

FCC RF Test Report

APPLICANT : ZTE CORPORATION
EQUIPMENT : LTE AND CDMA mobile hotspot
BRAND NAME : ZTE
MODEL NAME : EuFi891
FCC ID : Q78-EUFI891
STANDARD : 47 CFR Part 2, 22(H), 24(E), 27(L), 27(H)
CLASSIFICATION : PCS Licensed Transmitter (PCB)

The product was received on Jun. 19, 2012 and completely tested on Nov. 23, 2012. We, SPORTON INTERNATIONAL (KUNSHAN) INC., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI / TIA / EIA-603-C-2004 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL (KUNSHAN) INC., the test report shall not be reproduced except in full.

Reviewed by:



Jones Tsai / Manager



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SUMMARY OF TEST RESULT

| Report Section | FCC Rule | IC Rule | Description | Limit | Result | Remark |
|----------------|--|---|--|---|--------|--|
| 3.1 | §2.1046 | NA | Conducted Output Power | NA | PASS | - |
| 3.1 | §22.913(a)(2) | RSS-132(4.4) SRSP-503(5.1.3) | Effective Radiated Power | ERP < 7 Watts (Band 5) | PASS | - |
| 3.1 | §24.232(c) | RSS-133 (6.4) SRSP-510(5.1.2) | Equivalent Isotropic Radiated Power | EIRP < 2 Watt (Band 2) | PASS | - |
| 3.1 | §27.50(c)(10) §27.50(d)(4) | RSS-139 (6.4) SRSP-513(5.1.2) | Effective Radiated Power and Equivalent Isotropic Radiated Power | ERP < 3 Watts (Band 12) EIRP < 1 Watt (Band 4) | PASS | - |
| 3.2 | §24.232(d) §27.50(d)(5) | RSS-133(6.4) RSS-139(6.4) | Peak-to-Average Ratio | <13 dB | PASS | - |
| 3.3 | §2.1049 §22.917(a) §24.238(a) §27.53(g) (h) | N/A | Occupied Bandwidth | NA | PASS | - |
| 3.4 | §2.1051 §22.917(a) §24.238(a) §27.53(g)(h) | RSS-132 (4.5.1) RSS-133 (6.5.1) RSS-139 (6.5) | Emission Mask Measurement | < 43+10log ₁₀ (P[Watts]) | PASS | - |
| 3.4 | §2.1051 §22.917(a) §24.238(a) §27.53(g)(h) | RSS-132 (4.5.1) RSS-133 (6.5.1) RSS-139 (6.5) | Conducted Spurious Emission | < 43+10log ₁₀ (P[Watts]) | PASS | - |
| 3.5 | §2.1053 §22.917(a) §24.238(a) §27.53(g)(h) | RSS-132 (4.5.1) RSS-133 (6.5.1) RSS-139 (6.5) | Undesirable Out of Band Emissions | < 43+10log ₁₀ (P[Watts]) | PASS | Under limit 17.16 dB at 3818.000 MHz |
| 3.6 | §2.1055 §22.355 §24.235 §27.54 | RSS-132 (4.3) RSS-133 (6.3) RSS-139 (6.3) | Frequency Stability Temperature & Voltage | < 2.5 ppm | PASS | - |



1 General Description

1.1 Applicant

ZTE CORPORATION

ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China

1.2 Manufacturer

ZTE CORPORATION

ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China

1.3 Feature of Equipment Under Test

| Product Feature | |
|---------------------------------|--|
| Equipment | LTE AND CDMA mobile hotspot |
| Brand Name | ZTE |
| Model Name | EuFi891 |
| FCC ID | Q78-EUFI891 |
| EUT supports Radios application | CDMA/EV-DO/ LTE/WLAN 11bgn |
| HW Version | xh7C_V1.0 |
| SW Version | USCC_EuFi891V1.0.0B02 |
| Test Sample | Sample 1: SN 001 Sample 2: SN 002 Sample number is lab. internal controlled. |
| EUT Stage | Identical Prototype |

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. The 2nd sample is electrically identical with sample 1 for all U.S. operating bands, and devices are tested and found compliance with FCC standard.



| Product Specification subjective to this standard | |
|---|---|
| Tx Frequency | LTE Band 2 : 1850.7 MHz ~ 1909.3 MHz LTE Band 4 : 1710.7MHz ~ 1754.3 MHz LTE Band 5 : 824.7 MHz ~ 848.3 MHz LTE Band 12 : 699.7 MHz ~ 715.3 MHz |
| Rx Frequency | LTE Band 2 : 1930.7 MHz ~ 1989.3 MHz LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz LTE Band 5 : 869.7 MHz ~ 893.3 MHz LTE Band 12 : 729.7 MHz ~ 745.3 MHz |
| Bandwidth | 1.4MHz / 3MHz / 5MHz/ 10MHz / 15MHz / 20MHz (Band 2 and Band 4) 1.4MHz / 3MHz / 5MHz/ 10MHz (Band 5 and Band 12) |
| Maximum Output Average Power to Antenna | LTE Band 2 : 22.95 dBm LTE Band 4 : 22.87 dBm LTE Band 5 : 23.48 dBm LTE Band 12 : 23.35 dBm |
| Antenna Type | IFA Antenna |
| Type of Modulation | QPSK / 16QAM |

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4 Emission Designator and Maximum EIRP/ERP

| FCC Rule | System | Type of Modulation | BW | Maximum EIRP (W) | Emission Designator |
|----------|------------|--------------------|--------|------------------|---------------------|
| Part 24E | LTE Band 2 | QPSK | 1.4MHz | 0.3334 W | 1M10G7D |
| Part 24E | LTE Band 2 | 16QAM | 1.4MHz | 0.2685 W | 1M10D7W |
| Part 24E | LTE Band 2 | QPSK | 3MHz | 0.3508 W | 2M74G7D |
| Part 24E | LTE Band 2 | 16QAM | 3MHz | 0.2891 W | 2M74D7W |
| Part 24E | LTE Band 2 | QPSK | 5MHz | 0.2328 W | 4M52G7D |
| Part 24E | LTE Band 2 | 16QAM | 5MHz | 0.2208 W | 4M52D7W |
| Part 24E | LTE Band 2 | QPSK | 10MHz | 0.3126 W | 9M12G7D |
| Part 24E | LTE Band 2 | 16QAM | 10MHz | 0.2500 W | 9M08D7W |
| Part 24E | LTE Band 2 | QPSK | 15MHz | 0.2649 W | 13M4G7D |
| Part 24E | LTE Band 2 | 16QAM | 15MHz | 0.2344 W | 13M4D7W |
| Part 24E | LTE Band 2 | QPSK | 20MHz | 0.2178 W | 17M8G7D |
| Part 24E | LTE Band 2 | 16QAM | 20MHz | 0.2042 W | 17M8D7W |
| Part 27L | LTE Band 4 | QPSK | 1.4MHz | 0.3281 W | 1M10G7D |
| Part 27L | LTE Band 4 | 16QAM | 1.4MHz | 0.3192 W | 1M11D7W |
| Part 27L | LTE Band 4 | QPSK | 3MHz | 0.3681 W | 2M75G7D |
| Part 27L | LTE Band 4 | 16QAM | 3MHz | 0.3055 W | 2M75D7W |
| Part 27L | LTE Band 4 | QPSK | 5MHz | 0.2056 W | 4M52G7D |
| Part 27L | LTE Band 4 | 16QAM | 5MHz | 0.1928 W | 4M52D7W |
| Part 27L | LTE Band 4 | QPSK | 10MHz | 0.2979 W | 9M08G7D |
| Part 27L | LTE Band 4 | 16QAM | 10MHz | 0.2891 W | 9M04D7W |
| Part 27L | LTE Band 4 | QPSK | 15MHz | 0.3236 W | 13M5G7D |
| Part 27L | LTE Band 4 | 16QAM | 15MHz | 0.3006 W | 13M6D7W |
| Part 27L | LTE Band 4 | QPSK | 20MHz | 0.3273 W | 18M0G7D |
| Part 27L | LTE Band 4 | 16QAM | 20MHz | 0.3206 W | 18M0D7W |



| FCC Rule | System | Type of Modulation | BW | Maximum ERP (W) | Emission Designator |
|----------|-------------|--------------------|--------|-----------------|---------------------|
| Part 22H | LTE Band 5 | QPSK | 1.4MHz | 0.0881 W | 1M10G7D |
| Part 22H | LTE Band 5 | 16QAM | 1.4MHz | 0.0692 W | 1M11D7W |
| Part 22H | LTE Band 5 | QPSK | 3MHz | 0.1245 W | 2M74G7D |
| Part 22H | LTE Band 5 | 16QAM | 3MHz | 0.1202 W | 2M74D7W |
| Part 22H | LTE Band 5 | QPSK | 5MHz | 0.1216 W | 4M52G7D |
| Part 22H | LTE Band 5 | 16QAM | 5MHz | 0.1253 W | 4M50D7W |
| Part 22H | LTE Band 5 | QPSK | 10MHz | 0.1239 W | 9M12G7D |
| Part 22H | LTE Band 5 | 16QAM | 10MHz | 0.1279 W | 9M08D7W |
| Part 27H | LTE Band 12 | QPSK | 1.4MHz | 0.1368 W | 1M10G7D |
| Part 27H | LTE Band 12 | 16QAM | 1.4MHz | 0.1507 W | 1M11D7W |
| Part 27H | LTE Band 12 | QPSK | 3MHz | 0.1479 W | 2M75G7D |
| Part 27H | LTE Band 12 | 16QAM | 3MHz | 0.1371 W | 2M74D7W |
| Part 27H | LTE Band 12 | QPSK | 5MHz | 0.1416 W | 4M52G7D |
| Part 27H | LTE Band 12 | 16QAM | 5MHz | 0.1469 W | 4M52D7W |
| Part 27H | LTE Band 12 | QPSK | 10MHz | 0.1449 W | 9M16G7D |
| Part 27H | LTE Band 12 | 16QAM | 10MHz | 0.1242 W | 9M08D7W |



1.5 Testing Site

| | | |
|---------------------------|---|--------------------------------|
| Test Site | SPORTON INTERNATIONAL INC. | |
| Test Site Location | No. 52, Hwa Ya 1 st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL: +886-3-327-3456 FAX: +886-3-328-4978 | |
| Test Site No. | Sporton Site No. | FCC/IC Registration No. |
| | TH02-HY | TW1022/4086B-1 |

| | | |
|---------------------------|--|--------------------------------|
| Test Site | SPORTON INTERNATIONAL (KUNSHAN) INC. | |
| Test Site Location | No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P.R.C. TEL: +86-0512-5790-0158 FAX: +86-0512-5790-0958 | |
| Test Site No. | Sporton Site No. | FCC/IC Registration No. |
| | TH01-KS 03CH01-KS | 149928/4086E-1 |



1.6 Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR Part 2, 22(H), 24(E), 27(L), 27(H)
- ANSI / TIA / EIA-603-C-2004
- FCC KDB 971168 D01 Power Meas. License Digital Systems v01
- IC RSS-132 Issue 2
- IC RSS-133 Issue 5
- IC RSS-139 Issue 2

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

1.7 Ancillary Equipment List

| Item | Equipment | Trade Name | Model No. | FCC ID | Data Cable | Power Cord |
|------|------------------------------|------------|-----------|--------|------------|-------------------|
| 1. | LTE Base Station | Anritsu | MT8820C | N/A | N/A | Unshielded, 1.8 m |
| 2. | Radio Communication Analyzer | Anritsu | MT8820C | N/A | N/A | Unshielded, 1.8 m |
| 3. | DC Power Supply | GWINSTEK | GPS-3030D | N/A | N/A | Unshielded, 1.8 m |
| 4. | DC Power Supply | TOPWARD | 3303D | N/A | N/A | Unshielded, 1.8 m |

2 Test Configuration of Equipment Under Test

2.1 Test Mode

During all testing, EUT is in link mode with base station emulator at maximum power level. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range, and EUT is rotated on three test planes to find out the worst emission.

Frequency range investigated for radiated emission is as follows:

1. 30 MHz to 20000 MHz for LTE Band 2.
2. 30 MHz to 18000 MHz for LTE Band 4.
3. 30 MHz to 9000 MHz LTE Band 5.
4. 30 MHz to 8000 MHz LTE Band 12.

| Test Modes | | | |
|---------------|--------------|---|---|
| Band | Radiated TCs | Conducted TCs | |
| LTE Band 2 | BW 1.4MHz | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0) QPSK Link | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0)Link ■ LTE (RB Size 1, RB Offset 5)Link ■ LTE (RB Size 3, RB Offset 2)Link ■ LTE (RB Size 6, RB Offset 0)Link |
| | BW 3MHz | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0) QPSK Link | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0)Link ■ LTE (RB Size 1, RB Offset 14)Link ■ LTE (RB Size 8, RB Offset 4)Link ■ LTE (RB Size 15, RB Offset 0)Link |
| | BW 5MHz | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0) QPSK Link | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0)Link ■ LTE (RB Size 1, RB Offset 24)Link ■ LTE (RB Size 12, RB Offset 6)Link ■ LTE (RB Size 25, RB Offset 0)Link |
| | BW 10MHz | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0) QPSK Link | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0)Link ■ LTE (RB Size 1, RB Offset 49)Link ■ LTE (RB Size 25, RB Offset 13)Link ■ LTE (RB Size 50, RB Offset 0)Link |
| | BW 15MHz | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0) QPSK Link | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0)Link ■ LTE (RB Size 1, RB Offset 74)Link ■ LTE (RB Size 36, RB Offset 18)Link ■ LTE (RB Size 75, RB Offset 0)Link |
| | BW 20MHz | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 99) QPSK Link | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0) Link ■ LTE (RB Size 1, RB Offset 99) Link ■ LTE (RB Size 50, RB Offset 25) Link ■ LTE (RB Size 100, RB Offset 0) Link |



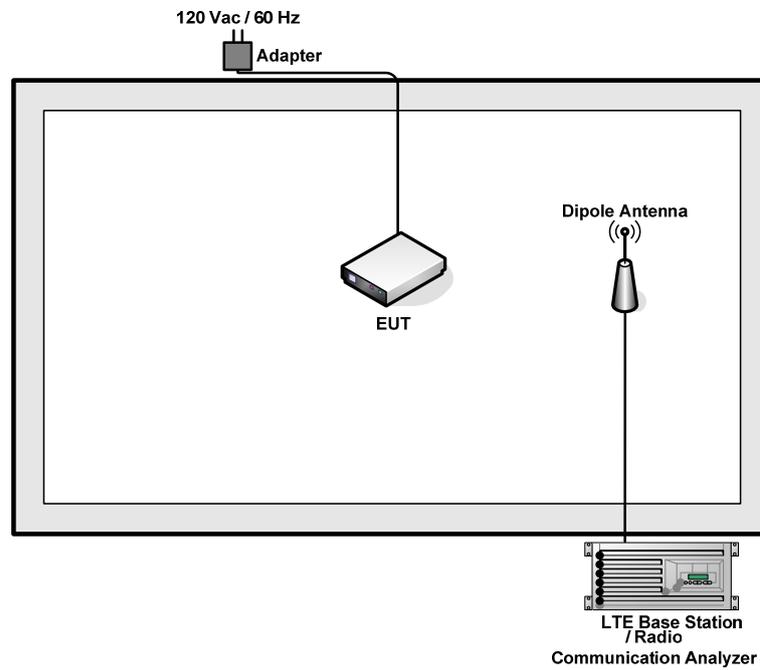
| Test Modes | | | |
|---------------|--------------|--|---|
| Band | | | |
| | Radiated TCs | Conducted TCs | |
| LTE Band 4 | BW 1.4MHz | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0) QPSK Link | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0)Link ■ LTE (RB Size 1, RB Offset 5)Link ■ LTE (RB Size 3, RB Offset 2)Link ■ LTE (RB Size 6, RB Offset 0)Link |
| | BW 3MHz | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0) QPSK Link | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0)Link ■ LTE (RB Size 1, RB Offset 14)Link ■ LTE (RB Size 8, RB Offset 4)Link ■ LTE (RB Size 15, RB Offset 0)Link |
| | BW 5MHz | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0) QPSK Link | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0)Link ■ LTE (RB Size 1, RB Offset 24)Link ■ LTE (RB Size 12, RB Offset 6)Link ■ LTE (RB Size 25, RB Offset 0)Link |
| | BW 10MHz | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0) QPSK Link | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0)Link ■ LTE (RB Size 1, RB Offset 49)Link ■ LTE (RB Size 25, RB Offset 13)Link ■ LTE (RB Size 50, RB Offset 0)Link |
| | BW 15MHz | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0) QPSK Link | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0)Link ■ LTE (RB Size 1, RB Offset 74)Link ■ LTE (RB Size 36, RB Offset 18)Link ■ LTE (RB Size 75, RB Offset 0)Link |
| | BW 20MHz | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0) QPSK Link | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0) Link ■ LTE (RB Size 1, RB Offset 99) Link ■ LTE (RB Size 50, RB Offset 25) Link ■ LTE (RB Size 100, RB Offset 0) Link |

| Test Modes | | | |
|----------------|--------------|--|--|
| Band | | | |
| | Radiated TCs | Conducted TCs | |
| LTE Band 5 | BW 1.4MHz | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0) QPSK Link | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0)Link ■ LTE (RB Size 1, RB Offset 5)Link ■ LTE (RB Size 3, RB Offset 2)Link ■ LTE (RB Size 6, RB Offset 0)Link |
| | BW 3MHz | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0) QPSK Link | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0)Link ■ LTE (RB Size 1, RB Offset 14)Link ■ LTE (RB Size 8, RB Offset 4)Link ■ LTE (RB Size 15, RB Offset 0)Link |
| | BW 5MHz | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0) QPSK Link | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0)Link ■ LTE (RB Size 1, RB Offset 24)Link ■ LTE (RB Size 12, RB Offset 6)Link ■ LTE (RB Size 25, RB Offset 0)Link |
| | BW 10MHz | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0) QPSK Link | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0)Link ■ LTE (RB Size 1, RB Offset 49)Link ■ LTE (RB Size 25, RB Offset 13)Link ■ LTE (RB Size 50, RB Offset 0)Link |
| LTE Band 12 | BW 1.4MHz | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0) QPSK Link | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0)Link ■ LTE (RB Size 1, RB Offset 5)Link ■ LTE (RB Size 3, RB Offset 2)Link ■ LTE (RB Size 6, RB Offset 0)Link |
| | BW 3MHz | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0) QPSK Link | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0)Link ■ LTE (RB Size 1, RB Offset 14)Link ■ LTE (RB Size 8, RB Offset 4)Link ■ LTE (RB Size 15, RB Offset 0)Link |
| | BW 5MHz | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0) QPSK Link | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0)Link ■ LTE (RB Size 1, RB Offset 24)Link ■ LTE (RB Size 12, RB Offset 6)Link ■ LTE (RB Size 25, RB Offset 0)Link |
| | BW 10MHz | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0) QPSK Link | <ul style="list-style-type: none"> ■ LTE (RB Size 1, RB Offset 0)Link ■ LTE (RB Size 1, RB Offset 49)Link ■ LTE (RB Size 25, RB Offset 13)Link ■ LTE (RB Size 50, RB Offset 0)Link |

Note:

1. For conducted test, both two Modulations (QPSK and 16QAM) are tested. For RSE, only the maximum RF output power level is chosen.
2. From conducted spurious emission measurement, the modulation related spurious emission out of the band is not identified. Since MPR is implemented, 1RB-QPSK results in highest RF power, therefore it's chosen for RSE measurement.

2.2 Connection Diagram of Test System



3 Test Result

3.1 Maximum Output Power and Effective Radiated Power/Effective Isotropic Radiated Power Measurement

3.1.1 Limit

Effective radiated power output measurements by substitution method according to ANSI / TIA / EIA-603-C-2004, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v01. Mobile and portable (hand-held) stations operating are limited to average ERP of 7 watts with band 5 and ERP of 3 watt with band 12.

Equivalent isotropic radiated power output measurements by substitution method according to ANSI / TIA / EIA-603-C-2004. Mobile and portable (hand-held) stations operating in each channel are limited to average EIRP of 2 watts with band 2 and 1 watt with band 4.

3.1.2 Measuring Instruments

See list of measuring instruments of this test report.

3.1.3 Test Procedures

For Conducted Power Measurement:

1. The RF output of the transmitter was connected to base station simulator.
2. Set EUT at maximum average power by base station simulator.
3. Measure lowest, middle, and highest channels for each bandwidth and different modulation.

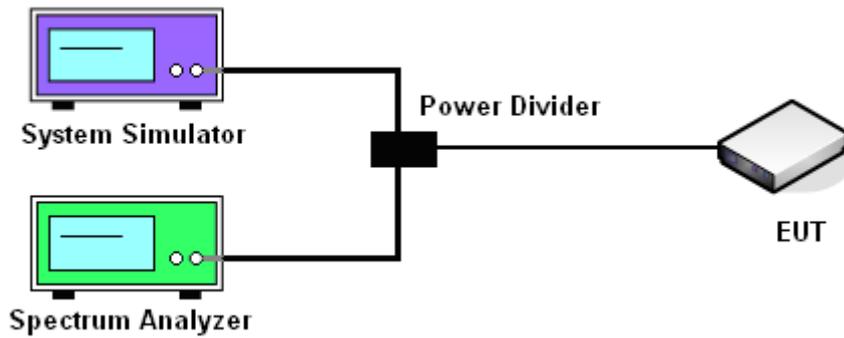
For Effective Isotropic Radiated Power Measurement:

1. The EUT was placed on an non-conductive rotating platform with 0.8 meter height in a semi-anechoic chamber. The radiated emission at the fundamental frequency was measured at 3 m.
2. During the measurement, the EUT was enforced in maximum power. The highest emission was recorded from analyzer power level (LVL) from the 360 degrees rotation of the turntable and the test antenna raised and lowered over a range from 1 to 4 meters in both horizontally and vertically polarized orientations.
3. Effective Radiated Power (ERP) and Effective Isotropic Radiated Power (EIRP) was measured by substitution method according to TIA/EIA-603-C. The EUT was replaced by dipole antenna (substitution antenna) at same location, and then a known power from S.G. was applied into the dipole antenna through a Tx cable, and then recorded the maximum Analyzer reading through

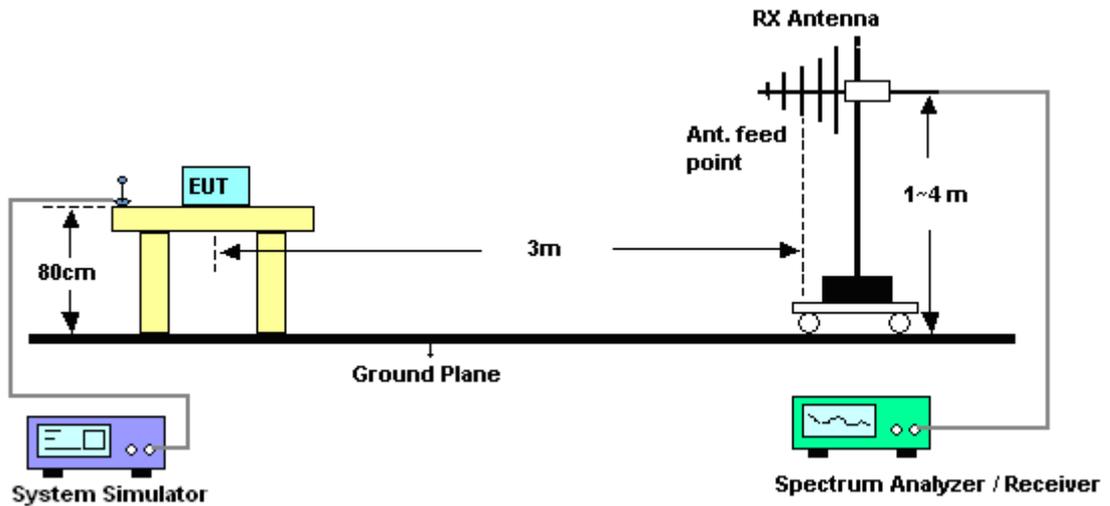
raised and lowered the test antenna. The correction factor (in dB) = S.G. - Tx Cable loss + Substitution antenna gain - Analyzer reading. Then the EUT's EIRP was calculated with the correction factor, $EIRP = LVL + \text{Correction factor}$.

3.1.4 Test Setup

<Conducted Power and Band Edge Measurement>



<Effective Radiated Power and Effective Isotropic Radiated Power Measurement>



3.1.5 Test Result of Conducted Output Power

| Mode | Band Width | Channel | Frequency (MHz) | Modulation | RB Configuration | | Average Power (dBm) | Average Power (Watts) |
|------------|------------|---------|-----------------|------------|------------------|-----------|---------------------|-----------------------|
| | | | | | RB Size | RB Offset | | |
| LTE Band 2 | 1.4MHz | 18607 | 1850.7 | QPSK | 1 | 0 | 22.78 | 0.1897 |
| | | | | | 1 | 5 | 22.65 | 0.1841 |
| | | | | | 3 | 2 | 22.76 | 0.1888 |
| | | | | | 6 | 0 | 21.97 | 0.1574 |
| | | | | 16-QAM | 1 | 0 | 22.14 | 0.1637 |
| | | | | | 1 | 5 | 22.08 | 0.1614 |
| | | | | | 3 | 2 | 21.94 | 0.1563 |
| | | | | | 6 | 0 | 20.92 | 0.1236 |
| | | 18900 | 1880 | QPSK | 1 | 0 | 22.85 | 0.1928 |
| | | | | | 1 | 5 | 22.88 | 0.1941 |
| | | | | | 3 | 2 | 22.82 | 0.1914 |
| | | | | | 6 | 0 | 21.87 | 0.1538 |
| | | | | 16-QAM | 1 | 0 | 22.15 | 0.1641 |
| | | | | | 1 | 5 | 21.98 | 0.1578 |
| | | | | | 3 | 2 | 21.94 | 0.1563 |
| | | | | | 6 | 0 | 21.16 | 0.1306 |
| | | 19193 | 1909.3 | QPSK | 1 | 0 | 22.89 | 0.1945 |
| | | | | | 1 | 5 | 22.58 | 0.1811 |
| | | | | | 3 | 2 | 22.66 | 0.1845 |
| | | | | | 6 | 0 | 21.72 | 0.1486 |
| | | | | 16-QAM | 1 | 0 | 21.97 | 0.1574 |
| | | | | | 1 | 5 | 21.91 | 0.1552 |
| | | | | | 3 | 2 | 21.73 | 0.1489 |
| | | | | | 6 | 0 | 21.05 | 0.1274 |



| Mode | Band Width | Channel | Frequency (MHz) | Modulation | RB Configuration | | Average Power (dBm) | Average Power (Watts) |
|------------|------------|---------|-----------------|------------|------------------|-----------|---------------------|-----------------------|
| | | | | | RB Size | RB Offset | | |
| LTE Band 2 | 3MHz | 18615 | 1851.5 | QPSK | 1 | 0 | 22.62 | 0.1828 |
| | | | | | 1 | 14 | 22.50 | 0.1778 |
| | | | | | 8 | 4 | 21.73 | 0.1489 |
| | | | | | 15 | 0 | 21.66 | 0.1466 |
| | | | | 16-QAM | 1 | 0 | 22.19 | 0.1656 |
| | | | | | 1 | 14 | 22.07 | 0.1611 |
| | | | | | 8 | 4 | 21.02 | 0.1265 |
| | | | | | 15 | 0 | 20.64 | 0.1159 |
| | | 18900 | 1880 | QPSK | 1 | 0 | 22.66 | 0.1845 |
| | | | | | 1 | 14 | 22.54 | 0.1795 |
| | | | | | 8 | 4 | 21.79 | 0.1510 |
| | | | | | 15 | 0 | 21.72 | 0.1486 |
| | | | | 16-QAM | 1 | 0 | 22.08 | 0.1614 |
| | | | | | 1 | 14 | 21.92 | 0.1556 |
| | | | | | 8 | 4 | 21.02 | 0.1265 |
| | | | | | 15 | 0 | 20.73 | 0.1183 |
| | | 19185 | 1908.5 | QPSK | 1 | 0 | 22.67 | 0.1849 |
| | | | | | 1 | 14 | 22.45 | 0.1758 |
| | | | | | 8 | 4 | 21.64 | 0.1459 |
| | | | | | 15 | 0 | 21.57 | 0.1435 |
| | | | | 16-QAM | 1 | 0 | 22.28 | 0.1690 |
| | | | | | 1 | 14 | 21.91 | 0.1552 |
| | | | | | 8 | 4 | 20.92 | 0.1236 |
| | | | | | 15 | 0 | 20.84 | 0.1213 |



| Mode | Band Width | Channel | Frequency (MHz) | Modulation | RB Configuration | | Average Power (dBm) | Average Power (Watts) |
|------------|------------|---------|-----------------|------------|------------------|-----------|---------------------|-----------------------|
| | | | | | RB Size | RB Offset | | |
| LTE Band 2 | 5MHz | 18625 | 1852.5 | QPSK | 1 | 0 | 22.71 | 0.1866 |
| | | | | | 1 | 24 | 22.74 | 0.1879 |
| | | | | | 12 | 6 | 21.65 | 0.1462 |
| | | | | | 25 | 0 | 21.81 | 0.1517 |
| | | | | 16-QAM | 1 | 0 | 22.17 | 0.1648 |
| | | | | | 1 | 24 | 22.20 | 0.1660 |
| | | | | | 12 | 6 | 20.76 | 0.1191 |
| | | | | | 25 | 0 | 20.68 | 0.1169 |
| | | 18900 | 1880 | QPSK | 1 | 0 | 22.62 | 0.1828 |
| | | | | | 1 | 24 | 22.65 | 0.1841 |
| | | | | | 12 | 6 | 21.88 | 0.1542 |
| | | | | | 25 | 0 | 22.05 | 0.1603 |
| | | | | 16-QAM | 1 | 0 | 22.16 | 0.1644 |
| | | | | | 1 | 24 | 21.94 | 0.1563 |
| | | | | | 12 | 6 | 20.83 | 0.1211 |
| | | | | | 25 | 0 | 20.77 | 0.1194 |
| | | 19175 | 1907.5 | QPSK | 1 | 0 | 22.79 | 0.1901 |
| | | | | | 1 | 24 | 22.32 | 0.1706 |
| | | | | | 12 | 6 | 21.70 | 0.1479 |
| | | | | | 25 | 0 | 21.79 | 0.1510 |
| 16-QAM | 1 | | | 0 | 22.15 | 0.1641 | | |
| | 1 | | | 24 | 21.90 | 0.1549 | | |
| | 12 | | | 6 | 20.75 | 0.1189 | | |
| | 25 | | | 0 | 20.91 | 0.1233 | | |



| Mode | Band Width | Channel | Frequency (MHz) | Modulation | RB Configuration | | Average Power (dBm) | Average Power (Watts) |
|------------|------------|---------|-----------------|------------|------------------|-----------|---------------------|-----------------------|
| | | | | | RB Size | RB Offset | | |
| LTE Band 2 | 10MHz | 18650 | 1855 | QPSK | 1 | 0 | 22.63 | 0.1832 |
| | | | | | 1 | 49 | 22.65 | 0.1841 |
| | | | | | 25 | 13 | 21.95 | 0.1567 |
| | | | | | 50 | 0 | 21.64 | 0.1459 |
| | | | | 16-QAM | 1 | 0 | 22.27 | 0.1687 |
| | | | | | 1 | 49 | 22.30 | 0.1698 |
| | | | | | 25 | 13 | 21.21 | 0.1321 |
| | | | | | 50 | 0 | 21.13 | 0.1297 |
| | | 18900 | 1880 | QPSK | 1 | 0 | 22.86 | 0.1932 |
| | | | | | 1 | 49 | 22.88 | 0.1941 |
| | | | | | 25 | 13 | 22.01 | 0.1589 |
| | | | | | 50 | 0 | 21.98 | 0.1578 |
| | | | | 16-QAM | 1 | 0 | 22.24 | 0.1675 |
| | | | | | 1 | 49 | 22.13 | 0.1633 |
| | | | | | 25 | 13 | 21.35 | 0.1365 |
| | | | | | 50 | 0 | 21.13 | 0.1297 |
| | | 19150 | 1905 | QPSK | 1 | 0 | 22.89 | 0.1945 |
| | | | | | 1 | 49 | 22.71 | 0.1866 |
| | | | | | 25 | 13 | 21.85 | 0.1531 |
| | | | | | 50 | 0 | 21.73 | 0.1489 |
| 16-QAM | 1 | | | 0 | 22.02 | 0.1592 | | |
| | 1 | | | 49 | 21.85 | 0.1531 | | |
| | 25 | | | 13 | 20.98 | 0.1253 | | |
| | 50 | | | 0 | 20.92 | 0.1236 | | |



| Mode | Band Width | Channel | Frequency (MHz) | Modulation | RB Configuration | | Average Power (dBm) | Average Power (Watts) |
|------------|------------|---------|-----------------|------------|------------------|-----------|---------------------|-----------------------|
| | | | | | RB Size | RB Offset | | |
| LTE Band 2 | 15MHz | 18675 | 1857.5 | QPSK | 1 | 0 | 22.85 | 0.1928 |
| | | | | | 1 | 74 | 22.86 | 0.1932 |
| | | | | | 36 | 18 | 22.50 | 0.1778 |
| | | | | | 75 | 0 | 21.92 | 0.1556 |
| | | | | 16-QAM | 1 | 0 | 22.28 | 0.1690 |
| | | | | | 1 | 74 | 22.30 | 0.1698 |
| | | | | | 36 | 18 | 21.21 | 0.1321 |
| | | | | | 75 | 0 | 20.74 | 0.1186 |
| | | 18900 | 1880 | QPSK | 1 | 0 | 22.89 | 0.1945 |
| | | | | | 1 | 74 | 22.91 | 0.1954 |
| | | | | | 36 | 18 | 22.08 | 0.1614 |
| | | | | | 75 | 0 | 22.01 | 0.1589 |
| | | | | 16-QAM | 1 | 0 | 22.37 | 0.1726 |
| | | | | | 1 | 74 | 22.33 | 0.1710 |
| | | | | | 36 | 18 | 21.08 | 0.1282 |
| | | | | | 75 | 0 | 20.97 | 0.1250 |
| | | 19125 | 1902.5 | QPSK | 1 | 0 | 22.95 | 0.1972 |
| | | | | | 1 | 74 | 22.60 | 0.1820 |
| | | | | | 36 | 18 | 21.91 | 0.1552 |
| | | | | | 75 | 0 | 21.83 | 0.1524 |
| | | | | 16-QAM | 1 | 0 | 22.30 | 0.1698 |
| | | | | | 1 | 74 | 22.13 | 0.1633 |
| | | | | | 36 | 18 | 20.93 | 0.1239 |
| | | | | | 75 | 0 | 20.62 | 0.1153 |



| Mode | Band Width | Channel | Frequency (MHz) | Modulation | RB Configuration | | Average Power (dBm) | Average Power (Watts) |
|------------|------------|---------|-----------------|------------|------------------|-----------|---------------------|-----------------------|
| | | | | | RB Size | RB Offset | | |
| LTE Band 2 | 20MHz | 18700 | 1860 | QPSK | 1 | 0 | 22.57 | 0.1807 |
| | | | | | 1 | 99 | 22.56 | 0.1803 |
| | | | | | 50 | 25 | 21.55 | 0.1429 |
| | | | | | 100 | 0 | 21.50 | 0.1413 |
| | | | | 16-QAM | 1 | 0 | 22.04 | 0.1600 |
| | | | | | 1 | 99 | 22.02 | 0.1592 |
| | | | | | 50 | 25 | 20.71 | 0.1178 |
| | | | | | 100 | 0 | 20.63 | 0.1156 |
| | | 18900 | 1880 | QPSK | 1 | 0 | 22.67 | 0.1849 |
| | | | | | 1 | 99 | 22.69 | 0.1858 |
| | | | | | 50 | 25 | 21.83 | 0.1524 |
| | | | | | 100 | 0 | 21.67 | 0.1469 |
| | | | | 16-QAM | 1 | 0 | 22.22 | 0.1667 |
| | | | | | 1 | 99 | 22.14 | 0.1637 |
| | | | | | 50 | 25 | 20.87 | 0.1222 |
| | | | | | 100 | 0 | 20.80 | 0.1202 |
| | | 19100 | 1900 | QPSK | 1 | 0 | 22.63 | 0.1832 |
| | | | | | 1 | 99 | 22.57 | 0.1807 |
| | | | | | 50 | 25 | 21.77 | 0.1503 |
| | | | | | 100 | 0 | 21.78 | 0.1507 |
| 16-QAM | 1 | | | 0 | 22.20 | 0.1660 | | |
| | 1 | | | 99 | 22.05 | 0.1603 | | |
| | 50 | | | 25 | 20.85 | 0.1216 | | |
| | 100 | | | 0 | 20.74 | 0.1186 | | |



| Mode | Band Width | Channel | Frequency (MHz) | Modulation | RB Configuration | | Average Power (dBm) | Average Power (Watts) |
|------------|------------|---------|-----------------|------------|------------------|-----------|---------------------|-----------------------|
| | | | | | RB Size | RB Offset | | |
| LTE Band 4 | 1.4MHz | 19957 | 1710.7 | QPSK | 1 | 0 | 22.85 | 0.1928 |
| | | | | | 1 | 5 | 22.63 | 0.1832 |
| | | | | | 3 | 2 | 22.78 | 0.1897 |
| | | | | | 6 | 0 | 21.97 | 0.1574 |
| | | | | 16-QAM | 1 | 0 | 22.15 | 0.1641 |
| | | | | | 1 | 5 | 21.88 | 0.1542 |
| | | | | | 3 | 2 | 22.14 | 0.1637 |
| | | | | | 6 | 0 | 20.96 | 0.1247 |
| | | 20175 | 1732.5 | QPSK | 1 | 0 | 22.86 | 0.1932 |
| | | | | | 1 | 5 | 22.55 | 0.1799 |
| | | | | | 3 | 2 | 22.69 | 0.1858 |
| | | | | | 6 | 0 | 21.68 | 0.1472 |
| | | | | 16-QAM | 1 | 0 | 22.08 | 0.1614 |
| | | | | | 1 | 5 | 21.86 | 0.1535 |
| | | | | | 3 | 2 | 21.72 | 0.1486 |
| | | | | | 6 | 0 | 20.85 | 0.1216 |
| | | 20393 | 1754.3 | QPSK | 1 | 0 | 22.60 | 0.1820 |
| | | | | | 1 | 5 | 22.65 | 0.1841 |
| | | | | | 3 | 2 | 22.56 | 0.1803 |
| | | | | | 6 | 0 | 21.63 | 0.1455 |
| | | | | 16-QAM | 1 | 0 | 22.02 | 0.1592 |
| | | | | | 1 | 5 | 22.05 | 0.1603 |
| | | | | | 3 | 2 | 21.73 | 0.1489 |
| | | | | | 6 | 0 | 20.65 | 0.1161 |



| Mode | Band Width | Channel | Frequency (MHz) | Modulation | RB Configuration | | Average Power (dBm) | Average Power (Watts) |
|------------|------------|---------|-----------------|------------|------------------|-----------|---------------------|-----------------------|
| | | | | | RB Size | RB Offset | | |
| LTE Band 4 | 3MHz | 19965 | 1711.5 | QPSK | 1 | 0 | 22.82 | 0.1914 |
| | | | | | 1 | 14 | 22.74 | 0.1879 |
| | | | | | 8 | 4 | 21.94 | 0.1563 |
| | | | | | 15 | 0 | 21.85 | 0.1531 |
| | | | | 16-QAM | 1 | 0 | 22.14 | 0.1637 |
| | | | | | 1 | 14 | 21.91 | 0.1552 |
| | | | | | 8 | 4 | 21.15 | 0.1303 |
| | | | | | 15 | 0 | 20.97 | 0.1250 |
| | | 20175 | 1732.5 | QPSK | 1 | 0 | 22.61 | 0.1824 |
| | | | | | 1 | 14 | 22.55 | 0.1799 |
| | | | | | 8 | 4 | 21.63 | 0.1455 |
| | | | | | 15 | 0 | 21.52 | 0.1419 |
| | | | | 16-QAM | 1 | 0 | 22.16 | 0.1644 |
| | | | | | 1 | 14 | 22.09 | 0.1618 |
| | | | | | 8 | 4 | 20.96 | 0.1247 |
| | | | | | 15 | 0 | 20.64 | 0.1159 |
| | | 20385 | 1753.5 | QPSK | 1 | 0 | 22.86 | 0.1932 |
| | | | | | 1 | 14 | 22.47 | 0.1766 |
| | | | | | 8 | 4 | 21.64 | 0.1459 |
| | | | | | 15 | 0 | 21.47 | 0.1403 |
| | | | | 16-QAM | 1 | 0 | 22.01 | 0.1589 |
| | | | | | 1 | 14 | 21.97 | 0.1574 |
| | | | | | 8 | 4 | 20.79 | 0.1199 |
| | | | | | 15 | 0 | 20.52 | 0.1127 |



| Mode | Band Width | Channel | Frequency (MHz) | Modulation | RB Configuration | | Average Power (dBm) | Average Power (Watts) |
|------------|------------|---------|-----------------|------------|------------------|-----------|---------------------|-----------------------|
| | | | | | RB Size | RB Offset | | |
| LTE Band 4 | 5MHz | 19975 | 1712.5 | QPSK | 1 | 0 | 22.84 | 0.1923 |
| | | | | | 1 | 24 | 22.75 | 0.1884 |
| | | | | | 12 | 6 | 21.78 | 0.1507 |
| | | | | | 25 | 0 | 22.03 | 0.1596 |
| | | | | 16-QAM | 1 | 0 | 22.17 | 0.1648 |
| | | | | | 1 | 24 | 22.01 | 0.1589 |
| | | | | | 12 | 6 | 20.95 | 0.1245 |
| | | | | | 25 | 0 | 20.84 | 0.1213 |
| | | 20175 | 1732.5 | QPSK | 1 | 0 | 22.58 | 0.1811 |
| | | | | | 1 | 24 | 22.43 | 0.1750 |
| | | | | | 12 | 6 | 21.76 | 0.1500 |
| | | | | | 25 | 0 | 21.64 | 0.1459 |
| | | | | 16-QAM | 1 | 0 | 22.18 | 0.1652 |
| | | | | | 1 | 24 | 21.73 | 0.1489 |
| | | | | | 12 | 6 | 20.59 | 0.1146 |
| | | | | | 25 | 0 | 21.05 | 0.1274 |
| | | 20375 | 1752.5 | QPSK | 1 | 0 | 22.87 | 0.1936 |
| | | | | | 1 | 24 | 22.61 | 0.1824 |
| | | | | | 12 | 6 | 21.53 | 0.1422 |
| | | | | | 25 | 0 | 21.42 | 0.1387 |
| | | | | 16-QAM | 1 | 0 | 22.15 | 0.1641 |
| | | | | | 1 | 24 | 21.73 | 0.1489 |
| | | | | | 12 | 6 | 20.55 | 0.1135 |
| | | | | | 25 | 0 | 20.91 | 0.1233 |



| Mode | Band Width | Channel | Frequency (MHz) | Modulation | RB Configuration | | Average Power (dBm) | Average Power (Watts) |
|------------|------------|---------|-----------------|------------|------------------|-----------|---------------------|-----------------------|
| | | | | | RB Size | RB Offset | | |
| LTE Band 4 | 10MHz | 20000 | 1715 | QPSK | 1 | 0 | 22.84 | 0.1923 |
| | | | | | 1 | 49 | 22.65 | 0.1841 |
| | | | | | 25 | 13 | 21.90 | 0.1549 |
| | | | | | 50 | 0 | 21.84 | 0.1528 |
| | | | | 16-QAM | 1 | 0 | 22.51 | 0.1782 |
| | | | | | 1 | 49 | 22.15 | 0.1641 |
| | | | | | 25 | 13 | 21.09 | 0.1285 |
| | | | | | 50 | 0 | 20.87 | 0.1222 |
| | | 20175 | 1732.5 | QPSK | 1 | 0 | 22.63 | 0.1832 |
| | | | | | 1 | 49 | 22.55 | 0.1799 |
| | | | | | 25 | 13 | 21.77 | 0.1503 |
| | | | | | 50 | 0 | 21.64 | 0.1459 |
| | | | | 16-QAM | 1 | 0 | 22.07 | 0.1611 |
| | | | | | 1 | 49 | 21.83 | 0.1524 |
| | | | | | 25 | 13 | 20.89 | 0.1227 |
| | | | | | 50 | 0 | 20.73 | 0.1183 |
| | | 20350 | 1750 | QPSK | 1 | 0 | 22.86 | 0.1932 |
| | | | | | 1 | 49 | 22.60 | 0.1820 |
| | | | | | 25 | 13 | 22.01 | 0.1589 |
| | | | | | 50 | 0 | 21.68 | 0.1472 |
| | | | | 16-QAM | 1 | 0 | 22.10 | 0.1622 |
| | | | | | 1 | 49 | 21.97 | 0.1574 |
| | | | | | 25 | 13 | 21.05 | 0.1274 |
| | | | | | 50 | 0 | 20.81 | 0.1205 |



| Mode | Band Width | Channel | Frequency (MHz) | Modulation | RB Configuration | | Average Power (dBm) | Average Power (Watts) |
|------------|------------|---------|-----------------|------------|------------------|-----------|---------------------|-----------------------|
| | | | | | RB Size | RB Offset | | |
| LTE Band 4 | 15MHz | 20025 | 1717.5 | QPSK | 1 | 0 | 22.79 | 0.1901 |
| | | | | | 1 | 74 | 22.51 | 0.1782 |
| | | | | | 36 | 18 | 21.95 | 0.1567 |
| | | | | | 75 | 0 | 21.88 | 0.1542 |
| | | | | 16-QAM | 1 | 0 | 22.47 | 0.1766 |
| | | | | | 1 | 74 | 22.16 | 0.1644 |
| | | | | | 36 | 18 | 21.04 | 0.1271 |
| | | | | | 75 | 0 | 20.66 | 0.1164 |
| | | 20175 | 1732.5 | QPSK | 1 | 0 | 22.66 | 0.1845 |
| | | | | | 1 | 74 | 22.51 | 0.1782 |
| | | | | | 36 | 18 | 21.90 | 0.1549 |
| | | | | | 75 | 0 | 21.71 | 0.1483 |
| | | | | 16-QAM | 1 | 0 | 22.19 | 0.1656 |
| | | | | | 1 | 74 | 21.83 | 0.1524 |
| | | | | | 36 | 18 | 20.95 | 0.1245 |
| | | | | | 75 | 0 | 20.54 | 0.1132 |
| | | 20325 | 1747.5 | QPSK | 1 | 0 | 22.83 | 0.1919 |
| | | | | | 1 | 74 | 22.46 | 0.1762 |
| | | | | | 36 | 18 | 21.90 | 0.1549 |
| | | | | | 75 | 0 | 21.73 | 0.1489 |
| | | | | 16-QAM | 1 | 0 | 22.23 | 0.1671 |
| | | | | | 1 | 74 | 22.10 | 0.1622 |
| | | | | | 36 | 18 | 20.92 | 0.1236 |
| | | | | | 75 | 0 | 20.38 | 0.1091 |



| Mode | Band Width | Channel | Frequency (MHz) | Modulation | RB Configuration | | Average Power (dBm) | Average Power (Watts) |
|------------|------------|---------|-----------------|------------|------------------|-----------|---------------------|-----------------------|
| | | | | | RB Size | RB Offset | | |
| LTE Band 4 | 20MHz | 20050 | 1720 | QPSK | 1 | 0 | 22.83 | 0.1919 |
| | | | | | 1 | 99 | 22.46 | 0.1762 |
| | | | | | 50 | 25 | 21.95 | 0.1567 |
| | | | | | 100 | 0 | 21.58 | 0.1439 |
| | | | | 16-QAM | 1 | 0 | 22.34 | 0.1714 |
| | | | | | 1 | 99 | 22.15 | 0.1641 |
| | | | | | 50 | 25 | 20.95 | 0.1245 |
| | | | | | 100 | 0 | 20.84 | 0.1213 |
| | | 20175 | 1732.5 | QPSK | 1 | 0 | 22.85 | 0.1928 |
| | | | | | 1 | 99 | 22.59 | 0.1816 |
| | | | | | 50 | 25 | 21.82 | 0.1521 |
| | | | | | 100 | 0 | 21.71 | 0.1483 |
| | | | | 16-QAM | 1 | 0 | 22.35 | 0.1718 |
| | | | | | 1 | 99 | 22.17 | 0.1648 |
| | | | | | 50 | 25 | 20.78 | 0.1197 |
| | | | | | 100 | 0 | 20.62 | 0.1153 |
| | | 20300 | 1745 | QPSK | 1 | 0 | 22.75 | 0.1884 |
| | | | | | 1 | 99 | 22.42 | 0.1746 |
| | | | | | 50 | 25 | 21.91 | 0.1552 |
| | | | | | 100 | 0 | 21.76 | 0.1500 |
| | | | | 16-QAM | 1 | 0 | 22.23 | 0.1671 |
| | | | | | 1 | 99 | 21.95 | 0.1567 |
| | | | | | 50 | 25 | 20.84 | 0.1213 |
| | | | | | 100 | 0 | 20.65 | 0.1161 |



| Mode | Band Width | Channel | Frequency (MHz) | Modulation | RB Configuration | | Average Power (dBm) | Average Power (Watts) |
|------------|------------|---------|-----------------|------------|------------------|-----------|---------------------|-----------------------|
| | | | | | RB Size | RB Offset | | |
| LTE Band 5 | 1.4MHz | 20407 | 824.7 | QPSK | 1 | 0 | 23.33 | 0.2153 |
| | | | | | 1 | 5 | 23.21 | 0.2094 |
| | | | | | 3 | 2 | 23.34 | 0.2158 |
| | | | | | 6 | 0 | 22.32 | 0.1706 |
| | | | | 16-QAM | 1 | 0 | 22.72 | 0.1871 |
| | | | | | 1 | 5 | 22.30 | 0.1698 |
| | | | | | 3 | 2 | 22.73 | 0.1875 |
| | | | | | 6 | 0 | 21.14 | 0.1300 |
| | | 20525 | 836.5 | QPSK | 1 | 0 | 23.19 | 0.2084 |
| | | | | | 1 | 5 | 23.18 | 0.2080 |
| | | | | | 3 | 2 | 22.83 | 0.1919 |
| | | | | | 6 | 0 | 22.23 | 0.1671 |
| | | | | 16-QAM | 1 | 0 | 22.66 | 0.1845 |
| | | | | | 1 | 5 | 22.42 | 0.1746 |
| | | | | | 3 | 2 | 21.82 | 0.1521 |
| | | | | | 6 | 0 | 21.14 | 0.1300 |
| | | 20643 | 848.3 | QPSK | 1 | 0 | 23.35 | 0.2163 |
| | | | | | 1 | 5 | 23.19 | 0.2084 |
| | | | | | 3 | 2 | 22.89 | 0.1945 |
| | | | | | 6 | 0 | 22.06 | 0.1607 |
| | | | | 16-QAM | 1 | 0 | 22.76 | 0.1888 |
| | | | | | 1 | 5 | 22.63 | 0.1832 |
| | | | | | 3 | 2 | 21.86 | 0.1535 |
| | | | | | 6 | 0 | 21.55 | 0.1429 |



| Mode | Band Width | Channel | Frequency (MHz) | Modulation | RB Configuration | | Average Power (dBm) | Average Power (Watts) |
|------------|------------|---------|-----------------|------------|------------------|-----------|---------------------|-----------------------|
| | | | | | RB Size | RB Offset | | |
| LTE Band 5 | 3MHz | 20415 | 825.5 | QPSK | 1 | 0 | 23.36 | 0.2168 |
| | | | | | 1 | 14 | 23.28 | 0.2128 |
| | | | | | 8 | 4 | 22.47 | 0.1766 |
| | | | | | 15 | 0 | 22.33 | 0.1710 |
| | | | | 16-QAM | 1 | 0 | 22.78 | 0.1897 |
| | | | | | 1 | 14 | 22.37 | 0.1726 |
| | | | | | 8 | 4 | 21.38 | 0.1374 |
| | | | | | 15 | 0 | 21.14 | 0.1300 |
| | | 20525 | 836.5 | QPSK | 1 | 0 | 23.25 | 0.2113 |
| | | | | | 1 | 14 | 23.21 | 0.2094 |
| | | | | | 8 | 4 | 22.29 | 0.1694 |
| | | | | | 15 | 0 | 22.18 | 0.1652 |
| | | | | 16-QAM | 1 | 0 | 22.73 | 0.1875 |
| | | | | | 1 | 14 | 22.48 | 0.1770 |
| | | | | | 8 | 4 | 21.65 | 0.1462 |
| | | | | | 15 | 0 | 21.16 | 0.1306 |
| | | 20635 | 847.5 | QPSK | 1 | 0 | 23.39 | 0.2183 |
| | | | | | 1 | 14 | 23.26 | 0.2118 |
| | | | | | 8 | 4 | 22.55 | 0.1799 |
| | | | | | 15 | 0 | 22.16 | 0.1644 |
| | | | | 16-QAM | 1 | 0 | 22.89 | 0.1945 |
| | | | | | 1 | 14 | 22.72 | 0.1871 |
| | | | | | 8 | 4 | 21.59 | 0.1442 |
| | | | | | 15 | 0 | 21.43 | 0.1390 |



| Mode | Band Width | Channel | Frequency (MHz) | Modulation | RB Configuration | | Average Power (dBm) | Average Power (Watts) |
|------------|------------|---------|-----------------|------------|------------------|-----------|---------------------|-----------------------|
| | | | | | RB Size | RB Offset | | |
| LTE Band 5 | 5MHz | 20425 | 826.5 | QPSK | 1 | 0 | 23.25 | 0.2113 |
| | | | | | 1 | 24 | 23.21 | 0.2094 |
| | | | | | 12 | 6 | 22.51 | 0.1782 |
| | | | | | 25 | 0 | 22.46 | 0.1762 |
| | | | | 16-QAM | 1 | 0 | 22.91 | 0.1954 |
| | | | | | 1 | 24 | 22.69 | 0.1858 |
| | | | | | 12 | 6 | 21.55 | 0.1429 |
| | | | | | 25 | 0 | 21.63 | 0.1455 |
| | | 20525 | 836.5 | QPSK | 1 | 0 | 23.44 | 0.2208 |
| | | | | | 1 | 24 | 23.32 | 0.2148 |
| | | | | | 12 | 6 | 22.49 | 0.1774 |
| | | | | | 25 | 0 | 22.37 | 0.1726 |
| | | | | 16-QAM | 1 | 0 | 22.79 | 0.1901 |
| | | | | | 1 | 24 | 22.77 | 0.1892 |
| | | | | | 12 | 6 | 21.69 | 0.1476 |
| | | | | | 25 | 0 | 21.38 | 0.1374 |
| | | 20625 | 846.5 | QPSK | 1 | 0 | 23.48 | 0.2228 |
| | | | | | 1 | 24 | 23.22 | 0.2099 |
| | | | | | 12 | 6 | 22.49 | 0.1774 |
| | | | | | 25 | 0 | 22.26 | 0.1683 |
| | | | | 16-QAM | 1 | 0 | 22.90 | 0.1950 |
| | | | | | 1 | 24 | 22.82 | 0.1914 |
| | | | | | 12 | 6 | 21.44 | 0.1393 |
| | | | | | 25 | 0 | 21.32 | 0.1355 |



| Mode | Band Width | Channel | Frequency (MHz) | Modulation | RB Configuration | | Average Power (dBm) | Average Power (Watts) |
|------------|------------|---------|-----------------|------------|------------------|-----------|---------------------|-----------------------|
| | | | | | RB Size | RB Offset | | |
| LTE Band 5 | 10MHz | 20450 | 829 | QPSK | 1 | 0 | 23.29 | 0.2133 |
| | | | | | 1 | 49 | 23.26 | 0.2118 |
| | | | | | 25 | 13 | 22.63 | 0.1832 |
| | | | | | 50 | 0 | 22.42 | 0.1746 |
| | | | | 16-QAM | 1 | 0 | 22.86 | 0.1932 |
| | | | | | 1 | 49 | 22.66 | 0.1845 |
| | | | | | 25 | 13 | 21.77 | 0.1503 |
| | | | | | 50 | 0 | 21.45 | 0.1396 |
| | | 20525 | 836.5 | QPSK | 1 | 0 | 23.39 | 0.2183 |
| | | | | | 1 | 49 | 23.14 | 0.2061 |
| | | | | | 25 | 13 | 22.46 | 0.1762 |
| | | | | | 50 | 0 | 22.33 | 0.1710 |
| | | | | 16-QAM | 1 | 0 | 22.90 | 0.1950 |
| | | | | | 1 | 49 | 22.65 | 0.1841 |
| | | | | | 25 | 13 | 21.63 | 0.1455 |
| | | | | | 50 | 0 | 21.29 | 0.1346 |
| | | 20600 | 844 | QPSK | 1 | 0 | 23.21 | 0.2094 |
| | | | | | 1 | 49 | 23.10 | 0.2042 |
| | | | | | 25 | 13 | 22.34 | 0.1714 |
| | | | | | 50 | 0 | 22.17 | 0.1648 |
| | | | | 16-QAM | 1 | 0 | 22.66 | 0.1845 |
| | | | | | 1 | 49 | 22.38 | 0.1730 |
| | | | | | 25 | 13 | 21.74 | 0.1493 |
| | | | | | 50 | 0 | 21.65 | 0.1462 |



| Mode | Band Width | Channel | Frequency (MHz) | Modulation | RB Configuration | | Average Power (dBm) | Average Power (Watts) |
|-------------|------------|---------|-----------------|------------|------------------|-----------|---------------------|-----------------------|
| | | | | | RB Size | RB Offset | | |
| LTE Band 12 | 1.4MHz | 23017 | 699.7 | QPSK | 1 | 0 | 23.01 | 0.2000 |
| | | | | | 1 | 5 | 22.93 | 0.1963 |
| | | | | | 3 | 2 | 23.06 | 0.2023 |
| | | | | | 6 | 0 | 22.19 | 0.1656 |
| | | | | 16-QAM | 1 | 0 | 22.48 | 0.1770 |
| | | | | | 1 | 5 | 22.36 | 0.1722 |
| | | | | | 3 | 2 | 22.12 | 0.1629 |
| | | | | | 6 | 0 | 21.29 | 0.1346 |
| | | 23095 | 707.5 | QPSK | 1 | 0 | 23.04 | 0.2014 |
| | | | | | 1 | 5 | 22.91 | 0.1954 |
| | | | | | 3 | 2 | 22.56 | 0.1803 |
| | | | | | 6 | 0 | 21.93 | 0.1560 |
| | | | | 16-QAM | 1 | 0 | 22.33 | 0.1710 |
| | | | | | 1 | 5 | 22.24 | 0.1675 |
| | | | | | 3 | 2 | 21.59 | 0.1442 |
| | | | | | 6 | 0 | 21.12 | 0.1294 |
| | | 23173 | 715.3 | QPSK | 1 | 0 | 23.29 | 0.2133 |
| | | | | | 1 | 5 | 23.30 | 0.2138 |
| | | | | | 3 | 2 | 23.27 | 0.2123 |
| | | | | | 6 | 0 | 22.28 | 0.1690 |
| | | | | 16-QAM | 1 | 0 | 22.66 | 0.1845 |
| | | | | | 1 | 5 | 22.55 | 0.1799 |
| | | | | | 3 | 2 | 22.43 | 0.1750 |
| | | | | | 6 | 0 | 21.78 | 0.1507 |



| Mode | Band Width | Channel | Frequency (MHz) | Modulation | RB Configuration | | Average Power (dBm) | Average Power (Watts) |
|-------------|------------|---------|-----------------|------------|------------------|-----------|---------------------|-----------------------|
| | | | | | RB Size | RB Offset | | |
| LTE Band 12 | 3MHz | 23025 | 700.5 | QPSK | 1 | 0 | 23.20 | 0.2089 |
| | | | | | 1 | 14 | 22.99 | 0.1991 |
| | | | | | 8 | 4 | 21.97 | 0.1574 |
| | | | | | 15 | 0 | 21.80 | 0.1514 |
| | | | | 16-QAM | 1 | 0 | 22.54 | 0.1795 |
| | | | | | 1 | 14 | 22.36 | 0.1722 |
| | | | | | 8 | 4 | 21.34 | 0.1361 |
| | | | | | 15 | 0 | 21.06 | 0.1276 |
| | | 23095 | 707.5 | QPSK | 1 | 0 | 23.18 | 0.2080 |
| | | | | | 1 | 14 | 22.97 | 0.1982 |
| | | | | | 8 | 4 | 22.17 | 0.1648 |
| | | | | | 15 | 0 | 21.98 | 0.1578 |
| | | | | 16-QAM | 1 | 0 | 22.53 | 0.1791 |
| | | | | | 1 | 14 | 22.18 | 0.1652 |
| | | | | | 8 | 4 | 21.27 | 0.1340 |
| | | | | | 15 | 0 | 20.95 | 0.1245 |
| | | 23165 | 714.5 | QPSK | 1 | 0 | 23.05 | 0.2018 |
| | | | | | 1 | 14 | 23.09 | 0.2037 |
| | | | | | 8 | 4 | 22.51 | 0.1782 |
| | | | | | 15 | 0 | 22.37 | 0.1726 |
| | | | | 16-QAM | 1 | 0 | 22.45 | 0.1758 |
| | | | | | 1 | 14 | 22.42 | 0.1746 |
| | | | | | 8 | 4 | 21.60 | 0.1445 |
| | | | | | 15 | 0 | 21.39 | 0.1377 |



| Mode | Band Width | Channel | Frequency (MHz) | Modulation | RB Configuration | | Average Power (dBm) | Average Power (Watts) |
|-------------|------------|---------|-----------------|------------|------------------|-----------|---------------------|-----------------------|
| | | | | | RB Size | RB Offset | | |
| LTE Band 12 | 5MHz | 23035 | 701.5 | QPSK | 1 | 0 | 23.35 | 0.2163 |
| | | | | | 1 | 24 | 23.33 | 0.2153 |
| | | | | | 12 | 6 | 22.48 | 0.1770 |
| | | | | | 25 | 0 | 21.97 | 0.1574 |
| | | | | 16-QAM | 1 | 0 | 22.68 | 0.1854 |
| | | | | | 1 | 24 | 22.47 | 0.1766 |
| | | | | | 12 | 6 | 21.11 | 0.1291 |
| | | | | | 25 | 0 | 20.95 | 0.1245 |
| | | 23095 | 707.5 | QPSK | 1 | 0 | 23.18 | 0.2080 |
| | | | | | 1 | 24 | 22.95 | 0.1972 |
| | | | | | 12 | 6 | 22.03 | 0.1596 |
| | | | | | 25 | 0 | 22.07 | 0.1611 |
| | | | | 16-QAM | 1 | 0 | 22.65 | 0.1841 |
| | | | | | 1 | 24 | 22.60 | 0.1820 |
| | | | | | 12 | 6 | 21.05 | 0.1274 |
| | | | | | 25 | 0 | 21.14 | 0.1300 |
| | | 23155 | 713.5 | QPSK | 1 | 0 | 23.01 | 0.2000 |
| | | | | | 1 | 24 | 23.03 | 0.2009 |
| | | | | | 12 | 6 | 22.02 | 0.1592 |
| | | | | | 25 | 0 | 21.98 | 0.1578 |
| 16-QAM | 1 | | | 0 | 22.36 | 0.1722 | | |
| | 1 | | | 24 | 22.43 | 0.1750 | | |
| | 12 | | | 6 | 21.36 | 0.1368 | | |
| | 25 | | | 0 | 21.09 | 0.1285 | | |



| Mode | Band Width | Channel | Frequency (MHz) | Modulation | RB Configuration | | Average Power (dBm) | Average Power (Watts) |
|-------------|------------|---------|-----------------|------------|------------------|-----------|---------------------|-----------------------|
| | | | | | RB Size | RB Offset | | |
| LTE Band 12 | 10MHz | 23060 | 704 | QPSK | 1 | 0 | 22.79 | 0.1901 |
| | | | | | 1 | 49 | 22.66 | 0.1845 |
| | | | | | 25 | 13 | 22.14 | 0.1637 |
| | | | | | 50 | 0 | 21.85 | 0.1531 |
| | | | | 16-QAM | 1 | 0 | 22.47 | 0.1766 |
| | | | | | 1 | 49 | 22.33 | 0.1709 |
| | | | | | 25 | 13 | 21.43 | 0.1390 |
| | | | | | 50 | 0 | 21.37 | 0.1371 |
| | | 23095 | 707.5 | QPSK | 1 | 0 | 23.16 | 0.2070 |
| | | | | | 1 | 49 | 23.01 | 0.2000 |
| | | | | | 25 | 13 | 21.98 | 0.1578 |
| | | | | | 50 | 0 | 21.69 | 0.1476 |
| | | | | 16-QAM | 1 | 0 | 22.42 | 0.1746 |
| | | | | | 1 | 49 | 22.33 | 0.1710 |
| | | | | | 25 | 13 | 21.59 | 0.1442 |
| | | | | | 50 | 0 | 21.33 | 0.1358 |
| | | 23130 | 711 | QPSK | 1 | 0 | 23.13 | 0.2056 |
| | | | | | 1 | 49 | 23.14 | 0.2061 |
| | | | | | 25 | 13 | 22.27 | 0.1687 |
| | | | | | 50 | 0 | 22.10 | 0.1622 |
| | | | | 16-QAM | 1 | 0 | 22.45 | 0.1758 |
| | | | | | 1 | 49 | 22.46 | 0.1762 |
| | | | | | 25 | 13 | 21.48 | 0.1406 |
| | | | | | 50 | 0 | 21.13 | 0.1297 |

3.1.6 Test Result of ERP/EIRP

| LTE Band 2 Radiated Power EIRP | | | | | | | | | | |
|--------------------------------|------------------|------------|------------------|-----------|-------------|-----------|------------------------|------------|----------|-----|
| LTE Band | Channel BW (MHz) | Modulation | RB Configuration | | Freq. (MHz) | LVL (dBm) | Correction Factor (dB) | EIRP (dBm) | EIRP (W) | H/V |
| | | | RB Size | RB Offset | | | | | | |
| 2 | 1.4 | QPSK | 1 | 0 | 1850.70 | -11.93 | 37.16 | 25.23 | 0.3334 | H |
| 2 | 1.4 | QPSK | 1 | 5 | 1880.00 | -11.53 | 35.61 | 24.08 | 0.2559 | H |
| 2 | 1.4 | QPSK | 1 | 0 | 1909.30 | -12.05 | 36.04 | 23.99 | 0.2506 | H |
| 2 | 1.4 | QPSK | 1 | 0 | 1850.70 | -20.38 | 36.1 | 15.72 | 0.0373 | V |
| 2 | 1.4 | QPSK | 1 | 5 | 1880.00 | -19.40 | 37.44 | 18.04 | 0.0637 | V |
| 2 | 1.4 | QPSK | 1 | 0 | 1909.30 | -20.74 | 39.12 | 18.38 | 0.0689 | V |
| 2 | 1.4 | 16QAM | 1 | 0 | 1850.70 | -12.87 | 37.16 | 24.29 | 0.2685 | H |
| 2 | 1.4 | 16QAM | 1 | 0 | 1880.00 | -12.35 | 35.61 | 23.26 | 0.2118 | H |
| 2 | 1.4 | 16QAM | 1 | 0 | 1909.30 | -14.97 | 36.04 | 21.07 | 0.1279 | H |
| 2 | 1.4 | 16QAM | 1 | 0 | 1850.70 | -22.19 | 36.1 | 13.91 | 0.0246 | V |
| 2 | 1.4 | 16QAM | 1 | 0 | 1880.00 | -21.51 | 37.44 | 15.93 | 0.0392 | V |
| 2 | 1.4 | 16QAM | 1 | 0 | 1909.30 | -21.46 | 39.12 | 17.66 | 0.0583 | V |
| 2 | 3 | QPSK | 1 | 0 | 1851.50 | -16.46 | 40.4 | 23.94 | 0.2477 | H |
| 2 | 3 | QPSK | 1 | 0 | 1880.00 | -16.46 | 41.91 | 25.45 | 0.3508 | H |
| 2 | 3 | QPSK | 1 | 0 | 1908.50 | -17.10 | 41.59 | 24.49 | 0.2812 | H |
| 2 | 3 | QPSK | 1 | 0 | 1851.50 | -21.98 | 42.69 | 20.71 | 0.1178 | V |
| 2 | 3 | QPSK | 1 | 0 | 1880.00 | -22.77 | 43.75 | 20.98 | 0.1253 | V |
| 2 | 3 | QPSK | 1 | 0 | 1908.50 | -22.69 | 43.02 | 20.33 | 0.1079 | V |
| 2 | 3 | 16QAM | 1 | 0 | 1851.50 | -17.24 | 40.4 | 23.16 | 0.2070 | H |
| 2 | 3 | 16QAM | 1 | 0 | 1880.00 | -17.30 | 41.91 | 24.61 | 0.2891 | H |
| 2 | 3 | 16QAM | 1 | 0 | 1908.50 | -17.34 | 41.59 | 24.25 | 0.2661 | H |
| 2 | 3 | 16QAM | 1 | 0 | 1851.50 | -22.83 | 42.69 | 19.86 | 0.0968 | V |
| 2 | 3 | 16QAM | 1 | 0 | 1880.00 | -23.66 | 43.75 | 20.09 | 0.1021 | V |
| 2 | 3 | 16QAM | 1 | 0 | 1908.50 | -22.91 | 43.02 | 20.11 | 0.1026 | V |



| LTE Band 2 Radiated Power EIRP | | | | | | | | | | |
|--------------------------------|------------------|------------|------------------|-----------|-------------|-----------|------------------------|------------|----------|-----|
| LTE Band | Channel BW (MHz) | Modulation | RB Configuration | | Freq. (MHz) | LVL (dBm) | Correction Factor (dB) | EIRP (dBm) | EIRP (W) | H/V |
| | | | RB Size | RB Offset | | | | | | |
| 2 | 5 | QPSK | 1 | 24 | 1852.50 | -16.74 | 40.4 | 23.66 | 0.2323 | H |
| 2 | 5 | QPSK | 1 | 24 | 1880.00 | -18.24 | 41.91 | 23.67 | 0.2328 | H |
| 2 | 5 | QPSK | 1 | 0 | 1907.50 | -17.93 | 41.59 | 23.66 | 0.2323 | H |
| 2 | 5 | QPSK | 1 | 24 | 1852.50 | -22.88 | 42.69 | 19.81 | 0.0957 | V |
| 2 | 5 | QPSK | 1 | 24 | 1880.00 | -23.28 | 43.75 | 20.47 | 0.1114 | V |
| 2 | 5 | QPSK | 1 | 0 | 1907.50 | -23.50 | 43.02 | 19.52 | 0.0895 | V |
| 2 | 5 | 16QAM | 1 | 24 | 1852.50 | -17.56 | 40.4 | 22.84 | 0.1923 | H |
| 2 | 5 | 16QAM | 1 | 0 | 1880.00 | -18.55 | 41.91 | 23.36 | 0.2168 | H |
| 2 | 5 | 16QAM | 1 | 0 | 1907.50 | -18.15 | 41.59 | 23.44 | 0.2208 | H |
| 2 | 5 | 16QAM | 1 | 24 | 1852.50 | -23.85 | 42.69 | 18.84 | 0.0766 | V |
| 2 | 5 | 16QAM | 1 | 0 | 1880.00 | -24.28 | 43.75 | 19.47 | 0.0885 | V |
| 2 | 5 | 16QAM | 1 | 0 | 1907.50 | -23.95 | 43.02 | 19.07 | 0.0807 | V |
| 2 | 10 | QPSK | 1 | 49 | 1855.00 | -15.75 | 40.7 | 24.95 | 0.3126 | H |
| 2 | 10 | QPSK | 1 | 49 | 1880.00 | -17.93 | 41.91 | 23.98 | 0.2500 | H |
| 2 | 10 | QPSK | 1 | 0 | 1905.00 | -17.00 | 41.73 | 24.73 | 0.2972 | H |
| 2 | 10 | QPSK | 1 | 49 | 1855.00 | -23.54 | 42.78 | 19.24 | 0.0839 | V |
| 2 | 10 | QPSK | 1 | 49 | 1880.00 | -23.43 | 43.75 | 20.32 | 0.1076 | V |
| 2 | 10 | QPSK | 1 | 0 | 1905.00 | -23.66 | 43.06 | 19.40 | 0.0871 | V |
| 2 | 10 | 16QAM | 1 | 49 | 1855.00 | -16.89 | 40.7 | 23.81 | 0.2404 | H |
| 2 | 10 | 16QAM | 1 | 0 | 1880.00 | -18.30 | 41.91 | 23.61 | 0.2296 | H |
| 2 | 10 | 16QAM | 1 | 0 | 1905.00 | -17.75 | 41.73 | 23.98 | 0.2500 | H |
| 2 | 10 | 16QAM | 1 | 49 | 1855.00 | -24.18 | 42.78 | 18.60 | 0.0724 | V |
| 2 | 10 | 16QAM | 1 | 0 | 1880.00 | -24.45 | 43.75 | 19.30 | 0.0851 | V |
| 2 | 10 | 16QAM | 1 | 0 | 1905.00 | -24.54 | 43.06 | 18.52 | 0.0711 | V |



| LTE Band 2 Radiated Power EIRP | | | | | | | | | | |
|--------------------------------|------------------|------------|------------------|-----------|-------------|-----------|------------------------|------------|----------|-----|
| LTE Band | Channel BW (MHz) | Modulation | RB Configuration | | Freq. (MHz) | LVL (dBm) | Correction Factor (dB) | EIRP (dBm) | EIRP (W) | H/V |
| | | | RB Size | RB Offset | | | | | | |
| 2 | 15 | QPSK | 1 | 74 | 1857.50 | -17.56 | 40.7 | 23.14 | 0.2061 | H |
| 2 | 15 | QPSK | 1 | 74 | 1880.00 | -17.68 | 41.91 | 24.23 | 0.2649 | H |
| 2 | 15 | QPSK | 1 | 0 | 1902.50 | -18.19 | 41.73 | 23.54 | 0.2259 | H |
| 2 | 15 | QPSK | 1 | 74 | 1857.50 | -25.33 | 42.78 | 17.45 | 0.0556 | V |
| 2 | 15 | QPSK | 1 | 74 | 1880.00 | -24.82 | 43.75 | 18.93 | 0.0782 | V |
| 2 | 15 | QPSK | 1 | 0 | 1902.50 | -23.79 | 43.06 | 19.27 | 0.0845 | V |
| 2 | 15 | 16QAM | 1 | 74 | 1857.50 | -18.54 | 40.7 | 22.16 | 0.1644 | H |
| 2 | 15 | 16QAM | 1 | 0 | 1880.00 | -18.21 | 41.91 | 23.70 | 0.2344 | H |
| 2 | 15 | 16QAM | 1 | 0 | 1902.50 | -19.03 | 41.73 | 22.70 | 0.1862 | H |
| 2 | 15 | 16QAM | 1 | 74 | 1857.50 | -25.59 | 42.78 | 17.19 | 0.0524 | V |
| 2 | 15 | 16QAM | 1 | 0 | 1880.00 | -25.17 | 43.75 | 18.58 | 0.0721 | V |
| 2 | 15 | 16QAM | 1 | 0 | 1902.50 | -24.04 | 43.06 | 19.02 | 0.0798 | V |
| 2 | 20 | QPSK | 1 | 0 | 1860.00 | -17.40 | 40.7 | 23.30 | 0.2138 | H |
| 2 | 20 | QPSK | 1 | 99 | 1880.00 | -18.53 | 41.91 | 23.38 | 0.2178 | H |
| 2 | 20 | QPSK | 1 | 0 | 1900.00 | -18.91 | 41.73 | 22.82 | 0.1914 | H |
| 2 | 20 | QPSK | 1 | 0 | 1860.00 | -23.37 | 42.78 | 19.41 | 0.0873 | V |
| 2 | 20 | QPSK | 1 | 99 | 1880.00 | -23.57 | 43.75 | 20.18 | 0.1042 | V |
| 2 | 20 | QPSK | 1 | 0 | 1900.00 | -23.51 | 43.06 | 19.55 | 0.0902 | V |
| 2 | 20 | 16QAM | 1 | 0 | 1860.00 | -17.66 | 40.7 | 23.04 | 0.2014 | H |
| 2 | 20 | 16QAM | 1 | 0 | 1880.00 | -18.81 | 41.91 | 23.10 | 0.2042 | H |
| 2 | 20 | 16QAM | 1 | 0 | 1900.00 | -19.21 | 41.73 | 22.52 | 0.1786 | H |
| 2 | 20 | 16QAM | 1 | 0 | 1860.00 | -23.47 | 42.78 | 19.31 | 0.0853 | V |
| 2 | 20 | 16QAM | 1 | 0 | 1880.00 | -24.28 | 43.75 | 19.47 | 0.0885 | V |
| 2 | 20 | 16QAM | 1 | 0 | 1900.00 | -23.81 | 43.06 | 19.25 | 0.0841 | V |



| LTE Band 4 Radiated Power EIRP | | | | | | | | | | |
|--------------------------------|------------------|------------|------------------|-----------|-------------|-----------|------------------------|------------|----------|-----|
| LTE Band | Channel BW (MHz) | Modulation | RB Configuration | | Freq. (MHz) | LVL (dBm) | Correction Factor (dB) | EIRP (dBm) | EIRP (W) | H/V |
| | | | RB Size | RB Offset | | | | | | |
| 4 | 1.4 | QPSK | 1 | 5 | 1710.70 | -19.90 | 39.33 | 19.43 | 0.0877 | H |
| 4 | 1.4 | QPSK | 1 | 0 | 1732.50 | -20.16 | 39.86 | 19.70 | 0.0933 | H |
| 4 | 1.4 | QPSK | 1 | 0 | 1754.30 | -19.92 | 39.91 | 19.99 | 0.0998 | H |
| 4 | 1.4 | QPSK | 1 | 5 | 1710.70 | -17.86 | 42.9 | 25.04 | 0.3192 | V |
| 4 | 1.4 | QPSK | 1 | 0 | 1732.50 | -17.07 | 42.23 | 25.16 | 0.3281 | V |
| 4 | 1.4 | QPSK | 1 | 0 | 1754.30 | -16.99 | 41.7 | 24.71 | 0.2958 | V |
| 4 | 1.4 | 16QAM | 1 | 5 | 1710.70 | -20.57 | 39.33 | 18.76 | 0.0752 | H |
| 4 | 1.4 | 16QAM | 1 | 0 | 1732.50 | -20.43 | 39.86 | 19.43 | 0.0877 | H |
| 4 | 1.4 | 16QAM | 1 | 0 | 1754.30 | -20.64 | 39.91 | 19.27 | 0.0845 | H |
| 4 | 1.4 | 16QAM | 1 | 5 | 1710.70 | -18.23 | 42.9 | 24.67 | 0.2931 | V |
| 4 | 1.4 | 16QAM | 1 | 0 | 1732.50 | -17.19 | 42.23 | 25.04 | 0.3192 | V |
| 4 | 1.4 | 16QAM | 1 | 0 | 1754.30 | -17.38 | 41.7 | 24.32 | 0.2704 | V |
| 4 | 3 | QPSK | 1 | 0 | 1711.50 | -19.74 | 39.36 | 19.62 | 0.0916 | H |
| 4 | 3 | QPSK | 1 | 0 | 1732.50 | -20.22 | 39.86 | 19.64 | 0.0920 | H |
| 4 | 3 | QPSK | 1 | 0 | 1753.50 | -19.37 | 39.88 | 20.51 | 0.1125 | H |
| 4 | 3 | QPSK | 1 | 0 | 1711.50 | -17.60 | 42.85 | 25.25 | 0.3350 | V |
| 4 | 3 | QPSK | 1 | 0 | 1732.50 | -16.57 | 42.23 | 25.66 | 0.3681 | V |
| 4 | 3 | QPSK | 1 | 0 | 1753.50 | -16.90 | 41.66 | 24.76 | 0.2992 | V |
| 4 | 3 | 16QAM | 1 | 0 | 1711.50 | -20.01 | 39.36 | 19.35 | 0.0861 | H |
| 4 | 3 | 16QAM | 1 | 0 | 1732.50 | -20.42 | 39.86 | 19.44 | 0.0879 | H |
| 4 | 3 | 16QAM | 1 | 0 | 1753.50 | -19.46 | 39.88 | 20.42 | 0.1102 | H |
| 4 | 3 | 16QAM | 1 | 0 | 1711.50 | -18.05 | 42.85 | 24.80 | 0.3020 | V |
| 4 | 3 | 16QAM | 1 | 0 | 1732.50 | -17.38 | 42.23 | 24.85 | 0.3055 | V |
| 4 | 3 | 16QAM | 1 | 0 | 1753.50 | -17.71 | 41.66 | 23.95 | 0.2483 | V |



| LTE Band 4 Radiated Power EIRP | | | | | | | | | | |
|--------------------------------|------------------|------------|------------------|-----------|-------------|-----------|------------------------|------------|----------|-----|
| LTE Band | Channel BW (MHz) | Modulation | RB Configuration | | Freq. (MHz) | LVL (dBm) | Correction Factor (dB) | EIRP (dBm) | EIRP (W) | H/V |
| | | | RB Size | RB Offset | | | | | | |
| 4 | 5 | QPSK | 1 | 0 | 1712.50 | -11.88 | 33.69 | 21.81 | 0.1517 | H |
| 4 | 5 | QPSK | 1 | 0 | 1732.50 | -11.91 | 35.01 | 23.10 | 0.2042 | H |
| 4 | 5 | QPSK | 1 | 0 | 1752.50 | -11.29 | 34.42 | 23.13 | 0.2056 | H |
| 4 | 5 | QPSK | 1 | 0 | 1712.50 | -20.31 | 36.15 | 15.84 | 0.0384 | V |
| 4 | 5 | QPSK | 1 | 0 | 1732.50 | -19.77 | 37.4 | 17.63 | 0.0579 | V |
| 4 | 5 | QPSK | 1 | 0 | 1752.50 | -19.37 | 36.78 | 17.41 | 0.0551 | V |
| 4 | 5 | 16QAM | 1 | 0 | 1712.50 | -12.03 | 33.69 | 21.66 | 0.1466 | H |
| 4 | 5 | 16QAM | 1 | 0 | 1732.50 | -12.28 | 35.01 | 22.73 | 0.1875 | H |
| 4 | 5 | 16QAM | 1 | 0 | 1752.50 | -11.57 | 34.42 | 22.85 | 0.1928 | H |
| 4 | 5 | 16QAM | 1 | 0 | 1712.50 | -19.99 | 36.15 | 16.16 | 0.0413 | V |
| 4 | 5 | 16QAM | 1 | 0 | 1732.50 | -20.06 | 37.4 | 17.34 | 0.0542 | V |
| 4 | 5 | 16QAM | 1 | 0 | 1752.50 | -19.31 | 36.78 | 17.47 | 0.0558 | V |
| 4 | 10 | QPSK | 1 | 0 | 1715.00 | -19.81 | 39.43 | 19.62 | 0.0916 | H |
| 4 | 10 | QPSK | 1 | 0 | 1732.50 | -20.65 | 39.86 | 19.21 | 0.0834 | H |
| 4 | 10 | QPSK | 1 | 0 | 1750.00 | -19.90 | 39.77 | 19.87 | 0.0971 | H |
| 4 | 10 | QPSK | 1 | 0 | 1715.00 | -18.57 | 42.36 | 23.79 | 0.2393 | V |
| 4 | 10 | QPSK | 1 | 0 | 1732.50 | -17.49 | 42.23 | 24.74 | 0.2979 | V |
| 4 | 10 | QPSK | 1 | 0 | 1750.00 | -17.90 | 41.69 | 23.79 | 0.2393 | V |
| 4 | 10 | 16QAM | 1 | 0 | 1715.00 | -19.98 | 39.43 | 19.45 | 0.0881 | H |
| 4 | 10 | 16QAM | 1 | 0 | 1732.50 | -21.00 | 39.86 | 18.86 | 0.0769 | H |
| 4 | 10 | 16QAM | 1 | 0 | 1750.00 | -20.17 | 39.77 | 19.60 | 0.0912 | H |
| 4 | 10 | 16QAM | 1 | 0 | 1715.00 | -18.74 | 42.36 | 23.62 | 0.2301 | V |
| 4 | 10 | 16QAM | 1 | 0 | 1732.50 | -17.62 | 42.23 | 24.61 | 0.2891 | V |
| 4 | 10 | 16QAM | 1 | 0 | 1750.00 | -18.27 | 41.69 | 23.42 | 0.2198 | V |



| LTE Band 4 Radiated Power EIRP | | | | | | | | | | |
|--------------------------------|------------------|------------|------------------|-----------|-------------|-----------|------------------------|------------|----------|-----|
| LTE Band | Channel BW (MHz) | Modulation | RB Configuration | | Freq. (MHz) | LVL (dBm) | Correction Factor (dB) | EIRP (dBm) | EIRP (W) | H/V |
| | | | RB Size | RB Offset | | | | | | |
| 4 | 15 | QPSK | 1 | 0 | 1717.50 | -20.04 | 39.52 | 19.48 | 0.0887 | H |
| 4 | 15 | QPSK | 1 | 0 | 1732.50 | -20.65 | 39.86 | 19.21 | 0.0834 | H |
| 4 | 15 | QPSK | 1 | 0 | 1747.50 | -20.46 | 39.45 | 18.99 | 0.0793 | H |
| 4 | 15 | QPSK | 1 | 0 | 1717.50 | -18.90 | 42 | 23.10 | 0.2042 | V |
| 4 | 15 | QPSK | 1 | 0 | 1732.50 | -17.13 | 42.23 | 25.10 | 0.3236 | V |
| 4 | 15 | QPSK | 1 | 0 | 1747.50 | -18.16 | 41.9 | 23.74 | 0.2366 | V |
| 4 | 15 | 16QAM | 1 | 0 | 1717.50 | -20.22 | 39.52 | 19.30 | 0.0851 | H |
| 4 | 15 | 16QAM | 1 | 0 | 1732.50 | -20.89 | 39.86 | 18.97 | 0.0789 | H |
| 4 | 15 | 16QAM | 1 | 0 | 1747.50 | -20.77 | 39.45 | 18.68 | 0.0738 | H |
| 4 | 15 | 16QAM | 1 | 0 | 1717.50 | -18.99 | 42 | 23.01 | 0.2000 | V |
| 4 | 15 | 16QAM | 1 | 0 | 1732.50 | -17.45 | 42.23 | 24.78 | 0.3006 | V |
| 4 | 15 | 16QAM | 1 | 0 | 1747.50 | -18.56 | 41.9 | 23.34 | 0.2158 | V |
| 4 | 20 | QPSK | 1 | 0 | 1720.00 | -20.03 | 39.55 | 19.52 | 0.0895 | H |
| 4 | 20 | QPSK | 1 | 0 | 1732.50 | -20.52 | 39.86 | 19.34 | 0.0859 | H |
| 4 | 20 | QPSK | 1 | 0 | 1745.00 | -21.16 | 39.43 | 18.27 | 0.0671 | H |
| 4 | 20 | QPSK | 1 | 0 | 1720.00 | -18.88 | 42.03 | 23.15 | 0.2065 | V |
| 4 | 20 | QPSK | 1 | 0 | 1732.50 | -17.08 | 42.23 | 25.15 | 0.3273 | V |
| 4 | 20 | QPSK | 1 | 0 | 1745.00 | -18.11 | 41.88 | 23.77 | 0.2382 | V |
| 4 | 20 | 16QAM | 1 | 0 | 1720.00 | -20.17 | 39.55 | 19.38 | 0.0867 | H |
| 4 | 20 | 16QAM | 1 | 0 | 1732.50 | -20.72 | 39.86 | 19.14 | 0.0820 | H |
| 4 | 20 | 16QAM | 1 | 0 | 1745.00 | -21.32 | 39.43 | 18.11 | 0.0647 | H |
| 4 | 20 | 16QAM | 1 | 0 | 1720.00 | -18.98 | 42.03 | 23.05 | 0.2018 | V |
| 4 | 20 | 16QAM | 1 | 0 | 1732.50 | -17.17 | 42.23 | 25.06 | 0.3206 | V |
| 4 | 20 | 16QAM | 1 | 0 | 1745.00 | -18.57 | 41.88 | 23.31 | 0.2143 | V |



| LTE Band 5 Radiated Power ERP | | | | | | | | | | |
|-------------------------------|------------------|------------|------------------|-----------|-------------|-----------|------------------------|-----------|---------|-----|
| LTE Band | Channel BW (MHz) | Modulation | RB Configuration | | Freq. (MHz) | LVL (dBm) | Correction Factor (dB) | ERP (dBm) | ERP (W) | H/V |
| | | | RB Size | RB Offset | | | | | | |
| 5 | 1.4 | QPSK | 3 | 2 | 824.70 | -8.27 | 29.1 | 18.68 | 0.0738 | H |
| 5 | 1.4 | QPSK | 1 | 0 | 836.50 | -8.36 | 28.98 | 18.47 | 0.0703 | H |
| 5 | 1.4 | QPSK | 1 | 0 | 848.30 | -8.01 | 29.61 | 19.45 | 0.0881 | H |
| 5 | 1.4 | QPSK | 3 | 2 | 824.70 | -17.60 | 33.4 | 13.65 | 0.0232 | V |
| 5 | 1.4 | QPSK | 1 | 0 | 836.50 | -15.25 | 32.48 | 15.08 | 0.0322 | V |
| 5 | 1.4 | QPSK | 1 | 0 | 848.30 | -15.29 | 31.91 | 14.47 | 0.0280 | V |
| 5 | 1.4 | 16QAM | 3 | 2 | 824.70 | -9.05 | 29.1 | 17.9 | 0.0617 | H |
| 5 | 1.4 | 16QAM | 1 | 0 | 836.50 | -8.43 | 28.98 | 18.4 | 0.0692 | H |
| 5 | 1.4 | 16QAM | 1 | 0 | 848.30 | -9.63 | 29.61 | 17.83 | 0.0607 | H |
| 5 | 1.4 | 16QAM | 3 | 2 | 824.70 | -18.02 | 33.4 | 13.23 | 0.0210 | V |
| 5 | 1.4 | 16QAM | 1 | 0 | 836.50 | -18.52 | 32.48 | 11.81 | 0.0152 | V |
| 5 | 1.4 | 16QAM | 1 | 0 | 848.30 | -19.59 | 31.91 | 10.17 | 0.0104 | V |
| 5 | 3 | QPSK | 1 | 0 | 825.50 | -7.89 | 30.99 | 20.95 | 0.1245 | H |
| 5 | 3 | QPSK | 1 | 0 | 836.50 | -8.79 | 30.89 | 19.95 | 0.0989 | H |
| 5 | 3 | QPSK | 1 | 0 | 847.50 | -8.96 | 31.22 | 20.11 | 0.1026 | H |
| 5 | 3 | QPSK | 1 | 0 | 825.50 | -16.58 | 34.67 | 15.94 | 0.0393 | V |
| 5 | 3 | QPSK | 1 | 0 | 836.50 | -17.50 | 34.88 | 15.23 | 0.0333 | V |
| 5 | 3 | QPSK | 1 | 0 | 847.50 | -16.81 | 34.74 | 15.78 | 0.0378 | V |
| 5 | 3 | 16QAM | 1 | 0 | 825.50 | -8.04 | 30.99 | 20.80 | 0.1202 | H |
| 5 | 3 | 16QAM | 1 | 0 | 836.50 | -8.55 | 30.89 | 20.19 | 0.1045 | H |
| 5 | 3 | 16QAM | 1 | 0 | 847.50 | -8.58 | 31.22 | 20.49 | 0.1119 | H |
| 5 | 3 | 16QAM | 1 | 0 | 825.50 | -16.61 | 34.67 | 15.91 | 0.0390 | V |
| 5 | 3 | 16QAM | 1 | 0 | 836.50 | -17.68 | 34.88 | 15.05 | 0.0320 | V |
| 5 | 3 | 16QAM | 1 | 0 | 847.50 | -17.02 | 34.74 | 15.57 | 0.0361 | V |



| LTE Band 5 Radiated Power ERP | | | | | | | | | | |
|-------------------------------|------------------|------------|------------------|-----------|-------------|-----------|------------------------|-----------|---------|-----|
| LTE Band | Channel BW (MHz) | Modulation | RB Configuration | | Freq. (MHz) | LVL (dBm) | Correction Factor (dB) | ERP (dBm) | ERP (W) | H/V |
| | | | RB Size | RB Offset | | | | | | |
| 5 | 5 | QPSK | 1 | 0 | 826.50 | -7.74 | 30.74 | 20.85 | 0.1216 | H |
| 5 | 5 | QPSK | 1 | 0 | 836.50 | -8.52 | 30.89 | 20.22 | 0.1052 | H |
| 5 | 5 | QPSK | 1 | 0 | 846.50 | -8.49 | 31.29 | 20.65 | 0.1161 | H |
| 5 | 5 | QPSK | 1 | 0 | 826.50 | -17.00 | 34.94 | 15.79 | 0.0379 | V |
| 5 | 5 | QPSK | 1 | 0 | 836.50 | -17.64 | 34.88 | 15.09 | 0.0323 | V |
| 5 | 5 | QPSK | 1 | 0 | 846.50 | -17.04 | 34.67 | 15.48 | 0.0353 | V |
| 5 | 5 | 16QAM | 1 | 0 | 826.50 | -7.61 | 30.74 | 20.98 | 0.1253 | H |
| 5 | 5 | 16QAM | 1 | 0 | 836.50 | -8.70 | 30.89 | 20.04 | 0.1009 | H |
| 5 | 5 | 16QAM | 1 | 0 | 846.50 | -8.35 | 31.29 | 20.79 | 0.1199 | H |
| 5 | 5 | 16QAM | 1 | 0 | 826.50 | -17.19 | 34.94 | 15.60 | 0.0363 | V |
| 5 | 5 | 16QAM | 1 | 0 | 836.50 | -17.68 | 34.88 | 15.05 | 0.0320 | V |
| 5 | 5 | 16QAM | 1 | 0 | 846.50 | -17.23 | 34.67 | 15.29 | 0.0338 | V |
| 5 | 10 | QPSK | 1 | 0 | 829.00 | -7.66 | 30.74 | 20.93 | 0.1239 | H |
| 5 | 10 | QPSK | 1 | 0 | 836.50 | -8.91 | 30.89 | 19.83 | 0.0962 | H |
| 5 | 10 | QPSK | 1 | 0 | 844.00 | -9.04 | 31.29 | 20.10 | 0.1023 | H |
| 5 | 10 | QPSK | 1 | 0 | 829.00 | -17.02 | 34.94 | 15.77 | 0.0378 | V |
| 5 | 10 | QPSK | 1 | 0 | 836.50 | -17.69 | 34.88 | 15.04 | 0.0319 | V |
| 5 | 10 | QPSK | 1 | 0 | 844.00 | -17.40 | 34.67 | 15.12 | 0.0325 | V |
| 5 | 10 | 16QAM | 1 | 0 | 829.00 | -7.52 | 30.74 | 21.07 | 0.1279 | H |
| 5 | 10 | 16QAM | 1 | 0 | 836.50 | -8.65 | 30.89 | 20.09 | 0.1021 | H |
| 5 | 10 | 16QAM | 1 | 0 | 844.00 | -9.09 | 31.29 | 20.05 | 0.1012 | H |
| 5 | 10 | 16QAM | 1 | 0 | 829.00 | -17.06 | 34.94 | 15.73 | 0.0374 | V |
| 5 | 10 | 16QAM | 1 | 0 | 836.50 | -17.47 | 34.88 | 15.26 | 0.0336 | V |
| 5 | 10 | 16QAM | 1 | 0 | 844.00 | -17.38 | 34.67 | 15.14 | 0.0327 | V |



| LTE Band 12 Radiated Power ERP | | | | | | | | | | |
|--------------------------------|------------------|------------|------------------|-----------|-------------|-----------|------------------------|-----------|---------|-----|
| LTE Band | Channel BW (MHz) | Modulation | RB Configuration | | Freq. (MHz) | LVL (dBm) | Correction Factor (dB) | ERP (dBm) | ERP (W) | H/V |
| | | | RB Size | RB Offset | | | | | | |
| 12 | 1.4 | QPSK | 1 | 0 | 699.70 | -7.71 | 30.76 | 20.90 | 0.1230 | H |
| 12 | 1.4 | QPSK | 1 | 0 | 707.50 | -7.56 | 31.07 | 21.36 | 0.1368 | H |
| 12 | 1.4 | QPSK | 1 | 5 | 715.30 | -8.53 | 31.09 | 20.41 | 0.1099 | H |
| 12 | 1.4 | QPSK | 1 | 0 | 699.70 | -18.53 | 34.86 | 14.18 | 0.0262 | V |
| 12 | 1.4 | QPSK | 1 | 0 | 707.50 | -17.66 | 34.63 | 14.82 | 0.0303 | V |
| 12 | 1.4 | QPSK | 1 | 5 | 715.30 | -18.42 | 34.39 | 13.82 | 0.0241 | V |
| 12 | 1.4 | 16QAM | 1 | 0 | 699.70 | -7.32 | 30.76 | 21.29 | 0.1346 | H |
| 12 | 1.4 | 16QAM | 1 | 0 | 707.50 | -7.14 | 31.07 | 21.78 | 0.1507 | H |
| 12 | 1.4 | 16QAM | 1 | 0 | 715.30 | -8.26 | 31.09 | 20.68 | 0.1169 | H |
| 12 | 1.4 | 16QAM | 1 | 0 | 699.70 | -18.47 | 34.86 | 14.24 | 0.0265 | V |
| 12 | 1.4 | 16QAM | 1 | 0 | 707.50 | -18.27 | 34.63 | 14.21 | 0.0264 | V |
| 12 | 1.4 | 16QAM | 1 | 0 | 715.30 | -18.67 | 34.39 | 13.57 | 0.0228 | V |
| 12 | 3 | QPSK | 1 | 0 | 700.50 | -7.12 | 30.97 | 21.70 | 0.1479 | H |
| 12 | 3 | QPSK | 1 | 0 | 707.50 | -8.04 | 31.07 | 20.88 | 0.1225 | H |
| 12 | 3 | QPSK | 1 | 14 | 714.50 | -8.28 | 30.88 | 20.45 | 0.1109 | H |
| 12 | 3 | QPSK | 1 | 0 | 700.50 | -18.06 | 34.69 | 14.48 | 0.0281 | V |
| 12 | 3 | QPSK | 1 | 0 | 707.50 | -17.74 | 34.63 | 14.74 | 0.0298 | V |
| 12 | 3 | QPSK | 1 | 14 | 714.50 | -18.08 | 34.5 | 14.27 | 0.0267 | V |
| 12 | 3 | 16QAM | 1 | 0 | 700.50 | -7.66 | 30.97 | 21.16 | 0.1306 | H |
| 12 | 3 | 16QAM | 1 | 0 | 707.50 | -7.55 | 31.07 | 21.37 | 0.1371 | H |
| 12 | 3 | 16QAM | 1 | 0 | 714.50 | -8.19 | 30.88 | 20.54 | 0.1132 | H |
| 12 | 3 | 16QAM | 1 | 0 | 700.50 | -18.38 | 34.69 | 14.16 | 0.0261 | V |
| 12 | 3 | 16QAM | 1 | 0 | 707.50 | -18.28 | 34.63 | 14.20 | 0.0263 | V |
| 12 | 3 | 16QAM | 1 | 0 | 714.50 | -18.67 | 34.5 | 13.68 | 0.0233 | V |



| LTE Band 12 Radiated Power ERP | | | | | | | | | | |
|--------------------------------|------------------|------------|------------------|-----------|-------------|-----------|------------------------|-----------|---------|-----|
| LTE Band | Channel BW (MHz) | Modulation | RB Configuration | | Freq. (MHz) | LVL (dBm) | Correction Factor (dB) | ERP (dBm) | ERP (W) | H/V |
| | | | RB Size | RB Offset | | | | | | |
| 12 | 5 | QPSK | 1 | 0 | 701.50 | -7.31 | 30.97 | 21.51 | 0.1416 | H |
| 12 | 5 | QPSK | 1 | 0 | 707.50 | -7.68 | 31.07 | 21.24 | 0.1330 | H |
| 12 | 5 | QPSK | 1 | 24 | 713.50 | -7.49 | 30.88 | 21.24 | 0.1330 | H |
| 12 | 5 | QPSK | 1 | 0 | 701.50 | -17.56 | 34.69 | 14.98 | 0.0315 | V |
| 12 | 5 | QPSK | 1 | 0 | 707.50 | -18.16 | 34.63 | 14.32 | 0.0270 | V |
| 12 | 5 | QPSK | 1 | 24 | 713.50 | -18.09 | 34.5 | 14.26 | 0.0267 | V |
| 12 | 5 | 16QAM | 1 | 0 | 701.50 | -7.15 | 30.97 | 21.67 | 0.1469 | H |
| 12 | 5 | 16QAM | 1 | 24 | 707.50 | -7.97 | 31.07 | 20.95 | 0.1245 | H |
| 12 | 5 | 16QAM | 1 | 24 | 713.50 | -8.21 | 30.88 | 20.52 | 0.1127 | H |
| 12 | 5 | 16QAM | 1 | 0 | 701.50 | -18.12 | 34.69 | 14.42 | 0.0277 | V |
| 12 | 5 | 16QAM | 1 | 24 | 707.50 | -18.79 | 34.63 | 13.69 | 0.0234 | V |
| 12 | 5 | 16QAM | 1 | 24 | 713.50 | -18.50 | 34.5 | 13.85 | 0.0243 | V |
| 12 | 10 | QPSK | 1 | 0 | 704.00 | -5.84 | 27.34 | 21.50 | 0.1413 | H |
| 12 | 10 | QPSK | 1 | 0 | 707.50 | -5.80 | 27.34 | 21.54 | 0.1426 | H |
| 12 | 10 | QPSK | 1 | 49 | 711.00 | -5.69 | 27.3 | 21.61 | 0.1449 | H |
| 12 | 10 | QPSK | 1 | 0 | 704.00 | -12.09 | 29.58 | 17.49 | 0.0561 | V |
| 12 | 10 | QPSK | 1 | 0 | 707.50 | -12.06 | 29.63 | 17.57 | 0.0571 | V |
| 12 | 10 | QPSK | 1 | 49 | 711.00 | -11.04 | 29.95 | 18.91 | 0.0778 | V |
| 12 | 10 | 16QAM | 1 | 0 | 704.00 | -6.40 | 27.34 | 20.94 | 0.1242 | H |
| 12 | 10 | 16QAM | 1 | 0 | 707.50 | -6.50 | 27.34 | 20.84 | 0.1213 | H |
| 12 | 10 | 16QAM | 1 | 0 | 711.00 | -6.53 | 27.3 | 20.77 | 0.1194 | H |
| 12 | 10 | 16QAM | 1 | 0 | 704.00 | -12.13 | 29.58 | 17.45 | 0.0556 | V |
| 12 | 10 | 16QAM | 1 | 0 | 707.50 | -12.47 | 29.63 | 17.16 | 0.0520 | V |
| 12 | 10 | 16QAM | 1 | 0 | 711.00 | -11.10 | 29.95 | 18.85 | 0.0767 | V |

3.2 Peak-to-Average Ratio

3.2.1 Description of the PAR Measurement

Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement instrumentation include the capability to produce CCDF curves for an input signal provided that the instrument's resolution bandwidth can be set wide enough to accommodate the entire input signal bandwidth. The following guidelines are offered for performing a CCDF measurement.

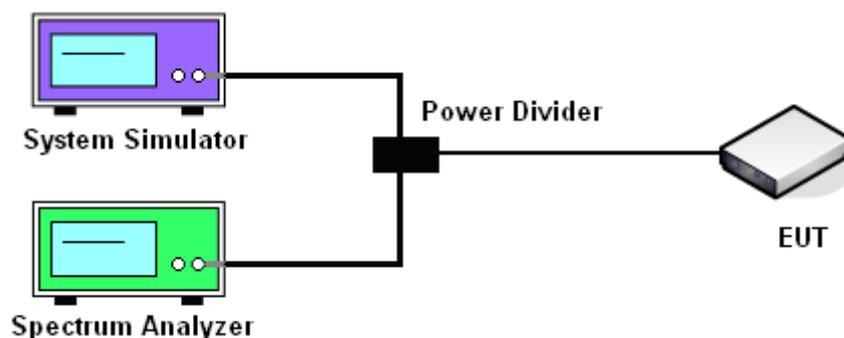
3.2.2 Measuring Instruments

See list of measuring instruments of this test report.

3.2.3 Test Procedures

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The CCDF (Complementary Cumulative Distribution Function) of the middle channel for the highest RF powers were measured.

3.2.4 Test Setup



3.2.5 Test Result of Peak-to-Average Ratio

| Band | Band Width | Channel | Frequency (MHz) | Modulation | PAR (dB) |
|------------|------------|---------|-----------------|------------|----------|
| LTE Band 2 | 1.4MHz | 18900 | 1880 | QPSK | 5.72 |
| | | | | 16-QAM | 6.52 |
| | 3MHz | 18900 | 1880 | QPSK | 5.80 |
| | | | | 16-QAM | 6.44 |
| | 5MHz | 18900 | 1880 | QPSK | 5.60 |
| | | | | 16-QAM | 6.16 |
| | 10MHz | 18900 | 1880 | QPSK | 5.56 |
| | | | | 16-QAM | 6.48 |
| | 15MHz | 18900 | 1880 | QPSK | 5.92 |
| | | | | 16-QAM | 6.92 |
| | 20MHz | 18900 | 1880 | QPSK | 6.64 |
| | | | | 16-QAM | 7.24 |
| LTE Band 4 | 1.4MHz | 20175 | 1732.5 | QPSK | 5.48 |
| | | | | 16-QAM | 6.20 |
| | 3MHz | 20175 | 1732.5 | QPSK | 5.44 |
| | | | | 16-QAM | 6.16 |
| | 5MHz | 20175 | 1732.5 | QPSK | 5.96 |
| | | | | 16-QAM | 5.92 |
| | 10MHz | 20175 | 1732.5 | QPSK | 5.32 |
| | | | | 16-QAM | 6.24 |
| | 15MHz | 20175 | 1732.5 | QPSK | 5.68 |
| | | | | 16-QAM | 6.72 |
| | 20MHz | 20175 | 1732.5 | QPSK | 6.20 |
| | | | | 16-QAM | 7.08 |

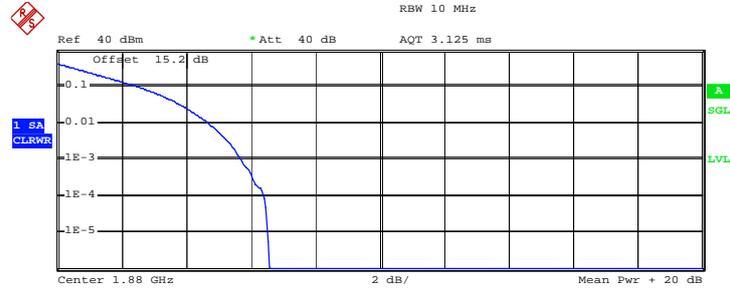


| Band | Band Width | Channel | Frequency (MHz) | Modulation | PAR (dB) |
|-------------|------------|---------|-----------------|------------|----------|
| LTE Band 5 | 1.4MHz | 20525 | 836.5 | QPSK | 5.76 |
| | | | | 16-QAM | 6.64 |
| | 3MHz | 20525 | 836.5 | QPSK | 5.96 |
| | | | | 16-QAM | 6.88 |
| | 5MHz | 20525 | 836.5 | QPSK | 5.96 |
| | | | | 16-QAM | 6.52 |
| 10MHz | 20525 | 836.5 | QPSK | 5.56 | |
| | | | 16-QAM | 6.52 | |
| LTE Band 12 | 1.4MHz | 23095 | 707.5 | QPSK | 5.48 |
| | | | | 16-QAM | 6.28 |
| | 3MHz | 23095 | 707.5 | QPSK | 5.48 |
| | | | | 16-QAM | 6.32 |
| | 5MHz | 23095 | 707.5 | QPSK | 5.52 |
| | | | | 16-QAM | 6.04 |
| 10MHz | 23095 | 707.5 | QPSK | 5.32 | |
| | | | 16-QAM | 6.04 | |



| | | | |
|--------------|------------|-------------------|--------|
| Band: | LTE Band 2 | Bandwidth: | 1.4MHz |
|--------------|------------|-------------------|--------|

Peak-to-Average Ratio for QPSK-RB Size 6, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

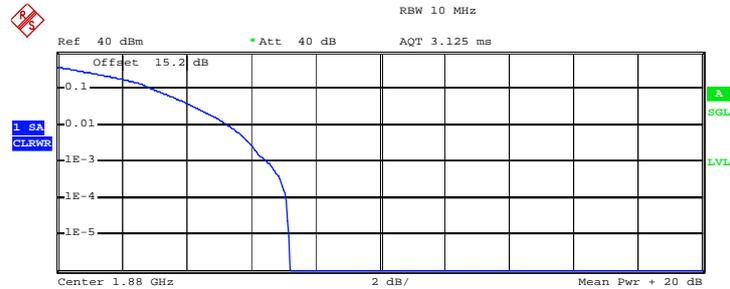
Trace 1

Mean 21.87 dBm
 Peak 28.43 dBm
 Crest 6.57 dB

10 % 2.60 dB
 1 % 4.72 dB
 .1 % 5.72 dB
 .01 % 6.44 dB

Date: 14.JUL.2012 17:15:17

Peak-to-Average Ratio for 16QAM-RB Size 6, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean 20.93 dBm
 Peak 28.15 dBm
 Crest 7.22 dB

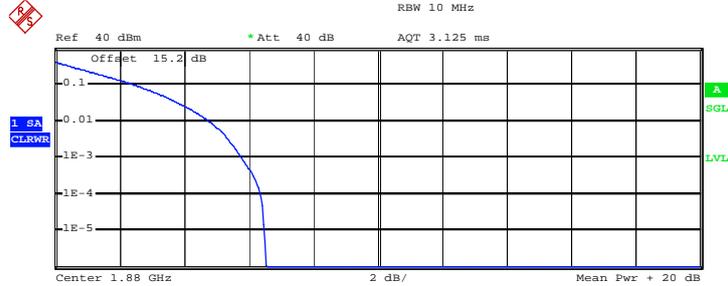
10 % 3.00 dB
 1 % 5.32 dB
 .1 % 6.52 dB
 .01 % 7.12 dB

Date: 14.JUL.2012 17:15:03



| | | | |
|--------------|------------|-------------------|------|
| Band: | LTE Band 2 | Bandwidth: | 3MHz |
|--------------|------------|-------------------|------|

Peak-to-Average Ratio for QPSK-RB Size 15, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1
 Mean 21.75 dBm
 Peak 28.29 dBm
 Crest 6.54 dB

10 % 2.56 dB
 1 % 4.80 dB
 .1 % 5.80 dB
 .01 % 6.40 dB

Date: 14.JUL.2012 17:13:14

Peak-to-Average Ratio for 16QAM-RB Size 15, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1
 Mean 20.66 dBm
 Peak 28.15 dBm
 Crest 7.49 dB

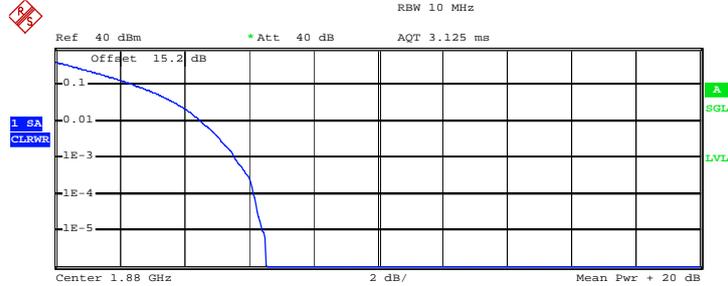
10 % 3.08 dB
 1 % 5.32 dB
 .1 % 6.44 dB
 .01 % 7.08 dB

Date: 14.JUL.2012 17:14:32



| | | | |
|--------------|------------|-------------------|------|
| Band: | LTE Band 2 | Bandwidth: | 5MHz |
|--------------|------------|-------------------|------|

Peak-to-Average Ratio for QPSK-RB Size 25, RB Offset 0



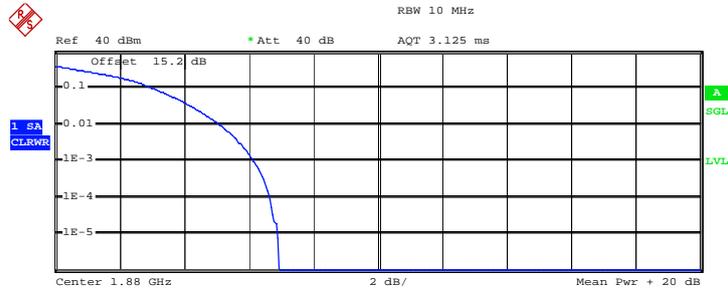
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 21.81 dBm
Peak 28.36 dBm
Crest 6.55 dB

10 % 2.52 dB
1 % 4.56 dB
.1 % 5.60 dB
.01 % 6.16 dB

Date: 14.JUL.2012 17:15:51

Peak-to-Average Ratio for 16QAM-RB Size 25, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 21.29 dBm
Peak 28.22 dBm
Crest 6.93 dB

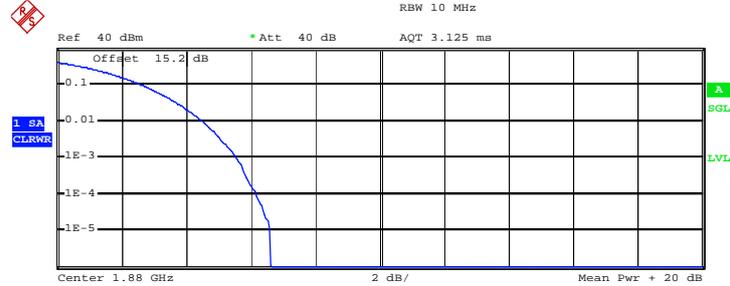
10 % 3.08 dB
1 % 5.12 dB
.1 % 6.16 dB
.01 % 6.68 dB

Date: 14.JUL.2012 17:16:12



| | | | |
|--------------|------------|-------------------|-------|
| Band: | LTE Band 2 | Bandwidth: | 10MHz |
|--------------|------------|-------------------|-------|

Peak-to-Average Ratio for QPSK-RB Size 50, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

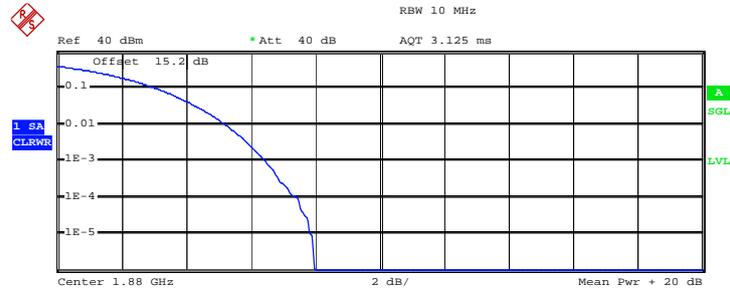
Trace 1

Mean 21.59 dBm
 Peak 28.22 dBm
 Crest 6.63 dB

10 % 2.68 dB
 1 % 4.56 dB
 .1 % 5.56 dB
 .01 % 6.20 dB

Date: 14.JUL.2012 17:17:20

Peak-to-Average Ratio for 16QAM-RB Size 50, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean 20.75 dBm
 Peak 28.72 dBm
 Crest 7.97 dB

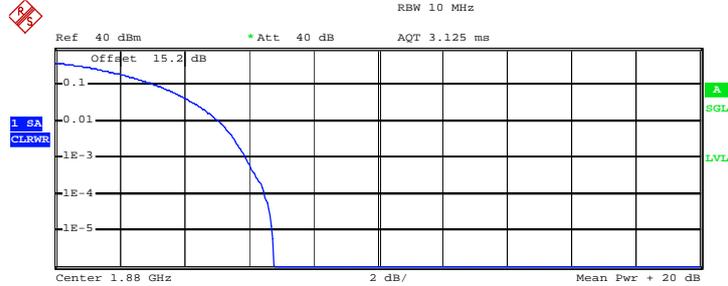
10 % 3.12 dB
 1 % 5.24 dB
 .1 % 6.48 dB
 .01 % 7.44 dB

Date: 14.JUL.2012 17:17:04



| | | | |
|--------------|------------|-------------------|-------|
| Band: | LTE Band 2 | Bandwidth: | 15MHz |
|--------------|------------|-------------------|-------|

Peak-to-Average Ratio for QPSK-RB Size 75, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean 20.37 dBm
 Peak 27.16 dBm
 Crest 6.79 dB

10 % 3.20 dB
 1 % 5.08 dB
 .1 % 5.92 dB
 .01 % 6.52 dB

Date: 14.JUL.2012 17:17:48

Peak-to-Average Ratio for 16QAM-RB Size 75, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean 19.39 dBm
 Peak 27.30 dBm
 Crest 7.92 dB

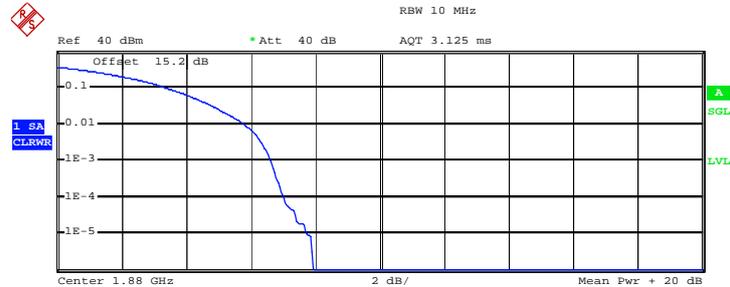
10 % 3.40 dB
 1 % 5.68 dB
 .1 % 6.92 dB
 .01 % 7.60 dB

Date: 14.JUL.2012 17:18:10



| | | | |
|--------------|------------|-------------------|-------|
| Band: | LTE Band 2 | Bandwidth: | 20MHz |
|--------------|------------|-------------------|-------|

Peak-to-Average Ratio for QPSK-RB Size 100, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 19.17 dBm
Peak 27.09 dBm
Crest 7.93 dB

| | |
|-------|---------|
| 10 % | 3.48 dB |
| 1 % | 5.84 dB |
| .1 % | 6.64 dB |
| .01 % | 7.04 dB |

Date: 14.JUL.2012 17:18:51

Peak-to-Average Ratio for 16QAM-RB Size 100, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 18.32 dBm
Peak 26.95 dBm
Crest 8.63 dB

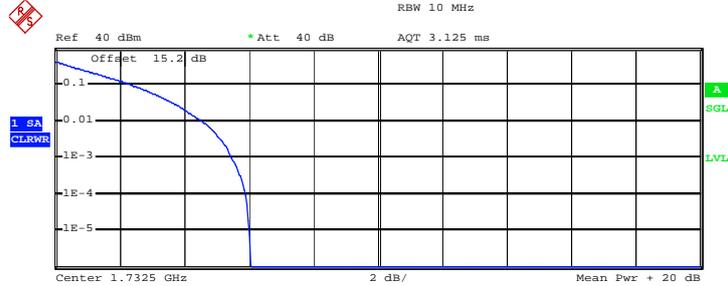
| | |
|-------|---------|
| 10 % | 3.44 dB |
| 1 % | 5.88 dB |
| .1 % | 7.24 dB |
| .01 % | 8.16 dB |

Date: 14.JUL.2012 17:18:33



| | | | |
|--------------|------------|-------------------|--------|
| Band: | LTE Band 4 | Bandwidth: | 1.4MHz |
|--------------|------------|-------------------|--------|

Peak-to-Average Ratio for QPSK-RB Size 6, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 22.38 dBm
Peak 28.43 dBm
Crest 6.06 dB

10 % 2.44 dB
1 % 4.60 dB
.1 % 5.48 dB
.01 % 5.92 dB

Date: 14.JUL.2012 17:39:23

Peak-to-Average Ratio for 16QAM-RB Size 6, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 21.61 dBm
Peak 28.22 dBm
Crest 6.62 dB

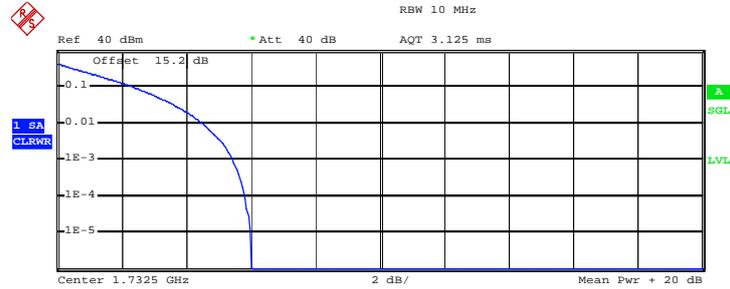
10 % 2.92 dB
1 % 5.16 dB
.1 % 6.20 dB
.01 % 6.48 dB

Date: 14.JUL.2012 17:39:42



| | | | |
|--------------|------------|-------------------|------|
| Band: | LTE Band 4 | Bandwidth: | 3MHz |
|--------------|------------|-------------------|------|

Peak-to-Average Ratio for QPSK-RB Size 15, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

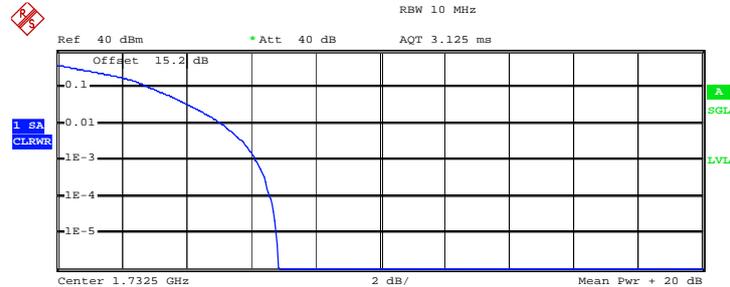
Trace 1

Mean 22.42 dBm
 Peak 28.43 dBm
 Crest 6.02 dB

10 % 2.44 dB
 1 % 4.52 dB
 .1 % 5.44 dB
 .01 % 5.84 dB

Date: 14.JUL.2012 17:38:49

Peak-to-Average Ratio for 16QAM-RB Size 15, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean 21.43 dBm
 Peak 28.29 dBm
 Crest 6.86 dB

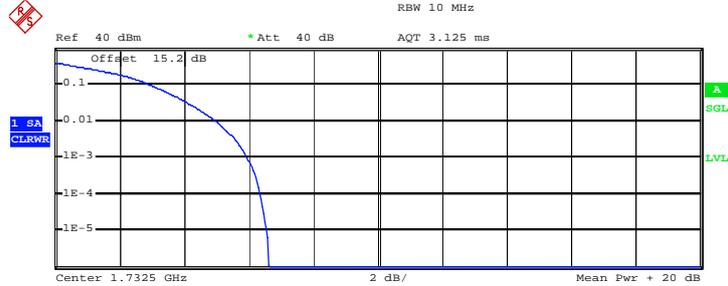
10 % 2.92 dB
 1 % 5.12 dB
 .1 % 6.16 dB
 .01 % 6.60 dB

Date: 14.JUL.2012 17:38:27



| | | | |
|--------------|------------|-------------------|------|
| Band: | LTE Band 4 | Bandwidth: | 5MHz |
|--------------|------------|-------------------|------|

Peak-to-Average Ratio for QPSK-RB Size 25, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean 21.87 dBm
 Peak 28.50 dBm
 Crest 6.63 dB

10 % 3.00 dB
 1 % 5.04 dB
 .1 % 5.96 dB
 .01 % 6.36 dB

Date: 14.JUL.2012 17:29:19

Peak-to-Average Ratio for 16QAM-RB Size 25, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean 21.95 dBm
 Peak 28.50 dBm
 Crest 6.55 dB

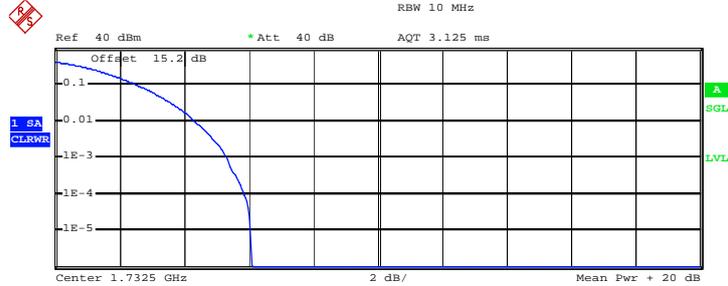
10 % 3.00 dB
 1 % 5.00 dB
 .1 % 5.92 dB
 .01 % 6.32 dB

Date: 14.JUL.2012 17:28:24



| | | | |
|--------------|------------|-------------------|-------|
| Band: | LTE Band 4 | Bandwidth: | 10MHz |
|--------------|------------|-------------------|-------|

Peak-to-Average Ratio for QPSK-RB Size 50, RB Offset 0



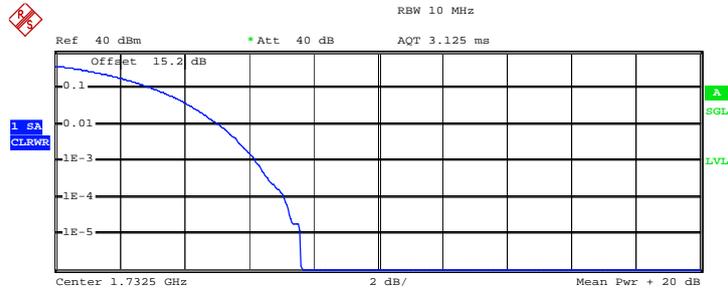
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
 Mean 22.21 dBm
 Peak 28.29 dBm
 Crest 6.08 dB

10 % 2.60 dB
 1 % 4.36 dB
 .1 % 5.32 dB
 .01 % 5.88 dB

Date: 14.JUL.2012 17:22:37

Peak-to-Average Ratio for 16QAM-RB Size 50, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1
 Mean 21.37 dBm
 Peak 29.00 dBm
 Crest 7.63 dB

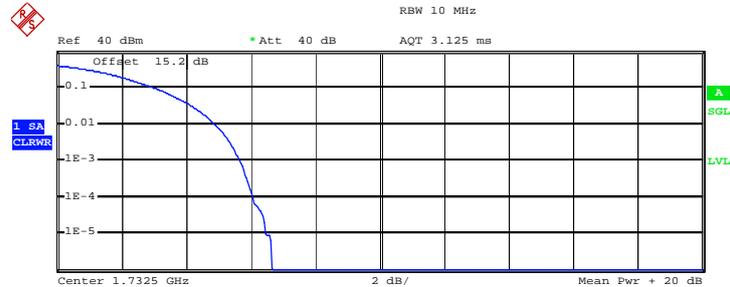
10 % 3.08 dB
 1 % 5.12 dB
 .1 % 6.24 dB
 .01 % 7.12 dB

Date: 14.JUL.2012 17:22:55



| | | | |
|--------------|------------|-------------------|-------|
| Band: | LTE Band 4 | Bandwidth: | 15MHz |
|--------------|------------|-------------------|-------|

Peak-to-Average Ratio for QPSK-RB Size 75, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 21.34 dBm
Peak 28.01 dBm
Crest 6.67 dB

10 % 3.08 dB
1 % 4.92 dB
.1 % 5.68 dB
.01 % 6.08 dB

Date: 14.JUL.2012 17:21:21

Peak-to-Average Ratio for 16QAM-RB Size 75, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 20.29 dBm
Peak 28.15 dBm
Crest 7.87 dB

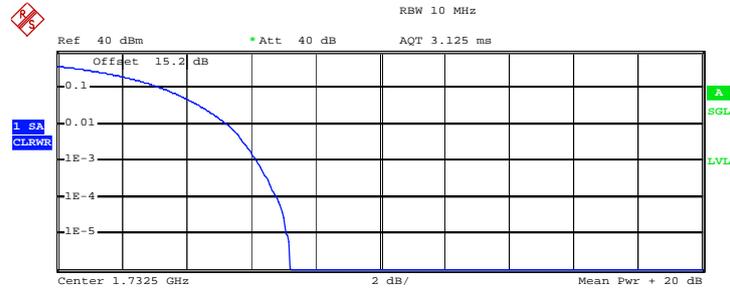
10 % 3.28 dB
1 % 5.52 dB
.1 % 6.72 dB
.01 % 7.36 dB

Date: 14.JUL.2012 17:21:08



| | | | |
|--------------|------------|-------------------|-------|
| Band: | LTE Band 4 | Bandwidth: | 20MHz |
|--------------|------------|-------------------|-------|

Peak-to-Average Ratio for QPSK-RB Size 100, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean 20.57 dBm
 Peak 27.80 dBm
 Crest 7.23 dB

10 % 3.32 dB
 1 % 5.28 dB
 .1 % 6.20 dB
 .01 % 6.84 dB

Date: 14.JUL.2012 17:20:24

Peak-to-Average Ratio for 16QAM-RB Size 100, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean 19.64 dBm
 Peak 28.43 dBm
 Crest 8.79 dB

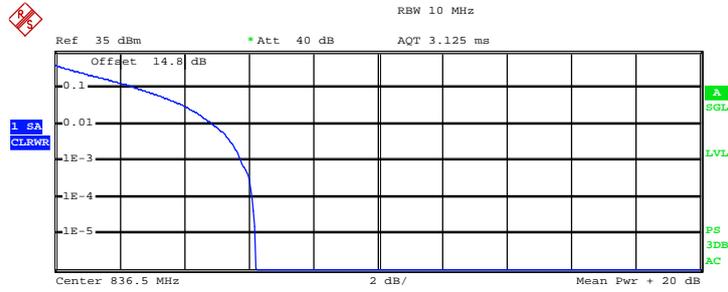
10 % 3.56 dB
 1 % 6.00 dB
 .1 % 7.08 dB
 .01 % 8.00 dB

Date: 14.JUL.2012 17:20:40



| | | | |
|--------------|------------|-------------------|--------|
| Band: | LTE Band 5 | Bandwidth: | 1.4MHz |
|--------------|------------|-------------------|--------|

Peak-to-Average Ratio for QPSK-RB Size 6, RB Offset 0



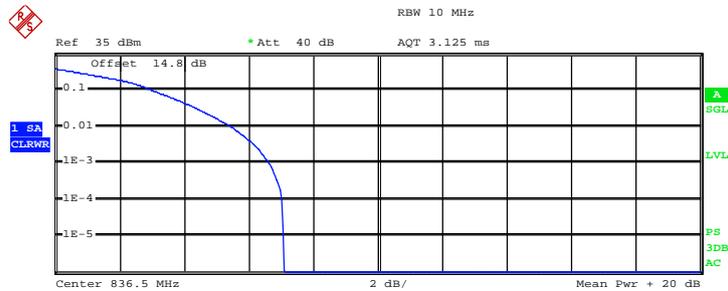
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 18.64 dBm
Peak 24.85 dBm
Crest 6.21 dB

10 % 2.60 dB
1 % 4.92 dB
.1 % 5.76 dB
.01 % 6.12 dB

Date: 12.JUL.2012 05:57:00

Peak-to-Average Ratio for 16QAM-RB Size 6, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 17.91 dBm
Peak 24.99 dBm
Crest 7.08 dB

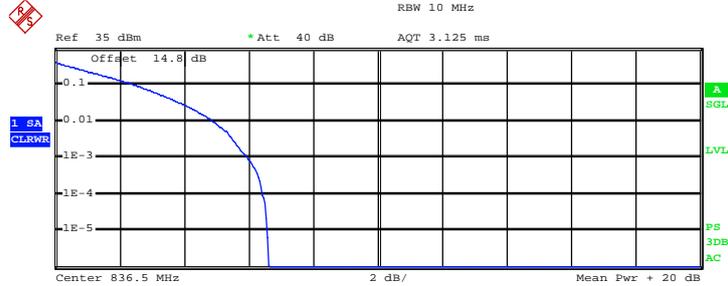
10 % 3.08 dB
1 % 5.48 dB
.1 % 6.64 dB
.01 % 7.04 dB

Date: 12.JUL.2012 05:57:18



| | | | |
|--------------|------------|-------------------|------|
| Band: | LTE Band 5 | Bandwidth: | 3MHz |
|--------------|------------|-------------------|------|

Peak-to-Average Ratio for QPSK-RB Size 15, RB Offset 0



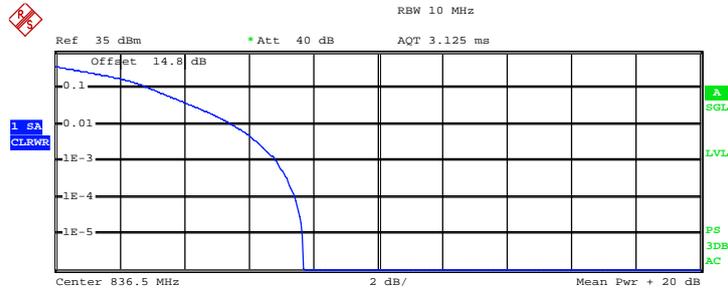
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 18.85 dBm
Peak 25.48 dBm
Crest 6.63 dB

10 % 2.56 dB
1 % 4.92 dB
.1 % 5.96 dB
.01 % 6.44 dB

Date: 12.JUL.2012 06:03:14

Peak-to-Average Ratio for 16QAM-RB Size 15, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 17.71 dBm
Peak 25.41 dBm
Crest 7.70 dB

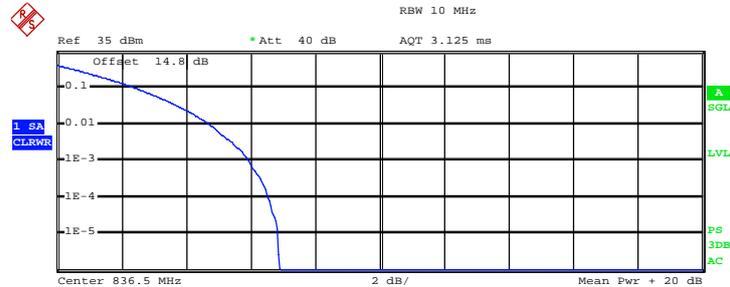
10 % 3.00 dB
1 % 5.52 dB
.1 % 6.88 dB
.01 % 7.44 dB

Date: 12.JUL.2012 06:01:12



| | | | |
|--------------|------------|-------------------|------|
| Band: | LTE Band 5 | Bandwidth: | 5MHz |
|--------------|------------|-------------------|------|

Peak-to-Average Ratio for QPSK-RB Size 25, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

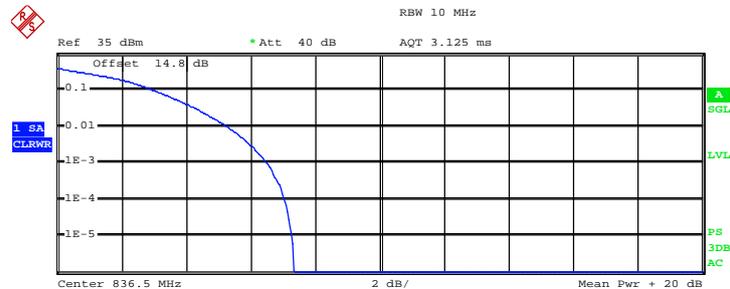
Trace 1

Mean 19.17 dBm
 Peak 26.05 dBm
 Crest 6.88 dB

10 % 2.52 dB
 1 % 4.76 dB
 .1 % 5.96 dB
 .01 % 6.56 dB

Date: 12.JUL.2012 06:16:00

Peak-to-Average Ratio for 16QAM-RB Size 25, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean 18.48 dBm
 Peak 25.83 dBm
 Crest 7.35 dB

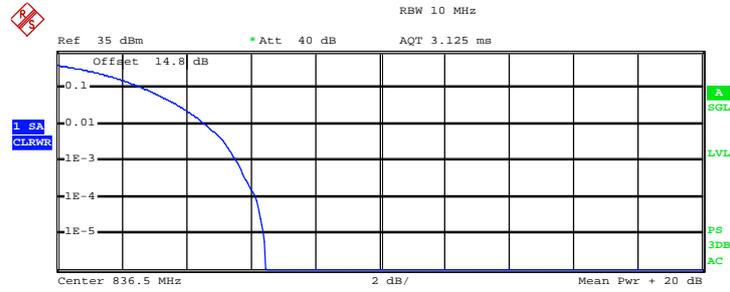
10 % 3.04 dB
 1 % 5.32 dB
 .1 % 6.52 dB
 .01 % 7.08 dB

Date: 12.JUL.2012 06:16:33



| | | | |
|--------------|------------|-------------------|-------|
| Band: | LTE Band 5 | Bandwidth: | 10MHz |
|--------------|------------|-------------------|-------|

Peak-to-Average Ratio for QPSK-RB Size 50, RB Offset 0



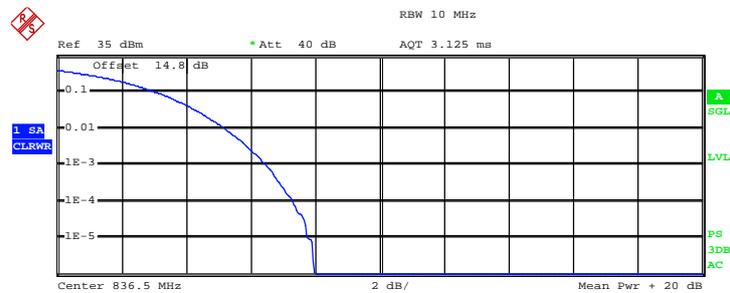
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 19.22 dBm
Peak 25.69 dBm
Crest 6.47 dB

10 % 2.72 dB
1 % 4.60 dB
.1 % 5.56 dB
.01 % 6.16 dB

Date: 12.JUL.2012 06:23:01

Peak-to-Average Ratio for 16QAM-RB Size 50, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 18.30 dBm
Peak 26.26 dBm
Crest 7.96 dB

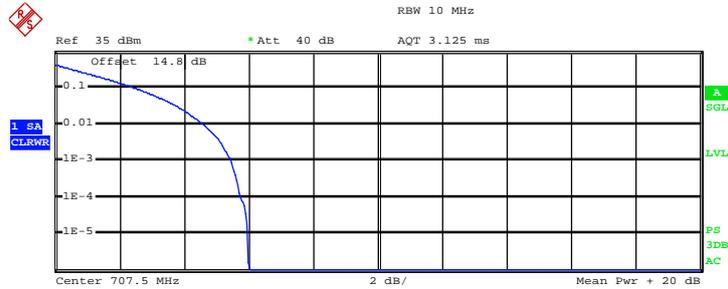
10 % 3.16 dB
1 % 5.20 dB
.1 % 6.52 dB
.01 % 7.32 dB

Date: 12.JUL.2012 06:22:40



| | | | |
|--------------|-------------|-------------------|--------|
| Band: | LTE Band 12 | Bandwidth: | 1.4MHz |
|--------------|-------------|-------------------|--------|

Peak-to-Average Ratio for QPSK-RB Size 6, RB Offset 0



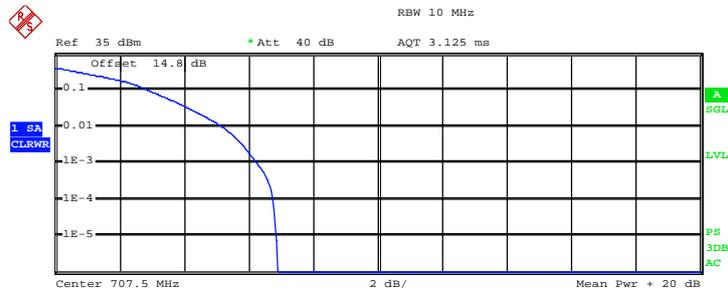
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 19.77 dBm
Peak 25.76 dBm
Crest 5.99 dB

| | |
|-------|---------|
| 10 % | 2.56 dB |
| 1 % | 4.60 dB |
| .1 % | 5.48 dB |
| .01 % | 5.76 dB |

Date: 12.JUL.2012 08:10:33

Peak-to-Average Ratio for 16QAM-RB Size 6, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 18.80 dBm
Peak 25.69 dBm
Crest 6.89 dB

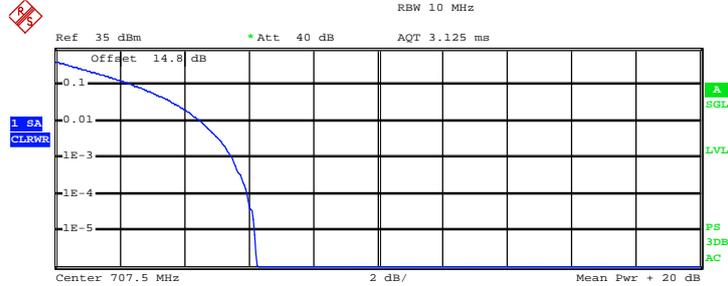
| | |
|-------|---------|
| 10 % | 2.96 dB |
| 1 % | 5.20 dB |
| .1 % | 6.28 dB |
| .01 % | 6.76 dB |

Date: 12.JUL.2012 08:10:21



| | | | |
|--------------|-------------|-------------------|------|
| Band: | LTE Band 12 | Bandwidth: | 3MHz |
|--------------|-------------|-------------------|------|

Peak-to-Average Ratio for QPSK-RB Size 15, RB Offset 0



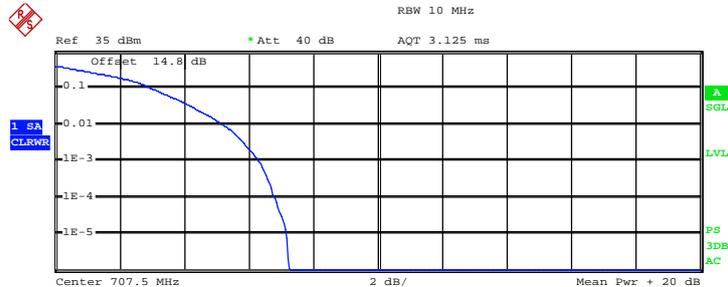
Center 707.5 MHz 2 dB/ Mean Pwr + 20 dB

Complementary Cumulative Distribution Function (100000 samples)
 Trace 1
 Mean 19.73 dBm
 Peak 25.98 dBm
 Crest 6.24 dB

| | |
|-------|---------|
| 10 % | 2.48 dB |
| 1 % | 4.52 dB |
| .1 % | 5.48 dB |
| .01 % | 5.96 dB |

Date: 12.JUL.2012 08:08:39

Peak-to-Average Ratio for 16QAM-RB Size 15, RB Offset 0



Center 707.5 MHz 2 dB/ Mean Pwr + 20 dB

Complementary Cumulative Distribution Function (100000 samples)
 Trace 1
 Mean 18.52 dBm
 Peak 25.76 dBm
 Crest 7.24 dB

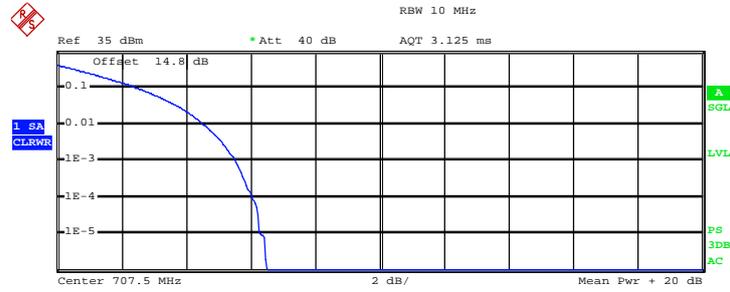
| | |
|-------|---------|
| 10 % | 3.04 dB |
| 1 % | 5.24 dB |
| .1 % | 6.32 dB |
| .01 % | 6.84 dB |

Date: 12.JUL.2012 08:08:57



| | | | |
|--------------|-------------|-------------------|------|
| Band: | LTE Band 12 | Bandwidth: | 5MHz |
|--------------|-------------|-------------------|------|

Peak-to-Average Ratio for QPSK-RB Size 25, RB Offset 0



Center 707.5 MHz 2 dB/ Mean Pwr + 20 dB

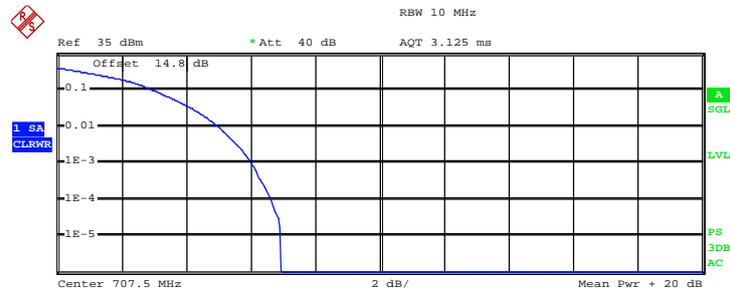
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
 Mean 19.00 dBm
 Peak 25.48 dBm
 Crest 6.48 dB

10 % 2.56 dB
 1 % 4.56 dB
 .1 % 5.52 dB
 .01 % 6.04 dB

Date: 12.JUL.2012 06:49:30

Peak-to-Average Ratio for 16QAM-RB Size 25, RB Offset 0



Center 707.5 MHz 2 dB/ Mean Pwr + 20 dB

Complementary Cumulative Distribution Function (100000 samples)

Trace 1
 Mean 18.60 dBm
 Peak 25.55 dBm
 Crest 6.95 dB

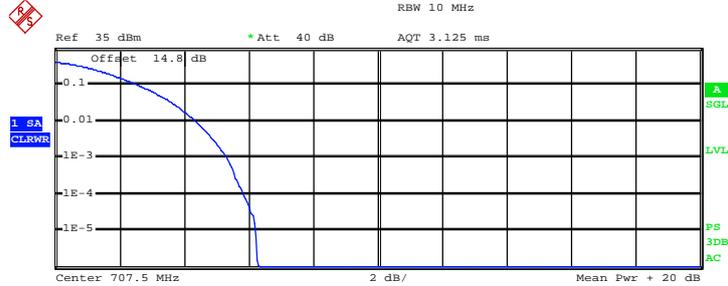
10 % 3.04 dB
 1 % 5.00 dB
 .1 % 6.04 dB
 .01 % 6.64 dB

Date: 12.JUL.2012 06:47:48



| | | | |
|--------------|-------------|-------------------|-------|
| Band: | LTE Band 12 | Bandwidth: | 10MHz |
|--------------|-------------|-------------------|-------|

Peak-to-Average Ratio for QPSK-RB Size 50, RB Offset 0



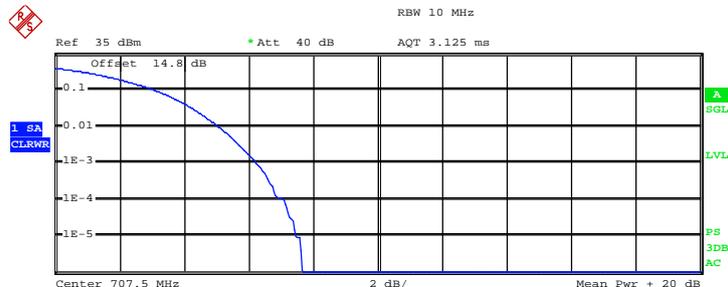
Center 707.5 MHz 2 dB/ Mean Pwr + 20 dB

Complementary Cumulative Distribution Function (100000 samples)
 Trace 1
 Mean 18.85 dBm
 Peak 25.13 dBm
 Crest 6.28 dB

| | |
|-------|---------|
| 10 % | 2.64 dB |
| 1 % | 4.40 dB |
| .1 % | 5.32 dB |
| .01 % | 5.84 dB |

Date: 12.JUL.2012 06:46:02

Peak-to-Average Ratio for 16QAM-RB Size 50, RB Offset 0



Center 707.5 MHz 2 dB/ Mean Pwr + 20 dB

Complementary Cumulative Distribution Function (100000 samples)
 Trace 1
 Mean 17.69 dBm
 Peak 25.34 dBm
 Crest 7.65 dB

| | |
|-------|---------|
| 10 % | 3.16 dB |
| 1 % | 5.08 dB |
| .1 % | 6.24 dB |
| .01 % | 7.08 dB |

Date: 12.JUL.2012 06:46:21

3.3 Emission Bandwidth

3.3.1 Description of Emission Bandwidth Measurement

The 99% occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

The emission bandwidth is defined as the width of the signal between two points, located at the 2 sides of the carrier frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

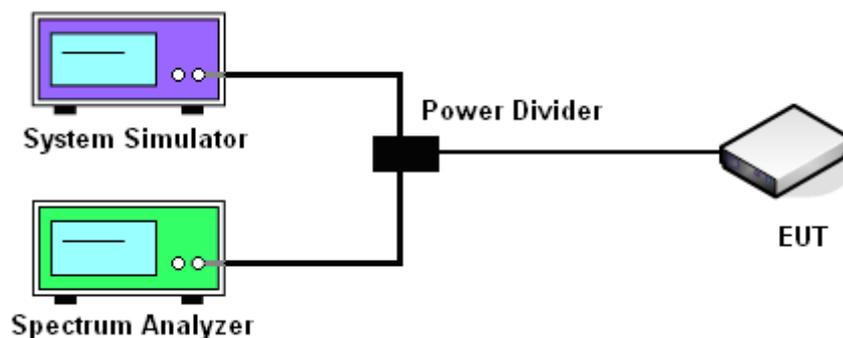
3.3.2 Measuring Instruments

See list of measuring instruments of this test report.

3.3.3 Test Procedures

1. The EUT was connected to Spectrum Analyzer and System Simulator via power divider.
2. The 99% occupied bandwidth and 26 dB bandwidth of the middle channel for the highest RF powers were measured.

3.3.4 Test Setup



3.3.6 Test Result of 99% Occupied Bandwidth and 26dB Bandwidth

| Band | Band Width | Channel | Frequency (MHz) | Modulation | 99%Bandwidth (MHz) | 26dB Bandwidth (MHz) |
|------------|------------|---------|-----------------|------------|--------------------|----------------------|
| LTE Band 2 | 1.4MHz | 18900 | 1880 | QPSK | 1.10 | 1.30 |
| | | | | 16-QAM | 1.10 | 1.32 |
| | 3MHz | 18900 | 1880 | QPSK | 2.74 | 3.13 |
| | | | | 16-QAM | 2.74 | 3.13 |
| | 5MHz | 18900 | 1880 | QPSK | 4.52 | 5.14 |
| | | | | 16-QAM | 4.52 | 5.12 |
| | 10MHz | 18900 | 1880 | QPSK | 9.12 | 10.36 |
| | | | | 16-QAM | 9.08 | 10.20 |
| | 15MHz | 18900 | 1880 | QPSK | 13.44 | 15.12 |
| | | | | 16-QAM | 13.44 | 15.18 |
| | 20MHz | 18900 | 1880 | QPSK | 17.76 | 19.68 |
| | | | | 16-QAM | 17.76 | 19.60 |
| LTE Band 4 | 1.4MHz | 20175 | 1732.5 | QPSK | 1.10 | 1.31 |
| | | | | 16-QAM | 1.11 | 1.32 |
| | 3MHz | 20175 | 1732.5 | QPSK | 2.75 | 3.14 |
| | | | | 16-QAM | 2.75 | 3.17 |
| | 5MHz | 20175 | 1732.5 | QPSK | 4.52 | 5.12 |
| | | | | 16-QAM | 4.52 | 5.14 |
| | 10MHz | 20175 | 1732.5 | QPSK | 9.08 | 10.32 |
| | | | | 16-QAM | 9.04 | 10.16 |
| | 15MHz | 20175 | 1732.5 | QPSK | 13.50 | 15.06 |
| | | | | 16-QAM | 13.56 | 15.06 |
| | 20MHz | 20175 | 1732.5 | QPSK | 18.00 | 19.68 |
| | | | | 16-QAM | 18.00 | 19.60 |



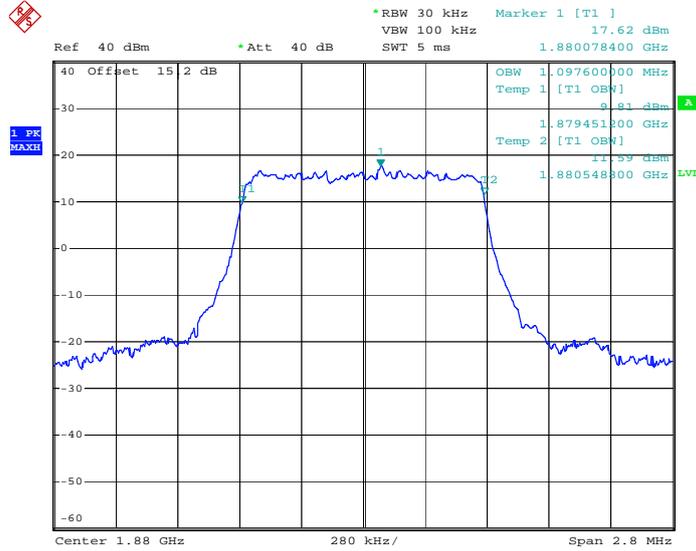
| Band | Band Width | Channel | Frequency (MHz) | Modulation | 99%Bandwidth (MHz) | 26dB Bandwidth (MHz) |
|-------------|------------|---------|-----------------|------------|--------------------|----------------------|
| LTE Band 5 | 1.4MHz | 20525 | 836.5 | QPSK | 1.10 | 1.31 |
| | | | | 16-QAM | 1.11 | 1.32 |
| | 3MHz | 20525 | 836.5 | QPSK | 2.74 | 3.13 |
| | | | | 16-QAM | 2.74 | 3.16 |
| | 5MHz | 20525 | 836.5 | QPSK | 4.52 | 5.14 |
| | | | | 16-QAM | 4.50 | 5.12 |
| 10MHz | 20525 | 836.5 | QPSK | 9.12 | 10.32 | |
| | | | 16-QAM | 9.08 | 10.24 | |
| LTE Band 12 | 1.4MHz | 23095 | 707.5 | QPSK | 1.10 | 1.30 |
| | | | | 16-QAM | 1.11 | 1.32 |
| | 3MHz | 23095 | 707.5 | QPSK | 2.75 | 3.14 |
| | | | | 16-QAM | 2.74 | 3.16 |
| | 5MHz | 23095 | 707.5 | QPSK | 4.52 | 5.14 |
| | | | | 16-QAM | 4.52 | 5.10 |
| 10MHz | 23095 | 707.5 | QPSK | 9.16 | 10.28 | |
| | | | 16-QAM | 9.08 | 10.28 | |



3.3.7 Test Result (Plots) of 99% Occupied Bandwidth and 26dB Bandwidth

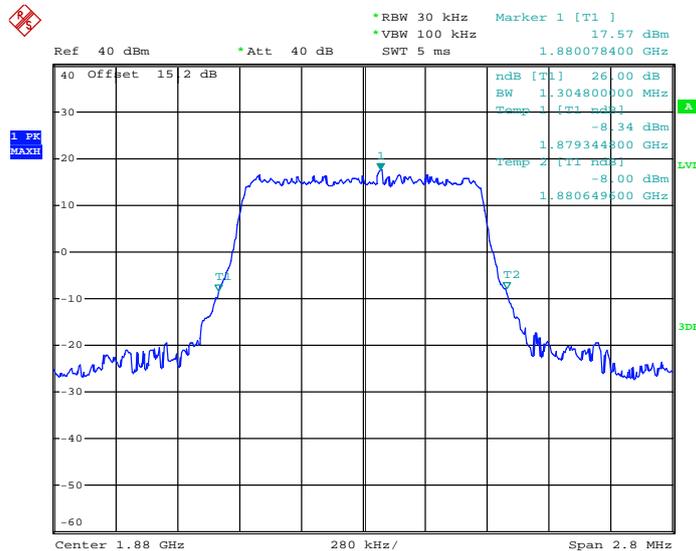
| | | | |
|--------|------------|-------------|---------------|
| Band : | LTE Band 2 | BW / Mod. : | 1.4MHz / QPSK |
|--------|------------|-------------|---------------|

99% Occupied Bandwidth Plot on Channel 18900



Date: 15.JUL.2012 00:56:58

26dB Bandwidth Plot on Channel 18900

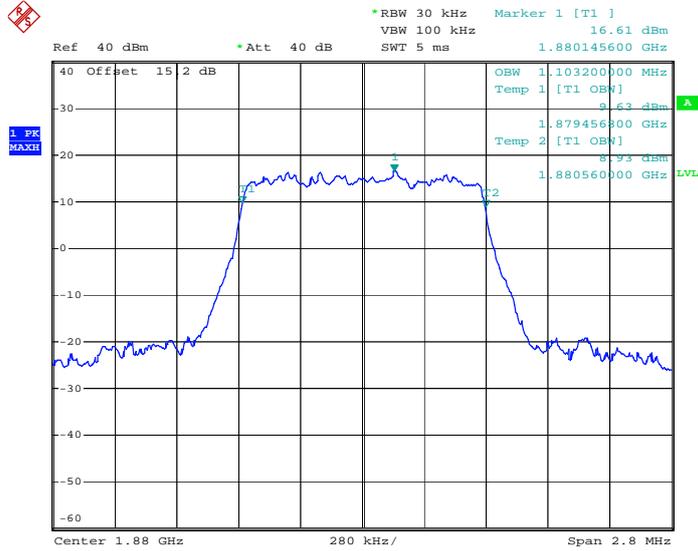


Date: 11.JUL.2012 13:02:57



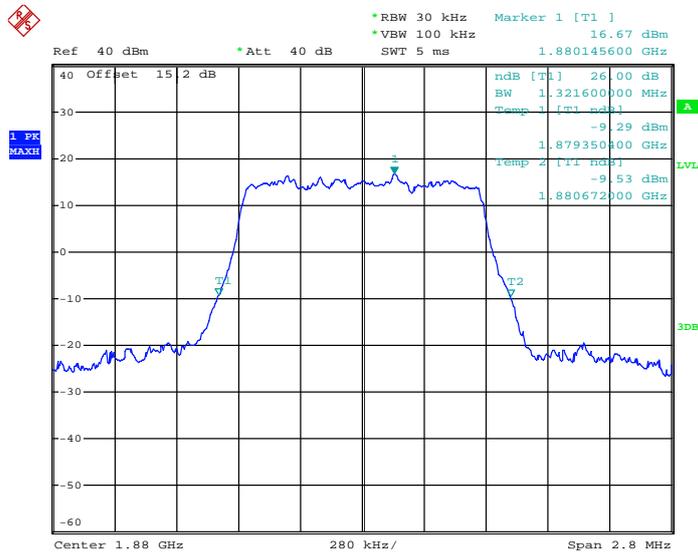
| | | | |
|---------------|------------|--------------------|----------------|
| Band : | LTE Band 2 | BW / Mod. : | 1.4MHz / 16QAM |
|---------------|------------|--------------------|----------------|

99% Occupied Bandwidth Plot on Channel 18900



Date: 15.JUL.2012 00:56:21

26dB Bandwidth Plot on Channel 18900

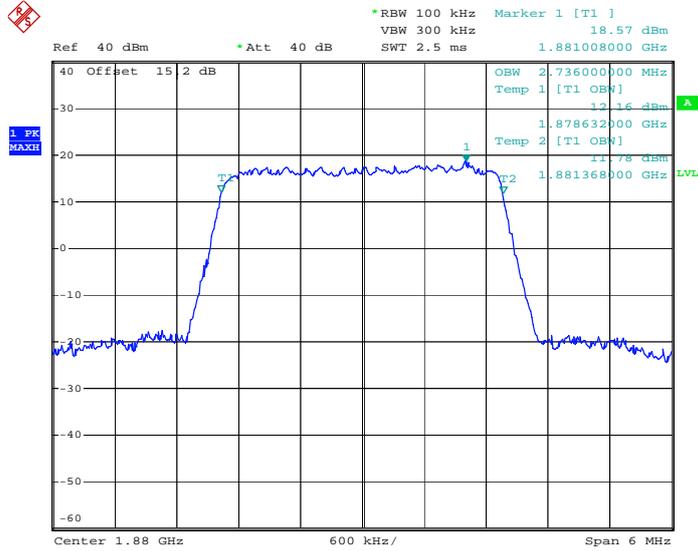


Date: 11.JUL.2012 13:02:37



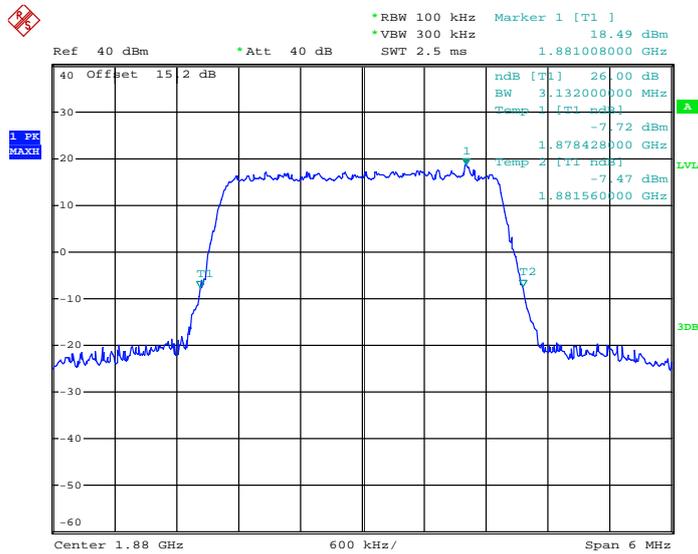
| | | | |
|--------|------------|-------------|-------------|
| Band : | LTE Band 2 | BW / Mod. : | 3MHz / QPSK |
|--------|------------|-------------|-------------|

99% Occupied Bandwidth Plot on Channel 18900



Date: 15.JUL.2012 00:48:36

26dB Bandwidth Plot on Channel 18900

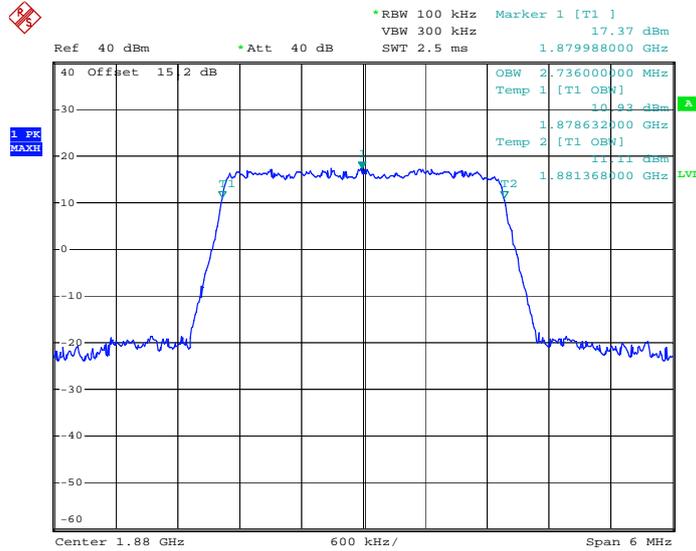


Date: 11.JUL.2012 13:07:05



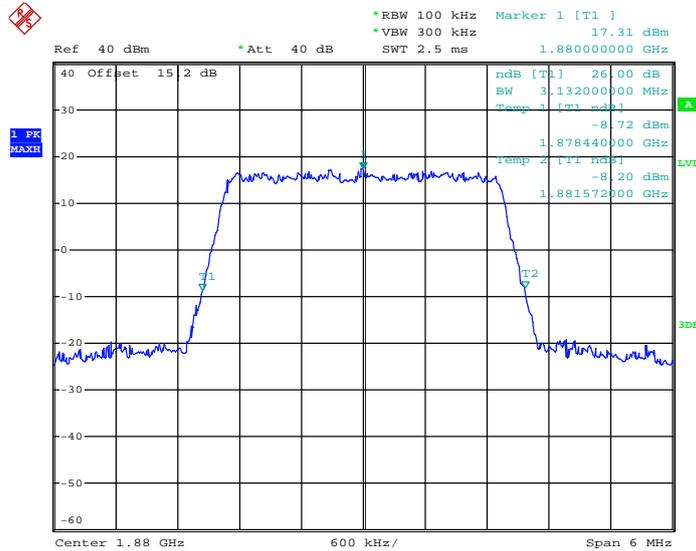
| | | | |
|--------|------------|-------------|--------------|
| Band : | LTE Band 2 | BW / Mod. : | 3MHz / 16QAM |
|--------|------------|-------------|--------------|

99% Occupied Bandwidth Plot on Channel 18900



Date: 15.JUL.2012 00:48:03

26dB Bandwidth Plot on Channel 18900

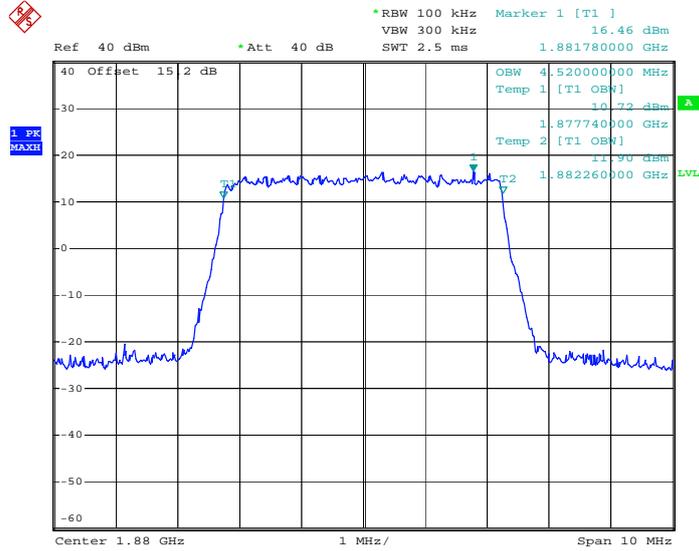


Date: 11.JUL.2012 13:07:27



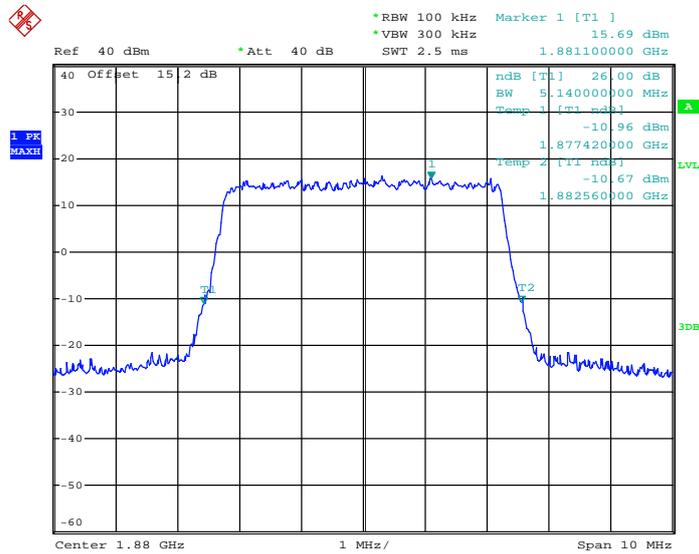
| | | | |
|---------------|------------|--------------------|-------------|
| Band : | LTE Band 2 | BW / Mod. : | 5MHz / QPSK |
|---------------|------------|--------------------|-------------|

99% Occupied Bandwidth Plot on Channel 18900



Date: 15.JUL.2012 00:41:55

26dB Bandwidth Plot on Channel 18900

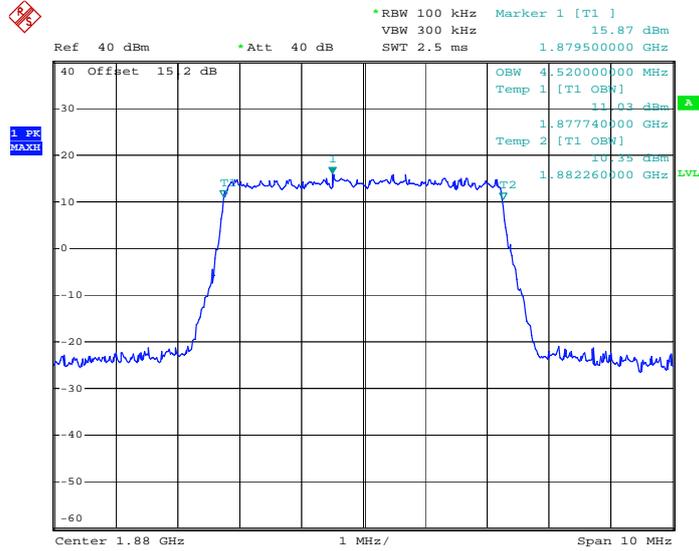


Date: 11.JUL.2012 13:00:11



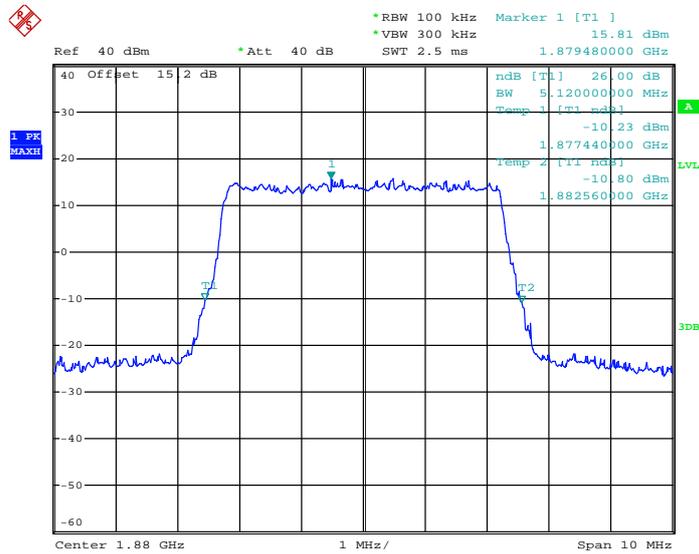
| | | | |
|--------|------------|-------------|--------------|
| Band : | LTE Band 2 | BW / Mod. : | 5MHz / 16QAM |
|--------|------------|-------------|--------------|

99% Occupied Bandwidth Plot on Channel 18900



Date: 15.JUL.2012 00:41:18

26dB Bandwidth Plot on Channel 18900

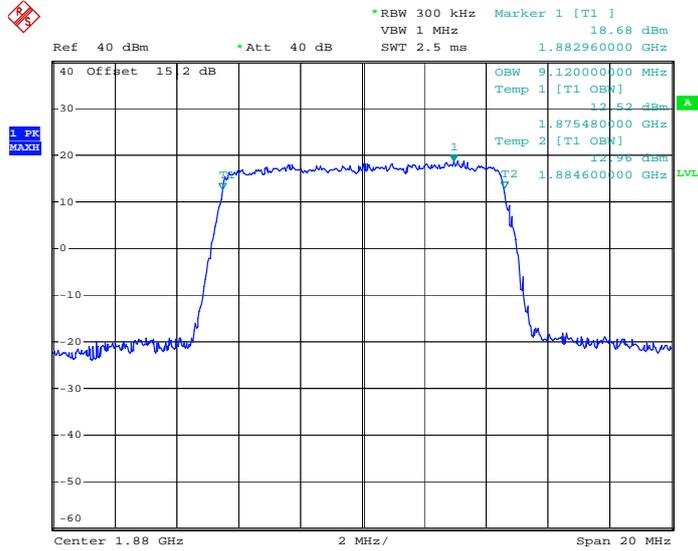


Date: 11.JUL.2012 13:00:43



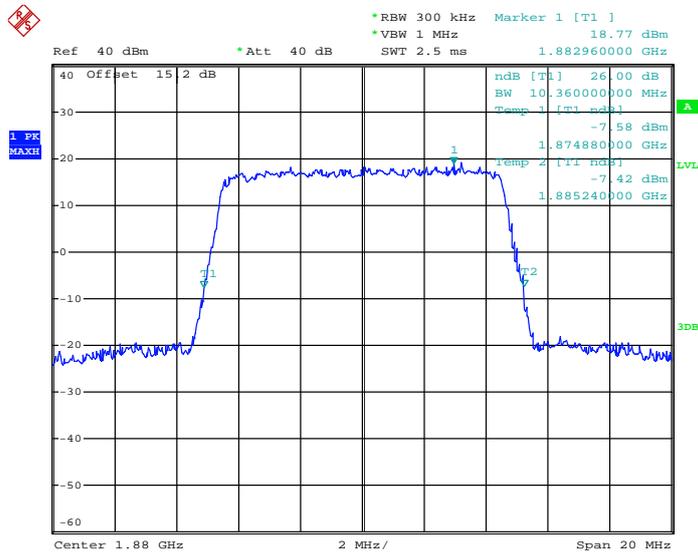
| | | | |
|---------------|------------|--------------------|--------------|
| Band : | LTE Band 2 | BW / Mod. : | 10MHz / QPSK |
|---------------|------------|--------------------|--------------|

99% Occupied Bandwidth Plot on Channel 18900



Date: 15.JUL.2012 00:32:00

26dB Bandwidth Plot on Channel 18900

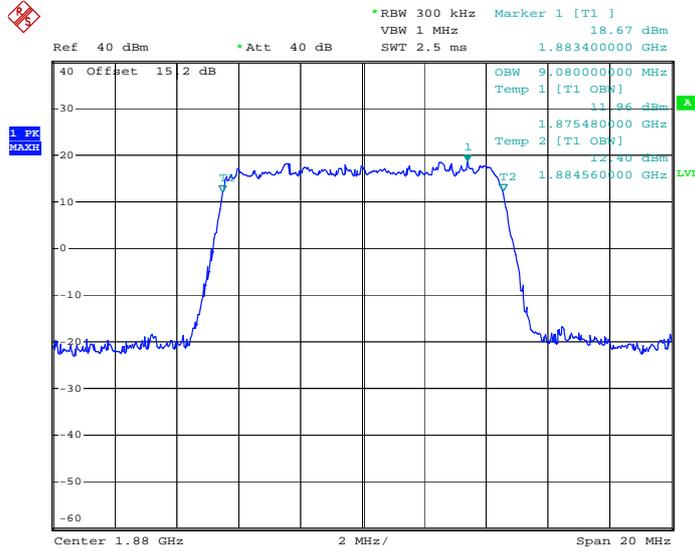


Date: 11.JUL.2012 12:58:42



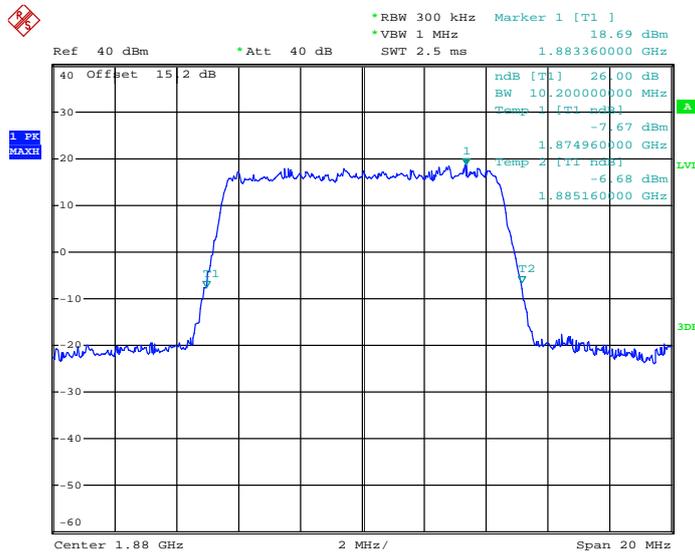
| | | | |
|--------|------------|-------------|---------------|
| Band : | LTE Band 2 | BW / Mod. : | 10MHz / 16QAM |
|--------|------------|-------------|---------------|

99% Occupied Bandwidth Plot on Channel 18900



Date: 15.JUL.2012 00:31:27

26dB Bandwidth Plot on Channel 18900

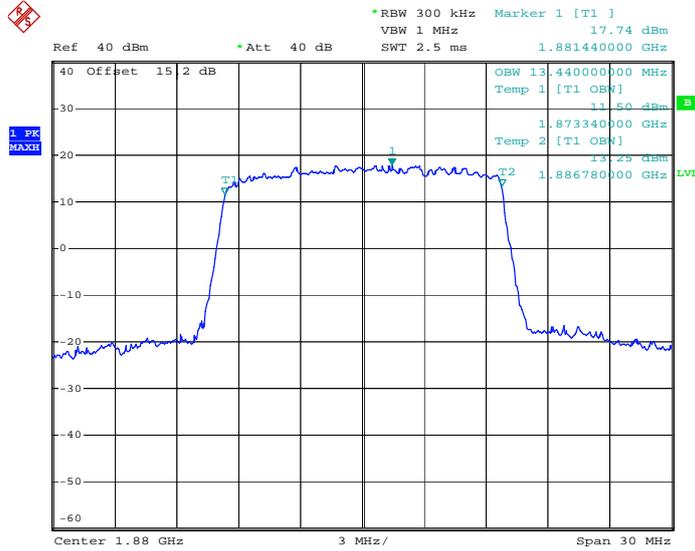


Date: 11.JUL.2012 12:58:19



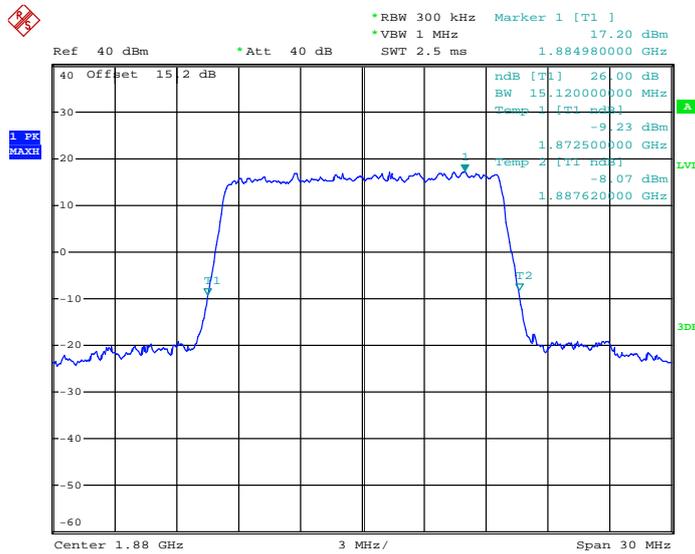
| | | | |
|--------|------------|-------------|--------------|
| Band : | LTE Band 2 | BW / Mod. : | 15MHz / QPSK |
|--------|------------|-------------|--------------|

99% Occupied Bandwidth Plot on Channel 18900



Date: 14.JUL.2012 21:25:21

26dB Bandwidth Plot on Channel 18900

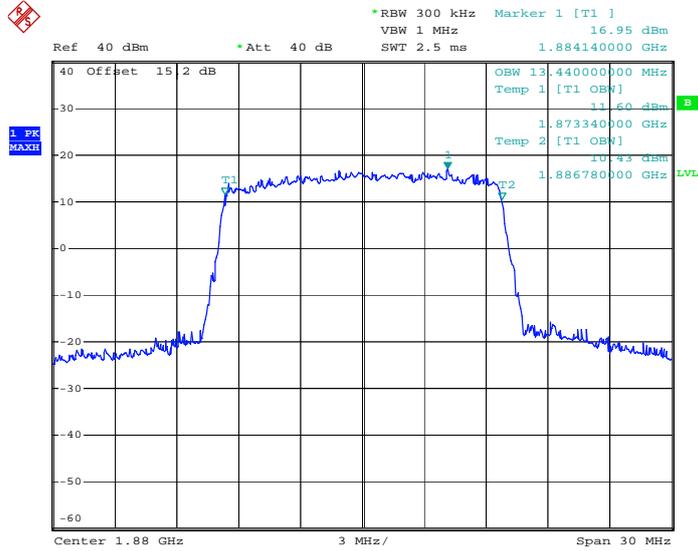


Date: 11.JUL.2012 12:43:37



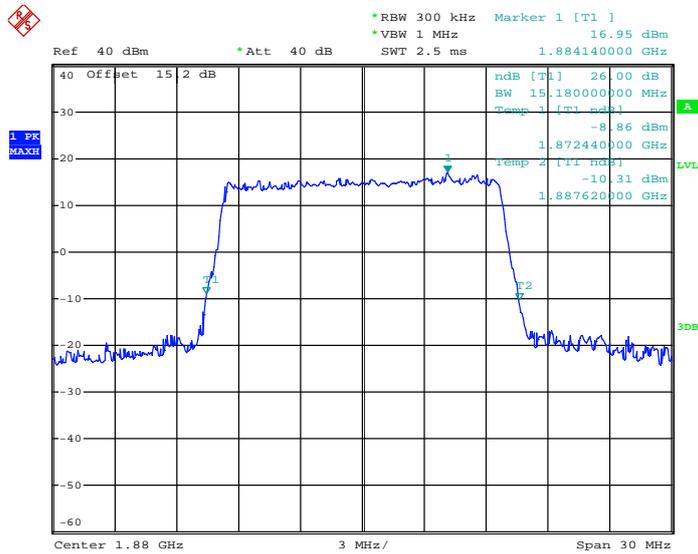
| | | | |
|--------|------------|-------------|---------------|
| Band : | LTE Band 2 | BW / Mod. : | 15MHz / 16QAM |
|--------|------------|-------------|---------------|

99% Occupied Bandwidth Plot on Channel 18900



Date: 14.JUL.2012 21:23:19

26dB Bandwidth Plot on Channel 18900

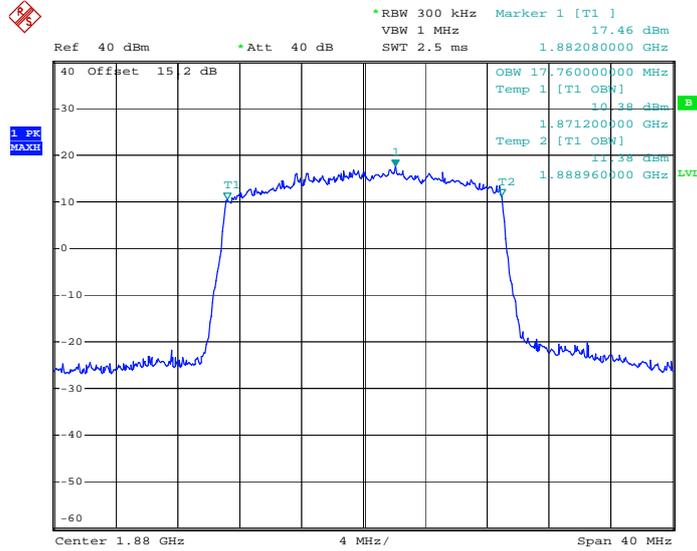


Date: 11.JUL.2012 12:44:21



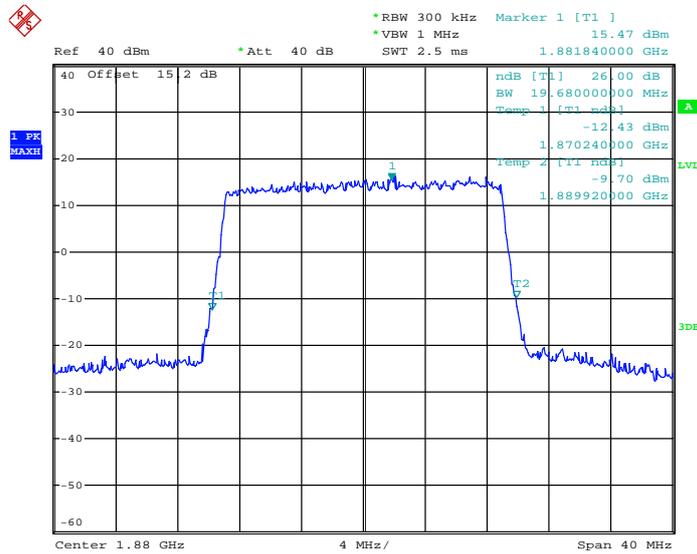
| | | | |
|--------|------------|-------------|--------------|
| Band : | LTE Band 2 | BW / Mod. : | 20MHz / QPSK |
|--------|------------|-------------|--------------|

99% Occupied Bandwidth Plot on Channel 18900



Date: 14.JUL.2012 21:22:07

26dB Bandwidth Plot on Channel 18900

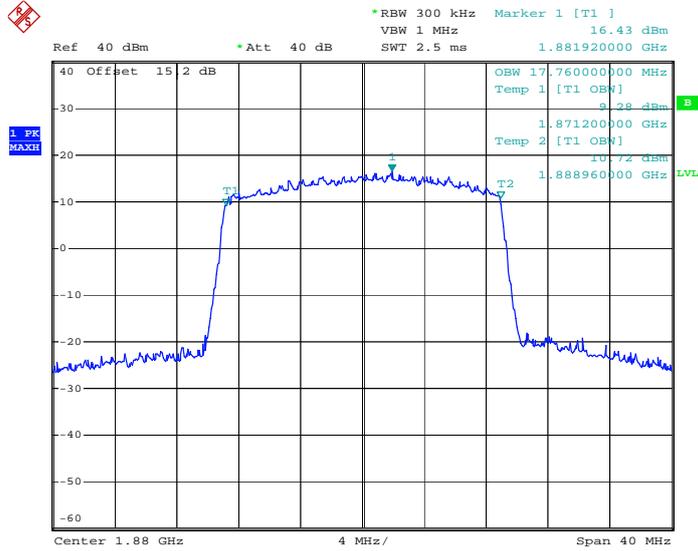


Date: 11.JUL.2012 12:17:44



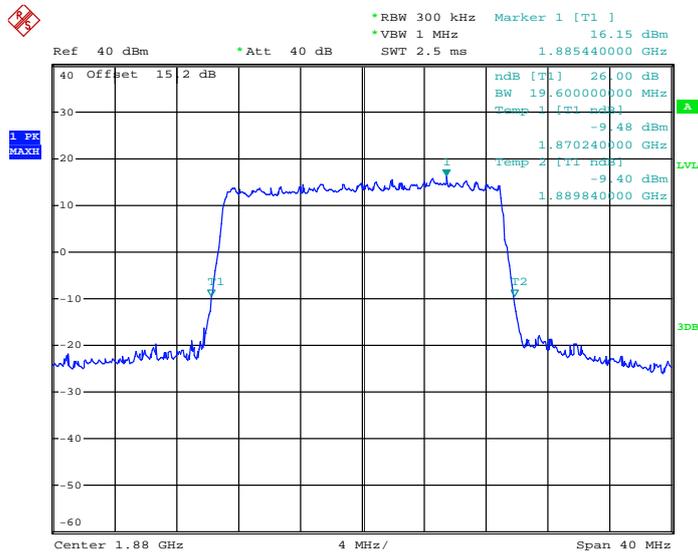
| | | | |
|--------|------------|-------------|---------------|
| Band : | LTE Band 2 | BW / Mod. : | 20MHz / 16QAM |
|--------|------------|-------------|---------------|

99% Occupied Bandwidth Plot on Channel 18900



Date: 14.JUL.2012 21:22:43

26dB Bandwidth Plot on Channel 18900

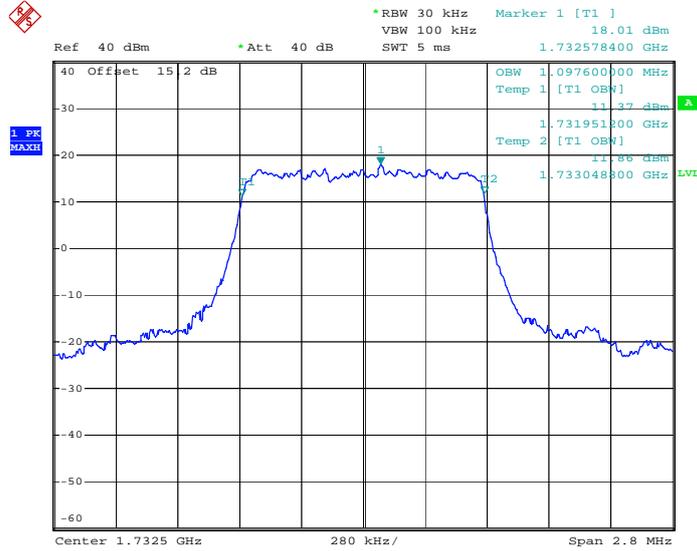


Date: 11.JUL.2012 12:16:23



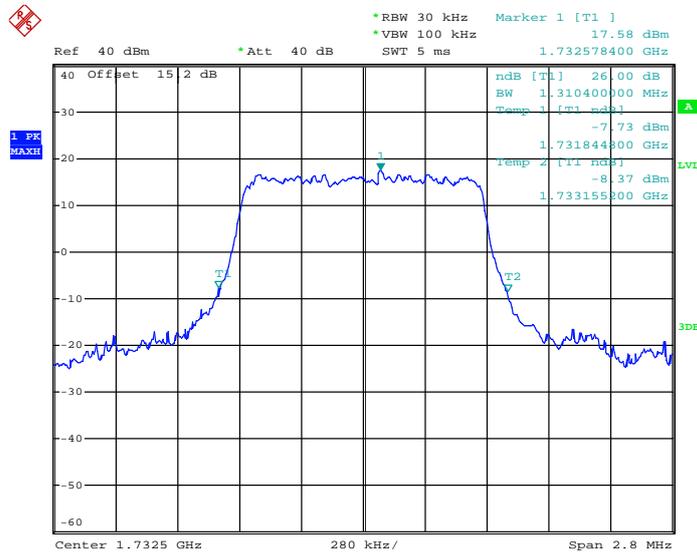
| | | | |
|---------------|------------|--------------------|---------------|
| Band : | LTE Band 4 | BW / Mod. : | 1.4MHz / QPSK |
|---------------|------------|--------------------|---------------|

99% Occupied Bandwidth Plot on Channel 20175



Date: 14.JUL.2012 18:03:25

26dB Bandwidth Plot on Channel 20175

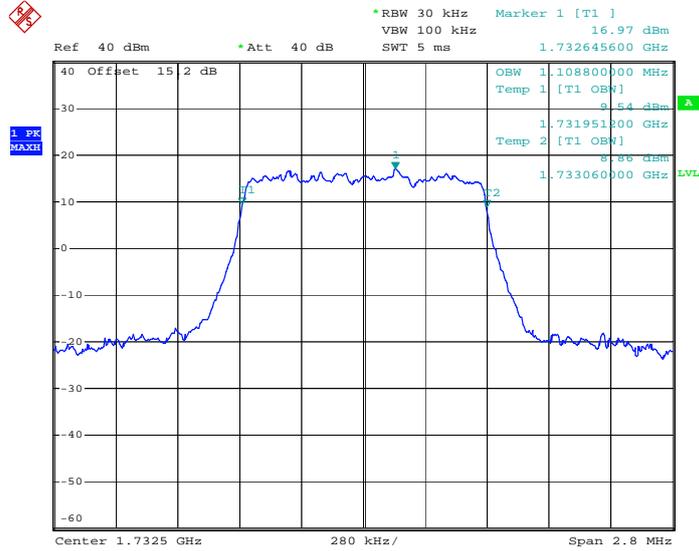


Date: 11.JUL.2012 11:18:15



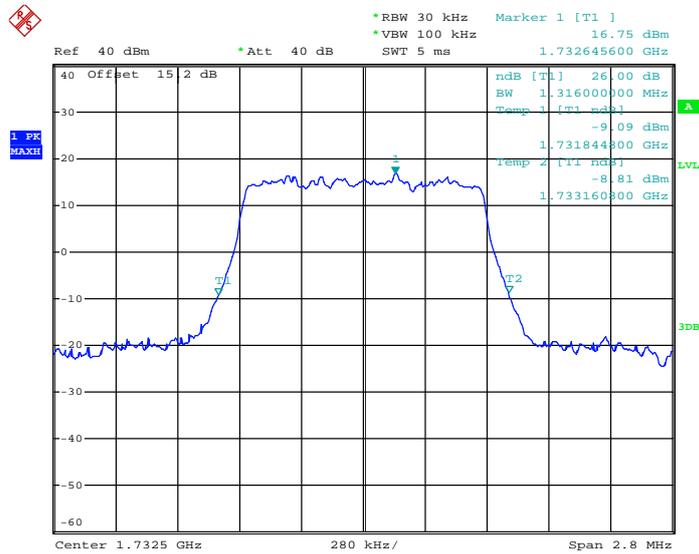
| | | | |
|---------------|------------|--------------------|----------------|
| Band : | LTE Band 4 | BW / Mod. : | 1.4MHz / 16QAM |
|---------------|------------|--------------------|----------------|

99% Occupied Bandwidth Plot on Channel 20175



Date: 14.JUL.2012 18:02:30

26dB Bandwidth Plot on Channel 20175

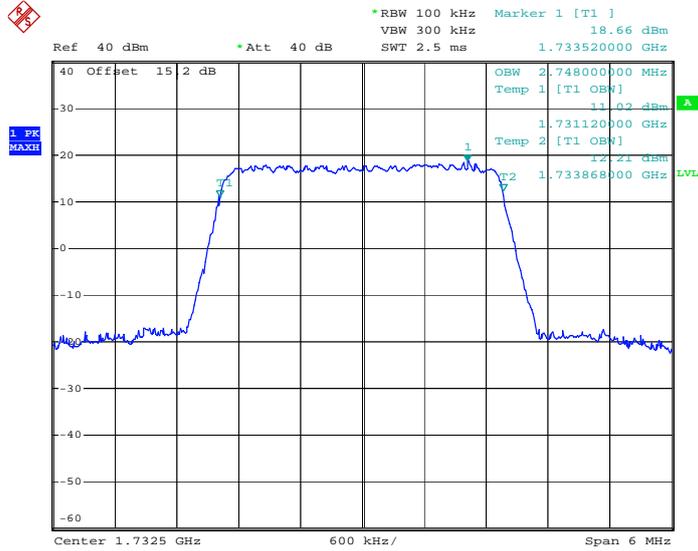


Date: 11.JUL.2012 11:17:39



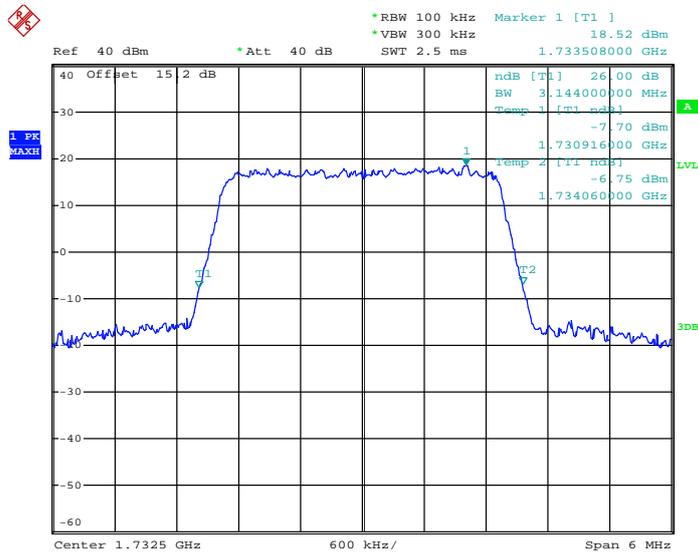
| | | | |
|--------|------------|-------------|-------------|
| Band : | LTE Band 4 | BW / Mod. : | 3MHz / QPSK |
|--------|------------|-------------|-------------|

99% Occupied Bandwidth Plot on Channel 20175



Date: 14.JUL.2012 19:32:25

26dB Bandwidth Plot on Channel 20175

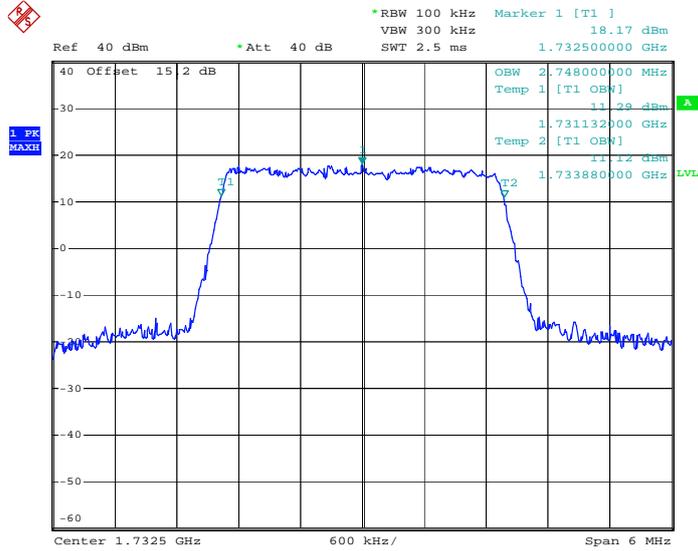


Date: 11.JUL.2012 11:30:34



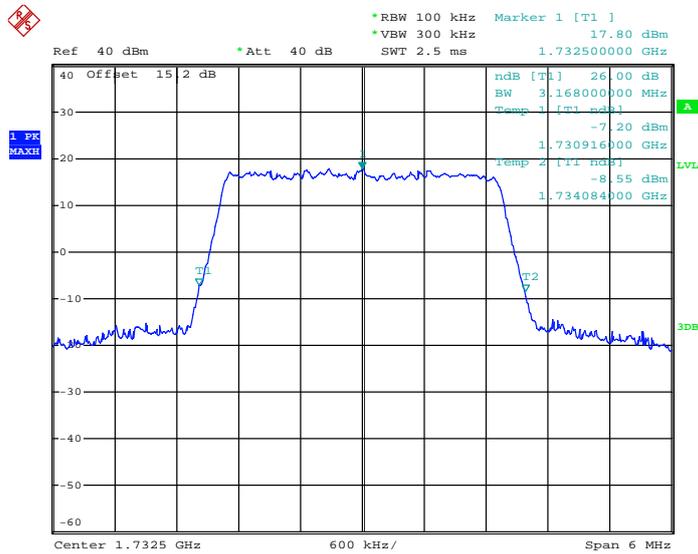
| | | | |
|--------|------------|-------------|--------------|
| Band : | LTE Band 4 | BW / Mod. : | 3MHz / 16QAM |
|--------|------------|-------------|--------------|

99% Occupied Bandwidth Plot on Channel 20175



Date: 14.JUL.2012 18:09:35

26dB Bandwidth Plot on Channel 20175

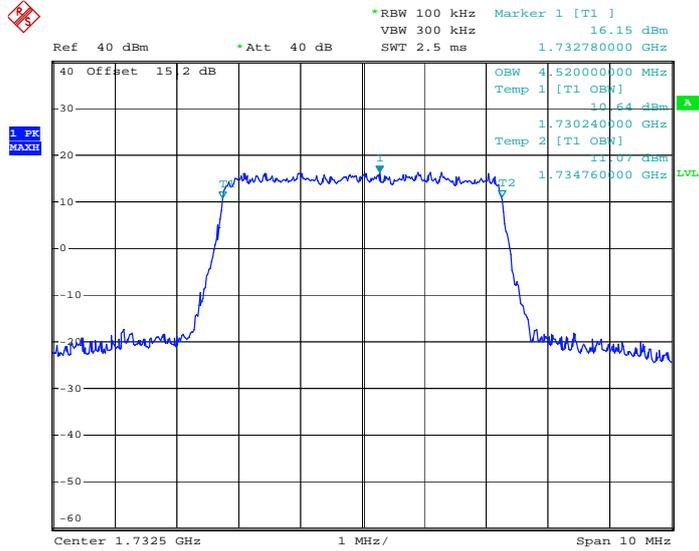


Date: 11.JUL.2012 11:31:55



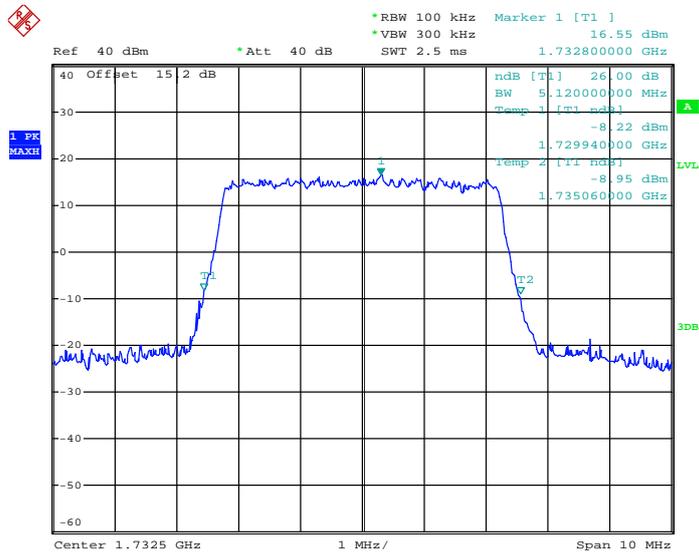
| | | | |
|--------|------------|-------------|-------------|
| Band : | LTE Band 4 | BW / Mod. : | 5MHz / QPSK |
|--------|------------|-------------|-------------|

99% Occupied Bandwidth Plot on Channel 20175



Date: 14.JUL.2012 20:33:13

26dB Bandwidth Plot on Channel 20175

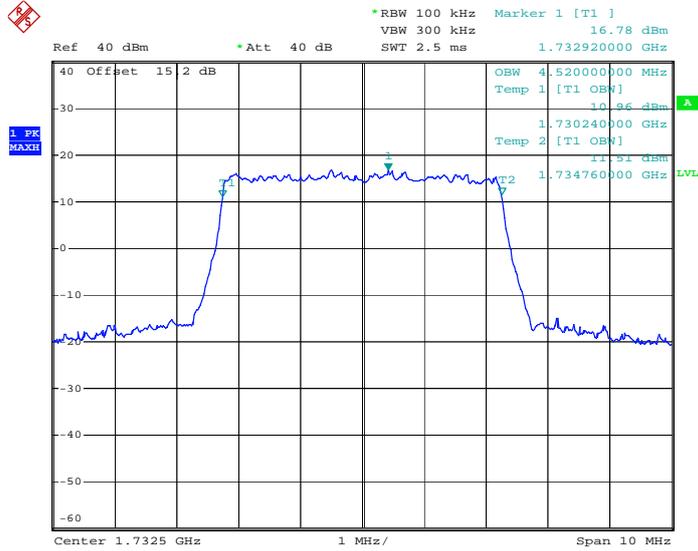


Date: 11.JUL.2012 11:35:10



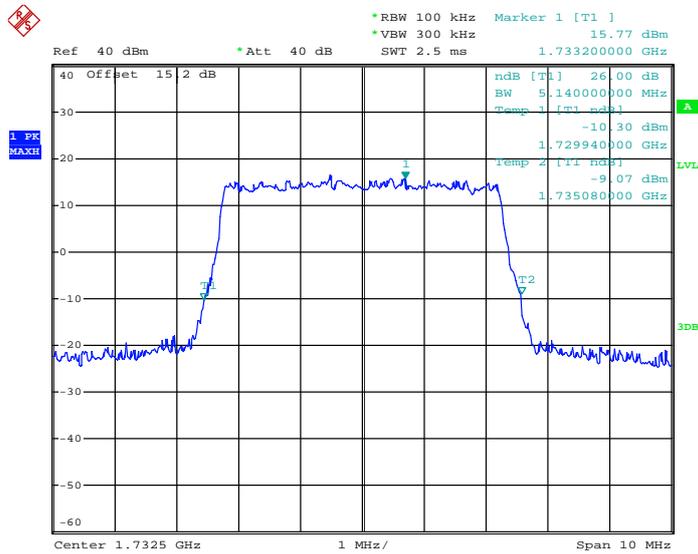
| | | | |
|--------|------------|-------------|--------------|
| Band : | LTE Band 4 | BW / Mod. : | 5MHz / 16QAM |
|--------|------------|-------------|--------------|

99% Occupied Bandwidth Plot on Channel 20175



Date: 14.JUL.2012 20:32:48

26dB Bandwidth Plot on Channel 20175

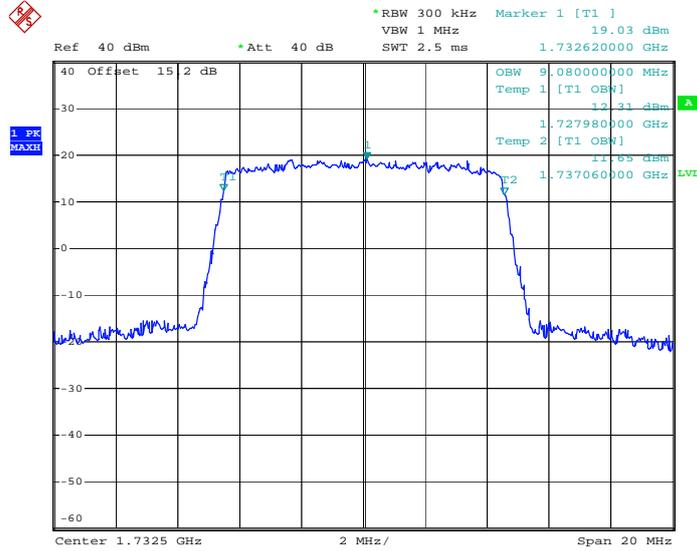


Date: 11.JUL.2012 11:34:45



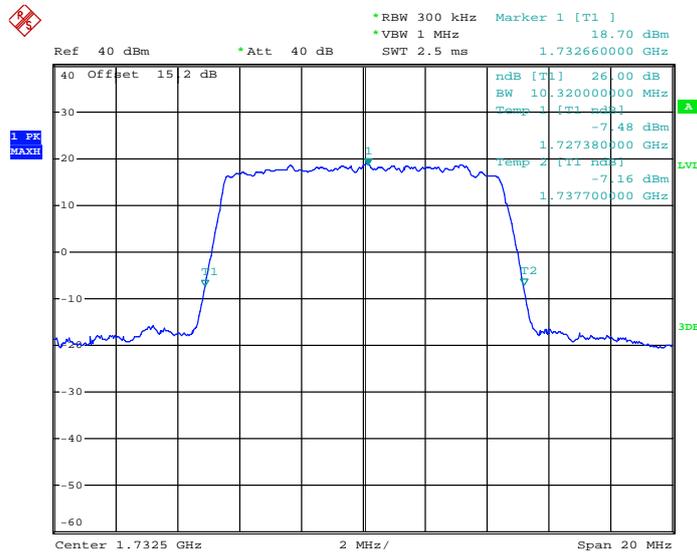
| | | | |
|--------|------------|-------------|--------------|
| Band : | LTE Band 4 | BW / Mod. : | 10MHz / QPSK |
|--------|------------|-------------|--------------|

99% Occupied Bandwidth Plot on Channel 20175



Date: 14.JUL.2012 20:39:28

26dB Bandwidth Plot on Channel 20175

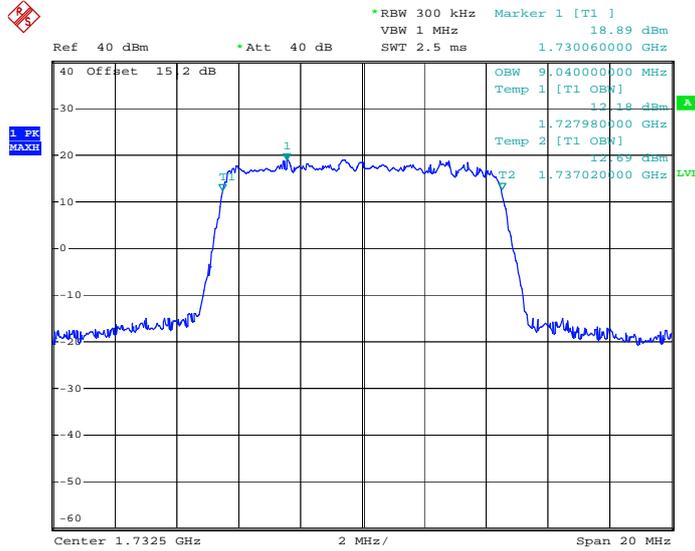


Date: 11.JUL.2012 11:59:21



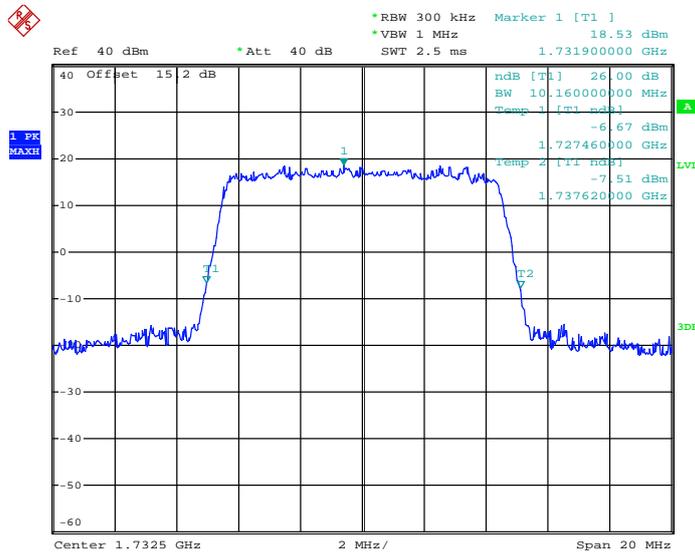
| | | | |
|--------|------------|-------------|---------------|
| Band : | LTE Band 4 | BW / Mod. : | 10MHz / 16QAM |
|--------|------------|-------------|---------------|

99% Occupied Bandwidth Plot on Channel 20175



Date: 14.JUL.2012 20:39:07

26dB Bandwidth Plot on Channel 20175

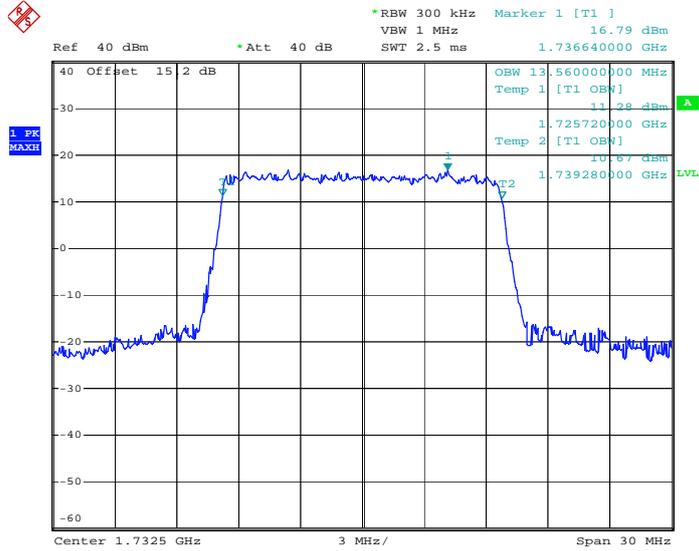


Date: 11.JUL.2012 12:02:56



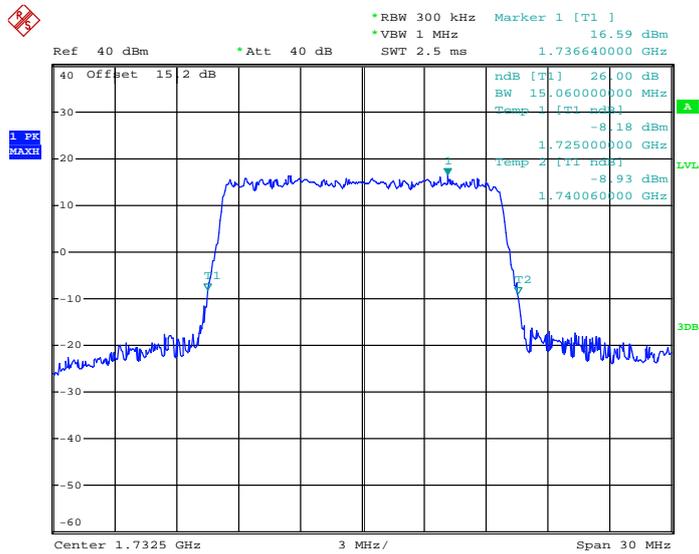
| | | | |
|--------|------------|-------------|---------------|
| Band : | LTE Band 4 | BW / Mod. : | 15MHz / 16QAM |
|--------|------------|-------------|---------------|

99% Occupied Bandwidth Plot on Channel 20175



Date: 14.JUL.2012 20:45:39

26dB Bandwidth Plot on Channel 20175

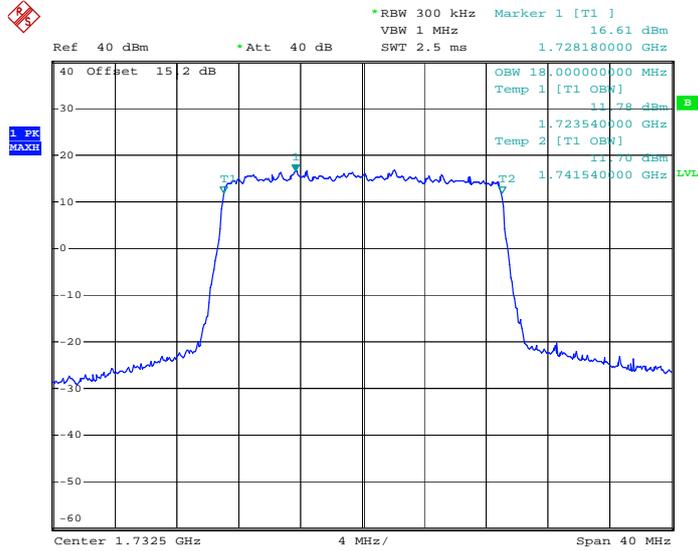


Date: 11.JUL.2012 12:06:15



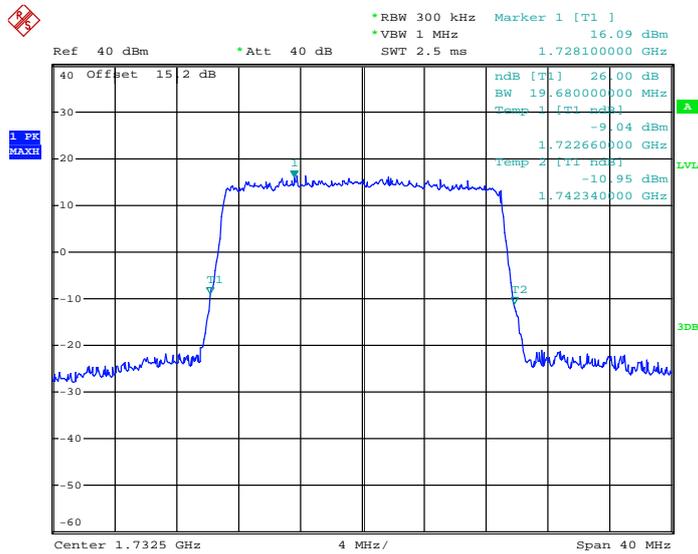
| | | | |
|--------|------------|-------------|--------------|
| Band : | LTE Band 4 | BW / Mod. : | 20MHz / QPSK |
|--------|------------|-------------|--------------|

99% Occupied Bandwidth Plot on Channel 20175



Date: 14.JUL.2012 20:59:21

26dB Bandwidth Plot on Channel 20175

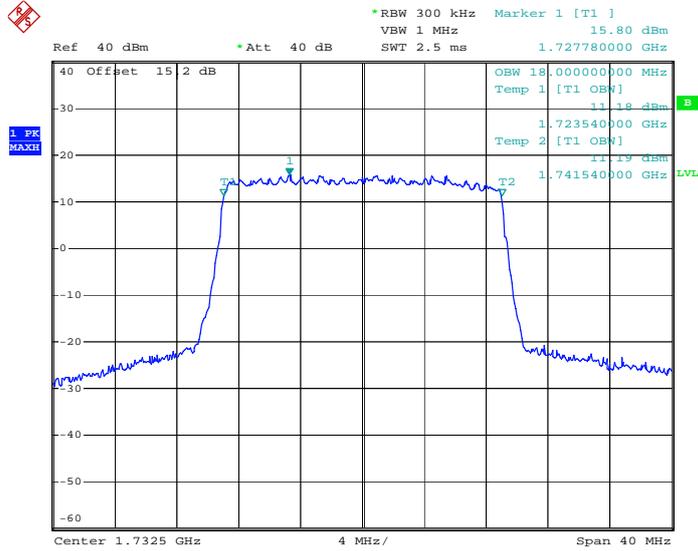


Date: 11.JUL.2012 12:11:48



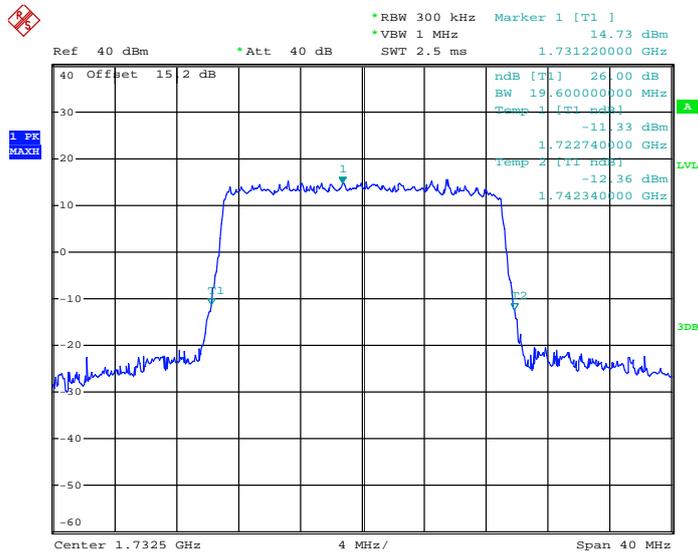
| | | | |
|--------|------------|-------------|---------------|
| Band : | LTE Band 4 | BW / Mod. : | 20MHz / 16QAM |
|--------|------------|-------------|---------------|

99% Occupied Bandwidth Plot on Channel 20175



Date: 14.JUL.2012 20:57:37

26dB Bandwidth Plot on Channel 20175

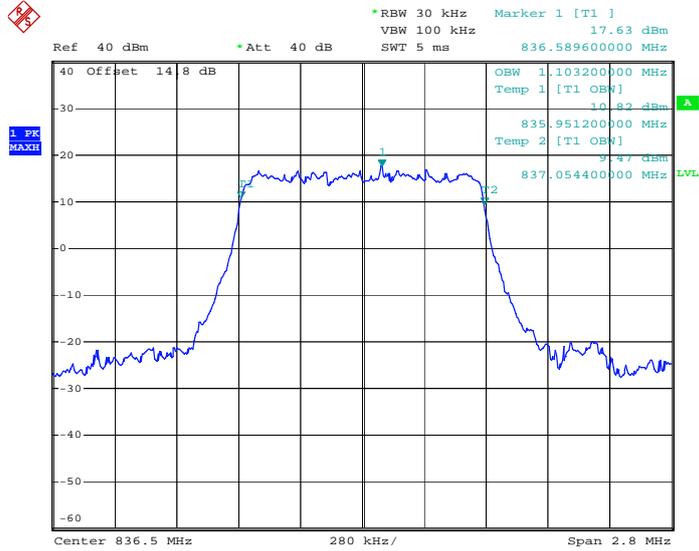


Date: 11.JUL.2012 12:13:25



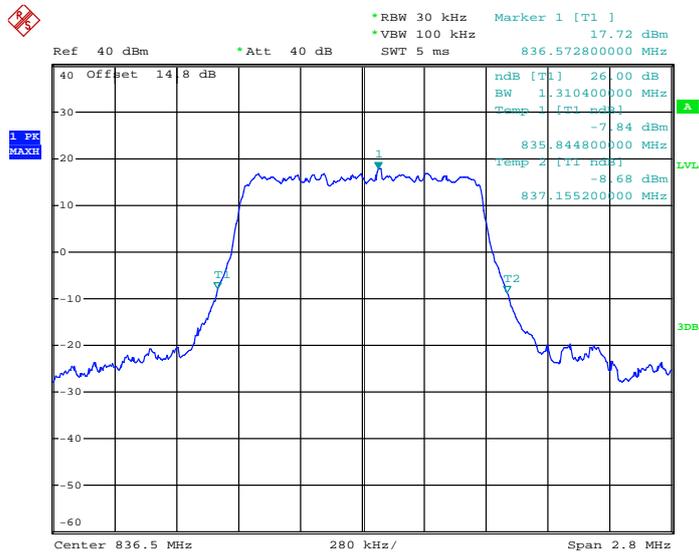
| | | | |
|--------|------------|-------------|---------------|
| Band : | LTE Band 5 | BW / Mod. : | 1.4MHz / QPSK |
|--------|------------|-------------|---------------|

99% Occupied Bandwidth Plot on Channel 20525



Date: 15.JUL.2012 11:33:18

26dB Bandwidth Plot on Channel 20525

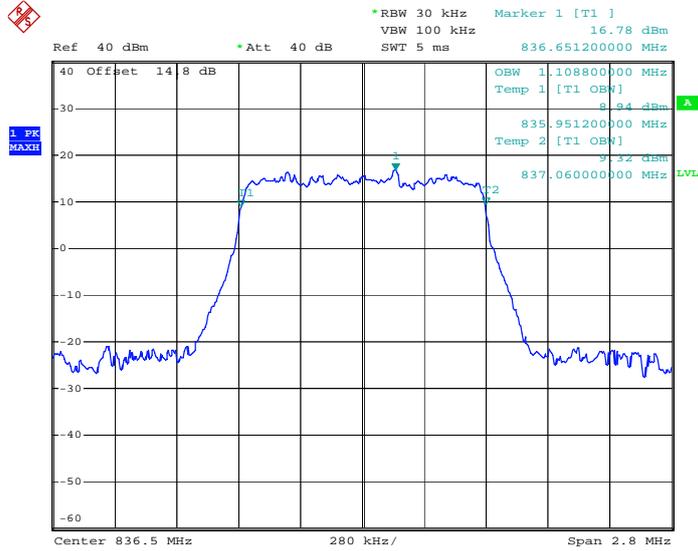


Date: 11.JUL.2012 11:10:53



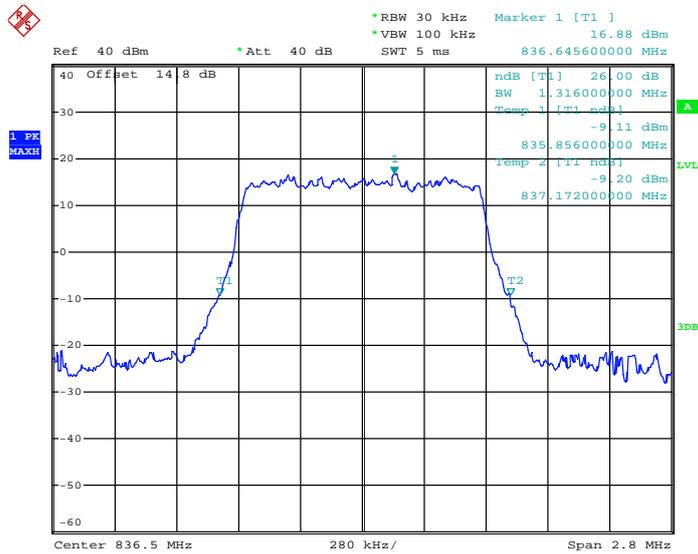
| | | | |
|---------------|------------|--------------------|----------------|
| Band : | LTE Band 5 | BW / Mod. : | 1.4MHz / 16QAM |
|---------------|------------|--------------------|----------------|

99% Occupied Bandwidth Plot on Channel 20525



Date: 15.JUL.2012 11:32:53

26dB Bandwidth Plot on Channel 20525

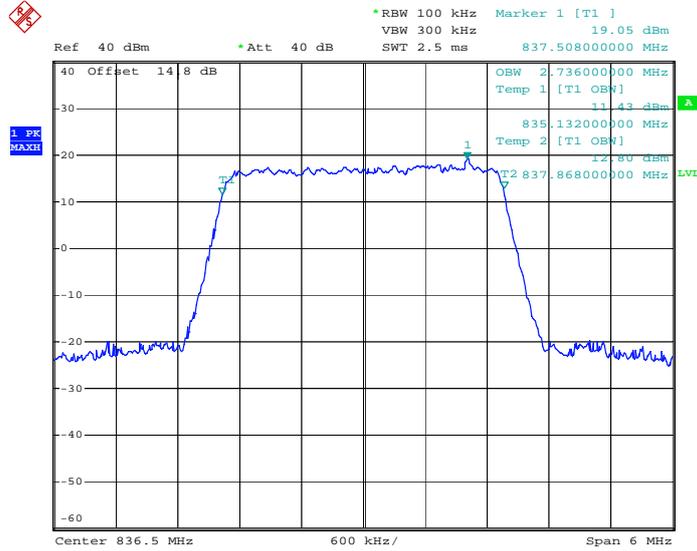


Date: 11.JUL.2012 11:11:22



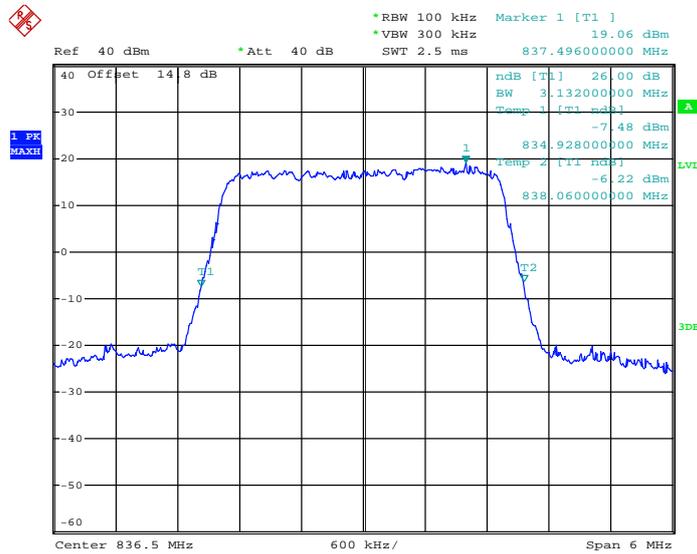
| | | | |
|--------|------------|-------------|-------------|
| Band : | LTE Band 5 | BW / Mod. : | 3MHz / QPSK |
|--------|------------|-------------|-------------|

99% Occupied Bandwidth Plot on Channel 20525



Date: 15.JUL.2012 11:37:14

26dB Bandwidth Plot on Channel 20525

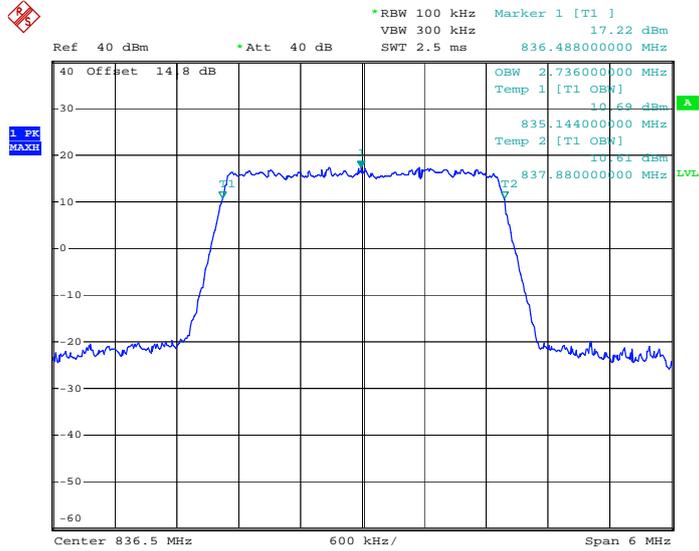


Date: 11.JUL.2012 11:08:52



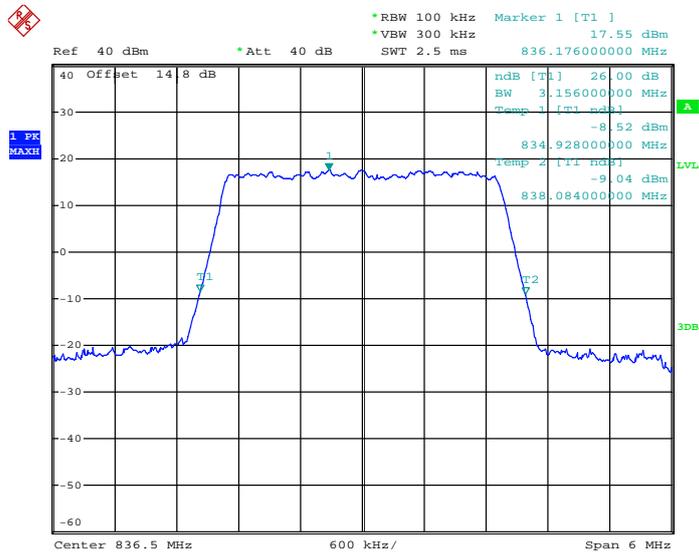
| | | | |
|--------|------------|-------------|--------------|
| Band : | LTE Band 5 | BW / Mod. : | 3MHz / 16QAM |
|--------|------------|-------------|--------------|

99% Occupied Bandwidth Plot on Channel 20525



Date: 15.JUL.2012 11:36:28

26dB Bandwidth Plot on Channel 20525

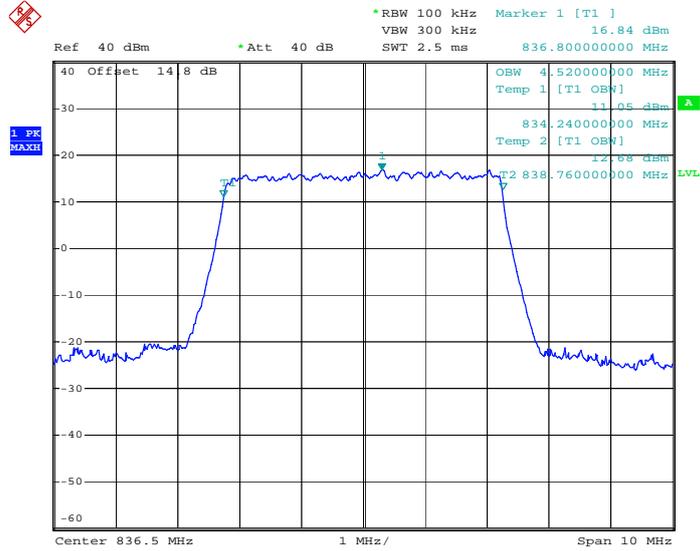


Date: 11.JUL.2012 11:08:20



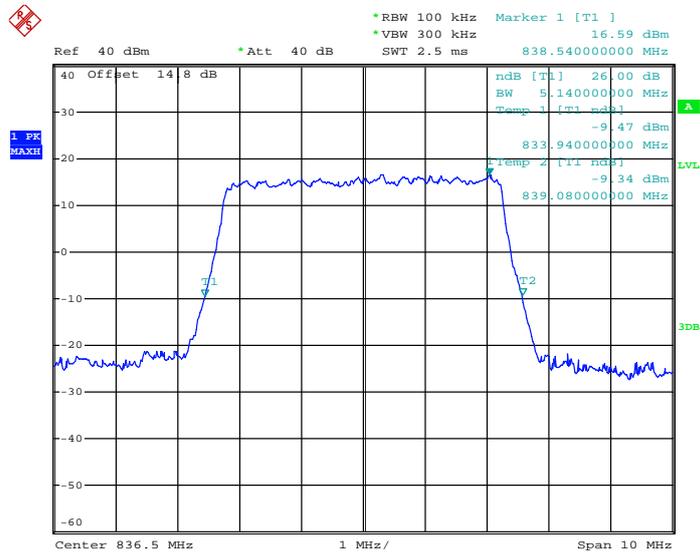
| | | | |
|--------|------------|-------------|-------------|
| Band : | LTE Band 5 | BW / Mod. : | 5MHz / QPSK |
|--------|------------|-------------|-------------|

99% Occupied Bandwidth Plot on Channel 20525



Date: 15.JUL.2012 13:05:43

26dB Bandwidth Plot on Channel 20525

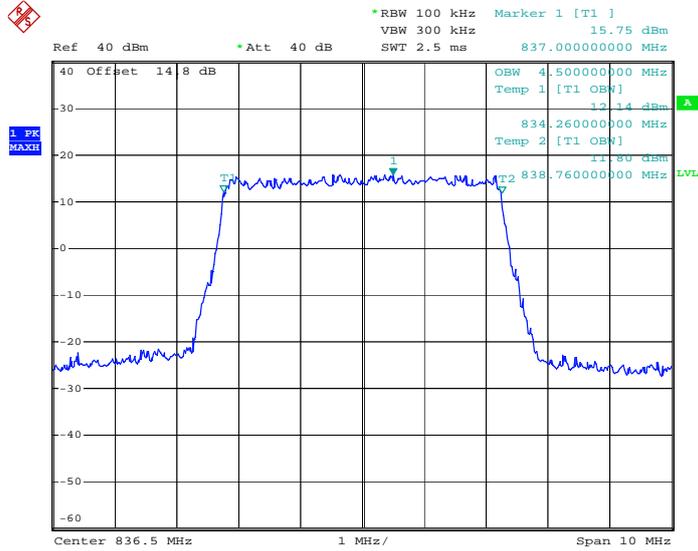


Date: 11.JUL.2012 10:52:06



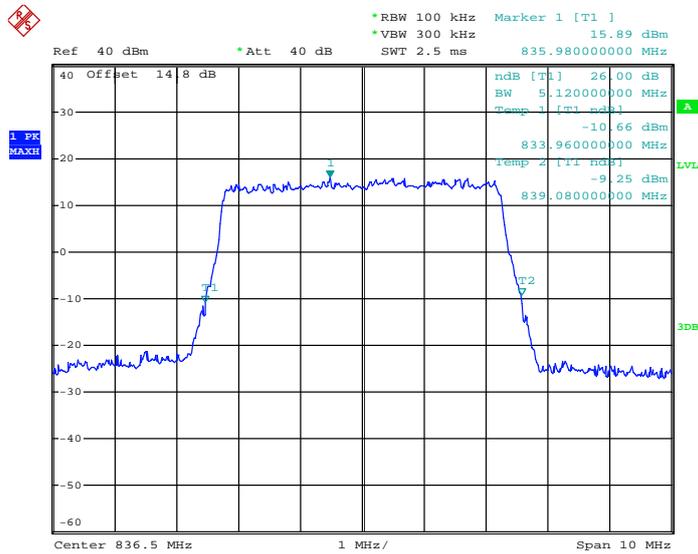
| | | | |
|--------|------------|-------------|--------------|
| Band : | LTE Band 5 | BW / Mod. : | 5MHz / 16QAM |
|--------|------------|-------------|--------------|

99% Occupied Bandwidth Plot on Channel 20525



Date: 15.JUL.2012 13:01:47

26dB Bandwidth Plot on Channel 20525

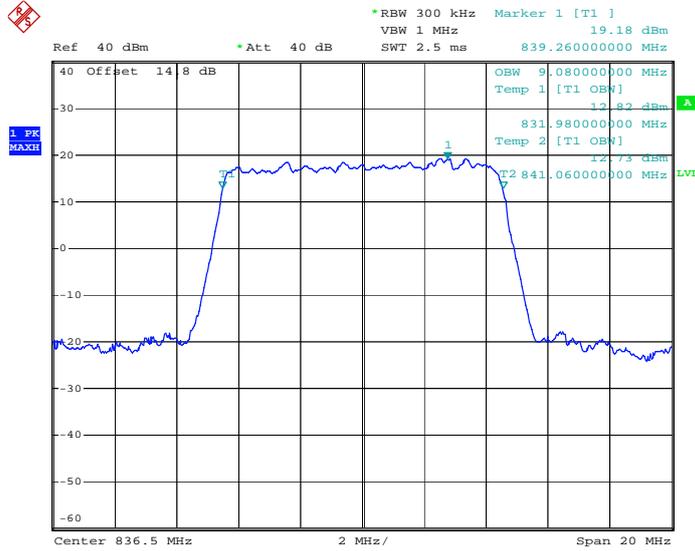


Date: 11.JUL.2012 10:52:54



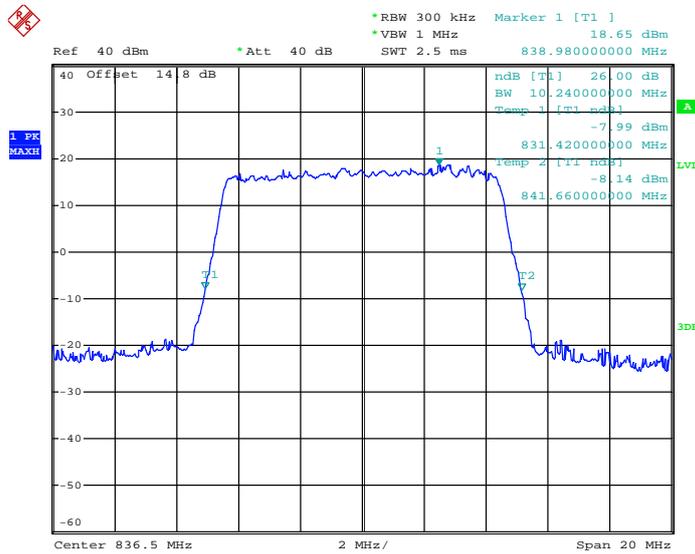
| | | | |
|--------|------------|-------------|---------------|
| Band : | LTE Band 5 | BW / Mod. : | 10MHz / 16QAM |
|--------|------------|-------------|---------------|

99% Occupied Bandwidth Plot on Channel 20525



Date: 15.JUL.2012 13:16:18

26dB Bandwidth Plot on Channel 20525

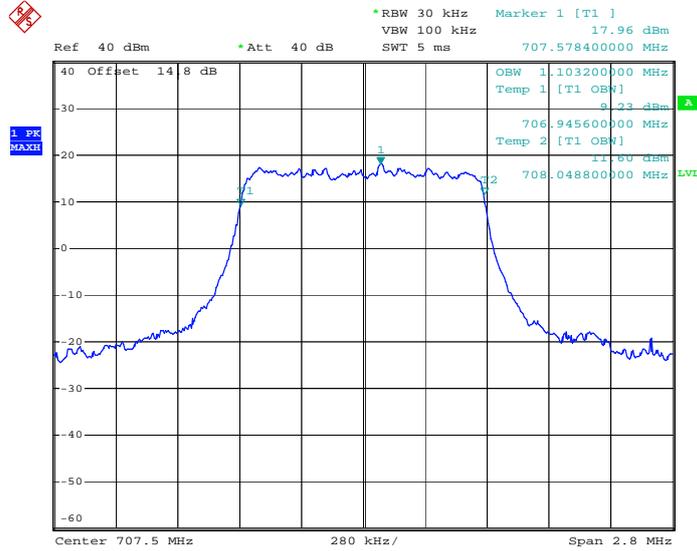


Date: 11.JUL.2012 10:46:23



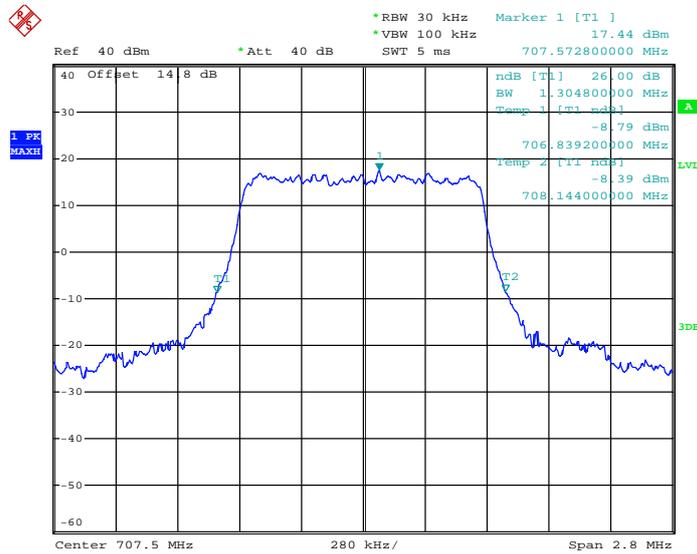
| | | | |
|--------|-------------|-------------|---------------|
| Band : | LTE Band 12 | BW / Mod. : | 1.4MHz / QPSK |
|--------|-------------|-------------|---------------|

99% Occupied Bandwidth Plot on Channel 23095



Date: 15.JUL.2012 19:59:39

26dB Bandwidth Plot on Channel 23095

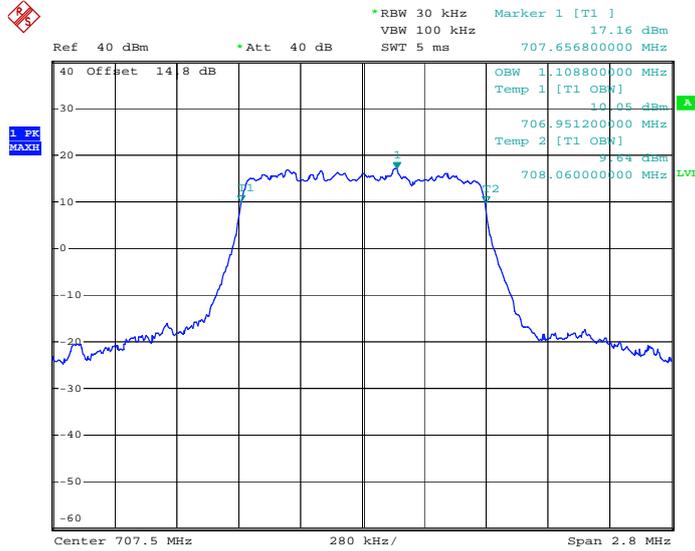


Date: 11.JUL.2012 09:59:15



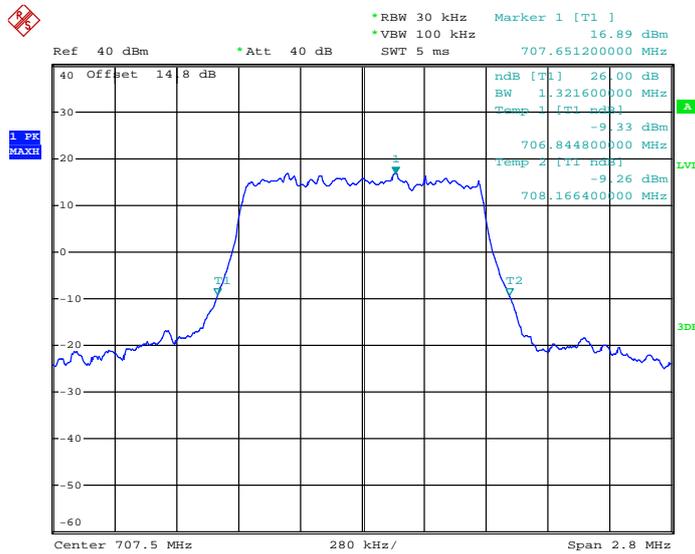
| | | | |
|---------------|-------------|--------------------|----------------|
| Band : | LTE Band 12 | BW / Mod. : | 1.4MHz / 16QAM |
|---------------|-------------|--------------------|----------------|

99% Occupied Bandwidth Plot on Channel 23095



Date: 15.JUL.2012 19:58:45

26dB Bandwidth Plot on Channel 23095

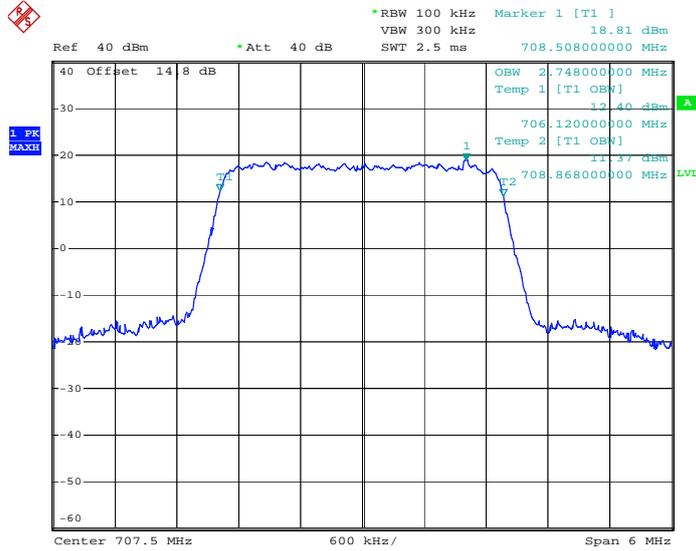


Date: 11.JUL.2012 09:58:38



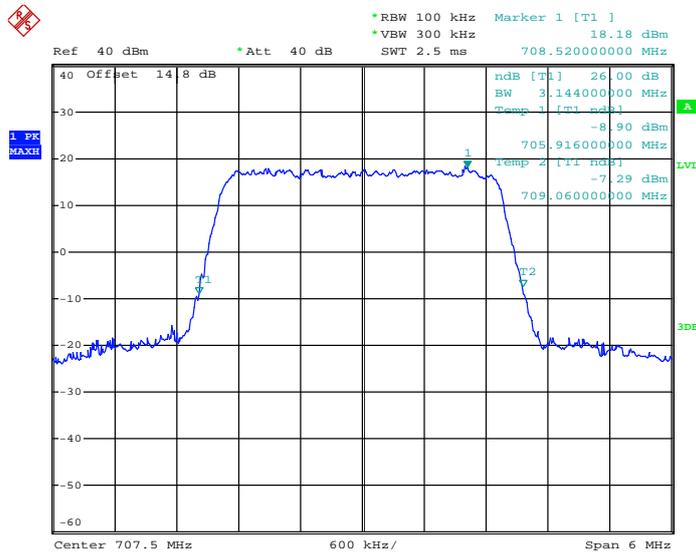
| | | | |
|---------------|-------------|--------------------|-------------|
| Band : | LTE Band 12 | BW / Mod. : | 3MHz / QPSK |
|---------------|-------------|--------------------|-------------|

99% Occupied Bandwidth Plot on Channel 23095



Date: 15.JUL.2012 19:51:28

26dB Bandwidth Plot on Channel 23095

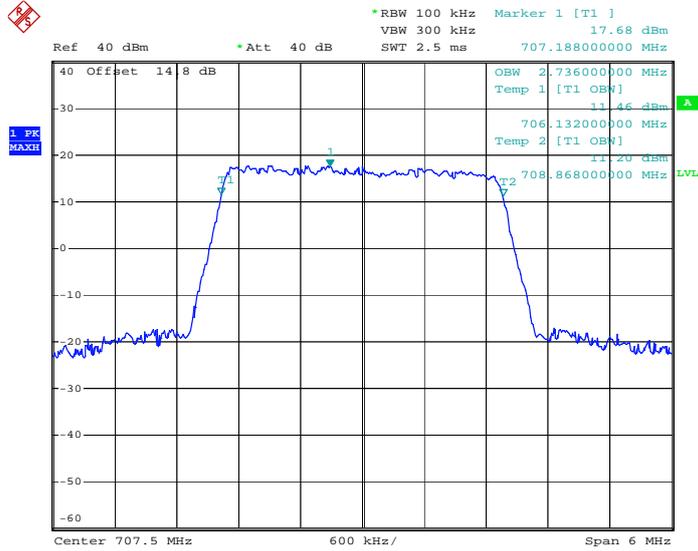


Date: 11.JUL.2012 10:02:41



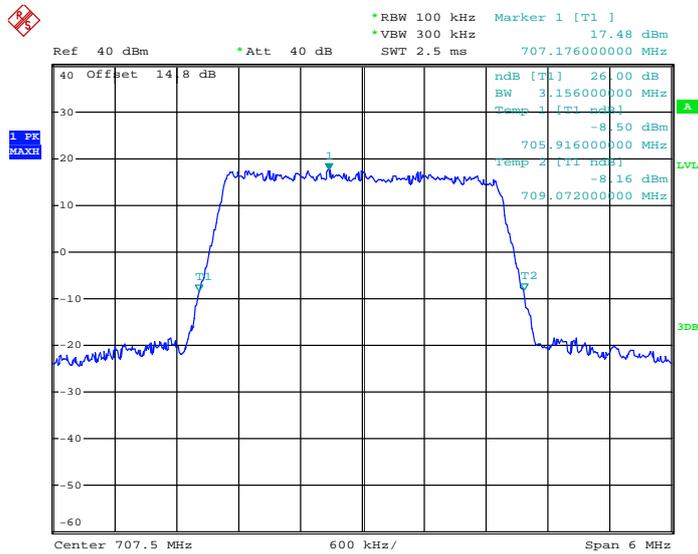
| | | | |
|--------|-------------|-------------|--------------|
| Band : | LTE Band 12 | BW / Mod. : | 3MHz / 16QAM |
|--------|-------------|-------------|--------------|

99% Occupied Bandwidth Plot on Channel 23095



Date: 15.JUL.2012 13:57:05

26dB Bandwidth Plot on Channel 23095

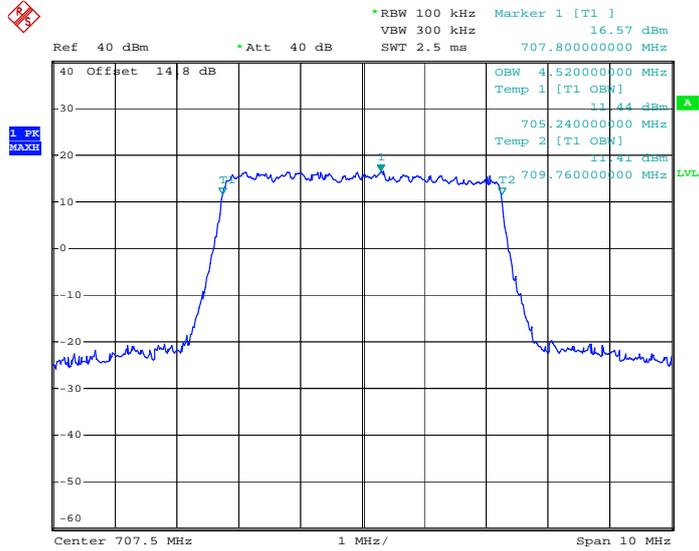


Date: 11.JUL.2012 10:03:17



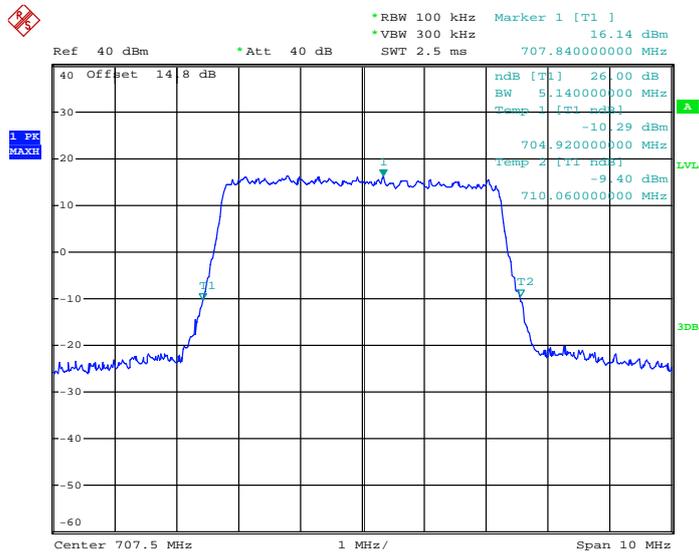
| | | | |
|--------|-------------|-------------|-------------|
| Band : | LTE Band 12 | BW / Mod. : | 5MHz / QPSK |
|--------|-------------|-------------|-------------|

99% Occupied Bandwidth Plot on Channel 23095



Date: 15.JUL.2012 13:51:09

26dB Bandwidth Plot on Channel 23095

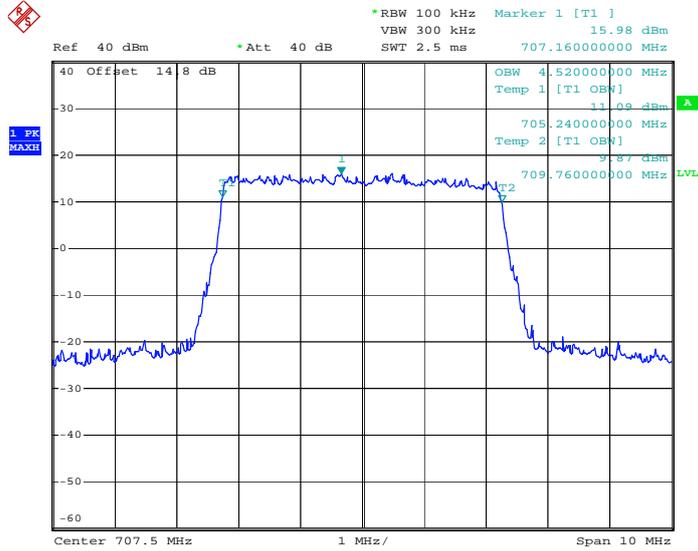


Date: 11.JUL.2012 10:08:51



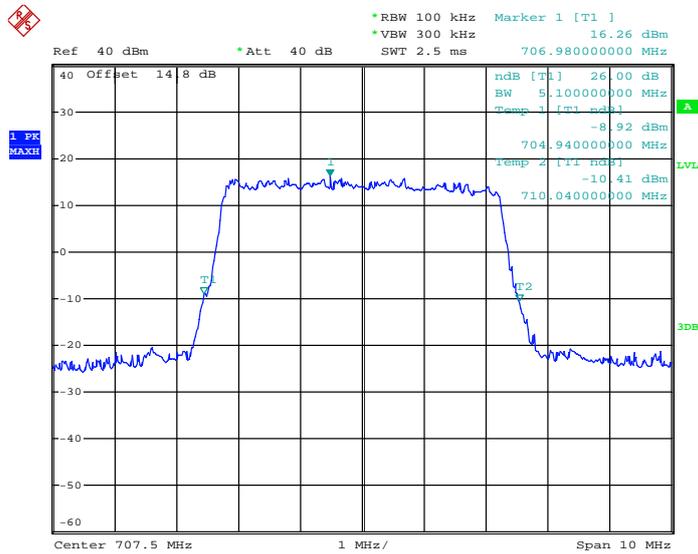
| | | | |
|--------|-------------|-------------|--------------|
| Band : | LTE Band 12 | BW / Mod. : | 5MHz / 16QAM |
|--------|-------------|-------------|--------------|

99% Occupied Bandwidth Plot on Channel 23095



Date: 15.JUL.2012 13:50:01

26dB Bandwidth Plot on Channel 23095

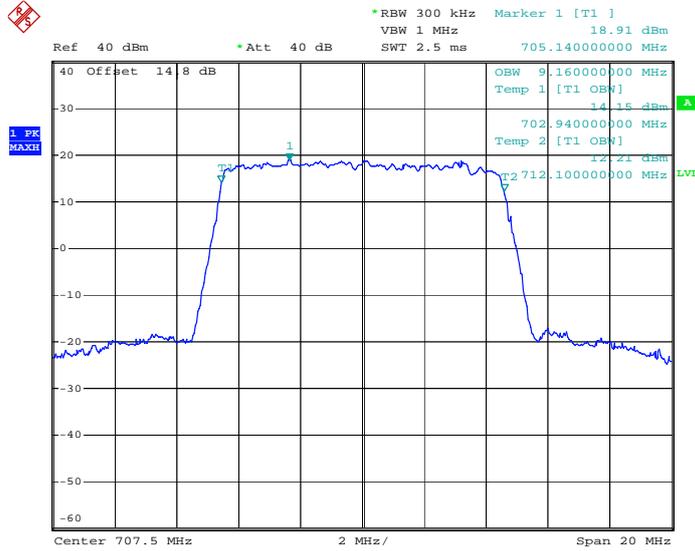


Date: 11.JUL.2012 10:07:54



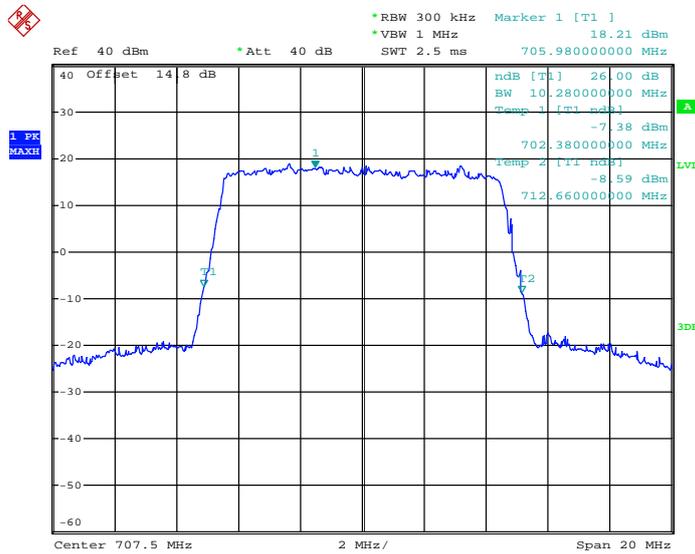
| | | | |
|---------------|-------------|--------------------|--------------|
| Band : | LTE Band 12 | BW / Mod. : | 10MHz / QPSK |
|---------------|-------------|--------------------|--------------|

99% Occupied Bandwidth Plot on Channel 23095



Date: 15.JUL.2012 13:48:03

26dB Bandwidth Plot on Channel 23095

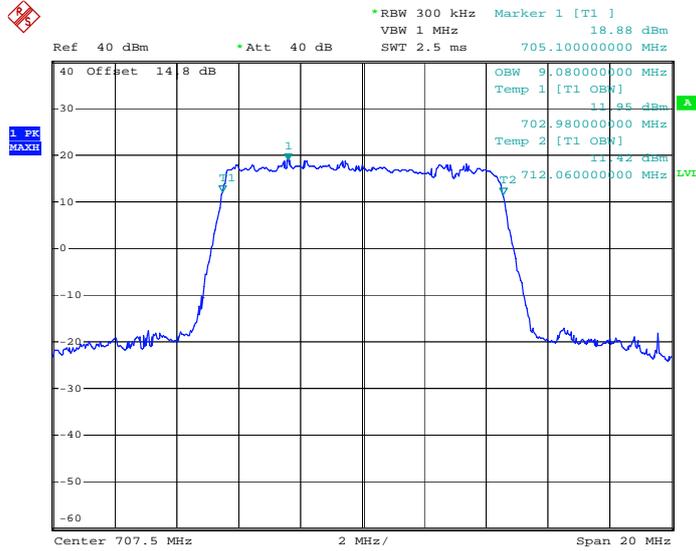


Date: 11.JUL.2012 10:11:41



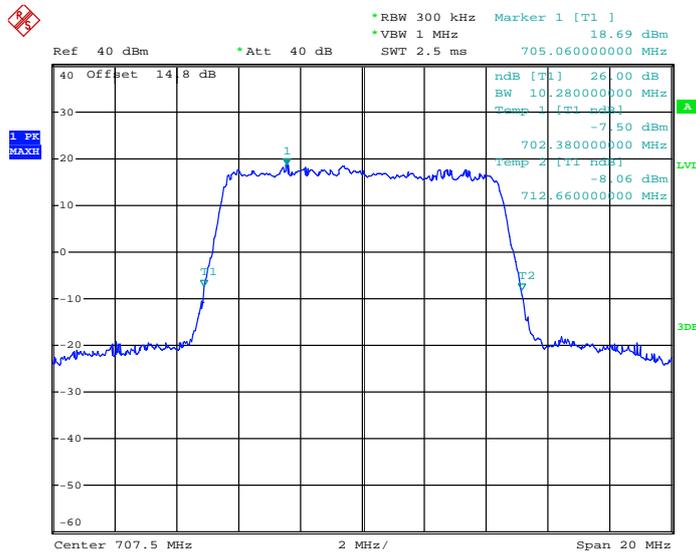
| | | | |
|--------|-------------|-------------|---------------|
| Band : | LTE Band 12 | BW / Mod. : | 10MHz / 16QAM |
|--------|-------------|-------------|---------------|

99% Occupied Bandwidth Plot on Channel 23095



Date: 15.JUL.2012 13:49:06

26dB Bandwidth Plot on Channel 23095



Date: 11.JUL.2012 10:12:40

3.4 Conducted Band Edge and Spurious Emission Measurement

3.4.1 Limit

For operations in band 2 and band 4, the FCC limit is
 $43 + 10\log_{10}(P[\text{Watts}]) \text{ dB} = -13 \text{ dBm}$ in a 1 MHz bandwidth.

For operations in band 5 and band 12, the FCC limit is
 $43 + 10\log_{10}(P[\text{Watts}]) \text{ dB} = -13 \text{ dBm}$ in a 100 kHz bandwidth.

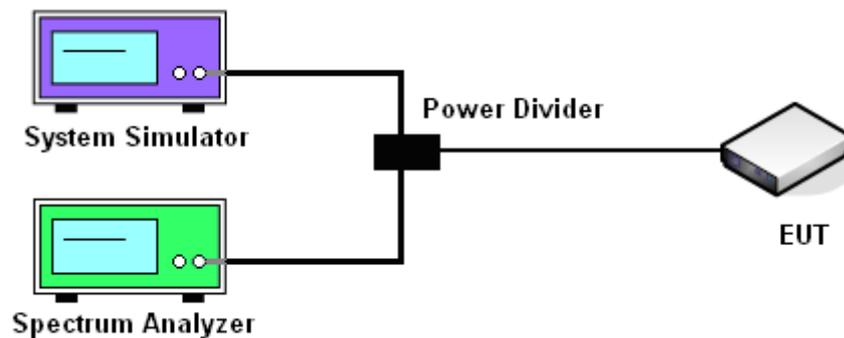
3.4.2 Measuring Instruments

See list of measuring instruments of this test report.

3.4.3 Test Procedures

1. The EUT was connected to spectrum analyzer and system simulator via power divider.
2. The conducted spurious emission for the whole frequency range was taken.

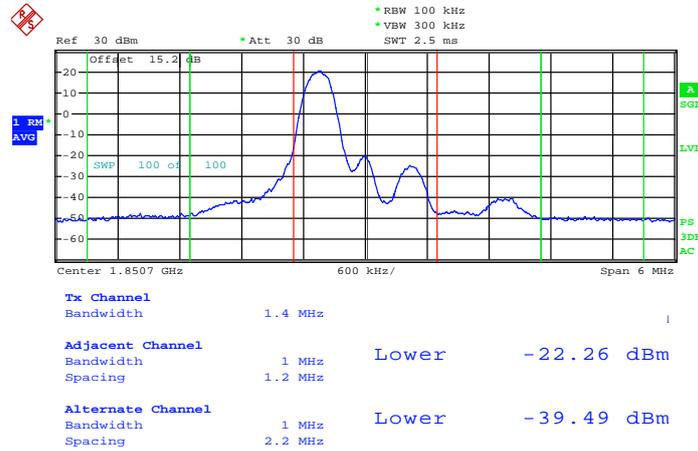
3.4.4 Test Setup



3.4.5 Test Plots of Conducted Band-Edge Emission

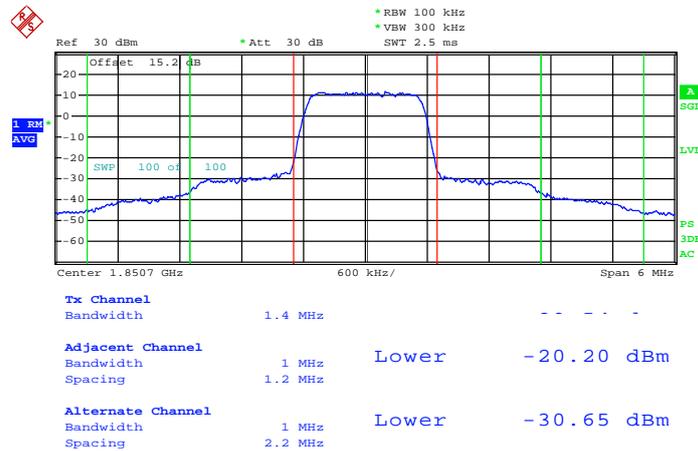
| | | | |
|---------------|------------|--------------------|---------------|
| Band : | LTE Band 2 | BW / Mod. : | 1.4MHz / QPSK |
|---------------|------------|--------------------|---------------|

Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 18.JUL.2012 09:07:18

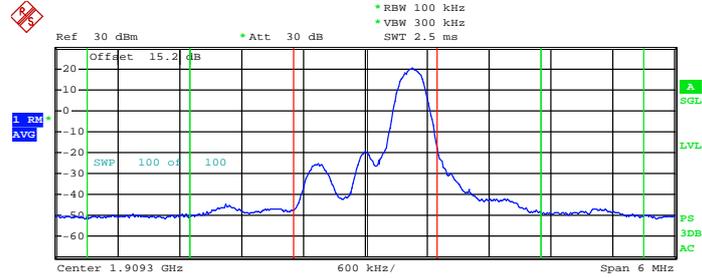
Lower Band Edge Plot for QPSK-RB Size 6, RB Offset 0



Date: 18.JUL.2012 09:08:01



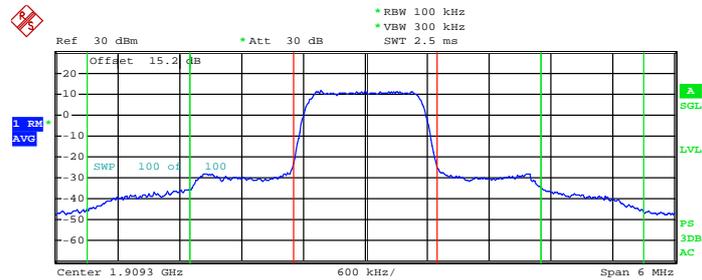
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 5



| | | | |
|--------------------------|---------|-------|------------|
| Tx Channel | | | |
| Bandwidth | 1.4 MHz | | |
| Adjacent Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 1.2 MHz | Upper | -22.37 dBm |
| Alternate Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 2.2 MHz | Upper | -38.93 dBm |

Date: 18.JUL.2012 09:03:08

Higher Band Edge Plot for QPSK-RB Size 6, RB Offset 0



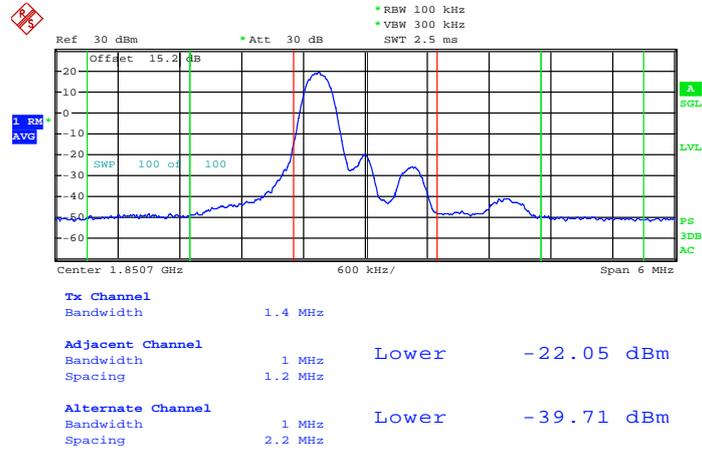
| | | | |
|--------------------------|---------|-------|------------|
| Tx Channel | | | |
| Bandwidth | 1.4 MHz | | |
| Adjacent Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 1.2 MHz | Upper | -19.96 dBm |
| Alternate Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 2.2 MHz | Upper | -29.27 dBm |

Date: 18.JUL.2012 09:02:39



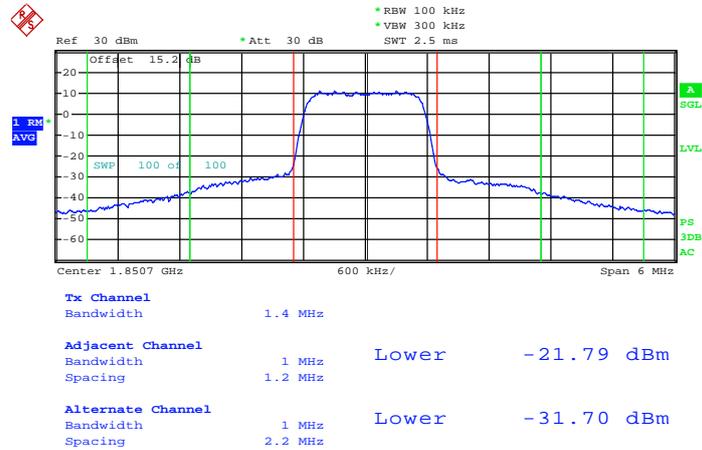
| | | | |
|---------------|------------|--------------------|----------------|
| Band : | LTE Band 2 | BW / Mod. : | 1.4MHz / 16QAM |
|---------------|------------|--------------------|----------------|

Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 18.JUL.2012 09:07:35

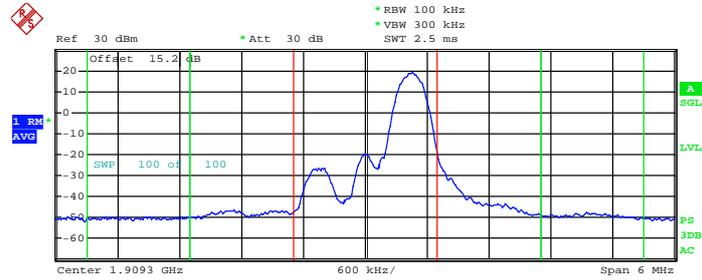
Lower Band Edge Plot for 16QAM -RB Size 6, RB Offset 0



Date: 18.JUL.2012 09:07:49



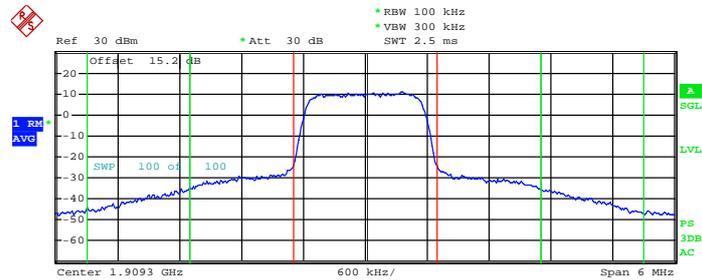
Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 5



| | | | |
|--------------------------|---------|-------|------------|
| Tx Channel | | | |
| Bandwidth | 1.4 MHz | | |
| Adjacent Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 1.2 MHz | Upper | -23.58 dBm |
| Alternate Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 2.2 MHz | Upper | -39.37 dBm |

Date: 18.JUL.2012 09:04:07

Higher Band Edge Plot for 16QAM -RB Size 6, RB Offset 0



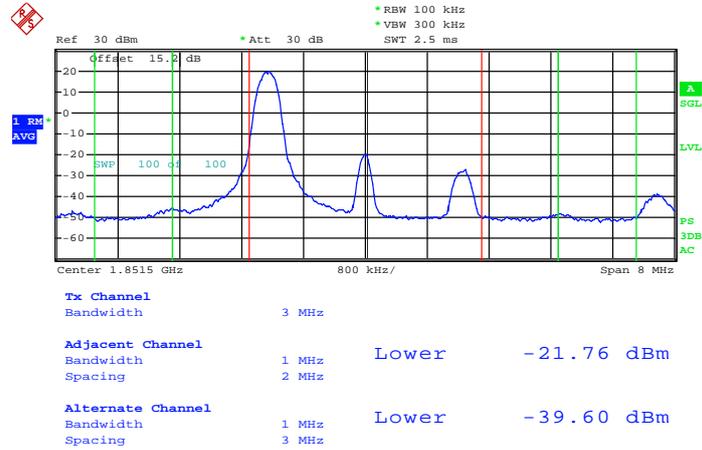
| | | | |
|--------------------------|---------|-------|------------|
| Tx Channel | | | |
| Bandwidth | 1.4 MHz | | |
| Adjacent Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 1.2 MHz | Upper | -20.72 dBm |
| Alternate Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 2.2 MHz | Upper | -30.16 dBm |

Date: 18.JUL.2012 09:02:24



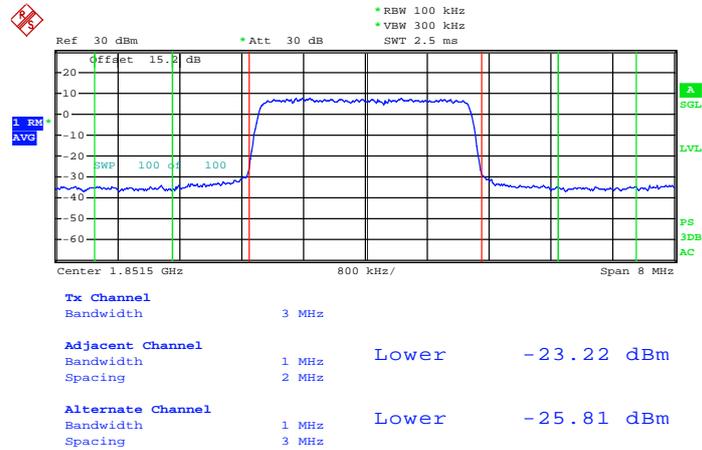
| | | | |
|---------------|------------|--------------------|-------------|
| Band : | LTE Band 2 | BW / Mod. : | 3MHz / QPSK |
|---------------|------------|--------------------|-------------|

Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 18.JUL.2012 08:56:07

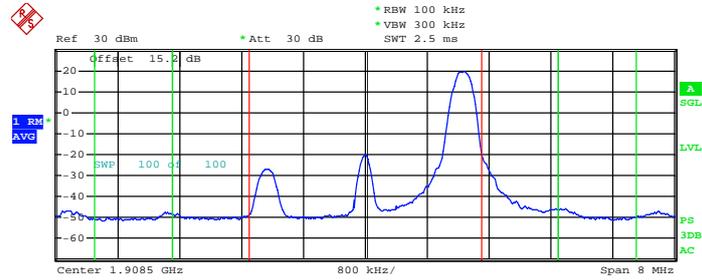
Lower Band Edge Plot for QPSK-RB Size 15, RB Offset 0



Date: 18.JUL.2012 08:56:26



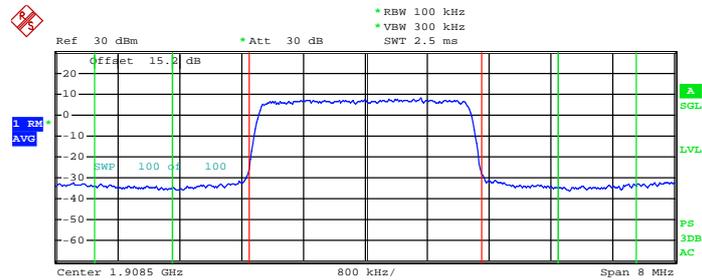
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 14



| | | | |
|--------------------------|-------|-------|------------|
| Tx Channel | | | |
| Bandwidth | 3 MHz | | |
| Adjacent Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 2 MHz | Upper | -21.39 dBm |
| Alternate Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 3 MHz | Upper | -39.37 dBm |

Date: 18.JUL.2012 08:58:40

Higher Band Edge Plot for QPSK-RB Size 15, RB Offset 0



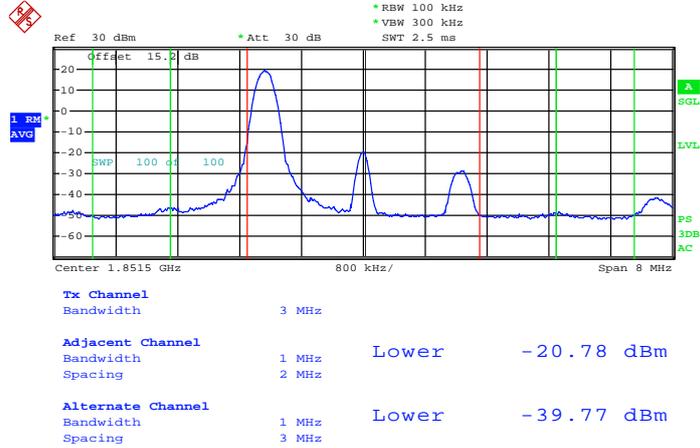
| | | | |
|--------------------------|-------|-------|------------|
| Tx Channel | | | |
| Bandwidth | 3 MHz | | |
| Adjacent Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 2 MHz | Upper | -23.10 dBm |
| Alternate Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 3 MHz | Upper | -24.77 dBm |

Date: 18.JUL.2012 08:57:52



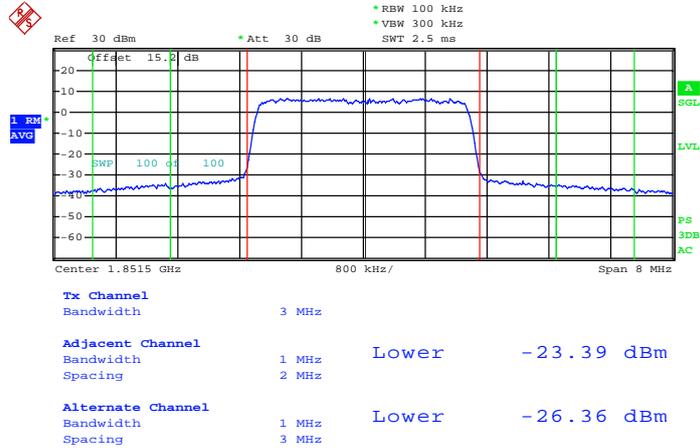
| | | | |
|---------------|------------|--------------------|--------------|
| Band : | LTE Band 2 | BW / Mod. : | 3MHz / 16QAM |
|---------------|------------|--------------------|--------------|

Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 18.JUL.2012 08:55:52

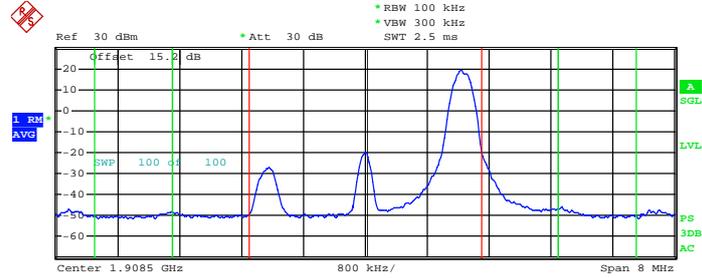
Lower Band Edge Plot for 16QAM -RB Size 15, RB Offset 0



Date: 18.JUL.2012 08:56:42



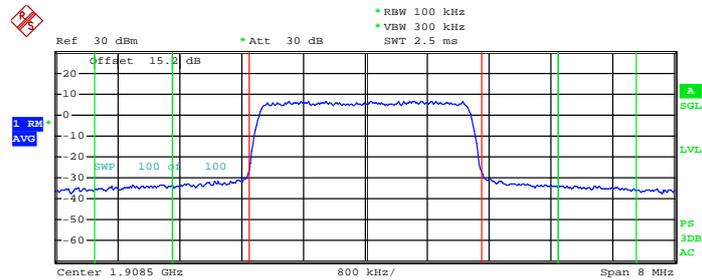
Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 14



| | | | |
|--------------------------|-------|-------|------------|
| Tx Channel | | | |
| Bandwidth | 3 MHz | | |
| Adjacent Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 2 MHz | Upper | -21.69 dBm |
| Alternate Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 3 MHz | Upper | -39.62 dBm |

Date: 18.JUL.2012 08:58:56

Higher Band Edge Plot for 16QAM -RB Size 15, RB Offset 0



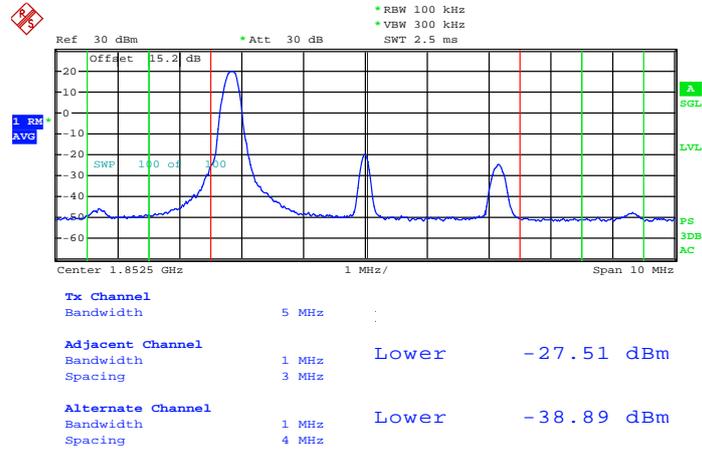
| | | | |
|--------------------------|-------|-------|------------|
| Tx Channel | | | |
| Bandwidth | 3 MHz | | |
| Adjacent Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 2 MHz | Upper | -22.72 dBm |
| Alternate Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 3 MHz | Upper | -25.09 dBm |

Date: 18.JUL.2012 08:57:30



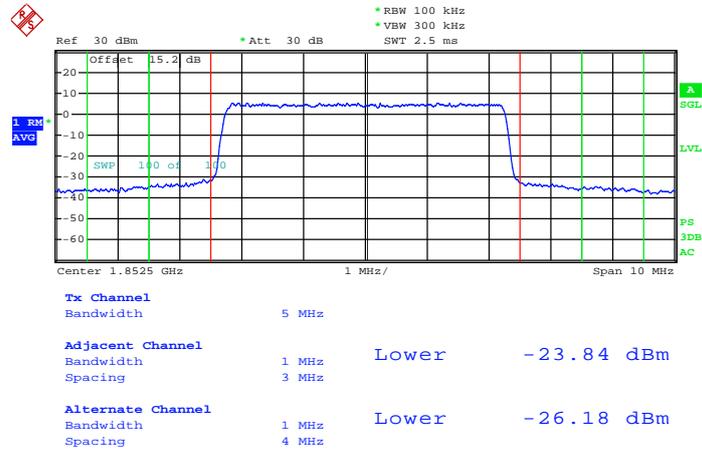
| | | | |
|---------------|------------|--------------------|-------------|
| Band : | LTE Band 2 | BW / Mod. : | 5MHz / QPSK |
|---------------|------------|--------------------|-------------|

Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 18.JUL.2012 09:10:52

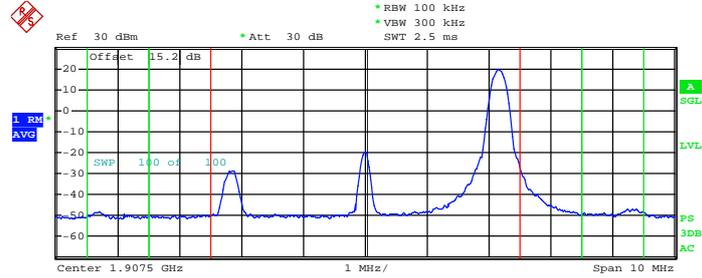
Lower Band Edge Plot for QPSK-RB Size 25, RB Offset 0



Date: 18.JUL.2012 09:09:53



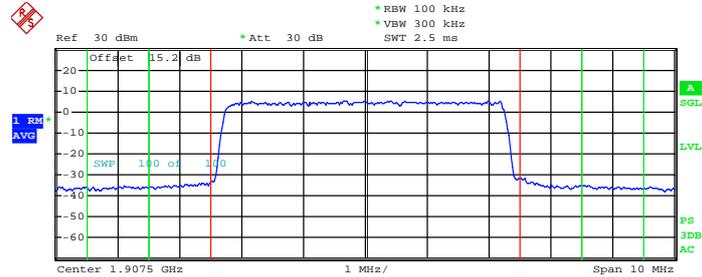
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 24



| | | | |
|--------------------------|-------|-------|------------|
| Tx Channel | | | |
| Bandwidth | 5 MHz | | |
| Adjacent Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 3 MHz | Upper | -28.53 dBm |
| Alternate Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 4 MHz | Upper | -39.01 dBm |

Date: 18.JUL.2012 09:14:37

Higher Band Edge Plot for QPSK-RB Size 25, RB Offset 0



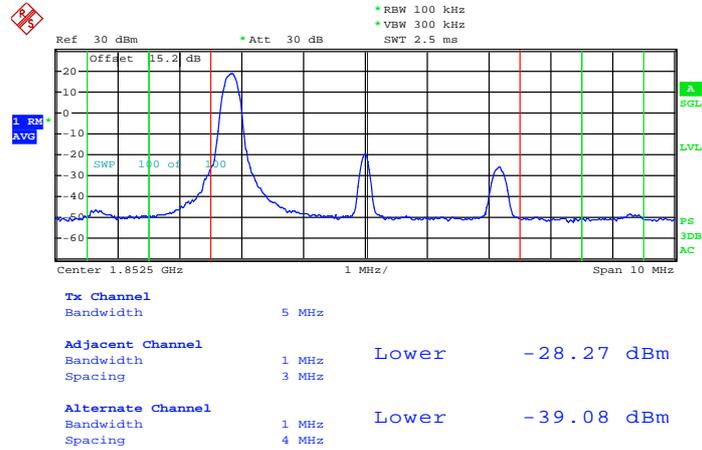
| | | | |
|--------------------------|-------|-------|------------|
| Tx Channel | | | |
| Bandwidth | 5 MHz | | |
| Adjacent Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 3 MHz | Upper | -24.99 dBm |
| Alternate Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 4 MHz | Upper | -26.37 dBm |

Date: 18.JUL.2012 09:15:33



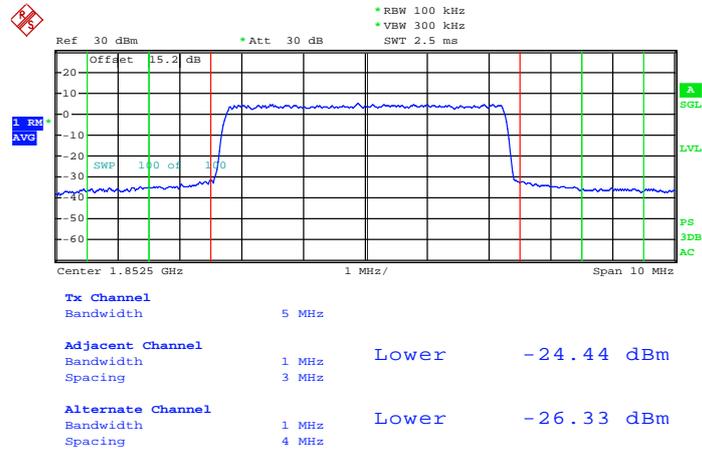
| | | | |
|---------------|------------|--------------------|--------------|
| Band : | LTE Band 2 | BW / Mod. : | 5MHz / 16QAM |
|---------------|------------|--------------------|--------------|

Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 18.JUL.2012 09:10:39

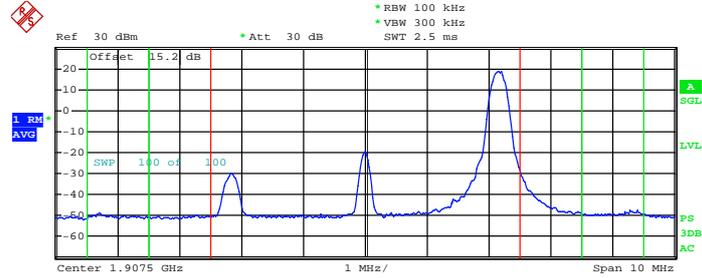
Lower Band Edge Plot for 16QAM -RB Size 25, RB Offset 0



Date: 18.JUL.2012 09:10:20



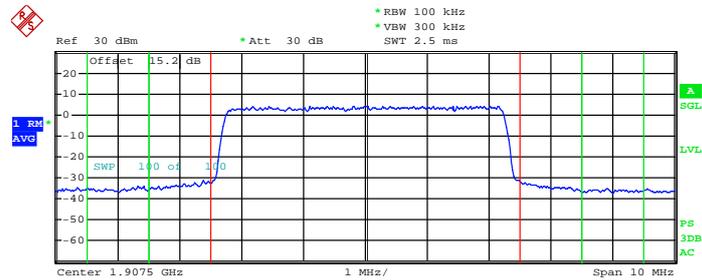
Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 24



| | | | |
|--------------------------|-------|-------|------------|
| Tx Channel | | | |
| Bandwidth | 5 MHz | | |
| Adjacent Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 3 MHz | Upper | -29.65 dBm |
| Alternate Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 4 MHz | Upper | -39.47 dBm |

Date: 18.JUL.2012 09:14:58

Higher Band Edge Plot for 16QAM -RB Size 25, RB Offset 0



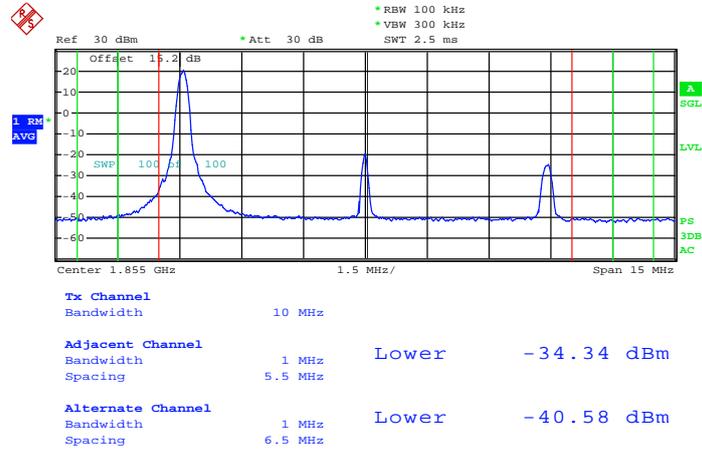
| | | | |
|--------------------------|-------|-------|------------|
| Tx Channel | | | |
| Bandwidth | 5 MHz | | |
| Adjacent Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 3 MHz | Upper | -24.48 dBm |
| Alternate Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 4 MHz | Upper | -26.44 dBm |

Date: 18.JUL.2012 09:15:19



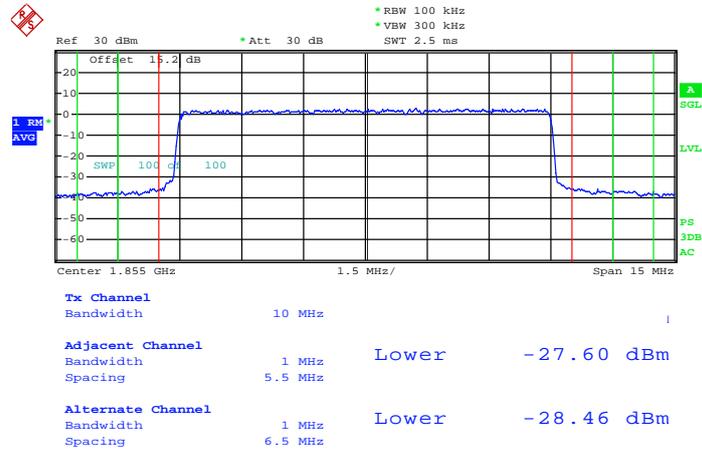
| | | | |
|---------------|------------|--------------------|--------------|
| Band : | LTE Band 2 | BW / Mod. : | 10MHz / QPSK |
|---------------|------------|--------------------|--------------|

Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 18.JUL.2012 09:21:43

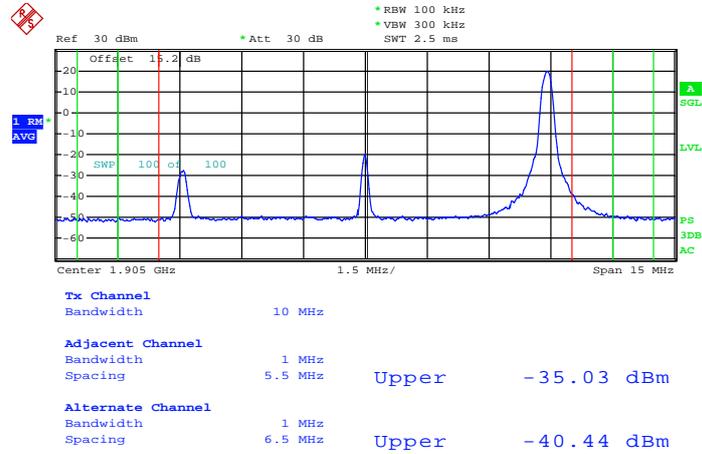
Lower Band Edge Plot for QPSK-RB Size 50, RB Offset 0



Date: 18.JUL.2012 09:23:28

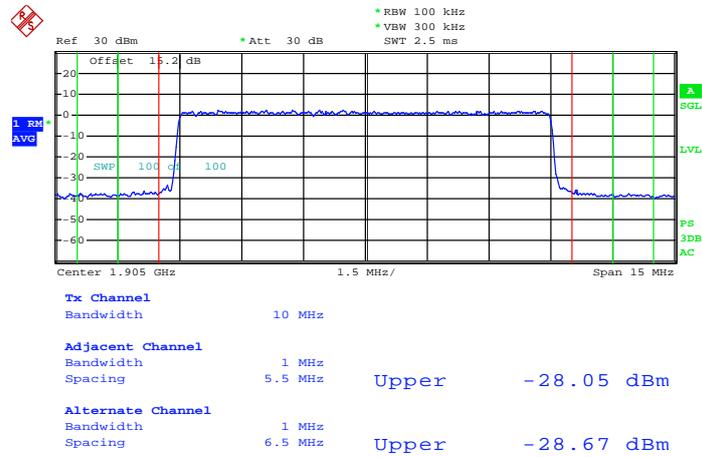


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 49



Date: 18.JUL.2012 09:20:45

Higher Band Edge Plot for QPSK-RB Size 50, RB Offset 0

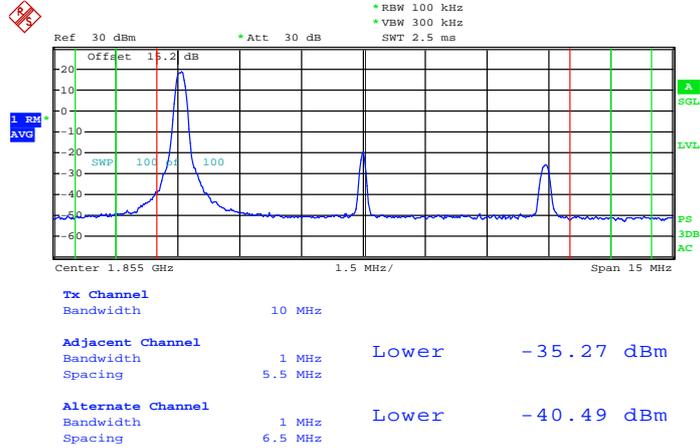


Date: 18.JUL.2012 09:19:16



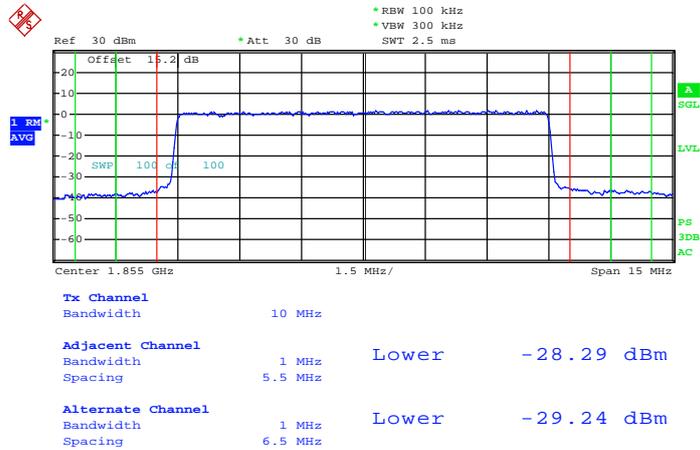
| | | | |
|---------------|------------|--------------------|---------------|
| Band : | LTE Band 2 | BW / Mod. : | 10MHz / 16QAM |
|---------------|------------|--------------------|---------------|

Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 18.JUL.2012 09:22:07

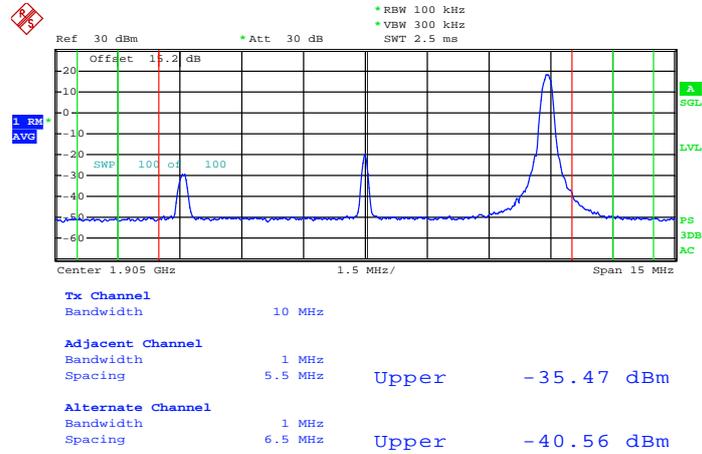
Lower Band Edge Plot for 16QAM -RB Size 50, RB Offset 0



Date: 18.JUL.2012 09:22:57

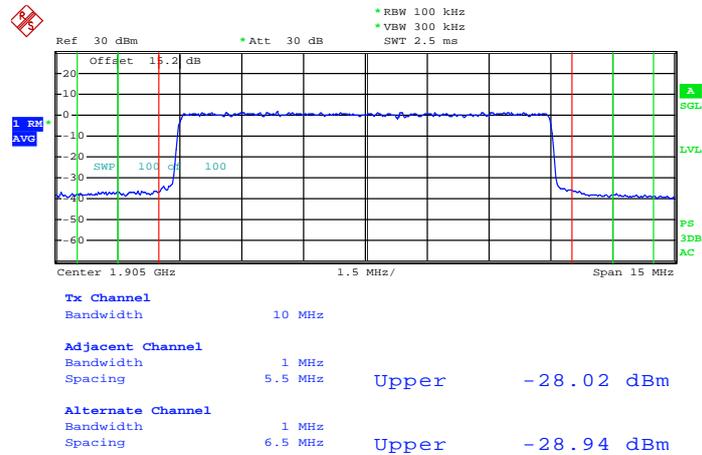


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 49



Date: 18.JUL.2012 09:20:22

Higher Band Edge Plot for 16QAM -RB Size 50, RB Offset 0

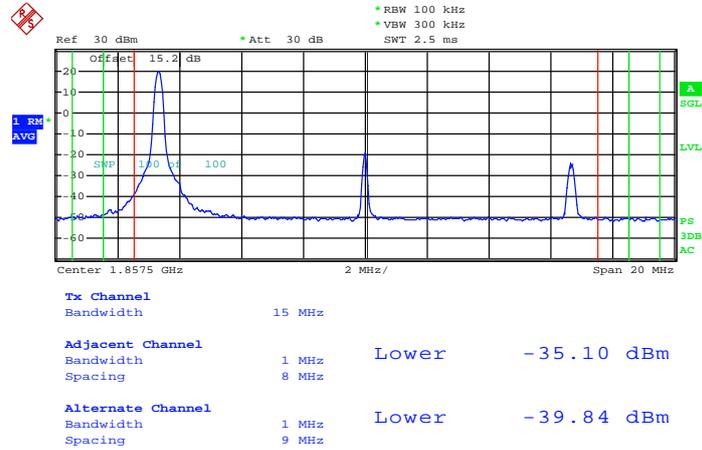


Date: 18.JUL.2012 09:19:36



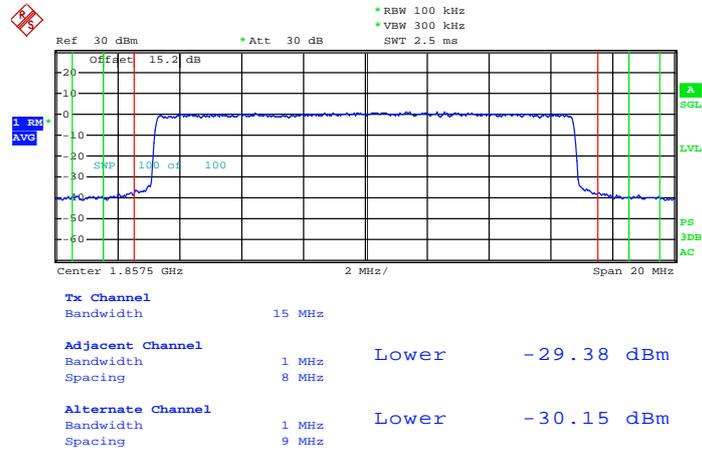
| | | | |
|---------------|------------|--------------------|--------------|
| Band : | LTE Band 2 | BW / Mod. : | 15MHz / QPSK |
|---------------|------------|--------------------|--------------|

Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 18.JUL.2012 09:28:19

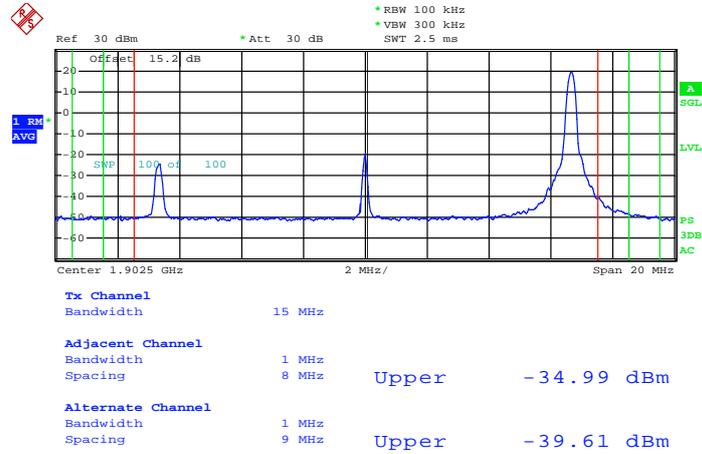
Lower Band Edge Plot for QPSK-RB Size 75, RB Offset 0



Date: 18.JUL.2012 09:25:33

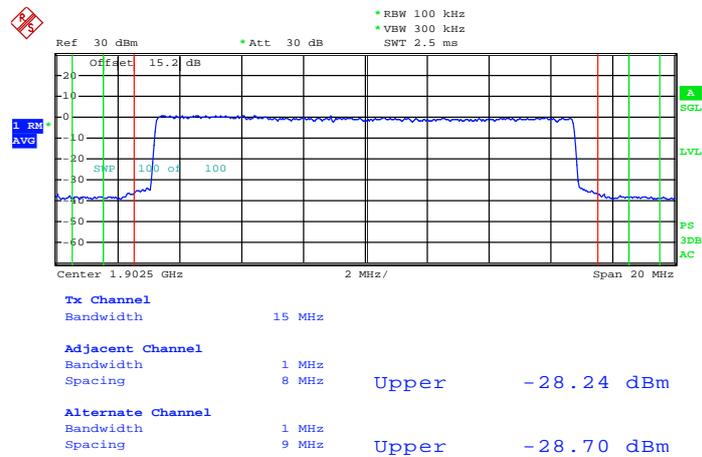


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 74



Date: 18.JUL.2012 09:30:06

Higher Band Edge Plot for QPSK-RB Size 75, RB Offset 0

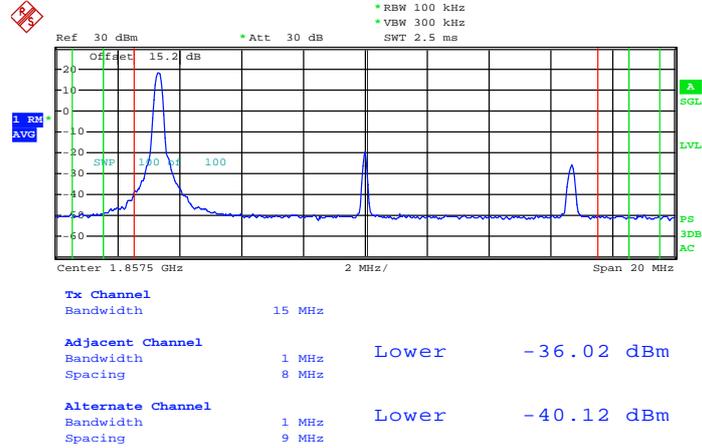


Date: 18.JUL.2012 09:31:08



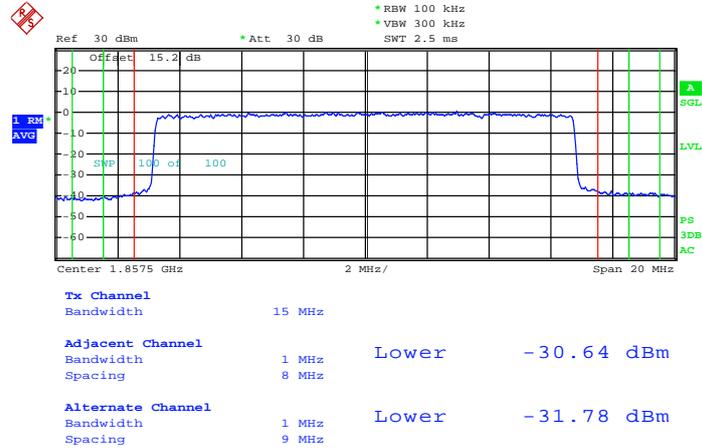
| | | | |
|---------------|------------|--------------------|---------------|
| Band : | LTE Band 2 | BW / Mod. : | 15MHz / 16QAM |
|---------------|------------|--------------------|---------------|

Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 18.JUL.2012 09:28:05

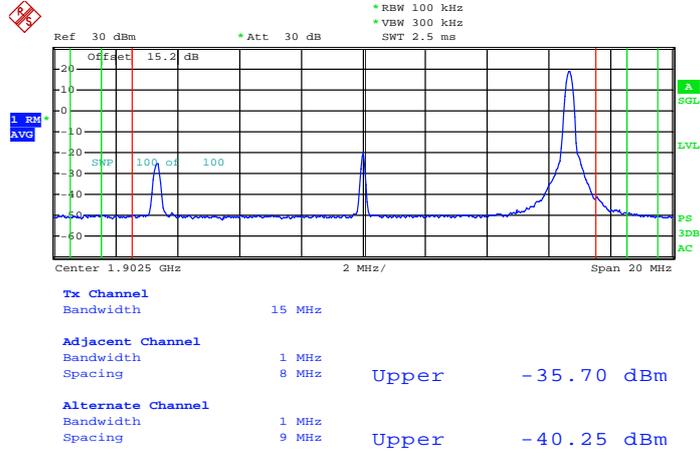
Lower Band Edge Plot for 16QAM -RB Size 75, RB Offset 0



Date: 18.JUL.2012 09:25:48

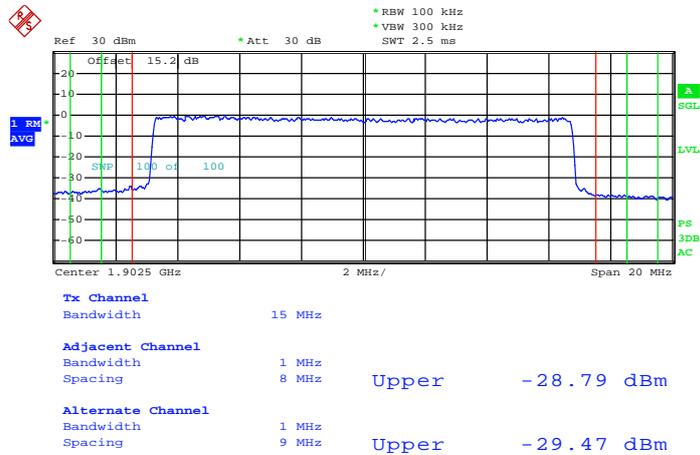


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 74



Date: 18.JUL.2012 09:30:26

Higher Band Edge Plot for 16QAM -RB Size 75, RB Offset 0

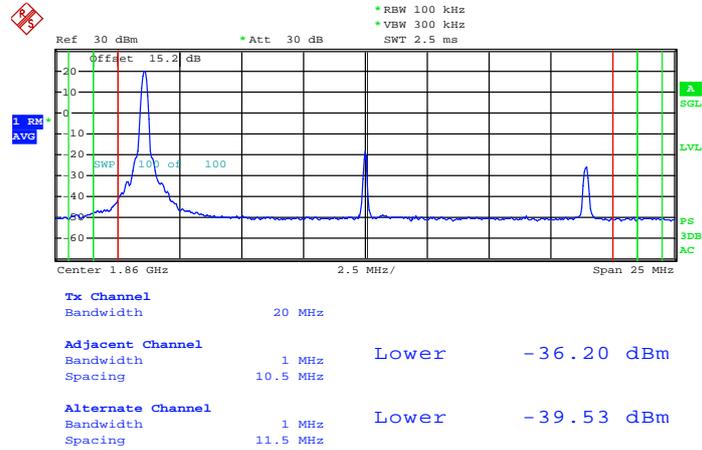


Date: 18.JUL.2012 09:30:50



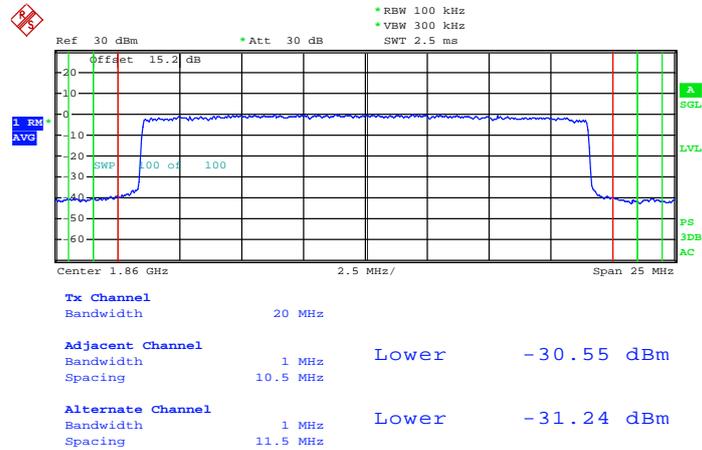
| | | | |
|---------------|------------|--------------------|--------------|
| Band : | LTE Band 2 | BW / Mod. : | 20MHz / QPSK |
|---------------|------------|--------------------|--------------|

Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 18.JUL.2012 09:45:51

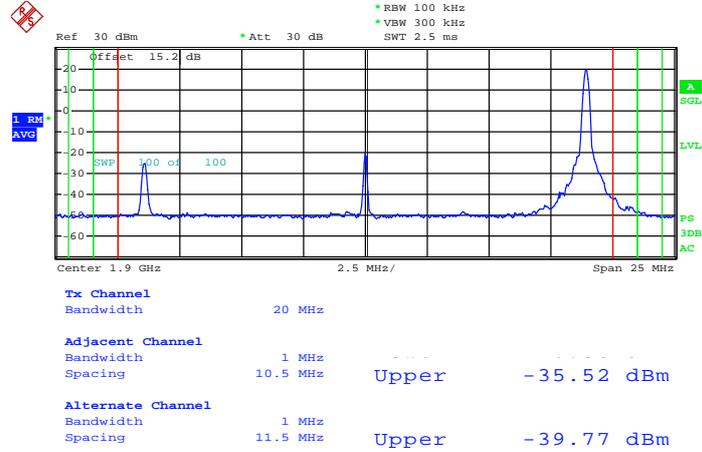
Lower Band Edge Plot for QPSK-RB Size 100, RB Offset 0



Date: 18.JUL.2012 09:46:38

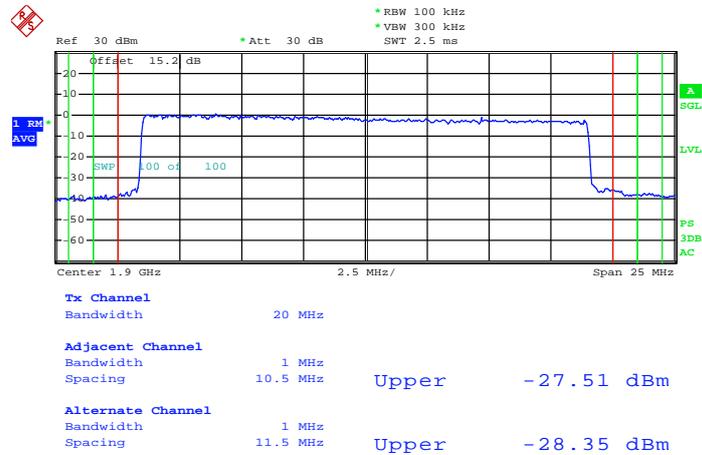


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 99



Date: 18.JUL.2012 09:44:53

Higher Band Edge Plot for QPSK-RB Size 100, RB Offset 0

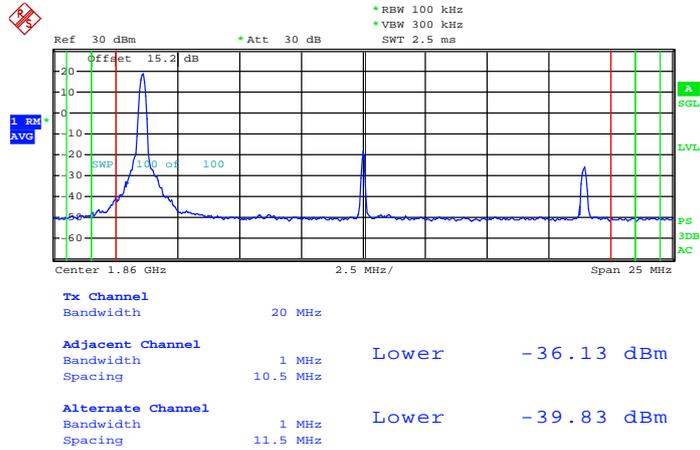


Date: 18.JUL.2012 09:43:39



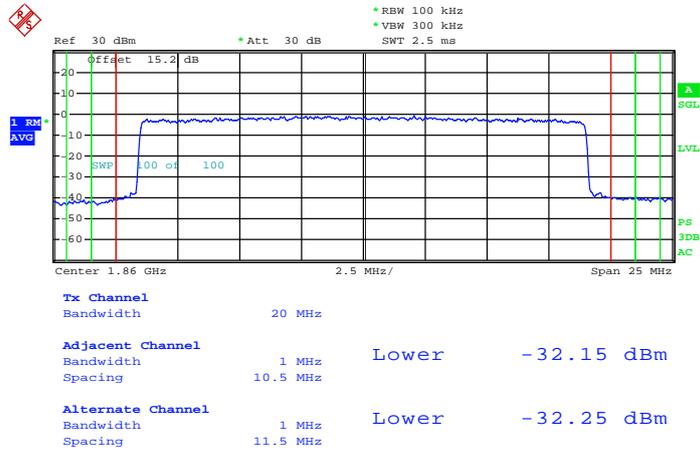
| | | | |
|---------------|------------|--------------------|---------------|
| Band : | LTE Band 2 | BW / Mod. : | 20MHz / 16QAM |
|---------------|------------|--------------------|---------------|

Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 18.JUL.2012 09:46:10

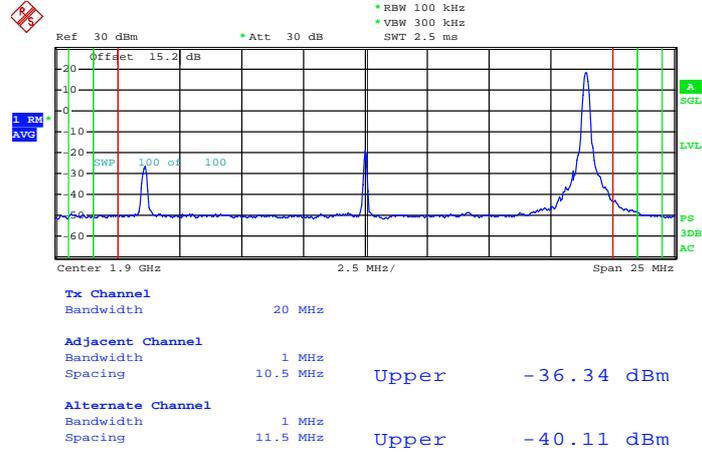
Lower Band Edge Plot for 16QAM -RB Size 100, RB Offset 0



Date: 18.JUL.2012 09:46:26

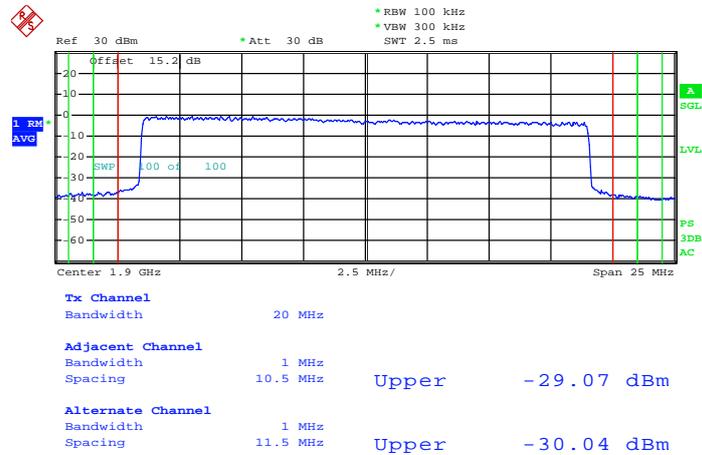


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 99



Date: 18.JUL.2012 09:44:41

Higher Band Edge Plot for 16QAM -RB Size 100, RB Offset 0

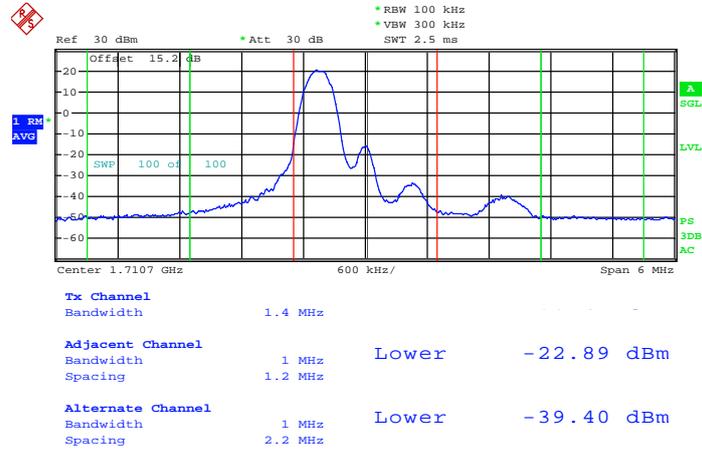


Date: 18.JUL.2012 09:43:59



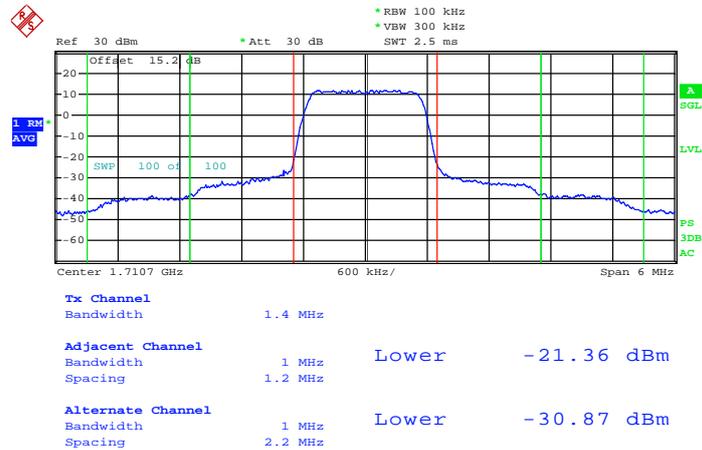
| | | | |
|---------------|------------|--------------------|---------------|
| Band : | LTE Band 4 | BW / Mod. : | 1.4MHz / QPSK |
|---------------|------------|--------------------|---------------|

Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 18.JUL.2012 11:50:04

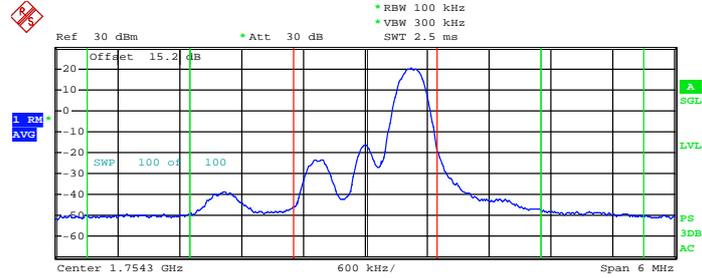
Lower Band Edge Plot for QPSK-RB Size 6, RB Offset 0



Date: 18.JUL.2012 11:50:58



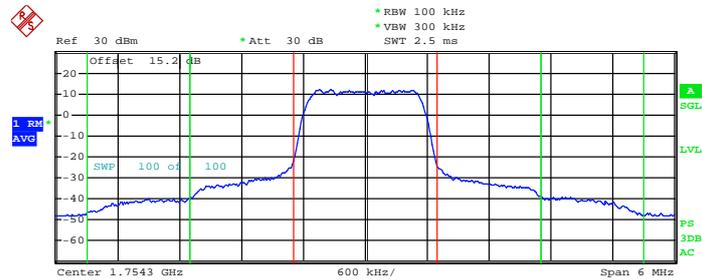
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 5



| | | | |
|--------------------------|---------|-------|------------|
| Tx Channel | | | |
| Bandwidth | 1.4 MHz | | |
| Adjacent Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 1.2 MHz | Upper | -23.00 dBm |
| Alternate Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 2.2 MHz | Upper | -39.28 dBm |

Date: 18.JUL.2012 11:48:43

Higher Band Edge Plot for QPSK-RB Size 6, RB Offset 0



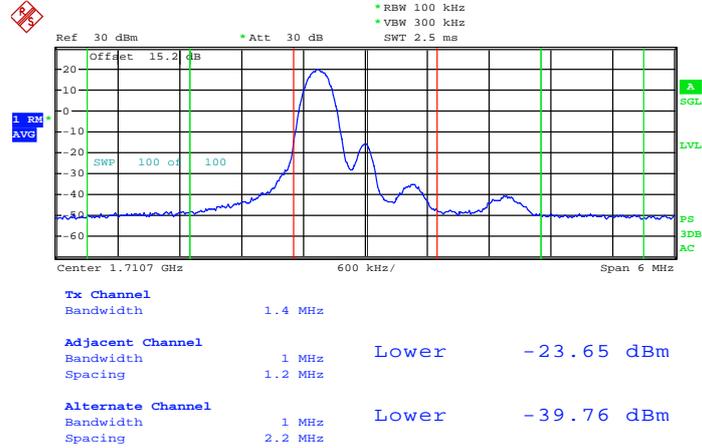
| | | | |
|--------------------------|---------|-------|------------|
| Tx Channel | | | |
| Bandwidth | 1.4 MHz | | |
| Adjacent Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 1.2 MHz | Upper | -21.82 dBm |
| Alternate Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 2.2 MHz | Upper | -31.71 dBm |

Date: 18.JUL.2012 11:46:59



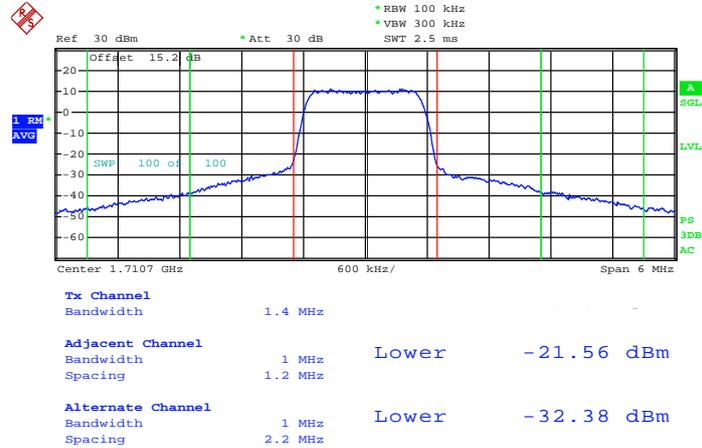
| | | | |
|---------------|------------|--------------------|----------------|
| Band : | LTE Band 4 | BW / Mod. : | 1.4MHz / 16QAM |
|---------------|------------|--------------------|----------------|

Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 18.JUL.2012 11:50:27

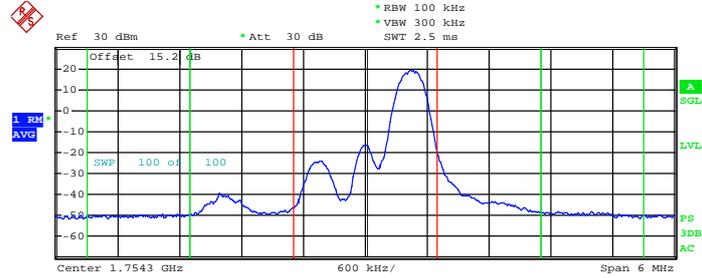
Lower Band Edge Plot for 16QAM -RB Size 6, RB Offset 0



Date: 18.JUL.2012 11:50:45



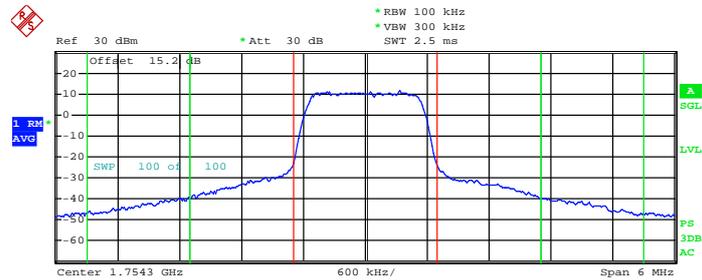
Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 5



| | | | |
|--------------------------|---------|-------|------------|
| Tx Channel | | | |
| Bandwidth | 1.4 MHz | | |
| Adjacent Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 1.2 MHz | Upper | -24.30 dBm |
| Alternate Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 2.2 MHz | Upper | -39.56 dBm |

Date: 18.JUL.2012 11:48:25

Higher Band Edge Plot for 16QAM -RB Size 6, RB Offset 0



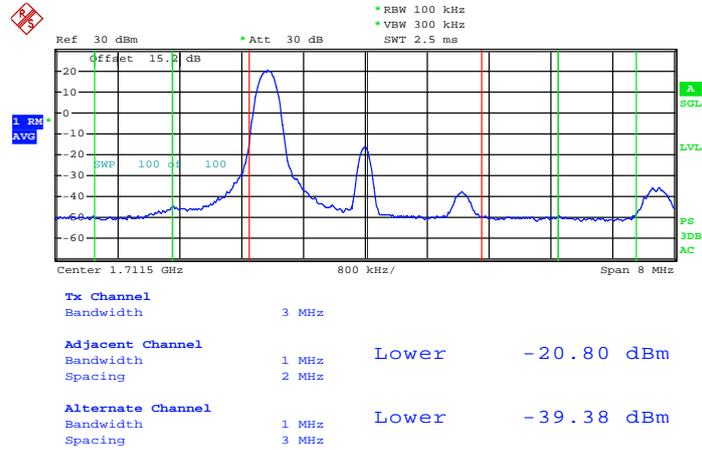
| | | | |
|--------------------------|---------|-------|------------|
| Tx Channel | | | |
| Bandwidth | 1.4 MHz | | |
| Adjacent Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 1.2 MHz | Upper | -22.25 dBm |
| Alternate Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 2.2 MHz | Upper | -33.03 dBm |

Date: 18.JUL.2012 11:47:17



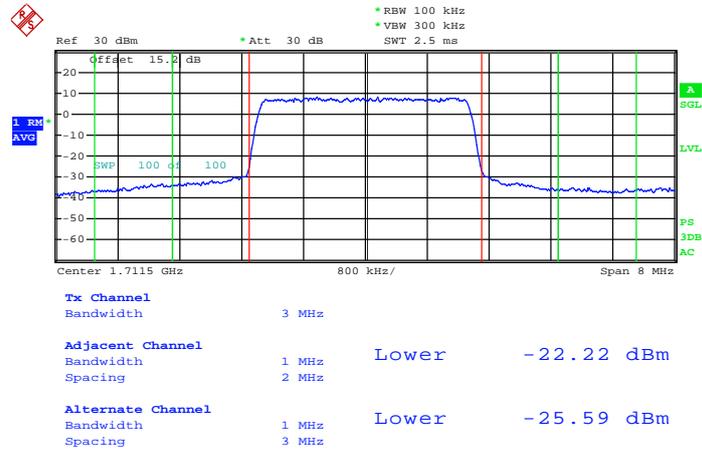
| | | | |
|---------------|------------|--------------------|-------------|
| Band : | LTE Band 4 | BW / Mod. : | 3MHz / QPSK |
|---------------|------------|--------------------|-------------|

Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 18.JUL.2012 11:28:56

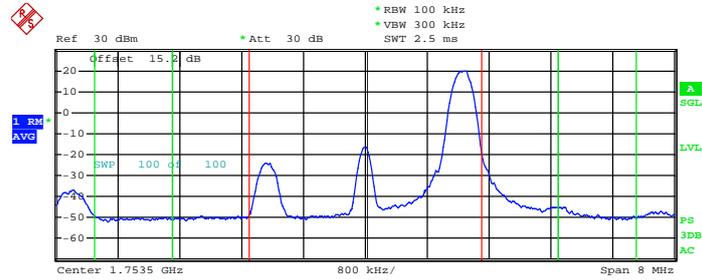
Lower Band Edge Plot for QPSK-RB Size 15, RB Offset 0



Date: 18.JUL.2012 11:27:26



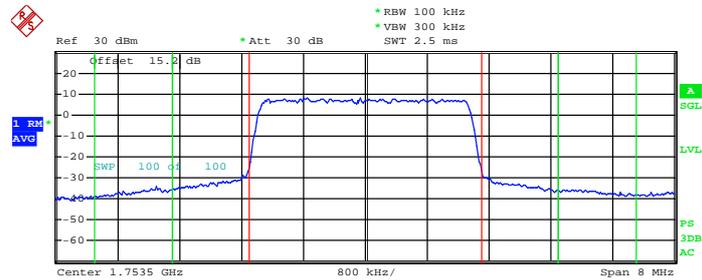
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 14



| | | | |
|--------------------------|-------|-------|------------|
| Tx Channel | | | |
| Bandwidth | 3 MHz | | |
| Adjacent Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 2 MHz | Upper | -21.91 dBm |
| Alternate Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 3 MHz | Upper | -38.94 dBm |

Date: 18.JUL.2012 11:30:06

Higher Band Edge Plot for QPSK-RB Size 15, RB Offset 0



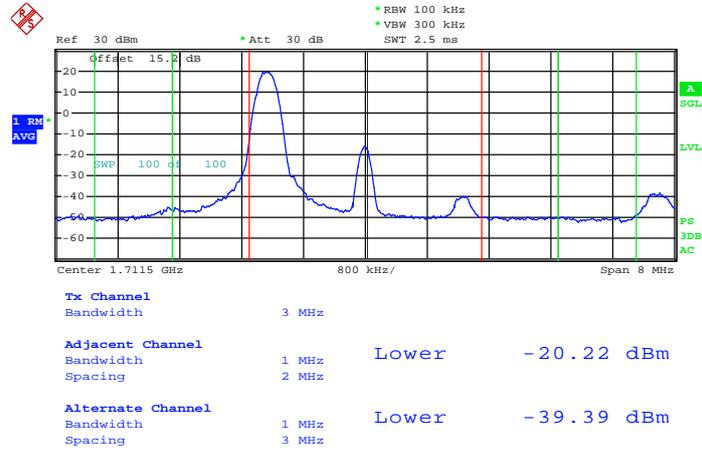
| | | | |
|--------------------------|-------|-------|------------|
| Tx Channel | | | |
| Bandwidth | 3 MHz | | |
| Adjacent Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 2 MHz | Upper | -23.11 dBm |
| Alternate Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 3 MHz | Upper | -27.25 dBm |

Date: 18.JUL.2012 11:45:17



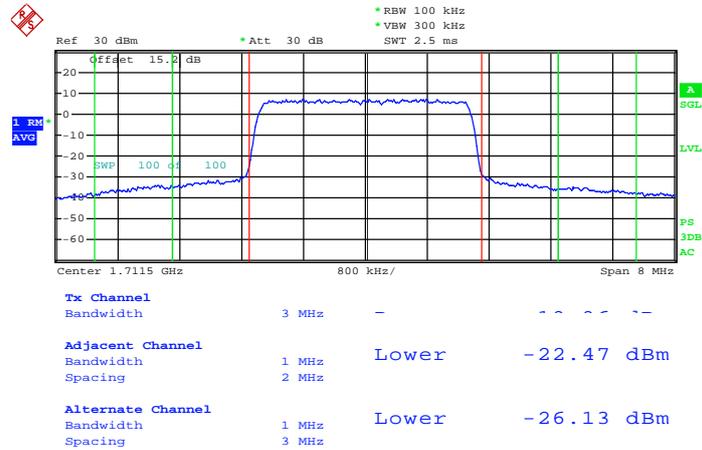
| | | | |
|---------------|------------|--------------------|--------------|
| Band : | LTE Band 4 | BW / Mod. : | 3MHz / 16QAM |
|---------------|------------|--------------------|--------------|

Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 18.JUL.2012 11:28:41

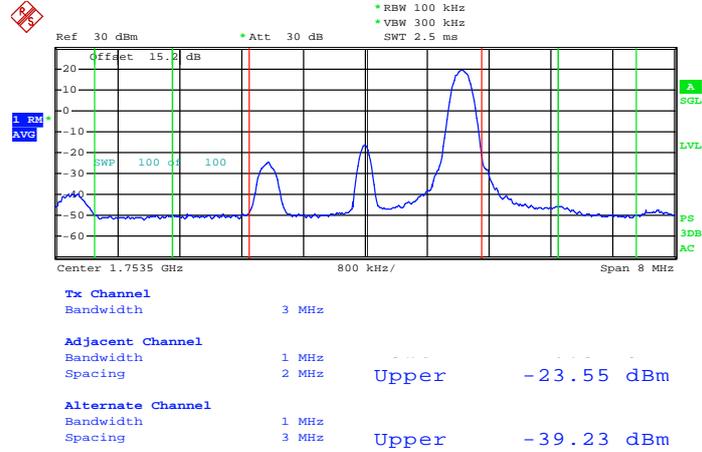
Lower Band Edge Plot for 16QAM -RB Size 15, RB Offset 0



Date: 18.JUL.2012 11:28:06

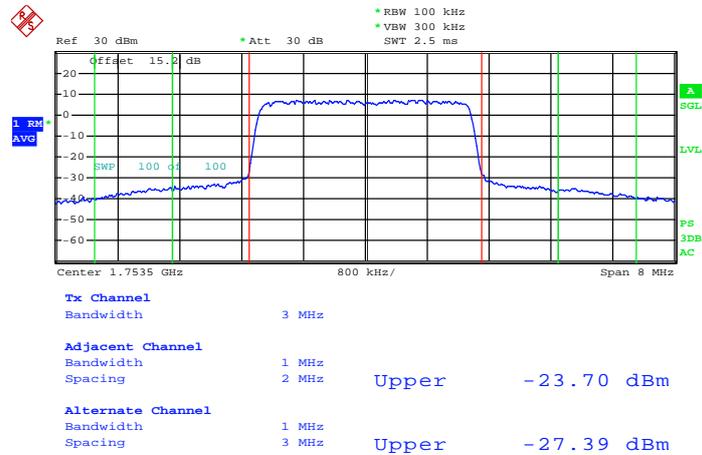


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 14



Date: 18.JUL.2012 11:30:25

Higher Band Edge Plot for 16QAM -RB Size 15, RB Offset 0

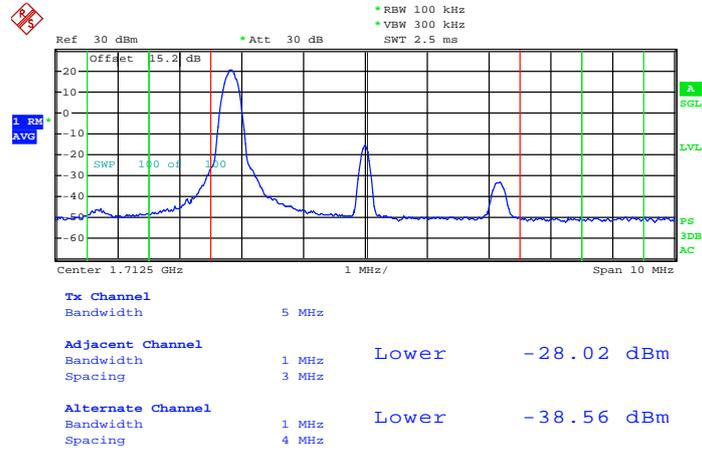


Date: 18.JUL.2012 11:30:43



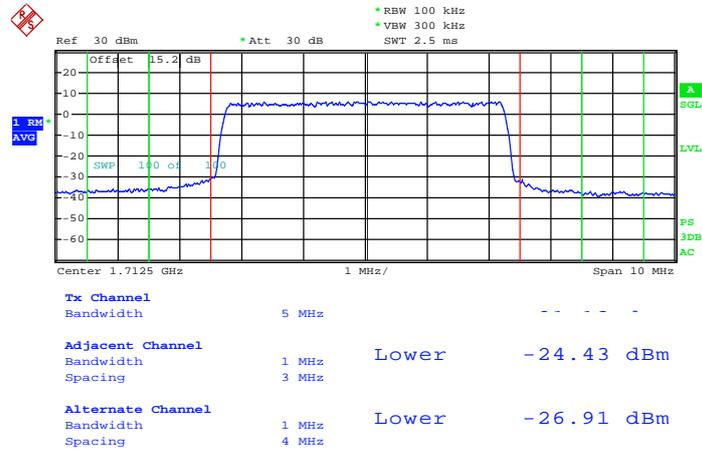
| | | | |
|---------------|------------|--------------------|-------------|
| Band : | LTE Band 4 | BW / Mod. : | 5MHz / QPSK |
|---------------|------------|--------------------|-------------|

Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 18.JUL.2012 11:20:39

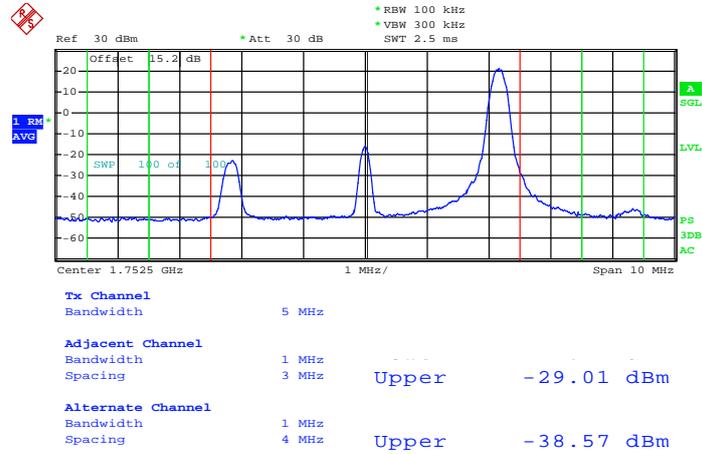
Lower Band Edge Plot for QPSK-RB Size 25, RB Offset 0



Date: 18.JUL.2012 11:21:37

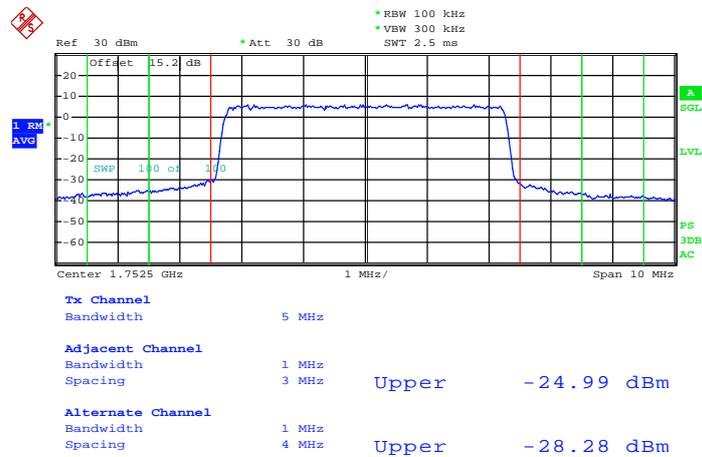


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 24



Date: 18.JUL.2012 10:43:49

Higher Band Edge Plot for QPSK-RB Size 25, RB Offset 0

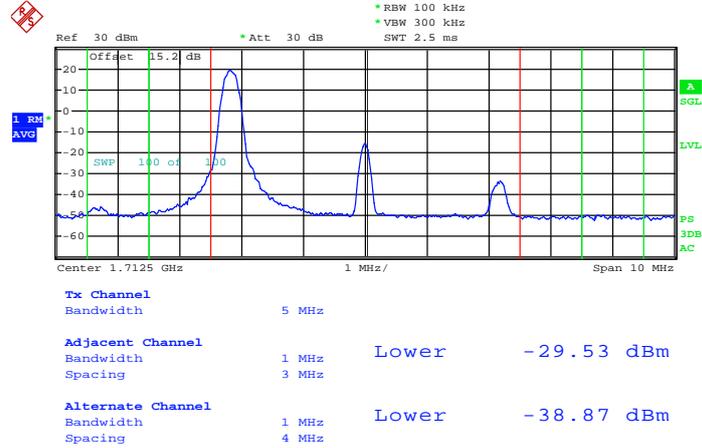


Date: 18.JUL.2012 10:37:32



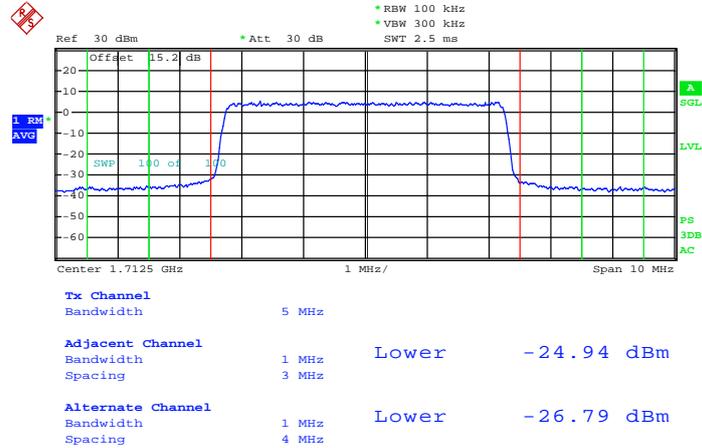
| | | | |
|---------------|------------|--------------------|--------------|
| Band : | LTE Band 4 | BW / Mod. : | 5MHz / 16QAM |
|---------------|------------|--------------------|--------------|

Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 18.JUL.2012 11:20:56

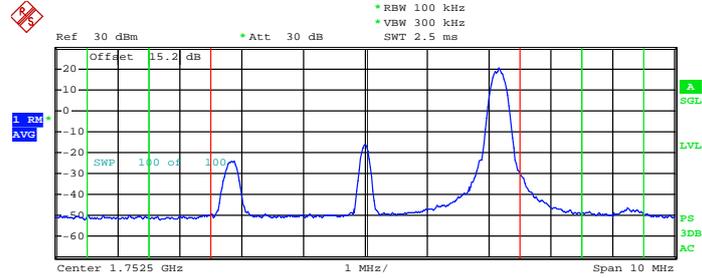
Lower Band Edge Plot for 16QAM -RB Size 25, RB Offset 0



Date: 18.JUL.2012 11:21:21



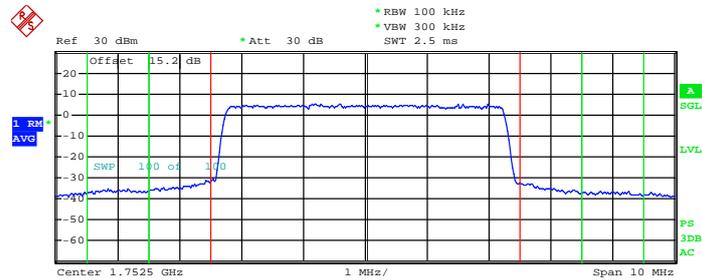
Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 24



| | | | |
|--------------------------|-------|-------|------------|
| Tx Channel | | | |
| Bandwidth | 5 MHz | | |
| Adjacent Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 3 MHz | Upper | -29.98 dBm |
| Alternate Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 4 MHz | Upper | -38.87 dBm |

Date: 18.JUL.2012 10:43:33

Higher Band Edge Plot for 16QAM -RB Size 25, RB Offset 0



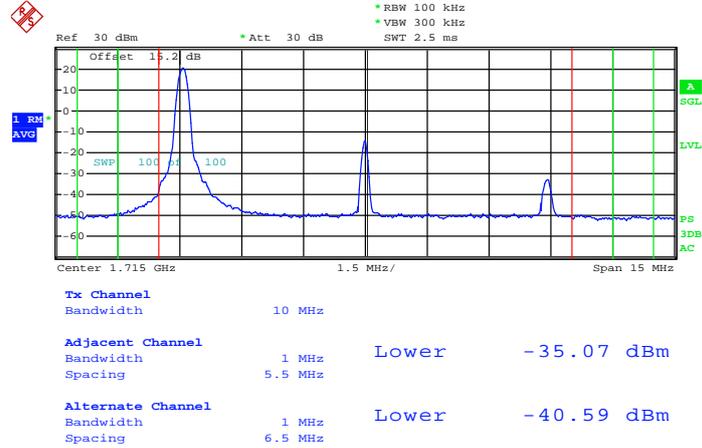
| | | | |
|--------------------------|-------|-------|------------|
| Tx Channel | | | |
| Bandwidth | 5 MHz | | |
| Adjacent Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 3 MHz | Upper | -25.21 dBm |
| Alternate Channel | | | |
| Bandwidth | 1 MHz | | |
| Spacing | 4 MHz | Upper | -27.57 dBm |

Date: 18.JUL.2012 10:37:49



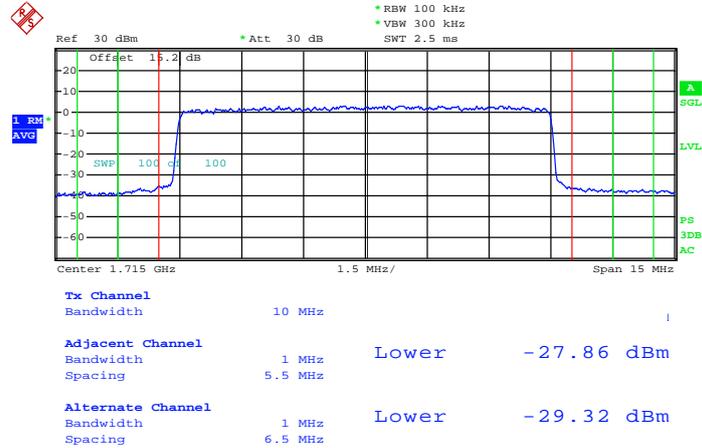
| | | | |
|---------------|------------|--------------------|--------------|
| Band : | LTE Band 4 | BW / Mod. : | 10MHz / QPSK |
|---------------|------------|--------------------|--------------|

Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 18.JUL.2012 10:22:00

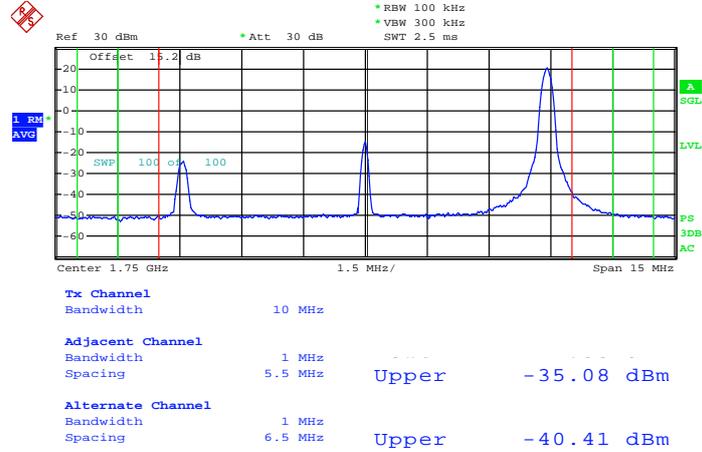
Lower Band Edge Plot for QPSK-RB Size 50, RB Offset 0



Date: 18.JUL.2012 10:20:52

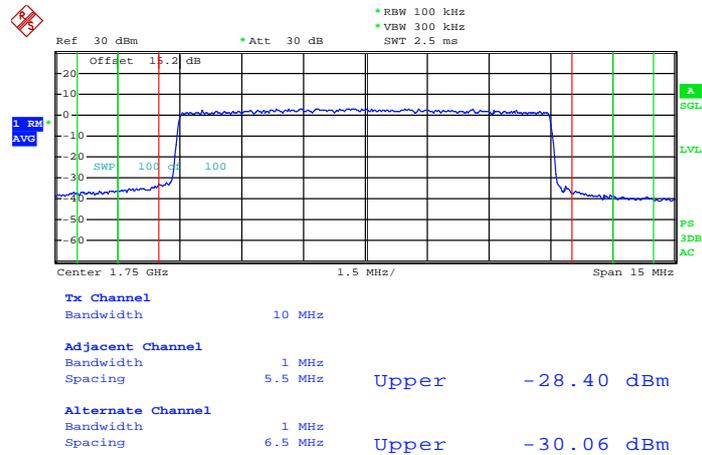


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 49



Date: 18.JUL.2012 10:27:05

Higher Band Edge Plot for QPSK-RB Size 50, RB Offset 0

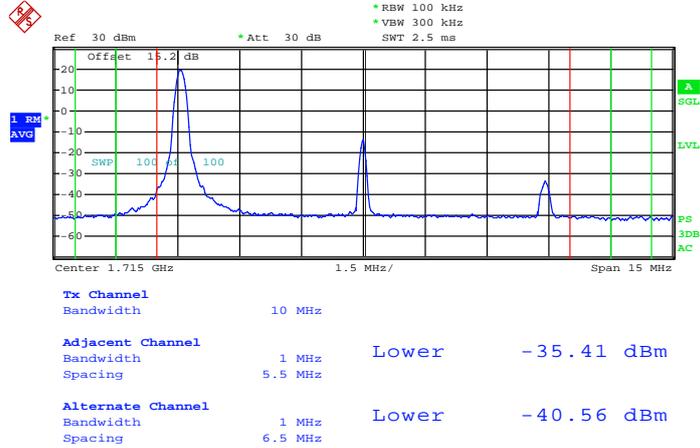


Date: 18.JUL.2012 10:25:37



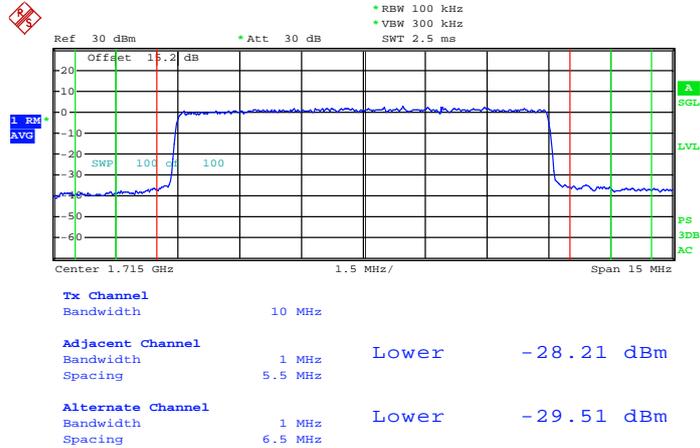
| | | | |
|---------------|------------|--------------------|---------------|
| Band : | LTE Band 4 | BW / Mod. : | 10MHz / 16QAM |
|---------------|------------|--------------------|---------------|

Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 18.JUL.2012 10:21:38

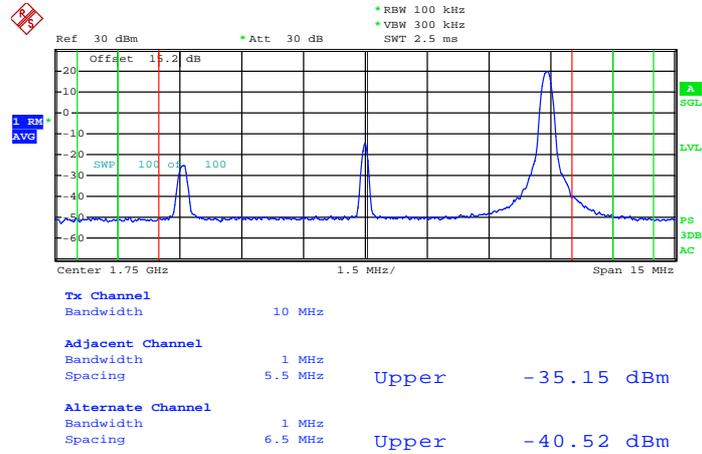
Lower Band Edge Plot for 16QAM -RB Size 50, RB Offset 0



Date: 18.JUL.2012 10:21:11

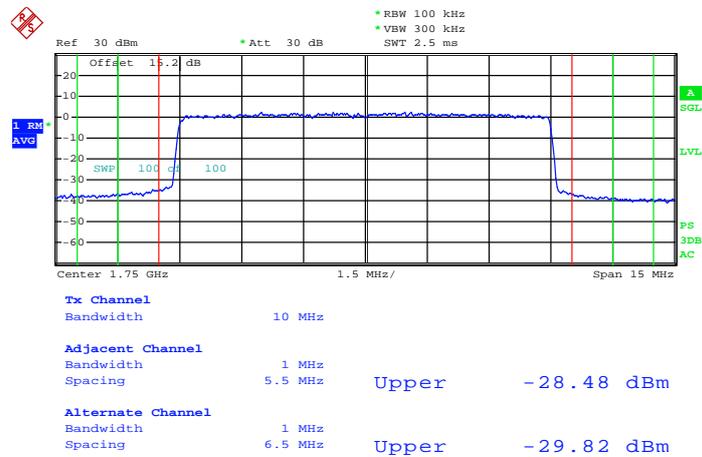


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 49



Date: 18.JUL.2012 10:26:53

Higher Band Edge Plot for 16QAM -RB Size 50, RB Offset 0

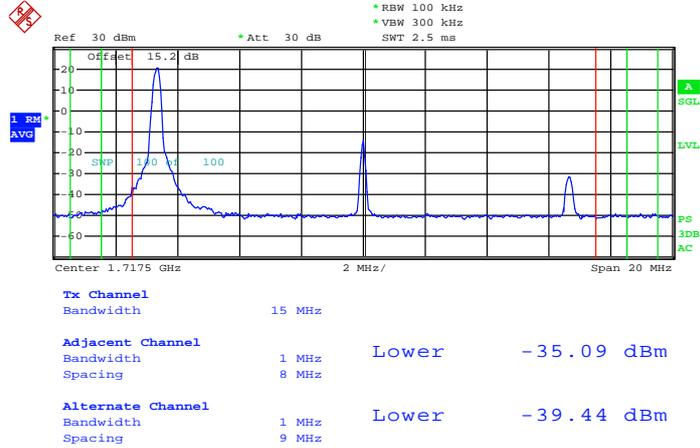


Date: 18.JUL.2012 10:25:55



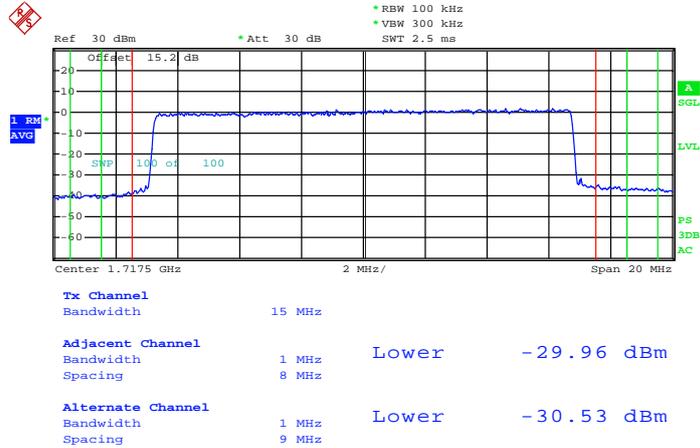
| | | | |
|---------------|------------|--------------------|--------------|
| Band : | LTE Band 4 | BW / Mod. : | 15MHz / QPSK |
|---------------|------------|--------------------|--------------|

Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 18.JUL.2012 10:18:24

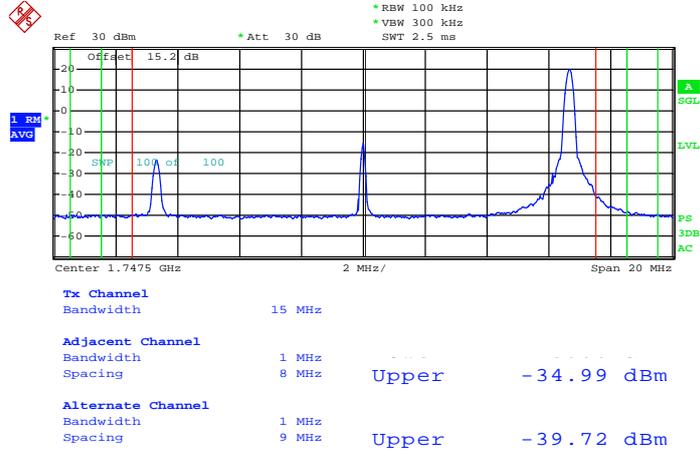
Lower Band Edge Plot for QPSK-RB Size 75, RB Offset 0



Date: 18.JUL.2012 10:19:15

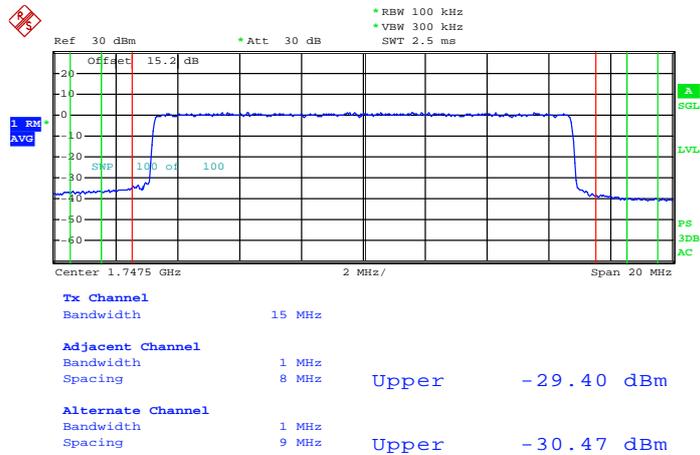


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 74



Date: 18.JUL.2012 10:17:24

Higher Band Edge Plot for QPSK-RB Size 75, RB Offset 0

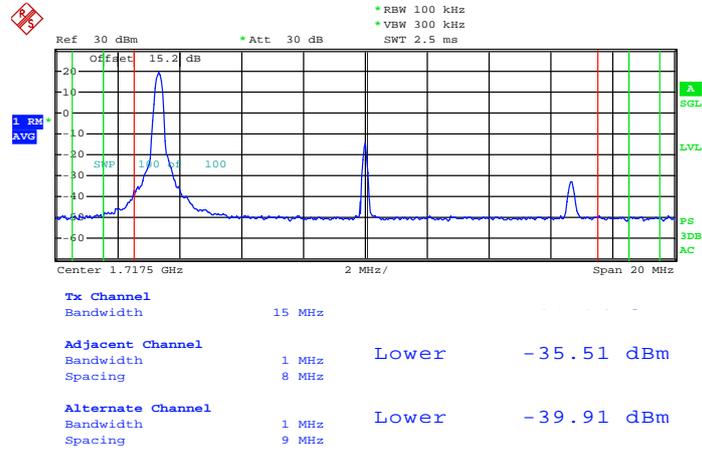


Date: 18.JUL.2012 10:15:42



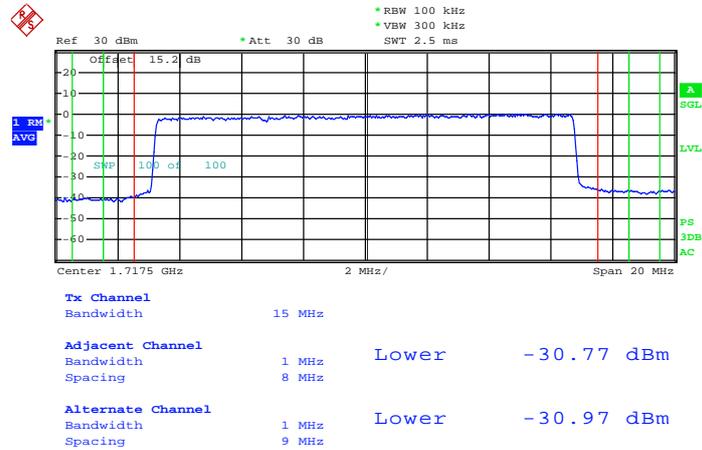
| | | | |
|---------------|------------|--------------------|---------------|
| Band : | LTE Band 4 | BW / Mod. : | 15MHz / 16QAM |
|---------------|------------|--------------------|---------------|

Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 18.JUL.2012 10:18:40

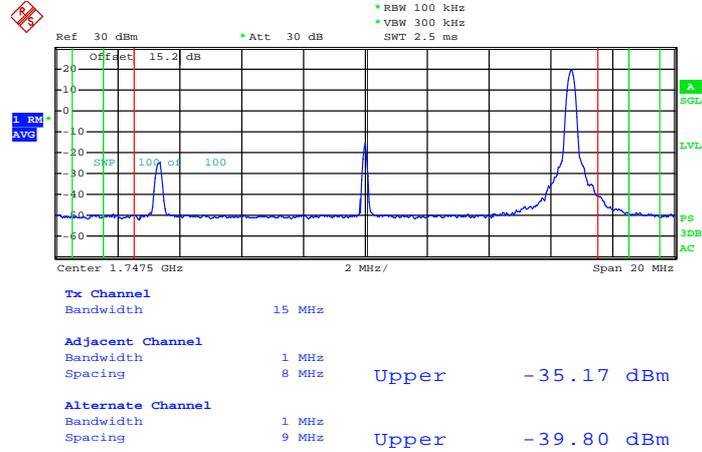
Lower Band Edge Plot for 16QAM -RB Size 75, RB Offset 0



Date: 18.JUL.2012 10:19:02

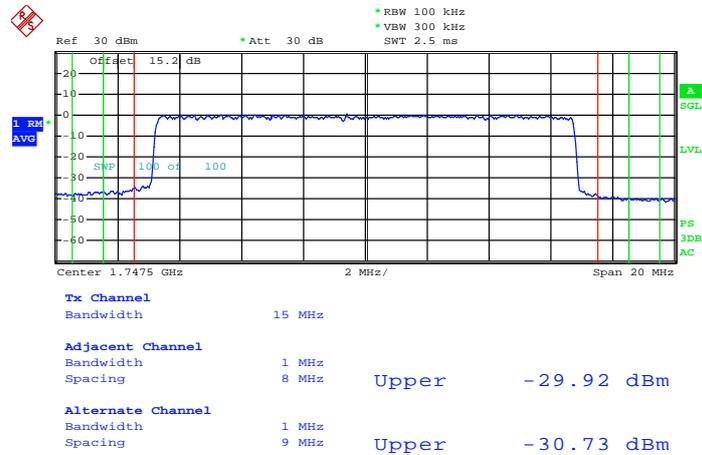


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 74



Date: 18.JUL.2012 10:17:05

Higher Band Edge Plot for 16QAM -RB Size 75, RB Offset 0

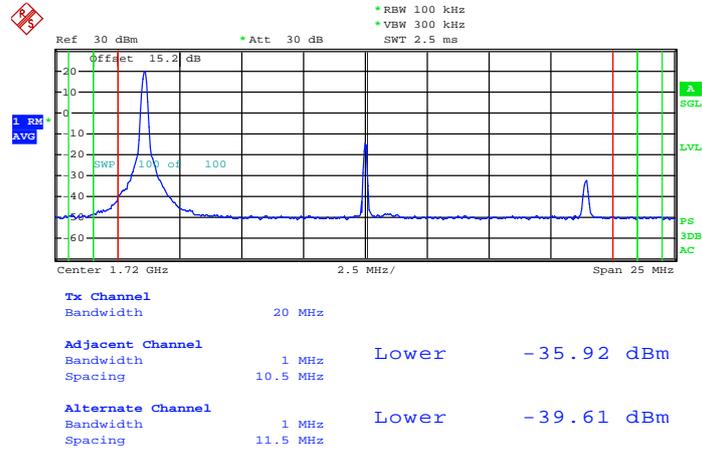


Date: 18.JUL.2012 10:16:00



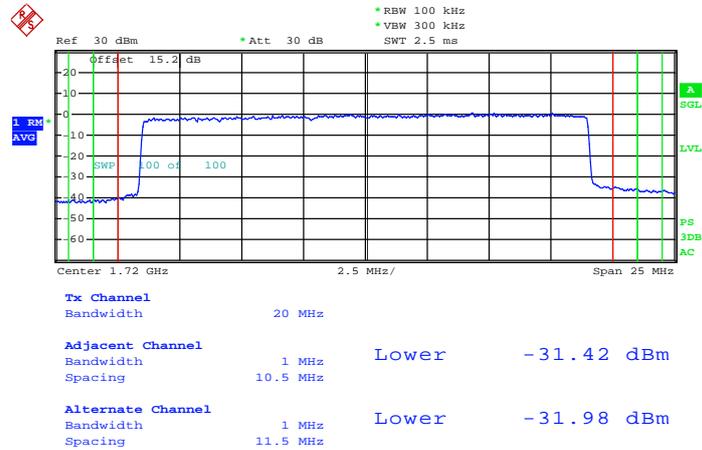
| | | | |
|---------------|------------|--------------------|--------------|
| Band : | LTE Band 4 | BW / Mod. : | 20MHz / QPSK |
|---------------|------------|--------------------|--------------|

Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 18.JUL.2012 10:11:19

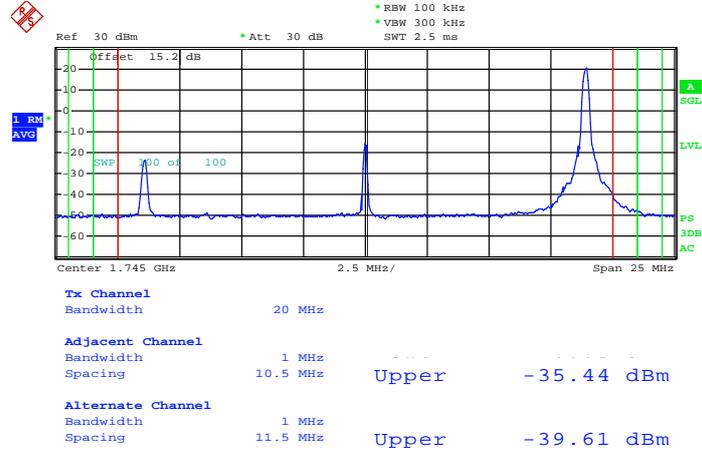
Lower Band Edge Plot for QPSK-RB Size 100, RB Offset 0



Date: 18.JUL.2012 10:04:58

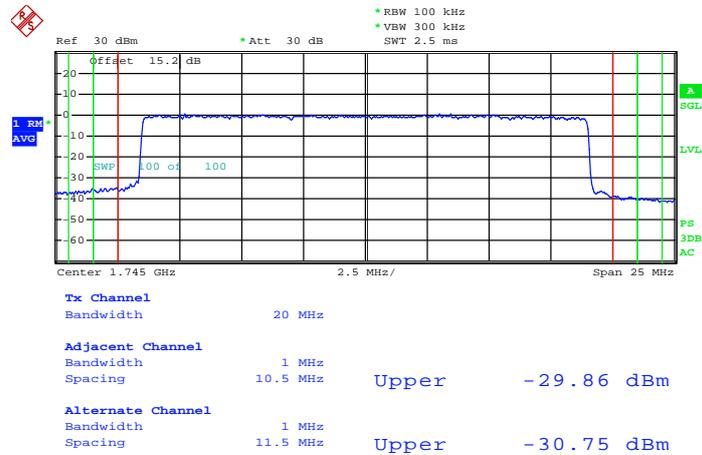


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 99



Date: 18.JUL.2012 10:12:18

Higher Band Edge Plot for QPSK-RB Size 100, RB Offset 0

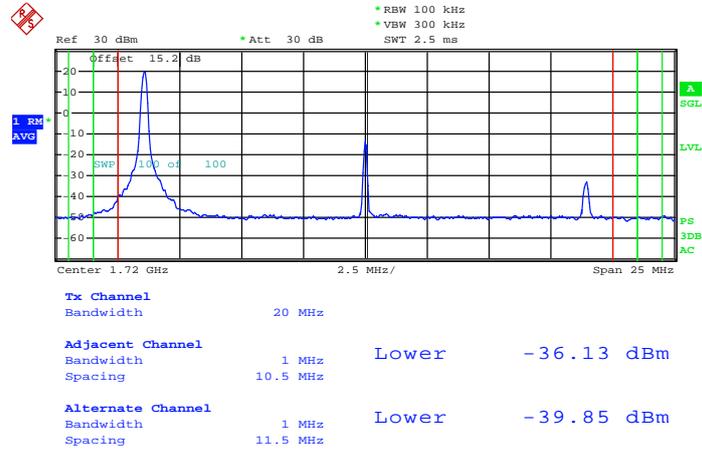


Date: 18.JUL.2012 10:13:20



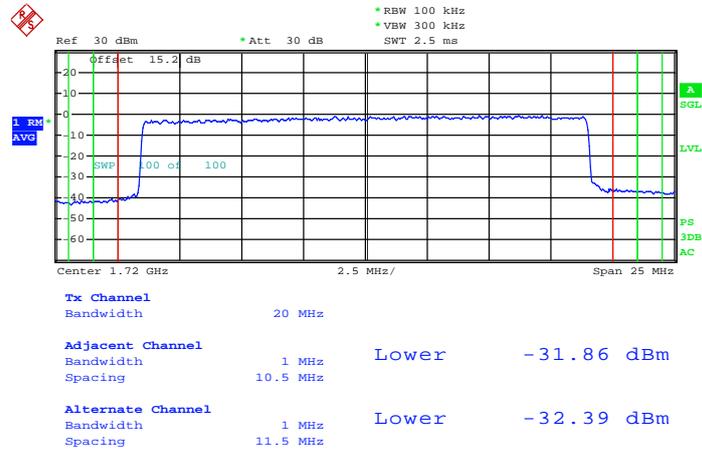
| | | | |
|---------------|------------|--------------------|---------------|
| Band : | LTE Band 4 | BW / Mod. : | 20MHz / 16QAM |
|---------------|------------|--------------------|---------------|

Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 18.JUL.2012 10:11:07

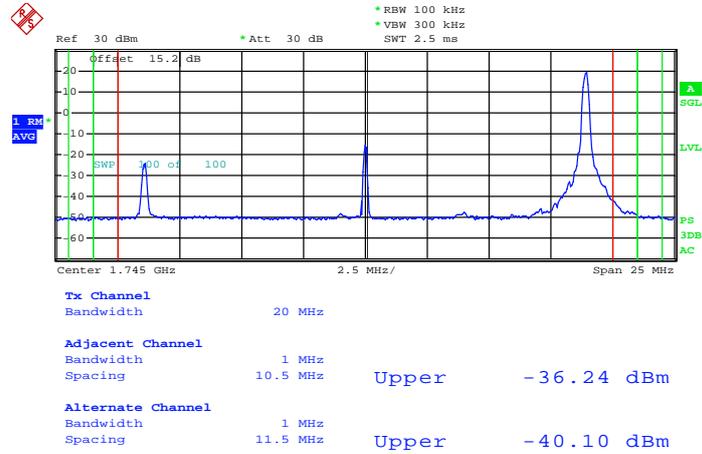
Lower Band Edge Plot for 16QAM -RB Size 100, RB Offset 0



Date: 18.JUL.2012 10:10:29

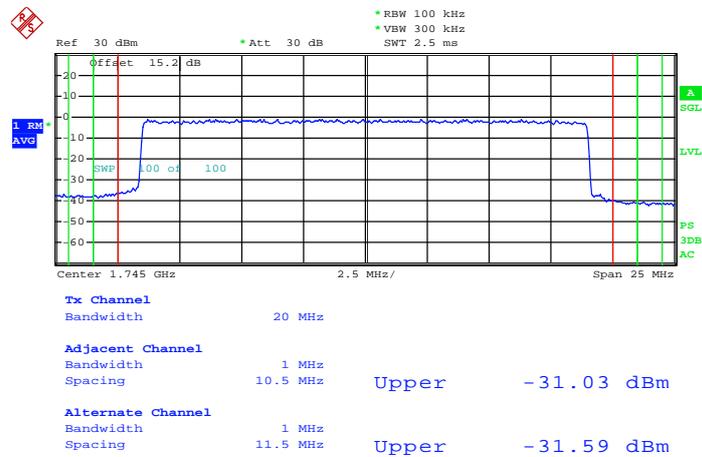


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 99



Date: 18.JUL.2012 10:12:36

Higher Band Edge Plot for 16QAM -RB Size 100, RB Offset 0

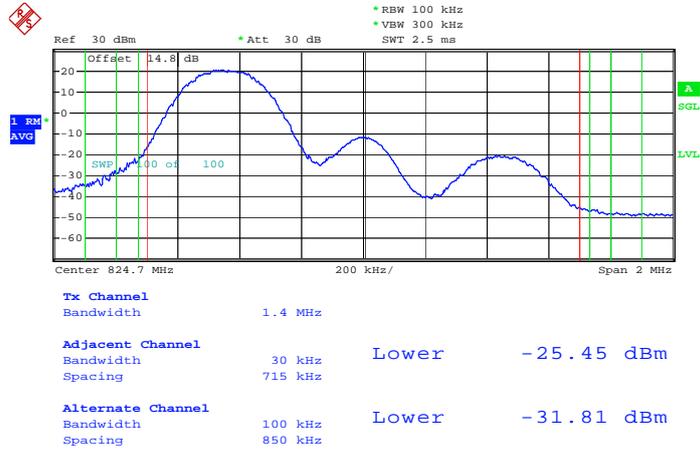


Date: 18.JUL.2012 10:12:57



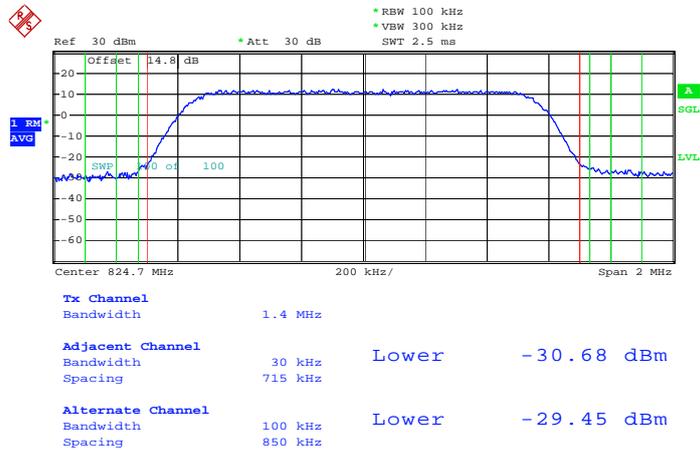
| | | | |
|---------------|------------|--------------------|---------------|
| Band : | LTE Band 5 | BW / Mod. : | 1.4MHz / QPSK |
|---------------|------------|--------------------|---------------|

Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 20.JUL.2012 18:52:36

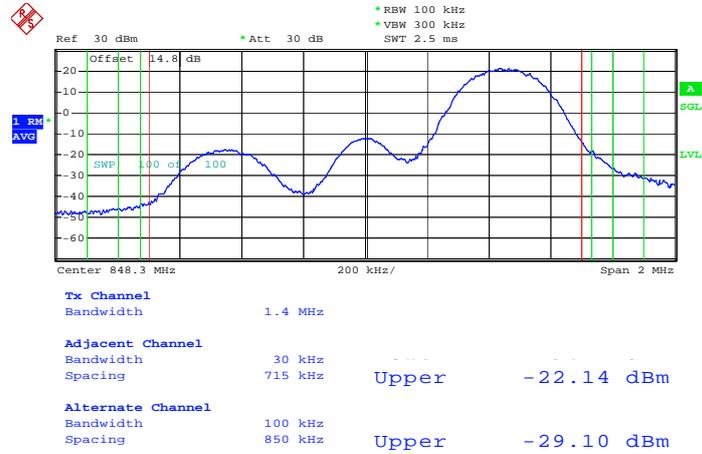
Lower Band Edge Plot for QPSK-RB Size 6, RB Offset 0



Date: 20.JUL.2012 18:52:14

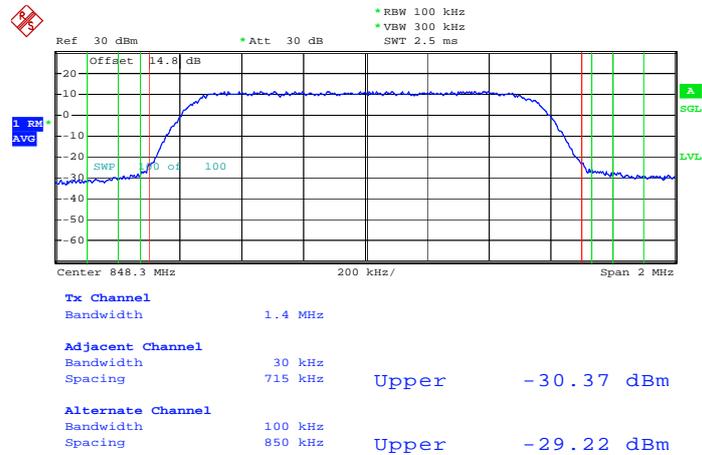


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 5



Date: 20.JUL.2012 18:47:37

Higher Band Edge Plot for QPSK-RB Size 6, RB Offset 0

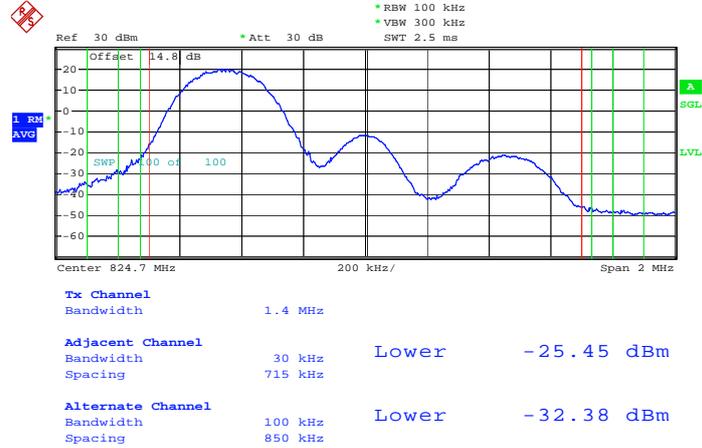


Date: 20.JUL.2012 18:50:39



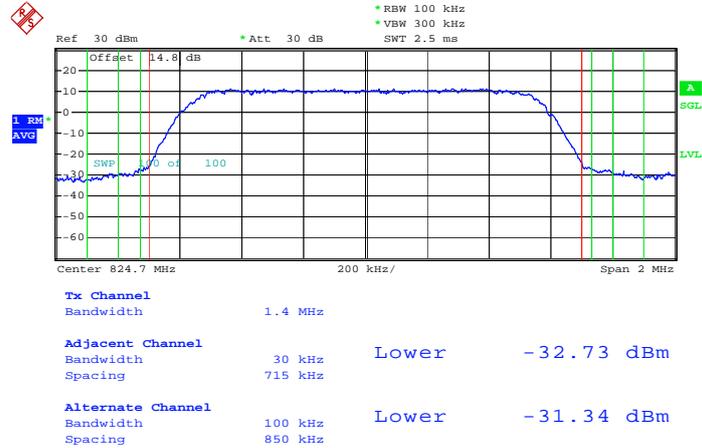
| | | | |
|---------------|------------|--------------------|----------------|
| Band : | LTE Band 5 | BW / Mod. : | 1.4MHz / 16QAM |
|---------------|------------|--------------------|----------------|

Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 20.JUL.2012 18:52:52

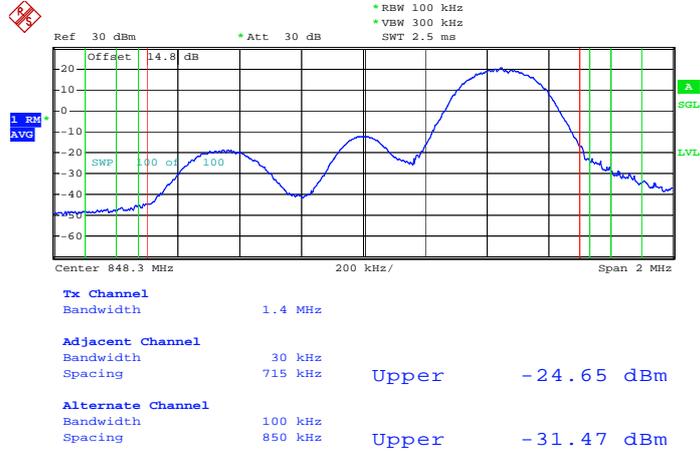
Lower Band Edge Plot for 16QAM -RB Size 6, RB Offset 0



Date: 20.JUL.2012 18:51:55

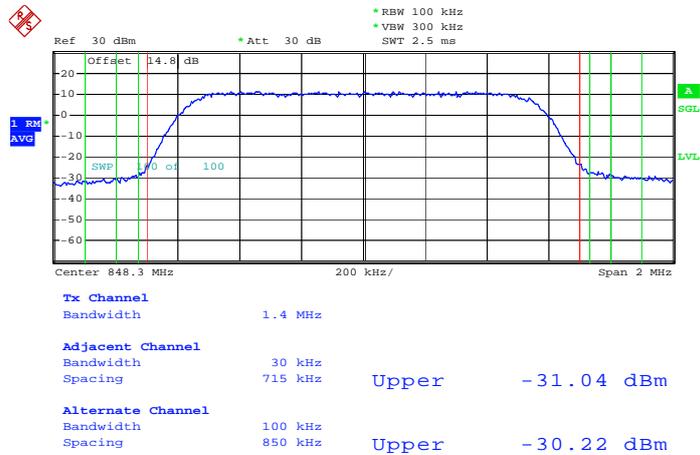


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 5



Date: 20.JUL.2012 18:47:53

Higher Band Edge Plot for 16QAM -RB Size 6, RB Offset 0

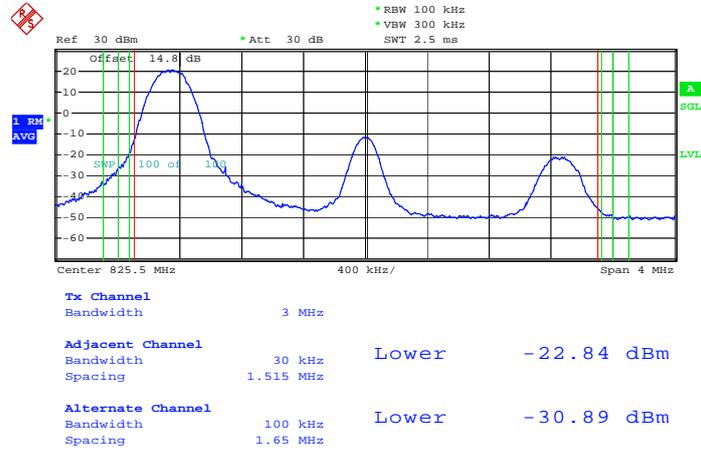


Date: 20.JUL.2012 18:48:09



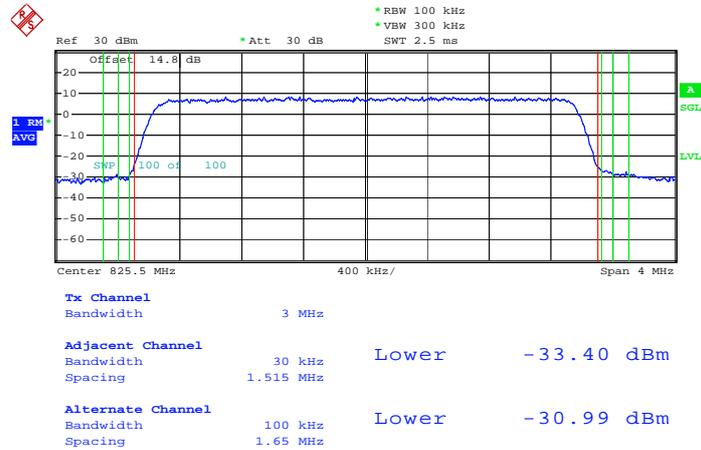
| | | | |
|---------------|------------|--------------------|-------------|
| Band : | LTE Band 5 | BW / Mod. : | 3MHz / QPSK |
|---------------|------------|--------------------|-------------|

Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 20.JUL.2012 19:00:55

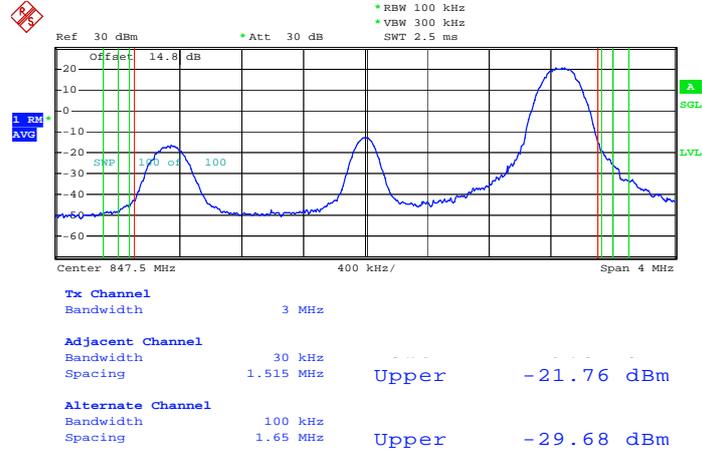
Lower Band Edge Plot for QPSK-RB Size 15, RB Offset 0



Date: 20.JUL.2012 19:00:28

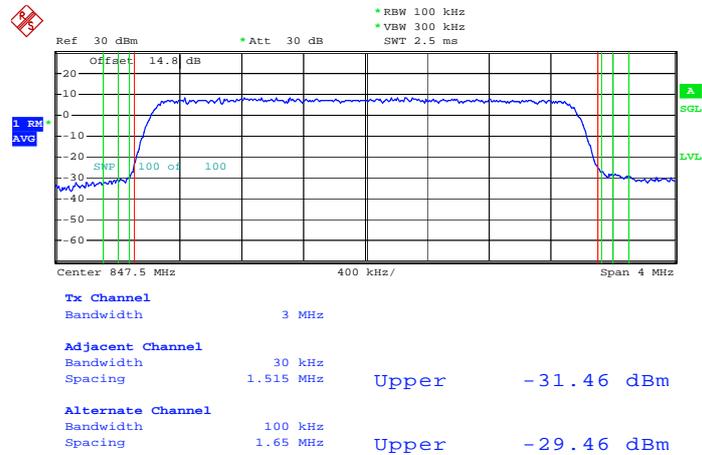


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 14



Date: 20.JUL.2012 19:02:30

Higher Band Edge Plot for QPSK-RB Size 15, RB Offset 0

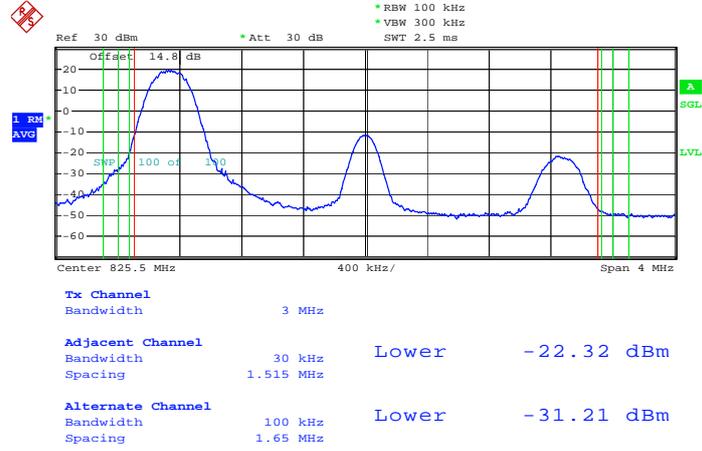


Date: 20.JUL.2012 19:03:22



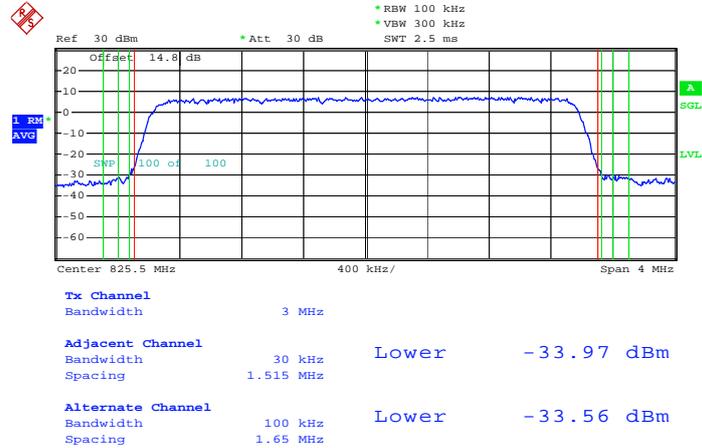
| | | | |
|---------------|------------|--------------------|--------------|
| Band : | LTE Band 5 | BW / Mod. : | 3MHz / 16QAM |
|---------------|------------|--------------------|--------------|

Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 20.JUL.2012 19:01:11

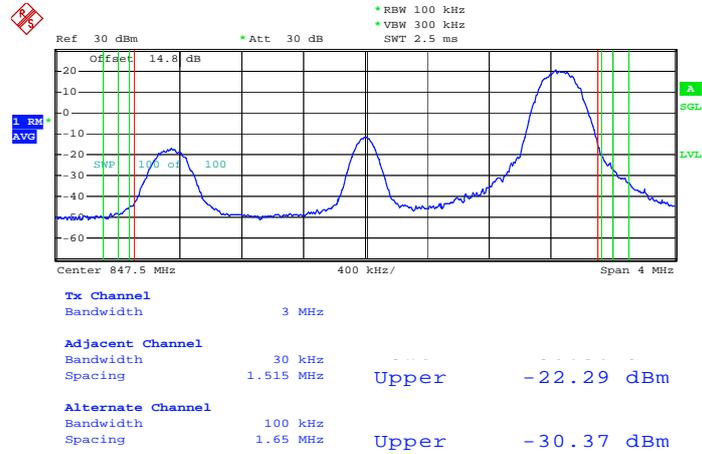
Lower Band Edge Plot for 16QAM -RB Size 15, RB Offset 0



Date: 20.JUL.2012 18:59:29

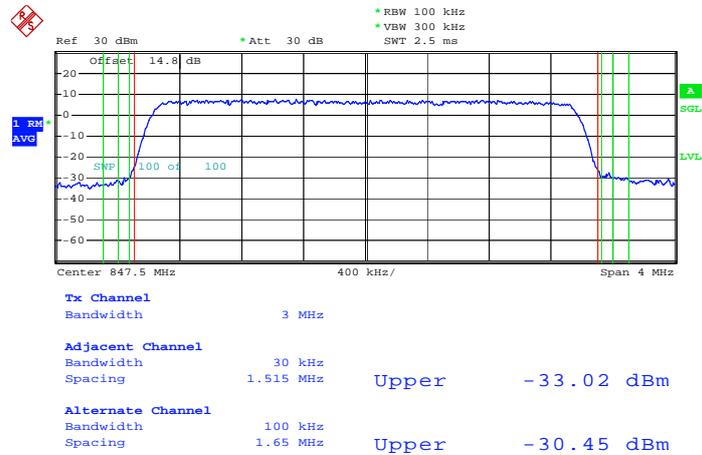


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 14



Date: 20.JUL.2012 19:02:09

Higher Band Edge Plot for 16QAM -RB Size 15, RB Offset 0

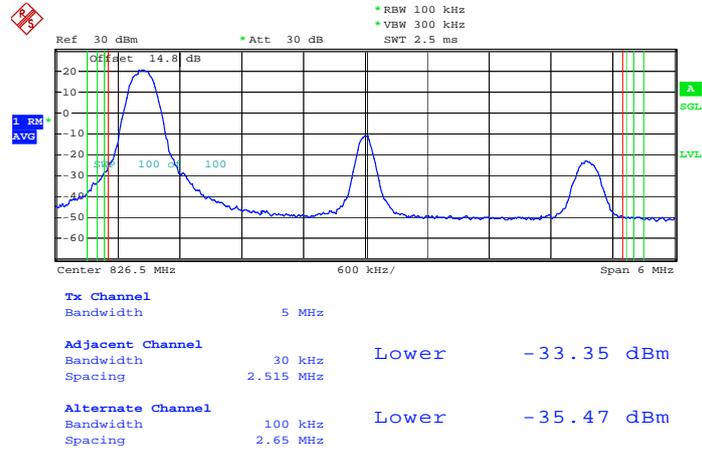


Date: 20.JUL.2012 19:03:39



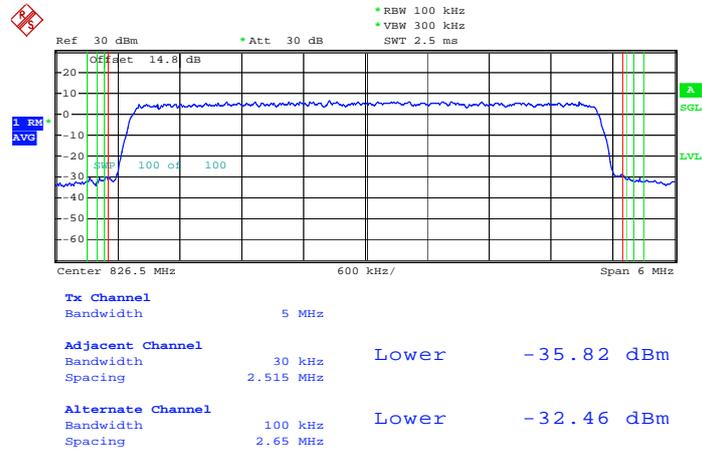
| | | | |
|---------------|------------|--------------------|-------------|
| Band : | LTE Band 5 | BW / Mod. : | 5MHz / QPSK |
|---------------|------------|--------------------|-------------|

Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 20.JUL.2012 19:08:56

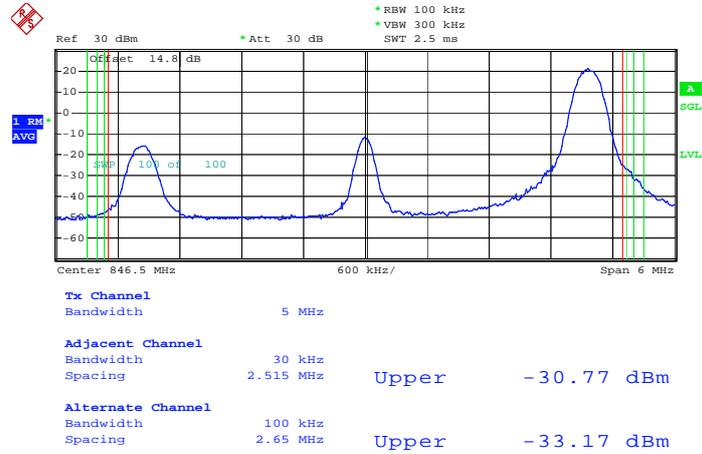
Lower Band Edge Plot for QPSK-RB Size 25, RB Offset 0



Date: 20.JUL.2012 19:09:34

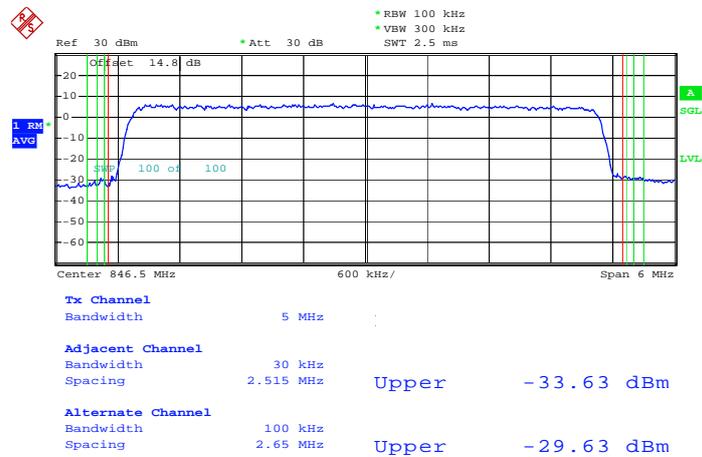


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 24



Date: 20.JUL.2012 19:07:05

Higher Band Edge Plot for QPSK-RB Size 25, RB Offset 0

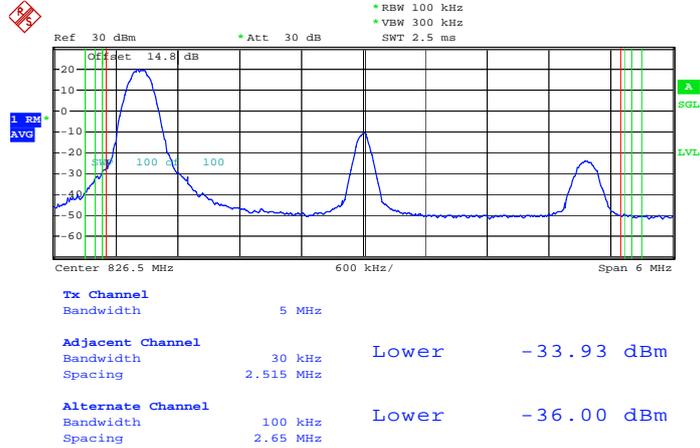


Date: 20.JUL.2012 19:06:35



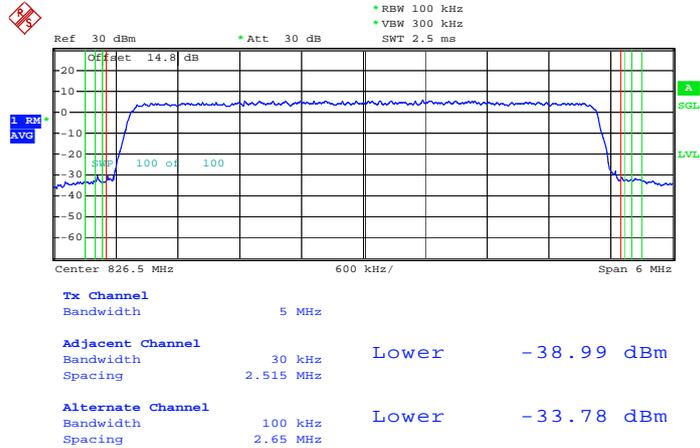
| | | | |
|---------------|------------|--------------------|--------------|
| Band : | LTE Band 5 | BW / Mod. : | 5MHz / 16QAM |
|---------------|------------|--------------------|--------------|

Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 20.JUL.2012 19:08:34

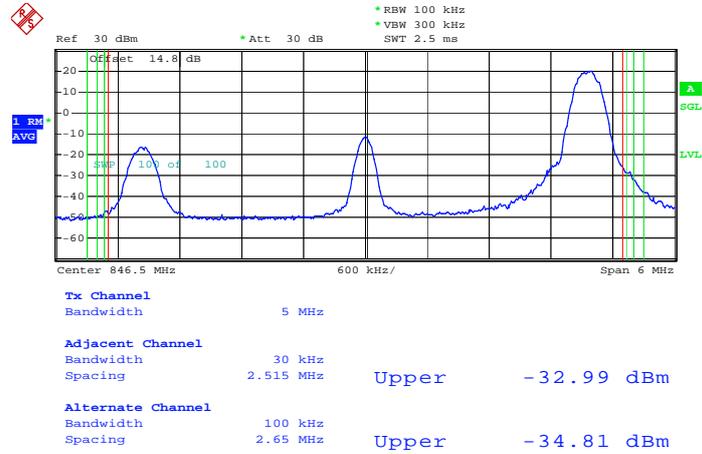
Lower Band Edge Plot for 16QAM -RB Size 25, RB Offset 0



Date: 20.JUL.2012 19:09:55

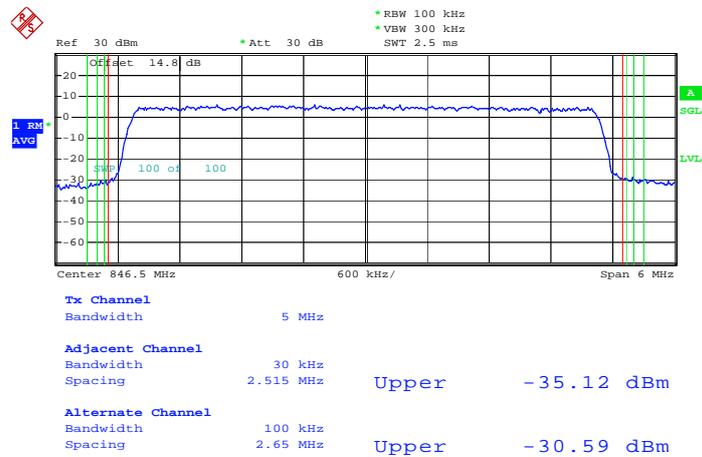


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 24



Date: 20.JUL.2012 19:07:37

Higher Band Edge Plot for 16QAM -RB Size 25, RB Offset 0

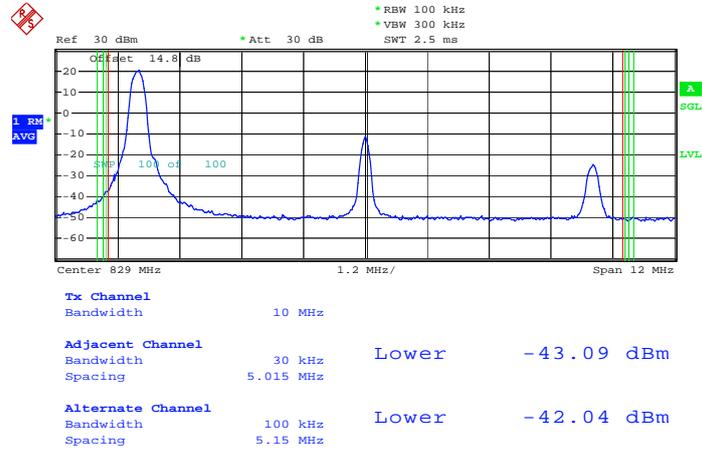


Date: 20.JUL.2012 19:06:08



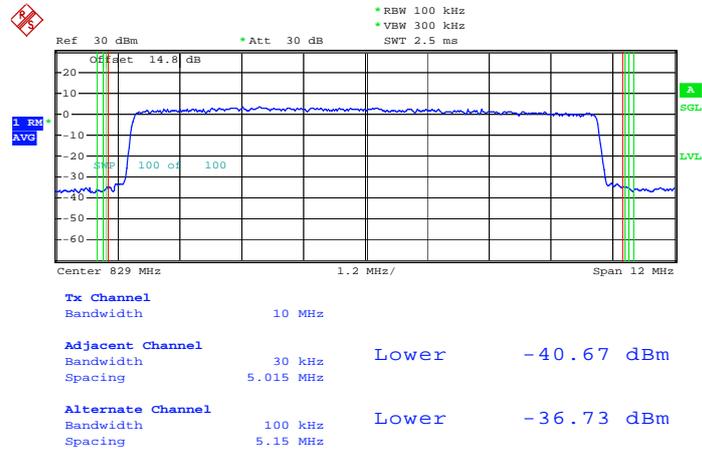
| | | | |
|---------------|------------|--------------------|--------------|
| Band : | LTE Band 5 | BW / Mod. : | 10MHz / QPSK |
|---------------|------------|--------------------|--------------|

Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 20.JUL.2012 19:12:57

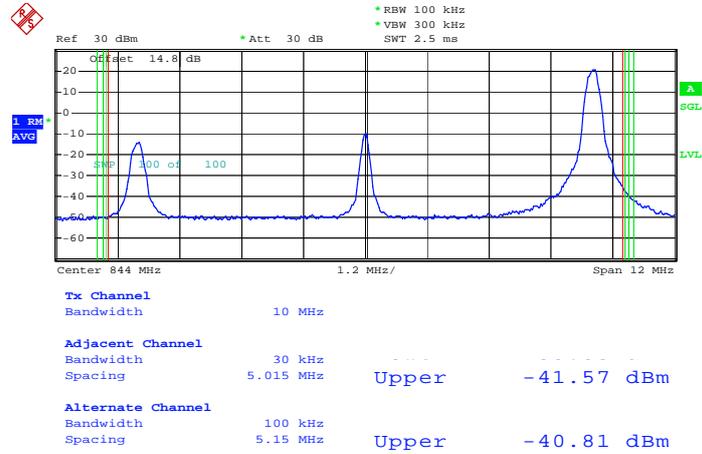
Lower Band Edge Plot for QPSK-RB Size 50, RB Offset 0



Date: 20.JUL.2012 19:12:32

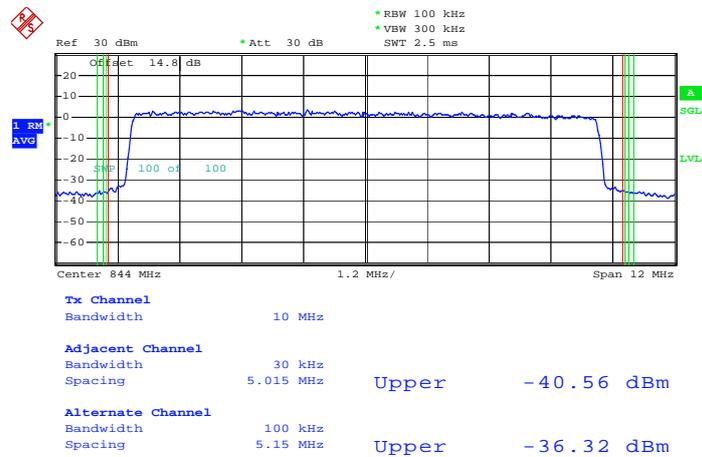


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 49



Date: 20.JUL.2012 19:14:26

Higher Band Edge Plot for QPSK-RB Size 50, RB Offset 0

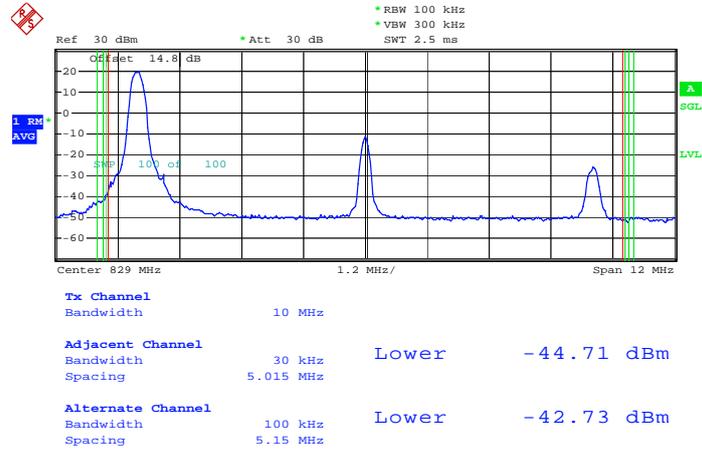


Date: 20.JUL.2012 19:14:49



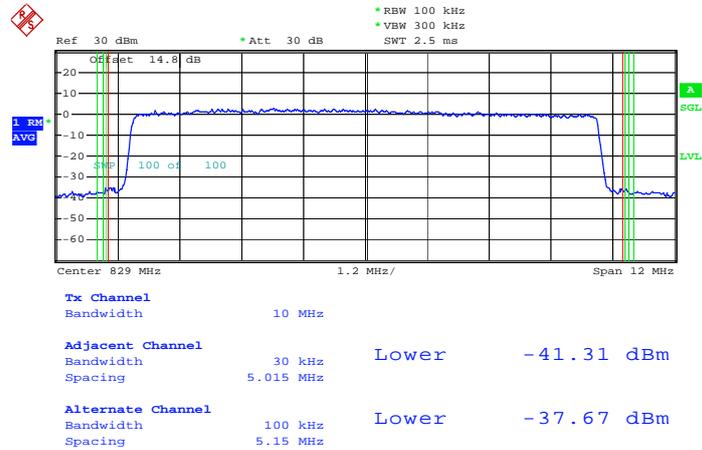
| | | | |
|---------------|------------|--------------------|---------------|
| Band : | LTE Band 5 | BW / Mod. : | 10MHz / 16QAM |
|---------------|------------|--------------------|---------------|

Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 20.JUL.2012 19:13:13

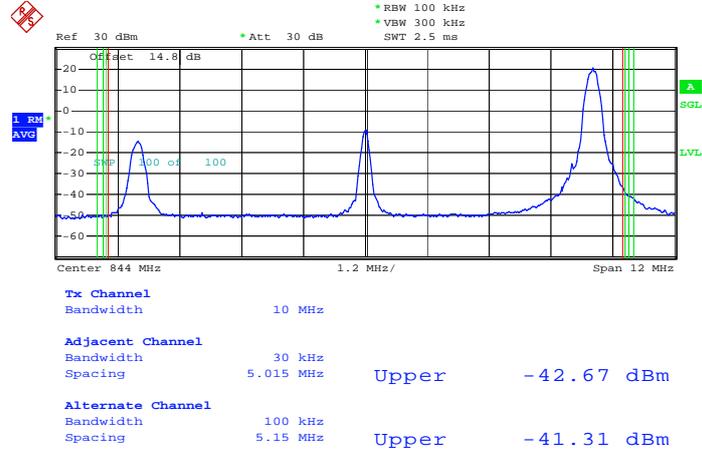
Lower Band Edge Plot for 16QAM -RB Size 50, RB Offset 0



Date: 20.JUL.2012 19:12:17

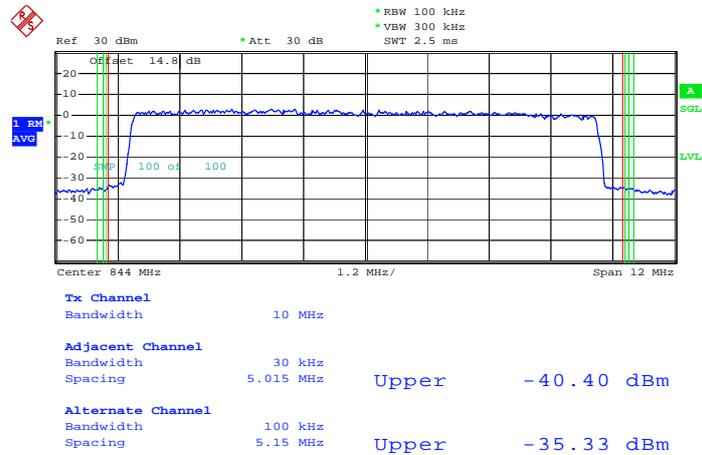


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 49



Date: 20.JUL.2012 19:14:05

Higher Band Edge Plot for 16QAM -RB Size 50, RB Offset 0

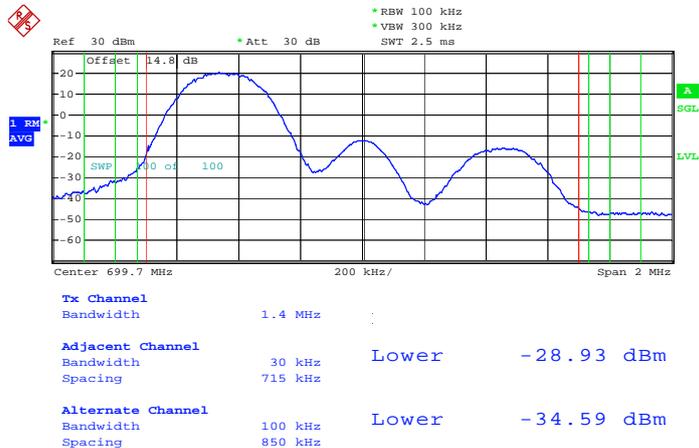


Date: 20.JUL.2012 19:15:06



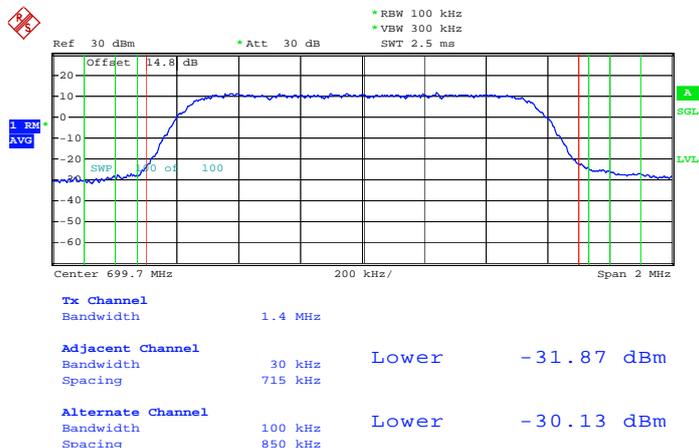
| | | | |
|---------------|-------------|--------------------|---------------|
| Band : | LTE Band 12 | BW / Mod. : | 1.4MHz / QPSK |
|---------------|-------------|--------------------|---------------|

Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 20.JUL.2012 20:19:30

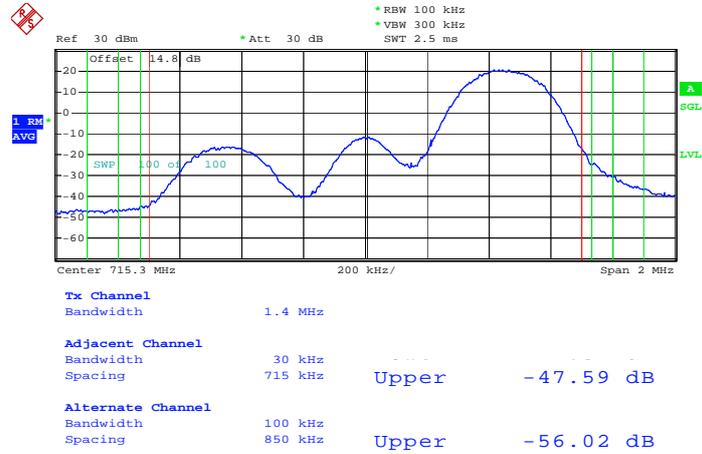
Lower Band Edge Plot for QPSK-RB Size 6, RB Offset 0



Date: 20.JUL.2012 20:17:49

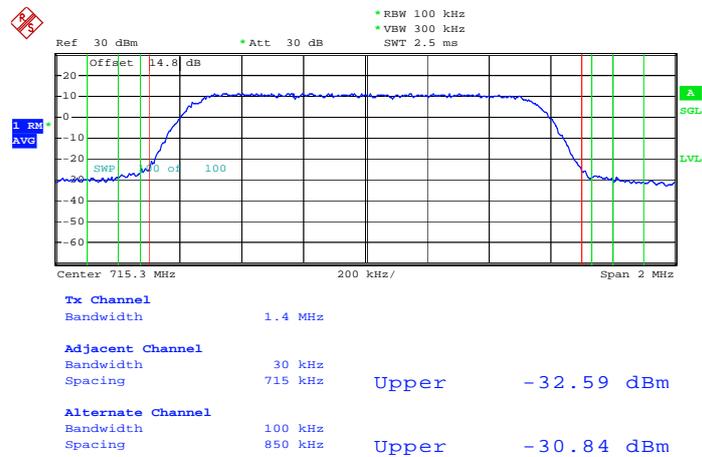


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 5



Date: 20.JUL.2012 21:20:08

Higher Band Edge Plot for QPSK-RB Size 6, RB Offset 0

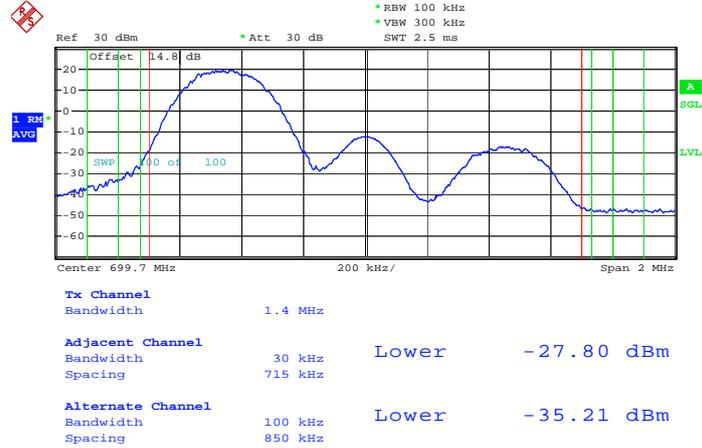


Date: 20.JUL.2012 20:21:36



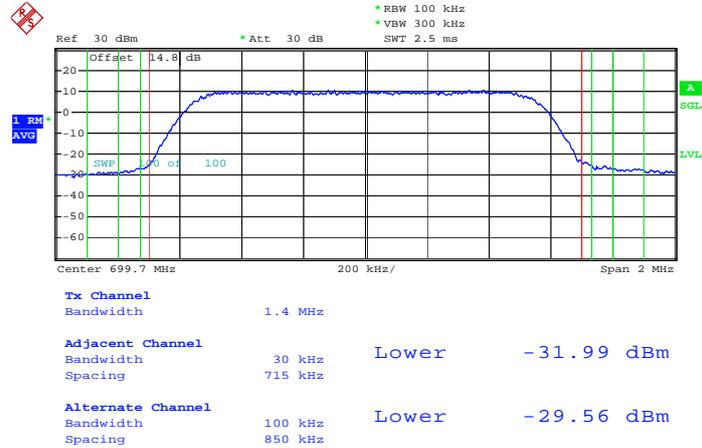
| | | | |
|---------------|-------------|--------------------|----------------|
| Band : | LTE Band 12 | BW / Mod. : | 1.4MHz / 16QAM |
|---------------|-------------|--------------------|----------------|

Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 20.JUL.2012 20:19:06

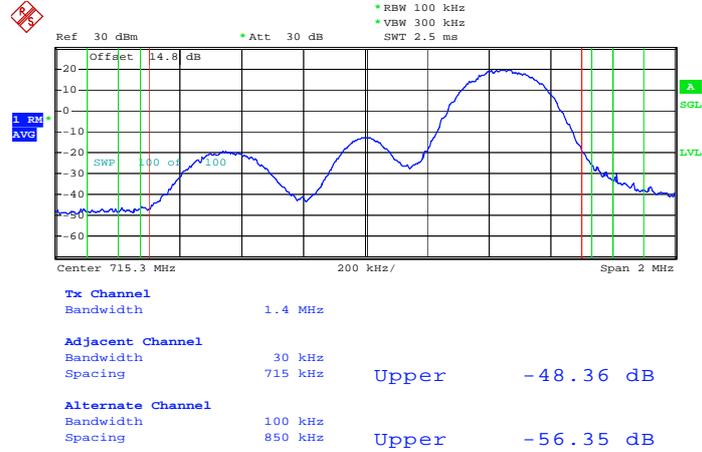
Lower Band Edge Plot for 16QAM -RB Size 6, RB Offset 0



Date: 20.JUL.2012 20:18:21

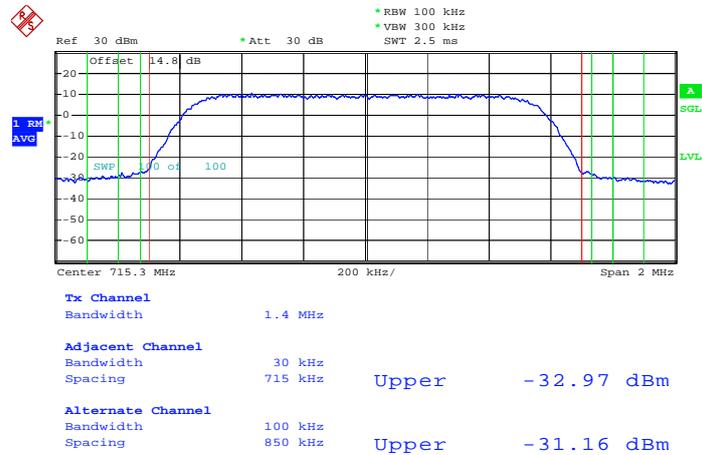


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 5



Date: 20.JUL.2012 21:21:46

Higher Band Edge Plot for 16QAM -RB Size 6, RB Offset 0

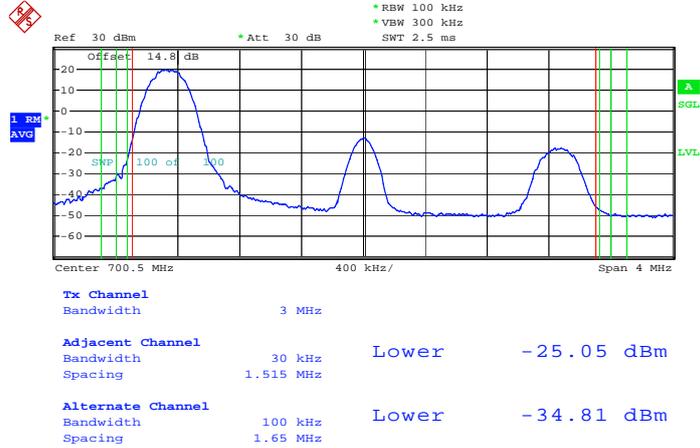


Date: 20.JUL.2012 20:21:16



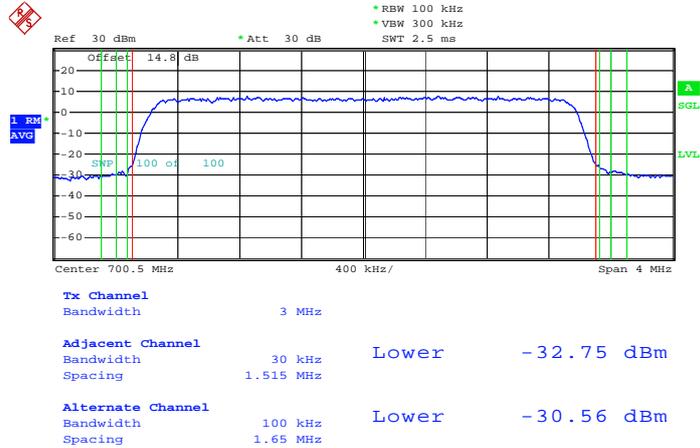
| | | | |
|---------------|-------------|--------------------|-------------|
| Band : | LTE Band 12 | BW / Mod. : | 3MHz / QPSK |
|---------------|-------------|--------------------|-------------|

Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 20.JUL.2012 20:15:15

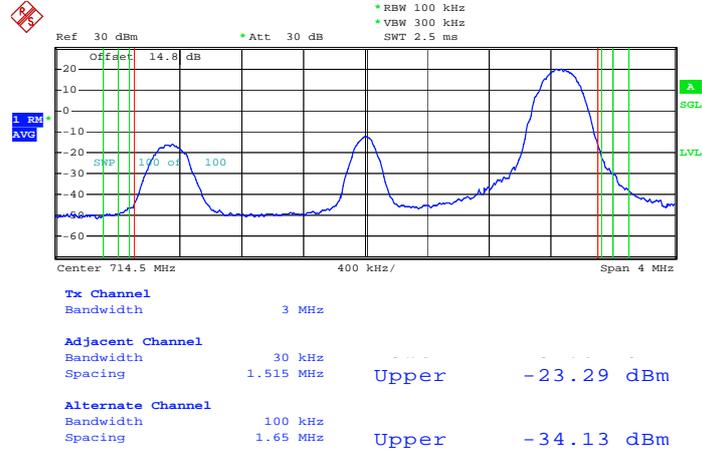
Lower Band Edge Plot for QPSK-RB Size 15, RB Offset 0



Date: 20.JUL.2012 20:16:15

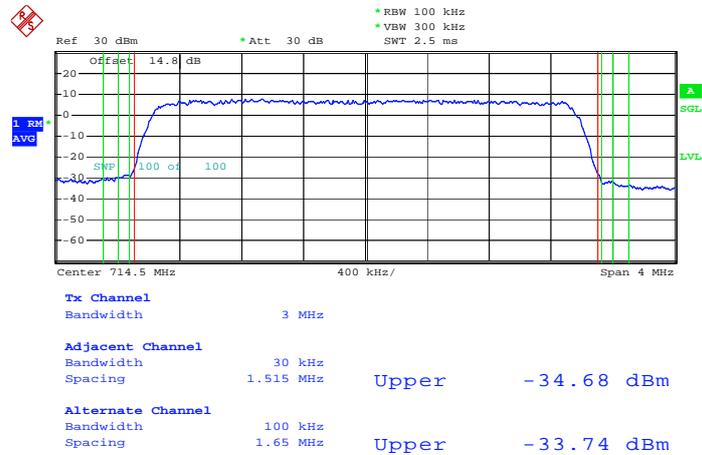


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 14



Date: 20.JUL.2012 20:14:20

Higher Band Edge Plot for QPSK-RB Size 15, RB Offset 0

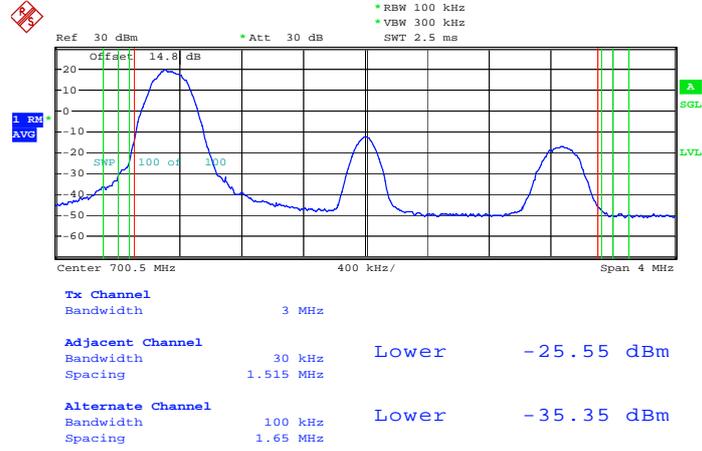


Date: 20.JUL.2012 20:12:42



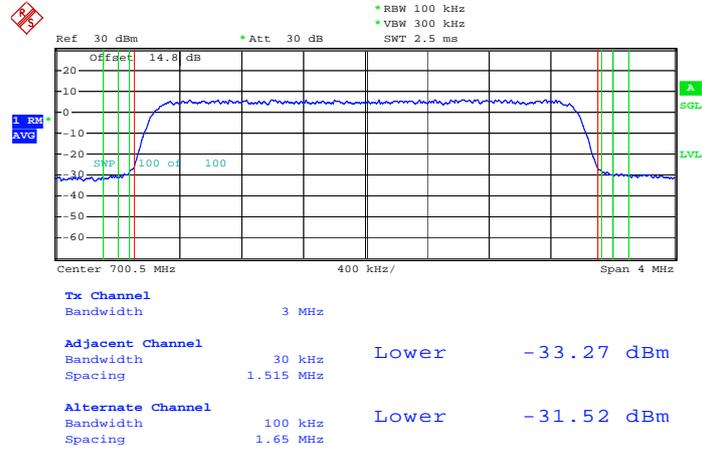
| | | | |
|---------------|-------------|--------------------|--------------|
| Band : | LTE Band 12 | BW / Mod. : | 3MHz / 16QAM |
|---------------|-------------|--------------------|--------------|

Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 20.JUL.2012 20:15:39

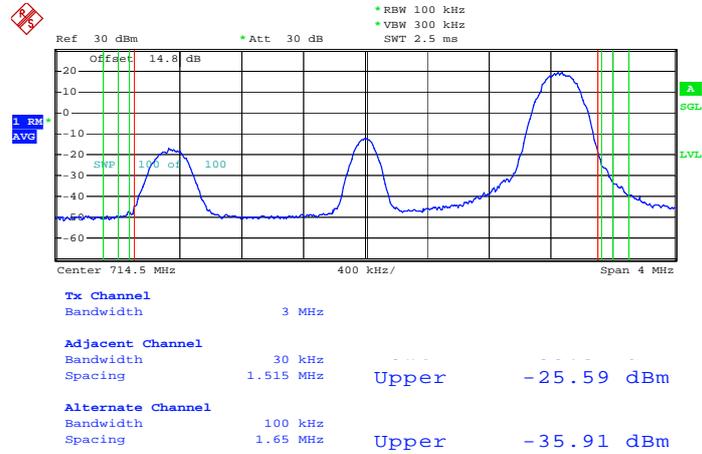
Lower Band Edge Plot for 16QAM -RB Size 15, RB Offset 0



Date: 20.JUL.2012 20:15:57

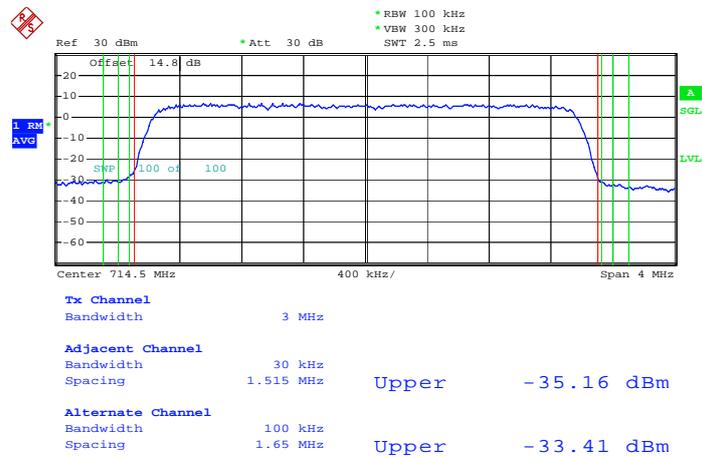


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 14



Date: 20.JUL.2012 20:13:57

Higher Band Edge Plot for 16QAM -RB Size 15, RB Offset 0

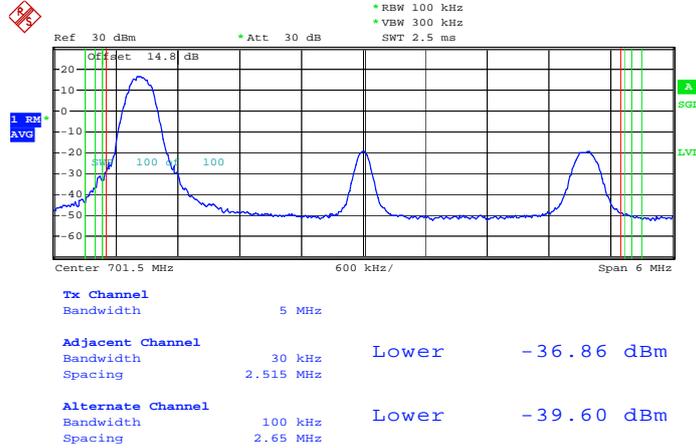


Date: 20.JUL.2012 20:13:17



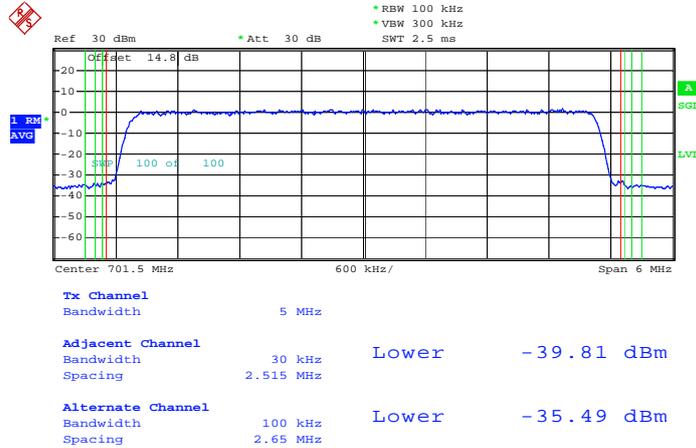
| | | | |
|---------------|-------------|--------------------|-------------|
| Band : | LTE Band 12 | BW / Mod. : | 5MHz / QPSK |
|---------------|-------------|--------------------|-------------|

Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 20.JUL.2012 19:34:33

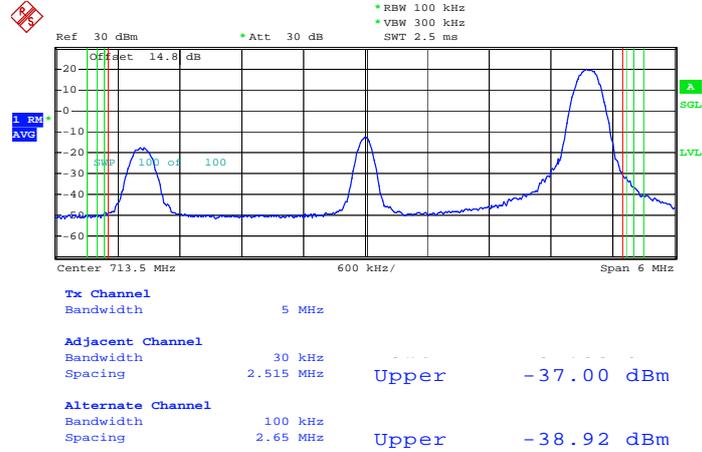
Lower Band Edge Plot for QPSK-RB Size 25, RB Offset 0



Date: 20.JUL.2012 19:32:54

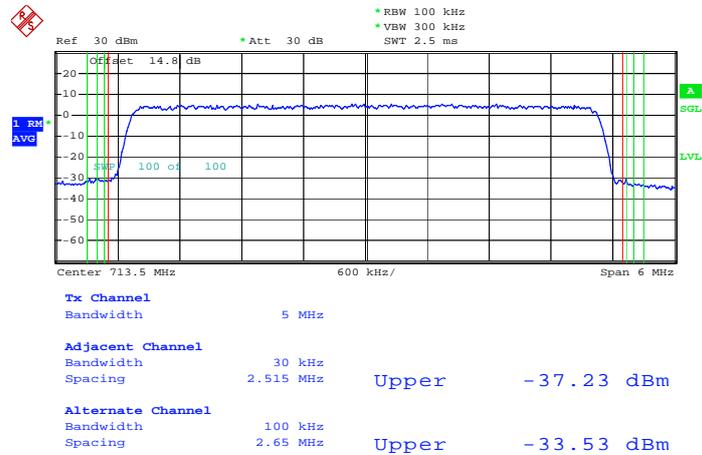


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 24



Date: 20.JUL.2012 19:51:20

Higher Band Edge Plot for QPSK-RB Size 25, RB Offset 0

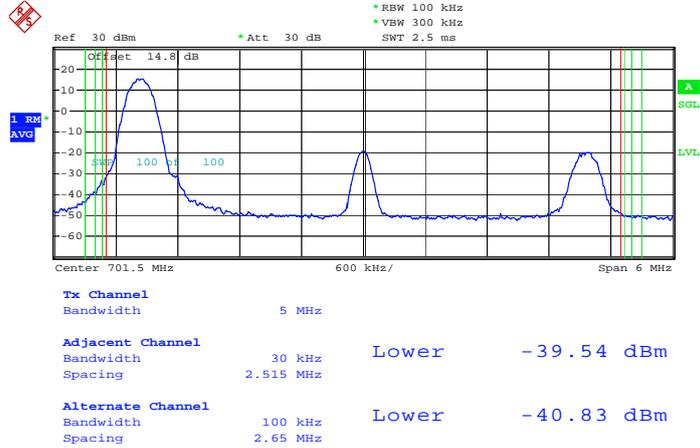


Date: 20.JUL.2012 19:53:17



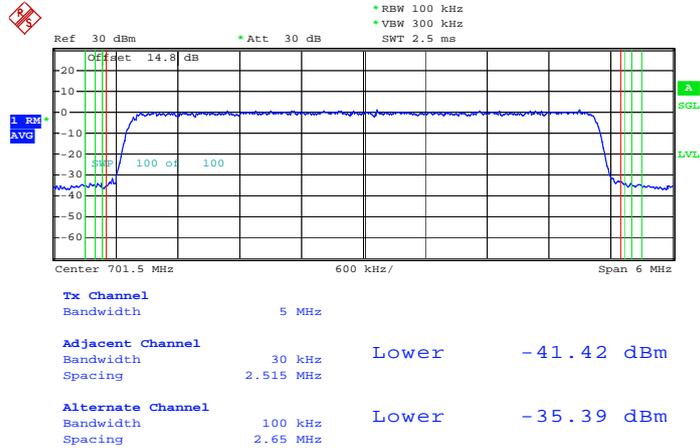
| | | | |
|---------------|-------------|--------------------|--------------|
| Band : | LTE Band 12 | BW / Mod. : | 5MHz / 16QAM |
|---------------|-------------|--------------------|--------------|

Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 20.JUL.2012 19:34:58

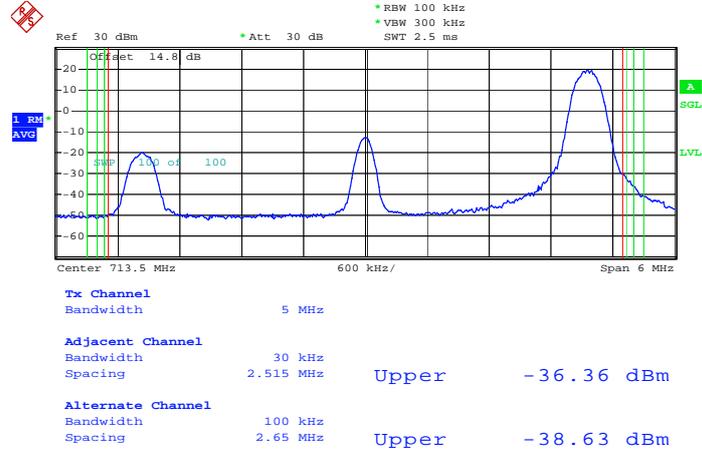
Lower Band Edge Plot for 16QAM -RB Size 25, RB Offset 0



Date: 20.JUL.2012 19:32:28

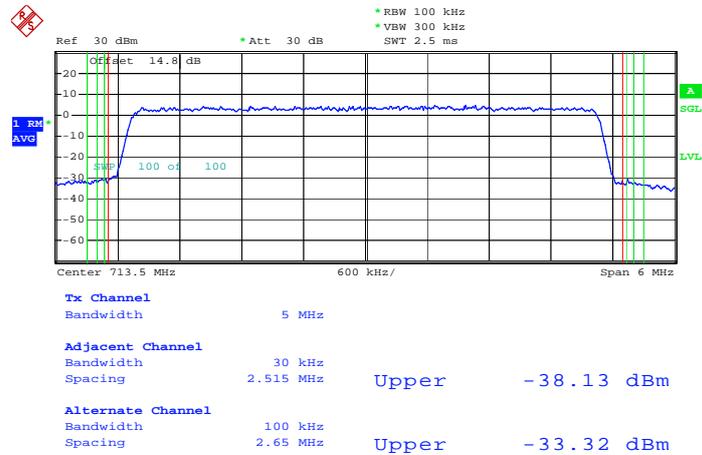


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 24



Date: 20.JUL.2012 19:51:00

Higher Band Edge Plot for 16QAM -RB Size 25, RB Offset 0

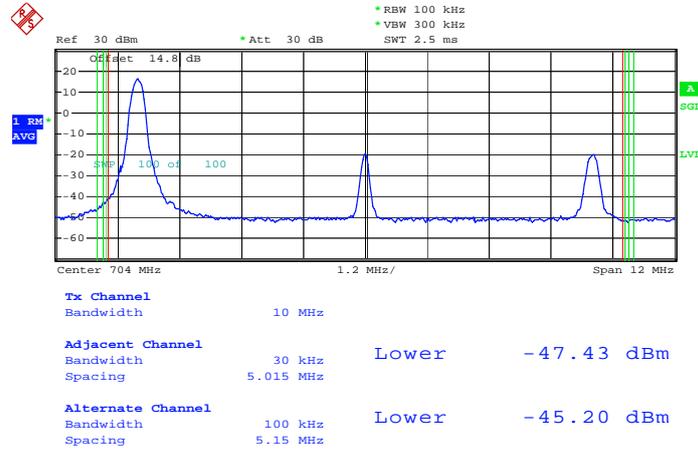


Date: 20.JUL.2012 19:56:51



| | | | |
|---------------|-------------|--------------------|--------------|
| Band : | LTE Band 12 | BW / Mod. : | 10MHz / QPSK |
|---------------|-------------|--------------------|--------------|

Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 20.JUL.2012 19:28:57

Lower Band Edge Plot for QPSK-RB Size 50, RB Offset 0



Date: 20.JUL.2012 19:29:16