

EMC Test Report

Project Number: 3811993

Report Number: 3811993EMC01 **Revision Level:** 0

Client: Continental Automotive Systems, Inc.

Equipment Under Test: Wireless Modem Module

Model: TVN

FCC Rule Parts: Part 2, Part 27, Part 22H, Part 24E

Industry Canada: RSS-GEN, Issue 4

RSS-130, Issue 1

RSS-132, Issue 3

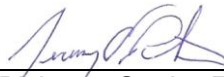
RSS-133, Issue 6

RSS-139, Issue 3

Report issued on: 23 September 2015

Test Result: Compliant

Tested by:



Jeremy O. Pickens, Senior EMC Engineer

Reviewed by:



David Schramm, EMC/RF/SAR/HAC Manager

Remarks:

This report details the results of the testing carried out on one sample, the results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

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1 Summary of Test Results

| Reference Sections | | Test Description | Test Limit | Test Condition | Test Result |
|---|--|---|---|----------------|-------------|
| FCC | IC | | | | |
| 2.1046 | RSS-GEN (6.12) | Conducted Output Power | N/A | Conducted | Pass |
| 24.232(d) 27.50(d)(5) | RSS-130 (4.4) RSS-132 (5.4) RSS-133 (6.4) RSS-139 (6.4) | Peak-to-Average Ratio | <13 dB | | Pass |
| 2.1049 22.917(a) 24.238(a) | RSS-GEN(6.6) RSS-133 (2.3) RSS-139(2.3) | Occupied Bandwidth | N/A | | Reported |
| 2.1051 22.917(a) 24.238(a) 27.53(c)(2) 27.53(h) | RSS-130 (4.6.1) RSS-132 (5.5) RSS-133 (6.5.1) RSS-139(6.5.1) | Band Edge / Conducted Spurious Emissions | $< 43 + 10\log_{10}(P_{\text{Watts}})$ at band edge and for all out of band emissions | | Pass |
| 22.913(a)(2) 27.55(b)(10) | -- | Effective Radiated Power | < 3 Watts max ERP | Radiated | Pass |
| -- | RSS-130 (4.4) | Effective Radiated Power | < 5 Watts max ERP | | Pass |
| 24.232(c) 27.50(d)(4) | RSS-132 (5.4) RSS-133 (6.4) RSS-139 (6.4) | Effective Isotropic Radiated Power | < 1 Watts max EIRP | | Pass |
| 2.1053 22.917(a) 24.238(a) 27.53(c)(2) 27.53(h) | RSS-GEN (6.13) RSS-130 (4.6) RSS-132 (5.5) RSS-133 (6.5.1) RSS-139 (6.5.1) | Radiated Spurious Emissions | $< 43 + 10\log_{10}(P_{\text{Watts}})$ at band edge and for all out of band emissions | | Pass |
| 2.1055 22.917(a) 24.238(a) 27.5(b) 27.5(h) 27.54 | RSS-GEN (6.11) RSS-130 (4.3) RSS-132 (5.3) RSS-133 (6.3) RSS-139 (6.3) | Frequency Stability | <2.5 ppm | | Pass |

1.1 Modifications Required to Compliance

None

2 General Information

2.1 Client Information

Name: Continental Automotive System, Inc.
 Address: 21440 West Lake Cook Road
 City, State, Zip, Country: Deer Park, IL 60010, USA

2.2 Test Laboratory

Name: SGS North America, Inc.
 Address: 620 Old Peachtree Road NW, Suite 100
 City, State, Zip, Country: Suwanee, GA 30024, USA

2.3 General Information of EUT

Type of Product: Wireless Modem Module
 Model Number: TVN
 FCC ID: LHJ-TVN
 IC ID: 2807E-TVN
 IMEI Number: 352584070000705

Rated Voltage: 10.2 – 13.8 Vdc,
 Test Voltage: 12 Vdc,

Tx Frequency Range: 1850 - 1910 MHz (LTE Band 2)
 1710 – 1755 MHz (LTE Band 4)
 824 – 849 MHz (LTE Band 5)
 777 – 787 MHz (LTE Band 13)

FCC Classification: PCS Licensed Transmitter PCB
 Type: Pre Production

Sample Received Date: 28 July 2015
 Dates of testing: 17 Aug - 22 Sept 2015

2.4 Operating Modes and Conditions

The EUT was exercised by connecting a CMW communications tester to the device. The CMW was used to control signaling and channel during testing.

3 RF Output Power

3.1 Test Result

| Test Description | Basic Standards | Test Result |
|------------------|-----------------------------------|-------------|
| RF Output Power | FCC Part 2.1046 RSS-GEN (6.12) | Compliant |

3.2 Test Method

The EUT was directly connected to a Radio Communication Tester (CMW 500) and a radio link was established. The output power of the EUT was set to maximum value by using the maximum power setting on the CMW. The output power was measured using the CMW internal measurement functions.

3.3 Test Site

SGS EMC Laboratory, Suwanee, GA

Environmental Conditions

Temperature: 24.1 °C

Relative Humidity: 45.6 %

Atmospheric Pressure: 97.9 kPa

3.4 Test Equipment

Test Date: 13 August 2015

| Equipment | Model | Manufacturer | Asset Number | Cal Due Date |
|-----------------|--------|-----------------|--------------|--------------|
| CMW500 WIDEBAND | CMW500 | ROHDE & SCHWARZ | B094874 | 6-Dec-2015 |

- Based on manufacturer's specifications, the CMW-500 is on a 3 year calibration cycle.

3.5 Test Data - LTE Band 2

Max Power: 24.41dBm

| UpLink Channel | UL Frequency (MHz) | BW (MHz) | RB# | Position | Measured Power (dBm) | Cable Loss (dB) | Conducted Power (dBm) |
|----------------|--------------------|----------|-----|-------------|----------------------|-----------------|-----------------------|
| 18607 | 1850.7 | 1.4 | 1 | (RB_Pos:0) | 22.48 | 0.53 | 23.01 |
| 18607 | 1850.7 | 1.4 | 1 | (RB_Pos:5) | 23.61 | 0.53 | 24.14 |
| 18607 | 1850.7 | 1.4 | 4 | (RB_Pos:0) | 23.71 | 0.53 | 24.24 |
| 18607 | 1850.7 | 1.4 | 4 | (RB_Pos:2) | 23.74 | 0.53 | 24.27 |
| 18607 | 1850.7 | 1.4 | 6 | (RB_Pos:0) | 23.7 | 0.53 | 24.23 |
| 18900 | 1880 | 1.4 | 1 | (RB_Pos:0) | 23.69 | 0.53 | 24.22 |
| 18900 | 1880 | 1.4 | 1 | (RB_Pos:5) | 23.75 | 0.53 | 24.28 |
| 18900 | 1880 | 1.4 | 4 | (RB_Pos:0) | 23.77 | 0.53 | 24.3 |
| 18900 | 1880 | 1.4 | 4 | (RB_Pos:2) | 23.74 | 0.53 | 24.27 |
| 18900 | 1880 | 1.4 | 6 | (RB_Pos:0) | 23.7 | 0.53 | 24.23 |
| 19193 | 1909.3 | 1.4 | 1 | (RB_Pos:0) | 22.51 | 0.54 | 23.05 |
| 19193 | 1909.3 | 1.4 | 1 | (RB_Pos:5) | 23.6 | 0.54 | 24.14 |
| 19193 | 1909.3 | 1.4 | 4 | (RB_Pos:0) | 23.73 | 0.54 | 24.27 |
| 19193 | 1909.3 | 1.4 | 4 | (RB_Pos:2) | 23.76 | 0.54 | 24.3 |
| 19193 | 1909.3 | 1.4 | 6 | (RB_Pos:0) | 23.72 | 0.54 | 24.26 |
| 18615 | 1851.5 | 3 | 1 | (RB_Pos:0) | 22.53 | 0.53 | 23.06 |
| 18615 | 1851.5 | 3 | 1 | (RB_Pos:14) | 23.64 | 0.53 | 24.17 |
| 18615 | 1851.5 | 3 | 8 | (RB_Pos:0) | 23.78 | 0.53 | 24.31 |
| 18615 | 1851.5 | 3 | 8 | (RB_Pos:7) | 23.67 | 0.53 | 24.2 |
| 18615 | 1851.5 | 3 | 15 | (RB_Pos:0) | 22.83 | 0.53 | 23.36 |
| 18900 | 1880 | 3 | 1 | (RB_Pos:0) | 22.45 | 0.53 | 22.98 |
| 18900 | 1880 | 3 | 1 | (RB_Pos:14) | 23.76 | 0.53 | 24.29 |
| 18900 | 1880 | 3 | 8 | (RB_Pos:0) | 23.85 | 0.53 | 24.38 |
| 18900 | 1880 | 3 | 8 | (RB_Pos:7) | 23.72 | 0.53 | 24.25 |
| 18900 | 1880 | 3 | 15 | (RB_Pos:0) | 22.93 | 0.53 | 23.46 |
| 19185 | 1909.9 | 3 | 1 | (RB_Pos:0) | 22.52 | 0.54 | 23.06 |
| 19185 | 1909.9 | 3 | 1 | (RB_Pos:14) | 23.63 | 0.54 | 24.17 |
| 19185 | 1909.9 | 3 | 8 | (RB_Pos:0) | 23.81 | 0.54 | 24.35 |
| 19185 | 1909.9 | 3 | 8 | (RB_Pos:7) | 23.67 | 0.54 | 24.21 |
| 19185 | 1909.9 | 3 | 15 | (RB_Pos:0) | 22.78 | 0.54 | 23.32 |
| 18625 | 1852.5 | 5 | 1 | (RB_Pos:0) | 23.24 | 0.53 | 23.77 |
| 18625 | 1852.5 | 5 | 1 | (RB_Pos:24) | 23.18 | 0.53 | 23.71 |
| 18625 | 1852.5 | 5 | 12 | (RB_Pos:0) | 22.25 | 0.53 | 22.78 |
| 18625 | 1852.5 | 5 | 12 | (RB_Pos:13) | 22.3 | 0.53 | 22.83 |
| 18625 | 1852.5 | 5 | 25 | (RB_Pos:0) | 22.13 | 0.53 | 22.66 |
| 18900 | 1880 | 5 | 1 | (RB_Pos:0) | 23.69 | 0.53 | 24.22 |
| 18900 | 1880 | 5 | 1 | (RB_Pos:24) | 23.51 | 0.53 | 24.04 |
| 18900 | 1880 | 5 | 12 | (RB_Pos:0) | 22.83 | 0.53 | 23.36 |
| 18900 | 1880 | 5 | 12 | (RB_Pos:13) | 22.67 | 0.53 | 23.2 |
| 18900 | 1880 | 5 | 25 | (RB_Pos:0) | 22.71 | 0.53 | 23.24 |
| 19175 | 1907.5 | 5 | 1 | (RB_Pos:0) | 23.28 | 0.54 | 23.82 |
| 19175 | 1907.5 | 5 | 1 | (RB_Pos:24) | 23.26 | 0.54 | 23.8 |
| 19175 | 1907.5 | 5 | 12 | (RB_Pos:0) | 22.28 | 0.54 | 22.82 |
| 19175 | 1907.5 | 5 | 12 | (RB_Pos:13) | 22.21 | 0.54 | 22.75 |
| 19175 | 1907.5 | 5 | 25 | (RB_Pos:0) | 22.22 | 0.54 | 22.76 |
| 18650 | 1855 | 10 | 1 | (RB_Pos:0) | 23.17 | 0.53 | 23.7 |
| 18650 | 1855 | 10 | 1 | (RB_Pos:49) | 23.47 | 0.53 | 24 |
| 18650 | 1855 | 10 | 25 | (RB_Pos:0) | 22.22 | 0.53 | 22.75 |
| 18650 | 1855 | 10 | 25 | (RB_Pos:25) | 22.34 | 0.53 | 22.87 |
| 18650 | 1855 | 10 | 50 | (RB_Pos:0) | 22.16 | 0.53 | 22.69 |
| 18900 | 1880 | 10 | 1 | (RB_Pos:0) | 23.79 | 0.53 | 24.32 |
| 18900 | 1880 | 10 | 1 | (RB_Pos:49) | 23.47 | 0.53 | 24 |
| 18900 | 1880 | 10 | 25 | (RB_Pos:0) | 22.79 | 0.53 | 23.32 |
| 18900 | 1880 | 10 | 25 | (RB_Pos:25) | 22.6 | 0.53 | 23.13 |
| 18900 | 1880 | 10 | 50 | (RB_Pos:0) | 22.6 | 0.53 | 23.13 |
| 19150 | 1905 | 10 | 1 | (RB_Pos:0) | 23.25 | 0.54 | 23.79 |
| 19150 | 1905 | 10 | 1 | (RB_Pos:49) | 23.12 | 0.54 | 23.66 |
| 19150 | 1905 | 10 | 25 | (RB_Pos:0) | 22.19 | 0.54 | 22.73 |
| 19150 | 1905 | 10 | 25 | (RB_Pos:25) | 22.19 | 0.54 | 22.73 |

3.6 Test Data - LTE Band 4

Max Power: 23.81dBm

| UpLink Channel | UL Frequency (MHz) | BW (MHz) | RB# | Position | Measured Power (dBm) | Cable Loss (dB) | Conducted Power (dBm) |
|----------------|--------------------|----------|-----|-------------|----------------------|-----------------|-----------------------|
| 19957 | 1710.7 | 1.4 | 1 | (RB_Pos:0) | 23.29 | 0.52 | 23.81 |
| 19957 | 1710.7 | 1.4 | 1 | (RB_Pos:5) | 23.27 | 0.52 | 23.79 |
| 19957 | 1710.7 | 1.4 | 4 | (RB_Pos:0) | 23.28 | 0.52 | 23.8 |
| 19957 | 1710.7 | 1.4 | 4 | (RB_Pos:2) | 23.27 | 0.52 | 23.79 |
| 19957 | 1710.7 | 1.4 | 6 | (RB_Pos:0) | 22.31 | 0.52 | 22.83 |
| 20175 | 1732.5 | 1.4 | 1 | (RB_Pos:0) | 23.12 | 0.52 | 23.64 |
| 20175 | 1732.5 | 1.4 | 1 | (RB_Pos:5) | 22.96 | 0.52 | 23.48 |
| 20175 | 1732.5 | 1.4 | 4 | (RB_Pos:0) | 23.12 | 0.52 | 23.64 |
| 20175 | 1732.5 | 1.4 | 4 | (RB_Pos:2) | 23.12 | 0.52 | 23.64 |
| 20175 | 1732.5 | 1.4 | 6 | (RB_Pos:0) | 22.14 | 0.52 | 22.66 |
| 20393 | 1754.3 | 1.4 | 1 | (RB_Pos:0) | 23.2 | 0.53 | 23.73 |
| 20393 | 1754.3 | 1.4 | 1 | (RB_Pos:5) | 23.16 | 0.53 | 23.69 |
| 20393 | 1754.3 | 1.4 | 4 | (RB_Pos:0) | 23.2 | 0.53 | 23.73 |
| 20393 | 1754.3 | 1.4 | 4 | (RB_Pos:2) | 23.17 | 0.53 | 23.7 |
| 20393 | 1754.3 | 1.4 | 6 | (RB_Pos:0) | 22.05 | 0.53 | 22.58 |
| 19965 | 1711.5 | 3 | 1 | (RB_Pos:0) | 23.18 | 0.52 | 23.7 |
| 19965 | 1711.5 | 3 | 1 | (RB_Pos:14) | 23.16 | 0.52 | 23.68 |
| 19965 | 1711.5 | 3 | 8 | (RB_Pos:0) | 23.17 | 0.52 | 23.69 |
| 19965 | 1711.5 | 3 | 8 | (RB_Pos:7) | 23.16 | 0.52 | 23.68 |
| 19965 | 1711.5 | 3 | 15 | (RB_Pos:0) | 23.15 | 0.52 | 23.67 |
| 20175 | 1732.5 | 3 | 1 | (RB_Pos:0) | 23.15 | 0.52 | 23.67 |
| 20175 | 1732.5 | 3 | 1 | (RB_Pos:14) | 23.15 | 0.52 | 23.67 |
| 20175 | 1732.5 | 3 | 8 | (RB_Pos:0) | 23.17 | 0.52 | 23.69 |
| 20175 | 1732.5 | 3 | 8 | (RB_Pos:7) | 23.16 | 0.52 | 23.68 |
| 20175 | 1732.5 | 3 | 15 | (RB_Pos:0) | 23.14 | 0.52 | 23.66 |
| 20385 | 1753.5 | 3 | 1 | (RB_Pos:0) | 23.14 | 0.53 | 23.67 |
| 20385 | 1753.5 | 3 | 1 | (RB_Pos:14) | 23.17 | 0.53 | 23.7 |
| 20385 | 1753.5 | 3 | 8 | (RB_Pos:0) | 23.16 | 0.53 | 23.69 |
| 20385 | 1753.5 | 3 | 8 | (RB_Pos:7) | 23.15 | 0.53 | 23.68 |
| 20385 | 1753.5 | 3 | 15 | (RB_Pos:0) | 23.18 | 0.53 | 23.71 |
| 19975 | 1712.5 | 5 | 1 | (RB_Pos:0) | 23.19 | 0.52 | 23.71 |
| 19975 | 1712.5 | 5 | 1 | (RB_Pos:24) | 23.16 | 0.52 | 23.68 |
| 19975 | 1712.5 | 5 | 12 | (RB_Pos:0) | 23.15 | 0.52 | 23.67 |
| 19975 | 1712.5 | 5 | 12 | (RB_Pos:13) | 23.14 | 0.52 | 23.66 |
| 19975 | 1712.5 | 5 | 25 | (RB_Pos:0) | 23.13 | 0.52 | 23.65 |
| 20175 | 1732.5 | 5 | 1 | (RB_Pos:0) | 23.18 | 0.52 | 23.7 |
| 20175 | 1732.5 | 5 | 1 | (RB_Pos:24) | 23.15 | 0.52 | 23.67 |
| 20175 | 1732.5 | 5 | 12 | (RB_Pos:0) | 23.14 | 0.52 | 23.66 |
| 20175 | 1732.5 | 5 | 12 | (RB_Pos:13) | 23.13 | 0.52 | 23.65 |
| 20175 | 1732.5 | 5 | 25 | (RB_Pos:0) | 23.12 | 0.52 | 23.64 |
| 20375 | 1752.5 | 5 | 1 | (RB_Pos:0) | 23.15 | 0.53 | 23.68 |
| 20375 | 1752.5 | 5 | 1 | (RB_Pos:24) | 23.15 | 0.53 | 23.68 |
| 20375 | 1752.5 | 5 | 12 | (RB_Pos:0) | 23.14 | 0.53 | 23.67 |
| 20375 | 1752.5 | 5 | 12 | (RB_Pos:13) | 23.13 | 0.53 | 23.66 |
| 20375 | 1752.5 | 5 | 25 | (RB_Pos:0) | 23.12 | 0.53 | 23.65 |
| 20000 | 1715 | 10 | 1 | (RB_Pos:0) | 23.18 | 0.52 | 23.7 |
| 20000 | 1715 | 10 | 1 | (RB_Pos:49) | 23.15 | 0.52 | 23.67 |
| 20000 | 1715 | 10 | 25 | (RB_Pos:0) | 23.13 | 0.52 | 23.65 |
| 20000 | 1715 | 10 | 25 | (RB_Pos:25) | 23.17 | 0.52 | 23.69 |
| 20000 | 1715 | 10 | 50 | (RB_Pos:0) | 23.14 | 0.52 | 23.66 |
| 20175 | 1732.5 | 10 | 1 | (RB_Pos:0) | 23.17 | 0.52 | 23.69 |
| 20175 | 1732.5 | 10 | 1 | (RB_Pos:49) | 23.14 | 0.52 | 23.66 |
| 20175 | 1732.5 | 10 | 25 | (RB_Pos:0) | 23.13 | 0.52 | 23.65 |
| 20175 | 1732.5 | 10 | 25 | (RB_Pos:25) | 23.12 | 0.52 | 23.64 |
| 20175 | 1732.5 | 10 | 50 | (RB_Pos:0) | 23.17 | 0.52 | 23.69 |
| 20350 | 1750 | 10 | 1 | (RB_Pos:0) | 23.17 | 0.53 | 23.7 |
| 20350 | 1750 | 10 | 1 | (RB_Pos:49) | 23.14 | 0.53 | 23.67 |
| 20350 | 1750 | 10 | 25 | (RB_Pos:0) | 23.16 | 0.53 | 23.69 |
| 20350 | 1750 | 10 | 25 | (RB_Pos:25) | 23.12 | 0.53 | 23.65 |

3.7 Test Data - LTE Band 5

Max Power: 23.84dBm

| UpLink Channel | UL Frequency (MHz) | BW (MHz) | RB# | Position | Measured Power (dBm) | Cable Loss (dB) | Conducted Power (dBm) |
|----------------|--------------------|----------|-----|-------------|----------------------|-----------------|-----------------------|
| 20407 | 824.7 | 1.4 | 1 | (RB_Pos:0) | 22.37 | 0.35 | 22.72 |
| 20407 | 824.7 | 1.4 | 1 | (RB_Pos:5) | 23.37 | 0.35 | 23.72 |
| 20407 | 824.7 | 1.4 | 4 | (RB_Pos:0) | 23.48 | 0.35 | 23.83 |
| 20407 | 824.7 | 1.4 | 4 | (RB_Pos:2) | 23.45 | 0.35 | 23.8 |
| 20407 | 824.7 | 1.4 | 6 | (RB_Pos:0) | 23.39 | 0.35 | 23.74 |
| 20525 | 836.5 | 1.4 | 1 | (RB_Pos:0) | 22.38 | 0.35 | 22.73 |
| 20525 | 836.5 | 1.4 | 1 | (RB_Pos:5) | 23.37 | 0.35 | 23.72 |
| 20525 | 836.5 | 1.4 | 4 | (RB_Pos:0) | 23.48 | 0.35 | 23.83 |
| 20525 | 836.5 | 1.4 | 4 | (RB_Pos:2) | 23.45 | 0.35 | 23.8 |
| 20525 | 836.5 | 1.4 | 6 | (RB_Pos:0) | 23.39 | 0.35 | 23.74 |
| 20643 | 848.5 | 1.4 | 1 | (RB_Pos:0) | 23.38 | 0.35 | 23.73 |
| 20643 | 848.5 | 1.4 | 1 | (RB_Pos:5) | 23.29 | 0.35 | 23.64 |
| 20643 | 848.5 | 1.4 | 4 | (RB_Pos:0) | 23.4 | 0.35 | 23.75 |
| 20643 | 848.5 | 1.4 | 4 | (RB_Pos:2) | 23.33 | 0.35 | 23.68 |
| 20643 | 848.5 | 1.4 | 6 | (RB_Pos:0) | 22.42 | 0.35 | 22.77 |
| 20415 | 825.5 | 3 | 1 | (RB_Pos:0) | 22.33 | 0.35 | 22.68 |
| 20415 | 825.5 | 3 | 1 | (RB_Pos:14) | 23.45 | 0.35 | 23.8 |
| 20415 | 825.5 | 3 | 8 | (RB_Pos:0) | 23.37 | 0.35 | 23.72 |
| 20415 | 825.5 | 3 | 8 | (RB_Pos:7) | 23.49 | 0.35 | 23.84 |
| 20415 | 825.5 | 3 | 15 | (RB_Pos:0) | 22.45 | 0.35 | 22.8 |
| 20525 | 836.5 | 3 | 1 | (RB_Pos:0) | 22.33 | 0.35 | 22.68 |
| 20525 | 836.5 | 3 | 1 | (RB_Pos:14) | 23.43 | 0.35 | 23.78 |
| 20525 | 836.5 | 3 | 8 | (RB_Pos:0) | 23.37 | 0.35 | 23.72 |
| 20525 | 836.5 | 3 | 8 | (RB_Pos:7) | 23.48 | 0.35 | 23.83 |
| 20525 | 836.5 | 3 | 15 | (RB_Pos:0) | 22.45 | 0.35 | 22.8 |
| 20635 | 847.5 | 3 | 1 | (RB_Pos:0) | 23.42 | 0.35 | 23.77 |
| 20635 | 847.5 | 3 | 1 | (RB_Pos:14) | 23.27 | 0.35 | 23.62 |
| 20635 | 847.5 | 3 | 8 | (RB_Pos:0) | 22.41 | 0.35 | 22.76 |
| 20635 | 847.5 | 3 | 8 | (RB_Pos:7) | 22.37 | 0.35 | 22.72 |
| 20635 | 847.5 | 3 | 15 | (RB_Pos:0) | 22.32 | 0.35 | 22.67 |
| 20425 | 826.5 | 5 | 1 | (RB_Pos:0) | 23.37 | 0.35 | 23.72 |
| 20425 | 826.5 | 5 | 1 | (RB_Pos:24) | 23.36 | 0.35 | 23.71 |
| 20425 | 826.5 | 5 | 12 | (RB_Pos:0) | 23.37 | 0.35 | 23.72 |
| 20425 | 826.5 | 5 | 12 | (RB_Pos:13) | 23.43 | 0.35 | 23.78 |
| 20425 | 826.5 | 5 | 25 | (RB_Pos:0) | 22.42 | 0.35 | 22.77 |
| 20525 | 836.5 | 5 | 1 | (RB_Pos:0) | 23.34 | 0.35 | 23.69 |
| 20525 | 836.5 | 5 | 1 | (RB_Pos:24) | 23.35 | 0.35 | 23.7 |
| 20525 | 836.5 | 5 | 12 | (RB_Pos:0) | 22.46 | 0.35 | 22.81 |
| 20525 | 836.5 | 5 | 12 | (RB_Pos:13) | 22.44 | 0.35 | 22.79 |
| 20525 | 836.5 | 5 | 25 | (RB_Pos:0) | 22.47 | 0.35 | 22.82 |
| 20625 | 846.5 | 5 | 1 | (RB_Pos:0) | 23.36 | 0.35 | 23.71 |
| 20625 | 846.5 | 5 | 1 | (RB_Pos:24) | 23.39 | 0.35 | 23.74 |
| 20625 | 846.5 | 5 | 12 | (RB_Pos:0) | 22.63 | 0.35 | 22.98 |
| 20625 | 846.5 | 5 | 12 | (RB_Pos:13) | 22.33 | 0.35 | 22.68 |
| 20625 | 846.5 | 5 | 25 | (RB_Pos:0) | 22.39 | 0.35 | 22.74 |
| 20450 | 829 | 10 | 1 | (RB_Pos:0) | 23.27 | 0.35 | 23.62 |
| 20450 | 829 | 10 | 1 | (RB_Pos:49) | 23.36 | 0.35 | 23.71 |
| 20450 | 829 | 10 | 25 | (RB_Pos:0) | 22.42 | 0.35 | 22.77 |
| 20450 | 829 | 10 | 25 | (RB_Pos:25) | 22.36 | 0.35 | 22.71 |
| 20450 | 829 | 10 | 50 | (RB_Pos:0) | 22.35 | 0.35 | 22.7 |
| 20525 | 836.5 | 10 | 1 | (RB_Pos:0) | 23.28 | 0.35 | 23.63 |
| 20525 | 836.5 | 10 | 1 | (RB_Pos:49) | 23.39 | 0.35 | 23.74 |
| 20525 | 836.5 | 10 | 25 | (RB_Pos:0) | 22.48 | 0.35 | 22.83 |
| 20525 | 836.5 | 10 | 25 | (RB_Pos:25) | 22.39 | 0.35 | 22.74 |
| 20525 | 836.5 | 10 | 50 | (RB_Pos:0) | 22.3 | 0.35 | 22.65 |
| 20600 | 844 | 10 | 1 | (RB_Pos:0) | 23.26 | 0.35 | 23.61 |
| 20600 | 844 | 10 | 1 | (RB_Pos:49) | 23.26 | 0.35 | 23.61 |
| 20600 | 844 | 10 | 25 | (RB_Pos:0) | 22.26 | 0.35 | 22.61 |
| 20600 | 844 | 10 | 25 | (RB_Pos:25) | 22.32 | 0.35 | 22.67 |

3.8 Test Data - LTE Band 13

Max Power: 23.36dBm

| UpLink Channel | UL Frequency (MHz) | BW (MHz) | RB# | Position | Measured Power (dBm) | Cable Loss (dB) | Conducted Power (dBm) |
|----------------|--------------------|----------|-----|-------------|----------------------|-----------------|-----------------------|
| 23205 | 779.5 | 5 | 1 | (RB_Pos:0) | 23.02 | 0.34 | 23.36 |
| 23205 | 779.5 | 5 | 1 | (RB_Pos:24) | 22.86 | 0.34 | 23.2 |
| 23205 | 779.5 | 5 | 12 | (RB_Pos:0) | 21.94 | 0.34 | 22.28 |
| 23205 | 779.5 | 5 | 12 | (RB_Pos:12) | 21.98 | 0.34 | 22.32 |
| 23205 | 779.5 | 5 | 24 | (RB_Pos:0) | 21.89 | 0.34 | 22.23 |
| 23230 | 782 | 5 | 1 | (RB_Pos:0) | 22.92 | 0.34 | 23.26 |
| 23230 | 782 | 5 | 1 | (RB_Pos:24) | 22.91 | 0.34 | 23.25 |
| 23230 | 782 | 5 | 12 | (RB_Pos:0) | 21.95 | 0.34 | 22.29 |
| 23230 | 782 | 5 | 12 | (RB_Pos:12) | 21.87 | 0.34 | 22.21 |
| 23230 | 782 | 5 | 24 | (RB_Pos:0) | 21.92 | 0.34 | 22.26 |
| 23255 | 784.5 | 5 | 1 | (RB_Pos:0) | 22.86 | 0.34 | 23.2 |
| 23255 | 784.5 | 5 | 1 | (RB_Pos:24) | 22.97 | 0.34 | 23.31 |
| 23255 | 784.5 | 5 | 12 | (RB_Pos:0) | 21.94 | 0.34 | 22.28 |
| 23255 | 784.5 | 5 | 12 | (RB_Pos:12) | 21.82 | 0.34 | 22.16 |
| 23255 | 784.5 | 5 | 24 | (RB_Pos:0) | 21.8 | 0.34 | 22.14 |
| 23230 | 782 | 10 | 50 | (RB_Pos:0) | 21.81 | 0.34 | 22.15 |
| 23230 | 782 | 10 | 1 | (RB_Pos:0) | 22.85 | 0.34 | 23.19 |
| 23230 | 782 | 10 | 1 | (RB_Pos:25) | 22.84 | 0.34 | 23.18 |
| 23230 | 782 | 10 | 1 | (RB_Pos:49) | 22.84 | 0.34 | 23.18 |
| 23230 | 782 | 10 | 25 | (RB_Pos:0) | 21.84 | 0.34 | 22.18 |
| 23230 | 782 | 10 | 25 | (RB_Pos:24) | 21.72 | 0.34 | 22.06 |

4 Peak to Average Ratio

4.1 Test Result

| Test Description | Basic Standards | Test Result |
|-----------------------|--|-------------|
| Peak to Average Ratio | 24.232(d) 27.50(d)(5) RSS-130 (4.4) RSS-132 (5.4) RSS-133 (6.4) RSS-139 (6.4) | Pass |

4.2 Test Method

KDB document 971168 D01 Power Meas License Digital Systems v02r01 was used to determine peak-to-average ratio. For the LTE measurements, Clause 5.7.1 was used which defined the measurement method using the CCDF function of the spectrum analyzer. Measurements were recorded at the mid channels and the worst-case setting was determined to be 3MHz cell bandwidth, 1RB (center), and QPSK modulation except for Band 13 where a 5MHz cell bandwidth was used.

4.3 Test Site

SGS EMC Laboratory, Suwanee, GA

Environmental Conditions

Temperature: 23.1 °C
 Relative Humidity: 51.4 %
 Atmospheric Pressure: 98.2 kPa

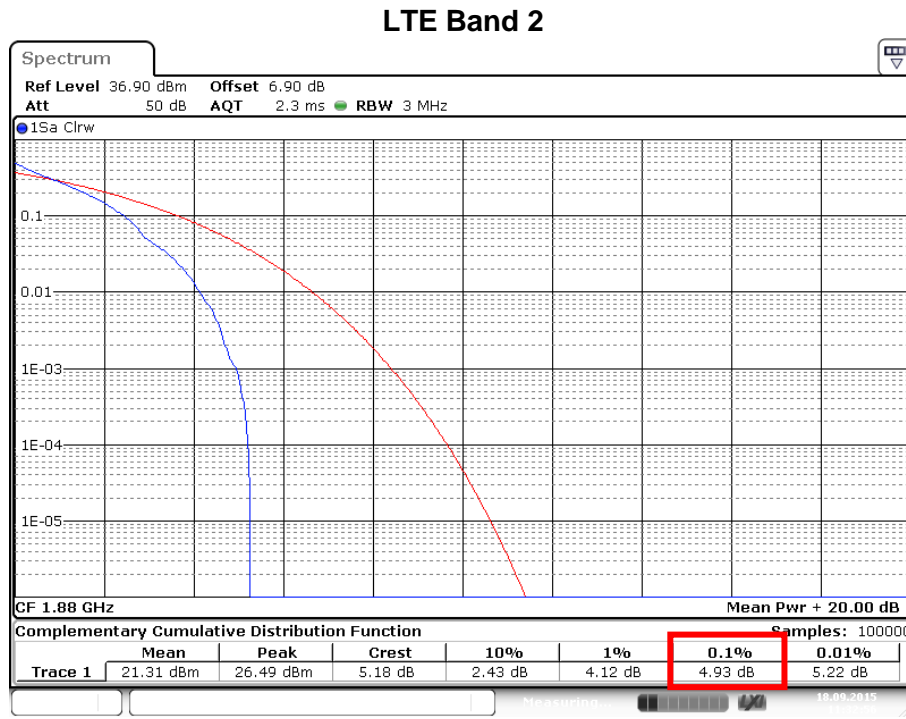
4.4 Test Equipment

Test Date: 18 September 2015

| Equipment | Model | Manufacturer | Asset Number | Cal Due Date |
|-------------------------------------|--------------|-----------------|--------------|--------------|
| SIGNAL ANALYZER | FSV30 | ROHDE & SCHWARZ | B085749 | 27-Sep-2015 |
| WIDEBAND RADIO COMMUNICATION TESTER | CMW500 | ROHDE & SCHWARZ | B079788 | 17-Oct-2015 |
| POWER SPLITTER | ZFRSC-123-S+ | MINI-CIRCUITS | B101739 | 5-Aug-2016 |
| COAXIAL CABLE | 1134 | GORE | B094785 | 4-Aug-2016 |

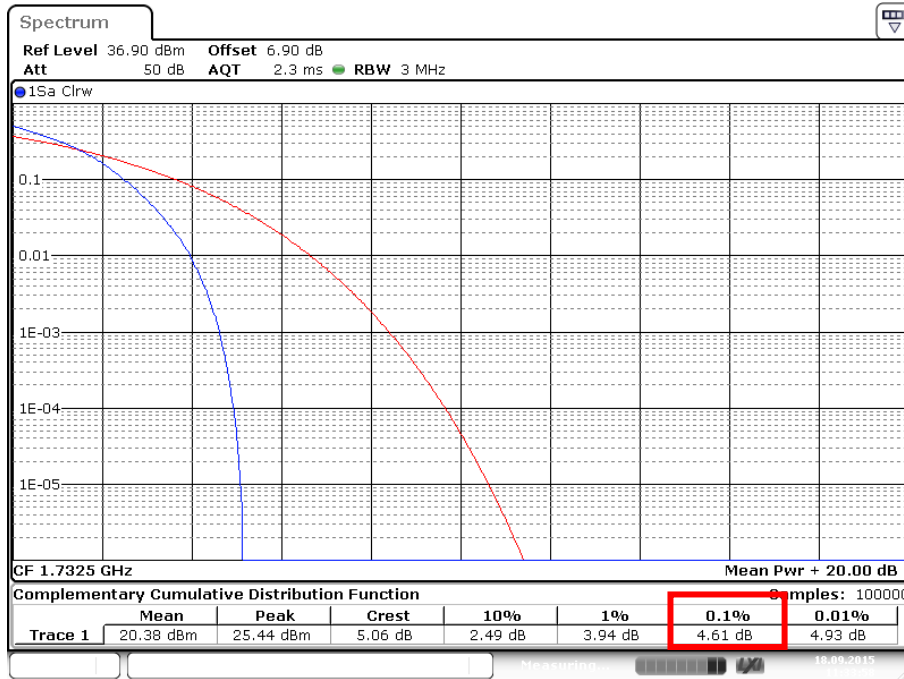
- Unless otherwise noted, equipment is on a 1 year calibration cycle.
- Based on manufacturer's specifications, the CMW-500 is on a 3 year calibration cycle.

4.5 Test Data



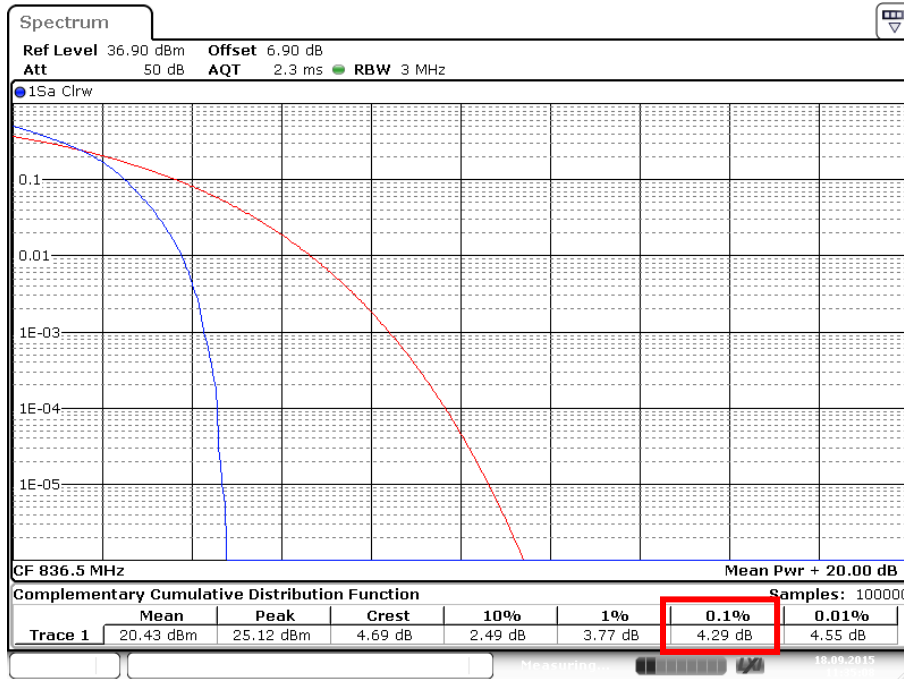
Date: 18.SEP.2015 11:32:56

LTE Band 4



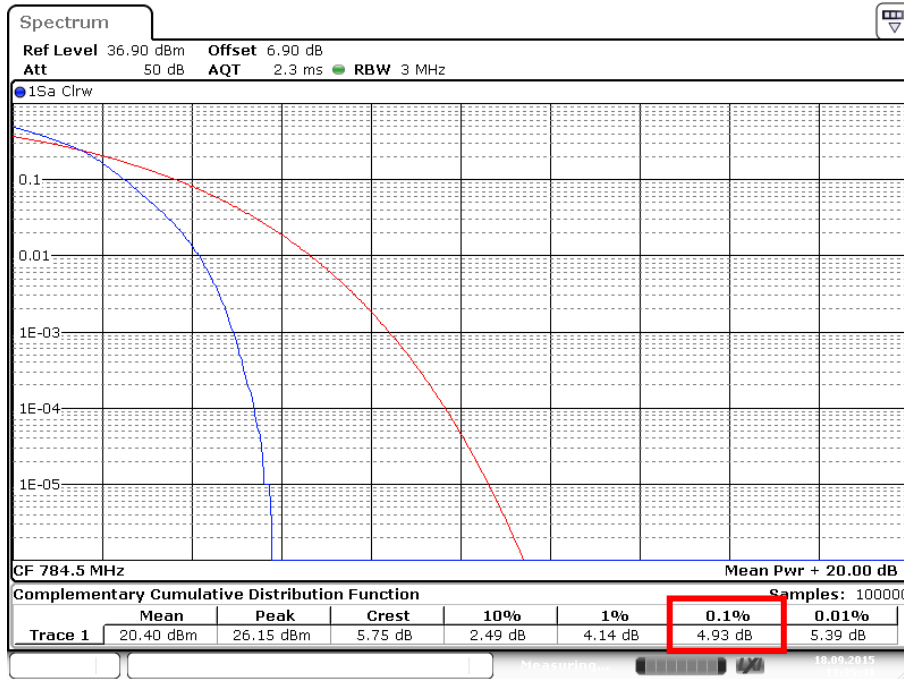
Date: 18.SEP.2015 11:33:57

LTE Band 5



Date: 18.SEP.2015 11:35:08

LTE Band 13



Date: 18.SEP.2015 11:35:41

5 Occupied Bandwidth

5.1 Test Result

| Test Description | Basic Standards | Test Result |
|--------------------|---|-------------|
| Occupied Bandwidth | 2.1049 22.917(a) 24.238(a) RSS-GEN(6.6) RSS-133 (2.3) RSS-139(2.3) | Reported |

5.2 Test Method

The occupied bandwidth is the frequency bandwidth such that below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power by a given emission. The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts. The resolution bandwidth shall be set to as close to 1% of the selected span without being below 1%. The video bandwidth shall be set to 3 times the resolution bandwidth. Video averaging is not permitted. Where practical, a sample detector shall be used since a peak detector may produce a wider than actual bandwidth.

A radio link was established between EUT and Radio Communications Tester. The output power of the EUT was set to maximum value by using the maximum power setting on the Radio Communications Tester. The occupied bandwidth was measured using spectrum analyzer's occupied bandwidth measurement.

The bandwidth of 99% power can be read on spectrum analyzer.

The measurement was conducted at the center channel of each band. All resource blocks were explored. Worst-case results are reported.

5.3 Test Site

SGS EMC Laboratory, Suwanee, GA

Environmental Conditions

Temperature: 23.6 °C
 Relative Humidity: 50.7 %
 Atmospheric Pressure: 97.8 kPa

5.4 Test Equipment

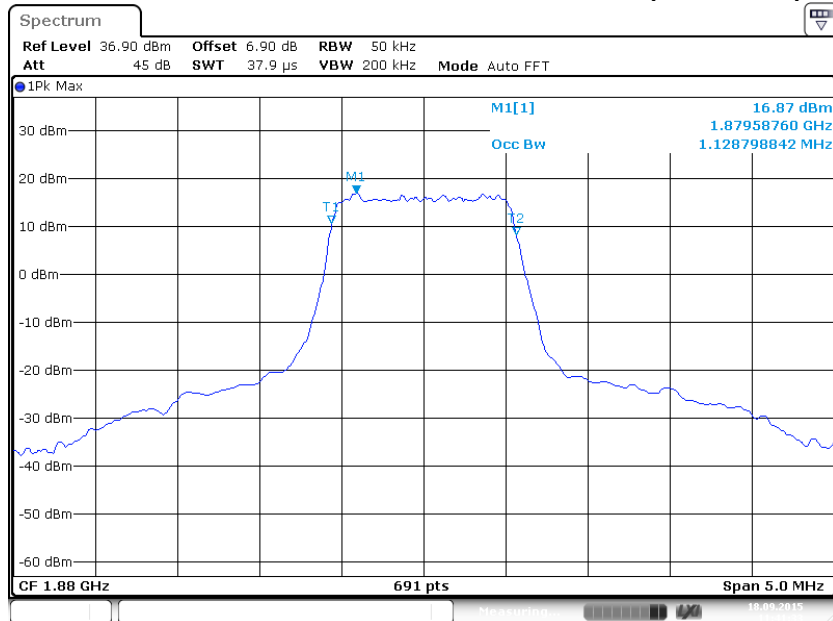
| Equipment | Model | Manufacturer | Asset Number | Cal Due Date |
|---|--------------|-----------------|--------------|--------------|
| SIGNAL ANALYZER | FSV30 | ROHDE & SCHWARZ | B085749 | 27-Sep-2015 |
| CMW500 WIDEBAND RADIO COMMUNICATIONS TESTER | CMW500 | ROHDE & SCHWARZ | B094874 | 6-Dec-2015 |
| POWER SPLITTER | ZFRSC-183-S+ | MINI-CIRCUITS | B101743 | 5-Aug-2016 |

- Unless otherwise noted, equipment is on a 1 year calibration cycle.
- Based on manufacturer's specifications, the CMW-500 is on a 3 year calibration cycle.

5.5 Test Data

LTE Band 2

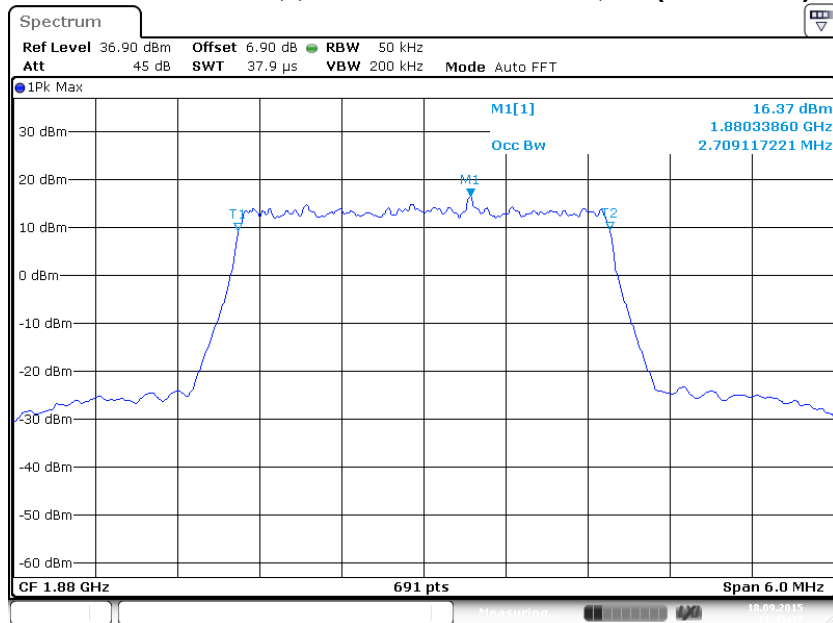
Occupied Bandwidth: :@ULCH: 18900, BW: 1.4 MHz ,
ULPower: 23dBm; ; UL_MOD_RB: QPSK, 6 (RB_Pos:0)



Date: 18.SEP.2015 11:41:33

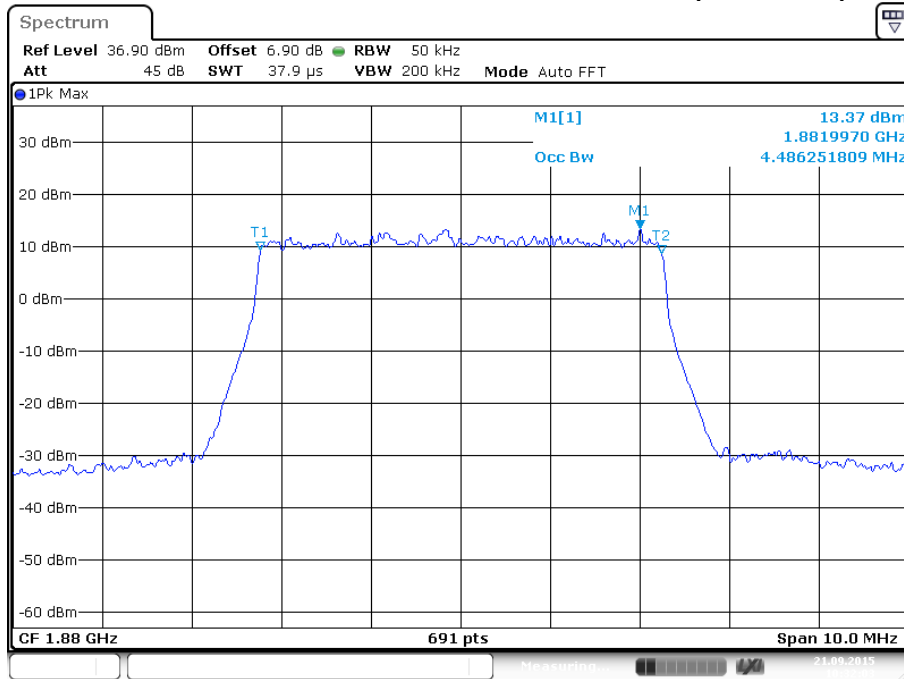
LTE Band 2

Occupied Bandwidth: :@ULCH: 18900, BW: 3.0 MHz ,
ULPower: 23dBm; ; UL_MOD_RB: QPSK, 15 (RB_Pos:0)



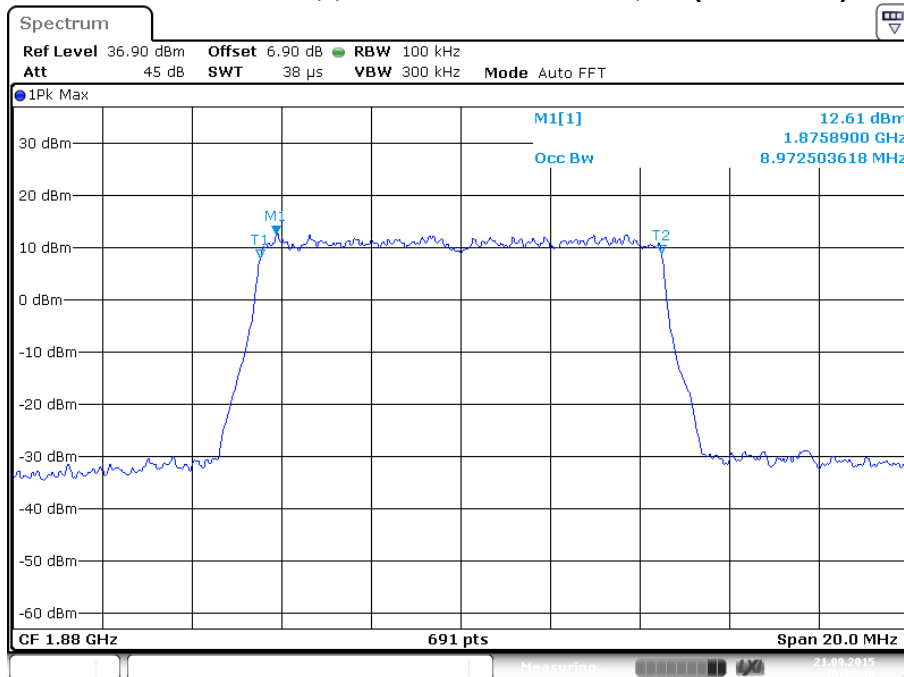
Date: 18.SEP.2015 11:45:37

LTE Band 2
Occupied Bandwidth: :@ULCH: 18900, BW: 5.0 MHz ,
ULPower: 23dBm; ; UL_MOD_RB: QPSK, 25 (RB_Pos:0)



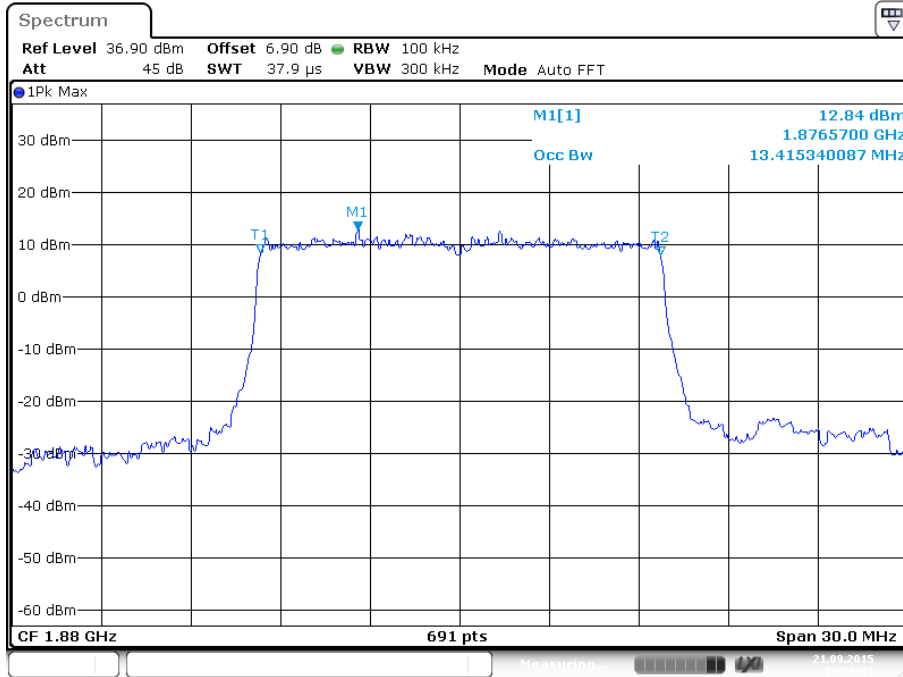
Date: 21.SEP.2015 10:32:04

LTE Band 2
Occupied Bandwidth: :@ULCH: 18900, BW: 10 MHz ,
ULPower: 23dBm; ; UL_MOD_RB: QPSK, 50 (RB_Pos:0)



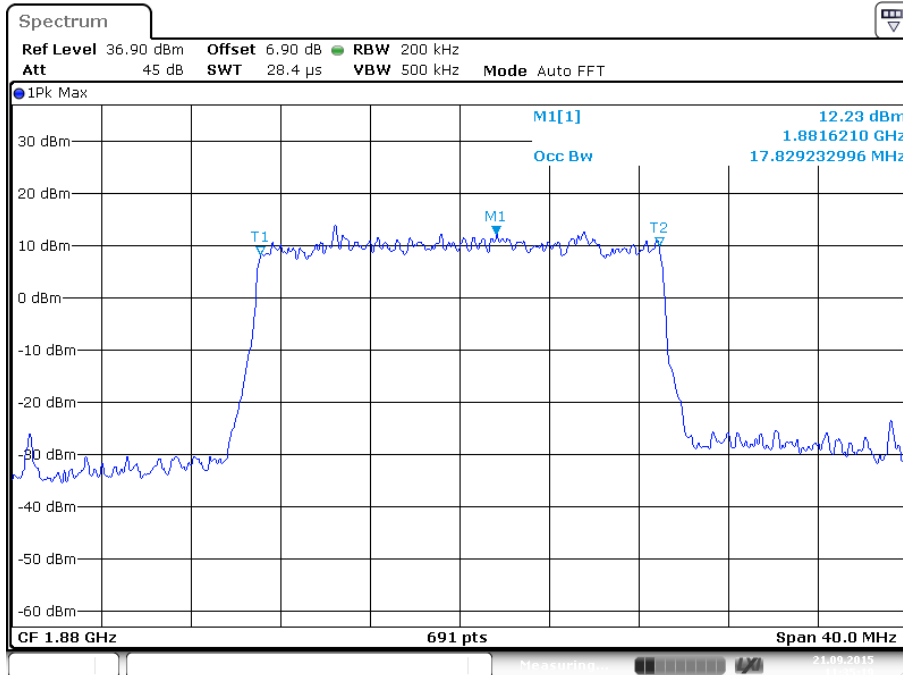
Date: 21.SEP.2015 10:38:47

LTE Band 2
Occupied Bandwidth: :@ULCH: 18900, BW: 15 MHz , ULPower: 23dBm; ; UL_MOD_RB: QPSK, 75 (RB_Pos:0)



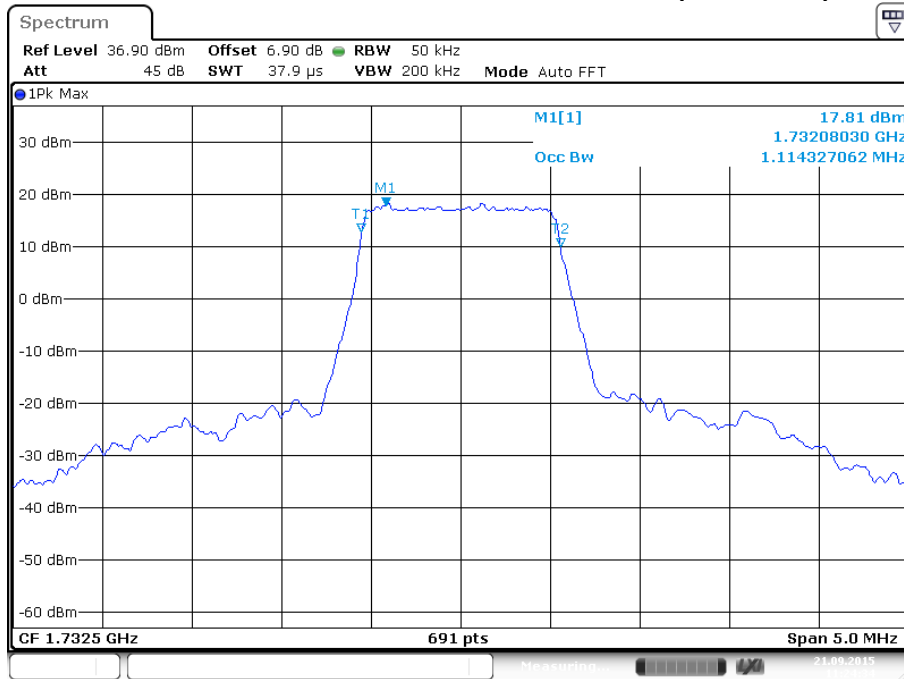
Date: 21.SEP.2015 11:36:01

LTE Band 2
Occupied Bandwidth: :@ULCH: 18900, BW: 20 MHz , ULPower: 23dBm; ; UL_MOD_RB: QPSK, 100 (RB_Pos:0)



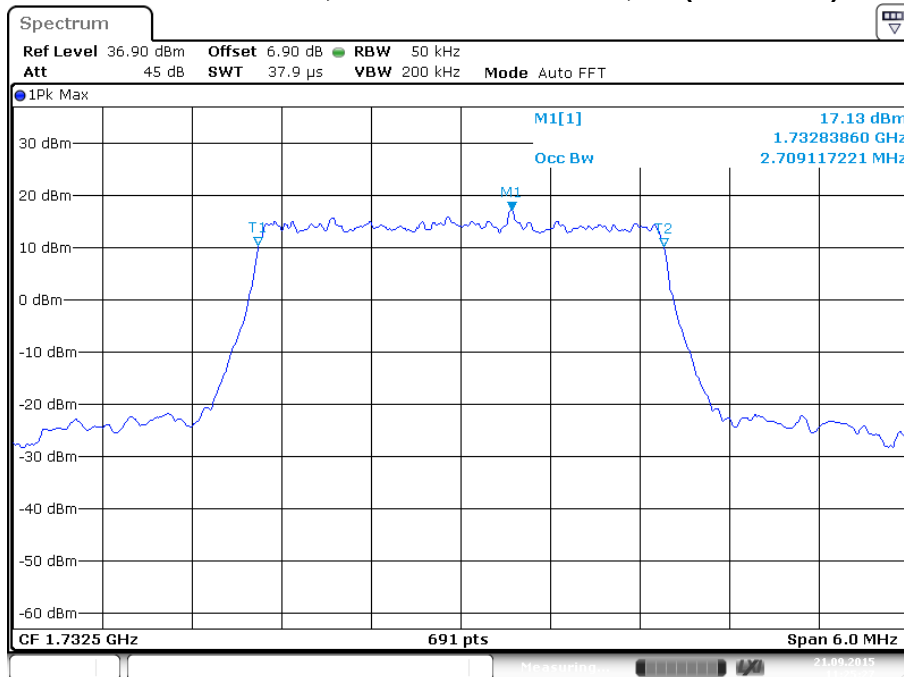
Date: 21.SEP.2015 11:35:20

LTE Band 4
Occupied Bandwidth: :@ULCH: 20175, BW: 1.4 MHz ,
ULPower: 23dBm; UL_MOD_RB: QPSK, 6 (RB_Pos:0)



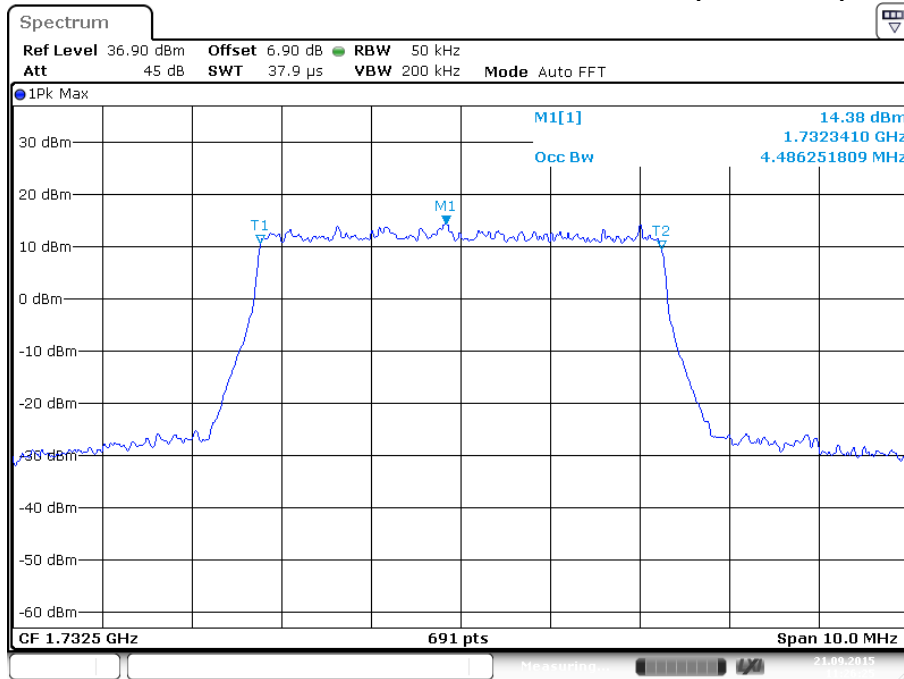
Date: 21.SEP.2015 11:24:35

LTE Band 4
Occupied Bandwidth: :@ULCH: 20175, BW: 3.0 MHz ,
ULPower: 23dBm; UL_MOD_RB: QPSK, 15 (RB_Pos:0)



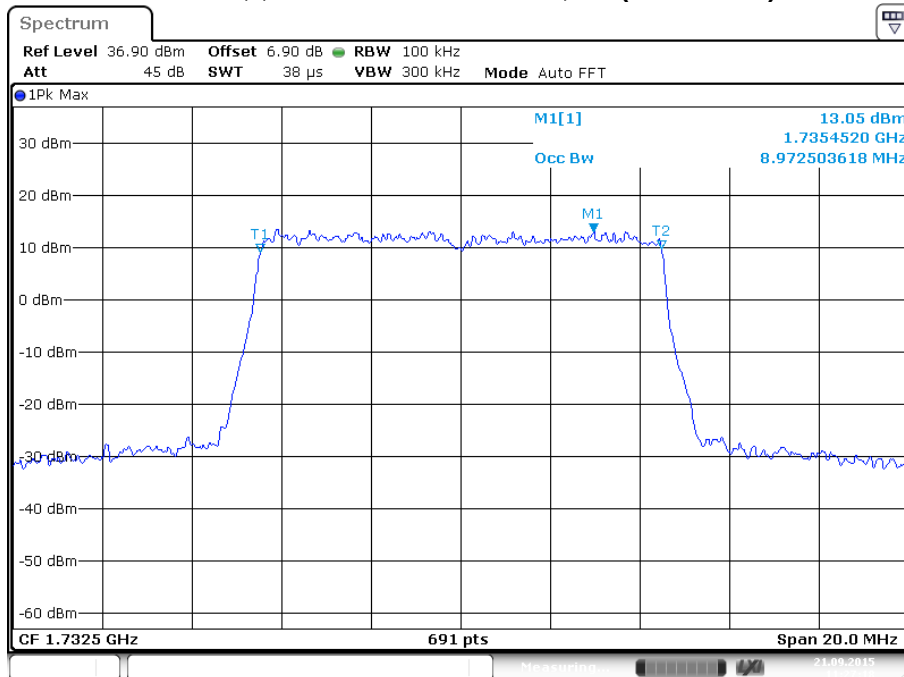
Date: 21.SEP.2015 11:25:28

LTE Band 4
Occupied Bandwidth: :@ULCH: 20175, BW: 5.0 MHz ,
ULPower: 23dBm; ; UL_MOD_RB: QPSK, 25 (RB_Pos:0)



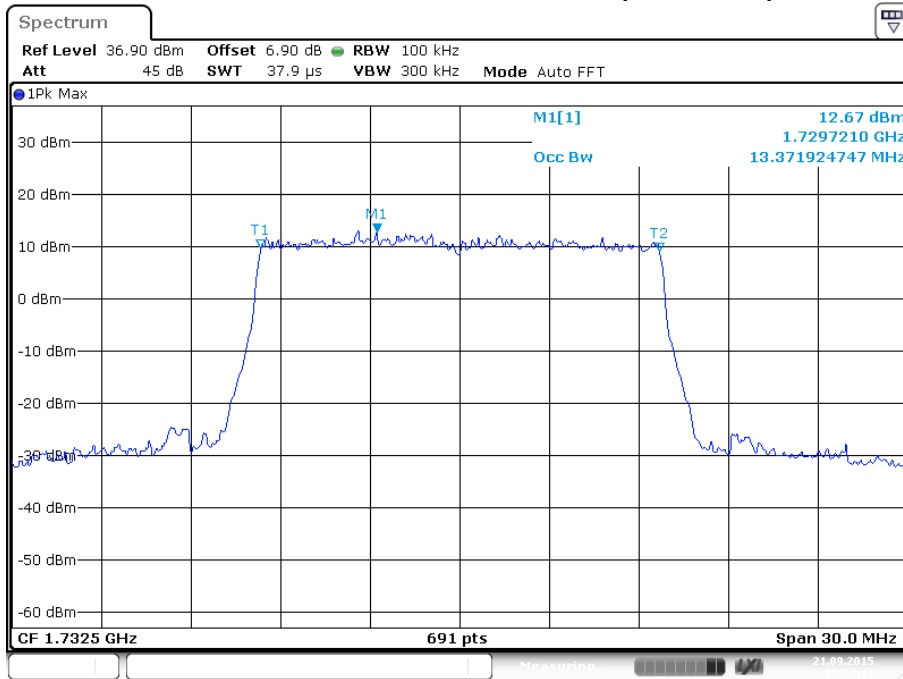
Date: 21.SEP.2015 11:26:26

LTE Band 4
Occupied Bandwidth: :@ULCH: 20175, BW: 10 MHz , ULPower:
23dBm; ; UL_MOD_RB: QPSK, 50 (RB_Pos:0)



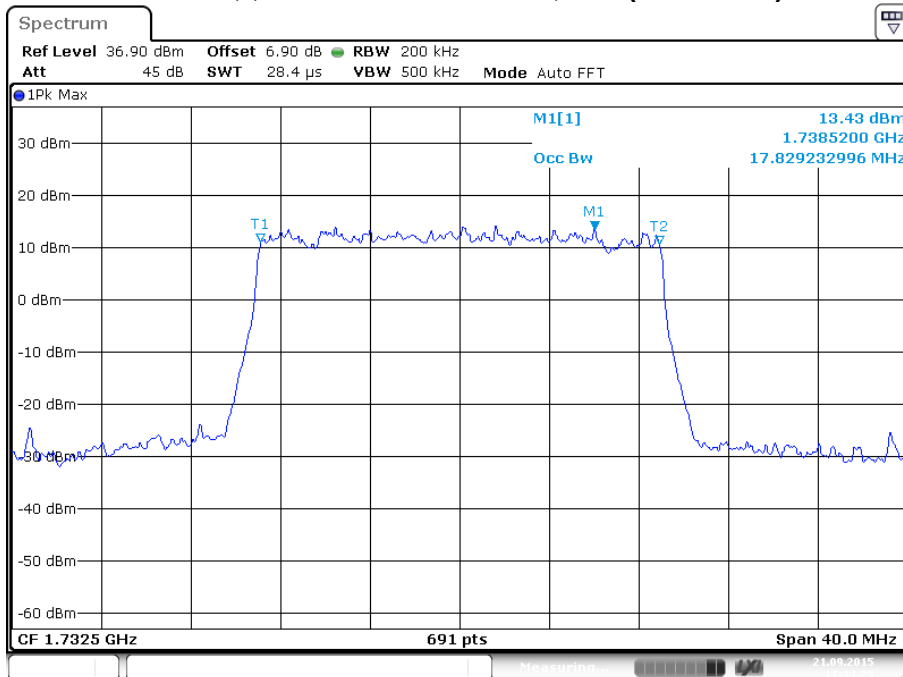
Date: 21.SEP.2015 11:27:19

LTE Band 4
Occupied Bandwidth: :@ULCH: 20175, BW: 15 MHz , ULPower: 23dBm; ; UL_MOD_RB: QPSK, 75 (RB_Pos:0)



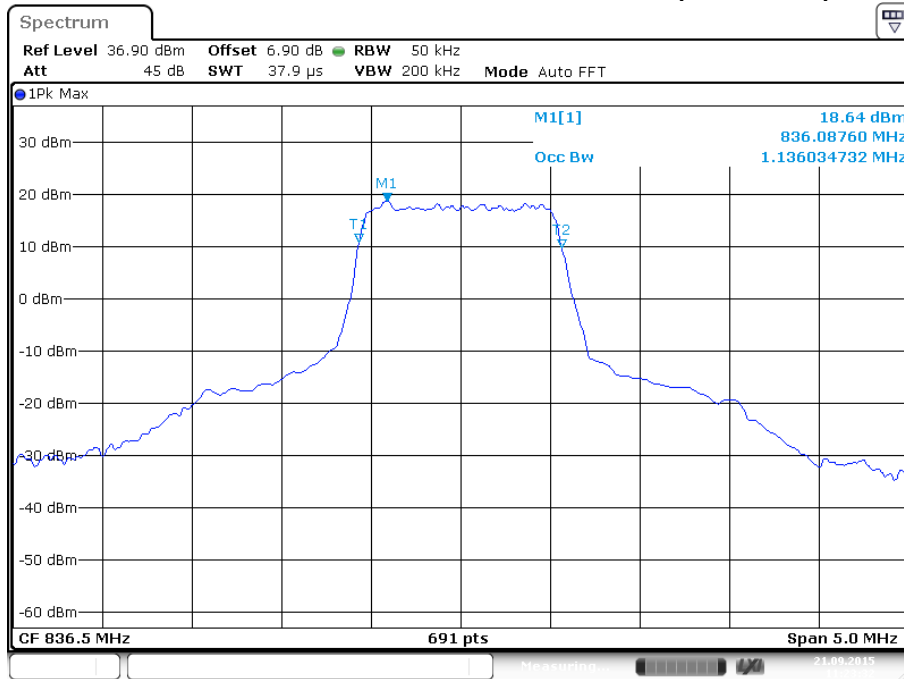
Date: 21.SEP.2015 11:33:20

LTE Band 4
Occupied Bandwidth: :@ULCH: 20175, BW: 20 MHz , ULPower: 23dBm; ; UL_MOD_RB: QPSK, 100 (RB_Pos:0)



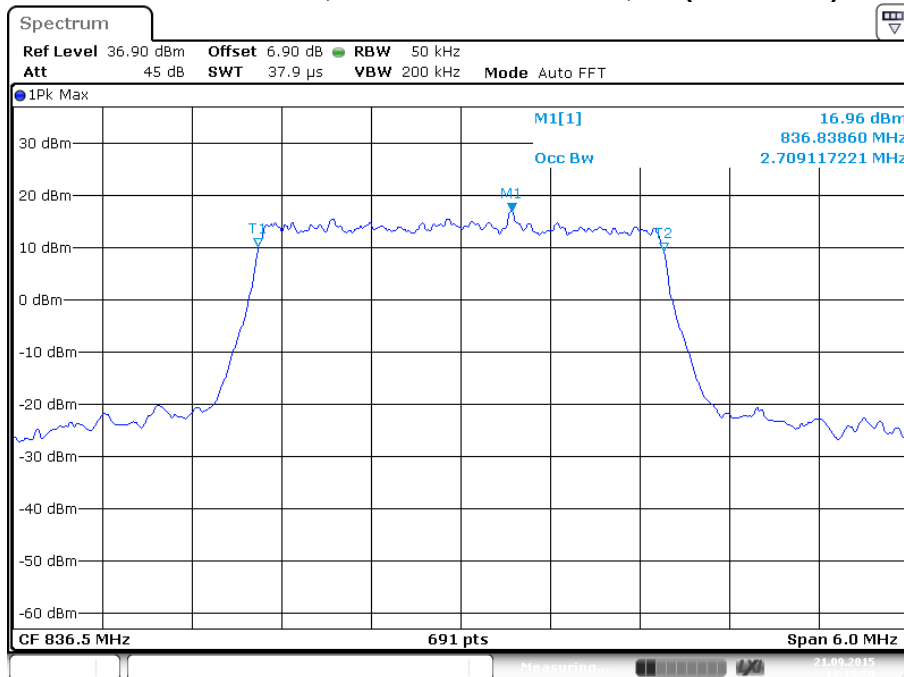
Date: 21.SEP.2015 11:34:25

LTE Band 5
Occupied Bandwidth: :@ULCH: 20525, BW: 1.4 MHz ,
ULPower: 23dBm; UL_MOD_RB: QPSK, 6 (RB_Pos:0)



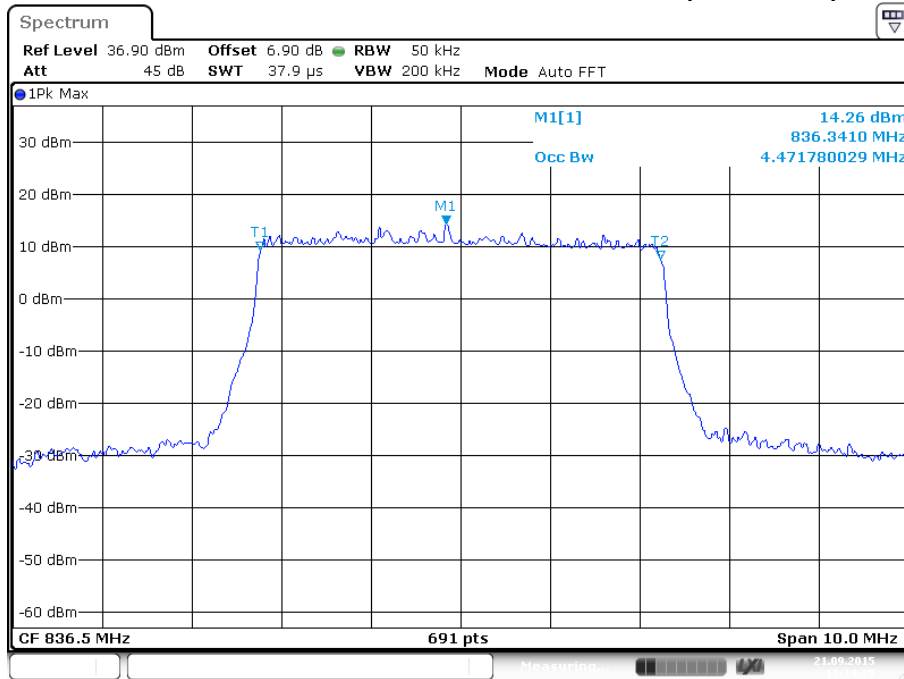
Date: 21.SEP.2015 11:23:33

LTE Band 5
Occupied Bandwidth: :@ULCH: 20525, BW: 3.0 MHz ,
ULPower: 23dBm; UL_MOD_RB: QPSK, 15 (RB_Pos:0)

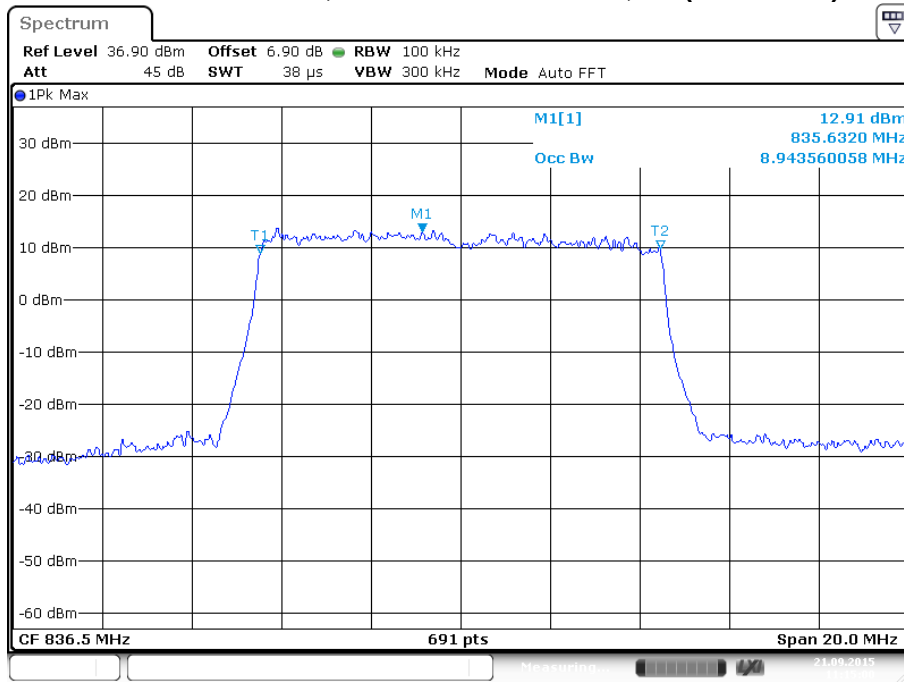


Date: 21.SEP.2015 11:15:59

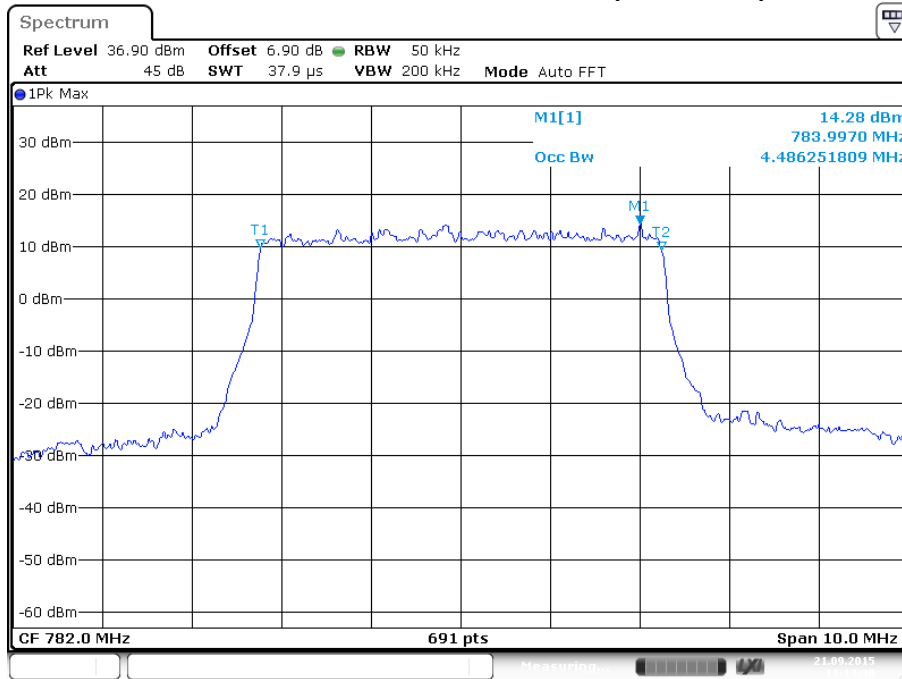
LTE Band 5
Occupied Bandwidth: :@ULCH: 20525, BW: 5.0 MHz ,
ULPower: 23dBm; UL_MOD_RB: QPSK, 25 (RB_Pos:0)



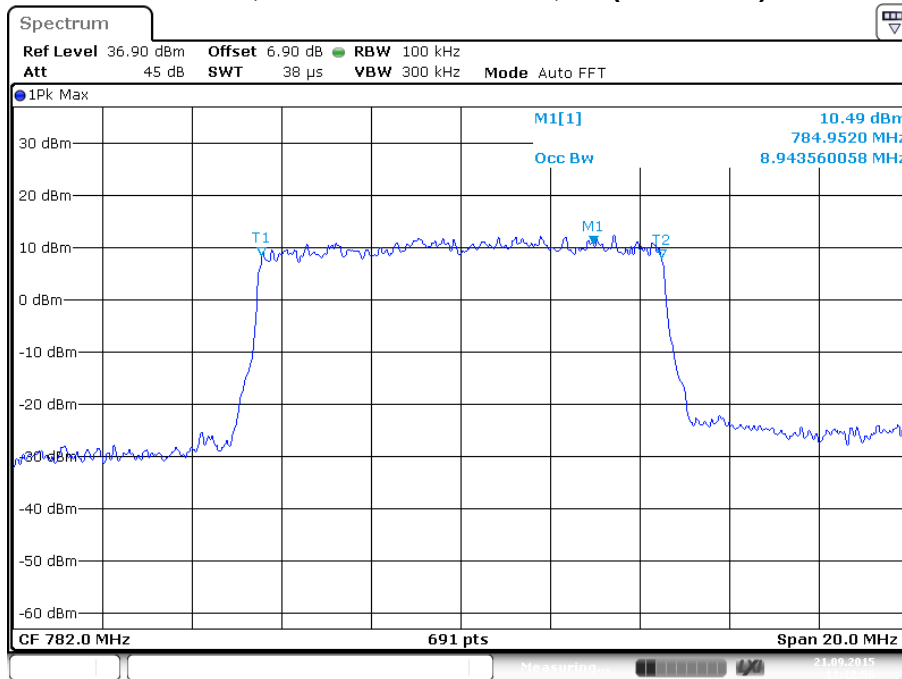
LTE Band 5
Occupied Bandwidth: :@ULCH: 20525, BW: 10 MHz ,
ULPower: 23dBm; UL_MOD_RB: QPSK, 50 (RB_Pos:0)



LTE Band 13
Occupied Bandwidth: :@ULCH: 23230, BW: 5 MHz , ULPower: 23dBm; UL_MOD_RB: QPSK, 25 (RB_Pos:0)



LTE Band 13
Occupied Bandwidth: :@ULCH: 23230, BW: 10 MHz , ULPower: 23dBm; UL_MOD_RB: QPSK, 50 (RB_Pos:0)



6 Band Edge and Conducted Spurious Emissions

6.1 Test Result

| Test Description | Basic Standards | Test Result |
|--|--|-------------|
| Conducted spurious emissions and Band Edge | 2.1051 22.917(a) 24.238(a) 27.53(c)(2) 27.53(h) RSS-130 (4.6.1) RSS-132 (5.5) RSS-133 (6.5.1) RSS-139(6.5.1) | Pass |

6.2 Test Method

The levels of the carrier and the various conducted spurious and harmonics frequencies are measured by means of a calibrated spectrum analyzer. The emissions spectrum emanating from the EUT transmit antenna port is scanned from the lowest frequency generated in the equipment up to a frequency including its 10th harmonic. On any frequency outside a licensee's frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least 43 + 10 log (P) dB. Compliance is based on the use of a spectrum analyzer employing a resolution bandwidth of 1 MHz or greater. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of a least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emissions bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

6.3 Test Site

SGS EMC Laboratory, Suwanee, GA

Environmental Conditions

Temperature: 23.6 °C
 Relative Humidity: 50.7 %
 Atmospheric Pressure: 97.8 kPa

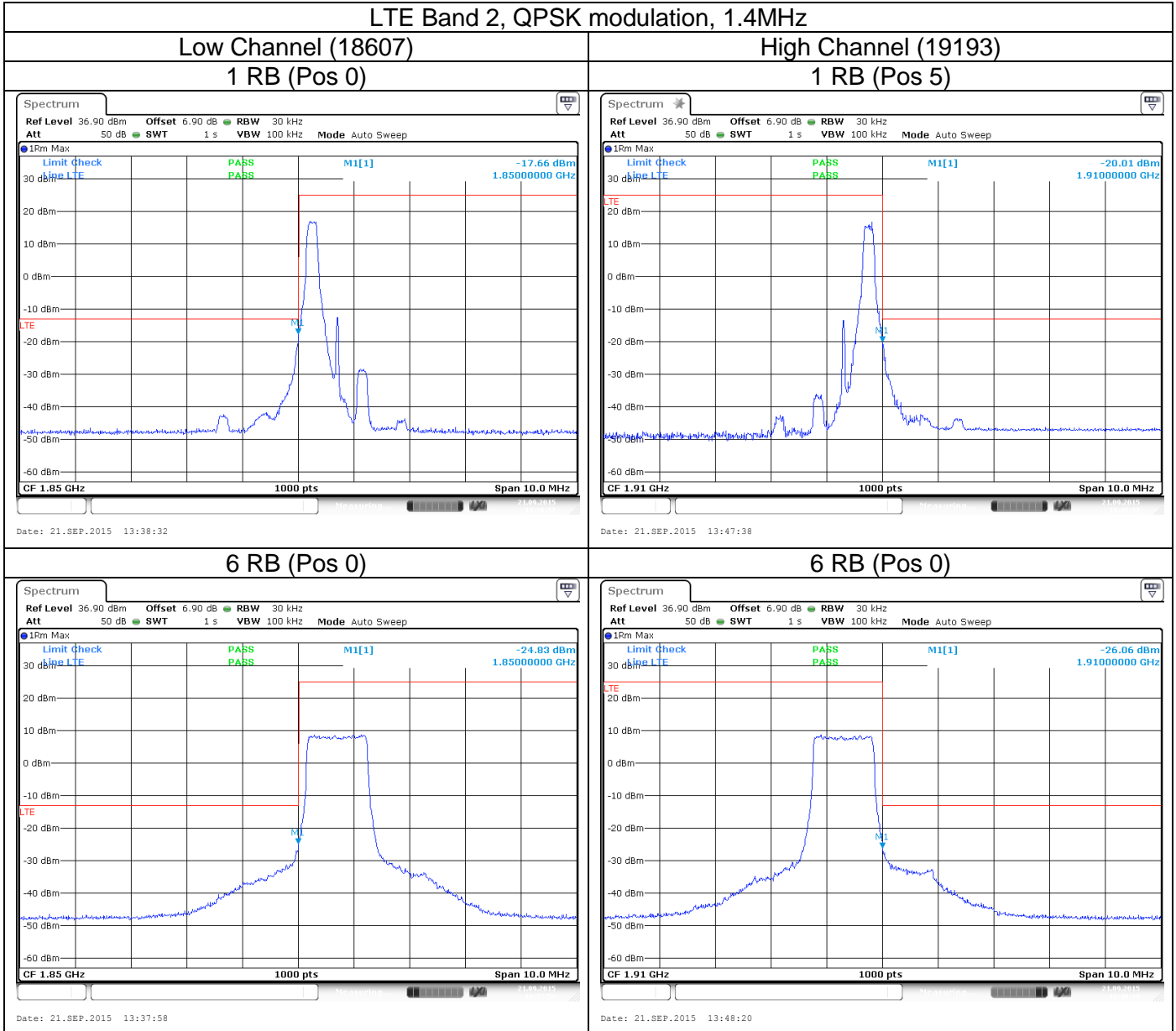
6.4 Test Equipment

| Equipment | Model | Manufacturer | Asset Number | Cal Due Date |
|---|--------------|-----------------|--------------|--------------|
| SIGNAL ANALYZER | FSV30 | ROHDE & SCHWARZ | B085749 | 27-Sep-2015 |
| CMW500 WIDEBAND RADIO COMMUNICATIONS TESTER | CMW500 | ROHDE & SCHWARZ | B094874 | 6-Dec-2015 |
| POWER SPLITTER | ZFRSC-183-S+ | MINI-CIRCUITS | B101743 | 5-Aug-2016 |

- Unless otherwise noted, equipment is on a 1 year calibration cycle.
- Based on manufacturer's specifications, the CMW-500 is on a 3 year calibration cycle.

6.5 Test Data - Band Edge

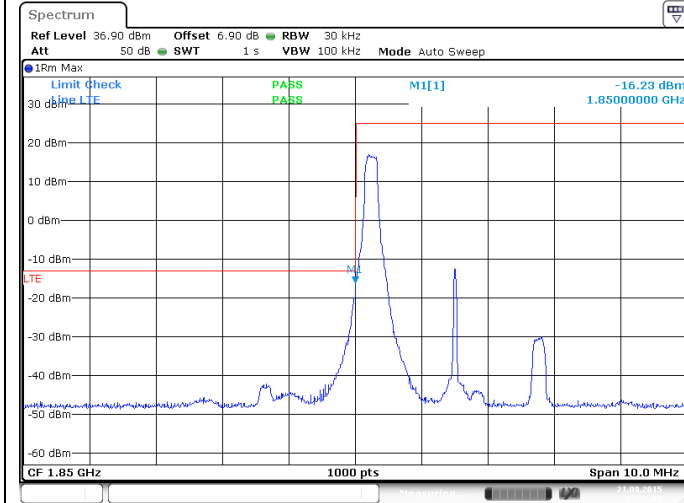
LTE Band 2, QPSK modulation, 1.4MHz



LTE Band 2, QPSK modulation, 3MHz

Low Channel (18615)

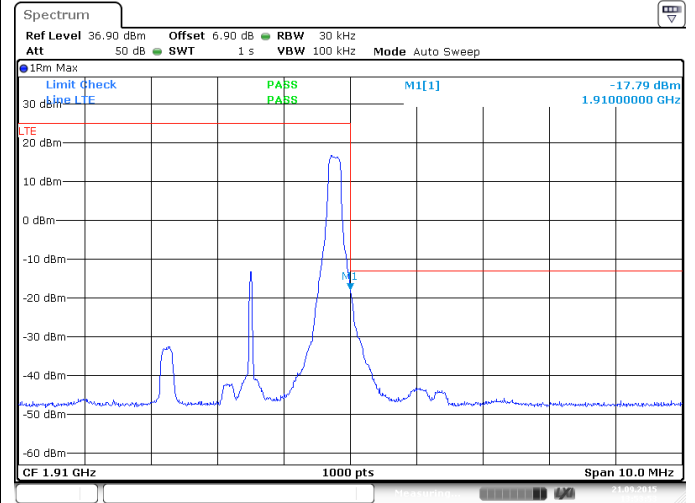
1 RB (Pos 0)



Date: 21.SEP.2015 13:55:01

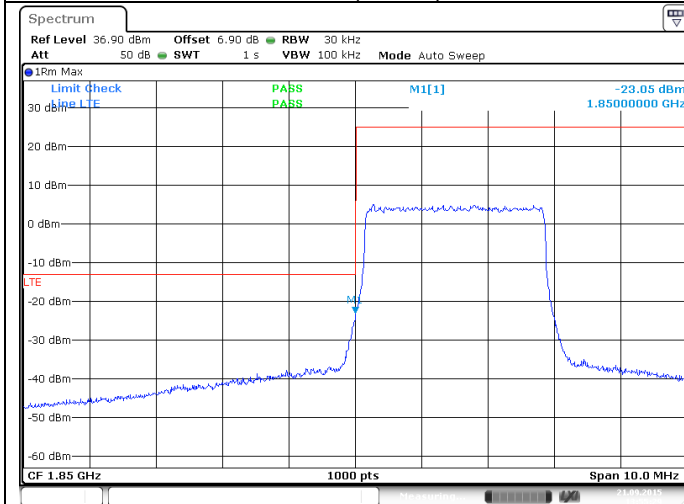
High Channel (19185)

1 RB (Pos 14)



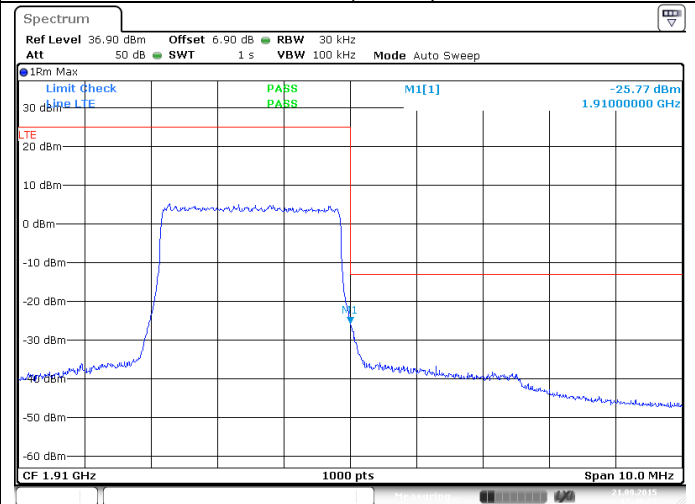
Date: 21.SEP.2015 13:53:54

15 RB (Pos 0)



Date: 21.SEP.2015 13:55:30

15 RB (Pos 0)

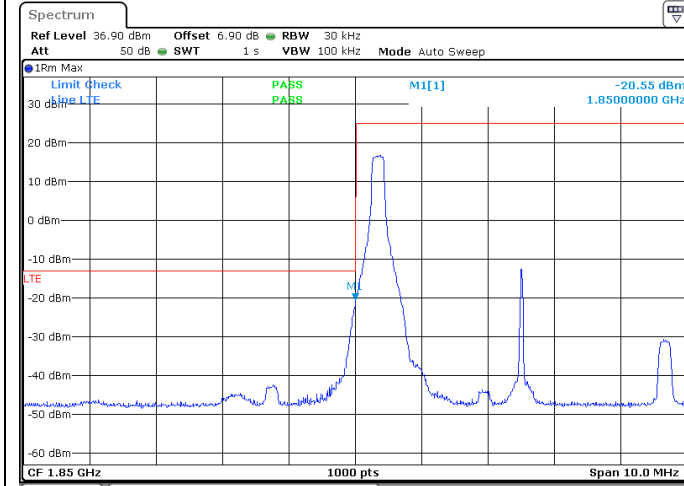


Date: 21.SEP.2015 13:49:28

LTE Band 2, QPSK modulation, 5MHz

Low Channel (18625)

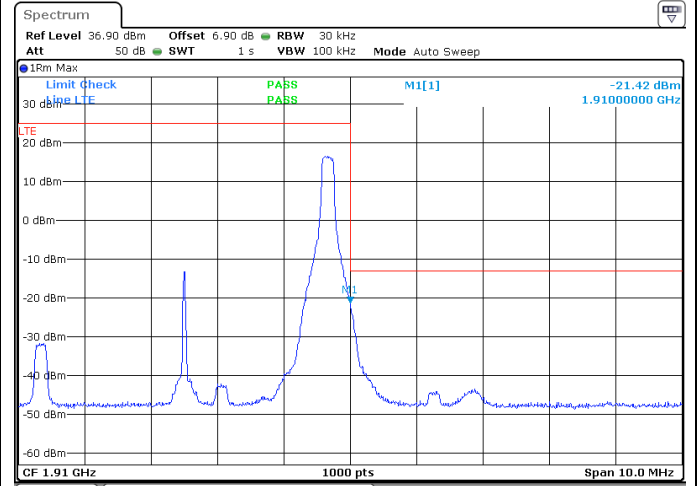
1 RB (Pos 0)



Date: 21.SEP.2015 13:57:04

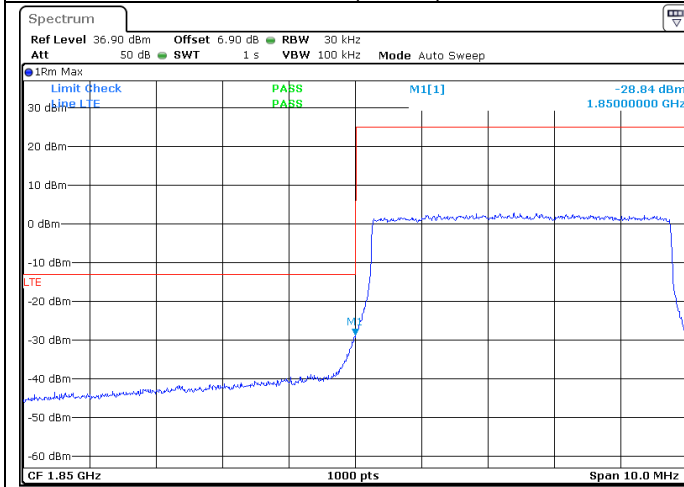
High Channel (19175)

1 RB (Pos 24)



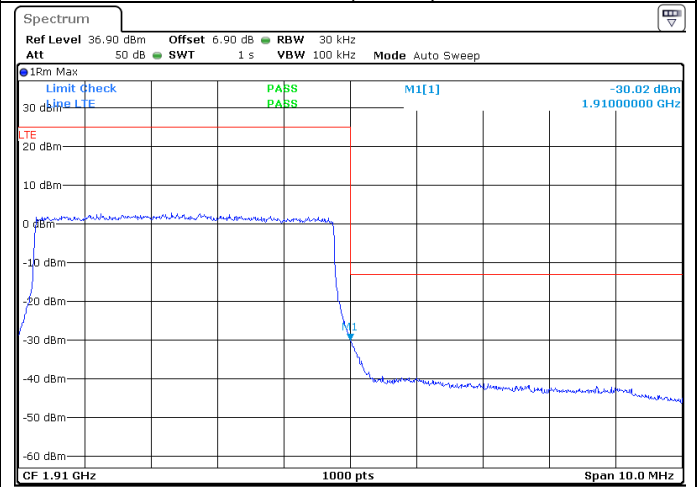
Date: 21.SEP.2015 13:58:51

25 RB (Pos 0)



Date: 21.SEP.2015 13:56:24

25 RB (Pos 0)



Date: 21.SEP.2015 13:58:16

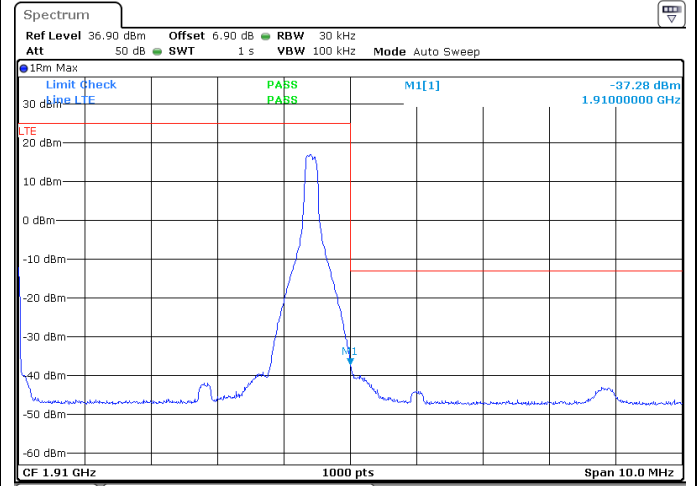
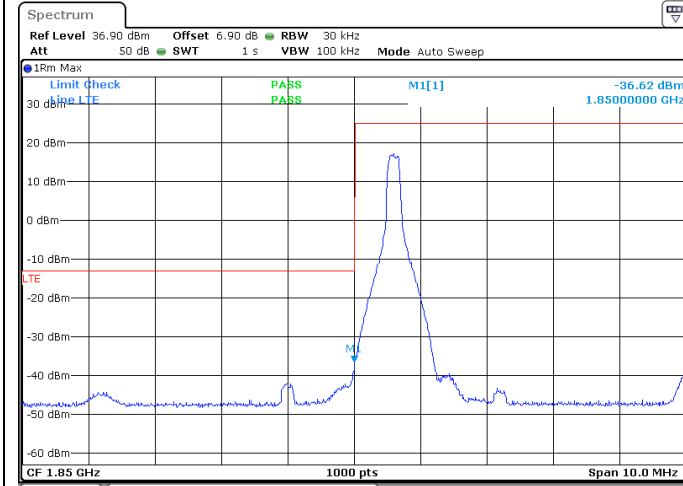
LTE Band 2, QPSK modulation, 10MHz

Low Channel (18650)

High Channel (19150)

1 RB (Pos 0)

1 RB (Pos 49)

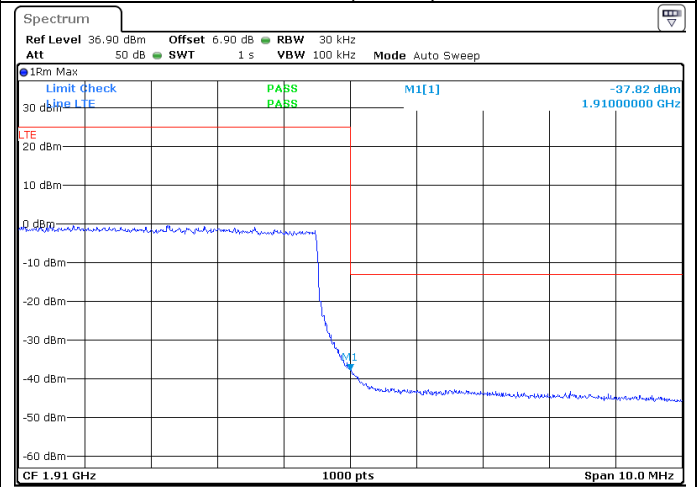
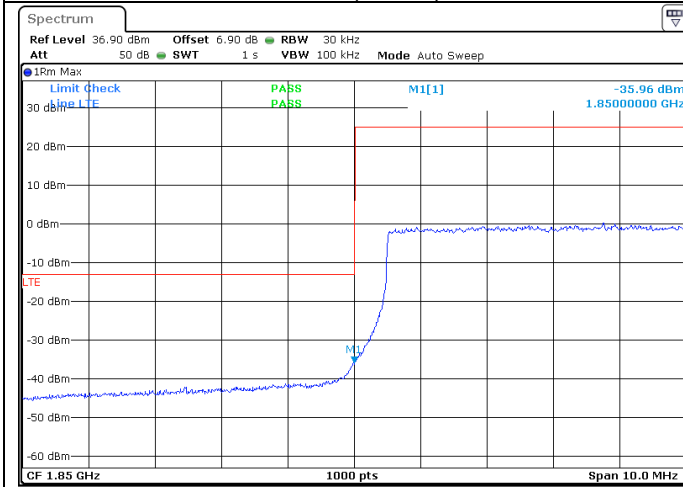


Date: 21.SEP.2015 14:06:59

Date: 21.SEP.2015 14:04:51

50 RB (Pos 0)

50 RB (Pos 0)



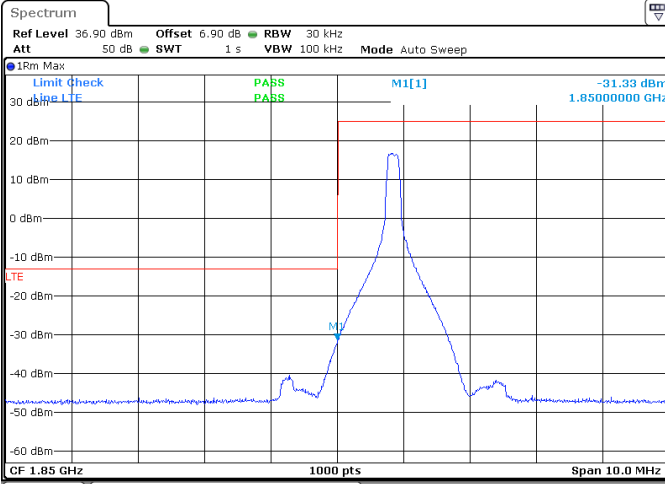
Date: 21.SEP.2015 14:08:00

Date: 21.SEP.2015 13:59:51

LTE Band 2, QPSK modulation, 15MHz

Low Channel (18675)

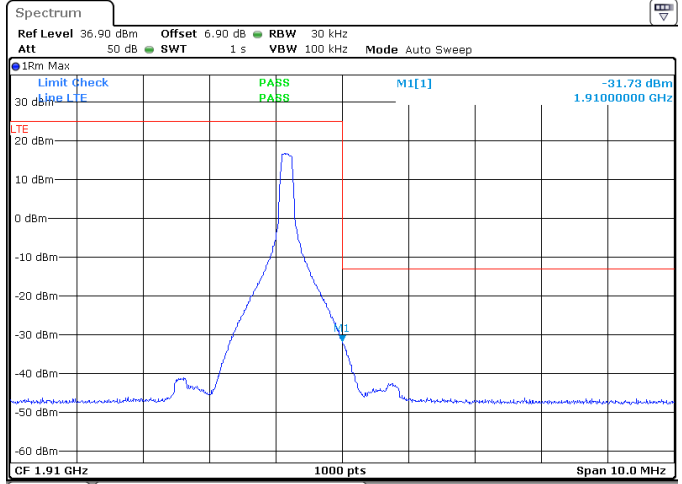
1 RB (Pos 0)



Date: 21.SEP.2015 14:09:45

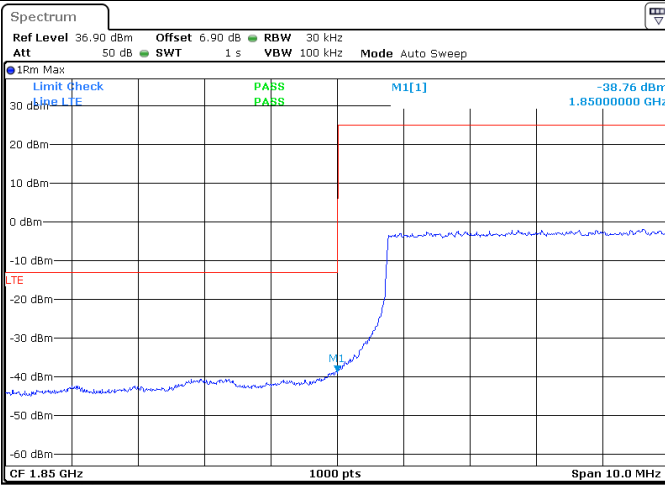
High Channel (19125)

1 RB (Pos 74)



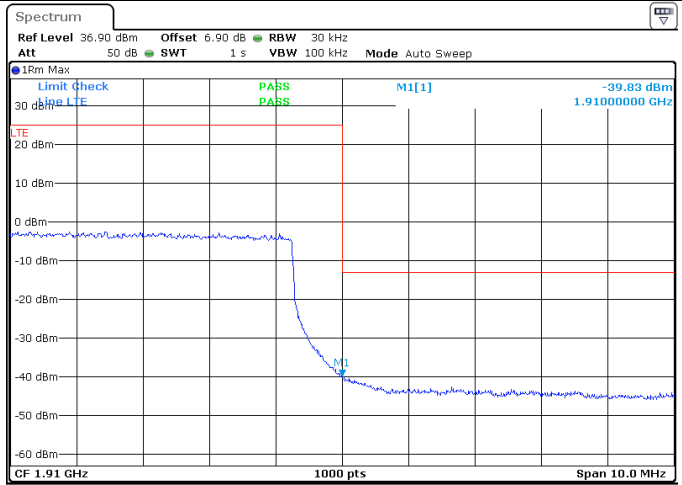
Date: 21.SEP.2015 14:14:31

75 RB (Pos 0)



Date: 21.SEP.2015 14:10:58

75 RB (Pos 0)

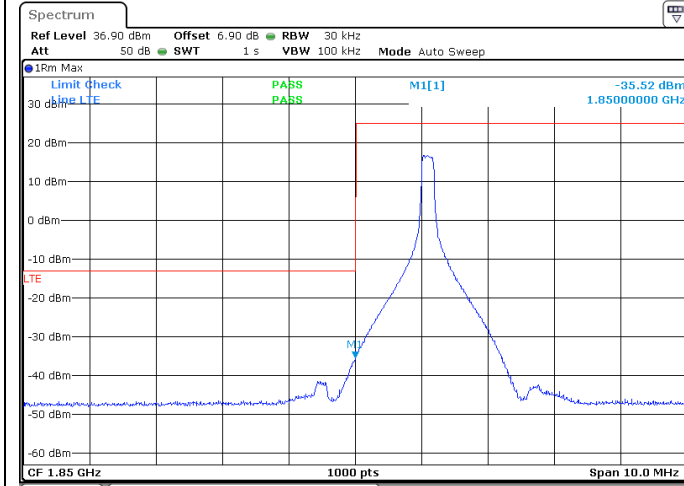


Date: 21.SEP.2015 14:13:13

LTE Band 2, QPSK modulation, 20MHz

Low Channel (18700)

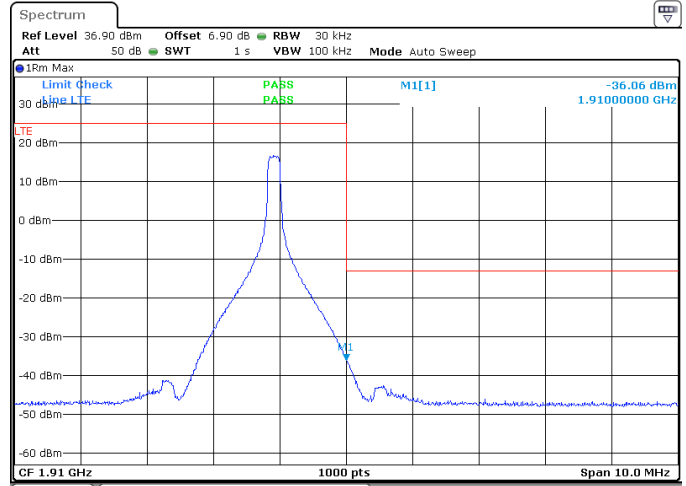
1 RB (Pos 0)



Date: 21.SEP.2015 14:19:06

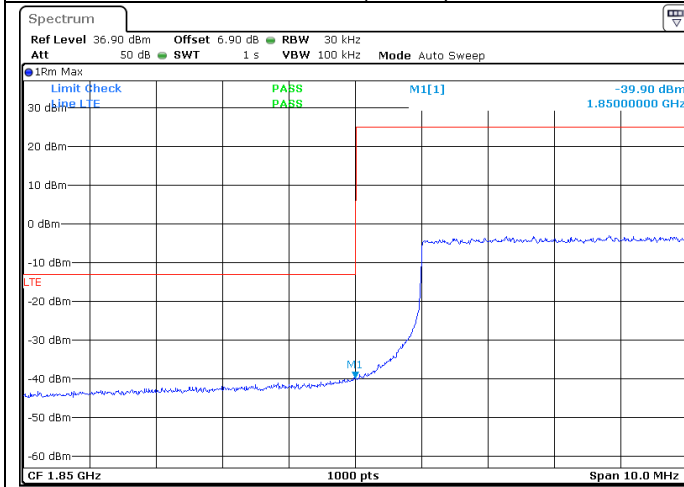
High Channel (19100)

1 RB (Pos 99)



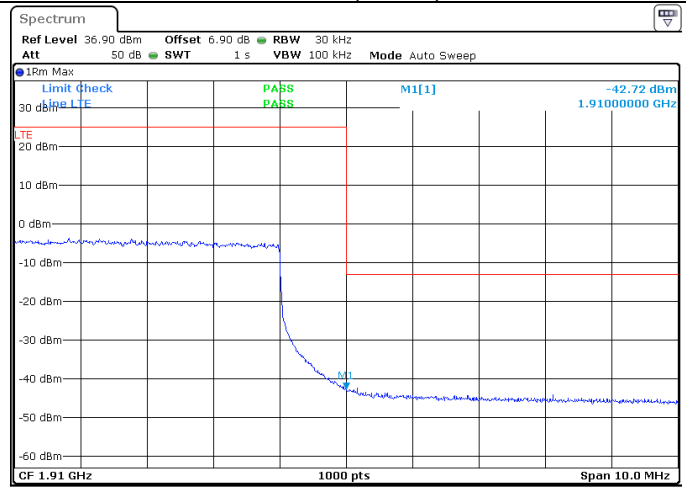
Date: 21.SEP.2015 14:16:37

100 RB (Pos 0)



Date: 21.SEP.2015 14:17:51

100 RB (Pos 0)

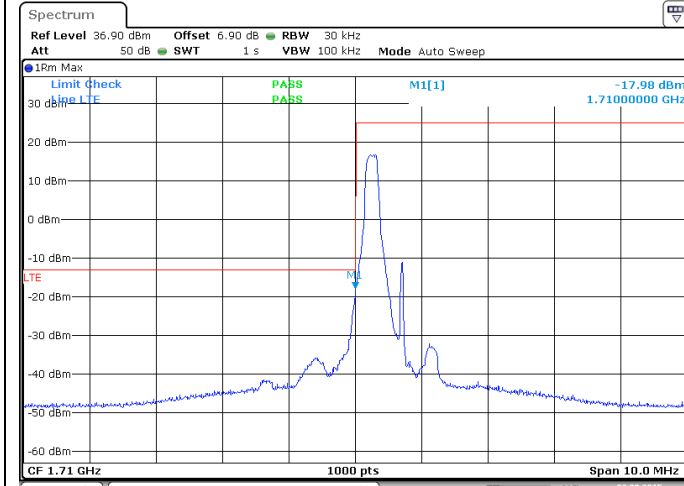


Date: 21.SEP.2015 14:15:33

LTE Band 4, QPSK modulation, 1.4MHz

Low Channel (19957)

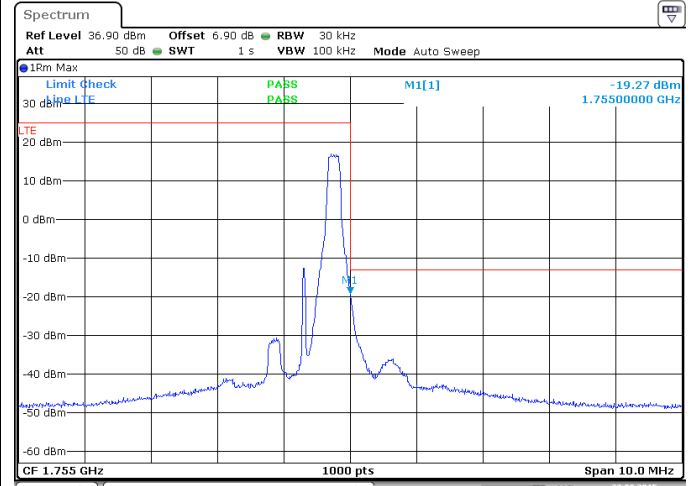
1 RB (Pos 0)



Date: 22.SEP.2015 07:50:43

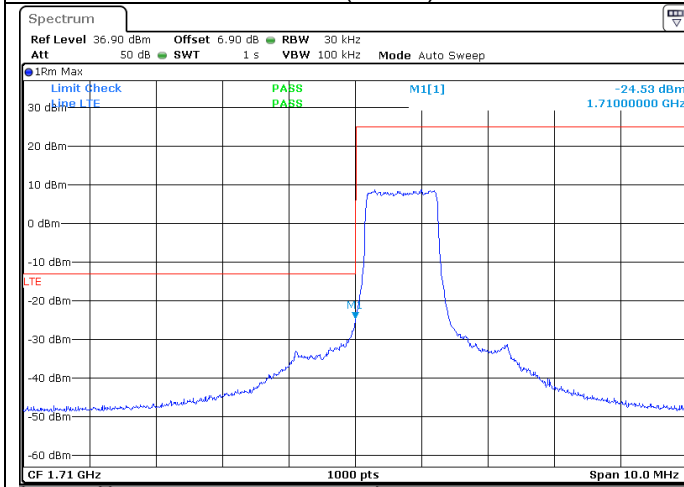
High Channel (20393)

1 RB (Pos 5)



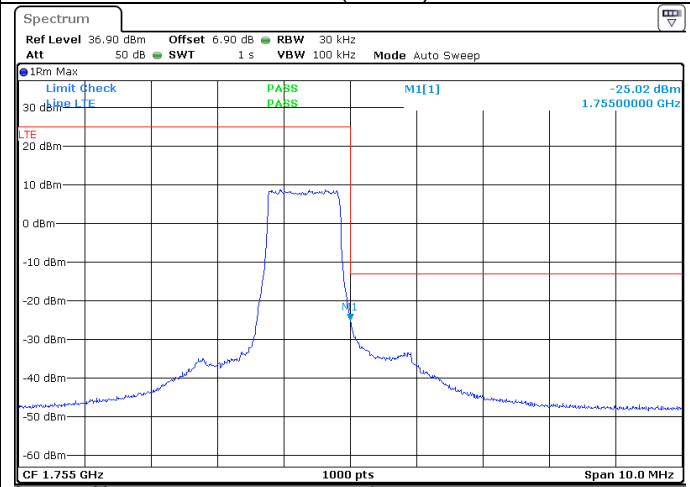
Date: 22.SEP.2015 07:53:14

6 RB (Pos 0)



Date: 22.SEP.2015 07:50:05

6 RB (Pos 0)

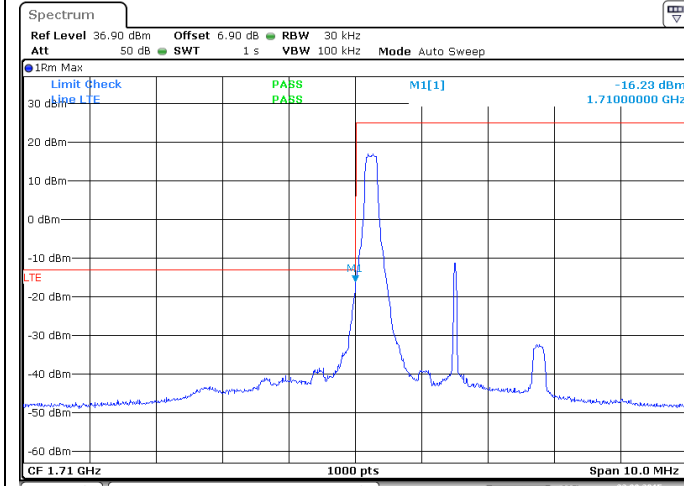


Date: 22.SEP.2015 07:52:39

LTE Band 4, QPSK modulation, 3MHz

Low Channel (19965)

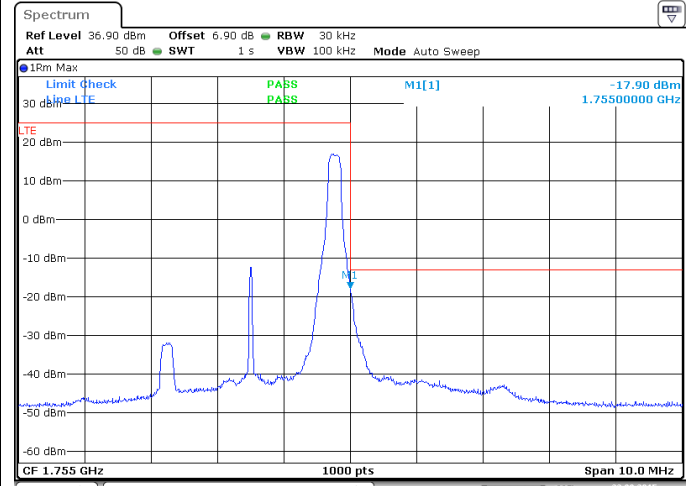
1 RB (Pos 0)



Date: 22.SEP.2015 07:48:09

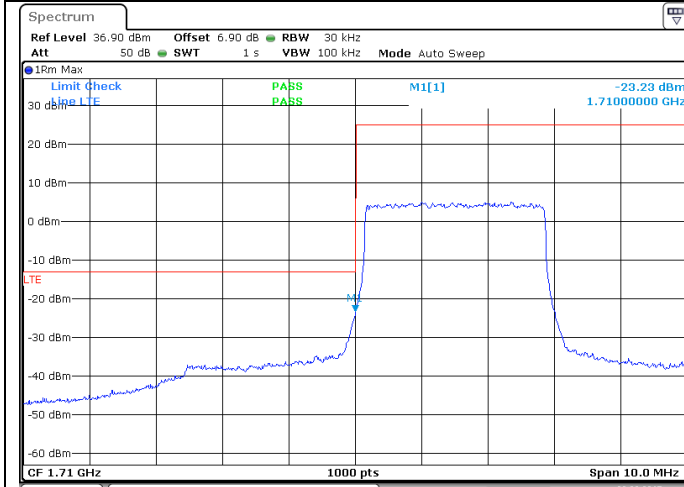
High Channel (20385)

1 RB (Pos 14)



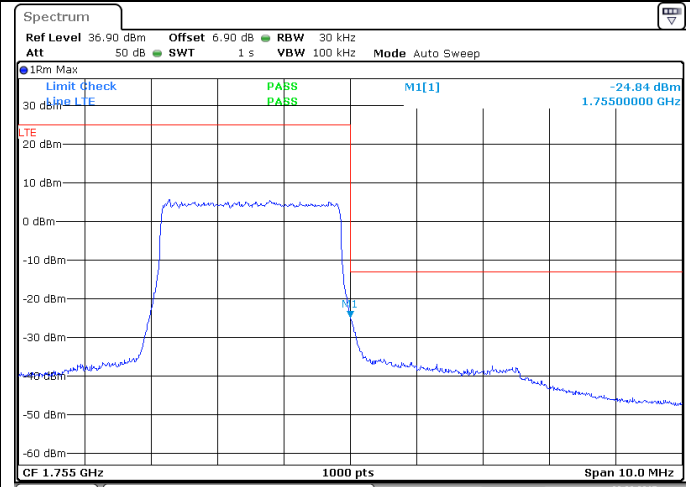
Date: 22.SEP.2015 07:44:35

15 RB (Pos 0)



Date: 22.SEP.2015 07:47:20

15 RB (Pos 0)

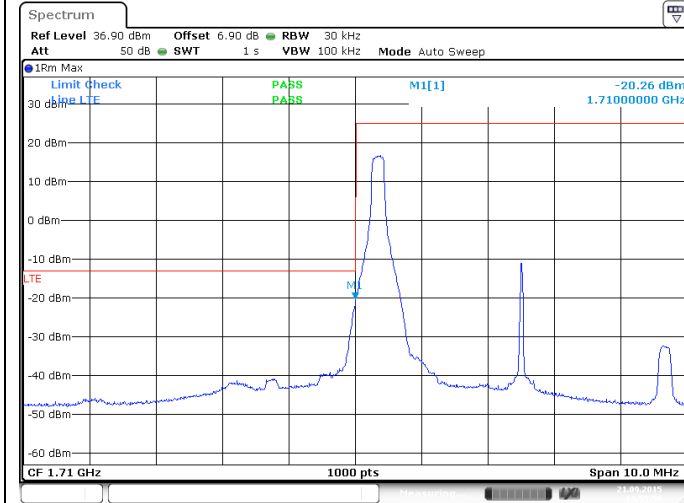


Date: 22.SEP.2015 07:42:31

LTE Band 4, QPSK modulation, 5MHz

Low Channel (19975)

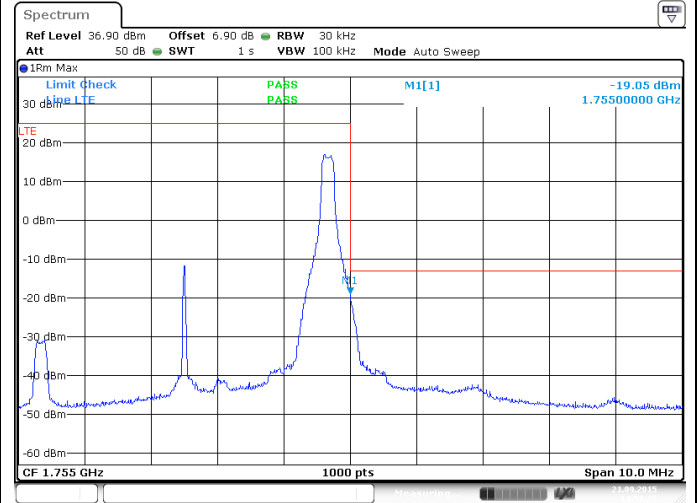
1 RB (Pos 0)



Date: 21.SEP.2015 14:55:56

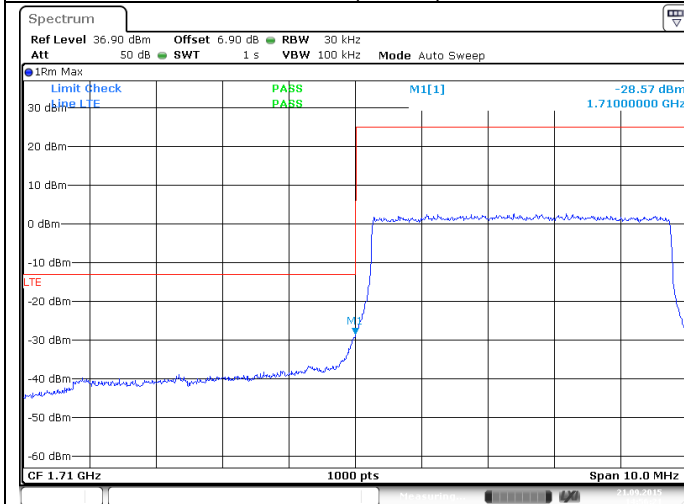
High Channel (20375)

1 RB (Pos 24)



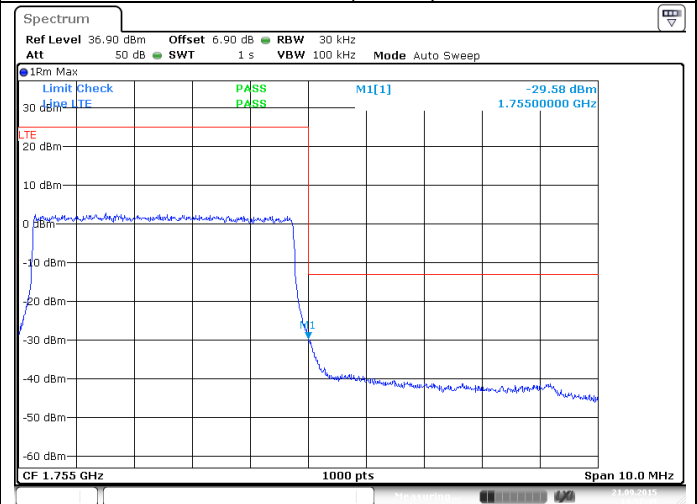
Date: 21.SEP.2015 14:57:26

25 RB (Pos 0)



Date: 21.SEP.2015 14:56:22

25 RB (Pos 0)

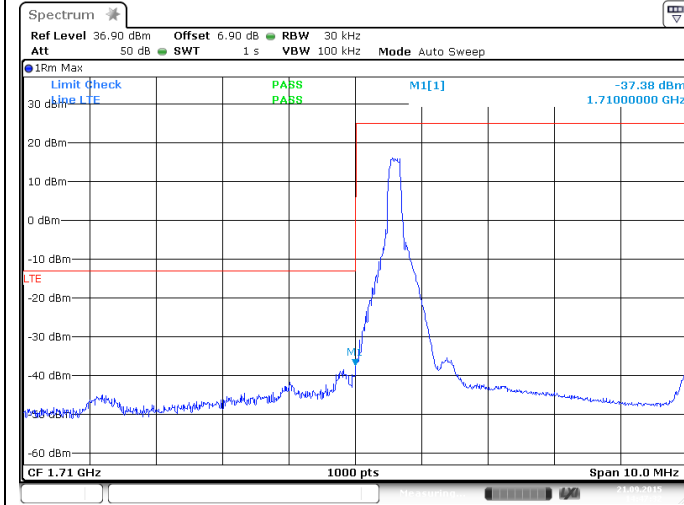


Date: 21.SEP.2015 14:57:50

LTE Band 4, QPSK modulation, 10MHz

Low Channel (20000)

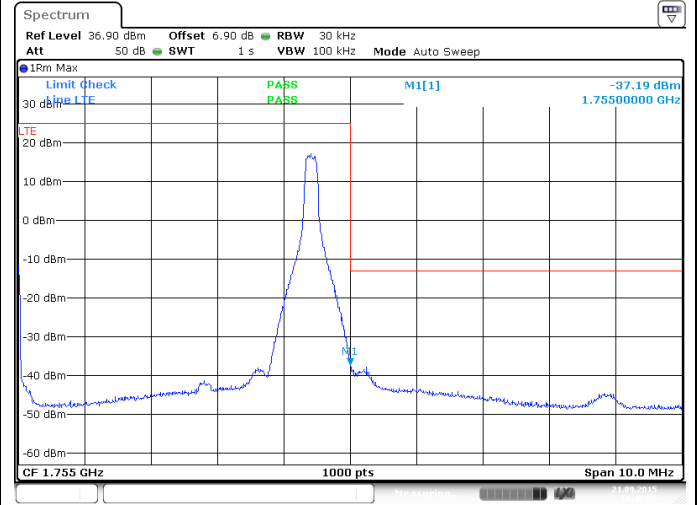
1 RB (Pos 0)



Date: 21.SEP.2015 14:47:33

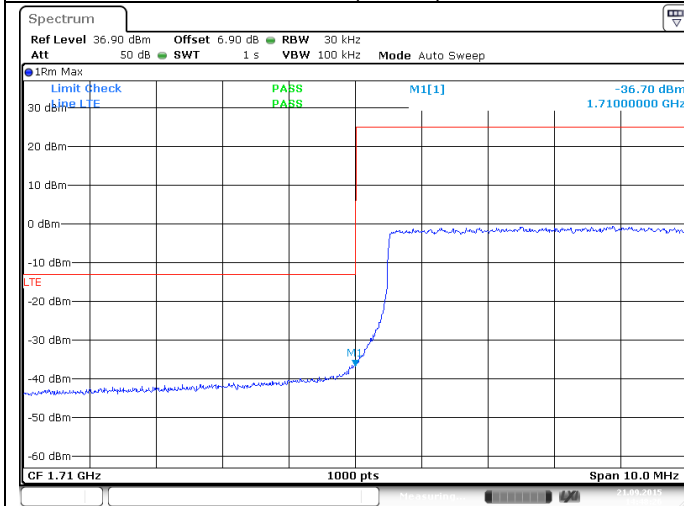
High Channel (20350)

1 RB (Pos 49)



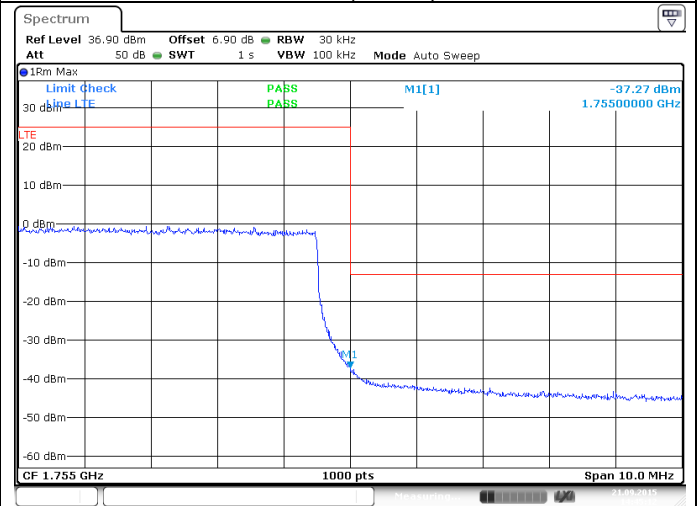
Date: 21.SEP.2015 14:45:57

50 RB (Pos 0)



Date: 21.SEP.2015 14:48:27

50 RB (Pos 0)

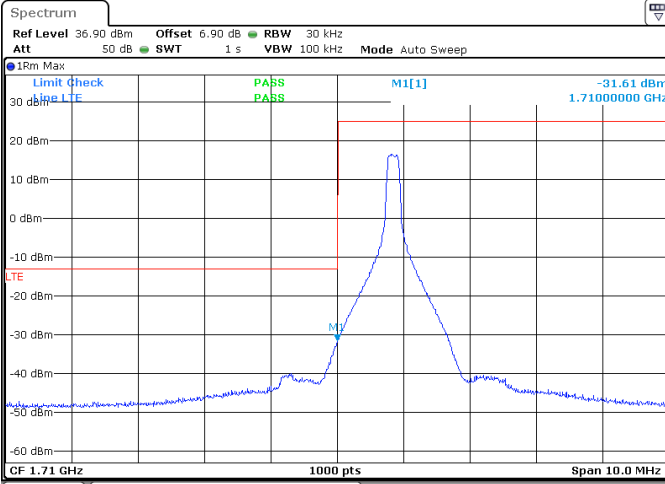


Date: 21.SEP.2015 14:45:12

LTE Band 4, QPSK modulation, 15MHz

Low Channel (20025)

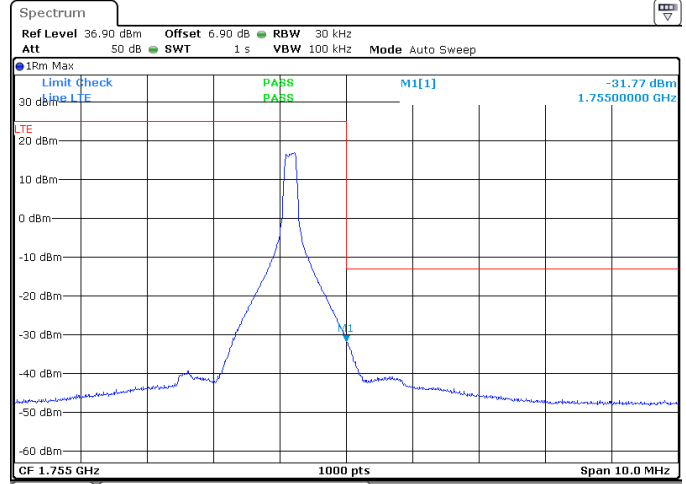
1 RB (Pos 0)



Date: 21.SEP.2015 14:29:28

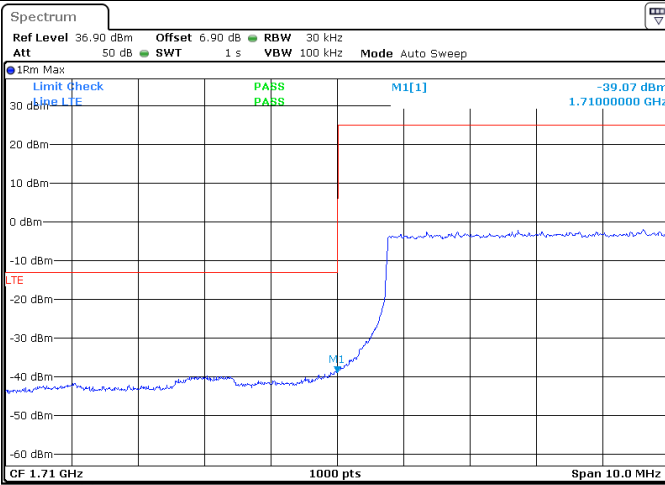
High Channel (20325)

1 RB (Pos 74)



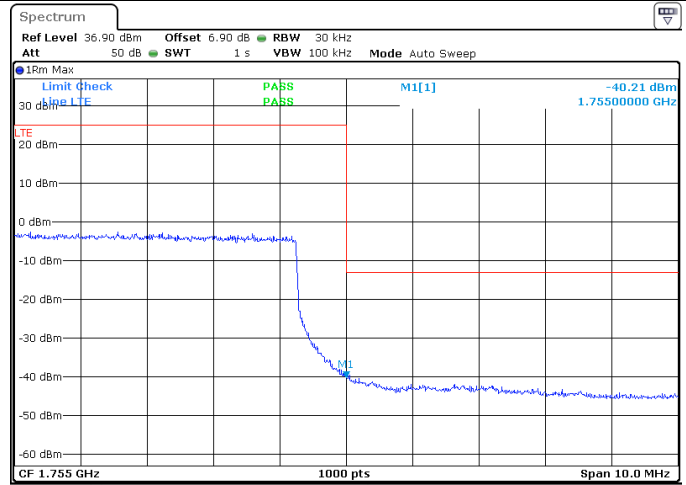
Date: 21.SEP.2015 14:36:07

75 RB (Pos 0)



Date: 21.SEP.2015 14:31:49

75 RB (Pos 0)

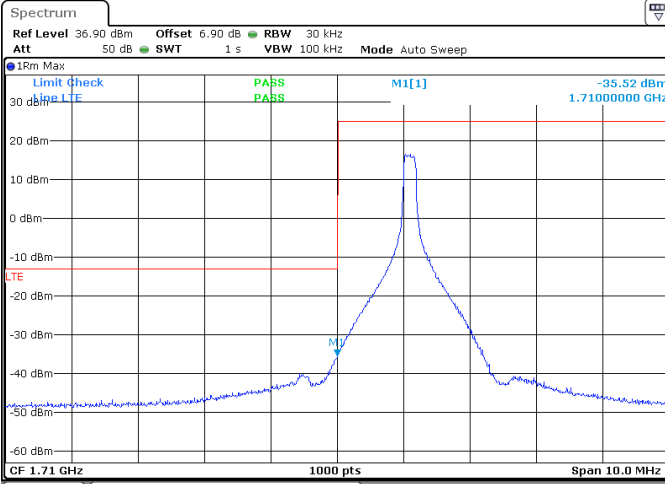


Date: 21.SEP.2015 14:44:00

LTE Band 4, QPSK modulation, 20MHz

Low Channel (20050)

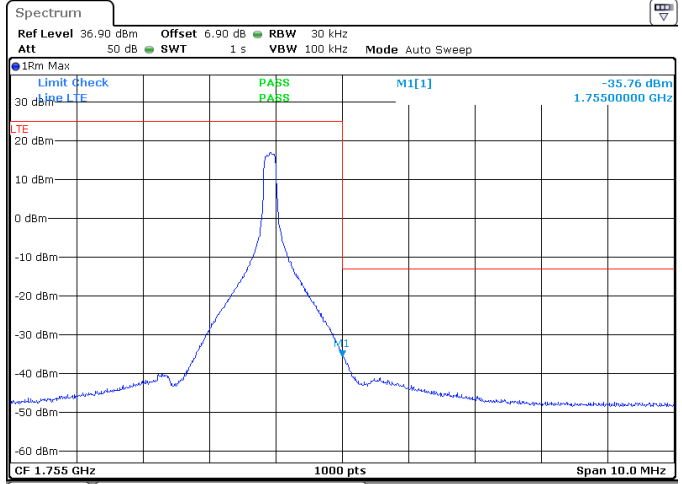
1 RB (Pos 0)



Date: 21.SEP.2015 14:28:21

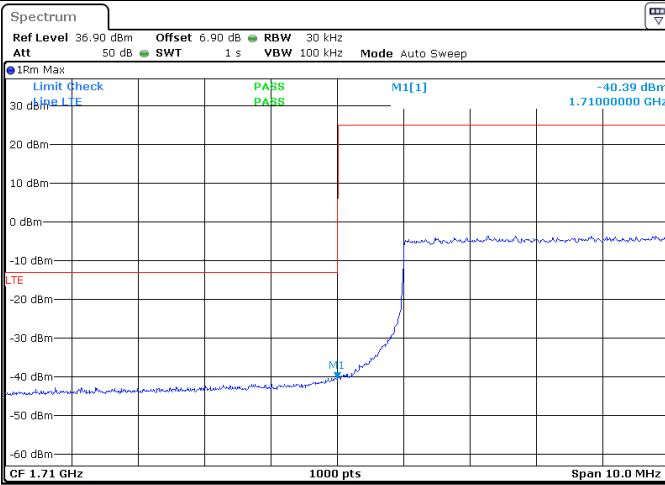
High Channel (20300)

1 RB (Pos 99)



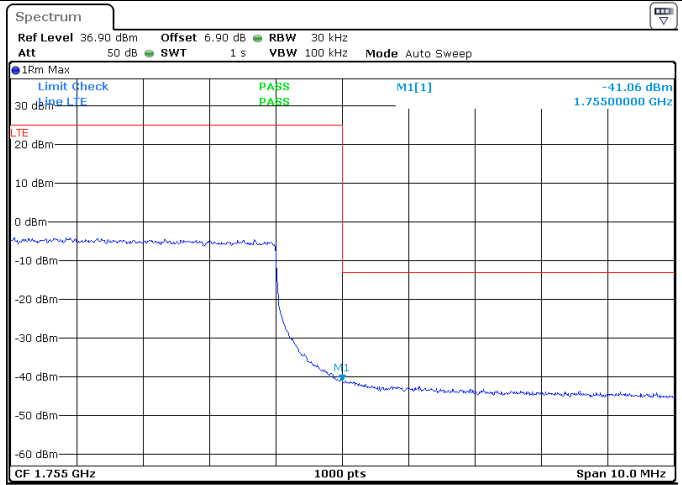
Date: 21.SEP.2015 14:25:40

100 RB (Pos 0)



Date: 21.SEP.2015 14:27:16

100 RB (Pos 0)

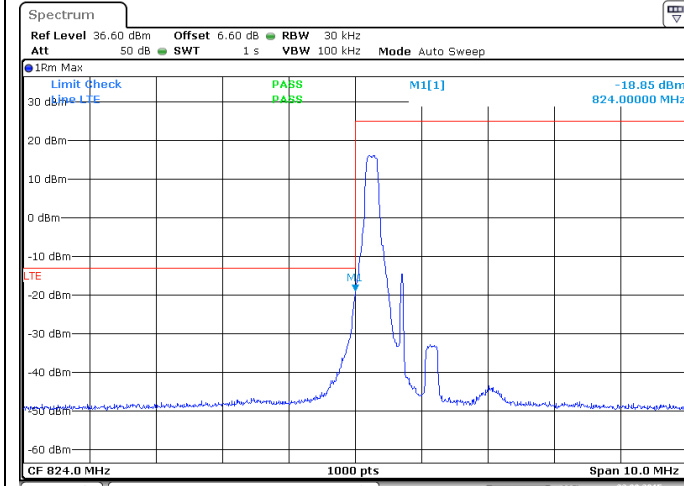


Date: 21.SEP.2015 14:24:43

LTE Band 5, QPSK modulation, 1.4MHz

Low Channel (20407)

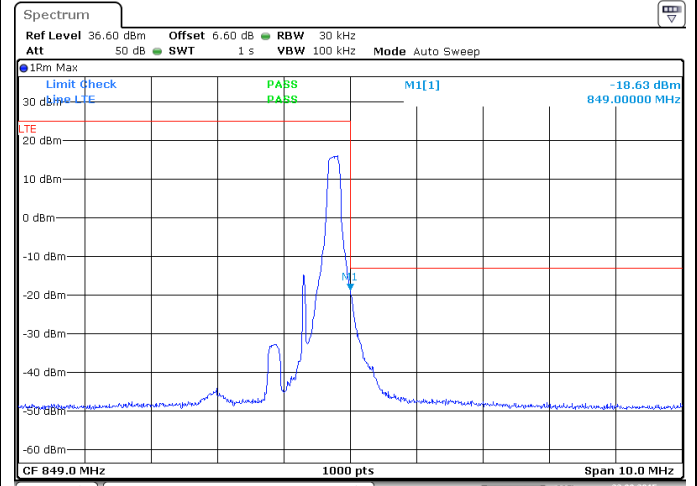
1 RB (Pos 0)



Date: 22.SEP.2015 07:57:59

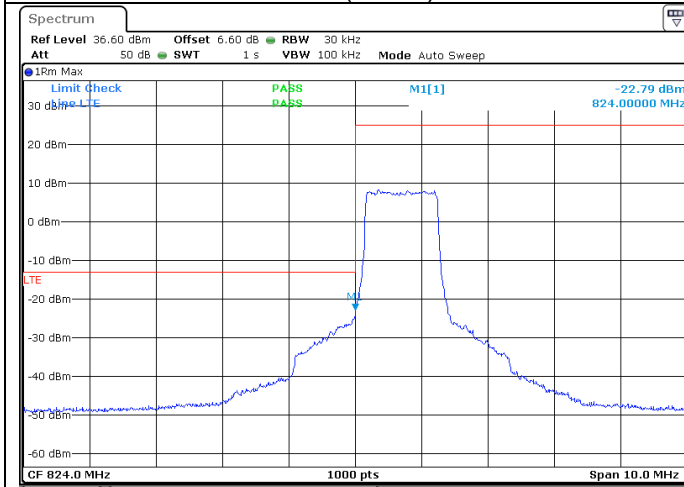
High Channel (20643)

1 RB (Pos 5)



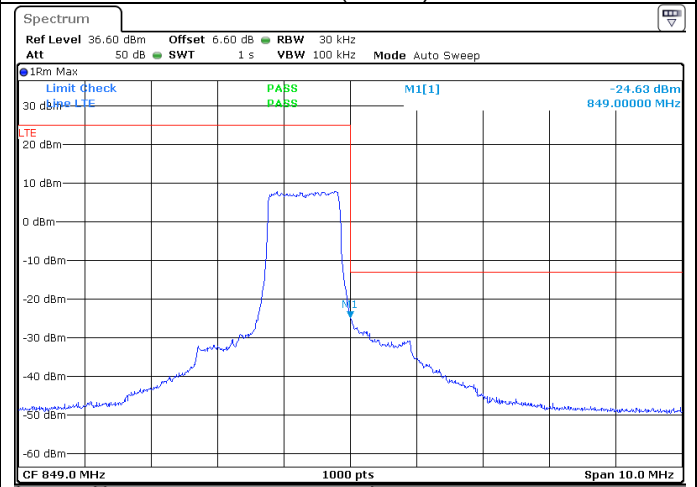
Date: 22.SEP.2015 07:55:55

6 RB (Pos 0)



Date: 22.SEP.2015 07:57:25

6 RB (Pos 0)

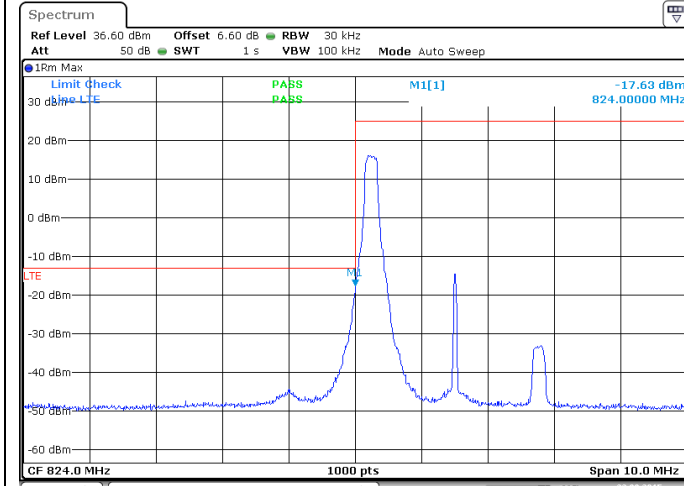


Date: 22.SEP.2015 07:55:21

LTE Band 5, QPSK modulation, 3MHz

Low Channel (20415)

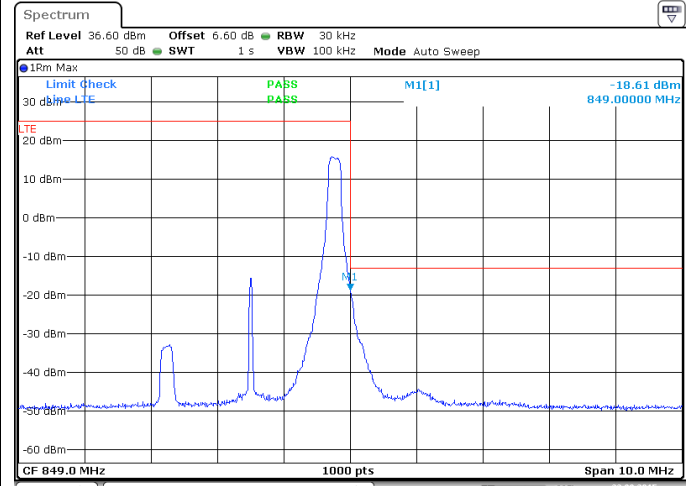
1 RB (Pos 0)



Date: 22.SEP.2015 07:59:35

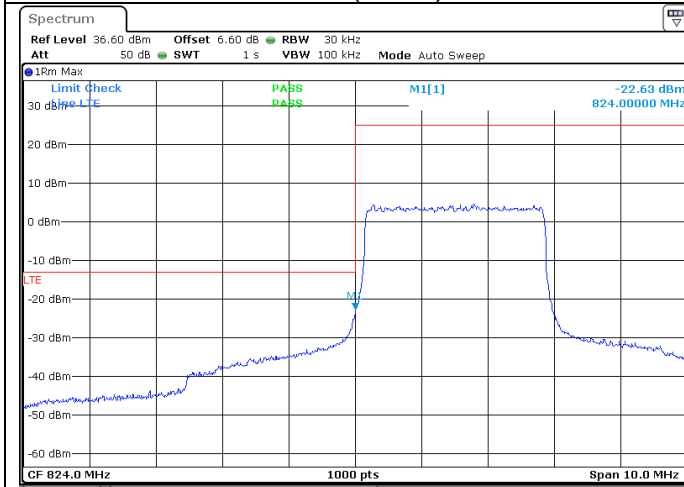
High Channel (20635)

1 RB (Pos 14)



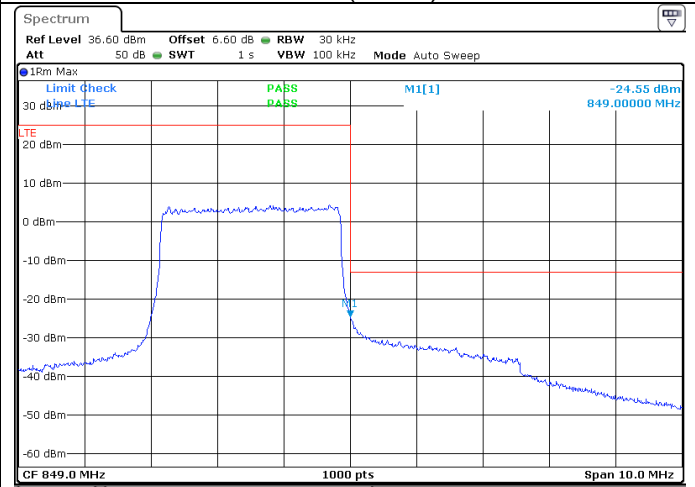
Date: 22.SEP.2015 08:10:13

15 RB (Pos 0)



Date: 22.SEP.2015 07:59:10

15 RB (Pos 0)

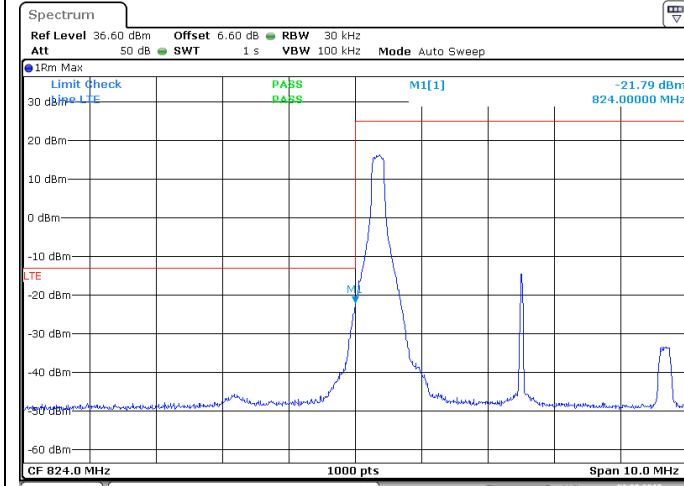


Date: 22.SEP.2015 08:11:59

LTE Band 5, QPSK modulation, 5MHz

Low Channel (20425)

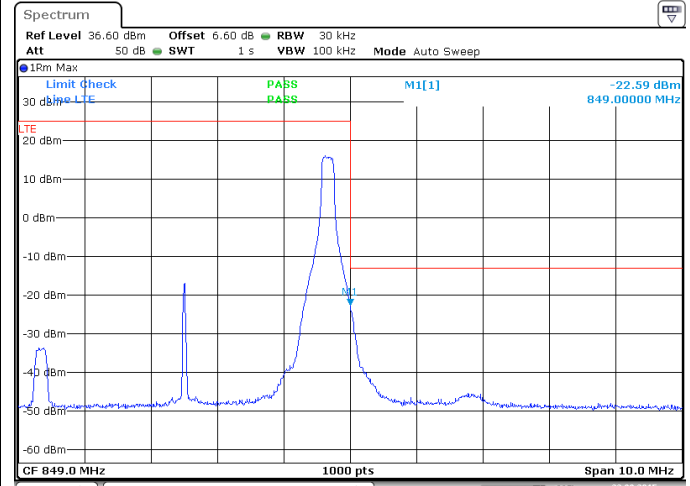
1 RB (Pos 0)



Date: 22.SEP.2015 08:00:48

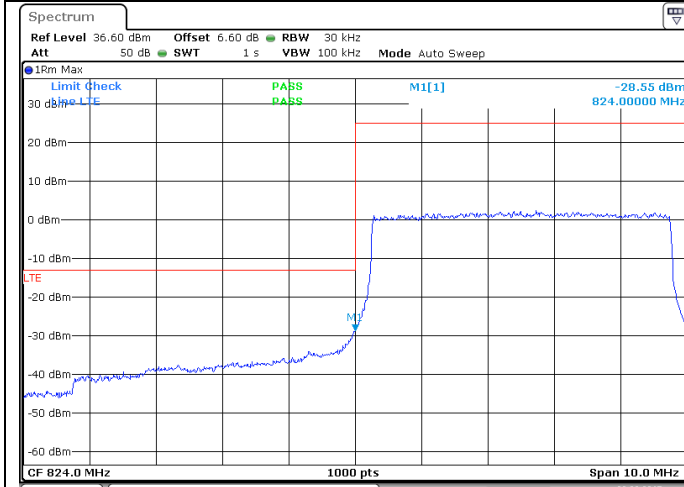
High Channel (20625)

1 RB (Pos 24)



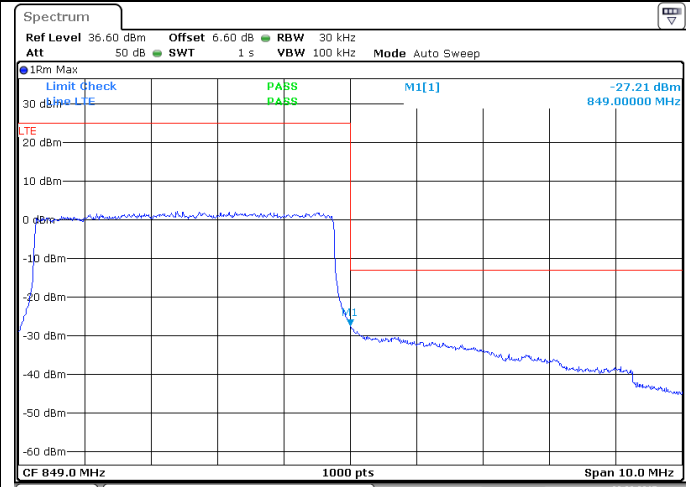
Date: 22.SEP.2015 08:09:22

25 RB (Pos 0)



Date: 22.SEP.2015 08:00:16

25 RB (Pos 0)



Date: 22.SEP.2015 08:08:50