

FCC REPORT

Applicant: Nexus Telecom Inc

Address of Applicant: PO Box 873, Venterpool Plaza 873 Road Town, Tortola Virgin Islands (British), UK

Equipment Under Test (EUT)

Product Name: 4G mobile phone

Model No.: GO1001

Trade mark: GOMOBILE

FCC ID: YSEGO1001

Applicable standards: FCC CFR Title 47 Part 2
FCC CFR Title 47 Part 24 Subpart E

Date of sample receipt: 28 Aug., 2015

Date of Test: 28 Aug., to 19 Oct., 2015

Date of report issued: 20 Oct., 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.

This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

2. Version

Version No.	Date	Description
00	20 Oct., 2015	Original

Tested by:

MT. Liang

Date:

20 Oct., 2015

Test Engineer

Reviewed by:

Wimer Zhang

Date:

20 Oct., 2015

Project Engineer

3. Contents

	Page
1. COVER PAGE	1
2. VERSION.....	2
3. CONTENTS.....	3
4. TEST SUMMARY	4
5. GENERAL INFORMATION	5
5.1 CLIENT INFORMATION.....	5
5.2 GENERAL DESCRIPTION OF E.U.T	5
5.3 TEST MODES.....	8
5.4 RELATED SUBMITTAL(S) / GRANT (S).....	8
5.5 TEST METHODOLOGY.....	8
5.6 LABORATORY FACILITY.....	8
5.7 LABORATORY LOCATION	8
5.8 TEST INSTRUMENTS LIST.....	9
6. SYSTEM TEST CONFIGURATION	10
6.1 EUT CONFIGURATION	10
6.2 EUT EXERCISE.....	10
6.3 CONFIGURATION OF TESTED SYSTEM.....	10
6.4 DESCRIPTION OF TEST MODES.....	10
6.5 CONDUCTED OUTPUT POWER	11
6.6 PEAK-TO-AVERAGE RATIO	14
6.7 OCCUPY BANDWIDTH	16
6.8 MODULATION CHARACTERISTIC.....	30
6.9 OUT OF BAND EMISSION AT ANTENNA TERMINALS	30
6.10 ERP, EIRP MEASUREMENT	145
6.11 FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT.....	150
6.12 FREQUENCY STABILITY V.S. TEMPERATURE MEASUREMENT.....	155
6.13 FREQUENCY STABILITY V.S. VOLTAGE MEASUREMENT	160
7 TEST SETUP PHOTO.....	163
8 EUT CONSTRUCTIONAL DETAILS	164

4. Test Summary

Test Item	Section in CFR 47	Result
RF Exposure (SAR)	Part 1.1307 Part 2.1093	Passed* (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 22.917 (a) 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 Inc
Address of Applicant:	PO Box 873, Venterpool Plaza 873 Road Town, Tortola Virgin Islands (British), UK
Manufacturer/ Factory:	United Time Technology Co., Ltd
Address of Manufacturer/ Factory:	7/F., 5-A Building, Software IndustrialBase, No.1006 Keyuan Road, Nanshan District, Shenzhen, P.R.China

5.2 General Description of E.U.T.

Product Name:	4G mobile phone
Model No.:	GO1001
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: 2.3 dBi
AC adapter:	Input:100-240V AC,50/60Hz 0.2A Output:5V DC MAX 1.0A
Power supply:	Rechargeable Li-ion Battery DC3.8V/2000mAh

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). (LTE band 2(1.4MHz), LTE band 2(3MHz), LTE band 2(5MHz), LTE band 2(10MHz), LTE band 2(15MHz), LTE band 2(20MHz))
Data mode (LTE band 2(16QAM))	Keep the EUT in data communicating mode on LTE band 2(16QAM). (LTE band 2(1.4MHz), LTE band 2(3MHz), LTE band 2(5MHz), LTE band 2(10MHz), LTE band 2(15MHz), LTE band 2(20MHz))
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 our 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

Radiated Emission:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
1	3m Semi - Anechoic Chamber	SAEMC	9(L)*6(W)* 6(H)	CCIS0001	08-23-2014	08-22-2017
2	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	CCIS0005	03-28-2015	03-28-2016
3	Double - ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	CCIS0006	03-28-2015	03-28-2016
4	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
5	Amplifier (10kHz-1.3GHz)	HP	8447D	CCIS0003	04-01-2015	03-31-2016
6	Amplifier (1GHz-18GHz)	Compliance Direction Systems Inc.	PAP-1G18	CCIS0011	04-01-2015	03-31-2016
7	Pre-amplifier (18-26.5GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	04-01-2015	03-31-2016
8	Horn Antenna	ETS-LINDGREN	3160	GTS217	04-01-2015	03-31-2016
9	Printer	HP	HP LaserJet P1007	N/A	N/A	N/A
10	Positioning Controller	UC	UC3000	CCIS0015	N/A	N/A
11	Spectrum analyzer 9k-30GHz	Rohde & Schwarz	FSP	CCIS0023	03-28-2015	03-28-2016
12	EMI Test Receiver	Rohde & Schwarz	ESRP	CCIS0167	03-28-2015	03-28-2016
13	Loop antenna	Laplace instrument	RF300	EMC0701	04-01-2015	03-31-2016
14	Wideband Radio Communication Tester	Rhode & Schwarz	CMW500	140330	05-29-2015	05-28-2016
15	Signal Analyzer	Rohde & Schwarz	FSIQ3	CCIS0088	04-08-2015	04-08-2016
16	Temperature and humidity chamber	Foshan Hengpu	HPGDS-500	CCIS0240	11-18-2014	11-17-2015

6. System test configuration

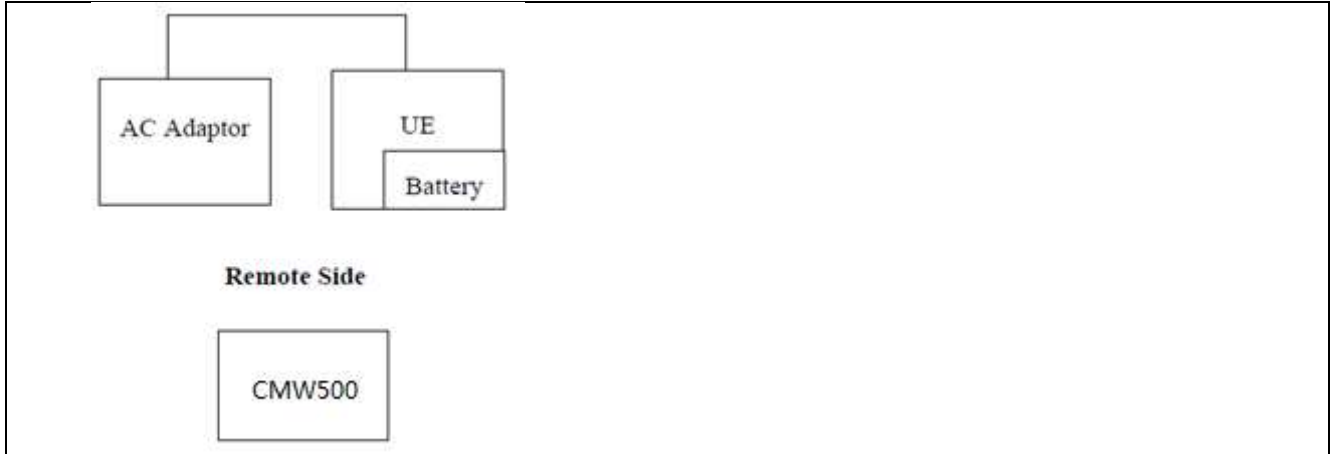
6.1 EUT Configuration

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 two modes (LTE Band 2) with power adaptor, earphone and Data cable. The worst-case H mode for LTE Band 2.

6.5 Conducted Output Power

Test Requirement:	FCC Part 24.232 (c)
Test Method:	FCC part 2.1046
Limit:	LTE Band 2: 2W
Test setup:	EUT ATT Communication Tester <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 CMW500. Transmitter output power was read off in dBm.
Test Uncertainty:	±1.5 dB
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

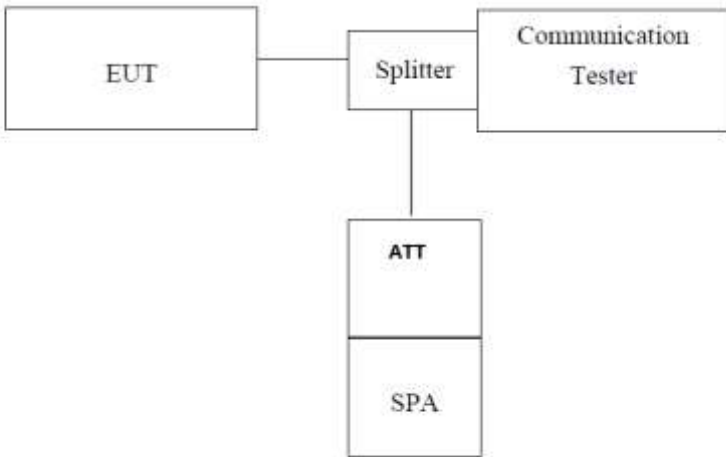
Measurement Data

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	22.66	22.34	22.74
			1	2	22.60	22.32	22.73
			1	5	22.62	22.30	22.75
			3	0	22.81	22.45	22.77
			3	1	22.77	22.30	22.66
			3	2	22.85	22.40	22.73
			6	0	21.71	21.37	21.69
		16QAM	1	0	21.73	21.42	21.57
			1	2	21.67	21.45	21.91
			1	5	21.44	21.48	21.61
			3	0	21.89	21.37	21.49
			3	1	21.61	21.27	21.57
			3	2	21.68	21.38	21.66
			6	0	20.72	20.36	20.70
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	22.75	22.47	22.84
			1	7	22.79	22.52	22.86
			1	14	22.70	22.46	22.79
			8	0	21.89	21.59	21.86
			8	4	21.85	21.60	21.88
			8	7	21.84	21.54	21.88
			15	0	21.90	21.58	21.83
		16QAM	1	0	21.86	21.58	21.78
			1	7	21.77	21.58	21.88
			1	14	21.81	21.46	21.78
			8	0	20.90	20.85	20.79
			8	4	20.78	20.84	20.99
			8	7	20.78	20.69	20.82
			15	0	20.92	20.58	20.87
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	22.84	22.54	22.85
			1	12	22.83	22.51	22.89
			1	24	22.74	22.49	22.80
			12	0	21.92	21.63	21.96
			12	6	21.89	21.59	21.90
			12	11	21.84	21.63	21.98
			25	0	21.82	21.54	21.96
		16QAM	1	0	21.89	21.42	21.83
			1	12	22.25	21.65	21.84
			1	24	21.80	21.61	21.75
			12	0	20.90	20.65	20.84
			12	6	20.89	20.73	20.85
			12	11	20.89	20.72	20.88
			25	0	20.82	20.60	20.88

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	22.48	21.72	21.71
			1	24	22.63	21.64	21.64
			1	49	22.59	21.58	21.63
			25	0	21.86	20.67	20.76
			25	12	21.79	20.66	20.55
			25	24	21.79	20.65	20.85
			50	0	21.90	20.68	20.80
		16QAM	1	0	21.99	20.71	20.58
			1	24	21.76	20.95	20.74
			1	49	21.69	20.72	20.71
			25	0	20.84	19.58	19.65
			25	12	20.81	19.64	19.65
			25	24	20.81	19.53	19.70
			50	0	20.88	19.66	19.71
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	21.85	21.42	21.68
			1	37	21.72	21.47	21.78
			1	74	21.57	21.49	21.80
			36	0	20.81	20.53	20.68
			36	16	20.75	20.51	20.78
			36	35	20.64	20.57	20.76
			75	0	20.72	20.53	20.74
		16QAM	1	0	21.06	21.05	20.77
			1	37	20.53	20.62	20.82
			1	74	20.60	20.63	20.94
			36	0	19.80	19.64	19.74
			36	16	19.75	19.57	19.81
			36	35	19.60	19.52	19.82
			75	0	19.66	19.59	19.77
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	21.89	21.73	21.71
			1	49	21.63	21.53	21.67
			1	99	21.55	21.54	21.84
			50	0	20.97	20.66	20.85
			50	24	20.81	20.57	20.91
			50	49	20.74	20.63	20.79
			100	0	20.76	20.63	20.76
		16QAM	1	0	21.07	20.77	21.14
			1	49	20.80	20.30	20.39
			1	99	20.25	20.74	20.97
			50	0	19.86	19.67	19.69
			50	24	19.76	19.56	19.70
			50	49	19.68	19.64	19.79
			100	0	19.79	19.64	19.77

6.6 Peak-to-Average Ratio

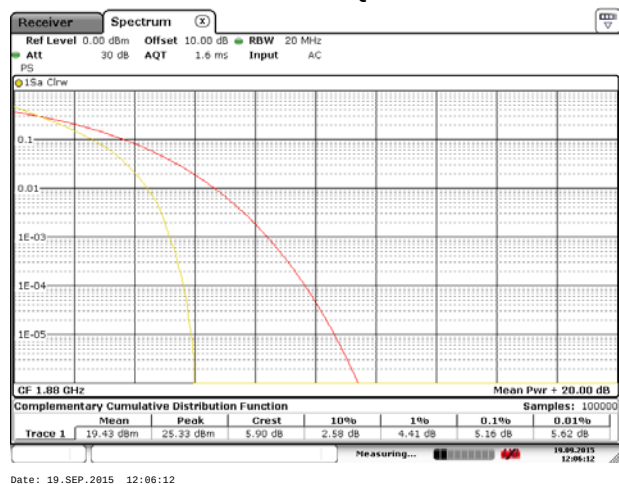
Test Requirement:	FCC part 24.232(d)
Limit:	The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.
Test setup:	 <i>Note: Measurement setup for testing on Antenna connector</i>
Test Procedure:	1 The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation. 2 Set the CCDF option in spectrum analyzer, RBW $\geq$ OBW, 3 Set the EUT working in highest power level, measured and recorded the 0.1% as PAPR level. 4 Repeat step 1~3 at other frequency and modulations.
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	5.16
	16QAM	100	0	6.06

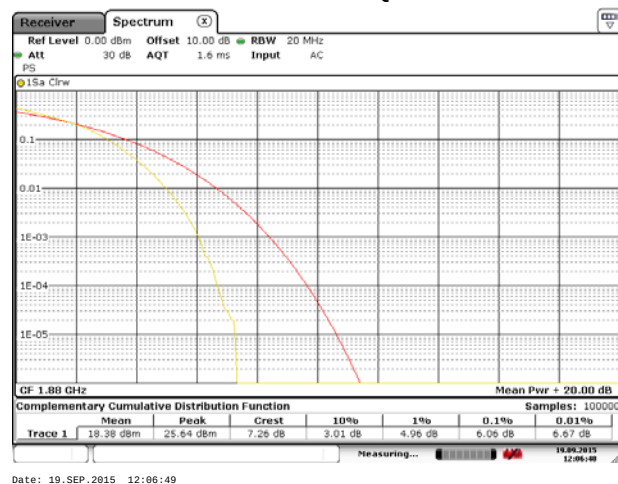
Test plots as below:

LTE Band 2 Middle channel

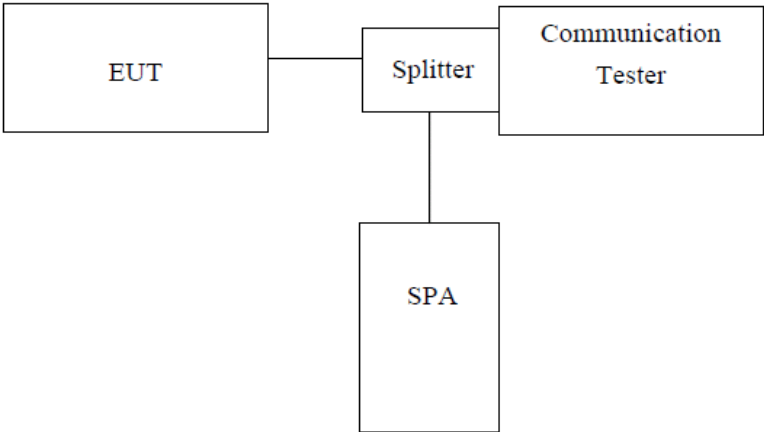
Modulation: QPSK



Modulation: 16QAM



6.7 Occupy Bandwidth

Test Requirement:	FCC Part 24.238
Test Method:	FCC part 2.1049
Test setup:	 <i>Note: Measurement setup for testing on Antenna connector</i>
Test Procedure:	1. The EUT's output RF connector was connected with a short cable to the spectrum analyzer 2. RBW was set to about 1% ~ 5% of emission BW, VBW= 3 times RBW. 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.
Test Uncertainty:	$\pm 1 \times 10^{-6}$
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:

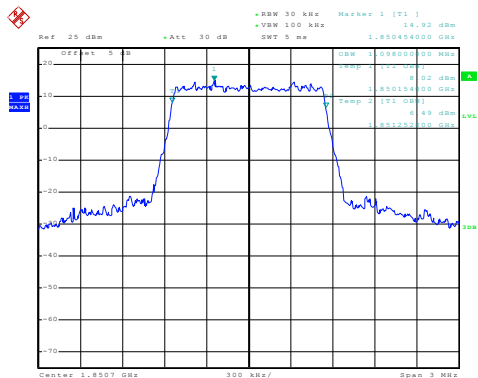
EUT Mode	Channel	Frequency (MHz)	Modulation	99% OBW (kHz)	-26dBc EBW (kHz)
1.4MHz	18607	1850.70	16QAM	1098	1266
			QPSK	1104	1272
	18900	1880.00	16QAM	1098	1266
			QPSK	1104	1272
	19193	1909.30	16QAM	1098	1272
			QPSK	1104	1272
3MHz	18615	1851.50	16QAM	2724	3024
			QPSK	2736	3072
	18900	1880.00	16QAM	2736	3024
			QPSK	2736	3048
	19185	1908.50	16QAM	2736	3036
			QPSK	2748	3060
5MHz	18625	1852.50	16QAM	4520	5000
			QPSK	4520	4960
	18900	1880.00	16QAM	4520	5000
			QPSK	4540	5020
	19175	1907.50	16QAM	4520	4960
			QPSK	4540	5060
10MHz	18650	1855.00	16QAM	9080	10160
			QPSK	9080	10240
	18900	1880.00	16QAM	9120	10280
			QPSK	9080	10280
	19150	1905.00	16QAM	9120	10200
			QPSK	9160	10360
15MHz	18675	1857.50	16QAM	13560	14940
			QPSK	13560	15000
	18900	1880.00	16QAM	13560	14940
			QPSK	13560	14940
	19125	1902.50	16QAM	13500	15060
			QPSK	13560	14880
20MHz	18700	1860.00	16QAM	17920	19440
			QPSK	18080	19360
	18900	1880.00	16QAM	18000	19520
			QPSK	18080	19440
	19100	1900.00	16QAM	18000	19440
			QPSK	18080	19520

Test plot as follows:

LTE Band 2 part

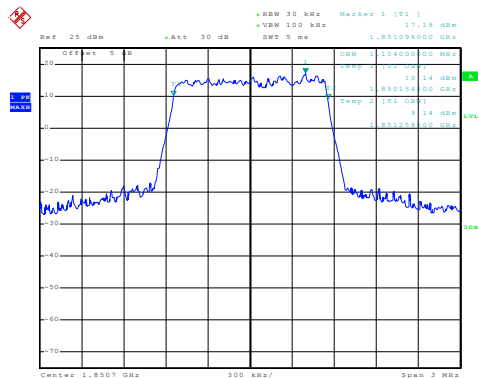
Test Item: 99% Occupy bandwidth
BW: 1.4MHz

Modulation: 16QAM



Date: 10.SEP.2015 11:09:04

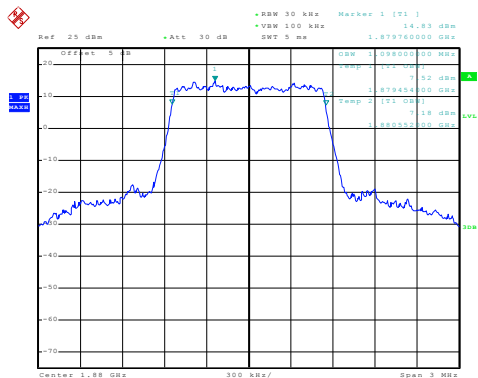
Modulation: QPSK



Date: 10.SEP.2015 11:06:45

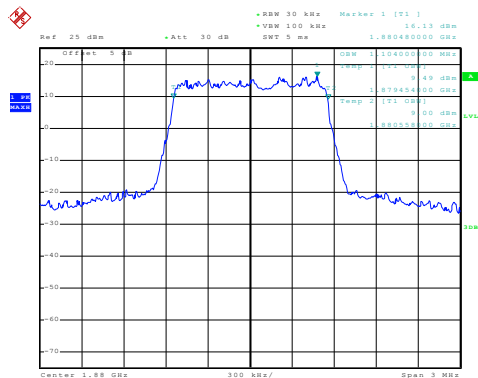
Lowest channel

Modulation: 16QAM



Date: 10.SEP.2015 11:16:40

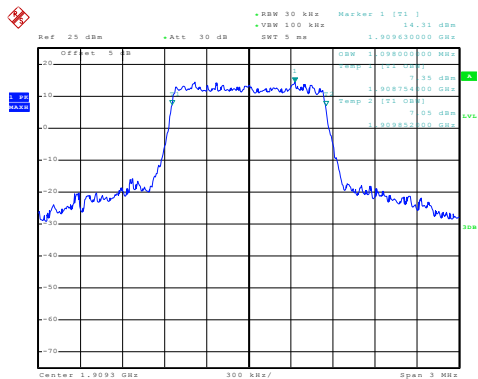
Modulation: QPSK



Date: 10.SEP.2015 11:15:43

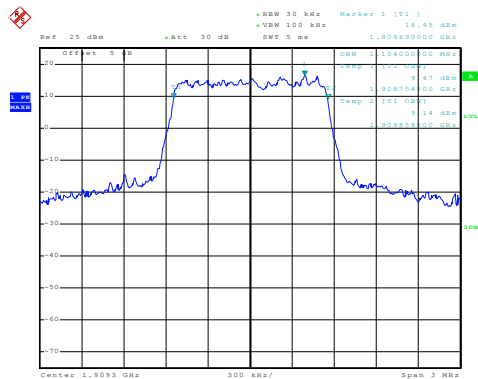
Middle channel

Modulation: 16QAM



Date: 10.SEP.2015 11:18:13

Modulation: QPSK

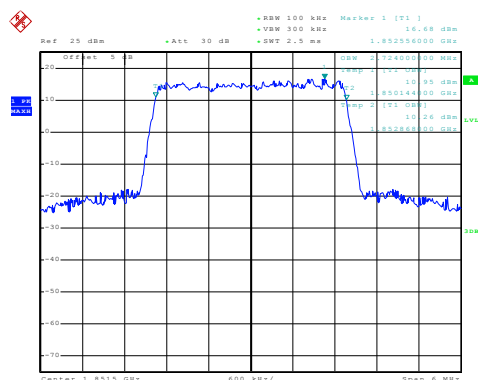


Date: 10.SEP.2015 11:17:31

Highest channel

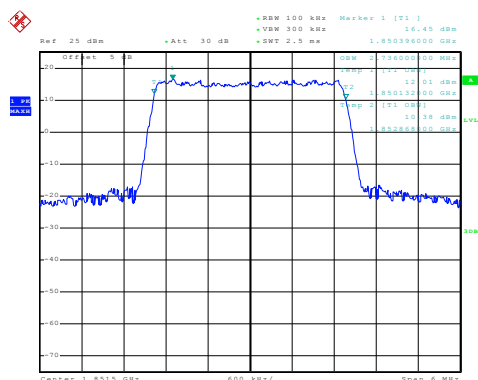
Test Item: 99% Occupy bandwidth
BW: 3MHz

Modulation: 16QAM



Date: 10-SEP-2015 11:21:44

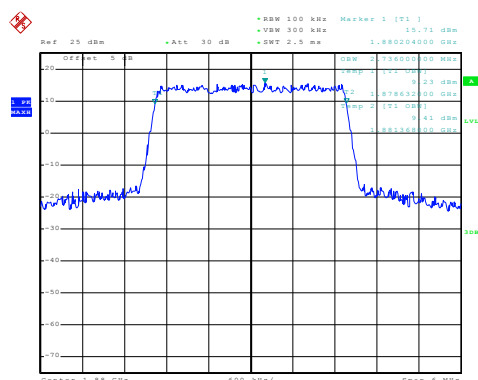
Modulation: QPSK



Date: 10-SEP-2015 11:20:26

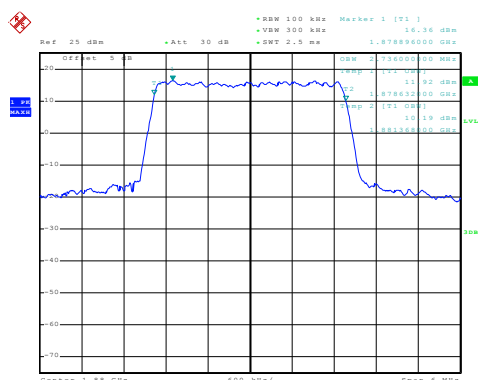
Lowest channel

Modulation: 16QAM



Date: 10.SEP.2015 11:24:03

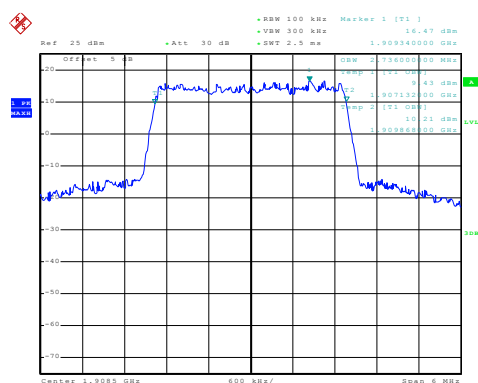
Modulation: QPSK



Date: 10.SEP.2015 11:23:24

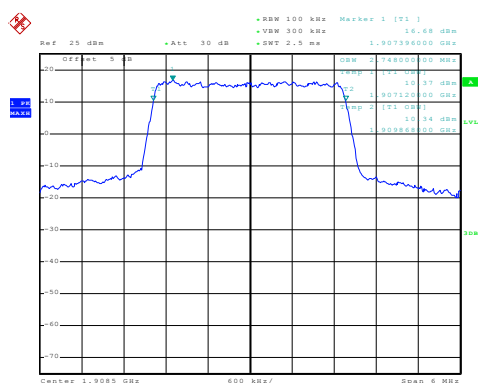
Middle channel

Modulation: 16QAM



Date: 10 SEP 2015 11:25:57

Modulation: QPSK



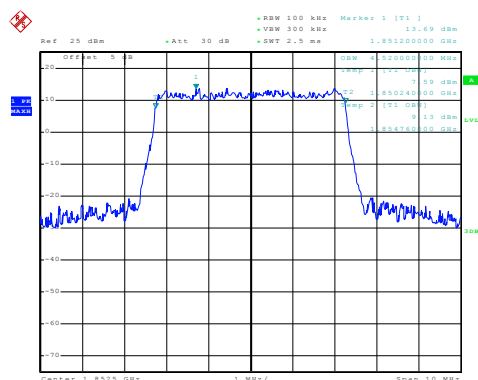
Date: 10 SEP 2015 11:25:17

Highest channel

Test Item: 99% Occupy bandwidth

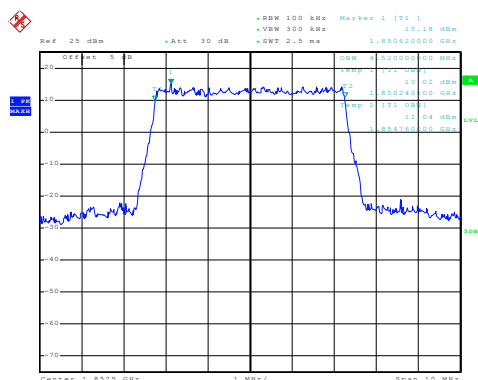
BW: 5MHz

Modulation: 16QAM



Date: 10 SEP 2015 11:27:39

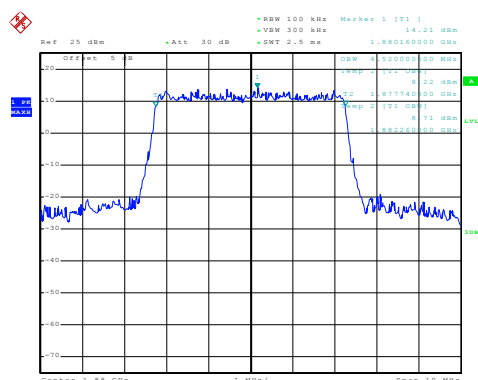
Modulation: QPSK



Date: 10-SEP-2015 11:27:01

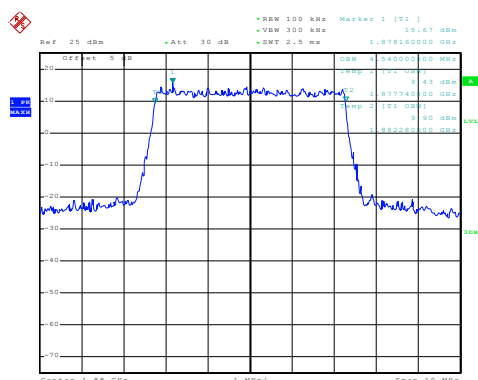
Lowest channel

Modulation: 16QAM



Date: 10.SEP.2015 11:28:58

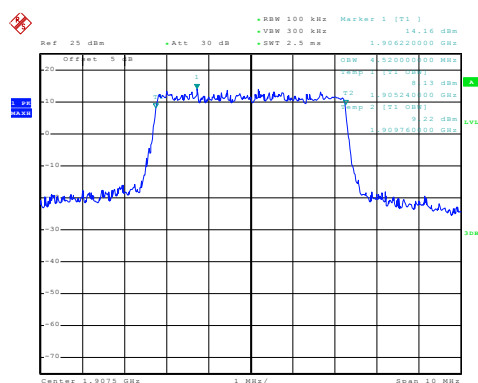
Modulation: QPSK



Date: 10.SEP.2015 11:28:14

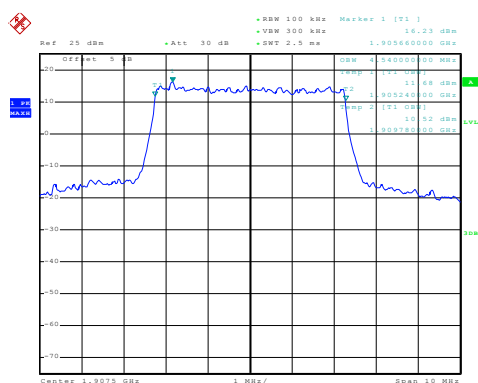
Middle channel

Modulation: 16QAM



Date: 10 SEP 2015 11:57:39

Modulation: QPSK

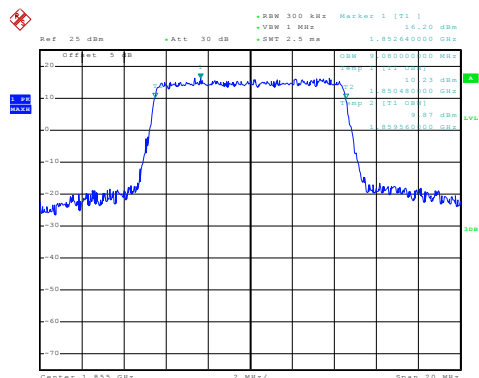


Date: 10 SEP 2015 11:56:50

Highest channel

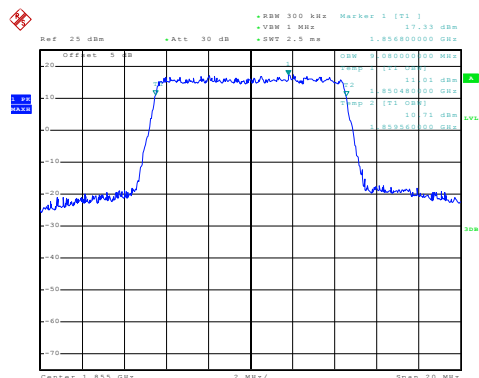
Test Item: 99% Occupy bandwidth
BW: 10MHz

Modulation: 16QAM



Date: 10.SEP.2015 12:01:20

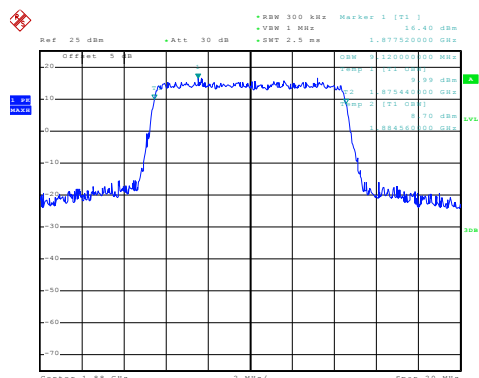
Modulation: QPSK



Date: 10.SEP.2015 12:00:37

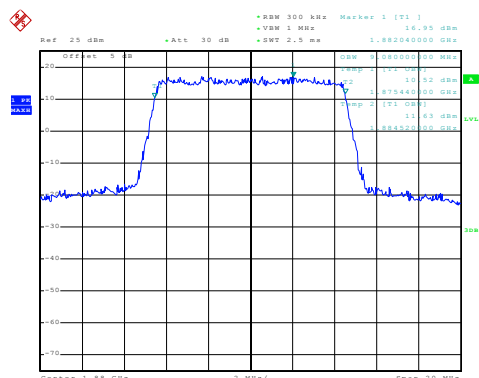
Lowest channel

Modulation: 16QAM



Date: 10.SEP.2015 12:02:47

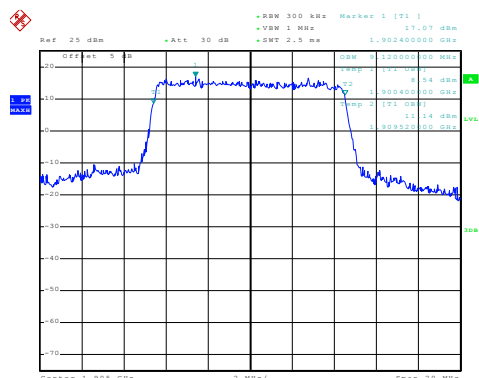
Modulation: QPSK



Date: 10.SEP.2015 12:01:56

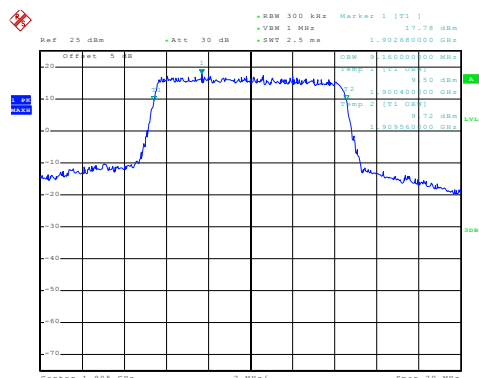
Middle channel

Modulation: 16QAM



Date: 10.SEP.2015 12:04:02

Modulation: QPSK

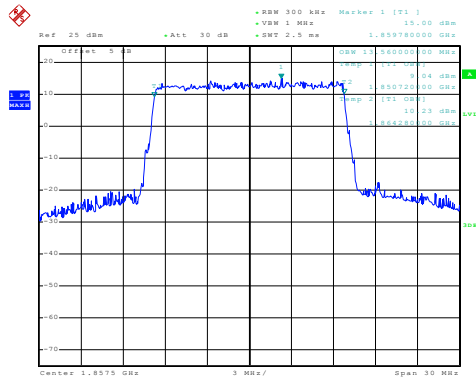


Date: 10.SEP.2015 12:03:19

Highest channel

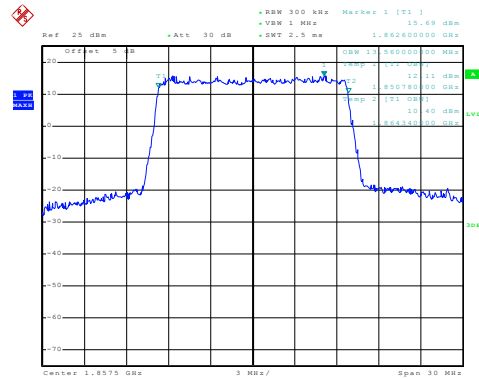
Test Item: 99% Occupy bandwidth
BW: 15MHz

Modulation: 16QAM



Date: 10.SEP.2015 12:05:46

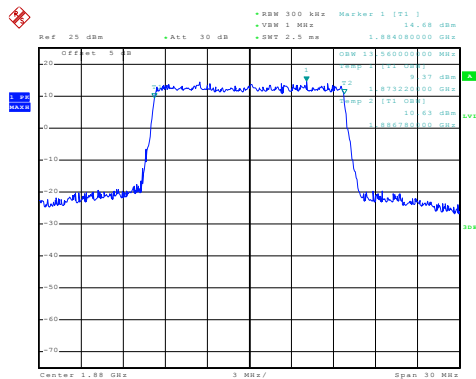
Modulation: QPSK



Date: 10.SEP.2015 12:05:10

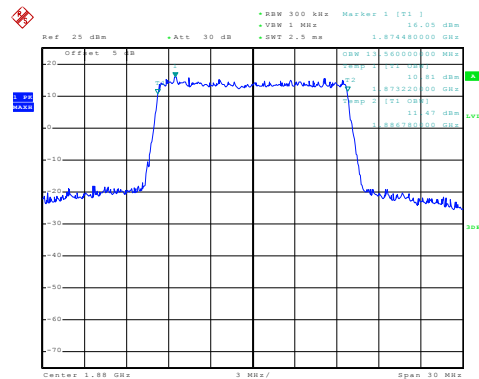
Lowest channel

Modulation: 16QAM



Date: 10.SEP.2015 12:07:32

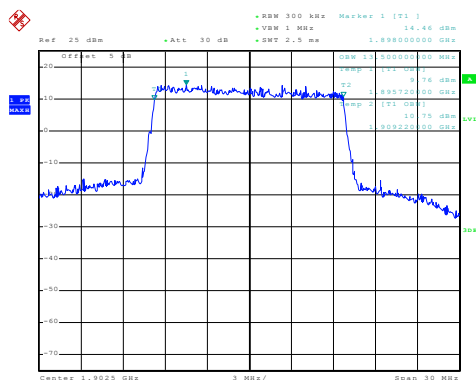
Modulation: QPSK



Date: 10.SEP.2015 12:06:16

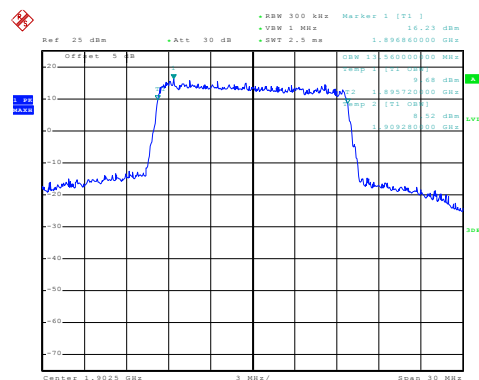
Middle channel

Modulation: 16QAM



Date: 10.SEP.2015 12:09:20

Modulation: QPSK

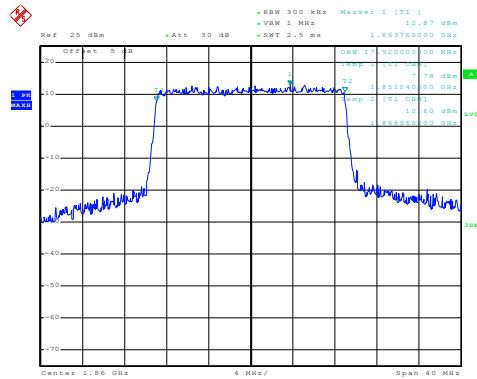


Date: 10.SEP.2015 12:08:29

Highest channel

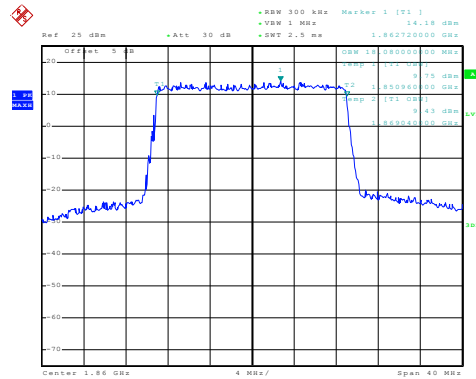
Test Item: 99% Occupy bandwidth
BW: 20MHz

Modulation: 16QAM



Date: 10.SEP.2015 13:46:14

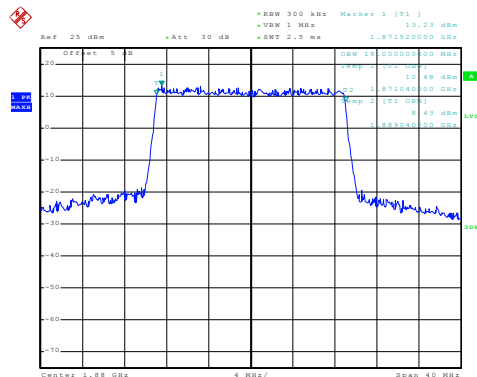
Modulation: QPSK



Date: 10.SEP.2015 13:45:00

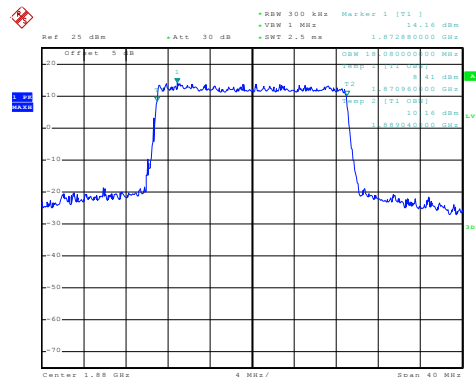
Lowest channel

Modulation: 16QAM



Date: 10.SEP.2015 13:58:29

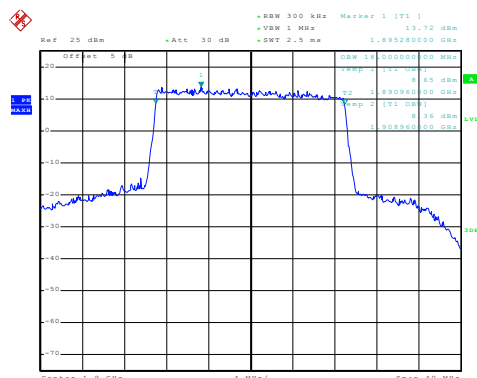
Modulation: QPSK



Date: 10.SEP.2015 13:57:39

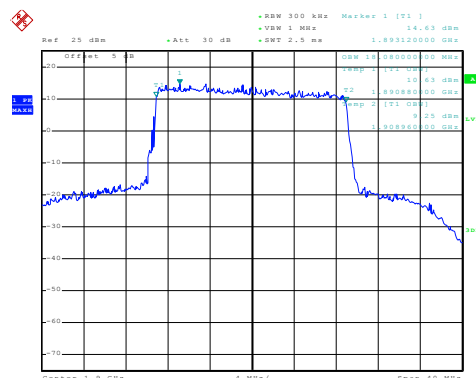
Middle channel

Modulation: 16QAM



Date: 10.SEP.2015 14:00:00

Modulation: QPSK



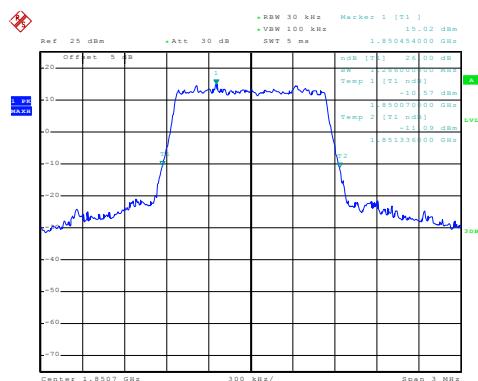
Date: 10.SEP.2015 13:58:59

Highest channel

Test Item: -26dBc bandwidth

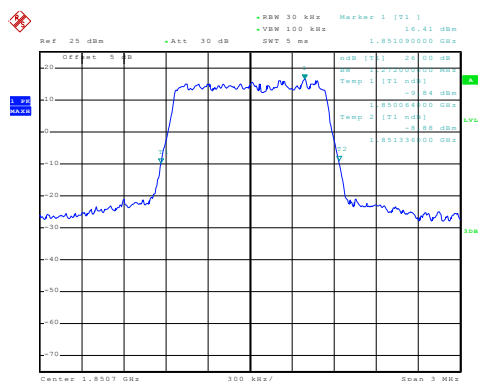
BW: 1.4MHz

Modulation: 16QAM



Date: 10 SEP 2015 11:08:47

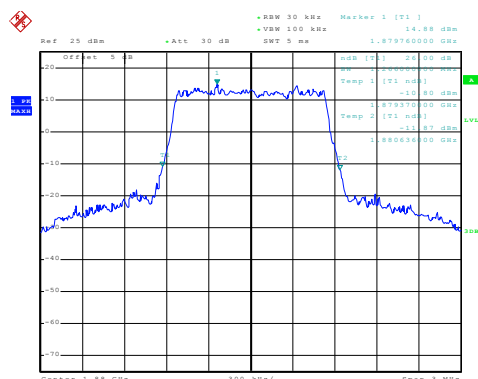
Modulation: QPSK



Date: 10 SEP 2015 11:07:46

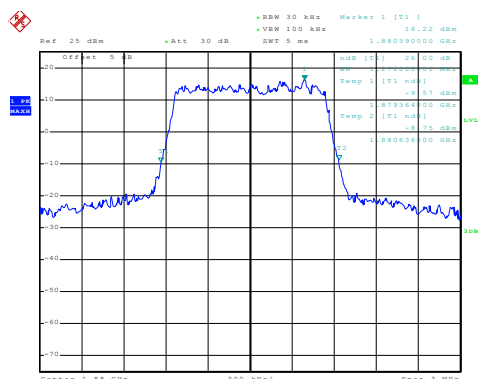
Lowest channel

Modulation: 16QAM



Date: 10 SEP 2015 11:16:14

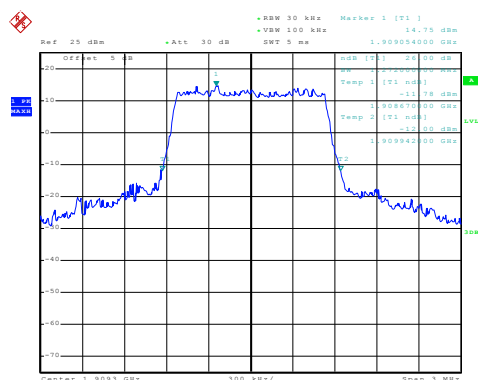
Modulation: QPSK



Date: 10 SEP 2015 11:16:00

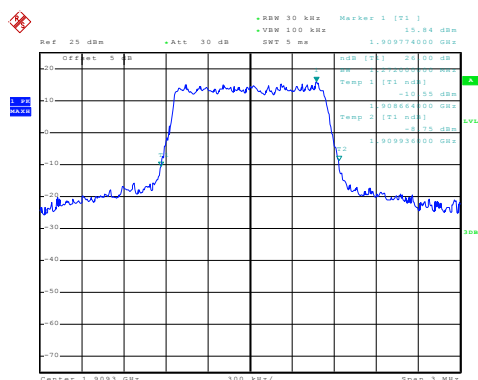
Middle channel

Modulation: 16QAM



Date: 10 SEP 2015 11:17:58

Modulation: QPSK



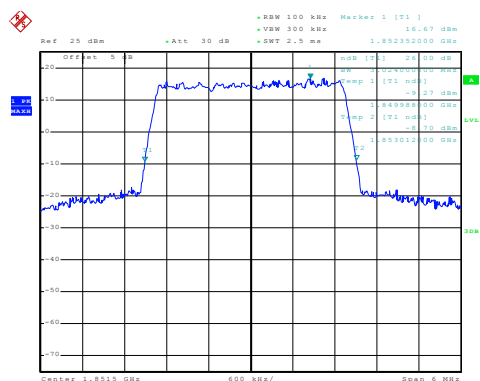
Date: 10 SEP 2015 11:17:45

Highest channel

Test Item: -26dBc bandwidth

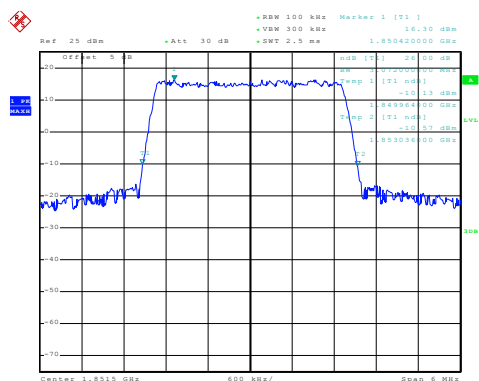
BW: 3MHz

Modulation: 16QAM



Date: 10 SEP 2015 11:21:15

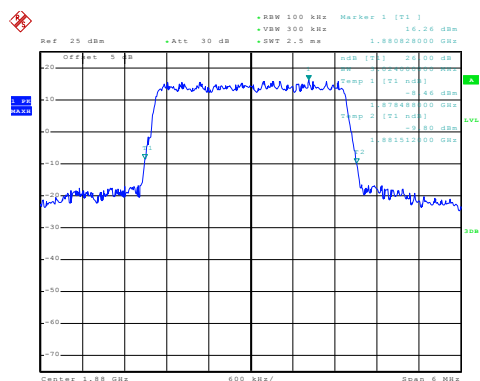
Modulation: QPSK



Date: 10 SEP 2015 11:20:48

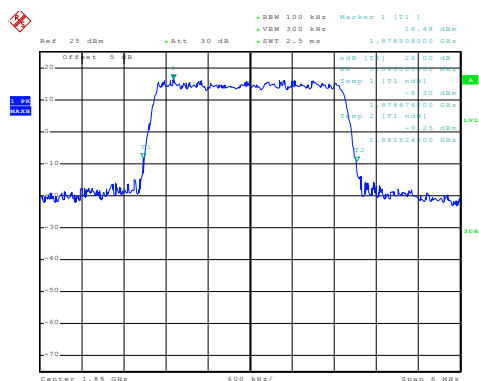
Lowest channel

Modulation: 16QAM



Date: 10 SEP 2015 11:23:50

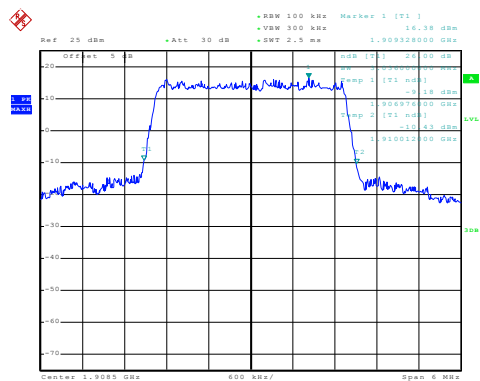
Modulation: QPSK



Date: 10 SEP 2015 11:23:36

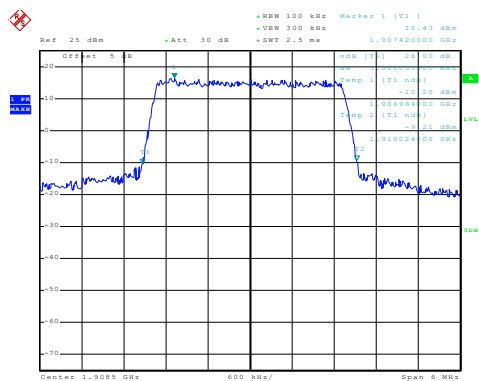
Middle channel

Modulation:16QAM



Date: 10 SEP 2015 11:25:39

Modulation: QPSK

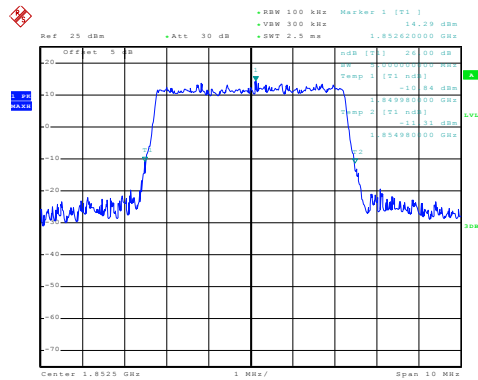


Date: 10 SEP 2015 11:25:28

Highest channel

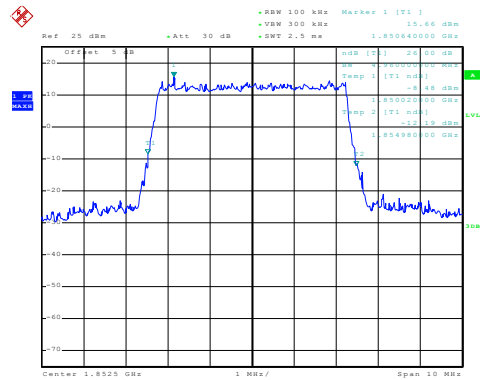
Test Item: -26dBc bandwidth
BW: 5MHz

Modulation: 16QAM



Date: 10 SEP 2015 11:27:25

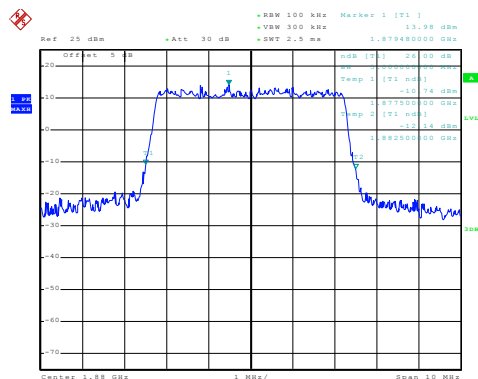
Modulation: QPSK



Date: 10 SEP 2015 11:27:12

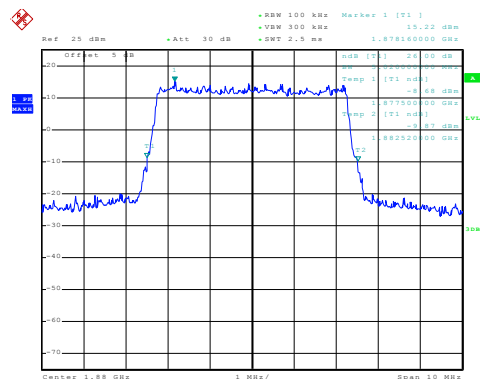
Lowest channel

Modulation: 16QAM



Date: 10 SEP 2015 11:28:41

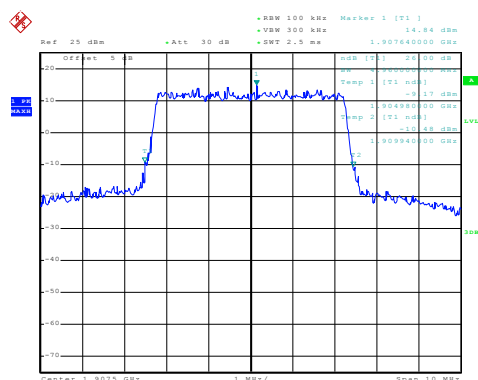
Modulation: QPSK



Date: 10 SEP 2015 11:28:29

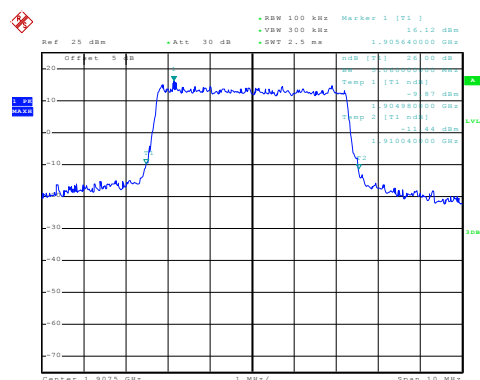
Middle channel

Modulation: 16QAM



Date: 10 SEP 2015 11:57:25

Modulation: QPSK

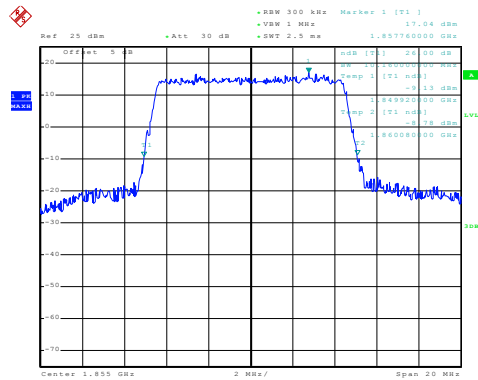


Date: 10 SEP 2015 11:57:11

Highest channel

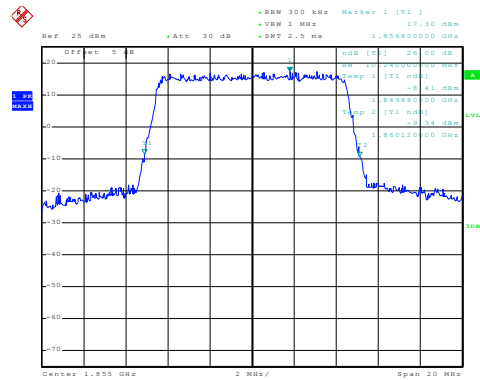
Test Item: -26dBc bandwidth
BW: 10MHz

Modulation: 16QAM



Date: 10 SEP 2015 17:01:04

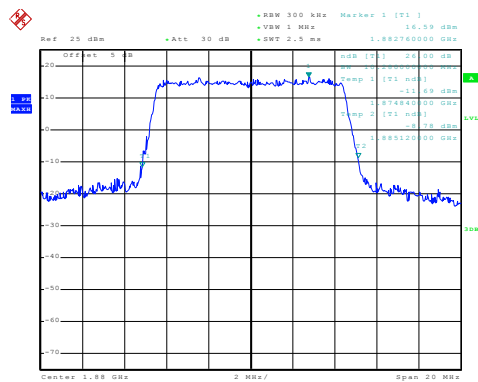
Modulation: QPSK



Date: 10 SEP 2015 17:00:51

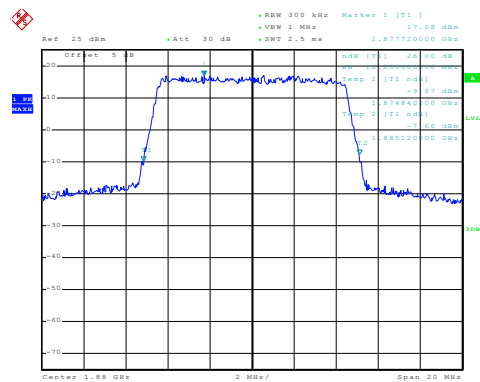
Lowest channel

Modulation: 16QAM



Date: 10 SEP 2015 17:02:25

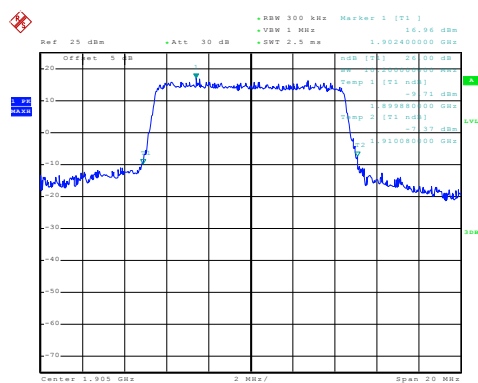
Modulation: QPSK



Date: 10 SEP 2015 17:02:12

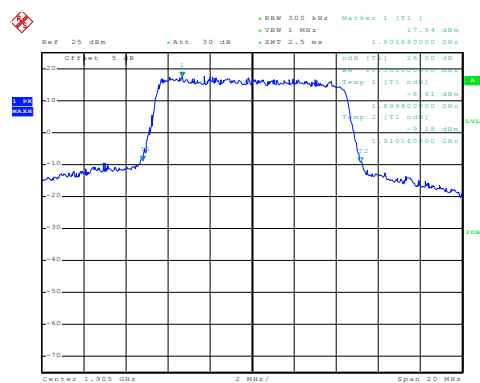
Middle channel

Modulation: 16QAM



Date: 10 SEP 2015 17:03:49

Modulation: QPSK

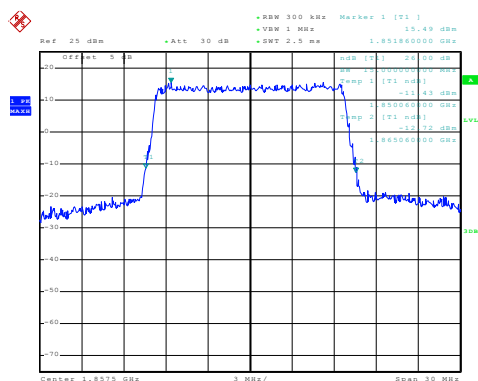


Date: 10 SEP 2015 17:03:27

Highest channel

BW: 15MHz

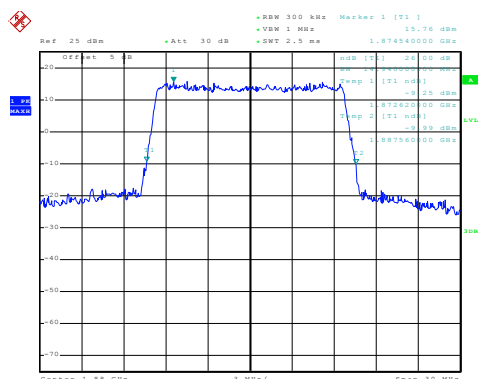
Modulation: QPSK



Date: 10 SEP 2015 12:05:23

Lowest channel

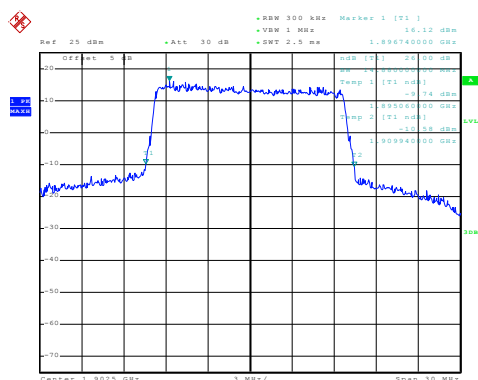
Modulation: QPSK



Date: 10 SEP 2015 12:06:30

Middle channel

Modulation: QPSK

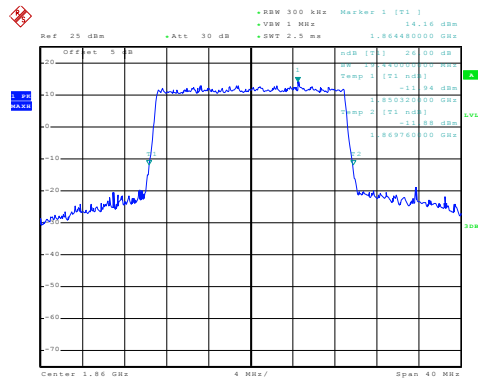


Date: 10 SEP 2015 12:08:45

Highest channel

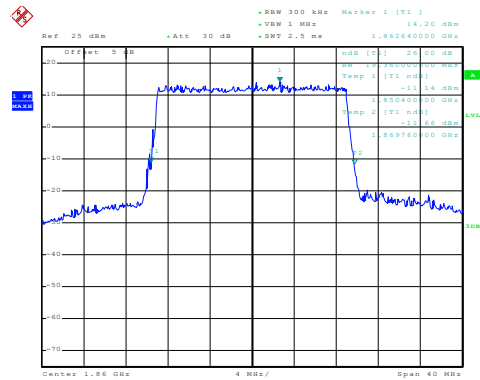
Test Item: -26dBc bandwidth
BW: 20MHz

Modulation: 16QAM



Date: 10 SEP 2015 13:45:59

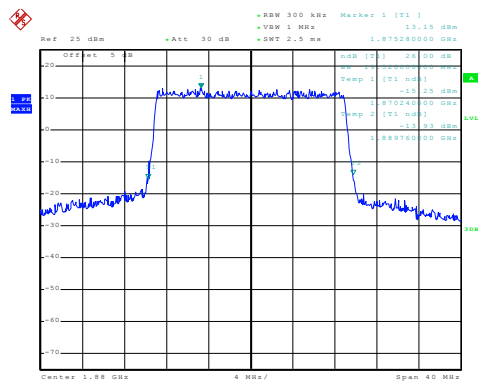
Modulation: QPSK



Date: 10 SEP 2015 13:45:15

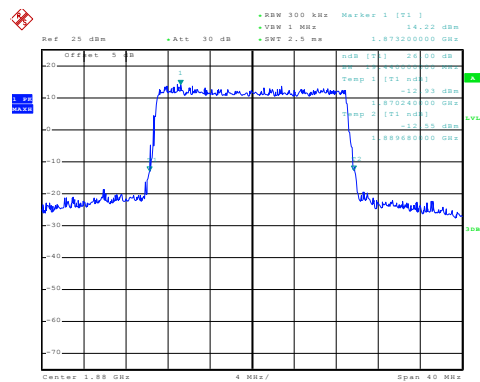
Lowest channel

Modulation: 16QAM



Date: 10 SEP 2015 13:58:06

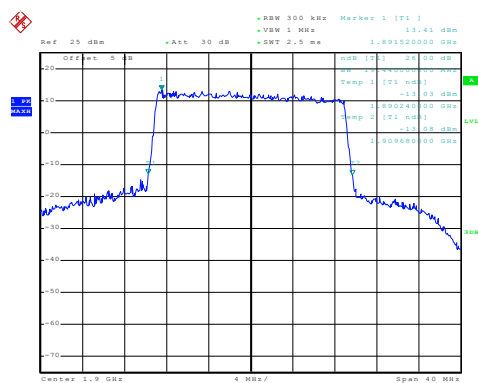
Modulation: QPSK



Date: 10 SEP 2015 13:57:50

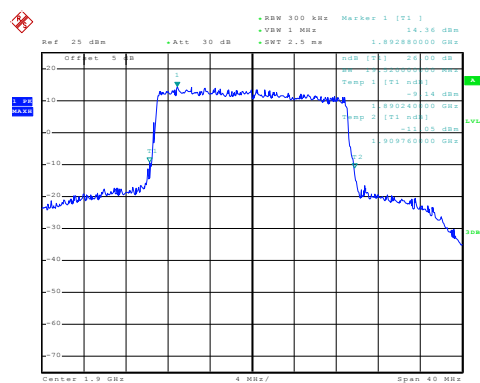
Middle channel

Modulation: 16QAM



Date: 10 SEP 2015 14:00:29

Modulation: QPSK



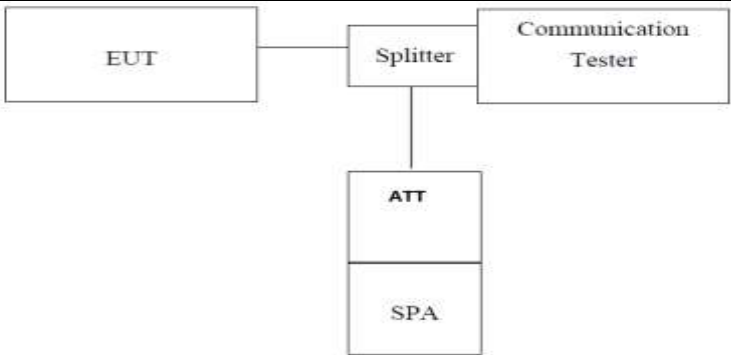
Date: 10 SEP 2015 13:59:12

Highest channel

6.8 Modulation Characteristic

According to FCC § 2.1047(d), Part 27L & 27C 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 part 2.1051
Limit:	Conducted spurious emission: LTE Band 2: -13 dBm Band edge: LTE Band 2: the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10} (P)$ dB.
Test setup:	 <i>Note: Measurement setup for testing on Antenna connector</i>
Test Procedure:	1 The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation. 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. 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. 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.
Test Uncertainty:	±1.5 dB
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

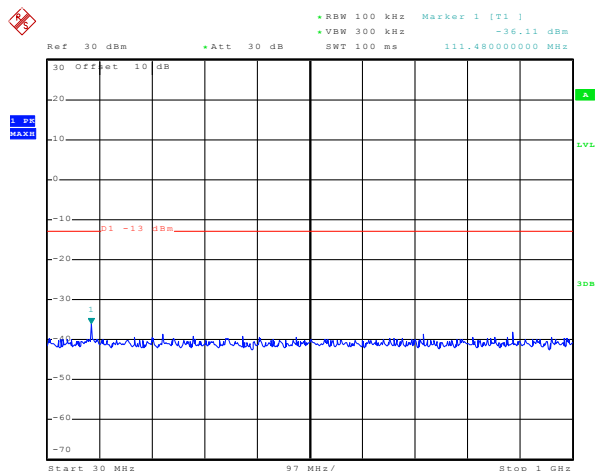
Test plots as follows:

Spurious emission

LTE band 2 Part:

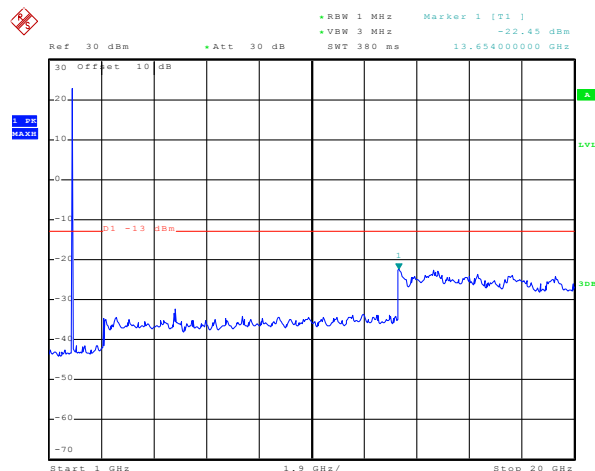
1.4MHz

Test Mode:	LTE band 2(1.4 MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Lowest channel
------------	--	---------------	----------------



Date: 19.SEP.2015 09:57:45

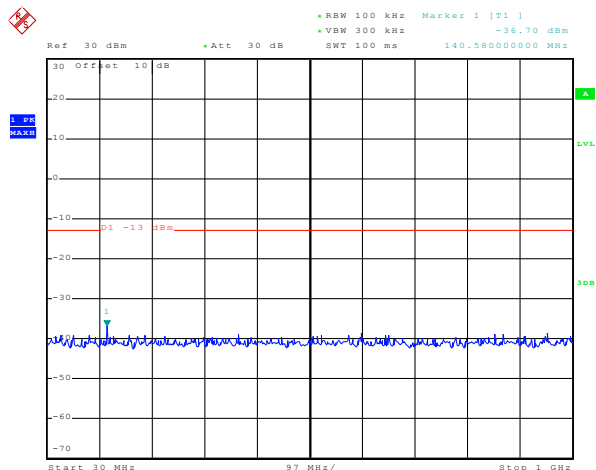
30MHz~1GHz



Date: 19.SEP.2015 09:52:48

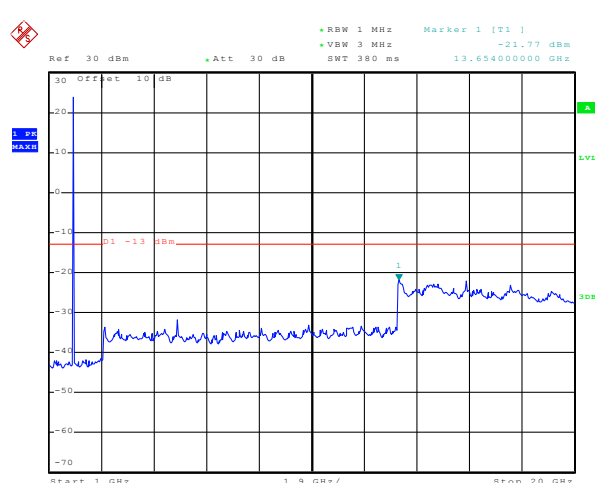
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Middle channel
------------	--	---------------	----------------



Date: 19.SEP.2015 10:00:21

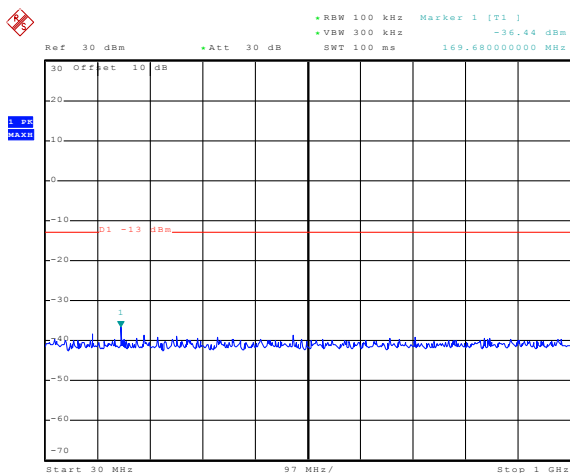
30MHz~1GHz



Date: 19.SEP.2015 10:03:51

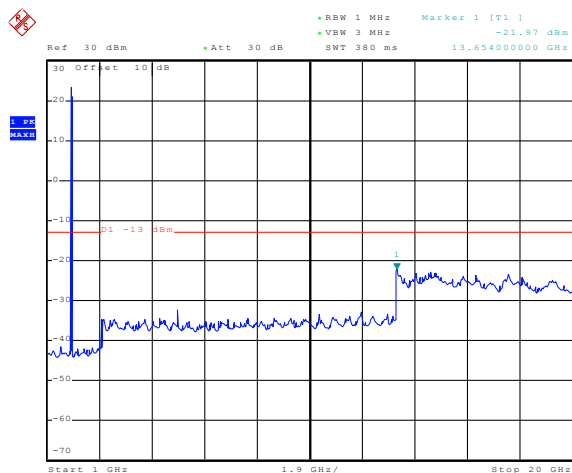
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Highest channel
------------	--	---------------	-----------------



Date: 19.SEP.2015 10:09:50

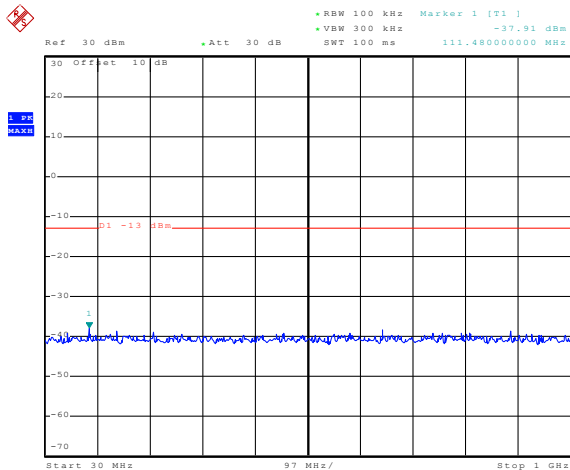
30MHz~1GHz



Date: 19.SEP.2015 10:06:36

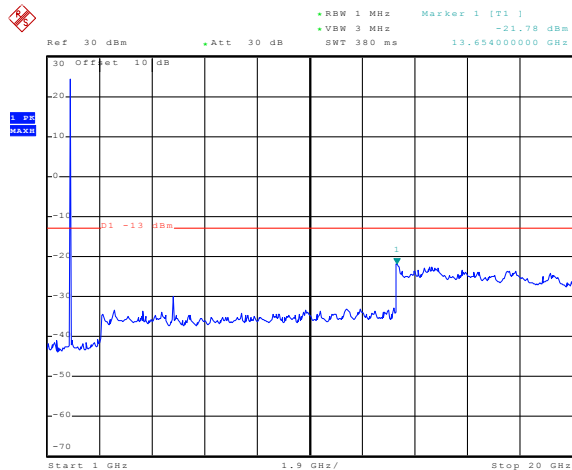
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz 16QAM) RB Size 3 & RB Offset 0	Test Channel:	Lowest channel
------------	--	---------------	----------------



Date: 19.SEP.2015 09:58:06

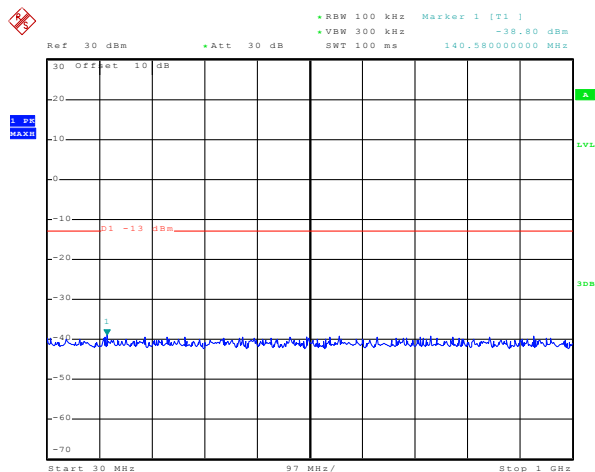
30MHz~1GHz



Date: 19.SEP.2015 09:53:53

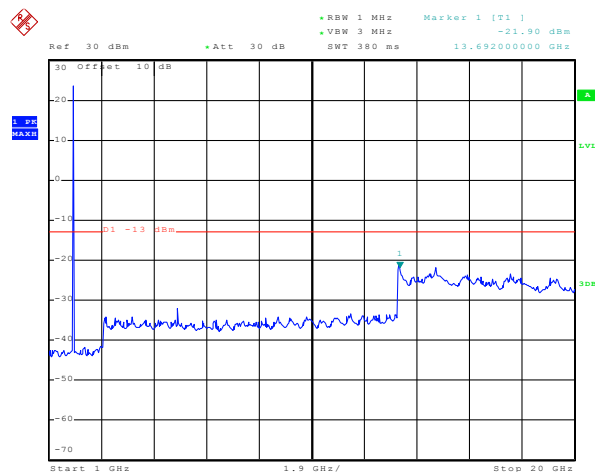
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz 16QAM) RB Size 3 & RB Offset 0	Test Channel:	Middle channel
------------	--	---------------	----------------



Date: 19.SEP.2015 10:00:55

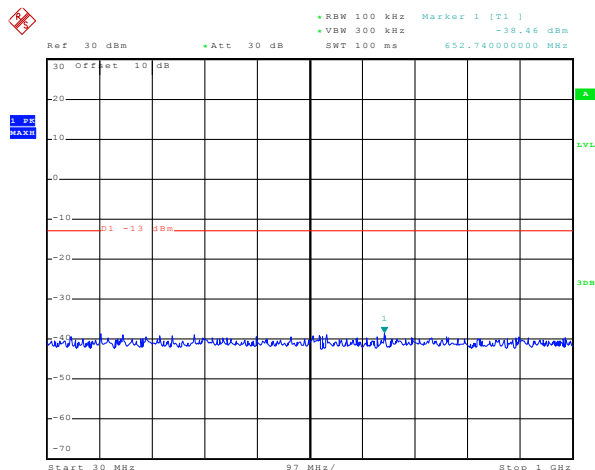
30MHz~1GHz



Date: 19.SEP.2015 10:04:12

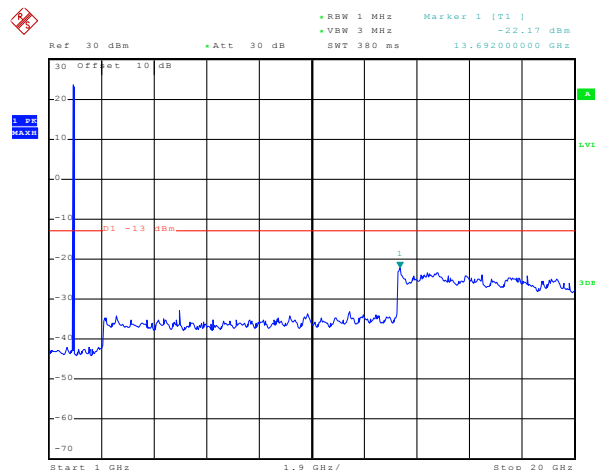
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz 16QAM) RB Size 3 & RB Offset 0	Test Channel:	Highest channel
------------	--	---------------	-----------------



Date: 19.SEP.2015 10:10:04

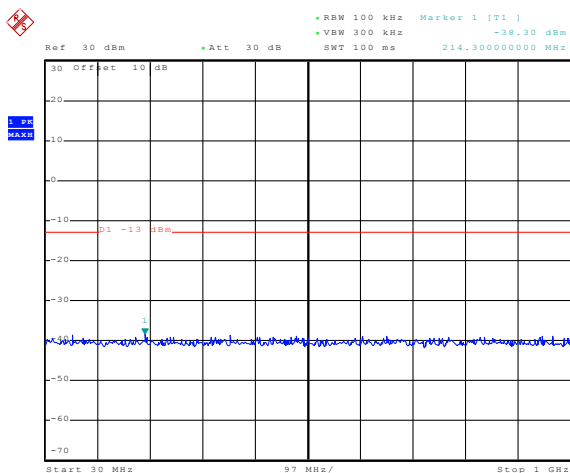
30MHz~1GHz



Date: 19.SEP.2015 10:06:57

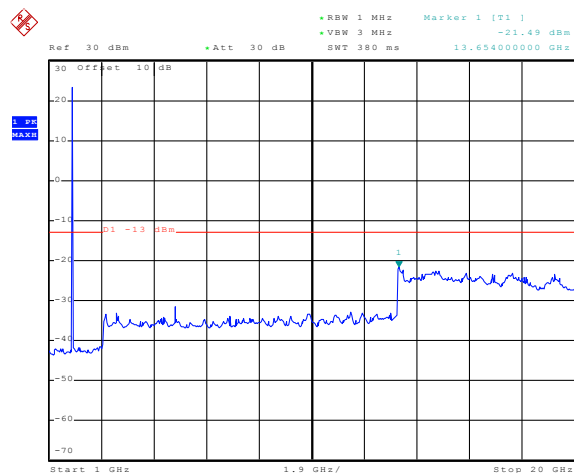
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz 16QAM) RB Size 6 & RB Offset 0	Test Channel:	Lowest channel
------------	--	---------------	----------------



Date: 19.SEP.2015 09:57:00

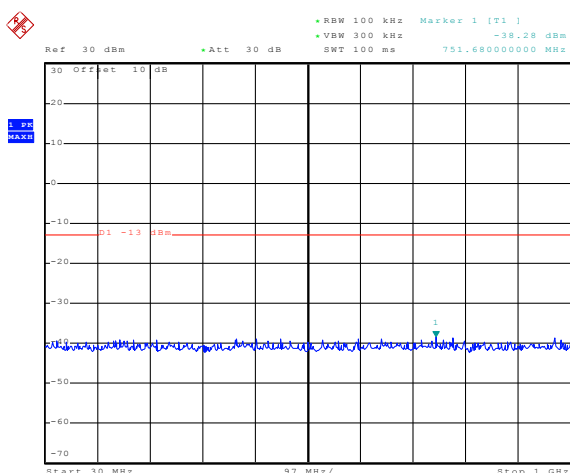
30MHz~1GHz



Date: 19.SEP.2015 09:55:23

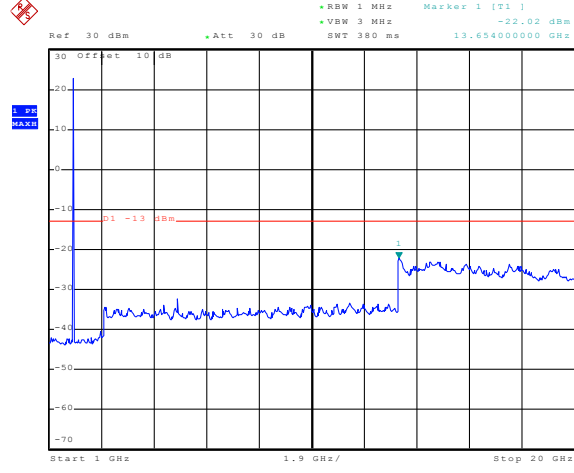
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz 16QAM) RB Size 6 & RB Offset 0	Test Channel:	Middle channel
------------	--	---------------	----------------



Date: 19.SEP.2015 10:01:24

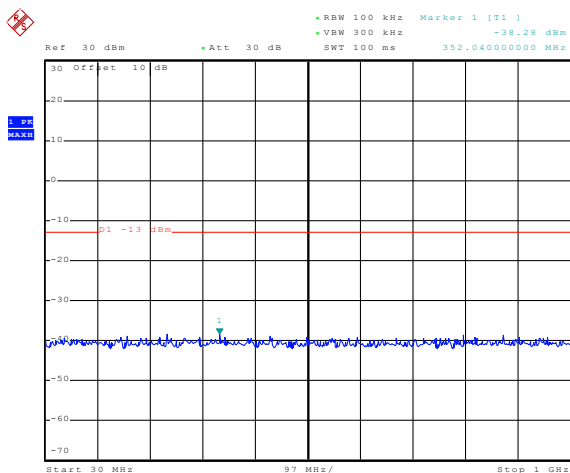
30MHz~1GHz



Date: 19.SEP.2015 10:02:26

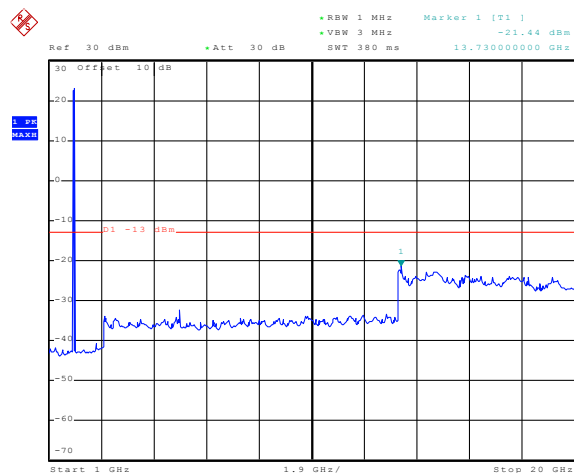
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz 16QAM) RB Size 6 & RB Offset 0	Test Channel:	Highest channel
------------	--	---------------	-----------------



Date: 19.SEP.2015 10:09:12

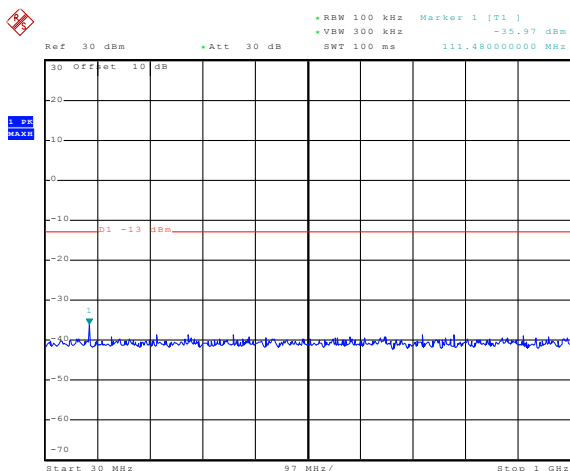
30MHz~1GHz



Date: 19.SEP.2015 10:08:34

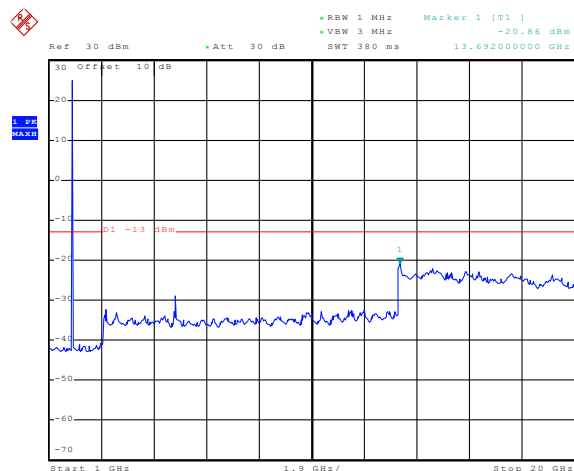
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz QPSK) RB Size 1 & RB Offset 0	Test Channel:	Lowest channel
------------	---	---------------	----------------



Date: 19.SEP.2015 09:57:30

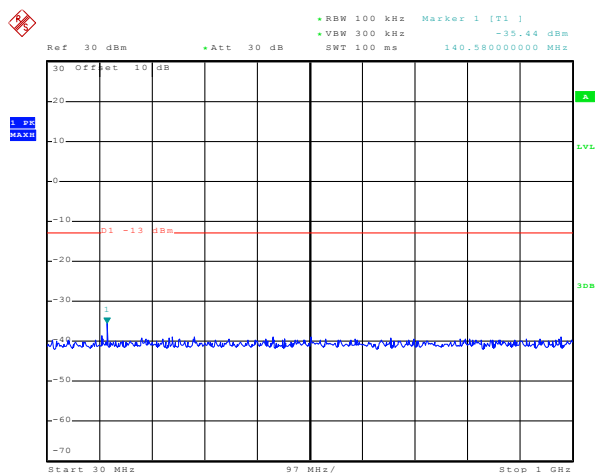
30MHz~1GHz



Date: 19.SEP.2015 09:52:17

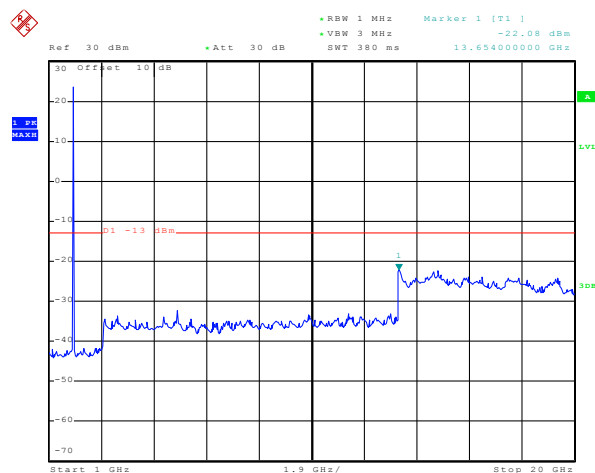
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz QPSK) RB Size 1 & RB Offset 0	Test Channel:	Middle channel
------------	---	---------------	----------------



Date: 19.SEP.2015 10:00:07

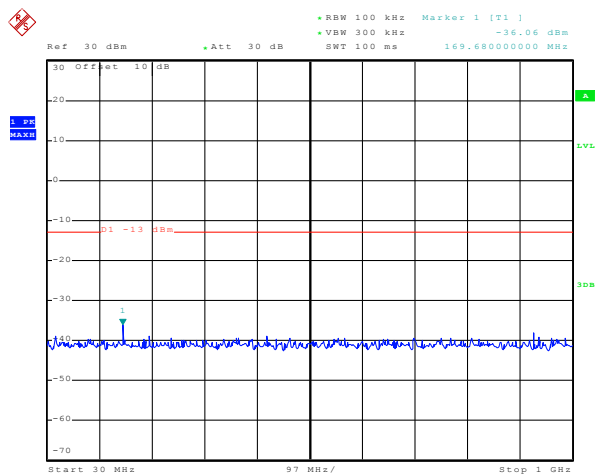
30MHz~1GHz



Date: 19.SEP.2015 10:03:18

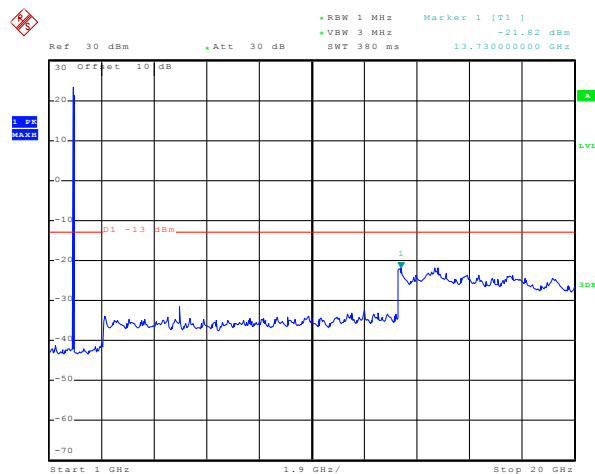
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz QPSK) RB Size 1 & RB Offset 0	Test Channel:	Highest channel
------------	---	---------------	-----------------



Date: 19.SEP.2015 10:09:37

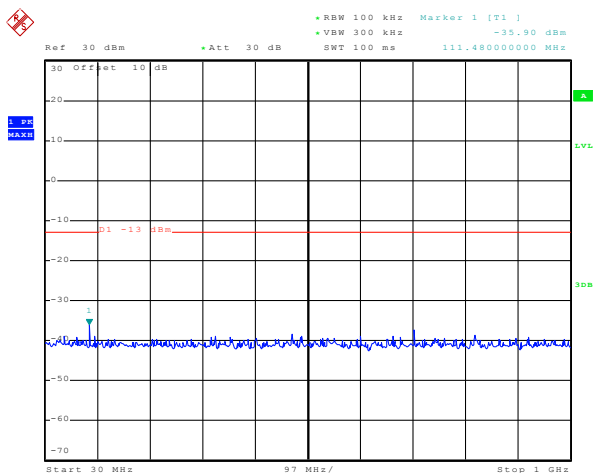
30MHz~1GHz



Date: 19.SEP.2015 10:06:10

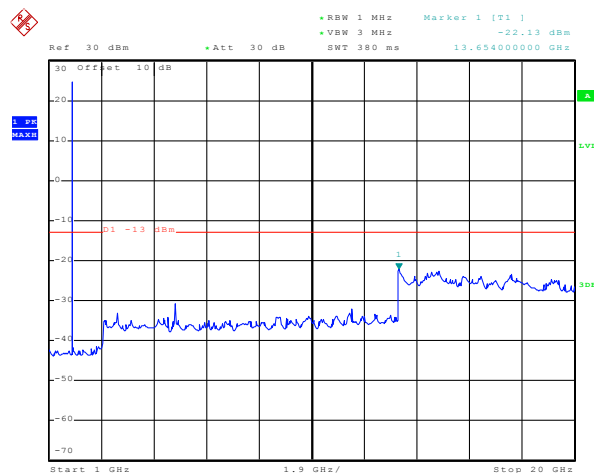
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz QPSK) RB Size 3 & RB Offset 0	Test Channel:	Lowest channel
------------	---	---------------	----------------



Date: 19.SEP.2015 09:58:21

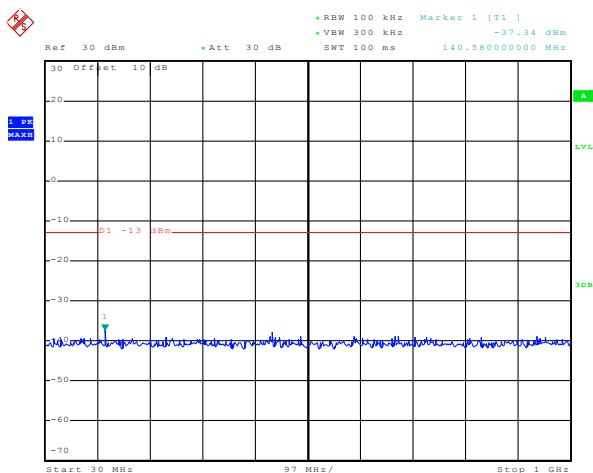
30MHz~1GHz



Date: 19.SEP.2015 09:54:17

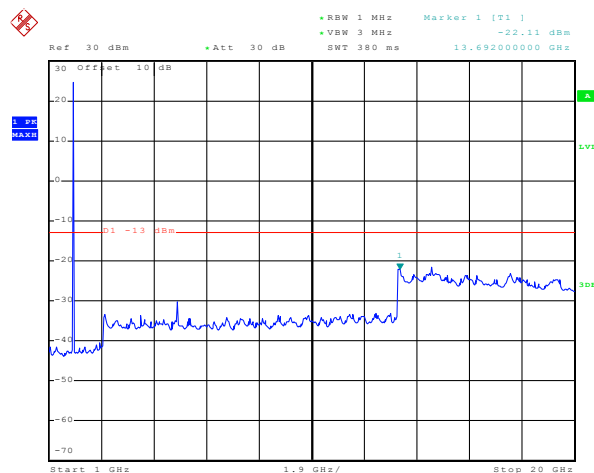
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz QPSK) RB Size 3 & RB Offset 0	Test Channel:	Middle channel
------------	---	---------------	----------------



Date: 19.SEP.2015 10:00:41

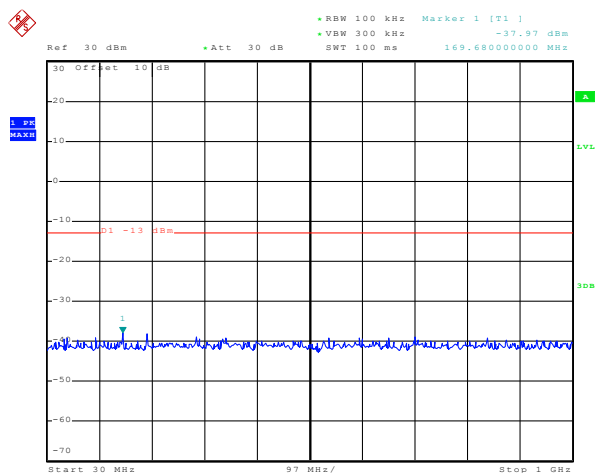
30MHz~1GHz



Date: 19.SEP.2015 10:05:01

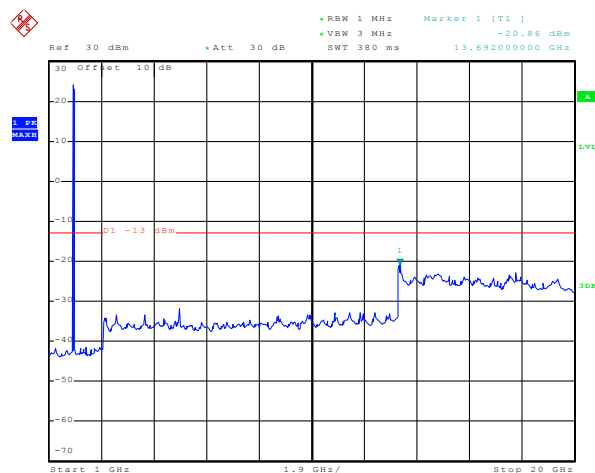
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz QPSK) RB Size 3 & RB Offset 0	Test Channel:	Highest channel
------------	---	---------------	-----------------



Date: 19.SEP.2015 10:10:19

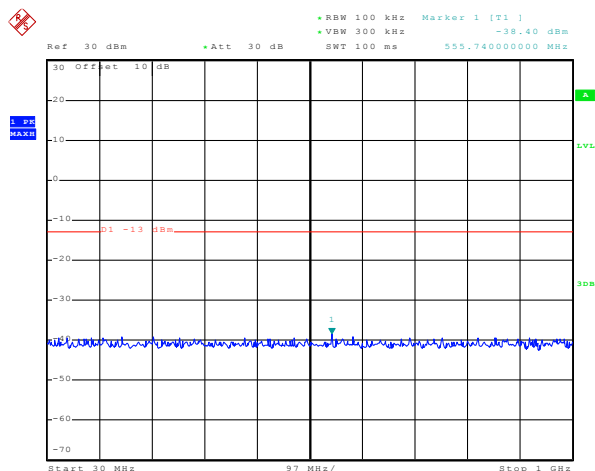
30MHz~1GHz



Date: 19.SEP.2015 10:07:26

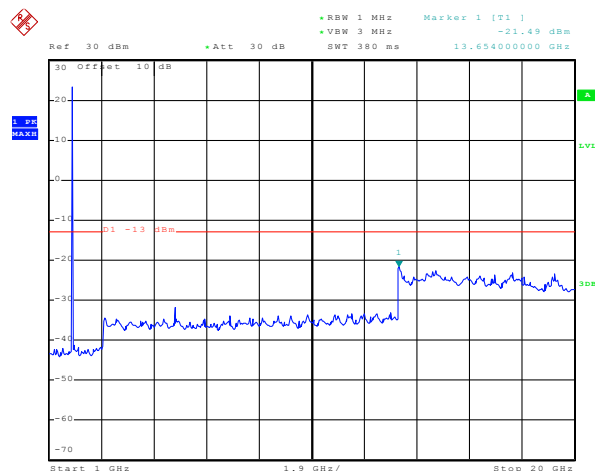
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz QPSK) RB Size 6 & RB Offset 0	Test Channel:	Lowest channel
------------	---	---------------	----------------



Date: 19.SEP.2015 09:57:14

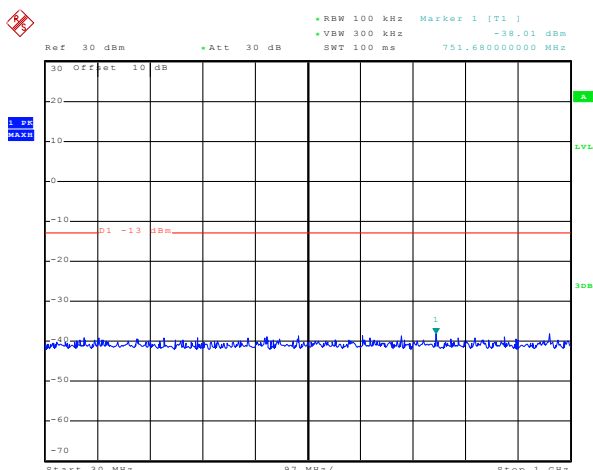
30MHz~1GHz



Date: 19.SEP.2015 09:54:46

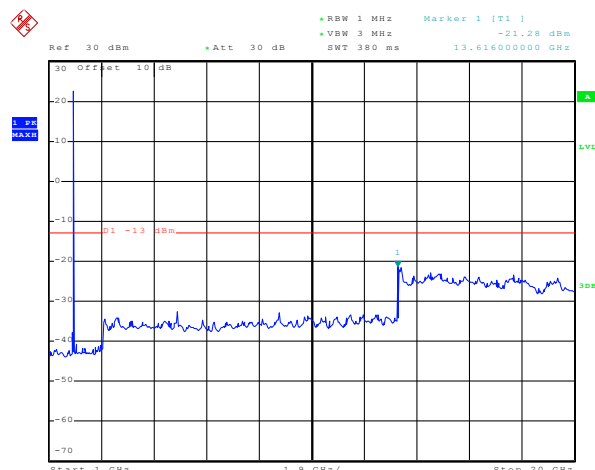
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz QPSK) RB Size 6 & RB Offset 0	Test Channel:	Middle channel
------------	---	---------------	----------------



Date: 19.SEP.2015 10:01:11

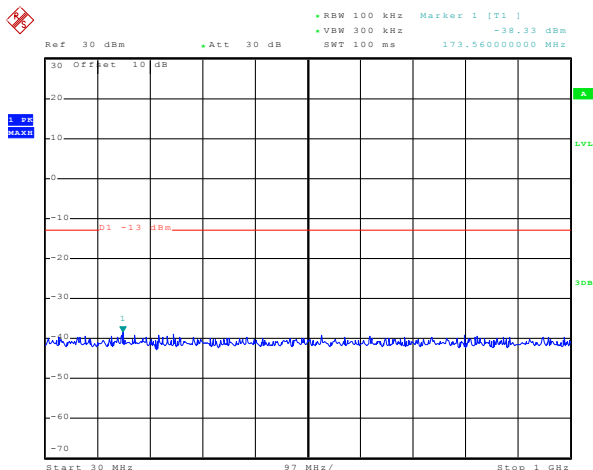
30MHz~1GHz



Date: 19.SEP.2015 10:02:55

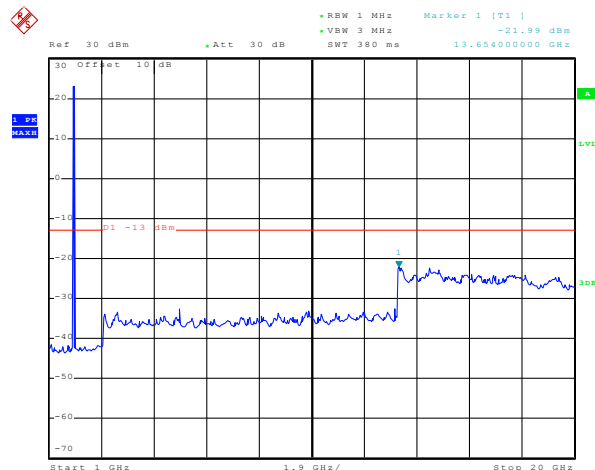
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz QPSK) RB Size 6 & RB Offset 0	Test Channel:	Highest channel
------------	---	---------------	-----------------



Date: 19.SEP.2015 10:09:24

30MHz~1GHz

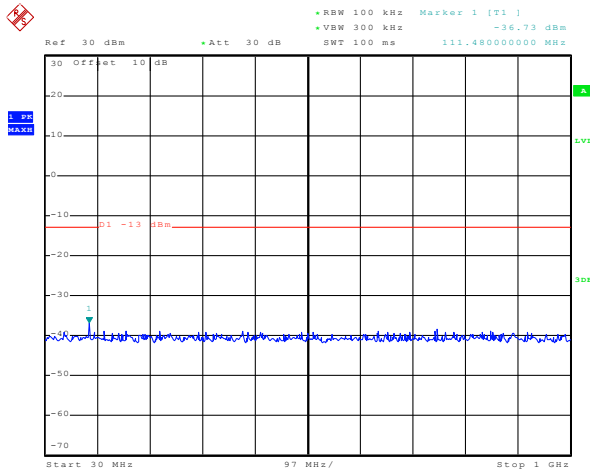


Date: 19.SEP.2015 10:07:58

1GHz~20GHz

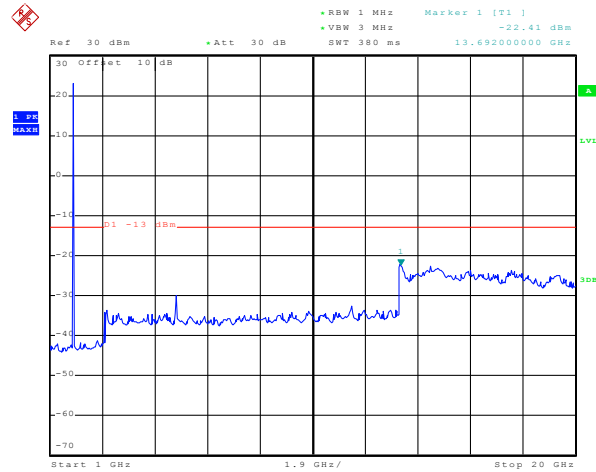
3MHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Lowest channel
------------	---	---------------	----------------



Date: 19.SEP.2015 10:12:08

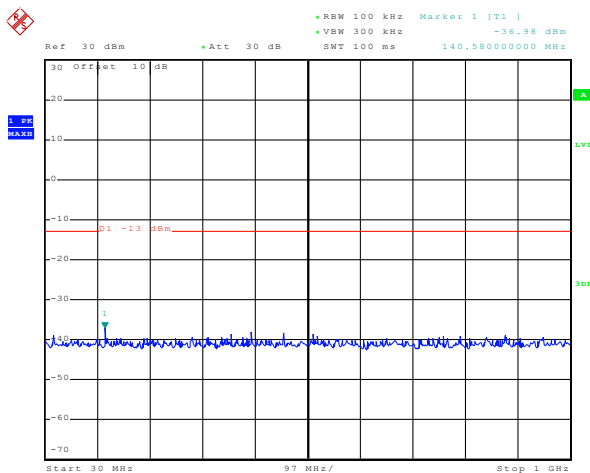
30MHz~1GHz



Date: 19.SEP.2015 10:16:09

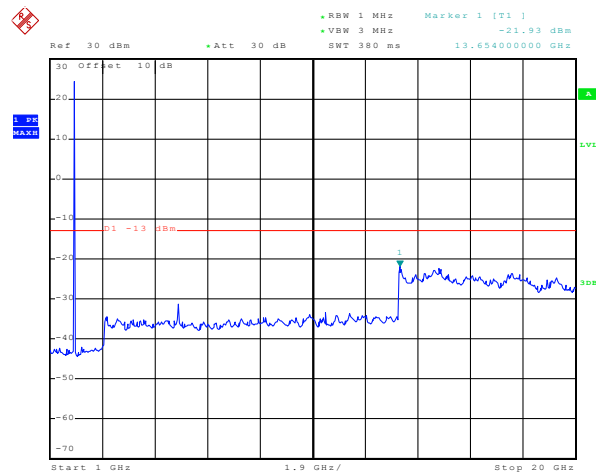
1GHz~20GHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Middle channel
------------	---	---------------	----------------



Date: 19.SEP.2015 10:21:23

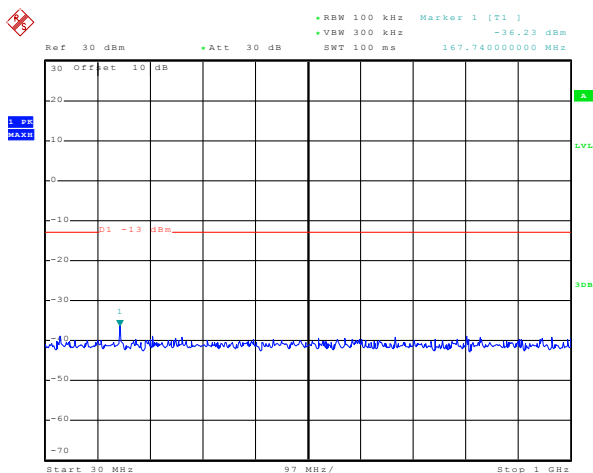
30MHz~1GHz



Date: 19.SEP.2015 10:18:35

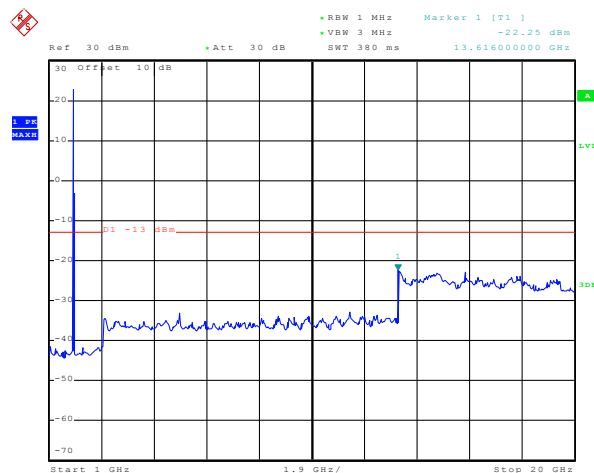
1GHz~20GHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Highest channel
------------	---	---------------	-----------------



Date: 19.SEP.2015 10:23:34

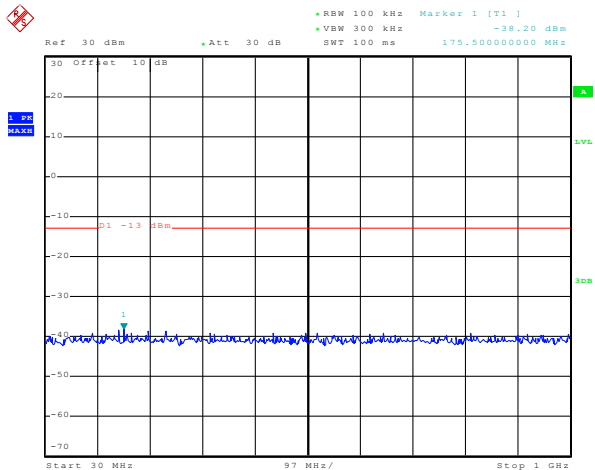
30MHz~1GHz



Date: 19.SEP.2015 10:26:29

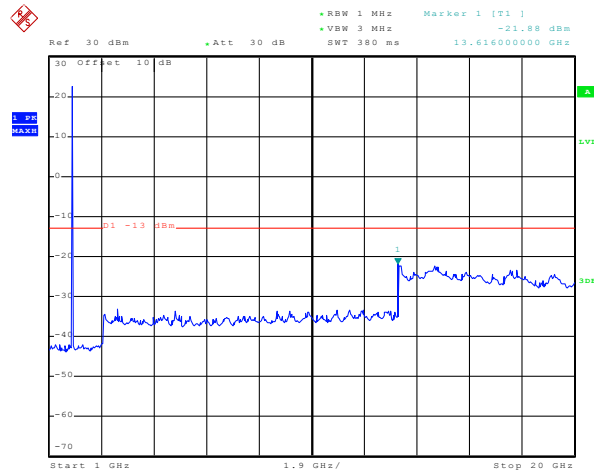
1GHz~20GHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 8 & RB Offset 0	Test Channel:	Lowest channel
------------	---	---------------	----------------



Date: 19.SEP.2015 10:12:55

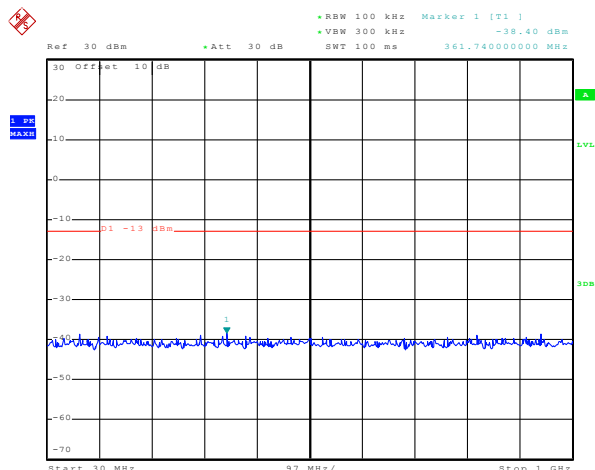
30MHz~1GHz



Date: 19.SEP.2015 10:16:39

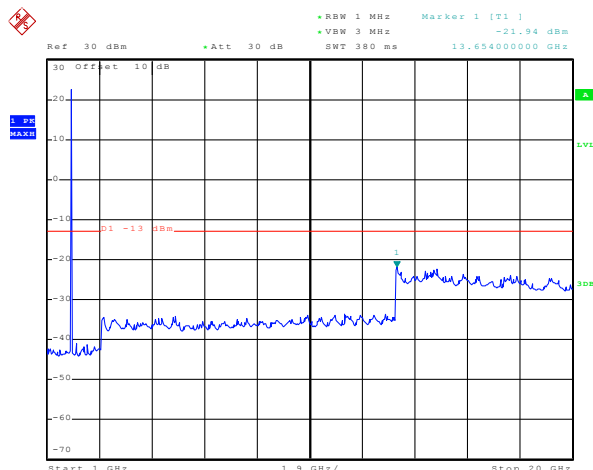
1GHz~20GHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 8 & RB Offset 0	Test Channel:	Middle channel
------------	---	---------------	----------------



Date: 19.SEP.2015 10:21:37

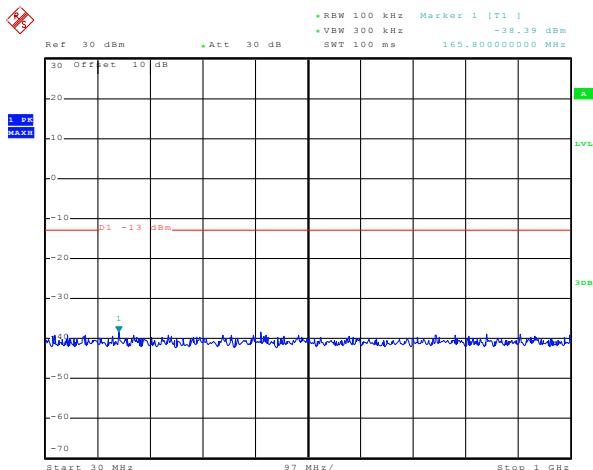
30MHz~1GHz



Date: 19.SEP.2015 10:18:54

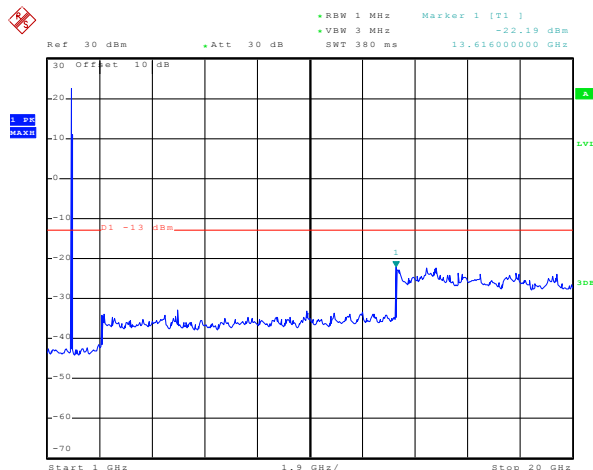
1GHz~20GHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 8 & RB Offset 0	Test Channel:	Highest channel
------------	---	---------------	-----------------



Date: 19.SEP.2015 10:23:48

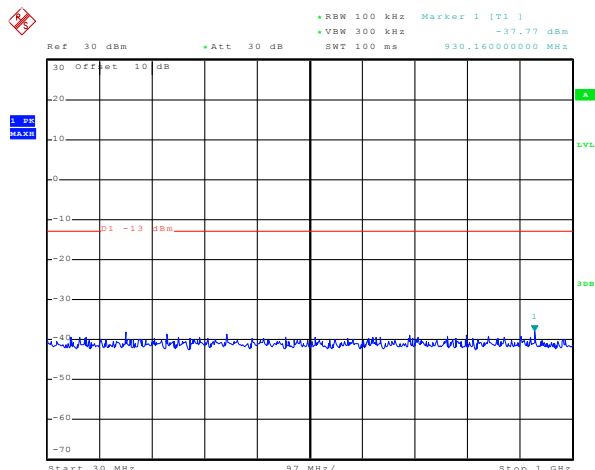
30MHz~1GHz



Date: 19.SEP.2015 10:26:49

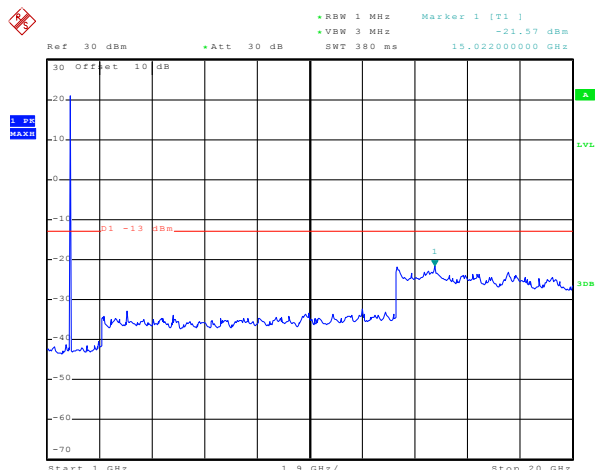
1GHz~20GHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 15 & RB Offset 0	Test Channel:	Lowest channel
------------	--	---------------	----------------



Date: 19.SEP.2015 10:13:46

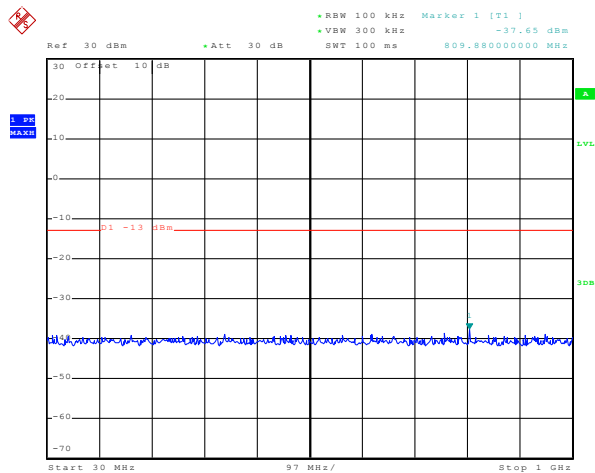
30MHz~1GHz



Date: 19.SEP.2015 10:14:46

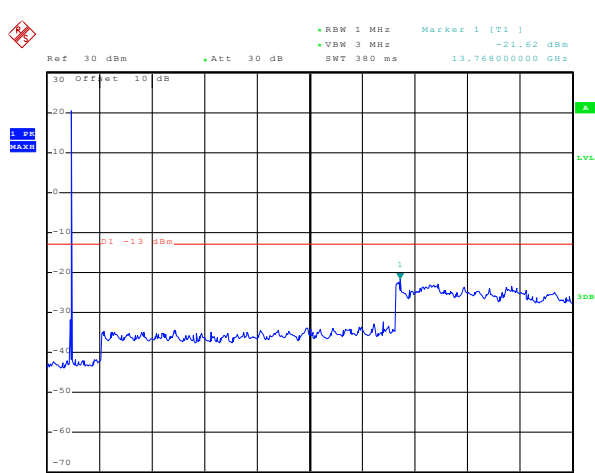
1GHz~20GHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 15 & RB Offset 0	Test Channel:	Middle channel
------------	--	---------------	----------------



Date: 19.SEP.2015 10:22:48

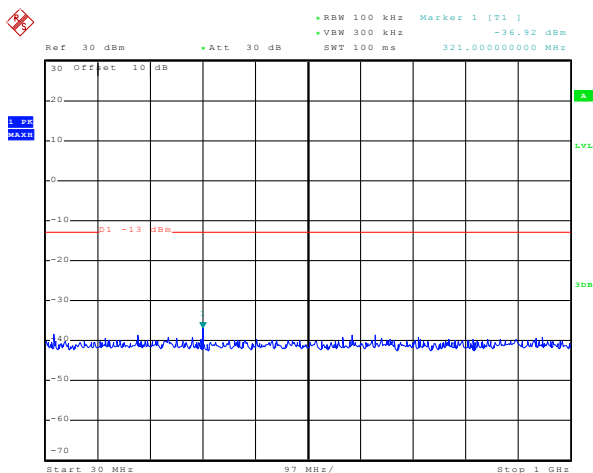
30MHz~1GHz



Date: 19.SEP.2015 10:20:09

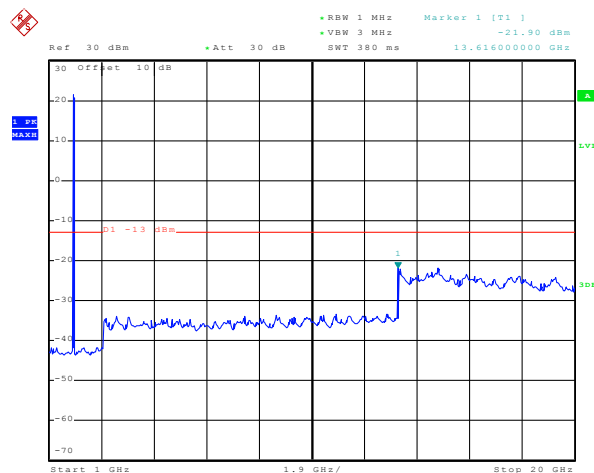
1GHz~20GHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 15 & RB Offset 0	Test Channel:	Highest channel
------------	--	---------------	-----------------



Date: 19.SEP.2015 10:24:30

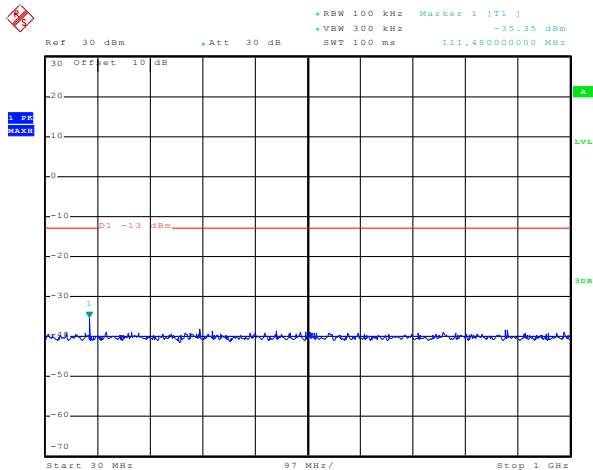
30MHz~1GHz



Date: 19.SEP.2015 10:25:16

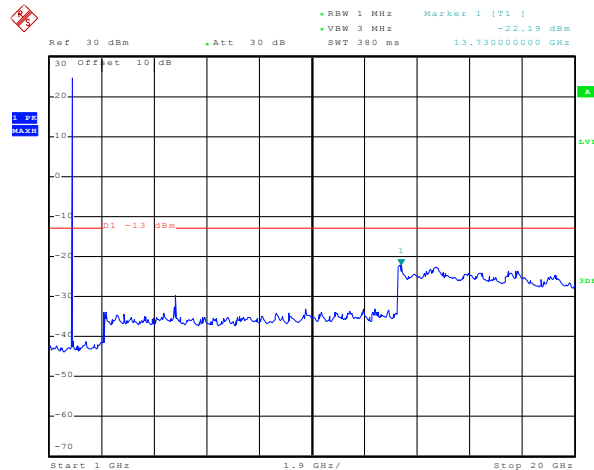
1GHz~20GHz

Test Mode:	LTE band 2(3MHz QPSK) RB Size 1 & RB Offset 0	Test Channel:	Lowest channel
------------	--	---------------	----------------



Date: 19.SEP.2015 10:11:45

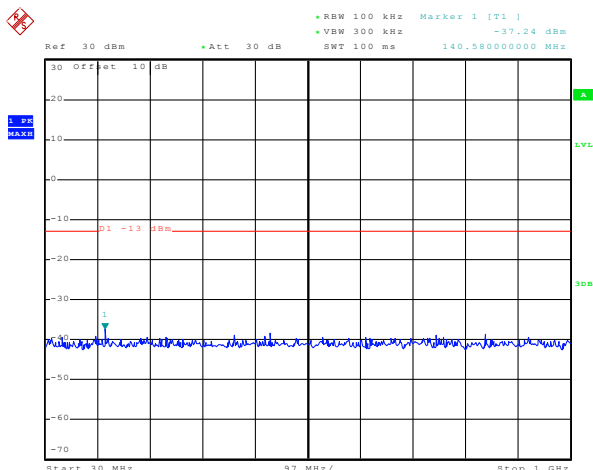
30MHz~1GHz



Date: 19.SEP.2015 10:15:43

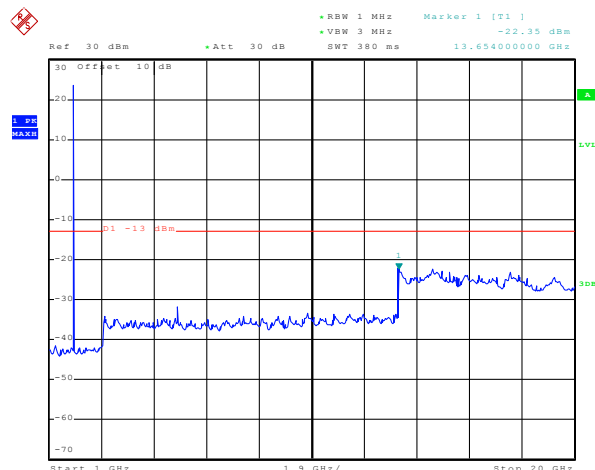
1GHz~20GHz

Test Mode:	LTE band 2(3MHz QPSK) RB Size 1 & RB Offset 0	Test Channel:	Middle channel
------------	--	---------------	----------------



Date: 19.SEP.2015 10:21:09

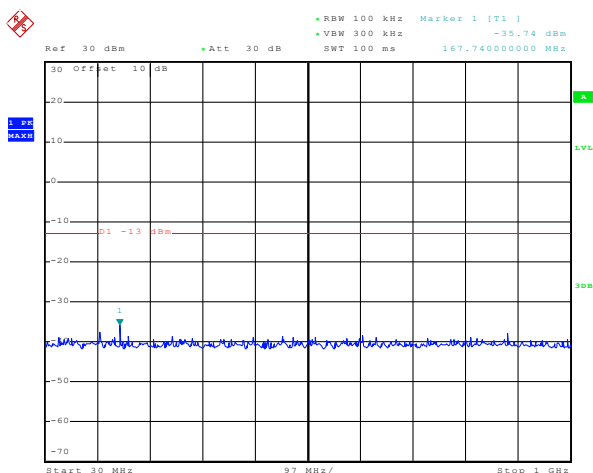
30MHz~1GHz



Date: 19.SEP.2015 10:18:14

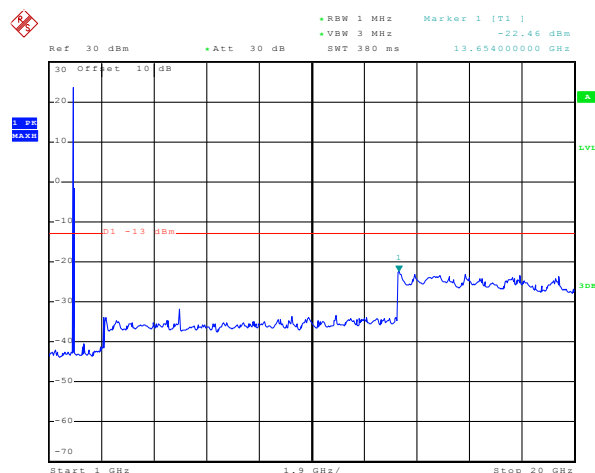
1GHz~20GHz

Test Mode:	LTE band 2(3MHz QPSK) RB Size 1 & RB Offset 0	Test Channel:	Highest channel
------------	--	---------------	-----------------



Date: 19.SEP.2015 10:23:20

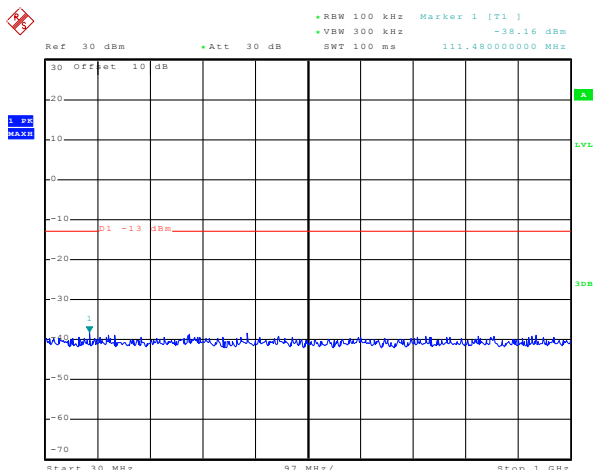
30MHz~1GHz



Date: 19.SEP.2015 10:26:06

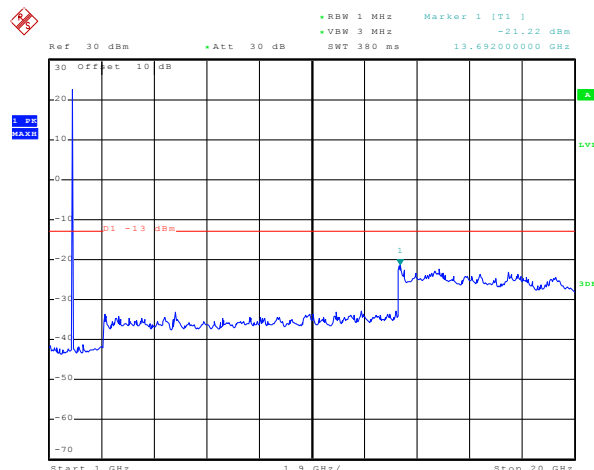
1GHz~20GHz

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



Date: 19.SEP.2015 10:13:17

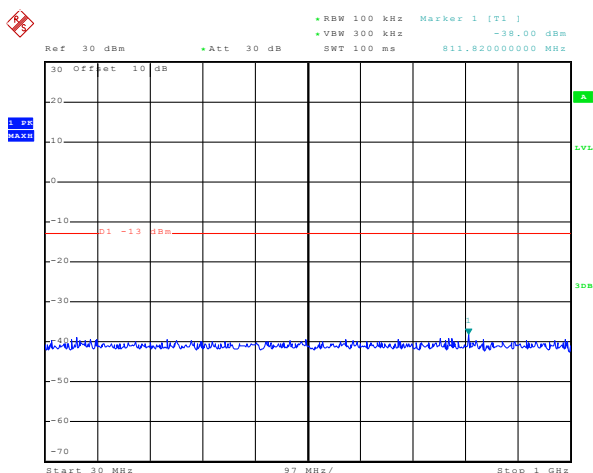
30MHz~1GHz



Date: 19.SEP.2015 10:17:31

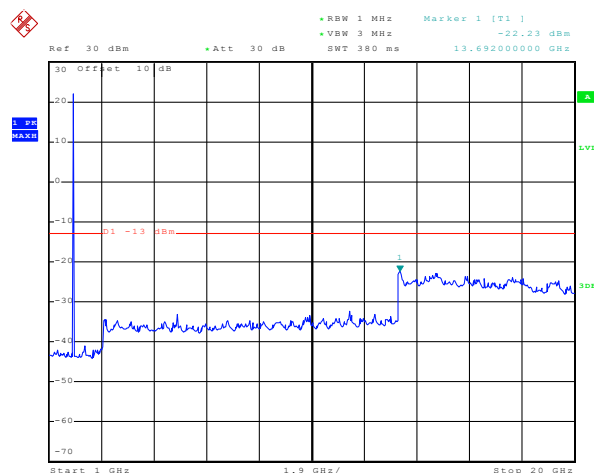
1GHz~20GHz

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



Date: 19.SEP.2015 10:21:51

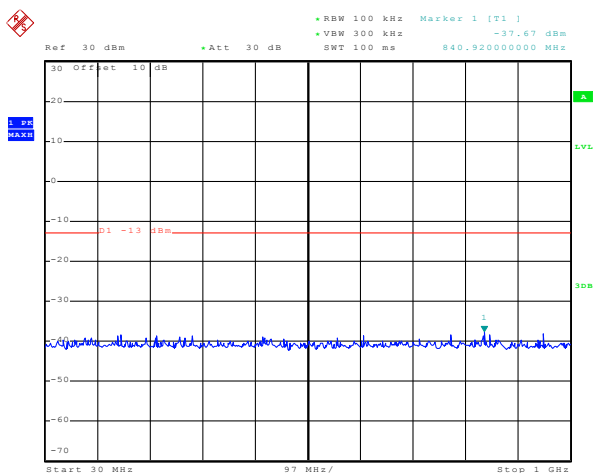
30MHz~1GHz



Date: 19.SEP.2015 10:19:14

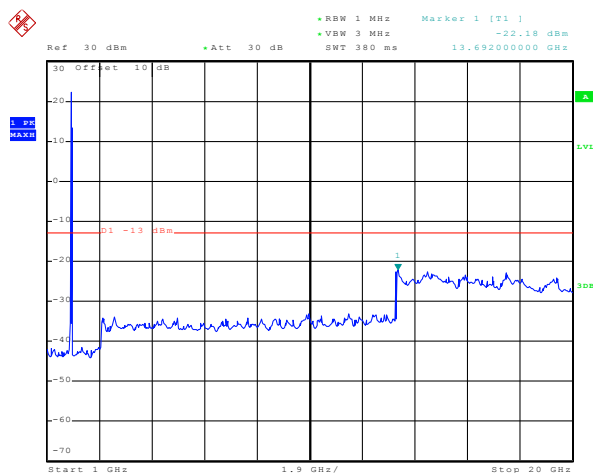
1GHz~20GHz

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



Date: 19.SEP.2015 10:24:05

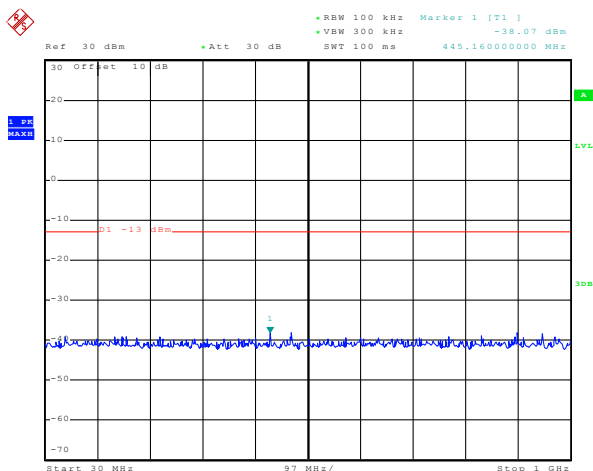
30MHz~1GHz



Date: 19.SEP.2015 10:27:19

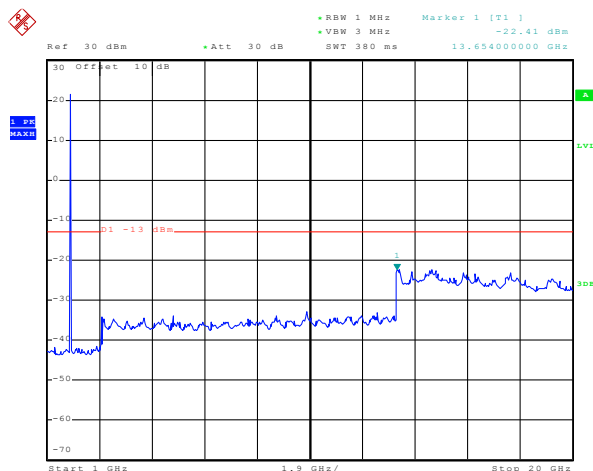
1GHz~20GHz

Test Mode:	LTE band 2(3MHz QPSK) RB Size 15 & RB Offset 0	Test Channel:	Lowest channel
------------	---	---------------	----------------



Date: 19.SEP.2015 10:13:35

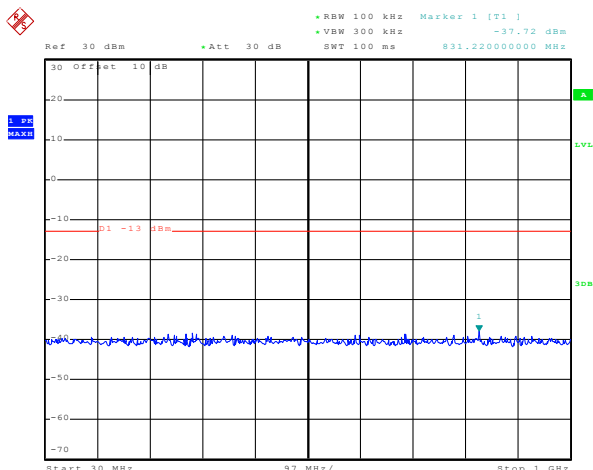
30MHz~1GHz



Date: 19.SEP.2015 10:15:10

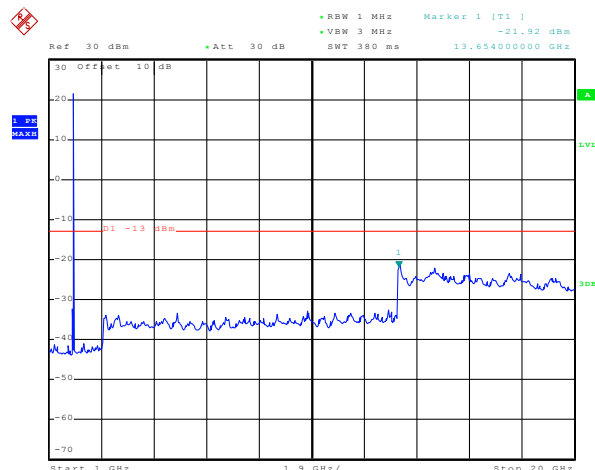
1GHz~20GHz

Test Mode:	LTE band 2(3MHz QPSK) RB Size 15 & RB Offset 0	Test Channel:	Middle channel
------------	---	---------------	----------------



Date: 19.SEP.2015 10:22:12

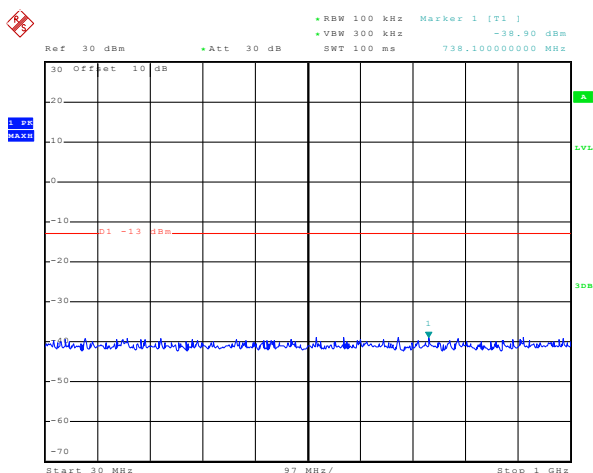
30MHz~1GHz



Date: 19.SEP.2015 10:19:42

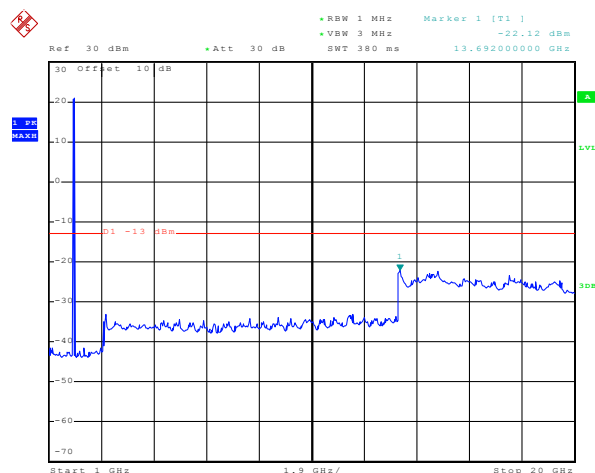
1GHz~20GHz

Test Mode:	LTE band 2(3MHz QPSK) RB Size 15 & RB Offset 0	Test Channel:	Highest channel
------------	---	---------------	-----------------



Date: 19.SEP.2015 10:24:19

30MHz~1GHz

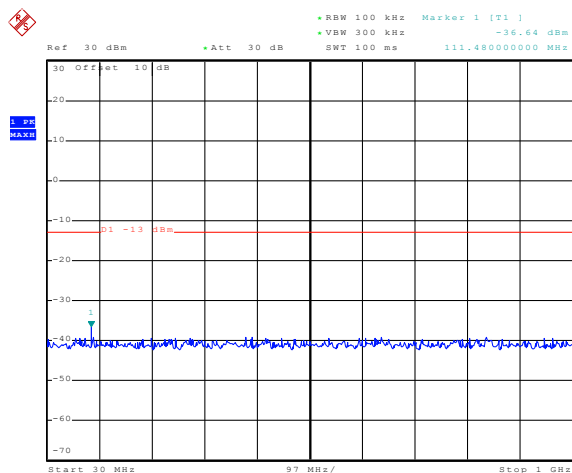


Date: 19.SEP.2015 10:27:45

1GHz~20GHz

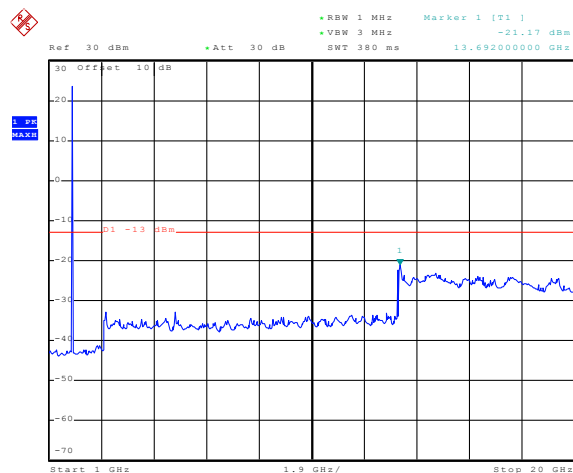
5MHz

Test Mode:	LTE band 2(5MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Lowest channel
------------	---	---------------	----------------



Date: 19.SEP.2015 10:33:28

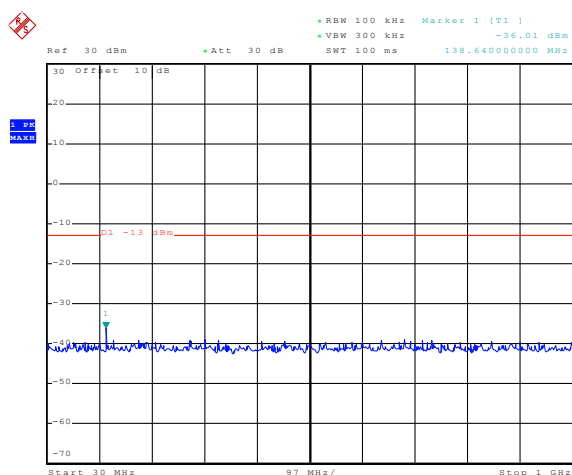
30MHz~1GHz



Date: 19.SEP.2015 10:29:40

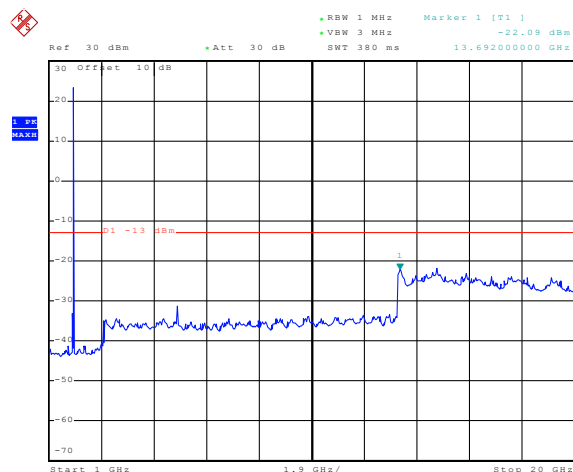
1GHz~20GHz

Test Mode:	LTE band 2(5MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Middle channel
------------	---	---------------	----------------



Date: 19.SEP.2015 10:34:51

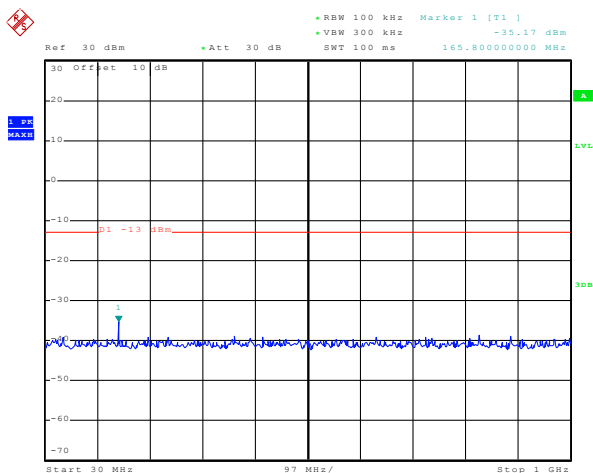
30MHz~1GHz



Date: 19.SEP.2015 10:39:15

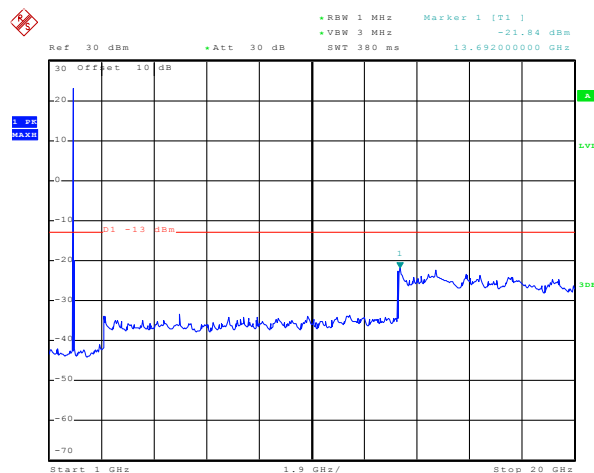
1GHz~20GHz

Test Mode:	LTE band 2(5MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Highest channel
------------	---	---------------	-----------------



Date: 19.SEP.2015 10:45:09

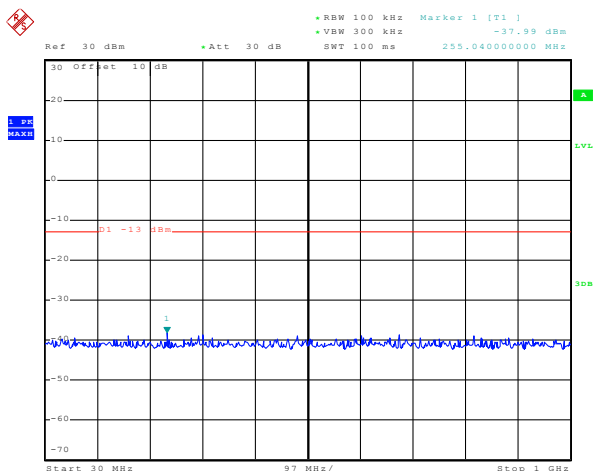
30MHz~1GHz



Date: 19.SEP.2015 10:41:40

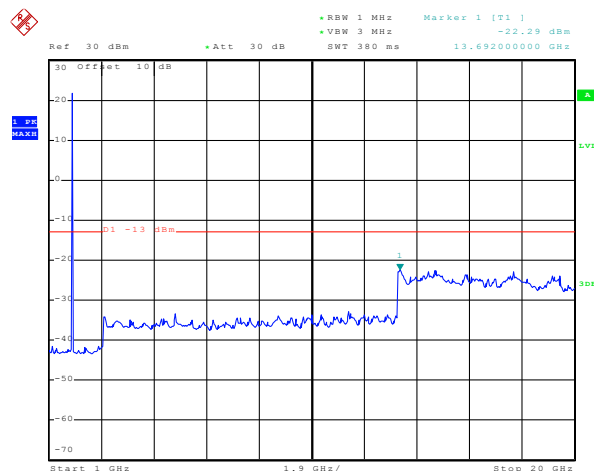
1GHz~20GHz

Test Mode:	LTE band 2(5MHz 16QAM) RB Size 12 & RB Offset 0	Test Channel:	Lowest channel
------------	--	---------------	----------------



Date: 19.SEP.2015 10:33:43

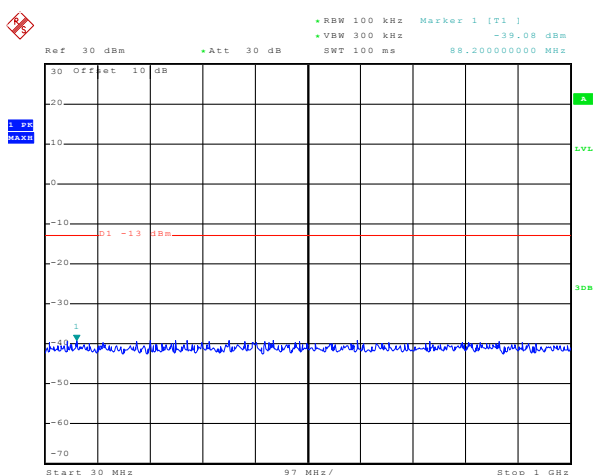
30MHz~1GHz



Date: 19.SEP.2015 10:30:09

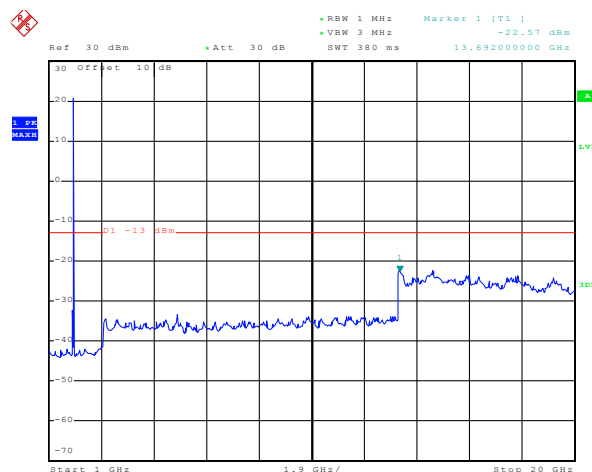
1GHz~20GHz

Test Mode:	LTE band 2(5MHz 16QAM) RB Size 12 & RB Offset 0	Test Channel:	Middle channel
------------	--	---------------	----------------



Date: 19.SEP.2015 10:35:05

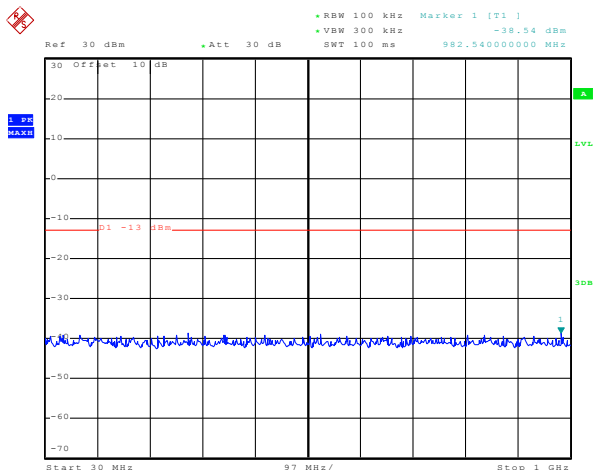
30MHz~1GHz



Date: 19.SEP.2015 10:39:36

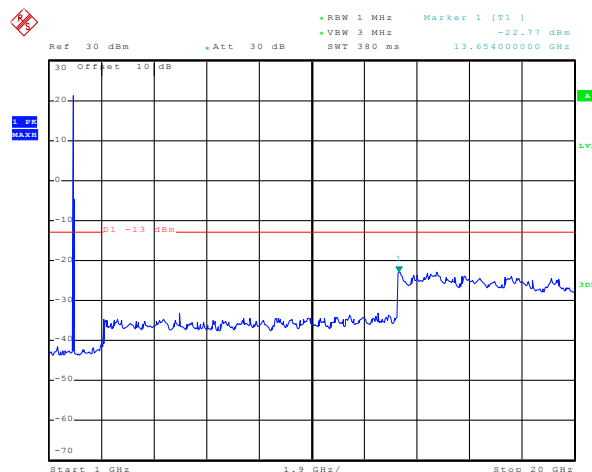
1GHz~20GHz

Test Mode:	LTE band 2(5MHz 16QAM) RB Size 12 & RB Offset 0	Test Channel:	Highest channel
------------	--	---------------	-----------------



Date: 19.SEP.2015 10:45:24

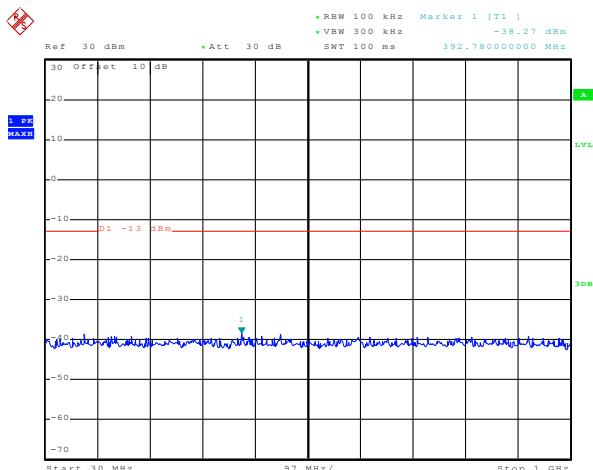
30MHz~1GHz



Date: 19.SEP.2015 10:42:09

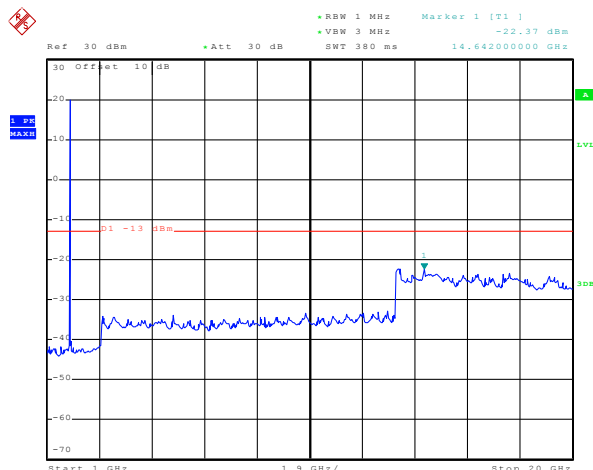
1GHz~20GHz

Test Mode:	LTE band 2(5MHz 16QAM) RB Size 25 & RB Offset 0	Test Channel:	Lowest channel
------------	--	---------------	----------------



Date: 19.SEP.2015 10:32:56

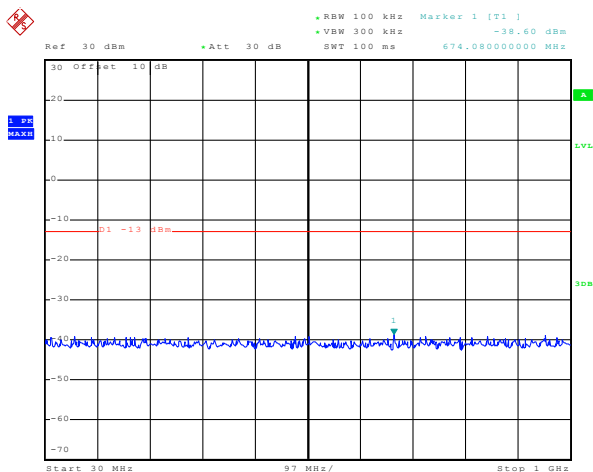
30MHz~1GHz



Date: 19.SEP.2015 10:31:17

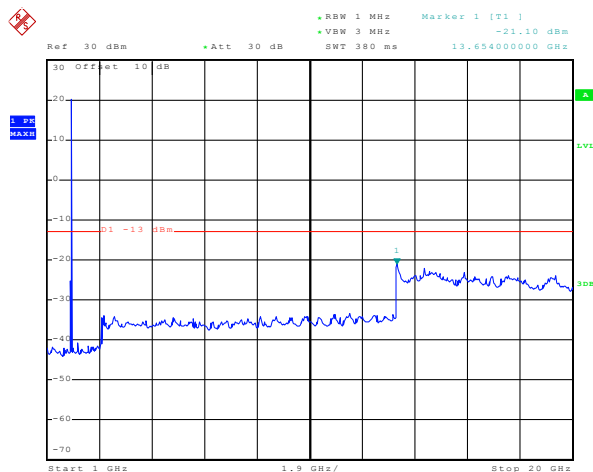
1GHz~20GHz

Test Mode:	LTE band 2(5MHz 16QAM) RB Size 25 & RB Offset 0	Test Channel:	Middle channel
------------	--	---------------	----------------



Date: 19.SEP.2015 10:37:13

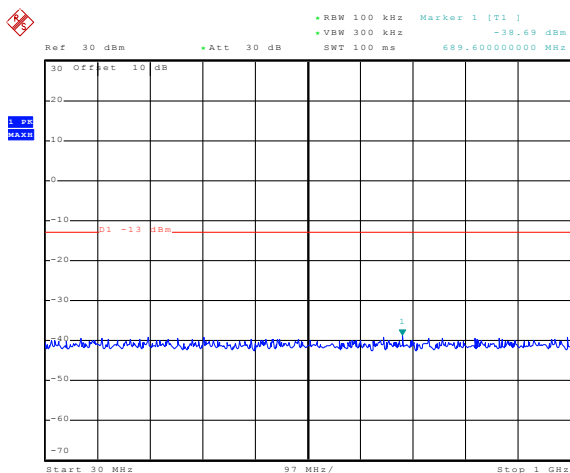
30MHz~1GHz



Date: 19.SEP.2015 10:37:47

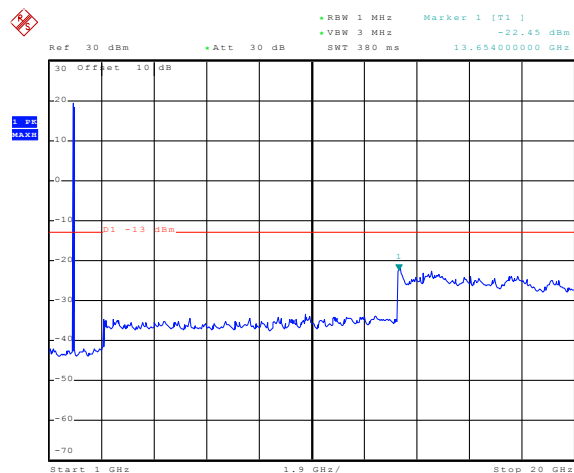
1GHz~20GHz

Test Mode:	LTE band 2(5MHz 16QAM) RB Size 25 & RB Offset 0	Test Channel:	Highest channel
------------	--	---------------	-----------------



Date: 19.SEP.2015 10:44:36

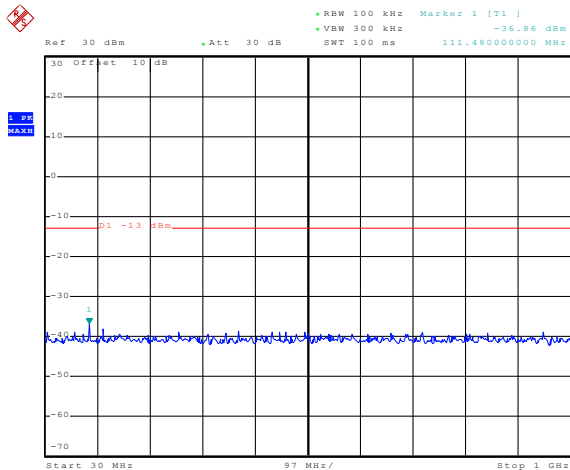
30MHz~1GHz



Date: 19.SEP.2015 10:43:25

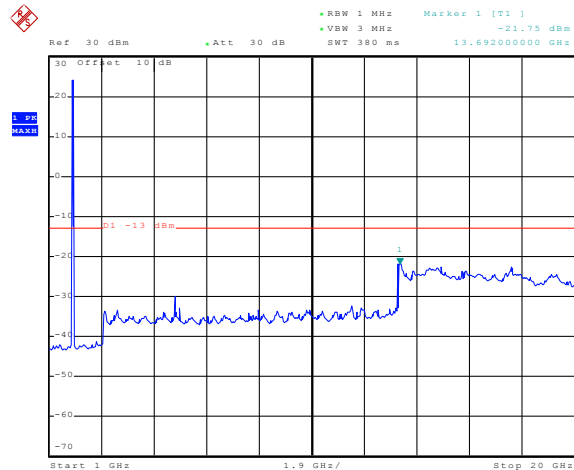
1GHz~20GHz

Test Mode:	LTE band 2(5MHz QPSK) RB Size 1 & RB Offset 0	Test Channel:	Lowest channel
------------	--	---------------	----------------



Date: 19.SEP.2015 10:33:13

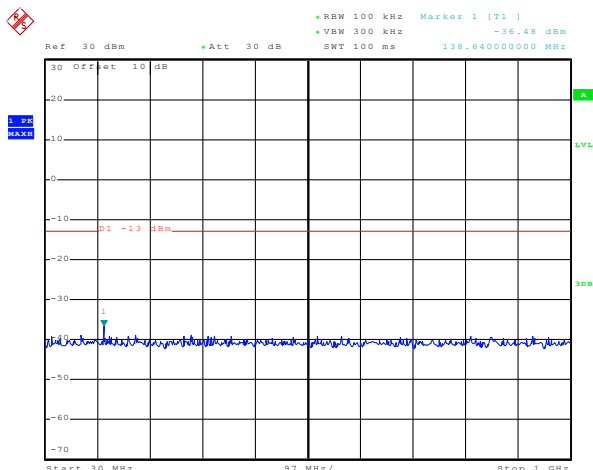
30MHz~1GHz



Date: 19.SEP.2015 10:29:02

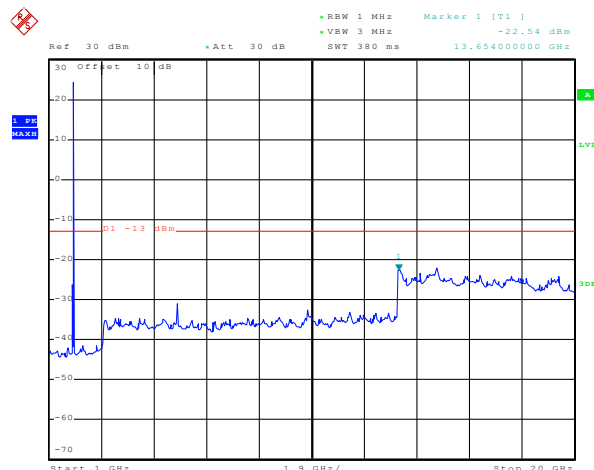
1GHz~20GHz

Test Mode:	LTE band 2(5MHz QPSK) RB Size 1 & RB Offset 0	Test Channel:	Middle channel
------------	--	---------------	----------------



Date: 19.SEP.2015 10:34:38

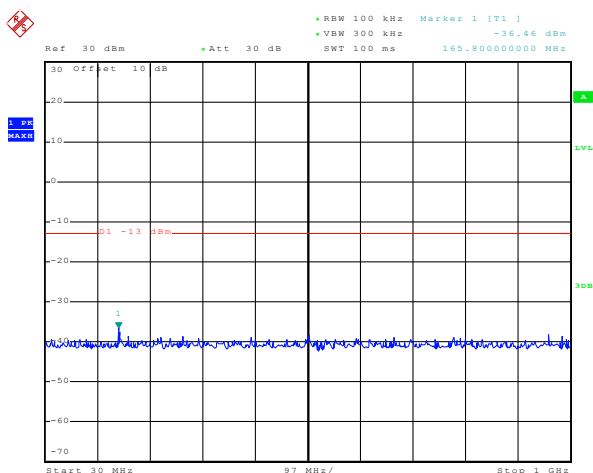
30MHz~1GHz



Date: 19.SEP.2015 10:38:46

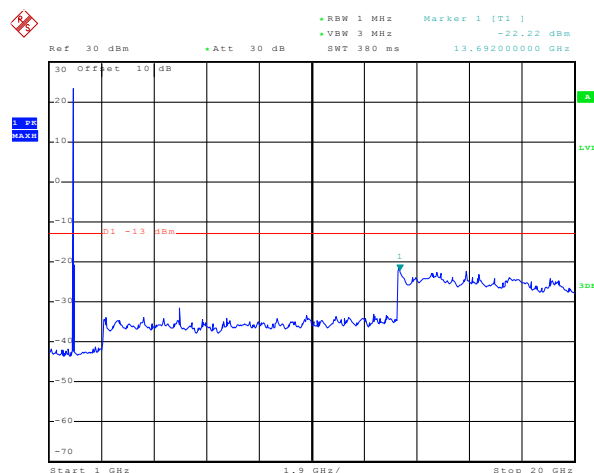
1GHz~20GHz

Test Mode:	LTE band 2(5MHz QPSK) RB Size 1 & RB Offset 0	Test Channel:	Highest channel
------------	--	---------------	-----------------



Date: 19.SEP.2015 10:44:54

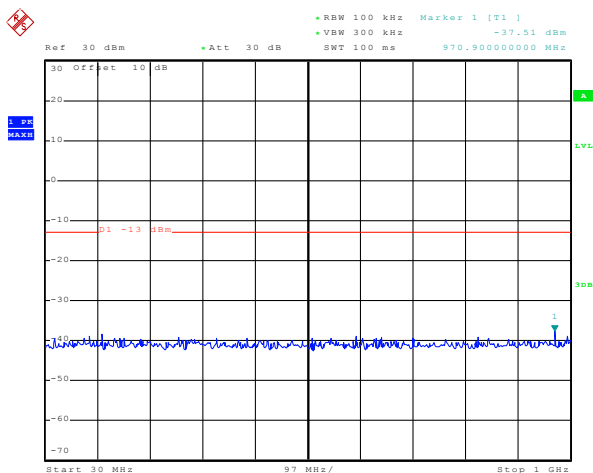
30MHz~1GHz



Date: 19.SEP.2015 10:41:20

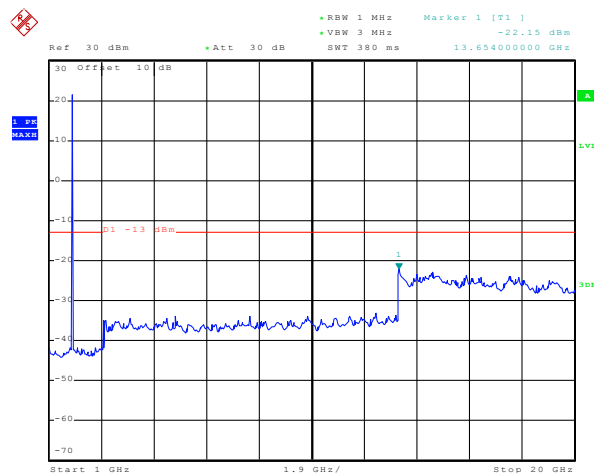
1GHz~20GHz

Test Mode:	LTE band 2(5MHz QPSK) RB Size 12 & RB Offset 0	Test Channel:	Lowest channel
------------	---	---------------	----------------



Date: 19.SEP.2015 10:33:57

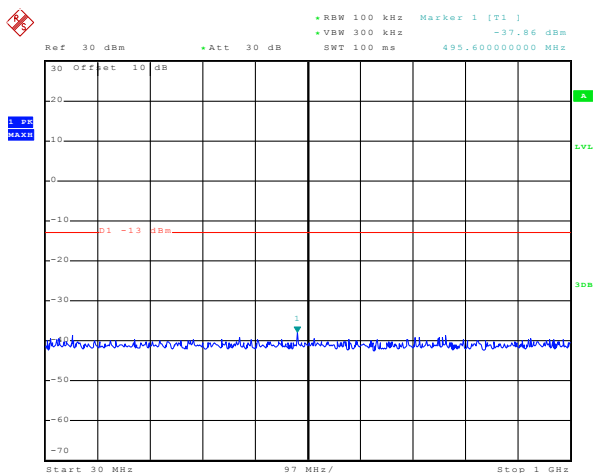
30MHz~1GHz



Date: 19.SEP.2015 10:30:29

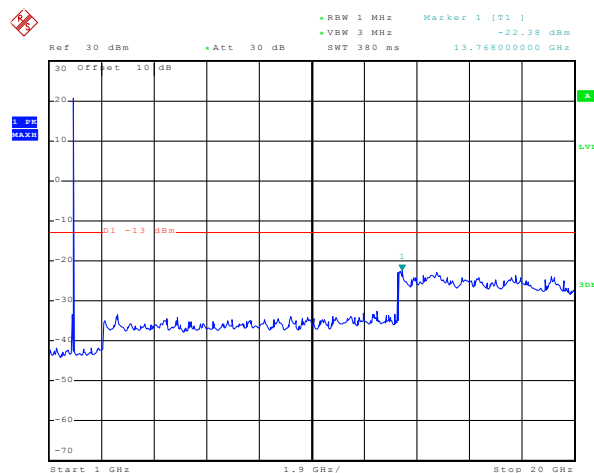
1GHz~20GHz

Test Mode:	LTE band 2(5MHz QPSK) RB Size 12 & RB Offset 0	Test Channel:	Middle channel
------------	---	---------------	----------------



Date: 19.SEP.2015 10:35:22

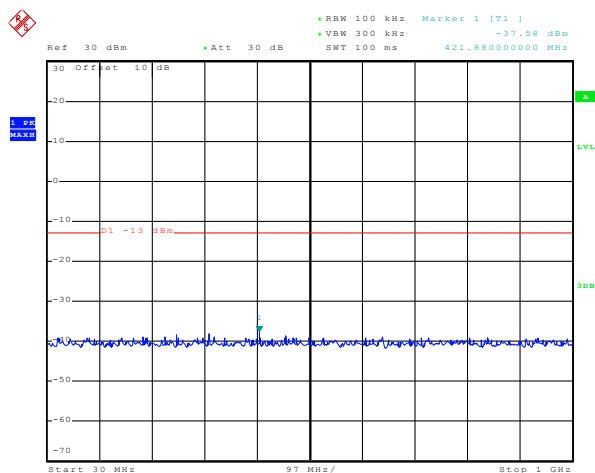
30MHz~1GHz



Date: 19.SEP.2015 10:39:56

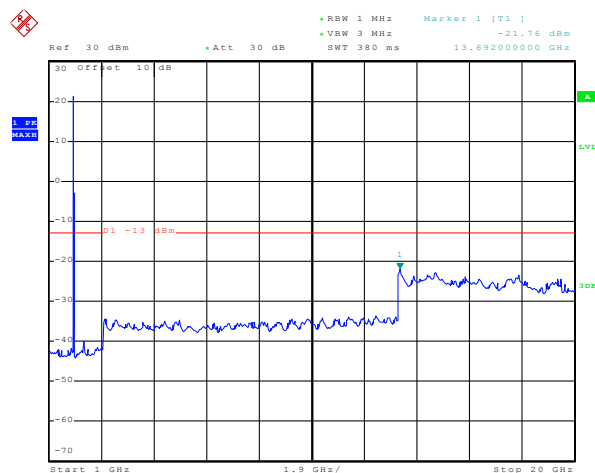
1GHz~20GHz

Test Mode:	LTE band 2(5MHz QPSK) RB Size 12 & RB Offset 0	Test Channel:	Highest channel
------------	---	---------------	-----------------



Date: 19.SEP.2015 10:45:51

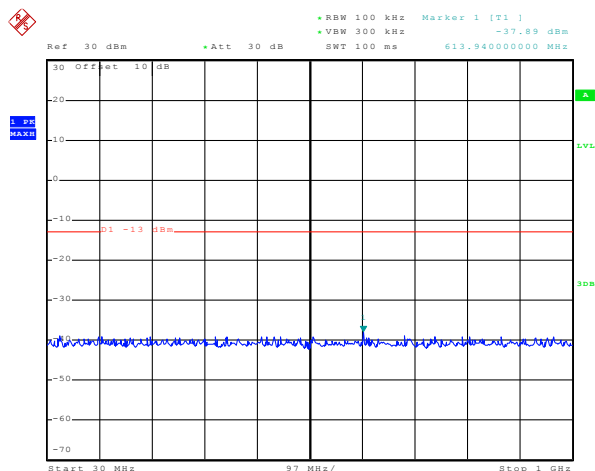
30MHz~1GHz



Date: 19.SEP.2015 10:42:33

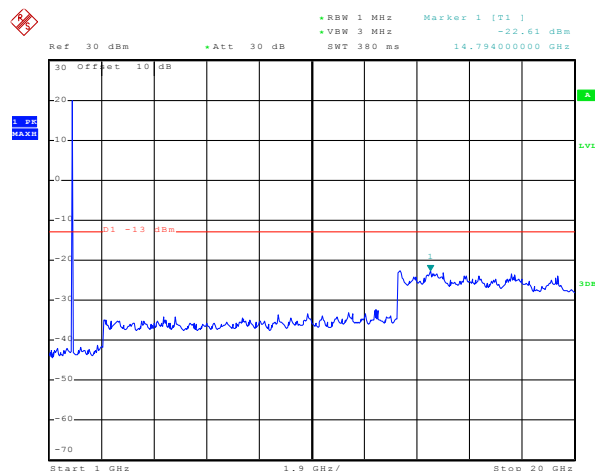
1GHz~20GHz

Test Mode:	LTE band 2(5MHz QPSK) RB Size 25 & RB Offset 0	Test Channel:	Lowest channel
------------	---	---------------	----------------



Date: 19.SEP.2015 10:32:39

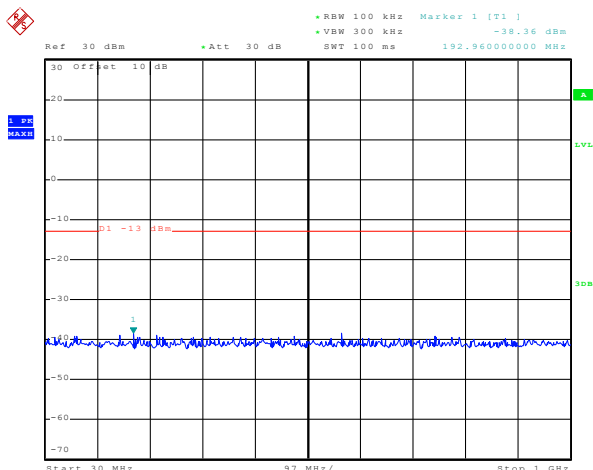
30MHz~1GHz



Date: 19.SEP.2015 10:32:08

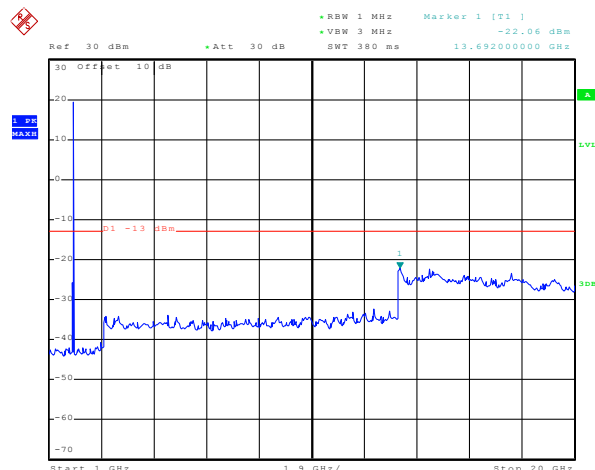
1GHz~20GHz

Test Mode:	LTE band 2(5MHz QPSK) RB Size 25 & RB Offset 0	Test Channel:	Middle channel
------------	---	---------------	----------------



Date: 19.SEP.2015 10:35:36

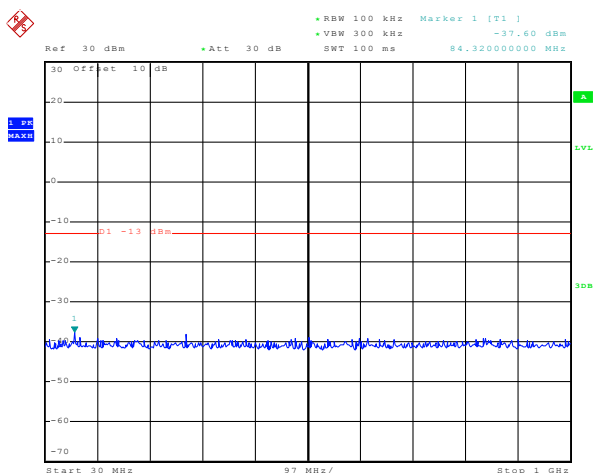
30MHz~1GHz



Date: 19.SEP.2015 10:40:29

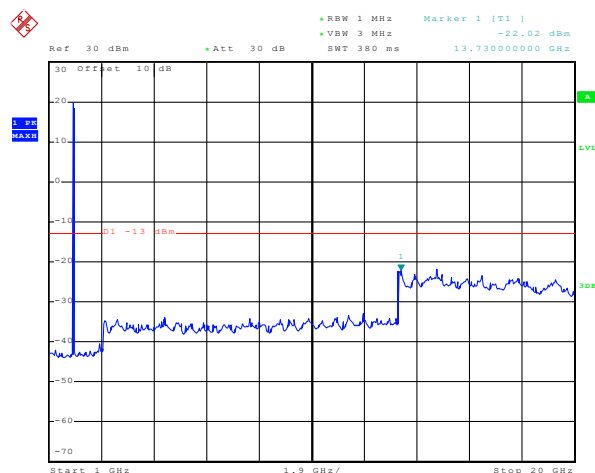
1GHz~20GHz

Test Mode:	LTE band 2(5MHz QPSK) RB Size 25 & RB Offset 0	Test Channel:	Highest channel
------------	---	---------------	-----------------



Date: 19.SEP.2015 10:46:07

30MHz~1GHz

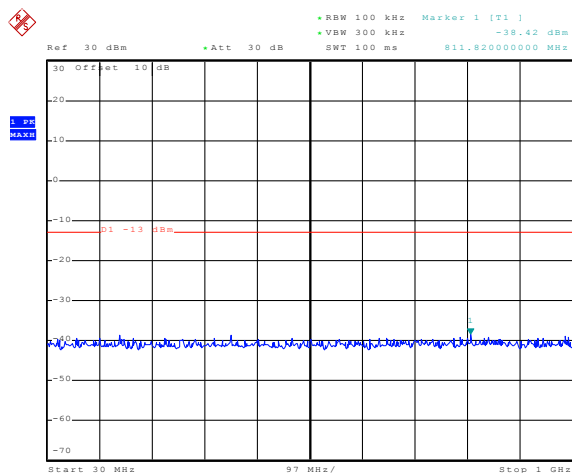


Date: 19.SEP.2015 10:43:56

1GHz~20GHz

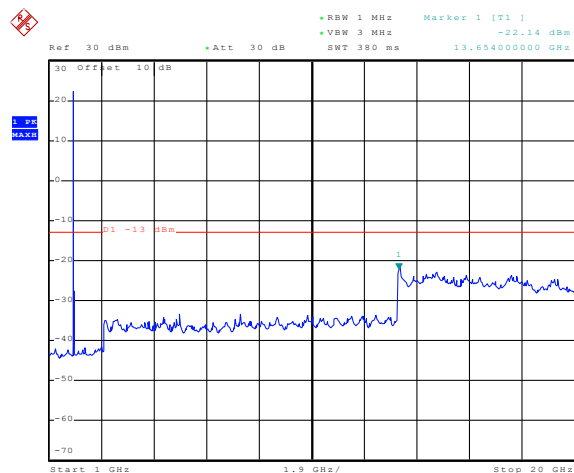
10MHz

Test Mode:	LTE band 2(10MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Lowest channel
------------	--	---------------	----------------



Date: 19.SEP.2015 10:53:02

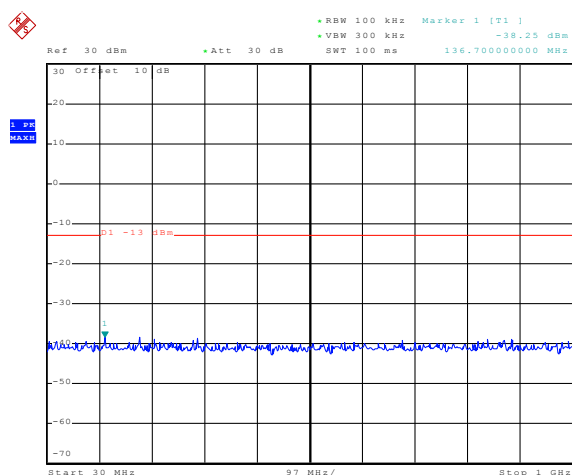
30MHz~1GHz



Date: 19.SEP.2015 10:55:48

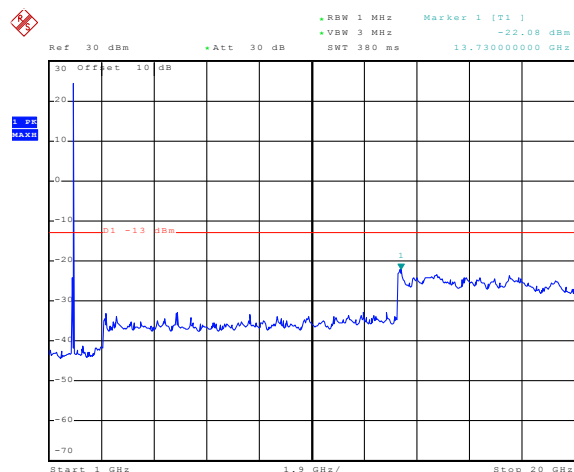
1GHz~20GHz

Test Mode:	LTE band 2(10MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Middle channel
------------	--	---------------	----------------



Date: 19.SEP.2015 11:00:37

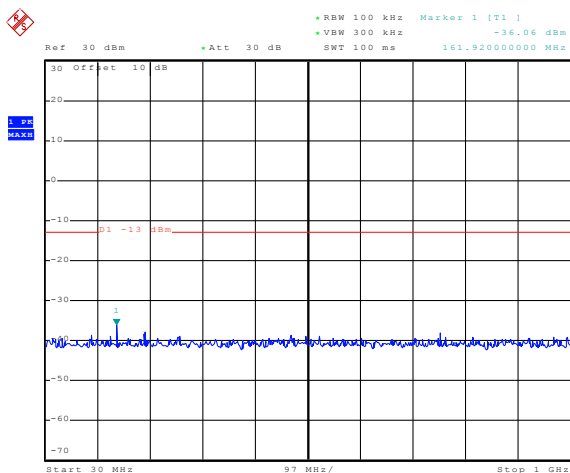
30MHz~1GHz



Date: 19.SEP.2015 10:57:47

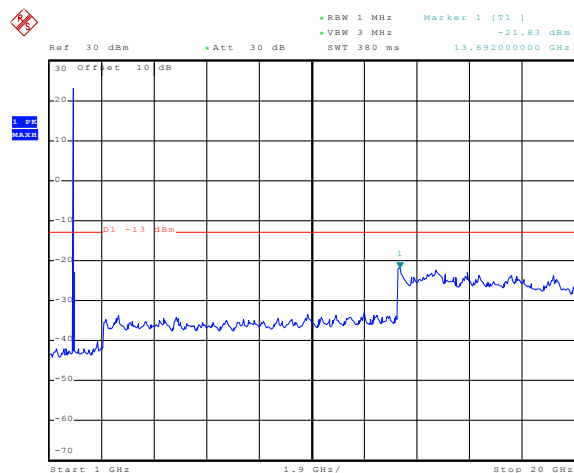
1GHz~20GHz

Test Mode:	LTE band 2(10MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Highest channel
------------	--	---------------	-----------------



Date: 19.SEP.2015 11:02:40

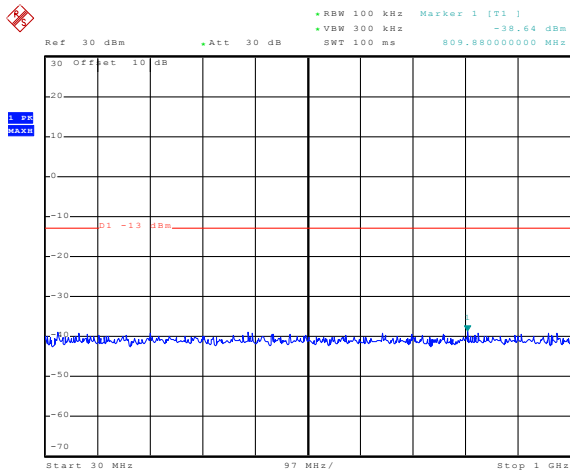
30MHz~1GHz



Date: 19.SEP.2015 11:07:33

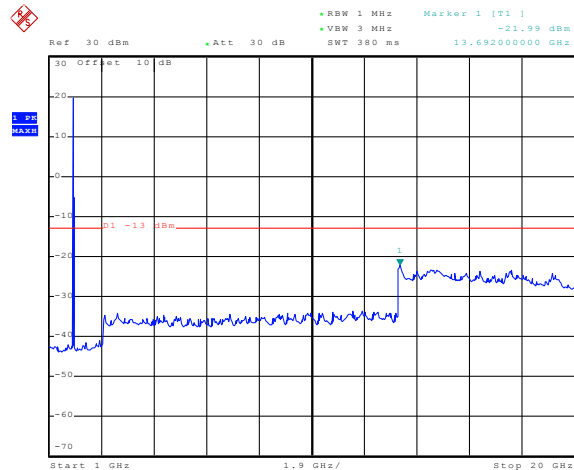
1GHz~20GHz

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



Date: 19.SEP.2015 10:53:20

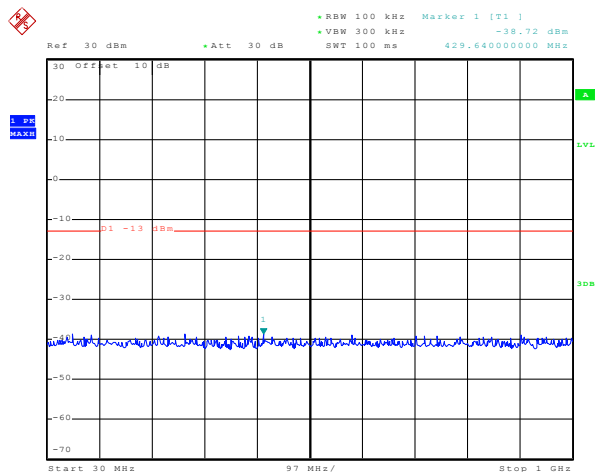
30MHz~1GHz



Date: 19.SEP.2015 10:56:14

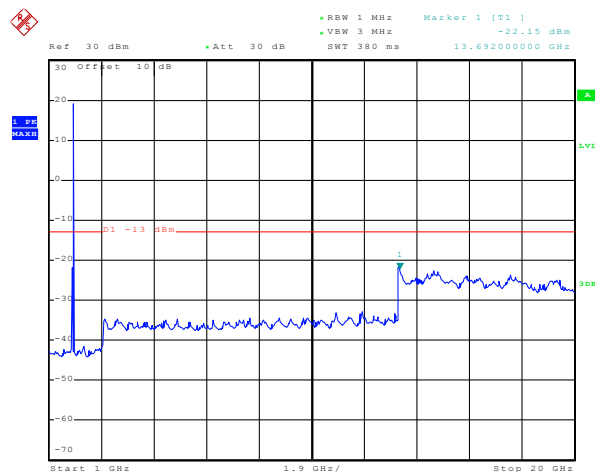
1GHz~20GHz

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



Date: 19.SEP.2015 11:00:50

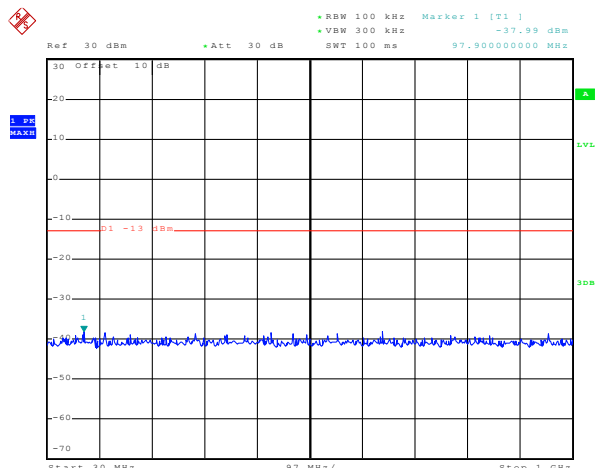
30MHz~1GHz



Date: 19.SEP.2015 10:58:09

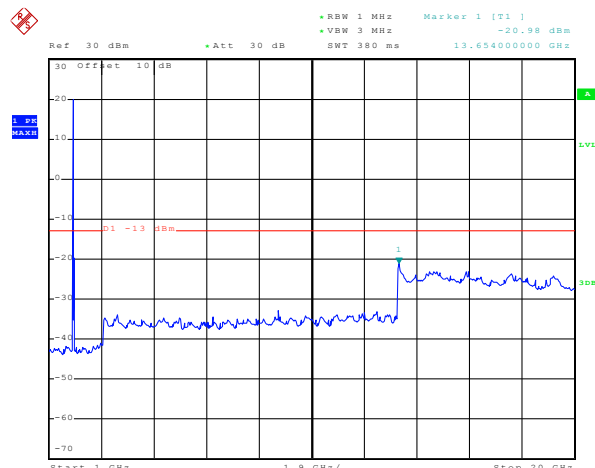
1GHz~20GHz

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



Date: 19.SEP.2015 11:03:02

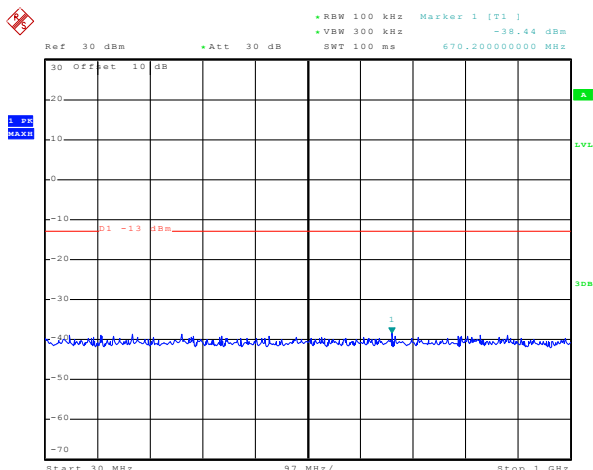
30MHz~1GHz



Date: 19.SEP.2015 11:08:07

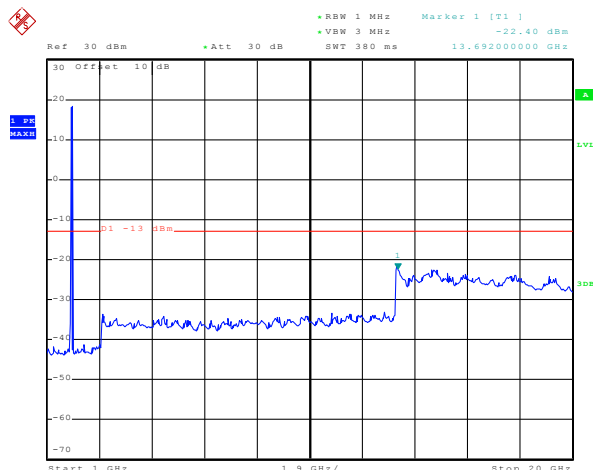
1GHz~20GHz

Test Mode:	LTE band 2(10MHz 16QAM) RB Size 50 & RB Offset 0	Test Channel:	Lowest channel
------------	---	---------------	----------------



Date: 19.SEP.2015 10:54:08

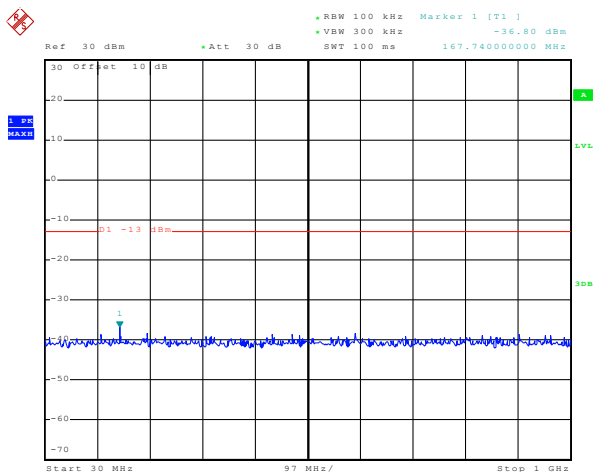
30MHz~1GHz



Date: 19.SEP.2015 10:54:37

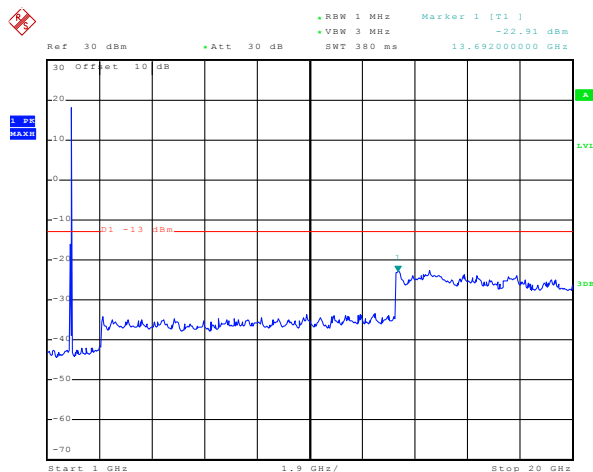
1GHz~20GHz

Test Mode:	LTE band 2(10MHz 16QAM) RB Size 50 & RB Offset 0	Test Channel:	Middle channel
------------	---	---------------	----------------



Date: 19.SEP.2015 10:59:56

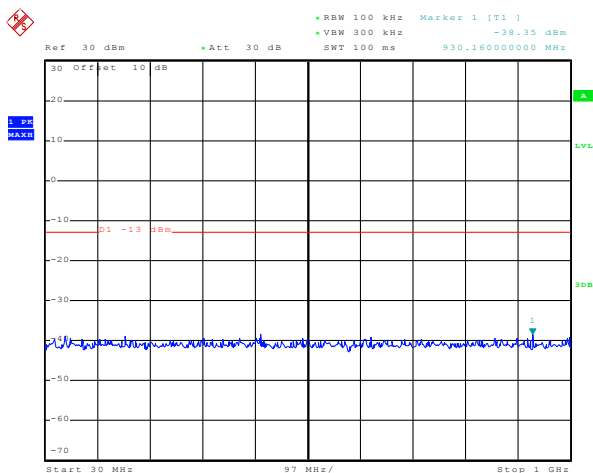
30MHz~1GHz



Date: 19.SEP.2015 10:59:22

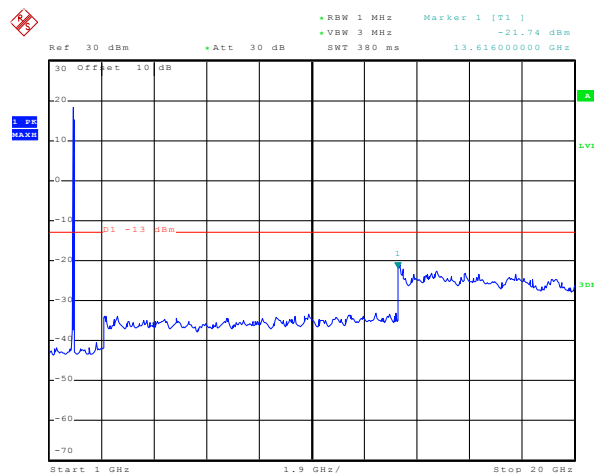
1GHz~20GHz

Test Mode:	LTE band 2(10MHz 16QAM) RB Size 50 & RB Offset 0	Test Channel:	Highest channel
------------	---	---------------	-----------------



Date: 19.SEP.2015 11:03:47

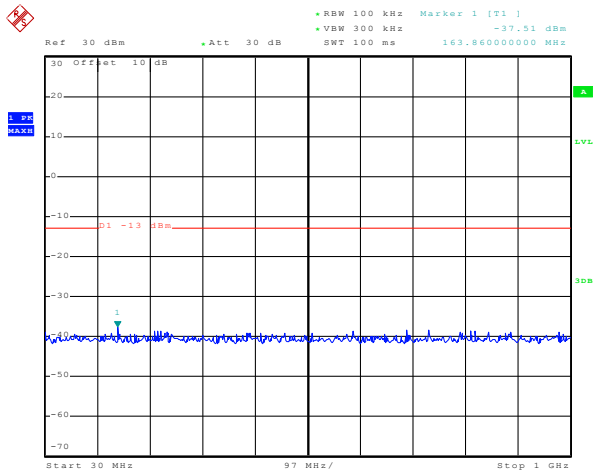
30MHz~1GHz



Date: 19.SEP.2015 11:04:42

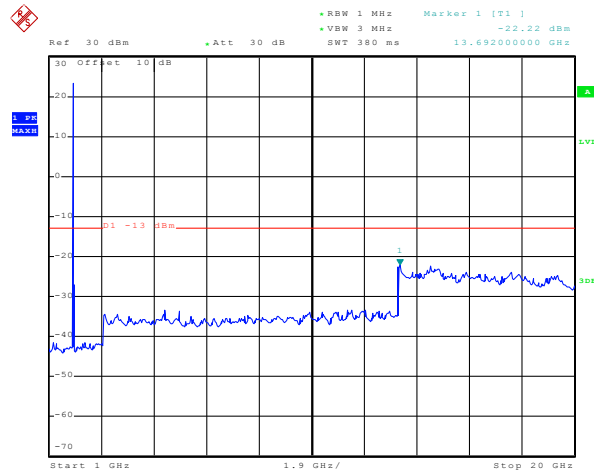
1GHz~20GHz

Test Mode:	LTE band 2(10MHz QPSK) RB Size 1 & RB Offset 0	Test Channel:	Lowest channel
------------	---	---------------	----------------



Date: 19.SEP.2015 10:52:20

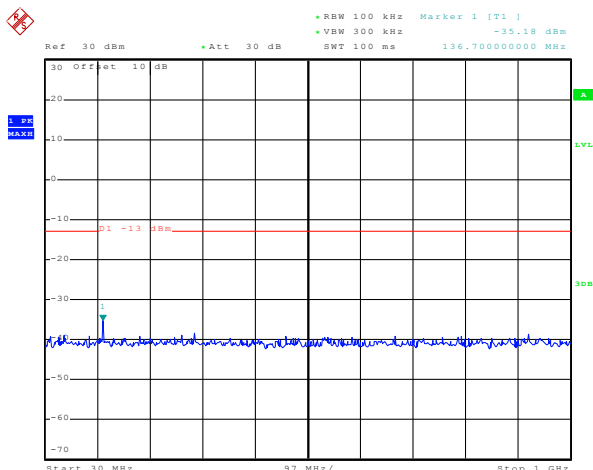
30MHz~1GHz



Date: 19.SEP.2015 10:55:28

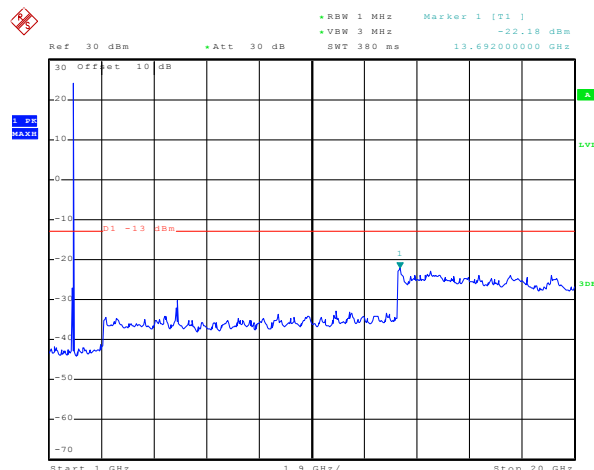
1GHz~20GHz

Test Mode:	LTE band 2(10MHz QPSK) RB Size 1 & RB Offset 0	Test Channel:	Middle channel
------------	---	---------------	----------------



Date: 19.SEP.2015 11:00:24

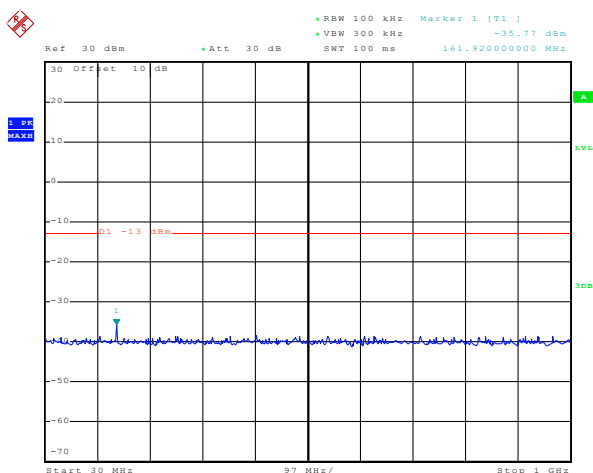
30MHz~1GHz



Date: 19.SEP.2015 10:57:21

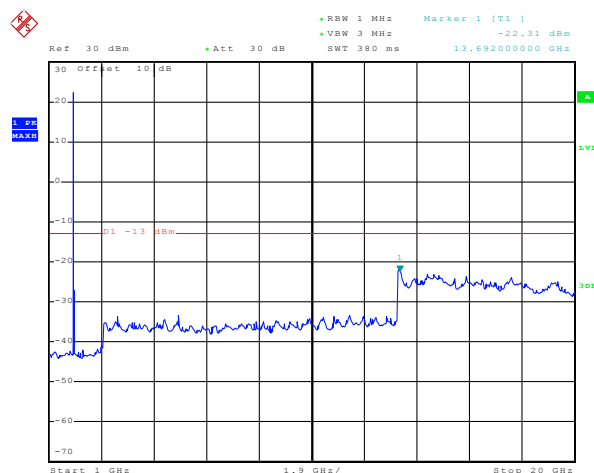
1GHz~20GHz

Test Mode:	LTE band 2(10MHz QPSK) RB Size 1 & RB Offset 0	Test Channel:	Highest channel
------------	---	---------------	-----------------



Date: 19.SEP.2015 11:02:21

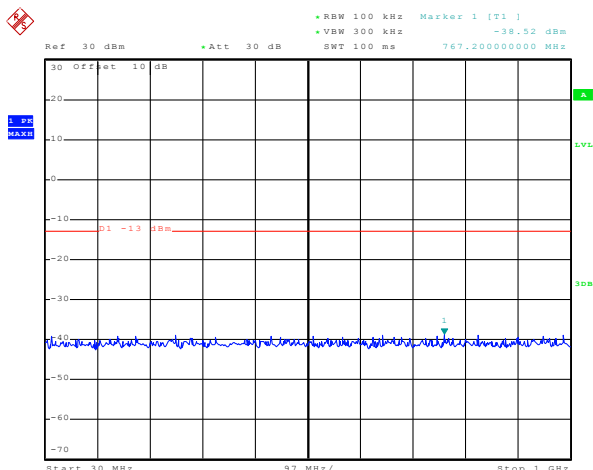
30MHz~1GHz



Date: 19.SEP.2015 11:07:04

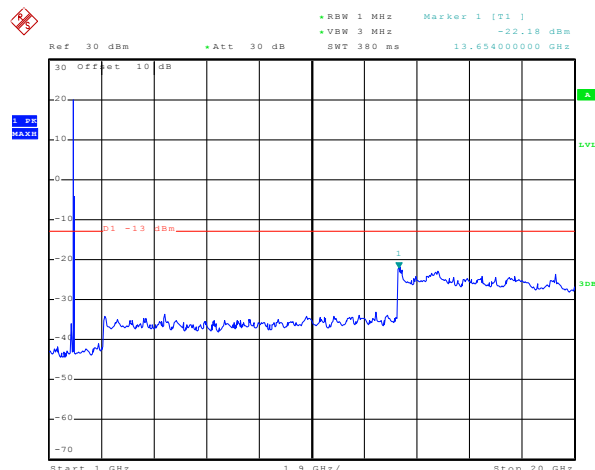
1GHz~20GHz

Test Mode:	LTE band 2(10MHz QPSK) RB Size 25 & RB Offset 0	Test Channel:	Lowest channel
------------	--	---------------	----------------



Date: 19.SEP.2015 10:53:35

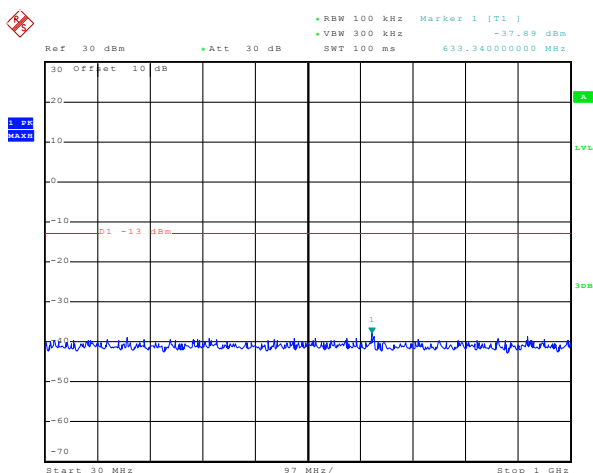
30MHz~1GHz



Date: 19.SEP.2015 10:56:33

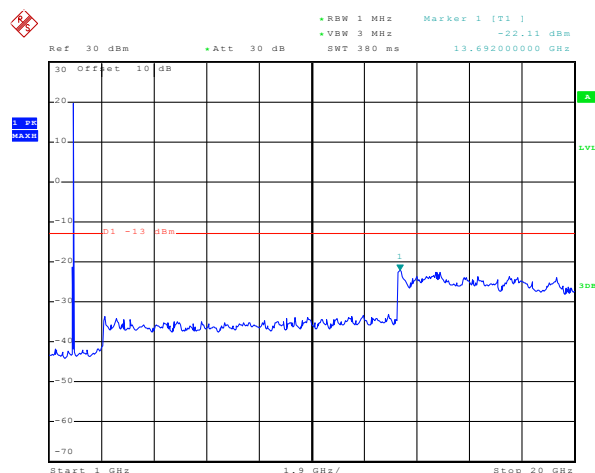
1GHz~20GHz

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



Date: 19.SEP.2015 11:01:02

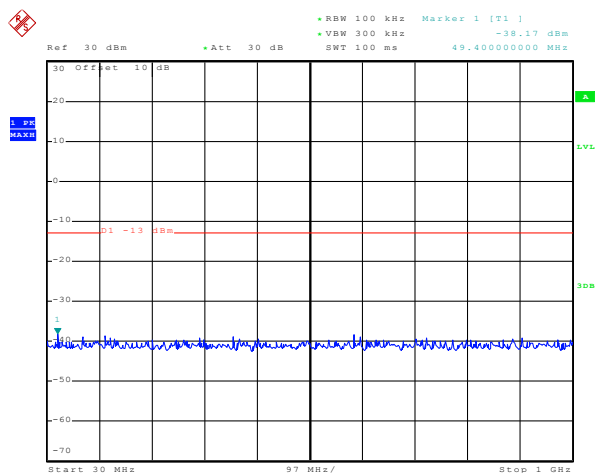
30MHz~1GHz



Date: 19.SEP.2015 10:58:40

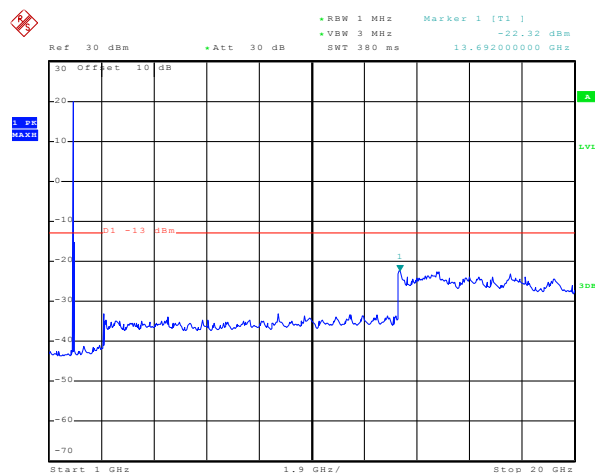
1GHz~20GHz

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



Date: 19.SEP.2015 11:03:22

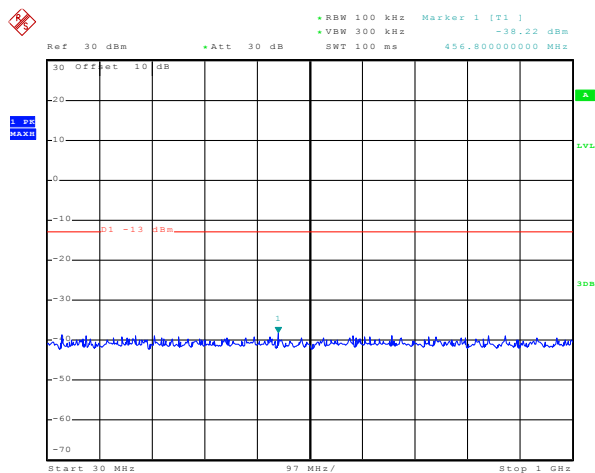
30MHz~1GHz



Date: 19.SEP.2015 11:08:40

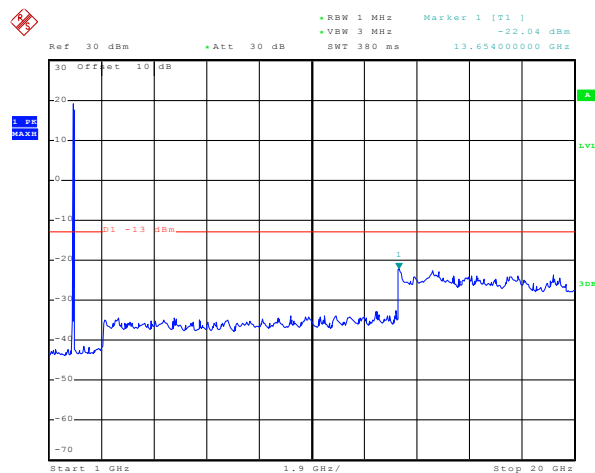
1GHz~20GHz

Test Mode:	LTE band 2(10MHz QPSK) RB Size 50 & RB Offset 0	Test Channel:	Lowest channel
------------	--	---------------	----------------



Date: 19.SEP.2015 10:53:51

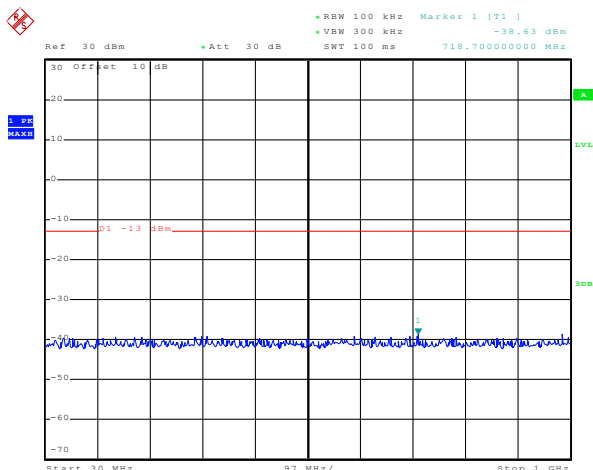
30MHz~1GHz



Date: 19.SEP.2015 10:54:59

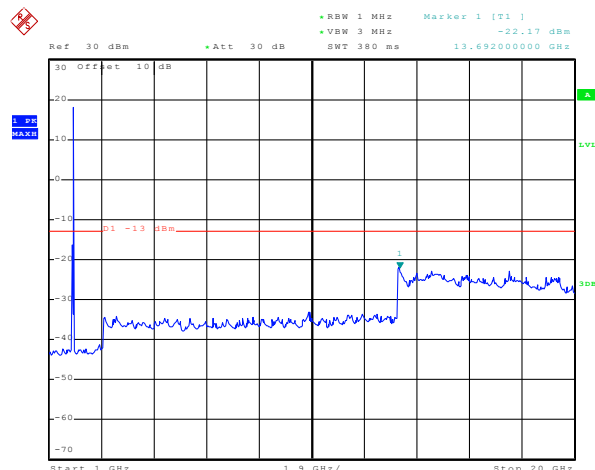
1GHz~20GHz

Test Mode:	LTE band 2(10MHz QPSK) RB Size 50 & RB Offset 0	Test Channel:	Middle channel
------------	--	---------------	----------------



Date: 19.SEP.2015 11:00:09

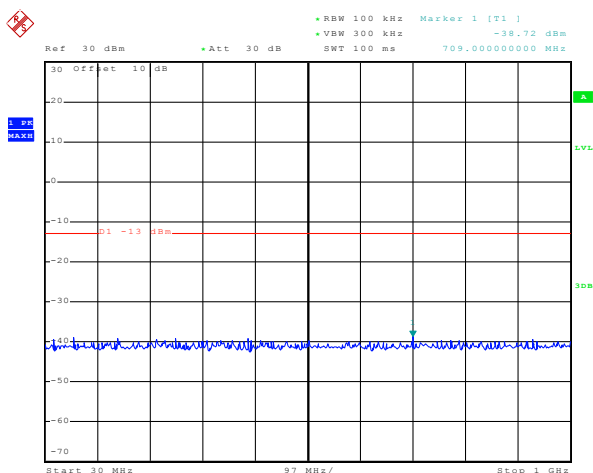
30MHz~1GHz



Date: 19.SEP.2015 10:59:02

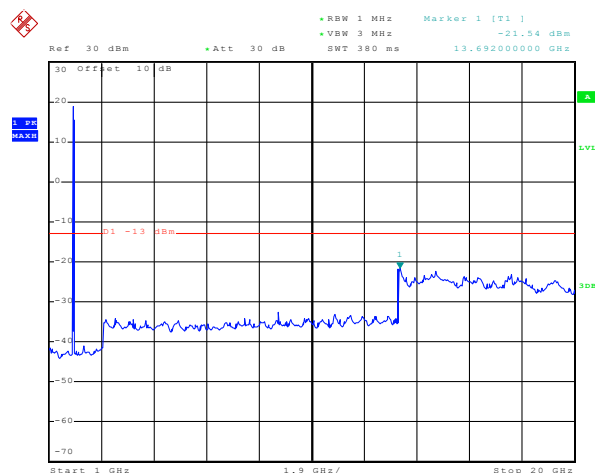
1GHz~20GHz

Test Mode:	LTE band 2(10MHz QPSK) RB Size 50 & RB Offset 0	Test Channel:	Highest channel
------------	--	---------------	-----------------



Date: 19.SEP.2015 11:03:34

30MHz~1GHz

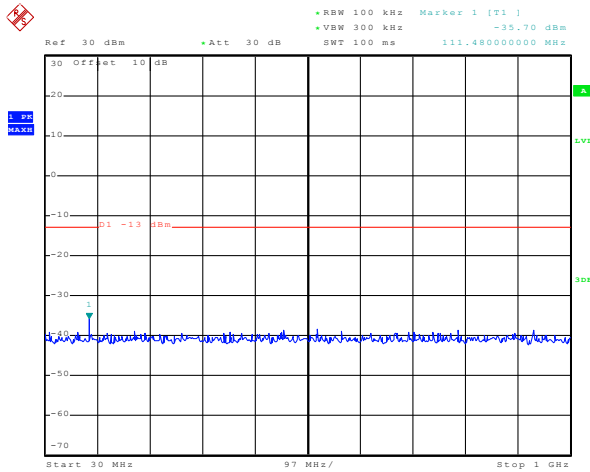


Date: 19.SEP.2015 11:06:48

1GHz~20GHz

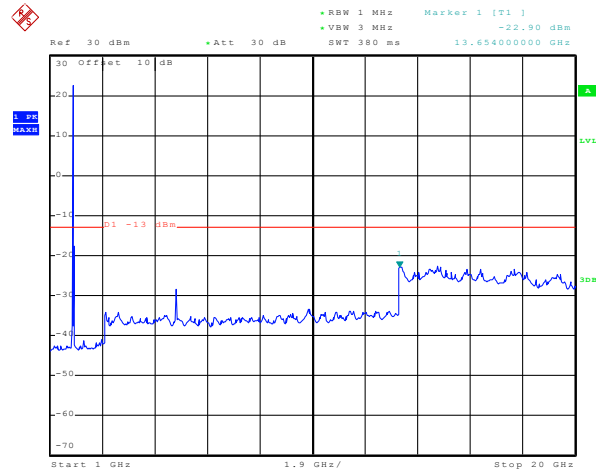
15MHz

Test Mode:	LTE band 2(15MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Lowest channel
------------	--	---------------	----------------



Date: 19.SEP.2015 11:12:52

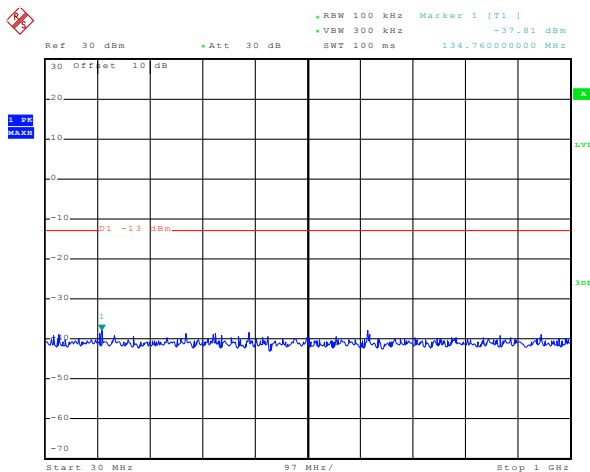
30MHz~1GHz



Date: 19.SEP.2015 11:10:13

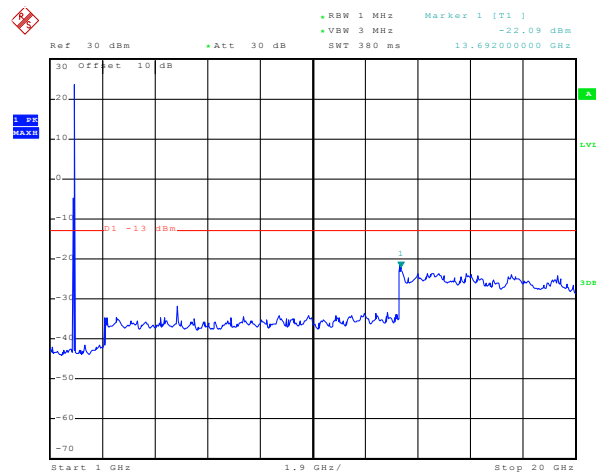
1GHz~20GHz

Test Mode:	LTE band 2(15MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Middle channel
------------	--	---------------	----------------



Date: 19.SEP.2015 11:14:30

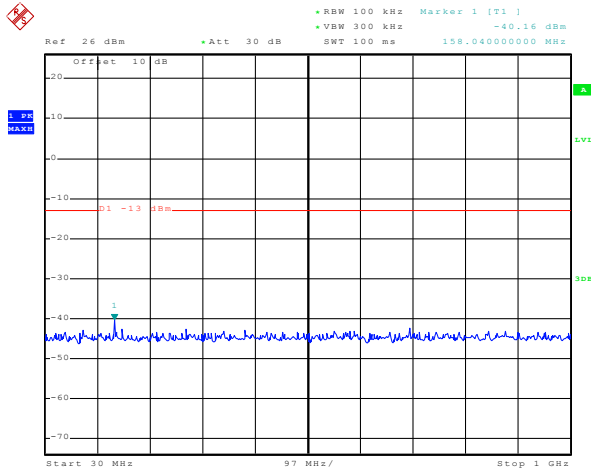
30MHz~1GHz



Date: 19.SEP.2015 11:17:15

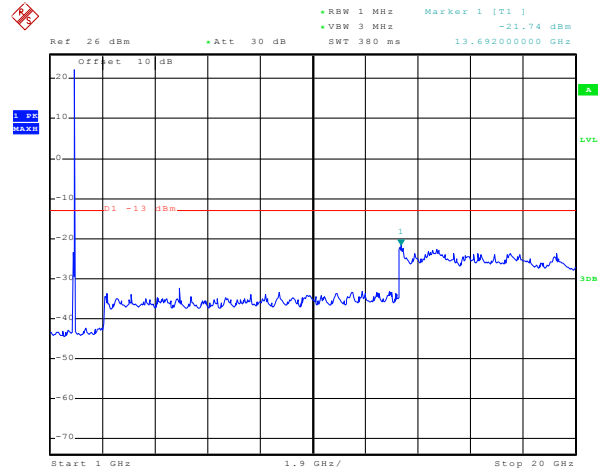
1GHz~20GHz

Test Mode:	LTE band 2(15MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Highest channel
------------	--	---------------	-----------------



Date: 19.SEP.2015 11:35:06

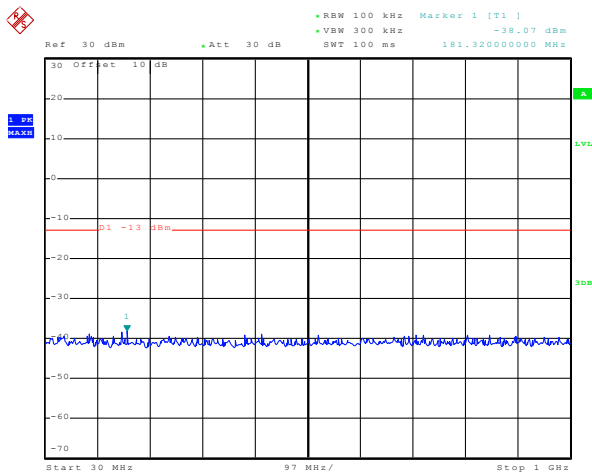
30MHz~1GHz



Date: 19.SEP.2015 11:39:48

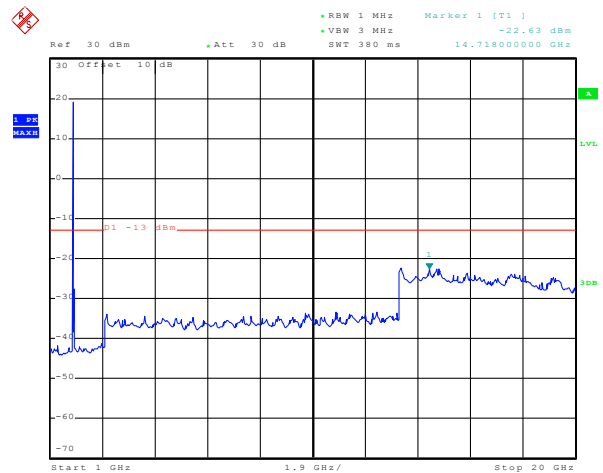
1GHz~20GHz

Test Mode:	LTE band 2(15MHz 16QAM) RB Size 36 & RB Offset 0	Test Channel:	Lowest channel
------------	---	---------------	----------------



Date: 19.SEP.2015 11:13:07

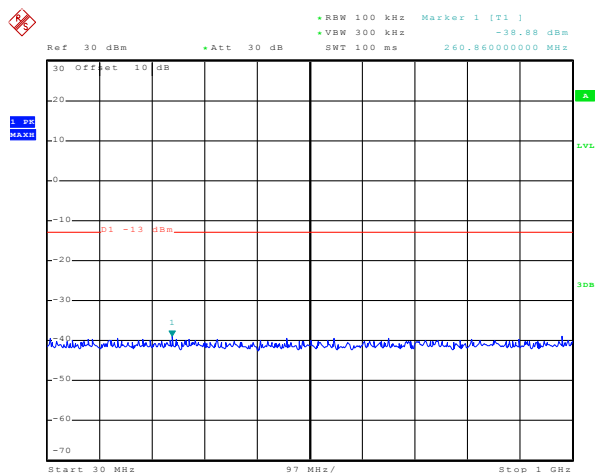
30MHz~1GHz



Date: 19.SEP.2015 11:10:38

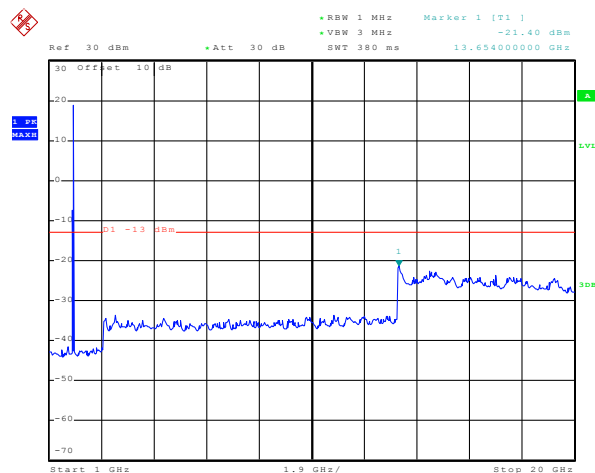
1GHz~20GHz

Test Mode:	LTE band 2(15MHz 16QAM) RB Size 36 & RB Offset 0	Test Channel:	Middle channel
------------	---	---------------	----------------



Date: 19.SEP.2015 11:14:42

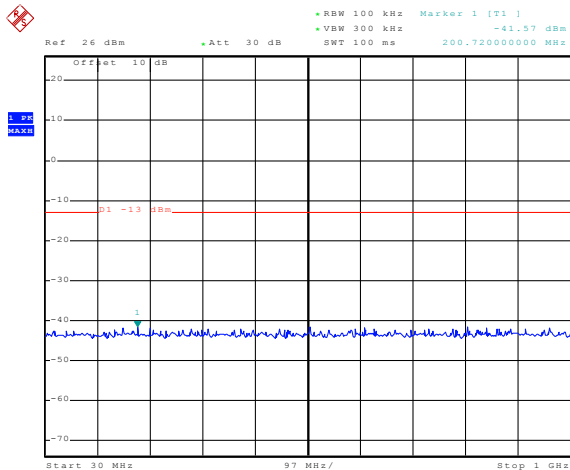
30MHz~1GHz



Date: 19.SEP.2015 11:17:38

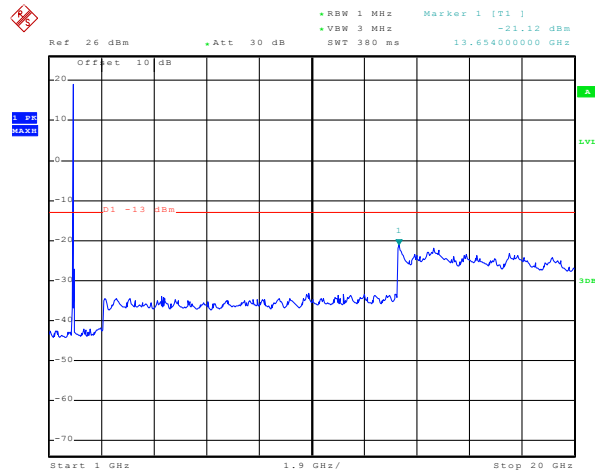
1GHz~20GHz

Test Mode:	LTE band 2(15MHz 16QAM) RB Size 36 & RB Offset 0	Test Channel:	Highest channel
------------	---	---------------	-----------------



Date: 19.SEP.2015 11:37:04

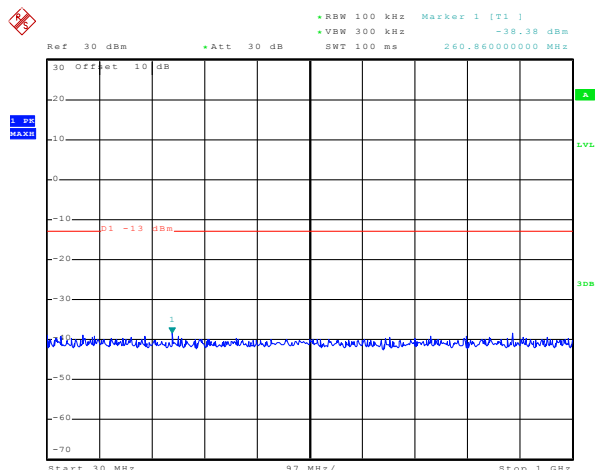
30MHz~1GHz



Date: 19.SEP.2015 11:40:32

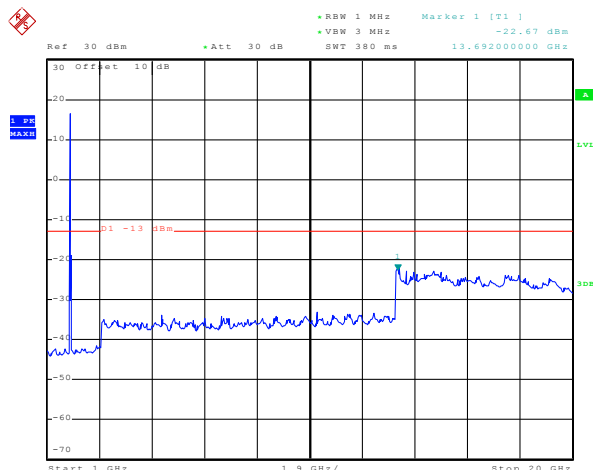
1GHz~20GHz

Test Mode:	LTE band 2(15MHz 16QAM) RB Size 75 & RB Offset 0	Test Channel:	Lowest channel
------------	---	---------------	----------------



Date: 19.SEP.2015 11:12:13

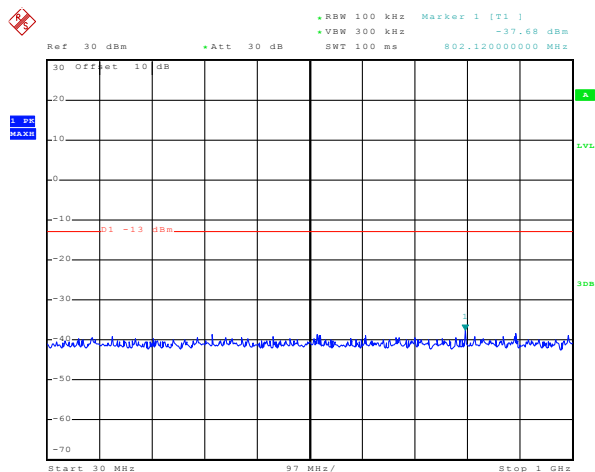
30MHz~1GHz



Date: 19.SEP.2015 11:11:49

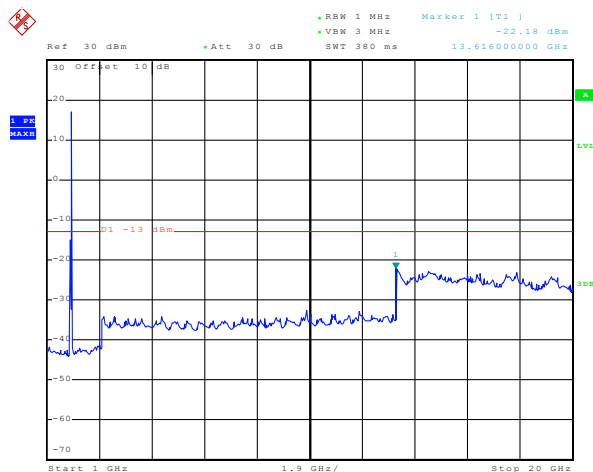
1GHz~20GHz

Test Mode:	LTE band 2(15MHz 16QAM) RB Size 75 & RB Offset 0	Test Channel:	Middle channel
------------	---	---------------	----------------



Date: 19.SEP.2015 11:15:28

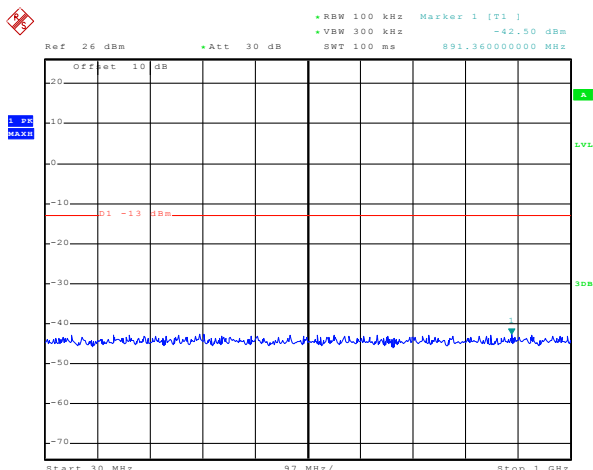
30MHz~1GHz



Date: 19.SEP.2015 11:16:03

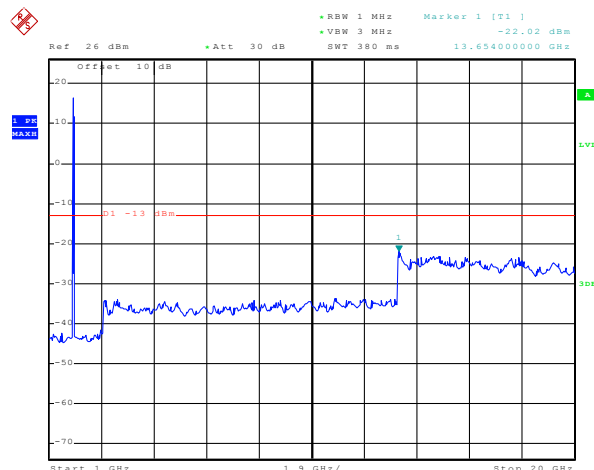
1GHz~20GHz

Test Mode:	LTE band 2(15MHz 16QAM) RB Size 75 & RB Offset 0	Test Channel:	Highest channel
------------	---	---------------	-----------------



Date: 19.SEP.2015 11:38:00

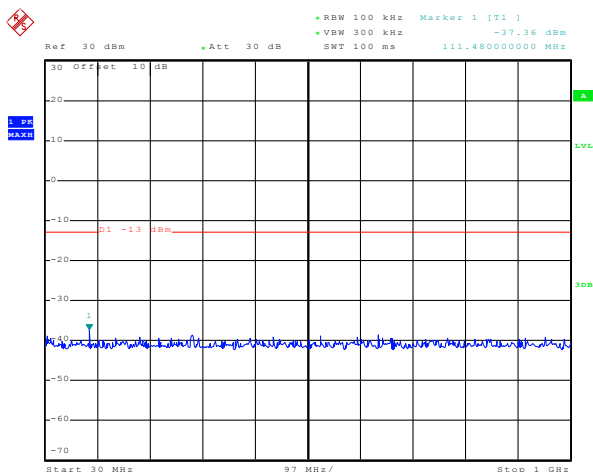
30MHz~1GHz



Date: 19.SEP.2015 11:38:35

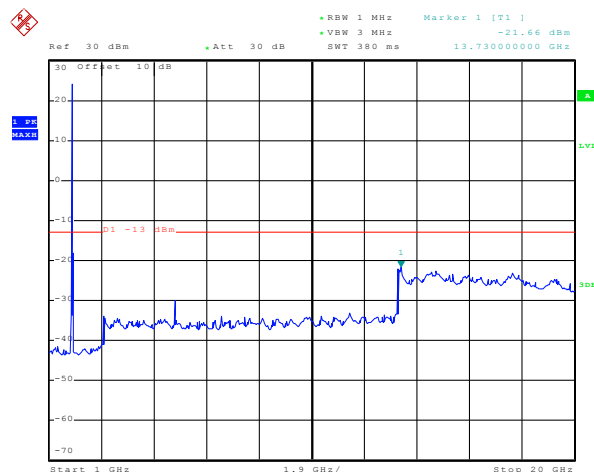
1GHz~20GHz

Test Mode:	LTE band 2(15MHz QPSK) RB Size 1 & RB Offset 0	Test Channel:	Lowest channel
------------	---	---------------	----------------



Date: 19.SEP.2015 11:12:37

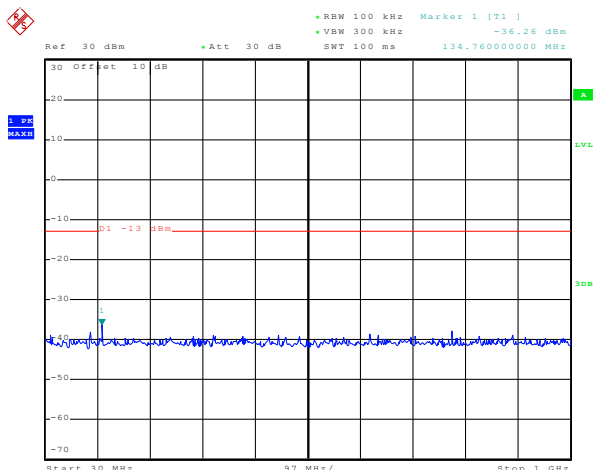
30MHz~1GHz



Date: 19.SEP.2015 11:09:39

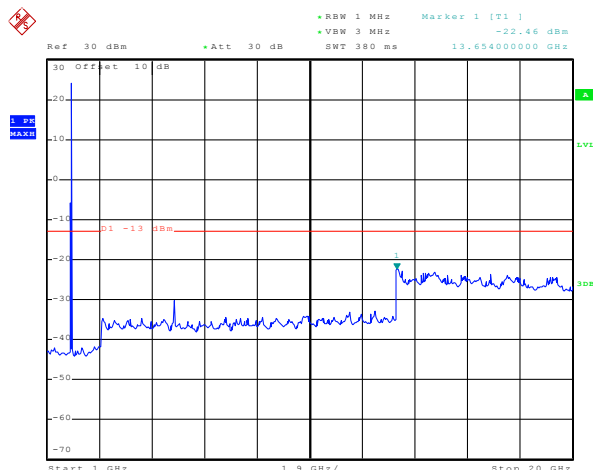
1GHz~20GHz

Test Mode:	LTE band 2(15MHz QPSK) RB Size 1 & RB Offset 0	Test Channel:	Middle channel
------------	---	---------------	----------------



Date: 19.SEP.2015 11:14:17

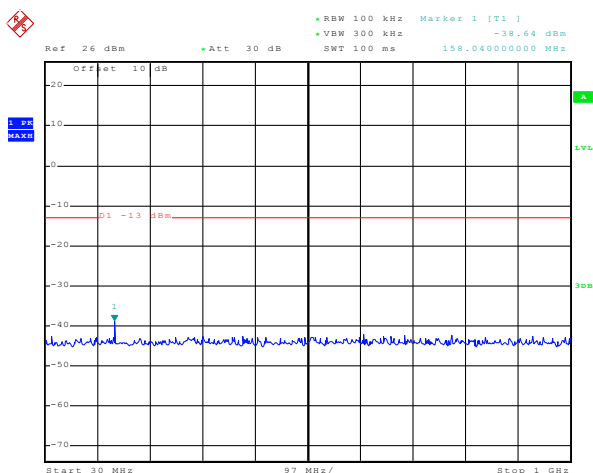
30MHz~1GHz



Date: 19.SEP.2015 11:16:54

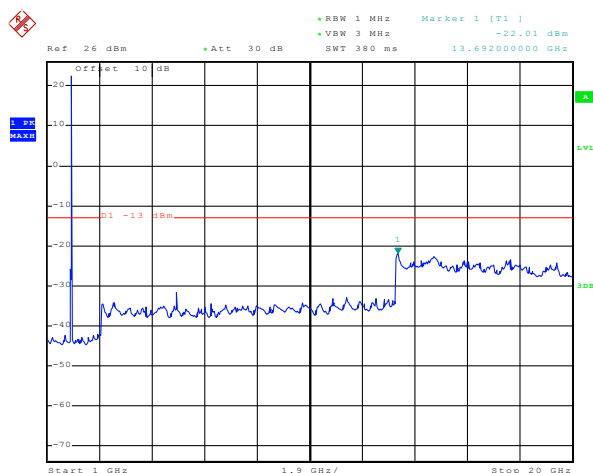
1GHz~20GHz

Test Mode:	LTE band 2(15MHz QPSK) RB Size 1 & RB Offset 0	Test Channel:	Highest channel
------------	---	---------------	-----------------



Date: 19.SEP.2015 11:34:45

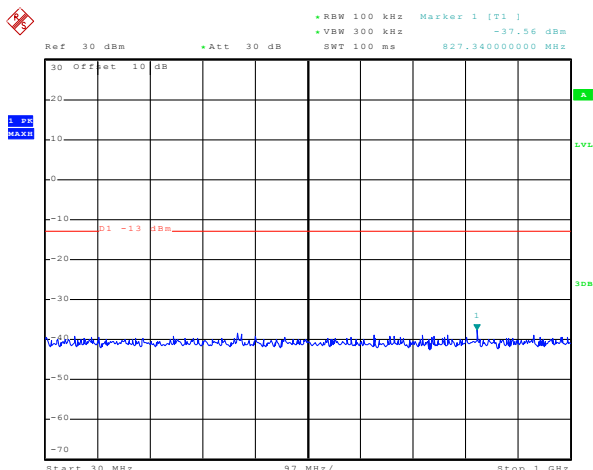
30MHz~1GHz



Date: 19.SEP.2015 11:39:17

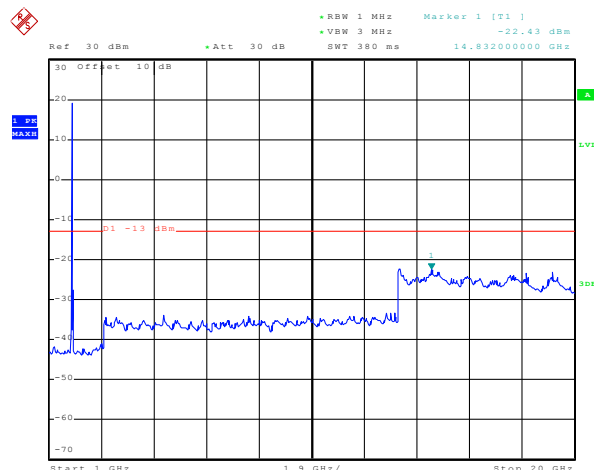
1GHz~20GHz

Test Mode:	LTE band 2(15MHz QPSK) RB Size 36 & RB Offset 0	Test Channel:	Lowest channel
------------	--	---------------	----------------



Date: 19.SEP.2015 11:13:25

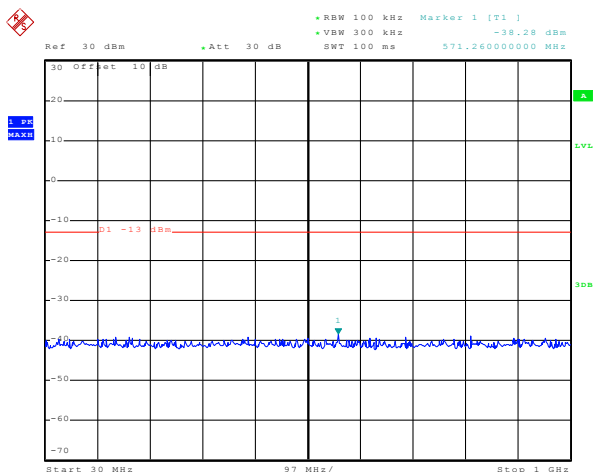
30MHz~1GHz



Date: 19.SEP.2015 11:10:58

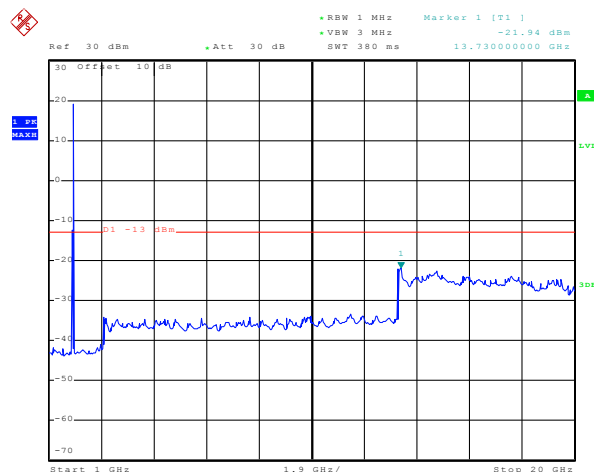
1GHz~20GHz

Test Mode:	LTE band 2(15MHz QPSK) RB Size 36 & RB Offset 0	Test Channel:	Middle channel
------------	--	---------------	----------------



Date: 19.SEP.2015 11:14:57

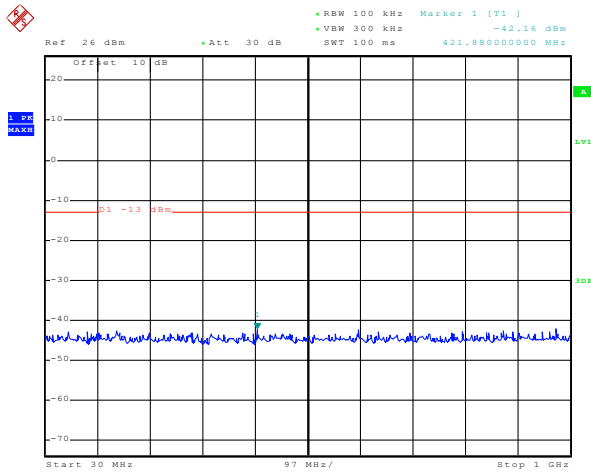
30MHz~1GHz



Date: 19.SEP.2015 11:18:06

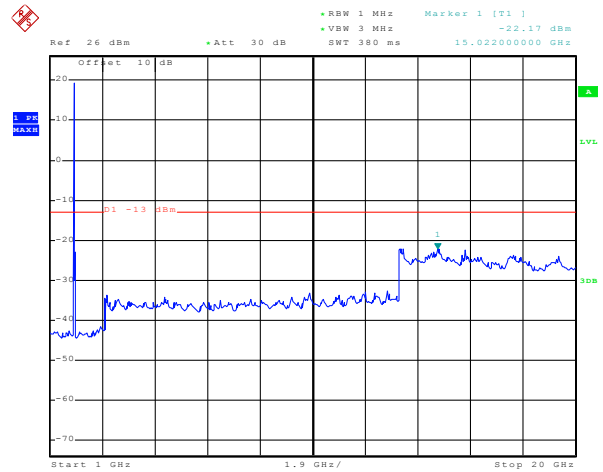
1GHz~20GHz

Test Mode:	LTE band 2(15MHz QPSK) RB Size 36 & RB Offset 0	Test Channel:	Highest channel
------------	--	---------------	-----------------



Date: 19.SEP.2015 11:37:22

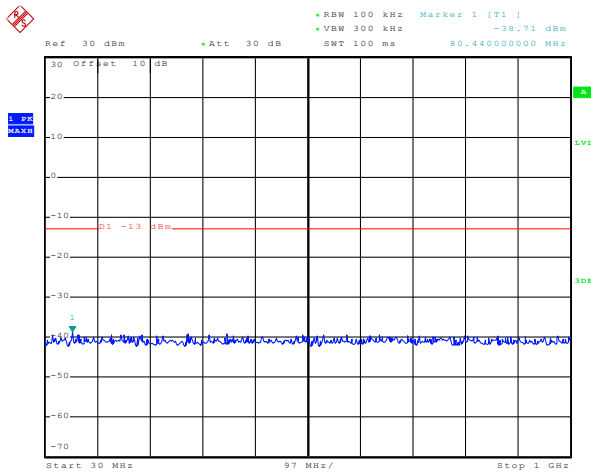
30MHz~1GHz



Date: 19.SEP.2015 11:40:59

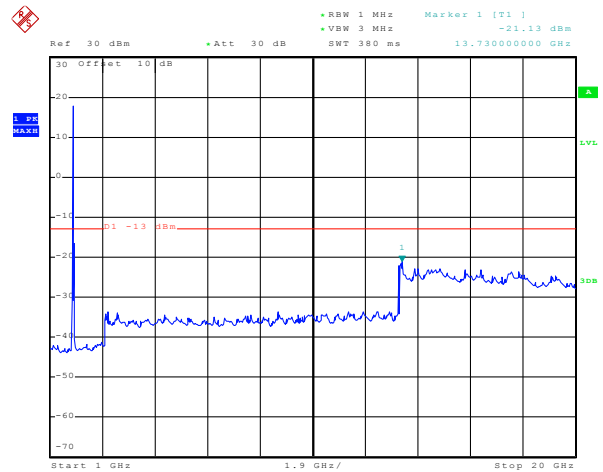
1GHz~20GHz

Test Mode:	LTE band 2(15MHz QPSK) RB Size 75 & RB Offset 0	Test Channel:	Lowest channel
------------	--	---------------	----------------



Date: 19.SEP.2015 11:12:25

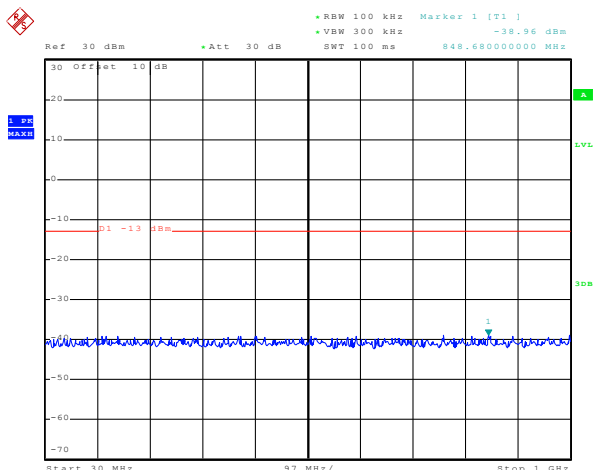
30MHz~1GHz



Date: 19.SEP.2015 11:11:30

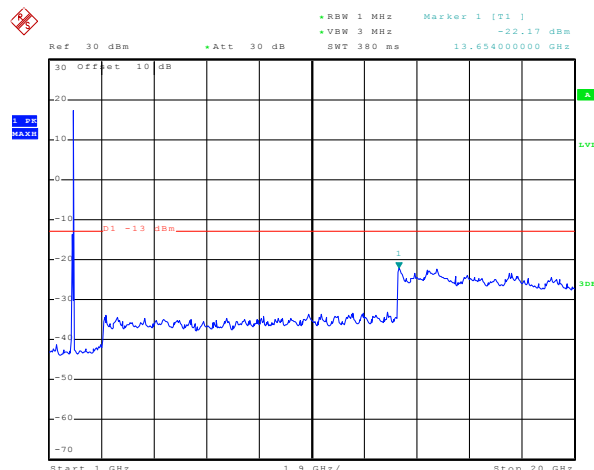
1GHz~20GHz

Test Mode:	LTE band 2(15MHz QPSK) RB Size 75 & RB Offset 0	Test Channel:	Middle channel
------------	--	---------------	----------------



Date: 19.SEP.2015 11:15:12

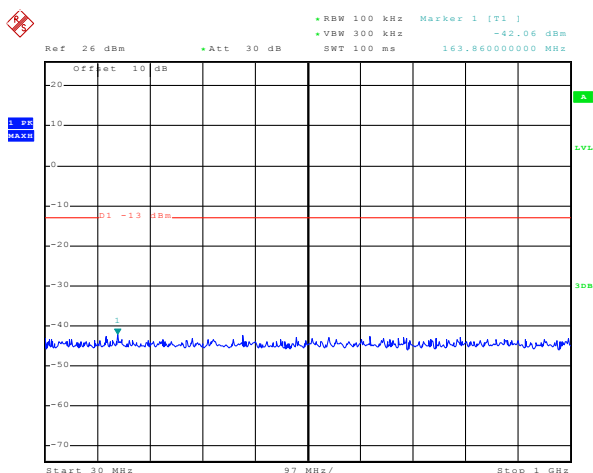
30MHz~1GHz



Date: 19.SEP.2015 11:16:36

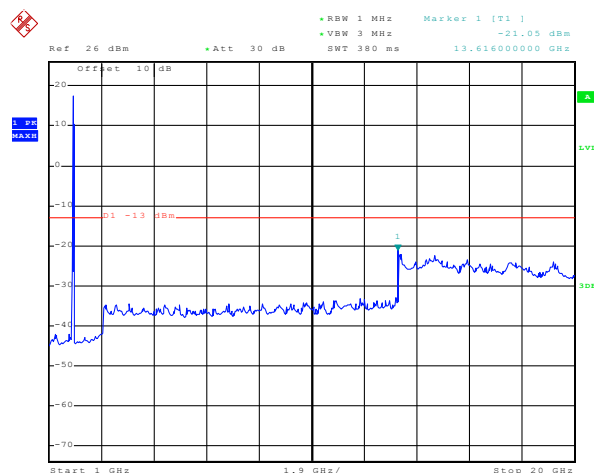
1GHz~20GHz

Test Mode:	LTE band 2(15MHz QPSK) RB Size 75 & RB Offset 0	Test Channel:	Highest channel
------------	--	---------------	-----------------



Date: 19.SEP.2015 11:37:37

30MHz~1GHz

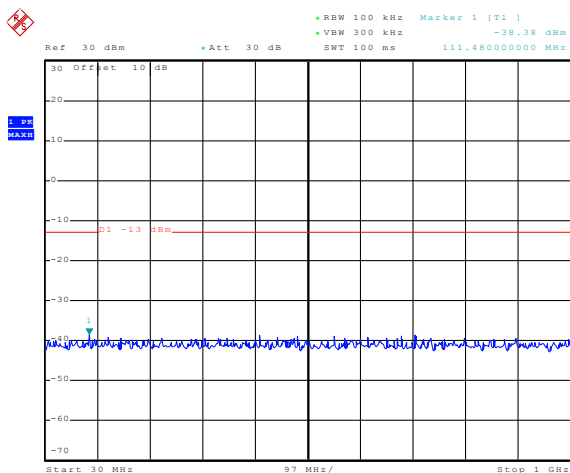


Date: 19.SEP.2015 11:38:52

1GHz~20GHz

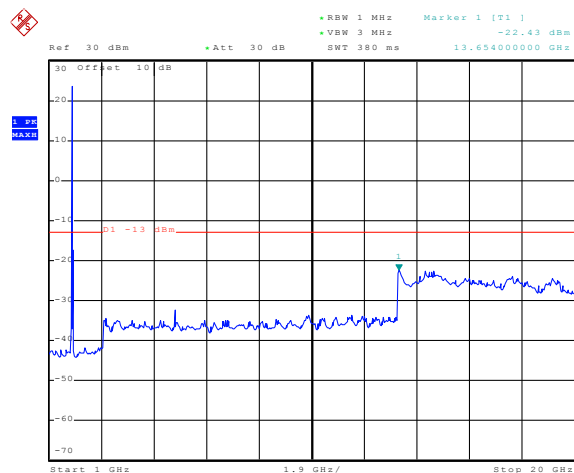
20MHz

Test Mode:	LTE band 2(20MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Lowest channel
------------	--	---------------	----------------



Date: 19.SEP.2015 11:46:50

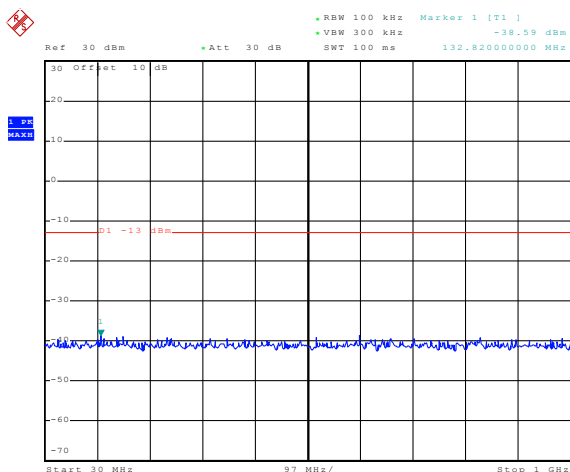
30MHz~1GHz



Date: 19.SEP.2015 11:44:08

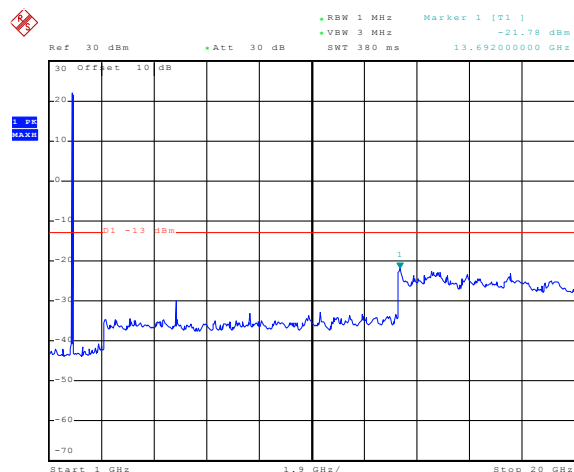
1GHz~20GHz

Test Mode:	LTE band 2(20MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Middle channel
------------	--	---------------	----------------



Date: 19.SEP.2015 11:48:01

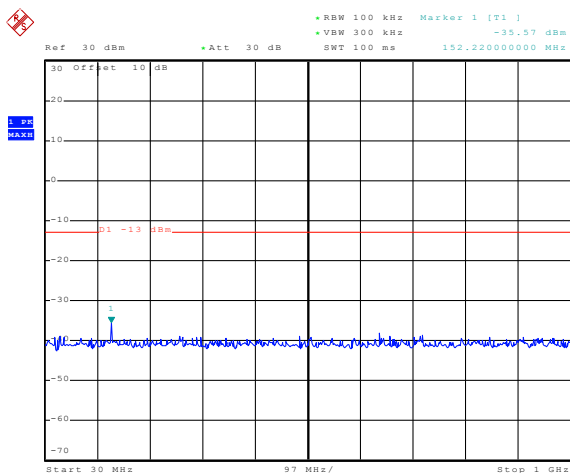
30MHz~1GHz



Date: 19.SEP.2015 11:50:29

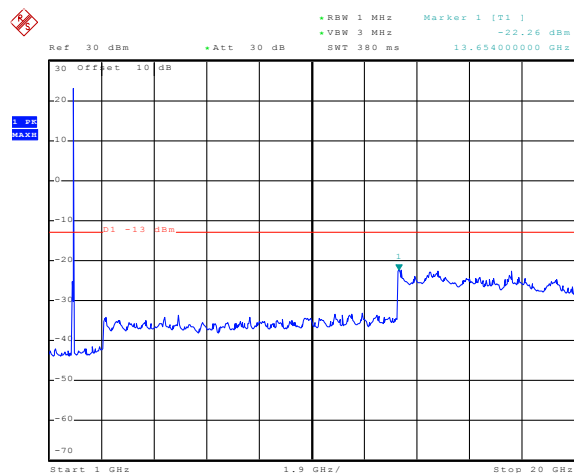
1GHz~20GHz

Test Mode:	LTE band 2(20MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Highest channel
------------	--	---------------	-----------------



Date: 19.SEP.2015 11:55:02

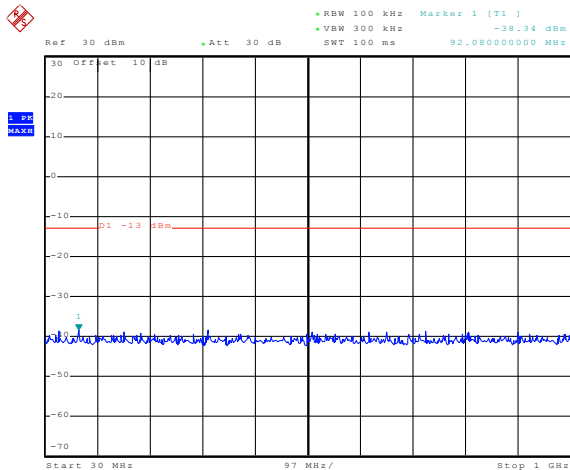
30MHz~1GHz



Date: 19.SEP.2015 11:52:23

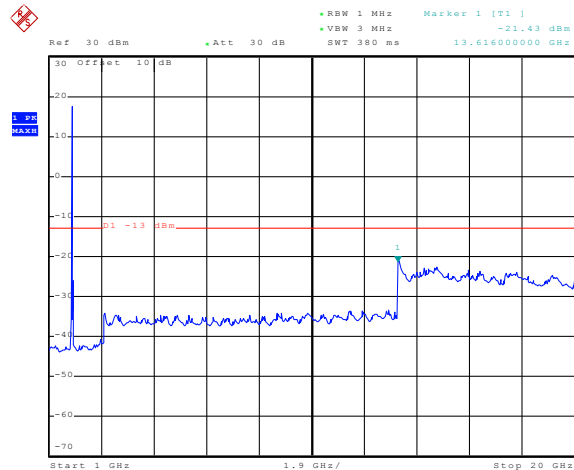
1GHz~20GHz

Test Mode:	LTE band 2(20MHz 16QAM) RB Size 50 & RB Offset 0	Test Channel:	Lowest channel
------------	---	---------------	----------------



Date: 19.SEP.2015 11:47:08

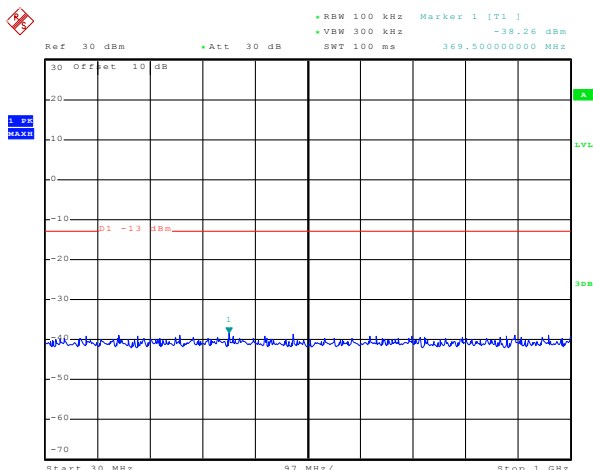
30MHz~1GHz



Date: 19.SEP.2015 11:44:34

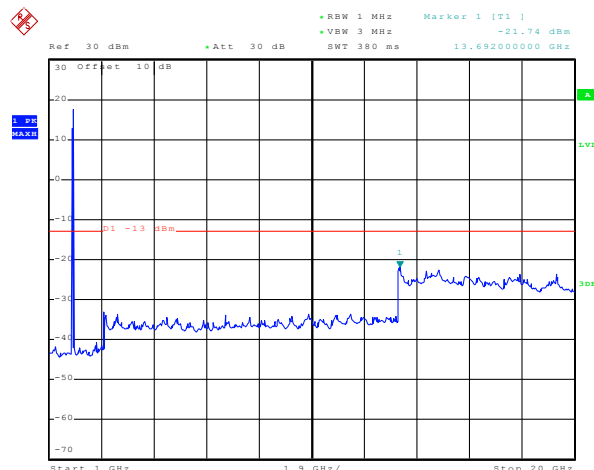
1GHz~20GHz

Test Mode:	LTE band 2(20MHz 16QAM) RB Size 50 & RB Offset 0	Test Channel:	Middle channel
------------	---	---------------	----------------



Date: 19.SEP.2015 11:48:18

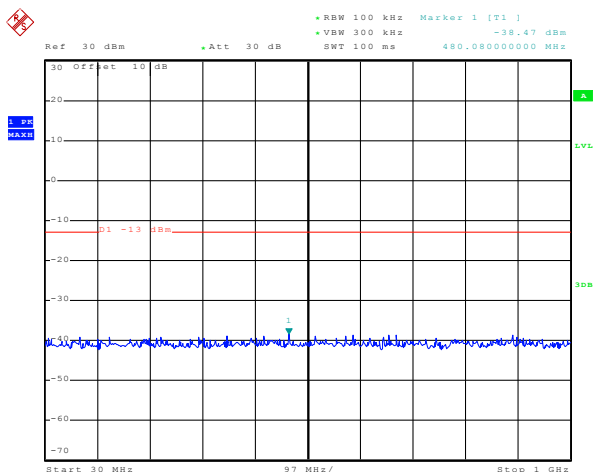
30MHz~1GHz



Date: 19.SEP.2015 11:50:48

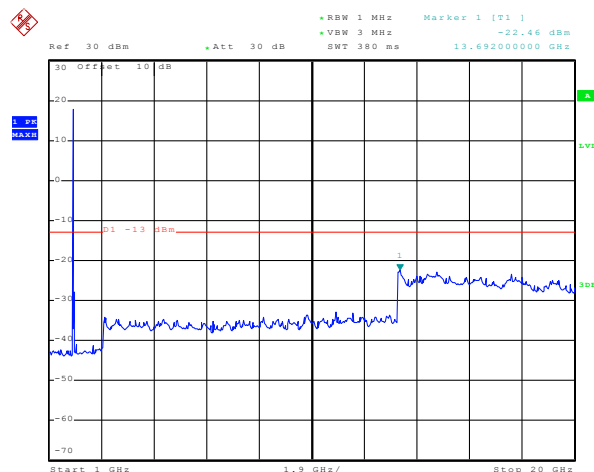
1GHz~20GHz

Test Mode:	LTE band 2(20MHz 16QAM) RB Size 50 & RB Offset 0	Test Channel:	Highest channel
------------	---	---------------	-----------------



Date: 19.SEP.2015 11:55:19

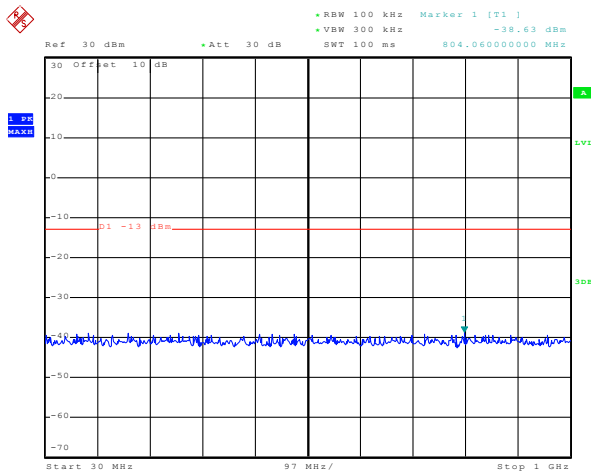
30MHz~1GHz



Date: 19.SEP.2015 11:52:47

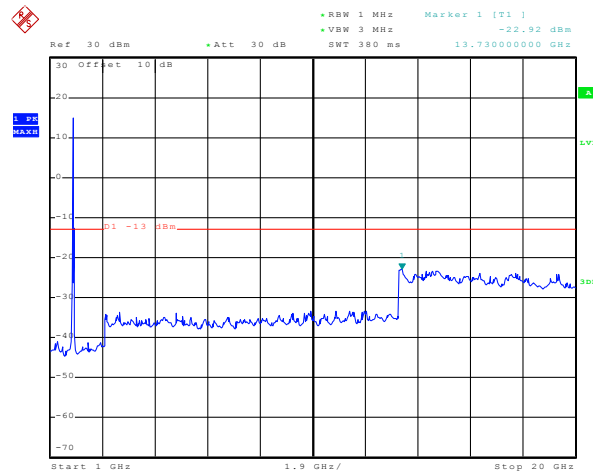
1GHz~20GHz

Test Mode:	LTE band 2(20MHz 16QAM) RB Size 100 & RB Offset 0	Test Channel:	Lowest channel
------------	--	---------------	----------------



Date: 19.SEP.2015 11:46:10

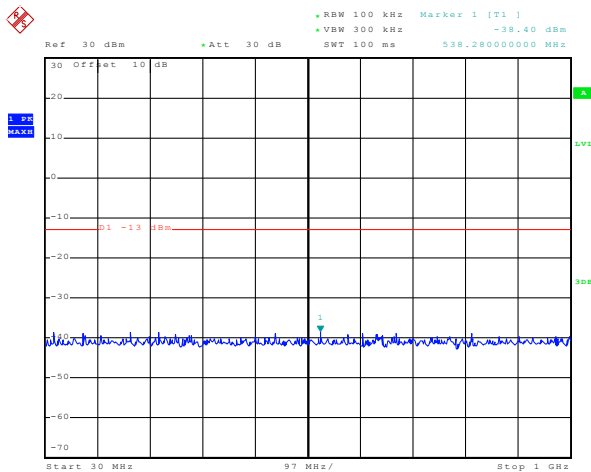
30MHz~1GHz



Date: 19.SEP.2015 11:45:40

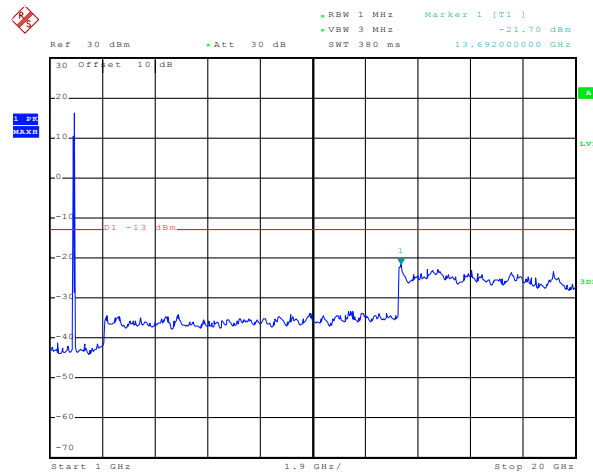
1GHz~20GHz

Test Mode:	LTE band 2(20MHz 16QAM) RB Size 100 & RB Offset 0	Test Channel:	Middle channel
------------	--	---------------	----------------



Date: 19.SEP.2015 11:48:58

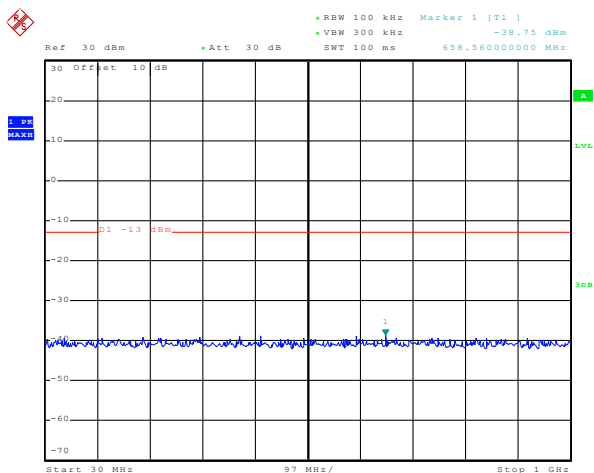
30MHz~1GHz



Date: 19.SEP.2015 11:49:32

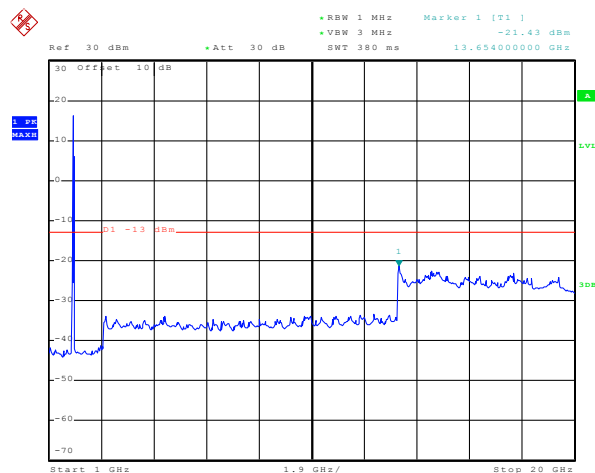
1GHz~20GHz

Test Mode:	LTE band 2(20MHz 16QAM) RB Size 100 & RB Offset 0	Test Channel:	Highest channel
------------	--	---------------	-----------------



Date: 19.SEP.2015 11:54:22

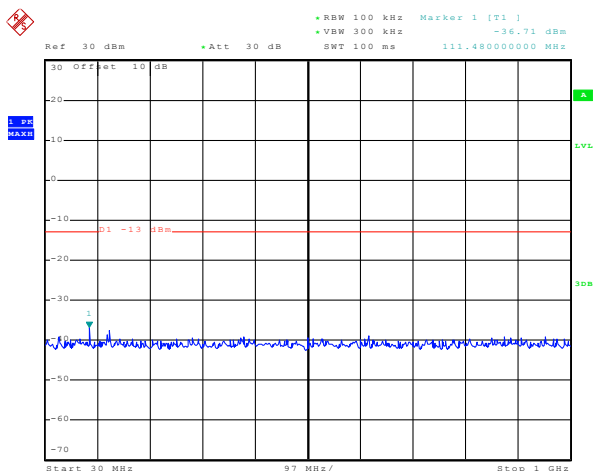
30MHz~1GHz



Date: 19.SEP.2015 11:53:56

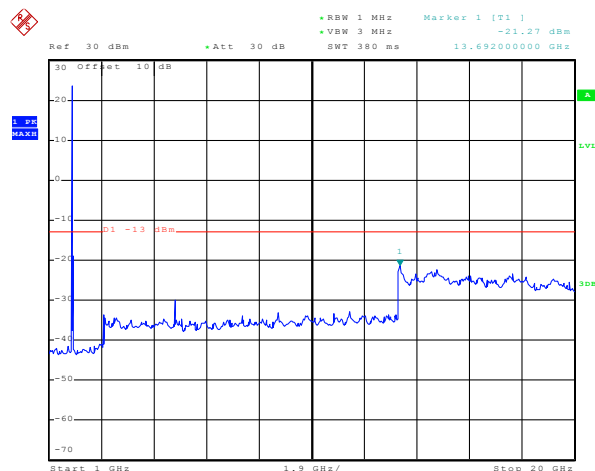
1GHz~20GHz

Test Mode:	LTE band 2(20MHz QPSK) RB Size 1 & RB Offset 0	Test Channel:	Lowest channel
------------	---	---------------	----------------



Date: 19.SEP.2015 11:46:36

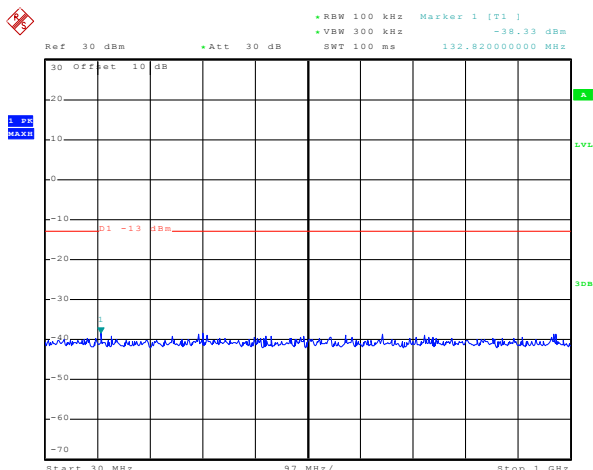
30MHz~1GHz



Date: 19.SEP.2015 11:42:46

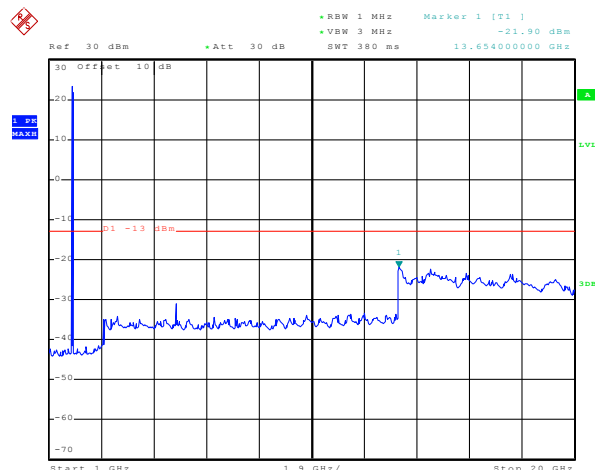
1GHz~20GHz

Test Mode:	LTE band 2(20MHz QPSK) RB Size 1 & RB Offset 0	Test Channel:	Middle channel
------------	---	---------------	----------------



Date: 19.SEP.2015 11:47:49

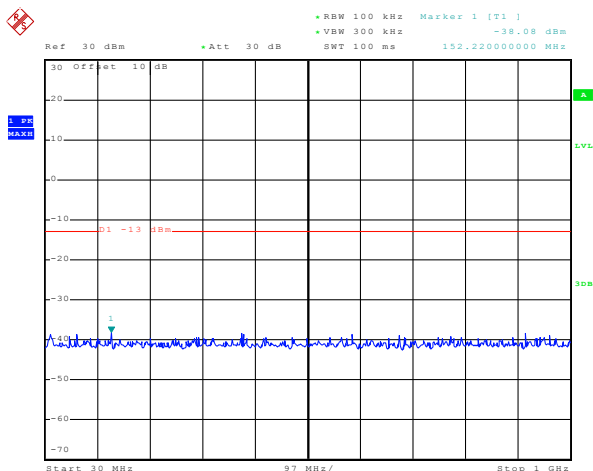
30MHz~1GHz



Date: 19.SEP.2015 11:50:05

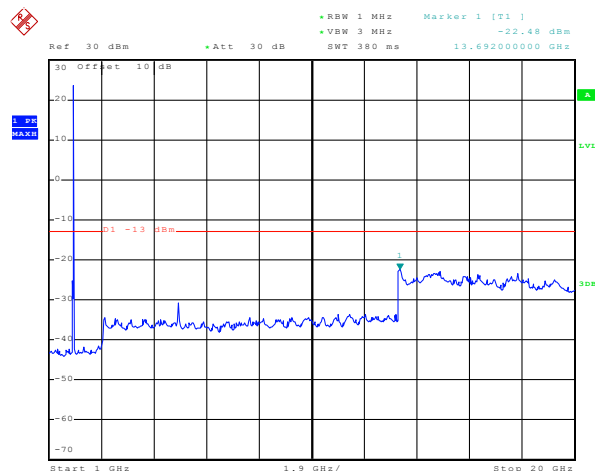
1GHz~20GHz

Test Mode:	LTE band 2(20MHz QPSK) RB Size 1 & RB Offset 0	Test Channel:	Highest channel
------------	---	---------------	-----------------



Date: 19.SEP.2015 11:54:46

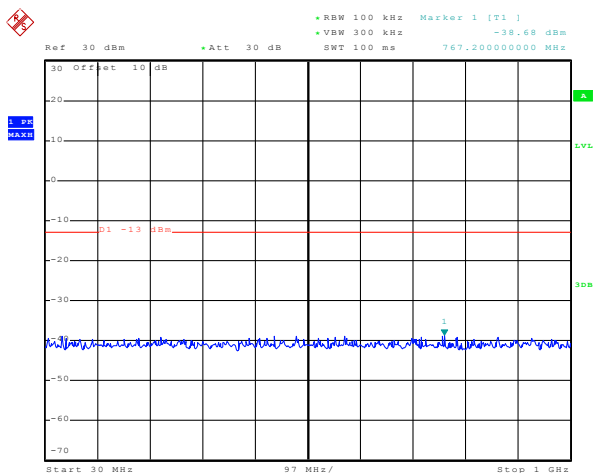
30MHz~1GHz



Date: 19.SEP.2015 11:52:03

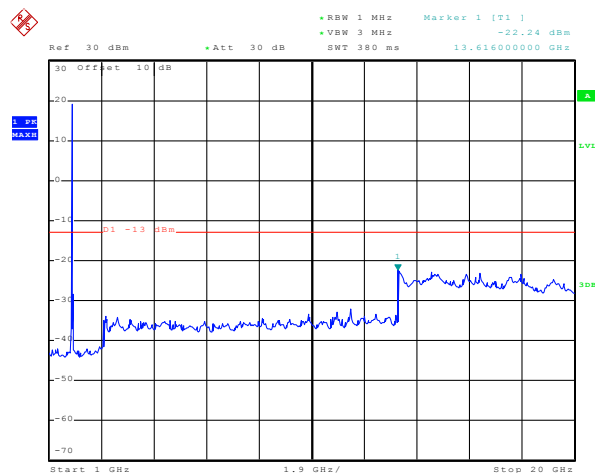
1GHz~20GHz

Test Mode:	LTE band 2 (20MHz QPSK) RB Size 50 & RB Offset 0	Test Channel:	Lowest channel
------------	---	---------------	----------------



Date: 19.SEP.2015 11:47:22

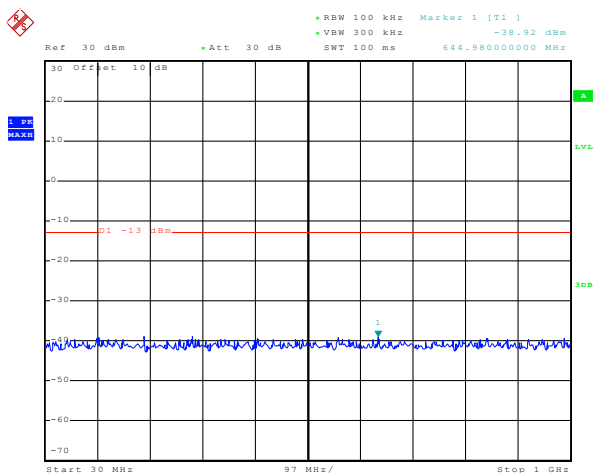
30MHz~1GHz



Date: 19.SEP.2015 11:44:57

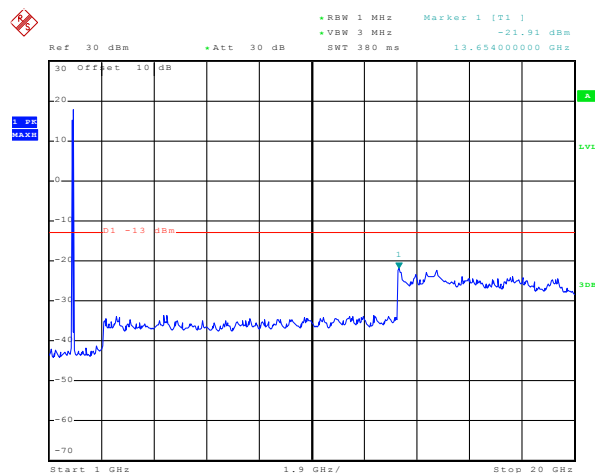
1GHz~20GHz

Test Mode:	LTE band 2 (20MHz QPSK) RB Size 50 & RB Offset 0	Test Channel:	Middle channel
------------	---	---------------	----------------



Date: 19.SEP.2015 11:48:33

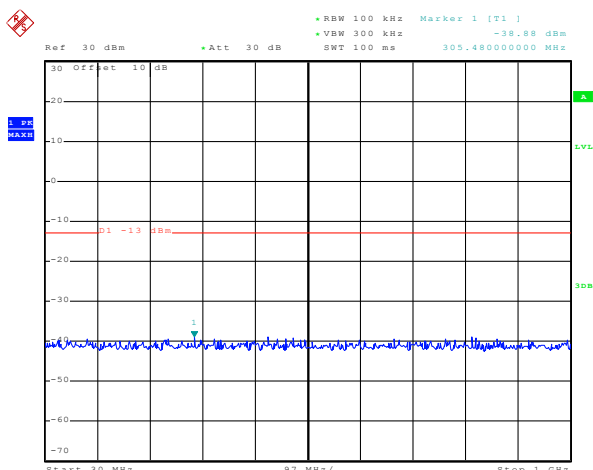
30MHz~1GHz



Date: 19.SEP.2015 11:51:14

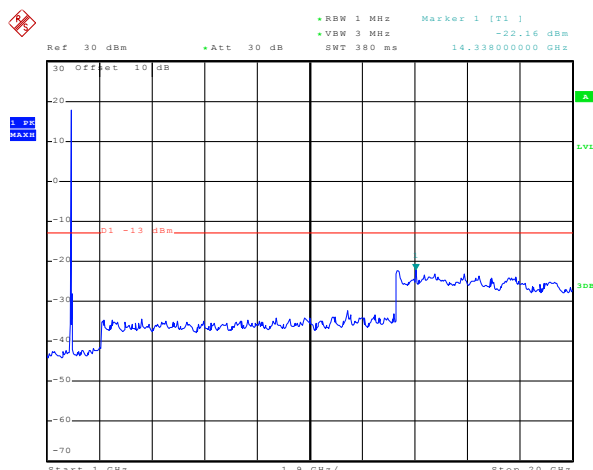
1GHz~20GHz

Test Mode:	LTE band 2(20MHz QPSK) RB Size 50 & RB Offset 0	Test Channel:	Highest channel
------------	--	---------------	-----------------



Date: 19.SEP.2015 11:55:32

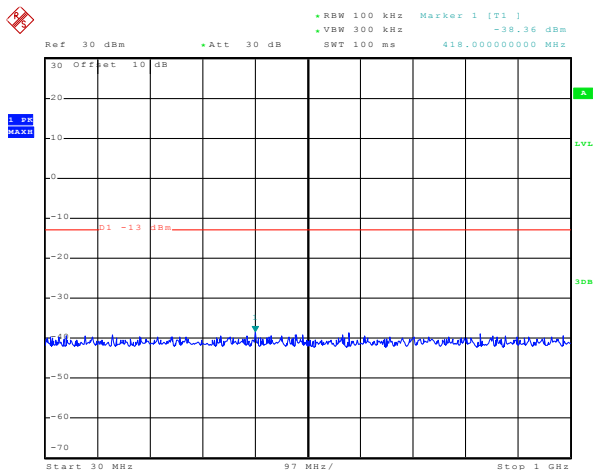
30MHz~1GHz



Date: 19.SEP.2015 11:53:11

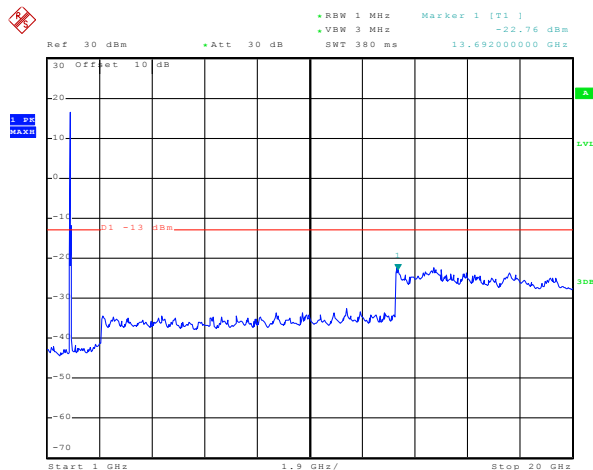
1GHz~20GHz

Test Mode:	LTE band 2(20MHz QPSK) RB Size 100 & RB Offset 0	Test Channel:	Lowest channel
------------	---	---------------	----------------



Date: 19.SEP.2015 11:46:22

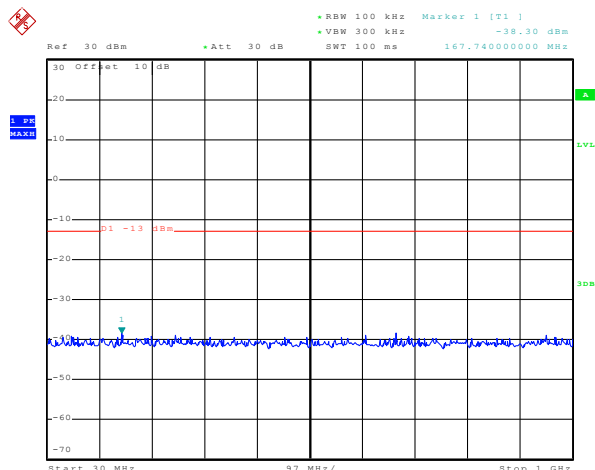
30MHz~1GHz



Date: 19.SEP.2015 11:45:20

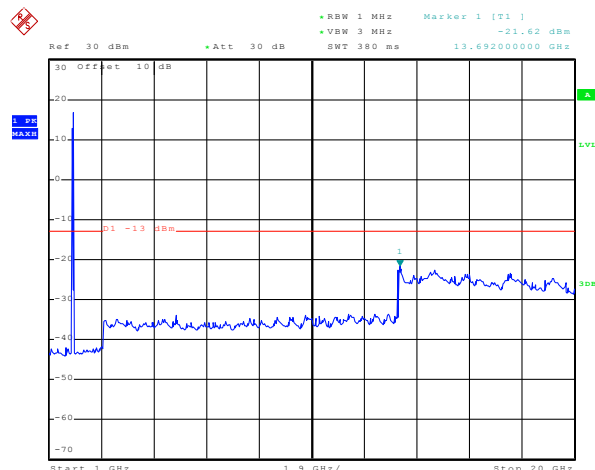
1GHz~20GHz

Test Mode:	LTE band 2(20MHz QPSK) RB Size 100 & RB Offset 0	Test Channel:	Middle channel
------------	---	---------------	----------------



Date: 19.SEP.2015 11:48:46

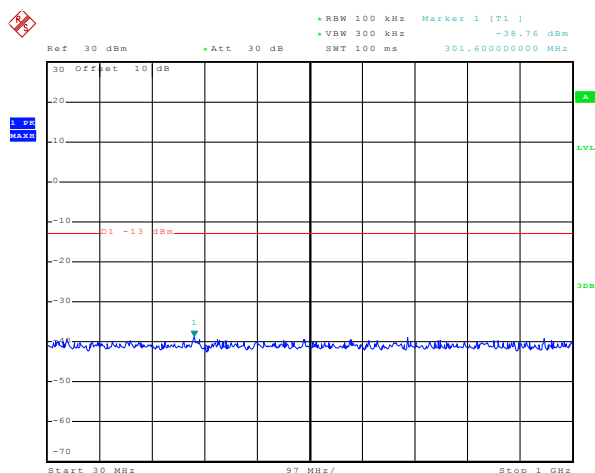
30MHz~1GHz



Date: 19.SEP.2015 11:49:49

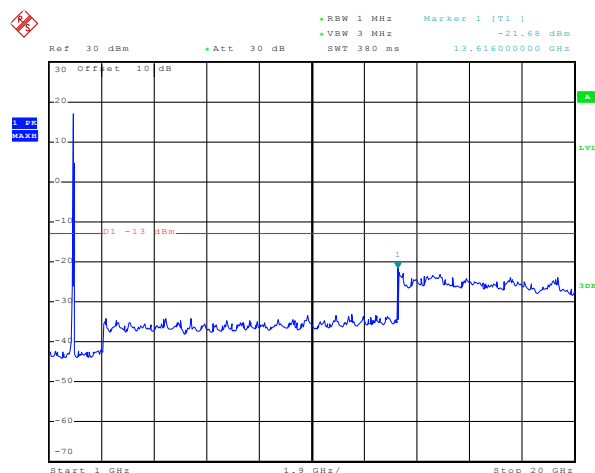
1GHz~20GHz

Test Mode:	LTE band 2(20MHz QPSK) RB Size 100 & RB Offset 0	Test Channel:	Highest channel
------------	---	---------------	-----------------



Date: 19.SEP.2015 11:54:35

30MHz~1GHz



Date: 19.SEP.2015 11:53:32

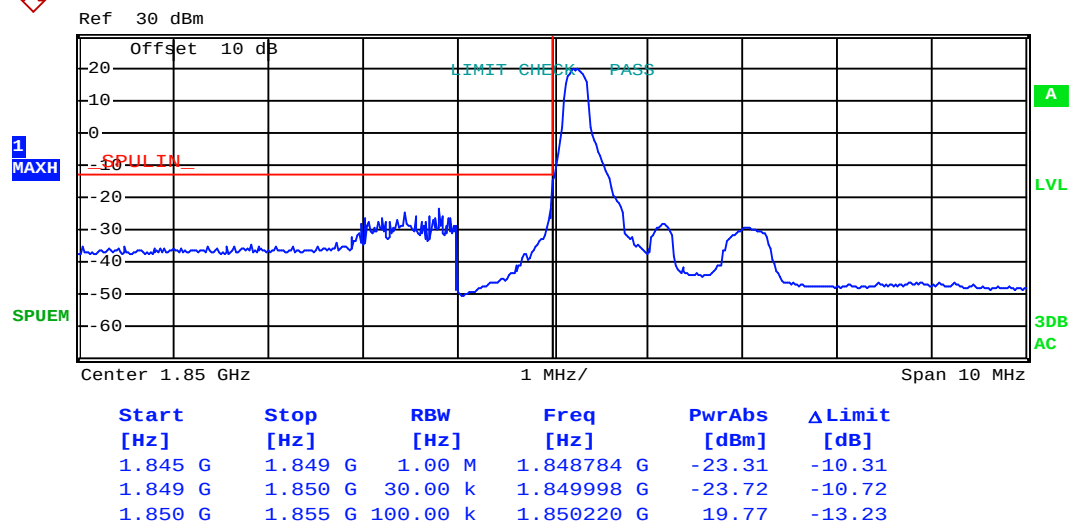
1GHz~20GHz

Band edge emission:

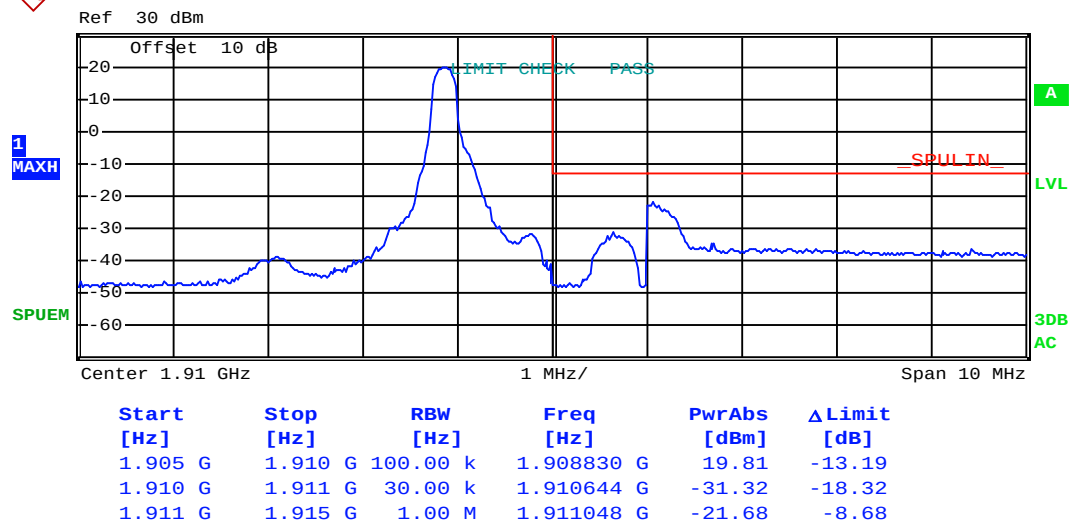
LTE band 2 part:

1.4MHz:

Test Mode:	LTE band 2(QPSK RB Size 1 & RB Offset 0)
------------	--



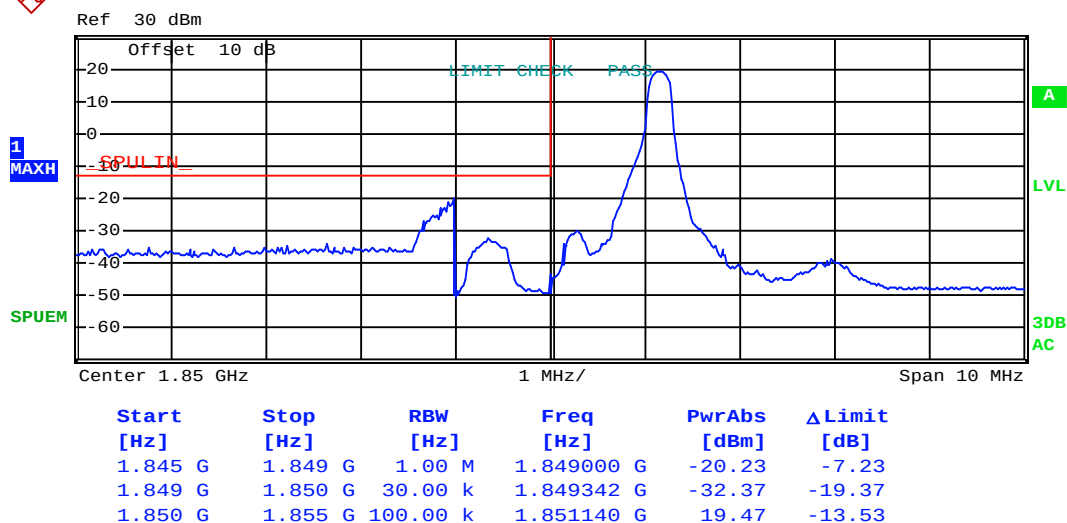
Lowest channel



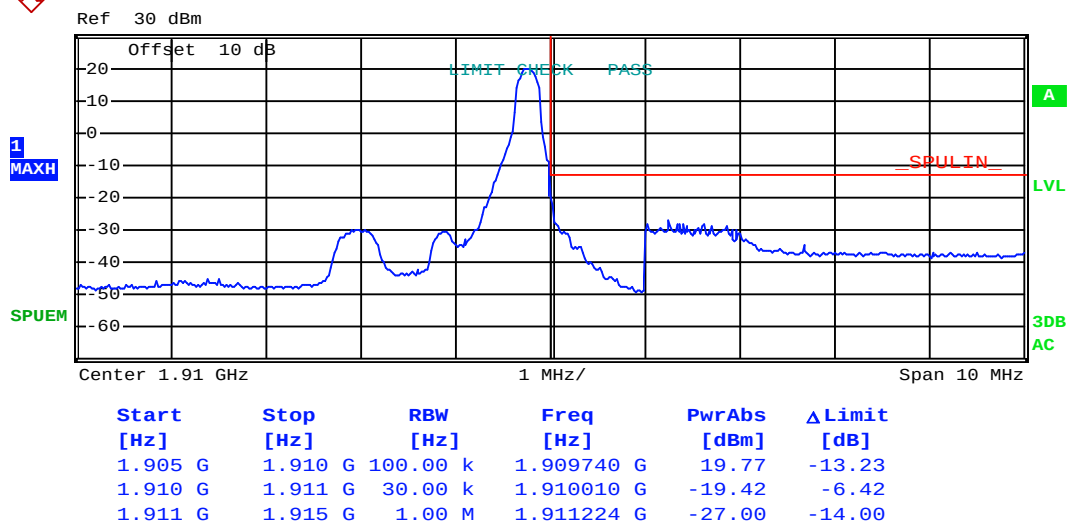
Highest channel

Test Mode:

LTE band 2(QPSK RB Size 1 & RB Offset 5)



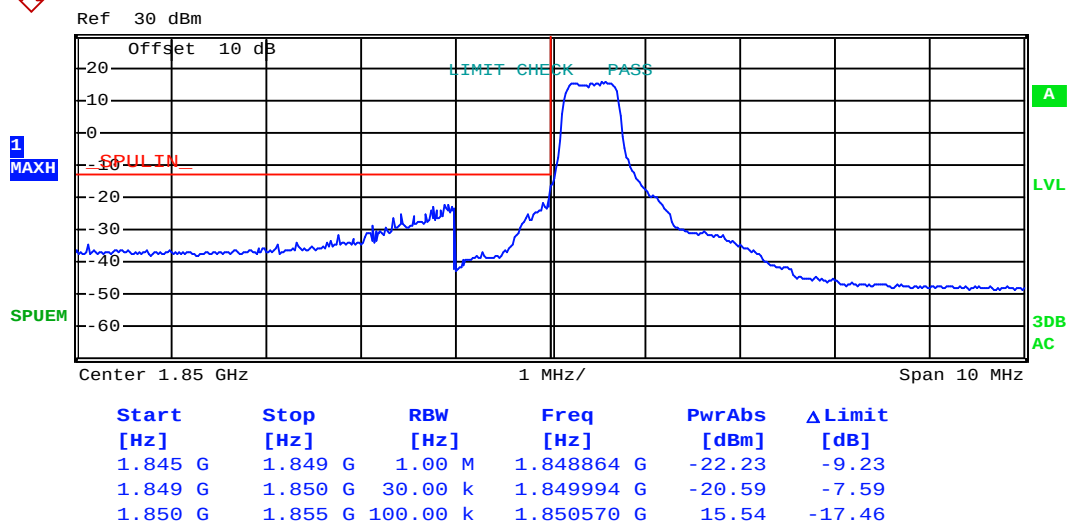
Lowest channel



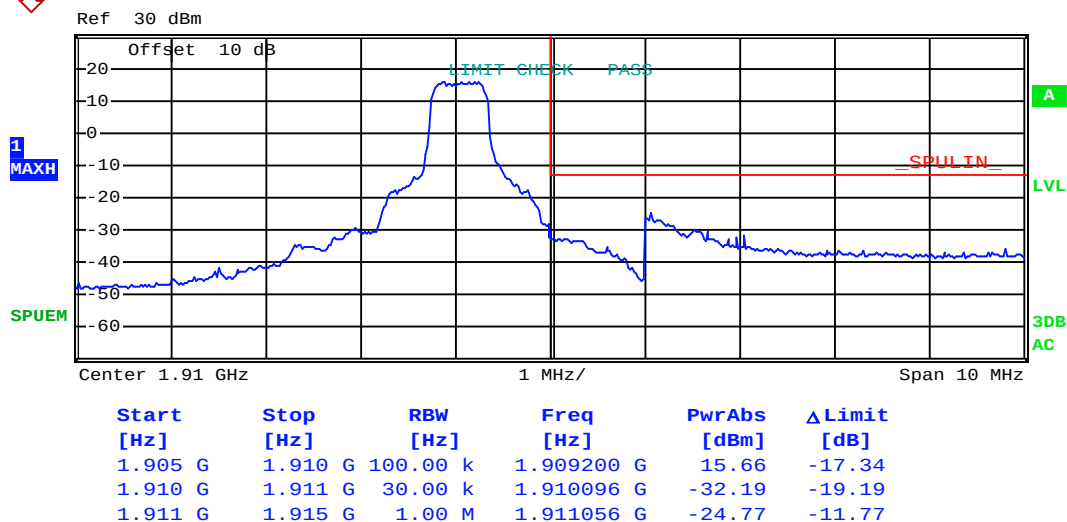
Highest channel

Test Mode:

LTE band 2(QPSK RB Size 3 & RB Offset 0)



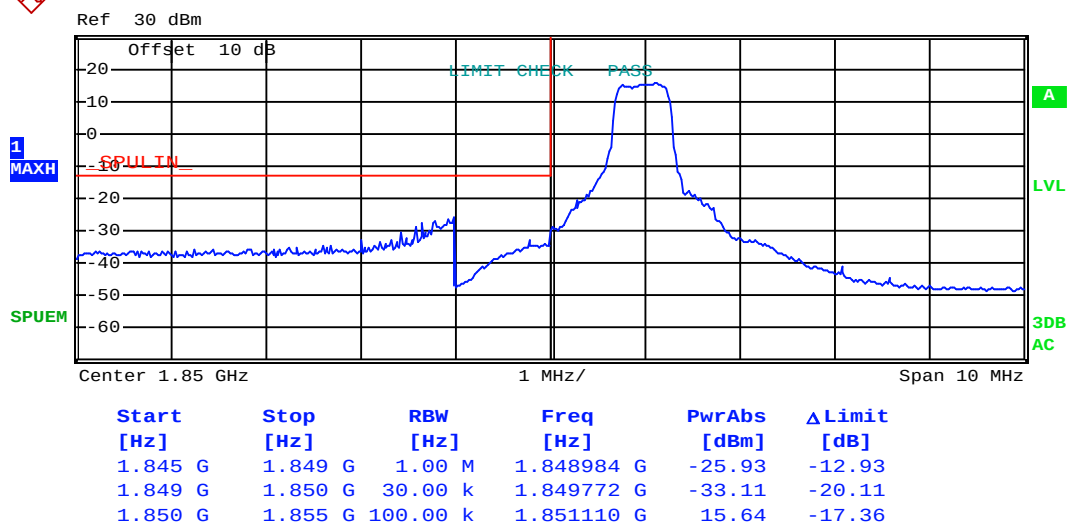
Lowest channel



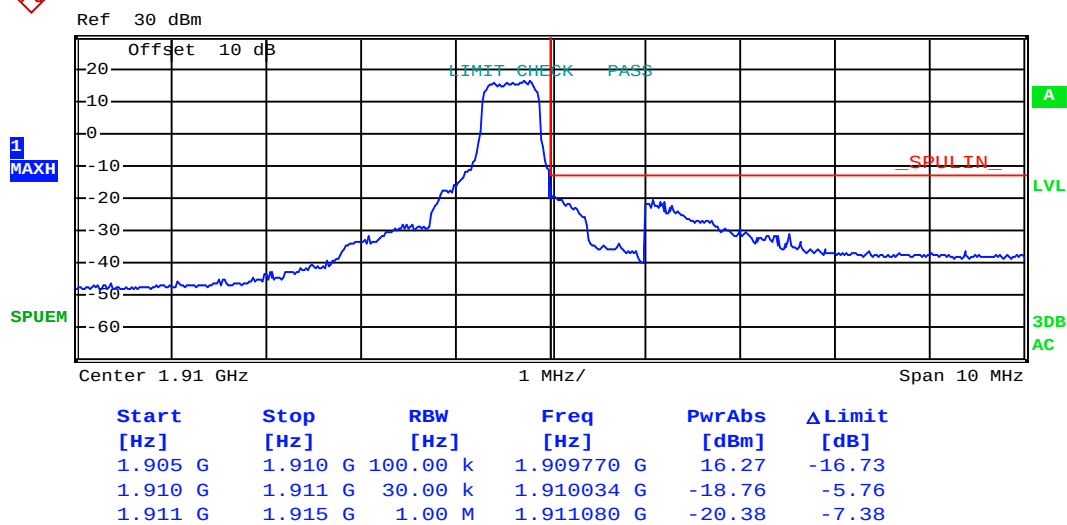
Highest channel

Test Mode:

LTE band 2(QPSK RB Size 3 & RB Offset 2)



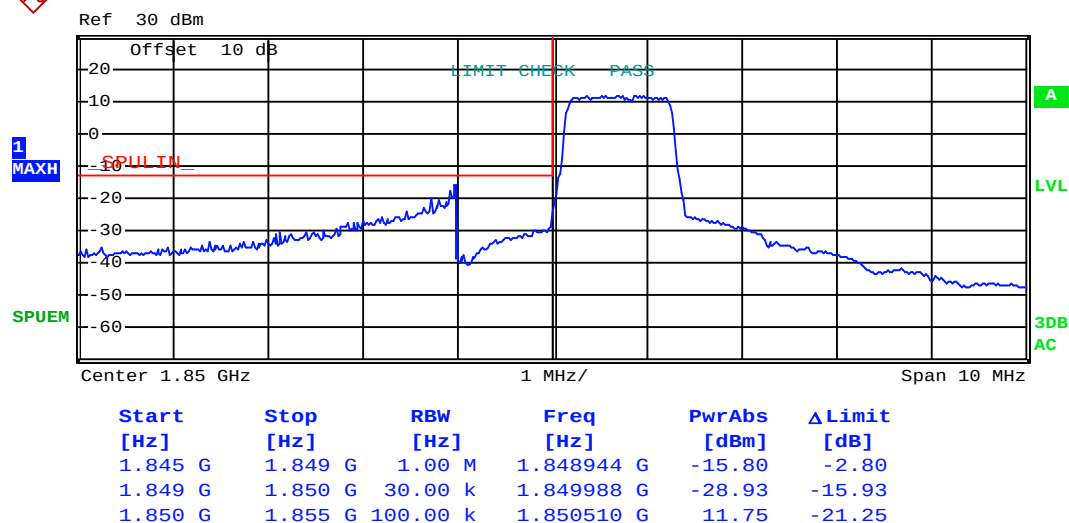
Lowest channel



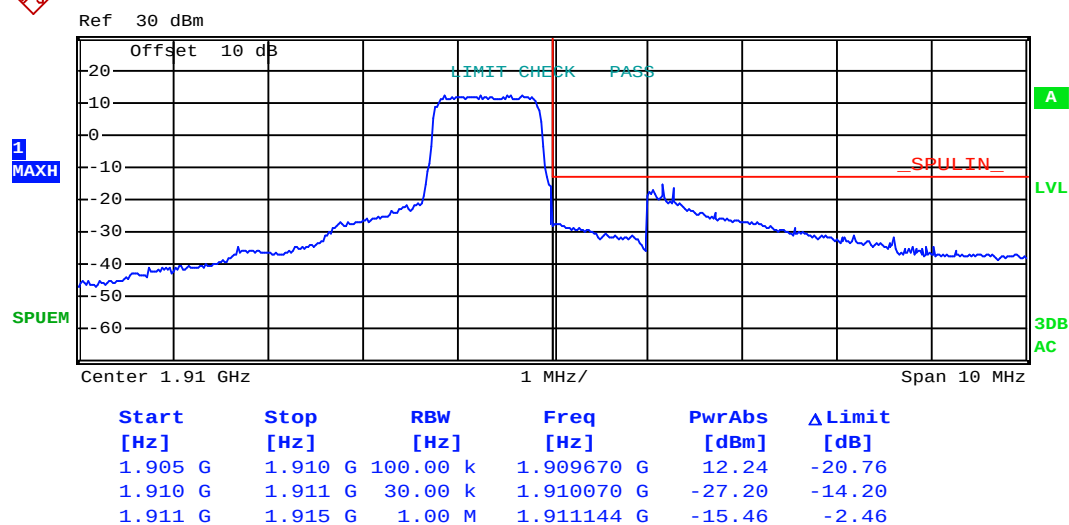
Highest channel

Test Mode:

LTE band 2(QPSK RB Size 6 & RB Offset 0)



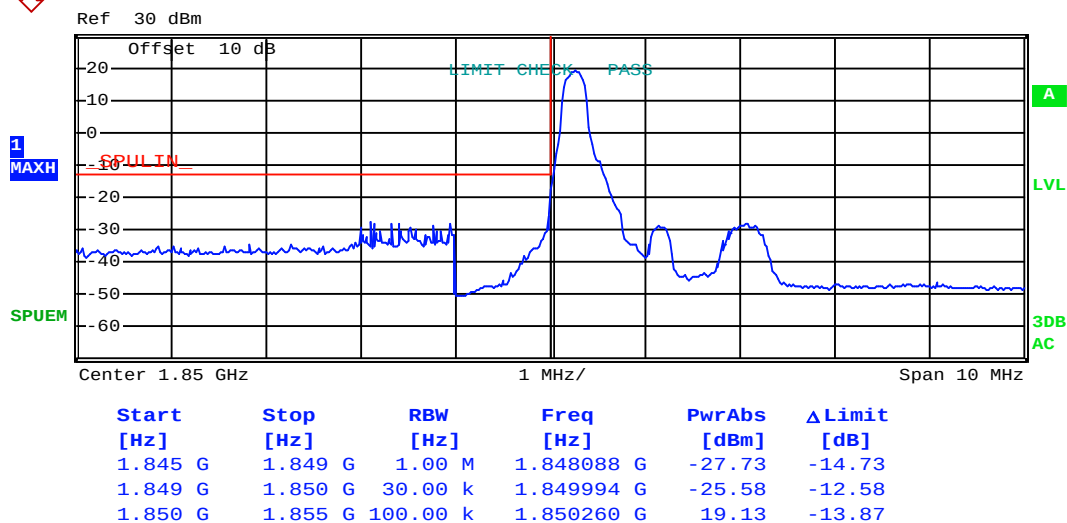
Lowest channel



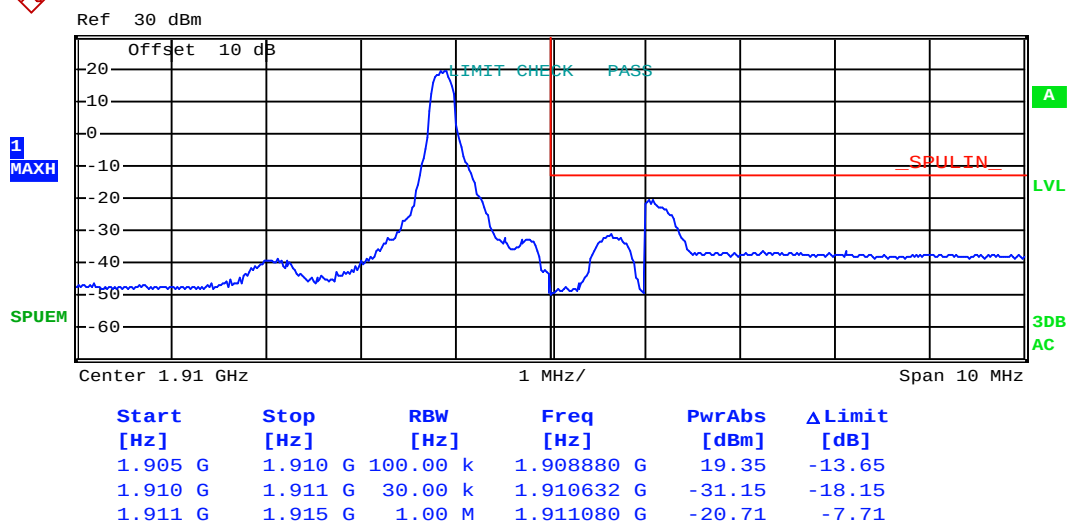
Highest channel

Test Mode:

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



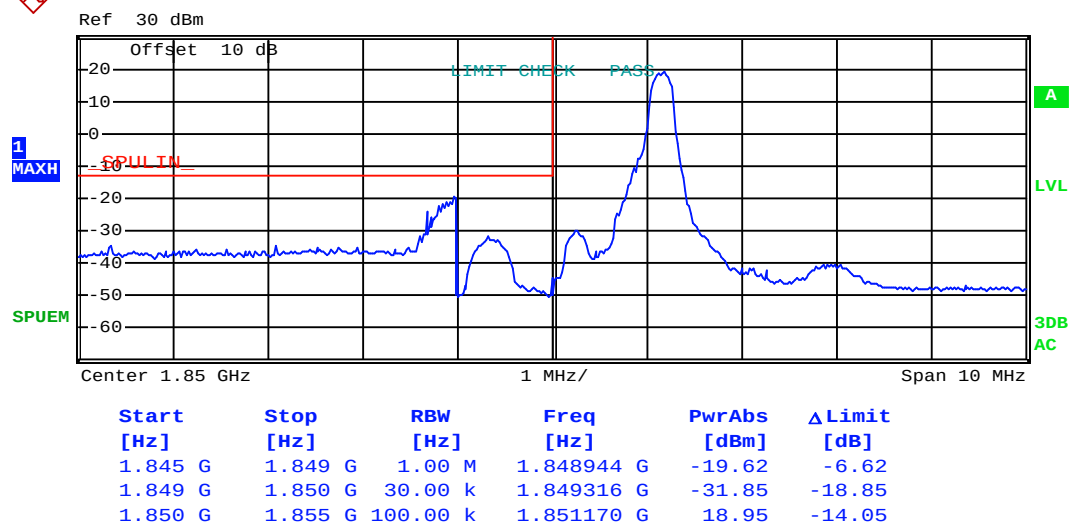
Lowest channel



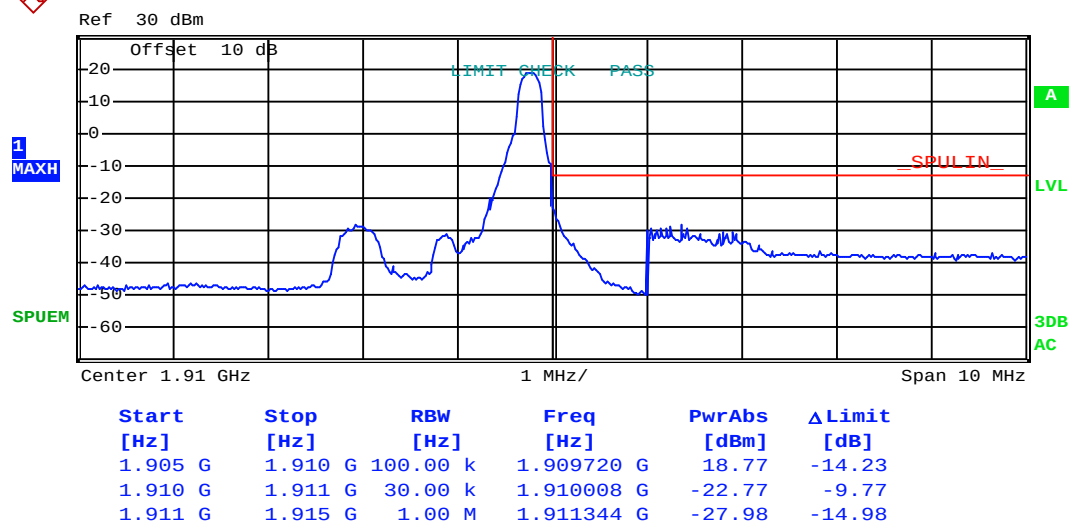
Highest channel

Test Mode:

LTE band 2(16QAM RB Size 1 & RB Offset 5)



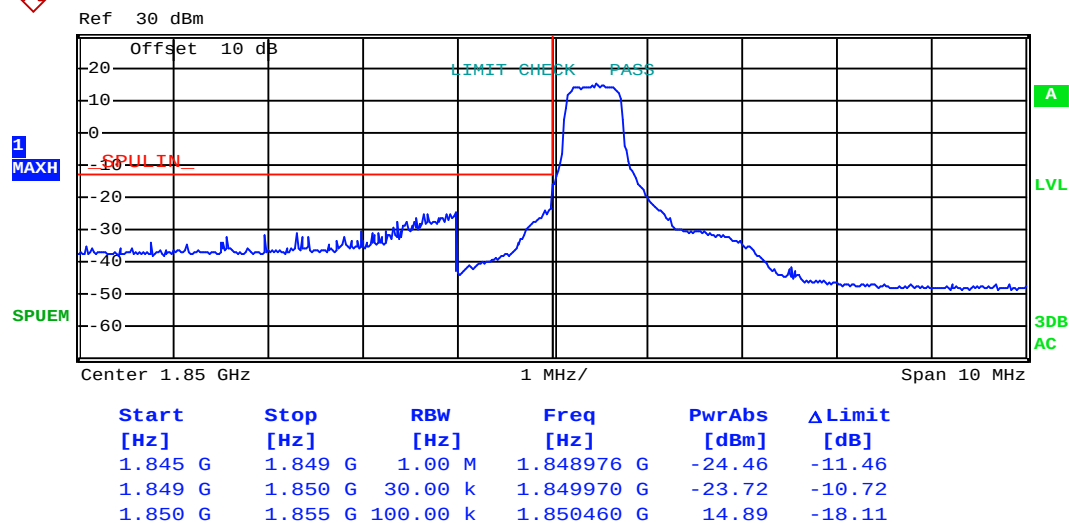
Lowest channel



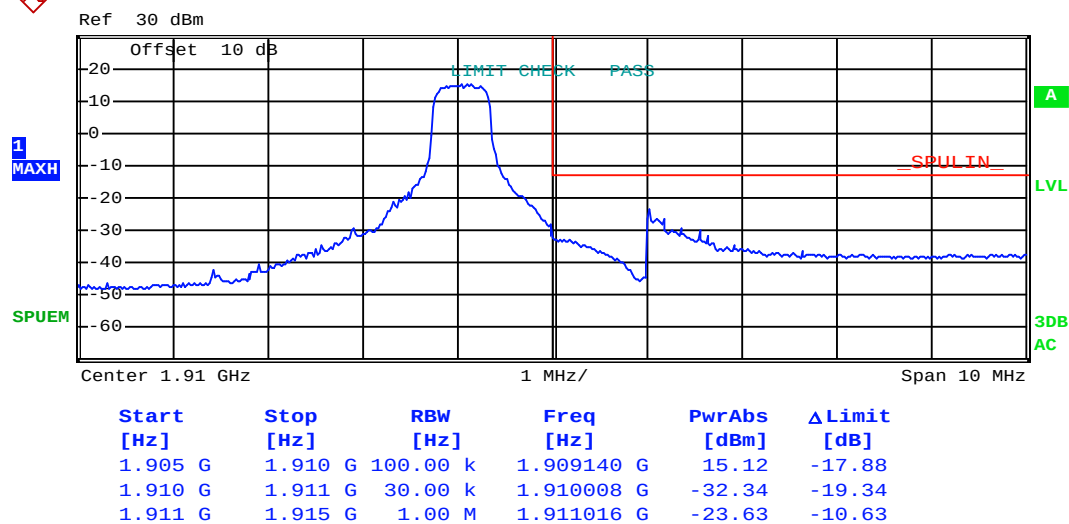
Highest channel

Test Mode:

LTE band 2(16QAM RB Size 3 & RB Offset 0)



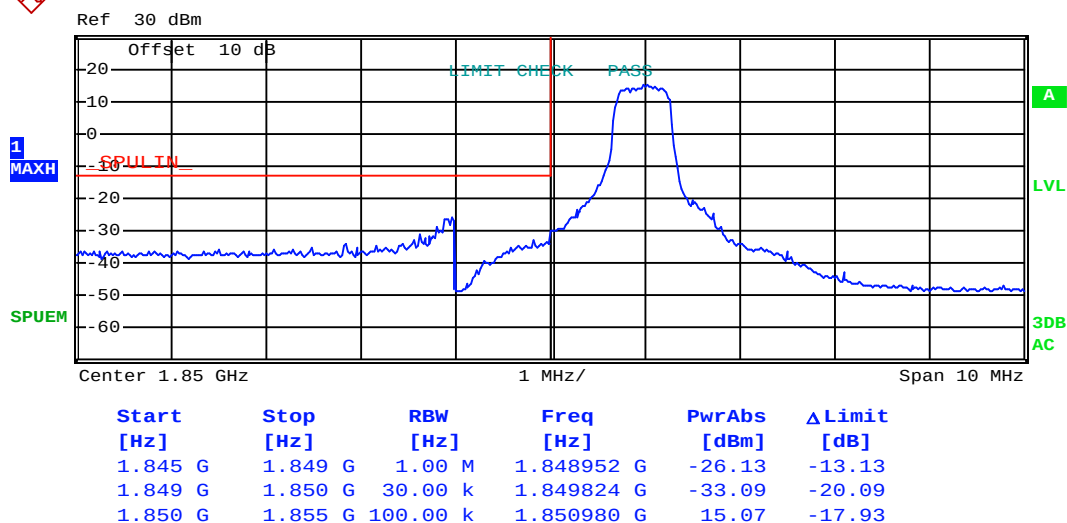
Lowest channel



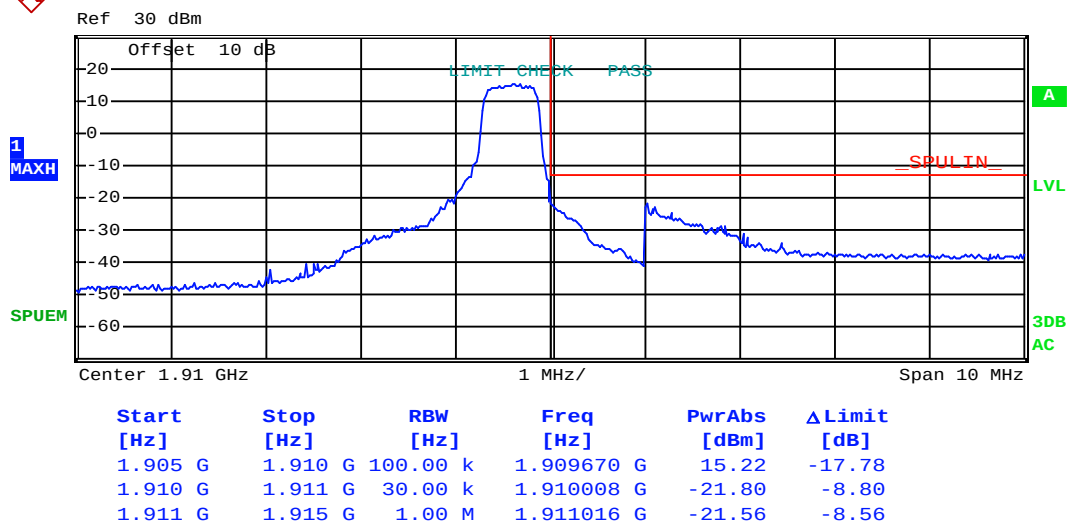
Highest channel

Test Mode:

LTE band 2(16QAM RB Size 3 & RB Offset 2)



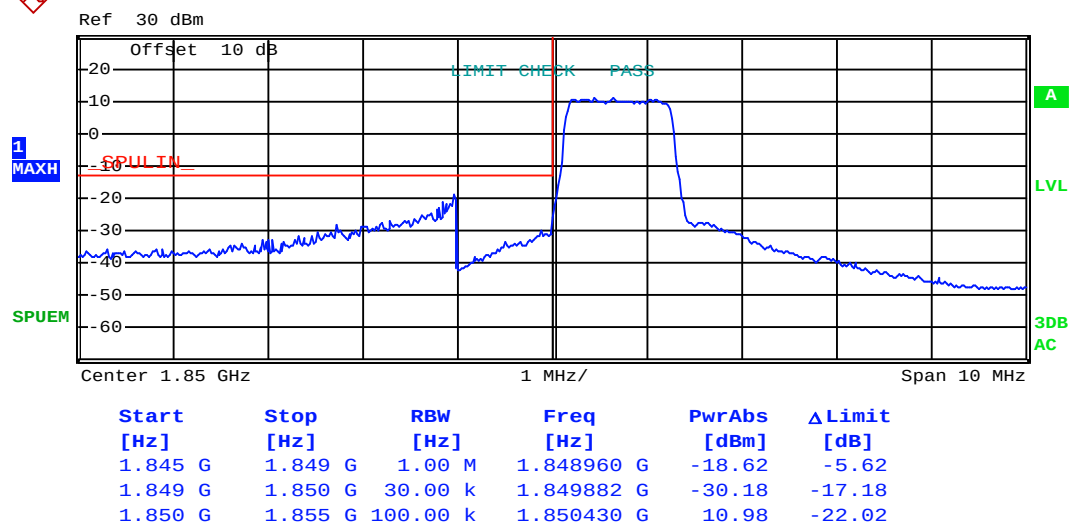
Lowest channel



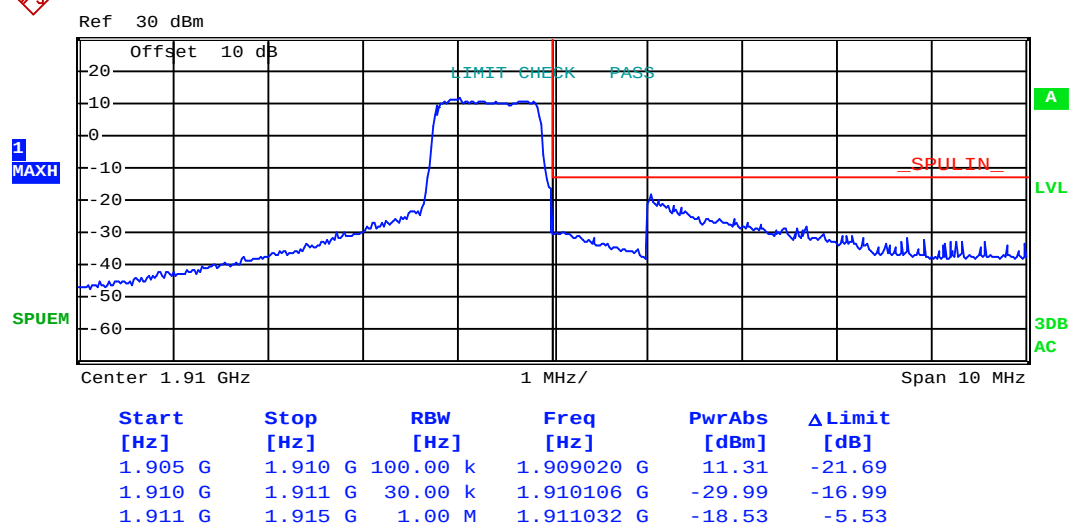
Highest channel

Test Mode:

LTE band 2(16QAM RB Size 6 & RB Offset 0)



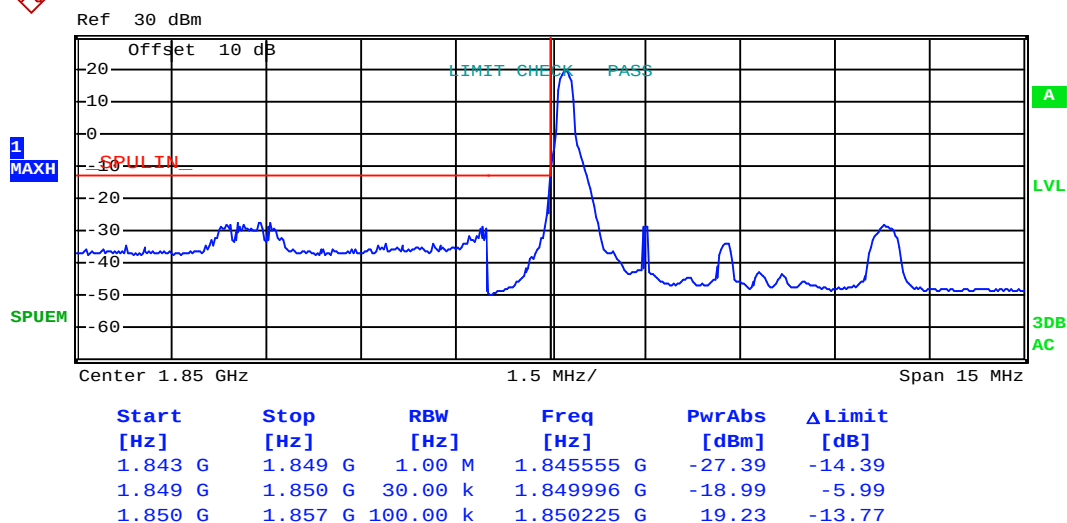
Lowest channel



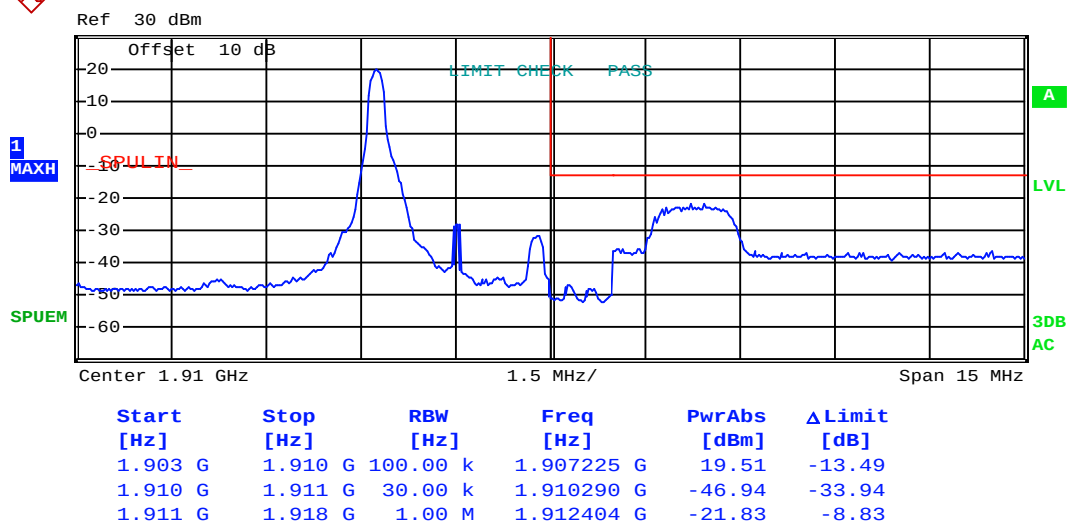
Highest channel

3MHz:

Test Mode:	LTE band 2(QPSK RB Size 1 & RB Offset 0)
------------	--



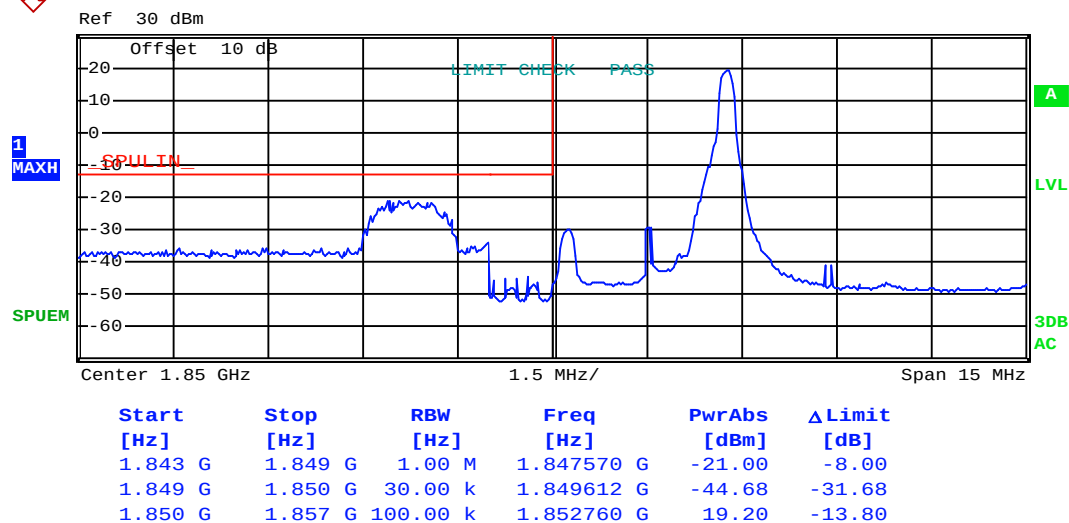
Lowest channel



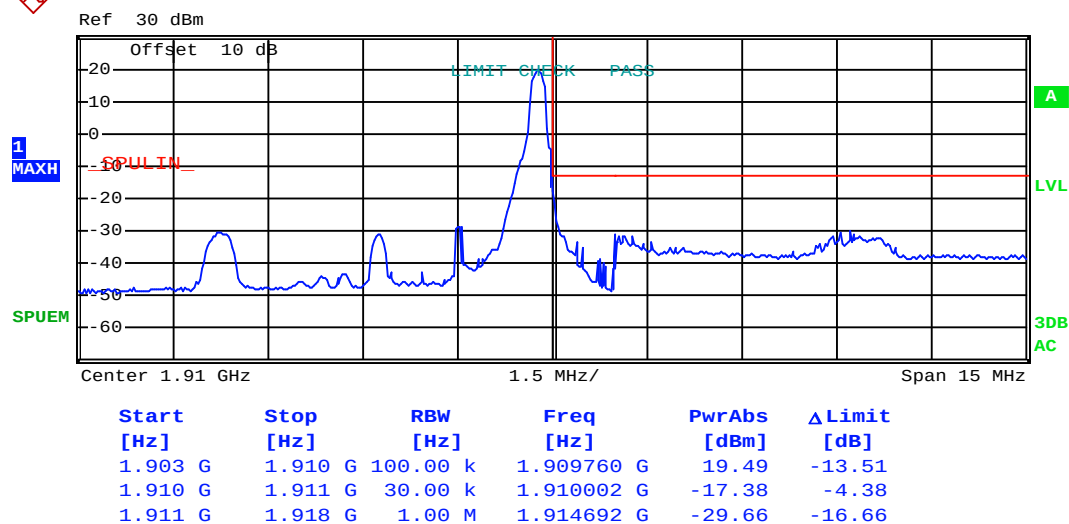
Highest channel

Test Mode:

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



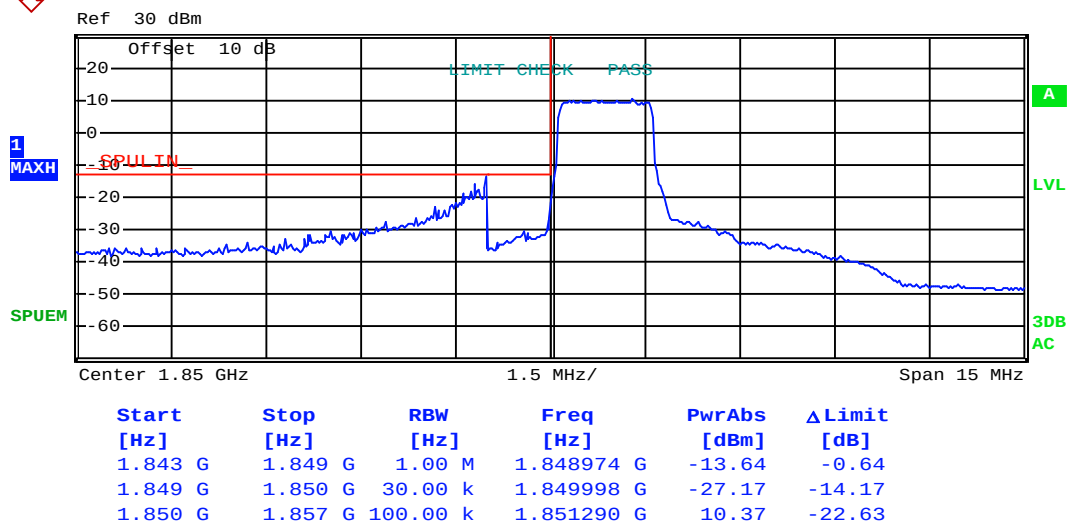
Lowest channel



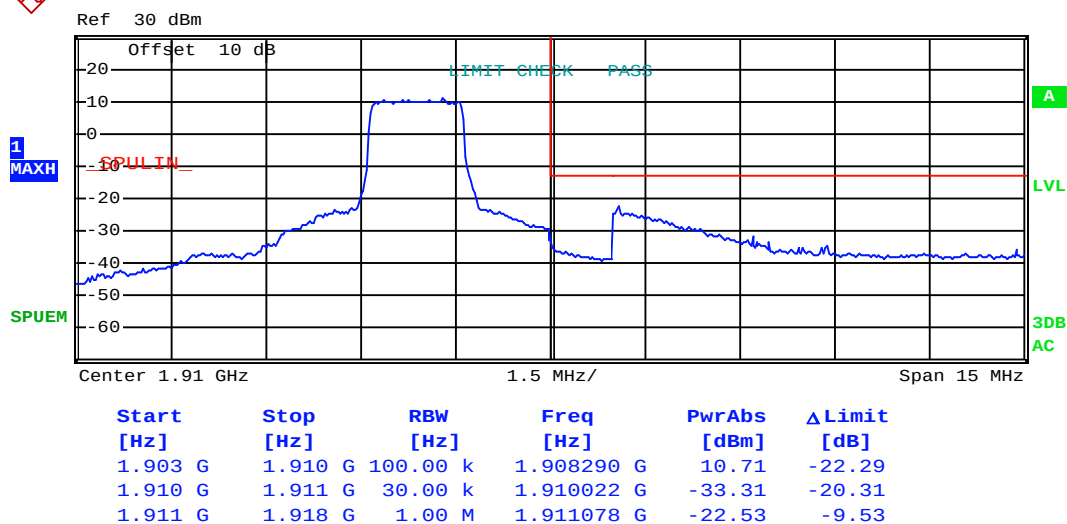
Highest channel

Test Mode:

LTE band 2(QPSK RB Size 8 & RB Offset 0)



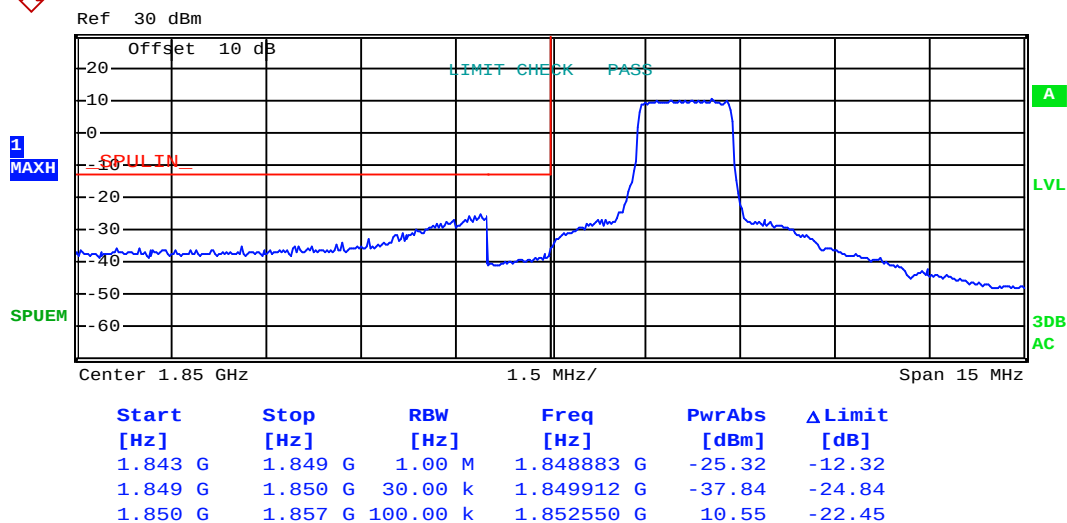
Lowest channel



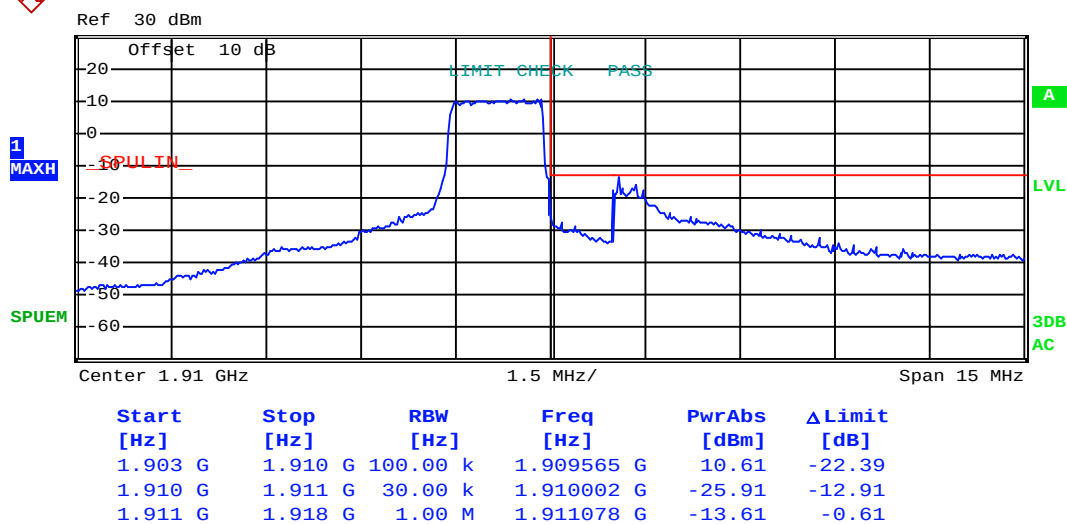
Highest channel

Test Mode:

LTE band 2(QPSK RB Size 8 & RB Offset 7)

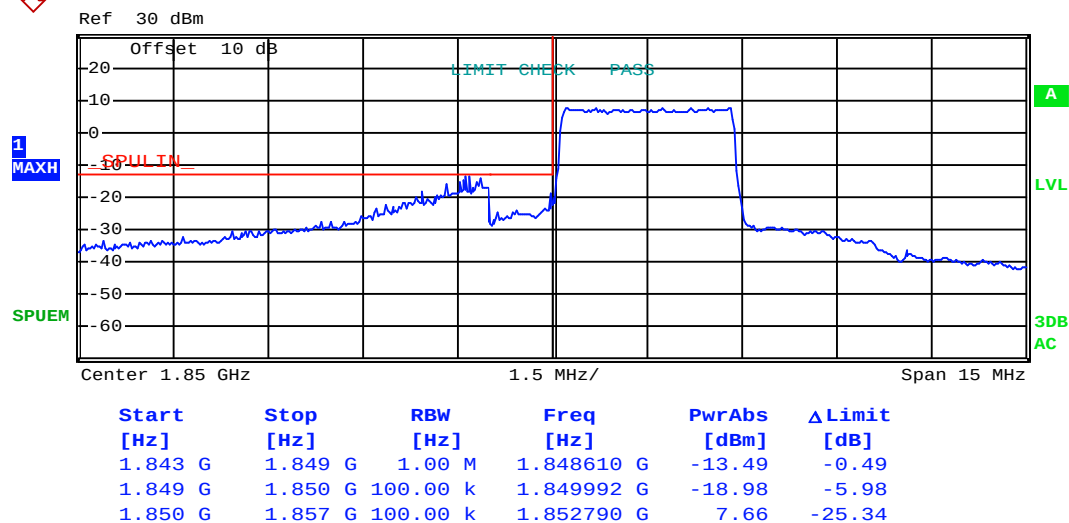


Lowest channel

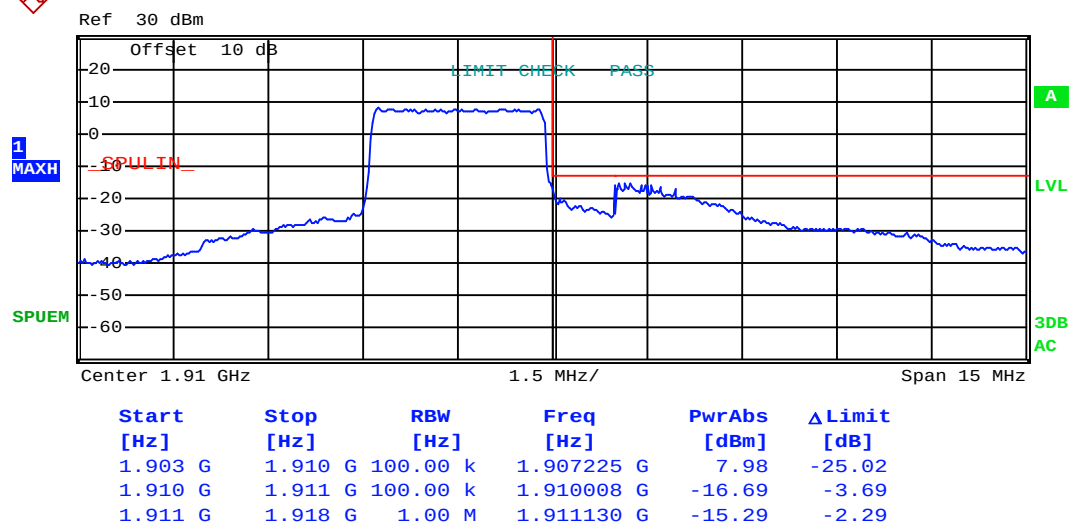


Highest channel

Test Mode:	LTE band 2(QPSK RB Size 15 & RB Offset 0)
------------	---



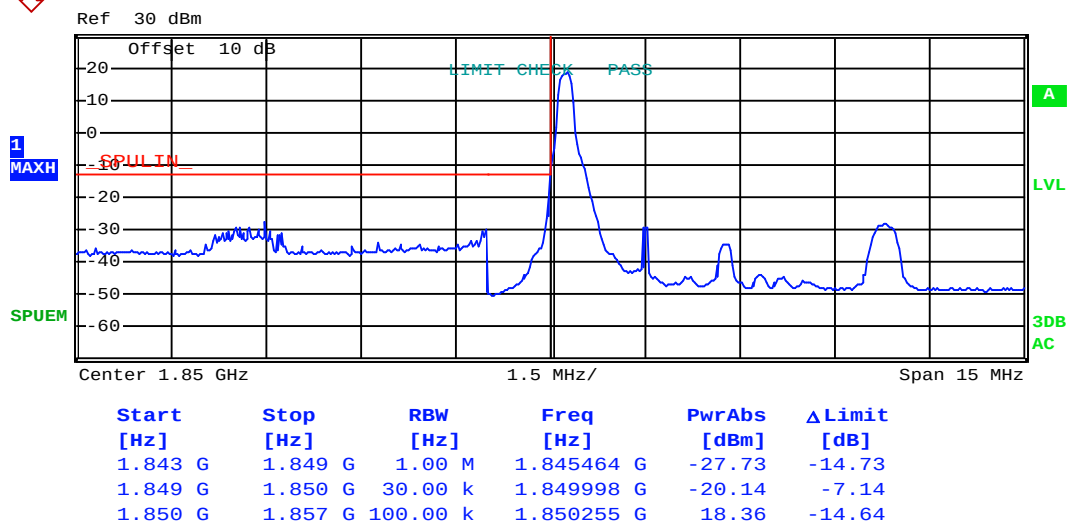
Lowest channel



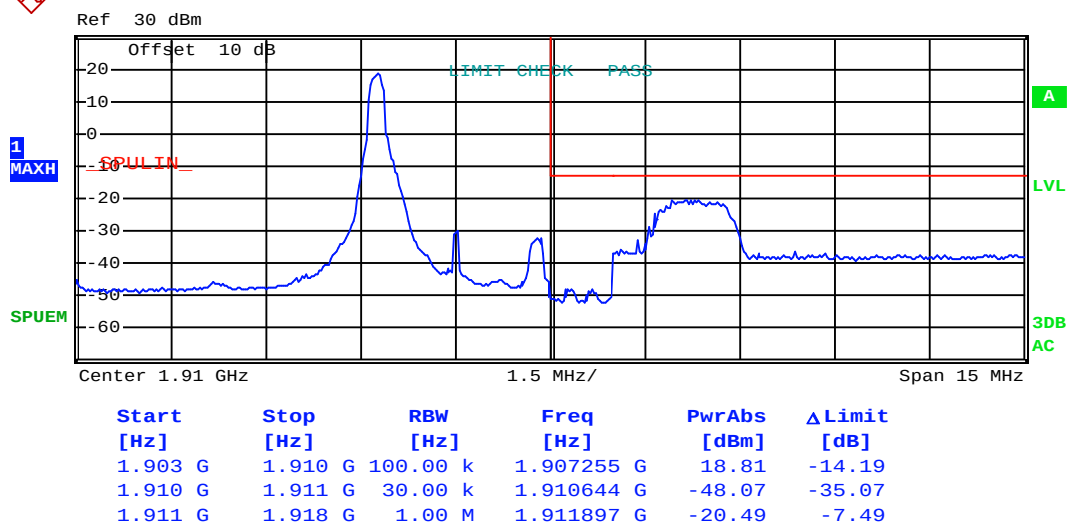
Highest channel

Test Mode:

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



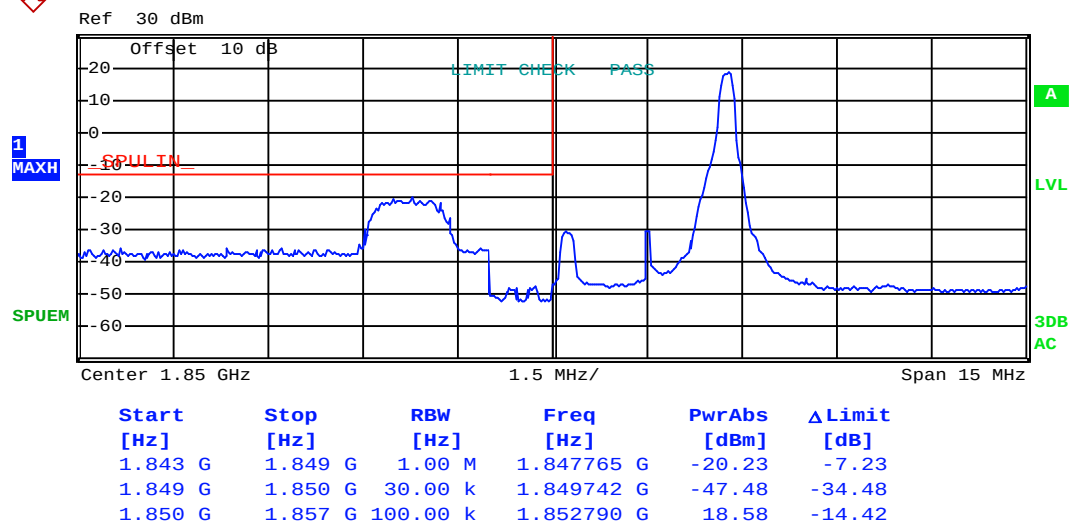
Lowest channel



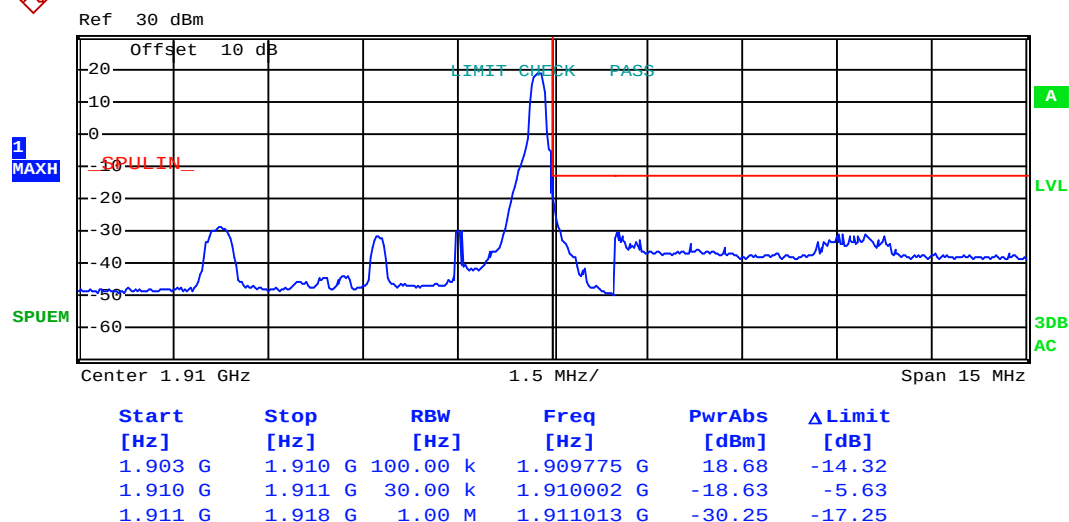
Highest channel

Test Mode:

LTE band 2(16QAM RB Size 1 & RB Offset 14)



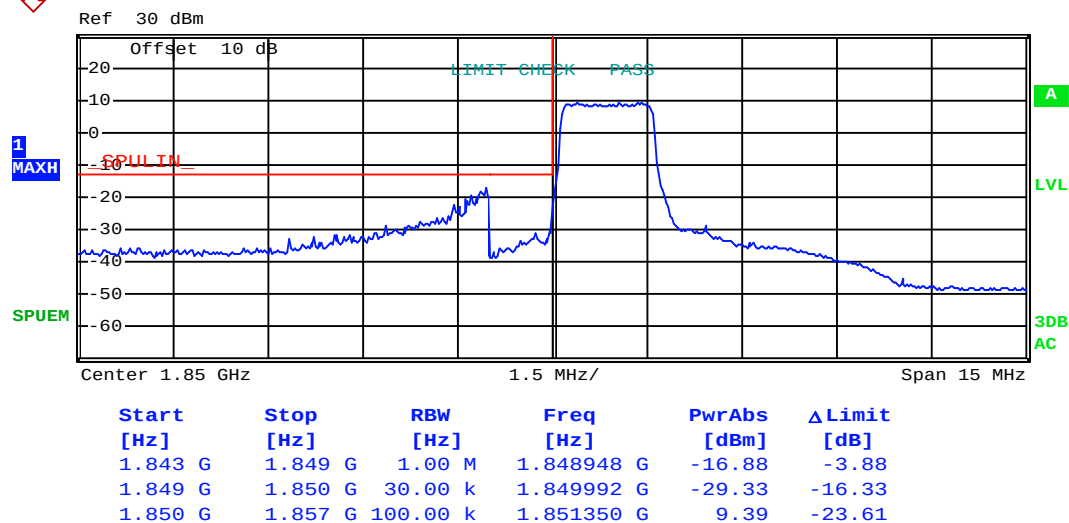
Lowest channel



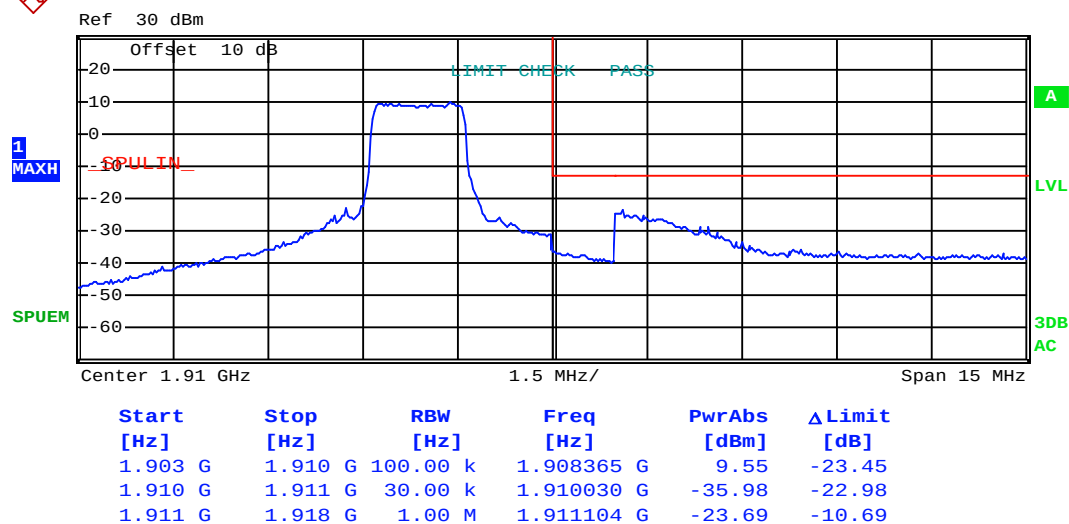
Highest channel

Test Mode:

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



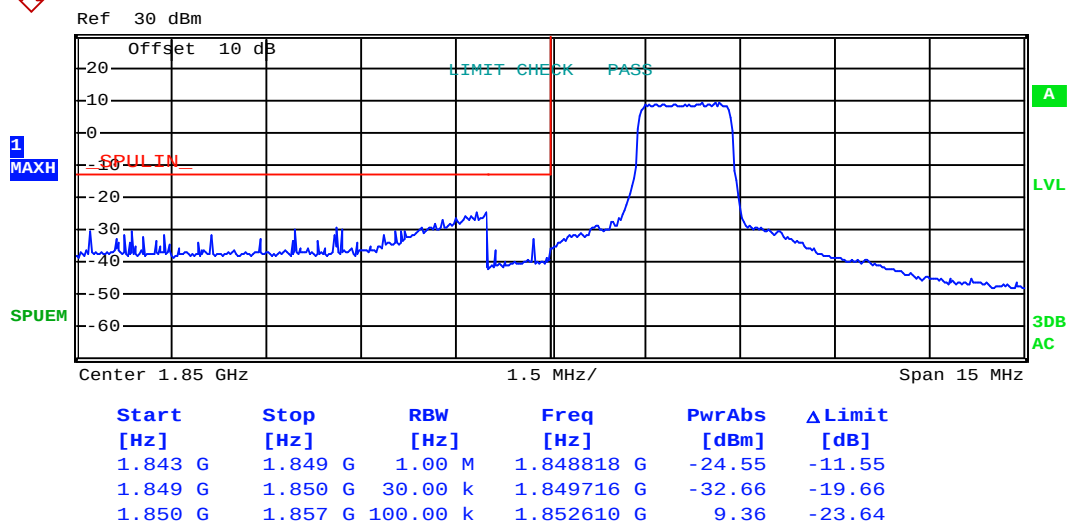
Lowest channel



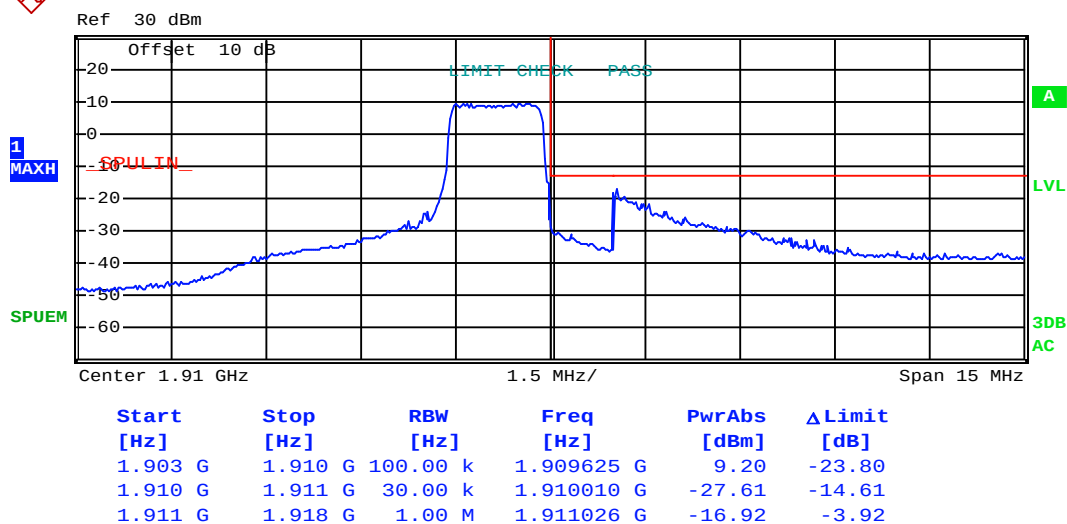
Highest channel

Test Mode:

LTE band 2(16QAM RB Size 8 & RB Offset 7)



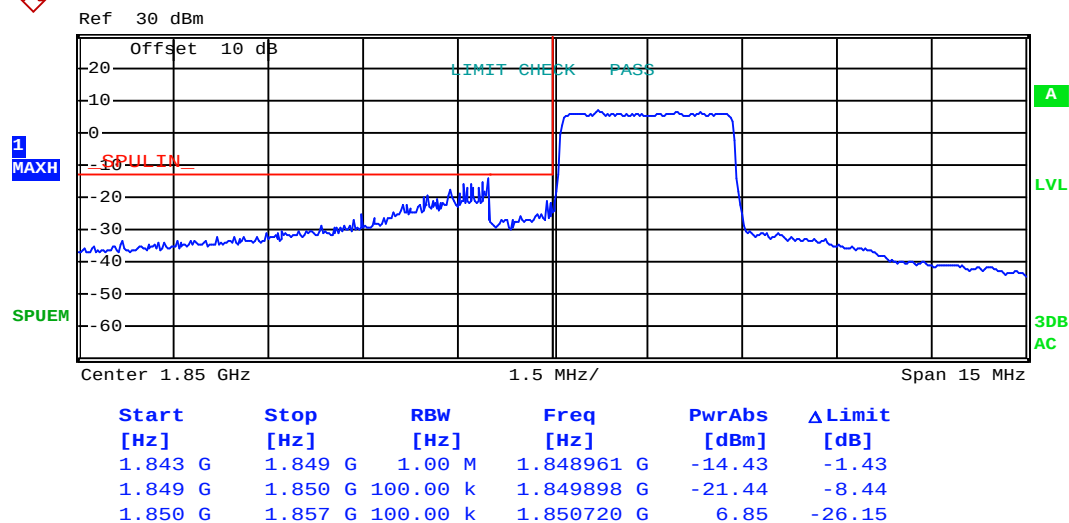
Lowest channel



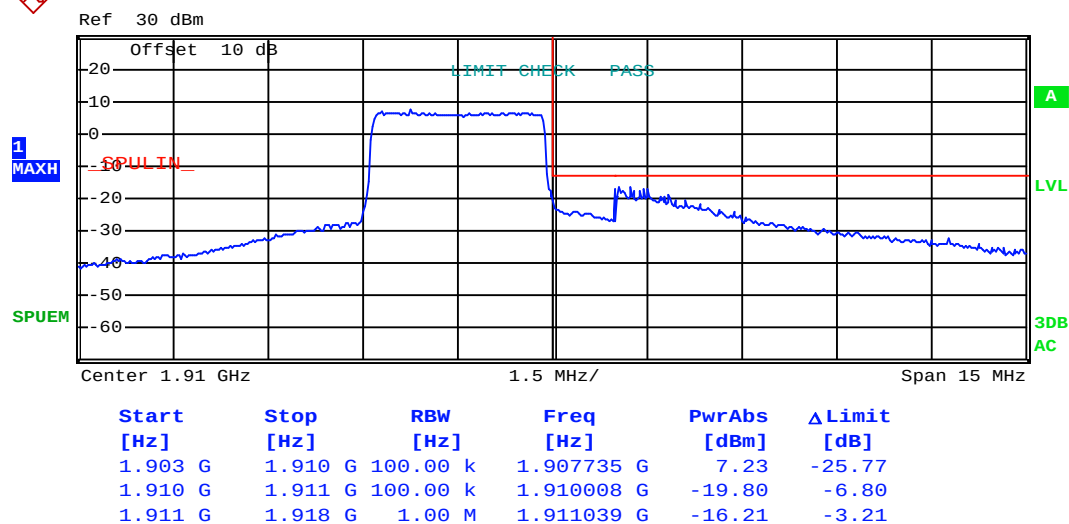
Highest channel

Test Mode:

LTE band 2(16QAM RB Size 15 & RB Offset 0)



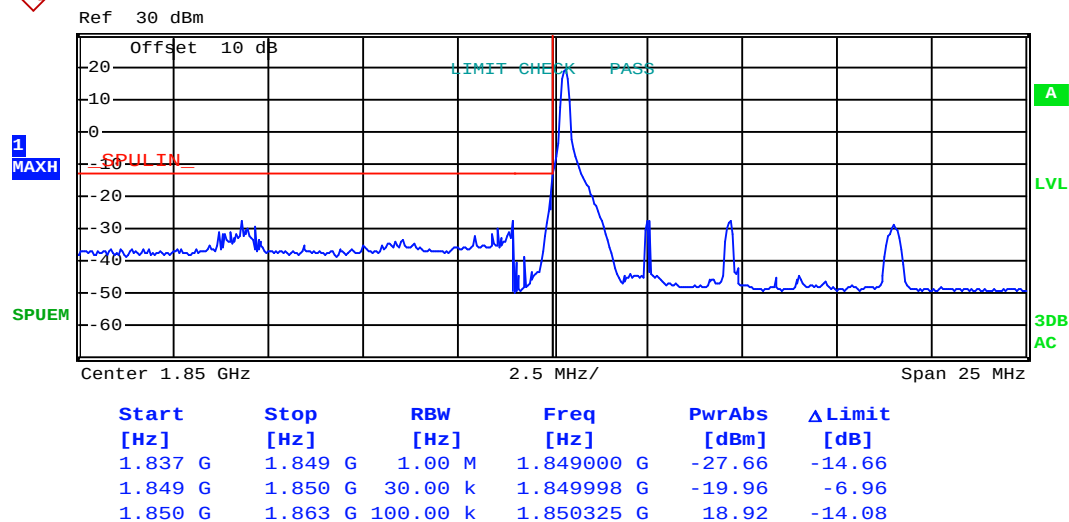
Lowest channel



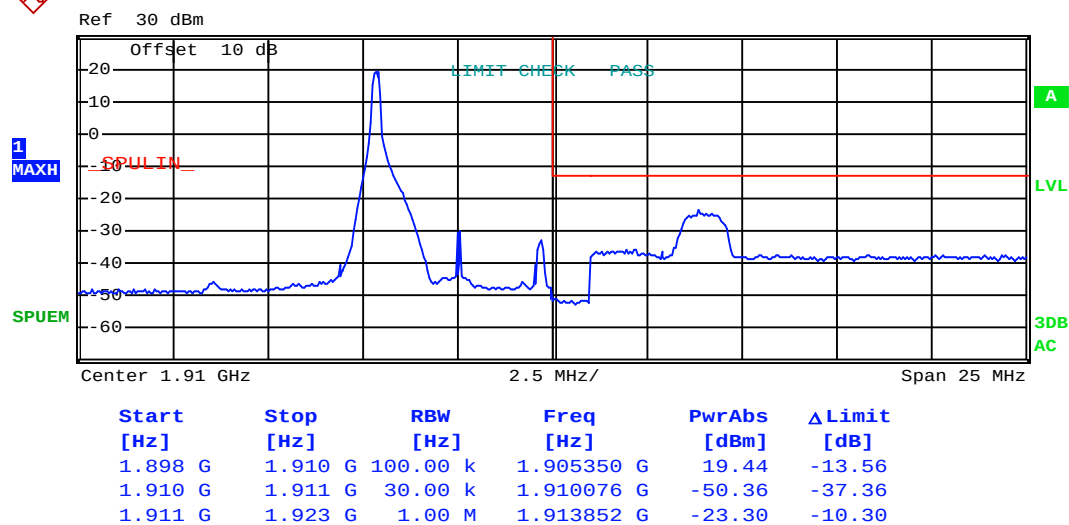
Highest channel

5MHz:

Test Mode:	LTE band 2(QPSK RB Size 1 & RB Offset 0)
------------	--



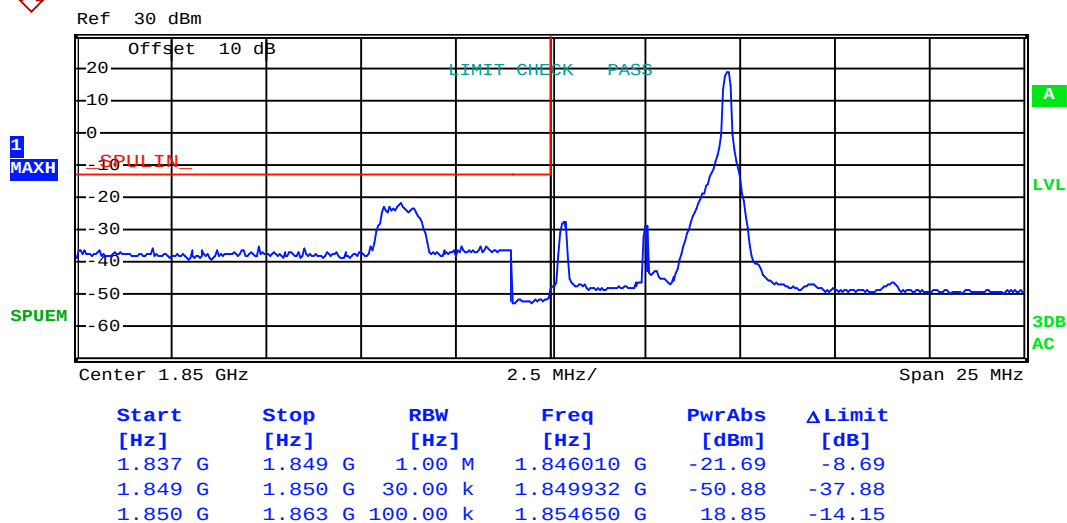
Lowest channel



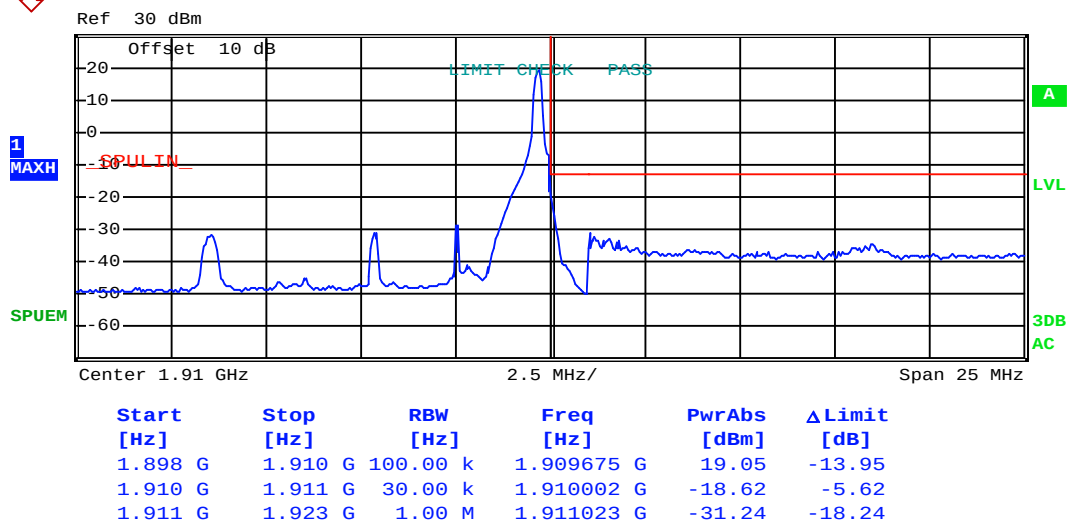
Highest channel

Test Mode:

LTE band 2(QPSK RB Size 1 & RB Offset 24)



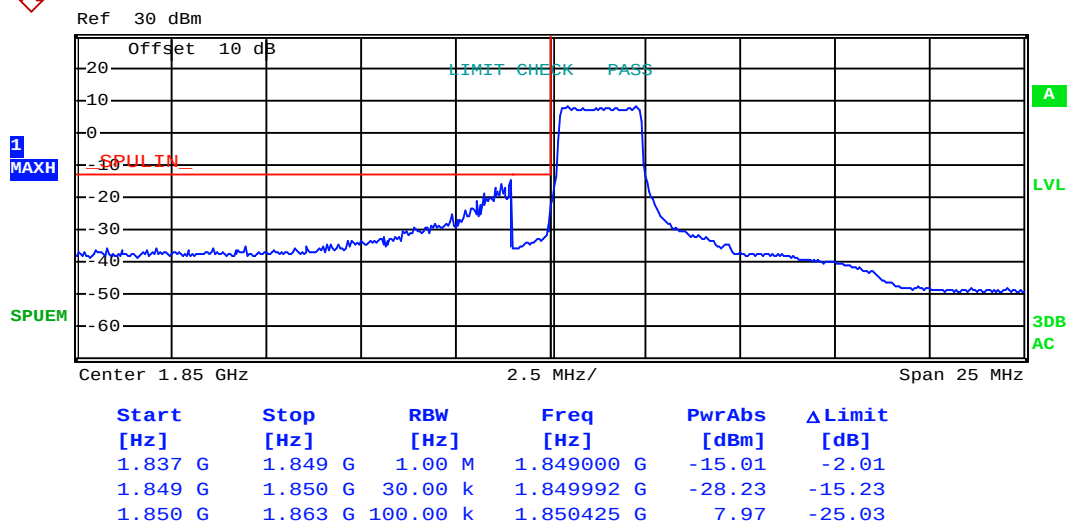
Lowest channel



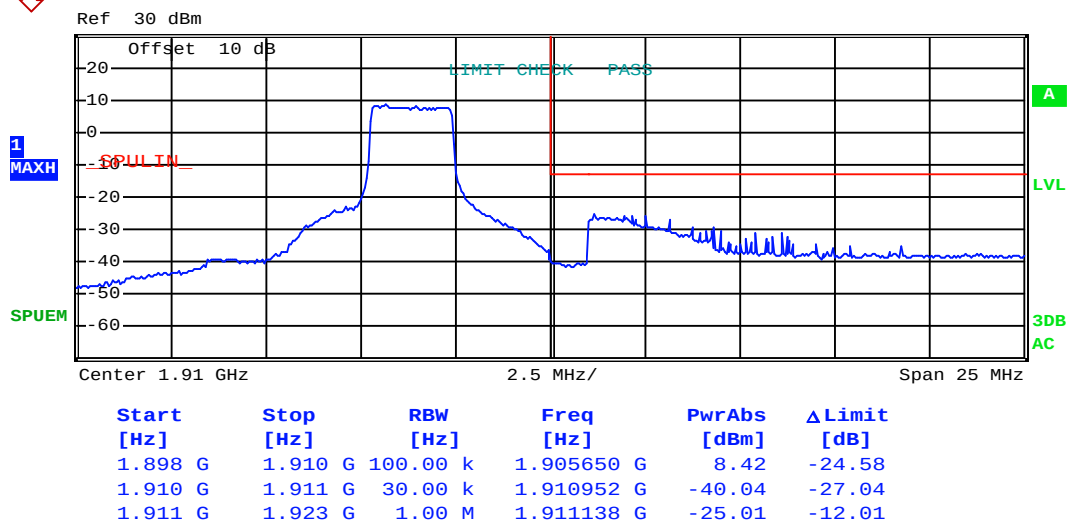
Highest channel

Test Mode:

LTE band 2(QPSK RB Size 12 & RB Offset 0)



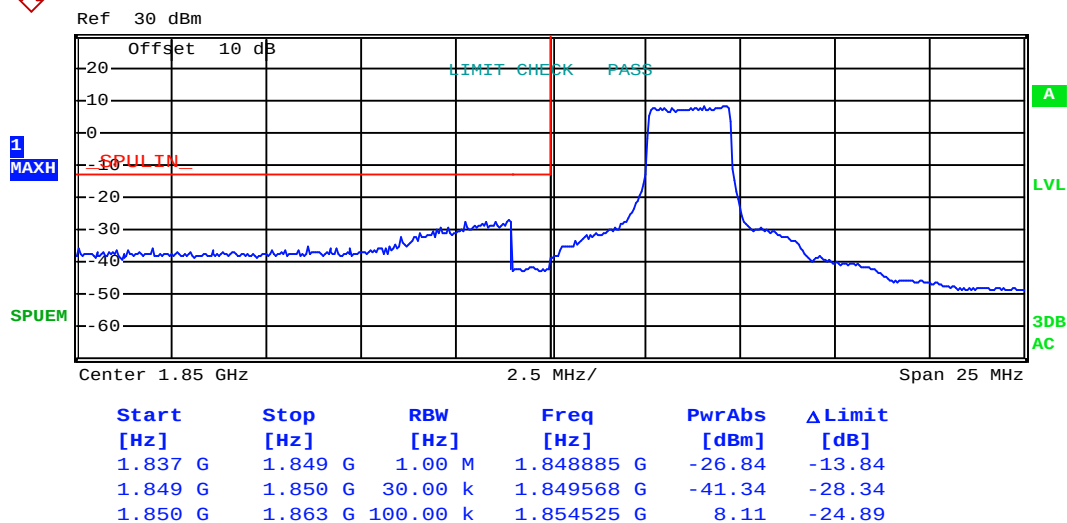
Lowest channel



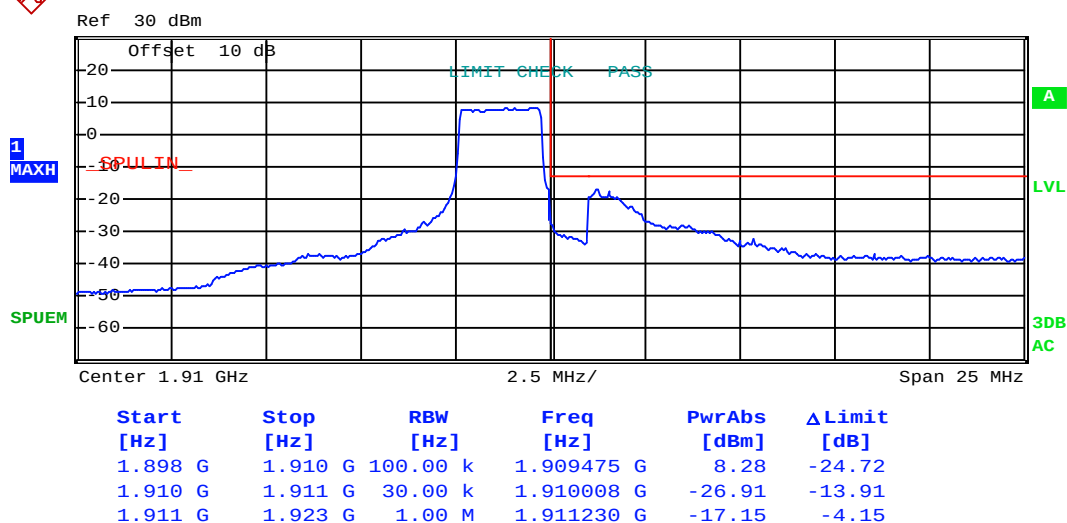
Highest channel

Test Mode:

LTE band 2(QPSK RB Size 12 & RB Offset 11)



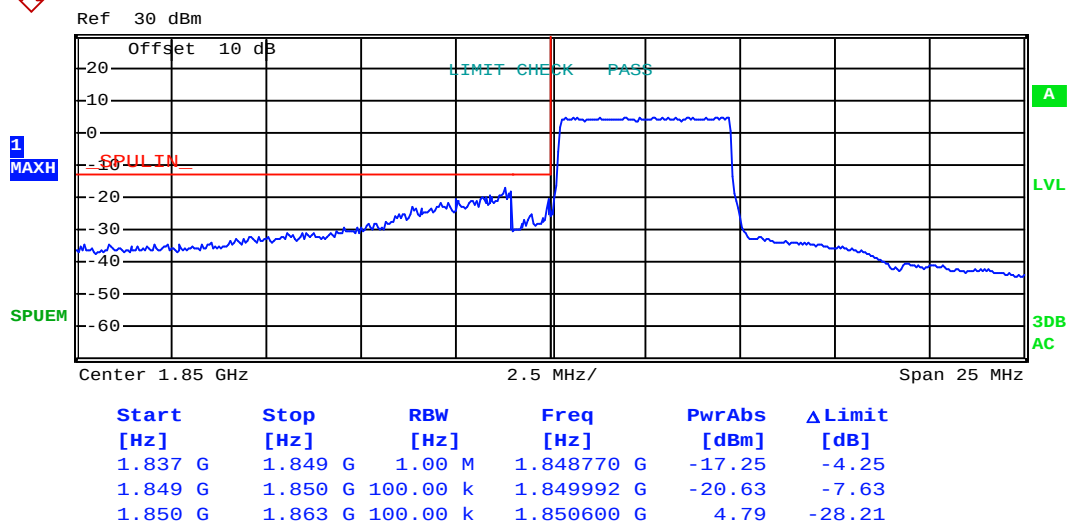
Lowest channel



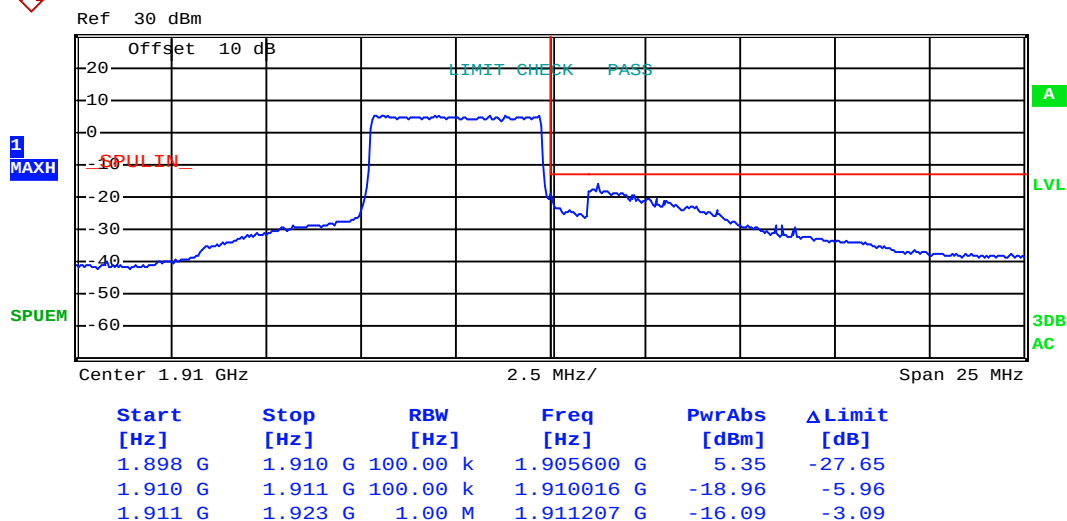
Highest channel

Test Mode:

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



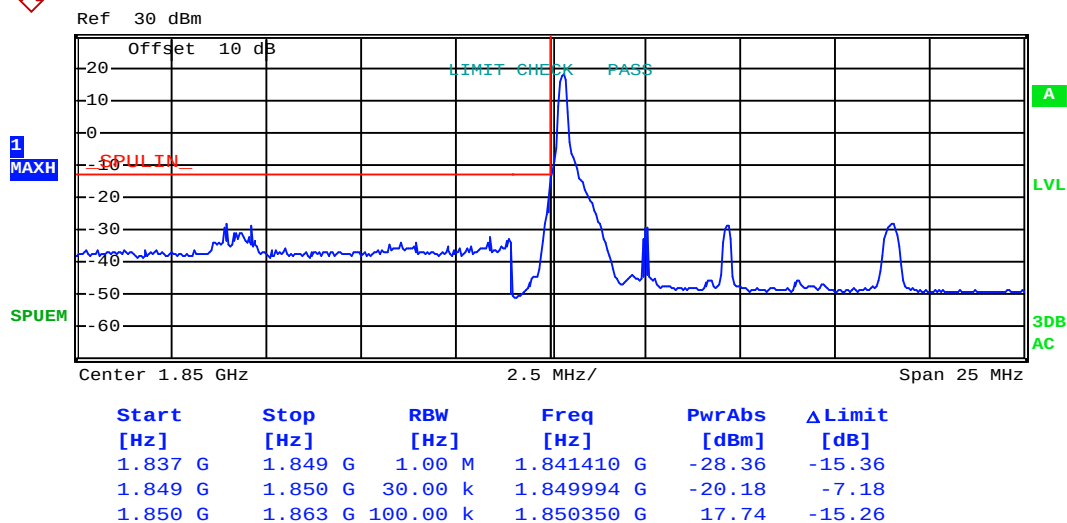
Lowest channel



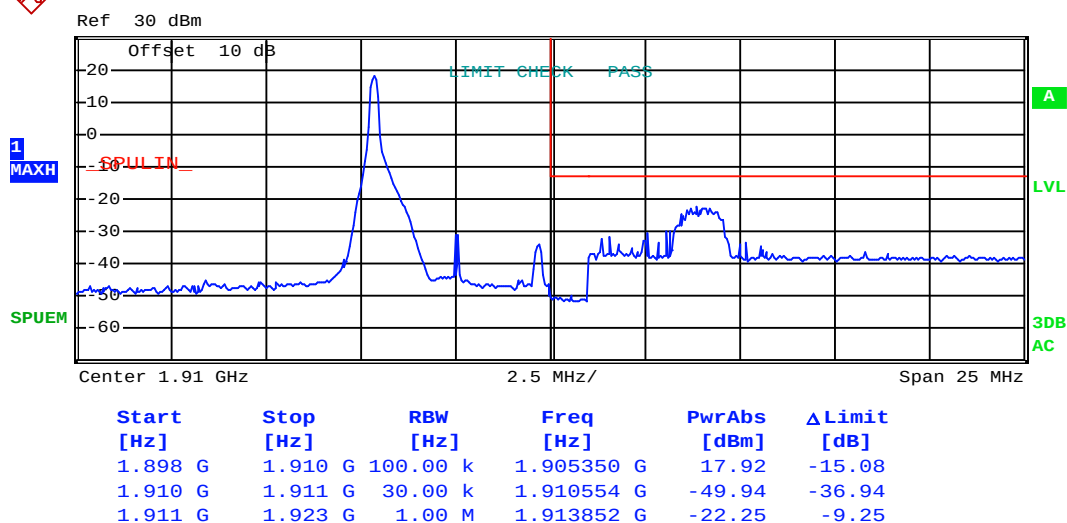
Highest channel

Test Mode:

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



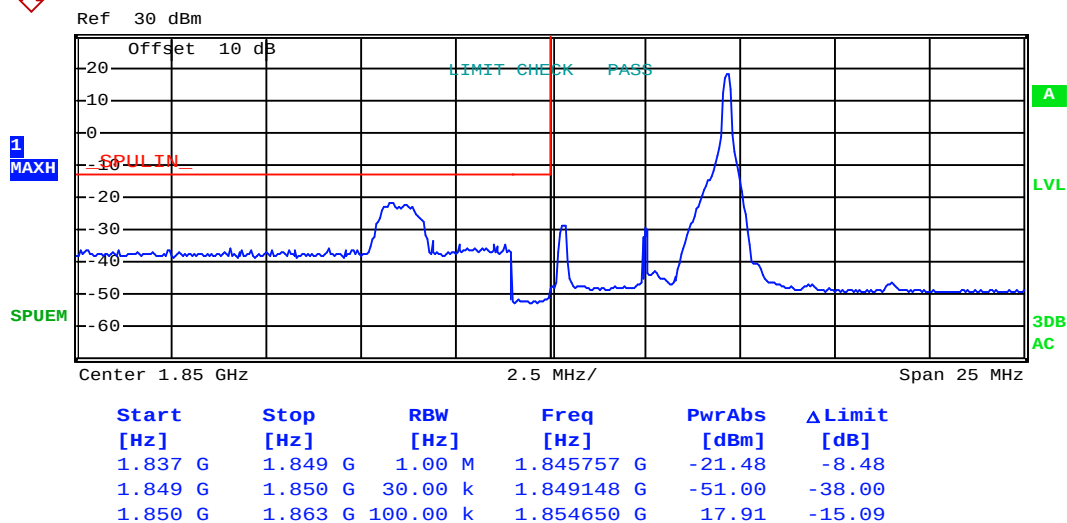
Lowest channel



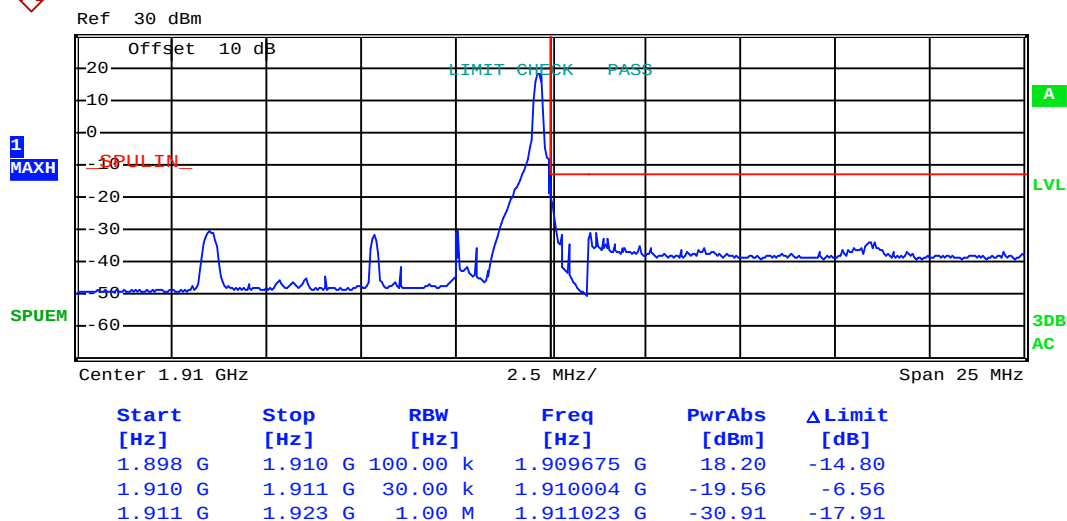
Highest channel

Test Mode:

LTE band 2(16QAM RB Size 1 & RB Offset 24)



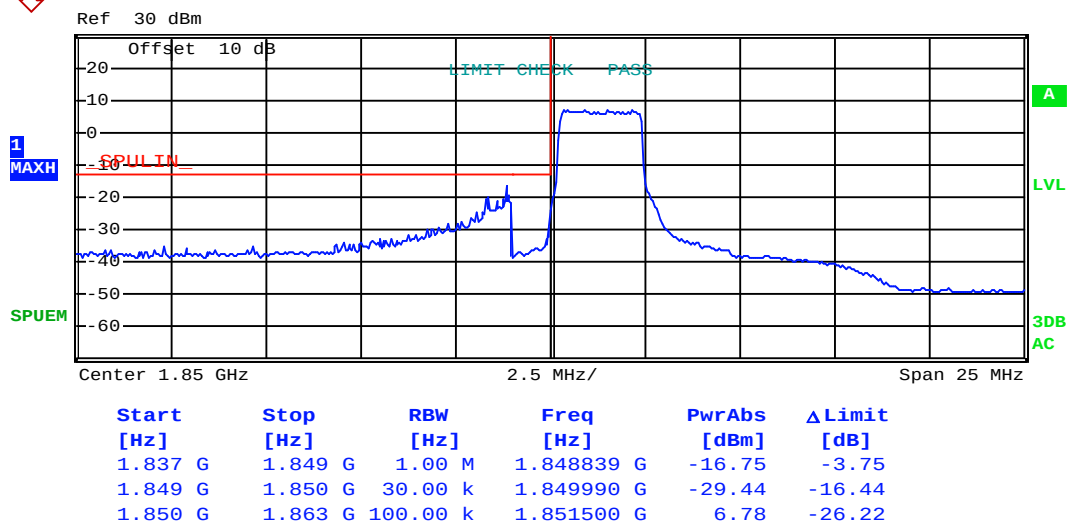
Lowest channel



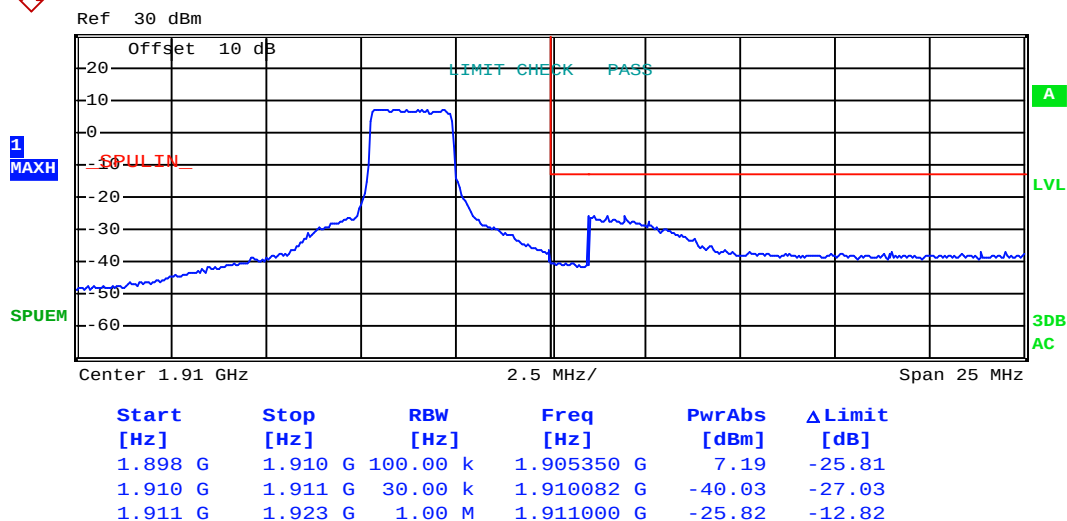
Highest channel

Test Mode:

LTE band 2(16QAM RB Size 12 & RB Offset 0)



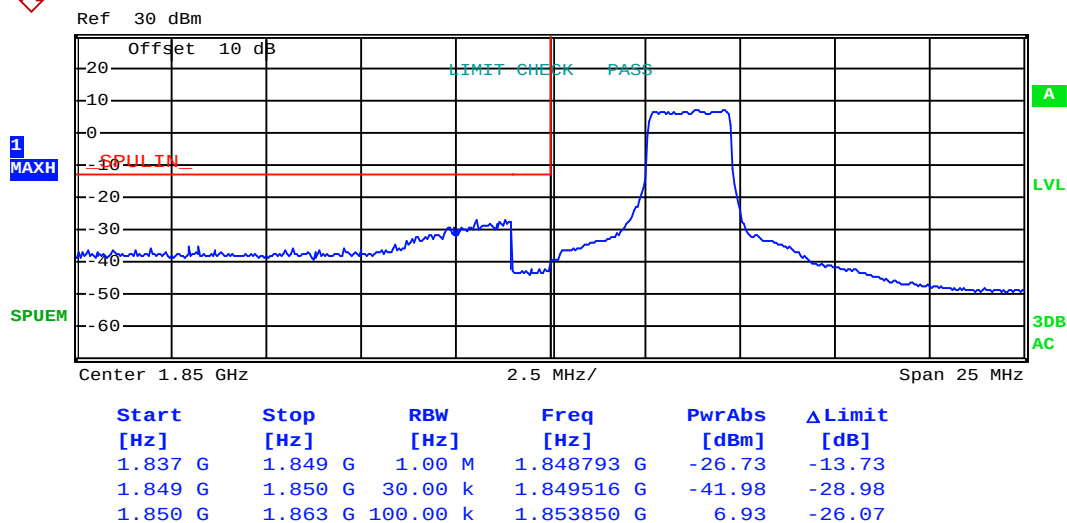
Lowest channel



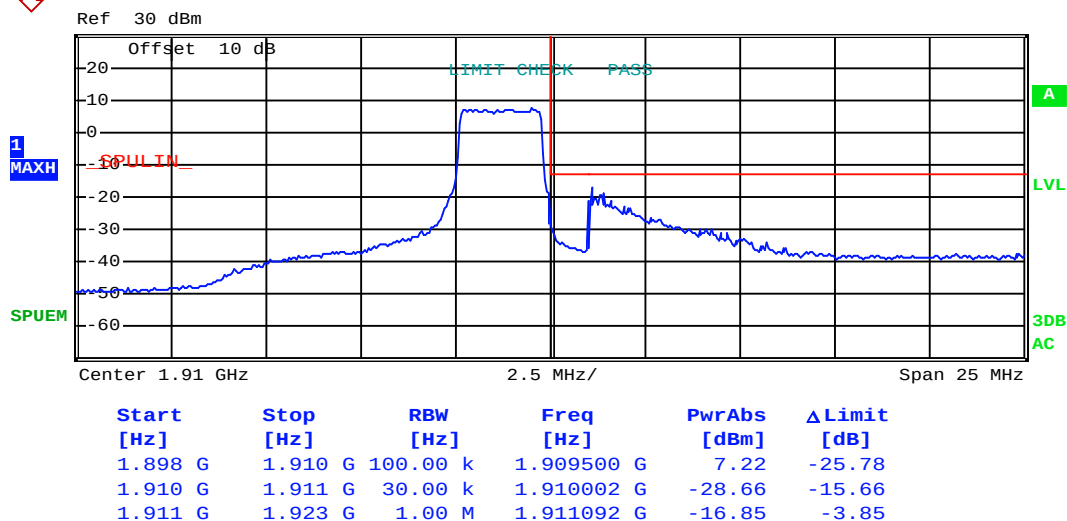
Highest channel

Test Mode:

LTE band 2(16QAM RB Size 12 & RB Offset 11)



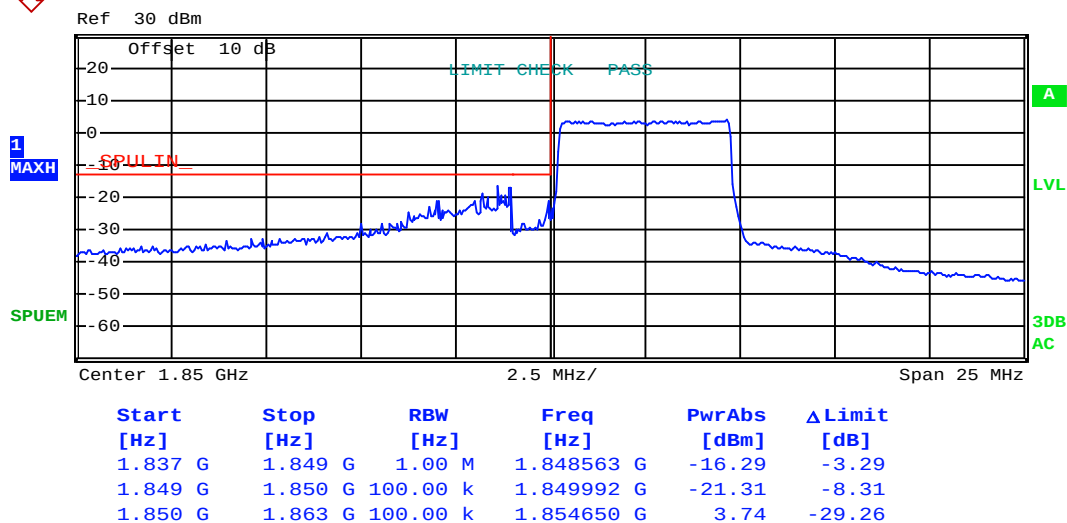
Lowest channel



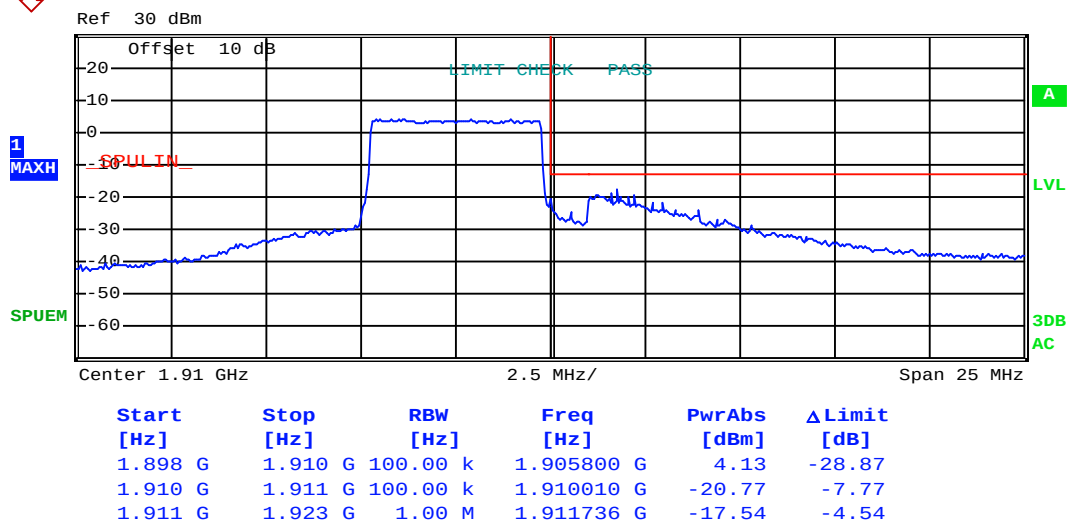
Highest channel

Test Mode:

LTE band 2(16QAM RB Size 25 & RB Offset 0)



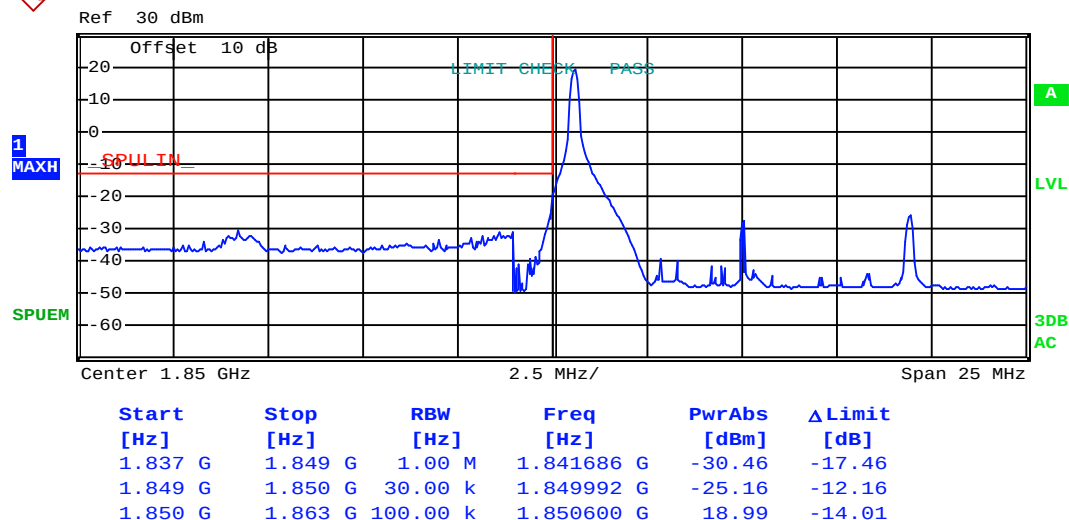
Lowest channel



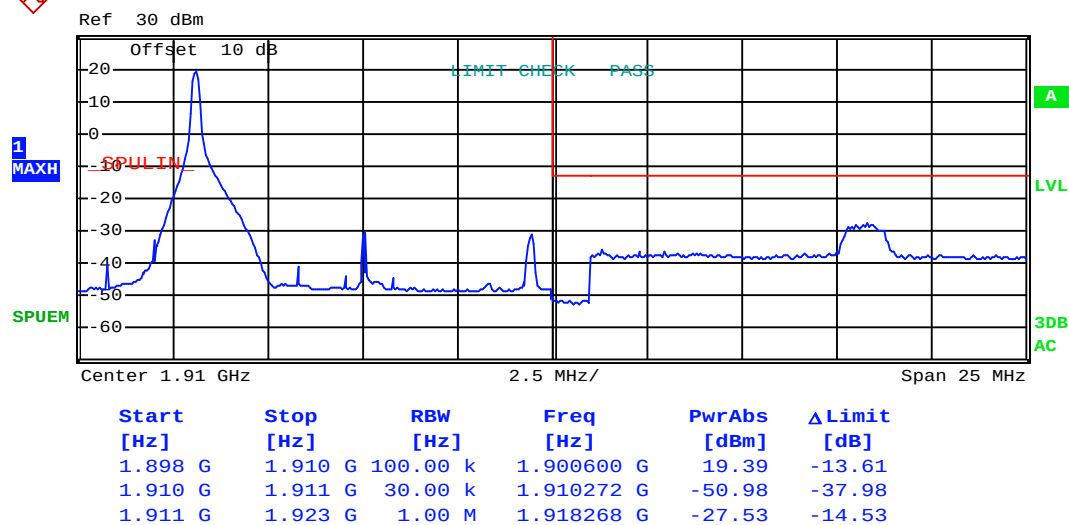
Highest channel

10MHz:

Test Mode:	LTE band 2(QPSK RB Size 1 & RB Offset 0)
------------	--



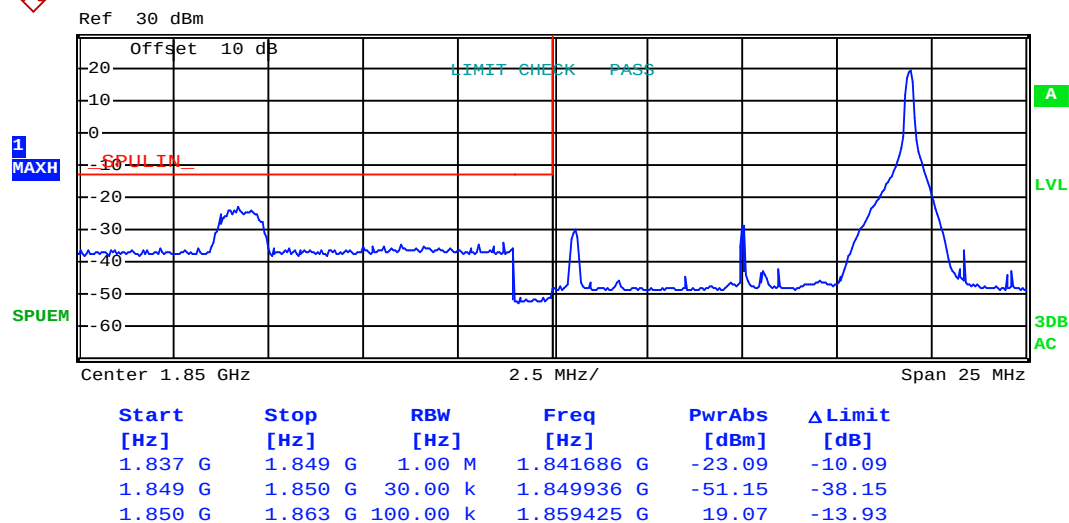
Lowest channel



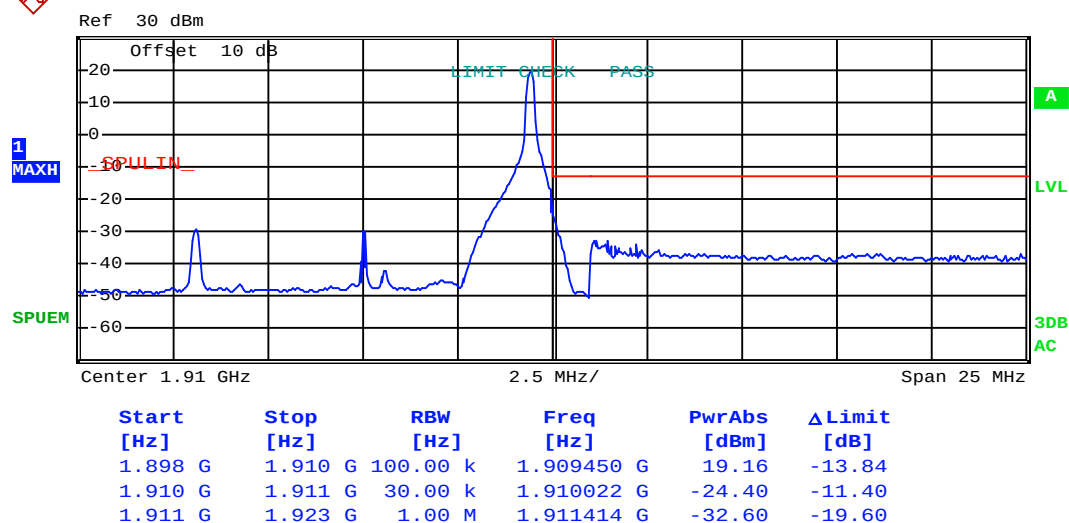
Highest channel

Test Mode:

LTE band 2(QPSK RB Size 1 & RB Offset 49)



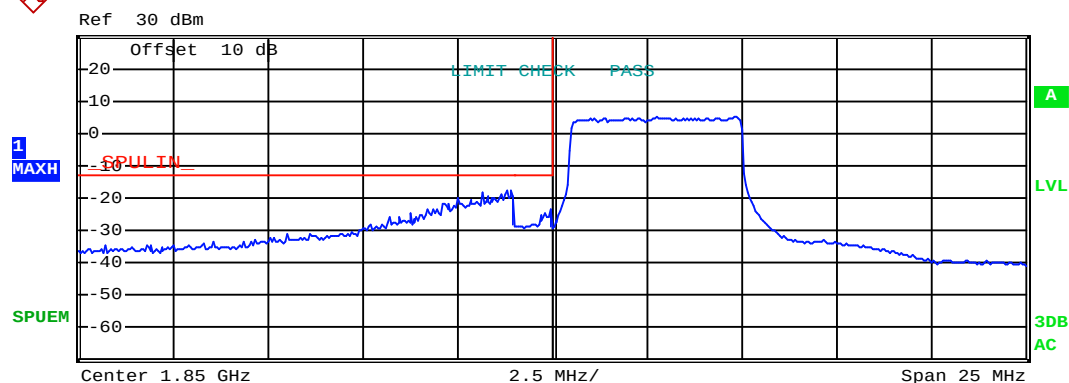
Lowest channel



Highest channel

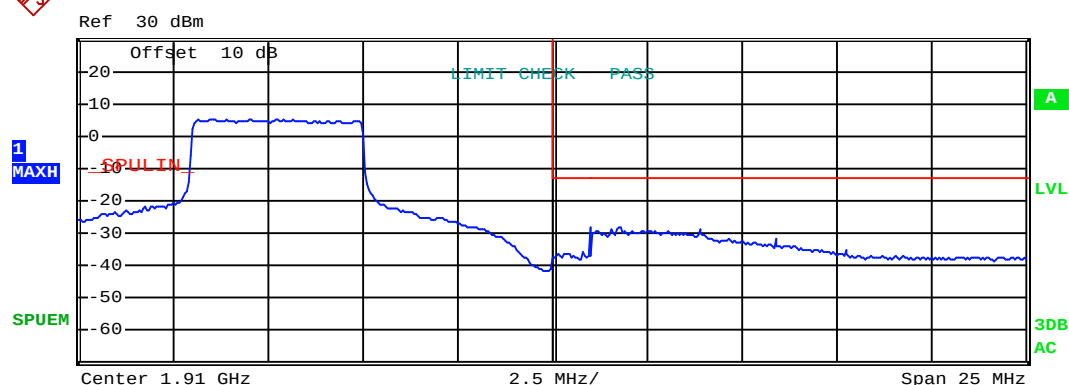
Test Mode:

LTE band 4(QPSK RB Size 25 & RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.837 G	1.849 G	1.00 M	1.848885 G	-17.43	-4.43
1.849 G	1.850 G	100.00 k	1.849976 G	-23.36	-10.36
1.850 G	1.863 G	100.00 k	1.854850 G	5.25	-27.75

Lowest channel

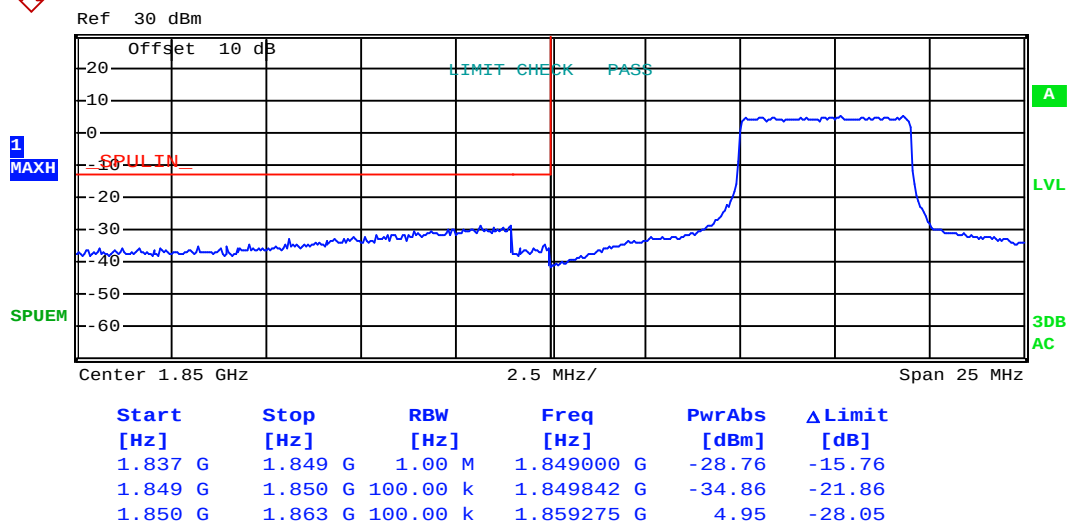


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.898 G	1.910 G	100.00 k	1.902725 G	5.19	-27.81
1.910 G	1.911 G	100.00 k	1.910778 G	-36.07	-23.07
1.911 G	1.923 G	1.00 M	1.911736 G	-27.97	-14.97

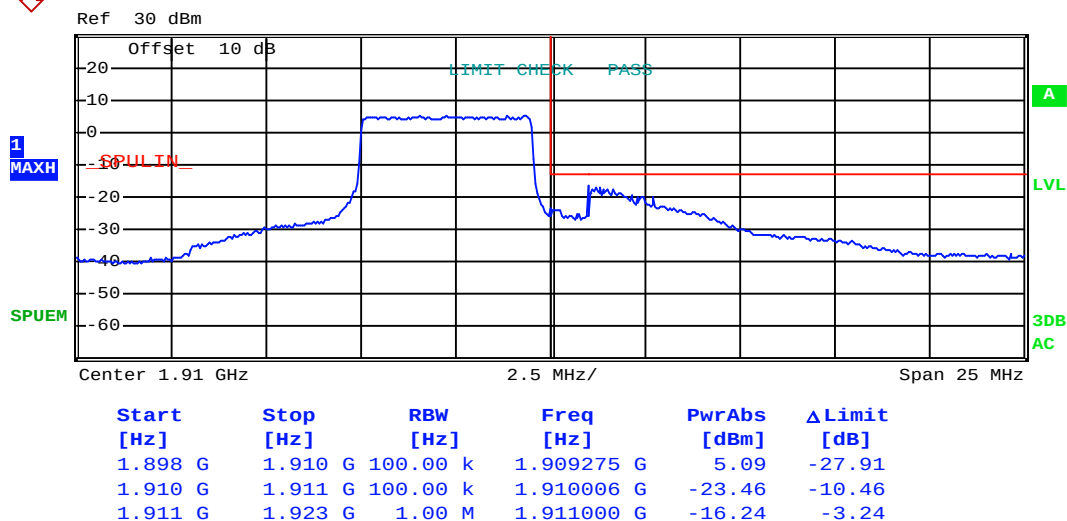
Highest channel

Test Mode:

LTE band 4(QPSK RB Size 25 & RB Offset 24)



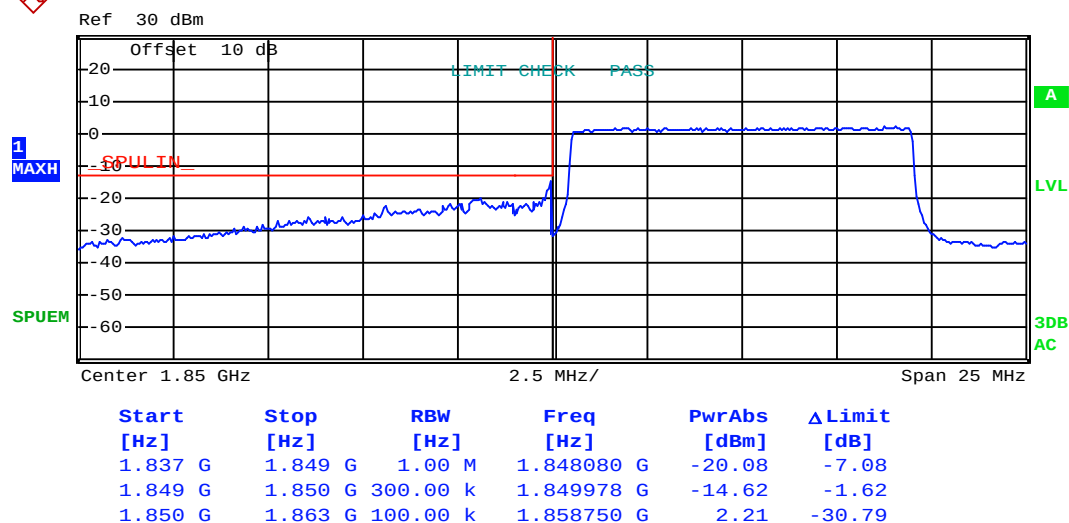
Lowest channel



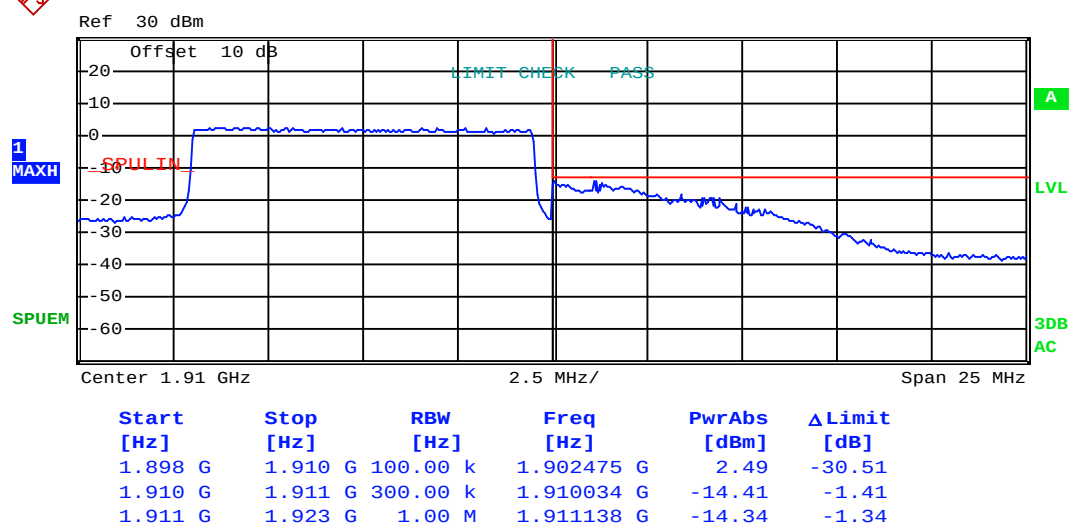
Highest channel

Test Mode:

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



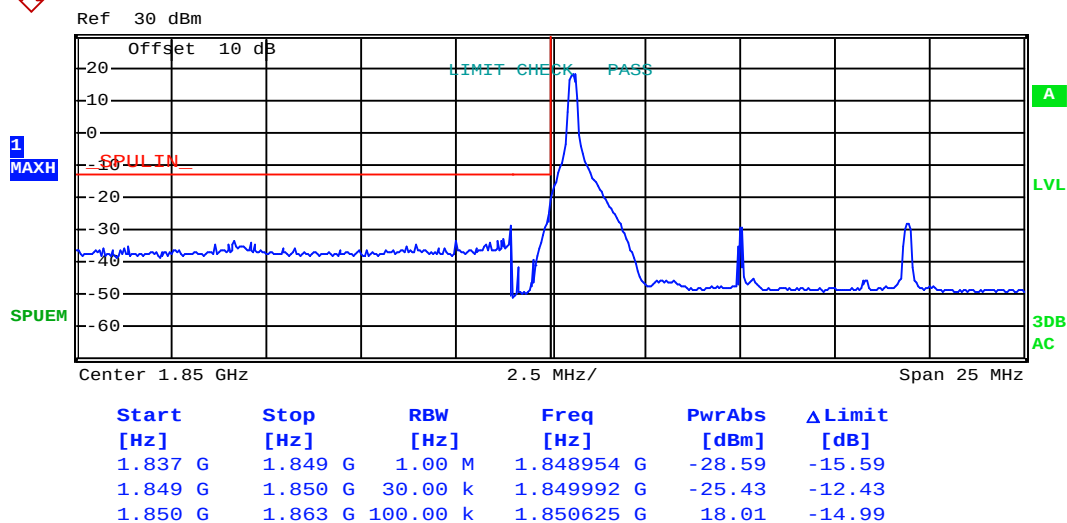
Lowest channel



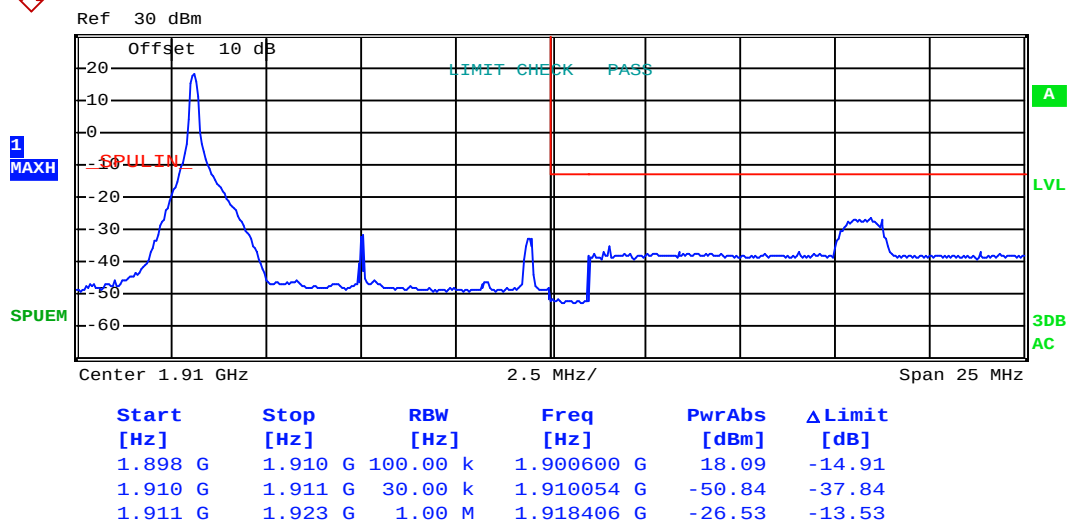
Highest channel

Test Mode:

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



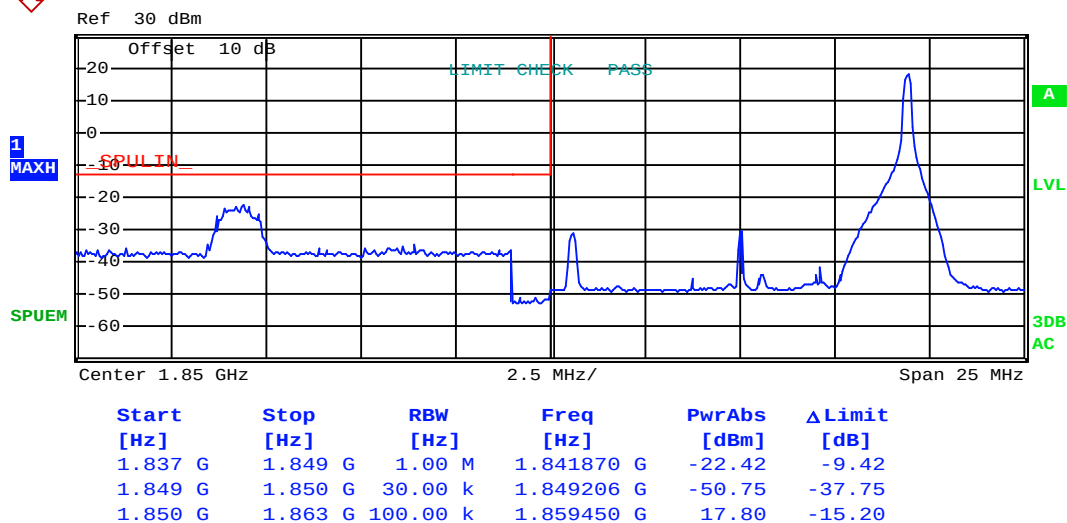
Lowest channel



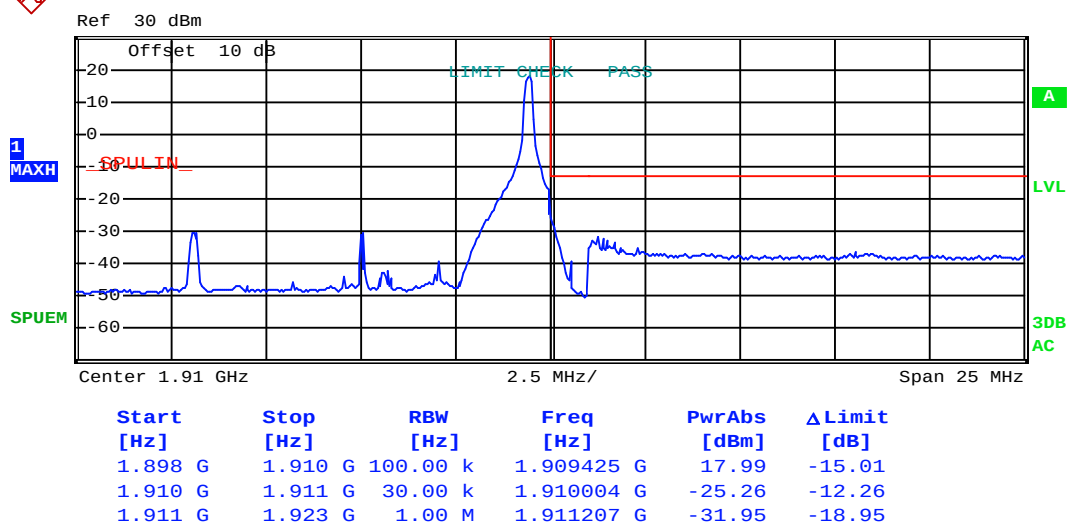
Highest channel

Test Mode:

LTE band 2(16QAM RB Size 1 & RB Offset 49)



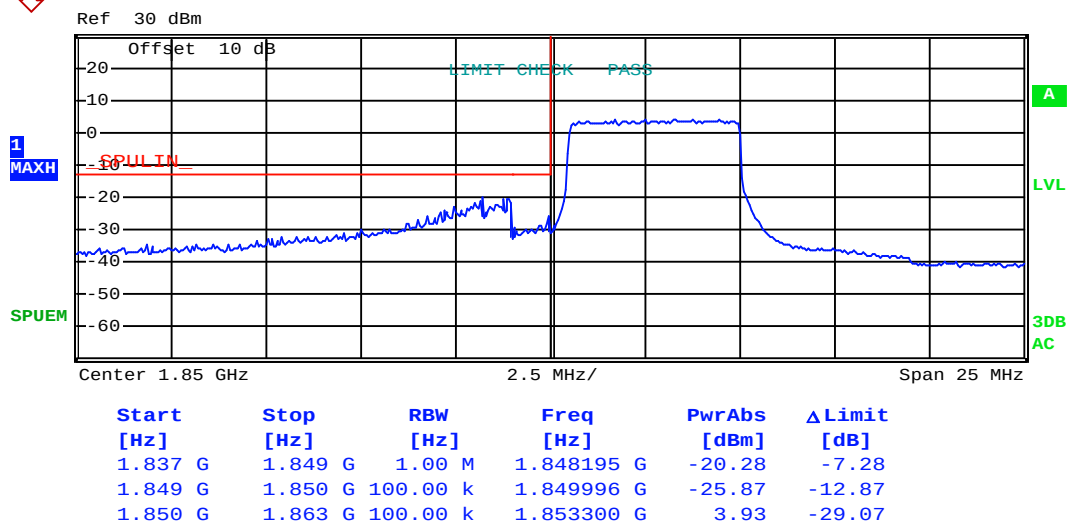
Lowest channel



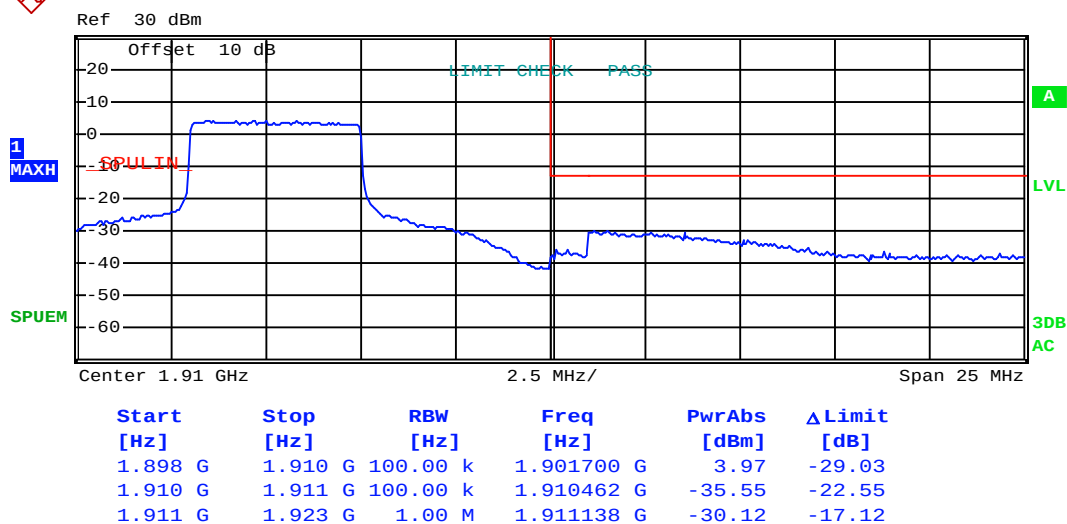
Highest channel

Test Mode:

LTE band 2(16QAM RB Size 25 & RB Offset 0)



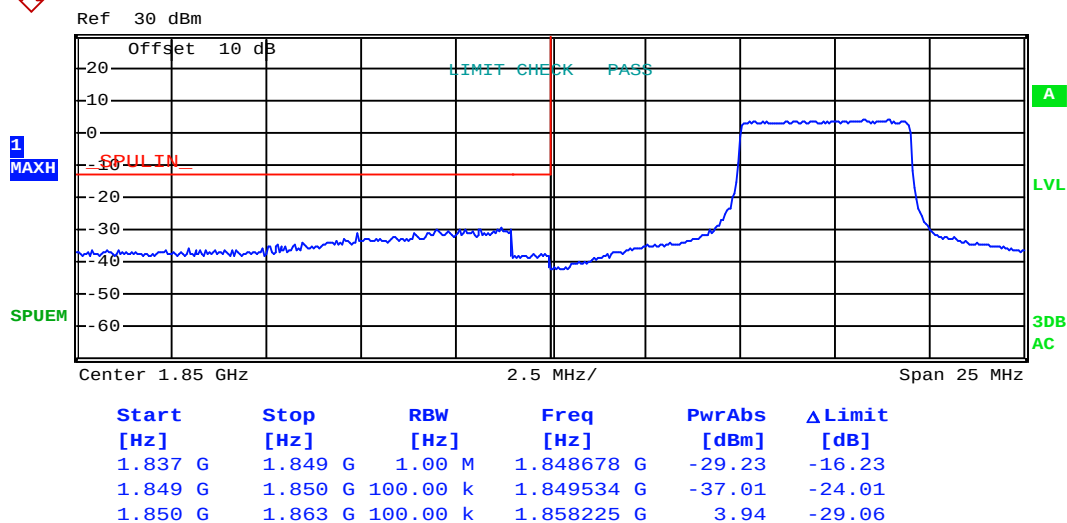
Lowest channel



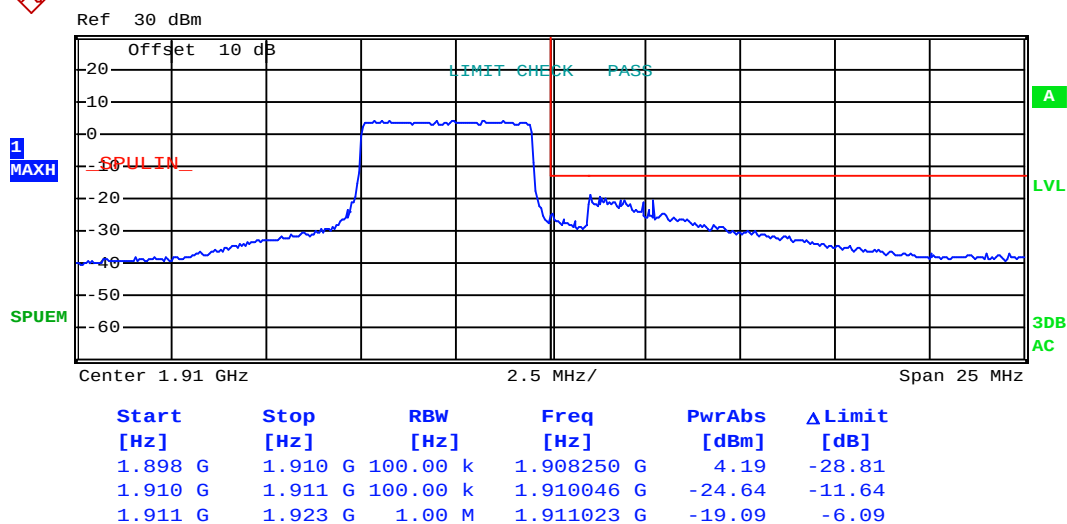
Highest channel

Test Mode:

LTE band 2(16QAM RB Size 25 & RB Offset 24)



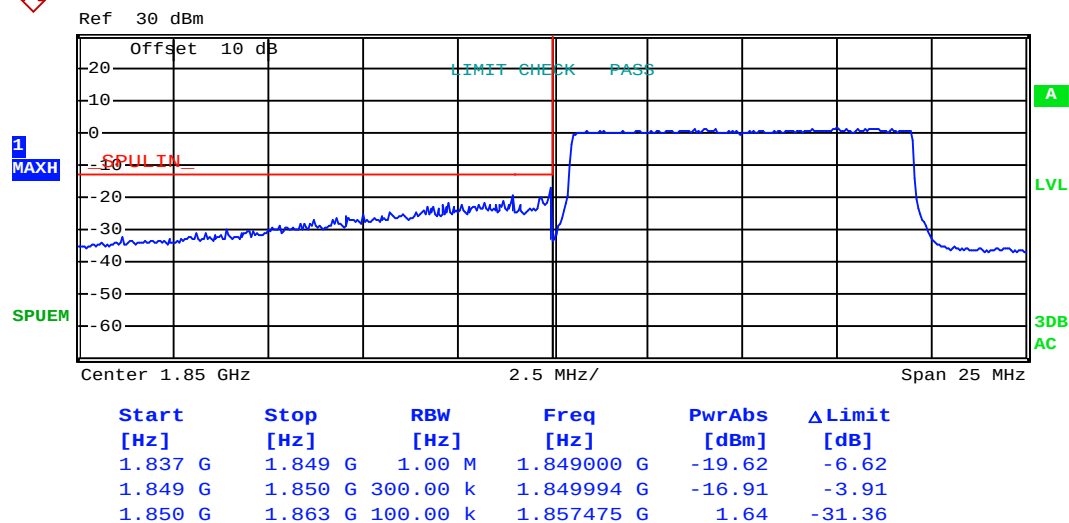
Lowest channel



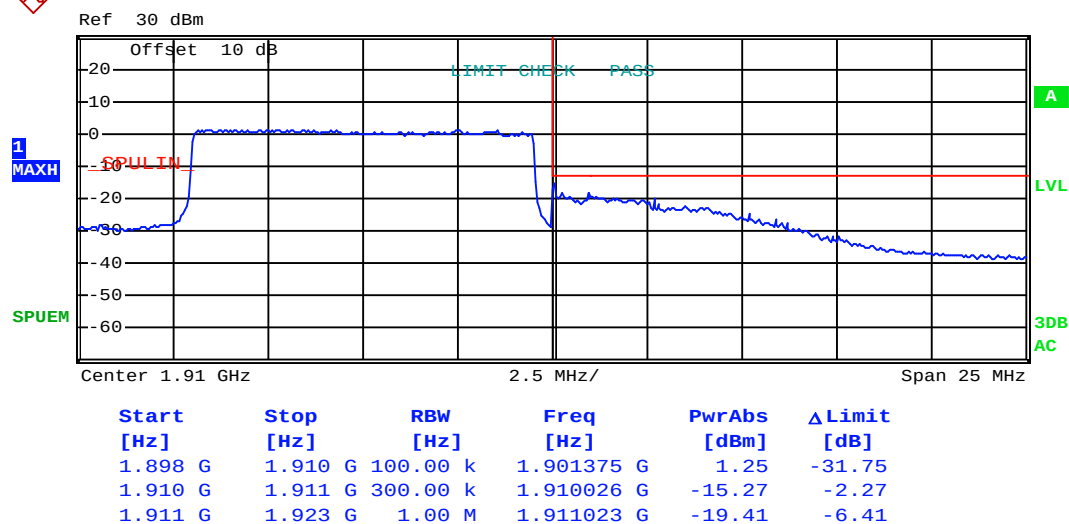
Highest channel

Test Mode:

LTE band 2(16QAM RB Size 50 & RB Offset 0)



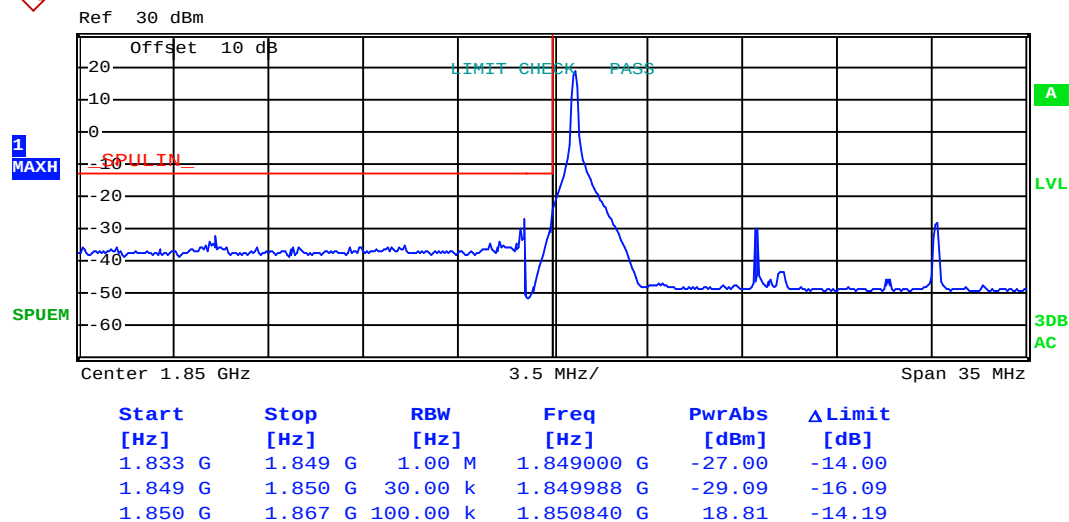
Lowest channel



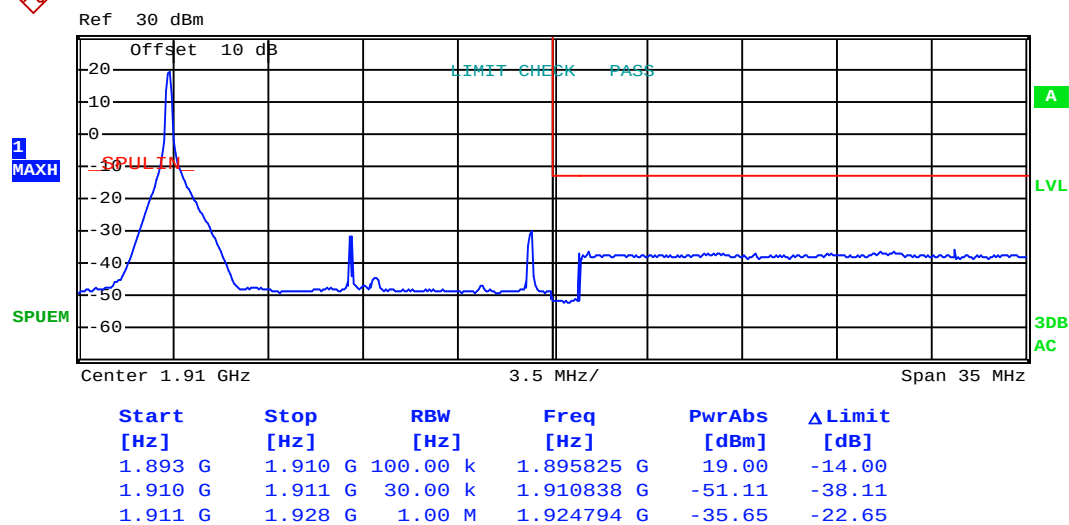
Highest channel

15MHz:

Test Mode:	LTE band 2(QPSK RB Size 1 & RB Offset 0)
------------	--



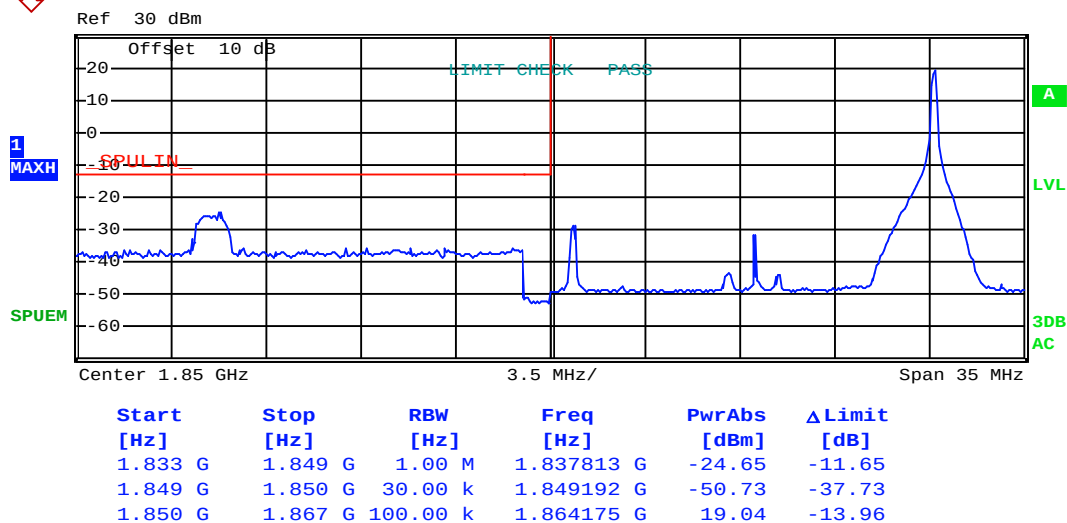
Lowest channel



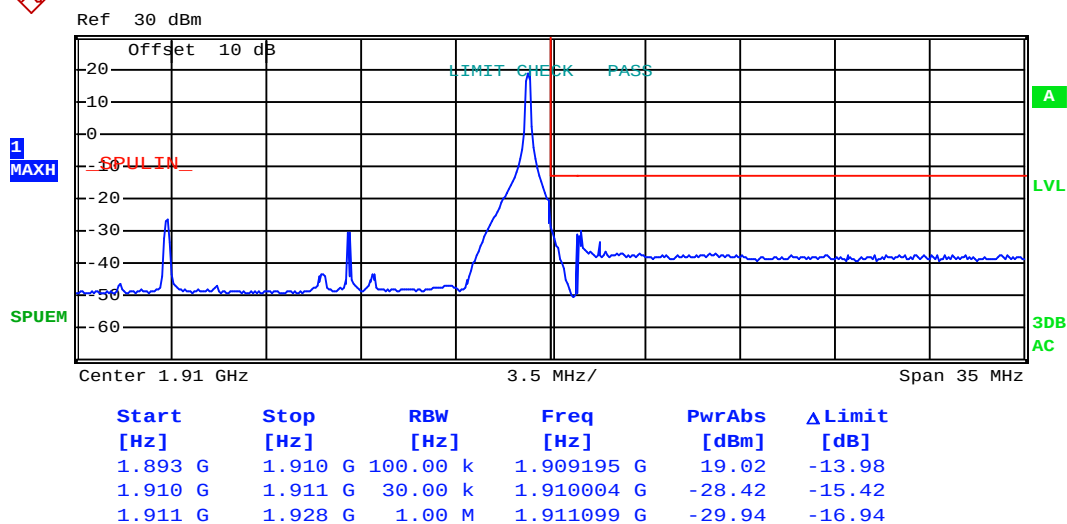
Highest channel

Test Mode:

LTE band 2(QPSK RB Size 1 & RB Offset 74)



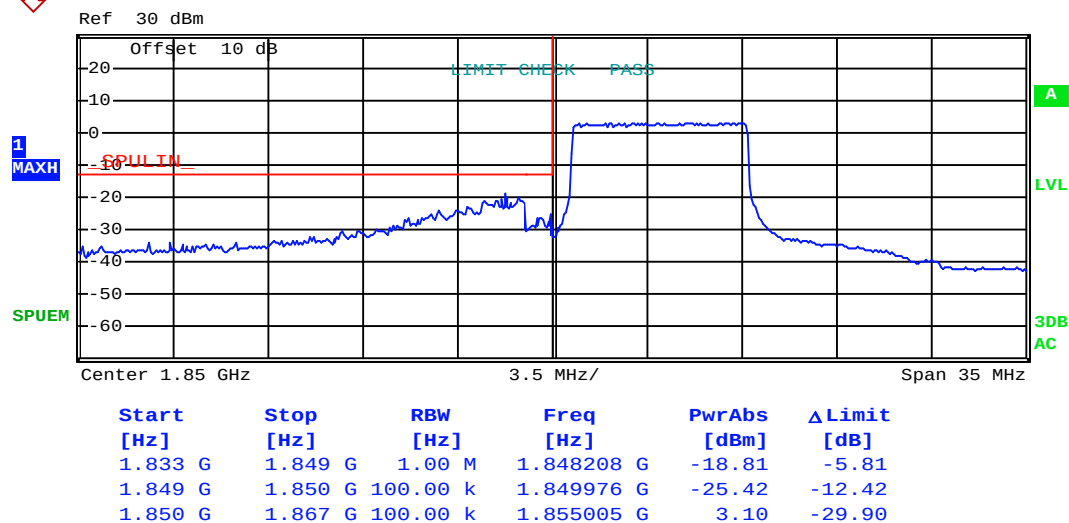
Lowest channel



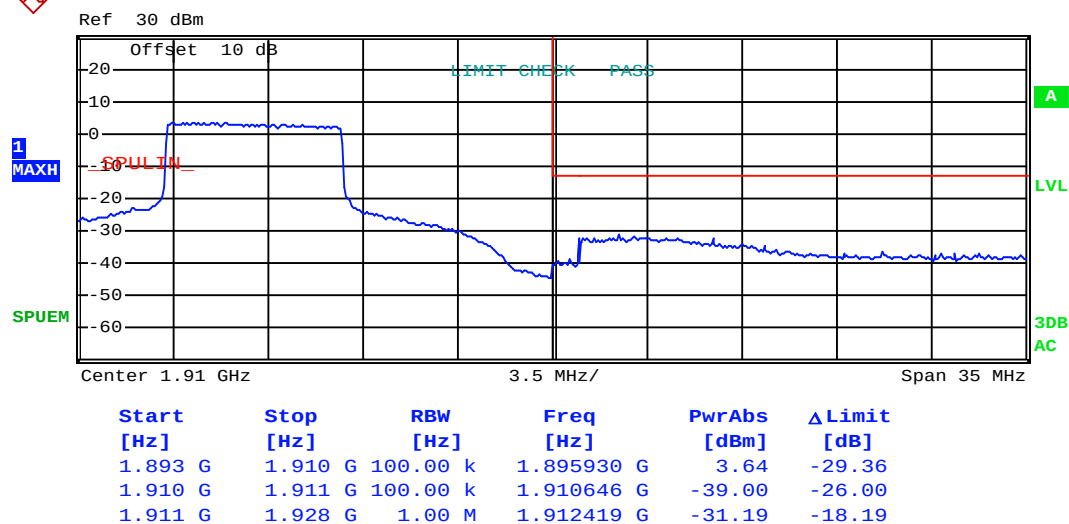
Highest channel

Test Mode:

LTE band 2(QPSK RB Size 36 & RB Offset 0)



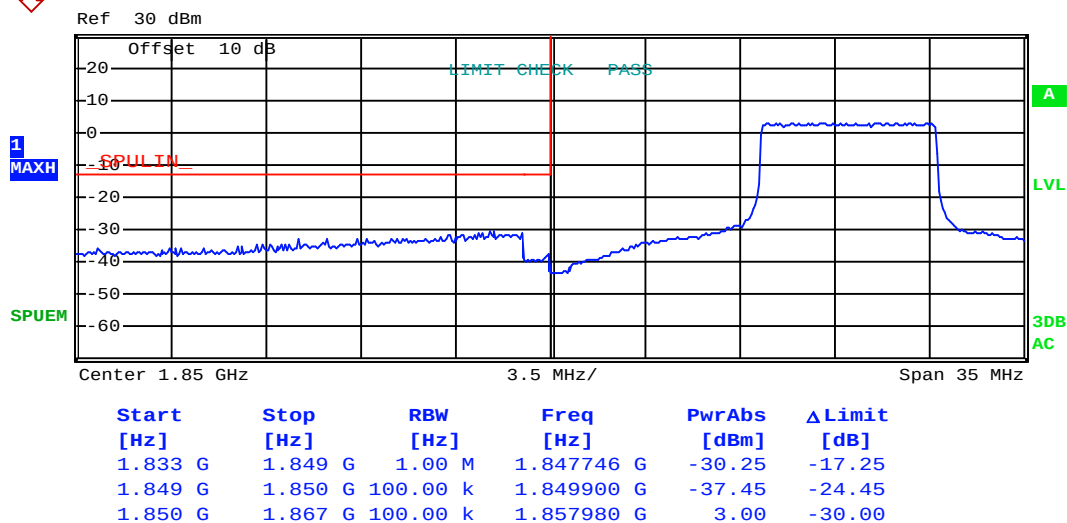
Lowest channel



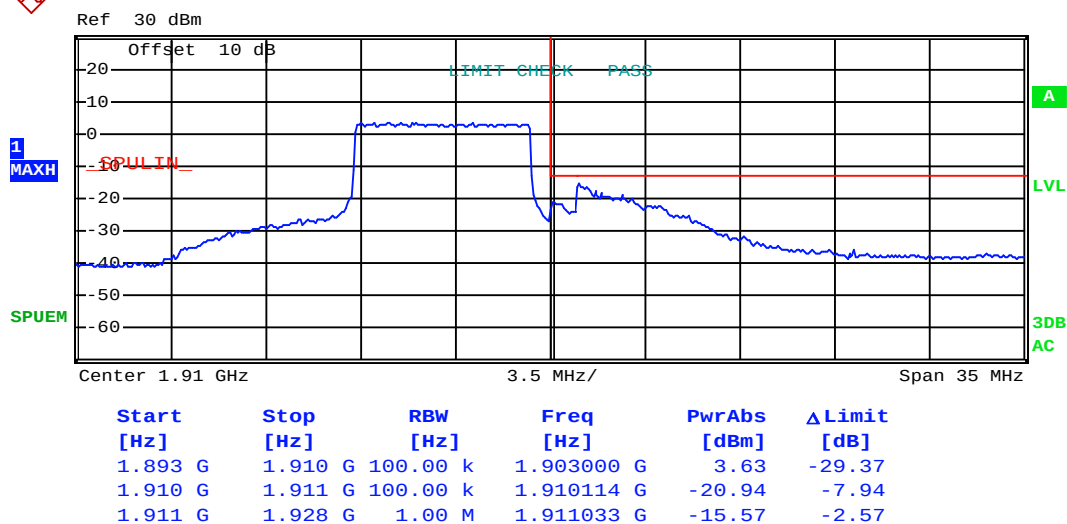
Highest channel

Test Mode:

LTE band 2(QPSK RB Size 36 & RB Offset 35)



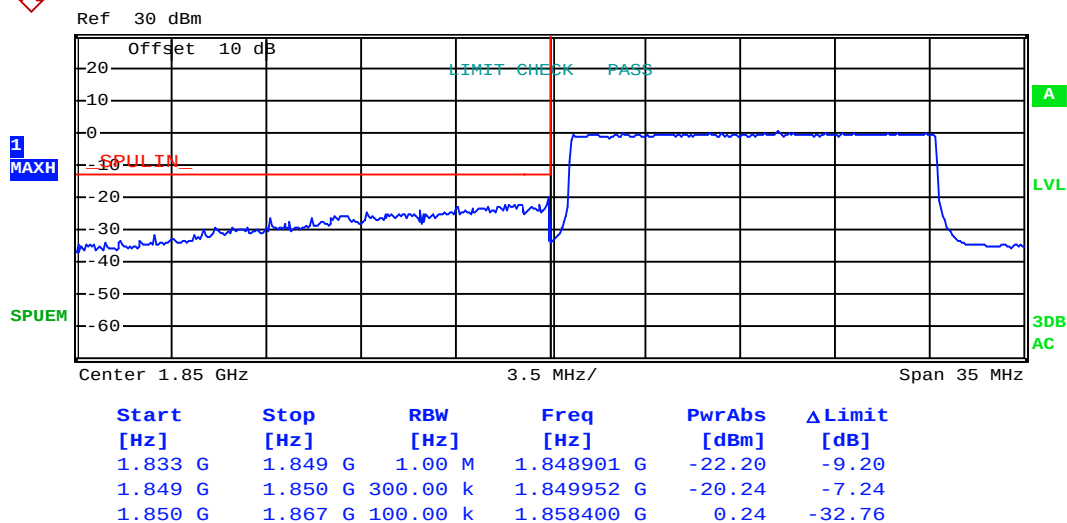
Lowest channel



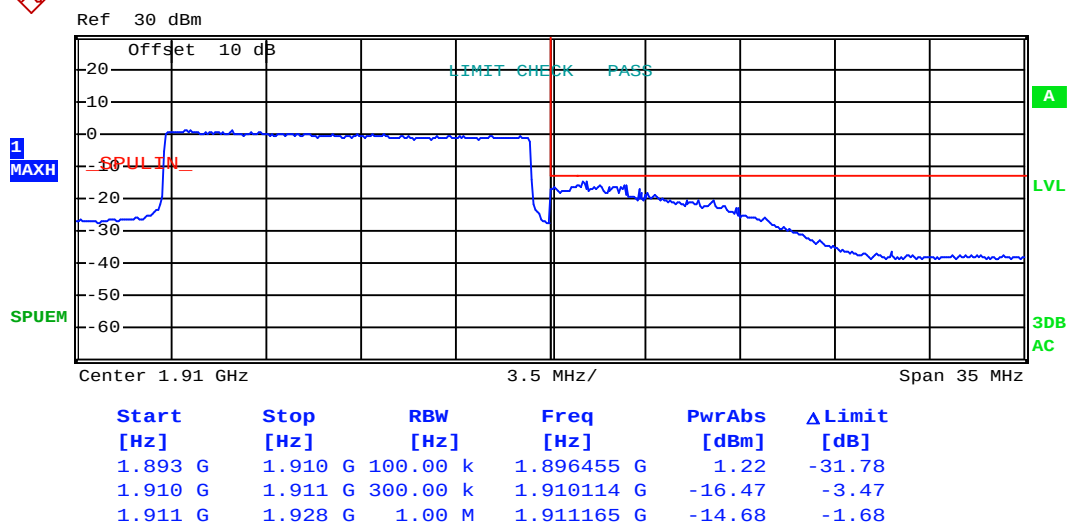
Highest channel

Test Mode:

LTE band 2(QPSK RB Size 75 & RB Offset 0)



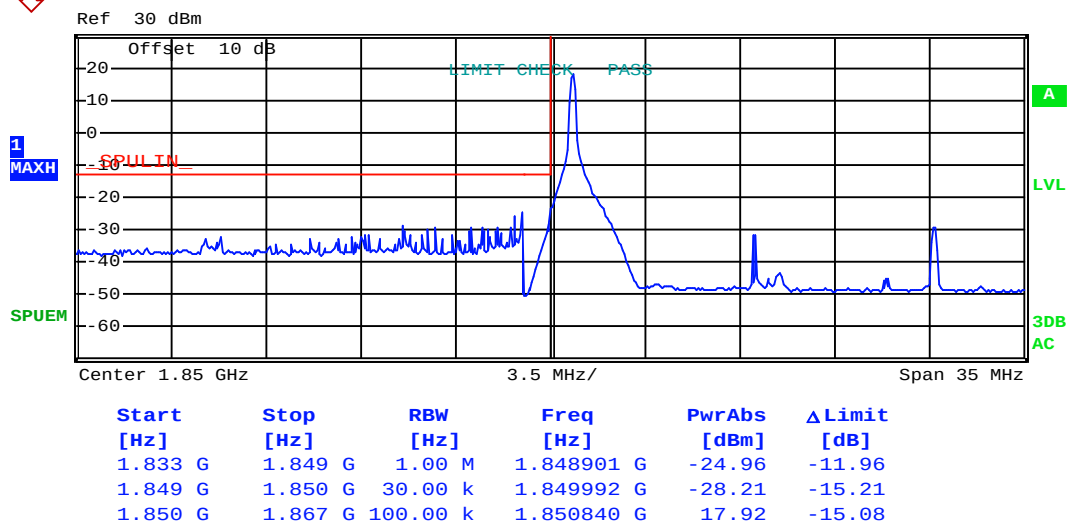
Lowest channel



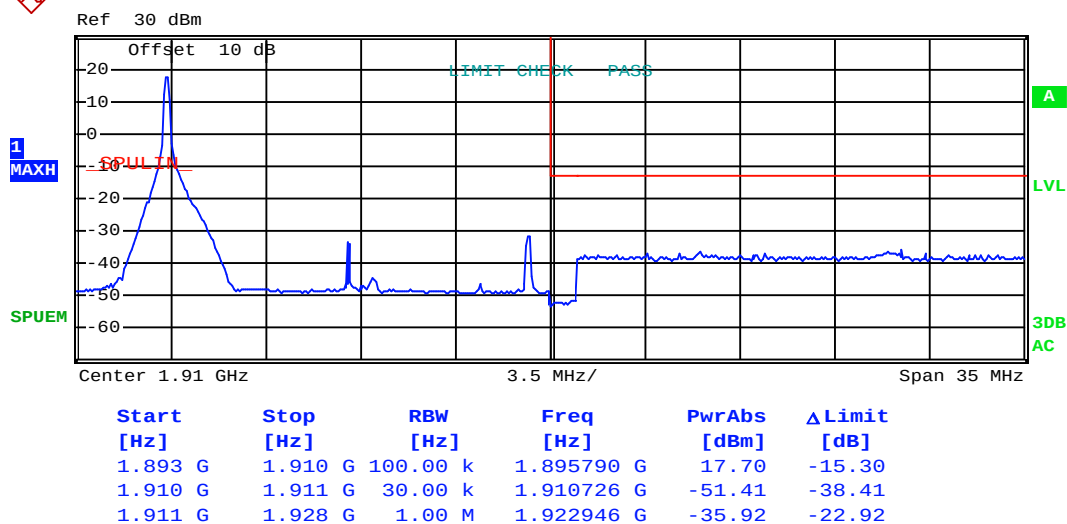
Highest channel

Test Mode:

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



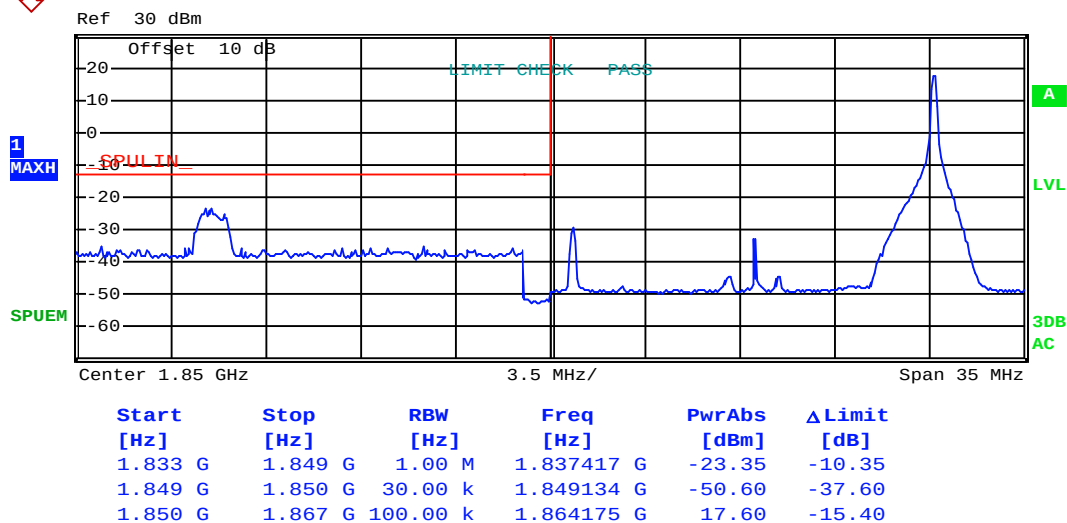
Lowest channel



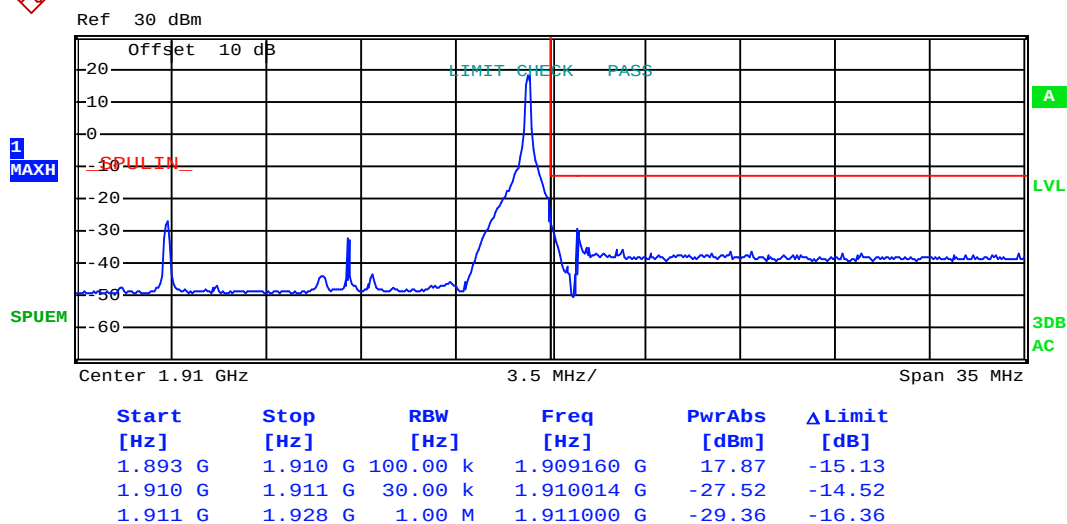
Highest channel

Test Mode:

LTE band 2(16QAM RB Size 1 & RB Offset 74)



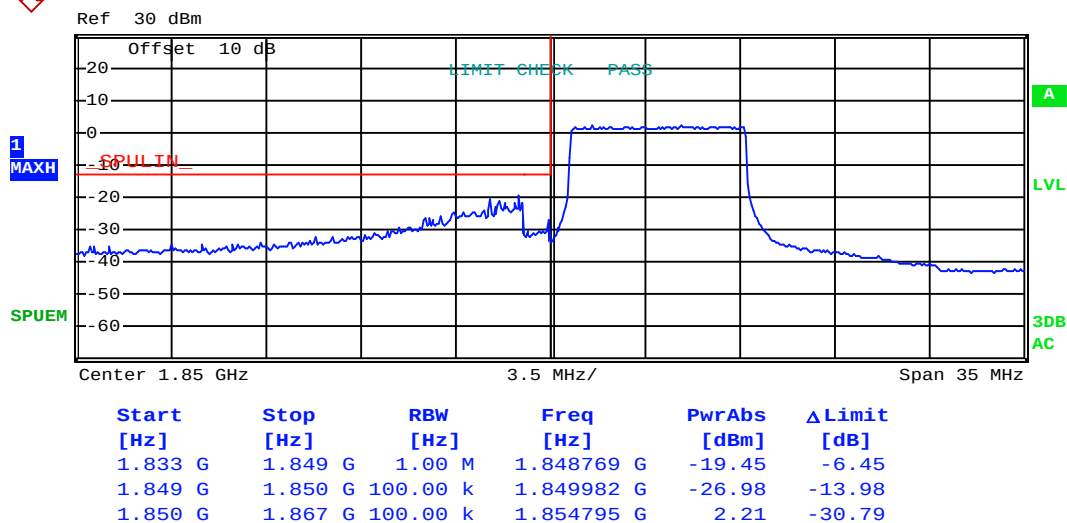
Lowest channel



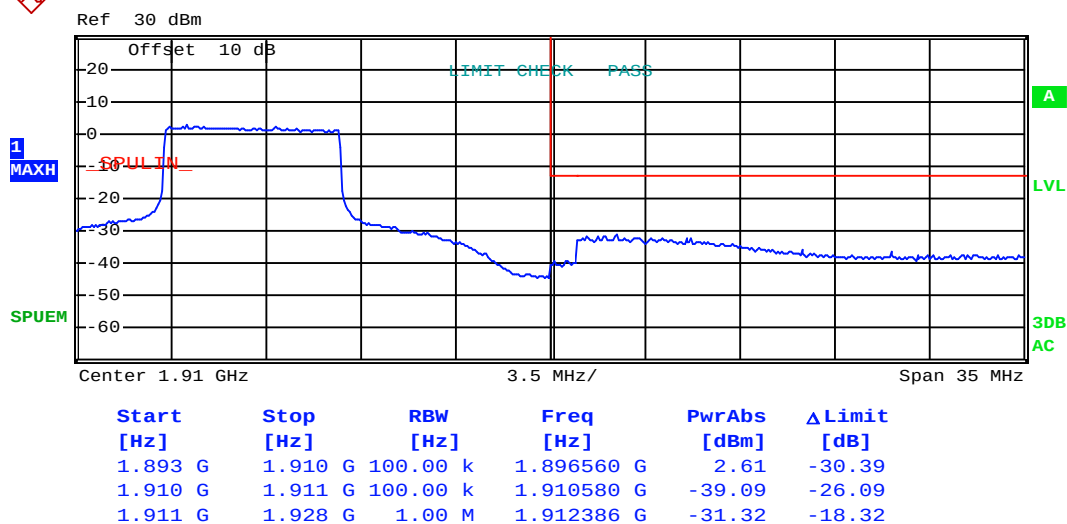
Highest channel

Test Mode:

LTE band 2(16QAM RB Size 36 & RB Offset 0)



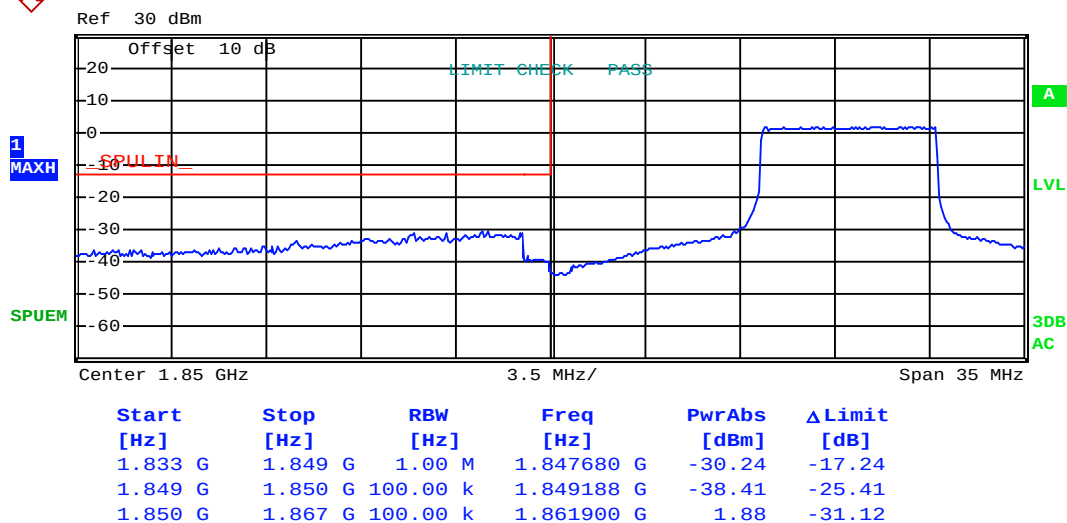
Lowest channel



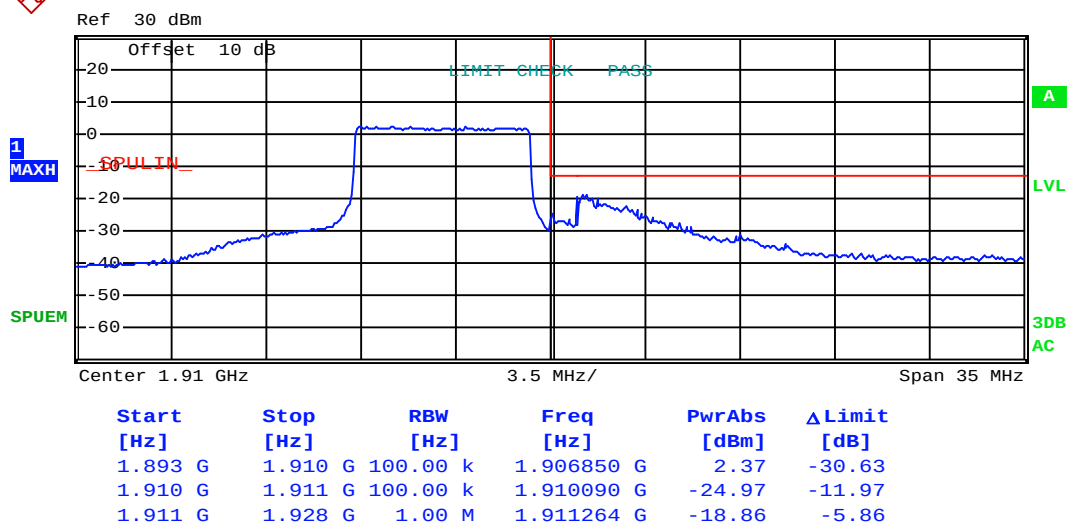
Highest channel

Test Mode:

LTE band 2(16QAM RB Size 36 & RB Offset 35)

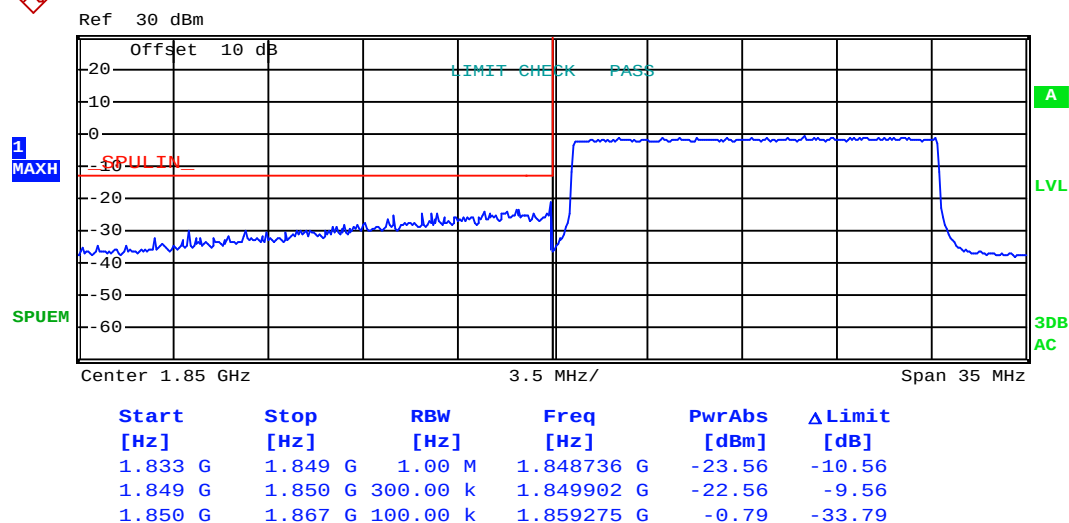


Lowest channel

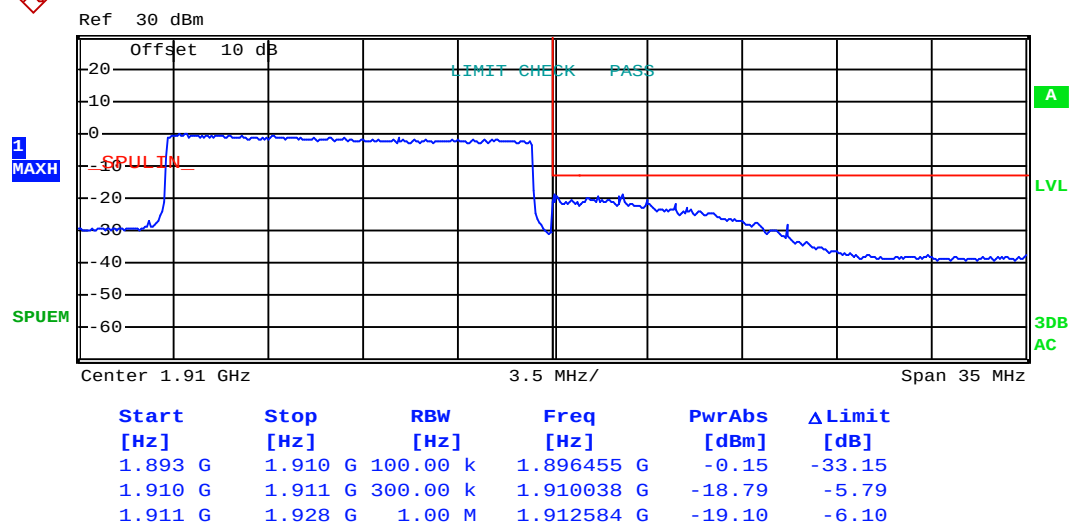


Highest channel

Test Mode:	LTE band 2(16QAM RB Size 75 & RB Offset 0)
------------	--



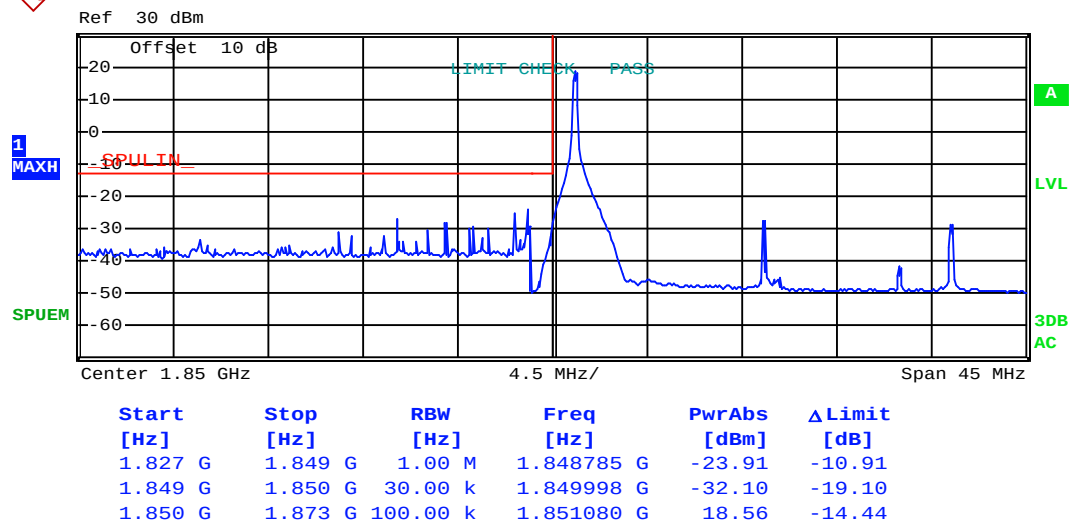
Lowest channel



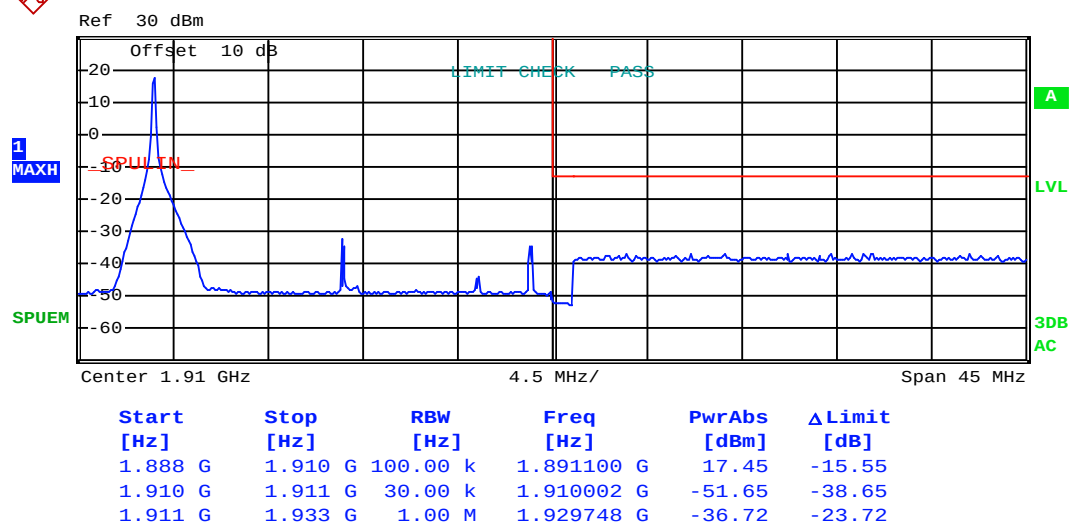
Highest channel

20MHz:

Test Mode:	LTE band 2(QPSK RB Size 1 & RB Offset 0)
------------	--



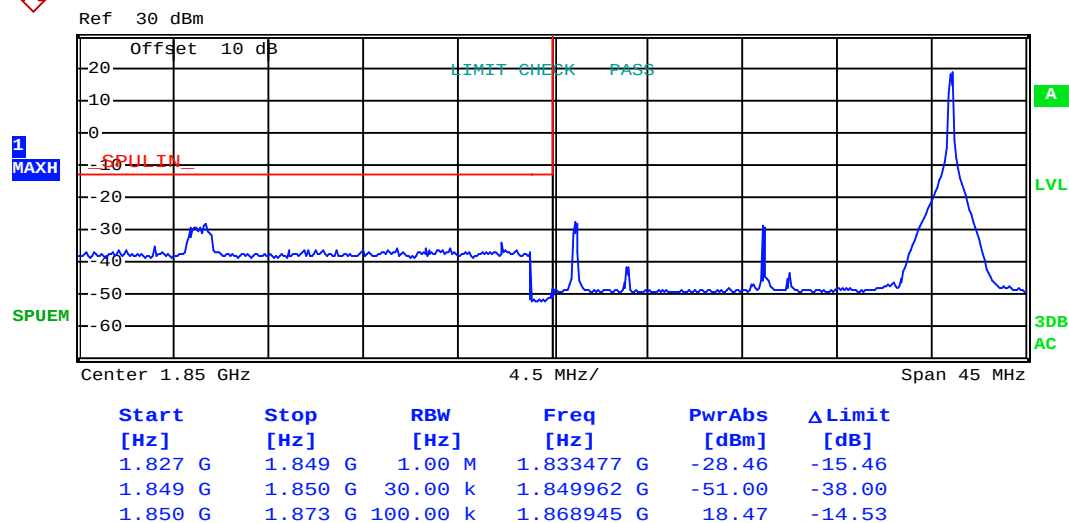
Lowest channel



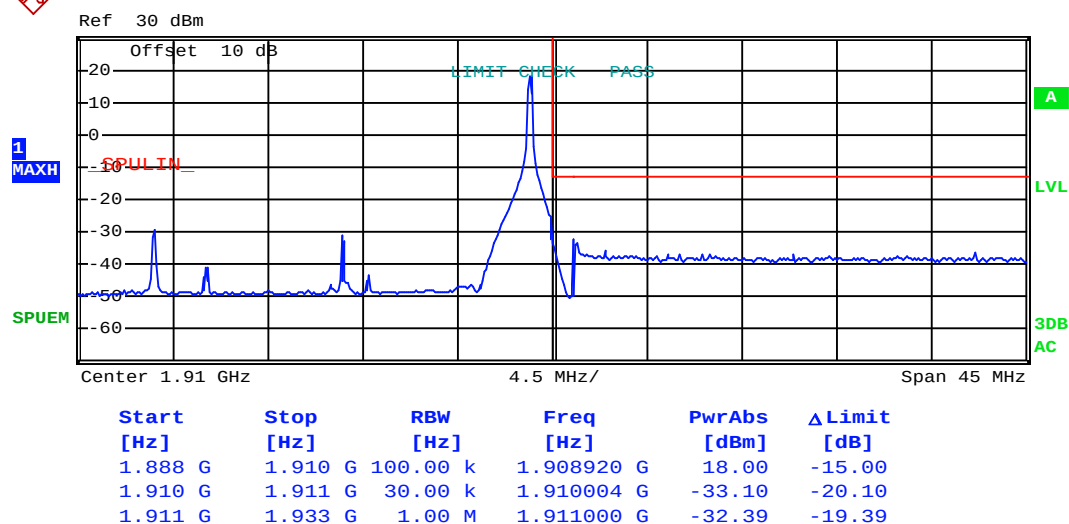
Highest channel

Test Mode:

LTE band 2(QPSK RB Size 1 & RB Offset 99)

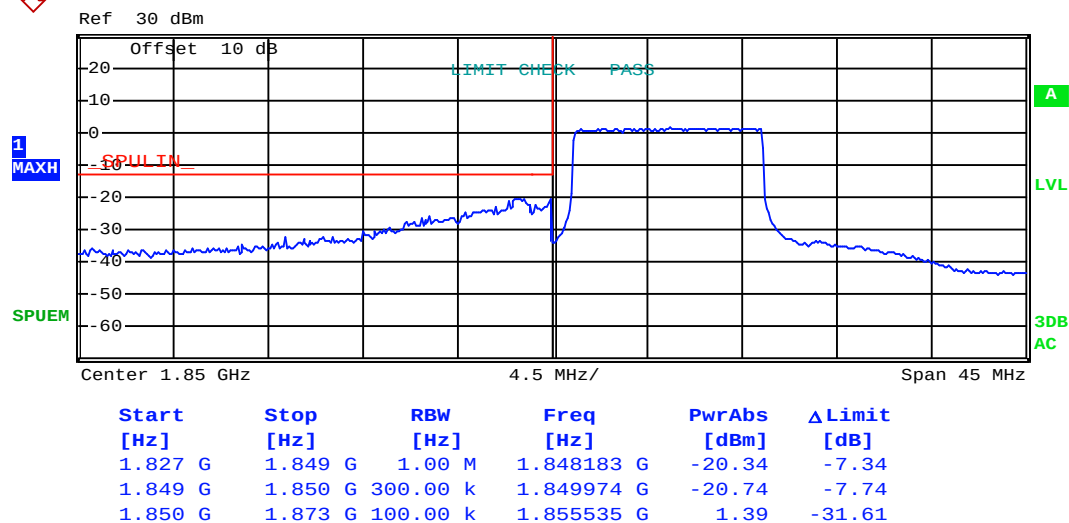


Lowest channel

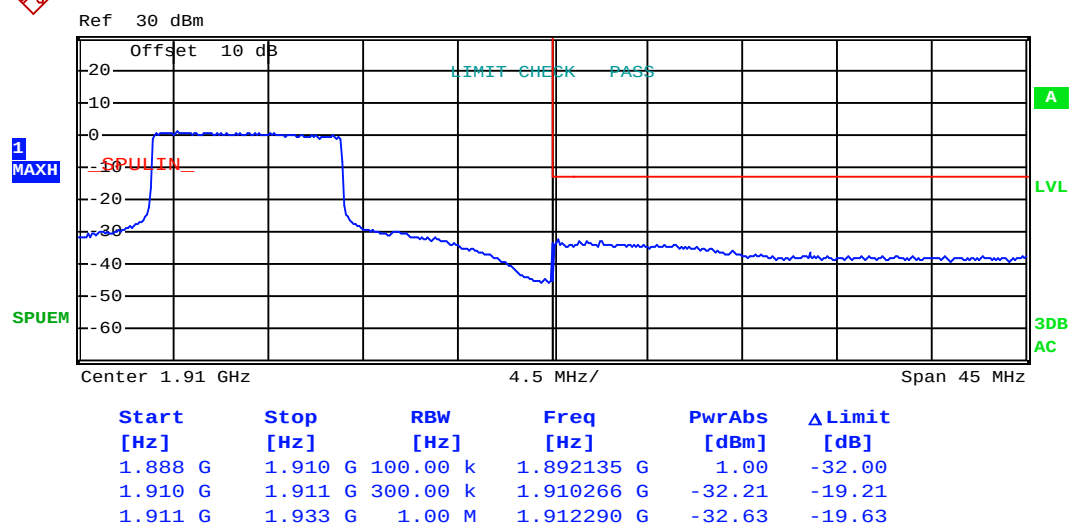


Highest channel

Test Mode:	LTE band 2(QPSK RB Size 50 & RB Offset 0)
------------	---



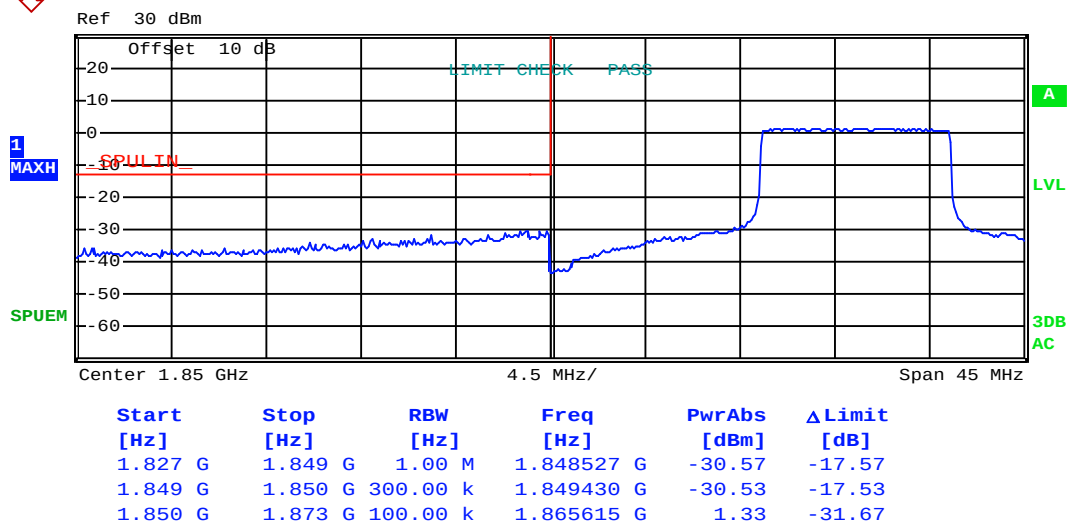
Lowest channel



Highest channel

Test Mode:

LTE band 2(QPSK RB Size 50 & RB Offset 49)



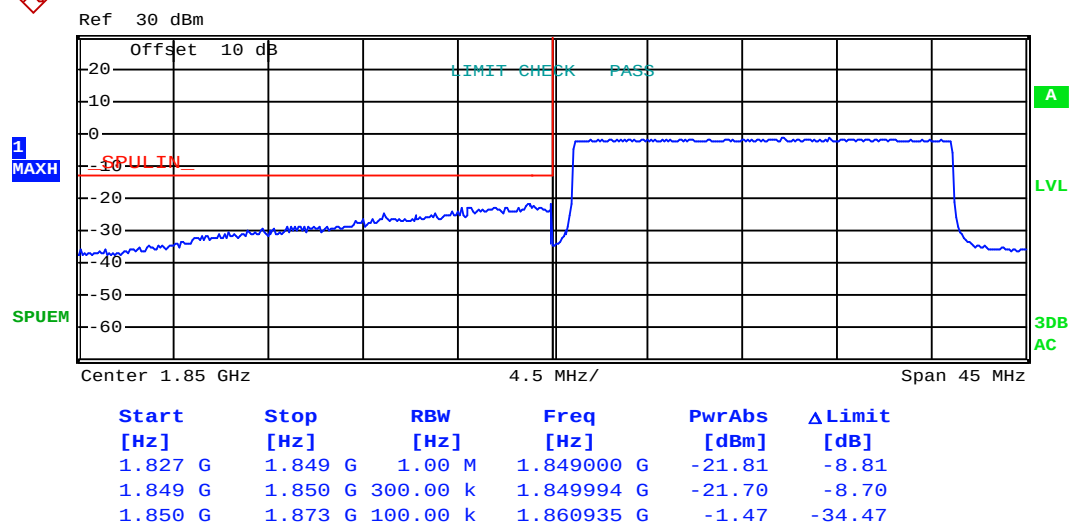
Lowest channel



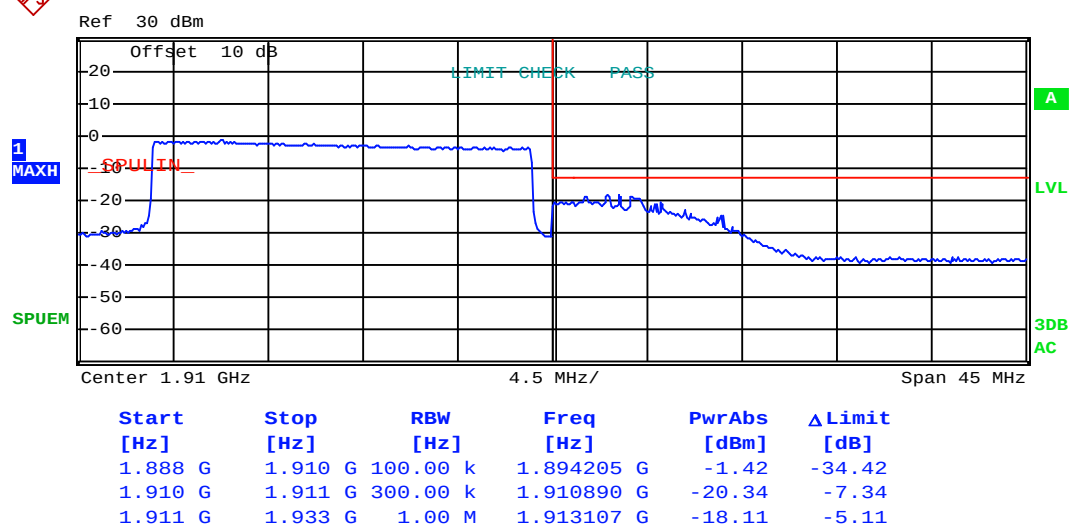
Highest channel

Test Mode:

LTE band 2(QPSK RB Size 100 & RB Offset 0)



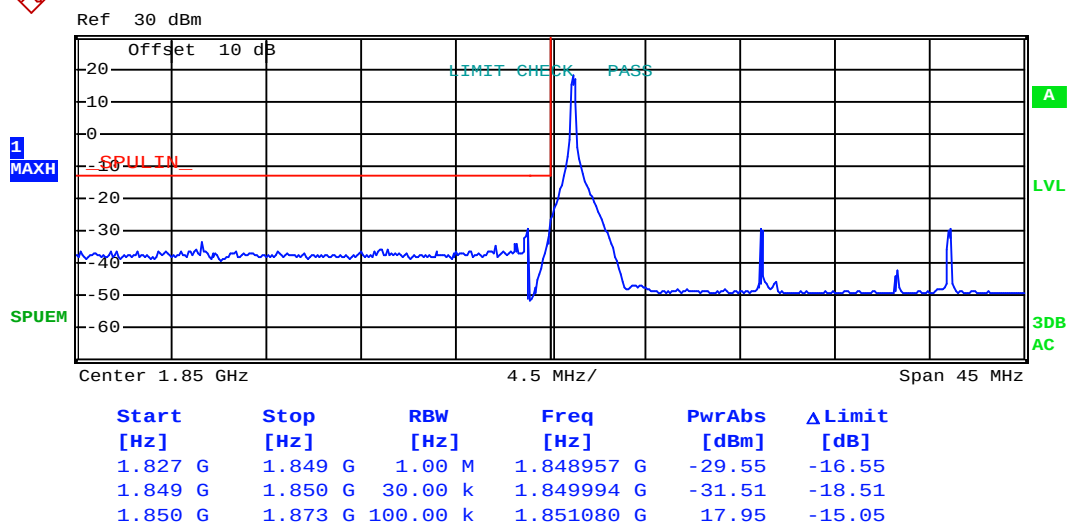
Lowest channel



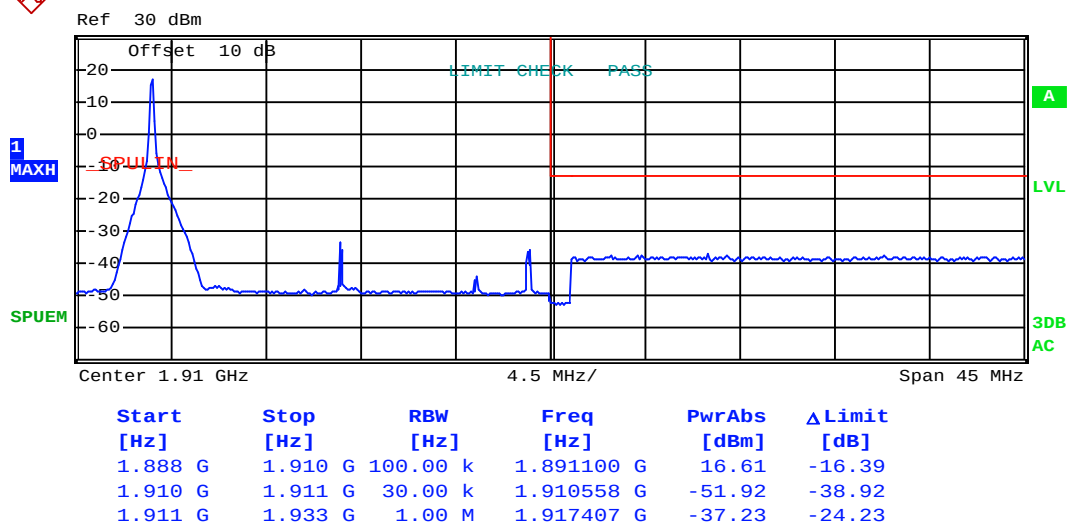
Highest channel

Test Mode:

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

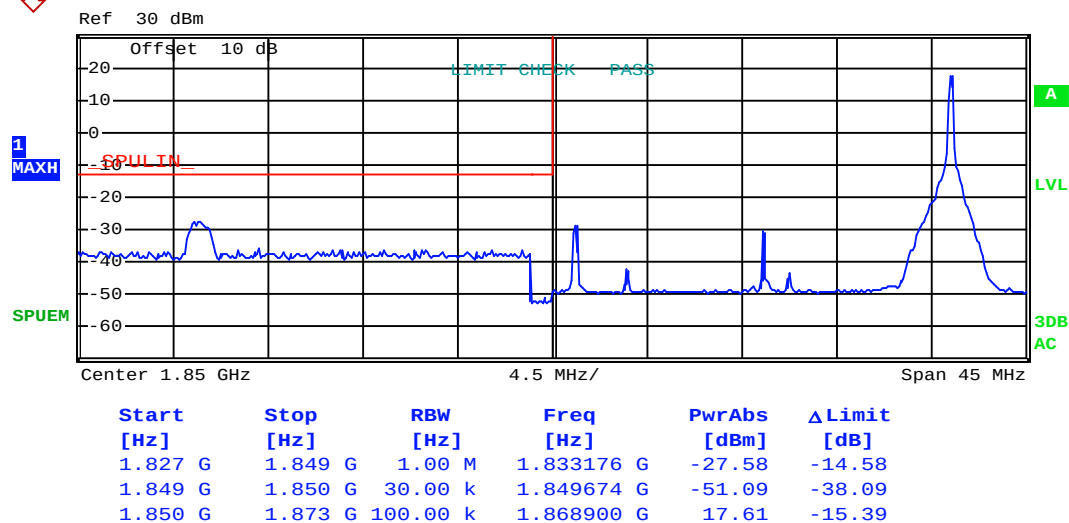


Lowest channel

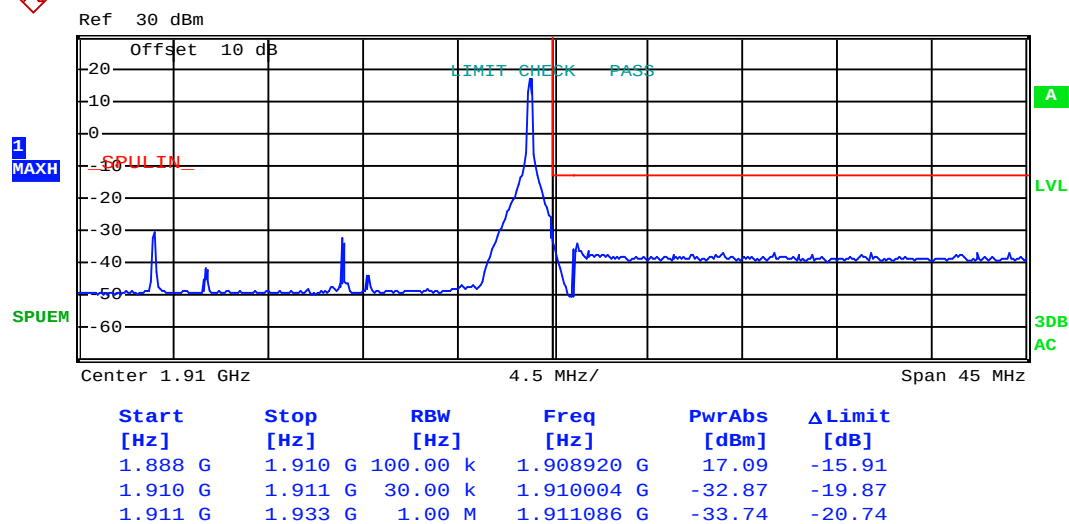


Highest channel

Test Mode:	LTE band 2(16QAM RB Size 1 & RB Offset 99)
------------	--



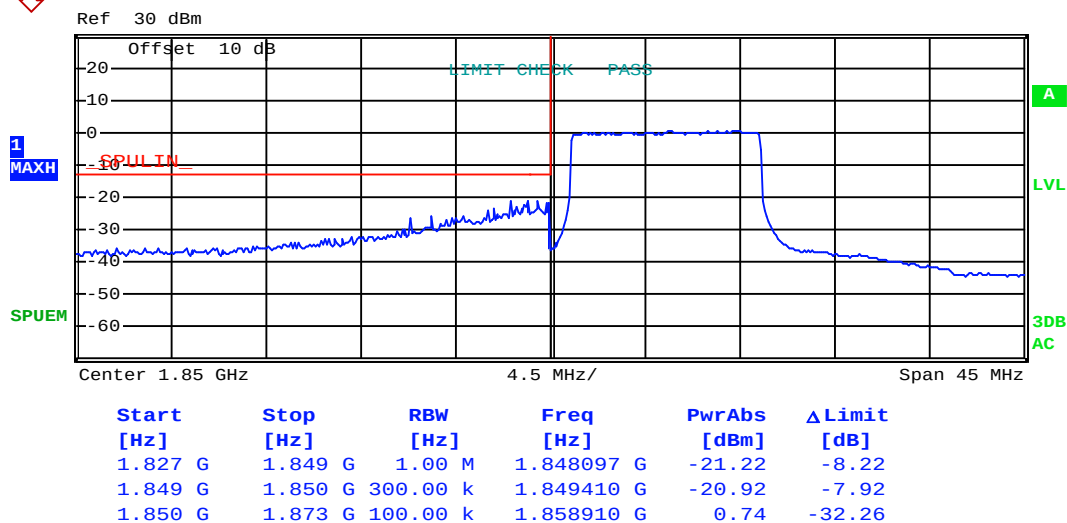
Lowest channel



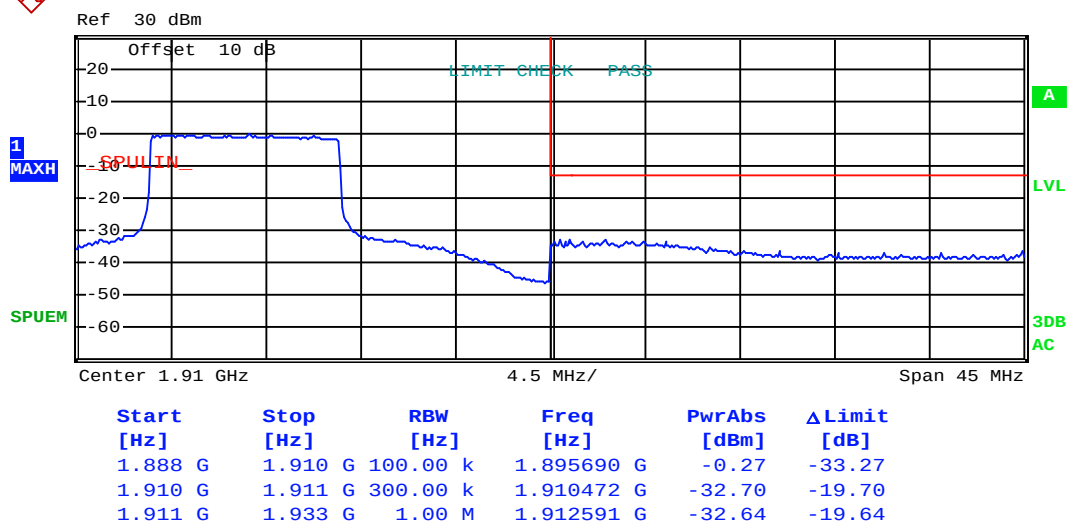
Highest channel

Test Mode:

LTE band 2(16QAM RB Size 50 & RB Offset 0)



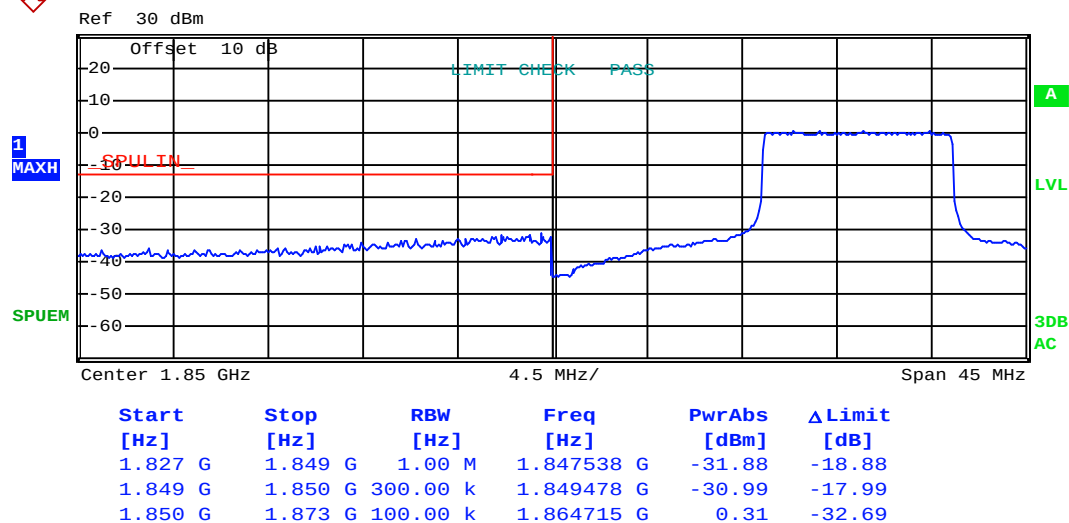
Lowest channel



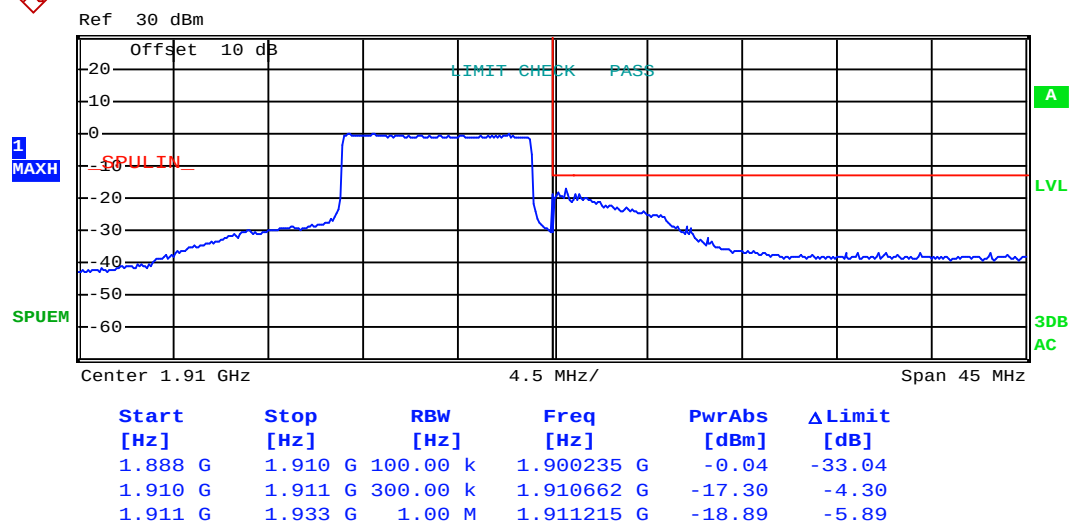
Highest channel

Test Mode:

LTE band 2(16QAM RB Size 50 & RB Offset 49)



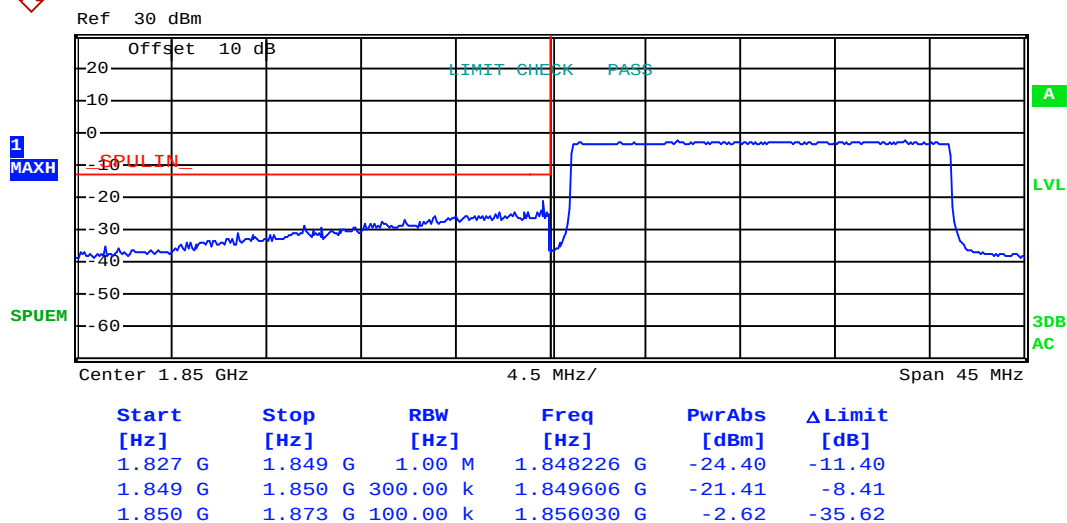
Lowest channel



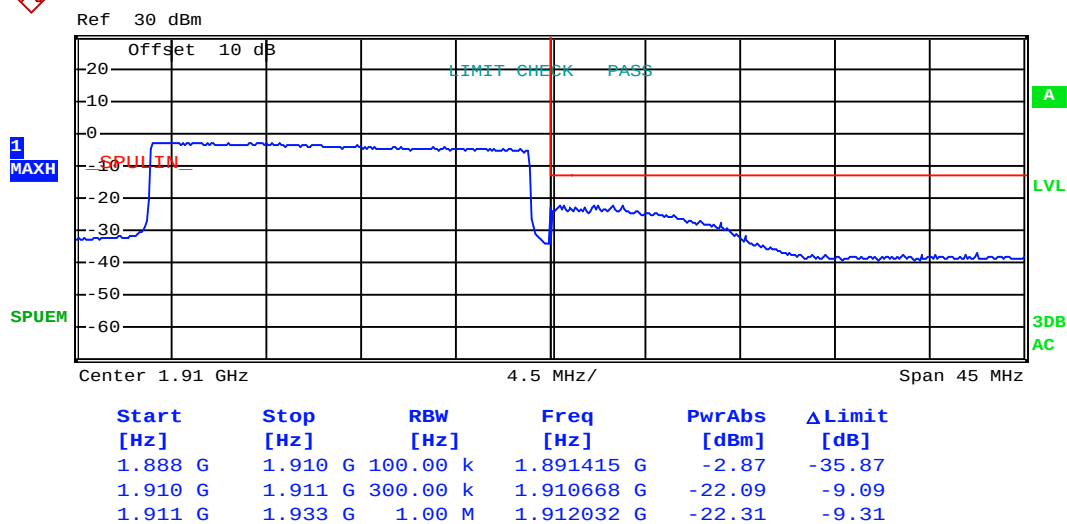
Highest channel

Test Mode:

LTE band 2(16QAM RB Size 100 & RB Offset 0)

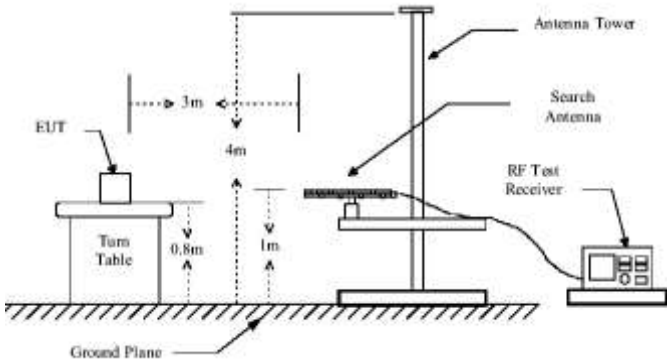
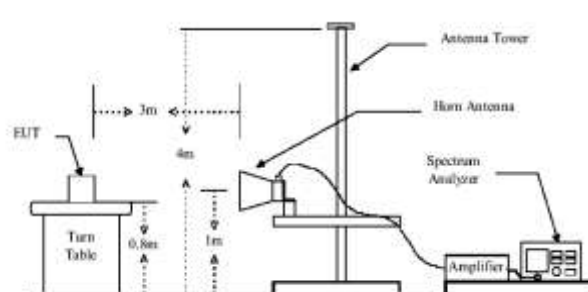
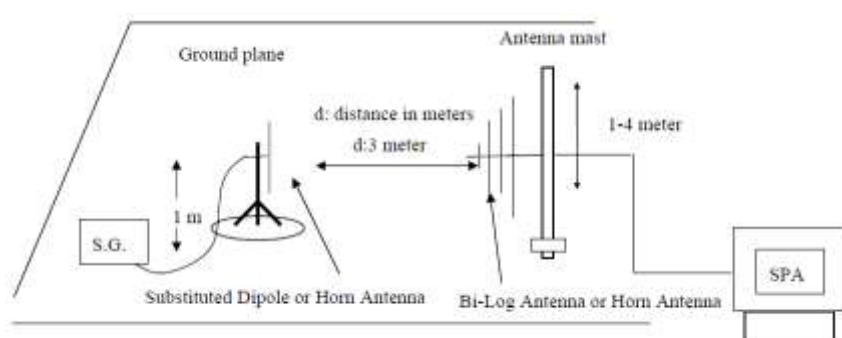


Lowest channel



Highest channel

6.10 ERP, EIRP Measurement

Test Requirement:	FCC part 24.232 (c)
Test Method:	FCC part 2.1046
Limit:	LTE Band 2: 2W EIRP
Test setup:	Below 1GHz  Above 1GHz  Substituted method: 

Test Procedure:	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. 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. 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: $\text{EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBi)} - \text{Cable Loss (dB)}$ 4. The worse case was relating to the conducted output power.
Test Uncertainty:	±4.88 dB
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

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	25.13	33.00	Pass
					H	15.93		
1850.70	18607	16QAM	1.4	H	V	25.63		
					H	15.67		
1.4MHz(RB size 3 & RB offset 0)								
1850.70	18607	QPSK	1.4	H	V	26.16	33.00	Pass
					H	15.86		
1850.70	18607	16QAM	1.4	H	V	26.12		
					H	15.98		
1.4MHz(RB size 6 & RB offset 0)								
1850.70	18607	QPSK	1.4	H	V	25.07	33.00	Pass
					H	14.81		
1850.70	18607	16QAM	1.4	H	V	25.63		
					H	15.18		

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	24.69	33.00	Pass
					H	21.07		
1880.00	18900	16QAM	1.4	H	V	22.42		
					H	17.12		
1.4MHz(RB size 3 & RB offset 0)								
1880.00	18900	QPSK	1.4	H	V	23.41	33.00	Pass
					H	16.80		
1880.00	18900	16QAM	1.4	H	V	23.35		
					H	17.01		
1.4MHz(RB size 6 & RB offset 0)								
1880.00	18900	QPSK	1.40	H	V	21.73	33.00	Pass
					H	17.03		
1880.00	18900	16QAM	1.40	H	V	23.07		
					H	15.19		

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	20.69	33.00	Pass
					H	15.66		
1909.30	19193	16QAM	1.4	H	V	20.87		
					H	15.65		
1.4MHz(RB size 3 & RB offset 0)								
1909.30	19193	QPSK	1.4	H	V	16.60	33.00	Pass
					H	16.24		
1909.30	19193	16QAM	1.4	H	V	31.75		
					H	27.28		
1.4MHz(RB size 6 & RB offset 0)								
1909.30	19193	QPSK	1.4	H	V	31.35	33.00	Pass
					H	25.46		
1909.30	19193	16QAM	1.4	H	V	31.34		
					H	24.90		

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	30.08	33.00	Pass
					H	27.32		
1860.00	18700	16QAM	20	H	V	30.76		
					H	27.09		
20MHz(RB size 50 & RB offset 0)								
1860.00	18700	QPSK	20	H	V	30.52	33.00	Pass
					H	26.13		
1860.00	18700	16QAM	20	H	V	27.32		
					H	26.25		
20MHz(RB size 100 & RB offset 0)								
1860.00	18700	QPSK	20	H	V	30.68	33.00	Pass
					H	24.17		
1860.00	18700	16QAM	20	H	V	25.17		
					H	23.90		

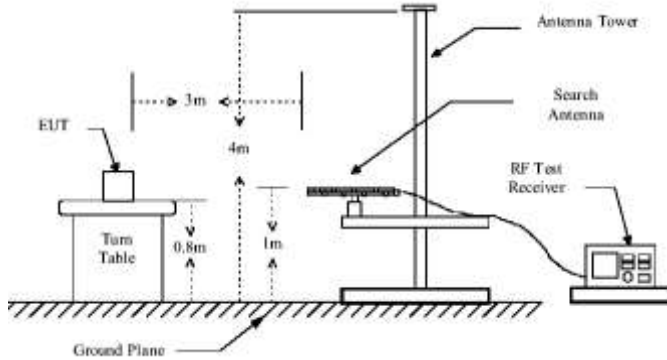
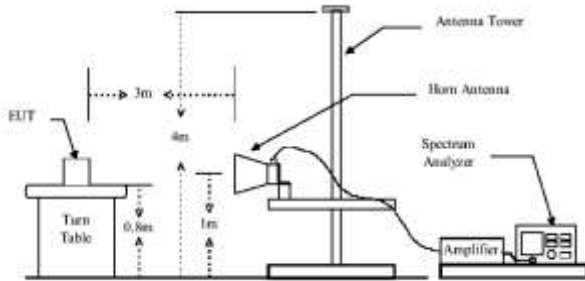
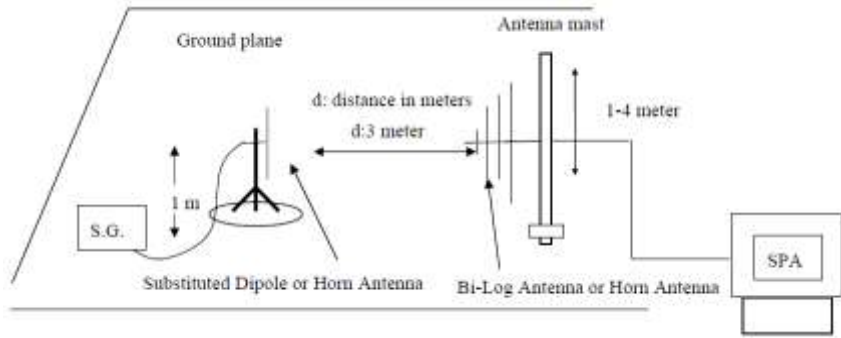
Middle channel

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	30.73	33.00	Pass
					H	24.48		
1880.00	18900	16QAM	20	H	V	30.65		
					H	23.94		
20MHz(RB size 50 & RB offset 0)								
1880.00	18900	QPSK	20	H	V	32.39	33.00	Pass
					H	24.32		
1880.00	18900	16QAM	20	H	V	30.40		
					H	24.66		
20MHz(RB size 100 & RB offset 0)								
1880.00	18900	QPSK	20	H	V	28.95	33.00	Pass
					H	25.83		
1880.00	18900	16QAM	20	H	V	29.54		
					H	23.60		

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	31.03	33.00	Pass
					H	26.26		
1900.00	19100	16QAM	20	H	V	31.41		
					H	25.88		
20MHz(RB size 50 & RB offset 0)								
1900.00	19100	QPSK	20	H	V	29.84	33.00	Pass
					H	25.90		
1900.00	19100	16QAM	20	H	V	30.69		
					H	24.66		
20MHz(RB size 100 & RB offset 0)								
1900.00	19100	QPSK	20	H	V	28.46	33.00	Pass
					H	22.95		
1900.00	19100	16QAM	20	H	V	29.27		
					H	23.27		

6.11 Field strength of spurious radiation measurement

Test Requirement:	FCC Part 24.238 (a)
Test Method:	FCC part 2.1053
Limit:	LTE Band 2: -25dBm
Test setup:	Below 1GHz  Above 1GHz  Substituted method: 
Test Procedure:	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. 2. 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. 3. 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. 4. The spurious emissions attenuation was calculated as the difference

	between radiated power at the fundamental frequency and the spurious emissions frequency. $\text{ERP / EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain(dB/dBi)} - \text{Cable Loss (dB)}$
Test Uncertainty:	±4.88 dB
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.

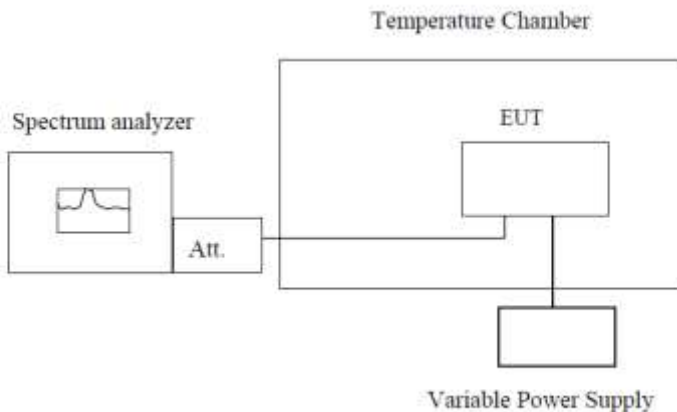
LTE band 2 part:

1.4MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
3701.40	Vertical	-44.33	-13.00	Pass
5552.10	V	-21.60		
3701.40	Horizontal	-37.14		
5552.10	H	-20.08		
Middle				
3760.00	Vertical	-40.66	-13.00	Pass
5640.00	V	-22.59		
3760.00	Horizontal	-37.21		
5640.00	H	-19.02		
Highest				
3816.60	Vertical	-40.24	-13.00	Pass
5724.90	V	-30.96		
3816.60	Horizontal	-34.25		
5724.90	H	-21.24		
3MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
3703.00	Vertical	-41.16	-13.00	Pass
5554.50	V	-22.09		
3703.00	Horizontal	-36.37		
5554.50	H	-21.04		
Middle				
3760.00	Vertical	-40.54	-13.00	Pass
5640.00	V	-23.96		
3760.00	Horizontal	-38.49		
5640.00	H	-21.07		
Highest				
3817.00	Vertical	-40.37	-13.00	Pass
5725.50	V	-36.16		
3817.00	Horizontal	-36.64		
5725.50	H	-23.48		

5MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
3705.00	Vertical	-43.73	-13.00	Pass
5557.50	V	-22.04		
3705.00	Horizontal	-38.23		
5557.50	H	-18.82		
Middle				
3760.00	Vertical	-41.63	-13.00	Pass
5640.00	V	-23.00		
3760.00	Horizontal	-40.98		
5640.00	H	-21.35		
Highest				
3815.00	Vertical	-42.89	-13.00	Pass
5722.50	V	-27.61		
3815.00	Horizontal	-42.01		
5722.50	H	-26.48		
10MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
3710.00	Vertical	-43.77	-13.00	Pass
5565.00	V	-22.82		
3710.00	Horizontal	-38.21		
5565.00	H	-20.97		
Middle				
3760.00	Vertical	-38.71	-13.00	Pass
5640.00	V	-20.62		
3760.00	Horizontal	-37.70		
5640.00	H	-22.12		
Highest				
3810.00	Vertical	-44.65	-13.00	Pass
5715.00	V	-25.54		
3810.00	Horizontal	-40.93		
5715.00	H	-22.17		

15MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
3715.00	Vertical	-42.75	-13.00	Pass
5572.50	V	-23.87		
3715.00	Horizontal	-39.77		
5572.50	H	-21.32		
Middle				
3760.00	Vertical	-40.57	-13.00	Pass
5640.00	V	-21.07		
3760.00	Horizontal	-37.14		
5640.00	H	-16.51		
Highest				
3805.00	Vertical	-45.92	-13.00	Pass
5707.50	V	-27.59		
3805.00	Horizontal	-42.32		
5707.50	H	-25.17		
20MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
3720.00	Vertical	-44.34	-13.00	Pass
5580.00	V	-22.89		
3720.00	Horizontal	-38.65		
5580.00	H	-21.62		
Middle				
3760.00	Vertical	-44.62	-13.00	Pass
5640.00	V	-22.05		
3760.00	Horizontal	-41.91		
5640.00	H	-19.85		
Highest				
3800.00	Vertical	-45.59	-13.00	Pass
5700.00	V	-23.92		
3800.00	Horizontal	-40.21		
5700.00	H	-24.91		

6.12 Frequency stability V.S. Temperature measurement

Test Requirement:	FCC Part 2.1055(a)(1)(b)
Test Method:	FCC Part 2.1055(a)(1)(b)
Limit:	± 2.5 ppm
Test setup:	 Note : Measurement setup for testing on Antenna connector
Test procedure:	1. The equipment under test was connected to an external DC power supply and input rated voltage. 2. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. 3. The EUT was placed inside the temperature chamber. 4. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25°C operating frequency as reference frequency. 5. Turn EUT off and set the chamber temperature to -30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. 6. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached
Test Uncertainty:	$\pm 1 \times 10^{-6}$
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	192	0.102128	±2.5	Pass
	-20	156	0.082979		
	-10	176	0.093617		
	0	151	0.080319		
	10	124	0.065957		
	20	108	0.057447		
	30	163	0.086702		
	40	144	0.076596		
	50	72	0.038298		
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	132	0.070213	±2.5	Pass
	-20	153	0.081383		
	-10	171	0.090957		
	0	162	0.086170		
	10	156	0.082979		
	20	164	0.087234		
	30	143	0.076064		
	40	138	0.073404		
	50	146	0.077660		
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	122	0.064894	±2.5	Pass
	-20	123	0.065426		
	-10	95	0.050532		
	0	84	0.044681		
	10	9	0.004787		
	20	137	0.072872		
	30	61	0.032447		
	40	89	0.047340		
	50	106	0.056383		

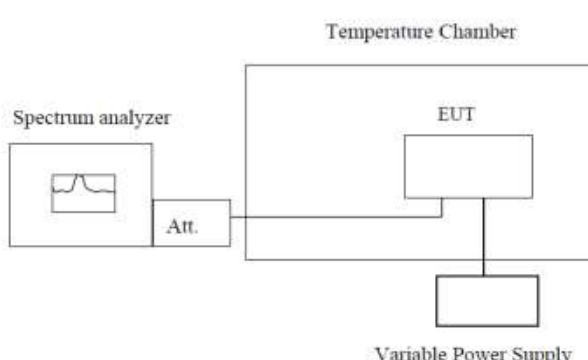
Reference Frequency: LTE Band 2(10MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	62	0.032979	±2.5	Pass
	-20	176	0.093617		
	-10	58	0.030851		
	0	63	0.033511		
	10	135	0.071809		
	20	127	0.067553		
	30	72	0.038298		
	40	109	0.057979		
	50	85	0.045213		
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	94	0.050000	±2.5	Pass
	-20	86	0.045745		
	-10	78	0.041489		
	0	121	0.064362		
	10	78	0.041489		
	20	109	0.057979		
	30	98	0.052128		
	40	120	0.063830		
	50	65	0.034574		
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	142	0.075532	±2.5	Pass
	-20	159	0.084574		
	-10	137	0.072872		
	0	82	0.043617		
	10	63	0.033511		
	20	98	0.052128		
	30	101	0.053723		
	40	127	0.067553		
	50	136	0.072340		

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	123	0.065426	±2.5	Pass
	-20	168	0.089362		
	-10	189	0.100532		
	0	171	0.090957		
	10	64	0.034043		
	20	181	0.096277		
	30	124	0.065957		
	40	136	0.072340		
	50	167	0.088830		
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	133	0.070745	±2.5	Pass
	-20	124	0.065957		
	-10	127	0.067553		
	0	108	0.057447		
	10	124	0.065957		
	20	162	0.086170		
	30	156	0.082979		
	40	138	0.073404		
	50	122	0.064894		
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	125	0.066489	±2.5	Pass
	-20	92	0.048936		
	-10	87	0.046277		
	0	132	0.070213		
	10	125	0.066489		
	20	121	0.064362		
	30	105	0.055851		
	40	135	0.071809		
	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	102	0.054255	±2.5	Pass
	-20	135	0.071809		
	-10	81	0.043085		
	0	106	0.056383		
	10	123	0.065426		
	20	175	0.093085		
	30	62	0.032979		
	40	101	0.053723		
	50	108	0.057447		
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	132	0.070213	±2.5	Pass
	-20	105	0.055851		
	-10	91	0.048404		
	0	124	0.065957		
	10	136	0.072340		
	20	145	0.077128		
	30	63	0.033511		
	40	122	0.064894		
	50	95	0.050532		
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	132	0.070213	±2.5	Pass
	-20	155	0.082447		
	-10	121	0.064362		
	0	127	0.067553		
	10	95	0.050532		
	20	86	0.045745		
	30	72	0.038298		
	40	61	0.032447		
	50	99	0.052660		

6.13 Frequency stability V.S. Voltage measurement

Test Requirement:	FCC Part 2.1055(d)(1)(2)
Test Method:	FCC Part 2.1055(d)(1)(2)
Limit:	2.5ppm
Test setup:	 Note : Measurement setup for testing on Antenna connector
Test procedure:	1. Set chamber temperature to 25°C. Use a variable DC power source to power the EUT and set the voltage to rated voltage. 2. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency. 3. Reduce the input voltage to specify extreme voltage variation (+/- 15%) and endpoint, record the maximum frequency change.
Test Uncertainty:	$\pm 1 \times 10^{-6}$
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 (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	61	0.032447	±2.5	Pass
	3.80	85	0.045213		
	3.40	67	0.035638		
Reference Frequency: LTE Band 2(3MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	84	0.044681	±2.5	Pass
	3.80	83	0.044149		
	3.40	76	0.040426		
Reference Frequency: LTE Band 2(5MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	62	0.032979	±2.5	Pass
	3.80	45	0.023936		
	3.40	71	0.037766		
Reference Frequency: LTE Band 2(10MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	63	0.033511	±2.5	Pass
	3.80	95	0.050532		
	3.40	87	0.046277		
Reference Frequency: LTE Band 2(15MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	77	0.040957	±2.5	Pass
	3.80	45	0.023936		
	3.40	33	0.017553		
Reference Frequency: LTE Band 2(20MHz) Middle channel=20175 channel=1880.00MHz					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	55	0.029255	±2.5	Pass
	3.80	48	0.025532		
	3.40	65	0.034574		

LTE Band 2(16QAM):

Reference Frequency: LTE Band 2(1.4MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (℃)	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	71	0.037766		
Reference Frequency: LTE Band 2(3MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	44	0.023404	±2.5	Pass
	3.80	33	0.017553		
	3.40	84	0.044681		
Reference Frequency: LTE Band 2(5MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	45	0.023936	±2.5	Pass
	3.80	62	0.032979		
	3.40	74	0.039362		
Reference Frequency: LTE Band 2(10MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	81	0.043085	±2.5	Pass
	3.80	95	0.050532		
	3.40	66	0.035106		
Reference Frequency: LTE Band 2(15MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	55	0.029255	±2.5	Pass
	3.80	65	0.034574		
	3.40	45	0.023936		
Reference Frequency: LTE Band 2(20MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	48	0.025532	±2.5	Pass
	3.80	59	0.031383		
	3.40	67	0.035638		