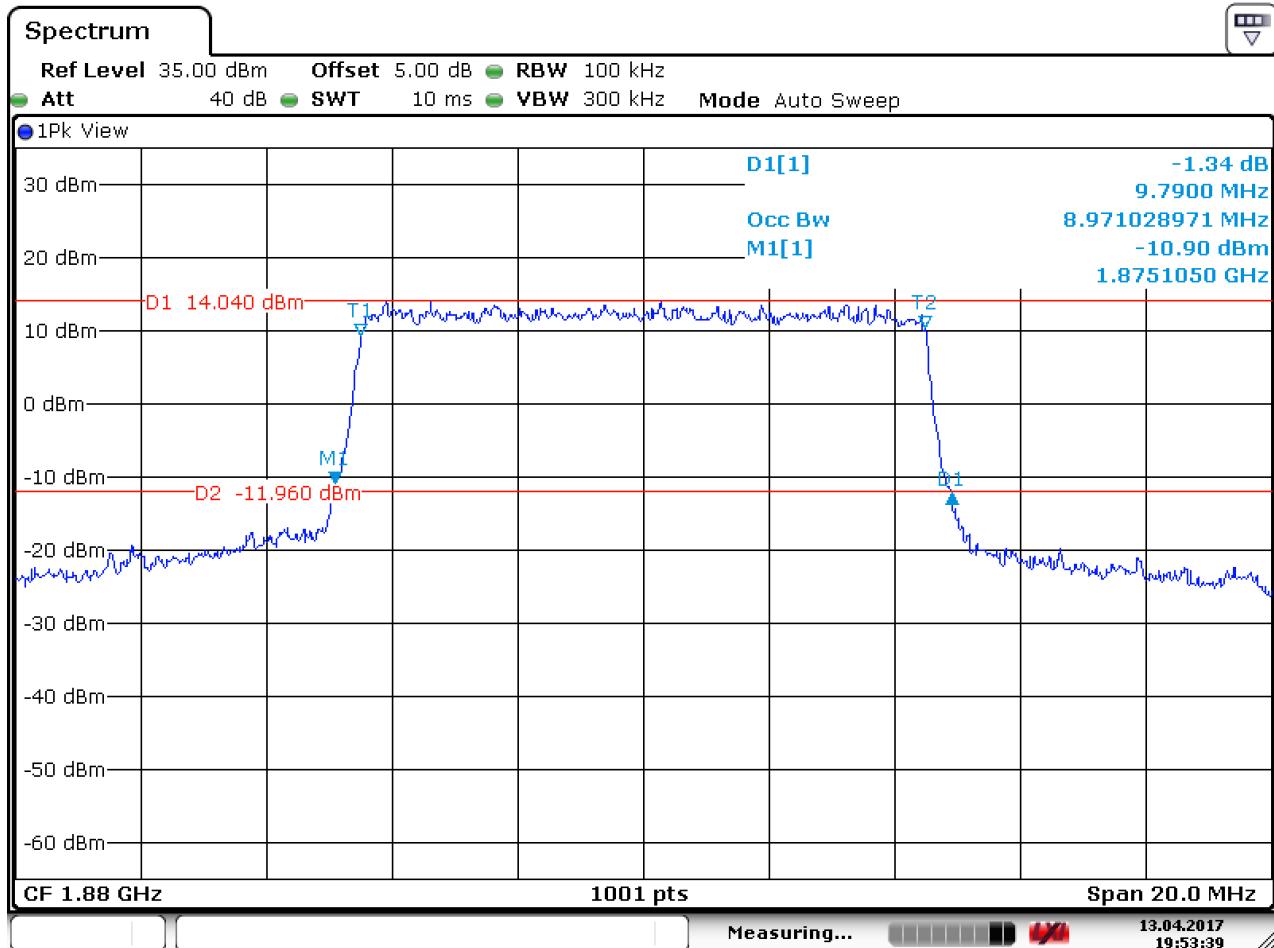
4.1.1.6.3 Test Channel = HCH

Date: 13.APR.2017 20:29:13

4.1.1.7 Test Mode = LTE/TM1 10MHz**4.1.1.7.1 Test Channel = LCH**

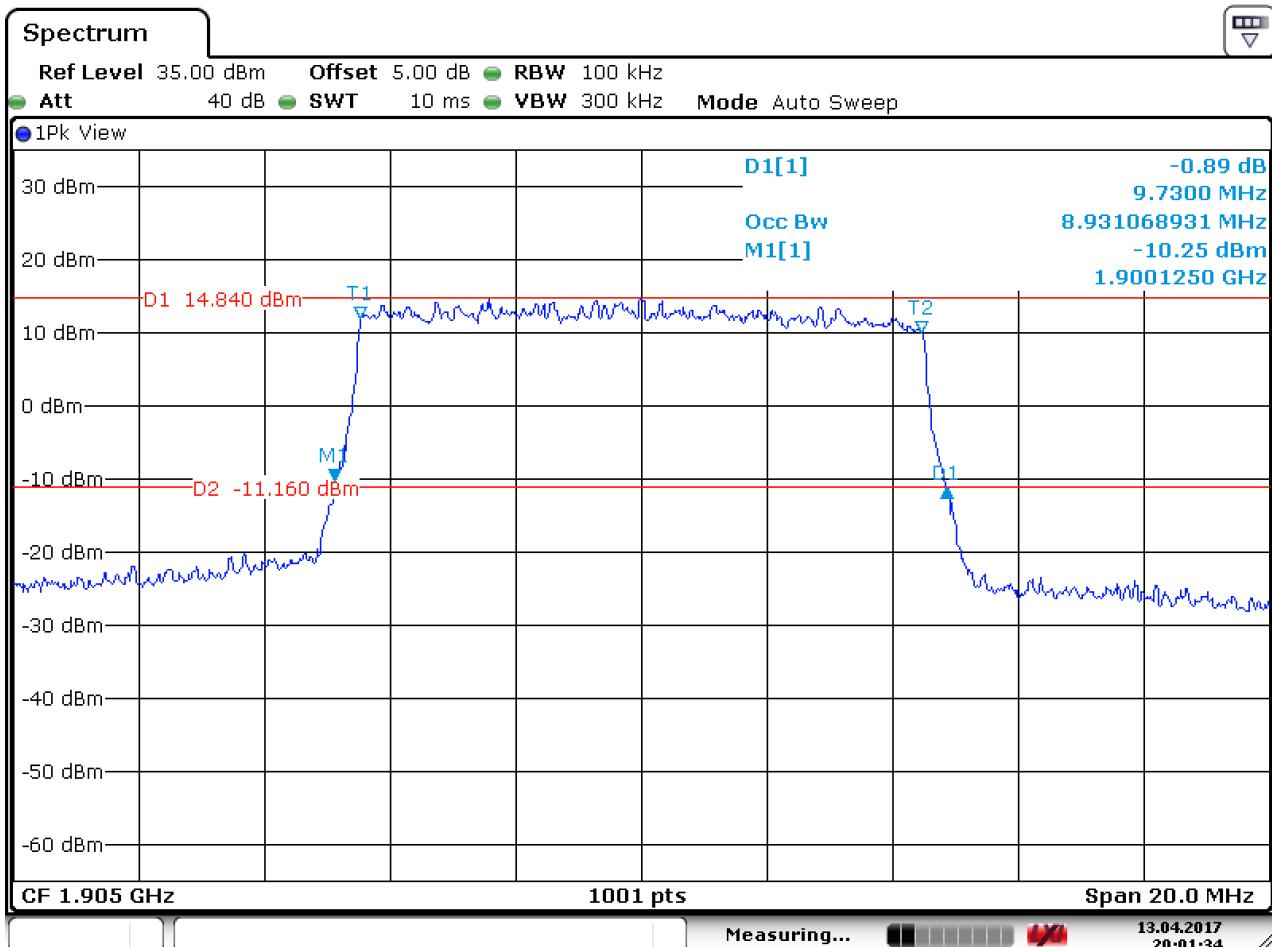
Date: 13.APR.2017 19:59:43

4.1.1.7.2 Test Channel = MCH

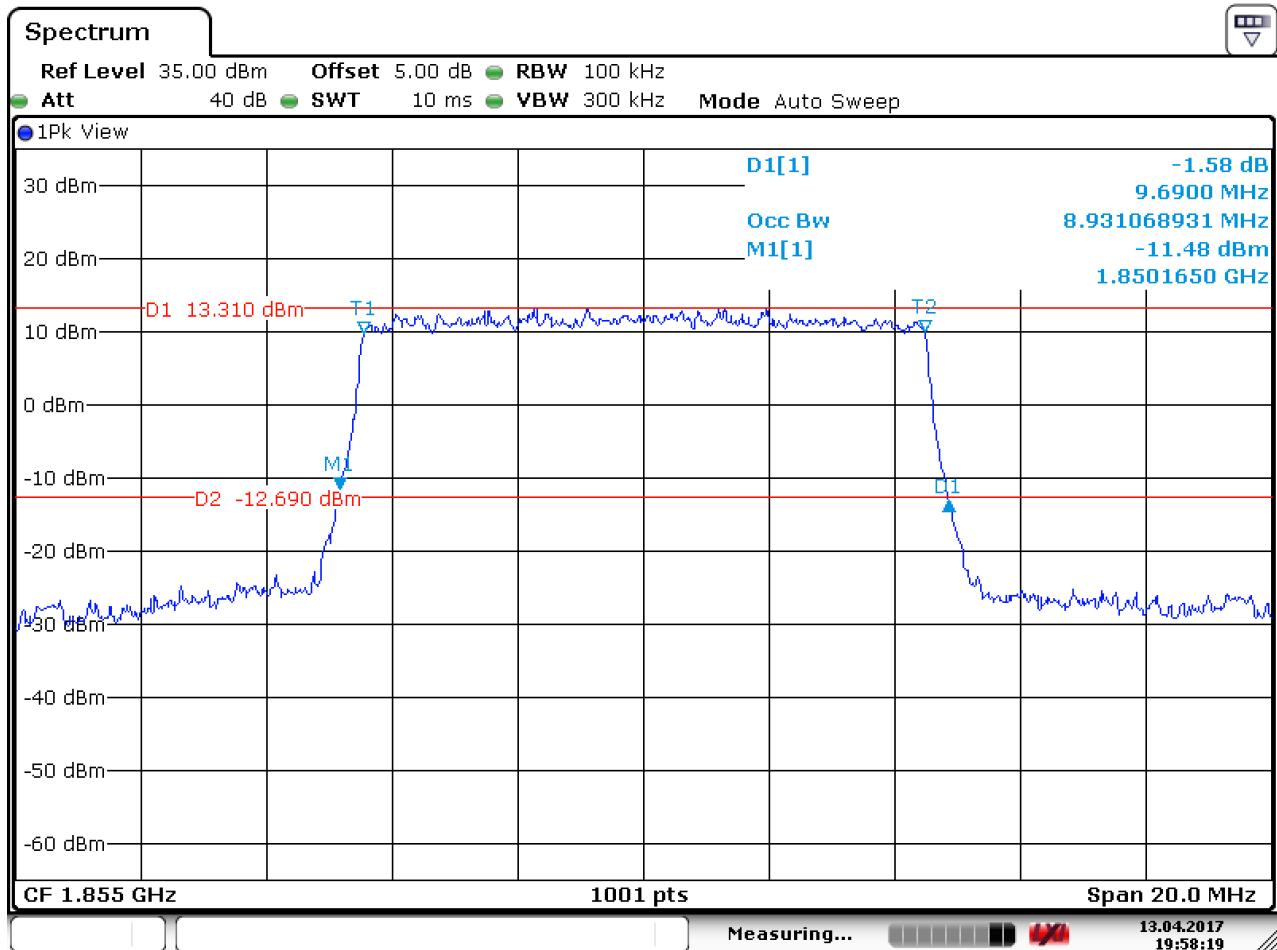


Date: 13.APR.2017 19:53:39

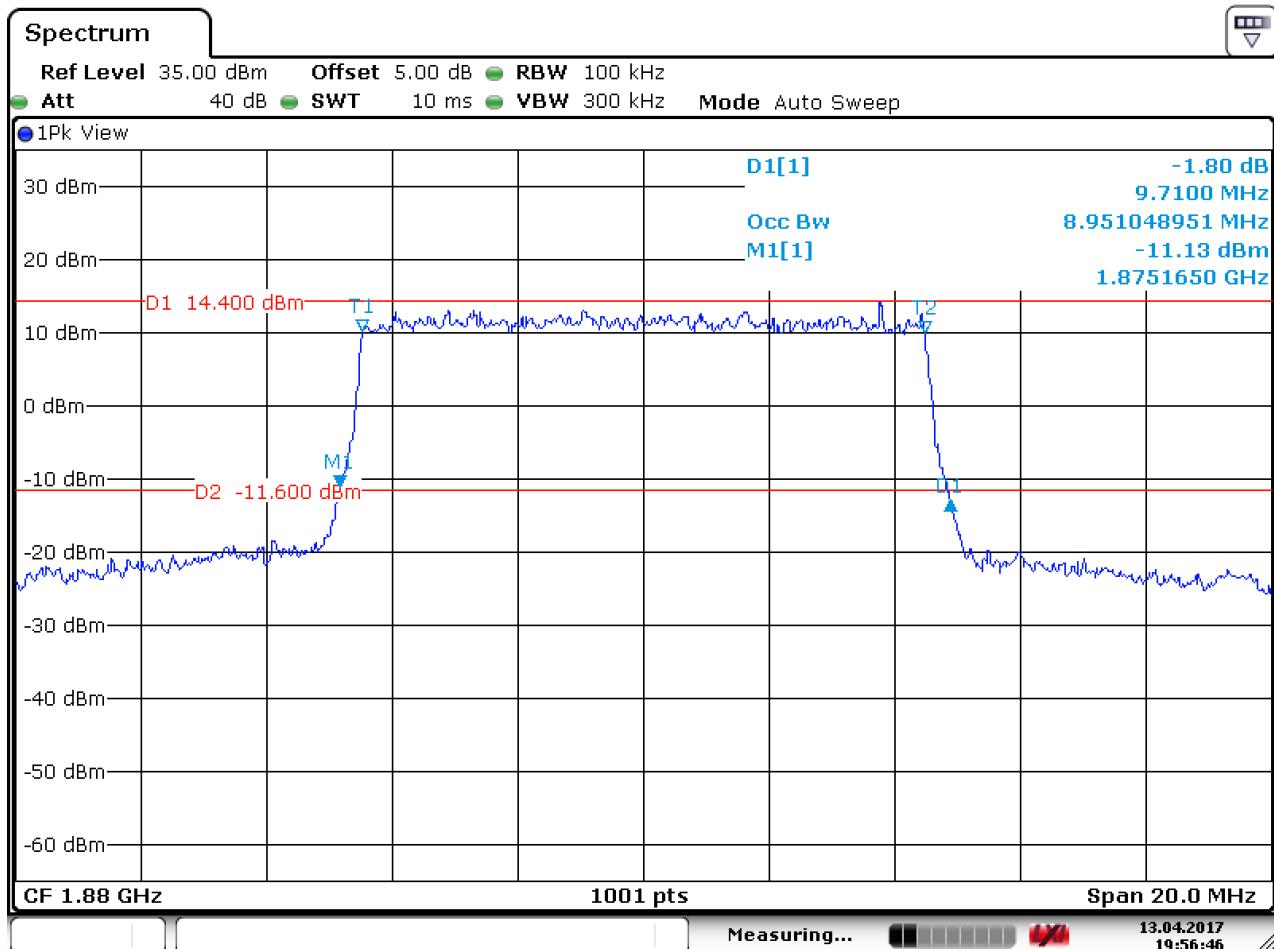
4.1.1.7.3 Test Channel = HCH



Date: 13.APR.2017 20:01:34

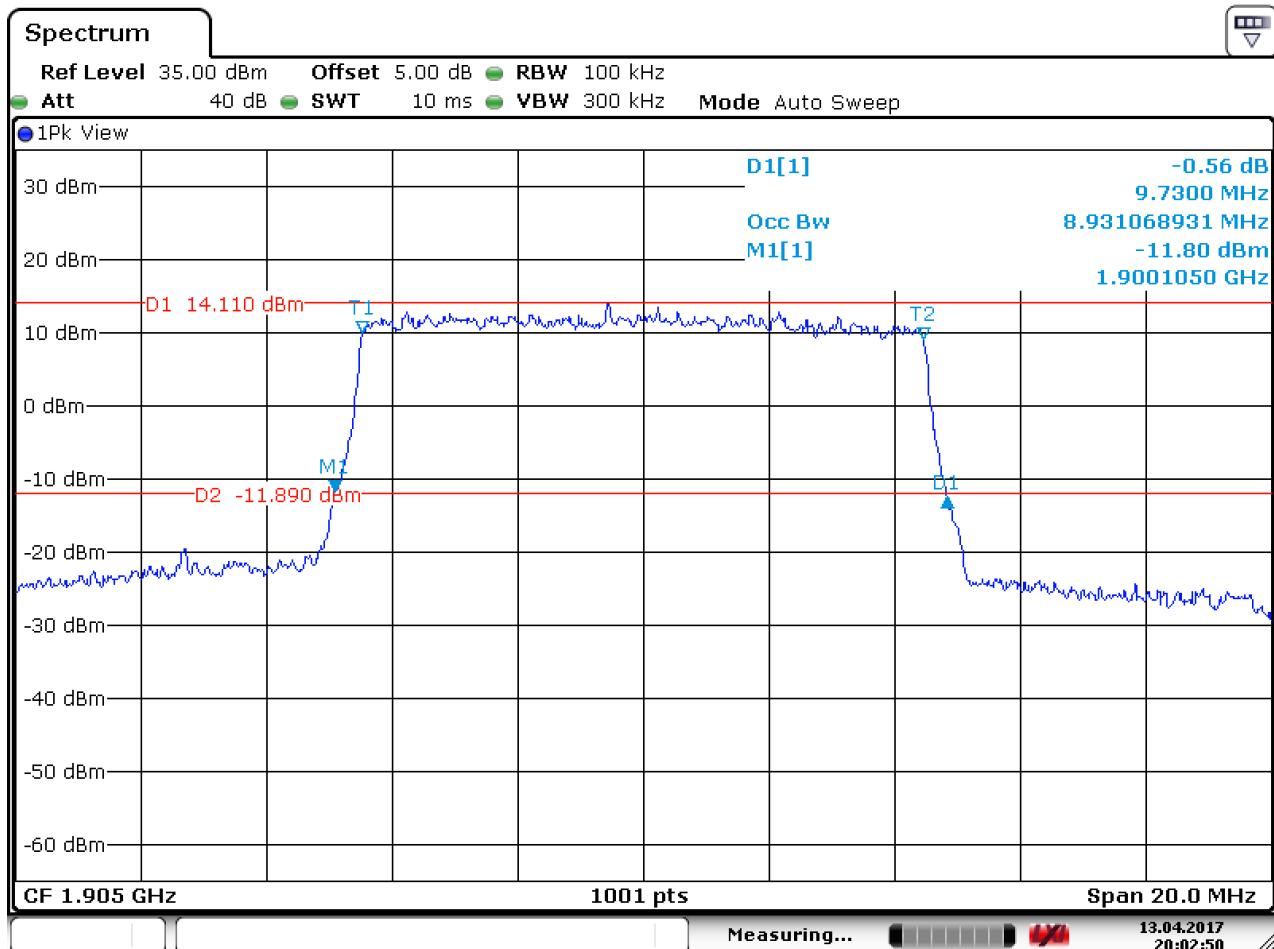
4.1.1.8 Test Mode = LTE/TM2 10MHz**4.1.1.8.1 Test Channel = LCH**

Date: 13.APR.2017 19:58:20

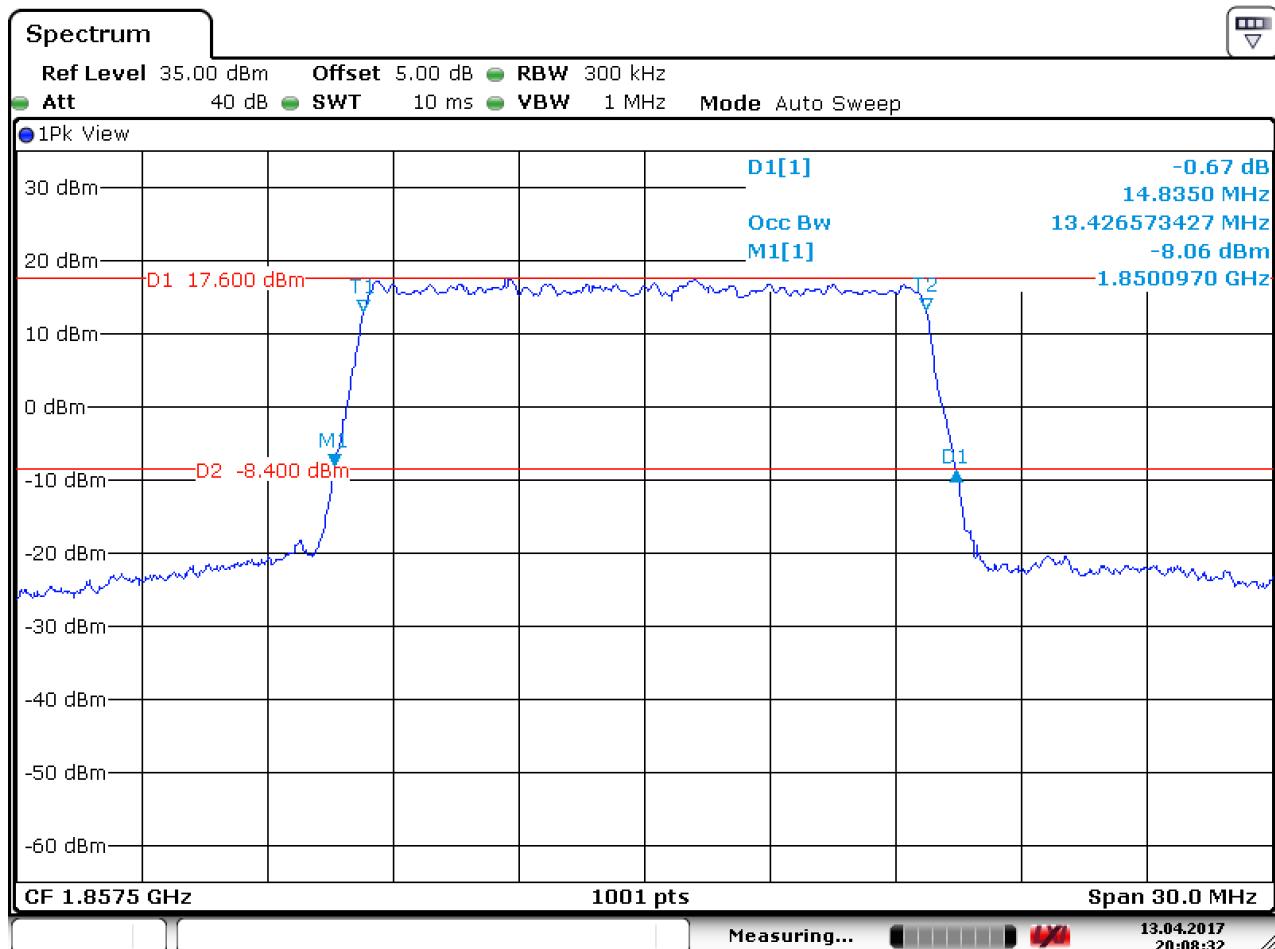
4.1.1.8.2 Test Channel = MCH

Date: 13.APR.2017 19:56:47

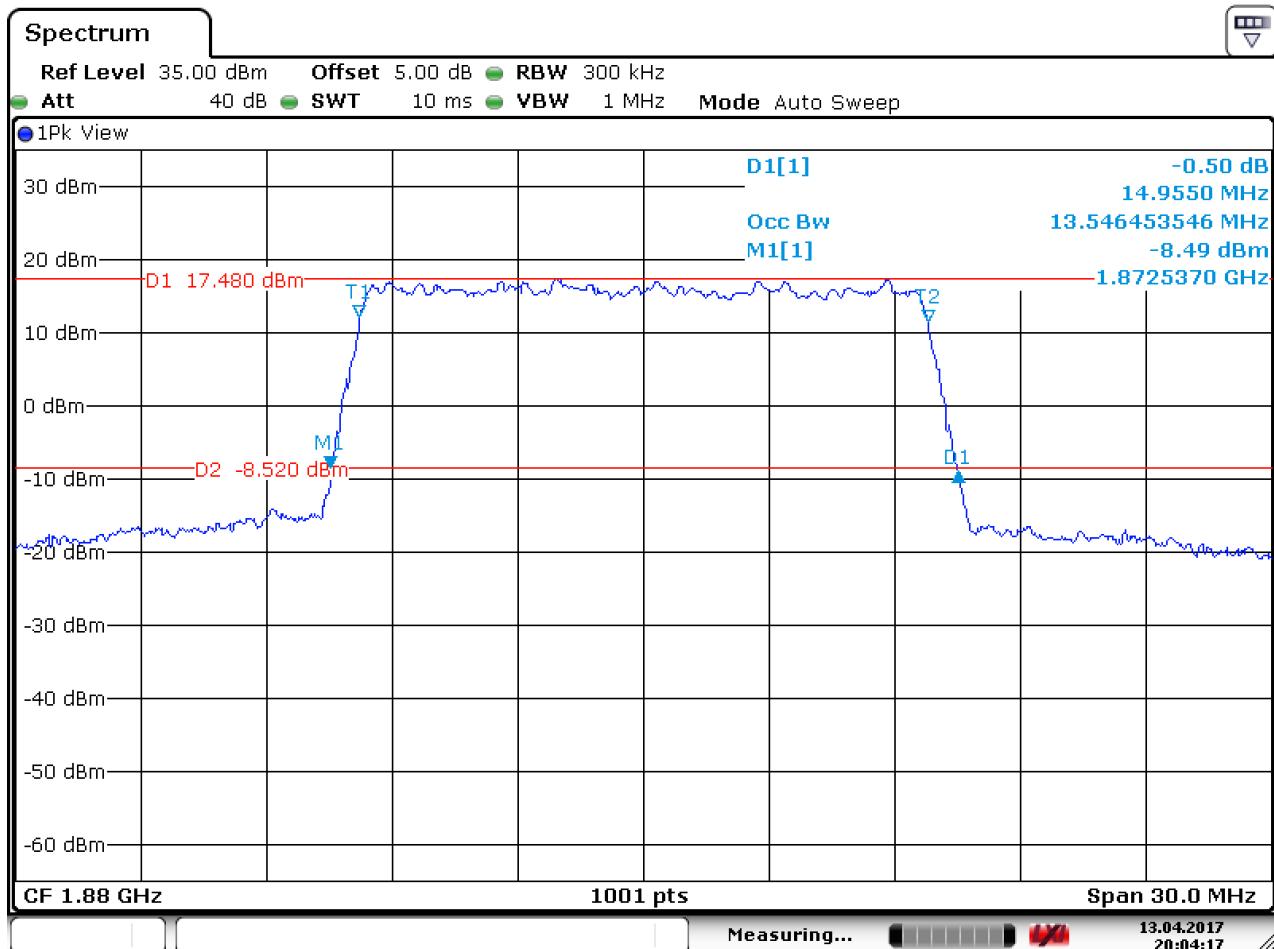
4.1.1.8.3 Test Channel = HCH



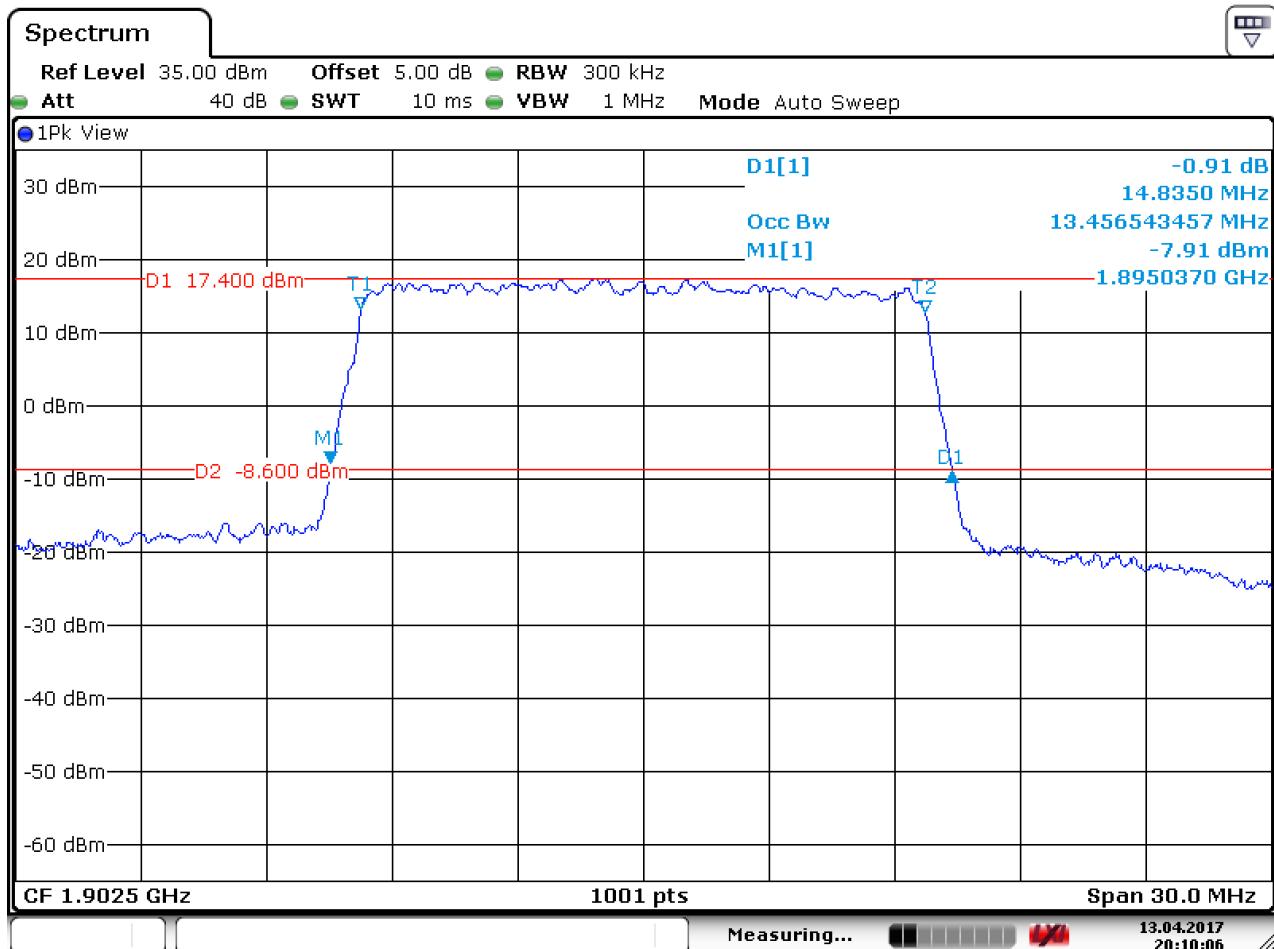
Date: 13.APR.2017 20:02:51

4.1.1.9 Test Mode = LTE/TM1 15MHz**4.1.1.9.1 Test Channel = LCH**

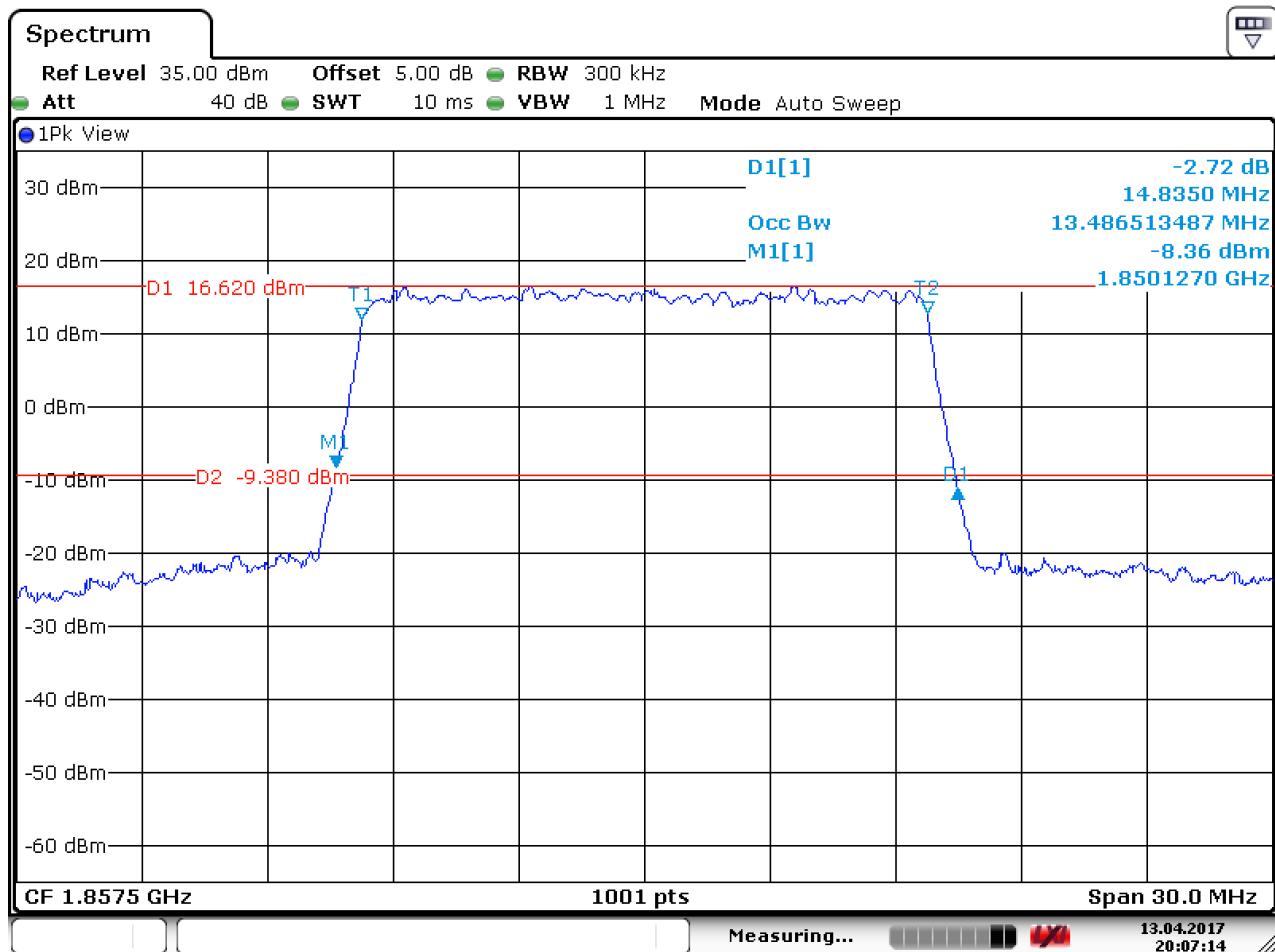
Date: 13.APR.2017 20:08:32

4.1.1.9.2 Test Channel = MCH

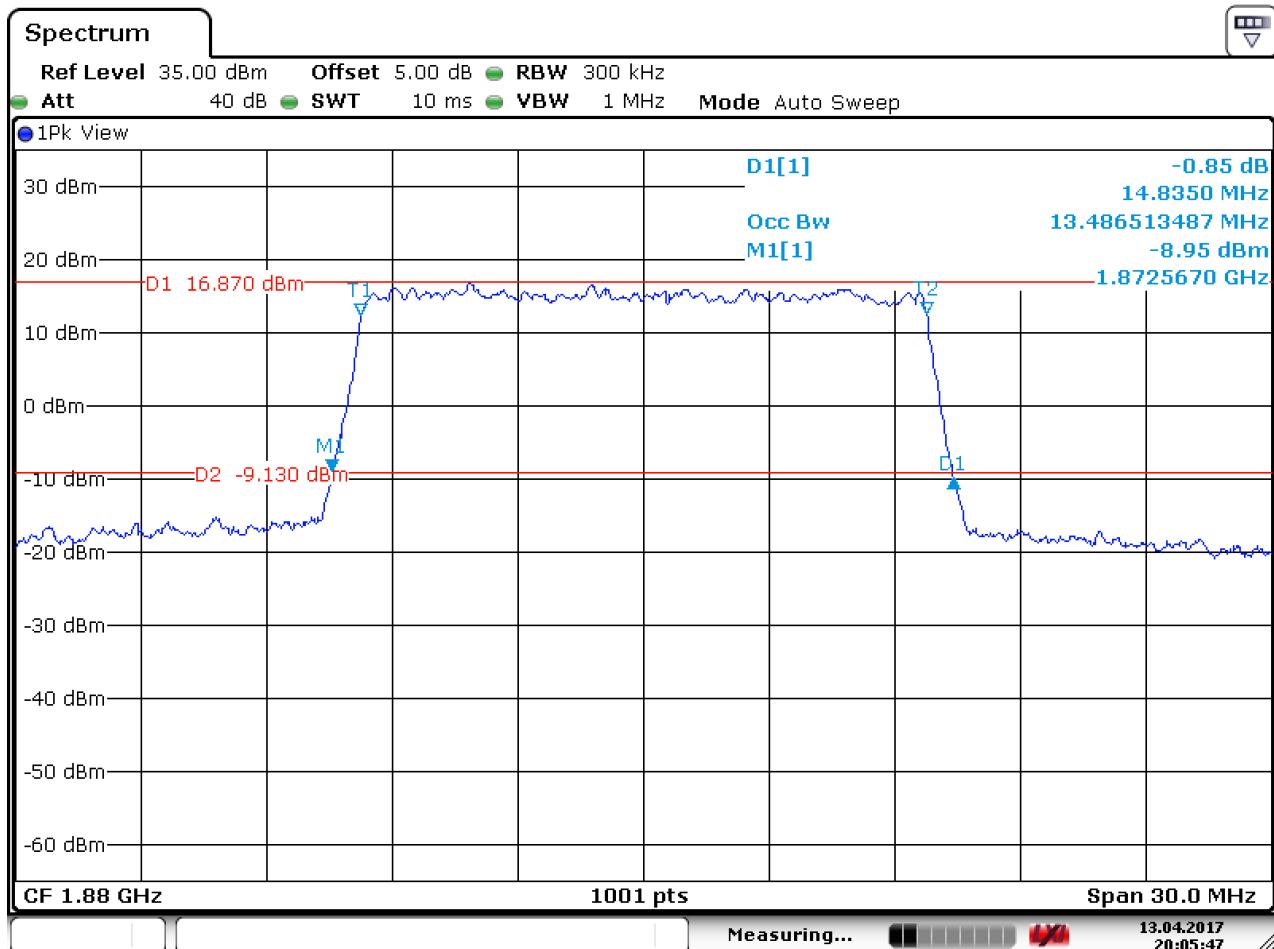
Date: 13.APR.2017 20:04:18

4.1.1.9.3 Test Channel = HCH

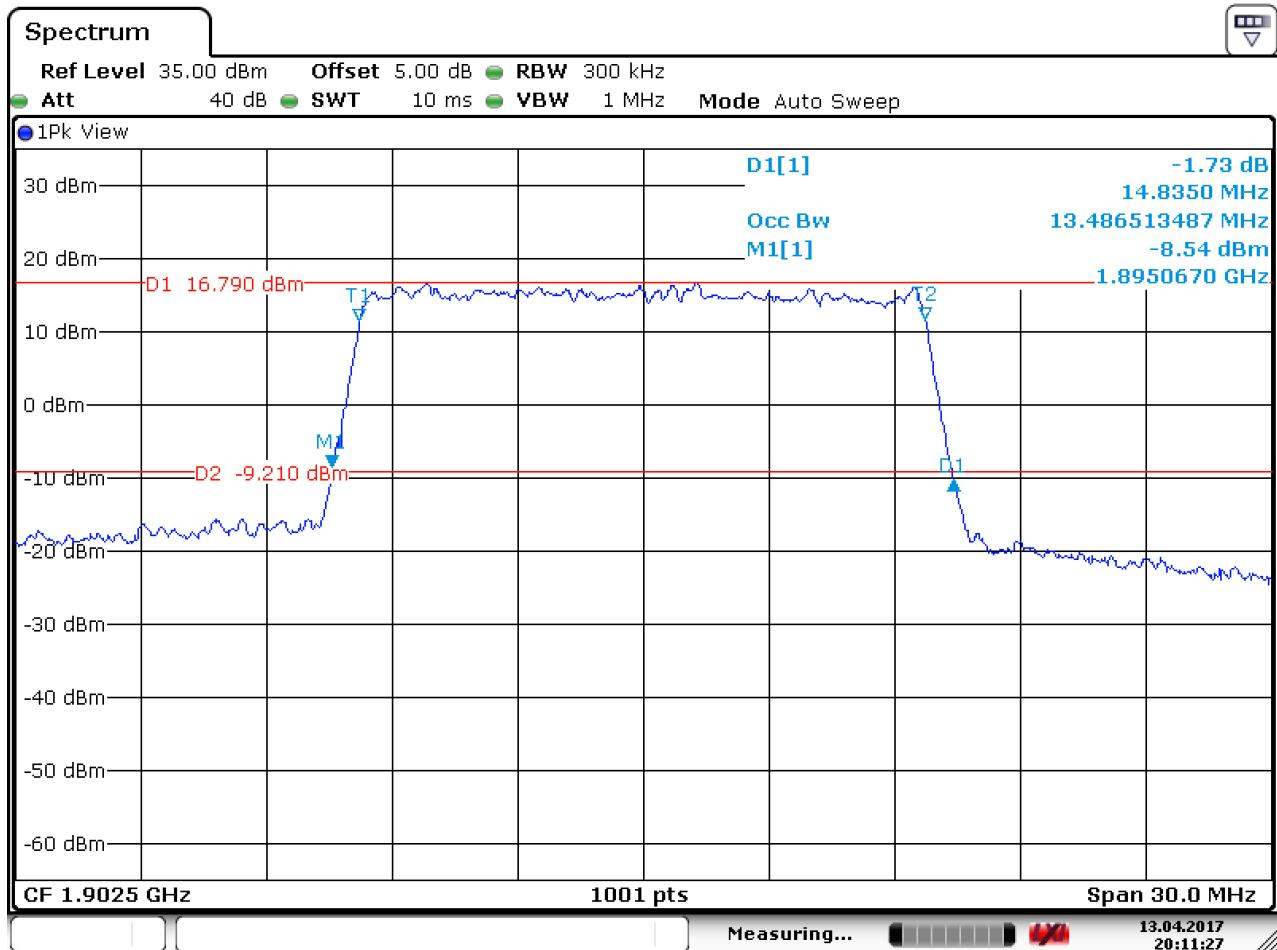
Date: 13.APR.2017 20:10:06

4.1.1.10 Test Mode = LTE/TM2 15MHz**4.1.1.10.1 Test Channel = LCH**

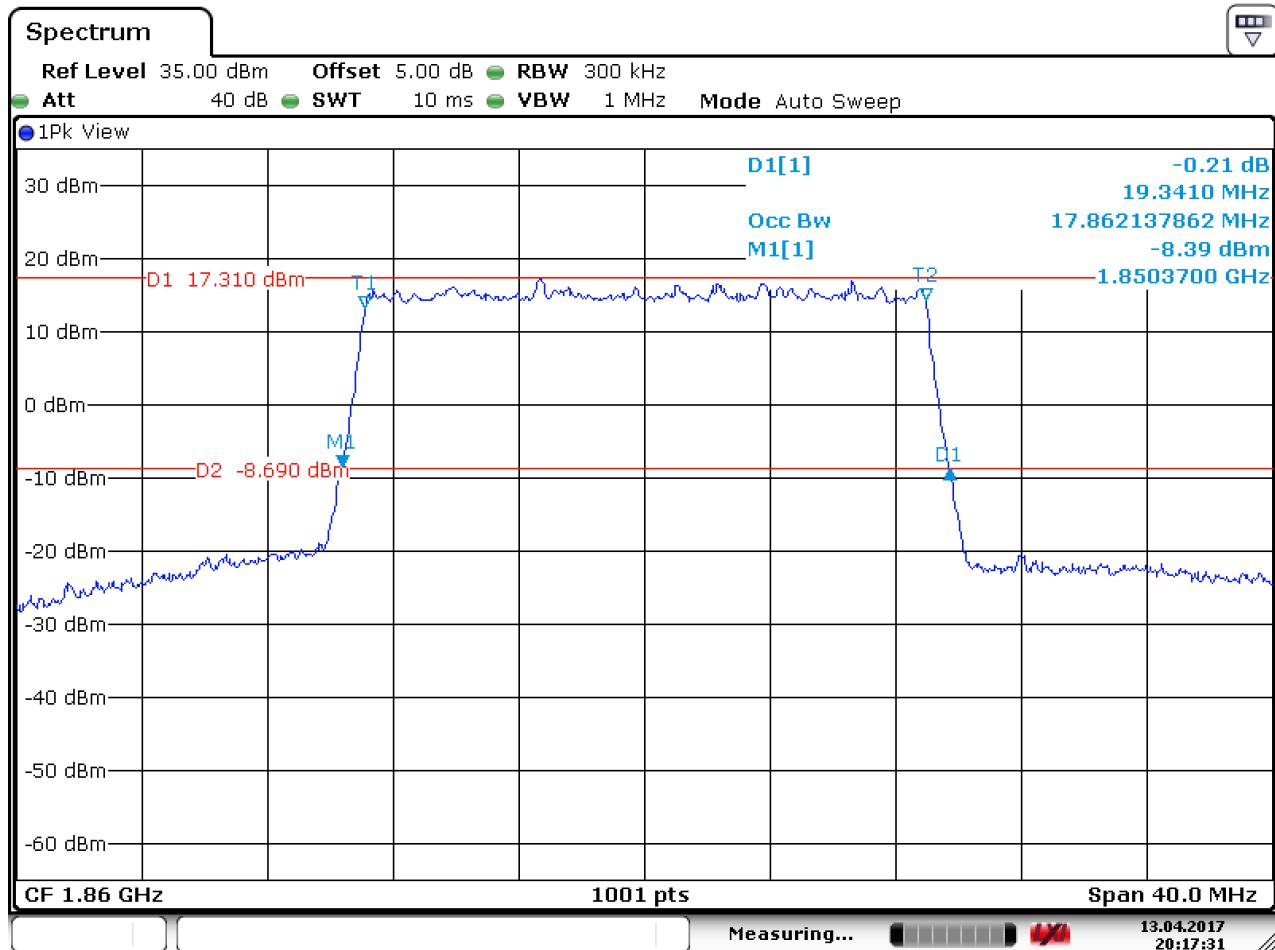
Date: 13.APR.2017 20:07:14

4.1.1.10.2 Test Channel = MCH

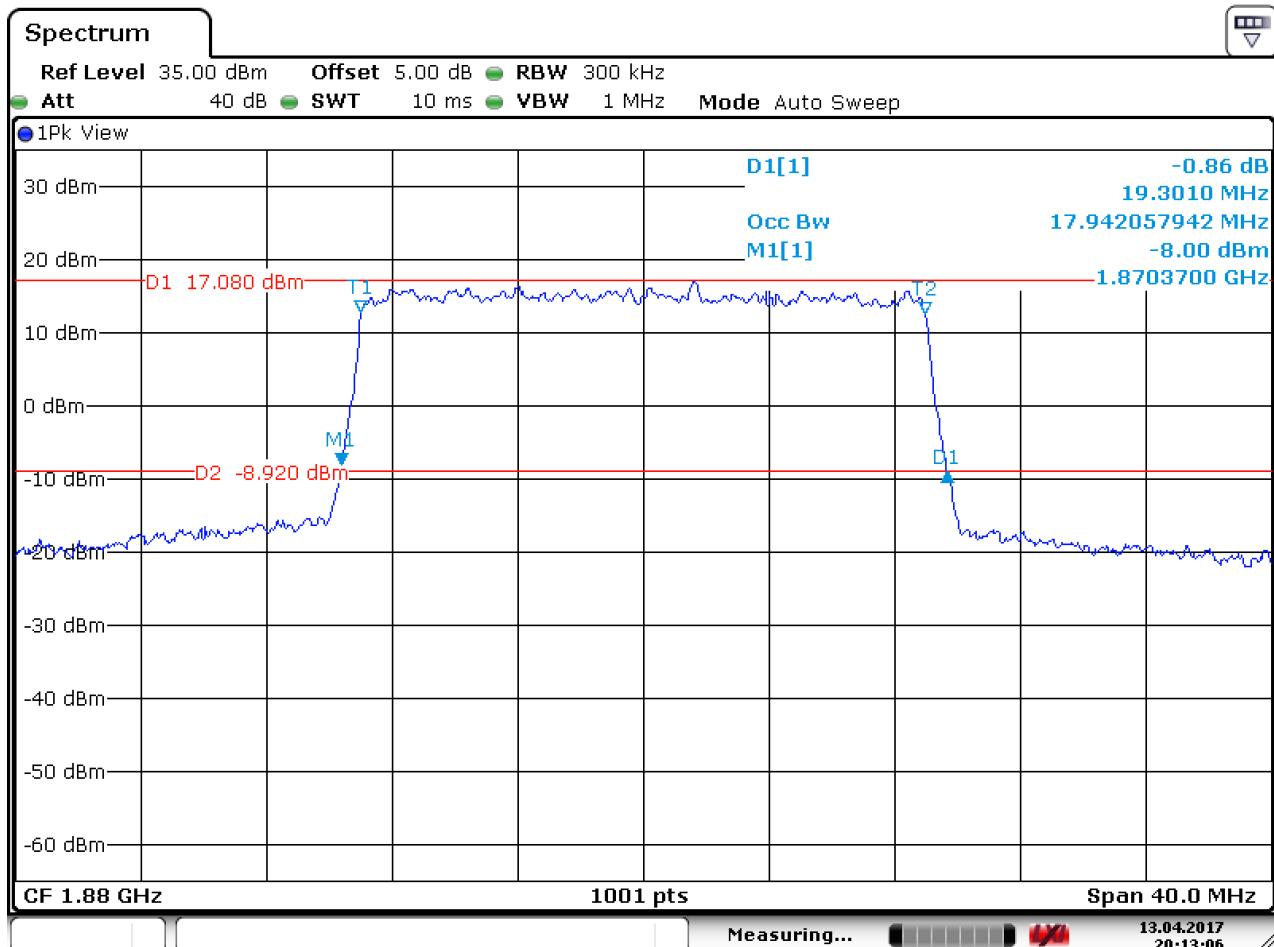
Date: 13.APR.2017 20:05:47

4.1.1.10.3 Test Channel = HCH

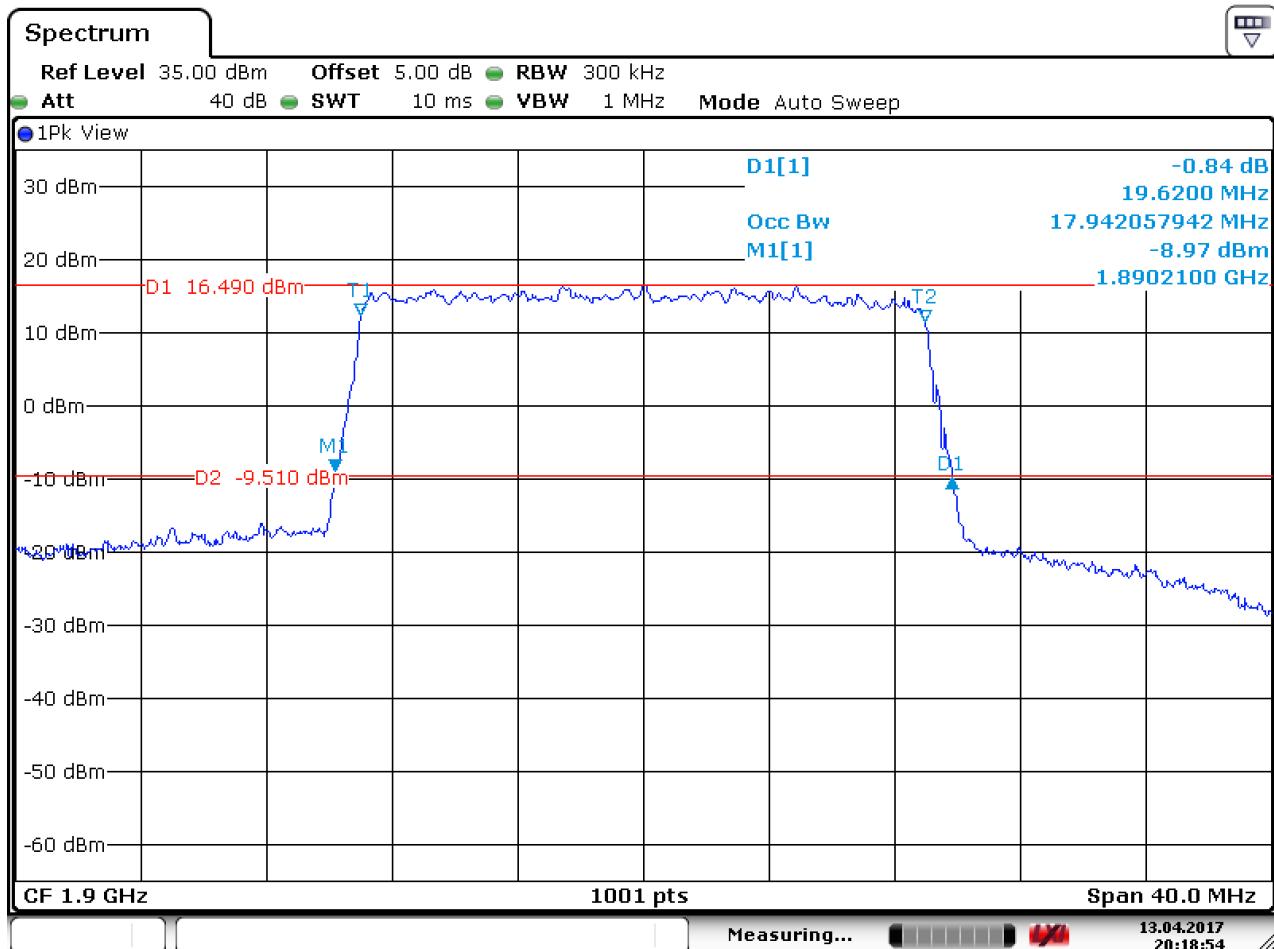
Date: 13.APR.2017 20:11:28

4.1.1.11 Test Mode = LTE/TM1 20MHz**4.1.1.11.1 Test Channel = LCH**

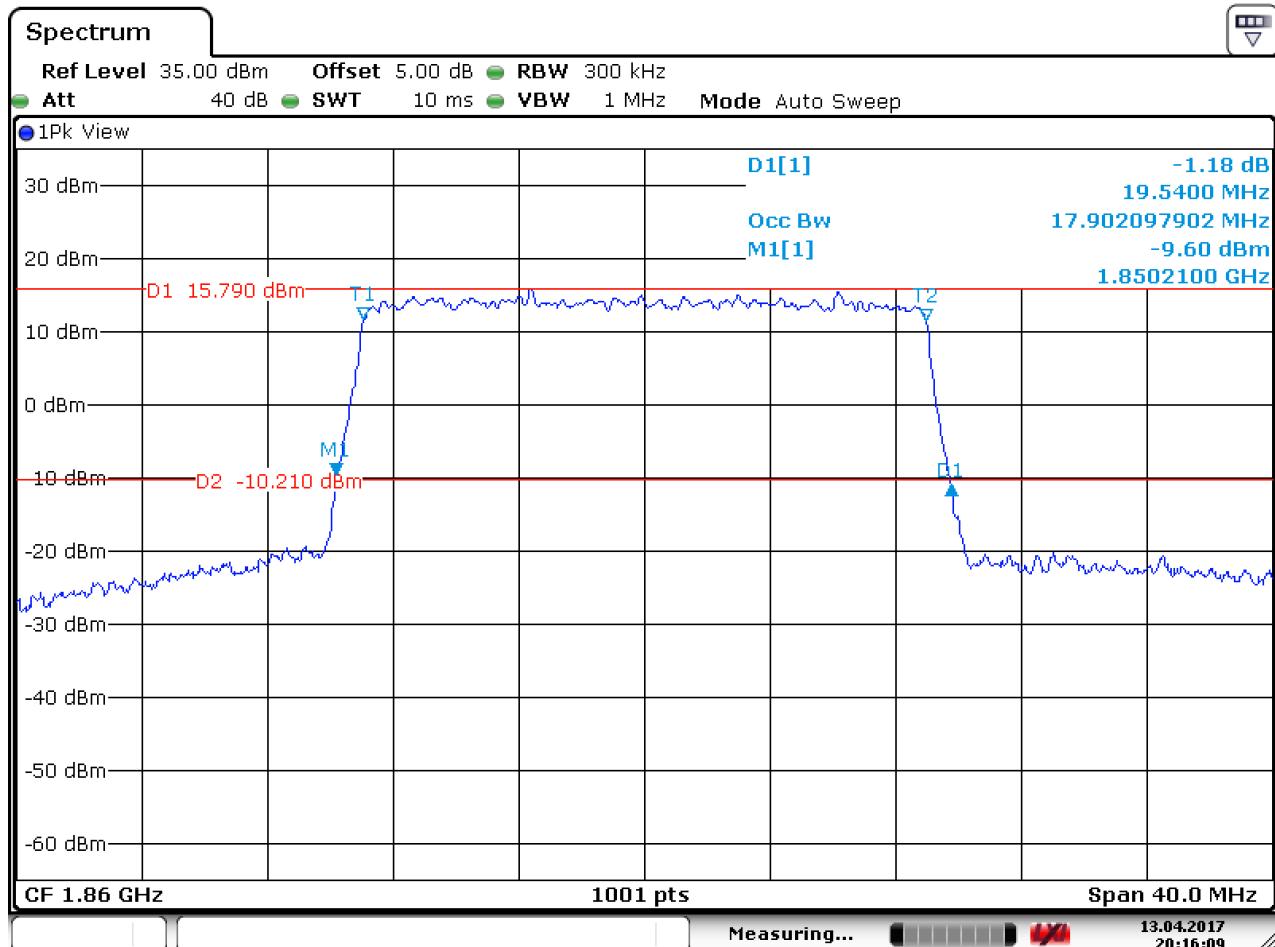
Date: 13.APR.2017 20:17:32

4.1.1.11.2 Test Channel = MCH

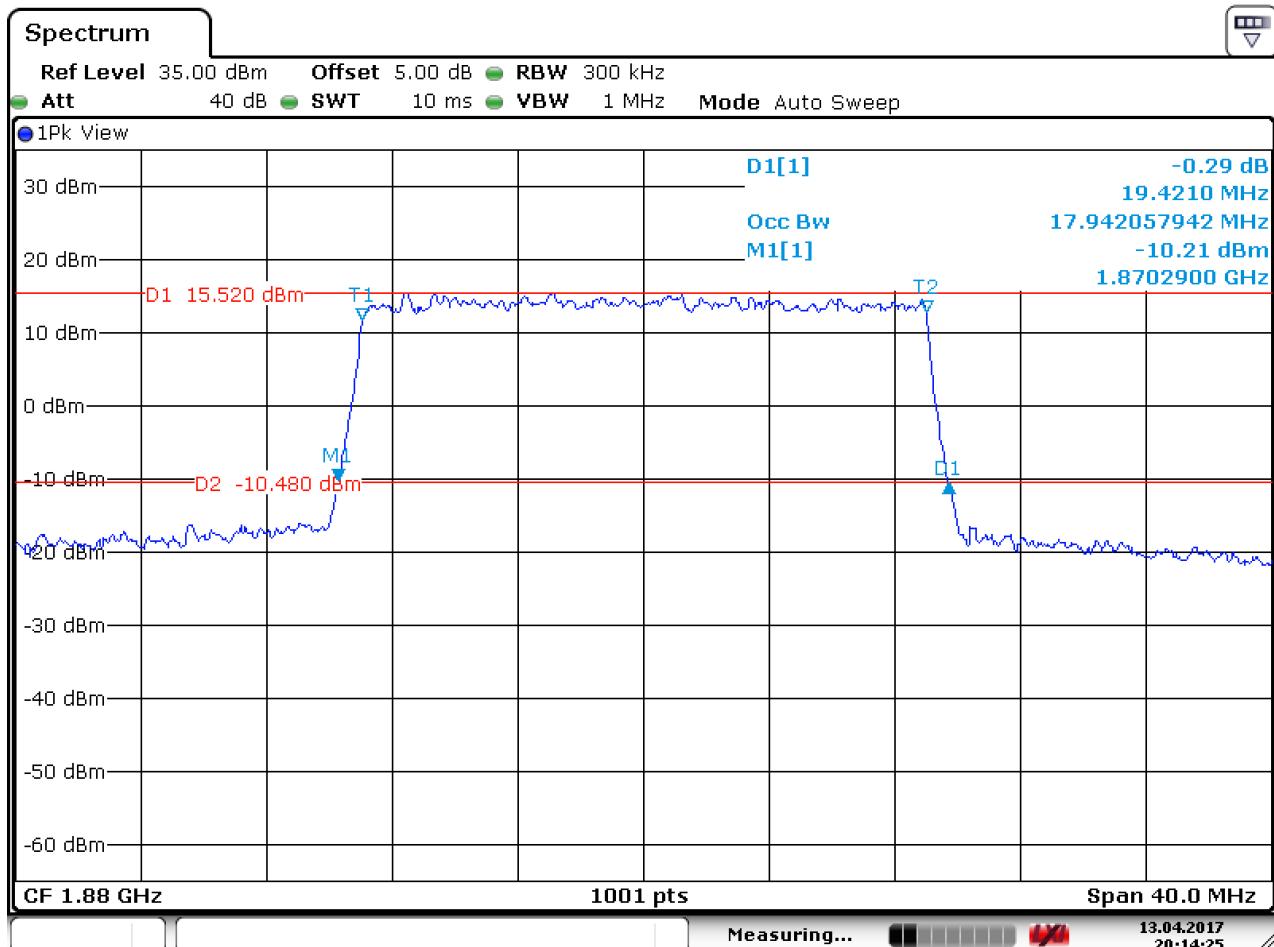
Date: 13.APR.2017 20:13:06

4.1.1.11.3 Test Channel = HCH

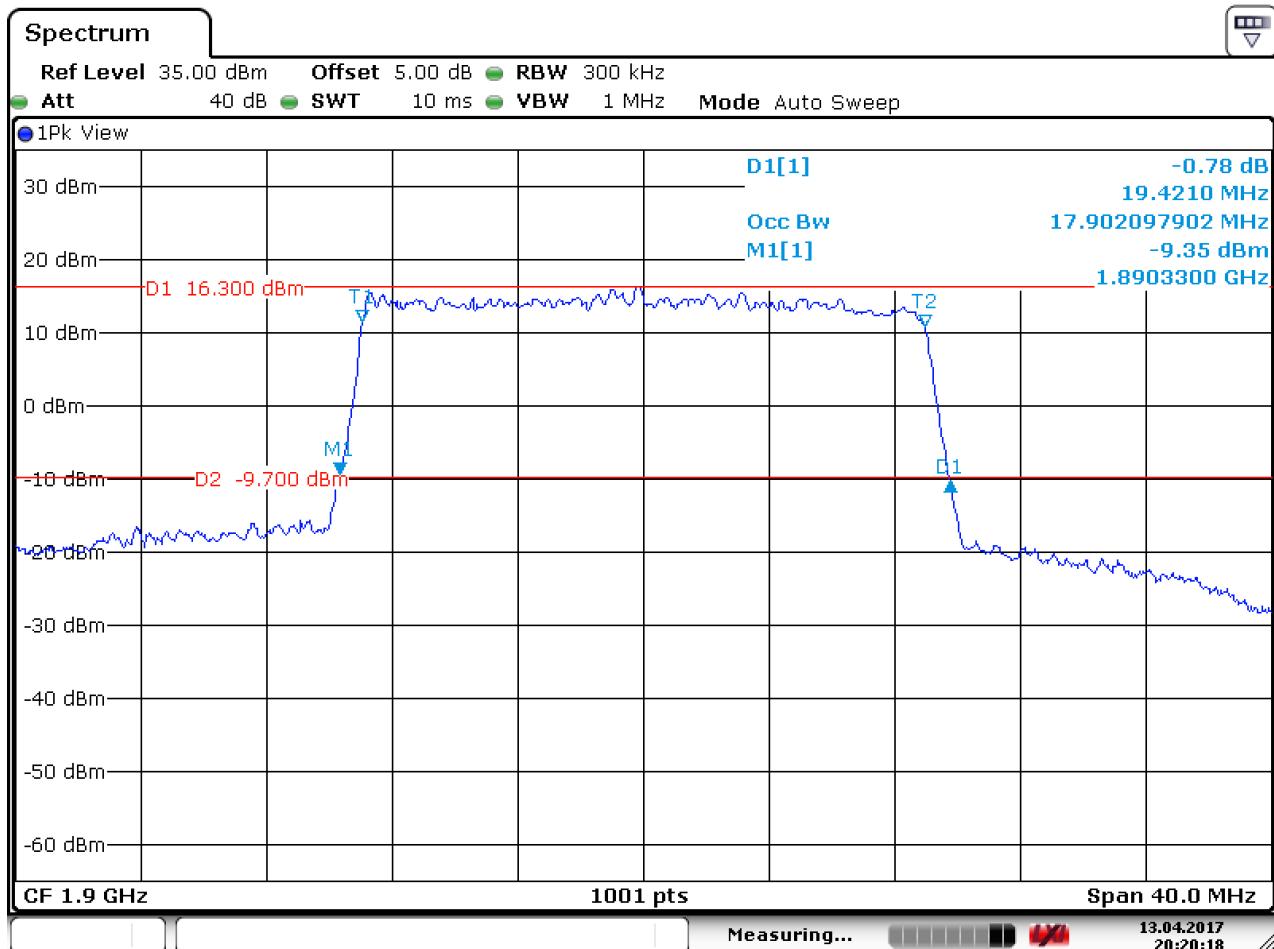
Date: 13.APR.2017 20:18:55

4.1.1.12 Test Mode = LTE/TM2 20MHz**4.1.1.12.1 Test Channel = LCH**

Date: 13.APR.2017 20:16:09

4.1.1.12.2 Test Channel = MCH

Date: 13.APR.2017 20:14:26

4.1.1.12.3 Test Channel = HCH

Date: 13.APR.2017 20:20:18

5 Band Edges Compliance

Part I –

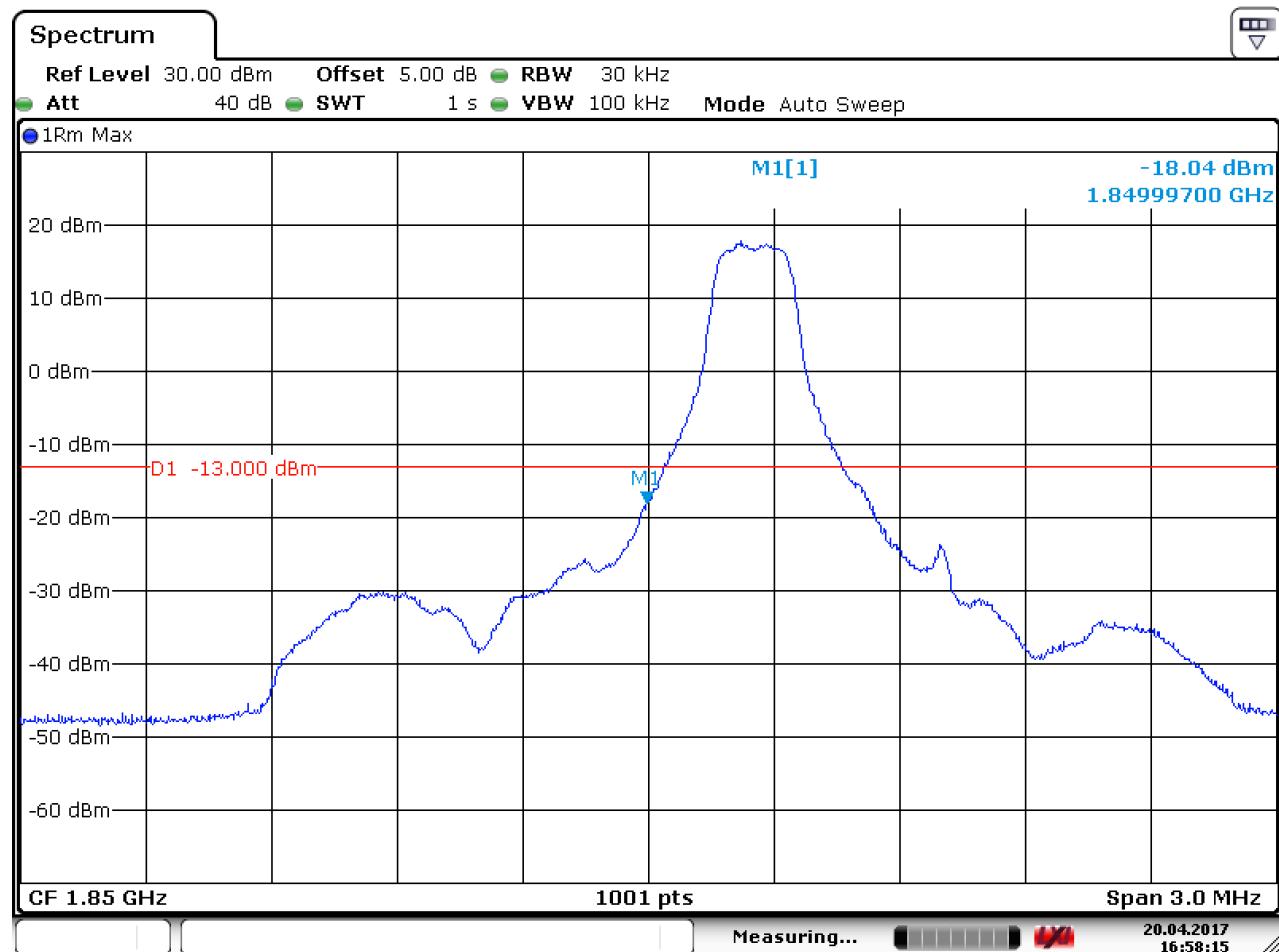
5.1 For LTE

5.1.1 Test Band = LTE band2

5.1.1.1 Test Mode = LTE/TM1 1.4MHz

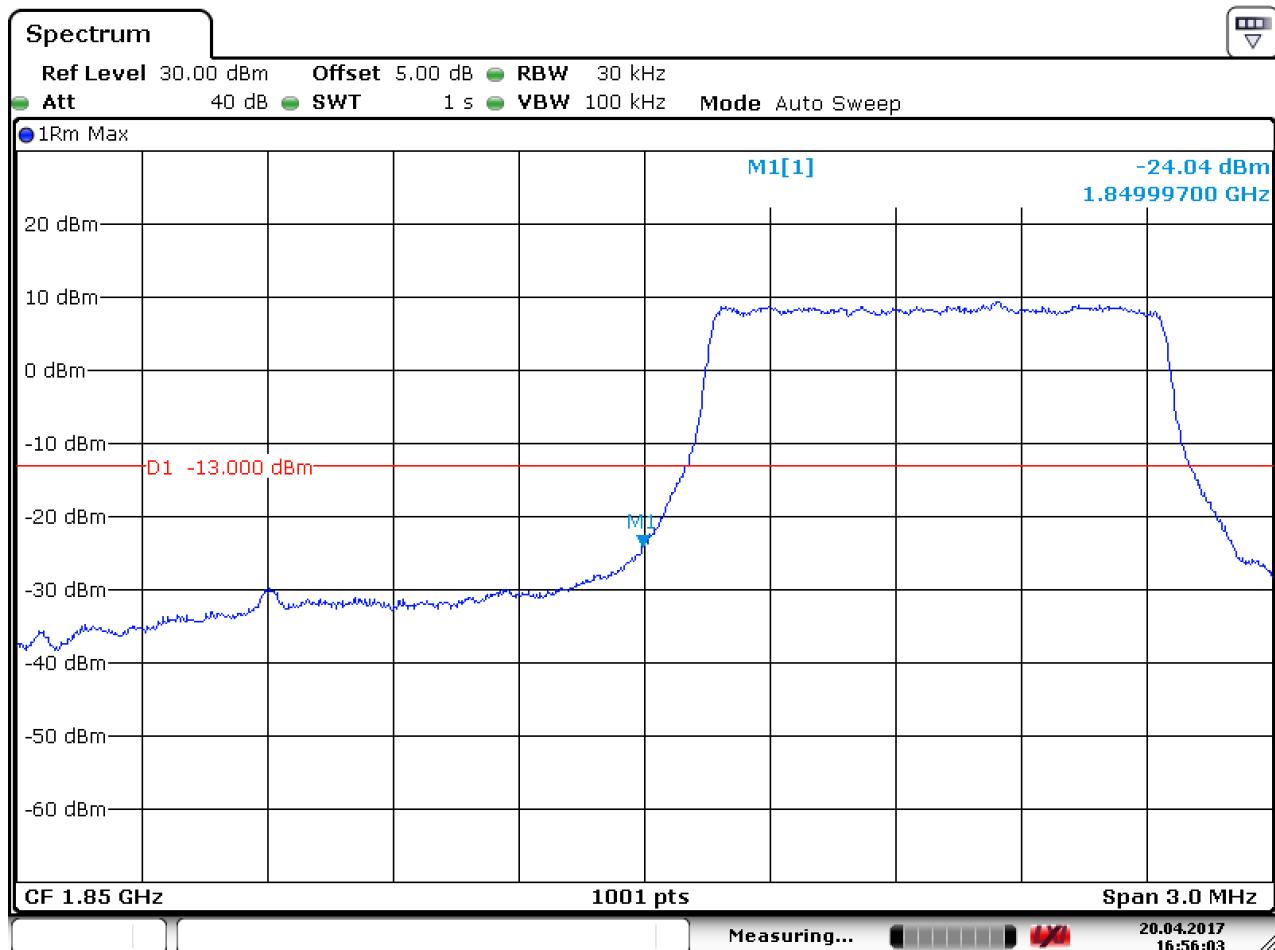
5.1.1.1.1 Test Channel = LCH

5.1.1.1.1.1 Test RB=1RB



Date: 20.APR.2017 16:58:16

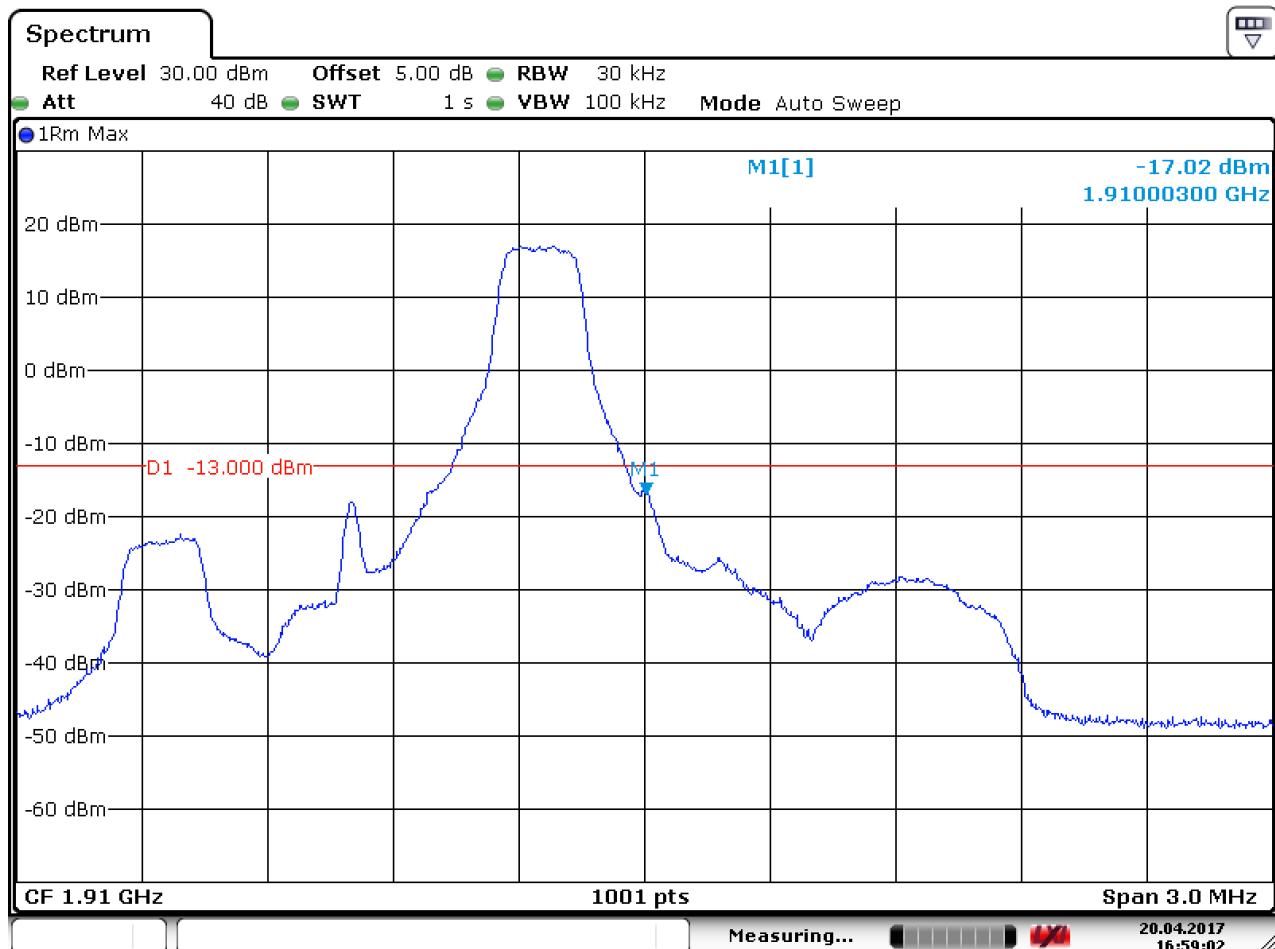
5.1.1.1.1.2 Test RB=6RB



Date: 20.APR.2017 16:56:03

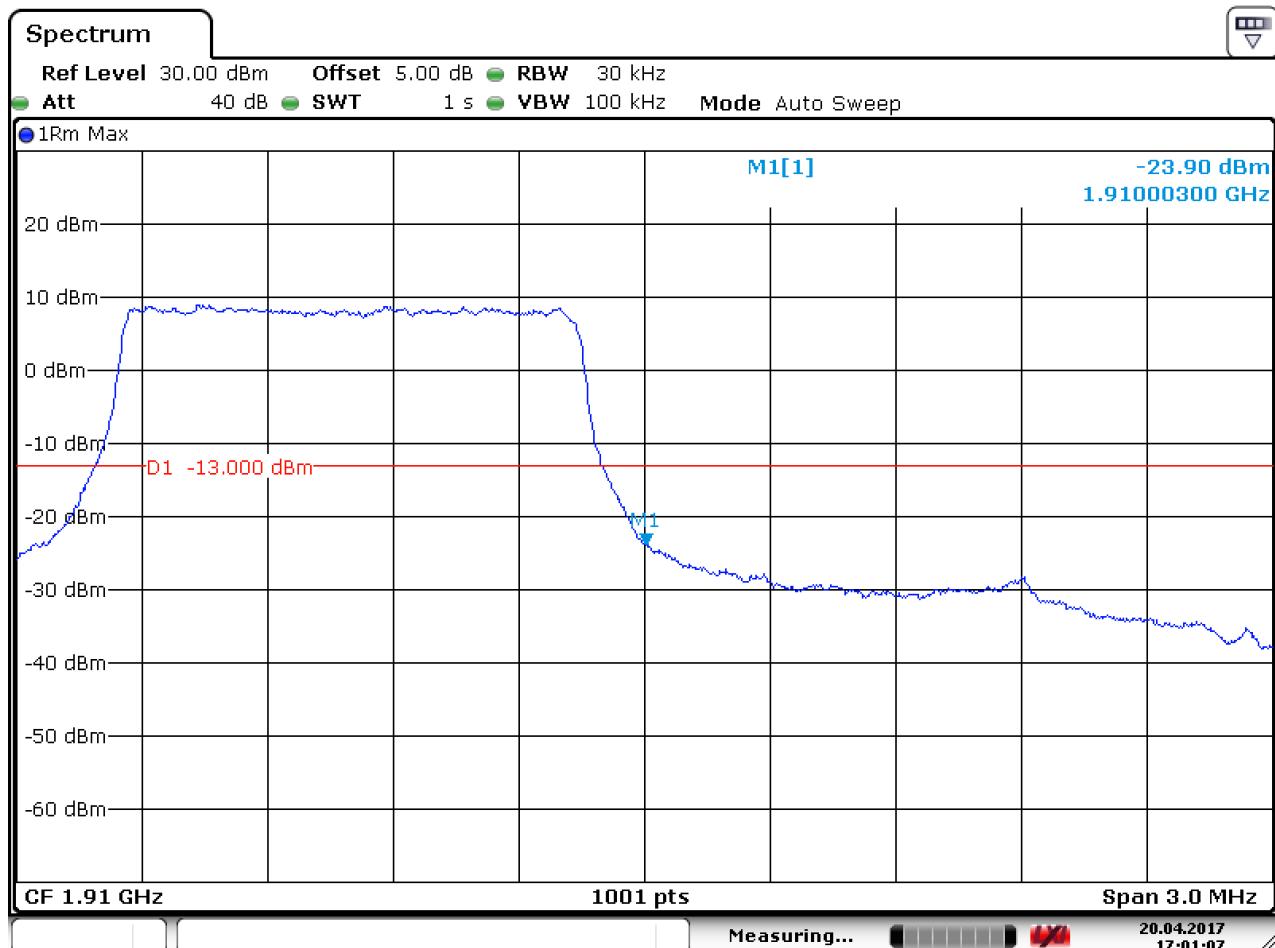
5.1.1.1.2 Test Channel = HCH

5.1.1.1.2.1 Test RB=1RB

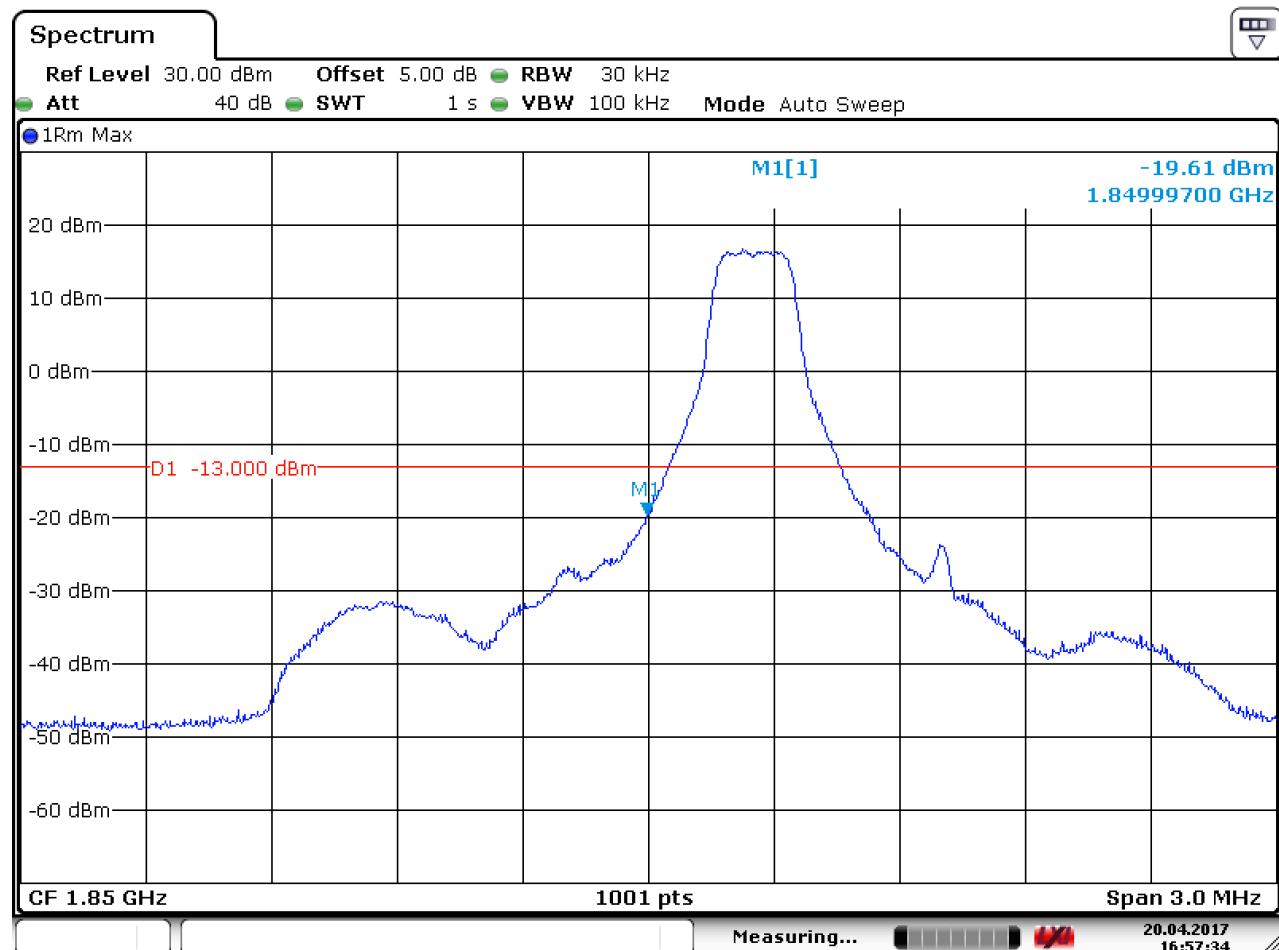


Date: 20.APR.2017 16:59:02

5.1.1.1.2.2 Test RB=6RB

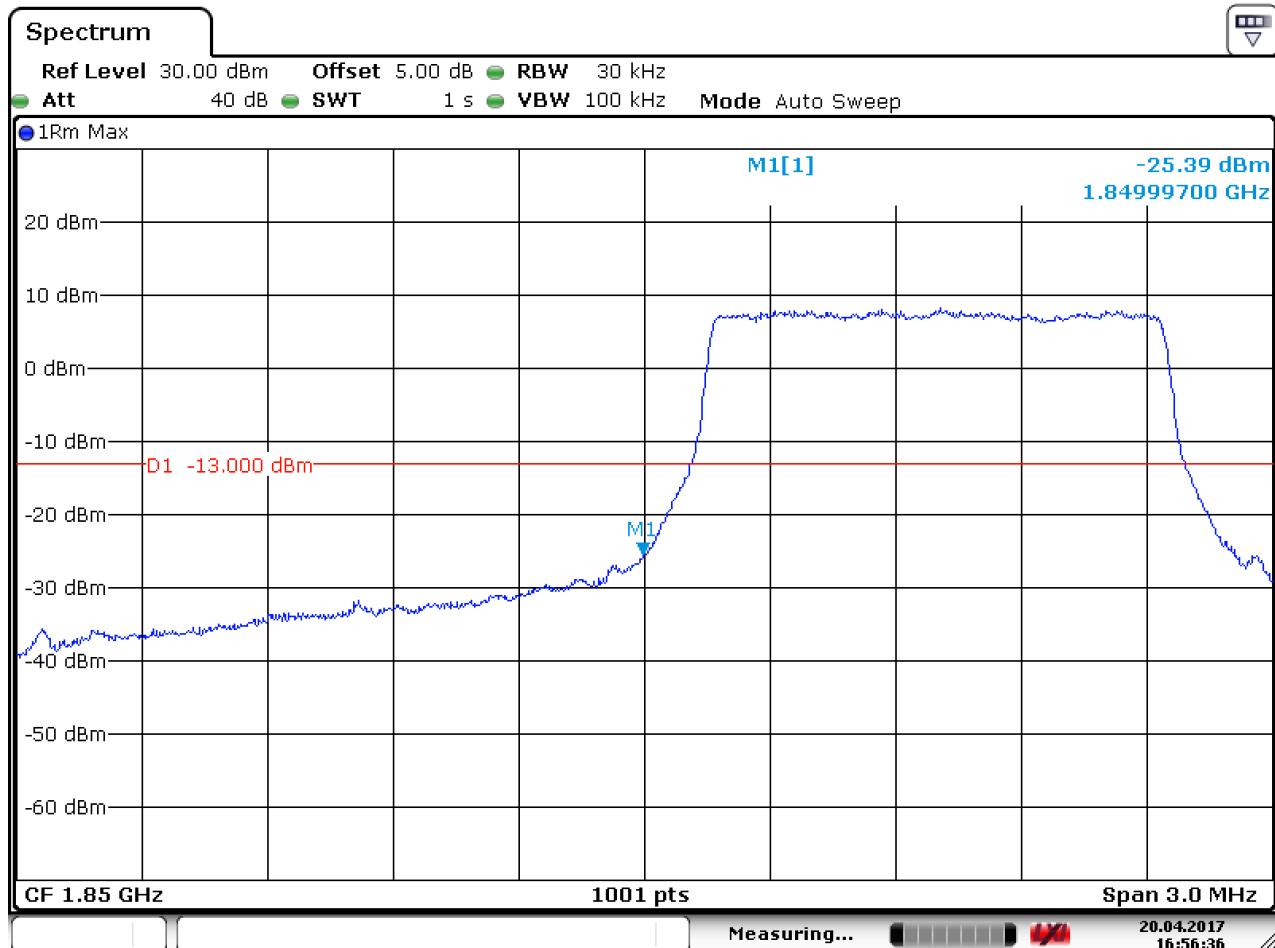


Date: 20.APR.2017 17:01:07

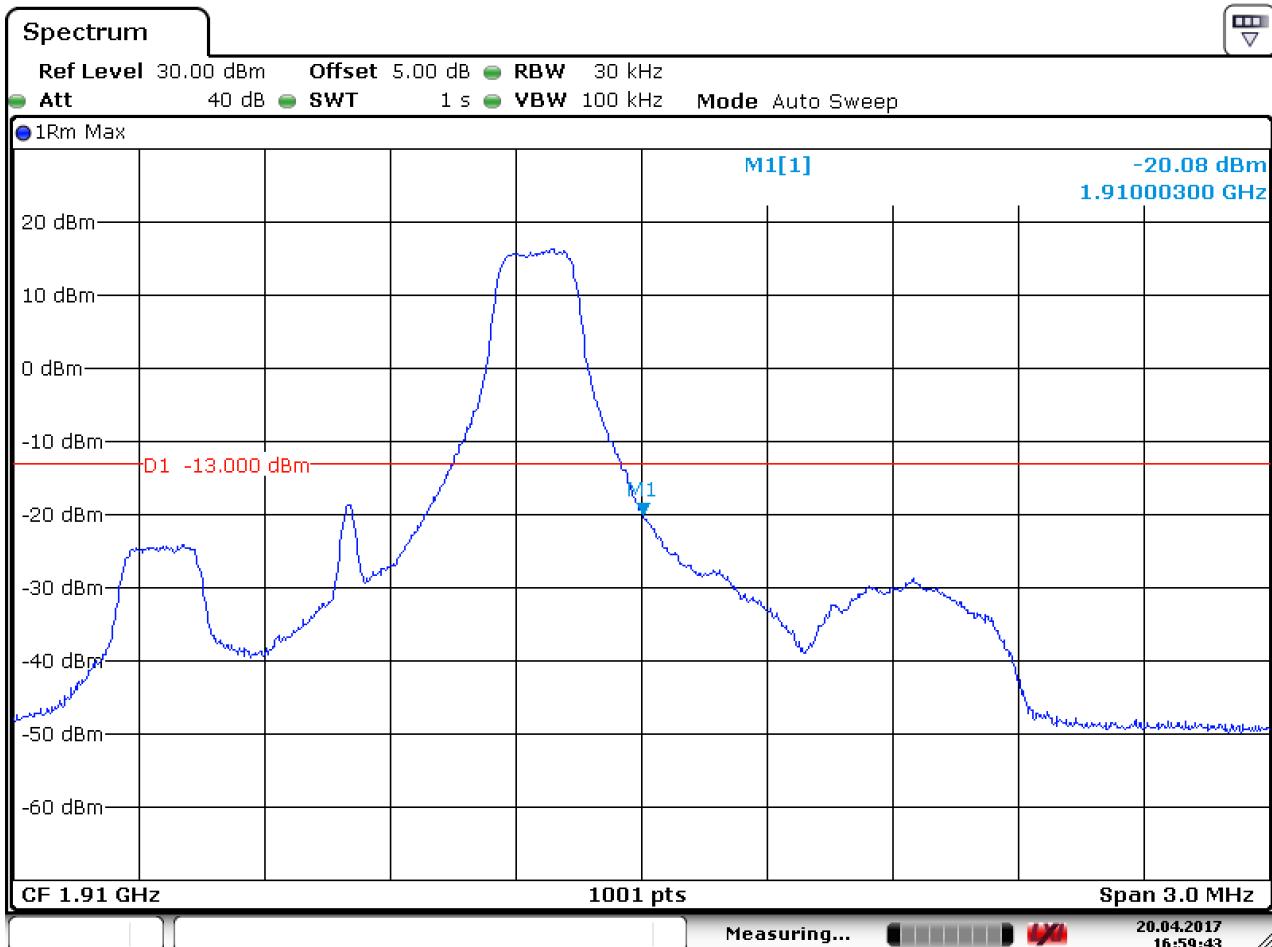
5.1.1.2 Test Mode = LTE/TM2 1.4MHz**5.1.1.2.1 Test Channel = LCH****5.1.1.2.1.1 Test RB=1RB**

Date: 20.APR.2017 16:57:34

5.1.1.2.1.2 Test RB=6RB

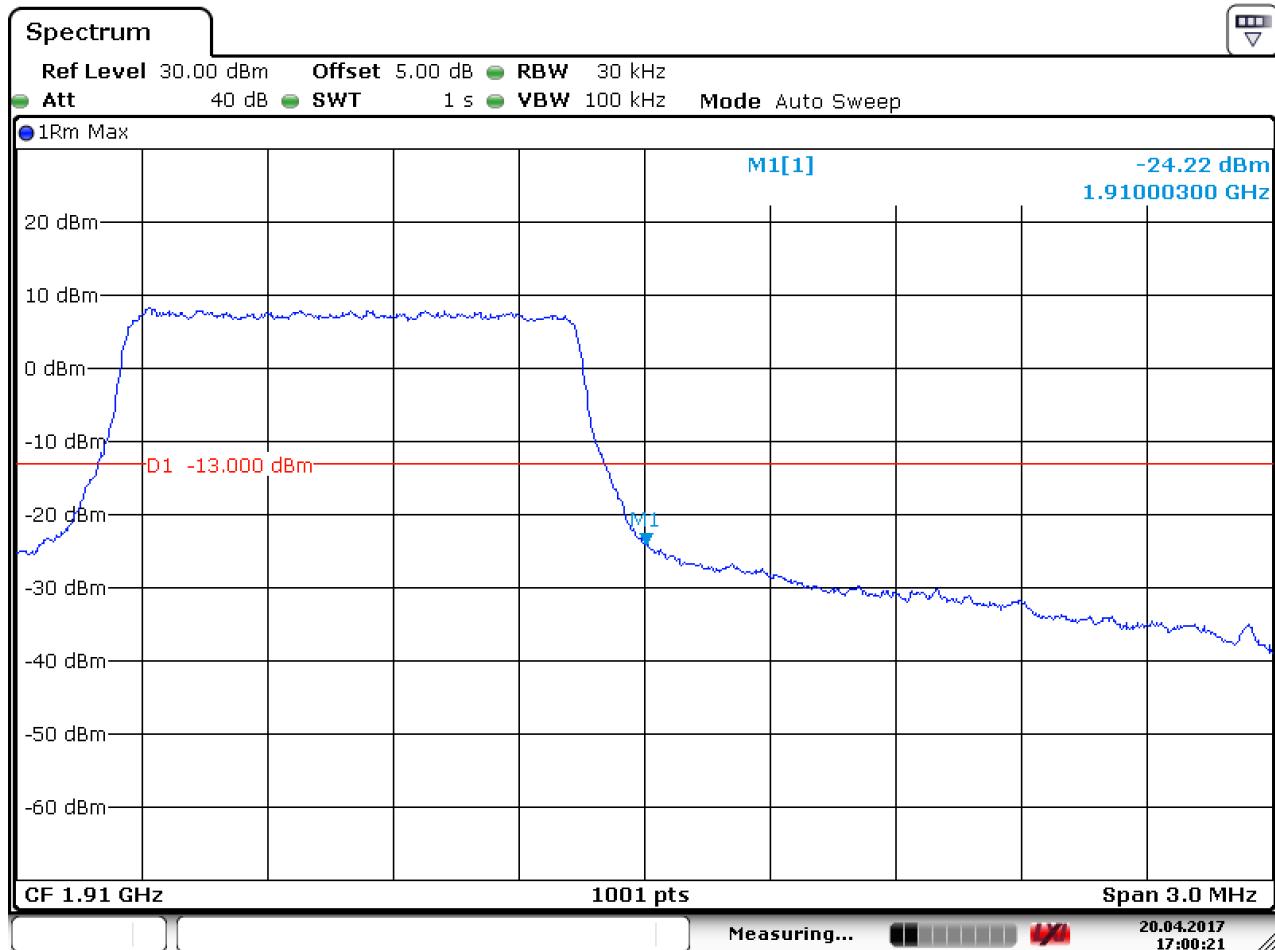


Date: 20.APR.2017 16:56:36

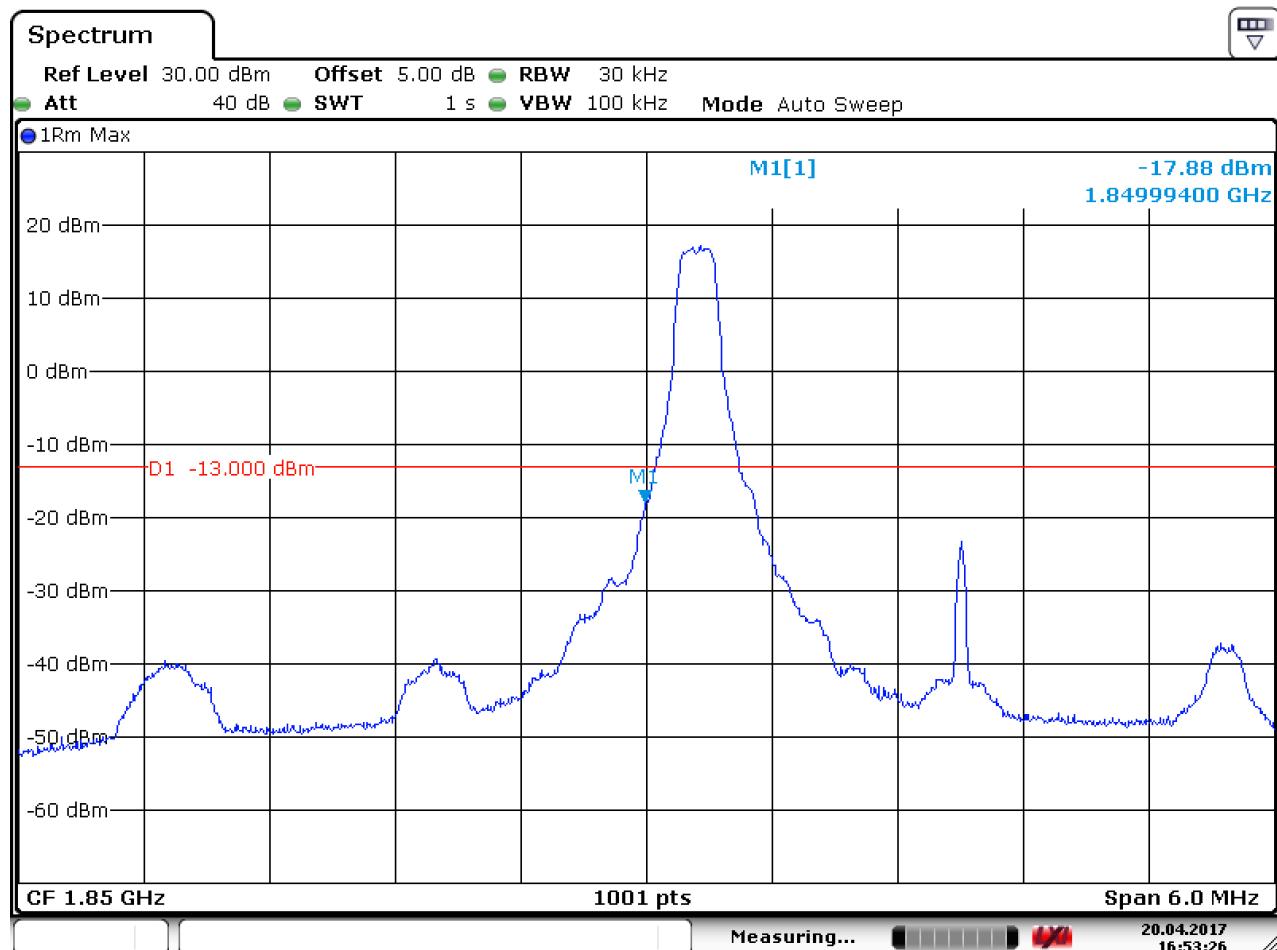
5.1.1.2.2 Test Channel = HCH**5.1.1.2.2.1 Test RB=1RB**

Date: 20.APR.2017 16:59:43

5.1.1.2.2.2 Test RB=6RB

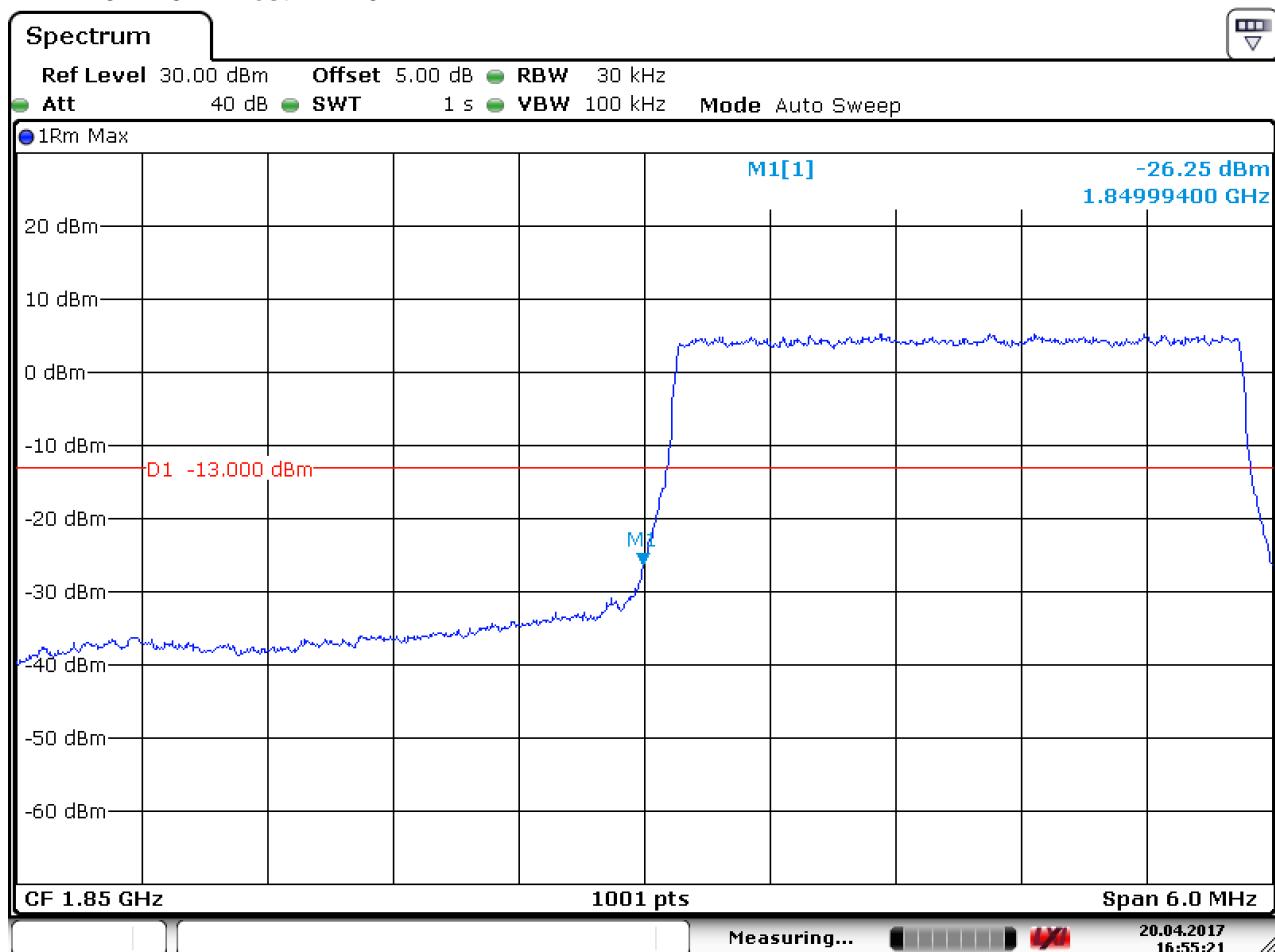


Date: 20.APR.2017 17:00:22

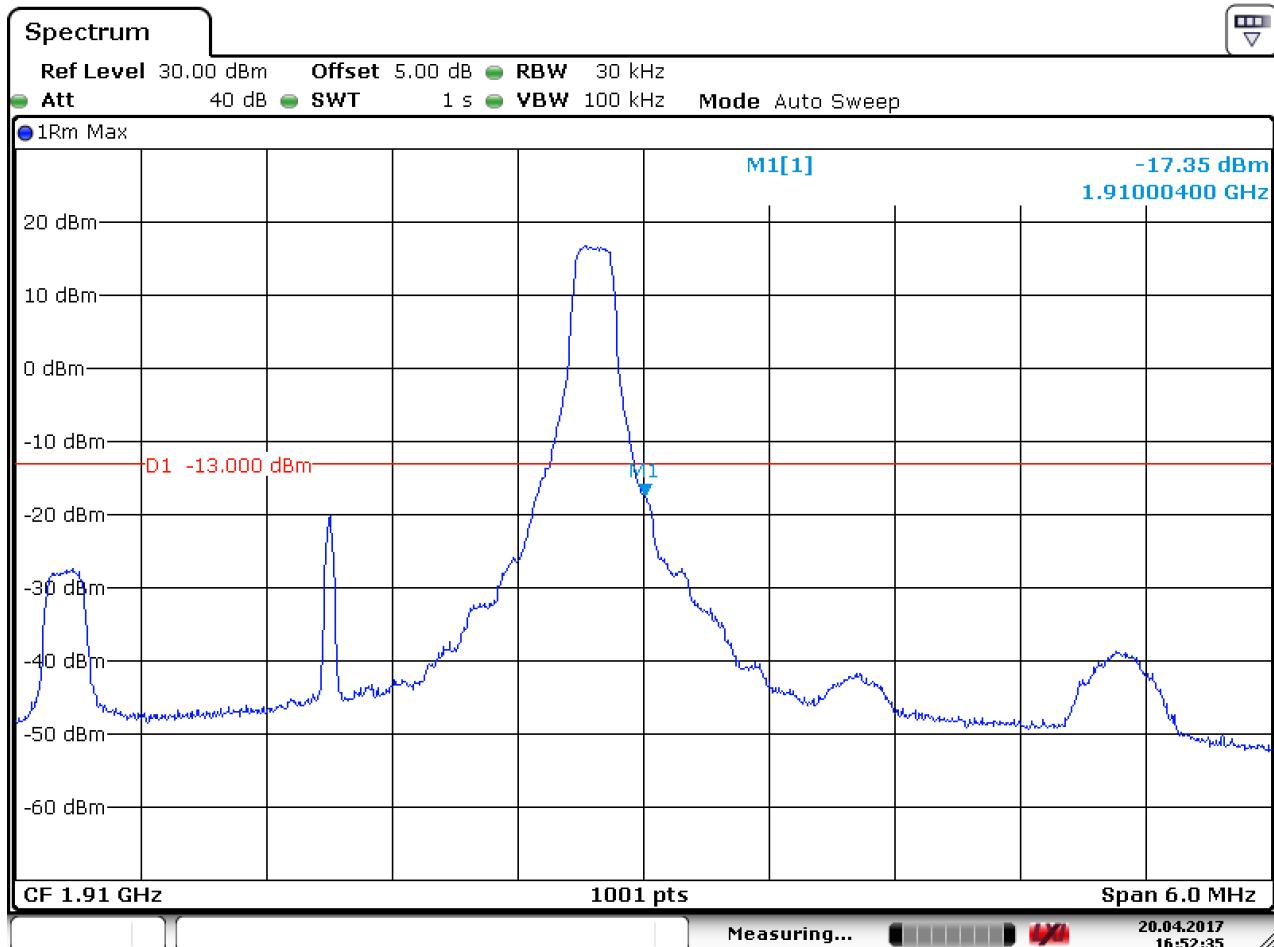
5.1.1.3 Test Mode = LTE/TM1 3MHz**5.1.1.3.1 Test Channel = LCH****5.1.1.3.1.1 Test RB=1RB**

Date: 20.APR.2017 16:53:27

5.1.1.3.1.2 Test RB=15RB

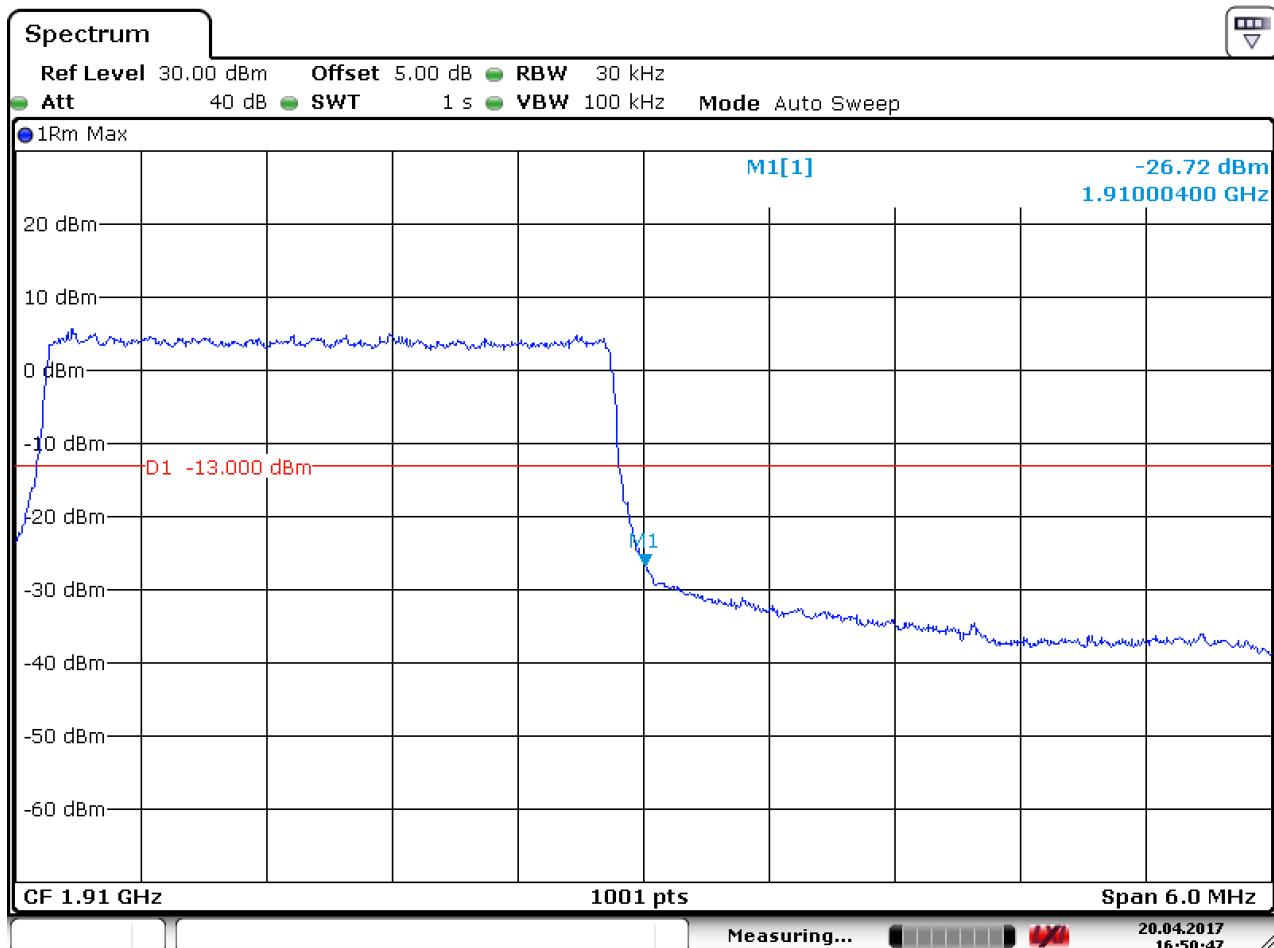


Date: 20.APR.2017 16:55:21

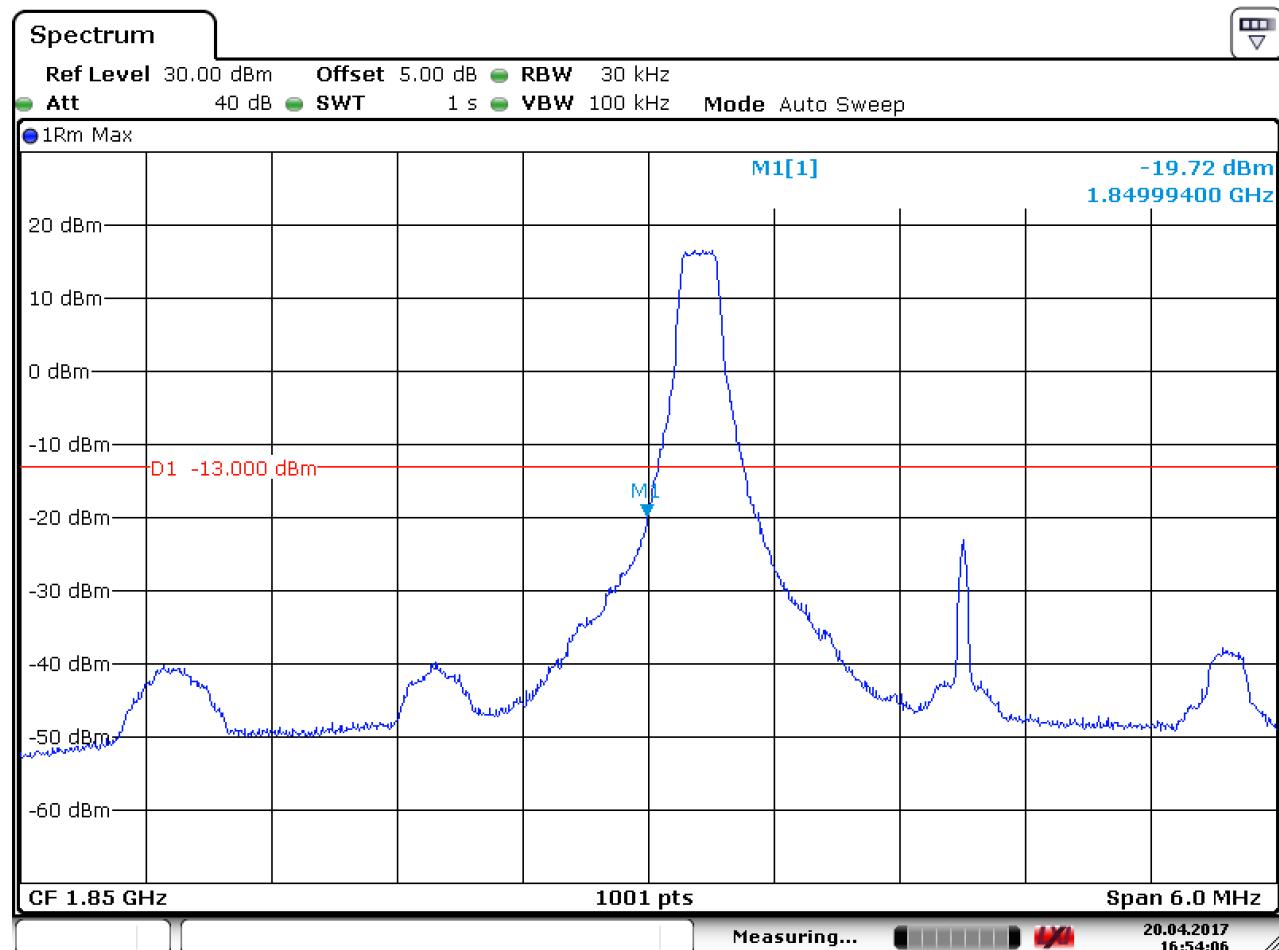
5.1.1.3.2 Test Channel = HCH**5.1.1.3.2.1 Test RB=1RB**

Date: 20.APR.2017 16:52:35

5.1.1.3.2.2 Test RB=15RB

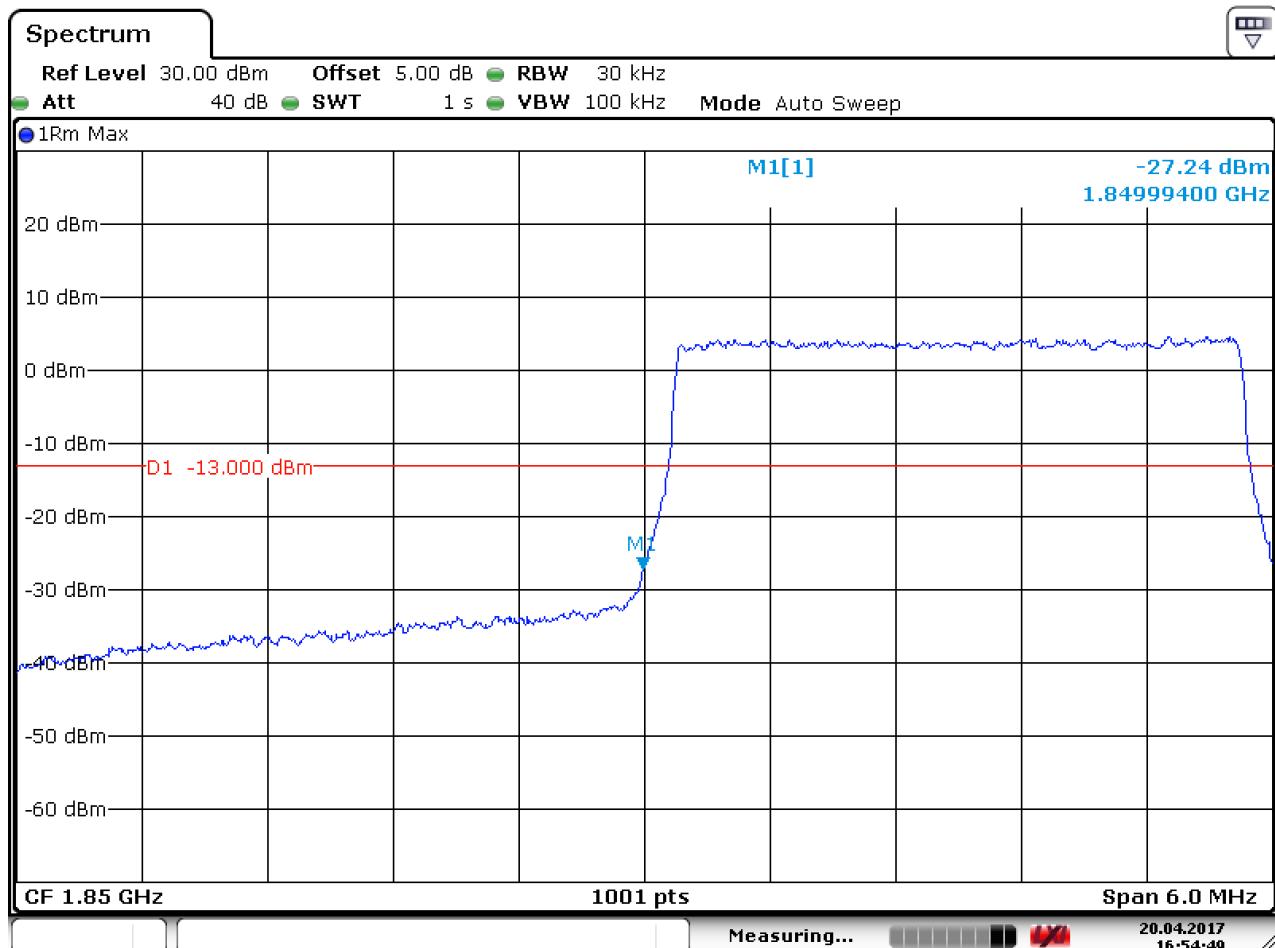


Date: 20.APR.2017 16:50:47

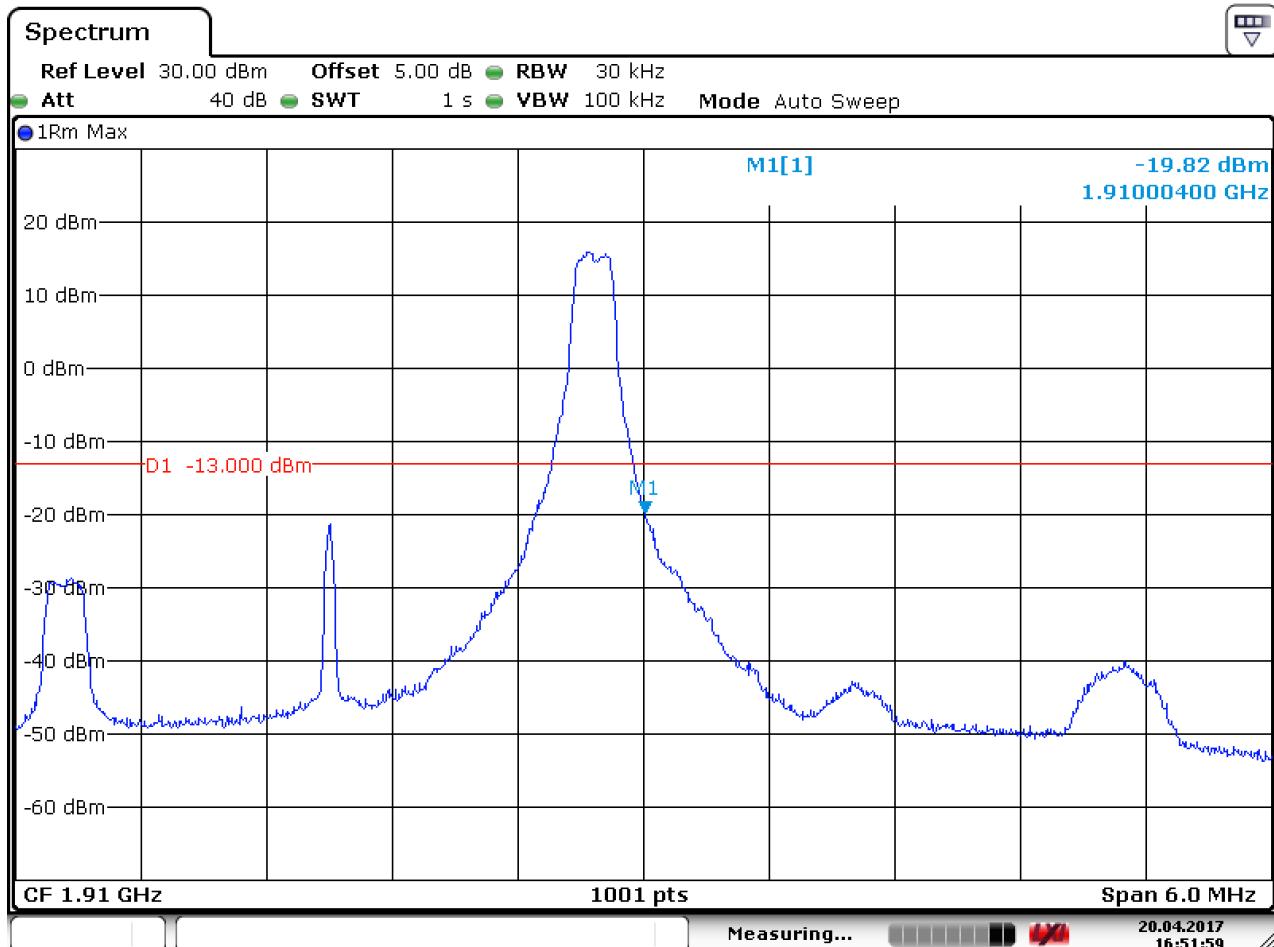
5.1.1.4 Test Mode = LTE/TM2 3MHz**5.1.1.4.1 Test Channel = LCH****5.1.1.4.1.1 Test RB=1RB**

Date: 20.APR.2017 16:54:06

5.1.1.4.1.2 Test RB=15RB

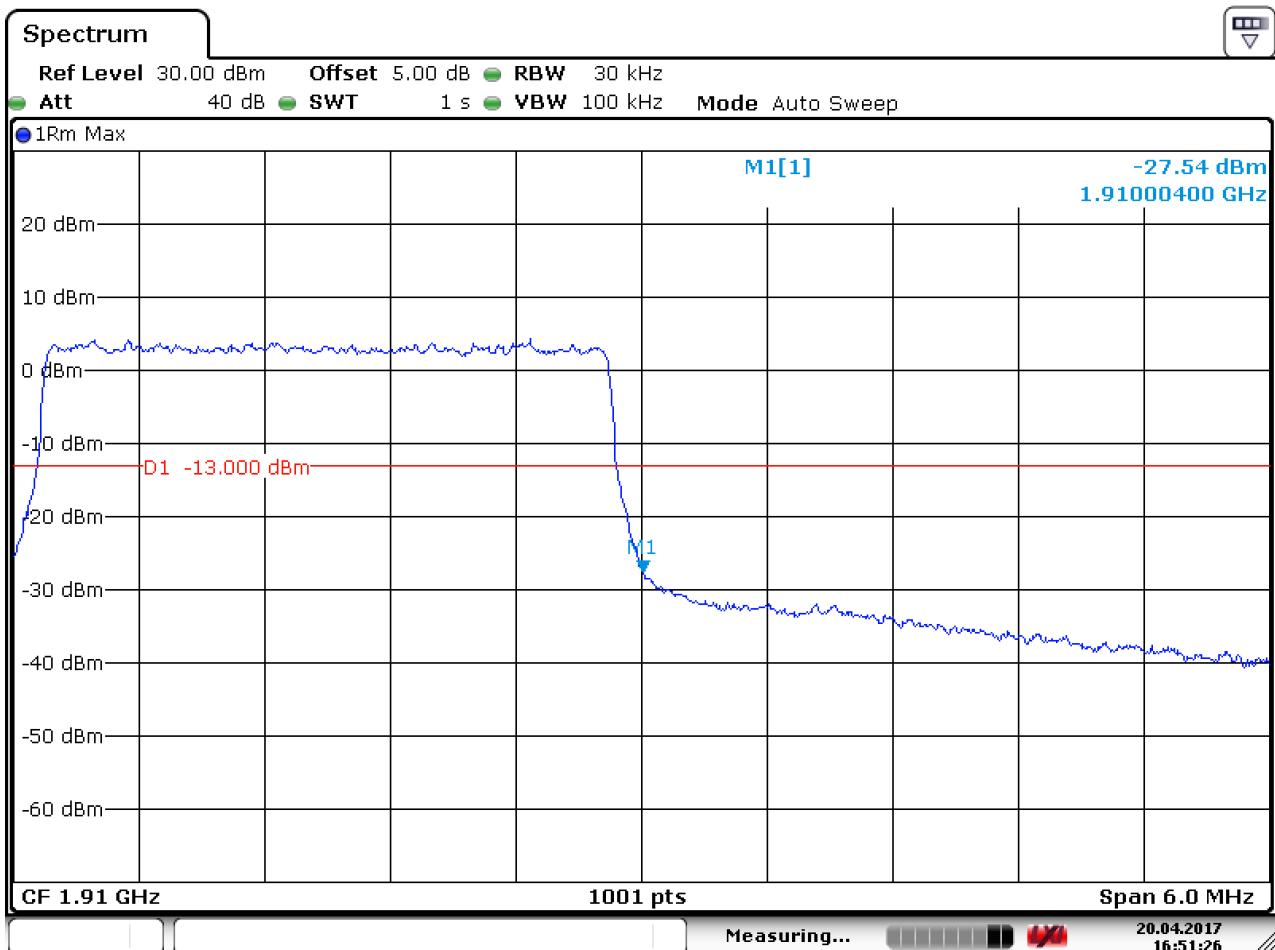


Date: 20.APR.2017 16:54:48

5.1.1.4.2 Test Channel = HCH**5.1.1.4.2.1 Test RB=1RB**

Date: 20.APR.2017 16:52:00

5.1.1.4.3 Test RB=15RB

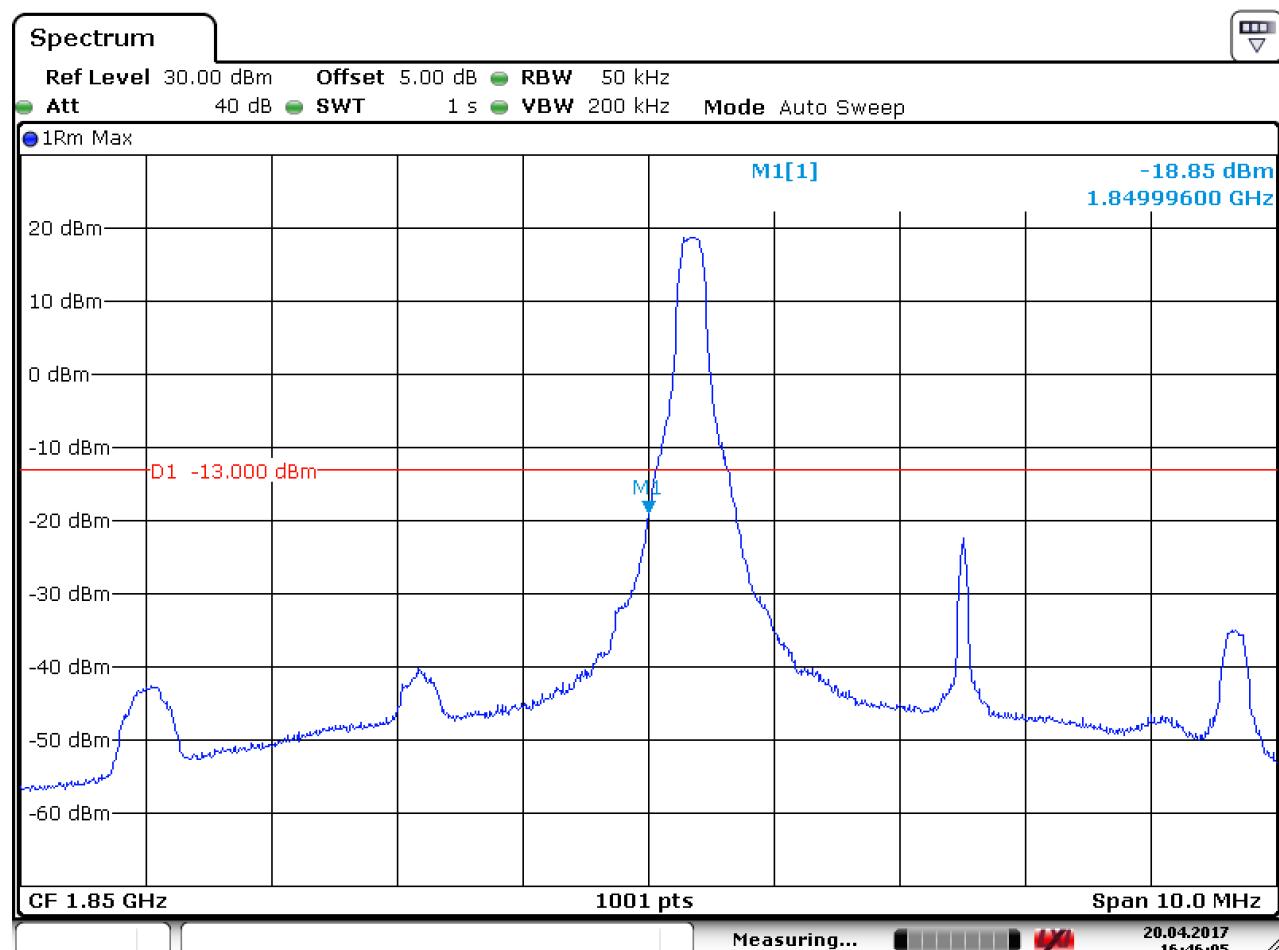


Date: 20.APR.2017 16:51:26

5.1.1.5 Test Mode = LTE/TM1 5MHz

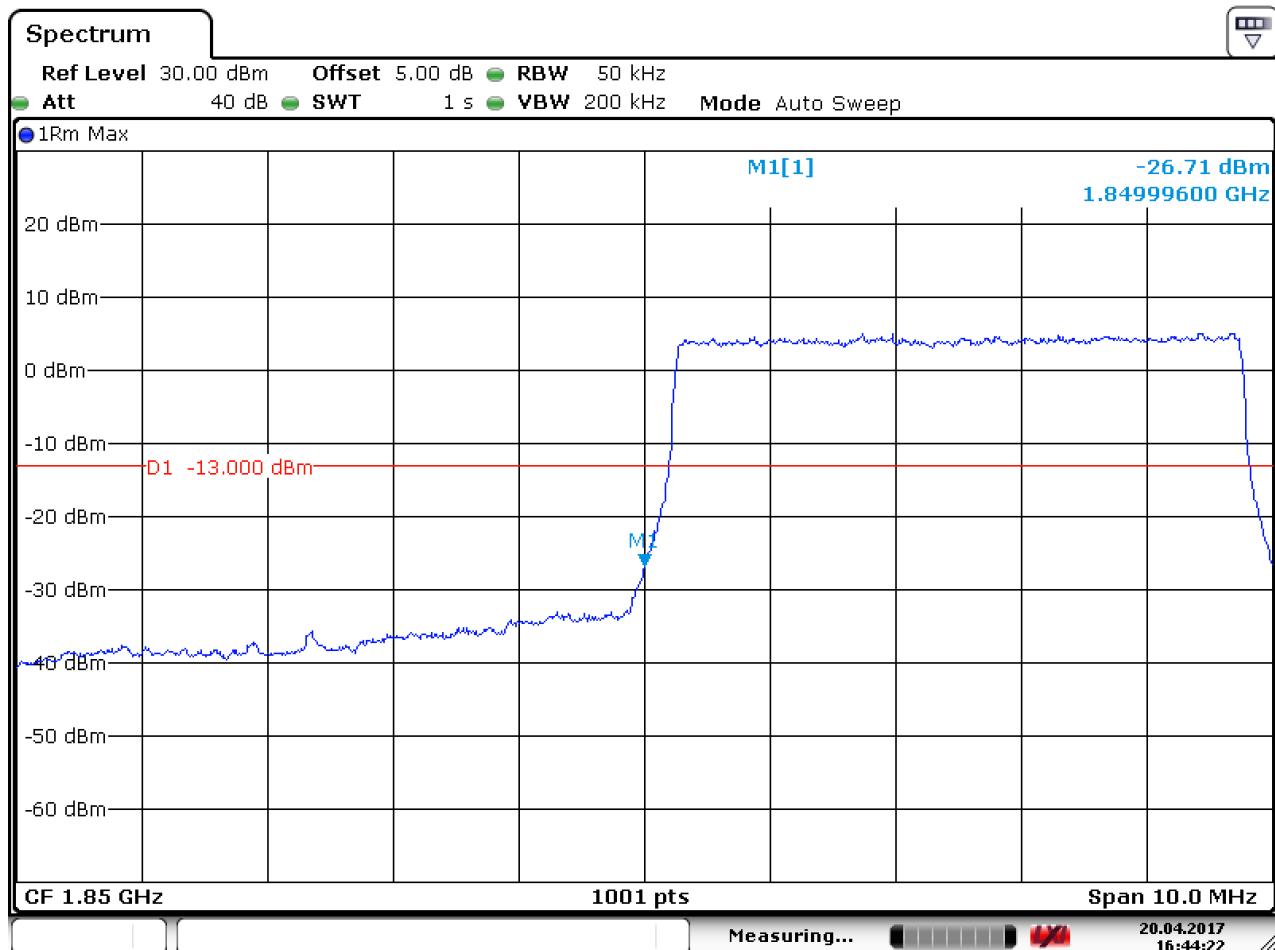
5.1.1.5.1 Test Channel = LCH

5.1.1.5.1.1 Test RB=1RB

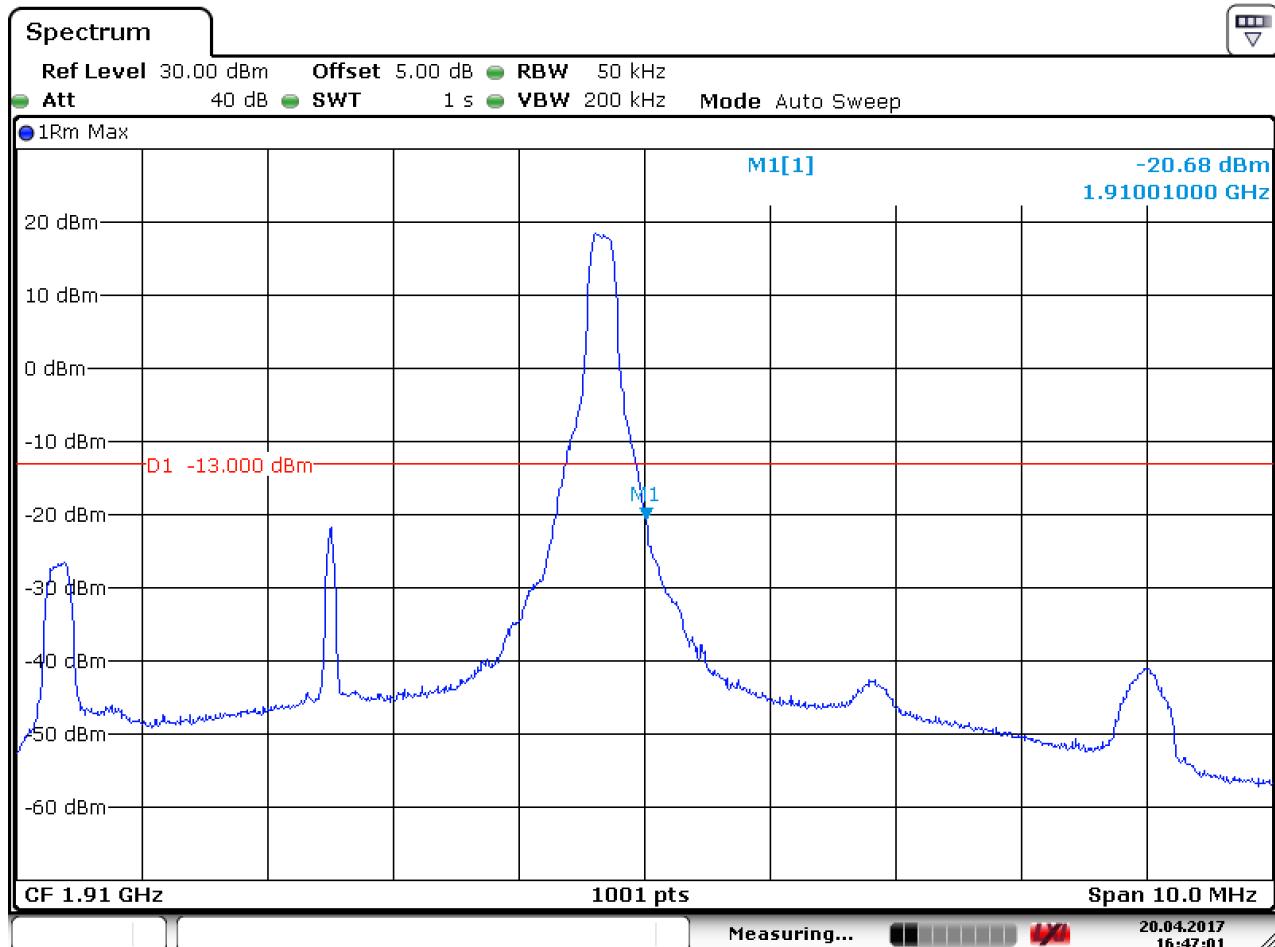


Date: 20.APR.2017 16:46:06

5.1.1.5.1.2 Test RB=25RB

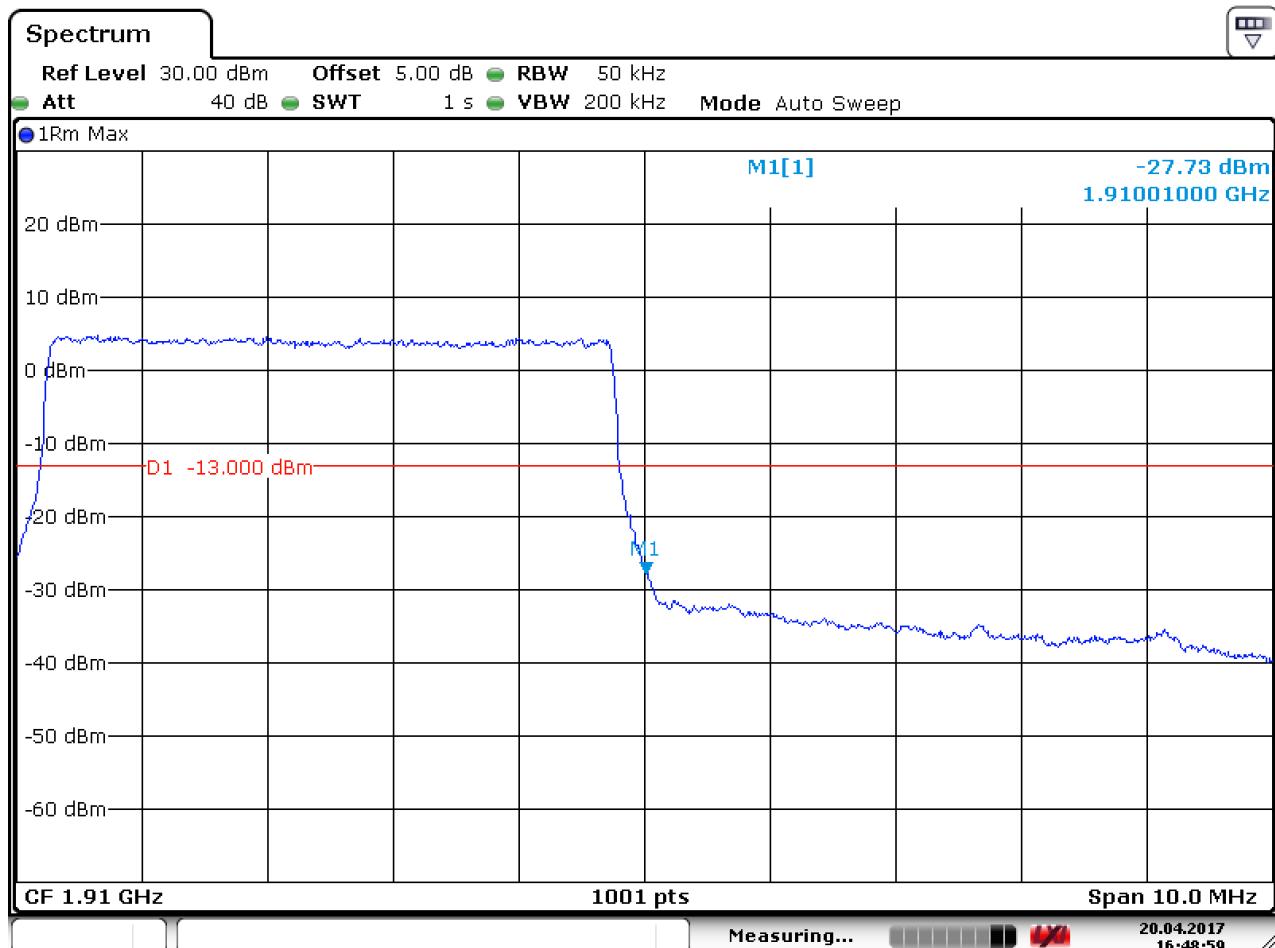


Date: 20.APR.2017 16:44:22

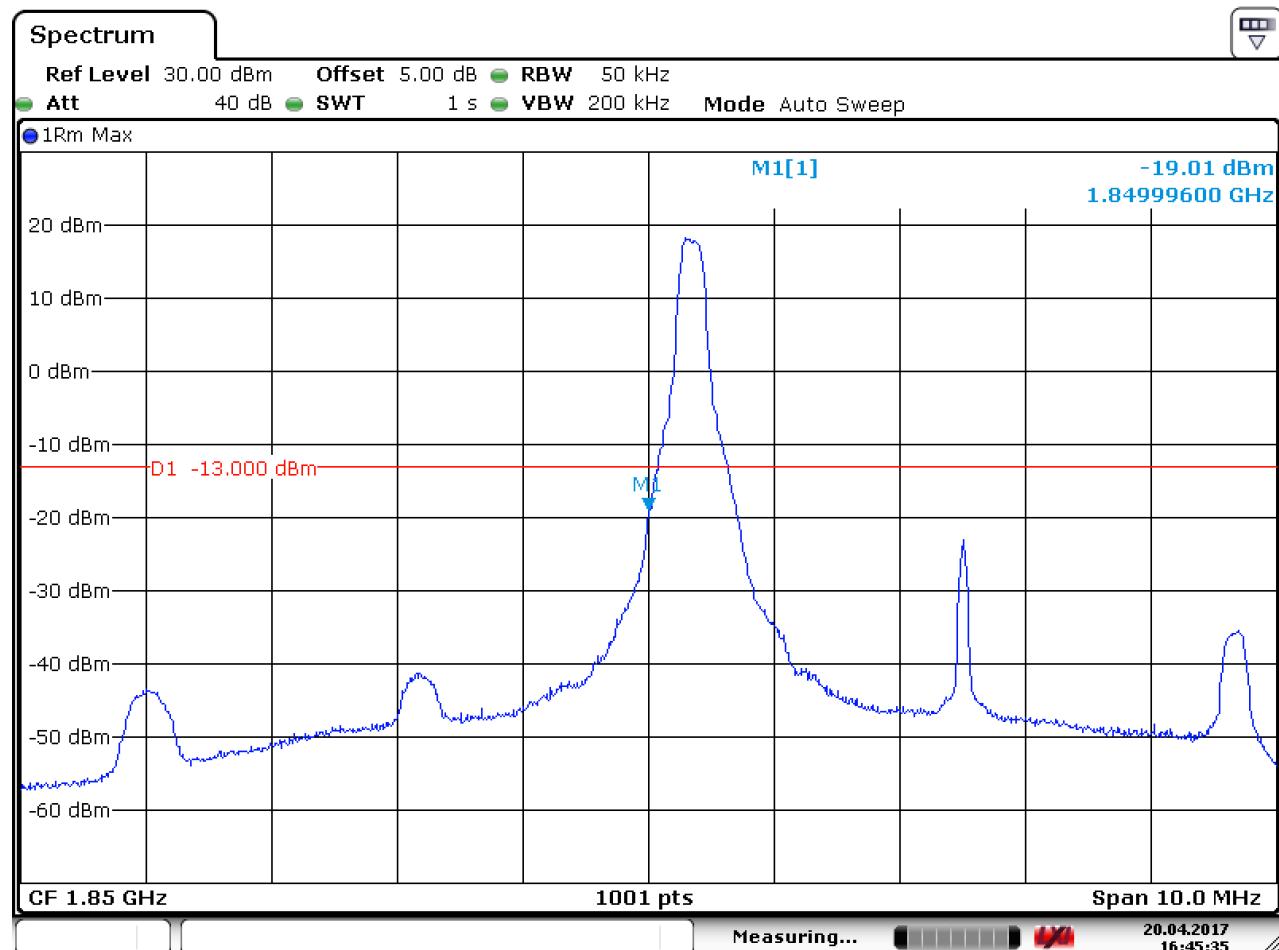
5.1.1.5.2 Test Channel = HCH**5.1.1.5.2.1 Test RB=1RB**

Date: 20.APR.2017 16:47:01

5.1.1.5.2.2 Test RB=25RB

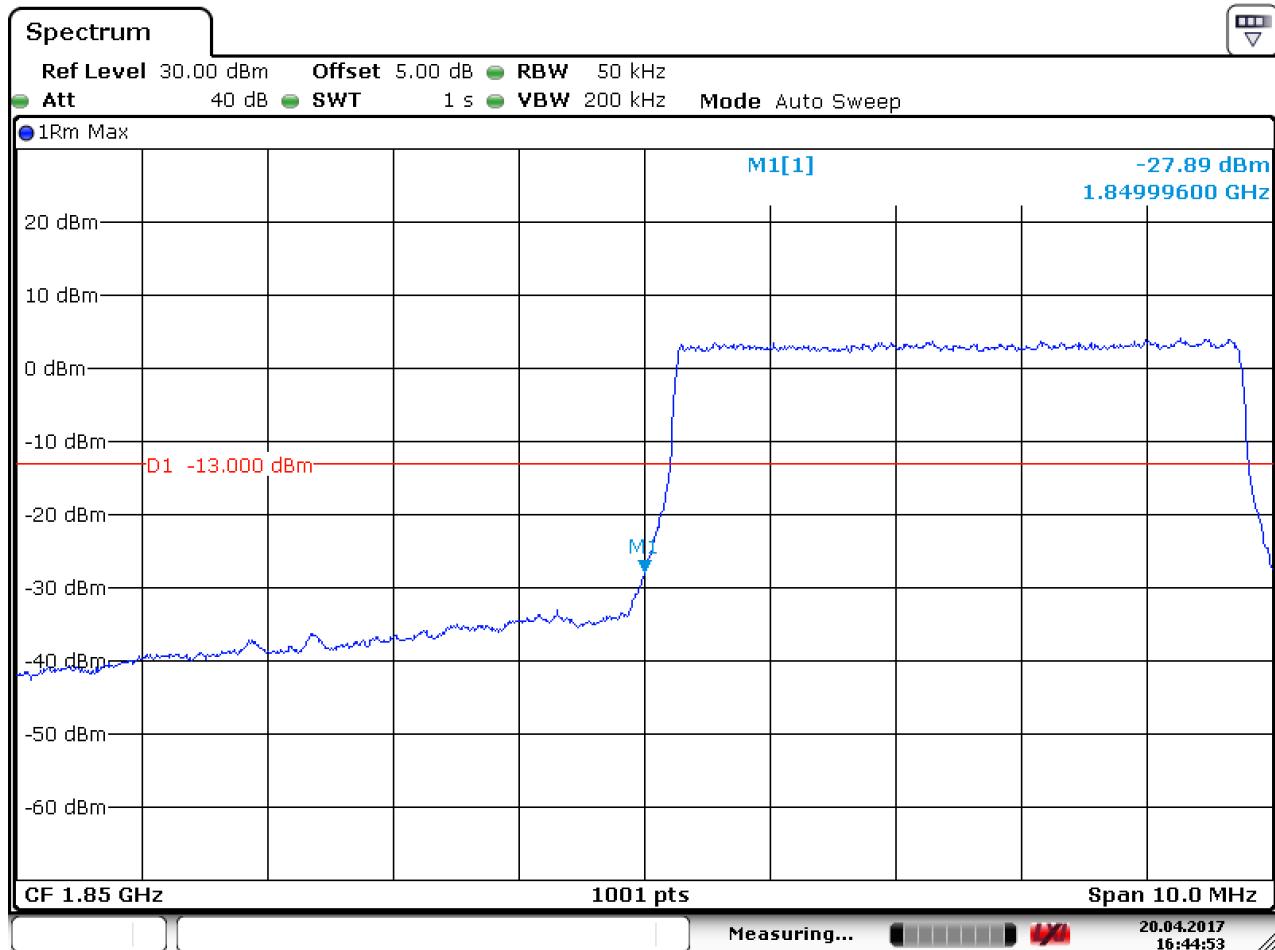


Date: 20.APR.2017 16:48:59

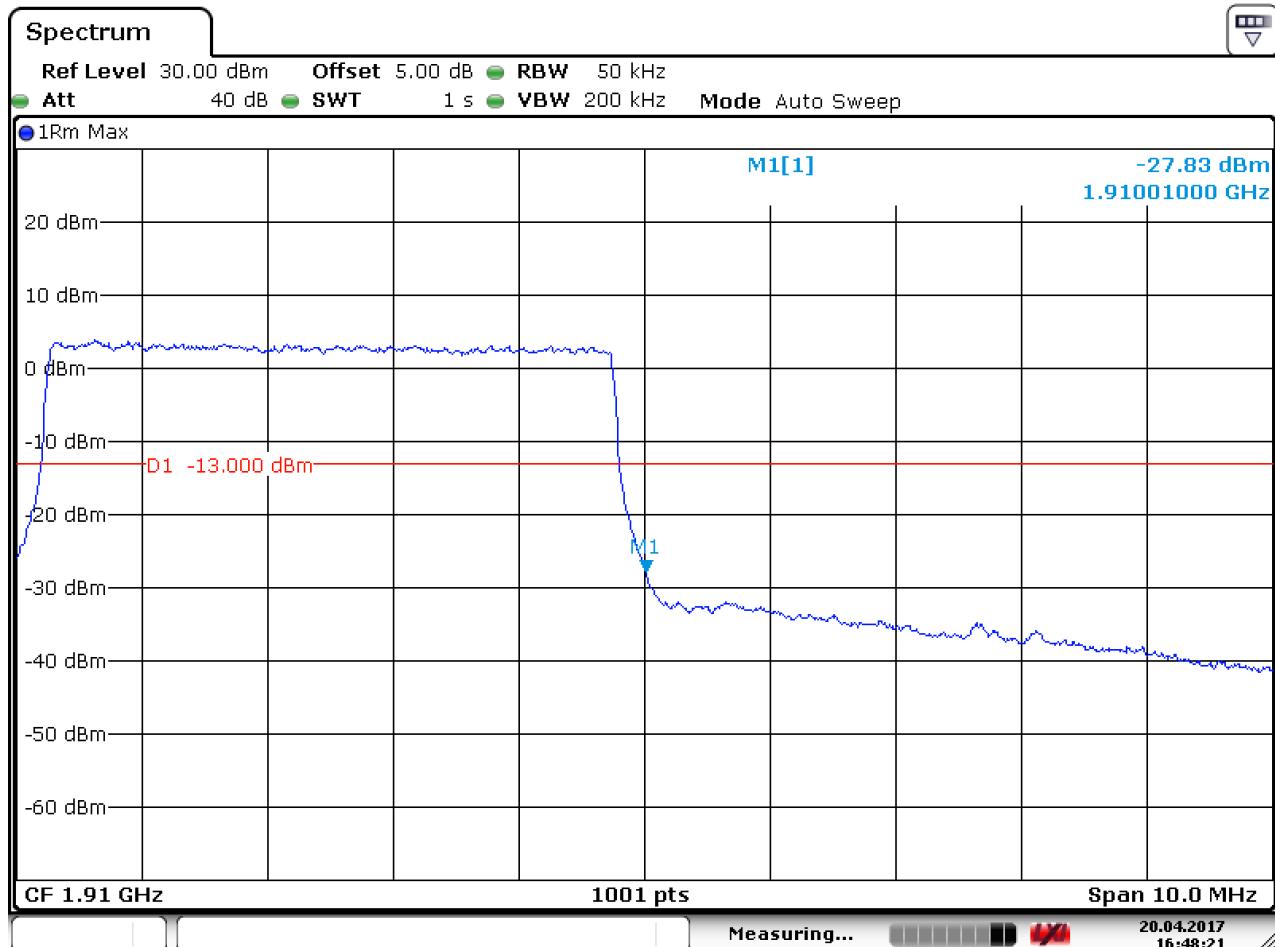
5.1.1.6 Test Mode = LTE/TM2 5MHz**5.1.1.6.1 Test Channel = LCH****5.1.1.6.1.1 Test RB=1RB**

Date: 20.APR.2017 16:45:35

5.1.1.6.1.2 Test RB=25RB

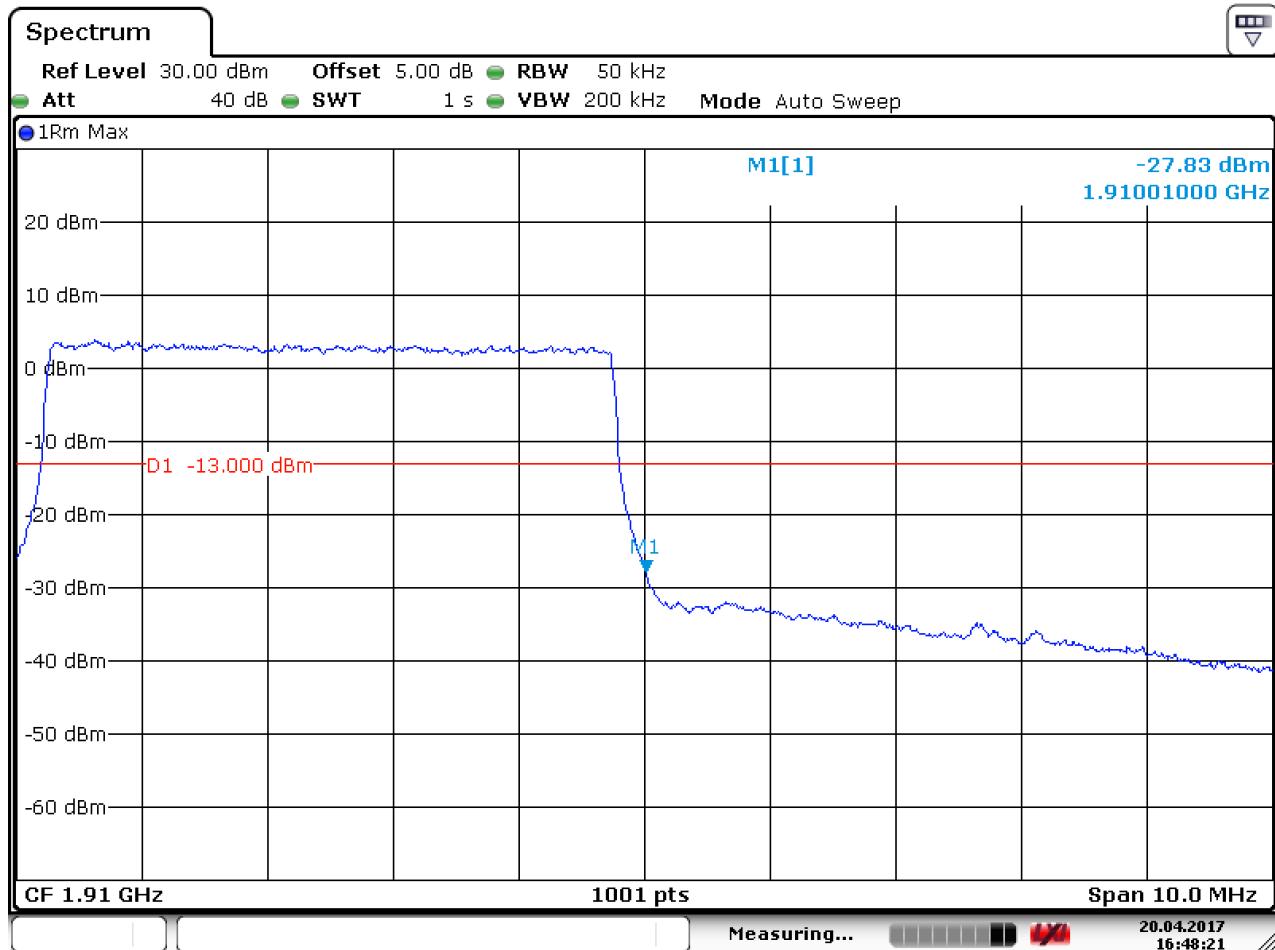


Date: 20.APR.2017 16:44:54

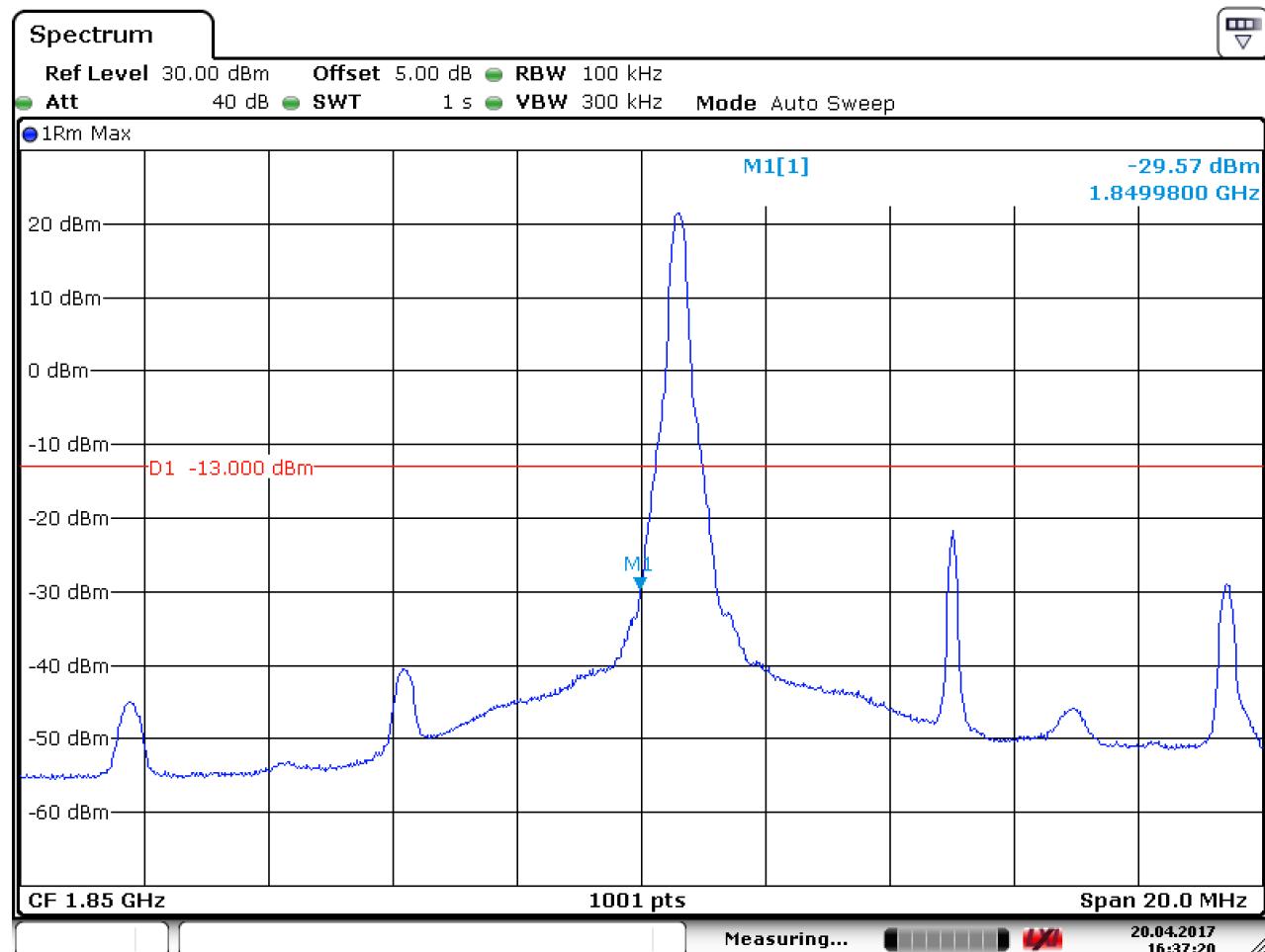
5.1.1.6.2 Test Channel = HCH**5.1.1.6.2.1 Test RB=1RB**

Date: 20.APR.2017 16:48:22

5.1.1.6.2.2 Test RB=25RB

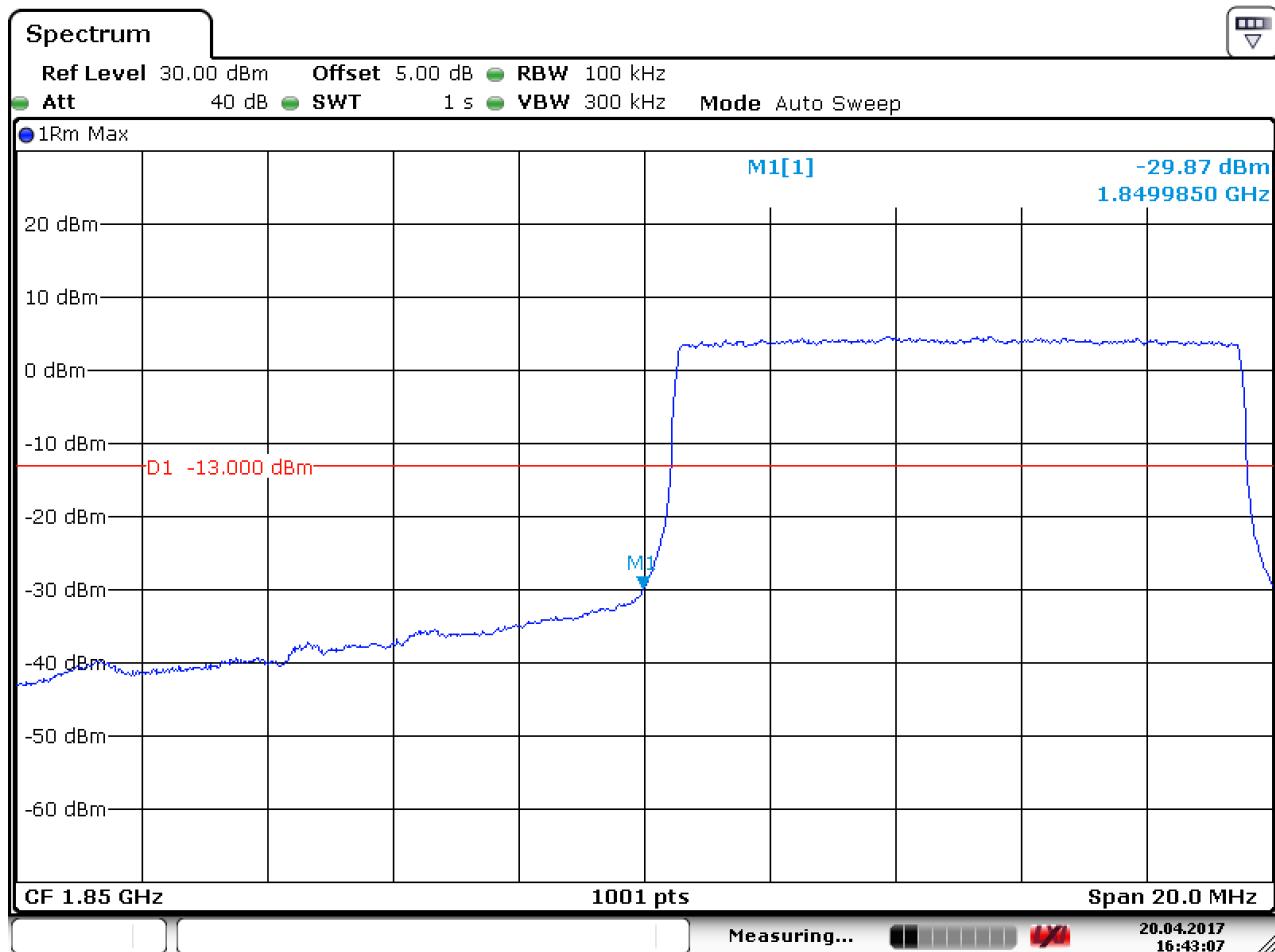


Date: 20.APR.2017 16:48:22

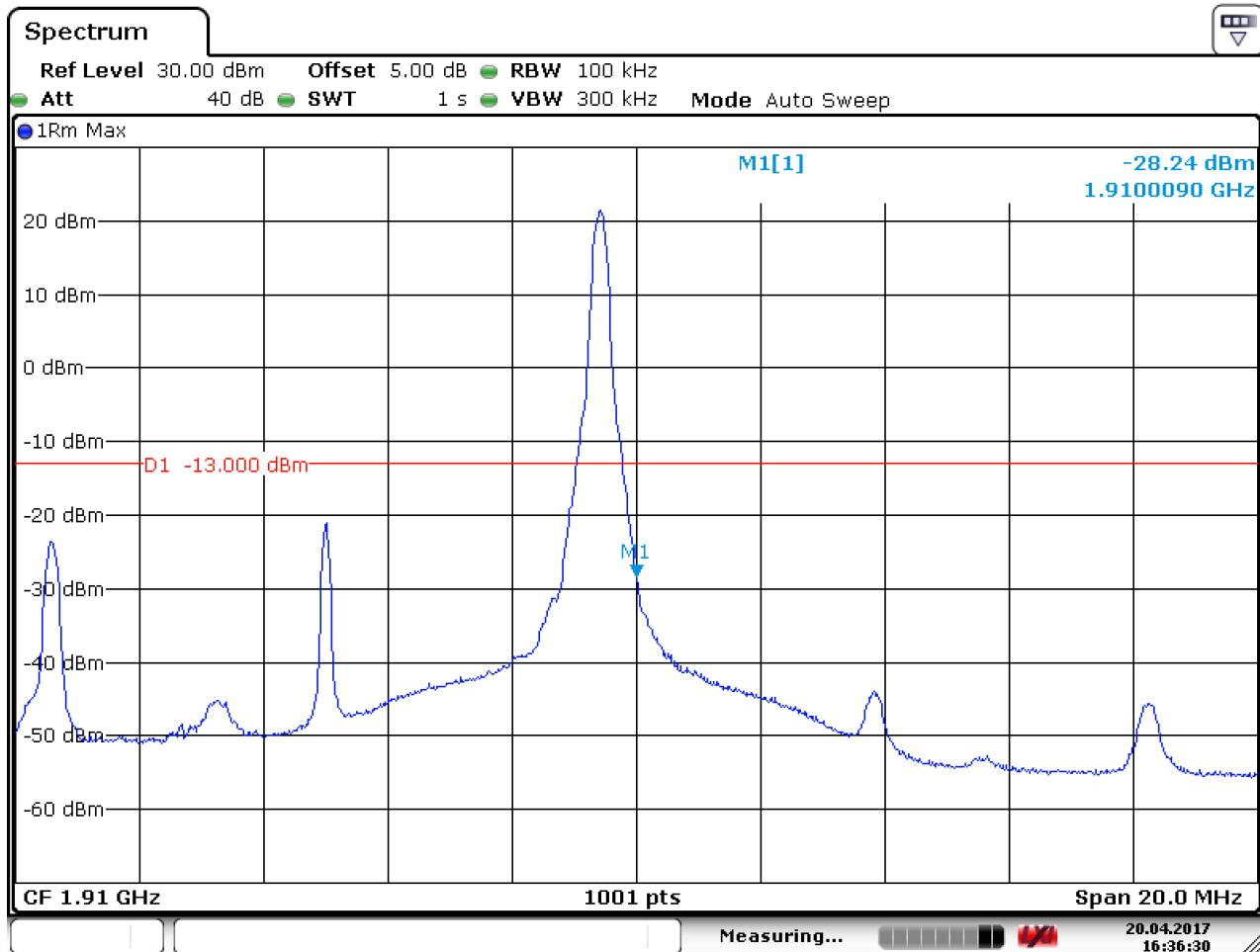
5.1.1.7 Test Mode = LTE/TM1 10MHz**5.1.1.7.1 Test Channel = LCH****5.1.1.7.1.1 Test RB=1RB**

Date: 20.APR.2017 16:37:21

5.1.1.7.1.2 Test RB=50RB

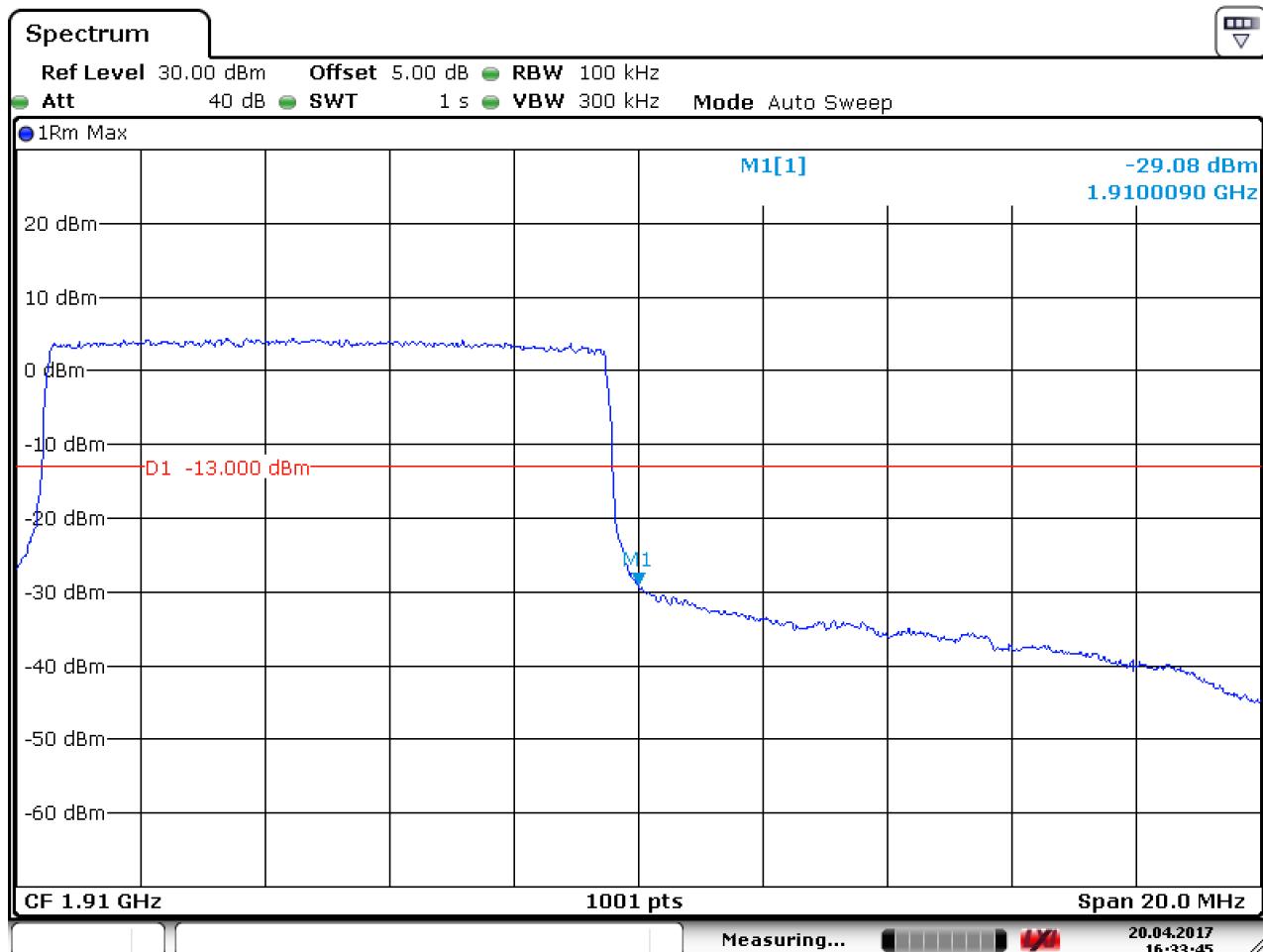


Date: 20.APR.2017 16:43:07

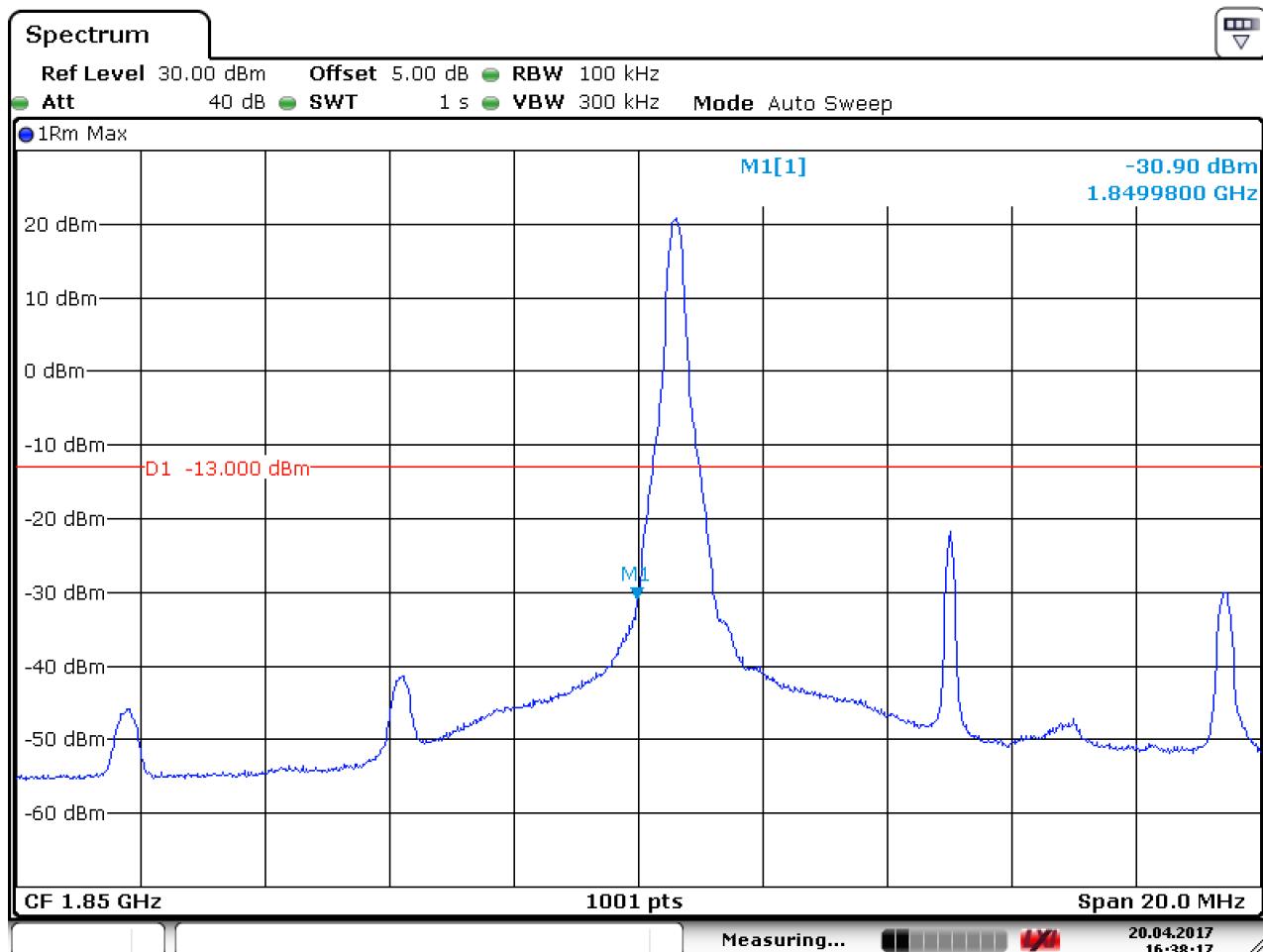
5.1.1.7.2 Test Channel = HCH**5.1.1.7.2.1 Test RB=1RB**

Date: 20.APR.2017 16:36:31

5.1.1.7.2.2 Test RB=50RB



Date: 20.APR.2017 16:33:46

5.1.1.8 Test Mode = LTE/TM2 10MHz**5.1.1.8.1 Test Channel = LCH****5.1.1.8.1.1 Test RB=1RB**

Date: 20.APR.2017 16:38:18