

# FCC REPORT

## (LTE)

**Applicant:** NEXUS TELECOM SERVICES (HK) LIMITED

**Address of Applicant:** R112, 11/F Hollywood Plaza, Mangkok, Kowloon, Hong Kong

### Equipment Under Test (EUT)

**Product Name:** MOBILE PHONE

**Model No.:** GO1005

**Trade mark:** GOMOBILE

**FCC ID:** 2AHDFGO1005

**Applicable standards:** FCC CFR Title 47 Part 2  
FCC CFR Title 47 Part24 Subpart E

**Date of sample receipt:** 10 Nov., 2015

**Date of Test:** 10 Nov., to 16 Dec., 2015

**Date of report issued:** 17 Dec., 2015

**Test Result:** PASS\*

\* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



Bruce Zhang  
Laboratory Manager

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

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

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**2. Version**

Version No.	Date	Description
00	17 Dec., 2015	Original

**Tested by:****Date:**

17 Dec., 2015

**Test Engineer****Reviewed by:****Date:**

17 Dec., 2015

**Project Engineer**

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## 4. Test Summary

Test Item	Section in CFR 47	Result
RF Exposure (SAR)	Part 1.1307 Part 2.1093	Pass(Please refer to SAR Report)
RF Output Power	Part 2.1046 Part 24.232 (c)	Pass
Peak-to-Average Ratio	Part 24.232 (d)	Pass
Modulation Characteristics	Part 2.1047	Pass
99% & -26 dB Occupied Bandwidth	Part 2.1049 Part 24.238	Pass
Spurious Emissions at Antenna Terminal	Part 2.1051 Part 24.238 (a)	Pass
Field Strength of Spurious Radiation	Part 2.1053 Part 24.238 (a)	Pass
Out of band emission, Band Edge	Part 24.238 (a)	Pass
Frequency stability vs. temperature	Part 2.1055(a)(1)(b)	Pass
Frequency stability vs. voltage	Part 2.1055(d)(1)(2)	Pass

*Pass: The EUT complies with the essential requirements in the standard.*

## 5. General Information

### 5.1 Client Information

Applicant:	NEXUS TELECOM SERVICES (HK) LIMITED
Address of Applicant:	R112, 11/F Hollywood Plaza, Mangkok, Kowloon, Hong Kong
Manufacturer:	TEM MOBILE LIMITED
Address of Manufacturer:	No 1708, Cangsong Building, Tairan 6 Road, Futian ShenZhen, China

### 5.2 General Description of E.U.T.

Product Name:	MOBILE PHONE
Model No.:	GO1005
Operation Frequency range:	LTE Band 2: TX: 1850MHz-1910MHz, RX: 1930MHz-1990MHz
Modulation type:	QPSK, 16QAM
Antenna type:	Internal Antenna
Antenna gain:	LTE Band 2: 2dBi
AC adapter:	Input:100-240V AC, 50/60Hz 0.2A Output:5V DC MAX 1.0A
Power supply:	Rechargeable Li-ion Battery DC3.7V-2600mAh

**Operation Frequency List:**

LTE Band 2(1.4MHz)		LTE Band 2(3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
18607	1850.70	18615	1851.50
18608	1850.80	18616	1851.60
....	....	....	....
18899	1879.90	18899	1879.90
18900	1880.00	18900	1880.00
18901	1880.10	18901	1880.10
...	...	...	...
19193	1909.20	19185	1908.40
19194	1909.30	19186	1908.50
LTE Band 2(5MHz)		LTE Band 2(10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
18625	1852.50	18650	1855.00
18626	1852.60	18651	1855.10
....	....	....	....
18899	1879.90	18899	1879.90
18900	1880.00	18900	1880.00
18901	1880.10	18901	1880.10
...	...	...	...
19175	1907.40	19150	1904.90
19176	1907.50	19151	1905.00
LTE Band 2(15MHz)		LTE Band 2(20MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
18675	1857.50	18700	1860.00
18676	1857.60	18701	1860.10
....	....	....	....
18899	1879.90	18899	1879.90
18900	1880.00	18900	1880.00
18901	1880.10	18901	1880.10
...	...	...	...
19125	1902.40	19100	1899.90
19126	1902.50	19101	1900.00

Regards to the operating frequency range, the lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channels as below:

LTE Band 2(1.4MHz)			LTE Band 2(3MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	18607	1850.70	Lowest channel	18615	1851.50
Middle channel	18900	1880.00	Middle channel	18900	1880.00
Highest channel	19193	1909.30	Highest channel	19185	1908.50
LTE Band 2(5MHz)			LTE Band 2(10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	18625	1852.50	Lowest channel	18650	1855.00
Middle channel	18900	1880.00	Middle channel	18900	1880.00
Highest channel	19175	1907.50	Highest channel	19150	1905.00
LTE Band 2(15MHz)			LTE Band 2(20MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	18675	1857.50	Lowest channel	18700	1860.00
Middle channel	18900	1880.00	Middle channel	18900	1880.00
Highest channel	19125	1902.50	Highest channel	19100	1900.00

### 5.3 Test modes

Data mode (LTE band 2(QPSK))	Keep the EUT in data communicating mode on LTE band 2(QPSK). ( <i>LTE band2(1.4MHz), LTE band2(3MHz), LTE band2(5MHz), LTE band2(10MHz), LTE band2(15MHz), LTE band2(20MHz)</i> )
Data mode (LTE band 2(16QAM))	Keep the EUT in data communicating mode on LTE band 2(16QAM). ( <i>LTE band2(1.4MHz), LTE band2(3MHz), LTE band2(5MHz), LTE band2(10MHz), LTE band2(15MHz), LTE band2(20MHz)</i> )
Remark :	Just the worst case data were shown in the report.

### 5.4 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is filing to comply with Section Part 24 subpart E, of the FCC CFR 47 Rules.

### 5.5 Test Methodology

Both conducted and radiated testing were performed according to the procedures document on TIA/EIA 603 and FCC CFR 47 clause 2.1046, 2.1047, 2.1049, 2.1051, 2.1053, 2.1055 and 2.1057

### 5.6 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

● **FCC - Registration No.: 817957**

Shenzhen Zhongjian Nanfang Testing Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in out files. Registration 817957, February 27, 2012.

● **IC - Registration No.: 10106A-1**

The 3m Semi-anechoic chamber of Shenzhen Zhongjian Nanfang Testing Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

● **CNAS - Registration No.: CNAS L6048**

Shenzhen Zhongjian Nanfang Testing Co., Ltd. is accredited to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L6048.

### 5.7 Laboratory Location

Shenzhen Zhongjian Nanfang Testing Co., Ltd.  
Address: No.B-C, 1/F., Building 2, Laodong No.2 Industrial Park, Xixiang Road,  
Bao'an District, Shenzhen, Guangdong, China  
Tel: +86-755-23118282  
Fax: +86-755-23116366

## 5.8 Test Instruments list

Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
3m SAC	SAEMC	9(L)*6(W)* 6(H)	CCIS0001	08-23-2014	08-22-2017
BiConiLog Antenna	SCHWARZBECK	VULB9163	CCIS0005	03-28-2015	03-28-2016
Horn Antenna	SCHWARZBECK	BBHA9120D	CCIS0006	03-28-2015	03-28-2016
Pre-amplifier (10kHz-1.3GHz)	HP	8447D	CCIS0003	04-01-2015	03-31-2016
Pre-amplifier (1GHz-18GHz)	Compliance Direction Systems Inc.	PAP-1G18	CCIS0011	04-01-2015	03-31-2016
Pre-amplifier (18-26.5GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	04-01-2015	03-31-2016
Horn Antenna	ETS-LINDGREN	3160	GTS217	04-01-2015	03-31-2016
Spectrum analyzer 9k-30GHz	Rohde & Schwarz	FSP30	CCIS0023	03-28-2015	03-28-2016
EMI Test Receiver	Rohde & Schwarz	ESRP7	CCIS0167	03-28-2015	03-28-2016
Loop antenna	Laplace instrument	RF300	EMC0701	04-01-2015	03-31-2016
LTE Simulated station	Anritsu	MT8820C	CCIS0170	04-08-2015	04-08-2016
Temperature and humidity chamber	Foshan Hengpu	HPGDS-500	CCIS0240	03-28-2015	03-28-2016

## 6. System test configuration

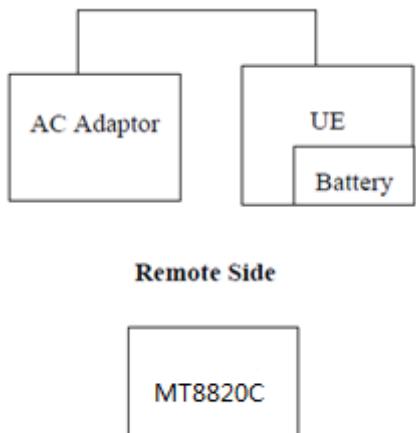
### 6.1 EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the commission's requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

### 6.2 EUT Exercise

The EUT (Transmitter) was operated in the engineering mode to fix the Tx frequency which was for the purpose of the measurements.

### 6.3 Configuration of Tested System



### 6.4 Description of Test Modes

The EUT has been tested under operating condition.

EUT staying in continuous transmitting mode. Channel Low, Mid and High for each type band with rated data rate were chosen for full testing.

The field strength of spurious radiation emission was measured as EUT stand-up position (H mode) and lie down position (E1, E2 mode) for three modes (LTE Band 2, LTE Band 4, LTE Band 7) with power adaptor, earphone and Data cable. The worst-case H mode forLTE Band 2, LTE Band 4,LTE Band 7.

## 6.5 Conducted Output Power

Test Requirement:	FCC Part 24.232 (c)
Test Method:	FCC part 2.1046
Limit:	LTE Band2: 2W
Test setup:	 <p>The diagram illustrates the measurement setup for testing conducted output power. It shows a block labeled "EUT" (Equipment Under Test) connected via a line to a block labeled "ATT" (Attenuator). From the "ATT" block, another line extends to a larger block labeled "Communication Tester".</p>
<i>Note: Measurement setup for testing on Antenna connector</i>	
Test Procedure:	The transmitter output was connected to a calibrated attenuator, the other end of which was connected to the simulated station. Transmitter output power was read off in dBm.
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

Measurement Data

## LTE Band 2 part

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					18607	18900	19193
					1850.7MHz	1880.0MHz	1909.3MHz
2	1.4	QPSK	1	0	22.65	22.92	22.73
			1	2	22.77	22.97	22.76
			1	5	22.73	22.90	22.69
			3	0	22.84	23.11	22.80
			3	1	22.81	23.08	22.77
			3	2	22.80	23.04	22.79
			6	0	21.85	22.12	21.83
		16QAM	1	0	21.83	22.06	21.82
			1	2	21.87	21.88	21.85
			1	5	21.88	22.05	21.52
			3	0	21.92	22.12	21.88
			3	1	21.87	22.29	21.93
			3	2	21.83	22.25	21.80
			6	0	20.87	21.03	20.85
LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					18615	18900	19185
					1851.5MHz	1880.0MHz	1908.5MHz
2	3	QPSK	1	0	22.79	22.83	22.79
			1	7	22.85	22.97	22.87
			1	14	22.71	22.84	22.75
			8	0	21.96	22.18	21.89
			8	4	21.97	22.17	21.90
			8	7	21.99	22.16	21.97
			15	0	22.02	22.15	22.08
		16QAM	1	0	21.90	22.03	21.82
			1	7	21.75	22.19	21.91
			1	14	21.67	22.06	21.72
			8	0	21.03	21.19	20.94
			8	4	21.00	21.37	20.95
			8	7	21.03	21.22	20.86
			15	0	21.06	21.14	20.89
LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					18625	18900	19175
					1852.5MHz	1880.0MHz	1907.5MHz
2	5	QPSK	1	0	22.87	23.04	22.82
			1	12	22.91	23.12	22.87
			1	24	22.73	22.92	22.76
			12	0	22.04	22.17	22.03
			12	6	22.04	22.23	21.97
			12	11	22.03	22.17	21.94
			25	0	21.96	22.21	21.94
		16QAM	1	0	21.94	22.09	21.82
			1	12	21.88	22.21	21.90
			1	24	21.89	22.02	21.61
			12	0	21.07	21.21	20.99
			12	6	20.95	21.25	20.93
			12	11	21.04	21.08	20.88
			25	0	21.04	21.20	20.97

LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					18650	18900	19150
					1855.0MHz	1880.0MHz	1905.0MHz
2	10	QPSK	1	0	22.99	23.07	22.97
			1	24	22.97	23.06	22.95
			1	49	22.93	22.99	22.16
			25	0	22.07	22.29	22.03
			25	12	22.03	22.19	22.05
			25	24	22.05	22.17	21.94
			50	0	22.14	22.32	22.09
		16QAM	1	0	21.32	22.09	21.98
			1	24	21.91	22.11	21.68
			1	49	21.95	22.04	21.54
			25	0	21.01	21.22	21.02
			25	12	21.02	21.25	21.03
			25	24	21.01	21.21	21.01
			50	0	21.04	21.22	21.04
LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					18675	18900	19125
					1857.5MHz	1880.0MHz	1902.5MHz
2	15	QPSK	1	0	22.94	23.08	22.92
			1	37	23.02	23.17	23.09
			1	74	22.95	23.01	22.19
			36	0	22.16	22.31	22.14
			36	16	22.15	22.34	22.08
			36	35	22.19	22.23	22.02
			75	0	22.16	22.27	22.08
		16QAM	1	0	21.80	22.28	21.86
			1	37	21.99	22.34	21.90
			1	74	21.87	22.13	21.83
			36	0	21.19	21.29	21.06
			36	16	21.20	21.3	21.10
			36	35	21.18	21.26	21.03
			75	0	21.18	21.23	21.06
LTE Band	Bandwidth (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)		
					18700	18900	19100
					1860.0MHz	1880.0MHz	1900.0MHz
2	20	QPSK	1	0	22.96	23.07	22.90
			1	49	23.00	23.08	22.82
			1	99	22.96	22.94	22.07
			50	0	22.18	22.32	22.26
			50	24	22.18	22.36	22.13
			50	49	22.20	22.28	22.10
			100	0	22.13	22.26	22.08
		16QAM	1	0	22.09	22.25	22.15
			1	49	22.10	22.70	21.81
			1	99	22.11	22.20	21.55
			50	0	21.18	21.31	21.18
			50	24	21.20	21.3	21.08
			50	49	21.24	21.27	21.04
			100	0	21.14	21.20	21.09

## 6.6 Peak-to-Average Ratio

Test Requirement:	FCC part 24.232(d)
Limit:	The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.
Test setup:	<pre> graph LR     EUT[EUT] --- Splitter[Splitter]     Splitter --- CommTester[Communication Tester]     Splitter --- ATT[ATT]     ATT --- SPA[SPA]   </pre>
<i>Note: Measurement setup for testing on Antenna connector</i>	
Test Procedure:	<ol style="list-style-type: none"> <li>1 The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation.</li> <li>2 Set the CCDF option in spectrum analyzer, <math>RBW \geq OBW</math>,</li> <li>3 Set the EUT working in highest power level, measured and recorded the 0.1% as PAPR level.</li> <li>4 Repeat step 1~3 at other frequency and modulations.</li> </ol>
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

BW(MHz)	Modulation	RB Size	RB Offset	PAPR
LTE Band 2 (Middle Channel)				
20MHz	QPSK	100	0	5.07
	16QAM	100	0	5.57

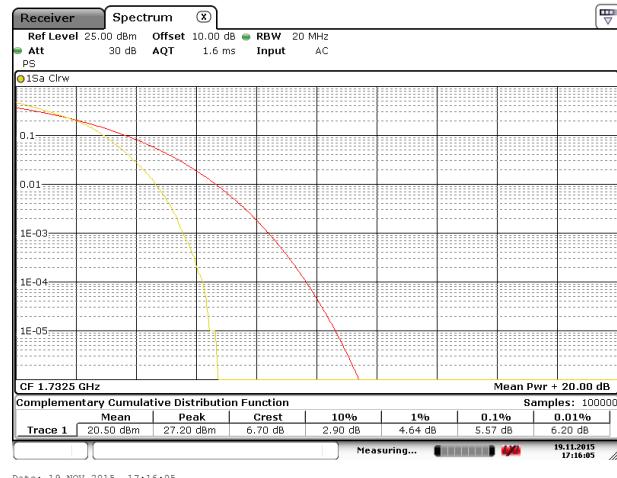
**Test plots as below:**

## LTE Band 2 Middle channel

Modulation: QPSK



Modulation:16QAM



## 6.7 Occupy Bandwidth

Test Requirement:	FCC Part 24.238
Test Method:	FCC part2.1049
Test setup:	<pre> graph LR     EUT[EUT] --- Splitter[Splitter]     Splitter --- SPA[SPA]     Splitter --- CT[Communication Tester]   </pre> <p><i>Note: Measurement setup for testing on Antenna connector</i></p>
Test Procedure:	
Test Procedure:	<ol style="list-style-type: none"> <li>1. The EUT's output RF connector was connected with a short cable to the spectrum analyzer</li> <li>2. RBW was set to about 1% ~ 5% of emission BW, VBW= 3 times RBW.</li> <li>3. -26dBc display line was placed on the screen (or 99% bandwidth), the occupied bandwidth is the delta frequency between the two points where the display line intersects the signal trace.</li> </ol>
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

### Measurement Data

**LTE Band 2 part:**

EUT Mode	Channel	Frequency(MHz)	Modulation	99% OBW (kHz)	-26dBcEBW (kHz)
1.4MHz	18607	1850.70	16QAM	1098	1272
			QPSK	1098	1266
	18900	1880.00	16QAM	1092	1266
			QPSK	1104	1272
	19193	1909.30	16QAM	1092	1278
			QPSK	1098	1272
3MHz	18615	1851.50	16QAM	2712	2988
			QPSK	2736	3048
	18900	1880.00	16QAM	2724	3012
			QPSK	2736	3036
	19185	1908.50	16QAM	2724	3000
			QPSK	2736	3072
5MHz	18625	1852.50	16QAM	4500	5000
			QPSK	4520	4980
	18900	1880.00	16QAM	4520	4920
			QPSK	4520	5020
	19175	1907.50	16QAM	4520	4880
			QPSK	4520	4900
10MHz	18650	1855.00	16QAM	9080	9960
			QPSK	9080	10280
	18900	1880.00	16QAM	9120	10080
			QPSK	9080	10240
	19150	1905.00	16QAM	9080	10080
			QPSK	9080	10160
15MHz	18675	1857.50	16QAM	13500	14580
			QPSK	13560	14820
	18900	1880.00	16QAM	13560	14880
			QPSK	13560	14880
	19125	1902.50	16QAM	13500	14760
			QPSK	13500	14700
20MHz	18700	1860.00	16QAM	17840	19040
			QPSK	17920	19600
	18900	1880.00	16QAM	17920	19280
			QPSK	18080	19440
	19100	1900.00	16QAM	17920	19360
			QPSK	18000	19520

Test plot as follows:

## LTE Band 2 part

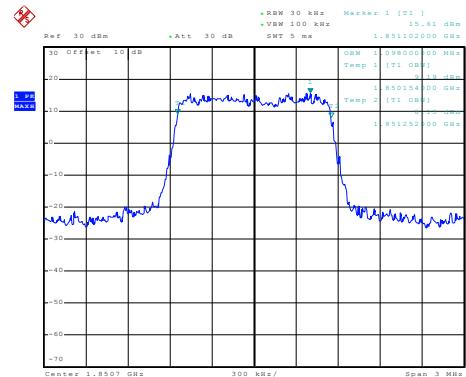
Test Item:99% Occupy bandwidth

BW: 1.4MHz

Modulation: 16QAM



Modulation: QPSK

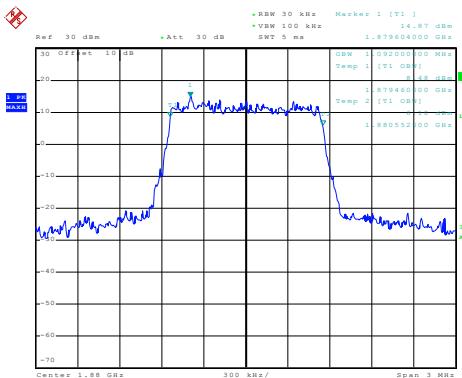


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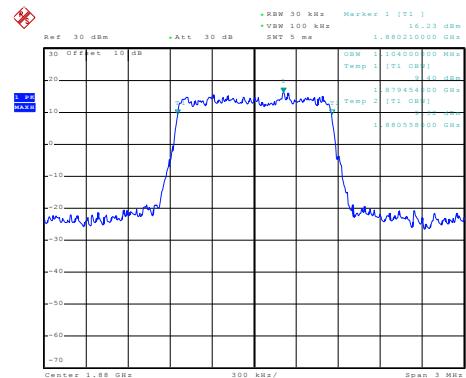
Date: 10.NOV.2015 17:23:33

Lowest channel

Modulation:16QAM



Modulation:QPSK

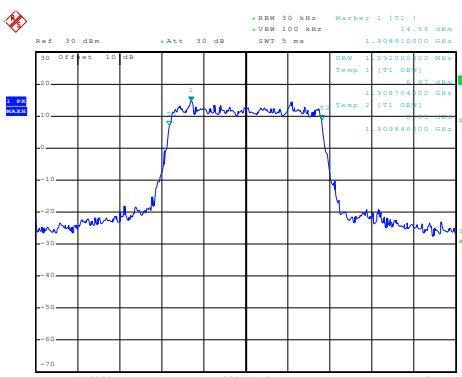


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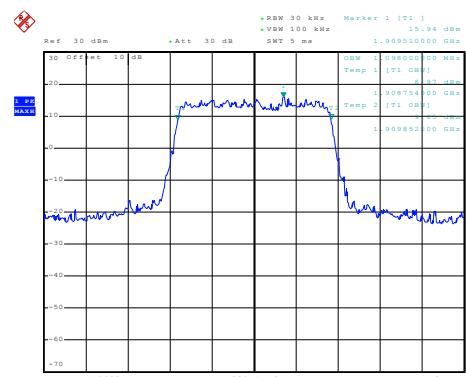
Date: 10.NOV.2015 17:22:49

Middle channel

Modulation:16QAM



Modulation:QPSK



Date: 10.NOV.2015 17:24:05

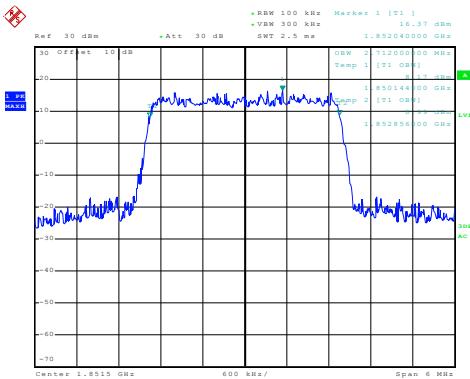
Date: 10.NOV.2015 17:23:58

Highest channel

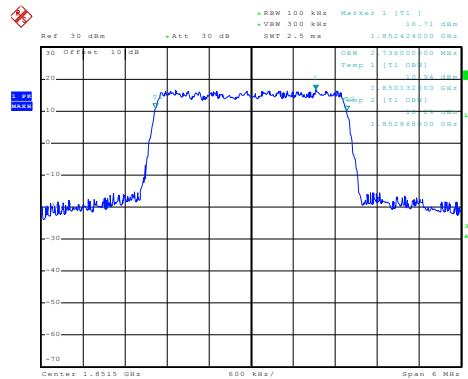
Test Item:99% Occupy bandwidth

BW: 3MHz

Modulation:16QAM



Modulation:QPSK

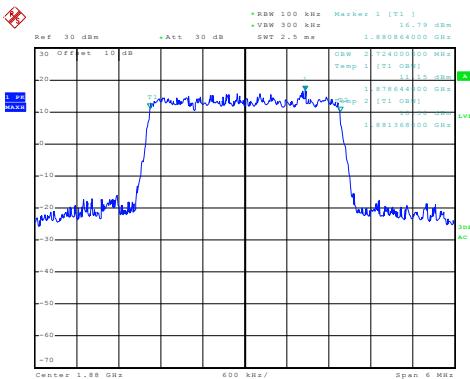


Date: 10.NOV.2015 17:27:38

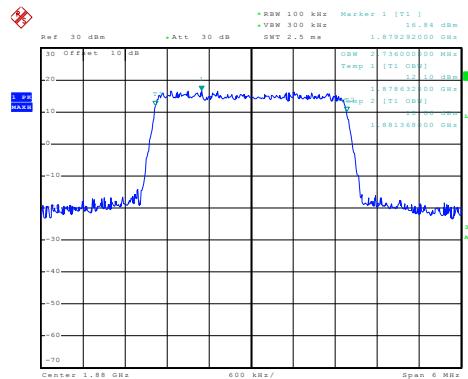
Date: 10.NOV.2015 17:27:33

Lowest channel

Modulation:16QAM



Modulation:QPSK

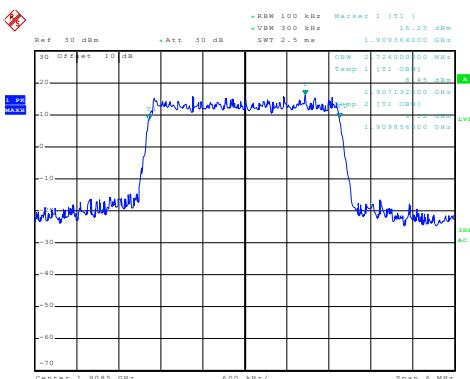


Date: 10.NOV.2015 17:28:02

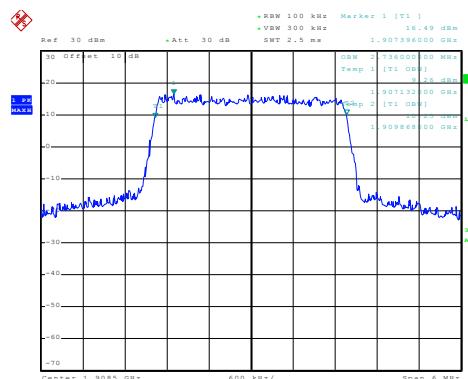
Date: 10.NOV.2015 17:27:56

Middle channel

Modulation:16QAM



Modulation:QPSK



Date: 10.NOV.2015 17:30:27

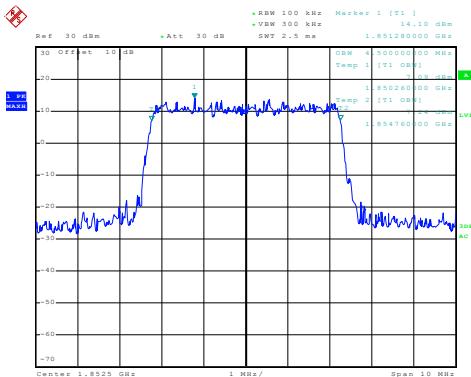
Date: 10.NOV.2015 17:30:23

Highest channel

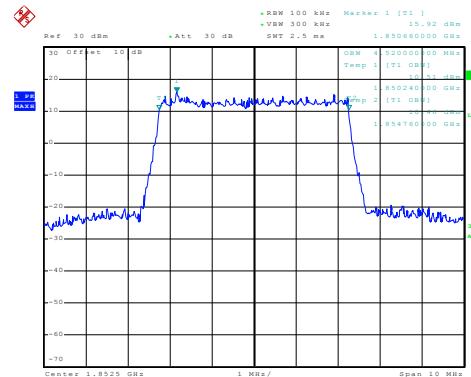
Test Item:99% Occupy bandwidth

BW: 5MHz

Modulation:16QAM



Modulation:QPSK

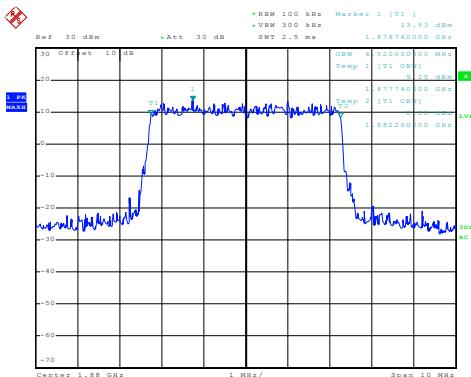


Date: 10.NOV.2015 17:33:14

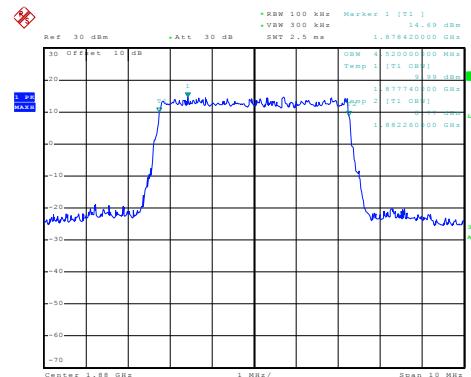
Date: 10.NOV.2015 17:33:09

Lowest channel

Modulation:16QAM



Modulation:QPSK

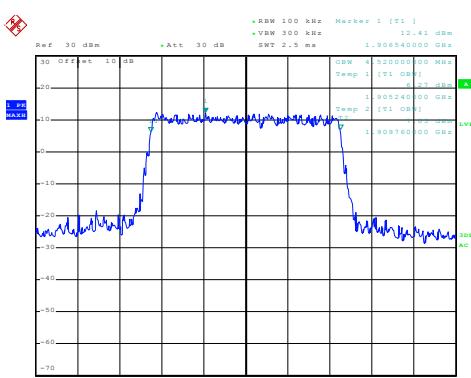


Date: 10.NOV.2015 17:34:08

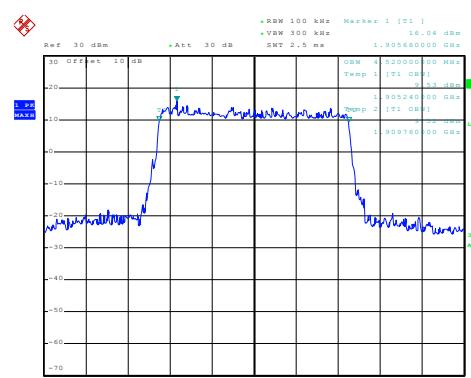
Date: 10.NOV.2015 17:34:03

Middle channel

Modulation:16QAM



Modulation:QPSK



Date: 10.NOV.2015 17:34:27

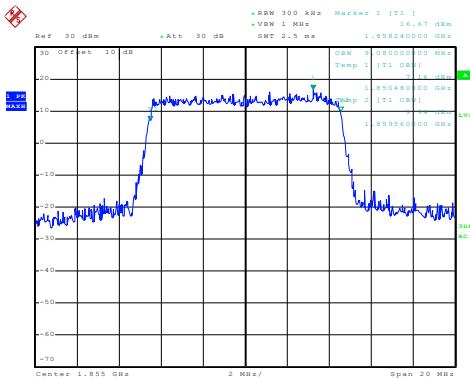
Date: 10.NOV.2015 17:34:22

Highest channel

Test Item:99% Occupy bandwidth

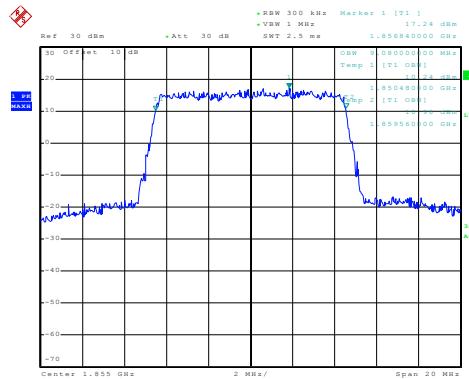
BW: 10MHz

Modulation:16QAM



Date: 10.NOV.2015 17:35:36

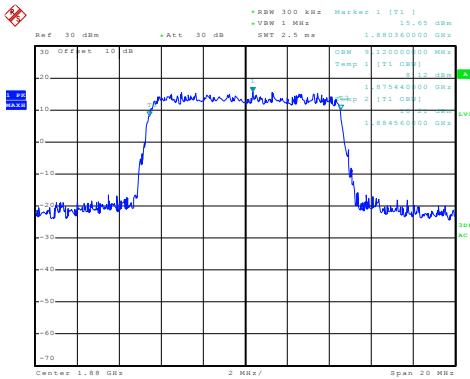
Modulation:QPSK



Date: 10.NOV.2015 17:35:30

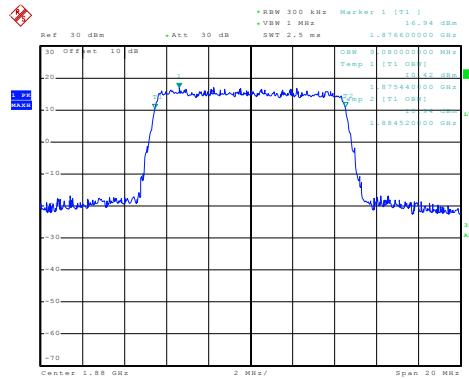
Lowest channel

Modulation:16QAM



Date: 10.NOV.2015 17:35:53

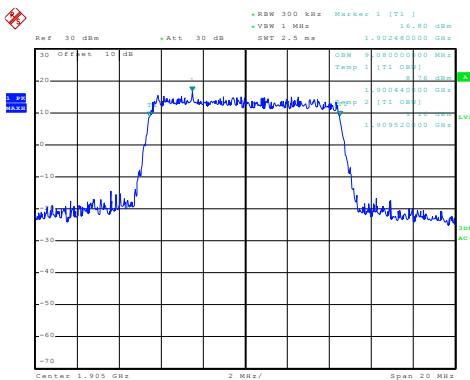
Modulation:QPSK



Date: 10.NOV.2015 17:35:48

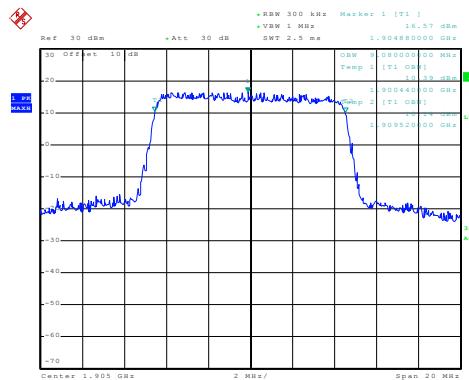
Middle channel

Modulation:16QAM



Date: 10.NOV.2015 17:37:05

Modulation:QPSK



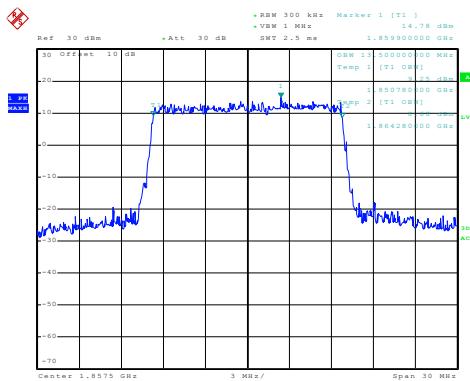
Date: 10.NOV.2015 17:36:59

Highest channel

Test Item:99% Occupy bandwidth

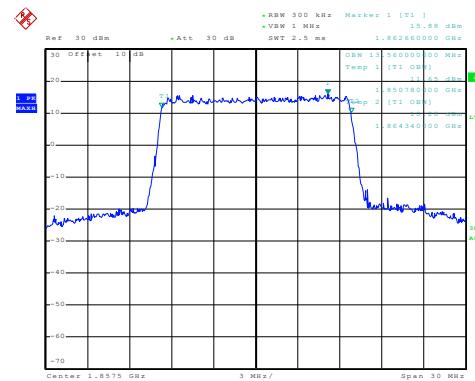
BW: 15MHz

Modulation:16QAM



Date: 10.NOV.2015 17:37:51

Modulation:QPSK



Date: 10.NOV.2015 17:37:46

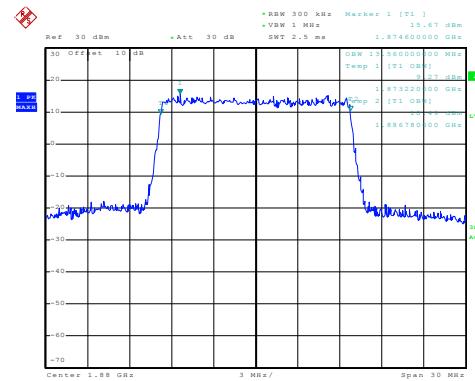
Lowest channel

Modulation:16QAM



Date: 10.NOV.2015 17:38:40

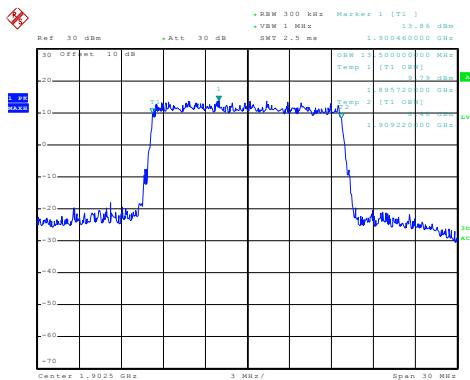
Modulation:QPSK



Date: 10.NOV.2015 17:38:35

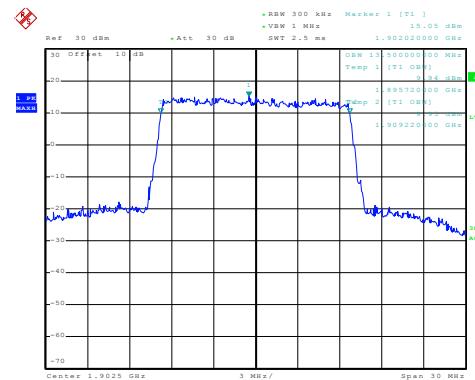
Middle channel

Modulation:16QAM



Date: 10.NOV.2015 17:39:01

Modulation:QPSK



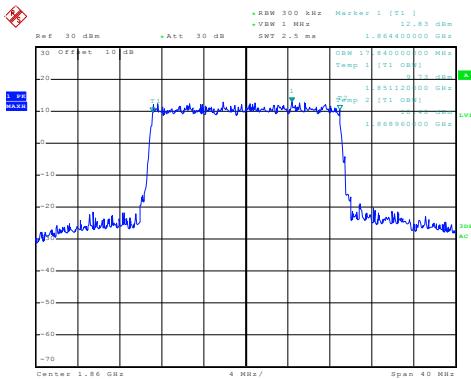
Date: 10.NOV.2015 17:38:57

Highest channel

Test Item:99% Occupy bandwidth

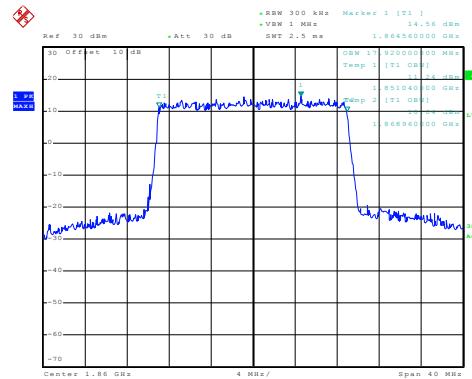
BW: 20MHz

Modulation:16QAM



Date: 10.NOV.2015 17:40:00

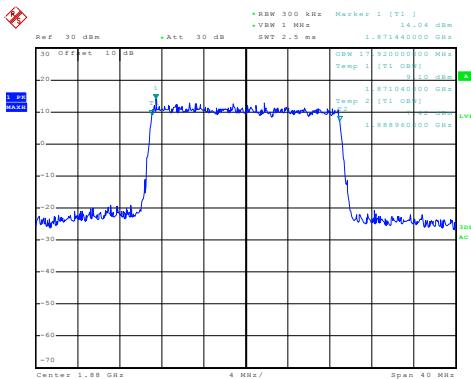
Modulation:QPSK



Date: 10.NOV.2015 17:39:56

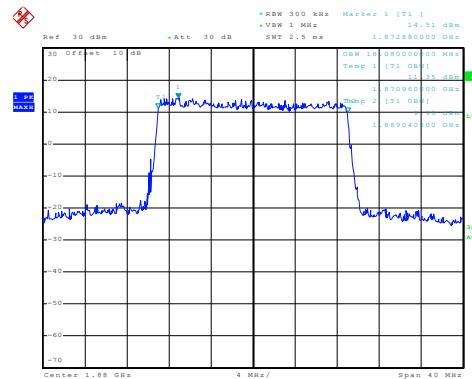
Lowest channel

Modulation:16QAM



Date: 10.NOV.2015 17:40:21

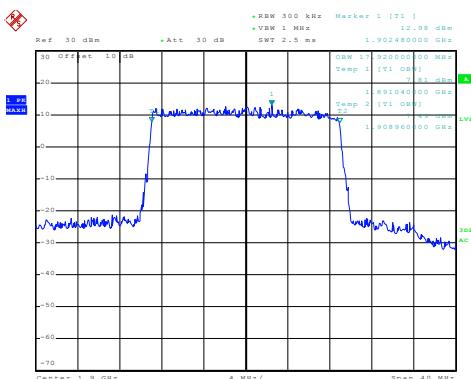
Modulation:QPSK



Date: 10.NOV.2015 17:40:17

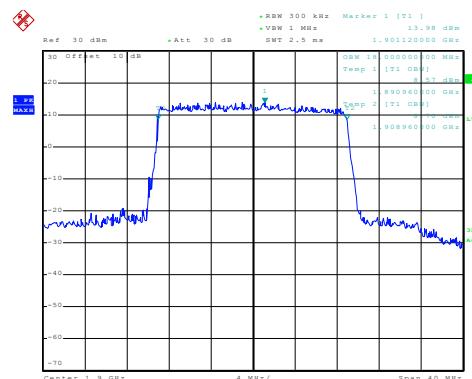
Middle channel

Modulation:16QAM



Date: 10.NOV.2015 17:41:12

Modulation:QPSK



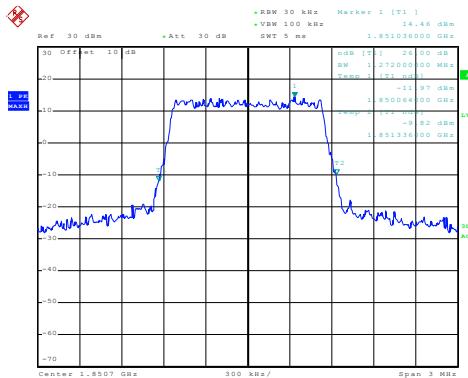
Date: 10.NOV.2015 17:41:06

Highest channel

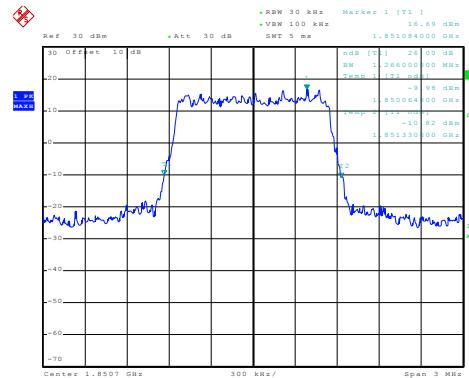
Test Item:-26dBc bandwidth

BW: 1.4MHz

Modulation:16QAM



Modulation:QPSK

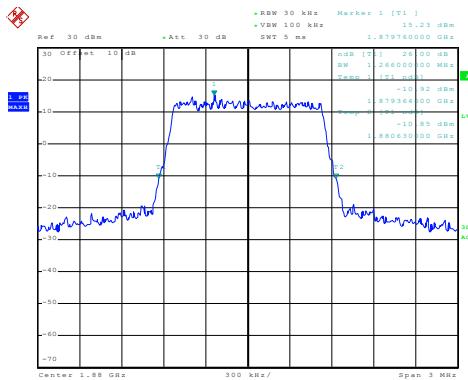


Date: 10 NOV 2015 17:23:27

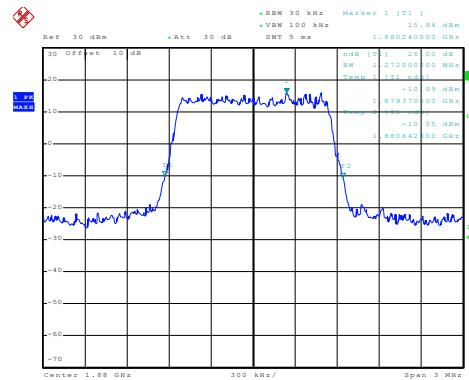
Date: 10 NOV 2015 17:23:20

Lowest channel

Modulation:16QAM



Modulation:QPSK

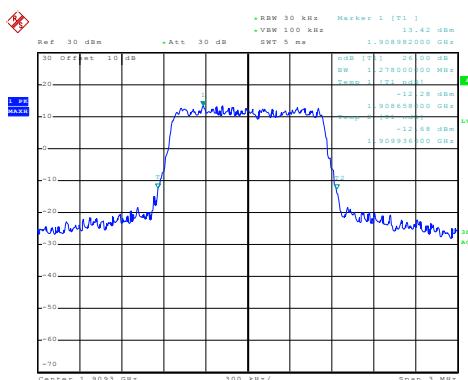


Date: 10 NOV 2015 17:23:06

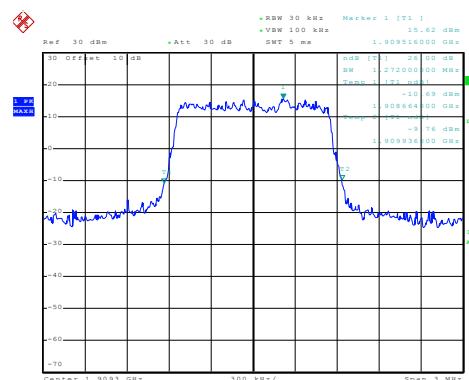
Date: 10 NOV 2015 17:23:00

Middle channel

Modulation:16QAM



Modulation:QPSK



Date: 10 NOV 2015 17:24:19

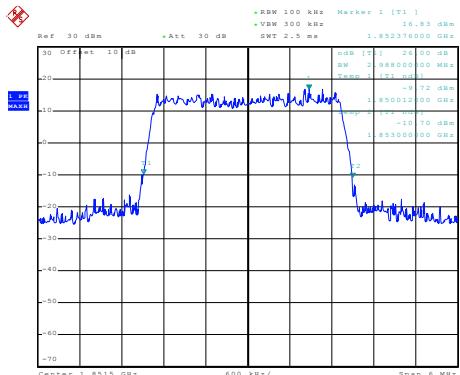
Date: 10 NOV 2015 17:24:14

Highest channel

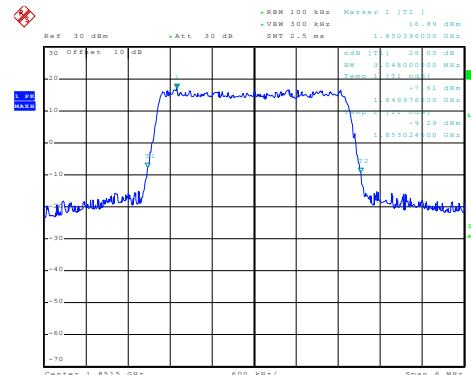
Test Item:-26dBc bandwidth

BW: 3MHz

Modulation:16QAM



Modulation:QPSK

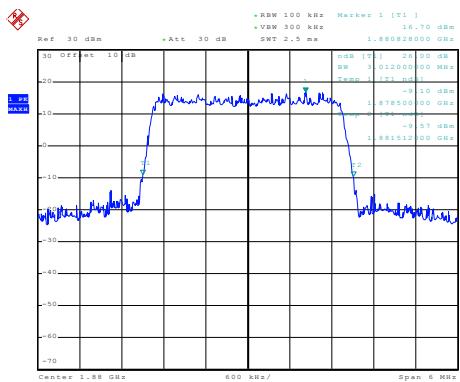


Date: 10 NOV 2015 17:27:22

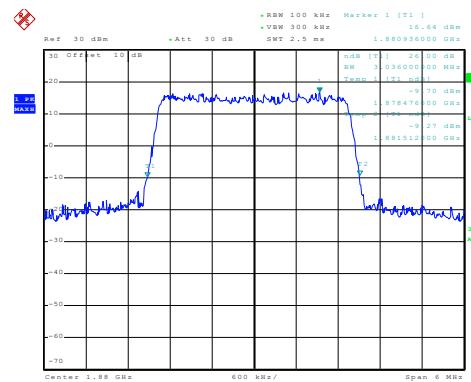
Date: 10 NOV 2015 17:27:15

Lowest channel

Modulation:16QAM



Modulation:QPSK

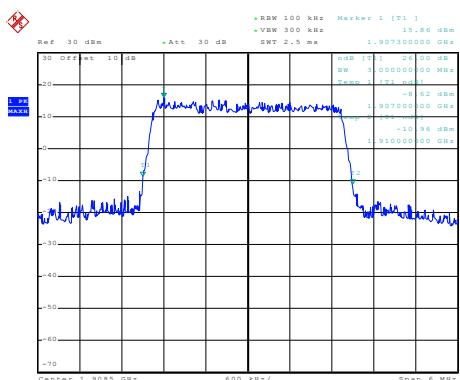


Date: 10 NOV 2015 17:28:16

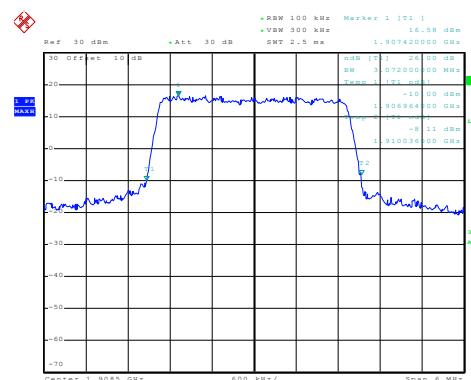
Date: 10 NOV 2015 17:28:09

Middle channel

Modulation:16QAM



Modulation:QPSK



Date: 10 NOV 2015 17:30:16

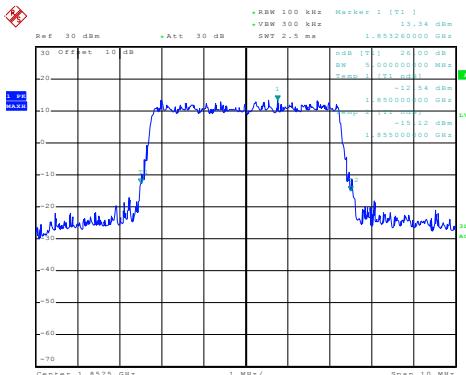
Date: 10 NOV 2015 17:30:11

Highest channel

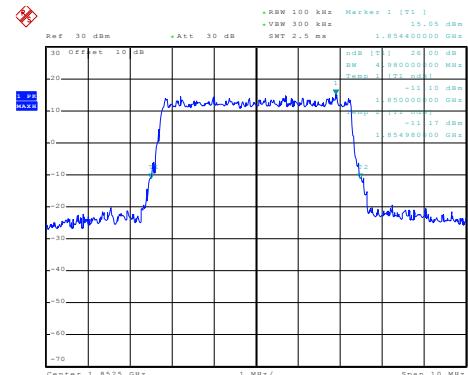
Test Item:-26dBc bandwidth

BW: 5MHz

Modulation:16QAM



Modulation:QPSK

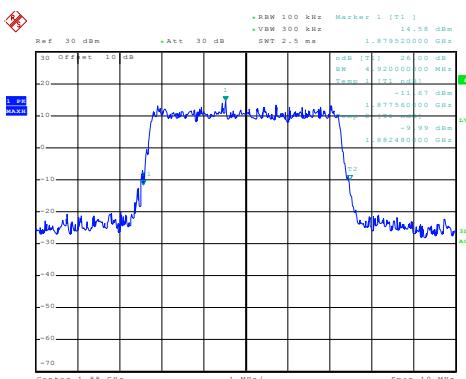


Date: 10 Nov 2015 17:33:27

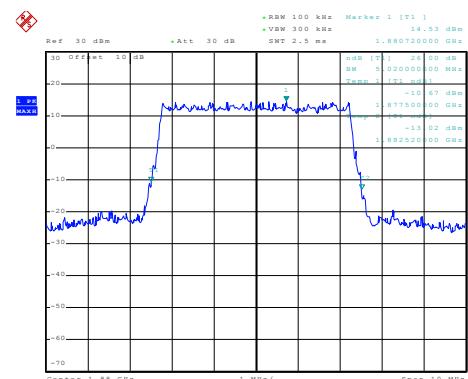
Date: 10 Nov 2015 17:33:22

Lowest channel

Modulation:16QAM



Modulation:QPSK

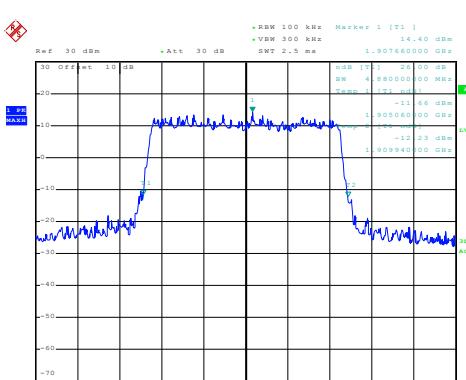


Date: 10 Nov 2015 17:33:51

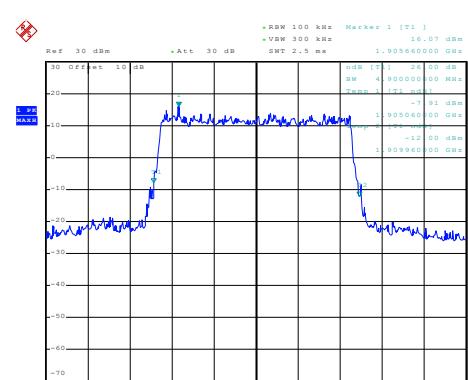
Date: 10 Nov 2015 17:33:47

Middle channel

Modulation:16QAM



Modulation:QPSK



Date: 10 Nov 2015 17:34:40

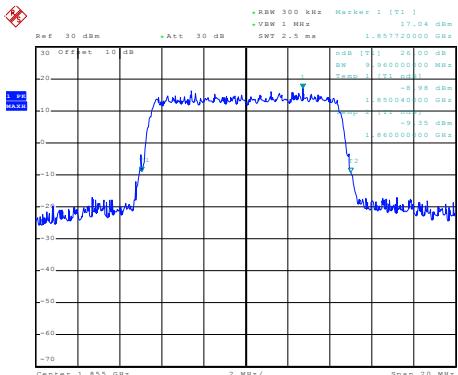
Date: 10 Nov 2015 17:34:33

Highest channel

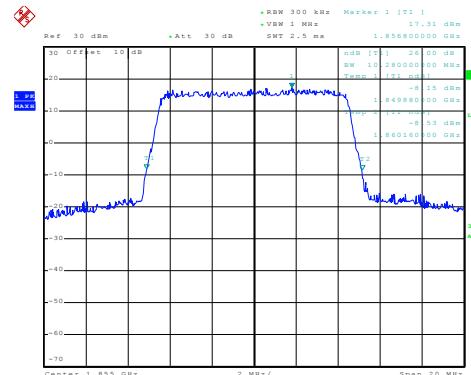
Test Item:-26dBc bandwidth

BW: 10MHz

Modulation:16QAM



Modulation:QPSK

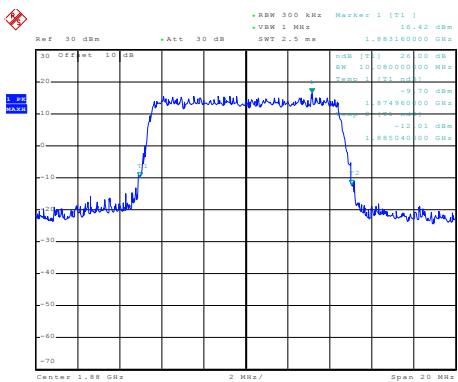


Date: 10 NOV 2015 17:35:24

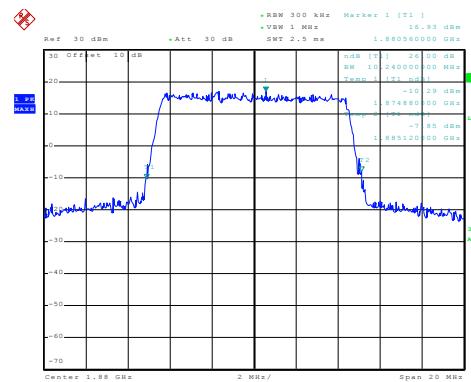
Date: 10 NOV 2015 17:35:19

Lowest channel

Modulation:16QAM



Modulation:QPSK

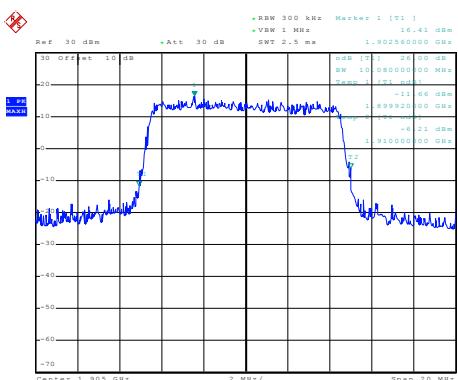


Date: 10 NOV 2015 17:36:09

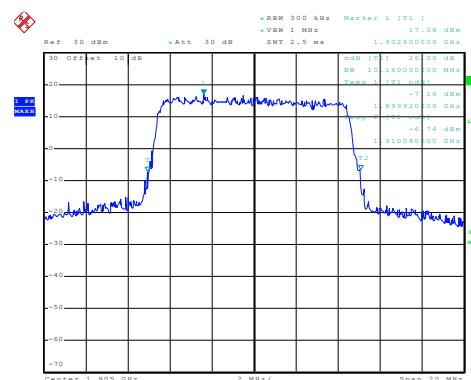
Date: 10 NOV 2015 17:36:05

Middle channel

Modulation:16QAM



Modulation:QPSK



Date: 10 NOV 2015 17:36:51

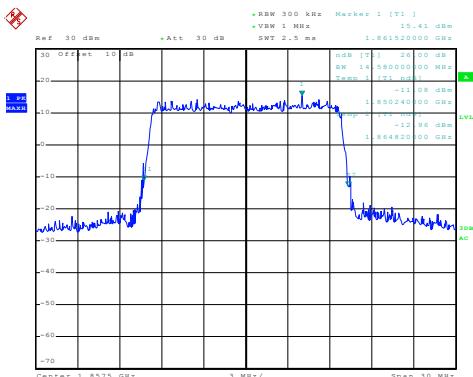
Date: 10 NOV 2015 17:36:46

Highest channel

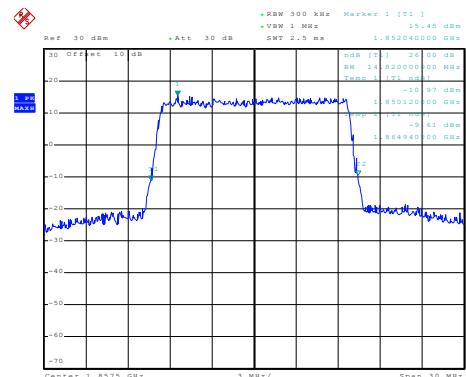
Test Item:-26dBc bandwidth

BW: 15MHz

Modulation:16QAM



Modulation:QPSK

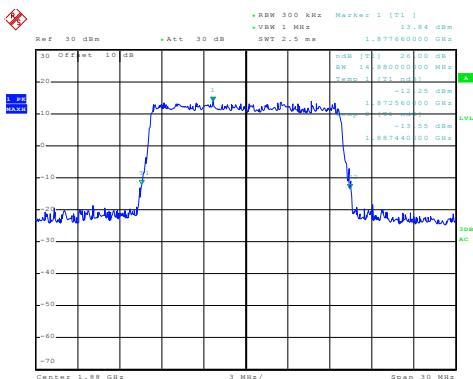


Date: 10 Nov 2015 17:38:03

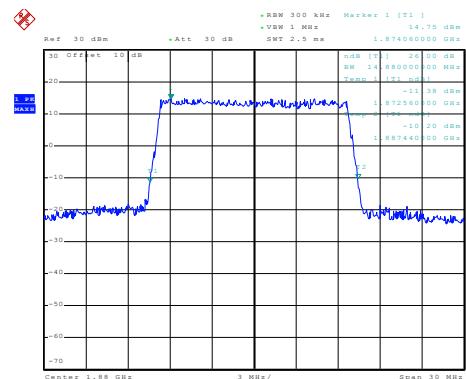
Date: 10 Nov 2015 17:37:59

Lowest channel

Modulation:16QAM



Modulation:QPSK

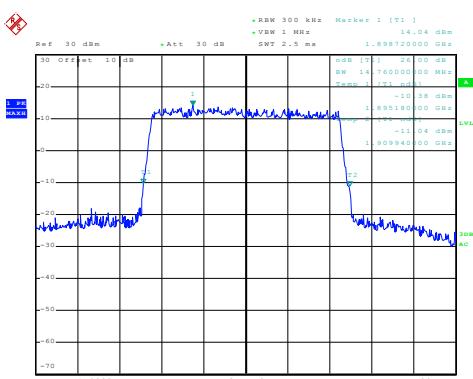


Date: 10 Nov 2015 17:38:24

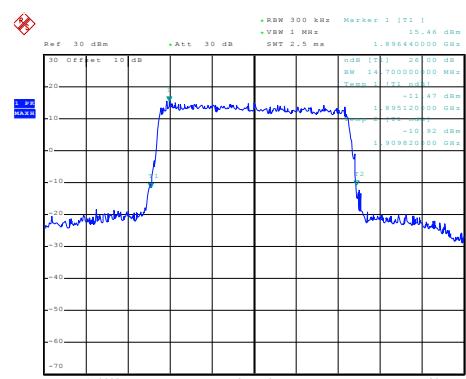
Date: 10 Nov 2015 17:38:18

Middle channel

Modulation:16QAM



Modulation:QPSK



Date: 10 Nov 2015 17:39:13

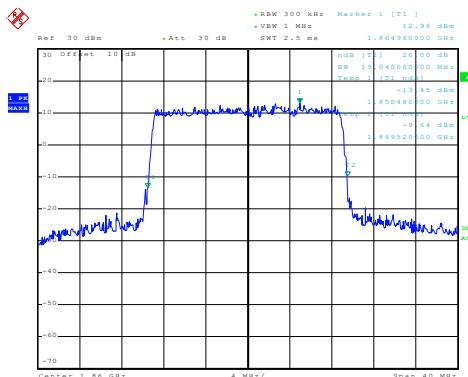
Date: 10 Nov 2015 17:39:08

Highest channel

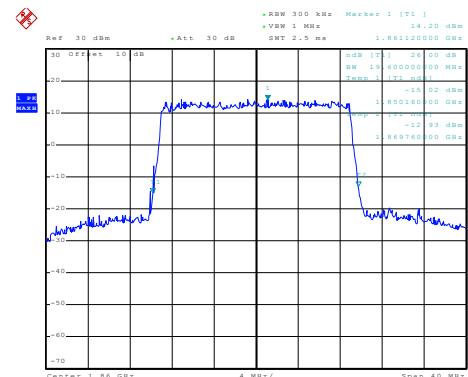
Test Item:-26dBc bandwidth

BW: 20MHz

Modulation:16QAM



Modulation:QPSK

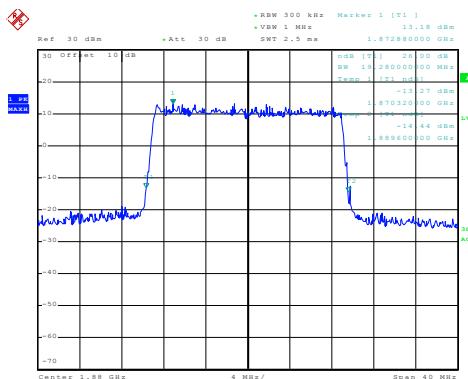


Date: 10 Nov 2015 17:39:49

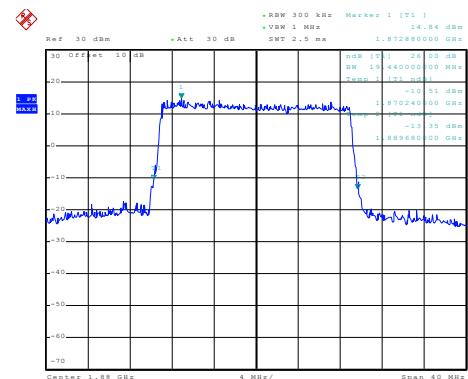
Date: 10 Nov 2015 17:39:44

Lowest channel

Modulation:16QAM



Modulation:QPSK

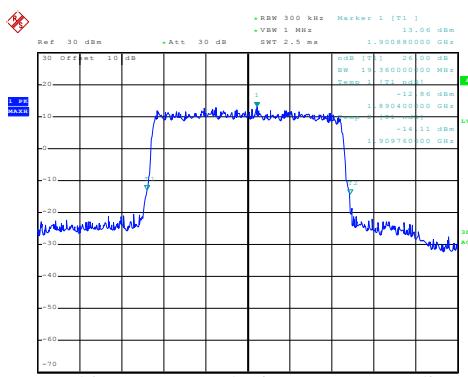


Date: 10 Nov 2015 17:40:33

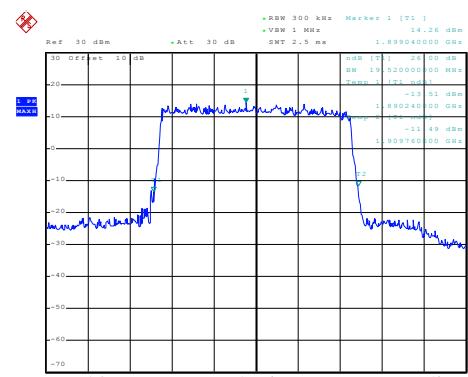
Date: 10 Nov 2015 17:40:28

Middle channel

Modulation:16QAM



Modulation:QPSK



Date: 10 Nov 2015 17:40:59

Date: 10 Nov 2015 17:40:54

Highest channel

## 6.8 Modulation Characteristic

According to FCC § 2.1047(d) there is no specific requirement for digital modulation, therefore modulation characteristic is not presented.

## 6.9 Out of band emission at antenna terminals

Test Requirement:	FCC Part 24.238 (a)
Test Method:	FCC part2.1051
Limit:	<p><b>Conducted spurious emission:</b>  <b>LTE Band 2</b>  <b>Band edge:</b>  <b>LTE Band 2:</b> the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least <math>43 + 10 \log_{10}(P)</math> dB.</p>
Test setup:	<p><i>Note: Measurement setup for testing on Antenna connector</i></p>
Test Procedure:	<ol style="list-style-type: none"> <li>1 The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation.</li> <li>2 The resolution bandwidth of the spectrum analyzer was set at 100 kHz when below 1GHz, 1MHz when above 1 GHz; sufficient scans were taken to show the out of band Emissions if any up to 10th harmonic.</li> <li>3 For the out of band: Set the RBW=100 kHz, VBW=300 kHz when below 1 GHz, RBW =1 MHz, VBW=3 MHz when above 1 GHz, Start=30MHz, Stop= 10th harmonic.</li> <li>4 Band Edge Requirements: In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to measure the out of band Emissions.</li> </ol>
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

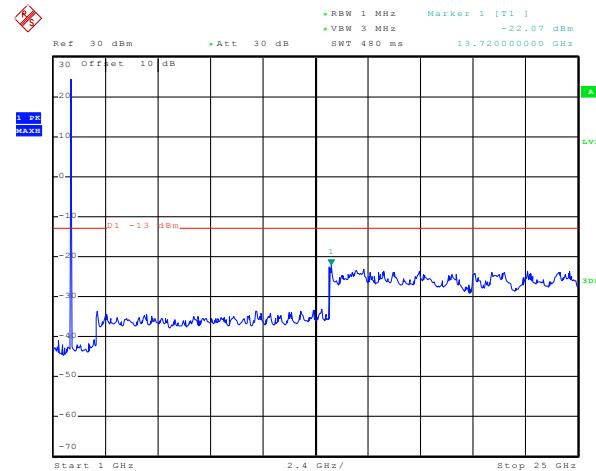
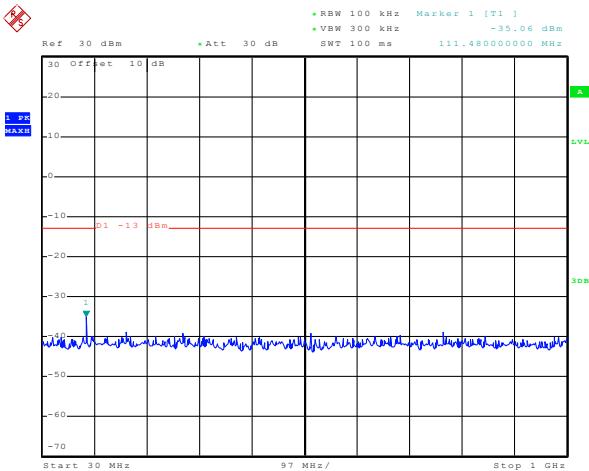
Test plots as follows:

## Spurious emission

### LTE band 2 Part:

#### 1.4MHz

Test Mode:	LTE band 2(1.4 MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Lowest channel
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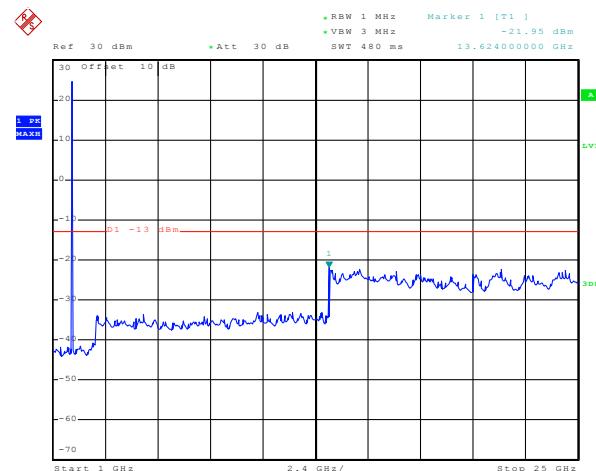
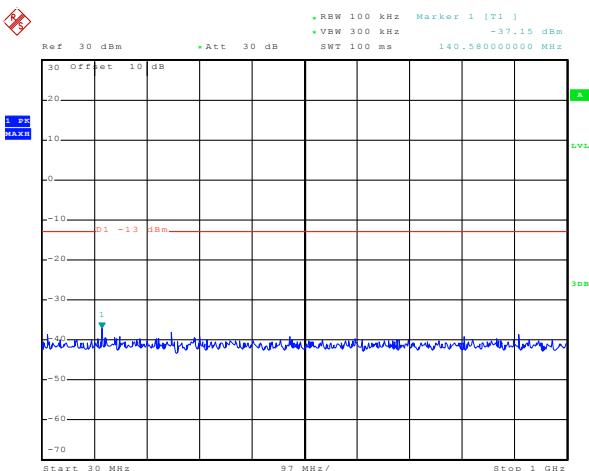
Date: 9.NOV.2015 01:57:30

30MHz~1GHz

Date: 9.NOV.2015 02:34:13

1GHz~25GHz

Test Mode:	LTE band 2(1.4 MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Middle channel
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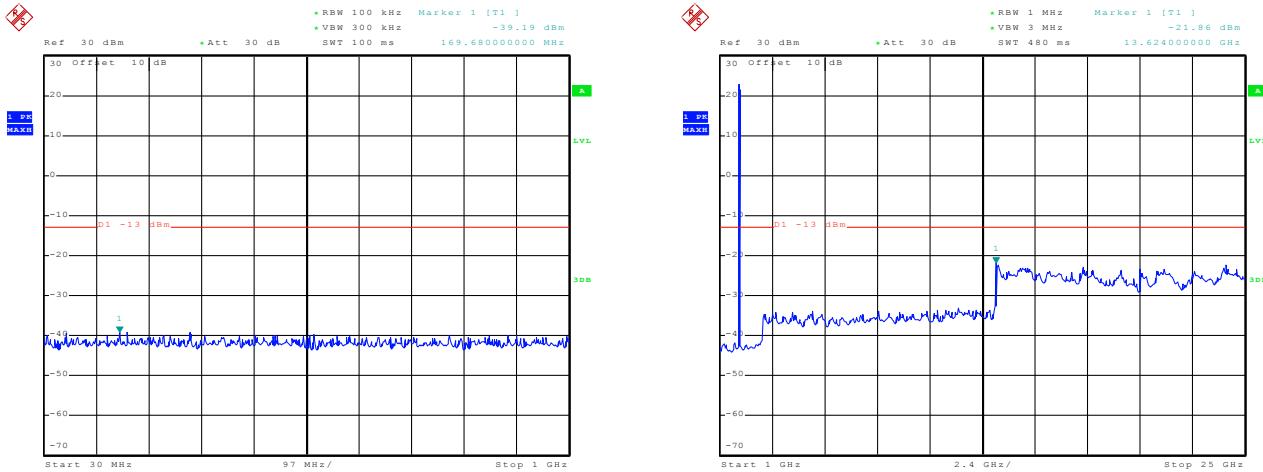
Date: 9.NOV.2015 01:58:22

30MHz~1GHz

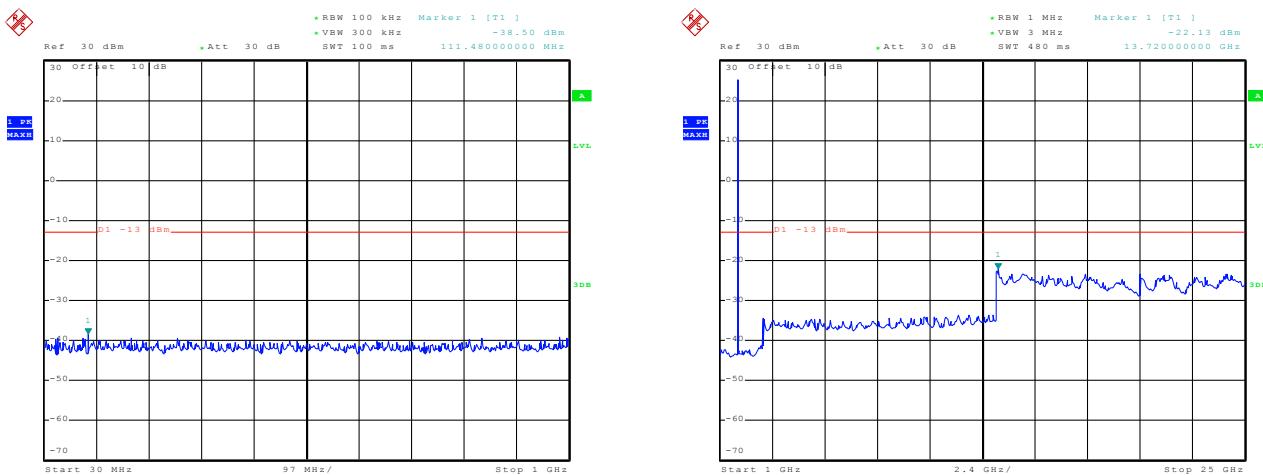
Date: 9.NOV.2015 02:35:25

1GHz~25GHz

Test Mode:	LTE band 2(1.4 MHz16QAM) RB Size 1 & RB Offset 0	Test Channel:	Highest channel
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Test Mode:	LTE band 2(1.4 MHz 16QAM) RB Size 3 & RB Offset 0	Test Channel:	Lowest channel
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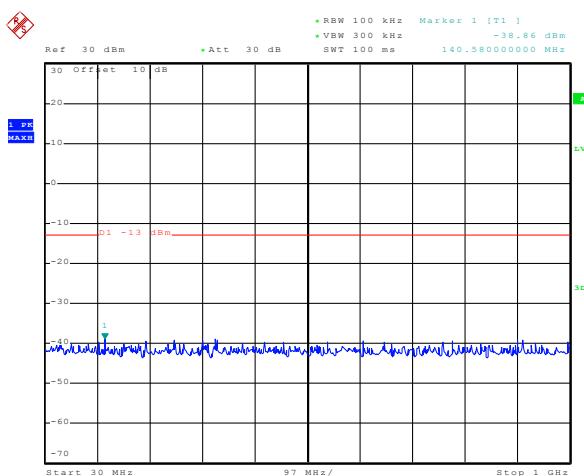
Date: 9.NOV.2015 01:57:46

30MHz~1GHz

Date: 9.NOV.2015 02:34:34

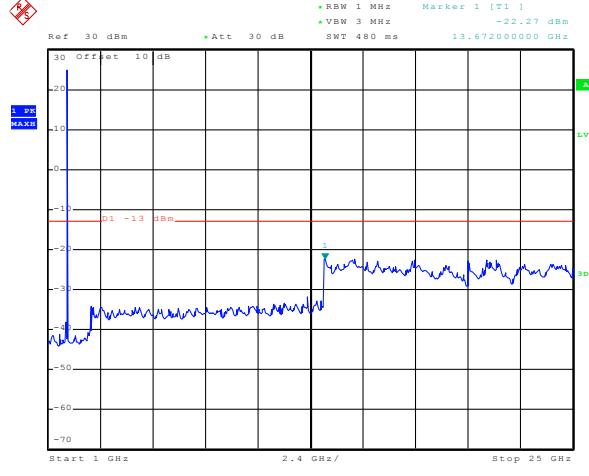
1GHz~25GHz

Test Mode:	LTE band 2(1.4 MHz 16QAM) RB Size 3 & RB Offset 0	Test Channel:	Middle channel
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Date: 9.NOV.2015 01:58:35

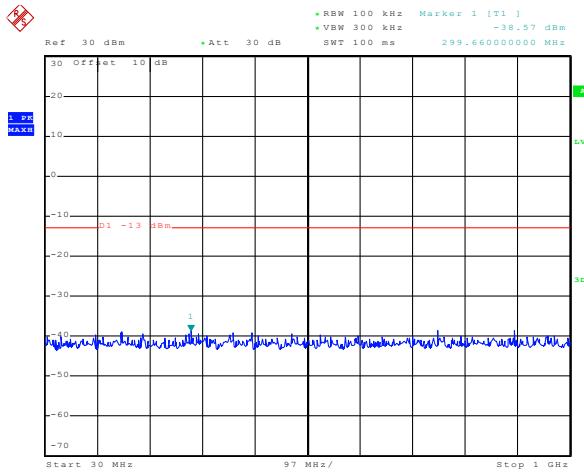
30MHz~1GHz



Date: 9.NOV.2015 02:35:57

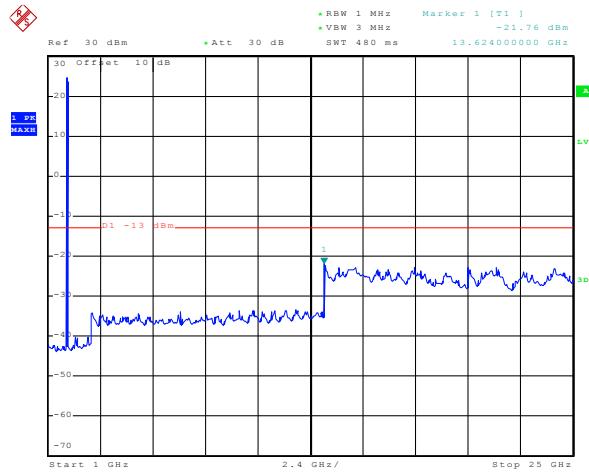
1GHz~25GHz

Test Mode:	LTE band 2(1.4 MHz 16QAM) RB Size 3 & RB Offset 0	Test Channel:	Highest channel
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Date: 9.NOV.2015 02:00:24

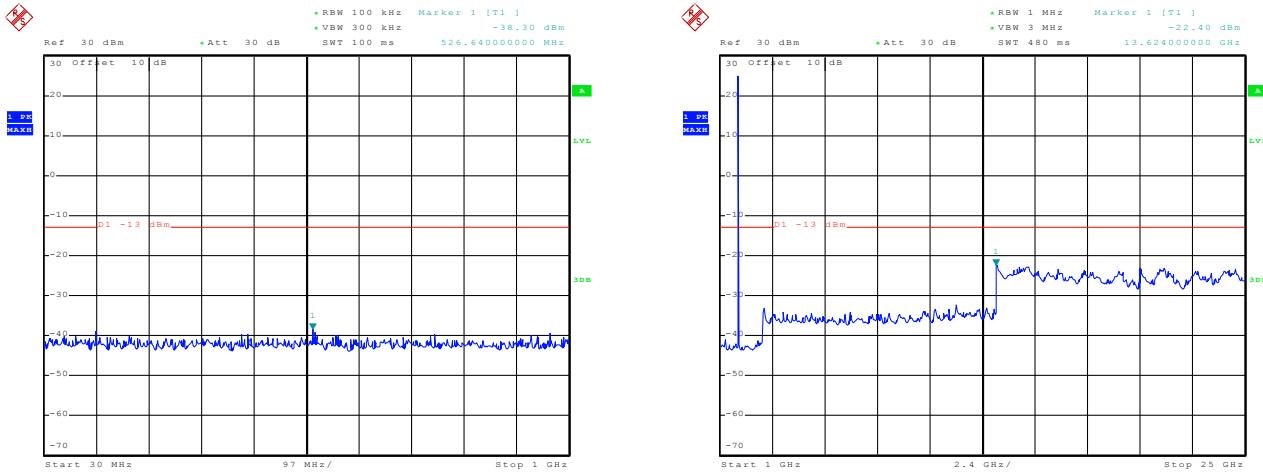
30MHz~1GHz



Date: 9.NOV.2015 02:37:15

1GHz~25GHz

Test Mode:	LTE band 2(1.4 MHz 16QAM) RB Size 6 & RB Offset 0	Test Channel:	Lowest channel
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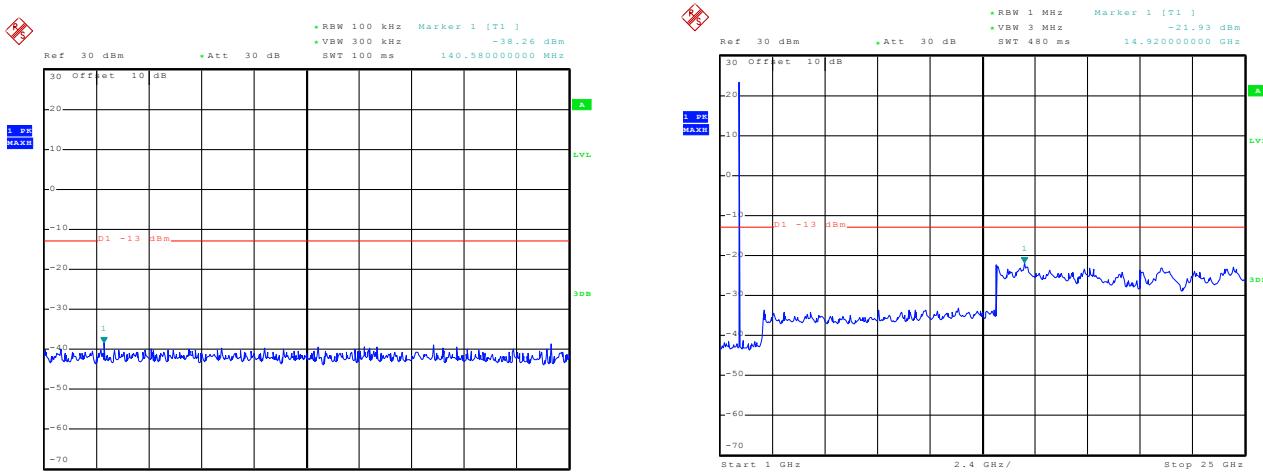
Date: 9.NOV.2015 01:58:01

30MHz~1GHz

Date: 9.NOV.2015 02:34:55

1GHz~25GHz

Test Mode:	LTE band 2(1.4 MHz 16QAM) RB Size 6 & RB Offset 0	Test Channel:	Middle channel
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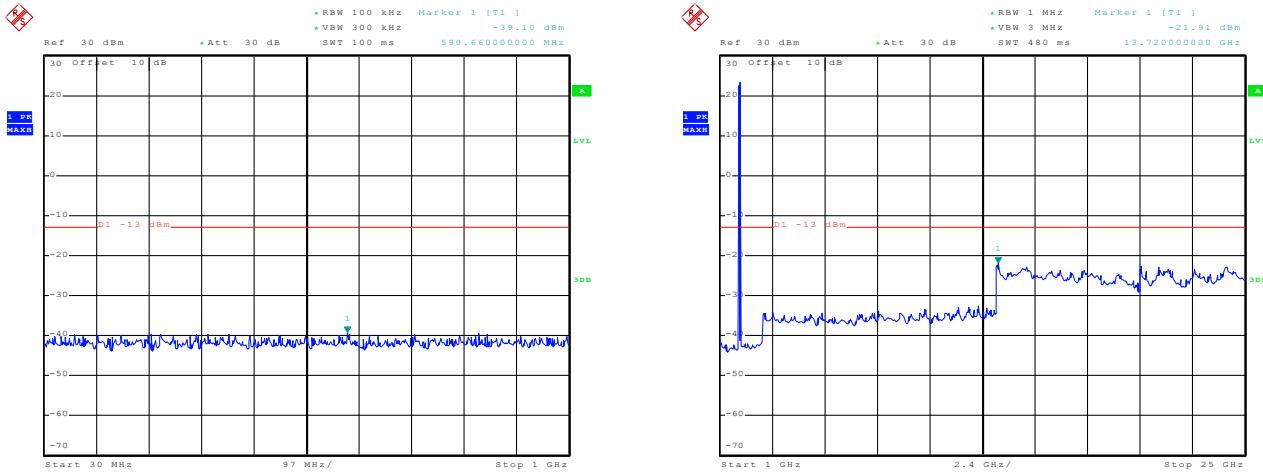
Date: 9.NOV.2015 01:58:48

30MHz~1GHz

Date: 9.NOV.2015 02:36:23

1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz16QAM) RB Size 6 & RB Offset 0	Test Channel:	Highest channel
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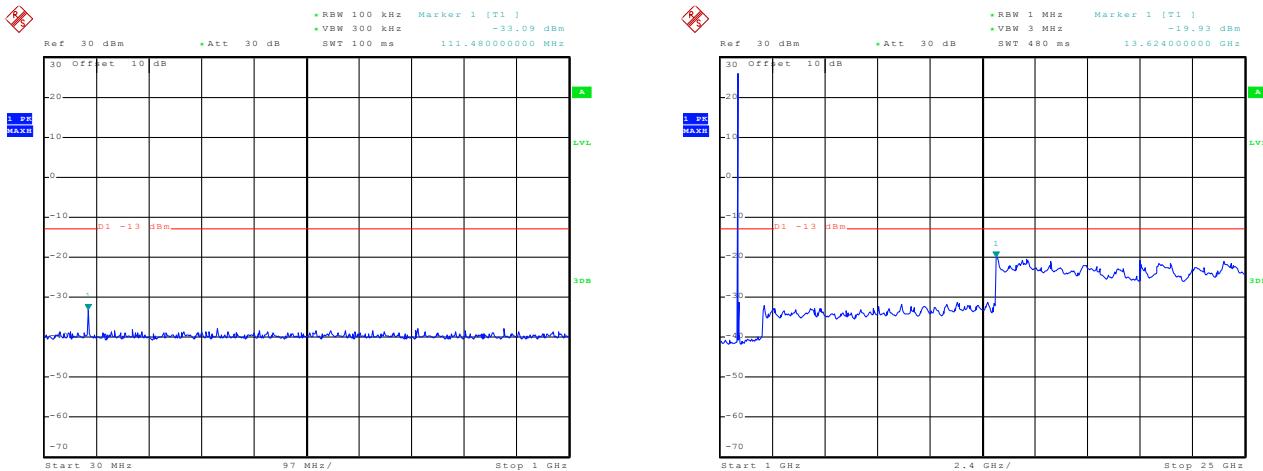
Date: 9.NOV.2015 02:00:37

30MHz~1GHz

Date: 9.NOV.2015 02:37:34

1GHz~25GHz

Test Mode:	LTE band 2(1.4 MHz QPSK) RB Size 1 & RB Offset 0	Test Channel:	Lowest channel
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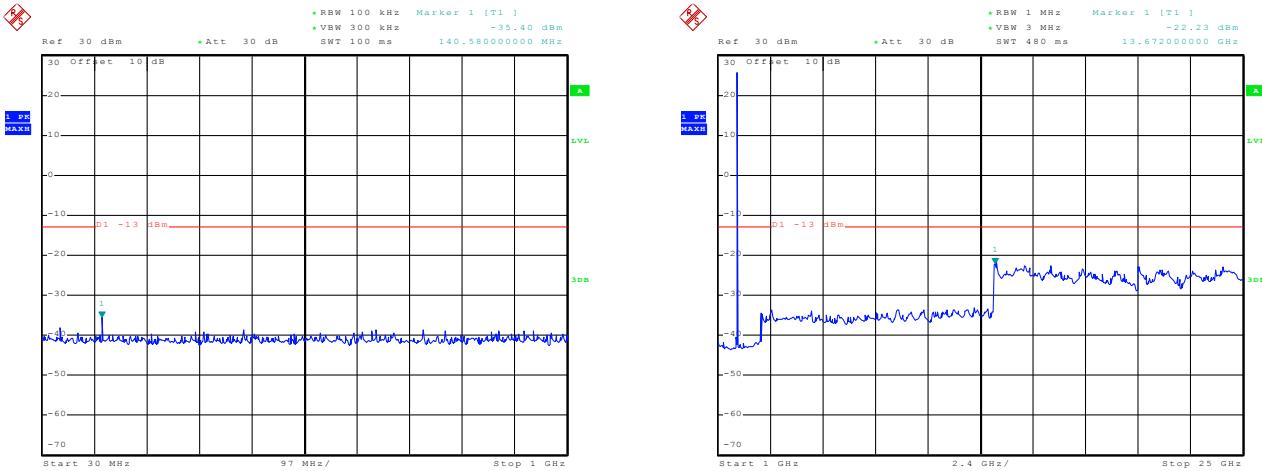
Date: 9.NOV.2015 01:57:23

30MHz~1GHz

Date: 9.NOV.2015 02:33:55

1GHz~25GHz

Test Mode:	LTE band 2(1.4 MHzQPSK) RB Size 1 & RB Offset 0	Test Channel:	Middle channel
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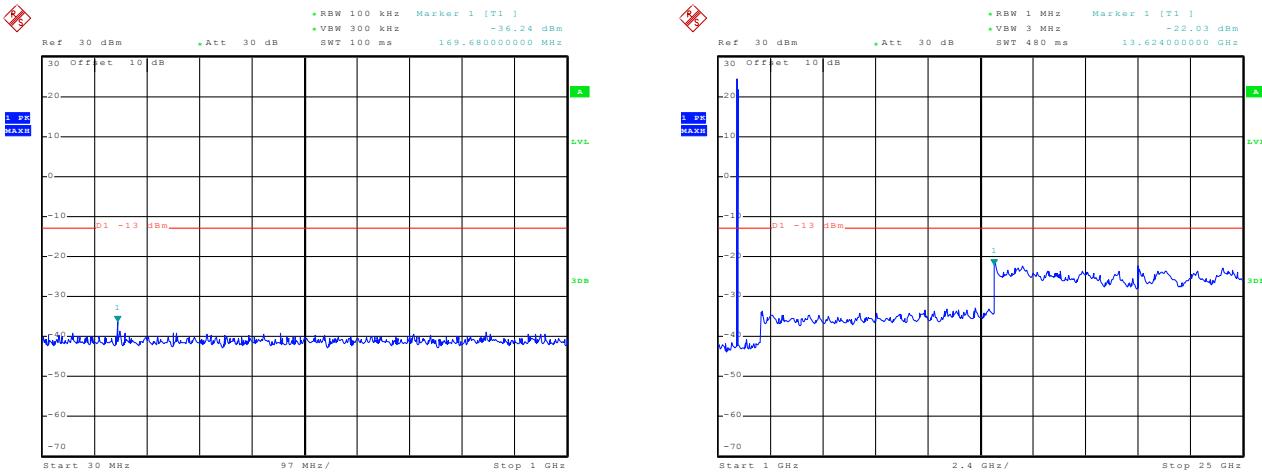
Date: 9.NOV.2015 01:58:13

30MHz~1GHz

Date: 9.NOV.2015 02:35:12

1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHzQPSK) RB Size 1 & RB Offset 0	Test Channel:	Highest channel
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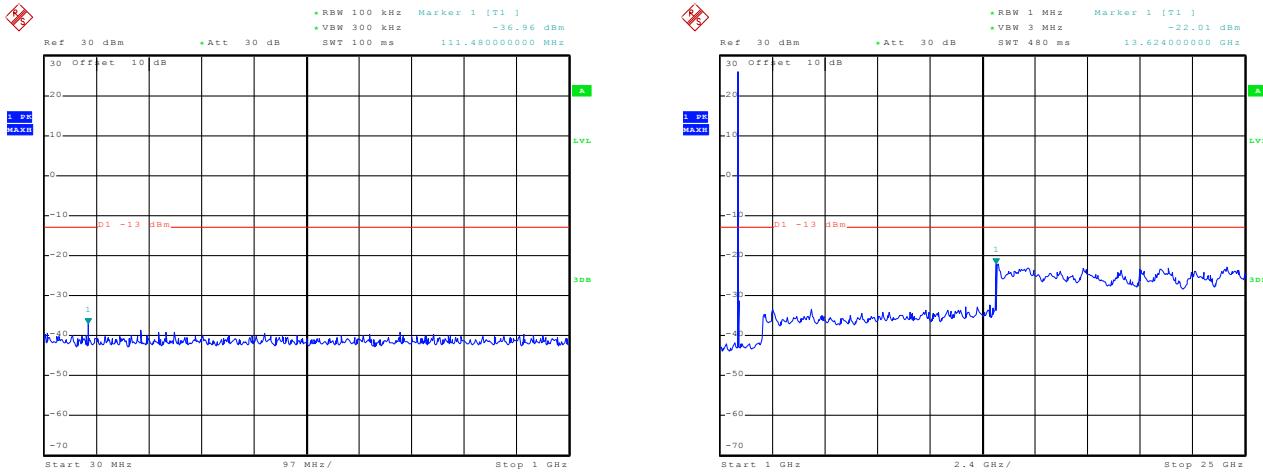
Date: 9.NOV.2015 02:00:02

30MHz~1GHz

Date: 9.NOV.2015 02:36:45

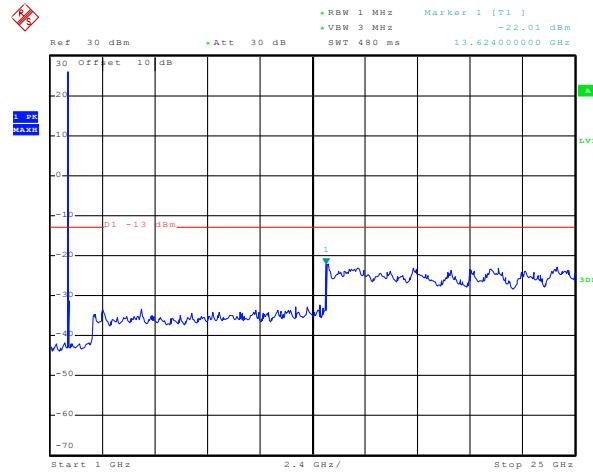
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz QPSK) RB Size 3 & RB Offset 0	Test Channel:	Lowest channel
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Date: 9.NOV.2015 01:57:39

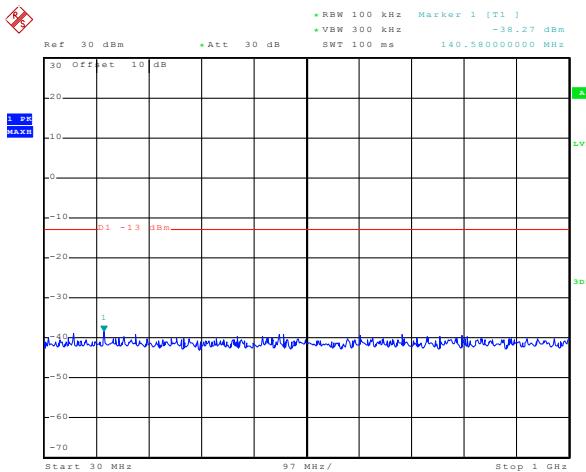
30MHz~1GHz



Date: 9.NOV.2015 02:34:26

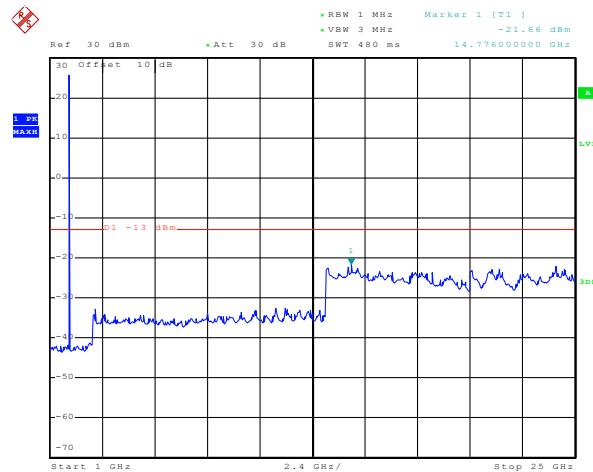
1GHz~25GHz

Test Mode:	LTE band 2(1.4 MHzQPSK) RB Size 3 & RB Offset 0	Test Channel:	Middle channel
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Date: 9.NOV.2015 01:58:29

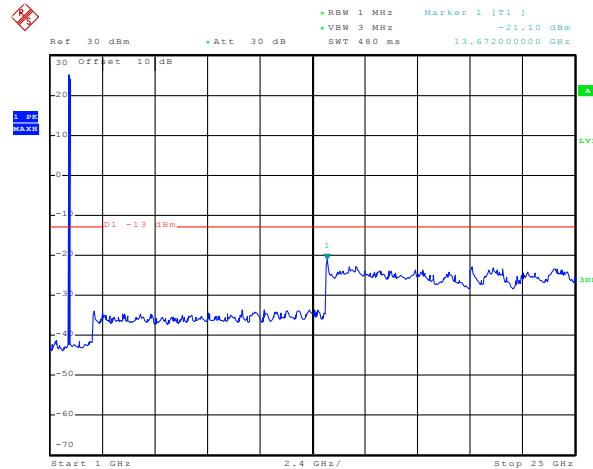
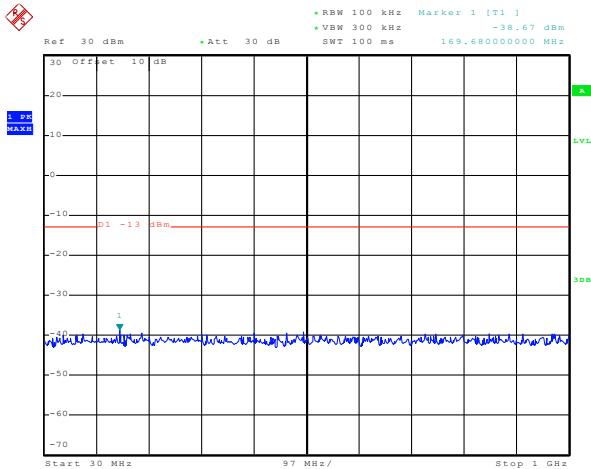
30MHz~1GHz



Date: 9.NOV.2015 02:35:47

1GHz~25GHz

Test Mode:	LTE band 2(1.4 MHzQPSK) RB Size 3 & RB Offset 0	Test Channel:	Highest channel
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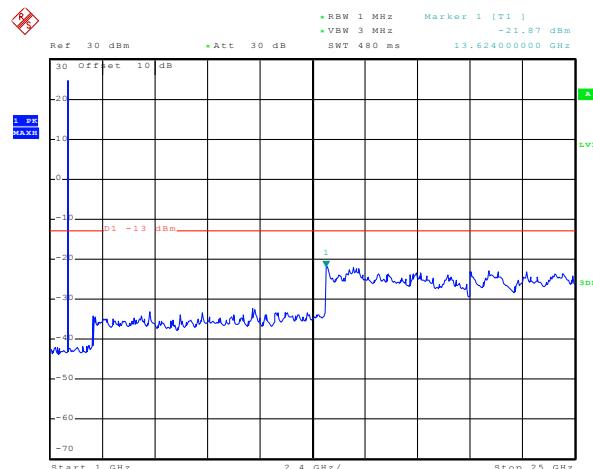
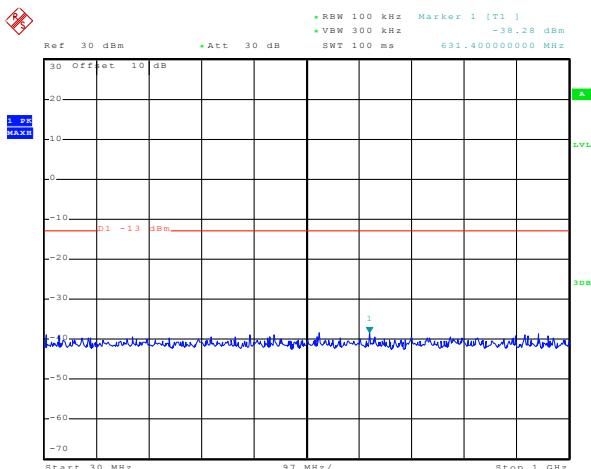
Date: 9.NOV.2015 02:00:18

30MHz~1GHz

Date: 9.NOV.2015 02:37:06

1GHz~25GHz

Test Mode:	LTE band 2(1.4 MHz QPSK) RB Size 6 & RB Offset 0	Test Channel:	Lowest channel
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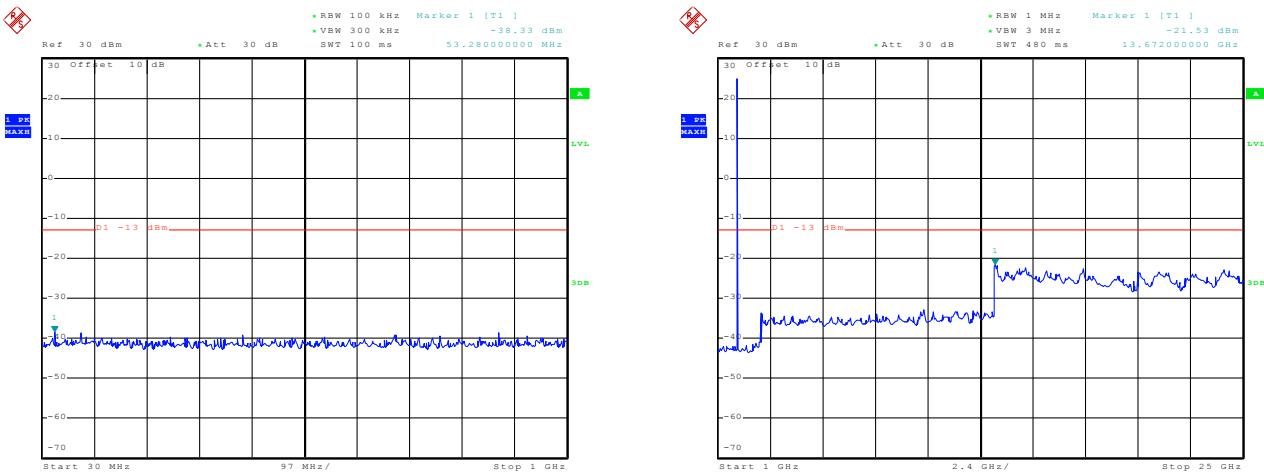
Date: 9.NOV.2015 01:57:56

30MHz~1GHz

Date: 9.NOV.2015 02:34:46

1GHz~25GHz

Test Mode:	LTE band 2(1.4 MHzQPSK) RB Size 6 & RB Offset 0	Test Channel:	Middle channel
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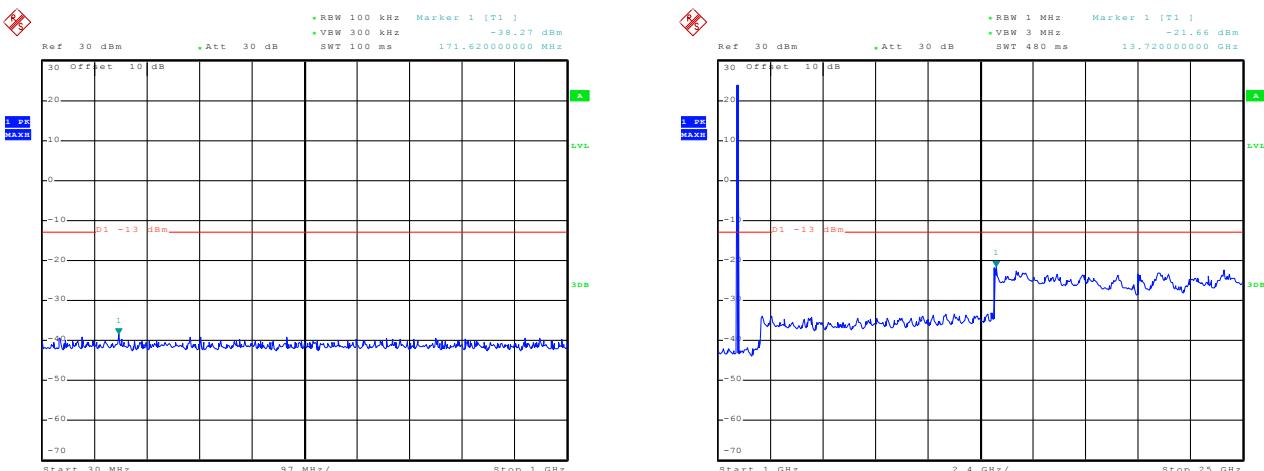
Date: 9.NOV.2015 01:58:42

30MHz~1GHz

Date: 9.NOV.2015 02:36:11

1GHz~25GHz

Test Mode:	LTE band 2(1.4 MHzQPSK) RB Size 6 & RB Offset 0	Test Channel:	Highest channel
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Date: 9.NOV.2015 02:00:31

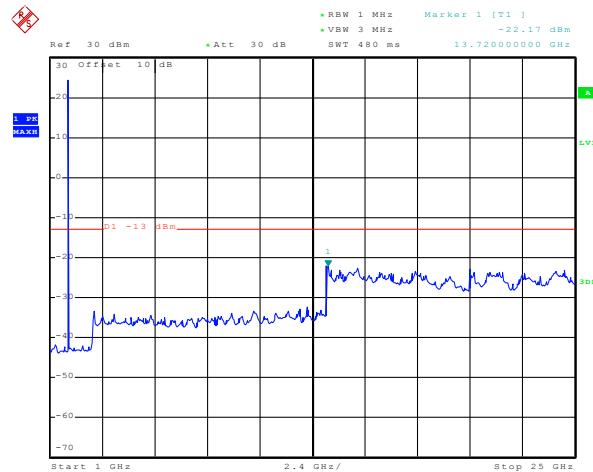
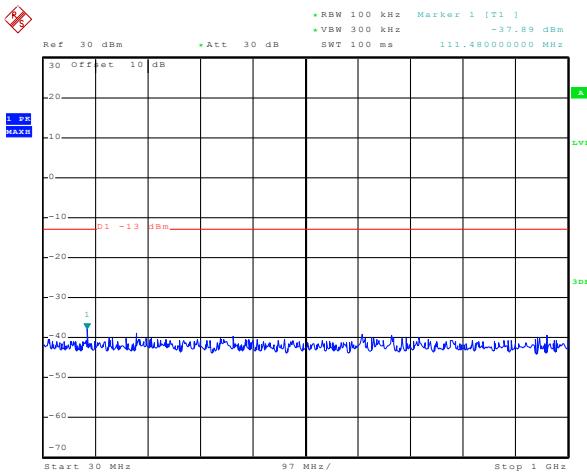
30MHz~1GHz

Date: 9.NOV.2015 02:37:25

1GHz~25GHz

## 3MHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Lowest channel
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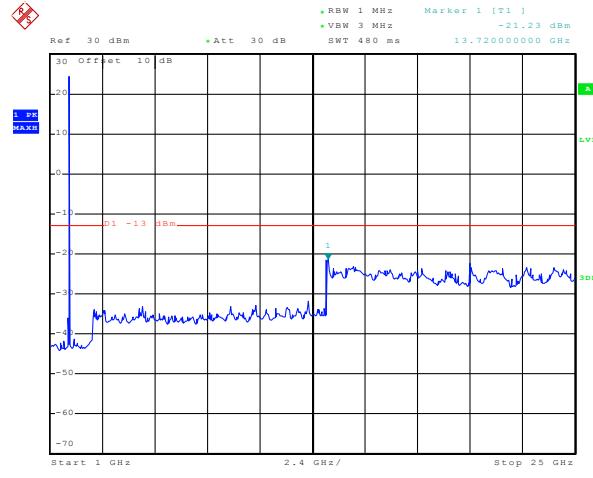
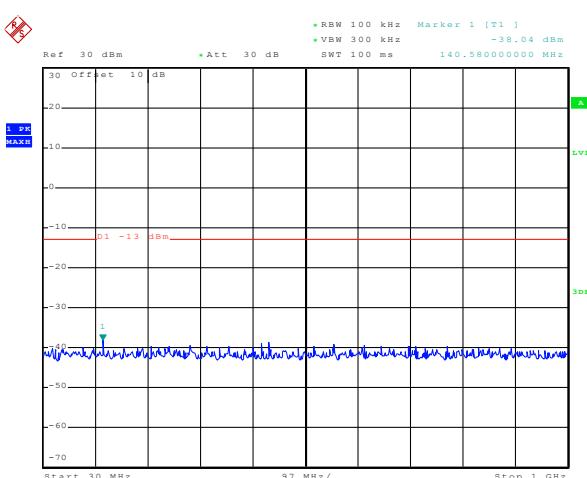
Date: 9.NOV.2015 02:01:12

30MHz~1GHz

Date: 9.NOV.2015 02:38:25

1GHz~25GHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Middle channel
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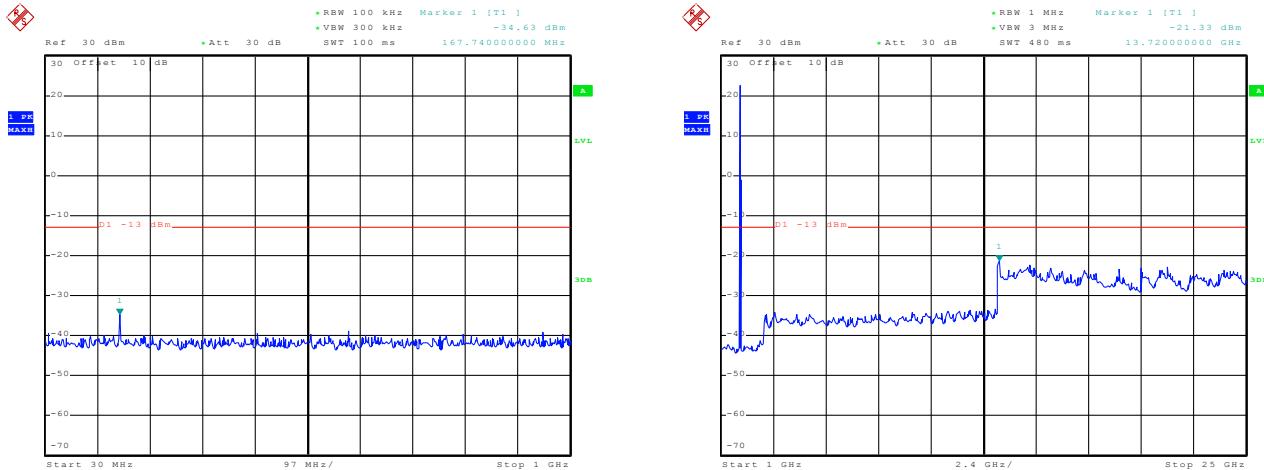
Date: 9.NOV.2015 02:01:59

30MHz~1GHz

Date: 9.NOV.2015 02:39:23

1GHz~25GHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Highest channel
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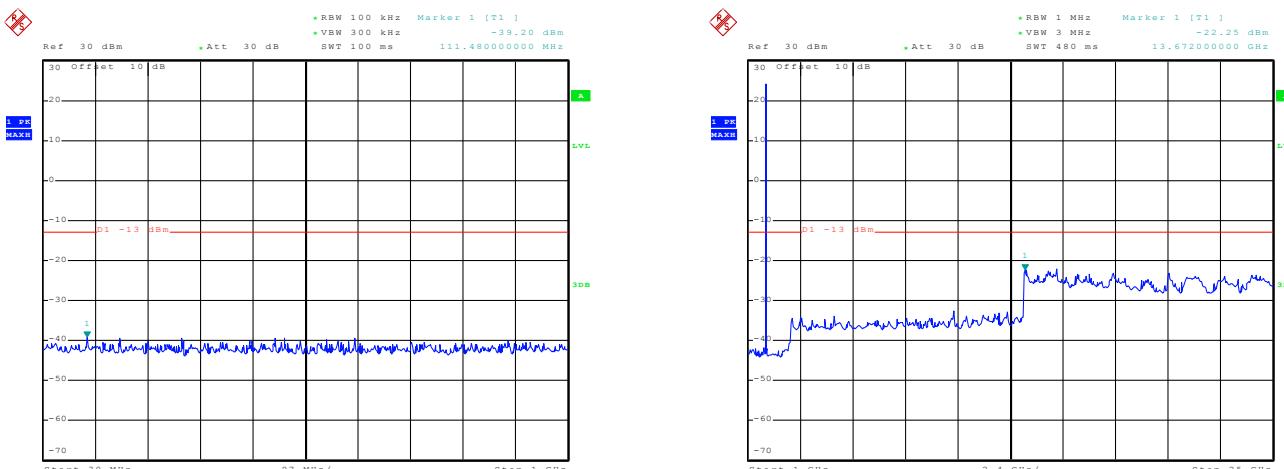
Date: 9.NOV.2015 02:02:45

30MHz~1GHz

Date: 9.NOV.2015 02:40:33

1GHz~25GHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 8 & RB Offset 0	Test Channel:	Lowest channel
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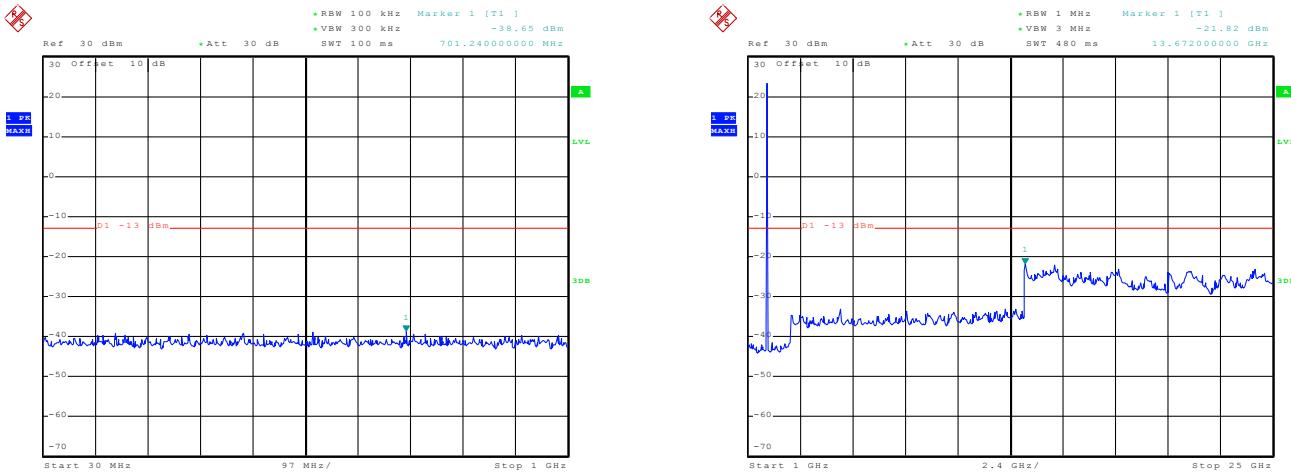
Date: 9.NOV.2015 02:01:27

30MHz~1GHz

Date: 9.NOV.2015 02:38:44

1GHz~25GHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 8 & RB Offset 0	Test Channel:	Middle channel
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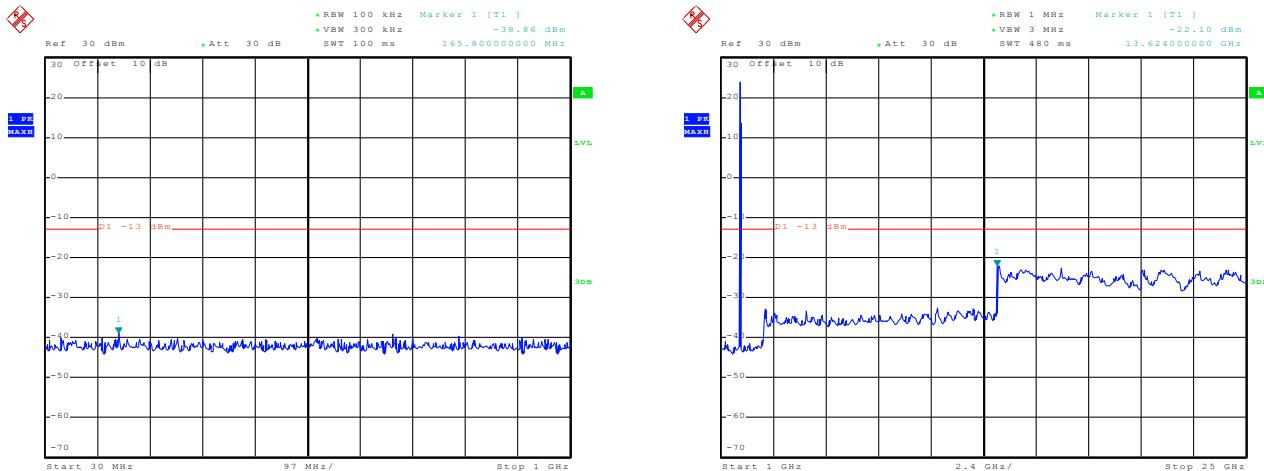
Date: 9.NOV.2015 02:02:14

30MHz~1GHz

Date: 9.NOV.2015 02:39:45

1GHz~25GHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 8 & RB Offset 0	Test Channel:	Highest channel
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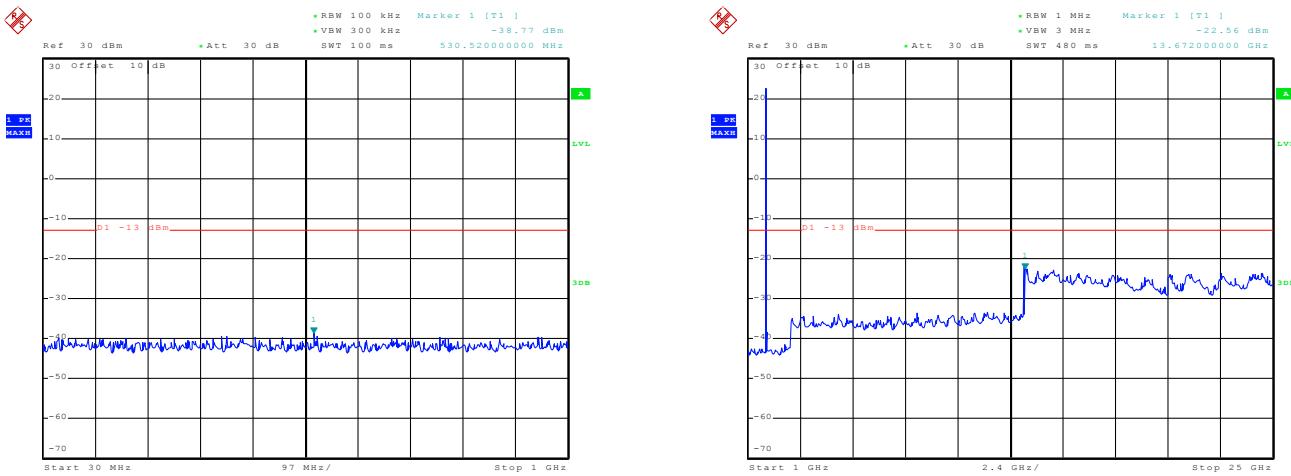
Date: 9.NOV.2015 02:02:58

30MHz~1GHz

Date: 9.NOV.2015 02:41:01

1GHz~25GHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 15& RB Offset 0	Test Channel:	Lowest channel
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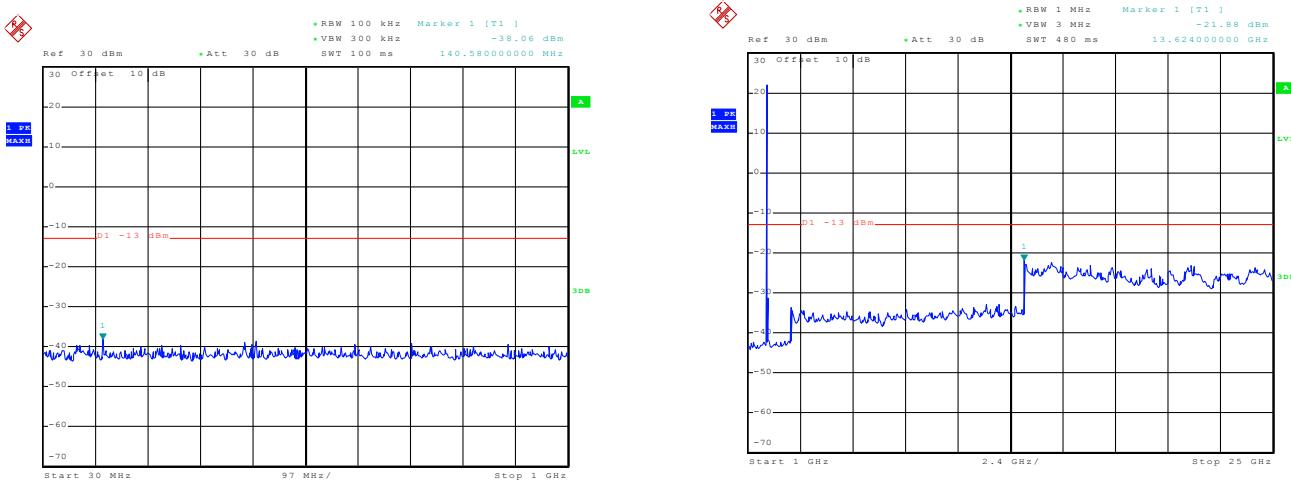
Date: 9.NOV.2015 02:01:40

30MHz~1GHz

Date: 9.NOV.2015 02:38:59

1GHz~25GHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 15& RB Offset 0	Test Channel:	Middle channel
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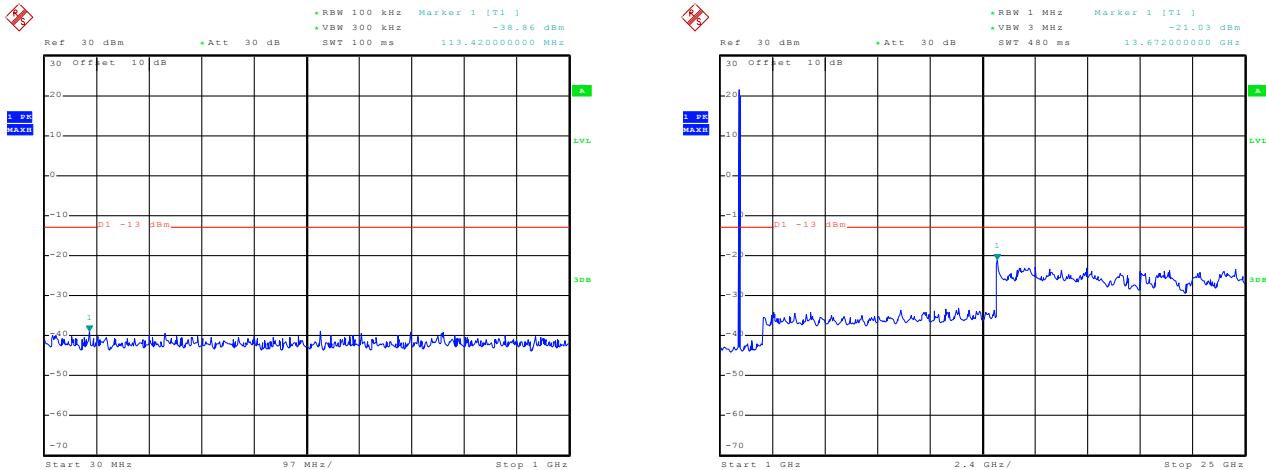
Date: 9.NOV.2015 02:02:26

30MHz~1GHz

Date: 9.NOV.2015 02:40:01

1GHz~25GHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 15& RB Offset 0	Test Channel:	Highest channel
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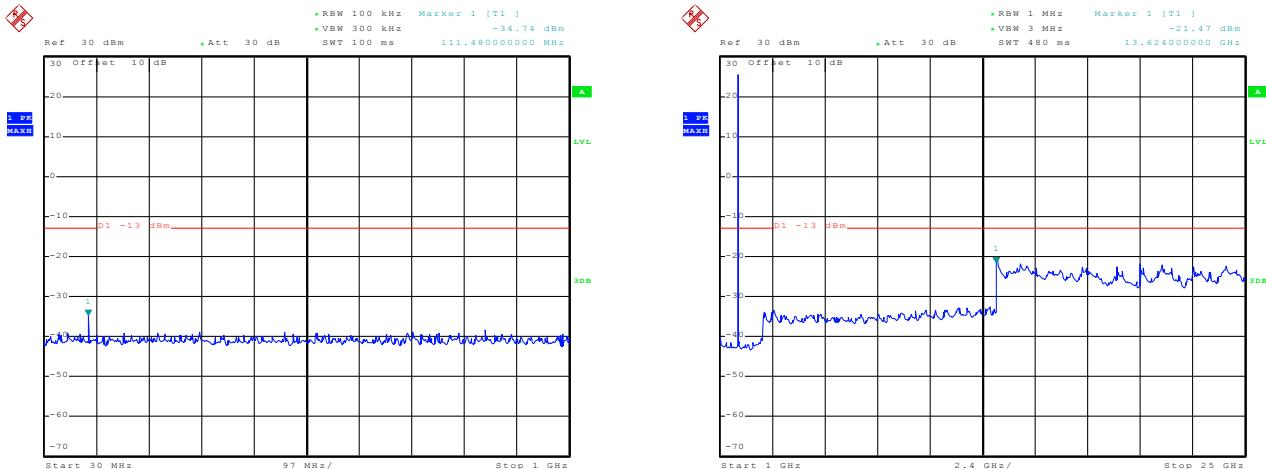
Date: 9.NOV.2015 02:03:11

30MHz~1GHz

Date: 9.NOV.2015 02:41:23

1GHz~25GHz

Test Mode:	LTE band 2(3MHz QPSK) RB Size 1 & RB Offset 0	Test Channel:	Lowest channel
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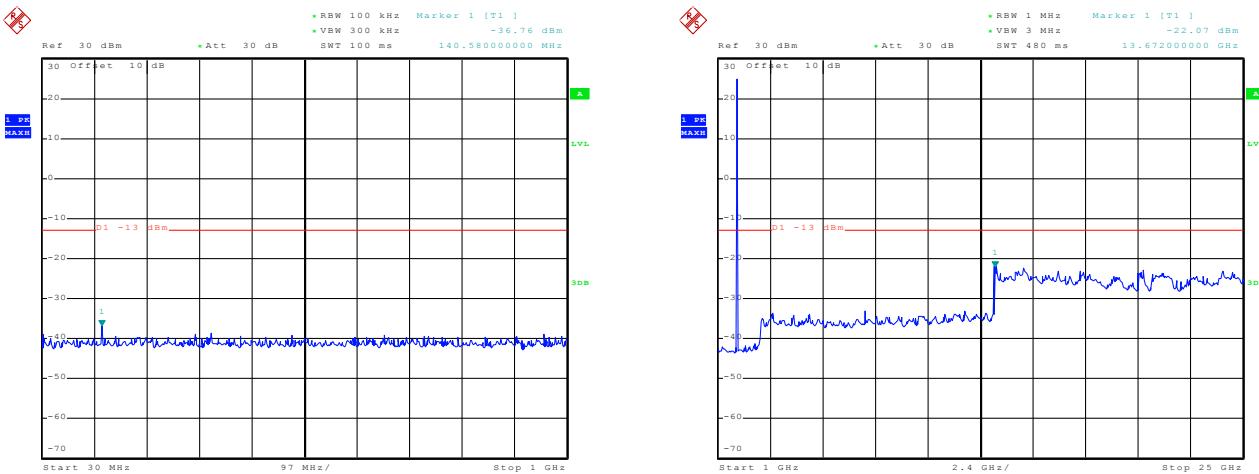
Date: 9.NOV.2015 02:01:06

30MHz~1GHz

Date: 9.NOV.2015 02:38:17

1GHz~25GHz

Test Mode:	LTE band 2(3MHz QPSK) RB Size 1 & RB Offset 0	Test Channel:	Middle channel
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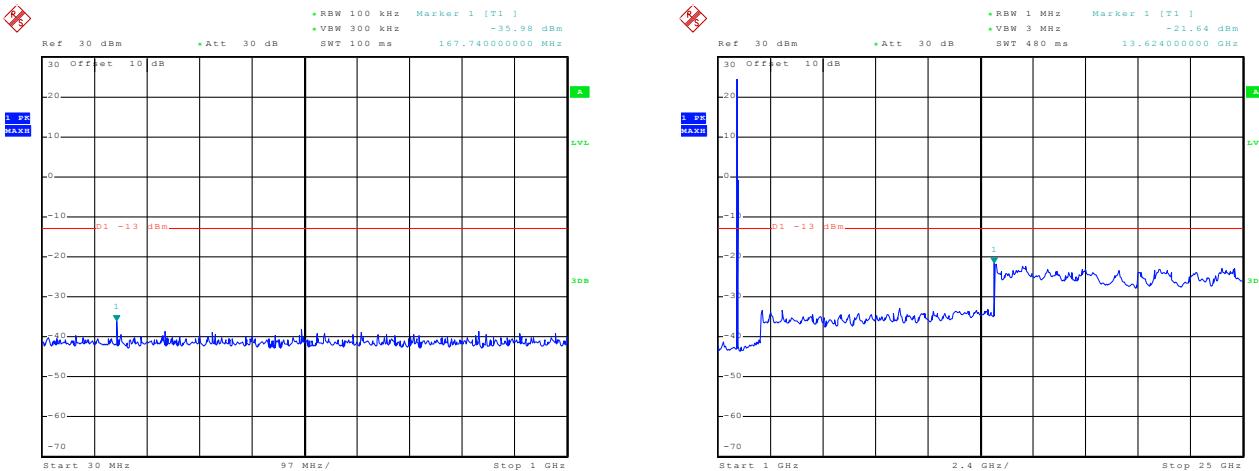
Date: 9.NOV.2015 02:01:52

30MHz~1GHz

Date: 9.NOV.2015 02:39:14

1GHz~25GHz

Test Mode:	LTE band 2(3MHz QPSK) RB Size 1 & RB Offset 0	Test Channel:	Highest channel
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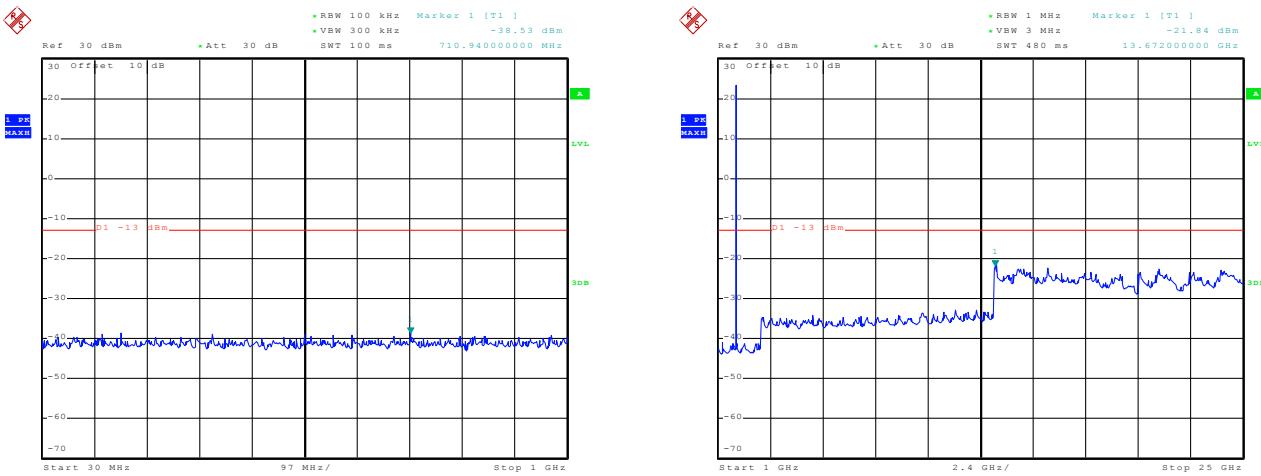
Date: 9.NOV.2015 02:02:39

30MHz~1GHz

Date: 9.NOV.2015 02:40:25

1GHz~25GHz

Test Mode:	LTE band 2(3MHz QPSK) RB Size 8 & RB Offset 0	Test Channel:	Lowest channel
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Date: 9.NOV.2015 02:01:21

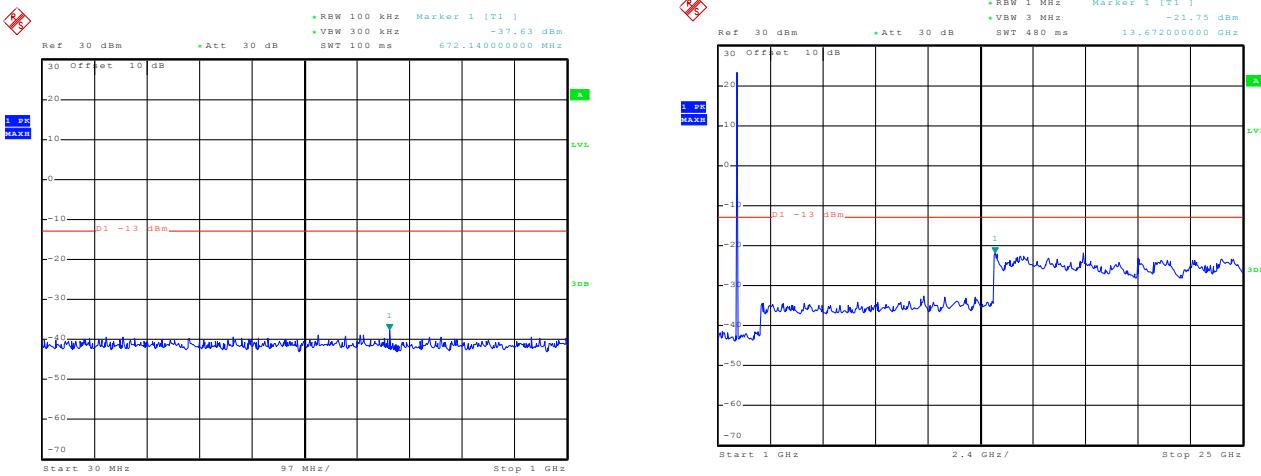
30MHz~1GHz

Date: 9.NOV.2015 02:38:36

1GHz~25GHz

Test Mode:	LTE band 2(3MHz QPSK) RB Size 8 & RB Offset 0	Test Channel:	Middle channel
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7



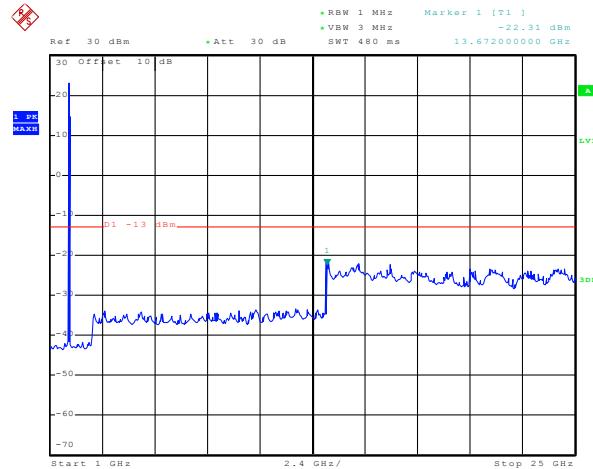
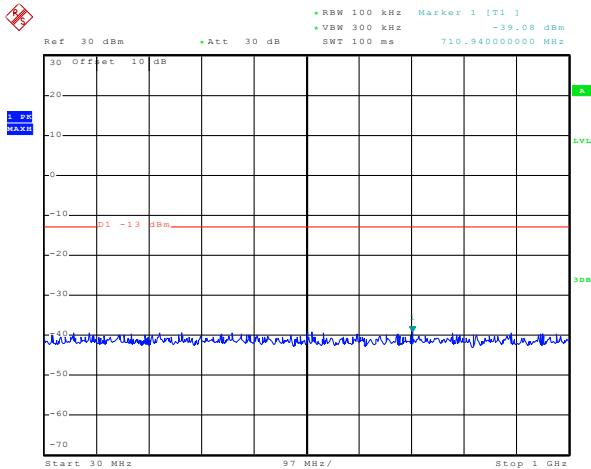
Date: 9.NOV.2015 02:02:08

30MHz~1GHz

Date: 9.NOV.2015 02:39:37

1GHz~20GHz

Test Mode:	LTE band 2(3MHz QPSK) RB Size 8 & RB Offset 0	Test Channel:	Highest channel
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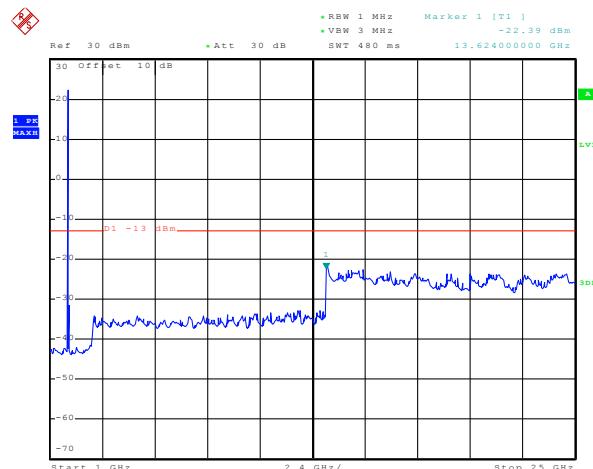
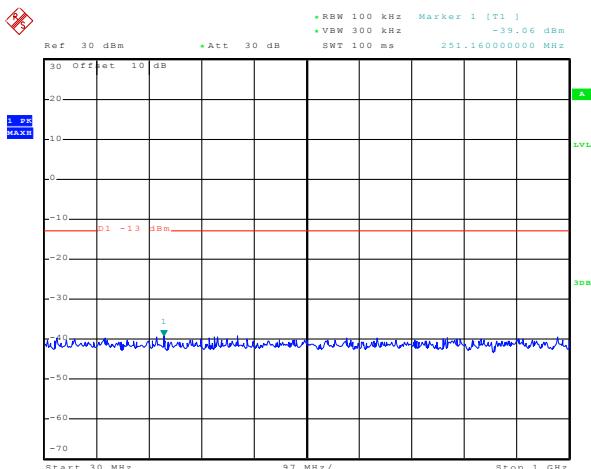
Date: 9.NOV.2015 02:02:54

30MHz~1GHz

Date: 9.NOV.2015 02:40:44

1GHz~25GHz

Test Mode:	LTE band 2(3MHz QPSK) RB Size 15& RB Offset 0	Test Channel:	Lowest channel
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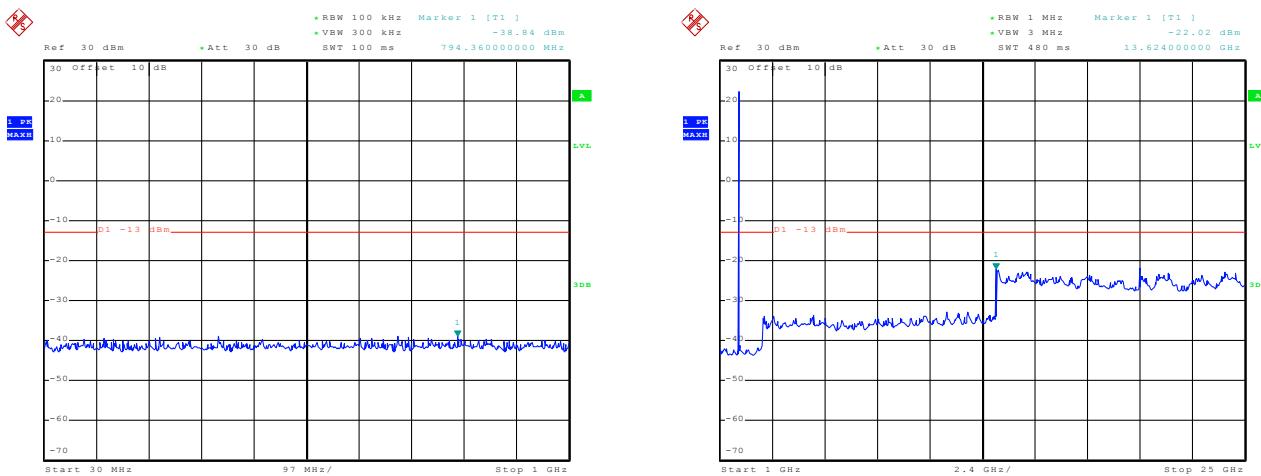
Date: 9.NOV.2015 02:01:34

30MHz~1GHz

Date: 9.NOV.2015 02:38:53

1GHz~25GHz

Test Mode:	LTE band 2(3MHz QPSK) RB Size 15& RB Offset 0	Test Channel:	Middle channel
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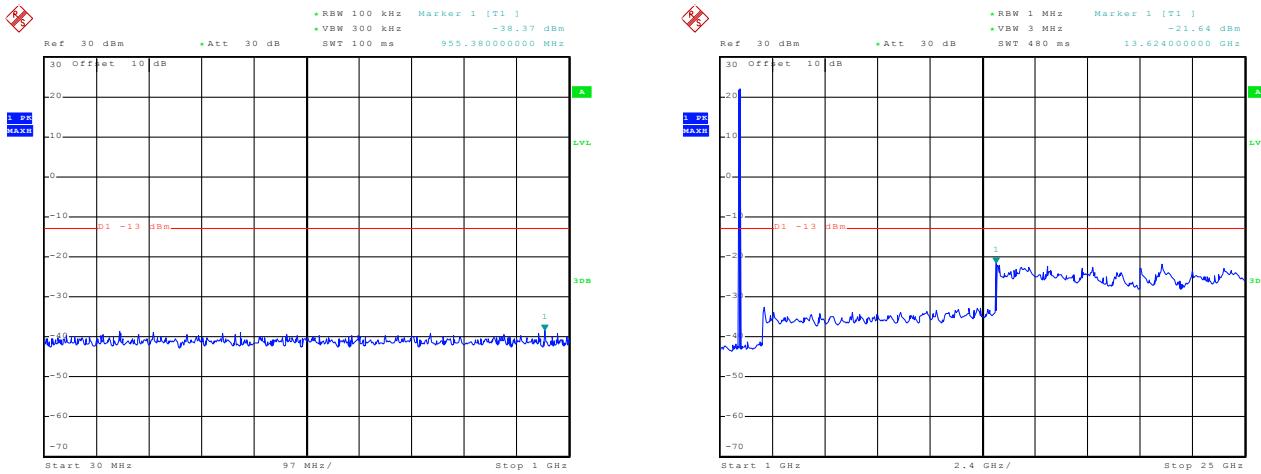
Date: 9.NOV.2015 02:02:22

30MHz~1GHz

Date: 9.NOV.2015 02:39:54

1GHz~25GHz

Test Mode:	LTE band 2(3MHz QPSK) RB Size 15& RB Offset 0	Test Channel:	Highest channel
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Date: 9.NOV.2015 02:03:05

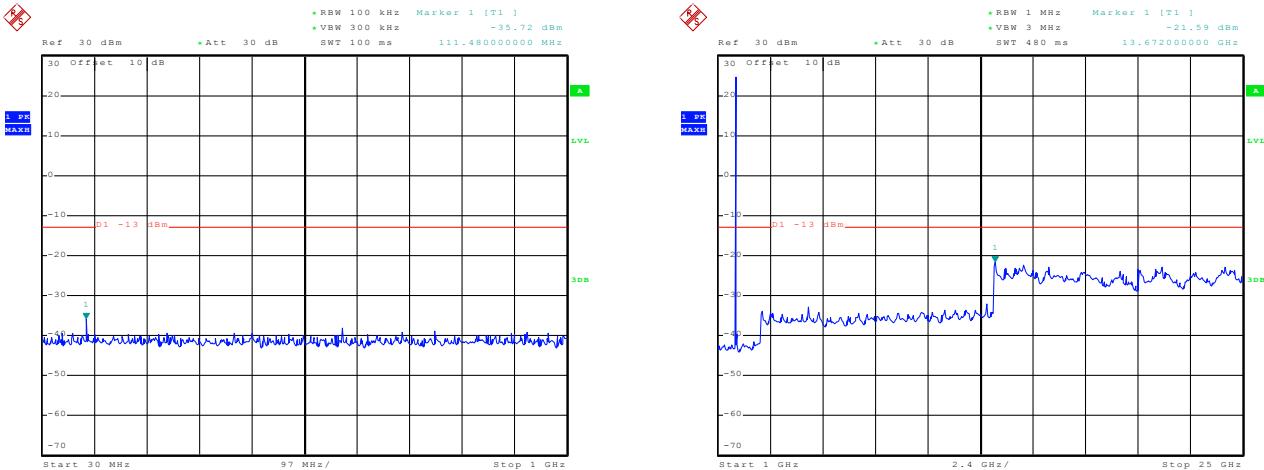
30MHz~1GHz

Date: 9.NOV.2015 02:41:17

1GHz~25GHz

## 5MHz

Test Mode:	LTE band 2(5MHz 16QAM) RB Size 1& RB Offset 0	Test Channel:	Lowest channel
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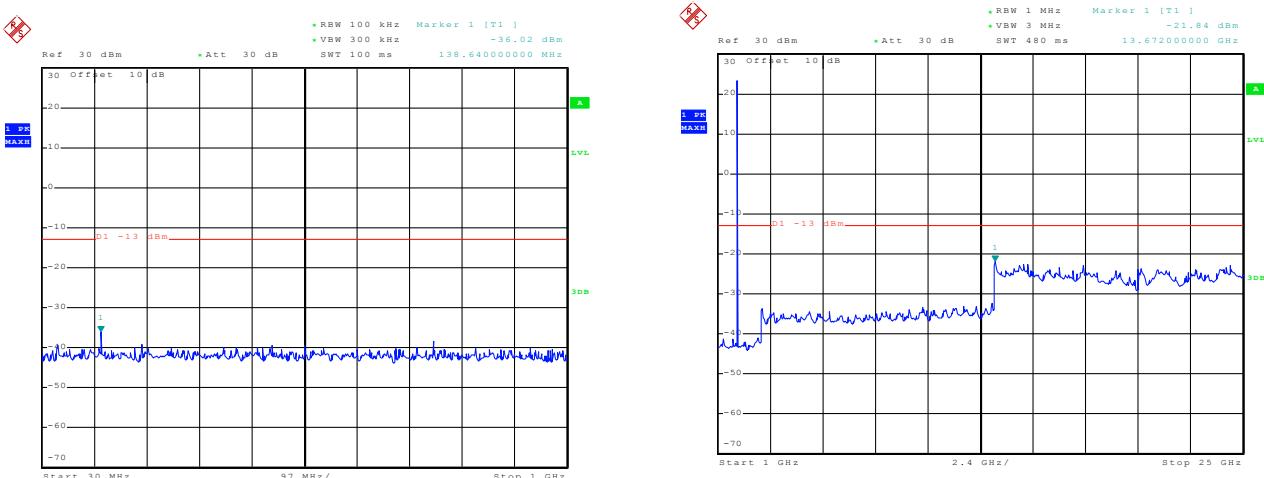
Date: 9.NOV.2015 02:04:13

30MHz~1GHz

Date: 9.NOV.2015 02:42:01

1GHz~25GHz

Test Mode:	LTE band 2(5MHz 16QAM) RB Size 1& RB Offset 0	Test Channel:	Middle channel
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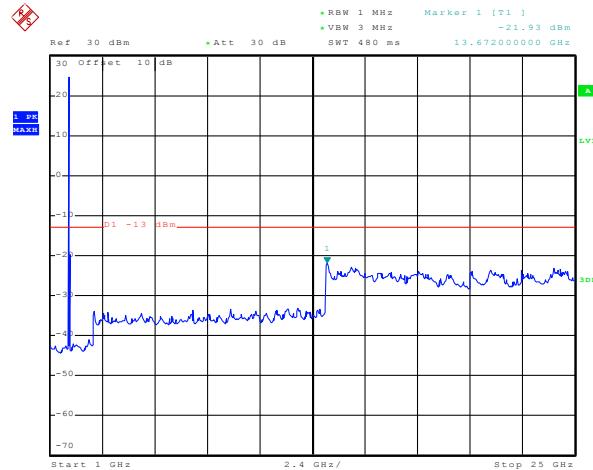
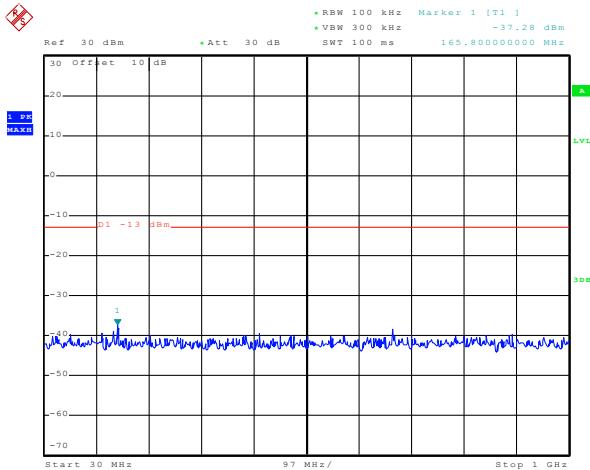
Date: 9.NOV.2015 02:05:02

30MHz~1GHz

Date: 9.NOV.2015 02:43:09

1GHz~25GHz

Test Mode:	LTE band 2(5MHz 16QAM) RB Size 1& RB Offset 0	Test Channel:	Highest channel
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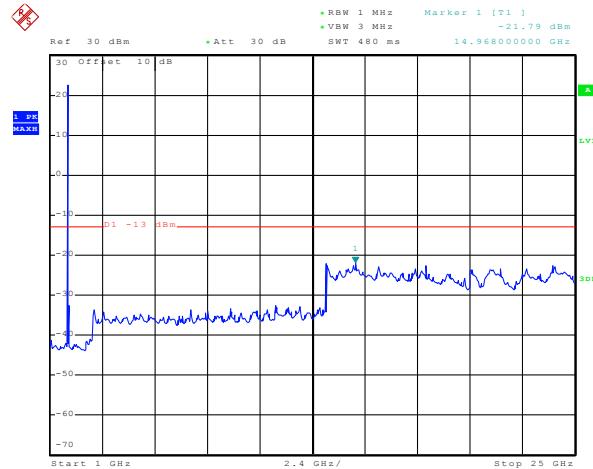
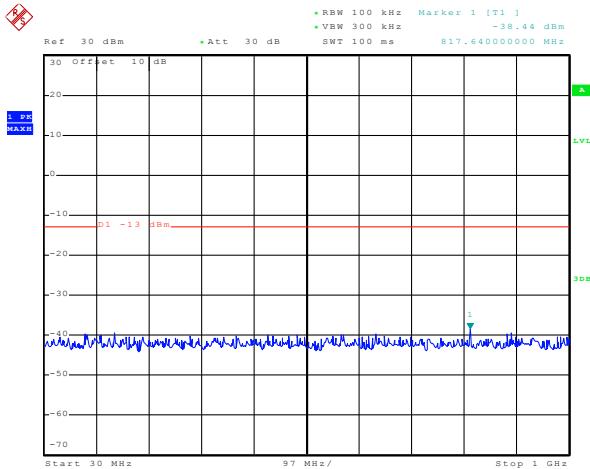
Date: 9.NOV.2015 02:05:48

30MHz~1GHz

Date: 9.NOV.2015 02:44:22

1GHz~20GHz

Test Mode:	LTE band 2(5MHz 16QAM) RB Size 12& RB Offset 0	Test Channel:	Lowest channel
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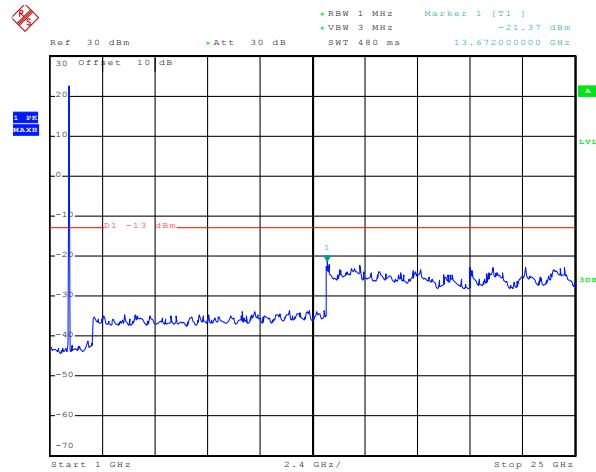
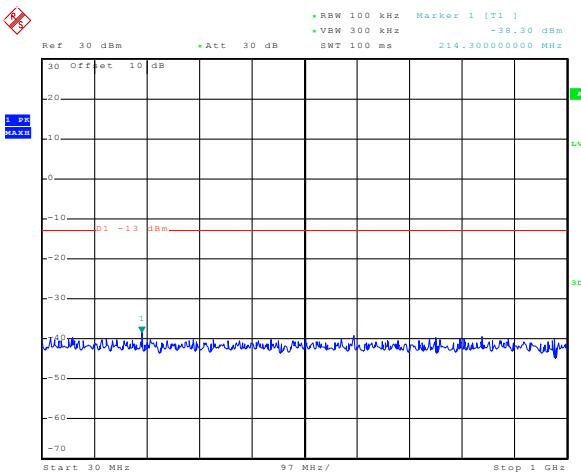
Date: 9.NOV.2015 02:04:25

30MHz~1GHz

Date: 9.NOV.2015 02:42:24

1GHz~25GHz

Test Mode:	LTE band 2(5MHz 16QAM) RB Size 12& RB Offset 0	Test Channel:	Middle channel
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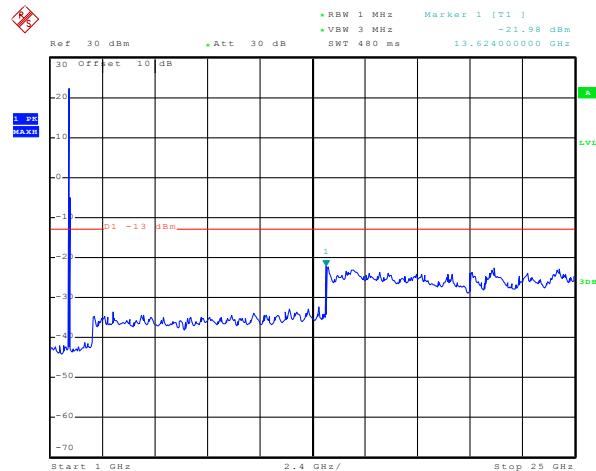
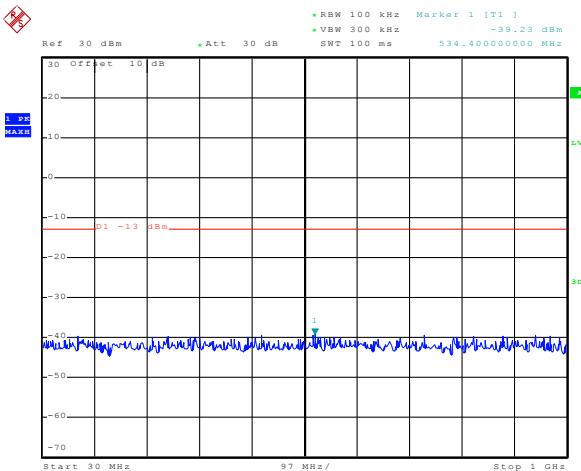
Date: 9.NOV.2015 02:05:14

30MHz~1GHz

Date: 9.NOV.2015 02:43:28

1GHz~25GHz

Test Mode:	LTE band 2(5MHz 16QAM) RB Size 12& RB Offset 0	Test Channel:	Highest channel
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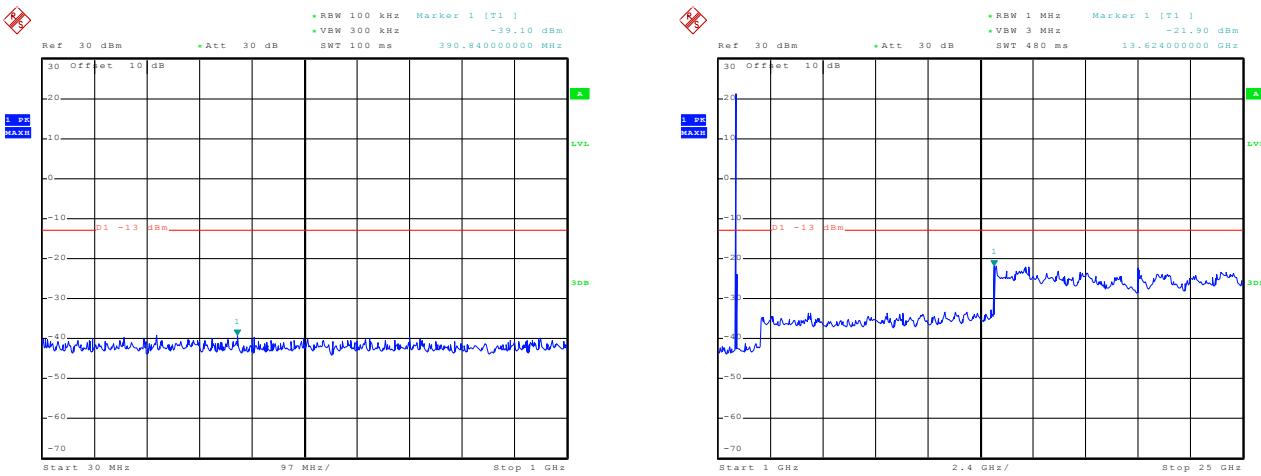
Date: 9.NOV.2015 02:06:01

30MHz~1GHz

Date: 9.NOV.2015 02:44:48

1GHz~25GHz

Test Mode:	LTE band 2(5MHz 16QAM) RB Size 25& RB Offset 0	Test Channel:	Lowest channel
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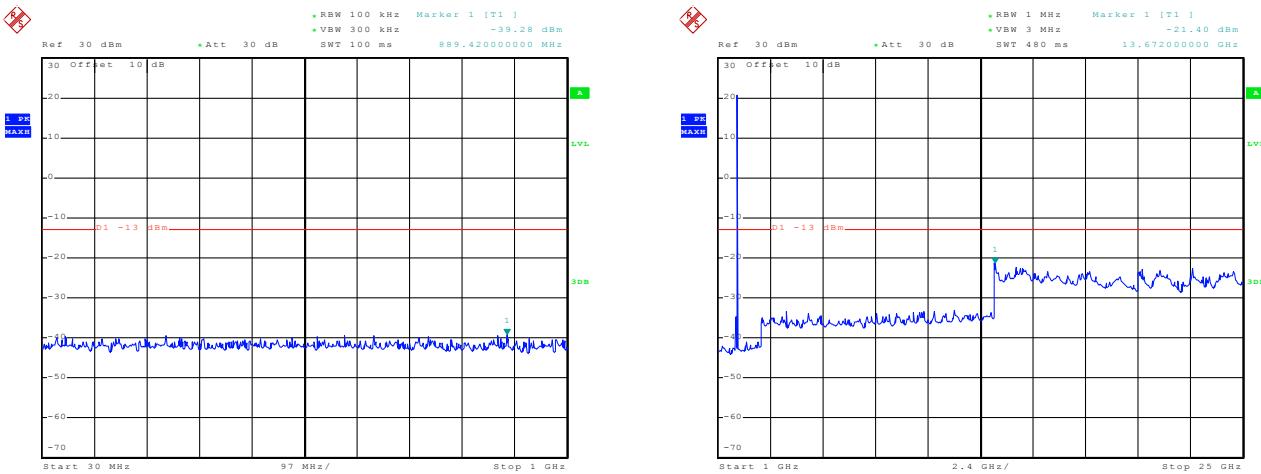
Date: 9.NOV.2015 02:04:35

30MHz~1GHz

Date: 9.NOV.2015 02:42:44

1GHz~25GHz

Test Mode:	LTE band 2(5MHz 16QAM) RB Size 25& RB Offset 0	Test Channel:	Middle channel
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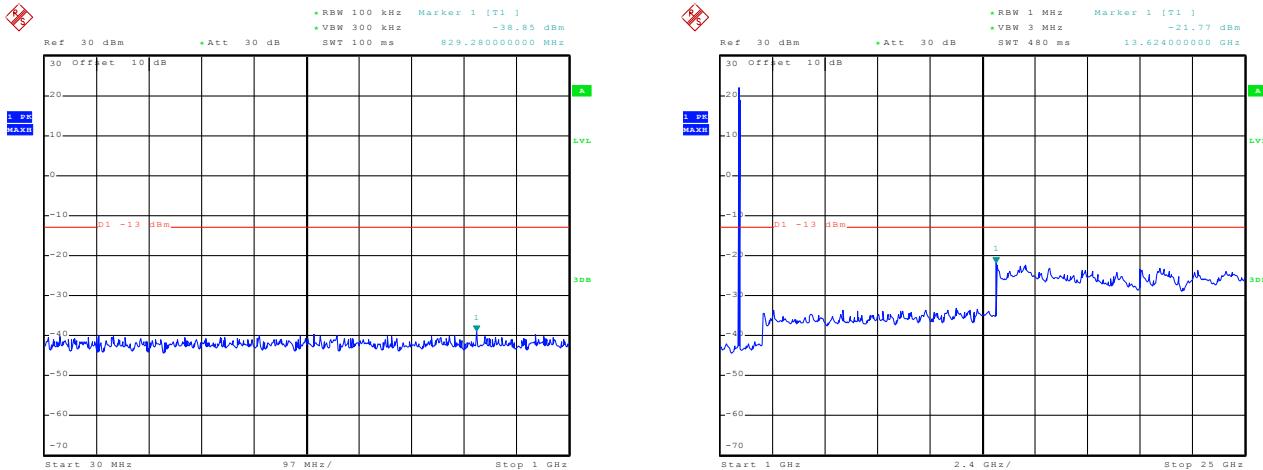
Date: 9.NOV.2015 02:05:27

30MHz~1GHz

Date: 9.NOV.2015 02:43:48

1GHz~25GHz

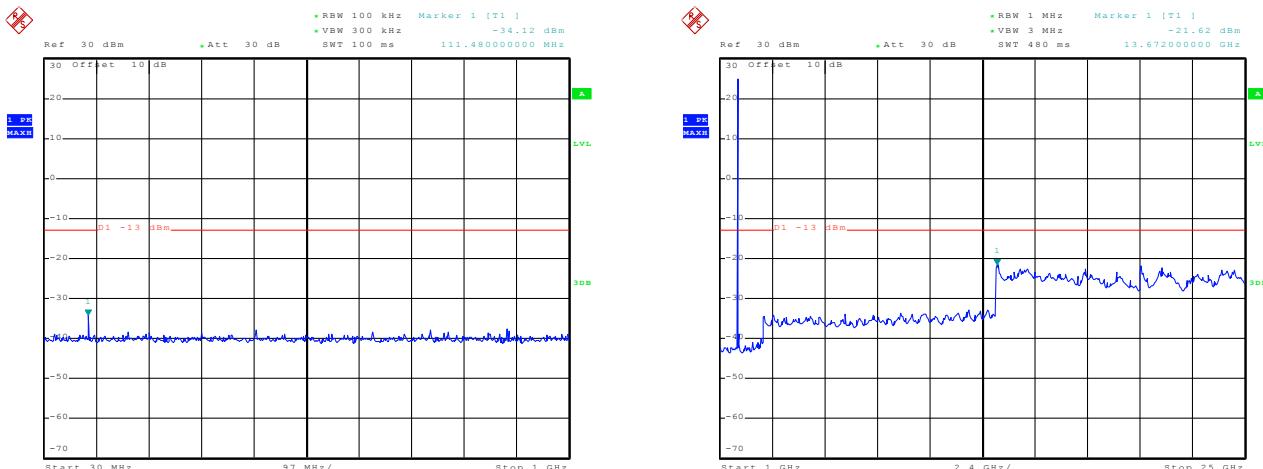
Test Mode:	LTE band 2(5MHz 16QAM) RB Size 25& RB Offset 0	Test Channel:	Highest channel
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Date: 9.NOV.2015 02:06:12  
30MHz~1GHz

Date: 9.NOV.2015 02:45:16  
1GHz~25GHz

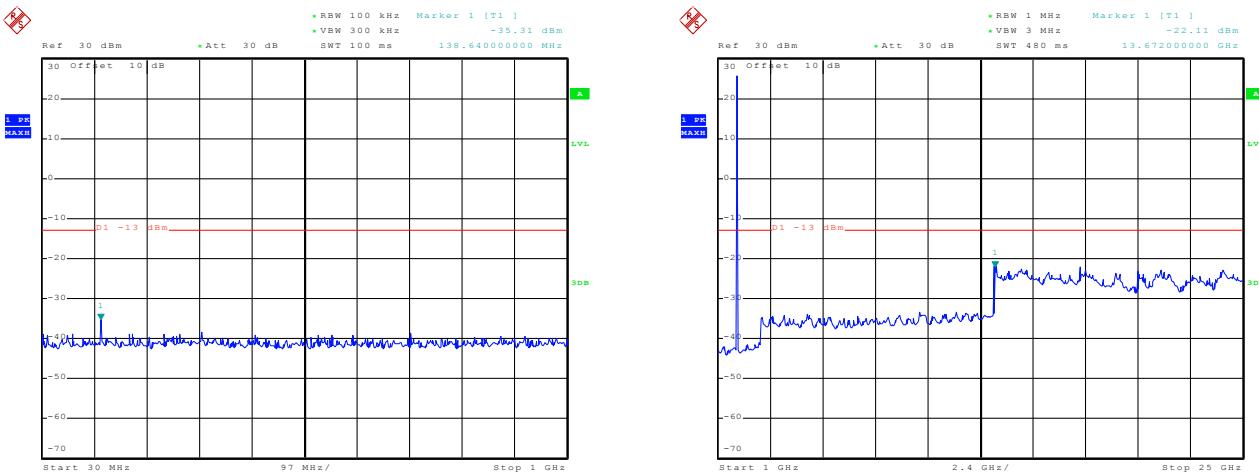
Test Mode:	LTE band 2(5MHz QPSK) RB Size 1& RB Offset 0	Test Channel:	Lowest channel
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Date: 9.NOV.2015 02:04:04  
30MHz~1GHz

Date: 9.NOV.2015 02:41:52  
1GHz~25GHz

Test Mode:	LTE band 2(5MHz QPSK) RB Size 1& RB Offset 0	Test Channel:	Middle channel
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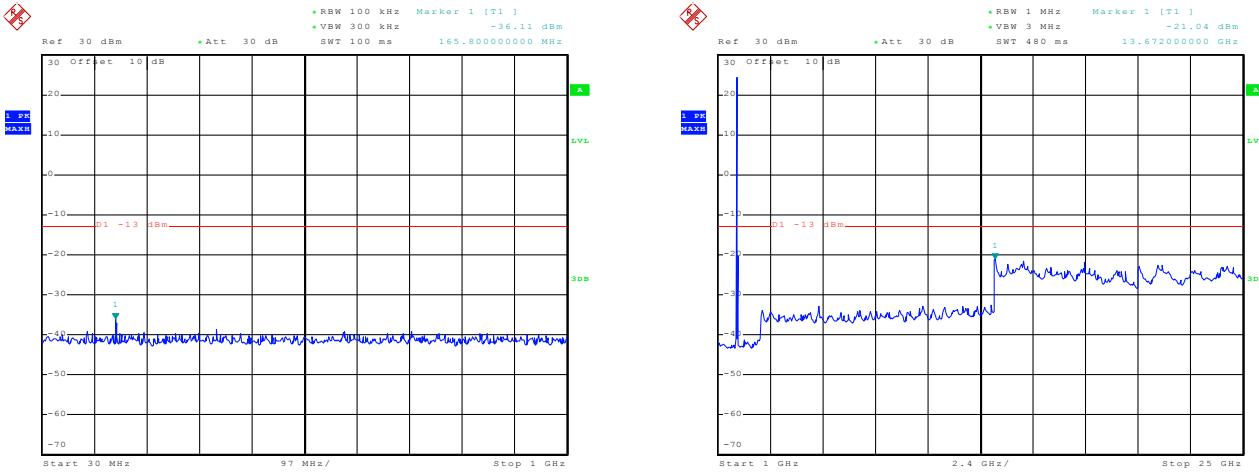
Date: 9.NOV.2015 02:04:57

30MHz~1GHz

Date: 9.NOV.2015 02:42:59

1GHz~25GHz

Test Mode:	LTE band 2(5MHz QPSK) RB Size 1& RB Offset 0	Test Channel:	Highest channel
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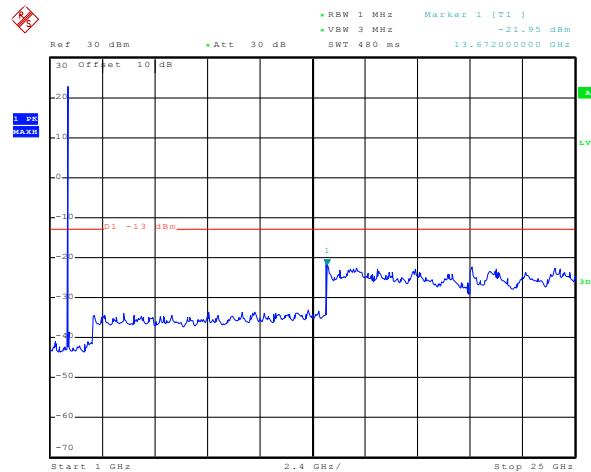
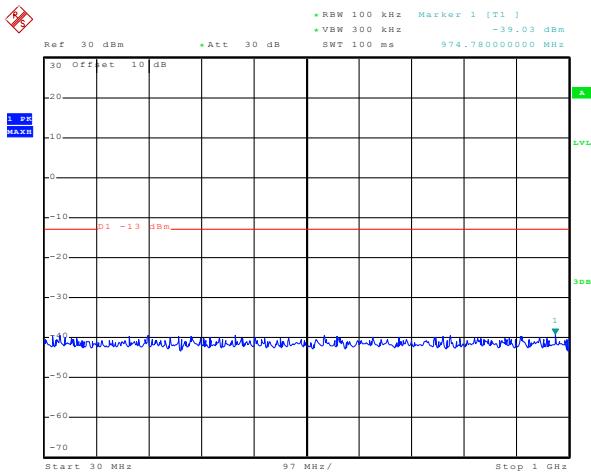
Date: 9.NOV.2015 02:05:40

30MHz~1GHz

Date: 9.NOV.2015 02:44:12

1GHz~25GHz

Test Mode:	LTE band 2(5MHz QPSK) RB Size 12& RB Offset 0	Test Channel:	Lowest channel
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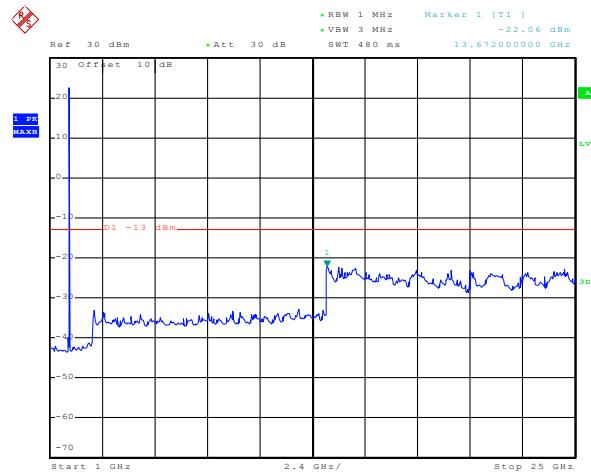
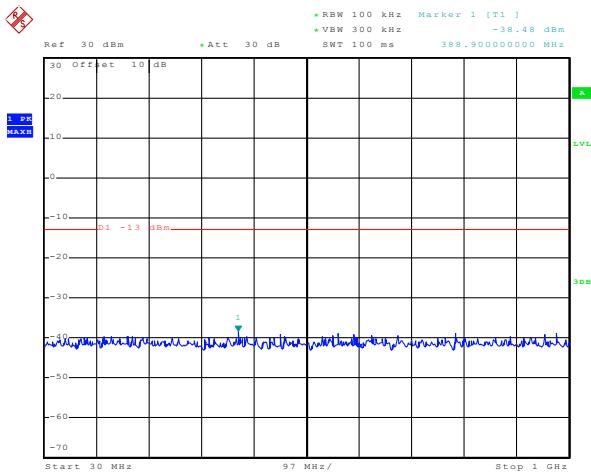
Date: 9.NOV.2015 02:04:21

30MHz~1GHz

Date: 9.NOV.2015 02:42:15

1GHz~25GHz

Test Mode:	LTE band 2(5MHz QPSK) RB Size 12& RB Offset 0	Test Channel:	Middle channel
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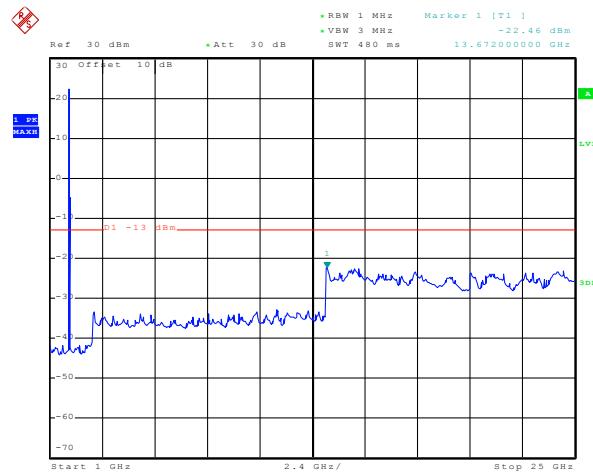
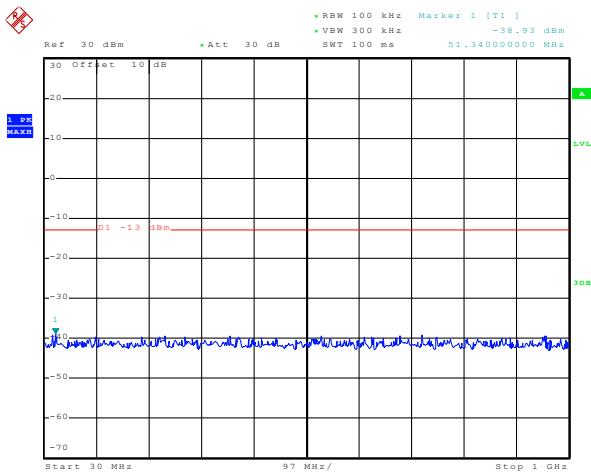
Date: 9.NOV.2015 02:05:10

30MHz~1GHz

Date: 9.NOV.2015 02:43:20

1GHz~20GHz

Test Mode:	LTE band 2(5MHz QPSK) RB Size 12& RB Offset 0	Test Channel:	Highest channel
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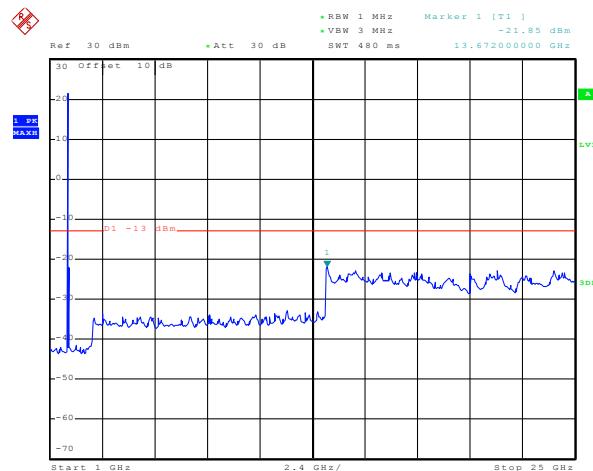
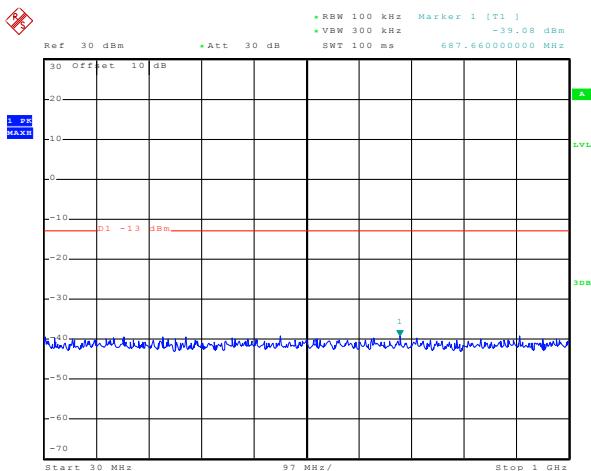
Date: 9.NOV.2015 02:05:56

30MHz~1GHz

Date: 9.NOV.2015 02:44:37

1GHz~25GHz

Test Mode:	LTE band 2(5MHz QPSK) RB Size 25& RB Offset 0	Test Channel:	Lowest channel
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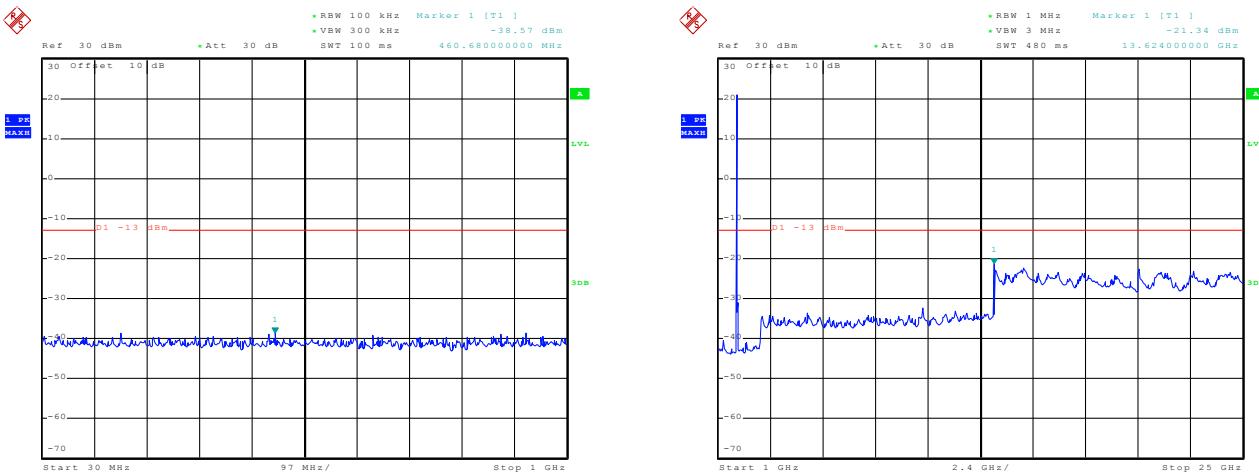
Date: 9.NOV.2015 02:04:31

30MHz~1GHz

Date: 9.NOV.2015 02:42:33

1GHz~25GHz

Test Mode:	LTE band 2(5MHz QPSK) RB Size 25& RB Offset 0	Test Channel:	Middle channel
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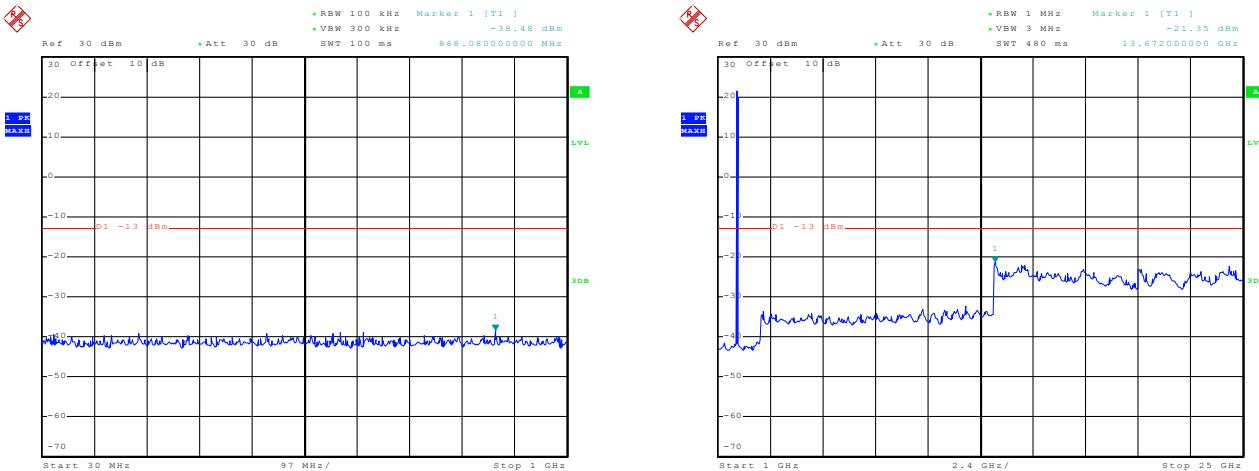
Date: 9.NOV.2015 02:05:23

30MHz~1GHz

Date: 9.NOV.2015 02:43:39

1GHz~25GHz

Test Mode:	LTE band 2(5MHz QPSK) RB Size 25& RB Offset 0	Test Channel:	Highest channel
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Date: 9.NOV.2015 02:06:08

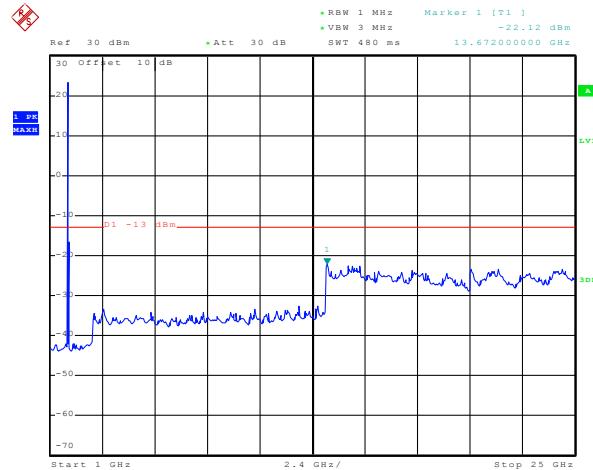
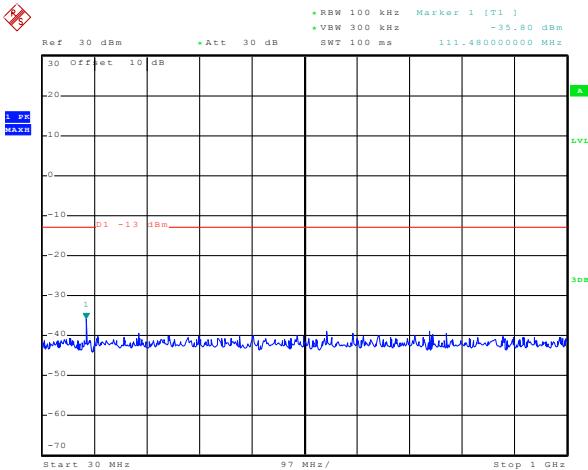
30MHz~1GHz

Date: 9.NOV.2015 02:45:07

1GHz~25GHz

## 10MHz

Test Mode:	LTE band 2(10MHz 16QAM) RB Size 1& RB Offset 0	Test Channel:	Lowest channel
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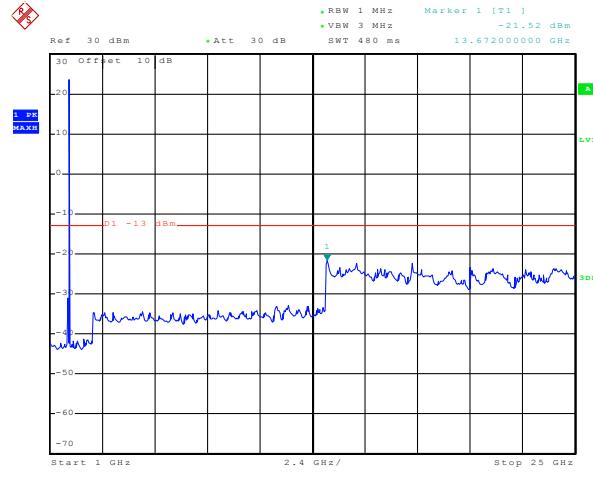
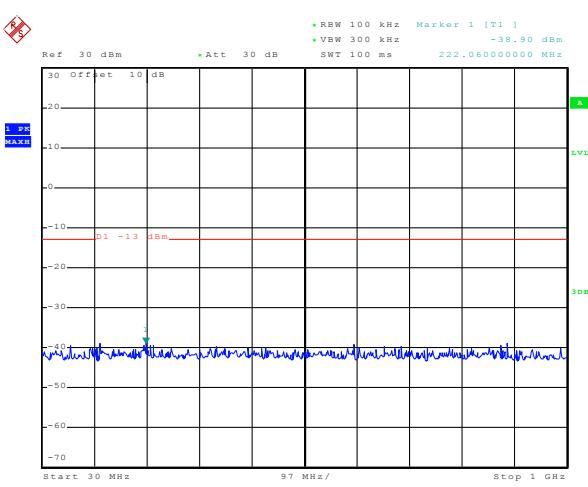
Date: 9.NOV.2015 02:06:55

30MHz~1GHz

Date: 9.NOV.2015 02:45:53

1GHz~25GHz

Test Mode:	LTE band 2(10MHz 16QAM) RB Size 1& RB Offset 0	Test Channel:	Middle channel
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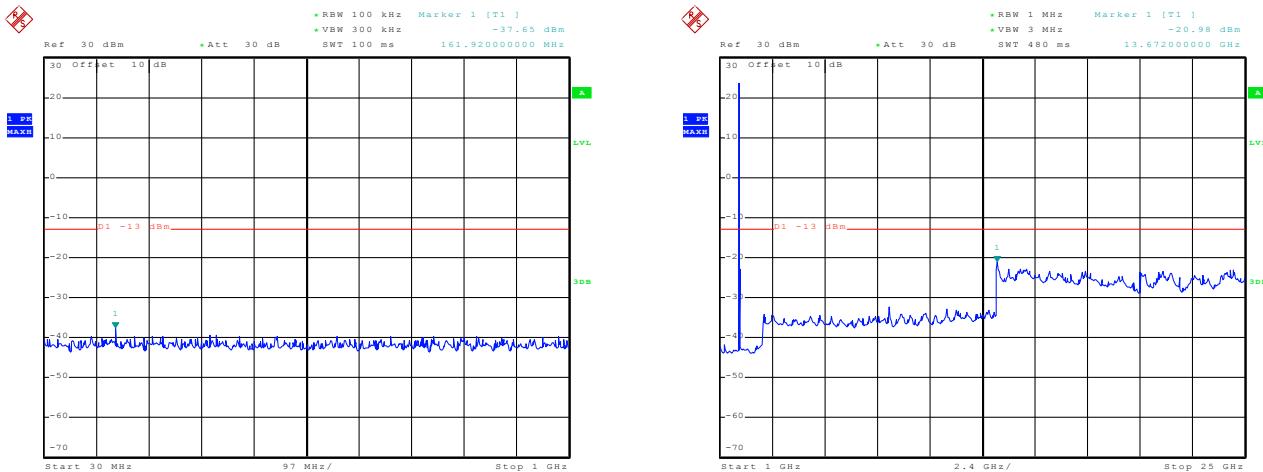
Date: 9.NOV.2015 02:07:43

30MHz~1GHz

Date: 9.NOV.2015 02:47:09

1GHz~25GHz

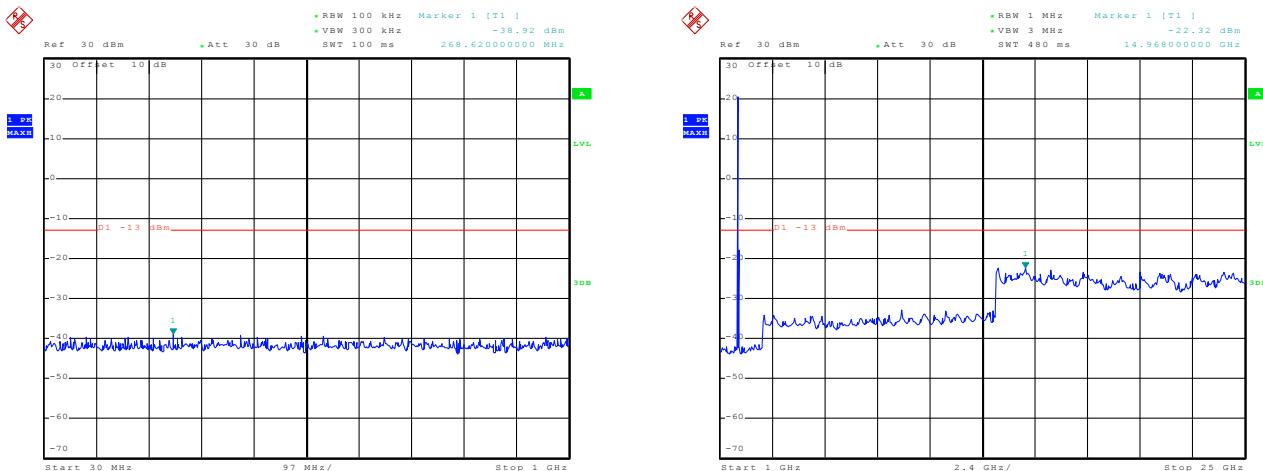
Test Mode:	LTE band 2(10MHz 16QAM) RB Size 1& RB Offset 0	Test Channel:	Highest channel
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Date: 9.NOV.2015 02:08:29  
30MHz~1GHz

Date: 9.NOV.2015 02:48:36  
1GHz~25GHz

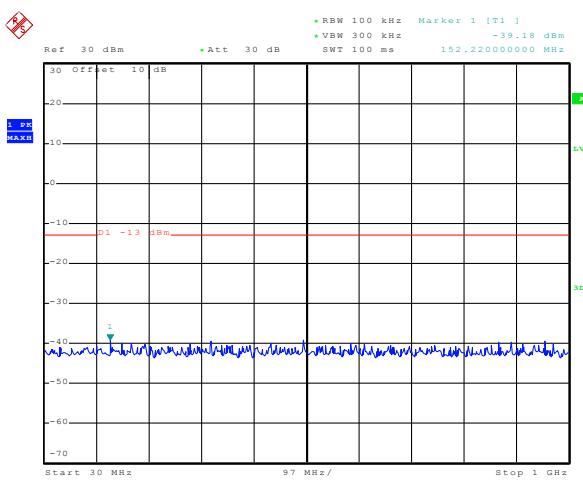
Test Mode:	LTE band 2(10MHz 16QAM) RB Size 25& RB Offset 0	Test Channel:	Lowest channel
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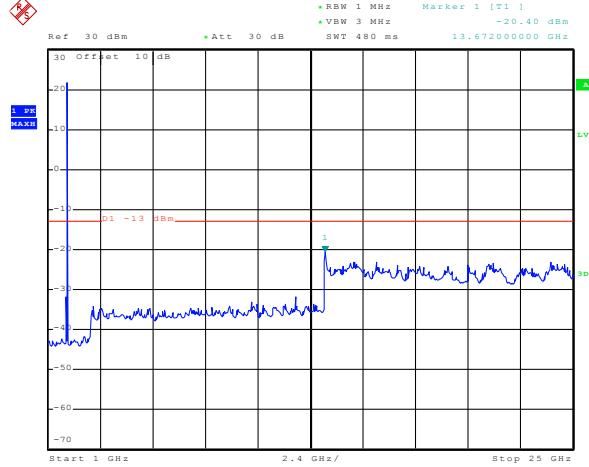
Date: 9.NOV.2015 02:07:10  
30MHz~1GHz

Date: 9.NOV.2015 02:46:25  
1GHz~25GHz

Test Mode:	LTE band 2(10MHz 16QAM) RB Size 25& RB Offset 0	Test Channel:	Middle channel
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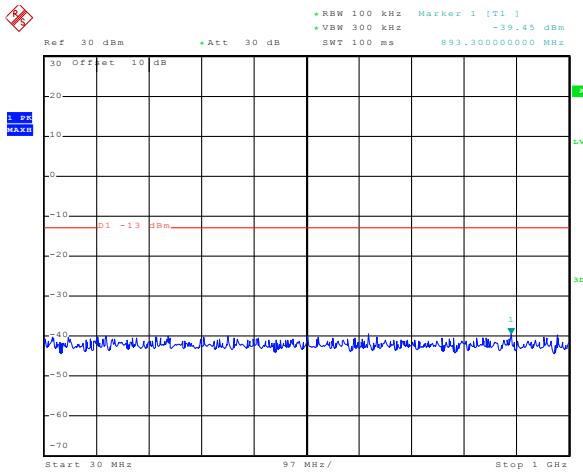


30MHz~1GHz

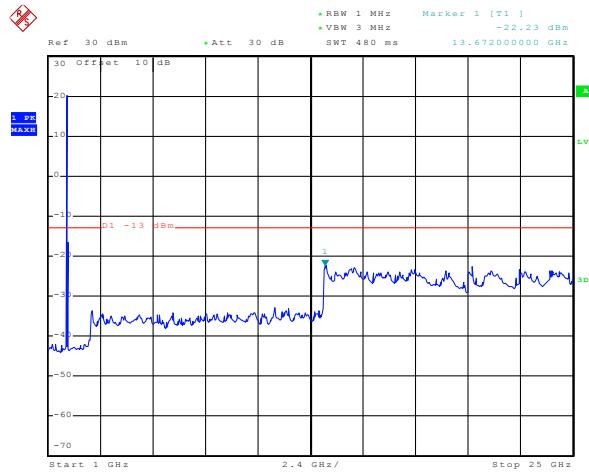


1GHz~25GHz

Test Mode:	LTE band 2(10MHz 16QAM) RB Size 25& RB Offset 0	Test Channel:	Highest channel
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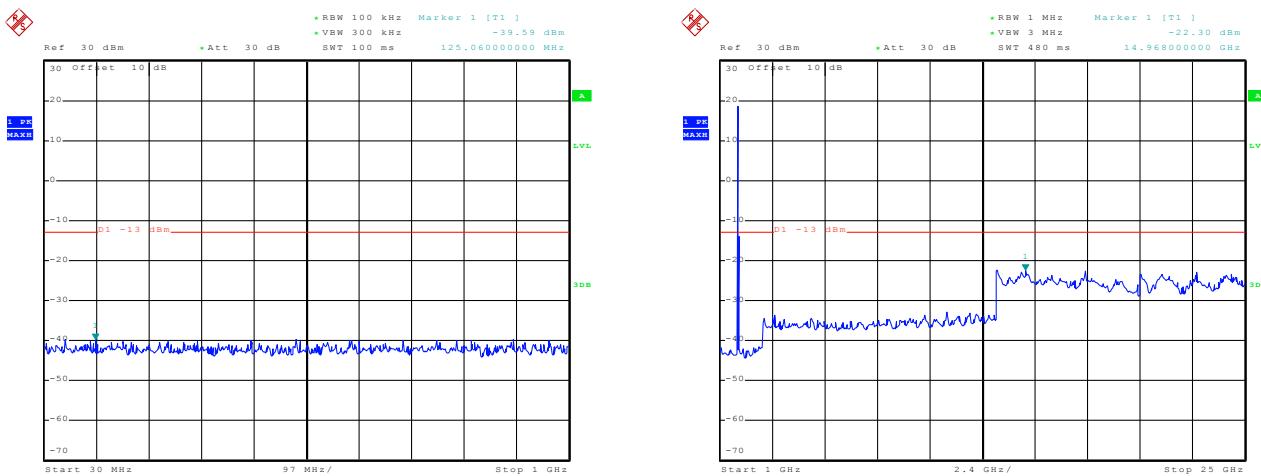


30MHz~1GHz



1GHz~25GHz

Test Mode:	LTE band 2(10MHz 16QAM) RB Size 50& RB Offset 0	Test Channel:	Lowest channel
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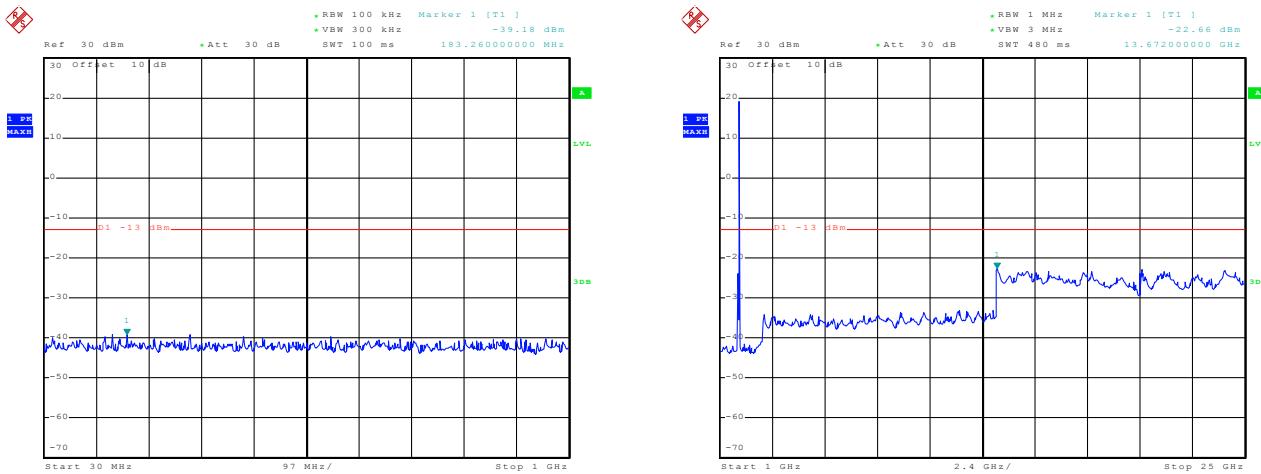
Date: 9.NOV.2015 02:07:22

30MHz~1GHz

Date: 9.NOV.2015 02:46:44

1GHz~25GHz

Test Mode:	LTE band 2(10MHz 16QAM) RB Size 50& RB Offset 0	Test Channel:	Middle channel
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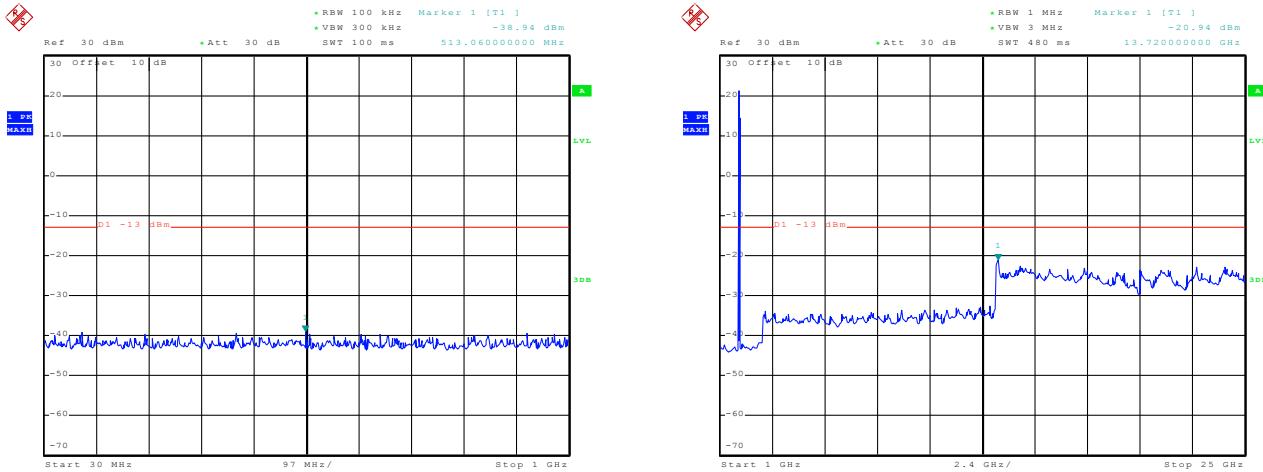
Date: 9.NOV.2015 02:08:10

30MHz~1GHz

Date: 9.NOV.2015 02:48:01

1GHz~20GHz

Test Mode:	LTE band 2(10MHz 16QAM) RB Size 50& RB Offset 0	Test Channel:	Highest channel
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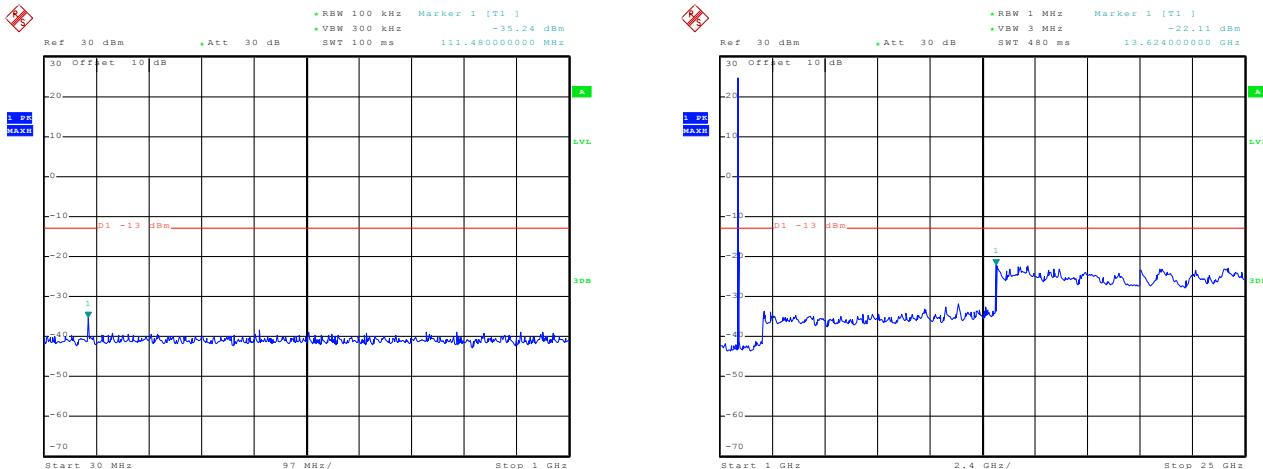
Date: 9.NOV.2015 02:08:58

30MHz~1GHz

Date: 9.NOV.2015 02:49:23

1GHz~25GHz

Test Mode:	LTE band 2(10MHz QPSK) RB Size 1& RB Offset 0	Test Channel:	Lowest channel
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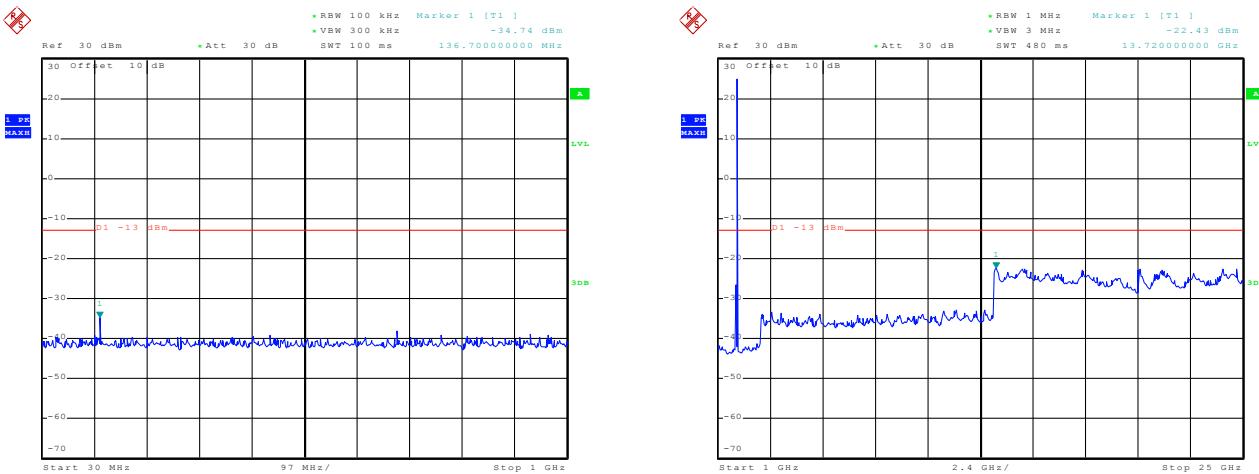
Date: 9.NOV.2015 02:06:48

30MHz~1GHz

Date: 9.NOV.2015 02:45:43

1GHz~25GHz

Test Mode:	LTE band 2(10MHz QPSK) RB Size 1& RB Offset 0	Test Channel:	Middle channel
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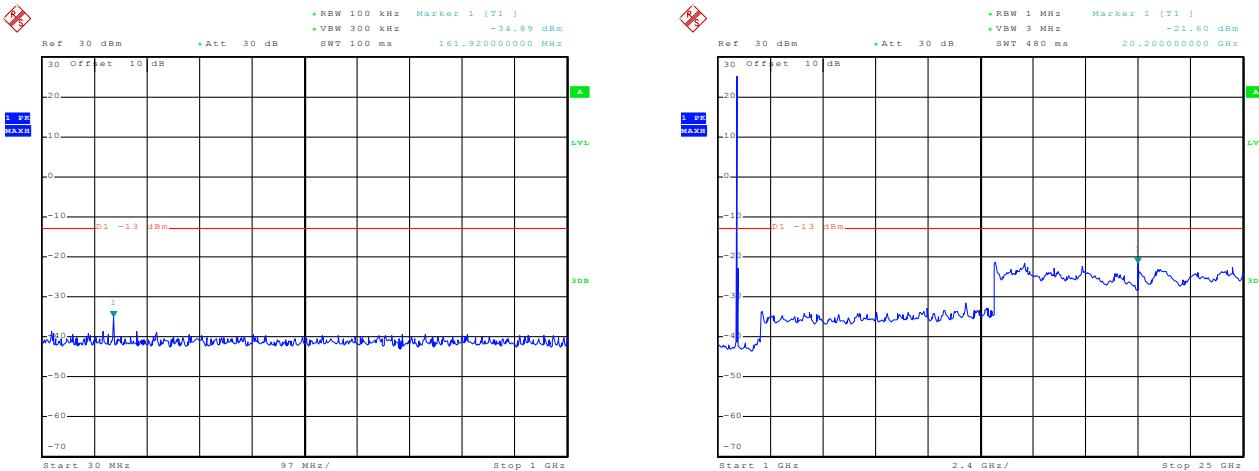
Date: 9.NOV.2015 02:07:36

30MHz~1GHz

Date: 9.NOV.2015 02:47:00

1GHz~25GHz

Test Mode:	LTE band 2(10MHz QPSK) RB Size 1& RB Offset 0	Test Channel:	Highest channel
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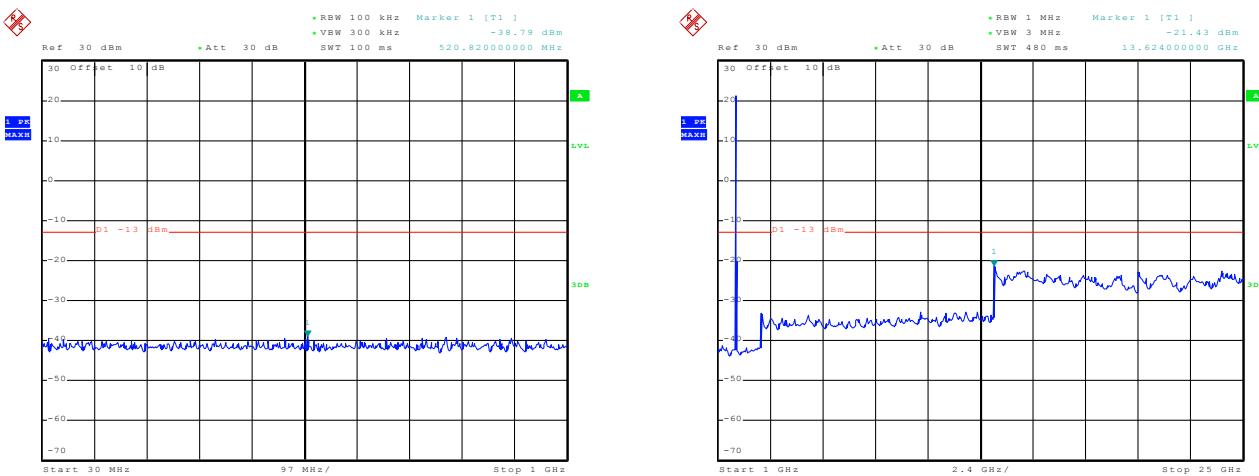
Date: 9.NOV.2015 02:08:23

30MHz~1GHz

Date: 9.NOV.2015 02:48:26

1GHz~25GHz

Test Mode:	LTE band 2(10MHz QPSK) RB Size 25& RB Offset 0	Test Channel:	Lowest channel
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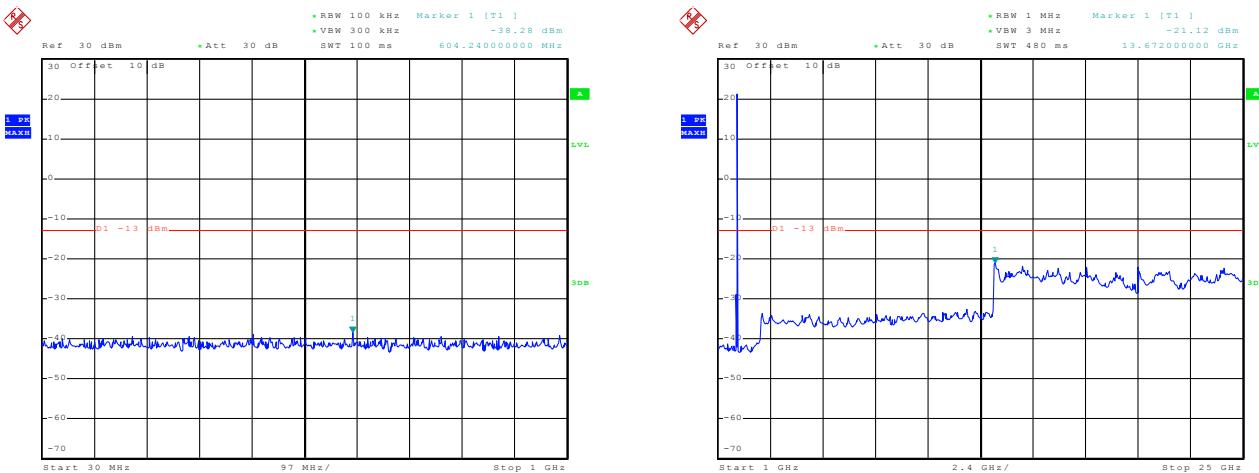
Date: 9.NOV.2015 02:07:03

30MHz~1GHz

Date: 9.NOV.2015 02:46:16

1GHz~25GHz

Test Mode:	LTE band 2(10MHz QPSK) RB Size 25& RB Offset 0	Test Channel:	Middle channel
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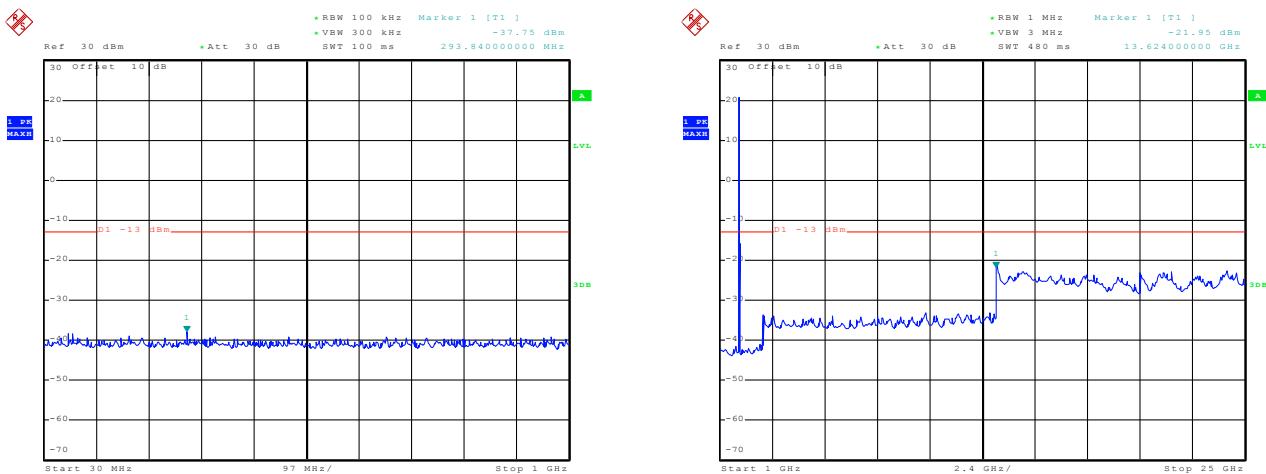
Date: 9.NOV.2015 02:07:54

30MHz~1GHz

Date: 9.NOV.2015 02:47:34

1GHz~25GHz

Test Mode:	LTE band 2(10MHz QPSK) RB Size 25& RB Offset 0	Test Channel:	Highest channel
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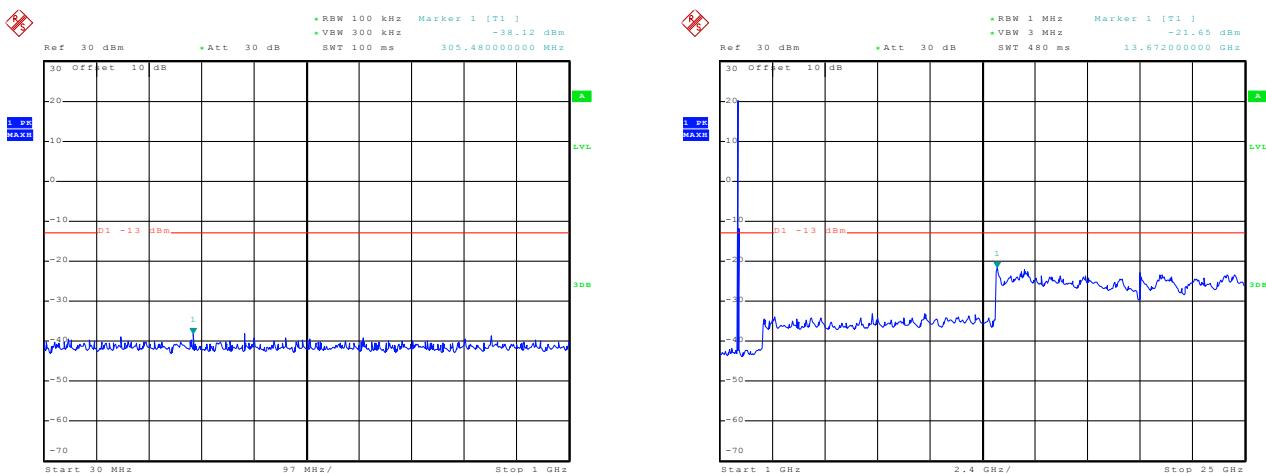
Date: 9.NOV.2015 02:08:43

30MHz~1GHz

Date: 9.NOV.2015 02:48:48

1GHz~25GHz

Test Mode:	LTE band 2(10MHz QPSK) RB Size 50& RB Offset 0	Test Channel:	Lowest channel
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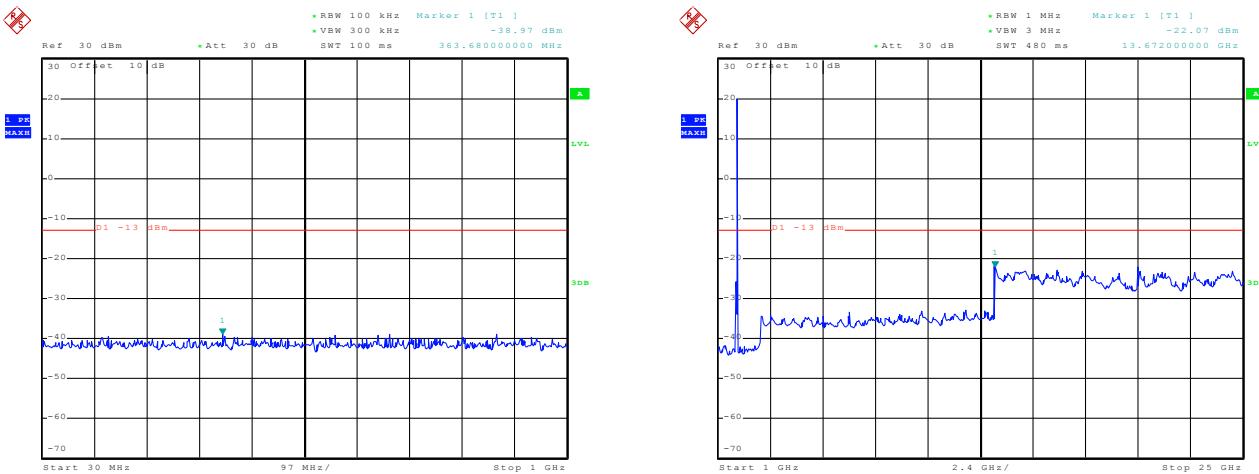
Date: 9.NOV.2015 02:07:19

30MHz~1GHz

Date: 9.NOV.2015 02:46:35

1GHz~25GHz

Test Mode:	LTE band 2(10MHz QPSK) RB Size 50& RB Offset 0	Test Channel:	Middle channel
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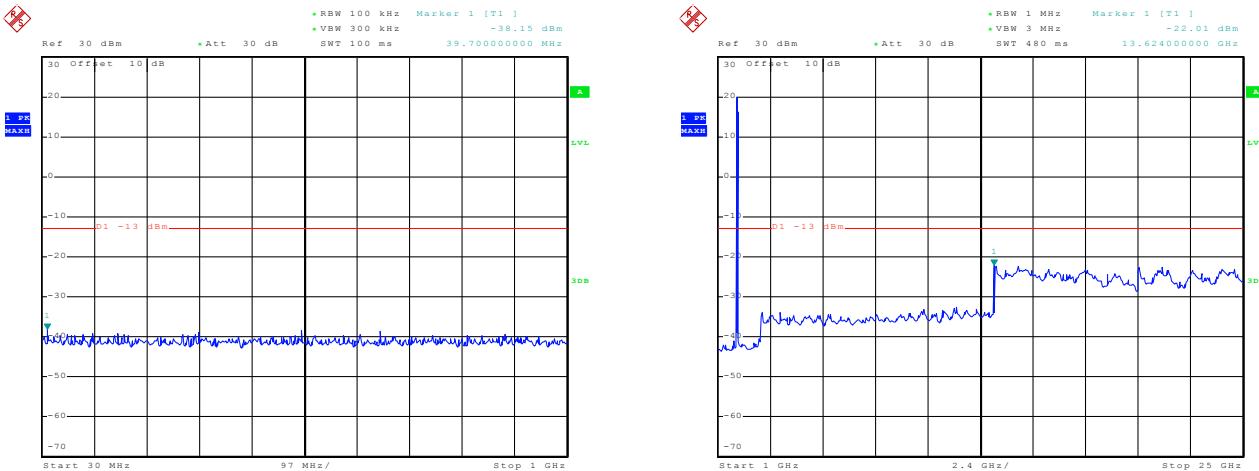
Date: 9.NOV.2015 02:08:06

30MHz~1GHz

Date: 9.NOV.2015 02:47:53

1GHz~25GHz

Test Mode:	LTE band 2(10MHz QPSK) RB Size 50& RB Offset 0	Test Channel:	Highest channel
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Date: 9.NOV.2015 02:08:54

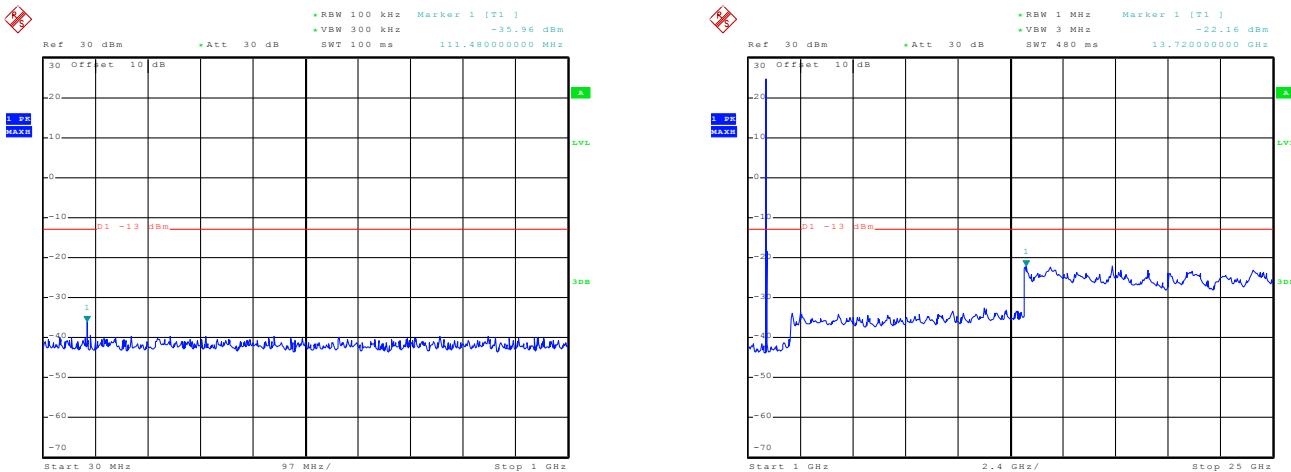
30MHz~1GHz

Date: 9.NOV.2015 02:49:14

1GHz~25GHz

## 15MHz

Test Mode:	LTE band 2(15MHz 16QAM) RB Size 1& RB Offset 0	Test Channel:	Lowest channel
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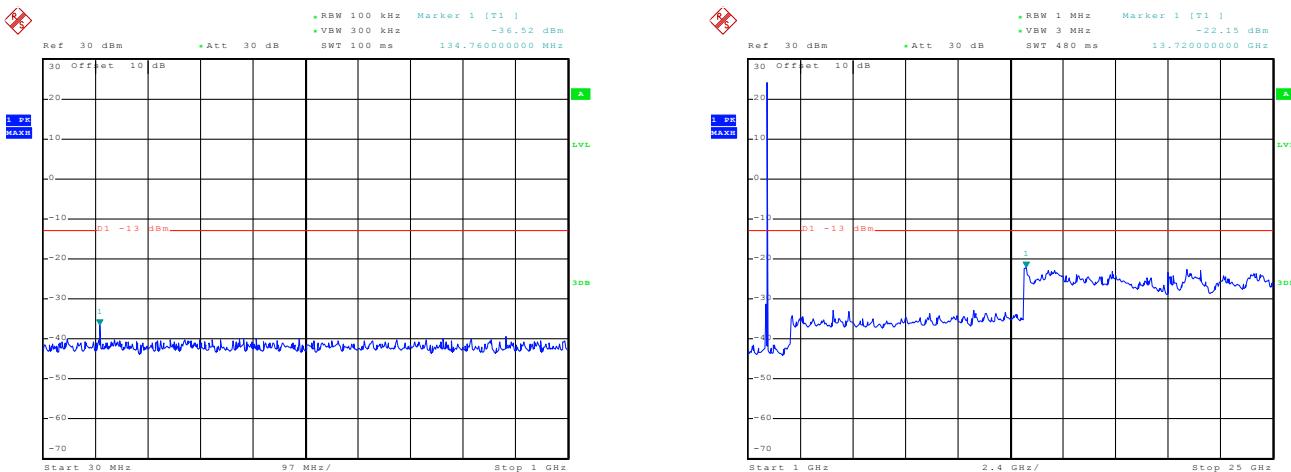
Date: 9.NOV.2015 02:09:30

30MHz~1GHz

Date: 9.NOV.2015 02:50:07

1GHz~25GHz

Test Mode:	LTE band 2(15MHz16QAM) RB Size 1& RB Offset 0	Test Channel:	Middle channel
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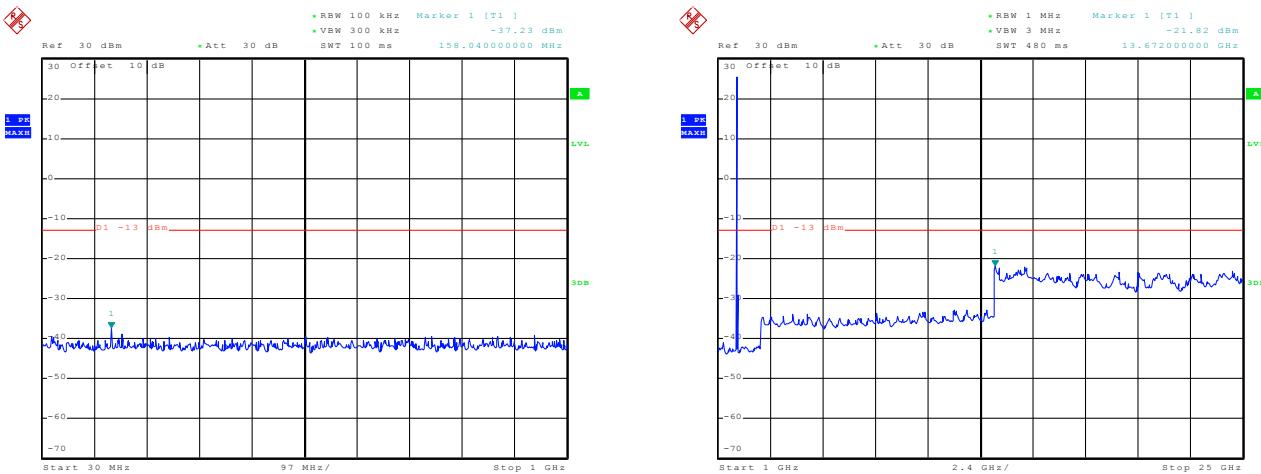
Date: 9.NOV.2015 02:10:17

30MHz~1GHz

Date: 9.NOV.2015 02:51:13

1GHz~25GHz

Test Mode:	LTE band 2(15MHz16QAM) RB Size 1& RB Offset 0	Test Channel:	Highest channel
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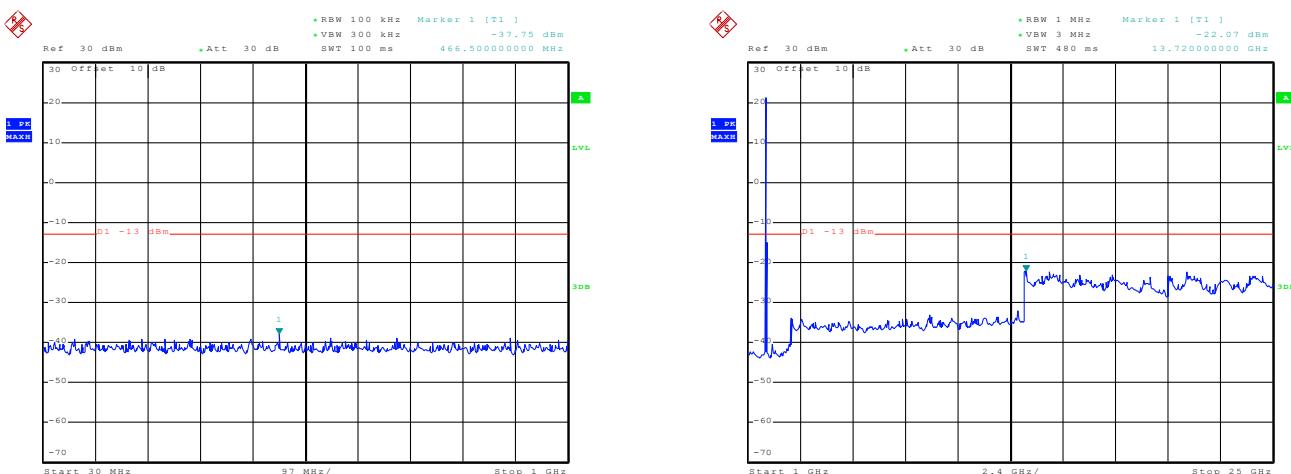
Date: 9.NOV.2015 02:11:08

30MHz~1GHz

Date: 9.NOV.2015 02:52:34

1GHz~25GHz

Test Mode:	LTE band 2(15MHz 16QAM) RB Size 36& RB Offset 0	Test Channel:	Lowest channel
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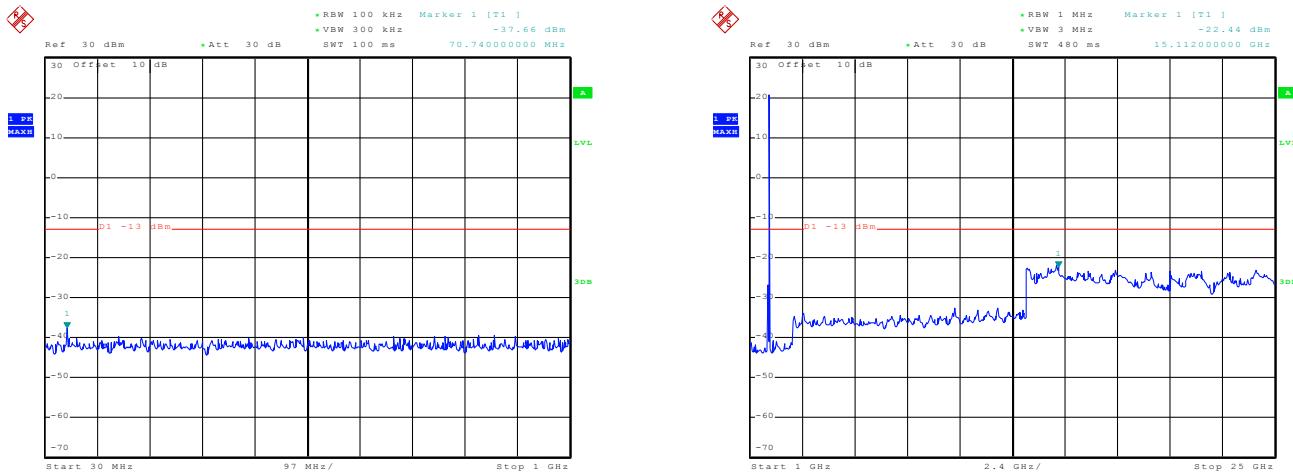
Date: 9.NOV.2015 02:09:44

30MHz~1GHz

Date: 9.NOV.2015 02:50:29

1GHz~25GHz

Test Mode:	LTE band 2(15MHz16QAM) RB Size 36& RB Offset 0	Test Channel:	Middle channel
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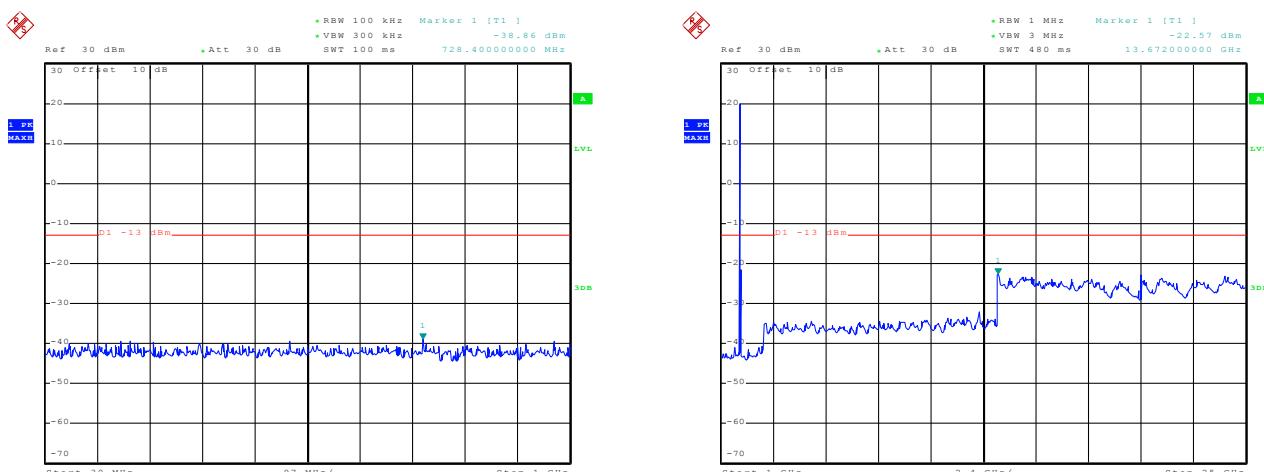
Date: 9.NOV.2015 02:10:33

30MHz~1GHz

Date: 9.NOV.2015 02:51:44

1GHz~25GHz

Test Mode:	LTE band 2(15MHz16QAM) RB Size 36& RB Offset 0	Test Channel:	Highest channel
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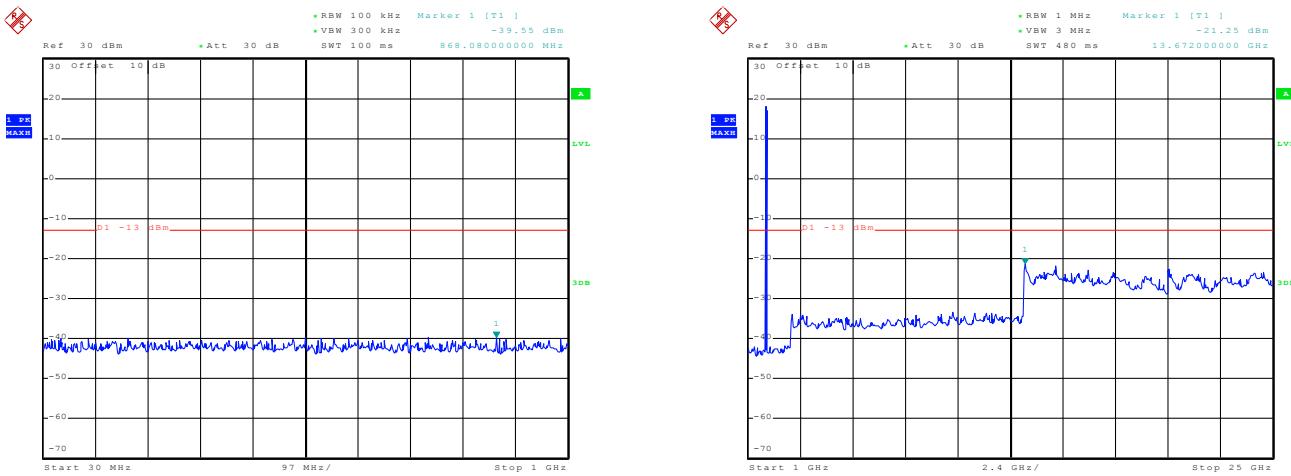
Date: 9.NOV.2015 02:11:20

30MHz~1GHz

Date: 9.NOV.2015 02:52:54

1GHz~25GHz

Test Mode:	LTE band 2(15MHz 16QAM) RB Size 75& RB Offset 0	Test Channel:	Lowest channel
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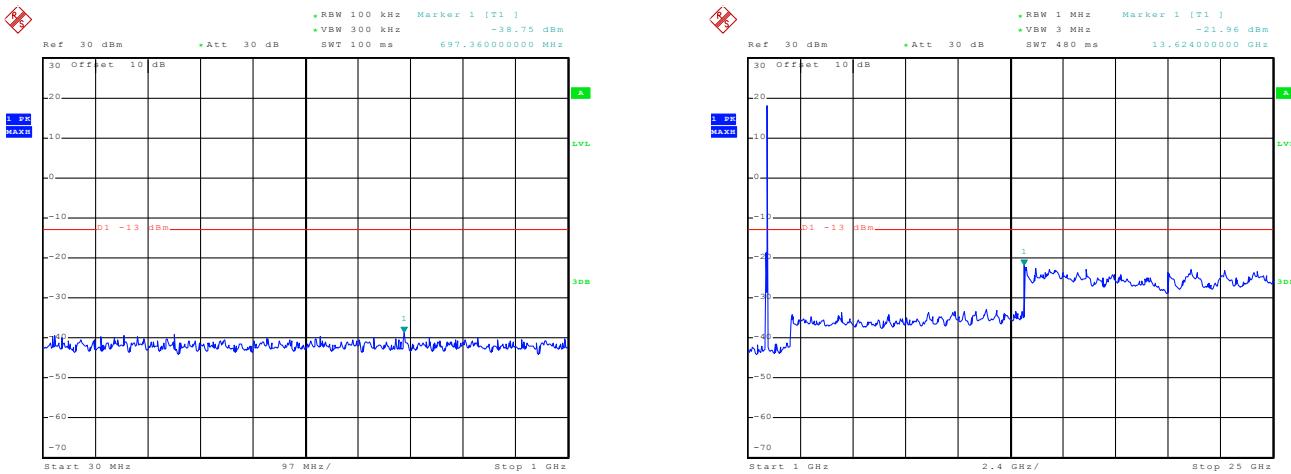
Date: 9.NOV.2015 02:09:56

30MHz~1GHz

Date: 9.NOV.2015 02:50:48

1GHz~25GHz

Test Mode:	LTE band 2(15MHz 16QAM) RB Size 75& RB Offset 0	Test Channel:	Middle channel
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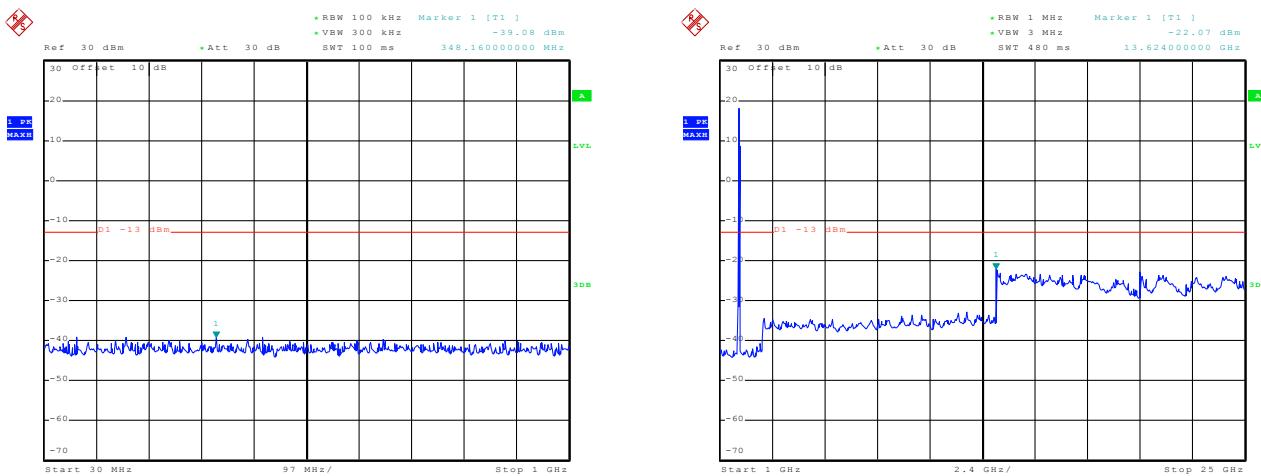
Date: 9.NOV.2015 02:10:43

30MHz~1GHz

Date: 9.NOV.2015 02:52:07

1GHz~25GHz

Test Mode:	LTE band 2(15MHz 16QAM) RB Size 75& RB Offset 0	Test Channel:	Highest channel
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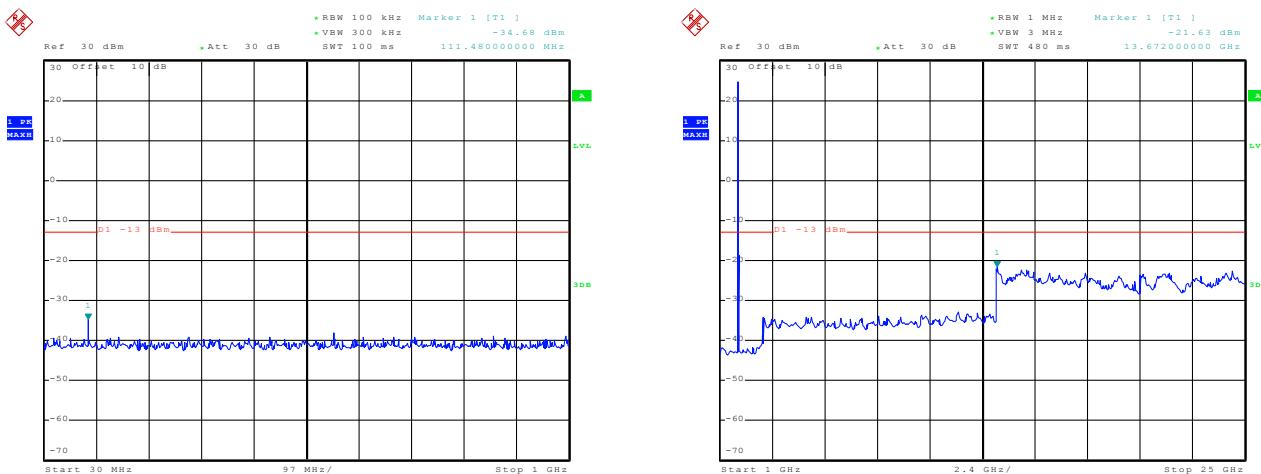
Date: 9.NOV.2015 02:11:30

30MHz~1GHz

Date: 9.NOV.2015 02:53:13

1GHz~25GHz

Test Mode:	LTE band 2(15MHzQPSK) RB Size 1& RB Offset 0	Test Channel:	Lowest channel
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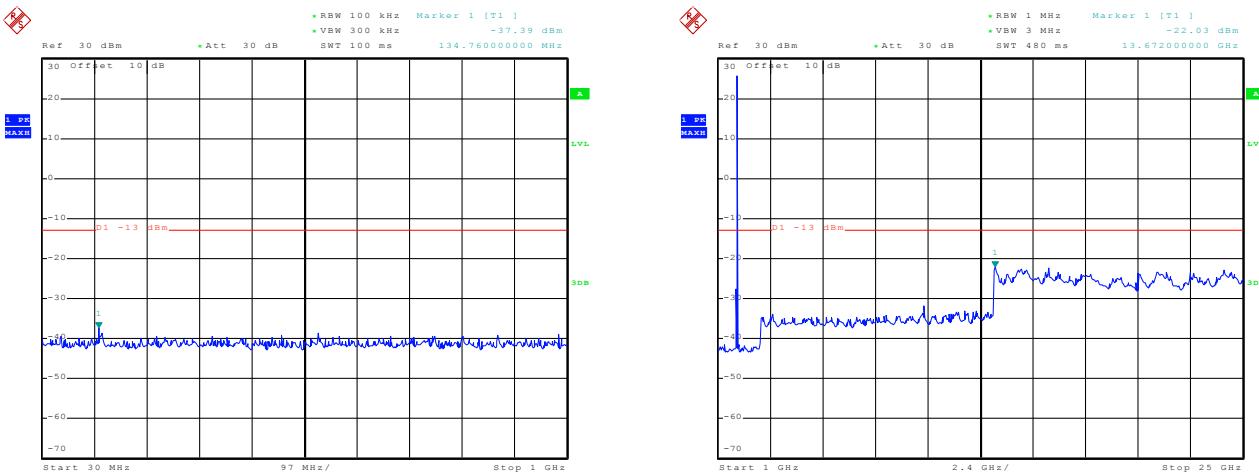
Date: 9.NOV.2015 02:09:23

30MHz~1GHz

Date: 9.NOV.2015 02:49:52

1GHz~25GHz

Test Mode:	LTE band 2(15MHzQPSK) RB Size 1& RB Offset 0	Test Channel:	Middle channel
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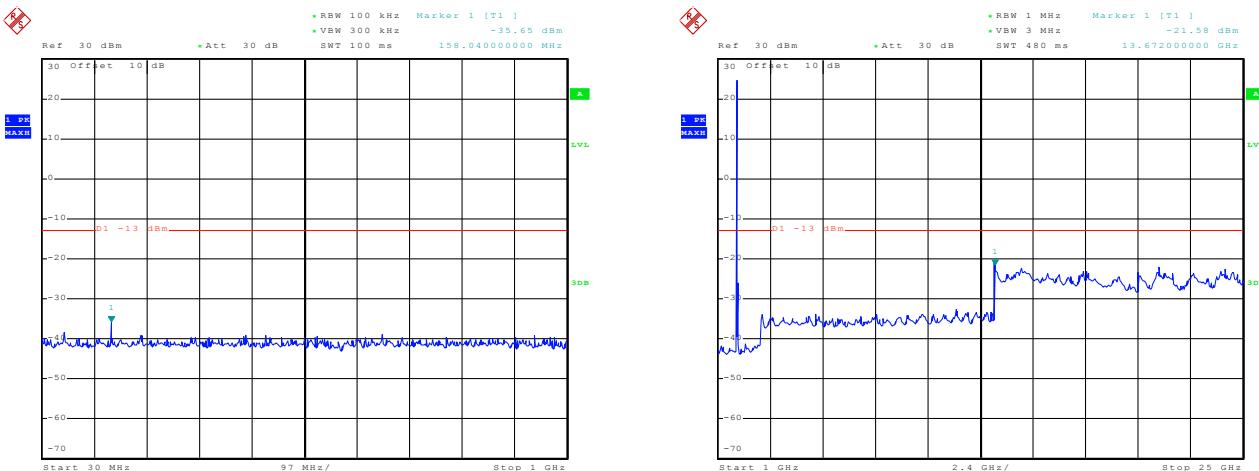
Date: 9.NOV.2015 02:10:11

30MHz~1GHz

Date: 9.NOV.2015 02:51:03

1GHz~25GHz

Test Mode:	LTE band 2(15MHzQPSK) RB Size 1& RB Offset 0	Test Channel:	Highest channel
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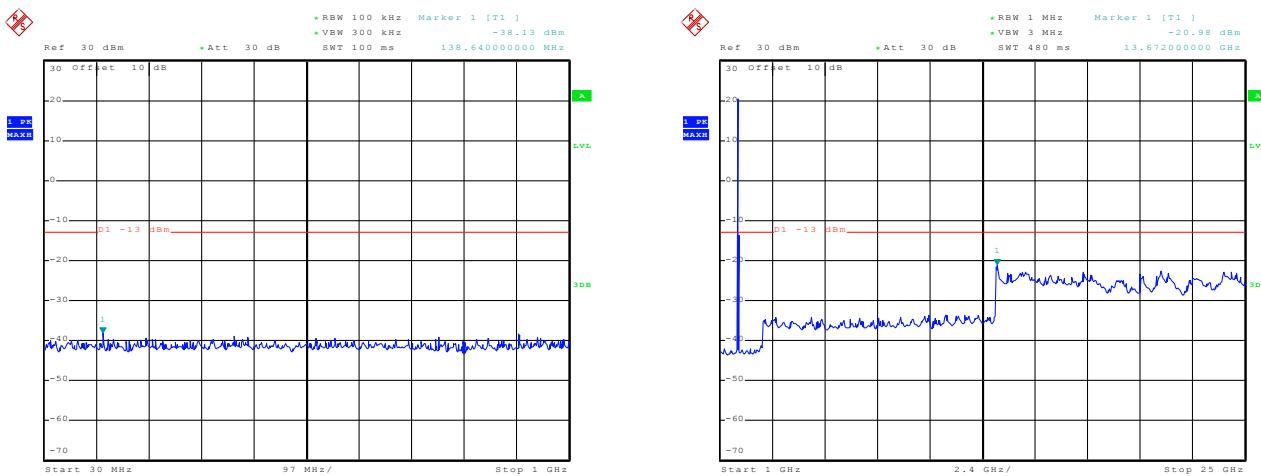
Date: 9.NOV.2015 02:11:00

30MHz~1GHz

Date: 9.NOV.2015 02:52:24

1GHz~25GHz

Test Mode:	LTE band 2(15MHzQPSK) RB Size 36& RB Offset 0	Test Channel:	Lowest channel
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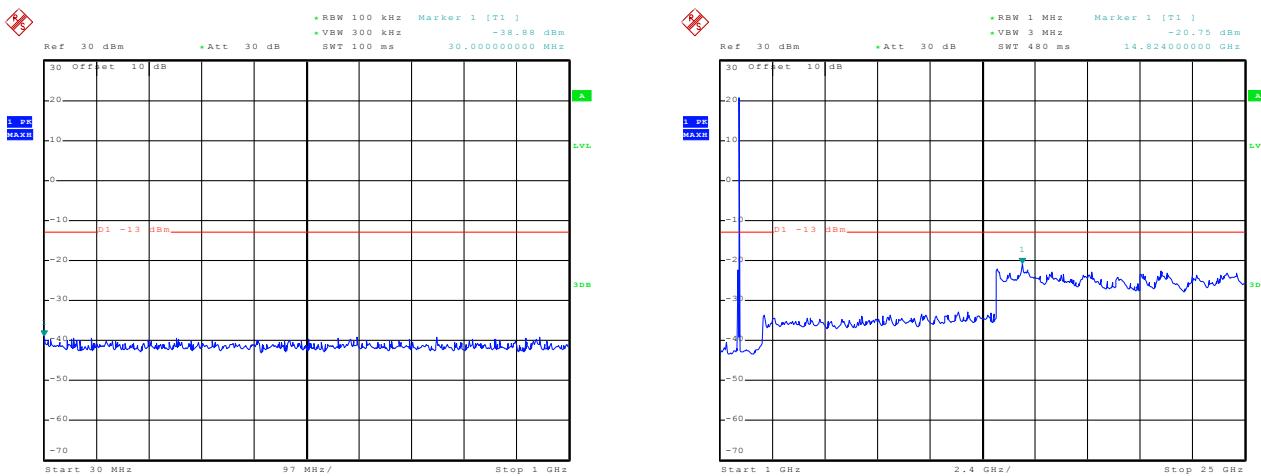
Date: 9.NOV.2015 02:09:38

30MHz~1GHz

Date: 9.NOV.2015 02:50:19

1GHz~25GHz

Test Mode:	LTE band 2(15MHzQPSK) RB Size 36 & RB Offset 0	Test Channel:	Middle channel
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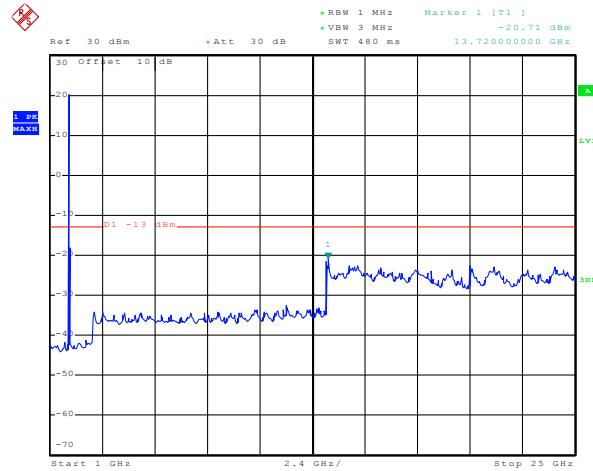
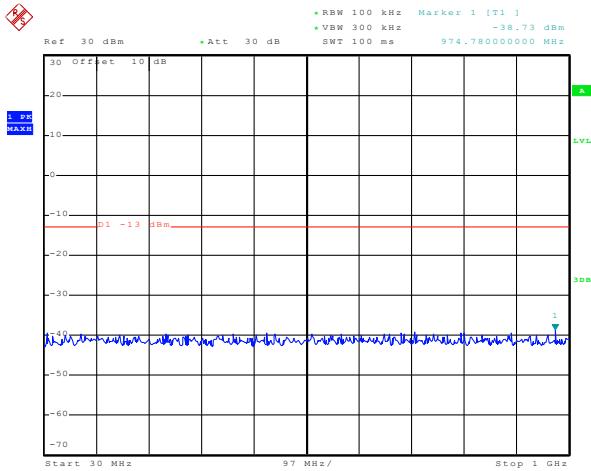
Date: 9.NOV.2015 02:10:26

30MHz~1GHz

Date: 9.NOV.2015 02:51:33

1GHz~25GHz

Test Mode:	LTE band 2(15MHzQPSK) RB Size 36& RB Offset 0	Test Channel:	Highest channel
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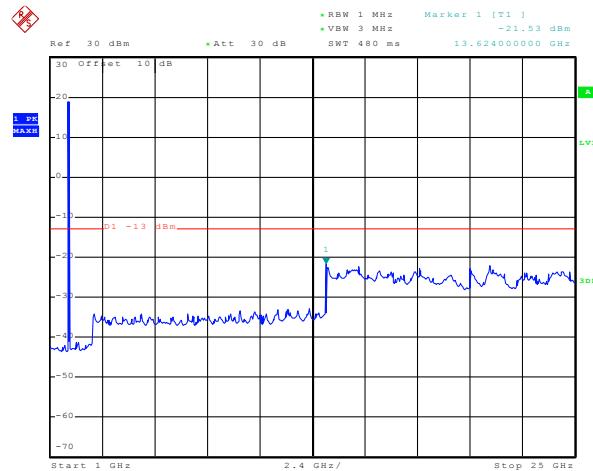
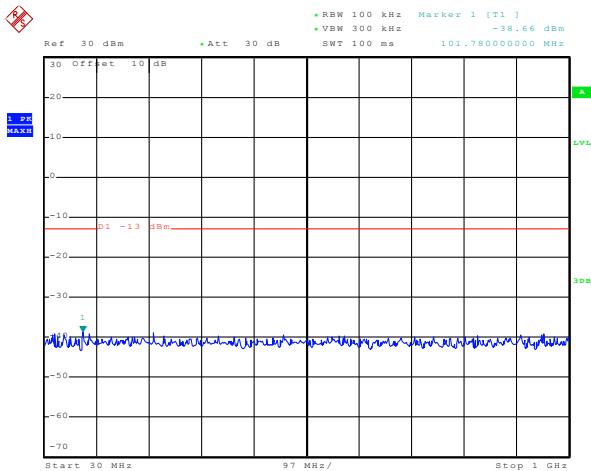
Date: 9.NOV.2015 02:11:16

30MHz~1GHz

Date: 9.NOV.2015 02:52:45

1GHz~25GHz

Test Mode:	LTE band 2(15MHz QPSK) RB Size 75& RB Offset 0	Test Channel:	Lowest channel
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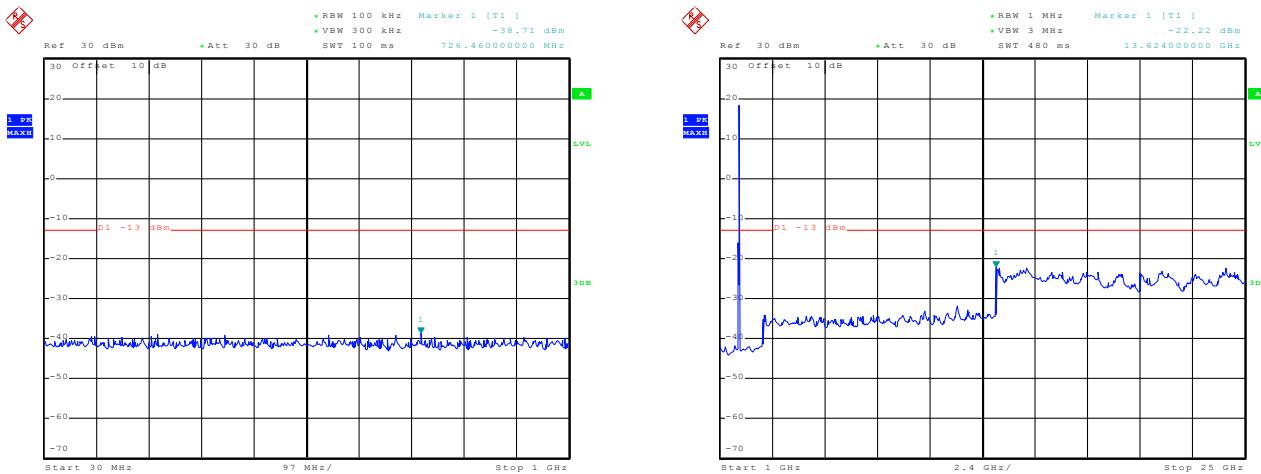
Date: 9.NOV.2015 02:09:52

30MHz~1GHz

Date: 9.NOV.2015 02:50:40

1GHz~25GHz

Test Mode:	LTE band 2(15MHz QPSK) RB Size 75& RB Offset 0	Test Channel:	Middle channel
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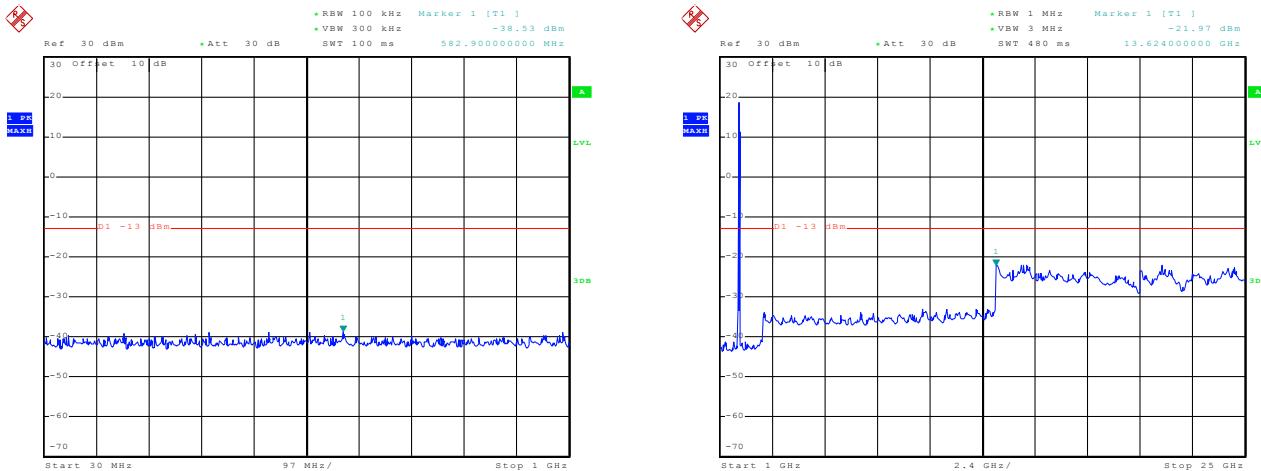
Date: 9.NOV.2015 02:10:39

30MHz~1GHz

Date: 9.NOV.2015 02:51:58

1GHz~25GHz

Test Mode:	LTE band 2(15MHz QPSK) RB Size 75& RB Offset 0	Test Channel:	Highest channel
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Date: 9.NOV.2015 02:11:26

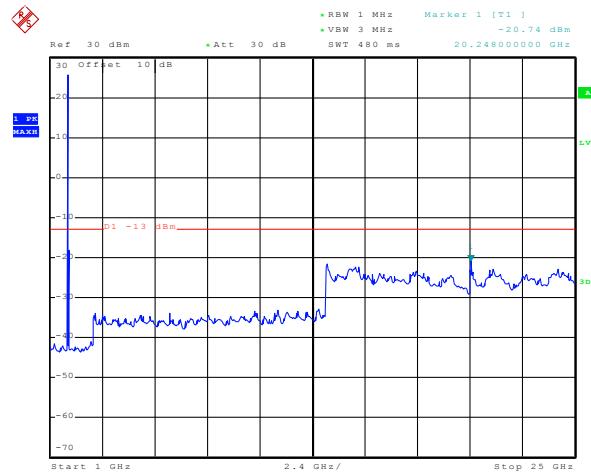
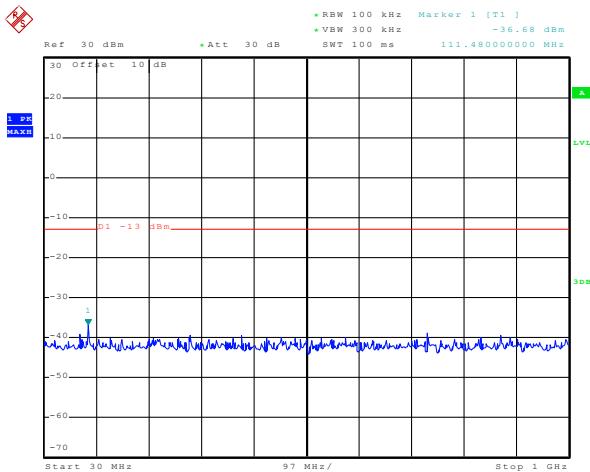
30MHz~1GHz

Date: 9.NOV.2015 02:53:06

1GHz~25GHz

## 20MHz

Test Mode:	LTE band 2(20MHz16QAM) RB Size 1& RB Offset 0	Test Channel:	Lowest channel
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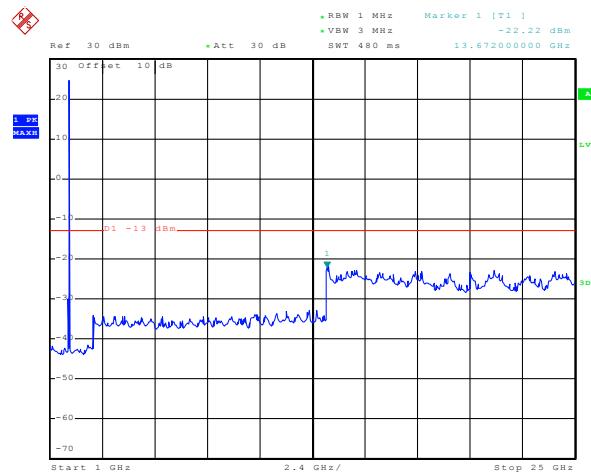
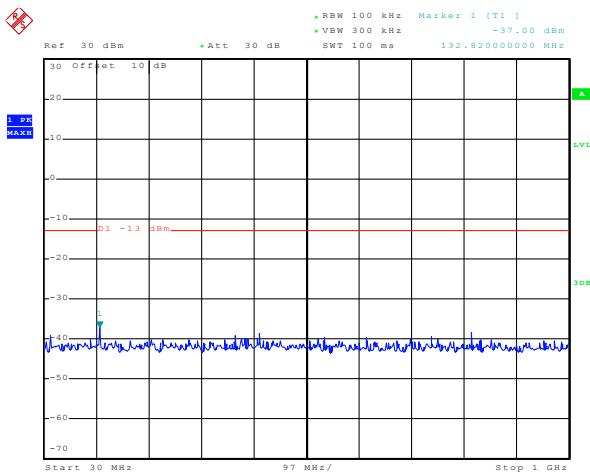
Date: 9.NOV.2015 02:12:02

30MHz~1GHz

Date: 9.NOV.2015 02:53:55

1GHz~25GHz

Test Mode:	LTE band 2(20MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Middle channel
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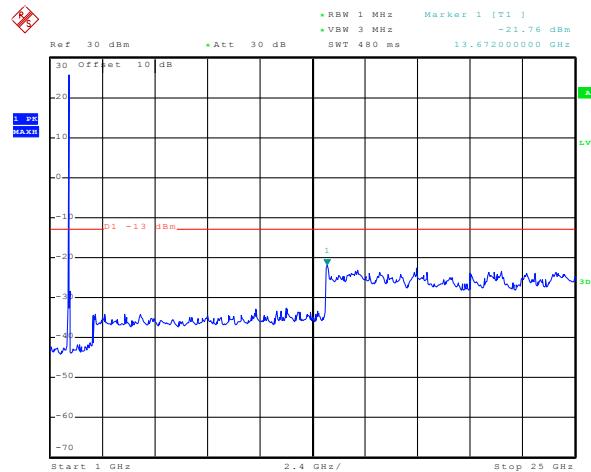
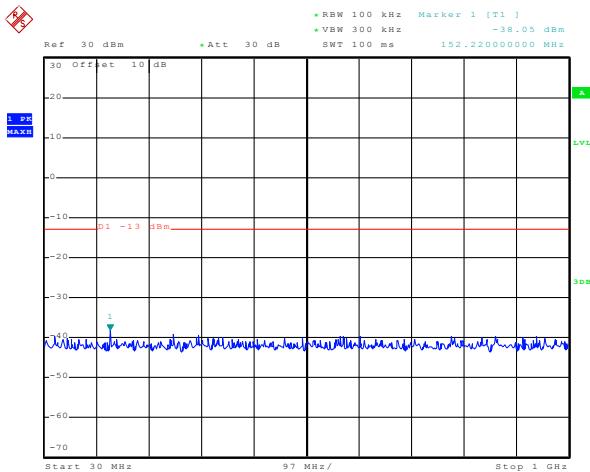
Date: 9.NOV.2015 02:12:46

30MHz~1GHz

Date: 9.NOV.2015 02:55:12

1GHz~25GHz

Test Mode:	LTE band 2(20MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Highest channel
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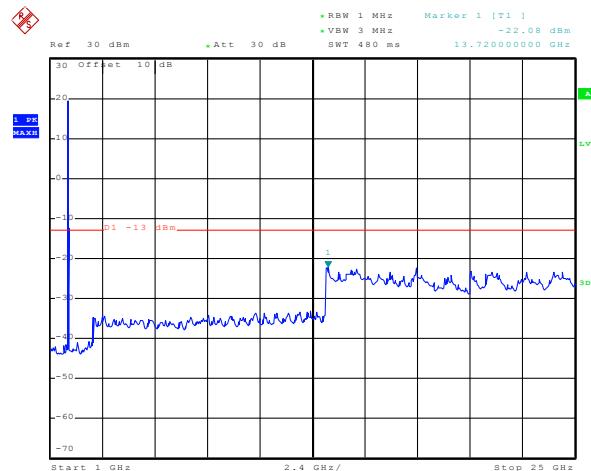
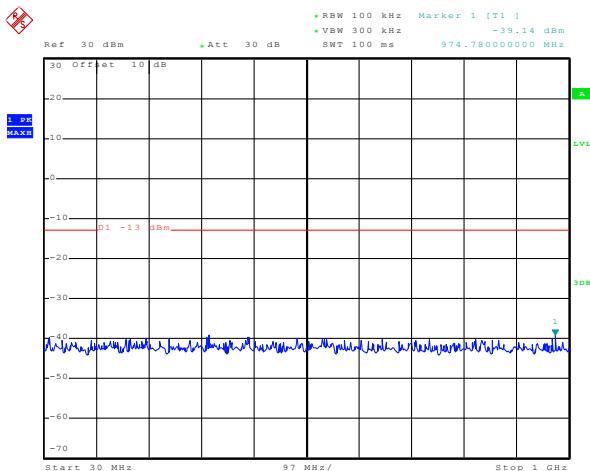
Date: 9.NOV.2015 02:13:34

30MHz~1GHz

Date: 9.NOV.2015 02:56:23

1GHz~25GHz

Test Mode:	LTE band 2(20MHz16QAM) RB Size 50& RB Offset 0	Test Channel:	Lowest channel
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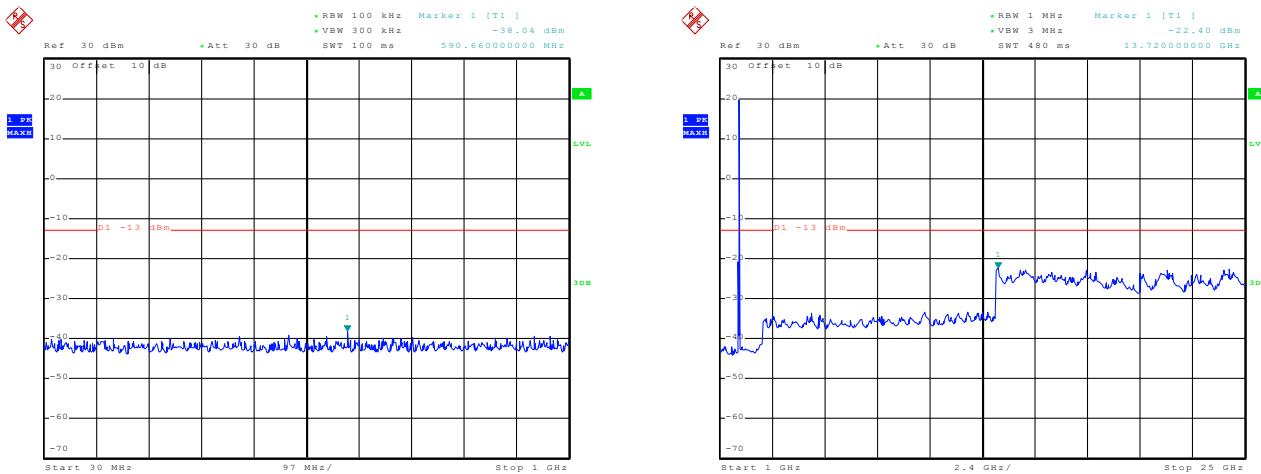
Date: 9.NOV.2015 02:12:15

30MHz~1GHz

Date: 9.NOV.2015 02:54:18

1GHz~25GHz

Test Mode:	LTE band 2(20MHz 16QAM) RB Size 50& RB Offset 0	Test Channel:	Middle channel
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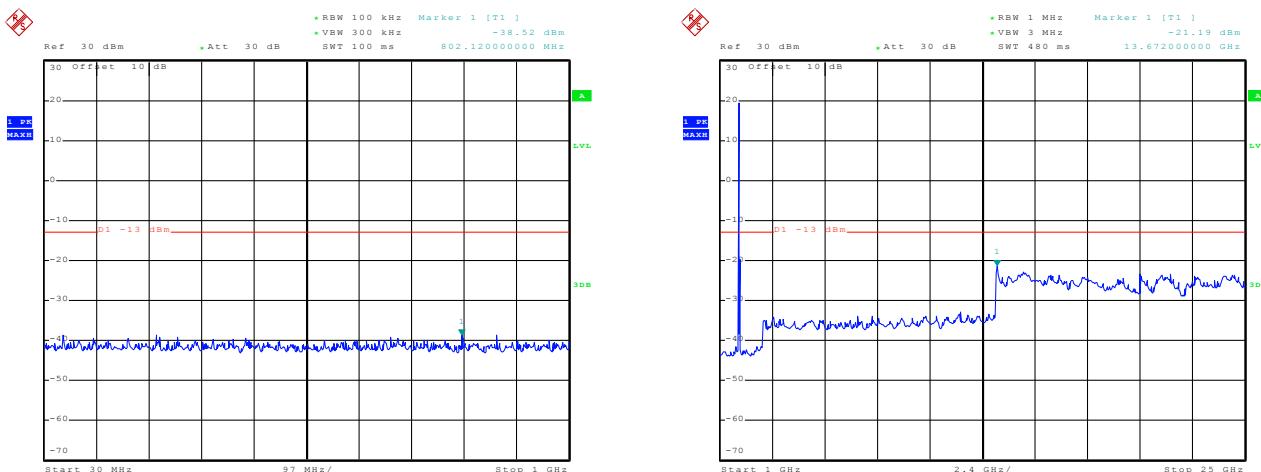
Date: 9.NOV.2015 02:13:01

30MHz~1GHz

Date: 9.NOV.2015 02:55:36

1GHz~20GHz

Test Mode:	LTE band 2(20MHz 16QAM) RB Size 50& RB Offset 0	Test Channel:	Highest channel
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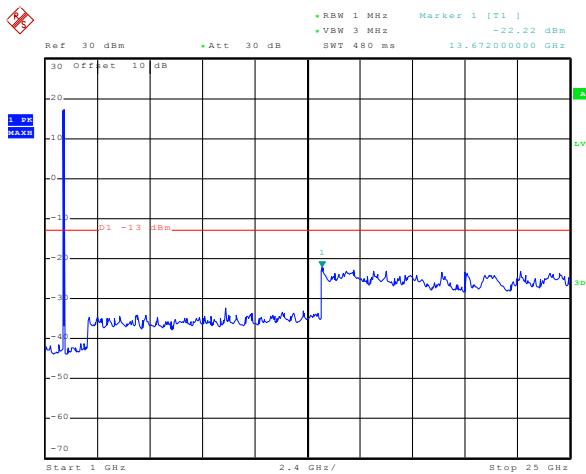
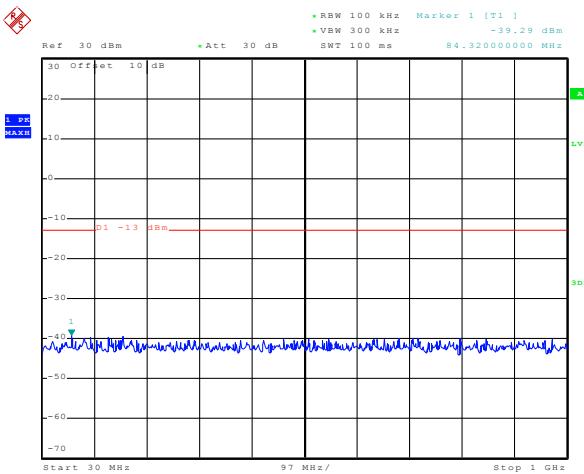
Date: 9.NOV.2015 02:13:53

30MHz~1GHz

Date: 9.NOV.2015 02:56:47

1GHz~25GHz

Test Mode:	LTE band 2(20MHz 16QAM) RB Size 100& RB Offset 0	Test Channel:	Lowest channel
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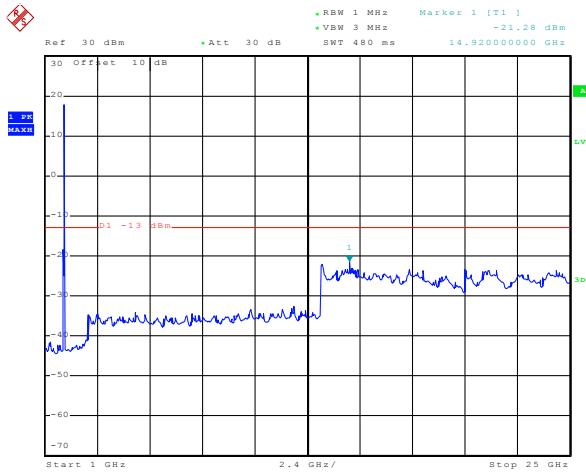
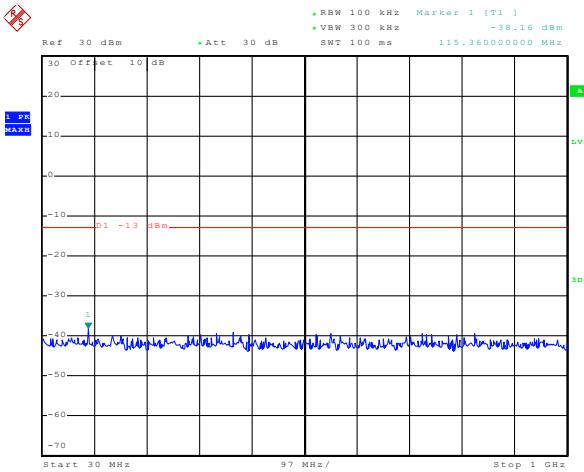
Date: 9.NOV.2015 02:12:26

30MHz~1GHz

Date: 9.NOV.2015 02:54:44

1GHz~20GHz

Test Mode:	LTE band 2(20MHz 16QAM) RB Size 100& RB Offset 0	Test Channel:	Middle channel
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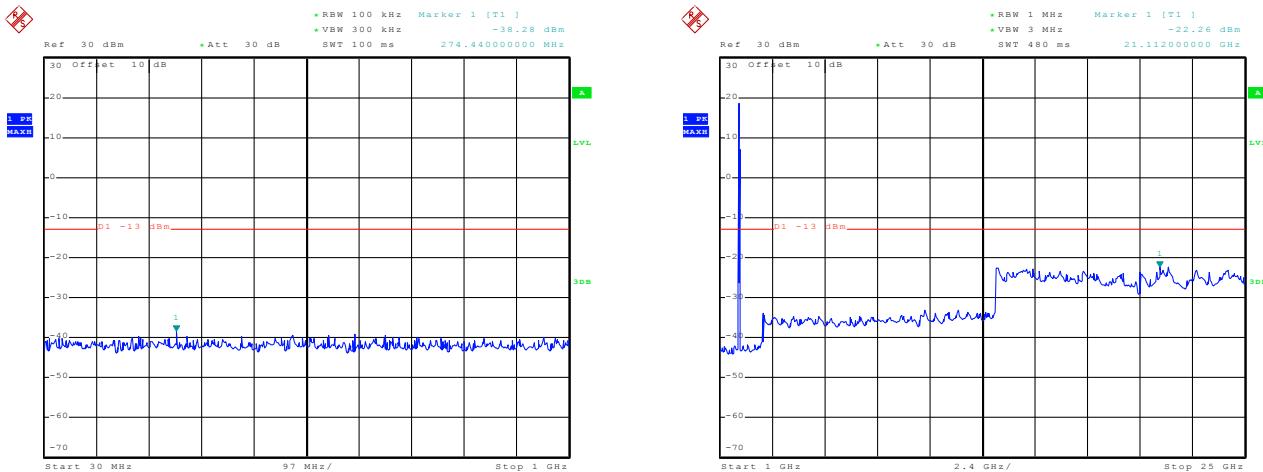
Date: 9.NOV.2015 02:13:12

30MHz~1GHz

Date: 9.NOV.2015 02:55:55

1GHz~20GHz

Test Mode:	LTE band 2(20MHz 16QAM) RB Size 100& RB Offset 0	Test Channel:	Highest channel
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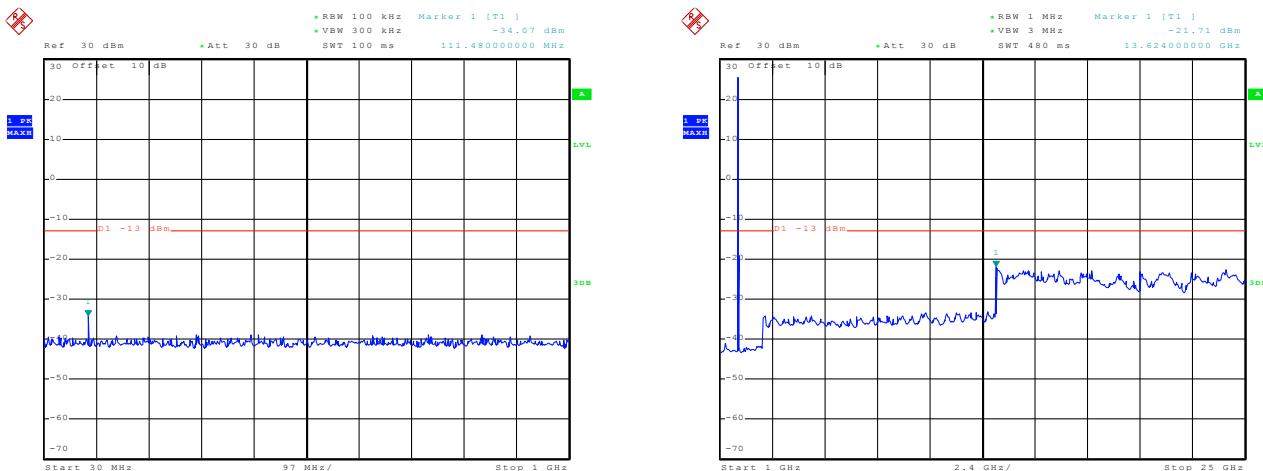
Date: 9.NOV.2015 02:14:05

30MHz~1GHz

Date: 9.NOV.2015 02:57:07

1GHz~25GHz

Test Mode:	LTE band 2(20MHz QPSK) RB Size 1& RB Offset 0	Test Channel:	Lowest channel
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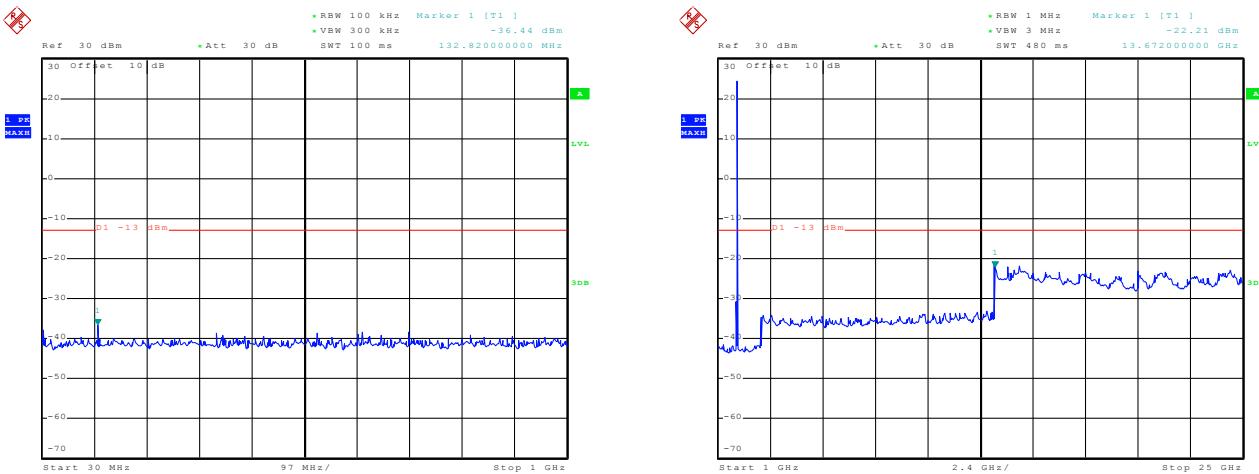
Date: 9.NOV.2015 02:11:54

30MHz~1GHz

Date: 9.NOV.2015 02:53:43

1GHz~20GHz

Test Mode:	LTE band 2(20MHz QPSK) RB Size 1& RB Offset 0	Test Channel:	Middle channel
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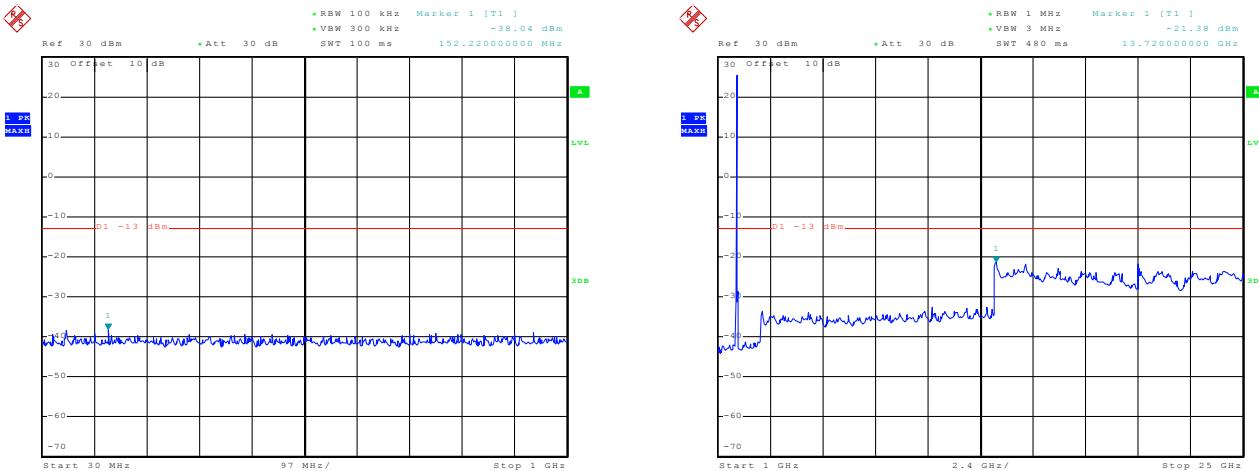
Date: 9.NOV.2015 02:12:39

30MHz~1GHz

Date: 9.NOV.2015 02:55:00

1GHz~25GHz

Test Mode:	LTE band 2(20MHz QPSK) RB Size 1& RB Offset 0	Test Channel:	Highest channel
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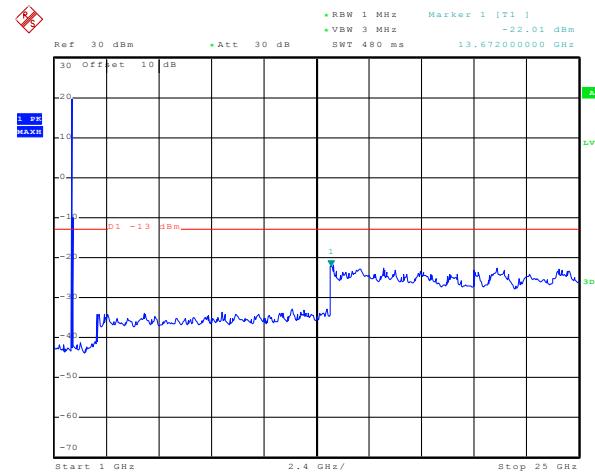
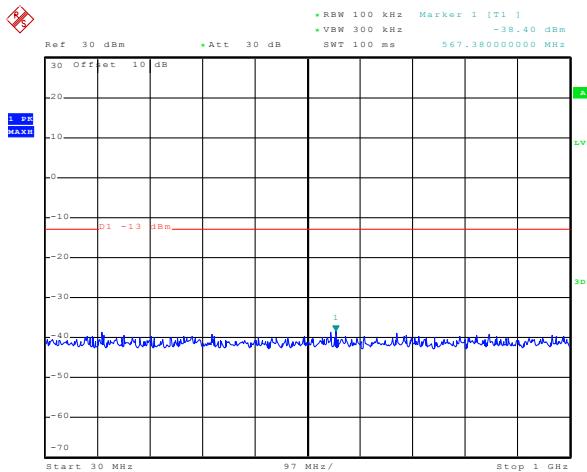
Date: 9.NOV.2015 02:13:27

30MHz~1GHz

Date: 9.NOV.2015 02:56:14

1GHz~25GHz

Test Mode:	LTE band 2(20MHz QPSK) RB Size 50& RB Offset 0	Test Channel:	Lowest channel
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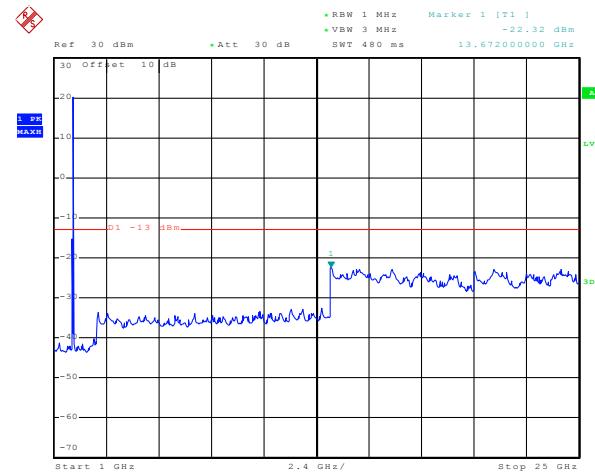
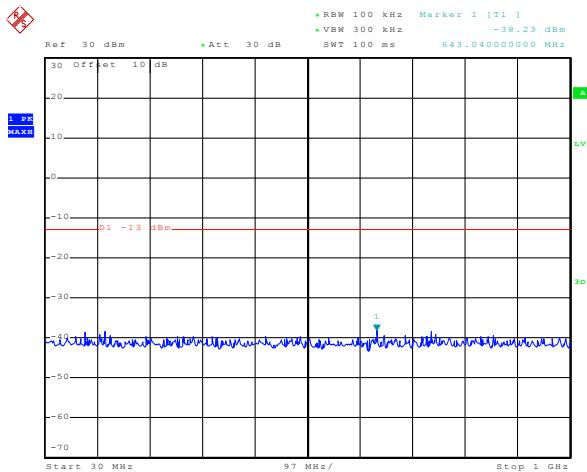
Date: 9.NOV.2015 02:12:11

30MHz~1GHz

Date: 9.NOV.2015 02:54:08

1GHz~25GHz

Test Mode:	LTE band 2(20MHz QPSK) RB Size 50& RB Offset 0	Test Channel:	Middle channel
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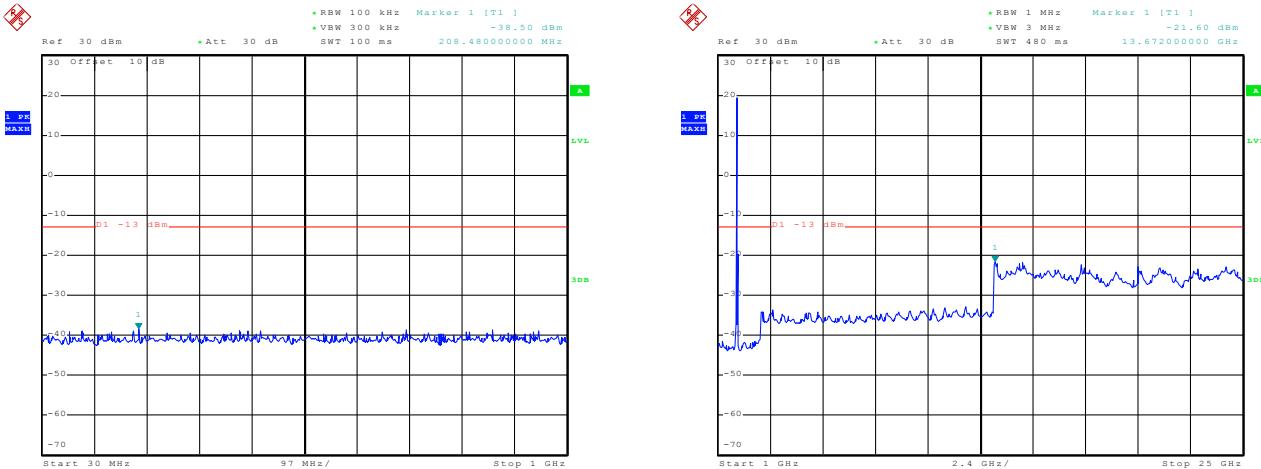
Date: 9.NOV.2015 02:12:55

30MHz~1GHz

Date: 9.NOV.2015 02:55:25

1GHz~25GHz

Test Mode:	LTE band 2(20MHz QPSK) RB Size 50& RB Offset 0	Test Channel:	Highest channel
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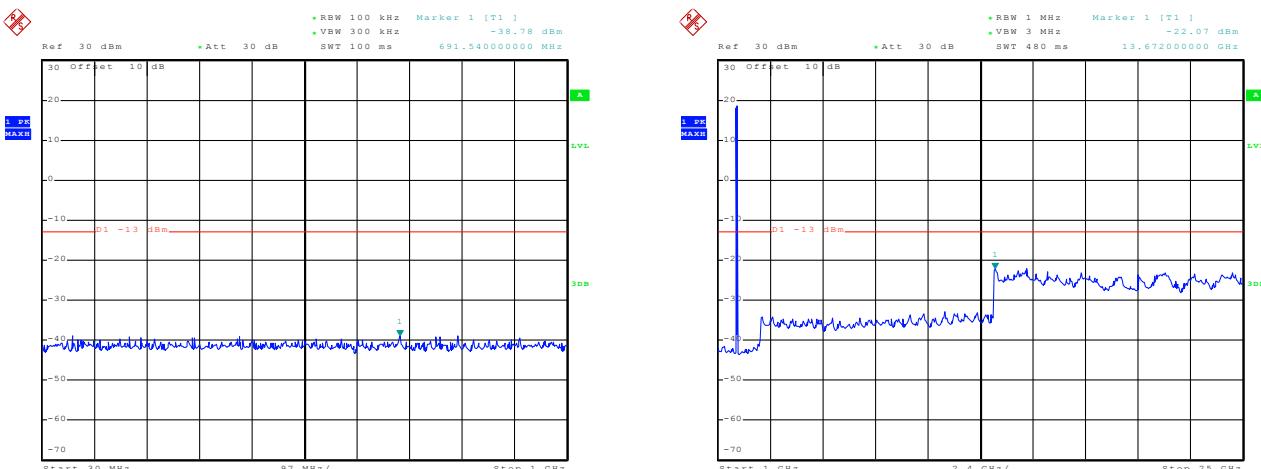
Date: 9.NOV.2015 02:13:47

30MHz~1GHz

Date: 9.NOV.2015 02:56:37

1GHz~25GHz

Test Mode:	LTE band 2(20MHz QPSK) RB Size 100& RB Offset 0	Test Channel:	Lowest channel
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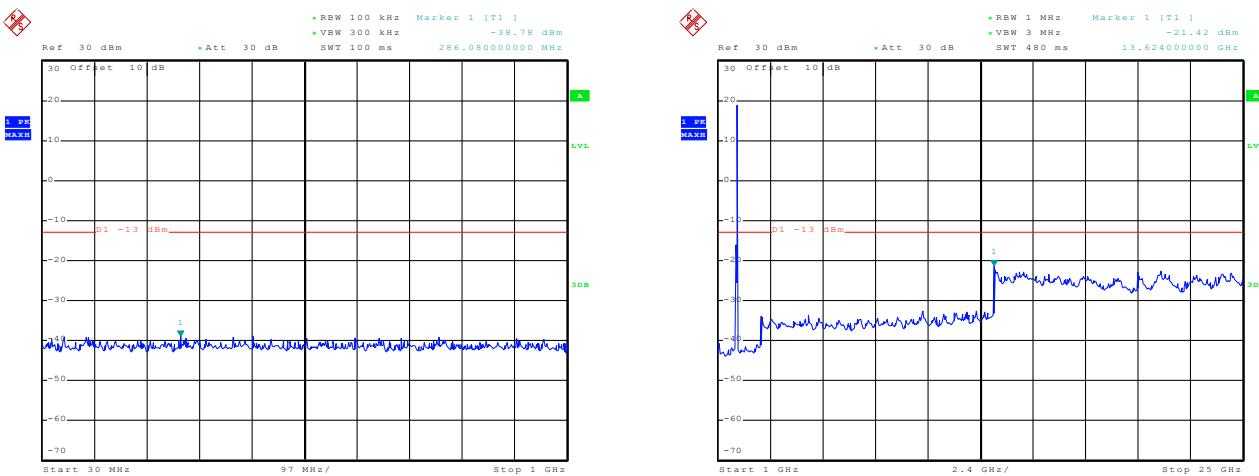
Date: 9.NOV.2015 02:12:22

30MHz~1GHz

Date: 9.NOV.2015 02:54:34

1GHz~25GHz

Test Mode:	LTE band 2(20MHz QPSK) RB Size 100& RB Offset 0	Test Channel:	Middle channel
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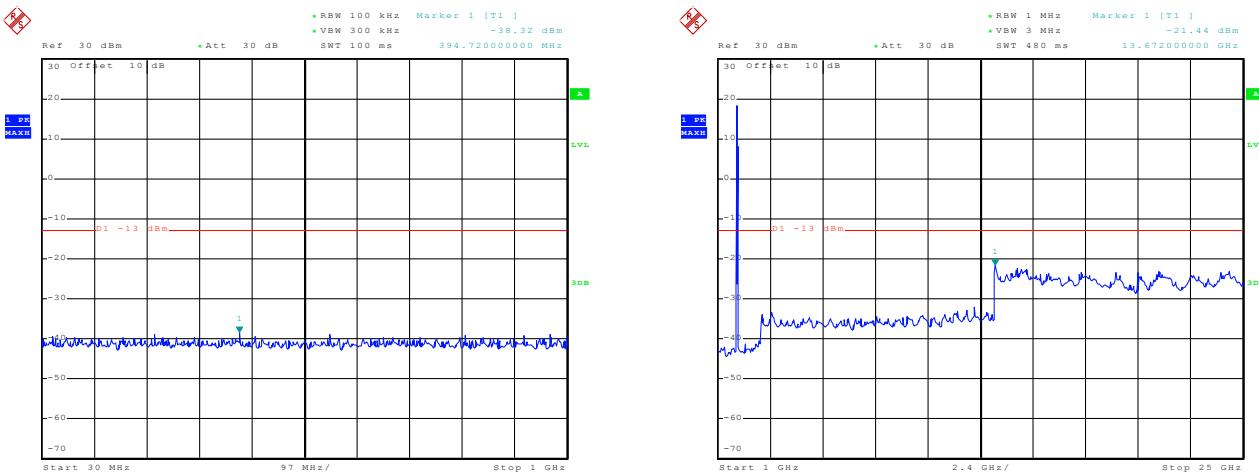
Date: 9.NOV.2015 02:13:08

30MHz~1GHz

Date: 9.NOV.2015 02:55:47

1GHz~25GHz

Test Mode:	LTE band 2(20MHz QPSK) RB Size 100 & RB Offset 0	Test Channel:	Highest channel
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Date: 9.NOV.2015 02:14:01

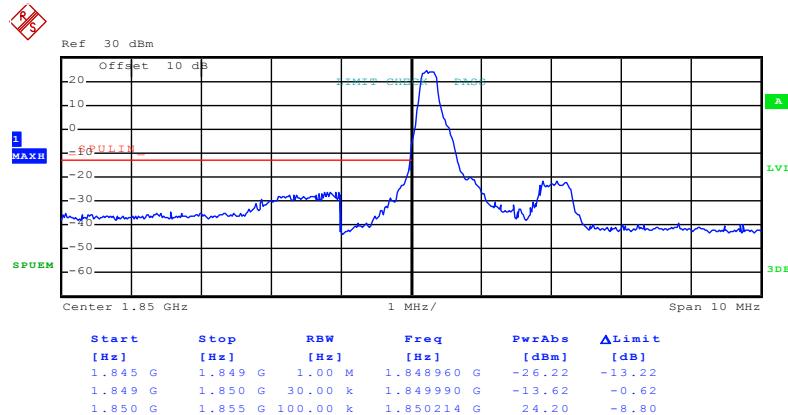
30MHz~1GHz

Date: 9.NOV.2015 02:56:57

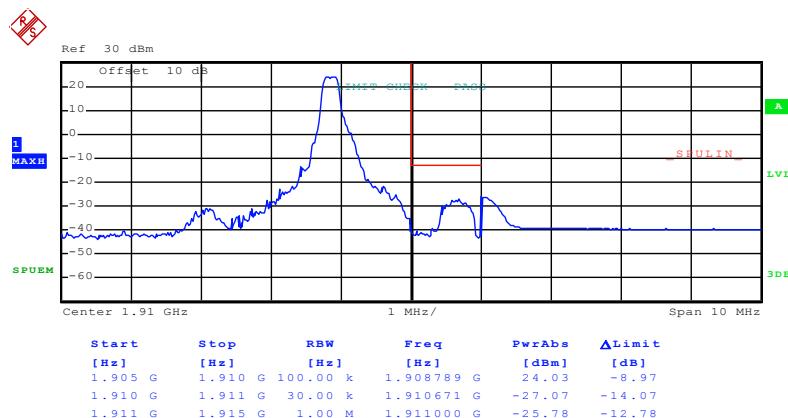
1GHz~25GHz

**Band edge emission:****LTE band 2 part:****1.4MHz:**

Test Mode:	LTE band 2(QPSKRB Size 1 &RB Offset0)
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Date: 9.NOV.2015 01:19:59

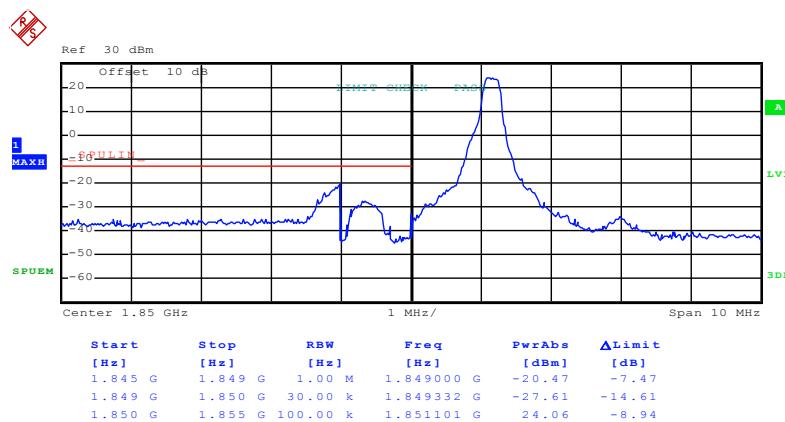
**Lowest channel**

Date: 9.NOV.2015 01:22:13

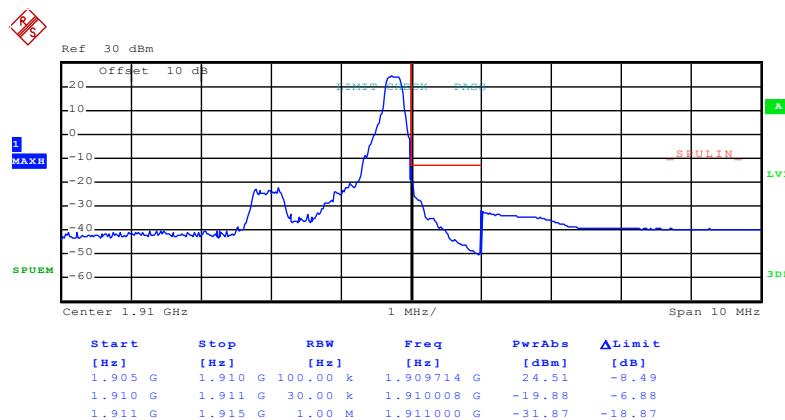
**Highest channel**

Test Mode:

LTE band 2(QPSKRB Size 1 &amp;RB Offset 5)



Date: 9.NOV.2015 01:20:40

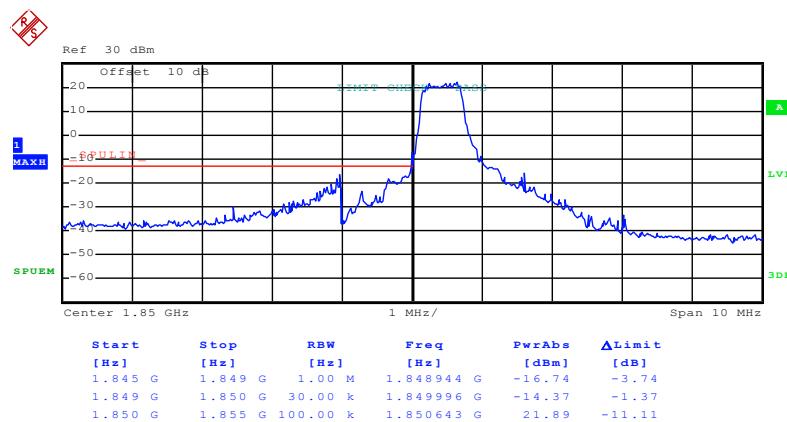
**Lowest channel**

Date: 9.NOV.2015 01:23:07

**Highest channel**

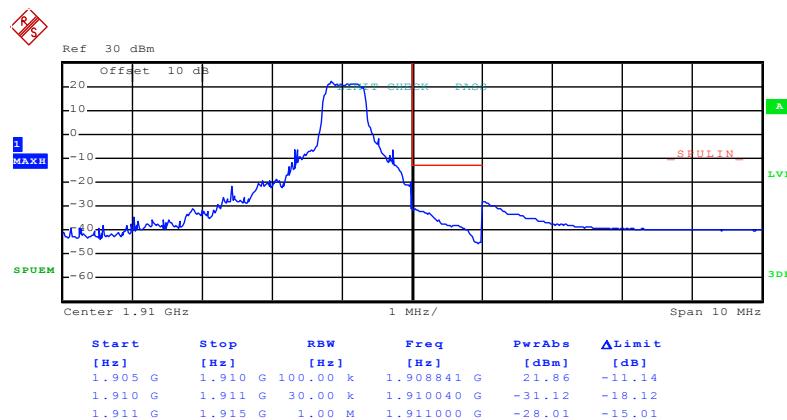
Test Mode:

LTE band 2(QPSKRB Size 3 &RB Offset0)



Date: 9.NOV.2015 01:21:02

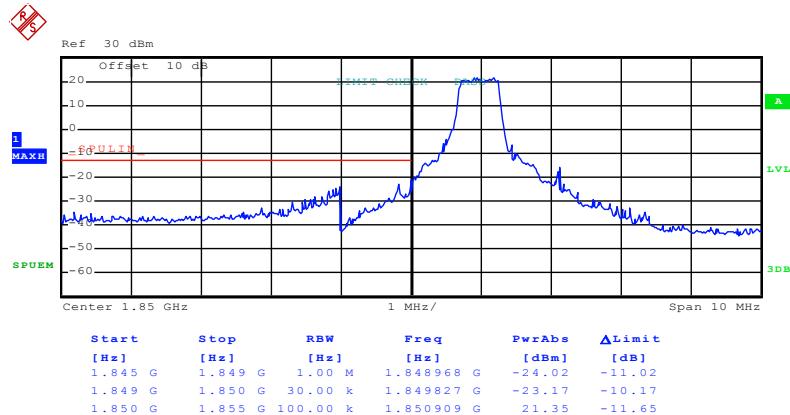
### Lowest channel



Date: 9.NOV.2015 01:23:26

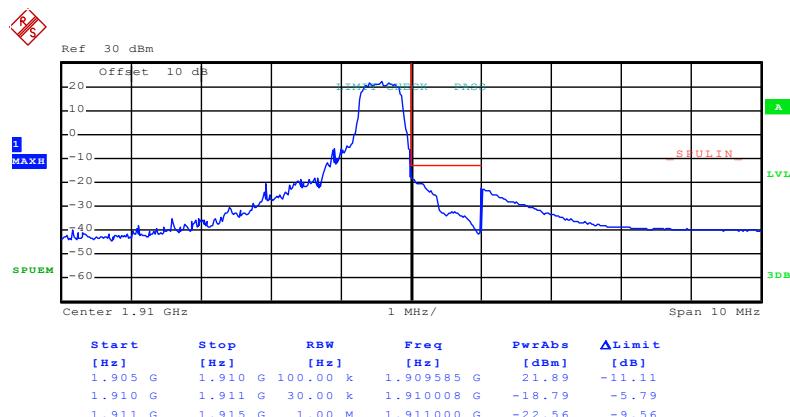
### Highest channel

Test Mode:	LTE band 2(QPSKRB Size 3 &RB Offset 2)
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Date: 9.NOV.2015 01:21:21

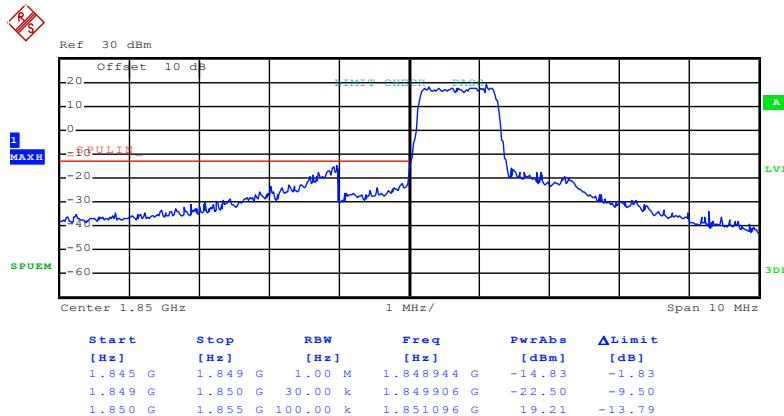
#### Lowest channel



Date: 9.NOV.2015 01:23:43

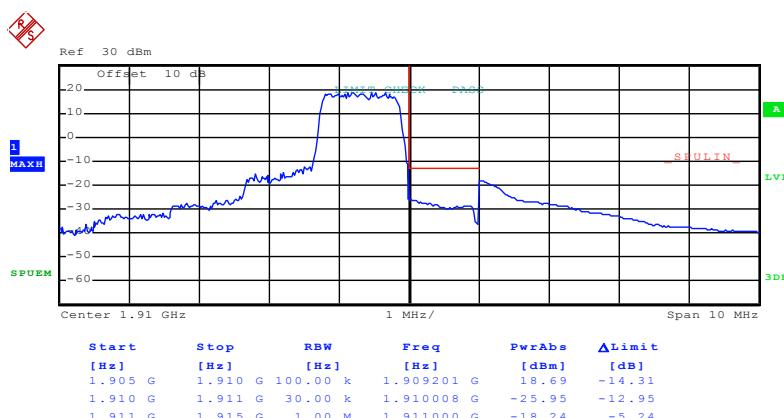
#### Highest channel

Test Mode:	LTE band 2(QPSKRB Size 6 & RB Offset 0)
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Date: 9.NOV.2015 01:21:40

#### Lowest channel

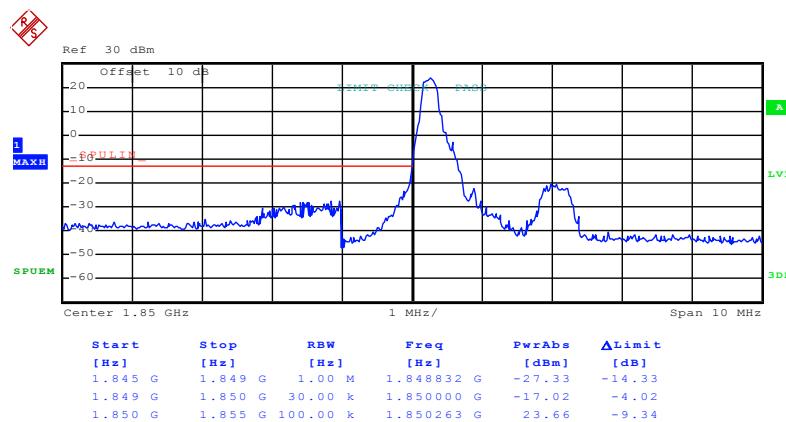


Date: 9.NOV.2015 01:24:04

#### Highest channel

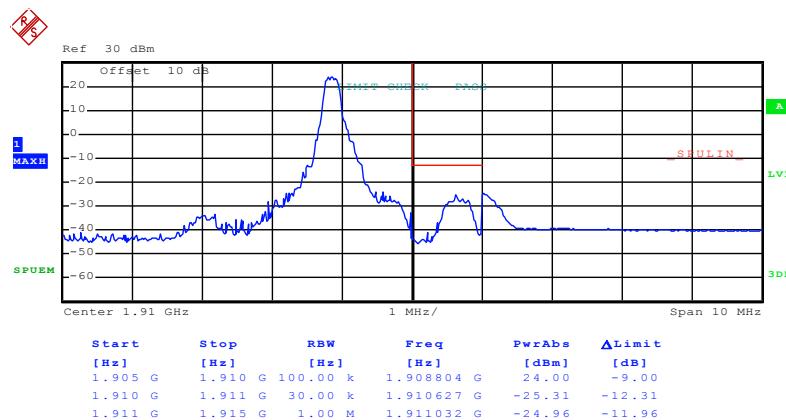
Test Mode:

LTE band 2(16QAMRB Size 1 &RB Offset0)



Date: 9.NOV.2015 01:20:14

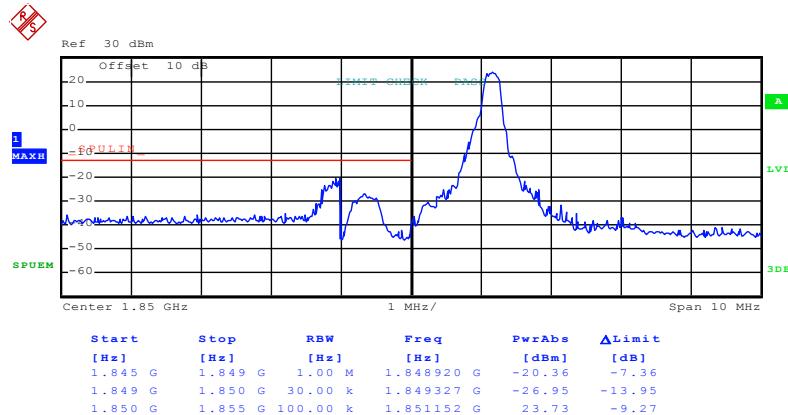
### Lowest channel



Date: 9.NOV.2015 01:22:21

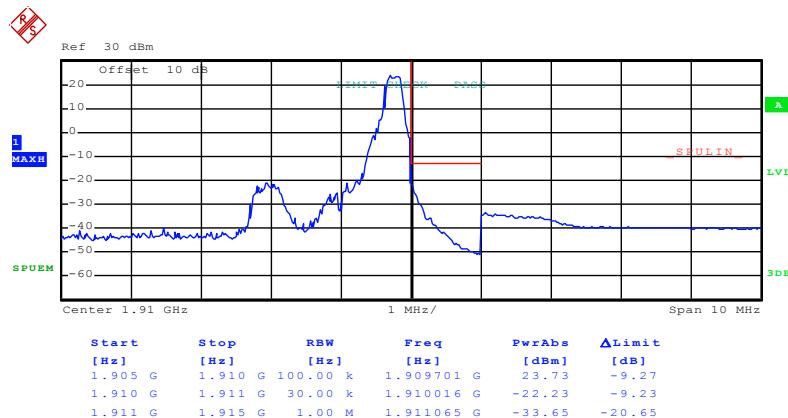
### Highest channel

Test Mode:	LTE band 2(16QAMRB Size 1 &RB Offset5)
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Date: 9.NOV.2015 01:20:50

### Lowest channel

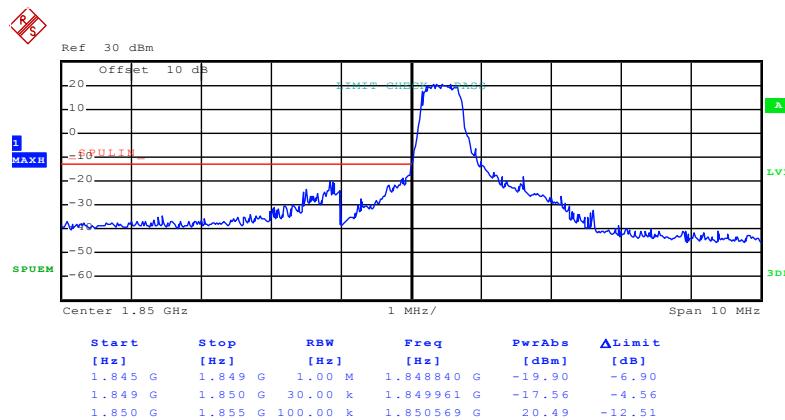


Date: 9.NOV.2015 01:23:16

### Highest channel

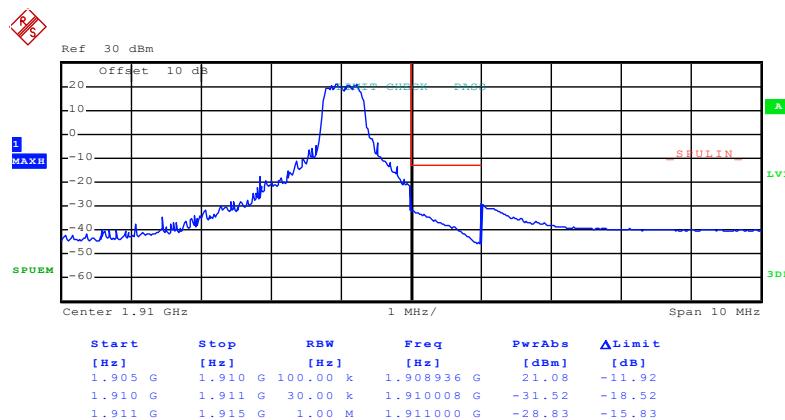
Test Mode:

LTE band 2(16QAMRB Size 3 &amp;RB Offset0)



Date: 9.NOV.2015 01:21:09

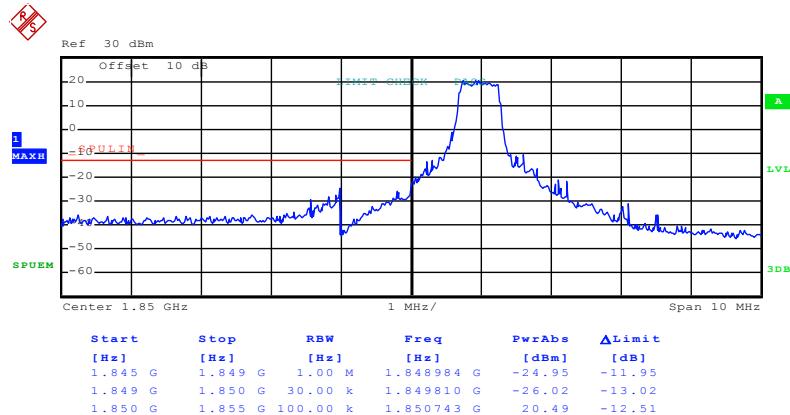
## Lowest channel



Date: 9.NOV.2015 01:23:33

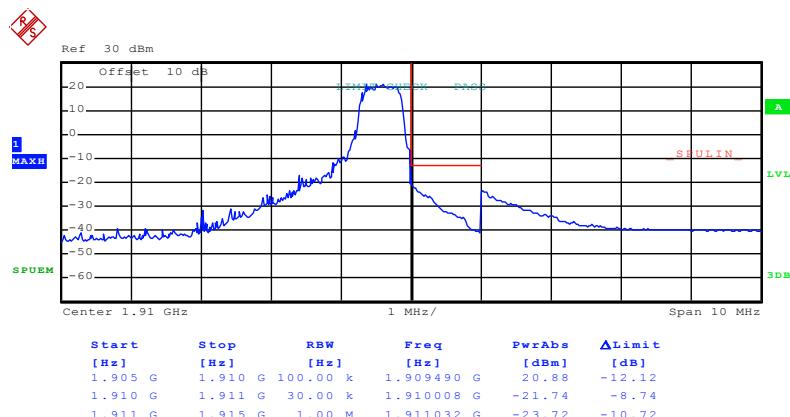
## Highest channel

Test Mode:	LTE band 2(16QAMRB Size 3 &RB Offset 2)
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Date: 9.NOV.2015 01:21:30

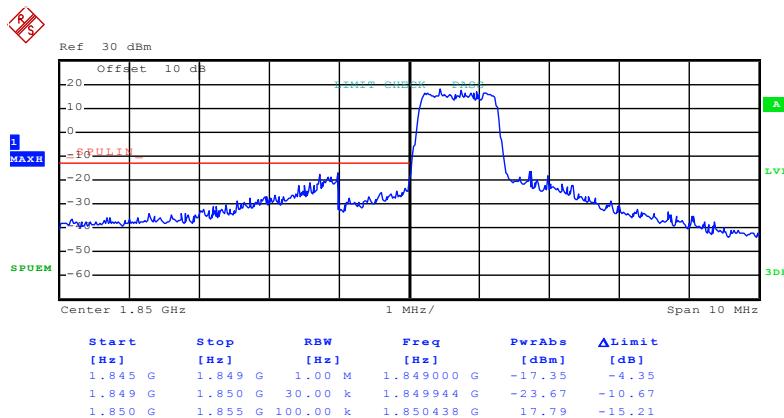
### Lowest channel



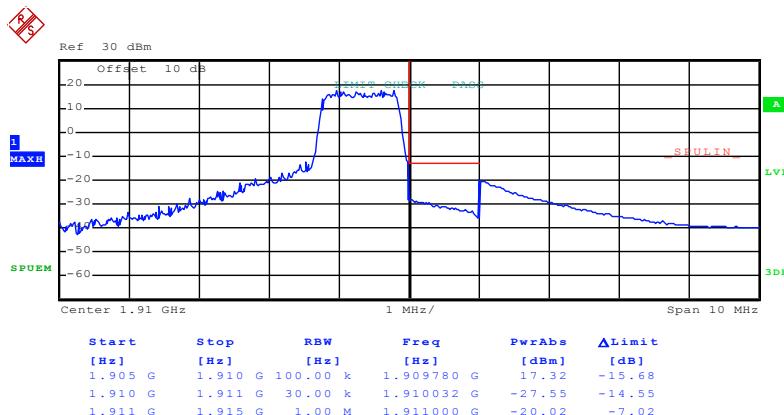
Date: 9.NOV.2015 01:23:53

### Highest channel

Test Mode:	LTE band 2(16QAMRB Size 6& RB Offset 0)
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Date: 9.NOV.2015 01:21:47

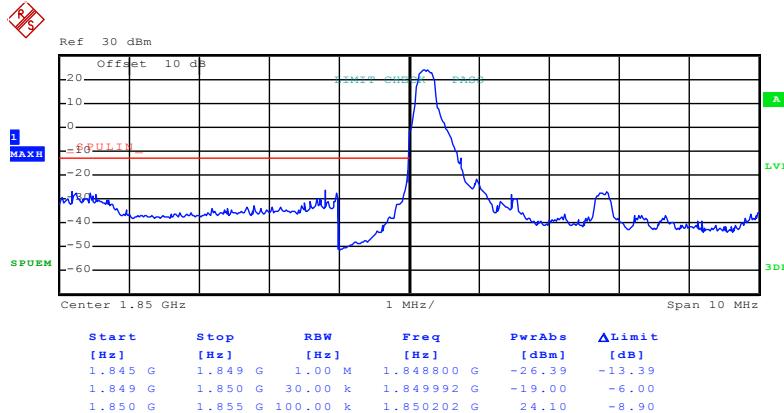
**Lowest channel**

Date: 9.NOV.2015 01:24:10

**Highest channel**

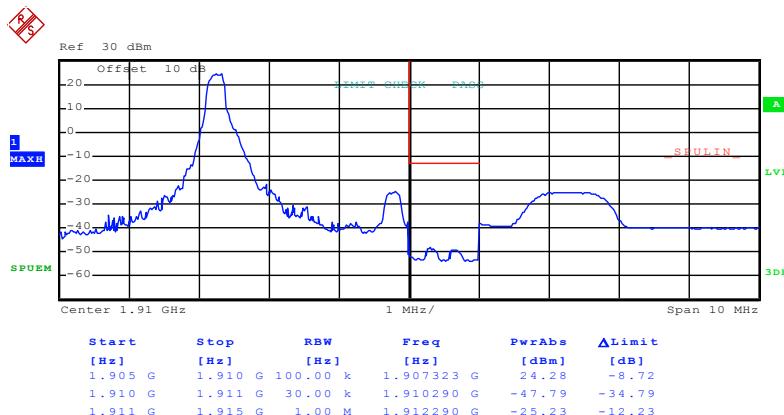
3MHz:

Test Mode:	LTE band 2(QPSKRB Size 1& RB Offset 0)
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Date: 9.NOV.2015 01:24:56

## Lowest channel

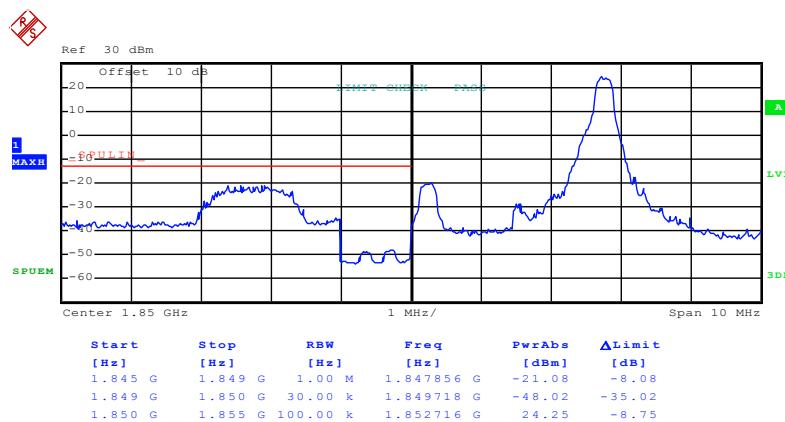


Date: 9.NOV.2015 01:27:08

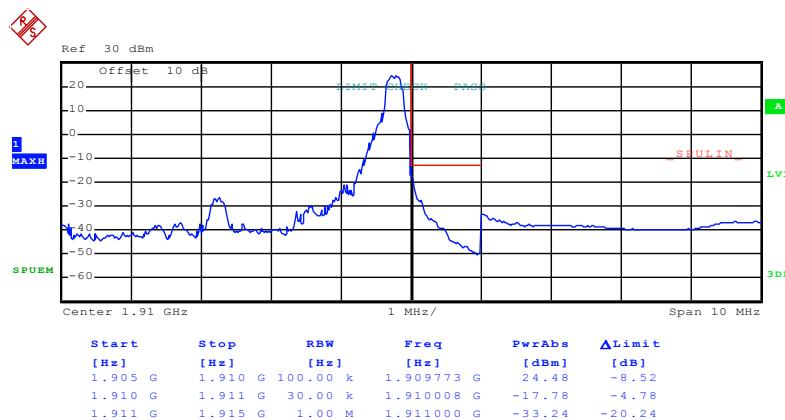
## Highest channel

Test Mode:

LTE band 2(QPSK RB Size 1&amp; RB Offset 14)



Date: 9.NOV.2015 01:25:26

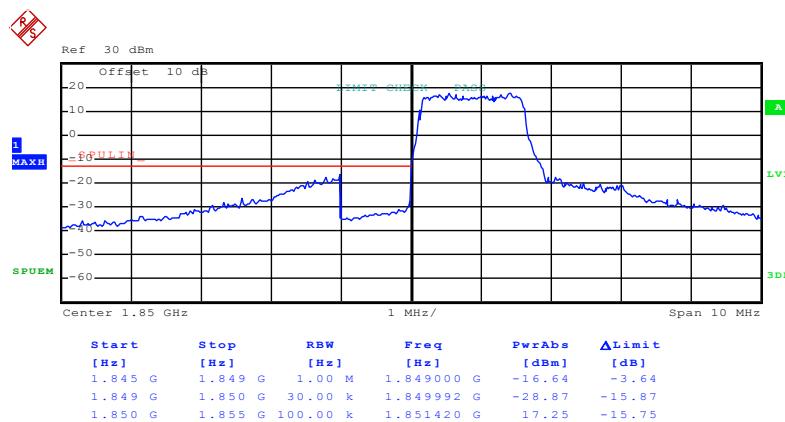
**Lowest channel**

Date: 9.NOV.2015 01:27:24

**Highest channel**

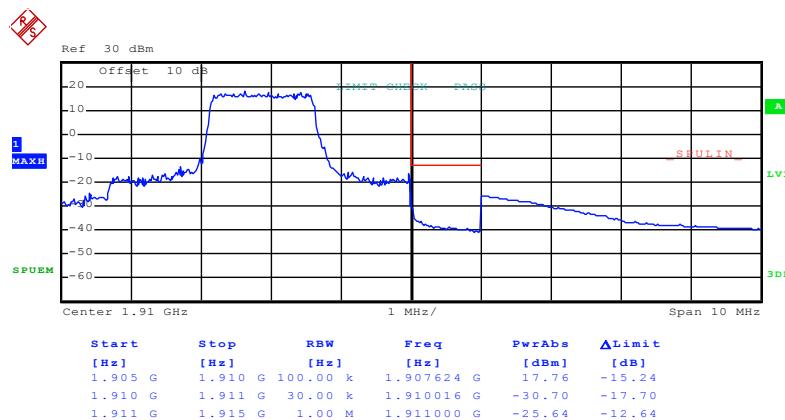
Test Mode:

LTE band 2(QPSKRB Size 8&amp; RB Offset 0)



Date: 9.NOV.2015 01:25:54

## Lowest channel

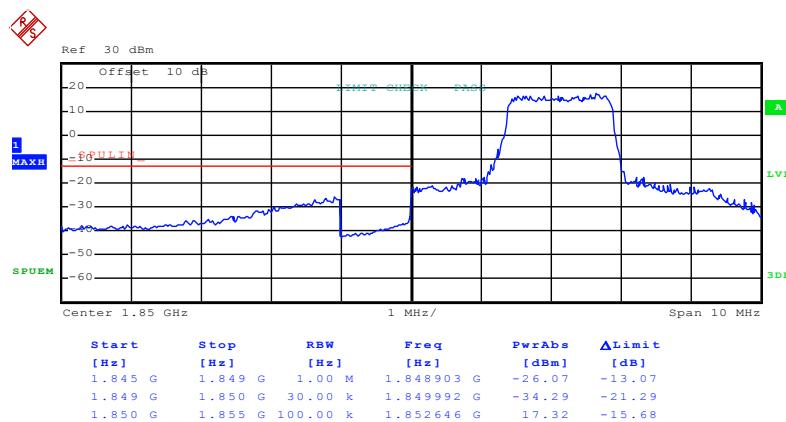


Date: 9.NOV.2015 01:27:42

## Highest channel

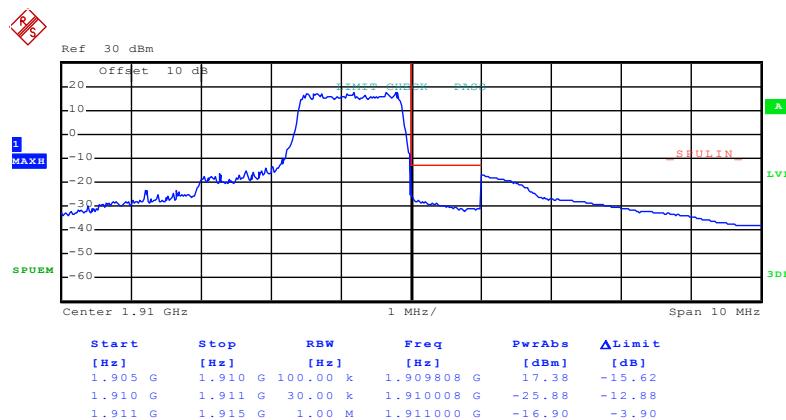
Test Mode:

LTE band 2(QPSKRB Size 8&amp; RB Offset 7)



Date: 9.NOV.2015 01:26:11

## Lowest channel



Date: 9.NOV.2015 01:28:00

## Highest channel

Test Mode:

LTE band 2(QPSKRB Size 15&amp; RB Offset 0)



Date: 9.NOV.2015 01:26:37

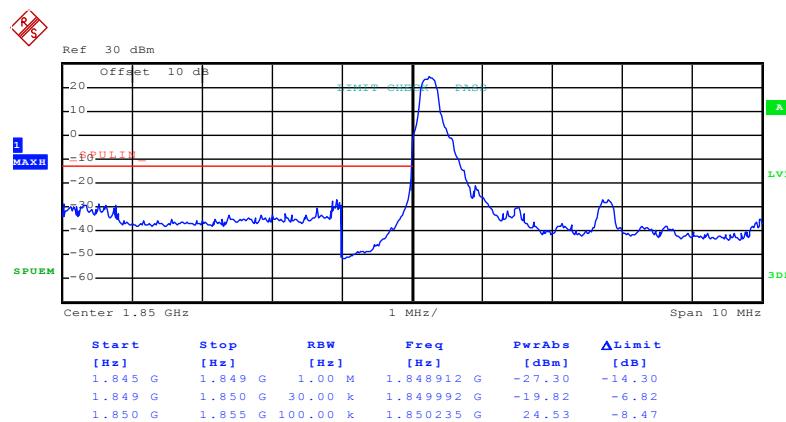
**Lowest channel**

Date: 9.NOV.2015 01:28:21

**Highest channel**

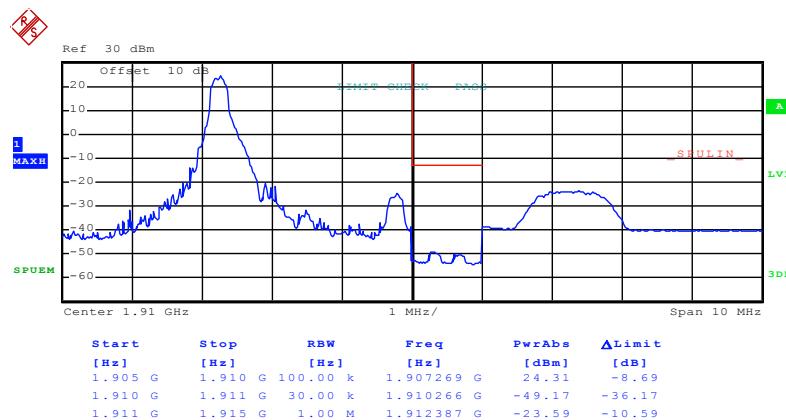
Test Mode:

LTE band 2(16QAMRB Size 1& RB Offset 0)



Date: 9.NOV.2015 01:25:12

### Lowest channel



Date: 9.NOV.2015 01:27:15

### Highest channel

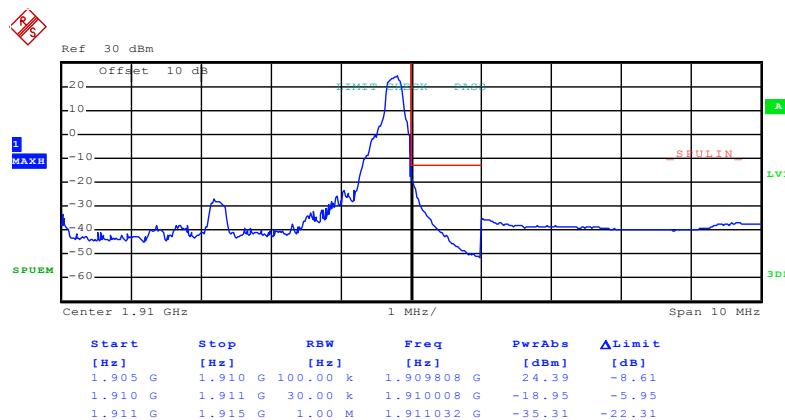
Test Mode:

LTE band 2(16QAMRB Size 1 &amp; RB Offset 14)



Date: 9.NOV.2015 01:25:34

## Lowest channel

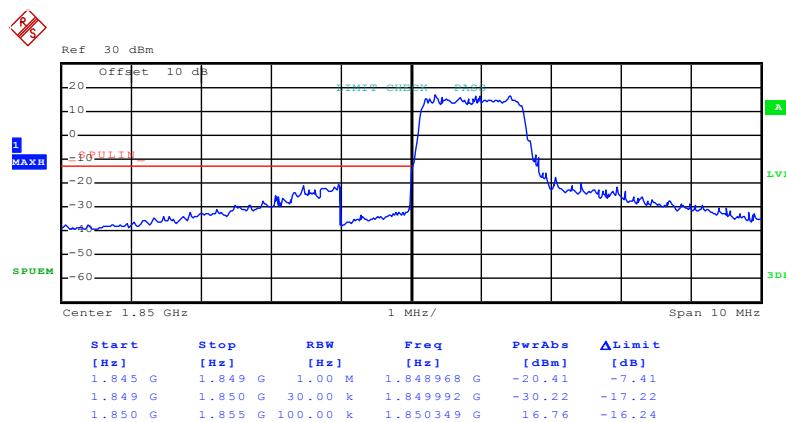


Date: 9.NOV.2015 01:27:31

## Highest channel

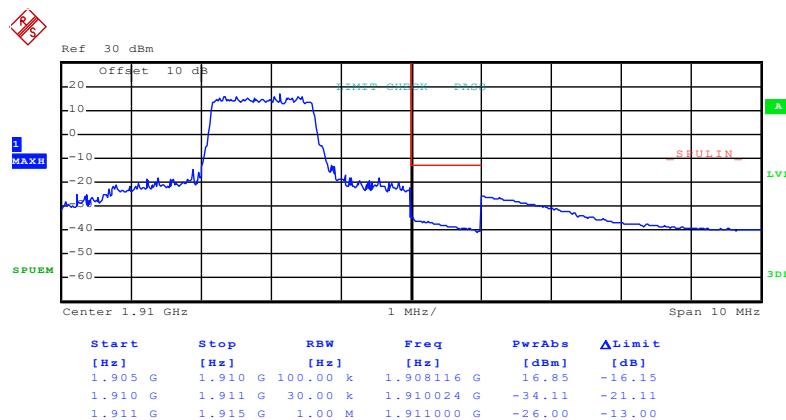
Test Mode:

LTE band 2(16QAMRB Size 8& RB Offset 0)



Date: 9.NOV.2015 01:26:02

### Lowest channel

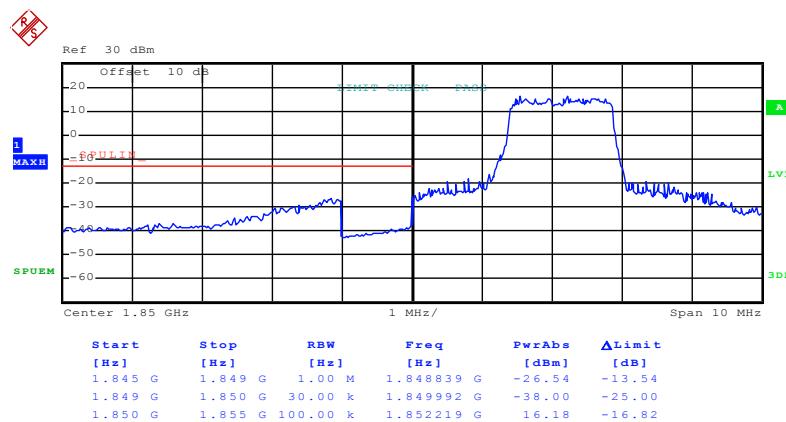


Date: 9.NOV.2015 01:27:49

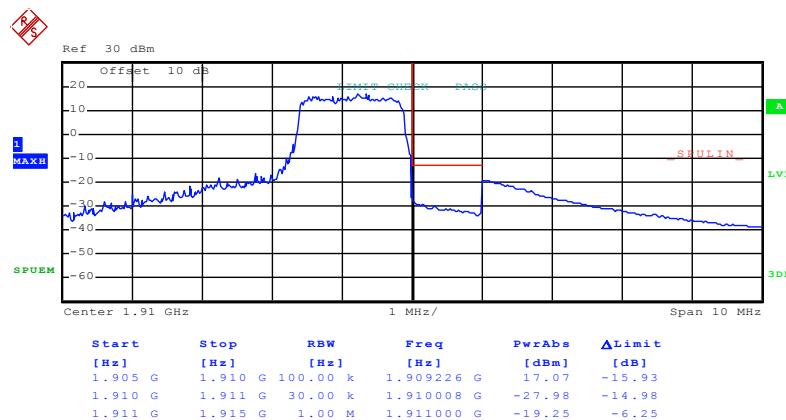
### Highest channel

Test Mode:

LTE band 2(16QAMRB Size 8&amp; RB Offset 7)



Date: 9.NOV.2015 01:26:19

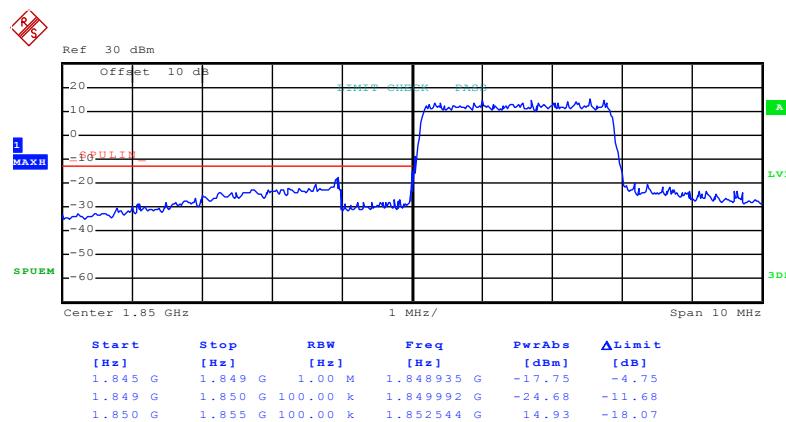
**Lowest channel**

Date: 9.NOV.2015 01:28:08

**Highest channel**

Test Mode:

LTE band 2(16QAMRB Size 15&amp; RB Offset 0)



Date: 9.NOV.2015 01:26:43

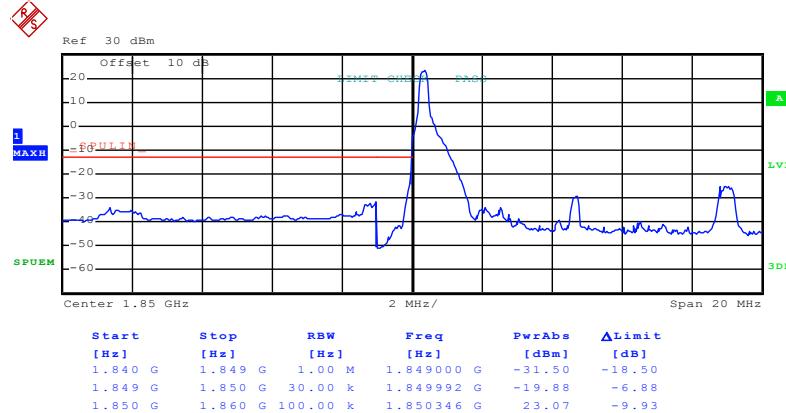
**Lowest channel**

Date: 9.NOV.2015 01:28:27

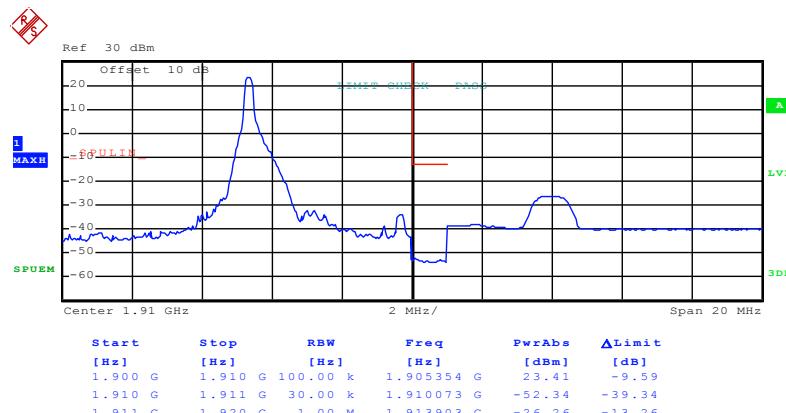
**Highest channel**

5MHz:

Test Mode:	LTE band 2(QPSKRB Size 1& RB Offset 0)
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Date: 9.NOV.2015 01:29:10

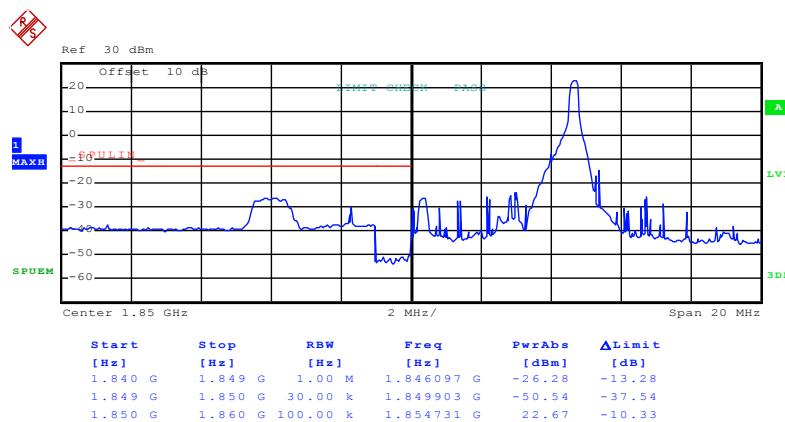
**Lowest channel**

Date: 9.NOV.2015 01:31:37

**Highest channel**

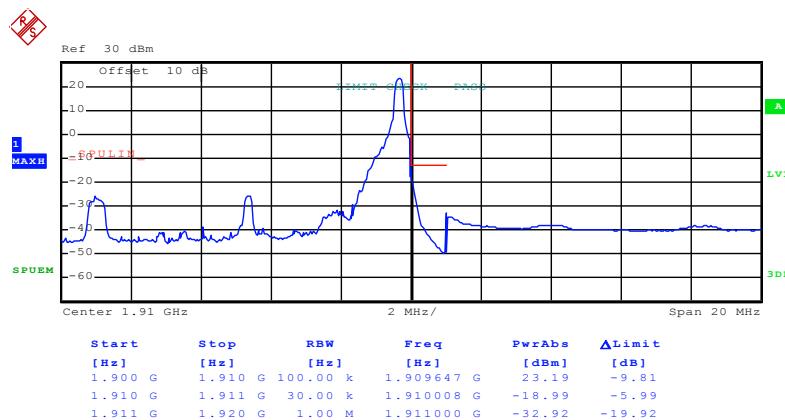
Test Mode:

LTE band 2(QPSKRB Size 1&amp; RB Offset 24)



Date: 9.NOV.2015 01:29:31

## Lowest channel

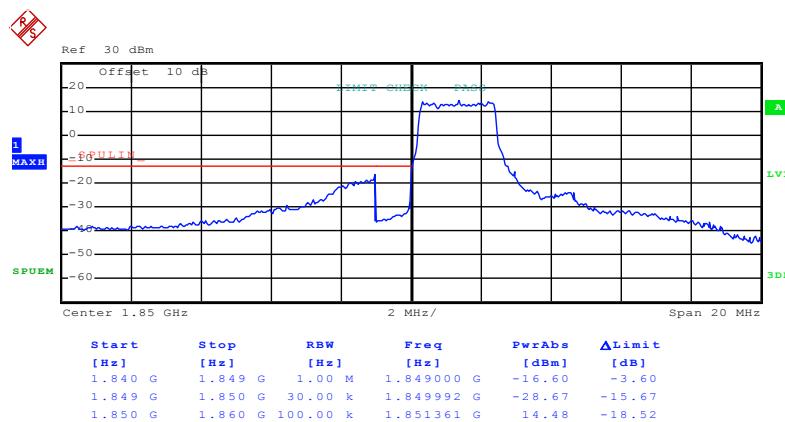


Date: 9.NOV.2015 01:31:54

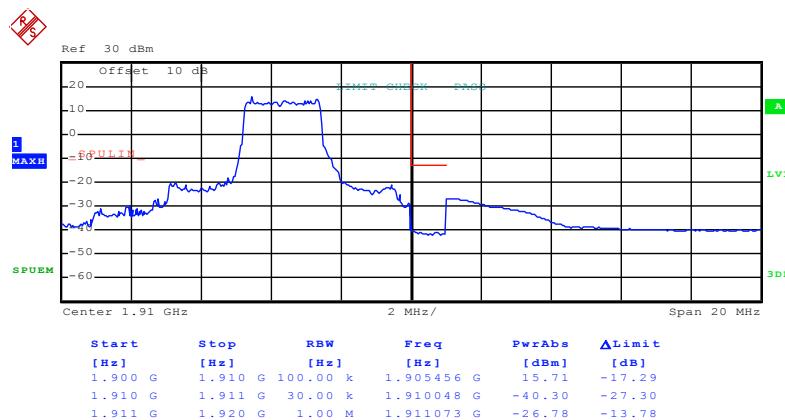
## Highest channel

Test Mode:

LTE band 2(QPSKRB Size 12&amp; RB Offset 0)



Date: 9.NOV.2015 01:29:55

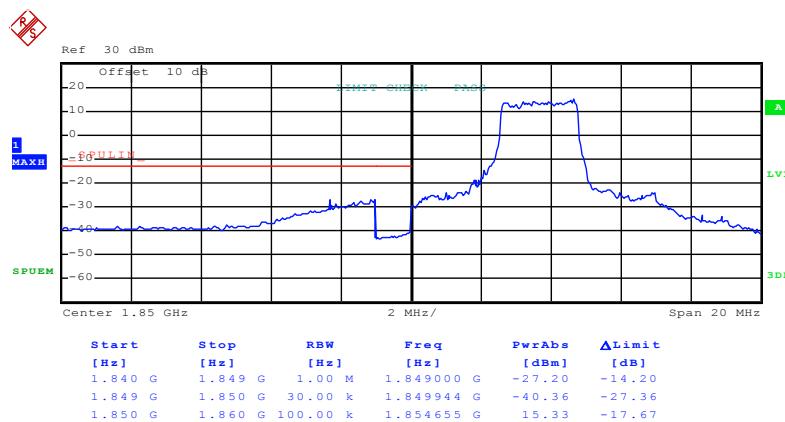
**Lowest channel**

Date: 9.NOV.2015 01:32:21

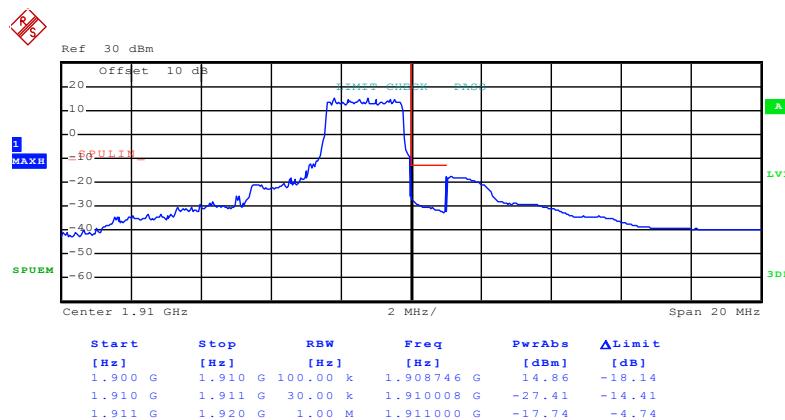
**Highest channel**

Test Mode:

LTE band 2(QPSKRB Size 12&amp; RB Offset 11)



Date: 9.NOV.2015 01:30:16

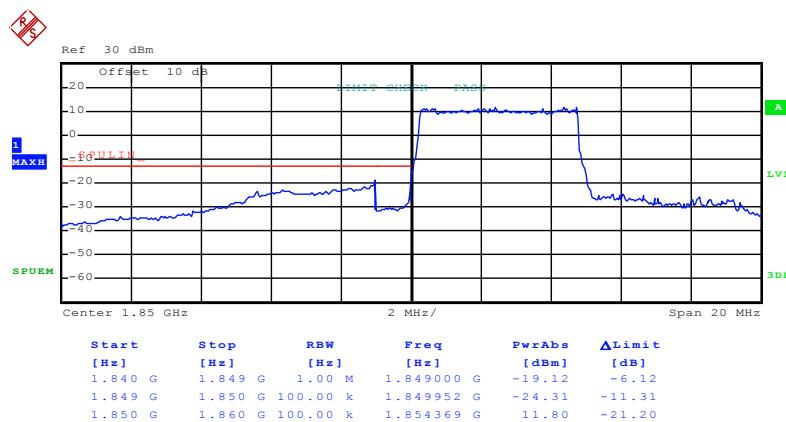
**Lowest channel**

Date: 9.NOV.2015 01:32:48

**Highest channel**

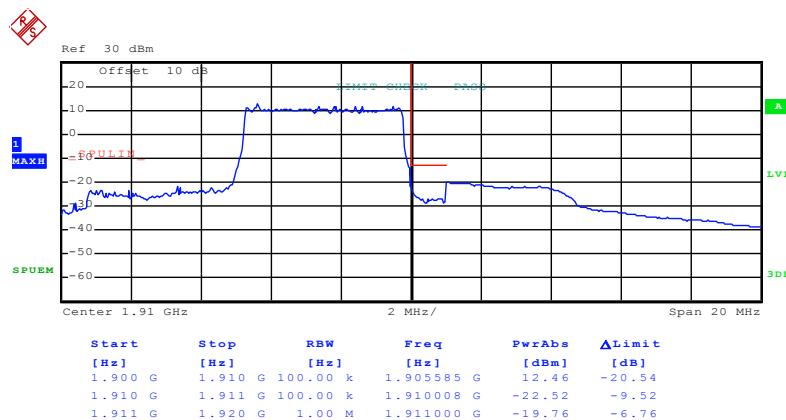
Test Mode:

LTE band 2(QPSKRB Size 25& RB Offset 0)



Date: 9.NOV.2015 01:30:48

### Lowest channel

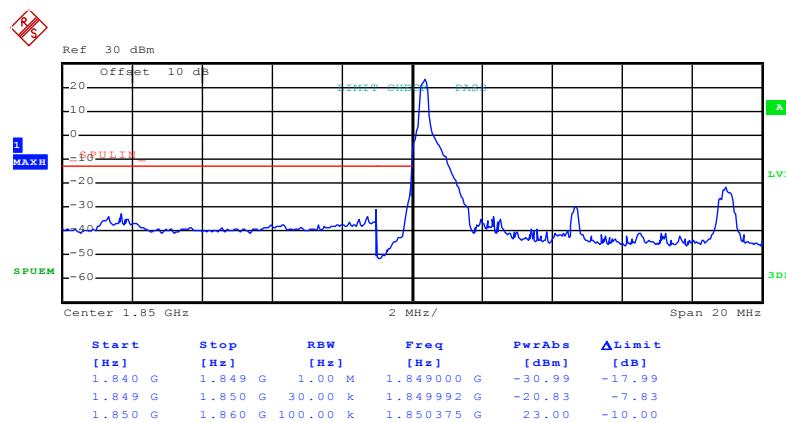


Date: 9.NOV.2015 01:33:11

### Highest channel

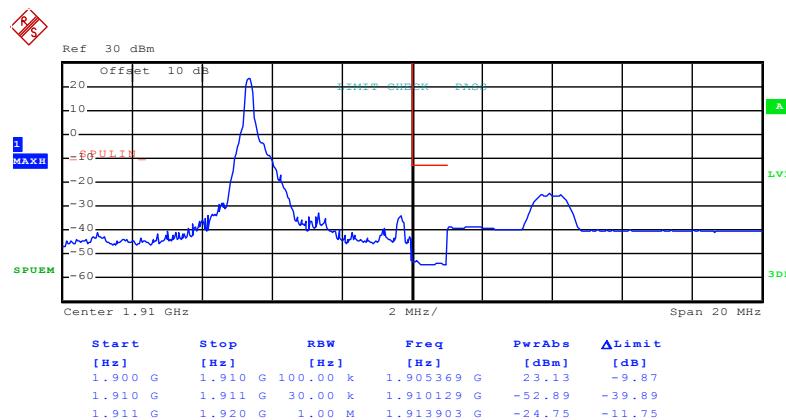
Test Mode:

LTE band 2(16QAMRB Size 1&amp; RB Offset 0)



Date: 9.NOV.2015 01:29:17

## Lowest channel

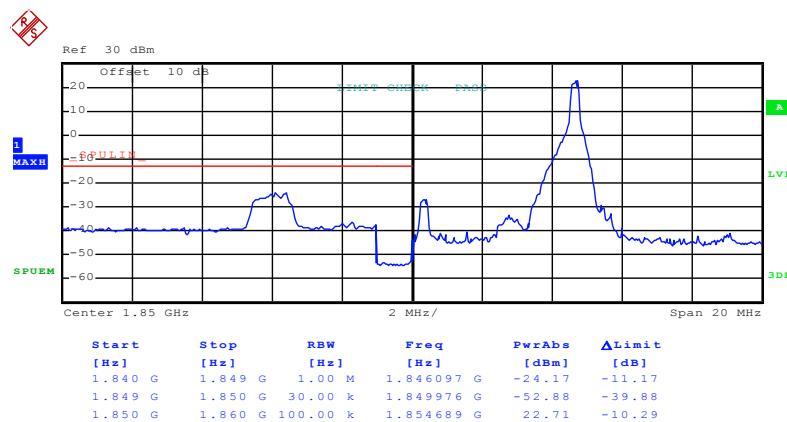


Date: 9.NOV.2015 01:31:44

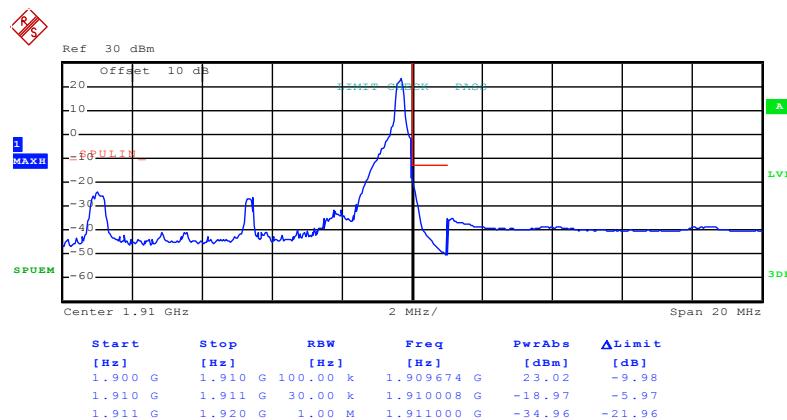
## Highest channel

Test Mode:

LTE band 2(16QAMRB Size 1&amp; RB Offset 24)



Date: 9.NOV.2015 01:29:41

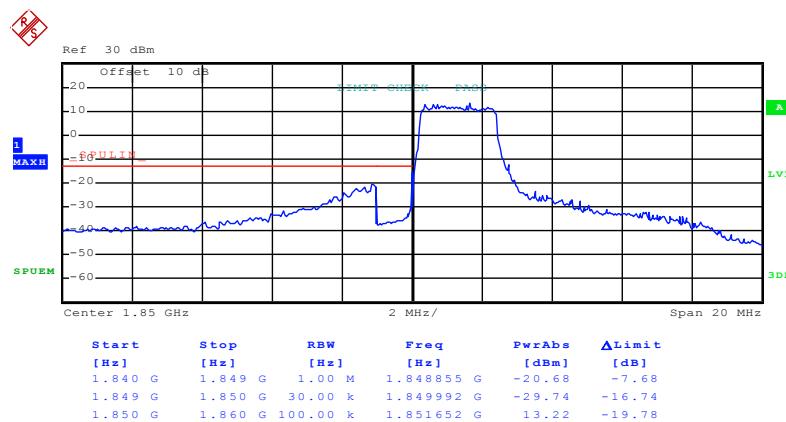
**Lowest channel**

Date: 9.NOV.2015 01:32:10

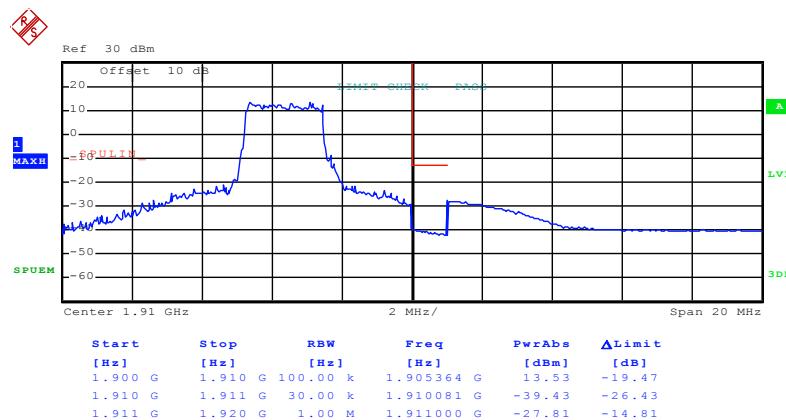
**Highest channel**

Test Mode:

LTE band 2(16QAMRB Size 12&amp; RB Offset 0)



Date: 9.NOV.2015 01:30:02

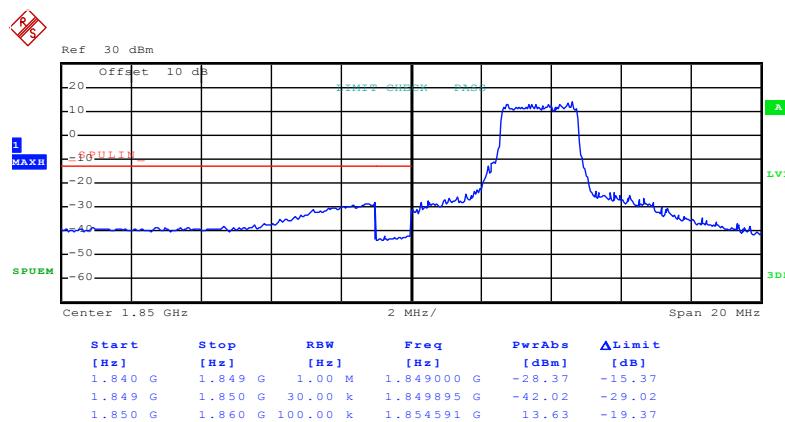
**Lowest channel**

Date: 9.NOV.2015 01:32:30

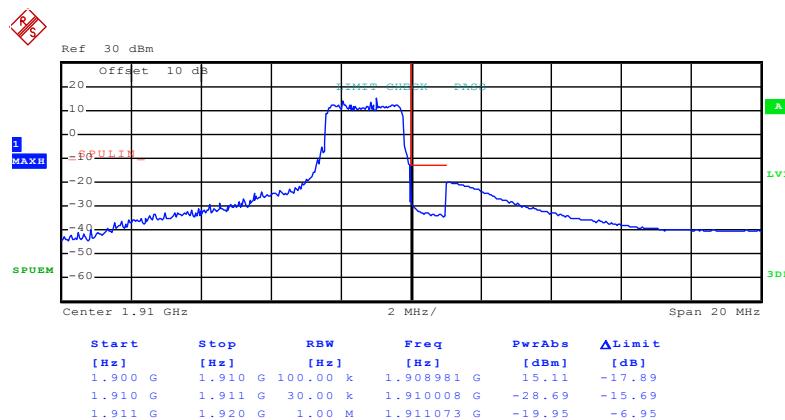
**Highest channel**

Test Mode:

LTE band 2(16QAMRB Size 12&amp; RB Offset 11)



Date: 9.NOV.2015 01:30:26

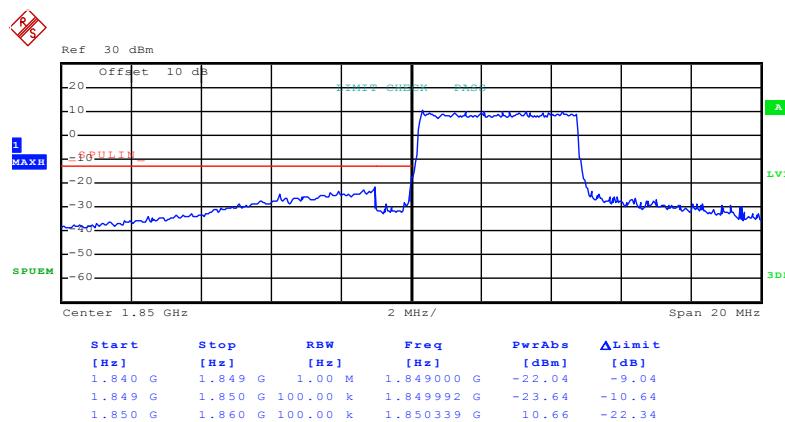
**Lowest channel**

Date: 9.NOV.2015 01:32:56

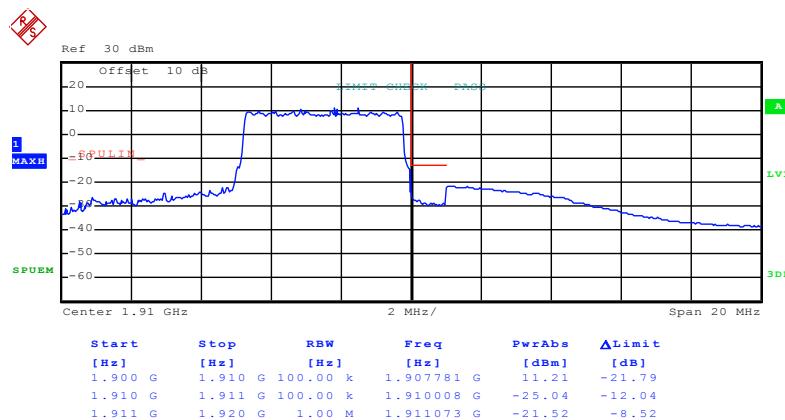
**Highest channel**

Test Mode:

LTE band 2(16QAMRB Size 25&amp; RB Offset 0)



Date: 9.NOV.2015 01:30:55

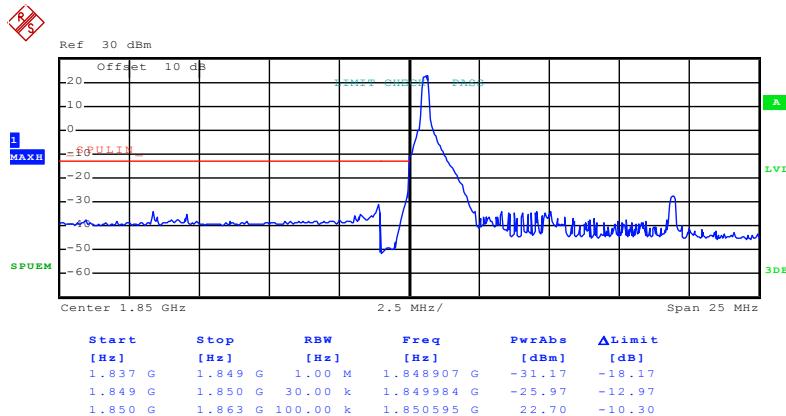
**Lowest channel**

Date: 9.NOV.2015 01:33:17

**Highest channel**

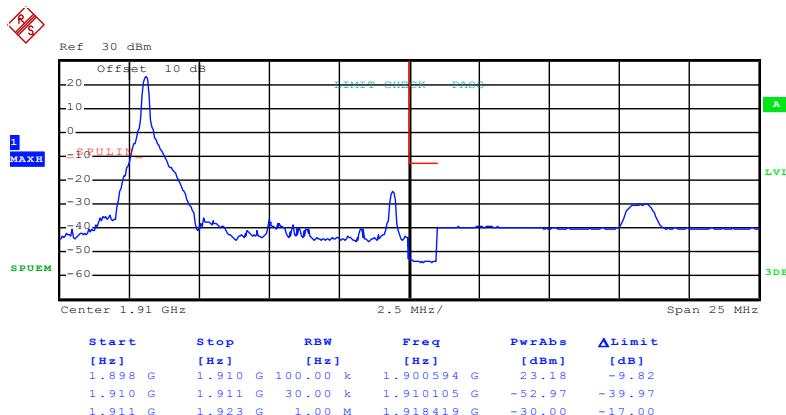
**10MHz:**

Test Mode:	LTE band 2(QPSKRB Size 1& RB Offset 0)
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Date: 9.NOV.2015 01:34:06

**Lowest channel**

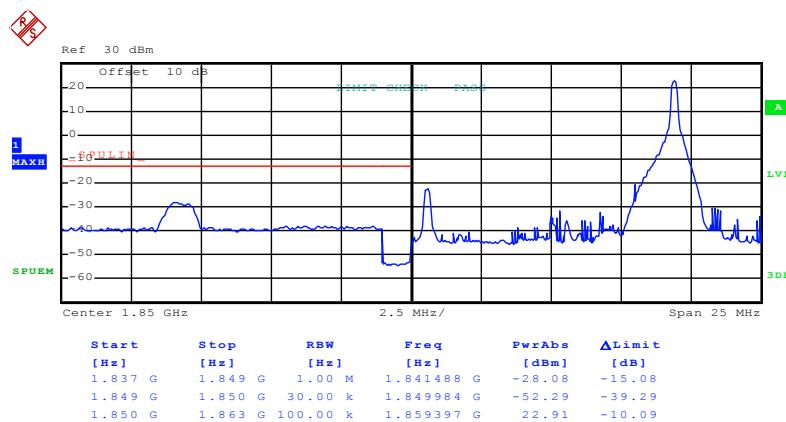


Date: 9.NOV.2015 01:37:18

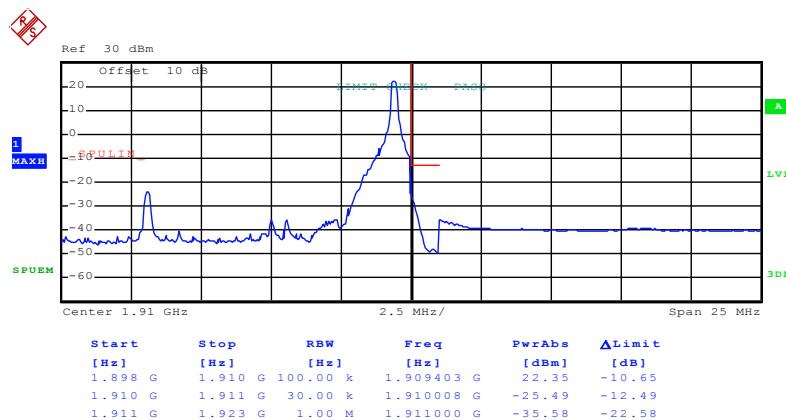
**Highest channel**

Test Mode:

LTE band 2(QPSKRB Size 1&amp; RB Offset 49)



Date: 9.NOV.2015 01:34:52

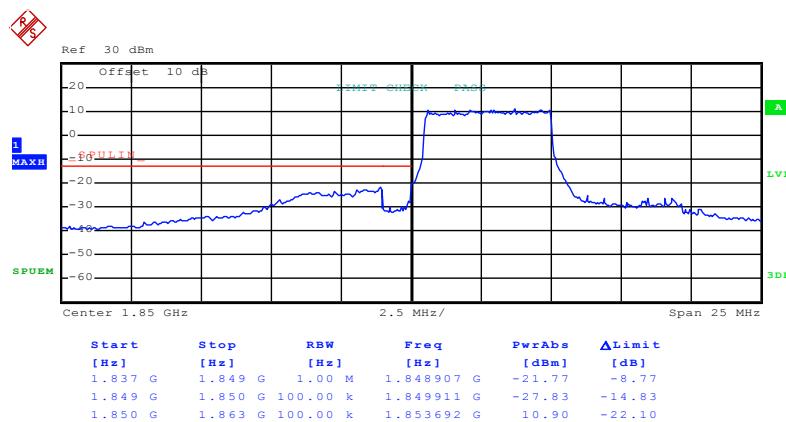
**Lowest channel**

Date: 9.NOV.2015 01:37:36

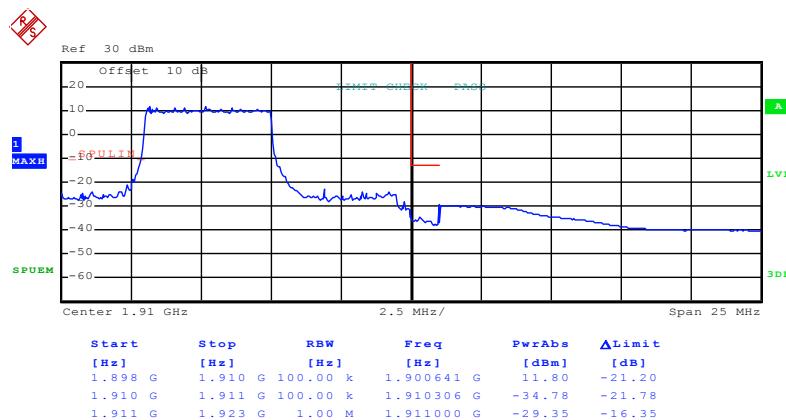
**Highest channel**

Test Mode:

LTE band 4(QPSKRB Size 25&amp; RB Offset 0)



Date: 9.NOV.2015 01:35:15

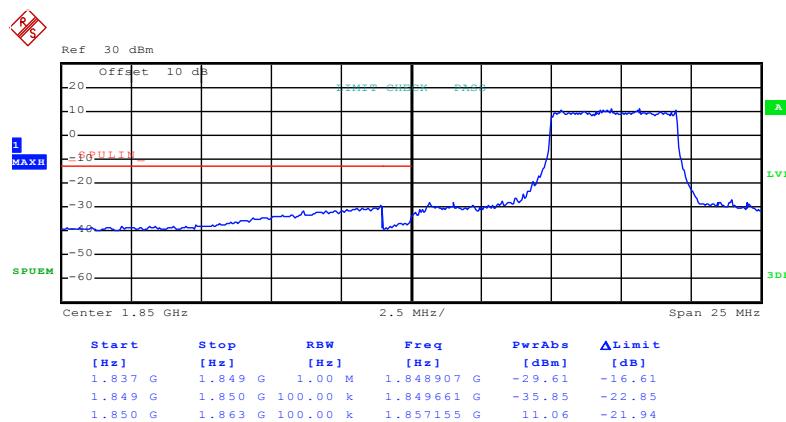
**Lowest channel**

Date: 9.NOV.2015 01:37:59

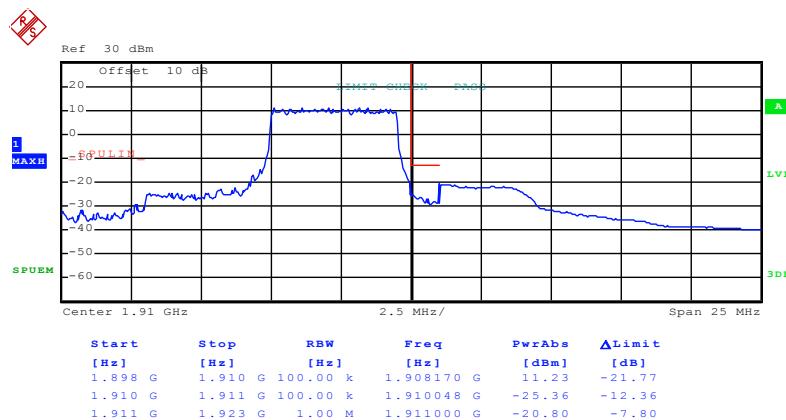
**Highest channel**

Test Mode:

LTE band 4(QPSKRB Size 25&amp; RB Offset 24)



Date: 9.NOV.2015 01:35:33

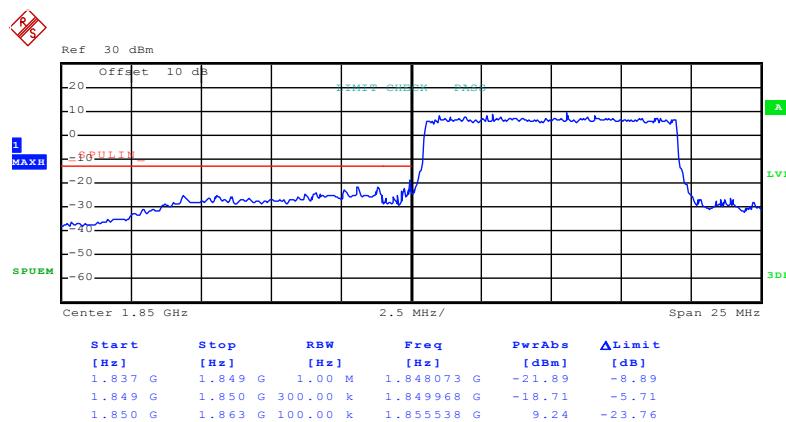
**Lowest channel**

Date: 9.NOV.2015 01:38:18

**Highest channel**

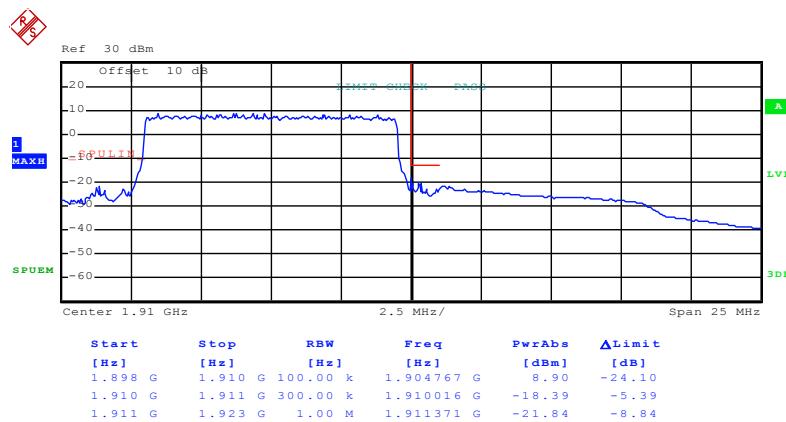
Test Mode:

LTE band 4(QPSKRB Size 50& RB Offset 0)



Date: 9.NOV.2015 01:36:50

### Lowest channel

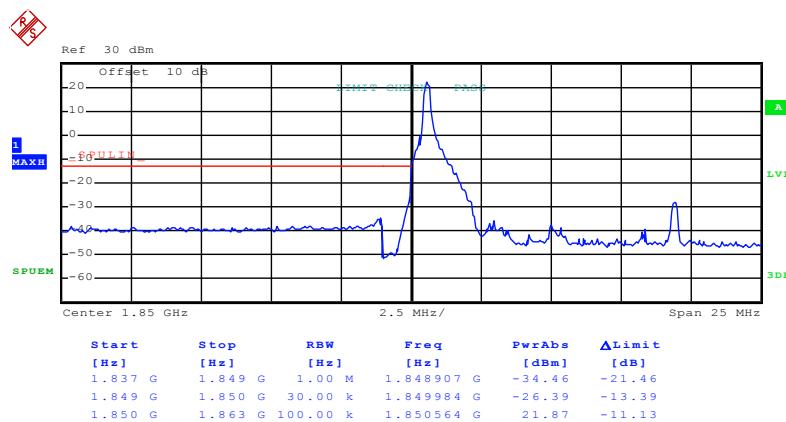


Date: 9.NOV.2015 01:38:43

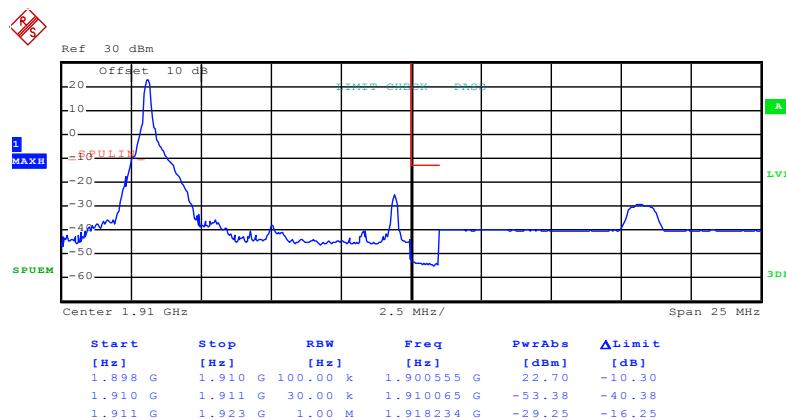
### Highest channel

Test Mode:

LTE band 2(16QAMRB Size 1&amp; RB Offset 0)



Date: 9.NOV.2015 01:34:13

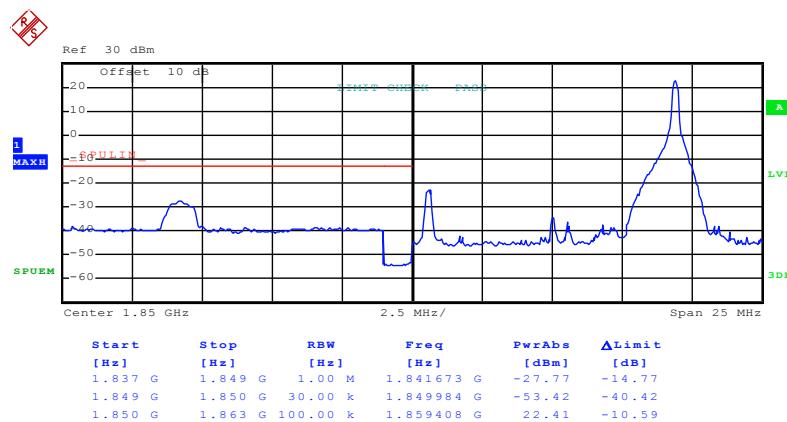
**Lowest channel**

Date: 9.NOV.2015 01:37:26

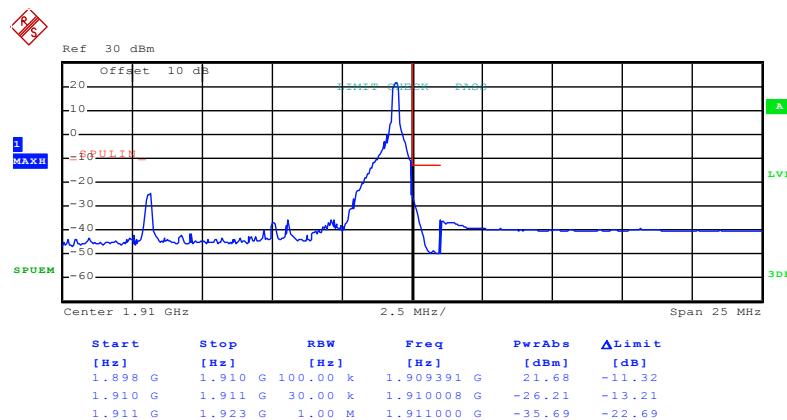
**Highest channel**

Test Mode:

LTE band 2(16QAMRB Size 1&amp; RB Offset 49)



Date: 9.NOV.2015 01:35:00

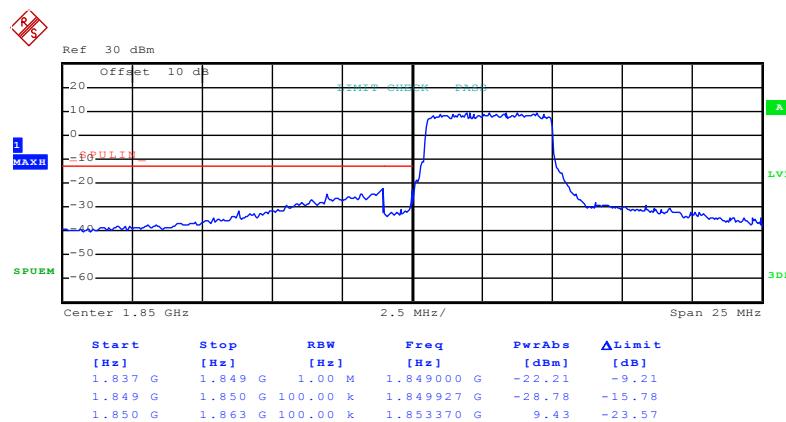
**Lowest channel**

Date: 9.NOV.2015 01:37:44

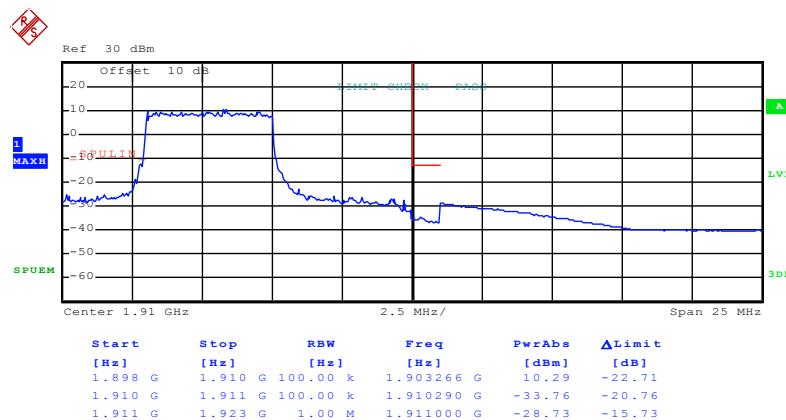
**Highest channel**

Test Mode:

LTE band 2(16QAMRB Size 25&amp; RB Offset 0)



Date: 9.NOV.2015 01:35:22

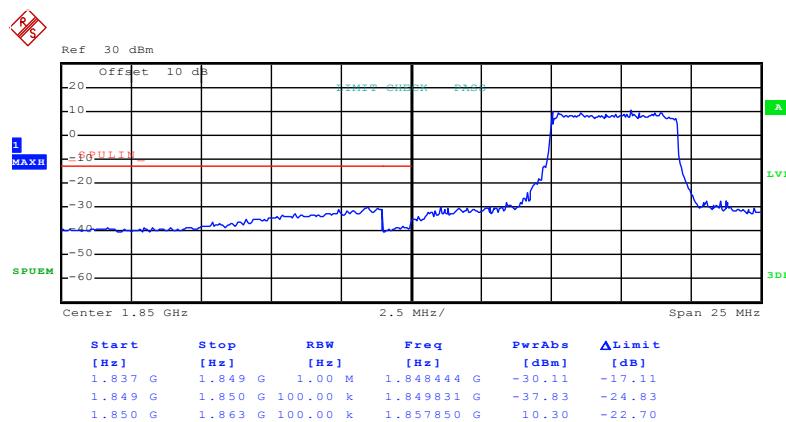
**Lowest channel**

Date: 9.NOV.2015 01:38:07

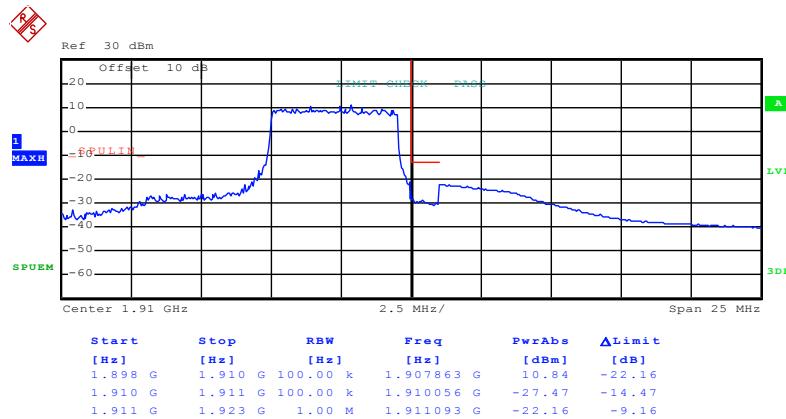
**Highest channel**

Test Mode:

LTE band 2(16QAMRB Size 25&amp; RB Offset 24)



Date: 9.NOV.2015 01:35:40

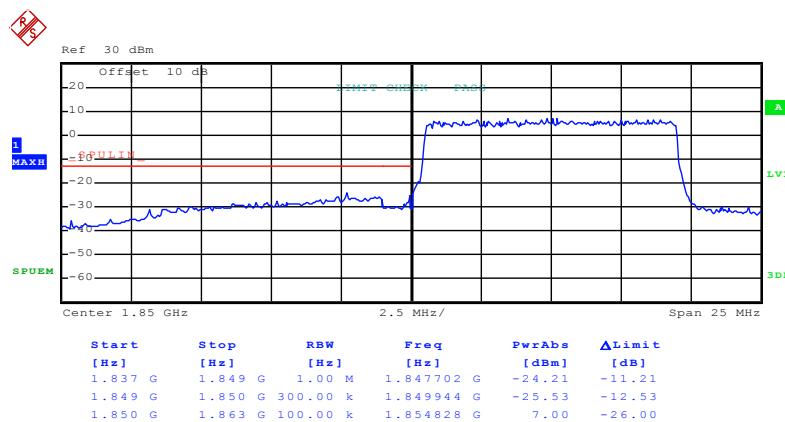
**Lowest channel**

Date: 9.NOV.2015 01:38:26

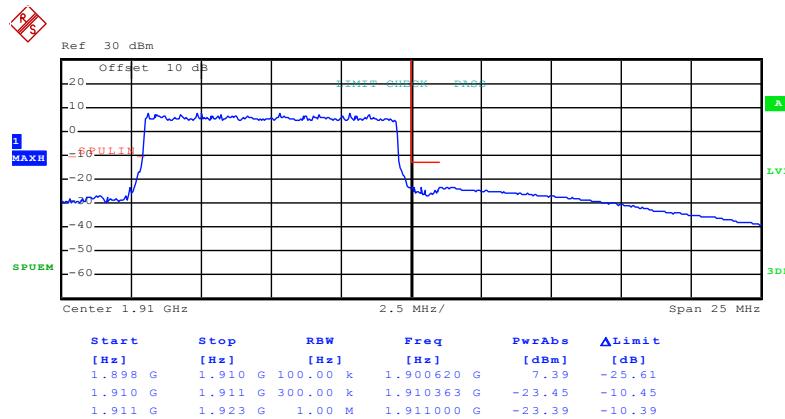
**Highest channel**

Test Mode:

LTE band 2(16QAMRB Size 50&amp; RB Offset 0)



Date: 9.NOV.2015 01:36:06

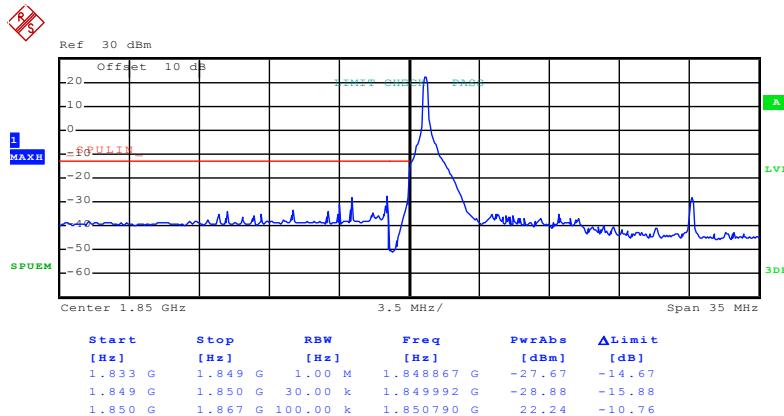
**Lowest channel**

Date: 9.NOV.2015 01:38:49

**Highest channel**

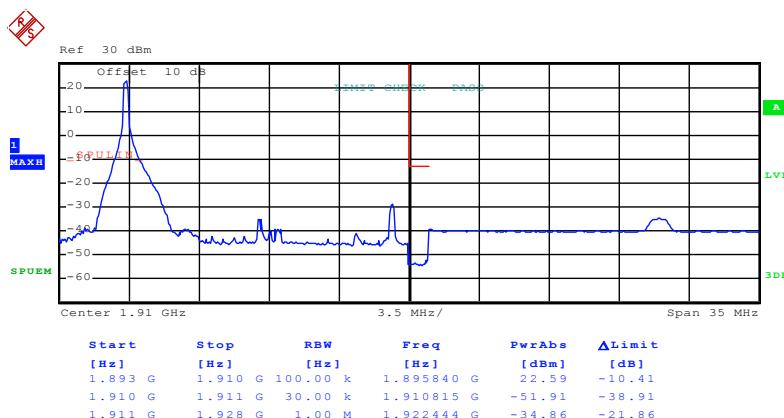
## 15MHz:

Test Mode:	LTE band 2(QPSKRB Size 1& RB Offset 0)
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Date: 9.NOV.2015 01:39:26

## Lowest channel

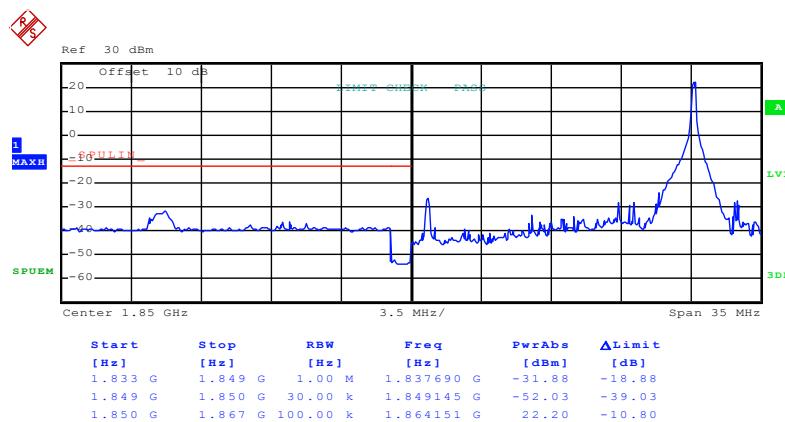


Date: 9.NOV.2015 01:41:57

## Highest channel

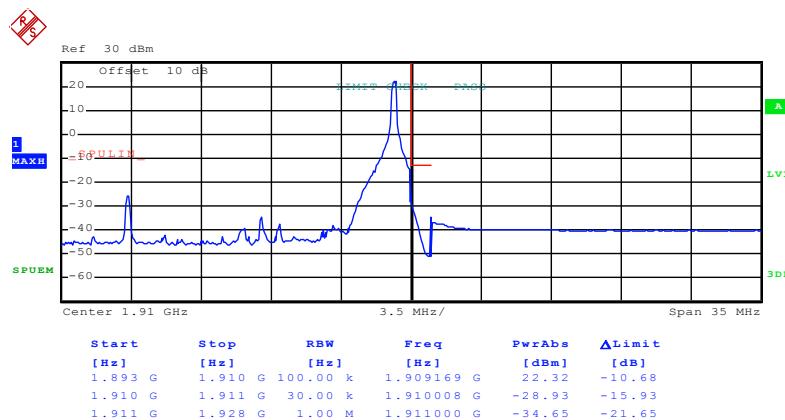
Test Mode:

LTE band 2(QPSKRB Size 1 &amp; RB Offset 74)



Date: 9.NOV.2015 01:39:44

## Lowest channel

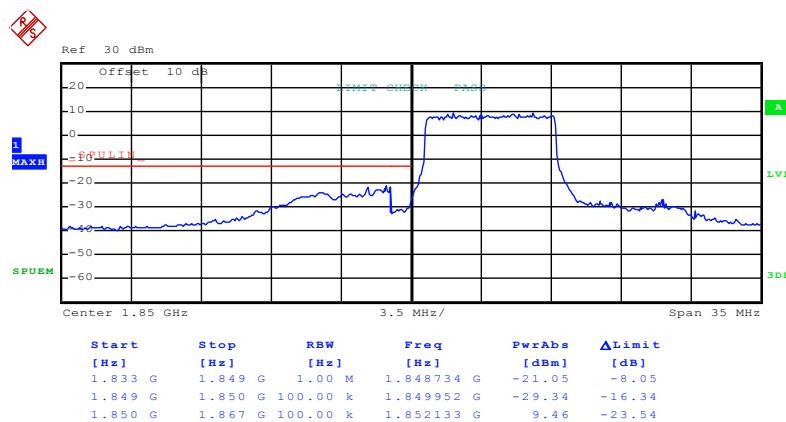


Date: 9.NOV.2015 01:42:19

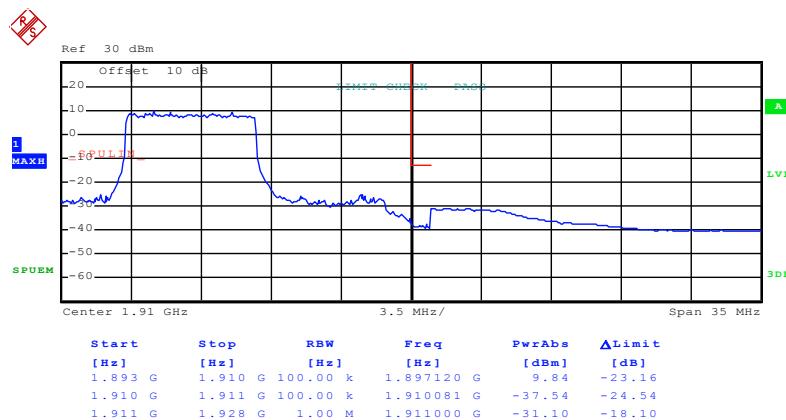
## Highest channel

Test Mode:

LTE band 2(QPSKRB Size 36&amp; RB Offset 0)



Date: 9.NOV.2015 01:40:31

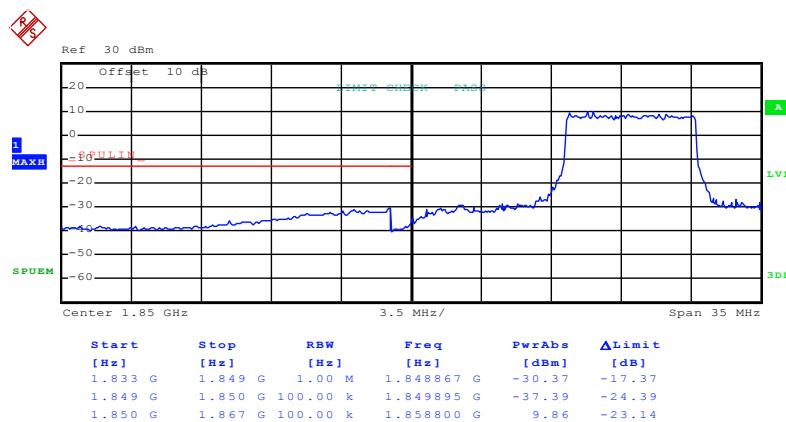
**Lowest channel**

Date: 9.NOV.2015 01:42:43

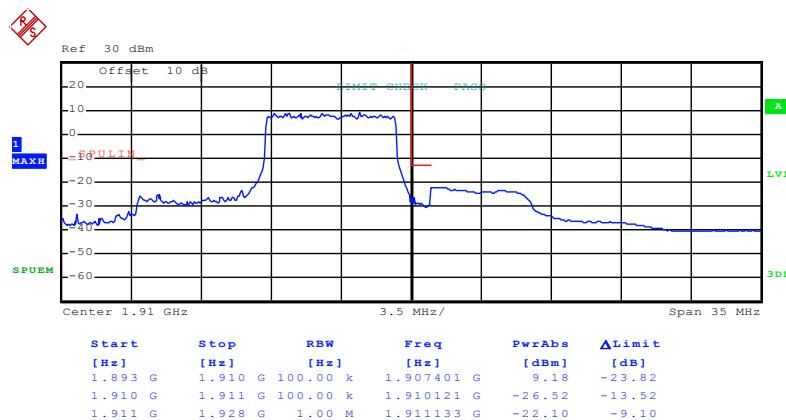
**Highest channel**

Test Mode:

LTE band 2(QPSKRB Size 36&amp; RB Offset 37)



Date: 9.NOV.2015 01:40:57

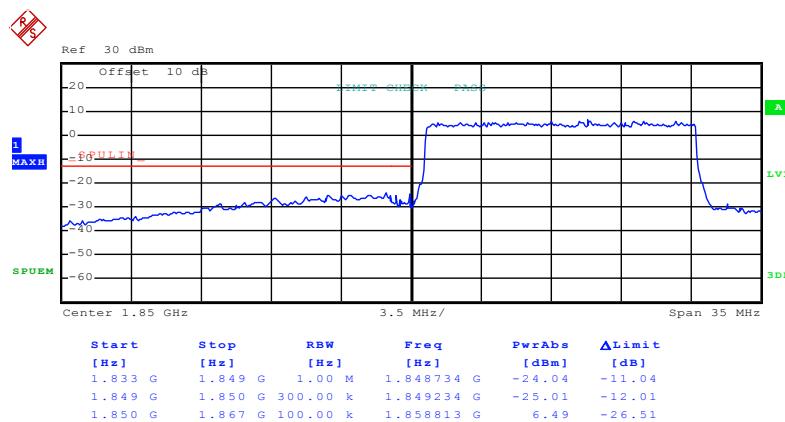
**Lowest channel**

Date: 9.NOV.2015 01:43:03

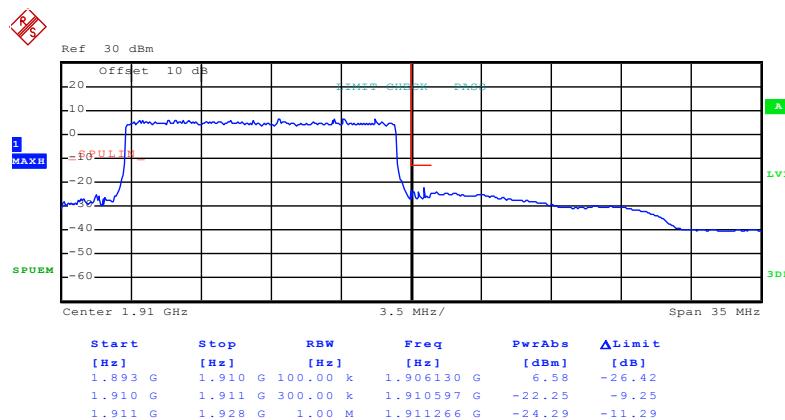
**Highest channel**

Test Mode:

LTE band 2(QPSKRB Size 75&amp; RB Offset 0)



Date: 9.NOV.2015 01:41:24

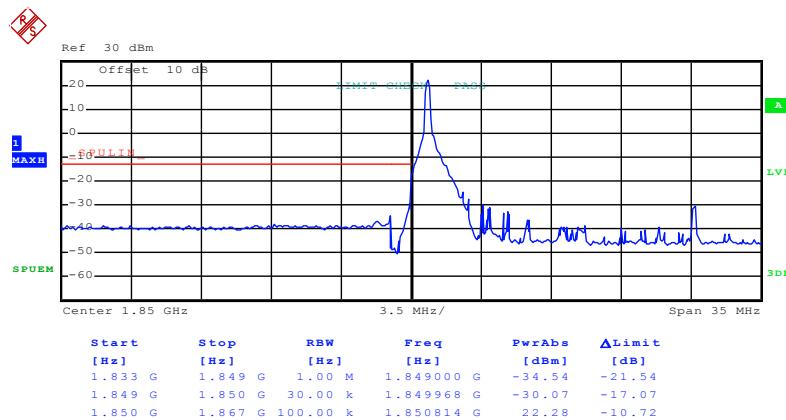
**Lowest channel**

Date: 9.NOV.2015 01:43:27

**Highest channel**

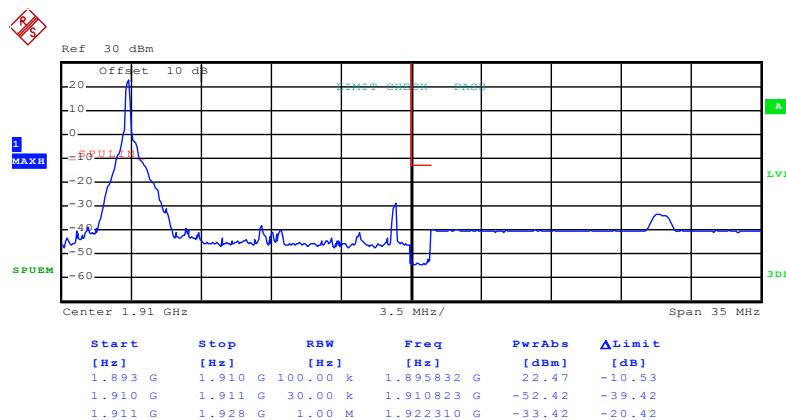
Test Mode:

LTE band 2(16QAMRB Size 1 & RB Offset 0)



Date: 9.NOV.2015 01:39:35

### Lowest channel

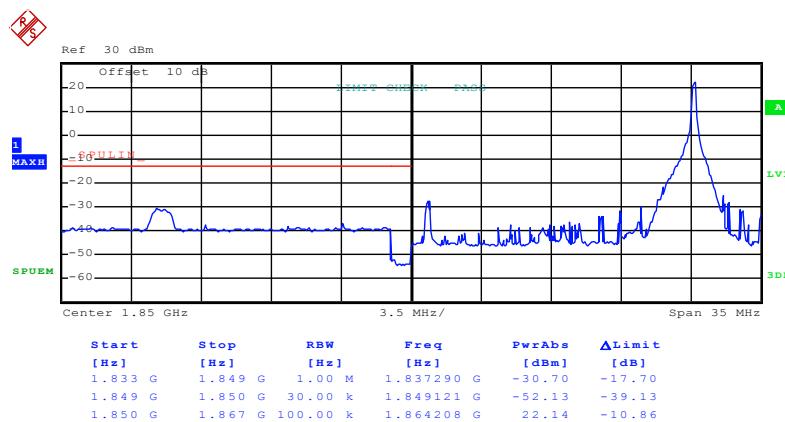


Date: 9.NOV.2015 01:42:04

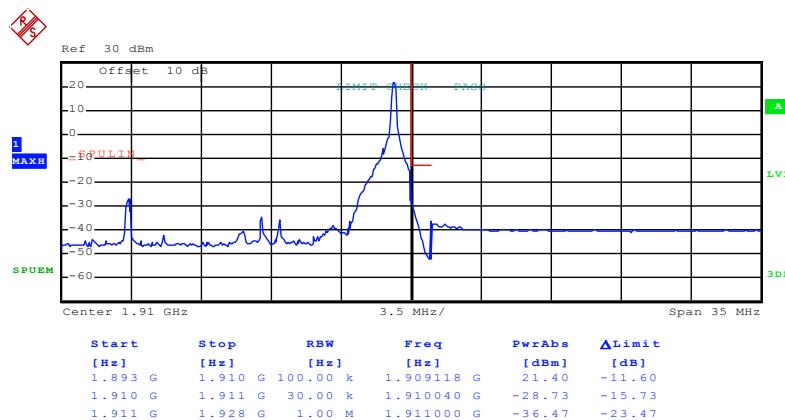
### Highest channel

Test Mode:

LTE band 2(16QAMRB Size 1 &amp; RB Offset 74)



Date: 9.NOV.2015 01:40:13

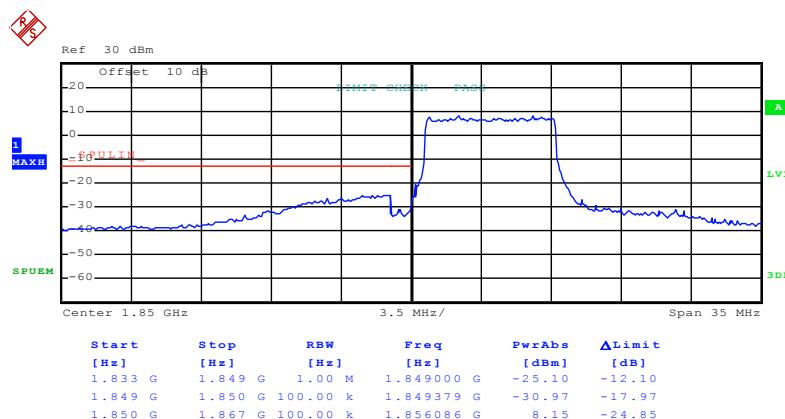
**Lowest channel**

Date: 9.NOV.2015 01:42:27

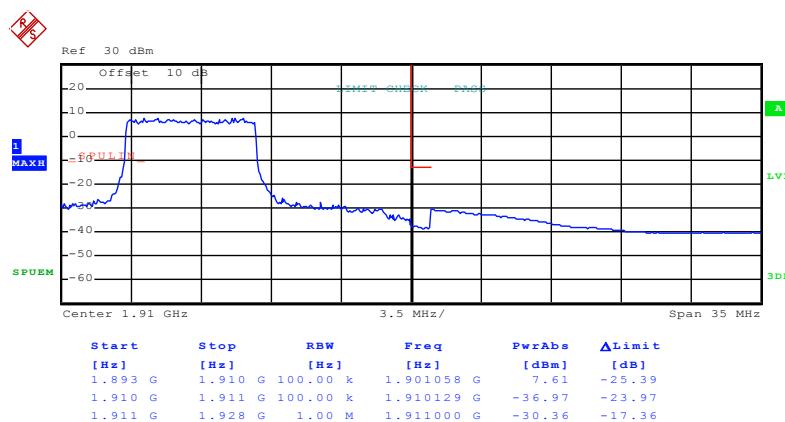
**Highest channel**

Test Mode:

LTE band 2(16QAMRB Size 36&amp; RB Offset 0)



Date: 9.NOV.2015 01:40:44

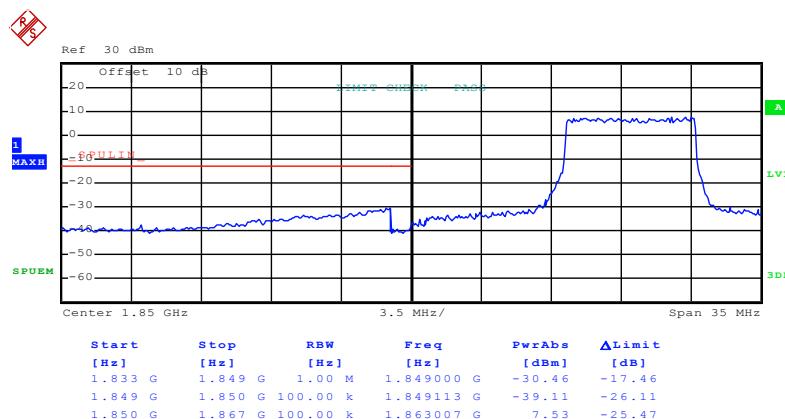
**Lowest channel**

Date: 9.NOV.2015 01:42:51

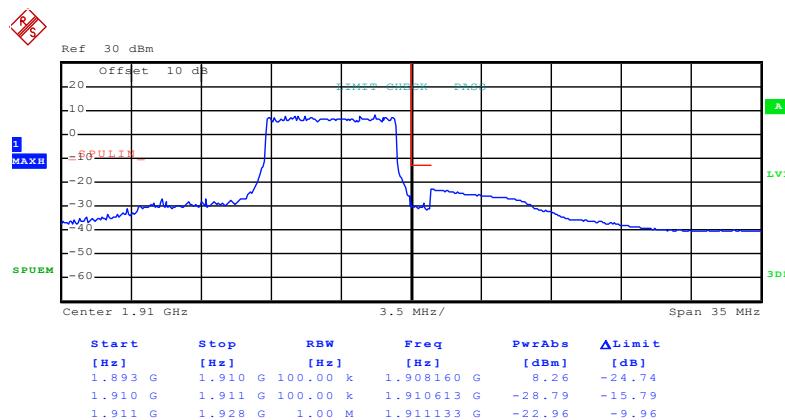
**Highest channel**

Test Mode:

LTE band 2(16QAMRB Size 36&amp; RB Offset 37)



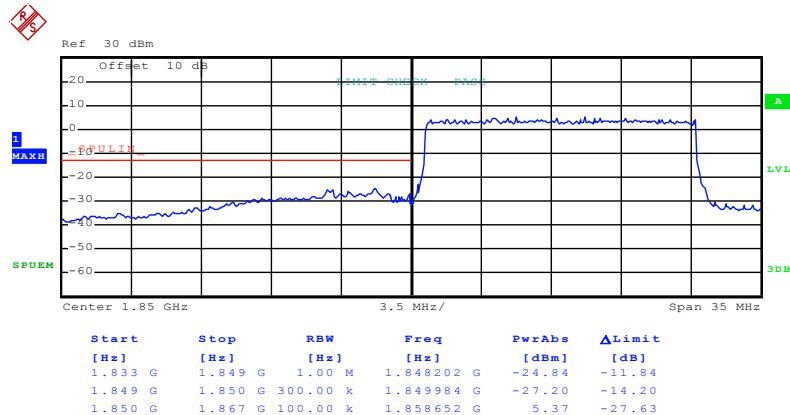
Date: 9.NOV.2015 01:41:06

**Lowest channel**

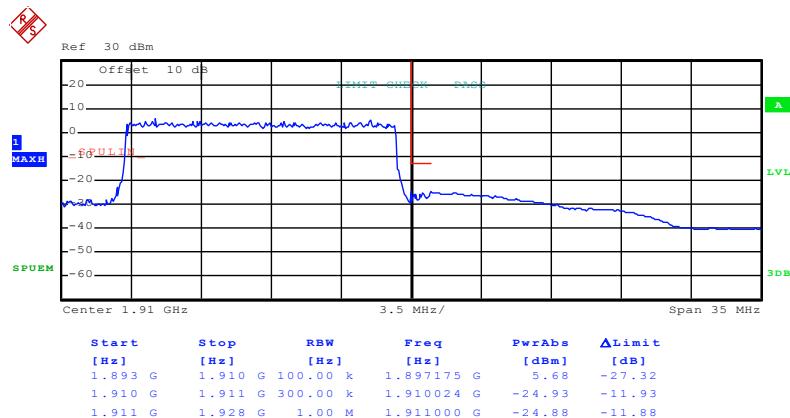
Date: 9.NOV.2015 01:43:11

**Highest channel**

Test Mode:	LTE band 2(16QAMRB Size 75& RB Offset 0)
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Date: 9.NOV.2015 01:41:33

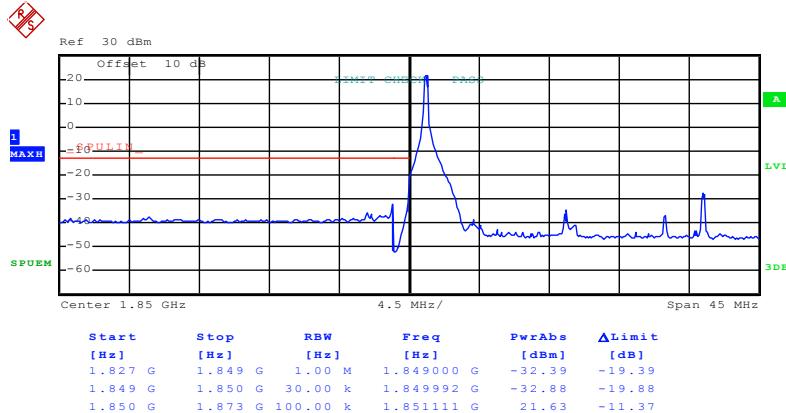
**Lowest channel**

Date: 9.NOV.2015 01:43:34

**Highest channel**

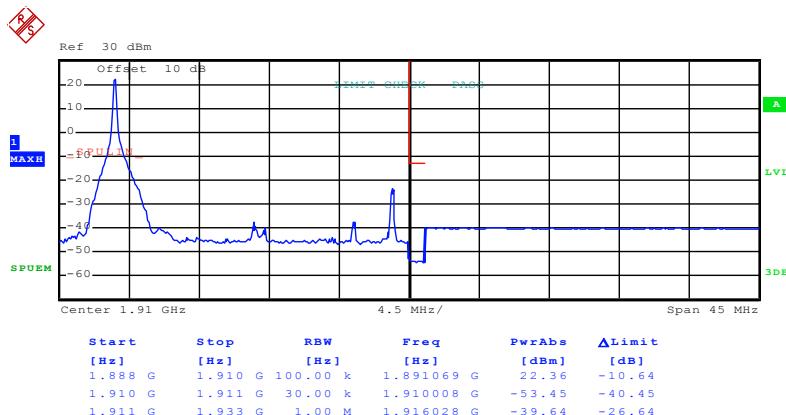
**20MHz:**

Test Mode:	LTE band 2(QPSKRB Size 1& RB Offset 0)
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Date: 9.NOV.2015 01:44:12

**Lowest channel**

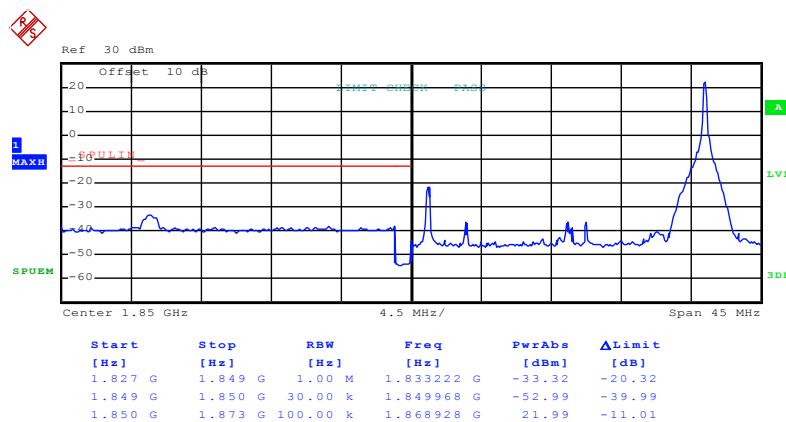


Date: 9.NOV.2015 01:46:05

**Highest channel**

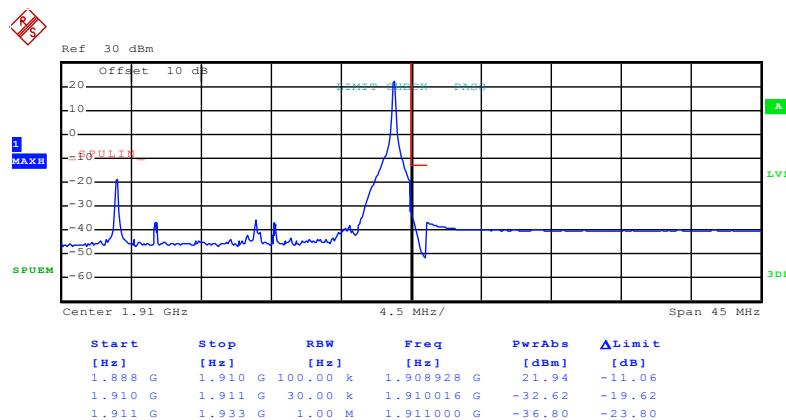
Test Mode:

LTE band 2(QPSKRB Size 1 &amp; RB Offset 99)



Date: 9.NOV.2015 01:44:32

## Lowest channel

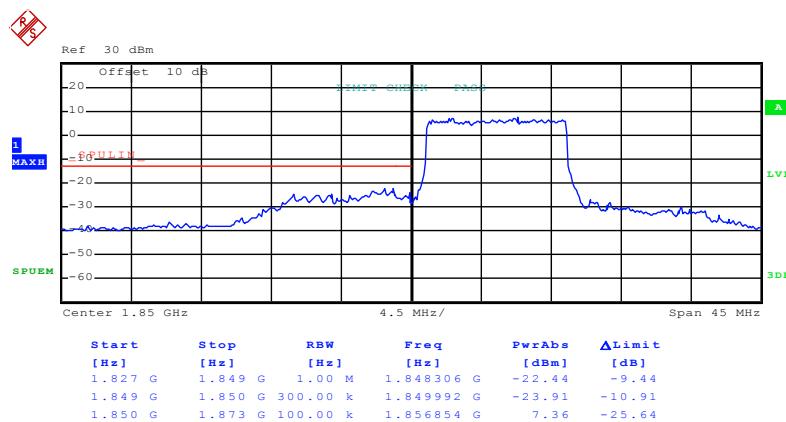


Date: 9.NOV.2015 01:46:23

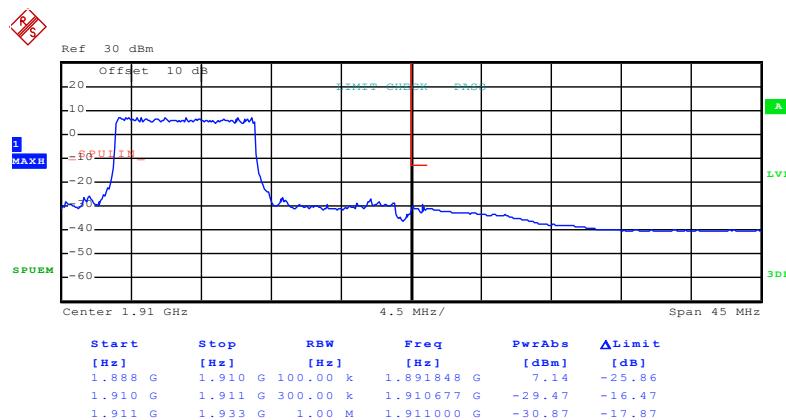
## Highest channel

Test Mode:

LTE band 2(QPSKRB Size 50&amp; RB Offset 0)



Date: 9.NOV.2015 01:44:56

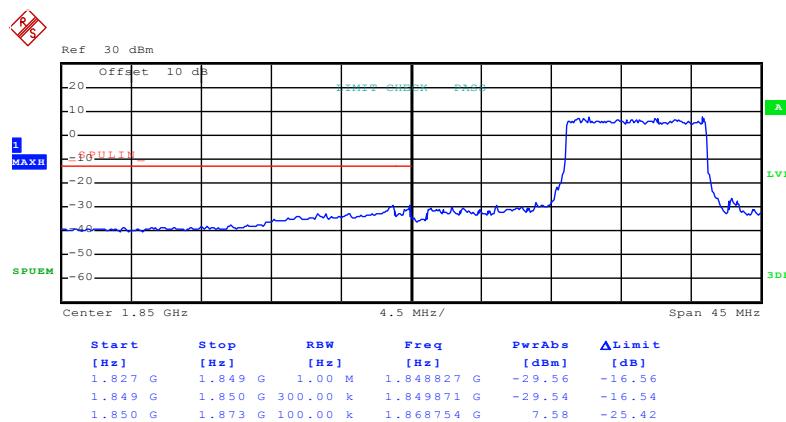
**Lowest channel**

Date: 9.NOV.2015 01:46:49

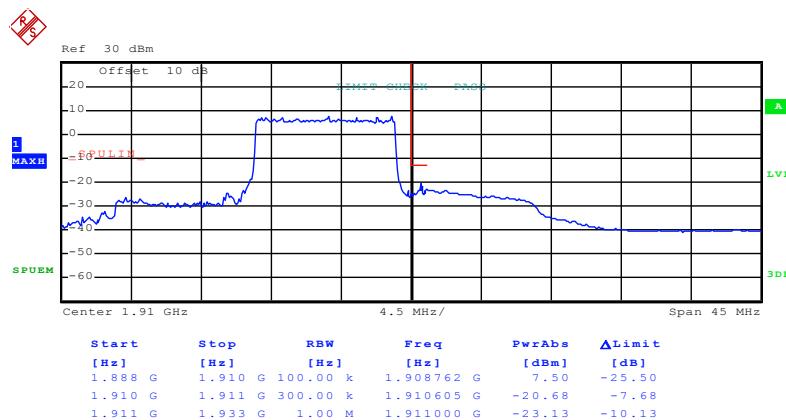
**Highest channel**

Test Mode:

LTE band 2(QPSKRB Size 50&amp; RB Offset 49)



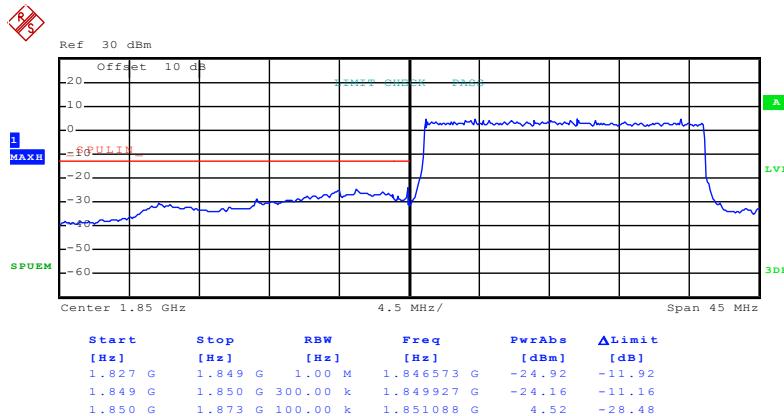
Date: 9.NOV.2015 01:45:16

**Lowest channel**

Date: 9.NOV.2015 01:47:07

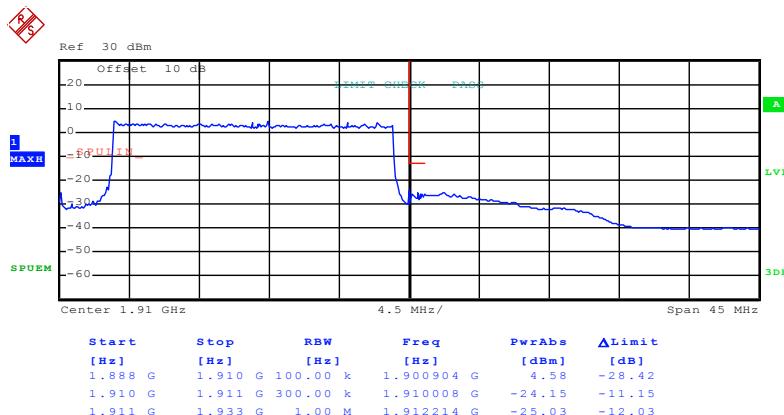
**Highest channel**

Test Mode:	LTE band 2(QPSKRB Size 100& RB Offset 0)
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Date: 9.NOV.2015 01:45:39

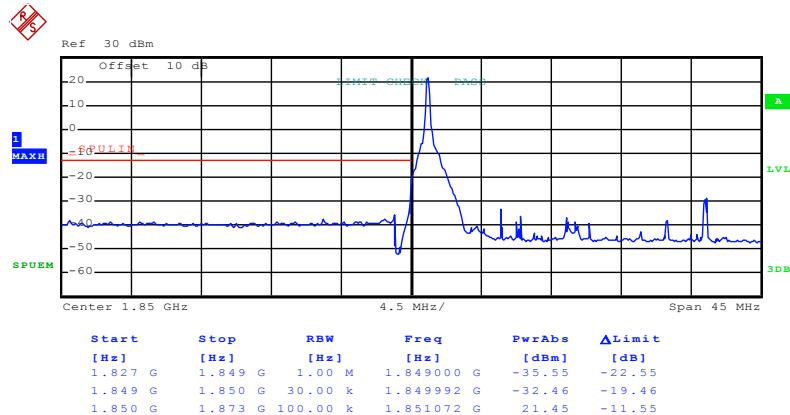
### Lowest channel



Date: 9.NOV.2015 01:47:25

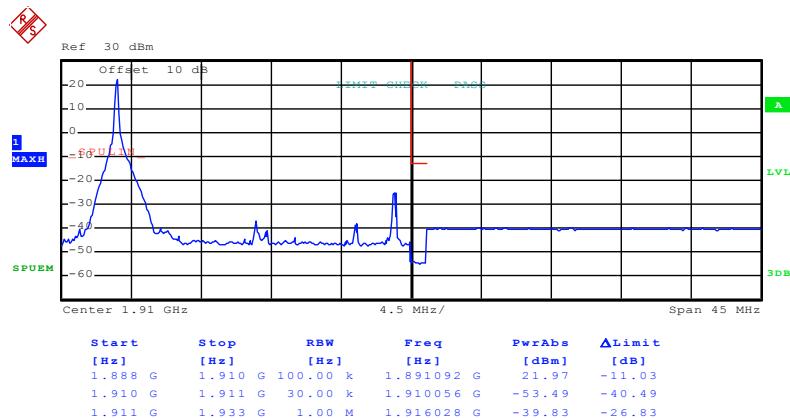
### Highest channel

Test Mode:	LTE band 2(16QAMRB Size 1& RB Offset 0)
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Date: 9.NOV.2015 01:44:20

### Lowest channel

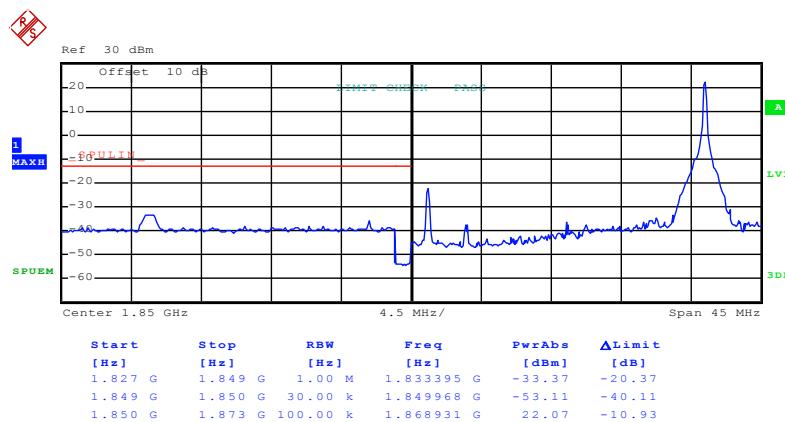


Date: 9.NOV.2015 01:46:12

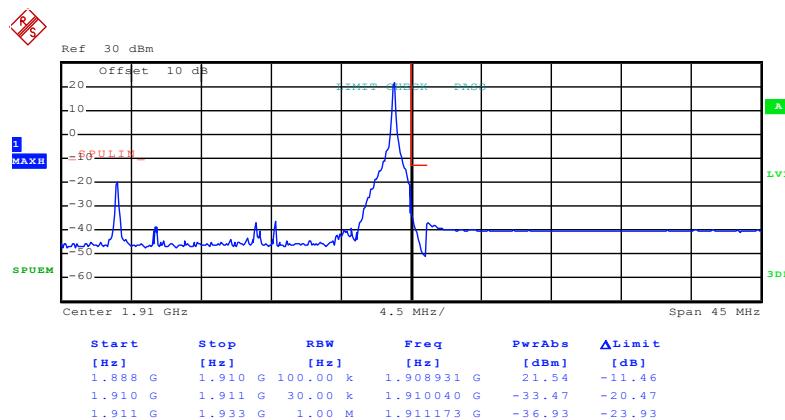
### Highest channel

Test Mode:

LTE band 2(16QAMRB Size 1&amp; RB Offset 99)



Date: 9.NOV.2015 01:44:41

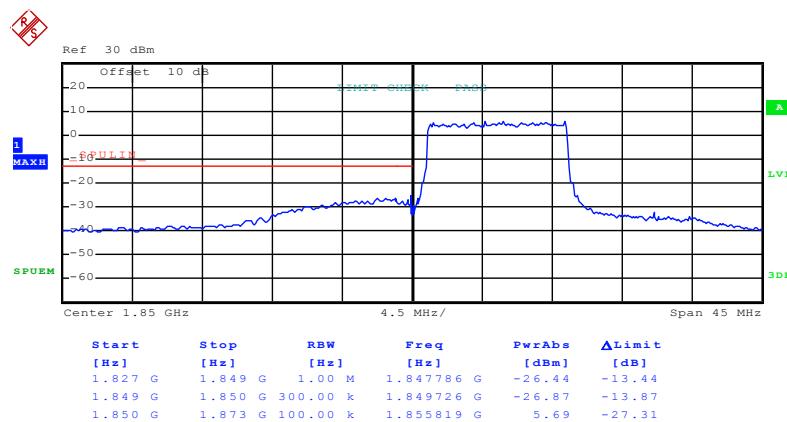
**Lowest channel**

Date: 9.NOV.2015 01:46:32

**Highest channel**

Test Mode:

LTE band 2(16QAMRB Size 50&amp; RB Offset 0)



Date: 9.NOV.2015 01:45:05

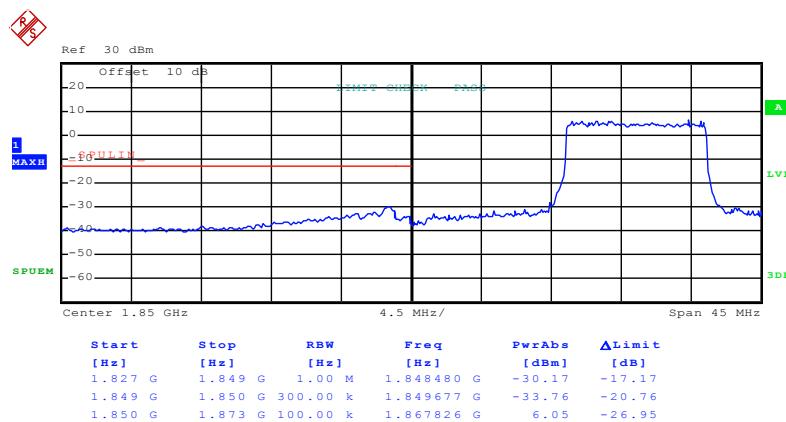
**Lowest channel**

Date: 9.NOV.2015 01:46:57

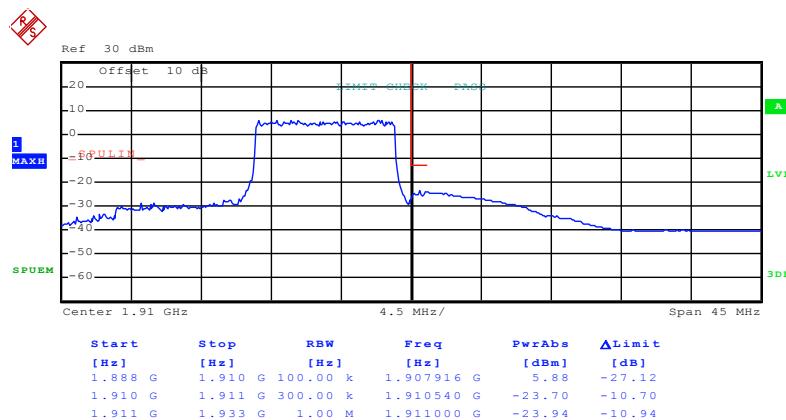
**Highest channel**

Test Mode:

LTE band 2(16QAMRB Size 50&amp; RB Offset 49)



Date: 9.NOV.2015 01:45:25

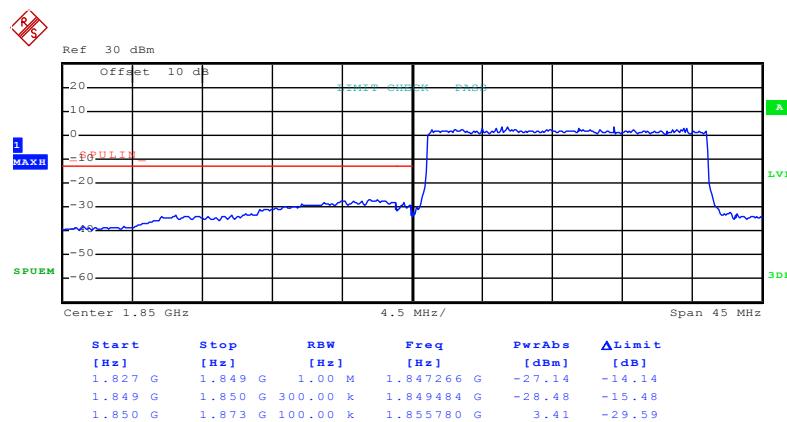
**Lowest channel**

Date: 9.NOV.2015 01:47:15

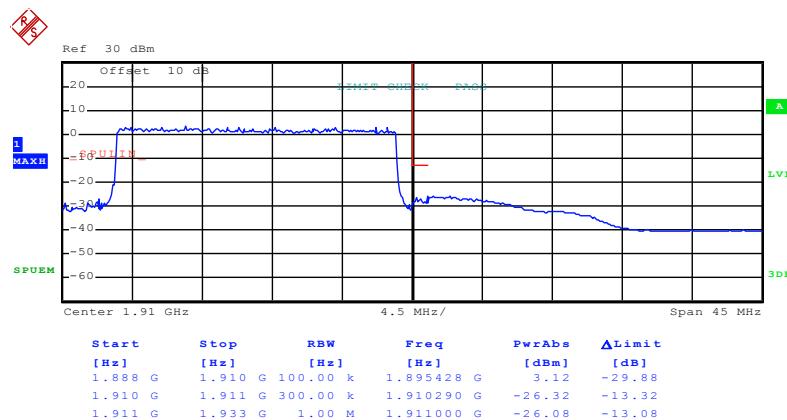
**Highest channel**

Test Mode:

LTE band 2(16QAMRB Size 100&amp; RB Offset 0)



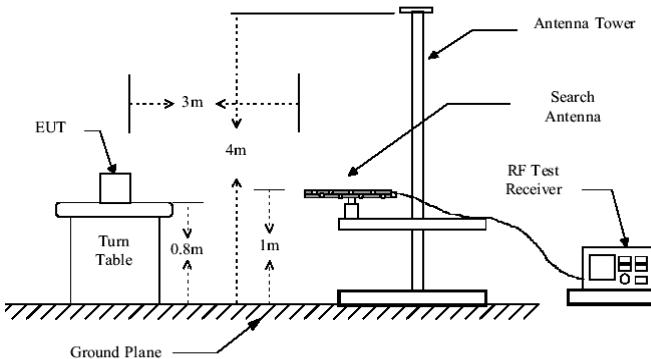
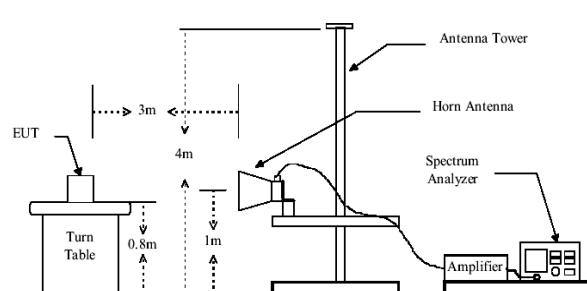
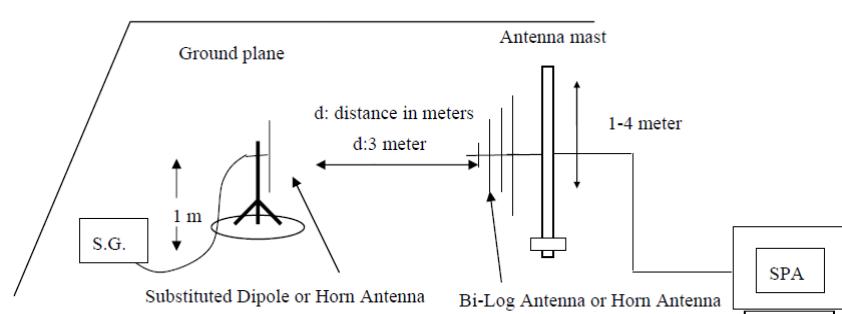
Date: 9.NOV.2015 01:45:46

**Lowest channel**

Date: 9.NOV.2015 01:47:32

**Highest channel**

## 6.10 ERP, EIRP Measurement

Test Requirement:	FCCpart 24.232 (c)
Test Method:	FCC part2.1046
Limit:	LTE Band 2: 2W EIRP
Test setup:	<p>Below 1GHz</p>  <p>Above 1GHz</p>  <p>Substituted method:</p> 

Test Procedure:	<ol style="list-style-type: none"><li>1. The EUT was placed on an non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer.</li><li>2. During the measurement, the EUT was communication with the station. The highest emission was recorded with the rotation of the turntable and the lowering of the test antenna from 4m to 1m. The reading was recorded and the field strength (E in dBuV/m) was calculated.</li><li>3. EIRP in frequency band 1850.7 –1909.3MHz, 1710.7-1754.3 MHz and 706.5-713.5 MHz were measured using a substitution method. The EUT was replaced by or horn antenna connected, the S.G. output was recorded and EIRP was calculated as follows: <math display="block">\text{EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBi)} - \text{Cable Loss (dB)}</math></li><li>4. The worse case was relating to the conducted output power.</li></ol>
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

## Measurement Data (worst case)

**LTE band 2 part****Lowest channel**

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
1.4MHz(RB size 1 & RB offset 0)								
1850.70	18607	QPSK	1.4	H	V	28.60	33.00	Pass
					H	21.14		
1850.70	18607	16QAM	1.4	H	V	29.56	33.00	Pass
					H	19.65		
1.4MHz(RB size 3 & RB offset 0)								
1850.70	18607	QPSK	1.4	H	V	29.09	33.00	Pass
					H	21.42		
1850.70	18607	16QAM	1.4	H	V	29.02	33.00	Pass
					H	21.06		
1.4MHz(RB size 6 & RB offset 0)								
1850.70	18607	QPSK	1.4	H	V	27.86	33.00	Pass
					H	20.11		
1850.70	18607	16QAM	1.4	H	V	27.89	33.00	Pass
					H	20.28		

**Middle channel**

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
1.4MHz(RB size 1 & RB offset 0)								
1880.00	18900	QPSK	1.4	H	V	29.47	33.00	Pass
					H	21.68		
1880.00	18900	16QAM	1.4	H	V	29.06	33.00	Pass
					H	21.59		
1.4MHz(RB size 3 & RB offset 0)								
1880.00	18900	QPSK	1.4	H	V	29.93	33.00	Pass
					H	22.05		
1880.00	18900	16QAM	1.4	H	V	29.75	33.00	Pass
					H	21.92		
1.4MHz(RB size 6 & RB offset 0)								
1880.00	18900	QPSK	1.40	H	V	28.51	33.00	Pass
					H	21.23		
1880.00	18900	16QAM	1.40	H	V	28.94	33.00	Pass
					H	21.44		

**Highest channel**

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
1.4MHz(RB size 1 & RB offset 0)								
1909.30	19193	QPSK	1.4	H	V	27.82	33.00	Pass
					H	21.57		
1909.30	19193	16QAM	1.4	H	V	27.85	33.00	Pass
					H	21.16		
1.4MHz(RB size 3 & RB offset 0)								
1909.30	19193	QPSK	1.4	H	V	28.04	33.00	Pass
					H	21.54		
1909.30	19193	16QAM	1.4	H	V	28.09	33.00	Pass
					H	21.24		
1.4MHz(RB size 6 & RB offset 0)								
1909.30	19193	QPSK	1.4	H	V	27.19	33.00	Pass
					H	20.57		
1909.30	19193	16QAM	1.4	H	V	27.32	33.00	Pass
					H	20.54		

**Lowest channel**

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
20MHz(RB size 1 & RB offset 0)								
1860.00	18700	QPSK	20	H	V	28.65	33.00	Pass
					H	21.33		
1860.00	18700	16QAM	20	H	V	28.65	33.00	Pass
					H	20.96		
20MHz(RB size 50 & RB offset 0)								
1860.00	18700	QPSK	20	H	V	28.23	33.00	Pass
					H	20.51		
1860.00	18700	16QAM	20	H	V	27.14	33.00	Pass
					H	20.94		
20MHz(RB size 100 & RB offset 0)								
1860.00	18700	QPSK	20	H	V	26.85	33.00	Pass
					H	19.13		
1860.00	18700	16QAM	20	H	V	27.46	33.00	Pass
					H	19.08		

**Middle channel**

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
20MHz(RB size 1 & RB offset 0)								
1880.00	18900	QPSK	20	H	V	29.43	33.00	Pass
					H	21.71		
1880.00	18900	16QAM	20	H	V	29.58	33.00	Pass
					H	21.62		
20MHz(RB size 50 & RB offset 0)								
1880.00	18900	QPSK	20	H	V	29.25	33.00	Pass
					H	21.59		
1880.00	18900	16QAM	20	H	V	29.04	33.00	Pass
					H	21.75		
20MHz(RB size 100 & RB offset 0)								
1880.00	18900	QPSK	20	H	V	27.51	33.00	Pass
					H	20.19		
1880.00	18900	16QAM	20	H	V	27.85	33.00	Pass
					H	20.19		

**Highest channel**

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
20MHz(RB size 1 & RB offset 0)								
1900.00	19100	QPSK	20	H	V	29.35	33.00	Pass
					H	21.84		
1900.00	19100	16QAM	20	H	V	29.32	33.00	Pass
					H	22.02		
20MHz(RB size 50 & RB offset 0)								
1900.00	19100	QPSK	20	H	V	28.28	33.00	Pass
					H	21.16		
1900.00	19100	16QAM	20	H	V	28.89	33.00	Pass
					H	20.98		
20MHz(RB size 100 & RB offset 0)								
1900.00	19100	QPSK	20	H	V	26.45	33.00	Pass
					H	19.33		
1900.00	19100	16QAM	20	H	V	26.87	33.00	Pass
					H	19.76		

## 6.11 Field strength of spurious radiation measurement

Test Requirement:	FCC Part 24.238 (a)
Test Method:	FCC part2.1053
Limit:	LTE Band 2: -13 dBm
Test setup:	<p>Below 1GHz</p> <p>Above 1GHz</p> <p>Substituted method:</p>
Test Procedure:	<ol style="list-style-type: none"> <li>The EUT was placed on a non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer.</li> <li>During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.</li> <li>The frequency range up to tenth harmonic was investigated for each of three fundamental frequency (low, middle and high channels). Once spurious emission was identified, the power of the emission was determined using the substitution method.</li> <li>The spurious emissions attenuation was calculated as the difference</li> </ol>

	between radiated power at the fundamental frequency and the spurious emissions frequency. ERP / EIRP = S.G. output (dBm) + Antenna Gain(dB/dBi) – Cable Loss (dB)
Test Uncertainty:	±4.88dB
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details.
Test results:	Passed

**Measurement Data (worst case)****Below 1GHz:**

The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.

**Above 1GHz**

For above 1 GHz, all test modes were performed, and just the worst case shown in the report.

LTE band 2 part: 1.4MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest</b>				
3701.40	Vertical	-36.55	-13.00	Pass
5552.10	V	-19.01		
7402.00	V	-28.34		
3701.40	Horizontal	-40.53		
5552.10	H	-24.13		
7402.00	H	-30.38		
<b>Middle</b>				
3760.00	Vertical	-37.50	-13.00	Pass
5640.00	V	-18.84		
7520.00	V	-30.48		
3760.00	Horizontal	-43.02		
5640.00	H	-22.60		
7520.00	H	-33.43		
<b>Highest</b>				
3816.60	Vertical	-41.58	-13.00	Pass
5724.90	V	-18.95		
7633.20	V	-28.64		
3816.60	Horizontal	-39.44		
5724.90	H	-17.48		
7633.20	H	-36.64		

3MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest</b>				
3703.00	Vertical	-37.54	-13.00	Pass
5554.50	V	-21.99		
7406.00	V	-30.55		
3703.00	Horizontal	-41.32		
5554.50	H	-26.41		
7406.00	H	-26.61		
<b>Middle</b>				
3760.00	Vertical	-46.56	-13.00	Pass
5640.00	V	-23.45		
7520.00	V	-34.61		
3760.00	Horizontal	-43.76		
5640.00	H	-25.21		
7520.00	H	-33.56		
<b>Highest</b>				
3817.00	Vertical	-39.61	-13.00	Pass
5725.50	V	-18.28		
7634.00	V	-30.11		
3817.00	Horizontal	-42.62		
5725.50	H	-21.99		
7634.00	H	-34.46		

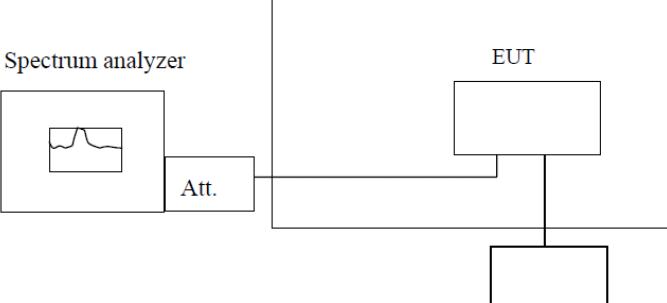
5MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest</b>				
3705.00	Vertical	-36.11	-13.00	Pass
5557.50	V	-19.56		
7410.00	V	-28.92		
3705.00	Horizontal	-40.21		
5557.50	H	-24.39		
7410.00	H	-30.12		
<b>Middle</b>				
3760.00	Vertical	-37.12	-13.00	Pass
5640.00	V	-18.10		
7520.00	V	-30.33		
3760.00	Horizontal	-43.11		
5640.00	H	-22.19		
7520.00	H	-33.47		
<b>Highest</b>				
3815.00	Vertical	-41.57	-13.00	Pass
5722.50	V	-18.19		
7630.00	V	-28.11		
3815.00	Horizontal	-39.50		
5722.50	H	-17.50		
7630.00	H	-36.58		

10MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest</b>				
3710.00	Vertical	-37.56	-13.00	Pass
5565.00	V	-21.47		
7420.00	V	-30.52		
3710.00	Horizontal	-41.37		
5565.00	H	-26.81		
7420.00	H	-32.86		
<b>Middle</b>				
3760.00	Vertical	-46.86	-13.00	Pass
5640.00	V	-23.75		
7520.00	V	-34.01		
3760.00	Horizontal	-43.08		
5640.00	H	-25.81		
7520.00	H	-33.66		
<b>Highest</b>				
3810.00	Vertical	-39.28	-13.00	Pass
5715.00	V	-18.98		
7620.00	V	-30.52		
3810.00	Horizontal	-42.66		
5715.00	H	-21.56		
7620.00	H	-34.42		

15MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest</b>				
3715.00	Vertical	-36.37	-13.00	Pass
5572.50	V	-19.46		
7430.00	V	-28.73		
3715.00	Horizontal	-40.21		
5572.50	H	-24.53		
7430.00	H	-30.74		
<b>Middle</b>				
3760.00	Vertical	-37.25	-13.00	Pass
5640.00	V	-18.52		
7520.00	V	-30.51		
3760.00	Horizontal	-43.19		
5640.00	H	-22.99		
7520.00	H	-33.37		
<b>Highest</b>				
3805.00	Vertical	-41.13	-13.00	Pass
5707.50	V	-18.46		
7610.00	V	-28.32		
3805.00	Horizontal	-39.21		
5707.50	H	-17.53		
7610.00	H	-36.74		

20MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest</b>				
3720.00	Vertical	-37.73	-13.00	Pass
5580.00	V	-21.21		
7440.00	V	-30.53		
3720.00	Horizontal	-41.58		
5580.00	H	-26.05		
7440.00	H	-32.24		
<b>Middle</b>				
3760.00	Vertical	-46.11	-13.00	Pass
5640.00	V	-23.56		
7520.00	V	-34.92		
3760.00	Horizontal	-43.51		
5640.00	H	-25.66		
7520.00	H	-33.77		
<b>Highest</b>				
3800.00	Vertical	-39.08	-13.00	Pass
5700.00	V	-18.70		
7600.00	V	-30.93		
3800.00	Horizontal	-42.61		
5700.00	H	-21.75		
7600.00	H	-34.06		

## 6.12 Frequency stability V.S. Temperature measurement

Test Requirement:	FCC Part2.1055(a)(1)(b)
Test Method:	FCC Part2.1055(a)(1)(b)
Limit:	$\pm 2.5\text{ppm}$
Test setup:	<p style="text-align: right;">Temperature Chamber</p>  <p style="text-align: center;"><b>Note :</b> Measurement setup for testing on Antenna connector</p>
Test procedure:	<ol style="list-style-type: none"> <li>1. The equipment under test was connected to an external DC power supply and input rated voltage.</li> <li>2. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators.</li> <li>3. The EUT was placed inside the temperature chamber.</li> <li>4. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25°C operating frequency as reference frequency.</li> <li>5. Turn EUT off and set the chamber temperature to -30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency.</li> <li>6. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached</li> </ol>
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed
Remark:	All three channels of all modulations have been tested, but only the worst channel and the worst modulation show in this test item.

Measurement Data (the worst channel):

## LTE Band 2(QPSK):

Reference Frequency: LTE Band 2(1.4MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	163	0.086702	±2.5	Pass
	-20	125	0.066489		
	-10	114	0.060638		
	0	128	0.068085		
	10	127	0.067553		
	20	150	0.079787		
	30	156	0.082979		
	40	138	0.073404		
	50	134	0.071277		
	Reference Frequency: LTE Band 2(3MHz) Middle channel=18900 channel=1880.00MHz				
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	145	0.077128	±2.5	Pass
	-20	174	0.092553		
	-10	163	0.086702		
	0	105	0.055851		
	10	128	0.068085		
	20	134	0.071277		
	30	133	0.070745		
	40	156	0.082979		
	50	159	0.084574		
	Reference Frequency: LTE Band 2(5MHz) Middle channel=18900 channel=1880.00MHz				
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	148	0.078723	±2.5	Pass
	-20	145	0.077128		
	-10	169	0.089894		
	0	124	0.065957		
	10	125	0.066489		
	20	147	0.078191		
	30	156	0.082979		
	40	136	0.072340		
	50	128	0.068085		

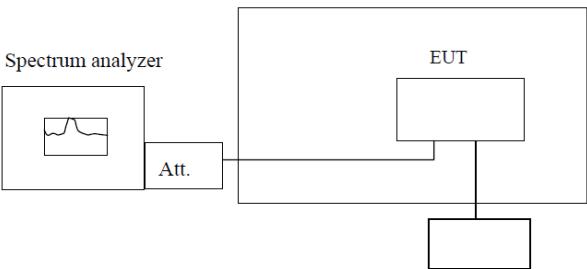
Reference Frequency: LTE Band 2(10MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	178	0.094681	±2.5	Pass
	-20	145	0.077128		
	-10	163	0.086702		
	0	125	0.066489		
	10	127	0.067553		
	20	149	0.079255		
	30	146	0.077660		
	40	108	0.057447		
	50	125	0.066489		
Reference Frequency: LTE Band 2(15MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	146	0.077660	±2.5	Pass
	-20	148	0.078723		
	-10	129	0.068617		
	0	136	0.072340		
	10	149	0.079255		
	20	142	0.075532		
	30	137	0.072872		
	40	138	0.073404		
	50	125	0.066489		
Reference Frequency: LTE Band 2(20MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	149	0.079255	±2.5	Pass
	-20	188	0.100000		
	-10	145	0.077128		
	0	146	0.077660		
	10	125	0.066489		
	20	126	0.067021		
	30	136	0.072340		
	40	134	0.071277		
	50	108	0.057447		

**LTE Band 2(16QAM):**

Reference Frequency: LTE Band 2(1.4MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	124	0.065957	±2.5	Pass
	-20	136	0.072340		
	-10	105	0.055851		
	0	118	0.062766		
	10	117	0.062234		
	20	122	0.064894		
	30	120	0.063830		
	40	136	0.072340		
	50	109	0.057979		
Reference Frequency: LTE Band 2(3MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	124	0.065957	±2.5	Pass
	-20	146	0.077660		
	-10	142	0.075532		
	0	131	0.069681		
	10	128	0.068085		
	20	105	0.055851		
	30	106	0.056383		
	40	140	0.074468		
	50	128	0.068085		
Reference Frequency: LTE Band 2(5MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	147	0.078191	±2.5	Pass
	-20	146	0.077660		
	-10	133	0.070745		
	0	128	0.068085		
	10	129	0.068617		
	20	105	0.055851		
	30	126	0.067021		
	40	134	0.071277		
	50	146	0.077660		

Reference Frequency: LTE Band 2(10MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	148	0.078723	±2.5	Pass
	-20	136	0.072340		
	-10	135	0.071809		
	0	126	0.067021		
	10	158	0.084043		
	20	149	0.079255		
	30	105	0.055851		
	40	125	0.066489		
	50	124	0.065957		
Reference Frequency: LTE Band 2(15MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	147	0.078191	±2.5	Pass
	-20	146	0.077660		
	-10	135	0.071809		
	0	136	0.072340		
	10	128	0.068085		
	20	129	0.068617		
	30	109	0.057979		
	40	146	0.077660		
	50	140	0.074468		
Reference Frequency: LTE Band 2(20MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	133	0.070745	±2.5	Pass
	-20	125	0.066489		
	-10	104	0.055319		
	0	128	0.068085		
	10	140	0.074468		
	20	142	0.075532		
	30	107	0.056915		
	40	106	0.056383		
	50	132	0.070213		

## 6.13 Frequency stability V.S. Voltage measurement

Test Requirement:	FCC Part2.1055(d)(1)(2)
Test Method:	FCC Part2.1055(d)(1)(2)
Limit:	$\pm 2.5\text{ppm}$
Test setup:	<p style="text-align: center;">Temperature Chamber</p>  <p>Note : Measurement setup for testing on Antenna connector</p>
Test procedure:	<ol style="list-style-type: none"> <li>Set chamber temperature to 25°C. Use a variable DC power source to power the EUT and set the voltage to rated voltage.</li> <li>Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.</li> <li>Reduce the input voltage to specify extreme voltage variation (+/- 15%) and endpoint, record the maximum frequency change.</li> </ol>
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details, and all channels have been tested, only shows the worst channel data in this report.
Test results:	Passed

Measurement Data (the worst channel):

## LTE Band 2(QPSK):

Reference Frequency: LTE Band 2(1.4MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	74	0.039362	±2.5	Pass
	3.80	59	0.031383		
	3.40	68	0.036170		
Reference Frequency: LTE Band 2(3MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	85	0.045213	±2.5	Pass
	3.80	79	0.042021		
	3.40	55	0.029255		
Reference Frequency: LTE Band 2(5MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	78	0.041489	±2.5	Pass
	3.80	89	0.047340		
	3.40	52	0.027660		
Reference Frequency: LTE Band 2(10MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	67	0.035638	±2.5	Pass
	3.80	69	0.036702		
	3.40	85	0.045213		
Reference Frequency: LTE Band 2(15MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	49	0.026064	±2.5	Pass
	3.80	88	0.046809		
	3.40	78	0.041489		
Reference Frequency: LTE Band 2(20MHz) Middle channel=20175 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	63	0.033511	±2.5	Pass
	3.80	85	0.045213		
	3.40	49	0.026064		

**LTE Band 2(16QAM):**

Reference Frequency: LTE Band 2(1.4MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	74	0.039362	±2.5	Pass
	3.80	79	0.042021		
	3.40	98	0.052128		
Reference Frequency: LTE Band 2(3MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	85	0.045213	±2.5	Pass
	3.80	74	0.039362		
	3.40	79	0.042021		
Reference Frequency: LTE Band 2(5MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	88	0.046809	±2.5	Pass
	3.80	89	0.047340		
	3.40	59	0.031383		
Reference Frequency: LTE Band 2(10MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	49	0.026064	±2.5	Pass
	3.80	66	0.035106		
	3.40	76	0.040426		
Reference Frequency: LTE Band 2(15MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	85	0.045213	±2.5	Pass
	3.80	89	0.047340		
	3.40	74	0.039362		
Reference Frequency: LTE Band 2(20MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	96	0.051064	±2.5	Pass
	3.80	92	0.048936		
	3.40	83	0.044149		