

FCC REPORT

Applicant: Sun Cupid Technology (HK) Ltd.

Address of Applicant: 16/F,CEO Tower,77 Wing Hong Street, Cheung Sha Wan,
Hong Kong

Equipment Under Test (EUT)

Product Name: LTE mobile phone

Model No.: X3

Trade mark: NUU

FCC ID: 2ADINNUUX3

Applicable standards: FCC CFR Title 47 Part 2
FCC CFR Title 47 Part 24 Subpart E
FCC CFR Title 47 Part 27 Subpart L
FCC CFR Title 47 Part 27 Subpart C

Date of sample receipt: 18 Mar., 2015

Date of Test: 19 Mar., 2015 to 08 Apr., 2015

Date of report issued: 08 Apr., 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.

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2. Version

Version No.	Date	Description
00	08 Apr., 2015	Original

Prepared by:

Luna Gao

Date:

08 Apr., 2015

Report Clerk

Reviewed by:

Atomb Yang

Date:

08 Apr., 2015

Project Engineer

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4. Test Summary

Test Item	Section in CFR 47	Result
RF Exposure (SAR)	Part 1.1307 Part 2.1093	Passed* (Please refer to SAR Report)
RF Output Power	Part 2.1046 Part 24.232 (c) Part 27.50 (d)(4) Part 27.50 (c)(10)	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 Part 27.53(h) Part 27.53(g)	Pass
Spurious Emissions at Antenna Terminal	Part 2.1051 Part 24.238 (a) Part 27.53 (h) Part 27.53(g)	Pass
Field Strength of Spurious Radiation	Part 2.1053 Part 24.238 (a) Part 27.53 (h) Part 27.53(g)	Pass
Out of band emission, Band Edge	Part 22.917 (a) Part 24.238 (a) Part 27.53 (h) Part 27.53(g)	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:	Sun Cupid Technology (HK) Ltd.
Address of Applicant:	16/F,CEO Tower,77 Wing Hong Street, Cheung Sha Wan, Hong Kong
Manufacturer/ Factory:	Suncupid(Shen Zhen) Electronic Ltd
Address of Manufacturer / Factory:	Baolong Industrial City, Longgang District, Shenzhen Hi-Tech Road, Building 1, A 7

5.2 General Description of E.U.T.

Product Name:	LTE mobile phone
Model No.:	X3
Operation Frequency range:	LTE Band 2: TX: 1850MHz-1910MHz, RX: 1930MHz-1990MHz LTE Band 4: TX: 1710MHz-1755MHz, RX: 2110MHz-2155MHz LTE Band 17: TX: 704MHz -716MHz, RX: 734MHz-746MHz
Modulation type:	QPSK, 16QAM
Antenna type:	Internal Antenna
Antenna gain:	LTE Band 2: 0.9 dBi LTE Band 4: -3.6 dBi LTE Band 17: -4.4 dBi
AC adapter:	Model: HNFG050100UU Input:110-240V AC,50/60Hz 0.2A Output:5V DC MAX 1A
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

LTE Band 4(1.4MHz)		LTE Band 4(3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
19957	1710.70	19965	1711.50
19958	1710.80	19966	1711.60
....			
20174	1732.40	20174	1732.40
20175	1732.50	20175	1732.50
20176	1732.60	20176	1732.60
...	...	...	...
20392	1754.20	20384	1753.40
20393	1754.30	20385	1753.50
LTE Band 4(5MHz)		LTE Band 4(10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
19975	1712.50	20000	1715.00
19976	1712.60	20001	1715.10
....			
20174	1732.40	20174	1732.40
20175	1732.50	20175	1732.50
20176	1732.60	20176	1732.60
...	...	...	...
20374	1752.40	20349	1749.90
20375	1752.50	20350	1750.00
LTE Band 4(15MHz)		LTE Band 4(20MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
20025	1717.50	20050	1720.00
20026	1717.60	20051	1720.10
....			
20174	1732.40	20174	1732.40
20175	1732.50	20175	1732.50
20176	1732.60	20176	1732.60
...	...	...	...
20324	1747.40	20299	1744.90
20325	1747.50	20300	1745.00

LTE Band 17(5MHz)		LTE Band 17(10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
23755	706.50	23780	709.00
23756	706.60	23781	709.10
....			
23789	709.90	23789	709.90
23790	710.00	23790	710.00
23791	710.10	23791	710.10
...	...	...	...
23824	713.40	23799	710.90
23825	713.50	23800	711.00

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

LTE Band 4(1.4MHz)			LTE Band 4(3MHz)		
Channel:		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	19957	1710.70	Lowest channel	19965	1711.50
Middle channel	20175	1732.50	Middle channel	20175	1732.50
Highest channel	20393	1754.30	Highest channel	20385	1753.50
LTE Band 4(5MHz)			LTE Band 4(10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	19975	1712.50	Lowest channel	20000	1715.00
Middle channel	20175	1732.50	Middle channel	20175	1732.50
Highest channel	20375	1752.50	Highest channel	20350	1750.00
LTE Band 4(15MHz)			LTE Band 4(20MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	20025	1717.50	Lowest channel	20050	1720.00
Middle channel	20175	1732.50	Middle channel	20175	1732.50
Highest channel	20325	1747.50	Highest channel	20300	1745.00

LTE Band 17(5MHz)			LTE Band 17(10MHz)		
Channel		Frequency (MHz)	Channel		Frequency (MHz)
Lowest channel	23755	706.50	Lowest channel	23780	709.00
Middle channel	23790	710.00	Middle channel	23790	710.00
Highest channel	23825	713.50	Highest channel	23800	711.00

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))
Data mode (LTE band 4(QPSK))	Keep the EUT in data communicating mode on LTE band 4(QPSK). (LTE band 4(1.4MHz), LTE band 4(3MHz), LTE band 4(5MHz), LTE band 4(10MHz), LTE band 4(15MHz), LTE band 4(20MHz))
Data mode (LTE band 4(16QAM))	Keep the EUT in data communicating mode on LTE band 4(16QAM). (LTE band 4(1.4MHz), LTE band 4(3MHz), LTE band 4(5MHz), LTE band 4(10MHz), LTE band 4(15MHz), LTE band 4(20MHz))
Data mode (LTE band 17(QPSK))	Keep the EUT in data communicating mode on LTE band 7(QPSK). (LTE band 17(5MHz), LTE band 17(10MHz))
Data mode (LTE band 17(16QAM))	Keep the EUT in data communicating mode on LTE band 17(16QAM). (LTE band 17(5MHz), LTE band 17(10MHz))
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, Part 27 subpart L and Part 27 subpart M 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	04-19-2014	04-19-2015
3	Double - ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	CCIS0006	04-19-2014	04-19-2015
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	06-09-2014	06-08-2015
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	03-30-2015	03-29-2016
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	04-19-2014	04-19-2015
12	EMI Test Receiver	Rohde & Schwarz	ESCI	CCIS0002	04-01-2015	03-31-2016
13	Loop antenna	Laplace instrument	RF300	EMC0701	04-01-2015	03-31-2016
14	Wideband Radio Communication Tester	Rhode & Schwarz	CMW500	140330	05-29-2014	05-28-2015
15	Signal Analyzer	Rohde & Schwarz	FSIQ3	CCIS0088	04-19-2014	04-19-2015
16	Temperature and humidity chamber	Foshan Hengpu	HPGDS-500	CCIS0240	11-18-2014	11-17-2015

6. System test configuration

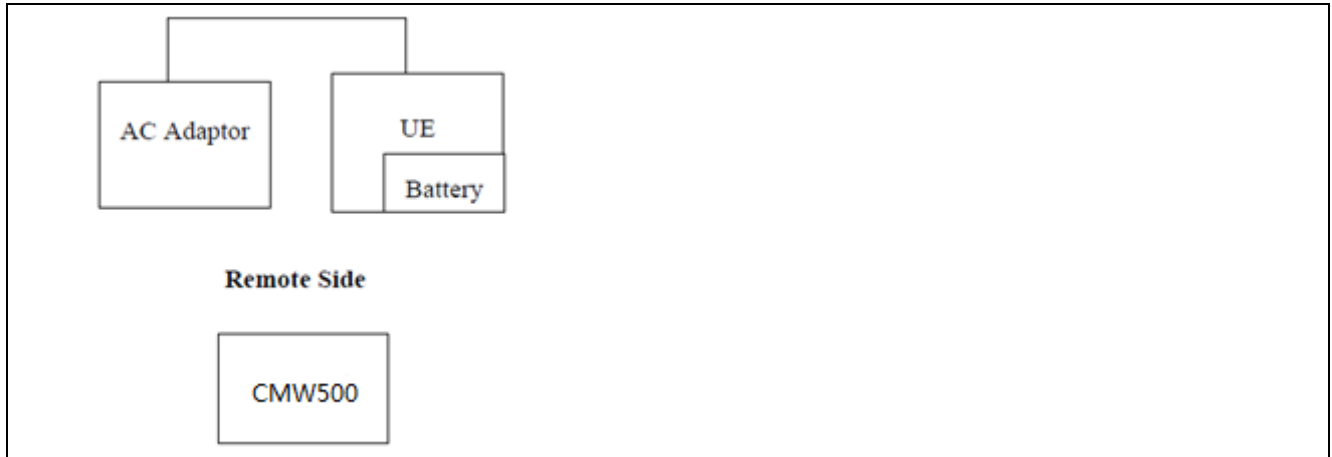
6.1 EUT Configuration

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.

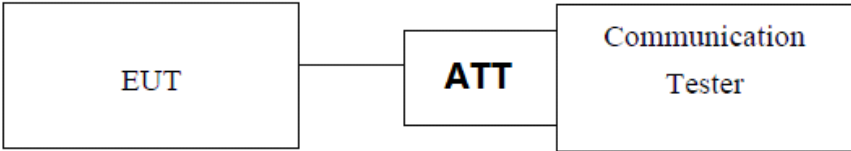
6.3 Configuration of Tested System



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 three modes (LTE Band 2, LTE Band 4 and LTE Band 17) with power adaptor, earphone and Data cable. The worst-case H mode for LTE Band 2, LTE Band 4 and LTE Band 17.

6.5 Conducted Output Power

Test Requirement:	FCC Part 24.232 (c), part 27.50(d) and part 27.50(c)
Test Method:	FCC part 2.1046
Limit:	LTE Band 2: 2W LTE Band 4: 1W LTE Band 17: 3W
Test setup:	 <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 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

Frequency (MHz)	Channel No.	Modulation	BW (MHz)	RB Size	RB Offset	Ave. Power (dBm)
1850.70	18607	QPSK	1.4	1	0	22.65
				1	2	22.52
				1	5	22.71
				3	0	23.02
				3	1	22.69
				3	2	22.66
		6		0	22.25	
		16QAM		1	0	21.32
				1	2	21.63
				1	5	21.53
				3	0	22.19
				3	1	21.86
				3	2	21.80
				6	0	21.45
1880.00	18900		QPSK	1.4	1	0
		1			2	22.45
		1			5	22.45
		3			0	23.02
		3			1	22.99
		3			2	22.98
		6	0		22.31	
		16QAM	1		0	21.22
			1		2	21.30
			1		5	21.33
			3		0	21.49
			3		1	21.55
			3		2	21.57
			6		0	21.51
1909.30	19193		QPSK	1.4	1	0
		1			2	21.86
		1			5	21.75
		3			0	21.58
		3			1	21.83
		3			2	21.57
		6	0		21.78	
		16QAM	1		0	20.60
			1		2	20.58
			1		5	20.41
			3		0	20.50
			3		1	20.56
			3		2	20.53
			6		0	20.04

Frequency (MHz)	Channel No.	Modulation	BW (MHz)	RB Size	RB Offset	Ave. Power (dBm)
1851.50	18615	QPSK	3.0	1	0	22.21
				1	7	23.02
				1	14	22.78
				8	0	22.28
				8	4	22.26
				8	7	22.16
				15	0	22.23
		16QAM		1	0	21.17
				1	7	21.12
				1	14	20.84
				8	0	21.30
				8	4	21.27
				8	7	21.17
				15	0	21.22
1880.00	18900	QPSK	3.0	1	0	22.23
				1	7	22.55
				1	14	22.64
				8	0	22.18
				8	4	22.31
				8	7	22.29
				15	0	22.22
		16QAM		1	0	21.61
				1	7	22.02
				1	14	22.07
				8	0	21.28
				8	4	21.46
				8	7	21.44
				15	0	21.28
1908.50	19185	QPSK	3.0	1	0	21.58
				1	7	21.96
				1	14	21.51
				8	0	21.69
				8	4	21.75
				8	7	21.68
				15	0	21.85
		16QAM		1	0	20.57
				1	7	20.60
				1	14	20.55
				8	0	20.70
				8	4	20.77
				8	7	20.72
				15	0	20.71

Frequency (MHz)	Channel No.	Modulation	BW (MHz)	RB Size	RB Offset	Ave. Power (dBm)
1852.50	18625	QPSK	5.0	1	0	22.74
				1	12	22.82
				1	24	22.31
				12	0	22.43
				12	6	22.19
				12	11	22.29
				25	0	22.34
		16QAM		1	0	22.31
				1	12	22.39
				1	24	21.90
				12	0	21.52
				12	6	21.25
				12	11	21.39
				25	0	21.36
1880.00	18900	QPSK	5.0	1	0	22.39
				1	12	22.83
				1	24	22.81
				12	0	22.21
				12	6	22.26
				12	11	22.37
				25	0	22.22
		16QAM		1	0	21.42
				1	12	21.94
				1	24	21.95
				12	0	21.25
				12	6	21.35
				12	11	21.44
				25	0	21.25
1907.50	19175	QPSK	5.0	1	0	21.50
				1	12	21.92
				1	24	21.55
				12	0	21.61
				12	6	21.80
				12	11	21.78
				25	0	21.67
		16QAM		1	0	20.57
				1	12	21.04
				1	24	20.68
				12	0	20.68
				12	6	20.88
				12	11	20.86
				25	0	20.72

Frequency (MHz)	Channel No.	Modulation	BW (MHz)	RB Size	RB Offset	Ave. Power (dBm)
1855.00	18650	QPSK	10.0	1	0	22.75
				1	24	22.60
				1	49	21.69
				25	0	22.49
				25	12	22.30
				25	24	22.16
		50		0	22.28	
		16QAM		1	0	21.49
				1	24	21.41
				1	49	20.48
				25	0	21.62
				25	12	21.38
				25	24	21.30
				50	0	21.35
1880.00	18900		QPSK	10.0	1	0
		1			24	22.88
		1			49	22.84
		25			0	21.95
		25			12	22.03
		25			24	22.24
		50	0		22.16	
		16QAM	1		0	21.38
			1		24	22.27
			1		49	22.27
			25		0	20.95
			25		12	21.15
			25		24	21.31
			50		0	21.23
1905.00	19150		QPSK	10.0	1	0
		1			24	21.40
		1			49	21.31
		25			0	21.13
		25			12	21.42
		25			24	21.54
		50	0		21.34	
		16QAM	1		0	20.58
			1		24	20.83
			1		49	20.56
			25		0	20.25
			25		12	20.55
			25		24	20.68
			50		0	20.42

Frequency (MHz)	Channel No.	Modulation	BW (MHz)	RB Size	RB Offset	Average (dBm)
1857.50	18675	QPSK	15.0	1	0	22.33
				1	37	22.25
				1	74	21.10
				36	0	22.34
				36	18	22.26
				36	37	21.80
				75	0	22.05
		16QAM		1	0	21.42
				1	37	21.31
				1	74	20.17
				36	0	21.44
				36	18	21.29
				36	37	20.80
				75	0	21.14
1880.00	18900	QPSK	15.0	1	0	21.48
				1	37	22.78
				1	74	22.50
				36	0	21.82
				36	18	22.16
				36	37	22.36
				75	0	22.14
		16QAM		1	0	20.86
				1	37	21.96
				1	74	21.91
				36	0	20.79
				36	18	21.12
				36	37	21.43
				75	0	21.20
1902.50	19125	QPSK	15.0	1	0	21.10
				1	37	21.21
				1	74	21.06
				36	0	21.12
				36	18	21.20
				36	37	21.25
				75	0	21.17
		16QAM		1	0	20.22
				1	37	20.26
				1	74	20.17
				36	0	20.16
				36	18	20.23
				36	37	20.34
				75	0	20.17

Frequency (MHz)	Channel No.	Modulation	BW (MHz)	RB Size	RB Offset	Ave. Power (dBm)
1860.00	18700	QPSK	20.0	1	0	21.64
				1	49	22.02
				1	99	21.46
				50	0	22.02
				50	24	21.99
				50	49	21.42
				100	0	21.68
		16QAM		1	0	20.61
				1	49	20.84
				1	99	20.57
				50	0	21.16
				50	24	21.07
				50	49	20.48
				100	0	20.82
1880.00	18900	QPSK	20.0	1	0	21.88
				1	49	22.96
				1	99	22.06
				50	0	21.87
				50	24	22.42
				50	49	22.49
				100	0	22.27
		16QAM		1	0	20.59
				1	49	22.18
				1	99	21.27
				50	0	20.91
				50	24	21.47
				50	49	21.67
				100	0	21.33
1900.00	19100	QPSK	20.0	1	0	21.44
				1	49	21.25
				1	99	21.60
				50	0	21.48
				50	24	21.30
				50	49	21.03
				100	0	21.22
		16QAM		1	0	20.92
				1	49	20.67
				1	99	20.54
				50	0	20.57
				50	24	20.40
				50	49	20.09
				100	0	20.35

LTE Band 4 part

Frequency (MHz)	Channel No.	Modulation	BW (MHz)	RB Size	RB Offset	Ave. Power (dBm)
1710.70	19957	QPSK	1.4	1	0	21.72
				1	2	21.67
				1	5	21.58
				3	0	21.61
				3	1	21.61
				3	2	21.59
		6		0	21.49	
		16QAM		1	0	21.10
				1	2	21.08
				1	5	20.95
				3	0	20.91
				3	1	20.90
				3	2	20.87
				6	0	20.40
1732.50	20175		QPSK	1.4	1	0
		1			2	22.51
		1			5	22.53
		3			0	22.46
		3			1	22.51
		3			2	22.51
		6	0		21.90	
		16QAM	1		0	21.29
			1		2	21.34
			1		5	21.36
			3		0	21.61
			3		1	21.67
			3		2	21.66
			6		0	21.06
1754.30	20393		QPSK	1.4	1	0
		1			2	21.22
		1			5	21.12
		3			0	21.10
		3			1	21.14
		3			2	21.13
		6	0		21.12	
		16QAM	1		0	20.09
			1		2	20.09
			1		5	20.04
			3		0	20.36
			3		1	20.39
			3		2	20.38
			6		0	20.34

Frequency (MHz)	Channel No.	Modulation	BW (MHz)	RB Size	RB Offset	Ave. Power (dBm)
1711.50	19965	QPSK	3.0	1	0	21.25
				1	7	21.28
				1	14	21.10
				8	0	21.25
				8	4	21.27
				8	7	21.21
				15	0	21.25
		16QAM		1	0	20.10
				1	7	20.13
				1	14	19.94
				8	0	20.28
				8	4	21.36
				8	7	20.24
				15	0	20.26
1732.50	20175	QPSK	3.0	1	0	22.48
				1	7	22.53
				1	14	22.45
				8	0	21.85
				8	4	21.84
				8	7	21.84
				15	0	21.87
		16QAM		1	0	21.81
				1	7	21.94
				1	14	21.83
				8	0	21.00
				8	4	21.00
				8	7	20.97
				15	0	20.95
1753.50	20385	QPSK	3.0	1	0	21.28
				1	7	21.27
				1	14	21.06
				8	0	21.25
				8	4	21.25
				8	7	21.16
				15	0	21.22
		16QAM		1	0	20.13
				1	7	20.13
				1	14	19.91
				8	0	20.28
				8	4	20.27
				8	7	20.18
				15	0	20.22

Frequency (MHz)	Channel No.	Modulation	BW (MHz)	RB Size	RB Offset	Ave. Power (dBm)
1712.50	19975	QPSK	5.0	1	0	21.04
				1	12	21.21
				1	24	20.89
				12	0	21.22
				12	6	21.26
				12	11	21.19
				25	0	21.19
		16QAM		1	0	20.64
				1	12	20.82
				1	24	20.50
				12	0	20.32
				12	6	20.37
				12	11	20.30
				25	0	20.21
1732.50	20175	QPSK	5.0	1	0	22.06
				1	12	22.42
				1	24	22.20
				12	0	22.10
				12	6	21.89
				12	11	21.88
				25	0	21.91
		16QAM		1	0	21.20
				1	12	21.56
				1	24	21.35
				12	0	21.04
				12	6	20.93
				12	11	20.96
				25	0	20.98
1752.50	20375	QPSK	5.0	1	0	21.20
				1	12	21.31
				1	24	20.89
				12	0	21.36
				12	6	21.37
				12	11	21.25
				25	0	21.28
		16QAM		1	0	20.80
				1	12	20.92
				1	24	20.49
				12	0	20.46
				12	6	20.48
				12	11	20.37
				25	0	20.31

Frequency (MHz)	Channel No.	Modulation	BW (MHz)	RB Size	RB Offset	Ave. Power (dBm)
1715.00	20000	QPSK	10.0	1	0	21.10
				1	24	21.17
				1	49	21.07
				25	0	22.24
				25	12	21.62
				25	24	21.62
				50	0	21.70
		16QAM		1	0	20.37
				1	24	20.68
				1	49	20.54
				25	0	20.63
				25	12	20.73
				25	24	20.76
				50	0	20.79
1732.50	20175	QPSK	10.0	1	0	22.28
				1	24	22.95
				1	49	22.83
				25	0	21.93
				25	12	21.87
				25	24	21.88
				50	0	21.87
		16QAM		1	0	21.13
				1	24	21.80
				1	49	21.70
				25	0	21.07
				25	12	21.03
				25	24	21.04
				50	0	20.98
1750.00	20350	QPSK	10.0	1	0	22.53
				1	24	22.49
				1	49	21.80
				25	0	21.88
				25	12	21.79
				25	24	21.88
				50	0	21.84
		16QAM		1	0	21.96
				1	24	21.90
				1	49	21.21
				25	0	20.98
				25	12	20.90
				25	24	20.98
				50	0	20.91

Frequency (MHz)	Channel No.	Modulation	BW (MHz)	RB Size	RB Offset	Average (dBm)
1717.50	20025	QPSK	15.0	1	0	22.66
				1	37	22.04
				1	74	21.82
				36	0	21.70
				36	18	21.79
				36	37	21.93
				75	0	21.77
		16QAM		1	0	20.74
				1	37	21.14
				1	74	20.98
				36	0	20.85
				36	18	20.83
				36	37	20.98
				75	0	20.85
1732.50	20175	QPSK	15.0	1	0	22.15
				1	37	22.98
				1	74	22.72
				36	0	22.09
				36	18	21.98
				36	37	21.87
				75	0	21.85
		16QAM		1	0	21.56
				1	37	22.37
				1	74	22.45
				36	0	21.19
				36	18	21.16
				36	37	20.94
				75	0	21.37
1747.50	20325	QPSK	15.0	1	0	22.56
				1	37	22.66
				1	74	21.63
				36	0	21.69
				36	18	22.51
				36	37	21.79
				75	0	21.78
		16QAM		1	0	21.66
				1	37	21.68
				1	74	21.26
				36	0	20.70
				36	18	20.78
				36	37	20.84
				75	0	20.80

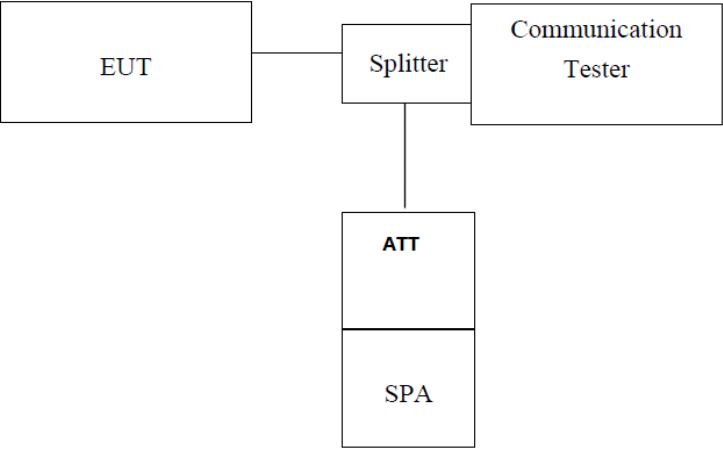
Frequency (MHz)	Channel No.	Modulation	BW (MHz)	RB Size	RB Offset	Ave. Power (dBm)
1720.00	20050	QPSK	20.0	1	0	22.10
				1	49	22.08
				1	99	21.74
				50	0	21.68
				50	24	21.91
				50	49	21.95
				100	0	21.77
		16QAM		1	0	21.43
				1	49	20.95
				1	99	20.64
				50	0	20.84
				50	24	21.10
				50	49	21.12
				100	0	21.19
1732.50	20175	QPSK	20.0	1	0	21.51
				1	49	23.30
				1	99	22.16
				50	0	22.11
				50	24	22.13
				50	49	21.83
				100	0	21.94
		16QAM		1	0	20.85
				1	49	22.34
				1	99	21.59
				50	0	21.20
				50	24	21.20
				50	49	20.91
				100	0	21.01
1745.00	20300	QPSK	20.0	1	0	22.23
				1	49	22.83
				1	99	21.59
				50	0	21.74
				50	24	21.77
				50	49	21.69
				100	0	21.83
		16QAM		1	0	22.43
				1	49	21.81
				1	99	20.59
				50	0	20.90
				50	24	20.93
				50	49	20.85
				100	0	20.97

LTE Band 17 part

Frequency (MHz)	Channel No.	Modulation	BW (MHz)	RB Size	RB Offset	Ave. Power (dBm)
706.50	23755	QPSK	5.0	1	0	22.88
				1	12	23.46
				1	24	23.50
				12	0	22.10
				12	6	22.50
				12	11	22.38
				25	0	22.26
		16QAM		1	0	22.10
				1	12	22.58
				1	24	22.56
				12	0	21.15
				12	6	21.27
				12	11	21.32
				25	0	21.34
710.00	23790	QPSK	5.0	1	0	23.25
				1	12	23.18
				1	24	22.72
				12	0	22.28
				12	6	22.19
				12	11	22.12
				25	0	22.19
		16QAM		1	0	22.72
				1	12	22.61
				1	24	22.23
				12	0	21.37
				12	6	21.29
				12	11	21.27
				25	0	21.22
713.50	23825	QPSK	5.0	1	0	23.22
				1	12	22.98
				1	24	22.72
				12	0	22.29
				12	6	22.15
				12	11	22.12
				25	0	22.11
		16QAM		1	0	22.13
				1	12	21.82
				1	24	21.54
				12	0	21.33
				12	6	21.23
				12	11	21.18
				25	0	21.32

Frequency (MHz)	Channel No.	Modulation	BW (MHz)	RB Size	RB Offset	Ave. Power (dBm)
709.00	23780	QPSK	10.0	1	0	23.10
				1	24	23.31
				1	49	22.93
				25	0	22.18
				25	12	22.17
				25	24	22.10
				50	0	22.12
		16QAM		1	0	22.04
				1	24	22.16
				1	49	21.85
				25	0	21.38
				25	12	21.27
				25	24	21.26
				50	0	21.24
710.00	23790	QPSK	10.0	1	0	23.23
				1	24	23.03
				1	49	23.02
				25	0	22.22
				25	12	22.10
				25	24	21.99
				50	0	22.05
		16QAM		1	0	22.64
				1	24	22.46
				1	49	22.47
				25	0	21.35
				25	12	21.20
				25	24	21.10
				50	0	21.23
711.00	23800	QPSK	10.0	1	0	23.54
				1	24	23.09
				1	49	22.80
				25	0	22.25
				25	12	22.17
				25	24	22.00
				50	0	22.08
		16QAM		1	0	22.34
				1	24	21.96
				1	49	21.56
				25	0	21.41
				25	12	21.33
				25	24	21.10
				50	0	21.18

6.6 Peak-to-Average Ratio

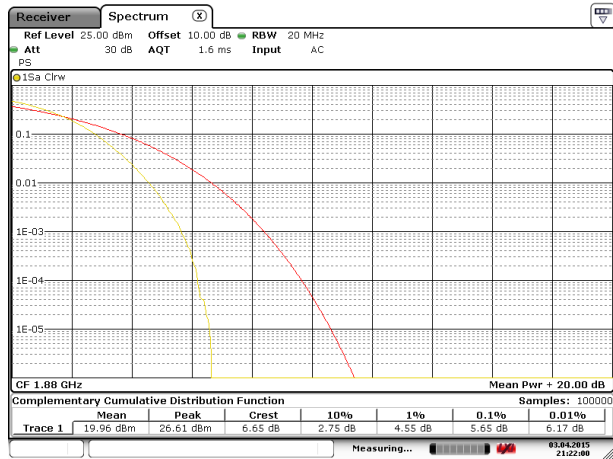
Test Requirement:	FCC part 24.232(d)
Limit:	The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.
Test setup:	 <i>Note: Measurement setup for testing on Antenna connector</i>
Test Procedure:	1 The RF output of the transceiver was connected to a spectrum analyzer through appropriate 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	4.64
	16QAM	100	0	5.65
LTE Band 4 (Middle Channel)				
20MHz	QPSK	100	0	4.78
	16QAM	100	0	5.68
LTE Band 17 (Middle Channel)				
10MHz	QPSK	100	0	4.17
	16QAM	100	0	5.19

Test plots as below:

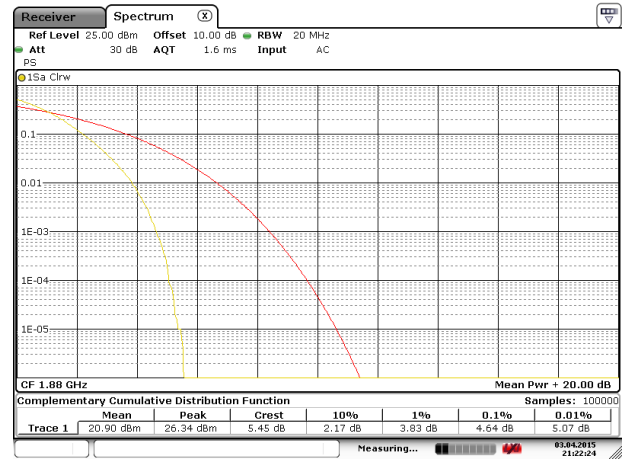
LTE Band 2 Middle channel

Modulation:16QAM



Date: 3.APR.2015 21:21:59

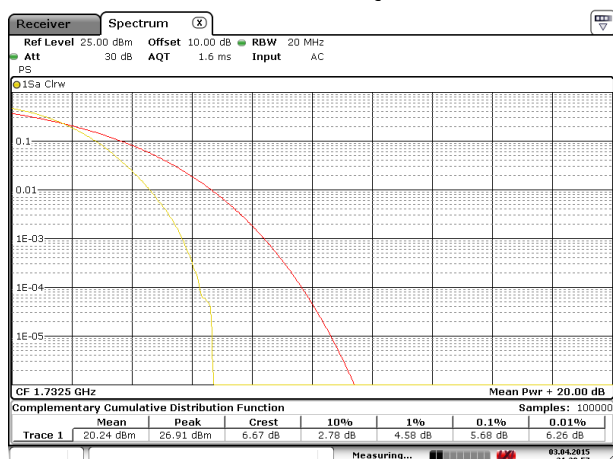
Modulation: QPSK



Date: 3.APR.2015 21:22:24

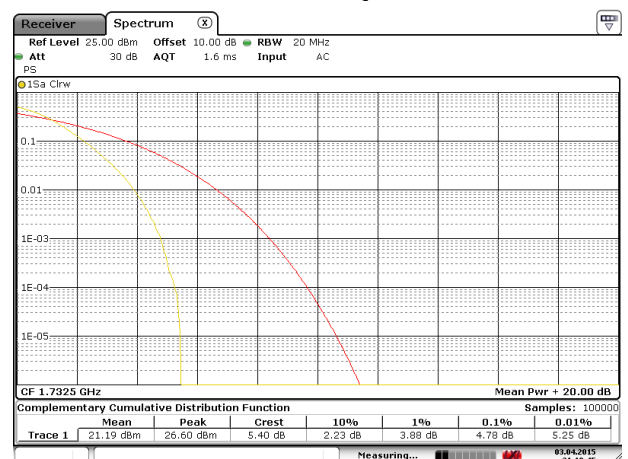
LTE Band 4 Middle channel

Modulation:16QAM



Date: 3.APR.2015 21:20:57

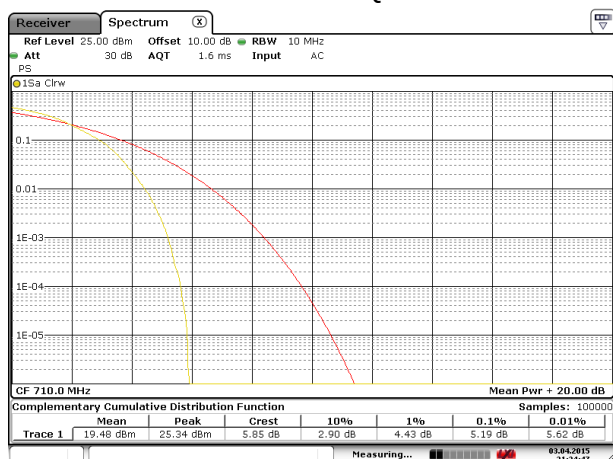
Modulation: QPSK



Date: 3.APR.2015 21:19:45

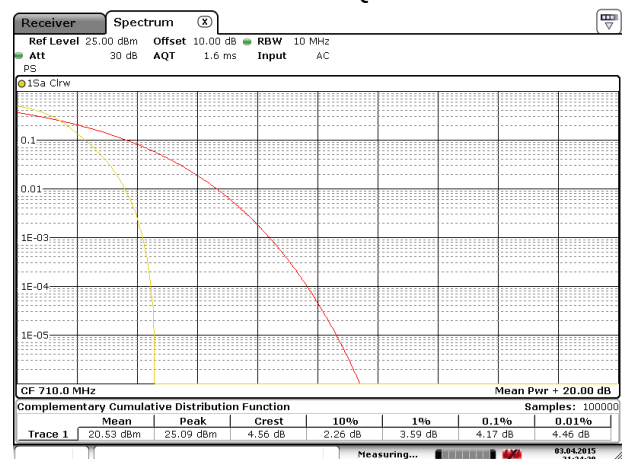
LTE Band 17 Middle channel

Modulation:16QAM



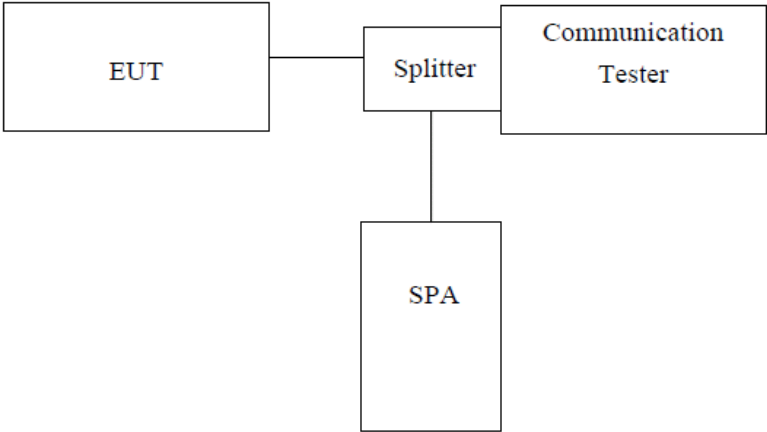
Date: 3.APR.2015 21:24:47

Modulation: QPSK



Date: 3.APR.2015 21:24:20

6.7 Occupy Bandwidth

Test Requirement:	FCC Part 24.238, part 27.53(h) and part 27.53(g)
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 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	1110	1362
			QPSK	1098	1308
	18900	1880.00	16QAM	1110	1290
			QPSK	1098	1296
	19193	1909.30	16QAM	1104	1332
			QPSK	1104	1296
3MHz	18615	1851.50	16QAM	2700	2964
			QPSK	2688	2940
	18900	1880.00	16QAM	2688	2940
			QPSK	2688	2952
	19185	1908.50	16QAM	2688	2916
			QPSK	2688	2940
5MHz	18625	1852.50	16QAM	4520	4940
			QPSK	4520	5040
	18900	1880.00	16QAM	4520	4980
			QPSK	4500	4960
	19175	1907.50	16QAM	4520	4980
			QPSK	4520	4960
10MHz	18650	1855.00	16QAM	8960	9800
			QPSK	8960	9600
	18900	1880.00	16QAM	8960	9680
			QPSK	9000	9600
	19150	1905.00	16QAM	8960	9760
			QPSK	8960	9640
15MHz	18675	1857.50	16QAM	13560	14820
			QPSK	13500	14760
	18900	1880.00	16QAM	13500	14820
			QPSK	13440	14760
	19125	1902.50	16QAM	13500	14880
			QPSK	13560	14760
20MHz	18700	1860.00	16QAM	17920	19600
			QPSK	18000	19200
	18900	1880.00	16QAM	17840	19600
			QPSK	17840	19120
	19100	1900.00	16QAM	18000	19440
			QPSK	18000	19200

LTE Band 4 part:

EUT Mode	Channel	Frequency (MHz)	Modulation	99% OBW (kHz)	-26dBc EBW (kHz)
1.4MHz	19957	1710.7	16QAM	1104	1314
			QPSK	1092	1296
	20175	1732.5	16QAM	1110	1308
			QPSK	1104	1296
	20393	1754.3	16QAM	1104	1302
			QPSK	1110	1278
3MHz	19965	1711.5	16QAM	2700	2940
			QPSK	2688	2928
	20175	1732.5	16QAM	2700	2964
			QPSK	2688	2928
	20385	1750.5	16QAM	2700	2940
			QPSK	2688	2940
5MHz	19975	1712.5	16QAM	4520	5040
			QPSK	4520	4980
	20175	1732.5	16QAM	4520	5000
			QPSK	4520	4900
	20375	1752.5	16QAM	4540	4980
			QPSK	4540	5020
10MHz	20000	1715.0	16QAM	8960	9800
			QPSK	8960	9560
	20175	1732.5	16QAM	8960	9760
			QPSK	8960	9600
	20350	1750.0	16QAM	9000	9720
			QPSK	8960	9680
15MHz	20025	1717.5	16QAM	13500	15060
			QPSK	13560	14880
	20175	1732.5	16QAM	13500	14880
			QPSK	13500	14760
	20325	1747.5	16QAM	13500	14940
			QPSK	13500	14700
20MHz	20050	1720.0	16QAM	18080	19440
			QPSK	18000	19280
	20175	1732.5	16QAM	17920	19520
			QPSK	17920	19440
	20300	1745.0	16QAM	17920	19360
			QPSK	17920	19360

LTE Band 17 part:

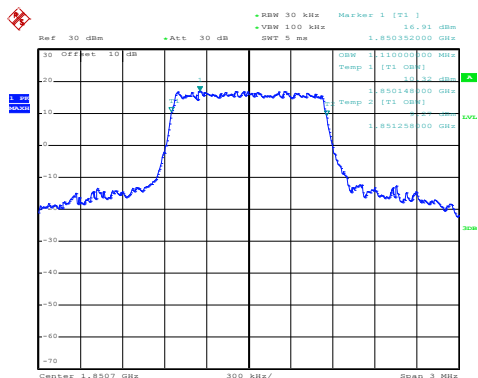
EUT Mode	Channel	Frequency (MHz)	Modulation	99% OBW (kHz)	-26dB EBW (kHz)
5MHz	23755	706.5	16QAM	4580	5200
			QPSK	4540	5080
	23790	710.0	16QAM	4520	4980
			QPSK	4520	4960
	23825	713.5	16QAM	4520	5060
			QPSK	4540	5060
10MHz	23780	709.0	16QAM	9000	9800
			QPSK	9000	9720
	23790	710.0	16QAM	9000	9840
			QPSK	9000	9520
	23800	711.0	16QAM	9000	9600
			QPSK	8960	9560

Test plot as follows:

LTE Band 2 part

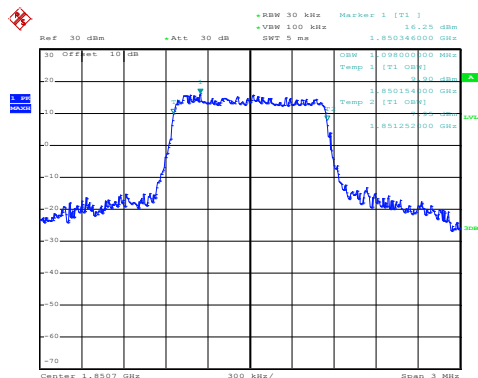
Test Item: 99% Occupy bandwidth
BW: 1.4MHz

Modulation: 16QAM



Date: 27.MAR.2015 18:32:03

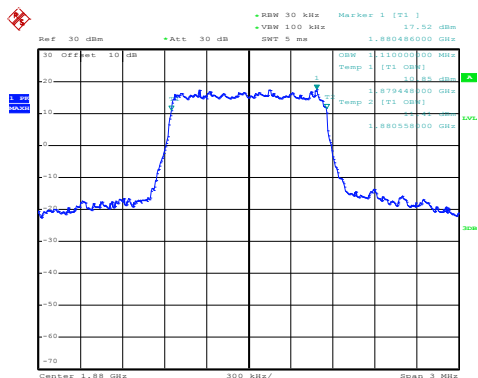
Modulation: QPSK



Date: 27.MAR.2015 18:32:18

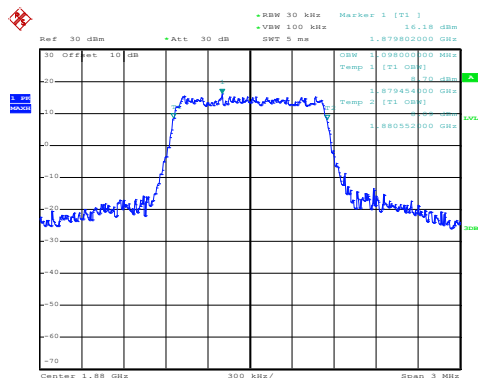
Lowest channel

Modulation: 16QAM



Date: 27.MAR.2015 18:33:17

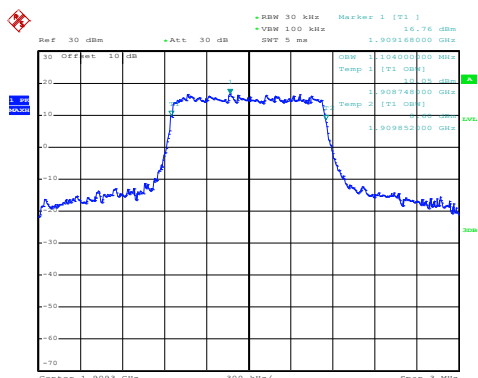
Modulation: QPSK



Date: 27.MAR.2015 18:33:25

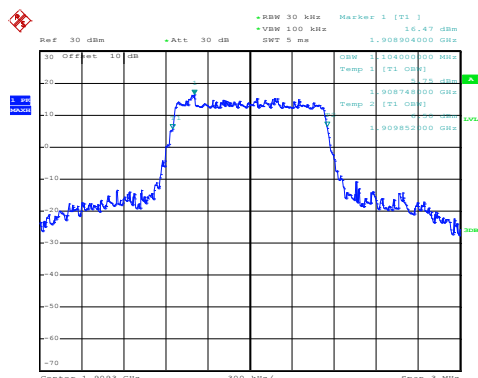
Middle channel

Modulation: 16QAM



Date: 27.MAR.2015 18:34:13

Modulation: QPSK

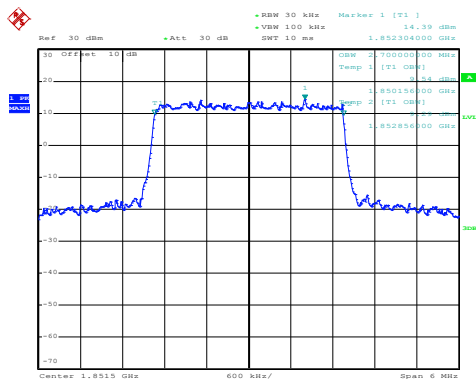


Date: 27.MAR.2015 18:34:23

Highest channel

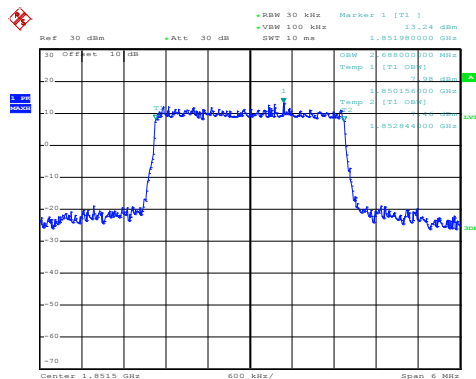
Test Item: 99% Occupy bandwidth
BW: 3MHz

Modulation: 16QAM



Date: 27.MAR.2015 18:35:45

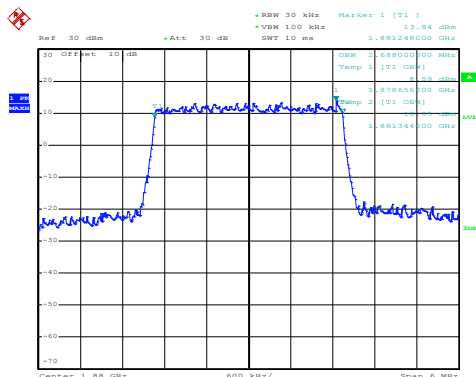
Modulation: QPSK



Date: 27.MAR.2015 18:35:52

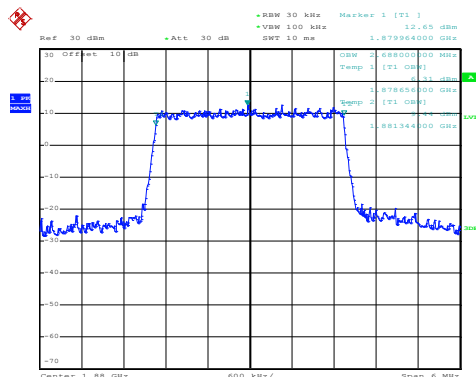
Lowest channel

Modulation: 16QAM



Date: 27.MAR.2015 18:36:14

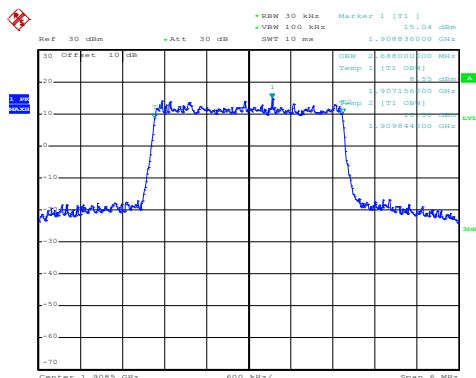
Modulation: QPSK



Date: 27.MAR.2015 18:36:21

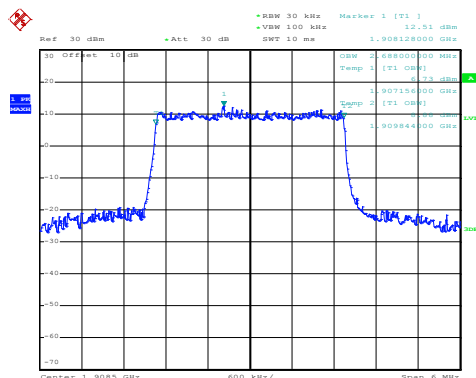
Middle channel

Modulation: 16QAM



Date: 27.MAR.2015 18:37:35

Modulation: QPSK

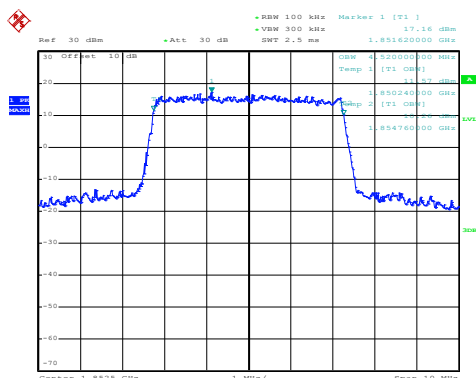


Date: 27.MAR.2015 18:37:42

Highest channel

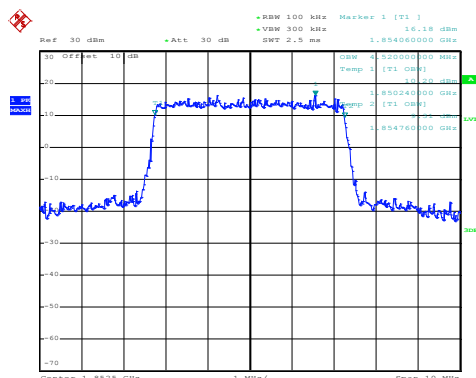
Test Item: 99% Occupancy bandwidth
BW: 5MHz

Modulation: 16QAM



Date: 27.MAR.2015 18:38:25

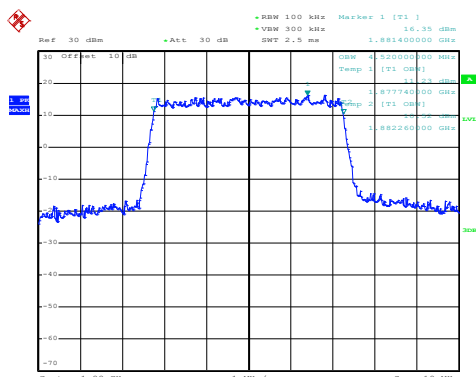
Modulation: QPSK



Date: 27.MAR.2015 18:38:42

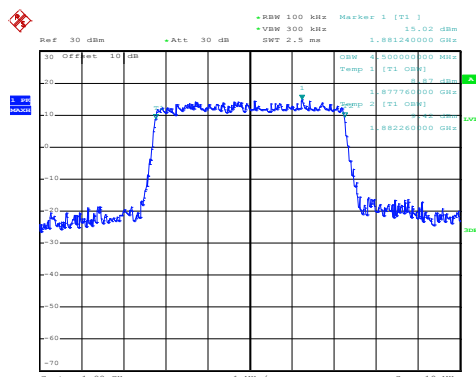
Lowest channel

Modulation: 16QAM



Date: 27.MAR.2015 18:39:10

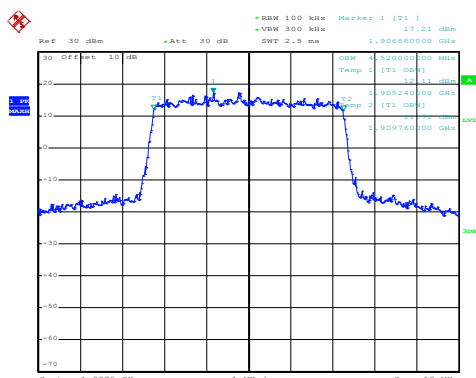
Modulation: QPSK



Date: 27.MAR.2015 18:39:20

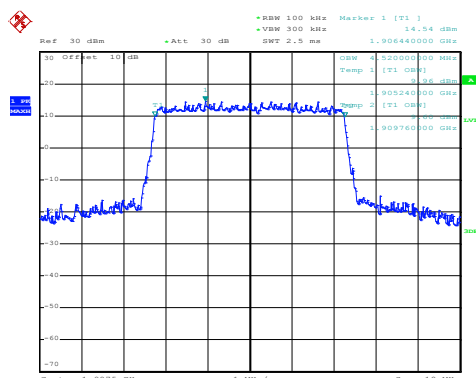
Middle channel

Modulation: 16QAM



Date: 27.MAR.2015 18:40:19

Modulation: QPSK

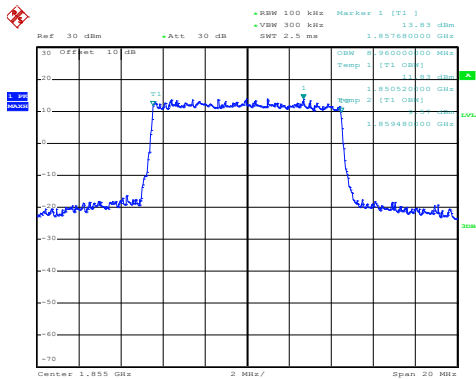


Date: 27.MAR.2015 18:40:26

Highest channel

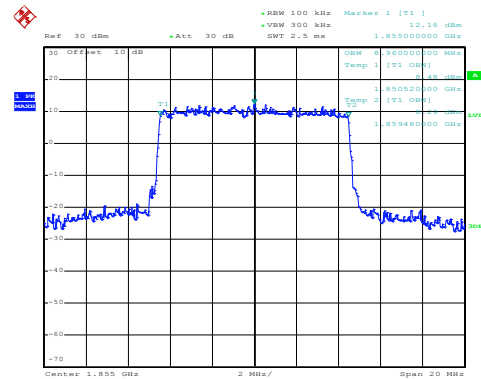
Test Item: 99% Occupy bandwidth
BW: 10MHz

Modulation: 16QAM



Date: 27.MAR.2015 18:41:41

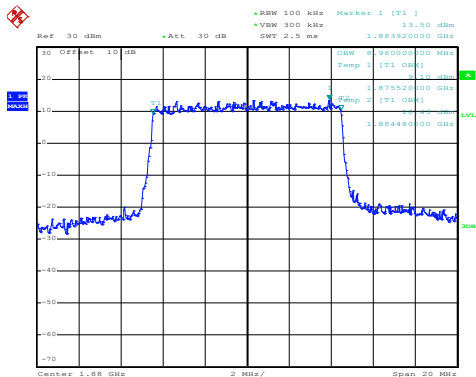
Modulation: QPSK



Date: 27.MAR.2015 18:42:26

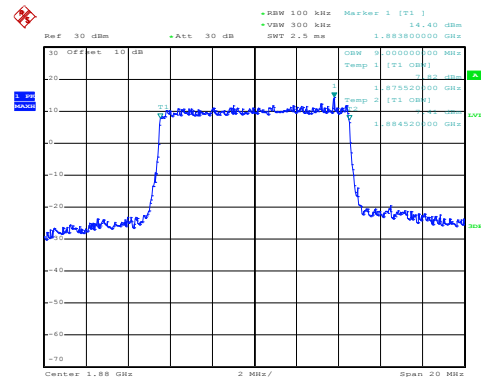
Lowest channel

Modulation: 16QAM



Date: 27.MAR.2015 18:43:02

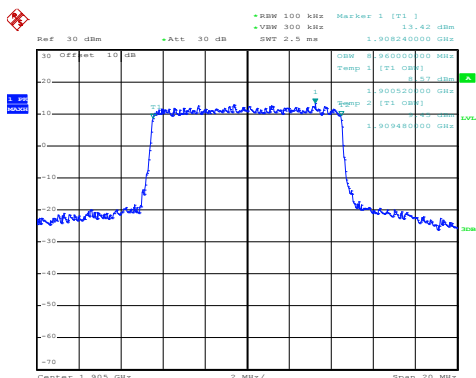
Modulation: QPSK



Date: 27.MAR.2015 18:43:15

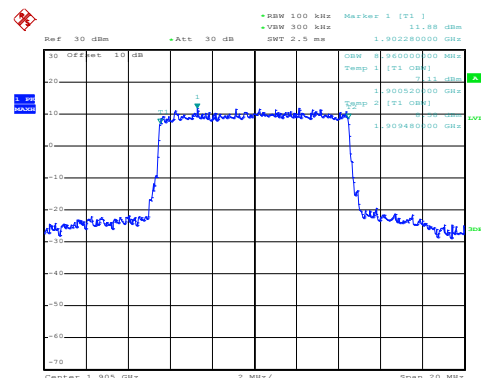
Middle channel

Modulation: 16QAM



Date: 27.MAR.2015 18:49:16

Modulation: QPSK



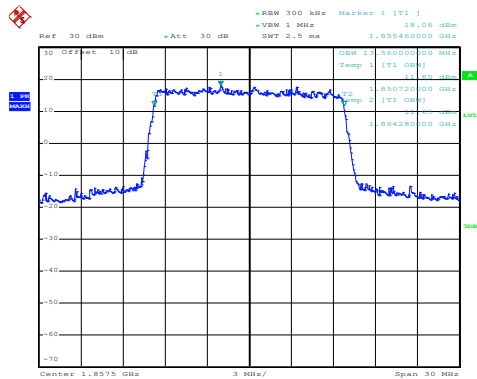
Date: 27.MAR.2015 18:49:26

Highest channel

Test Item: 99% Occupancy bandwidth

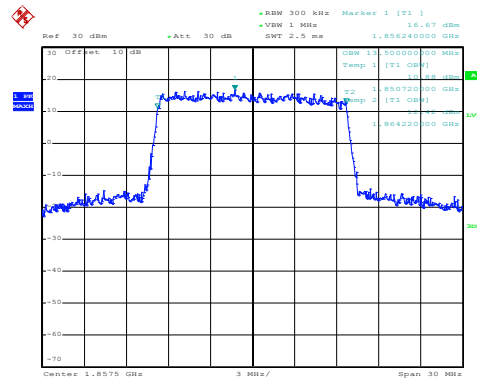
BW: 15MHz

Modulation: 16QAM



Date: 27_MAR.2015 18:50:55

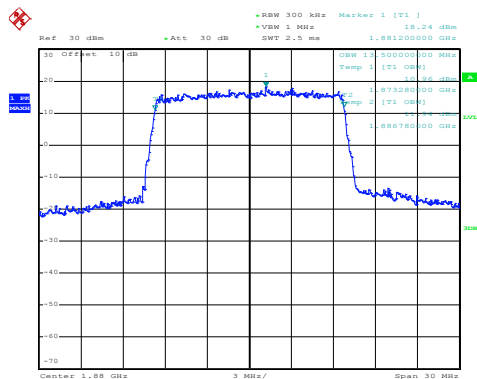
Modulation: QPSK



Date: 27_MAR.2015 18:51:35

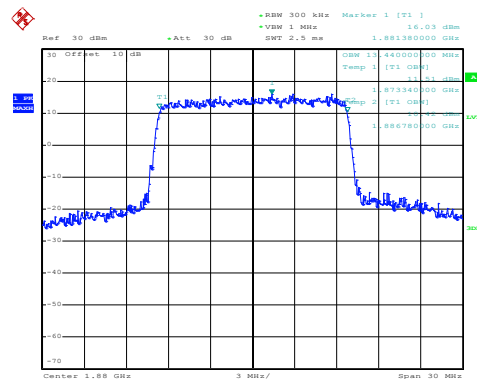
Lowest channel

Modulation: 16QAM



Date: 27_MAR.2015 18:51:58

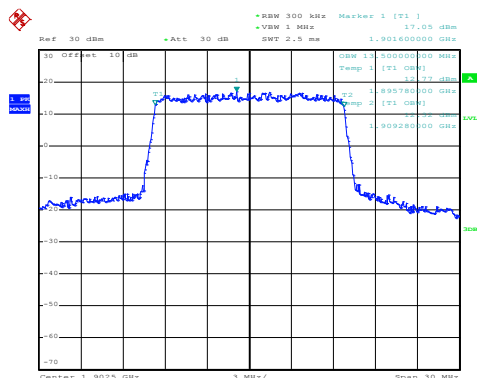
Modulation: QPSK



Date: 27_MAR.2015 18:52:10

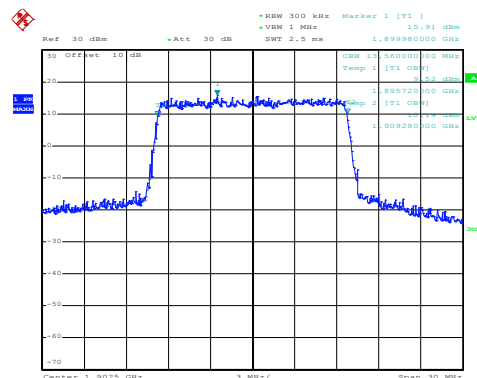
Middle channel

Modulation: 16QAM



Date: 27_MAR.2015 18:52:31

Modulation: QPSK



Date: 27_MAR.2015 18:52:41

Highest channel

Modulation: 16QAM



Modulation: QPSK



Lowest channel

Modulation: 16QAM



Modulation: QPSK



Middle channel

Modulation: 16QAM



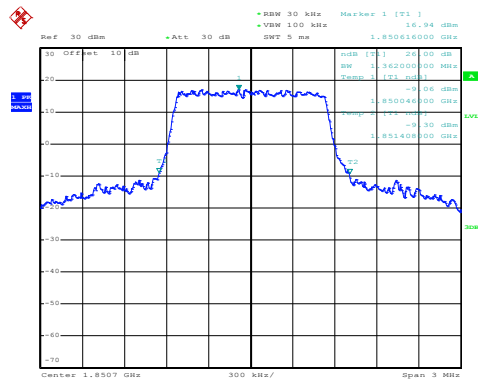
Modulation: QPSK



Highest channel

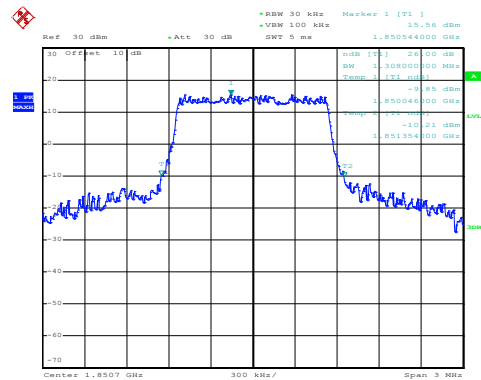
Test Item: -26dBc bandwidth
BW: 1.4MHz

Modulation: 16QAM



Date: 27.MAR.2015 18:56:08

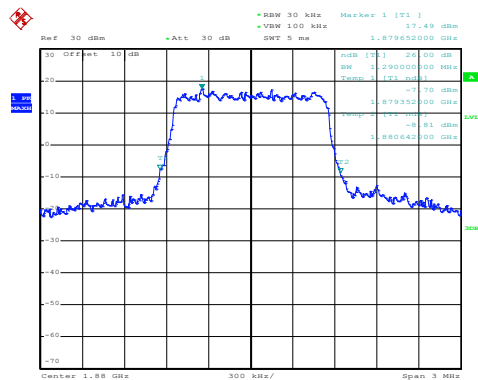
Modulation: QPSK



Date: 27.MAR.2015 18:56:17

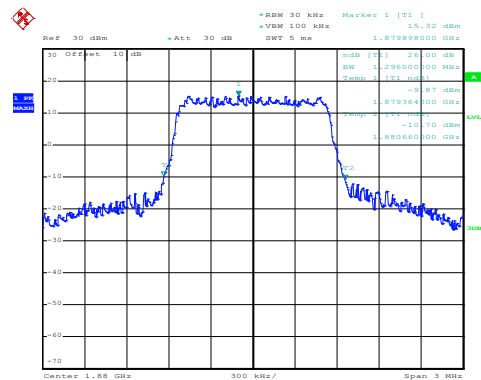
Lowest channel

Modulation: 16QAM



Date: 27.MAR.2015 18:56:36

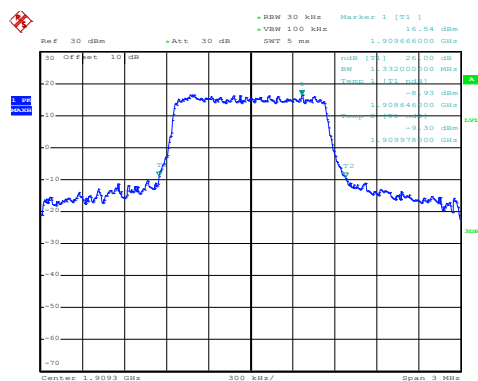
Modulation: QPSK



Date: 27.MAR.2015 18:56:43

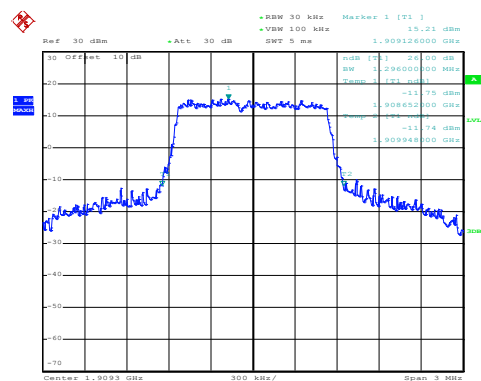
Middle channel

Modulation: 16QAM



Date: 27.MAR.2015 18:57:04

Modulation: QPSK

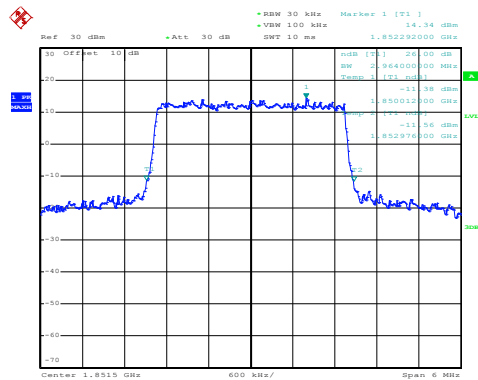


Date: 27.MAR.2015 18:57:11

Highest channel

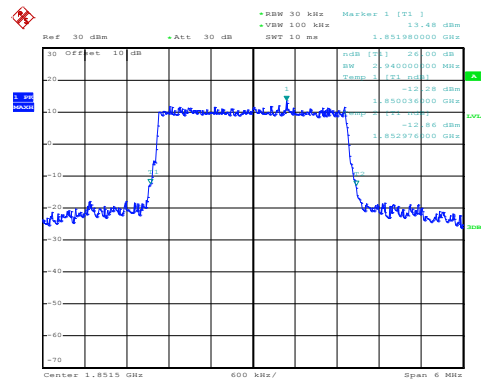
Test Item: -26dBc bandwidth
BW: 3MHz

Modulation: 16QAM



Date: 27.MAR.2015 18:57:46

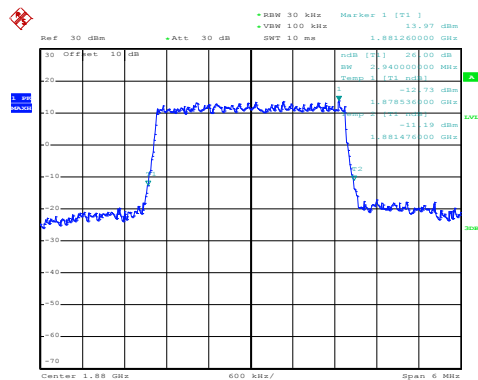
Modulation: QPSK



Date: 27.MAR.2015 18:57:52

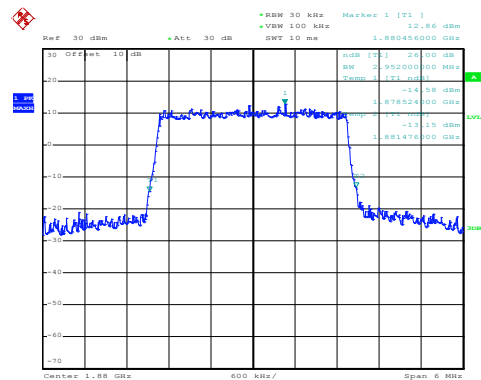
Lowest channel

Modulation: 16QAM



Date: 27.MAR.2015 18:58:11

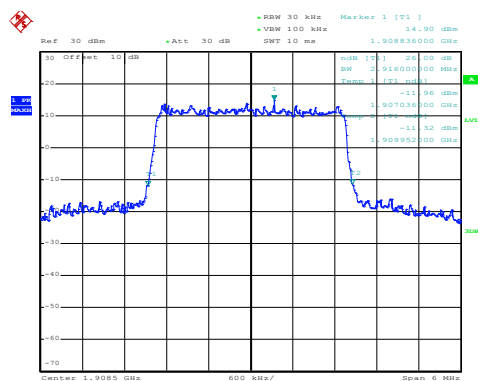
Modulation: QPSK



Date: 27.MAR.2015 18:58:18

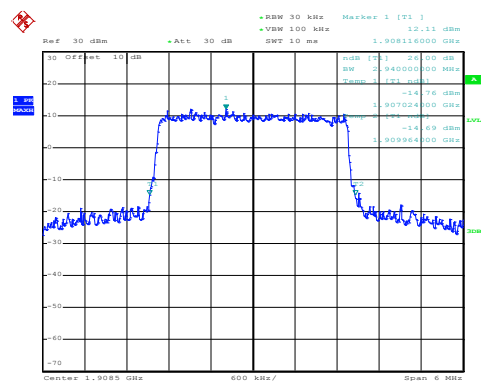
Middle channel

Modulation:16QAM



Date: 27.MAR.2015 18:58:43

Modulation: QPSK

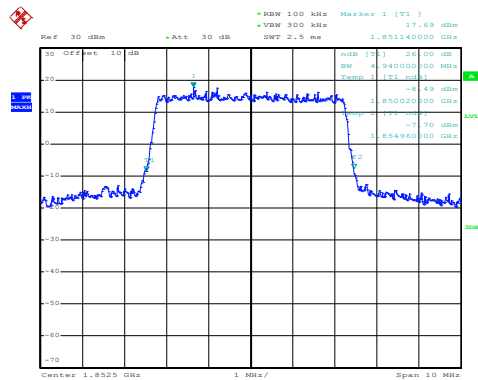


Date: 27.MAR.2015 18:58:50

Highest channel

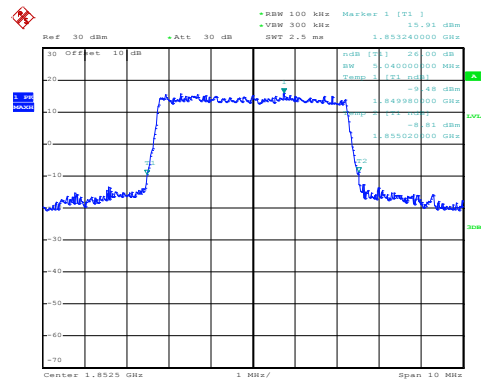
Test Item: -26dBc bandwidth
BW: 5MHz

Modulation: 16QAM



Date: 27.MAR.2015 18:59:42

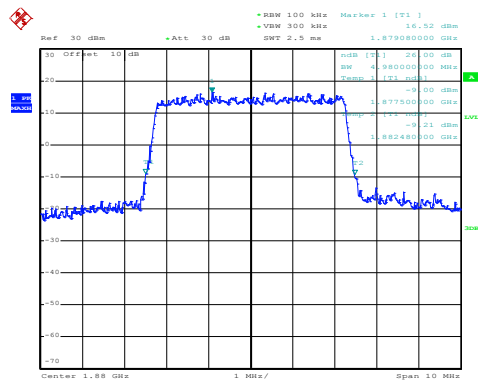
Modulation: QPSK



Date: 27.MAR.2015 19:00:13

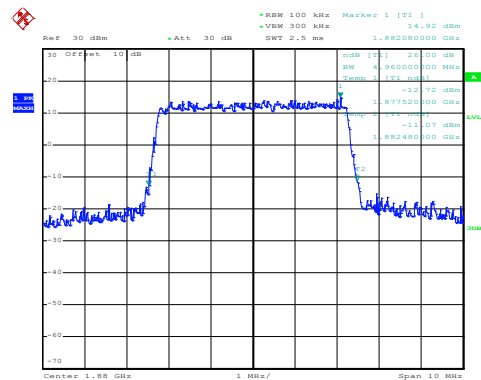
Lowest channel

Modulation: 16QAM



Date: 27.MAR.2015 19:00:31

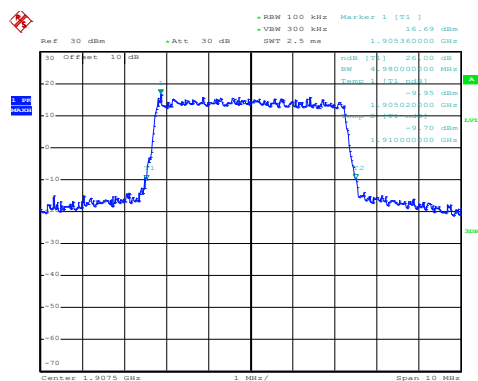
Modulation: QPSK



Date: 27.MAR.2015 19:00:38

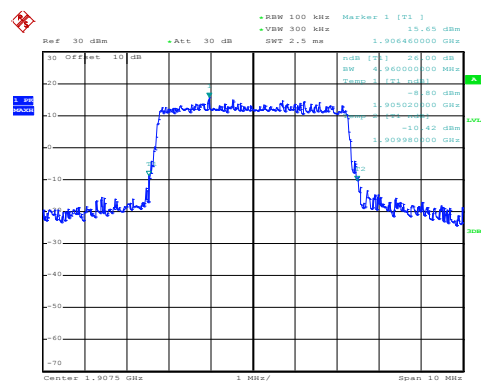
Middle channel

Modulation: 16QAM



Date: 27.MAR.2015 19:00:58

Modulation: QPSK



Date: 27.MAR.2015 19:01:05

Highest channel

BW: 10MHz

Date: 27.MAR.2015 19:01:45

Date: 27.MAR.2015 19:01:50

Date: 27.MAR.2015 19:02:40

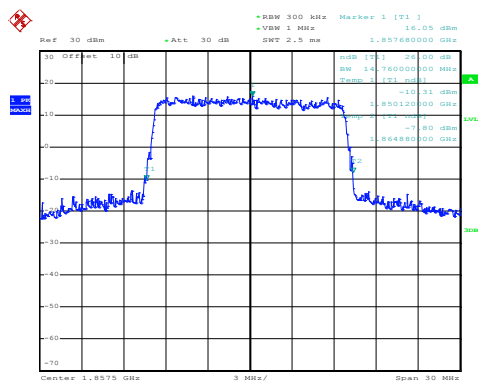
Date: 27.MAR.2015 19:02:53

Date: 27.MAR.2015 19:03:35

Date: 27.MAR.2015 19:03:48

BW: 15MHz

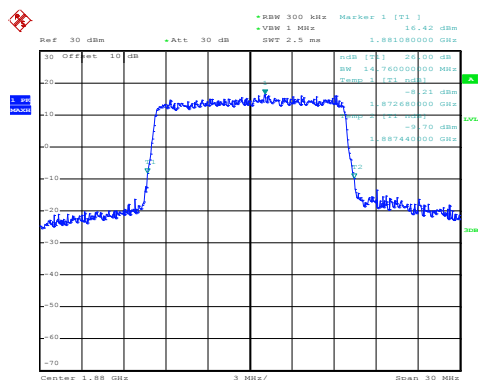
Modulation: QPSK



Date: 27.MAR.2015 19:06:16

Lowest channel

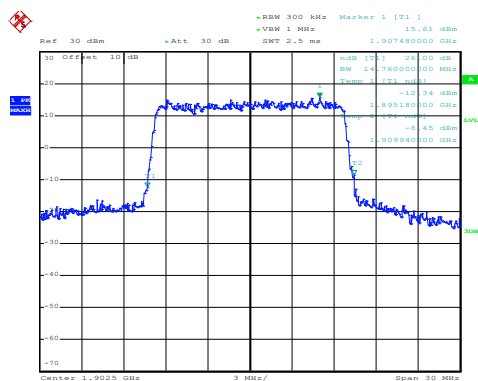
Modulation: QPSK



Date: 27.MAR.2015 19:06:44

Middle channel

Modulation: QPSK



Date: 27.MAR.2015 19:07:14

Highest channel

BW: 20MHz

Date: 27.MAR.2015 19:07:49

Date: 27.MAR.2015 19:07:56

Lowest channel

Date: 27.MAR.2015 19:08:14

Date: 27.MAR.2015 19:08:24

Middle channel

Date: 27.MAR.2015 19:08:43

Date: 27.MAR.2015 19:08:50

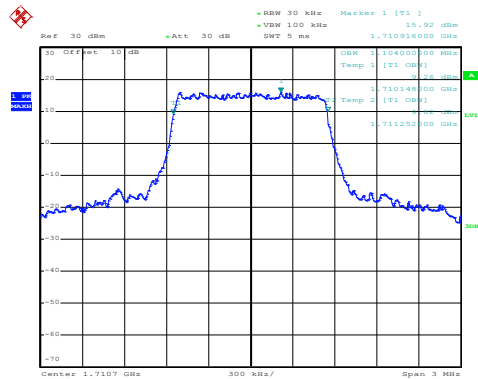
Highest channel

LTE Band 4 part

Test Item: 99% Occupy bandwidth

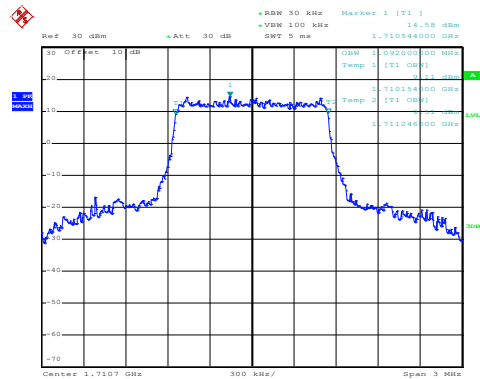
BW: 1.4MHz

Modulation: 16QAM



Date: 27.MAR.2015 19:28:06

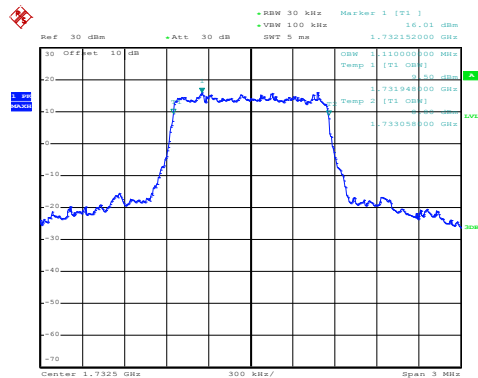
Modulation: QPSK



Date: 27.MAR.2015 19:28:13

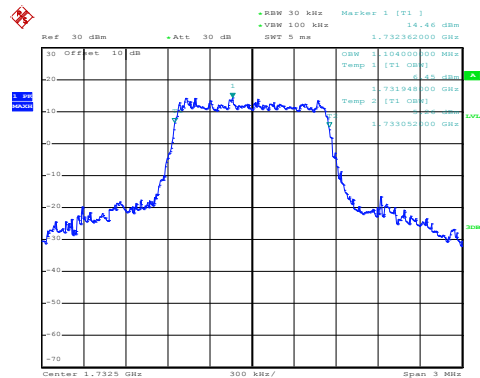
Lowest channel

Modulation: 16QAM



Date: 27.MAR.2015 19:28:35

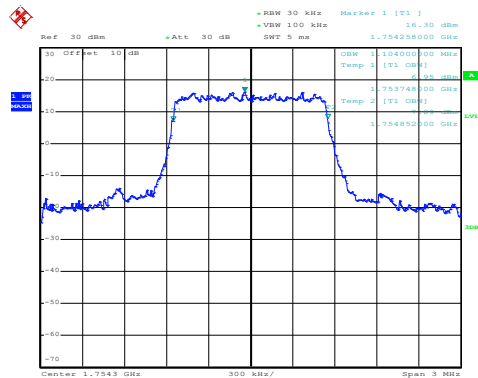
Modulation: QPSK



Date: 27.MAR.2015 19:28:42

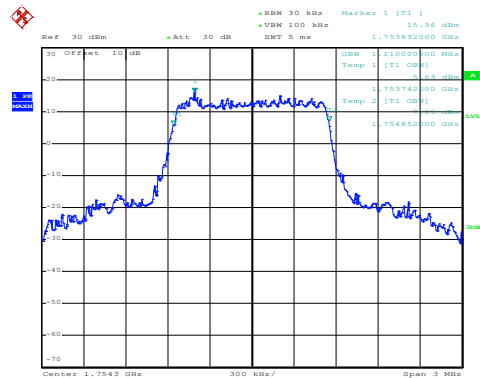
Middle channel

Modulation: 16QAM



Date: 27.MAR.2015 19:29:01

Modulation: QPSK

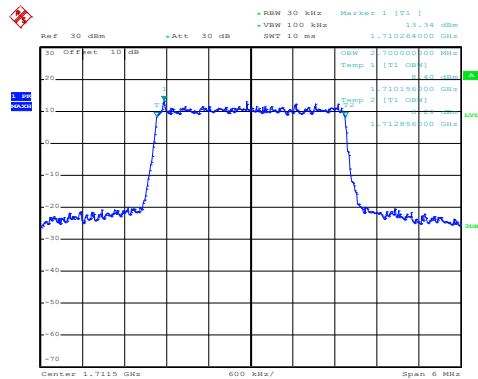


Date: 27.MAR.2015 19:29:07

Highest channel

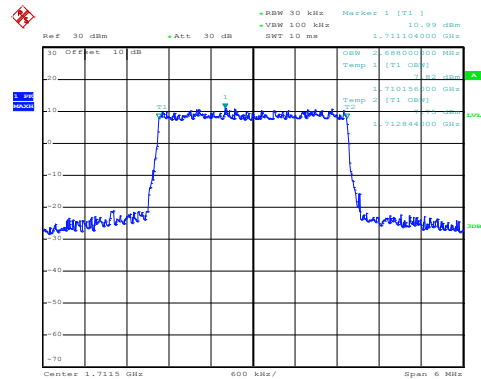
Test Item: 99% Occupy bandwidth
BW: 3MHz

Modulation: 16QAM



Date: 27.MAR.2015 19:30:26

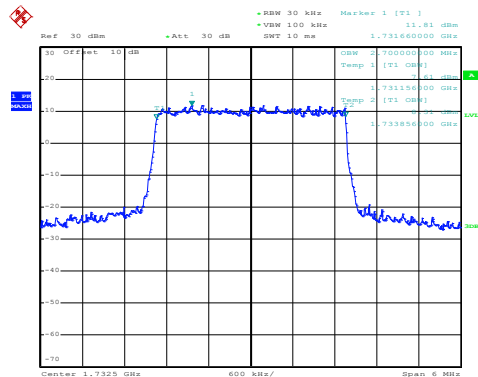
Modulation: QPSK



Date: 27.MAR.2015 19:30:33

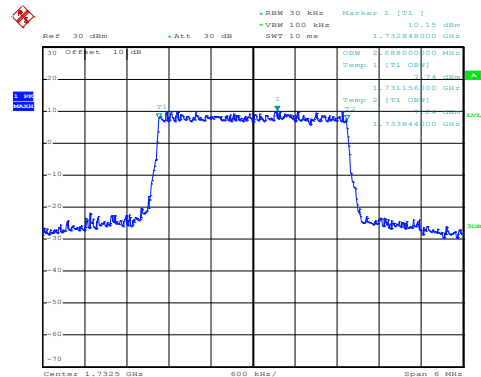
Lowest channel

Modulation: 16QAM



Date: 27.MAR.2015 19:30:54

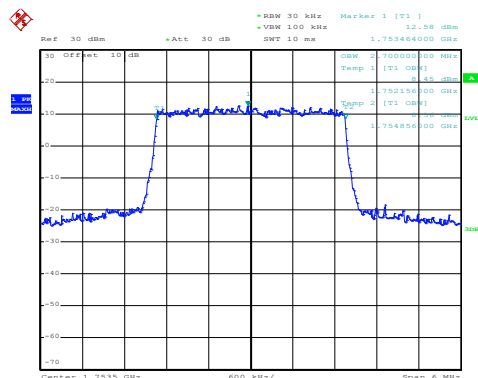
Modulation: QPSK



Date: 27.MAR.2015 19:31:01

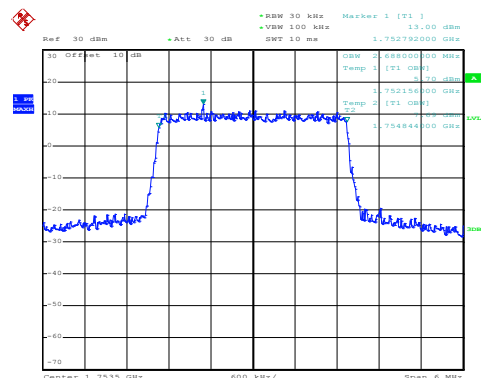
Middle channel

Modulation: 16QAM



Date: 27.MAR.2015 19:31:24

Modulation: QPSK

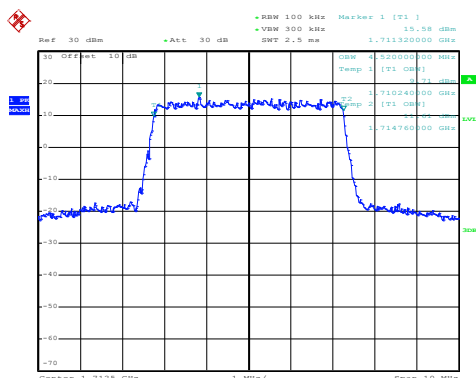


Date: 27.MAR.2015 19:31:31

Highest channel

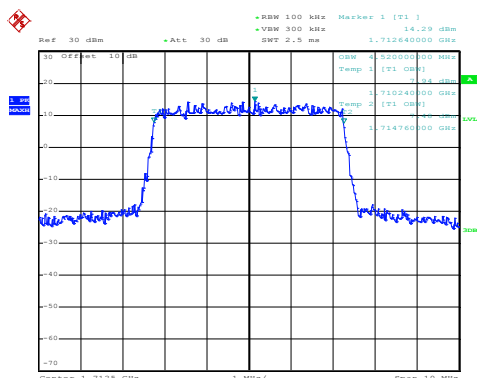
Test Item: 99% Occupy bandwidth
BW: 5MHz

Modulation: 16QAM



Date: 27.MAR.2015 19:32:58

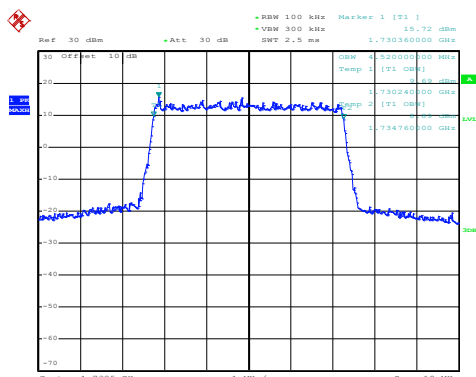
Modulation: QPSK



Date: 27.MAR.2015 19:33:07

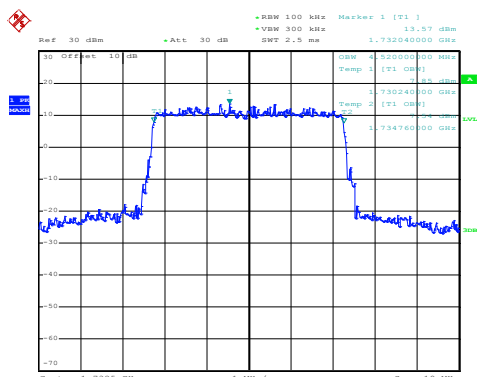
Lowest channel

Modulation: 16QAM



Date: 27.MAR.2015 19:33:29

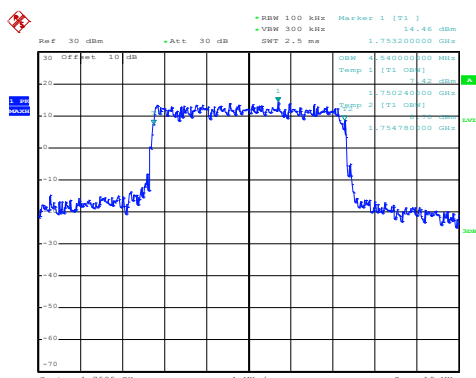
Modulation: QPSK



Date: 27.MAR.2015 19:33:35

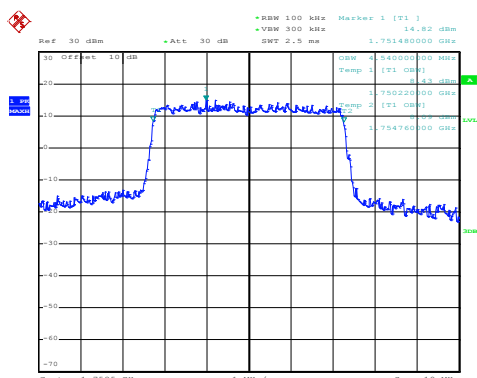
Middle channel

Modulation: 16QAM



Date: 27.MAR.2015 21:11:55

Modulation: QPSK

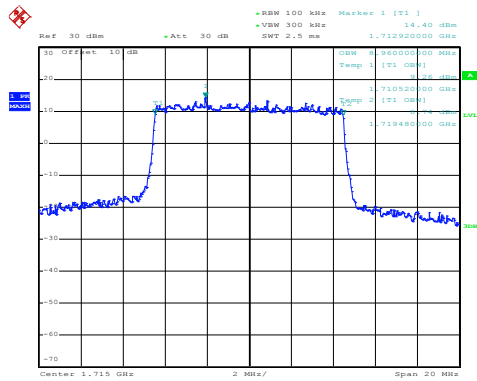


Date: 27.MAR.2015 21:12:47

Highest channel

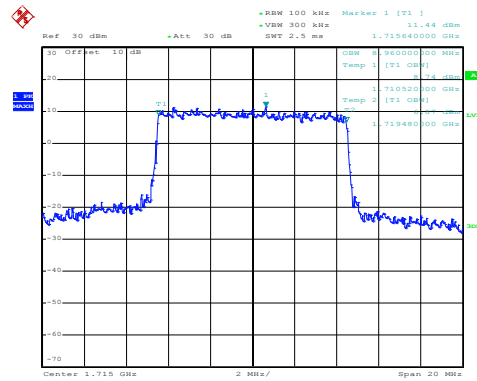
Test Item: 99% Occupy bandwidth
BW: 10MHz

Modulation: 16QAM



Date: 27_MAR.2015 21:13:45

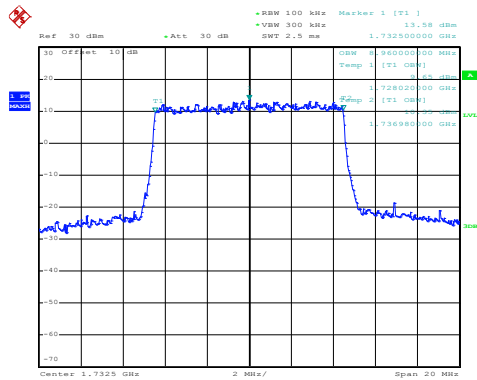
Modulation: QPSK



Date: 27_MAR.2015 21:13:52

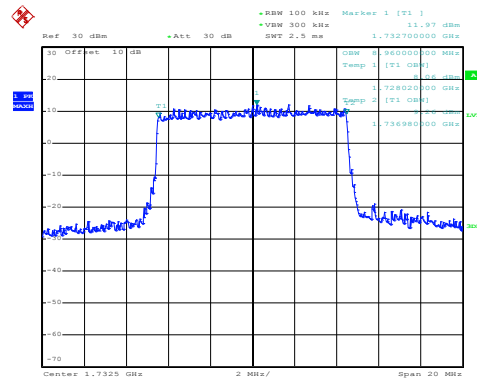
Lowest channel

Modulation: 16QAM



Date: 27_MAR.2015 21:14:24

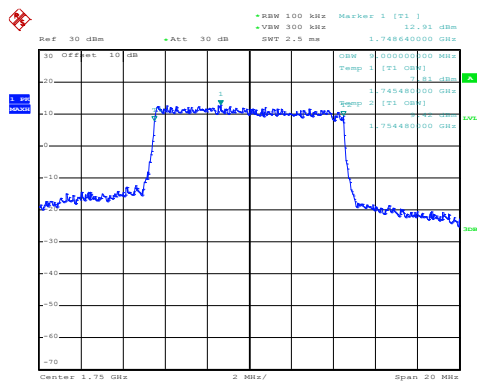
Modulation: QPSK



Date: 27_MAR.2015 21:14:31

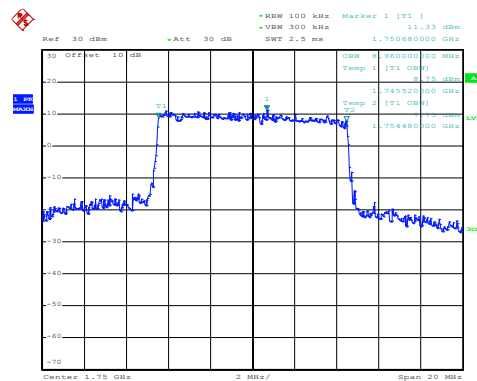
Middle channel

Modulation: 16QAM



Date: 27_MAR.2015 21:14:53

Modulation: QPSK

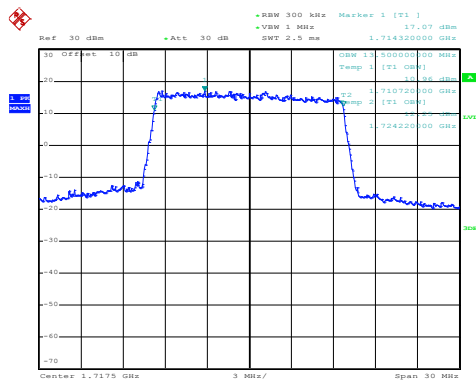


Date: 27_MAR.2015 21:14:59

Highest channel

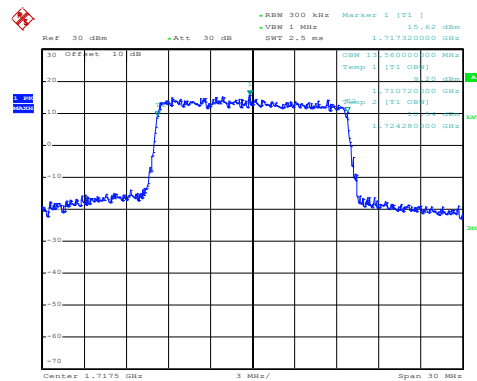
Test Item: 99% Occupy bandwidth
BW: 15MHz

Modulation: 16QAM



Date: 27_MAR.2015 21:15:50

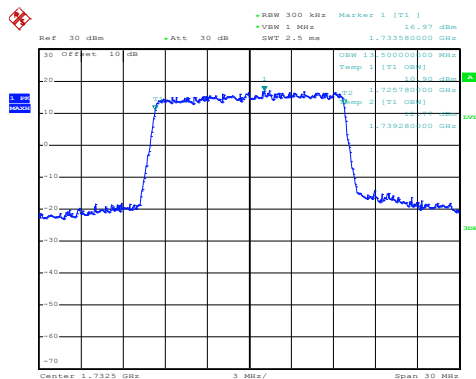
Modulation: QPSK



Date: 27_MAR.2015 21:15:57

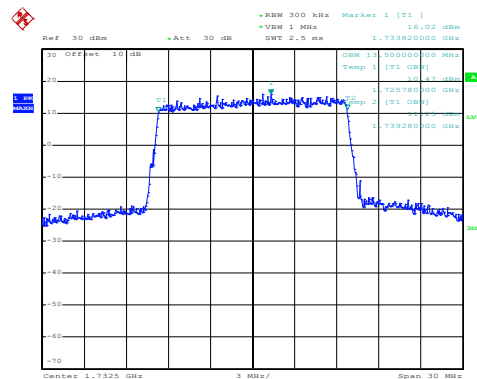
Lowest channel

Modulation: 16QAM



Date: 27_MAR.2015 21:16:21

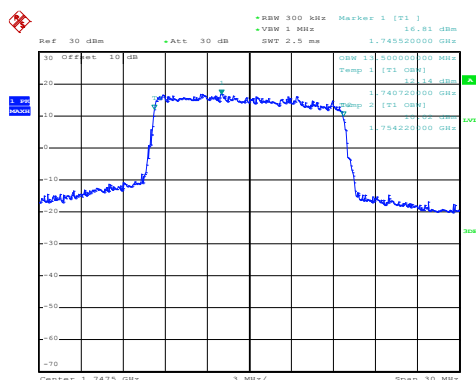
Modulation: QPSK



Date: 27_MAR.2015 21:16:27

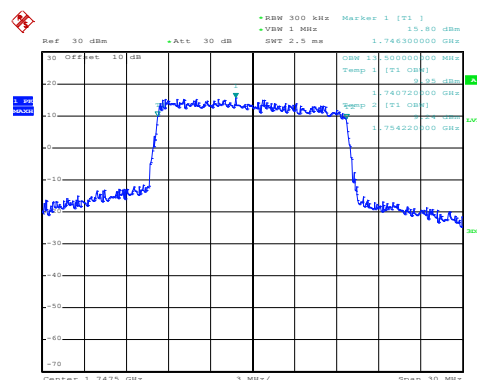
Middle channel

Modulation: 16QAM



Date: 27_MAR.2015 21:16:49

Modulation: QPSK

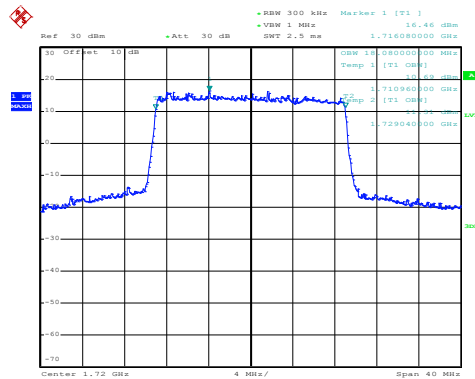


Date: 27_MAR.2015 21:16:56

Highest channel

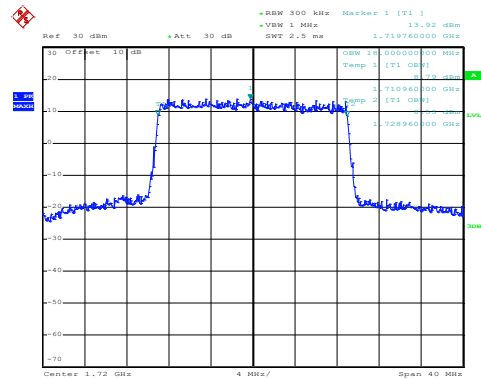
Test Item: 99% Occupy bandwidth
BW: 20MHz

Modulation: 16QAM



Date: 27.MAR.2015 21:18:07

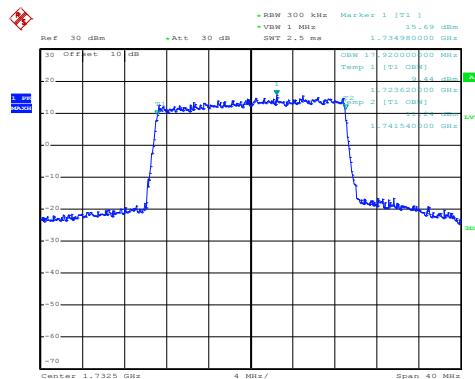
Modulation: QPSK



Date: 27.MAR.2015 21:18:15

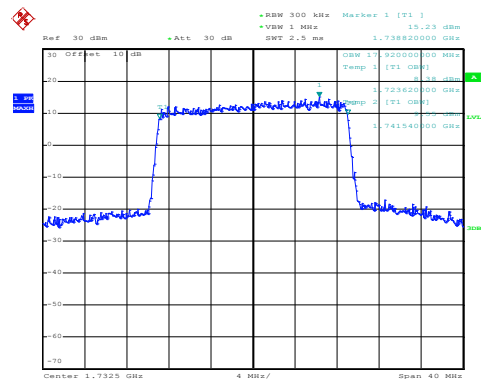
Lowest channel

Modulation: 16QAM



Date: 27.MAR.2015 21:18:49

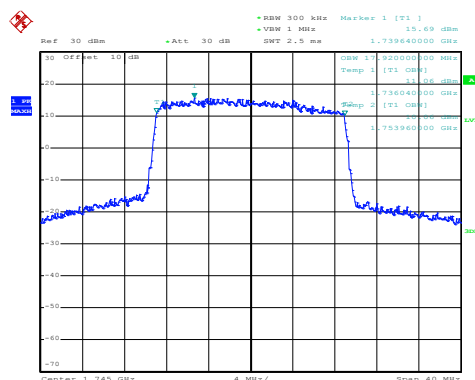
Modulation: QPSK



Date: 27.MAR.2015 21:18:57

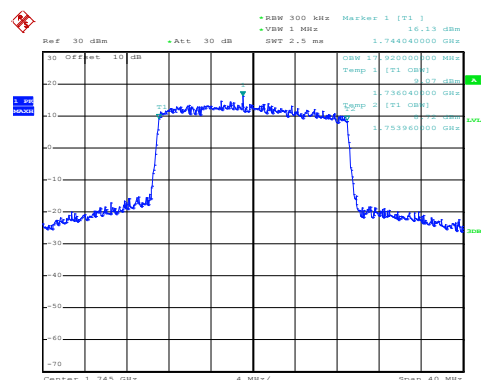
Middle channel

Modulation: 16QAM



Date: 27.MAR.2015 21:19:18

Modulation: QPSK

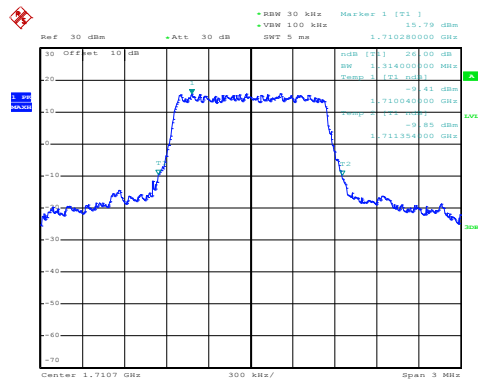


Date: 27.MAR.2015 21:19:26

Highest channel

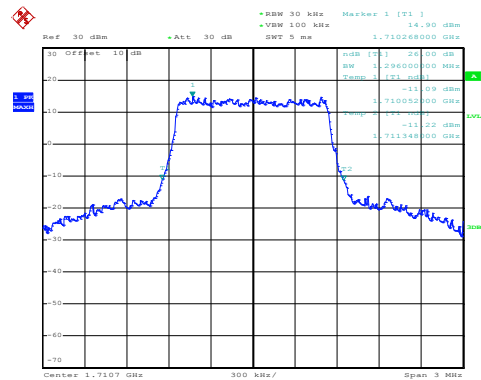
Test Item: -26dBc bandwidth
BW: 1.4MHz

Modulation: 16QAM



Date: 27.MAR.2015 19:11:46

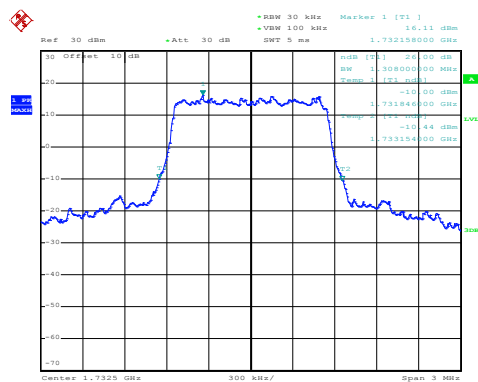
Modulation: QPSK



Date: 27.MAR.2015 19:12:07

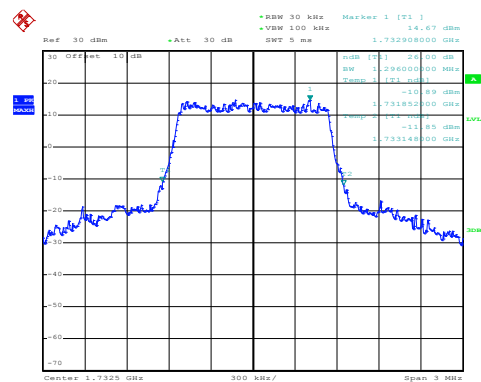
Lowest channel

Modulation: 16QAM



Date: 27.MAR.2015 19:12:41

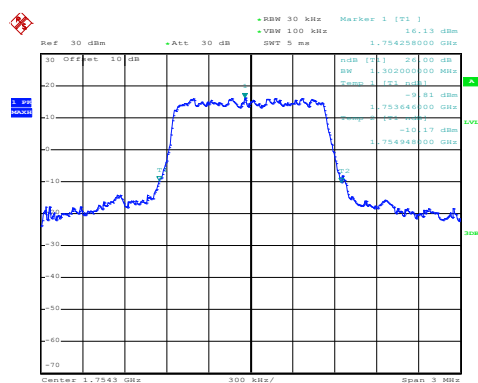
Modulation: QPSK



Date: 27.MAR.2015 19:12:51

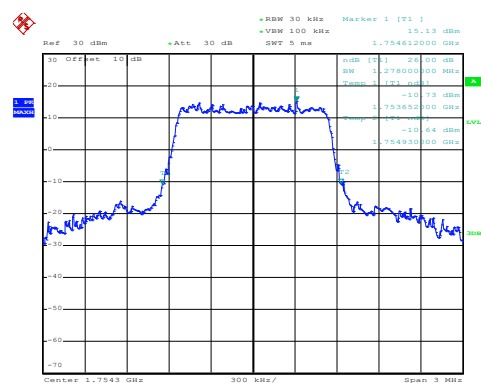
Middle channel

Modulation: 16QAM



Date: 27.MAR.2015 19:13:18

Modulation: QPSK

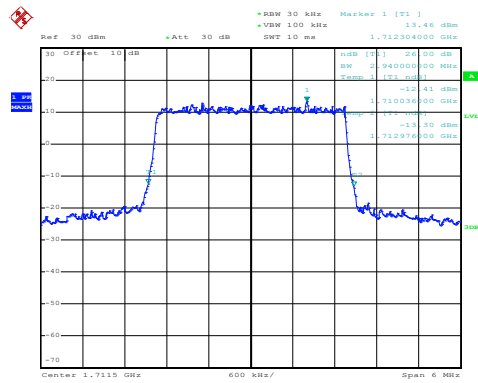


Date: 27.MAR.2015 19:13:27

Highest channel

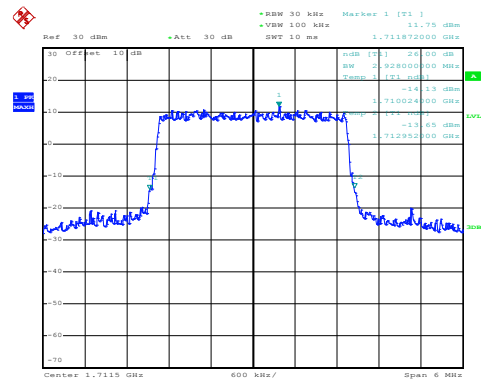
Test Item: -26dBc bandwidth
BW: 3MHz

Modulation: 16QAM



Date: 27.MAR.2015 19:14:06

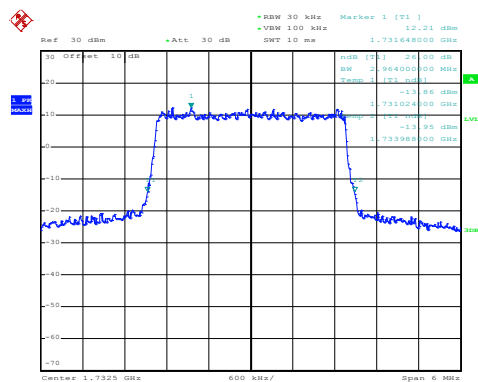
Modulation: QPSK



Date: 27.MAR.2015 19:14:13

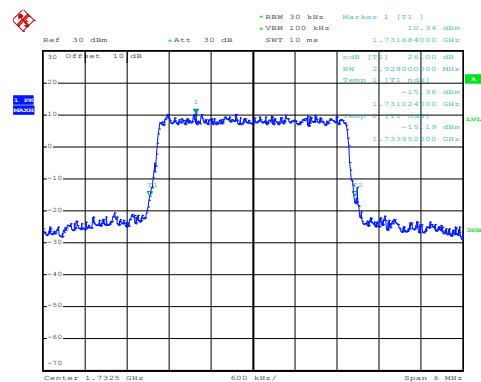
Lowest channel

Modulation: 16QAM



Date: 27.MAR.2015 19:15:24

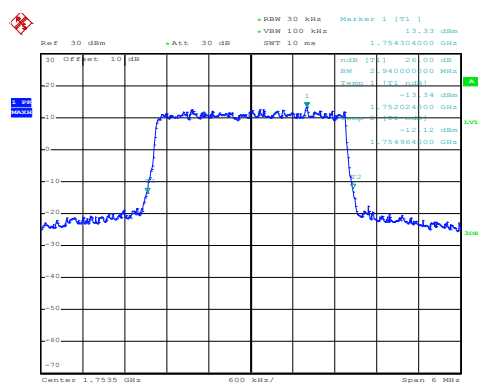
Modulation: QPSK



Date: 27.MAR.2015 19:15:36

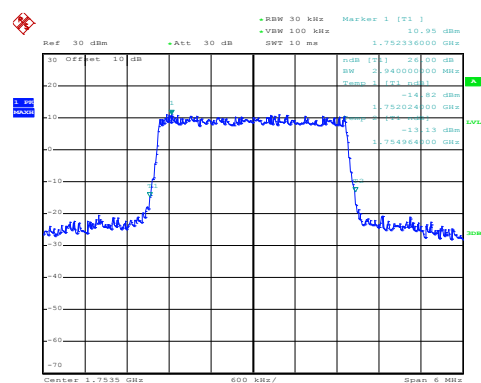
Middle channel

Modulation:16QAM



Date: 27.MAR.2015 19:16:11

Modulation: QPSK

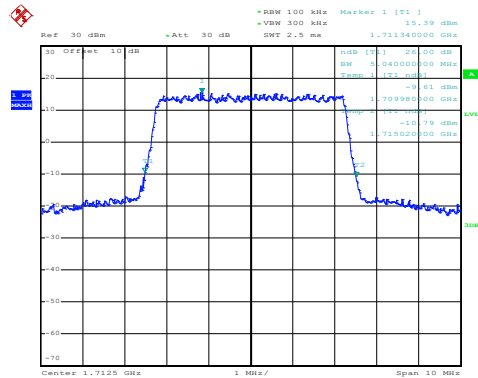


Date: 27.MAR.2015 19:16:18

Highest channel

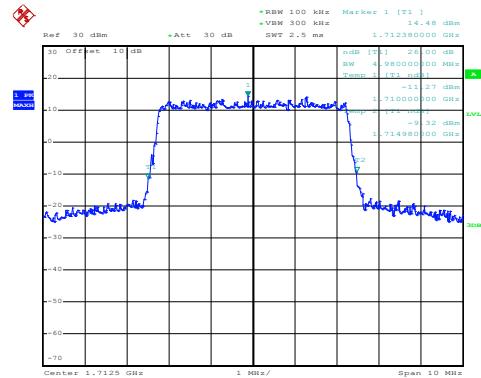
Test Item: -26dBc bandwidth
BW: 5MHz

Modulation: 16QAM



Date: 27.MAR.2015 19:17:12

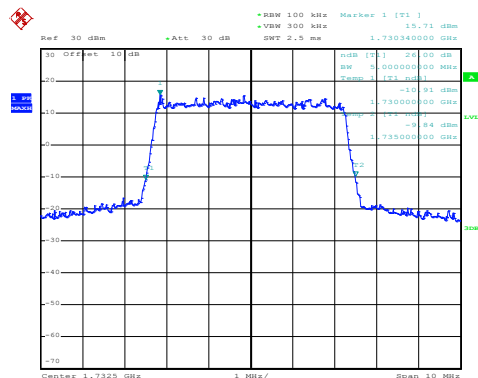
Modulation: QPSK



Date: 27.MAR.2015 19:17:24

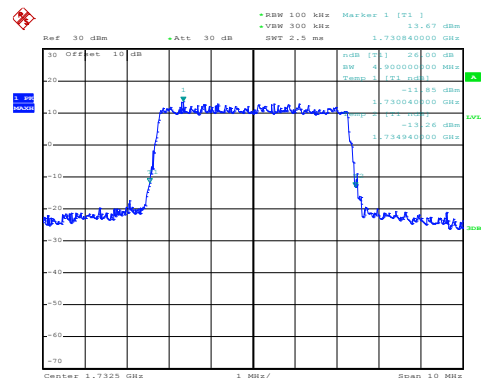
Lowest channel

Modulation: 16QAM



Date: 27.MAR.2015 19:17:47

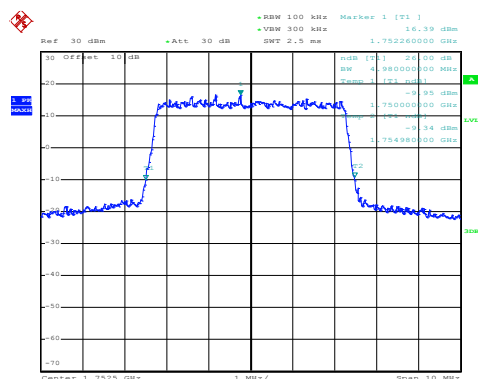
Modulation: QPSK



Date: 27.MAR.2015 19:17:54

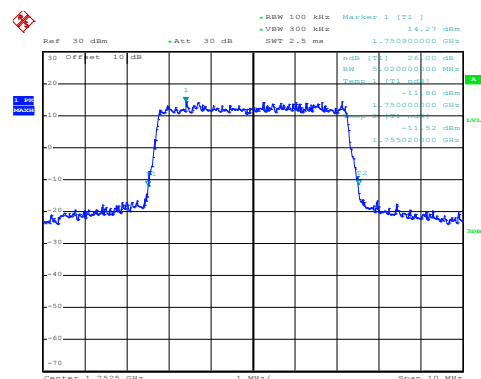
Middle channel

Modulation: 16QAM



Date: 27.MAR.2015 19:18:12

Modulation: QPSK

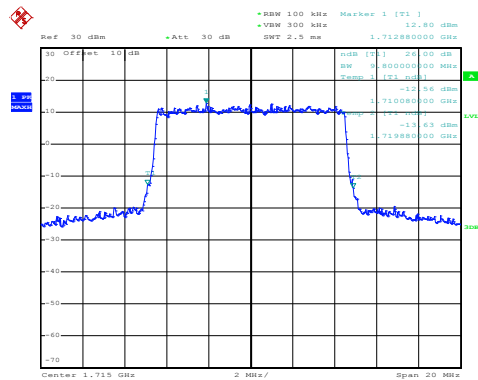


Date: 27.MAR.2015 19:18:25

Highest channel

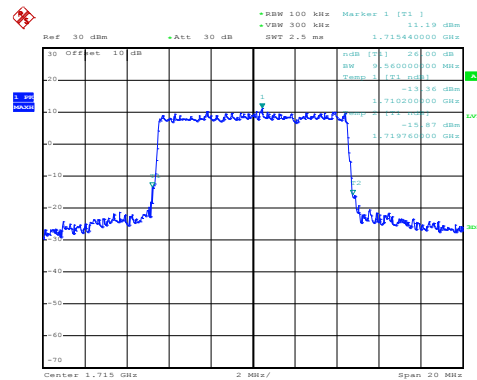
Test Item: -26dBc bandwidth
BW: 10MHz

Modulation: 16QAM



Date: 27.MAR.2015 19:19:13

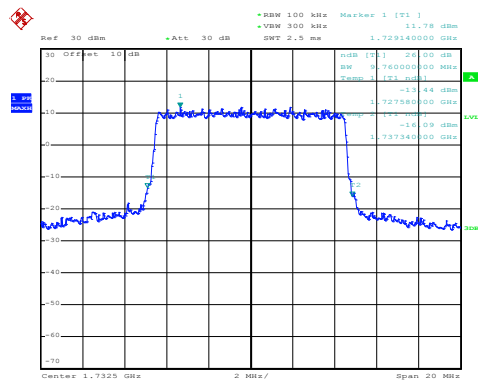
Modulation: QPSK



Date: 27.MAR.2015 19:19:21

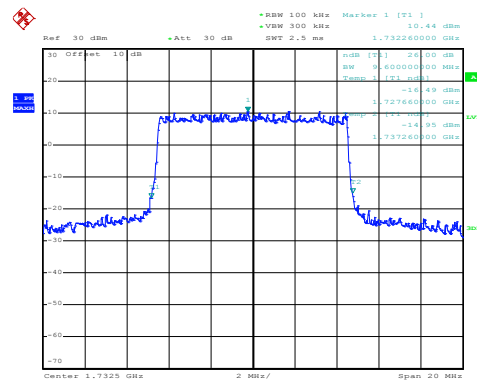
Lowest channel

Modulation: 16QAM



Date: 27.MAR.2015 19:20:10

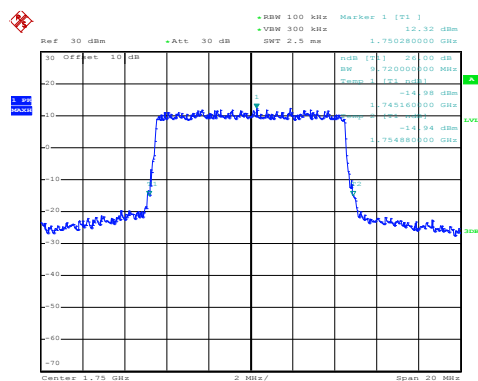
Modulation: QPSK



Date: 27.MAR.2015 19:20:18

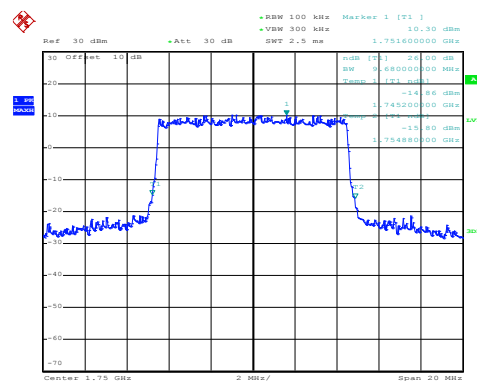
Middle channel

Modulation: 16QAM



Date: 27.MAR.2015 19:21:21

Modulation: QPSK



Date: 27.MAR.2015 19:21:29

Highest channel

BW: 15MHz

[illegible]

Date: 27.MAR.2015 19:22:48

~BW 300 kHz Marker 1 [F1] 14.91 dBm
 ~VSM 1 MHz
 ~SWT 2.5 ms 1.722120000 GHz

Ref 30 dBm Att 30 dB

20
10
0
-10
-20
-30
-40
-50
-60
-70

2.715 2.720 2.725 MHz

1
2

1.722120000 GHz
 ~10.83 dBm
 1.710060000 GHz
 1.724940000 GHz

Date: 27.MAR.2015 19:22:58

Lowest channel

*BW 300 kHz Marker 1 [1]
 *VM 1 MHz 16.34 dBm
 Ref 30 dBm *Att 30 dB SWT 2.5 ms 1.73370000 GHz

30 OFFset 50 dB
 20
 10
 0
 -10
 -20
 -30
 -40
 -50
 -60
 -70

1.7320 GHz 1.7330 GHz 1.7340 GHz
 Center 1.7320 GHz Span 10 MHz

1.7337000 GHz
 1.7336000000 MHz
 1.7335000000 MHz
 1.7334000000 MHz
 1.7333000000 MHz
 1.7332000000 MHz
 1.7331000000 MHz
 1.7330000000 MHz
 1.7329000000 MHz
 1.7328000000 MHz
 1.7327000000 MHz
 1.7326000000 MHz
 1.7325000000 MHz
 1.7324000000 MHz
 1.7323000000 MHz
 1.7322000000 MHz
 1.7321000000 MHz
 1.7320000000 MHz

16.34 dBm
 1.73370000 GHz

Date: 27.MAR.2015 19:23:20

*RSM 300 kHz Marker 1 [1] 14.58 dBm
 *VSM 1 MHz
 Ref 30 dBm Att 30 dB SWT 2.5 ms 1.730220000 GHz

dBm [2] 24.00 dBm
 BW 14.760000000 MHz
 Span 1.181000000 GHz
 -25.26 dBm
 1.725180000 GHz
 Imp 1.77 dBm
 -3.95 dBm
 1.739940000 GHz

Center 1.7302 GHz Span 10 MHz

Date: 27.MAR.2015 19:23:28

Middle channel

[illegible]

Date: 27.MAR.2015 19:23:59

dBm

BW 300 kHz Marker 1 [1] 14.98 dBm
 VSW 1 MHz
 SWT 2.5 ms 1.747500000 GHz

20
 10
 0
 -10
 -20
 -30
 -40
 -50
 -60
 -70

1.7470 GHz 1.7475 GHz

Center 1.7475 GHz Span 30 MHz

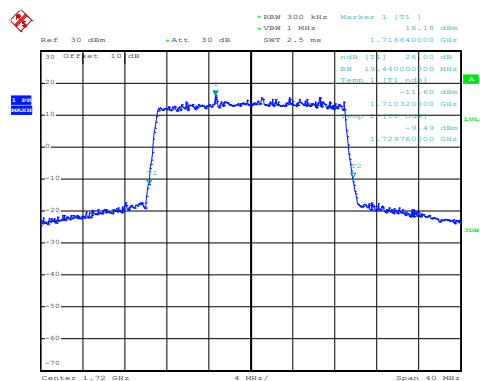
Date: 27.MAR.2015 19:24:07

Highest channel

Test Item: -26dBc bandwidth

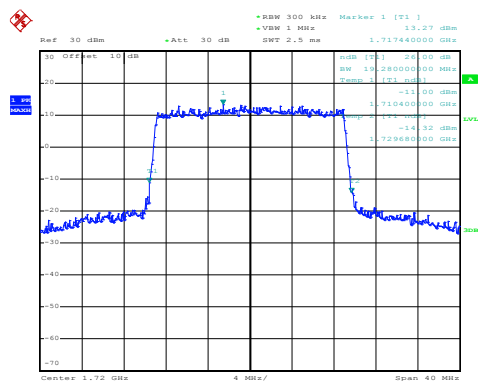
BW: 20MHz

Modulation: 16QAM



Date: 27.MAR.2015 19:25:05

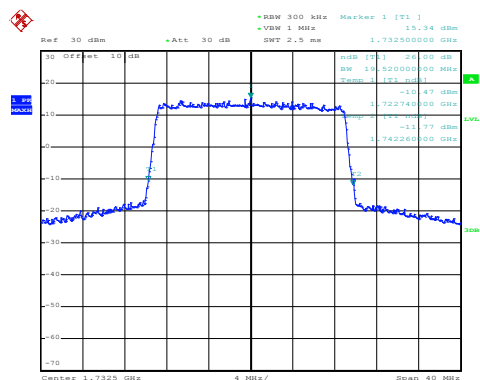
Modulation: QPSK



Date: 27.MAR.2015 19:25:13

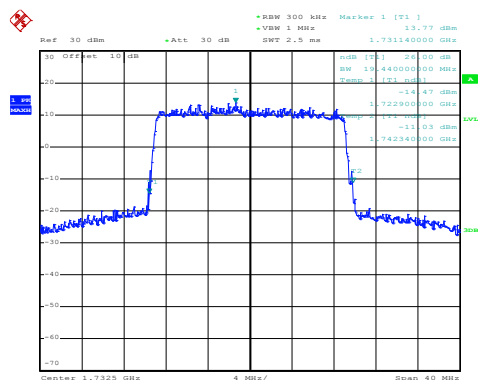
Lowest channel

Modulation: 16QAM



Date: 27.MAR.2015 19:25:39

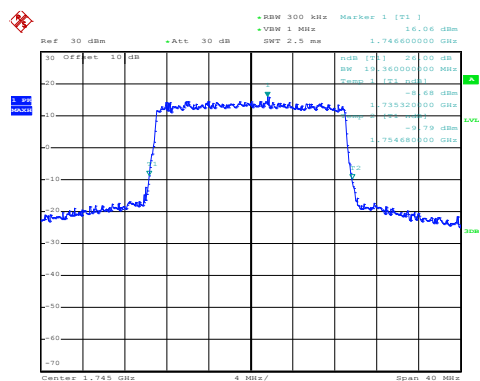
Modulation: QPSK



Date: 27.MAR.2015 19:25:45

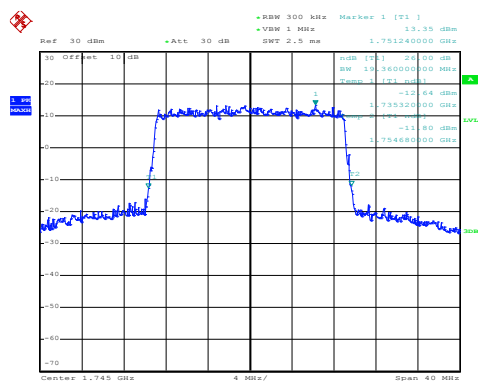
Middle channel

Modulation:16QAM



Date: 27.MAR.2015 19:27:05

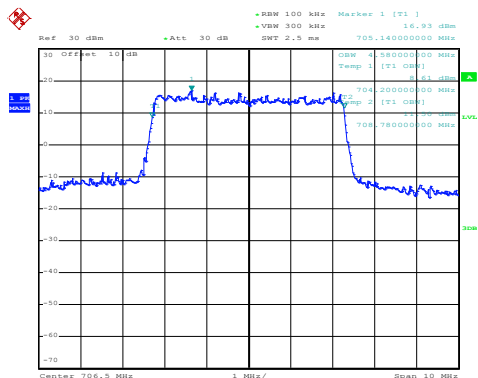
Modulation: QPSK



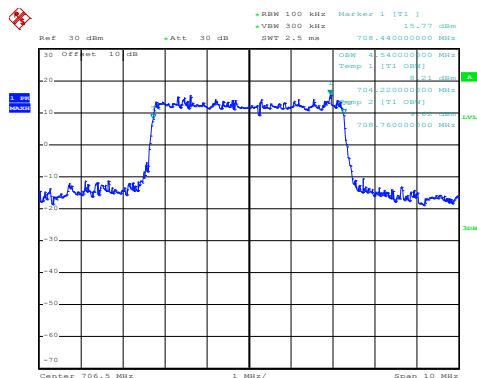
Date: 27.MAR.2015 19:27:13

Highest channel

Test Item: 99% Occupy bandwidth
BW: 5MHz



Date: 27.MAR.2015 21:22:06



Date: 27.MAR.2015 21:22:18

• BW 100 kHz
 • VBW 300 kHz
 • SWT 2.5 ms

Ref 30 dBm
 Att 30 dB
 15.81 dBm
 711.92000000 MHz

30 Offset 10 dB
 0 dB
 -10 dB
 -20 dB
 -30 dB
 -40 dB
 -50 dB
 -60 dB
 -70 dB

709.28000000 MHz
 710.76000000 MHz
 711.92000000 MHz
 712.28000000 MHz

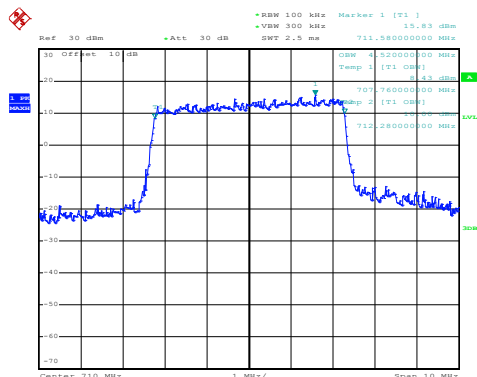
DBW 4.52000000 MHz
 Temp 1 171.0000 MHz
 Temp 2 171.0000 MHz
 Temp 3 171.0000 MHz

0.41 dBm
 0.41 dBm
 0.41 dBm
 0.41 dBm

30 dBm

Contrast 21.0 MHz
 1 MHz
 Span 10 MHz

Date: 27.MAR.2015 21:22:36



Date: 27.MAR.2015 21:23:07

The screenshot shows a VectorStar spectrum analyzer interface. The main display area features a grid with a blue trace representing the signal spectrum. A prominent notch is visible in the signal, indicating a specific frequency component. The trace is labeled with 'dB' on the vertical axis and 'MHz' on the horizontal axis. The vertical axis ranges from -20 to -70 dB, and the horizontal axis ranges from 710.36000000 MHz to 710.74000000 MHz. The signal level is approximately -10 dB. The notch is located at approximately 710.52000000 MHz, where the signal drops to about -70 dB. The trace is labeled with 'dB' and 'MHz'.

At the top of the screen, the following parameters are displayed:

- BW 100 kHz
- Att 30 dB
- SWT 2.5 ms
- Hecker 1 [T1]
- 16.43 dB
- 710.36000000 MHz

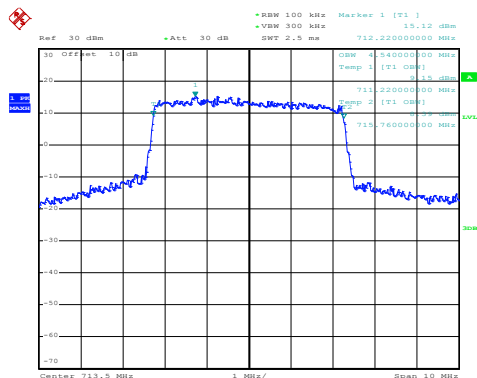
On the left side, there is a small red square icon with a white 'X' inside, and a blue square icon with a white 'X' inside. Below these icons, the text 'LVL' is visible.

On the right side, there is a small red square icon with a white 'X' inside, and a blue square icon with a white 'X' inside. Below these icons, the text 'LVL' is visible.

At the bottom of the screen, the following parameters are displayed:

- Center: 710.5 MHz
- Span: 10 MHz

Date: 27.MAR.2015 21:23:30



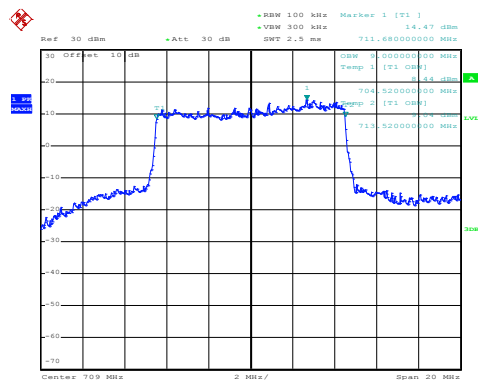
Date: 27.MAR.2015 21:24:01

Shenzhen Zhongjian Nanfang Testing Co., Ltd.
No. B-C, 1/F., Building 2, Laodong No.2 Industrial Park, Xixiang Road,
Bao'an District, Shenzhen, Guangdong, China
Telephone: +86 (0) 755 23118282 Fax: +86 (0) 755 23116366

Test Item: 99% Occupancy bandwidth

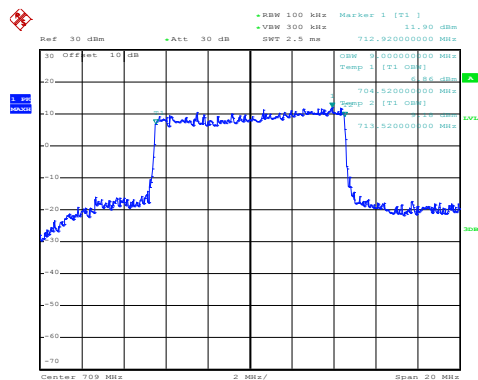
BW: 10MHz

Modulation:16QAM



Date: 27.MAR.2015 21:24:46

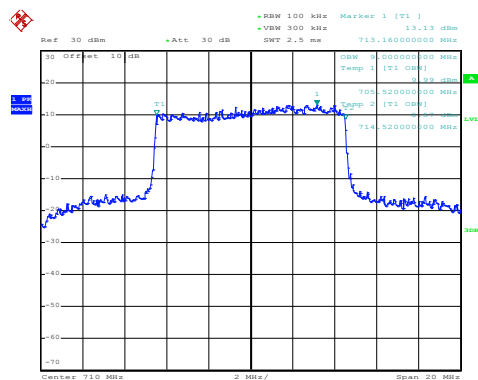
Modulation: QPSK



Date: 27.MAR.2015 21:24:54

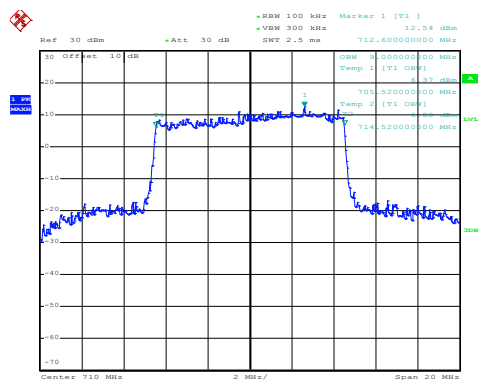
Lowest channel

Modulation:16QAM



Date: 27.MAR.2015 21:25:17

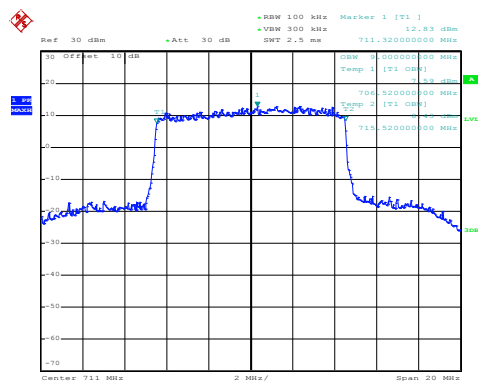
Modulation: QPSK



Date: 27.MAR.2015 21:25:24

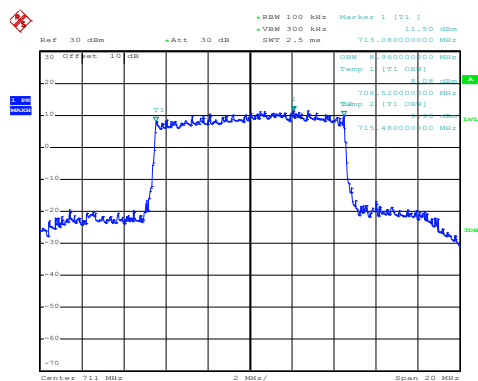
Middle channel

Modulation:16QAM



Date: 27.MAR.2015 21:25:52

Modulation: QPSK

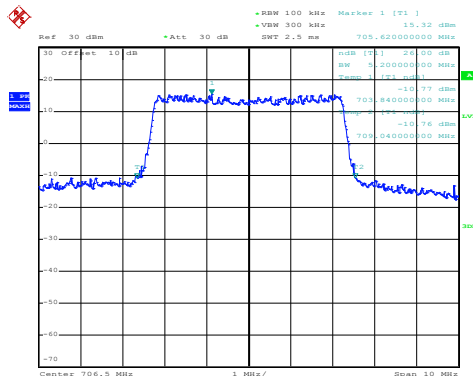


Date: 27.MAR.2015 21:26:00

Highest channel

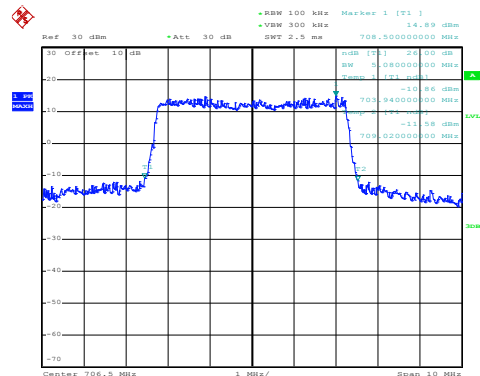
Test Item: -26dBc bandwidth
BW: 5MHz

Modulation: 16QAM



Date: 27.MAR.2015 21:28:49

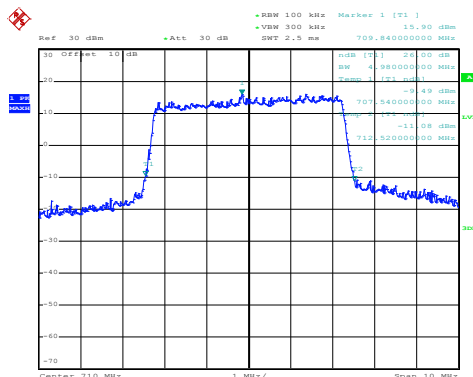
Modulation: QPSK



Date: 27.MAR.2015 21:29:02

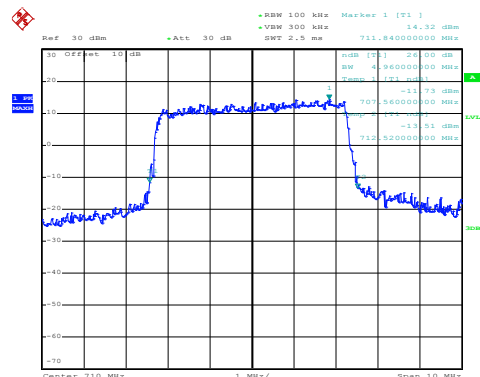
Lowest channel

Modulation:16QAM



Date: 27.MAR.2015 21:29:22

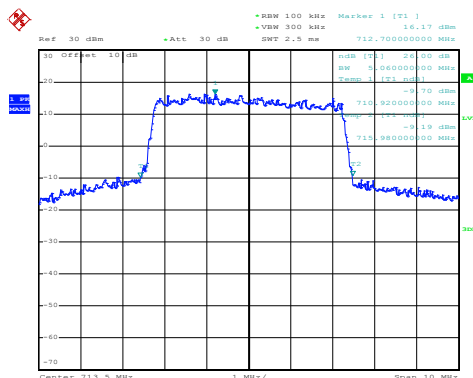
Modulation: QPSK



Date: 27.MAR.2015 21:29:29

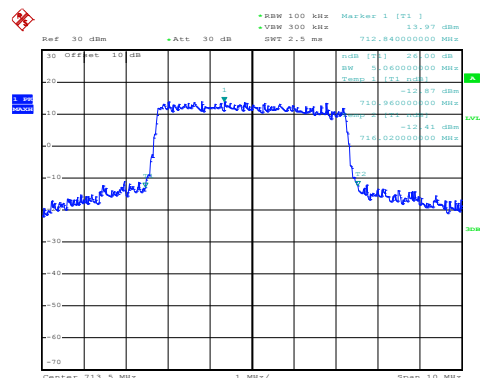
Middle channel

Modulation:16QAM



Date: 27.MAR.2015 21:29:51

Modulation: QPSK



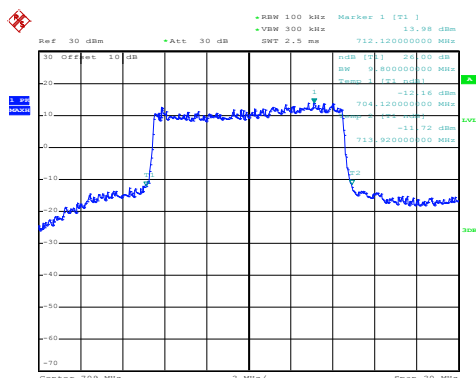
Date: 27.MAR.2015 21:30:00

Highest channel

Test Item: -26dBc bandwidth

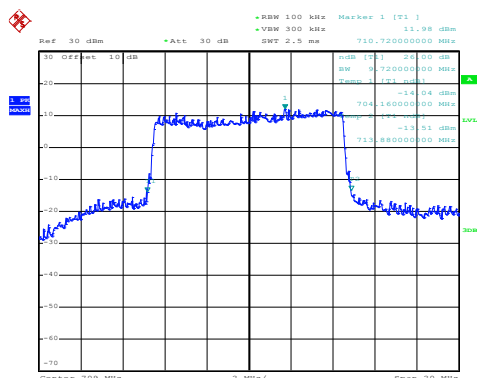
BW: 10MHz

Modulation: 16QAM



Date: 27.MAR.2015 21:27:46

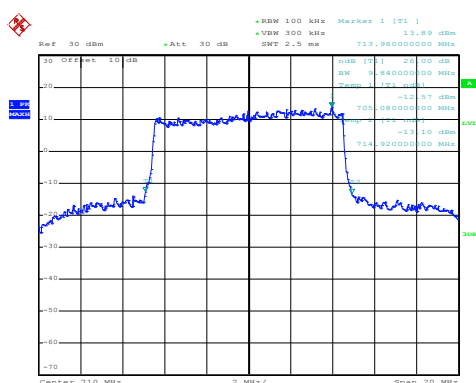
Modulation: QPSK



Date: 27.MAR.2015 21:28:01

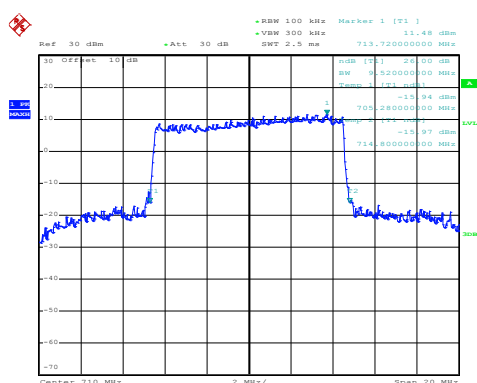
Lowest channel

Modulation: 16QAM



Date: 27.MAR.2015 21:27:14

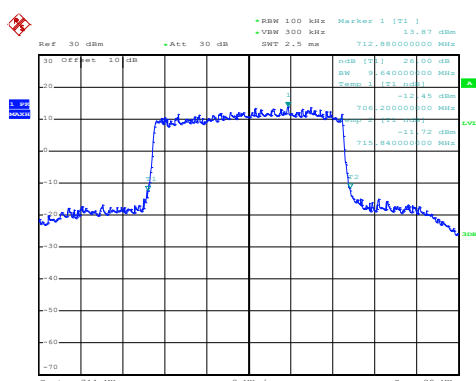
Modulation: QPSK



Date: 27.MAR.2015 21:27:21

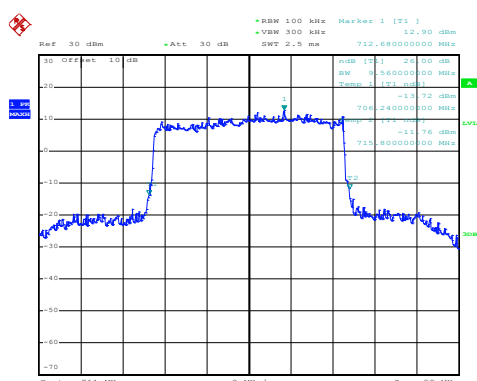
Middle channel

Modulation: 16QAM



Date: 27.MAR.2015 21:26:41

Modulation: QPSK



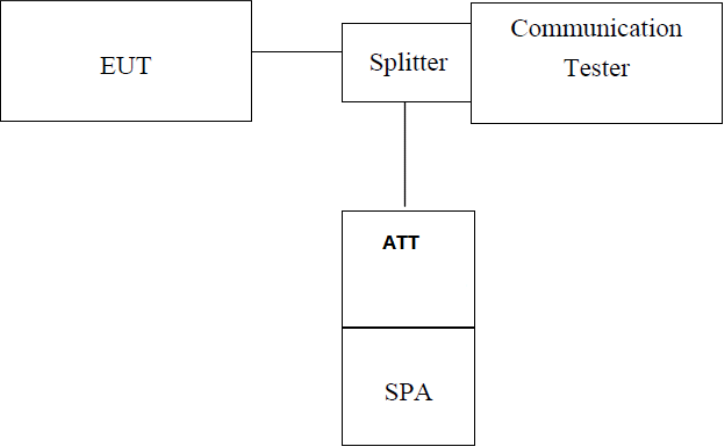
Date: 27.MAR.2015 21:26:49

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), part 27.53(h) and part 27.53(g)
Test Method:	FCC part 2.1051
Limit:	For LTE Band 2 ,Band 4 and Band 17:-13 dBm.
Test setup:	 <i>Note: Measurement setup for testing on Antenna connector</i>
Test Procedure:	5 The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation. 6 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. 7 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. 8 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 Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

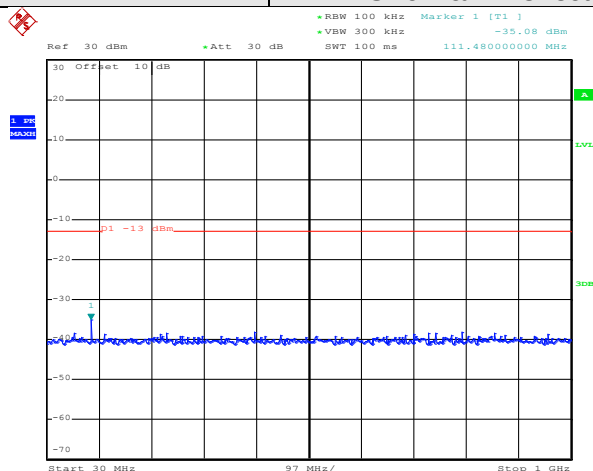
Test plots as follows:

Spurious emission

LTE band 2 Part:

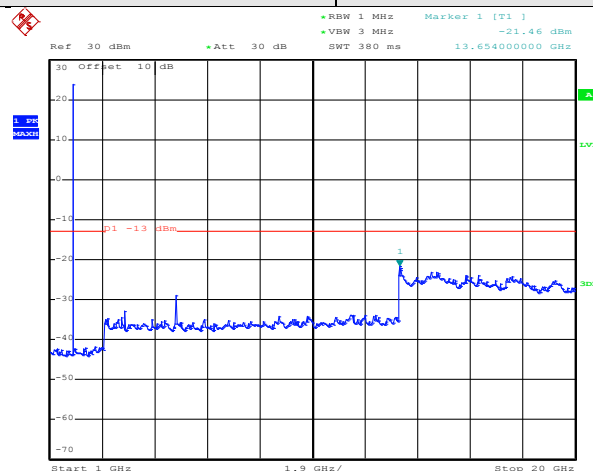
1.4MHz

Test Mode:	LTE band 2(1.4 MHz 16QAM) RB Size 1 & RB Offset 2	Test Channel:	Lowest channel
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Date: 1.APR.2015 16:48:19

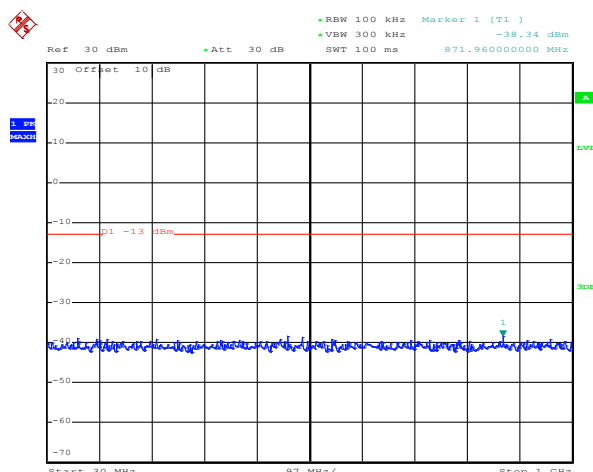
30MHz~1GHz



Date: 1.APR.2015 17:25:49

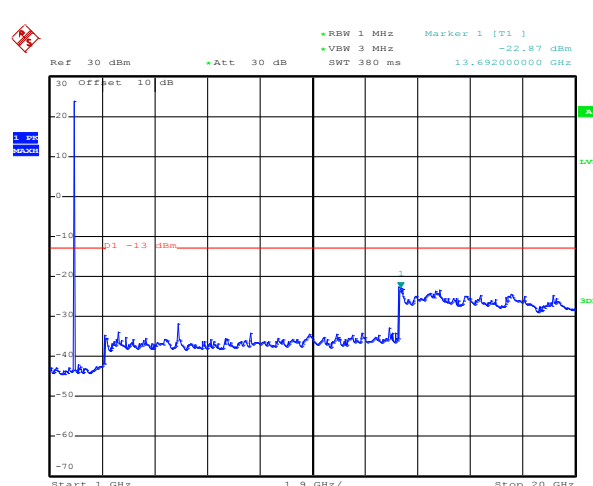
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz 16QAM) RB Size 1 & RB Offset 5	Test Channel:	Middle channel
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Date: 1.APR.2015 16:50:15

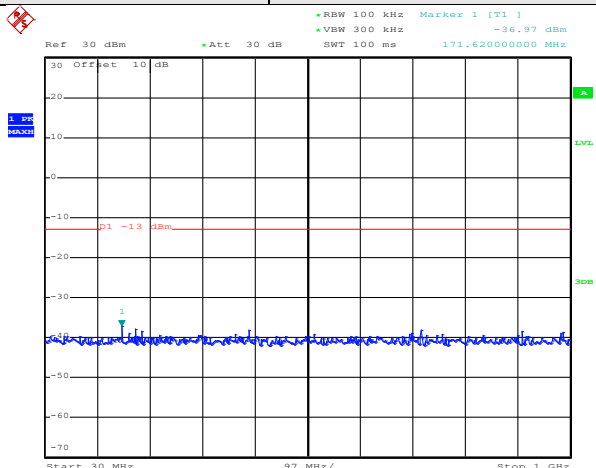
30MHz~1GHz



Date: 1.APR.2015 17:31:40

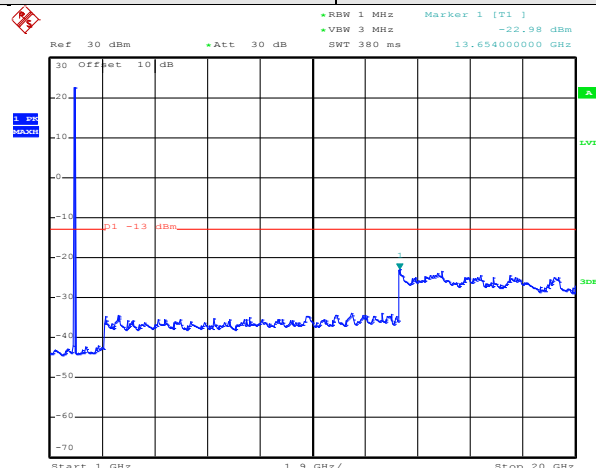
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Highest channel
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Date: 1.APR.2015 16:52:37

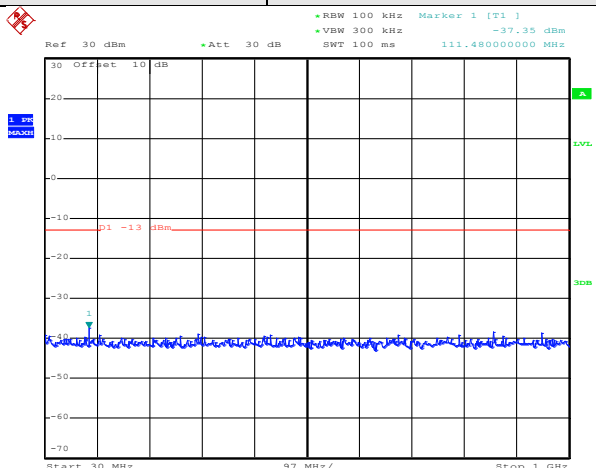
30MHz~1GHz



Date: 1.APR.2015 17:34:22

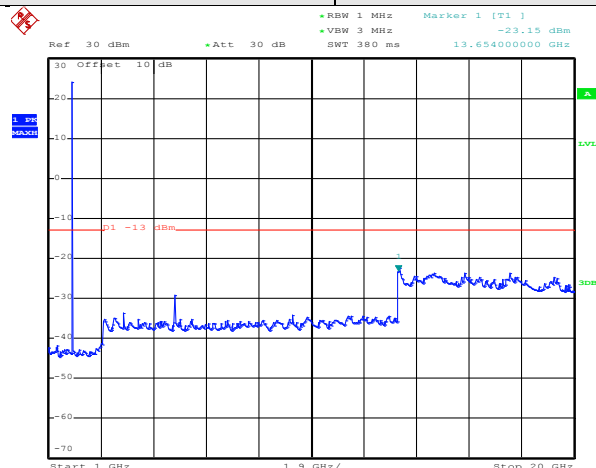
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz 16QAM) RB Size 3 & RB Offset 0	Test Channel:	Lowest channel
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Date: 1.APR.2015 16:48:33

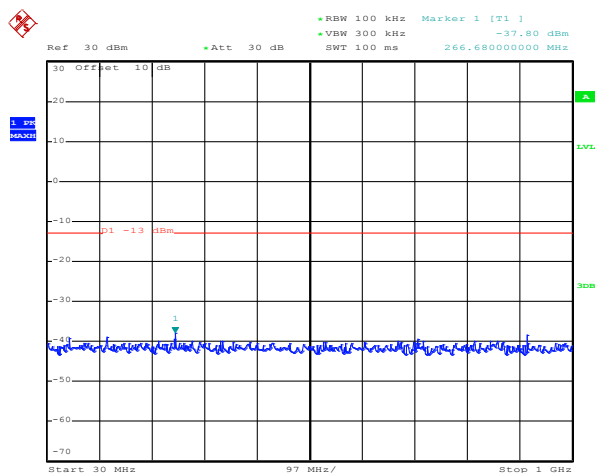
30MHz~1GHz



Date: 1.APR.2015 17:26:43

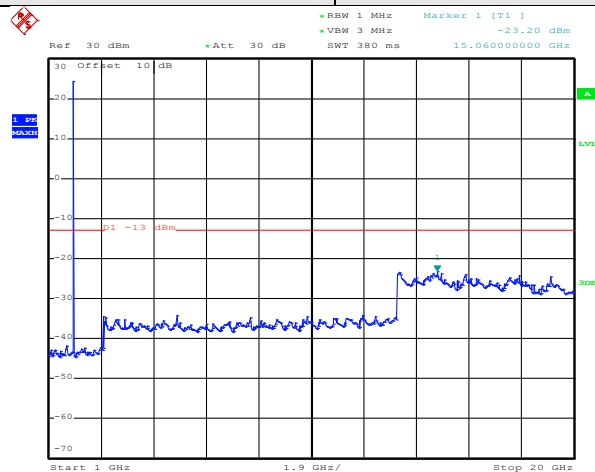
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz 16QAM) RB Size 3 & RB Offset 2	Test Channel:	Middle channel
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Date: 1.APR.2015 16:50:25

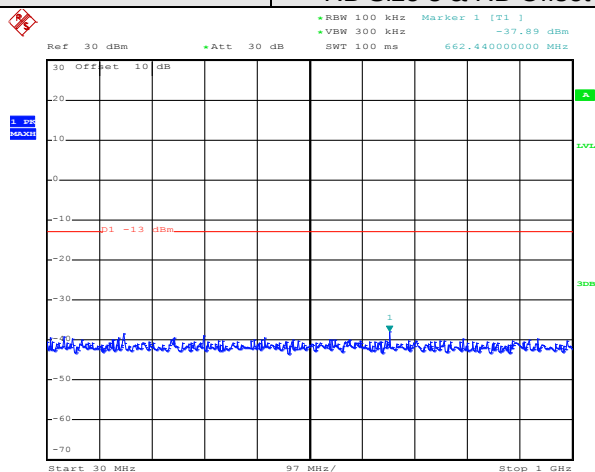
30MHz~1GHz



Date: 1.APR.2015 17:31:09

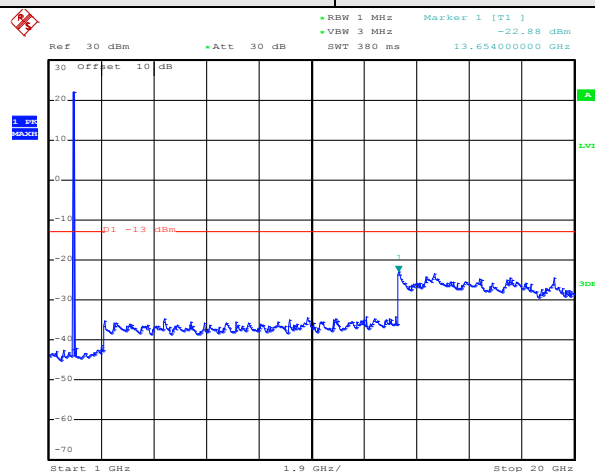
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz 16QAM) RB Size 3 & RB Offset 1	Test Channel:	Highest channel
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Date: 1.APR.2015 16:52:45

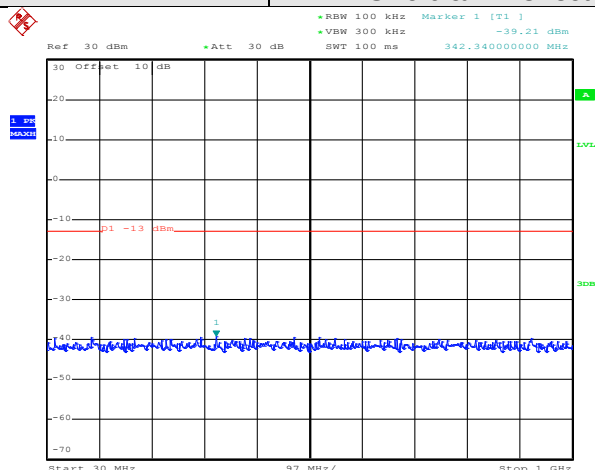
30MHz~1GHz



Date: 1.APR.2015 17:34:36

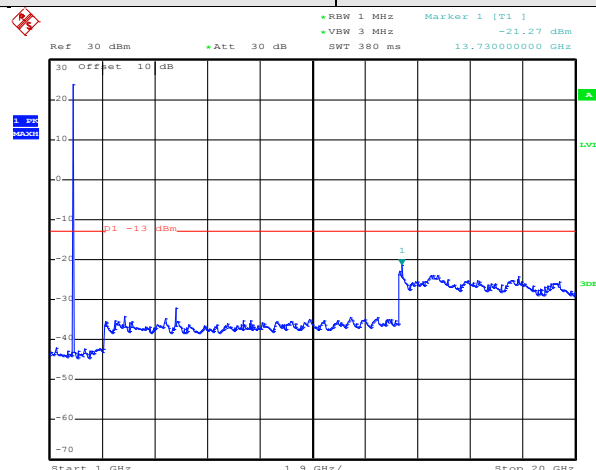
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz 16QAM) RB Size 6 & RB Offset 0	Test Channel:	Lowest channel
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Date: 1.APR.2015 16:48:46

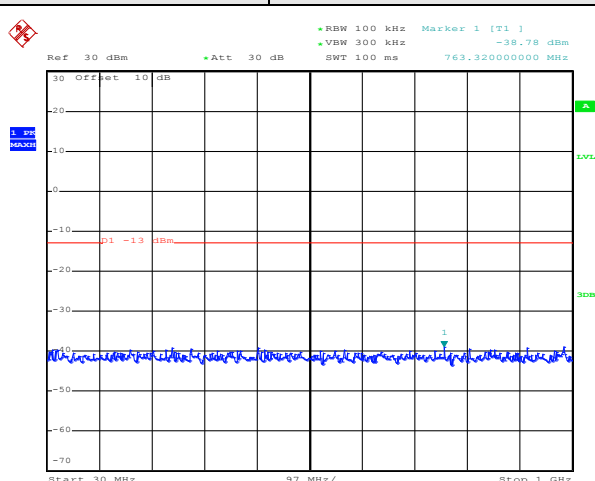
30MHz~1GHz



Date: 1.APR.2015 17:27:01

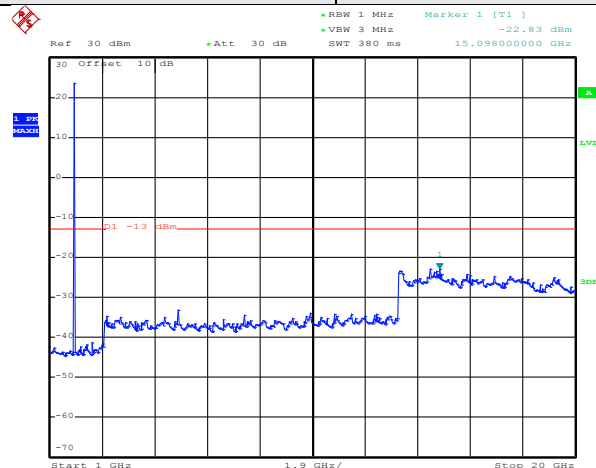
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz 16QAM) RB Size 6 & RB Offset 0	Test Channel:	Middle channel
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Date: 1.APR.2015 16:50:34

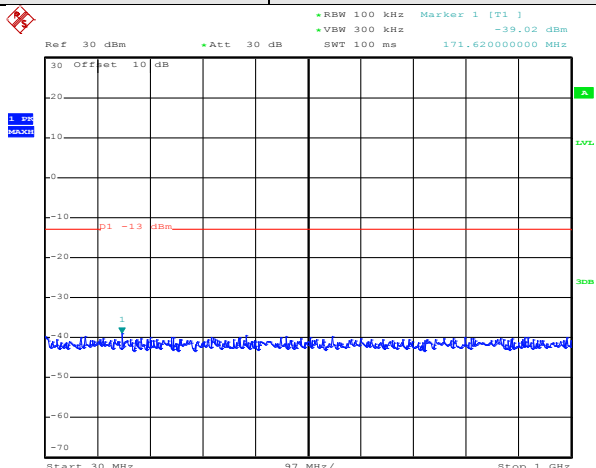
30MHz~1GHz



Date: 1.APR.2015 17:32:15

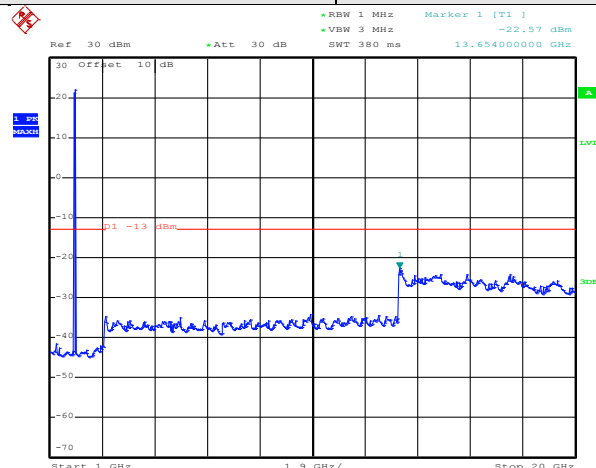
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz 16QAM) RB Size 6 & RB Offset 0	Test Channel:	Highest channel
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Date: 1.APR.2015 16:52:54

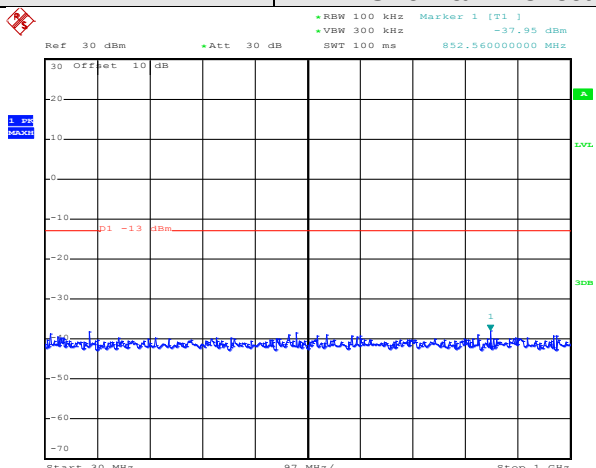
30MHz~1GHz



Date: 1.APR.2015 17:34:48

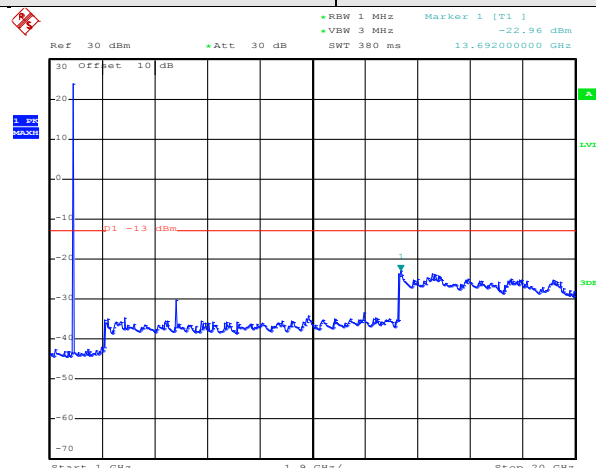
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz QPSK) RB Size 1 & RB Offset 5	Test Channel:	Lowest channel
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Date: 1.APR.2015 16:49:10

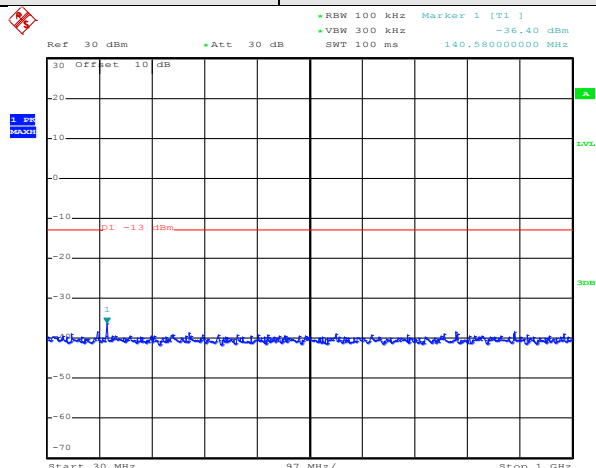
30MHz~1GHz



Date: 1.APR.2015 17:27:19

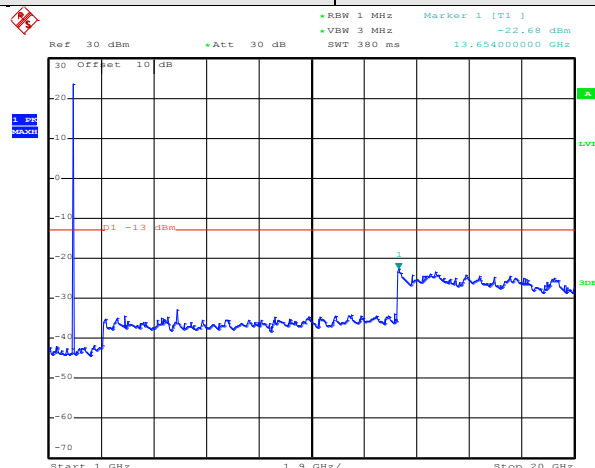
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz QPSK) RB Size 1 & RB Offset 2	Test Channel:	Middle channel
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Date: 1.APR.2015 16:50:51

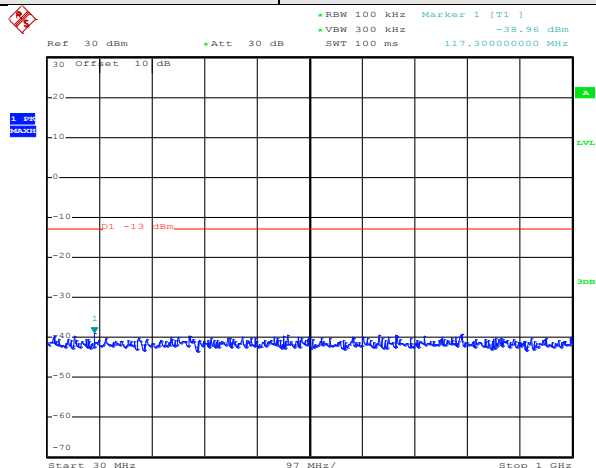
30MHz~1GHz



Date: 1.APR.2015 17:32:52

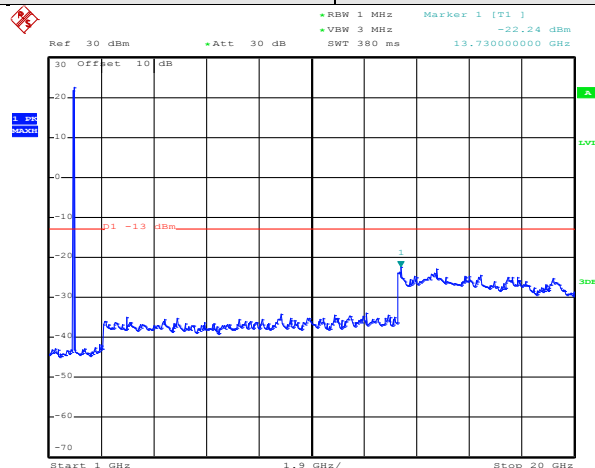
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz QPSK) RB Size 1 & RB Offset 0	Test Channel:	Highest channel
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Date: 1.APR.2015 16:53:05

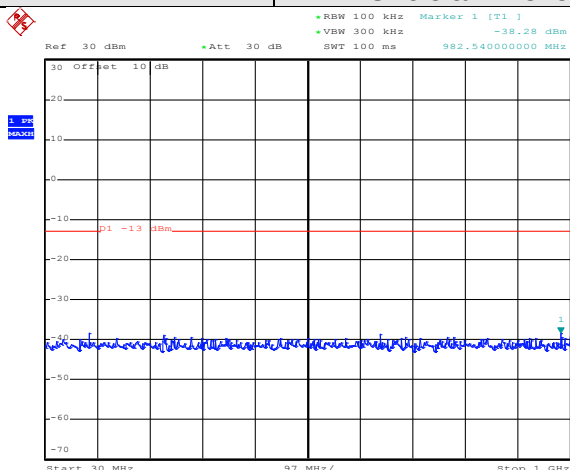
30MHz~1GHz



Date: 1.APR.2015 17:35:00

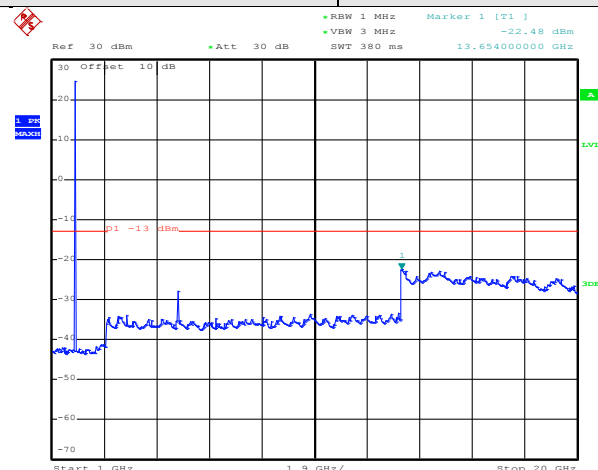
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz QPSK) RB Size 3 & RB Offset 0	Test Channel:	Lowest channel
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Date: 1.APR.2015 16:49:20

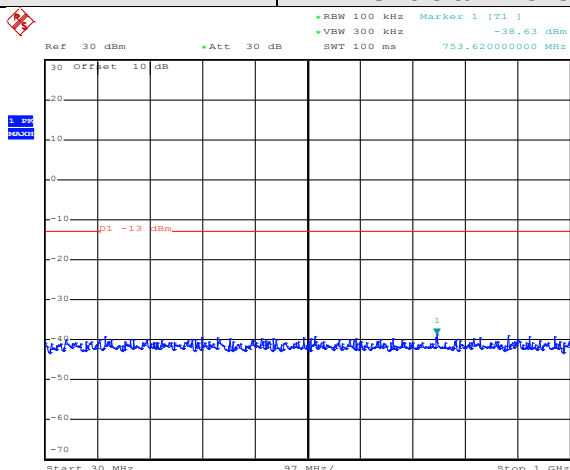
30MHz~1GHz



Date: 1.APR.2015 17:28:44

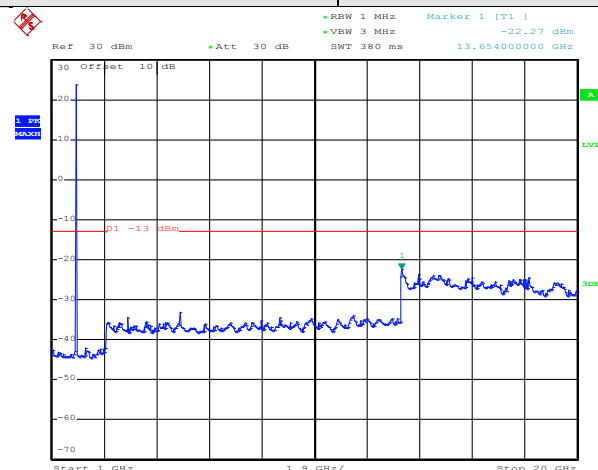
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz QPSK) RB Size 3 & RB Offset 0	Test Channel:	Middle channel
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Date: 1.APR.2015 16:51:05

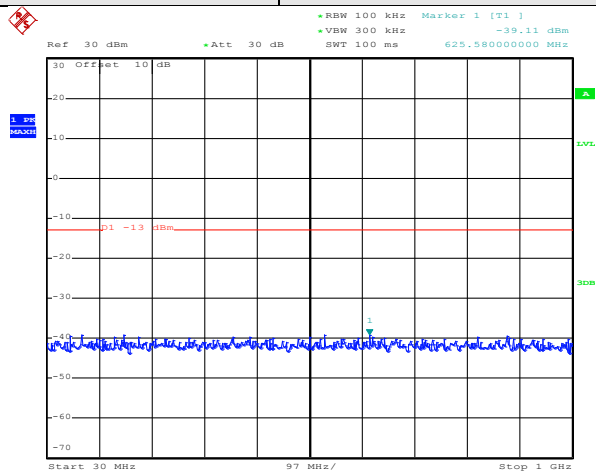
30MHz~1GHz



Date: 1.APR.2015 17:33:18

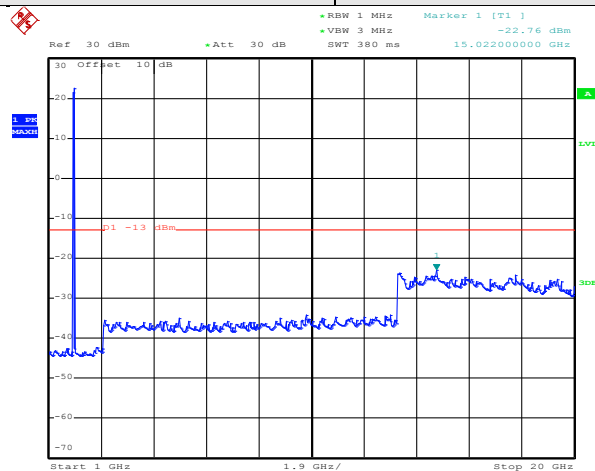
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz QPSK) RB Size 3 & RB Offset 1	Test Channel:	Highest channel
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Date: 1.APR.2015 16:53:13

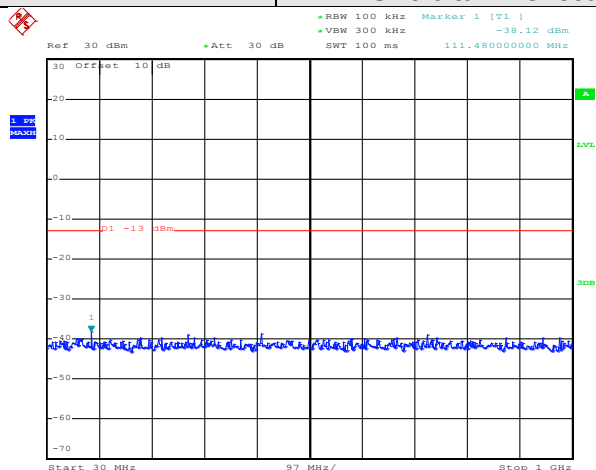
30MHz~1GHz



Date: 1.APR.2015 17:35:16

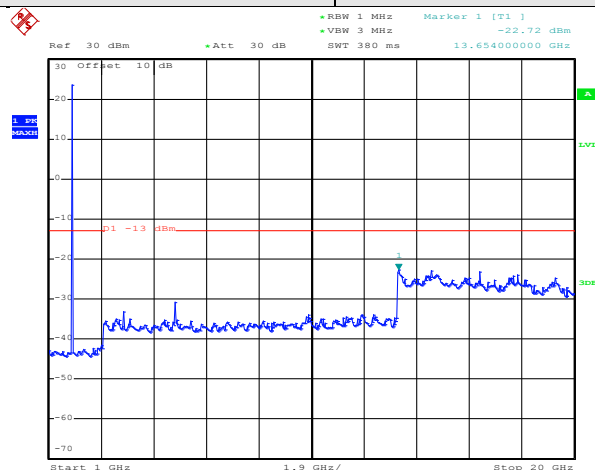
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz QPSK) RB Size 6 & RB Offset 0	Test Channel:	Lowest channel
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Date: 1.APR.2015 16:49:29

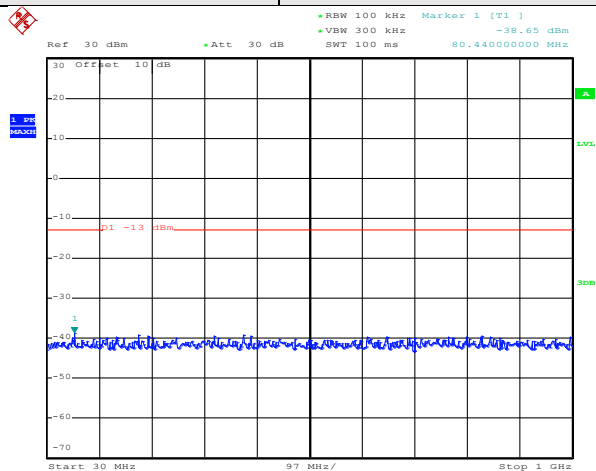
30MHz~1GHz



Date: 1.APR.2015 17:29:11

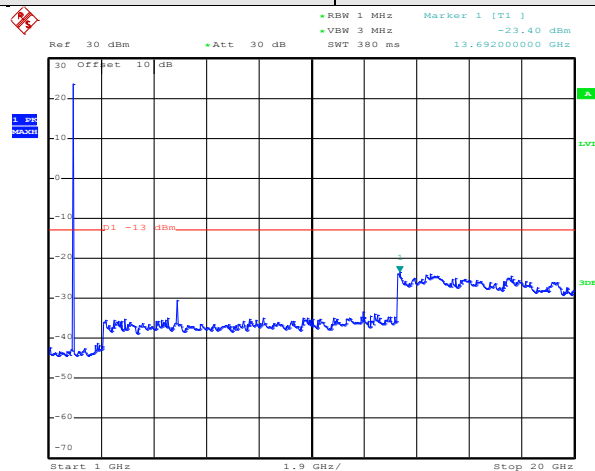
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz QPSK) RB Size 6 & RB Offset 0	Test Channel:	Middle channel
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Date: 1.APR.2015 16:51:16

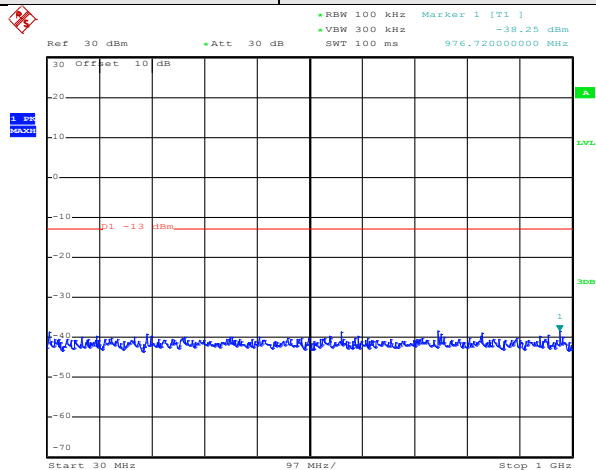
30MHz~1GHz



Date: 1.APR.2015 17:33:35

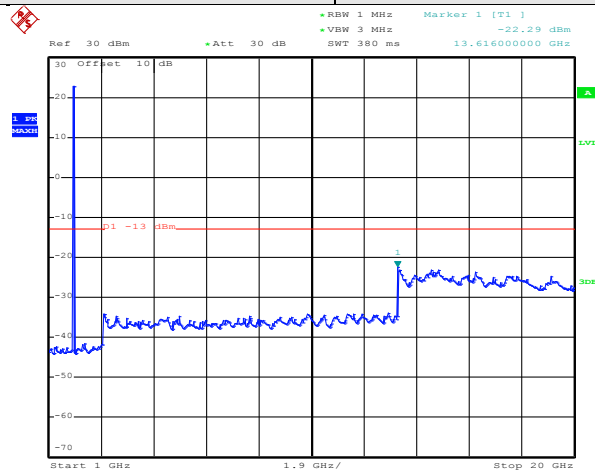
1GHz~20GHz

Test Mode:	LTE band 2(1.4 MHz QPSK) RB Size 6 & RB Offset 0	Test Channel:	Highest channel
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Date: 1.APR.2015 16:53:21

30MHz~1GHz

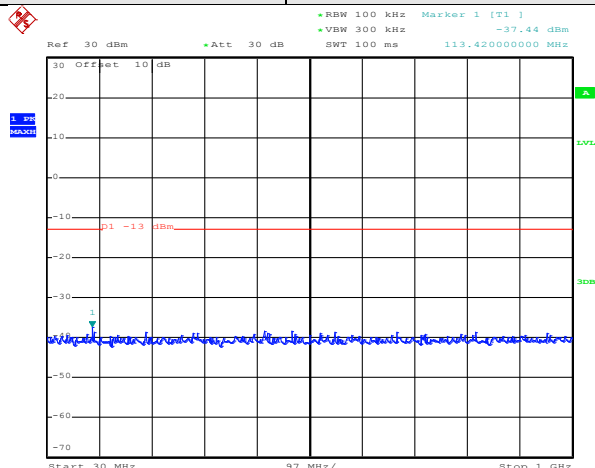


Date: 1.APR.2015 17:35:50

1GHz~20GHz

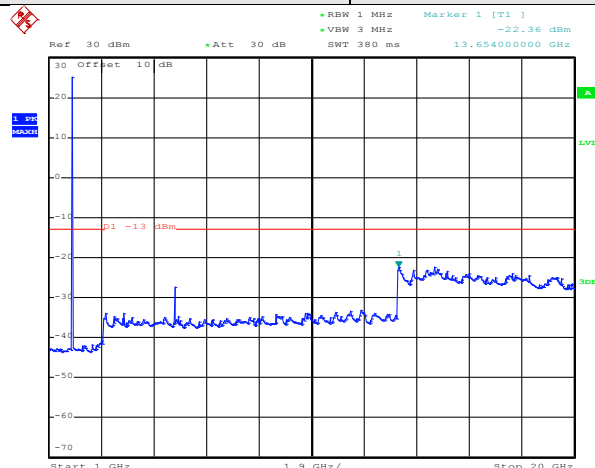
3MHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Lowest channel
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Date: 1.APR.2015 16:54:25

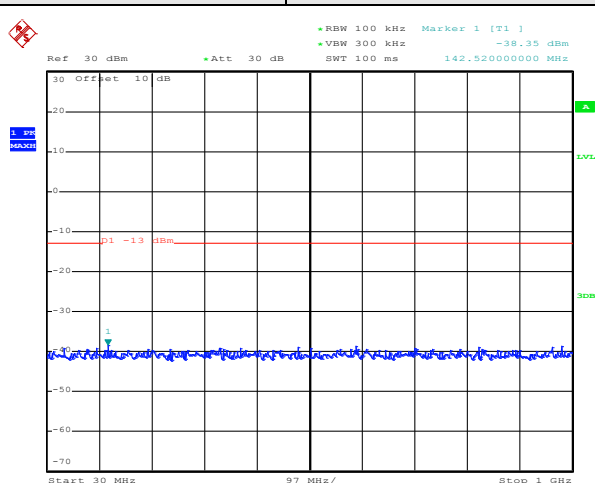
30MHz~1GHz



Date: 2.APR.2015 18:52:49

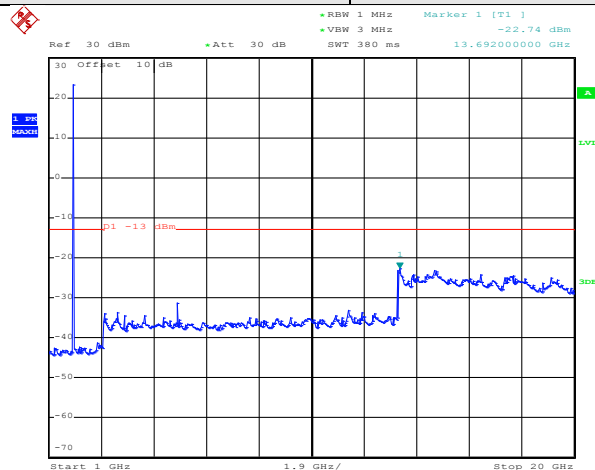
1GHz~20GHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 1 & RB Offset 14	Test Channel:	Middle channel
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Date: 1.APR.2015 16:56:49

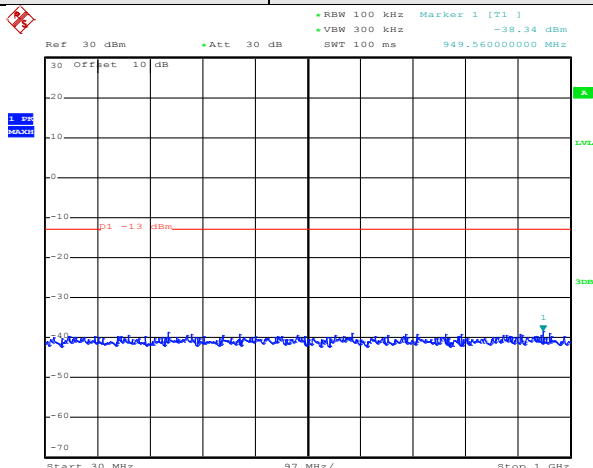
30MHz~1GHz



Date: 2.APR.2015 19:00:44

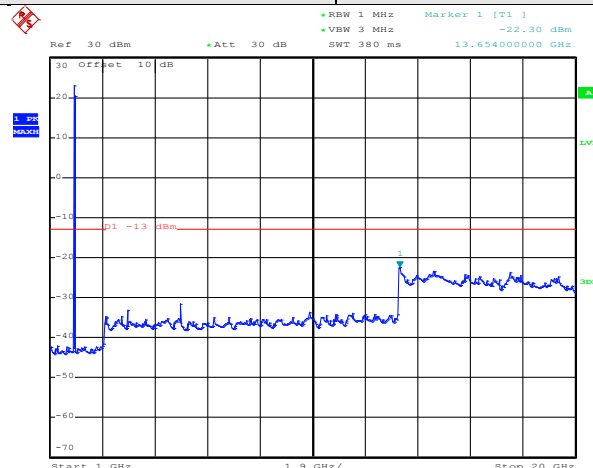
1GHz~20GHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 1 & RB Offset 7	Test Channel:	Highest channel
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Date: 1.APR.2015 16:58:30

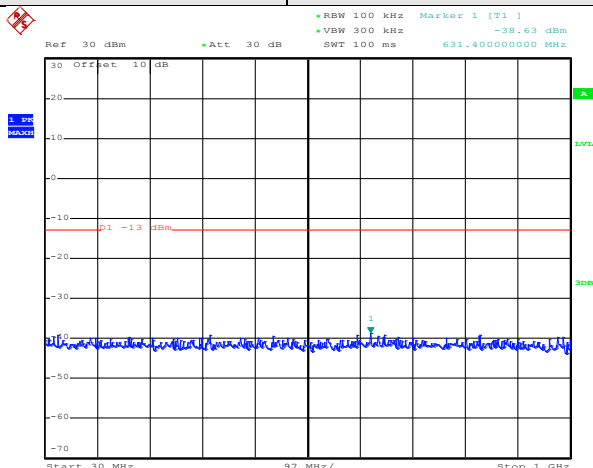
30MHz~1GHz



Date: 2.APR.2015 19:03:27

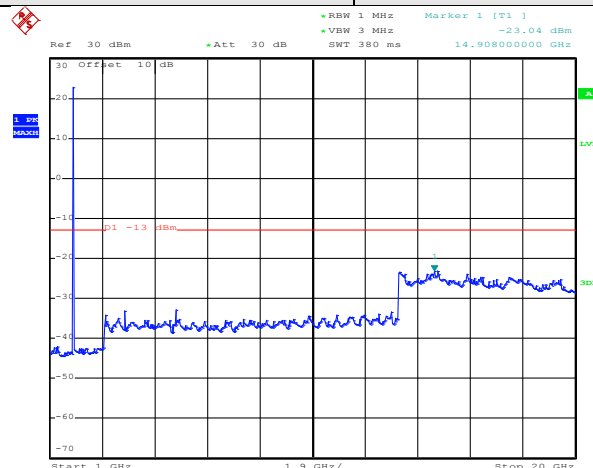
1GHz~20GHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 8 & RB Offset 0	Test Channel:	Lowest channel
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Date: 1.APR.2015 16:54:35

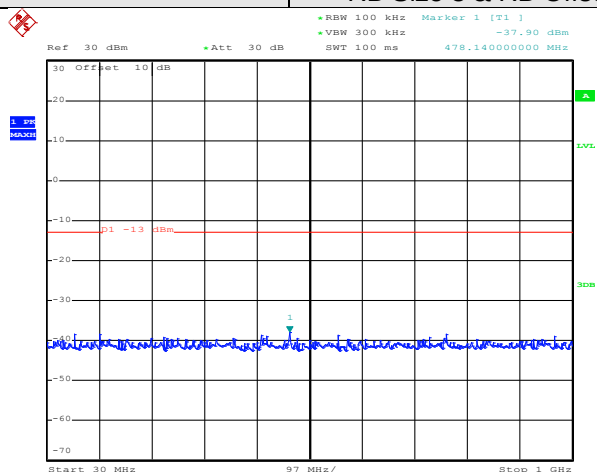
30MHz~1GHz



Date: 2.APR.2015 18:53:26

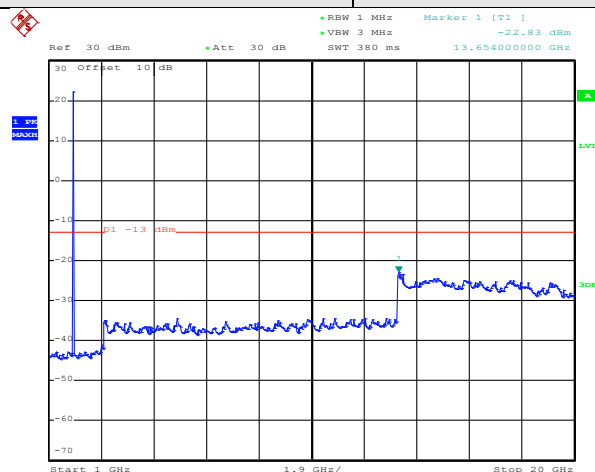
1GHz~20GHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 8 & RB Offset 4	Test Channel:	Middle channel
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Date: 1.APR.2015 16:57:10

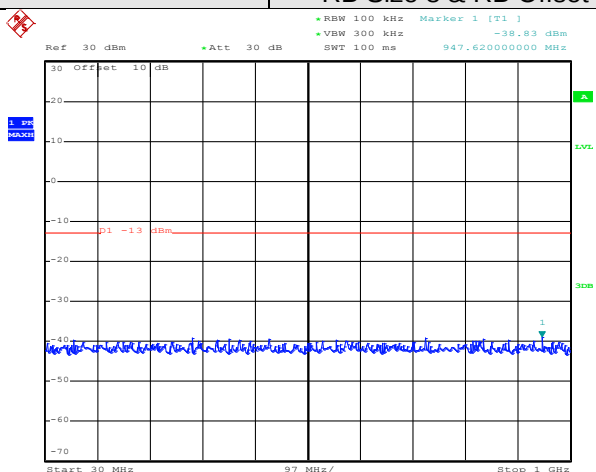
30MHz~1GHz



Date: 2.APR.2015 19:01:03

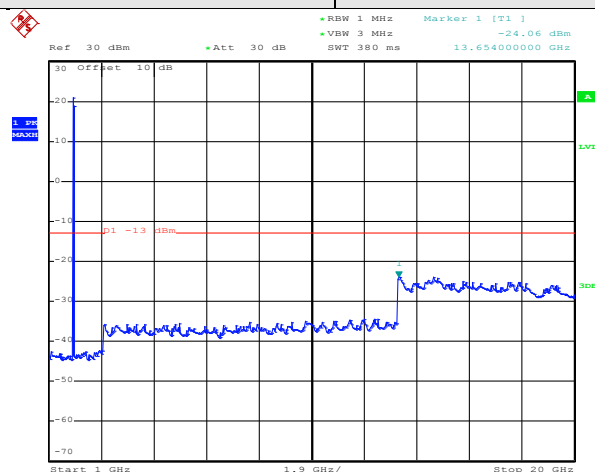
1GHz~20GHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 8 & RB Offset 4	Test Channel:	Highest channel
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Date: 1.APR.2015 16:58:39

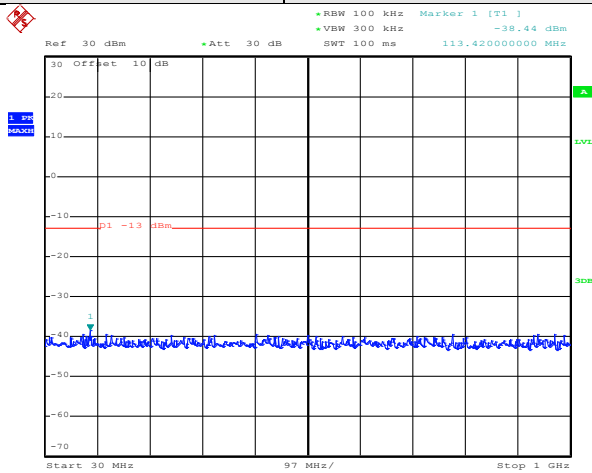
30MHz~1GHz



Date: 2.APR.2015 19:03:46

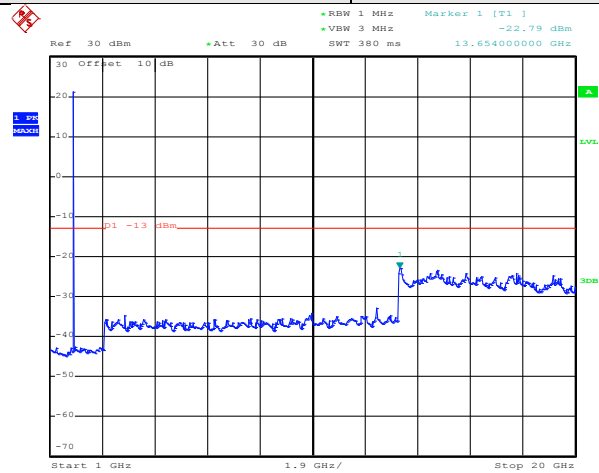
1GHz~20GHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 15 & RB Offset 0	Test Channel:	Lowest channel
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Date: 1.APR.2015 16:54:44

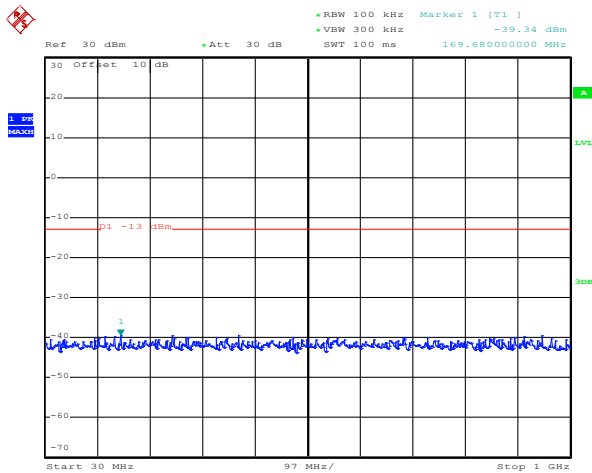
30MHz~1GHz



Date: 2.APR.2015 18:53:50

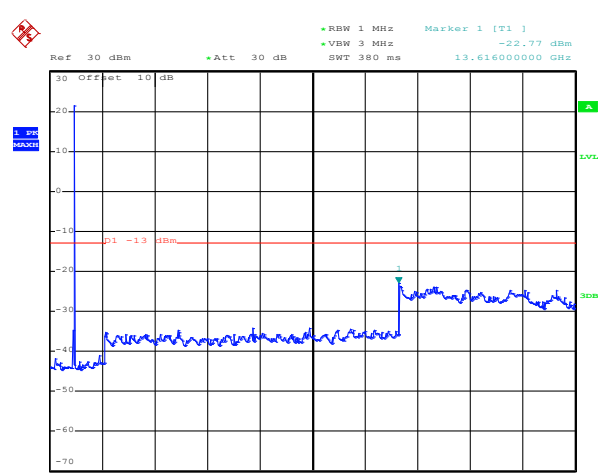
1GHz~20GHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 15 & RB Offset 0	Test Channel:	Middle channel
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Date: 1.APR.2015 16:57:18

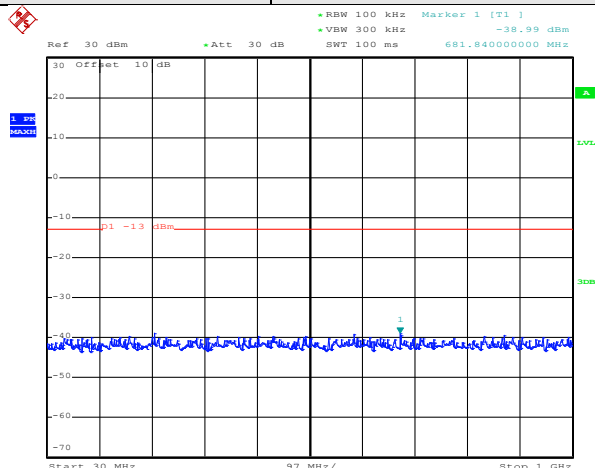
30MHz~1GHz



Date: 2.APR.2015 19:01:21

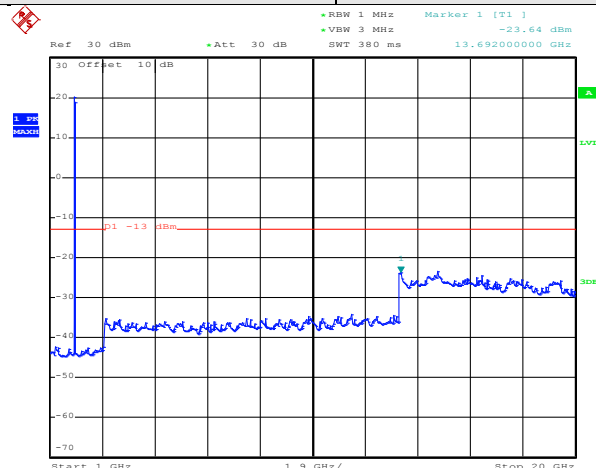
1GHz~20GHz

Test Mode:	LTE band 2(3MHz 16QAM) RB Size 15 & RB Offset 0	Test Channel:	Highest channel
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Date: 1.APR.2015 16:58:54

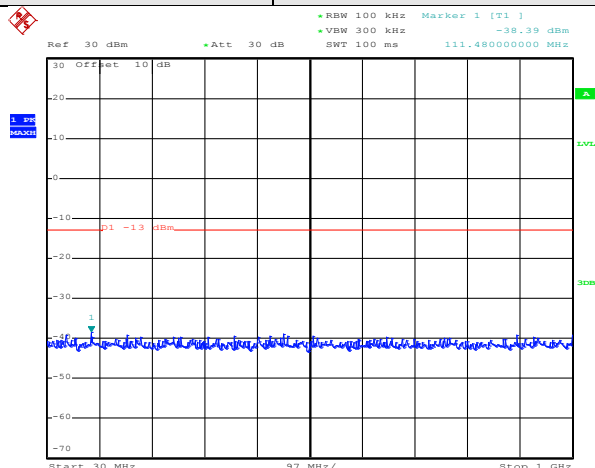
30MHz~1GHz



Date: 2.APR.2015 19:04:01

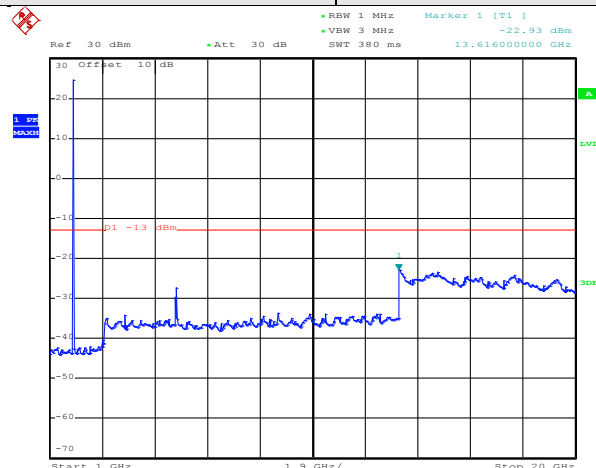
1GHz~20GHz

Test Mode:	LTE band 2(3MHz QPSK) RB Size 1 & RB Offset 7	Test Channel:	Lowest channel
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Date: 1.APR.2015 16:54:55

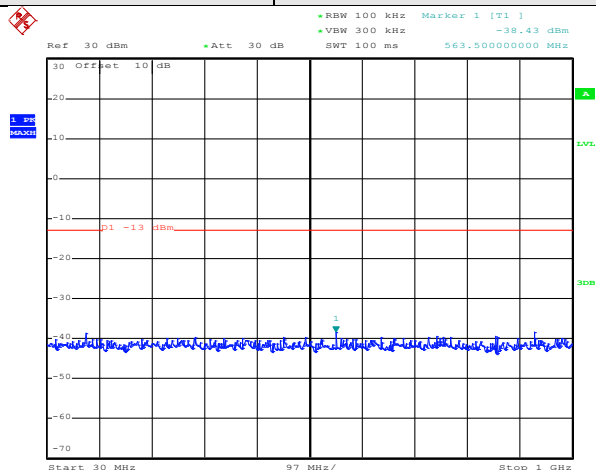
30MHz~1GHz



Date: 2.APR.2015 18:57:11

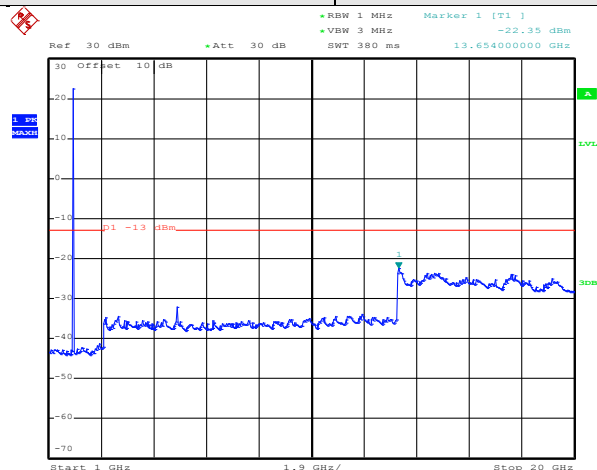
1GHz~20GHz

Test Mode:	LTE band 2(3MHz QPSK) RB Size 1 & RB Offset 14	Test Channel:	Middle channel
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Date: 1.APR.2015 16:57:32

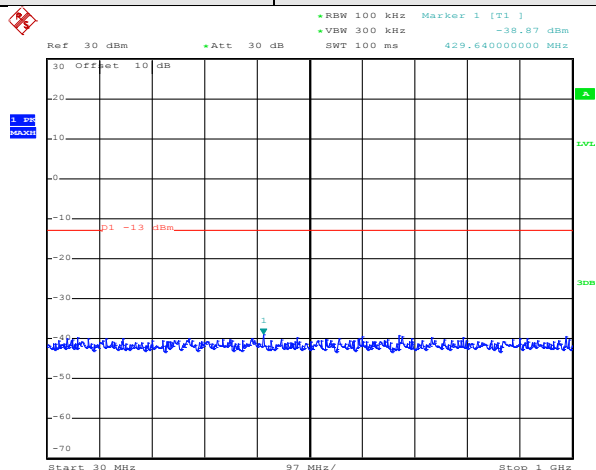
30MHz~1GHz



Date: 2.APR.2015 19:01:54

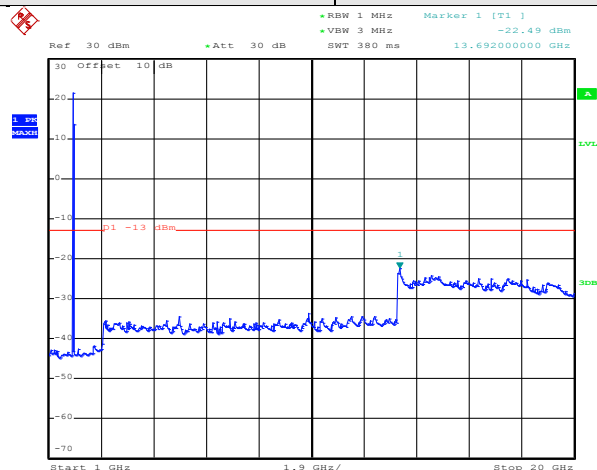
1GHz~20GHz

Test Mode:	LTE band 2(3MHz QPSK) RB Size 1 & RB Offset 7	Test Channel:	Highest channel
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Date: 1.APR.2015 16:59:08

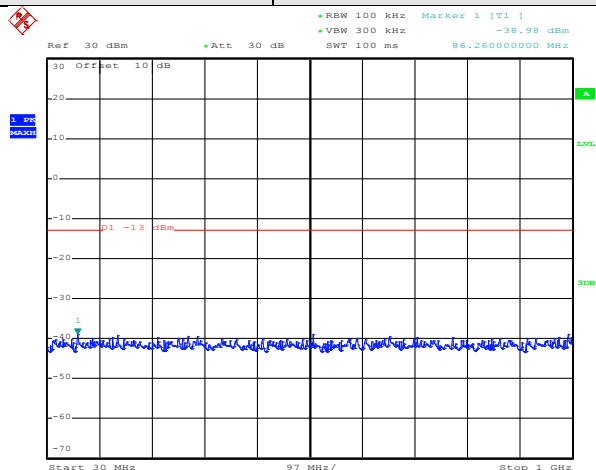
30MHz~1GHz



Date: 2.APR.2015 19:04:18

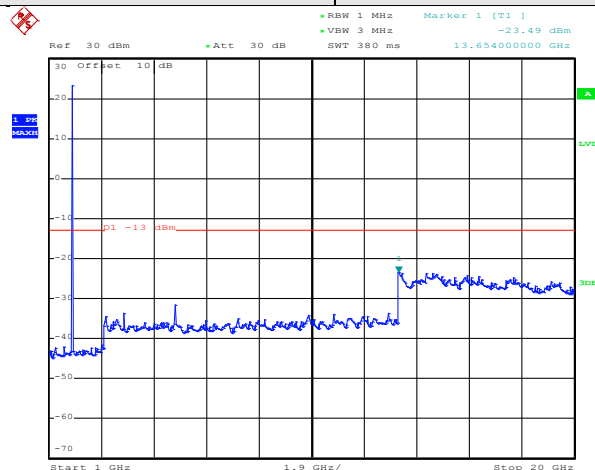
1GHz~20GHz

Test Mode:	LTE band 2(3MHz QPSK) RB Size 8 & RB Offset 0	Test Channel:	Lowest channel
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Date: 1.APR.2015 16:55:07

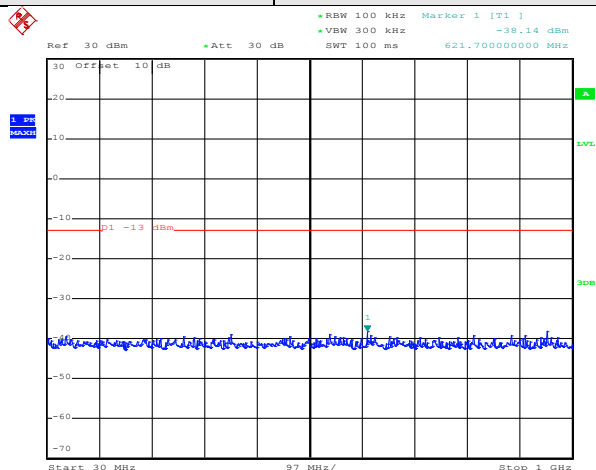
30MHz~1GHz



Date: 2.APR.2015 18:58:18

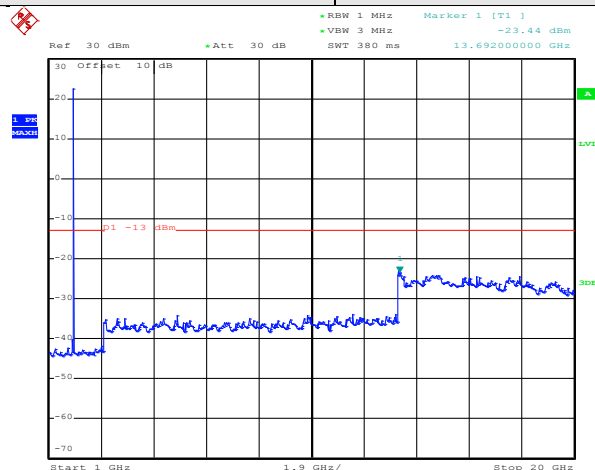
1GHz~20GHz

Test Mode:	LTE band 2(3MHz QPSK) RB Size 8 & RB Offset 4	Test Channel:	Middle channel
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Date: 1.APR.2015 16:57:46

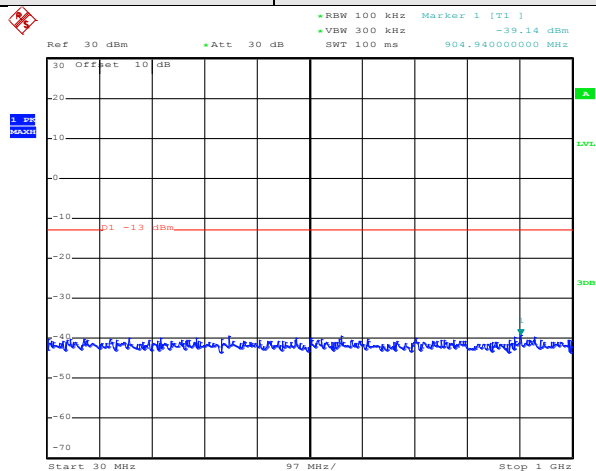
30MHz~1GHz



Date: 2.APR.2015 19:02:14

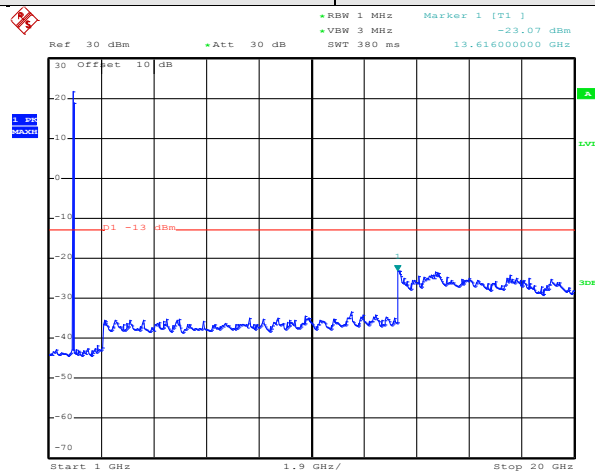
1GHz~20GHz

Test Mode:	LTE band 2(3MHz QPSK) RB Size 8 & RB Offset 4	Test Channel:	Highest channel
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Date: 1.APR.2015 16:59:20

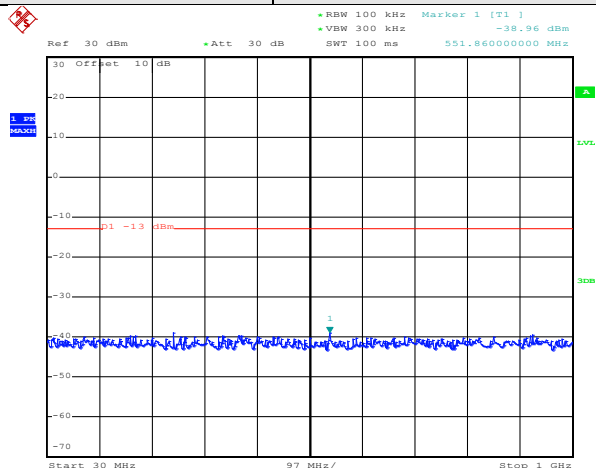
30MHz~1GHz



Date: 2.APR.2015 19:04:34

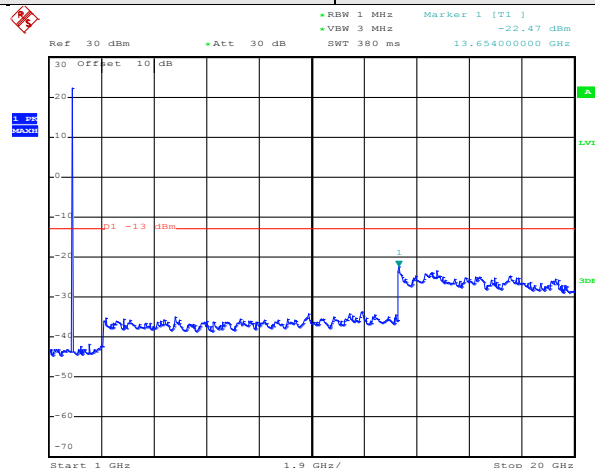
1GHz~20GHz

Test Mode:	LTE band 2(3MHz QPSK) RB Size 15 & RB Offset 0	Test Channel:	Lowest channel
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Date: 1.APR.2015 16:55:16

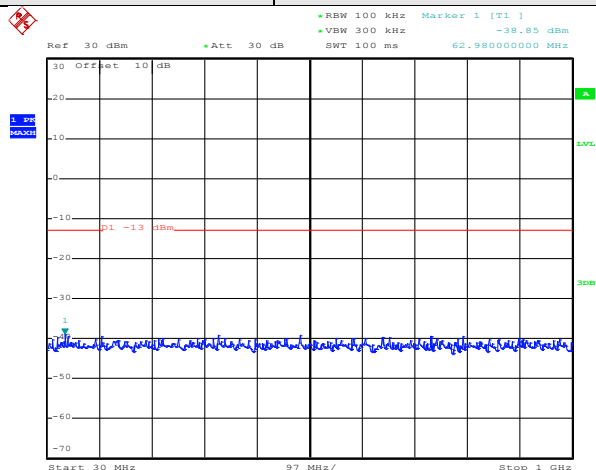
30MHz~1GHz



Date: 2.APR.2015 18:59:08

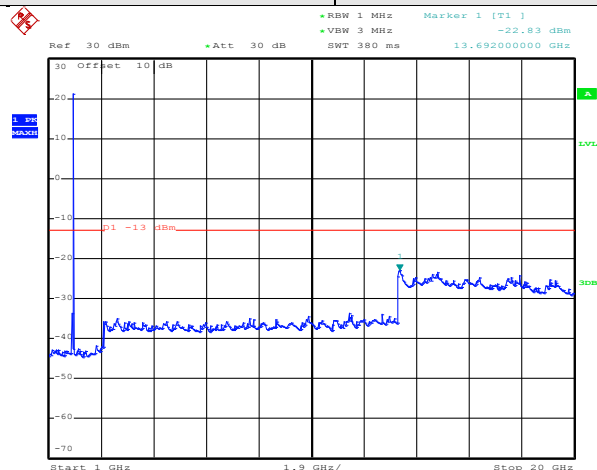
1GHz~20GHz

Test Mode:	LTE band 2(3MHz QPSK) RB Size 15 & RB Offset 0	Test Channel:	Middle channel
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Date: 1.APR.2015 16:57:54

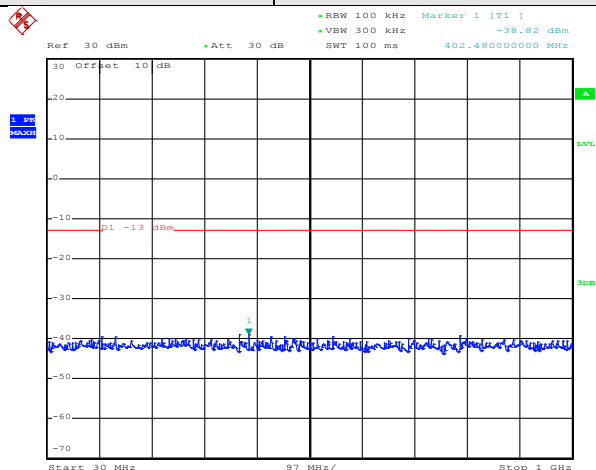
30MHz~1GHz



Date: 2.APR.2015 19:02:34

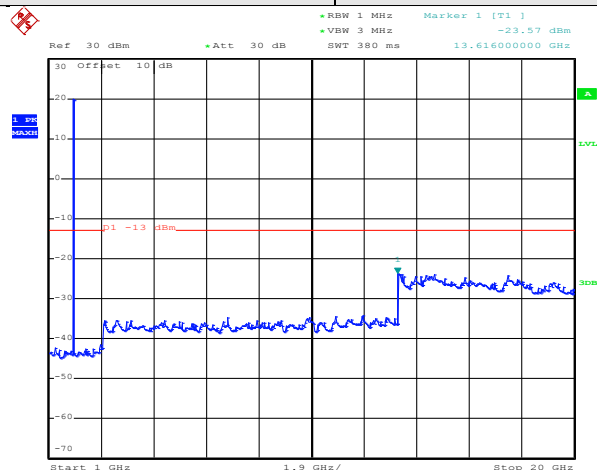
1GHz~20GHz

Test Mode:	LTE band 2(3MHz QPSK) RB Size 15 & RB Offset 0	Test Channel:	Highest channel
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Date: 1.APR.2015 16:59:28

30MHz~1GHz

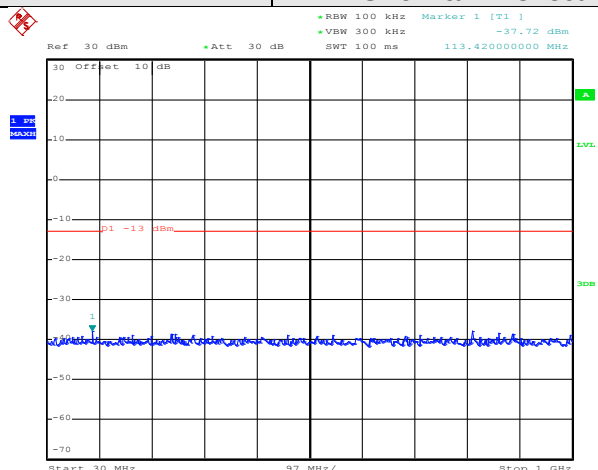


Date: 2.APR.2015 19:04:51

1GHz~20GHz

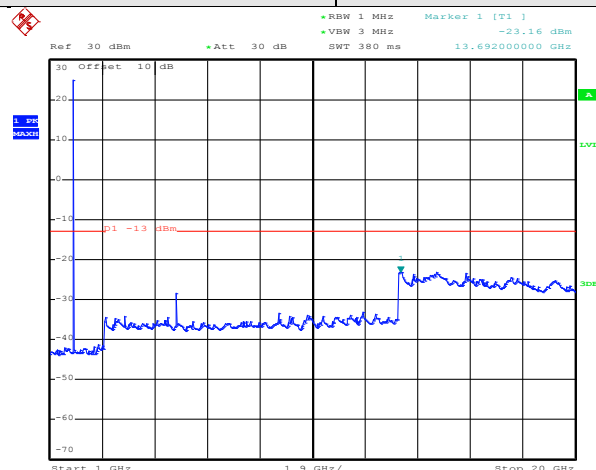
5MHz

Test Mode:	LTE band 2(5MHz 16QAM) RB Size 1 & RB Offset 12	Test Channel:	Lowest channel
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Date: 1.APR.2015 17:01:01

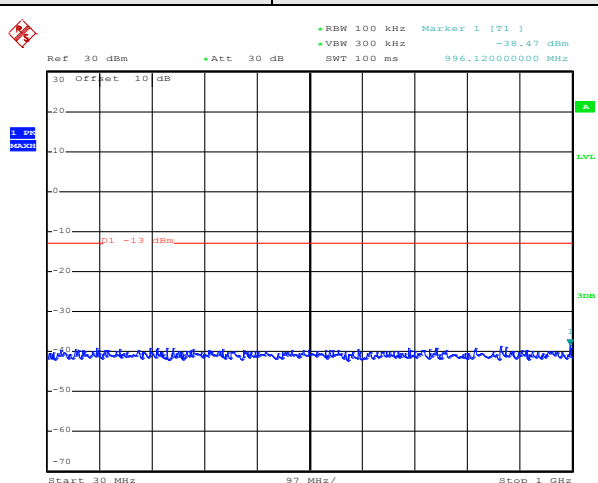
30MHz~1GHz



Date: 2.APR.2015 19:10:28

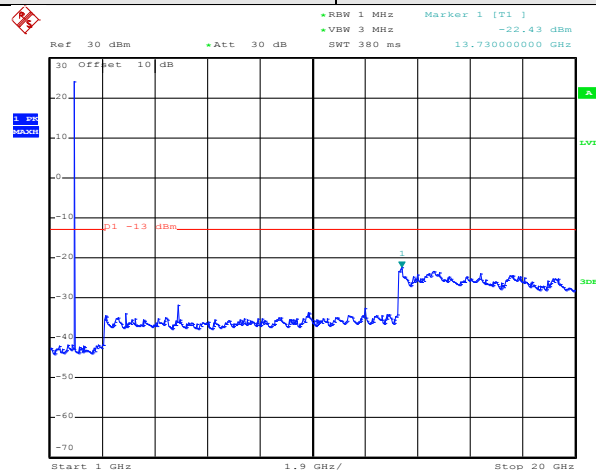
1GHz~20GHz

Test Mode:	LTE band 2(5MHz 16QAM) RB Size 1 & RB Offset 24	Test Channel:	Middle channel
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Date: 1.APR.2015 17:03:30

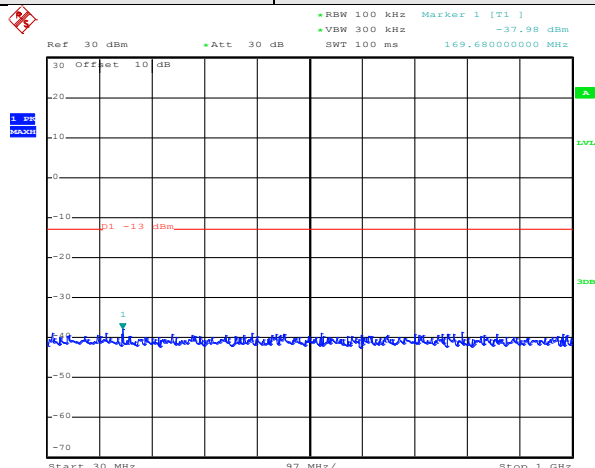
30MHz~1GHz



Date: 2.APR.2015 19:13:14

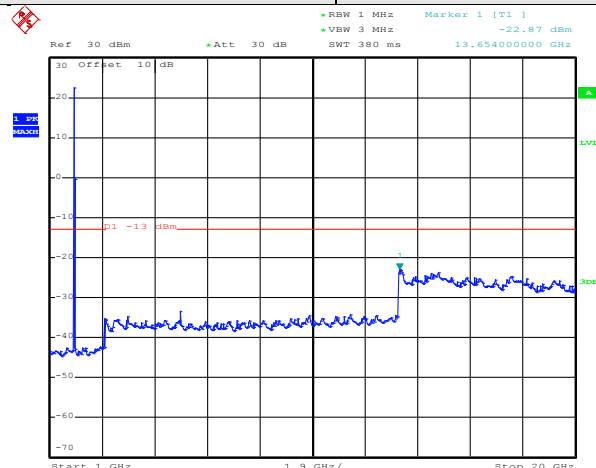
1GHz~20GHz

Test Mode:	LTE band 2(5MHz 16QAM) RB Size 1 & RB Offset 12	Test Channel:	Highest channel
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Date: 1.APR.2015 17:04:58

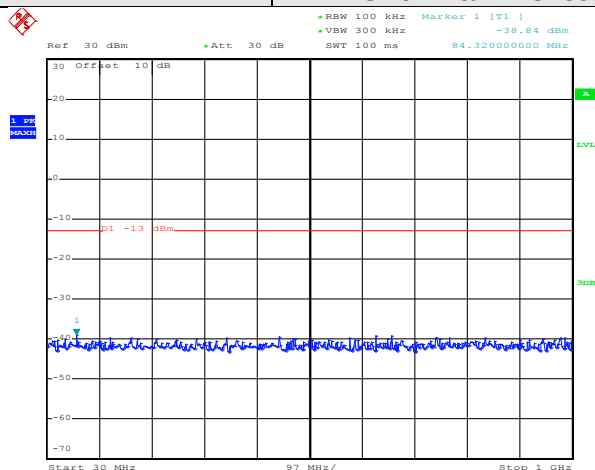
30MHz~1GHz



Date: 2.APR.2015 19:15:17

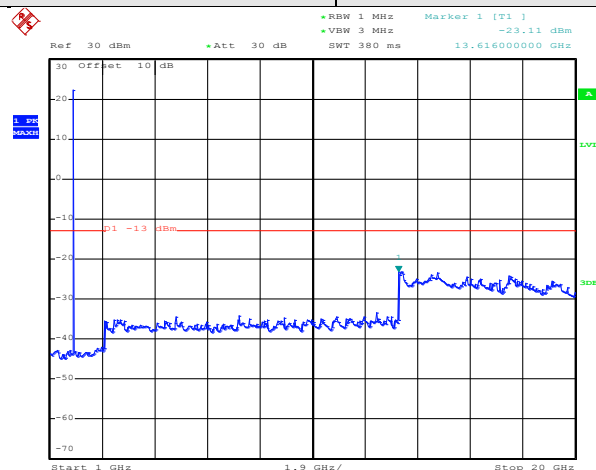
1GHz~20GHz

Test Mode:	LTE band 2(5MHz 16QAM) RB Size 12 & RB Offset 0	Test Channel:	Lowest channel
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Date: 1.APR.2015 17:01:12

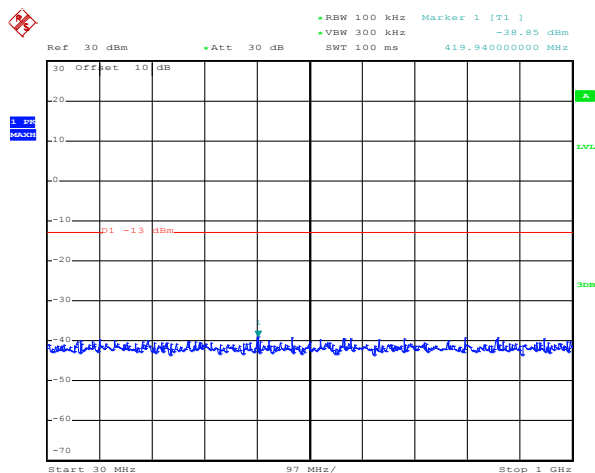
30MHz~1GHz



Date: 2.APR.2015 19:10:48

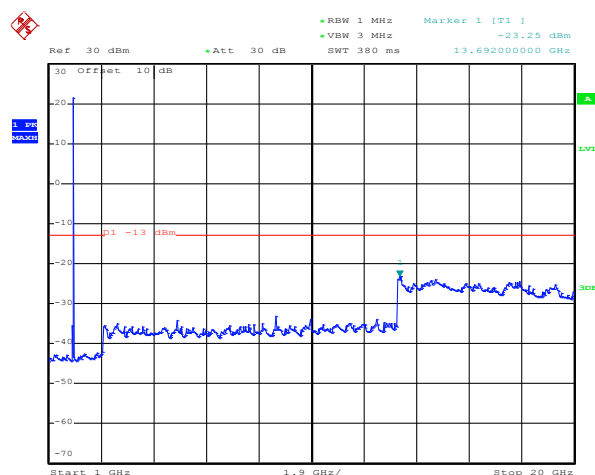
1GHz~20GHz

Test Mode:	LTE band 2(5MHz 16QAM) RB Size 12 & RB Offset 11	Test Channel:	Middle channel
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Date: 1.APR.2015 17:03:42

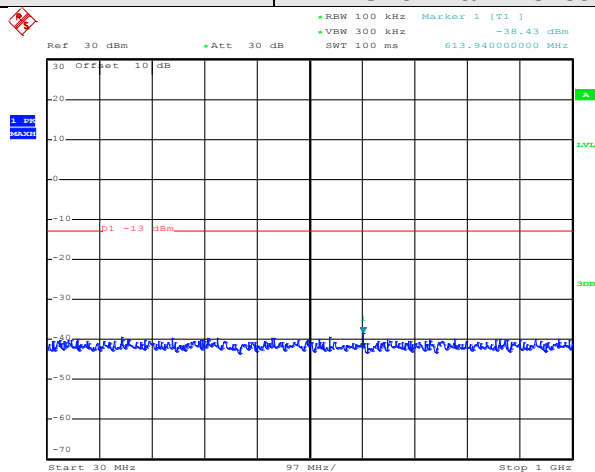
30MHz~1GHz



Date: 2.APR.2015 19:13:37

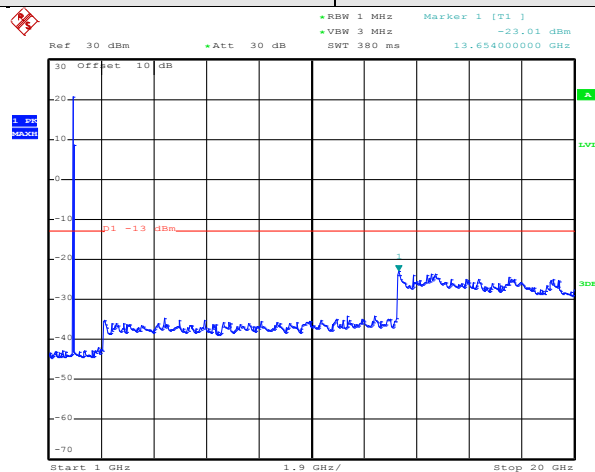
1GHz~20GHz

Test Mode:	LTE band 2(5MHz 16QAM) RB Size 12 & RB Offset 6	Test Channel:	Highest channel
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Date: 1.APR.2015 17:05:08

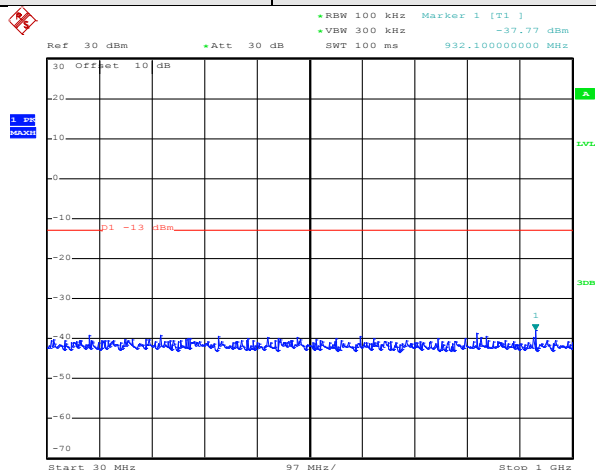
30MHz~1GHz



Date: 2.APR.2015 19:15:32

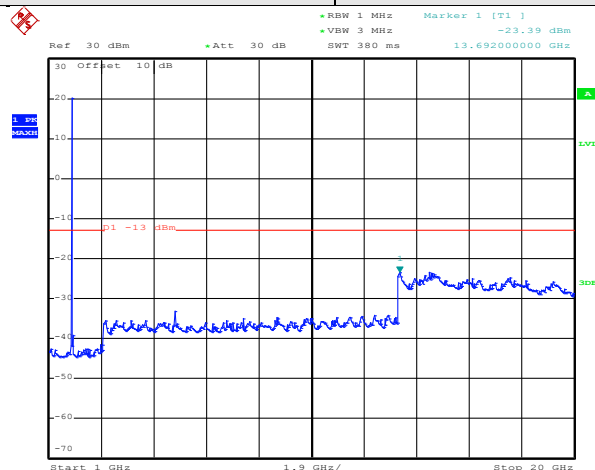
1GHz~20GHz

Test Mode:	LTE band 2(5MHz 16QAM) RB Size 25 & RB Offset 0	Test Channel:	Lowest channel
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Date: 1.APR.2015 17:01:21

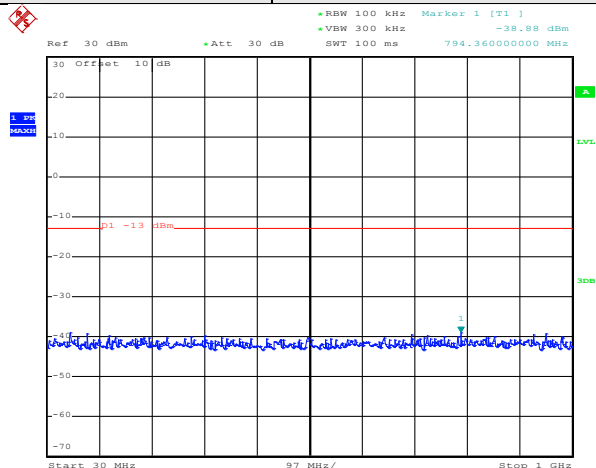
30MHz~1GHz



Date: 2.APR.2015 19:11:06

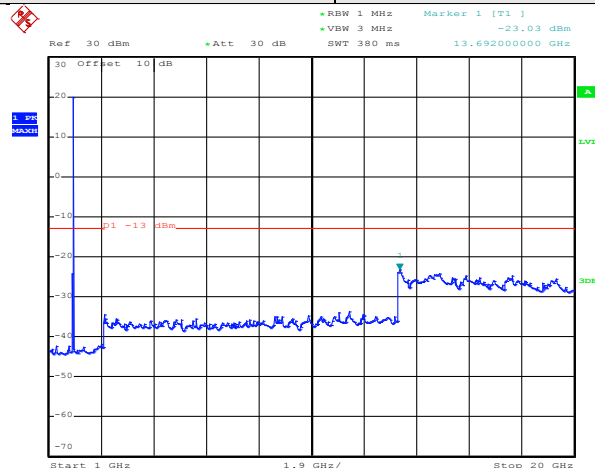
1GHz~20GHz

Test Mode:	LTE band 2(5MHz 16QAM) RB Size 25 & RB Offset 0	Test Channel:	Middle channel
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Date: 1.APR.2015 17:03:50

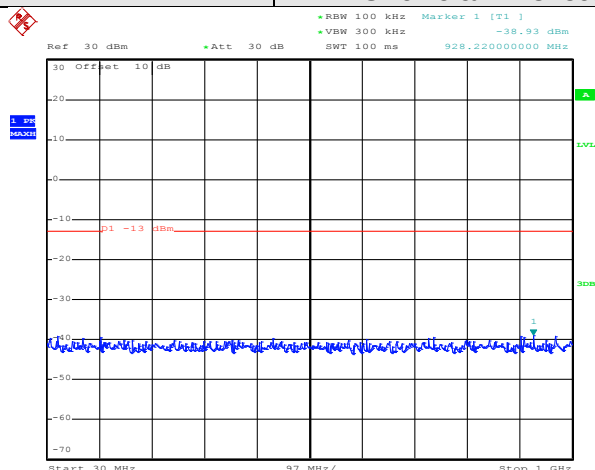
30MHz~1GHz



Date: 2.APR.2015 19:13:53

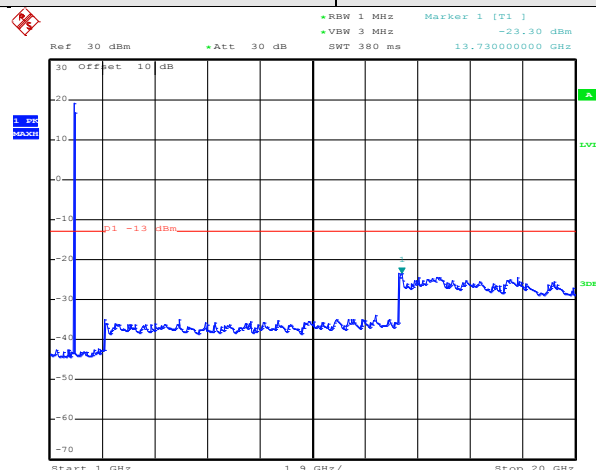
1GHz~20GHz

Test Mode:	LTE band 2(5MHz 16QAM) RB Size 25 & RB Offset 0	Test Channel:	Highest channel
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Date: 1.APR.2015 17:05:21

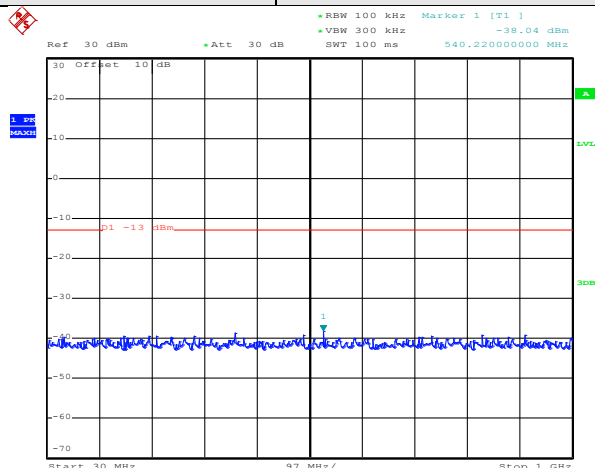
30MHz~1GHz



Date: 2.APR.2015 19:15:46

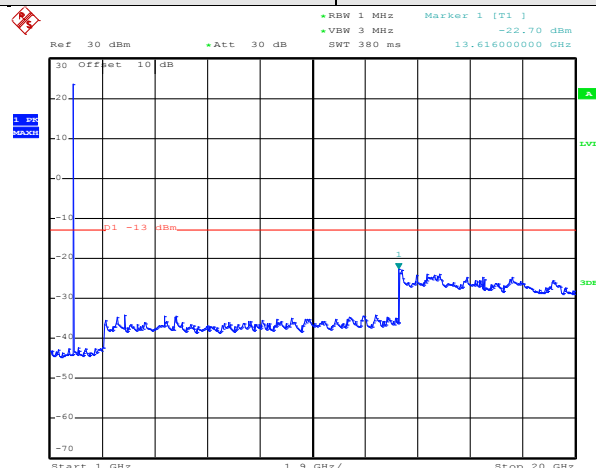
1GHz~20GHz

Test Mode:	LTE band 2(5MHz QPSK) RB Size 1 & RB Offset 12	Test Channel:	Lowest channel
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Date: 1.APR.2015 17:01:40

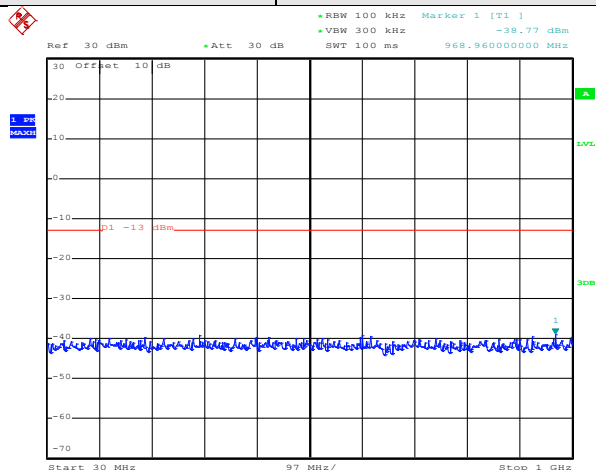
30MHz~1GHz



Date: 2.APR.2015 19:11:22

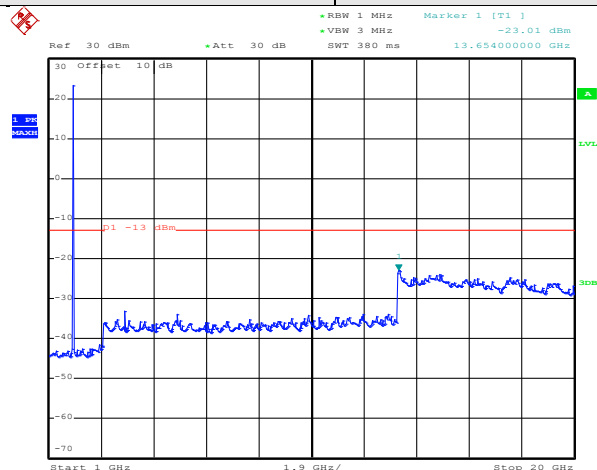
1GHz~20GHz

Test Mode:	LTE band 2(5MHz QPSK) RB Size 1 & RB Offset 12	Test Channel:	Middle channel
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Date: 1.APR.2015 17:04:05

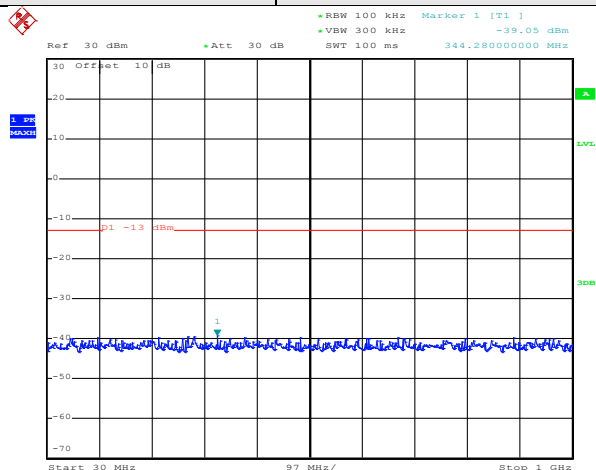
30MHz~1GHz



Date: 2.APR.2015 19:14:13

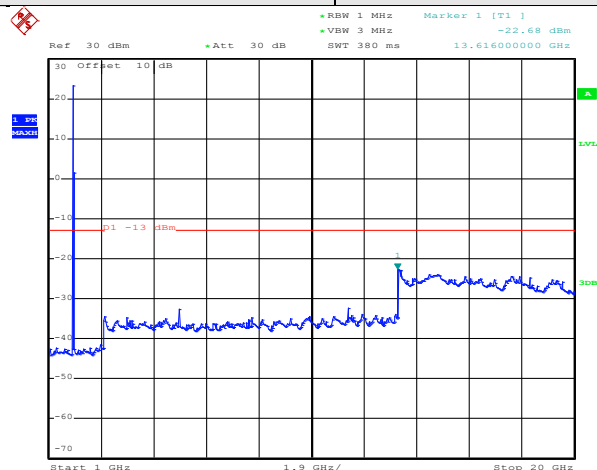
1GHz~20GHz

Test Mode:	LTE band 2(5MHz QPSK) RB Size 1 & RB Offset 12	Test Channel:	Highest channel
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Date: 1.APR.2015 17:05:42

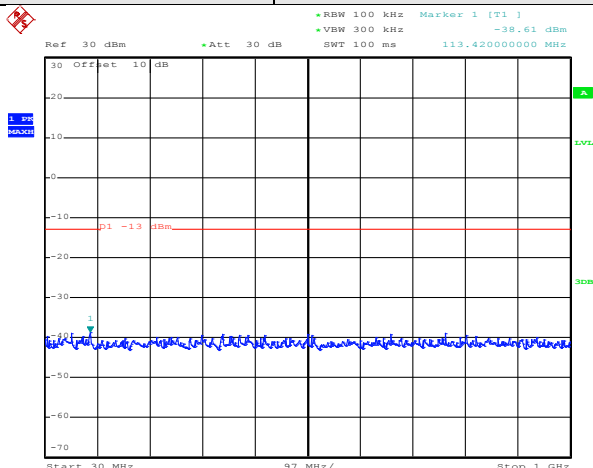
30MHz~1GHz



Date: 2.APR.2015 19:16:16

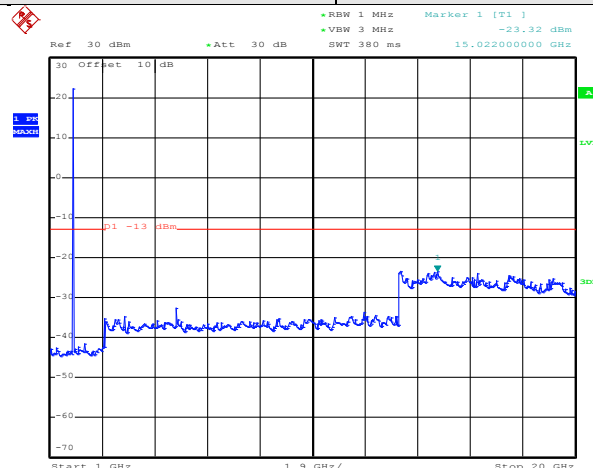
1GHz~20GHz

Test Mode:	LTE band 2(5MHz QPSK) RB Size 12 & RB Offset 0	Test Channel:	Lowest channel
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Date: 1.APR.2015 17:01:52

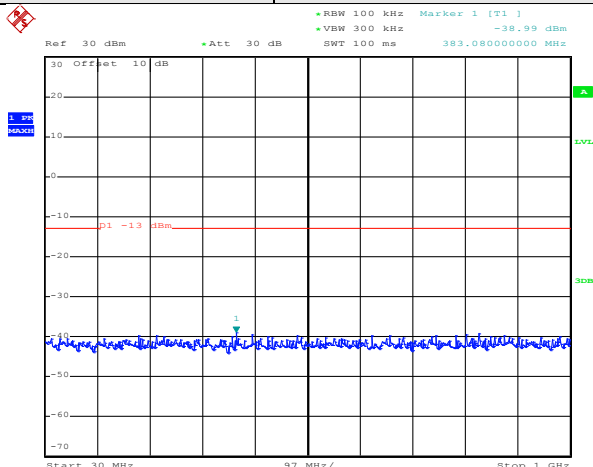
30MHz~1GHz



Date: 2.APR.2015 19:11:37

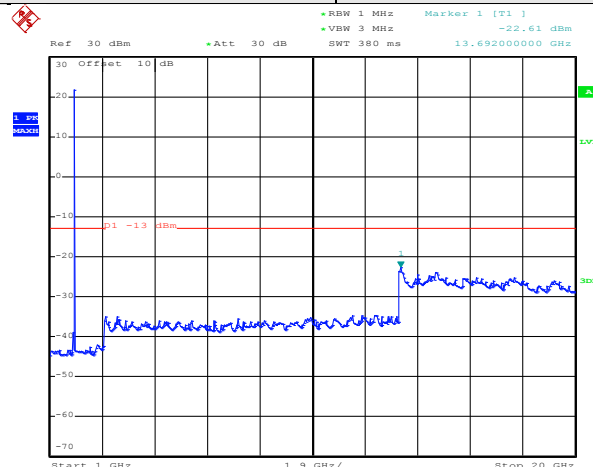
1GHz~20GHz

Test Mode:	LTE band 2(5MHz QPSK) RB Size 12 & RB Offset 11	Test Channel:	Middle channel
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Date: 1.APR.2015 17:04:16

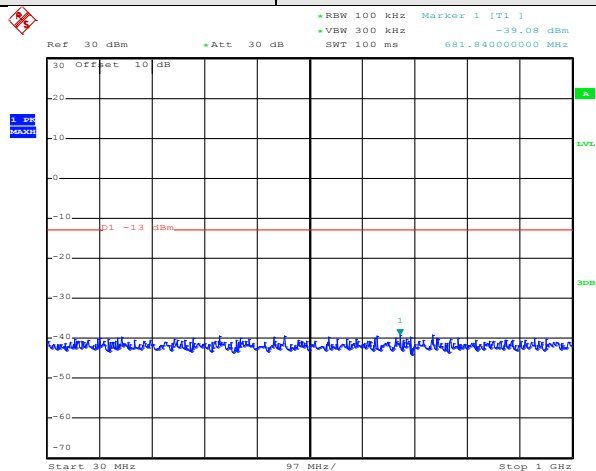
30MHz~1GHz



Date: 2.APR.2015 19:14:27

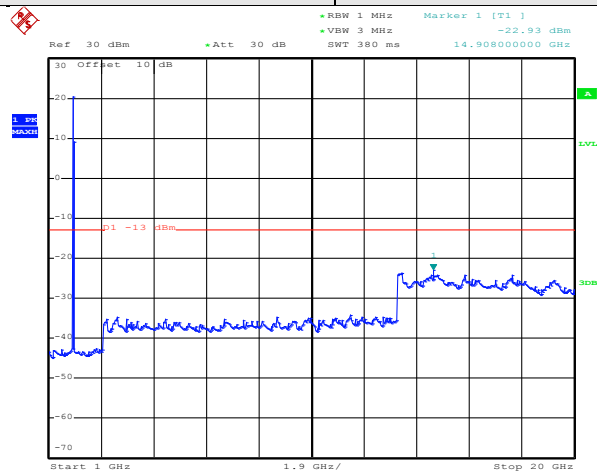
1GHz~20GHz

Test Mode:	LTE band 2(5MHz QPSK) RB Size 12 & RB Offset 6	Test Channel:	Highest channel
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Date: 1.APR.2015 17:05:52

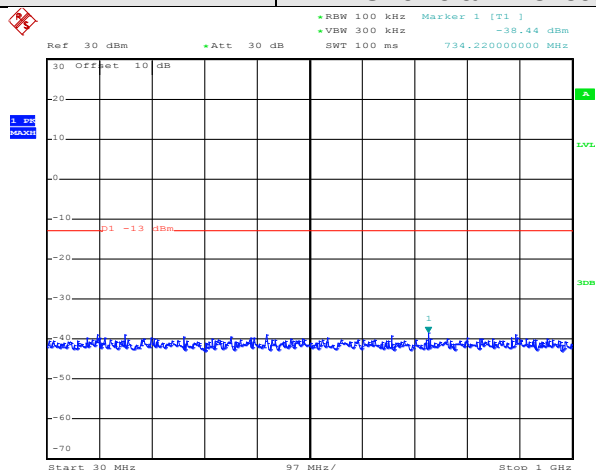
30MHz~1GHz



Date: 2.APR.2015 19:16:33

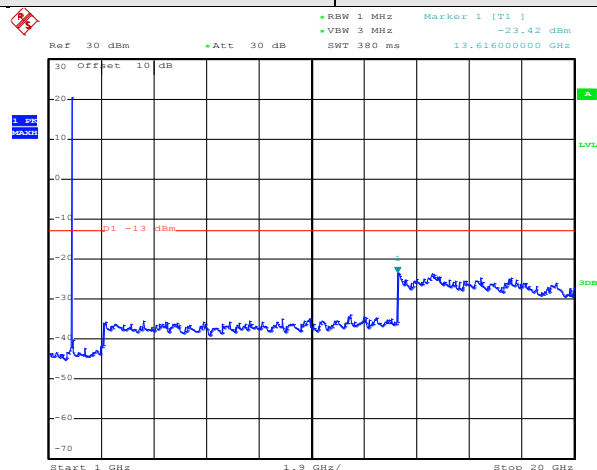
1GHz~20GHz

Test Mode:	LTE band 2(5MHz QPSK) RB Size 25 & RB Offset 0	Test Channel:	Lowest channel
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Date: 1.APR.2015 17:02:07

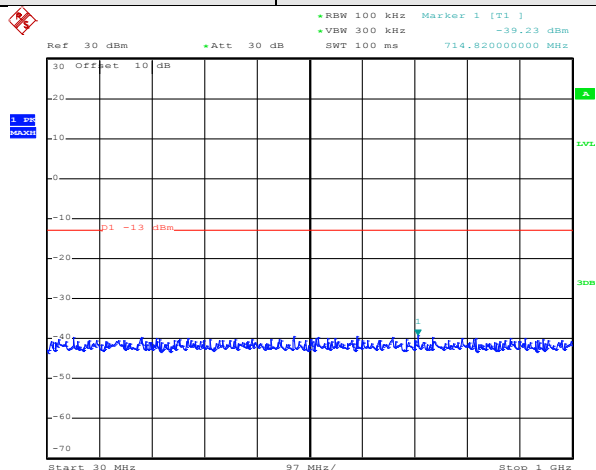
30MHz~1GHz



Date: 2.APR.2015 19:11:54

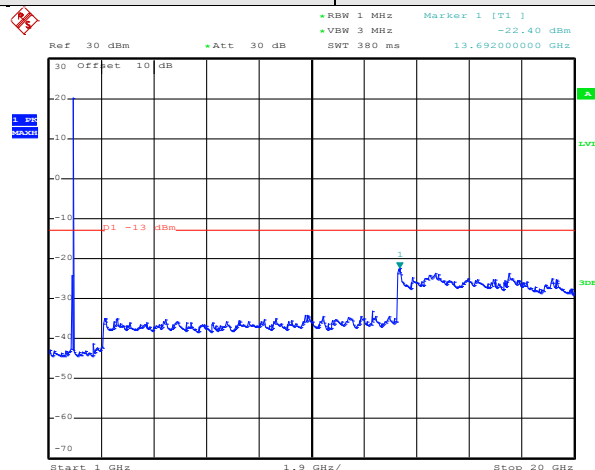
1GHz~20GHz

Test Mode:	LTE band 2(5MHz QPSK) RB Size 25 & RB Offset 0	Test Channel:	Middle channel
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Date: 1.APR.2015 17:04:23

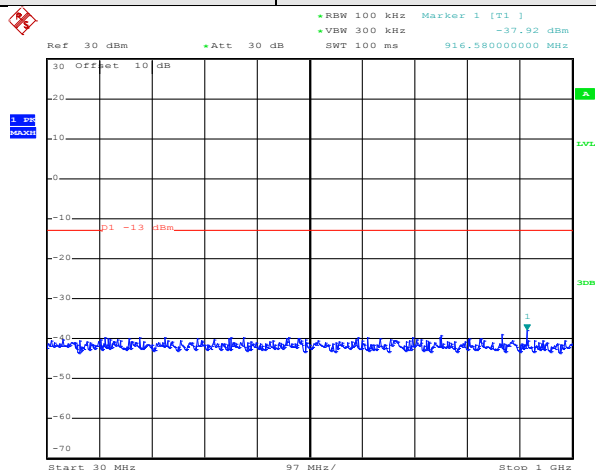
30MHz~1GHz



Date: 2.APR.2015 19:14:44

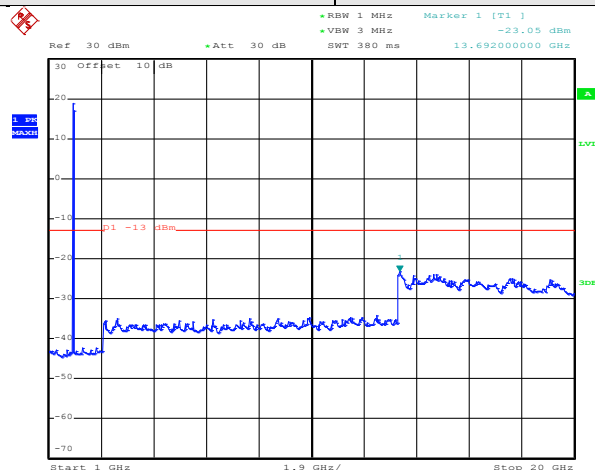
1GHz~20GHz

Test Mode:	LTE band 2(5MHz QPSK) RB Size 25 & RB Offset 0	Test Channel:	Highest channel
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Date: 1.APR.2015 17:06:00

30MHz~1GHz

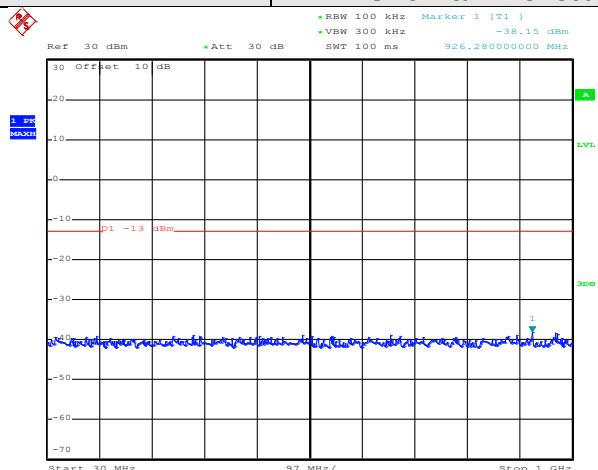


Date: 2.APR.2015 19:16:48

1GHz~20GHz

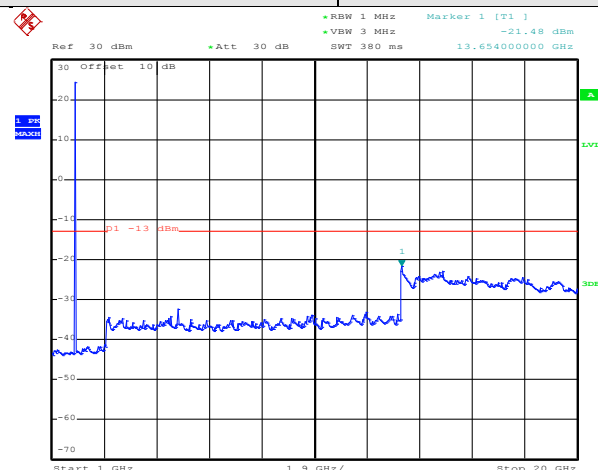
10MHz

Test Mode:	LTE band 2(10MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Lowest channel
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Date: 1.APR.2015 17:07:32

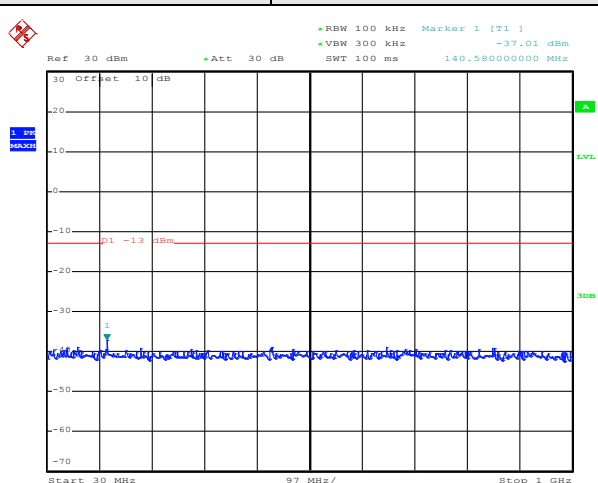
30MHz~1GHz



Date: 2.APR.2015 19:18:07

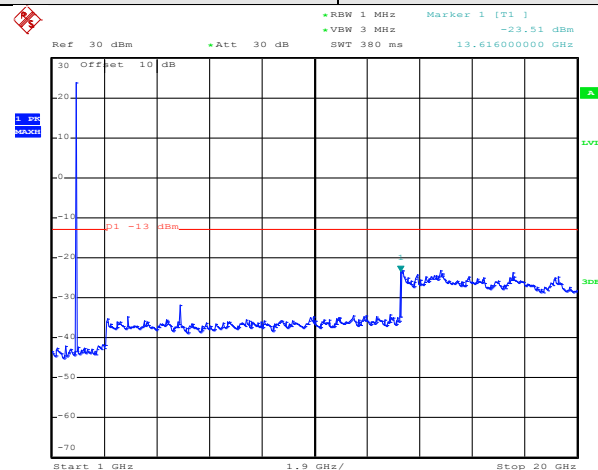
1GHz~20GHz

Test Mode:	LTE band 2(10MHz 16QAM) RB Size 1 & RB Offset 24	Test Channel:	Middle channel
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Date: 1.APR.2015 17:08:58

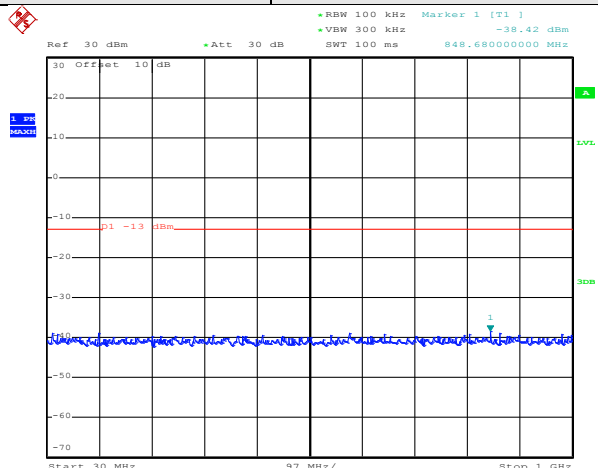
30MHz~1GHz



Date: 2.APR.2015 19:20:49

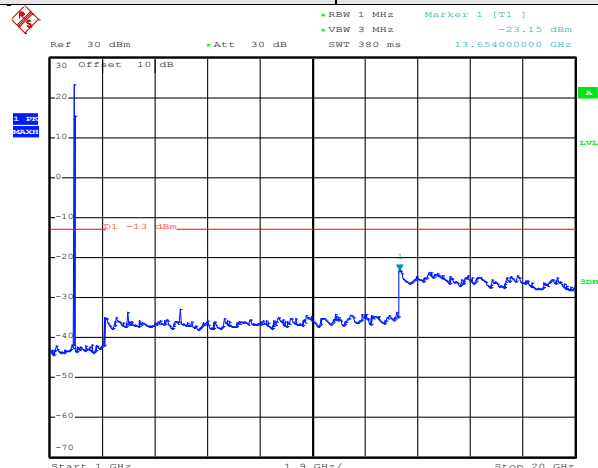
1GHz~20GHz

Test Mode:	LTE band 2(10MHz 16QAM) RB Size 1 & RB Offset 24	Test Channel:	Highest channel
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Date: 1.APR.2015 17:10:45

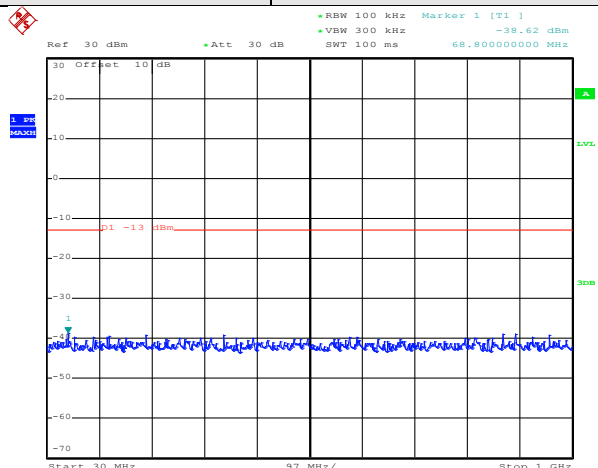
30MHz~1GHz



Date: 2.APR.2015 19:22:59

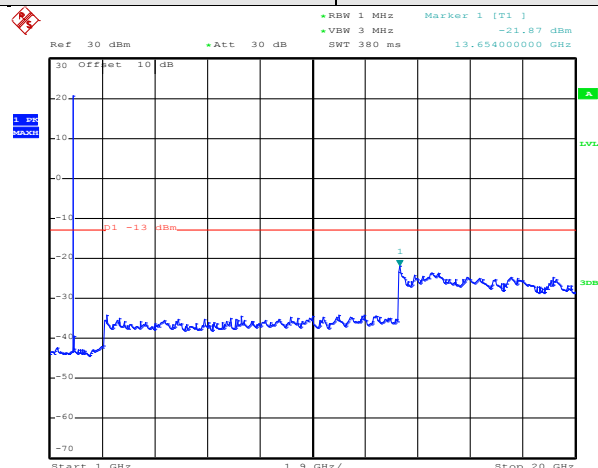
1GHz~20GHz

Test Mode:	LTE band 2(10MHz 16QAM) RB Size 25 & RB Offset 0	Test Channel:	Lowest channel
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Date: 1.APR.2015 17:07:45

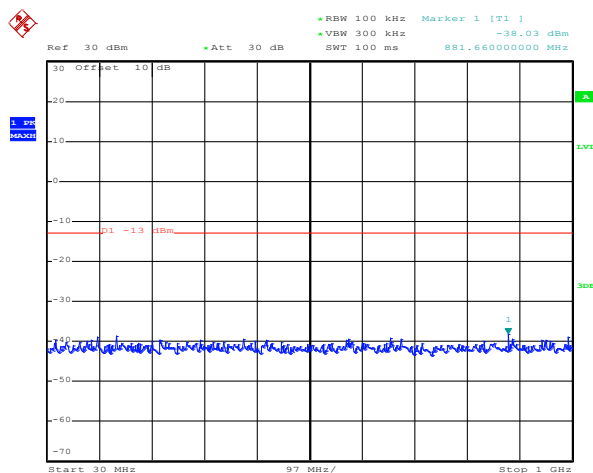
30MHz~1GHz



Date: 2.APR.2015 19:19:07

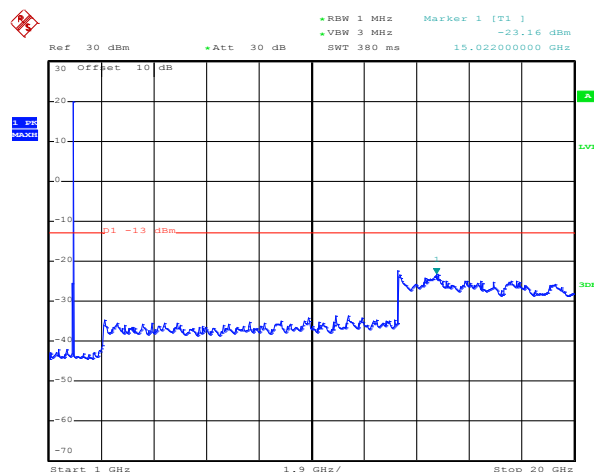
1GHz~20GHz

Test Mode:	LTE band 2(10MHz 16QAM) RB Size 25 & RB Offset 24	Test Channel:	Middle channel
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Date: 1.APR.2015 17:09:13

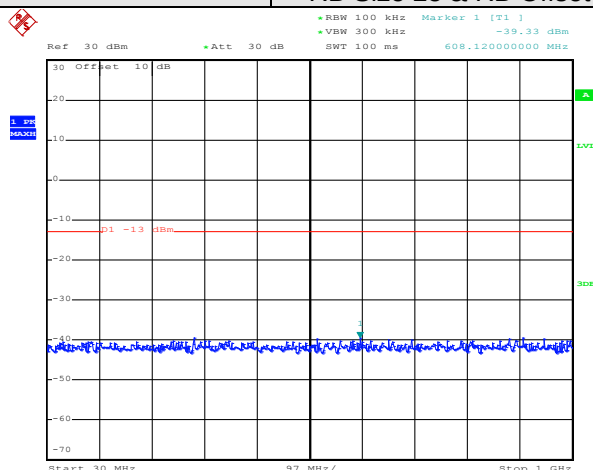
30MHz~1GHz



Date: 2.APR.2015 19:21:07

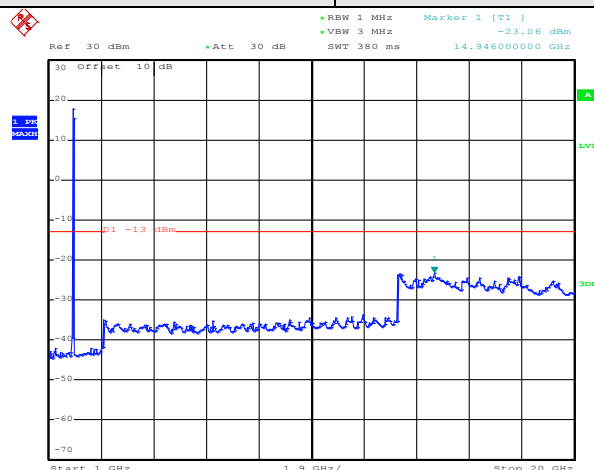
1GHz~20GHz

Test Mode:	LTE band 2(10MHz 16QAM) RB Size 25 & RB Offset 24	Test Channel:	Highest channel
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Date: 1.APR.2015 17:10:51

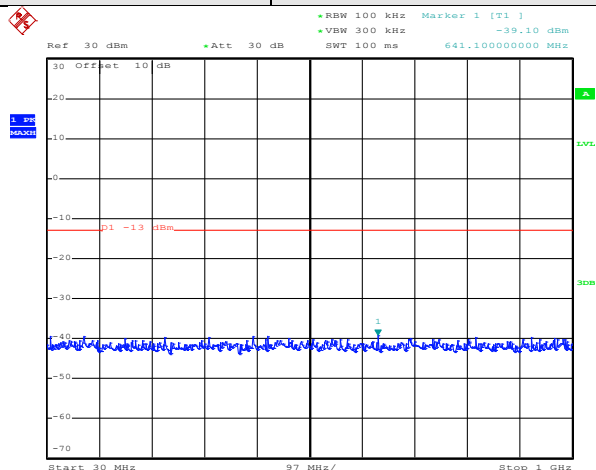
30MHz~1GHz



Date: 2.APR.2015 19:23:25

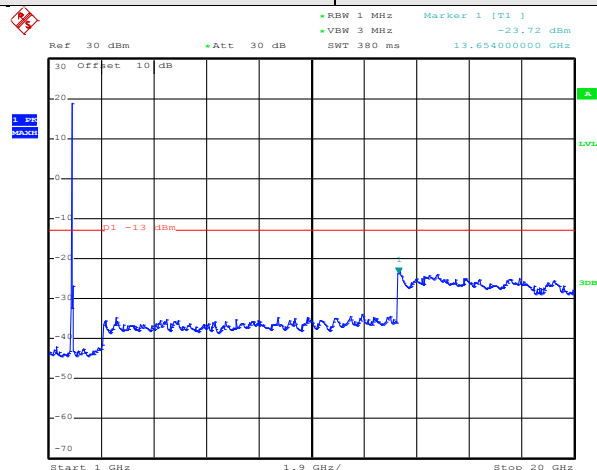
1GHz~20GHz

Test Mode:	LTE band 2(10MHz 16QAM) RB Size 50 & RB Offset 0	Test Channel:	Lowest channel
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Date: 1.APR.2015 17:07:53

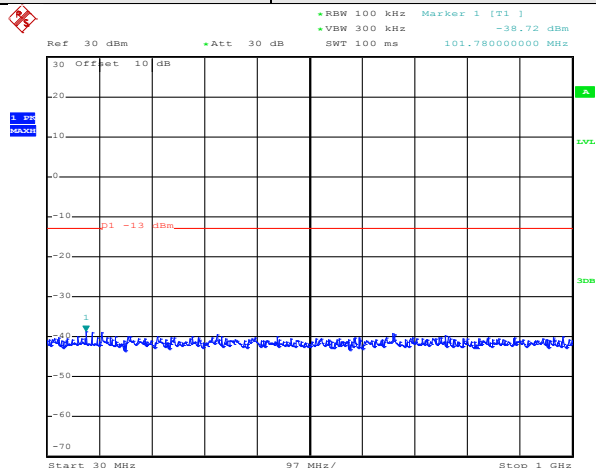
30MHz~1GHz



Date: 2.APR.2015 19:19:25

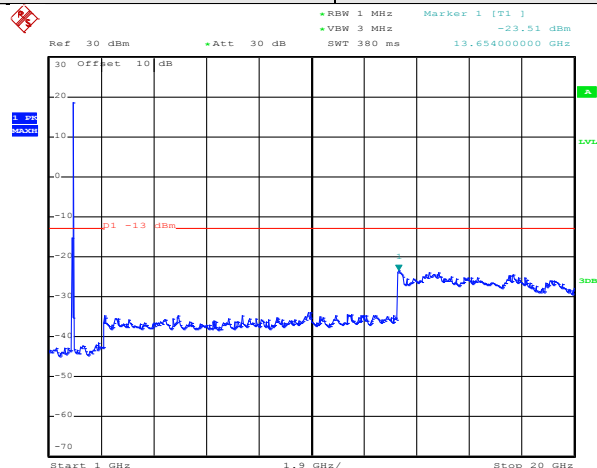
1GHz~20GHz

Test Mode:	LTE band 2(10MHz 16QAM) RB Size 50 & RB Offset 0	Test Channel:	Middle channel
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Date: 1.APR.2015 17:09:23

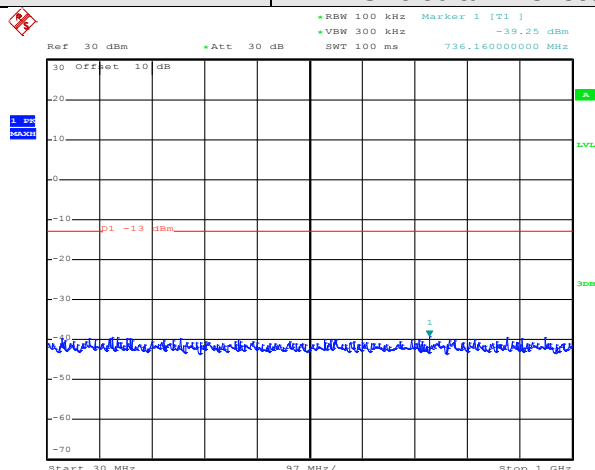
30MHz~1GHz



Date: 2.APR.2015 19:21:26

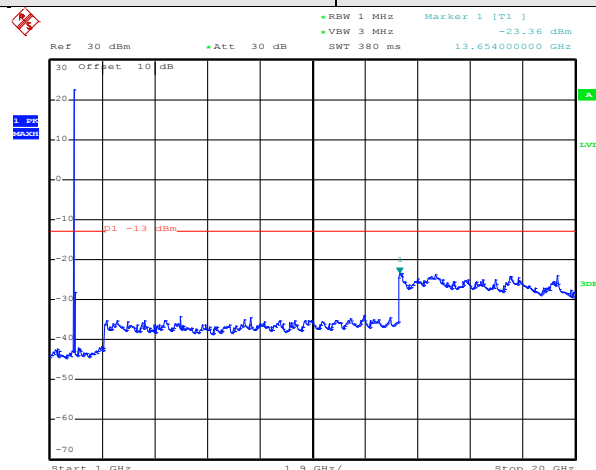
1GHz~20GHz

Test Mode:	LTE band 2(10MHz 16QAM) RB Size 50 & RB Offset 0	Test Channel:	Highest channel
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Date: 1.APR.2015 17:11:01

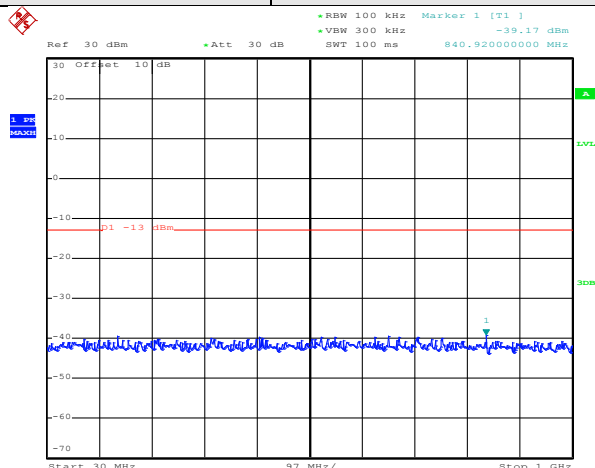
30MHz~1GHz



Date: 2.APR.2015 19:23:43

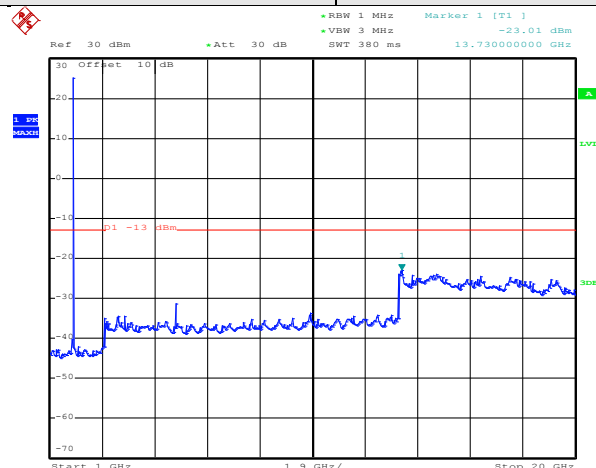
1GHz~20GHz

Test Mode:	LTE band 2(10MHz QPSK) RB Size 1 & RB Offset 0	Test Channel:	Lowest channel
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Date: 1.APR.2015 17:08:05

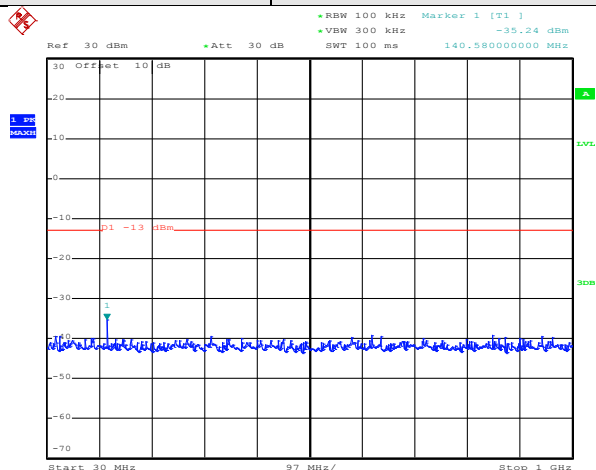
30MHz~1GHz



Date: 2.APR.2015 19:19:43

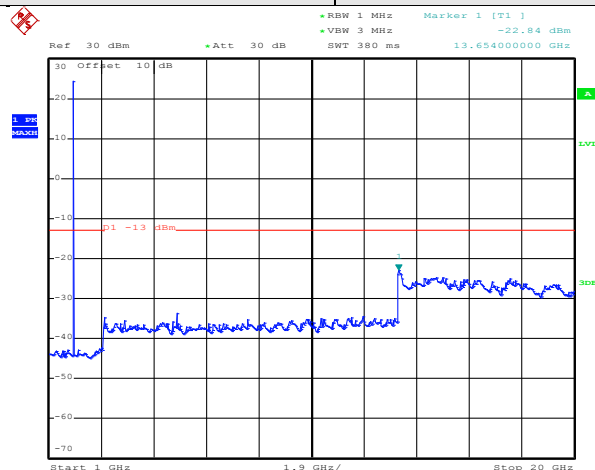
1GHz~20GHz

Test Mode:	LTE band 2(10MHz QPSK) RB Size 1 & RB Offset 24	Test Channel:	Middle channel
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Date: 1.APR.2015 17:09:33

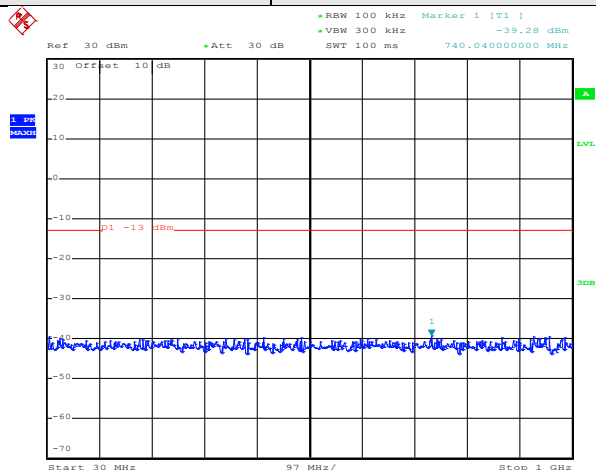
30MHz~1GHz



Date: 2.APR.2015 19:21:37

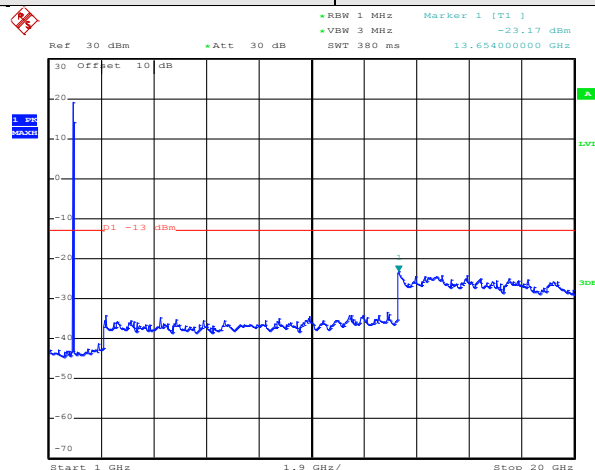
1GHz~20GHz

Test Mode:	LTE band 2(10MHz QPSK) RB Size 1 & RB Offset 24	Test Channel:	Highest channel
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Date: 1.APR.2015 17:11:19

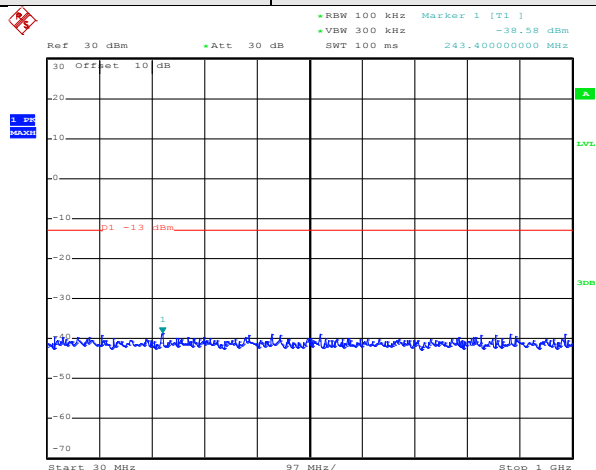
30MHz~1GHz



Date: 2.APR.2015 19:24:02

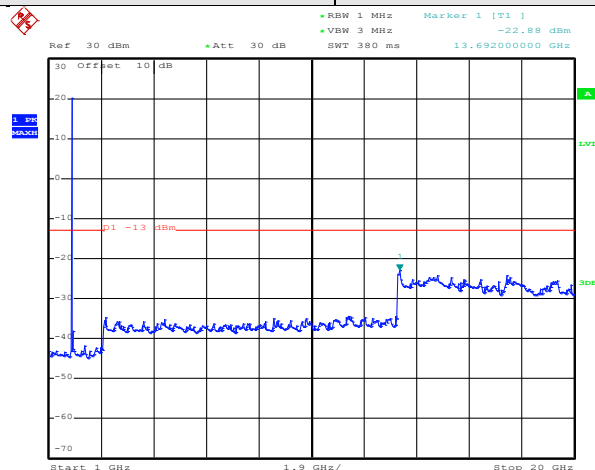
1GHz~20GHz

Test Mode:	LTE band 2(10MHz QPSK) RB Size 25 & RB Offset 0	Test Channel:	Lowest channel
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Date: 1.APR.2015 17:08:16

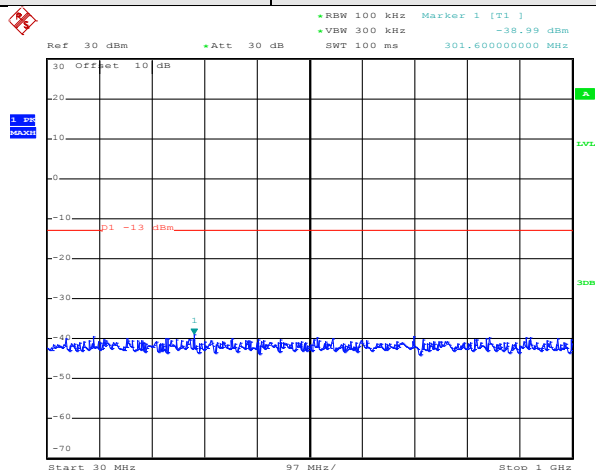
30MHz~1GHz



Date: 2.APR.2015 19:19:55

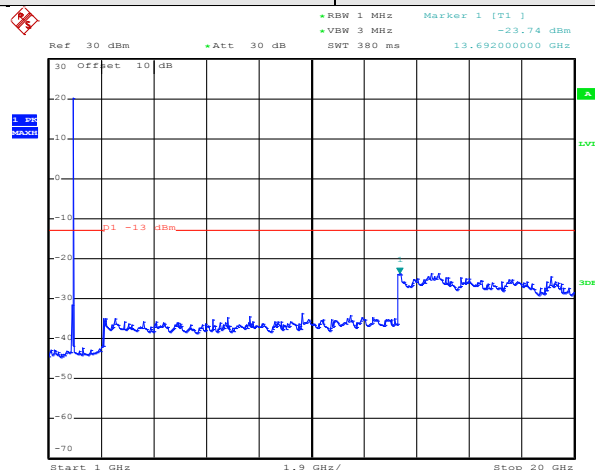
1GHz~20GHz

Test Mode:	LTE band 2(10MHz QPSK) RB Size 25 & RB Offset 24	Test Channel:	Middle channel
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Date: 1.APR.2015 17:09:42

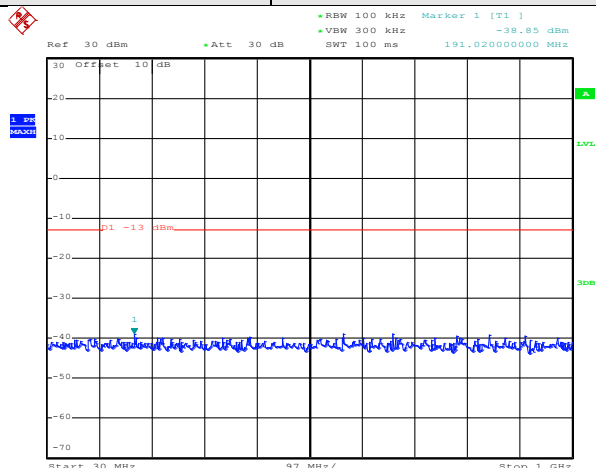
30MHz~1GHz



Date: 2.APR.2015 19:21:51

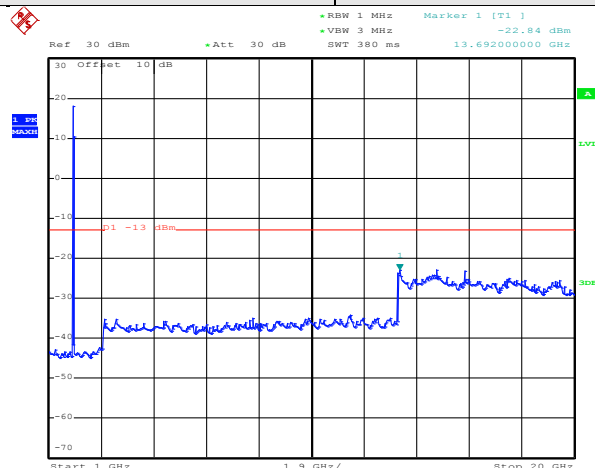
1GHz~20GHz

Test Mode:	LTE band 2(10MHz QPSK) RB Size 25 & RB Offset 24	Test Channel:	Highest channel
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Date: 1.APR.2015 17:11:27

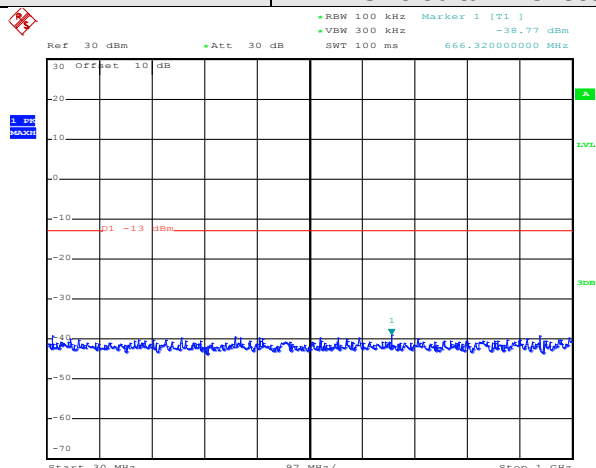
30MHz~1GHz



Date: 2.APR.2015 19:24:16

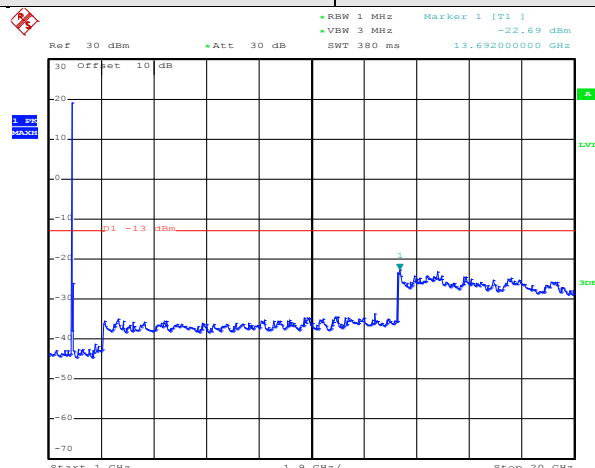
1GHz~20GHz

Test Mode:	LTE band 2(10MHz QPSK) RB Size 50 & RB Offset 0	Test Channel:	Lowest channel
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Date: 1.APR.2015 17:08:23

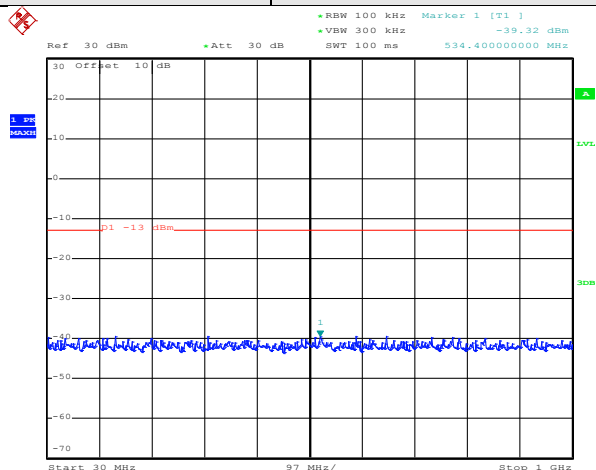
30MHz~1GHz



Date: 2.APR.2015 19:20:11

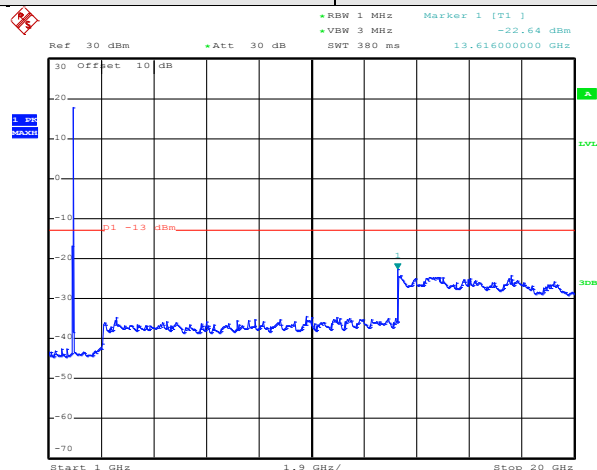
1GHz~20GHz

Test Mode:	LTE band 2(10MHz QPSK) RB Size 50 & RB Offset 0	Test Channel:	Middle channel
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Date: 1.APR.2015 17:09:47

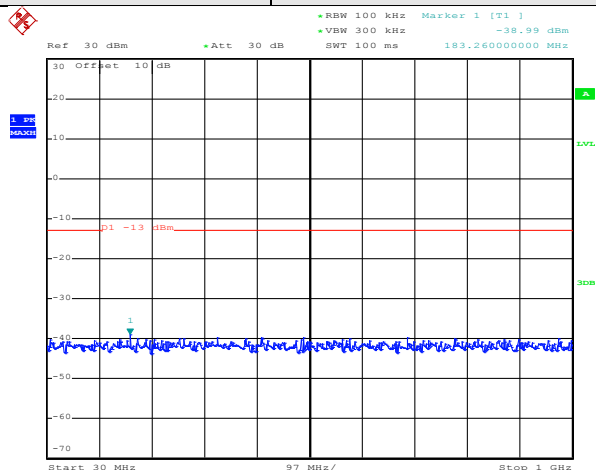
30MHz~1GHz



Date: 2.APR.2015 19:22:05

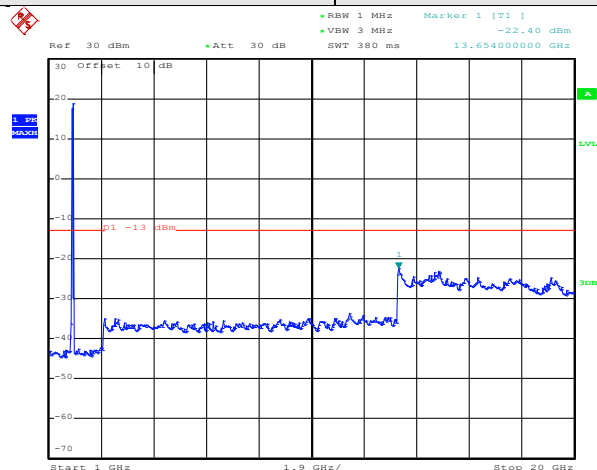
1GHz~20GHz

Test Mode:	LTE band 2(10MHz QPSK) RB Size 50 & RB Offset 0	Test Channel:	Highest channel
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Date: 1.APR.2015 17:11:34

30MHz~1GHz

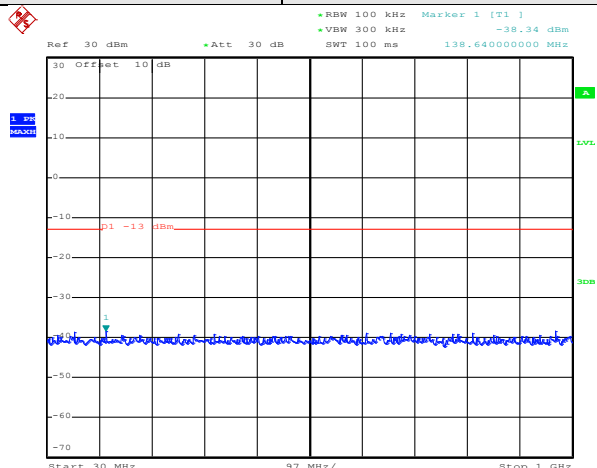


Date: 2.APR.2015 19:24:38

1GHz~20GHz

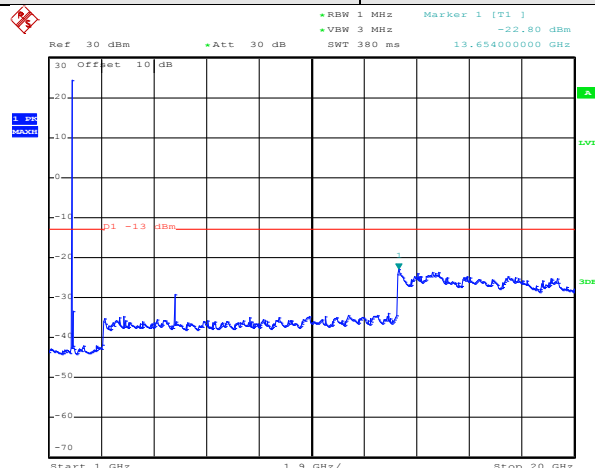
15MHz

Test Mode:	LTE band 2(15MHz 16QAM) RB Size 1 & RB Offset 0	Test Channel:	Lowest channel
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Date: 1.APR.2015 17:12:30

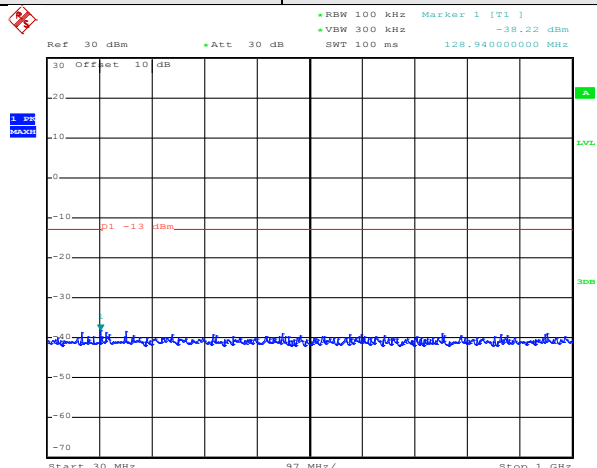
30MHz~1GHz



Date: 2.APR.2015 19:26:11

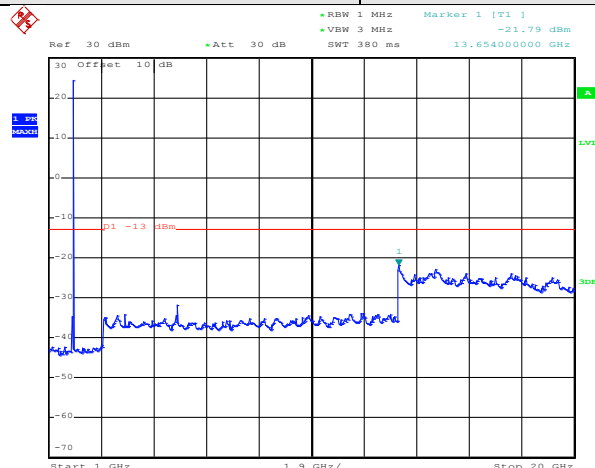
1GHz~20GHz

Test Mode:	LTE band 2(15MHz 16QAM) RB Size 1 & RB Offset 37	Test Channel:	Middle channel
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Date: 1.APR.2015 17:13:38

30MHz~1GHz



Date: 2.APR.2015 19:28:42

1GHz~20GHz