

# FCC RF Test Report

APPLICANT : ZTE CORPORATION  
EQUIPMENT : WCDMA/LTE Multi-mode Digital Mobile Phone  
BRAND NAME : ZTE  
MODEL NAME : Z995  
FCC ID : Q78-Z995  
STANDARD : 47 CFR Part 2, 22H, 24E, 27H, 27L  
CLASSIFICATION : PCS Licensed Transmitter Held to Ear (PCE)

The product was received on Jan. 23, 2013 and completely tested on Mar. 25, 2013. 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:



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Jones Tsai / Manager



**SPORTON INTERNATIONAL (KUNSHAN) INC.**  
**No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P.R.C.**



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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(5.4) 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 17) 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 (5.5.1) RSS-133 (6.5.1) RSS-139 (6.5)	Conducted Band Edge Measurement	< 43+10log <sub>10</sub> (P[Watts])	PASS	-
3.5	§2.1051 §22.917(a) §24.238(a) §27.53(g)(h)	RSS-132 (5.5.1) RSS-133 (6.5.1) RSS-139 (6.5)	Conducted Spurious Emission	< 43+10log <sub>10</sub> (P[Watts])	PASS	-
3.5	§2.1053 §22.917(a) §24.238(a) §27.53(g)(h)	RSS-132 (5.5.1) RSS-133 (6.5.1) RSS-139 (6.5)	Field Strength of Spurious Radiation	< 43+10log <sub>10</sub> (P[Watts])	PASS	Under limit 8.46 dB at 10395.000 MHz
3.6	§2.1055 §22.355 §24.235 §27.54	RSS-132 (5.3) 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	WCDMA/LTE Multi-mode Digital Mobile Phone
Brand Name	ZTE
Model Name	Z995
FCC ID	Q78-Z995
EUT supports Radios application	GSM/GPRS/EGPRS/WCDMA/HSPA/HSPA+(Downlink Only)/ LTE/WLAN11bgn/Bluetooth EDR/Bluetooth 4.0-LE
HW Version	w9mA
SW Version	Z995V1.0.0B02
EUT Stage	Identical Prototype

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

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 17 : 706.5 MHz ~ 713.5 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 17 : 736.5 MHz ~ 743.5 MHz
Bandwidth	1.4MHz / 3MHz / 5MHz/ 10MHz / 15MHz / 20MHz (Band 2 and Band 4) 1.4MHz / 3MHz / 5MHz/ 10MHz (Band 5) 5MHz / 10MHz (Band 17)
Maximum Output Power to Antenna	LTE Band 2 : 22.67 dBm LTE Band 4 : 22.20 dBm LTE Band 5 : 23.34 dBm LTE Band 17 : 23.03 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 ERP/EIRP Power

FCC Rule	System	Type of Modulation	BW	Maximum EIRP (W)	Frequency Tolerance (% , Hz, ppm)	Emission Designator
Part 24E	LTE Band 2	QPSK	1.4MHz	0.3020 W	0.007 ppm	1M31G7D
Part 24E	LTE Band 2	16QAM	1.4MHz	0.2421 W	0.009 ppm	1M29D7W
Part 24E	LTE Band 2	QPSK	3MHz	0.3266 W	0.007 ppm	3M11G7D
Part 24E	LTE Band 2	16QAM	3MHz	0.2523 W	0.010 ppm	3M11D7W
Part 24E	LTE Band 2	QPSK	5MHz	0.3041 W	0.009 ppm	5M02G7D
Part 24E	LTE Band 2	16QAM	5MHz	0.2317 W	0.009 ppm	5M02D7W
Part 24E	LTE Band 2	QPSK	10MHz	0.1954 W	0.009 ppm	10M1G7D
Part 24E	LTE Band 2	16QAM	10MHz	0.1552 W	0.009 ppm	10M0D7W
Part 24E	LTE Band 2	QPSK	15MHz	0.2630 W	0.009 ppm	14M7G7D
Part 24E	LTE Band 2	16QAM	15MHz	0.2094 W	0.010 ppm	14M7D7W
Part 24E	LTE Band 2	QPSK	20MHz	0.2838 W	0.007 ppm	21M2G7D
Part 24E	LTE Band 2	16QAM	20MHz	0.2427 W	0.007 ppm	21M4D7W
Part 27L	LTE Band 4	QPSK	1.4MHz	0.4236 W	0.006 ppm	1M10G7D
Part 27L	LTE Band 4	16QAM	1.4MHz	0.3162 W	0.005 ppm	1M10D7W
Part 27L	LTE Band 4	QPSK	3MHz	0.4295 W	0.006 ppm	2M72G7D
Part 27L	LTE Band 4	16QAM	3MHz	0.3243 W	0.006 ppm	2M74D7W
Part 27L	LTE Band 4	QPSK	5MHz	0.3926 W	0.006 ppm	4M50G7D
Part 27L	LTE Band 4	16QAM	5MHz	0.3013 W	0.005 ppm	4M50D7W
Part 27L	LTE Band 4	QPSK	10MHz	0.4227 W	0.006 ppm	9M12G7D
Part 27L	LTE Band 4	16QAM	10MHz	0.3228 W	0.006 ppm	9M12D7W
Part 27L	LTE Band 4	QPSK	15MHz	0.4529 W	0.006 ppm	13M6G7D
Part 27L	LTE Band 4	16QAM	15MHz	0.3396 W	0.006 ppm	13M6D7W
Part 27L	LTE Band 4	QPSK	20MHz	0.3936 W	0.005 ppm	18M6G7D
Part 27L	LTE Band 4	16QAM	20MHz	0.2958 W	0.007 ppm	18M7D7W



FCC Rule	System	Type of Modulation	BW	Maximum ERP (W)	Frequency Tolerance (% , Hz, ppm)	Emission Designator
Part 22H	LTE Band 5	QPSK	1.4MHz	0.0962 W	0.020 ppm	1M10G7D
Part 22H	LTE Band 5	16QAM	1.4MHz	0.0764 W	0.010 ppm	1M10D7W
Part 22H	LTE Band 5	QPSK	3MHz	0.0955 W	0.014 ppm	2M74G7D
Part 22H	LTE Band 5	16QAM	3MHz	0.0743 W	0.006 ppm	2M72D7W
Part 22H	LTE Band 5	QPSK	5MHz	0.1122 W	0.010 ppm	4M48G7D
Part 22H	LTE Band 5	16QAM	5MHz	0.0818 W	0.007 ppm	4M50D7W
Part 22H	LTE Band 5	QPSK	10MHz	0.1127 W	0.010 ppm	9M12G7D
Part 22H	LTE Band 5	16QAM	10MHz	0.0828 W	0.006 ppm	9M04D7W
Part 27H	LTE Band 17	QPSK	5MHz	0.1183 W	0.005 ppm	4M50G7D
Part 27H	LTE Band 17	16QAM	5MHz	0.0933 W	0.005 ppm	4M50D7W
Part 27H	LTE Band 17	QPSK	10MHz	0.1143 W	0.008 ppm	9M20G7D
Part 27H	LTE Band 17	16QAM	10MHz	0.0948 W	0.008 ppm	9M12D7W

## 1.5 Testing Site

<b>Test Site</b>	SPORTON INTERNATIONAL (KUNSHAN) INC.		
<b>Test Site Location</b>	No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P.R.C. TEL: +86-0512-5790-0158 FAX: +86-0512-5790-0958		
<b>Test Site No.</b>	<b>Sporton Site No.</b>		<b>FCC/IC Registration No.</b>
	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, 22H, 24E, 27H, 27L
- ♦ ANSI / TIA / EIA-603-C-2004
- ♦ FCC KDB 971168 D01 Power Meas. License Digital Systems v01

### 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.	DC Power Supply	GWINSTEK	GPS-3030D	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 17.

Test Modes			
Band		Radiated TCs	Conducted TCs
LTE Band 2	BW 1.4MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) QPSK Link</li> </ul>	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) Link</li> <li>■ LTE (RB Size 1, RB Offset 2) Link</li> <li>■ LTE (RB Size 1, RB Offset 5) Link</li> <li>■ LTE (RB Size 3, RB Offset 0) Link</li> <li>■ LTE (RB Size 3, RB Offset 1) Link</li> <li>■ LTE (RB Size 3, RB Offset 2) Link</li> <li>■ LTE (RB Size 6, RB Offset 0) Link</li> </ul>
	BW 3MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) QPSK Link</li> </ul>	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) Link</li> <li>■ LTE (RB Size 1, RB Offset 7) Link</li> <li>■ LTE (RB Size 1, RB Offset 14) Link</li> <li>■ LTE (RB Size 8, RB Offset 0) Link</li> <li>■ LTE (RB Size 8, RB Offset 4) Link</li> <li>■ LTE (RB Size 8, RB Offset 7) Link</li> <li>■ LTE (RB Size 15, RB Offset 0) Link</li> </ul>
	BW 5MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) QPSK Link</li> </ul>	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) Link</li> <li>■ LTE (RB Size 1, RB Offset 12) Link</li> <li>■ LTE (RB Size 1, RB Offset 24) Link</li> <li>■ LTE (RB Size 12, RB Offset 0) Link</li> <li>■ LTE (RB Size 12, RB Offset 6) Link</li> <li>■ LTE (RB Size 12, RB Offset 11) Link</li> <li>■ LTE (RB Size 25, RB Offset 0) Link</li> </ul>



<b>LTE Band 2</b>	<b>BW 10MHz</b>	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) QPSK Link</li> </ul>	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) Link</li> <li>■ LTE (RB Size 1, RB Offset 24) Link</li> <li>■ LTE (RB Size 1, RB Offset 49) Link</li> <li>■ LTE (RB Size 25, RB Offset 0) Link</li> <li>■ LTE (RB Size 25, RB Offset 12) Link</li> <li>■ LTE (RB Size 25, RB Offset 24) Link</li> <li>■ LTE (RB Size 50, RB Offset 0) Link</li> </ul>
	<b>BW 15MHz</b>	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) QPSK Link</li> </ul>	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) Link</li> <li>■ LTE (RB Size 1, RB Offset 37) Link</li> <li>■ LTE (RB Size 1, RB Offset 74) Link</li> <li>■ LTE (RB Size 36, RB Offset 0) Link</li> <li>■ LTE (RB Size 36, RB Offset 19) Link</li> <li>■ LTE (RB Size 36, RB Offset 39) Link</li> <li>■ LTE (RB Size 75, RB Offset 0) Link</li> </ul>
	<b>BW 20MHz</b>	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) QPSK Link</li> </ul>	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) Link</li> <li>■ LTE (RB Size 1, RB Offset 49) Link</li> <li>■ LTE (RB Size 1, RB Offset 99) Link</li> <li>■ LTE (RB Size 50, RB Offset 0) Link</li> <li>■ LTE (RB Size 50, RB Offset 24) Link</li> <li>■ LTE (RB Size 50, RB Offset 49) Link</li> <li>■ LTE (RB Size 100, RB Offset 0) Link</li> </ul>



Test Modes			
Band		Radiated TCs	Conducted TCs
LTE Band 4	BW 1.4MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) QPSK Link</li> </ul>	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) Link</li> <li>■ LTE (RB Size 1, RB Offset 2) Link</li> <li>■ LTE (RB Size 1, RB Offset 5) Link</li> <li>■ LTE (RB Size 3, RB Offset 0) Link</li> <li>■ LTE (RB Size 3, RB Offset 1) Link</li> <li>■ LTE (RB Size 3, RB Offset 2) Link</li> <li>■ LTE (RB Size 6, RB Offset 0) Link</li> </ul>
	BW 3MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) QPSK Link</li> </ul>	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) Link</li> <li>■ LTE (RB Size 1, RB Offset 7) Link</li> <li>■ LTE (RB Size 1, RB Offset 14) Link</li> <li>■ LTE (RB Size 8, RB Offset 0) Link</li> <li>■ LTE (RB Size 8, RB Offset 4) Link</li> <li>■ LTE (RB Size 8, RB Offset 7) Link</li> <li>■ LTE (RB Size 15, RB Offset 0) Link</li> </ul>
	BW 5MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) QPSK Link</li> </ul>	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) Link</li> <li>■ LTE (RB Size 1, RB Offset 12) Link</li> <li>■ LTE (RB Size 1, RB Offset 24) Link</li> <li>■ LTE (RB Size 12, RB Offset 0) Link</li> <li>■ LTE (RB Size 12, RB Offset 6) Link</li> <li>■ LTE (RB Size 12, RB Offset 11) Link</li> <li>■ LTE (RB Size 25, RB Offset 0) Link</li> </ul>
LTE Band 4	BW 10MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) QPSK Link</li> </ul>	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) Link</li> <li>■ LTE (RB Size 1, RB Offset 24) Link</li> <li>■ LTE (RB Size 1, RB Offset 49) Link</li> <li>■ LTE (RB Size 25, RB Offset 0) Link</li> <li>■ LTE (RB Size 25, RB Offset 12) Link</li> <li>■ LTE (RB Size 25, RB Offset 24) Link</li> <li>■ LTE (RB Size 50, RB Offset 0) Link</li> </ul>
	BW 15MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) QPSK Link</li> </ul>	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) Link</li> <li>■ LTE (RB Size 1, RB Offset 37) Link</li> <li>■ LTE (RB Size 1, RB Offset 74) Link</li> <li>■ LTE (RB Size 38, RB Offset 0) Link</li> <li>■ LTE (RB Size 38, RB Offset 18) Link</li> <li>■ LTE (RB Size 38, RB Offset 37) Link</li> <li>■ LTE (RB Size 75, RB Offset 0) Link</li> </ul>

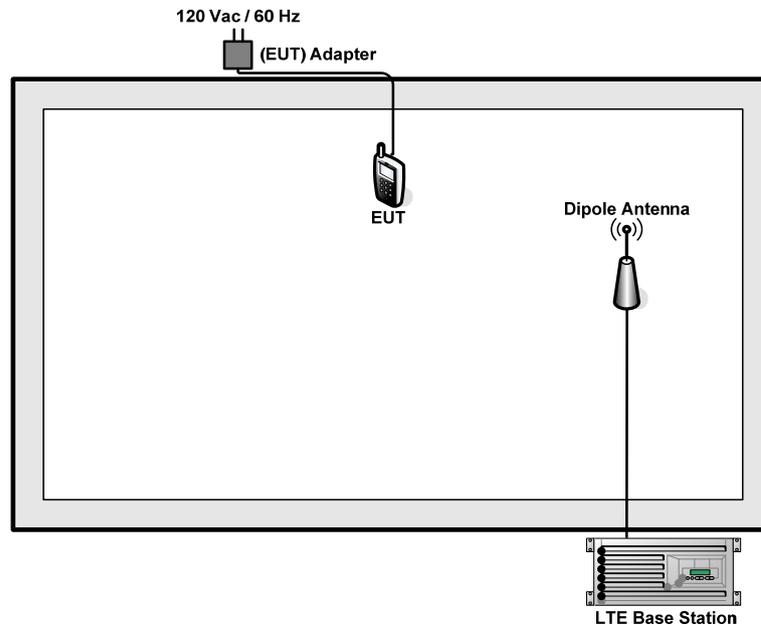


LTE Band 4	BW 20MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) QPSK Link</li> </ul>	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) Link</li> <li>■ LTE (RB Size 1, RB Offset 49) Link</li> <li>■ LTE (RB Size 1, RB Offset 99) Link</li> <li>■ LTE (RB Size 50, RB Offset 0) Link</li> <li>■ LTE (RB Size 50, RB Offset 24) Link</li> <li>■ LTE (RB Size 50, RB Offset 49) Link</li> <li>■ LTE (RB Size 100, RB Offset 0) Link</li> </ul>
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Test Modes			
Band	Radiated TCs		Conducted TCs
LTE Band 5	BW 1.4MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) QPSK Link</li> </ul>	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) Link</li> <li>■ LTE (RB Size 1, RB Offset 2) Link</li> <li>■ LTE (RB Size 1, RB Offset 5) Link</li> <li>■ LTE (RB Size 3, RB Offset 0) Link</li> <li>■ LTE (RB Size 3, RB Offset 1) Link</li> <li>■ LTE (RB Size 3, RB Offset 2) Link</li> <li>■ LTE (RB Size 6, RB Offset 0) Link</li> </ul>
	BW 3MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) QPSK Link</li> </ul>	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) Link</li> <li>■ LTE (RB Size 1, RB Offset 7) Link</li> <li>■ LTE (RB Size 1, RB Offset 14) Link</li> <li>■ LTE (RB Size 8, RB Offset 0) Link</li> <li>■ LTE (RB Size 8, RB Offset 4) Link</li> <li>■ LTE (RB Size 8, RB Offset 7) Link</li> <li>■ LTE (RB Size 15, RB Offset 0) Link</li> </ul>
	BW 5MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) QPSK Link</li> </ul>	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) Link</li> <li>■ LTE (RB Size 1, RB Offset 12) Link</li> <li>■ LTE (RB Size 1, RB Offset 24) Link</li> <li>■ LTE (RB Size 12, RB Offset 0) Link</li> <li>■ LTE (RB Size 12, RB Offset 6) Link</li> <li>■ LTE (RB Size 12, RB Offset 11) Link</li> <li>■ LTE (RB Size 25, RB Offset 0) Link</li> </ul>
	BW 10MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) QPSK Link</li> </ul>	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) Link</li> <li>■ LTE (RB Size 1, RB Offset 24) Link</li> <li>■ LTE (RB Size 1, RB Offset 49) Link</li> <li>■ LTE (RB Size 25, RB Offset 0) Link</li> <li>■ LTE (RB Size 25, RB Offset 12) Link</li> <li>■ LTE (RB Size 25, RB Offset 24) Link</li> <li>■ LTE (RB Size 50, RB Offset 0) Link</li> </ul>

Test Modes			
Band		Radiated TCs	Conducted TCs
LTE Band 17	BW 5MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) QPSK Link</li> </ul>	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) Link</li> <li>■ LTE (RB Size 1, RB Offset 12) Link</li> <li>■ LTE (RB Size 1, RB Offset 24) Link</li> <li>■ LTE (RB Size 12, RB Offset 0) Link</li> <li>■ LTE (RB Size 12, RB Offset 6) Link</li> <li>■ LTE (RB Size 12, RB Offset 11) Link</li> <li>■ LTE (RB Size 25, RB Offset 0) Link</li> </ul>
	BW 10MHz	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) QPSK Link</li> </ul>	<ul style="list-style-type: none"> <li>■ LTE (RB Size 1, RB Offset 0) Link</li> <li>■ LTE (RB Size 1, RB Offset 24) Link</li> <li>■ LTE (RB Size 1, RB Offset 49) Link</li> <li>■ LTE (RB Size 25, RB Offset 0) Link</li> <li>■ LTE (RB Size 25, RB Offset 12) Link</li> <li>■ LTE (RB Size 25, RB Offset 24) Link</li> <li>■ LTE (RB Size 50, RB Offset 0) Link</li> </ul>

## 2.2 Connection Diagram of Test System





### **3 Test Result**

#### **3.1 Conducted Output Power and Effective Radiated Power/ Effective Isotropic Radiated Power Measurement**

##### **3.1.1 Maximum Output Power and Effective Radiated Power/ Effective Isotropic Radiated Power Measurement**

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 watt with band 5 and 3 watt with band 17.

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:**

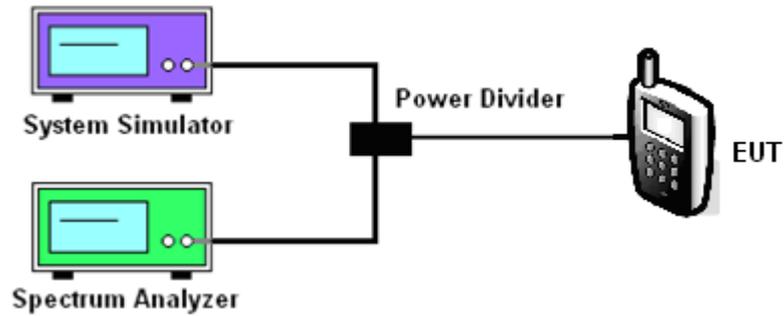
1. The RF output of the transmitter was connected to base station simulator.
2. Set EUT at maximum average power by base station simulator.
3. Measure lowest, middle, and highest channels for each bandwidth and different modulation.

**For Effective Radiated Power and Effective Isotropic Radiated Power Measurement:**

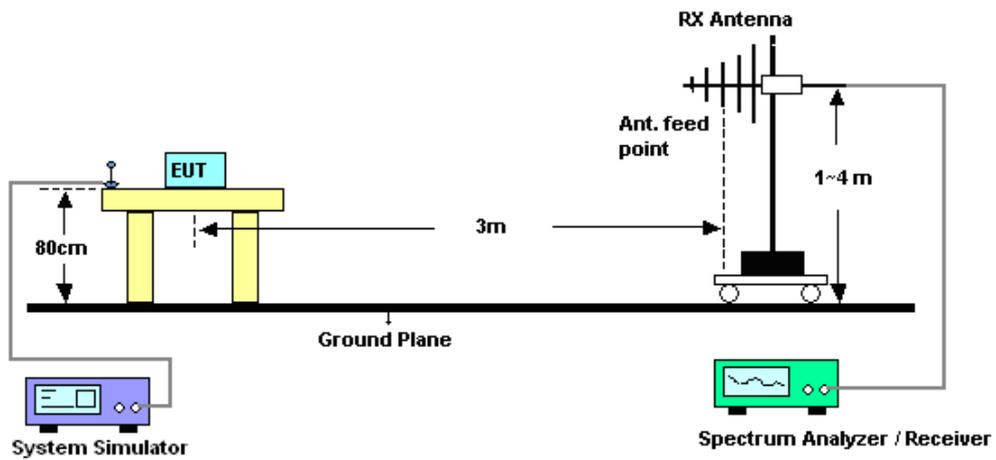
1. The EUT was placed on a turntable with 1.5 meter height in a fully anechoic chamber.
2. The EUT was set at 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. GSM operating modes: Set RBW= 1MHz, VBW= 3MHz, RMS detector over burst;  
UMTS operating modes: Set RBW= 100 KHz, VBW= 300 KHz, RMS detector over frame, and use channel power option with bandwidth=5MHz, per section 4.0 of KDB 971168 D01.
4. The table was rotated 360 degrees to determine the position of the highest radiated power.
5. The height of the receiving antenna is adjusted to look for the maximum ERP/EIRP.
6. Taking the record of maximum ERP/EIRP.
7. A dipole antenna was substituted in place of the EUT and was driven by a signal generator.
8. The conducted power at the terminal of the dipole antenna is measured.
9. Repeat step 3 to step 5 to get the maximum ERP/EIRP of the substitution antenna.
10.  $ERP/EIRP = P_s + E_t - E_s + G_s = P_s + R_t - R_s + G_s$   
Ps (dBm) : Input power to substitution antenna.  
Gs (dBi or dBd) : Substitution antenna Gain.  
 $E_t = R_t + AF$   
 $E_s = R_s + AF$   
AF (dB/m) : Receive antenna factor  
Rt : The highest received signal in spectrum analyzer for EUT.  
Rs : The highest received signal in spectrum analyzer for substitution antenna.

### 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	22.50	0.1778	
					1	2	22.44	0.1754	
					1	5	22.46	0.1762	
					3	0	22.40	0.1738	
					3	1	22.49	0.1774	
					3	2	22.48	0.1770	
		16-QAM	6	0	21.55	0.1429			
			1	0	21.60	0.1445			
			1	2	21.54	0.1426			
			1	5	21.23	0.1327			
			3	0	21.55	0.1429			
			3	1	21.56	0.1432			
		18900	1880.0	QPSK	1880.0	3	2	21.58	0.1439
						6	0	20.70	0.1175
						1	0	22.59	0.1816
						1	2	22.57	0.1807
						1	5	22.51	0.1782
						3	0	22.54	0.1795
	16-QAM		3	1	22.58	0.1811			
			3	2	22.55	0.1799			
			6	0	21.62	0.1452			
			1	0	21.72	0.1486			
			1	2	21.41	0.1384			
			1	5	21.65	0.1462			
	19193	1909.3	QPSK	1909.3	3	0	21.70	0.1479	
					3	1	21.63	0.1455	
					3	2	21.71	0.1483	
					6	0	20.84	0.1213	
					1	0	22.11	0.1626	
					1	2	22.01	0.1589	
		16-QAM	1	5	22.06	0.1607			
			3	0	22.08	0.1614			
			3	1	22.06	0.1607			
			3	2	22.04	0.1600			
			6	0	21.04	0.1271			
			1	0	20.95	0.1245			
1			2	20.90	0.1230				
1			5	20.80	0.1202				
3			0	20.83	0.1211				
3			1	20.83	0.1211				
3			2	20.90	0.1230				
6			0	20.17	0.1040				



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	22.64	0.1837
					1	7	22.50	0.1778
					1	14	22.61	0.1824
					8	0	21.51	0.1416
					8	4	21.60	0.1445
					8	7	21.62	0.1452
				15	0	21.52	0.1419	
				16-QAM	1	0	21.69	0.1476
					1	7	21.71	0.1483
		1	14		21.37	0.1371		
		8	0		20.46	0.1112		
		8	4		20.44	0.1107		
		8	7		20.51	0.1125		
		15	0	20.49	0.1119			
		18900	1880.0	QPSK	1	0	22.56	0.1803
					1	7	22.54	0.1795
					1	14	22.53	0.1791
					8	0	21.57	0.1435
	8				4	21.63	0.1455	
	8				7	21.53	0.1422	
	15			0	21.55	0.1429		
	16-QAM			1	0	21.77	0.1503	
				1	7	21.76	0.1500	
		1	14	21.73	0.1489			
		8	0	20.51	0.1125			
		8	4	20.57	0.1140			
		8	7	20.63	0.1156			
	15	0	20.58	0.1143				
	19185	1908.5	QPSK	1	0	22.29	0.1694	
				1	7	22.18	0.1652	
				1	14	22.05	0.1603	
				8	0	21.30	0.1349	
				8	4	21.22	0.1324	
				8	7	21.12	0.1294	
				15	0	21.14	0.1300	
				16-QAM	1	0	21.09	0.1285
1					7	20.97	0.1250	
1			14		20.84	0.1213		
8			0		20.27	0.1064		
8			4		20.22	0.1052		
8			7		20.25	0.1059		
15			0		20.23	0.1054		



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	22.43	0.1750
					1	12	22.59	0.1816
					1	24	22.51	0.1782
					12	0	21.55	0.1429
					12	6	21.61	0.1449
					12	11	21.54	0.1426
					25	0	21.46	0.1400
		16-QAM	1	0	21.20	0.1318		
			1	12	21.51	0.1416		
			1	24	21.83	0.1524		
			12	0	20.58	0.1143		
			12	6	20.67	0.1167		
			12	11	20.58	0.1143		
			25	0	20.49	0.1119		
	18900	1880.0	QPSK	1	0	22.61	0.1824	
				1	12	22.54	0.1795	
				1	24	22.54	0.1795	
				12	0	21.60	0.1445	
				12	6	21.51	0.1416	
				12	11	21.50	0.1413	
				25	0	21.48	0.1406	
	16-QAM	1	0	21.87	0.1538			
		1	12	21.82	0.1521			
		1	24	21.85	0.1531			
		12	0	20.63	0.1156			
		12	6	20.67	0.1167			
		12	11	20.60	0.1148			
25		0	20.43	0.1104				
19175	1907.5	QPSK	1	0	22.29	0.1694		
			1	12	22.28	0.1690		
			1	24	22.08	0.1614		
			12	0	21.38	0.1374		
			12	6	21.33	0.1358		
			12	11	21.23	0.1327		
			25	0	21.17	0.1309		
			16-QAM	1	0	21.57	0.1435	
	1	12		21.00	0.1259			
	1	24		21.05	0.1274			
	12	0		20.49	0.1119			
	12	6		20.43	0.1104			
	12	11		20.29	0.1069			
	25	0		20.21	0.1050			



Mode	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power (dBm)	Average Power (Watts)			
					RB Size	RB Offset					
LTE Band 2	10MHz	18650	1855.0	QPSK	1	0	22.60	0.1820			
					1	24	22.49	0.1774			
					1	49	22.55	0.1799			
					25	0	21.55	0.1429			
					25	12	21.56	0.1432			
					25	24	21.54	0.1426			
				16-QAM	50	0	21.37	0.1371			
					1	0	21.66	0.1466			
					1	24	21.30	0.1349			
		18900	1880.0	QPSK	1	49	21.39	0.1377			
					25	0	20.56	0.1138			
					25	12	20.56	0.1138			
					25	24	20.55	0.1135			
					50	0	20.38	0.1091			
					16-QAM	1	0	22.59	0.1816		
				1		24	22.55	0.1799			
				1		49	22.55	0.1799			
				19150	1905.0	QPSK	25	0	21.51	0.1416	
	25	12	21.49				0.1409				
	25	24	21.46				0.1400				
	50	0	21.31				0.1352				
	16-QAM	1	0				21.75	0.1496			
		1	24				21.72	0.1486			
		1	49			21.39	0.1377				
	QPSK	19150	1905.0			QPSK	25	0	20.52	0.1127	
							25	12	20.58	0.1143	
				25	24		20.44	0.1107			
				50	0		20.40	0.1096			
				16-QAM	1		0	22.43	0.1750		
					1		24	22.36	0.1722		
					1	49	22.13	0.1633			
				16-QAM	19150	1905.0	QPSK	25	0	21.38	0.1374
								25	12	21.33	0.1358
		25	24					21.31	0.1352		
		50	0					21.13	0.1297		
		16-QAM	1					0	21.33	0.1358	
1			24					21.19	0.1315		
1			49				21.26	0.1337			
16-QAM		19150	1905.0				16-QAM	25	0	20.45	0.1109
								25	12	20.44	0.1107
				25	24	20.24		0.1057			
				50	0	20.24		0.1057			



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	22.61	0.1824
					1	37	22.60	0.1820
					1	74	22.56	0.1803
					36	0	21.62	0.1452
					36	19	21.48	0.1406
					36	39	21.52	0.1419
					75	0	21.44	0.1393
		16-QAM	1	0	21.49	0.1409		
			1	37	21.47	0.1403		
			1	74	21.34	0.1361		
			36	0	20.54	0.1132		
			36	19	20.52	0.1127		
			36	39	20.39	0.1094		
			75	0	20.33	0.1079		
	18900	1880.0	QPSK	1	0	22.59	0.1816	
				1	37	22.55	0.1799	
				1	74	22.58	0.1811	
				36	0	21.48	0.1406	
				36	19	21.46	0.1400	
				36	39	21.54	0.1426	
				75	0	21.35	0.1365	
		16-QAM	1	0	21.65	0.1462		
			1	37	21.63	0.1455		
			1	74	21.14	0.1300		
			36	0	20.55	0.1135		
			36	19	20.59	0.1146		
			36	39	20.57	0.1140		
75			0	20.43	0.1104			
19125	1902.5	QPSK	1	0	22.63	0.1832		
			1	37	22.58	0.1811		
			1	74	22.26	0.1683		
			36	0	21.44	0.1393		
			36	19	21.42	0.1387		
			36	39	21.35	0.1365		
			75	0	21.33	0.1358		
	16-QAM	1	0	21.74	0.1493			
		1	37	21.69	0.1476			
		1	74	21.33	0.1358			
		36	0	20.56	0.1138			
		36	19	20.50	0.1122			
		36	39	20.52	0.1127			
		75	0	20.27	0.1064			



Mode	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power (dBm)	Average Power (Watts)
					RB Size	RB Offset		
LTE Band 2	20MHz	18700	1860.5	QPSK	1	0	22.60	0.1820
					1	49	22.56	0.1803
					1	99	22.58	0.1811
					50	0	21.46	0.1400
					50	24	21.36	0.1368
					50	49	21.33	0.1358
		16-QAM	100	0	21.44	0.1393		
			1	0	21.76	0.1500		
			1	49	21.75	0.1496		
			1	99	21.68	0.1472		
			50	0	20.35	0.1084		
			50	24	20.40	0.1096		
	18900	1880.0	QPSK	50	49	20.37	0.1089	
				100	0	20.36	0.1086	
				1	0	22.67	0.1849	
				1	49	22.58	0.1811	
				1	99	22.41	0.1742	
				50	0	21.48	0.1406	
		16-QAM	50	24	21.37	0.1371		
			50	49	21.33	0.1358		
			100	0	21.47	0.1403		
			1	0	21.86	0.1535		
			1	49	21.85	0.1531		
			1	99	21.28	0.1343		
	19100	1900.0	QPSK	50	0	20.38	0.1091	
				50	24	20.29	0.1069	
				50	49	20.37	0.1089	
				100	0	20.39	0.1094	
				1	0	22.65	0.1841	
				1	49	22.56	0.1803	
		16-QAM	1	99	22.23	0.1671		
			50	0	21.42	0.1387		
			50	24	21.31	0.1352		
			50	49	21.18	0.1312		
			100	0	21.35	0.1365		
			1	0	21.93	0.1560		
	1	49	21.70	0.1479				
	1	99	21.09	0.1285				
	50	0	20.37	0.1089				
	50	24	20.33	0.1079				
	50	49	20.22	0.1052				
	100	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	1.4MHz	19957	1710.7	QPSK	1	0	21.94	0.1563
					1	2	21.88	0.1542
					1	5	21.83	0.1524
					3	0	21.88	0.1542
					3	1	21.91	0.1552
					3	2	21.81	0.1517
					6	0	20.88	0.1225
		16-QAM	1	0	21.16	0.1306		
			1	2	21.13	0.1297		
			1	5	20.48	0.1117		
			3	0	20.94	0.1242		
			3	1	20.97	0.1250		
			3	2	20.87	0.1222		
			6	0	19.89	0.0975		
	20175	1732.5	QPSK	1	0	21.97	0.1574	
				1	2	21.88	0.1542	
				1	5	21.96	0.1570	
				3	0	21.84	0.1528	
				3	1	21.81	0.1517	
				3	2	21.82	0.1521	
				6	0	20.83	0.1211	
		16-QAM	1	0	20.98	0.1253		
			1	2	20.92	0.1236		
			1	5	20.88	0.1225		
			3	0	20.83	0.1211		
			3	1	20.89	0.1227		
			3	2	20.87	0.1222		
			6	0	19.81	0.0957		
	20393	1754.3	QPSK	1	0	21.98	0.1578	
				1	2	21.91	0.1552	
1				5	21.85	0.1531		
3				0	21.96	0.1570		
3				1	21.95	0.1567		
3				2	21.90	0.1549		
6				0	20.87	0.1222		
16-QAM		1	0	21.13	0.1297			
		1	2	20.70	0.1175			
		1	5	21.12	0.1294			
		3	0	20.90	0.1230			
		3	1	20.95	0.1245			
		3	2	20.91	0.1233			
		6	0	19.77	0.0948			



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	21.89	0.1545
					1	7	21.87	0.1538
					1	14	21.81	0.1517
					8	0	20.75	0.1189
					8	4	20.89	0.1227
					8	7	20.82	0.1208
				16-QAM	15	0	20.79	0.1199
					1	0	20.97	0.1250
					1	7	20.57	0.1140
					1	14	20.96	0.1247
					8	0	19.82	0.0959
					8	4	19.80	0.0955
		20175	1732.5	QPSK	8	7	19.90	0.0977
					15	0	19.93	0.0984
					1	0	22.06	0.1607
					1	7	22.01	0.1589
					1	14	21.99	0.1581
					8	0	20.89	0.1227
				16-QAM	8	4	20.87	0.1222
					8	7	20.98	0.1253
					15	0	20.85	0.1216
					1	0	21.12	0.1294
					1	7	21.10	0.1288
					1	14	20.96	0.1247
		20385	1753.5	QPSK	8	0	19.78	0.0951
					8	4	19.89	0.0975
					8	7	19.80	0.0955
					15	0	19.83	0.0962
					1	0	22.08	0.1614
					1	7	21.88	0.1542
16-QAM	1			14	21.84	0.1528		
	8			0	20.89	0.1227		
	8			4	20.93	0.1239		
	8			7	20.83	0.1211		
	15			0	20.86	0.1219		
	1			0	21.13	0.1297		
16-QAM	1	7	21.10	0.1288				
	1	14	20.74	0.1186				
	8	0	19.89	0.0975				
	8	4	19.93	0.0984				
	8	7	19.82	0.0959				
	15	0	19.95	0.0989				



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	21.91	0.1552
					1	12	21.75	0.1496
					1	24	21.81	0.1517
					12	0	20.80	0.1202
					12	6	20.79	0.1199
					12	11	20.81	0.1205
					25	0	20.73	0.1183
				16-QAM	1	0	21.04	0.1271
					1	12	20.94	0.1242
					1	24	20.89	0.1227
					12	0	19.82	0.0959
					12	6	19.71	0.0935
					12	11	19.76	0.0946
					25	0	19.66	0.0925
		20175	1732.5	QPSK	1	0	21.95	0.1567
					1	12	21.94	0.1563
					1	24	21.93	0.1560
					12	0	20.87	0.1222
					12	6	20.84	0.1213
					12	11	20.87	0.1222
					25	0	20.80	0.1202
				16-QAM	1	0	21.27	0.1340
					1	12	21.20	0.1318
					1	24	20.73	0.1183
					12	0	19.89	0.0975
					12	6	19.94	0.0986
					12	11	19.96	0.0991
					25	0	19.74	0.0942
		20375	1752.5	QPSK	1	0	21.93	0.1560
					1	12	21.88	0.1542
1	24				21.91	0.1552		
12	0				20.93	0.1239		
12	6				20.95	0.1245		
12	11				20.90	0.1230		
25	0				20.89	0.1227		
16-QAM	1			0	21.09	0.1285		
	1			12	20.72	0.1180		
	1			24	20.73	0.1183		
	12			0	19.93	0.0984		
	12			6	20.03	0.1007		
	12			11	19.98	0.0995		
	25			0	19.80	0.0955		



Mode	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power (dBm)	Average Power (Watts)
					RB Size	RB Offset		
LTE Band 4	10MHz	20000	1715.0	QPSK	1	0	21.97	0.1574
					1	24	21.77	0.1503
					1	49	21.96	0.1570
					25	0	20.76	0.1191
					25	12	20.78	0.1197
					25	24	20.76	0.1191
					50	0	20.58	0.1143
		16-QAM	1	0	21.11	0.1291		
			1	24	21.05	0.1274		
			1	49	20.77	0.1194		
			25	0	19.74	0.0942		
			25	12	19.78	0.0951		
			25	24	19.77	0.0948		
			50	0	19.53	0.0897		
		20175	1732.5	QPSK	1	0	21.98	0.1578
	1				24	21.81	0.1517	
	1				49	21.96	0.1570	
	25				0	20.90	0.1230	
	25				12	20.77	0.1194	
	25				24	20.85	0.1216	
	50				0	20.72	0.1180	
	16-QAM		1	0	21.14	0.1300		
			1	24	21.07	0.1279		
			1	49	20.91	0.1233		
			25	0	19.75	0.0944		
			25	12	19.71	0.0935		
			25	24	19.85	0.0966		
			50	0	19.60	0.0912		
	20350		1750.5	QPSK	1	0	21.96	0.1570
		1			24	21.94	0.1563	
1		49			21.92	0.1556		
25		0			20.81	0.1205		
25		12			20.78	0.1197		
25		24			20.81	0.1205		
50		0			20.69	0.1172		
16-QAM		1	0	20.74	0.1186			
		1	24	20.62	0.1153			
		1	49	20.55	0.1135			
		25	0	19.90	0.0977			
		25	12	19.81	0.0957			
		25	24	19.78	0.0951			
		50	0	19.69	0.0931			



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	22.07	0.1611
					1	37	21.85	0.1531
					1	74	22.04	0.1600
					38	0	20.98	0.1253
					38	18	20.86	0.1219
					38	37	20.93	0.1239
					75	0	20.66	0.1164
				16-QAM	1	0	20.95	0.1245
					1	37	20.84	0.1213
					1	74	20.89	0.1227
					38	0	19.87	0.0971
					38	18	19.80	0.0955
					38	37	19.82	0.0959
					75	0	19.77	0.0948
		20175	1732.5	QPSK	1	0	22.15	0.1641
					1	37	22.01	0.1589
					1	74	21.92	0.1556
					38	0	21.01	0.1262
					38	18	20.92	0.1236
					38	37	20.92	0.1236
					75	0	20.65	0.1161
				16-QAM	1	0	21.14	0.1300
					1	37	21.11	0.1291
					1	74	20.68	0.1169
					38	0	20.02	0.1005
					38	18	20.05	0.1012
					38	37	19.90	0.0977
					75	0	19.63	0.0918
		20325	1747.5	QPSK	1	0	21.99	0.1581
					1	37	21.98	0.1578
1	74				21.94	0.1563		
38	0				20.85	0.1216		
38	18				20.84	0.1213		
38	37				20.95	0.1245		
75	0				20.73	0.1183		
16-QAM	1			0	21.18	0.1312		
	1			37	21.07	0.1279		
	1			74	20.71	0.1178		
	38			0	19.93	0.0984		
	38			18	19.86	0.0968		
	38			37	19.98	0.0995		
	75			0	19.73	0.0940		



Mode	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power (dBm)	Average Power (Watts)
					RB Size	RB Offset		
LTE Band 4	20MHz	20050	1720.0	QPSK	1	0	22.15	0.1641
					1	49	22.10	0.1622
					1	99	21.97	0.1574
					50	0	20.69	0.1172
					50	24	20.69	0.1172
					50	49	20.80	0.1202
					100	0	20.70	0.1175
		16-QAM	1	0	21.15	0.1303		
			1	49	20.95	0.1245		
			1	99	21.10	0.1288		
			50	0	19.63	0.0918		
			50	24	19.62	0.0916		
			50	49	19.74	0.0942		
			100	0	19.68	0.0929		
		20175	1732.5	QPSK	1	0	22.20	0.1660
	1				49	21.96	0.1570	
	1				99	21.90	0.1549	
	50				0	20.81	0.1205	
	50				24	20.75	0.1189	
	50				49	20.71	0.1178	
	100				0	20.83	0.1211	
	16-QAM		1	0	21.41	0.1384		
			1	49	21.17	0.1309		
			1	99	20.68	0.1169		
			50	0	19.77	0.0948		
			50	24	19.64	0.0920		
			50	49	19.74	0.0942		
			100	0	19.70	0.0933		
	20300		1745.0	QPSK	1	0	22.11	0.1626
		1			49	21.98	0.1578	
1		99			21.92	0.1556		
50		0			20.78	0.1197		
50		24			20.70	0.1175		
50		49			20.72	0.1180		
100		0			20.82	0.1208		
16-QAM		1	0	21.15	0.1303			
		1	49	20.74	0.1186			
		1	99	21.13	0.1297			
		50	0	19.76	0.0946			
		50	24	19.73	0.0940			
		50	49	19.79	0.0953			
		100	0	19.82	0.0959			



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	23.26	0.2118
					1	2	23.22	0.2099
					1	5	23.18	0.2080
					3	0	23.24	0.2109
					3	1	23.18	0.2080
					3	2	23.16	0.2070
		16-QAM	6	0	22.25	0.1679		
			1	0	22.33	0.1710		
			1	2	22.19	0.1656		
			1	5	22.07	0.1611		
			3	0	22.28	0.1690		
			3	1	22.17	0.1648		
		20525	836.5	QPSK	3	2	22.12	0.1629
					6	0	21.16	0.1306
					1	0	22.92	0.1959
					1	2	22.80	0.1905
					1	5	22.89	0.1945
					3	0	22.87	0.1936
	16-QAM		3	1	22.80	0.1905		
			3	2	22.90	0.1950		
			6	0	21.95	0.1567		
			1	0	21.96	0.1570		
			1	2	21.81	0.1517		
			1	5	21.66	0.1466		
	20643	848.3	QPSK	3	0	21.94	0.1563	
				3	1	21.84	0.1528	
				3	2	21.89	0.1545	
				6	0	20.99	0.1256	
				1	0	23.28	0.2128	
				1	2	23.01	0.2000	
16-QAM		1	5	23.07	0.2028			
		3	0	23.12	0.2051			
		3	1	23.16	0.2070			
		3	2	23.09	0.2037			
		6	0	22.16	0.1644			
		1	0	22.31	0.1702			
					1	2	21.76	0.1500
					1	5	21.80	0.1514
					3	0	22.28	0.1690
					3	1	22.08	0.1614
					3	2	22.29	0.1694
					6	0	21.25	0.1334



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	23.14	0.2061	
					1	7	23.11	0.2046	
					1	14	23.12	0.2051	
					8	0	22.25	0.1679	
					8	4	22.20	0.1660	
					8	7	22.09	0.1618	
				16-QAM	15	0	22.09	0.1618	
					1	0	22.43	0.1750	
					1	7	22.38	0.1730	
					1	14	21.92	0.1556	
					8	0	21.17	0.1309	
					8	4	21.05	0.1274	
		20525	836.5	QPSK	8	8	7	20.98	0.1253
						15	0	21.11	0.1291
						1	0	23.04	0.2014
						1	7	22.88	0.1941
						1	14	22.95	0.1972
						8	0	22.10	0.1622
				16-QAM	8	4	21.94	0.1563	
					8	7	21.85	0.1531	
					15	0	21.98	0.1578	
					1	0	22.19	0.1656	
					1	7	21.73	0.1489	
					1	14	21.93	0.1560	
		20635	847.5	QPSK	8	8	0	21.03	0.1268
						8	4	20.85	0.1216
						8	7	20.88	0.1225
						15	0	21.03	0.1268
						1	0	23.16	0.2070
						1	7	23.09	0.2037
16-QAM	1			14	23.12	0.2051			
	8			0	21.94	0.1563			
	8			4	22.19	0.1656			
	8			7	22.15	0.1641			
	15			0	21.97	0.1574			
	1			0	21.89	0.1545			
16-QAM	1	7	21.68	0.1472					
	1	14	21.80	0.1514					
	8	0	20.80	0.1202					
	8	4	21.15	0.1303					
	8	7	21.18	0.1312					
	15	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 5	5MHz	20425	826.5	QPSK	1	0	23.22	0.2099
					1	12	23.10	0.2042
					1	24	22.91	0.1954
					12	0	22.23	0.1671
					12	6	22.17	0.1648
					12	11	22.26	0.1683
					25	0	22.00	0.1585
				16-QAM	1	0	22.32	0.1706
					1	12	22.28	0.1690
					1	24	22.30	0.1698
					12	0	21.17	0.1309
					12	6	21.22	0.1324
					12	11	21.07	0.1279
					25	0	20.91	0.1233
		20525	836.5	QPSK	1	0	23.09	0.2037
					1	12	22.87	0.1936
					1	24	22.98	0.1986
					12	0	22.04	0.1600
					12	6	22.12	0.1629
					12	11	22.06	0.1607
					25	0	21.95	0.1567
				16-QAM	1	0	22.33	0.1710
					1	12	22.16	0.1644
					1	24	22.29	0.1694
					12	0	21.12	0.1294
					12	6	21.07	0.1279
					12	11	20.98	0.1253
					25	0	20.93	0.1239
		20625	846.5	QPSK	1	0	23.34	0.2158
					1	12	22.90	0.1950
1	24				23.02	0.2004		
12	0				21.85	0.1531		
12	6				21.86	0.1535		
12	11				22.00	0.1585		
25	0				21.84	0.1528		
16-QAM	1			0	22.18	0.1652		
	1			12	21.88	0.1542		
	1			24	21.93	0.1560		
	12			0	21.02	0.1265		
	12			6	21.04	0.1271		
	12			11	21.08	0.1282		
	25			0	20.93	0.1239		



Mode	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power (dBm)	Average Power (Watts)
					RB Size	RB Offset		
LTE Band 5	10MHz	20450	829.0	QPSK	1	0	23.11	0.2046
					1	24	23.06	0.2023
					1	49	23.01	0.2000
					25	0	21.98	0.1578
					25	12	22.03	0.1596
					25	24	22.08	0.1614
					50	0	21.87	0.1538
		16-QAM	1	0	22.00	0.1585		
			1	24	21.88	0.1542		
			1	49	21.73	0.1489		
			25	0	21.04	0.1271		
			25	12	20.93	0.1239		
			25	24	21.07	0.1279		
			50	0	20.81	0.1205		
	20525	836.5	QPSK	1	0	23.13	0.2056	
				1	24	22.75	0.1884	
				1	49	22.81	0.1910	
				25	0	22.09	0.1618	
				25	12	21.96	0.1570	
				25	24	21.91	0.1552	
				50	0	21.92	0.1556	
		16-QAM	1	0	22.15	0.1641		
			1	24	22.05	0.1603		
			1	49	21.66	0.1466		
			25	0	20.90	0.1230		
			25	12	21.02	0.1265		
			25	24	20.75	0.1189		
50			0	20.78	0.1197			
20600	844.0	QPSK	1	0	23.11	0.2046		
			1	24	22.96	0.1977		
			1	49	22.95	0.1972		
			25	0	21.98	0.1578		
			25	12	21.77	0.1503		
			25	24	21.92	0.1556		
			50	0	21.72	0.1486		
	16-QAM	1	0	22.12	0.1629			
		1	24	22.01	0.1589			
		1	49	21.98	0.1578			
		25	0	20.75	0.1189			
		25	12	20.89	0.1227			
		25	24	20.82	0.1208			
		50	0	20.70	0.1175			



Mode	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power (dBm)	Average Power (Watts)
					RB Size	RB Offset		
LTE Band 17	5MHz	23755	706.5	QPSK	1	0	23.03	0.2009
					1	12	22.82	0.1914
					1	24	22.93	0.1963
					12	0	22.01	0.1589
					12	6	21.87	0.1538
					12	11	21.88	0.1542
					25	0	21.77	0.1503
		16-QAM	1	0	21.87	0.1538		
			1	12	21.79	0.1510		
			1	24	21.86	0.1535		
			12	0	20.96	0.1247		
			12	6	20.82	0.1208		
			12	11	20.78	0.1197		
			25	0	20.75	0.1189		
	23790	710.0	QPSK	1	0	23.01	0.2000	
				1	12	22.90	0.1950	
				1	24	23.00	0.1995	
				12	0	21.84	0.1528	
				12	6	21.92	0.1556	
				12	11	21.86	0.1535	
				25	0	21.85	0.1531	
		16-QAM	1	0	22.15	0.1641		
			1	12	22.05	0.1603		
			1	24	22.13	0.1633		
			12	0	20.84	0.1213		
			12	6	20.93	0.1239		
			12	11	20.76	0.1191		
25			0	20.68	0.1169			
23825	713.5	QPSK	1	0	23.02	0.2004		
			1	12	22.82	0.1914		
			1	24	22.62	0.1828		
			12	0	21.96	0.1570		
			12	6	21.96	0.1570		
			12	11	21.97	0.1574		
			25	0	21.83	0.1524		
	16-QAM	1	0	22.12	0.1629			
		1	12	21.89	0.1545			
		1	24	21.67	0.1469			
		12	0	20.92	0.1236			
		12	6	21.10	0.1288			
		12	11	21.08	0.1282			
		25	0	20.69	0.1172			



Mode	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power (dBm)	Average Power (Watts)
					RB Size	RB Offset		
LTE Band 17	10MHz	23780	709.0	QPSK	1	0	22.93	0.1963
					1	24	22.80	0.1905
					1	49	22.92	0.1959
					25	0	21.77	0.1503
					25	12	21.81	0.1517
					25	24	21.83	0.1524
					50	0	21.66	0.1466
		16-QAM	1	0	22.11	0.1626		
			1	24	22.08	0.1614		
			1	49	21.86	0.1535		
			25	0	20.82	0.1208		
			25	12	20.76	0.1191		
			25	24	20.74	0.1186		
			50	0	20.51	0.1125		
	23790	710.0	QPSK	1	0	22.94	0.1968	
				1	24	22.83	0.1919	
				1	49	22.90	0.1950	
				25	0	21.84	0.1528	
				25	12	21.70	0.1479	
				25	24	21.77	0.1503	
				50	0	21.62	0.1452	
		16-QAM	1	0	22.15	0.1641		
			1	24	21.64	0.1459		
			1	49	22.10	0.1622		
			25	0	20.68	0.1169		
			25	12	20.82	0.1208		
			25	24	20.66	0.1164		
50			0	20.56	0.1138			
23800	711.0	QPSK	1	0	22.93	0.1963		
			1	24	22.79	0.1901		
			1	49	22.70	0.1862		
			25	0	21.68	0.1472		
			25	12	21.83	0.1524		
			25	24	21.78	0.1507		
			50	0	21.63	0.1455		
	16-QAM	1	0	22.19	0.1656			
		1	24	21.84	0.1528			
		1	49	21.73	0.1489			
		25	0	20.75	0.1189			
		25	12	20.69	0.1172			
		25	24	20.82	0.1208			
		50	0	20.56	0.1138			



3.1.6 Test Result of ERP/EIRP

LTE Band 2 Radiated Power EIRP								
LTE BAND	Channel BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	EIRP (dBm)	EIRP (W)	H/V
			RB Size	RB Offset				
2	1.4	QPSK	1	0	1850.7	24.80	0.3020	H
2	1.4	QPSK	1	0	1880	24.30	0.2692	H
2	1.4	QPSK	1	0	1909.3	22.25	0.1679	H
2	1.4	QPSK	1	0	1850.7	24.70	0.2951	V
2	1.4	QPSK	1	0	1880	24.36	0.2729	V
2	1.4	QPSK	1	0	1909.3	22.32	0.1706	V
2	1.4	16QAM	1	0	1850.7	23.84	0.2421	H
2	1.4	16QAM	1	0	1880	23.35	0.2163	H
2	1.4	16QAM	1	0	1909.3	21.07	0.1279	H
2	1.4	16QAM	1	0	1850.7	23.69	0.2339	V
2	1.4	16QAM	1	0	1880	23.14	0.2061	V
2	1.4	16QAM	1	0	1909.3	20.96	0.1247	V
2	3	QPSK	1	0	1851.5	25.14	0.3266	H
2	3	QPSK	1	0	1880	24.39	0.2748	H
2	3	QPSK	1	0	1908.5	22.74	0.1879	H
2	3	QPSK	1	0	1851.5	24.82	0.3034	V
2	3	QPSK	1	0	1880	24.09	0.2564	V
2	3	QPSK	1	0	1908.5	22.08	0.1614	V
2	3	16QAM	1	0	1851.5	24.02	0.2523	H
2	3	16QAM	1	0	1880	23.33	0.2153	H
2	3	16QAM	1	0	1908.5	21.49	0.1409	H
2	3	16QAM	1	0	1851.5	23.78	0.2388	V
2	3	16QAM	1	0	1880	23.10	0.2042	V
2	3	16QAM	1	0	1908.5	20.97	0.1250	V



LTE Band 2 Radiated Power EIRP								
LTE BAND	Channel BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	EIRP (dBm)	EIRP (W)	H/V
			RB Size	RB Offset				
2	5	QPSK	1	12	1852.5	24.83	0.3041	H
2	5	QPSK	1	0	1880	24.35	0.2723	H
2	5	QPSK	1	0	1907.5	24.14	0.2594	H
2	5	QPSK	1	12	1852.5	24.15	0.2600	V
2	5	QPSK	1	0	1880	24.50	0.2818	V
2	5	QPSK	1	0	1907.5	22.89	0.1945	V
2	5	16QAM	1	24	1852.5	23.65	0.2317	H
2	5	16QAM	1	0	1880	23.08	0.2032	H
2	5	16QAM	1	0	1907.5	22.12	0.1629	H
2	5	16QAM	1	24	1852.5	23.38	0.2178	V
2	5	16QAM	1	0	1880	23.20	0.2089	V
2	5	16QAM	1	0	1907.5	21.51	0.1416	V
2	10	QPSK	1	0	1855	22.91	0.1954	H
2	10	QPSK	1	0	1880	22.28	0.1690	H
2	10	QPSK	1	0	1905	21.46	0.1400	H
2	10	QPSK	1	0	1855	22.67	0.1849	V
2	10	QPSK	1	0	1880	22.23	0.1671	V
2	10	QPSK	1	0	1905	20.77	0.1194	V
2	10	16QAM	1	0	1855	21.91	0.1552	H
2	10	16QAM	1	0	1880	21.55	0.1429	H
2	10	16QAM	1	0	1905	20.52	0.1127	H
2	10	16QAM	1	0	1855	21.70	0.1479	V
2	10	16QAM	1	0	1880	21.50	0.1413	V
2	10	16QAM	1	0	1905	19.85	0.0966	V



LTE Band 2 Radiated Power EIRP								
LTE BAND	Channel BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	EIRP (dBm)	EIRP (W)	H/V
			RB Size	RB Offset				
2	15	QPSK	1	0	1857.5	23.00	0.1995	H
2	15	QPSK	1	0	1880	23.93	0.2472	H
2	15	QPSK	1	0	1902.5	21.68	0.1472	H
2	15	QPSK	1	0	1857.5	22.84	0.1923	V
2	15	QPSK	1	0	1880	24.20	0.2630	V
2	15	QPSK	1	0	1902.5	20.97	0.1250	V
2	15	16QAM	1	0	1857.5	21.85	0.1531	H
2	15	16QAM	1	0	1880	23.21	0.2094	H
2	15	16QAM	1	0	1902.5	20.72	0.1180	H
2	15	16QAM	1	0	1857.5	21.78	0.1507	V
2	15	16QAM	1	0	1880	22.96	0.1977	V
2	15	16QAM	1	0	1902.5	20.09	0.1021	V
2	20	QPSK	1	0	1860	23.77	0.2382	H
2	20	QPSK	1	0	1880	24.00	0.2512	H
2	20	QPSK	1	0	1900	23.28	0.2128	H
2	20	QPSK	1	0	1860	24.53	0.2838	V
2	20	QPSK	1	0	1880	23.77	0.2382	V
2	20	QPSK	1	0	1900	23.36	0.2168	V
2	20	16QAM	1	0	1860	23.85	0.2427	H
2	20	16QAM	1	0	1880	23.50	0.2239	H
2	20	16QAM	1	0	1900	22.99	0.1991	H
2	20	16QAM	1	0	1860	23.00	0.1995	V
2	20	16QAM	1	0	1880	23.00	0.1995	V
2	20	16QAM	1	0	1900	22.10	0.1622	V



LTE Band 4 Radiated Power EIRP								
LTE BAND	Channel BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	EIRP (dBm)	EIRP (W)	H/V
			RB Size	RB Offset				
4	1.4	QPSK	1	0	1710.7	26.27	0.4236	H
4	1.4	QPSK	1	0	1732.5	25.46	0.3516	H
4	1.4	QPSK	1	0	1754.3	24.83	0.3041	H
4	1.4	QPSK	1	0	1710.7	24.73	0.2972	V
4	1.4	QPSK	1	0	1732.5	24.18	0.2618	V
4	1.4	QPSK	1	0	1754.3	23.55	0.2265	V
4	1.4	16QAM	1	0	1710.7	25.00	0.3162	H
4	1.4	16QAM	1	0	1732.5	24.37	0.2735	H
4	1.4	16QAM	1	0	1754.3	23.75	0.2371	H
4	1.4	16QAM	1	0	1710.7	23.77	0.2382	V
4	1.4	16QAM	1	0	1732.5	23.10	0.2042	V
4	1.4	16QAM	1	0	1754.3	22.52	0.1786	V
4	3	QPSK	1	0	1711.5	26.33	0.4295	H
4	3	QPSK	1	0	1732.5	25.43	0.3491	H
4	3	QPSK	1	0	1753.5	25.29	0.3381	H
4	3	QPSK	1	0	1711.5	25.19	0.3304	V
4	3	QPSK	1	0	1732.5	24.55	0.2851	V
4	3	QPSK	1	0	1753.5	23.90	0.2455	V
4	3	16QAM	1	0	1711.5	25.11	0.3243	H
4	3	16QAM	1	0	1732.5	24.35	0.2723	H
4	3	16QAM	1	0	1753.5	24.05	0.2541	H
4	3	16QAM	1	0	1711.5	23.94	0.2477	V
4	3	16QAM	1	0	1732.5	23.00	0.1995	V
4	3	16QAM	1	0	1753.5	22.97	0.1982	V



LTE Band 4 Radiated Power EIRP								
LTE BAND	Channel BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	EIRP (dBm)	EIRP (W)	H/V
			RB Size	RB Offset				
4	5	QPSK	1	0	1712.5	25.94	0.3926	H
4	5	QPSK	1	0	1732.5	25.42	0.3483	H
4	5	QPSK	1	0	1752.5	25.24	0.3342	H
4	5	QPSK	1	0	1712.5	25.08	0.3221	V
4	5	QPSK	1	0	1732.5	24.11	0.2576	V
4	5	QPSK	1	0	1752.5	24.07	0.2553	V
4	5	16QAM	1	0	1712.5	24.79	0.3013	H
4	5	16QAM	1	0	1732.5	24.08	0.2559	H
4	5	16QAM	1	0	1752.5	24.32	0.2704	H
4	5	16QAM	1	0	1712.5	23.65	0.2317	V
4	5	16QAM	1	0	1732.5	23.15	0.2065	V
4	5	16QAM	1	0	1752.5	23.13	0.2056	V
4	10	QPSK	1	0	1715	26.26	0.4227	H
4	10	QPSK	1	0	1732.5	25.51	0.3556	H
4	10	QPSK	1	0	1750	24.95	0.3126	H
4	10	QPSK	1	0	1715	24.75	0.2985	V
4	10	QPSK	1	0	1732.5	24.91	0.3097	V
4	10	QPSK	1	0	1750	24.31	0.2698	V
4	10	16QAM	1	0	1715	25.09	0.3228	H
4	10	16QAM	1	0	1732.5	24.86	0.3062	H
4	10	16QAM	1	0	1750	24.26	0.2667	H
4	10	16QAM	1	0	1715	23.55	0.2265	V
4	10	16QAM	1	0	1732.5	23.24	0.2109	V
4	10	16QAM	1	0	1750	22.99	0.1991	V



LTE Band 4 Radiated Power EIRP								
LTE BAND	Channel BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	EIRP (dBm)	EIRP (W)	H/V
			RB Size	RB Offset				
4	15	QPSK	1	0	1717.5	26.56	0.4529	H
4	15	QPSK	1	0	1732.5	25.79	0.3793	H
4	15	QPSK	1	0	1747.5	25.44	0.3499	H
4	15	QPSK	1	0	1717.5	24.94	0.3119	V
4	15	QPSK	1	0	1732.5	24.77	0.2999	V
4	15	QPSK	1	0	1747.5	24.53	0.2838	V
4	15	16QAM	1	0	1717.5	25.31	0.3396	H
4	15	16QAM	1	0	1732.5	24.52	0.2831	H
4	15	16QAM	1	0	1747.5	25.00	0.3162	H
4	15	16QAM	1	0	1717.5	23.58	0.2280	V
4	15	16QAM	1	0	1732.5	23.77	0.2382	V
4	15	16QAM	1	0	1747.5	23.55	0.2265	V
4	20	QPSK	1	0	1720	25.86	0.3855	H
4	20	QPSK	1	0	1732.5	25.95	0.3936	H
4	20	QPSK	1	0	1745	25.65	0.3673	H
4	20	QPSK	1	0	1720	25.11	0.3243	V
4	20	QPSK	1	0	1732.5	24.13	0.2588	V
4	20	QPSK	1	0	1745	25.16	0.3281	V
4	20	16QAM	1	0	1720	24.71	0.2958	H
4	20	16QAM	1	0	1732.5	23.77	0.2382	H
4	20	16QAM	1	0	1745	24.42	0.2767	H
4	20	16QAM	1	0	1720	24.09	0.2564	V
4	20	16QAM	1	0	1732.5	23.46	0.2218	V
4	20	16QAM	1	0	1745	23.86	0.2432	V



LTE Band 5 Radiated Power ERP								
LTE BAND	Channel BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	ERP (dBm)	ERP (W)	H/V
			RB Size	RB Offset				
5	1.4	QPSK	1	0	824.7	19.42	0.0875	H
5	1.4	QPSK	1	0	836.5	19.35	0.0861	H
5	1.4	QPSK	1	0	848.3	19.83	0.0962	H
5	1.4	QPSK	1	0	824.7	5.86	0.0039	V
5	1.4	QPSK	1	0	836.5	7.97	0.0063	V
5	1.4	QPSK	1	0	848.3	9.70	0.0093	V
5	1.4	16QAM	1	0	824.7	18.30	0.0676	H
5	1.4	16QAM	1	0	836.5	18.13	0.0650	H
5	1.4	16QAM	1	0	848.3	18.83	0.0764	H
5	1.4	16QAM	1	0	824.7	4.72	0.0030	V
5	1.4	16QAM	1	0	836.5	6.73	0.0047	V
5	1.4	16QAM	1	0	848.3	8.60	0.0072	V
5	3	QPSK	1	0	825.5	19.43	0.0877	H
5	3	QPSK	1	0	836.5	19.80	0.0955	H
5	3	QPSK	1	0	847.5	19.29	0.0849	H
5	3	QPSK	1	0	825.5	6.07	0.0040	V
5	3	QPSK	1	0	836.5	8.25	0.0067	V
5	3	QPSK	1	0	847.5	9.21	0.0083	V
5	3	16QAM	1	0	825.5	18.24	0.0667	H
5	3	16QAM	1	0	836.5	18.71	0.0743	H
5	3	16QAM	1	0	847.5	17.95	0.0624	H
5	3	16QAM	1	0	825.5	4.87	0.0031	V
5	3	16QAM	1	0	836.5	7.18	0.0052	V
5	3	16QAM	1	0	847.5	7.91	0.0062	V



LTE Band 5 Radiated Power ERP								
LTE BAND	Channel BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	ERP (dBm)	ERP (W)	H/V
			RB Size	RB Offset				
5	5	QPSK	1	0	826.5	19.49	0.0889	H
5	5	QPSK	1	0	836.5	20.50	0.1122	H
5	5	QPSK	1	0	846.5	18.34	0.0682	H
5	5	QPSK	1	0	826.5	6.38	0.0043	V
5	5	QPSK	1	0	836.5	8.99	0.0079	V
5	5	QPSK	1	0	846.5	8.04	0.0064	V
5	5	16QAM	1	0	826.5	18.19	0.0659	H
5	5	16QAM	1	0	836.5	19.13	0.0818	H
5	5	16QAM	1	0	846.5	17.09	0.0512	H
5	5	16QAM	1	0	826.5	5.18	0.0033	V
5	5	16QAM	1	0	836.5	7.99	0.0063	V
5	5	16QAM	1	0	846.5	6.73	0.0047	V
5	10	QPSK	1	0	829	19.52	0.0895	H
5	10	QPSK	1	0	836.5	20.52	0.1127	H
5	10	QPSK	1	0	844	18.44	0.0698	H
5	10	QPSK	1	0	829	5.77	0.0038	V
5	10	QPSK	1	0	836.5	8.02	0.0063	V
5	10	QPSK	1	0	844	7.78	0.0060	V
5	10	16QAM	1	0	829	18.13	0.0650	H
5	10	16QAM	1	0	836.5	19.18	0.0828	H
5	10	16QAM	1	0	844	17.41	0.0551	H
5	10	16QAM	1	0	829	5.43	0.0035	V
5	10	16QAM	1	0	836.5	6.76	0.0047	V
5	10	16QAM	1	0	844	6.78	0.0048	V



LTE Band 17 Radiated Power ERP								
LTE BAND	Channel BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	ERP (dBm)	ERP (W)	H/V
			RB Size	RB Offset				
17	5	QPSK	1	0	706.5	20.73	0.1183	H
17	5	QPSK	1	0	710	20.42	0.1102	H
17	5	QPSK	1	0	713.5	20.42	0.1102	H
17	5	QPSK	1	0	706.5	6.46	0.0044	V
17	5	QPSK	1	0	710	6.71	0.0047	V
17	5	QPSK	1	0	713.5	6.86	0.0049	V
17	5	16QAM	1	0	706.5	19.70	0.0933	H
17	5	16QAM	1	0	710	19.41	0.0873	H
17	5	16QAM	1	0	713.5	19.23	0.0838	H
17	5	16QAM	1	0	706.5	5.60	0.0036	V
17	5	16QAM	1	0	710	5.89	0.0039	V
17	5	16QAM	1	0	713.5	5.76	0.0038	V
17	10	QPSK	1	0	709	20.58	0.1143	H
17	10	QPSK	1	0	710	20.50	0.1122	H
17	10	QPSK	1	0	711	20.45	0.1109	H
17	10	QPSK	1	0	709	7.14	0.0052	V
17	10	QPSK	1	0	710	6.28	0.0042	V
17	10	QPSK	1	0	711	5.98	0.0040	V
17	10	16QAM	1	0	709	19.52	0.0895	H
17	10	16QAM	1	0	710	19.77	0.0948	H
17	10	16QAM	1	0	711	19.47	0.0885	H
17	10	16QAM	1	0	709	5.50	0.0035	V
17	10	16QAM	1	0	710	5.51	0.0036	V
17	10	16QAM	1	0	711	5.50	0.0035	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.

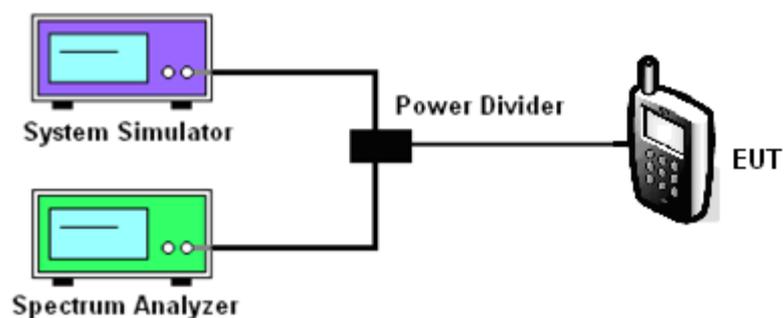
### 3.2.2 Measuring Instruments

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



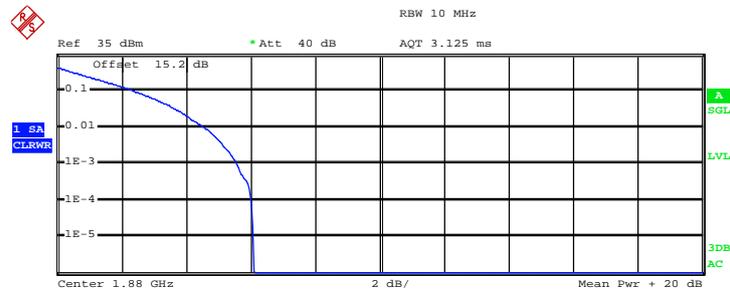
3.2.5 Test Result of Peak-to-Average Ratio

Band	Band Width	Channel	Frequency (MHz)	Modulation	PAR (dB)
LTE Band 2	1.4MHz	18900	1880	QPSK	5.60
				16-QAM	6.36
	3MHz	18900	1880	QPSK	5.60
				16-QAM	6.44
	5MHz	18900	1880	QPSK	5.56
				16-QAM	6.36
	10MHz	18900	1880	QPSK	5.44
				16-QAM	6.28
	15MHz	18900	1880	QPSK	5.72
				16-QAM	6.64
	20MHz	18900	1880	QPSK	6.44
				16-QAM	7.12
LTE Band 4	1.4MHz	20175	1732.5	QPSK	5.52
				16-QAM	6.40
	3MHz	20175	1732.5	QPSK	5.60
				16-QAM	6.44
	5MHz	20175	1732.5	QPSK	5.64
				16-QAM	6.44
	10MHz	20175	1732.5	QPSK	5.64
				16-QAM	6.40
	15MHz	20175	1732.5	QPSK	5.60
				16-QAM	6.76
	20MHz	20175	1732.5	QPSK	6.36
				16-QAM	7.16
LTE Band 5	1.4MHz	20525	836.5	QPSK	6.00
				16-QAM	6.60
	3MHz	20525	836.5	QPSK	5.64
				16-QAM	6.52
	5MHz	20525	836.5	QPSK	5.76
				16-QAM	6.52
	10MHz	20525	836.5	QPSK	5.52
				16-QAM	6.24
LTE Band 17	5MHz	23790	710.0	QPSK	6.12
				16-QAM	6.76
	10MHz	23790	710.0	QPSK	5.84
				16-QAM	6.52

### 3.2.6 Peak to Average Power Ratio

<b>Band:</b>	LTE Band 2	<b>Bandwidth:</b>	1.4MHz
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**Peak-to-Average Ratio for QPSK-RB Size 6, RB Offset 0**



Center 1.88 GHz 2 dB/ Mean Pwr + 20 dB

Complementary Cumulative Distribution Function (100000 samples)  
 Trace 1  
 Mean 22.14 dBm  
 Peak 28.22 dBm  
 Crest 6.08 dB

10 %	2.44 dB
1 %	4.60 dB
.1 %	5.60 dB
.01 %	6.04 dB

Date: 29.JAN.2013 08:36:56

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



Center 1.88 GHz 2 dB/ Mean Pwr + 20 dB

Complementary Cumulative Distribution Function (100000 samples)  
 Trace 1  
 Mean 21.17 dBm  
 Peak 28.01 dBm  
 Crest 6.84 dB

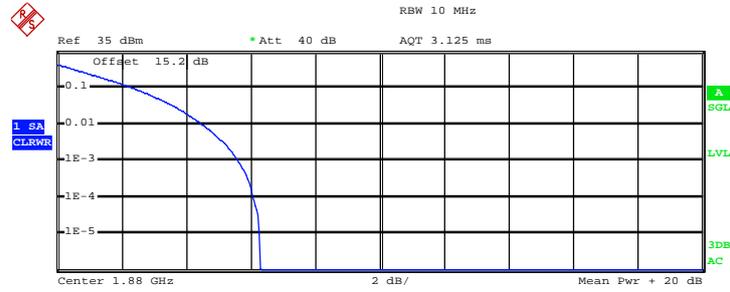
10 %	2.92 dB
1 %	5.16 dB
.1 %	6.36 dB
.01 %	6.76 dB

Date: 29.JAN.2013 08:36:42



<b>Band:</b>	LTE Band 2	<b>Bandwidth:</b>	3MHz
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Peak-to-Average Ratio for QPSK-RB Size 15, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean 22.07 dBm  
 Peak 28.36 dBm  
 Crest 6.29 dB

10 % 2.44 dB  
 1 % 4.52 dB  
 .1 % 5.60 dB  
 .01 % 6.08 dB

Date: 29.JAN.2013 08:36:16

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



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean 21.04 dBm  
 Peak 28.15 dBm  
 Crest 7.11 dB

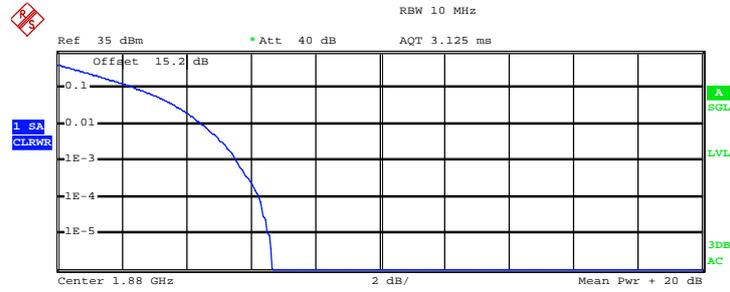
10 % 2.92 dB  
 1 % 5.20 dB  
 .1 % 6.44 dB  
 .01 % 6.96 dB

Date: 29.JAN.2013 08:36:25



<b>Band:</b>	LTE Band 2	<b>Bandwidth:</b>	5MHz
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**Peak-to-Average Ratio for QPSK-RB Size 25, RB Offset 0**



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean 21.99 dBm  
 Peak 28.64 dBm  
 Crest 6.66 dB

10 % 2.48 dB  
 1 % 4.52 dB  
 .1 % 5.56 dB  
 .01 % 6.28 dB

Date: 29.JAN.2013 08:35:59

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



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean 20.93 dBm  
 Peak 28.15 dBm  
 Crest 7.22 dB

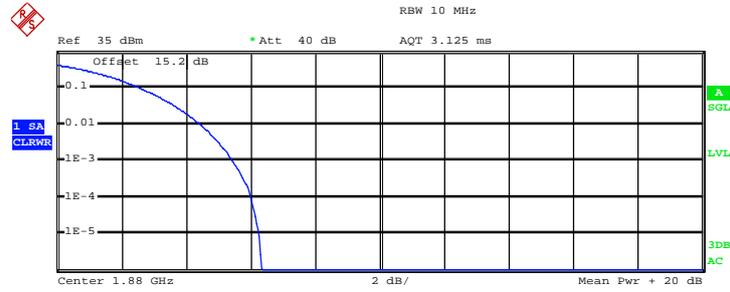
10 % 2.92 dB  
 1 % 5.04 dB  
 .1 % 6.36 dB  
 .01 % 7.00 dB

Date: 29.JAN.2013 08:35:47



<b>Band:</b>	LTE Band 2	<b>Bandwidth:</b>	10MHz
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Peak-to-Average Ratio for QPSK-RB Size 50, RB Offset 0



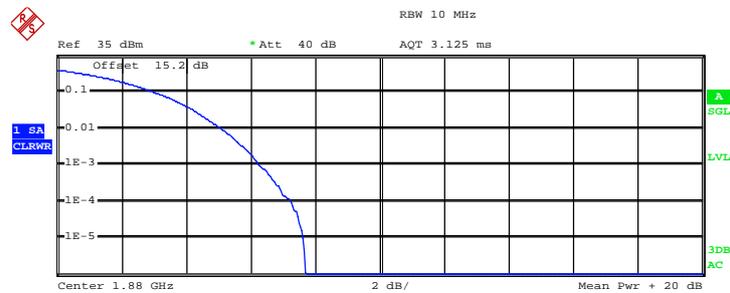
Complementary Cumulative Distribution Function (100000 samples)

Trace 1  
Mean 21.47 dBm  
Peak 27.79 dBm  
Crest 6.33 dB

10 % 2.64 dB  
1 % 4.44 dB  
.1 % 5.44 dB  
.01 % 6.00 dB

Date: 29.JAN.2013 08:35:17

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



Complementary Cumulative Distribution Function (100000 samples)

Trace 1  
Mean 20.45 dBm  
Peak 28.15 dBm  
Crest 7.70 dB

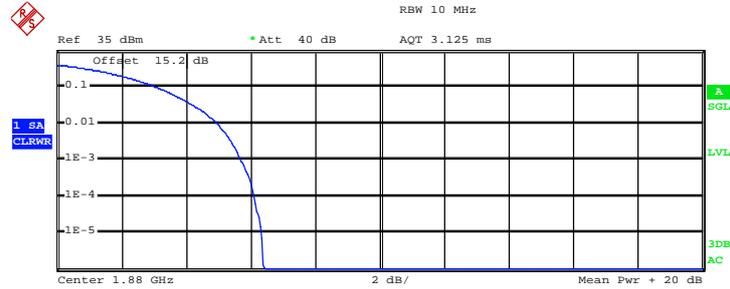
10 % 3.08 dB  
1 % 5.12 dB  
.1 % 6.28 dB  
.01 % 7.28 dB

Date: 29.JAN.2013 08:35:29



<b>Band:</b>	LTE Band 2	<b>Bandwidth:</b>	15MHz
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Peak-to-Average Ratio for QPSK-RB Size 75, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

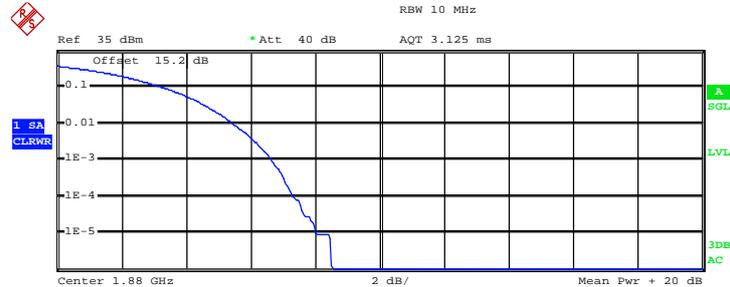
Trace 1

Mean 20.13 dBm  
 Peak 26.52 dBm  
 Crest 6.40 dB

10 % 3.16 dB  
 1 % 4.96 dB  
 .1 % 5.72 dB  
 .01 % 6.12 dB

Date: 29.JAN.2013 08:35:00

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



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean 19.07 dBm  
 Peak 27.58 dBm  
 Crest 8.51 dB

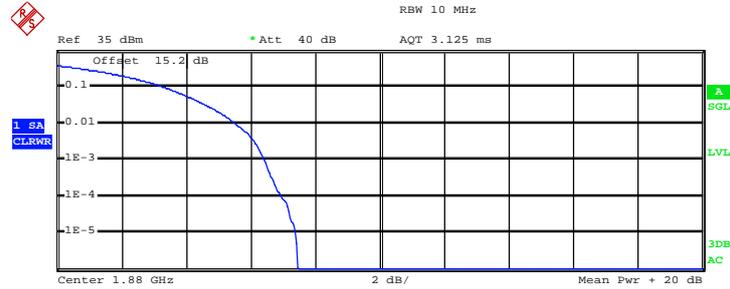
10 % 3.36 dB  
 1 % 5.48 dB  
 .1 % 6.64 dB  
 .01 % 7.32 dB

Date: 29.JAN.2013 08:34:49



<b>Band:</b>	LTE Band 2	<b>Bandwidth:</b>	20MHz
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Peak-to-Average Ratio for QPSK-RB Size 100, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

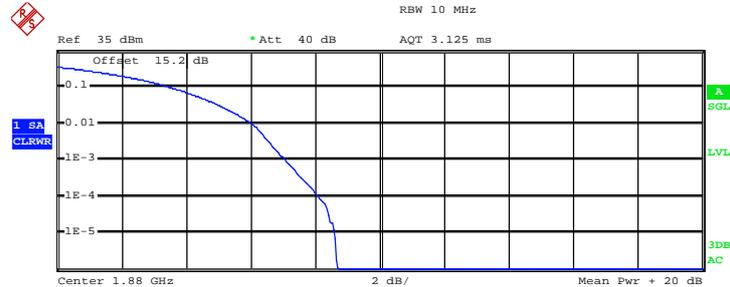
Trace 1

Mean 18.92 dBm  
 Peak 26.38 dBm  
 Crest 7.46 dB

10 % 3.40 dB  
 1 % 5.56 dB  
 .1 % 6.44 dB  
 .01 % 6.96 dB

Date: 29.JAN.2013 08:34:19

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



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean 17.85 dBm  
 Peak 26.52 dBm  
 Crest 8.68 dB

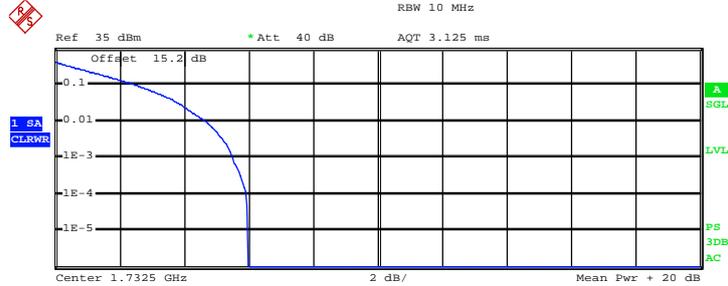
10 % 3.60 dB  
 1 % 6.08 dB  
 .1 % 7.12 dB  
 .01 % 8.12 dB

Date: 29.JAN.2013 08:34:32



<b>Band:</b>	LTE Band 4	<b>Bandwidth:</b>	1.4MHz
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**Peak-to-Average Ratio for QPSK-RB Size 6, RB Offset 0**



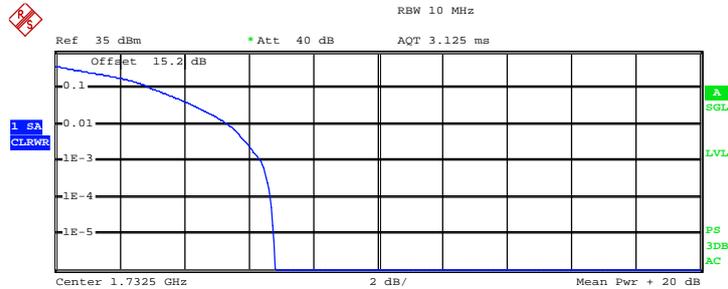
Complementary Cumulative Distribution Function (100000 samples)

Trace 1  
Mean 20.35 dBm  
Peak 26.32 dBm  
Crest 5.97 dB

10 % 2.60 dB  
1 % 4.68 dB  
.1 % 5.52 dB  
.01 % 5.92 dB

Date: 29.JAN.2013 10:30:49

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



Complementary Cumulative Distribution Function (100000 samples)

Trace 1  
Mean 19.30 dBm  
Peak 26.11 dBm  
Crest 6.81 dB

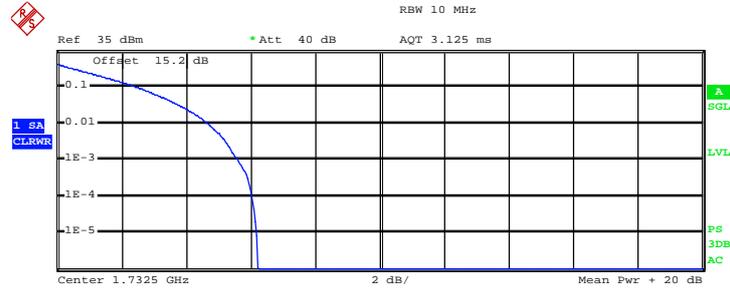
10 % 3.04 dB  
1 % 5.40 dB  
.1 % 6.40 dB  
.01 % 6.68 dB

Date: 29.JAN.2013 10:30:40



<b>Band:</b>	LTE Band 4	<b>Bandwidth:</b>	3MHz
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Peak-to-Average Ratio for QPSK-RB Size 15, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

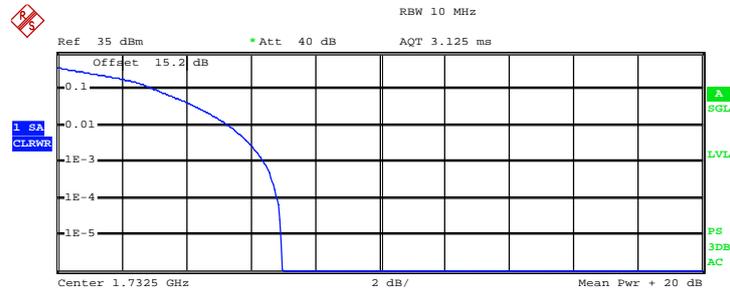
Trace 1

Mean 20.24 dBm  
 Peak 26.46 dBm  
 Crest 6.22 dB

10 % 2.56 dB  
 1 % 4.68 dB  
 .1 % 5.60 dB  
 .01 % 6.04 dB

Date: 29.JAN.2013 10:30:02

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



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean 19.33 dBm  
 Peak 26.32 dBm  
 Crest 6.99 dB

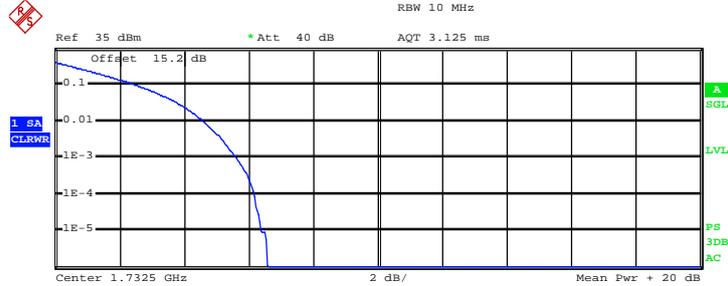
10 % 3.08 dB  
 1 % 5.36 dB  
 .1 % 6.44 dB  
 .01 % 6.84 dB

Date: 29.JAN.2013 10:30:26



<b>Band:</b>	LTE Band 4	<b>Bandwidth:</b>	5MHz
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Peak-to-Average Ratio for QPSK-RB Size 25, RB Offset 0



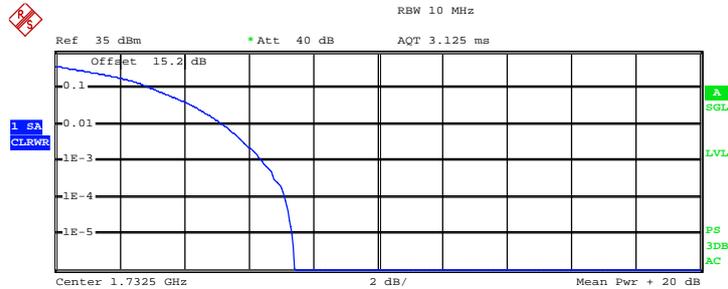
Complementary Cumulative Distribution Function (100000 samples)

Trace 1  
 Mean 20.16 dBm  
 Peak 26.74 dBm  
 Crest 6.59 dB

10 %	2.60 dB
1 %	4.64 dB
.1 %	5.64 dB
.01 %	6.20 dB

Date: 29.JAN.2013 10:29:47

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



Complementary Cumulative Distribution Function (100000 samples)

Trace 1  
 Mean 19.12 dBm  
 Peak 26.53 dBm  
 Crest 7.42 dB

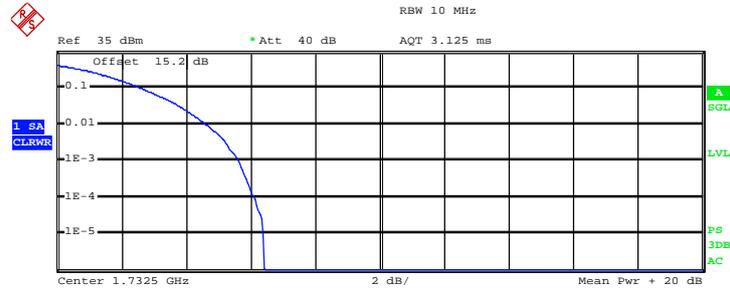
10 %	3.04 dB
1 %	5.24 dB
.1 %	6.44 dB
.01 %	7.12 dB

Date: 29.JAN.2013 10:29:38



<b>Band:</b>	LTE Band 4	<b>Bandwidth:</b>	10MHz
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**Peak-to-Average Ratio for QPSK-RB Size 50, RB Offset 0**



Center 1.7325 GHz 2 dB/ Mean Pwr + 20 dB

Complementary Cumulative Distribution Function (100000 samples)  
Trace 1

Mean 19.63 dBm  
 Peak 26.04 dBm  
 Crest 6.41 dB

10 % 2.68 dB  
 1 % 4.64 dB  
 .1 % 5.64 dB  
 .01 % 6.12 dB

Date: 29.JAN.2013 10:29:12

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



Center 1.7325 GHz 2 dB/ Mean Pwr + 20 dB

Complementary Cumulative Distribution Function (100000 samples)  
Trace 1

Mean 18.62 dBm  
 Peak 26.32 dBm  
 Crest 7.70 dB

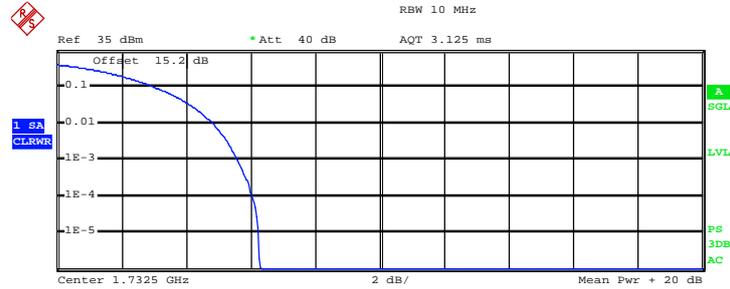
10 % 3.12 dB  
 1 % 5.20 dB  
 .1 % 6.40 dB  
 .01 % 7.20 dB

Date: 29.JAN.2013 10:29:24



<b>Band:</b>	LTE Band 4	<b>Bandwidth:</b>	15MHz
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Peak-to-Average Ratio for QPSK-RB Size 75, RB Offset 0



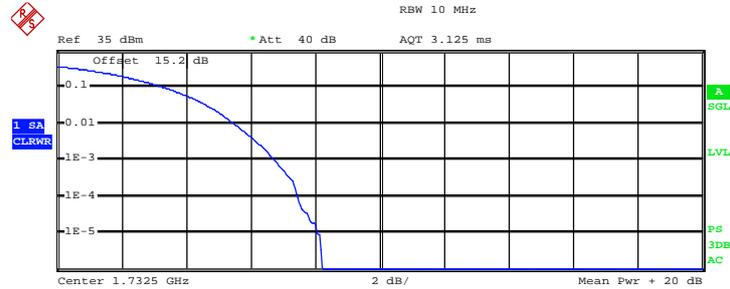
Complementary Cumulative Distribution Function (100000 samples)  
Trace 1

Mean 18.28 dBm  
 Peak 24.56 dBm  
 Crest 6.27 dB

10 % 3.08 dB  
 1 % 4.84 dB  
 .1 % 5.60 dB  
 .01 % 6.04 dB

Date: 29.JAN.2013 10:28:55

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



Complementary Cumulative Distribution Function (100000 samples)  
Trace 1

Mean 17.27 dBm  
 Peak 25.47 dBm  
 Crest 8.21 dB

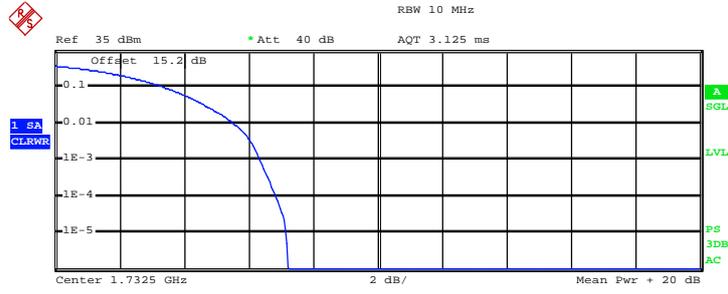
10 % 3.40 dB  
 1 % 5.52 dB  
 .1 % 6.76 dB  
 .01 % 7.48 dB

Date: 29.JAN.2013 10:28:28



<b>Band:</b>	LTE Band 4	<b>Bandwidth:</b>	20MHz
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Peak-to-Average Ratio for QPSK-RB Size 100, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

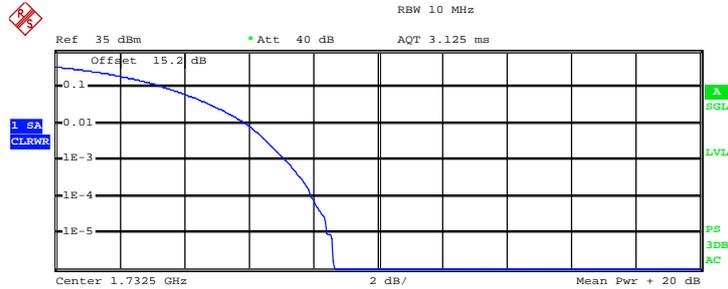
Trace 1

Mean 16.91 dBm  
 Peak 24.13 dBm  
 Crest 7.22 dB

10 % 3.44 dB  
 1 % 5.56 dB  
 .1 % 6.36 dB  
 .01 % 6.88 dB

Date: 29.JAN.2013 10:27:59

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



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean 15.92 dBm  
 Peak 24.56 dBm  
 Crest 8.63 dB

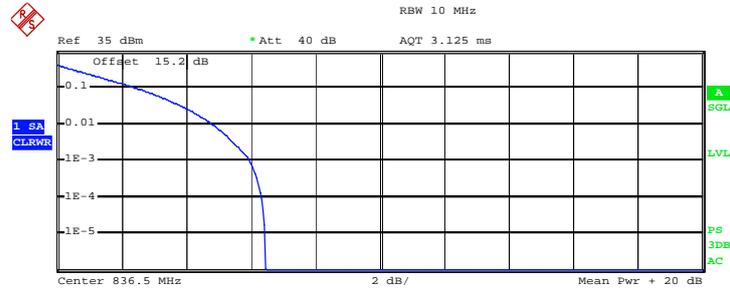
10 % 3.48 dB  
 1 % 5.96 dB  
 .1 % 7.16 dB  
 .01 % 7.96 dB

Date: 29.JAN.2013 10:28:10



<b>Band:</b>	LTE Band 5	<b>Bandwidth:</b>	1.4MHz
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Peak-to-Average Ratio for QPSK-RB Size 6, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1  
Mean 20.56 dBm  
Peak 27.02 dBm  
Crest 6.46 dB

10 % 2.56 dB  
1 % 4.84 dB  
.1 % 6.00 dB  
.01 % 6.36 dB

Date: 30.JAN.2013 08:15:14

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



Complementary Cumulative Distribution Function (100000 samples)

Trace 1  
Mean 19.59 dBm  
Peak 26.95 dBm  
Crest 7.36 dB

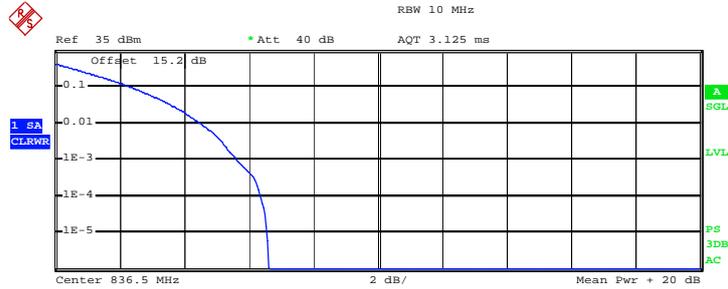
10 % 2.92 dB  
1 % 5.08 dB  
.1 % 6.60 dB  
.01 % 7.16 dB

Date: 30.JAN.2013 08:15:04



<b>Band:</b>	LTE Band 5	<b>Bandwidth:</b>	3MHz
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Peak-to-Average Ratio for QPSK-RB Size 15, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

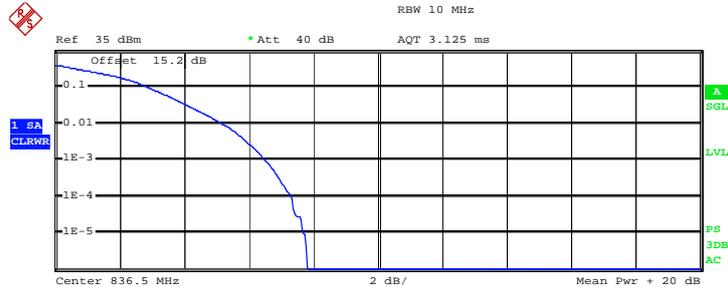
Trace 1

Mean 20.46 dBm  
 Peak 27.09 dBm  
 Crest 6.63 dB

10 % 2.40 dB  
 1 % 4.56 dB  
 .1 % 5.64 dB  
 .01 % 6.36 dB

Date: 30.JAN.2013 08:15:34

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



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean 19.49 dBm  
 Peak 27.30 dBm  
 Crest 7.82 dB

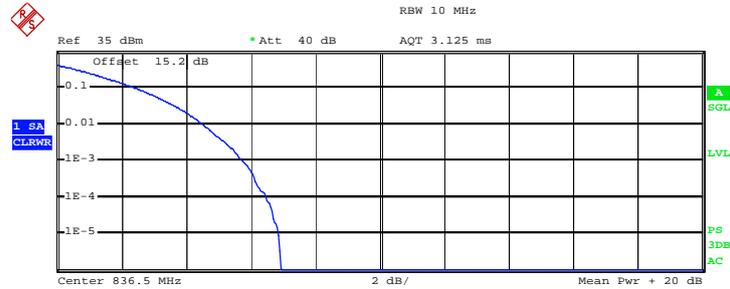
10 % 2.96 dB  
 1 % 5.24 dB  
 .1 % 6.52 dB  
 .01 % 7.36 dB

Date: 30.JAN.2013 08:15:49



<b>Band:</b>	LTE Band 5	<b>Bandwidth:</b>	5MHz
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Peak-to-Average Ratio for QPSK-RB Size 25, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean 20.37 dBm  
 Peak 27.30 dBm  
 Crest 6.93 dB

10 % 2.48 dB  
 1 % 4.56 dB  
 .1 % 5.76 dB  
 .01 % 6.48 dB

Date: 30.JAN.2013 08:20:55

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



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean 19.37 dBm  
 Peak 27.23 dBm  
 Crest 7.86 dB

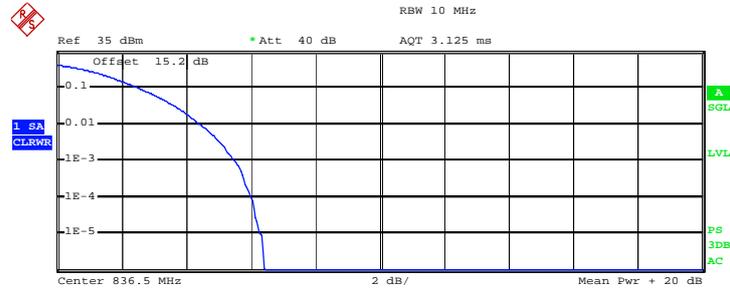
10 % 3.00 dB  
 1 % 5.12 dB  
 .1 % 6.52 dB  
 .01 % 7.32 dB

Date: 30.JAN.2013 08:16:21



<b>Band:</b>	LTE Band 5	<b>Bandwidth:</b>	10MHz
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Peak-to-Average Ratio for QPSK-RB Size 50, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

Trace 1  
Mean 19.76 dBm  
Peak 26.17 dBm  
Crest 6.41 dB

10 % 2.60 dB  
1 % 4.48 dB  
.1 % 5.52 dB  
.01 % 6.04 dB

Date: 30.JAN.2013 08:21:11

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



Complementary Cumulative Distribution Function (100000 samples)

Trace 1  
Mean 18.78 dBm  
Peak 26.31 dBm  
Crest 7.54 dB

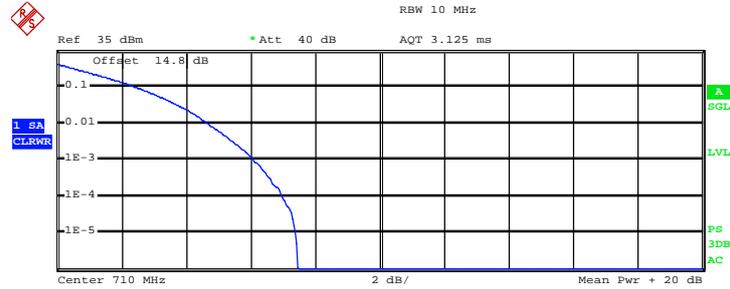
10 % 3.04 dB  
1 % 5.04 dB  
.1 % 6.24 dB  
.01 % 6.92 dB

Date: 30.JAN.2013 08:21:22



Band:	LTE Band 17	Bandwidth:	5MHz
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Peak-to-Average Ratio for QPSK-RB Size 25, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

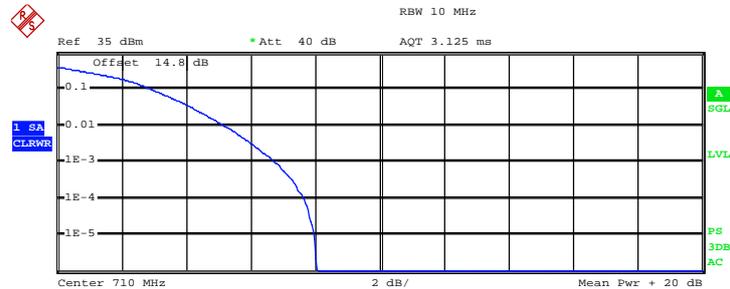
Trace 1

Mean 13.14 dBm  
 Peak 20.61 dBm  
 Crest 7.46 dB

10 % 2.52 dB  
 1 % 4.72 dB  
 .1 % 6.12 dB  
 .01 % 7.00 dB

Date: 29.JAN.2013 11:07:30

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



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean 12.07 dBm  
 Peak 20.11 dBm  
 Crest 8.04 dB

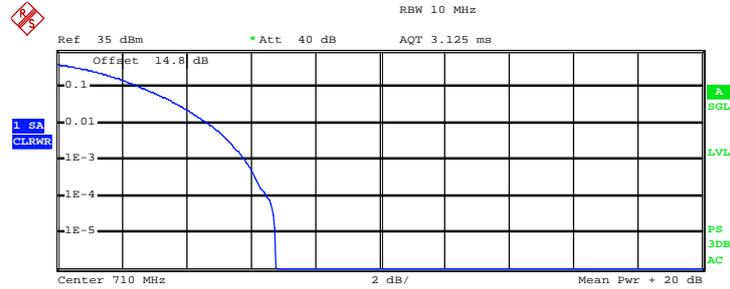
10 % 3.00 dB  
 1 % 5.24 dB  
 .1 % 6.76 dB  
 .01 % 7.68 dB

Date: 29.JAN.2013 11:07:21



Band:	LTE Band 17	Bandwidth:	10MHz
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Peak-to-Average Ratio for QPSK-RB Size 50, RB Offset 0



Complementary Cumulative Distribution Function (100000 samples)

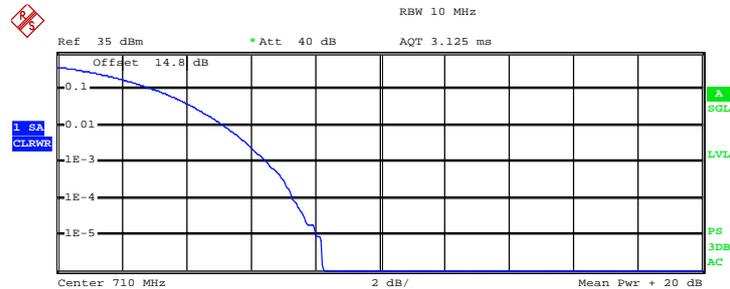
Trace 1

Mean 12.70 dBm  
 Peak 19.48 dBm  
 Crest 6.78 dB

10 % 2.64 dB  
 1 % 4.72 dB  
 .1 % 5.84 dB  
 .01 % 6.52 dB

Date: 29.JAN.2013 11:06:55

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



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean 11.67 dBm  
 Peak 19.90 dBm  
 Crest 8.24 dB

10 % 3.08 dB  
 1 % 5.20 dB  
 .1 % 6.52 dB  
 .01 % 7.32 dB

Date: 29.JAN.2013 11:07:05

### 3.3 99% Occupied Bandwidth and 26dB Bandwidth Measurement

#### 3.3.1 Description of 99% Occupied Bandwidth and 26dB Bandwidth Measurement

The 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.

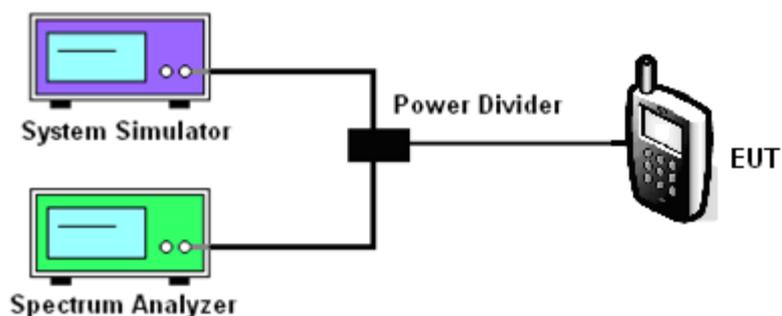
#### 3.3.2 Measuring Instruments

See list of measuring instruments of this test report.

#### 3.3.3 Test Procedures

1. The EUT was connected to Spectrum Analyzer and Base Station 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



3.3.5 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	1.3104	1.3160
				16-QAM	1.2936	1.3104
	3MHz	18900	1880	QPSK	3.1080	3.1320
				16-QAM	3.1080	3.1560
	5MHz	18900	1880	QPSK	5.0200	5.1600
				16-QAM	5.0200	5.1400
	10MHz	18900	1880	QPSK	10.1200	10.2400
				16-QAM	10.0000	10.2800
	15MHz	18900	1880	QPSK	14.7000	15.1200
				16-QAM	14.7000	15.1200
	20MHz	18900	1880	QPSK	21.2000	21.4400
				16-QAM	21.3600	21.3600
LTE Band 4	1.4MHz	20175	1732.5	QPSK	1.1032	1.3216
				16-QAM	1.1032	1.3216
	3MHz	20175	1732.5	QPSK	2.7240	3.1200
				16-QAM	2.7360	3.1440
	5MHz	20175	1732.5	QPSK	4.5000	5.1200
				16-QAM	4.5000	5.1200
	10MHz	20175	1732.5	QPSK	9.1200	10.3200
				16-QAM	9.1200	10.2800
	15MHz	20175	1732.5	QPSK	13.6200	15.1200
				16-QAM	13.5600	15.0000
	20MHz	20175	1732.5	QPSK	18.6400	21.3600
				16-QAM	18.7200	21.5200



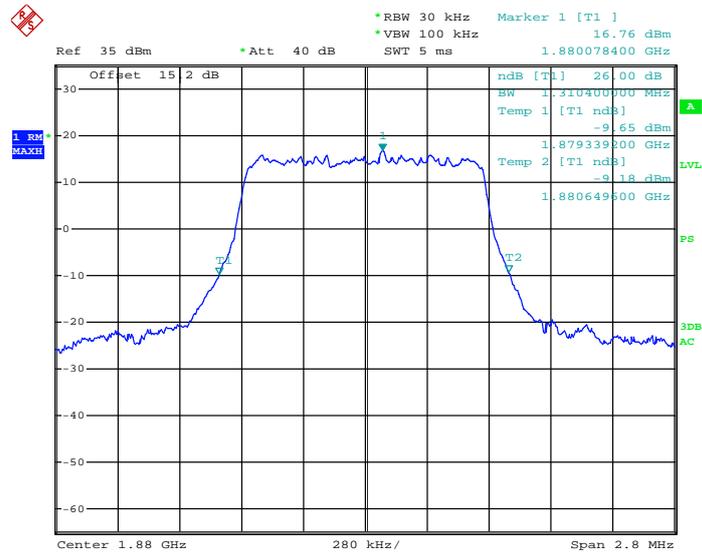
Band	Band Width	Channel	Frequency (MHz)	Modulation	99%Bandwidth (MHz)	26dB Bandwidth (MHz)
LTE Band 5	1.4MHz	20525	836.5	QPSK	1.1032	1.3160
				16-QAM	1.0976	1.3160
	3MHz	20525	836.5	QPSK	2.7360	3.1440
				16-QAM	2.7240	3.1560
	5MHz	20525	836.5	QPSK	4.4800	5.1200
				16-QAM	4.5000	5.1000
10MHz	20525	836.5	QPSK	9.1200	10.2000	
			16-QAM	9.0400	10.1600	
LTE Band 17	5MHz	23790	710.0	QPSK	4.5000	5.1200
				16-QAM	4.5000	5.0600
	10MHz	23790	710.0	QPSK	9.2000	10.1200
				16-QAM	9.1200	10.0800



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

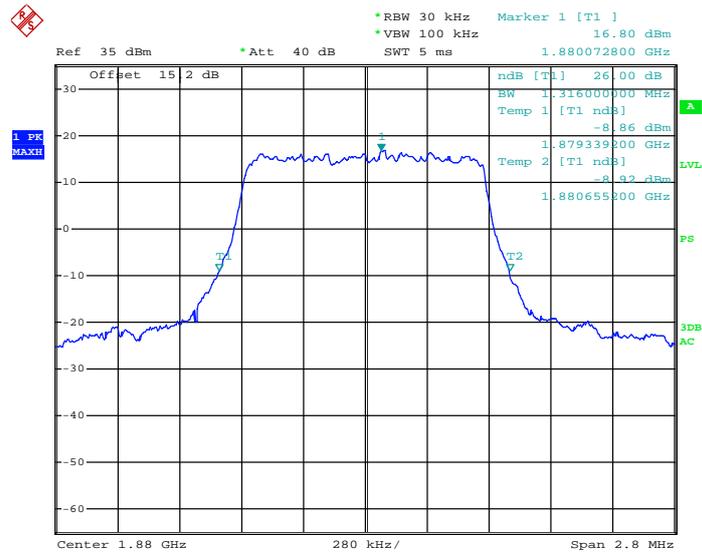
Band :	LTE Band 2	BW / Mod. :	1.4MHz / QPSK
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99% Occupied Bandwidth Plot on Channel 18900 for RB Size 6, RB Offset 0



Date: 29.JAN.2013 08:39:32

26dB Bandwidth Plot on Channel 18900 for RB Size 6, RB Offset 0

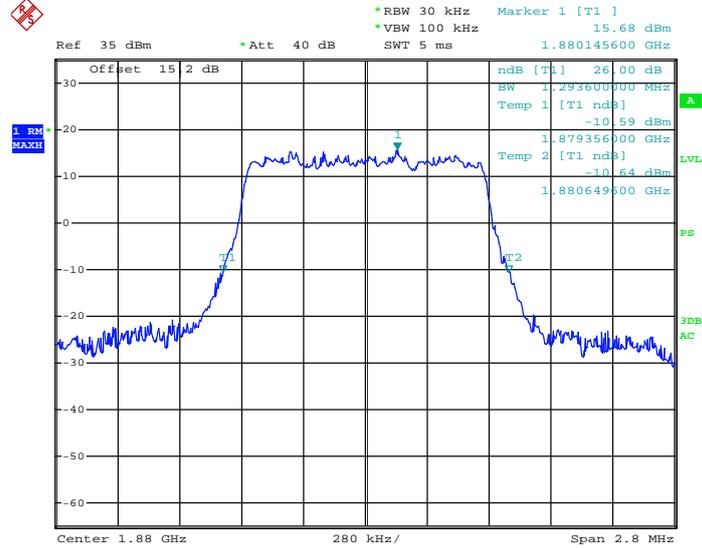


Date: 29.JAN.2013 08:23:44



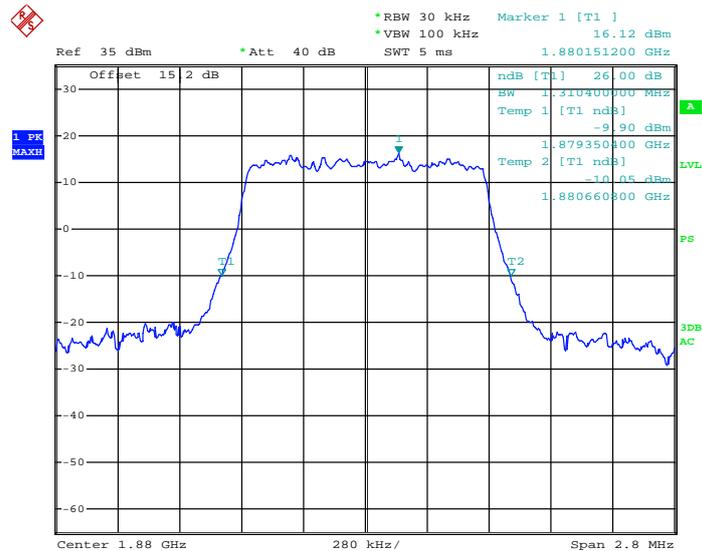
Band :	LTE Band 2	BW / Mod. :	1.4MHz / 16QAM
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**99% Occupied Bandwidth Plot on Channel 18900  
for RB Size 6, RB Offset 0**



Date: 29.JAN.2013 08:39:50

**26dB Bandwidth Plot on Channel 18900  
for RB Size 6, RB Offset 0**



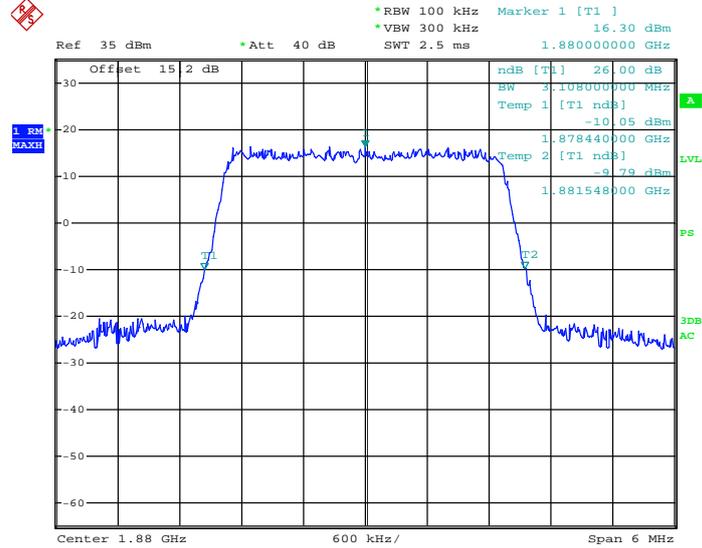
Date: 29.JAN.2013 08:24:10





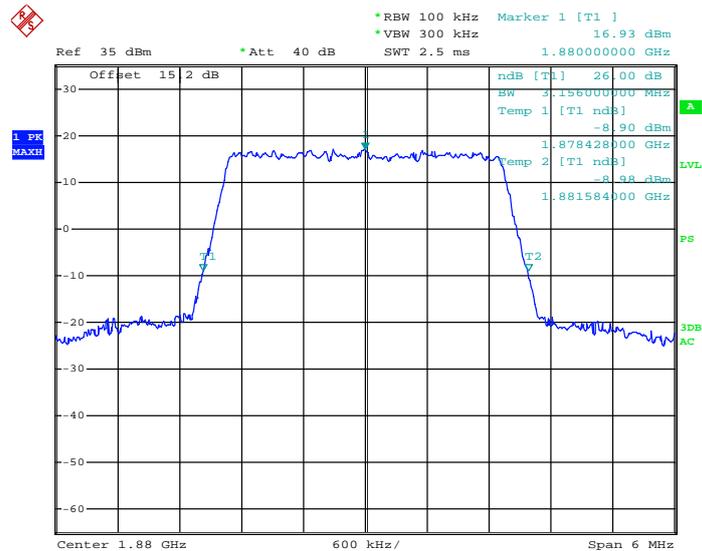
Band :	LTE Band 2	BW / Mod. :	3MHz / 16QAM
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**99% Occupied Bandwidth Plot on Channel 18900  
for RB Size 15, RB Offset 0**



Date: 29.JAN.2013 08:43:37

**26dB Bandwidth Plot on Channel 18900  
for RB Size 15, RB Offset 0**



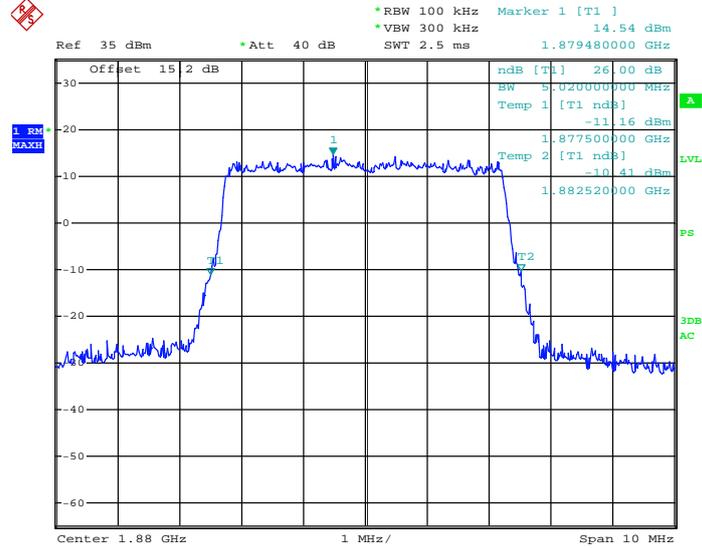
Date: 29.JAN.2013 08:25:31





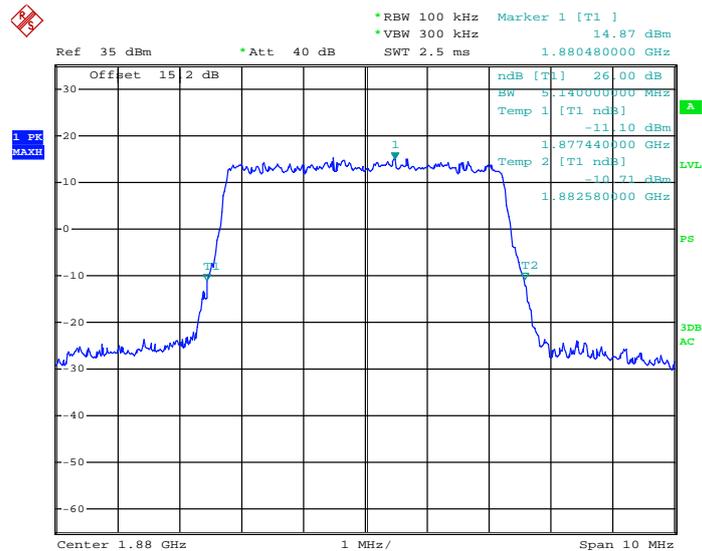
Band :	LTE Band 2	BW / Mod. :	5MHz / 16QAM
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**99% Occupied Bandwidth Plot on Channel 18900  
for RB Size 25, RB Offset 0**



Date: 29.JAN.2013 08:47:20

**26dB Bandwidth Plot on Channel 18900  
for RB Size 25, RB Offset 0**



Date: 29.JAN.2013 08:27:21







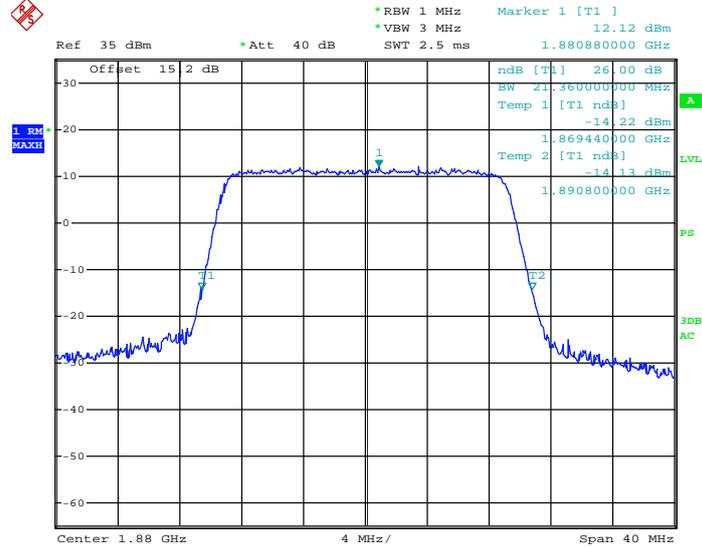






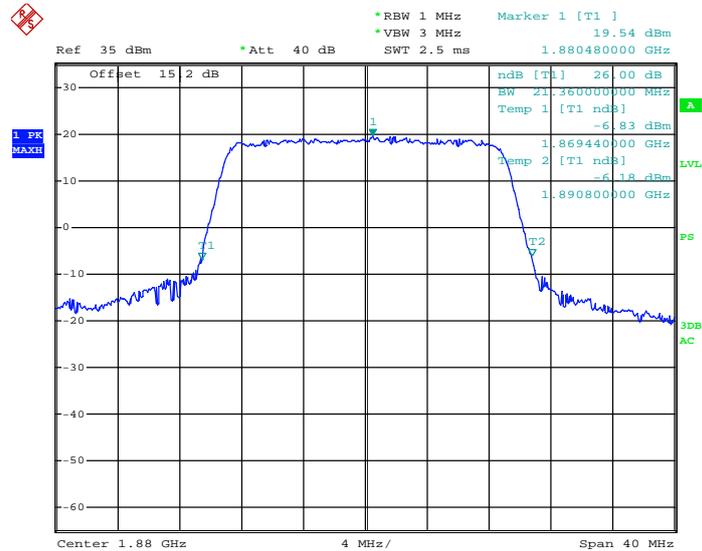
Band :	LTE Band 2	BW / Mod. :	20MHz / 16QAM
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**99% Occupied Bandwidth Plot on Channel 18900  
for RB Size 100, RB Offset 0**



Date: 29.JAN.2013 08:59:19

**26dB Bandwidth Plot on Channel 18900  
for RB Size 100, RB Offset 0**

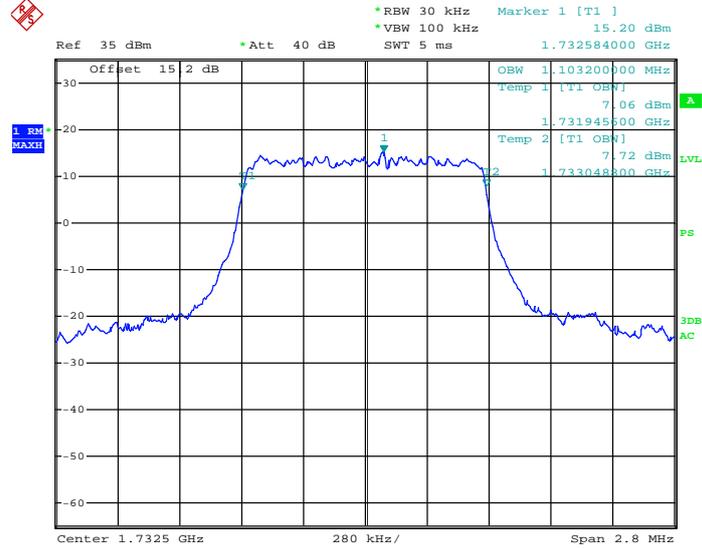


Date: 29.JAN.2013 08:32:10



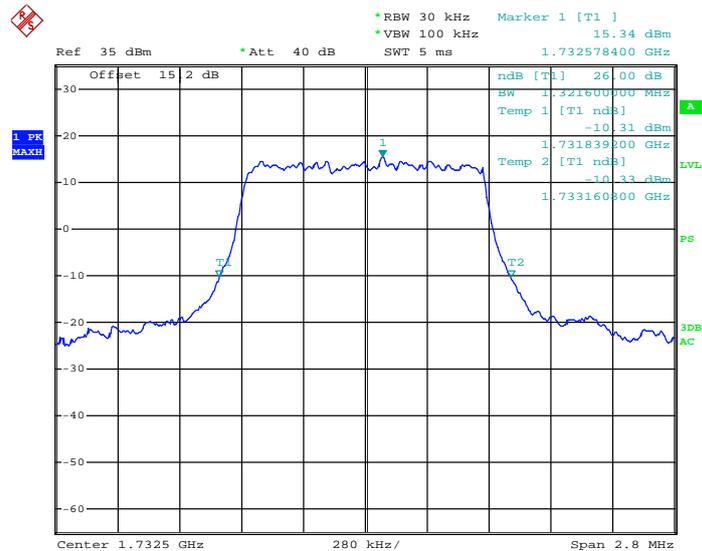
Band :	LTE Band 4	BW / Mod. :	1.4MHz / QPSK
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**99% Occupied Bandwidth Plot on Channel 20175  
for RB Size 6, RB Offset 0**



Date: 29.JAN.2013 10:33:59

**26dB Bandwidth Plot on Channel 20175  
for RB Size 6, RB Offset 0**

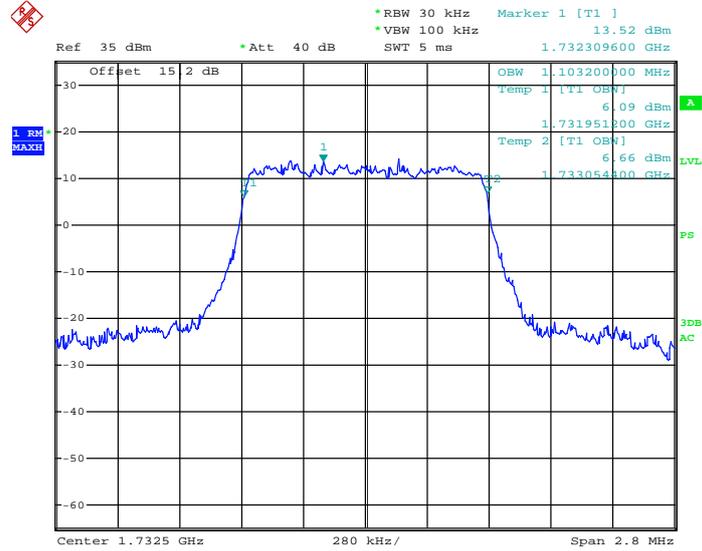


Date: 29.JAN.2013 10:22:20



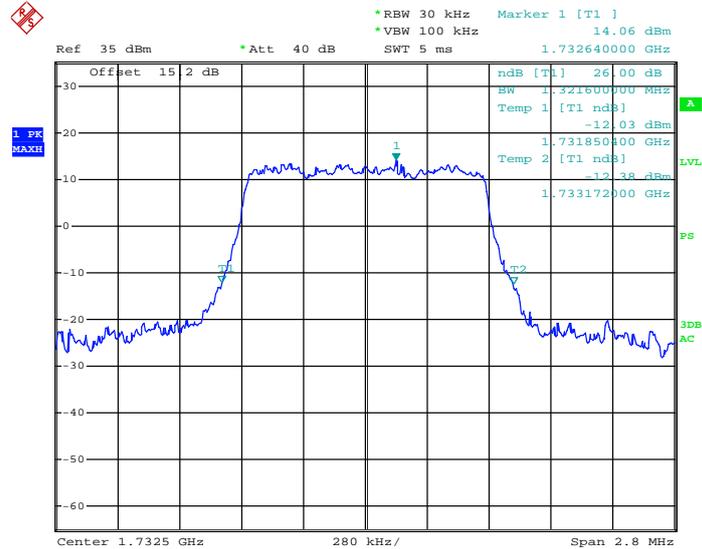
Band :	LTE Band 4	BW / Mod. :	1.4MHz / 16QAM
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**99% Occupied Bandwidth Plot on Channel 20175  
for RB Size 6, RB Offset 0**



Date: 29.JAN.2013 10:34:27

**26dB Bandwidth Plot on Channel 20175  
for RB Size 6, RB Offset 0**



Date: 29.JAN.2013 10:22:34

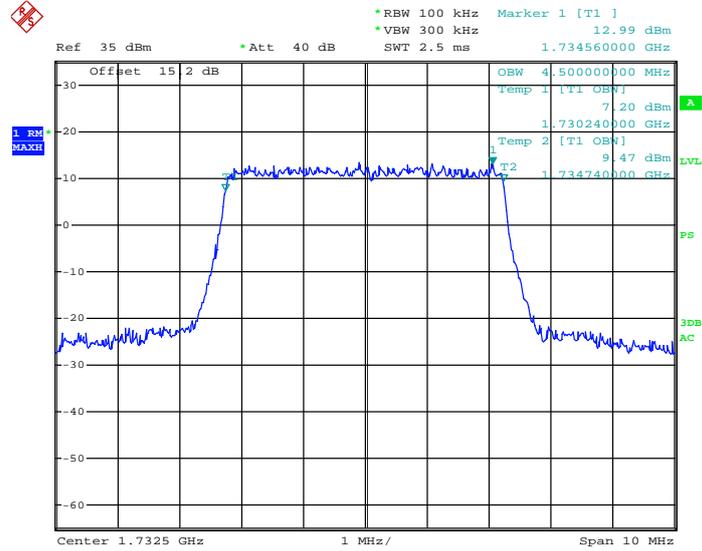






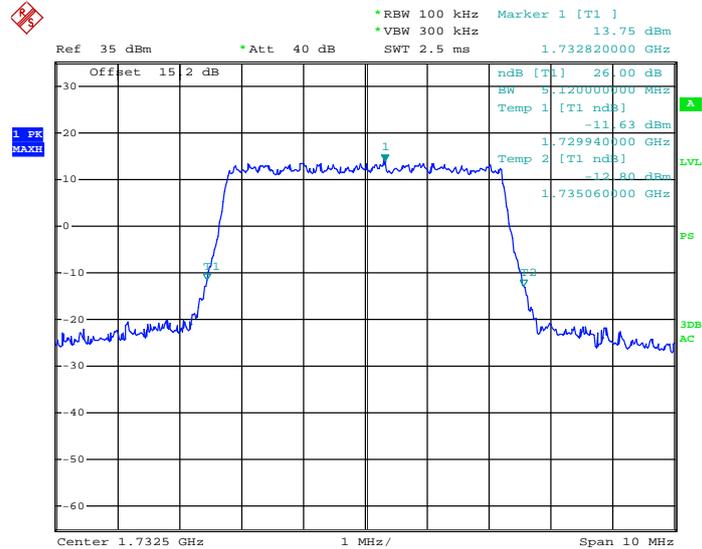
Band :	LTE Band 4	BW / Mod. :	5MHz / QPSK
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**99% Occupied Bandwidth Plot on Channel 20175  
for RB Size 25, RB Offset 0**



Date: 29.JAN.2013 10:40:43

**26dB Bandwidth Plot on Channel 20175  
for RB Size 25, RB Offset 0**

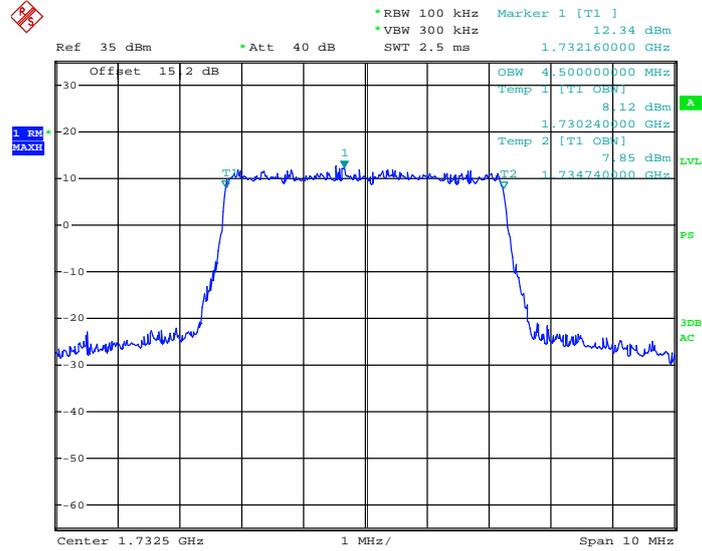


Date: 29.JAN.2013 10:24:03



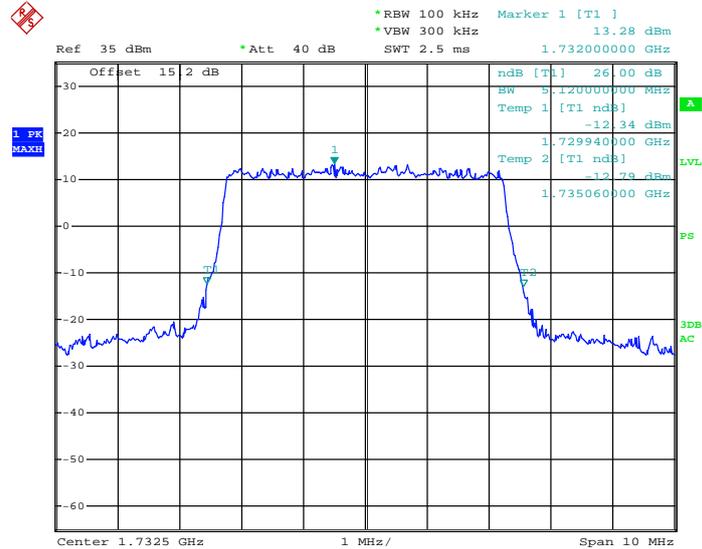
Band :	LTE Band 4	BW / Mod. :	5MHz / 16QAM
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**99% Occupied Bandwidth Plot on Channel 20175  
for RB Size 25, RB Offset 0**



Date: 29.JAN.2013 10:41:08

**26dB Bandwidth Plot on Channel 20175  
for RB Size 25, RB Offset 0**



Date: 29.JAN.2013 10:24:29

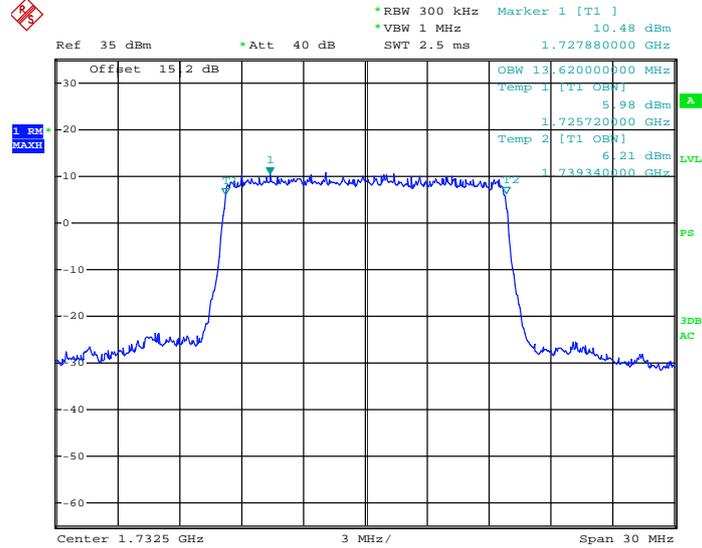






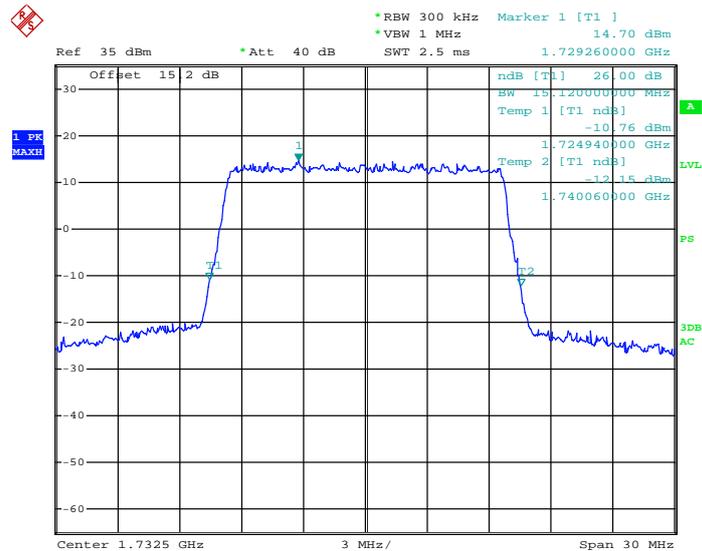
Band :	LTE Band 4	BW / Mod. :	15MHz / QPSK
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**99% Occupied Bandwidth Plot on Channel 20175  
for RB Size 75, RB Offset 0**



Date: 29.JAN.2013 10:47:56

**26dB Bandwidth Plot on Channel 20175  
for RB Size 75, RB Offset 0**

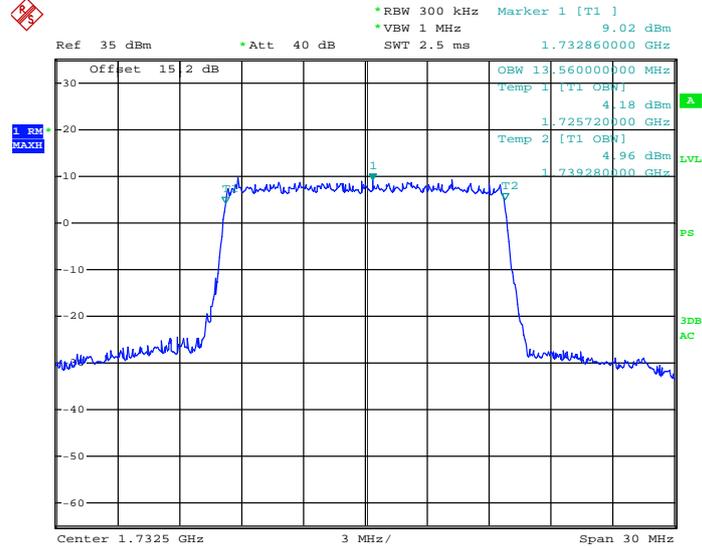


Date: 29.JAN.2013 10:25:45



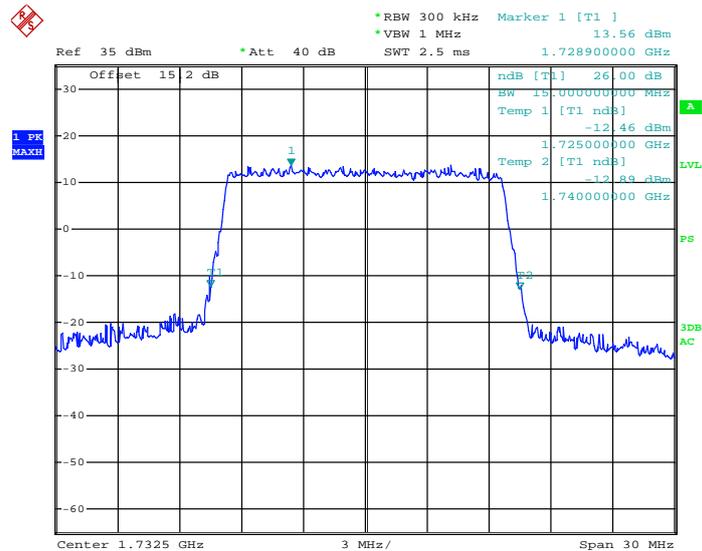
Band :	LTE Band 4	BW / Mod. :	15MHz / 16QAM
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**99% Occupied Bandwidth Plot on Channel 20175  
for RB Size 75, RB Offset 0**



Date: 29.JAN.2013 10:48:13

**26dB Bandwidth Plot on Channel 20175  
for RB Size 75, RB Offset 0**

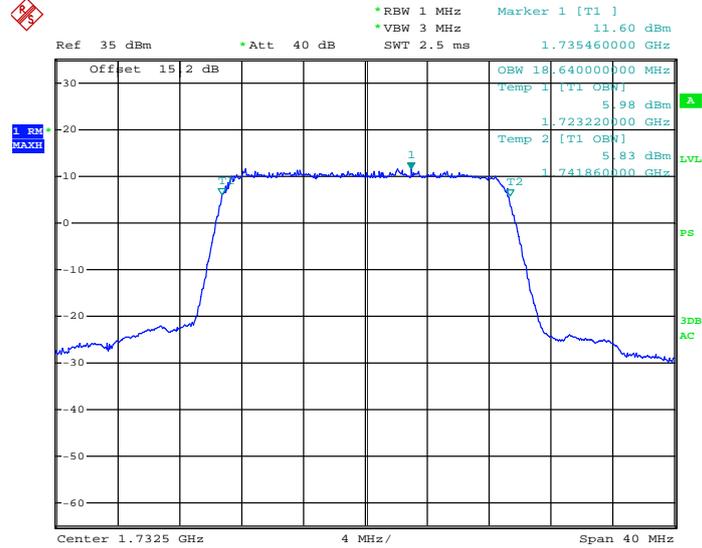


Date: 29.JAN.2013 10:26:04



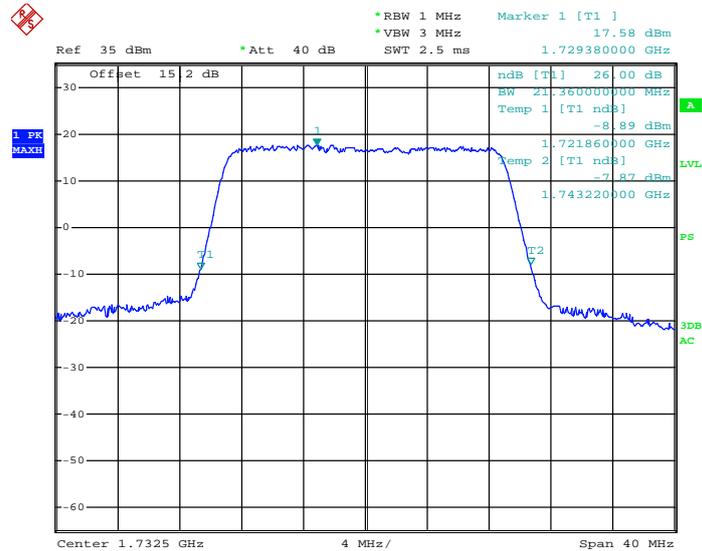
Band :	LTE Band 4	BW / Mod. :	20MHz / QPSK
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**99% Occupied Bandwidth Plot on Channel 20175  
for RB Size 100, RB Offset 0**



Date: 29.JAN.2013 10:50:55

**26dB Bandwidth Plot on Channel 20175  
for RB Size 100, RB Offset 0**



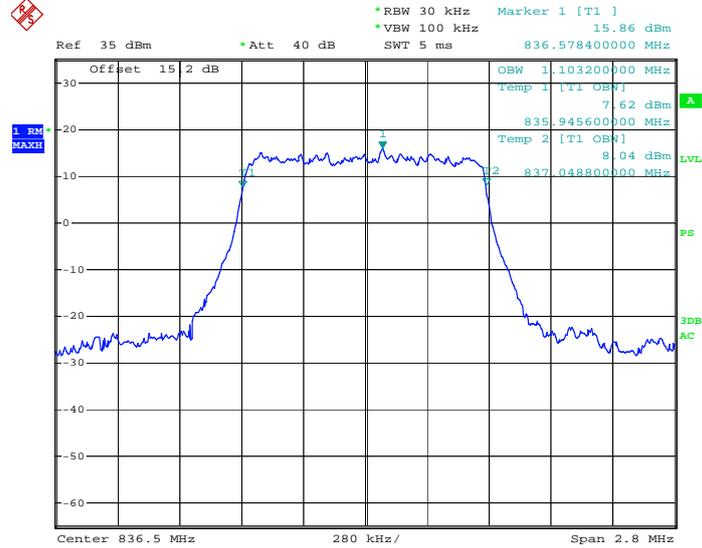
Date: 29.JAN.2013 10:27:36





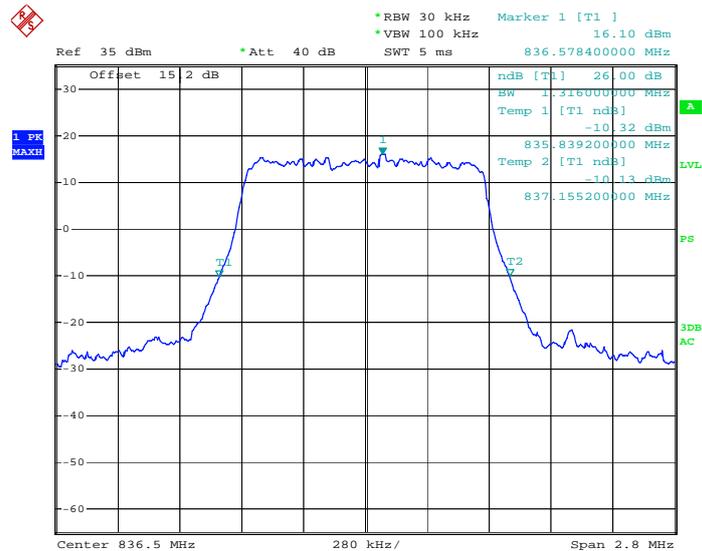
Band :	LTE Band 5	BW / Mod. :	1.4MHz / QPSK
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**99% Occupied Bandwidth Plot on Channel 20525  
for RB Size 6, RB Offset 0**



Date: 30.JAN.2013 07:43:49

**26dB Bandwidth Plot on Channel 20525  
for RB Size 6, RB Offset 0**

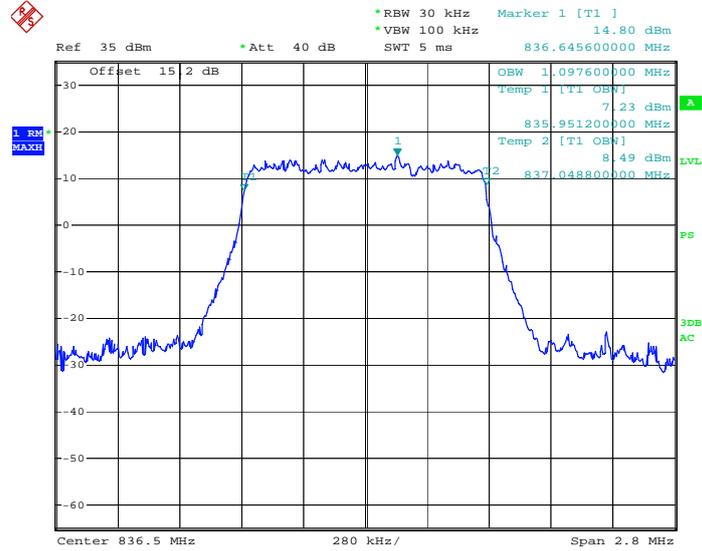


Date: 30.JAN.2013 08:13:21



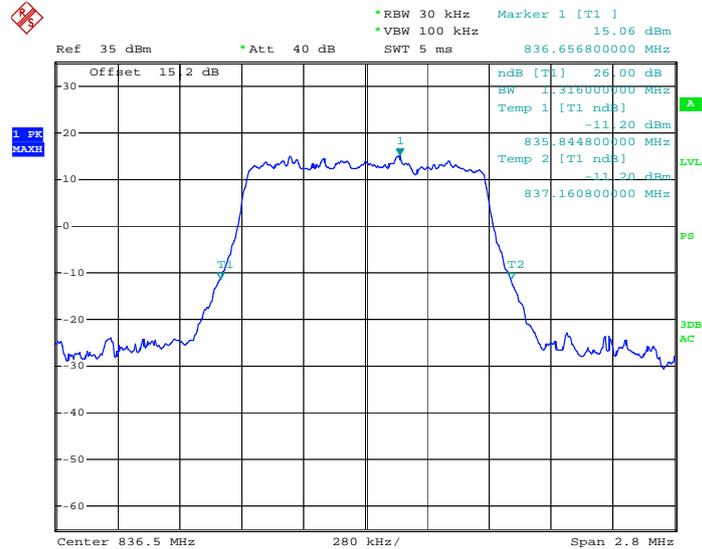
Band :	LTE Band 5	BW / Mod. :	1.4MHz / 16QAM
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**99% Occupied Bandwidth Plot on Channel 20525  
for RB Size 6, RB Offset 0**



Date: 30.JAN.2013 07:44:13

**26dB Bandwidth Plot on Channel 20525  
for RB Size 6, RB Offset 0**



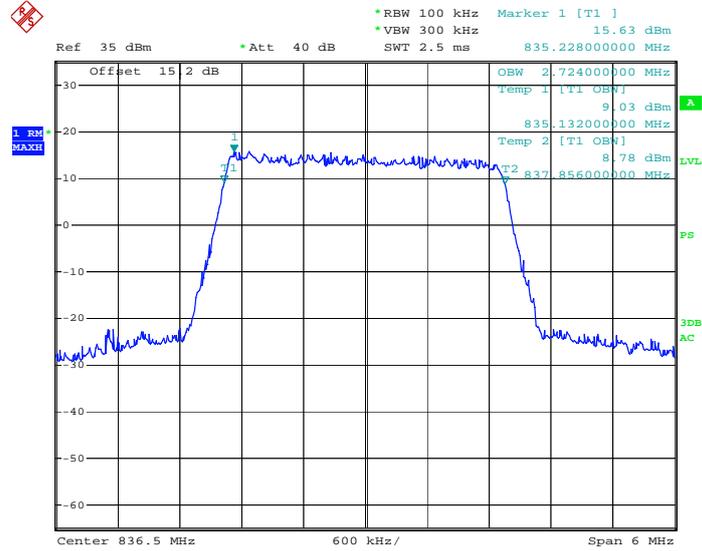
Date: 30.JAN.2013 08:14:03





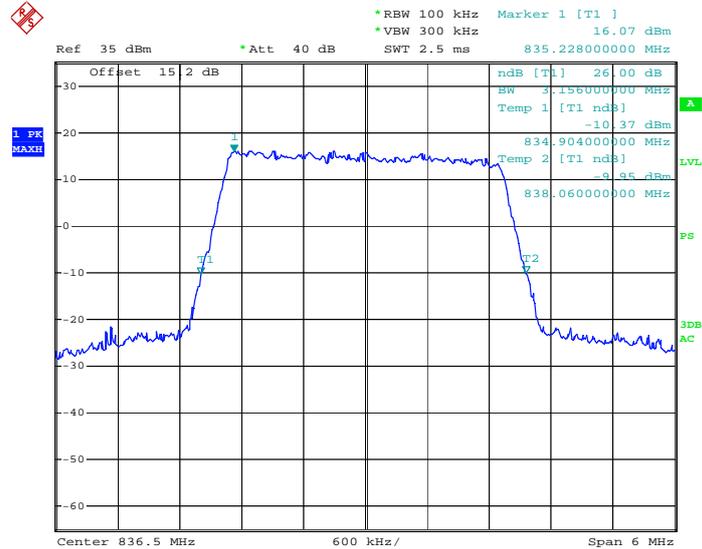
Band :	LTE Band 5	BW / Mod. :	3MHz / 16QAM
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**99% Occupied Bandwidth Plot on Channel 20525  
for RB Size 15, RB Offset 0**



Date: 30.JAN.2013 07:48:37

**26dB Bandwidth Plot on Channel 20525  
for RB Size 15, RB Offset 0**

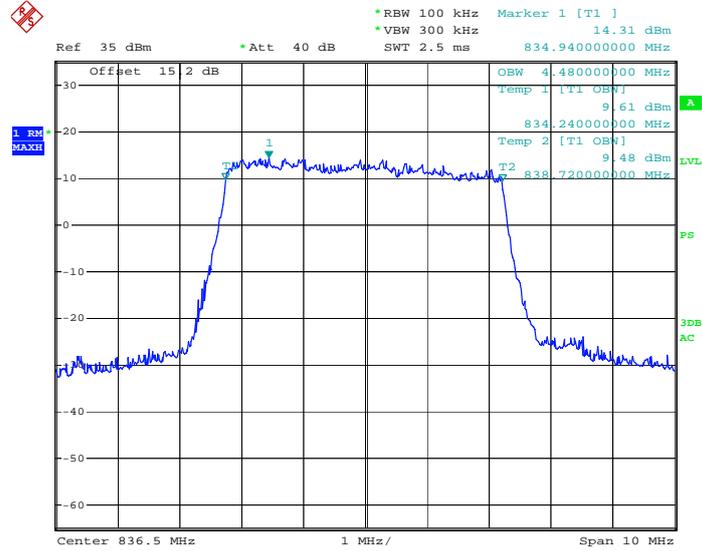


Date: 30.JAN.2013 08:10:54



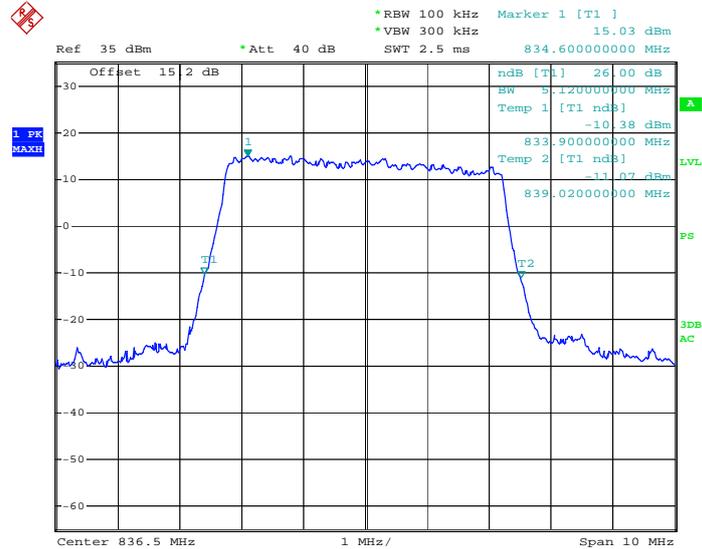
Band :	LTE Band 5	BW / Mod. :	5MHz / QPSK
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**99% Occupied Bandwidth Plot on Channel 20525  
for RB Size 25, RB Offset 0**



Date: 30.JAN.2013 07:53:55

**26dB Bandwidth Plot on Channel 20525  
for RB Size 25, RB Offset 0**

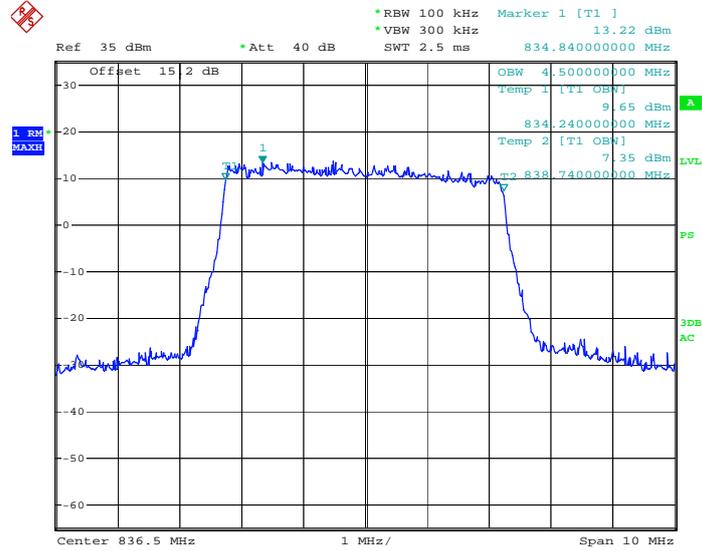


Date: 30.JAN.2013 08:09:11



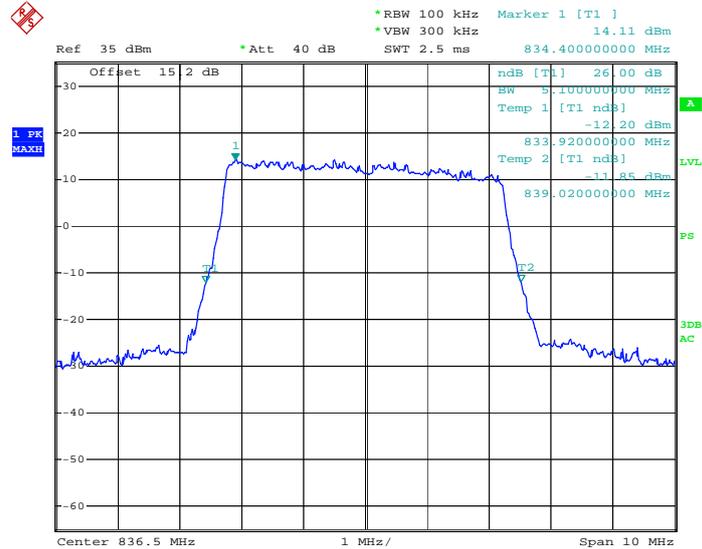
Band :	LTE Band 5	BW / Mod. :	5MHz / 16QAM
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**99% Occupied Bandwidth Plot on Channel 20525  
for RB Size 25, RB Offset 0**



Date: 30.JAN.2013 07:53:25

**26dB Bandwidth Plot on Channel 20525  
for RB Size 25, RB Offset 0**

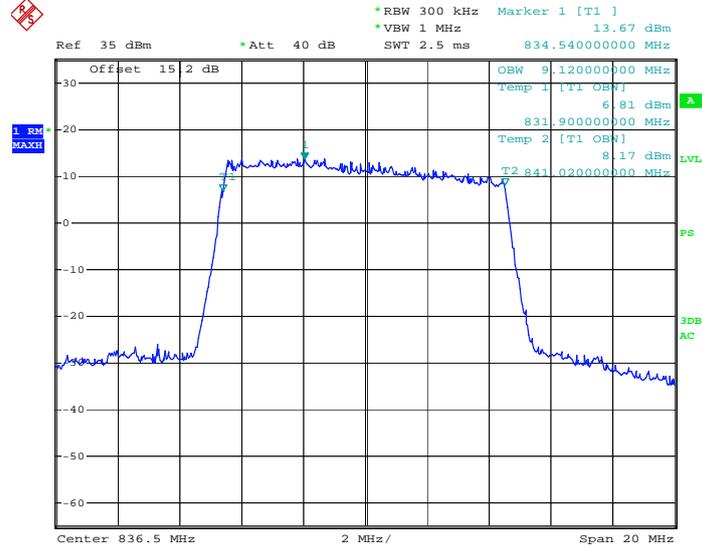


Date: 30.JAN.2013 08:10:09



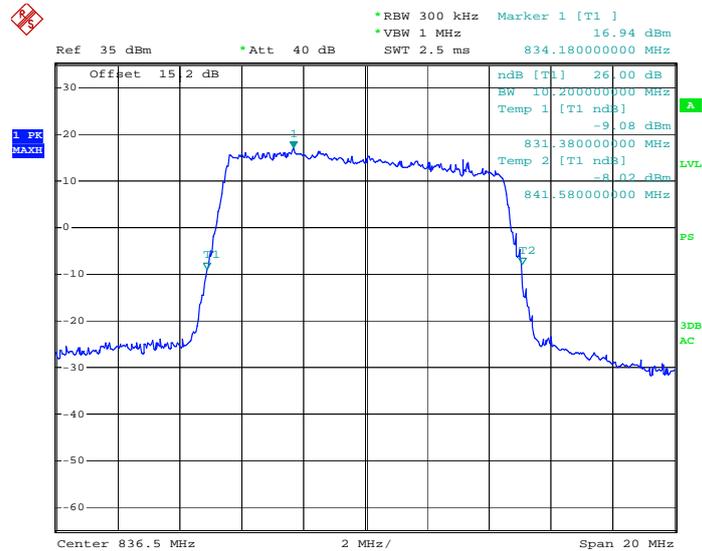
Band :	LTE Band 5	BW / Mod. :	10MHz / QPSK
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**99% Occupied Bandwidth Plot on Channel 20525  
for RB Size 50, RB Offset 0**



Date: 30.JAN.2013 07:58:23

**26dB Bandwidth Plot on Channel 20525  
for RB Size 50, RB Offset 0**

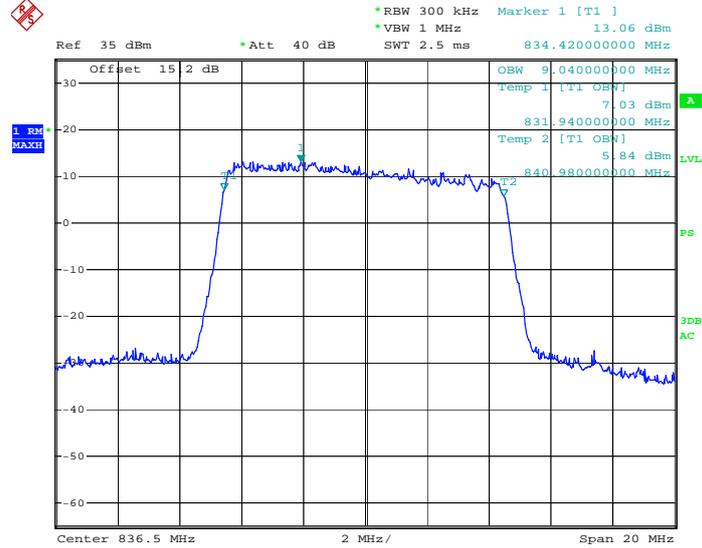


Date: 30.JAN.2013 08:07:43



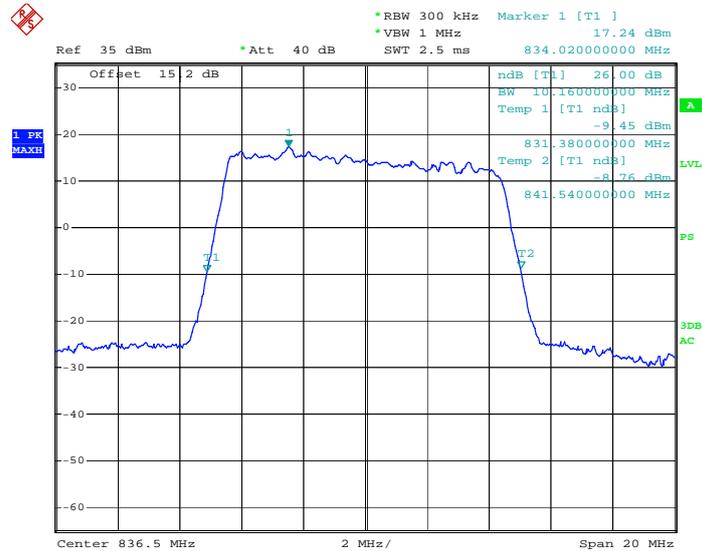
Band :	LTE Band 5	BW / Mod. :	10MHz / 16QAM
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**99% Occupied Bandwidth Plot on Channel 20525  
for RB Size 50, RB Offset 0**



Date: 30.JAN.2013 07:57:59

**26dB Bandwidth Plot on Channel 20525  
for RB Size 50, RB Offset 0**

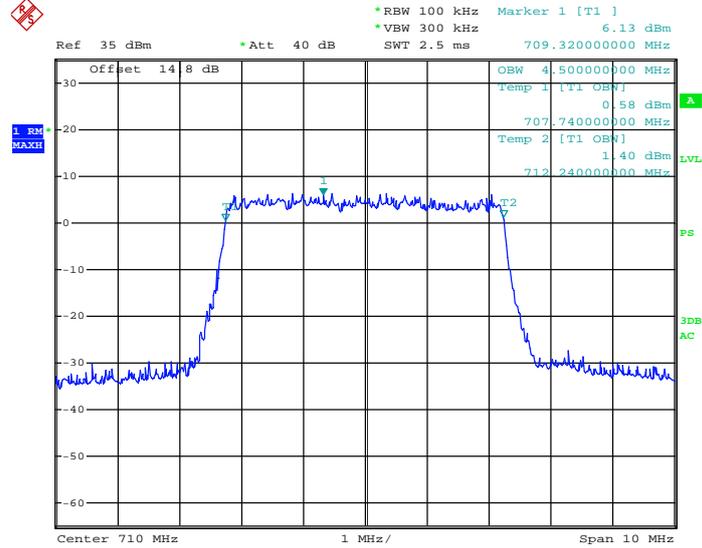


Date: 30.JAN.2013 08:07:23



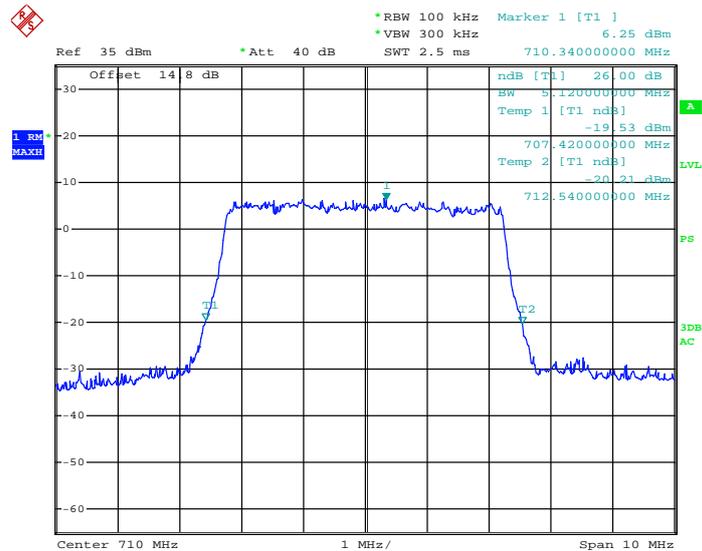
Band :	LTE Band 17	BW / Mod. :	5MHz / QPSK
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**99% Occupied Bandwidth Plot on Channel 23790  
for RB Size 25, RB Offset 0**



Date: 29.JAN.2013 10:59:16

**26dB Bandwidth Plot on Channel 23790  
for RB Size 25, RB Offset 0**

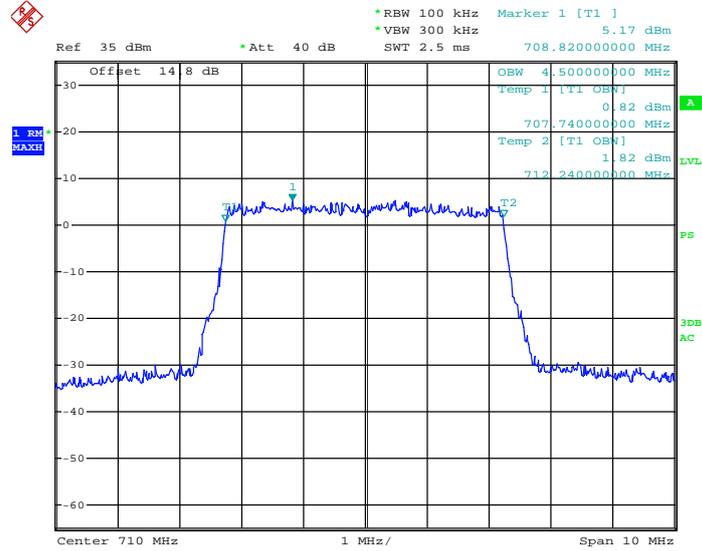


Date: 29.JAN.2013 11:05:27



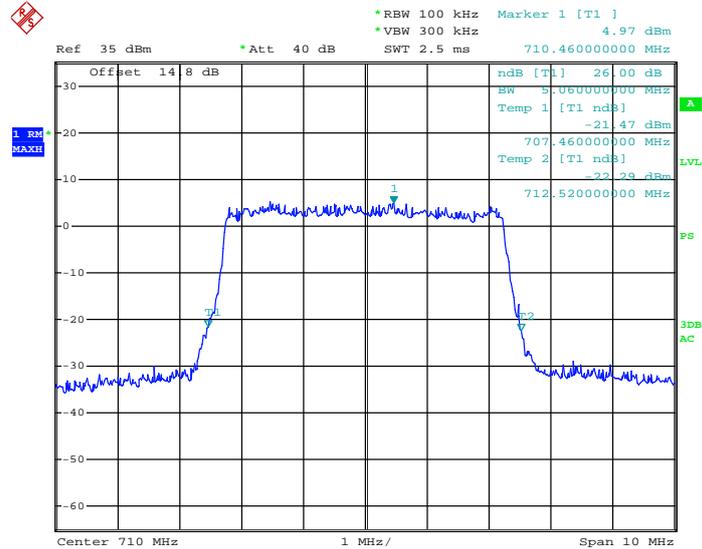
Band :	LTE Band 17	BW / Mod. :	5MHz / 16QAM
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**99% Occupied Bandwidth Plot on Channel 23790  
for RB Size 25, RB Offset 0**



Date: 29.JAN.2013 10:59:00

**26dB Bandwidth Plot on Channel 23790  
for RB Size 25, RB Offset 0**

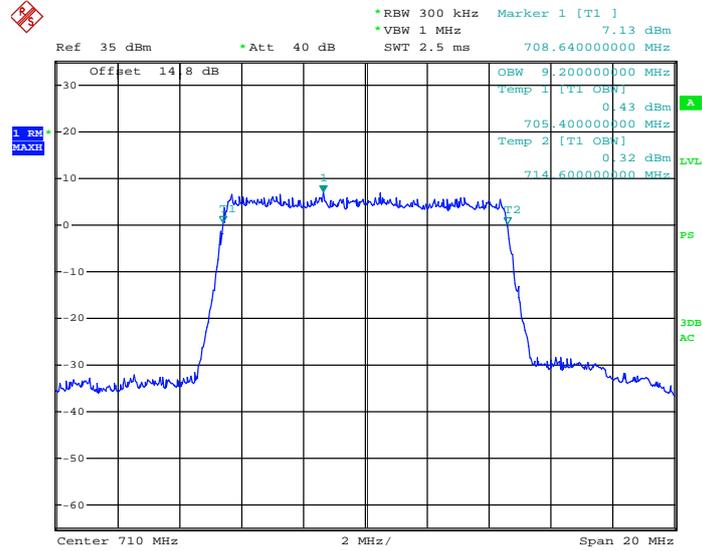


Date: 29.JAN.2013 11:05:43



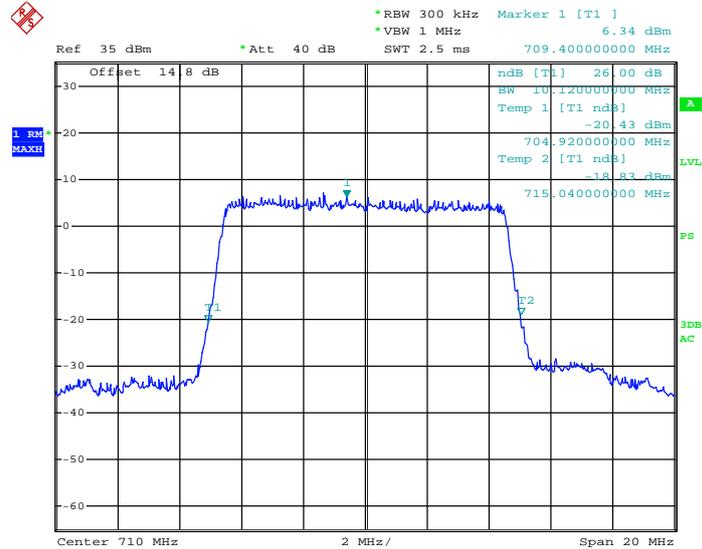
Band :	LTE Band 17	BW / Mod. :	10MHz / QPSK
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**99% Occupied Bandwidth Plot on Channel 23790  
for RB Size 50, RB Offset 0**



Date: 29.JAN.2013 10:58:07

**26dB Bandwidth Plot on Channel 23790  
for RB Size 50, RB Offset 0**



Date: 29.JAN.2013 11:06:36



## 3.4 Band Edge 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 17, the FCC limit is  
 $43 + 10\log_{10}(P[\text{Watts}]) \text{ dB} = -13 \text{ dBm}$  in a 100 kHz bandwidth.

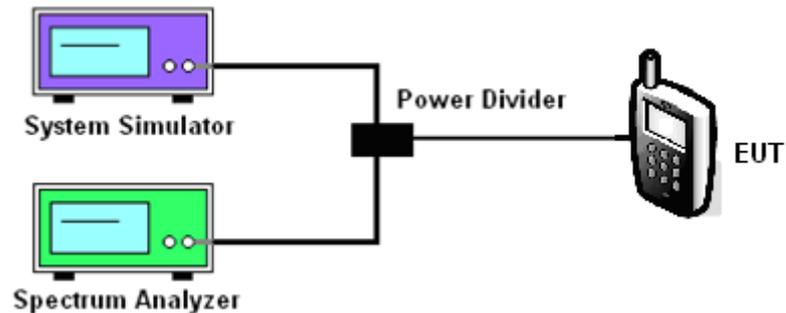
### 3.4.2 Measuring Instruments

See list of measuring instruments of this test report.

### 3.4.3 Test Procedures

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The band edges of low and high channels for the highest RF powers were measured.

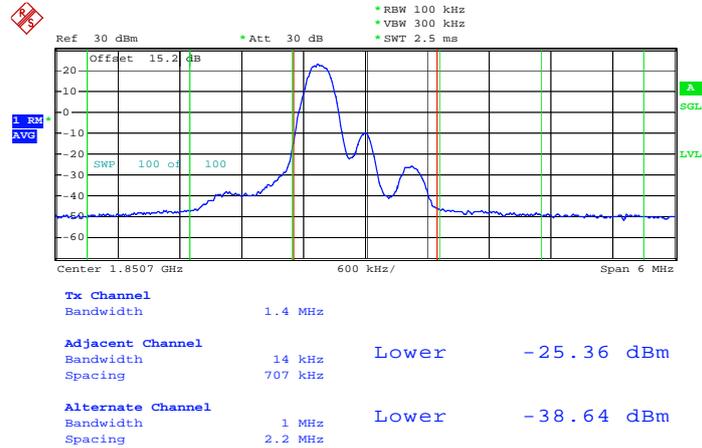
### 3.4.4 Test Setup



### 3.4.5 Test Result (Plots) of Conducted Band Edge

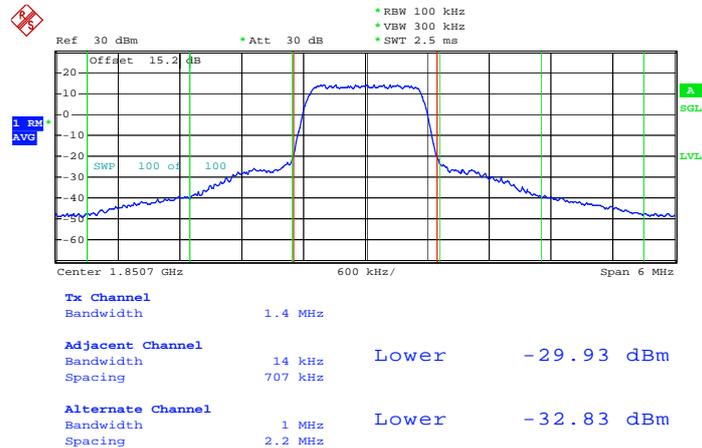
<b>Band :</b>	LTE Band 2	<b>BW / Mod. :</b>	1.4MHz / QPSK
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Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 20.MAR.2013 05:30:31

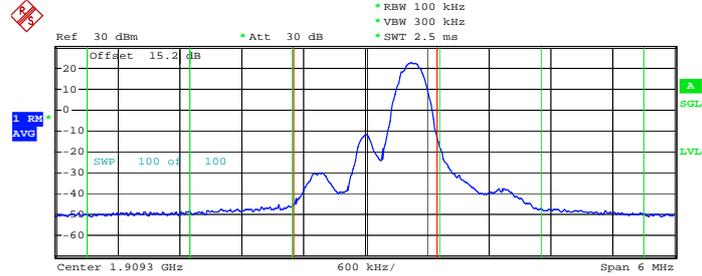
Lower Band Edge Plot for QPSK-RB Size 6, RB Offset 0



Date: 20.MAR.2013 05:30:15



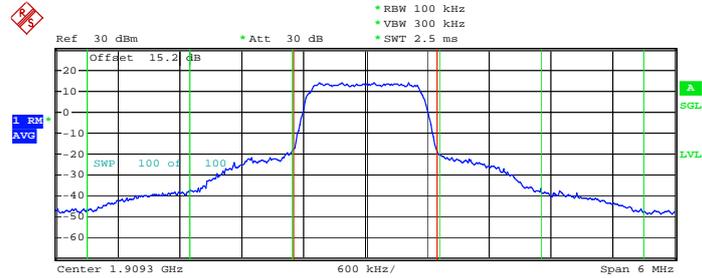
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 5



<b>Tx Channel</b>			
Bandwidth	1.4 MHz		
<b>Adjacent Channel</b>			
Bandwidth	14 kHz		
Spacing	707 kHz	Upper	-22.80 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	2.2 MHz	Upper	-38.90 dBm

Date: 20.MAR.2013 05:31:48

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



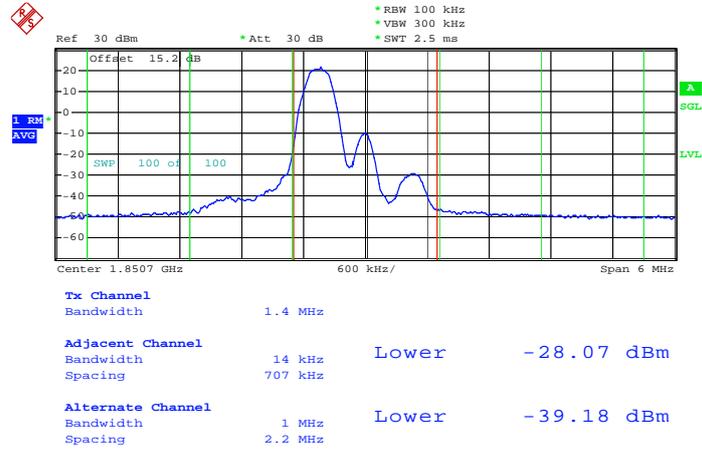
<b>Tx Channel</b>			
Bandwidth	1.4 MHz		
<b>Adjacent Channel</b>			
Bandwidth	14 kHz		
Spacing	707 kHz	Upper	-28.23 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	2.2 MHz	Upper	-31.47 dBm

Date: 20.MAR.2013 05:32:08



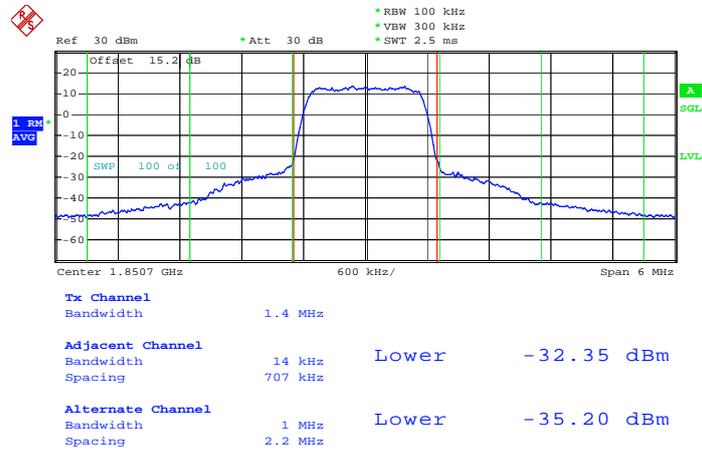
<b>Band :</b>	LTE Band 2	<b>BW / Mod. :</b>	1.4MHz / 16QAM
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Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 20.MAR.2013 05:30:46

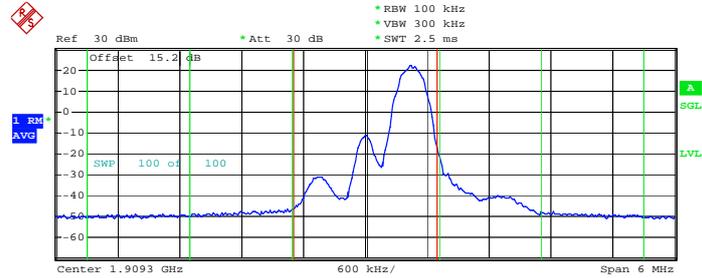
Lower Band Edge Plot for 16QAM -RB Size 6, RB Offset 0



Date: 20.MAR.2013 05:29:55



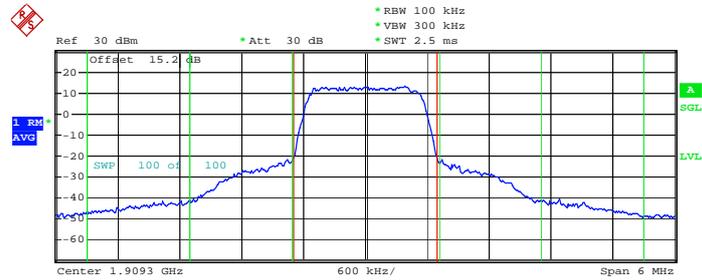
Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 5



<b>Tx Channel</b>			
Bandwidth	1.4 MHz		
<b>Adjacent Channel</b>			
Bandwidth	14 kHz		
Spacing	707 kHz	Upper	-26.42 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	2.2 MHz	Upper	-39.40 dBm

Date: 20.MAR.2013 05:31:32

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



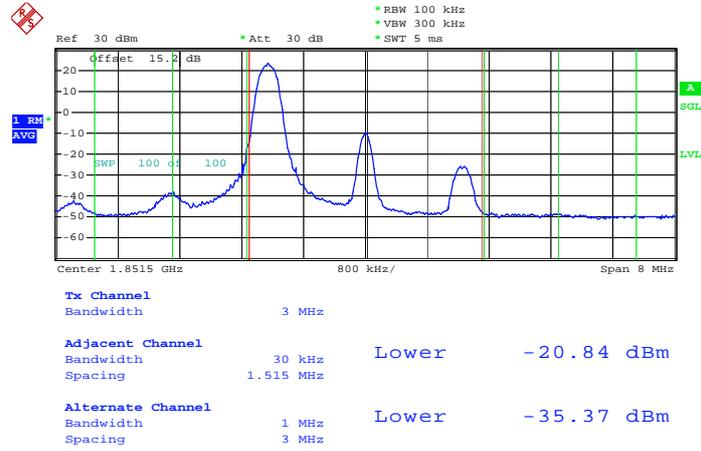
<b>Tx Channel</b>			
Bandwidth	1.4 MHz		
<b>Adjacent Channel</b>			
Bandwidth	14 kHz		
Spacing	707 kHz	Upper	-30.50 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	2.2 MHz	Upper	-34.53 dBm

Date: 20.MAR.2013 05:32:24



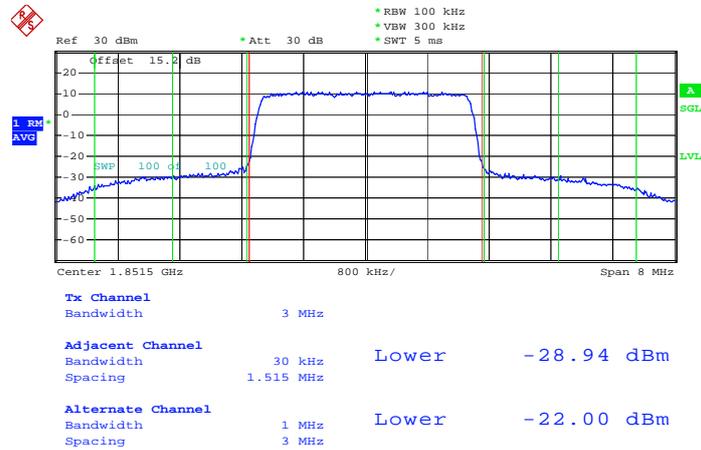
<b>Band :</b>	LTE Band 2	<b>BW / Mod. :</b>	3MHz / QPSK
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Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 20.MAR.2013 05:36:40

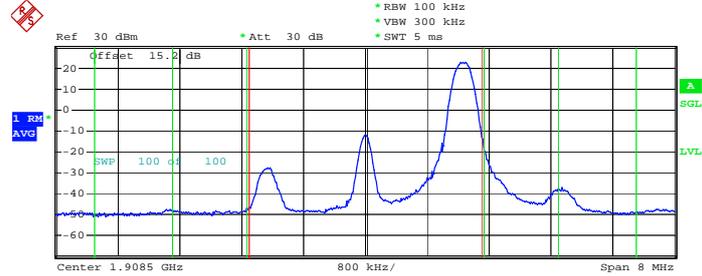
Lower Band Edge Plot for QPSK-RB Size 15, RB Offset 0



Date: 20.MAR.2013 05:36:26



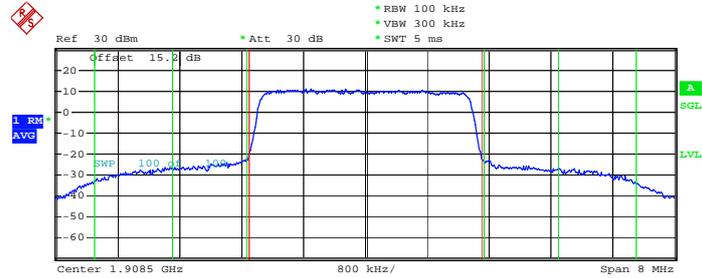
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 14



<b>Tx Channel</b>			
Bandwidth	3 MHz		
<b>Adjacent Channel</b>			
Bandwidth	30 kHz		
Spacing	1.515 MHz	Upper	-16.98 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	3 MHz	Upper	-34.44 dBm

Date: 20.MAR.2013 05:38:06

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



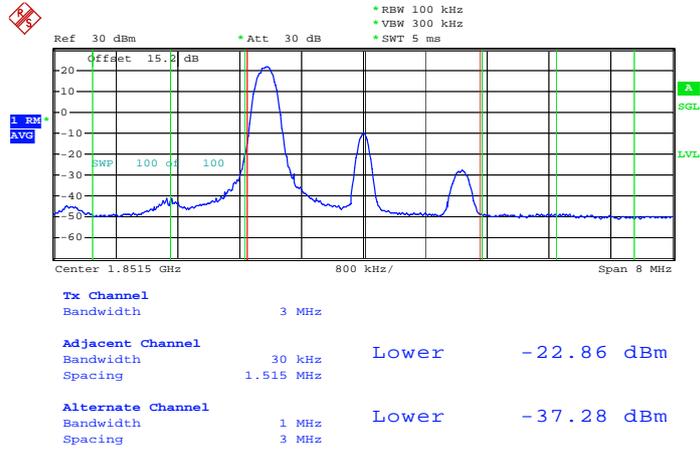
<b>Tx Channel</b>			
Bandwidth	3 MHz		
<b>Adjacent Channel</b>			
Bandwidth	30 kHz		
Spacing	1.515 MHz	Upper	-26.95 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	3 MHz	Upper	-19.64 dBm

Date: 20.MAR.2013 05:38:23



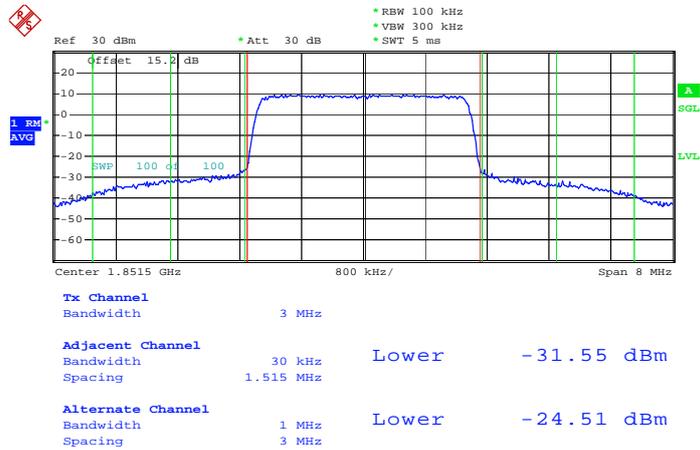
<b>Band :</b>	LTE Band 2	<b>BW / Mod. :</b>	3MHz / 16QAM
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Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 20.MAR.2013 05:36:56

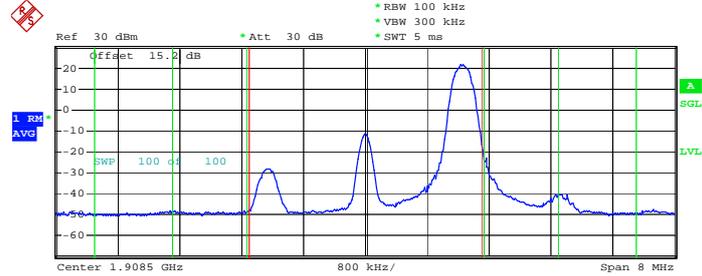
Lower Band Edge Plot for 16QAM -RB Size 15, RB Offset 0



Date: 20.MAR.2013 05:36:10



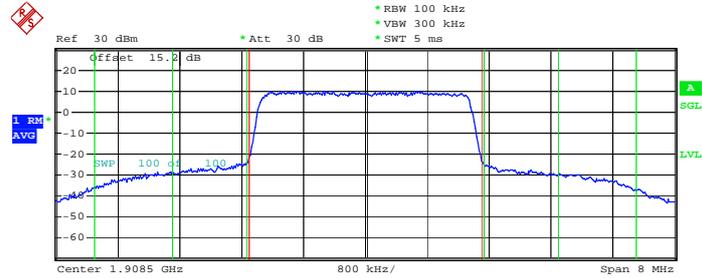
Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 14



<b>Tx Channel</b>			
Bandwidth	3 MHz		
<b>Adjacent Channel</b>			
Bandwidth	30 kHz		
Spacing	1.515 MHz	Upper	-20.17 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	3 MHz	Upper	-36.73 dBm

Date: 20.MAR.2013 05:37:45

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



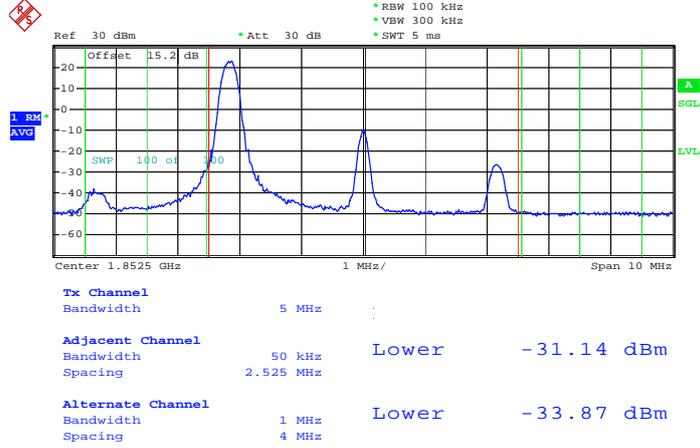
<b>Tx Channel</b>			
Bandwidth	3 MHz		
<b>Adjacent Channel</b>			
Bandwidth	30 kHz		
Spacing	1.515 MHz	Upper	-28.09 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	3 MHz	Upper	-22.24 dBm

Date: 20.MAR.2013 05:38:37



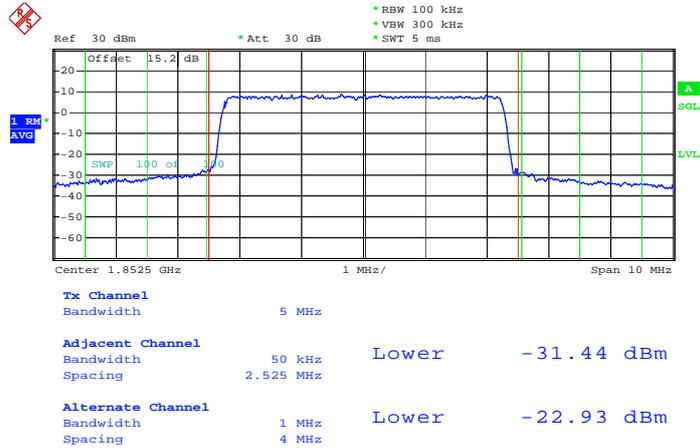
<b>Band :</b>	LTE Band 2	<b>BW / Mod. :</b>	5MHz / QPSK
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Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 20.MAR.2013 05:42:40

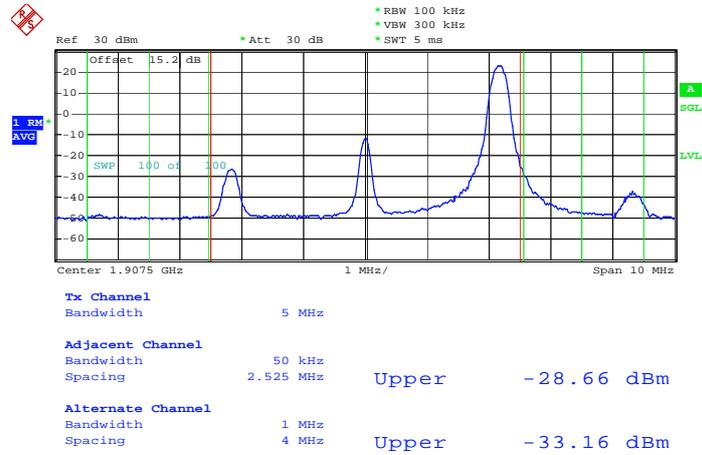
Lower Band Edge Plot for QPSK-RB Size 25, RB Offset 0



Date: 20.MAR.2013 05:42:19

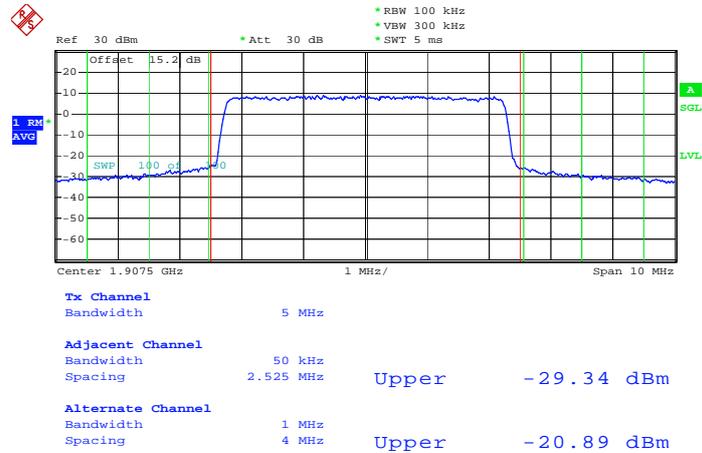


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 24



Date: 20.MAR.2013 05:44:19

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

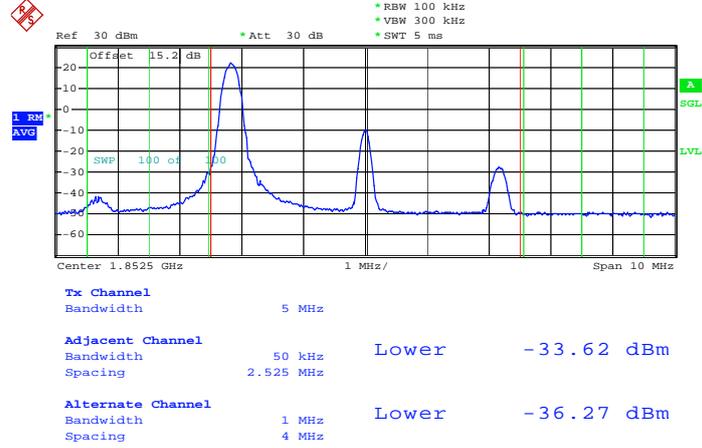


Date: 20.MAR.2013 05:44:43



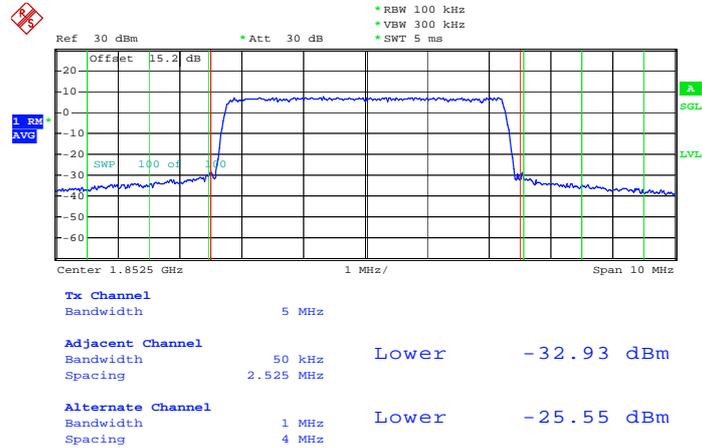
<b>Band :</b>	LTE Band 2	<b>BW / Mod. :</b>	5MHz / 16QAM
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Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 20.MAR.2013 05:43:01

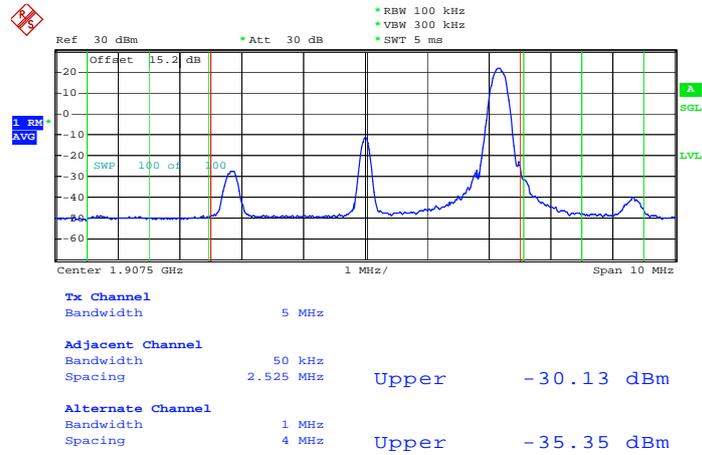
Lower Band Edge Plot for 16QAM -RB Size 25, RB Offset 0



Date: 20.MAR.2013 05:41:53

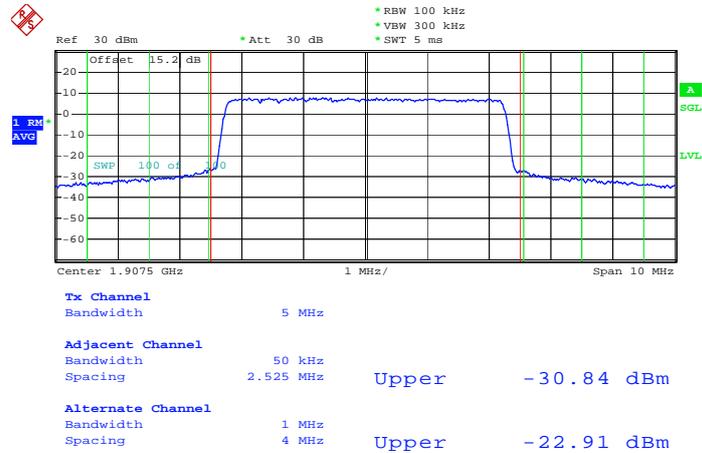


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 24



Date: 20.MAR.2013 05:44:04

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

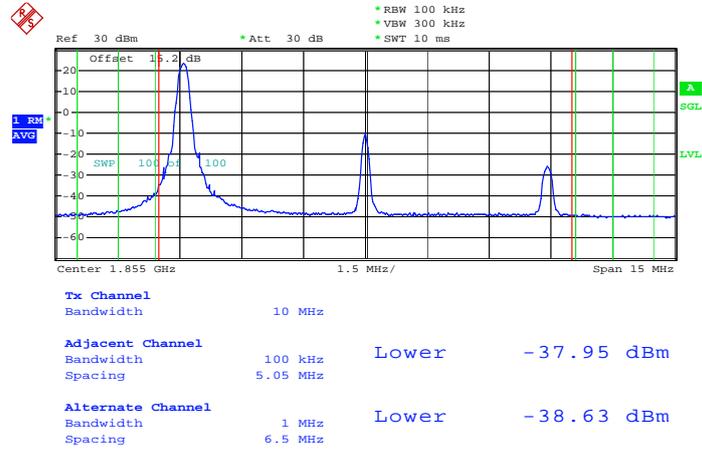


Date: 20.MAR.2013 05:45:03



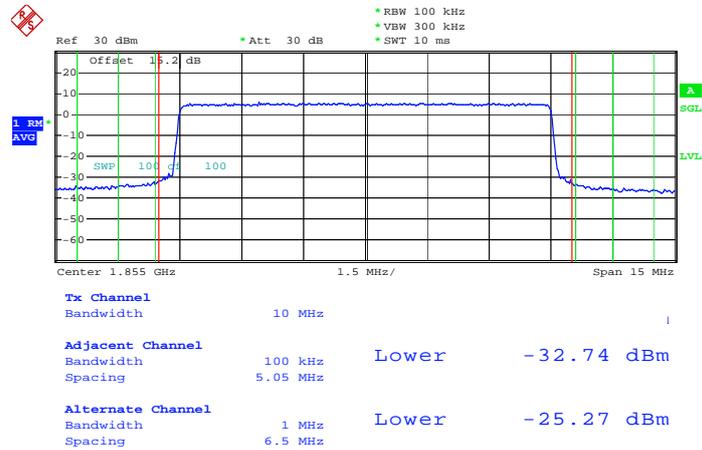
<b>Band :</b>	LTE Band 2	<b>BW / Mod. :</b>	10MHz / QPSK
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**Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0**



Date: 20.MAR.2013 06:01:53

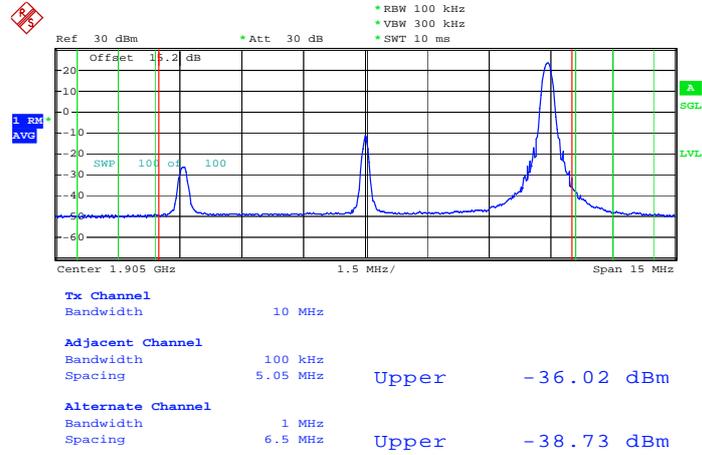
**Lower Band Edge Plot for QPSK-RB Size 50, RB Offset 0**



Date: 20.MAR.2013 06:01:32

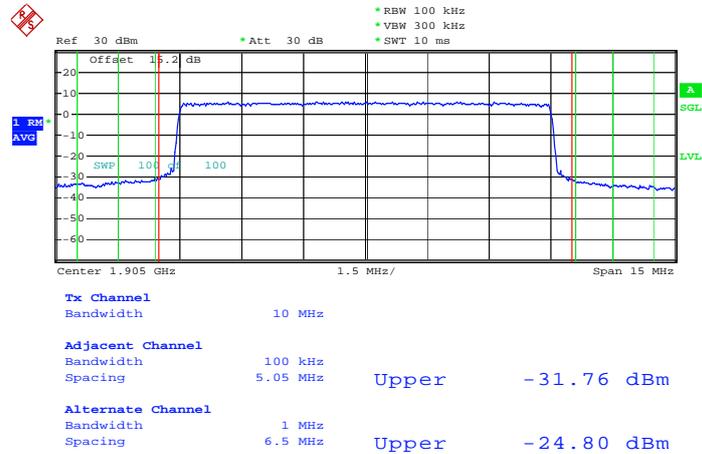


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 49



Date: 20.MAR.2013 06:03:20

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

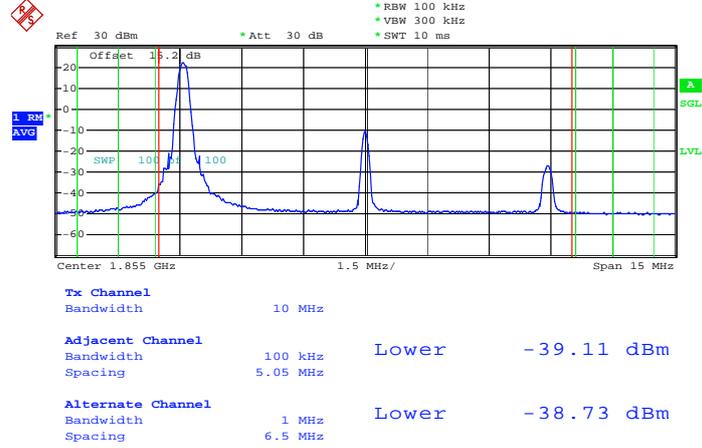


Date: 20.MAR.2013 06:03:38



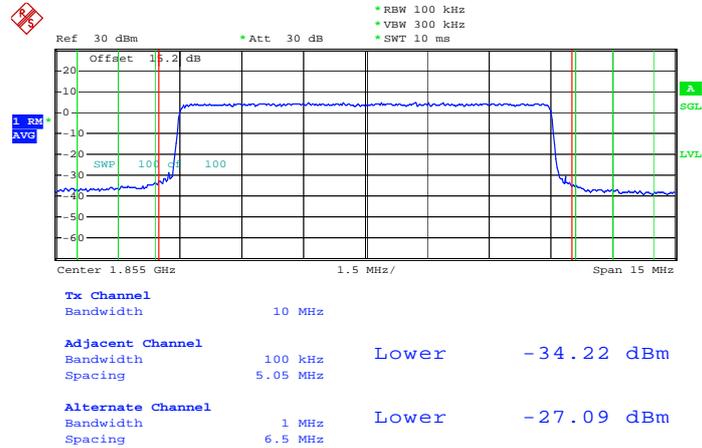
<b>Band :</b>	LTE Band 2	<b>BW / Mod. :</b>	10MHz / 16QAM
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Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 20.MAR.2013 06:02:14

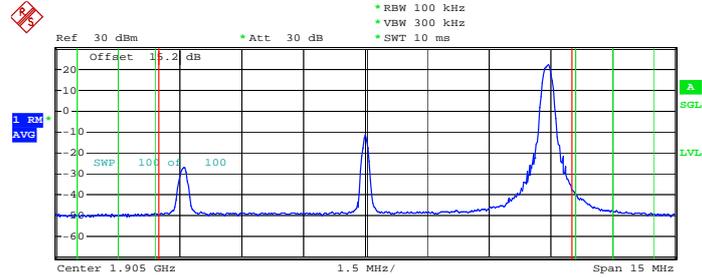
Lower Band Edge Plot for 16QAM -RB Size 50, RB Offset 0



Date: 20.MAR.2013 06:01:15



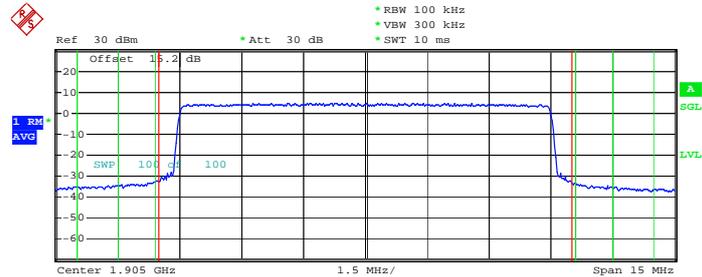
Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 49



<b>Tx Channel</b>	
Bandwidth	10 MHz
<b>Adjacent Channel</b>	
Bandwidth	100 kHz
Spacing	5.05 MHz
	Upper -37.85 dBm
<b>Alternate Channel</b>	
Bandwidth	1 MHz
Spacing	6.5 MHz
	Upper -38.93 dBm

Date: 20.MAR.2013 06:03:02

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



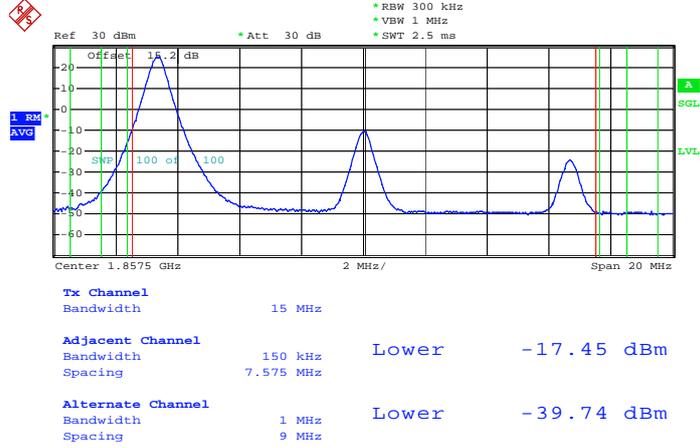
<b>Tx Channel</b>	
Bandwidth	10 MHz
<b>Adjacent Channel</b>	
Bandwidth	100 kHz
Spacing	5.05 MHz
	Upper -33.52 dBm
<b>Alternate Channel</b>	
Bandwidth	1 MHz
Spacing	6.5 MHz
	Upper -26.50 dBm

Date: 20.MAR.2013 06:03:56



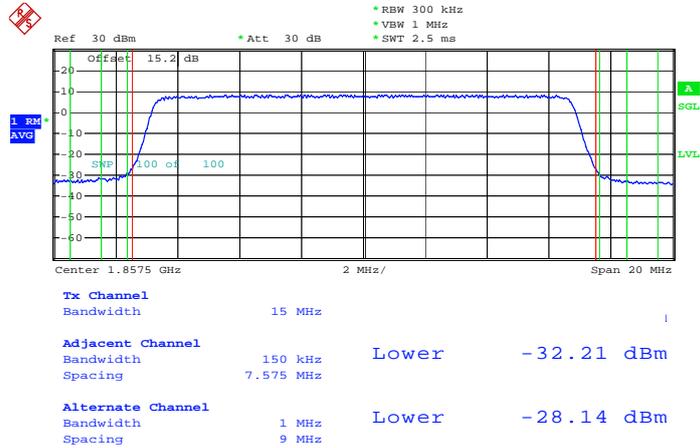
<b>Band :</b>	LTE Band 2	<b>BW / Mod. :</b>	15MHz / QPSK
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Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 20.MAR.2013 06:07:12

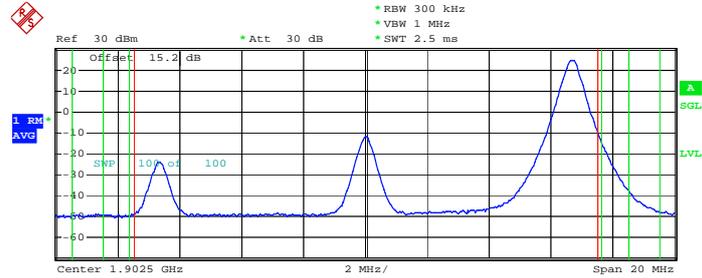
Lower Band Edge Plot for QPSK-RB Size 75, RB Offset 0



Date: 20.MAR.2013 06:06:54



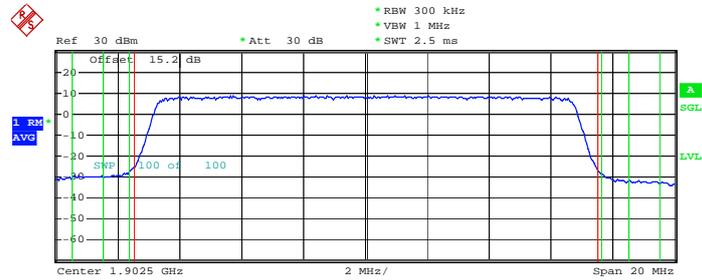
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 74



**Tx Channel**  
 Bandwidth 15 MHz  
**Adjacent Channel**  
 Bandwidth 150 kHz  
 Spacing 7.575 MHz Upper -14.87 dBm  
**Alternate Channel**  
 Bandwidth 1 MHz  
 Spacing 9 MHz Upper -38.36 dBm

Date: 20.MAR.2013 06:08:51

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



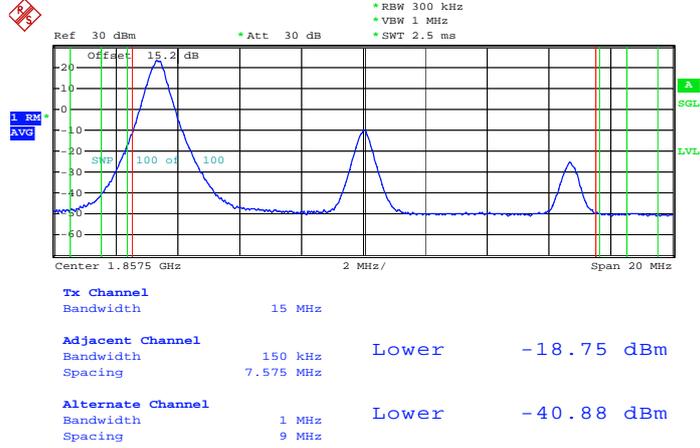
**Tx Channel**  
 Bandwidth 15 MHz  
**Adjacent Channel**  
 Bandwidth 150 kHz  
 Spacing 7.575 MHz Upper -31.26 dBm  
**Alternate Channel**  
 Bandwidth 1 MHz  
 Spacing 9 MHz Upper -27.81 dBm

Date: 20.MAR.2013 06:09:09



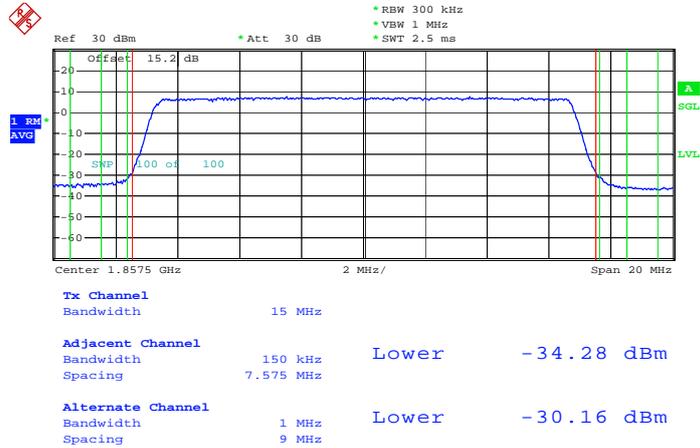
<b>Band :</b>	LTE Band 2	<b>BW / Mod. :</b>	15MHz / 16QAM
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Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 20.MAR.2013 06:07:32

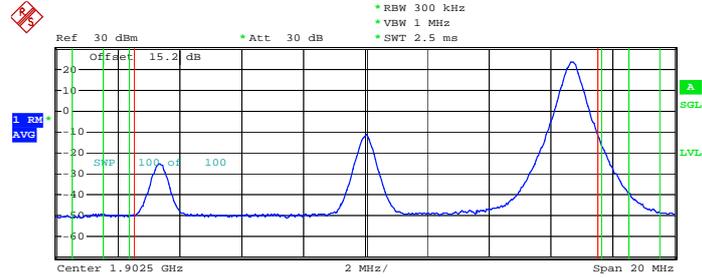
Lower Band Edge Plot for 16QAM -RB Size 75, RB Offset 0



Date: 20.MAR.2013 06:06:38



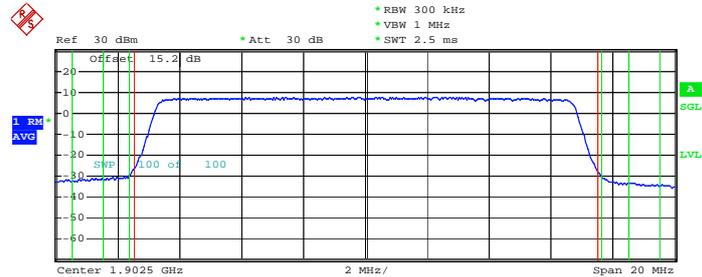
Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 74



<b>Tx Channel</b>	Bandwidth	15 MHz		
<b>Adjacent Channel</b>	Bandwidth	150 kHz		
	Spacing	7.575 MHz	Upper	-16.66 dBm
<b>Alternate Channel</b>	Bandwidth	1 MHz		
	Spacing	9 MHz	Upper	-39.42 dBm

Date: 20.MAR.2013 06:08:33

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



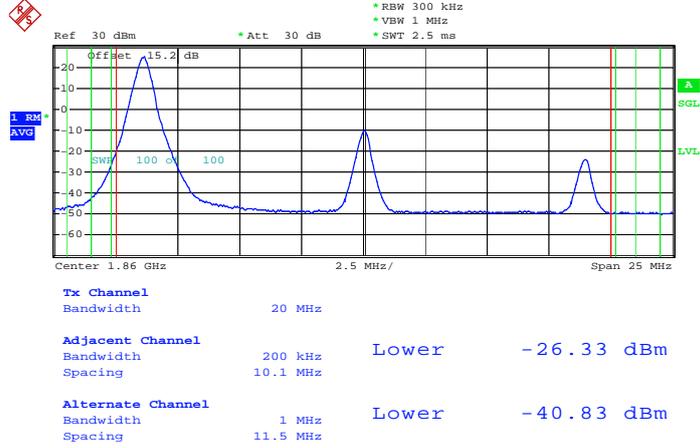
<b>Tx Channel</b>	Bandwidth	15 MHz		
<b>Adjacent Channel</b>	Bandwidth	150 kHz		
	Spacing	7.575 MHz	Upper	-32.41 dBm
<b>Alternate Channel</b>	Bandwidth	1 MHz		
	Spacing	9 MHz	Upper	-29.57 dBm

Date: 20.MAR.2013 06:09:25



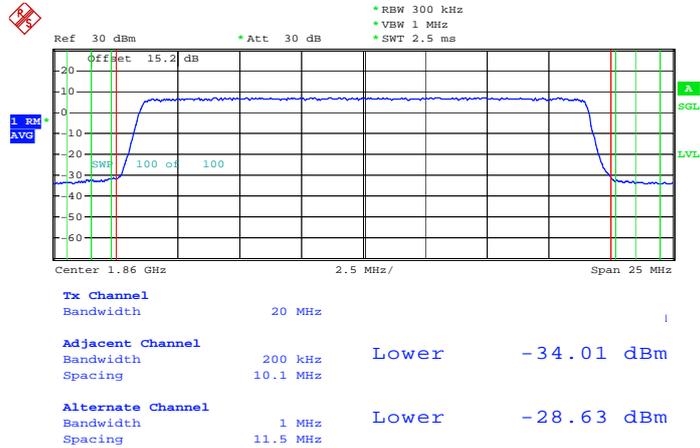
<b>Band :</b>	LTE Band 2	<b>BW / Mod. :</b>	20MHz / QPSK
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Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 20.MAR.2013 06:16:23

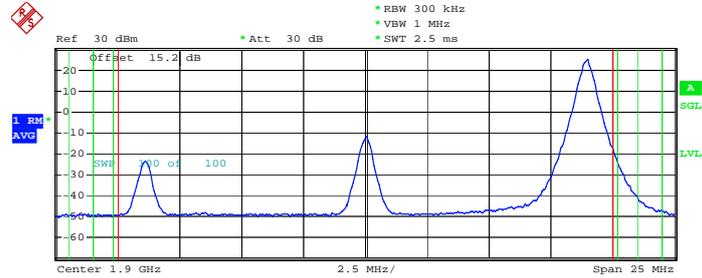
Lower Band Edge Plot for QPSK-RB Size 100, RB Offset 0



Date: 20.MAR.2013 06:16:05



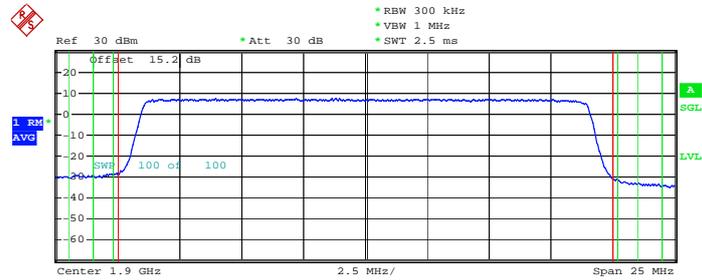
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 99



<b>Tx Channel</b>			
Bandwidth	20 MHz		
<b>Adjacent Channel</b>			
Bandwidth	200 kHz		
Spacing	10.1 MHz	Upper	-22.44 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	11.5 MHz	Upper	-40.21 dBm

Date: 20.MAR.2013 06:17:59

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



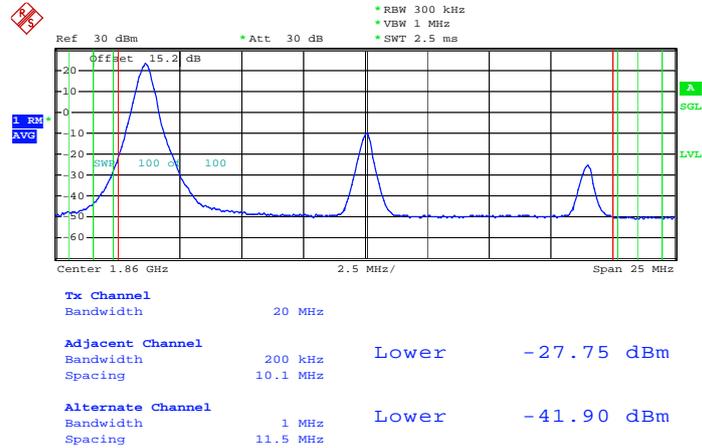
<b>Tx Channel</b>			
Bandwidth	20 MHz		
<b>Adjacent Channel</b>			
Bandwidth	200 kHz		
Spacing	10.1 MHz	Upper	-33.73 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	11.5 MHz	Upper	-29.18 dBm

Date: 20.MAR.2013 06:18:18



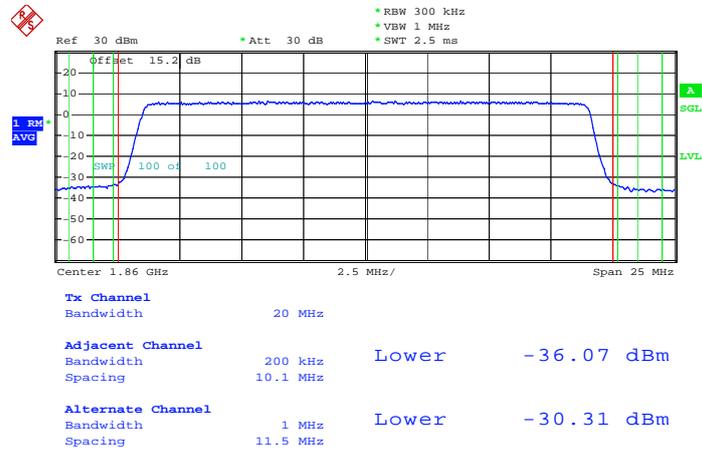
<b>Band :</b>	LTE Band 2	<b>BW / Mod. :</b>	20MHz / 16QAM
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Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 20.MAR.2013 06:16:47

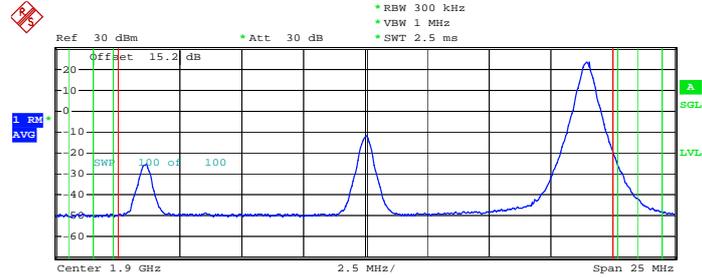
Lower Band Edge Plot for 16QAM -RB Size 100, RB Offset 0



Date: 20.MAR.2013 06:15:48



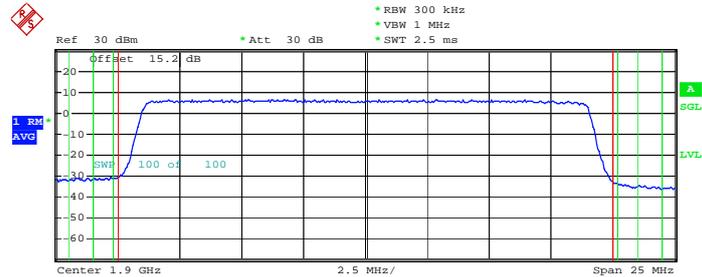
Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 99



<b>Tx Channel</b>			
Bandwidth	20 MHz		
<b>Adjacent Channel</b>			
Bandwidth	200 kHz		
Spacing	10.1 MHz	Upper	-24.21 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	11.5 MHz	Upper	-41.19 dBm

Date: 20.MAR.2013 06:17:42

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



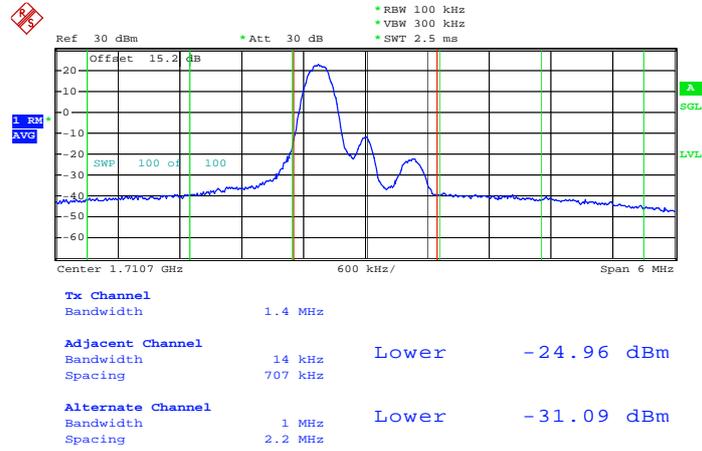
<b>Tx Channel</b>			
Bandwidth	20 MHz		
<b>Adjacent Channel</b>			
Bandwidth	200 kHz		
Spacing	10.1 MHz	Upper	-35.73 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	11.5 MHz	Upper	-30.72 dBm

Date: 20.MAR.2013 06:18:34



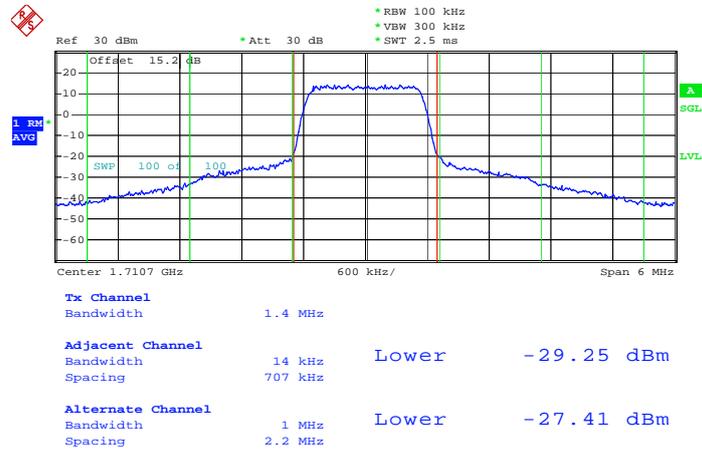
<b>Band :</b>	LTE Band 4	<b>BW / Mod. :</b>	1.4MHz / QPSK
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Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 20.MAR.2013 06:34:15

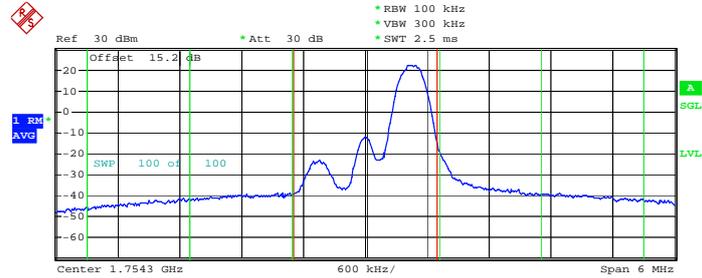
Lower Band Edge Plot for QPSK-RB Size 6, RB Offset 0



Date: 20.MAR.2013 06:33:52



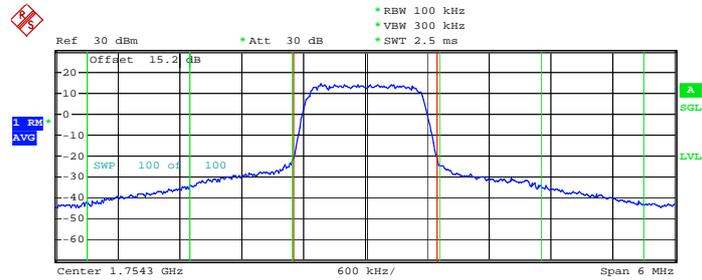
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 5



<b>Tx Channel</b>			
Bandwidth	1.4 MHz		
<b>Adjacent Channel</b>			
Bandwidth	14 kHz		
Spacing	707 kHz	Upper	-24.16 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	2.2 MHz	Upper	-30.79 dBm

Date: 20.MAR.2013 06:35:43

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



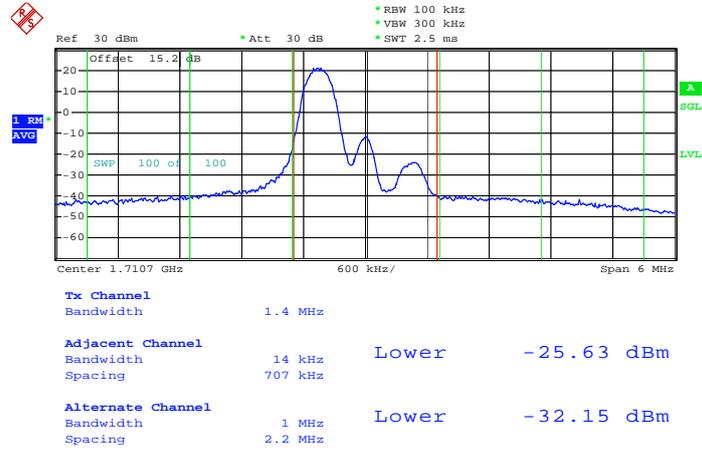
<b>Tx Channel</b>			
Bandwidth	1.4 MHz		
<b>Adjacent Channel</b>			
Bandwidth	14 kHz		
Spacing	707 kHz	Upper	-30.76 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	2.2 MHz	Upper	-28.48 dBm

Date: 20.MAR.2013 06:36:02



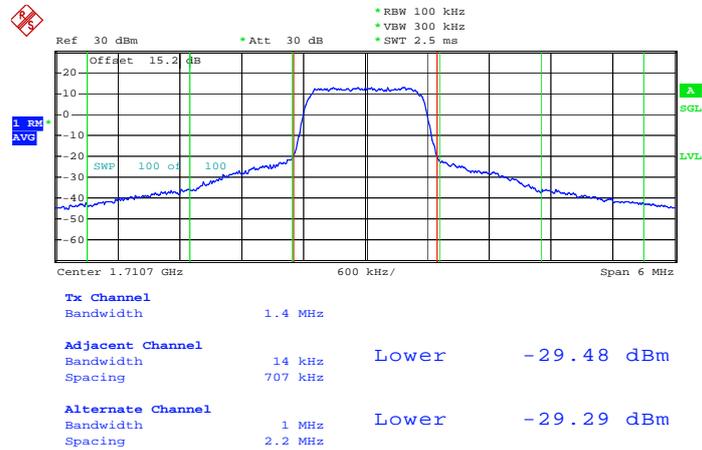
<b>Band :</b>	LTE Band 4	<b>BW / Mod. :</b>	1.4MHz / 16QAM
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Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 20.MAR.2013 06:34:32

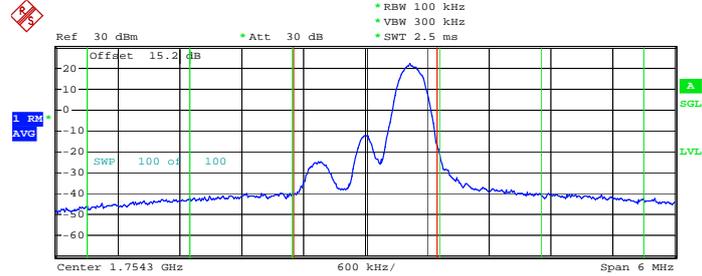
Lower Band Edge Plot for 16QAM -RB Size 6, RB Offset 0



Date: 20.MAR.2013 06:33:36



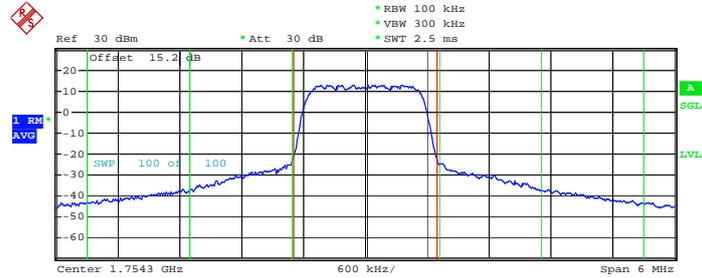
Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 5



<b>Tx Channel</b>			
Bandwidth	1.4 MHz		
<b>Adjacent Channel</b>			
Bandwidth	14 kHz		
Spacing	707 kHz	Upper	-26.45 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	2.2 MHz	Upper	-31.89 dBm

Date: 20.MAR.2013 06:35:27

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



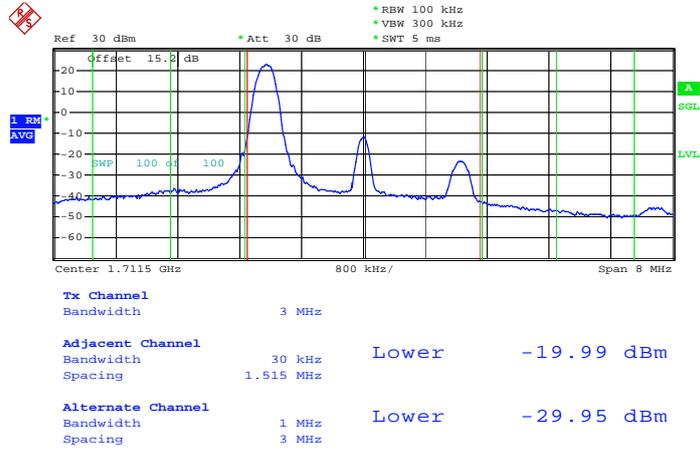
<b>Tx Channel</b>			
Bandwidth	1.4 MHz		
<b>Adjacent Channel</b>			
Bandwidth	14 kHz		
Spacing	707 kHz	Upper	-32.28 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	2.2 MHz	Upper	-30.37 dBm

Date: 20.MAR.2013 06:36:22



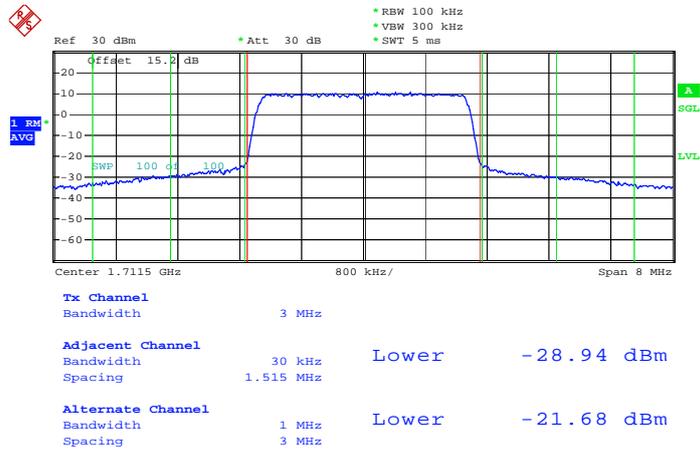
<b>Band :</b>	LTE Band 4	<b>BW / Mod. :</b>	3MHz / QPSK
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Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 20.MAR.2013 06:40:34

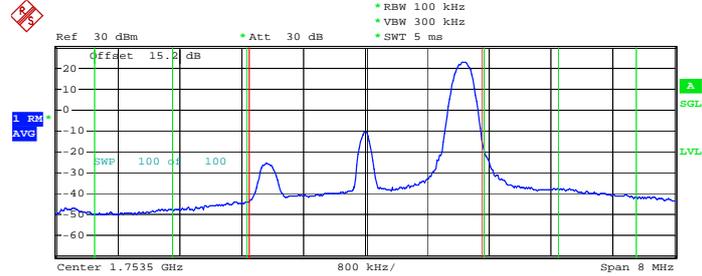
Lower Band Edge Plot for QPSK-RB Size 15, RB Offset 0



Date: 20.MAR.2013 06:40:19



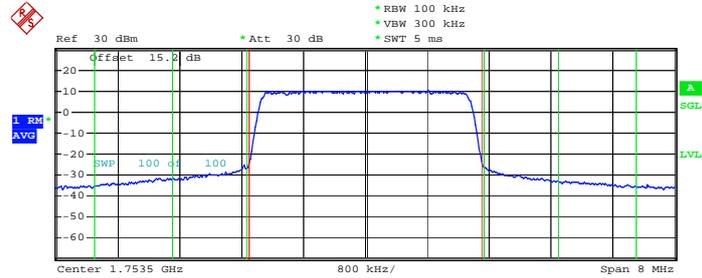
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 14



<b>Tx Channel</b>			
Bandwidth	3 MHz		
<b>Adjacent Channel</b>			
Bandwidth	30 kHz		
Spacing	1.515 MHz	Upper	-18.15 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	3 MHz	Upper	-29.94 dBm

Date: 20.MAR.2013 06:42:06

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



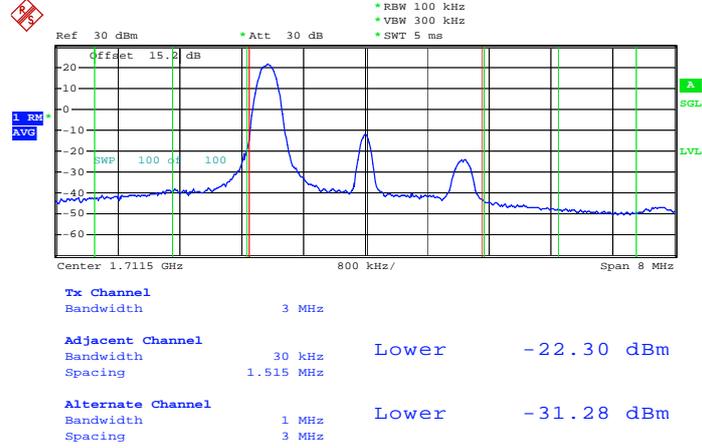
<b>Tx Channel</b>			
Bandwidth	3 MHz		
<b>Adjacent Channel</b>			
Bandwidth	30 kHz		
Spacing	1.515 MHz	Upper	-28.44 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	3 MHz	Upper	-24.58 dBm

Date: 20.MAR.2013 06:42:26



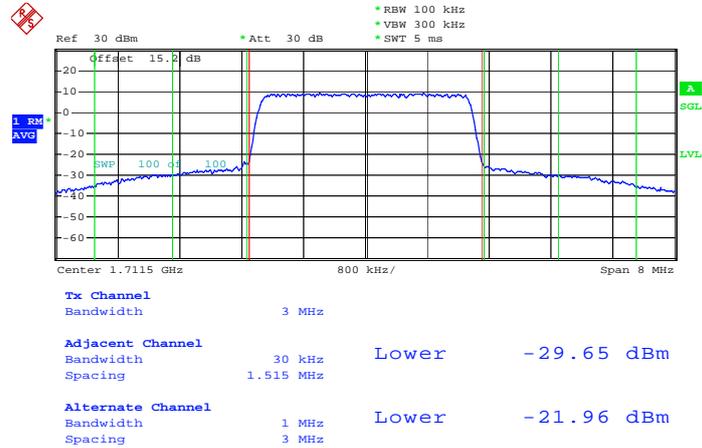
<b>Band :</b>	LTE Band 4	<b>BW / Mod. :</b>	3MHz / 16QAM
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Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 20.MAR.2013 06:41:07

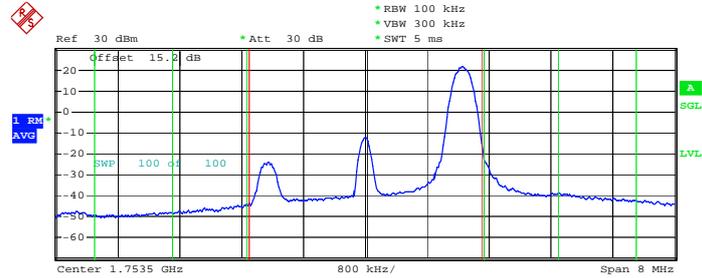
Lower Band Edge Plot for 16QAM -RB Size 15, RB Offset 0



Date: 20.MAR.2013 06:40:01



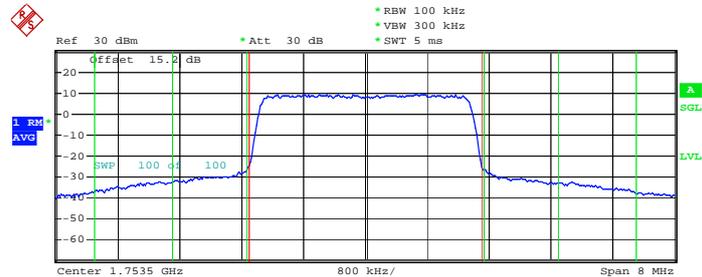
Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 14



<b>Tx Channel</b>			
Bandwidth	3 MHz		
<b>Adjacent Channel</b>			
Bandwidth	30 kHz		
Spacing	1.515 MHz	Upper	-19.50 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	3 MHz	Upper	-31.30 dBm

Date: 20.MAR.2013 06:41:50

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



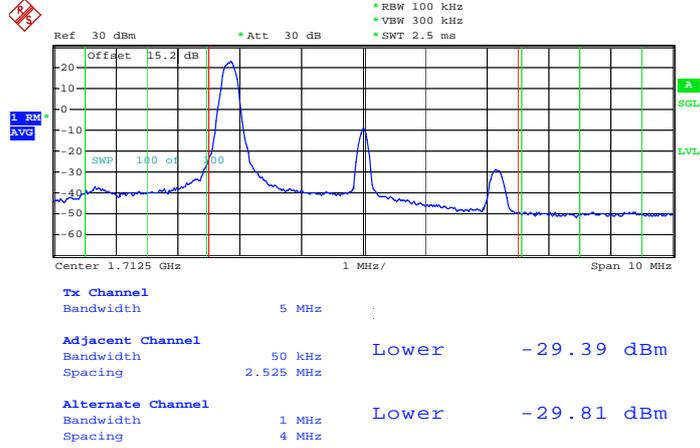
<b>Tx Channel</b>			
Bandwidth	3 MHz		
<b>Adjacent Channel</b>			
Bandwidth	30 kHz		
Spacing	1.515 MHz	Upper	-30.21 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	3 MHz	Upper	-24.93 dBm

Date: 20.MAR.2013 06:42:43



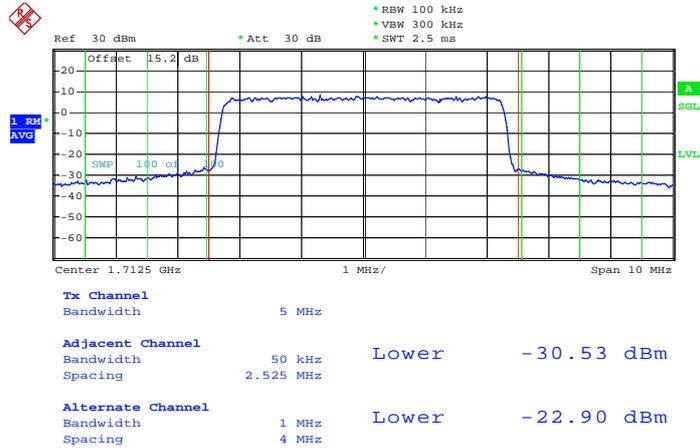
<b>Band :</b>	LTE Band 4	<b>BW / Mod. :</b>	5MHz / QPSK
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Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 20.MAR.2013 06:55:18

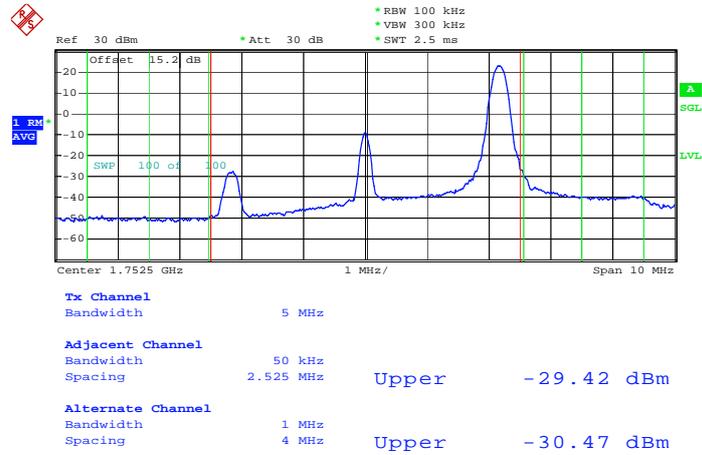
Lower Band Edge Plot for QPSK-RB Size 25, RB Offset 0



Date: 20.MAR.2013 06:54:58

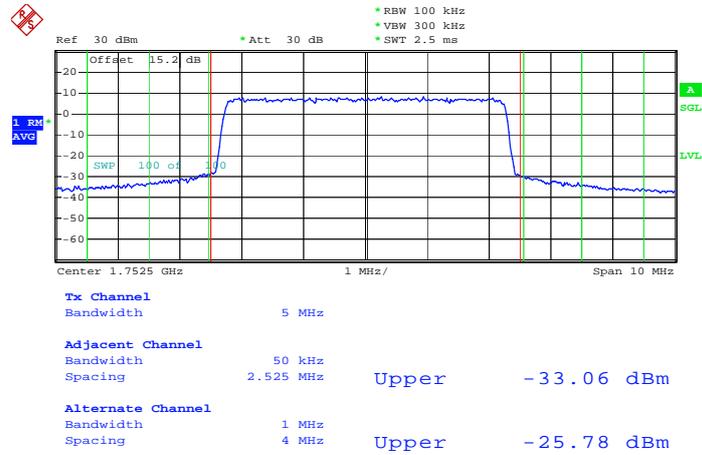


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 24



Date: 20.MAR.2013 06:57:51

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

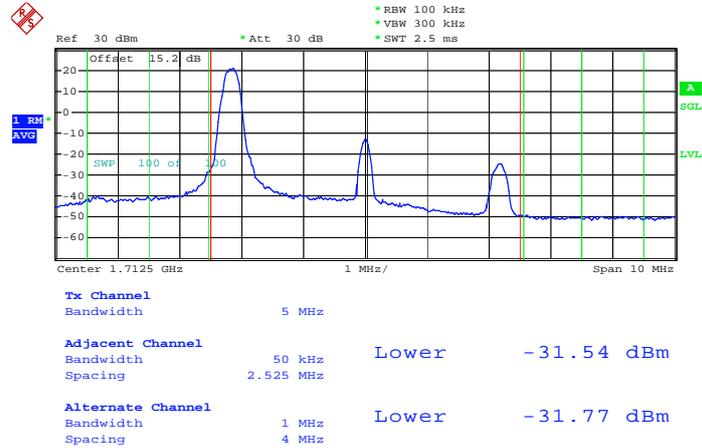


Date: 20.MAR.2013 06:58:12



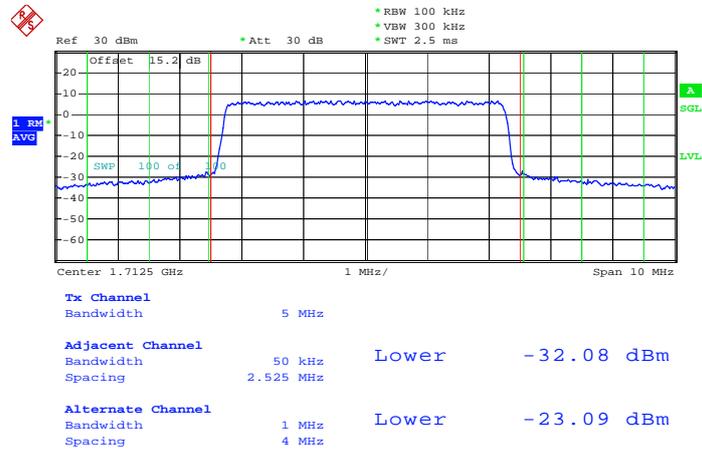
<b>Band :</b>	LTE Band 4	<b>BW / Mod. :</b>	5MHz / 16QAM
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Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 20.MAR.2013 06:55:36

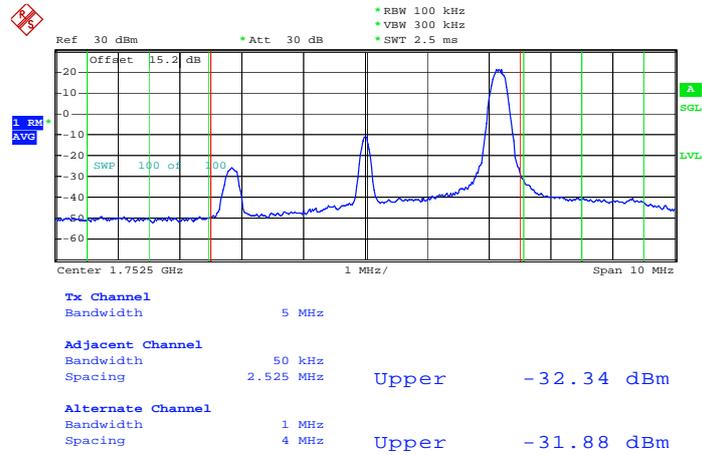
Lower Band Edge Plot for 16QAM -RB Size 25, RB Offset 0



Date: 20.MAR.2013 06:54:40

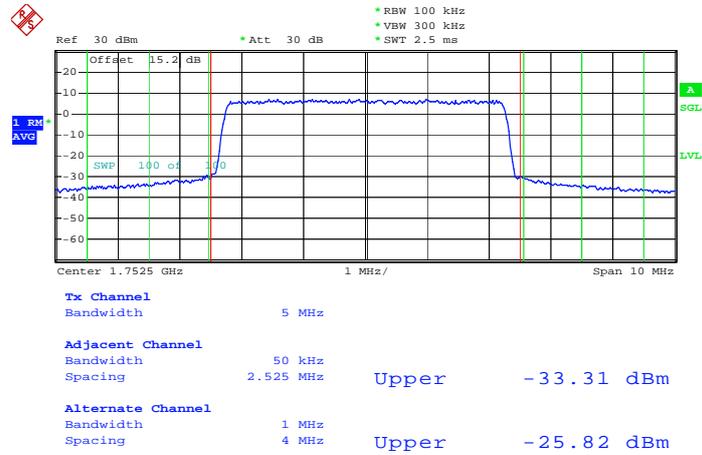


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 24



Date: 20.MAR.2013 06:57:35

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

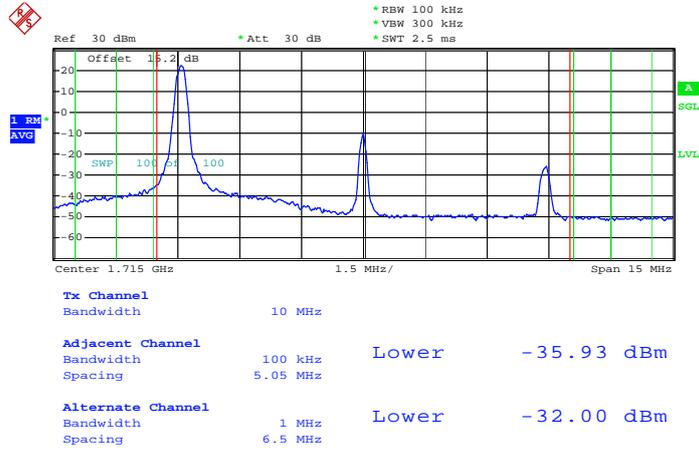


Date: 20.MAR.2013 06:58:35



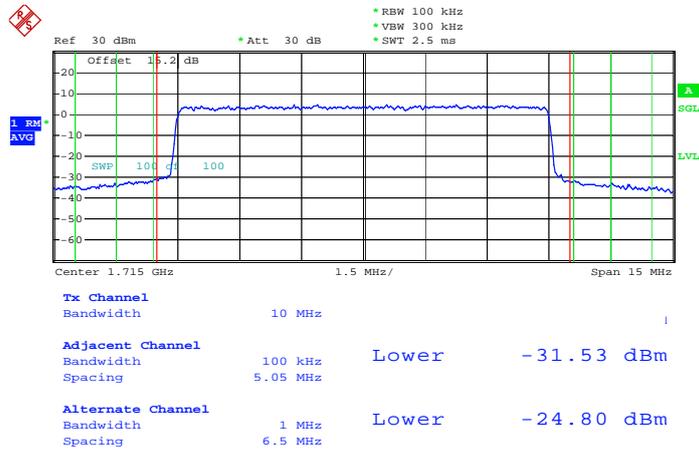
<b>Band :</b>	LTE Band 4	<b>BW / Mod. :</b>	10MHz / QPSK
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Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 20.MAR.2013 07:01:28

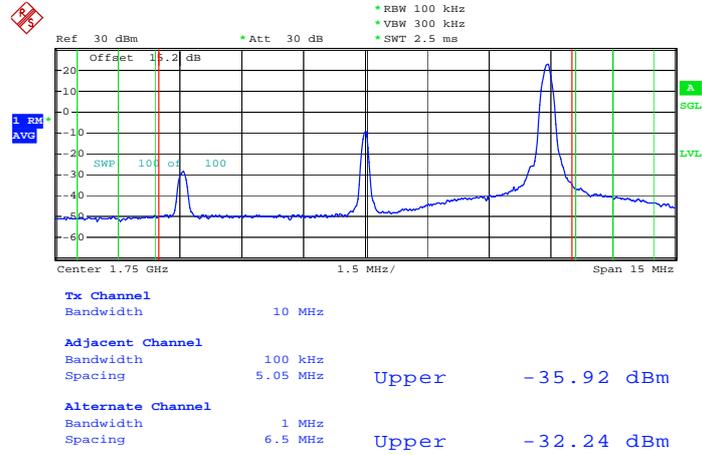
Lower Band Edge Plot for QPSK-RB Size 50, RB Offset 0



Date: 20.MAR.2013 07:01:12

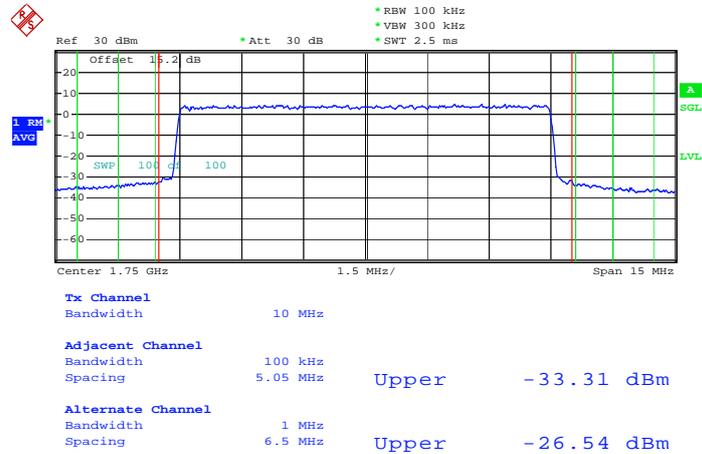


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 49



Date: 20.MAR.2013 07:02:44

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

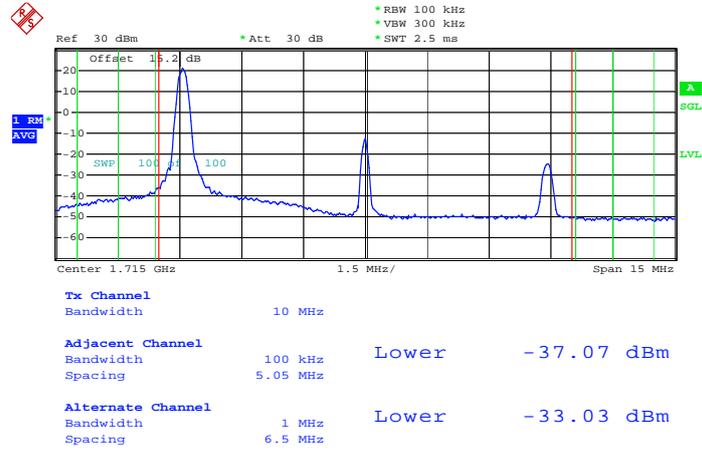


Date: 20.MAR.2013 07:03:08



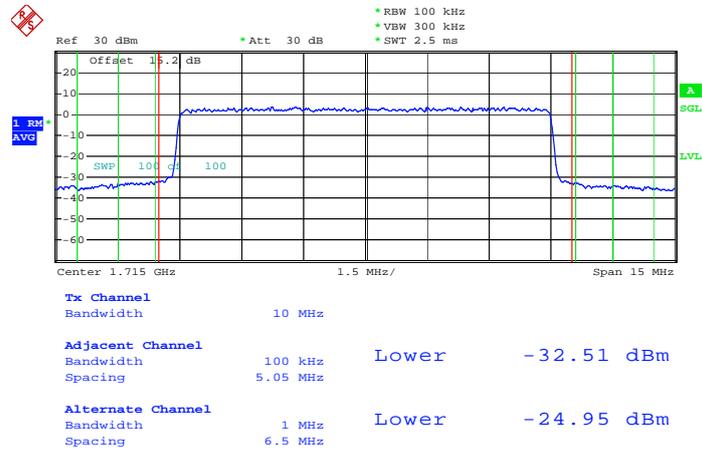
<b>Band :</b>	LTE Band 4	<b>BW / Mod. :</b>	10MHz / 16QAM
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Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 20.MAR.2013 07:01:44

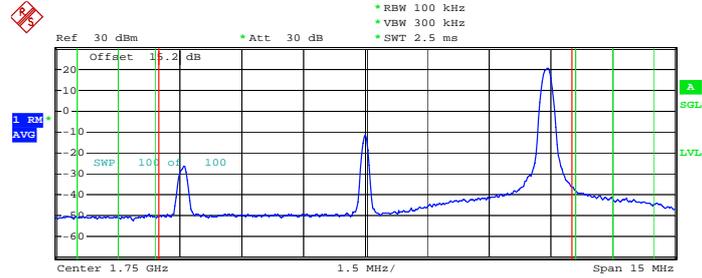
Lower Band Edge Plot for 16QAM -RB Size 50, RB Offset 0



Date: 20.MAR.2013 07:00:51



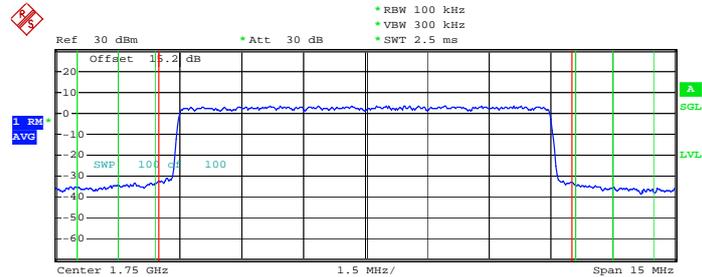
Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 49



<b>Tx Channel</b>			
Bandwidth	10 MHz		
<b>Adjacent Channel</b>			
Bandwidth	100 kHz		
Spacing	5.05 MHz	Upper	-37.23 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	6.5 MHz	Upper	-33.35 dBm

Date: 20.MAR.2013 07:02:28

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



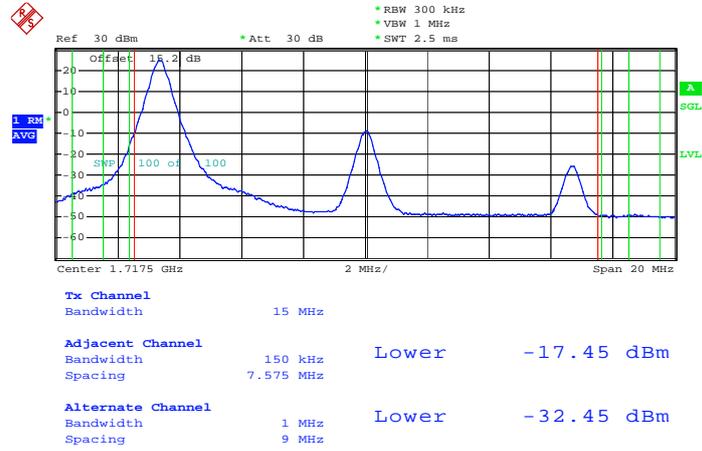
<b>Tx Channel</b>			
Bandwidth	10 MHz		
<b>Adjacent Channel</b>			
Bandwidth	100 kHz		
Spacing	5.05 MHz	Upper	-34.11 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	6.5 MHz	Upper	-26.72 dBm

Date: 20.MAR.2013 07:03:24



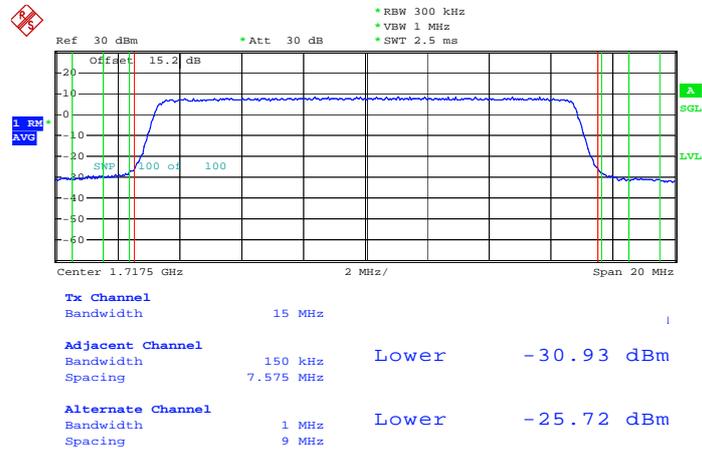
<b>Band :</b>	LTE Band 4	<b>BW / Mod. :</b>	15MHz / QPSK
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Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 20.MAR.2013 07:06:38

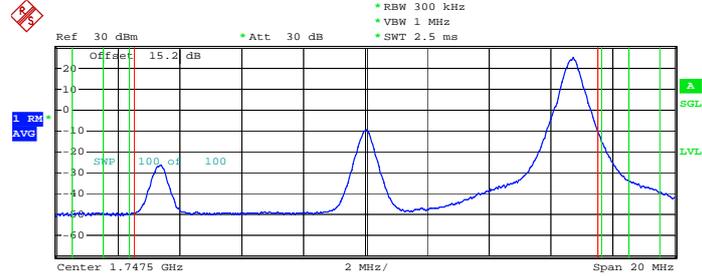
Lower Band Edge Plot for QPSK-RB Size 75, RB Offset 0



Date: 20.MAR.2013 07:06:17



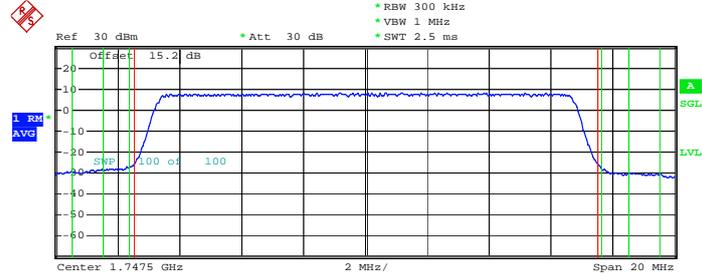
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 74



<b>Tx Channel</b>			
Bandwidth	15 MHz		
<b>Adjacent Channel</b>			
Bandwidth	150 kHz		
Spacing	7.575 MHz	Upper	-15.58 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	9 MHz	Upper	-31.74 dBm

Date: 20.MAR.2013 07:07:57

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



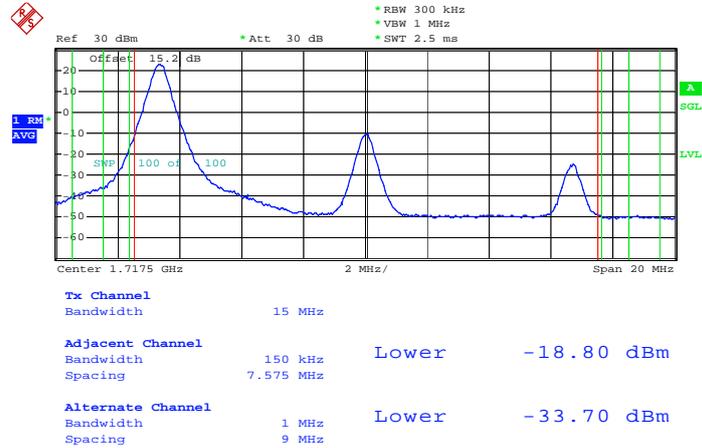
<b>Tx Channel</b>			
Bandwidth	15 MHz		
<b>Adjacent Channel</b>			
Bandwidth	150 kHz		
Spacing	7.575 MHz	Upper	-30.51 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	9 MHz	Upper	-26.13 dBm

Date: 20.MAR.2013 07:08:20



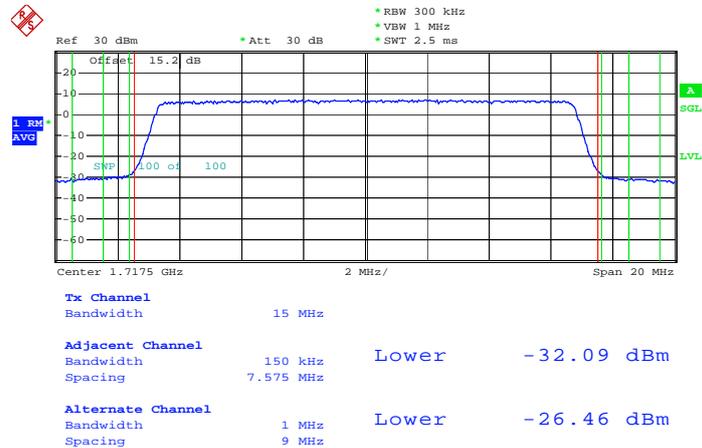
<b>Band :</b>	LTE Band 4	<b>BW / Mod. :</b>	15MHz / 16QAM
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Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 20.MAR.2013 07:06:53

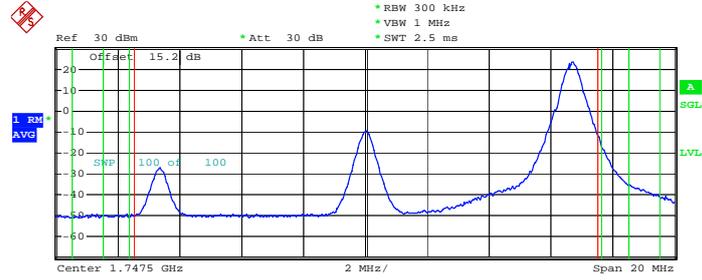
Lower Band Edge Plot for 16QAM -RB Size 75, RB Offset 0



Date: 20.MAR.2013 07:06:02



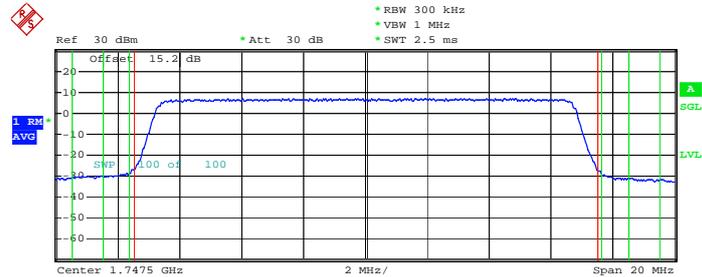
Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 74



<b>Tx Channel</b>	Bandwidth	15 MHz		
<b>Adjacent Channel</b>	Bandwidth	150 kHz		
	Spacing	7.575 MHz	Upper	-16.79 dBm
<b>Alternate Channel</b>	Bandwidth	1 MHz		
	Spacing	9 MHz	Upper	-33.20 dBm

Date: 20.MAR.2013 07:07:43

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



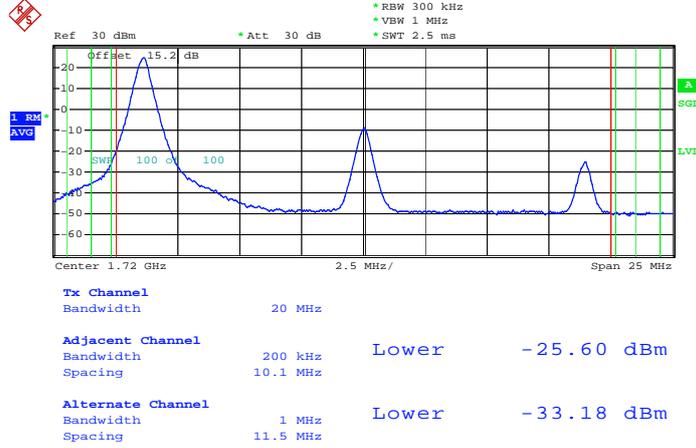
<b>Tx Channel</b>	Bandwidth	15 MHz		
<b>Adjacent Channel</b>	Bandwidth	150 kHz		
	Spacing	7.575 MHz	Upper	-31.45 dBm
<b>Alternate Channel</b>	Bandwidth	1 MHz		
	Spacing	9 MHz	Upper	-27.29 dBm

Date: 20.MAR.2013 07:08:35



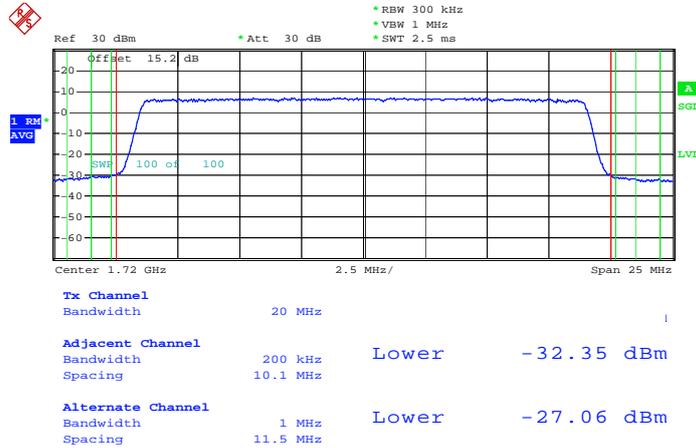
<b>Band :</b>	LTE Band 4	<b>BW / Mod. :</b>	20MHz / QPSK
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Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 20.MAR.2013 07:26:58

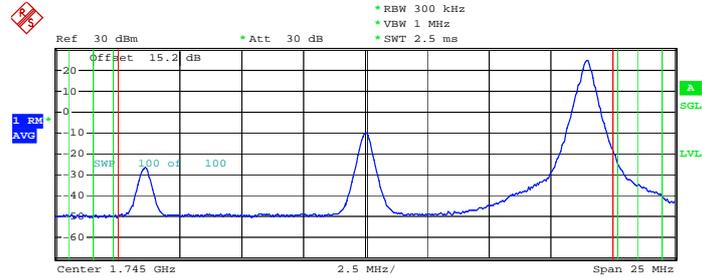
Lower Band Edge Plot for QPSK-RB Size 100, RB Offset 0



Date: 20.MAR.2013 07:26:23



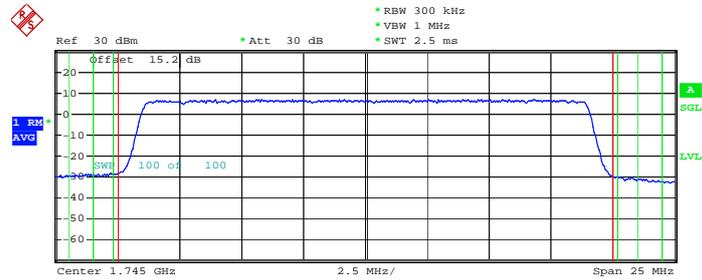
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 99



<b>Tx Channel</b>			
Bandwidth	20 MHz		
<b>Adjacent Channel</b>			
Bandwidth	200 kHz		
Spacing	10.1 MHz	Upper	-22.95 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	11.5 MHz	Upper	-32.67 dBm

Date: 20.MAR.2013 07:28:09

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



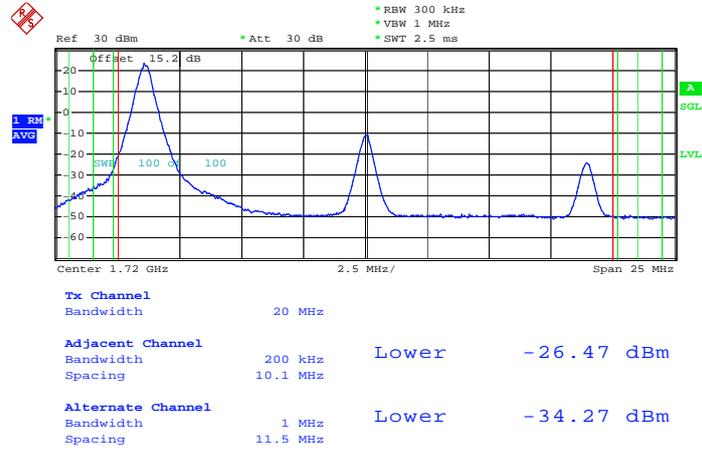
<b>Tx Channel</b>			
Bandwidth	20 MHz		
<b>Adjacent Channel</b>			
Bandwidth	200 kHz		
Spacing	10.1 MHz	Upper	-32.41 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	11.5 MHz	Upper	-27.16 dBm

Date: 20.MAR.2013 07:28:28



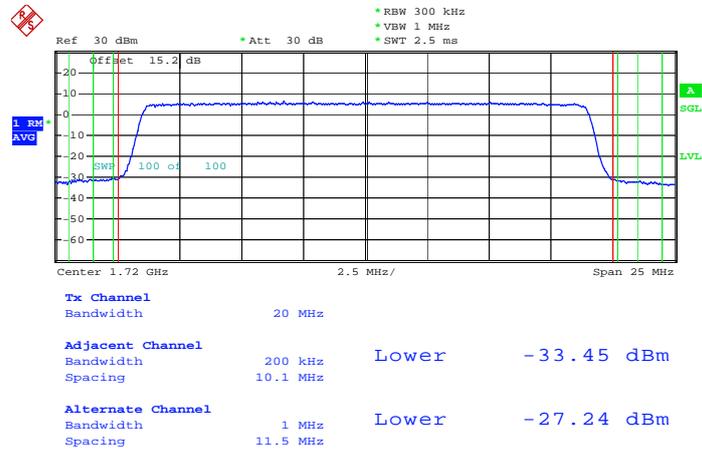
<b>Band :</b>	LTE Band 4	<b>BW / Mod. :</b>	20MHz / 16QAM
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Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 20.MAR.2013 07:27:13

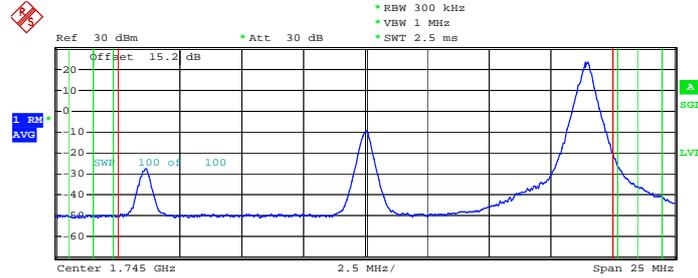
Lower Band Edge Plot for 16QAM -RB Size 100, RB Offset 0



Date: 20.MAR.2013 07:26:07



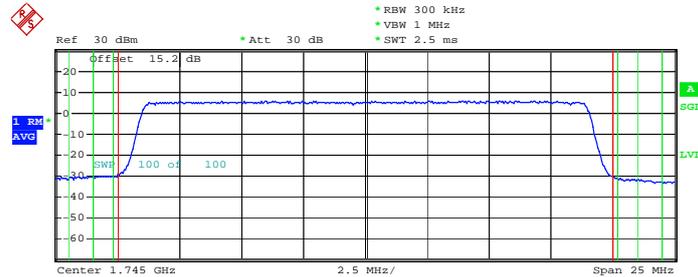
Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 99



<b>Tx Channel</b>			
Bandwidth	20 MHz		
<b>Adjacent Channel</b>			
Bandwidth	200 kHz		
Spacing	10.1 MHz	Upper	-24.75 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	11.5 MHz	Upper	-33.98 dBm

Date: 20.MAR.2013 07:27:55

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



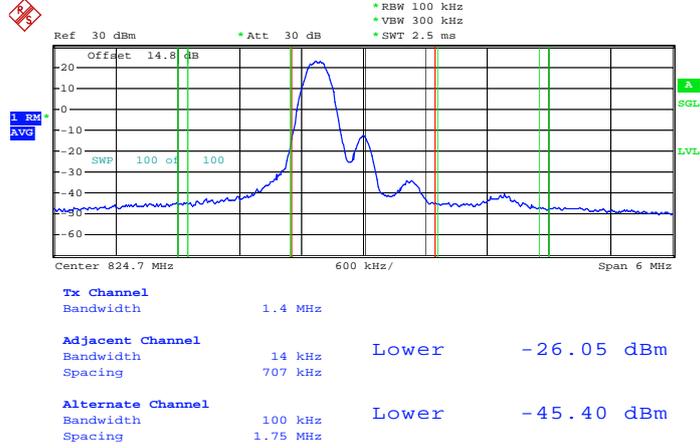
<b>Tx Channel</b>			
Bandwidth	20 MHz		
<b>Adjacent Channel</b>			
Bandwidth	200 kHz		
Spacing	10.1 MHz	Upper	-33.16 dBm
<b>Alternate Channel</b>			
Bandwidth	1 MHz		
Spacing	11.5 MHz	Upper	-27.92 dBm

Date: 20.MAR.2013 07:28:42



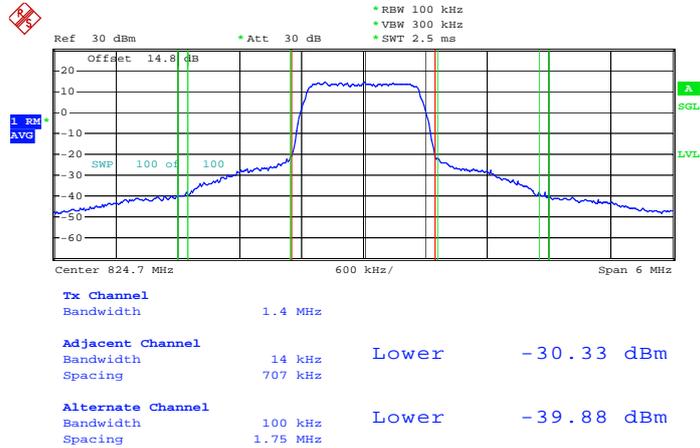
<b>Band :</b>	LTE Band 5	<b>BW / Mod. :</b>	1.4MHz / QPSK
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Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 20.MAR.2013 07:32:42

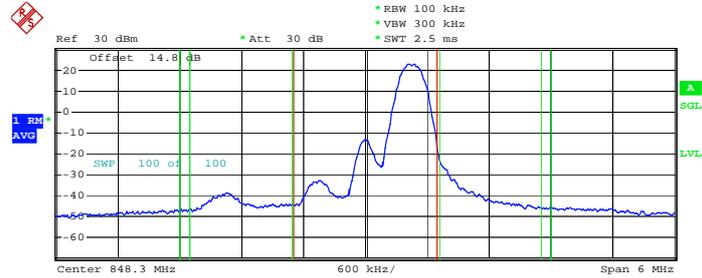
Lower Band Edge Plot for QPSK-RB Size 6, RB Offset 0



Date: 20.MAR.2013 07:32:09



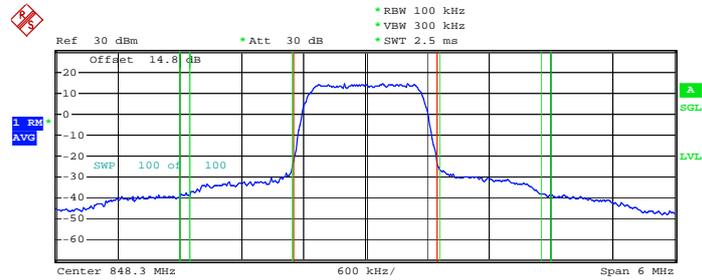
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 5



<b>Tx Channel</b>			
Bandwidth	1.4 MHz		
<b>Adjacent Channel</b>			
Bandwidth	14 kHz		
Spacing	707 kHz	Upper	-25.86 dBm
<b>Alternate Channel</b>			
Bandwidth	100 kHz		
Spacing	1.75 MHz	Upper	-46.19 dBm

Date: 20.MAR.2013 07:34:08

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



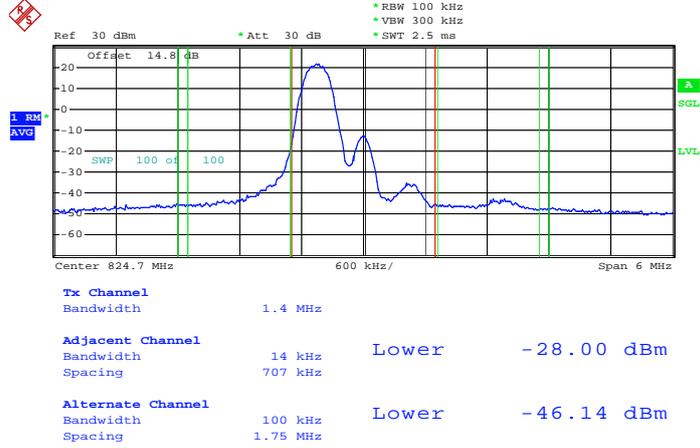
<b>Tx Channel</b>			
Bandwidth	1.4 MHz		
<b>Adjacent Channel</b>			
Bandwidth	14 kHz		
Spacing	707 kHz	Upper	-32.40 dBm
<b>Alternate Channel</b>			
Bandwidth	100 kHz		
Spacing	1.75 MHz	Upper	-38.72 dBm

Date: 20.MAR.2013 07:34:26



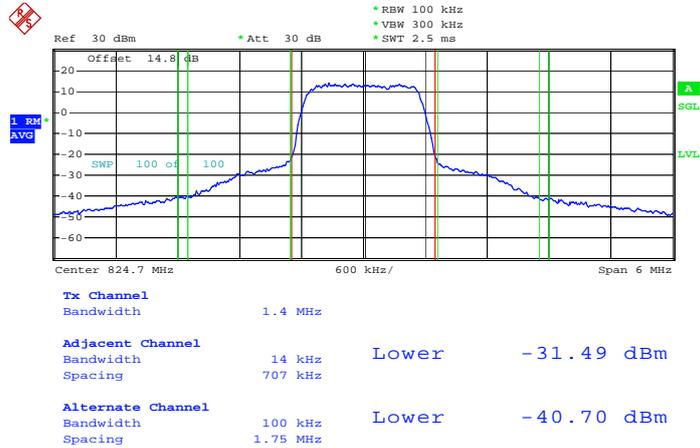
<b>Band :</b>	LTE Band 5	<b>BW / Mod. :</b>	1.4MHz / 16QAM
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Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 20.MAR.2013 07:32:57

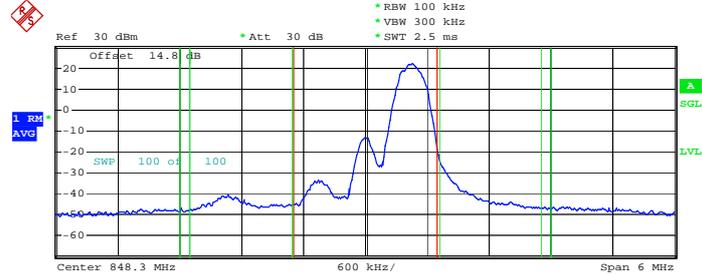
Lower Band Edge Plot for 16QAM -RB Size 6, RB Offset 0



Date: 20.MAR.2013 07:31:53



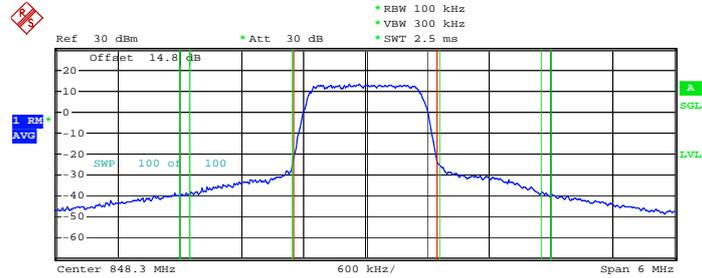
Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 5



<b>Tx Channel</b>			
Bandwidth	1.4 MHz		
<b>Adjacent Channel</b>			
Bandwidth	14 kHz		
Spacing	707 kHz	Upper	-27.58 dBm
<b>Alternate Channel</b>			
Bandwidth	100 kHz		
Spacing	1.75 MHz	Upper	-47.04 dBm

Date: 20.MAR.2013 07:33:52

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



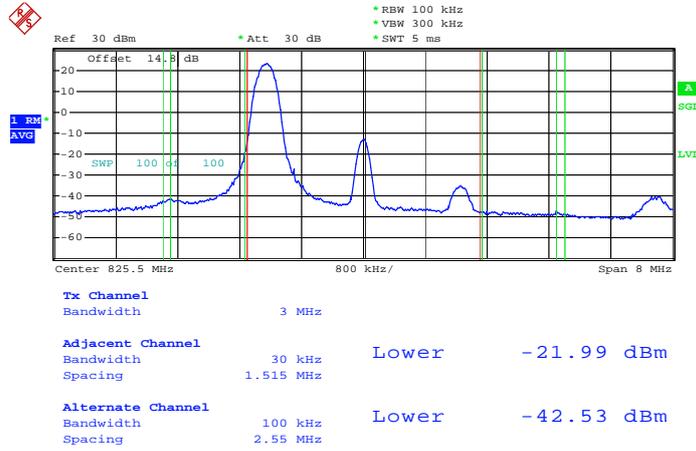
<b>Tx Channel</b>			
Bandwidth	1.4 MHz		
<b>Adjacent Channel</b>			
Bandwidth	14 kHz		
Spacing	707 kHz	Upper	-33.06 dBm
<b>Alternate Channel</b>			
Bandwidth	100 kHz		
Spacing	1.75 MHz	Upper	-39.38 dBm

Date: 20.MAR.2013 07:34:40



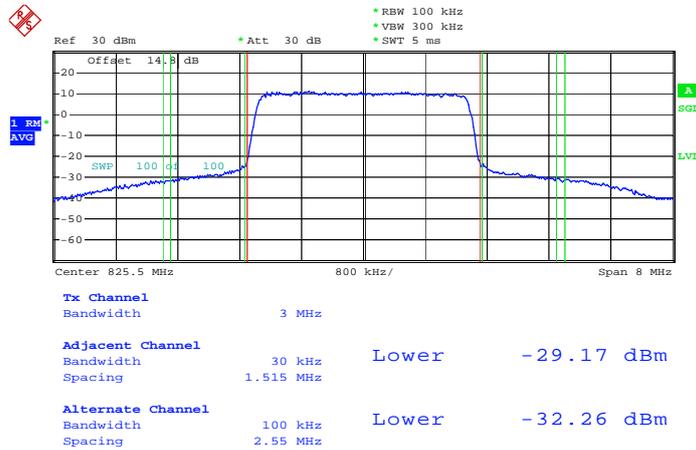
<b>Band :</b>	LTE Band 5	<b>BW / Mod. :</b>	3MHz / QPSK
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Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 20.MAR.2013 07:38:17

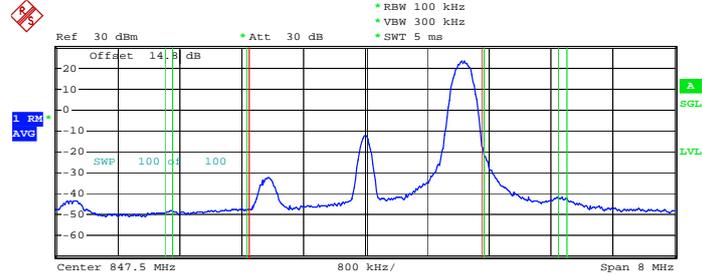
Lower Band Edge Plot for QPSK-RB Size 15, RB Offset 0



Date: 20.MAR.2013 07:38:00



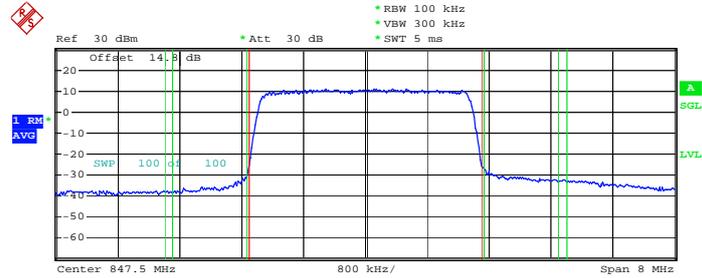
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 14



<b>Tx Channel</b>			
Bandwidth	3 MHz		
<b>Adjacent Channel</b>			
Bandwidth	30 kHz		
Spacing	1.515 MHz	Upper	-20.35 dBm
<b>Alternate Channel</b>			
Bandwidth	100 kHz		
Spacing	2.55 MHz	Upper	-42.49 dBm

Date: 20.MAR.2013 07:39:46

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



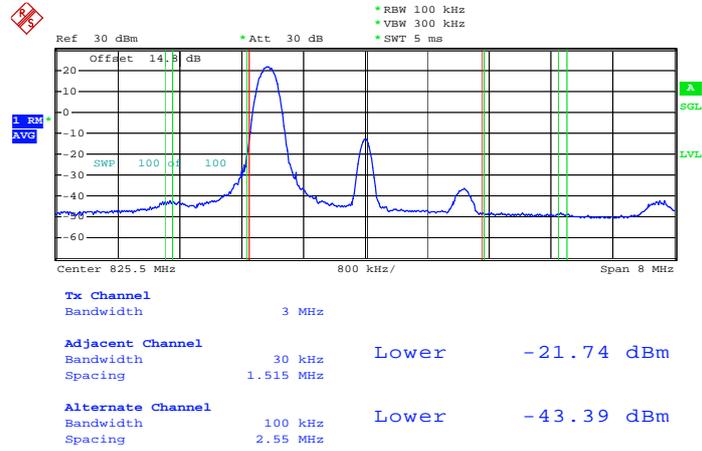
<b>Tx Channel</b>			
Bandwidth	3 MHz		
<b>Adjacent Channel</b>			
Bandwidth	30 kHz		
Spacing	1.515 MHz	Upper	-30.75 dBm
<b>Alternate Channel</b>			
Bandwidth	100 kHz		
Spacing	2.55 MHz	Upper	-33.01 dBm

Date: 20.MAR.2013 07:40:07



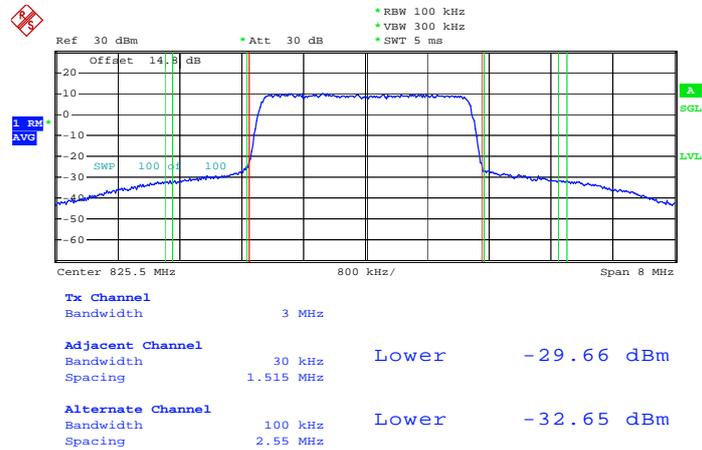
<b>Band :</b>	LTE Band 5	<b>BW / Mod. :</b>	3MHz / 16QAM
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Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 20.MAR.2013 07:38:32

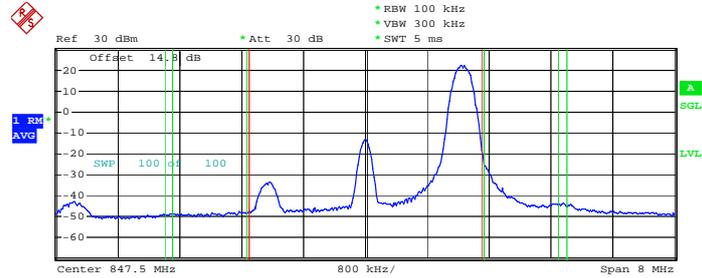
Lower Band Edge Plot for 16QAM -RB Size 15, RB Offset 0



Date: 20.MAR.2013 07:37:43



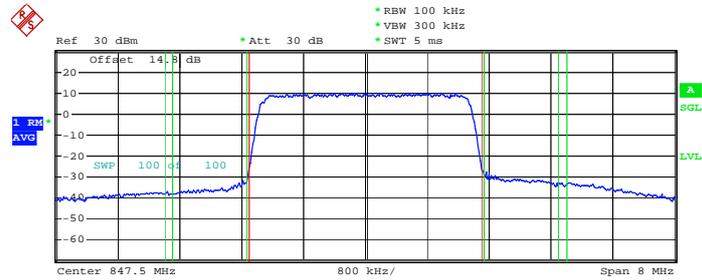
Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 14



<b>Tx Channel</b>			
Bandwidth	3 MHz		
<b>Adjacent Channel</b>			
Bandwidth	30 kHz		
Spacing	1.515 MHz	Upper	-21.93 dBm
<b>Alternate Channel</b>			
Bandwidth	100 kHz		
Spacing	2.55 MHz	Upper	-44.07 dBm

Date: 20.MAR.2013 07:39:25

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



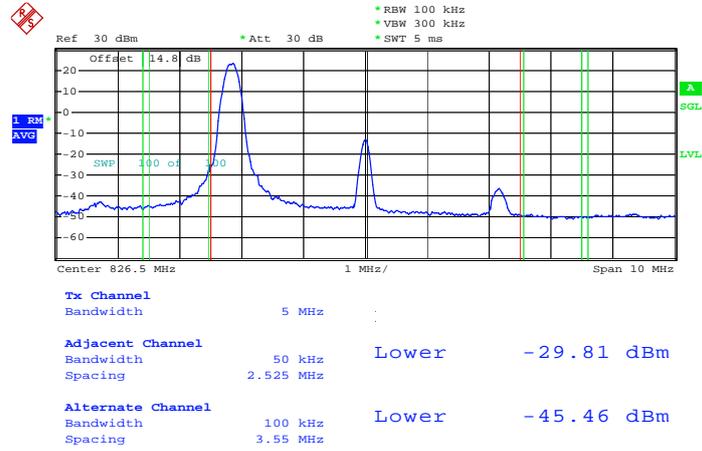
<b>Tx Channel</b>			
Bandwidth	3 MHz		
<b>Adjacent Channel</b>			
Bandwidth	30 kHz		
Spacing	1.515 MHz	Upper	-30.72 dBm
<b>Alternate Channel</b>			
Bandwidth	100 kHz		
Spacing	2.55 MHz	Upper	-33.63 dBm

Date: 20.MAR.2013 07:40:26



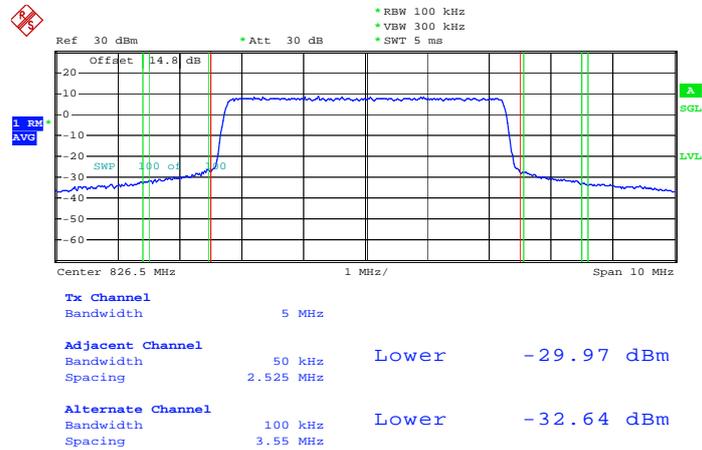
<b>Band :</b>	LTE Band 5	<b>BW / Mod. :</b>	5MHz / QPSK
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Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 20.MAR.2013 07:44:42

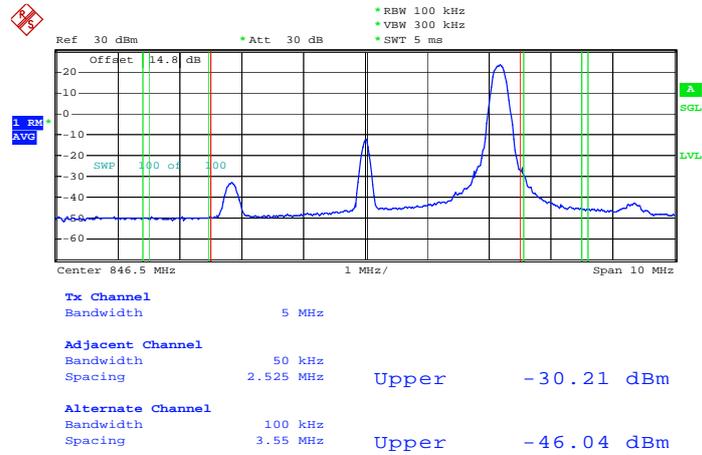
Lower Band Edge Plot for QPSK-RB Size 25, RB Offset 0



Date: 20.MAR.2013 07:44:26

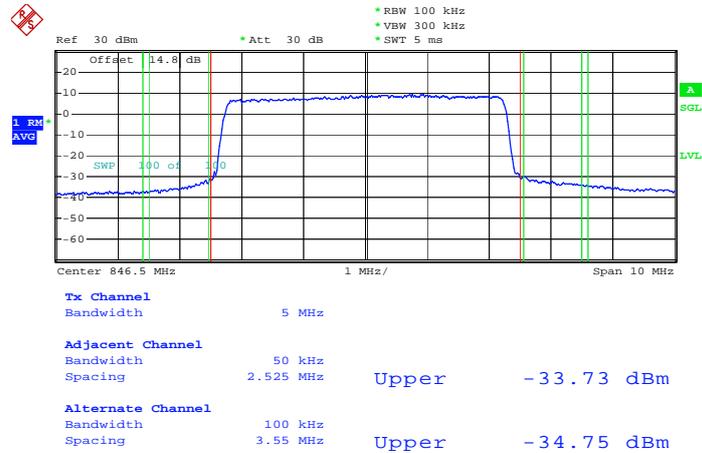


### Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 24



Date: 20.MAR.2013 07:46:22

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

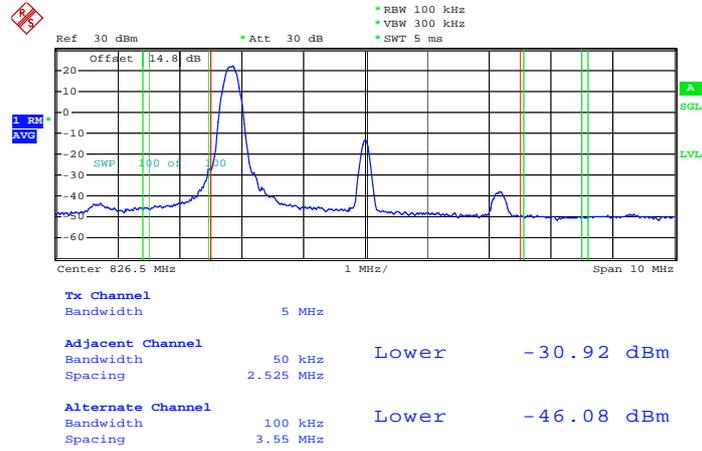


Date: 20.MAR.2013 07:47:20



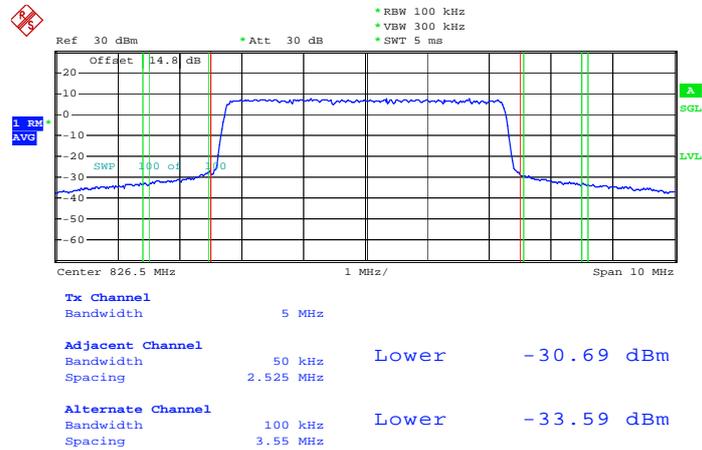
<b>Band :</b>	LTE Band 5	<b>BW / Mod. :</b>	5MHz / 16QAM
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Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 20.MAR.2013 07:44:58

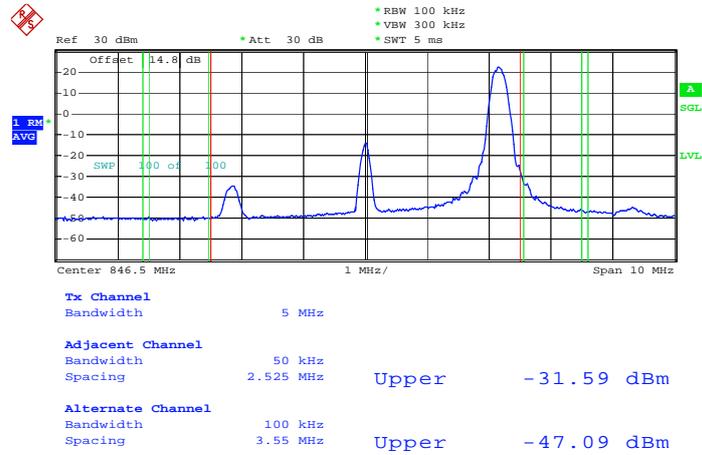
Lower Band Edge Plot for 16QAM -RB Size 25, RB Offset 0



Date: 20.MAR.2013 07:44:06

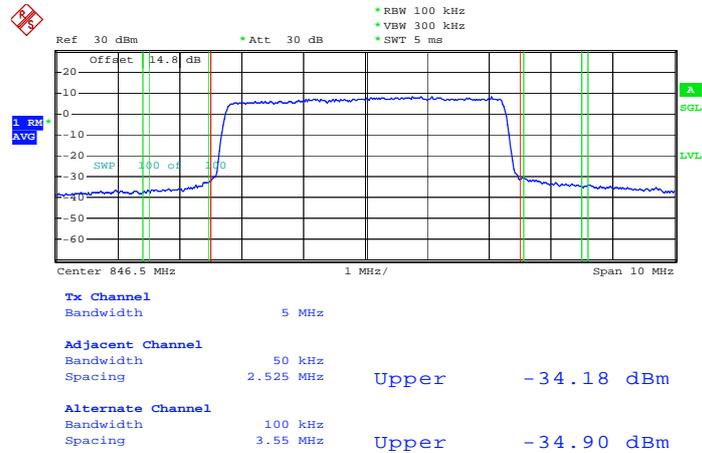


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 24



Date: 20.MAR.2013 07:46:43

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

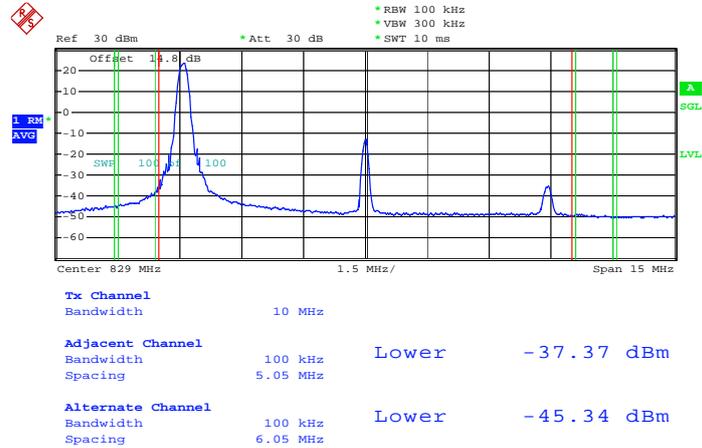


Date: 20.MAR.2013 07:47:01



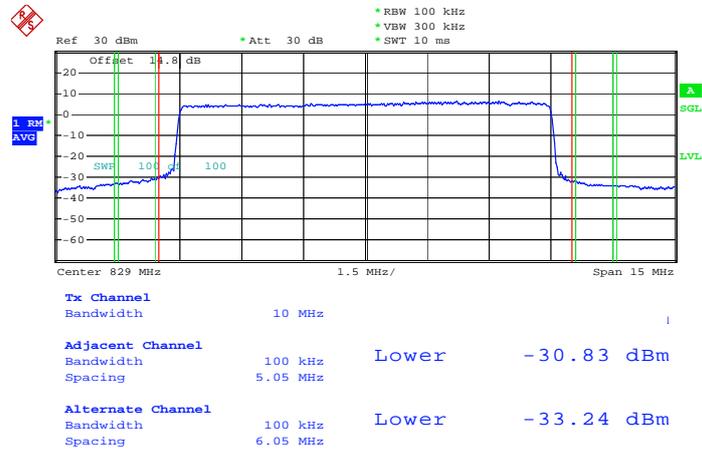
<b>Band :</b>	LTE Band 5	<b>BW / Mod. :</b>	10MHz / QPSK
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**Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0**



Date: 20.MAR.2013 07:50:36

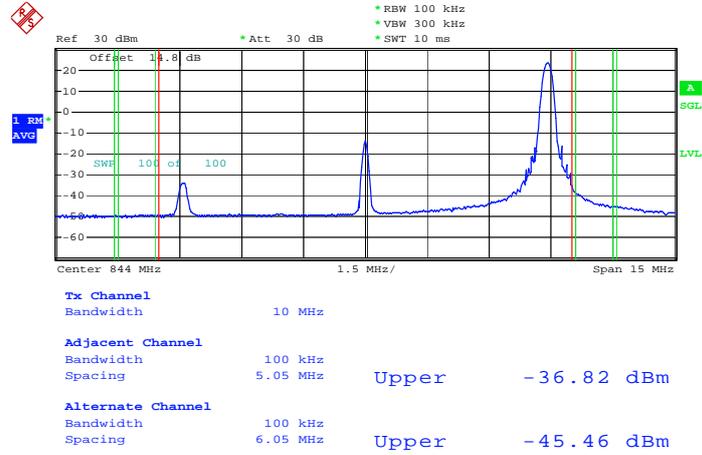
**Lower Band Edge Plot for QPSK-RB Size 50, RB Offset 0**



Date: 20.MAR.2013 07:49:44

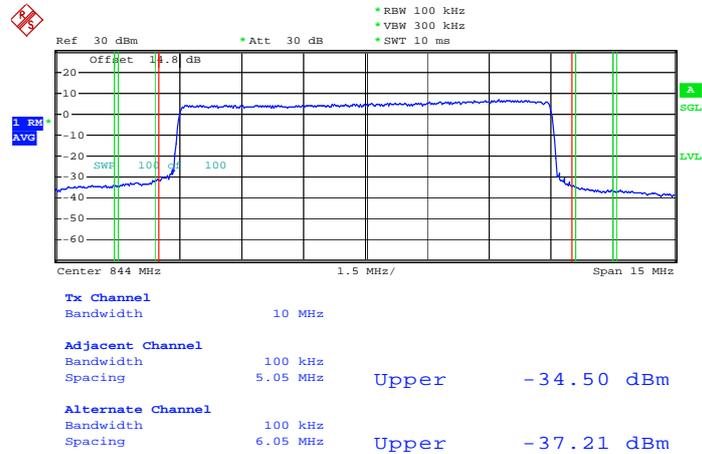


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 49



Date: 20.MAR.2013 07:56:15

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

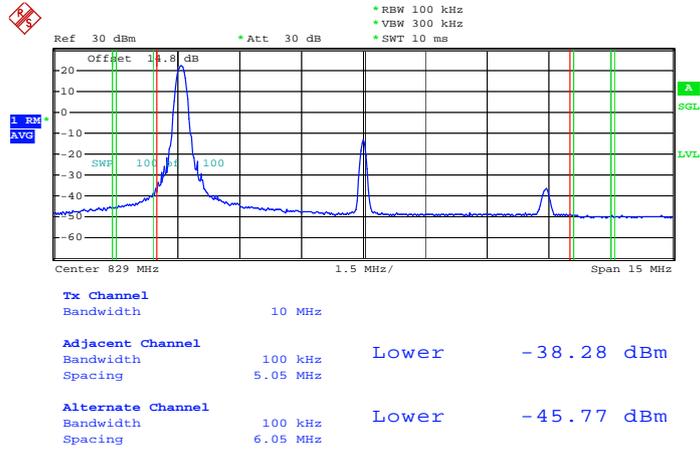


Date: 20.MAR.2013 07:57:17



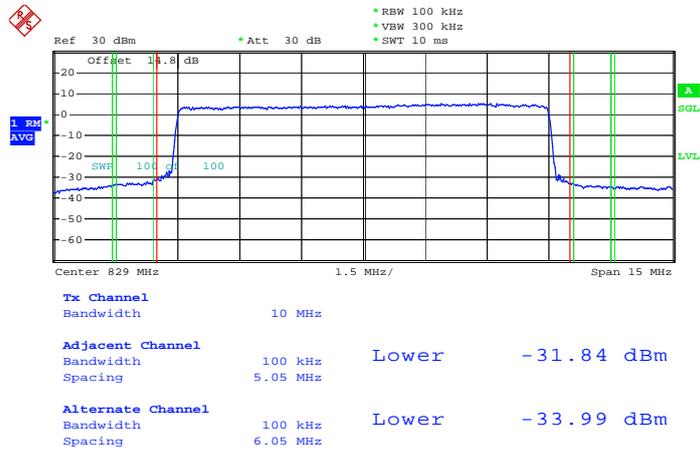
<b>Band :</b>	LTE Band 5	<b>BW / Mod. :</b>	10MHz / 16QAM
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Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Date: 20.MAR.2013 07:50:19

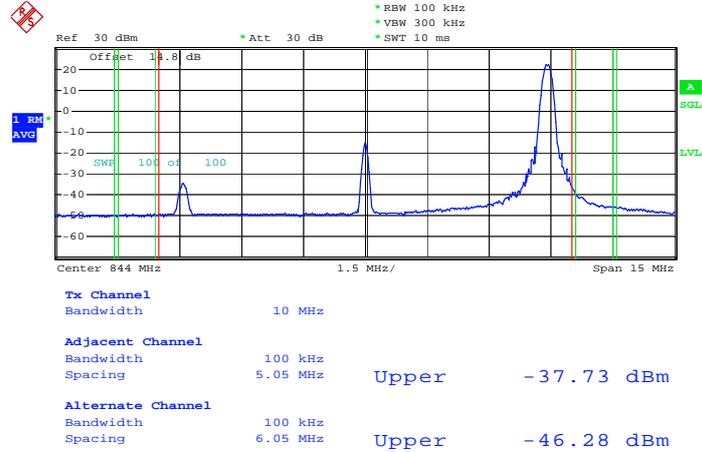
Lower Band Edge Plot for 16QAM -RB Size 50, RB Offset 0



Date: 20.MAR.2013 07:49:58

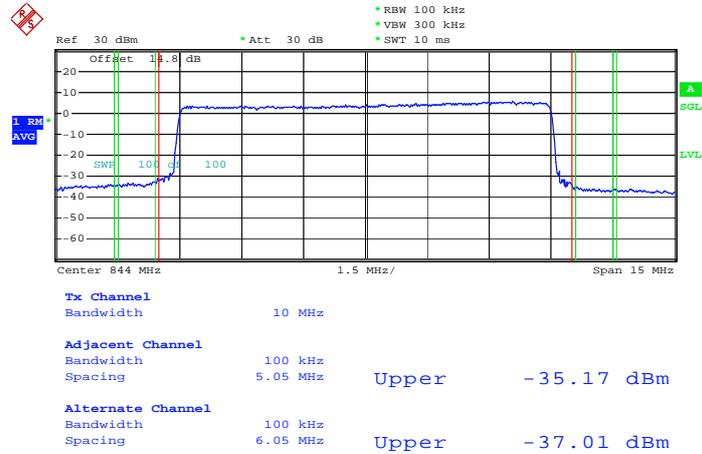


Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 49



Date: 20.MAR.2013 07:56:35

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

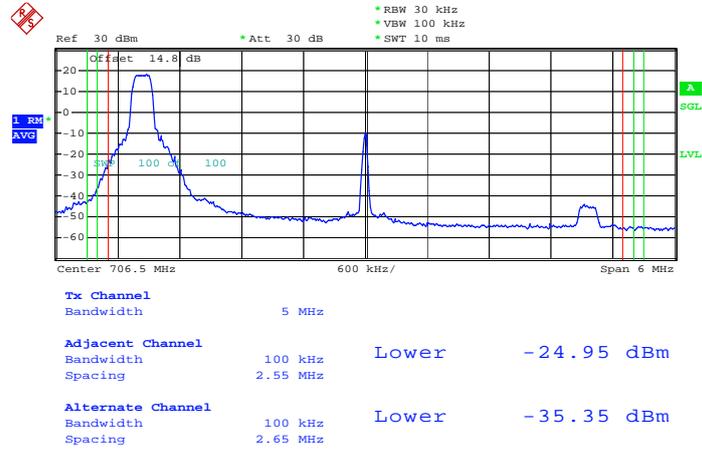


Date: 20.MAR.2013 07:57:01



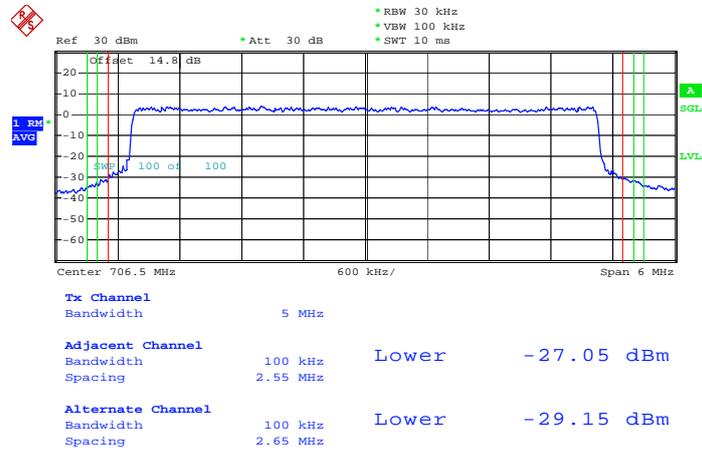
<b>Band :</b>	LTE Band 17	<b>Band Width</b>	5MHz / QPSK
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Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 20.MAR.2013 08:54:52

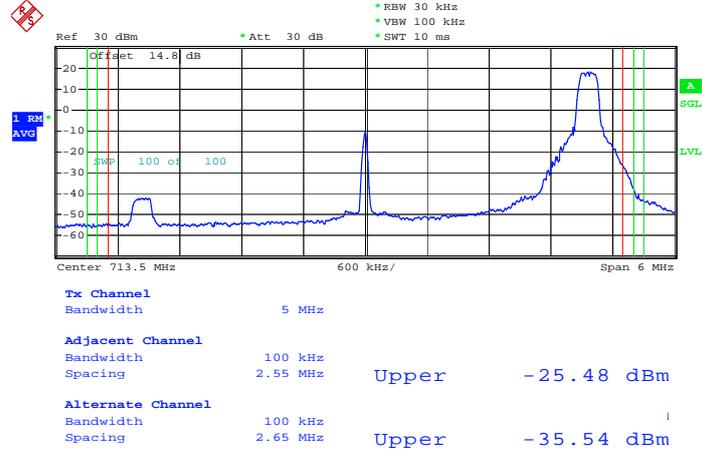
Lower Band Edge Plot for QPSK-RB Size 25, RB Offset 0



Date: 20.MAR.2013 08:53:58

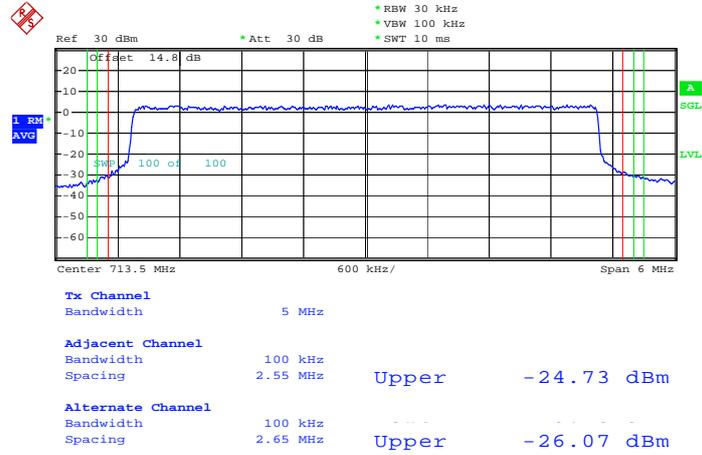


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 24



Date: 20.MAR.2013 08:55:37

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

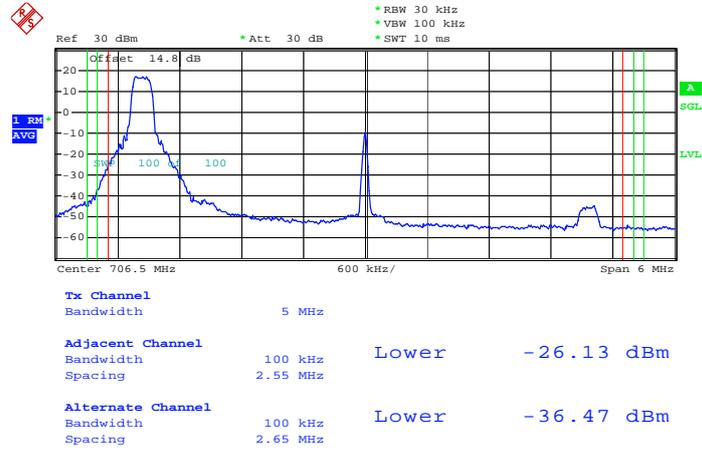


Date: 20.MAR.2013 08:56:31



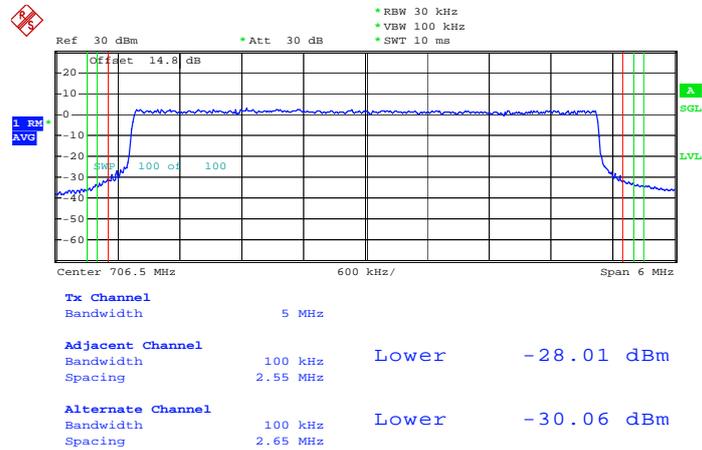
<b>Band :</b>	LTE Band 17	<b>Band Width</b>	5MHz / 16QAM
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Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Date: 20.MAR.2013 08:54:36

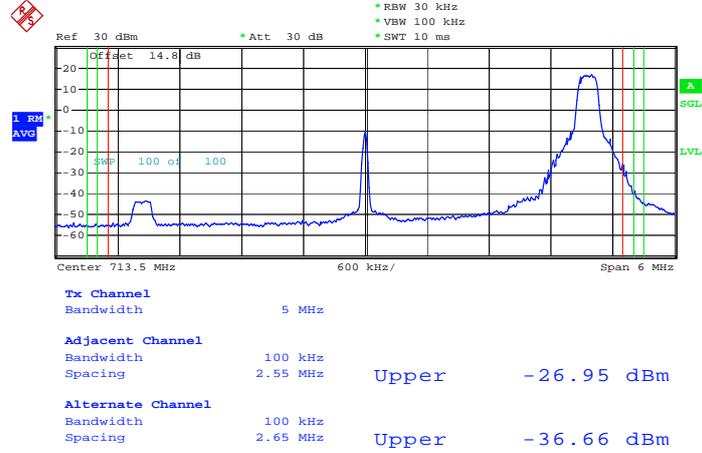
Lower Band Edge Plot for 16QAM-RB Size 25, RB Offset 0



Date: 20.MAR.2013 08:54:18

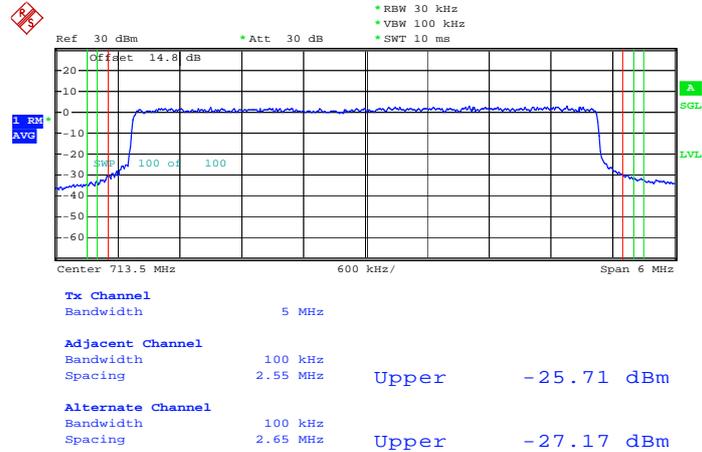


Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 24



Date: 20.MAR.2013 08:55:51

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

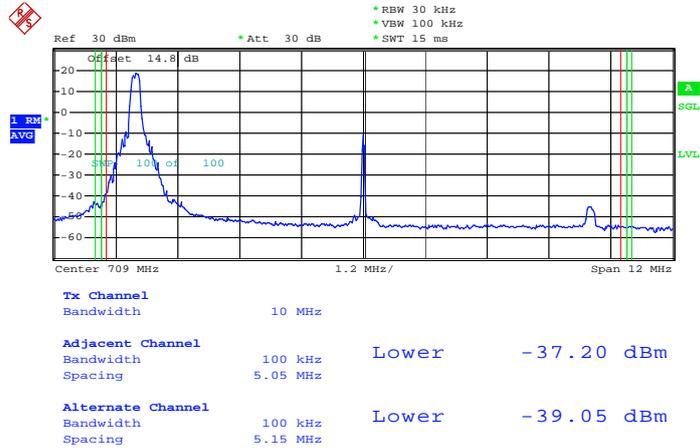


Date: 20.MAR.2013 08:56:11



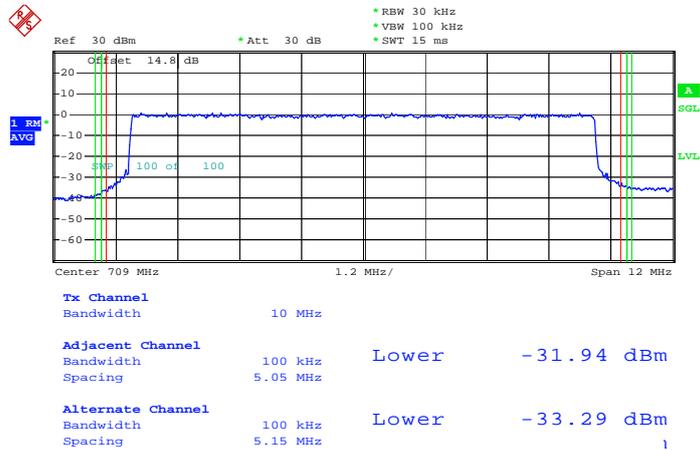
<b>Band :</b>	LTE Band 17	<b>Band Width</b>	10MHz / QPSK
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Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Date: 20.MAR.2013 08:59:38

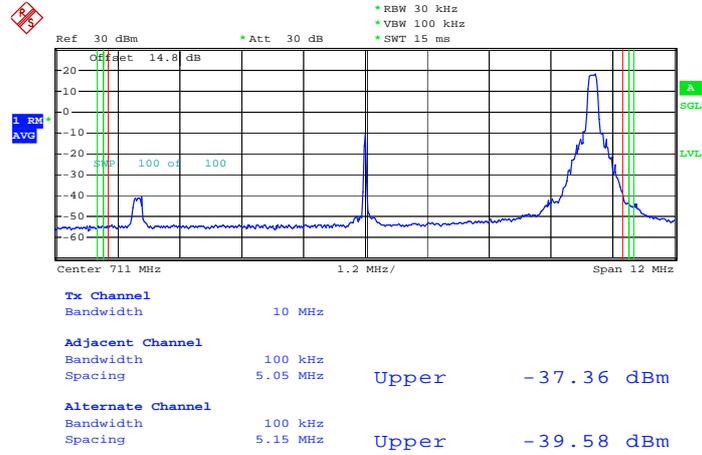
Lower Band Edge Plot for QPSK-RB Size 50, RB Offset 0



Date: 20.MAR.2013 08:58:39

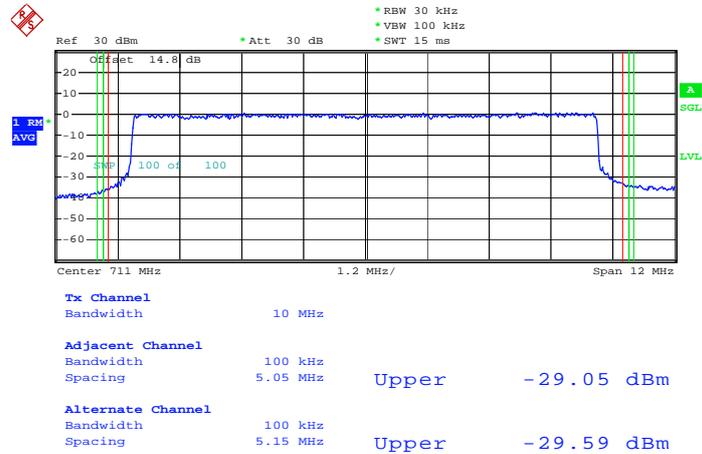


Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 49



Date: 20.MAR.2013 09:00:21

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

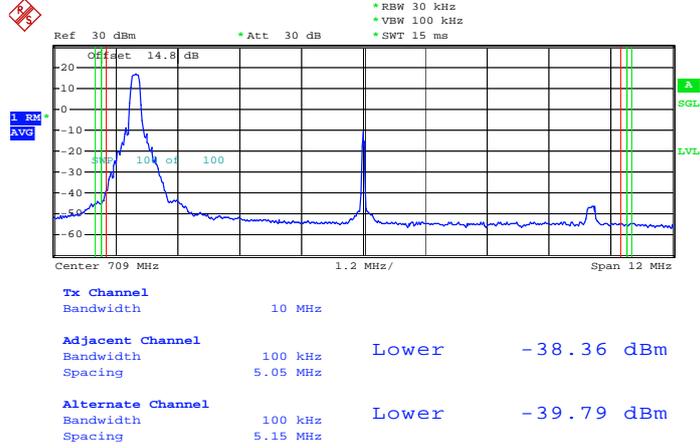


Date: 20.MAR.2013 09:01:15



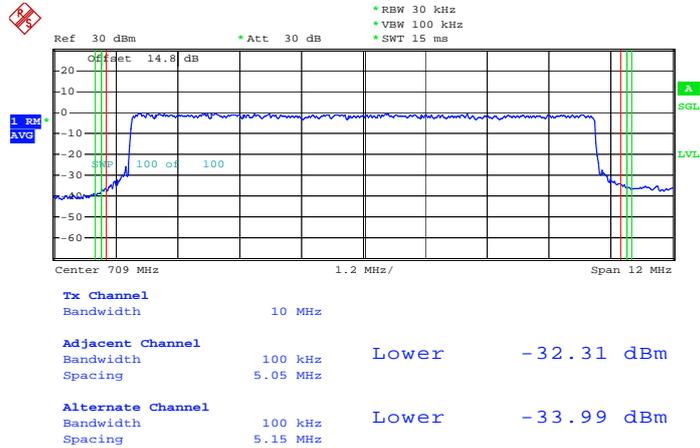
<b>Band :</b>	LTE Band 17	<b>Band Width</b>	10MHz / 16QAM
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Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Date: 20.MAR.2013 08:59:22

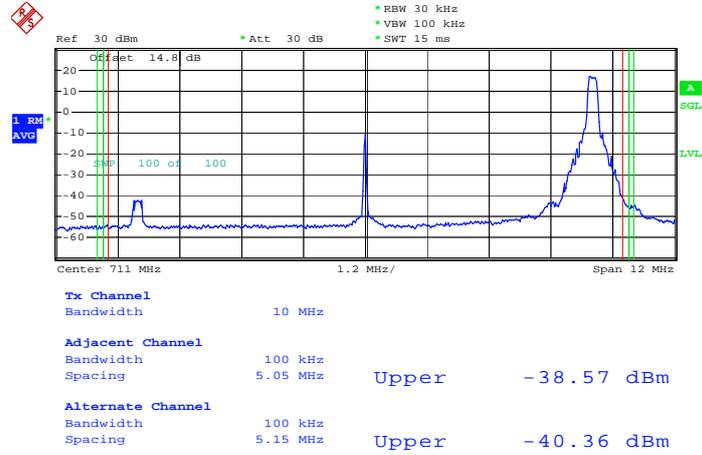
Lower Band Edge Plot for 16QAM-RB Size 50, RB Offset 0



Date: 20.MAR.2013 08:59:05

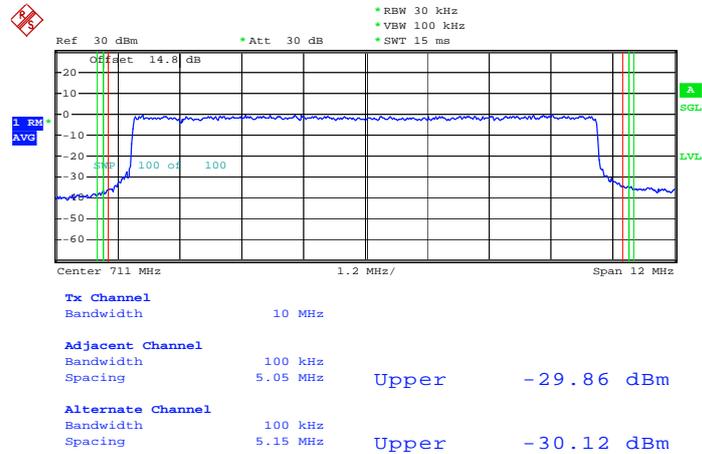


### Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 49



Date: 20.MAR.2013 09:00:37

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



Date: 20.MAR.2013 09:00:58

## 3.5 Conducted Spurious Emission Measurement

### 3.5.1 Description of Conducted Spurious Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least  $43 + 10 \log (P)$  dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 9 KHz up to a frequency including its 10<sup>th</sup> harmonic.

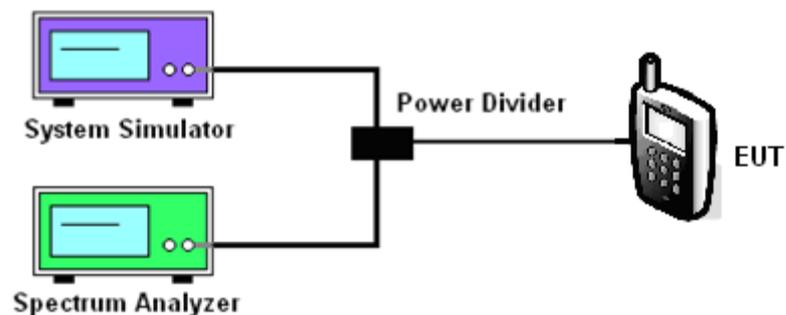
### 3.5.2 Measuring Instruments

See list of measuring instruments of this test report.

### 3.5.3 Test Procedures

1. The EUT was connected to spectrum analyzer and base station via power divider.
2. The middle channel for the highest RF power within the transmitting frequency was measured.
3. The conducted spurious emission for the whole frequency range was taken.

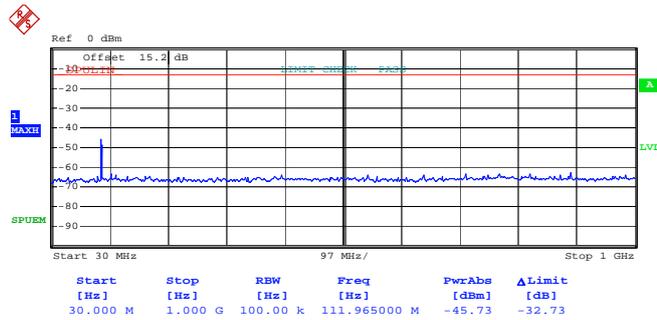
### 3.5.4 Test Setup



### 3.5.5 Test Result (Plots) of Conducted Spurious Emission

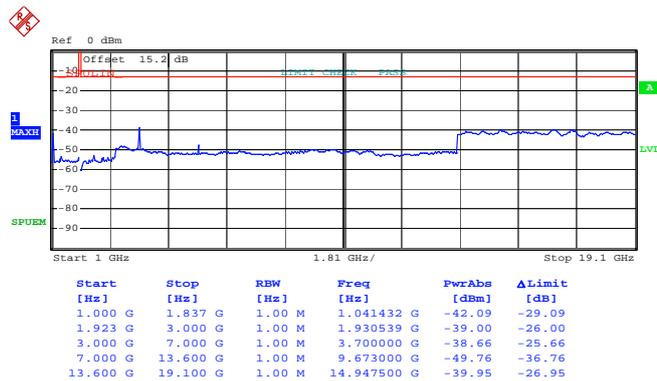
Band :	LTE Band 2	BW / Mod. :	1.4MHz / QPSK
Frequency :	1850.7	Channel :	18607

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 18:21:02

Conducted Emission Plot (1GHz ~ 19GHz) for QPSK (RB Size 1, RB Offset 0)

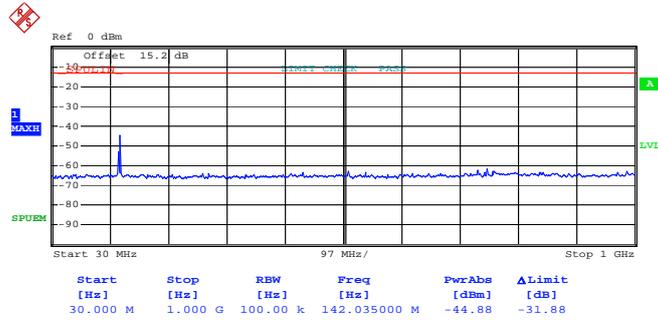


Date: 26.JAN.2013 18:20:35



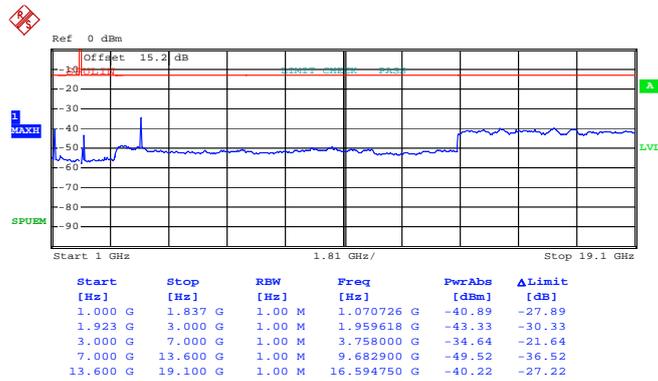
Band :	LTE Band 2	BW / Mod. :	1.4MHz / QPSK
Frequency :	1880	Channel :	18900

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 17:47:59

Conducted Emission Plot (1GHz ~ 19GHz) for QPSK (RB Size 1, RB Offset 0)

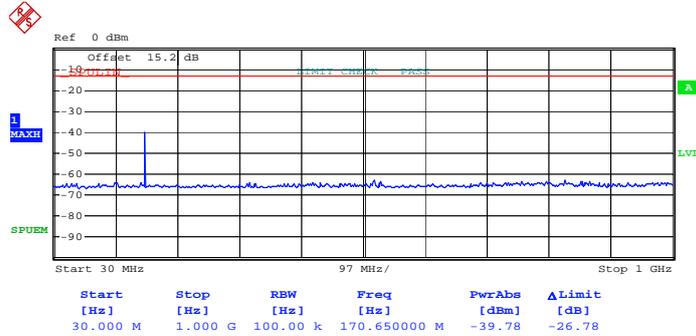


Date: 26.JAN.2013 17:48:57



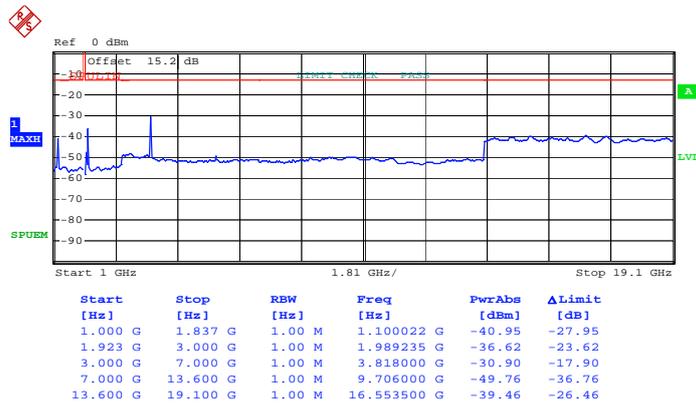
Band :	LTE Band 2	BW / Mod. :	1.4MHz / QPSK
Frequency :	1909.3	Channel :	19193

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:03:46

Conducted Emission Plot (1GHz ~ 19GHz) for QPSK (RB Size 1, RB Offset 0)

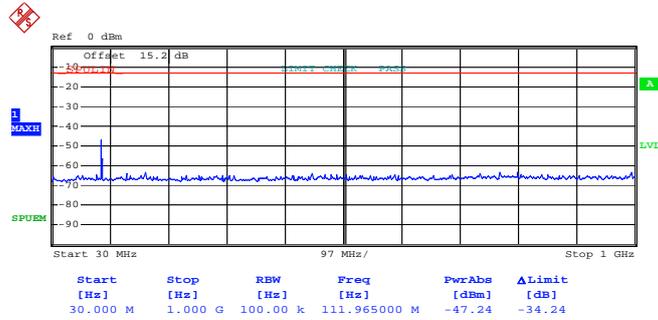


Date: 26.JAN.2013 20:04:21



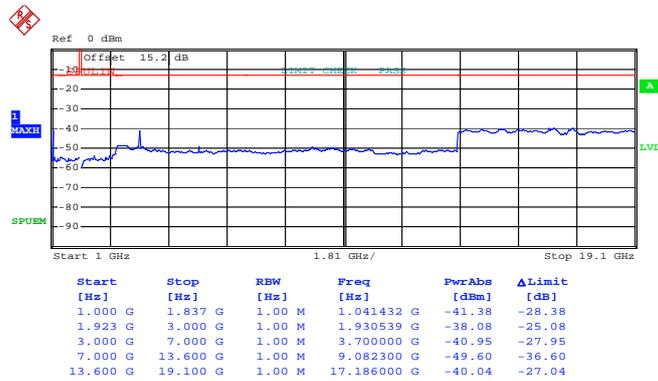
Band :	LTE Band 2	BW / Mod. :	1.4MHz / 16QAM
Frequency :	1850.7	Channel :	18607

Conducted Emission Plot (30MHz ~ 1GHz) for  
16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 18:21:22

Conducted Emission Plot (1GHz ~ 19GHz) for  
16-QAM (RB Size 1, RB Offset 0)

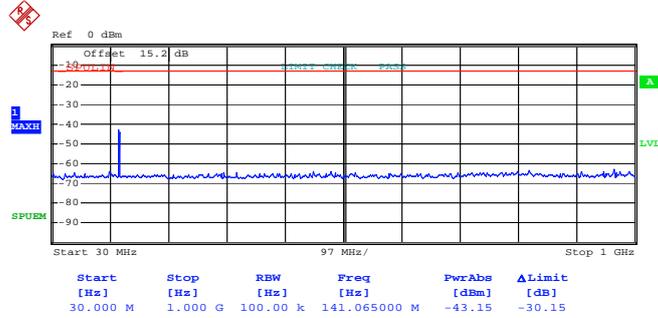


Date: 26.JAN.2013 18:20:13



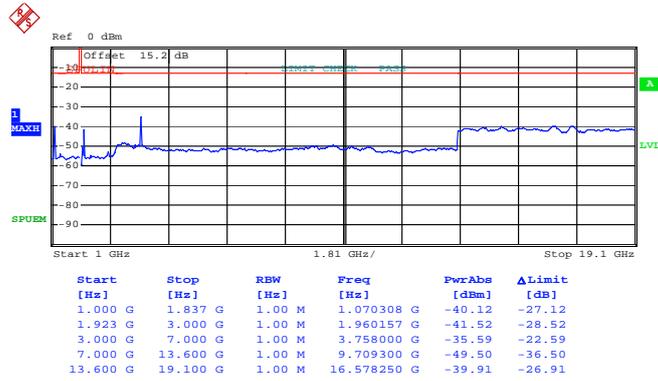
Band :	LTE Band 2	BW / Mod. :	1.4MHz / 16QAM
Frequency :	1880	Channel :	18900

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 17:48:18

Conducted Emission Plot (1GHz ~ 19GHz) for 16-QAM (RB Size 1, RB Offset 0)

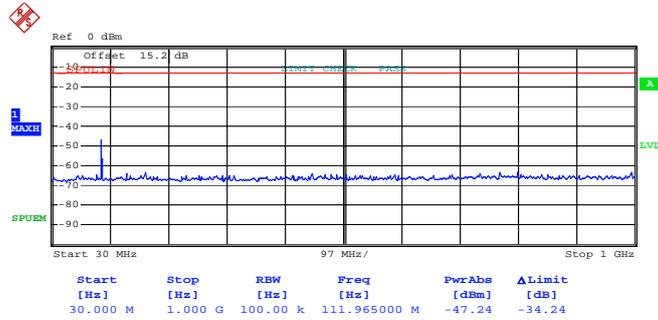


Date: 26.JAN.2013 17:48:42



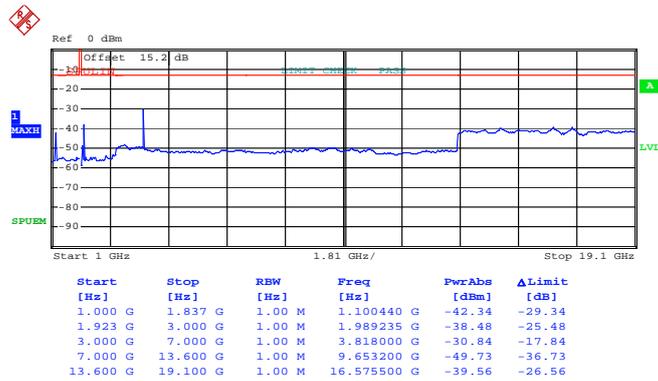
Band :	LTE Band 2	BW / Mod. :	1.4MHz / 16QAM
Frequency :	1909.3	Channel :	19193

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:03:13

Conducted Emission Plot (1GHz ~ 19GHz) for 16-QAM (RB Size 1, RB Offset 0)

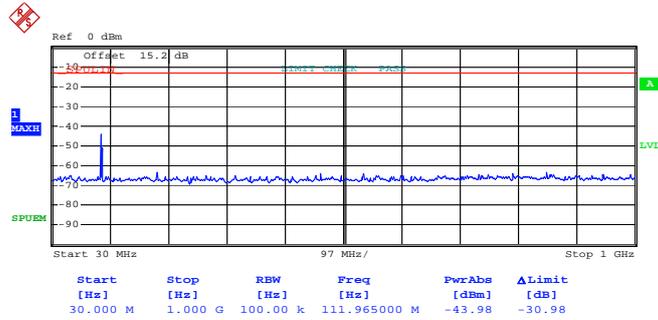


Date: 26.JAN.2013 20:04:44



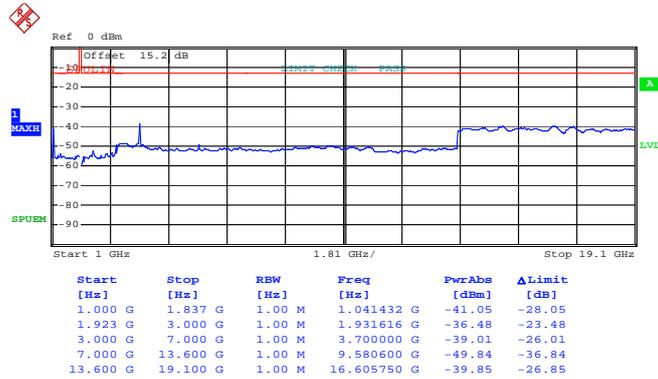
Band :	LTE Band 2	BW / Mod. :	3MHz / QPSK
Frequency :	1851.5	Channel :	18615

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 18:18:26

Conducted Emission Plot (1GHz ~ 19GHz) for QPSK (RB Size 1, RB Offset 0)

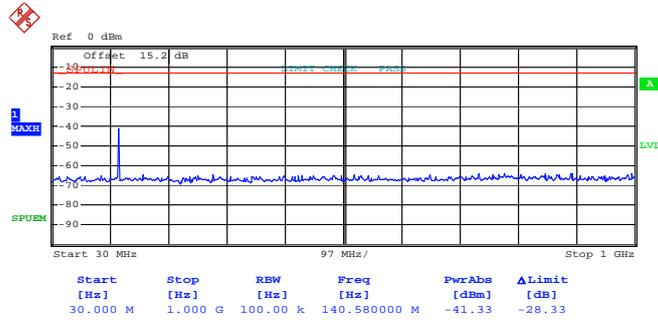


Date: 26.JAN.2013 18:19:07



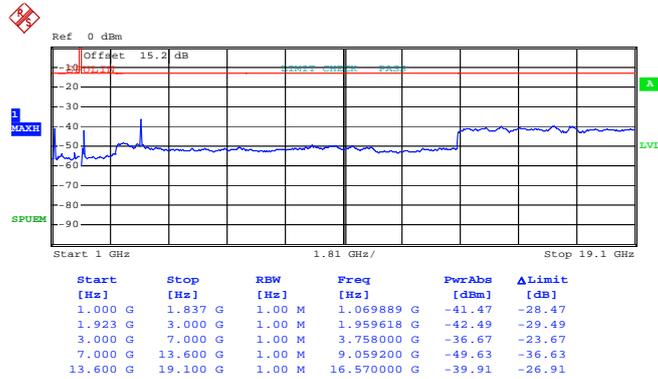
Band :	LTE Band 2	BW / Mod. :	3MHz / QPSK
Frequency :	1880	Channel :	18900

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 17:51:01

Conducted Emission Plot (1GHz ~ 19GHz) for QPSK (RB Size 1, RB Offset 0)

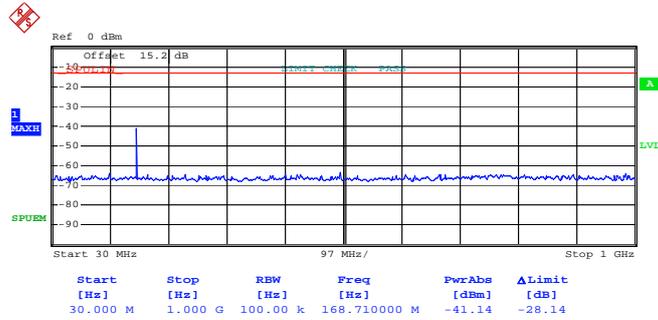


Date: 26.JAN.2013 17:49:25



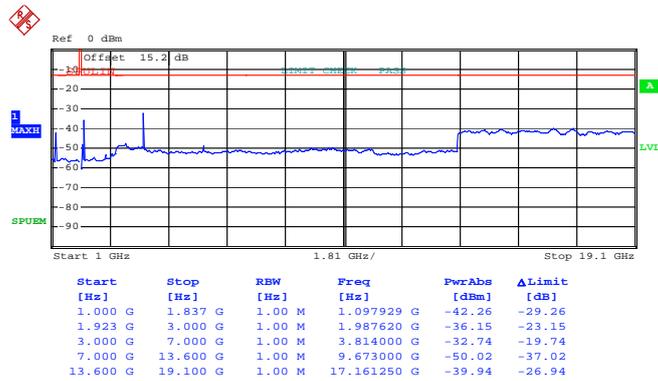
Band :	LTE Band 2	BW / Mod. :	3MHz / QPSK
Frequency :	1908.5	Channel :	19185

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:06:32

Conducted Emission Plot (1GHz ~ 19GHz) for QPSK (RB Size 1, RB Offset 0)

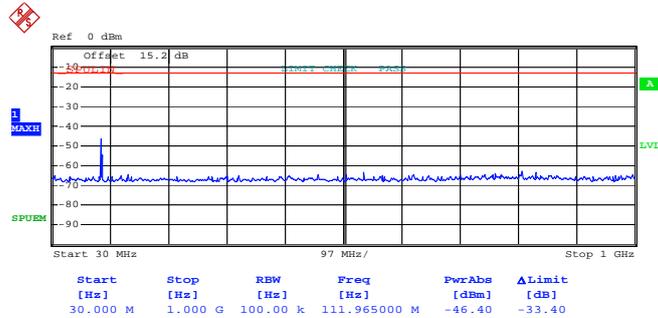


Date: 26.JAN.2013 20:06:04



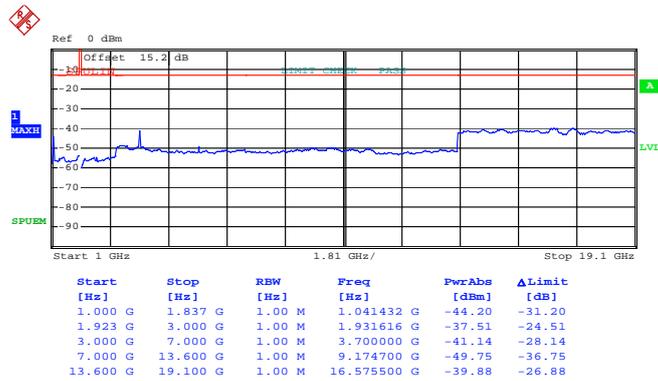
Band :	LTE Band 2	BW / Mod. :	3MHz / 16QAM
Frequency :	1851.5	Channel :	18615

Conducted Emission Plot (30MHz ~ 1GHz) for  
16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 18:18:05

Conducted Emission Plot (1GHz ~ 19GHz) for  
16-QAM (RB Size 1, RB Offset 0)

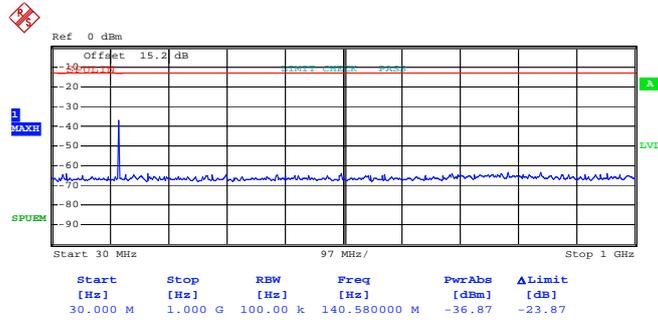


Date: 26.JAN.2013 18:19:29



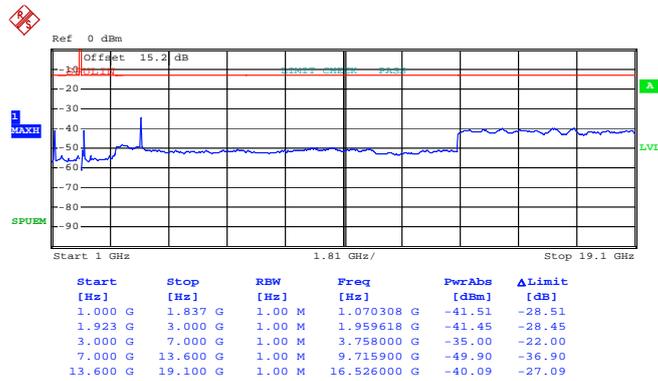
Band :	LTE Band 2	BW / Mod. :	3MHz / 16QAM
Frequency :	1880	Channel :	18900

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 17:50:44

Conducted Emission Plot (1GHz ~ 19GHz) for 16-QAM (RB Size 1, RB Offset 0)

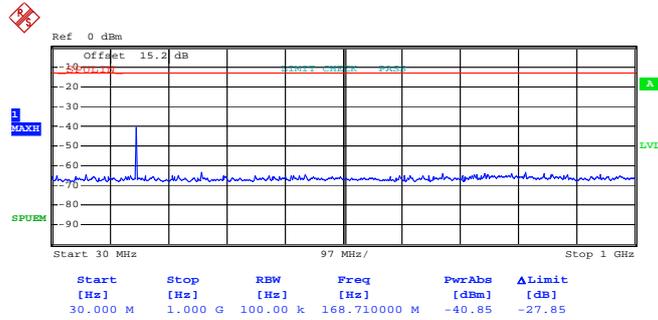


Date: 26.JAN.2013 17:50:12



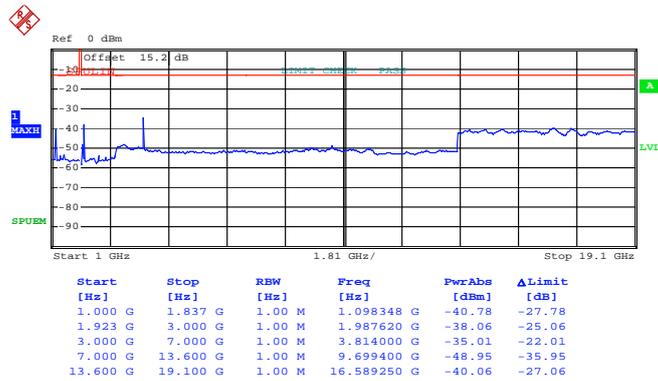
Band :	LTE Band 2	BW / Mod. :	3MHz / 16QAM
Frequency :	1908.5	Channel :	19185

Conducted Emission Plot (30MHz ~ 1GHz) for  
16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:06:54

Conducted Emission Plot (1GHz ~ 19GHz) for  
16-QAM (RB Size 1, RB Offset 0)

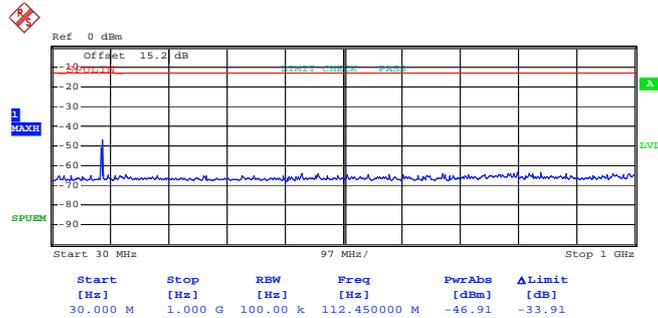


Date: 26.JAN.2013 20:05:46



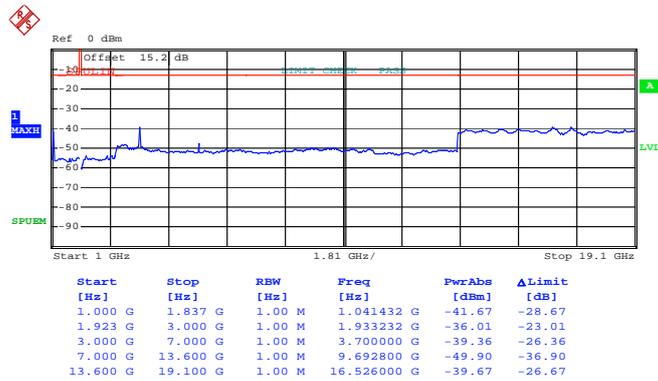
Band :	LTE Band 2	BW / Mod. :	5MHz / QPSK
Frequency :	1852.5	Channel :	18625

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 12)



Date: 26.JAN.2013 18:17:12

Conducted Emission Plot (1GHz ~ 19GHz) for QPSK (RB Size 1, RB Offset 12)

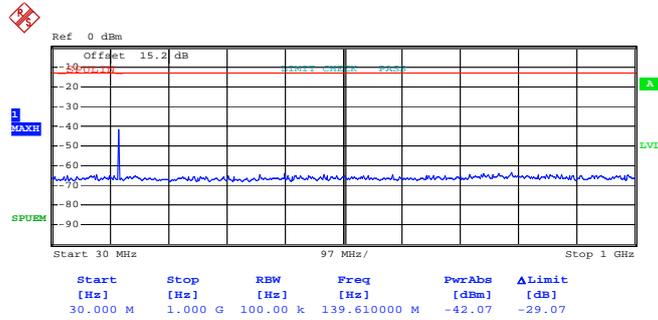


Date: 26.JAN.2013 18:16:52



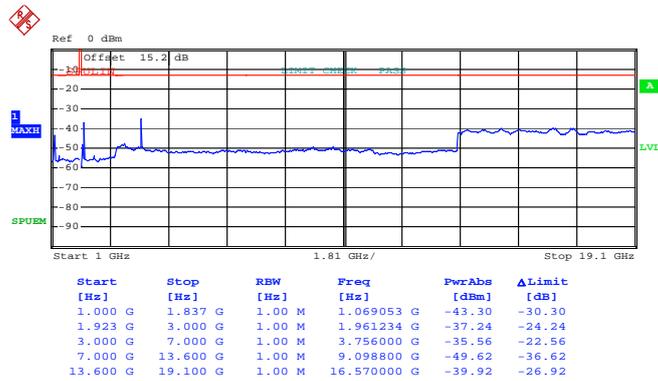
Band :	LTE Band 2	BW / Mod. :	5MHz / QPSK
Frequency :	1880	Channel :	18900

Conducted Emission Plot (30MHz ~ 1GHz) for  
QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 18:00:56

Conducted Emission Plot (1GHz ~ 19GHz) for  
QPSK (RB Size 1, RB Offset 0)

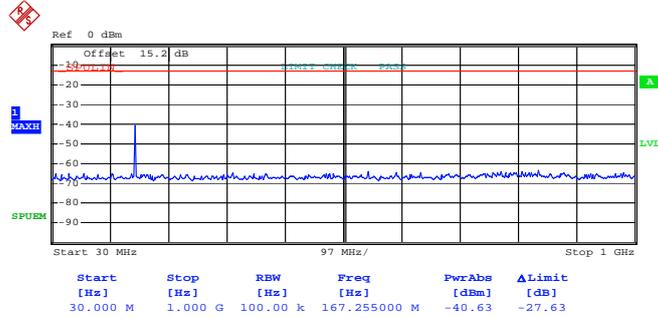


Date: 26.JAN.2013 18:02:08



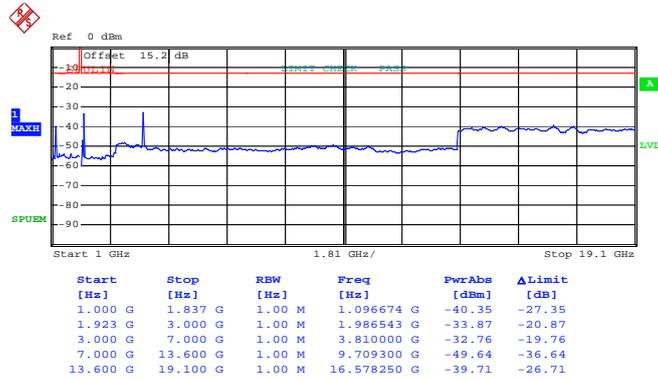
Band :	LTE Band 2	BW / Mod. :	5MHz / QPSK
Frequency :	1907.5	Channel :	19175

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:11:07

Conducted Emission Plot (1GHz ~ 19GHz) for QPSK (RB Size 1, RB Offset 0)

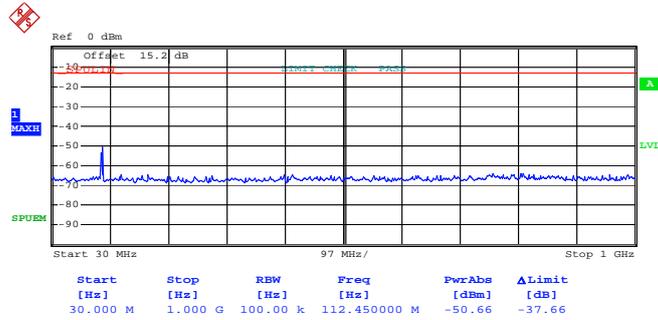


Date: 26.JAN.2013 20:11:30



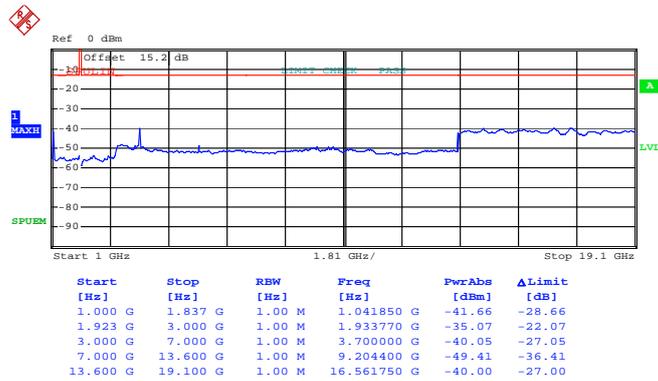
Band :	LTE Band 2	BW / Mod. :	5MHz / 16QAM
Frequency :	1852.5	Channel :	18625

Conducted Emission Plot (30MHz ~ 1GHz) for  
16-QAM (RB Size 1, RB Offset 24)



Date: 26.JAN.2013 18:17:31

Conducted Emission Plot (1GHz ~ 19GHz) for  
16-QAM (RB Size 1, RB Offset 24)

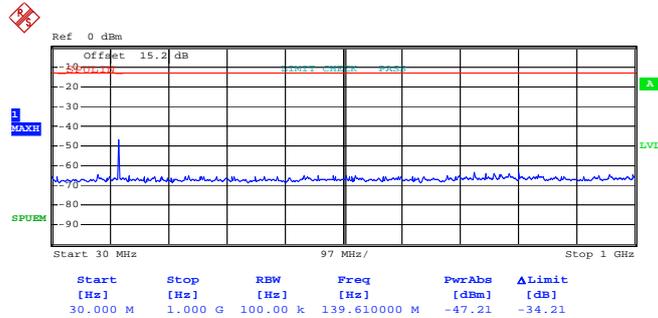


Date: 26.JAN.2013 18:16:29



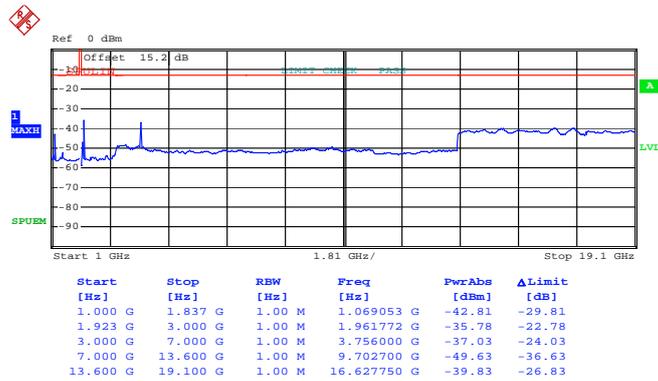
Band :	LTE Band 2	BW / Mod. :	5MHz / 16QAM
Frequency :	1880	Channel :	18900

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 18:01:16

Conducted Emission Plot (1GHz ~ 19GHz) for 16-QAM (RB Size 1, RB Offset 0)

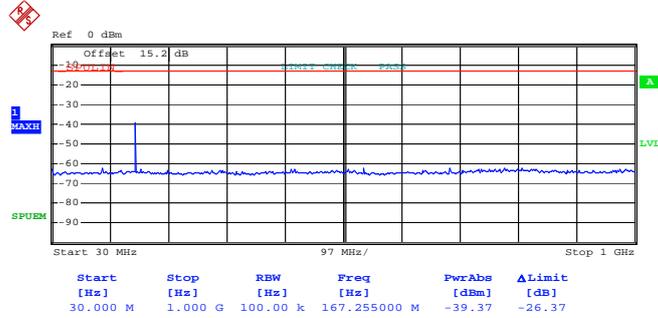


Date: 26.JAN.2013 18:01:46



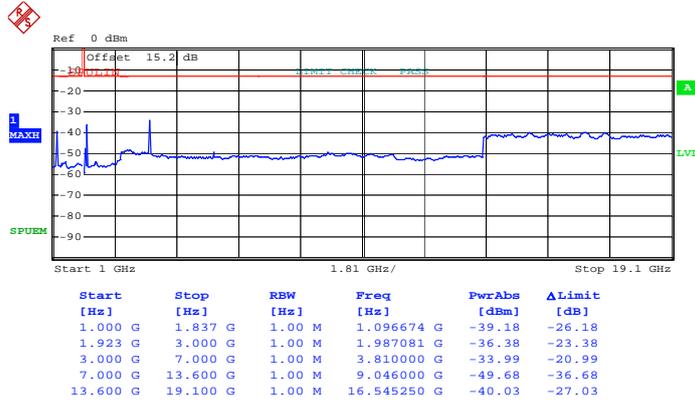
Band :	LTE Band 2	BW / Mod. :	5MHz / 16QAM
Frequency :	1907.5	Channel :	19175

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:10:46

Conducted Emission Plot (1GHz ~ 19GHz) for 16-QAM (RB Size 1, RB Offset 0)

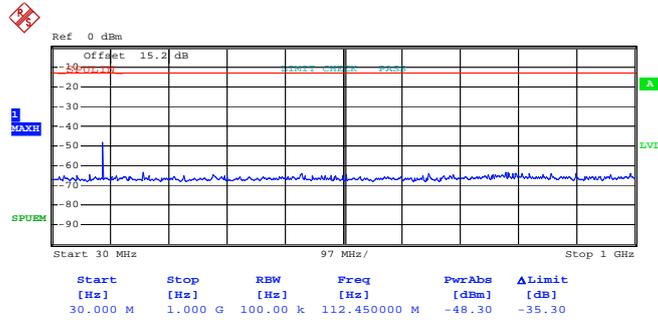


Date: 26.JAN.2013 20:11:50



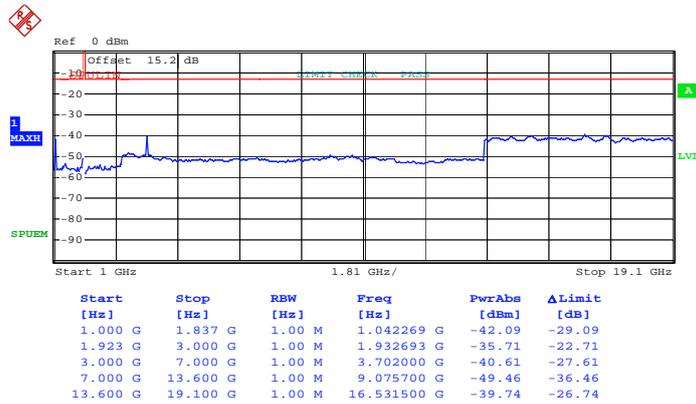
Band :	LTE Band 2	BW / Mod. :	10MHz / QPSK
Frequency :	1855	Channel :	18650

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 18:14:44

Conducted Emission Plot (1GHz ~ 19GHz) for QPSK (RB Size 1, RB Offset 0)

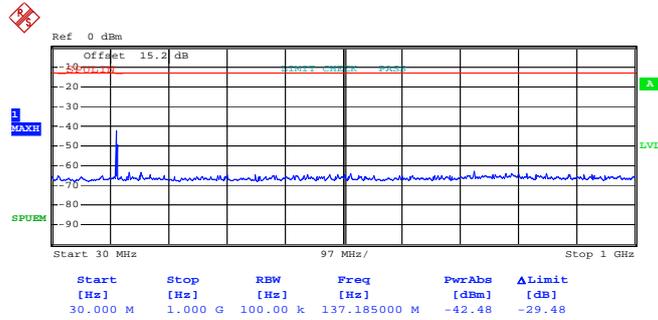


Date: 26.JAN.2013 18:15:19



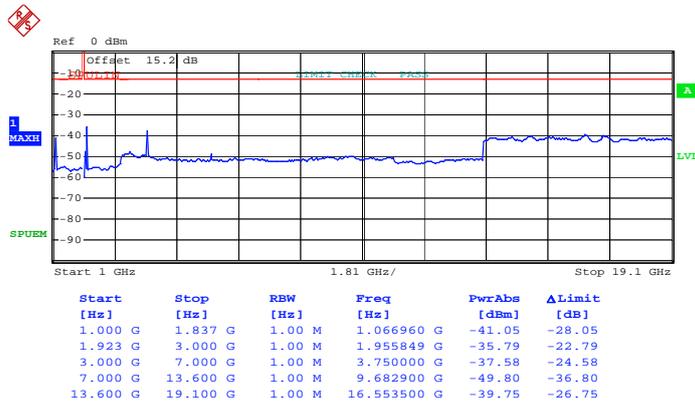
Band :	LTE Band 2	BW / Mod. :	10MHz / QPSK
Frequency :	1880	Channel :	18900

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 18:04:00

Conducted Emission Plot (1GHz ~ 19GHz) for QPSK (RB Size 1, RB Offset 0)

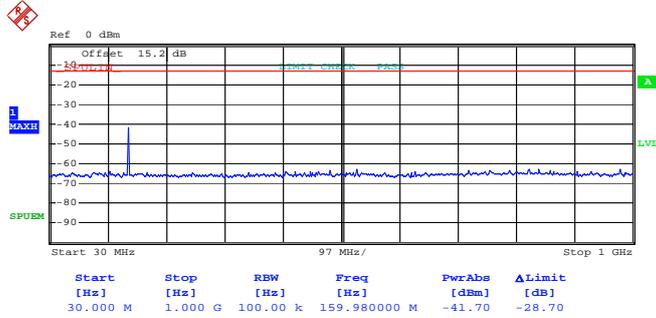


Date: 26.JAN.2013 18:03:41



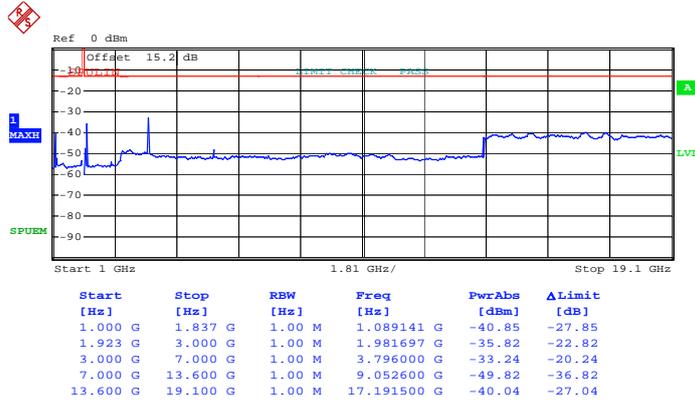
Band :	LTE Band 2	BW / Mod. :	10MHz / QPSK
Frequency :	1905	Channel :	19150

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:13:44

Conducted Emission Plot (1GHz ~ 19GHz) for QPSK (RB Size 1, RB Offset 0)

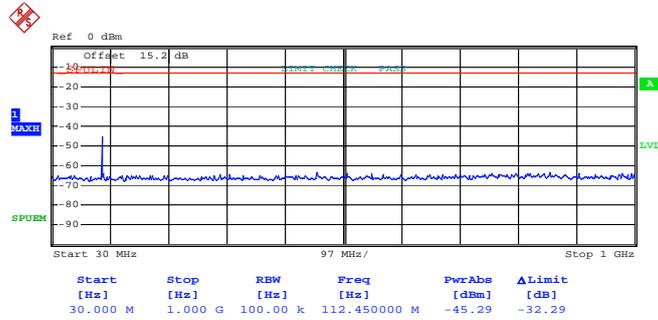


Date: 26.JAN.2013 20:12:49



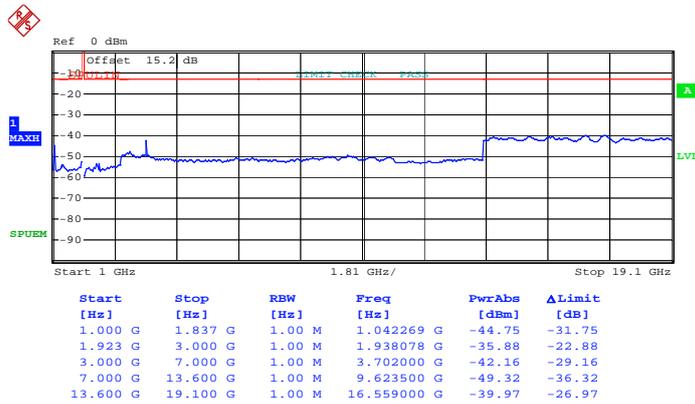
Band :	LTE Band 2	BW / Mod. :	10MHz / 16QAM
Frequency :	1855	Channel :	18650

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 18:14:26

Conducted Emission Plot (1GHz ~ 19GHz) for 16-QAM (RB Size 1, RB Offset 0)

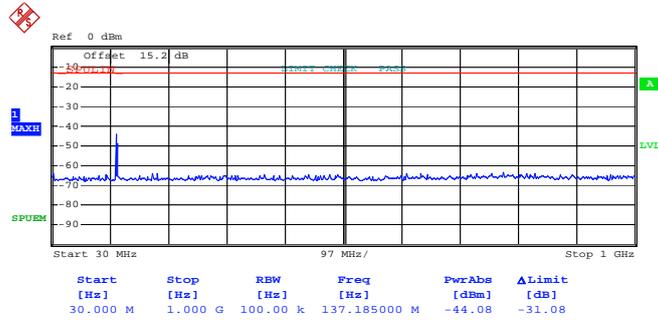


Date: 26.JAN.2013 18:15:52



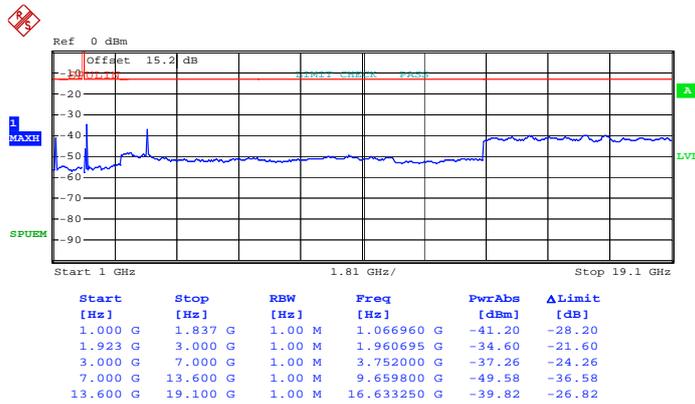
Band :	LTE Band 2	BW / Mod. :	10MHz / 16QAM
Frequency :	1880	Channel :	18900

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 18:04:21

Conducted Emission Plot (1GHz ~ 19GHz) for 16-QAM (RB Size 1, RB Offset 0)

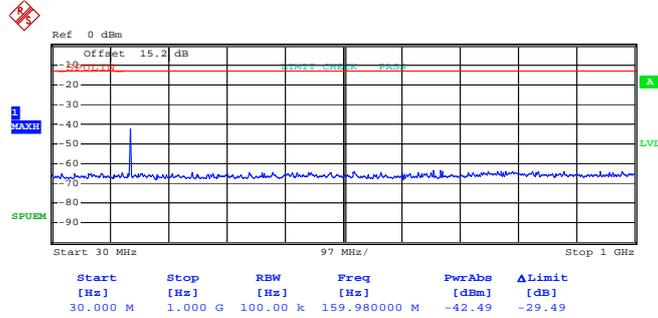


Date: 26.JAN.2013 18:03:20



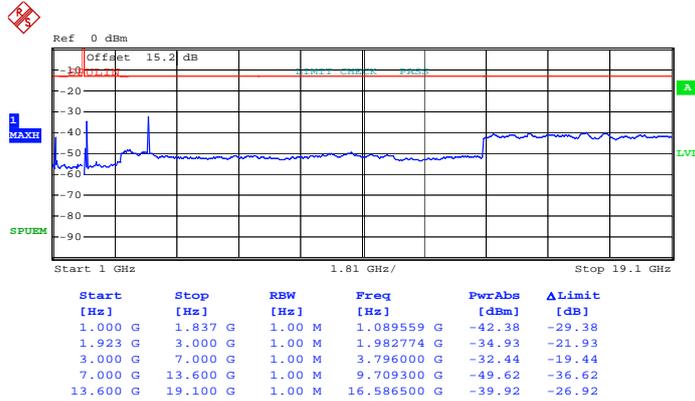
Band :	LTE Band 2	BW / Mod. :	10MHz / 16QAM
Frequency :	1905	Channel :	19150

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:14:24

Conducted Emission Plot (1GHz ~ 19GHz) for 16-QAM (RB Size 1, RB Offset 0)

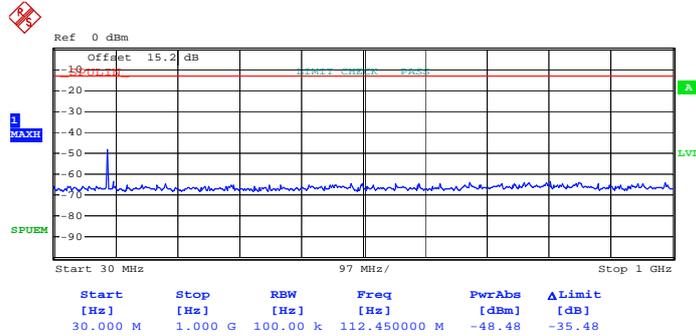


Date: 26.JAN.2013 20:12:32



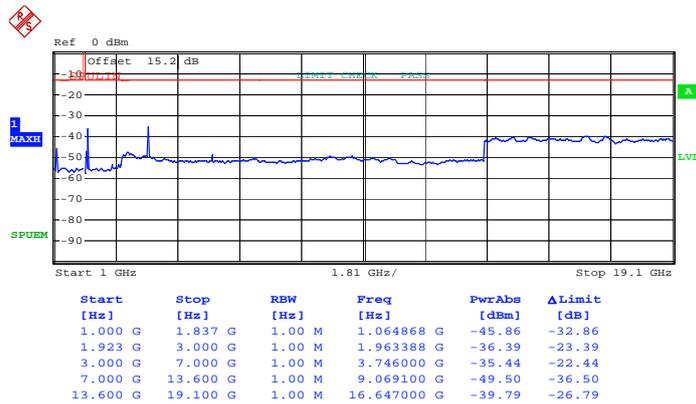
Band :	LTE Band 2	BW / Mod. :	15MHz / QPSK
Frequency :	1857.5	Channel :	18675

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 18:13:21

Conducted Emission Plot (1GHz ~ 19GHz) for QPSK (RB Size 1, RB Offset 0)

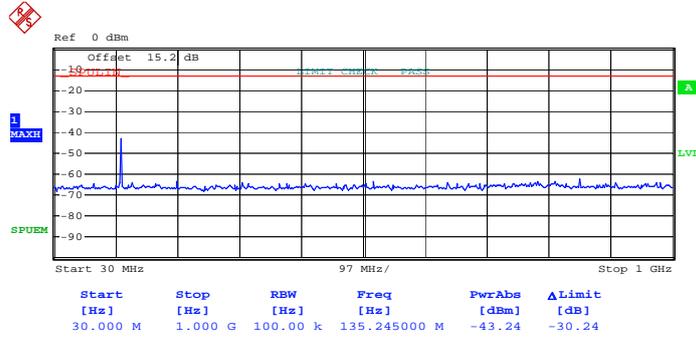


Date: 26.JAN.2013 18:06:04



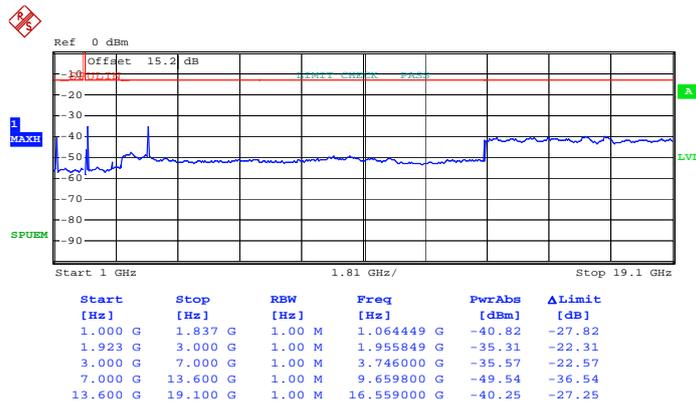
<b>Band :</b>	LTE Band 2	<b>BW / Mod. :</b>	15MHz / QPSK
<b>Frequency :</b>	1880	<b>Channel :</b>	18900

**Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)**



Date: 26.JAN.2013 18:05:21

**Conducted Emission Plot (1GHz ~ 19GHz) for QPSK (RB Size 1, RB Offset 0)**

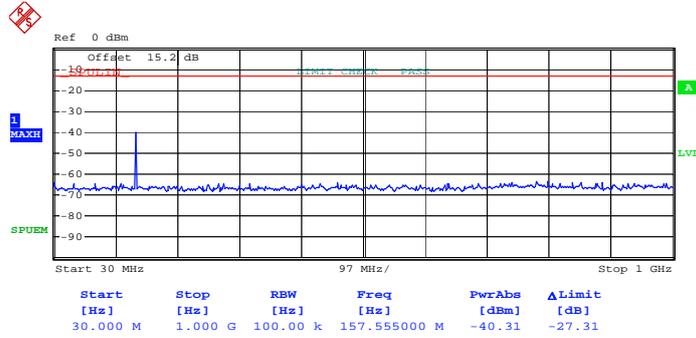


Date: 26.JAN.2013 18:05:44



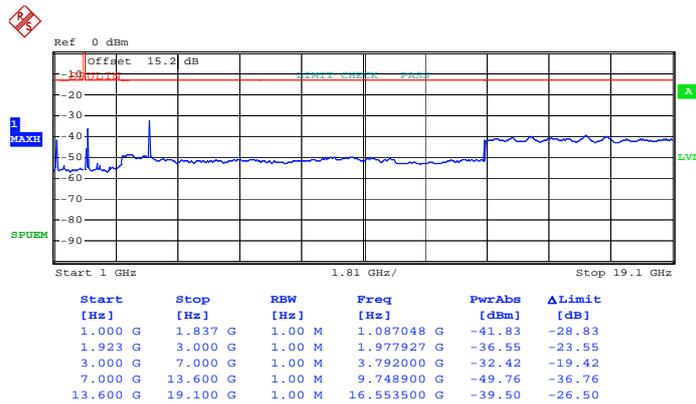
Band :	LTE Band 2	BW / Mod. :	15MHz / QPSK
Frequency :	1902.5	Channel :	19125

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:15:46

Conducted Emission Plot (1GHz ~ 19GHz) for QPSK (RB Size 1, RB Offset 0)

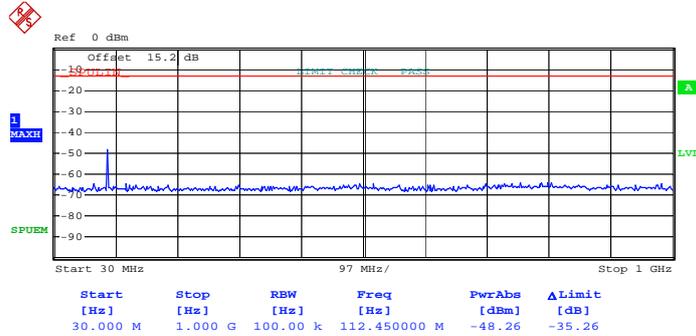


Date: 26.JAN.2013 20:16:11



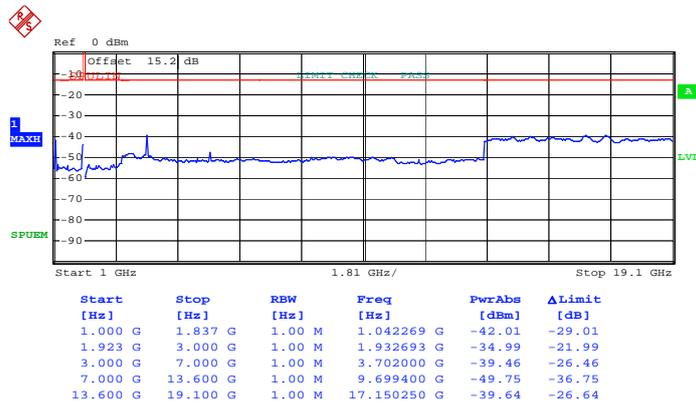
Band :	LTE Band 2	BW / Mod. :	15MHz / 16QAM
Frequency :	1857.5	Channel :	18675

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 18:13:39

Conducted Emission Plot (1GHz ~ 19GHz) for 16-QAM (RB Size 1, RB Offset 0)

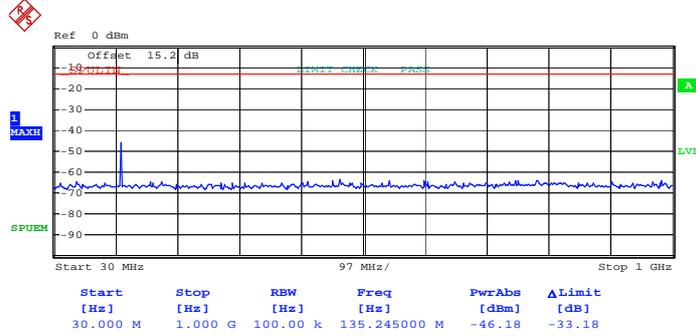


Date: 26.JAN.2013 18:12:42



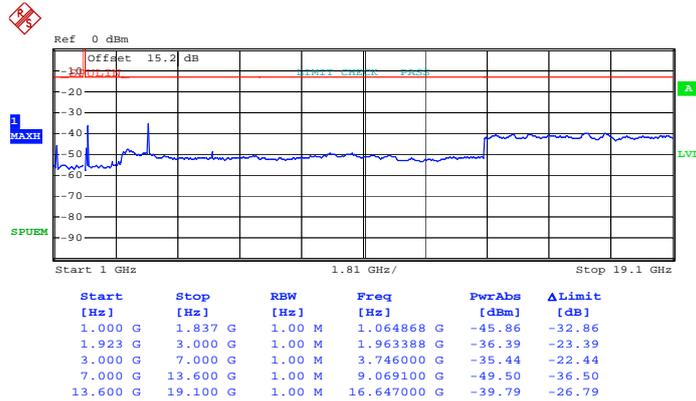
<b>Band :</b>	LTE Band 2	<b>BW / Mod. :</b>	15MHz / 16QAM
<b>Frequency :</b>	1880	<b>Channel :</b>	18900

**Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)**



Date: 26.JAN.2013 18:04:47

**Conducted Emission Plot (1GHz ~ 19GHz) for 16-QAM (RB Size 1, RB Offset 0)**

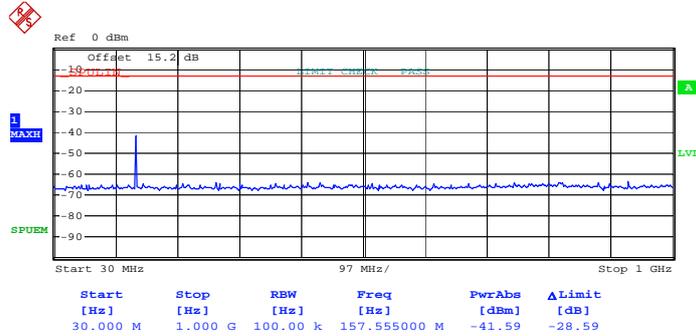


Date: 26.JAN.2013 18:06:04



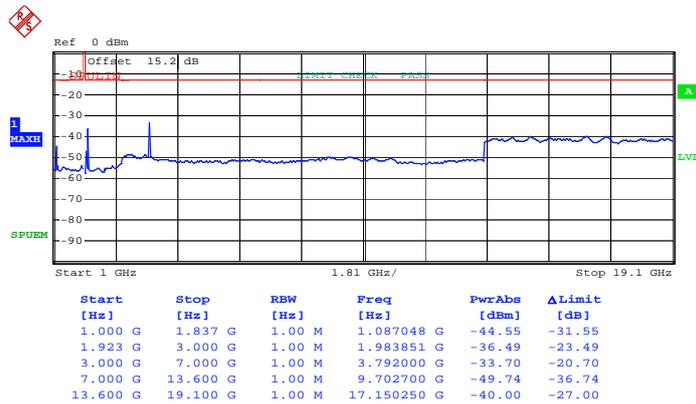
<b>Band :</b>	LTE Band 2	<b>BW / Mod. :</b>	15MHz / 16QAM
<b>Frequency :</b>	1902.5	<b>Channel :</b>	19125

**Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)**



Date: 26.JAN.2013 20:15:20

**Conducted Emission Plot (1GHz ~ 19GHz) for 16-QAM (RB Size 1, RB Offset 0)**

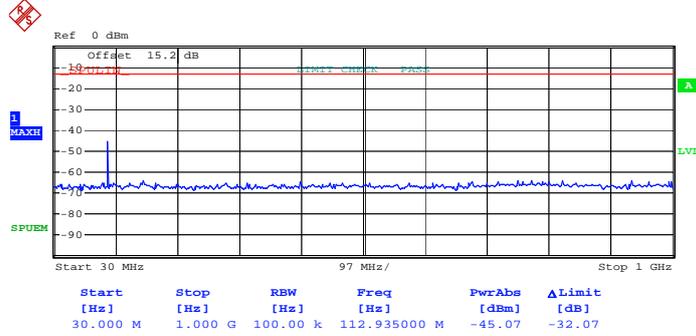


Date: 26.JAN.2013 20:16:34



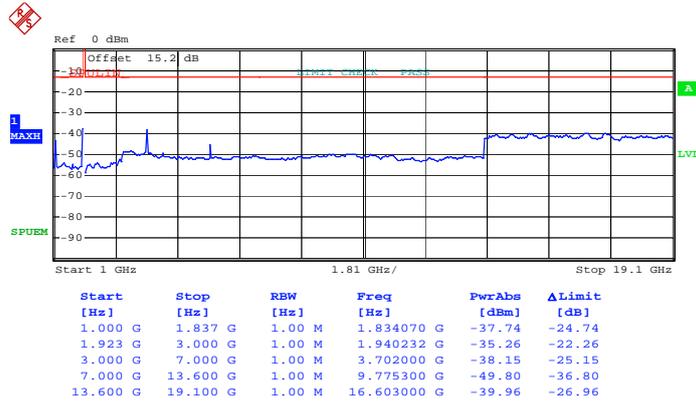
<b>Band :</b>	LTE Band 2	<b>BW / Mod. :</b>	20MHz / QPSK
<b>Frequency :</b>	1860	<b>Channel :</b>	18700

**Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)**



Date: 26.JAN.2013 18:11:07

**Conducted Emission Plot (1GHz ~ 19GHz) for QPSK (RB Size 1, RB Offset 0)**

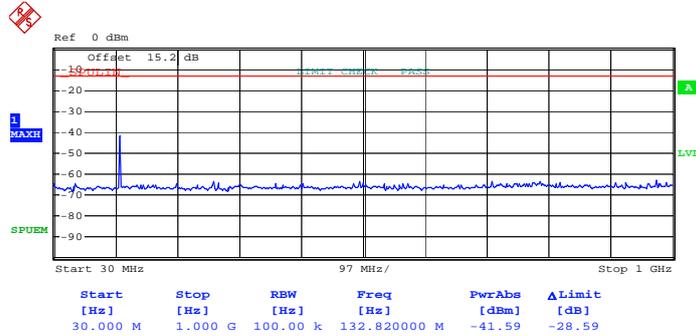


Date: 26.JAN.2013 18:11:35



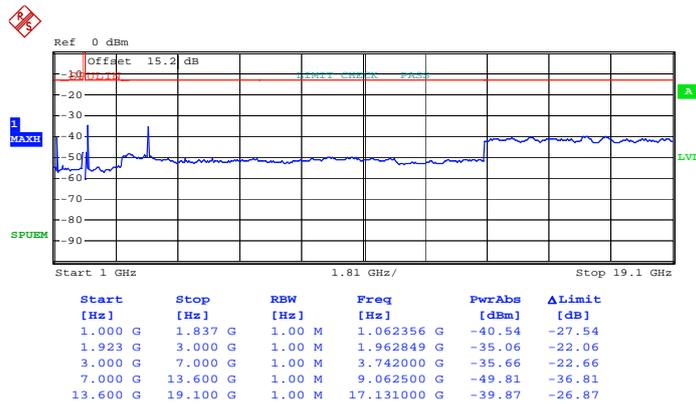
<b>Band :</b>	LTE Band 2	<b>BW / Mod. :</b>	20MHz / QPSK
<b>Frequency :</b>	1880	<b>Channel :</b>	18900

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 18:07:27

Conducted Emission Plot (1GHz ~ 19GHz) for QPSK (RB Size 1, RB Offset 0)

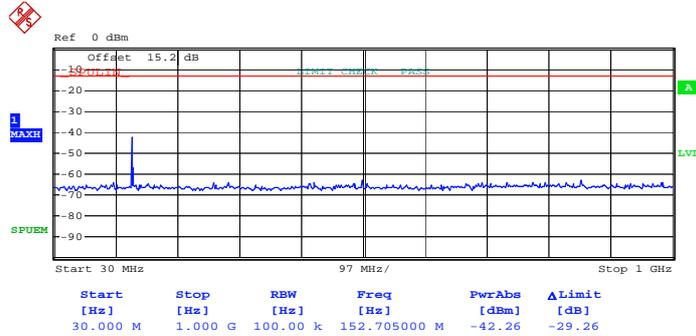


Date: 26.JAN.2013 18:07:04



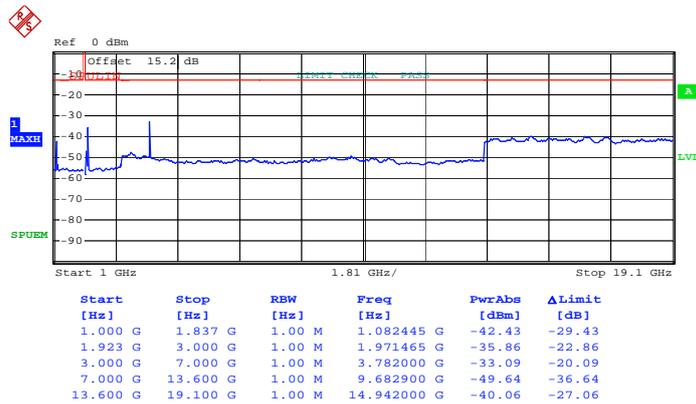
<b>Band :</b>	LTE Band 2	<b>BW / Mod. :</b>	20MHz / QPSK
<b>Frequency :</b>	1900	<b>Channel :</b>	19100

**Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)**



Date: 26.JAN.2013 20:17:52

**Conducted Emission Plot (1GHz ~ 19GHz) for QPSK (RB Size 1, RB Offset 0)**

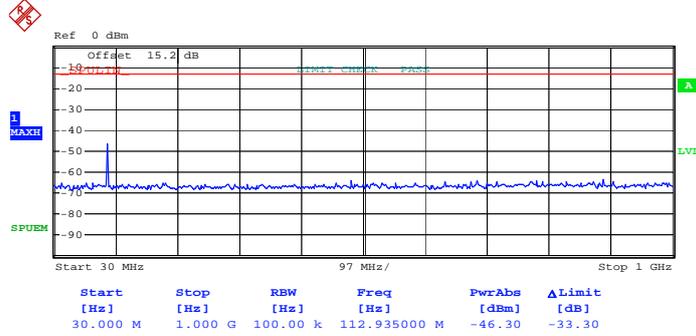


Date: 26.JAN.2013 20:17:27



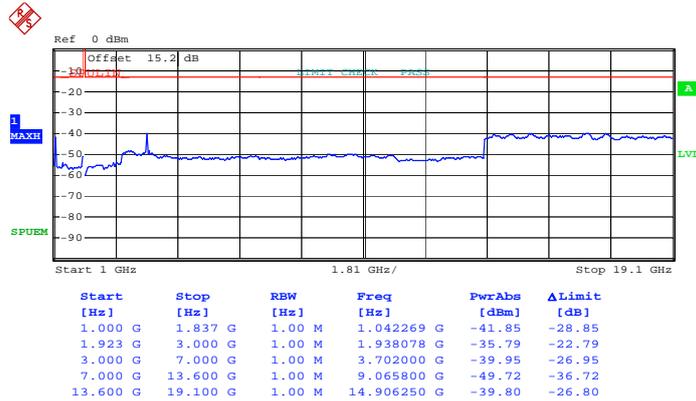
<b>Band :</b>	LTE Band 2	<b>BW / Mod. :</b>	20MHz / 16QAM
<b>Frequency :</b>	1860	<b>Channel :</b>	18700

**Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)**



Date: 26.JAN.2013 18:10:43

**Conducted Emission Plot (1GHz ~ 19GHz) for 16-QAM (RB Size 1, RB Offset 0)**

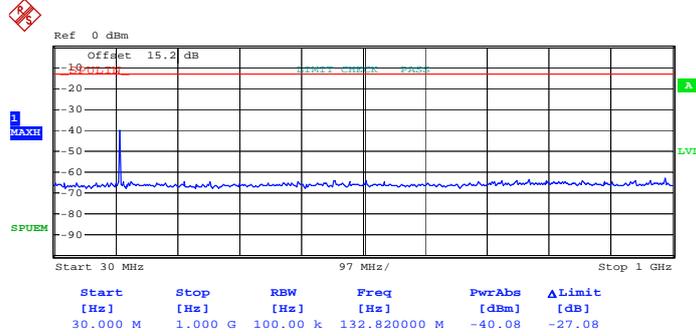


Date: 26.JAN.2013 18:11:56



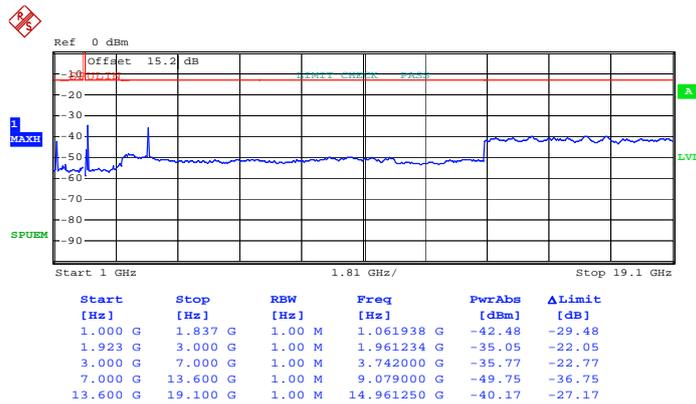
<b>Band :</b>	LTE Band 2	<b>BW / Mod. :</b>	20MHz / 16QAM
<b>Frequency :</b>	1880	<b>Channel :</b>	18900

**Conducted Emission Plot (30MHz ~ 1GHz) for  
16-QAM (RB Size 1, RB Offset 0)**



Date: 26.JAN.2013 18:07:52

**Conducted Emission Plot (1GHz ~ 19GHz) for  
16-QAM (RB Size 1, RB Offset 0)**

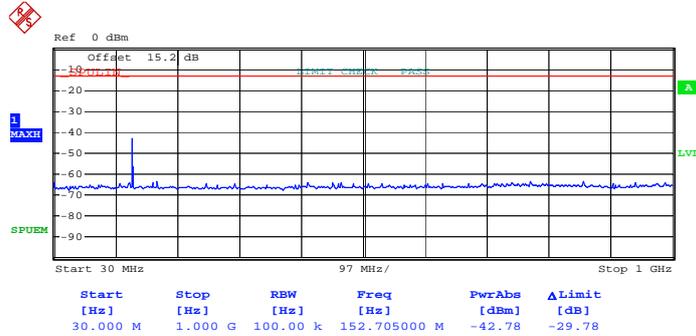


Date: 26.JAN.2013 18:06:30



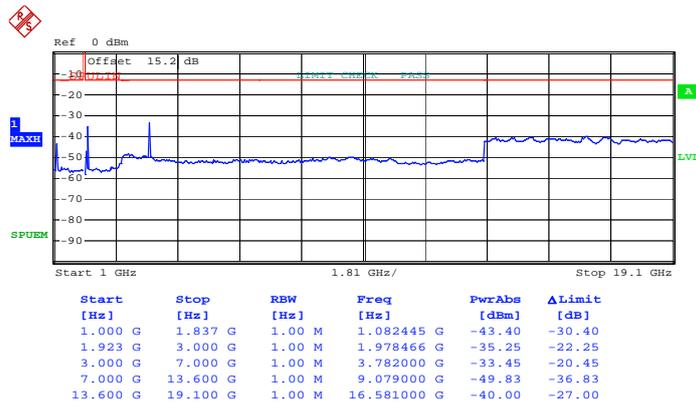
Band :	LTE Band 2	BW / Mod. :	20MHz / 16QAM
Frequency :	1900	Channel :	19100

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:18:22

Conducted Emission Plot (1GHz ~ 19GHz) for 16-QAM (RB Size 1, RB Offset 0)

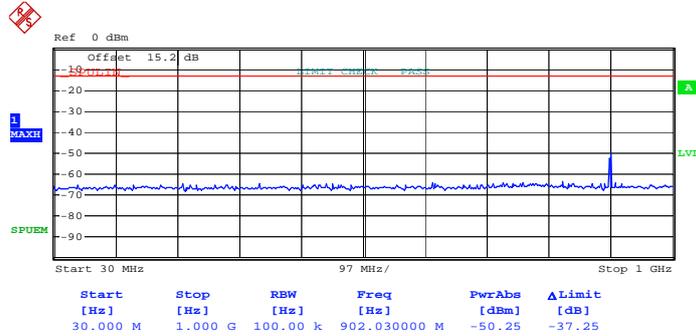


Date: 26.JAN.2013 20:17:07



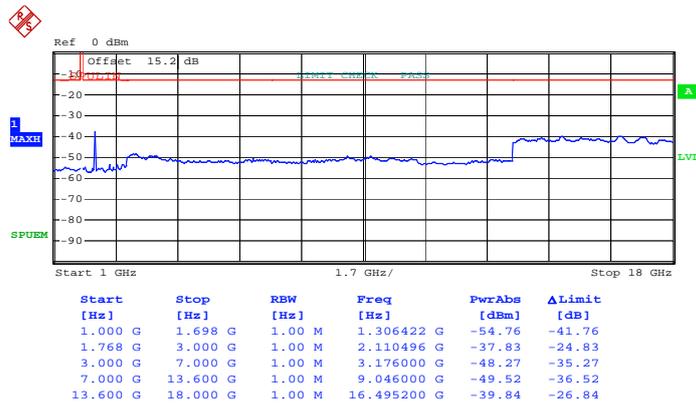
Band :	LTE Band 4	BW / Mod. :	1.4MHz / QPSK
Frequency :	1710.7	Channel :	19957

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:58:38

Conducted Emission Plot (1GHz ~ 18GHz) for QPSK (RB Size 1, RB Offset 0)

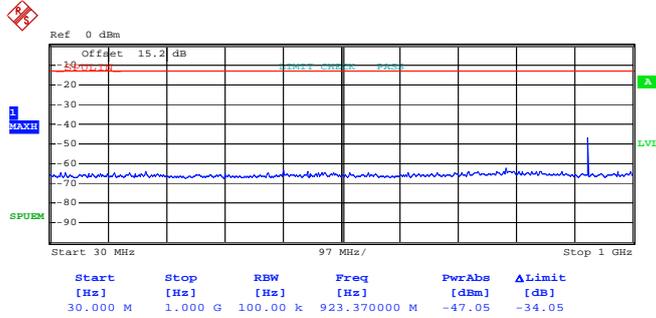


Date: 26.JAN.2013 20:58:12



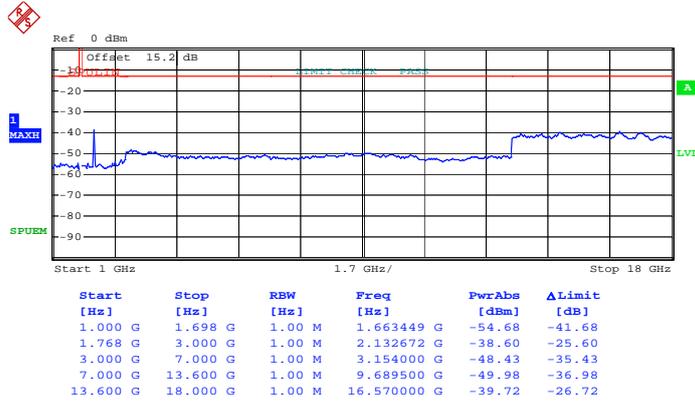
Band :	LTE Band 4	BW / Mod. :	1.4MHz / QPSK
Frequency :	1732.5	Channel :	20175

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:33:07

Conducted Emission Plot (1GHz ~ 18GHz) for QPSK (RB Size 1, RB Offset 0)

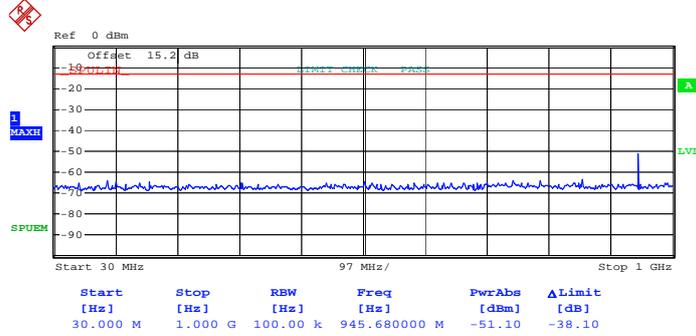


Date: 26.JAN.2013 20:32:33



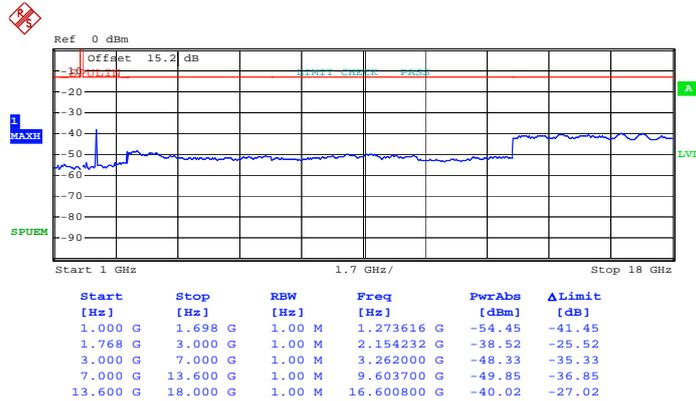
Band :	LTE Band 4	BW / Mod. :	1.4MHz / QPSK
Frequency :	1754.3	Channel :	20393

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:35:51

Conducted Emission Plot (1GHz ~ 18GHz) for QPSK (RB Size 1, RB Offset 0)

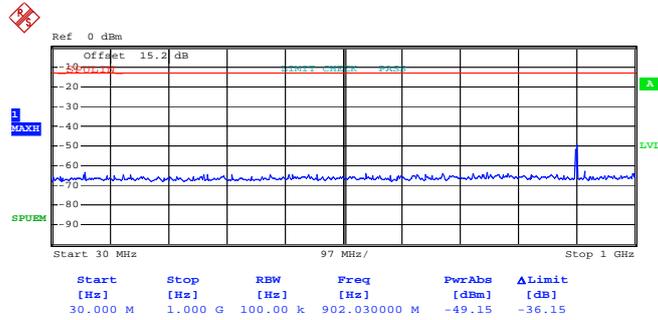


Date: 26.JAN.2013 20:36:19



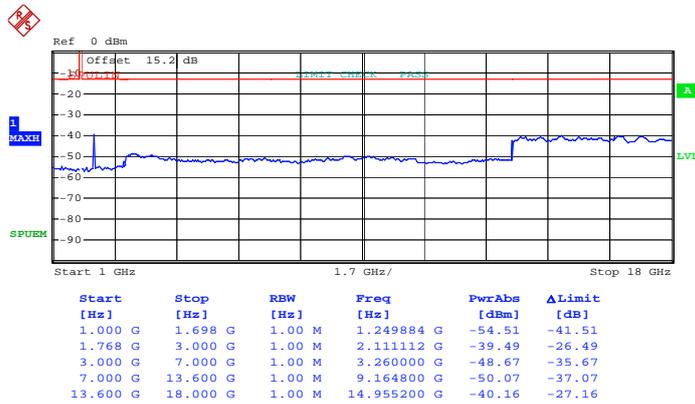
Band :	LTE Band 4	BW / Mod. :	1.4MHz / 16QAM
Frequency :	1710.7	Channel :	19957

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:58:57

Conducted Emission Plot (1GHz ~ 18GHz) for 16-QAM (RB Size 1, RB Offset 0)

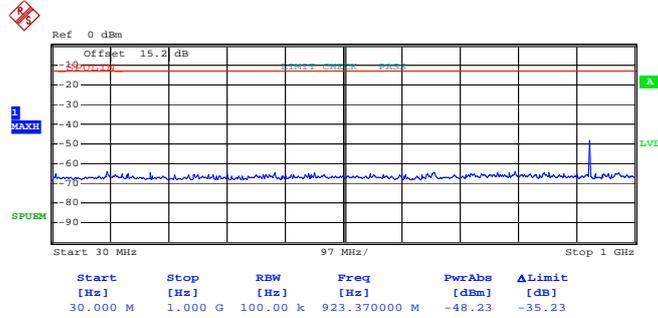


Date: 26.JAN.2013 20:57:50



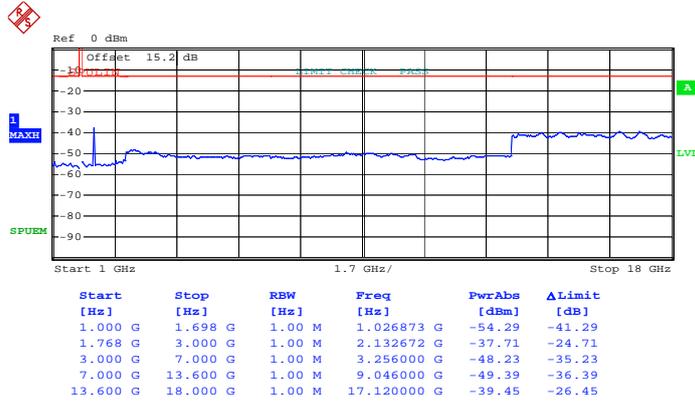
Band :	LTE Band 4	BW / Mod. :	1.4MHz / 16QAM
Frequency :	1732.5	Channel :	20175

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:33:24

Conducted Emission Plot (1GHz ~ 18GHz) for 16-QAM (RB Size 1, RB Offset 0)

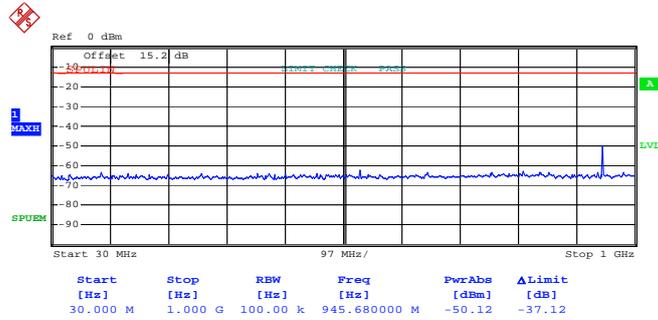


Date: 26.JAN.2013 20:32:14



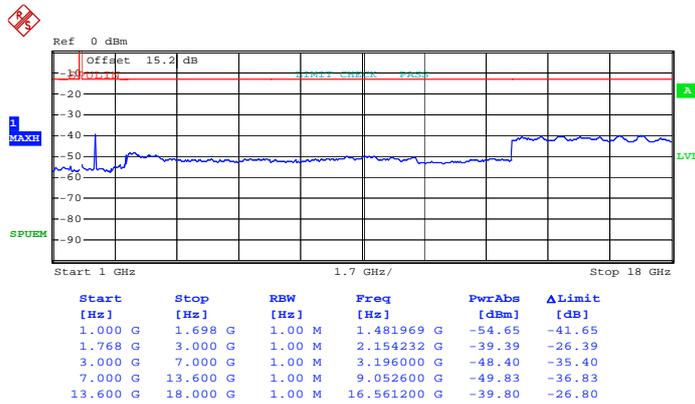
Band :	LTE Band 4	BW / Mod. :	1.4MHz / 16QAM
Frequency :	1754.3	Channel :	20393

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:35:37

Conducted Emission Plot (1GHz ~ 18GHz) for 16-QAM (RB Size 1, RB Offset 0)

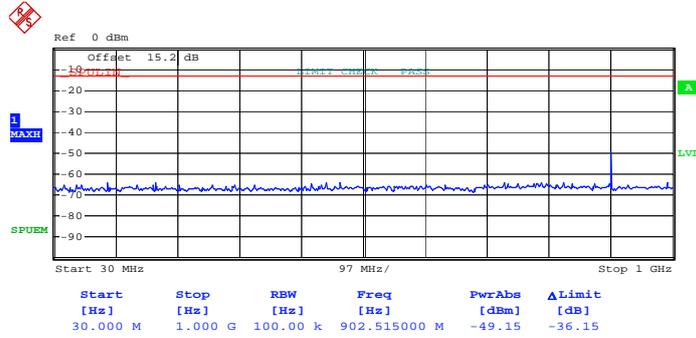


Date: 26.JAN.2013 20:36:38



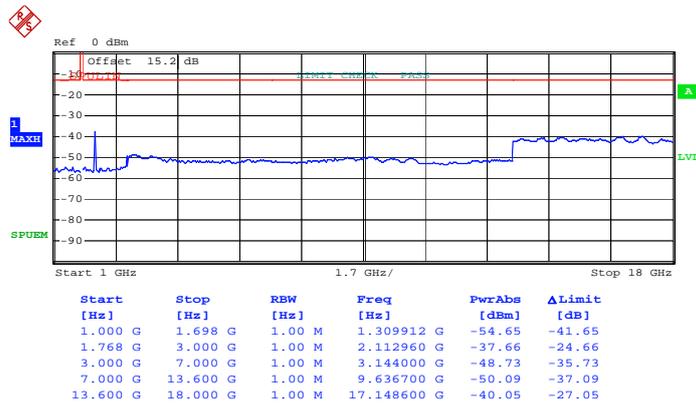
Band :	LTE Band 4	BW / Mod. :	3MHz / QPSK
Frequency :	1711.5	Channel :	19965

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:56:23

Conducted Emission Plot (1GHz ~ 18GHz) for QPSK (RB Size 1, RB Offset 0)

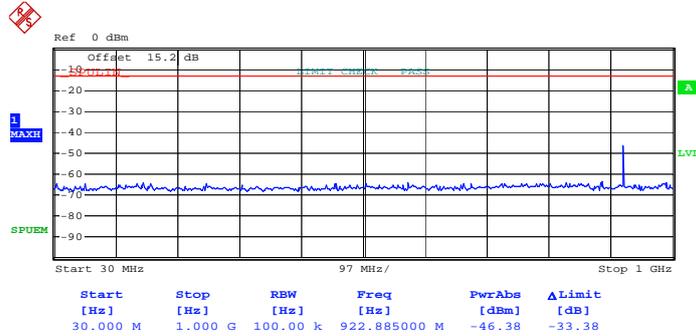


Date: 26.JAN.2013 20:56:46



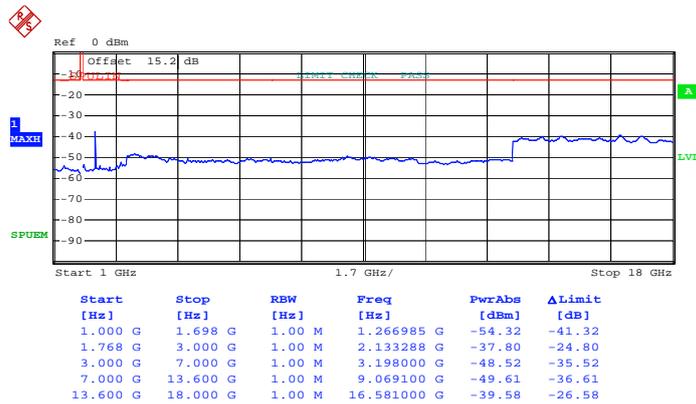
Band :	LTE Band 4	BW / Mod. :	3MHz / QPSK
Frequency :	1732.5	Channel :	20175

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:30:30

Conducted Emission Plot (1GHz ~ 18GHz) for QPSK (RB Size 1, RB Offset 0)

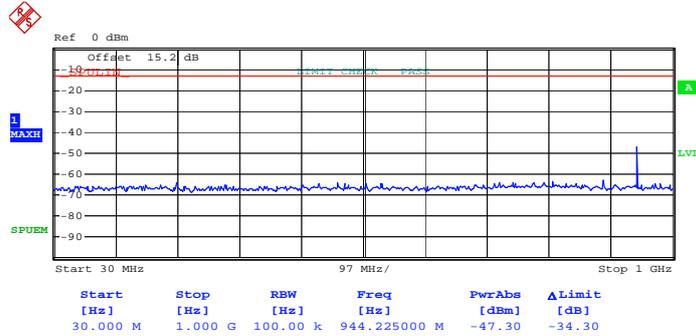


Date: 26.JAN.2013 20:30:59



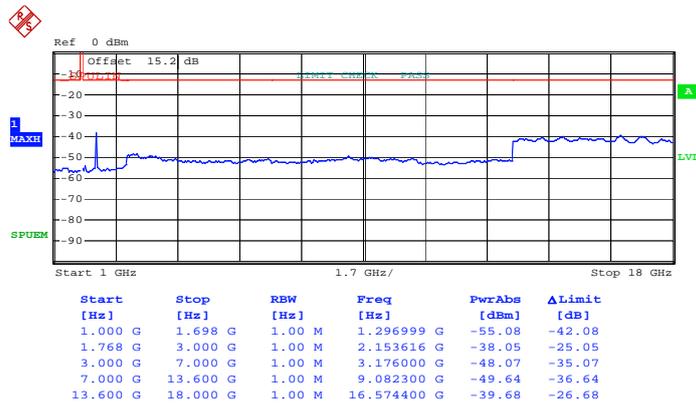
Band :	LTE Band 4	BW / Mod. :	3MHz / QPSK
Frequency :	1753.5	Channel :	20385

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:37:58

Conducted Emission Plot (1GHz ~ 18GHz) for QPSK (RB Size 1, RB Offset 0)

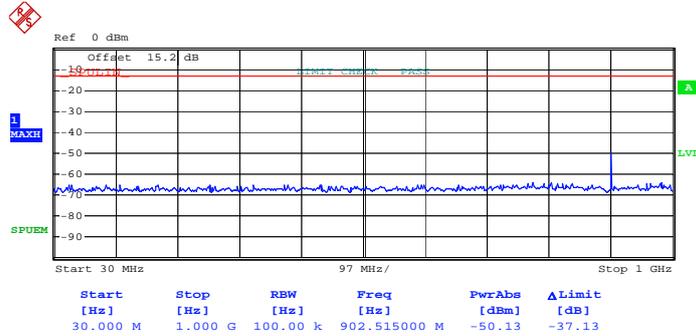


Date: 26.JAN.2013 20:37:38



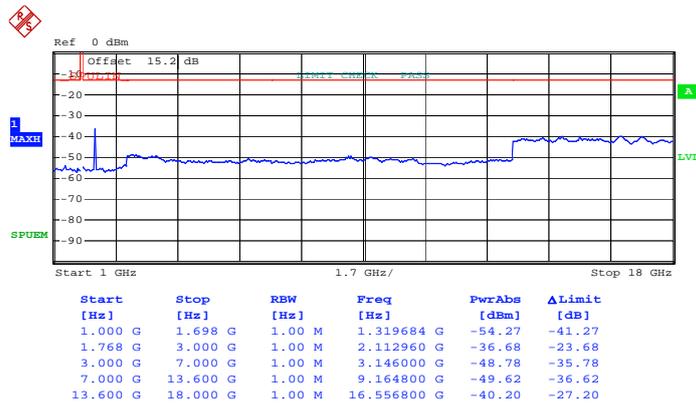
Band :	LTE Band 4	BW / Mod. :	3MHz / 16QAM
Frequency :	1711.5	Channel :	19965

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:56:01

Conducted Emission Plot (1GHz ~ 18GHz) for 16-QAM (RB Size 1, RB Offset 0)

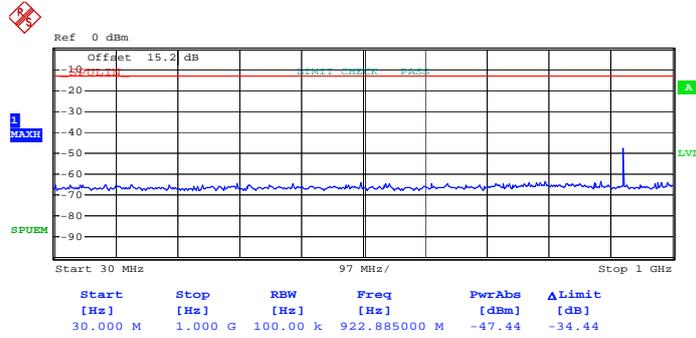


Date: 26.JAN.2013 20:57:07



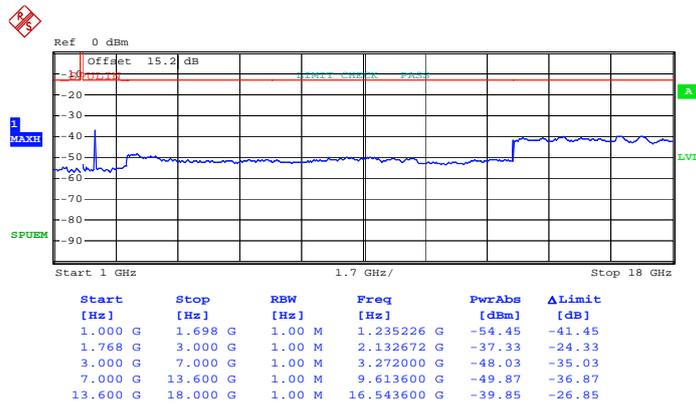
Band :	LTE Band 4	BW / Mod. :	3MHz / 16QAM
Frequency :	1732.5	Channel :	20175

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:30:07

Conducted Emission Plot (1GHz ~ 18GHz) for 16-QAM (RB Size 1, RB Offset 0)

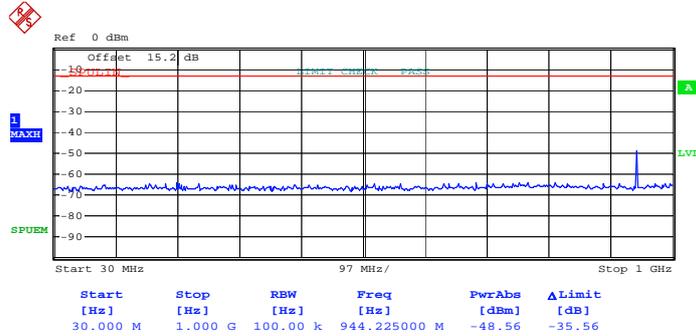


Date: 26.JAN.2013 20:31:20



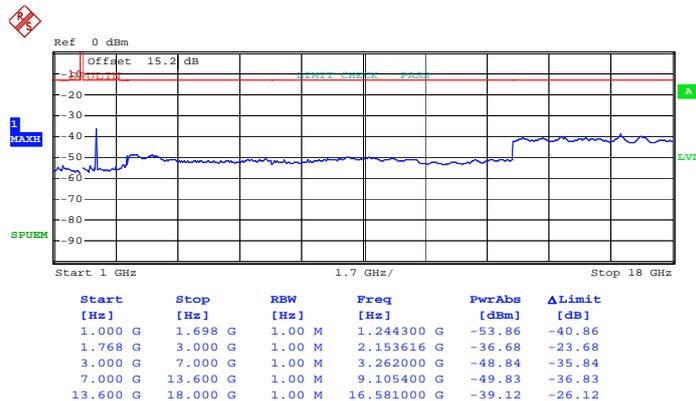
<b>Band :</b>	LTE Band 4	<b>BW / Mod. :</b>	3MHz / 16QAM
<b>Frequency :</b>	1753.5	<b>Channel :</b>	20385

**Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)**



Date: 26.JAN.2013 20:38:18

**Conducted Emission Plot (1GHz ~ 18GHz) for 16-QAM (RB Size 1, RB Offset 0)**

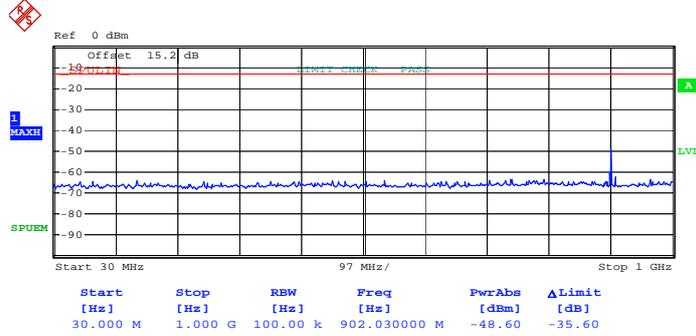


Date: 26.JAN.2013 20:37:16



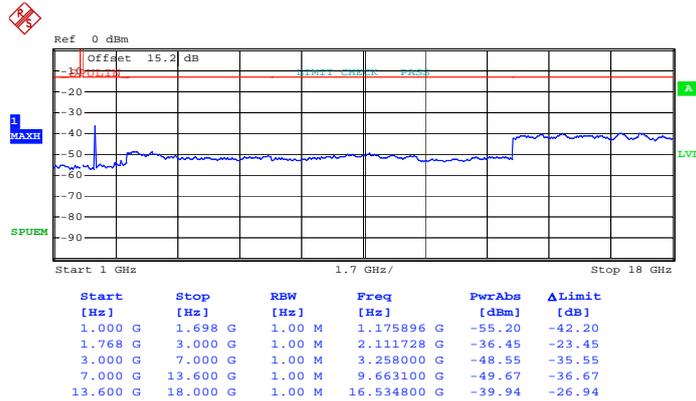
Band :	LTE Band 4	BW / Mod. :	5MHz / QPSK
Frequency :	1712.5	Channel :	19975

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:55:12

Conducted Emission Plot (1GHz ~ 18GHz) for QPSK (RB Size 1, RB Offset 0)

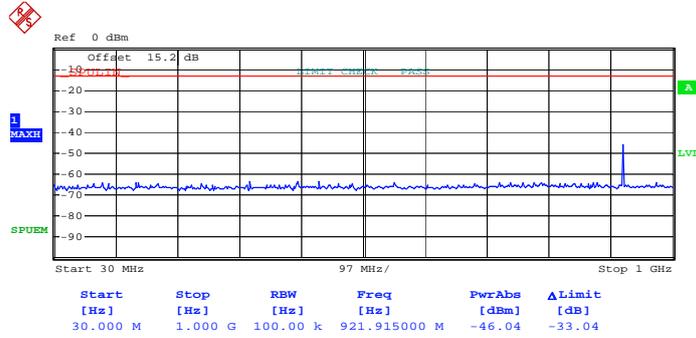


Date: 26.JAN.2013 20:54:49



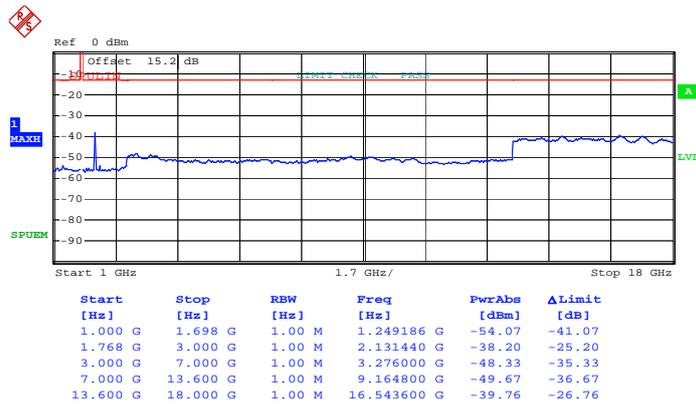
Band :	LTE Band 4	BW / Mod. :	5MHz / QPSK
Frequency :	1732.5	Channel :	20175

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:29:10

Conducted Emission Plot (1GHz ~ 18GHz) for QPSK (RB Size 1, RB Offset 0)

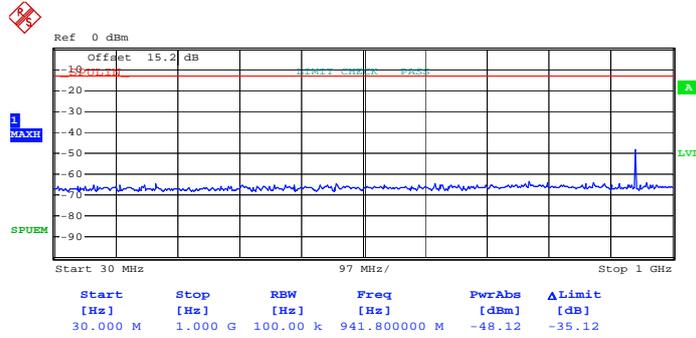


Date: 26.JAN.2013 20:28:42



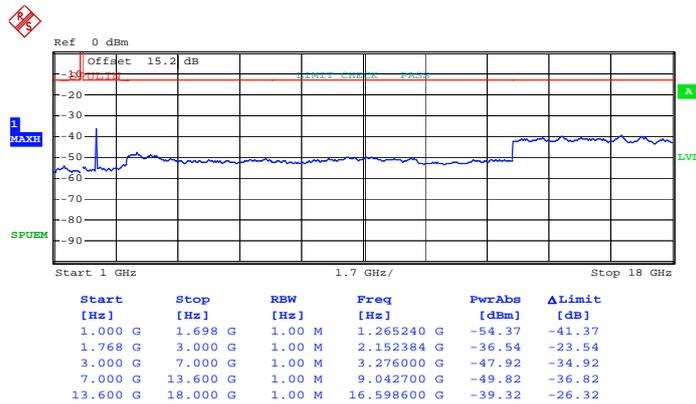
Band :	LTE Band 4	BW / Mod. :	5MHz / QPSK
Frequency :	1752.5	Channel :	20375

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:40:45

Conducted Emission Plot (1GHz ~ 18GHz) for QPSK (RB Size 1, RB Offset 0)

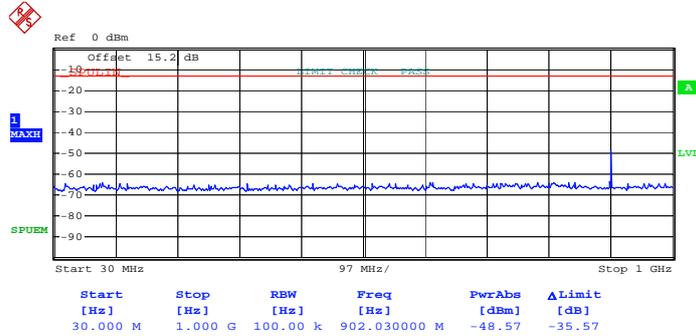


Date: 26.JAN.2013 20:41:08



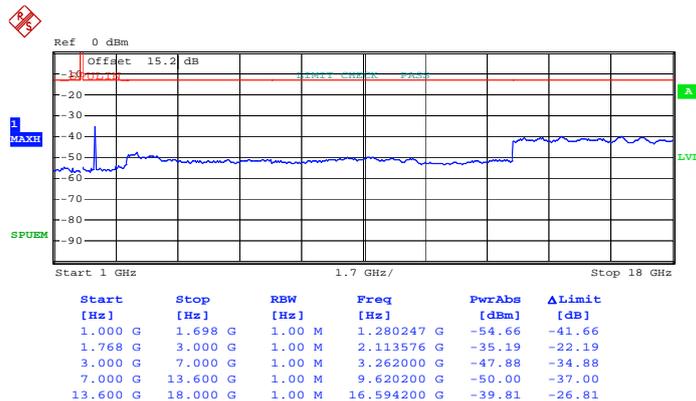
Band :	LTE Band 4	BW / Mod. :	5MHz / 16QAM
Frequency :	1712.5	Channel :	19975

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:55:37

Conducted Emission Plot (1GHz ~ 18GHz) for 16-QAM (RB Size 1, RB Offset 0)

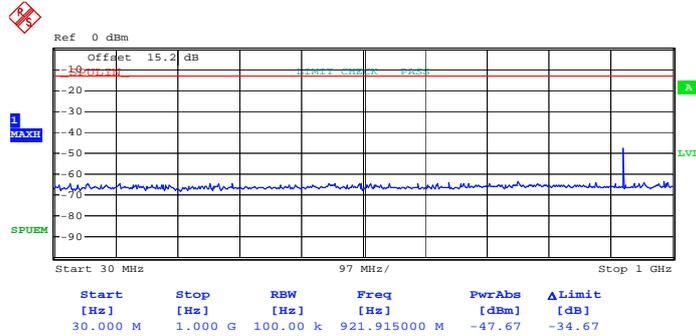


Date: 26.JAN.2013 20:54:29



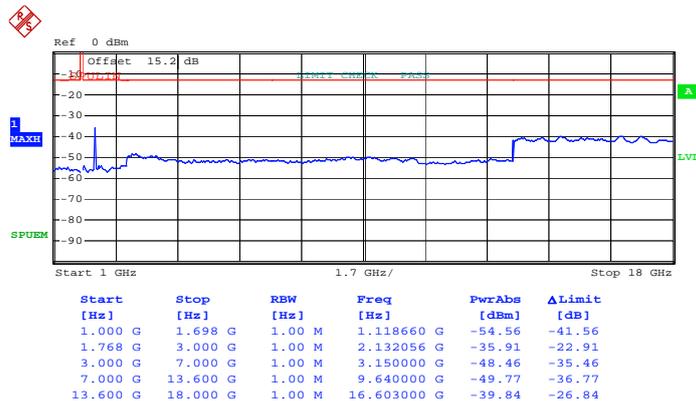
Band :	LTE Band 4	BW / Mod. :	5MHz / 16QAM
Frequency :	1732.5	Channel :	20175

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:29:38

Conducted Emission Plot (1GHz ~ 18GHz) for 16-QAM (RB Size 1, RB Offset 0)

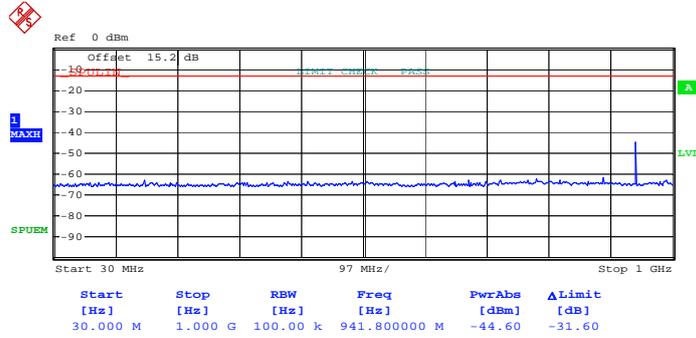


Date: 26.JAN.2013 20:28:17



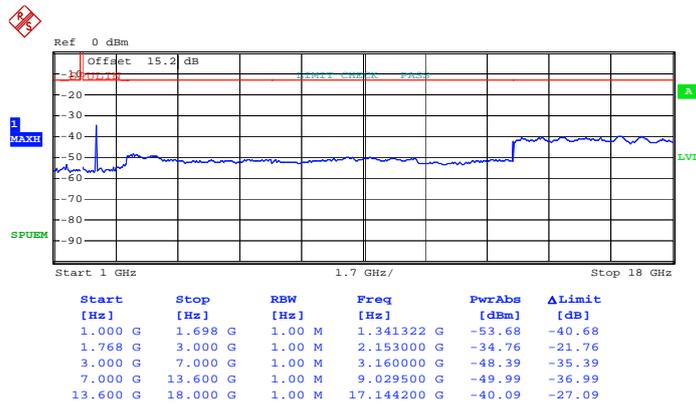
Band :	LTE Band 4	BW / Mod. :	5MHz / 16QAM
Frequency :	1752.5	Channel :	20375

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:40:26

Conducted Emission Plot (1GHz ~ 18GHz) for 16-QAM (RB Size 1, RB Offset 0)

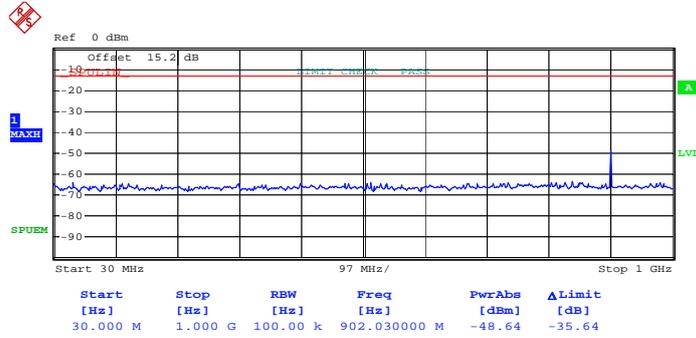


Date: 26.JAN.2013 20:41:29



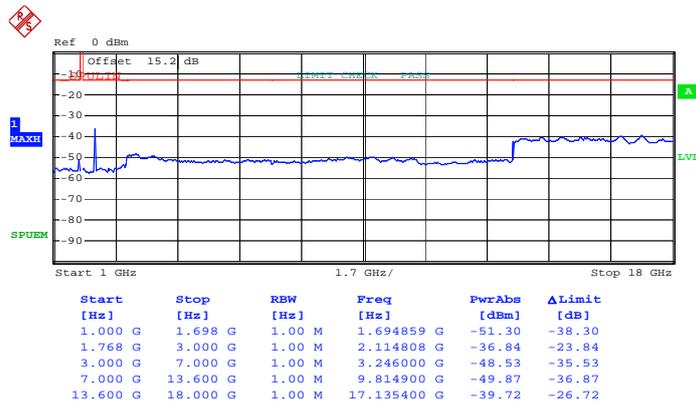
Band :	LTE Band 4	BW / Mod. :	10MHz / QPSK
Frequency :	1715	Channel :	20000

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:53:06

Conducted Emission Plot (1GHz ~ 18GHz) for QPSK (RB Size 1, RB Offset 0)

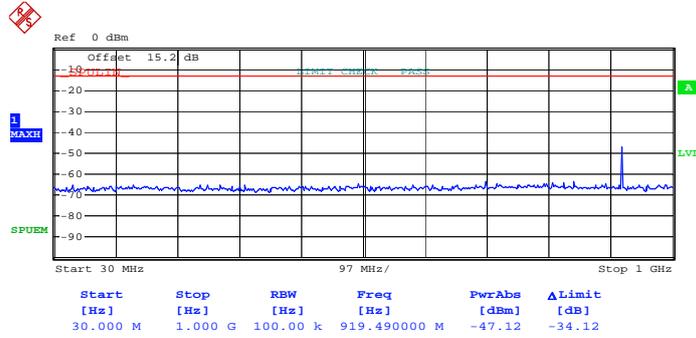


Date: 26.JAN.2013 20:53:32



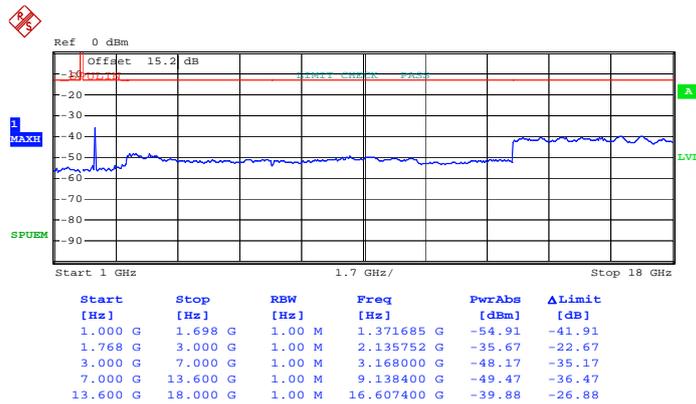
Band :	LTE Band 4	BW / Mod. :	10MHz / QPSK
Frequency :	1732.5	Channel :	20175

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:27:02

Conducted Emission Plot (1GHz ~ 18GHz) for QPSK (RB Size 1, RB Offset 0)

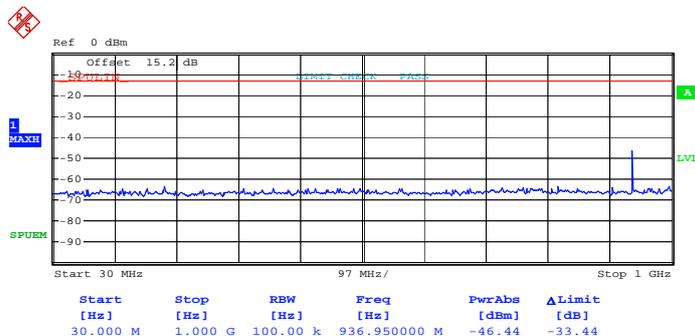


Date: 26.JAN.2013 20:27:27



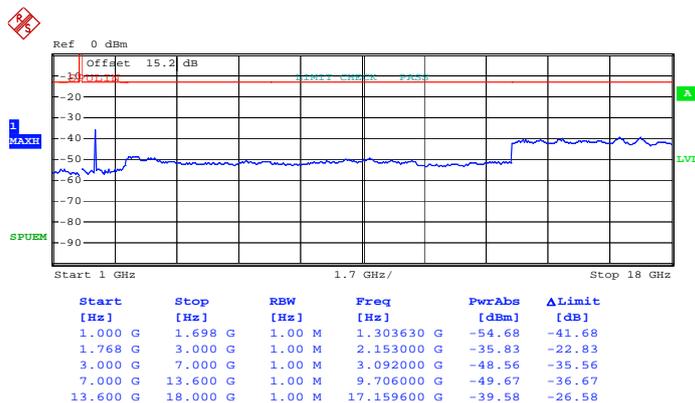
<b>Band :</b>	LTE Band 4	<b>BW / Mod. :</b>	10MHz / QPSK
<b>Frequency :</b>	1750	<b>Channel :</b>	20350

**Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)**



Date: 26.JAN.2013 20:42:59

**Conducted Emission Plot (1GHz ~ 18GHz) for QPSK (RB Size 1, RB Offset 0)**

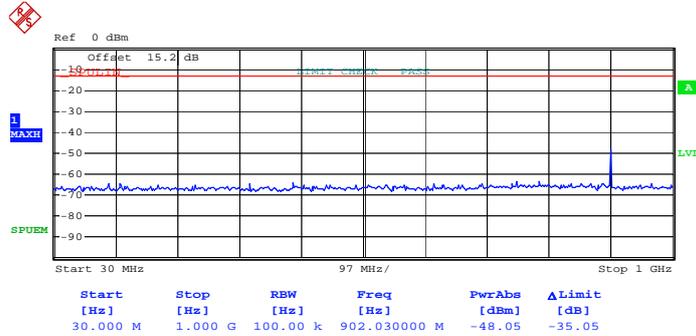


Date: 26.JAN.2013 20:42:35



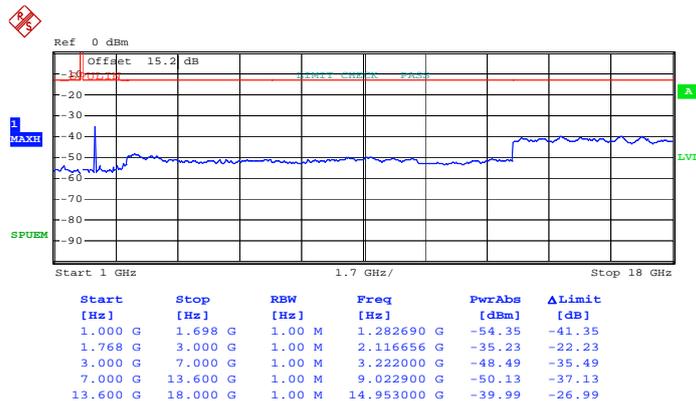
Band :	LTE Band 4	BW / Mod. :	10MHz / 16QAM
Frequency :	1715	Channel :	20000

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:52:49

Conducted Emission Plot (1GHz ~ 18GHz) for 16-QAM (RB Size 1, RB Offset 0)

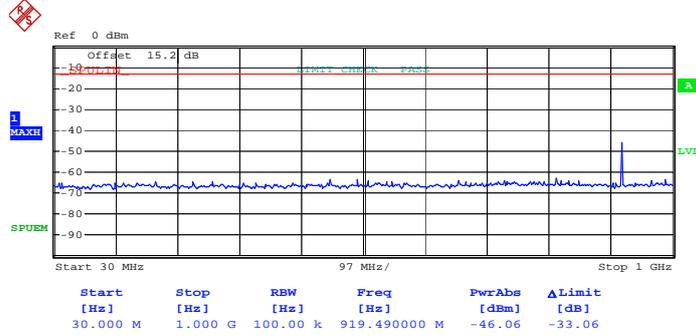


Date: 26.JAN.2013 20:53:53



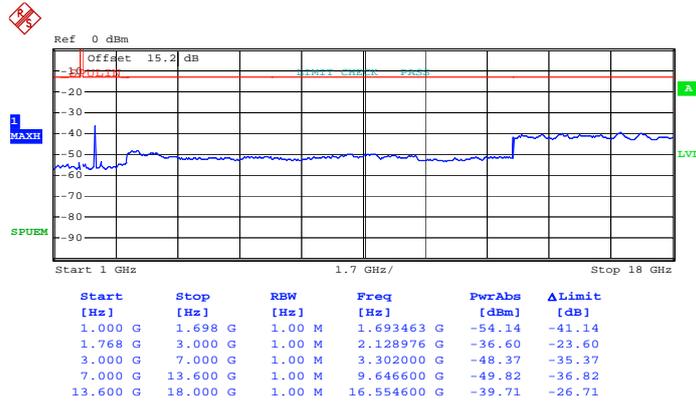
Band :	LTE Band 4	BW / Mod. :	10MHz / 16QAM
Frequency :	1732.5	Channel :	20175

Conducted Emission Plot (30MHz ~ 1GHz) for  
16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:26:48

Conducted Emission Plot (1GHz ~ 18GHz) for  
16-QAM (RB Size 1, RB Offset 0)

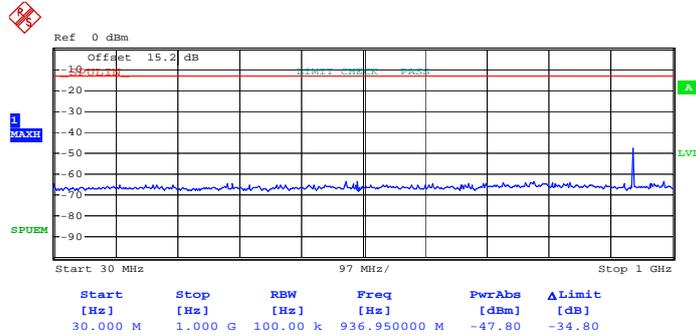


Date: 26.JAN.2013 20:27:49



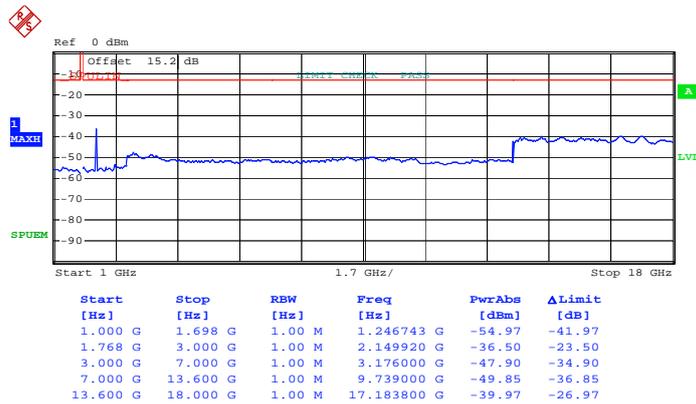
Band :	LTE Band 4	BW / Mod. :	10MHz / 16QAM
Frequency :	1750	Channel :	20350

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:43:18

Conducted Emission Plot (1GHz ~ 18GHz) for 16-QAM (RB Size 1, RB Offset 0)

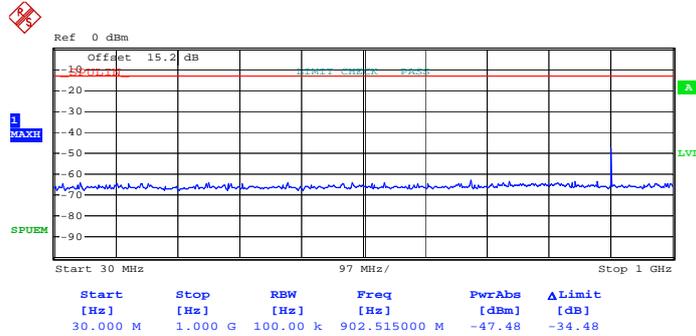


Date: 26.JAN.2013 20:42:14



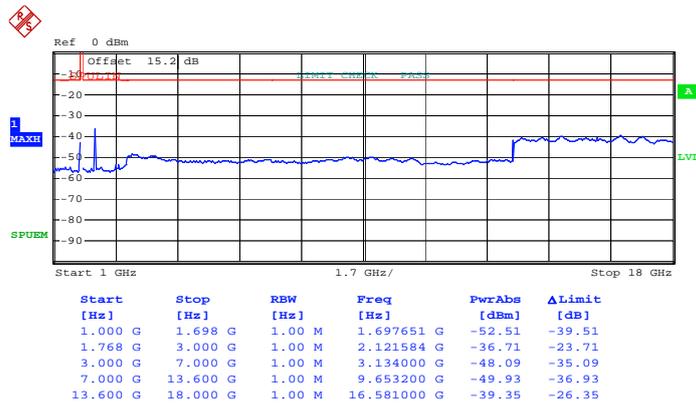
Band :	LTE Band 4	BW / Mod. :	15MHz / QPSK
Frequency :	1717.5	Channel :	20025

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:51:55

Conducted Emission Plot (1GHz ~ 18GHz) for QPSK (RB Size 1, RB Offset 0)

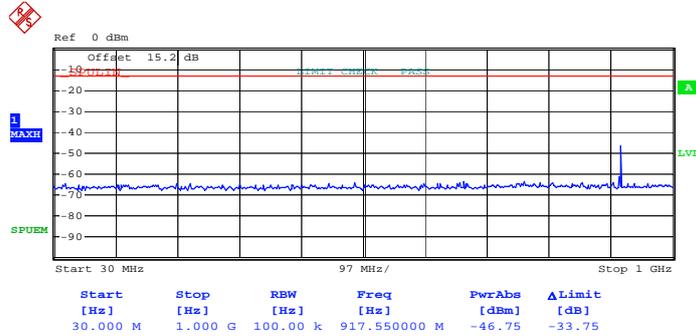


Date: 26.JAN.2013 20:51:31



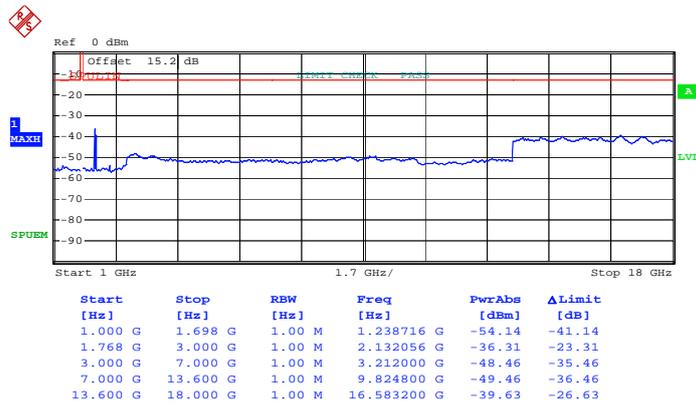
Band :	LTE Band 4	BW / Mod. :	15MHz / QPSK
Frequency :	1732.5	Channel :	20175

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:25:56

Conducted Emission Plot (1GHz ~ 18GHz) for QPSK (RB Size 1, RB Offset 0)

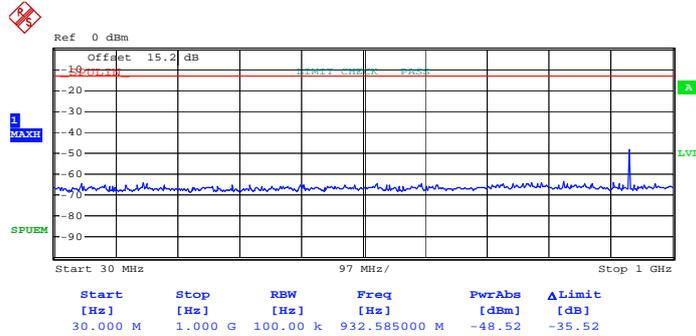


Date: 26.JAN.2013 20:25:31



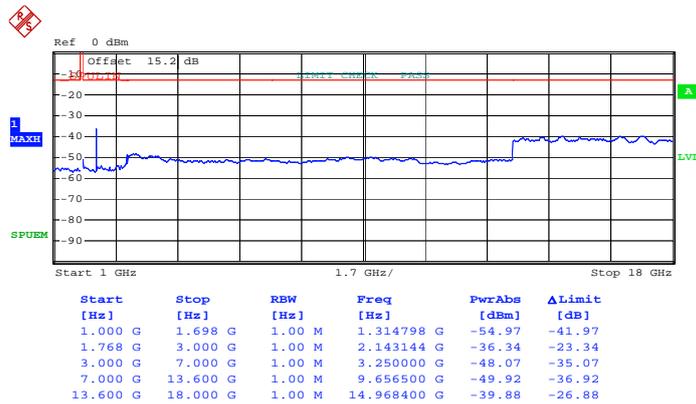
Band :	LTE Band 4	BW / Mod. :	15MHz / QPSK
Frequency :	1747.5	Channel :	20325

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:44:51

Conducted Emission Plot (1GHz ~ 18GHz) for QPSK (RB Size 1, RB Offset 0)

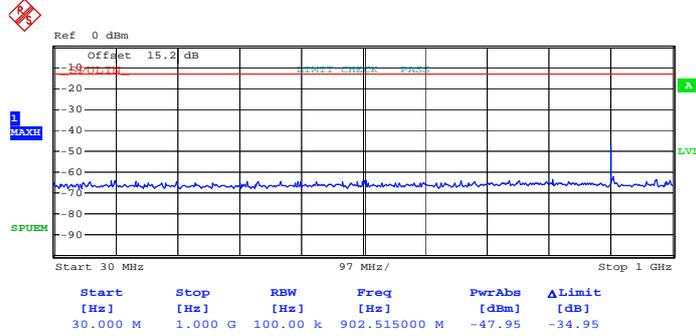


Date: 26.JAN.2013 20:45:16



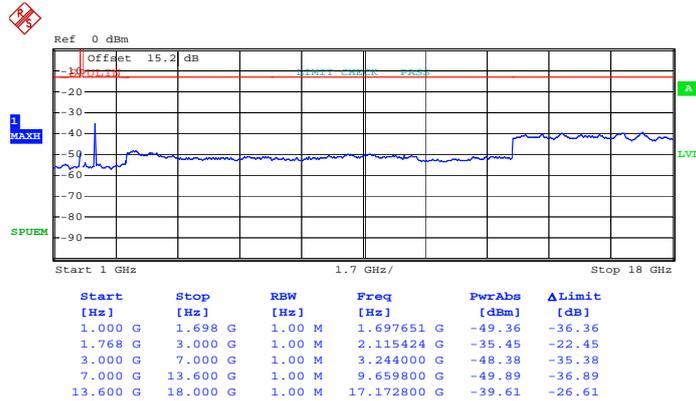
Band :	LTE Band 4	BW / Mod. :	15MHz / 16QAM
Frequency :	1717.5	Channel :	20025

Conducted Emission Plot (30MHz ~ 1GHz) for  
16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:52:13

Conducted Emission Plot (1GHz ~ 18GHz) for  
16-QAM (RB Size 1, RB Offset 0)

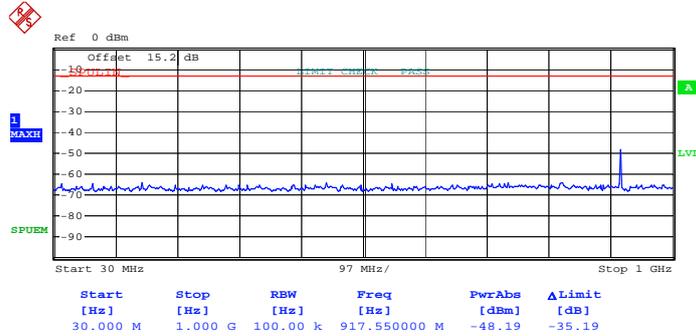


Date: 26.JAN.2013 20:51:11



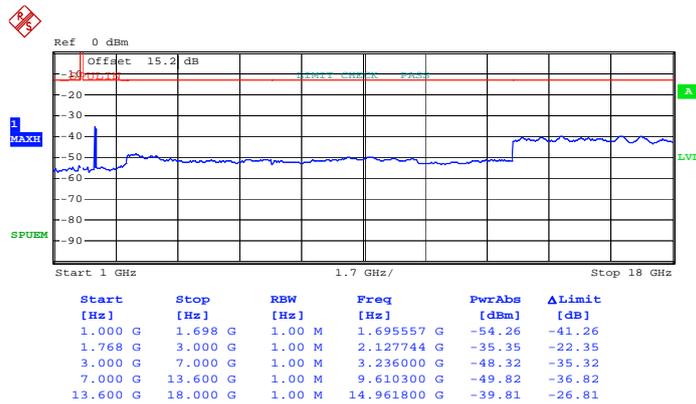
Band :	LTE Band 4	BW / Mod. :	15MHz / 16QAM
Frequency :	1732.5	Channel :	20175

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:26:14

Conducted Emission Plot (1GHz ~ 18GHz) for 16-QAM (RB Size 1, RB Offset 0)

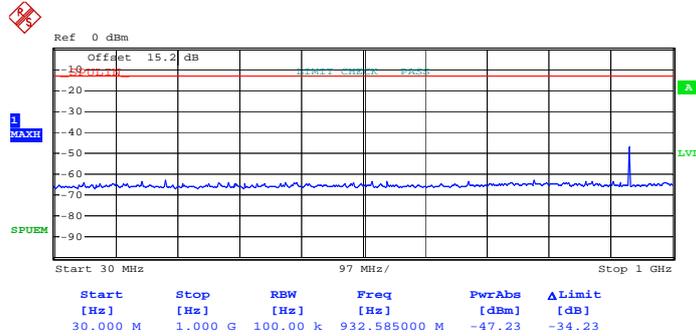


Date: 26.JAN.2013 20:25:12



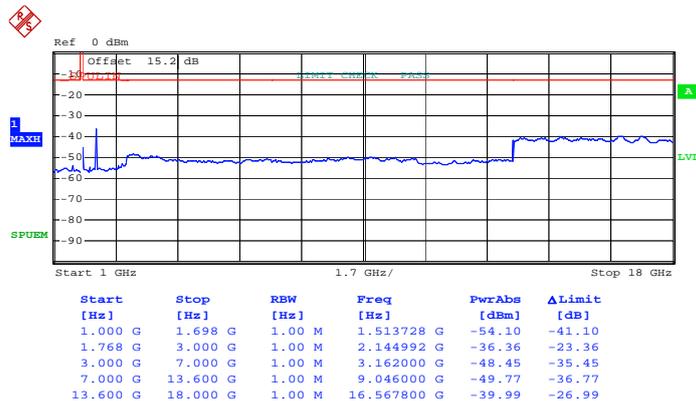
Band :	LTE Band 4	BW / Mod. :	15MHz / 16QAM
Frequency :	1747.5	Channel :	20325

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:44:25

Conducted Emission Plot (1GHz ~ 18GHz) for 16-QAM (RB Size 1, RB Offset 0)

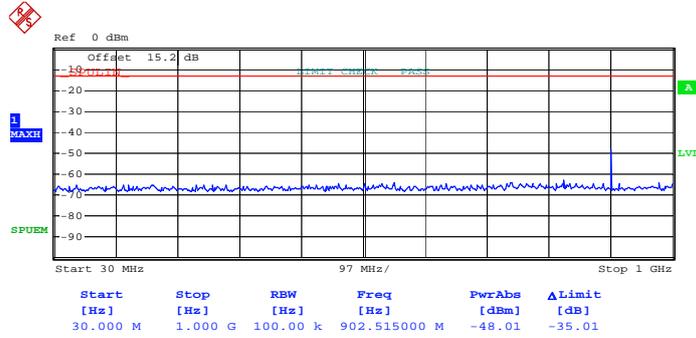


Date: 26.JAN.2013 20:45:42



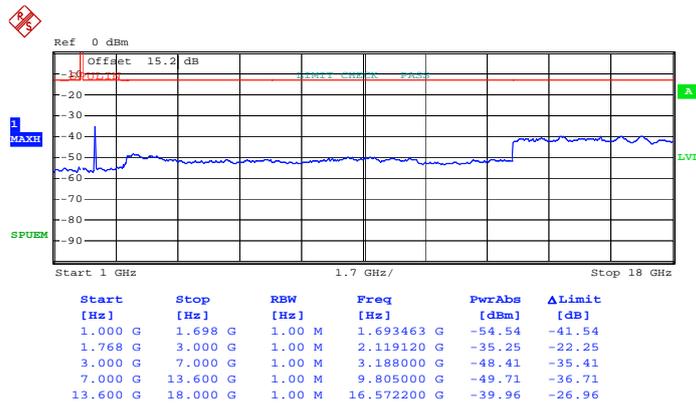
<b>Band :</b>	LTE Band 4	<b>BW / Mod. :</b>	20MHz / QPSK
<b>Frequency :</b>	1720	<b>Channel :</b>	20050

**Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)**



Date: 26.JAN.2013 20:49:54

**Conducted Emission Plot (1GHz ~ 18GHz) for QPSK (RB Size 1, RB Offset 0)**

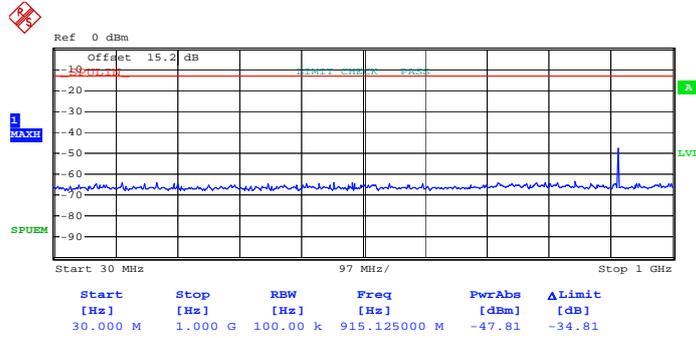


Date: 26.JAN.2013 20:50:15



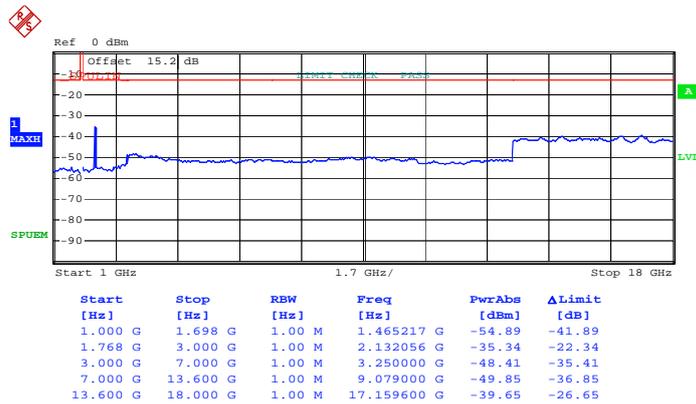
Band :	LTE Band 4	BW / Mod. :	20MHz / QPSK
Frequency :	1732.5	Channel :	20175

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:23:49

Conducted Emission Plot (1GHz ~ 18GHz) for QPSK (RB Size 1, RB Offset 0)

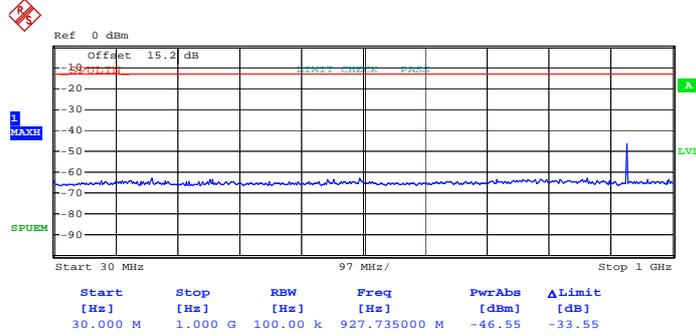


Date: 26.JAN.2013 20:24:20



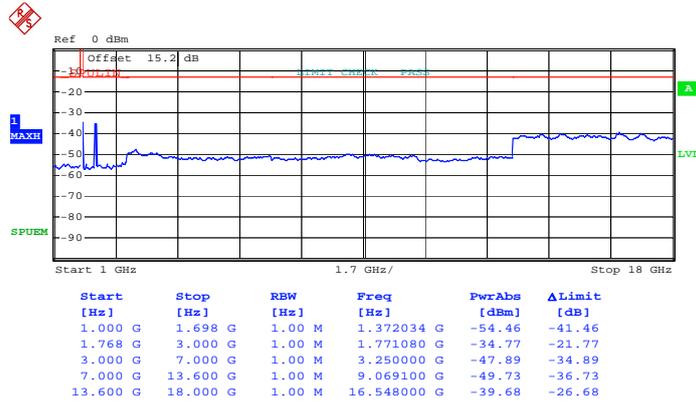
Band :	LTE Band 4	BW / Mod. :	20MHz / QPSK
Frequency :	1745	Channel :	20300

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:47:27

Conducted Emission Plot (1GHz ~ 18GHz) for QPSK (RB Size 1, RB Offset 0)

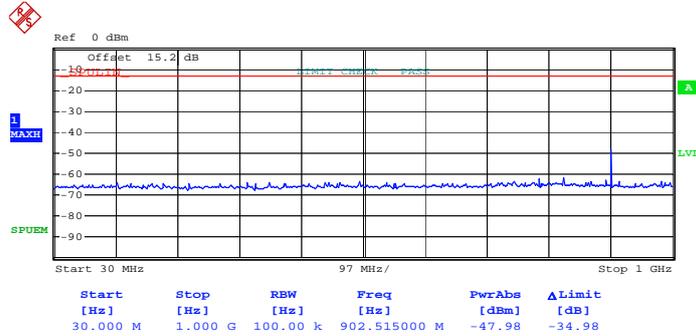


Date: 26.JAN.2013 20:46:30



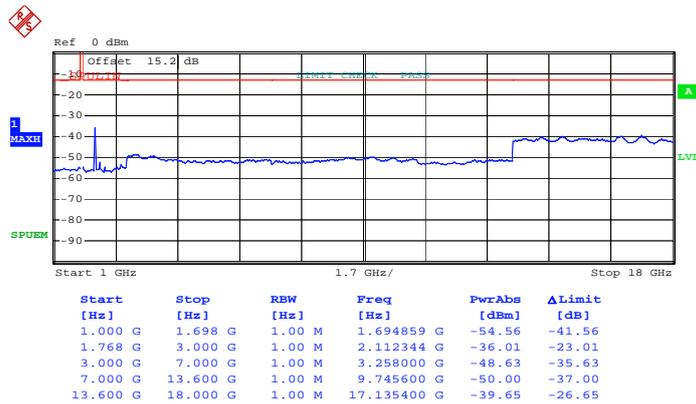
Band :	LTE Band 4	BW / Mod. :	20MHz / 16QAM
Frequency :	1720	Channel :	20050

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:49:39

Conducted Emission Plot (1GHz ~ 18GHz) for 16-QAM (RB Size 1, RB Offset 0)

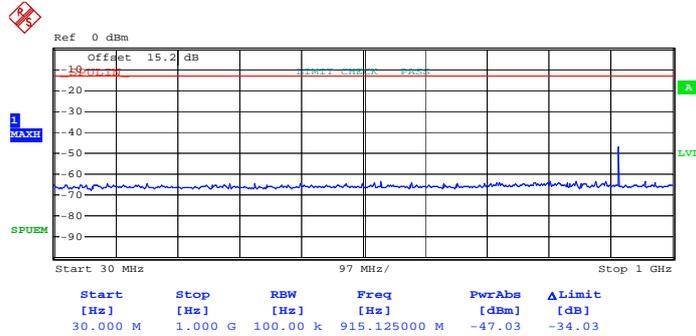


Date: 26.JAN.2013 20:50:34



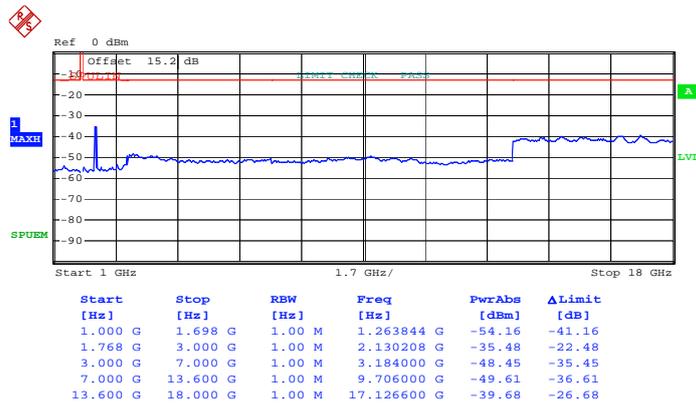
<b>Band :</b>	LTE Band 4	<b>BW / Mod. :</b>	20MHz / 16QAM
<b>Frequency :</b>	1732.5	<b>Channel :</b>	20175

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:23:30

Conducted Emission Plot (1GHz ~ 18GHz) for 16-QAM (RB Size 1, RB Offset 0)

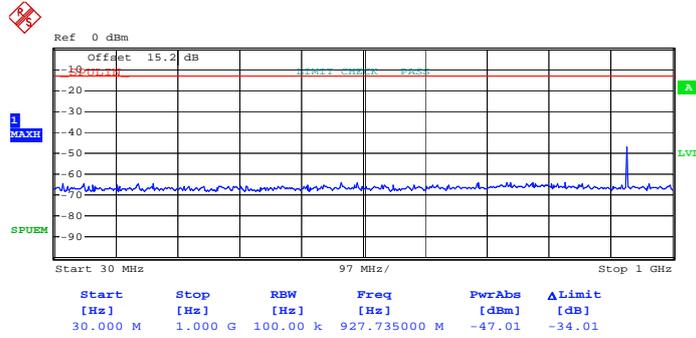


Date: 26.JAN.2013 20:24:44



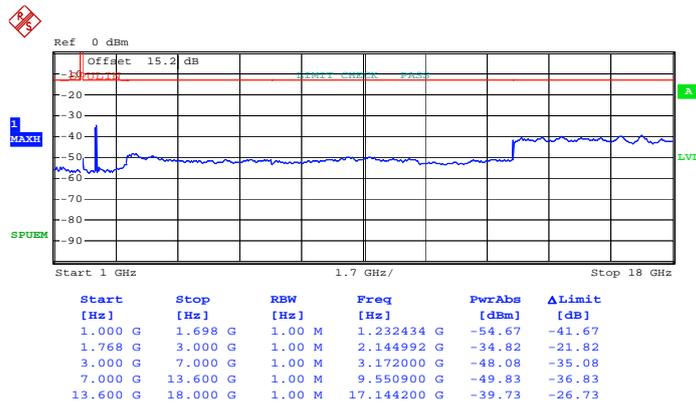
Band :	LTE Band 4	BW / Mod. :	20MHz / 16QAM
Frequency :	1745	Channel :	20300

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 20:47:49

Conducted Emission Plot (1GHz ~ 18GHz) for 16-QAM (RB Size 1, RB Offset 0)

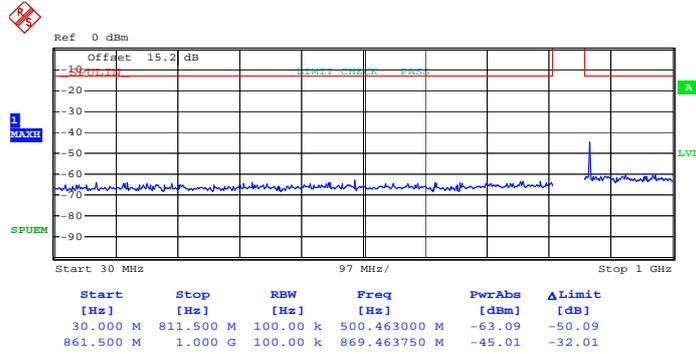


Date: 26.JAN.2013 20:46:09



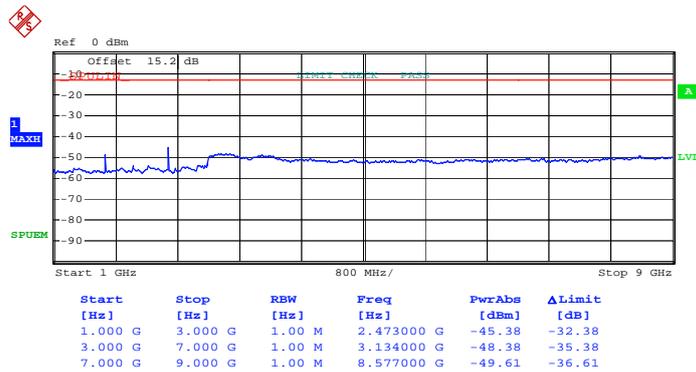
Band :	LTE Band 5	BW / Mod. :	1.4MHz / QPSK
Frequency :	824.7	Channel :	20407

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 21:50:45

Conducted Emission Plot (1GHz ~ 9GHz) for QPSK (RB Size 1, RB Offset 0)

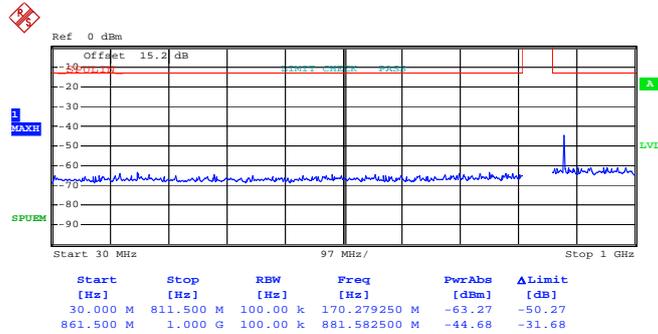


Date: 26.JAN.2013 21:51:12



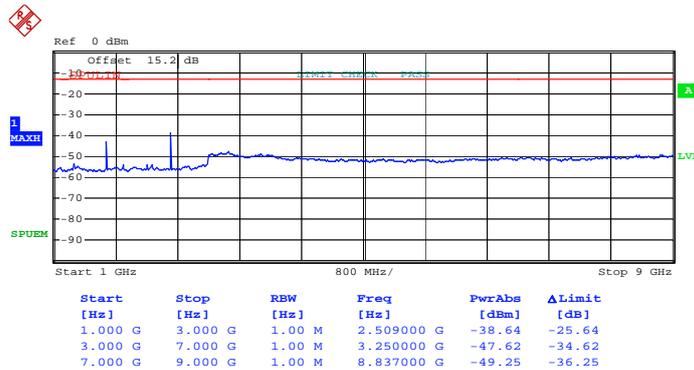
Band :	LTE Band 5	BW / Mod. :	1.4MHz / QPSK
Frequency :	836.5	Channel :	20525

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 21:34:24

Conducted Emission Plot (1GHz ~ 9GHz) for QPSK (RB Size 1, RB Offset 0)

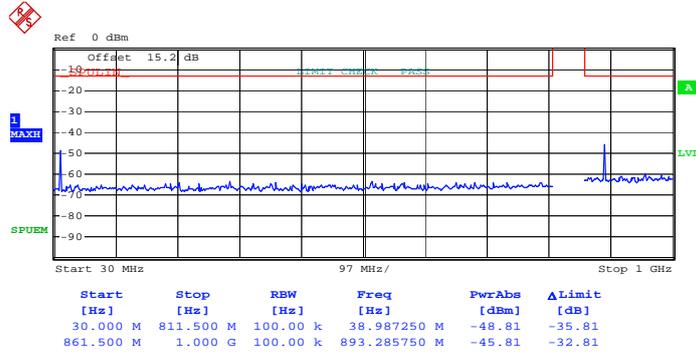


Date: 26.JAN.2013 21:34:54



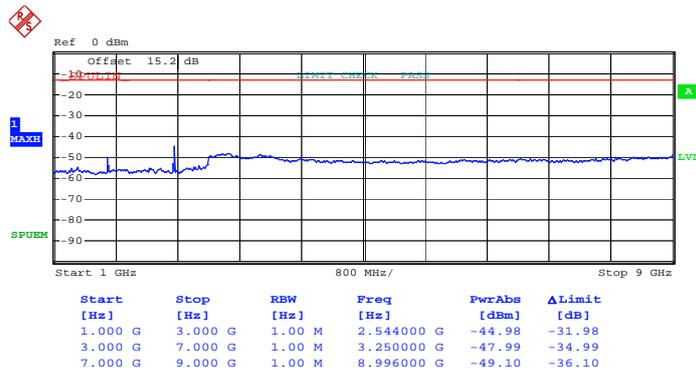
Band :	LTE Band 5	BW / Mod. :	1.4MHz / QPSK
Frequency :	848.3	Channel :	20643

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 21:48:55

Conducted Emission Plot (1GHz ~ 9GHz) for QPSK (RB Size 1, RB Offset 0)

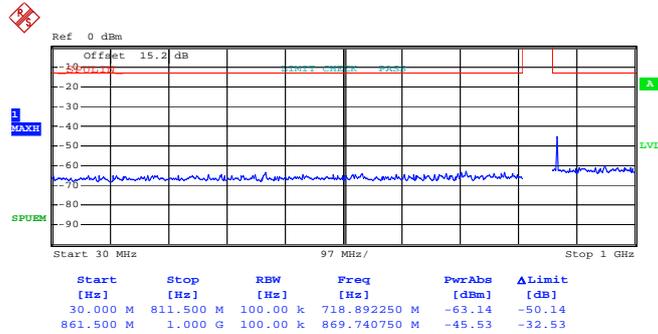


Date: 26.JAN.2013 21:47:50



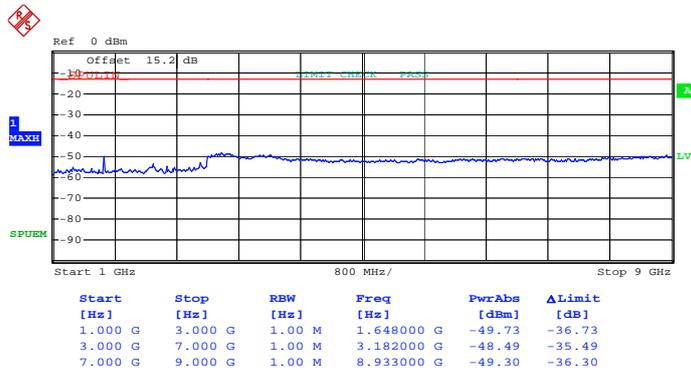
<b>Band :</b>	LTE Band 5	<b>BW / Mod. :</b>	1.4MHz / 16QAM
<b>Frequency :</b>	824.7	<b>Channel :</b>	20407

**Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)**



Date: 26.JAN.2013 21:50:28

**Conducted Emission Plot (1GHz ~ 9GHz) for 16-QAM (RB Size 1, RB Offset 0)**

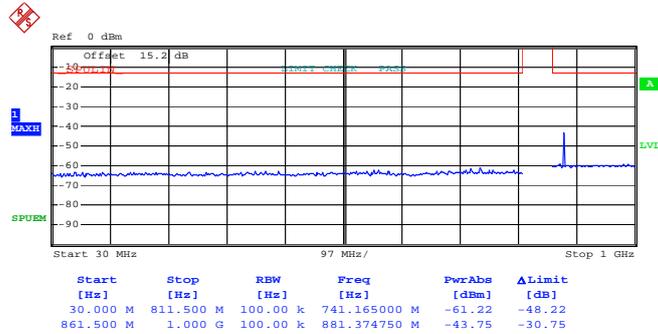


Date: 26.JAN.2013 21:51:29



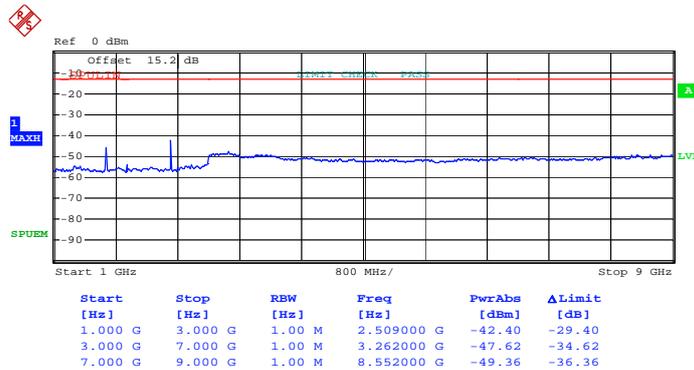
Band :	LTE Band 5	BW / Mod. :	1.4MHz / 16QAM
Frequency :	836.5	Channel :	20525

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 21:34:03

Conducted Emission Plot (1GHz ~ 9GHz) for 16-QAM (RB Size 1, RB Offset 0)

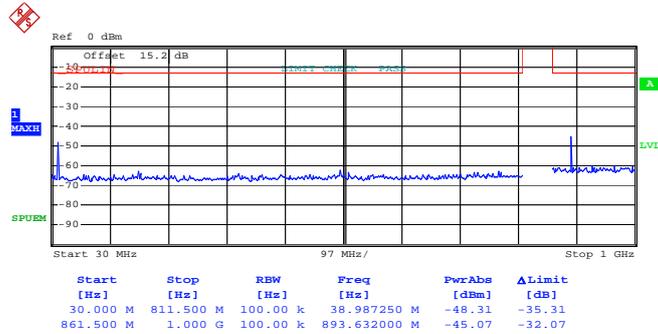


Date: 26.JAN.2013 21:35:22



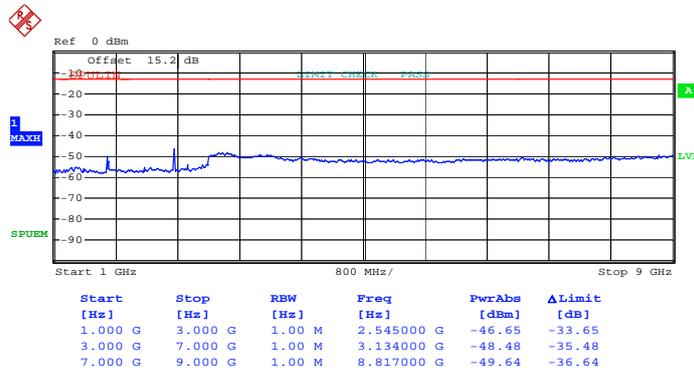
Band :	LTE Band 5	BW / Mod. :	1.4MHz / 16QAM
Frequency :	848.3	Channel :	20643

Conducted Emission Plot (30MHz ~ 1GHz) for  
16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 21:48:21

Conducted Emission Plot (1GHz ~ 9GHz) for  
16-QAM (RB Size 1, RB Offset 0)

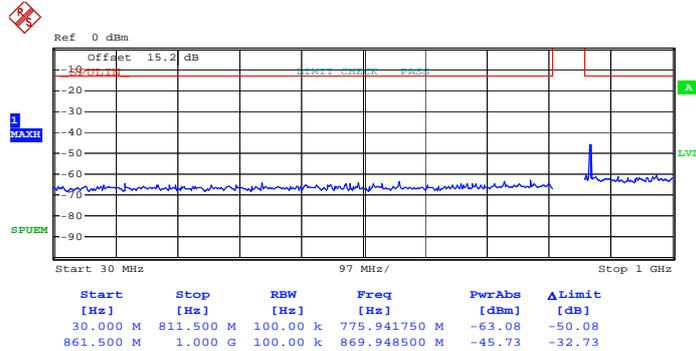


Date: 26.JAN.2013 21:47:32



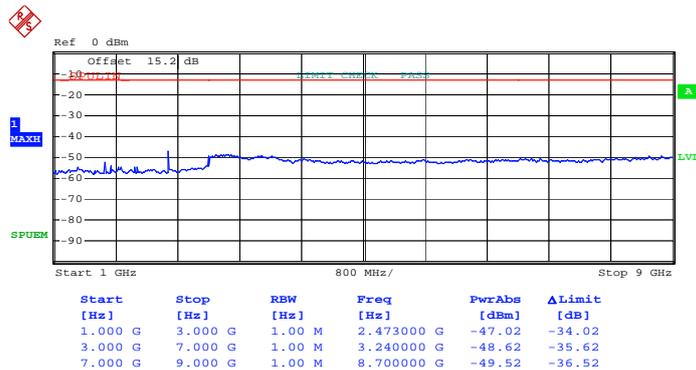
Band :	LTE Band 5	BW / Mod. :	3MHz / QPSK
Frequency :	825.5	Channel :	20415

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 21:54:38

Conducted Emission Plot (1GHz ~ 9GHz) for QPSK (RB Size 1, RB Offset 0)

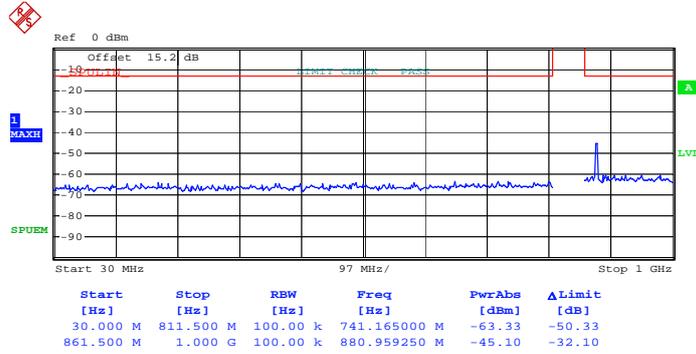


Date: 26.JAN.2013 21:53:54



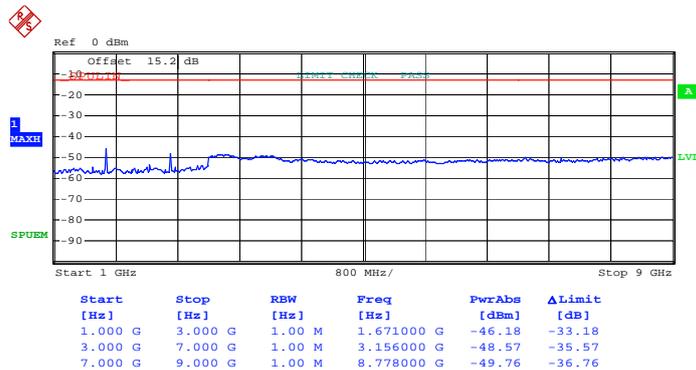
Band :	LTE Band 5	BW / Mod. :	3MHz / QPSK
Frequency :	836.5	Channel :	20525

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 21:36:48

Conducted Emission Plot (1GHz ~ 9GHz) for QPSK (RB Size 1, RB Offset 0)

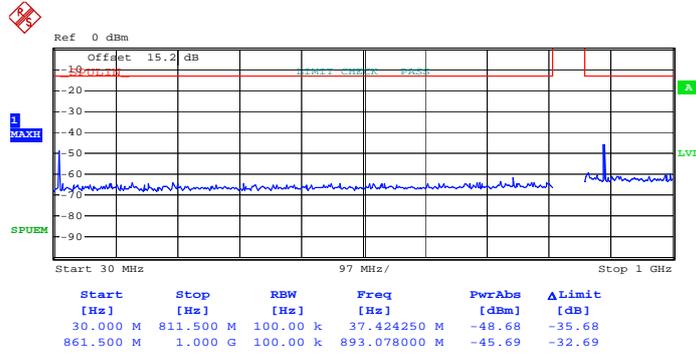


Date: 26.JAN.2013 21:36:22



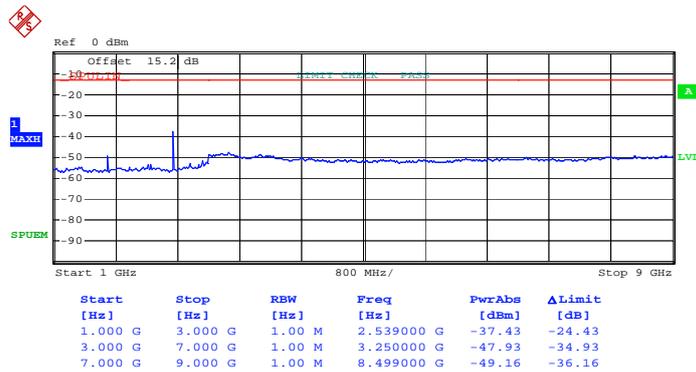
Band :	LTE Band 5	BW / Mod. :	3MHz / QPSK
Frequency :	847.5	Channel :	20635

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 21:45:59

Conducted Emission Plot (1GHz ~ 9GHz) for QPSK (RB Size 1, RB Offset 0)

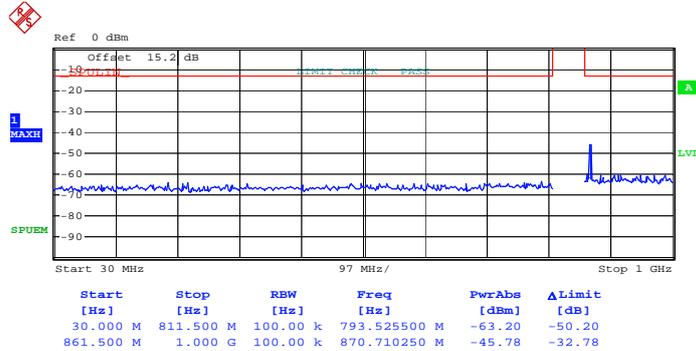


Date: 26.JAN.2013 21:46:38



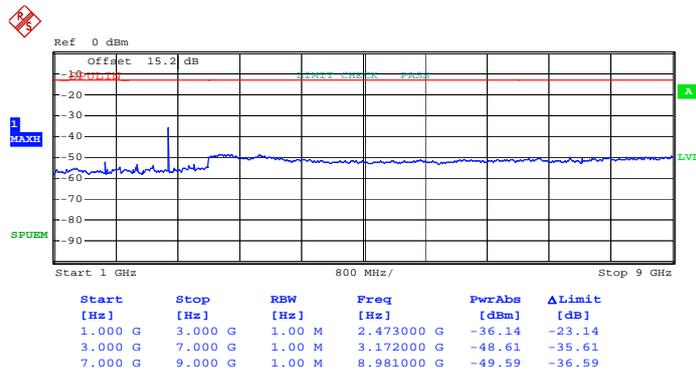
Band :	LTE Band 5	BW / Mod. :	3MHz / 16QAM
Frequency :	825.5	Channel :	20415

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 21:54:18

Conducted Emission Plot (1GHz ~ 9GHz) for 16-QAM (RB Size 1, RB Offset 0)

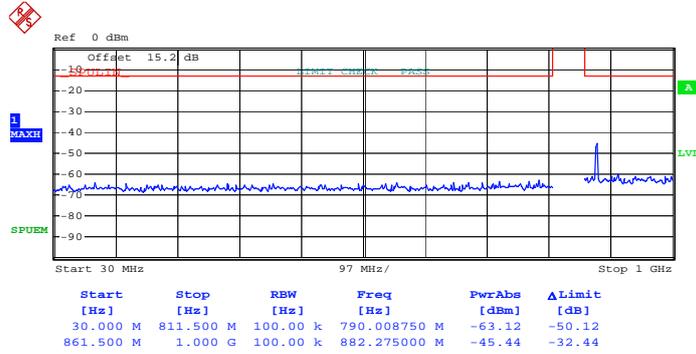


Date: 26.JAN.2013 21:52:17



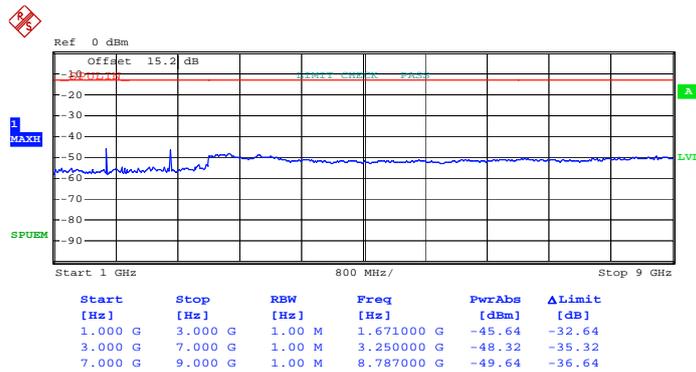
<b>Band :</b>	LTE Band 5	<b>BW / Mod. :</b>	3MHz / 16QAM
<b>Frequency :</b>	836.5	<b>Channel :</b>	20525

**Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)**



Date: 26.JAN.2013 21:37:08

**Conducted Emission Plot (1GHz ~ 9GHz) for 16-QAM (RB Size 1, RB Offset 0)**

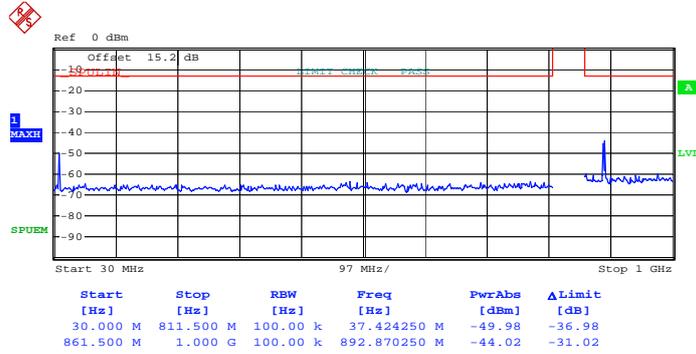


Date: 26.JAN.2013 21:35:55



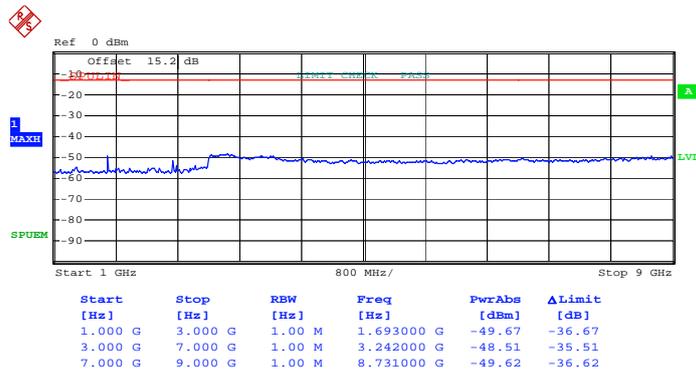
<b>Band :</b>	LTE Band 5	<b>BW / Mod. :</b>	3MHz / 16QAM
<b>Frequency :</b>	847.5	<b>Channel :</b>	20635

**Conducted Emission Plot (30MHz ~ 1GHz) for  
16-QAM (RB Size 1, RB Offset 0)**



Date: 26.JAN.2013 21:45:31

**Conducted Emission Plot (1GHz ~ 9GHz) for  
16-QAM (RB Size 1, RB Offset 0)**

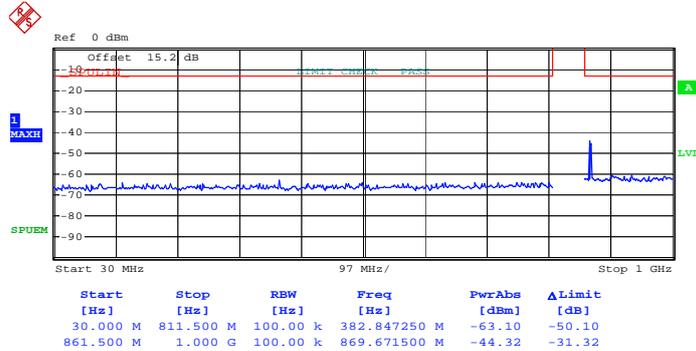


Date: 26.JAN.2013 21:46:58



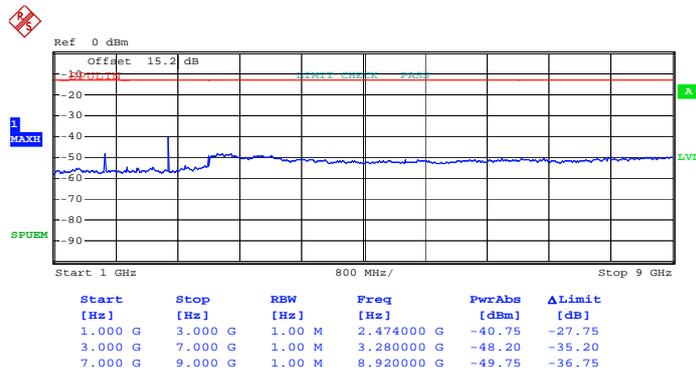
Band :	LTE Band 5	BW / Mod. :	5MHz / QPSK
Frequency :	826.5	Channel :	20425

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 21:55:23

Conducted Emission Plot (1GHz ~ 9GHz) for QPSK (RB Size 1, RB Offset 0)

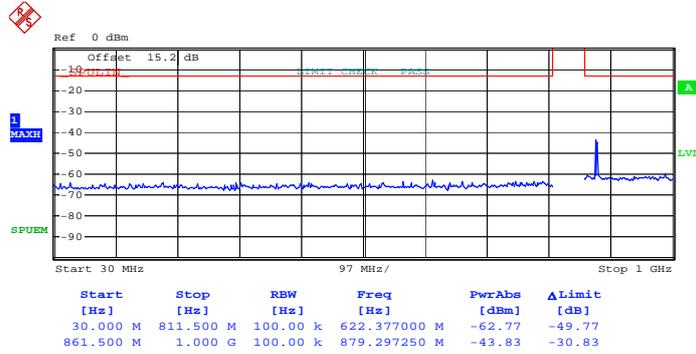


Date: 26.JAN.2013 21:56:32



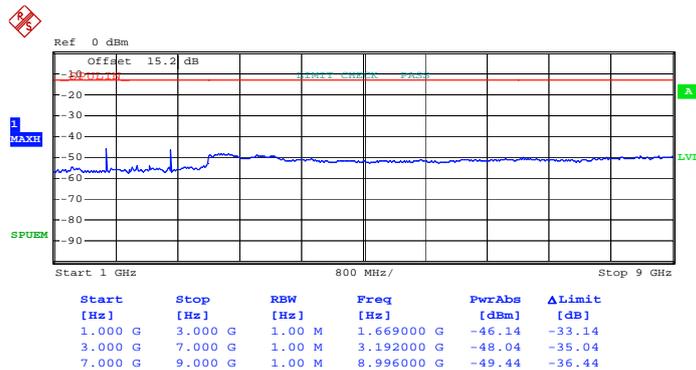
Band :	LTE Band 5	BW / Mod. :	5MHz / QPSK
Frequency :	836.5	Channel :	20525

Conducted Emission Plot (30MHz ~ 1GHz) for  
QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 21:38:06

Conducted Emission Plot (1GHz ~ 9GHz) for  
QPSK (RB Size 1, RB Offset 0)

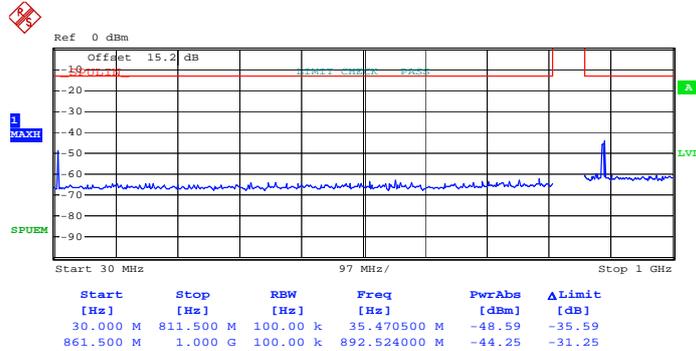


Date: 26.JAN.2013 21:38:46



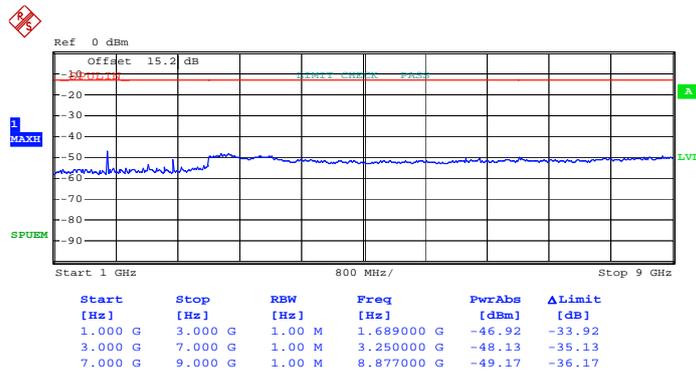
Band :	LTE Band 5	BW / Mod. :	5MHz / QPSK
Frequency :	846.5	Channel :	20625

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 21:44:38

Conducted Emission Plot (1GHz ~ 9GHz) for QPSK (RB Size 1, RB Offset 0)

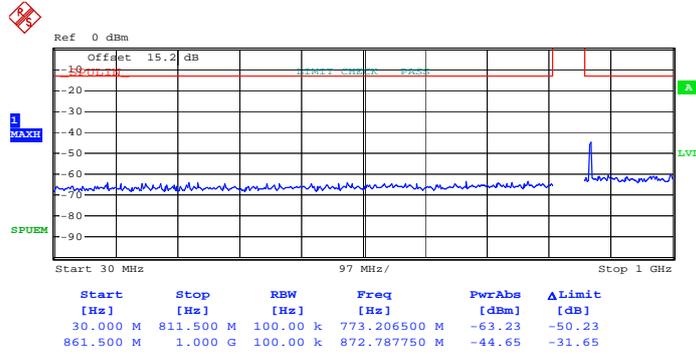


Date: 26.JAN.2013 21:44:06



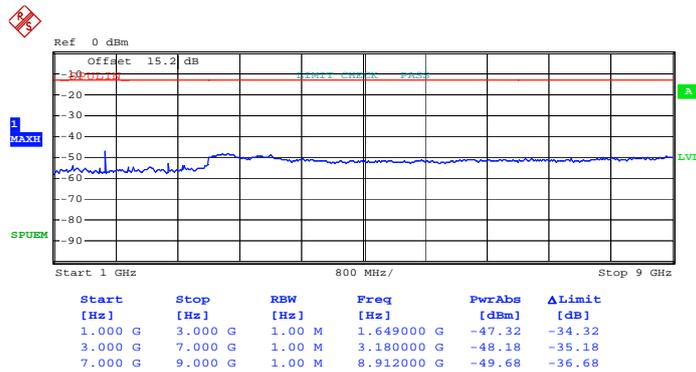
Band :	LTE Band 5	BW / Mod. :	5MHz / 16QAM
Frequency :	826.5	Channel :	20425

Conducted Emission Plot (30MHz ~ 1GHz) for  
16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 21:55:43

Conducted Emission Plot (1GHz ~ 9GHz) for  
16-QAM (RB Size 1, RB Offset 0)

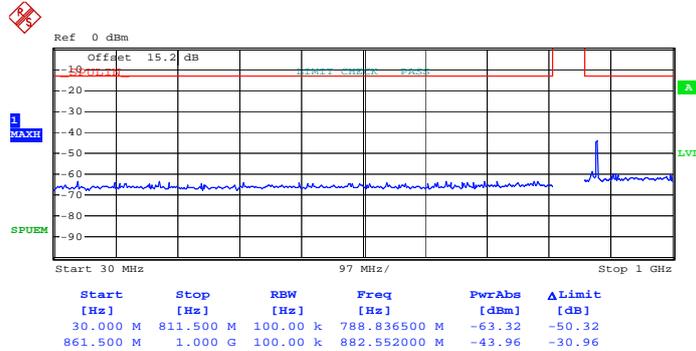


Date: 26.JAN.2013 21:56:13



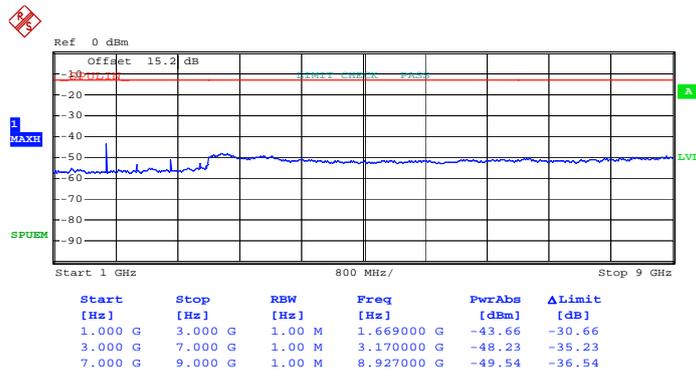
<b>Band :</b>	LTE Band 5	<b>BW / Mod. :</b>	5MHz / 16QAM
<b>Frequency :</b>	836.5	<b>Channel :</b>	20525

**Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)**



Date: 26.JAN.2013 21:37:42

**Conducted Emission Plot (1GHz ~ 9GHz) for 16-QAM (RB Size 1, RB Offset 0)**

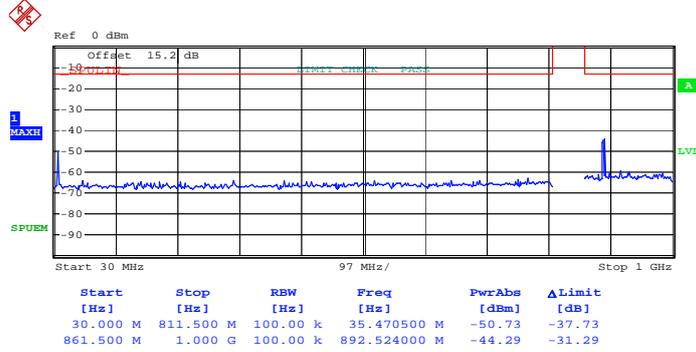


Date: 26.JAN.2013 21:39:05



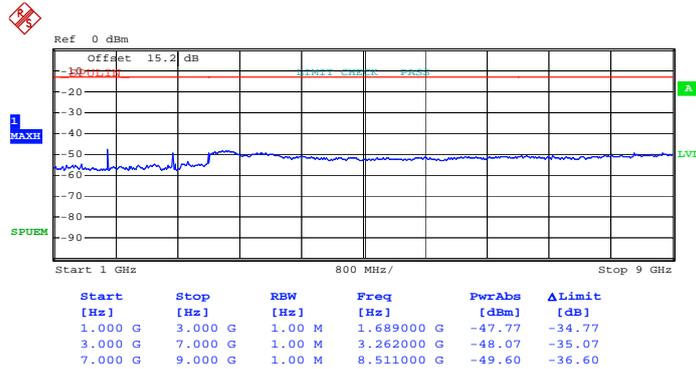
Band :	LTE Band 5	BW / Mod. :	5MHz / 16QAM
Frequency :	846.5	Channel :	20625

Conducted Emission Plot (30MHz ~ 1GHz) for  
16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 21:44:56

Conducted Emission Plot (1GHz ~ 9GHz) for  
16-QAM (RB Size 1, RB Offset 0)

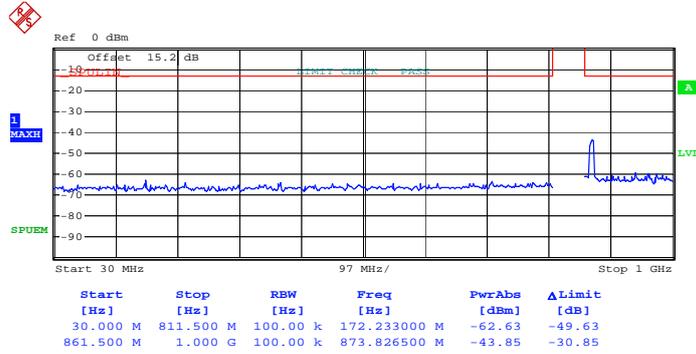


Date: 26.JAN.2013 21:43:48



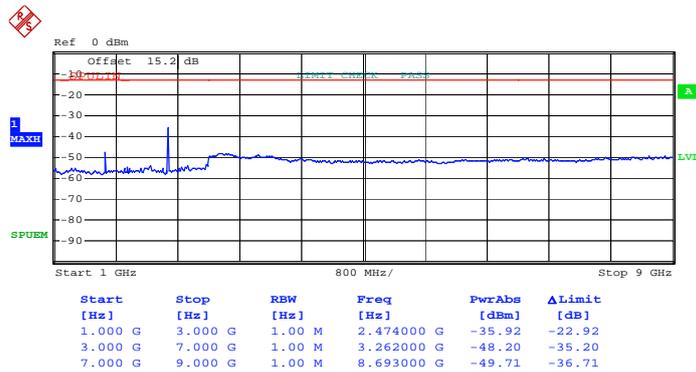
Band :	LTE Band 5	BW / Mod. :	10MHz / QPSK
Frequency :	829	Channel :	20450

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 21:58:41

Conducted Emission Plot (1GHz ~ 9GHz) for QPSK (RB Size 1, RB Offset 0)

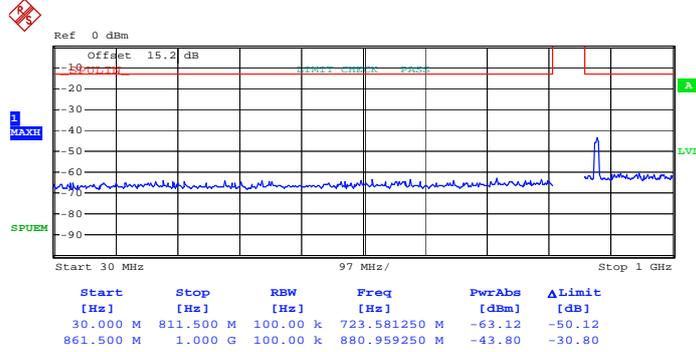


Date: 26.JAN.2013 21:57:04



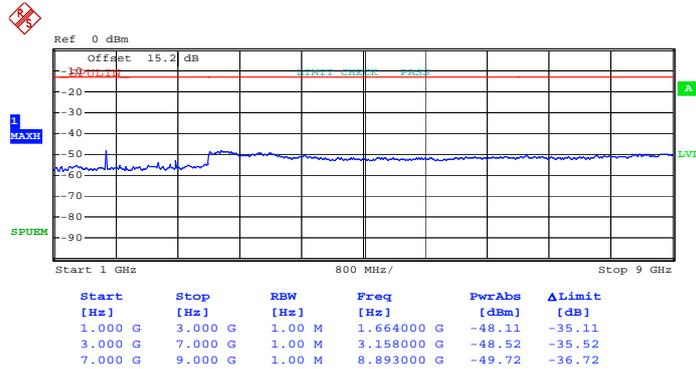
<b>Band :</b>	LTE Band 5	<b>BW / Mod. :</b>	10MHz / QPSK
<b>Frequency :</b>	836.5	<b>Channel :</b>	20525

**Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)**



Date: 26.JAN.2013 21:40:09

**Conducted Emission Plot (1GHz ~ 9GHz) for QPSK (RB Size 1, RB Offset 0)**

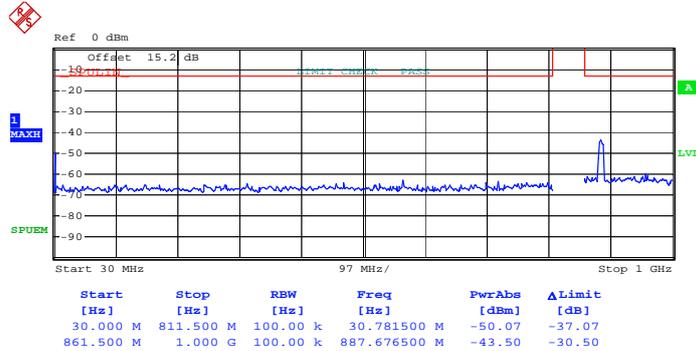


Date: 26.JAN.2013 21:39:49



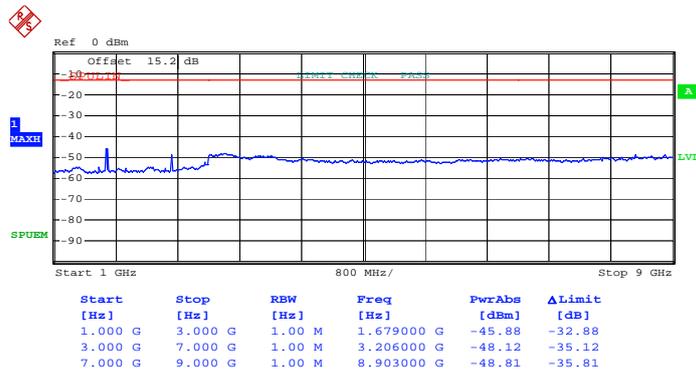
Band :	LTE Band 5	BW / Mod. :	10MHz / QPSK
Frequency :	844	Channel :	20600

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 21:42:25

Conducted Emission Plot (1GHz ~ 9GHz) for QPSK (RB Size 1, RB Offset 0)

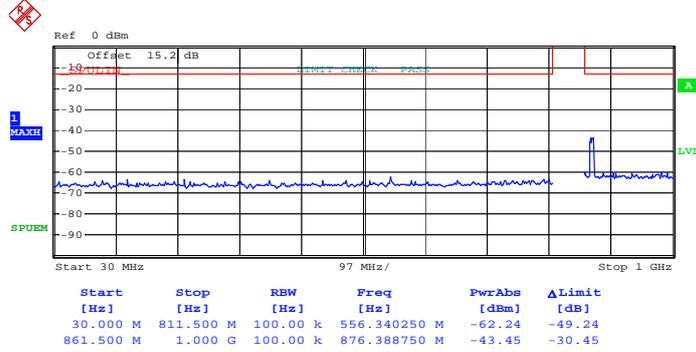


Date: 26.JAN.2013 21:42:52



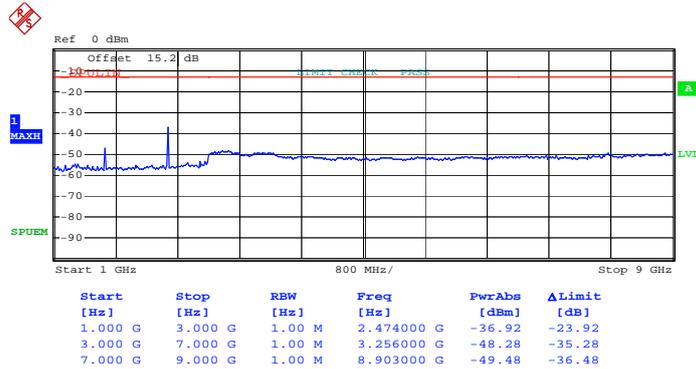
Band :	LTE Band 5	BW / Mod. :	10MHz / 16QAM
Frequency :	829	Channel :	20450

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 21:58:21

Conducted Emission Plot (1GHz ~ 9GHz) for 16-QAM (RB Size 1, RB Offset 0)

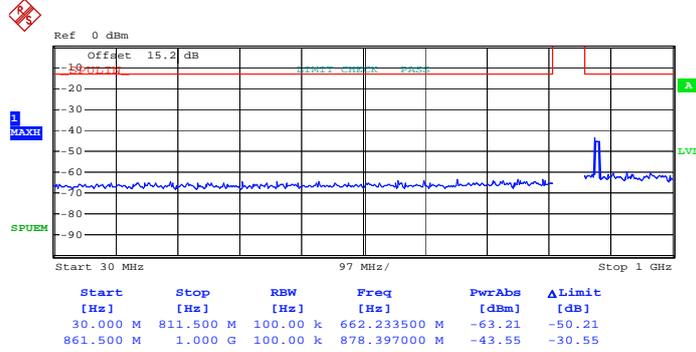


Date: 26.JAN.2013 21:57:50



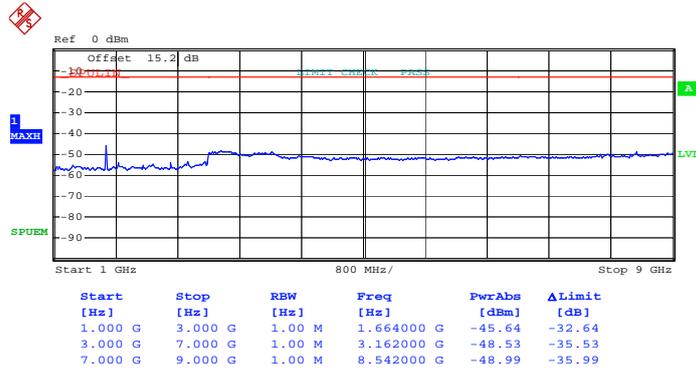
Band :	LTE Band 5	BW / Mod. :	10MHz / 16QAM
Frequency :	836.5	Channel :	20525

Conducted Emission Plot (30MHz ~ 1GHz) for  
16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 21:40:27

Conducted Emission Plot (1GHz ~ 9GHz) for  
16-QAM (RB Size 1, RB Offset 0)

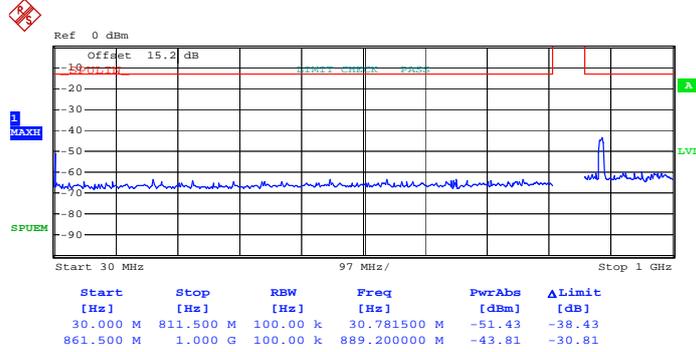


Date: 26.JAN.2013 21:39:31



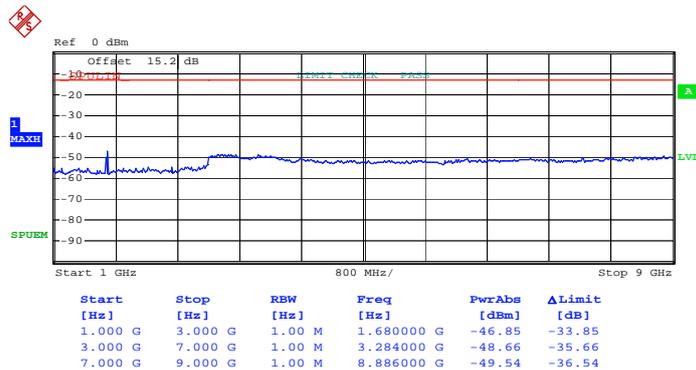
Band :	LTE Band 5	BW / Mod. :	10MHz / 16QAM
Frequency :	844	Channel :	20350

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 21:42:04

Conducted Emission Plot (1GHz ~ 9GHz) for 16-QAM (RB Size 1, RB Offset 0)

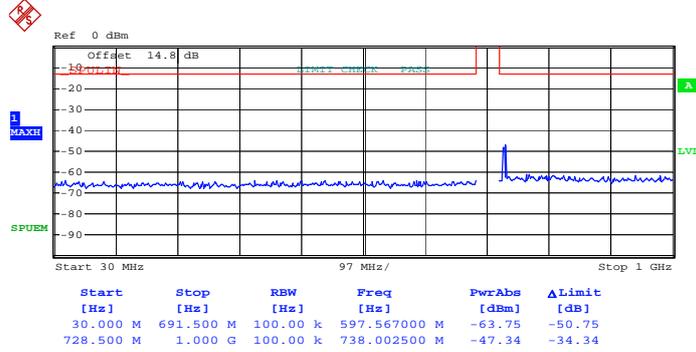


Date: 26.JAN.2013 21:43:10



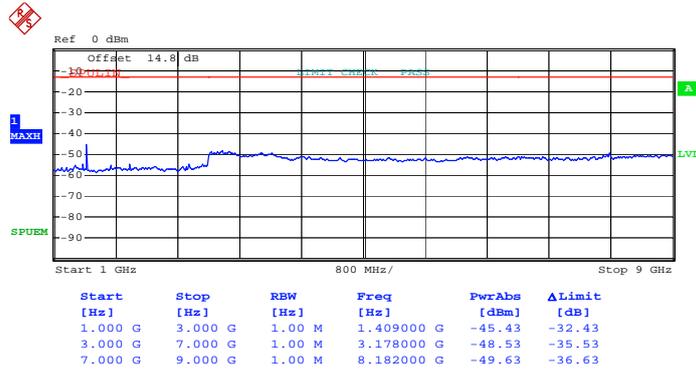
Band :	LTE Band 17	BW / Mod. :	5MHz / QPSK
Frequency :	706.5	Channel :	23755

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 22:06:16

Conducted Emission Plot (1GHz ~ 9GHz) for QPSK (RB Size 1, RB Offset 0)

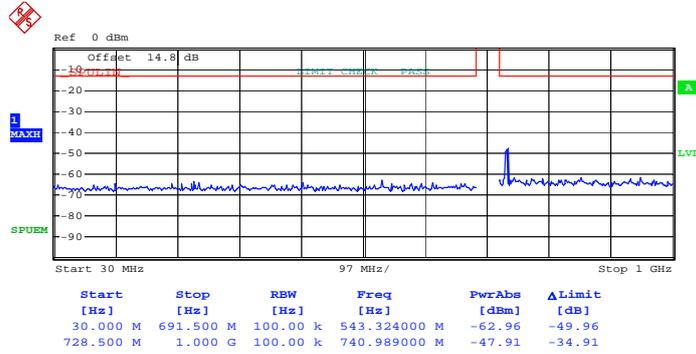


Date: 26.JAN.2013 22:07:32



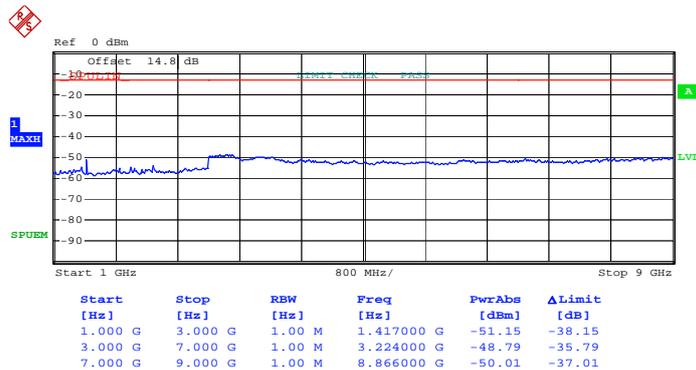
Band :	LTE Band 17	BW / Mod. :	5MHz / QPSK
Frequency :	710	Channel :	23790

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 22:05:28

Conducted Emission Plot (1GHz ~ 9GHz) for QPSK (RB Size 1, RB Offset 0)

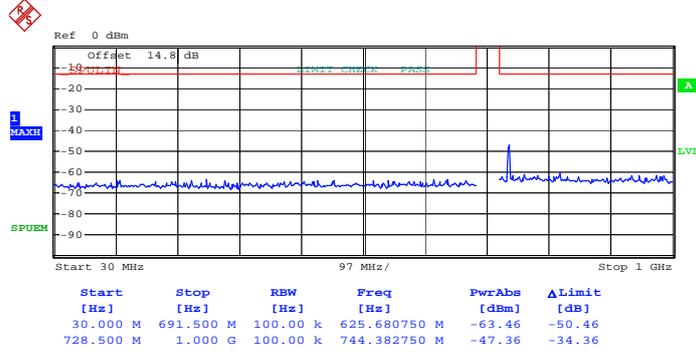


Date: 26.JAN.2013 22:04:20



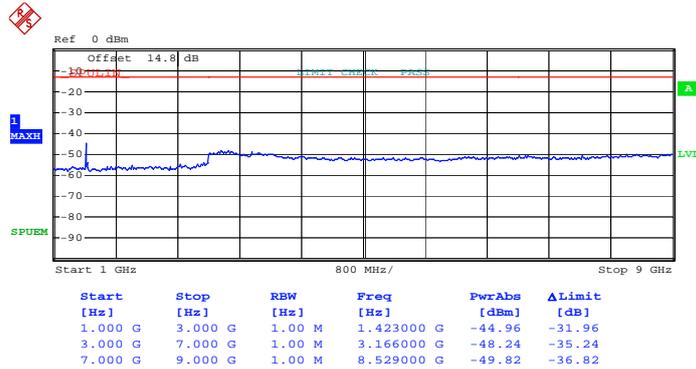
<b>Band :</b>	LTE Band 17	<b>BW / Mod. :</b>	5MHz / QPSK
<b>Frequency :</b>	713.5	<b>Channel :</b>	23825

**Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)**



Date: 26.JAN.2013 22:14:13

**Conducted Emission Plot (1GHz ~ 9GHz) for QPSK (RB Size 1, RB Offset 0)**

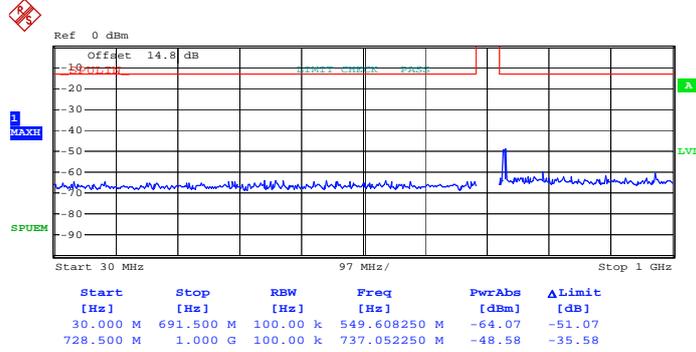


Date: 26.JAN.2013 22:13:01



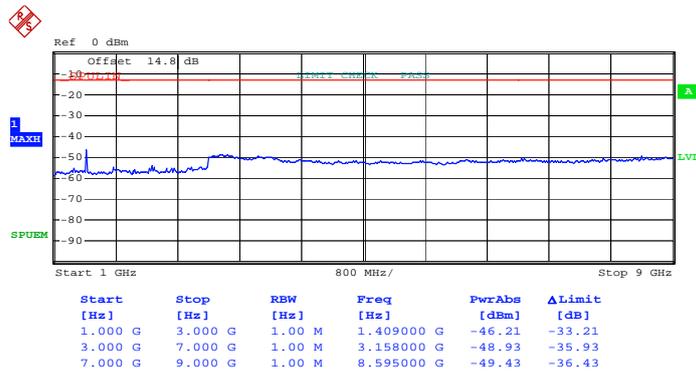
Band :	LTE Band 17	BW / Mod. :	5MHz / 16QAM
Frequency :	706.5	Channel :	23755

Conducted Emission Plot (30MHz ~ 1GHz) for  
16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 22:06:39

Conducted Emission Plot (1GHz ~ 9GHz) for  
16-QAM (RB Size 1, RB Offset 0)

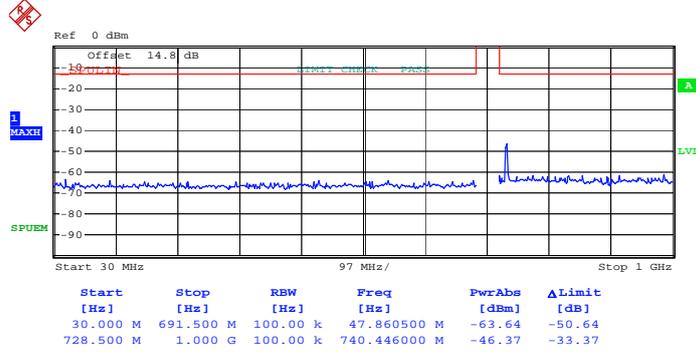


Date: 26.JAN.2013 22:07:08



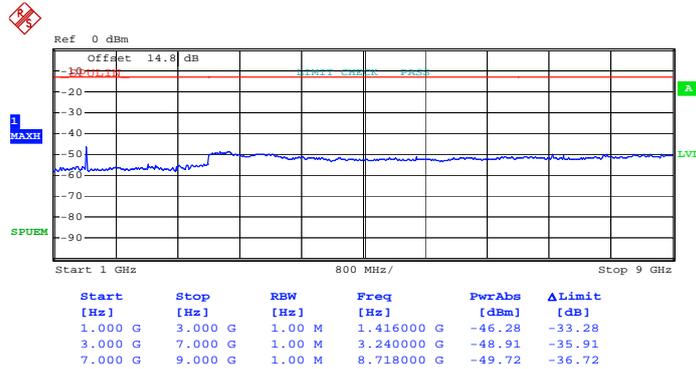
Band :	LTE Band 17	BW / Mod. :	5MHz / 16QAM
Frequency :	710	Channel :	23790

Conducted Emission Plot (30MHz ~ 1GHz) for  
16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 22:05:07

Conducted Emission Plot (1GHz ~ 9GHz) for  
16-QAM (RB Size 1, RB Offset 0)

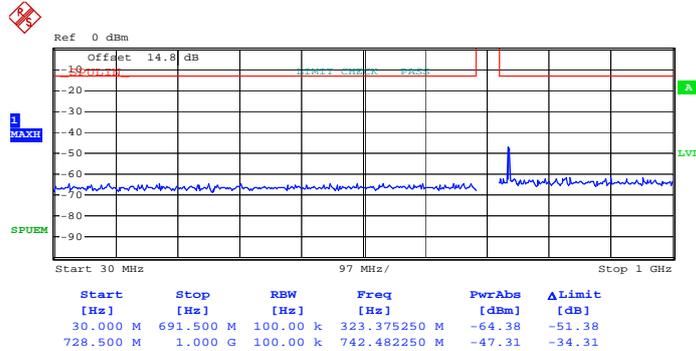


Date: 26.JAN.2013 22:04:40



<b>Band :</b>	LTE Band 17	<b>BW / Mod. :</b>	5MHz / 16QAM
<b>Frequency :</b>	713.5	<b>Channel :</b>	23825

**Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)**



Date: 26.JAN.2013 22:13:50

**Conducted Emission Plot (1GHz ~ 9GHz) for 16-QAM (RB Size 1, RB Offset 0)**

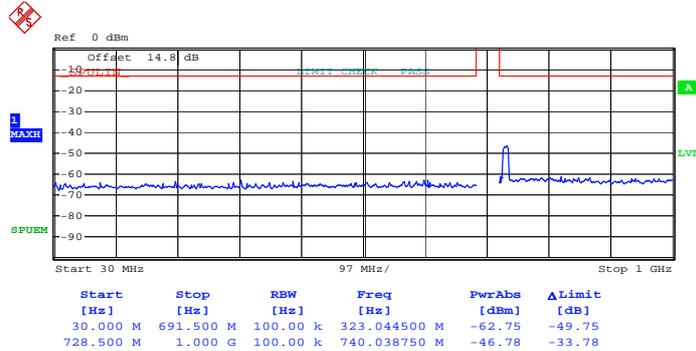


Date: 26.JAN.2013 22:13:24



Band :	LTE Band 17	BW / Mod. :	10MHz / QPSK
Frequency :	709	Channel :	23780

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 22:09:46

Conducted Emission Plot (1GHz ~ 9GHz) for QPSK (RB Size 1, RB Offset 0)

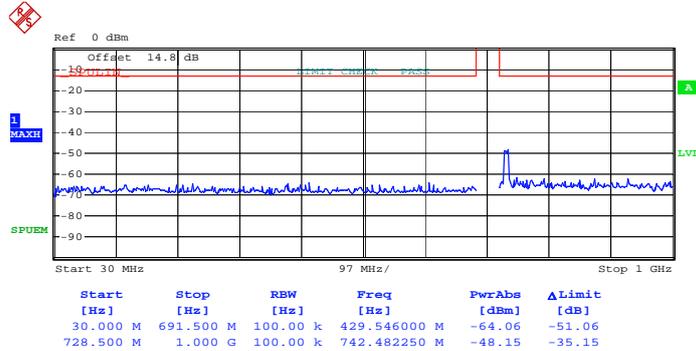


Date: 26.JAN.2013 22:08:13



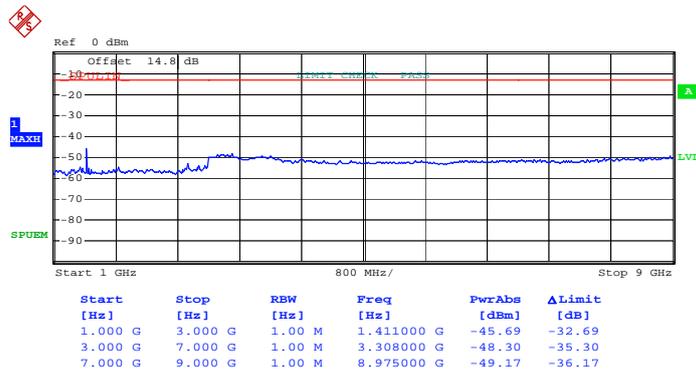
<b>Band :</b>	LTE Band 17	<b>BW / Mod. :</b>	10MHz / QPSK
<b>Frequency :</b>	710	<b>Channel :</b>	23790

**Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)**



Date: 26.JAN.2013 22:02:44

**Conducted Emission Plot (1GHz ~ 9GHz) for QPSK (RB Size 1, RB Offset 0)**

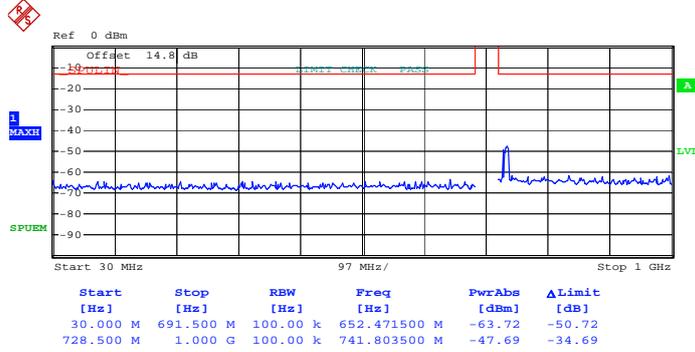


Date: 26.JAN.2013 22:03:55



Band :	LTE Band 17	BW / Mod. :	10MHz / QPSK
Frequency :	711	Channel :	23800

Conducted Emission Plot (30MHz ~ 1GHz) for QPSK (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 22:11:05

Conducted Emission Plot (1GHz ~ 9GHz) for QPSK (RB Size 1, RB Offset 0)

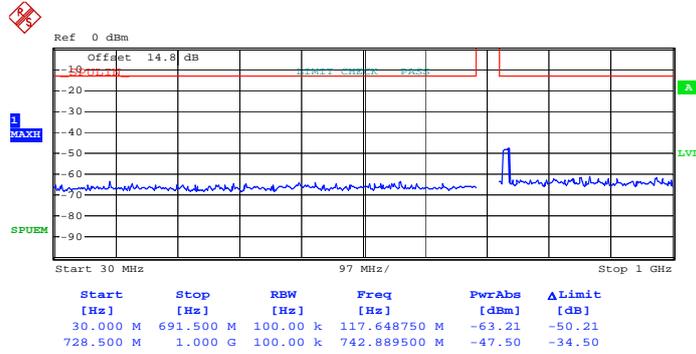


Date: 26.JAN.2013 22:12:21



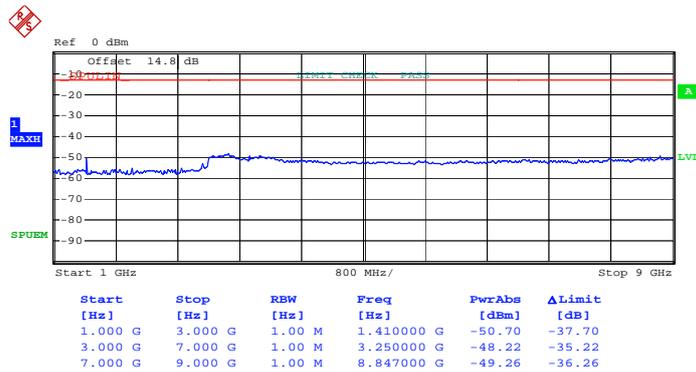
Band :	LTE Band 17	BW / Mod. :	10MHz / 16QAM
Frequency :	709	Channel :	23780

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 22:09:04

Conducted Emission Plot (1GHz ~ 9GHz) for 16-QAM (RB Size 1, RB Offset 0)

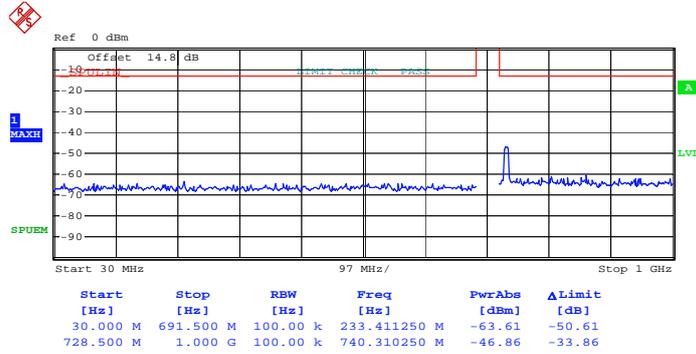


Date: 26.JAN.2013 22:08:33



<b>Band :</b>	LTE Band 17	<b>BW / Mod. :</b>	10MHz / 16QAM
<b>Frequency :</b>	710	<b>Channel :</b>	23790

**Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)**



Date: 26.JAN.2013 22:03:07

**Conducted Emission Plot (1GHz ~ 9GHz) for 16-QAM (RB Size 1, RB Offset 0)**

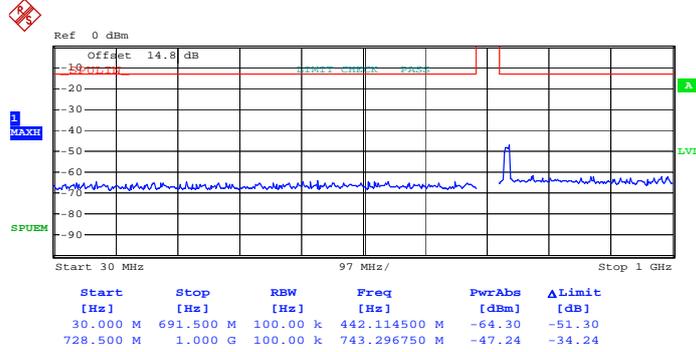


Date: 26.JAN.2013 22:03:38



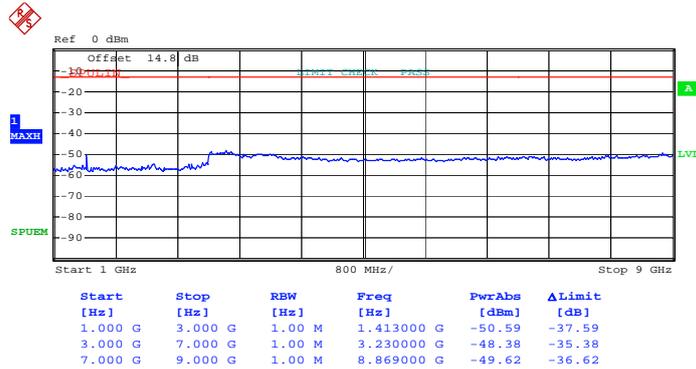
Band :	LTE Band 17	BW / Mod. :	10MHz / 16QAM
Frequency :	711	Channel :	23800

Conducted Emission Plot (30MHz ~ 1GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 22:11:24

Conducted Emission Plot (1GHz ~ 9GHz) for 16-QAM (RB Size 1, RB Offset 0)



Date: 26.JAN.2013 22:12:03

## 3.6 Field Strength of Spurious Radiation Measurement

### 3.6.1 Description of Field Strength of Spurious Radiated Measurement

The radiated spurious emission was measured by substitution method according to ANSI / TIA / EIA-603-C-2004. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least  $43 + 10 \log (P)$  dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

### 3.6.2 Measuring Instruments

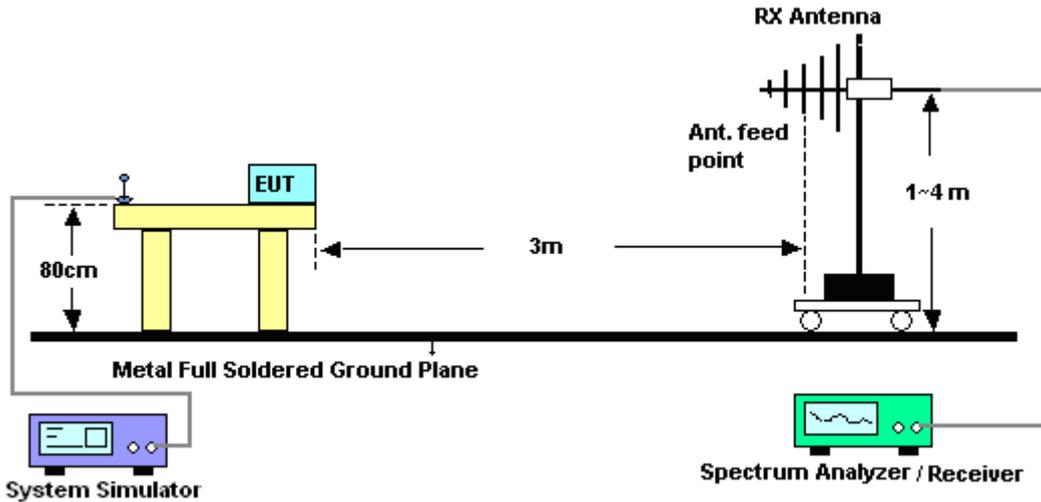
See list of measuring instruments of this test report.

### 3.6.3 Test Procedures

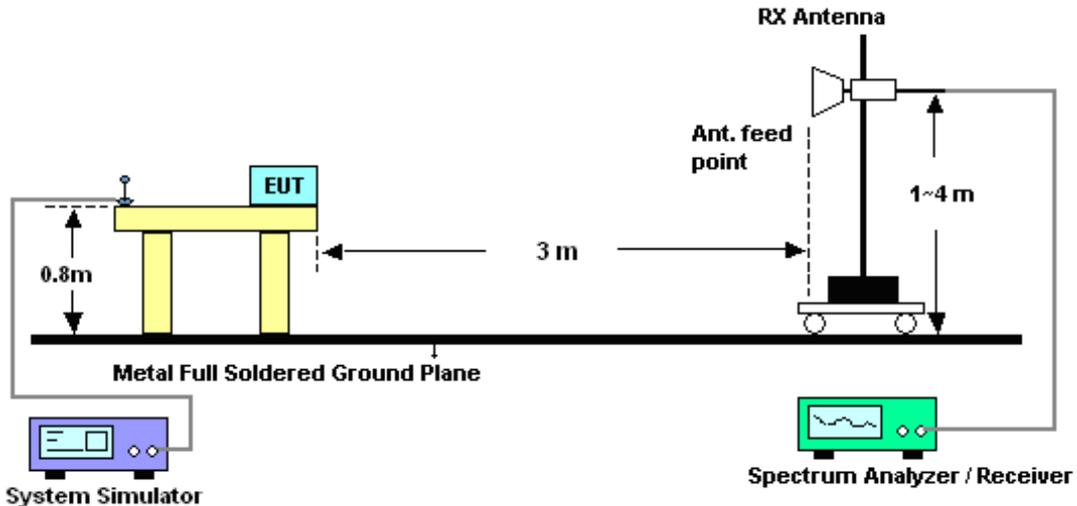
1. The EUT was placed on a rotatable wooden table with 0.8 meter above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, Sweep = 500ms, Taking the record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. Emission level (dBm) = output power + substitution Gain.

### 3.6.4 Test Setup

For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



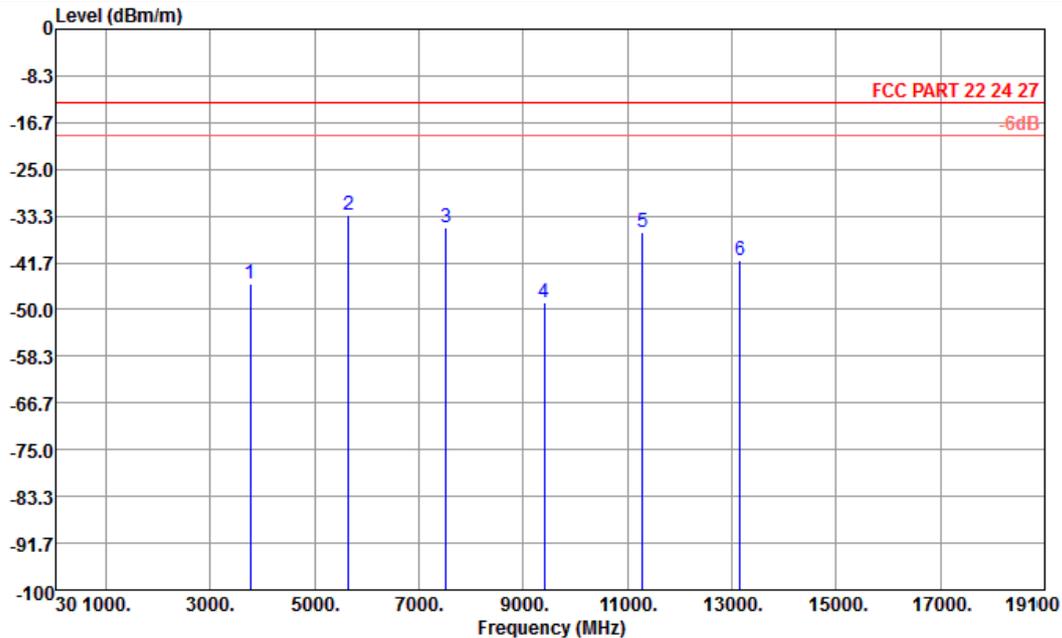
### 3.6.5 Test Results of Radiated Emissions (9 KHz ~ 30 MHz)

The low frequency, which started from 9 KHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.



3.6.6 Test Result of Field Strength of Spurious Radiated

<b>Band :</b>	LTE Band 2	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	1.4MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Horizontal
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

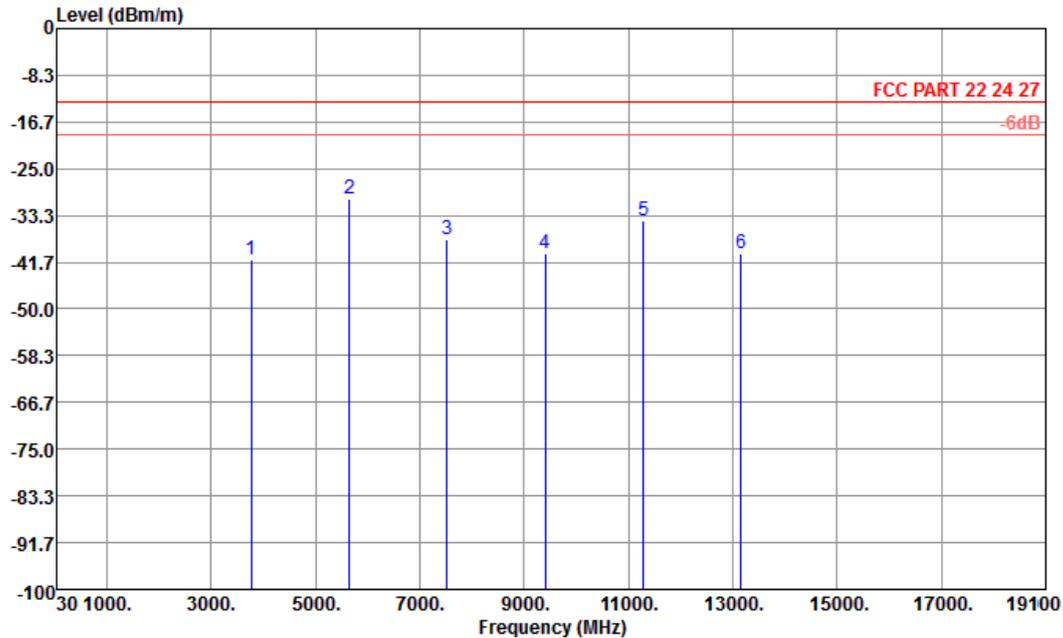


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 HORIZONTAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3760	-45.46	-13	-32.46	-60.31	-52.20	1.28	8.02	H	Pass
5640	-33.11	-13	-20.11	-54.50	-41.53	1.58	10.00	H	Pass
7520	-35.50	-13	-22.50	-60.46	-45.82	1.78	12.10	H	Pass
9400	-48.72	-13	-35.72	-70.84	-59.50	2.22	13.00	H	Pass
11280	-36.23	-13	-23.23	-65.16	-47.08	2.16	13.01	H	Pass
13160	-41.35	-13	-28.35	-71.93	-52.41	2.64	13.70	H	Pass



<b>Band :</b>	LTE Band 2	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	1.4MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Vertical
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

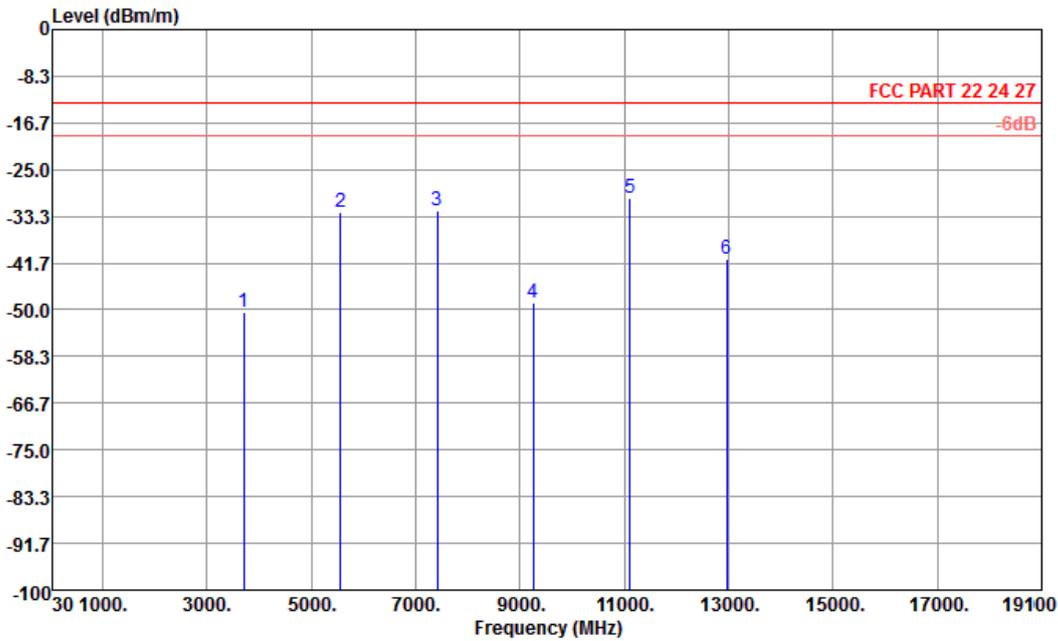


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 VERTICAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3760	-41.92	-13	-28.92	-58.5	-48.66	1.28	8.02	V	Pass
5640	-30.34	-13	-17.34	-51.12	-38.76	1.58	10	V	Pass
7520	-37.52	-13	-24.52	-61.24	-47.84	1.78	12.1	V	Pass
9400	-40.02	-13	-27.02	-63.64	-50.80	2.22	13	V	Pass
11280	-34.19	-13	-21.19	-63.23	-45.04	2.16	13.01	V	Pass
13160	-40.03	-13	-27.03	-70.68	-51.09	2.64	13.7	V	Pass



<b>Band :</b>	LTE Band 2	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	3MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Horizontal
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

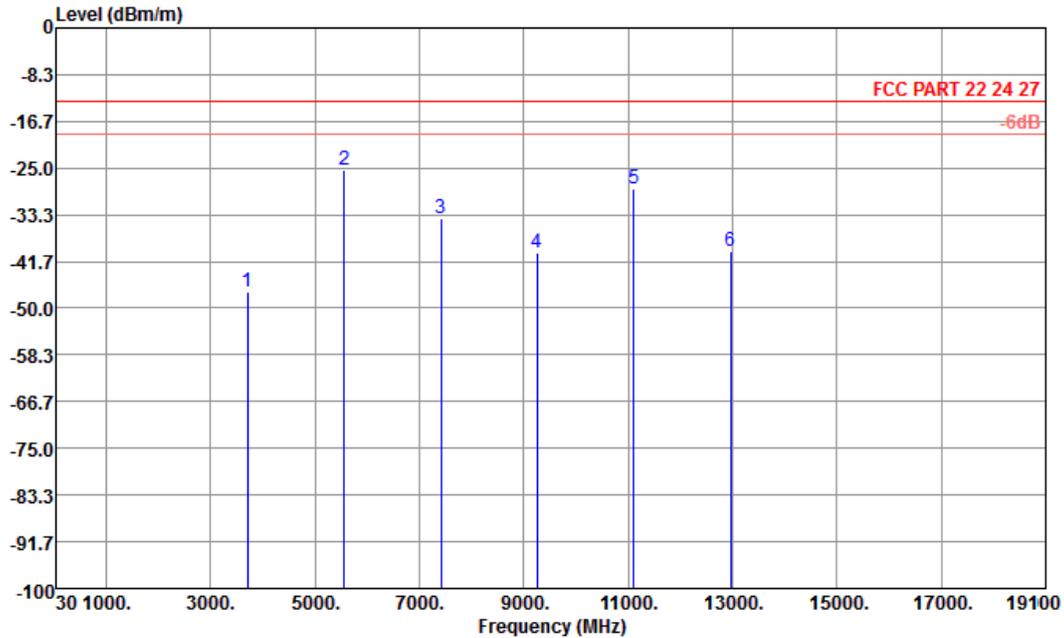


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 HORIZONTAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3703	-50.53	-13	-37.53	-63.60	-57.27	1.28	8.02	H	Pass
5554.5	-32.55	-13	-19.55	-53.93	-40.97	1.58	10.00	H	Pass
7406	-32.43	-13	-19.43	-57.98	-42.75	1.78	12.10	H	Pass
9257.5	-48.63	-13	-35.63	-70.75	-59.41	2.22	13.00	H	Pass
11109	-30.20	-13	-17.20	-61.29	-41.05	2.16	13.01	H	Pass
12960.5	-40.83	-13	-27.83	-71.41	-51.89	2.64	13.70	H	Pass



<b>Band :</b>	LTE Band 2	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	3MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Vertical
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

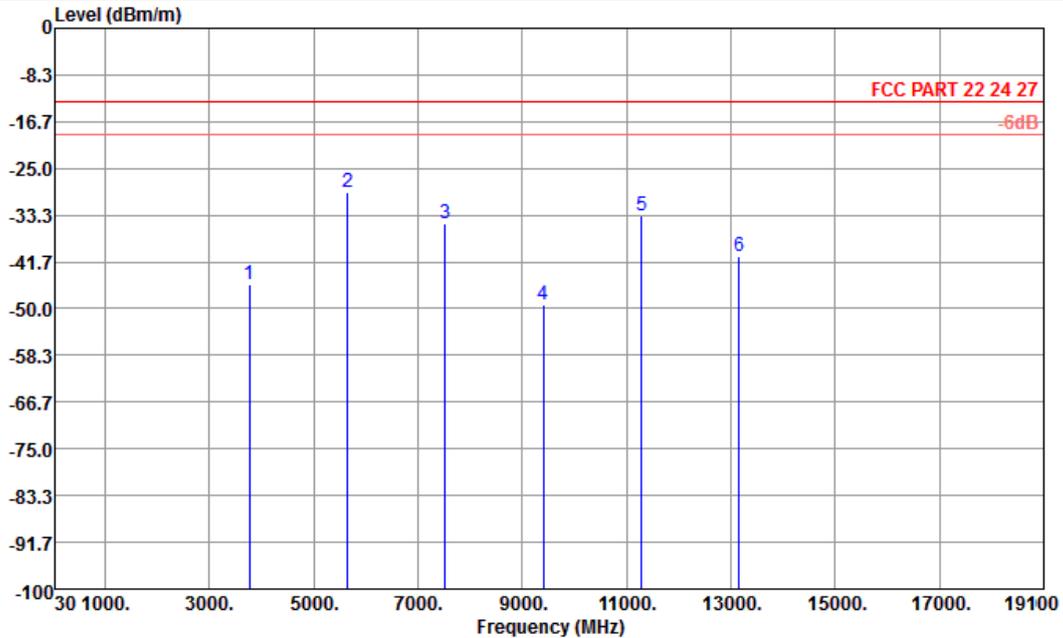


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 VERTICAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3703	-47.16	-13	-34.16	-62.19	-53.90	1.28	8.02	V	Pass
5554.5	-25.34	-13	-12.34	-46.38	-33.76	1.58	10	V	Pass
7406	-34.06	-13	-21.06	-58.45	-44.38	1.78	12.1	V	Pass
9257.5	-40.03	-13	-27.03	-63.65	-50.81	2.22	13	V	Pass
11109	-28.83	-13	-15.83	-59.54	-39.68	2.16	13.01	V	Pass
12960.5	-39.92	-13	-26.92	-70.57	-50.98	2.64	13.7	V	Pass



<b>Band :</b>	LTE Band 2	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	5MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Horizontal
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

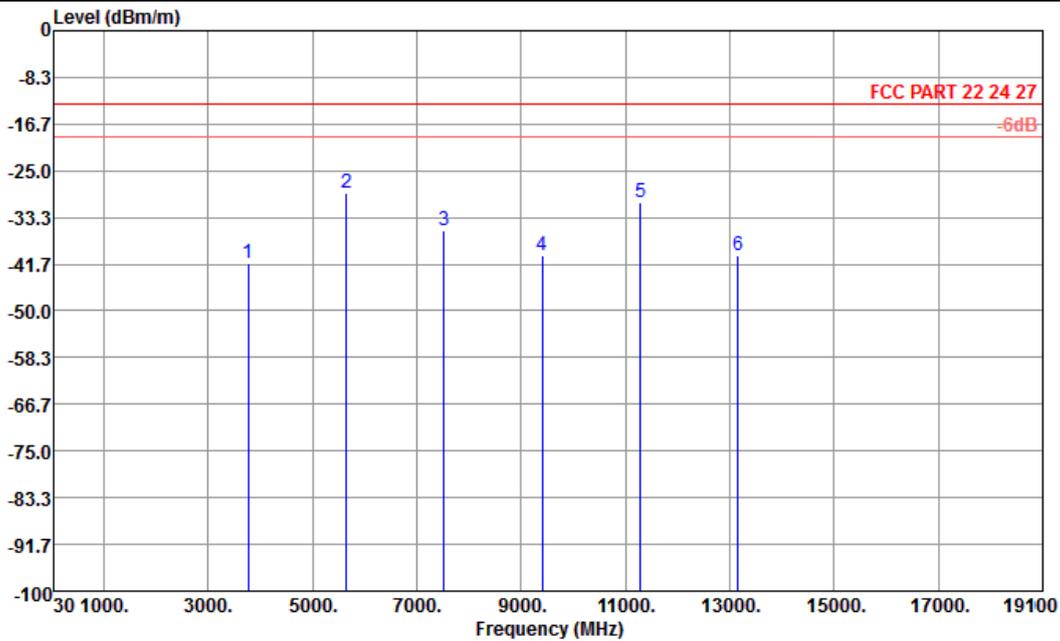


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 HORIZONTAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3760	-45.72	-13	-32.72	-60.51	-52.46	1.28	8.02	H	Pass
5640	-29.28	-13	-16.28	-50.96	-37.70	1.58	10.00	H	Pass
7520	-34.80	-13	-21.80	-59.83	-45.12	1.78	12.10	H	Pass
9400	-49.23	-13	-36.23	-71.35	-60.01	2.22	13.00	H	Pass
11280	-33.32	-13	-20.32	-63.44	-44.17	2.16	13.01	H	Pass
13160	-40.77	-13	-27.77	-71.35	-51.83	2.64	13.70	H	Pass



<b>Band :</b>	LTE Band 2	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	5MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Vertical
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

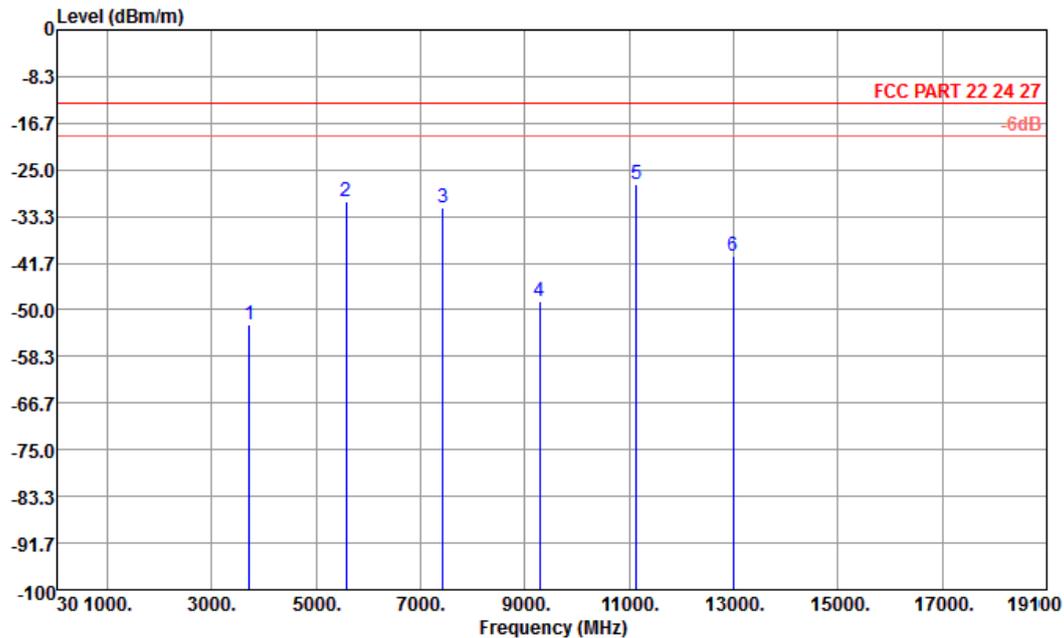


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 VERTICAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3760	-41.51	-13	-28.51	-58.24	-48.25	1.28	8.02	V	Pass
5640	-29.04	-13	-16.04	-49.92	-37.46	1.58	10	V	Pass
7520	-35.63	-13	-22.63	-59.73	-45.95	1.78	12.1	V	Pass
9400	-40.07	-13	-27.07	-63.69	-50.85	2.22	13	V	Pass
11280	-30.71	-13	-17.71	-60.95	-41.56	2.16	13.01	V	Pass
13160	-40.18	-13	-27.18	-70.83	-51.24	2.64	13.7	V	Pass



<b>Band :</b>	LTE Band 2	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	10MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Horizontal
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

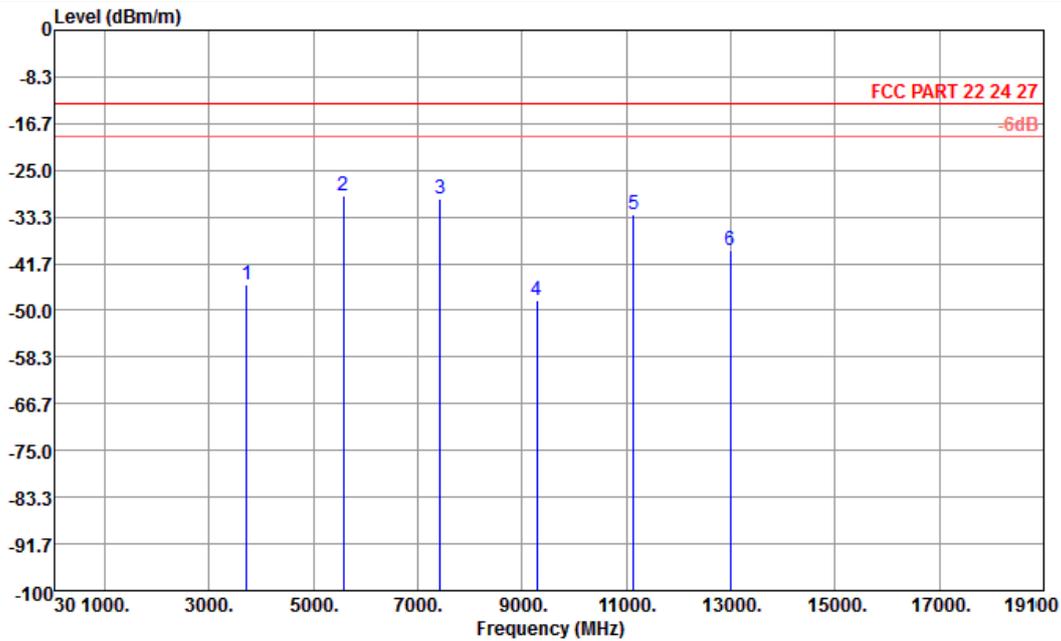


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 HORIZONTAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3710	-52.74	-13	-39.74	-64.89	-59.48	1.28	8.02	H	Pass
5565	-30.65	-13	-17.65	-52.18	-39.07	1.58	10.00	H	Pass
7420	-31.84	-13	-18.84	-57.50	-42.16	1.78	12.10	H	Pass
9275	-48.60	-13	-35.60	-70.72	-59.38	2.22	13.00	H	Pass
11130	-27.57	-13	-14.57	-59.44	-38.42	2.16	13.01	H	Pass
12985	-40.36	-13	-27.36	-70.94	-51.42	2.64	13.70	H	Pass



<b>Band :</b>	LTE Band 2	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	10MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Vertical
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

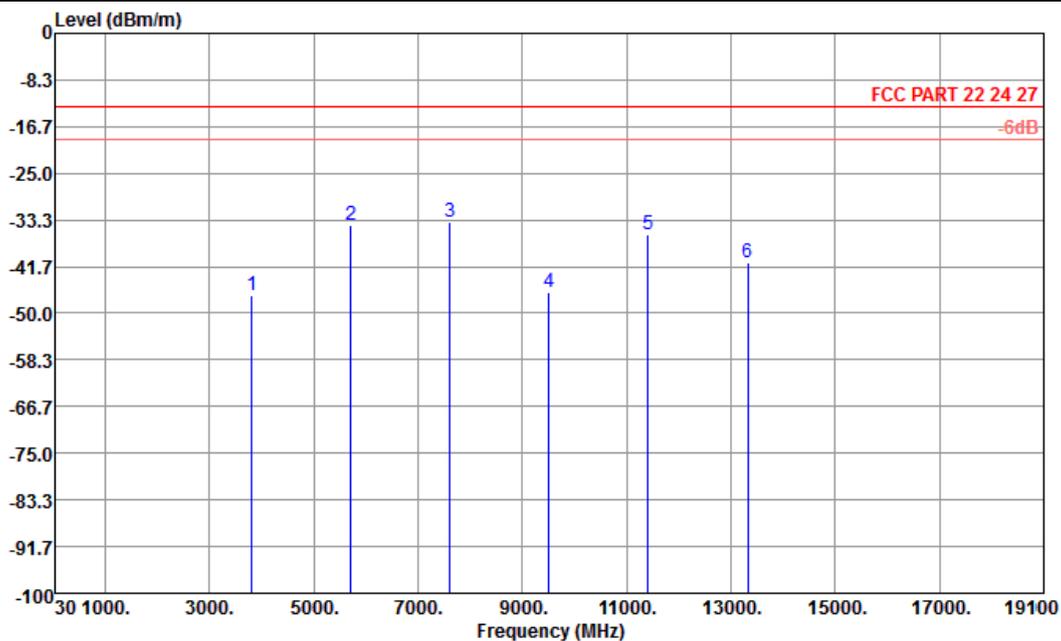


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 VERTICAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3710	-45.28	-13	-32.28	-61.34	-52.02	1.28	8.02	V	Pass
5565	-29.52	-13	-16.52	-50.38	-37.94	1.58	10	V	Pass
7420	-30.03	-13	-17.03	-55.19	-40.35	1.78	12.1	V	Pass
9275	-48.12	-13	-35.12	-71.74	-58.90	2.22	13	V	Pass
11130	-32.92	-13	-19.92	-62.38	-43.77	2.16	13.01	V	Pass
12985	-39.23	-13	-26.23	-69.88	-50.29	2.64	13.7	V	Pass



<b>Band :</b>	LTE Band 2	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	15MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Horizontal
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

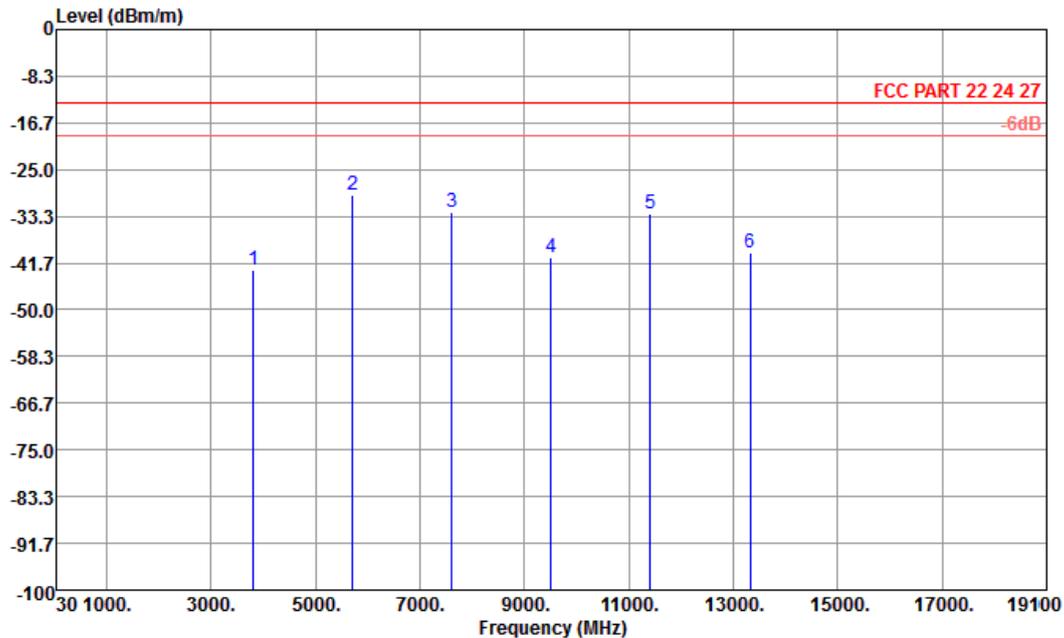


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 HORIZONTAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3805	-46.84	-13	-33.84	-61.35	-53.58	1.28	8.02	H	Pass
5707.5	-34.23	-13	-21.23	-55.33	-42.65	1.58	10.00	H	Pass
7610	-33.83	-13	-20.83	-59.04	-44.15	1.78	12.10	H	Pass
9512.5	-46.23	-13	-33.23	-68.35	-57.01	2.22	13.00	H	Pass
11415	-36.00	-13	-23.00	-65.06	-46.85	2.16	13.01	H	Pass
13317.5	-41.00	-13	-28.00	-71.58	-52.06	2.64	13.70	H	Pass



Band :	LTE Band 2	Temperature :	23~24°C
Test Mode :	15MHz, QPSK, RB Size 1, RB Offset 0	Relative Humidity :	43~44%
Test Engineer :	Stone Gu	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

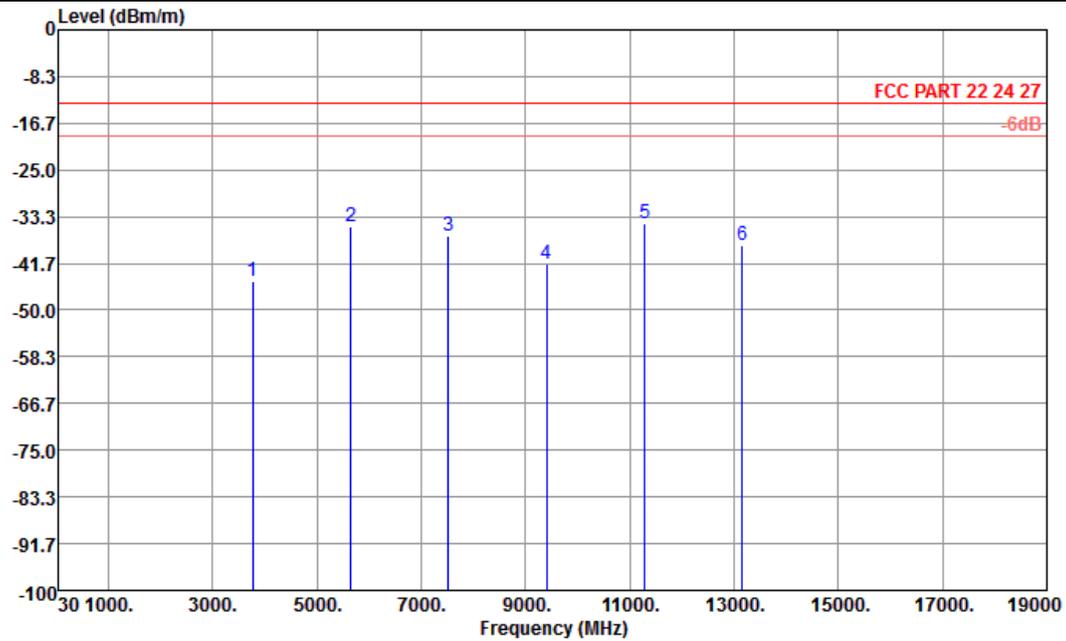


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 VERTICAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3805	-42.98	-13	-29.98	-59.49	-49.72	1.28	8.02	V	Pass
5707.5	-29.63	-13	-16.63	-50.49	-38.05	1.58	10	V	Pass
7610	-32.46	-13	-19.46	-57.23	-42.78	1.78	12.1	V	Pass
9512.5	-40.66	-13	-27.66	-64.28	-51.44	2.22	13	V	Pass
11415	-32.76	-13	-19.76	-62.32	-43.61	2.16	13.01	V	Pass
13317.5	-39.75	-13	-26.75	-70.4	-50.81	2.64	13.7	V	Pass



<b>Band :</b>	LTE Band 2	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	20MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Horizontal
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

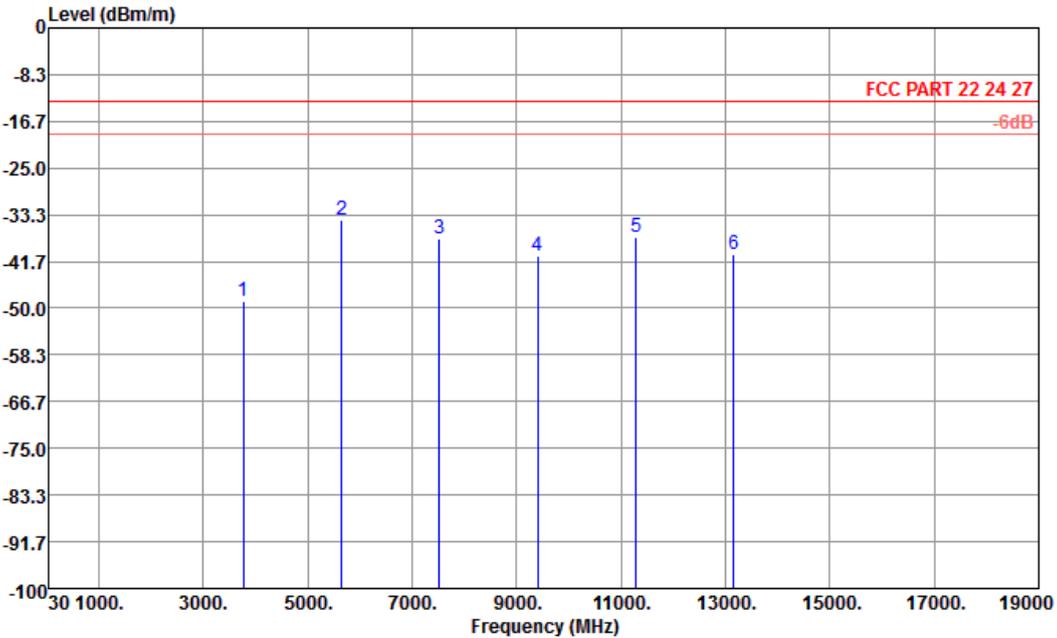


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 HORIZONTAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3760	-44.84	-13	-31.84	-59.87	-51.58	1.28	8.02	H	Pass
5640	-35.00	-13	-22.00	-56.28	-43.42	1.58	10.00	H	Pass
7520	-36.66	-13	-23.66	-61.22	-46.98	1.78	12.10	H	Pass
9400	-41.80	-13	-28.80	-64.63	-52.58	2.22	13.00	H	Pass
11280	-34.51	-13	-21.51	-64.16	-45.36	2.16	13.01	H	Pass
13160	-38.43	-13	-25.43	-69.01	-49.49	2.64	13.70	H	Pass



<b>Band :</b>	LTE Band 2	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	20MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Vertical
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

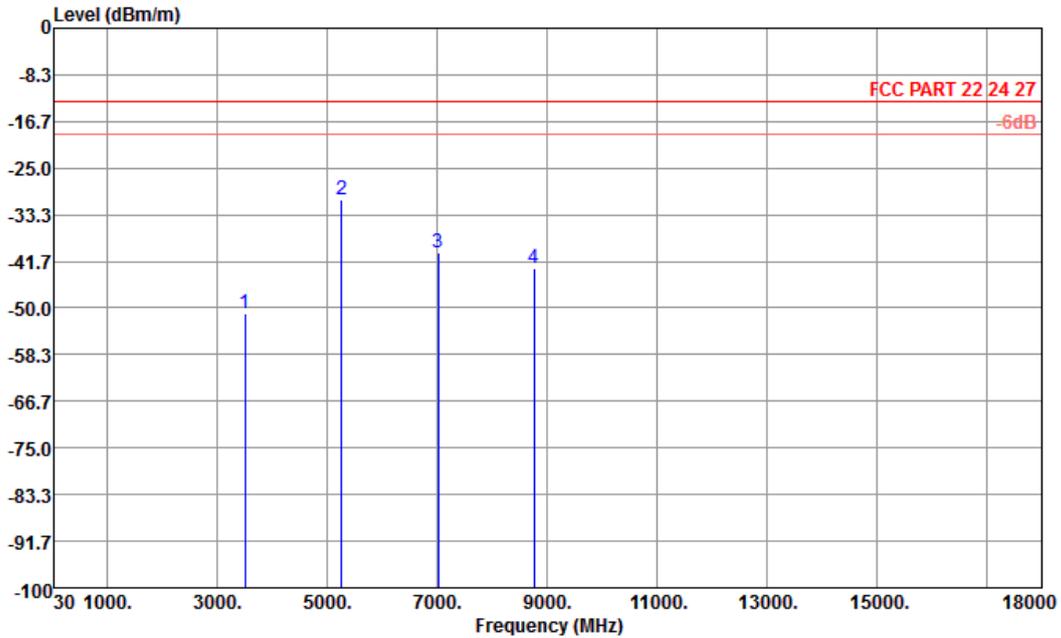


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 VERTICAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3760	-48.75	-13	-35.75	-63.78	-55.49	1.28	8.02	V	Pass
5640	-34.30	-13	-21.30	-54.68	-42.72	1.58	10	V	Pass
7520	-37.65	-13	-24.65	-61.34	-47.97	1.78	12.1	V	Pass
9400	-40.57	-13	-27.57	-64.19	-51.35	2.22	13	V	Pass
11280	-37.37	-13	-24.37	-65.96	-48.22	2.16	13.01	V	Pass
13160	-40.39	-13	-27.39	-71.04	-51.45	2.64	13.7	V	Pass



<b>Band :</b>	LTE Band 4	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	1.4MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Horizontal
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

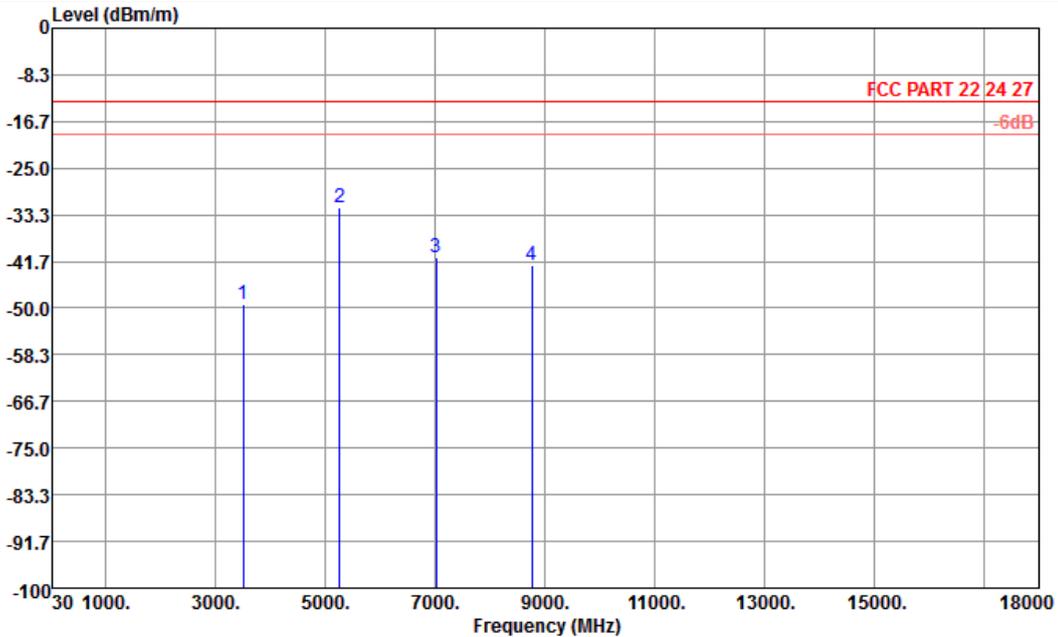


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 HORIZONTAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3508.60	-50.88	-13	-37.88	-61.96	-38.20	1.15	7.54	H	Pass
5262.90	-30.54	-13	-17.54	-51.90	-68.60	1.51	9.80	H	Pass
7017.20	-40.14	-13	-27.14	-63.76	-67.90	1.75	11.51	H	Pass
8771.50	-42.95	-13	-29.95	-69.21	-58.70	1.97	12.86	H	Pass



<b>Band :</b>	LTE Band 4	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	1.4MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Vertical
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

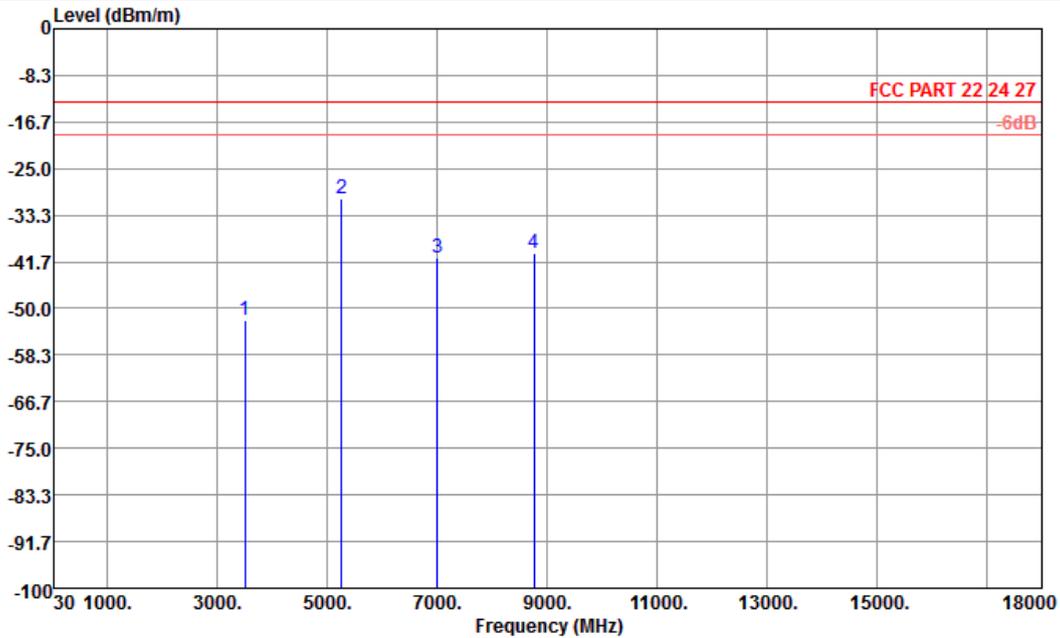


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 VERTICAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3508.6	-49.38	-13	-36.38	-62.24	-43.20	1.15	7.54	V	Pass
5262.9	-31.96	-13	-18.96	-52.77	-70.30	1.51	9.80	V	Pass
7017.2	-41.02	-13	-28.02	-64.35	-64.60	1.75	11.51	V	Pass
8771.5	-42.47	-13	-29.47	-68.37	-56.60	1.97	12.86	V	Pass



<b>Band :</b>	LTE Band 4	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	3MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Horizontal
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

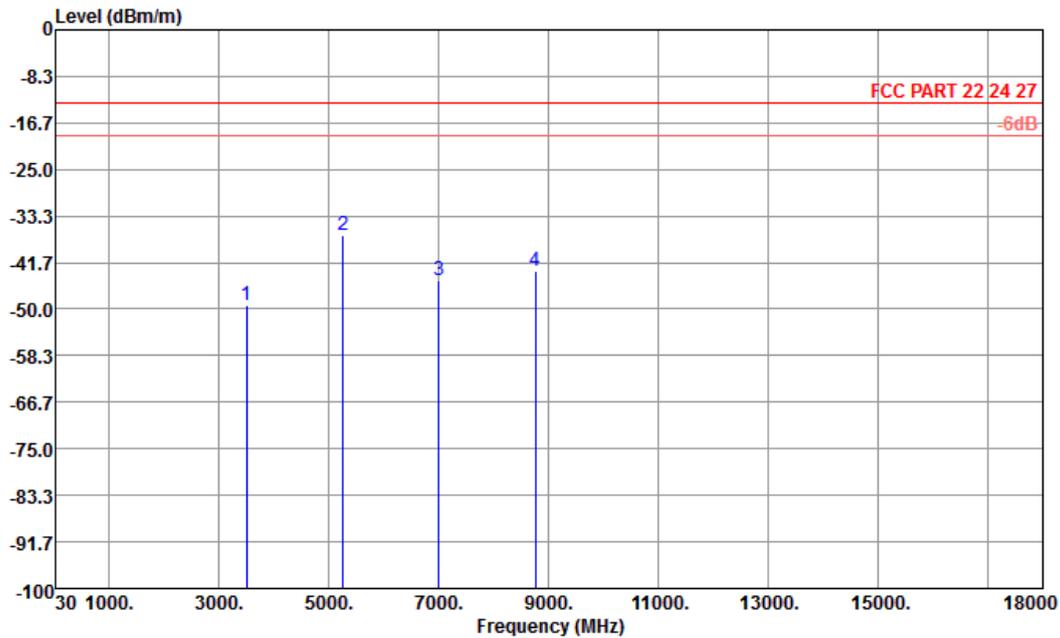


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 HORIZONTAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3507.00	-51.97	-13	-38.97	-63.05	-38.20	1.15	7.54	H	Pass
5260.50	-30.32	-13	-17.32	-51.69	-68.60	1.51	9.80	H	Pass
7014.00	-40.81	-13	-27.81	-64.43	-67.90	1.75	11.51	H	Pass
8767.50	-40.14	-13	-27.14	-66.40	-58.70	1.97	12.86	H	Pass



<b>Band :</b>	LTE Band 4	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	3MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Vertical
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

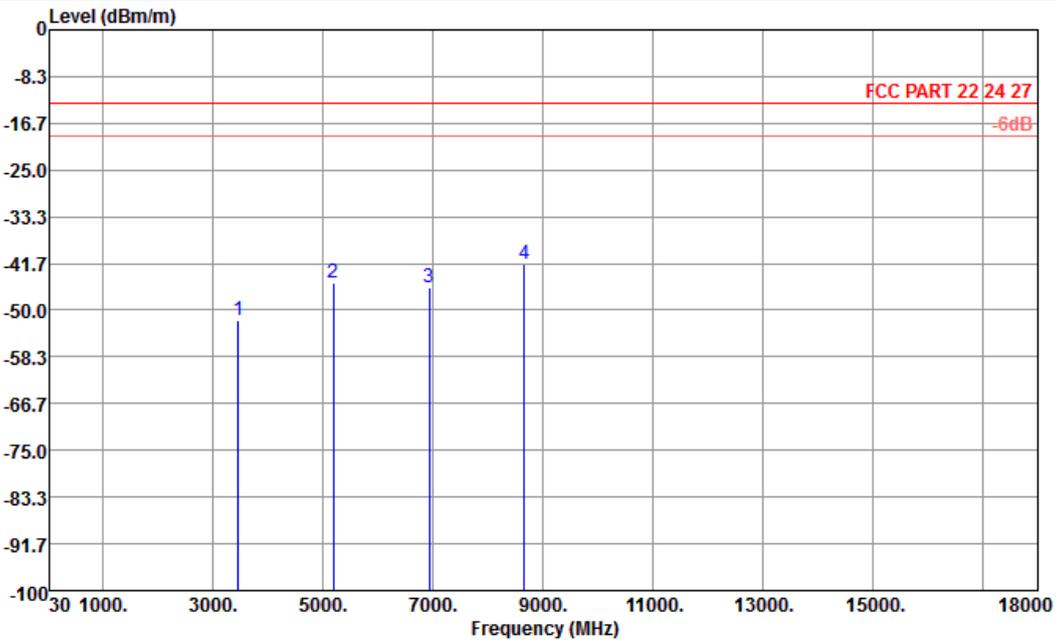


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 VERTICAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3507	-49.41	-13	-36.41	-62.27	-43.20	1.15	7.54	V	Pass
5260.5	-36.63	-13	-23.63	-55.28	-70.30	1.51	9.80	V	Pass
7014	-44.77	-13	-31.77	-68.1	-64.60	1.75	11.51	V	Pass
8767.5	-43.11	-13	-30.11	-69.01	-56.60	1.97	12.86	V	Pass



<b>Band :</b>	LTE Band 4	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	5MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Horizontal
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

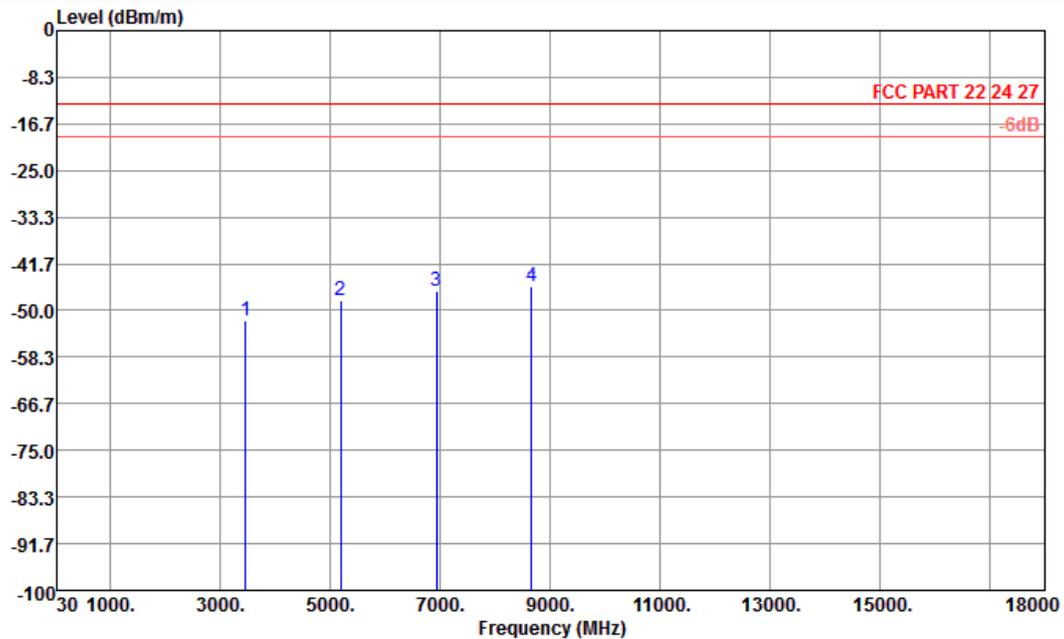


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 HORIZONTAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3465.00	-51.83	-13	-38.83	-62.91	-38.20	1.15	7.54	H	Pass
5197.50	-45.26	-13	-32.26	-64.22	-68.60	1.51	9.80	H	Pass
6930.00	-46.08	-13	-33.08	-69.70	-67.90	1.75	11.51	H	Pass
8662.50	-41.74	-13	-28.74	-68.00	-58.70	1.97	12.86	H	Pass



<b>Band :</b>	LTE Band 4	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	5MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Vertical
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

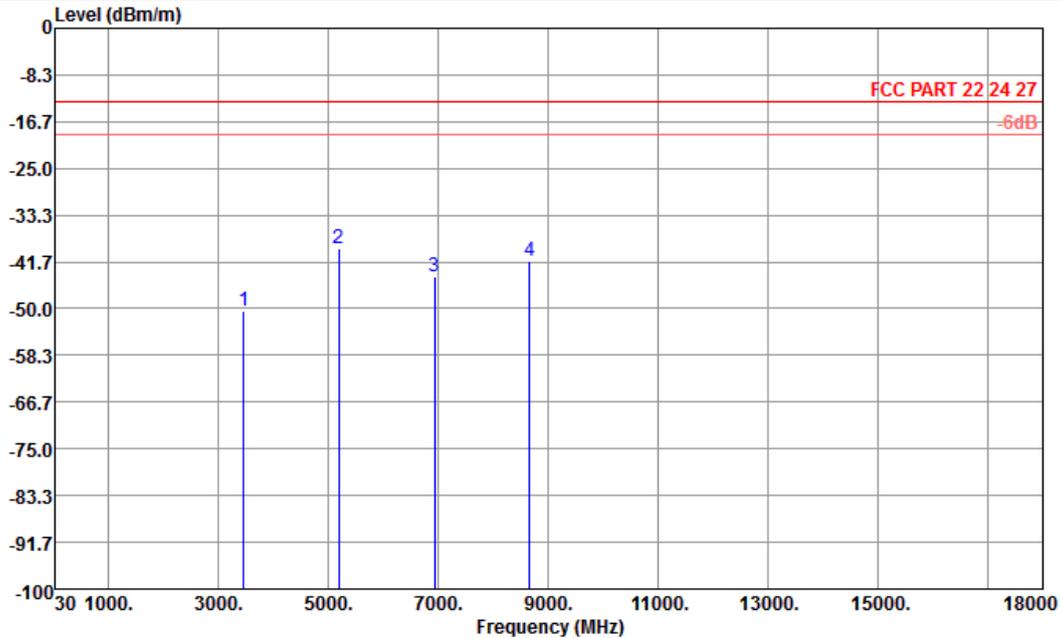


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 VERTICAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3465	-51.69	-13	-38.69	-64.55	-43.20	1.15	7.54	V	Pass
5197.5	-48.26	-13	-35.26	-67.66	-70.30	1.51	9.80	V	Pass
6930	-46.48	-13	-33.48	-69.81	-64.60	1.75	11.51	V	Pass
8662.5	-46.02	-13	-33.02	-71.92	-56.60	1.97	12.86	V	Pass



<b>Band :</b>	LTE Band 4	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	10MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Horizontal
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

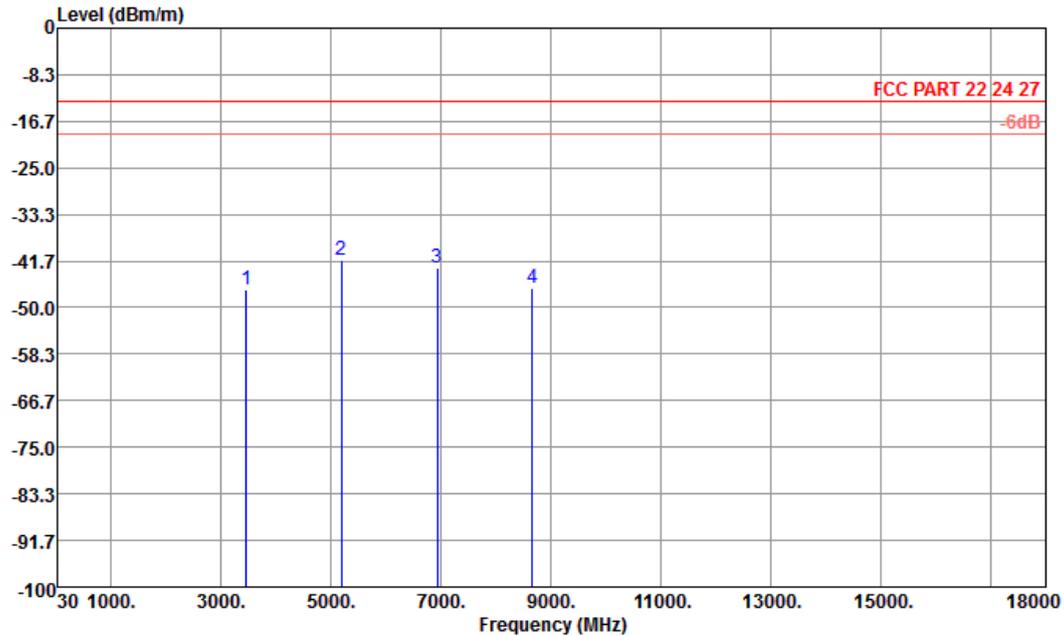


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 HORIZONTAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3465.00	-50.40	-13	-37.40	-61.48	-38.20	1.15	7.54	H	Pass
5197.50	-39.14	-13	-26.14	-59.12	-68.60	1.51	9.80	H	Pass
6930.00	-44.18	-13	-31.18	-67.80	-67.90	1.75	11.51	H	Pass
8662.50	-41.62	-13	-28.62	-67.88	-58.70	1.97	12.86	H	Pass



<b>Band :</b>	LTE Band 4	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	10MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Vertical
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

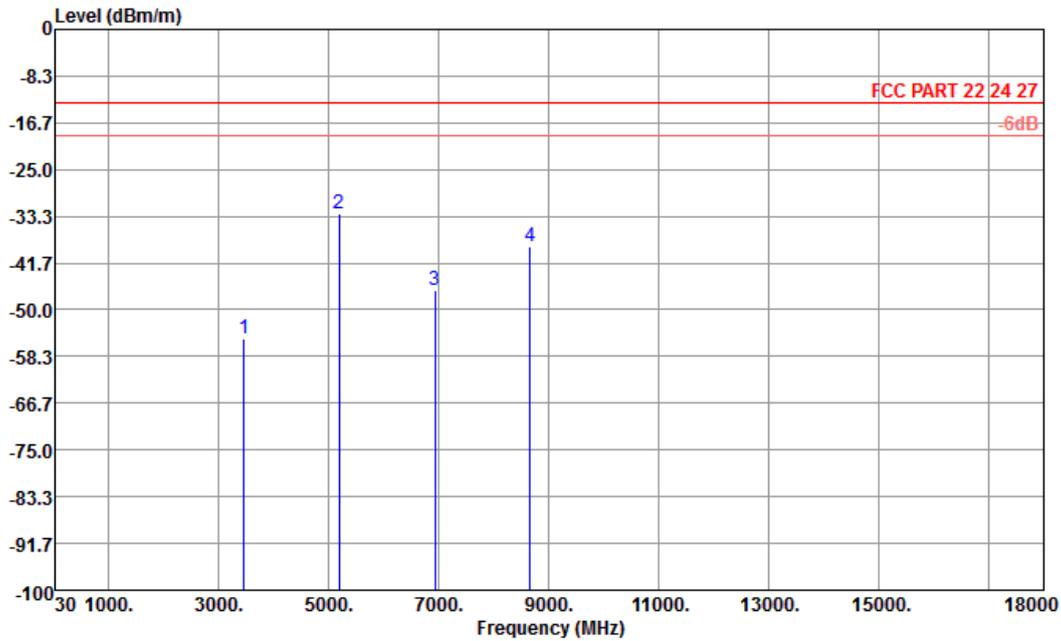


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 VERTICAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3465	-46.80	-13	-33.80	-60.29	-43.20	1.15	7.54	V	Pass
5197.5	-41.64	-13	-28.64	-61.04	-70.30	1.51	9.80	V	Pass
6930	-42.85	-13	-29.85	-66.18	-64.60	1.75	11.51	V	Pass
8662.5	-46.50	-13	-33.50	-72.4	-56.60	1.97	12.86	V	Pass



<b>Band :</b>	LTE Band 4	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	15MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Horizontal
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

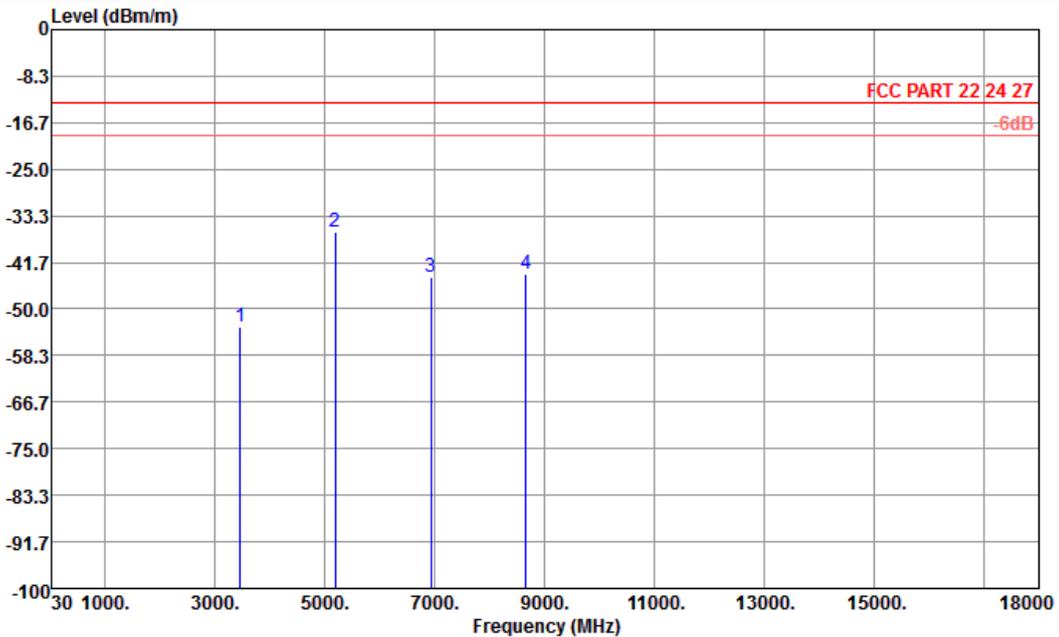


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 HORIZONTAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3465.00	-55.25	-13	-42.25	-66.33	-38.20	1.15	7.54	H	Pass
5197.50	-32.88	-13	-19.88	-53.97	-68.60	1.51	9.80	H	Pass
6930.00	-46.43	-13	-33.43	-70.05	-67.90	1.75	11.51	H	Pass
8662.50	-38.67	-13	-25.67	-64.93	-58.70	1.97	12.86	H	Pass



<b>Band :</b>	LTE Band 4	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	15MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Vertical
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

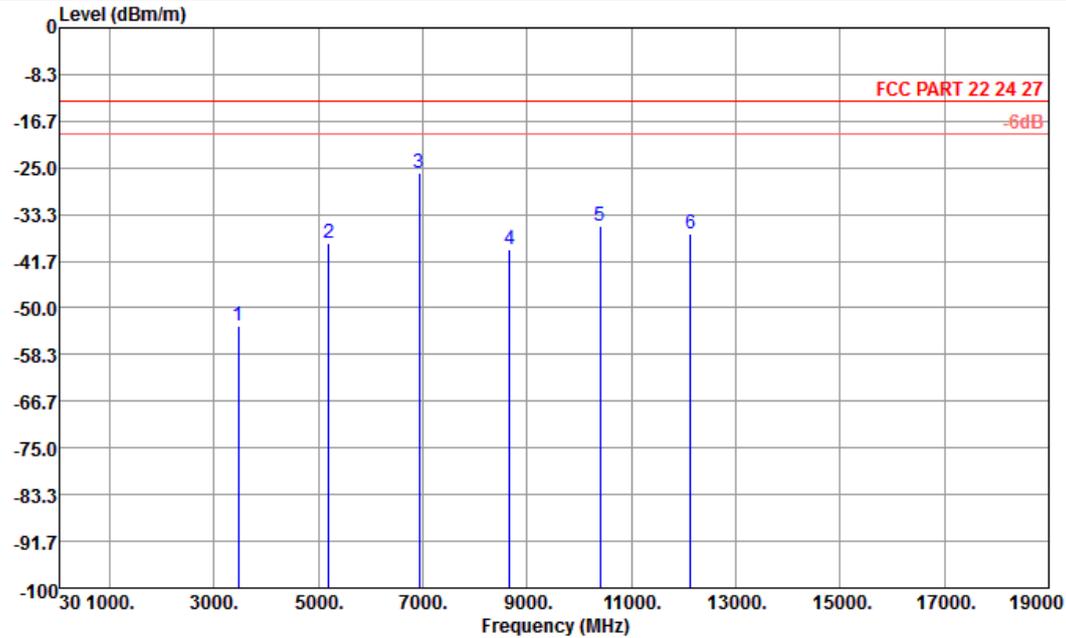


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 VERTICAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3465	-53.19	-13	-40.19	-66.05	-43.20	1.15	7.54	V	Pass
5197.5	-36.30	-13	-23.30	-56.68	-70.30	1.51	9.80	V	Pass
6930	-44.34	-13	-31.34	-67.67	-64.60	1.75	11.51	V	Pass
8662.5	-43.68	-13	-30.68	-69.58	-56.60	1.97	12.86	V	Pass



<b>Band :</b>	LTE Band 4	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	20MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Horizontal
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

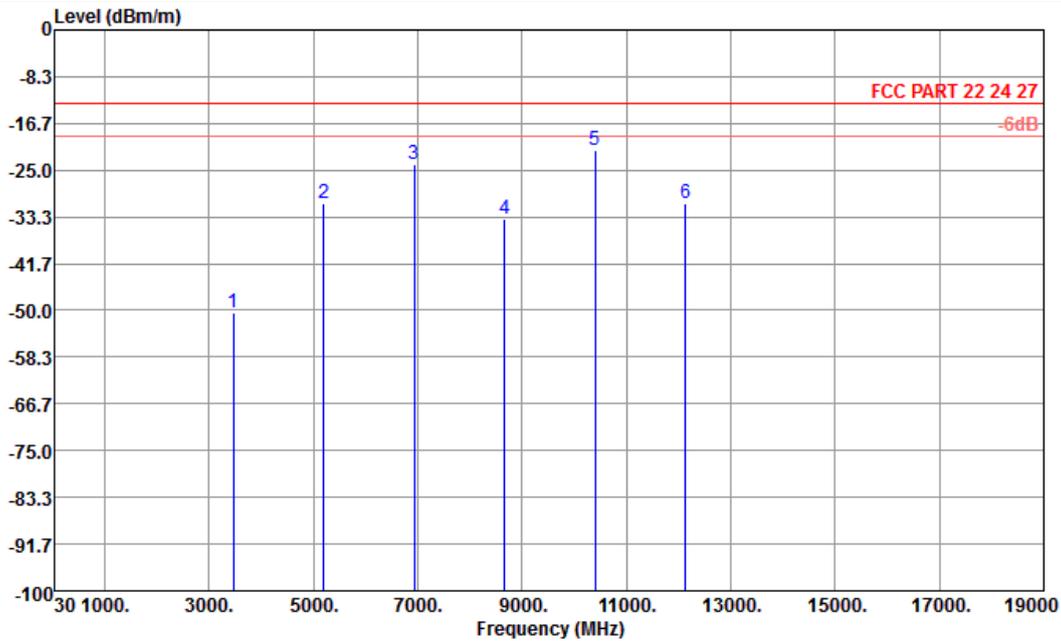


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 HORIZONTAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3465.00	-53.14	-13	-40.14	-64.22	-38.20	1.15	7.54	H	Pass
5197.50	-38.41	-13	-25.41	-58.61	-68.60	1.51	9.80	H	Pass
6930.00	-25.83	-13	-12.83	-51.21	-67.90	1.75	11.51	H	Pass
8662.50	-39.45	-13	-26.45	-65.71	-58.70	1.97	12.86	H	Pass
10395.00	-35.25	-13	-22.25	-65.19	-54.80	2.11	12.90	H	Pass
12127.50	-36.77	-13	-23.77	-70.45	-53.00	2.24	13.10	H	Pass



<b>Band :</b>	LTE Band 4	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	20MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Vertical
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

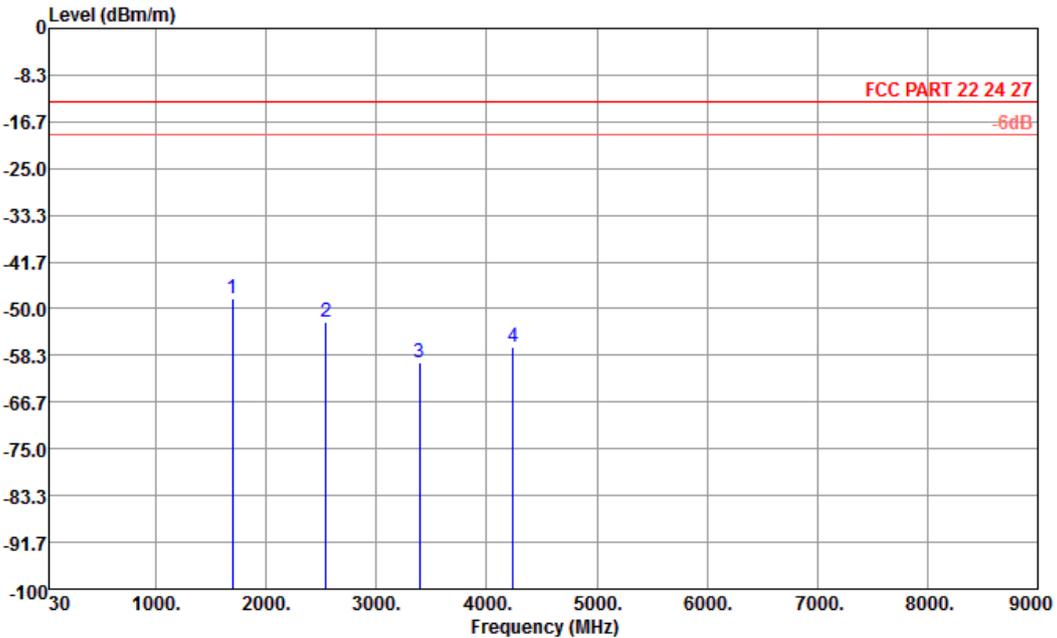


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 VERTICAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
3465	-50.42	-13	-37.42	-63.28	-43.20	1.15	7.54	V	Pass
5197.5	-30.99	-13	-17.99	-51.26	-70.30	1.51	9.80	V	Pass
6930	-23.84	-13	-10.84	-48.62	-64.60	1.75	11.51	V	Pass
8662.5	-33.60	-13	-20.60	-59.78	-56.60	1.97	12.86	V	Pass
10395	-21.46	-13	-8.46	-60.36	-53.60	2.11	12.90	V	Pass
12127.5	-30.80	-13	-17.80	-63.14	-52.20	2.24	13.10	V	Pass



<b>Band :</b>	LTE Band 5	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	1.4MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Horizontal
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

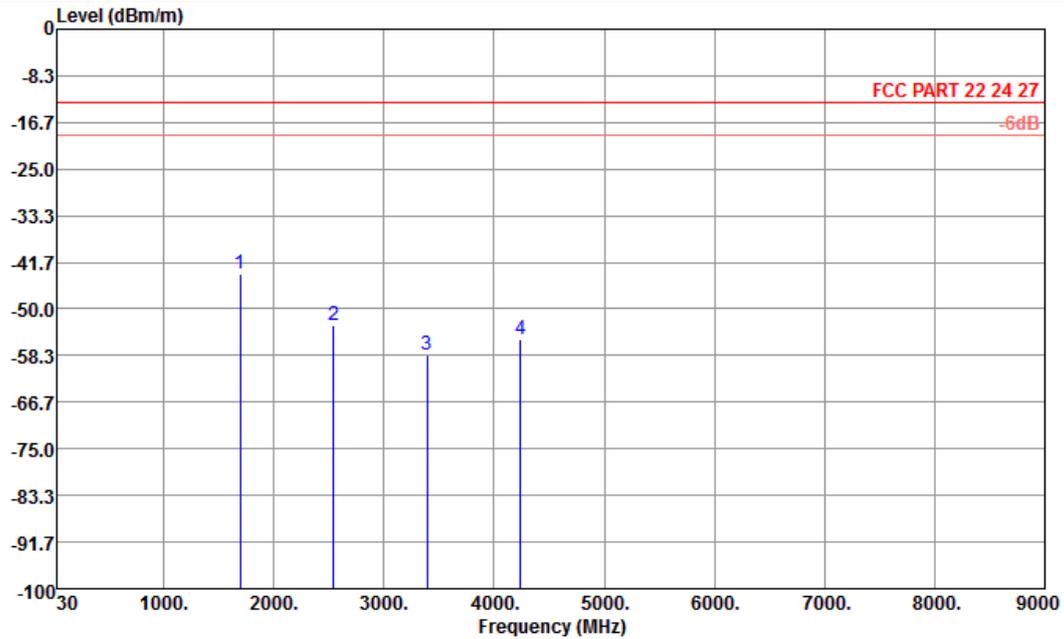


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 HORIZONTAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1696.6	-48.29	-13	-35.29	-63.32	-51.26	0.88	6.00	H	Pass
2544.9	-52.50	-13	-39.50	-72.11	-55.11	1.08	5.84	H	Pass
3393.2	-59.48	-13	-46.48	-70.08	-63.85	1.14	7.66	H	Pass
4241.5	-56.94	-13	-43.94	-71.70	-62.21	1.37	8.79	H	Pass



<b>Band :</b>	LTE Band 5	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	1.4MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Vertical
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

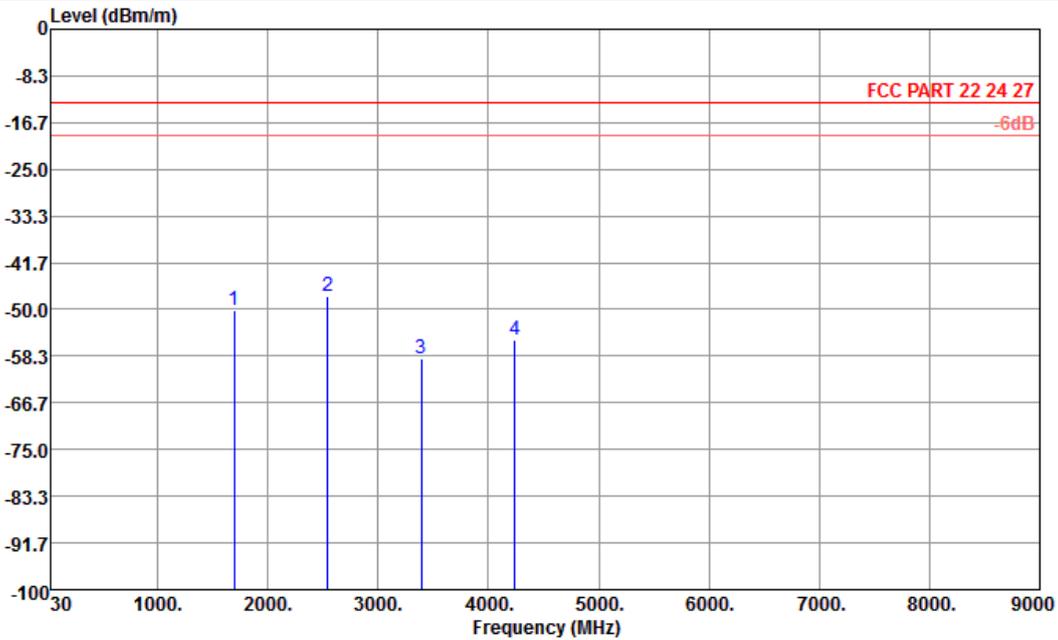


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 VERTICAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1696.6	-43.77	-13	-30.77	-57.11	-46.74	0.88	6.00	V	Pass
2544.9	-52.90	-13	-39.90	-71.75	-55.51	1.08	5.84	V	Pass
3393.2	-58.26	-13	-45.26	-70.09	-62.63	1.14	7.66	V	Pass
4241.5	-55.41	-13	-42.41	-70.63	-60.68	1.37	8.79	V	Pass



<b>Band :</b>	LTE Band 5	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	3MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Horizontal
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

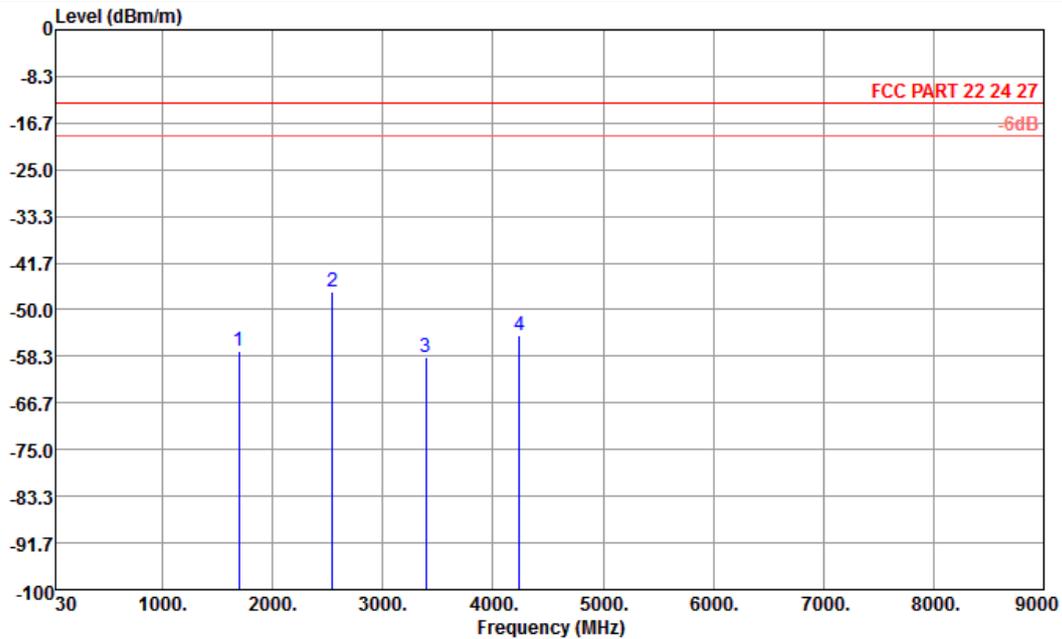


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 HORIZONTAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1695	-50.16	-13	-37.16	-64.82	-53.13	0.88	6.00	H	Pass
2542.5	-47.67	-13	-34.67	-69.93	-50.28	1.08	5.84	H	Pass
3390	-58.82	-13	-45.82	-69.42	-63.19	1.14	7.66	H	Pass
4237.5	-55.39	-13	-42.39	-71.15	-60.66	1.37	8.79	H	Pass



<b>Band :</b>	LTE Band 5	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	3MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Vertical
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

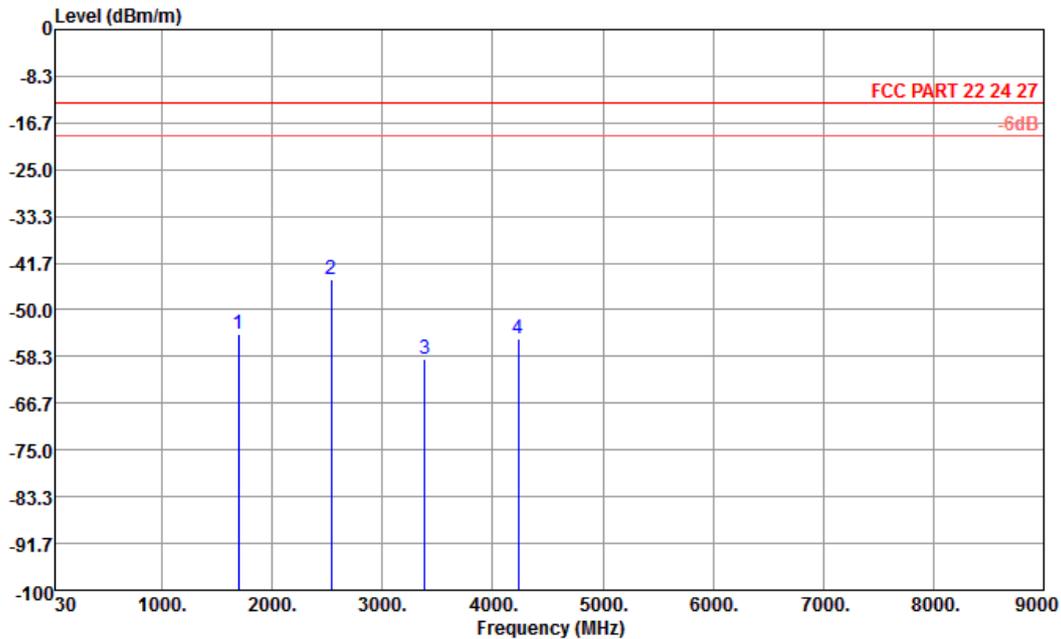


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 VERTICAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1695	-57.30	-13	-44.30	-67.93	-60.27	0.88	6.00	V	Pass
2542.5	-46.77	-13	-33.77	-67.67	-49.38	1.08	5.84	V	Pass
3390	-58.63	-13	-45.63	-70.46	-63.00	1.14	7.66	V	Pass
4237.5	-54.54	-13	-41.54	-69.76	-59.81	1.37	8.79	V	Pass



<b>Band :</b>	LTE Band 5	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	5MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Horizontal
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

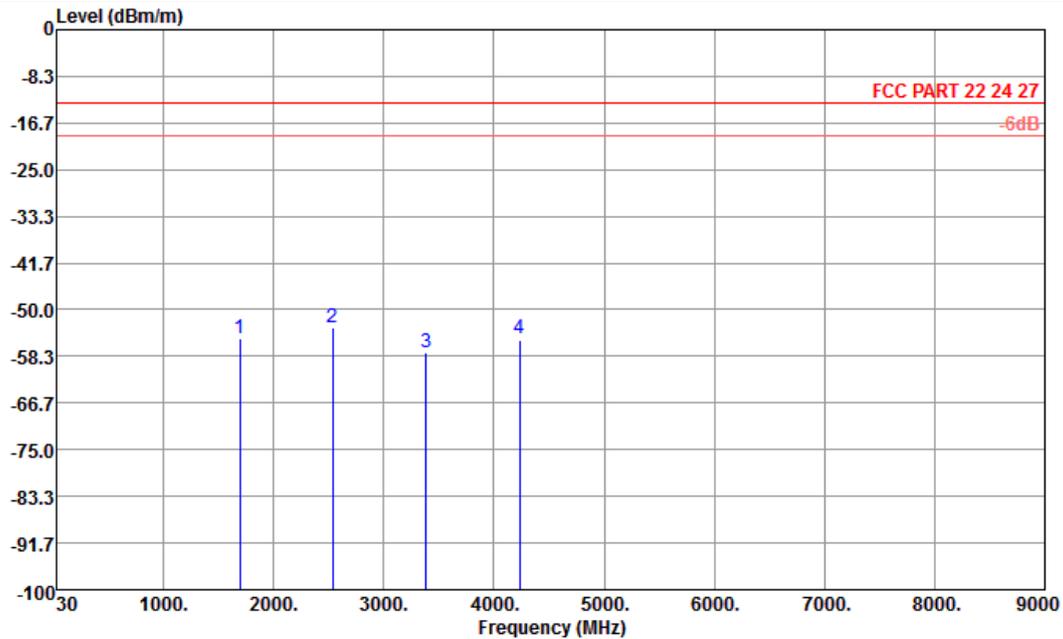


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 HORIZONTAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1693	-54.22	-13	-41.22	-67.14	-57.19	0.88	6.00	H	Pass
2539.5	-44.70	-13	-31.70	-68.56	-47.31	1.08	5.84	H	Pass
3386	-58.81	-13	-45.81	-69.41	-63.18	1.14	7.66	H	Pass
4232.5	-55.28	-13	-42.28	-70.04	-60.55	1.37	8.79	H	Pass



<b>Band :</b>	LTE Band 5	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	5MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Vertical
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

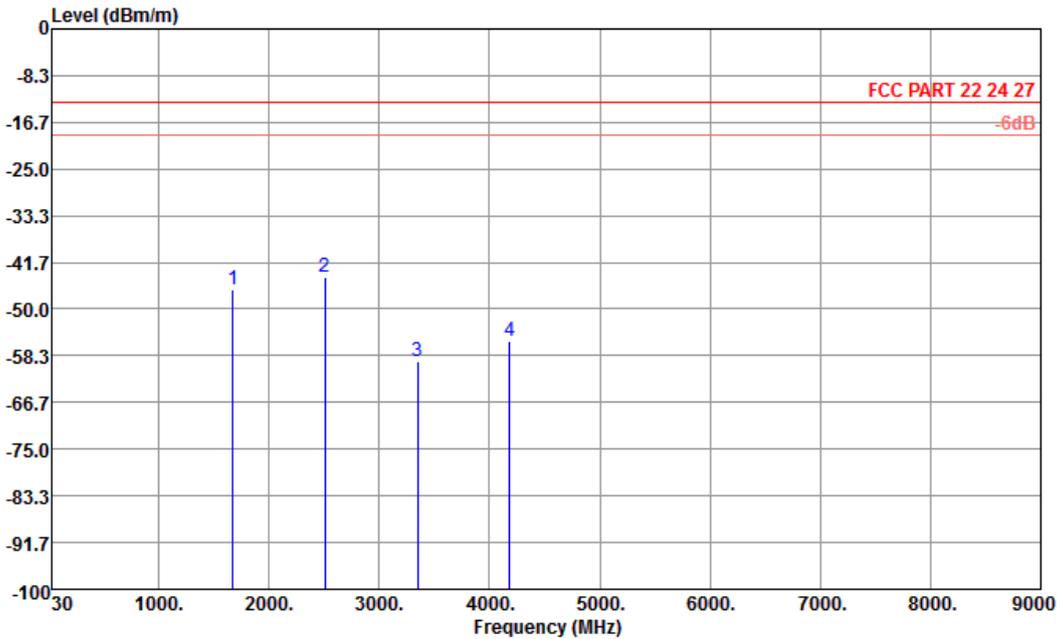


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 VERTICAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1693	-55.17	-13	-42.17	-65.80	-58.14	0.88	6.00	V	Pass
2539.5	-53.27	-13	-40.27	-72.12	-55.88	1.08	5.84	V	Pass
3386	-57.73	-13	-44.73	-69.56	-62.10	1.14	7.66	V	Pass
4232.5	-55.25	-13	-42.25	-70.47	-60.52	1.37	8.79	V	Pass



<b>Band :</b>	LTE Band 5	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	10MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Horizontal
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

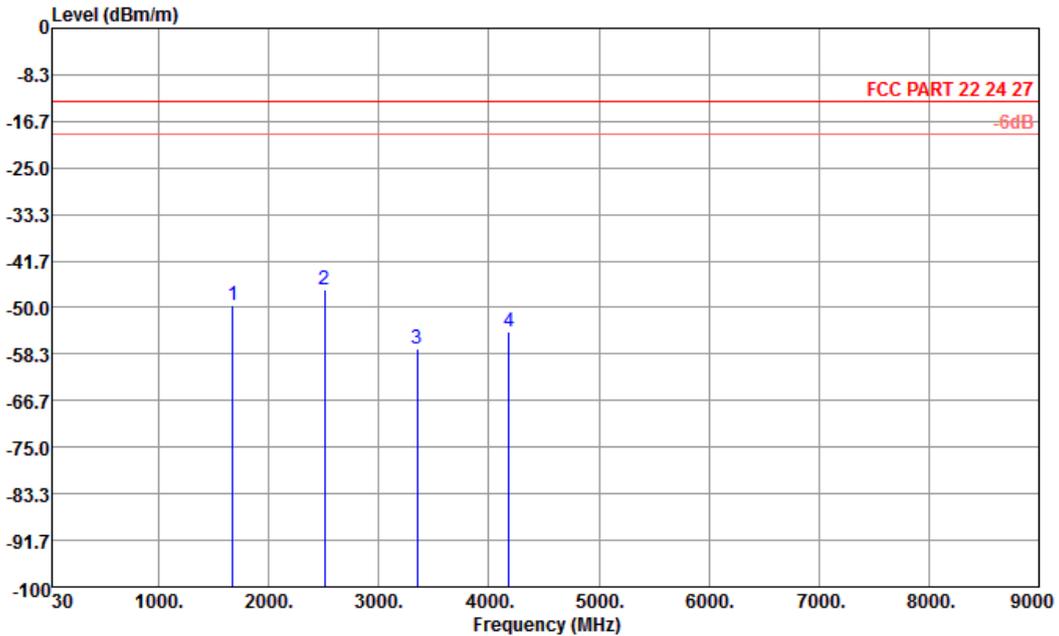


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 HORIZONTAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1673	-46.95	-13	-33.95	-62.62	-49.92	0.88	6.00	H	Pass
2509.5	-45.34	-13	-32.34	-68.27	-47.95	1.08	5.84	H	Pass
3346	-59.28	-13	-46.28	-69.88	-63.65	1.14	7.66	H	Pass
4182.5	-55.72	-13	-42.72	-70.48	-60.99	1.37	8.79	H	Pass



<b>Band :</b>	LTE Band 5	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	10MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Vertical
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

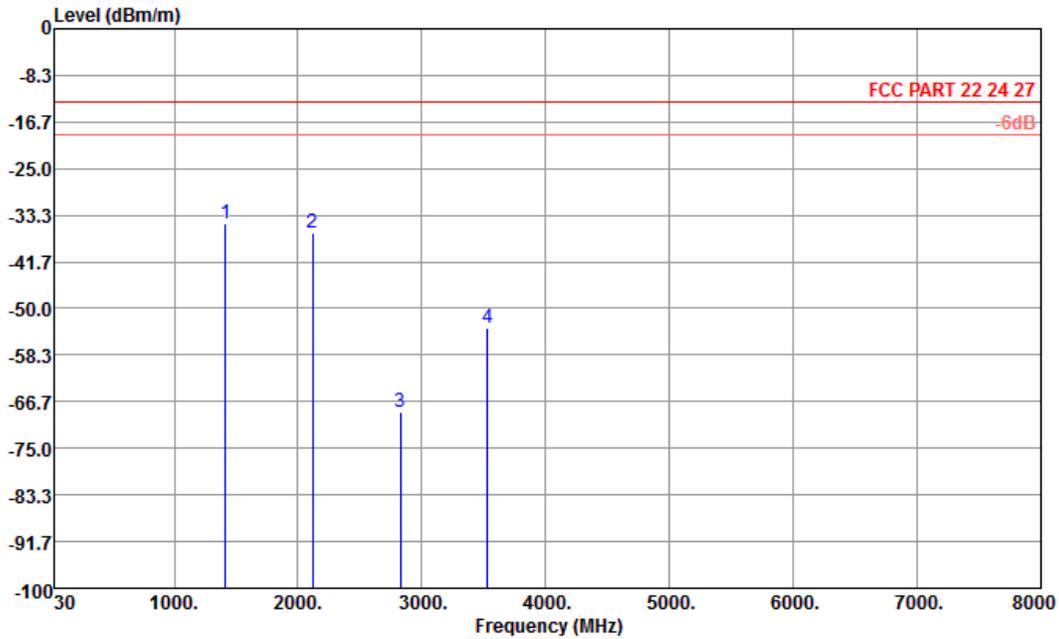


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 VERTICAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1673	-49.67	-13	-36.67	-62.23	-52.64	0.88	6.00	V	Pass
2509.5	-46.68	-13	-33.68	-67.59	-49.29	1.08	5.84	V	Pass
3346	-57.45	-13	-44.45	-69.28	-61.82	1.14	7.66	V	Pass
4182.5	-54.18	-13	-41.18	-69.40	-59.45	1.37	8.79	V	Pass



<b>Band :</b>	LTE Band 17	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	5MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Horizontal
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

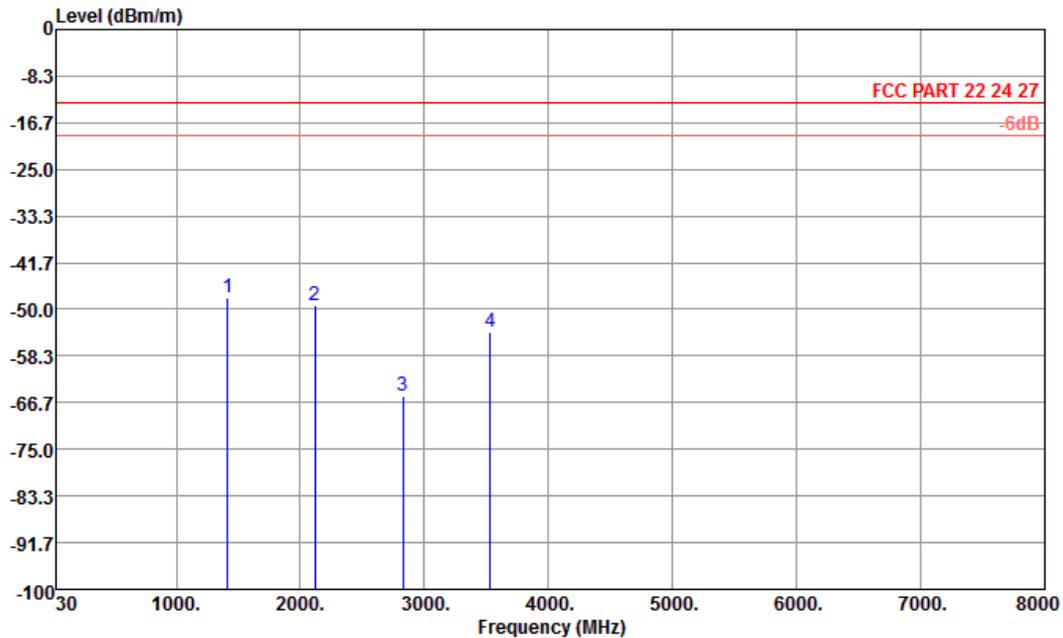


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 VERTICAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1413	-35.94	-13	-22.94	-52.81	-38.91	0.88	6.00	H	Pass
2119.5	-36.52	-13	-23.52	-61.30	-39.13	1.08	5.84	H	Pass
2826	-68.45	-13	-55.45	-79.05	-72.82	1.14	7.66	H	Pass
3532.5	-53.57	-13	-40.57	-68.33	-58.84	1.37	8.79	H	Pass



Band :	LTE Band 17	Temperature :	23~24°C
Test Mode :	5MHz, QPSK, RB Size 1, RB Offset 0	Relative Humidity :	43~44%
Test Engineer :	Stone Gu	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

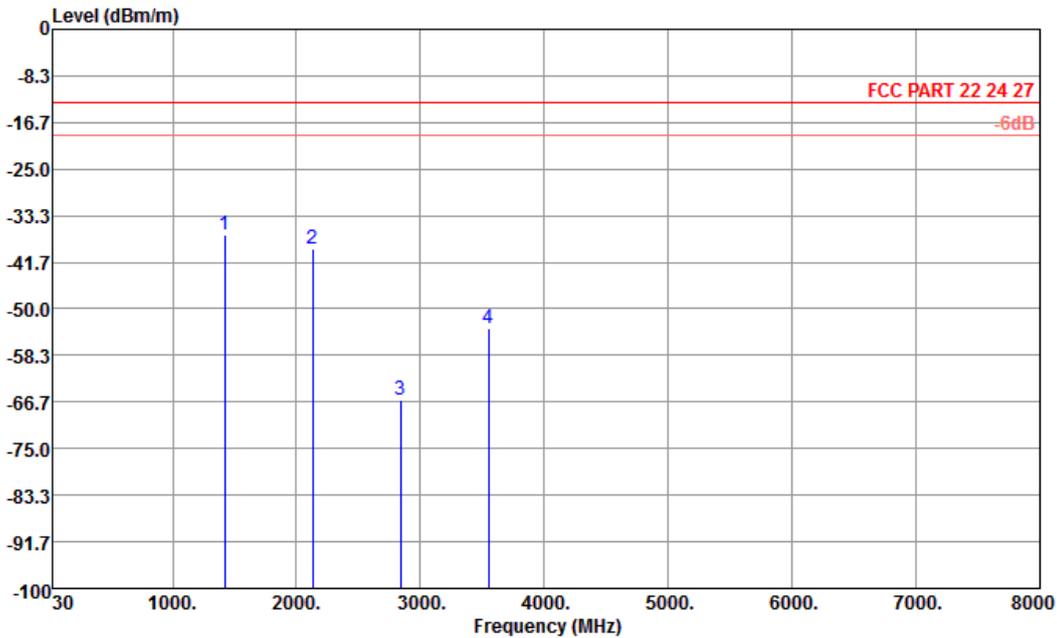


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 VERTICAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1413	-47.82	-13	-34.82	-60.55	-50.79	0.88	6.00	V	Pass
2119.5	-49.35	-13	-36.35	-69.49	-51.96	1.08	5.84	V	Pass
2826	-65.38	-13	-52.38	-77.21	-69.75	1.14	7.66	V	Pass
3532.5	-53.94	-13	-40.94	-69.16	-59.21	1.37	8.79	V	Pass



<b>Band :</b>	LTE Band 17	<b>Temperature :</b>	23~24°C
<b>Test Mode :</b>	10MHz, QPSK, RB Size 1, RB Offset 0	<b>Relative Humidity :</b>	43~44%
<b>Test Engineer :</b>	Stone Gu	<b>Polarization :</b>	Horizontal
<b>Remark :</b>	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

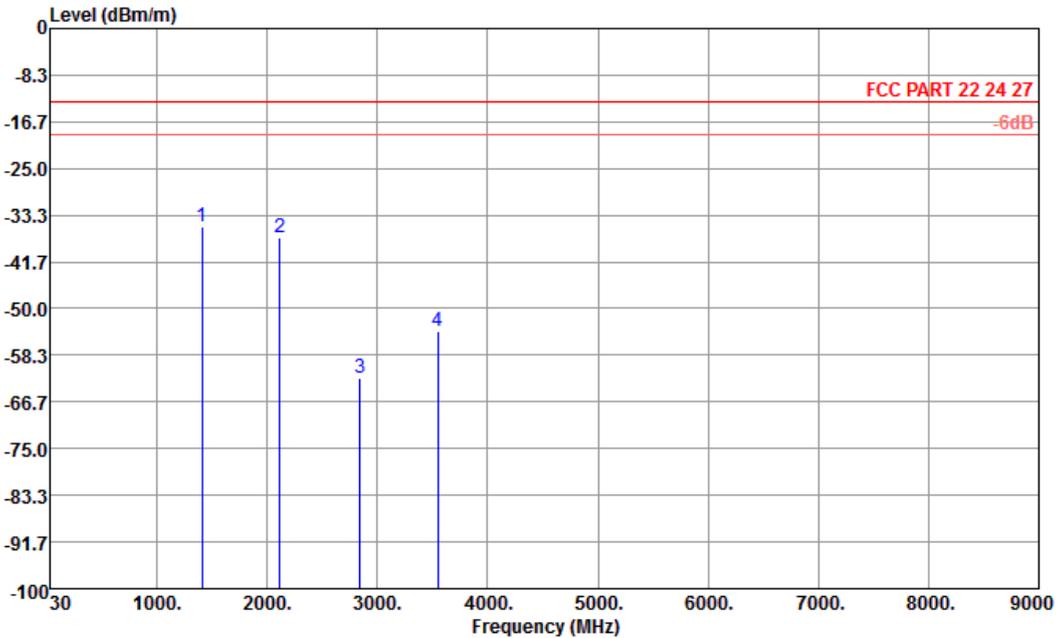


Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 HORIZONTAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1420	-36.85	-13	-23.85	-53.69	-39.82	0.88	6.00	H	Pass
2130	-39.33	-13	-26.33	-63.61	-41.94	1.08	5.84	H	Pass
2840	-66.33	-13	-53.33	-76.93	-70.70	1.14	7.66	H	Pass
3550	-53.35	-13	-40.35	-68.11	-58.62	1.37	8.79	H	Pass



Band :	LTE Band 17	Temperature :	23~24°C
Test Mode :	10MHz, QPSK, RB Size 1, RB Offset 0	Relative Humidity :	43~44%
Test Engineer :	Stone Gu	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



Site : 03CH01-KS  
 Condition : FCC PART 22 24 27 3m HF EIRP FACTOR-09020 VERTICAL

Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading ( dBm )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain ( dBi )	Polarization ( H/V )	Result
1420	-35.26	-13	-22.26	-49.29	-38.23	0.88	6.00	V	Pass
2130	-37.34	-13	-24.34	-59.84	-39.95	1.08	5.84	V	Pass
2840	-62.49	-13	-49.49	-74.32	-66.86	1.14	7.66	V	Pass
3550	-54.05	-13	-41.05	-69.27	-59.32	1.37	8.79	V	Pass

### 3.7 Frequency Stability Measurement

#### 3.7.1 Description of Frequency Stability Measurement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within  $\pm 0.00025\%$  ( $\pm 2.5\text{ppm}$ ) of the center frequency.

#### 3.7.2 Measuring Instruments

See list of measuring instruments of this test report.

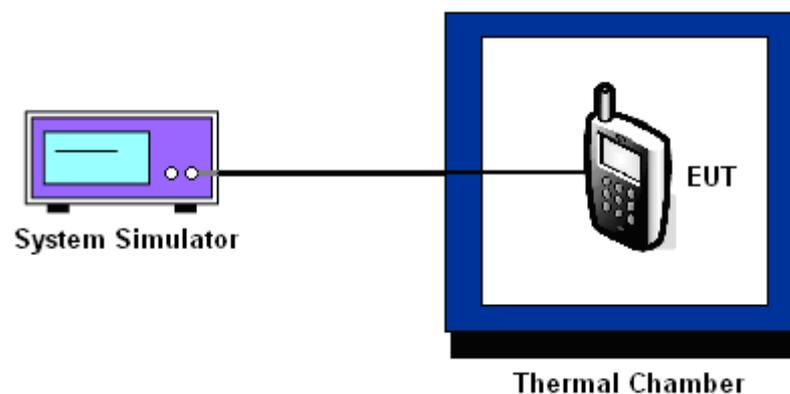
#### 3.7.3 Test Procedures for Temperature Variation

1. The EUT was set up in the thermal chamber and connected with the base station.
2. With power OFF, the temperature was decreased to  $-30^{\circ}\text{C}$  and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power OFF, the temperature was raised in  $10^{\circ}\text{C}$  step up to  $50^{\circ}\text{C}$ . The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.
4. If the EUT cannot be turned on at  $-30^{\circ}\text{C}$ , the testing lowest temperature will be raised in  $10^{\circ}\text{C}$  step until the EUT can be turned on.

#### 3.7.4 Test Procedures for Voltage Variation

1. The EUT was placed in a temperature chamber at  $25\pm 5^{\circ}\text{C}$  and connected with the base station.
2. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

#### 3.7.5 Test Setup



3.7.6 Test Result of Temperature Variation

Band :	LTE Band 2 (QPSK)		Limit (ppm) :	2.5	
Temperature (°C)	BW 1.4MHz		BW 3MHz		Result
	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)	
-30	-7.6	-0.004	7.1	0.004	PASS
-20	-8.4	-0.004	6.5	0.003	
-10	-8.4	-0.004	7.1	0.004	
0	-9.1	-0.005	-6.5	-0.003	
10	-6.7	-0.004	-8.4	-0.004	
20	-7.1	-0.004	-9.1	-0.005	
30	-5.1	-0.003	6.7	0.004	
40	-8.0	-0.004	-8.1	-0.004	
50	9.0	0.005	7.2	0.004	
55	10.3	0.005	-9.5	-0.005	

Note: The manufacturer declared that the EUT could work properly between temperatures 55°C.

Band :	LTE Band 2 (QPSK)		Limit (ppm) :	2.5	
Temperature (°C)	BW 5MHz		BW 10MHz		Result
	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)	
-30	-7.6	-0.004	8.4	0.004	PASS
-20	-9.5	-0.005	-9.5	-0.005	
-10	-4.9	-0.003	8.5	0.005	
0	6.6	0.004	-7.4	-0.004	
10	-8.1	-0.004	-9.5	-0.005	
20	7.2	0.004	-5.0	-0.003	
30	6.5	0.003	-6.1	-0.003	
40	9.1	0.005	-5.5	-0.003	
50	8.4	0.004	-8.1	-0.004	
55	-8.6	-0.005	11.2	0.006	

Note: The manufacturer declared that the EUT could work properly between temperatures 55°C.



Band :	LTE Band 2 (QPSK)		Limit (ppm) :	2.5	
Temperature (°C)	BW 15MHz		BW 20MHz		Result
	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)	
-30	-11.2	-0.006	-8.4	-0.004	PASS
-20	-10.6	-0.006	9.2	0.005	
-10	8.7	0.005	7.4	0.004	
0	-7.1	-0.004	-9.5	-0.005	
10	-9.7	-0.005	-6.1	-0.003	
20	-8.5	-0.005	-6.5	-0.003	
30	-7.6	-0.004	-5.3	-0.003	
40	-9.5	-0.005	6.7	0.004	
50	-11.6	-0.006	8.1	0.004	
55	-10.0	-0.005	-9.0	-0.005	

**Note:** The manufacturer declared that the EUT could work properly between temperatures 55°C.

Band :	LTE Band 2 (16QAM)		Limit (ppm) :	2.5	
Temperature (°C)	BW 1.4MHz		BW 3MHz		Result
	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)	
-30	-6.3	-0.003	5.7	0.003	PASS
-20	3.6	0.002	3.7	0.002	
-10	-6.9	-0.004	-4.4	-0.002	
0	7.3	0.004	0.5	0.000	
10	-10.4	-0.006	-18.6	-0.010	
20	-7.3	-0.004	1.1	0.001	
30	8.0	0.004	-20.6	-0.011	
40	3.2	0.002	-7.2	-0.004	
50	-3.5	-0.002	10.9	0.006	
55	-16.6	-0.009	-6.4	-0.003	

**Note:** The manufacturer declared that the EUT could work properly between temperatures 55°C.



Band :	LTE Band 2 (16QAM)		Limit (ppm) :	2.5	
Temperature (°C)	BW 5MHz		BW 10MHz		Result
	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)	
-30	-5.1	-0.003	5.1	0.003	PASS
-20	-9.2	-0.005	-13.7	-0.007	
-10	-8.7	-0.005	-7.3	-0.004	
0	-9.8	-0.005	-7.0	-0.004	
10	-14.1	-0.008	-13.8	-0.007	
20	11.5	0.006	-7.1	-0.004	
30	-13.1	-0.007	-12.5	-0.007	
40	-3.3	-0.002	9.8	0.005	
50	-17.6	-0.009	6.8	0.004	
55	-6.4	-0.003	-7.8	-0.004	

**Note:** The manufacturer declared that the EUT could work properly between temperatures 55°C.

Band :	LTE Band 2 (16QAM)		Limit (ppm) :	2.5	
Temperature (°C)	BW 15MHz		BW 20MHz		Result
	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)	
-30	-9.9	-0.005	-12.5	-0.007	PASS
-20	8.3	0.004	12.5	0.007	
-10	-7.3	-0.004	-1.7	-0.001	
0	-8.8	-0.005	-11.5	-0.006	
10	-18.3	-0.010	-3.9	-0.002	
20	-1.0	-0.001	-13.6	-0.007	
30	12.2	0.006	3.3	0.002	
40	-15.9	-0.008	-10.5	-0.006	
50	-1.9	-0.001	-11.6	-0.006	
55	-7.3	-0.004	-3.4	-0.002	

**Note:** The manufacturer declared that the EUT could work properly between temperatures 55°C.



Band :	LTE Band 4 (QPSK)		Limit (ppm) :	2.5	
Temperature (°C)	BW 1.4MHz		BW 3MHz		Result
	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)	
-30	-2.8	-0.002	3.3	0.002	PASS
-20	1.7	0.001	9.8	0.006	
-10	3.2	0.002	-2.7	-0.002	
0	1.7	0.001	-5.2	-0.003	
10	-3.7	-0.002	0.4	0.000	
20	2.7	0.002	-3.6	-0.002	
30	2.2	0.001	3.5	0.002	
40	-1.2	-0.001	5.0	0.003	
50	-3.0	-0.002	7.6	0.004	
55	3.2	0.002	3.8	0.002	

**Note:** The manufacturer declared that the EUT could work properly between temperatures 55°C.

Band :	LTE Band 4 (QPSK)		Limit (ppm) :	2.5	
Temperature (°C)	BW 5MHz		BW 10MHz		Result
	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)	
-30	1.7	0.001	3.2	0.002	PASS
-20	0.5	0.000	4.5	0.003	
-10	2.1	0.001	-2.8	-0.002	
0	6.8	0.004	1.7	0.001	
10	4.5	0.003	3.2	0.002	
20	-2.5	-0.001	8.1	0.005	
30	7.2	0.004	-1.2	-0.001	
40	3.2	0.002	-0.8	0.000	
50	8.7	0.005	2.1	0.001	
55	4.9	0.003	0.2	0.000	

**Note:** The manufacturer declared that the EUT could work properly between temperatures 55°C.



<b>Band :</b>	LTE Band 4 (QPSK)		<b>Limit (ppm) :</b>	2.5	
Temperature (°C)	BW 15MHz		BW 20MHz		Result
	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)	
-30	6.2	0.004	3.7	0.002	PASS
-20	3.3	0.002	4.1	0.002	
-10	9.8	0.006	-2.7	-0.002	
0	1.9	0.001	0.4	0.000	
10	1.4	0.001	2.2	0.001	
20	3.2	0.002	7.6	0.004	
30	8.1	0.005	3.1	0.002	
40	-1.2	-0.001	7.1	0.004	
50	4.4	0.003	8.9	0.005	
55	6.2	0.004	4.2	0.002	

Note: The manufacturer declared that the EUT could work properly between temperatures 55°C.

<b>Band :</b>	LTE Band 4 (16QAM)		<b>Limit (ppm) :</b>	2.5	
Temperature (°C)	BW 1.4MHz		BW 3MHz		Result
	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)	
-30	-8.0	-0.005	1.9	0.001	PASS
-20	7.5	0.004	-6.4	-0.004	
-10	-9.5	-0.005	-9.7	-0.006	
0	-8.1	-0.005	-8.5	-0.005	
10	6.5	0.004	-6.5	-0.004	
20	-7.5	-0.004	-10.2	-0.006	
30	-8.5	-0.005	8.7	0.005	
40	-8.4	-0.005	-5.6	-0.003	
50	-5.1	-0.003	11.2	0.006	
55	5.6	0.003	-7.9	-0.005	

Note: The manufacturer declared that the EUT could work properly between temperatures 55°C.



Band :		LTE Band 4 (16QAM)		Limit (ppm) :		2.5
Temperature (°C)	BW 5MHz		BW 10MHz		Result	
	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)		
-30	5.0	0.003	3.9	0.002	PASS	
-20	6.5	0.004	-7.8	-0.005		
-10	6.7	0.004	-5.6	-0.003		
0	-9.5	-0.005	7.1	0.004		
10	-5.6	-0.003	10.3	0.006		
20	-6.8	-0.004	-6.8	-0.004		
30	-7.1	-0.004	-9.4	-0.005		
40	-9.4	-0.005	-7.8	-0.005		
50	-8.2	-0.005	-5.1	-0.003		
55	-7.3	-0.004	-6.6	-0.004		

**Note:** The manufacturer declared that the EUT could work properly between temperatures 55°C.

Band :		LTE Band 4 (16QAM)		Limit (ppm) :		2.5
Temperature (°C)	BW 15MHz		BW 20MHz		Result	
	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)		
-30	7.3	0.004	5.5	0.003	PASS	
-20	-7.5	-0.004	-9.8	-0.006		
-10	8.3	0.005	7.2	0.004		
0	-6.5	-0.004	-3.6	-0.002		
10	-6.7	-0.004	4.5	0.003		
20	-9.8	-0.006	6.9	0.004		
30	-9.8	-0.006	-10.6	-0.006		
40	-4.5	-0.003	-10.9	-0.006		
50	-6.7	-0.004	-11.3	-0.007		
55	-8.0	-0.005	6.8	0.004		

**Note:** The manufacturer declared that the EUT could work properly between temperatures 55°C.



<b>Band :</b>	LTE Band 5 (QPSK)		<b>Limit (ppm) :</b>	2.5	
Temperature (°C)	BW 1.4MHz		BW 3MHz		Result
	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)	
-30	6.5	0.009	-8.7	-0.012	PASS
-20	9.5	0.013	-5.9	-0.008	
-10	-14.2	-0.020	-8.4	-0.012	
0	-6.8	-0.010	-9.7	-0.014	
10	-5.4	-0.008	-6.9	-0.010	
20	-6.9	-0.010	-4.6	-0.006	
30	-5.4	-0.008	-4.1	-0.006	
40	-9.1	-0.013	-6.6	-0.009	
50	10.2	0.014	-8.5	-0.012	
55	9.5	0.013	-7.2	-0.010	

Note: The manufacturer declared that the EUT could work properly between temperatures 55°C.

<b>Band :</b>	LTE Band 5 (QPSK)		<b>Limit (ppm) :</b>	2.5	
Temperature (°C)	BW 5MHz		BW 10MHz		Result
	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)	
-30	3.2	0.005	2.6	0.004	PASS
-20	5.6	0.008	7.4	0.010	
-10	1.6	0.002	4.3	0.006	
0	3.8	0.005	-2.8	-0.004	
10	-6.3	-0.009	4.4	0.006	
20	3.2	0.005	5.2	0.007	
30	-7.0	-0.010	-3.5	-0.005	
40	-6.5	-0.009	2.6	0.004	
50	-3.3	-0.005	1.1	0.002	
55	-2.9	-0.004	-1.2	-0.002	

Note: The manufacturer declared that the EUT could work properly between temperatures 55°C.



Band :	LTE Band 5 (16QAM)		Limit (ppm) :	2.5	
Temperature (°C)	BW 1.4MHz		BW 3MHz		Result
	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)	
-30	3.9	0.005	3.2	0.005	PASS
-20	3.6	0.005	-1.5	-0.002	
-10	0.8	0.001	-0.5	-0.001	
0	-5.2	-0.007	0.4	0.001	
10	0.7	0.001	-2.7	-0.004	
20	-1.8	-0.003	3.2	0.005	
30	5.2	0.007	3.7	0.005	
40	2.5	0.004	-1.2	-0.002	
50	1.4	0.002	1.5	0.002	
55	6.2	0.009	1.2	0.002	

**Note:** The manufacturer declared that the EUT could work properly between temperatures 55°C.

Band :	LTE Band 5 (16QAM)		Limit (ppm) :	2.5	
Temperature (°C)	BW 5MHz		BW 10MHz		Result
	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)	
-30	-1.2	-0.002	3.7	0.005	PASS
-20	1.1	0.002	2.9	0.004	
-10	-2.2	-0.003	1.9	0.003	
0	1.4	0.002	-0.4	-0.001	
10	5.0	0.007	4.1	0.006	
20	2.8	0.004	-1.2	-0.002	
30	-3.6	-0.005	2.1	0.003	
40	3.3	0.005	2.6	0.004	
50	-2.6	-0.004	2.3	0.003	
55	-1.6	-0.002	1.6	0.002	

**Note:** The manufacturer declared that the EUT could work properly between temperatures 55°C.



Band :	LTE Band 17 (QPSK)		Limit (ppm) :	2.5	
Temperature (°C)	BW 5MHz		BW 10MHz		Result
	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)	
-30	-1.1	-0.002	-2.3	-0.003	PASS
-20	1.2	0.002	-4.4	-0.006	
-10	2.9	0.004	-0.6	-0.001	
0	3.3	0.005	-1.1	-0.002	
10	-1.5	-0.002	-3.9	-0.005	
20	-0.9	-0.001	-1.2	-0.002	
30	-2.5	-0.004	-2.9	-0.004	
40	-1.3	-0.002	-1.9	-0.003	
50	-3.0	-0.004	-0.9	-0.001	
55	-1.9	-0.003	-0.4	-0.001	

Note: The manufacturer declared that the EUT could work properly between temperatures 55°C.

Band :	LTE Band 17 (16QAM)		Limit (ppm) :	2.5	
Temperature (°C)	BW 5MHz		BW 10MHz		Result
	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)	
-30	-0.8	-0.001	-3.3	-0.005	PASS
-20	-1.3	-0.002	-1.4	-0.002	
-10	2.2	0.003	-0.3	0.000	
0	2.8	0.004	-1.3	-0.002	
10	-0.9	-0.001	-3.2	-0.005	
20	-0.1	0.000	-1.5	-0.002	
30	-1.5	-0.002	-2.5	-0.004	
40	-1.9	-0.003	-3.9	-0.005	
50	-3.2	-0.005	-0.3	0.000	
55	-1.2	-0.002	-0.1	0.000	

Note: The manufacturer declared that the EUT could work properly between temperatures 55°C.



3.7.7 Test Result of Voltage Variation

Band	Bandwidth	Voltage (Volt)	Freq. Dev. (Hz)	Deviation (ppm)	Limit (ppm)	Result
LTE Band 2 (QPSK)	1.4M	3.7	-5.3	-0.003	2.5	PASS
		BEP	3.3	0.002		
		4.2	-12.4	-0.007		
	3M	3.7	-12.4	-0.007		
		BEP	-12.3	-0.007		
		4.2	3.3	0.002		
	5M	3.7	-4.8	-0.003		
		BEP	-16.3	-0.009		
		4.2	5.0	0.003		
	10M	3.7	5.0	0.003		
		BEP	13.5	0.007		
		4.2	-16.3	-0.009		
	15M	3.7	5.9	0.003		
		BEP	-16.3	-0.009		
		4.2	8.3	0.004		
	20M	3.7	-4.8	-0.003		
		BEP	-12.4	-0.007		
		4.2	-8.6	-0.005		



Band	Bandwidth	Voltage (Volt)	Freq. Dev. (Hz)	Deviation (ppm)	Limit (ppm)	Result
LTE Band 2 (16QAM)	1.4M	3.7	-4.9	-0.003	2.5	PASS
		BEP	-5.5	-0.003		
		4.2	-3.2	-0.002		
	3M	3.7	-6.8	-0.004		
		BEP	-12.3	-0.007		
		4.2	3.3	0.002		
	5M	3.7	-13.7	-0.007		
		BEP	-15.6	-0.008		
		4.2	-11.5	-0.006		
	10M	3.7	-12.4	-0.007		
		BEP	-4.8	-0.003		
		4.2	-16.3	-0.009		
	15M	3.7	5.0	0.003		
		BEP	2.6	0.001		
		4.2	8.3	0.004		
20M	3.7	5.3	0.003			
	BEP	5.9	0.003			
	4.2	13.5	0.007			



Band	Bandwidth	Voltage (Volt)	Freq. Dev. (Hz)	Deviation (ppm)	Limit (ppm)	Result
LTE Band 4 (QPSK)	1.4M	3.7	-0.6	0.000	2.5	PASS
		BEP	-10.3	-0.006		
		4.2	3.9	0.002		
	3M	3.7	3.9	0.002		
		BEP	7.3	0.004		
		4.2	5.8	0.003		
	5M	3.7	-9.8	-0.006		
		BEP	-7.5	-0.004		
		4.2	-6.8	-0.004		
	10M	3.7	-9.8	-0.006		
		BEP	-9.1	-0.005		
		4.2	8.6	0.005		
	15M	3.7	5.5	0.003		
		BEP	7.0	0.004		
		4.2	6.3	0.004		
	20M	3.7	4.5	0.003		
		BEP	4.9	0.003		
		4.2	3.2	0.002		



Band	Bandwidth	Voltage (Volt)	Freq. Dev. (Hz)	Deviation (ppm)	Limit (ppm)	Result
LTE Band 4 (16QAM)	1.4M	3.7	1.9	0.001	2.5	PASS
		BEP	3.2	0.002		
		4.2	1.4	0.001		
	3M	3.7	7.3	0.004		
		BEP	-8.6	-0.005		
		4.2	-9.8	-0.006		
	5M	3.7	-2.3	-0.001		
		BEP	4.8	0.003		
		4.2	0.6	0.000		
	10M	3.7	1.4	0.001		
		BEP	-3.9	-0.002		
		4.2	3.2	0.002		
	15M	3.7	6.5	0.004		
		BEP	5.4	0.003		
		4.2	4.6	0.003		
	20M	3.7	-2.9	-0.002		
		BEP	-7.3	-0.004		
		4.2	-3.8	-0.002		



Band	Bandwidth	Voltage (Volt)	Freq. Dev. (Hz)	Deviation (ppm)	Limit (ppm)	Result
LTE Band 5 (QPSK)	1.4M	3.7	3.0	0.004	2.5	PASS
		BEP	2.9	0.004		
		4.2	-4.2	-0.006		
	3M	3.7	-1.8	-0.003		
		BEP	-3.5	-0.005		
		4.2	-4.0	-0.006		
	5M	3.7	3.6	0.005		
		BEP	4.9	0.007		
		4.2	-2.2	-0.003		
	10M	3.7	-3.5	-0.005		
		BEP	-3.9	-0.005		
		4.2	5.0	0.007		

Band	Bandwidth	Voltage (Volt)	Freq. Dev. (Hz)	Deviation (ppm)	Limit (ppm)	Result
LTE Band 5 (16QAM)	1.4M	3.7	5.1	0.007	2.5	PASS
		BEP	3.9	0.005		
		4.2	7.4	0.010		
	3M	3.7	0.5	0.001		
		BEP	4.3	0.006		
		4.2	-0.1	0.000		
	5M	3.7	1.1	0.002		
		BEP	0.5	0.001		
		4.2	0.4	0.001		
	10M	3.7	-0.3	0.000		
		BEP	3.4	0.005		
		4.2	2.2	0.003		



Band	Bandwidth	Voltage (Volt)	Freq. Dev. (Hz)	Deviation (ppm)	Limit (ppm)	Result
LTE Band 17 (QPSK)	5M	3.7	-2.9	-0.004	2.5	PASS
		BEP	-1.7	-0.002		
		4.2	-1.2	-0.002		
	10M	3.7	2.1	0.003		
		BEP	-5.9	-0.008		
		4.2	-2.9	-0.004		

Band	Bandwidth	Voltage (Volt)	Freq. Dev. (Hz)	Deviation (ppm)	Limit (ppm)	Result
LTE Band 17 (16QAM)	5M	3.7	-2.2	-0.003	2.5	PASS
		BEP	-0.8	-0.001		
		4.2	-1.1	-0.002		
	10M	3.7	2.8	0.004		
		BEP	-5.8	-0.008		
		4.2	-2.5	-0.004		

**Note:**

- 1. Normal Voltage = 3.7V.
- 2. Battery End Point (BEP) = 3.5 V.



## 4 List of Measuring Equipments

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Data	Due Date	Remark
Spectrum Analyzer	R&S	FSP40	100319	9kHz~40GHz	Dec. 29, 2012	Jan. 26, 2013~ Mar. 25, 2013	Dec. 28, 2013	Conducted (TH01-KS)
DC Power Supply	GWINSTEK	GPS-3030D	E1884515	N/A	Aug. 22, 2012	Jan. 26, 2013~ Mar. 25, 2013	Aug. 21, 2013	Conducted (TH01-KS)
Thermal Chamber	Ten Billion	TTC-B3S	TBN-960502	N/A	Dec. 29, 2012	Jan. 26, 2013~ Mar. 25, 2013	Dec. 28, 2013	Conducted (TH01-KS)
EMI Test Receiver	R&S	ESCI	100534	9kHz~3GHz	Nov. 08, 2012	Mar. 08, 2013	Nov. 07, 2013	Radiation (03CH01-KS)
Spectrum Analyzer	R&S	FSP30	100400	9kHz~30GHz	Jun. 01, 2012	Mar. 08, 2013	May 31, 2013	Radiation (03CH01-KS)
Bilog Antenna	SCHAFFNER	CBL6112D	23182	25MHz~2GHz	Dec. 07, 2012	Mar. 08, 2013	Dec. 06, 2013	Radiation (03CH01-KS)
Double Ridge Horn Antenna	EMCO	3117	00075959	1GHz~18GHz	Jan. 06, 2013	Mar. 08, 2013	Jan. 05, 2014	Radiation (03CH01-KS)
Amplifier	com-power	PA-103A	161069	1MHz~1GHz	Jun. 01, 2012	Mar. 08, 2013	May 31, 2013	Radiation (03CH01-KS)
Amplifier	Agilent	8449B	3008A02370	1GHz~26.5GHz	Dec. 29, 2012	Mar. 08, 2013	Dec. 28, 2013	Radiation (03CH01-KS)
SHF-EHF Horn	Schwarzbeck	BBHA 9170	9170249	15GHz~40GHz	Nov. 23, 2012	Mar. 08, 2013	Nov. 22, 2013	Radiation (03CH01-KS)
Loop Antenna	R&S	HFH2-Z2	860004/001	9KHz ~ 30MHz	Jul. 03, 2012	Mar. 08, 2013	Jul. 02, 2014	Radiation (03CH01-KS)
LTE Base Station	Anritsu	MT8820C	6201074235	LTE_FDD full band	Nov. 29, 2012	Jan. 26, 2013~ Mar. 25, 2013	Nov. 28, 2013	-



## 5 Uncertainty of Evaluation

### Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	2.54
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### Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	4.72
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## **Appendix A. Photographs of EUT**

Please refer to Sporton report number EP312303 as below.